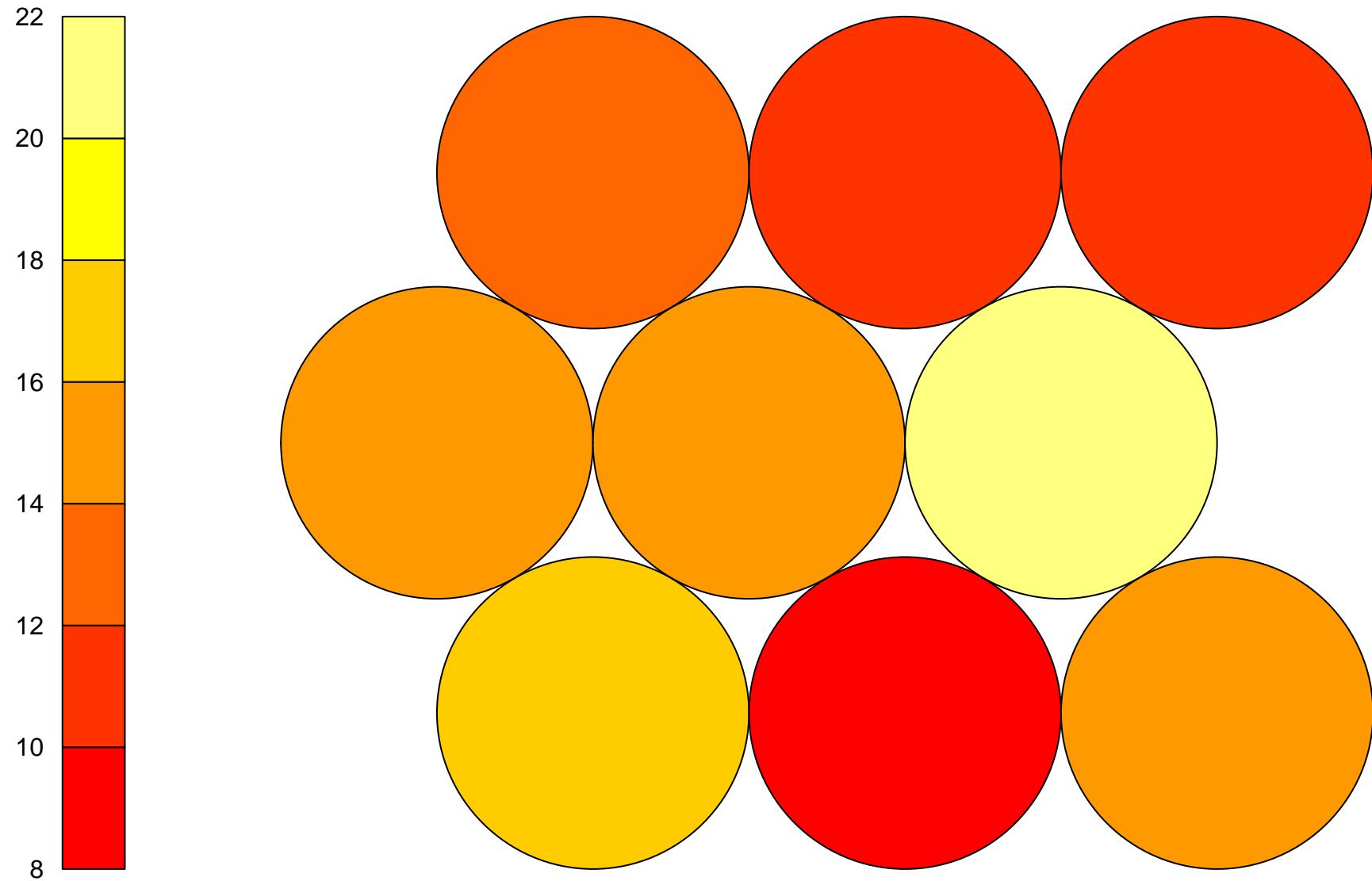
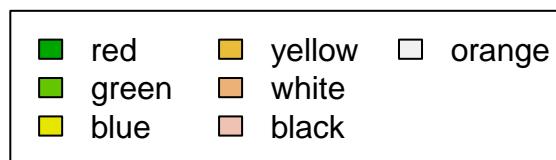
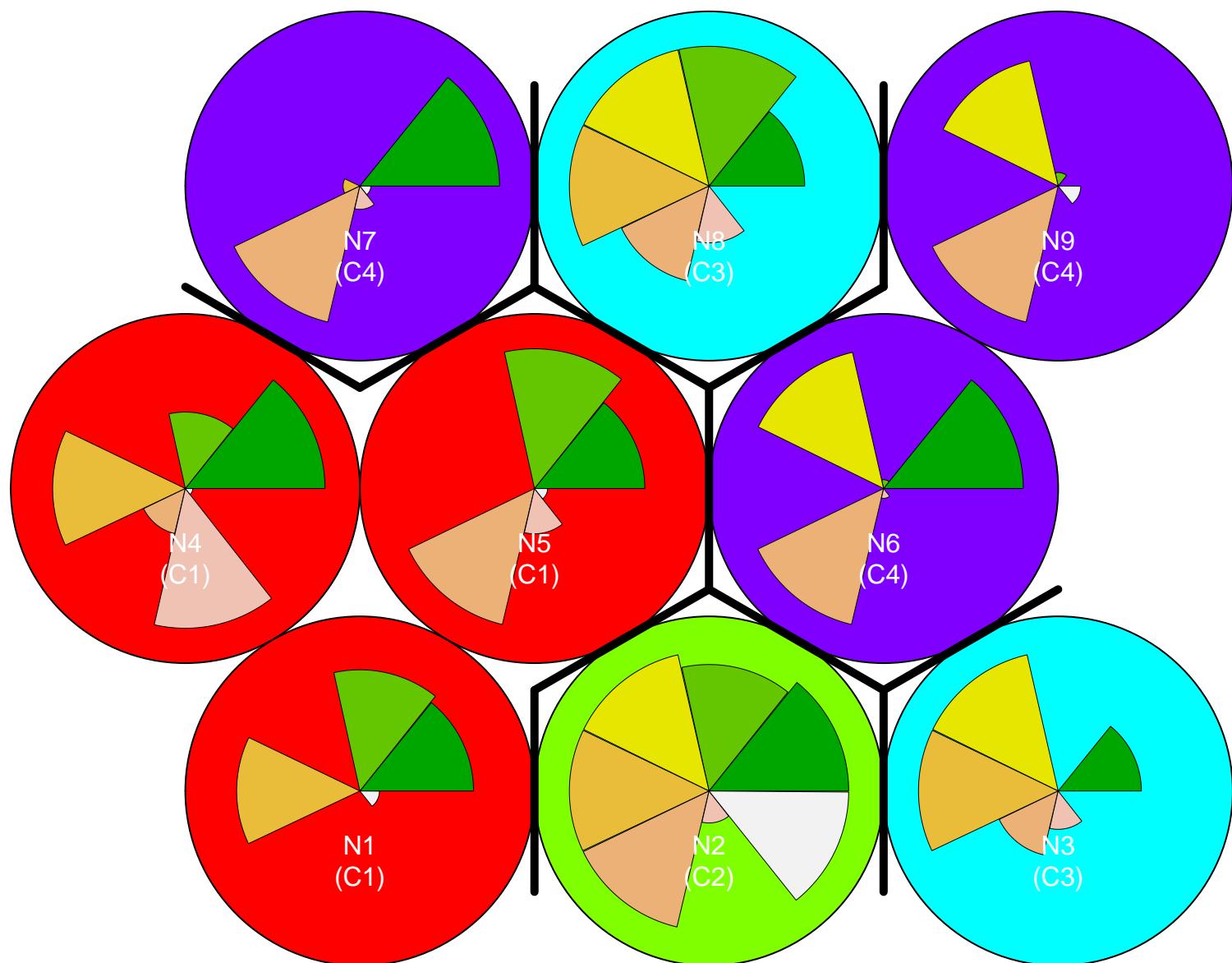


**SOM – Counts (k = 4 )**



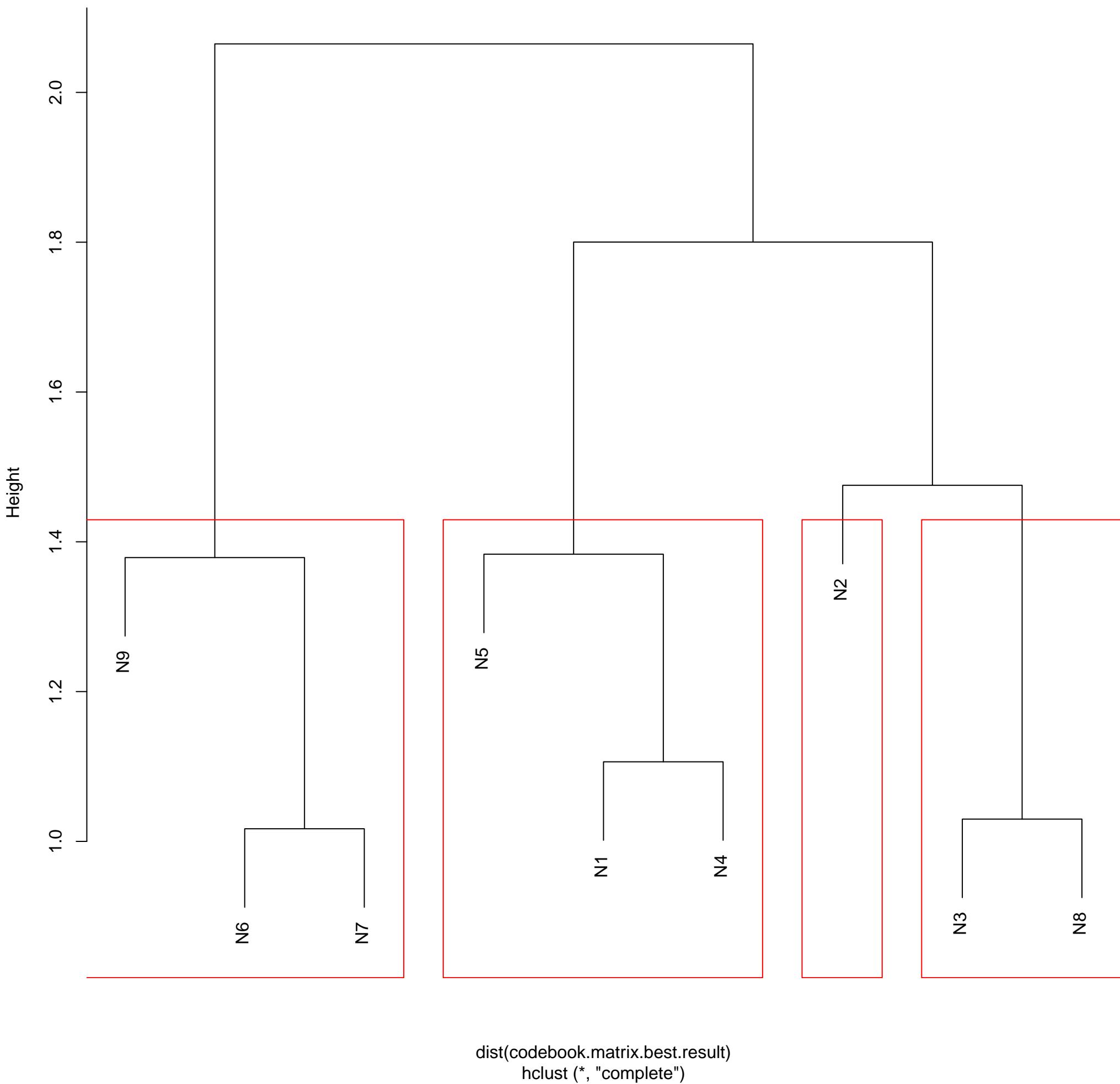
# SOM – Clusters (k = 4 )



| <b>neuron</b> |   | <b>Y.red</b> | <b>Y.green</b> | <b>Y.blue</b> | <b>Y.yellow</b> | <b>Y.white</b> | <b>Y.black</b> | <b>Y.orange</b> |
|---------------|---|--------------|----------------|---------------|-----------------|----------------|----------------|-----------------|
| 1             | 1 | 14           | 14             | 0             | 15              | 3              | 0              | 2               |
| 2             | 2 | 8            | 7              | 8             | 8               | 8              | 2              | 8               |
| 3             | 3 | 9            | 0              | 15            | 15              | 8              | 4              | 0               |
| 4             | 4 | 16           | 9              | 0             | 15              | 7              | 16             | 1               |
| 5             | 5 | 12           | 16             | 0             | 0               | 16             | 5              | 2               |
| 6             | 6 | 22           | 2              | 22            | 0               | 22             | 2              | 0               |
| 7             | 7 | 13           | 0              | 0             | 1               | 13             | 2              | 1               |
| 8             | 8 | 7            | 11             | 11            | 11              | 8              | 4              | 0               |
| 9             | 9 | 0            | 1              | 10            | 0               | 11             | 0              | 2               |

Grid: bubble\_hexagonal | rlen: 1000 | radius: 5 | alpha1: 0.5 | alpha2: 0.01 | QE Teste: 0.495456996134963

### Cluster Dendrogram



| <b>cluster</b> | <b>Y.red</b> | <b>Y.green</b> | <b>Y.blue</b> | <b>Y.yellow</b> | <b>Y.white</b> | <b>Y.black</b> | <b>Y.orange</b> |
|----------------|--------------|----------------|---------------|-----------------|----------------|----------------|-----------------|
| 1              | 1            | 42             | 39            | 0               | 30             | 26             | 21              |
| 2              | 2            | 8              | 7             | 8               | 8              | 2              | 8               |
| 3              | 3            | 16             | 11            | 26              | 26             | 16             | 8               |
| 4              | 4            | 35             | 3             | 32              | 1              | 46             | 3               |

|    | <b>cluster</b> | <b>combinacao</b> | <b>frequencia</b> |
|----|----------------|-------------------|-------------------|
| 2  | 1              | 0100101           | 1                 |
| 3  | 1              | 0101000           | 1                 |
| 4  | 1              | 0101001           | 1                 |
| 5  | 1              | 0101100           | 1                 |
| 10 | 1              | 1100010           | 1                 |
| 12 | 1              | 1100101           | 1                 |
| 15 | 1              | 1101001           | 1                 |
| 17 | 1              | 1101011           | 1                 |
| 9  | 1              | 1100000           | 2                 |
| 18 | 1              | 1101100           | 2                 |
| 1  | 1              | 0100100           | 3                 |
| 6  | 1              | 1001000           | 3                 |
| 8  | 1              | 1001110           | 3                 |
| 16 | 1              | 1101010           | 3                 |
| 7  | 1              | 1001010           | 4                 |
| 19 | 1              | 1101110           | 4                 |
| 13 | 1              | 1100110           | 5                 |
| 11 | 1              | 1100100           | 6                 |
| 14 | 1              | 1101000           | 6                 |

| <b>cluster</b> | <b>combinacao</b> | <b>frequencia</b> |
|----------------|-------------------|-------------------|
| 1              | 2                 | 1011111           |
| 3              | 2                 | 1111111           |
| 2              | 2                 | 1111101           |

|    | <b>cluster</b> | <b>combinacao</b> | <b>frequencia</b> |
|----|----------------|-------------------|-------------------|
| 1  | 3              | 0011000           | 1                 |
| 4  | 3              | 0011110           | 1                 |
| 5  | 3              | 0111000           | 1                 |
| 6  | 3              | 0111010           | 1                 |
| 10 | 3              | 1011110           | 1                 |
| 11 | 3              | 1111000           | 1                 |
| 2  | 3              | 0011010           | 2                 |
| 3  | 3              | 0011100           | 2                 |
| 7  | 3              | 0111100           | 2                 |
| 12 | 3              | 1111100           | 3                 |
| 13 | 3              | 1111110           | 3                 |
| 8  | 3              | 1011000           | 4                 |
| 9  | 3              | 1011100           | 4                 |

|    | <b>cluster</b> | <b>combinacao</b> | <b>frequencia</b> |
|----|----------------|-------------------|-------------------|
| 1  | 4              | 0000101           | 1                 |
| 3  | 4              | 0010101           | 1                 |
| 4  | 4              | 0110100           | 1                 |
| 6  | 4              | 1000110           | 1                 |
| 7  | 4              | 1000111           | 1                 |
| 8  | 4              | 1001100           | 1                 |
| 10 | 4              | 1010110           | 2                 |
| 11 | 4              | 1110100           | 2                 |
| 2  | 4              | 0010100           | 8                 |
| 5  | 4              | 1000100           | 10                |
| 9  | 4              | 1010100           | 18                |