

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: P197672

Luminaire Tested: **TT-C5-LED-E1-MQ-CG-LWR-LW-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197672  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115378)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C5-LED-E1-MQ-CG-LWR-LW-7060  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR  
Light Source: (160) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7483.5 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 77  
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

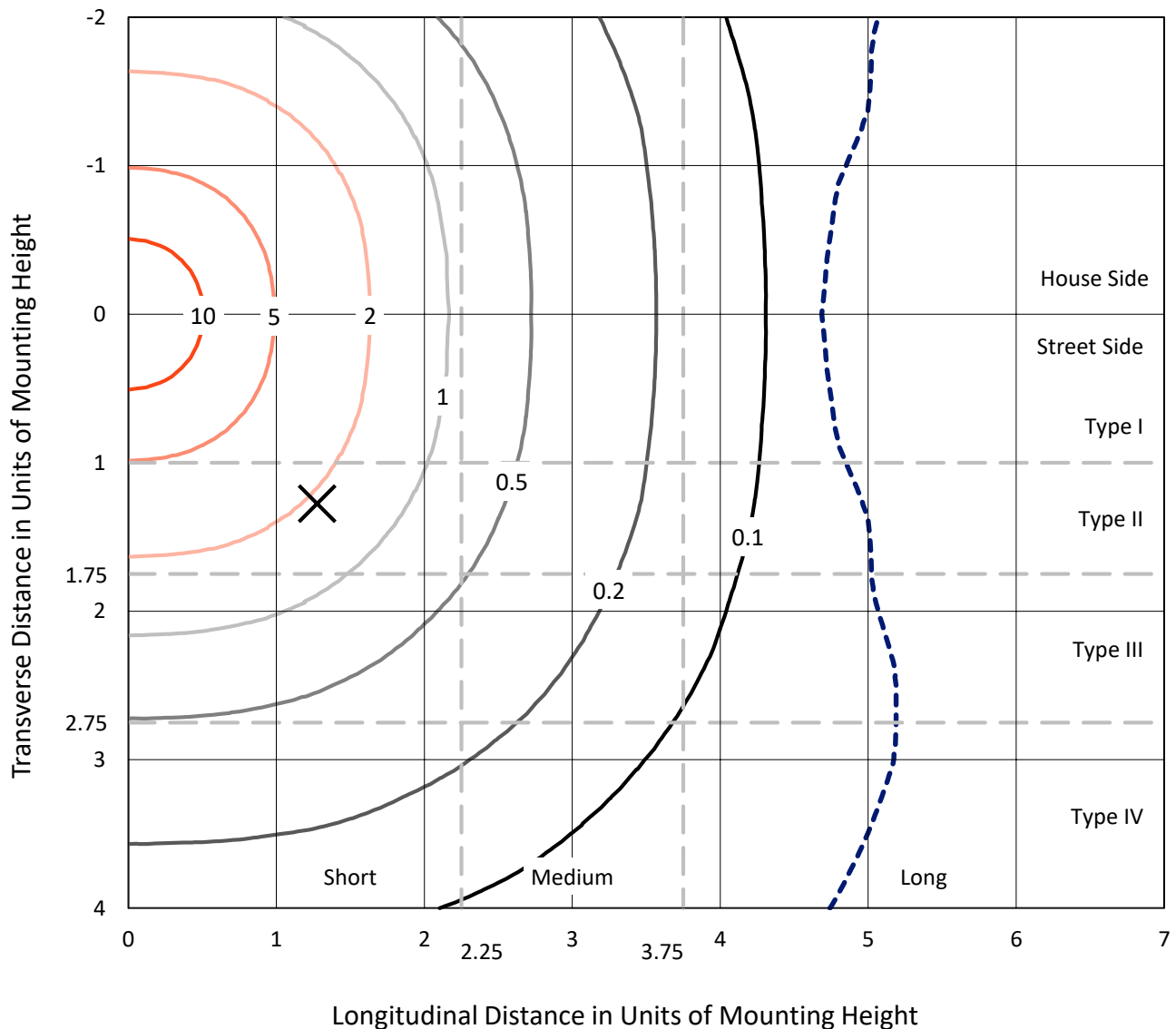


REPORT NUMBER: P197672

CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

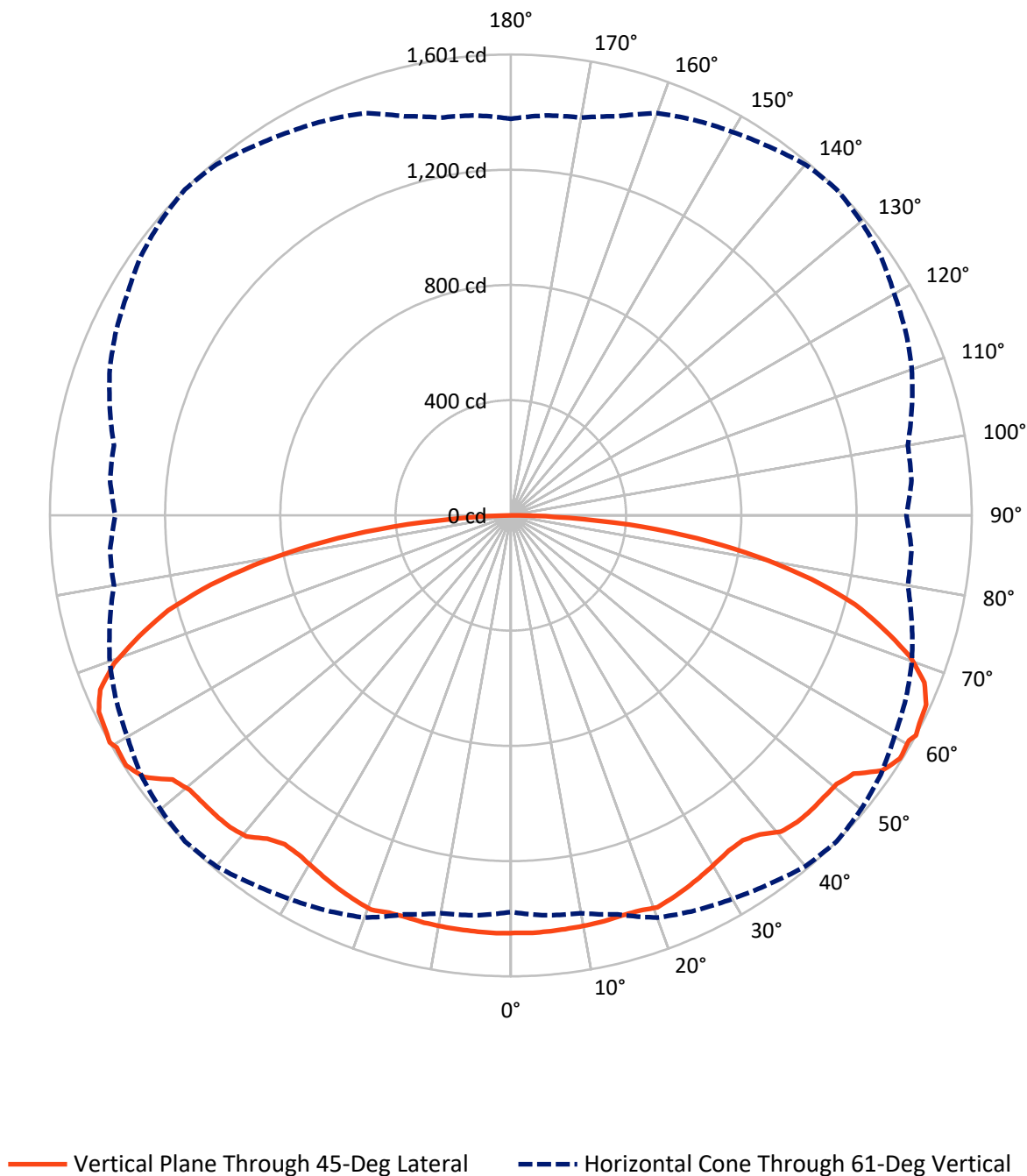


Based on 10 foot mounting height. Maximum calculated value = 14.5 fc  
Type V - Short - Semi-Cutoff

REPORT NUMBER: P197672

CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

## Luminous Intensity Polar Plot



REPORT NUMBER: P197672

CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3741.8   | 0.0    | 3741.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 3741.8   | 0.0    | 3741.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 7483.5   | 0.0    | 7483.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 138.3  | 1.8       |
| 10°-20°   | 408.9  | 5.5       |
| 20°-30°   | 658.0  | 8.8       |
| 30°-40°   | 871.6  | 11.6      |
| 40°-50°   | 1100.7 | 14.7      |
| 50°-60°   | 1318.9 | 17.6      |
| 60°-70°   | 1442.1 | 19.3      |
| 70°-80°   | 1154.4 | 15.4      |
| 80°-90°   | 390.6  | 5.2       |
| 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°    | 7483.5 | 100.0     |
| 0°-180°   | 7483.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P197672

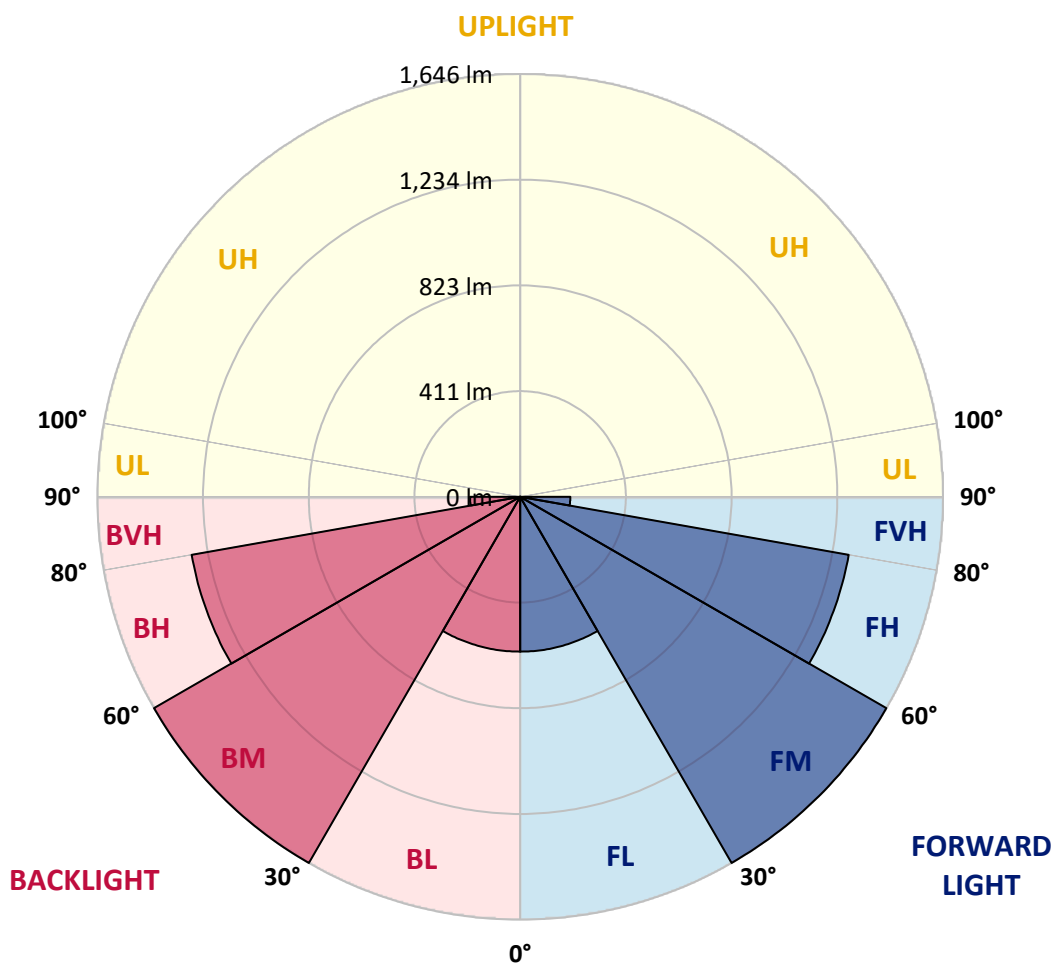
CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 602.6  | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 1645.6 | 22.0      |                         |      |         |
| FH   | (60°-80°)   | 1298.3 | 17.3      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 195.3  | 2.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 602.6  | 8.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1645.6 | 22.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1298.3 | 17.3      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 195.3  | 2.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short



REPORT NUMBER: P197672

CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 |
| 2.5°  | 1451.2 | 1450.0 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 |
| 5°    | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 |
| 7.5°  | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1450.0 | 1448.6 | 1450.0 |
| 10°   | 1445.7 | 1445.7 | 1445.7 | 1445.7 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 |
| 12.5° | 1442.9 | 1442.9 | 1442.9 | 1442.9 | 1444.3 | 1444.3 | 1444.3 | 1444.3 | 1445.7 | 1445.7 | 1444.3 |
| 15°   | 1440.1 | 1438.7 | 1438.7 | 1440.1 | 1440.1 | 1441.5 | 1441.5 | 1441.5 | 1442.9 | 1441.5 | 1441.5 |
| 17.5° | 1437.3 | 1435.9 | 1437.3 | 1438.7 | 1438.7 | 1440.1 | 1441.5 | 1441.5 | 1442.9 | 1442.9 | 1442.9 |
| 20°   | 1441.5 | 1440.1 | 1441.5 | 1442.9 | 1444.3 | 1447.2 | 1448.6 | 1450.0 | 1451.2 | 1452.6 | 1452.6 |
| 22.5° | 1433.1 | 1431.7 | 1433.1 | 1433.1 | 1434.5 | 1435.9 | 1438.7 | 1440.1 | 1441.5 | 1441.5 | 1441.5 |
| 25°   | 1420.6 | 1420.6 | 1422.0 | 1422.0 | 1423.4 | 1424.8 | 1426.2 | 1427.6 | 1427.6 | 1429.0 | 1427.6 |
| 27.5° | 1406.7 | 1406.7 | 1408.1 | 1408.1 | 1410.9 | 1410.9 | 1412.3 | 1413.6 | 1415.0 | 1415.0 | 1415.0 |
| 30°   | 1390.0 | 1390.0 | 1391.4 | 1392.8 | 1395.4 | 1396.8 | 1398.3 | 1399.7 | 1401.1 | 1401.1 | 1401.1 |
| 32.5° | 1374.7 | 1373.3 | 1374.7 | 1377.3 | 1381.5 | 1384.4 | 1387.2 | 1388.6 | 1388.6 | 1388.6 | 1390.0 |
| 35°   | 1362.0 | 1363.4 | 1366.2 | 1369.1 | 1374.7 | 1377.3 | 1380.1 | 1384.4 | 1385.8 | 1385.8 | 1385.8 |
| 37.5° | 1364.8 | 1366.2 | 1370.5 | 1375.9 | 1383.0 | 1391.4 | 1396.8 | 1402.5 | 1406.7 | 1405.3 | 1403.9 |
| 40°   | 1383.0 | 1385.8 | 1392.8 | 1401.1 | 1412.3 | 1423.4 | 1431.7 | 1438.7 | 1442.9 | 1444.3 | 1442.9 |
| 42.5° | 1385.8 | 1388.6 | 1394.0 | 1406.7 | 1419.2 | 1431.7 | 1442.9 | 1450.0 | 1455.4 | 1456.8 | 1455.4 |
| 45°   | 1384.4 | 1384.4 | 1392.8 | 1406.7 | 1419.2 | 1431.7 | 1445.7 | 1455.4 | 1461.0 | 1461.0 | 1461.0 |
| 47.5° | 1374.7 | 1378.7 | 1384.4 | 1398.3 | 1415.0 | 1427.6 | 1441.5 | 1451.2 | 1458.2 | 1462.5 | 1458.2 |
| 50°   | 1374.7 | 1374.7 | 1384.4 | 1394.0 | 1409.5 | 1431.7 | 1451.2 | 1461.0 | 1468.1 | 1466.7 | 1468.1 |
| 52.5° | 1371.9 | 1380.1 | 1385.8 | 1399.7 | 1427.6 | 1450.0 | 1465.3 | 1479.2 | 1488.8 | 1490.2 | 1487.6 |
| 55°   | 1396.8 | 1398.3 | 1410.9 | 1437.3 | 1463.9 | 1488.8 | 1516.8 | 1537.7 | 1554.4 | 1564.3 | 1550.2 |
| 57.5° | 1416.4 | 1409.5 | 1434.5 | 1456.8 | 1487.6 | 1525.2 | 1566.9 | 1583.6 | 1596.3 | 1593.5 | 1597.7 |
| 60°   | 1390.0 | 1399.7 | 1417.8 | 1441.5 | 1490.2 | 1527.9 | 1550.2 | 1568.3 | 1583.6 | 1587.9 | 1582.4 |
| 61°   | 1377.3 | 1394.0 | 1402.5 | 1434.5 | 1486.2 | 1514.0 | 1537.7 | 1562.9 | 1590.7 | 1600.5 | 1587.9 |
| 62.5° | 1356.4 | 1383.0 | 1380.1 | 1431.7 | 1463.9 | 1495.9 | 1540.5 | 1569.7 | 1589.3 | 1592.1 | 1589.3 |
| 65°   | 1357.8 | 1353.8 | 1385.8 | 1423.4 | 1455.4 | 1512.6 | 1550.2 | 1568.3 | 1579.6 | 1585.0 | 1582.4 |
| 67.5° | 1313.3 | 1299.2 | 1338.3 | 1364.8 | 1419.2 | 1463.9 | 1500.1 | 1526.5 | 1543.4 | 1548.8 | 1542.0 |
| 70°   | 1210.1 | 1219.9 | 1247.7 | 1288.2 | 1332.8 | 1387.2 | 1420.6 | 1455.4 | 1469.5 | 1470.7 | 1470.7 |
| 72.5° | 1111.0 | 1116.7 | 1144.6 | 1182.3 | 1233.8 | 1281.1 | 1314.7 | 1342.5 | 1355.2 | 1356.4 | 1359.2 |
| 75°   | 980.0  | 985.6  | 1017.6 | 1052.5 | 1104.2 | 1144.6 | 1168.2 | 1201.8 | 1219.9 | 1235.2 | 1222.7 |
| 77.5° | 828.0  | 837.9  | 862.9  | 900.7  | 948.0  | 970.3  | 1012.2 | 1051.2 | 1063.7 | 1068.0 | 1063.7 |
| 80°   | 656.6  | 669.2  | 691.6  | 741.7  | 762.6  | 798.9  | 839.3  | 856.0  | 867.1  | 869.9  | 871.3  |
| 82.5° | 472.6  | 482.4  | 506.0  | 540.8  | 564.6  | 594.0  | 621.7  | 642.7  | 655.2  | 652.5  | 651.1  |
| 85°   | 278.8  | 281.6  | 306.7  | 330.5  | 348.6  | 366.7  | 388.9  | 404.4  | 407.2  | 412.6  | 411.2  |
| 87.5° | 83.7   | 85.1   | 96.2   | 108.7  | 117.1  | 125.4  | 139.5  | 157.6  | 161.6  | 150.6  | 152.0  |
| 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: P197672

CATALOG NUMBER: TT-C5-LED-E1-MQ-CG-LWR-LW-7060

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 |
| 2.5°  | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1450.0 | 1451.2 |
| 5°    | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 | 1450.0 |
| 7.5°  | 1450.0 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 | 1448.6 |
| 10°   | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1445.7 | 1445.7 | 1445.7 | 1445.7 |
| 12.5° | 1444.3 | 1444.3 | 1444.3 | 1444.3 | 1442.9 | 1442.9 | 1442.9 | 1442.9 |
| 15°   | 1441.5 | 1441.5 | 1441.5 | 1441.5 | 1440.1 | 1440.1 | 1440.1 | 1440.1 |
| 17.5° | 1442.9 | 1441.5 | 1440.1 | 1440.1 | 1438.7 | 1437.3 | 1437.3 | 1437.3 |
| 20°   | 1451.2 | 1450.0 | 1447.2 | 1444.3 | 1442.9 | 1441.5 | 1441.5 | 1441.5 |
| 22.5° | 1440.1 | 1438.7 | 1435.9 | 1434.5 | 1434.5 | 1433.1 | 1431.7 | 1431.7 |
| 25°   | 1427.6 | 1424.8 | 1424.8 | 1423.4 | 1423.4 | 1420.6 | 1420.6 | 1419.2 |
| 27.5° | 1413.6 | 1412.3 | 1410.9 | 1409.5 | 1409.5 | 1408.1 | 1406.7 | 1405.3 |
| 30°   | 1401.1 | 1398.3 | 1395.4 | 1394.0 | 1392.8 | 1391.4 | 1391.4 | 1391.4 |
| 32.5° | 1388.6 | 1385.8 | 1384.4 | 1380.1 | 1377.3 | 1375.9 | 1374.7 | 1374.7 |
| 35°   | 1384.4 | 1380.1 | 1377.3 | 1373.3 | 1369.1 | 1366.2 | 1364.8 | 1362.0 |
| 37.5° | 1401.1 | 1395.4 | 1391.4 | 1384.4 | 1374.7 | 1370.5 | 1366.2 | 1364.8 |
| 40°   | 1437.3 | 1431.7 | 1423.4 | 1412.3 | 1401.1 | 1392.8 | 1385.8 | 1383.0 |
| 42.5° | 1450.0 | 1442.9 | 1431.7 | 1420.6 | 1406.7 | 1394.0 | 1388.6 | 1385.8 |
| 45°   | 1454.0 | 1447.2 | 1431.7 | 1417.8 | 1405.3 | 1394.0 | 1385.8 | 1383.0 |
| 47.5° | 1450.0 | 1440.1 | 1426.2 | 1415.0 | 1396.8 | 1383.0 | 1377.3 | 1373.3 |
| 50°   | 1459.6 | 1451.2 | 1433.1 | 1408.1 | 1392.8 | 1384.4 | 1374.7 | 1373.3 |
| 52.5° | 1479.2 | 1463.9 | 1447.2 | 1429.0 | 1399.7 | 1383.0 | 1377.3 | 1370.5 |
| 55°   | 1537.7 | 1516.8 | 1487.6 | 1458.2 | 1440.1 | 1413.6 | 1396.8 | 1396.8 |
| 57.5° | 1582.4 | 1565.5 | 1527.9 | 1488.8 | 1455.4 | 1435.9 | 1410.9 | 1412.3 |
| 60°   | 1569.7 | 1547.4 | 1529.3 | 1490.2 | 1442.9 | 1416.4 | 1406.7 | 1388.6 |
| 61°   | 1568.3 | 1537.7 | 1512.6 | 1482.0 | 1441.5 | 1399.7 | 1396.8 | 1373.3 |
| 62.5° | 1571.1 | 1543.4 | 1495.9 | 1463.9 | 1433.1 | 1378.7 | 1377.3 | 1355.2 |
| 65°   | 1568.3 | 1542.0 | 1518.2 | 1458.2 | 1416.4 | 1394.0 | 1346.7 | 1364.8 |
| 67.5° | 1525.2 | 1501.5 | 1458.2 | 1424.8 | 1360.6 | 1332.8 | 1306.3 | 1306.3 |
| 70°   | 1456.8 | 1422.0 | 1380.1 | 1338.3 | 1295.2 | 1247.7 | 1224.0 | 1210.1 |
| 72.5° | 1342.5 | 1313.3 | 1279.9 | 1235.2 | 1182.3 | 1139.0 | 1116.7 | 1107.0 |
| 75°   | 1199.0 | 1166.8 | 1137.6 | 1104.2 | 1048.4 | 1012.2 | 988.5  | 981.4  |
| 77.5° | 1048.4 | 1020.5 | 968.9  | 936.9  | 899.3  | 857.4  | 836.5  | 828.0  |
| 80°   | 856.0  | 840.7  | 804.5  | 752.8  | 734.7  | 683.1  | 669.2  | 656.6  |
| 82.5° | 642.7  | 626.0  | 592.5  | 556.3  | 534.0  | 504.6  | 479.6  | 476.8  |
| 85°   | 404.4  | 393.1  | 372.2  | 345.8  | 317.8  | 301.1  | 278.8  | 284.4  |
| 87.5° | 150.6  | 143.5  | 131.0  | 114.3  | 101.8  | 90.6   | 79.5   | 83.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)