|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Longrange |   |   |  |  |
| Distance [m] | throughput[kbps] | current [mA] | time[sec] | Tx-Power | Power [mWatt] | Energy [Joule] |
| 50 | 522,33 | 20,7 | 16,62 | 9 dBm  | 62,1 | 1,032 |
| 100 | 506,07 | 20,85 | 16,57 | 9 dBm  | 62,55 | 1,036 |
| 180 | 477,17 | 20,71 | 17,58 | 9 dBm  | 62,13 | 1,092 |
| 240 | 21,15 | 16,26 | 396,63 | 9 dBm  | 48,78 | 19,34 |
| 300 | 194,31 | 18,4 | 43,31 | 9 dBm  | 55,2 | 2,39 |
| 400 | 25,54 | 16,35 | 328,48 | 9 dBm  | 49,05 | 16,11 |
| 420 | 15,91 | 14,3 | 527,42 | 9 dBm  | 42,9 | 22,62 |
| 460 | 24,59 | 16,5 | 341,16 | 9 dBm  | 49,5 | 16,88 |
| 500 | 18,01 | 13,23 | 465,52 | 9 dBm  | 39,69 | 18,47 |
|  |  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Normal Modus 2 M |  |  |  |
| Distance [m] | throughput[kbps] | current [mA] | time[sec] | Tx-Power | Power [mWatt] | Energy [Joule] |
| 20 | 786,06 | 18,04 | 10,67 | 4 dBm | 54,12 | 577,46 |
| 40 | 786,43 | 18,05 | 10,66 | 4 dBm | 54,15 | 577,23 |
| 100 | 769,55 | 17,95 | 11,23 | 4 dBm | 53,85 | 604,73 |
| 200 | 766,32 | 17,98 | 10,94 | 4 dBm | 53,94 | 590,1 |
| 260 | 767,86 | 17,98 | 10,92 | 4 dBm | 53,94 | 589,02 |
| 300 | 791,18 | 17,32 | 10,6 | 4 dBm | 51,96 | 550,77 |
| 340 | 107,58 | 12,8 | 77,98 | 4 dBm | 38,4 | 2994,4 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Normal Modus 1M |  |  |  |
| Distance [m] | throughput[kbps] | current [mA] | time[sec] | Tx-Power | Power [mWatt] | Energy [Joule] |
| 20 | 256,45 | 10,25 | 32,71 | 4 dBm | 30,75 | 1 |
| 40 | 252,07 | 14,02 | 33,28 | 4 dBm | 42,06 | 1,4 |
| 100 | 232,84 | 13,97 | 36,31 | 4 dBm | 41,91 | 1,5 |
| 180 | 248,73 | 12,95 | 33,73 | 4 dBm | 38,85 | 1,31 |
| 260 | 237,91 | 12,98 | 35,26 | 4 dBm | 38,94 | 1,4 |
| 300 | 136,66 | 14,4 | 61,38 | 4 dBm | 43,2 | 2,7 |
| 380 | 241,94 | 12,96 | 34,67 | 4 dBm | 38,88 | 1,35 |
| 460 | 153,12 | 13,06 | 54,79 | 4 dBm | 39,18 | 2,2 |