

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P157160

Luminaire Tested: **UTLD-E02-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157160
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33662)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-E02-LED-E-U-T3
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5391 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

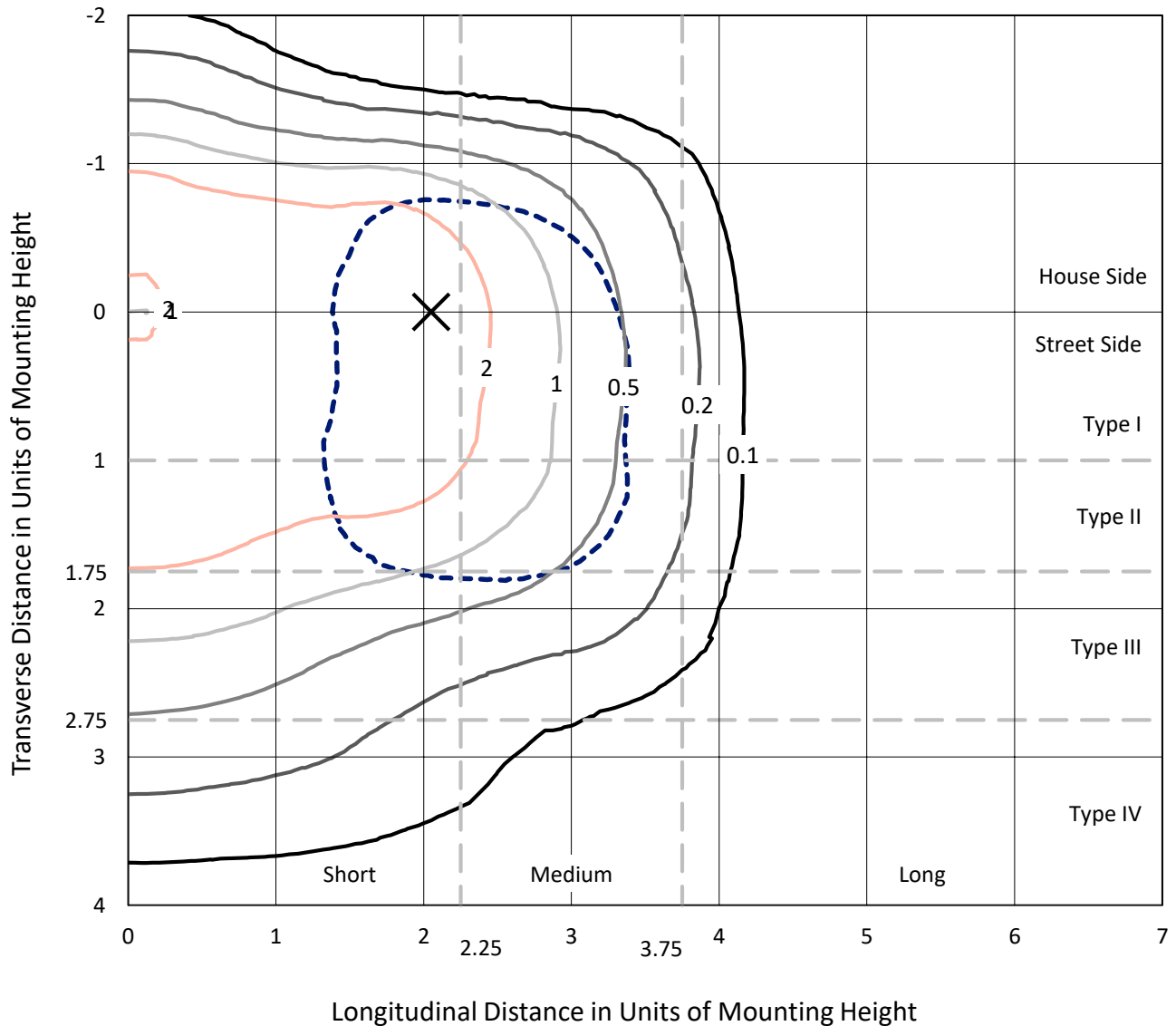


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

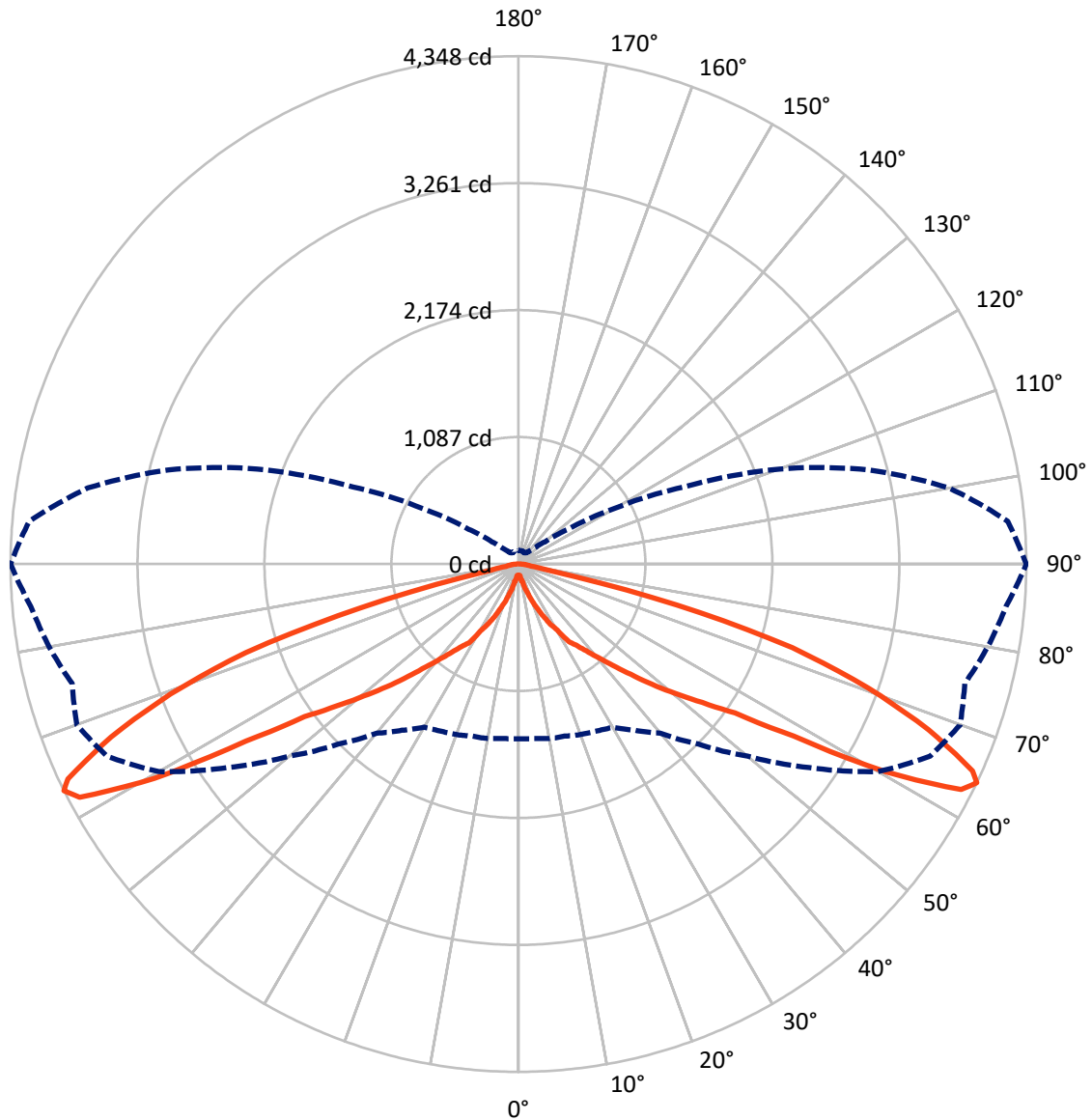


Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical



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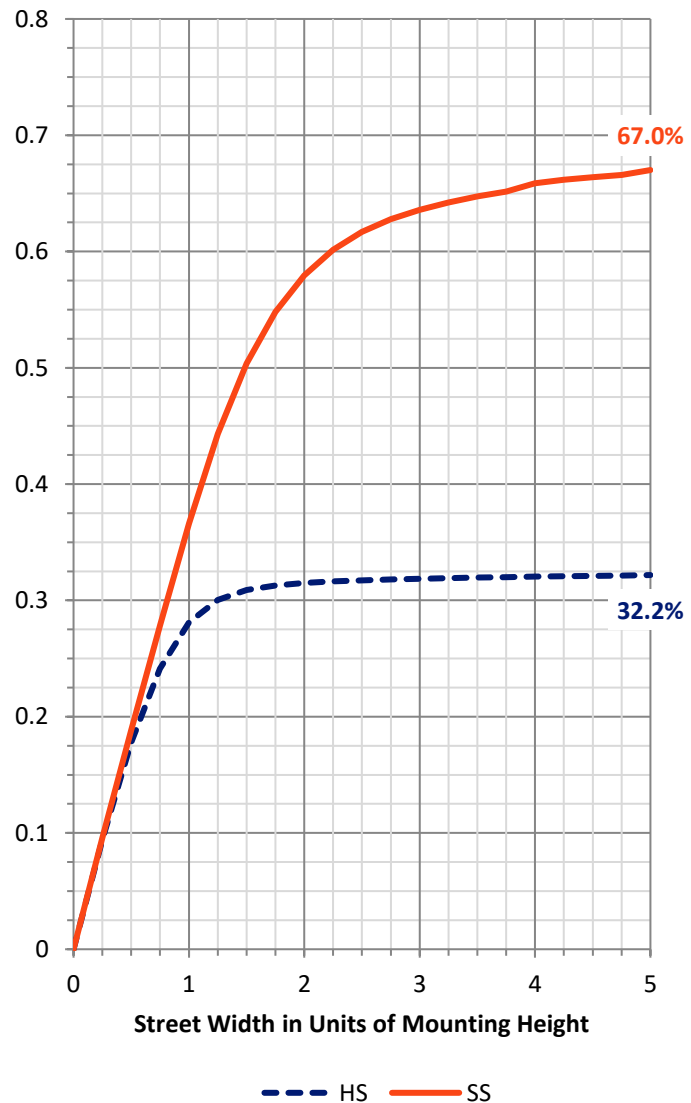
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1752.0 | 0.0 | 1752.0 |
| | % Fixture | 32.5 | 0.0 | 32.5 |
| Street Side | Lumens | 3639.0 | 0.0 | 3639.0 |
| | % Fixture | 67.5 | 0.0 | 67.5 |
| Total | Lumens | 5391.0 | 0.0 | 5391.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 13.2 | 0.2 |
| 10°-20° | 70.8 | 1.3 |
| 20°-30° | 208.7 | 3.9 |
| 30°-40° | 441.1 | 8.2 |
| 40°-50° | 773.4 | 14.3 |
| 50°-60° | 1231.5 | 22.8 |
| 60°-70° | 1727.1 | 32.0 |
| 70°-80° | 782.2 | 14.5 |
| 80°-90° | 142.9 | 2.6 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 5391.0 | 100.0 |
| 0°-180° | 5391.0 | 100.0 |

Coefficient of Utilization



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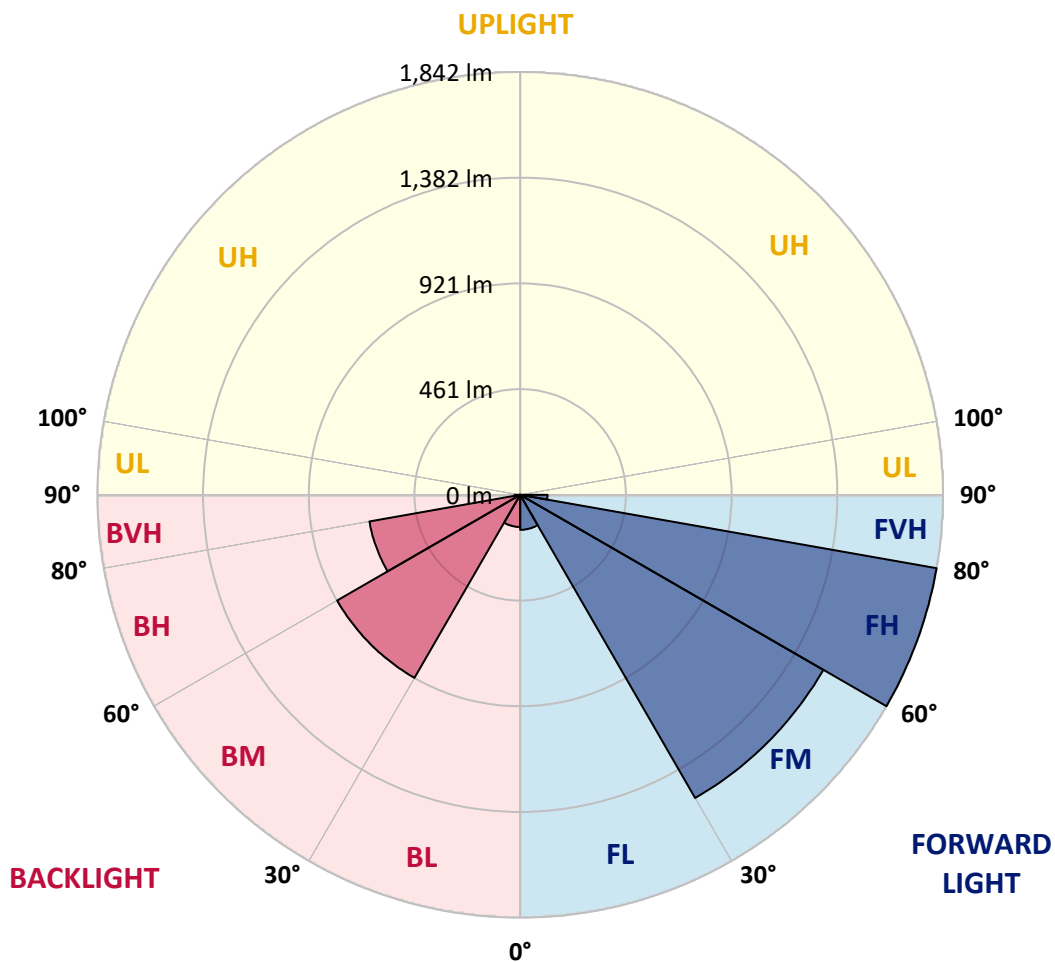
CATALOG NUMBER: UTLD-E02-LED-E-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 152.5 | 2.8 | | | |
| FM | (30°-60°) | 1525.2 | 28.3 | | | |
| FH | (60°-80°) | 1842.2 | 34.2 | | | G2/5000 |
| FVH | (80°-90°) | 119.0 | 2.2 | | | G2/225 |
| BL | (0°-30°) | 140.2 | 2.6 | B1/500 | | |
| BM | (30°-60°) | 920.8 | 17.1 | B1/1000 | | |
| BH | (60°-80°) | 667.1 | 12.4 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 23.9 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type III Short





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CATALOG NUMBER: UTLD-E02-LED-E-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0° | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |
| 2.5° | 156 | 158 | 157 | 158 | 159 | 158 | 158 | 157 | 158 | 159 | 159 |
| 5° | 127 | 128 | 128 | 127 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |
| 7.5° | 190 | 191 | 192 | 190 | 190 | 191 | 189 | 162 | 131 | 129 | 127 |
| 10° | 190 | 191 | 191 | 189 | 190 | 191 | 191 | 190 | 184 | 183 | 183 |
| 12.5° | 244 | 245 | 246 | 246 | 246 | 239 | 230 | 193 | 188 | 237 | 241 |
| 15° | 247 | 247 | 247 | 243 | 243 | 239 | 242 | 286 | 283 | 249 | 245 |
| 17.5° | 304 | 304 | 304 | 303 | 296 | 296 | 298 | 288 | 289 | 290 | 342 |
| 20° | 370 | 372 | 345 | 316 | 305 | 340 | 341 | 335 | 368 | 328 | 345 |
| 22.5° | 387 | 387 | 386 | 377 | 379 | 403 | 388 | 375 | 383 | 362 | 391 |
| 25° | 460 | 460 | 454 | 446 | 434 | 423 | 435 | 433 | 415 | 413 | 461 |
| 27.5° | 493 | 479 | 476 | 466 | 493 | 487 | 497 | 452 | 490 | 481 | 507 |
| 30° | 566 | 565 | 555 | 564 | 564 | 541 | 523 | 544 | 552 | 535 | 594 |
| 32.5° | 670 | 669 | 657 | 650 | 601 | 596 | 607 | 610 | 609 | 614 | 632 |
| 35° | 783 | 782 | 716 | 703 | 685 | 681 | 680 | 664 | 683 | 659 | 707 |
| 37.5° | 858 | 866 | 828 | 819 | 796 | 770 | 749 | 759 | 736 | 733 | 768 |
| 40° | 1008 | 1011 | 977 | 949 | 929 | 870 | 849 | 843 | 835 | 825 | 872 |
| 42.5° | 1149 | 1145 | 1115 | 1093 | 1068 | 1011 | 950 | 943 | 941 | 932 | 973 |
| 45° | 1286 | 1289 | 1254 | 1244 | 1204 | 1168 | 1084 | 1085 | 1079 | 1069 | 1106 |
| 47.5° | 1411 | 1418 | 1399 | 1368 | 1336 | 1307 | 1243 | 1239 | 1225 | 1228 | 1272 |
| 50° | 1516 | 1529 | 1511 | 1488 | 1459 | 1439 | 1402 | 1393 | 1385 | 1393 | 1441 |
| 52.5° | 1588 | 1599 | 1606 | 1577 | 1577 | 1551 | 1539 | 1530 | 1533 | 1557 | 1614 |
| 55° | 1624 | 1634 | 1649 | 1629 | 1673 | 1635 | 1624 | 1637 | 1657 | 1700 | 1781 |
| 57.5° | 1624 | 1630 | 1649 | 1653 | 1679 | 1652 | 1672 | 1700 | 1743 | 1818 | 1932 |
| 60° | 1590 | 1595 | 1618 | 1621 | 1645 | 1639 | 1656 | 1736 | 1799 | 1923 | 2106 |
| 62.5° | 1536 | 1539 | 1561 | 1567 | 1592 | 1604 | 1630 | 1746 | 1858 | 2074 | 2368 |
| 64° | 1497 | 1499 | 1517 | 1526 | 1554 | 1577 | 1613 | 1738 | 1891 | 2180 | 2560 |
| 65° | 1470 | 1470 | 1492 | 1496 | 1524 | 1554 | 1593 | 1719 | 1893 | 2220 | 2643 |
| 67.5° | 1364 | 1359 | 1381 | 1391 | 1402 | 1426 | 1450 | 1581 | 1775 | 2157 | 2621 |
| 70° | 1185 | 1173 | 1184 | 1176 | 1170 | 1159 | 1147 | 1238 | 1376 | 1760 | 2220 |
| 72.5° | 831 | 831 | 822 | 841 | 855 | 869 | 821 | 832 | 907 | 1155 | 1565 |
| 75° | 558 | 564 | 580 | 626 | 671 | 712 | 728 | 729 | 666 | 685 | 950 |
| 77.5° | 331 | 344 | 356 | 410 | 468 | 554 | 630 | 704 | 721 | 711 | 688 |
| 80° | 149 | 153 | 170 | 191 | 227 | 286 | 397 | 515 | 649 | 716 | 702 |
| 82.5° | 51 | 56 | 67 | 80 | 95 | 121 | 180 | 243 | 371 | 526 | 654 |
| 85° | 17 | 19 | 26 | 36 | 40 | 46 | 61 | 90 | 147 | 207 | 394 |
| 87.5° | 7 | 9 | 12 | 18 | 20 | 20 | 21 | 27 | 27 | 27 | 108 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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CATALOG NUMBER: UTLD-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0° | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |
| 2.5° | 131 | 121 | 107 | 104 | 100 | 99 | 98 | 98 | 97 | 98 | 98 |
| 5° | 140 | 148 | 154 | 150 | 111 | 106 | 98 | 97 | 98 | 98 | 103 |
| 7.5° | 127 | 127 | 121 | 139 | 140 | 104 | 96 | 98 | 99 | 100 | 116 |
| 10° | 137 | 174 | 173 | 176 | 201 | 197 | 147 | 144 | 145 | 152 | 201 |
| 12.5° | 244 | 226 | 178 | 186 | 184 | 204 | 157 | 151 | 155 | 193 | 188 |
| 15° | 245 | 281 | 287 | 253 | 240 | 254 | 229 | 218 | 211 | 251 | 216 |
| 17.5° | 291 | 288 | 294 | 271 | 256 | 252 | 276 | 270 | 259 | 241 | 224 |
| 20° | 322 | 344 | 351 | 396 | 369 | 358 | 366 | 345 | 333 | 338 | 337 |
| 22.5° | 395 | 426 | 403 | 412 | 420 | 448 | 438 | 406 | 414 | 416 | 403 |
| 25° | 418 | 469 | 502 | 519 | 525 | 507 | 532 | 495 | 507 | 490 | 502 |
| 27.5° | 518 | 521 | 547 | 541 | 582 | 603 | 602 | 582 | 587 | 597 | 610 |
| 30° | 547 | 558 | 610 | 628 | 651 | 667 | 648 | 656 | 641 | 662 | 665 |
| 32.5° | 638 | 628 | 647 | 723 | 776 | 803 | 776 | 792 | 775 | 782 | 747 |
| 35° | 692 | 739 | 752 | 788 | 828 | 866 | 858 | 855 | 853 | 867 | 794 |
| 37.5° | 803 | 813 | 820 | 866 | 902 | 952 | 954 | 943 | 962 | 922 | 859 |
| 40° | 876 | 892 | 901 | 932 | 1005 | 1045 | 1075 | 1053 | 1080 | 1000 | 955 |
| 42.5° | 985 | 978 | 994 | 1042 | 1132 | 1156 | 1198 | 1184 | 1225 | 1139 | 1050 |
| 45° | 1128 | 1122 | 1125 | 1156 | 1278 | 1295 | 1337 | 1348 | 1368 | 1261 | 1170 |
| 47.5° | 1289 | 1292 | 1292 | 1323 | 1423 | 1457 | 1505 | 1538 | 1531 | 1391 | 1300 |
| 50° | 1470 | 1484 | 1463 | 1506 | 1581 | 1642 | 1669 | 1740 | 1714 | 1572 | 1471 |
| 52.5° | 1670 | 1693 | 1674 | 1710 | 1781 | 1858 | 1903 | 1970 | 1925 | 1806 | 1628 |
| 55° | 1868 | 1908 | 1930 | 1969 | 2060 | 2133 | 2153 | 2248 | 2185 | 2068 | 1800 |
| 57.5° | 2076 | 2161 | 2240 | 2293 | 2446 | 2531 | 2574 | 2780 | 2703 | 2579 | 2165 |
| 60° | 2345 | 2603 | 2818 | 2937 | 3139 | 3226 | 3398 | 3616 | 3561 | 3378 | 2819 |
| 62.5° | 2786 | 3245 | 3573 | 3726 | 3774 | 3887 | 4048 | 4254 | 4169 | 3747 | 3163 |
| 64° | 3038 | 3556 | 3889 | 4024 | 3956 | 4080 | 4190 | 4348 | 4205 | 3744 | 3110 |
| 65° | 3145 | 3672 | 3991 | 4119 | 3982 | 4084 | 4175 | 4274 | 4095 | 3646 | 2980 |
| 67.5° | 3172 | 3680 | 3965 | 4041 | 3814 | 3784 | 3799 | 3789 | 3549 | 3139 | 2545 |
| 70° | 2766 | 3253 | 3652 | 3749 | 3445 | 3284 | 3276 | 3180 | 2936 | 2613 | 2096 |
| 72.5° | 2136 | 2561 | 2956 | 3087 | 2800 | 2673 | 2643 | 2454 | 2251 | 1952 | 1579 |
| 75° | 1447 | 1791 | 1906 | 1914 | 1684 | 1616 | 1572 | 1401 | 1225 | 1097 | 926 |
| 77.5° | 850 | 992 | 887 | 781 | 612 | 434 | 323 | 269 | 294 | 293 | 276 |
| 80° | 719 | 675 | 546 | 423 | 304 | 172 | 125 | 106 | 108 | 110 | 108 |
| 82.5° | 773 | 823 | 698 | 496 | 372 | 219 | 106 | 76 | 87 | 96 | 92 |
| 85° | 655 | 803 | 748 | 536 | 399 | 230 | 75 | 50 | 64 | 79 | 84 |
| 87.5° | 254 | 371 | 301 | 207 | 139 | 77 | 44 | 36 | 45 | 63 | 69 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



REPORT NUMBER: P157160

CATALOG NUMBER: UTLD-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0° | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |
| 2.5° | 99 | 102 | 107 | 107 | 104 | 107 | 121 | 138 | 148 | 156 | 165 |
| 5° | 103 | 135 | 157 | 160 | 156 | 113 | 105 | 105 | 109 | 113 | 104 |
| 7.5° | 144 | 137 | 96 | 102 | 103 | 104 | 103 | 106 | 107 | 142 | 162 |
| 10° | 164 | 149 | 145 | 121 | 113 | 158 | 158 | 159 | 165 | 166 | 165 |
| 12.5° | 160 | 153 | 154 | 205 | 221 | 211 | 171 | 158 | 165 | 189 | 212 |
| 15° | 214 | 228 | 242 | 212 | 222 | 215 | 253 | 263 | 217 | 214 | 221 |
| 17.5° | 228 | 275 | 277 | 265 | 299 | 267 | 260 | 263 | 259 | 240 | 271 |
| 20° | 376 | 350 | 326 | 299 | 324 | 314 | 308 | 311 | 308 | 309 | 273 |
| 22.5° | 399 | 388 | 409 | 398 | 375 | 350 | 360 | 354 | 321 | 356 | 329 |
| 25° | 519 | 511 | 466 | 415 | 450 | 398 | 374 | 398 | 392 | 365 | 365 |
| 27.5° | 546 | 544 | 536 | 545 | 479 | 451 | 480 | 411 | 415 | 424 | 422 |
| 30° | 632 | 631 | 564 | 572 | 568 | 519 | 500 | 507 | 460 | 452 | 470 |
| 32.5° | 724 | 664 | 646 | 652 | 605 | 573 | 563 | 524 | 506 | 497 | 468 |
| 35° | 764 | 762 | 746 | 689 | 671 | 611 | 602 | 557 | 540 | 534 | 519 |
| 37.5° | 817 | 815 | 798 | 768 | 725 | 654 | 623 | 593 | 555 | 531 | 550 |
| 40° | 888 | 873 | 856 | 807 | 748 | 684 | 640 | 588 | 564 | 541 | 568 |
| 42.5° | 1014 | 947 | 905 | 843 | 764 | 687 | 638 | 588 | 542 | 535 | 539 |
| 45° | 1125 | 1018 | 946 | 866 | 771 | 681 | 619 | 562 | 530 | 503 | 502 |
| 47.5° | 1222 | 1099 | 984 | 884 | 767 | 665 | 591 | 530 | 490 | 464 | 452 |
| 50° | 1313 | 1184 | 1023 | 890 | 750 | 634 | 551 | 486 | 436 | 407 | 404 |
| 52.5° | 1404 | 1244 | 1056 | 881 | 717 | 587 | 493 | 424 | 370 | 346 | 341 |
| 55° | 1533 | 1278 | 1073 | 849 | 665 | 523 | 424 | 351 | 297 | 285 | 278 |
| 57.5° | 1804 | 1389 | 1090 | 799 | 588 | 440 | 343 | 280 | 240 | 228 | 222 |
| 60° | 2240 | 1601 | 1129 | 723 | 483 | 347 | 262 | 210 | 183 | 176 | 173 |
| 62.5° | 2445 | 1657 | 1069 | 608 | 370 | 247 | 184 | 148 | 134 | 132 | 134 |
| 64° | 2380 | 1562 | 953 | 519 | 295 | 191 | 142 | 118 | 110 | 109 | 113 |
| 65° | 2265 | 1454 | 865 | 458 | 245 | 158 | 119 | 102 | 96 | 98 | 101 |
| 67.5° | 1871 | 1124 | 586 | 274 | 142 | 97 | 81 | 73 | 74 | 76 | 80 |
| 70° | 1461 | 753 | 319 | 142 | 85 | 66 | 61 | 58 | 60 | 63 | 67 |
| 72.5° | 1002 | 421 | 152 | 81 | 63 | 53 | 52 | 51 | 53 | 56 | 60 |
| 75° | 525 | 176 | 86 | 64 | 55 | 48 | 49 | 48 | 50 | 53 | 56 |
| 77.5° | 166 | 95 | 72 | 59 | 52 | 45 | 46 | 47 | 49 | 51 | 53 |
| 80° | 90 | 79 | 65 | 55 | 49 | 42 | 44 | 45 | 48 | 49 | 49 |
| 82.5° | 82 | 69 | 57 | 50 | 47 | 41 | 45 | 45 | 45 | 45 | 45 |
| 85° | 72 | 56 | 47 | 44 | 44 | 39 | 42 | 42 | 40 | 40 | 38 |
| 87.5° | 56 | 41 | 40 | 44 | 41 | 28 | 36 | 34 | 31 | 31 | 30 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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CATALOG NUMBER: UTLD-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|------|------|------|------|
| 0° | 99 | 99 | 99 | 99 |
| 2.5° | 164 | 165 | 161 | 161 |
| 5° | 103 | 104 | 103 | 103 |
| 7.5° | 168 | 166 | 172 | 166 |
| 10° | 169 | 164 | 163 | 164 |
| 12.5° | 220 | 220 | 221 | 221 |
| 15° | 220 | 219 | 221 | 220 |
| 17.5° | 276 | 278 | 279 | 278 |
| 20° | 279 | 280 | 288 | 282 |
| 22.5° | 331 | 337 | 337 | 336 |
| 25° | 345 | 389 | 398 | 397 |
| 27.5° | 396 | 401 | 402 | 401 |
| 30° | 451 | 453 | 458 | 456 |
| 32.5° | 475 | 507 | 513 | 511 |
| 35° | 515 | 506 | 527 | 548 |
| 37.5° | 539 | 536 | 541 | 540 |
| 40° | 561 | 566 | 572 | 567 |
| 42.5° | 540 | 537 | 540 | 538 |
| 45° | 497 | 498 | 496 | 494 |
| 47.5° | 443 | 443 | 441 | 441 |
| 50° | 386 | 388 | 380 | 381 |
| 52.5° | 326 | 328 | 322 | 316 |
| 55° | 270 | 271 | 263 | 261 |
| 57.5° | 218 | 221 | 214 | 211 |
| 60° | 173 | 174 | 172 | 172 |
| 62.5° | 137 | 135 | 133 | 134 |
| 64° | 116 | 117 | 114 | 116 |
| 65° | 104 | 106 | 104 | 106 |
| 67.5° | 83 | 86 | 85 | 86 |
| 70° | 71 | 72 | 71 | 71 |
| 72.5° | 63 | 64 | 62 | 61 |
| 75° | 59 | 58 | 57 | 56 |
| 77.5° | 54 | 54 | 52 | 51 |
| 80° | 48 | 47 | 45 | 43 |
| 82.5° | 44 | 42 | 37 | 34 |
| 85° | 37 | 34 | 28 | 22 |
| 87.5° | 30 | 27 | 17 | 9 |
| 90° | 0 | 0 | 0 | 0 |

(END OF REPORT)