Journal of Machine Learning Research 25 (2024) 1-28 Submitted 7/22; Published 9/24

A Statistical Experimental Design Method for Constructing Deterministic Sensing Matrices for Compressed Sensing

Youran Qi YQI28@WISC.EDU
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Xu He HEXU@AMSS.AC.CN
Academy of Mathematics and Systems Science
Chinese Academy of Sciences
Beijing, 100190, China

Tzu-Hsiang Hung THUNG6@WISC.EDU
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Peter Chien PETER.CHIEN@WISC.EDU
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Editor: Ji Zhu

Abstract

Compressed sensing is a signal processing technique used to efficiently acquire and reconstruct signals across various fields, including science, engineering, and business. A critical research challenge in compressed sensing is constructing a sensing matrix with desirable reconstruction properties. For optimal performance, the reconstruction process requires the sensing matrix to have low coherence. Several methods have been proposed to create deterministic sensing matrices. We propose a new statistical method to construct deterministic sensing matrices by intelligently sampling rows of Walsh-Hadamard matrices. Compared to existing methods, our approach yields sensing matrices with lower coherence, accommodates a more flexible number of measurements, and entails lower computational cost.

Keywords: coding theory, coherence, compressed sensing, design of experiment, hadamard matrix, supersaturated design

1. Introduction

The interface between the design of experiments (DOEs), also known as data collection, and data modeling forms the foundation of statistics. This interface manifests in various forms across numerous modern statistical models. Examples include factorial designs for linear models, optimal designs for generalized linear models, space-filling designs for Gaussian process models in computer experiments, and response surface designs for process modeling and optimization. Penalized linear models have garnered significant interest in the field of statistics. This work aims to construct DOEs for compressed sensing, a form of penalized linear model used for acquiring and reconstructing sparse signals in applications such as magnetic resonance imaging, single-pixel cameras, and radar.

The general formulation of DOEs is an optimization problem: selecting a finite number of input configurations among all level combinations according to a desirable criterion. This is not a routine optimization problem that can be readily solved by standard software tools. Addressing this problem requires novel statistical ideas, tools, methods, and algorithms. The foundational tools used in this work include Hadamard matrices, coding theory, and statistical search algorithms. While these tools have traditionally been used for constructing DOEs for linear models, we apply them to the emerging field of compressed sensing.

There are two main categories of DOEs. One consists of model-based optimal designs pioneered by Jack Kiefer and others (Wynn, 1984; Fedorov and Hackl, 2012). The method for low-rank matrix recovery proposed by Mak and Xie (2018) falls into this category. The other consists of model-free DOEs, including *minimum aberration designs* and *supersaturated designs*. In this latter category, tools such as Hadamard matrices (Lin, 1993) and coding theory (Xu, 2005; Xu and Wong, 2007) are used to construct DOEs for standard linear models.

Our proposed DOEs for compressed sensing are related to supersaturated designs and can be viewed as new supersaturated designs for compressed sensing. Supersaturated designs are typical DOEs for penalized linear models. For example, Qi and Chien (2023) used supersaturated designs for a penalized linear model to screen out insignificant factors. Common criteria for selecting supersaturated designs include minimax, $E(s^2)$, $UE(s^2)$, mean square correlation, D-optimality, Bayesian D-optimality, S-optimality, MS-optimality, and others. Extensive research has been conducted to construct supersaturated designs based on these criteria (Shah, 1960; Booth and Cox, 1962; Eccleston and Hedayat, 1974; Lin, 1993; Wu, 1993; Deng and Lin, 1994; Tang and Wu, 1997; Jones et al., 2008; Jones and Majumdar, 2014).

Compared to existing supersaturated designs, our DOEs are related to $UE(s^2)$-optimal supersaturated designs proposed by Jones and Majumdar (2014), particularly in constructing two-level supersaturated designs by sampling the rows of Hadamard matrices and allowing for unbalanced designs. According to Jones and Majumdar (2014), any n rows of a $p \times p$ Hadamard matrix form a $UE(s^2)$-optimal design, termed type T_0 designs in their paper. As we will show below, our proposed DOEs for compressed sensing are formed by particular n rows of a $p \times p$ Hadamard matrix, making our DOEs $UE(s^2)$-optimal as well. Additionally, according to Jones and Majumdar (2014), all type T_0 designs are D-optimal supersaturated designs, a $UE(s^2)$-optimal design is Bayesian D-optimal when the prior variance is sufficiently small, and $UE(s^2)$-optimality is equivalent to S-optimality (Shah, 1960) and MS-optimality (Eccleston and Hedayat, 1974). Thus, as a special type T_0 $UE(s^2)$-optimal design, our design inherits all these advantages, including being $UE(s^2)$-optimal, D-optimal, Bayesian D-optimal for small prior variance, S-optimal, and MS-optimal.

The major difference is that while the $UE(s^2)$-optimal designs randomly sample rows, we intelligently sample the rows of Hadamard matrices using sophisticated tools in coding theory to optimize the *coherence* criterion widely used in compressed sensing. This significant difference makes our DOEs superior to the $UE(s^2)$-optimal designs for compressed sensing. To demonstrate that the coherence of our DOEs is significantly smaller than that of the $UE(s^2)$-optimal designs, we conduct simulations and present the results in Appendix B.

2. Compressed Sensing

A compressed sensing procedure consists of two steps. The first step is to acquire a compressed version of a sparse signal via a small number of measurements. The second step is to reconstruct the original signal from these measurements using a reconstruction algorithm.

Denote the original signal by a p-dimensional vector x with no more than s nonzero entries (i.e., s-sparse). The n-dimensional measurement vector y can be acquired by

$$y = Ax, \tag{1}$$

where A is the $n \times p$ sensing matrix ($n < p$). Without loss of generality, we assume the measurement error is zero. Instead of storing all the values in x and then compressing them to obtain y, we simultaneously sense and compress the signal x to obtain y. This means that in the measurement acquisition stage, x is not observed, and only the measurement vector y is observed and stored, significantly reducing the number of measurements that need to be stored (Eldar and Kutyniok, 2012).

There are two main research tasks in compressed sensing. The first task is developing methods to construct the sensing matrix A to ensure that the measurement vector y captures sufficient information for accurate signal reconstruction. The second task is developing algorithms to reconstruct the original sparse signal x from the measurement vector y given a sensing matrix A. Reconstruction algorithms include Basis Pursuit (Chen et al., 2001) and Iterative Hard Thresholding (Blumensath and Davies, 2009), among others. We focus on the first task.

The following restricted isometry property (RIP) is a popular criterion to evaluate sensing matrices:

Definition 1 *Let A be an $n \times p$ matrix. If there is a constant $0 < \delta_s < 1$ such that*

$$(1 - \delta_s)\|x\|_2^2 \le \|Ax\|_2^2 \le (1 + \delta_s)\|x\|_2^2$$

holds for any s-sparse signal $x \in \mathbb{R}^p$, then the matrix A satisfies the restricted isometry property (RIP) of order s. The minimum nonnegative integer δ_s is called the restricted isometry constant (RIC) of order s.

The RIP is used to guarantee the exact reconstruction of sparse signals. A sufficient condition for the exact reconstruction of all s-sparse signals is $\delta_{2s} < \sqrt{2} - 1$ (Candes and Tao, 2005).

Coherence is another widely used criterion to evaluate sensing matrices. The coherence of an $n \times p$ matrix A is defined as

$$\mu(A) = \max_{1 \le i < j \le p} \frac{|a_i^\top a_j|}{\|a_i\|_2 \|a_j\|_2},$$

where a_i is the ith column of A and $\|\cdot\|_2$ is the ℓ_2-norm (Bourgain et al., 2011). According to Welch (1974), for any $n \times p$ matrix A with $n < p$,

$$\sqrt{\frac{p - n}{n(p - 1)}} \le \mu(A) \le 1.$$

In compressed sensing, small $\mu(A)$ is preferred. A sufficient condition for the exact reconstruction of all s-sparse signals is $\mu(A) < 1/(2s-1)$ (Eldar and Kutyniok, 2012). Hereinafter, we use coherence as a guiding criterion.

Sensing matrices can be generated randomly or deterministically, and these two classes complement each other. Random sensing matrices can be analyzed probabilistically. For example, random matrices with entries drawn from particular probability distributions satisfy the RIP of order s with high probability (Baraniuk et al., 2008). However, from a practical viewpoint, there is no guarantee that a specific realization of a random matrix will work, and random matrices usually require large storage space. In contrast, the RIP and coherence of deterministic sensing matrices are guaranteed by their constructions, removing variability and significantly reducing uncertainty in decision-making with compressed sensing methods. Moreover, deterministic sensing matrices usually provide significant storage savings because their entries are often integers or they are often sparse matrices.

For these reasons, deterministic sensing matrices are gaining popularity, particularly those based on the coherence criterion. Many methods to construct deterministic sensing matrices have been proposed. Some construction methods are based on finite fields. DeVore (2007) used polynomials over finite fields to construct binary deterministic sensing matrices. Li et al. (2012) generalized DeVore's work by using algebraic curves over finite fields. Wang et al. (2019) provided constructions from optimal codebooks and codes, which generalizes the constructions in DeVore (2007) and Li et al. (2012). Meanwhile, some methods use error-correcting codes. Jafarpour et al. (2008) used the adjacency matrix of an expander graph, obtained from Parvaresh-Vardy codes (Parvaresh and Vardy, 2005), to construct sensing matrices. Howard et al. (2008) used second-order Reed-Muller functions, but their sensing matrices can only be of size $2^m \times 2^{m(m+1)/2}$, which is inflexible. Yu and Zhao (2013) proposed real-valued ternary deterministic sensing matrices using optical orthogonal codes. Additionally, families of sensing matrices, called *equiangular tight frames* (ETFs) (Strohmer and Heath, 2003), achieve the well-known Welch bound (Welch, 1974). Several infinite families of ETFs were given in Sustik et al. (2007) and Fickus et al. (2012). Li and Ge (2014) provided deterministic sensing matrices arising from these near orthogonal systems. Lastly, some construction methods are based on knowledge from domains such as signal processing and lattice theory. Applebaum et al. (2009) used chirps to construct deterministic sensing matrices for Fourier signals. Guo and Liu (2018) constructed deterministic sensing matrices using semi-lattices. We focus on deterministic construction of sensing matrices with real numbers and flexible sizes. The existing deterministic sensing matrices mentioned above often contain complex numbers, have restrictive sizes, and are constructed using non-statistical methods.

Compared to existing deterministic sensing matrices, the sensing matrices constructed from our DOEs have four advantages. First, they have smaller coherence for many values of n and p, leading to better signal reconstruction. Second, our method can construct sensing matrices with any number of rows, offering much more flexibility than existing methods. This flexibility is important in many real applications. Third, they align with the Fast Hadamard Transform technique, enabling the matrix-vector multiplication between a $p \times p$ matrix and a p-dimensional vector to be computed at a lower cost of $\mathcal{O}(p \log p)$ (Wang, 2012). Lastly, the entries in our sensing matrices are ± 1. Compared to floating-point numbers, ± 1 entries require much less storage space and lower computational complexity. Moreover, the corresponding hardware implementation is much easier, especially in the analog domain, where the multiplication between a signal value and a ± 1 can be readily implemented as a simple switch.

3. The Proposed Method

The key idea of our method is to intelligently take n rows of the $p \times p$ Walsh Hadamard matrix to form an $n \times p$ ($n < p$) submatrix with small coherence, which will then be used as the sensing matrix in compressed sensing.

When n and p are large, an exhaustive search over all submatrices is computationally prohibitive. Our method overcomes this difficulty in two steps. The first step is to convert the task of finding an $n \times p$ sub-Walsh Hadamard matrix to an equivalent task based on coding theory. The second step is to develop an efficient algorithm to solve the equivalent coding theory task. The details are discussed below.

3.1 Walsh Hadamard Matrix and Binary Linear Code

We establish a connection between Walsh Hadamard matrices and binary linear codes following the well-known link between Hadamard matrices and binary codes (Hedayat et al., 2012).

We first state some definitions. A $p \times p$ matrix H is called a Hadamard matrix if its entries take values -1 and $+1$ and $H^\top H = pI_p$, where I_p is the $p \times p$ identity matrix. The $p \times p$ Walsh Hadamard matrix H_p is a Hadamard matrix recursively constructed by

$$H_p = \begin{pmatrix} H_{p/2} & H_{p/2} \\ H_{p/2} & -H_{p/2} \end{pmatrix},$$

where $p = 2^m$ for some positive integer m and

$$H_2 = \begin{pmatrix} 1 & 1 \\ 1 & -1 \end{pmatrix}.$$

The first column and the first row of H_p consist of all 1's. Throughout, let $H_{n,p}$ denote an $n \times p$ submatrix formed by n rows of H_p, where $n < p = 2^m$.

A binary code of length n and size p is a subset of $\{0,1\}^n$ with p elements. Write it as a $p \times n$ binary matrix $C_{p,n} = [c_1, \ldots, c_p]^\top$, where each row $c_i \in \{0,1\}^n$ is a codeword. Let $w(c_i)$ denote the number of nonzero entries of c_i, also called the Hamming weight of c_i. The Hamming distance between two codewords c_i and c_j, denoted by $\Delta(c_i, c_j)$, is $w(c_i - c_j)$. Then $d(C_{p,n})$ is defined as the minimum distance of code $C_{p,n}$, i.e., $\min_{i \neq j} \Delta(c_i, c_j)$. A binary linear code is a binary code the codewords of which form a linear space. A binary linear code has full rank if its generator matrix has full row rank. The minimum distance of a full rank binary linear code $C_{p,n}$ equals its minimum nonzero weight, given as (MacWilliams and Sloane, 1977)

$$d(C_{p,n}) = \min_{c \in C_{p,n}, c \neq 0} w(c). \tag{2}$$

The Walsh Hadamard matrix is closely related to a special binary linear code, called the binary first-order Reed-Muller code (MacWilliams and Sloane, 1977). We construct a binary first-order Reed-Muller code[1] $C_{2p,p}$ by

$$C_{2p,p} = \begin{pmatrix} B_p \\ \bar{B}_p \end{pmatrix}, \tag{3}$$

where

$$B_p = \frac{1}{2}(J_{p,p} - H_p^\top), \quad \bar{B}_p = \frac{1}{2}(J_{p,p} + H_p^\top),$$

and hereinafter $J_{p,q}$ denotes a $p \times q$ matrix the entries of which are all 1's (MacWilliams and Sloane, 1977). The construction in (3) indicates a direct one-to-one mapping between the first-order Reed-Muller code $C_{2p,p}$ and the Walsh Hadamard matrix H_p, which holds only for a Walsh Hadamard matrix, but not for a general Hadamard matrix. The same relationship extends to sub-codes and submatrices. For a sub-code $C_{2p,n}$ obtained by taking n columns of $C_{2p,p}$, we have

$$C_{2p,n} = \begin{pmatrix} B_{p,n} \\ \bar{B}_{p,n} \end{pmatrix}, \tag{4}$$

where

$$B_{p,n} = \frac{1}{2}(J_{p,n} - H_{n,p}^\top), \quad \bar{B}_{p,n} = \frac{1}{2}(J_{p,n} + H_{n,p}^\top).$$

We can use (4) to obtain sub-Walsh Hadamard matrices via sub-codes.

The following theorem connects the coherence of a sub-Walsh Hadamard matrix $H_{n,p}$ and the minimum nonzero weight of its corresponding sub first-order Reed-Muller code $C_{2p,n}$.

Theorem 2 *If $\mu(H_{n,p}) < 1$, $C_{2p,n}$ constructed in* (4) *is a full rank binary linear code and*

$$\mu(H_{n,p}) = 1 - \frac{2}{n} \min_{c \in C_{2p,n}, c \neq 0} w(c). \tag{5}$$

Here (5) does not hold when $\mu(H_{n,p}) = 1$, because one can find an $H_{n,p}$ with $\mu(H_{n,p})$ of 1 but the minimum nonzero weight not being 0, using the fact that (2) does not hold for a linear code without full rank.

According to Theorem 2, a sub-code with a large minimum nonzero weight, or equivalently a large minimum distance, leads to a sub-Walsh Hadamard matrix with small coherence. The fact that $C_{2p,n}$ consists of $B_{p,n}$ and $\bar{B}_{p,n}$ stacked together is critical for Theorem 2. For example, consider two codewords of $B_{p,4}$, $c_i = (0,0,1,1)^\top$ and $c_j = (1,1,0,0)^\top$. They have the largest possible distance 4, but the coexistence of these two codewords results in two columns with opposite signs in the sub-Walsh Hadamard matrix $H_{4,p}$, thus yielding the largest possible coherence 1. If we only use $B_{p,4}$ with a large minimum distance, we cannot rule out the coexistence of c_i and c_j since they already have the largest possible distance. However, if we attach $\bar{B}_{p,4}$ under $B_{p,4}$ to obtain $C_{2p,4}$, there will be a pair of codewords $c_i = (0,0,1,1)^\top$ and $\bar{c}_j = (0,0,1,1)^\top$, which has the smallest possible distance 0. This makes it possible to correctly rule out the coexistence of c_i and c_j. Small coherence requires that the distance between any two codewords of $B_{p,n}$ is neither too small nor too large.

1. It corresponds to a resolution IV two-level fractional factorial design.

Now, our problem is converted into finding a sub first-order Reed-Muller code $C_{2p,n}$ with a large minimum nonzero weight. The computational complexity of finding an $H_{n,p}$ with small coherence is

$$\mathcal{O}\left(\binom{p}{n}np^2\right)$$

since it entails computing the dot product of every two columns for every given sub-Walsh Hadamard matrix. In contrast, the computational complexity of the transferred problem is

$$\mathcal{O}\left(\binom{p}{n}np\right)$$

since it computes the minimum nonzero weight by one pass over the codewords. However, it is still computationally prohibitive. Next, we provide an efficient algorithm in the context of binary linear code to overcome this difficulty.

3.2 Back-Elimination Algorithm

We develop a back-elimination algorithm to intelligently select n columns of the code $C_{2p,p}$. Let D_{-j} be a sub-code removing the column j of a code D and $A_i(D)$ be the number of codewords with weight i in a code D. The algorithm has two versions: the sequential version in Algorithm 1 and the weighted average version in Algorithm 2.

Algorithm 1. Sequential Back-Elimination

Input n, p $(n < p)$
Set $n_0 = p$ and $D = C_{2p,p}$
While $n_0 > n$
  Compute $A_i(D_{-j})$ for $i = d(D) - 1, \ldots, n_0 - d(D)$ and $j = 1, \ldots, n_0$
  Select one of the columns $j = j^*$ sequentially minimizing
$$A_{d(D)-1}(D_{-j}), \ldots, A_{n_0-d(D)}(D_{-j})$$
  $n_0 \leftarrow n_0 - 1$ and $D \leftarrow D_{-j^*}$
Output $H_{n,p} = J_{n,p} - 2B_{p,n}^{\top}$, where $B_{p,n}$ consists of the first p rows of D

Algorithm 1 uses backward elimination to remove $p - n$ columns one by one from the code $C_{2p,p}$ according to the minimum nonzero weight criterion. The resulting $n \times p$ sub-Walsh Hadamard matrix $H_{n,p}$ has guaranteed small coherence and is a suitable deterministic sensing matrix for compressed sensing.

Here are some remarks for Algorithm 1. First, for a tie in selecting j^*, the algorithm picks the column with the largest index. Second, the algorithm obtains the outputs for all integers between n and p with a computational complexity of $\mathcal{O}(p^3)$. These outputs are nested since the columns selected for n are contained in the columns selected for $n + 1$. Third, one can start with any code C_{2p,n_0}, not necessarily $C_{2p,p}$, if C_{2p,n_0} has a relatively large minimum nonzero weight. For example, suppose one has a code C_{2p,n_0} of length n_0 and wants to obtain a code $C_{2p,n}$ of length n, where $n < n_0 \ll p$. Then starting the algorithm with C_{2p,n_0} instead of $C_{2p,p}$ would dramatically reduce the computational cost. If C_{2p,n_0} has a relatively large minimum nonzero weight, then the $C_{2p,n}$ given by the algorithm would have a large minimum nonzero weight as well. Fourth, once computed, the indices of the selected rows can be saved and reused for many compressed sensing problems with no need to rerun the algorithm, which is desirable in practice.

We present the weighted average version of the back-elimination algorithm in Algorithm 2, which simultaneously takes account of all $A_i(D_{-j})$ in deleting a column. The only difference between this version and the previous sequential version is that we now minimize $\tilde{A}(D_{-j}) = \sum_{i=1}^{n_0-1} b_i A_i(D_{-j})$ with n_0 being the length of code D and certain $b_1, \ldots, b_p$ defined below, instead of sequentially minimizing $A_{d(D)-1}(D_{-j}), \ldots, A_{n_0-d(D)}(D_{-j})$. The weighted average version is more computationally expensive but yields smaller coherence for some values of n and p.

Algorithm 2. Weighted Average Back-Elimination

Input n, p $(n < p)$
Set $b_p = 1$ and $b_{i-1} = b_i(1.5p + i)/i$ for $i = p, \ldots, 2$
Set $n_0 = p$ and $D = C_{2p,p}$
While $n_0 > n$
  $\tilde{A}(D_{-j}) \leftarrow \sum_{i=1}^{n_0-1} b_i A_i(D_{-j})$ for $j = 1, \ldots, n_0$
  Select one of the columns $j = j^*$ minimizing $\tilde{A}(D_{-j})$
  $n_0 \leftarrow n_0 - 1$ and $D \leftarrow D_{-j^*}$
Output $H_{n,p} = J_{n,p} - 2B_{p,n}^\top$, where $B_{p,n}$ consists of the first p rows of D

Next, we provide examples of sub-Walsh Hadamard matrices $H_{n,p}$ and sub-codes $C_{2p,n}$ constructed by the algorithm. Tables 1 and 2 present results for p = 64, 128, 256, 512, 1024, 2048 and different sampling rates n/p. If Algorithms 1 and 2 yield two submatrices with different coherence, we display the coherence of Algorithm 2 in the parentheses. More results can be found in the Supplementary Materials.

	$p = 64$		$p = 128$		$p = 256$	
n/p	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
0.80	51	0.098	102	0.078	205	0.054
0.75	48	0.125	96	0.083	192	0.062
0.70	45	0.111	90	0.089 (0.111)	179	0.073
0.65	42	0.143	83	0.108	166	0.084
0.60	38	0.158	77	0.117	154	0.091
0.55	35	0.200	70	0.143	141	0.092
0.50	32	0.250	64	0.156	128	0.109
0.45	29	0.241	58	0.172	115	0.113
0.40	26	0.231	51	0.176	102	0.137
0.35	22	0.273	45	0.200	90	0.156
0.30	19	0.368	38	0.263 (0.211)	77	0.169
0.25	16	0.375	32	0.250	64	0.188
0.20	13	0.385	26	0.308	51	0.216

Table 1: Examples for $p = 64, 128, 256$

	$p = 512$		$p = 1024$		$p = 2048$	
n/p	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
0.80	410	0.039	819	0.028	1638	0.022
0.75	384	0.042 (0.047)	768	0.031 (0.034)	1536	0.023
0.70	358	0.050	717	0.038	1434	0.028
0.65	333	0.057	666	0.039 (0.042)	1331	0.031
0.60	307	0.068 (0.062)	614	0.046	1229	0.035
0.55	282	0.071	563	0.052	1126	0.037
0.50	256	0.078	512	0.055	1024	0.041
0.45	230	0.087	461	0.063	922	0.046
0.40	205	0.093	410	0.073 (0.068)	819	0.050
0.35	179	0.106	358	0.078	717	0.057
0.30	154	0.130	307	0.088	614	0.065
0.25	128	0.141	256	0.109 (0.102)	512	0.074
0.20	102	0.157 (0.176)	205	0.122	410	0.088

Table 2: Examples for $p = 512, 1024, 2048$

4. Theoretical Analysis

We provide theoretical analysis for our constructed sensing matrices. All proofs are deferred to Appendix A. Our goal is to show how the proposed method makes the minimum distance of the sub-code as large as possible, because (2) and (5) showed that a larger minimum distance of the sub-code leads to smaller coherence of the sensing matrix and Section 2 showed that smaller coherence leads to higher signal reconstruction quality.

Deleting an arbitrary column from a sub-code $C_{2p,n}$ makes the minimum distance either decrease by one or remain the same. Theorem 3 shows that Algorithm 1 will not decrease the minimum distance to zero until $n_0 \leq m$, which means the speed at which the minimum distance decreases is controlled much better than a random deletion algorithm.

Theorem 3 *Let $p = 2^m$. The sub-code $C_{2p,n}$ constructed by Algorithm 1 is a full rank binary linear code for every $n = m+1, \ldots, p-1$ and $d(C_{2p,m+1}) = 1$.*

Theorem 3 guarantees that during the while loop of Algorithm 1, the sub-code has full rank and the connection between coherence and minimum nonzero weight in Theorem 2 holds. More importantly, $d(C_{2p,m+1}) = 1$ indicates that the minimum distance will not decrease to zero until $n_0 \leq m$. This is the best possible decreasing speed, because as shown in the proof of Theorem 3, any sub first-order Reed-Muller code with $n \leq m$ has a minimum distance of exactly zero. The following corollary of Theorem 3 shows that on average Algorithm 1 decreases the minimum distance by one in every two deletions.

Corollary 4 *For Algorithm 1, the decreasing rate of minimum distance is asymptotically 1/2 for large p.*

A stronger result on how Algorithm 1 controls the decreasing speed of minimum distance is given in Theorem 6. First, Lemma 5 gives a simple fact.

Lemma 5 *Suppose that $m+1 < n < p = 2^m$ and $d(C_{2p,n}) = d > 1$. Let $A_d(C_{2p,n}) = a$. If $C_{2p,n-1}$ is a sub-code obtained by deleting a column of $C_{2p,n}$ using Algorithm 1, then $A_{d-1}(C_{2p,n-1}) \leq da/n$.*

Theorem 6 *Suppose t is a positive integer such that $m+t+1 < n < p = 2^m$ and $d(C_{2p,n}) = d > t+1$. Let $A_d(C_{2p,n}) = a$. If $C_{2p,n-t-1}$ is a sub-code obtained by deleting $(t+1)$ columns of $C_{2p,n}$ using Algorithm 1 and*

$$a < \prod_{i=0}^{t} \frac{n-i}{d-i}, \tag{6}$$

then $d(C_{2p,n-t-1}) \geq d - t$.

Theorem 6 indicates that if (6) holds, at least one out of $t+1$ consecutive deletions in the process of Algorithm 1 keeps minimum distance the same. This result is conservative since $d(C_{2p,n-t-1})$ can be much greater than $d-t$. On the contrary, a random deletion algorithm has no such guarantee and decreases the minimum distance much faster. Here is a corollary of Theorem 6.

Corollary 7 *Suppose that t is a positive integer such that $m+t+1<n<p=2^m$ and $d(C_{2p,n})=d<n/2$. If $C_{2p,n-t-1}$ is a sub-code obtained by deleting $(t+1)$ columns of $C_{2p,n}$ using Algorithm 1 and*

$$p-1<\prod_{i=0}^{t}\frac{n-i}{d-i}, \tag{7}$$

then $d(C_{2p,n-t-1})\geq d-t$.

When $t=m-1$, (7) holds under the basic assumptions of the corollary, because $p-1<p=2^m=2^{t+1}<\prod_{i=0}^{t}\{(n-i)/(d-i)\}$. Therefore, Corollary 7 indicates that, as long as $d<n/2$, at least one out of m consecutive deletions in the process of Algorithm 1 keeps minimum distance the same. Moreover, when d/n is smaller, the decreasing speed of minimum distance will be even lower than this.

For Algorithm 1, we provide another lower bound for $d(C_{2p,n})$ in the following theorem.

Theorem 8 *If $C_{2p,n}$ is the sub-code constructed by Algorithm 1, z is a nonnegative integer, and*

$$p-1<\prod_{i=0}^{t_y}\frac{p-1-\sum_{1\leq j<y}(t_j+1)-i}{p/2-1-\sum_{1\leq j<y}t_j-i}$$

for all $1\leq y\leq z$, then $d(C_{2p,n-1-\sum_{1\leq j<z}(t_z+1)})\geq p/2-1-\sum_{1\leq j<z}t_z$.

Finally, we provide analysis for Algorithm 2 below.

Theorem 9 *If t is an integer such that*

$$\prod_{i=t+1}^{p/2}\left(1+\frac{1.5p}{i}\right)\geq(2p-2)\prod_{i=n+1}^{p}\left(1+\frac{1.5p}{i}\right),$$

then $d(C_{2p,n})\geq t+1$, where $C_{2p,n}$ is the sub-code constructed by Algorithm 2.

Corollary 10 *If $C_{2p,n}$ is the sub-code constructed by Algorithm 2, then*

$$d(C_{2p,n})\geq\frac{p}{2}-\frac{2(p-n)}{3}-\frac{m}{2}-\frac{1}{2}.$$

Corollary 10 indicates that, when Algorithm 2 is used, at least one out of three deletions keeps minimum distance the same, which is a stronger guarantee than Algorithm 1.

5. Comparison with Existing Methods

We conduct extensive comparisons with some existing methods to demonstrate the superiority of our method in terms of coherence, probabilities of signal reconstructions and performance of signal reconstructions in real image applications.

5.1 Comparison of Coherence

We compare the coherence of our proposed method with the coherence of four deterministic construction methods proposed by DeVore (2007), Li et al. (2012), Yu and Zhao (2013) and Guo and Liu (2018).

First, we introduce each competing method. For a given prime number q and a positive integer $r < q$, DeVore (2007) constructed an $n \times p$ deterministic sensing matrix A with $n = q^2$, $p = q^{r+1}$ and $\mu(A) = r/q$. For given positive integers r and s, Li et al. (2012) constructed an $n \times p$ deterministic sensing matrix A with $n = 2^r(N_r - 1)$, $p = 2^{rs}$ and $\mu(A) \leq s/(N_r - 1)$, where $n < p$, $s < N_r - 1$, and

$$N_r = \begin{cases} 2^r + 1 & r \equiv 2, 6 \mod 8 \\ 2^r + 1 + 2^{(r+2)/2} & r \equiv 4 \mod 8 \\ 2^r + 1 - 2^{(r+2)/2} & r \equiv 0 \mod 8 \\ 2^r + 1 + 2^{(r+1)/2} & r \equiv 1, 7 \mod 8 \\ 2^r + 1 - 2^{(r+1)/2} & r \equiv 3, 5 \mod 8 \end{cases}.$$

For a given prime number q and a nonnegative integer $\delta \leq q$ with $q + \delta + 1 \equiv 0 \mod 4$, Yu and Zhao (2013) constructed an $n \times p$ deterministic sensing matrix A with $n = q^2 + q + 1$, $p = (q + \delta + 1)n$ and $\mu(A) \leq \max\{1/(q+1), \delta/(q+1)\}$. For a given integer $q \geq 2$, Guo and Liu (2018) constructed an $n \times p$ deterministic sensing matrix A with $n = (q^2 + 1)(q + 1)$, $p = (q^2 + 1)(q^2 + q + 1)$ and $\mu(A) = 1/(q + 1)$.

Tables 3 to 6 give the coherence of each of the four methods and the proposed method for some n and p.

			DeVore		Proposed	
q	r	n	p	$\mu(A)$	p	$\mu(H_{n,p})$
3	2	9	27	0.667	32	0.556
5	2	25	125	0.400	128	0.360
5	3	25	625	0.600	1024	0.520
5	4	25	3125	0.800	4096	0.600
7	2	49	343	0.286	512	0.265
7	3	49	2401	0.429	4096	0.388
11	3	121	14641	0.273	16384	0.256

Table 3: Coherence of DeVore (2007)'s method and the proposed method

			Li et al.		Proposed	
r	s	n	p	$\mu(A)$	p	$\mu(H_{n,p})$
2	3	16	64	0.750	64	0.375
3	2	32	64	0.500	64	0.250
3	3	32	512	0.750	512	0.375
4	3	384	4096	0.125	4096	0.104
5	2	768	1024	0.083	1024	0.031

Table 4: Coherence of Li et al. (2012)'s method and the proposed method

			Yu and Zhao		Proposed	
q	δ	n	p	$\mu(A)$	p	$\mu(H_{n,p})$
7	4	57	684	0.500	1024	0.298
11	4	133	2128	0.333	4096	0.203
13	6	183	3660	0.429	4096	0.169
13	10	183	4392	0.714	8192	0.191
17	6	307	7368	0.333	8192	0.140
17	10	307	8596	0.556	16384	0.153
17	14	307	9824	0.778	16384	0.153
19	4	381	9144	0.200	16384	0.134
19	8	381	10668	0.400	16384	0.134
19	12	381	12192	0.600	16384	0.134
19	16	381	13716	0.800	16384	0.134
23	4	553	15484	0.167	16384	0.107

Table 5: Coherence of Yu and Zhao (2013)'s method and the proposed method

		Guo and Liu		Proposed	
q	n	p	$\mu(A)$	p	$\mu(H_{n,p})$
4	85	357	0.200	512	0.176
5	156	806	0.167	1024	0.141
6	259	1591	0.143	2048	0.120
7	400	2850	0.125	4096	0.105
8	585	4745	0.111	8192	0.091
9	820	7462	0.100	8192	0.073
10	1111	11211	0.091	16384	0.068

Table 6: Coherence of Guo and Liu (2018)'s method and the proposed method

As shown in the tables above, the coherence of our method is smaller than that of the four competing methods, even when our sensing matrices have more columns. In addition, given the number of columns p, our method is more flexible as it constructs sensing matrices with any number of rows less than p, whereas the four competing methods all have restrictions on the numbers of rows of the sensing matrices.

5.2 Comparison of Reconstruction Probability

We compare the reconstruction probabilities of our method with those of DeVore (2007)'s method and Guo and Liu (2018)'s method by simulations.

To make our simulations effective, we deviate from the conventional choice of fixing the original signal x to a specific predetermined value. This choice may be potentially unconvincing, as it focuses on a particular instance of the signal. To be more statistical, we randomly generate the original signal x in the simulations, while maintaining fixed values for the parameters p and n. This random approach gives a more comprehensive assessment to capture a broader spectrum of scenarios and provide a better understanding of the performance of different methods under varying signal conditions.

For each sparsity level s, we randomly generate a total of 5000 s-sparse original signals. Then we compress each original signal x by a sensing matrix and use the Orthogonal Matching Pursuit (OMP) algorithm (Pati et al., 1993) to obtain the reconstructed signal $\hat{x}$. Let the successful and unsuccessful reconstructions correspond to the outcomes of 1 and 0 respectively, where success means the Signal-to-Noise Ratio (SNR), calculated as $10\log_{10}(\|x\|^2/\|x-\hat{x}\|^2)$, surpasses a threshold of 100. For each sparsity level s, we compute the reconstruction probability as the mean of the 5000 binary outcomes.

5.2.1 Comparison with DeVore (2007)

Let the dimensions of the original signals and the measurement vectors be 125 and 25, respectively. We follow DeVore's method to construct a sensing matrix with $p = 125$ and $n = 25$, corresponding to $q = 5$ and $r = 2$. We construct our sensing matrix with $p = 128$ and $n = 25$, and append 3 zeros to the end of each original signal to apply our sensing matrix. The probabilities of reconstructions across varying sparsity levels are plotted in Figure 1, where the probabilities of reconstructions of a random Gaussian sensing matrix are provided as a benchmark.

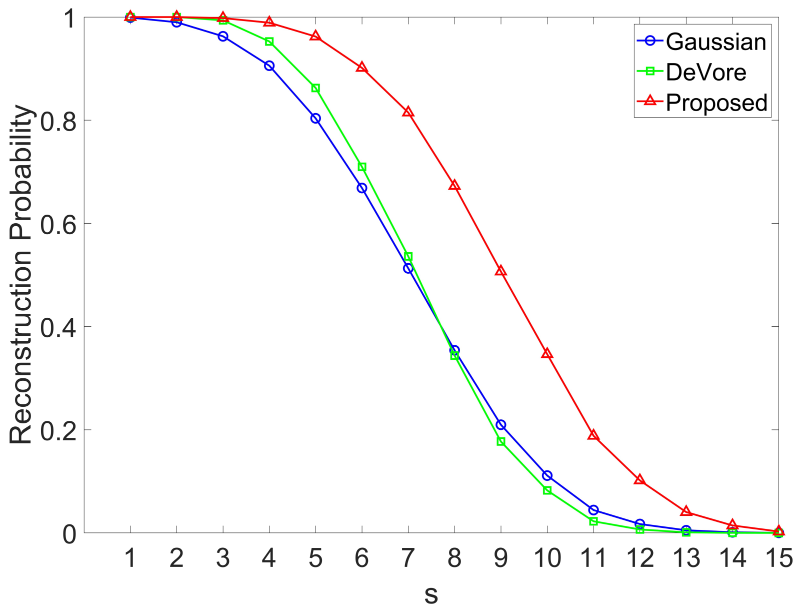


Figure 1: The probabilities of reconstructions of a random Gaussian matrix, a matrix constructed by DeVore's method and a matrix constructed by our method.

Figure 1 shows that for every s, the probability of reconstruction of our sensing matrix is significantly higher than that of DeVore's sensing matrix and the random Gaussian matrix, because of the smaller coherence of our sensing matrix. In addition, DeVore's sensing matrix performs equally well as the random Gaussian matrix but without variability, which demonstrates the superiority of deterministic sensing matrices.

5.2.2 Comparison with Guo and Liu (2018)

Let the dimensions of the original signals and the measurement vectors be 252 and 45 respectively. We follow Guo and Liu's method to construct a sensing matrix with $p = 252$ and $n = 45$ according to Example 3.1 of Guo and Liu (2018), which corresponds to $d = 2$, $l = 5$ and $N = 10$ in the context of their Example 3.1. We construct our sensing matrix with $p = 256$ and $n = 45$, and append 4 zeros to the end of each original signal to apply our sensing matrix. The probabilities of reconstructions across varying sparsity levels are plotted in Figure 2.

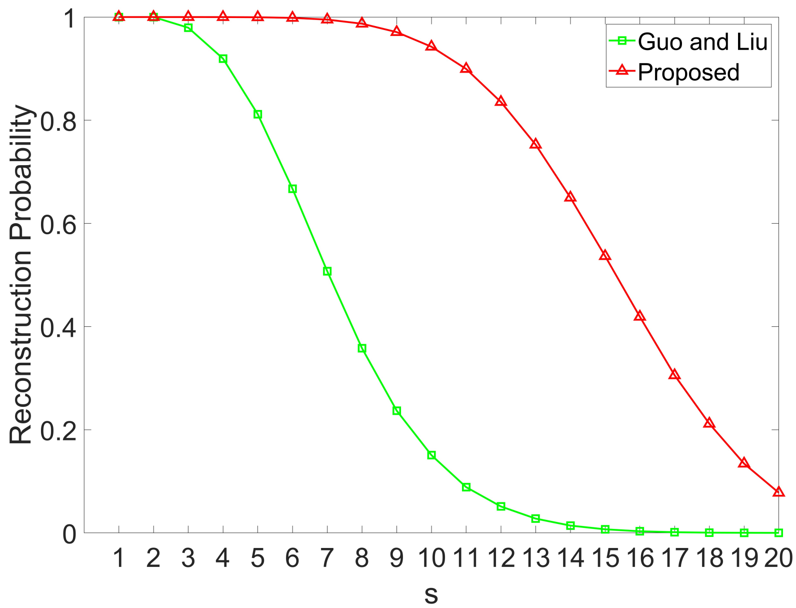


Figure 2: The probabilities of reconstructions of a matrix constructed by Guo and Liu's method and a matrix constructed by our method.

Figure 2 shows a consistent pattern across varying sparsity levels: the probability of reconstruction of our method consistently surpasses that of Guo and Liu's method. This significant difference is due to the smaller coherence of our sensing matrix.

5.3 Real Applications

We compare our method with DeVore (2007)'s method in real image examples. Our setup here follows the standard practice in image processing to provide a meaningful evaluation of the image reconstruction performance.

We use three images *Boat*, *Baboon* and *Peppers*. Each image is represented as a 512×512 matrix of pixels. The Daubechies 9/7 wavelet basis is commonly used in image processing to capture and represent complex image features in a sparse and efficient manner, which balances between localization and frequency representation. We use the Daubechies 9/7 wavelet basis to represent each of the three images as a sparse vector in the wavelet domain. This sparse vector is compressible, which is the original sparse signal we will compress in the next step.

Since the dimension of the original sparse signal $512^2 = 262144$ is large, we use the following block diagonal sensing matrix A to compress it:

$$A = \begin{bmatrix} M & & & \\ & M & & \\ & & \ddots & \\ & & & M \end{bmatrix},$$

where each block M is an $\ell \times k$ matrix constructed by either DeVore's method or our Algorithm 1, and the remaining entries are all zero. Because $\mu(A) = \mu(M)$ due to this block diagonal structure, the coherence of A remains small. Let $\ell = 9$, $k = 32$ and use 8192 blocks, resulting in a sensing matrix A with $p = 8192 \times 32 = 262144$, $n = 8192 \times 9 = 73728$ and a sampling rate of $73728/262144 \approx 28\%$.

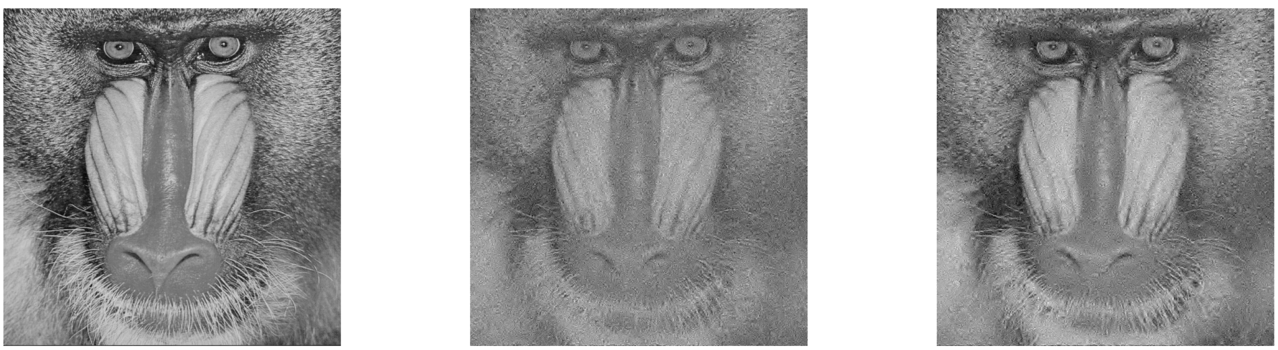
After compressing the original sparse signal by the above block diagonal sensing matrix, we reconstruct the signal by the GPSR software (Figueiredo et al., 2007) and obtain the reconstructed image by applying the inverse wavelet transform on the reconstructed signal. The GPSR software employs gradient-based optimization techniques commonly used for sparse signal recovery in compressed sensing.

We use the Peak Signal-to-Noise Ratio (PSNR) to evaluate the quality of the reconstructed image. The PSNR is defined as $10 \log_{10}(255^2/\mathrm{MSE}(x, \hat{x}))$, where x is the original image and $\hat{x}$ is the reconstructed image. A higher PSNR indicates a higher quality of the reconstruction.

In Figures 3 to 5, for each image of *Boat*, *Baboon* and *Peppers*, we show the original image and the images reconstructed from the compressions given by DeVore's method and our proposed method. We also provide the PSNRs in the figure captions. For all the three examples, the PSNRs of the images reconstructed from our compressions are significantly higher than those reconstructed from DeVore's compressions. Furthermore, visual inspection of the reconstructed images reveals some significant advantage of our method. The images reconstructed from DeVore's compressions exhibit blurring, which indicates a compromised fidelity, whereas the images reconstructed from our compressions are sharper and more faithful. These findings demonstrate the superiority of our method in preserving the image information during the compression process, and its accuracy and robustness in achieving superior image reconstruction results. In addition, these image reconstruction examples underscore the effectiveness of the block diagonal sensing matrix constructed by our method, particularly in handling scenarios with very large p.

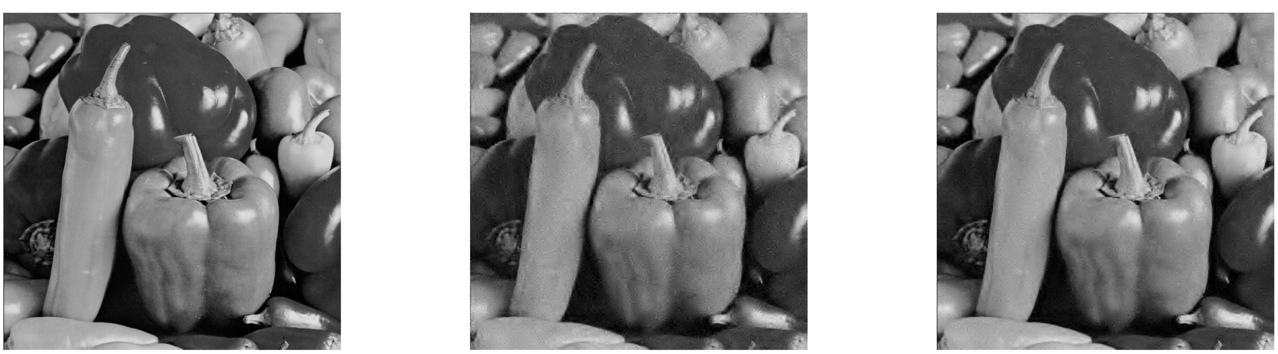
(a) (b) (c)

Figure 3: 512×512 Boat image reconstruction. (a) Original Boat image (b) DeVore's method (PSNR: 22.69 dB) (c) Our method (PSNR: 26.42 dB).



(a) (b) (c)

Figure 4: 512×512 Baboon image reconstruction. (a) Original Baboon image (b) DeVore's method (PSNR: 18.79 dB) (c) Our method (PSNR: 20.70 dB).



(a) (b) (c)

Figure 5: 512×512 Peppers image reconstruction. (a) Original Peppers image (b) DeVore's method (PSNR: 25.88 dB) (c) Our method (PSNR: 29.50 dB).

6. Discussion

We proposed a method for constructing a new class of deterministic compressed sensing matrices by intelligently selecting some rows of a Walsh Hadamard matrix. Compared to existing deterministic sensing matrices, the proposed method constructs sensing matrices with smaller coherence for many values of n and p. It also constructs sensing matrices for any numbers of rows n and columns p with $n < p$. Depending on the required number of columns, one can either choose a subset of columns of our sensing matrices or use a block diagonal version of our sensing matrices, for which the coherence would further decrease or remain the same. Recall that the proposed algorithm has a computational complexity of $\mathcal{O}(p^3)$. It would be computationally expensive for our method to construct a standard non-block diagonal sensing matrix with very large p, e.g., $p = 32768$, 65536. However, as shown in Section 5.3, it is still feasible to apply our method in real applications with very large p, e.g., $p = 262144$ by using a block diagonal sensing matrix. Moreover, our method aligns with the Fast Hadamard Transform technique. In addition, the row indices of the submatrices given by our back-elimination algorithms can be saved and reused without the need to rerun the algorithms. Finally, our sensing matrices, which consist of only ± 1, significantly reduce the cost of storage, computation and hardware implementation. The superiority of our method is demonstrated by numerical simulations and real applications in image reconstruction.

Some possible directions for future work are as follows. First, one can propose a new criterion to delete columns in the back-elimination algorithms. It is of interest to find better criteria to make the algorithms more efficient or yield smaller coherence. Second, one can apply our method to other statistical applications requiring design or model matrices with small coherence.

Our proposed method can also be applied to construct better subsampled Hadamard transforms in other statistical and machine learning problems, including matrix approximation, matrix completion, kernel regression and least square. This line of research sheds new light on how experimental design researchers tackle modern challenges in the big data era. The combined benefits of the new experimental design thinking and the power of large-scale statistical analysis can solve larger and more complex problems.

7. Acknowledgements and Disclosure of Funding

The authors would like to thank the reviewers and Action Editor for useful comments and suggestions that significantly improved the article. Qi, Hung and Chien are supported by U.S. NSF DMS Focus Research Group Grant 1564376. He is supported by National Key R&D Program of China 2021YFA 1000300, 2021YFA 1000301, National Natural Science Foundation of China (NSFC 12022115, NSFC 11971465, NSFC 71988101), and National Center for Mathematics and Interdisciplinary Sciences, CAS

8. Supplementary Materials

Our supplementary materials list the coherence of the sensing matrices constructed by Algorithm 1 for $p = 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192, 16384$ and many values of n.

Appendix A. Proofs

Theorem 2 *If $\mu(H_{n,p}) < 1$, $C_{2p,n}$ constructed in (4) is a full rank binary linear code and*

$$\mu(H_{n,p}) = 1 - \frac{2}{n} \min_{c \in C_{2p,n}, c \neq 0} w(c). \tag{5}$$

Proof First, since a first-order Reed-Muller code $C_{2p,p}$ in (3) is a binary linear code, $C_{2p,n}$ obtained by taking some columns of $C_{2p,p}$ is binary linear as well.

Second, $\mu(H_{n,p}) < 1$ indicates no two columns of $H_{n,p}$ have completely identical or completely opposite signs. By the construction of $C_{2p,n}$, this implies that $C_{2p,n}$ has no equal codewords. It then follows that the generator matrix of $C_{2p,n}$ has full row rank.

Finally, by Lemma 1 in Cheng and Tang (2001), $h_i^\top h_j = n - 2\Delta(c_i, c_j)$ for any $i \neq j$, where h_i is the ith column of $H_{n,p}$ and c_i is the ith codeword of $B_{p,n}$. Thus,

$$\begin{aligned}
&\mu(H_{n,p}) \\
=& \max_{i \neq j} \frac{|h_i^\top h_j|}{n} \\
=& \max_{i \neq j} \frac{|n - 2\Delta(c_i, c_j)|}{n} \\
=& \max[\max_{i \neq j} \{1 - \frac{2}{n}\Delta(c_i, c_j)\}, -\min_{i \neq j}\{1 - \frac{2}{n}\Delta(c_i, c_j)\}] \\
=& \max\{1 - \frac{2}{n} \min_{i \neq j} \Delta(c_i, c_j), -1 + \frac{2}{n} \max_{i \neq j} \Delta(c_i, c_j)\} \\
=& \max[1 - \frac{2}{n} \min_{i \neq j} \Delta(c_i, c_j), -1 + \frac{2}{n} \max_{i \neq j} \{n - \Delta(c_i, \bar{c}_j)\}] \\
=& \max\{1 - \frac{2}{n} \min_{i \neq j} \Delta(c_i, c_j), 1 - \frac{2}{n} \min_{i \neq j} \Delta(c_i, \bar{c}_j)\} \\
=& 1 - \frac{2}{n} d(C_{2p,n}),
\end{aligned}$$

where $\bar{c}_j = J_{n,1} - c_j$ is the counterpart of c_j in $\bar{B}_{p,n}$. Since $C_{2p,n}$ has full rank and is linear,

$$d(C_{2p,n}) = \min_{c \in C_{2p,n}, c \neq 0} w(c),$$

which completes the proof. ∎

Theorem 3 *Let $p = 2^m$. The sub-code $C_{2p,n}$ constructed by Algorithm 1 is a full rank binary linear code for every $n = m + 1, \ldots, p - 1$ and $d(C_{2p,m+1}) = 1$.*

Proof First, since $C_{2p,p}$ is binary linear, the sub-code $C_{2p,n}$ obtained by the algorithm is binary linear as well.

Second, since each step of the algorithm deletes only one column, the minimum distance decreases at most by 1. Hence, there exists an n_0 such that C_{2p,n_0} and C_{2p,n_0-1} constructed by the algorithm have $d(C_{2p,n_0}) = 1$ and $d(C_{2p,n_0-1}) = 0$, respectively. Since C_{2p,n_0} has full rank and is linear, the minimum distance of 1 indicates that it has some rows with weight 1, i.e., $A_1(C_{2p,n_0}) > 0$. Consider the submatrix $C_{2p,n_0}(1)$ consisting of the rows with weight 1. None of its columns can have more than one 1; otherwise it has two equal rows, which contradicts with $d(C_{2p,n_0}) = 1$. None of its columns consists of only 0's; otherwise Algorithm 1 would delete a column consisting of only 0's in $C_{2p,n_0}(1)$ and thus will not decrease the minimum distance to 0, contradicting with the fact $d(C_{2p,n_0-1}) = 0$. Hence, $C_{2p,n_0}(1)$ is an $n_0 \times n_0$ submatrix, each row or column of which has exactly one 1. These n_0 rows form a basis of the linear space $\{0,1\}^{n_0}$. Since C_{2p,n_0} is a linear code, $2^{n_0} \leq 2p$, which means $n_0 \leq m+1$.

Suppose that $n_0 \leq m$. Since any sub-Walsh Hadamard matrix $H_{n_0,p}$ has at most $2^{n_0} \leq 2^m = p$ possible different columns, there will either be two identical columns or two columns with opposite signs, resulting that $d(C_{2p,n_0}) = 0$, which is a contradiction. Therefore, $n_0 = m+1$, implying $d(C_{2p,m+1}) = 1$.

Finally, since the minimum distance will not increase in the process of deleting columns, for every $n = m+1, \ldots, p-1$, $d(C_{2p,n}) \geq d(C_{2p,m+1}) = 1$, which indicates they all have full rank. ■

Corollary 4 *For Algorithm 1, the decreasing rate of minimum distance is asymptotically 1/2 for large p.*

Proof The decreasing rate of minimum distance is the average amount of decrease in minimum distance as n_0 decreases from p to $m+1$. Since $d(C_{2p,p}) = p/2$ (MacWilliams and Sloane, 1977) and $d(C_{2p,m+1}) = 1$, the decreasing rate equals to $(p/2-1)/(p-(\log_2 p+1))$, which approaches to $1/2$ as p goes to infinity. ■

Lemma 5 *Suppose that $m+1 < n < p = 2^m$ and $d(C_{2p,n}) = d > 1$. Let $A_d(C_{2p,n}) = a$. If $C_{2p,n-1}$ is a sub-code obtained by deleting a column of $C_{2p,n}$ using Algorithm 1, then $A_{d-1}(C_{2p,n-1}) \leq da/n$.*

Proof According to Algorithm 1,

$$A_{d-1}(C_{2p,n-1}) = \min\left\{\sum_{i=1}^{a} C_{2p,n}(d)_{i1}, \ldots, \sum_{i=1}^{a} C_{2p,n}(d)_{in}\right\},$$

where $C_{2p,n}(d)$ is the submatrix consisting of the rows with weight d in $C_{2p,n}$, and $C_{2p,n}(d)_{ij}$ is the (i,j)th entry of $C_{2p,n}(d)$. Since

$$\sum_{j=1}^{n}\sum_{i=1}^{a} C_{2p,n}(d)_{ij} = da,$$

we have $A_{d-1}(C_{2p,n-1}) \leq da/n$. ■

Theorem 6 *Suppose t is a positive integer such that $m+t+1<n<p=2^m$ and $d(C_{2p,n})=d>t+1$. Let $A_d(C_{2p,n})=a$. If $C_{2p,n-t-1}$ is a sub-code obtained by deleting $(t+1)$ columns of $C_{2p,n}$ using Algorithm 1 and*

$$a<\prod_{i=0}^{t}\frac{n-i}{d-i}, \tag{6}$$

then $d(C_{2p,n-t-1})\geq d-t$.

Proof By Lemma 5 and (6),

$$A_{d-t-1}(C_{2p,n-t-1})\leq a\prod_{i=0}^{t}\frac{d-i}{n-i}<1.$$

Hence, $A_{d-t-1}(C_{2p,n-t-1})=0$, implying $d(C_{2p,n-t-1})\geq d-t$. ■

Corollary 7 *Suppose that t is a positive integer such that $m+t+1<n<p=2^m$ and $d(C_{2p,n})=d<n/2$. If $C_{2p,n-t-1}$ is a sub-code obtained by deleting $(t+1)$ columns of $C_{2p,n}$ using Algorithm 1 and*

$$p-1<\prod_{i=0}^{t}\frac{n-i}{d-i}, \tag{7}$$

then $d(C_{2p,n-t-1})\geq d-t$.

Proof Because $A_0(C_{2p,n})=A_n(C_{2p,n})=1$, $A_d(C_{2p,n})=A_{n-d}(C_{2p,n})$, $0<d<n/2<n-d$, and $\sum_{z=0}^{n}A_z(C_{2p,n})=2p$, $A_d(C_{2p,n})\leq p-1$. By Theorem 6, $d(C_{2p,n-t-1})\geq d-t$. ■

Theorem 8 *If $C_{2p,n}$ is the sub-code constructed by Algorithm 1, z is a nonnegative integer, and*

$$p-1<\prod_{i=0}^{t_y}\frac{p-1-\sum_{1\leq j<y}(t_j+1)-i}{p/2-1-\sum_{1\leq j<y}t_j-i}$$

for all $1\leq y\leq z$, then $d(C_{2p,n-1-\sum_{1\leq j<z}(t_z+1)})\geq p/2-1-\sum_{1\leq j<z}t_z$.

Proof For $z=0$, because $d(C_{2p,p})=p/2$, we have $d(C_{2p,p-1})\geq p/2-1$. Then the result can be proved by performing induction on z and repeatedly applying Corollary 7. ■

Theorem 9 *If t is an integer such that*

$$\prod_{i=t+1}^{p/2}\left(1+\frac{1.5p}{i}\right)\geq(2p-2)\prod_{i=n+1}^{p}\left(1+\frac{1.5p}{i}\right),$$

then $d(C_{2p,n})\geq t+1$, where $C_{2p,n}$ is the sub-code constructed by Algorithm 2.

Proof Let $D = C_{2p,n_0}$, the sub-code obtained by deleting $p - n_0$ columns of $C_{2p,p}$. Since

$$\begin{aligned}
\sum_{j=1}^{n_0} \tilde{A}(D_{-j}) &= \sum_{j=1}^{n_0} \sum_{i=1}^{n_0-1} b_i A_i(D_{-j}) \\
&\leq \sum_{i=1}^{n_0-1} \{b_i A_i(D)(n_0 - i) + b_{i-1} A_i(D) i\} \\
&= \sum_{i=1}^{n_0-1} \left\{ b_i A_i(D)(n_0 - i) + \left(1 + \frac{1.5p}{i}\right) b_i A_i(D) i \right\} \\
&= \tilde{A}(D)(n_0 + 1.5p),
\end{aligned}$$

there exists a j such that

$$\tilde{A}(D_{-j}) \leq (1 + \frac{1.5p}{n_0})\tilde{A}(D).$$

Consequently,

$$\tilde{A}(C_{2p,n_0-1}) \leq \left(1 + \frac{1.5p}{n_0}\right) \tilde{A}(C_{2p,n_0}),$$

where C_{2p,n_0-1} is obtained by deleting a column of C_{2p,n_0} using Algorithm 2. Since $\tilde{A}(C_{2p,p}) = (2p-2)b_{p/2}$,

$$\begin{aligned}
\tilde{A}(C_{2p,n}) &\leq \tilde{A}(C_{2p,p}) \prod_{i=n+1}^{p} \left(1 + \frac{1.5p}{i}\right) \\
&= (2p-2)b_{p/2} \prod_{i=n+1}^{p} \left(1 + \frac{1.5p}{i}\right) \\
&= (2p-2)b_t \prod_{i=n+1}^{p} \left(1 + \frac{1.5p}{i}\right) \left\{ \prod_{i=t+1}^{p/2} \left(1 + \frac{1.5p}{i}\right) \right\}^{-1} \\
&\leq b_t,
\end{aligned}$$

which implies $d(C_{2p,n}) \geq t + 1$. ■

Corollary 10 *If $C_{2p,n}$ is the sub-code constructed by Algorithm 2, then*

$$d(C_{2p,n}) \geq \frac{p}{2} - \frac{2(p-n)}{3} - \frac{m}{2} - \frac{1}{2}.$$

Proof Since

$$(2p-2r)^2(p-3r)^3 \geq 4(p-r)^3(p-4r)^2 \geq (0.5p-2r)^2(2.5p-3r)^3 \quad (0 \leq r \leq \frac{p}{4}),$$

we have

$$\log \frac{2p-2r}{0.5p-2r} \geq \frac{3}{2} \log \frac{2.5p-3r}{p-3r} \quad (0 \leq r \leq \frac{p}{4}).$$

As a result, for any $r \in [0, p/4]$,

$$\begin{aligned}
&\frac{2}{3}\log\frac{1.5p+0.5p-2r-1}{0.5p-2r-1} \geq \log\frac{1.5p+p-3r}{p-3r},\\
&\frac{1}{3}\log\frac{1.5p+0.5p-2r-1}{0.5p-2r-1} + \frac{1}{3}\log\frac{1.5p+0.5p-2r-2}{0.5p-2r-2} \geq \log\frac{1.5p+p-3r-1}{p-3r-1},\\
&\frac{2}{3}\log\frac{1.5p+0.5p-2r-2}{0.5p-2r-2} \geq \log\frac{1.5p+p-3r-2}{p-3r-2}.
\end{aligned}$$

In addition, for any $r \in [0, p/2]$,

$$\frac{1}{2}\log\frac{1.5p+0.5p-r}{0.5p-r} \geq \log 2.$$

We have

$$\log(2p-2) < \log 2^{m+1} = (m+1)\log 2.$$

Therefore, letting $t = \lfloor p/2 - 2(p-n)/3 - m/2 - 1/2 \rfloor$, where $\lfloor x \rfloor$ denotes the largest integer no greater than x, we have

$$\prod_{i=t+1}^{p/2}\left(1+\frac{1.5p}{i}\right) \geq (2p-2)\prod_{i=n+1}^{p}\left(1+\frac{1.5p}{i}\right).$$

Therefore, according to Theorem 9,

$$d(C_{2p,n}) \geq t+1 \geq \frac{p}{2} - \frac{2(p-n)}{3} - \frac{m}{2} - \frac{1}{2},$$

which completes the proof. ■

Appendix B. Comparison with $UE(s^2)$-Optimal Designs

In this section, we compare the coherence of the $UE(s^2)$-optimal designs and the proposed sensing matrices. Since for given n and p, any n rows of the $p \times p$ Walsh Hadamard matrix form a $UE(s^2)$-optimal design, we construct 30 $UE(s^2)$-optimal designs by randomly selecting the n rows, compute the coherence for each of the 30 designs and use the median of the 30 coherence. The proposed sensing matrices are all constructed by Algorithm 1.

For $p = 256, 512, 1024, 2048$ and each n between $0.125p$ and $0.5p$, we plot the median coherence of the $UE(s^2)$-optimal designs and the coherence of the proposed sensing matrices in Figure 6 below. As shown in the figure, the coherence of the proposed sensing matrices is much smaller than the median coherence of the $UE(s^2)$-optimal designs for all p and n.

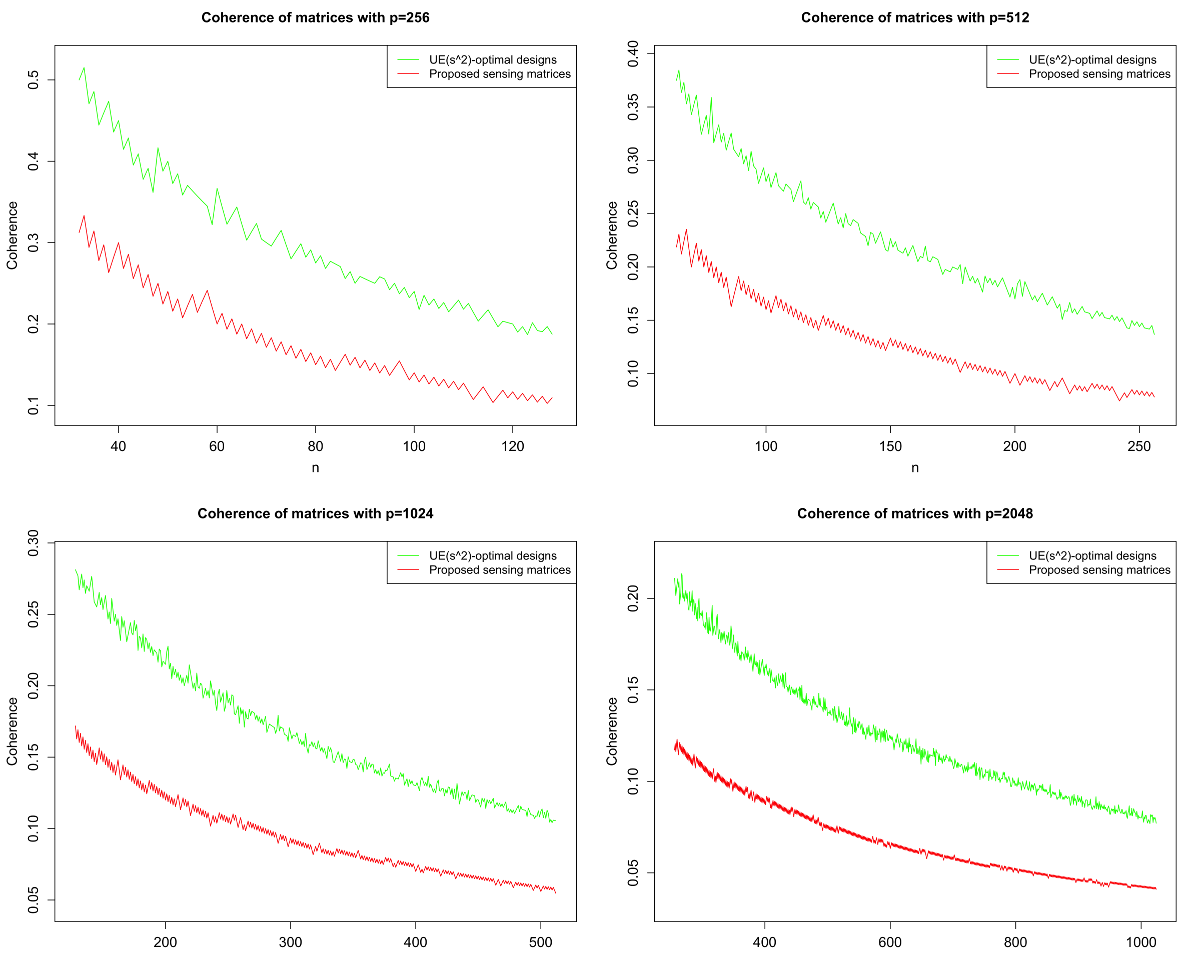


Figure 6: Coherence of the $UE(s^2)$-optimal designs and the proposed sensing matrices for $p = 256, 512, 1024, 2048$

References

Lorne Applebaum, Stephen D Howard, Stephen Searle, and Robert Calderbank. Chirp sensing codes: Deterministic compressed sensing measurements for fast recovery. *Applied and Computational Harmonic Analysis*, 26(2):283–290, 2009.

Richard Baraniuk, Mark Davenport, Ronald DeVore, and Michael Wakin. A simple proof of the restricted isometry property for random matrices. *Constructive Approximation*, 28 (3):253–263, 2008.

Thomas Blumensath and Mike E Davies. Iterative hard thresholding for compressed sensing. *Applied and Computational Harmonic Analysis*, 27(3):265–274, 2009.

Kathleen HV Booth and David R Cox. Some systematic supersaturated designs. *Technometrics*, 4(4):489–495, 1962.

Jean Bourgain, Stephen Dilworth, Kevin Ford, Sergei Konyagin, Denka Kutzarova, et al. Explicit constructions of rip matrices and related problems. *Duke Mathematical Journal*, 159(1):145–185, 2011.

Emmanuel J Candes and Terence Tao. Decoding by linear programming. *IEEE transactions on information theory*, 51(12):4203–4215, 2005.

Scott Shaobing Chen, David L Donoho, and Michael A Saunders. Atomic decomposition by basis pursuit. *SIAM Review*, 43(1):129–159, 2001.

Ching-Shui Cheng and Boxin Tang. Upper bounds on the number of columns in supersaturated designs. *Biometrika*, 88(4):1169–1174, 2001.

Lih-Yuan Deng and Dennis KJ Lin. Criteria for supersaturated designs. In *Proceedings of the Section on Physical and Engineering Sciences, American Statistical Association*, volume 124128, 1994.

Ronald A DeVore. Deterministic constructions of compressed sensing matrices. *Journal of Complexity*, 23(4-6):918–925, 2007.

JA Eccleston and A Hedayat. On the theory of connected designs: characterization and optimality. *The annals of statistics*, pages 1238–1255, 1974.

Yonina C Eldar and Gitta Kutyniok. *Compressed Sensing: Theory and Applications*. Cambridge University Press, 2012.

Valerii V Fedorov and Peter Hackl. *Model-Oriented Design of Experiments*, volume 125. Springer Science & Business Media, 2012.

Matthew Fickus, Dustin G Mixon, and Janet C Tremain. Steiner equiangular tight frames. *Linear algebra and its applications*, 436(5):1014–1027, 2012.

Mário AT Figueiredo, Robert D Nowak, and Stephen J Wright. Gradient Projection for Sparse Reconstruction: Application to Compressed Sensing and Other Inverse Problems. *IEEE Journal of Selected Topics in Signal Processing*, 1(4):586–597, 2007.

Jun Guo and Junli Liu. Deterministic construction of compressed sensing matrices based on semilattices. *Journal of Combinatorial Optimization*, 35(1):148–161, 2018.

A Samad Hedayat, Neil James Alexander Sloane, and John Stufken. *Orthogonal Arrays: Theory and Applications*. Springer Science & Business Media, 2012.

Stephen D Howard, A Robert Calderbank, and Stephen J Searle. A fast reconstruction algorithm for deterministic compressive sensing using second order reed-muller codes. In *2008 42nd Annual Conference on Information Sciences and Systems*, pages 11–15. IEEE, 2008.

Sina Jafarpour, Weiyu Xu, Babak Hassibi, and Robert Calderbank. Efficient compressed sensing using high-quality expander graphs. *Preprint*, 2008.

Bradley Jones and Dibyen Majumdar. Optimal supersaturated designs. *Journal of the American Statistical Association*, 109(508):1592–1600, 2014.

Bradley Jones, Dennis KJ Lin, and Christopher J Nachtsheim. Bayesian d-optimal supersaturated designs. *Journal of Statistical Planning and Inference*, 138(1):86–92, 2008.

Shuxing Li and Gennian Ge. Deterministic sensing matrices arising from near orthogonal systems. *IEEE Transactions on Information Theory*, 60(4):2291–2302, 2014.

Shuxing Li, Fei Gao, Gennian Ge, and Shengyuan Zhang. Deterministic construction of compressed sensing matrices via algebraic curves. *IEEE Transactions on Information Theory*, 58(8):5035–5041, 2012.

Dennis KJ Lin. A new class of supersaturated designs. *Technometrics*, 35(1):28–31, 1993.

Florence Jessie MacWilliams and Neil James Alexander Sloane. *The Theory of Error-Correcting Codes*, volume 16). Elsevier, 1977.

Simon Mak and Yao Xie. Maximum entropy low-rank matrix recovery. *IEEE Journal of Selected Topics in Signal Processing*, 12(5):886–901, 2018.

Farzad Parvaresh and Alexander Vardy. Correcting errors beyond the guruswami-sudan radius in polynomial time. In *46th Annual IEEE Symposium on Foundations of Computer Science (FOCS'05)*, pages 285–294. IEEE, 2005.

Yagyensh Chandra Pati, Ramin Rezaiifar, and Perinkulam Sambamurthy Krishnaprasad. Orthogonal matching pursuit: Recursive function approximation with applications to wavelet decomposition. In *Proceedings of 27th Asilomar conference on signals, systems and computers*, pages 40–44. IEEE, 1993.

Youran Qi and Peter Chien. Construction of supersaturated designs with small coherence for variable selection. *The New England Journal of Statistics in Data Science*, 1(3): 323–333, 2023.

KR Shah. Optimality criteria for incomplete block designs. *The Annals of Mathematical Statistics*, pages 791–794, 1960.

Thomas Strohmer and Robert Heath. Grassmannian frames with applications to coding and communication. *Applied and Computational Harmonic Analysis*, 14(3):257–275, 2003.

Mátyás A Sustik, Joel A Tropp, Inderjit S Dhillon, and Robert W Heath Jr. On the existence of equiangular tight frames. *Linear Algebra and its applications*, 426(2-3):619–635, 2007.

Boxin Tang and CFJ Wu. A method for constructing supersaturated designs and its es2 optimality. *Canadian Journal of Statistics*, 25(2):191–201, 1997.

Gang Wang, Min-Yao Niu, and Fang-Wei Fu. Deterministic constructions of compressed sensing matrices based on optimal codebooks and codes. *Applied Mathematics and Computation*, 343:128–136, 2019.

Ruye Wang. *Introduction to Orthogonal Transforms: With Applications in Data Processing and Analysis*. Cambridge University Press, 2012.

Lloyd Welch. Lower bounds on the maximum cross correlation of signals (corresp.). *IEEE Transactions on Information Theory*, 20(3):397–399, 1974.

CFJ Wu. Construction of supersaturated designs through partially aliased interactions. *Biometrika*, 80(3):661–669, 1993.

Henry P Wynn. Jack Kiefer's Contributions to Experimental Design. *The Annals of Statistics*, 12(2):416–423, 1984.

Hongquan Xu. Some nonregular designs from the nordstrom–robinson code and their statistical properties. *Biometrika*, 92(2):385–397, 2005.

Hongquan Xu and Alan Wong. Two-level nonregular designs from quaternary linear codes. *Statistica Sinica*, pages 1191–1213, 2007.

Nam Yul Yu and Na Zhao. Deterministic construction of real-valued ternary sensing matrices using optical orthogonal codes. *IEEE Signal Processing Letters*, 20(11):1106–1109, 2013.

Journal of Machine Learning Research 25 (2024) 1-49 Submitted 7/22; Published 9/24

Supplementary of A Statistical Experimental Design Method for Constructing Deterministic Sensing Matrices for Compressed Sensing

Youran Qi yqi28@wisc.edu
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Xu He hexu@amss.ac.cn
Academy of Mathematics and Systems Science
Chinese Academy of Sciences
Beijing, 100190, China

Tzu-Hsiang Hung thung6@wisc.edu
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Peter Chien peter.chien@wisc.edu
Department of Statistics
University of Wisconsin-Madison
Madison, WI 53706, USA

Editor: Ji Zhu

Coherence of the Sensing Matrices Constructed by Algorithm 1 for $p =$ 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192, 16384 and Many Values of n

Table 1: Coherence for $p = 32$ and $5 \le n \le 32$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
32	0.0000	25	0.2000	18	0.3333	11	0.4545
31	0.0323	24	0.1667	17	0.2941	10	0.4000
30	0.0667	23	0.2174	16	0.2500	9	0.5556
29	0.1034	22	0.1818	15	0.3333	8	0.5000
28	0.1429	21	0.2381	14	0.2857	7	0.7143
27	0.1852	20	0.2000	13	0.3846	6	0.6667
26	0.1538	19	0.2632	12	0.3333	5	1.0000

Table 2: Coherence for $p = 64$ and $10 \leq n \leq 64$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
64	0.0000	53	0.1321	42	0.1429	31	0.2258	20	0.3000
63	0.0159	52	0.1154	41	0.1707	30	0.2667	19	0.3684
62	0.0323	51	0.0980	40	0.2000	29	0.2414	18	0.3333
61	0.0492	50	0.1200	39	0.1795	28	0.2143	17	0.4118
60	0.0667	49	0.1429	38	0.1579	27	0.1852	16	0.3750
59	0.0847	48	0.1250	37	0.1892	26	0.2308	15	0.4667
58	0.1034	47	0.1489	36	0.2222	25	0.2800	14	0.4286
57	0.0877	46	0.1304	35	0.2000	24	0.2500	13	0.3846
56	0.0714	45	0.1111	34	0.1765	23	0.3043	12	0.5000
55	0.0909	44	0.1364	33	0.2121	22	0.2727	11	0.4545
54	0.1111	43	0.1628	32	0.2500	21	0.2381	10	0.6000

Table 3: Coherence for $p = 128$ and $9 \leq n \leq 128$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
128	0.0000	104	0.0769	80	0.1250	56	0.1786	32	0.2500
127	0.0079	103	0.0874	79	0.1139	55	0.1636	31	0.2903
126	0.0159	102	0.0784	78	0.1282	54	0.1852	30	0.2667
125	0.0240	101	0.0891	77	0.1169	53	0.1698	29	0.3103
124	0.0323	100	0.0800	76	0.1316	52	0.1923	28	0.2857
123	0.0407	99	0.0909	75	0.1200	51	0.1765	27	0.3333
122	0.0492	98	0.0816	74	0.1351	50	0.2000	26	0.3077
121	0.0579	97	0.0928	73	0.1233	49	0.1837	25	0.3600
120	0.0500	96	0.0833	72	0.1389	48	0.2083	24	0.3333
119	0.0588	95	0.0947	71	0.1268	47	0.1915	23	0.3913
118	0.0508	94	0.0851	70	0.1429	46	0.2174	22	0.3636
117	0.0598	93	0.0968	69	0.1304	45	0.2000	21	0.3333
116	0.0517	92	0.0870	68	0.1471	44	0.2273	20	0.4000
115	0.0609	91	0.0989	67	0.1343	43	0.2093	19	0.3684
114	0.0526	90	0.0889	66	0.1515	42	0.1905	18	0.4444
113	0.0619	89	0.1011	65	0.1385	41	0.2195	17	0.4118
112	0.0714	88	0.0909	64	0.1562	40	0.2500	16	0.5000
111	0.0631	87	0.1034	63	0.1429	39	0.2308	15	0.4667
110	0.0545	86	0.1163	62	0.1613	38	0.2632	14	0.4286
109	0.0642	85	0.1059	61	0.1475	37	0.2432	13	0.5385
108	0.0741	84	0.0952	60	0.1667	36	0.2222	12	0.5000
107	0.0654	83	0.1084	59	0.1525	35	0.2571	11	0.6364
106	0.0566	82	0.1220	58	0.1724	34	0.2353	10	0.6000
105	0.0667	81	0.1111	57	0.1579	33	0.2727	9	0.7778

Table 4: Coherence for $p = 256$ and $12 \leq n \leq 256$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
256	0.0000	207	0.0531	158	0.0886	109	0.1193	60	0.2000
255	0.0039	206	0.0583	157	0.0828	108	0.1296	59	0.2203
254	0.0079	205	0.0537	156	0.0897	107	0.1215	58	0.2414
253	0.0119	204	0.0588	155	0.0839	106	0.1321	57	0.2281
252	0.0159	203	0.0542	154	0.0909	105	0.1238	56	0.2143
251	0.0199	202	0.0594	153	0.0850	104	0.1346	55	0.2364
250	0.0240	201	0.0547	152	0.0921	103	0.1262	54	0.2222
249	0.0281	200	0.0600	151	0.0861	102	0.1373	53	0.2075
248	0.0323	199	0.0553	150	0.0933	101	0.1287	52	0.2308
247	0.0283	198	0.0505	149	0.1007	100	0.1400	51	0.2157
246	0.0244	197	0.0558	148	0.0946	99	0.1313	50	0.2400
245	0.0286	196	0.0612	147	0.0884	98	0.1429	49	0.2245
244	0.0328	195	0.0667	146	0.0959	97	0.1546	48	0.2500
243	0.0370	194	0.0619	145	0.0897	96	0.1458	47	0.2340
242	0.0331	193	0.0674	144	0.0972	95	0.1368	46	0.2609
241	0.0290	192	0.0625	143	0.0909	94	0.1489	45	0.2444
240	0.0333	191	0.0681	142	0.0986	93	0.1398	44	0.2727
239	0.0377	190	0.0632	141	0.0922	92	0.1522	43	0.2558
238	0.0336	189	0.0688	140	0.1000	91	0.1429	42	0.2857
237	0.0295	188	0.0638	139	0.0935	90	0.1556	41	0.2683
236	0.0339	187	0.0695	138	0.1014	89	0.1461	40	0.3000
235	0.0383	186	0.0645	137	0.0949	88	0.1591	39	0.2821
234	0.0427	185	0.0703	136	0.1029	87	0.1494	38	0.2632
233	0.0386	184	0.0652	135	0.0963	86	0.1628	37	0.2973
232	0.0345	183	0.0710	134	0.1045	85	0.1529	36	0.2778
231	0.0390	182	0.0659	133	0.0977	84	0.1429	35	0.3143
230	0.0435	181	0.0718	132	0.1061	83	0.1566	34	0.2941
229	0.0393	180	0.0667	131	0.0992	82	0.1463	33	0.3333
228	0.0351	179	0.0726	130	0.1077	81	0.1605	32	0.3125
227	0.0396	178	0.0674	129	0.1008	80	0.1500	31	0.3548
226	0.0442	177	0.0734	128	0.1094	79	0.1646	30	0.3333
225	0.0400	176	0.0682	127	0.1024	78	0.1538	29	0.3103
224	0.0357	175	0.0743	126	0.1111	77	0.1688	28	0.3571
223	0.0404	174	0.0805	125	0.1040	76	0.1579	27	0.3333
222	0.0450	173	0.0751	124	0.1129	75	0.1733	26	0.3846
221	0.0498	172	0.0698	123	0.1057	74	0.1622	25	0.3600
220	0.0455	171	0.0760	122	0.1148	73	0.1781	24	0.4167
219	0.0502	170	0.0824	121	0.1074	72	0.1667	23	0.3913
218	0.0459	169	0.0769	120	0.1167	71	0.1831	22	0.4545
217	0.0507	168	0.0714	119	0.1092	70	0.1714	21	0.4286
216	0.0463	167	0.0778	118	0.1186	69	0.1884	20	0.4000
215	0.0512	166	0.0843	117	0.1111	68	0.1765	19	0.4737
214	0.0467	165	0.0788	116	0.1034	67	0.1940	18	0.4444
213	0.0516	164	0.0854	115	0.1130	66	0.1818	17	0.5294
212	0.0566	163	0.0798	114	0.1228	65	0.2000	16	0.5000
211	0.0521	162	0.0864	113	0.1150	64	0.1875	15	0.6000
210	0.0571	161	0.0807	112	0.1071	63	0.2063	14	0.5714
209	0.0526	160	0.0875	111	0.1171	62	0.1935	13	0.6923
208	0.0577	159	0.0818	110	0.1273	61	0.2131	12	0.6667

Table 5: Coherence for $p = 512$ and $253 \leq n \leq 512$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
512	0.0000	460	0.0261	408	0.0392	356	0.0506	304	0.0658
511	0.0020	459	0.0283	407	0.0418	355	0.0535	303	0.0627
510	0.0039	458	0.0306	406	0.0394	354	0.0508	302	0.0596
509	0.0059	457	0.0284	405	0.0420	353	0.0538	301	0.0631
508	0.0079	456	0.0307	404	0.0396	352	0.0511	300	0.0667
507	0.0099	455	0.0286	403	0.0422	351	0.0541	299	0.0702
506	0.0119	454	0.0308	402	0.0448	350	0.0514	298	0.0671
505	0.0139	453	0.0287	401	0.0424	349	0.0544	297	0.0707
504	0.0159	452	0.0265	400	0.0400	348	0.0517	296	0.0676
503	0.0179	451	0.0288	399	0.0426	347	0.0548	295	0.0644
502	0.0159	450	0.0311	398	0.0452	346	0.0520	294	0.0612
501	0.0180	449	0.0334	397	0.0428	345	0.0551	293	0.0648
500	0.0160	448	0.0312	396	0.0455	344	0.0523	292	0.0685
499	0.0180	447	0.0336	395	0.0430	343	0.0554	291	0.0722
498	0.0201	446	0.0314	394	0.0457	342	0.0526	290	0.0690
497	0.0181	445	0.0337	393	0.0433	341	0.0557	289	0.0657
496	0.0161	444	0.0315	392	0.0459	340	0.0529	288	0.0694
495	0.0182	443	0.0339	391	0.0435	339	0.0560	287	0.0732
494	0.0202	442	0.0317	390	0.0462	338	0.0533	286	0.0699
493	0.0223	441	0.0340	389	0.0437	337	0.0564	285	0.0667
492	0.0203	440	0.0318	388	0.0412	336	0.0595	284	0.0704
491	0.0183	439	0.0342	387	0.0439	335	0.0567	283	0.0742
490	0.0204	438	0.0320	386	0.0466	334	0.0539	282	0.0709
489	0.0225	437	0.0343	385	0.0442	333	0.0571	281	0.0747
488	0.0205	436	0.0367	384	0.0417	332	0.0602	280	0.0714
487	0.0226	435	0.0345	383	0.0444	331	0.0574	279	0.0753
486	0.0206	434	0.0323	382	0.0471	330	0.0606	278	0.0719
485	0.0227	433	0.0346	381	0.0446	329	0.0578	277	0.0758
484	0.0248	432	0.0370	380	0.0421	328	0.0549	276	0.0725
483	0.0228	431	0.0348	379	0.0449	327	0.0581	275	0.0764
482	0.0207	430	0.0326	378	0.0476	326	0.0613	274	0.0730
481	0.0229	429	0.0350	377	0.0504	325	0.0585	273	0.0769
480	0.0250	428	0.0374	376	0.0479	324	0.0617	272	0.0735
479	0.0230	427	0.0351	375	0.0453	323	0.0588	271	0.0775
478	0.0209	426	0.0329	374	0.0481	322	0.0621	270	0.0741
477	0.0231	425	0.0353	373	0.0456	321	0.0592	269	0.0781
476	0.0252	424	0.0377	372	0.0430	320	0.0625	268	0.0746
475	0.0232	423	0.0355	371	0.0458	319	0.0596	267	0.0787
474	0.0211	422	0.0379	370	0.0486	318	0.0629	266	0.0752
473	0.0233	421	0.0356	369	0.0515	317	0.0599	265	0.0792
472	0.0254	420	0.0381	368	0.0489	316	0.0633	264	0.0758
471	0.0276	419	0.0358	367	0.0463	315	0.0603	263	0.0798
470	0.0255	418	0.0335	366	0.0492	314	0.0573	262	0.0763
469	0.0277	417	0.0360	365	0.0521	313	0.0607	261	0.0805
468	0.0256	416	0.0385	364	0.0495	312	0.0641	260	0.0769
467	0.0278	415	0.0410	363	0.0523	311	0.0675	259	0.0811
466	0.0258	414	0.0386	362	0.0497	310	0.0645	258	0.0775
465	0.0280	413	0.0412	361	0.0526	309	0.0680	257	0.0817
464	0.0259	412	0.0388	360	0.0500	308	0.0649	256	0.0781
463	0.0281	411	0.0414	359	0.0529	307	0.0684	255	0.0824
462	0.0260	410	0.0390	358	0.0503	306	0.0654	254	0.0787
461	0.0282	409	0.0416	357	0.0532	305	0.0623	253	0.0830

Table 6: Coherence for $p = 512$ and $13 \leq n \leq 252$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
252	0.0794	204	0.0980	156	0.1282	108	0.1667	60	0.2333
251	0.0837	203	0.0936	155	0.1226	107	0.1589	59	0.2542
250	0.0800	202	0.0891	154	0.1299	106	0.1698	58	0.2414
249	0.0843	201	0.0945	153	0.1242	105	0.1619	57	0.2632
248	0.0806	200	0.1000	152	0.1316	104	0.1731	56	0.2500
247	0.0850	199	0.0955	151	0.1258	103	0.1650	55	0.2727
246	0.0813	198	0.0909	150	0.1333	102	0.1569	54	0.2593
245	0.0776	197	0.0964	149	0.1275	101	0.1683	53	0.2830
244	0.0820	196	0.1020	148	0.1216	100	0.1600	52	0.2692
243	0.0782	195	0.0974	147	0.1293	99	0.1717	51	0.2941
242	0.0744	194	0.1031	146	0.1233	98	0.1633	50	0.2800
241	0.0788	193	0.0984	145	0.1310	97	0.1753	49	0.2653
240	0.0833	192	0.1042	144	0.1250	96	0.1667	48	0.2917
239	0.0879	191	0.0995	143	0.1329	95	0.1789	47	0.2766
238	0.0840	190	0.1053	142	0.1268	94	0.1702	46	0.3043
237	0.0886	189	0.1005	141	0.1348	93	0.1828	45	0.2889
236	0.0847	188	0.1064	140	0.1286	92	0.1739	44	0.3182
235	0.0894	187	0.1016	139	0.1367	91	0.1868	43	0.3023
234	0.0855	186	0.1075	138	0.1304	90	0.1778	42	0.2857
233	0.0901	185	0.1027	137	0.1387	89	0.1910	41	0.3171
232	0.0862	184	0.1087	136	0.1324	88	0.1818	40	0.3000
231	0.0909	183	0.1038	135	0.1407	87	0.1724	39	0.3333
230	0.0870	182	0.1099	134	0.1343	86	0.1628	38	0.3158
229	0.0830	181	0.1050	133	0.1429	85	0.1765	37	0.2973
228	0.0877	180	0.1111	132	0.1364	84	0.1905	36	0.3333
227	0.0837	179	0.1061	131	0.1450	83	0.1807	35	0.3143
226	0.0885	178	0.1011	130	0.1385	82	0.1951	34	0.3529
225	0.0844	177	0.1073	129	0.1473	81	0.1852	33	0.3333
224	0.0893	176	0.1136	128	0.1406	80	0.2000	32	0.3750
223	0.0852	175	0.1086	127	0.1496	79	0.1899	31	0.3548
222	0.0811	174	0.1149	126	0.1429	78	0.2051	30	0.4000
221	0.0860	173	0.1098	125	0.1520	77	0.1948	29	0.3793
220	0.0909	172	0.1163	124	0.1452	76	0.2105	28	0.4286
219	0.0959	171	0.1111	123	0.1545	75	0.2000	27	0.4074
218	0.0917	170	0.1176	122	0.1475	74	0.2162	26	0.3846
217	0.0876	169	0.1124	121	0.1405	73	0.2055	25	0.4400
216	0.0926	168	0.1190	120	0.1500	72	0.2222	24	0.4167
215	0.0884	167	0.1138	119	0.1429	71	0.2113	23	0.4783
214	0.0841	166	0.1205	118	0.1525	70	0.2000	22	0.4545
213	0.0892	165	0.1152	117	0.1453	69	0.2174	21	0.5238
212	0.0943	164	0.1220	116	0.1552	68	0.2353	20	0.5000
211	0.0900	163	0.1166	115	0.1478	67	0.2239	19	0.5789
210	0.0952	162	0.1235	114	0.1579	66	0.2121	18	0.5556
209	0.0909	161	0.1180	113	0.1504	65	0.2308	17	0.5294
208	0.0962	160	0.1250	112	0.1607	64	0.2188	16	0.6250
207	0.0918	159	0.1195	111	0.1532	63	0.2381	15	0.6000
206	0.0971	158	0.1266	110	0.1636	62	0.2258	14	0.7143
205	0.0927	157	0.1210	109	0.1560	61	0.2459	13	0.6923

Table 7: Coherence for $p = 1024$ and $765 \leq n \leq 1024$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1024	0.0000	972	0.0165	920	0.0217	868	0.0230	816	0.0294
1023	0.0010	971	0.0154	919	0.0207	867	0.0242	815	0.0282
1022	0.0020	970	0.0165	918	0.0196	866	0.0254	814	0.0295
1021	0.0029	969	0.0155	917	0.0207	865	0.0266	813	0.0283
1020	0.0039	968	0.0165	916	0.0218	864	0.0255	812	0.0296
1019	0.0049	967	0.0155	915	0.0208	863	0.0267	811	0.0284
1018	0.0059	966	0.0166	914	0.0197	862	0.0255	810	0.0272
1017	0.0069	965	0.0155	913	0.0208	861	0.0267	809	0.0284
1016	0.0079	964	0.0166	912	0.0219	860	0.0256	808	0.0297
1015	0.0089	963	0.0156	911	0.0231	859	0.0268	807	0.0310
1014	0.0099	962	0.0146	910	0.0220	858	0.0256	806	0.0298
1013	0.0089	961	0.0156	909	0.0231	857	0.0268	805	0.0311
1012	0.0079	960	0.0167	908	0.0220	856	0.0257	804	0.0299
1011	0.0089	959	0.0177	907	0.0232	855	0.0269	803	0.0311
1010	0.0099	958	0.0167	906	0.0221	854	0.0258	802	0.0299
1009	0.0109	957	0.0178	905	0.0232	853	0.0270	801	0.0312
1008	0.0099	956	0.0167	904	0.0221	852	0.0258	800	0.0300
1007	0.0089	955	0.0178	903	0.0233	851	0.0270	799	0.0313
1006	0.0099	954	0.0168	902	0.0222	850	0.0259	798	0.0301
1005	0.0109	953	0.0178	901	0.0233	849	0.0271	797	0.0314
1004	0.0120	952	0.0168	900	0.0222	848	0.0259	796	0.0302
1003	0.0110	951	0.0179	899	0.0234	847	0.0272	795	0.0314
1002	0.0100	950	0.0168	898	0.0245	846	0.0260	794	0.0302
1001	0.0090	949	0.0179	897	0.0234	845	0.0272	793	0.0315
1000	0.0100	948	0.0169	896	0.0223	844	0.0261	792	0.0303
999	0.0110	947	0.0180	895	0.0235	843	0.0273	791	0.0316
998	0.0100	946	0.0190	894	0.0224	842	0.0261	790	0.0304
997	0.0110	945	0.0180	893	0.0235	841	0.0273	789	0.0317
996	0.0120	944	0.0169	892	0.0224	840	0.0262	788	0.0305
995	0.0131	943	0.0180	891	0.0236	839	0.0274	787	0.0318
994	0.0141	942	0.0191	890	0.0247	838	0.0263	786	0.0305
993	0.0131	941	0.0181	889	0.0236	837	0.0275	785	0.0318
992	0.0121	940	0.0170	888	0.0225	836	0.0263	784	0.0306
991	0.0131	939	0.0181	887	0.0237	835	0.0275	783	0.0319
990	0.0141	938	0.0192	886	0.0248	834	0.0264	782	0.0307
989	0.0131	937	0.0203	885	0.0237	833	0.0276	781	0.0320
988	0.0121	936	0.0192	884	0.0226	832	0.0288	780	0.0308
987	0.0132	935	0.0203	883	0.0238	831	0.0277	779	0.0321
986	0.0142	934	0.0193	882	0.0249	830	0.0289	778	0.0334
985	0.0152	933	0.0204	881	0.0238	829	0.0277	777	0.0322
984	0.0142	932	0.0193	880	0.0227	828	0.0290	776	0.0309
983	0.0132	931	0.0204	879	0.0239	827	0.0278	775	0.0323
982	0.0143	930	0.0194	878	0.0251	826	0.0266	774	0.0310
981	0.0153	929	0.0205	877	0.0262	825	0.0279	773	0.0323
980	0.0143	928	0.0194	876	0.0251	824	0.0291	772	0.0311
979	0.0153	927	0.0205	875	0.0240	823	0.0279	771	0.0324
978	0.0143	926	0.0194	874	0.0252	822	0.0268	770	0.0338
977	0.0154	925	0.0205	873	0.0263	821	0.0280	769	0.0325
976	0.0143	924	0.0216	872	0.0252	820	0.0293	768	0.0312
975	0.0154	923	0.0206	871	0.0264	819	0.0281	767	0.0326
974	0.0144	922	0.0195	870	0.0253	818	0.0269	766	0.0339
973	0.0154	921	0.0206	869	0.0242	817	0.0282	765	0.0327

Table 8: Coherence for $p = 1024$ and $505 \leq n \leq 764$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
764	0.0340	712	0.0365	660	0.0424	608	0.0461	556	0.0504
763	0.0328	711	0.0380	659	0.0410	607	0.0478	555	0.0523
762	0.0341	710	0.0366	658	0.0426	606	0.0462	554	0.0505
761	0.0329	709	0.0381	657	0.0411	605	0.0479	553	0.0524
760	0.0316	708	0.0395	656	0.0427	604	0.0464	552	0.0507
759	0.0329	707	0.0382	655	0.0412	603	0.0481	551	0.0526
758	0.0343	706	0.0368	654	0.0398	602	0.0465	550	0.0545
757	0.0330	705	0.0383	653	0.0413	601	0.0483	549	0.0528
756	0.0344	704	0.0398	652	0.0429	600	0.0467	548	0.0511
755	0.0331	703	0.0384	651	0.0445	599	0.0484	547	0.0530
754	0.0345	702	0.0370	650	0.0431	598	0.0468	546	0.0513
753	0.0359	701	0.0385	649	0.0447	597	0.0486	545	0.0532
752	0.0346	700	0.0400	648	0.0432	596	0.0470	544	0.0515
751	0.0360	699	0.0386	647	0.0448	595	0.0487	543	0.0534
750	0.0347	698	0.0401	646	0.0433	594	0.0505	542	0.0517
749	0.0360	697	0.0387	645	0.0450	593	0.0489	541	0.0536
748	0.0348	696	0.0402	644	0.0435	592	0.0473	540	0.0519
747	0.0335	695	0.0388	643	0.0451	591	0.0491	539	0.0538
746	0.0349	694	0.0375	642	0.0436	590	0.0475	538	0.0520
745	0.0362	693	0.0390	641	0.0452	589	0.0492	537	0.0540
744	0.0349	692	0.0405	640	0.0437	588	0.0476	536	0.0522
743	0.0363	691	0.0391	639	0.0454	587	0.0494	535	0.0542
742	0.0350	690	0.0406	638	0.0439	586	0.0478	534	0.0524
741	0.0364	689	0.0392	637	0.0455	585	0.0496	533	0.0544
740	0.0351	688	0.0407	636	0.0440	584	0.0479	532	0.0526
739	0.0365	687	0.0393	635	0.0457	583	0.0497	531	0.0546
738	0.0352	686	0.0379	634	0.0442	582	0.0481	530	0.0566
737	0.0366	685	0.0394	633	0.0458	581	0.0499	529	0.0548
736	0.0353	684	0.0409	632	0.0443	580	0.0483	528	0.0530
735	0.0367	683	0.0395	631	0.0460	579	0.0501	527	0.0550
734	0.0354	682	0.0411	630	0.0444	578	0.0484	526	0.0570
733	0.0368	681	0.0396	629	0.0461	577	0.0503	525	0.0552
732	0.0355	680	0.0412	628	0.0446	576	0.0486	524	0.0573
731	0.0369	679	0.0398	627	0.0463	575	0.0504	523	0.0554
730	0.0356	678	0.0383	626	0.0447	574	0.0488	522	0.0575
729	0.0370	677	0.0399	625	0.0464	573	0.0506	521	0.0557
728	0.0357	676	0.0414	624	0.0449	572	0.0490	520	0.0577
727	0.0371	675	0.0400	623	0.0465	571	0.0508	519	0.0559
726	0.0358	674	0.0386	622	0.0450	570	0.0491	518	0.0579
725	0.0372	673	0.0401	621	0.0467	569	0.0510	517	0.0561
724	0.0359	672	0.0417	620	0.0452	568	0.0493	516	0.0581
723	0.0373	671	0.0402	619	0.0468	567	0.0511	515	0.0563
722	0.0360	670	0.0418	618	0.0453	566	0.0495	514	0.0584
721	0.0374	669	0.0404	617	0.0470	565	0.0513	513	0.0565
720	0.0361	668	0.0419	616	0.0455	564	0.0496	512	0.0547
719	0.0376	667	0.0405	615	0.0472	563	0.0515	511	0.0568
718	0.0362	666	0.0390	614	0.0456	562	0.0498	510	0.0588
717	0.0377	665	0.0406	613	0.0473	561	0.0517	509	0.0570
716	0.0363	664	0.0422	612	0.0458	560	0.0500	508	0.0591
715	0.0378	663	0.0407	611	0.0475	559	0.0519	507	0.0572
714	0.0364	662	0.0423	610	0.0459	558	0.0502	506	0.0593
713	0.0379	661	0.0408	609	0.0476	557	0.0521	505	0.0574

Table 9: Coherence for $p = 1024$ and $245 \leq n \leq 504$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
504	0.0595	452	0.0664	400	0.0700	348	0.0805	296	0.0946
503	0.0577	451	0.0643	399	0.0727	347	0.0836	295	0.0915
502	0.0598	450	0.0667	398	0.0754	346	0.0809	294	0.0952
501	0.0579	449	0.0646	397	0.0730	345	0.0841	293	0.0922
500	0.0560	448	0.0670	396	0.0758	344	0.0814	292	0.0959
499	0.0581	447	0.0649	395	0.0734	343	0.0845	291	0.0928
498	0.0602	446	0.0673	394	0.0761	342	0.0819	290	0.0897
497	0.0584	445	0.0652	393	0.0738	341	0.0850	289	0.0934
496	0.0605	444	0.0676	392	0.0765	340	0.0824	288	0.0972
495	0.0586	443	0.0655	391	0.0742	339	0.0855	287	0.0941
494	0.0567	442	0.0679	390	0.0769	338	0.0828	286	0.0979
493	0.0588	441	0.0658	389	0.0746	337	0.0861	285	0.0947
492	0.0610	440	0.0682	388	0.0773	336	0.0833	284	0.0986
491	0.0591	439	0.0661	387	0.0749	335	0.0806	283	0.0954
490	0.0612	438	0.0685	386	0.0777	334	0.0838	282	0.0993
489	0.0593	437	0.0664	385	0.0753	333	0.0811	281	0.0961
488	0.0615	436	0.0688	384	0.0729	332	0.0843	280	0.1000
487	0.0595	435	0.0667	383	0.0757	331	0.0816	279	0.0968
486	0.0617	434	0.0691	382	0.0733	330	0.0848	278	0.1007
485	0.0598	433	0.0670	381	0.0761	329	0.0821	277	0.0975
484	0.0620	432	0.0648	380	0.0789	328	0.0854	276	0.1014
483	0.0600	431	0.0673	379	0.0765	327	0.0826	275	0.0982
482	0.0622	430	0.0698	378	0.0794	326	0.0859	274	0.1022
481	0.0603	429	0.0676	377	0.0769	325	0.0831	273	0.0989
480	0.0625	428	0.0701	376	0.0798	324	0.0864	272	0.1029
479	0.0605	427	0.0679	375	0.0773	323	0.0898	271	0.0996
478	0.0586	426	0.0704	374	0.0749	322	0.0870	270	0.1037
477	0.0608	425	0.0682	373	0.0777	321	0.0841	269	0.1004
476	0.0630	424	0.0708	372	0.0753	320	0.0875	268	0.1045
475	0.0611	423	0.0686	371	0.0782	319	0.0846	267	0.1011
474	0.0633	422	0.0711	370	0.0757	318	0.0818	266	0.1053
473	0.0613	421	0.0689	369	0.0786	317	0.0852	265	0.1019
472	0.0636	420	0.0667	368	0.0761	316	0.0886	264	0.0985
471	0.0616	419	0.0692	367	0.0790	315	0.0857	263	0.1027
470	0.0638	418	0.0718	366	0.0765	314	0.0892	262	0.0992
469	0.0618	417	0.0695	365	0.0795	313	0.0863	261	0.1034
468	0.0598	416	0.0721	364	0.0769	312	0.0897	260	0.1077
467	0.0621	415	0.0699	363	0.0799	311	0.0868	259	0.1042
466	0.0644	414	0.0725	362	0.0773	310	0.0903	258	0.1008
465	0.0624	413	0.0702	361	0.0803	309	0.0874	257	0.1051
464	0.0603	412	0.0728	360	0.0778	308	0.0909	256	0.1094
463	0.0626	411	0.0706	359	0.0808	307	0.0879	255	0.1059
462	0.0649	410	0.0732	358	0.0782	306	0.0915	254	0.1102
461	0.0629	409	0.0709	357	0.0812	305	0.0885	253	0.1067
460	0.0652	408	0.0735	356	0.0787	304	0.0921	252	0.1032
459	0.0632	407	0.0713	355	0.0817	303	0.0891	251	0.1076
458	0.0655	406	0.0690	354	0.0847	302	0.0927	250	0.1040
457	0.0635	405	0.0716	353	0.0822	301	0.0897	249	0.1084
456	0.0658	404	0.0693	352	0.0795	300	0.0933	248	0.1048
455	0.0637	403	0.0720	351	0.0826	299	0.0903	247	0.1093
454	0.0661	402	0.0746	350	0.0800	298	0.0872	246	0.1057
453	0.0640	401	0.0723	349	0.0831	297	0.0909	245	0.1102

Table 10: Coherence for $p = 1024$ and $10 \leq n \leq 244$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
244	0.1066	197	0.1269	150	0.1467	103	0.2039	56	0.2857
243	0.1111	196	0.1224	149	0.1544	102	0.1961	55	0.2727
242	0.1074	195	0.1282	148	0.1486	101	0.2079	54	0.2963
241	0.1037	194	0.1237	147	0.1565	100	0.2000	53	0.2830
240	0.1083	193	0.1295	146	0.1507	99	0.1919	52	0.3077
239	0.1046	192	0.1250	145	0.1448	98	0.2041	51	0.2941
238	0.1092	191	0.1309	144	0.1528	97	0.1959	50	0.3200
237	0.1055	190	0.1263	143	0.1469	96	0.2083	49	0.3061
236	0.1017	189	0.1323	142	0.1549	95	0.2000	48	0.2917
235	0.1064	188	0.1277	141	0.1489	94	0.2128	47	0.3191
234	0.1111	187	0.1337	140	0.1571	93	0.2043	46	0.3043
233	0.1073	186	0.1290	139	0.1511	92	0.2174	45	0.3333
232	0.1121	185	0.1243	138	0.1594	91	0.2088	44	0.3182
231	0.1082	184	0.1304	137	0.1533	90	0.2222	43	0.3488
230	0.1130	183	0.1257	136	0.1618	89	0.2135	42	0.3333
229	0.1092	182	0.1319	135	0.1556	88	0.2273	41	0.3659
228	0.1140	181	0.1271	134	0.1642	87	0.2184	40	0.3500
227	0.1101	180	0.1333	133	0.1579	86	0.2326	39	0.3846
226	0.1150	179	0.1285	132	0.1667	85	0.2235	38	0.3684
225	0.1111	178	0.1348	131	0.1603	84	0.2143	37	0.3514
224	0.1161	177	0.1299	130	0.1692	83	0.2289	36	0.3889
223	0.1121	176	0.1364	129	0.1628	82	0.2195	35	0.3714
222	0.1171	175	0.1314	128	0.1719	81	0.2346	34	0.4118
221	0.1131	174	0.1379	127	0.1654	80	0.2250	33	0.3939
220	0.1091	173	0.1329	126	0.1746	79	0.2405	32	0.4375
219	0.1142	172	0.1395	125	0.1680	78	0.2308	31	0.4194
218	0.1193	171	0.1345	124	0.1613	77	0.2468	30	0.4000
217	0.1152	170	0.1412	123	0.1707	76	0.2368	29	0.4483
216	0.1204	169	0.1361	122	0.1803	75	0.2267	28	0.4286
215	0.1163	168	0.1429	121	0.1736	74	0.2432	27	0.4815
214	0.1215	167	0.1377	120	0.1833	73	0.2603	26	0.4615
213	0.1174	166	0.1446	119	0.1765	72	0.2500	25	0.5200
212	0.1132	165	0.1394	118	0.1695	71	0.2394	24	0.5000
211	0.1185	164	0.1341	117	0.1795	70	0.2571	23	0.4783
210	0.1238	163	0.1411	116	0.1724	69	0.2464	22	0.5455
209	0.1196	162	0.1481	115	0.1826	68	0.2647	21	0.5238
208	0.1154	161	0.1429	114	0.1754	67	0.2537	20	0.6000
207	0.1208	160	0.1375	113	0.1858	66	0.2424	19	0.5789
206	0.1165	159	0.1447	112	0.1786	65	0.2615	18	0.6667
205	0.1220	158	0.1392	111	0.1892	64	0.2500	17	0.6471
204	0.1176	157	0.1465	110	0.1818	63	0.2698	16	0.6250
203	0.1232	156	0.1410	109	0.1927	62	0.2581	15	0.7333
202	0.1188	155	0.1484	108	0.1852	61	0.2787	14	0.7143
201	0.1244	154	0.1429	107	0.1963	60	0.2667	13	0.8462
200	0.1200	153	0.1503	106	0.1887	59	0.2881	12	0.8333
199	0.1256	152	0.1447	105	0.2000	58	0.2759	11	0.8182
198	0.1212	151	0.1523	104	0.1923	57	0.2982	10	1.0000

Table 11: Coherence for $p = 2048$ and $1426 \leq n \leq 2048$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
2048	0.0000	1944	0.0113	1840	0.0152	1736	0.0184	1632	0.0208	1528	0.0249
2046	0.0010	1942	0.0113	1838	0.0152	1734	0.0185	1630	0.0221	1526	0.0249
2044	0.0020	1940	0.0113	1836	0.0153	1732	0.0185	1628	0.0221	1524	0.0249
2042	0.0029	1938	0.0114	1834	0.0153	1730	0.0185	1626	0.0221	1522	0.0250
2040	0.0039	1936	0.0103	1832	0.0153	1728	0.0185	1624	0.0222	1520	0.0250
2038	0.0049	1934	0.0114	1830	0.0153	1726	0.0185	1622	0.0222	1518	0.0250
2036	0.0049	1932	0.0114	1828	0.0153	1724	0.0186	1620	0.0222	1516	0.0251
2034	0.0049	1930	0.0114	1826	0.0153	1722	0.0186	1618	0.0222	1514	0.0251
2032	0.0059	1928	0.0114	1824	0.0154	1720	0.0186	1616	0.0223	1512	0.0251
2030	0.0049	1926	0.0114	1822	0.0154	1718	0.0186	1614	0.0223	1510	0.0252
2028	0.0059	1924	0.0114	1820	0.0154	1716	0.0186	1612	0.0223	1508	0.0252
2026	0.0059	1922	0.0114	1818	0.0154	1714	0.0187	1610	0.0211	1506	0.0252
2024	0.0059	1920	0.0115	1816	0.0154	1712	0.0187	1608	0.0224	1504	0.0253
2022	0.0059	1918	0.0115	1814	0.0165	1710	0.0199	1606	0.0212	1502	0.0253
2020	0.0059	1916	0.0125	1812	0.0166	1708	0.0199	1604	0.0224	1500	0.0253
2018	0.0069	1914	0.0125	1810	0.0166	1706	0.0199	1602	0.0225	1498	0.0254
2016	0.0060	1912	0.0126	1808	0.0166	1704	0.0200	1600	0.0225	1496	0.0254
2014	0.0070	1910	0.0126	1806	0.0166	1702	0.0200	1598	0.0225	1494	0.0254
2012	0.0080	1908	0.0126	1804	0.0166	1700	0.0200	1596	0.0226	1492	0.0255
2010	0.0070	1906	0.0126	1802	0.0166	1698	0.0200	1594	0.0226	1490	0.0255
2008	0.0080	1904	0.0126	1800	0.0156	1696	0.0200	1592	0.0226	1488	0.0255
2006	0.0070	1902	0.0126	1798	0.0167	1694	0.0201	1590	0.0226	1486	0.0256
2004	0.0080	1900	0.0126	1796	0.0167	1692	0.0189	1588	0.0227	1484	0.0256
2002	0.0080	1898	0.0126	1794	0.0167	1690	0.0201	1586	0.0227	1482	0.0256
2000	0.0080	1896	0.0127	1792	0.0167	1688	0.0190	1584	0.0227	1480	0.0257
1998	0.0080	1894	0.0127	1790	0.0168	1686	0.0202	1582	0.0228	1478	0.0257
1996	0.0080	1892	0.0127	1788	0.0157	1684	0.0202	1580	0.0228	1476	0.0257
1994	0.0090	1890	0.0138	1786	0.0168	1682	0.0202	1578	0.0228	1474	0.0258
1992	0.0080	1888	0.0127	1784	0.0168	1680	0.0190	1576	0.0228	1472	0.0258
1990	0.0090	1886	0.0138	1782	0.0168	1678	0.0203	1574	0.0229	1470	0.0259
1988	0.0091	1884	0.0127	1780	0.0169	1676	0.0203	1572	0.0229	1468	0.0259
1986	0.0091	1882	0.0138	1778	0.0169	1674	0.0203	1570	0.0229	1466	0.0259
1984	0.0081	1880	0.0138	1776	0.0169	1672	0.0203	1568	0.0230	1464	0.0260
1982	0.0091	1878	0.0138	1774	0.0169	1670	0.0204	1566	0.0243	1462	0.0260
1980	0.0091	1876	0.0139	1772	0.0169	1668	0.0204	1564	0.0243	1460	0.0260
1978	0.0091	1874	0.0139	1770	0.0169	1666	0.0204	1562	0.0230	1458	0.0261
1976	0.0091	1872	0.0139	1768	0.0170	1664	0.0204	1560	0.0231	1456	0.0261
1974	0.0091	1870	0.0139	1766	0.0170	1662	0.0205	1558	0.0244	1454	0.0261
1972	0.0101	1868	0.0139	1764	0.0170	1660	0.0205	1556	0.0244	1452	0.0275
1970	0.0091	1866	0.0139	1762	0.0170	1658	0.0205	1554	0.0245	1450	0.0262
1968	0.0102	1864	0.0139	1760	0.0182	1656	0.0205	1552	0.0245	1448	0.0276
1966	0.0102	1862	0.0140	1758	0.0182	1654	0.0206	1550	0.0245	1446	0.0277
1964	0.0102	1860	0.0151	1756	0.0182	1652	0.0206	1548	0.0245	1444	0.0277
1962	0.0102	1858	0.0140	1754	0.0171	1650	0.0206	1546	0.0246	1442	0.0277
1960	0.0102	1856	0.0140	1752	0.0183	1648	0.0218	1544	0.0233	1440	0.0278
1958	0.0102	1854	0.0140	1750	0.0171	1646	0.0219	1542	0.0246	1438	0.0264
1956	0.0102	1852	0.0151	1748	0.0183	1644	0.0219	1540	0.0247	1436	0.0279
1954	0.0102	1850	0.0151	1746	0.0172	1642	0.0207	1538	0.0247	1434	0.0279
1952	0.0102	1848	0.0152	1744	0.0183	1640	0.0220	1536	0.0234	1432	0.0279
1950	0.0113	1846	0.0141	1742	0.0184	1638	0.0220	1534	0.0248	1430	0.0266
1948	0.0113	1844	0.0152	1740	0.0184	1636	0.0220	1532	0.0235	1428	0.0280
1946	0.0113	1842	0.0152	1738	0.0184	1634	0.0220	1530	0.0248	1426	0.0266

Table 12: Coherence for $p = 2048$ and $802 \leq n \leq 1424$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1424	0.0281	1320	0.0303	1216	0.0345	1112	0.0378	1008	0.0417	904	0.0465
1422	0.0267	1318	0.0303	1214	0.0346	1110	0.0378	1006	0.0417	902	0.0466
1420	0.0282	1316	0.0304	1212	0.0330	1108	0.0379	1004	0.0418	900	0.0467
1418	0.0282	1314	0.0304	1210	0.0347	1106	0.0380	1002	0.0419	898	0.0468
1416	0.0282	1312	0.0305	1208	0.0331	1104	0.0380	1000	0.0420	896	0.0446
1414	0.0283	1310	0.0305	1206	0.0348	1102	0.0381	998	0.0421	894	0.0470
1412	0.0283	1308	0.0306	1204	0.0349	1100	0.0382	996	0.0422	892	0.0471
1410	0.0284	1306	0.0306	1202	0.0349	1098	0.0383	994	0.0423	890	0.0472
1408	0.0284	1304	0.0307	1200	0.0350	1096	0.0383	992	0.0423	888	0.0473
1406	0.0270	1302	0.0323	1198	0.0351	1094	0.0384	990	0.0424	886	0.0474
1404	0.0285	1300	0.0323	1196	0.0351	1092	0.0385	988	0.0425	884	0.0475
1402	0.0285	1298	0.0308	1194	0.0352	1090	0.0385	986	0.0426	882	0.0476
1400	0.0286	1296	0.0309	1192	0.0352	1088	0.0386	984	0.0427	880	0.0477
1398	0.0272	1294	0.0325	1190	0.0353	1086	0.0387	982	0.0428	878	0.0478
1396	0.0287	1292	0.0325	1188	0.0354	1084	0.0387	980	0.0429	876	0.0479
1394	0.0287	1290	0.0326	1186	0.0354	1082	0.0388	978	0.0429	874	0.0481
1392	0.0287	1288	0.0311	1184	0.0355	1080	0.0389	976	0.0430	872	0.0482
1390	0.0288	1286	0.0327	1182	0.0355	1078	0.0390	974	0.0431	870	0.0483
1388	0.0288	1284	0.0312	1180	0.0356	1076	0.0390	972	0.0432	868	0.0484
1386	0.0274	1282	0.0328	1178	0.0357	1074	0.0391	970	0.0433	866	0.0485
1384	0.0289	1280	0.0328	1176	0.0357	1072	0.0392	968	0.0434	864	0.0486
1382	0.0289	1278	0.0329	1174	0.0358	1070	0.0393	966	0.0435	862	0.0487
1380	0.0290	1276	0.0313	1172	0.0358	1068	0.0393	964	0.0436	860	0.0488
1378	0.0290	1274	0.0330	1170	0.0359	1066	0.0394	962	0.0437	858	0.0490
1376	0.0291	1272	0.0314	1168	0.0360	1064	0.0395	960	0.0437	856	0.0491
1374	0.0291	1270	0.0331	1166	0.0360	1062	0.0395	958	0.0438	854	0.0492
1372	0.0292	1268	0.0315	1164	0.0361	1060	0.0396	956	0.0439	852	0.0469
1370	0.0277	1266	0.0332	1162	0.0361	1058	0.0397	954	0.0440	850	0.0494
1368	0.0292	1264	0.0316	1160	0.0362	1056	0.0398	952	0.0441	848	0.0495
1366	0.0293	1262	0.0333	1158	0.0363	1054	0.0398	950	0.0442	846	0.0496
1364	0.0293	1260	0.0333	1156	0.0363	1052	0.0399	948	0.0422	844	0.0498
1362	0.0294	1258	0.0334	1154	0.0364	1050	0.0400	946	0.0444	842	0.0499
1360	0.0294	1256	0.0318	1152	0.0365	1048	0.0401	944	0.0445	840	0.0500
1358	0.0295	1254	0.0335	1150	0.0365	1046	0.0402	942	0.0446	838	0.0501
1356	0.0295	1252	0.0335	1148	0.0366	1044	0.0402	940	0.0426	836	0.0502
1354	0.0295	1250	0.0336	1146	0.0366	1042	0.0403	938	0.0448	834	0.0504
1352	0.0296	1248	0.0321	1144	0.0367	1040	0.0404	936	0.0427	832	0.0505
1350	0.0296	1246	0.0337	1142	0.0368	1038	0.0405	934	0.0450	830	0.0506
1348	0.0297	1244	0.0338	1140	0.0368	1036	0.0405	932	0.0451	828	0.0483
1346	0.0297	1242	0.0338	1138	0.0369	1034	0.0406	930	0.0452	826	0.0508
1344	0.0298	1240	0.0339	1136	0.0370	1032	0.0407	928	0.0453	824	0.0510
1342	0.0298	1238	0.0339	1134	0.0370	1030	0.0408	926	0.0454	822	0.0511
1340	0.0299	1236	0.0340	1132	0.0371	1028	0.0409	924	0.0455	820	0.0512
1338	0.0299	1234	0.0340	1130	0.0372	1026	0.0409	922	0.0456	818	0.0513
1336	0.0299	1232	0.0341	1128	0.0372	1024	0.0410	920	0.0457	816	0.0515
1334	0.0300	1230	0.0341	1126	0.0373	1022	0.0411	918	0.0458	814	0.0516
1332	0.0300	1228	0.0342	1124	0.0374	1020	0.0412	916	0.0459	812	0.0517
1330	0.0301	1226	0.0343	1122	0.0374	1018	0.0413	914	0.0460	810	0.0519
1328	0.0301	1224	0.0327	1120	0.0375	1016	0.0413	912	0.0461	808	0.0520
1326	0.0302	1222	0.0344	1118	0.0376	1014	0.0414	910	0.0462	806	0.0521
1324	0.0302	1220	0.0344	1116	0.0376	1012	0.0415	908	0.0463	804	0.0498
1322	0.0303	1218	0.0345	1114	0.0377	1010	0.0416	906	0.0464	802	0.0524

Table 13: Coherence for $p = 2048$ and $178 \leq n \leq 800$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
800	0.0525	696	0.0575	592	0.0642	488	0.0779	384	0.0885	280	0.1143
798	0.0526	694	0.0576	590	0.0644	486	0.0782	382	0.0942	278	0.1151
796	0.0503	692	0.0578	588	0.0680	484	0.0785	380	0.0895	276	0.1159
794	0.0529	690	0.0580	586	0.0683	482	0.0788	378	0.0952	274	0.1168
792	0.0530	688	0.0581	584	0.0685	480	0.0792	376	0.0904	272	0.1176
790	0.0532	686	0.0583	582	0.0687	478	0.0795	374	0.0909	270	0.1185
788	0.0533	684	0.0585	580	0.0655	476	0.0798	372	0.0968	268	0.1194
786	0.0509	682	0.0587	578	0.0692	474	0.0802	370	0.0973	266	0.1203
784	0.0536	680	0.0588	576	0.0660	472	0.0805	368	0.0924	264	0.1212
782	0.0537	678	0.0590	574	0.0662	470	0.0809	366	0.0929	262	0.1145
780	0.0513	676	0.0592	572	0.0699	468	0.0812	364	0.0934	260	0.1231
778	0.0540	674	0.0593	570	0.0667	466	0.0815	362	0.0939	258	0.1163
776	0.0515	672	0.0595	568	0.0669	464	0.0819	360	0.0944	256	0.1172
774	0.0543	670	0.0597	566	0.0671	462	0.0823	358	0.0950	254	0.1181
772	0.0544	668	0.0599	564	0.0674	460	0.0826	356	0.0955	252	0.1190
770	0.0545	666	0.0601	562	0.0676	458	0.0830	354	0.0960	250	0.1200
768	0.0547	664	0.0602	560	0.0679	456	0.0833	352	0.0966	248	0.1210
766	0.0548	662	0.0604	558	0.0681	454	0.0837	350	0.0971	246	0.1220
764	0.0550	660	0.0606	556	0.0683	452	0.0841	348	0.0977	244	0.1230
762	0.0551	658	0.0578	554	0.0686	450	0.0844	346	0.0983	242	0.1240
760	0.0553	656	0.0610	552	0.0688	448	0.0848	344	0.0988	240	0.1250
758	0.0528	654	0.0612	550	0.0691	446	0.0807	342	0.0994	238	0.1261
756	0.0529	652	0.0613	548	0.0693	444	0.0856	340	0.1000	236	0.1271
754	0.0531	650	0.0615	546	0.0696	442	0.0860	338	0.1006	234	0.1282
752	0.0532	648	0.0617	544	0.0699	440	0.0818	336	0.1012	232	0.1293
750	0.0533	646	0.0619	542	0.0701	438	0.0822	334	0.1018	230	0.1304
748	0.0535	644	0.0621	540	0.0704	436	0.0826	332	0.1024	228	0.1316
746	0.0536	642	0.0623	538	0.0706	434	0.0829	330	0.1030	226	0.1239
744	0.0538	640	0.0625	536	0.0709	432	0.0833	328	0.1037	224	0.1250
742	0.0539	638	0.0627	534	0.0712	430	0.0837	326	0.1043	222	0.1261
740	0.0541	636	0.0629	532	0.0714	428	0.0841	324	0.1049	220	0.1364
738	0.0542	634	0.0631	530	0.0717	426	0.0845	322	0.0994	218	0.1284
736	0.0543	632	0.0633	528	0.0720	424	0.0849	320	0.1000	216	0.1296
734	0.0545	630	0.0635	526	0.0722	422	0.0853	318	0.1069	214	0.1308
732	0.0546	628	0.0637	524	0.0725	420	0.0857	316	0.1013	212	0.1321
730	0.0548	626	0.0639	522	0.0728	418	0.0861	314	0.1019	210	0.1333
728	0.0549	624	0.0641	520	0.0731	416	0.0865	312	0.1026	208	0.1346
726	0.0579	622	0.0643	518	0.0734	414	0.0870	310	0.1032	206	0.1359
724	0.0552	620	0.0645	516	0.0736	412	0.0874	308	0.1039	204	0.1373
722	0.0554	618	0.0647	514	0.0739	410	0.0878	306	0.1046	202	0.1386
720	0.0556	616	0.0649	512	0.0742	408	0.0882	304	0.1053	200	0.1400
718	0.0557	614	0.0651	510	0.0745	406	0.0887	302	0.1060	198	0.1414
716	0.0559	612	0.0654	508	0.0748	404	0.0891	300	0.1067	196	0.1429
714	0.0560	610	0.0656	506	0.0751	402	0.0896	298	0.1074	194	0.1443
712	0.0562	608	0.0658	504	0.0754	400	0.0900	296	0.1081	192	0.1458
710	0.0563	606	0.0660	502	0.0757	398	0.0905	294	0.1088	190	0.1474
708	0.0565	604	0.0662	500	0.0760	396	0.0909	292	0.1096	188	0.1489
706	0.0567	602	0.0664	498	0.0763	394	0.0914	290	0.1103	186	0.1505
704	0.0568	600	0.0633	496	0.0766	392	0.0918	288	0.1111	184	0.1522
702	0.0598	598	0.0669	494	0.0769	390	0.0923	286	0.1119	182	0.1538
700	0.0571	596	0.0671	492	0.0732	388	0.0928	284	0.1127	180	0.1556
698	0.0573	594	0.0640	490	0.0776	386	0.0933	282	0.1135	178	0.1573

Table 14: Coherence for $p = 2048$ and $22 \le n \le 176$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
176	0.1591	150	0.1733	124	0.1935	98	0.2245	72	0.2778	46	0.3478
174	0.1609	148	0.1757	122	0.1967	96	0.2292	70	0.2857	44	0.3636
172	0.1512	146	0.1781	120	0.2000	94	0.2340	68	0.2941	42	0.3810
170	0.1529	144	0.1806	118	0.2034	92	0.2391	66	0.3030	40	0.4000
168	0.1548	142	0.1831	116	0.2069	90	0.2444	64	0.2812	38	0.4211
166	0.1566	140	0.1714	114	0.2105	88	0.2500	62	0.2903	36	0.4444
164	0.1585	138	0.1739	112	0.2143	86	0.2326	60	0.3000	34	0.4118
162	0.1605	136	0.1765	110	0.2182	84	0.2381	58	0.3103	32	0.4375
160	0.1625	134	0.1791	108	0.2037	82	0.2439	56	0.3214	30	0.4667
158	0.1646	132	0.1818	106	0.2075	80	0.2500	54	0.3333	28	0.5000
156	0.1667	130	0.1846	104	0.2115	78	0.2564	52	0.3462	26	0.5385
154	0.1688	128	0.1875	102	0.2157	76	0.2632	50	0.3600	24	0.5833
152	0.1711	126	0.1905	100	0.2200	74	0.2703	48	0.3333	22	0.5455

Table 15: Coherence for $p = 4096$ and $3474 \leq n \leq 4096$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
4096	0.0000	3992	0.0060	3888	0.0082	3784	0.0095	3680	0.0109	3576	0.0123
4094	0.0005	3990	0.0055	3886	0.0077	3782	0.0095	3678	0.0109	3574	0.0123
4092	0.0010	3988	0.0060	3884	0.0082	3780	0.0095	3676	0.0109	3572	0.0123
4090	0.0015	3986	0.0060	3882	0.0082	3778	0.0095	3674	0.0109	3570	0.0123
4088	0.0020	3984	0.0060	3880	0.0082	3776	0.0095	3672	0.0109	3568	0.0123
4086	0.0024	3982	0.0060	3878	0.0077	3774	0.0095	3670	0.0109	3566	0.0118
4084	0.0029	3980	0.0060	3876	0.0083	3772	0.0095	3668	0.0109	3564	0.0123
4082	0.0024	3978	0.0065	3874	0.0083	3770	0.0101	3666	0.0109	3562	0.0124
4080	0.0029	3976	0.0060	3872	0.0083	3768	0.0096	3664	0.0109	3560	0.0124
4078	0.0029	3974	0.0065	3870	0.0083	3766	0.0101	3662	0.0109	3558	0.0124
4076	0.0029	3972	0.0060	3868	0.0083	3764	0.0096	3660	0.0109	3556	0.0124
4074	0.0034	3970	0.0065	3866	0.0083	3762	0.0101	3658	0.0109	3554	0.0124
4072	0.0029	3968	0.0066	3864	0.0083	3760	0.0096	3656	0.0109	3552	0.0124
4070	0.0034	3966	0.0066	3862	0.0083	3758	0.0101	3654	0.0115	3550	0.0124
4068	0.0034	3964	0.0066	3860	0.0083	3756	0.0101	3652	0.0110	3548	0.0124
4066	0.0034	3962	0.0066	3858	0.0083	3754	0.0101	3650	0.0115	3546	0.0130
4064	0.0039	3960	0.0066	3856	0.0083	3752	0.0101	3648	0.0110	3544	0.0124
4062	0.0034	3958	0.0066	3854	0.0083	3750	0.0101	3646	0.0115	3542	0.0130
4060	0.0039	3956	0.0066	3852	0.0083	3748	0.0096	3644	0.0110	3540	0.0124
4058	0.0039	3954	0.0066	3850	0.0088	3746	0.0101	3642	0.0115	3538	0.0130
4056	0.0039	3952	0.0066	3848	0.0083	3744	0.0101	3640	0.0110	3536	0.0124
4054	0.0044	3950	0.0066	3846	0.0088	3742	0.0102	3638	0.0115	3534	0.0130
4052	0.0044	3948	0.0071	3844	0.0083	3740	0.0102	3636	0.0116	3532	0.0125
4050	0.0044	3946	0.0071	3842	0.0088	3738	0.0102	3634	0.0116	3530	0.0130
4048	0.0040	3944	0.0071	3840	0.0089	3736	0.0102	3632	0.0116	3528	0.0125
4046	0.0044	3942	0.0066	3838	0.0089	3734	0.0102	3630	0.0116	3526	0.0130
4044	0.0045	3940	0.0071	3836	0.0089	3732	0.0102	3628	0.0116	3524	0.0125
4042	0.0045	3938	0.0071	3834	0.0089	3730	0.0102	3626	0.0116	3522	0.0131
4040	0.0045	3936	0.0071	3832	0.0089	3728	0.0102	3624	0.0116	3520	0.0125
4038	0.0045	3934	0.0071	3830	0.0089	3726	0.0102	3622	0.0116	3518	0.0131
4036	0.0050	3932	0.0071	3828	0.0089	3724	0.0102	3620	0.0116	3516	0.0131
4034	0.0050	3930	0.0071	3826	0.0089	3722	0.0102	3618	0.0116	3514	0.0131
4032	0.0050	3928	0.0071	3824	0.0089	3720	0.0108	3616	0.0116	3512	0.0131
4030	0.0050	3926	0.0071	3822	0.0089	3718	0.0102	3614	0.0116	3510	0.0131
4028	0.0050	3924	0.0071	3820	0.0094	3716	0.0108	3612	0.0116	3508	0.0125
4026	0.0050	3922	0.0071	3818	0.0089	3714	0.0102	3610	0.0116	3506	0.0131
4024	0.0050	3920	0.0071	3816	0.0094	3712	0.0108	3608	0.0116	3504	0.0131
4022	0.0050	3918	0.0077	3814	0.0089	3710	0.0108	3606	0.0116	3502	0.0131
4020	0.0050	3916	0.0072	3812	0.0094	3708	0.0108	3604	0.0122	3500	0.0131
4018	0.0055	3914	0.0077	3810	0.0089	3706	0.0108	3602	0.0117	3498	0.0132
4016	0.0055	3912	0.0077	3808	0.0095	3704	0.0108	3600	0.0122	3496	0.0132
4014	0.0055	3910	0.0077	3806	0.0089	3702	0.0103	3598	0.0117	3494	0.0132
4012	0.0050	3908	0.0077	3804	0.0095	3700	0.0108	3596	0.0122	3492	0.0132
4010	0.0055	3906	0.0077	3802	0.0095	3698	0.0108	3594	0.0117	3490	0.0132
4008	0.0055	3904	0.0077	3800	0.0095	3696	0.0108	3592	0.0122	3488	0.0132
4006	0.0055	3902	0.0077	3798	0.0095	3694	0.0103	3590	0.0123	3486	0.0132
4004	0.0055	3900	0.0082	3796	0.0095	3692	0.0108	3588	0.0123	3484	0.0132
4002	0.0055	3898	0.0077	3794	0.0095	3690	0.0108	3586	0.0123	3482	0.0132
4000	0.0055	3896	0.0077	3792	0.0095	3688	0.0108	3584	0.0123	3480	0.0132
3998	0.0055	3894	0.0077	3790	0.0095	3686	0.0109	3582	0.0123	3478	0.0132
3996	0.0060	3892	0.0082	3788	0.0095	3684	0.0109	3580	0.0123	3476	0.0132
3994	0.0060	3890	0.0082	3786	0.0095	3682	0.0109	3578	0.0117	3474	0.0132

Table 16: Coherence for $p = 4096$ and $2850 \leq n \leq 3472$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
3472	0.0132	3368	0.0143	3264	0.0153	3160	0.0165	3056	0.0183	2952	0.0190
3470	0.0133	3366	0.0143	3262	0.0153	3158	0.0171	3054	0.0183	2950	0.0190
3468	0.0138	3364	0.0143	3260	0.0160	3156	0.0165	3052	0.0183	2948	0.0190
3466	0.0138	3362	0.0143	3258	0.0153	3154	0.0171	3050	0.0177	2946	0.0190
3464	0.0133	3360	0.0143	3256	0.0160	3152	0.0165	3048	0.0184	2944	0.0190
3462	0.0139	3358	0.0143	3254	0.0154	3150	0.0171	3046	0.0184	2942	0.0190
3460	0.0139	3356	0.0143	3252	0.0160	3148	0.0172	3044	0.0184	2940	0.0190
3458	0.0139	3354	0.0143	3250	0.0160	3146	0.0172	3042	0.0178	2938	0.0191
3456	0.0139	3352	0.0143	3248	0.0160	3144	0.0165	3040	0.0184	2936	0.0191
3454	0.0139	3350	0.0143	3246	0.0160	3142	0.0172	3038	0.0178	2934	0.0191
3452	0.0139	3348	0.0143	3244	0.0160	3140	0.0172	3036	0.0184	2932	0.0191
3450	0.0133	3346	0.0143	3242	0.0154	3138	0.0172	3034	0.0185	2930	0.0191
3448	0.0139	3344	0.0144	3240	0.0160	3136	0.0172	3032	0.0185	2928	0.0191
3446	0.0133	3342	0.0144	3238	0.0154	3134	0.0172	3030	0.0178	2926	0.0191
3444	0.0139	3340	0.0144	3236	0.0161	3132	0.0172	3028	0.0185	2924	0.0192
3442	0.0134	3338	0.0144	3234	0.0155	3130	0.0173	3026	0.0185	2922	0.0192
3440	0.0140	3336	0.0144	3232	0.0161	3128	0.0166	3024	0.0185	2920	0.0192
3438	0.0134	3334	0.0150	3230	0.0155	3126	0.0173	3022	0.0185	2918	0.0192
3436	0.0140	3332	0.0144	3228	0.0161	3124	0.0173	3020	0.0185	2916	0.0192
3434	0.0134	3330	0.0150	3226	0.0161	3122	0.0173	3018	0.0186	2914	0.0192
3432	0.0140	3328	0.0144	3224	0.0161	3120	0.0173	3016	0.0186	2912	0.0192
3430	0.0140	3326	0.0150	3222	0.0161	3118	0.0173	3014	0.0179	2910	0.0192
3428	0.0140	3324	0.0144	3220	0.0161	3116	0.0173	3012	0.0186	2908	0.0193
3426	0.0140	3322	0.0151	3218	0.0162	3114	0.0173	3010	0.0179	2906	0.0193
3424	0.0140	3320	0.0145	3216	0.0162	3112	0.0174	3008	0.0186	2904	0.0193
3422	0.0140	3318	0.0151	3214	0.0162	3110	0.0174	3006	0.0186	2902	0.0193
3420	0.0140	3316	0.0145	3212	0.0162	3108	0.0174	3004	0.0186	2900	0.0193
3418	0.0140	3314	0.0151	3210	0.0162	3106	0.0174	3002	0.0180	2898	0.0193
3416	0.0141	3312	0.0151	3208	0.0162	3104	0.0174	3000	0.0187	2896	0.0193
3414	0.0141	3310	0.0151	3206	0.0162	3102	0.0174	2998	0.0187	2894	0.0194
3412	0.0141	3308	0.0145	3204	0.0162	3100	0.0174	2996	0.0187	2892	0.0194
3410	0.0141	3306	0.0151	3202	0.0162	3098	0.0174	2994	0.0187	2890	0.0194
3408	0.0141	3304	0.0145	3200	0.0162	3096	0.0174	2992	0.0187	2888	0.0194
3406	0.0141	3302	0.0151	3198	0.0163	3094	0.0175	2990	0.0181	2886	0.0194
3404	0.0141	3300	0.0145	3196	0.0163	3092	0.0175	2988	0.0187	2884	0.0194
3402	0.0141	3298	0.0152	3194	0.0163	3090	0.0175	2986	0.0188	2882	0.0194
3400	0.0141	3296	0.0152	3192	0.0163	3088	0.0175	2984	0.0188	2880	0.0194
3398	0.0141	3294	0.0152	3190	0.0163	3086	0.0175	2982	0.0181	2878	0.0195
3396	0.0141	3292	0.0152	3188	0.0163	3084	0.0175	2980	0.0188	2876	0.0195
3394	0.0141	3290	0.0152	3186	0.0163	3082	0.0175	2978	0.0188	2874	0.0195
3392	0.0142	3288	0.0152	3184	0.0163	3080	0.0175	2976	0.0188	2872	0.0202
3390	0.0142	3286	0.0152	3182	0.0163	3078	0.0175	2974	0.0188	2870	0.0202
3388	0.0142	3284	0.0152	3180	0.0164	3076	0.0182	2972	0.0188	2868	0.0202
3386	0.0148	3282	0.0152	3178	0.0164	3074	0.0176	2970	0.0182	2866	0.0195
3384	0.0142	3280	0.0152	3176	0.0164	3072	0.0182	2968	0.0189	2864	0.0196
3382	0.0142	3278	0.0153	3174	0.0164	3070	0.0182	2966	0.0189	2862	0.0196
3380	0.0142	3276	0.0153	3172	0.0164	3068	0.0176	2964	0.0189	2860	0.0196
3378	0.0142	3274	0.0153	3170	0.0164	3066	0.0176	2962	0.0189	2858	0.0196
3376	0.0142	3272	0.0153	3168	0.0164	3064	0.0183	2960	0.0189	2856	0.0196
3374	0.0142	3270	0.0153	3166	0.0171	3062	0.0176	2958	0.0189	2854	0.0196
3372	0.0142	3268	0.0159	3164	0.0164	3060	0.0183	2956	0.0189	2852	0.0196
3370	0.0142	3266	0.0153	3162	0.0171	3058	0.0183	2954	0.0190	2850	0.0204

Table 17: Coherence for $p = 4096$ and $2226 \leq n \leq 2848$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
2848	0.0197	2744	0.0211	2640	0.0227	2536	0.0237	2432	0.0255	2328	0.0266
2846	0.0204	2742	0.0212	2638	0.0227	2534	0.0237	2430	0.0247	2326	0.0267
2844	0.0197	2740	0.0212	2636	0.0228	2532	0.0237	2428	0.0247	2324	0.0258
2842	0.0204	2738	0.0212	2634	0.0228	2530	0.0237	2426	0.0247	2322	0.0267
2840	0.0204	2736	0.0212	2632	0.0228	2528	0.0237	2424	0.0248	2320	0.0267
2838	0.0197	2734	0.0212	2630	0.0228	2526	0.0238	2422	0.0256	2318	0.0267
2836	0.0205	2732	0.0212	2628	0.0228	2524	0.0238	2420	0.0248	2316	0.0259
2834	0.0205	2730	0.0212	2626	0.0228	2522	0.0238	2418	0.0256	2314	0.0268
2832	0.0205	2728	0.0213	2624	0.0229	2520	0.0238	2416	0.0248	2312	0.0260
2830	0.0205	2726	0.0213	2622	0.0229	2518	0.0238	2414	0.0257	2310	0.0268
2828	0.0205	2724	0.0213	2620	0.0229	2516	0.0238	2412	0.0257	2308	0.0260
2826	0.0205	2722	0.0213	2618	0.0229	2514	0.0239	2410	0.0257	2306	0.0269
2824	0.0205	2720	0.0213	2616	0.0229	2512	0.0239	2408	0.0249	2304	0.0260
2822	0.0206	2718	0.0213	2614	0.0230	2510	0.0239	2406	0.0258	2302	0.0269
2820	0.0206	2716	0.0221	2612	0.0230	2508	0.0239	2404	0.0250	2300	0.0270
2818	0.0206	2714	0.0214	2610	0.0222	2506	0.0239	2402	0.0258	2298	0.0270
2816	0.0206	2712	0.0214	2608	0.0230	2504	0.0240	2400	0.0258	2296	0.0261
2814	0.0206	2710	0.0214	2606	0.0223	2502	0.0240	2398	0.0259	2294	0.0270
2812	0.0206	2708	0.0214	2604	0.0230	2500	0.0240	2396	0.0259	2292	0.0271
2810	0.0206	2706	0.0214	2602	0.0223	2498	0.0240	2394	0.0259	2290	0.0271
2808	0.0199	2704	0.0214	2600	0.0231	2496	0.0240	2392	0.0259	2288	0.0271
2806	0.0207	2702	0.0215	2598	0.0231	2494	0.0241	2390	0.0259	2286	0.0271
2804	0.0207	2700	0.0215	2596	0.0231	2492	0.0241	2388	0.0260	2284	0.0271
2802	0.0207	2698	0.0215	2594	0.0231	2490	0.0241	2386	0.0260	2282	0.0272
2800	0.0207	2696	0.0215	2592	0.0231	2488	0.0241	2384	0.0260	2280	0.0272
2798	0.0207	2694	0.0215	2590	0.0232	2486	0.0241	2382	0.0260	2278	0.0272
2796	0.0207	2692	0.0223	2588	0.0232	2484	0.0242	2380	0.0252	2276	0.0272
2794	0.0208	2690	0.0216	2586	0.0224	2482	0.0242	2378	0.0261	2274	0.0273
2792	0.0208	2688	0.0216	2584	0.0232	2480	0.0242	2376	0.0261	2272	0.0273
2790	0.0208	2686	0.0223	2582	0.0232	2478	0.0242	2374	0.0261	2270	0.0273
2788	0.0208	2684	0.0216	2580	0.0233	2476	0.0242	2372	0.0261	2268	0.0273
2786	0.0208	2682	0.0216	2578	0.0233	2474	0.0243	2370	0.0262	2266	0.0274
2784	0.0201	2680	0.0224	2576	0.0233	2472	0.0243	2368	0.0262	2264	0.0265
2782	0.0208	2678	0.0224	2574	0.0225	2470	0.0251	2366	0.0262	2262	0.0274
2780	0.0209	2676	0.0224	2572	0.0233	2468	0.0243	2364	0.0262	2260	0.0265
2778	0.0209	2674	0.0224	2570	0.0233	2466	0.0243	2362	0.0262	2258	0.0275
2776	0.0209	2672	0.0217	2568	0.0234	2464	0.0244	2360	0.0263	2256	0.0275
2774	0.0209	2670	0.0217	2566	0.0226	2462	0.0244	2358	0.0263	2254	0.0275
2772	0.0209	2668	0.0217	2564	0.0234	2460	0.0244	2356	0.0255	2252	0.0275
2770	0.0209	2666	0.0218	2562	0.0234	2458	0.0244	2354	0.0263	2250	0.0276
2768	0.0210	2664	0.0218	2560	0.0234	2456	0.0244	2352	0.0264	2248	0.0276
2766	0.0210	2662	0.0218	2558	0.0227	2454	0.0244	2350	0.0264	2246	0.0276
2764	0.0210	2660	0.0226	2556	0.0235	2452	0.0245	2348	0.0264	2244	0.0276
2762	0.0210	2658	0.0218	2554	0.0227	2450	0.0245	2346	0.0264	2242	0.0277
2760	0.0210	2656	0.0226	2552	0.0235	2448	0.0245	2344	0.0256	2240	0.0268
2758	0.0210	2654	0.0226	2550	0.0235	2446	0.0245	2342	0.0265	2238	0.0277
2756	0.0210	2652	0.0226	2548	0.0235	2444	0.0245	2340	0.0265	2236	0.0277
2754	0.0211	2650	0.0219	2546	0.0228	2442	0.0246	2338	0.0265	2234	0.0278
2752	0.0211	2648	0.0227	2544	0.0236	2440	0.0246	2336	0.0265	2232	0.0278
2750	0.0211	2646	0.0227	2542	0.0228	2438	0.0246	2334	0.0266	2230	0.0278
2748	0.0211	2644	0.0227	2540	0.0236	2436	0.0246	2332	0.0266	2228	0.0278
2746	0.0211	2642	0.0220	2538	0.0229	2434	0.0255	2330	0.0266	2226	0.0279

Table 18: Coherence for $p = 4096$ and $1602 \leq n \leq 2224$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
2224	0.0279	2120	0.0292	2016	0.0308	1912	0.0314	1808	0.0343	1704	0.0364
2222	0.0279	2118	0.0293	2014	0.0308	1910	0.0325	1806	0.0343	1702	0.0364
2220	0.0279	2116	0.0284	2012	0.0308	1908	0.0325	1804	0.0344	1700	0.0353
2218	0.0280	2114	0.0293	2010	0.0308	1906	0.0325	1802	0.0344	1698	0.0365
2216	0.0271	2112	0.0294	2008	0.0309	1904	0.0315	1800	0.0333	1696	0.0366
2214	0.0280	2110	0.0294	2006	0.0309	1902	0.0326	1798	0.0345	1694	0.0366
2212	0.0280	2108	0.0285	2004	0.0299	1900	0.0326	1796	0.0345	1692	0.0366
2210	0.0281	2106	0.0294	2002	0.0310	1898	0.0327	1794	0.0346	1690	0.0367
2208	0.0281	2104	0.0295	2000	0.0310	1896	0.0327	1792	0.0346	1688	0.0367
2206	0.0281	2102	0.0295	1998	0.0310	1894	0.0327	1790	0.0346	1686	0.0368
2204	0.0281	2100	0.0295	1996	0.0301	1892	0.0317	1788	0.0347	1684	0.0356
2202	0.0282	2098	0.0296	1994	0.0311	1890	0.0328	1786	0.0347	1682	0.0369
2200	0.0282	2096	0.0296	1992	0.0311	1888	0.0328	1784	0.0336	1680	0.0369
2198	0.0282	2094	0.0296	1990	0.0312	1886	0.0329	1782	0.0348	1678	0.0369
2196	0.0282	2092	0.0296	1988	0.0312	1884	0.0329	1780	0.0348	1676	0.0370
2194	0.0283	2090	0.0297	1986	0.0312	1882	0.0329	1778	0.0349	1674	0.0370
2192	0.0283	2088	0.0287	1984	0.0302	1880	0.0319	1776	0.0349	1672	0.0371
2190	0.0283	2086	0.0297	1982	0.0313	1878	0.0330	1774	0.0349	1670	0.0371
2188	0.0274	2084	0.0298	1980	0.0313	1876	0.0320	1772	0.0339	1668	0.0372
2186	0.0284	2082	0.0298	1978	0.0313	1874	0.0331	1770	0.0350	1666	0.0372
2184	0.0284	2080	0.0298	1976	0.0304	1872	0.0331	1768	0.0351	1664	0.0373
2182	0.0284	2078	0.0298	1974	0.0314	1870	0.0332	1766	0.0351	1662	0.0373
2180	0.0284	2076	0.0289	1972	0.0314	1868	0.0321	1764	0.0340	1660	0.0361
2178	0.0285	2074	0.0299	1970	0.0315	1866	0.0332	1762	0.0352	1658	0.0374
2176	0.0285	2072	0.0299	1968	0.0315	1864	0.0333	1760	0.0352	1656	0.0374
2174	0.0285	2070	0.0300	1966	0.0315	1862	0.0333	1758	0.0353	1654	0.0375
2172	0.0276	2068	0.0290	1964	0.0316	1860	0.0333	1756	0.0342	1652	0.0375
2170	0.0286	2066	0.0300	1962	0.0316	1858	0.0334	1754	0.0353	1650	0.0376
2168	0.0286	2064	0.0300	1960	0.0316	1856	0.0334	1752	0.0354	1648	0.0376
2166	0.0286	2062	0.0301	1958	0.0317	1854	0.0334	1750	0.0354	1646	0.0377
2164	0.0287	2060	0.0301	1956	0.0317	1852	0.0335	1748	0.0343	1644	0.0377
2162	0.0287	2058	0.0301	1954	0.0317	1850	0.0335	1746	0.0355	1642	0.0365
2160	0.0287	2056	0.0302	1952	0.0318	1848	0.0335	1744	0.0356	1640	0.0378
2158	0.0287	2054	0.0302	1950	0.0318	1846	0.0336	1742	0.0356	1638	0.0366
2156	0.0288	2052	0.0302	1948	0.0308	1844	0.0325	1740	0.0356	1636	0.0367
2154	0.0288	2050	0.0302	1946	0.0319	1842	0.0337	1738	0.0357	1634	0.0367
2152	0.0279	2048	0.0303	1944	0.0309	1840	0.0337	1736	0.0357	1632	0.0368
2150	0.0288	2046	0.0303	1942	0.0319	1838	0.0337	1734	0.0358	1630	0.0368
2148	0.0279	2044	0.0303	1940	0.0320	1836	0.0338	1732	0.0346	1628	0.0369
2146	0.0289	2042	0.0304	1938	0.0320	1834	0.0338	1730	0.0358	1626	0.0369
2144	0.0280	2040	0.0304	1936	0.0320	1832	0.0328	1728	0.0359	1624	0.0369
2142	0.0289	2038	0.0304	1934	0.0321	1830	0.0339	1726	0.0359	1622	0.0382
2140	0.0290	2036	0.0305	1932	0.0311	1828	0.0328	1724	0.0360	1620	0.0383
2138	0.0290	2034	0.0305	1930	0.0321	1826	0.0340	1722	0.0360	1618	0.0383
2136	0.0290	2032	0.0305	1928	0.0322	1824	0.0340	1720	0.0349	1616	0.0384
2134	0.0291	2030	0.0305	1926	0.0322	1822	0.0340	1718	0.0361	1614	0.0372
2132	0.0281	2028	0.0306	1924	0.0312	1820	0.0341	1716	0.0350	1612	0.0372
2130	0.0291	2026	0.0306	1922	0.0323	1818	0.0341	1714	0.0362	1610	0.0373
2128	0.0282	2024	0.0306	1920	0.0312	1816	0.0341	1712	0.0362	1608	0.0373
2126	0.0292	2022	0.0307	1918	0.0323	1814	0.0342	1710	0.0363	1606	0.0374
2124	0.0292	2020	0.0307	1916	0.0324	1812	0.0331	1708	0.0351	1604	0.0374
2122	0.0292	2018	0.0307	1914	0.0324	1810	0.0343	1706	0.0363	1602	0.0375

Table 19: Coherence for $p = 4096$ and $978 \leq n \leq 1600$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1600	0.0375	1496	0.0401	1392	0.0431	1288	0.0450	1184	0.0490	1080	0.0519
1598	0.0375	1494	0.0402	1390	0.0432	1286	0.0451	1182	0.0491	1078	0.0519
1596	0.0376	1492	0.0402	1388	0.0432	1284	0.0452	1180	0.0475	1076	0.0520
1594	0.0376	1490	0.0403	1386	0.0418	1282	0.0452	1178	0.0492	1074	0.0521
1592	0.0377	1488	0.0403	1384	0.0434	1280	0.0453	1176	0.0493	1072	0.0522
1590	0.0390	1486	0.0404	1382	0.0434	1278	0.0454	1174	0.0494	1070	0.0523
1588	0.0378	1484	0.0404	1380	0.0435	1276	0.0455	1172	0.0495	1068	0.0524
1586	0.0378	1482	0.0405	1378	0.0435	1274	0.0455	1170	0.0496	1066	0.0525
1584	0.0379	1480	0.0405	1376	0.0436	1272	0.0456	1168	0.0497	1064	0.0526
1582	0.0379	1478	0.0406	1374	0.0437	1270	0.0457	1166	0.0497	1062	0.0527
1580	0.0380	1476	0.0407	1372	0.0437	1268	0.0457	1164	0.0481	1060	0.0528
1578	0.0393	1474	0.0407	1370	0.0438	1266	0.0458	1162	0.0499	1058	0.0529
1576	0.0381	1472	0.0408	1368	0.0439	1264	0.0459	1160	0.0483	1056	0.0530
1574	0.0381	1470	0.0408	1366	0.0439	1262	0.0460	1158	0.0484	1054	0.0531
1572	0.0394	1468	0.0409	1364	0.0440	1260	0.0460	1156	0.0484	1052	0.0532
1570	0.0382	1466	0.0409	1362	0.0441	1258	0.0461	1154	0.0503	1050	0.0533
1568	0.0383	1464	0.0410	1360	0.0441	1256	0.0462	1152	0.0486	1048	0.0534
1566	0.0396	1462	0.0410	1358	0.0442	1254	0.0463	1150	0.0487	1046	0.0535
1564	0.0396	1460	0.0411	1356	0.0442	1252	0.0463	1148	0.0488	1044	0.0536
1562	0.0384	1458	0.0412	1354	0.0428	1250	0.0464	1146	0.0489	1042	0.0537
1560	0.0385	1456	0.0412	1352	0.0444	1248	0.0465	1144	0.0490	1040	0.0538
1558	0.0385	1454	0.0413	1350	0.0430	1246	0.0465	1142	0.0490	1038	0.0539
1556	0.0386	1452	0.0413	1348	0.0445	1244	0.0466	1140	0.0491	1036	0.0541
1554	0.0399	1450	0.0414	1346	0.0446	1242	0.0467	1138	0.0492	1034	0.0542
1552	0.0399	1448	0.0414	1344	0.0446	1240	0.0452	1136	0.0493	1032	0.0543
1550	0.0400	1446	0.0415	1342	0.0447	1238	0.0468	1134	0.0494	1030	0.0544
1548	0.0388	1444	0.0416	1340	0.0448	1236	0.0469	1132	0.0495	1028	0.0545
1546	0.0401	1442	0.0402	1338	0.0448	1234	0.0470	1130	0.0496	1026	0.0546
1544	0.0402	1440	0.0417	1336	0.0449	1232	0.0471	1128	0.0496	1024	0.0547
1542	0.0402	1438	0.0417	1334	0.0450	1230	0.0472	1126	0.0497	1022	0.0548
1540	0.0403	1436	0.0418	1332	0.0450	1228	0.0472	1124	0.0498	1020	0.0549
1538	0.0390	1434	0.0418	1330	0.0436	1226	0.0473	1122	0.0499	1018	0.0530
1536	0.0404	1432	0.0419	1328	0.0437	1224	0.0474	1120	0.0500	1016	0.0551
1534	0.0391	1430	0.0420	1326	0.0437	1222	0.0475	1118	0.0501	1014	0.0552
1532	0.0405	1428	0.0420	1324	0.0438	1220	0.0475	1116	0.0502	1012	0.0553
1530	0.0392	1426	0.0421	1322	0.0454	1218	0.0476	1114	0.0503	1010	0.0535
1528	0.0393	1424	0.0421	1320	0.0439	1216	0.0461	1112	0.0504	1008	0.0556
1526	0.0393	1422	0.0422	1318	0.0440	1214	0.0478	1110	0.0505	1006	0.0537
1524	0.0394	1420	0.0423	1316	0.0441	1212	0.0479	1108	0.0505	1004	0.0558
1522	0.0394	1418	0.0423	1314	0.0441	1210	0.0479	1106	0.0506	1002	0.0559
1520	0.0395	1416	0.0424	1312	0.0442	1208	0.0480	1104	0.0507	1000	0.0560
1518	0.0395	1414	0.0424	1310	0.0443	1206	0.0481	1102	0.0508	998	0.0561
1516	0.0396	1412	0.0425	1308	0.0443	1204	0.0482	1100	0.0509	996	0.0562
1514	0.0396	1410	0.0426	1306	0.0444	1202	0.0483	1098	0.0510	994	0.0563
1512	0.0397	1408	0.0426	1304	0.0445	1200	0.0483	1096	0.0511	992	0.0565
1510	0.0397	1406	0.0427	1302	0.0445	1198	0.0484	1094	0.0512	990	0.0566
1508	0.0398	1404	0.0427	1300	0.0446	1196	0.0485	1092	0.0513	988	0.0567
1506	0.0398	1402	0.0414	1298	0.0447	1194	0.0486	1090	0.0495	986	0.0548
1504	0.0399	1400	0.0429	1296	0.0448	1192	0.0487	1088	0.0515	984	0.0549
1502	0.0399	1398	0.0429	1294	0.0448	1190	0.0487	1086	0.0516	982	0.0550
1500	0.0400	1396	0.0430	1292	0.0449	1188	0.0488	1084	0.0517	980	0.0551
1498	0.0401	1394	0.0430	1290	0.0450	1186	0.0489	1082	0.0518	978	0.0552

Table 20: Coherence for $p = 4096$ and $354 \leq n \leq 976$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
976	0.0553	872	0.0619	768	0.0677	664	0.0723	560	0.0821	456	0.0965
974	0.0554	870	0.0621	766	0.0679	662	0.0725	558	0.0824	454	0.0925
972	0.0556	868	0.0622	764	0.0681	660	0.0727	556	0.0827	452	0.0929
970	0.0557	866	0.0624	762	0.0656	658	0.0729	554	0.0830	450	0.0933
968	0.0558	864	0.0625	760	0.0684	656	0.0732	552	0.0833	448	0.0938
966	0.0559	862	0.0603	758	0.0686	654	0.0734	550	0.0836	446	0.0942
964	0.0560	860	0.0605	756	0.0661	652	0.0736	548	0.0803	444	0.0946
962	0.0561	858	0.0629	754	0.0690	650	0.0738	546	0.0842	442	0.0950
960	0.0563	856	0.0607	752	0.0691	648	0.0741	544	0.0846	440	0.0955
958	0.0564	854	0.0609	750	0.0667	646	0.0743	542	0.0849	438	0.0959
956	0.0565	852	0.0610	748	0.0668	644	0.0745	540	0.0852	436	0.0963
954	0.0566	850	0.0612	746	0.0670	642	0.0748	538	0.0855	434	0.0968
952	0.0567	848	0.0613	744	0.0672	640	0.0750	536	0.0858	432	0.0972
950	0.0568	846	0.0615	742	0.0674	638	0.0752	534	0.0861	430	0.0977
948	0.0570	844	0.0616	740	0.0676	636	0.0755	532	0.0865	428	0.0981
946	0.0571	842	0.0618	738	0.0678	634	0.0757	530	0.0868	426	0.0986
944	0.0572	840	0.0619	736	0.0679	632	0.0759	528	0.0871	424	0.0943
942	0.0573	838	0.0621	734	0.0681	630	0.0730	526	0.0837	422	0.0995
940	0.0553	836	0.0622	732	0.0683	628	0.0764	524	0.0840	420	0.1000
938	0.0576	834	0.0624	730	0.0685	626	0.0767	522	0.0843	418	0.1005
936	0.0577	832	0.0625	728	0.0687	624	0.0769	520	0.0846	416	0.1010
934	0.0578	830	0.0627	726	0.0689	622	0.0772	518	0.0849	414	0.1014
932	0.0579	828	0.0628	724	0.0663	620	0.0774	516	0.0891	412	0.1019
930	0.0581	826	0.0630	722	0.0693	618	0.0777	514	0.0856	410	0.1024
928	0.0582	824	0.0631	720	0.0694	616	0.0779	512	0.0859	408	0.1029
926	0.0583	822	0.0633	718	0.0696	614	0.0782	510	0.0863	406	0.1034
924	0.0584	820	0.0634	716	0.0698	612	0.0784	508	0.0866	404	0.1040
922	0.0586	818	0.0636	714	0.0700	610	0.0787	506	0.0870	402	0.1045
920	0.0587	816	0.0637	712	0.0702	608	0.0789	504	0.0873	400	0.1050
918	0.0588	814	0.0639	710	0.0704	606	0.0792	502	0.0876	398	0.1055
916	0.0568	812	0.0640	708	0.0706	604	0.0795	500	0.0880	396	0.1061
914	0.0591	810	0.0642	706	0.0708	602	0.0797	498	0.0884	394	0.1015
912	0.0570	808	0.0644	704	0.0682	600	0.0800	496	0.0887	392	0.1020
910	0.0593	806	0.0645	702	0.0712	598	0.0803	494	0.0891	390	0.1026
908	0.0595	804	0.0647	700	0.0714	596	0.0805	492	0.0894	388	0.1031
906	0.0596	802	0.0623	698	0.0716	594	0.0808	490	0.0898	386	0.1036
904	0.0597	800	0.0650	696	0.0718	592	0.0777	488	0.0902	384	0.1042
902	0.0599	798	0.0652	694	0.0720	590	0.0780	486	0.0905	382	0.1047
900	0.0600	796	0.0653	692	0.0723	588	0.0816	484	0.0909	380	0.1053
898	0.0601	794	0.0630	690	0.0725	586	0.0785	482	0.0913	378	0.1058
896	0.0580	792	0.0657	688	0.0727	584	0.0788	480	0.0917	376	0.1064
894	0.0604	790	0.0658	686	0.0729	582	0.0790	478	0.0921	374	0.1070
892	0.0605	788	0.0660	684	0.0702	580	0.0793	476	0.0924	372	0.1075
890	0.0607	786	0.0662	682	0.0733	578	0.0830	474	0.0928	370	0.1081
888	0.0608	784	0.0663	680	0.0735	576	0.0799	472	0.0932	368	0.1087
886	0.0609	782	0.0665	678	0.0737	574	0.0801	470	0.0936	366	0.1093
884	0.0611	780	0.0667	676	0.0740	572	0.0804	468	0.0940	364	0.1099
882	0.0612	778	0.0668	674	0.0742	570	0.0807	466	0.0944	362	0.1105
880	0.0591	776	0.0670	672	0.0744	568	0.0810	464	0.0948	360	0.1111
878	0.0615	774	0.0672	670	0.0716	566	0.0813	462	0.0952	358	0.1117
876	0.0616	772	0.0674	668	0.0719	564	0.0816	460	0.0957	356	0.1124
874	0.0618	770	0.0675	666	0.0721	562	0.0819	458	0.0961	354	0.1130

Table 21: Coherence for $p = 4096$ and $18 \leq n \leq 352$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
352	0.1136	296	0.1216	240	0.1417	184	0.1630	128	0.2031	72	0.3056
350	0.1143	294	0.1224	238	0.1429	182	0.1648	126	0.2063	70	0.3143
348	0.1149	292	0.1233	236	0.1441	180	0.1667	124	0.2097	68	0.3235
346	0.1156	290	0.1241	234	0.1453	178	0.1685	122	0.2131	66	0.3333
344	0.1105	288	0.1250	232	0.1466	176	0.1705	120	0.2167	64	0.3438
342	0.1111	286	0.1259	230	0.1478	174	0.1724	118	0.2203	62	0.3226
340	0.1118	284	0.1268	228	0.1491	172	0.1744	116	0.2241	60	0.3333
338	0.1124	282	0.1277	226	0.1504	170	0.1765	114	0.2281	58	0.3448
336	0.1131	280	0.1286	224	0.1518	168	0.1786	112	0.2321	56	0.3571
334	0.1138	278	0.1295	222	0.1532	166	0.1807	110	0.2364	54	0.3704
332	0.1145	276	0.1304	220	0.1545	164	0.1829	108	0.2407	52	0.3846
330	0.1152	274	0.1314	218	0.1468	162	0.1852	106	0.2264	50	0.3600
328	0.1159	272	0.1324	216	0.1574	160	0.1875	104	0.2308	48	0.3750
326	0.1166	270	0.1333	214	0.1589	158	0.1899	102	0.2353	46	0.3913
324	0.1173	268	0.1343	212	0.1604	156	0.1923	100	0.2400	44	0.4091
322	0.1180	266	0.1353	210	0.1524	154	0.1818	98	0.2449	42	0.4286
320	0.1188	264	0.1364	208	0.1538	152	0.1842	96	0.2500	40	0.4500
318	0.1195	262	0.1374	206	0.1553	150	0.1867	94	0.2553	38	0.4211
316	0.1203	260	0.1385	204	0.1569	148	0.1892	92	0.2609	36	0.4444
314	0.1210	258	0.1318	202	0.1584	146	0.1918	90	0.2667	34	0.4706
312	0.1218	256	0.1328	200	0.1600	144	0.1944	88	0.2727	32	0.5000
310	0.1226	254	0.1339	198	0.1616	142	0.1972	86	0.2791	30	0.5333
308	0.1234	252	0.1349	196	0.1633	140	0.2000	84	0.2619	28	0.5714
306	0.1242	250	0.1360	194	0.1649	138	0.2029	82	0.2683	26	0.5385
304	0.1250	248	0.1371	192	0.1667	136	0.2059	80	0.2750	24	0.5833
302	0.1258	246	0.1382	190	0.1579	134	0.1940	78	0.2821	22	0.6364
300	0.1267	244	0.1393	188	0.1596	132	0.1970	76	0.2895	20	0.7000
298	0.1275	242	0.1405	186	0.1613	130	0.2000	74	0.2973	18	0.6667

Table 22: Coherence for $p = 8192$ and $7570 \leq n \leq 8192$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
8192	0.0000	8088	0.0030	7984	0.0043	7880	0.0051	7776	0.0057	7672	0.0063
8190	0.0002	8086	0.0032	7982	0.0043	7878	0.0048	7774	0.0059	7670	0.0065
8188	0.0005	8084	0.0032	7980	0.0043	7876	0.0051	7772	0.0057	7668	0.0063
8186	0.0007	8082	0.0032	7978	0.0043	7874	0.0051	7770	0.0059	7666	0.0065
8184	0.0010	8080	0.0032	7976	0.0043	7872	0.0051	7768	0.0057	7664	0.0065
8182	0.0012	8078	0.0032	7974	0.0043	7870	0.0051	7766	0.0059	7662	0.0065
8180	0.0015	8076	0.0032	7972	0.0045	7868	0.0051	7764	0.0057	7660	0.0065
8178	0.0015	8074	0.0032	7970	0.0043	7866	0.0051	7762	0.0059	7658	0.0065
8176	0.0015	8072	0.0035	7968	0.0045	7864	0.0051	7760	0.0059	7656	0.0065
8174	0.0017	8070	0.0032	7966	0.0043	7862	0.0051	7758	0.0059	7654	0.0065
8172	0.0015	8068	0.0035	7964	0.0045	7860	0.0051	7756	0.0057	7652	0.0065
8170	0.0017	8066	0.0035	7962	0.0045	7858	0.0053	7754	0.0059	7650	0.0065
8168	0.0017	8064	0.0035	7960	0.0045	7856	0.0053	7752	0.0059	7648	0.0065
8166	0.0017	8062	0.0032	7958	0.0045	7854	0.0053	7750	0.0059	7646	0.0065
8164	0.0020	8060	0.0035	7956	0.0045	7852	0.0051	7748	0.0059	7644	0.0065
8162	0.0017	8058	0.0035	7954	0.0045	7850	0.0054	7746	0.0059	7642	0.0065
8160	0.0020	8056	0.0035	7952	0.0045	7848	0.0051	7744	0.0059	7640	0.0065
8158	0.0022	8054	0.0035	7950	0.0045	7846	0.0054	7742	0.0059	7638	0.0065
8156	0.0020	8052	0.0035	7948	0.0045	7844	0.0054	7740	0.0059	7636	0.0065
8154	0.0022	8050	0.0037	7946	0.0045	7842	0.0054	7738	0.0059	7634	0.0065
8152	0.0020	8048	0.0037	7944	0.0045	7840	0.0054	7736	0.0059	7632	0.0066
8150	0.0022	8046	0.0037	7942	0.0045	7838	0.0054	7734	0.0059	7630	0.0066
8148	0.0022	8044	0.0035	7940	0.0045	7836	0.0054	7732	0.0059	7628	0.0066
8146	0.0022	8042	0.0037	7938	0.0048	7834	0.0054	7730	0.0060	7626	0.0066
8144	0.0025	8040	0.0037	7936	0.0045	7832	0.0054	7728	0.0060	7624	0.0068
8142	0.0025	8038	0.0037	7934	0.0048	7830	0.0054	7726	0.0060	7622	0.0066
8140	0.0025	8036	0.0037	7932	0.0045	7828	0.0054	7724	0.0062	7620	0.0068
8138	0.0022	8034	0.0037	7930	0.0048	7826	0.0054	7722	0.0060	7618	0.0066
8136	0.0025	8032	0.0037	7928	0.0048	7824	0.0054	7720	0.0062	7616	0.0068
8134	0.0025	8030	0.0037	7926	0.0048	7822	0.0054	7718	0.0060	7614	0.0066
8132	0.0025	8028	0.0037	7924	0.0048	7820	0.0054	7716	0.0062	7612	0.0068
8130	0.0027	8026	0.0037	7922	0.0048	7818	0.0054	7714	0.0062	7610	0.0066
8128	0.0027	8024	0.0040	7920	0.0048	7816	0.0056	7712	0.0062	7608	0.0068
8126	0.0027	8022	0.0037	7918	0.0048	7814	0.0056	7710	0.0062	7606	0.0066
8124	0.0025	8020	0.0040	7916	0.0048	7812	0.0056	7708	0.0062	7604	0.0068
8122	0.0027	8018	0.0037	7914	0.0048	7810	0.0054	7706	0.0062	7602	0.0066
8120	0.0027	8016	0.0040	7912	0.0048	7808	0.0056	7704	0.0062	7600	0.0068
8118	0.0027	8014	0.0040	7910	0.0048	7806	0.0054	7702	0.0062	7598	0.0066
8116	0.0030	8012	0.0040	7908	0.0048	7804	0.0056	7700	0.0062	7596	0.0068
8114	0.0027	8010	0.0037	7906	0.0048	7802	0.0054	7698	0.0065	7594	0.0068
8112	0.0030	8008	0.0040	7904	0.0048	7800	0.0056	7696	0.0062	7592	0.0068
8110	0.0027	8006	0.0040	7902	0.0048	7798	0.0056	7694	0.0062	7590	0.0069
8108	0.0030	8004	0.0040	7900	0.0048	7796	0.0056	7692	0.0062	7588	0.0069
8106	0.0030	8002	0.0040	7898	0.0048	7794	0.0056	7690	0.0062	7586	0.0069
8104	0.0030	8000	0.0040	7896	0.0051	7792	0.0056	7688	0.0062	7584	0.0069
8102	0.0030	7998	0.0043	7894	0.0048	7790	0.0056	7686	0.0065	7582	0.0069
8100	0.0030	7996	0.0043	7892	0.0051	7788	0.0056	7684	0.0062	7580	0.0069
8098	0.0030	7994	0.0043	7890	0.0048	7786	0.0057	7682	0.0062	7578	0.0069
8096	0.0030	7992	0.0040	7888	0.0051	7784	0.0057	7680	0.0062	7576	0.0069
8094	0.0030	7990	0.0043	7886	0.0048	7782	0.0057	7678	0.0065	7574	0.0071
8092	0.0030	7988	0.0043	7884	0.0051	7780	0.0057	7676	0.0063	7572	0.0069
8090	0.0032	7986	0.0043	7882	0.0048	7778	0.0057	7674	0.0065	7570	0.0071

Table 23: Coherence for $p = 8192$ and $6946 \leq n \leq 7568$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
7568	0.0069	7464	0.0075	7360	0.0079	7256	0.0083	7152	0.0089	7048	0.0094
7566	0.0071	7462	0.0072	7358	0.0079	7254	0.0085	7150	0.0090	7046	0.0094
7564	0.0069	7460	0.0075	7356	0.0079	7252	0.0085	7148	0.0090	7044	0.0094
7562	0.0071	7458	0.0075	7354	0.0079	7250	0.0086	7146	0.0090	7042	0.0094
7560	0.0069	7456	0.0075	7352	0.0079	7248	0.0083	7144	0.0090	7040	0.0094
7558	0.0071	7454	0.0075	7350	0.0079	7246	0.0086	7142	0.0090	7038	0.0094
7556	0.0069	7452	0.0075	7348	0.0079	7244	0.0086	7140	0.0090	7036	0.0094
7554	0.0071	7450	0.0075	7346	0.0079	7242	0.0086	7138	0.0090	7034	0.0094
7552	0.0072	7448	0.0075	7344	0.0079	7240	0.0086	7136	0.0090	7032	0.0094
7550	0.0072	7446	0.0075	7342	0.0079	7238	0.0086	7134	0.0090	7030	0.0094
7548	0.0069	7444	0.0075	7340	0.0079	7236	0.0086	7132	0.0090	7028	0.0097
7546	0.0072	7442	0.0075	7338	0.0079	7234	0.0086	7130	0.0090	7026	0.0094
7544	0.0072	7440	0.0075	7336	0.0079	7232	0.0086	7128	0.0090	7024	0.0097
7542	0.0072	7438	0.0075	7334	0.0079	7230	0.0086	7126	0.0090	7022	0.0094
7540	0.0072	7436	0.0075	7332	0.0082	7228	0.0086	7124	0.0090	7020	0.0097
7538	0.0072	7434	0.0075	7330	0.0079	7226	0.0086	7122	0.0090	7018	0.0094
7536	0.0072	7432	0.0075	7328	0.0082	7224	0.0086	7120	0.0090	7016	0.0097
7534	0.0072	7430	0.0075	7326	0.0079	7222	0.0086	7118	0.0093	7014	0.0094
7532	0.0072	7428	0.0075	7324	0.0082	7220	0.0086	7116	0.0093	7012	0.0097
7530	0.0072	7426	0.0075	7322	0.0082	7218	0.0086	7114	0.0090	7010	0.0094
7528	0.0072	7424	0.0078	7320	0.0082	7216	0.0086	7112	0.0090	7008	0.0097
7526	0.0072	7422	0.0078	7318	0.0082	7214	0.0086	7110	0.0093	7006	0.0097
7524	0.0072	7420	0.0075	7316	0.0082	7212	0.0089	7108	0.0090	7004	0.0097
7522	0.0072	7418	0.0078	7314	0.0082	7210	0.0086	7106	0.0093	7002	0.0097
7520	0.0072	7416	0.0076	7312	0.0082	7208	0.0089	7104	0.0090	7000	0.0097
7518	0.0072	7414	0.0078	7310	0.0082	7206	0.0086	7102	0.0093	6998	0.0094
7516	0.0072	7412	0.0078	7308	0.0082	7204	0.0089	7100	0.0090	6996	0.0097
7514	0.0072	7410	0.0078	7306	0.0082	7202	0.0086	7098	0.0093	6994	0.0097
7512	0.0072	7408	0.0078	7304	0.0082	7200	0.0089	7096	0.0090	6992	0.0097
7510	0.0072	7406	0.0078	7302	0.0082	7198	0.0086	7094	0.0093	6990	0.0094
7508	0.0072	7404	0.0078	7300	0.0082	7196	0.0089	7092	0.0093	6988	0.0097
7506	0.0072	7402	0.0078	7298	0.0082	7194	0.0086	7090	0.0093	6986	0.0097
7504	0.0072	7400	0.0078	7296	0.0082	7192	0.0089	7088	0.0093	6984	0.0097
7502	0.0072	7398	0.0078	7294	0.0082	7190	0.0086	7086	0.0093	6982	0.0095
7500	0.0072	7396	0.0078	7292	0.0082	7188	0.0089	7084	0.0093	6980	0.0097
7498	0.0072	7394	0.0078	7290	0.0082	7186	0.0086	7082	0.0093	6978	0.0097
7496	0.0072	7392	0.0078	7288	0.0082	7184	0.0089	7080	0.0090	6976	0.0097
7494	0.0072	7390	0.0078	7286	0.0082	7182	0.0089	7078	0.0093	6974	0.0098
7492	0.0075	7388	0.0079	7284	0.0082	7180	0.0089	7076	0.0093	6972	0.0098
7490	0.0072	7386	0.0079	7282	0.0085	7178	0.0089	7074	0.0093	6970	0.0098
7488	0.0075	7384	0.0079	7280	0.0082	7176	0.0089	7072	0.0093	6968	0.0098
7486	0.0072	7382	0.0079	7278	0.0085	7174	0.0086	7070	0.0093	6966	0.0098
7484	0.0075	7380	0.0079	7276	0.0085	7172	0.0089	7068	0.0093	6964	0.0098
7482	0.0075	7378	0.0079	7274	0.0085	7170	0.0089	7066	0.0093	6962	0.0098
7480	0.0075	7376	0.0079	7272	0.0083	7168	0.0089	7064	0.0093	6960	0.0098
7478	0.0072	7374	0.0079	7270	0.0085	7166	0.0089	7062	0.0093	6958	0.0098
7476	0.0075	7372	0.0079	7268	0.0083	7164	0.0089	7060	0.0093	6956	0.0098
7474	0.0075	7370	0.0079	7266	0.0085	7162	0.0089	7058	0.0094	6954	0.0098
7472	0.0075	7368	0.0079	7264	0.0083	7160	0.0089	7056	0.0094	6952	0.0098
7470	0.0075	7366	0.0079	7262	0.0085	7158	0.0089	7054	0.0094	6950	0.0098
7468	0.0075	7364	0.0079	7260	0.0083	7156	0.0089	7052	0.0096	6948	0.0098
7466	0.0072	7362	0.0079	7258	0.0085	7154	0.0089	7050	0.0094	6946	0.0098

Table 24: Coherence for $p = 8192$ and $6322 \leq n \leq 6944$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
6944	0.0098	6840	0.0102	6736	0.0107	6632	0.0109	6528	0.0113	6424	0.0118
6942	0.0098	6838	0.0102	6734	0.0104	6630	0.0112	6526	0.0113	6422	0.0118
6940	0.0098	6836	0.0102	6732	0.0107	6628	0.0109	6524	0.0113	6420	0.0118
6938	0.0098	6834	0.0102	6730	0.0107	6626	0.0112	6522	0.0113	6418	0.0118
6936	0.0098	6832	0.0102	6728	0.0107	6624	0.0109	6520	0.0117	6416	0.0118
6934	0.0098	6830	0.0102	6726	0.0107	6622	0.0112	6518	0.0114	6414	0.0118
6932	0.0098	6828	0.0103	6724	0.0107	6620	0.0109	6516	0.0114	6412	0.0119
6930	0.0098	6826	0.0103	6722	0.0107	6618	0.0112	6514	0.0114	6410	0.0122
6928	0.0098	6824	0.0103	6720	0.0107	6616	0.0112	6512	0.0114	6408	0.0122
6926	0.0098	6822	0.0103	6718	0.0107	6614	0.0112	6510	0.0114	6406	0.0119
6924	0.0098	6820	0.0103	6716	0.0107	6612	0.0112	6508	0.0114	6404	0.0119
6922	0.0098	6818	0.0103	6714	0.0107	6610	0.0112	6506	0.0114	6402	0.0119
6920	0.0098	6816	0.0106	6712	0.0107	6608	0.0109	6504	0.0117	6400	0.0119
6918	0.0101	6814	0.0103	6710	0.0107	6606	0.0112	6502	0.0117	6398	0.0122
6916	0.0098	6812	0.0103	6708	0.0107	6604	0.0109	6500	0.0117	6396	0.0119
6914	0.0101	6810	0.0103	6706	0.0107	6602	0.0112	6498	0.0114	6394	0.0122
6912	0.0098	6808	0.0103	6704	0.0107	6600	0.0109	6496	0.0117	6392	0.0122
6910	0.0101	6806	0.0103	6702	0.0107	6598	0.0112	6494	0.0114	6390	0.0122
6908	0.0098	6804	0.0106	6700	0.0107	6596	0.0109	6492	0.0117	6388	0.0119
6906	0.0101	6802	0.0103	6698	0.0107	6594	0.0112	6490	0.0114	6386	0.0122
6904	0.0101	6800	0.0103	6696	0.0108	6592	0.0112	6488	0.0117	6384	0.0119
6902	0.0101	6798	0.0103	6694	0.0108	6590	0.0112	6486	0.0114	6382	0.0122
6900	0.0101	6796	0.0103	6692	0.0108	6588	0.0112	6484	0.0117	6380	0.0122
6898	0.0101	6794	0.0103	6690	0.0108	6586	0.0112	6482	0.0114	6378	0.0122
6896	0.0099	6792	0.0103	6688	0.0108	6584	0.0112	6480	0.0117	6376	0.0119
6894	0.0102	6790	0.0103	6686	0.0108	6582	0.0112	6478	0.0114	6374	0.0122
6892	0.0099	6788	0.0103	6684	0.0108	6580	0.0112	6476	0.0117	6372	0.0122
6890	0.0102	6786	0.0103	6682	0.0108	6578	0.0112	6474	0.0114	6370	0.0122
6888	0.0099	6784	0.0103	6680	0.0108	6576	0.0113	6472	0.0117	6368	0.0122
6886	0.0102	6782	0.0103	6678	0.0108	6574	0.0113	6470	0.0117	6366	0.0123
6884	0.0099	6780	0.0103	6676	0.0108	6572	0.0113	6468	0.0118	6364	0.0119
6882	0.0102	6778	0.0103	6674	0.0108	6570	0.0113	6466	0.0118	6362	0.0123
6880	0.0099	6776	0.0103	6672	0.0108	6568	0.0113	6464	0.0118	6360	0.0119
6878	0.0102	6774	0.0103	6670	0.0108	6566	0.0113	6462	0.0118	6358	0.0123
6876	0.0102	6772	0.0103	6668	0.0108	6564	0.0113	6460	0.0118	6356	0.0123
6874	0.0102	6770	0.0103	6666	0.0108	6562	0.0113	6458	0.0118	6354	0.0123
6872	0.0102	6768	0.0103	6664	0.0108	6560	0.0113	6456	0.0118	6352	0.0123
6870	0.0102	6766	0.0103	6662	0.0108	6558	0.0113	6454	0.0118	6350	0.0123
6868	0.0102	6764	0.0103	6660	0.0108	6556	0.0113	6452	0.0118	6348	0.0123
6866	0.0102	6762	0.0104	6658	0.0108	6554	0.0113	6450	0.0118	6346	0.0123
6864	0.0102	6760	0.0107	6656	0.0108	6552	0.0113	6448	0.0118	6344	0.0120
6862	0.0102	6758	0.0104	6654	0.0108	6550	0.0113	6446	0.0118	6342	0.0123
6860	0.0102	6756	0.0107	6652	0.0108	6548	0.0113	6444	0.0118	6340	0.0123
6858	0.0102	6754	0.0104	6650	0.0108	6546	0.0113	6442	0.0118	6338	0.0123
6856	0.0102	6752	0.0104	6648	0.0108	6544	0.0113	6440	0.0118	6336	0.0123
6854	0.0102	6750	0.0104	6646	0.0108	6542	0.0113	6438	0.0118	6334	0.0123
6852	0.0102	6748	0.0107	6644	0.0108	6540	0.0113	6436	0.0118	6332	0.0120
6850	0.0102	6746	0.0104	6642	0.0108	6538	0.0113	6434	0.0121	6330	0.0123
6848	0.0102	6744	0.0107	6640	0.0108	6536	0.0113	6432	0.0118	6328	0.0120
6846	0.0102	6742	0.0107	6638	0.0108	6534	0.0113	6430	0.0118	6326	0.0123
6844	0.0102	6740	0.0107	6636	0.0108	6532	0.0113	6428	0.0118	6324	0.0123
6842	0.0102	6738	0.0107	6634	0.0112	6530	0.0113	6426	0.0118	6322	0.0123

Table 25: Coherence for $p = 8192$ and $5698 \leq n \leq 6320$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
6320	0.0123	6216	0.0129	6112	0.0131	6008	0.0133	5904	0.0139	5800	0.0145
6318	0.0123	6214	0.0126	6110	0.0131	6006	0.0137	5902	0.0139	5798	0.0145
6316	0.0123	6212	0.0129	6108	0.0131	6004	0.0133	5900	0.0136	5796	0.0145
6314	0.0124	6210	0.0126	6106	0.0131	6002	0.0137	5898	0.0139	5794	0.0142
6312	0.0124	6208	0.0129	6104	0.0131	6000	0.0133	5896	0.0136	5792	0.0145
6310	0.0124	6206	0.0129	6102	0.0131	5998	0.0137	5894	0.0139	5790	0.0142
6308	0.0124	6204	0.0129	6100	0.0131	5996	0.0133	5892	0.0136	5788	0.0145
6306	0.0124	6202	0.0126	6098	0.0131	5994	0.0137	5890	0.0139	5786	0.0142
6304	0.0124	6200	0.0129	6096	0.0131	5992	0.0137	5888	0.0139	5784	0.0145
6302	0.0124	6198	0.0129	6094	0.0131	5990	0.0137	5886	0.0139	5782	0.0145
6300	0.0124	6196	0.0129	6092	0.0131	5988	0.0134	5884	0.0139	5780	0.0145
6298	0.0124	6194	0.0126	6090	0.0131	5986	0.0137	5882	0.0139	5778	0.0145
6296	0.0124	6192	0.0129	6088	0.0131	5984	0.0134	5880	0.0139	5776	0.0145
6294	0.0124	6190	0.0126	6086	0.0131	5982	0.0137	5878	0.0140	5774	0.0145
6292	0.0124	6188	0.0129	6084	0.0131	5980	0.0134	5876	0.0140	5772	0.0146
6290	0.0124	6186	0.0126	6082	0.0132	5978	0.0137	5874	0.0140	5770	0.0142
6288	0.0124	6184	0.0129	6080	0.0132	5976	0.0134	5872	0.0140	5768	0.0146
6286	0.0124	6182	0.0126	6078	0.0132	5974	0.0137	5870	0.0140	5766	0.0146
6284	0.0124	6180	0.0129	6076	0.0132	5972	0.0137	5868	0.0140	5764	0.0146
6282	0.0124	6178	0.0129	6074	0.0132	5970	0.0137	5866	0.0140	5762	0.0146
6280	0.0124	6176	0.0130	6072	0.0132	5968	0.0134	5864	0.0140	5760	0.0146
6278	0.0124	6174	0.0130	6070	0.0132	5966	0.0137	5862	0.0140	5758	0.0142
6276	0.0124	6172	0.0130	6068	0.0132	5964	0.0137	5860	0.0140	5756	0.0146
6274	0.0124	6170	0.0130	6066	0.0132	5962	0.0138	5858	0.0140	5754	0.0146
6272	0.0124	6168	0.0130	6064	0.0132	5960	0.0138	5856	0.0140	5752	0.0146
6270	0.0124	6166	0.0127	6062	0.0132	5958	0.0138	5854	0.0140	5750	0.0146
6268	0.0124	6164	0.0130	6060	0.0132	5956	0.0138	5852	0.0140	5748	0.0146
6266	0.0124	6162	0.0130	6058	0.0132	5954	0.0138	5850	0.0140	5746	0.0146
6264	0.0125	6160	0.0130	6056	0.0132	5952	0.0134	5848	0.0144	5744	0.0146
6262	0.0125	6158	0.0130	6054	0.0132	5950	0.0138	5846	0.0140	5742	0.0146
6260	0.0125	6156	0.0130	6052	0.0132	5948	0.0138	5844	0.0140	5740	0.0146
6258	0.0125	6154	0.0127	6050	0.0132	5946	0.0138	5842	0.0140	5738	0.0146
6256	0.0125	6152	0.0130	6048	0.0132	5944	0.0135	5840	0.0140	5736	0.0146
6254	0.0125	6150	0.0127	6046	0.0132	5942	0.0138	5838	0.0140	5734	0.0146
6252	0.0125	6148	0.0130	6044	0.0132	5940	0.0135	5836	0.0141	5732	0.0147
6250	0.0125	6146	0.0130	6042	0.0132	5938	0.0138	5834	0.0141	5730	0.0147
6248	0.0125	6144	0.0130	6040	0.0132	5936	0.0135	5832	0.0141	5728	0.0147
6246	0.0125	6142	0.0130	6038	0.0132	5934	0.0138	5830	0.0141	5726	0.0147
6244	0.0125	6140	0.0130	6036	0.0133	5932	0.0138	5828	0.0141	5724	0.0147
6242	0.0125	6138	0.0130	6034	0.0133	5930	0.0138	5826	0.0141	5722	0.0147
6240	0.0125	6136	0.0130	6032	0.0133	5928	0.0135	5824	0.0144	5720	0.0147
6238	0.0125	6134	0.0130	6030	0.0133	5926	0.0138	5822	0.0144	5718	0.0147
6236	0.0128	6132	0.0130	6028	0.0133	5924	0.0138	5820	0.0144	5716	0.0147
6234	0.0125	6130	0.0131	6026	0.0133	5922	0.0138	5818	0.0144	5714	0.0147
6232	0.0128	6128	0.0131	6024	0.0133	5920	0.0135	5816	0.0144	5712	0.0147
6230	0.0128	6126	0.0131	6022	0.0133	5918	0.0139	5814	0.0144	5710	0.0147
6228	0.0128	6124	0.0131	6020	0.0133	5916	0.0139	5812	0.0145	5708	0.0147
6226	0.0125	6122	0.0131	6018	0.0133	5914	0.0139	5810	0.0141	5706	0.0147
6224	0.0129	6120	0.0131	6016	0.0133	5912	0.0135	5808	0.0145	5704	0.0147
6222	0.0129	6118	0.0131	6014	0.0136	5910	0.0139	5806	0.0145	5702	0.0147
6220	0.0129	6116	0.0131	6012	0.0133	5908	0.0135	5804	0.0145	5700	0.0147
6218	0.0125	6114	0.0131	6010	0.0133	5906	0.0139	5802	0.0145	5698	0.0147

Table 26: Coherence for $p = 8192$ and $5074 \leq n \leq 5696$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
5696	0.0147	5592	0.0150	5488	0.0157	5384	0.0163	5280	0.0167	5176	0.0170
5694	0.0148	5590	0.0154	5486	0.0157	5382	0.0160	5278	0.0167	5174	0.0170
5692	0.0148	5588	0.0154	5484	0.0157	5380	0.0164	5276	0.0167	5172	0.0170
5690	0.0148	5586	0.0154	5482	0.0157	5378	0.0160	5274	0.0167	5170	0.0170
5688	0.0148	5584	0.0154	5480	0.0157	5376	0.0164	5272	0.0167	5168	0.0170
5686	0.0148	5582	0.0154	5478	0.0157	5374	0.0164	5270	0.0167	5166	0.0170
5684	0.0148	5580	0.0151	5476	0.0157	5372	0.0164	5268	0.0167	5164	0.0170
5682	0.0148	5578	0.0154	5474	0.0157	5370	0.0160	5266	0.0163	5162	0.0170
5680	0.0148	5576	0.0151	5472	0.0157	5368	0.0164	5264	0.0167	5160	0.0171
5678	0.0148	5574	0.0154	5470	0.0157	5366	0.0164	5262	0.0167	5158	0.0171
5676	0.0148	5572	0.0154	5468	0.0157	5364	0.0164	5260	0.0167	5156	0.0171
5674	0.0148	5570	0.0154	5466	0.0157	5362	0.0164	5258	0.0167	5154	0.0171
5672	0.0148	5568	0.0151	5464	0.0157	5360	0.0164	5256	0.0167	5152	0.0171
5670	0.0148	5566	0.0155	5462	0.0157	5358	0.0161	5254	0.0167	5150	0.0171
5668	0.0148	5564	0.0151	5460	0.0158	5356	0.0164	5252	0.0168	5148	0.0171
5666	0.0148	5562	0.0155	5458	0.0158	5354	0.0164	5250	0.0164	5146	0.0171
5664	0.0148	5560	0.0151	5456	0.0158	5352	0.0164	5248	0.0168	5144	0.0171
5662	0.0148	5558	0.0155	5454	0.0158	5350	0.0161	5246	0.0168	5142	0.0171
5660	0.0148	5556	0.0151	5452	0.0158	5348	0.0165	5244	0.0168	5140	0.0171
5658	0.0148	5554	0.0155	5450	0.0158	5346	0.0165	5242	0.0168	5138	0.0171
5656	0.0149	5552	0.0155	5448	0.0158	5344	0.0165	5240	0.0168	5136	0.0171
5654	0.0149	5550	0.0155	5446	0.0158	5342	0.0161	5238	0.0168	5134	0.0171
5652	0.0149	5548	0.0155	5444	0.0158	5340	0.0165	5236	0.0168	5132	0.0171
5650	0.0149	5546	0.0155	5442	0.0158	5338	0.0161	5234	0.0168	5130	0.0172
5648	0.0149	5544	0.0155	5440	0.0158	5336	0.0165	5232	0.0168	5128	0.0172
5646	0.0149	5542	0.0155	5438	0.0158	5334	0.0161	5230	0.0164	5126	0.0172
5644	0.0149	5540	0.0155	5436	0.0158	5332	0.0165	5228	0.0168	5124	0.0172
5642	0.0149	5538	0.0155	5434	0.0158	5330	0.0161	5226	0.0165	5122	0.0172
5640	0.0149	5536	0.0155	5432	0.0158	5328	0.0165	5224	0.0168	5120	0.0172
5638	0.0149	5534	0.0155	5430	0.0158	5326	0.0165	5222	0.0169	5118	0.0172
5636	0.0149	5532	0.0155	5428	0.0158	5324	0.0165	5220	0.0169	5116	0.0172
5634	0.0149	5530	0.0156	5426	0.0158	5322	0.0162	5218	0.0169	5114	0.0172
5632	0.0149	5528	0.0156	5424	0.0159	5320	0.0165	5216	0.0169	5112	0.0172
5630	0.0149	5526	0.0156	5422	0.0159	5318	0.0165	5214	0.0169	5110	0.0172
5628	0.0149	5524	0.0156	5420	0.0162	5316	0.0166	5212	0.0169	5108	0.0172
5626	0.0149	5522	0.0156	5418	0.0159	5314	0.0166	5210	0.0169	5106	0.0172
5624	0.0149	5520	0.0156	5416	0.0162	5312	0.0166	5208	0.0169	5104	0.0172
5622	0.0149	5518	0.0156	5414	0.0159	5310	0.0166	5206	0.0169	5102	0.0172
5620	0.0149	5516	0.0156	5412	0.0159	5308	0.0166	5204	0.0169	5100	0.0173
5618	0.0150	5514	0.0156	5410	0.0159	5306	0.0166	5202	0.0169	5098	0.0173
5616	0.0150	5512	0.0156	5408	0.0159	5304	0.0166	5200	0.0169	5096	0.0173
5614	0.0150	5510	0.0156	5406	0.0159	5302	0.0166	5198	0.0169	5094	0.0173
5612	0.0150	5508	0.0156	5404	0.0163	5300	0.0166	5196	0.0169	5092	0.0173
5610	0.0150	5506	0.0156	5402	0.0163	5298	0.0166	5194	0.0169	5090	0.0173
5608	0.0150	5504	0.0156	5400	0.0163	5296	0.0166	5192	0.0169	5088	0.0173
5606	0.0150	5502	0.0156	5398	0.0163	5294	0.0166	5190	0.0170	5086	0.0173
5604	0.0150	5500	0.0156	5396	0.0163	5292	0.0166	5188	0.0170	5084	0.0173
5602	0.0150	5498	0.0156	5394	0.0159	5290	0.0166	5186	0.0170	5082	0.0173
5600	0.0150	5496	0.0156	5392	0.0163	5288	0.0166	5184	0.0170	5080	0.0173
5598	0.0154	5494	0.0157	5390	0.0163	5286	0.0166	5182	0.0170	5078	0.0173
5596	0.0150	5492	0.0157	5388	0.0163	5284	0.0167	5180	0.0170	5076	0.0173
5594	0.0150	5490	0.0157	5386	0.0160	5282	0.0167	5178	0.0170	5074	0.0173

Table 27: Coherence for $p = 8192$ and $4450 \leq n \leq 5072$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
5072	0.0174	4968	0.0177	4864	0.0181	4760	0.0185	4656	0.0189	4552	0.0198
5070	0.0174	4966	0.0177	4862	0.0181	4758	0.0185	4654	0.0193	4550	0.0198
5068	0.0174	4964	0.0177	4860	0.0181	4756	0.0185	4652	0.0189	4548	0.0198
5066	0.0174	4962	0.0177	4858	0.0181	4754	0.0185	4650	0.0194	4546	0.0198
5064	0.0174	4960	0.0177	4856	0.0181	4752	0.0185	4648	0.0194	4544	0.0198
5062	0.0174	4958	0.0177	4854	0.0181	4750	0.0185	4646	0.0194	4542	0.0198
5060	0.0174	4956	0.0178	4852	0.0181	4748	0.0185	4644	0.0189	4540	0.0198
5058	0.0174	4954	0.0178	4850	0.0181	4746	0.0185	4642	0.0194	4538	0.0198
5056	0.0174	4952	0.0178	4848	0.0182	4744	0.0185	4640	0.0190	4536	0.0198
5054	0.0174	4950	0.0178	4846	0.0182	4742	0.0186	4638	0.0194	4534	0.0199
5052	0.0174	4948	0.0178	4844	0.0182	4740	0.0186	4636	0.0194	4532	0.0199
5050	0.0174	4946	0.0178	4842	0.0182	4738	0.0186	4634	0.0194	4530	0.0199
5048	0.0174	4944	0.0178	4840	0.0182	4736	0.0186	4632	0.0194	4528	0.0199
5046	0.0174	4942	0.0178	4838	0.0182	4734	0.0186	4630	0.0194	4526	0.0199
5044	0.0174	4940	0.0178	4836	0.0182	4732	0.0186	4628	0.0194	4524	0.0199
5042	0.0175	4938	0.0178	4834	0.0182	4730	0.0186	4626	0.0195	4522	0.0199
5040	0.0175	4936	0.0178	4832	0.0182	4728	0.0190	4624	0.0195	4520	0.0199
5038	0.0175	4934	0.0178	4830	0.0182	4726	0.0186	4622	0.0195	4518	0.0199
5036	0.0175	4932	0.0178	4828	0.0182	4724	0.0186	4620	0.0195	4516	0.0199
5034	0.0175	4930	0.0178	4826	0.0182	4722	0.0186	4618	0.0195	4514	0.0199
5032	0.0175	4928	0.0179	4824	0.0182	4720	0.0186	4616	0.0195	4512	0.0199
5030	0.0175	4926	0.0179	4822	0.0182	4718	0.0187	4614	0.0195	4510	0.0200
5028	0.0175	4924	0.0179	4820	0.0183	4716	0.0187	4612	0.0195	4508	0.0195
5026	0.0175	4922	0.0179	4818	0.0183	4714	0.0187	4610	0.0195	4506	0.0200
5024	0.0175	4920	0.0179	4816	0.0183	4712	0.0187	4608	0.0195	4504	0.0195
5022	0.0175	4918	0.0179	4814	0.0183	4710	0.0187	4606	0.0195	4502	0.0200
5020	0.0175	4916	0.0179	4812	0.0183	4708	0.0187	4604	0.0195	4500	0.0200
5018	0.0175	4914	0.0179	4810	0.0183	4706	0.0191	4602	0.0196	4498	0.0200
5016	0.0175	4912	0.0179	4808	0.0183	4704	0.0187	4600	0.0196	4496	0.0200
5014	0.0176	4910	0.0179	4806	0.0183	4702	0.0191	4598	0.0196	4494	0.0200
5012	0.0176	4908	0.0179	4804	0.0183	4700	0.0191	4596	0.0196	4492	0.0200
5010	0.0176	4906	0.0179	4802	0.0183	4698	0.0192	4594	0.0196	4490	0.0200
5008	0.0176	4904	0.0179	4800	0.0183	4696	0.0192	4592	0.0196	4488	0.0201
5006	0.0176	4902	0.0180	4798	0.0183	4694	0.0192	4590	0.0196	4486	0.0201
5004	0.0176	4900	0.0180	4796	0.0183	4692	0.0192	4588	0.0196	4484	0.0201
5002	0.0176	4898	0.0180	4794	0.0184	4690	0.0192	4586	0.0196	4482	0.0201
5000	0.0176	4896	0.0180	4792	0.0184	4688	0.0192	4584	0.0196	4480	0.0201
4998	0.0180	4894	0.0180	4790	0.0184	4686	0.0192	4582	0.0196	4478	0.0201
4996	0.0176	4892	0.0180	4788	0.0184	4684	0.0188	4580	0.0197	4476	0.0201
4994	0.0180	4890	0.0180	4786	0.0184	4682	0.0192	4578	0.0197	4474	0.0201
4992	0.0176	4888	0.0180	4784	0.0184	4680	0.0188	4576	0.0197	4472	0.0201
4990	0.0176	4886	0.0180	4782	0.0184	4678	0.0192	4574	0.0197	4470	0.0201
4988	0.0176	4884	0.0180	4780	0.0184	4676	0.0192	4572	0.0201	4468	0.0201
4986	0.0181	4882	0.0180	4778	0.0184	4674	0.0193	4570	0.0197	4466	0.0202
4984	0.0181	4880	0.0180	4776	0.0184	4672	0.0188	4568	0.0197	4464	0.0202
4982	0.0177	4878	0.0180	4774	0.0184	4670	0.0193	4566	0.0197	4462	0.0202
4980	0.0177	4876	0.0180	4772	0.0184	4668	0.0189	4564	0.0197	4460	0.0202
4978	0.0177	4874	0.0181	4770	0.0184	4666	0.0193	4562	0.0197	4458	0.0202
4976	0.0177	4872	0.0181	4768	0.0185	4664	0.0189	4560	0.0197	4456	0.0202
4974	0.0177	4870	0.0181	4766	0.0185	4662	0.0193	4558	0.0197	4454	0.0202
4972	0.0181	4868	0.0181	4764	0.0185	4660	0.0193	4556	0.0198	4452	0.0202
4970	0.0177	4866	0.0181	4762	0.0185	4658	0.0193	4554	0.0198	4450	0.0202

Table 28: Coherence for $p = 8192$ and $3826 \leq n \leq 4448$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
4448	0.0202	4344	0.0212	4240	0.0217	4136	0.0218	4032	0.0223	3928	0.0229
4446	0.0202	4342	0.0207	4238	0.0217	4134	0.0218	4030	0.0223	3926	0.0229
4444	0.0203	4340	0.0212	4236	0.0217	4132	0.0218	4028	0.0223	3924	0.0229
4442	0.0203	4338	0.0212	4234	0.0213	4130	0.0218	4026	0.0224	3922	0.0229
4440	0.0203	4336	0.0212	4232	0.0217	4128	0.0218	4024	0.0224	3920	0.0230
4438	0.0203	4334	0.0212	4230	0.0217	4126	0.0218	4022	0.0224	3918	0.0230
4436	0.0203	4332	0.0212	4228	0.0218	4124	0.0218	4020	0.0224	3916	0.0230
4434	0.0203	4330	0.0212	4226	0.0218	4122	0.0218	4018	0.0224	3914	0.0230
4432	0.0203	4328	0.0213	4224	0.0218	4120	0.0218	4016	0.0224	3912	0.0230
4430	0.0203	4326	0.0208	4222	0.0218	4118	0.0219	4014	0.0224	3910	0.0230
4428	0.0203	4324	0.0213	4220	0.0213	4116	0.0219	4012	0.0224	3908	0.0230
4426	0.0203	4322	0.0208	4218	0.0213	4114	0.0219	4010	0.0224	3906	0.0230
4424	0.0203	4320	0.0213	4216	0.0213	4112	0.0219	4008	0.0225	3904	0.0231
4422	0.0204	4318	0.0208	4214	0.0214	4110	0.0219	4006	0.0225	3902	0.0231
4420	0.0204	4316	0.0213	4212	0.0214	4108	0.0219	4004	0.0225	3900	0.0231
4418	0.0204	4314	0.0213	4210	0.0214	4106	0.0219	4002	0.0225	3898	0.0231
4416	0.0204	4312	0.0213	4208	0.0214	4104	0.0219	4000	0.0225	3896	0.0231
4414	0.0204	4310	0.0213	4206	0.0214	4102	0.0219	3998	0.0225	3894	0.0231
4412	0.0204	4308	0.0214	4204	0.0214	4100	0.0220	3996	0.0225	3892	0.0231
4410	0.0204	4306	0.0214	4202	0.0214	4098	0.0220	3994	0.0225	3890	0.0231
4408	0.0204	4304	0.0214	4200	0.0214	4096	0.0220	3992	0.0225	3888	0.0231
4406	0.0204	4302	0.0214	4198	0.0214	4094	0.0220	3990	0.0226	3886	0.0232
4404	0.0204	4300	0.0214	4196	0.0214	4092	0.0220	3988	0.0226	3884	0.0232
4402	0.0204	4298	0.0214	4194	0.0215	4090	0.0220	3986	0.0226	3882	0.0232
4400	0.0205	4296	0.0214	4192	0.0215	4088	0.0220	3984	0.0226	3880	0.0232
4398	0.0205	4294	0.0210	4190	0.0215	4086	0.0220	3982	0.0226	3878	0.0232
4396	0.0205	4292	0.0214	4188	0.0215	4084	0.0220	3980	0.0226	3876	0.0232
4394	0.0205	4290	0.0214	4186	0.0215	4082	0.0220	3978	0.0226	3874	0.0232
4392	0.0205	4288	0.0215	4184	0.0215	4080	0.0221	3976	0.0221	3872	0.0232
4390	0.0205	4286	0.0215	4182	0.0215	4078	0.0221	3974	0.0226	3870	0.0233
4388	0.0205	4284	0.0210	4180	0.0215	4076	0.0221	3972	0.0227	3868	0.0233
4386	0.0205	4282	0.0215	4178	0.0215	4074	0.0221	3970	0.0227	3866	0.0233
4384	0.0205	4280	0.0210	4176	0.0216	4072	0.0221	3968	0.0227	3864	0.0233
4382	0.0205	4278	0.0215	4174	0.0216	4070	0.0221	3966	0.0227	3862	0.0233
4380	0.0205	4276	0.0210	4172	0.0216	4068	0.0221	3964	0.0227	3860	0.0233
4378	0.0206	4274	0.0211	4170	0.0216	4066	0.0221	3962	0.0227	3858	0.0233
4376	0.0206	4272	0.0215	4168	0.0216	4064	0.0221	3960	0.0227	3856	0.0233
4374	0.0206	4270	0.0215	4166	0.0216	4062	0.0222	3958	0.0227	3854	0.0234
4372	0.0206	4268	0.0216	4164	0.0216	4060	0.0222	3956	0.0228	3852	0.0234
4370	0.0206	4266	0.0216	4162	0.0216	4058	0.0222	3954	0.0228	3850	0.0234
4368	0.0206	4264	0.0211	4160	0.0216	4056	0.0222	3952	0.0228	3848	0.0234
4366	0.0206	4262	0.0211	4158	0.0216	4054	0.0222	3950	0.0228	3846	0.0234
4364	0.0206	4260	0.0211	4156	0.0217	4052	0.0222	3948	0.0228	3844	0.0234
4362	0.0206	4258	0.0211	4154	0.0217	4050	0.0222	3946	0.0228	3842	0.0234
4360	0.0206	4256	0.0211	4152	0.0217	4048	0.0222	3944	0.0228	3840	0.0234
4358	0.0207	4254	0.0212	4150	0.0217	4046	0.0222	3942	0.0228	3838	0.0234
4356	0.0207	4252	0.0212	4148	0.0217	4044	0.0223	3940	0.0228	3836	0.0235
4354	0.0207	4250	0.0212	4146	0.0217	4042	0.0223	3938	0.0229	3834	0.0235
4352	0.0211	4248	0.0217	4144	0.0217	4040	0.0223	3936	0.0229	3832	0.0235
4350	0.0207	4246	0.0217	4142	0.0217	4038	0.0223	3934	0.0229	3830	0.0235
4348	0.0212	4244	0.0212	4140	0.0217	4036	0.0223	3932	0.0229	3828	0.0235
4346	0.0207	4242	0.0217	4138	0.0217	4034	0.0223	3930	0.0229	3826	0.0235

Table 29: Coherence for $p = 8192$ and $3202 \leq n \leq 3824$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
3824	0.0235	3720	0.0242	3616	0.0249	3512	0.0256	3408	0.0264	3304	0.0266
3822	0.0235	3718	0.0242	3614	0.0249	3510	0.0256	3406	0.0264	3302	0.0267
3820	0.0236	3716	0.0242	3612	0.0249	3508	0.0251	3404	0.0264	3300	0.0267
3818	0.0236	3714	0.0242	3610	0.0249	3506	0.0257	3402	0.0265	3298	0.0267
3816	0.0236	3712	0.0242	3608	0.0249	3504	0.0257	3400	0.0265	3296	0.0267
3814	0.0236	3710	0.0243	3606	0.0250	3502	0.0257	3398	0.0265	3294	0.0267
3812	0.0236	3708	0.0243	3604	0.0250	3500	0.0257	3396	0.0265	3292	0.0267
3810	0.0236	3706	0.0243	3602	0.0250	3498	0.0257	3394	0.0265	3290	0.0267
3808	0.0236	3704	0.0243	3600	0.0250	3496	0.0257	3392	0.0265	3288	0.0268
3806	0.0236	3702	0.0243	3598	0.0250	3494	0.0258	3390	0.0265	3286	0.0268
3804	0.0237	3700	0.0243	3596	0.0250	3492	0.0258	3388	0.0260	3284	0.0268
3802	0.0237	3698	0.0243	3594	0.0250	3490	0.0258	3386	0.0266	3282	0.0268
3800	0.0237	3696	0.0244	3592	0.0251	3488	0.0258	3384	0.0260	3280	0.0268
3798	0.0237	3694	0.0244	3590	0.0251	3486	0.0258	3382	0.0266	3278	0.0268
3796	0.0237	3692	0.0244	3588	0.0251	3484	0.0258	3380	0.0266	3276	0.0269
3794	0.0237	3690	0.0244	3586	0.0251	3482	0.0258	3378	0.0266	3274	0.0269
3792	0.0237	3688	0.0244	3584	0.0251	3480	0.0253	3376	0.0261	3272	0.0269
3790	0.0237	3686	0.0244	3582	0.0251	3478	0.0259	3374	0.0267	3270	0.0269
3788	0.0238	3684	0.0244	3580	0.0251	3476	0.0253	3372	0.0267	3268	0.0269
3786	0.0238	3682	0.0244	3578	0.0252	3474	0.0259	3370	0.0267	3266	0.0269
3784	0.0238	3680	0.0245	3576	0.0252	3472	0.0259	3368	0.0267	3264	0.0270
3782	0.0238	3678	0.0245	3574	0.0252	3470	0.0259	3366	0.0267	3262	0.0270
3780	0.0238	3676	0.0245	3572	0.0252	3468	0.0260	3364	0.0268	3260	0.0270
3778	0.0238	3674	0.0245	3570	0.0252	3466	0.0260	3362	0.0268	3258	0.0270
3776	0.0238	3672	0.0245	3568	0.0252	3464	0.0260	3360	0.0268	3256	0.0270
3774	0.0238	3670	0.0245	3566	0.0252	3462	0.0260	3358	0.0268	3254	0.0270
3772	0.0239	3668	0.0240	3564	0.0253	3460	0.0260	3356	0.0268	3252	0.0271
3770	0.0239	3666	0.0245	3562	0.0253	3458	0.0260	3354	0.0268	3250	0.0271
3768	0.0239	3664	0.0240	3560	0.0253	3456	0.0260	3352	0.0268	3248	0.0271
3766	0.0239	3662	0.0246	3558	0.0253	3454	0.0261	3350	0.0269	3246	0.0271
3764	0.0239	3660	0.0246	3556	0.0253	3452	0.0261	3348	0.0269	3244	0.0271
3762	0.0239	3658	0.0246	3554	0.0253	3450	0.0261	3346	0.0269	3242	0.0271
3760	0.0239	3656	0.0246	3552	0.0253	3448	0.0261	3344	0.0269	3240	0.0272
3758	0.0239	3654	0.0246	3550	0.0254	3446	0.0261	3342	0.0269	3238	0.0272
3756	0.0240	3652	0.0246	3548	0.0254	3444	0.0261	3340	0.0269	3236	0.0272
3754	0.0240	3650	0.0247	3546	0.0254	3442	0.0261	3338	0.0270	3234	0.0272
3752	0.0240	3648	0.0247	3544	0.0254	3440	0.0262	3336	0.0270	3232	0.0272
3750	0.0240	3646	0.0247	3542	0.0254	3438	0.0262	3334	0.0270	3230	0.0272
3748	0.0240	3644	0.0247	3540	0.0249	3436	0.0256	3332	0.0264	3228	0.0273
3746	0.0240	3642	0.0247	3538	0.0254	3434	0.0262	3330	0.0270	3226	0.0273
3744	0.0240	3640	0.0247	3536	0.0255	3432	0.0262	3328	0.0270	3224	0.0273
3742	0.0241	3638	0.0247	3534	0.0255	3430	0.0262	3326	0.0271	3222	0.0273
3740	0.0241	3636	0.0248	3532	0.0255	3428	0.0263	3324	0.0271	3220	0.0273
3738	0.0241	3634	0.0248	3530	0.0255	3426	0.0263	3322	0.0271	3218	0.0273
3736	0.0241	3632	0.0248	3528	0.0255	3424	0.0263	3320	0.0265	3216	0.0274
3734	0.0241	3630	0.0248	3526	0.0255	3422	0.0263	3318	0.0265	3214	0.0274
3732	0.0241	3628	0.0248	3524	0.0255	3420	0.0263	3316	0.0265	3212	0.0274
3730	0.0241	3626	0.0248	3522	0.0256	3418	0.0263	3314	0.0266	3210	0.0274
3728	0.0241	3624	0.0243	3520	0.0256	3416	0.0263	3312	0.0266	3208	0.0274
3726	0.0242	3622	0.0248	3518	0.0256	3414	0.0264	3310	0.0266	3206	0.0274
3724	0.0242	3620	0.0249	3516	0.0256	3412	0.0264	3308	0.0266	3204	0.0275
3722	0.0242	3618	0.0249	3514	0.0256	3410	0.0264	3306	0.0266	3202	0.0275

Table 30: Coherence for $p = 8192$ and $2578 \leq n \leq 3200$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
3200	0.0275	3096	0.0284	2992	0.0294	2888	0.0305	2784	0.0309	2680	0.0321
3198	0.0275	3094	0.0284	2990	0.0294	2886	0.0298	2782	0.0309	2678	0.0321
3196	0.0275	3092	0.0285	2988	0.0295	2884	0.0305	2780	0.0309	2676	0.0321
3194	0.0276	3090	0.0285	2986	0.0295	2882	0.0305	2778	0.0310	2674	0.0322
3192	0.0276	3088	0.0285	2984	0.0295	2880	0.0306	2776	0.0310	2672	0.0322
3190	0.0276	3086	0.0285	2982	0.0295	2878	0.0299	2774	0.0310	2670	0.0322
3188	0.0276	3084	0.0285	2980	0.0295	2876	0.0306	2772	0.0310	2668	0.0315
3186	0.0276	3082	0.0286	2978	0.0289	2874	0.0306	2770	0.0310	2666	0.0323
3184	0.0276	3080	0.0286	2976	0.0296	2872	0.0306	2768	0.0311	2664	0.0323
3182	0.0277	3078	0.0279	2974	0.0296	2870	0.0307	2766	0.0311	2662	0.0323
3180	0.0277	3076	0.0286	2972	0.0296	2868	0.0307	2764	0.0311	2660	0.0323
3178	0.0277	3074	0.0286	2970	0.0296	2866	0.0307	2762	0.0311	2658	0.0324
3176	0.0277	3072	0.0286	2968	0.0296	2864	0.0307	2760	0.0312	2656	0.0324
3174	0.0277	3070	0.0280	2966	0.0290	2862	0.0307	2758	0.0312	2654	0.0324
3172	0.0277	3068	0.0287	2964	0.0297	2860	0.0308	2756	0.0312	2652	0.0324
3170	0.0278	3066	0.0280	2962	0.0290	2858	0.0308	2754	0.0312	2650	0.0325
3168	0.0278	3064	0.0287	2960	0.0297	2856	0.0308	2752	0.0312	2648	0.0325
3166	0.0278	3062	0.0287	2958	0.0297	2854	0.0308	2750	0.0313	2646	0.0325
3164	0.0278	3060	0.0288	2956	0.0298	2852	0.0309	2748	0.0313	2644	0.0325
3162	0.0278	3058	0.0288	2954	0.0291	2850	0.0302	2746	0.0313	2642	0.0326
3160	0.0278	3056	0.0288	2952	0.0298	2848	0.0302	2744	0.0313	2640	0.0326
3158	0.0279	3054	0.0288	2950	0.0298	2846	0.0302	2742	0.0314	2638	0.0326
3156	0.0279	3052	0.0288	2948	0.0299	2844	0.0309	2740	0.0314	2636	0.0326
3154	0.0273	3050	0.0289	2946	0.0292	2842	0.0310	2738	0.0314	2634	0.0326
3152	0.0279	3048	0.0289	2944	0.0299	2840	0.0303	2736	0.0314	2632	0.0327
3150	0.0279	3046	0.0282	2942	0.0292	2838	0.0303	2734	0.0315	2630	0.0327
3148	0.0280	3044	0.0289	2940	0.0299	2836	0.0310	2732	0.0315	2628	0.0327
3146	0.0280	3042	0.0289	2938	0.0293	2834	0.0311	2730	0.0315	2626	0.0327
3144	0.0280	3040	0.0289	2936	0.0300	2832	0.0311	2728	0.0315	2624	0.0328
3142	0.0280	3038	0.0283	2934	0.0293	2830	0.0304	2726	0.0315	2622	0.0328
3140	0.0280	3036	0.0290	2932	0.0300	2828	0.0311	2724	0.0316	2620	0.0328
3138	0.0280	3034	0.0290	2930	0.0300	2826	0.0304	2722	0.0316	2618	0.0328
3136	0.0281	3032	0.0290	2928	0.0301	2824	0.0305	2720	0.0316	2616	0.0329
3134	0.0281	3030	0.0290	2926	0.0301	2822	0.0305	2718	0.0316	2614	0.0329
3132	0.0281	3028	0.0291	2924	0.0301	2820	0.0305	2716	0.0317	2612	0.0329
3130	0.0281	3026	0.0291	2922	0.0294	2818	0.0305	2714	0.0317	2610	0.0330
3128	0.0281	3024	0.0291	2920	0.0301	2816	0.0312	2712	0.0310	2608	0.0330
3126	0.0282	3022	0.0291	2918	0.0302	2814	0.0306	2710	0.0317	2606	0.0330
3124	0.0282	3020	0.0291	2916	0.0302	2812	0.0313	2708	0.0310	2604	0.0330
3122	0.0282	3018	0.0292	2914	0.0302	2810	0.0306	2706	0.0318	2602	0.0331
3120	0.0282	3016	0.0292	2912	0.0302	2808	0.0313	2704	0.0311	2600	0.0331
3118	0.0282	3014	0.0292	2910	0.0296	2806	0.0314	2702	0.0318	2598	0.0331
3116	0.0282	3012	0.0292	2908	0.0303	2804	0.0307	2700	0.0319	2596	0.0331
3114	0.0283	3010	0.0292	2906	0.0296	2802	0.0307	2698	0.0319	2594	0.0332
3112	0.0283	3008	0.0293	2904	0.0303	2800	0.0307	2696	0.0312	2592	0.0324
3110	0.0283	3006	0.0293	2902	0.0303	2798	0.0307	2694	0.0319	2590	0.0332
3108	0.0283	3004	0.0293	2900	0.0303	2796	0.0308	2692	0.0319	2588	0.0332
3106	0.0277	3002	0.0293	2898	0.0297	2794	0.0308	2690	0.0320	2586	0.0333
3104	0.0284	3000	0.0293	2896	0.0304	2792	0.0308	2688	0.0320	2584	0.0333
3102	0.0284	2998	0.0287	2894	0.0304	2790	0.0308	2686	0.0320	2582	0.0333
3100	0.0284	2996	0.0294	2892	0.0304	2788	0.0308	2684	0.0320	2580	0.0333
3098	0.0284	2994	0.0287	2890	0.0304	2786	0.0309	2682	0.0321	2578	0.0326

Table 31: Coherence for $p = 8192$ and $1954 \leq n \leq 2576$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
2576	0.0326	2472	0.0340	2368	0.0355	2264	0.0362	2160	0.0370	2056	0.0399
2574	0.0326	2470	0.0340	2366	0.0347	2262	0.0363	2158	0.0380	2054	0.0399
2572	0.0327	2468	0.0340	2364	0.0355	2260	0.0363	2156	0.0380	2052	0.0400
2570	0.0327	2466	0.0341	2362	0.0356	2258	0.0363	2154	0.0381	2050	0.0390
2568	0.0327	2464	0.0341	2360	0.0356	2256	0.0363	2152	0.0381	2048	0.0400
2566	0.0327	2462	0.0341	2358	0.0356	2254	0.0364	2150	0.0381	2046	0.0401
2564	0.0328	2460	0.0341	2356	0.0357	2252	0.0364	2148	0.0382	2044	0.0391
2562	0.0336	2458	0.0342	2354	0.0357	2250	0.0364	2146	0.0382	2042	0.0402
2560	0.0336	2456	0.0342	2352	0.0357	2248	0.0365	2144	0.0382	2040	0.0402
2558	0.0328	2454	0.0342	2350	0.0357	2246	0.0365	2142	0.0383	2038	0.0402
2556	0.0329	2452	0.0343	2348	0.0358	2244	0.0365	2140	0.0383	2036	0.0403
2554	0.0329	2450	0.0343	2346	0.0358	2242	0.0366	2138	0.0384	2034	0.0393
2552	0.0329	2448	0.0343	2344	0.0358	2240	0.0366	2136	0.0384	2032	0.0394
2550	0.0329	2446	0.0343	2342	0.0359	2238	0.0366	2134	0.0384	2030	0.0404
2548	0.0330	2444	0.0344	2340	0.0359	2236	0.0367	2132	0.0385	2028	0.0404
2546	0.0330	2442	0.0344	2338	0.0359	2234	0.0367	2130	0.0385	2026	0.0405
2544	0.0330	2440	0.0344	2336	0.0360	2232	0.0367	2128	0.0385	2024	0.0395
2542	0.0330	2438	0.0345	2334	0.0351	2230	0.0368	2126	0.0386	2022	0.0406
2540	0.0331	2436	0.0345	2332	0.0360	2228	0.0368	2124	0.0386	2020	0.0396
2538	0.0331	2434	0.0345	2330	0.0361	2226	0.0368	2122	0.0386	2018	0.0396
2536	0.0331	2432	0.0345	2328	0.0361	2224	0.0369	2120	0.0387	2016	0.0397
2534	0.0331	2430	0.0346	2326	0.0361	2222	0.0369	2118	0.0387	2014	0.0397
2532	0.0332	2428	0.0346	2324	0.0361	2220	0.0369	2116	0.0378	2012	0.0398
2530	0.0332	2426	0.0346	2322	0.0362	2218	0.0370	2114	0.0388	2010	0.0398
2528	0.0332	2424	0.0347	2320	0.0362	2216	0.0370	2112	0.0388	2008	0.0398
2526	0.0333	2422	0.0347	2318	0.0354	2214	0.0370	2110	0.0389	2006	0.0399
2524	0.0333	2420	0.0347	2316	0.0363	2212	0.0371	2108	0.0389	2004	0.0399
2522	0.0333	2418	0.0347	2314	0.0354	2210	0.0371	2106	0.0389	2002	0.0400
2520	0.0333	2416	0.0348	2312	0.0363	2208	0.0371	2104	0.0390	2000	0.0400
2518	0.0334	2414	0.0348	2310	0.0355	2206	0.0372	2102	0.0390	1998	0.0400
2516	0.0334	2412	0.0348	2308	0.0364	2204	0.0372	2100	0.0390	1996	0.0401
2514	0.0334	2410	0.0349	2306	0.0356	2202	0.0372	2098	0.0391	1994	0.0401
2512	0.0334	2408	0.0349	2304	0.0365	2200	0.0373	2096	0.0391	1992	0.0402
2510	0.0335	2406	0.0349	2302	0.0356	2198	0.0373	2094	0.0392	1990	0.0402
2508	0.0335	2404	0.0349	2300	0.0357	2196	0.0373	2092	0.0382	1988	0.0402
2506	0.0335	2402	0.0358	2298	0.0357	2194	0.0374	2090	0.0383	1986	0.0403
2504	0.0335	2400	0.0350	2296	0.0366	2192	0.0374	2088	0.0383	1984	0.0403
2502	0.0336	2398	0.0350	2294	0.0357	2190	0.0374	2086	0.0384	1982	0.0404
2500	0.0336	2396	0.0351	2292	0.0358	2188	0.0375	2084	0.0393	1980	0.0404
2498	0.0336	2394	0.0351	2290	0.0358	2186	0.0375	2082	0.0394	1978	0.0404
2496	0.0337	2392	0.0351	2288	0.0367	2184	0.0375	2080	0.0394	1976	0.0405
2494	0.0337	2390	0.0351	2286	0.0367	2182	0.0376	2078	0.0395	1974	0.0405
2492	0.0337	2388	0.0352	2284	0.0359	2180	0.0376	2076	0.0395	1972	0.0406
2490	0.0337	2386	0.0352	2282	0.0368	2178	0.0376	2074	0.0395	1970	0.0406
2488	0.0338	2384	0.0352	2280	0.0368	2176	0.0377	2072	0.0396	1968	0.0407
2486	0.0338	2382	0.0353	2278	0.0360	2174	0.0377	2070	0.0396	1966	0.0407
2484	0.0338	2380	0.0353	2276	0.0369	2172	0.0378	2068	0.0397	1964	0.0407
2482	0.0338	2378	0.0353	2274	0.0361	2170	0.0378	2066	0.0387	1962	0.0398
2480	0.0339	2376	0.0354	2272	0.0361	2168	0.0378	2064	0.0397	1960	0.0408
2478	0.0339	2374	0.0345	2270	0.0361	2166	0.0379	2062	0.0398	1958	0.0409
2476	0.0339	2372	0.0354	2268	0.0362	2164	0.0370	2060	0.0398	1956	0.0409
2474	0.0340	2370	0.0346	2266	0.0362	2162	0.0379	2058	0.0398	1954	0.0409

Table 32: Coherence for $p = 8192$ and $1330 \leq n \leq 1952$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1952	0.0410	1848	0.0433	1744	0.0447	1640	0.0463	1536	0.0482	1432	0.0503
1950	0.0410	1846	0.0423	1742	0.0448	1638	0.0464	1534	0.0482	1430	0.0503
1948	0.0411	1844	0.0434	1740	0.0448	1636	0.0465	1532	0.0483	1428	0.0518
1946	0.0411	1842	0.0434	1738	0.0449	1634	0.0465	1530	0.0484	1426	0.0519
1944	0.0412	1840	0.0435	1736	0.0449	1632	0.0466	1528	0.0484	1424	0.0506
1942	0.0402	1838	0.0435	1734	0.0450	1630	0.0466	1526	0.0485	1422	0.0506
1940	0.0412	1836	0.0436	1732	0.0450	1628	0.0467	1524	0.0486	1420	0.0507
1938	0.0402	1834	0.0436	1730	0.0451	1626	0.0455	1522	0.0486	1418	0.0508
1936	0.0413	1832	0.0437	1728	0.0451	1624	0.0468	1520	0.0487	1416	0.0508
1934	0.0414	1830	0.0437	1726	0.0452	1622	0.0469	1518	0.0487	1414	0.0509
1932	0.0414	1828	0.0438	1724	0.0441	1620	0.0469	1516	0.0488	1412	0.0510
1930	0.0415	1826	0.0427	1722	0.0453	1618	0.0470	1514	0.0489	1410	0.0511
1928	0.0415	1824	0.0428	1720	0.0453	1616	0.0470	1512	0.0489	1408	0.0511
1926	0.0415	1822	0.0428	1718	0.0454	1614	0.0471	1510	0.0490	1406	0.0512
1924	0.0416	1820	0.0429	1716	0.0455	1612	0.0471	1508	0.0491	1404	0.0513
1922	0.0416	1818	0.0429	1714	0.0455	1610	0.0472	1506	0.0491	1402	0.0514
1920	0.0417	1816	0.0430	1712	0.0456	1608	0.0473	1504	0.0492	1400	0.0514
1918	0.0417	1814	0.0430	1710	0.0456	1606	0.0461	1502	0.0493	1398	0.0515
1916	0.0418	1812	0.0430	1708	0.0457	1604	0.0474	1500	0.0493	1396	0.0516
1914	0.0418	1810	0.0431	1706	0.0457	1602	0.0474	1498	0.0494	1394	0.0516
1912	0.0418	1808	0.0431	1704	0.0458	1600	0.0475	1496	0.0495	1392	0.0517
1910	0.0419	1806	0.0432	1702	0.0458	1598	0.0476	1494	0.0495	1390	0.0518
1908	0.0419	1804	0.0432	1700	0.0459	1596	0.0476	1492	0.0496	1388	0.0519
1906	0.0420	1802	0.0433	1698	0.0459	1594	0.0477	1490	0.0497	1386	0.0519
1904	0.0420	1800	0.0433	1696	0.0460	1592	0.0477	1488	0.0497	1384	0.0520
1902	0.0421	1798	0.0434	1694	0.0460	1590	0.0478	1486	0.0498	1382	0.0521
1900	0.0421	1796	0.0434	1692	0.0449	1588	0.0479	1484	0.0499	1380	0.0522
1898	0.0421	1794	0.0435	1690	0.0450	1586	0.0479	1482	0.0499	1378	0.0522
1896	0.0422	1792	0.0435	1688	0.0462	1584	0.0480	1480	0.0500	1376	0.0523
1894	0.0412	1790	0.0436	1686	0.0463	1582	0.0480	1478	0.0501	1374	0.0524
1892	0.0423	1788	0.0436	1684	0.0451	1580	0.0481	1476	0.0501	1372	0.0525
1890	0.0423	1786	0.0437	1682	0.0452	1578	0.0482	1474	0.0502	1370	0.0526
1888	0.0413	1784	0.0437	1680	0.0452	1576	0.0482	1472	0.0503	1368	0.0526
1886	0.0414	1782	0.0438	1678	0.0465	1574	0.0470	1470	0.0503	1366	0.0512
1884	0.0414	1780	0.0438	1676	0.0453	1572	0.0483	1468	0.0504	1364	0.0528
1882	0.0414	1778	0.0439	1674	0.0454	1570	0.0484	1466	0.0505	1362	0.0529
1880	0.0426	1776	0.0439	1672	0.0455	1568	0.0485	1464	0.0505	1360	0.0529
1878	0.0426	1774	0.0440	1670	0.0455	1566	0.0485	1462	0.0506	1358	0.0530
1876	0.0426	1772	0.0440	1668	0.0456	1564	0.0486	1460	0.0507	1356	0.0531
1874	0.0427	1770	0.0441	1666	0.0456	1562	0.0487	1458	0.0508	1354	0.0517
1872	0.0427	1768	0.0441	1664	0.0457	1560	0.0487	1456	0.0508	1352	0.0533
1870	0.0428	1766	0.0442	1662	0.0457	1558	0.0488	1454	0.0509	1350	0.0533
1868	0.0428	1764	0.0442	1660	0.0458	1556	0.0488	1452	0.0510	1348	0.0519
1866	0.0429	1762	0.0443	1658	0.0458	1554	0.0489	1450	0.0510	1346	0.0520
1864	0.0429	1760	0.0443	1656	0.0459	1552	0.0477	1448	0.0511	1344	0.0536
1862	0.0430	1758	0.0444	1654	0.0459	1550	0.0477	1446	0.0512	1342	0.0537
1860	0.0430	1756	0.0433	1652	0.0460	1548	0.0478	1444	0.0512	1340	0.0537
1858	0.0431	1754	0.0445	1650	0.0461	1546	0.0479	1442	0.0513	1338	0.0538
1856	0.0431	1752	0.0445	1648	0.0461	1544	0.0479	1440	0.0500	1336	0.0539
1854	0.0431	1750	0.0446	1646	0.0462	1542	0.0493	1438	0.0515	1334	0.0525
1852	0.0432	1748	0.0446	1644	0.0462	1540	0.0481	1436	0.0515	1332	0.0541
1850	0.0432	1746	0.0447	1642	0.0463	1538	0.0481	1434	0.0502	1330	0.0541

Table 33: Coherence for $p = 8192$ and $706 \leq n \leq 1328$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1328	0.0527	1224	0.0572	1120	0.0607	1016	0.0650	912	0.0680	808	0.0743
1326	0.0528	1222	0.0556	1118	0.0608	1014	0.0651	910	0.0681	806	0.0744
1324	0.0529	1220	0.0574	1116	0.0609	1012	0.0652	908	0.0683	804	0.0746
1322	0.0530	1218	0.0558	1114	0.0610	1010	0.0653	906	0.0684	802	0.0748
1320	0.0545	1216	0.0576	1112	0.0612	1008	0.0655	904	0.0686	800	0.0750
1318	0.0546	1214	0.0577	1110	0.0595	1006	0.0636	902	0.0687	798	0.0752
1316	0.0547	1212	0.0561	1108	0.0614	1004	0.0637	900	0.0689	796	0.0754
1314	0.0548	1210	0.0562	1106	0.0597	1002	0.0639	898	0.0690	794	0.0756
1312	0.0534	1208	0.0579	1104	0.0616	1000	0.0640	896	0.0692	792	0.0758
1310	0.0534	1206	0.0580	1102	0.0617	998	0.0641	894	0.0694	790	0.0759
1308	0.0535	1204	0.0581	1100	0.0618	996	0.0643	892	0.0695	788	0.0761
1306	0.0536	1202	0.0582	1098	0.0619	994	0.0644	890	0.0697	786	0.0763
1304	0.0537	1200	0.0583	1096	0.0620	992	0.0645	888	0.0698	784	0.0765
1302	0.0538	1198	0.0584	1094	0.0622	990	0.0646	886	0.0700	782	0.0767
1300	0.0538	1196	0.0585	1092	0.0623	988	0.0648	884	0.0701	780	0.0769
1298	0.0539	1194	0.0570	1090	0.0624	986	0.0649	882	0.0703	778	0.0771
1296	0.0540	1192	0.0570	1088	0.0607	984	0.0650	880	0.0705	776	0.0773
1294	0.0541	1190	0.0571	1086	0.0626	982	0.0652	878	0.0706	774	0.0775
1292	0.0542	1188	0.0572	1084	0.0627	980	0.0653	876	0.0708	772	0.0777
1290	0.0543	1186	0.0573	1082	0.0610	978	0.0654	874	0.0709	770	0.0753
1288	0.0543	1184	0.0574	1080	0.0630	976	0.0656	872	0.0711	768	0.0781
1286	0.0544	1182	0.0575	1078	0.0612	974	0.0657	870	0.0713	766	0.0783
1284	0.0545	1180	0.0576	1076	0.0632	972	0.0658	868	0.0714	764	0.0785
1282	0.0546	1178	0.0577	1074	0.0615	970	0.0660	866	0.0693	762	0.0787
1280	0.0547	1176	0.0578	1072	0.0616	968	0.0661	864	0.0694	760	0.0789
1278	0.0548	1174	0.0579	1070	0.0617	966	0.0663	862	0.0719	758	0.0792
1276	0.0549	1172	0.0580	1068	0.0618	964	0.0664	860	0.0721	756	0.0794
1274	0.0549	1170	0.0581	1066	0.0619	962	0.0665	858	0.0699	754	0.0796
1272	0.0550	1168	0.0582	1064	0.0620	960	0.0667	856	0.0724	752	0.0798
1270	0.0551	1166	0.0583	1062	0.0621	958	0.0668	854	0.0703	750	0.0800
1268	0.0552	1164	0.0584	1060	0.0623	956	0.0669	852	0.0728	748	0.0802
1266	0.0553	1162	0.0585	1058	0.0624	954	0.0671	850	0.0729	746	0.0804
1264	0.0554	1160	0.0586	1056	0.0625	952	0.0672	848	0.0708	744	0.0780
1262	0.0555	1158	0.0587	1054	0.0626	950	0.0674	846	0.0709	742	0.0809
1260	0.0540	1156	0.0588	1052	0.0627	948	0.0675	844	0.0711	740	0.0811
1258	0.0556	1154	0.0589	1050	0.0629	946	0.0677	842	0.0713	738	0.0813
1256	0.0541	1152	0.0590	1048	0.0630	944	0.0678	840	0.0714	736	0.0815
1254	0.0558	1150	0.0591	1046	0.0631	942	0.0679	838	0.0716	734	0.0790
1252	0.0559	1148	0.0592	1044	0.0632	940	0.0660	836	0.0718	732	0.0792
1250	0.0560	1146	0.0593	1042	0.0633	938	0.0682	834	0.0719	730	0.0795
1248	0.0561	1144	0.0594	1040	0.0615	936	0.0662	832	0.0721	728	0.0797
1246	0.0562	1142	0.0595	1038	0.0636	934	0.0685	830	0.0723	726	0.0799
1244	0.0563	1140	0.0596	1036	0.0637	932	0.0687	828	0.0725	724	0.0801
1242	0.0564	1138	0.0598	1034	0.0638	930	0.0667	826	0.0726	722	0.0803
1240	0.0565	1136	0.0599	1032	0.0640	928	0.0668	824	0.0728	720	0.0806
1238	0.0565	1134	0.0582	1030	0.0641	926	0.0691	822	0.0730	718	0.0808
1236	0.0566	1132	0.0601	1028	0.0642	924	0.0671	820	0.0732	716	0.0810
1234	0.0567	1130	0.0602	1026	0.0643	922	0.0672	818	0.0733	714	0.0812
1232	0.0568	1128	0.0603	1024	0.0625	920	0.0674	816	0.0735	712	0.0815
1230	0.0569	1126	0.0604	1022	0.0646	918	0.0675	814	0.0713	710	0.0817
1228	0.0570	1124	0.0605	1020	0.0647	916	0.0677	812	0.0739	708	0.0819
1226	0.0571	1122	0.0606	1018	0.0648	914	0.0678	810	0.0741	706	0.0822

Table 34: Coherence for $p = 8192$ and $82 \leq n \leq 704$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
704	0.0824	600	0.0900	496	0.1008	392	0.1173	288	0.1458	184	0.1848
702	0.0826	598	0.0903	494	0.1012	390	0.1179	286	0.1469	182	0.1868
700	0.0829	596	0.0906	492	0.1016	388	0.1186	284	0.1408	180	0.1889
698	0.0831	594	0.0909	490	0.1020	386	0.1192	282	0.1418	178	0.1910
696	0.0833	592	0.0912	488	0.1025	384	0.1198	280	0.1429	176	0.1932
694	0.0836	590	0.0915	486	0.1029	382	0.1204	278	0.1439	174	0.1954
692	0.0838	588	0.0918	484	0.1033	380	0.1211	276	0.1449	172	0.1977
690	0.0841	586	0.0922	482	0.1037	378	0.1217	274	0.1460	170	0.2000
688	0.0843	584	0.0925	480	0.1042	376	0.1223	272	0.1471	168	0.2024
686	0.0845	582	0.0928	478	0.1046	374	0.1230	270	0.1481	166	0.2048
684	0.0819	580	0.0931	476	0.1050	372	0.1237	268	0.1493	164	0.2073
682	0.0821	578	0.0934	474	0.1055	370	0.1243	266	0.1504	162	0.2099
680	0.0824	576	0.0938	472	0.1059	368	0.1196	264	0.1515	160	0.2000
678	0.0826	574	0.0941	470	0.1064	366	0.1202	262	0.1527	158	0.2025
676	0.0828	572	0.0944	468	0.1068	364	0.1209	260	0.1538	156	0.2051
674	0.0831	570	0.0912	466	0.1073	362	0.1215	258	0.1550	154	0.2078
672	0.0833	568	0.0915	464	0.1034	360	0.1222	256	0.1562	152	0.2105
670	0.0836	566	0.0919	462	0.1039	358	0.1229	254	0.1575	150	0.2133
668	0.0838	564	0.0922	460	0.1087	356	0.1236	252	0.1587	148	0.2162
666	0.0841	562	0.0925	458	0.1048	354	0.1243	250	0.1600	146	0.2192
664	0.0843	560	0.0929	456	0.1053	352	0.1250	248	0.1532	144	0.2222
662	0.0846	558	0.0932	454	0.1057	350	0.1257	246	0.1626	142	0.2254
660	0.0848	556	0.0935	452	0.1062	348	0.1264	244	0.1557	140	0.2143
658	0.0851	554	0.0939	450	0.1067	346	0.1272	242	0.1570	138	0.2174
656	0.0854	552	0.0942	448	0.1071	344	0.1279	240	0.1583	136	0.2206
654	0.0856	550	0.0945	446	0.1076	342	0.1287	238	0.1597	134	0.2239
652	0.0859	548	0.0949	444	0.1081	340	0.1294	236	0.1610	132	0.2273
650	0.0862	546	0.0952	442	0.1086	338	0.1302	234	0.1624	130	0.2308
648	0.0864	544	0.0956	440	0.1091	336	0.1310	232	0.1638	128	0.2344
646	0.0867	542	0.0959	438	0.1096	334	0.1317	230	0.1652	126	0.2381
644	0.0870	540	0.0963	436	0.1101	332	0.1325	228	0.1667	124	0.2419
642	0.0872	538	0.0967	434	0.1106	330	0.1333	226	0.1681	122	0.2295
640	0.0875	536	0.0970	432	0.1111	328	0.1341	224	0.1696	120	0.2500
638	0.0878	534	0.0974	430	0.1116	326	0.1350	222	0.1712	118	0.2373
636	0.0881	532	0.0977	428	0.1121	324	0.1296	220	0.1727	116	0.2414
634	0.0883	530	0.0981	426	0.1127	322	0.1304	218	0.1651	114	0.2456
632	0.0886	528	0.0985	424	0.1132	320	0.1312	216	0.1667	112	0.2500
630	0.0889	526	0.0989	422	0.1137	318	0.1321	214	0.1682	110	0.2545
628	0.0892	524	0.0992	420	0.1143	316	0.1329	212	0.1698	108	0.2593
626	0.0863	522	0.0958	418	0.1148	314	0.1338	210	0.1714	106	0.2642
624	0.0865	520	0.1000	416	0.1154	312	0.1346	208	0.1731	104	0.2692
622	0.0868	518	0.0965	414	0.1159	310	0.1355	206	0.1748	102	0.2549
620	0.0871	516	0.0969	412	0.1165	308	0.1364	204	0.1765	100	0.2600
618	0.0874	514	0.0973	410	0.1122	306	0.1373	202	0.1782	98	0.2653
616	0.0877	512	0.0977	408	0.1176	304	0.1382	200	0.1800	96	0.2708
614	0.0879	510	0.0980	406	0.1182	302	0.1391	198	0.1818	94	0.2766
612	0.0882	508	0.0984	404	0.1139	300	0.1400	196	0.1837	92	0.2826
610	0.0885	506	0.0988	402	0.1144	298	0.1409	194	0.1856	90	0.2889
608	0.0888	504	0.0992	400	0.1150	296	0.1419	192	0.1771	88	0.2955
606	0.0891	502	0.0996	398	0.1156	294	0.1429	190	0.1895	86	0.3023
604	0.0894	500	0.1000	396	0.1162	292	0.1438	188	0.1915	84	0.2857
602	0.0897	498	0.1004	394	0.1168	290	0.1448	186	0.1828	82	0.2927

Table 35: Coherence for $p = 8192$ and $22 \leq n \leq 80$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
80	0.3000	70	0.3429	60	0.3667	50	0.4000	40	0.4500	30	0.5333
78	0.3077	68	0.3235	58	0.3793	48	0.4167	38	0.4737	28	0.5714
76	0.3158	66	0.3333	56	0.3929	46	0.4348	36	0.5000	26	0.6154
74	0.3243	64	0.3438	54	0.3704	44	0.4545	34	0.5294	24	0.6667
72	0.3333	62	0.3548	52	0.3846	42	0.4762	32	0.5625	22	0.6364

Table 36: Coherence for $p = 16384$ and $15140 \leq n \leq 16384$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
16384	0.0000	16176	0.0022	15968	0.0031	15760	0.0037	15552	0.0042	15344	0.0047
16380	0.0002	16172	0.0023	15964	0.0031	15756	0.0037	15548	0.0042	15340	0.0047
16376	0.0005	16168	0.0022	15960	0.0031	15752	0.0037	15544	0.0042	15336	0.0047
16372	0.0007	16164	0.0024	15956	0.0031	15748	0.0038	15540	0.0042	15332	0.0047
16368	0.0007	16160	0.0024	15952	0.0031	15744	0.0038	15536	0.0042	15328	0.0047
16364	0.0010	16156	0.0025	15948	0.0031	15740	0.0038	15532	0.0042	15324	0.0047
16360	0.0010	16152	0.0025	15944	0.0033	15736	0.0038	15528	0.0043	15320	0.0047
16356	0.0010	16148	0.0025	15940	0.0033	15732	0.0038	15524	0.0043	15316	0.0047
16352	0.0010	16144	0.0025	15936	0.0033	15728	0.0038	15520	0.0043	15312	0.0047
16348	0.0010	16140	0.0025	15932	0.0033	15724	0.0038	15516	0.0043	15308	0.0048
16344	0.0012	16136	0.0025	15928	0.0033	15720	0.0038	15512	0.0044	15304	0.0047
16340	0.0012	16132	0.0025	15924	0.0033	15716	0.0038	15508	0.0044	15300	0.0048
16336	0.0012	16128	0.0025	15920	0.0033	15712	0.0038	15504	0.0044	15296	0.0047
16332	0.0012	16124	0.0025	15916	0.0033	15708	0.0038	15500	0.0044	15292	0.0047
16328	0.0012	16120	0.0025	15912	0.0033	15704	0.0038	15496	0.0044	15288	0.0048
16324	0.0013	16116	0.0025	15908	0.0033	15700	0.0039	15492	0.0044	15284	0.0047
16320	0.0015	16112	0.0025	15904	0.0033	15696	0.0038	15488	0.0044	15280	0.0048
16316	0.0015	16108	0.0026	15900	0.0033	15692	0.0038	15484	0.0044	15276	0.0048
16312	0.0015	16104	0.0026	15896	0.0034	15688	0.0040	15480	0.0044	15272	0.0048
16308	0.0015	16100	0.0026	15892	0.0033	15684	0.0040	15476	0.0044	15268	0.0048
16304	0.0016	16096	0.0026	15888	0.0034	15680	0.0040	15472	0.0044	15264	0.0048
16300	0.0015	16092	0.0027	15884	0.0033	15676	0.0040	15468	0.0044	15260	0.0048
16296	0.0016	16088	0.0027	15880	0.0034	15672	0.0040	15464	0.0044	15256	0.0049
16292	0.0016	16084	0.0027	15876	0.0034	15668	0.0040	15460	0.0044	15252	0.0049
16288	0.0017	16080	0.0027	15872	0.0034	15664	0.0040	15456	0.0044	15248	0.0049
16284	0.0017	16076	0.0027	15868	0.0034	15660	0.0040	15452	0.0044	15244	0.0049
16280	0.0017	16072	0.0027	15864	0.0034	15656	0.0040	15448	0.0044	15240	0.0049
16276	0.0017	16068	0.0027	15860	0.0034	15652	0.0041	15444	0.0044	15236	0.0049
16272	0.0017	16064	0.0027	15856	0.0034	15648	0.0041	15440	0.0044	15232	0.0049
16268	0.0017	16060	0.0027	15852	0.0035	15644	0.0041	15436	0.0044	15228	0.0049
16264	0.0018	16056	0.0027	15848	0.0035	15640	0.0041	15432	0.0045	15224	0.0049
16260	0.0018	16052	0.0027	15844	0.0035	15636	0.0041	15428	0.0044	15220	0.0050
16256	0.0018	16048	0.0027	15840	0.0035	15632	0.0041	15424	0.0044	15216	0.0050
16252	0.0020	16044	0.0027	15836	0.0035	15628	0.0041	15420	0.0045	15212	0.0050
16248	0.0020	16040	0.0029	15832	0.0035	15624	0.0041	15416	0.0045	15208	0.0050
16244	0.0020	16036	0.0029	15828	0.0035	15620	0.0041	15412	0.0045	15204	0.0050
16240	0.0020	16032	0.0029	15824	0.0035	15616	0.0041	15408	0.0045	15200	0.0050
16236	0.0020	16028	0.0029	15820	0.0035	15612	0.0041	15404	0.0045	15196	0.0050
16232	0.0020	16024	0.0029	15816	0.0035	15608	0.0041	15400	0.0045	15192	0.0050
16228	0.0020	16020	0.0029	15812	0.0035	15604	0.0041	15396	0.0047	15188	0.0050
16224	0.0020	16016	0.0030	15808	0.0035	15600	0.0041	15392	0.0045	15184	0.0050
16220	0.0020	16012	0.0030	15804	0.0035	15596	0.0041	15388	0.0047	15180	0.0050
16216	0.0021	16008	0.0030	15800	0.0035	15592	0.0041	15384	0.0047	15176	0.0050
16212	0.0021	16004	0.0030	15796	0.0035	15588	0.0042	15380	0.0047	15172	0.0050
16208	0.0022	16000	0.0030	15792	0.0035	15584	0.0041	15376	0.0047	15168	0.0050
16204	0.0022	15996	0.0030	15788	0.0035	15580	0.0041	15372	0.0047	15164	0.0050
16200	0.0022	15992	0.0030	15784	0.0035	15576	0.0042	15368	0.0047	15160	0.0050
16196	0.0022	15988	0.0030	15780	0.0037	15572	0.0042	15364	0.0047	15156	0.0050
16192	0.0022	15984	0.0031	15776	0.0037	15568	0.0042	15360	0.0047	15152	0.0050
16188	0.0022	15980	0.0031	15772	0.0037	15564	0.0042	15356	0.0047	15148	0.0050
16184	0.0022	15976	0.0031	15768	0.0037	15560	0.0042	15352	0.0047	15144	0.0050
16180	0.0022	15972	0.0031	15764	0.0037	15556	0.0042	15348	0.0047	15140	0.0050

Table 37: Coherence for $p = 16384$ and $13892 \leq n \leq 15136$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
15136	0.0050	14928	0.0055	14720	0.0058	14512	0.0062	14304	0.0064	14096	0.0068
15132	0.0050	14924	0.0055	14716	0.0058	14508	0.0062	14300	0.0066	14092	0.0068
15128	0.0050	14920	0.0054	14712	0.0058	14504	0.0062	14296	0.0066	14088	0.0068
15124	0.0050	14916	0.0054	14708	0.0058	14500	0.0062	14292	0.0066	14084	0.0068
15120	0.0052	14912	0.0055	14704	0.0058	14496	0.0062	14288	0.0066	14080	0.0070
15116	0.0050	14908	0.0055	14700	0.0059	14492	0.0062	14284	0.0066	14076	0.0070
15112	0.0052	14904	0.0055	14696	0.0059	14488	0.0062	14280	0.0066	14072	0.0068
15108	0.0050	14900	0.0055	14692	0.0059	14484	0.0062	14276	0.0066	14068	0.0068
15104	0.0052	14896	0.0054	14688	0.0059	14480	0.0062	14272	0.0066	14064	0.0070
15100	0.0050	14892	0.0055	14684	0.0059	14476	0.0062	14268	0.0066	14060	0.0068
15096	0.0050	14888	0.0055	14680	0.0059	14472	0.0062	14264	0.0066	14056	0.0070
15092	0.0052	14884	0.0055	14676	0.0059	14468	0.0062	14260	0.0066	14052	0.0070
15088	0.0052	14880	0.0055	14672	0.0059	14464	0.0062	14256	0.0066	14048	0.0070
15084	0.0052	14876	0.0055	14668	0.0059	14460	0.0064	14252	0.0066	14044	0.0070
15080	0.0052	14872	0.0055	14664	0.0059	14456	0.0062	14248	0.0066	14040	0.0070
15076	0.0052	14868	0.0055	14660	0.0059	14452	0.0062	14244	0.0066	14036	0.0068
15072	0.0052	14864	0.0055	14656	0.0059	14448	0.0064	14240	0.0066	14032	0.0070
15068	0.0052	14860	0.0057	14652	0.0059	14444	0.0064	14236	0.0066	14028	0.0070
15064	0.0052	14856	0.0057	14648	0.0060	14440	0.0064	14232	0.0066	14024	0.0070
15060	0.0052	14852	0.0057	14644	0.0060	14436	0.0064	14228	0.0066	14020	0.0070
15056	0.0052	14848	0.0057	14640	0.0060	14432	0.0064	14224	0.0066	14016	0.0070
15052	0.0052	14844	0.0057	14636	0.0060	14428	0.0064	14220	0.0066	14012	0.0070
15048	0.0052	14840	0.0057	14632	0.0060	14424	0.0064	14216	0.0066	14008	0.0070
15044	0.0052	14836	0.0057	14628	0.0060	14420	0.0064	14212	0.0068	14004	0.0070
15040	0.0053	14832	0.0057	14624	0.0060	14416	0.0064	14208	0.0066	14000	0.0070
15036	0.0053	14828	0.0057	14620	0.0060	14412	0.0064	14204	0.0068	13996	0.0070
15032	0.0053	14824	0.0057	14616	0.0060	14408	0.0064	14200	0.0068	13992	0.0070
15028	0.0053	14820	0.0057	14612	0.0060	14404	0.0064	14196	0.0068	13988	0.0070
15024	0.0053	14816	0.0057	14608	0.0060	14400	0.0064	14192	0.0068	13984	0.0070
15020	0.0053	14812	0.0057	14604	0.0060	14396	0.0064	14188	0.0068	13980	0.0070
15016	0.0053	14808	0.0057	14600	0.0060	14392	0.0064	14184	0.0068	13976	0.0070
15012	0.0053	14804	0.0057	14596	0.0060	14388	0.0064	14180	0.0068	13972	0.0070
15008	0.0053	14800	0.0057	14592	0.0060	14384	0.0064	14176	0.0068	13968	0.0070
15004	0.0053	14796	0.0057	14588	0.0060	14380	0.0064	14172	0.0068	13964	0.0070
15000	0.0053	14792	0.0057	14584	0.0060	14376	0.0064	14168	0.0068	13960	0.0070
14996	0.0053	14788	0.0057	14580	0.0060	14372	0.0064	14164	0.0068	13956	0.0070
14992	0.0053	14784	0.0057	14576	0.0060	14368	0.0064	14160	0.0068	13952	0.0070
14988	0.0053	14780	0.0057	14572	0.0060	14364	0.0064	14156	0.0068	13948	0.0070
14984	0.0053	14776	0.0057	14568	0.0060	14360	0.0064	14152	0.0068	13944	0.0070
14980	0.0053	14772	0.0057	14564	0.0060	14356	0.0064	14148	0.0068	13940	0.0070
14976	0.0053	14768	0.0057	14560	0.0062	14352	0.0064	14144	0.0068	13936	0.0070
14972	0.0053	14764	0.0058	14556	0.0062	14348	0.0064	14140	0.0068	13932	0.0072
14968	0.0053	14760	0.0057	14552	0.0060	14344	0.0064	14136	0.0068	13928	0.0072
14964	0.0053	14756	0.0057	14548	0.0060	14340	0.0064	14132	0.0068	13924	0.0072
14960	0.0053	14752	0.0057	14544	0.0062	14336	0.0064	14128	0.0068	13920	0.0072
14956	0.0053	14748	0.0058	14540	0.0062	14332	0.0064	14124	0.0068	13916	0.0072
14952	0.0054	14744	0.0057	14536	0.0062	14328	0.0064	14120	0.0068	13912	0.0072
14948	0.0054	14740	0.0057	14532	0.0061	14324	0.0064	14116	0.0068	13908	0.0072
14944	0.0054	14736	0.0057	14528	0.0062	14320	0.0064	14112	0.0068	13904	0.0072
14940	0.0054	14732	0.0058	14524	0.0062	14316	0.0066	14108	0.0068	13900	0.0072
14936	0.0054	14728	0.0057	14520	0.0062	14312	0.0066	14104	0.0068	13896	0.0072
14932	0.0055	14724	0.0058	14516	0.0062	14308	0.0064	14100	0.0070	13892	0.0072

Table 38: Coherence for $p = 16384$ and $12644 \leq n \leq 13888$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
13888	0.0072	13680	0.0075	13472	0.0077	13264	0.0081	13056	0.0084	12848	0.0087
13884	0.0072	13676	0.0075	13468	0.0077	13260	0.0081	13052	0.0083	12844	0.0087
13880	0.0072	13672	0.0075	13464	0.0077	13256	0.0081	13048	0.0083	12840	0.0087
13876	0.0072	13668	0.0075	13460	0.0077	13252	0.0081	13044	0.0083	12836	0.0087
13872	0.0072	13664	0.0075	13456	0.0077	13248	0.0082	13040	0.0084	12832	0.0087
13868	0.0072	13660	0.0075	13452	0.0077	13244	0.0082	13036	0.0083	12828	0.0087
13864	0.0072	13656	0.0075	13448	0.0077	13240	0.0082	13032	0.0083	12824	0.0087
13860	0.0072	13652	0.0075	13444	0.0077	13236	0.0082	13028	0.0084	12820	0.0087
13856	0.0072	13648	0.0075	13440	0.0077	13232	0.0082	13024	0.0084	12816	0.0087
13852	0.0072	13644	0.0075	13436	0.0079	13228	0.0082	13020	0.0084	12812	0.0087
13848	0.0072	13640	0.0075	13432	0.0079	13224	0.0082	13016	0.0085	12808	0.0087
13844	0.0072	13636	0.0075	13428	0.0077	13220	0.0082	13012	0.0085	12804	0.0087
13840	0.0072	13632	0.0075	13424	0.0079	13216	0.0082	13008	0.0085	12800	0.0088
13836	0.0072	13628	0.0075	13420	0.0079	13212	0.0082	13004	0.0085	12796	0.0088
13832	0.0072	13624	0.0075	13416	0.0078	13208	0.0082	13000	0.0085	12792	0.0088
13828	0.0072	13620	0.0075	13412	0.0079	13204	0.0082	12996	0.0085	12788	0.0088
13824	0.0072	13616	0.0075	13408	0.0079	13200	0.0082	12992	0.0085	12784	0.0088
13820	0.0072	13612	0.0075	13404	0.0079	13196	0.0082	12988	0.0086	12780	0.0088
13816	0.0072	13608	0.0076	13400	0.0079	13192	0.0082	12984	0.0085	12776	0.0088
13812	0.0072	13604	0.0075	13396	0.0079	13188	0.0082	12980	0.0085	12772	0.0088
13808	0.0072	13600	0.0075	13392	0.0079	13184	0.0082	12976	0.0085	12768	0.0088
13804	0.0072	13596	0.0075	13388	0.0079	13180	0.0082	12972	0.0085	12764	0.0088
13800	0.0072	13592	0.0075	13384	0.0079	13176	0.0082	12968	0.0085	12760	0.0088
13796	0.0072	13588	0.0077	13380	0.0079	13172	0.0082	12964	0.0085	12756	0.0088
13792	0.0073	13584	0.0077	13376	0.0079	13168	0.0082	12960	0.0086	12752	0.0088
13788	0.0073	13580	0.0077	13372	0.0079	13164	0.0082	12956	0.0086	12748	0.0088
13784	0.0073	13576	0.0077	13368	0.0079	13160	0.0082	12952	0.0086	12744	0.0088
13780	0.0073	13572	0.0077	13364	0.0079	13156	0.0082	12948	0.0086	12740	0.0088
13776	0.0073	13568	0.0077	13360	0.0081	13152	0.0082	12944	0.0087	12736	0.0088
13772	0.0074	13564	0.0077	13356	0.0081	13148	0.0082	12940	0.0087	12732	0.0088
13768	0.0074	13560	0.0077	13352	0.0079	13144	0.0082	12936	0.0087	12728	0.0088
13764	0.0073	13556	0.0077	13348	0.0081	13140	0.0082	12932	0.0087	12724	0.0090
13760	0.0073	13552	0.0077	13344	0.0081	13136	0.0082	12928	0.0087	12720	0.0090
13756	0.0074	13548	0.0077	13340	0.0081	13132	0.0082	12924	0.0087	12716	0.0090
13752	0.0073	13544	0.0077	13336	0.0081	13128	0.0082	12920	0.0087	12712	0.0090
13748	0.0074	13540	0.0077	13332	0.0081	13124	0.0082	12916	0.0087	12708	0.0090
13744	0.0073	13536	0.0077	13328	0.0081	13120	0.0084	12912	0.0087	12704	0.0090
13740	0.0073	13532	0.0077	13324	0.0081	13116	0.0082	12908	0.0087	12700	0.0088
13736	0.0073	13528	0.0077	13320	0.0081	13112	0.0082	12904	0.0087	12696	0.0088
13732	0.0073	13524	0.0077	13316	0.0081	13108	0.0082	12900	0.0087	12692	0.0088
13728	0.0073	13520	0.0077	13312	0.0081	13104	0.0084	12896	0.0087	12688	0.0090
13724	0.0074	13516	0.0077	13308	0.0081	13100	0.0084	12892	0.0087	12684	0.0090
13720	0.0074	13512	0.0077	13304	0.0081	13096	0.0084	12888	0.0087	12680	0.0088
13716	0.0074	13508	0.0077	13300	0.0081	13092	0.0082	12884	0.0087	12676	0.0088
13712	0.0074	13504	0.0077	13296	0.0081	13088	0.0084	12880	0.0087	12672	0.0088
13708	0.0074	13500	0.0077	13292	0.0081	13084	0.0083	12876	0.0087	12668	0.0088
13704	0.0074	13496	0.0077	13288	0.0081	13080	0.0083	12872	0.0087	12664	0.0090
13700	0.0074	13492	0.0077	13284	0.0081	13076	0.0083	12868	0.0087	12660	0.0090
13696	0.0073	13488	0.0077	13280	0.0081	13072	0.0083	12864	0.0087	12656	0.0088
13692	0.0073	13484	0.0077	13276	0.0081	13068	0.0084	12860	0.0087	12652	0.0089
13688	0.0075	13480	0.0077	13272	0.0081	13064	0.0083	12856	0.0087	12648	0.0090
13684	0.0075	13476	0.0077	13268	0.0081	13060	0.0084	12852	0.0087	12644	0.0090

Table 39: Coherence for $p = 16384$ and $11396 \leq n \leq 12640$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
12640	0.0090	12432	0.0093	12224	0.0095	12016	0.0098	11808	0.0102	11600	0.0103
12636	0.0089	12428	0.0093	12220	0.0097	12012	0.0098	11804	0.0102	11596	0.0103
12632	0.0090	12424	0.0093	12216	0.0097	12008	0.0098	11800	0.0102	11592	0.0104
12628	0.0090	12420	0.0093	12212	0.0095	12004	0.0098	11796	0.0102	11588	0.0104
12624	0.0090	12416	0.0093	12208	0.0097	12000	0.0098	11792	0.0102	11584	0.0104
12620	0.0090	12412	0.0093	12204	0.0097	11996	0.0098	11788	0.0102	11580	0.0104
12616	0.0090	12408	0.0093	12200	0.0097	11992	0.0098	11784	0.0102	11576	0.0104
12612	0.0090	12404	0.0094	12196	0.0095	11988	0.0097	11780	0.0102	11572	0.0104
12608	0.0090	12400	0.0094	12192	0.0097	11984	0.0098	11776	0.0102	11568	0.0104
12604	0.0090	12396	0.0094	12188	0.0097	11980	0.0098	11772	0.0102	11564	0.0104
12600	0.0090	12392	0.0094	12184	0.0097	11976	0.0099	11768	0.0102	11560	0.0104
12596	0.0091	12388	0.0094	12180	0.0095	11972	0.0099	11764	0.0102	11556	0.0104
12592	0.0091	12384	0.0094	12176	0.0095	11968	0.0099	11760	0.0102	11552	0.0104
12588	0.0091	12380	0.0094	12172	0.0097	11964	0.0099	11756	0.0102	11548	0.0104
12584	0.0091	12376	0.0094	12168	0.0095	11960	0.0099	11752	0.0102	11544	0.0104
12580	0.0091	12372	0.0094	12164	0.0095	11956	0.0099	11748	0.0102	11540	0.0104
12576	0.0091	12368	0.0094	12160	0.0097	11952	0.0099	11744	0.0102	11536	0.0104
12572	0.0091	12364	0.0094	12156	0.0097	11948	0.0099	11740	0.0102	11532	0.0104
12568	0.0091	12360	0.0094	12152	0.0097	11944	0.0099	11736	0.0102	11528	0.0104
12564	0.0091	12356	0.0094	12148	0.0097	11940	0.0099	11732	0.0102	11524	0.0104
12560	0.0091	12352	0.0094	12144	0.0097	11936	0.0099	11728	0.0102	11520	0.0104
12556	0.0091	12348	0.0094	12140	0.0097	11932	0.0099	11724	0.0102	11516	0.0104
12552	0.0091	12344	0.0094	12136	0.0097	11928	0.0099	11720	0.0102	11512	0.0106
12548	0.0091	12340	0.0094	12132	0.0097	11924	0.0099	11716	0.0102	11508	0.0106
12544	0.0091	12336	0.0094	12128	0.0097	11920	0.0099	11712	0.0102	11504	0.0106
12540	0.0091	12332	0.0094	12124	0.0097	11916	0.0099	11708	0.0102	11500	0.0106
12536	0.0091	12328	0.0094	12120	0.0097	11912	0.0099	11704	0.0103	11496	0.0104
12532	0.0091	12324	0.0094	12116	0.0097	11908	0.0099	11700	0.0103	11492	0.0104
12528	0.0091	12320	0.0094	12112	0.0097	11904	0.0099	11696	0.0103	11488	0.0104
12524	0.0091	12316	0.0094	12108	0.0097	11900	0.0099	11692	0.0103	11484	0.0106
12520	0.0091	12312	0.0094	12104	0.0097	11896	0.0099	11688	0.0103	11480	0.0106
12516	0.0091	12308	0.0094	12100	0.0098	11892	0.0099	11684	0.0103	11476	0.0105
12512	0.0091	12304	0.0094	12096	0.0098	11888	0.0099	11680	0.0103	11472	0.0106
12508	0.0091	12300	0.0096	12092	0.0098	11884	0.0099	11676	0.0103	11468	0.0106
12504	0.0091	12296	0.0094	12088	0.0098	11880	0.0099	11672	0.0103	11464	0.0105
12500	0.0091	12292	0.0096	12084	0.0098	11876	0.0099	11668	0.0103	11460	0.0106
12496	0.0091	12288	0.0094	12080	0.0098	11872	0.0099	11664	0.0103	11456	0.0106
12492	0.0091	12284	0.0094	12076	0.0098	11868	0.0099	11660	0.0103	11452	0.0107
12488	0.0093	12280	0.0094	12072	0.0098	11864	0.0099	11656	0.0103	11448	0.0107
12484	0.0093	12276	0.0094	12068	0.0098	11860	0.0099	11652	0.0103	11444	0.0107
12480	0.0093	12272	0.0096	12064	0.0098	11856	0.0101	11648	0.0103	11440	0.0107
12476	0.0093	12268	0.0095	12060	0.0098	11852	0.0101	11644	0.0103	11436	0.0107
12472	0.0091	12264	0.0095	12056	0.0098	11848	0.0101	11640	0.0103	11432	0.0107
12468	0.0091	12260	0.0095	12052	0.0098	11844	0.0101	11636	0.0103	11428	0.0107
12464	0.0093	12256	0.0096	12048	0.0098	11840	0.0101	11632	0.0103	11424	0.0107
12460	0.0091	12252	0.0095	12044	0.0098	11836	0.0101	11628	0.0103	11420	0.0107
12456	0.0093	12248	0.0096	12040	0.0098	11832	0.0101	11624	0.0103	11416	0.0107
12452	0.0093	12244	0.0096	12036	0.0098	11828	0.0101	11620	0.0103	11412	0.0107
12448	0.0093	12240	0.0096	12032	0.0098	11824	0.0101	11616	0.0103	11408	0.0107
12444	0.0093	12236	0.0096	12028	0.0098	11820	0.0102	11612	0.0103	11404	0.0107
12440	0.0093	12232	0.0096	12024	0.0098	11816	0.0102	11608	0.0103	11400	0.0107
12436	0.0093	12228	0.0096	12020	0.0098	11812	0.0102	11604	0.0103	11396	0.0107

Table 40: Coherence for $p = 16384$ and $10148 \leq n \leq 11392$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
11392	0.0107	11184	0.0111	10976	0.0113	10768	0.0117	10560	0.0121	10352	0.0124
11388	0.0107	11180	0.0111	10972	0.0115	10764	0.0117	10556	0.0121	10348	0.0124
11384	0.0107	11176	0.0111	10968	0.0115	10760	0.0117	10552	0.0121	10344	0.0124
11380	0.0107	11172	0.0111	10964	0.0113	10756	0.0117	10548	0.0121	10340	0.0124
11376	0.0107	11168	0.0111	10960	0.0115	10752	0.0117	10544	0.0121	10336	0.0124
11372	0.0107	11164	0.0111	10956	0.0113	10748	0.0117	10540	0.0121	10332	0.0124
11368	0.0107	11160	0.0111	10952	0.0115	10744	0.0117	10536	0.0121	10328	0.0124
11364	0.0107	11156	0.0111	10948	0.0115	10740	0.0117	10532	0.0122	10324	0.0124
11360	0.0107	11152	0.0111	10944	0.0115	10736	0.0117	10528	0.0122	10320	0.0124
11356	0.0107	11148	0.0111	10940	0.0113	10732	0.0117	10524	0.0122	10316	0.0124
11352	0.0107	11144	0.0111	10936	0.0113	10728	0.0117	10520	0.0122	10312	0.0124
11348	0.0108	11140	0.0111	10932	0.0113	10724	0.0117	10516	0.0122	10308	0.0124
11344	0.0108	11136	0.0111	10928	0.0115	10720	0.0118	10512	0.0122	10304	0.0124
11340	0.0108	11132	0.0111	10924	0.0115	10716	0.0118	10508	0.0122	10300	0.0124
11336	0.0108	11128	0.0111	10920	0.0115	10712	0.0118	10504	0.0122	10296	0.0124
11332	0.0108	11124	0.0111	10916	0.0114	10708	0.0118	10500	0.0122	10292	0.0124
11328	0.0108	11120	0.0112	10912	0.0115	10704	0.0118	10496	0.0122	10288	0.0124
11324	0.0108	11116	0.0112	10908	0.0116	10700	0.0118	10492	0.0122	10284	0.0124
11320	0.0110	11112	0.0112	10904	0.0116	10696	0.0118	10488	0.0122	10280	0.0125
11316	0.0110	11108	0.0112	10900	0.0116	10692	0.0118	10484	0.0122	10276	0.0125
11312	0.0110	11104	0.0112	10896	0.0116	10688	0.0120	10480	0.0122	10272	0.0125
11308	0.0110	11100	0.0112	10892	0.0114	10684	0.0120	10476	0.0122	10268	0.0125
11304	0.0110	11096	0.0112	10888	0.0116	10680	0.0120	10472	0.0122	10264	0.0125
11300	0.0110	11092	0.0112	10884	0.0116	10676	0.0120	10468	0.0122	10260	0.0125
11296	0.0110	11088	0.0112	10880	0.0116	10672	0.0120	10464	0.0122	10256	0.0125
11292	0.0110	11084	0.0112	10876	0.0116	10668	0.0120	10460	0.0122	10252	0.0125
11288	0.0110	11080	0.0112	10872	0.0116	10664	0.0120	10456	0.0122	10248	0.0125
11284	0.0110	11076	0.0112	10868	0.0116	10660	0.0120	10452	0.0122	10244	0.0127
11280	0.0110	11072	0.0112	10864	0.0116	10656	0.0120	10448	0.0123	10240	0.0127
11276	0.0110	11068	0.0112	10860	0.0116	10652	0.0120	10444	0.0123	10236	0.0127
11272	0.0110	11064	0.0112	10856	0.0116	10648	0.0120	10440	0.0123	10232	0.0127
11268	0.0110	11060	0.0112	10852	0.0116	10644	0.0120	10436	0.0123	10228	0.0127
11264	0.0110	11056	0.0112	10848	0.0116	10640	0.0120	10432	0.0123	10224	0.0127
11260	0.0110	11052	0.0112	10844	0.0116	10636	0.0120	10428	0.0123	10220	0.0127
11256	0.0110	11048	0.0112	10840	0.0114	10632	0.0120	10424	0.0123	10216	0.0125
11252	0.0110	11044	0.0112	10836	0.0116	10628	0.0120	10420	0.0123	10212	0.0127
11248	0.0110	11040	0.0112	10832	0.0116	10624	0.0120	10416	0.0123	10208	0.0125
11244	0.0110	11036	0.0112	10828	0.0116	10620	0.0121	10412	0.0123	10204	0.0127
11240	0.0110	11032	0.0112	10824	0.0116	10616	0.0121	10408	0.0123	10200	0.0125
11236	0.0110	11028	0.0112	10820	0.0116	10612	0.0121	10404	0.0123	10196	0.0128
11232	0.0110	11024	0.0112	10816	0.0116	10608	0.0121	10400	0.0123	10192	0.0128
11228	0.0110	11020	0.0113	10812	0.0117	10604	0.0121	10396	0.0123	10188	0.0126
11224	0.0110	11016	0.0113	10808	0.0117	10600	0.0121	10392	0.0123	10184	0.0128
11220	0.0111	11012	0.0114	10804	0.0117	10596	0.0121	10388	0.0123	10180	0.0126
11216	0.0111	11008	0.0114	10800	0.0117	10592	0.0121	10384	0.0123	10176	0.0128
11212	0.0111	11004	0.0115	10796	0.0117	10588	0.0121	10380	0.0123	10172	0.0126
11208	0.0111	11000	0.0113	10792	0.0117	10584	0.0121	10376	0.0123	10168	0.0128
11204	0.0111	10996	0.0113	10788	0.0117	10580	0.0121	10372	0.0123	10164	0.0126
11200	0.0111	10992	0.0113	10784	0.0117	10576	0.0121	10368	0.0123	10160	0.0126
11196	0.0111	10988	0.0113	10780	0.0117	10572	0.0121	10364	0.0124	10156	0.0126
11192	0.0111	10984	0.0113	10776	0.0117	10568	0.0121	10360	0.0124	10152	0.0126
11188	0.0111	10980	0.0113	10772	0.0117	10564	0.0121	10356	0.0124	10148	0.0126

Table 41: Coherence for $p = 16384$ and $8900 \leq n \leq 10144$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
10144	0.0128	9936	0.0131	9728	0.0134	9520	0.0137	9312	0.0142	9104	0.0145
10140	0.0128	9932	0.0131	9724	0.0134	9516	0.0137	9308	0.0142	9100	0.0145
10136	0.0128	9928	0.0131	9720	0.0134	9512	0.0137	9304	0.0142	9096	0.0145
10132	0.0126	9924	0.0131	9716	0.0134	9508	0.0137	9300	0.0142	9092	0.0145
10128	0.0128	9920	0.0131	9712	0.0134	9504	0.0137	9296	0.0142	9088	0.0145
10124	0.0126	9916	0.0131	9708	0.0134	9500	0.0137	9292	0.0142	9084	0.0145
10120	0.0126	9912	0.0131	9704	0.0134	9496	0.0137	9288	0.0142	9080	0.0145
10116	0.0129	9908	0.0131	9700	0.0134	9492	0.0137	9284	0.0142	9076	0.0145
10112	0.0129	9904	0.0131	9696	0.0134	9488	0.0137	9280	0.0142	9072	0.0146
10108	0.0127	9900	0.0129	9692	0.0134	9484	0.0137	9276	0.0142	9068	0.0146
10104	0.0127	9896	0.0129	9688	0.0134	9480	0.0137	9272	0.0142	9064	0.0146
10100	0.0127	9892	0.0129	9684	0.0134	9476	0.0139	9268	0.0142	9060	0.0146
10096	0.0129	9888	0.0131	9680	0.0134	9472	0.0137	9264	0.0142	9056	0.0146
10092	0.0129	9884	0.0130	9676	0.0134	9468	0.0139	9260	0.0143	9052	0.0146
10088	0.0129	9880	0.0132	9672	0.0134	9464	0.0139	9256	0.0143	9048	0.0146
10084	0.0127	9876	0.0130	9668	0.0134	9460	0.0140	9252	0.0143	9044	0.0146
10080	0.0127	9872	0.0132	9664	0.0135	9456	0.0140	9248	0.0143	9040	0.0146
10076	0.0129	9868	0.0132	9660	0.0135	9452	0.0140	9244	0.0143	9036	0.0146
10072	0.0129	9864	0.0132	9656	0.0135	9448	0.0140	9240	0.0143	9032	0.0146
10068	0.0127	9860	0.0130	9652	0.0135	9444	0.0140	9236	0.0143	9028	0.0146
10064	0.0129	9856	0.0132	9648	0.0135	9440	0.0140	9232	0.0143	9024	0.0146
10060	0.0127	9852	0.0130	9644	0.0135	9436	0.0140	9228	0.0143	9020	0.0146
10056	0.0129	9848	0.0130	9640	0.0135	9432	0.0140	9224	0.0143	9016	0.0146
10052	0.0129	9844	0.0130	9636	0.0135	9428	0.0140	9220	0.0143	9012	0.0146
10048	0.0127	9840	0.0132	9632	0.0135	9424	0.0140	9216	0.0143	9008	0.0147
10044	0.0127	9836	0.0132	9628	0.0135	9420	0.0140	9212	0.0143	9004	0.0147
10040	0.0129	9832	0.0132	9624	0.0135	9416	0.0140	9208	0.0143	9000	0.0147
10036	0.0130	9828	0.0132	9620	0.0135	9412	0.0140	9204	0.0143	8996	0.0147
10032	0.0130	9824	0.0132	9616	0.0135	9408	0.0140	9200	0.0143	8992	0.0147
10028	0.0130	9820	0.0132	9612	0.0135	9404	0.0140	9196	0.0144	8988	0.0147
10024	0.0128	9816	0.0132	9608	0.0135	9400	0.0140	9192	0.0144	8984	0.0147
10020	0.0130	9812	0.0132	9604	0.0135	9396	0.0140	9188	0.0144	8980	0.0147
10016	0.0130	9808	0.0131	9600	0.0135	9392	0.0141	9184	0.0144	8976	0.0147
10012	0.0128	9804	0.0133	9596	0.0135	9388	0.0141	9180	0.0144	8972	0.0147
10008	0.0130	9800	0.0131	9592	0.0136	9384	0.0141	9176	0.0144	8968	0.0147
10004	0.0128	9796	0.0131	9588	0.0136	9380	0.0141	9172	0.0144	8964	0.0147
10000	0.0130	9792	0.0131	9584	0.0136	9376	0.0141	9168	0.0144	8960	0.0147
9996	0.0128	9788	0.0133	9580	0.0136	9372	0.0141	9164	0.0144	8956	0.0147
9992	0.0130	9784	0.0133	9576	0.0136	9368	0.0141	9160	0.0144	8952	0.0147
9988	0.0128	9780	0.0133	9572	0.0136	9364	0.0141	9156	0.0144	8948	0.0148
9984	0.0128	9776	0.0133	9568	0.0136	9360	0.0141	9152	0.0144	8944	0.0148
9980	0.0128	9772	0.0133	9564	0.0136	9356	0.0141	9148	0.0144	8940	0.0148
9976	0.0130	9768	0.0133	9560	0.0136	9352	0.0141	9144	0.0144	8936	0.0148
9972	0.0128	9764	0.0133	9556	0.0136	9348	0.0141	9140	0.0144	8932	0.0148
9968	0.0130	9760	0.0133	9552	0.0136	9344	0.0141	9136	0.0144	8928	0.0148
9964	0.0130	9756	0.0133	9548	0.0136	9340	0.0141	9132	0.0145	8924	0.0148
9960	0.0129	9752	0.0133	9544	0.0136	9336	0.0141	9128	0.0145	8920	0.0148
9956	0.0131	9748	0.0133	9540	0.0136	9332	0.0141	9124	0.0145	8916	0.0148
9952	0.0129	9744	0.0133	9536	0.0136	9328	0.0142	9120	0.0145	8912	0.0148
9948	0.0131	9740	0.0133	9532	0.0136	9324	0.0142	9116	0.0145	8908	0.0148
9944	0.0131	9736	0.0134	9528	0.0136	9320	0.0142	9112	0.0145	8904	0.0148
9940	0.0131	9732	0.0134	9524	0.0136	9316	0.0142	9108	0.0145	8900	0.0148

Table 42: Coherence for $p = 16384$ and $7652 \leq n \leq 8896$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
8896	0.0148	8688	0.0152	8480	0.0156	8272	0.0160	8064	0.0164	7856	0.0168
8892	0.0148	8684	0.0152	8476	0.0156	8268	0.0160	8060	0.0164	7852	0.0168
8888	0.0149	8680	0.0152	8472	0.0156	8264	0.0160	8056	0.0164	7848	0.0168
8884	0.0149	8676	0.0152	8468	0.0156	8260	0.0160	8052	0.0164	7844	0.0168
8880	0.0149	8672	0.0152	8464	0.0156	8256	0.0160	8048	0.0164	7840	0.0168
8876	0.0149	8668	0.0152	8460	0.0156	8252	0.0160	8044	0.0164	7836	0.0168
8872	0.0149	8664	0.0152	8456	0.0156	8248	0.0160	8040	0.0164	7832	0.0169
8868	0.0149	8660	0.0152	8452	0.0156	8244	0.0160	8036	0.0164	7828	0.0169
8864	0.0149	8656	0.0152	8448	0.0156	8240	0.0160	8032	0.0164	7824	0.0169
8860	0.0149	8652	0.0153	8444	0.0156	8236	0.0160	8028	0.0164	7820	0.0169
8856	0.0149	8648	0.0153	8440	0.0156	8232	0.0160	8024	0.0165	7816	0.0169
8852	0.0149	8644	0.0153	8436	0.0156	8228	0.0160	8020	0.0165	7812	0.0169
8848	0.0149	8640	0.0153	8432	0.0157	8224	0.0161	8016	0.0165	7808	0.0169
8844	0.0149	8636	0.0153	8428	0.0157	8220	0.0161	8012	0.0165	7804	0.0169
8840	0.0149	8632	0.0153	8424	0.0157	8216	0.0161	8008	0.0165	7800	0.0169
8836	0.0149	8628	0.0153	8420	0.0157	8212	0.0161	8004	0.0165	7796	0.0169
8832	0.0149	8624	0.0153	8416	0.0157	8208	0.0161	8000	0.0165	7792	0.0169
8828	0.0150	8620	0.0153	8412	0.0157	8204	0.0161	7996	0.0165	7788	0.0169
8824	0.0150	8616	0.0153	8408	0.0157	8200	0.0161	7992	0.0165	7784	0.0170
8820	0.0150	8612	0.0153	8404	0.0157	8196	0.0161	7988	0.0165	7780	0.0170
8816	0.0150	8608	0.0153	8400	0.0157	8192	0.0161	7984	0.0165	7776	0.0170
8812	0.0150	8604	0.0153	8396	0.0157	8188	0.0161	7980	0.0165	7772	0.0170
8808	0.0150	8600	0.0153	8392	0.0157	8184	0.0161	7976	0.0165	7768	0.0170
8804	0.0150	8596	0.0154	8388	0.0157	8180	0.0161	7972	0.0166	7764	0.0170
8800	0.0150	8592	0.0154	8384	0.0157	8176	0.0161	7968	0.0166	7760	0.0170
8796	0.0150	8588	0.0154	8380	0.0158	8172	0.0162	7964	0.0166	7756	0.0170
8792	0.0150	8584	0.0154	8376	0.0158	8168	0.0162	7960	0.0166	7752	0.0170
8788	0.0150	8580	0.0154	8372	0.0158	8164	0.0162	7956	0.0166	7748	0.0170
8784	0.0150	8576	0.0154	8368	0.0158	8160	0.0162	7952	0.0166	7744	0.0170
8780	0.0150	8572	0.0154	8364	0.0158	8156	0.0162	7948	0.0166	7740	0.0171
8776	0.0150	8568	0.0154	8360	0.0158	8152	0.0162	7944	0.0166	7736	0.0171
8772	0.0150	8564	0.0154	8356	0.0158	8148	0.0162	7940	0.0166	7732	0.0171
8768	0.0151	8560	0.0154	8352	0.0158	8144	0.0162	7936	0.0166	7728	0.0171
8764	0.0151	8556	0.0154	8348	0.0158	8140	0.0162	7932	0.0166	7724	0.0171
8760	0.0151	8552	0.0154	8344	0.0158	8136	0.0162	7928	0.0166	7720	0.0171
8756	0.0151	8548	0.0154	8340	0.0158	8132	0.0162	7924	0.0167	7716	0.0171
8752	0.0151	8544	0.0154	8336	0.0158	8128	0.0162	7920	0.0167	7712	0.0171
8748	0.0151	8540	0.0155	8332	0.0158	8124	0.0162	7916	0.0167	7708	0.0171
8744	0.0151	8536	0.0155	8328	0.0159	8120	0.0163	7912	0.0167	7704	0.0171
8740	0.0151	8532	0.0155	8324	0.0159	8116	0.0163	7908	0.0167	7700	0.0171
8736	0.0151	8528	0.0155	8320	0.0159	8112	0.0163	7904	0.0167	7696	0.0172
8732	0.0151	8524	0.0155	8316	0.0159	8108	0.0163	7900	0.0167	7692	0.0172
8728	0.0151	8520	0.0155	8312	0.0159	8104	0.0163	7896	0.0167	7688	0.0172
8724	0.0151	8516	0.0155	8308	0.0159	8100	0.0163	7892	0.0167	7684	0.0172
8720	0.0151	8512	0.0155	8304	0.0159	8096	0.0163	7888	0.0167	7680	0.0172
8716	0.0151	8508	0.0155	8300	0.0159	8092	0.0163	7884	0.0167	7676	0.0172
8712	0.0152	8504	0.0155	8296	0.0159	8088	0.0163	7880	0.0168	7672	0.0172
8708	0.0152	8500	0.0155	8292	0.0159	8084	0.0163	7876	0.0168	7668	0.0172
8704	0.0152	8496	0.0155	8288	0.0159	8080	0.0163	7872	0.0168	7664	0.0172
8700	0.0152	8492	0.0155	8284	0.0159	8076	0.0163	7868	0.0168	7660	0.0172
8696	0.0152	8488	0.0156	8280	0.0159	8072	0.0164	7864	0.0168	7656	0.0172
8692	0.0152	8484	0.0156	8276	0.0159	8068	0.0164	7860	0.0168	7652	0.0173

Table 43: Coherence for $p = 16384$ and $6404 \leq n \leq 7648$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
7648	0.0173	7440	0.0177	7232	0.0183	7024	0.0188	6816	0.0194	6608	0.0200
7644	0.0173	7436	0.0178	7228	0.0183	7020	0.0188	6812	0.0194	6604	0.0200
7640	0.0173	7432	0.0178	7224	0.0183	7016	0.0188	6808	0.0194	6600	0.0200
7636	0.0173	7428	0.0178	7220	0.0183	7012	0.0188	6804	0.0194	6596	0.0200
7632	0.0173	7424	0.0178	7216	0.0183	7008	0.0188	6800	0.0194	6592	0.0200
7628	0.0173	7420	0.0178	7212	0.0183	7004	0.0188	6796	0.0191	6588	0.0200
7624	0.0173	7416	0.0178	7208	0.0183	7000	0.0189	6792	0.0194	6584	0.0200
7620	0.0173	7412	0.0178	7204	0.0183	6996	0.0189	6788	0.0194	6580	0.0201
7616	0.0173	7408	0.0178	7200	0.0183	6992	0.0189	6784	0.0195	6576	0.0201
7612	0.0173	7404	0.0178	7196	0.0183	6988	0.0189	6780	0.0195	6572	0.0201
7608	0.0174	7400	0.0178	7192	0.0184	6984	0.0189	6776	0.0195	6568	0.0201
7604	0.0174	7396	0.0178	7188	0.0184	6980	0.0189	6772	0.0195	6564	0.0201
7600	0.0174	7392	0.0179	7184	0.0184	6976	0.0189	6768	0.0195	6560	0.0201
7596	0.0174	7388	0.0179	7180	0.0184	6972	0.0189	6764	0.0195	6556	0.0201
7592	0.0174	7384	0.0179	7176	0.0184	6968	0.0189	6760	0.0195	6552	0.0201
7588	0.0174	7380	0.0179	7172	0.0184	6964	0.0190	6756	0.0192	6548	0.0199
7584	0.0174	7376	0.0179	7168	0.0184	6960	0.0190	6752	0.0195	6544	0.0202
7580	0.0174	7372	0.0179	7164	0.0184	6956	0.0190	6748	0.0193	6540	0.0202
7576	0.0174	7368	0.0179	7160	0.0184	6952	0.0190	6744	0.0196	6536	0.0202
7572	0.0174	7364	0.0179	7156	0.0184	6948	0.0190	6740	0.0193	6532	0.0202
7568	0.0174	7360	0.0179	7152	0.0185	6944	0.0190	6736	0.0193	6528	0.0202
7564	0.0175	7356	0.0179	7148	0.0185	6940	0.0190	6732	0.0193	6524	0.0202
7560	0.0175	7352	0.0180	7144	0.0185	6936	0.0190	6728	0.0193	6520	0.0202
7556	0.0175	7348	0.0180	7140	0.0185	6932	0.0190	6724	0.0193	6516	0.0203
7552	0.0175	7344	0.0180	7136	0.0185	6928	0.0191	6720	0.0193	6512	0.0203
7548	0.0175	7340	0.0180	7132	0.0185	6924	0.0191	6716	0.0197	6508	0.0203
7544	0.0175	7336	0.0180	7128	0.0185	6920	0.0191	6712	0.0197	6504	0.0203
7540	0.0175	7332	0.0180	7124	0.0185	6916	0.0191	6708	0.0197	6500	0.0203
7536	0.0175	7328	0.0180	7120	0.0185	6912	0.0191	6704	0.0197	6496	0.0203
7532	0.0175	7324	0.0180	7116	0.0185	6908	0.0191	6700	0.0197	6492	0.0203
7528	0.0175	7320	0.0180	7112	0.0186	6904	0.0191	6696	0.0197	6488	0.0203
7524	0.0175	7316	0.0180	7108	0.0186	6900	0.0191	6692	0.0197	6484	0.0204
7520	0.0176	7312	0.0181	7104	0.0186	6896	0.0191	6688	0.0197	6480	0.0204
7516	0.0176	7308	0.0181	7100	0.0186	6892	0.0192	6684	0.0197	6476	0.0204
7512	0.0176	7304	0.0181	7096	0.0186	6888	0.0192	6680	0.0198	6472	0.0204
7508	0.0176	7300	0.0181	7092	0.0186	6884	0.0192	6676	0.0198	6468	0.0204
7504	0.0176	7296	0.0181	7088	0.0186	6880	0.0192	6672	0.0198	6464	0.0204
7500	0.0176	7292	0.0181	7084	0.0186	6876	0.0192	6668	0.0198	6460	0.0204
7496	0.0176	7288	0.0181	7080	0.0186	6872	0.0192	6664	0.0198	6456	0.0204
7492	0.0176	7284	0.0181	7076	0.0187	6868	0.0192	6660	0.0198	6452	0.0205
7488	0.0176	7280	0.0181	7072	0.0187	6864	0.0192	6656	0.0198	6448	0.0205
7484	0.0176	7276	0.0181	7068	0.0187	6860	0.0192	6652	0.0198	6444	0.0205
7480	0.0176	7272	0.0182	7064	0.0187	6856	0.0193	6648	0.0199	6440	0.0205
7476	0.0177	7268	0.0182	7060	0.0187	6852	0.0193	6644	0.0199	6436	0.0205
7472	0.0177	7264	0.0182	7056	0.0187	6848	0.0193	6640	0.0199	6432	0.0205
7468	0.0177	7260	0.0182	7052	0.0187	6844	0.0193	6636	0.0199	6428	0.0205
7464	0.0177	7256	0.0182	7048	0.0187	6840	0.0193	6632	0.0196	6424	0.0205
7460	0.0177	7252	0.0182	7044	0.0187	6836	0.0190	6628	0.0199	6420	0.0206
7456	0.0177	7248	0.0182	7040	0.0188	6832	0.0190	6624	0.0199	6416	0.0206
7452	0.0177	7244	0.0182	7036	0.0188	6828	0.0190	6620	0.0199	6412	0.0206
7448	0.0177	7240	0.0182	7032	0.0188	6824	0.0191	6616	0.0200	6408	0.0206
7444	0.0177	7236	0.0182	7028	0.0188	6820	0.0191	6612	0.0200	6404	0.0206

Table 44: Coherence for $p = 16384$ and $5156 \leq n \leq 6400$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
6400	0.0206	6192	0.0210	5984	0.0214	5776	0.0222	5568	0.0230	5360	0.0239
6396	0.0206	6188	0.0210	5980	0.0217	5772	0.0222	5564	0.0230	5356	0.0239
6392	0.0207	6184	0.0210	5976	0.0218	5768	0.0222	5560	0.0230	5352	0.0239
6388	0.0207	6180	0.0210	5972	0.0218	5764	0.0222	5556	0.0230	5348	0.0239
6384	0.0207	6176	0.0210	5968	0.0214	5760	0.0222	5552	0.0231	5344	0.0240
6380	0.0207	6172	0.0211	5964	0.0218	5756	0.0222	5548	0.0231	5340	0.0240
6376	0.0207	6168	0.0211	5960	0.0215	5752	0.0223	5544	0.0231	5336	0.0236
6372	0.0207	6164	0.0208	5956	0.0215	5748	0.0223	5540	0.0231	5332	0.0236
6368	0.0207	6160	0.0208	5952	0.0215	5744	0.0223	5536	0.0231	5328	0.0240
6364	0.0207	6156	0.0211	5948	0.0219	5740	0.0223	5532	0.0231	5324	0.0240
6360	0.0208	6152	0.0211	5944	0.0219	5736	0.0223	5528	0.0232	5320	0.0241
6356	0.0208	6148	0.0211	5940	0.0219	5732	0.0223	5524	0.0232	5316	0.0241
6352	0.0208	6144	0.0212	5936	0.0219	5728	0.0223	5520	0.0232	5312	0.0237
6348	0.0208	6140	0.0212	5932	0.0216	5724	0.0224	5516	0.0232	5308	0.0237
6344	0.0208	6136	0.0212	5928	0.0216	5720	0.0224	5512	0.0232	5304	0.0238
6340	0.0208	6132	0.0209	5924	0.0219	5716	0.0224	5508	0.0232	5300	0.0238
6336	0.0208	6128	0.0212	5920	0.0220	5712	0.0224	5504	0.0233	5296	0.0238
6332	0.0205	6124	0.0212	5916	0.0220	5708	0.0224	5500	0.0233	5292	0.0238
6328	0.0205	6120	0.0212	5912	0.0220	5704	0.0224	5496	0.0233	5288	0.0238
6324	0.0209	6116	0.0213	5908	0.0217	5700	0.0225	5492	0.0233	5284	0.0238
6320	0.0206	6112	0.0209	5904	0.0220	5696	0.0225	5488	0.0233	5280	0.0239
6316	0.0206	6108	0.0210	5900	0.0217	5692	0.0225	5484	0.0233	5276	0.0239
6312	0.0206	6104	0.0213	5896	0.0217	5688	0.0225	5480	0.0234	5272	0.0239
6308	0.0206	6100	0.0213	5892	0.0217	5684	0.0225	5476	0.0234	5268	0.0239
6304	0.0206	6096	0.0213	5888	0.0217	5680	0.0225	5472	0.0234	5264	0.0239
6300	0.0206	6092	0.0213	5884	0.0218	5676	0.0226	5468	0.0234	5260	0.0240
6296	0.0206	6088	0.0210	5880	0.0221	5672	0.0226	5464	0.0234	5256	0.0240
6292	0.0207	6084	0.0214	5876	0.0221	5668	0.0226	5460	0.0234	5252	0.0240
6288	0.0207	6080	0.0211	5872	0.0218	5664	0.0226	5456	0.0235	5248	0.0240
6284	0.0207	6076	0.0214	5868	0.0218	5660	0.0226	5452	0.0235	5244	0.0240
6280	0.0207	6072	0.0211	5864	0.0222	5656	0.0226	5448	0.0235	5240	0.0237
6276	0.0207	6068	0.0211	5860	0.0222	5652	0.0226	5444	0.0235	5236	0.0241
6272	0.0207	6064	0.0214	5856	0.0222	5648	0.0227	5440	0.0235	5232	0.0237
6268	0.0207	6060	0.0215	5852	0.0222	5644	0.0227	5436	0.0235	5228	0.0241
6264	0.0208	6056	0.0211	5848	0.0222	5640	0.0227	5432	0.0236	5224	0.0241
6260	0.0208	6052	0.0215	5844	0.0222	5636	0.0227	5428	0.0236	5220	0.0241
6256	0.0208	6048	0.0215	5840	0.0223	5632	0.0227	5424	0.0236	5216	0.0242
6252	0.0208	6044	0.0212	5836	0.0219	5628	0.0227	5420	0.0236	5212	0.0242
6248	0.0208	6040	0.0215	5832	0.0219	5624	0.0228	5416	0.0236	5208	0.0242
6244	0.0208	6036	0.0212	5828	0.0220	5620	0.0228	5412	0.0237	5204	0.0242
6240	0.0208	6032	0.0216	5824	0.0220	5616	0.0228	5408	0.0237	5200	0.0242
6236	0.0208	6028	0.0216	5820	0.0220	5612	0.0228	5404	0.0237	5196	0.0242
6232	0.0209	6024	0.0212	5816	0.0220	5608	0.0228	5400	0.0237	5192	0.0243
6228	0.0209	6020	0.0213	5812	0.0220	5604	0.0228	5396	0.0237	5188	0.0243
6224	0.0209	6016	0.0216	5808	0.0220	5600	0.0229	5392	0.0237	5184	0.0243
6220	0.0209	6012	0.0213	5804	0.0221	5596	0.0229	5388	0.0238	5180	0.0243
6216	0.0209	6008	0.0213	5800	0.0221	5592	0.0229	5384	0.0238	5176	0.0243
6212	0.0209	6004	0.0217	5796	0.0221	5588	0.0229	5380	0.0238	5172	0.0244
6208	0.0209	6000	0.0217	5792	0.0221	5584	0.0229	5376	0.0238	5168	0.0244
6204	0.0210	5996	0.0217	5788	0.0221	5580	0.0229	5372	0.0238	5164	0.0244
6200	0.0210	5992	0.0217	5784	0.0221	5576	0.0230	5368	0.0238	5160	0.0244
6196	0.0210	5988	0.0217	5780	0.0221	5572	0.0230	5364	0.0239	5156	0.0244

Table 45: Coherence for $p = 16384$ and $3908 \leq n \leq 5152$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
5152	0.0245	4944	0.0255	4736	0.0262	4528	0.0265	4320	0.0278	4112	0.0287
5148	0.0245	4940	0.0255	4732	0.0262	4524	0.0270	4316	0.0278	4108	0.0292
5144	0.0245	4936	0.0251	4728	0.0262	4520	0.0270	4312	0.0278	4104	0.0288
5140	0.0245	4932	0.0255	4724	0.0262	4516	0.0270	4308	0.0279	4100	0.0288
5136	0.0245	4928	0.0252	4720	0.0263	4512	0.0270	4304	0.0279	4096	0.0293
5132	0.0246	4924	0.0252	4716	0.0263	4508	0.0266	4300	0.0279	4092	0.0293
5128	0.0246	4920	0.0256	4712	0.0263	4504	0.0271	4296	0.0279	4088	0.0294
5124	0.0246	4916	0.0256	4708	0.0263	4500	0.0271	4292	0.0280	4084	0.0289
5120	0.0246	4912	0.0257	4704	0.0264	4496	0.0271	4288	0.0280	4080	0.0289
5116	0.0246	4908	0.0257	4700	0.0264	4492	0.0272	4284	0.0280	4076	0.0289
5112	0.0246	4904	0.0257	4696	0.0264	4488	0.0272	4280	0.0280	4072	0.0290
5108	0.0247	4900	0.0253	4692	0.0264	4484	0.0272	4276	0.0281	4068	0.0290
5104	0.0243	4896	0.0253	4688	0.0265	4480	0.0272	4272	0.0281	4064	0.0290
5100	0.0243	4892	0.0253	4684	0.0265	4476	0.0273	4268	0.0281	4060	0.0291
5096	0.0247	4888	0.0254	4680	0.0265	4472	0.0273	4264	0.0281	4056	0.0291
5092	0.0244	4884	0.0254	4676	0.0265	4468	0.0273	4260	0.0282	4052	0.0291
5088	0.0248	4880	0.0254	4672	0.0265	4464	0.0273	4256	0.0282	4048	0.0292
5084	0.0244	4876	0.0254	4668	0.0266	4460	0.0274	4252	0.0282	4044	0.0292
5080	0.0248	4872	0.0255	4664	0.0266	4456	0.0274	4248	0.0282	4040	0.0292
5076	0.0248	4868	0.0255	4660	0.0266	4452	0.0274	4244	0.0283	4036	0.0292
5072	0.0248	4864	0.0255	4656	0.0266	4448	0.0274	4240	0.0283	4032	0.0293
5068	0.0249	4860	0.0255	4652	0.0267	4444	0.0275	4236	0.0283	4028	0.0293
5064	0.0249	4856	0.0255	4648	0.0262	4440	0.0275	4232	0.0284	4024	0.0293
5060	0.0249	4852	0.0256	4644	0.0263	4436	0.0271	4228	0.0284	4020	0.0294
5056	0.0249	4848	0.0256	4640	0.0263	4432	0.0271	4224	0.0284	4016	0.0294
5052	0.0249	4844	0.0256	4636	0.0263	4428	0.0276	4220	0.0284	4012	0.0294
5048	0.0250	4840	0.0256	4632	0.0263	4424	0.0271	4216	0.0285	4008	0.0289
5044	0.0250	4836	0.0256	4628	0.0264	4420	0.0276	4212	0.0285	4004	0.0295
5040	0.0250	4832	0.0257	4624	0.0264	4416	0.0276	4208	0.0285	4000	0.0295
5036	0.0250	4828	0.0257	4620	0.0264	4412	0.0277	4204	0.0285	3996	0.0295
5032	0.0250	4824	0.0257	4616	0.0264	4408	0.0277	4200	0.0286	3992	0.0296
5028	0.0251	4820	0.0257	4612	0.0265	4404	0.0277	4196	0.0286	3988	0.0296
5024	0.0251	4816	0.0257	4608	0.0265	4400	0.0277	4192	0.0286	3984	0.0296
5020	0.0251	4812	0.0258	4604	0.0265	4396	0.0278	4188	0.0287	3980	0.0296
5016	0.0251	4808	0.0258	4600	0.0265	4392	0.0278	4184	0.0287	3976	0.0292
5012	0.0247	4804	0.0258	4596	0.0265	4388	0.0273	4180	0.0287	3972	0.0292
5008	0.0248	4800	0.0258	4592	0.0266	4384	0.0278	4176	0.0287	3968	0.0292
5004	0.0248	4796	0.0259	4588	0.0266	4380	0.0279	4172	0.0288	3964	0.0298
5000	0.0252	4792	0.0259	4584	0.0266	4376	0.0274	4168	0.0283	3960	0.0293
4996	0.0252	4788	0.0259	4580	0.0266	4372	0.0274	4164	0.0288	3956	0.0298
4992	0.0252	4784	0.0259	4576	0.0267	4368	0.0275	4160	0.0288	3952	0.0294
4988	0.0253	4780	0.0259	4572	0.0267	4364	0.0280	4156	0.0289	3948	0.0299
4984	0.0253	4776	0.0260	4568	0.0263	4360	0.0275	4152	0.0284	3944	0.0299
4980	0.0253	4772	0.0260	4564	0.0267	4356	0.0275	4148	0.0289	3940	0.0299
4976	0.0253	4768	0.0260	4560	0.0268	4352	0.0276	4144	0.0285	3936	0.0300
4972	0.0249	4764	0.0260	4556	0.0263	4348	0.0276	4140	0.0290	3932	0.0300
4968	0.0254	4760	0.0261	4552	0.0268	4344	0.0276	4136	0.0285	3928	0.0300
4964	0.0250	4756	0.0261	4548	0.0268	4340	0.0276	4132	0.0286	3924	0.0301
4960	0.0254	4752	0.0261	4544	0.0268	4336	0.0277	4128	0.0291	3920	0.0301
4956	0.0254	4748	0.0261	4540	0.0269	4332	0.0277	4124	0.0286	3916	0.0296
4952	0.0250	4744	0.0257	4536	0.0269	4328	0.0277	4120	0.0286	3912	0.0302
4948	0.0255	4740	0.0262	4532	0.0269	4324	0.0278	4116	0.0287	3908	0.0297

Table 46: Coherence for $p = 16384$ and $2660 \leq n \leq 3904$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
3904	0.0297	3696	0.0314	3488	0.0327	3280	0.0341	3072	0.0358	2864	0.0377
3900	0.0297	3692	0.0314	3484	0.0327	3276	0.0348	3068	0.0359	2860	0.0378
3896	0.0303	3688	0.0315	3480	0.0328	3272	0.0342	3064	0.0359	2856	0.0378
3892	0.0303	3684	0.0315	3476	0.0328	3268	0.0343	3060	0.0359	2852	0.0379
3888	0.0298	3680	0.0315	3472	0.0328	3264	0.0343	3056	0.0353	2848	0.0379
3884	0.0299	3676	0.0316	3468	0.0329	3260	0.0344	3052	0.0360	2844	0.0380
3880	0.0299	3672	0.0316	3464	0.0329	3256	0.0344	3048	0.0361	2840	0.0380
3876	0.0299	3668	0.0316	3460	0.0329	3252	0.0344	3044	0.0361	2836	0.0381
3872	0.0300	3664	0.0317	3456	0.0330	3248	0.0345	3040	0.0362	2832	0.0381
3868	0.0300	3660	0.0317	3452	0.0330	3244	0.0345	3036	0.0362	2828	0.0382
3864	0.0300	3656	0.0317	3448	0.0331	3240	0.0346	3032	0.0363	2824	0.0375
3860	0.0301	3652	0.0318	3444	0.0331	3236	0.0346	3028	0.0363	2820	0.0376
3856	0.0301	3648	0.0318	3440	0.0331	3232	0.0347	3024	0.0364	2816	0.0376
3852	0.0301	3644	0.0313	3436	0.0332	3228	0.0347	3020	0.0364	2812	0.0377
3848	0.0301	3640	0.0319	3432	0.0332	3224	0.0347	3016	0.0365	2808	0.0377
3844	0.0302	3636	0.0319	3428	0.0333	3220	0.0348	3012	0.0365	2804	0.0378
3840	0.0302	3632	0.0319	3424	0.0333	3216	0.0348	3008	0.0366	2800	0.0379
3836	0.0302	3628	0.0320	3420	0.0333	3212	0.0349	3004	0.0366	2796	0.0379
3832	0.0303	3624	0.0320	3416	0.0334	3208	0.0349	3000	0.0367	2792	0.0380
3828	0.0303	3620	0.0315	3412	0.0334	3204	0.0350	2996	0.0367	2788	0.0373
3824	0.0303	3616	0.0315	3408	0.0335	3200	0.0350	2992	0.0368	2784	0.0381
3820	0.0304	3612	0.0316	3404	0.0335	3196	0.0350	2988	0.0368	2780	0.0381
3816	0.0304	3608	0.0316	3400	0.0335	3192	0.0351	2984	0.0369	2776	0.0382
3812	0.0304	3604	0.0316	3396	0.0336	3188	0.0351	2980	0.0369	2772	0.0382
3808	0.0305	3600	0.0317	3392	0.0336	3184	0.0352	2976	0.0370	2768	0.0383
3804	0.0305	3596	0.0317	3388	0.0336	3180	0.0352	2972	0.0363	2764	0.0384
3800	0.0305	3592	0.0317	3384	0.0337	3176	0.0353	2968	0.0364	2760	0.0384
3796	0.0306	3588	0.0318	3380	0.0337	3172	0.0353	2964	0.0364	2756	0.0385
3792	0.0306	3584	0.0318	3376	0.0338	3168	0.0354	2960	0.0365	2752	0.0385
3788	0.0306	3580	0.0318	3372	0.0338	3164	0.0348	2956	0.0365	2748	0.0386
3784	0.0307	3576	0.0319	3368	0.0338	3160	0.0354	2952	0.0366	2744	0.0386
3780	0.0307	3572	0.0319	3364	0.0339	3156	0.0355	2948	0.0366	2740	0.0387
3776	0.0307	3568	0.0320	3360	0.0339	3152	0.0355	2944	0.0367	2736	0.0387
3772	0.0308	3564	0.0320	3356	0.0334	3148	0.0356	2940	0.0367	2732	0.0388
3768	0.0308	3560	0.0320	3352	0.0340	3144	0.0356	2936	0.0368	2728	0.0389
3764	0.0308	3556	0.0321	3348	0.0341	3140	0.0357	2932	0.0368	2724	0.0389
3760	0.0309	3552	0.0321	3344	0.0335	3136	0.0357	2928	0.0369	2720	0.0390
3756	0.0309	3548	0.0321	3340	0.0335	3132	0.0358	2924	0.0369	2716	0.0390
3752	0.0309	3544	0.0322	3336	0.0336	3128	0.0352	2920	0.0370	2712	0.0391
3748	0.0309	3540	0.0322	3332	0.0336	3124	0.0352	2916	0.0370	2708	0.0384
3744	0.0310	3536	0.0322	3328	0.0337	3120	0.0353	2912	0.0371	2704	0.0392
3740	0.0310	3532	0.0323	3324	0.0343	3116	0.0353	2908	0.0371	2700	0.0385
3736	0.0310	3528	0.0323	3320	0.0343	3112	0.0353	2904	0.0372	2696	0.0386
3732	0.0311	3524	0.0323	3316	0.0344	3108	0.0354	2900	0.0372	2692	0.0386
3728	0.0311	3520	0.0324	3312	0.0344	3104	0.0354	2896	0.0373	2688	0.0387
3724	0.0311	3516	0.0324	3308	0.0345	3100	0.0355	2892	0.0373	2684	0.0395
3720	0.0312	3512	0.0325	3304	0.0345	3096	0.0355	2888	0.0374	2680	0.0396
3716	0.0312	3508	0.0325	3300	0.0345	3092	0.0356	2884	0.0374	2676	0.0389
3712	0.0312	3504	0.0325	3296	0.0346	3088	0.0356	2880	0.0375	2672	0.0389
3708	0.0313	3500	0.0320	3292	0.0346	3084	0.0357	2876	0.0376	2668	0.0390
3704	0.0313	3496	0.0326	3288	0.0341	3080	0.0357	2872	0.0376	2664	0.0398
3700	0.0314	3492	0.0326	3284	0.0347	3076	0.0358	2868	0.0377	2660	0.0391

Table 47: Coherence for $p = 16384$ and $1412 \leq n \leq 2656$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
2656	0.0399	2448	0.0417	2240	0.0437	2032	0.0472	1824	0.0504	1616	0.0545
2652	0.0392	2444	0.0417	2236	0.0438	2028	0.0473	1820	0.0505	1612	0.0546
2648	0.0393	2440	0.0418	2232	0.0439	2024	0.0474	1816	0.0507	1608	0.0547
2644	0.0393	2436	0.0419	2228	0.0440	2020	0.0475	1812	0.0508	1604	0.0549
2640	0.0402	2432	0.0419	2224	0.0450	2016	0.0476	1808	0.0509	1600	0.0550
2636	0.0395	2428	0.0420	2220	0.0441	2012	0.0477	1804	0.0510	1596	0.0551
2632	0.0395	2424	0.0421	2216	0.0442	2008	0.0478	1800	0.0511	1592	0.0540
2628	0.0396	2420	0.0421	2212	0.0443	2004	0.0479	1796	0.0512	1588	0.0542
2624	0.0396	2416	0.0422	2208	0.0444	2000	0.0480	1792	0.0502	1584	0.0556
2620	0.0397	2412	0.0415	2204	0.0445	1996	0.0471	1788	0.0503	1580	0.0557
2616	0.0398	2408	0.0424	2200	0.0445	1992	0.0472	1784	0.0504	1576	0.0546
2612	0.0398	2404	0.0424	2196	0.0446	1988	0.0473	1780	0.0506	1572	0.0560
2608	0.0399	2400	0.0425	2192	0.0447	1984	0.0474	1776	0.0507	1568	0.0561
2604	0.0399	2396	0.0417	2188	0.0448	1980	0.0475	1772	0.0508	1564	0.0550
2600	0.0400	2392	0.0426	2184	0.0449	1976	0.0476	1768	0.0509	1560	0.0551
2596	0.0401	2388	0.0427	2180	0.0450	1972	0.0477	1764	0.0510	1556	0.0553
2592	0.0401	2384	0.0428	2176	0.0450	1968	0.0478	1760	0.0511	1552	0.0554
2588	0.0402	2380	0.0429	2172	0.0451	1964	0.0479	1756	0.0513	1548	0.0556
2584	0.0402	2376	0.0429	2168	0.0452	1960	0.0480	1752	0.0514	1544	0.0557
2580	0.0403	2372	0.0430	2164	0.0453	1956	0.0481	1748	0.0515	1540	0.0558
2576	0.0404	2368	0.0431	2160	0.0454	1952	0.0482	1744	0.0516	1536	0.0560
2572	0.0404	2364	0.0431	2156	0.0455	1948	0.0483	1740	0.0517	1532	0.0561
2568	0.0405	2360	0.0424	2152	0.0455	1944	0.0484	1736	0.0518	1528	0.0563
2564	0.0406	2356	0.0433	2148	0.0456	1940	0.0485	1732	0.0520	1524	0.0564
2560	0.0406	2352	0.0434	2144	0.0457	1936	0.0486	1728	0.0521	1520	0.0566
2556	0.0407	2348	0.0426	2140	0.0458	1932	0.0487	1724	0.0522	1516	0.0567
2552	0.0408	2344	0.0427	2136	0.0459	1928	0.0488	1720	0.0523	1512	0.0569
2548	0.0408	2340	0.0427	2132	0.0450	1924	0.0489	1716	0.0524	1508	0.0570
2544	0.0409	2336	0.0428	2128	0.0461	1920	0.0490	1712	0.0526	1504	0.0572
2540	0.0409	2332	0.0429	2124	0.0461	1916	0.0491	1708	0.0527	1500	0.0560
2536	0.0410	2328	0.0430	2120	0.0462	1912	0.0492	1704	0.0528	1496	0.0575
2532	0.0411	2324	0.0430	2116	0.0454	1908	0.0493	1700	0.0529	1492	0.0563
2528	0.0411	2320	0.0431	2112	0.0455	1904	0.0494	1696	0.0531	1488	0.0565
2524	0.0412	2316	0.0432	2108	0.0465	1900	0.0484	1692	0.0532	1484	0.0566
2520	0.0413	2312	0.0433	2104	0.0466	1896	0.0485	1688	0.0533	1480	0.0568
2516	0.0413	2308	0.0433	2100	0.0457	1892	0.0486	1684	0.0534	1476	0.0569
2512	0.0414	2304	0.0434	2096	0.0468	1888	0.0487	1680	0.0536	1472	0.0571
2508	0.0415	2300	0.0435	2092	0.0468	1884	0.0488	1676	0.0525	1468	0.0572
2504	0.0407	2296	0.0436	2088	0.0469	1880	0.0489	1672	0.0526	1464	0.0574
2500	0.0416	2292	0.0436	2084	0.0461	1876	0.0490	1668	0.0528	1460	0.0575
2496	0.0409	2288	0.0437	2080	0.0462	1872	0.0491	1664	0.0529	1456	0.0577
2492	0.0409	2284	0.0438	2076	0.0462	1868	0.0493	1660	0.0530	1452	0.0579
2488	0.0410	2280	0.0439	2072	0.0463	1864	0.0494	1656	0.0531	1448	0.0580
2484	0.0419	2276	0.0439	2068	0.0464	1860	0.0495	1652	0.0533	1444	0.0582
2480	0.0411	2272	0.0440	2064	0.0465	1856	0.0496	1648	0.0534	1440	0.0583
2476	0.0420	2268	0.0441	2060	0.0466	1852	0.0497	1644	0.0535	1436	0.0571
2472	0.0413	2264	0.0442	2056	0.0467	1848	0.0498	1640	0.0537	1432	0.0587
2468	0.0413	2260	0.0442	2052	0.0468	1844	0.0499	1636	0.0538	1428	0.0574
2464	0.0414	2256	0.0434	2048	0.0469	1840	0.0500	1632	0.0539	1424	0.0576
2460	0.0415	2252	0.0435	2044	0.0470	1836	0.0501	1628	0.0541	1420	0.0577
2456	0.0415	2248	0.0445	2040	0.0471	1832	0.0502	1624	0.0542	1416	0.0579
2452	0.0416	2244	0.0446	2036	0.0472	1828	0.0503	1620	0.0543	1412	0.0581

Table 48: Coherence for $p = 16384$ and $164 \leq n \leq 1408$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
1408	0.0582	1200	0.0650	992	0.0746	784	0.0867	576	0.1042	368	0.1359
1404	0.0584	1196	0.0652	988	0.0749	780	0.0846	572	0.1049	364	0.1374
1400	0.0586	1192	0.0654	984	0.0732	776	0.0851	568	0.1056	360	0.1389
1396	0.0587	1188	0.0657	980	0.0735	772	0.0855	564	0.1028	356	0.1404
1392	0.0589	1184	0.0659	976	0.0738	768	0.0859	560	0.1036	352	0.1420
1388	0.0591	1180	0.0661	972	0.0741	764	0.0864	556	0.1043	348	0.1379
1384	0.0592	1176	0.0663	968	0.0744	760	0.0868	552	0.1051	344	0.1395
1380	0.0594	1172	0.0666	964	0.0747	756	0.0873	548	0.1058	340	0.1412
1376	0.0596	1168	0.0668	960	0.0750	752	0.0878	544	0.1066	336	0.1429
1372	0.0598	1164	0.0670	956	0.0753	748	0.0882	540	0.1074	332	0.1446
1368	0.0599	1160	0.0672	952	0.0756	744	0.0887	536	0.1082	328	0.1463
1364	0.0601	1156	0.0675	948	0.0759	740	0.0892	532	0.1090	324	0.1481
1360	0.0603	1152	0.0660	944	0.0763	736	0.0897	528	0.1098	320	0.1500
1356	0.0605	1148	0.0662	940	0.0766	732	0.0902	524	0.1107	316	0.1519
1352	0.0607	1144	0.0664	936	0.0769	728	0.0907	520	0.1115	312	0.1538
1348	0.0608	1140	0.0667	932	0.0773	724	0.0912	516	0.1085	308	0.1494
1344	0.0610	1136	0.0669	928	0.0776	720	0.0917	512	0.1094	304	0.1513
1340	0.0612	1132	0.0671	924	0.0779	716	0.0922	508	0.1102	300	0.1533
1336	0.0614	1128	0.0674	920	0.0783	712	0.0927	504	0.1111	296	0.1554
1332	0.0616	1124	0.0676	916	0.0786	708	0.0932	500	0.1120	292	0.1575
1328	0.0617	1120	0.0679	912	0.0789	704	0.0938	496	0.1129	288	0.1597
1324	0.0604	1116	0.0681	908	0.0771	700	0.0914	492	0.1138	284	0.1549
1320	0.0606	1112	0.0683	904	0.0796	696	0.0920	488	0.1148	280	0.1571
1316	0.0608	1108	0.0686	900	0.0778	692	0.0925	484	0.1157	276	0.1594
1312	0.0610	1104	0.0688	896	0.0781	688	0.0930	480	0.1167	272	0.1618
1308	0.0612	1100	0.0691	892	0.0785	684	0.0936	476	0.1134	268	0.1642
1304	0.0613	1096	0.0675	888	0.0788	680	0.0941	472	0.1144	264	0.1667
1300	0.0615	1092	0.0696	884	0.0792	676	0.0947	468	0.1154	260	0.1692
1296	0.0617	1088	0.0699	880	0.0795	672	0.0952	464	0.1164	256	0.1641
1292	0.0619	1084	0.0701	876	0.0799	668	0.0958	460	0.1174	252	0.1667
1288	0.0621	1080	0.0704	872	0.0803	664	0.0964	456	0.1184	248	0.1694
1284	0.0623	1076	0.0706	868	0.0806	660	0.0970	452	0.1195	244	0.1721
1280	0.0625	1072	0.0709	864	0.0810	656	0.0976	448	0.1205	240	0.1750
1276	0.0627	1068	0.0693	860	0.0814	652	0.0951	444	0.1216	236	0.1780
1272	0.0629	1064	0.0695	856	0.0818	648	0.0957	440	0.1227	232	0.1810
1268	0.0631	1060	0.0698	852	0.0822	644	0.0963	436	0.1193	228	0.1754
1264	0.0633	1056	0.0701	848	0.0802	640	0.0969	432	0.1250	224	0.1875
1260	0.0635	1052	0.0703	844	0.0806	636	0.0975	428	0.1215	220	0.1818
1256	0.0637	1048	0.0706	840	0.0810	632	0.0981	424	0.1226	216	0.1852
1252	0.0639	1044	0.0709	836	0.0813	628	0.0987	420	0.1238	212	0.1887
1248	0.0641	1040	0.0712	832	0.0817	624	0.0994	416	0.1250	208	0.1923
1244	0.0643	1036	0.0714	828	0.0821	620	0.1000	412	0.1262	204	0.1961
1240	0.0645	1032	0.0717	824	0.0825	616	0.0974	408	0.1275	200	0.2000
1236	0.0647	1028	0.0720	820	0.0829	612	0.1013	404	0.1287	196	0.1939
1232	0.0633	1024	0.0723	816	0.0833	608	0.0987	400	0.1250	192	0.1979
1228	0.0635	1020	0.0725	812	0.0837	604	0.0993	396	0.1313	188	0.2021
1224	0.0654	1016	0.0728	808	0.0842	600	0.1000	392	0.1327	184	0.2065
1220	0.0639	1012	0.0731	804	0.0846	596	0.1007	388	0.1289	180	0.2111
1216	0.0641	1008	0.0734	800	0.0850	592	0.1014	384	0.1302	176	0.2045
1212	0.0644	1004	0.0737	796	0.0854	588	0.1020	380	0.1316	172	0.2093
1208	0.0646	1000	0.0740	792	0.0859	584	0.1027	376	0.1330	168	0.2143
1204	0.0648	996	0.0743	788	0.0863	580	0.1000	372	0.1344	164	0.2195

Table 49: Coherence for $p = 16384$ and $20 \leq n \leq 160$

n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$	n	$\mu(H_{n,p})$
160	0.2250	136	0.2500	112	0.2679	88	0.3182	64	0.3750	40	0.5000
156	0.2179	132	0.2424	108	0.2778	84	0.3333	60	0.4000	36	0.5556
152	0.2237	128	0.2500	104	0.2885	80	0.3250	56	0.4286	32	0.5625
148	0.2297	124	0.2581	100	0.2800	76	0.3421	52	0.4231	28	0.5714
144	0.2361	120	0.2667	96	0.2917	72	0.3611	48	0.4583	24	0.6667
140	0.2429	116	0.2586	92	0.3043	68	0.3529	44	0.4545	20	0.7000