**Appendices**

1. Raw data collected for Quality Ratios in Device A

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FPS Processed in Relation to Quality Ratio in Device A for 30 Second Period(FPS)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 12 | 11 | 11 | 12 | 11 | 11 | 10 | 9 | 7 | 5 |
| 2 | 13 | 10 | 11 | 11 | 11 | 8 | 8 | 9 | 7 | 4 |
| 3 | 12 | 14 | 11 | 11 | 10 | 11 | 8 | 8 | 7 | 4 |
| 4 | 12 | 11 | 11 | 11 | 10 | 9 | 9 | 8 | 8 | 5 |
| 5 | 12 | 12 | 13 | 11 | 10 | 9 | 9 | 8 | 8 | 4 |
| 6 | 12 | 11 | 12 | 12 | 11 | 11 | 9 | 9 | 8 | 5 |
| 7 | 12 | 12 | 11 | 9 | 11 | 10 | 8 | 8 | 8 | 5 |
| 8 | 13 | 10 | 10 | 10 | 11 | 10 | 8 | 8 | 6 | 4 |
| 9 | 13 | 11 | 10 | 11 | 10 | 8 | 8 | 7 | 7 | 3 |
| 10 | 11 | 12 | 11 | 10 | 10 | 11 | 9 | 9 | 8 | 4 |
| 11 | 13 | 11 | 10 | 11 | 11 | 9 | 13 | 7 | 7 | 4 |
| 12 | 13 | 11 | 11 | 12 | 11 | 10 | 8 | 8 | 7 | 4 |
| 13 | 16 | 12 | 10 | 11 | 11 | 9 | 10 | 6 | 7 | 5 |
| 14 | 12 | 12 | 11 | 10 | 13 | 10 | 8 | 9 | 6 | 4 |
| 15 | 12 | 10 | 12 | 12 | 11 | 7 | 9 | 7 | 7 | 3 |
| 16 | 14 | 11 | 11 | 10 | 9 | 9 | 10 | 9 | 6 | 4 |
| 17 | 14 | 12 | 12 | 12 | 9 | 9 | 9 | 9 | 7 | 4 |
| 18 | 12 | 11 | 8 | 10 | 8 | 12 | 9 | 9 | 6 | 3 |
| 19 | 13 | 11 | 11 | 10 | 10 | 8 | 9 | 9 | 8 | 4 |
| 20 | 13 | 11 | 11 | 10 | 9 | 10 | 8 | 10 | 9 | 4 |
| 21 | 13 | 12 | 10 | 12 | 9 | 10 | 10 | 9 | 7 | 3 |
| 22 | 13 | 12 | 10 | 10 | 10 | 9 | 9 | 7 | 9 | 4 |
| 23 | 15 | 12 | 11 | 9 | 9 | 10 | 8 | 7 | 7 | 4 |
| 24 | 14 | 12 | 11 | 12 | 8 | 11 | 9 | 7 | 5 | 4 |
| 25 | 12 | 11 | 12 | 11 | 9 | 9 | 9 | 7 | 8 | 4 |
| 26 | 13 | 11 | 10 | 11 | 8 | 8 | 10 | 7 | 6 | 3 |
| 27 | 13 | 13 | 11 | 10 | 7 | 10 | 9 | 8 | 6 | 4 |
| 28 | 14 | 12 | 12 | 12 | 10 | 8 | 9 | 8 | 6 | 4 |
| 29 | 14 | 11 | 10 | 11 | 8 | 10 | 9 | 7 | 8 | 4 |
| 30 | 13 | 11 | 11 | 11 | 10 | 10 | 8 | 8 | 7 | 5 |

1. Raw data collected for Quality Ratios in Device B

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FPS Processed in Relation to Quality Ratio in Device B for 30 Second Period(FPS)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 14 | 11 | 11 | 9 | 11 | 9 | 9 | 9 | 7 | 4 |
| 2 | 14 | 13 | 13 | 10 | 11 | 7 | 9 | 8 | 6 | 4 |
| 3 | 15 | 12 | 12 | 13 | 10 | 12 | 9 | 10 | 5 | 2 |
| 4 | 15 | 12 | 10 | 11 | 12 | 8 | 8 | 8 | 6 | 2 |
| 5 | 15 | 11 | 13 | 10 | 12 | 8 | 9 | 9 | 8 | 3 |
| 6 | 14 | 12 | 9 | 14 | 13 | 9 | 10 | 9 | 5 | 4 |
| 7 | 15 | 10 | 10 | 14 | 12 | 13 | 9 | 9 | 7 | 3 |
| 8 | 14 | 11 | 11 | 13 | 9 | 11 | 8 | 9 | 8 | 3 |
| 9 | 15 | 9 | 12 | 11 | 12 | 12 | 10 | 8 | 7 | 2 |
| 10 | 15 | 12 | 13 | 13 | 13 | 12 | 8 | 9 | 6 | 3 |
| 11 | 15 | 10 | 14 | 11 | 8 | 13 | 9 | 9 | 7 | 4 |
| 12 | 15 | 12 | 11 | 12 | 10 | 13 | 8 | 9 | 7 | 3 |
| 13 | 15 | 14 | 12 | 13 | 8 | 12 | 8 | 9 | 5 | 4 |
| 14 | 14 | 13 | 13 | 10 | 10 | 11 | 10 | 9 | 7 | 4 |
| 15 | 14 | 13 | 10 | 11 | 13 | 8 | 9 | 10 | 7 | 4 |
| 16 | 13 | 14 | 12 | 12 | 9 | 8 | 9 | 9 | 6 | 4 |
| 17 | 14 | 13 | 10 | 13 | 9 | 10 | 10 | 9 | 7 | 3 |
| 18 | 12 | 14 | 12 | 11 | 8 | 11 | 8 | 10 | 6 | 3 |
| 19 | 14 | 13 | 12 | 10 | 10 | 12 | 11 | 9 | 7 | 4 |
| 20 | 15 | 13 | 12 | 13 | 12 | 11 | 9 | 9 | 8 | 3 |
| 21 | 14 | 13 | 13 | 11 | 12 | 13 | 10 | 9 | 6 | 2 |
| 22 | 12 | 13 | 13 | 12 | 13 | 11 | 9 | 9 | 6 | 3 |
| 23 | 14 | 14 | 14 | 12 | 13 | 9 | 9 | 9 | 6 | 3 |
| 24 | 14 | 13 | 11 | 12 | 9 | 10 | 10 | 9 | 7 | 2 |
| 25 | 15 | 12 | 13 | 13 | 10 | 10 | 8 | 10 | 6 | 2 |
| 26 | 15 | 11 | 12 | 11 | 9 | 9 | 8 | 7 | 6 | 3 |
| 27 | 14 | 10 | 13 | 12 | 10 | 8 | 9 | 9 | 7 | 3 |
| 28 | 15 | 12 | 10 | 11 | 11 | 8 | 10 | 8 | 7 | 3 |
| 29 | 14 | 11 | 12 | 13 | 12 | 7 | 9 | 9 | 7 | 3 |
| 30 | 14 | 11 | 12 | 10 | 12 | 9 | 10 | 9 | 6 | 4 |

1. Raw data collected for FPS in relation to distance

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FPS Processed in Relation to Distance in Device A for 30 Second Period(FPS)** | | | | | | | | | | |
| Distance(m) Time (s) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 13 | 12 | 12 | 13 | 10 | 8 | 5 | 6 | 1 | 1 |
| 2 | 13 | 15 | 11 | 10 | 11 | 8 | 5 | 5 | 2 | 1 |
| 3 | 13 | 15 | 13 | 12 | 10 | 8 | 7 | 4 | 2 | 1 |
| 4 | 13 | 14 | 13 | 10 | 7 | 9 | 7 | 3 | 1 | 1 |
| 5 | 13 | 12 | 12 | 12 | 11 | 9 | 8 | 2 | 2 | 1 |
| 6 | 13 | 14 | 11 | 13 | 8 | 9 | 7 | 4 | 1 | 1 |
| 7 | 15 | 12 | 13 | 13 | 7 | 7 | 4 | 3 | 2 | 1 |
| 8 | 14 | 15 | 12 | 12 | 11 | 6 | 4 | 2 | 1 | 1 |
| 9 | 14 | 12 | 14 | 9 | 10 | 6 | 8 | 3 | 3 | 1 |
| 10 | 13 | 12 | 14 | 13 | 9 | 9 | 5 | 2 | 3 | 1 |
| 11 | 15 | 13 | 11 | 12 | 10 | 6 | 8 | 3 | 3 | 1 |
| 12 | 15 | 15 | 13 | 9 | 8 | 9 | 4 | 2 | 1 | 1 |
| 13 | 13 | 15 | 12 | 9 | 7 | 9 | 8 | 4 | 3 | 1 |
| 14 | 14 | 13 | 14 | 11 | 11 | 8 | 6 | 5 | 3 | 1 |
| 15 | 13 | 15 | 13 | 9 | 7 | 7 | 7 | 3 | 2 | 1 |
| 16 | 14 | 14 | 12 | 8 | 7 | 7 | 5 | 2 | 2 | 1 |
| 17 | 13 | 12 | 15 | 10 | 8 | 7 | 8 | 4 | 2 | 1 |
| 18 | 15 | 14 | 14 | 11 | 8 | 9 | 4 | 5 | 1 | 1 |
| 19 | 15 | 15 | 13 | 9 | 10 | 6 | 5 | 3 | 3 | 1 |
| 20 | 13 | 13 | 15 | 12 | 8 | 6 | 7 | 2 | 1 | 1 |
| 21 | 14 | 15 | 12 | 9 | 8 | 8 | 6 | 6 | 2 | 1 |
| 22 | 14 | 13 | 14 | 11 | 9 | 8 | 4 | 3 | 1 | 1 |
| 23 | 15 | 13 | 11 | 13 | 11 | 9 | 8 | 2 | 3 | 1 |
| 24 | 13 | 12 | 12 | 9 | 10 | 9 | 4 | 4 | 3 | 1 |
| 25 | 13 | 13 | 14 | 10 | 10 | 8 | 5 | 5 | 2 | 1 |
| 26 | 13 | 14 | 12 | 10 | 8 | 8 | 5 | 3 | 4 | 1 |
| 27 | 14 | 12 | 12 | 11 | 7 | 6 | 8 | 2 | 1 | 1 |
| 28 | 14 | 15 | 12 | 9 | 7 | 9 | 7 | 4 | 3 | 1 |
| 29 | 13 | 14 | 13 | 10 | 10 | 9 | 4 | 3 | 2 | 1 |
| 30 | 13 | 15 | 12 | 13 | 8 | 6 | 4 | 4 | 1 | 1 |

1. Raw data collected in relation to signal strength

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FPS Processed in Relation to Signal in Device A for 30 Second Period(FPS)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 13 | 14 | 14 | 13 | 12 | 12 | 10 | 7 | 5 | 3 |
| 2 | 13 | 14 | 12 | 12 | 13 | 10 | 10 | 9 | 7 | 2 |
| 3 | 15 | 14 | 13 | 13 | 12 | 11 | 8 | 9 | 5 | 2 |
| 4 | 15 | 13 | 12 | 14 | 13 | 11 | 8 | 7 | 5 | 2 |
| 5 | 13 | 13 | 12 | 14 | 13 | 9 | 8 | 9 | 9 | 3 |
| 6 | 14 | 13 | 14 | 12 | 13 | 12 | 8 | 7 | 5 | 2 |
| 7 | 13 | 14 | 14 | 13 | 13 | 10 | 8 | 8 | 5 | 3 |
| 8 | 15 | 13 | 14 | 13 | 11 | 10 | 9 | 8 | 8 | 3 |
| 9 | 14 | 13 | 13 | 12 | 12 | 13 | 8 | 10 | 7 | 3 |
| 10 | 13 | 14 | 13 | 12 | 13 | 9 | 9 | 7 | 5 | 4 |
| 11 | 13 | 14 | 14 | 11 | 11 | 13 | 9 | 8 | 5 | 2 |
| 12 | 15 | 14 | 14 | 12 | 13 | 9 | 10 | 9 | 8 | 2 |
| 13 | 14 | 13 | 12 | 13 | 12 | 9 | 9 | 9 | 9 | 2 |
| 14 | 15 | 13 | 12 | 14 | 12 | 10 | 7 | 7 | 8 | 3 |
| 15 | 14 | 13 | 13 | 12 | 12 | 12 | 10 | 8 | 5 | 4 |
| 16 | 13 | 13 | 14 | 14 | 11 | 9 | 9 | 9 | 8 | 3 |
| 17 | 14 | 14 | 12 | 14 | 12 | 10 | 10 | 7 | 7 | 4 |
| 18 | 15 | 14 | 13 | 13 | 11 | 12 | 10 | 8 | 6 | 2 |
| 19 | 13 | 14 | 12 | 12 | 13 | 10 | 10 | 7 | 8 | 4 |
| 20 | 15 | 13 | 12 | 12 | 11 | 12 | 11 | 8 | 7 | 4 |
| 21 | 13 | 13 | 13 | 14 | 13 | 11 | 11 | 8 | 5 | 4 |
| 22 | 15 | 13 | 14 | 14 | 13 | 13 | 11 | 9 | 6 | 3 |
| 23 | 13 | 14 | 13 | 12 | 10 | 9 | 9 | 8 | 9 | 4 |
| 24 | 15 | 14 | 12 | 12 | 13 | 9 | 8 | 7 | 8 | 4 |
| 25 | 13 | 13 | 13 | 12 | 11 | 13 | 8 | 10 | 5 | 2 |
| 26 | 14 | 14 | 14 | 13 | 11 | 13 | 8 | 10 | 5 | 4 |
| 27 | 14 | 14 | 12 | 14 | 12 | 9 | 10 | 8 | 5 | 3 |
| 28 | 13 | 13 | 14 | 13 | 13 | 10 | 9 | 8 | 6 | 2 |
| 29 | 15 | 14 | 12 | 13 | 13 | 13 | 9 | 9 | 8 | 4 |
| 30 | 14 | 13 | 14 | 13 | 13 | 11 | 8 | 10 | 6 | 4 |

1. Raw data collected showing maximum FPS by sending null images

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Maximum Frames Transfer With A Null Image for All Quality Ratio in Device A for 30 Second Period(FPS)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 59 | 56 | 47 | 53 | 54 | 54 | 57 | 55 | 59 | 56 |
| 2 | 56 | 47 | 48 | 58 | 54 | 48 | 60 | 49 | 58 | 55 |
| 3 | 43 | 48 | 54 | 58 | 53 | 47 | 52 | 49 | 55 | 54 |
| 4 | 44 | 55 | 47 | 60 | 54 | 46 | 54 | 52 | 54 | 57 |
| 5 | 52 | 54 | 52 | 59 | 54 | 51 | 48 | 51 | 54 | 52 |
| 6 | 55 | 55 | 54 | 51 | 53 | 52 | 59 | 52 | 59 | 58 |
| 7 | 56 | 55 | 48 | 51 | 50 | 42 | 58 | 53 | 43 | 54 |
| 8 | 52 | 52 | 61 | 44 | 50 | 43 | 55 | 55 | 53 | 52 |
| 9 | 53 | 56 | 51 | 54 | 57 | 60 | 53 | 45 | 52 | 58 |
| 10 | 61 | 48 | 52 | 46 | 55 | 44 | 45 | 54 | 58 | 57 |
| 11 | 49 | 54 | 53 | 50 | 53 | 57 | 40 | 51 | 51 | 58 |
| 12 | 44 | 49 | 54 | 48 | 46 | 49 | 56 | 59 | 52 | 57 |
| 13 | 55 | 50 | 46 | 49 | 52 | 46 | 59 | 57 | 54 | 59 |
| 14 | 52 | 54 | 59 | 60 | 53 | 58 | 58 | 49 | 55 | 61 |
| 15 | 43 | 56 | 47 | 57 | 56 | 43 | 52 | 57 | 53 | 59 |
| 16 | 48 | 57 | 49 | 41 | 57 | 53 | 46 | 53 | 46 | 60 |
| 17 | 47 | 56 | 46 | 54 | 54 | 56 | 53 | 55 | 45 | 42 |
| 18 | 41 | 54 | 52 | 51 | 56 | 45 | 55 | 50 | 51 | 55 |
| 19 | 60 | 53 | 60 | 42 | 53 | 44 | 54 | 50 | 54 | 51 |
| 20 | 59 | 52 | 46 | 51 | 57 | 51 | 51 | 49 | 57 | 43 |
| 21 | 42 | 51 | 48 | 41 | 55 | 59 | 53 | 52 | 54 | 40 |
| 22 | 45 | 49 | 60 | 56 | 54 | 45 | 55 | 53 | 49 | 49 |
| 23 | 57 | 53 | 48 | 42 | 57 | 51 | 52 | 47 | 52 | 46 |
| 24 | 48 | 51 | 47 | 47 | 53 | 60 | 51 | 52 | 59 | 48 |
| 25 | 43 | 54 | 57 | 44 | 54 | 43 | 56 | 47 | 56 | 41 |
| 26 | 41 | 57 | 46 | 43 | 57 | 53 | 59 | 40 | 53 | 59 |
| 27 | 53 | 59 | 40 | 53 | 54 | 42 | 52 | 53 | 56 | 61 |
| 28 | 39 | 54 | 46 | 50 | 54 | 48 | 54 | 50 | 54 | 57 |
| 29 | 58 | 47 | 46 | 55 | 57 | 56 | 50 | 56 | 51 | 61 |
| 30 | 40 | 47 | 47 | 59 | 53 | 55 | 56 | 55 | 52 | 47 |

1. Raw data collected for frame sizes based on quality ratio

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Data Size of each Frame after Quality Ratio in Device A for 30 Second Period(KB)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 17.95 | 43.15 | 74.28 | 110.24 | 150.55 | 195.64 | 247.51 | 310.00 | 394.53 | 542.37 |
| 2 | 11.81 | 28.68 | 49.90 | 75.10 | 104.03 | 137.09 | 176.59 | 226.07 | 298.67 | 451.19 |
| 3 | 9.24 | 21.17 | 35.18 | 51.35 | 69.22 | 89.05 | 112.03 | 140.14 | 178.96 | 255.36 |
| 4 | 11.98 | 28.05 | 47.52 | 69.68 | 94.50 | 122.26 | 154.43 | 193.50 | 248.50 | 360.78 |
| 5 | 10.00 | 23.06 | 38.77 | 56.71 | 76.65 | 98.71 | 124.00 | 154.70 | 196.66 | 276.88 |
| 6 | 20.46 | 51.11 | 89.83 | 135.35 | 187.23 | 246.01 | 315.50 | 402.27 | 526.51 | 758.55 |
| 7 | 16.93 | 41.69 | 72.76 | 109.03 | 150.22 | 196.72 | 251.43 | 319.06 | 415.18 | 594.12 |
| 8 | 18.47 | 43.79 | 74.97 | 110.64 | 150.18 | 193.84 | 243.43 | 301.94 | 378.23 | 501.79 |
| 9 | 9.73 | 23.08 | 39.48 | 58.45 | 79.88 | 104.16 | 132.65 | 168.13 | 219.98 | 329.36 |
| 10 | 13.69 | 32.60 | 55.61 | 82.04 | 111.43 | 144.10 | 181.82 | 227.31 | 289.46 | 404.83 |
| 11 | 8.85 | 21.02 | 36.00 | 53.57 | 73.70 | 96.65 | 124.02 | 158.51 | 210.25 | 323.03 |
| 12 | 14.04 | 35.58 | 63.05 | 95.63 | 132.99 | 175.49 | 225.92 | 289.00 | 379.88 | 555.19 |
| 13 | 10.39 | 24.78 | 42.61 | 63.33 | 86.89 | 113.52 | 145.04 | 184.46 | 242.08 | 361.42 |
| 14 | 9.87 | 23.29 | 39.73 | 58.83 | 80.50 | 105.12 | 134.34 | 171.16 | 226.05 | 349.02 |
| 15 | 11.64 | 27.53 | 46.82 | 68.96 | 93.85 | 121.80 | 154.33 | 194.33 | 249.75 | 156.95 |
| 16 | 10.55 | 24.61 | 41.60 | 60.92 | 82.52 | 106.43 | 133.90 | 167.39 | 213.70 | 304.10 |
| 17 | 12.25 | 30.74 | 54.15 | 81.54 | 112.84 | 148.18 | 189.88 | 241.88 | 318.00 | 472.45 |
| 18 | 12.39 | 28.88 | 48.80 | 71.72 | 97.32 | 125.75 | 158.65 | 198.59 | 254.15 | 364.27 |
| 19 | 9.60 | 22.23 | 37.49 | 55.03 | 74.75 | 96.87 | 122.59 | 154.16 | 198.46 | 285.68 |
| 20 | 8.50 | 19.93 | 34.59 | 52.02 | 73.32 | 95.61 | 123.44 | 158.19 | 209.31 | 320.64 |
| 21 | 8.62 | 19.98 | 33.94 | 50.31 | 69.06 | 90.52 | 116.28 | 148.95 | 196.96 | 312.44 |
| 22 | 12.09 | 29.39 | 51.27 | 77.19 | 106.75 | 140.36 | 180.50 | 230.93 | 304.48 | 457.55 |
| 23 | 11.55 | 27.22 | 46.44 | 68.78 | 93.88 | 122.05 | 155.02 | 195.67 | 252.97 | 367.20 |
| 24 | 11.95 | 27.83 | 46.84 | 68.54 | 92.67 | 119.61 | 150.67 | 188.25 | 240.41 | 339.20 |
| 25 | 10.54 | 26.75 | 47.65 | 72.43 | 100.79 | 133.20 | 171.75 | 220.66 | 293.98 | 439.17 |
| 26 | 10.34 | 24.06 | 40.57 | 59.35 | 80.35 | 103.72 | 130.70 | 163.43 | 209.17 | 299.05 |
| 27 | 10.18 | 23.71 | 39.82 | 58.09 | 78.65 | 101.49 | 127.61 | 159.39 | 203.44 | 290.11 |
| 28 | 8.76 | 20.06 | 33.29 | 48.36 | 65.07 | 83.64 | 105.18 | 131.68 | 170.36 | 258.16 |
| 29 | 10.19 | 23.60 | 39.61 | 57.75 | 78.03 | 100.52 | 126.40 | 157.89 | 201.57 | 288.05 |
| 30 | 11.96 | 29.04 | 50.27 | 75.04 | 103.10 | 134.82 | 172.18 | 218.79 | 285.95 | 416.88 |

1. Raw data collected showing FPS processed in a low noise environment

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FPS Processed in Relation to Low Noise in Device A for 30 Second Period(FPS)** | | | | | | | | | | |
| Quality(%) Time (s) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 98 |
| 1 | 15 | 12 | 10 | 12 | 11 | 8 | 7 | 6 | 6 | 6 |
| 2 | 13 | 12 | 10 | 12 | 11 | 10 | 7 | 8 | 8 | 5 |
| 3 | 15 | 12 | 11 | 9 | 10 | 9 | 8 | 6 | 7 | 4 |
| 4 | 11 | 13 | 12 | 10 | 10 | 10 | 7 | 6 | 6 | 6 |
| 5 | 13 | 12 | 11 | 9 | 10 | 8 | 7 | 9 | 8 | 6 |
| 6 | 14 | 14 | 11 | 10 | 11 | 10 | 9 | 7 | 6 | 4 |
| 7 | 13 | 13 | 11 | 8 | 11 | 10 | 10 | 8 | 6 | 5 |
| 8 | 12 | 10 | 10 | 12 | 11 | 9 | 8 | 7 | 8 | 6 |
| 9 | 11 | 13 | 12 | 11 | 10 | 11 | 7 | 8 | 8 | 5 |
| 10 | 11 | 10 | 11 | 9 | 10 | 9 | 8 | 6 | 7 | 5 |
| 11 | 12 | 13 | 12 | 8 | 11 | 9 | 7 | 7 | 6 | 4 |
| 12 | 12 | 12 | 11 | 12 | 11 | 11 | 7 | 8 | 8 | 4 |
| 13 | 11 | 11 | 11 | 11 | 11 | 11 | 7 | 8 | 7 | 6 |
| 14 | 13 | 11 | 11 | 8 | 12 | 8 | 7 | 6 | 7 | 6 |
| 15 | 15 | 13 | 10 | 12 | 11 | 11 | 10 | 6 | 7 | 4 |
| 16 | 11 | 13 | 11 | 9 | 9 | 8 | 9 | 8 | 7 | 5 |
| 17 | 14 | 11 | 11 | 12 | 9 | 8 | 9 | 6 | 6 | 6 |
| 18 | 13 | 11 | 13 | 11 | 8 | 8 | 8 | 8 | 6 | 5 |
| 19 | 13 | 12 | 11 | 11 | 10 | 10 | 9 | 7 | 8 | 5 |
| 20 | 15 | 10 | 11 | 9 | 9 | 10 | 8 | 6 | 6 | 6 |
| 21 | 13 | 11 | 12 | 11 | 12 | 11 | 9 | 8 | 7 | 4 |
| 22 | 14 | 11 | 11 | 11 | 10 | 9 | 7 | 8 | 6 | 6 |
| 23 | 15 | 13 | 10 | 10 | 9 | 11 | 9 | 8 | 7 | 5 |
| 24 | 11 | 9 | 10 | 11 | 8 | 11 | 8 | 8 | 8 | 6 |
| 25 | 11 | 11 | 13 | 8 | 9 | 8 | 9 | 9 | 6 | 6 |
| 26 | 14 | 12 | 10 | 10 | 8 | 8 | 8 | 9 | 8 | 5 |
| 27 | 11 | 13 | 11 | 10 | 7 | 11 | 7 | 8 | 6 | 4 |
| 28 | 14 | 10 | 11 | 11 | 10 | 10 | 10 | 6 | 7 | 5 |
| 29 | 11 | 11 | 12 | 9 | 8 | 8 | 7 | 8 | 8 | 6 |
| 30 | 14 | 13 | 12 | 9 | 10 | 11 | 8 | 8 | 8 | 5 |