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# GENERAL

According to the format of the data as well as the style of the result, we got following processing steps as follows.

1. Process the data properly to meet the qualification of the classifier.

2. Do the classification experiment using some kind classifier, and check whether this classifier is capable of processing the given data.

3. Modify the parameters of the classifier to get a better result.

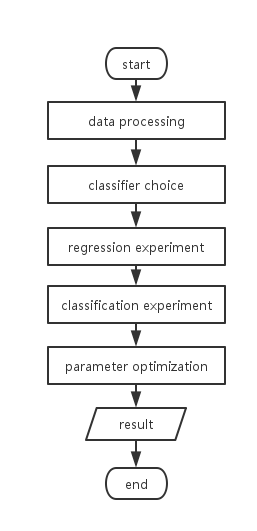


Figure1.1 Processing Flow

# DATA DESCRIPTION

## 2.1 BLOOD DATA

### 2.1.1 DATA-22

The Data-22 contains 44 files of 22 subjects including:

bp\_20150716\_1421\_KHN004\_IIB.csv,wav\_20150716\_1421\_KHN004\_IIB.csv, bp\_20150716\_1525\_KHN005\_IIB.csv,wav\_20150716\_1525\_KHN005\_IIB.csv etc.

There are acceleration data of 22 subjects stored for each folder one by one person. Folder name matches the ID of the subject. In each folder, there are two \*.csv files named with “bp\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv” and “wav\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv”.

“wav\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv” file is a real-time record of acceleration data of every subject body movement by 3 columns – “Acc\_X”, “Acc\_Y” and “Acc\_Z”. The sample rate is 125 Hz.

“bp\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv” file is a processed record of acceleration data by 6 columns – “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean”, “Acc\_x std”, “Acc\_y std” and “Acc\_z std", and it records the average and variance of every 120 data point (about 1 second) in “wav\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv”. It reduces the amount of data greatly and makes it become easier for data analysis. This file also provides 6 features during each time period.

### 2.1.2 NoiseFlag\_20151120.csv

This file is a noise label configuration file and outlines the reference of untrusted measurements by external disturbance. This reference file describes HDP and the state of the active channel in one beat unit and determines noise whether or not by flag based on the conditions as follows:

Value of HDP is out from the set value more than ± 3mmHg;

Active channel continues to change in 3 more consecutive beats;

Vacant interval of the pulse is more than 3 seconds.

The data which meet at least one of the three conditions above is noise.

The item name and the contents of the reference file "NoiseFlag\_20151202.csv" described below.

User: the subject ID, it can be found in DATA-22

BeatNo: beat of the number (for each subject) same with “bp\_2015\*\*\*\*\_\*\*\*\*\_KHN\*\*\*\_IIB.csv”

StartTime: beat of the start time (in min)

EndTime: beat the end of time (in min)

BP\_fluctuation: value of TRUE if blood pressure compared with the previous beat of (SBP or DBP) has changed more than 10mmHg (increase or decrease No preference)

Abnormal\_HDP: TRUE if the value of the HDP has exceeded the set value (set value ± 3mmHg)

ActCh\_moving: TRUE if the value of the active channel for the third consecutive beats or more has changed

Abnormal\_PLS: TRUE if pulse intervals (endTime-startTime) is 3 seconds or more

Action: The subject's action watched by video visually.

NoiseLabel: TRUE if it is determined the noise on the basis of the two ideas. "-" should be excluded from the evaluation.

In general, there are 75 kinds of action and sum to 40337 times in the action data with new labels. After processing raw training data, there left 8 labels and a set of 3D directions in the space. That is to say there are 3 kinds of features, sums to 2^3-1=7 kinds of combination of features.

## 2.2 ACTION DATA

There are 6 features in the action data, whose names and formats are totally identical to those of BLOOD data, which are “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean”, “Acc\_x std”, “Acc\_y std” and “Acc\_z std". At first, there were more than 30 labels in the output column, about 33. So there was a 33-class classification problem. It could be expected that the accuracy of this problem would be too low. So we classified the label roughly, and got 8 labels, which are the data we currently use. So, at last, there are 2^6-1=63 combinations of features.

The number of rows in dataset is 40044.

# DATA PROCESSING

## 3.1 Combine data

The data analysis purpose is to build a model to predict the blood pressure would be changed or not with the body movement. Therefore, the “DATA-22” need to be combined with “NoiseFlag\_20151120.csv” by the User’s ID and StartTime-EndTime.

The data row in which the NoiseLabel is TURE should be removed because it is noise and cannot be trusted. It indicates that the data is disturbed by external interference.

## 3.2 Select needed data property

After non-noise data selection, the data used to train model should be selected. As a result, the column “BP\_fluctuation”, “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean”,” Acc\_x std”, “Acc\_y std” and “Acc\_z std” are selected.

## 3.3 Data label setting

For data analysis, the data label is also indispensable. The label setting rule is that if BP\_fluctuation is TRUE, label equals to 1 and else if BP\_fluctuation is FALSE, label equals to -1.

## 3.4 Data format construction

The data format should be meet the classifier tools’ requirements as follows:

*<label> <index1>:<value1> <index2>:<value2> ...*

Each line contains an instance and is ended by a '\n' character. For classification, <label> is an integer indicating the class label. The pair <index>:<value> gives a feature(attribute) value: <index> is an integer starting from 1 and <value>is a real number.

As a result, the data is constructed as shown:

-1 1:-0.132009346 2:-0.722546729 3:0.699182243 4:0.013034996 5:0.010209438 6:0.015119368

-1 1:-0.143507282 2:-0.722694175 3:0.694781553 4:0.015356858 5:0.01037781 6:0.018061743

-1 1:-0.1328125 2:-0.719618056 3:0.689814815 4:0.013531647 5:0.005135486 6:0.022383194

-1 1:-0.144859813 2:-0.721086449 3:0.699182243 4:0.015040179 5:0.008219186 6:0.019355189

-1 1:-0.138480392 2:-0.719362745 3:0.694852941 4:0.015477121 5:0.004332762 6:0.018135599

-1 1:-0.131944444 2:-0.72337963 3:0.69849537 4:0.012991866 5:0.015223318 6:0.01916724

-1 1:-0.143691589 2:-0.718165888 3:0.707067757 4:0.015321118 5:0.004232295 6:0.019355189

-1 1:-0.134803922 2:-0.723651961 3:0.70189951 4:0.014500196 5:0.011364729 6:0.019895353

-1 1:-0.127380952 2:-0.723511905 3:0.694642857 4:0.008290707 5:0.01123093 6:0.021675168

-1 1:-0.137019231 2:-0.723557692 3:0.699519231 4:0.015203258 5:0.011275038 6:0.019528938

…………

1 1:-0.130952381 2:-0.706845238 3:0.71875 4:0.012271148 5:0.015175653 6:0.019287919

1 1:-0.133928571 2:-0.709821429 3:0.71875 4:0.014117311 5:0.014117311 6:0

1 1:-0.146634615 2:-0.716346154 3:0.71875 4:0.014423077 5:0.008327167 6:0

1 1:-0.131944444 2:-0.706018519 3:0.728009259 4:0.012991866 5:0.015354744 6:0.014269477

1 1:-0.125 2:-0.6875 3:0.71875 4:0 5:0 6:0

1 1:-0.1328125 2:-0.703125 3:0.7421875 4:0.013531647 5:0.015625 6:0.025911131

1 1:-0.125 2:-0.69375 3:0.71875 4:0 5:0.0125 6:0

1 1:-0.12890625 2:-0.71875 3:0.71875 4:0.010334966 5:0 6:0

1 1:-0.15625 2:-0.71875 3:0.71875 4:0 5:0 6:0

1 1:-0.13125 2:-0.69375 3:0.73125 4:0.0125 5:0.0125 6:0.015309311

1 1:-0.135416667 2:-0.706845238 3:0.71875 4:0.014731391 5:0.015175653 6:0

1 1:-0.125 2:-0.71875 3:0.733455882 4:0 5:0 6:0.015597944

1 1:-0.125 2:-0.704044118 3:0.704044118 4:0 5:0.015597944 6:0.015597944

1 1:-0.131740196 2:-0.712009804 3:0.728553922 4:0.01285305 5:0.01285305 6:0.014500196

1 1:-0.138020833 2:-0.705729167 3:0.71875 4:0.015406458 5:0.015406458 6:0

1 1:-0.130681818 2:-0.713068182 3:0.713068182 4:0.012052956 5:0.012052956 6:0.029248949

1 1:-0.125 2:-0.709490741 3:0.721064815 4:0 5:0.014269477 6:0.008184106

…………

<Label>: BP\_fluctuation. Value equals to 1 when BP\_fluctuation is TRUE, and equals to -1 when BP\_fluctuation is FALSE.

<Index 1>: “Acc\_x mean”. The average value of the x-axis acceleration.

<Index 2>: “Acc\_y mean”. The average value of the y-axis acceleration.

<Index 3>: “Acc\_z mean”. The average value of the z-axis acceleration.

<Index4>: “Acc\_x std”. The variance of the x-axis acceleration.

<Index5>: “Acc\_y std”. The variance of the y-axis acceleration.

<Index6>: “Acc\_z std”. The variance of the z-axis acceleration.

While the data below only focus on the label marked by -1 or 1, we also use the new data which has more detailed labels, whose labels are ranged from 1 to 8. Thus, the processing of new data is a multi-class classification problem.

# CLASSIFIER CHOICE

There are 3 classifiers usually used in classification task, which are SVM, MaxEnt and KNN, and each one has its own advantages and weakness.

## 4.1 KNN

KNN is a kind of unsupervised learning method. It just lumps the neighbor points together to form a class after iteration.

1. simple and efficient
2. low cost to re-train
3. the time and space complexity is linear with the scale of the corpus
4. if there exist many overlaps and intersections among the classes, KNN will function better, in that KNN classifies the data according to the position of each data point in the hyper space rather than the kinds of classes.
5. KNN is good at processing big corpus
6. KNN is a lazy learning method, thus it’s slower than most methods
7. category score is not standardized
8. hard to interpret the output
9. large calculation

## 4.2 SVM

SVM is a mature classifier extensively applied on industries.

1. SVM is good at processing small corpus
2. improve the generalization performance
3. solve the high-dimensional problem
4. solve the non-linear problem
5. avoid the problem of the neural network structure choice and local minima
6. sensitive to the loss of data
7. no unified solution to the non-linear problem

## 4.3 MmaxEnt

MaxEnt is a classifier which has good performance in some fields, especially NLP

1. just focus on the choice of features, rather than the combination of features.
2. the parameters can be smoothed without regular smoothing algorithms
3. fast, efficient, result is of good persuasion

After conducting some experiments with small corpus, we decided to use the SVM to do the whole job. And the classification toolbox-libSVM is provided by Prof. Chih-Jen Lin of National Taiwan University. Libsvm is a simple, easy-to-use, and efficient software for SVM classification and regression. It solves C-SVM classification, nu-SVM classification, one-class-SVM, epsilon-SVM regression, and nu-SVM regression. It also provides an automatic model selection tool for C-SVM classification. This document explains the use of libsvm.

# CLASSIFICATION EXPERIMENT

The whole result of blood pressure data as well as action data with new labels are in the appendix.

## 5.1 classification experiment on blood pressure data

We will start the explanation by talking about the kernels. One of the basic theory of SVM is to cast the data in the low dimension into the high dimension to find a proper hyper plane to achieve the goal of separating the data. There were several kernels which could be used, and we chose two types of kernels: linear and RBF (radial basis function). The linear kernel is the simplest and most straight-forward kernel, it just inputs points in low dimension into a linear function and gets the output of high dimension, while the RBF uses the radial basis function to get the output. Linear kernel is simple to understand but is slow, while the RBF kernel is stable and fast. So we regarded the result done by RBF kernel as the main result while the result done by linear function as the contrast.

Crucial parameters of SVM are c and gamma (radial kernel only). The value c reflects the tolerance of SVM to the error. The bigger c, the system is more incapable of tolerance errors. The parameter gamma decides the distribution of the data when they are casted into the high-dimension space.

There are 6 features in this classification task and can be combined by sorts. Therefore, we use different parameters c and g (gamma) to optimize the training model.

We judged the importance of a feature by observing the correct rate, which was the main entity in the result table. The correct rate was done by the k-fold cross validation, which was a popular strategy in the machine learning field. At the beginning, we split the whole data set into k (say, 5) subsets evenly, then we trained the model by subset 1, 2, 3 and 4, and used subset 5 as the test set to get the result. Then we used subset 1, 3, 4, 5 to train and subset 2 to test, and so on. Finally, we take the average of 5 results, as the final result – correct rate.

The BEST results are shown as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Feature combination | c(cost) | g(gamma) | Correct Rate |
| 1 | 1 | 2048.0 | 8.0 | 98.1123 |
| 2 | 2 | 0.03125 | 0.0078125 | 98.1057 |
| 3 | 3 | 0.03125 | 0.0078125 | 98.1057 |
| 4 | 4 | 8192.0 | 8.0 | 98.1488 |
| 5 | 5 | 32768.0 | 0.00048828125 | 98.1355 |
| 6 | 6 | 32768.0 | 0.001953125 | 98.1123 |
| 7 | 12 | 128.0 | 8.0 | 98.258 |
| 8 | 13 | 8.0 | 8.0 | 98.1156 |
| 9 | 14 | 32768.0 | 8.0 | 98.1819 |
| 10 | 15 | 32768.0 | 8.0 | 98.1852 |
| 11 | 16 | 32768.0 | 8.0 | 98.1156 |
| 12 | 23 | 8192.0 | 8.0 | 98.1421 |
| 13 | 24 | 4096.0 | 8.0 | 98.1454 |
| 14 | 25 | 4096.0 | 2.0 | 98.1653 |
| 15 | 26 | 32768.0 | 8.0 | 98.1223 |
| 16 | 34 | 32768.0 | 8.0 | 98.1918 |
| 17 | 35 | 4096.0 | 8.0 | 98.1819 |
| 18 | 36 | 4096.0 | 8.0 | 98.1587 |
| 19 | 45 | 128.0 | 8.0 | 98.1488 |
| 20 | 46 | 32768.0 | 0.5 | 98.1388 |
| 21 | 56 | 32.0 | 2.0 | 98.119 |
| 22 | 123 | 512.0 | 8.0 | 98.2945 |
| 23 | 124 | 8192.0 | 8.0 | 98.3243 |
| 24 | 125 | 4096.0 | 8.0 | 98.3309 |
| 25 | 126 | 8192.0 | 8.0 | 98.3077 |
| 26 | 134 | 8192.0 | 8.0 | 98.2746 |
| 27 | 135 | 128.0 | 8.0 | 98.1951 |
| 28 | 136 | 2048.0 | 8.0 | 98.2084 |
| 29 | 145 | 32768.0 | 8.0 | 98.1951 |
| 30 | 146 | 2048.0 | 2.0 | 98.1852 |
| 31 | 156 | 512.0 | 8.0 | 98.1388 |
| 32 | 234 | 32768.0 | 2.0 | 98.215 |
| 33 | 235 | 8192.0 | 8.0 | 98.2084 |
| 34 | 236 | 8192.0 | 8.0 | 98.2084 |
| 35 | 245 | 128.0 | 8.0 | 98.1984 |
| 36 | 246 | 2048.0 | 8.0 | 98.1521 |
| 37 | 256 | 2048.0 | 8.0 | 98.1488 |
| 38 | 345 | 2048.0 | 8.0 | 98.1918 |
| 39 | 346 | 2048.0 | 2.0 | 98.2017 |
| 40 | 356 | 2048.0 | 8.0 | 98.1984 |
| 41 | 456 | 128.0 | 8.0 | 98.1587 |
| 42 | 1234 | 128.0 | 8.0 | 98.3375 |
| 43 | 1235 | 2048.0 | 2.0 | 98.3243 |
| 44 | 1236 | 128.0 | 8.0 | 98.3044 |
| 45 | 1245 | 512.0 | 8.0 | 98.3342 |
| 46 | 1246 | 128.0 | 8.0 | 98.3475 |
| 47 | 1256 | 512.0 | 8.0 | 98.3044 |
| 48 | 1345 | 512.0 | 2.0 | 98.2349 |
| 49 | 1346 | 32768.0 | 2.0 | 98.2216 |
| 50 | 1356 | 32768.0 | 2.0 | 98.1951 |
| 51 | 1456 | 2048.0 | 0.5 | 98.1786 |
| 52 | 2345 | 2048.0 | 8.0 | 98.2183 |
| 53 | 2346 | 8192.0 | 2.0 | 98.258 |
| 54 | 2356 | 32768.0 | 2.0 | 98.2349 |
| 55 | 2456 | 32768.0 | 0.5 | 98.1852 |
| 56 | 3456 | 32768.0 | 2.0 | 98.2183 |
| 57 | 12345 | 512.0 | 2.0 | 98.3508 |
| 58 | 12346 | 32.0 | 8.0 | 98.3508 |
| 59 | 12356 | 8192.0 | 2.0 | 98.3044 |
| 60 | 12456 | 32.0 | 8.0 | 98.3276 |
| 61 | 13456 | 2048.0 | 8.0 | 98.2481 |
| 62 | 23456 | 2048.0 | 2.0 | 98.2249 |
| 63 | 123456 | 128.0 | 2.0 | 98.3408 |

Table5.1 Correct Rate in different C and Gamma

## 5.2 classification experiment on action data

In the experiment on classification experiment of action data, we use two types of kernel (linear and rbf) and three types of parameter c (0.5, 1 and 5). So there are 6 columns of results of output. The first column in the table refers to the feature combinations, say, “123” refers to the combination of first three features, and “125” refers to the combination of features with the 1st, 2nd and 5th feature. The main entities in the table are the accuracy of each feature combination with different kernels and parameters. As we can see, the best results are around 45%, using first three features.

# CONCLUSION

We select several classifiers as candidates to do the main job of classifying the data, after designing the steps of necessary processing and cleaning of data. Then we clean the data for the classifiers and use the one with best performance (SVM) to do the main job.

After trying different combinations of parameters with the same corpus, we have got the best parameter combination - gamma = 512.0 and c =2.0 or gamma = 32.0 and cost = 8.0. It achieves the best correct rate of classifying.

We conduct the classification experiment to get the best combination of features. The feature of the greatest combination is “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean”. “Acc\_x std”, “Acc\_y std” and “Acc\_z std” OR “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean”. “Acc\_x std”, “Acc\_x std” and “Acc\_z std”. All these combinations can get the best result. It can get the Correct rate at 98.3508%.

At first, we used a small set of data to conduct the 33-class classification experiment, but just got very low accuracy, around 25%. The introduction of the new labels leads the job to a kind of 8-class labelling problem. Although the feature of the greatest combination of new labeled data is “Acc\_x mean”, “Acc\_y mean”, “Acc\_z mean” as the same, the classifying correct rate are higher. The best accuracy of combinations is over 45%.

The whole result of the experiment are as follows, in the appendix.

# Appendix

## 7.1 Results on blood pressure data

There are all data results of all parameters and all feature combination. The red marked data result is the greatest correct rate of each combination.

Feature Combination No.1-8

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 1 | 2 | 3 | 4 | 5 | 6 | 12 | 13 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 | 98.1057 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1123 | 98.0991 | 98.1057 | 98.1057 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.1024 | 98.1057 | 98.1057 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 |
| 15 | 11 | 1 | 2048 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1223 | 98.1223 | 98.0892 | 98.109 | 98.109 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.1057 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.119 | 98.0925 | 98.109 | 98.1057 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 | 98.1057 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.1057 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1223 | 98.1057 | 98.1057 | 98.1057 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1256 | 98.0892 | 98.1057 | 98.1057 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.0991 | 98.1057 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1355 | 98.1024 | 98.0792 | 98.1156 | 98.1123 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1355 | 98.109 | 98.1057 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1156 | 98.0991 | 98.1057 | 98.1057 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0958 | 98.1057 | 98.1057 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.1223 | 98.0892 | 98.2481 | 98.1024 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.1057 | 98.1057 | 98.1057 |
| 59 | 11 | 3 | 2048 | 8 | 98.1123 | 98.1057 | 98.1057 | 98.1355 | 98.1024 | 98.0858 | 98.2547 | 98.1024 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1289 | 98.1156 | 98.0892 | 98.2481 | 98.1057 |
| 62 | 3 | 3 | 8 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.119 | 98.0892 | 98.109 | 98.1156 |
| 63 | 15 | 3 | 32768 | 8 | 98.109 | 98.0527 | 98.1057 | 98.1454 | 98.0958 | 98.0825 | 98.1951 | 97.7182 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 | 98.1057 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.109 | 98.0925 | 98.1057 | 98.1024 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1322 | 98.119 | 98.0958 | 98.258 | 98.1024 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1223 | 98.1123 | 98.1057 | 98.1057 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.1057 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.1123 | 98.0892 | 98.1024 | 98.1024 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.1057 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.109 | 98.0925 | 98.1057 | 98.1057 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1256 | 98.0892 | 98.1057 | 98.1057 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1322 | 98.1123 | 98.0925 | 98.1123 | 98.1123 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.1123 | 98.1057 | 98.1057 | 98.1488 | 98.1057 | 98.0858 | 98.2448 | 98.1024 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1057 | 98.0991 | 98.1057 | 98.1057 |
| Maximum | | | | | 98.1123 | 98.1057 | 98.1057 | 98.1488 | 98.1355 | 98.1123 | 98.258 | 98.1156 |

Table7.1 Feature Combination No.1-8

Feature Combination No.9-16

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 14 | 15 | 16 | 23 | 24 | 25 | 26 | 34 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1554 | 98.0991 | 98.0991 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1686 | 98.1123 | 98.0858 | 98.1057 | 98.119 | 98.1024 | 98.0925 | 98.1057 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1554 | 98.1123 | 98.0892 | 98.1057 | 98.1223 | 98.1123 | 98.1024 | 98.1156 |
| 14 | -1 | 1 | 0.5 | 2 | 98.109 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 15 | 11 | 1 | 2048 | 2 | 98.162 | 98.109 | 98.0627 | 98.1123 | 98.1355 | 98.1653 | 98.119 | 98.1554 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1587 | 98.0958 | 98.0892 | 98.1057 | 98.109 | 98.0925 | 98.0991 | 98.1156 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1488 | 98.0991 | 98.0792 | 98.1057 | 98.1355 | 98.1587 | 98.0991 | 98.1554 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.1289 | 98.1024 | 98.0991 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1521 | 98.0958 | 98.0892 | 98.1057 | 98.1057 | 98.0991 | 98.0958 | 98.1156 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.1587 | 98.1024 | 98.1024 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.109 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1587 | 98.1223 | 98.109 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1587 | 98.1123 | 98.0892 | 98.1057 | 98.1322 | 98.1421 | 98.109 | 98.162 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.109 | 98.1256 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.109 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1554 | 98.119 | 98.0527 | 98.1256 | 98.1388 | 98.1223 | 98.1123 | 98.1587 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.1289 | 98.1156 | 98.109 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.162 | 98.0991 | 98.0991 | 98.1057 | 98.1123 | 98.1057 | 98.1024 | 98.1123 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.109 | 98.0991 | 98.1057 | 98.1057 | 98.109 | 98.1024 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.162 | 98.1256 | 98.066 | 98.1156 | 98.1355 | 98.1587 | 98.109 | 98.1587 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1289 | 98.1024 | 98.0858 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 59 | 11 | 3 | 2048 | 8 | 98.1554 | 98.1388 | 98.0958 | 98.1355 | 98.1454 | 98.1554 | 98.1024 | 98.1587 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1653 | 98.1388 | 98.0858 | 98.1322 | 98.1388 | 98.1587 | 98.1057 | 98.1653 |
| 62 | 3 | 3 | 8 | 8 | 98.1653 | 98.1223 | 98.0825 | 98.109 | 98.1388 | 98.1587 | 98.0925 | 98.1355 |
| 63 | 15 | 3 | 32768 | 8 | 98.1819 | 98.1852 | 98.1156 | 98.0097 | 98.1355 | 98.1521 | 98.1223 | 98.1918 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1587 | 98.0958 | 98.0958 | 98.1057 | 98.109 | 98.0925 | 98.0958 | 98.1156 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1554 | 98.1123 | 98.0825 | 98.1057 | 98.1322 | 98.1421 | 98.0958 | 98.1256 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1786 | 98.1123 | 98.0759 | 98.1256 | 98.1355 | 98.1653 | 98.109 | 98.1554 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1521 | 98.1223 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1024 | 98.1057 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.1355 | 98.0958 | 98.0958 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1057 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.1488 | 98.109 | 98.0858 | 98.1024 | 98.119 | 98.1322 | 98.0958 | 98.1156 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1123 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1587 | 98.0991 | 98.1024 | 98.1057 | 98.1057 | 98.0991 | 98.0991 | 98.109 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.1521 | 98.0991 | 98.109 | 98.1057 | 98.1057 | 98.0958 | 98.1024 | 98.1057 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1653 | 98.1057 | 98.0958 | 98.1057 | 98.1355 | 98.1024 | 98.0958 | 98.119 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.1587 | 98.1024 | 98.1024 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.119 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1653 | 98.1289 | 98.0958 | 98.1057 | 98.1322 | 98.1322 | 98.1024 | 98.1223 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.162 | 98.109 | 98.0627 | 98.1156 | 98.1355 | 98.1653 | 98.1123 | 98.162 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.162 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1024 | 98.1057 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.1686 | 98.1753 | 98.0892 | 98.1421 | 98.1322 | 98.1521 | 98.1024 | 98.1719 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1587 | 98.0991 | 98.0958 | 98.1057 | 98.119 | 98.0958 | 98.0958 | 98.1156 |
| Maximum | | | | | 98.1819 | 98.1852 | 98.1156 | 98.1421 | 98.1454 | 98.1653 | 98.1223 | 98.1918 |

Table7.2 Feature Combination No.9-16

Feature Combination No.17-24

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 35 | 36 | 45 | 46 | 56 | 123 | 124 | 125 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.0925 | 98.109 | 98.1057 | 98.1057 | 98.0958 | 98.109 | 98.1454 | 98.1223 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1024 | 98.1123 | 98.1355 | 98.1223 | 98.1123 | 98.119 | 98.1488 | 98.1256 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1024 | 98.109 | 98.1223 | 98.1223 | 98.119 | 98.1322 | 98.162 | 98.119 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1024 |
| 15 | 11 | 1 | 2048 | 2 | 98.162 | 98.1322 | 98.1388 | 98.1289 | 98.109 | 98.2812 | 98.1819 | 98.1521 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1024 | 98.109 | 98.1322 | 98.119 | 98.109 | 98.1123 | 98.1554 | 98.1123 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1454 | 98.1289 | 98.1322 | 98.1355 | 98.1123 | 98.2614 | 98.1686 | 98.1388 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.0991 | 98.1057 | 98.1024 | 98.1057 | 98.0991 | 98.1057 | 98.1322 | 98.1123 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.0991 | 98.109 | 98.1123 | 98.1156 | 98.0991 | 98.1156 | 98.1454 | 98.1223 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.1024 | 98.1057 | 98.0991 | 98.1057 | 98.0958 | 98.1057 | 98.1488 | 98.119 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.0958 | 98.1057 | 98.119 | 98.1123 | 98.0991 | 98.1057 | 98.1554 | 98.1156 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1256 | 98.1223 | 98.1355 | 98.1388 | 98.1024 | 98.1686 | 98.1786 | 98.1223 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.109 | 98.1057 | 98.1223 | 98.1057 | 98.1123 | 98.1057 | 98.1057 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1521 | 98.1322 | 98.1454 | 98.1256 | 98.0991 | 98.268 | 98.1819 | 98.1653 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.109 | 98.109 | 98.119 | 98.109 | 98.119 | 98.1057 | 98.1057 | 98.0958 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.0991 | 98.1057 | 98.1256 | 98.1223 | 98.1024 | 98.1057 | 98.1554 | 98.1388 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1123 | 98.1057 | 98.1024 | 98.109 | 98.109 | 98.1057 | 98.1057 | 98.109 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.1488 | 98.1289 | 98.1322 | 98.1322 | 98.1057 | 98.2812 | 98.311 | 98.3011 |
| 58 | -1 | 3 | 0.5 | 8 | 98.0892 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1123 | 98.1123 | 98.109 |
| 59 | 11 | 3 | 2048 | 8 | 98.1819 | 98.1587 | 98.1421 | 98.1223 | 98.1057 | 98.2746 | 98.3143 | 98.3309 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1753 | 98.1488 | 98.1454 | 98.1223 | 98.0991 | 98.2945 | 98.2845 | 98.2978 |
| 62 | 3 | 3 | 8 | 8 | 98.1454 | 98.1322 | 98.1223 | 98.1388 | 98.1057 | 98.2713 | 98.1753 | 98.1653 |
| 63 | 15 | 3 | 32768 | 8 | 98.1686 | 98.1521 | 98.1388 | 98.1024 | 98.1057 | 97.8308 | 98.2945 | 98.2382 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.0925 | 98.1057 | 98.1156 | 98.119 | 98.0925 | 98.119 | 98.1554 | 98.1156 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1289 | 98.1024 | 98.1388 | 98.1223 | 98.1123 | 98.2448 | 98.162 | 98.1223 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1653 | 98.1355 | 98.1488 | 98.1322 | 98.0991 | 98.2912 | 98.3011 | 98.2779 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1024 | 98.1057 | 98.119 | 98.1057 | 98.1057 | 98.1057 | 98.1156 | 98.1024 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.0991 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.0892 | 98.1057 | 98.1057 | 98.109 | 98.0958 | 98.1156 | 98.1256 | 98.1223 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.1057 | 98.1024 | 98.1256 | 98.1289 | 98.1123 | 98.2514 | 98.1454 | 98.1322 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.0958 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.0925 | 98.1156 | 98.1156 | 98.1156 | 98.0991 | 98.1057 | 98.1587 | 98.1322 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.0925 | 98.1024 | 98.1057 | 98.1123 | 98.0958 | 98.1057 | 98.1521 | 98.1223 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1289 | 98.119 | 98.1289 | 98.1289 | 98.1156 | 98.1123 | 98.162 | 98.1289 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.0991 | 98.1057 | 98.1024 | 98.1057 | 98.0958 | 98.1057 | 98.1454 | 98.1156 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1024 | 98.1057 | 98.119 | 98.0991 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.109 | 98.0991 | 98.1454 | 98.1256 | 98.1123 | 98.1421 | 98.1521 | 98.1256 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1554 | 98.1421 | 98.1454 | 98.1256 | 98.1057 | 98.2415 | 98.1885 | 98.1719 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.0958 | 98.1024 | 98.109 | 98.1156 | 98.0925 | 98.1057 | 98.1521 | 98.1223 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.1819 | 98.1554 | 98.1388 | 98.1123 | 98.0958 | 98.2713 | 98.3243 | 98.3276 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1123 | 98.0991 | 98.1256 | 98.119 | 98.109 | 98.1123 | 98.1521 | 98.1123 |
| Maximum | | | | | 98.1819 | 98.1587 | 98.1488 | 98.1388 | 98.119 | 98.2945 | 98.3243 | 98.3309 |

Table7.3 Feature Combination No.17-24

Feature Combination No.33-40

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 235 | 236 | 245 | 246 | 256 | 345 | 346 | 356 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.0892 | 98.1223 | 98.1223 | 98.1057 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1322 | 98.1421 | 98.1355 | 98.1388 | 98.1057 | 98.1819 | 98.1521 | 98.1421 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1355 | 98.1289 | 98.1421 | 98.1322 | 98.1223 | 98.1819 | 98.1388 | 98.1454 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 15 | 11 | 1 | 2048 | 2 | 98.1686 | 98.1653 | 98.1819 | 98.1355 | 98.1488 | 98.1819 | 98.2017 | 98.1753 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1388 | 98.1156 | 98.1388 | 98.1322 | 98.109 | 98.1819 | 98.1322 | 98.1355 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1488 | 98.1554 | 98.162 | 98.1322 | 98.1421 | 98.1819 | 98.1885 | 98.1819 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.0958 | 98.1024 | 98.0991 | 98.1057 | 98.0925 | 98.0991 | 98.109 | 98.0925 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1322 | 98.1123 | 98.1223 | 98.1256 | 98.1156 | 98.1355 | 98.1223 | 98.1388 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.0958 | 98.0991 | 98.0991 | 98.1024 | 98.0925 | 98.0991 | 98.1057 | 98.0925 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.0991 | 98.1024 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1057 | 98.0991 | 98.1156 | 98.1057 | 98.0892 | 98.1057 | 98.1123 | 98.0958 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1421 | 98.1521 | 98.1786 | 98.1289 | 98.1256 | 98.1786 | 98.1852 | 98.1521 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.1024 | 98.1057 | 98.1057 | 98.1024 | 98.109 | 98.1057 | 98.109 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1587 | 98.1951 | 98.1786 | 98.1454 | 98.1322 | 98.1918 | 98.1885 | 98.1918 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.0958 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1223 | 98.1024 | 98.1256 | 98.1223 | 98.0958 | 98.1289 | 98.1256 | 98.1256 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.0991 | 98.109 | 98.109 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.162 | 98.1587 | 98.1719 | 98.1421 | 98.1388 | 98.1819 | 98.1819 | 98.1686 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1156 | 98.109 | 98.109 | 98.0991 | 98.1024 | 98.0991 | 98.1123 | 98.109 |
| 59 | 11 | 3 | 2048 | 8 | 98.1951 | 98.2017 | 98.1852 | 98.1521 | 98.119 | 98.1918 | 98.1852 | 98.1984 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1885 | 98.1984 | 98.1852 | 98.1454 | 98.1355 | 98.1819 | 98.1984 | 98.1852 |
| 62 | 3 | 3 | 8 | 8 | 98.1488 | 98.1488 | 98.162 | 98.1388 | 98.1355 | 98.1753 | 98.1719 | 98.1686 |
| 63 | 15 | 3 | 32768 | 8 | 98.1454 | 98.1918 | 98.1819 | 98.1256 | 98.1057 | 98.1786 | 98.1852 | 98.1719 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1322 | 98.109 | 98.119 | 98.1256 | 98.1057 | 98.1421 | 98.1223 | 98.1355 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1322 | 98.1454 | 98.1454 | 98.1322 | 98.1421 | 98.1819 | 98.1753 | 98.1488 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1587 | 98.1521 | 98.1984 | 98.1454 | 98.1421 | 98.1885 | 98.1951 | 98.1753 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.0958 | 98.1057 | 98.109 | 98.109 | 98.109 | 98.1057 | 98.1057 | 98.1057 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.0991 | 98.1057 | 98.0991 | 98.1057 | 98.0892 | 98.109 | 98.119 | 98.1057 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.119 | 98.1123 | 98.1488 | 98.1256 | 98.1223 | 98.1686 | 98.1421 | 98.1388 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1223 | 98.1057 | 98.1223 | 98.119 | 98.0925 | 98.1355 | 98.1355 | 98.1223 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.0991 | 98.0991 | 98.1024 | 98.1057 | 98.0892 | 98.1057 | 98.1123 | 98.0991 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1289 | 98.1123 | 98.1355 | 98.1421 | 98.109 | 98.1885 | 98.1686 | 98.1388 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.0958 | 98.0991 | 98.0958 | 98.1057 | 98.0892 | 98.0991 | 98.109 | 98.0925 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.0925 | 98.1024 | 98.0991 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1024 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1355 | 98.1488 | 98.1454 | 98.1322 | 98.1322 | 98.1786 | 98.1951 | 98.1322 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1488 | 98.1753 | 98.1753 | 98.1289 | 98.1355 | 98.1819 | 98.1786 | 98.1753 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.1057 | 98.0991 | 98.1057 | 98.109 | 98.0925 | 98.1123 | 98.1123 | 98.0958 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.2084 | 98.2084 | 98.1918 | 98.1223 | 98.119 | 98.1885 | 98.1719 | 98.1951 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1256 | 98.1057 | 98.1388 | 98.1322 | 98.0991 | 98.1719 | 98.1256 | 98.1421 |
| Maximum | | | | | 98.2084 | 98.2084 | 98.1984 | 98.1521 | 98.1488 | 98.1918 | 98.2017 | 98.1984 |

Table7.4 Feature Combination No.33-40

Feature Combination No.25-32

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 126 | 134 | 135 | 136 | 145 | 146 | 156 | 234 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.0958 | 98.1554 | 98.1123 | 98.1156 | 98.1421 | 98.1454 | 98.0925 | 98.109 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.109 | 98.109 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1057 | 98.1719 | 98.1289 | 98.1156 | 98.162 | 98.1653 | 98.1123 | 98.1521 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1256 | 98.162 | 98.1388 | 98.1024 | 98.1454 | 98.1587 | 98.0991 | 98.1454 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1024 | 98.1057 | 98.1024 | 98.1057 | 98.109 | 98.109 | 98.0925 | 98.1057 |
| 15 | 11 | 1 | 2048 | 2 | 98.1388 | 98.1819 | 98.1521 | 98.109 | 98.1719 | 98.1852 | 98.0892 | 98.1819 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.0958 | 98.1554 | 98.1123 | 98.109 | 98.1587 | 98.1521 | 98.0958 | 98.1388 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1223 | 98.1885 | 98.1322 | 98.1057 | 98.1753 | 98.1686 | 98.1024 | 98.1653 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.0991 | 98.1488 | 98.0958 | 98.0958 | 98.1256 | 98.1256 | 98.0958 | 98.1057 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1024 | 98.1454 | 98.1024 | 98.109 | 98.1488 | 98.1488 | 98.1024 | 98.1156 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.0991 | 98.1653 | 98.0925 | 98.0958 | 98.1488 | 98.1488 | 98.0991 | 98.1057 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1057 | 98.1256 | 98.0958 | 98.0991 | 98.1057 | 98.119 | 98.0925 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.109 | 98.1587 | 98.1156 | 98.1123 | 98.1554 | 98.1554 | 98.1024 | 98.1057 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1156 | 98.1819 | 98.1421 | 98.0925 | 98.1819 | 98.1819 | 98.1057 | 98.1753 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1256 | 98.109 | 98.109 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1653 | 98.1885 | 98.1852 | 98.1156 | 98.1653 | 98.162 | 98.1223 | 98.215 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.1057 | 98.1057 | 98.0958 | 98.1057 | 98.1256 | 98.109 | 98.0991 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1256 | 98.1521 | 98.1156 | 98.119 | 98.1521 | 98.1521 | 98.0958 | 98.1156 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1123 | 98.1057 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.2713 | 98.1686 | 98.1587 | 98.1322 | 98.1753 | 98.1719 | 98.1223 | 98.1686 |
| 58 | -1 | 3 | 0.5 | 8 | 98.109 | 98.1024 | 98.1024 | 98.0991 | 98.1289 | 98.1123 | 98.0991 | 98.1057 |
| 59 | 11 | 3 | 2048 | 8 | 98.2945 | 98.2084 | 98.1686 | 98.2084 | 98.1819 | 98.1786 | 98.1322 | 98.2117 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.2779 | 98.1819 | 98.1819 | 98.1719 | 98.1852 | 98.162 | 98.1388 | 98.2084 |
| 62 | 3 | 3 | 8 | 8 | 98.1322 | 98.1852 | 98.1488 | 98.1156 | 98.1852 | 98.1653 | 98.1223 | 98.1587 |
| 63 | 15 | 3 | 32768 | 8 | 98.2879 | 98.0362 | 98.0892 | 98.0097 | 98.1852 | 98.1454 | 98.1289 | 98.1488 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1123 | 98.1454 | 98.119 | 98.1123 | 98.1421 | 98.1521 | 98.0925 | 98.1156 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1156 | 98.1686 | 98.1388 | 98.109 | 98.1719 | 98.1653 | 98.109 | 98.1488 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1123 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.2812 | 98.2084 | 98.1951 | 98.1521 | 98.1686 | 98.1719 | 98.1289 | 98.1918 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1024 | 98.1256 | 98.0991 | 98.1057 | 98.1156 | 98.119 | 98.0958 | 98.1057 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.1057 | 98.1421 | 98.109 | 98.1057 | 98.1289 | 98.1289 | 98.0858 | 98.1057 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.109 | 98.1355 | 98.1289 | 98.0991 | 98.1719 | 98.1587 | 98.1024 | 98.1289 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1057 | 98.119 | 98.0958 | 98.0991 | 98.1024 | 98.119 | 98.0925 | 98.1057 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.0958 | 98.1554 | 98.1156 | 98.119 | 98.1421 | 98.1488 | 98.0958 | 98.1156 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.0991 | 98.162 | 98.1057 | 98.1123 | 98.1421 | 98.1454 | 98.0925 | 98.109 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.109 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.0958 | 98.1653 | 98.1256 | 98.1156 | 98.1686 | 98.162 | 98.119 | 98.1488 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.0958 | 98.1653 | 98.0925 | 98.0958 | 98.1454 | 98.1521 | 98.0991 | 98.1057 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.1024 | 98.1388 | 98.0958 | 98.1024 | 98.1256 | 98.1256 | 98.0958 | 98.1057 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1223 | 98.1852 | 98.1289 | 98.0925 | 98.1653 | 98.1786 | 98.1123 | 98.162 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1554 | 98.1951 | 98.1719 | 98.1322 | 98.1719 | 98.1753 | 98.0958 | 98.1852 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.109 | 98.1653 | 98.1057 | 98.1057 | 98.1421 | 98.1488 | 98.0925 | 98.1057 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.3077 | 98.2746 | 98.1256 | 98.2084 | 98.1951 | 98.1488 | 98.119 | 98.2084 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 | 98.109 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1057 | 98.1488 | 98.1289 | 98.1156 | 98.1554 | 98.1521 | 98.0892 | 98.1488 |
| Maximum | | | | | 98.3077 | 98.2746 | 98.1951 | 98.2084 | 98.1951 | 98.1852 | 98.1388 | 98.215 |

Table7.5 Feature Combination No.25-32

Feature Combination No.33-40

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 235 | 236 | 245 | 246 | 256 | 345 | 346 | 356 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1057 | 98.1024 | 98.1024 | 98.1057 | 98.0892 | 98.1223 | 98.1223 | 98.1057 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1322 | 98.1421 | 98.1355 | 98.1388 | 98.1057 | 98.1819 | 98.1521 | 98.1421 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1355 | 98.1289 | 98.1421 | 98.1322 | 98.1223 | 98.1819 | 98.1388 | 98.1454 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 15 | 11 | 1 | 2048 | 2 | 98.1686 | 98.1653 | 98.1819 | 98.1355 | 98.1488 | 98.1819 | 98.2017 | 98.1753 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1388 | 98.1156 | 98.1388 | 98.1322 | 98.109 | 98.1819 | 98.1322 | 98.1355 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1488 | 98.1554 | 98.162 | 98.1322 | 98.1421 | 98.1819 | 98.1885 | 98.1819 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.0958 | 98.1024 | 98.0991 | 98.1057 | 98.0925 | 98.0991 | 98.109 | 98.0925 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1322 | 98.1123 | 98.1223 | 98.1256 | 98.1156 | 98.1355 | 98.1223 | 98.1388 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.0958 | 98.0991 | 98.0991 | 98.1024 | 98.0925 | 98.0991 | 98.1057 | 98.0925 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.0991 | 98.1024 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1057 | 98.0991 | 98.1156 | 98.1057 | 98.0892 | 98.1057 | 98.1123 | 98.0958 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1421 | 98.1521 | 98.1786 | 98.1289 | 98.1256 | 98.1786 | 98.1852 | 98.1521 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.1024 | 98.1057 | 98.1057 | 98.1024 | 98.109 | 98.1057 | 98.109 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1587 | 98.1951 | 98.1786 | 98.1454 | 98.1322 | 98.1918 | 98.1885 | 98.1918 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.0958 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1223 | 98.1024 | 98.1256 | 98.1223 | 98.0958 | 98.1289 | 98.1256 | 98.1256 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.0991 | 98.109 | 98.109 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.162 | 98.1587 | 98.1719 | 98.1421 | 98.1388 | 98.1819 | 98.1819 | 98.1686 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1156 | 98.109 | 98.109 | 98.0991 | 98.1024 | 98.0991 | 98.1123 | 98.109 |
| 59 | 11 | 3 | 2048 | 8 | 98.1951 | 98.2017 | 98.1852 | 98.1521 | 98.119 | 98.1918 | 98.1852 | 98.1984 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1885 | 98.1984 | 98.1852 | 98.1454 | 98.1355 | 98.1819 | 98.1984 | 98.1852 |
| 62 | 3 | 3 | 8 | 8 | 98.1488 | 98.1488 | 98.162 | 98.1388 | 98.1355 | 98.1753 | 98.1719 | 98.1686 |
| 63 | 15 | 3 | 32768 | 8 | 98.1454 | 98.1918 | 98.1819 | 98.1256 | 98.1057 | 98.1786 | 98.1852 | 98.1719 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1322 | 98.109 | 98.119 | 98.1256 | 98.1057 | 98.1421 | 98.1223 | 98.1355 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1322 | 98.1454 | 98.1454 | 98.1322 | 98.1421 | 98.1819 | 98.1753 | 98.1488 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1587 | 98.1521 | 98.1984 | 98.1454 | 98.1421 | 98.1885 | 98.1951 | 98.1753 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.0958 | 98.1057 | 98.109 | 98.109 | 98.109 | 98.1057 | 98.1057 | 98.1057 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.0991 | 98.1057 | 98.0991 | 98.1057 | 98.0892 | 98.109 | 98.119 | 98.1057 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.119 | 98.1123 | 98.1488 | 98.1256 | 98.1223 | 98.1686 | 98.1421 | 98.1388 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1223 | 98.1057 | 98.1223 | 98.119 | 98.0925 | 98.1355 | 98.1355 | 98.1223 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.0991 | 98.0991 | 98.1024 | 98.1057 | 98.0892 | 98.1057 | 98.1123 | 98.0991 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1289 | 98.1123 | 98.1355 | 98.1421 | 98.109 | 98.1885 | 98.1686 | 98.1388 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.0958 | 98.0991 | 98.0958 | 98.1057 | 98.0892 | 98.0991 | 98.109 | 98.0925 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.0925 | 98.1024 | 98.0991 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1024 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1355 | 98.1488 | 98.1454 | 98.1322 | 98.1322 | 98.1786 | 98.1951 | 98.1322 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1488 | 98.1753 | 98.1753 | 98.1289 | 98.1355 | 98.1819 | 98.1786 | 98.1753 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.1057 | 98.0991 | 98.1057 | 98.109 | 98.0925 | 98.1123 | 98.1123 | 98.0958 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.2084 | 98.2084 | 98.1918 | 98.1223 | 98.119 | 98.1885 | 98.1719 | 98.1951 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1256 | 98.1057 | 98.1388 | 98.1322 | 98.0991 | 98.1719 | 98.1256 | 98.1421 |
| Maximum | | | | | 98.2084 | 98.2084 | 98.1984 | 98.1521 | 98.1488 | 98.1918 | 98.2017 | 98.1984 |

Table7.6 Feature Combination No.33-40

Feature Combination No.41-48

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 456 | 1234 | 1235 | 1236 | 1245 | 1246 | 1256 | 1345 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.109 | 98.1289 | 98.1156 | 98.1223 | 98.1521 | 98.1322 | 98.119 | 98.1421 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1123 | 98.1057 | 98.1057 | 98.0925 | 98.1057 | 98.1024 | 98.1024 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1256 | 98.1753 | 98.162 | 98.1388 | 98.2017 | 98.1819 | 98.1355 | 98.1852 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.119 | 98.1852 | 98.1587 | 98.1388 | 98.1719 | 98.162 | 98.1256 | 98.1786 |
| 14 | -1 | 1 | 0.5 | 2 | 98.0958 | 98.109 | 98.109 | 98.109 | 98.109 | 98.1123 | 98.1024 | 98.109 |
| 15 | 11 | 1 | 2048 | 2 | 98.1488 | 98.3276 | 98.3243 | 98.2746 | 98.2117 | 98.1852 | 98.1488 | 98.2282 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1123 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1156 | 98.1554 | 98.1421 | 98.119 | 98.1852 | 98.1719 | 98.1223 | 98.1719 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.1322 | 98.3177 | 98.2978 | 98.2945 | 98.2084 | 98.1885 | 98.1156 | 98.2349 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.0991 | 98.1289 | 98.1024 | 98.1123 | 98.1289 | 98.1289 | 98.1057 | 98.1223 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1223 | 98.1322 | 98.1421 | 98.109 | 98.1587 | 98.1521 | 98.1322 | 98.1521 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.0991 | 98.1421 | 98.1057 | 98.1156 | 98.1388 | 98.1421 | 98.1123 | 98.1488 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1024 | 98.1156 | 98.0991 | 98.1057 | 98.1388 | 98.1289 | 98.0958 | 98.1156 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.0958 | 98.1554 | 98.1123 | 98.109 | 98.1653 | 98.1488 | 98.1355 | 98.1554 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1454 | 98.3044 | 98.2547 | 98.2514 | 98.2051 | 98.1885 | 98.1156 | 98.2084 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.1554 | 98.3044 | 98.2912 | 98.2713 | 98.2051 | 98.2282 | 98.2216 | 98.1918 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.1024 | 98.1057 | 98.0925 | 98.109 | 98.1024 | 98.1057 | 98.0958 | 98.0958 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.119 | 98.1653 | 98.1289 | 98.119 | 98.162 | 98.1587 | 98.1322 | 98.1388 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1123 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.0991 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.1388 | 98.3276 | 98.3143 | 98.2845 | 98.321 | 98.321 | 98.2845 | 98.2117 |
| 58 | -1 | 3 | 0.5 | 8 | 98.109 | 98.1156 | 98.119 | 98.1057 | 98.1355 | 98.1123 | 98.109 | 98.119 |
| 59 | 11 | 3 | 2048 | 8 | 98.1322 | 98.3011 | 98.2779 | 98.2547 | 98.321 | 98.3011 | 98.2779 | 98.2282 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.1454 | 98.3309 | 98.3044 | 98.2945 | 98.3342 | 98.3408 | 98.3044 | 98.1885 |
| 62 | 3 | 3 | 8 | 8 | 98.1322 | 98.3143 | 98.2945 | 98.2812 | 98.2216 | 98.215 | 98.1488 | 98.2017 |
| 63 | 15 | 3 | 32768 | 8 | 98.1223 | 98.2216 | 98.0196 | 98.1951 | 98.2382 | 98.1984 | 98.2481 | 98.1223 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1223 | 98.1488 | 98.1223 | 98.1057 | 98.1454 | 98.1554 | 98.119 | 98.162 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1256 | 98.3011 | 98.2746 | 98.2746 | 98.1984 | 98.1819 | 98.109 | 98.2084 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.109 | 98.1024 | 98.1057 | 98.0892 | 98.1057 | 98.1024 | 98.1024 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1587 | 98.3375 | 98.321 | 98.3044 | 98.321 | 98.3475 | 98.2945 | 98.2282 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1024 | 98.1156 | 98.1057 | 98.1057 | 98.1355 | 98.1223 | 98.0958 | 98.119 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.1057 | 98.109 | 98.1024 | 98.1057 | 98.1024 | 98.109 | 98.1024 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.0925 | 98.1156 | 98.109 | 98.119 | 98.1554 | 98.119 | 98.119 | 98.109 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.1223 | 98.2779 | 98.2912 | 98.258 | 98.1421 | 98.1587 | 98.1322 | 98.1719 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1024 | 98.1123 | 98.0991 | 98.1057 | 98.1289 | 98.119 | 98.0958 | 98.1123 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.119 | 98.1521 | 98.0991 | 98.1156 | 98.1454 | 98.1488 | 98.119 | 98.1488 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.109 | 98.1388 | 98.1057 | 98.1057 | 98.1454 | 98.1355 | 98.1256 | 98.1388 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.109 | 98.1024 | 98.1057 | 98.1123 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1223 | 98.1653 | 98.1454 | 98.1256 | 98.1984 | 98.1852 | 98.1223 | 98.1885 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.0991 | 98.1388 | 98.1024 | 98.1156 | 98.1355 | 98.1388 | 98.1123 | 98.1421 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.0991 | 98.1223 | 98.0991 | 98.1057 | 98.1388 | 98.1355 | 98.0958 | 98.1355 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1355 | 98.1885 | 98.162 | 98.1488 | 98.1984 | 98.1753 | 98.1289 | 98.2183 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1488 | 98.3177 | 98.3044 | 98.2845 | 98.2183 | 98.215 | 98.1786 | 98.215 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.109 | 98.1488 | 98.1156 | 98.1156 | 98.1554 | 98.1421 | 98.1256 | 98.1421 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.1355 | 98.2481 | 98.258 | 98.215 | 98.311 | 98.268 | 98.258 | 98.2084 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1024 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1156 | 98.1587 | 98.1289 | 98.1123 | 98.1753 | 98.1653 | 98.1223 | 98.1753 |
| Maximum | | | | | 98.1587 | 98.3375 | 98.3243 | 98.3044 | 98.3342 | 98.3475 | 98.3044 | 98.2349 |

Table7.7 Feature Combination No.41-48

Feature Combination No.49-56

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 1346 | 1356 | 1456 | 2345 | 2346 | 2356 | 2456 | 3456 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1488 | 98.1024 | 98.1421 | 98.1123 | 98.1289 | 98.1123 | 98.1123 | 98.1223 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1057 | 98.1024 | 98.1057 | 98.1057 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.1918 | 98.1322 | 98.1786 | 98.1786 | 98.162 | 98.1686 | 98.1223 | 98.1885 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.1719 | 98.1554 | 98.1719 | 98.1753 | 98.1587 | 98.162 | 98.1388 | 98.1984 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1057 | 98.0958 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 |
| 15 | 11 | 1 | 2048 | 2 | 98.2084 | 98.1753 | 98.1554 | 98.1852 | 98.2216 | 98.1852 | 98.1653 | 98.1951 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.109 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1753 | 98.1322 | 98.162 | 98.1786 | 98.162 | 98.1488 | 98.119 | 98.1686 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.2084 | 98.1686 | 98.1653 | 98.2084 | 98.2183 | 98.1753 | 98.1786 | 98.1984 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.1355 | 98.0991 | 98.1322 | 98.0958 | 98.1123 | 98.0892 | 98.0991 | 98.0991 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1454 | 98.119 | 98.1488 | 98.162 | 98.1388 | 98.1355 | 98.1289 | 98.1488 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.1488 | 98.1024 | 98.1388 | 98.0925 | 98.1024 | 98.0925 | 98.0958 | 98.0958 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1289 | 98.1024 | 98.1057 | 98.0925 | 98.1024 | 98.0991 | 98.1024 | 98.1057 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1521 | 98.1156 | 98.1521 | 98.1156 | 98.1156 | 98.1123 | 98.0958 | 98.1024 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.1885 | 98.1587 | 98.1653 | 98.1951 | 98.1885 | 98.1554 | 98.1852 | 98.1951 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.109 | 98.1057 | 98.1156 | 98.1024 | 98.1057 | 98.1024 | 98.109 | 98.1024 |
| 40 | 15 | 1 | 32768 | 2 | 98.2216 | 98.1951 | 98.1521 | 98.2017 | 98.2547 | 98.2349 | 98.1587 | 98.2183 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.1057 | 98.0892 | 98.109 | 98.0991 | 98.109 | 98.0991 | 98.1123 | 98.1057 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1554 | 98.1156 | 98.1521 | 98.1388 | 98.1289 | 98.1256 | 98.119 | 98.1355 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.1885 | 98.1786 | 98.162 | 98.1786 | 98.2183 | 98.1719 | 98.1852 | 98.2051 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1057 | 98.0958 | 98.1256 | 98.1123 | 98.1024 | 98.119 | 98.1156 | 98.1322 |
| 59 | 11 | 3 | 2048 | 8 | 98.2183 | 98.1786 | 98.162 | 98.2183 | 98.215 | 98.1984 | 98.1653 | 98.1918 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.2084 | 98.1918 | 98.1786 | 98.1984 | 98.2316 | 98.215 | 98.1753 | 98.1984 |
| 62 | 3 | 3 | 8 | 8 | 98.1786 | 98.1587 | 98.1653 | 98.1819 | 98.1885 | 98.1753 | 98.1686 | 98.1984 |
| 63 | 15 | 3 | 32768 | 8 | 98.2051 | 97.9898 | 98.1454 | 98.1984 | 98.1819 | 98.1521 | 98.0991 | 98.1918 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1554 | 98.119 | 98.1521 | 98.1587 | 98.1421 | 98.1289 | 98.1223 | 98.1521 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.1951 | 98.1653 | 98.1753 | 98.1852 | 98.1686 | 98.1488 | 98.1488 | 98.2117 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.1057 | 98.109 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.1918 | 98.1918 | 98.1521 | 98.1885 | 98.2514 | 98.1786 | 98.1753 | 98.1852 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.119 | 98.0958 | 98.1156 | 98.1024 | 98.1057 | 98.0958 | 98.1024 | 98.1024 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.109 | 98.1024 | 98.1024 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.1256 | 98.1057 | 98.1355 | 98.1123 | 98.1223 | 98.1123 | 98.0958 | 98.119 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.1322 | 98.1388 | 98.1587 | 98.1521 | 98.1521 | 98.1521 | 98.1587 | 98.1951 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.119 | 98.0991 | 98.1024 | 98.0958 | 98.1057 | 98.1024 | 98.1024 | 98.109 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1587 | 98.1223 | 98.1488 | 98.1488 | 98.1256 | 98.109 | 98.1223 | 98.1388 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.1554 | 98.1024 | 98.1454 | 98.1156 | 98.1156 | 98.1057 | 98.109 | 98.109 |
| 96 | 3 | -3 | 8 | 0.125 | 98.1057 | 98.1057 | 98.109 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.1819 | 98.1355 | 98.1653 | 98.1819 | 98.1653 | 98.1554 | 98.1223 | 98.1885 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.1554 | 98.0991 | 98.1388 | 98.0958 | 98.1057 | 98.0892 | 98.0958 | 98.0925 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.1355 | 98.1024 | 98.1223 | 98.0925 | 98.1024 | 98.1024 | 98.0991 | 98.1024 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.1951 | 98.1488 | 98.1719 | 98.1786 | 98.1719 | 98.1488 | 98.1454 | 98.2017 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.1819 | 98.1786 | 98.1355 | 98.2051 | 98.258 | 98.2349 | 98.1554 | 98.2084 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.1521 | 98.1024 | 98.1421 | 98.1156 | 98.1156 | 98.1057 | 98.1123 | 98.1156 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.2051 | 98.1852 | 98.1488 | 98.2017 | 98.2216 | 98.1852 | 98.1322 | 98.1885 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.109 | 98.109 | 98.1024 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1686 | 98.1289 | 98.1554 | 98.1885 | 98.1521 | 98.1355 | 98.119 | 98.1686 |
| Maximum | | | | | 98.2216 | 98.1951 | 98.1786 | 98.2183 | 98.258 | 98.2349 | 98.1852 | 98.2183 |

Table7.8 Feature Combination No.49-56

Feature Combination No.57-63

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No./Feature Combination | log2c | log2g | c | g | 12345 | 12346 | 12356 | 12456 | 13456 | 23456 | 123456 |
| 1 | 5 | -7 | 32 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 2 | -1 | -7 | 0.5 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 3 | 5 | -1 | 32 | 0.5 | 98.1488 | 98.1322 | 98.1289 | 98.1719 | 98.1786 | 98.1421 | 98.1554 |
| 4 | -1 | -1 | 0.5 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 5 | 11 | -7 | 2048 | 0.0078125 | 98.1057 | 98.1057 | 98.1024 | 98.0991 | 98.109 | 98.0958 | 98.109 |
| 6 | 11 | -1 | 2048 | 0.5 | 98.2084 | 98.1587 | 98.1488 | 98.2051 | 98.2216 | 98.1786 | 98.1984 |
| 7 | 5 | -13 | 32 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 8 | -1 | -13 | 0.5 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 9 | 11 | -13 | 2048 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 10 | -3 | -7 | 0.125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 11 | -3 | -1 | 0.125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 12 | -3 | -13 | 0.125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 13 | 5 | 1 | 32 | 2 | 98.2017 | 98.1753 | 98.1587 | 98.1984 | 98.1951 | 98.1753 | 98.1984 |
| 14 | -1 | 1 | 0.5 | 2 | 98.1156 | 98.119 | 98.109 | 98.0958 | 98.0991 | 98.0991 | 98.1123 |
| 15 | 11 | 1 | 2048 | 2 | 98.3342 | 98.3408 | 98.3011 | 98.1984 | 98.2084 | 98.2249 | 98.3276 |
| 16 | -3 | 1 | 0.125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 17 | 9 | -7 | 512 | 0.0078125 | 98.1057 | 98.109 | 98.1057 | 98.109 | 98.1024 | 98.1057 | 98.109 |
| 18 | 9 | -1 | 512 | 0.5 | 98.1885 | 98.1653 | 98.1521 | 98.1885 | 98.1951 | 98.1918 | 98.1819 |
| 19 | 9 | -13 | 512 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 20 | 9 | 1 | 512 | 2 | 98.3508 | 98.3342 | 98.2879 | 98.1852 | 98.215 | 98.1786 | 98.3177 |
| 21 | 5 | -11 | 32 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 22 | -1 | -11 | 0.5 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 23 | 11 | -11 | 2048 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 24 | -3 | -11 | 0.125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 25 | 9 | -11 | 512 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 26 | 3 | -7 | 8 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 27 | 3 | -1 | 8 | 0.5 | 98.1289 | 98.1289 | 98.119 | 98.1322 | 98.1488 | 98.109 | 98.1322 |
| 28 | 3 | -13 | 8 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 29 | 3 | 1 | 8 | 2 | 98.1587 | 98.1587 | 98.1322 | 98.162 | 98.1819 | 98.1653 | 98.1587 |
| 30 | 3 | -11 | 8 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 31 | 5 | -5 | 32 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1123 | 98.1057 | 98.1057 | 98.109 |
| 32 | -1 | -5 | 0.5 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 33 | 11 | -5 | 2048 | 0.03125 | 98.1454 | 98.1454 | 98.1123 | 98.1521 | 98.1587 | 98.0958 | 98.1421 |
| 34 | -3 | -5 | 0.125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 35 | 9 | -5 | 512 | 0.03125 | 98.1388 | 98.1256 | 98.0991 | 98.1256 | 98.1388 | 98.0892 | 98.1355 |
| 36 | 3 | -5 | 8 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 37 | 15 | -7 | 32768 | 0.0078125 | 98.1587 | 98.1521 | 98.1289 | 98.1653 | 98.1686 | 98.1256 | 98.1554 |
| 38 | 15 | -1 | 32768 | 0.5 | 98.3375 | 98.2978 | 98.2647 | 98.2051 | 98.2117 | 98.1819 | 98.3243 |
| 39 | 15 | -13 | 32768 | 0.0001221 | 98.0991 | 98.1057 | 98.1057 | 98.1057 | 98.0991 | 98.1057 | 98.1057 |
| 40 | 15 | 1 | 32768 | 2 | 98.2912 | 98.2746 | 98.2316 | 98.2316 | 98.1852 | 98.2249 | 98.258 |
| 41 | 15 | -11 | 32768 | 0.0004883 | 98.109 | 98.1057 | 98.0958 | 98.0925 | 98.1057 | 98.0991 | 98.0958 |
| 42 | 15 | -5 | 32768 | 0.03125 | 98.1686 | 98.1686 | 98.1322 | 98.1753 | 98.1951 | 98.1454 | 98.1753 |
| 43 | 5 | -15 | 32 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 44 | -1 | -15 | 0.5 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 45 | 11 | -15 | 2048 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 46 | -3 | -15 | 0.125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 47 | 9 | -15 | 512 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 48 | 3 | -15 | 8 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 49 | 15 | -15 | 32768 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 50 | -5 | -7 | 0.03125 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 51 | -5 | -1 | 0.03125 | 0.5 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 52 | -5 | -13 | 0.03125 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 53 | -5 | 1 | 0.03125 | 2 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 54 | -5 | -11 | 0.03125 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 55 | -5 | -5 | 0.03125 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 56 | -5 | -15 | 0.03125 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 57 | 5 | 3 | 32 | 8 | 98.3508 | 98.3508 | 98.2945 | 98.3276 | 98.2117 | 98.1753 | 98.3276 |
| 58 | -1 | 3 | 0.5 | 8 | 98.1156 | 98.109 | 98.109 | 98.1355 | 98.1123 | 98.1355 | 98.1156 |
| 59 | 11 | 3 | 2048 | 8 | 98.2481 | 98.2514 | 98.2514 | 98.2912 | 98.2481 | 98.1753 | 98.2514 |
| 60 | -3 | 3 | 0.125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 61 | 9 | 3 | 512 | 8 | 98.3077 | 98.311 | 98.2713 | 98.3276 | 98.2349 | 98.2051 | 98.2614 |
| 62 | 3 | 3 | 8 | 8 | 98.3309 | 98.3309 | 98.2978 | 98.2216 | 98.1885 | 98.1852 | 98.3276 |
| 63 | 15 | 3 | 32768 | 8 | 98.1951 | 98.162 | 98.1488 | 98.2183 | 98.2216 | 98.0925 | 98.1488 |
| 64 | -5 | 3 | 0.03125 | 8 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 65 | 7 | -7 | 128 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 66 | 7 | -1 | 128 | 0.5 | 98.1753 | 98.1521 | 98.1388 | 98.1719 | 98.1918 | 98.1719 | 98.1819 |
| 67 | 7 | -13 | 128 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 68 | 7 | 1 | 128 | 2 | 98.3408 | 98.3143 | 98.2845 | 98.2017 | 98.2282 | 98.1885 | 98.3408 |
| 69 | 7 | -11 | 128 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 70 | 7 | -5 | 128 | 0.03125 | 98.0925 | 98.1057 | 98.1057 | 98.0991 | 98.0991 | 98.1024 | 98.109 |
| 71 | 7 | -15 | 128 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 72 | 7 | 3 | 128 | 8 | 98.3177 | 98.3177 | 98.2978 | 98.3276 | 98.2117 | 98.1951 | 98.3143 |
| 73 | 5 | -9 | 32 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 74 | -1 | -9 | 0.5 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 75 | 11 | -9 | 2048 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.109 |
| 76 | -3 | -9 | 0.125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 77 | 9 | -9 | 512 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 78 | 3 | -9 | 8 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 79 | 15 | -9 | 32768 | 0.0019531 | 98.1355 | 98.1256 | 98.1057 | 98.1156 | 98.1355 | 98.0991 | 98.119 |
| 80 | -5 | -9 | 0.03125 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 81 | 7 | -9 | 128 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 82 | 1 | -7 | 2 | 0.0078125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 83 | 1 | -1 | 2 | 0.5 | 98.0991 | 98.1123 | 98.1024 | 98.1024 | 98.0991 | 98.1024 | 98.109 |
| 84 | 1 | -13 | 2 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 85 | 1 | 1 | 2 | 2 | 98.1289 | 98.1223 | 98.1223 | 98.1554 | 98.1554 | 98.1355 | 98.1454 |
| 86 | 1 | -11 | 2 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 87 | 1 | -5 | 2 | 0.03125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 88 | 1 | -15 | 2 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 89 | 1 | 3 | 2 | 8 | 98.2845 | 98.2746 | 98.2912 | 98.1786 | 98.1753 | 98.1653 | 98.2879 |
| 90 | 1 | -9 | 2 | 0.0019531 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 91 | 5 | -3 | 32 | 0.125 | 98.1322 | 98.119 | 98.0991 | 98.119 | 98.1355 | 98.0892 | 98.1289 |
| 92 | -1 | -3 | 0.5 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 93 | 11 | -3 | 2048 | 0.125 | 98.1786 | 98.1587 | 98.1256 | 98.162 | 98.1852 | 98.1587 | 98.1819 |
| 94 | -3 | -3 | 0.125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 95 | 9 | -3 | 512 | 0.125 | 98.1521 | 98.1421 | 98.1322 | 98.1554 | 98.1653 | 98.1256 | 98.1587 |
| 96 | 3 | -3 | 8 | 0.125 | 98.109 | 98.1057 | 98.1024 | 98.1057 | 98.1024 | 98.1057 | 98.1024 |
| 97 | 15 | -3 | 32768 | 0.125 | 98.2051 | 98.1753 | 98.1355 | 98.1885 | 98.2282 | 98.1951 | 98.1984 |
| 98 | -5 | -3 | 0.03125 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 99 | 7 | -3 | 128 | 0.125 | 98.1421 | 98.1454 | 98.109 | 98.1521 | 98.1587 | 98.109 | 98.1521 |
| 100 | 1 | -3 | 2 | 0.125 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 101 | 13 | -7 | 8192 | 0.0078125 | 98.1388 | 98.1355 | 98.109 | 98.1388 | 98.1488 | 98.0892 | 98.1388 |
| 102 | 13 | -1 | 8192 | 0.5 | 98.2448 | 98.1786 | 98.1719 | 98.2084 | 98.215 | 98.1951 | 98.2481 |
| 103 | 13 | -13 | 8192 | 0.0001221 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 104 | 13 | 1 | 8192 | 2 | 98.3177 | 98.3011 | 98.3044 | 98.2448 | 98.1918 | 98.215 | 98.2547 |
| 105 | 13 | -11 | 8192 | 0.0004883 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 106 | 13 | -5 | 8192 | 0.03125 | 98.1521 | 98.1488 | 98.1355 | 98.1653 | 98.1554 | 98.1289 | 98.1554 |
| 107 | 13 | -15 | 8192 | 3.052E-05 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 | 98.1057 |
| 108 | 13 | 3 | 8192 | 8 | 98.2349 | 98.2249 | 98.2349 | 98.268 | 98.2183 | 98.1719 | 98.2117 |
| 109 | 13 | -9 | 8192 | 0.0019531 | 98.1024 | 98.1057 | 98.109 | 98.1024 | 98.0991 | 98.1057 | 98.0991 |
| 110 | 13 | -3 | 8192 | 0.125 | 98.1951 | 98.1653 | 98.1388 | 98.1653 | 98.2084 | 98.1918 | 98.1984 |
| Maximum | | | | | 98.3508 | 98.3508 | 98.3044 | 98.3276 | 98.2481 | 98.2249 | 98.3408 |

Table7.9 Feature Combination No.57-63

## 7.2 Results on action data

We conduct classification experiment using 2 kinds of kernel, which are linear and rbf kernel, and 3 kinds of parameter c, which are 0.5, 1 and 5. So ther are 2\*3=6 columns of output data in total. The first column in the table refers to the combination of features.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| kernel | linear |  |  | rbf |  |  |
| combinations | c=0.5 | c=1 | c=5 | c=0.5 | c=1 | c=5 |
| 1 | 41.809 | 41.839 | 41.8864 | 42.4483 | 42.4858 | 42.5107 |
| 12 | 43.4772 | 43.4772 | 43.4747 | 43.5821 | 43.7544 | 44.0041 |
| 123 | 43.3698 | 43.3648 | 43.3648 | 45.1304 | 45.4076 | 45.9769 |
| 1234 | 43.7044 | 43.7069 | 43.7144 | 44.9081 | 45.2277 | 46.0169 |
| 12345 | 43.7019 | 43.7144 | 43.7494 | 44.8107 | 45.013 | 45.8546 |
| 123456 | 43.5896 | 43.612 | 43.627 | 44.7283 | 44.9531 | 45.7172 |
| 12346 | 43.5521 | 43.5646 | 43.5995 | 44.8307 | 45.0504 | 45.8945 |
| 1235 | 43.3423 | 43.3573 | 43.3423 | 44.8731 | 45.1803 | 45.9919 |
| 12356 | 43.3273 | 43.3198 | 43.3223 | 44.7907 | 44.988 | 45.7996 |
| 1236 | 43.3298 | 43.3049 | 43.3149 | 44.9081 | 45.1928 | 45.9969 |
| 124 | 43.5196 | 43.5371 | 43.5396 | 43.5846 | 43.622 | 43.9891 |
| 1245 | 43.5371 | 43.5696 | 43.5995 | 43.3648 | 43.632 | 44.0291 |
| 12456 | 43.5321 | 43.5771 | 43.597 | 43.2075 | 43.4522 | 43.9017 |
| 1246 | 43.5121 | 43.5396 | 43.5496 | 43.3548 | 43.6195 | 44.0166 |
| 125 | 43.4422 | 43.4372 | 43.4322 | 43.5396 | 43.5821 | 43.9816 |
| 1256 | 43.4172 | 43.4197 | 43.4073 | 43.2899 | 43.5421 | 43.9292 |
| 126 | 43.3823 | 43.3798 | 43.3698 | 43.5321 | 43.5646 | 43.9641 |
| 13 | 41.2072 | 41.1997 | 41.1972 | 44.5785 | 44.6983 | 44.7982 |
| 134 | 41.3545 | 41.3595 | 41.3595 | 44.4136 | 44.7732 | 45.0579 |
| 1345 | 41.372 | 41.362 | 41.3945 | 44.3237 | 44.4786 | 45.2128 |
| 13456 | 41.3695 | 41.3645 | 41.4394 | 44.0915 | 44.3862 | 45.2203 |
| 1346 | 41.362 | 41.3745 | 41.4394 | 44.3063 | 44.521 | 45.2277 |
| 135 | 41.2022 | 41.2022 | 41.2072 | 44.3312 | 44.6709 | 45.0629 |
| 1356 | 41.2197 | 41.2222 | 41.2247 | 44.2738 | 44.4186 | 45.1578 |
| 136 | 41.2371 | 41.2296 | 41.2272 | 44.3512 | 44.6759 | 45.0305 |
| 14 | 41.794 | 41.8315 | 41.8265 | 42.0088 | 42.1911 | 42.5357 |
| 145 | 41.8115 | 41.8565 | 41.9164 | 41.8914 | 42.0987 | 42.6031 |
| 1456 | 41.804 | 41.8714 | 41.9588 | 41.5418 | 41.9838 | 42.3384 |
| 146 | 41.8115 | 41.8565 | 41.9339 | 41.9039 | 42.0762 | 42.5632 |
| 15 | 41.6717 | 41.7166 | 41.7416 | 41.9888 | 42.1986 | 42.5682 |
| 156 | 41.6667 | 41.6991 | 41.7166 | 41.854 | 42.0013 | 42.5282 |
| 16 | 41.6966 | 41.7341 | 41.774 | 41.9813 | 42.1861 | 42.5432 |
| 2 | 35.5933 | 35.5933 | 35.5933 | 37.771 | 37.746 | 37.7635 |
| 23 | 39.9486 | 39.9511 | 39.9511 | 42.0063 | 42.4933 | 42.7954 |
| 234 | 40.0584 | 40.0559 | 40.0734 | 41.849 | 42.0612 | 42.8554 |
| 2345 | 40.1633 | 40.1733 | 40.1933 | 41.8465 | 42.1386 | 42.9003 |
| 23456 | 40.1633 | 40.1908 | 40.2158 | 41.799 | 42.0612 | 43.0551 |
| 2346 | 40.1084 | 40.1483 | 40.1433 | 41.8615 | 42.2186 | 43.0427 |
| 235 | 39.976 | 39.9735 | 39.9785 | 41.9164 | 42.3634 | 42.9078 |
| 2356 | 39.9311 | 39.9311 | 39.9186 | 41.8789 | 42.286 | 43.0002 |
| 236 | 39.8836 | 39.8936 | 39.8861 | 41.9838 | 42.5382 | 43.0327 |
| 24 | 35.7357 | 35.7407 | 35.7457 | 37.9557 | 37.9682 | 38.0881 |
| 245 | 35.903 | 35.9629 | 36.0254 | 38.0806 | 38.1905 | 38.3054 |
| 2456 | 35.9355 | 35.9679 | 35.9979 | 37.9982 | 38.1955 | 38.3728 |
| 246 | 35.8006 | 35.8256 | 35.868 | 38.0581 | 38.1705 | 38.2679 |
| 25 | 35.6558 | 35.6533 | 35.6583 | 37.8384 | 37.8658 | 37.8733 |
| 256 | 35.6533 | 35.6583 | 35.6633 | 37.8584 | 37.8509 | 37.9857 |
| 26 | 35.6458 | 35.6433 | 35.6408 | 37.8309 | 37.8159 | 37.9483 |
| 3 | 38.9596 | 38.9596 | 38.9646 | 38.9522 | 38.9646 | 39.1444 |
| 34 | 39.2219 | 39.2343 | 39.2618 | 39.2094 | 39.2518 | 39.1394 |
| 345 | 39.2019 | 39.2119 | 39.2643 | 39.0545 | 39.1594 | 39.3068 |
| 3456 | 39.1994 | 39.2368 | 39.2768 | 39.2343 | 39.0495 | 39.3542 |
| 346 | 39.1944 | 39.2543 | 39.3018 | 39.102 | 39.2219 | 39.3892 |
| 35 | 38.9571 | 38.9571 | 38.9596 | 39.1569 | 39.1919 | 38.9946 |
| 356 | 38.9746 | 38.9696 | 38.9621 | 39.0246 | 39.067 | 39.2868 |
| 36 | 38.9921 | 38.9946 | 38.9996 | 39.1794 | 39.2269 | 39.127 |
| 4 | 31.0533 | 31.0533 | 31.0533 | 31.0533 | 31.0533 | 31.0533 |
| 45 | 31.2207 | 31.2481 | 31.2856 | 31.2057 | 31.2207 | 31.2306 |
| 456 | 31.2931 | 31.3031 | 31.3156 | 31.2581 | 31.2731 | 31.2931 |
| 46 | 31.2032 | 31.1982 | 31.2032 | 31.2057 | 31.2007 | 31.2057 |
| 5 | 31.0533 | 31.0533 | 31.0533 | 31.1732 | 31.1757 | 31.1832 |
| 56 | 31.0533 | 31.0558 | 31.0783 | 31.2007 | 31.2232 | 31.2381 |
| 6 | 31.0533 | 31.0558 | 31.0608 | 31.1582 | 31.1557 | 31.1582 |

Table 7.10 whole result on action data with different kernels and parameters