1 led

Luz ambiente ~184

Aumentou 103 atenuou 86 em 60cm

diferenca entre luz ambiente e 60cm 17

Com flash celular

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 287 | 245 | 240 | 230 | 220 | 215 | 213 | 210 | 207 | 205 | 203 | 202 | 201 |

2 leds paralelos

Luz ambiente ~200

Aumentou 80 atenuou 63 em 60cm

diferenca entre luz ambiente e 60cm 17

Com flash celular

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 280 | 264 | 251 | 242 | 236 | 231 | 228 | 225 | 223 | 221 | 220 | 218 | 217 |

2 leds serie

Luz ambiente ~410

Aumentou 160 atenuou 129 em 60cm

diferenca entre luz ambiente e 60cm 31

Com flash celular

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 570 | 530 | 504 | 488 | 475 | 468 | 462 | 457 | 453 | 449 | 446 | 444 | 441 |

Tx - Rx

1 led - 1 led

Luz ambiente ~184

Aumentou **76** atenuou **70** em 60cm

diferenca entre luz ambiente e 60cm **6**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 260 | 230 | 217 | 209 | 204 | 200 | 197 | 195 | 194 | 192 | 191 | 190 | 190 |

Tx - Rx

2 leds serie - 1 led

Luz ambiente ~184

Aumentou 77 atenuou 69 em 60cm

diferenca entre luz ambiente e 60cm 8

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 261 | 240 | 225 | 216 | 210 | 206 | 202 | 200 | 198 | 196 | 194 | 193 | 192 |

Tx - Rx

2 leds paralelos - 1 led

Luz ambiente ~184

Aumentou 73 atenuou 66 em 60cm

diferenca entre luz ambiente e 60cm 7

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 257 | 238 | 223 | 215 | 208 | 202 | 198 | 197 | 195 | 194 | 193 | 192 | 191 |

Tx - Rx

1 led - 2 leds serie

Luz ambiente ~410

Aumentou **94** atenuou **84** em 60cm

diferenca entre luz ambiente e 60cm **10**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 504 | 485 | 459 | 446 | 438 | 432 | 429 | 427 | 425 | 424 | 423 | 421 | 420 |

Tx - Rx

2 leds serie - 2 leds serie

Luz ambiente ~410

Aumentou 124 atenuou 109 em 60cm

diferenca entre luz ambiente e 60cm 15

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 534 | 502 | 476 | 458 | 449 | 442 | 437 | 434 | 431 | 429 | 427 | 426 | 425 |

Tx - Rx

2 leds paralelos - 2 leds serie

Luz ambiente ~410

Aumentou 123 atenuou 109 em 60cm

diferenca entre luz ambiente e 60cm 14

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 533 | 503 | 477 | 460 | 449 | 442 | 438 | 434 | 432 | 429 | 426 | 425 | 424 |

Tx - Rx

1 led - 2 leds paralelos

Luz ambiente ~200

Aumentou 56 atenuou 47 em 60cm

diferenca entre luz ambiente e 60cm 9

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 256 | 243 | 234 | 227 | 222 | 219 | 216 | 214 | 213 | 212 | 211 | 210 | 209 |

Tx - Rx

2 leds serie - 2 leds paralelos

Luz ambiente ~200

Aumentou 69 atenuou 57 em 60cm

diferenca entre luz ambiente e 60cm 12

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 269 | 251 | 240 | 232 | 227 | 223 | 221 | 219 | 217 | 215 | 214 | 213 | 212 |

Tx - Rx

2 leds paralelos - 2 leds paralelos

Luz ambiente ~200

Aumentou 68 atenuou 58 em 60cm

diferenca entre luz ambiente e 60cm 10

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 268 | 248 | 235 | 228 | 223 | 220 | 218 | 216 | 214 | 213 | 212 | 211 | 210 |