

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: P157033

Luminaire Tested: **UTLD-F01-LED-E-U-SL2-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P157033  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33668)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-F01-LED-E-U-SL2-8030  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL  
Light Source: (7) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1843.4 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): 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

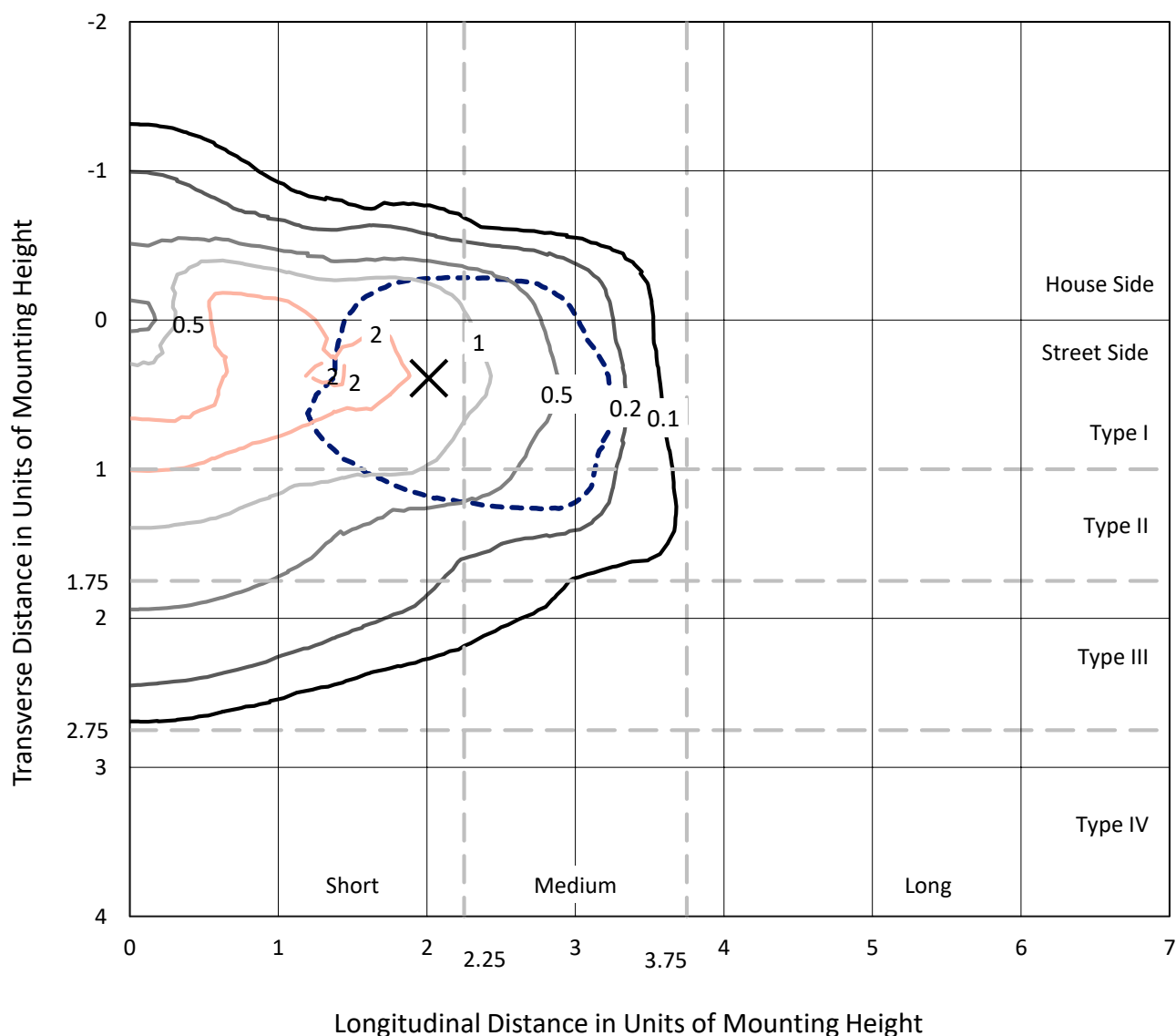


REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

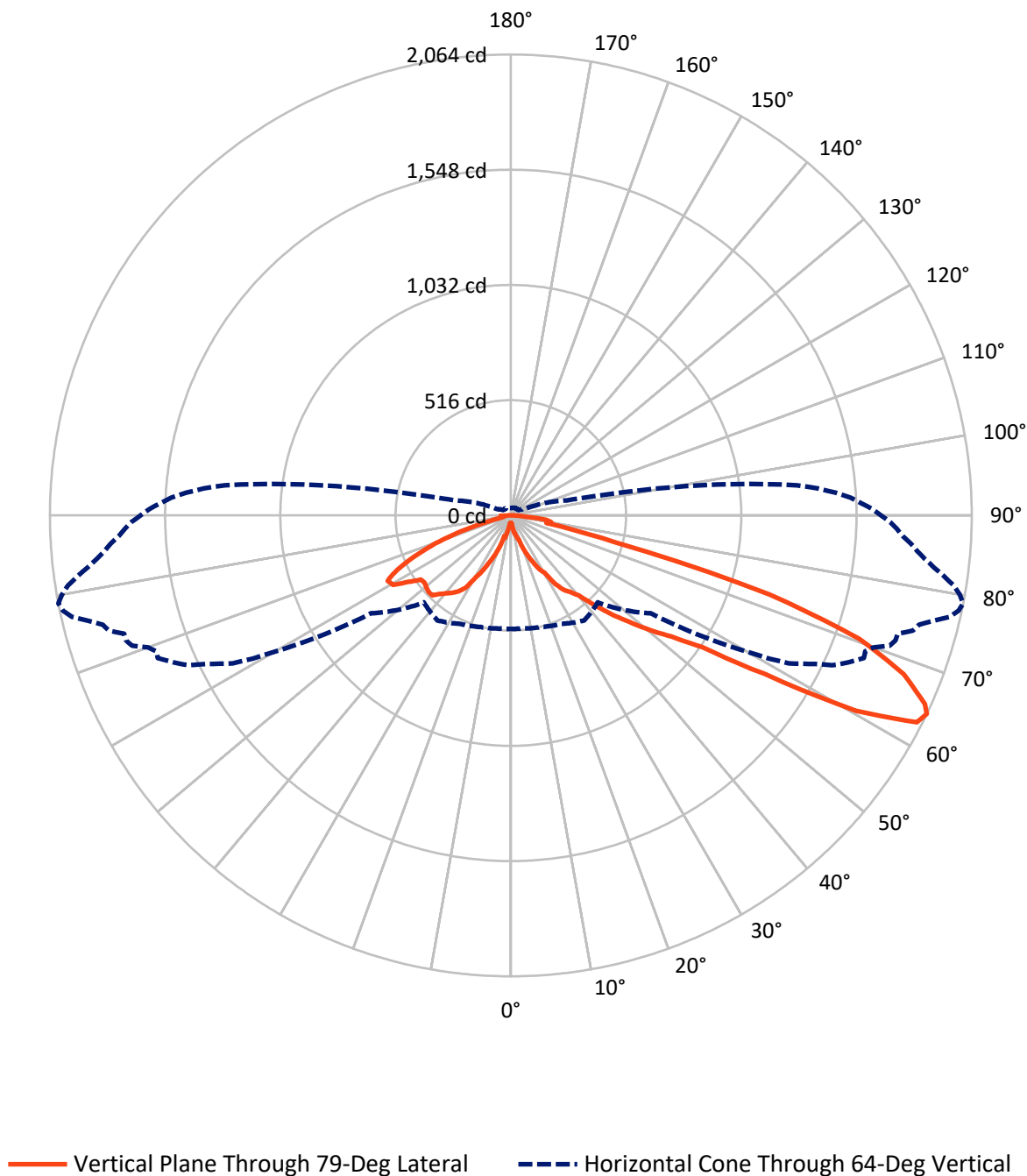


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

## Luminous Intensity Polar Plot



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

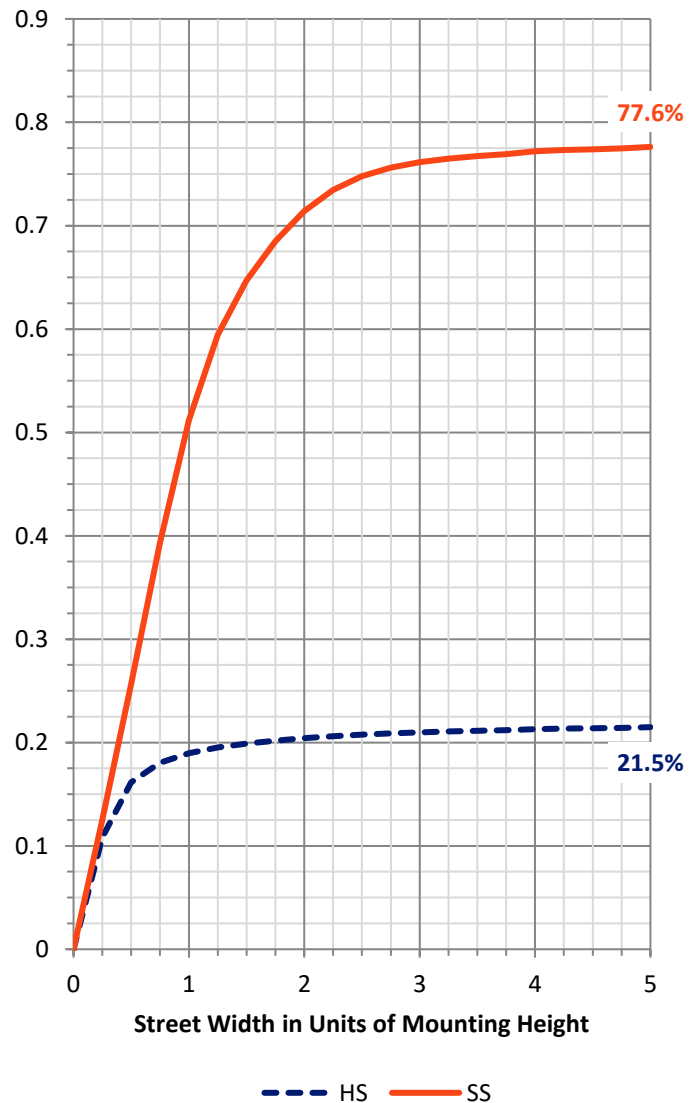
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 405.0    | 0.0    | 405.0  |
|                    | % Fixture | 22.0     | 0.0    | 22.0   |
| <b>Street Side</b> | Lumens    | 1438.4   | 0.0    | 1438.4 |
|                    | % Fixture | 78.0     | 0.0    | 78.0   |
| <b>Total</b>       | Lumens    | 1843.4   | 0.0    | 1843.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.6    | 0.3       |
| 10°-20°   | 26.9   | 1.5       |
| 20°-30°   | 78.8   | 4.3       |
| 30°-40°   | 172.3  | 9.3       |
| 40°-50°   | 313.3  | 17.0      |
| 50°-60°   | 437.5  | 23.7      |
| 60°-70°   | 550.1  | 29.8      |
| 70°-80°   | 213.3  | 11.6      |
| 80°-90°   | 46.5   | 2.5       |
| 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°    | 1843.4 | 100.0     |
| 0°-180°   | 1843.4 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P157033

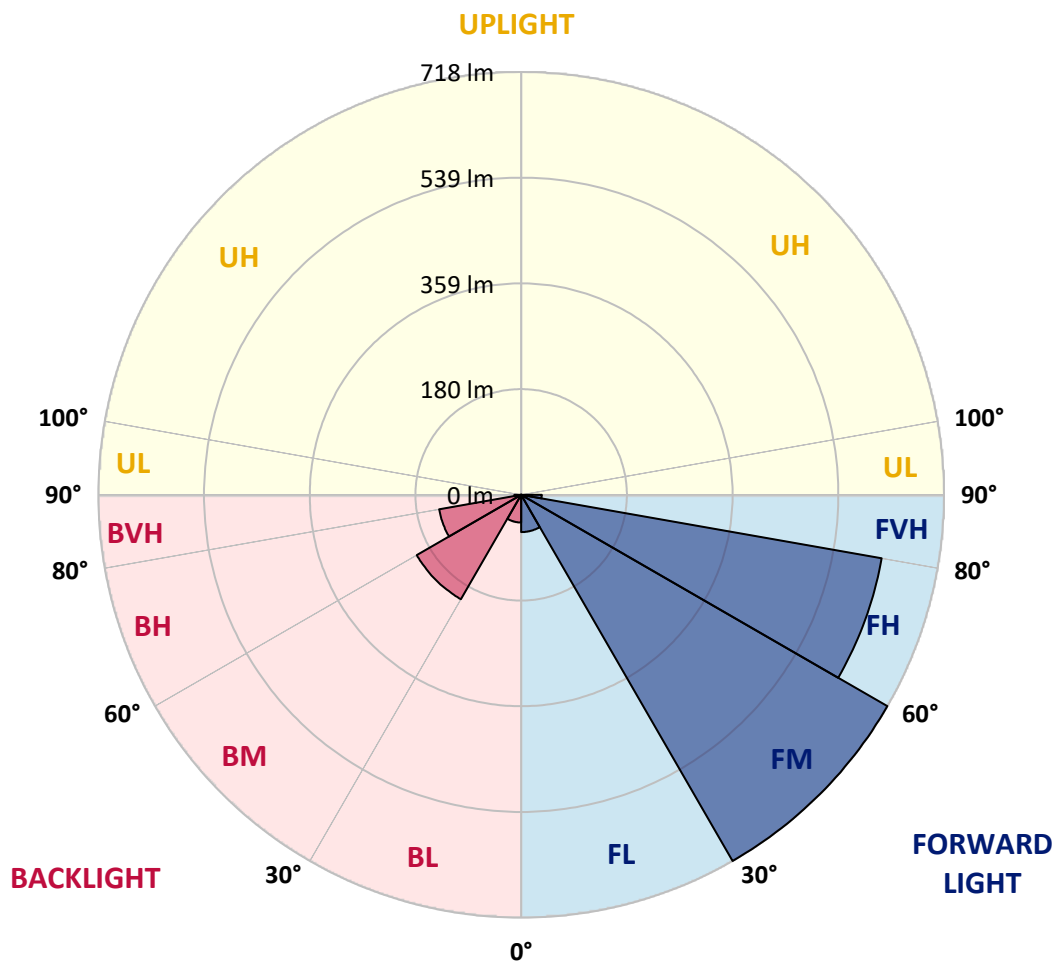
CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 63.3   | 3.4       |                         |      |        |
| FM   | (30°-60°)   | 718.3  | 39.0      |                         |      |        |
| FH   | (60°-80°)   | 621.8  | 33.7      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 34.9   | 1.9       |                         |      | G1/100 |
| BL   | (0°-30°)    | 47.0   | 2.6       | B0/110                  |      |        |
| BM   | (30°-60°)   | 204.7  | 11.1      | B0/220                  |      |        |
| BH   | (60°-80°)   | 141.6  | 7.7       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 11.6   | 0.6       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 60°    | 61°    | 62°    | 64°    |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0°    | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8   | 33.8   | 33.8   | 33.8   |
| 2.5°  | 54.0  | 53.6  | 54.3  | 54.3  | 54.3  | 53.6  | 48.1  | 41.1   | 40.8   | 39.7   | 38.7   |
| 5°    | 44.6  | 44.6  | 44.6  | 44.9  | 45.3  | 46.0  | 48.8  | 52.3   | 54.0   | 54.3   | 54.7   |
| 7.5°  | 65.1  | 65.8  | 65.8  | 65.8  | 54.7  | 47.0  | 46.7  | 47.4   | 46.7   | 46.0   | 44.9   |
| 10°   | 66.9  | 67.2  | 67.2  | 67.9  | 68.3  | 67.2  | 57.5  | 65.1   | 65.1   | 65.5   | 65.8   |
| 12.5° | 91.6  | 92.3  | 92.0  | 88.8  | 72.5  | 88.8  | 93.0  | 87.1   | 81.2   | 74.9   | 71.1   |
| 15°   | 97.2  | 98.6  | 95.8  | 93.0  | 110.8 | 104.2 | 98.2  | 113.2  | 113.2  | 114.3  | 117.4  |
| 17.5° | 125.4 | 125.8 | 123.7 | 120.2 | 115.0 | 117.7 | 120.2 | 119.8  | 121.9  | 123.7  | 122.6  |
| 20°   | 150.5 | 147.4 | 129.6 | 139.0 | 137.3 | 136.2 | 136.6 | 148.8  | 149.8  | 150.5  | 153.6  |
| 22.5° | 158.9 | 158.9 | 151.5 | 159.2 | 151.9 | 153.6 | 167.6 | 183.9  | 183.2  | 180.5  | 176.3  |
| 25°   | 193.7 | 194.4 | 177.7 | 164.8 | 168.3 | 172.4 | 180.8 | 205.9  | 202.8  | 206.2  | 208.0  |
| 27.5° | 209.4 | 210.8 | 195.8 | 192.3 | 175.2 | 194.0 | 223.7 | 230.6  | 233.1  | 237.2  | 237.2  |
| 30°   | 251.5 | 252.2 | 242.5 | 214.9 | 209.0 | 211.5 | 241.8 | 251.9  | 255.4  | 259.9  | 277.0  |
| 32.5° | 315.3 | 315.6 | 292.3 | 246.6 | 235.1 | 244.2 | 280.1 | 291.6  | 298.2  | 291.9  | 299.2  |
| 35°   | 417.0 | 413.9 | 370.3 | 333.4 | 304.8 | 282.2 | 317.7 | 358.1  | 353.9  | 355.0  | 358.5  |
| 37.5° | 484.6 | 488.8 | 475.2 | 433.0 | 413.2 | 381.8 | 403.1 | 408.3  | 400.3  | 406.5  | 408.6  |
| 40°   | 538.2 | 544.2 | 538.6 | 517.7 | 498.5 | 484.6 | 510.4 | 492.2  | 480.7  | 481.8  | 473.8  |
| 42.5° | 558.4 | 565.1 | 570.6 | 582.8 | 577.9 | 592.9 | 628.8 | 602.7  | 600.6  | 590.5  | 571.0  |
| 45°   | 572.4 | 578.6 | 596.8 | 621.1 | 628.8 | 668.2 | 730.2 | 719.7  | 727.4  | 705.4  | 693.6  |
| 47.5° | 575.2 | 581.1 | 601.6 | 640.0 | 661.2 | 718.3 | 814.1 | 824.6  | 830.5  | 818.7  | 815.9  |
| 50°   | 550.8 | 555.6 | 577.6 | 623.2 | 654.2 | 740.3 | 869.9 | 908.2  | 913.4  | 916.6  | 919.0  |
| 52.5° | 512.8 | 518.7 | 539.3 | 577.9 | 617.3 | 730.2 | 900.2 | 974.0  | 980.3  | 993.9  | 1010.3 |
| 55°   | 497.8 | 502.7 | 515.6 | 546.9 | 576.9 | 688.7 | 915.5 | 1029.8 | 1039.9 | 1063.6 | 1091.8 |
| 57.5° | 495.7 | 500.6 | 512.1 | 522.6 | 555.6 | 640.3 | 922.1 | 1092.8 | 1124.2 | 1162.5 | 1208.1 |
| 60°   | 513.8 | 515.9 | 521.2 | 521.5 | 536.8 | 603.4 | 901.9 | 1170.5 | 1233.2 | 1289.3 | 1361.1 |
| 62.5° | 526.0 | 527.8 | 535.8 | 550.4 | 546.2 | 566.4 | 833.6 | 1221.0 | 1314.4 | 1397.3 | 1490.3 |
| 64°   | 508.3 | 508.3 | 517.7 | 535.8 | 573.8 | 550.8 | 764.3 | 1219.3 | 1321.7 | 1410.5 | 1516.4 |
| 65°   | 488.1 | 487.7 | 496.4 | 511.1 | 569.2 | 548.3 | 714.2 | 1190.0 | 1295.9 | 1385.1 | 1499.7 |
| 67.5° | 396.4 | 382.9 | 390.9 | 409.3 | 480.1 | 553.9 | 589.4 | 1001.2 | 1109.9 | 1217.5 | 1349.6 |
| 70°   | 205.2 | 212.5 | 216.7 | 247.3 | 332.0 | 476.6 | 494.7 | 707.5  | 831.2  | 938.5  | 1120.7 |
| 72.5° | 86.7  | 81.2  | 91.3  | 112.9 | 174.5 | 337.6 | 455.0 | 491.5  | 556.0  | 641.3  | 834.7  |
| 75°   | 47.0  | 47.4  | 49.5  | 56.1  | 90.9  | 186.4 | 419.4 | 433.0  | 438.9  | 452.9  | 556.0  |
| 77.5° | 34.8  | 34.8  | 35.9  | 35.9  | 47.4  | 96.8  | 334.4 | 409.3  | 410.4  | 401.3  | 425.0  |
| 80°   | 26.1  | 27.5  | 29.3  | 27.9  | 29.6  | 55.0  | 195.8 | 371.7  | 387.4  | 390.5  | 410.0  |
| 82.5° | 21.6  | 22.3  | 26.1  | 25.1  | 23.3  | 33.1  | 92.0  | 281.5  | 325.4  | 351.2  | 399.2  |
| 85°   | 14.6  | 15.7  | 23.7  | 23.0  | 21.3  | 22.3  | 53.3  | 91.3   | 110.1  | 127.2  | 162.0  |
| 87.5° | 5.9   | 7.7   | 15.3  | 13.9  | 14.6  | 12.5  | 32.7  | 48.1   | 53.0   | 60.3   | 74.9   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (continued):**

|       | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    | 75°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   |
| 2.5°  | 38.0   | 37.3   | 36.9   | 36.2   | 35.9   | 35.5   | 35.9   | 35.2   | 34.8   | 35.2   | 34.5   |
| 5°    | 54.3   | 54.3   | 54.0   | 53.3   | 53.0   | 52.3   | 51.9   | 49.1   | 46.0   | 44.2   | 41.5   |
| 7.5°  | 45.3   | 45.3   | 46.0   | 47.7   | 49.5   | 51.2   | 52.3   | 52.6   | 52.3   | 52.6   | 52.6   |
| 10°   | 65.8   | 66.9   | 66.9   | 67.6   | 67.6   | 67.9   | 68.3   | 69.0   | 69.7   | 73.9   | 77.0   |
| 12.5° | 70.7   | 71.1   | 71.1   | 71.4   | 72.8   | 74.2   | 74.2   | 75.2   | 74.6   | 74.2   | 73.5   |
| 15°   | 115.7  | 113.9  | 105.9  | 104.9  | 104.5  | 103.5  | 100.7  | 99.6   | 99.6   | 100.3  | 100.0  |
| 17.5° | 123.7  | 124.7  | 123.3  | 121.6  | 119.8  | 116.0  | 109.4  | 110.1  | 109.4  | 110.1  | 111.5  |
| 20°   | 154.7  | 151.5  | 153.6  | 161.3  | 166.5  | 168.3  | 170.0  | 171.0  | 167.6  | 162.3  | 161.6  |
| 22.5° | 174.5  | 172.8  | 177.0  | 178.4  | 178.7  | 182.2  | 182.9  | 185.3  | 194.7  | 193.0  | 194.7  |
| 25°   | 208.3  | 226.4  | 226.8  | 227.8  | 229.6  | 231.7  | 230.3  | 233.4  | 232.7  | 235.5  | 235.5  |
| 27.5° | 242.5  | 241.1  | 242.5  | 243.9  | 242.1  | 241.1  | 244.6  | 244.6  | 251.2  | 247.3  | 248.0  |
| 30°   | 275.2  | 276.3  | 279.4  | 282.2  | 284.3  | 283.2  | 283.6  | 288.4  | 285.0  | 287.8  | 291.9  |
| 32.5° | 298.2  | 302.4  | 310.0  | 312.1  | 332.0  | 328.9  | 337.6  | 341.7  | 345.2  | 350.8  | 356.0  |
| 35°   | 364.0  | 367.2  | 371.4  | 371.4  | 369.3  | 374.5  | 378.3  | 381.1  | 384.6  | 393.3  | 390.5  |
| 37.5° | 409.7  | 410.0  | 411.4  | 402.4  | 408.3  | 410.7  | 410.7  | 416.6  | 422.9  | 423.3  | 417.0  |
| 40°   | 470.3  | 461.9  | 458.5  | 450.4  | 457.8  | 447.7  | 455.3  | 453.9  | 458.5  | 452.9  | 456.4  |
| 42.5° | 561.9  | 549.4  | 529.9  | 527.1  | 520.8  | 515.2  | 508.6  | 514.2  | 504.4  | 508.6  | 519.4  |
| 45°   | 678.3  | 644.8  | 636.1  | 627.1  | 601.3  | 597.1  | 594.0  | 581.1  | 568.5  | 582.1  | 600.6  |
| 47.5° | 799.9  | 762.9  | 751.1  | 734.0  | 716.9  | 695.0  | 682.1  | 655.3  | 649.0  | 666.1  | 678.3  |
| 50°   | 902.3  | 874.1  | 876.1  | 852.1  | 830.9  | 816.6  | 781.0  | 754.2  | 752.8  | 758.7  | 752.8  |
| 52.5° | 992.2  | 986.2  | 987.3  | 972.3  | 958.0  | 940.2  | 897.4  | 881.4  | 870.6  | 861.5  | 837.5  |
| 55°   | 1081.7 | 1101.2 | 1099.4 | 1110.9 | 1107.8 | 1094.9 | 1064.6 | 1068.1 | 1063.9 | 1034.3 | 1010.3 |
| 57.5° | 1229.7 | 1259.7 | 1278.5 | 1295.2 | 1330.8 | 1326.9 | 1321.0 | 1374.3 | 1372.2 | 1344.0 | 1355.2 |
| 60°   | 1423.4 | 1455.8 | 1503.6 | 1546.4 | 1586.1 | 1596.9 | 1630.7 | 1703.9 | 1697.6 | 1700.7 | 1737.7 |
| 62.5° | 1569.7 | 1610.5 | 1661.4 | 1711.5 | 1710.8 | 1739.1 | 1807.0 | 1843.9 | 1836.9 | 1887.1 | 1916.4 |
| 64°   | 1587.5 | 1630.7 | 1667.6 | 1705.3 | 1700.0 | 1728.6 | 1793.4 | 1811.2 | 1811.5 | 1872.5 | 1892.3 |
| 65°   | 1561.4 | 1607.4 | 1634.2 | 1667.3 | 1661.0 | 1692.4 | 1756.8 | 1756.1 | 1766.2 | 1828.2 | 1845.7 |
| 67.5° | 1401.1 | 1463.5 | 1485.4 | 1497.6 | 1504.6 | 1551.6 | 1586.8 | 1572.2 | 1615.7 | 1641.2 | 1683.3 |
| 70°   | 1181.7 | 1251.3 | 1289.7 | 1294.9 | 1319.3 | 1366.6 | 1392.4 | 1364.9 | 1418.6 | 1401.5 | 1475.0 |
| 72.5° | 931.9  | 997.0  | 1054.5 | 1060.8 | 1102.2 | 1126.6 | 1124.2 | 1124.5 | 1132.9 | 1106.1 | 1167.4 |
| 75°   | 647.3  | 697.1  | 741.0  | 746.6  | 768.5  | 746.9  | 730.9  | 699.2  | 662.6  | 631.6  | 627.8  |
| 77.5° | 440.7  | 457.1  | 452.9  | 436.5  | 418.7  | 390.5  | 368.2  | 362.0  | 338.6  | 328.9  | 308.7  |
| 80°   | 408.3  | 413.9  | 405.8  | 404.8  | 391.6  | 360.2  | 344.2  | 317.7  | 314.2  | 302.7  | 288.4  |
| 82.5° | 408.3  | 411.1  | 412.5  | 420.5  | 402.7  | 378.7  | 351.2  | 311.8  | 298.2  | 267.5  | 249.1  |
| 85°   | 193.7  | 205.5  | 225.4  | 242.8  | 242.1  | 235.5  | 205.2  | 189.2  | 160.6  | 137.6  | 116.7  |
| 87.5° | 86.4   | 96.1   | 107.3  | 111.5  | 115.3  | 111.5  | 101.0  | 91.3   | 74.9   | 58.5   | 48.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (continued):**

|       | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    | 86°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   |
| 2.5°  | 34.5   | 34.5   | 34.5   | 34.5   | 34.1   | 34.1   | 34.1   | 34.1   | 34.1   | 33.8   | 33.8   |
| 5°    | 38.7   | 38.0   | 36.6   | 36.6   | 35.9   | 35.5   | 35.5   | 35.2   | 35.2   | 34.8   | 34.8   |
| 7.5°  | 52.3   | 51.9   | 50.9   | 46.7   | 40.4   | 38.0   | 35.9   | 35.9   | 35.5   | 35.9   | 36.6   |
| 10°   | 78.4   | 78.4   | 77.7   | 76.6   | 76.3   | 74.9   | 67.9   | 62.0   | 58.2   | 57.5   | 56.8   |
| 12.5° | 74.6   | 76.3   | 80.8   | 83.3   | 83.3   | 82.9   | 82.2   | 80.1   | 70.4   | 64.4   | 63.1   |
| 15°   | 100.3  | 101.0  | 101.4  | 102.8  | 106.9  | 107.6  | 106.9  | 107.6  | 106.9  | 100.3  | 91.3   |
| 17.5° | 112.9  | 110.4  | 110.4  | 111.5  | 115.7  | 113.6  | 117.7  | 130.3  | 132.7  | 122.3  | 123.3  |
| 20°   | 160.2  | 160.2  | 160.9  | 158.5  | 160.2  | 163.4  | 163.7  | 165.1  | 167.9  | 167.2  | 163.0  |
| 22.5° | 190.2  | 187.8  | 193.7  | 196.5  | 197.5  | 197.2  | 196.8  | 196.1  | 197.5  | 199.6  | 197.9  |
| 25°   | 231.3  | 233.4  | 233.8  | 232.4  | 229.2  | 227.8  | 230.3  | 232.7  | 240.0  | 244.6  | 241.4  |
| 27.5° | 255.7  | 262.0  | 278.0  | 274.5  | 272.4  | 274.9  | 276.6  | 282.5  | 280.1  | 278.3  | 283.2  |
| 30°   | 297.9  | 296.8  | 293.3  | 296.5  | 300.6  | 305.9  | 304.5  | 300.3  | 298.2  | 303.1  | 301.7  |
| 32.5° | 354.3  | 350.1  | 356.7  | 366.1  | 372.8  | 367.2  | 363.3  | 368.2  | 368.2  | 363.0  | 368.9  |
| 35°   | 385.6  | 393.3  | 403.4  | 409.7  | 405.2  | 405.2  | 409.0  | 406.5  | 408.3  | 414.2  | 417.7  |
| 37.5° | 423.6  | 436.2  | 442.4  | 436.2  | 437.5  | 445.9  | 446.3  | 449.7  | 453.2  | 459.8  | 469.6  |
| 40°   | 472.0  | 478.3  | 473.8  | 473.4  | 483.9  | 486.7  | 492.9  | 505.1  | 510.4  | 519.8  | 523.9  |
| 42.5° | 532.0  | 533.7  | 534.4  | 546.9  | 548.7  | 551.8  | 567.8  | 579.0  | 592.6  | 596.4  | 591.2  |
| 45°   | 606.2  | 605.1  | 620.8  | 629.5  | 631.6  | 653.5  | 659.8  | 668.2  | 677.2  | 669.2  | 682.5  |
| 47.5° | 673.7  | 690.8  | 711.0  | 711.7  | 729.5  | 743.8  | 749.3  | 757.0  | 749.7  | 758.0  | 748.3  |
| 50°   | 753.5  | 784.2  | 781.0  | 806.5  | 820.4  | 823.2  | 834.7  | 823.5  | 824.9  | 816.9  | 814.1  |
| 52.5° | 853.2  | 866.0  | 864.6  | 900.2  | 902.6  | 912.4  | 904.0  | 897.4  | 896.4  | 885.9  | 878.2  |
| 55°   | 1026.3 | 1009.2 | 1027.3 | 1040.6 | 1047.5 | 1051.4 | 1024.9 | 1036.4 | 1009.9 | 1009.6 | 991.5  |
| 57.5° | 1345.4 | 1342.3 | 1353.8 | 1339.1 | 1357.9 | 1328.3 | 1326.6 | 1303.2 | 1286.9 | 1286.5 | 1276.1 |
| 60°   | 1729.6 | 1778.4 | 1789.6 | 1775.6 | 1739.7 | 1725.8 | 1703.2 | 1683.3 | 1654.4 | 1656.8 | 1635.2 |
| 62.5° | 1946.3 | 2013.6 | 2031.3 | 2040.4 | 1994.1 | 1973.2 | 1921.2 | 1888.2 | 1843.6 | 1829.3 | 1794.4 |
| 64°   | 1950.2 | 2017.4 | 2050.1 | 2064.1 | 2040.7 | 2008.0 | 1958.9 | 1909.1 | 1863.8 | 1826.5 | 1794.8 |
| 65°   | 1921.2 | 1979.1 | 2023.7 | 2037.6 | 2035.9 | 1992.7 | 1951.9 | 1893.0 | 1851.2 | 1799.7 | 1767.3 |
| 67.5° | 1765.5 | 1816.7 | 1874.9 | 1897.9 | 1921.6 | 1906.6 | 1871.8 | 1814.6 | 1764.5 | 1702.5 | 1657.2 |
| 70°   | 1524.5 | 1569.0 | 1621.0 | 1654.4 | 1680.2 | 1692.7 | 1662.8 | 1618.9 | 1580.9 | 1508.1 | 1454.8 |
| 72.5° | 1190.7 | 1198.0 | 1208.5 | 1209.9 | 1199.8 | 1194.9 | 1168.1 | 1171.2 | 1101.5 | 1057.3 | 1026.6 |
| 75°   | 591.5  | 567.1  | 507.9  | 486.0  | 435.8  | 406.2  | 372.1  | 358.5  | 322.9  | 312.8  | 285.7  |
| 77.5° | 271.0  | 237.2  | 195.8  | 163.0  | 136.2  | 117.7  | 100.3  | 88.1   | 78.0   | 74.2   | 68.6   |
| 80°   | 265.5  | 238.6  | 206.6  | 182.5  | 154.3  | 128.9  | 104.9  | 82.2   | 66.2   | 56.4   | 50.2   |
| 82.5° | 226.1  | 194.7  | 173.1  | 158.9  | 141.1  | 123.3  | 101.0  | 81.5   | 62.7   | 48.4   | 39.4   |
| 85°   | 92.7   | 75.6   | 64.1   | 58.2   | 51.9   | 45.6   | 39.4   | 33.8   | 30.3   | 25.8   | 23.3   |
| 87.5° | 39.7   | 34.8   | 32.0   | 31.7   | 30.3   | 29.3   | 28.2   | 26.8   | 23.7   | 21.9   | 19.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (continued):**

|       | 87°    | 88°    | 89°    | 90°    | 91°    | 92°    | 93°    | 94°    | 95°    | 96°    | 97°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   |
| 2.5°  | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   | 33.8   |
| 5°    | 34.8   | 34.8   | 34.5   | 34.5   | 34.5   | 34.5   | 34.8   | 34.5   | 34.5   | 34.5   | 34.5   |
| 7.5°  | 36.9   | 36.9   | 36.9   | 36.9   | 36.9   | 36.9   | 36.9   | 37.3   | 36.9   | 36.9   | 37.3   |
| 10°   | 56.4   | 56.1   | 54.7   | 54.3   | 53.6   | 53.6   | 53.6   | 54.0   | 55.4   | 56.1   | 56.8   |
| 12.5° | 61.7   | 62.4   | 63.1   | 61.7   | 62.4   | 60.6   | 61.7   | 62.4   | 62.0   | 62.4   | 61.7   |
| 15°   | 92.0   | 92.0   | 91.6   | 91.3   | 90.2   | 89.2   | 88.8   | 88.8   | 88.1   | 87.4   | 88.1   |
| 17.5° | 121.9  | 121.9  | 120.2  | 118.8  | 118.8  | 111.5  | 116.7  | 115.0  | 116.0  | 111.1  | 124.4  |
| 20°   | 152.9  | 152.2  | 153.3  | 155.7  | 156.8  | 155.0  | 152.6  | 149.8  | 149.1  | 153.6  | 159.2  |
| 22.5° | 197.5  | 196.1  | 192.3  | 187.4  | 186.7  | 186.4  | 190.9  | 190.9  | 191.3  | 193.3  | 196.8  |
| 25°   | 236.5  | 228.9  | 225.7  | 229.2  | 230.3  | 225.4  | 225.4  | 227.1  | 236.5  | 240.0  | 240.4  |
| 27.5° | 284.3  | 281.8  | 279.7  | 275.6  | 273.8  | 280.8  | 284.6  | 280.4  | 279.0  | 284.3  | 284.3  |
| 30°   | 303.8  | 309.4  | 309.0  | 313.2  | 316.3  | 307.6  | 303.1  | 314.2  | 313.2  | 305.2  | 309.7  |
| 32.5° | 375.2  | 378.0  | 381.8  | 387.0  | 383.2  | 388.8  | 382.9  | 378.3  | 385.6  | 384.2  | 379.0  |
| 35°   | 417.3  | 425.0  | 425.0  | 425.4  | 435.8  | 433.7  | 431.3  | 429.9  | 424.3  | 428.1  | 430.6  |
| 37.5° | 468.9  | 464.0  | 468.2  | 473.4  | 475.5  | 478.0  | 478.7  | 480.4  | 473.1  | 468.2  | 461.2  |
| 40°   | 519.4  | 525.3  | 520.1  | 521.5  | 525.7  | 525.0  | 527.8  | 531.6  | 521.2  | 513.8  | 504.1  |
| 42.5° | 595.4  | 593.3  | 591.9  | 589.8  | 584.9  | 589.8  | 584.9  | 573.8  | 576.2  | 565.4  | 551.5  |
| 45°   | 675.1  | 671.0  | 671.3  | 664.7  | 659.8  | 646.6  | 642.7  | 639.6  | 626.4  | 618.4  | 596.4  |
| 47.5° | 749.0  | 745.9  | 734.7  | 737.1  | 722.2  | 706.5  | 696.7  | 691.9  | 673.7  | 652.1  | 638.9  |
| 50°   | 812.4  | 804.0  | 804.4  | 788.4  | 777.6  | 765.4  | 750.0  | 731.2  | 711.4  | 691.2  | 662.6  |
| 52.5° | 869.9  | 869.2  | 859.1  | 847.9  | 831.9  | 825.3  | 799.2  | 772.3  | 748.3  | 724.3  | 692.2  |
| 55°   | 1003.3 | 991.1  | 969.9  | 964.3  | 956.6  | 916.6  | 897.0  | 864.3  | 827.0  | 797.8  | 754.9  |
| 57.5° | 1279.2 | 1263.2 | 1238.1 | 1235.7 | 1188.6 | 1156.6 | 1111.6 | 1073.3 | 1022.5 | 972.6  | 909.6  |
| 60°   | 1608.4 | 1584.7 | 1586.5 | 1550.2 | 1510.2 | 1471.9 | 1415.8 | 1361.4 | 1291.1 | 1205.7 | 1100.1 |
| 62.5° | 1763.1 | 1740.1 | 1720.2 | 1679.1 | 1636.6 | 1594.5 | 1548.1 | 1475.3 | 1407.4 | 1307.8 | 1176.8 |
| 64°   | 1757.9 | 1729.6 | 1699.3 | 1657.9 | 1619.6 | 1570.4 | 1523.4 | 1457.2 | 1380.6 | 1288.3 | 1150.0 |
| 65°   | 1732.4 | 1701.1 | 1662.1 | 1622.3 | 1576.4 | 1530.7 | 1484.4 | 1424.5 | 1339.8 | 1250.3 | 1110.9 |
| 67.5° | 1612.6 | 1572.2 | 1530.4 | 1492.1 | 1443.6 | 1398.3 | 1356.9 | 1302.9 | 1215.1 | 1119.0 | 993.9  |
| 70°   | 1415.4 | 1365.6 | 1319.6 | 1294.9 | 1259.7 | 1219.3 | 1169.1 | 1123.8 | 1042.7 | 947.2  | 833.6  |
| 72.5° | 971.9  | 914.5  | 882.4  | 892.9  | 857.7  | 845.1  | 833.3  | 797.8  | 726.7  | 658.1  | 585.3  |
| 75°   | 304.1  | 281.1  | 265.8  | 284.6  | 271.7  | 292.6  | 286.0  | 279.7  | 260.9  | 252.9  | 227.5  |
| 77.5° | 69.0   | 65.8   | 64.4   | 63.8   | 64.1   | 63.8   | 62.7   | 62.4   | 61.3   | 62.0   | 60.3   |
| 80°   | 47.7   | 45.6   | 44.9   | 43.9   | 43.2   | 42.2   | 41.1   | 40.8   | 40.4   | 39.7   | 39.4   |
| 82.5° | 34.5   | 31.7   | 31.4   | 30.7   | 30.3   | 29.6   | 29.3   | 30.0   | 29.6   | 30.7   | 30.7   |
| 85°   | 22.3   | 20.9   | 20.2   | 20.6   | 20.2   | 20.9   | 21.3   | 21.9   | 23.0   | 24.0   | 25.8   |
| 87.5° | 18.5   | 17.4   | 17.4   | 17.8   | 18.5   | 19.2   | 20.9   | 23.0   | 24.7   | 27.5   | 30.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (continued):**

|       | 98°    | 99°   | 100°  | 101°  | 102°  | 103°  | 104°  | 105°  | 115°  | 125°  | 135°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 33.8   | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  |
| 2.5°  | 33.8   | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 33.8  | 34.5  | 34.8  | 36.6  |
| 5°    | 34.5   | 34.8  | 34.5  | 34.8  | 34.8  | 34.8  | 35.2  | 35.2  | 44.2  | 53.6  | 37.6  |
| 7.5°  | 36.9   | 37.3  | 36.9  | 36.6  | 36.2  | 35.9  | 37.6  | 39.4  | 49.5  | 35.2  | 34.5  |
| 10°   | 57.1   | 57.5  | 57.8  | 61.3  | 66.5  | 73.9  | 75.2  | 75.2  | 54.7  | 47.7  | 53.6  |
| 12.5° | 61.7   | 64.1  | 74.6  | 78.4  | 78.4  | 78.4  | 77.7  | 73.5  | 57.8  | 75.6  | 75.2  |
| 15°   | 94.4   | 102.1 | 102.4 | 102.8 | 102.4 | 95.8  | 89.5  | 87.8  | 90.2  | 81.2  | 77.3  |
| 17.5° | 120.9  | 106.9 | 116.7 | 97.5  | 92.0  | 93.4  | 94.8  | 96.8  | 110.1 | 102.8 | 95.1  |
| 20°   | 162.0  | 162.3 | 152.6 | 149.1 | 146.7 | 146.3 | 147.0 | 148.4 | 140.0 | 115.3 | 106.3 |
| 22.5° | 193.3  | 188.1 | 189.9 | 192.3 | 190.2 | 185.3 | 183.2 | 180.8 | 165.8 | 152.2 | 112.2 |
| 25°   | 232.4  | 231.3 | 228.9 | 228.5 | 233.8 | 236.9 | 234.5 | 231.0 | 207.3 | 152.9 | 119.8 |
| 27.5° | 283.6  | 285.7 | 285.0 | 277.6 | 274.2 | 279.0 | 274.2 | 263.7 | 232.4 | 189.9 | 123.7 |
| 30°   | 310.0  | 314.9 | 317.4 | 317.0 | 308.7 | 308.7 | 306.2 | 313.2 | 255.7 | 185.0 | 126.8 |
| 32.5° | 381.8  | 382.2 | 381.1 | 381.5 | 380.1 | 368.2 | 356.0 | 349.4 | 252.2 | 189.2 | 120.9 |
| 35°   | 421.2  | 418.0 | 418.7 | 411.8 | 403.4 | 394.7 | 381.8 | 365.8 | 270.0 | 173.5 | 106.6 |
| 37.5° | 463.7  | 452.2 | 440.0 | 434.1 | 421.9 | 411.4 | 401.7 | 382.5 | 261.3 | 160.6 | 91.3  |
| 40°   | 493.3  | 489.8 | 466.8 | 451.8 | 443.5 | 427.1 | 410.4 | 398.2 | 244.9 | 133.4 | 77.3  |
| 42.5° | 528.5  | 513.5 | 502.7 | 473.4 | 454.6 | 441.7 | 418.0 | 395.7 | 219.1 | 108.0 | 67.2  |
| 45°   | 572.4  | 543.5 | 520.1 | 501.3 | 461.9 | 437.5 | 415.3 | 388.4 | 186.4 | 88.1  | 61.0  |
| 47.5° | 607.6  | 576.2 | 536.1 | 503.0 | 470.6 | 422.6 | 397.1 | 366.1 | 155.4 | 75.9  | 56.8  |
| 50°   | 637.5  | 593.3 | 548.0 | 496.8 | 455.0 | 405.2 | 364.4 | 339.7 | 128.2 | 66.2  | 51.9  |
| 52.5° | 655.6  | 606.5 | 550.8 | 489.5 | 430.6 | 384.6 | 339.7 | 304.5 | 107.6 | 59.2  | 47.0  |
| 55°   | 694.3  | 640.0 | 568.2 | 494.7 | 424.0 | 367.9 | 326.8 | 283.6 | 95.5  | 53.0  | 43.2  |
| 57.5° | 824.6  | 732.3 | 643.1 | 545.5 | 459.5 | 387.4 | 337.9 | 291.2 | 88.8  | 48.4  | 40.1  |
| 60°   | 990.1  | 864.6 | 737.5 | 612.1 | 505.8 | 419.1 | 351.5 | 302.7 | 81.9  | 45.6  | 38.3  |
| 62.5° | 1043.7 | 898.4 | 752.5 | 624.3 | 502.7 | 409.7 | 339.7 | 286.0 | 71.8  | 43.5  | 38.0  |
| 64°   | 1007.5 | 860.8 | 719.4 | 589.1 | 473.8 | 381.8 | 314.2 | 259.2 | 64.8  | 42.8  | 39.4  |
| 65°   | 966.0  | 821.5 | 688.4 | 561.2 | 448.7 | 357.4 | 290.9 | 239.7 | 60.3  | 42.5  | 40.8  |
| 67.5° | 846.2  | 712.8 | 584.9 | 465.8 | 367.9 | 289.1 | 225.4 | 180.1 | 50.5  | 43.5  | 45.6  |
| 70°   | 710.7  | 575.5 | 468.9 | 363.0 | 279.4 | 212.5 | 159.6 | 123.3 | 43.9  | 46.3  | 49.5  |
| 72.5° | 504.1  | 391.9 | 322.9 | 243.9 | 184.3 | 134.5 | 101.7 | 77.7  | 38.7  | 44.9  | 46.0  |
| 75°   | 199.6  | 167.2 | 133.8 | 104.2 | 85.0  | 69.7  | 58.5  | 47.7  | 34.8  | 40.1  | 36.2  |
| 77.5° | 56.1   | 52.6  | 48.8  | 43.9  | 41.1  | 38.7  | 36.2  | 34.5  | 31.4  | 33.8  | 27.2  |
| 80°   | 37.6   | 36.2  | 35.2  | 34.1  | 33.4  | 32.4  | 31.7  | 31.4  | 28.9  | 28.2  | 20.2  |
| 82.5° | 30.3   | 30.3  | 30.7  | 30.7  | 31.0  | 31.4  | 31.4  | 31.4  | 28.2  | 25.1  | 16.7  |
| 85°   | 27.5   | 29.3  | 31.4  | 33.8  | 35.5  | 36.2  | 36.6  | 35.9  | 26.8  | 21.6  | 13.2  |
| 87.5° | 34.1   | 38.0  | 41.8  | 45.3  | 46.0  | 47.4  | 45.3  | 44.2  | 21.6  | 17.4  | 8.4   |
| 90°   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



REPORT NUMBER: P157033

CATALOG NUMBER: UTLD-F01-LED-E-U-SL2-8030

**CANDELA DISTRIBUTION (continued):**

|       | 145°  | 155° | 165° | 175° | 180° |
|-------|-------|------|------|------|------|
| 0°    | 33.8  | 33.8 | 33.8 | 33.8 | 33.8 |
| 2.5°  | 40.8  | 51.9 | 54.3 | 54.3 | 53.3 |
| 5°    | 34.8  | 34.5 | 33.4 | 33.4 | 33.4 |
| 7.5°  | 34.8  | 47.0 | 53.0 | 54.0 | 53.3 |
| 10°   | 53.3  | 55.0 | 54.7 | 53.6 | 53.3 |
| 12.5° | 55.4  | 60.3 | 71.1 | 70.0 | 70.4 |
| 15°   | 90.6  | 68.6 | 67.6 | 65.5 | 65.5 |
| 17.5° | 86.4  | 73.9 | 77.3 | 75.9 | 75.9 |
| 20°   | 95.5  | 86.0 | 72.8 | 72.5 | 70.7 |
| 22.5° | 98.9  | 90.6 | 79.1 | 75.9 | 75.9 |
| 25°   | 101.7 | 83.6 | 73.2 | 77.7 | 77.7 |
| 27.5° | 93.7  | 84.3 | 71.1 | 67.9 | 67.6 |
| 30°   | 95.8  | 76.3 | 70.7 | 66.9 | 66.5 |
| 32.5° | 87.4  | 70.4 | 63.8 | 66.2 | 66.2 |
| 35°   | 78.0  | 66.5 | 62.4 | 63.1 | 63.1 |
| 37.5° | 70.4  | 62.4 | 62.7 | 63.8 | 63.8 |
| 40°   | 63.4  | 60.3 | 63.4 | 64.8 | 64.4 |
| 42.5° | 58.9  | 57.8 | 59.2 | 60.6 | 60.3 |
| 45°   | 54.7  | 54.0 | 55.4 | 56.1 | 55.7 |
| 47.5° | 51.2  | 51.2 | 51.6 | 51.9 | 51.9 |
| 50°   | 47.7  | 48.4 | 48.4 | 48.4 | 48.1 |
| 52.5° | 44.6  | 44.6 | 45.3 | 44.9 | 44.9 |
| 55°   | 41.5  | 41.8 | 42.8 | 42.2 | 41.8 |
| 57.5° | 38.7  | 40.1 | 40.1 | 39.4 | 39.0 |
| 60°   | 37.3  | 38.7 | 38.0 | 36.6 | 36.2 |
| 62.5° | 38.0  | 37.6 | 36.2 | 34.5 | 34.1 |
| 64°   | 39.0  | 37.6 | 35.5 | 33.4 | 33.4 |
| 65°   | 40.1  | 37.6 | 35.2 | 32.7 | 32.7 |
| 67.5° | 44.2  | 39.7 | 37.3 | 32.4 | 31.7 |
| 70°   | 46.7  | 42.8 | 40.1 | 32.4 | 31.0 |
| 72.5° | 42.5  | 40.4 | 40.1 | 31.7 | 30.0 |
| 75°   | 32.7  | 34.1 | 35.9 | 29.6 | 28.2 |
| 77.5° | 25.1  | 28.9 | 33.4 | 25.8 | 23.7 |
| 80°   | 20.2  | 27.5 | 34.8 | 21.6 | 18.1 |
| 82.5° | 17.4  | 33.1 | 35.9 | 17.8 | 15.0 |
| 85°   | 14.3  | 37.3 | 35.2 | 15.3 | 10.8 |
| 87.5° | 10.5  | 17.8 | 23.7 | 13.9 | 8.7  |
| 90°   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  |

(END OF REPORT)