

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: McGRAW-EDISON

Report Number: P198003

Luminaire Tested: **TT-C4-LED-E1-RW-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198003  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34691)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C4-LED-E1-RW-7050  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
RECTANGULAR DISTRIBUTION  
Light Source: (160) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5962.4 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 58  
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: 25 FT



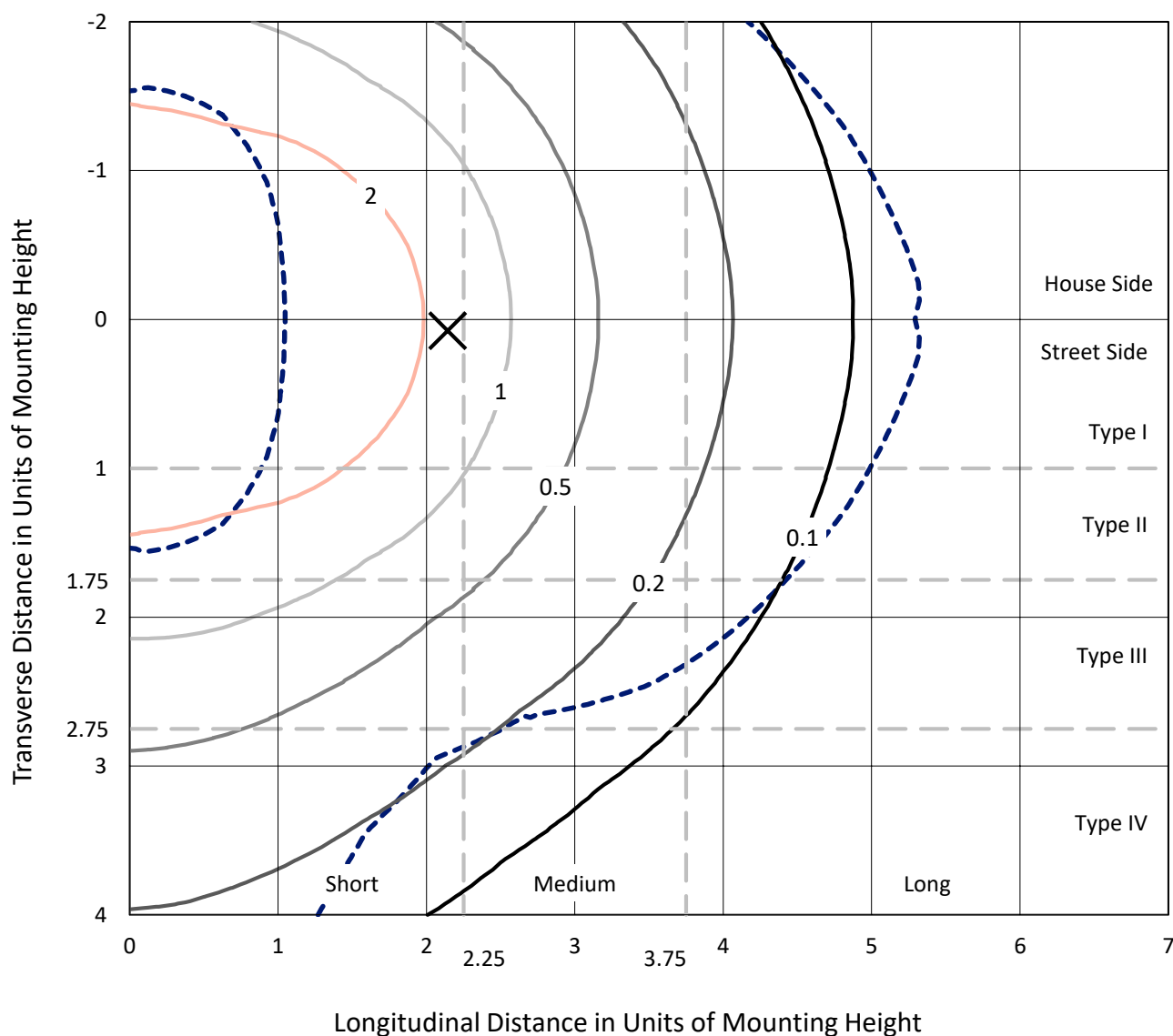
REPORT NUMBER: P198003

CATALOG NUMBER: TT-C4-LED-E1-RW-7050

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

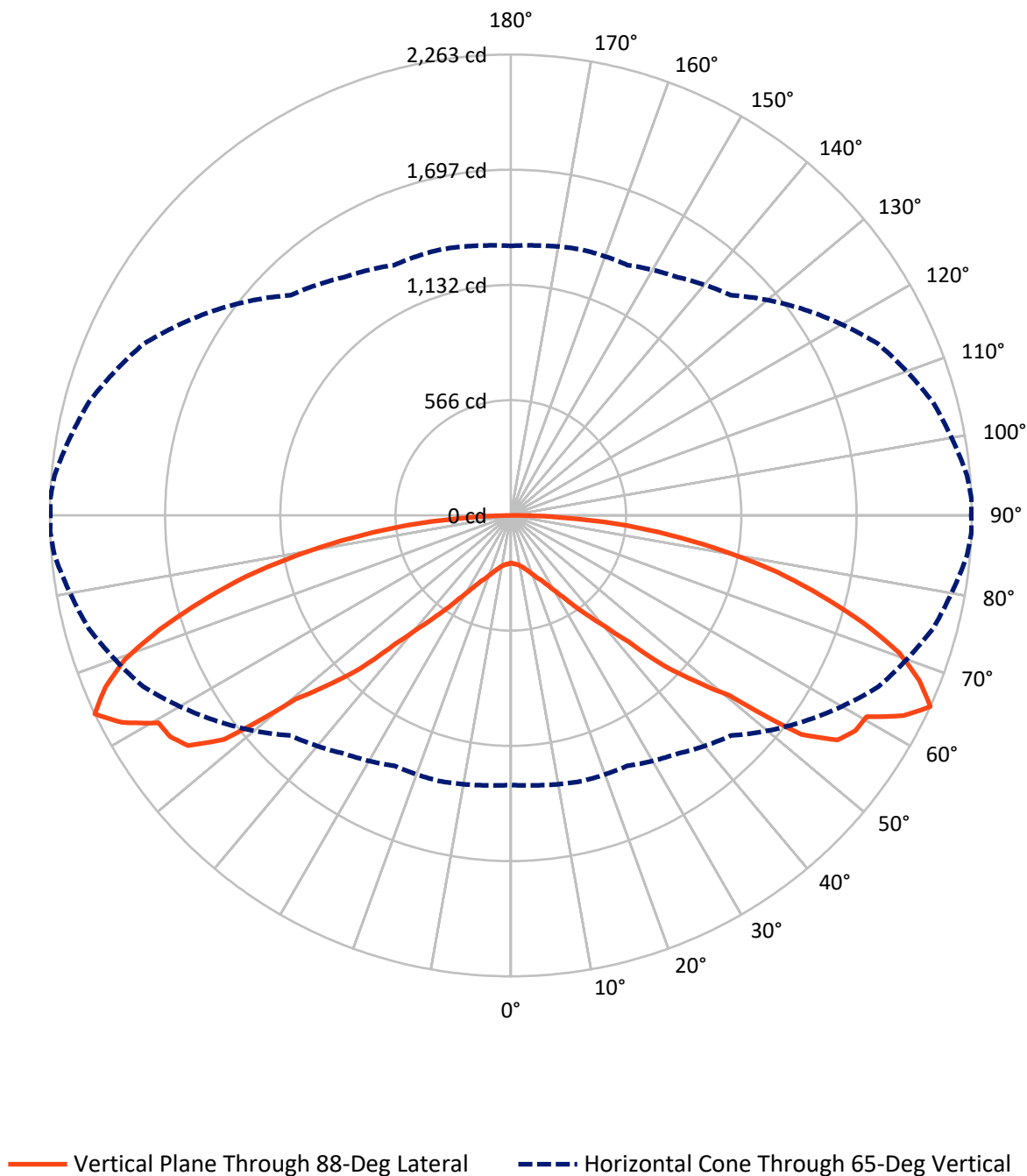


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P198003

CATALOG NUMBER: TT-C4-LED-E1-RW-7050

## Luminous Intensity Polar Plot



REPORT NUMBER: P198003

CATALOG NUMBER: TT-C4-LED-E1-RW-7050

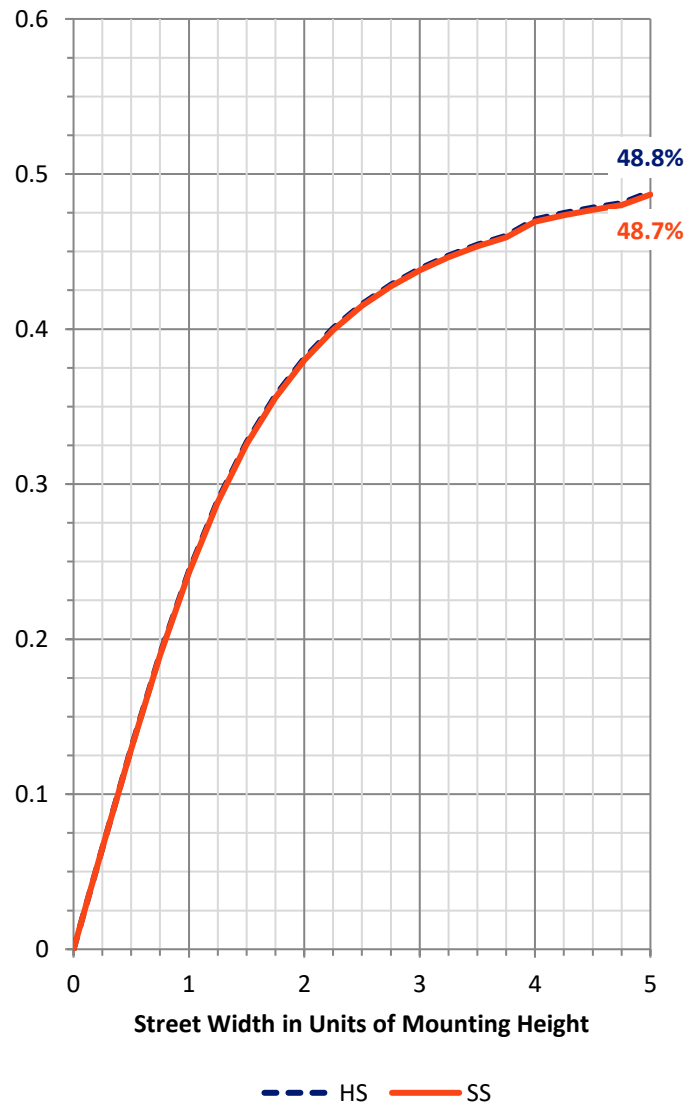
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2981.2   | 0.0    | 2981.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2981.2   | 0.0    | 2981.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5962.4   | 0.0    | 5962.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 23.4   | 0.4       |
| 10°-20°   | 81.2   | 1.4       |
| 20°-30°   | 179.3  | 3.0       |
| 30°-40°   | 357.3  | 6.0       |
| 40°-50°   | 684.0  | 11.5      |
| 50°-60°   | 1224.3 | 20.5      |
| 60°-70°   | 1622.3 | 27.2      |
| 70°-80°   | 1353.8 | 22.7      |
| 80°-90°   | 436.8  | 7.3       |
| 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°    | 5962.4 | 100.0     |
| 0°-180°   | 5962.4 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P198003

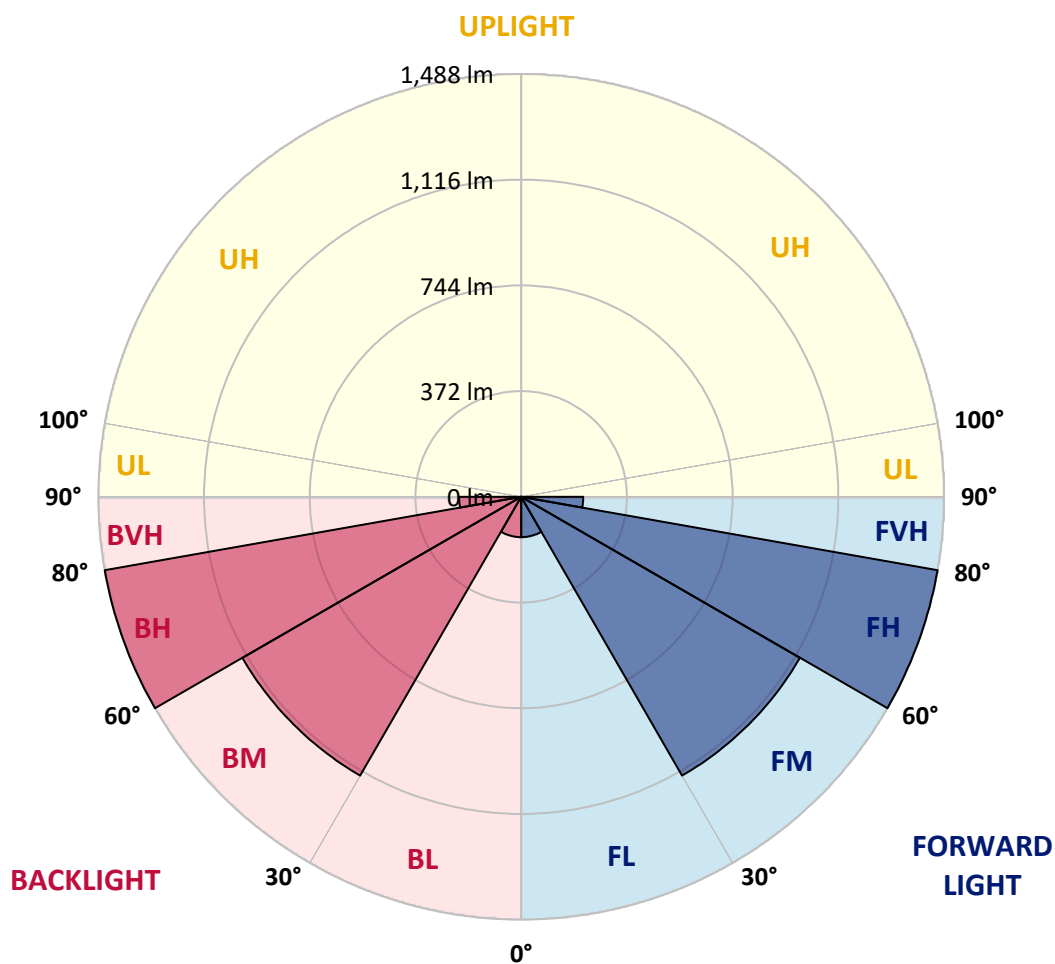
CATALOG NUMBER: TT-C4-LED-E1-RW-7050

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 141.9  | 2.4       |                         |      |         |
| FM   | (30°-60°)   | 1132.8 | 19.0      |                         |      |         |
| FH   | (60°-80°)   | 1488.1 | 25.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 218.4  | 3.7       |                         |      | G2/225  |
| BL   | (0°-30°)    | 141.9  | 2.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1132.8 | 19.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1488.1 | 25.0      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 218.4  | 3.7       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type IV Short



REPORT NUMBER: P198003

CATALOG NUMBER: TT-C4-LED-E1-RW-7050

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 88°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  | 233.5  |
| 2.5°  | 235.8  | 235.8  | 235.8  | 235.8  | 237.0  | 237.0  | 237.0  | 237.0  | 237.0  | 237.0  | 237.0  |
| 5°    | 239.3  | 239.3  | 240.5  | 240.5  | 241.7  | 241.7  | 241.7  | 241.7  | 240.5  | 240.5  | 240.5  |
| 7.5°  | 245.2  | 246.4  | 247.5  | 247.5  | 247.5  | 246.4  | 245.2  | 245.2  | 244.0  | 244.0  | 244.0  |
| 10°   | 255.8  | 255.8  | 256.9  | 256.9  | 255.8  | 254.6  | 253.4  | 252.2  | 252.2  | 252.2  | 251.1  |
| 12.5° | 268.7  | 268.7  | 269.8  | 268.7  | 266.3  | 265.1  | 262.8  | 261.6  | 261.6  | 260.5  | 260.5  |
| 15°   | 286.3  | 288.6  | 288.6  | 285.1  | 281.6  | 278.0  | 276.9  | 274.5  | 274.5  | 274.5  | 274.5  |
| 17.5° | 313.2  | 312.1  | 307.4  | 303.9  | 301.5  | 295.6  | 293.3  | 292.1  | 289.8  | 289.8  | 289.8  |
| 20°   | 343.7  | 341.4  | 335.5  | 330.8  | 326.2  | 319.1  | 314.4  | 312.1  | 310.9  | 309.7  | 309.7  |
| 22.5° | 377.8  | 374.3  | 366.0  | 362.5  | 353.1  | 346.1  | 340.2  | 335.5  | 332.0  | 330.8  | 333.2  |
| 25°   | 413.0  | 413.0  | 405.9  | 396.5  | 387.2  | 376.6  | 368.4  | 362.5  | 357.8  | 356.7  | 355.5  |
| 27.5° | 450.5  | 452.9  | 443.5  | 434.1  | 423.5  | 409.4  | 401.2  | 393.0  | 391.9  | 390.7  | 389.5  |
| 30°   | 490.4  | 495.1  | 485.7  | 476.3  | 462.2  | 448.2  | 437.6  | 434.1  | 430.6  | 432.9  | 432.9  |
| 32.5° | 539.7  | 542.0  | 531.5  | 524.4  | 505.7  | 491.6  | 482.2  | 479.8  | 481.0  | 479.8  | 483.4  |
| 35°   | 597.2  | 593.6  | 585.4  | 571.4  | 554.9  | 542.0  | 535.0  | 539.7  | 552.6  | 557.3  | 554.9  |
| 37.5° | 660.5  | 647.6  | 642.9  | 625.3  | 610.1  | 599.5  | 601.9  | 613.6  | 624.1  | 632.4  | 630.0  |
| 40°   | 707.4  | 709.8  | 696.9  | 680.5  | 666.4  | 664.0  | 676.9  | 692.2  | 712.1  | 719.2  | 721.5  |
| 42.5° | 755.5  | 769.6  | 754.4  | 737.9  | 730.9  | 735.6  | 754.4  | 784.9  | 829.5  | 852.9  | 849.4  |
| 45°   | 810.7  | 825.9  | 809.5  | 796.6  | 795.4  | 813.0  | 854.1  | 933.9  | 999.6  | 1046.5 | 1051.2 |
| 47.5° | 868.2  | 879.9  | 864.7  | 856.4  | 868.2  | 902.2  | 972.6  | 1079.3 | 1149.7 | 1204.9 | 1214.3 |
| 50°   | 940.9  | 936.2  | 924.5  | 923.3  | 949.1  | 1011.3 | 1106.3 | 1214.3 | 1341.0 | 1377.3 | 1389.1 |
| 52.5° | 1012.5 | 994.9  | 992.5  | 998.4  | 1044.2 | 1114.5 | 1241.3 | 1453.6 | 1640.1 | 1771.5 | 1785.6 |
| 55°   | 1079.3 | 1059.4 | 1064.1 | 1079.3 | 1143.9 | 1250.6 | 1426.6 | 1685.9 | 1849.0 | 1941.7 | 1946.3 |
| 57.5° | 1140.4 | 1128.6 | 1139.2 | 1160.3 | 1256.5 | 1393.8 | 1580.3 | 1793.8 | 1917.0 | 1982.7 | 1994.4 |
| 60°   | 1202.5 | 1200.2 | 1213.1 | 1251.8 | 1355.1 | 1477.1 | 1633.1 | 1822.0 | 1945.2 | 1995.6 | 2007.4 |
| 62.5° | 1261.2 | 1269.4 | 1285.8 | 1323.4 | 1403.2 | 1498.2 | 1649.5 | 1880.6 | 2064.8 | 2144.6 | 2164.6 |
| 65°   | 1323.4 | 1330.4 | 1350.4 | 1356.2 | 1427.8 | 1528.7 | 1761.0 | 1990.9 | 2145.8 | 2249.0 | 2263.1 |
| 67.5° | 1379.7 | 1389.1 | 1382.0 | 1377.3 | 1439.5 | 1528.7 | 1738.7 | 1940.5 | 2069.5 | 2148.1 | 2163.4 |
| 70°   | 1433.7 | 1423.1 | 1394.9 | 1358.6 | 1376.2 | 1437.2 | 1629.6 | 1804.4 | 1934.6 | 2008.5 | 2023.8 |
| 72.5° | 1447.7 | 1433.7 | 1358.6 | 1275.3 | 1249.5 | 1295.2 | 1472.4 | 1627.2 | 1734.0 | 1803.2 | 1812.6 |
| 75°   | 1411.4 | 1382.0 | 1255.3 | 1140.4 | 1091.1 | 1136.8 | 1284.7 | 1417.2 | 1492.3 | 1567.4 | 1573.3 |
| 77.5° | 1265.9 | 1247.1 | 1106.3 | 966.7  | 911.6  | 945.6  | 1068.8 | 1162.6 | 1249.5 | 1322.2 | 1336.3 |
| 80°   | 1039.5 | 1023.0 | 898.7  | 784.9  | 711.0  | 734.4  | 824.8  | 899.8  | 983.1  | 1040.6 | 1058.2 |
| 82.5° | 764.9  | 762.6  | 673.4  | 566.7  | 515.0  | 512.7  | 580.7  | 654.6  | 718.0  | 773.1  | 784.9  |
| 85°   | 481.0  | 481.0  | 420.0  | 355.5  | 301.5  | 302.7  | 343.7  | 397.7  | 477.5  | 512.7  | 516.2  |
| 87.5° | 163.1  | 154.9  | 144.3  | 117.3  | 93.9   | 84.5   | 90.3   | 103.2  | 157.2  | 194.8  | 201.8  |
| 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: P198003

CATALOG NUMBER: TT-C4-LED-E1-RW-7050

**CANDELA DISTRIBUTION (continued):**

|       | 90°    |
|-------|--------|
| 0°    | 233.5  |
| 2.5°  | 237.0  |
| 5°    | 240.5  |
| 7.5°  | 244.0  |
| 10°   | 251.1  |
| 12.5° | 261.6  |
| 15°   | 273.4  |
| 17.5° | 289.8  |
| 20°   | 309.7  |
| 22.5° | 332.0  |
| 25°   | 355.5  |
| 27.5° | 390.7  |
| 30°   | 431.7  |
| 32.5° | 482.2  |
| 35°   | 556.1  |
| 37.5° | 632.4  |
| 40°   | 727.4  |
| 42.5° | 858.8  |
| 45°   | 1039.5 |
| 47.5° | 1214.3 |
| 50°   | 1376.2 |
| 52.5° | 1756.3 |
| 55°   | 1951.0 |
| 57.5° | 1993.3 |
| 60°   | 2003.8 |
| 62.5° | 2154.0 |
| 65°   | 2260.8 |
| 67.5° | 2162.2 |
| 70°   | 2020.3 |
| 72.5° | 1805.6 |
| 75°   | 1582.7 |
| 77.5° | 1336.3 |
| 80°   | 1044.2 |
| 82.5° | 784.9  |
| 85°   | 508.0  |
| 87.5° | 195.9  |
| 90°   | 0.0    |

(END OF REPORT)