

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: P198469

Luminaire Tested: **TT-C4-LED-E1-WQ-CG-UPL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198469  
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: TT-C4-LED-E1-WQ-CG-UPL  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
WIDE DISTRIBUTION WITH CLEAR GLASS LENS  
Light Source: (160) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7380.1 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U4 - G2

Input Watts (W): 75.4  
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



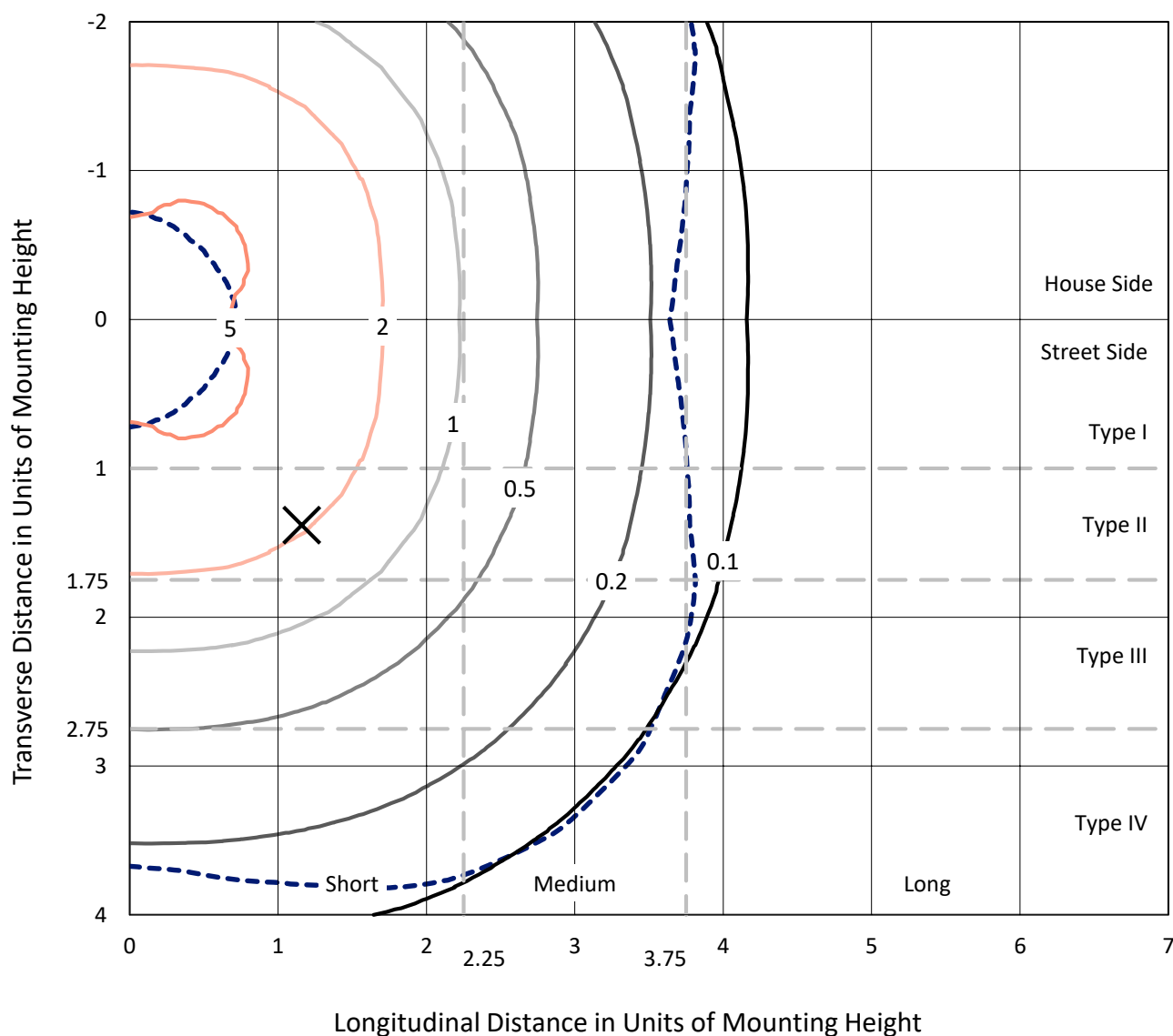
REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

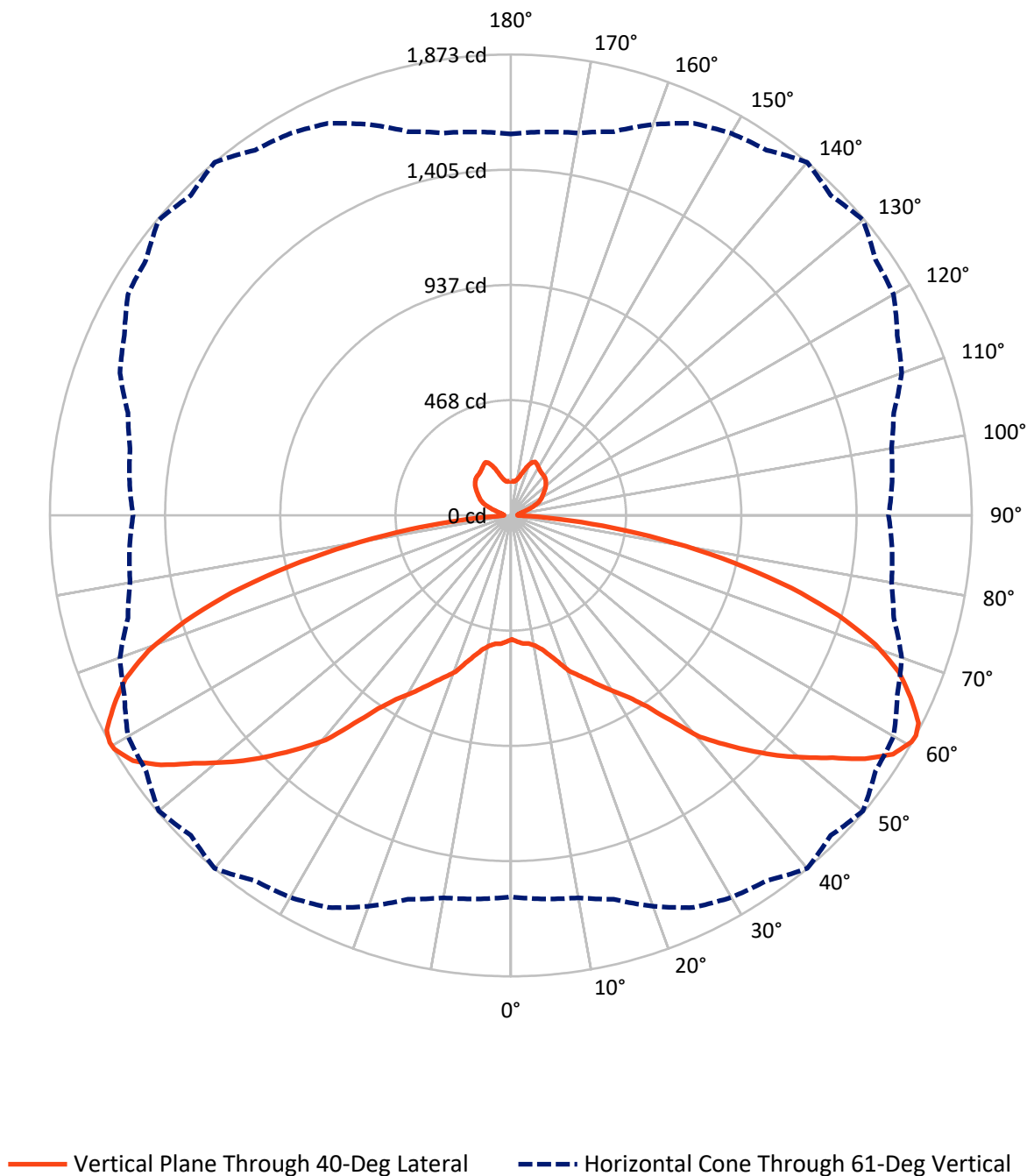


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

## Luminous Intensity Polar Plot



REPORT NUMBER: P198469

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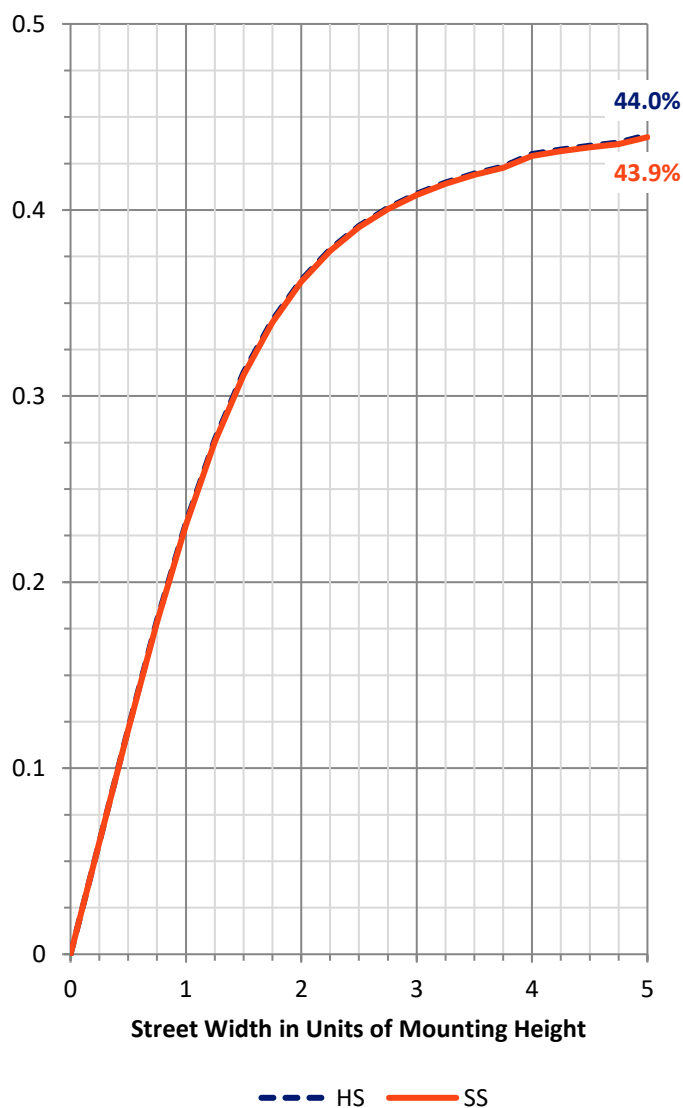
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3278.1   | 412.0  | 3690.1 |
|                    | % Fixture | 44.4     | 5.6    | 50.0   |
| <b>Street Side</b> | Lumens    | 3278.1   | 412.0  | 3690.1 |
|                    | % Fixture | 44.4     | 5.6    | 50.0   |
| <b>Total</b>       | Lumens    | 6556.1   | 824.0  | 7380.1 |
|                    | % Fixture | 88.8     | 11.2   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 50.2   | 0.7       |
| 10°-20°   | 169.4  | 2.3       |
| 20°-30°   | 343.6  | 4.7       |
| 30°-40°   | 597.5  | 8.1       |
| 40°-50°   | 1005.8 | 13.6      |
| 50°-60°   | 1449.0 | 19.6      |
| 60°-70°   | 1607.9 | 21.8      |
| 70°-80°   | 1092.0 | 14.8      |
| 80°-90°   | 240.9  | 3.3       |
| 90°-100°  | 38.3   | 0.5       |
| 100°-110° | 59.4   | 0.8       |
| 110°-120° | 119.3  | 1.6       |
| 120°-130° | 148.7  | 2.0       |
| 130°-140° | 153.2  | 2.1       |
| 140°-150° | 136.0  | 1.8       |
| 150°-160° | 103.7  | 1.4       |
| 160°-170° | 51.8   | 0.7       |
| 170°-180° | 13.6   | 0.2       |
| 0°-90°    | 6556.1 | 88.8      |
| 0°-180°   | 7380.1 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P198469

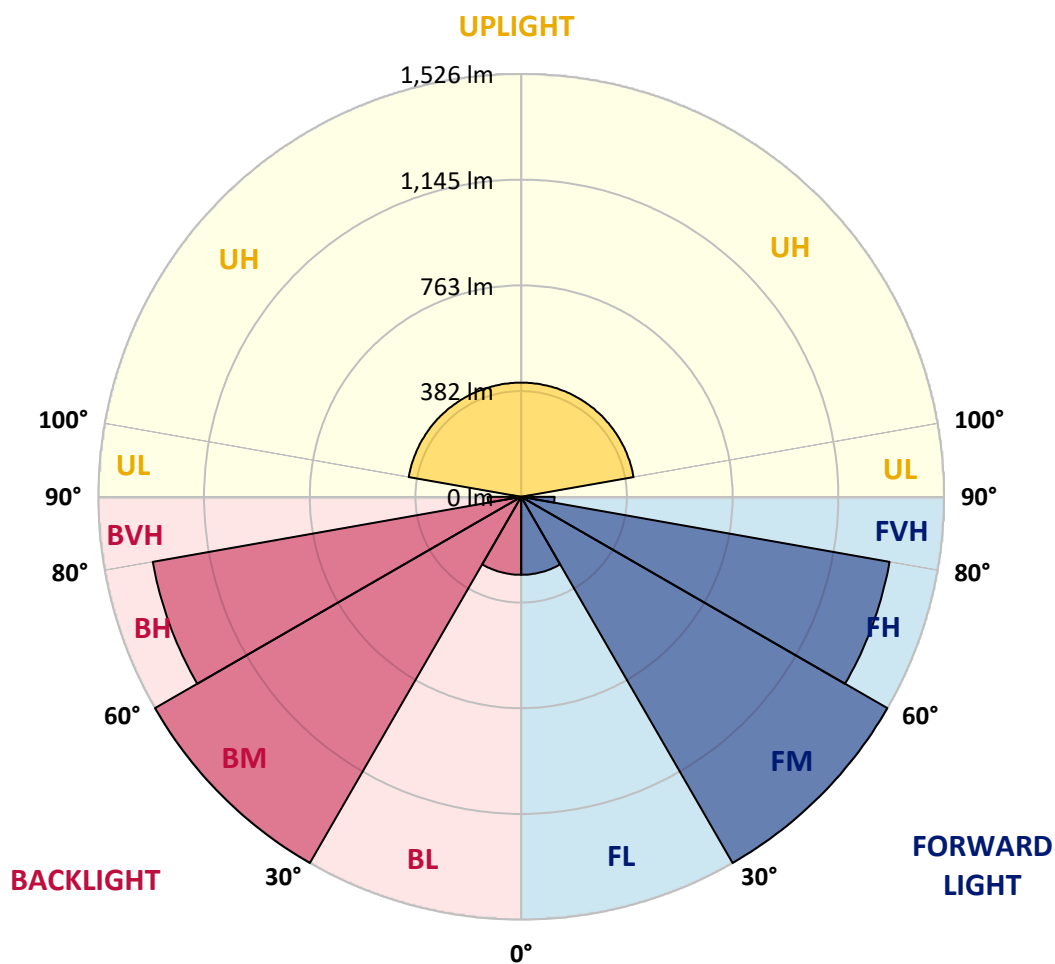
CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |         |
|------|-------------|--------|-----------|-------------------------|--------|---------|
|      |             |        |           | B                       | U      | G       |
| FL   | (0°-30°)    | 281.6  | 3.8       |                         |        |         |
| FM   | (30°-60°)   | 1526.1 | 20.7      |                         |        |         |
| FH   | (60°-80°)   | 1349.9 | 18.3      |                         |        | G1/1800 |
| FVH  | (80°-90°)   | 120.4  | 1.6       |                         |        | G2/225  |
| BL   | (0°-30°)    | 281.6  | 3.8       | B1/500                  |        |         |
| BM   | (30°-60°)   | 1526.1 | 20.7      | B2/2500                 |        |         |
| BH   | (60°-80°)   | 1349.9 | 18.3      | B3/2500                 |        | G1/1800 |
| BVH  | (80°-90°)   | 120.4  | 1.6       |                         |        | G2/225  |
| UL   | (90°-100°)  | 38.3   | 0.5       |                         | U2/50  |         |
| UH   | (100°-180°) | 412.0  | 5.6       |                         | U3/500 |         |

**BUG Rating: B3-U4-G2**

Type V Short



REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  |
| 2.5°   | 515.3  | 515.3  | 515.3  | 515.3  | 515.3  | 513.9  | 515.3  | 513.9  | 513.9  | 513.9  | 513.9  |
| 5°     | 519.2  | 520.6  | 520.6  | 520.6  | 520.6  | 521.9  | 521.9  | 523.2  | 523.2  | 523.2  | 523.2  |
| 7.5°   | 523.2  | 523.2  | 523.2  | 523.2  | 523.2  | 523.2  | 524.5  | 524.5  | 525.9  | 525.9  | 527.2  |
| 10°    | 539.1  | 539.1  | 540.4  | 540.4  | 539.1  | 539.1  | 539.1  | 537.8  | 537.8  | 536.5  | 536.5  |
| 12.5°  | 561.6  | 561.6  | 563.0  | 564.3  | 564.3  | 563.0  | 561.6  | 559.0  | 557.7  | 557.7  | 557.7  |
| 15°    | 578.9  | 580.2  | 582.8  | 585.5  | 586.8  | 586.8  | 588.1  | 588.1  | 588.1  | 586.8  | 585.5  |
| 17.5°  | 612.0  | 612.0  | 613.3  | 614.6  | 614.6  | 615.9  | 618.6  | 621.2  | 626.5  | 627.9  | 623.9  |
| 20°    | 659.7  | 661.0  | 665.0  | 663.6  | 663.6  | 666.3  | 668.9  | 670.2  | 674.2  | 676.9  | 676.9  |
| 22.5°  | 695.4  | 698.1  | 703.4  | 703.4  | 702.0  | 703.4  | 706.0  | 706.0  | 706.0  | 704.7  | 707.3  |
| 25°    | 723.2  | 725.9  | 729.9  | 729.9  | 732.5  | 739.1  | 747.1  | 745.8  | 741.8  | 741.8  | 740.5  |
| 27.5°  | 760.3  | 761.6  | 764.3  | 764.3  | 768.3  | 772.2  | 777.5  | 782.8  | 785.5  | 784.2  | 781.5  |
| 30°    | 806.7  | 809.3  | 812.0  | 808.0  | 814.6  | 818.6  | 821.3  | 821.3  | 831.9  | 837.1  | 827.9  |
| 32.5°  | 841.1  | 846.4  | 851.7  | 855.7  | 868.9  | 875.6  | 871.6  | 875.6  | 880.9  | 886.2  | 886.2  |
| 35°    | 898.1  | 903.4  | 907.4  | 910.0  | 923.2  | 932.5  | 943.1  | 953.7  | 952.4  | 948.4  | 956.4  |
| 37.5°  | 980.2  | 985.5  | 989.5  | 994.8  | 1012.0 | 1018.6 | 1026.6 | 1049.1 | 1057.0 | 1046.4 | 1051.7 |
| 40°    | 1067.6 | 1076.9 | 1090.1 | 1106.0 | 1131.2 | 1139.2 | 1152.4 | 1168.3 | 1182.9 | 1188.2 | 1174.9 |
| 42.5°  | 1143.1 | 1153.7 | 1156.4 | 1181.5 | 1212.0 | 1235.9 | 1254.4 | 1258.4 | 1271.6 | 1283.5 | 1274.3 |
| 45°    | 1223.9 | 1233.2 | 1239.8 | 1261.0 | 1278.2 | 1311.4 | 1341.8 | 1356.4 | 1363.0 | 1361.7 | 1372.3 |
| 47.5°  | 1299.4 | 1310.0 | 1319.3 | 1341.8 | 1363.0 | 1390.8 | 1410.7 | 1445.1 | 1457.1 | 1441.2 | 1458.4 |
| 50°    | 1345.8 | 1359.0 | 1371.0 | 1413.4 | 1450.4 | 1479.6 | 1495.5 | 1524.6 | 1545.8 | 1535.2 | 1539.2 |
| 52.5°  | 1422.6 | 1427.9 | 1437.2 | 1461.0 | 1510.0 | 1577.6 | 1593.5 | 1609.4 | 1635.9 | 1649.1 | 1625.3 |
| 55°    | 1520.6 | 1535.2 | 1548.5 | 1578.9 | 1604.1 | 1654.4 | 1727.3 | 1747.2 | 1745.8 | 1786.9 | 1749.8 |
| 57.5°  | 1541.8 | 1563.0 | 1589.5 | 1645.2 | 1694.2 | 1723.3 | 1769.7 | 1825.3 | 1830.6 | 1833.3 | 1838.6 |
| 60°    | 1544.5 | 1557.7 | 1575.0 | 1621.3 | 1707.4 | 1760.4 | 1786.9 | 1822.7 | 1870.3 | 1835.9 | 1871.7 |
| 61°    | 1549.8 | 1564.4 | 1577.6 | 1614.7 | 1690.2 | 1757.8 | 1792.2 | 1812.1 | 1873.0 | 1838.6 | 1867.7 |
| 62.5°  | 1540.5 | 1557.7 | 1577.6 | 1613.4 | 1663.7 | 1732.6 | 1798.8 | 1798.8 | 1859.7 | 1837.2 | 1853.1 |
| 65°    | 1484.9 | 1500.8 | 1539.2 | 1585.6 | 1646.5 | 1682.2 | 1751.1 | 1794.8 | 1785.6 | 1825.3 | 1785.6 |
| 67.5°  | 1390.8 | 1404.1 | 1437.2 | 1491.5 | 1557.7 | 1608.1 | 1639.9 | 1710.1 | 1700.8 | 1741.9 | 1696.8 |
| 70°    | 1258.4 | 1275.6 | 1316.7 | 1353.7 | 1416.0 | 1469.0 | 1511.4 | 1553.8 | 1572.3 | 1568.3 | 1571.0 |
| 72.5°  | 1099.4 | 1111.3 | 1148.4 | 1189.5 | 1238.5 | 1298.1 | 1336.5 | 1363.0 | 1392.2 | 1390.8 | 1396.1 |
| 75°    | 915.3  | 925.9  | 957.7  | 988.2  | 1035.8 | 1082.2 | 1125.9 | 1153.7 | 1177.6 | 1176.2 | 1171.0 |
| 77.5°  | 706.0  | 717.9  | 753.7  | 780.2  | 802.7  | 854.4  | 887.5  | 906.0  | 925.9  | 925.9  | 928.5  |
| 80°    | 492.8  | 500.7  | 528.5  | 556.3  | 577.5  | 602.7  | 645.1  | 649.1  | 671.6  | 666.3  | 671.6  |
| 82.5°  | 296.7  | 302.0  | 323.2  | 339.1  | 353.7  | 377.5  | 397.4  | 405.3  | 418.6  | 413.3  | 421.2  |
| 85°    | 133.8  | 136.4  | 149.7  | 159.0  | 165.6  | 178.8  | 189.4  | 193.4  | 200.0  | 198.7  | 204.0  |
| 87.5°  | 27.8   | 30.5   | 34.4   | 37.1   | 38.4   | 43.7   | 47.7   | 47.7   | 50.3   | 50.3   | 51.7   |
| 90°    | 36.0   | 36.0   | 36.0   | 36.0   | 35.0   | 34.0   | 31.0   | 29.0   | 27.0   | 26.0   | 26.0   |
| 92.5°  | 40.0   | 39.0   | 39.0   | 38.0   | 36.0   | 34.0   | 32.0   | 29.0   | 27.0   | 27.0   | 27.0   |
| 95°    | 44.0   | 43.0   | 42.0   | 41.0   | 38.0   | 36.0   | 34.0   | 32.0   | 31.0   | 30.0   | 30.0   |
| 97.5°  | 42.0   | 42.0   | 41.0   | 40.0   | 38.0   | 37.0   | 36.0   | 35.0   | 34.0   | 33.0   | 32.0   |
| 100°   | 45.0   | 45.0   | 45.0   | 44.0   | 42.0   | 40.0   | 39.0   | 38.0   | 36.0   | 36.0   | 35.0   |
| 102.5° | 51.0   | 51.0   | 50.0   | 49.0   | 47.0   | 46.0   | 45.0   | 44.0   | 42.0   | 42.0   | 42.0   |
| 105°   | 60.0   | 60.0   | 59.0   | 57.0   | 55.0   | 54.0   | 53.0   | 53.0   | 51.0   | 52.0   | 52.0   |
| 107.5° | 72.0   | 72.0   | 72.0   | 70.0   | 68.0   | 67.0   | 66.0   | 66.0   | 66.0   | 68.0   | 68.0   |

REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 86.0  | 86.0  | 87.0  | 89.0  | 86.0  | 85.0  | 85.0  | 86.0  | 86.0  | 87.0  | 86.0  |
| 112.5° | 101.0 | 102.0 | 104.0 | 108.0 | 106.0 | 107.0 | 107.0 | 110.0 | 108.0 | 107.0 | 103.0 |
| 115°   | 121.0 | 122.0 | 123.0 | 128.0 | 126.0 | 128.0 | 127.0 | 129.0 | 126.0 | 124.0 | 120.0 |
| 117.5° | 140.0 | 141.0 | 141.0 | 144.0 | 141.0 | 141.0 | 140.0 | 141.0 | 138.0 | 136.0 | 135.0 |
| 120°   | 152.0 | 153.0 | 154.0 | 155.0 | 151.0 | 149.0 | 147.0 | 149.0 | 147.0 | 147.0 | 148.0 |
| 122.5° | 161.0 | 162.0 | 163.0 | 164.0 | 159.0 | 154.0 | 153.0 | 155.0 | 156.0 | 158.0 | 158.0 |
| 125°   | 169.0 | 169.0 | 170.0 | 172.0 | 168.0 | 163.0 | 160.0 | 165.0 | 166.0 | 168.0 | 167.0 |
| 127.5° | 177.0 | 177.0 | 179.0 | 181.0 | 177.0 | 171.0 | 170.0 | 176.0 | 177.0 | 178.0 | 175.0 |
| 130°   | 187.0 | 188.0 | 190.0 | 191.0 | 185.0 | 179.0 | 179.0 | 186.0 | 187.0 | 186.0 | 183.0 |
| 132.5° | 198.0 | 199.0 | 200.0 | 201.0 | 193.0 | 186.0 | 187.0 | 193.0 | 195.0 | 195.0 | 191.0 |
| 135°   | 210.0 | 210.0 | 211.0 | 209.0 | 199.0 | 192.0 | 193.0 | 199.0 | 202.0 | 201.0 | 197.0 |
| 137.5° | 221.0 | 219.0 | 217.0 | 213.0 | 203.0 | 197.0 | 198.0 | 205.0 | 207.0 | 208.0 | 203.0 |
| 140°   | 229.0 | 226.0 | 222.0 | 216.0 | 205.0 | 200.0 | 201.0 | 207.0 | 210.0 | 213.0 | 212.0 |
| 142.5° | 235.0 | 231.0 | 225.0 | 218.0 | 206.0 | 201.0 | 202.0 | 208.0 | 212.0 | 218.0 | 218.0 |
| 145°   | 235.0 | 230.0 | 225.0 | 218.0 | 207.0 | 202.0 | 204.0 | 211.0 | 215.0 | 223.0 | 225.0 |
| 147.5° | 230.0 | 227.0 | 223.0 | 219.0 | 210.0 | 207.0 | 209.0 | 216.0 | 220.0 | 229.0 | 233.0 |
| 150°   | 224.0 | 221.0 | 219.0 | 220.0 | 215.0 | 214.0 | 216.0 | 222.0 | 227.0 | 235.0 | 239.0 |
| 152.5° | 216.0 | 214.0 | 216.0 | 221.0 | 220.0 | 220.0 | 224.0 | 230.0 | 234.0 | 241.0 | 241.0 |
| 155°   | 208.0 | 207.0 | 211.0 | 219.0 | 222.0 | 224.0 | 229.0 | 237.0 | 239.0 | 243.0 | 239.0 |
| 157.5° | 203.0 | 203.0 | 207.0 | 216.0 | 220.0 | 224.0 | 229.0 | 234.0 | 232.0 | 235.0 | 230.0 |
| 160°   | 199.0 | 198.0 | 203.0 | 210.0 | 212.0 | 213.0 | 216.0 | 219.0 | 216.0 | 219.0 | 216.0 |
| 162.5° | 185.0 | 184.0 | 188.0 | 193.0 | 194.0 | 193.0 | 196.0 | 198.0 | 195.0 | 198.0 | 196.0 |
| 165°   | 169.0 | 167.0 | 169.0 | 173.0 | 173.0 | 173.0 | 175.0 | 176.0 | 174.0 | 177.0 | 175.0 |
| 167.5° | 154.0 | 152.0 | 153.0 | 156.0 | 156.0 | 155.0 | 157.0 | 159.0 | 157.0 | 159.0 | 158.0 |
| 170°   | 142.0 | 141.0 | 142.0 | 145.0 | 144.0 | 144.0 | 146.0 | 147.0 | 146.0 | 147.0 | 147.0 |
| 172.5° | 137.0 | 135.0 | 136.0 | 139.0 | 139.0 | 138.0 | 140.0 | 141.0 | 140.0 | 141.0 | 140.0 |
| 175°   | 136.0 | 134.0 | 135.0 | 137.0 | 137.0 | 137.0 | 138.0 | 139.0 | 138.0 | 139.0 | 138.0 |
| 177.5° | 137.0 | 136.0 | 136.0 | 139.0 | 138.0 | 138.0 | 139.0 | 140.0 | 139.0 | 139.0 | 138.0 |
| 180°   | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 |

REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  | 503.3  |
| 2.5°   | 513.9  | 515.3  | 513.9  | 513.9  | 513.9  | 515.3  | 513.9  | 515.3  |
| 5°     | 523.2  | 523.2  | 523.2  | 521.9  | 520.6  | 520.6  | 520.6  | 519.2  |
| 7.5°   | 528.5  | 528.5  | 527.2  | 525.9  | 524.5  | 525.9  | 525.9  | 525.9  |
| 10°    | 539.1  | 541.8  | 543.1  | 543.1  | 541.8  | 541.8  | 541.8  | 540.4  |
| 12.5°  | 557.7  | 559.0  | 563.0  | 564.3  | 565.6  | 564.3  | 560.3  | 559.0  |
| 15°    | 582.8  | 582.8  | 584.2  | 586.8  | 586.8  | 581.5  | 577.5  | 576.2  |
| 17.5°  | 618.6  | 617.3  | 614.6  | 614.6  | 615.9  | 613.3  | 609.3  | 609.3  |
| 20°    | 672.9  | 667.6  | 665.0  | 661.0  | 665.0  | 665.0  | 657.0  | 653.0  |
| 22.5°  | 711.3  | 706.0  | 699.4  | 695.4  | 700.7  | 704.7  | 695.4  | 690.1  |
| 25°    | 744.4  | 745.8  | 735.2  | 729.9  | 731.2  | 733.8  | 721.9  | 720.6  |
| 27.5°  | 778.9  | 781.5  | 776.2  | 766.9  | 764.3  | 769.6  | 760.3  | 757.7  |
| 30°    | 821.3  | 819.9  | 822.6  | 810.7  | 805.4  | 809.3  | 808.0  | 801.4  |
| 32.5°  | 876.9  | 870.3  | 872.9  | 862.3  | 851.7  | 851.7  | 843.8  | 835.8  |
| 35°    | 953.7  | 939.1  | 932.5  | 925.9  | 906.0  | 907.4  | 900.7  | 894.1  |
| 37.5°  | 1054.4 | 1031.9 | 1013.3 | 1017.3 | 988.2  | 985.5  | 981.5  | 972.3  |
| 40°    | 1169.6 | 1159.0 | 1137.8 | 1125.9 | 1095.4 | 1080.9 | 1075.6 | 1058.4 |
| 42.5°  | 1255.7 | 1258.4 | 1226.6 | 1205.4 | 1181.5 | 1156.4 | 1153.7 | 1136.5 |
| 45°    | 1348.4 | 1339.2 | 1310.0 | 1275.6 | 1265.0 | 1234.5 | 1230.6 | 1213.3 |
| 47.5°  | 1441.2 | 1409.4 | 1392.2 | 1356.4 | 1339.2 | 1300.8 | 1303.4 | 1287.5 |
| 50°    | 1528.6 | 1491.5 | 1475.6 | 1433.2 | 1406.7 | 1368.3 | 1359.0 | 1332.6 |
| 52.5°  | 1621.3 | 1586.9 | 1561.7 | 1507.4 | 1469.0 | 1439.8 | 1423.9 | 1413.4 |
| 55°    | 1745.8 | 1711.4 | 1654.4 | 1604.1 | 1572.3 | 1524.6 | 1519.3 | 1500.8 |
| 57.5°  | 1804.1 | 1778.9 | 1716.7 | 1680.9 | 1624.0 | 1575.0 | 1559.1 | 1522.0 |
| 60°    | 1810.7 | 1800.1 | 1733.9 | 1699.5 | 1616.0 | 1576.3 | 1556.4 | 1533.9 |
| 61°    | 1809.4 | 1796.2 | 1732.6 | 1690.2 | 1610.7 | 1571.0 | 1555.1 | 1535.2 |
| 62.5°  | 1804.1 | 1788.2 | 1718.0 | 1674.3 | 1600.1 | 1561.7 | 1548.5 | 1519.3 |
| 65°    | 1786.9 | 1743.2 | 1682.2 | 1642.5 | 1561.7 | 1527.3 | 1495.5 | 1466.3 |
| 67.5°  | 1711.4 | 1629.3 | 1604.1 | 1553.8 | 1471.6 | 1433.2 | 1404.1 | 1378.9 |
| 70°    | 1549.8 | 1495.5 | 1469.0 | 1406.7 | 1340.5 | 1308.7 | 1275.6 | 1243.8 |
| 72.5°  | 1360.4 | 1324.6 | 1302.1 | 1226.6 | 1177.6 | 1145.8 | 1115.3 | 1084.9 |
| 75°    | 1148.4 | 1121.9 | 1080.9 | 1023.9 | 980.2  | 948.4  | 920.6  | 906.0  |
| 77.5°  | 902.1  | 884.8  | 853.0  | 796.1  | 772.2  | 744.4  | 716.6  | 694.1  |
| 80°    | 649.1  | 635.8  | 610.6  | 569.6  | 549.7  | 521.9  | 502.0  | 483.5  |
| 82.5°  | 404.0  | 393.4  | 378.8  | 348.4  | 340.4  | 323.2  | 304.7  | 291.4  |
| 85°    | 193.4  | 186.8  | 181.5  | 161.6  | 160.3  | 145.7  | 139.1  | 131.1  |
| 87.5°  | 50.3   | 49.0   | 46.4   | 39.7   | 38.4   | 34.4   | 31.8   | 27.8   |
| 90°    | 28.0   | 30.0   | 32.0   | 33.0   | 34.0   | 34.0   | 34.0   | 34.0   |
| 92.5°  | 28.0   | 30.0   | 32.0   | 33.0   | 35.0   | 36.0   | 36.0   | 36.0   |
| 95°    | 30.0   | 32.0   | 34.0   | 35.0   | 37.0   | 38.0   | 39.0   | 38.0   |
| 97.5°  | 33.0   | 34.0   | 34.0   | 35.0   | 36.0   | 36.0   | 36.0   | 36.0   |
| 100°   | 36.0   | 37.0   | 38.0   | 38.0   | 38.0   | 38.0   | 37.0   | 37.0   |
| 102.5° | 43.0   | 44.0   | 44.0   | 42.0   | 42.0   | 41.0   | 41.0   | 41.0   |
| 105°   | 54.0   | 54.0   | 53.0   | 51.0   | 49.0   | 48.0   | 48.0   | 49.0   |
| 107.5° | 68.0   | 68.0   | 66.0   | 63.0   | 60.0   | 59.0   | 59.0   | 60.0   |

REPORT NUMBER: P198469

CATALOG NUMBER: TT-C4-LED-E1-WQ-CG-UPL

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 84.0  | 83.0  | 84.0  | 81.0  | 78.0  | 76.0  | 74.0  | 75.0  |
| 112.5° | 102.0 | 102.0 | 105.0 | 103.0 | 100.0 | 98.0  | 95.0  | 94.0  |
| 115°   | 121.0 | 123.0 | 125.0 | 124.0 | 123.0 | 121.0 | 116.0 | 113.0 |
| 117.5° | 138.0 | 140.0 | 141.0 | 139.0 | 139.0 | 139.0 | 133.0 | 129.0 |
| 120°   | 150.0 | 151.0 | 153.0 | 148.0 | 148.0 | 148.0 | 145.0 | 142.0 |
| 122.5° | 159.0 | 160.0 | 162.0 | 156.0 | 155.0 | 156.0 | 153.0 | 150.0 |
| 125°   | 167.0 | 167.0 | 168.0 | 164.0 | 163.0 | 164.0 | 160.0 | 158.0 |
| 127.5° | 176.0 | 175.0 | 175.0 | 173.0 | 173.0 | 173.0 | 166.0 | 163.0 |
| 130°   | 183.0 | 182.0 | 183.0 | 181.0 | 184.0 | 181.0 | 171.0 | 169.0 |
| 132.5° | 190.0 | 189.0 | 192.0 | 189.0 | 192.0 | 190.0 | 179.0 | 176.0 |
| 135°   | 196.0 | 197.0 | 201.0 | 199.0 | 199.0 | 195.0 | 185.0 | 184.0 |
| 137.5° | 203.0 | 205.0 | 210.0 | 207.0 | 204.0 | 198.0 | 191.0 | 190.0 |
| 140°   | 212.0 | 214.0 | 217.0 | 214.0 | 209.0 | 202.0 | 195.0 | 195.0 |
| 142.5° | 220.0 | 222.0 | 223.0 | 217.0 | 211.0 | 204.0 | 198.0 | 198.0 |
| 145°   | 230.0 | 230.0 | 227.0 | 217.0 | 211.0 | 205.0 | 201.0 | 202.0 |
| 147.5° | 239.0 | 236.0 | 229.0 | 218.0 | 212.0 | 207.0 | 204.0 | 206.0 |
| 150°   | 242.0 | 240.0 | 232.0 | 220.0 | 214.0 | 211.0 | 210.0 | 211.0 |
| 152.5° | 242.0 | 241.0 | 235.0 | 223.0 | 219.0 | 217.0 | 215.0 | 216.0 |
| 155°   | 238.0 | 237.0 | 234.0 | 227.0 | 224.0 | 223.0 | 220.0 | 219.0 |
| 157.5° | 228.0 | 229.0 | 229.0 | 226.0 | 226.0 | 225.0 | 222.0 | 219.0 |
| 160°   | 215.0 | 217.0 | 219.0 | 219.0 | 221.0 | 222.0 | 218.0 | 215.0 |
| 162.5° | 196.0 | 199.0 | 200.0 | 201.0 | 204.0 | 208.0 | 207.0 | 207.0 |
| 165°   | 176.0 | 179.0 | 181.0 | 181.0 | 185.0 | 189.0 | 190.0 | 192.0 |
| 167.5° | 160.0 | 163.0 | 165.0 | 164.0 | 168.0 | 171.0 | 172.0 | 174.0 |
| 170°   | 148.0 | 150.0 | 152.0 | 152.0 | 155.0 | 158.0 | 159.0 | 160.0 |
| 172.5° | 141.0 | 144.0 | 145.0 | 144.0 | 146.0 | 149.0 | 149.0 | 151.0 |
| 175°   | 138.0 | 140.0 | 141.0 | 140.0 | 141.0 | 143.0 | 143.0 | 144.0 |
| 177.5° | 138.0 | 140.0 | 140.0 | 138.0 | 140.0 | 141.0 | 141.0 | 141.0 |
| 180°   | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 |

(END OF REPORT)