



Source Four™ Photometrics - 750W 230 & 240V

ETC Europe

All photometric tests conducted using the Prometric™ measurement system. All data normalized to nominal lamp lumens at rated voltage using calibrated lamp.

For beam diameter multiply distance with beam multiplier

For field diameter multiply distance with field multiplier

Cosine distribution

The illumination distribution where the beam angle is 0.7 times the field angle.

Field angle

Where illumination drops to 10 percent of the maximum illumination

Beam angle

Where illumination drops to 50 percent of the maximum illumination

Field lumens

The amount of light (lumens) within the field angle of the luminaire

Efficiency

The ratio of luminous flux (lumens) emitted by a luminaire to that emitted by the lamp

Efficacy

The effectiveness of a light source in converting electrical power (watts) to luminous flux (lumens) expressed in lumens per watt (LPW)

Illumination

To determine illumination in lux at any throw distance, divide candlepower by distance squared

Data issued 14-11-2000 ETC Europe Ltd. EL
Data subject to change without notice.

| USHIO HPL-750 W 230 V UCF Ultra Compact Filament Lamp | | | | | | | | | | Throw distance in metres | | | | | | | | | | | | |
|---|-------|--------------|--------------|----------------|----------------|-------------|------------|------------------|-----------------|--------------------------|--------|-------|-------|------|------|------|------|------|------|------|------|-----|
| Luminaire | Focus | Field Lumens | Candle power | Efficiency (%) | Efficacy (LPW) | Field Angle | Beam Angle | Field Multiplier | Beam Multiplier | 0,7 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| | | | | | | | | | | Values in Lux | | | | | | | | | | | | |
| Source 4 5° | | 7.200 | 1.190.000 | 37,1 | 9,6 | 7 | 5 | 0,12 | 0,09 | 2428571 | 132222 | 33056 | 14691 | 8264 | 5289 | 3673 | 2698 | 2066 | 1632 | 1322 | 1093 | 918 |
| Source 4 10° | | 9.650 | 709.000 | 49,7 | 12,9 | 11 | 8 | 0,19 | 0,14 | 1446939 | 78778 | 19694 | 8753 | 4924 | 3151 | 2188 | 1608 | 1231 | 973 | 788 | 651 | 547 |
| Source 4 19° | | 8.510 | 186.000 | 43,9 | 11,3 | 17 | 14 | 0,31 | 0,25 | 379592 | 20667 | 5167 | 2296 | 1292 | 827 | 574 | 422 | 323 | 255 | 207 | 171 | 144 |
| Source 4 26° | | 10.200 | 144.000 | 52,6 | 13,6 | 24 | 17 | 0,42 | 0,30 | 293878 | 16000 | 4000 | 1778 | 1000 | 640 | 444 | 327 | 250 | 198 | 160 | 132 | 111 |
| Source 4 36° | | 11.200 | 84.100 | 57,7 | 14,9 | 33 | 23 | 0,58 | 0,41 | 171633 | 9344 | 2336 | 1038 | 584 | 374 | 260 | 191 | 146 | 115 | 93 | 77 | 65 |
| Source 4 50° | | 10.800 | 33.900 | 55,7 | 14,4 | 50 | 36 | 0,93 | 0,64 | 69184 | 3767 | 942 | 419 | 235 | 151 | 105 | 77 | 59 | 47 | 38 | 31 | 26 |
| S 4 Zoom 15-30° | 15 | 11.300 | 287.000 | 58,2 | 15,1 | 17 | 12 | 0,30 | 0,21 | 585714 | 31889 | 7972 | 3543 | 1993 | 1276 | 886 | 651 | 498 | 394 | 319 | 264 | 221 |
| | 23 | 11.800 | 175.000 | 60,8 | 15,7 | 23 | 16 | 0,41 | 0,28 | 357143 | 19444 | 4861 | 2160 | 1215 | 778 | 540 | 397 | 304 | 240 | 194 | 161 | 135 |
| | 30 | 10.700 | 91.200 | 55,2 | 14,3 | 31 | 22 | 0,56 | 0,39 | 186122 | 10133 | 2533 | 1126 | 633 | 405 | 281 | 207 | 158 | 125 | 101 | 84 | 70 |
| S 4 Zoom 30-50° | 25 | 12.600 | 143.000 | 64,9 | 16,8 | 27 | 19 | 0,47 | 0,33 | 291837 | 15889 | 3972 | 1765 | 993 | 636 | 441 | 324 | 248 | 196 | 159 | 131 | 110 |
| | 36 | 12.800 | 73.900 | 66,0 | 17,1 | 37 | 26 | 0,66 | 0,46 | 150816 | 8211 | 2053 | 912 | 513 | 328 | 228 | 168 | 128 | 101 | 82 | 68 | 57 |
| | 50 | 11.700 | 37.500 | 60,3 | 15,6 | 49 | 35 | 0,92 | 0,63 | 76531 | 4167 | 1042 | 463 | 260 | 167 | 116 | 85 | 65 | 51 | 42 | 34 | 29 |
| Source 4 PARnel | 25 | 7.710 | 137.000 | 39,7 | 10,3 | 26 | 12 | 0,46 | 0,21 | 279592 | 15222 | 3806 | 1691 | 951 | 609 | 423 | 311 | 238 | 188 | 152 | 126 | 106 |
| | 45 | 9.030 | 34.000 | 46,5 | 12,0 | 47 | 29 | 0,87 | 0,52 | 69388 | 3778 | 944 | 420 | 236 | 151 | 105 | 77 | 59 | 47 | 38 | 31 | 26 |
| Source 4 EA PAR | VNSP | 9.270 | 282.000 | 47,8 | 12,4 | 18 | 11 | 0,32 | 0,19 | 575510 | 31333 | 7833 | 3481 | 1958 | 1253 | 870 | 639 | 490 | 387 | 313 | 259 | 218 |
| | NSP | 9.250 | 270.000 | 47,7 | 12,3 | 19 | 11 | 0,33 | 0,19 | 551020 | 30000 | 7500 | 3333 | 1875 | 1200 | 833 | 612 | 469 | 370 | 300 | 248 | 208 |
| | MFL | 9.370 | 127.000 | 48,3 | 12,5 | 32/23 | 19/13 | 0.57/0.41 | 0.33/0.23 | 259184 | 14111 | 3528 | 1568 | 882 | 564 | 392 | 288 | 220 | 174 | 141 | 117 | 98 |
| | WFL | 8.520 | 59.100 | 43,9 | 11,4 | 48/31 | 27/17 | 0.89/0.56 | 0.47/0.30 | 120612 | 6567 | 1642 | 730 | 410 | 263 | 182 | 134 | 103 | 81 | 66 | 54 | 46 |
| USHIO HPL-750 W 240 V UCF Ultra Compact Filament Lamp | | | | | | | | | | Throw distance in metres | | | | | | | | | | | | |
| Luminaire | Focus | Field Lumens | Candle power | Efficiency (%) | Efficacy (LPW) | Field Angle | Beam Angle | Field Multiplier | Beam Multiplier | 0,7 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| | | | | | | | | | | Values in Lux | | | | | | | | | | | | |
| Source 4 5° | | 5.270 | 918.000 | 27,2 | 7,0 | 7 | 5 | 0,12 | 0,08 | 1873469 | 102000 | 25500 | 11333 | 6375 | 4080 | 2833 | 2082 | 1594 | 1259 | 1020 | 843 | 708 |
| Source 4 10° | | 7.830 | 588.000 | 40,4 | 10,4 | 10 | 7 | 0,18 | 0,13 | 1200000 | 65333 | 16333 | 7259 | 4083 | 2613 | 1815 | 1333 | 1021 | 807 | 653 | 540 | 454 |
| Source 4 19° | | 7.580 | 166.000 | 39,1 | 10,1 | 17 | 14 | 0,30 | 0,25 | 338776 | 18444 | 4611 | 2049 | 1153 | 738 | 512 | 376 | 288 | 228 | 184 | 152 | 128 |
| Source 4 26° | | 9.120 | 130.000 | 47,0 | 12,2 | 24 | 17 | 0,42 | 0,30 | 265306 | 14444 | 3611 | 1605 | 903 | 578 | 401 | 295 | 226 | 178 | 144 | 119 | 100 |
| Source 4 36° | | 10.800 | 83.200 | 55,7 | 14,4 | 32 | 23 | 0,57 | 0,41 | 169796 | 9244 | 2311 | 1027 | 578 | 370 | 257 | 189 | 144 | 114 | 92 | 76 | 64 |
| Source 4 50° | | 10.700 | 34.100 | 55,2 | 14,3 | 50 | 35 | 0,93 | 0,63 | 69592 | 3789 | 947 | 421 | 237 | 152 | 105 | 77 | 59 | 47 | 38 | 31 | 26 |
| S 4 Zoom 15-30° | 15 | 9.290 | 289.000 | 47,9 | 12,4 | 16 | 11 | 0,28 | 0,20 | 589796 | 32111 | 8028 | 3568 | 2007 | 1284 | 892 | 655 | 502 | 396 | 321 | 265 | 223 |
| | 23 | 10.800 | 157.000 | 55,7 | 14,4 | 23 | 16 | 0,41 | 0,29 | 320408 | 17444 | 4361 | 1938 | 1090 | 698 | 485 | 356 | 273 | 215 | 174 | 144 | 121 |
| | 30 | 10.100 | 88.300 | 52,1 | 13,5 | 31 | 22 | 0,55 | 0,38 | 180204 | 9811 | 2453 | 1090 | 613 | 392 | 273 | 200 | 153 | 121 | 98 | 81 | 68 |
| S 4 Zoom 25-50° | 25 | 12.400 | 130.000 | 63,9 | 16,5 | 27 | 20 | 0,48 | 0,35 | 265306 | 14444 | 3611 | 1605 | 903 | 578 | 401 | 295 | 226 | 178 | 144 | 119 | 100 |
| | 36 | 12.400 | 74.900 | 63,9 | 16,5 | 36 | 26 | 0,65 | 0,45 | 152857 | 8322 | 2081 | 925 | 520 | 333 | 231 | 170 | 130 | 103 | 83 | 69 | 58 |
| | 50 | 11.600 | 36.100 | 59,8 | 15,5 | 49 | 35 | 0,92 | 0,64 | 73673 | 4011 | 1003 | 446 | 251 | 160 | 111 | 82 | 63 | 50 | 40 | 33 | 28 |
| Source 4 PARnel | 25 | 7.270 | 116.000 | 37,5 | 9,7 | 27 | 13 | 0,49 | 0,23 | 236735 | 12889 | 3222 | 1432 | 806 | 516 | 358 | 263 | 201 | 159 | 129 | 107 | 90 |
| | 45 | 7.990 | 30.000 | 41,2 | 10,7 | 50 | 31 | 0,93 | 0,56 | 61224 | 3333 | 833 | 370 | 208 | 133 | 93 | 68 | 52 | 41 | 33 | 28 | 23 |
| Source 4 EA PAR | VNSP | 9.110 | 269.000 | 47,0 | 12,1 | 18 | 11 | 0,32 | 0,19 | 548980 | 29889 | 7472 | 3321 | 1868 | 1196 | 830 | 610 | 467 | 369 | 299 | 247 | 208 |
| | NSP | 9.140 | 258.000 | 47,1 | 12,2 | 19 | 11 | 0,33 | 0,19 | 526531 | 28667 | 7167 | 3185 | 1792 | 1147 | 796 | 585 | 448 | 354 | 287 | 237 | 199 |
| | MFL | 8.740 | 117.000 | 45,1 | 11,7 | 32/24 | 19/13 | 0.57/0.42 | 0.33/0.23 | 238776 | 13000 | 3250 | 1444 | 813 | 520 | 361 | 265 | 203 | 160 | 130 | 107 | 90 |
| | WFL | 8.160 | 56.800 | 42,1 | 10,9 | 48/31 | 27/17 | 0.89/0.56 | 0.49/0.30 | 115918 | 6311 | 1578 | 701 | 394 | 252 | 175 | 129 | 99 | 78 | 63 | 52 | 44 |