

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: P198245

Luminaire Tested: **TT-C1-LED-E1-DL-MS/DIM-UPL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198245  
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C1-LED-E1-DL-MS/DIM-UPL  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
DRIVE LANE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR  
Light Source: (160) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3888.3 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U4 - G2

Input Watts (W): 50.9  
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: 25 FT



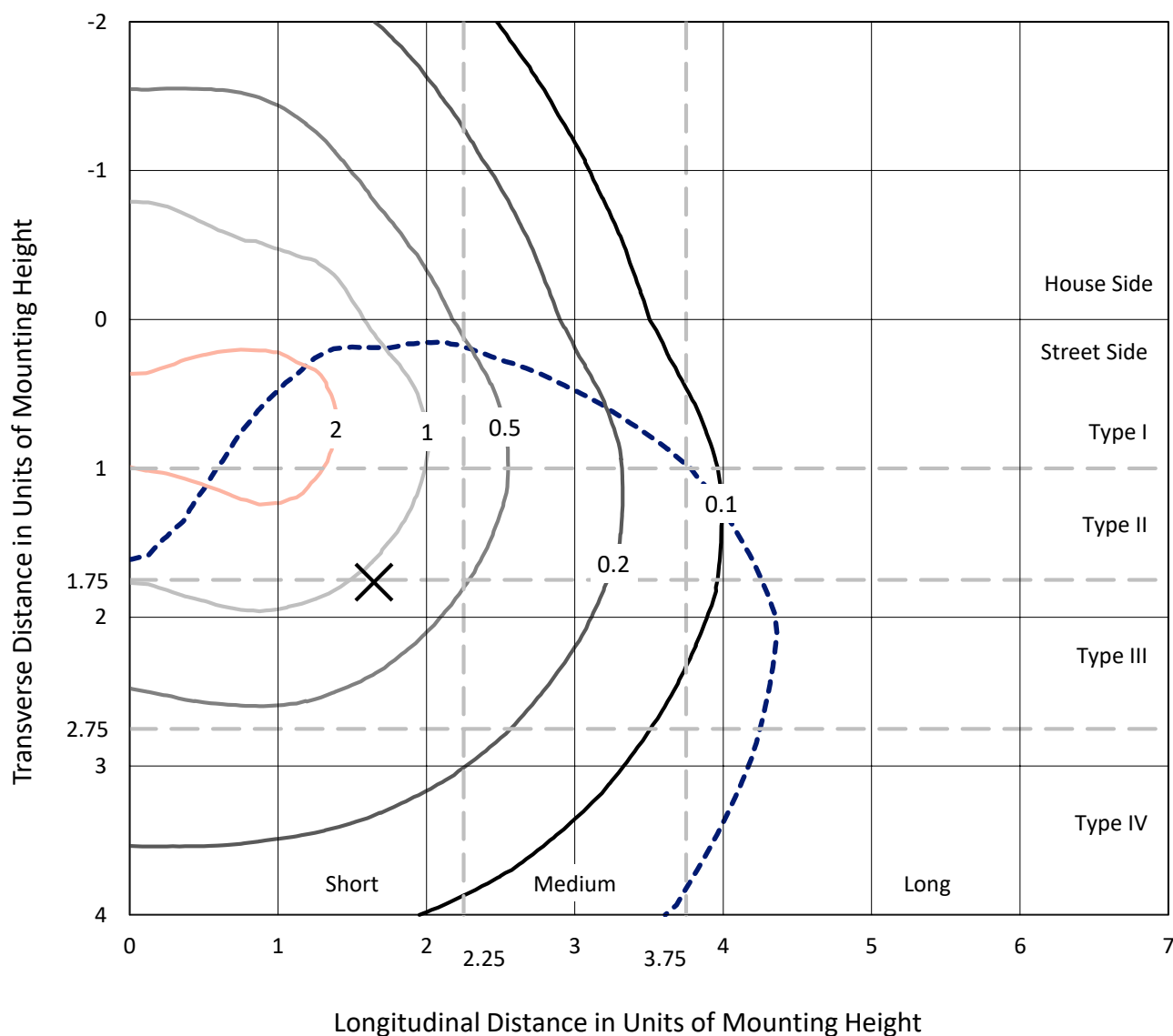
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

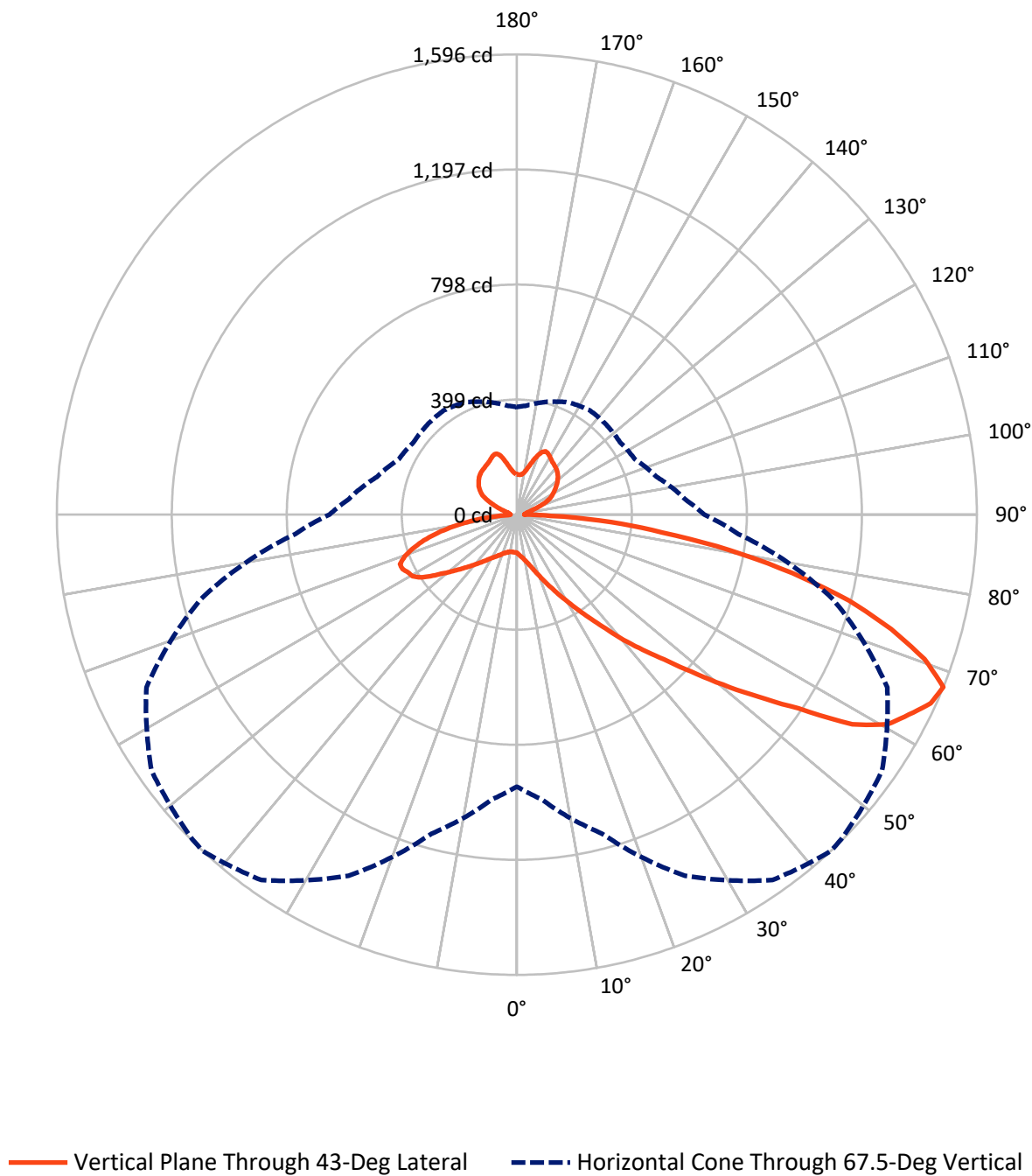


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc  
Type IV - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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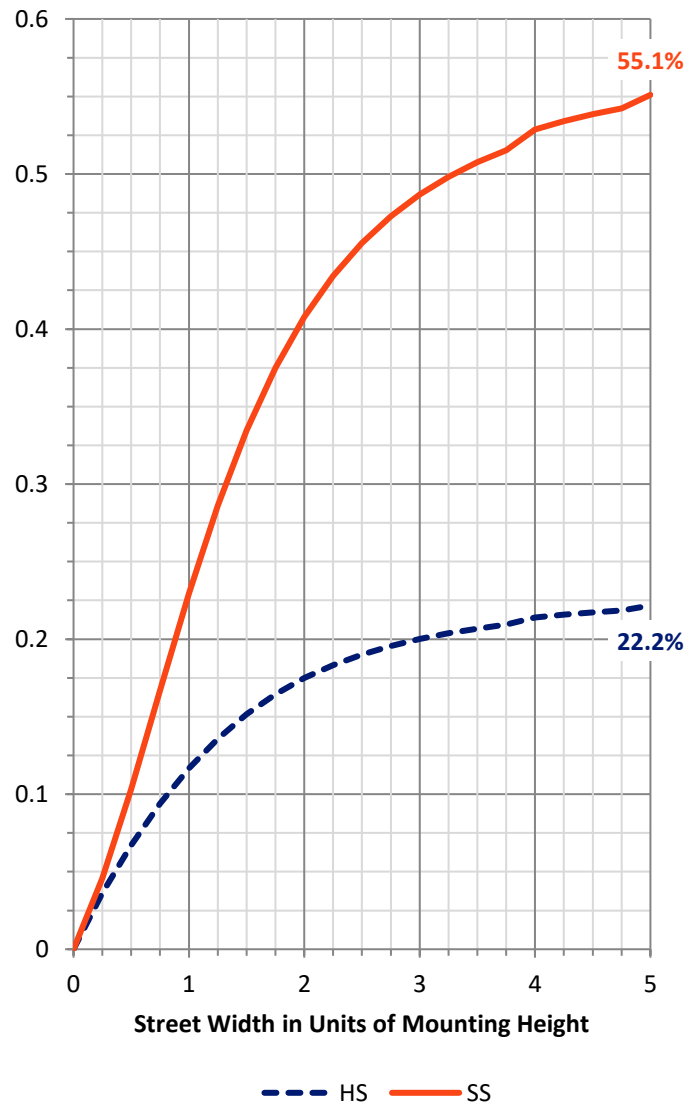
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 882.4    | 387.3  | 1269.8 |
|                    | % Fixture | 22.7     | 10.0   | 32.7   |
| <b>Street Side</b> | Lumens    | 2206.0   | 412.6  | 2618.6 |
|                    | % Fixture | 56.7     | 10.6   | 67.3   |
| <b>Total</b>       | Lumens    | 3088.4   | 799.9  | 3888.3 |
|                    | % Fixture | 79.4     | 20.6   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 13.4   | 0.3       |
| 10°-20°   | 46.7   | 1.2       |
| 20°-30°   | 101.2  | 2.6       |
| 30°-40°   | 195.5  | 5.0       |
| 40°-50°   | 358.9  | 9.2       |
| 50°-60°   | 619.9  | 15.9      |
| 60°-70°   | 838.3  | 21.6      |
| 70°-80°   | 702.0  | 18.1      |
| 80°-90°   | 212.4  | 5.5       |
| 90°-100°  | 36.3   | 0.9       |
| 100°-110° | 55.2   | 1.4       |
| 110°-120° | 110.8  | 2.9       |
| 120°-130° | 144.2  | 3.7       |
| 130°-140° | 148.0  | 3.8       |
| 140°-150° | 133.4  | 3.4       |
| 150°-160° | 102.6  | 2.6       |
| 160°-170° | 55.1   | 1.4       |
| 170°-180° | 14.3   | 0.4       |
| 0°-90°    | 3088.4 | 79.4      |
| 0°-180°   | 3888.3 | 100.0     |

**Coefficient of Utilization**



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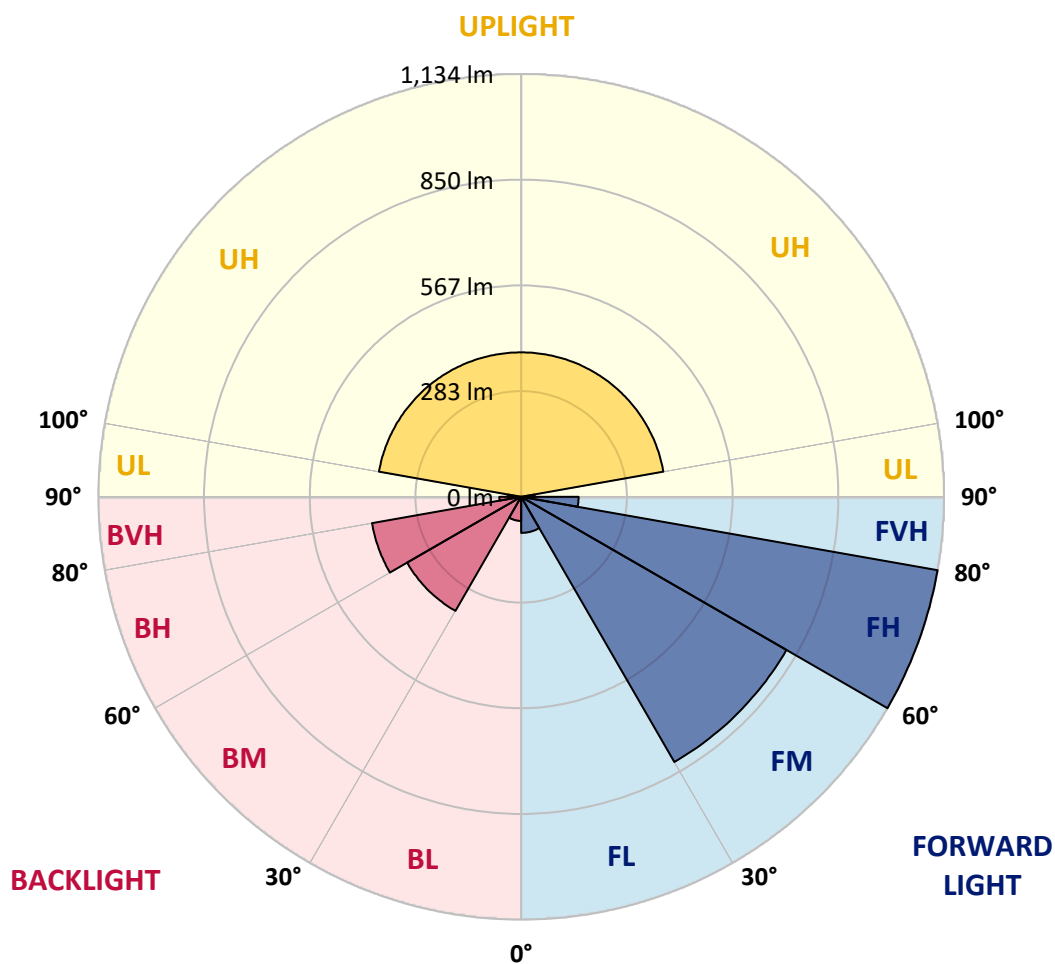
CATALOG NUMBER: TT-C1-LED-E1-DL-MS/DIM-UPL

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |         |
|------|-------------|--------|-----------|-------------------------|--------|---------|
|      |             |        |           | B                       | U      | G       |
| FL   | (0°-30°)    | 96.8   | 2.5       |                         |        |         |
| FM   | (30°-60°)   | 821.2  | 21.1      |                         |        |         |
| FH   | (60°-80°)   | 1134.0 | 29.2      |                         |        | G1/1800 |
| FVH  | (80°-90°)   | 154.0  | 4.0       |                         |        | G2/225  |
| BL   | (0°-30°)    | 64.6   | 1.7       | B0/110                  |        |         |
| BM   | (30°-60°)   | 353.1  | 9.1       | B1/1000                 |        |         |
| BH   | (60°-80°)   | 406.3  | 10.5      | B1/500                  |        | G1/500  |
| BVH  | (80°-90°)   | 58.4   | 1.5       |                         |        | G1/100  |
| UL   | (90°-100°)  | 36.3   | 0.9       |                         | U2/50  |         |
| UH   | (100°-180°) | 387.3  | 10.0      |                         | U3/500 |         |

**BUG Rating: B1-U4-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 43°    | 45°    | 55°    | 65°    | 75°    | 85°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°     | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8  | 132.8 |
| 2.5°   | 140.4  | 140.4  | 139.9  | 139.9  | 139.3  | 138.7  | 138.1  | 138.1  | 136.9  | 136.3  | 135.7 |
| 5°     | 148.1  | 148.1  | 148.1  | 146.9  | 145.7  | 145.1  | 145.1  | 143.4  | 141.6  | 139.9  | 138.1 |
| 7.5°   | 157.5  | 156.9  | 156.9  | 155.7  | 154.0  | 152.2  | 151.6  | 150.4  | 147.5  | 145.1  | 141.6 |
| 10°    | 168.1  | 168.1  | 168.1  | 165.7  | 163.9  | 162.2  | 161.0  | 158.7  | 155.1  | 151.0  | 147.5 |
| 12.5°  | 181.0  | 181.0  | 181.6  | 178.6  | 176.9  | 173.4  | 172.8  | 169.2  | 164.5  | 158.7  | 153.4 |
| 15°    | 195.7  | 198.0  | 196.3  | 196.3  | 190.4  | 188.6  | 187.5  | 183.3  | 176.9  | 169.2  | 162.2 |
| 17.5°  | 216.8  | 216.2  | 213.9  | 214.5  | 210.4  | 207.4  | 204.5  | 197.4  | 190.4  | 179.8  | 170.4 |
| 20°    | 240.9  | 239.8  | 236.8  | 235.6  | 233.3  | 228.0  | 226.8  | 217.4  | 206.3  | 195.1  | 182.8 |
| 22.5°  | 264.4  | 265.0  | 263.8  | 261.5  | 259.1  | 255.0  | 252.7  | 242.7  | 226.8  | 212.1  | 193.9 |
| 25°    | 287.9  | 290.3  | 290.3  | 292.1  | 287.9  | 282.7  | 280.9  | 269.1  | 251.5  | 229.2  | 209.8 |
| 27.5°  | 317.3  | 317.9  | 319.7  | 322.0  | 320.8  | 316.1  | 312.6  | 299.7  | 277.9  | 253.3  | 227.4 |
| 30°    | 346.7  | 349.1  | 350.2  | 354.9  | 356.1  | 352.6  | 349.1  | 334.4  | 312.0  | 279.7  | 246.8 |
| 32.5°  | 378.4  | 382.0  | 384.3  | 390.8  | 398.4  | 396.1  | 394.9  | 377.8  | 351.4  | 313.8  | 273.2 |
| 35°    | 414.3  | 414.9  | 422.5  | 437.2  | 443.7  | 444.8  | 441.9  | 430.1  | 397.8  | 353.2  | 302.6 |
| 37.5°  | 448.4  | 451.3  | 464.2  | 483.0  | 494.2  | 501.8  | 503.0  | 491.8  | 456.0  | 399.6  | 334.9 |
| 40°    | 486.0  | 487.7  | 508.9  | 528.9  | 558.8  | 571.2  | 568.2  | 556.5  | 517.7  | 453.1  | 373.1 |
| 42.5°  | 524.8  | 530.6  | 550.6  | 583.5  | 620.5  | 641.1  | 646.4  | 632.3  | 593.5  | 516.5  | 422.5 |
| 45°    | 562.4  | 571.8  | 593.5  | 636.4  | 691.6  | 716.3  | 721.6  | 728.7  | 692.2  | 595.9  | 488.3 |
| 47.5°  | 603.5  | 608.8  | 641.7  | 698.7  | 759.2  | 812.1  | 827.4  | 832.7  | 776.8  | 670.5  | 534.7 |
| 50°    | 646.4  | 647.6  | 693.4  | 771.0  | 865.6  | 926.7  | 927.9  | 954.9  | 883.8  | 765.1  | 591.7 |
| 52.5°  | 692.2  | 693.4  | 747.5  | 847.4  | 971.9  | 1048.3 | 1063.6 | 1072.4 | 1036.0 | 887.9  | 696.9 |
| 55°    | 737.5  | 740.4  | 807.4  | 950.8  | 1105.3 | 1185.8 | 1221.7 | 1259.9 | 1173.5 | 983.1  | 735.1 |
| 57.5°  | 785.1  | 791.0  | 889.1  | 1063.6 | 1252.2 | 1372.7 | 1390.9 | 1396.8 | 1261.6 | 1021.3 | 746.9 |
| 60°    | 828.6  | 841.5  | 974.3  | 1172.9 | 1376.2 | 1477.3 | 1479.7 | 1445.6 | 1295.1 | 1043.6 | 747.5 |
| 62.5°  | 873.8  | 890.3  | 1052.4 | 1277.5 | 1471.4 | 1526.7 | 1532.5 | 1477.9 | 1353.9 | 1118.3 | 799.2 |
| 65°    | 907.9  | 938.4  | 1111.2 | 1351.0 | 1509.0 | 1577.8 | 1588.4 | 1573.1 | 1446.2 | 1168.8 | 816.8 |
| 67.5°  | 943.1  | 991.3  | 1145.3 | 1381.5 | 1546.6 | 1596.0 | 1591.9 | 1547.2 | 1418.0 | 1135.9 | 772.1 |
| 70°    | 987.8  | 1023.1 | 1171.7 | 1370.9 | 1492.6 | 1500.2 | 1500.2 | 1445.0 | 1328.6 | 1070.1 | 717.5 |
| 72.5°  | 1005.4 | 1033.1 | 1142.4 | 1286.3 | 1360.4 | 1358.0 | 1347.4 | 1316.9 | 1207.0 | 969.0  | 636.4 |
| 75°    | 986.6  | 990.2  | 1040.7 | 1128.3 | 1184.1 | 1190.0 | 1177.6 | 1134.7 | 1048.3 | 840.3  | 544.7 |
| 77.5°  | 885.0  | 876.7  | 888.5  | 932.0  | 981.3  | 977.2  | 975.5  | 926.7  | 859.7  | 693.4  | 447.2 |
| 80°    | 696.9  | 701.6  | 702.2  | 710.4  | 740.4  | 751.0  | 739.8  | 702.8  | 657.6  | 539.4  | 346.1 |
| 82.5°  | 478.9  | 486.6  | 493.6  | 483.0  | 496.0  | 507.7  | 505.9  | 470.7  | 456.0  | 378.4  | 239.2 |
| 85°    | 258.0  | 276.2  | 280.3  | 286.2  | 315.0  | 329.1  | 323.8  | 297.3  | 276.8  | 233.9  | 144.6 |
| 87.5°  | 52.3   | 42.9   | 61.1   | 87.0   | 109.9  | 118.7  | 133.4  | 100.5  | 79.9   | 58.8   | 32.9  |
| 90°    | 36.0   | 36.0   | 36.0   | 34.0   | 29.0   | 26.4   | 26.0   | 28.0   | 32.0   | 34.0   | 34.0  |
| 92.5°  | 40.0   | 39.0   | 38.0   | 34.0   | 29.0   | 27.0   | 27.0   | 28.0   | 32.0   | 35.0   | 36.0  |
| 95°    | 44.0   | 43.0   | 41.0   | 36.0   | 32.0   | 30.4   | 30.0   | 30.0   | 34.0   | 37.0   | 39.0  |
| 97.5°  | 42.0   | 42.0   | 40.0   | 37.0   | 35.0   | 33.4   | 33.0   | 33.0   | 34.0   | 36.0   | 36.0  |
| 100°   | 45.0   | 45.0   | 44.0   | 40.0   | 38.0   | 36.0   | 36.0   | 36.0   | 38.0   | 38.0   | 37.0  |
| 102.5° | 51.0   | 51.0   | 49.0   | 46.0   | 44.0   | 42.0   | 42.0   | 43.0   | 44.0   | 42.0   | 41.0  |
| 105°   | 60.0   | 60.0   | 57.0   | 54.0   | 53.0   | 51.6   | 52.0   | 54.0   | 53.0   | 49.0   | 48.0  |
| 107.5° | 72.0   | 72.0   | 70.0   | 67.0   | 66.0   | 67.2   | 68.0   | 68.0   | 66.0   | 60.0   | 59.0  |
| 110°   | 86.0   | 86.0   | 89.0   | 85.0   | 86.0   | 86.6   | 87.0   | 84.0   | 84.0   | 78.0   | 74.0  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 43°   | 45°   | 55°   | 65°   | 75°   | 85°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 101.0 | 102.0 | 108.0 | 107.0 | 110.0 | 107.4 | 107.0 | 102.0 | 105.0 | 100.0 | 95.0  |
| 115°   | 121.0 | 122.0 | 128.0 | 128.0 | 129.0 | 124.8 | 124.0 | 121.0 | 125.0 | 123.0 | 116.0 |
| 117.5° | 140.0 | 141.0 | 144.0 | 141.0 | 141.0 | 136.8 | 136.0 | 138.0 | 141.0 | 139.0 | 133.0 |
| 120°   | 152.0 | 153.0 | 155.0 | 149.0 | 149.0 | 147.0 | 147.0 | 150.0 | 153.0 | 148.0 | 145.0 |
| 122.5° | 161.0 | 162.0 | 164.0 | 154.0 | 155.0 | 157.2 | 158.0 | 159.0 | 162.0 | 155.0 | 153.0 |
| 125°   | 169.0 | 169.0 | 172.0 | 163.0 | 165.0 | 167.2 | 168.0 | 167.0 | 168.0 | 163.0 | 160.0 |
| 127.5° | 177.0 | 177.0 | 181.0 | 171.0 | 176.0 | 177.6 | 178.0 | 176.0 | 175.0 | 173.0 | 166.0 |
| 130°   | 187.0 | 188.0 | 191.0 | 179.0 | 186.0 | 186.4 | 186.0 | 183.0 | 183.0 | 184.0 | 171.0 |
| 132.5° | 198.0 | 199.0 | 201.0 | 186.0 | 193.0 | 195.0 | 195.0 | 190.0 | 192.0 | 192.0 | 179.0 |
| 135°   | 210.0 | 210.0 | 209.0 | 192.0 | 199.0 | 201.4 | 201.0 | 196.0 | 201.0 | 199.0 | 185.0 |
| 137.5° | 221.0 | 219.0 | 213.0 | 197.0 | 205.0 | 207.6 | 208.0 | 203.0 | 210.0 | 204.0 | 191.0 |
| 140°   | 229.0 | 226.0 | 216.0 | 200.0 | 207.0 | 211.8 | 213.0 | 212.0 | 217.0 | 209.0 | 195.0 |
| 142.5° | 235.0 | 231.0 | 218.0 | 201.0 | 208.0 | 215.6 | 218.0 | 220.0 | 223.0 | 211.0 | 198.0 |
| 145°   | 235.0 | 230.0 | 218.0 | 202.0 | 211.0 | 219.8 | 223.0 | 230.0 | 227.0 | 211.0 | 201.0 |
| 147.5° | 230.0 | 227.0 | 219.0 | 207.0 | 216.0 | 225.4 | 229.0 | 239.0 | 229.0 | 212.0 | 204.0 |
| 150°   | 224.0 | 221.0 | 220.0 | 214.0 | 222.0 | 231.8 | 235.0 | 242.0 | 232.0 | 214.0 | 210.0 |
| 152.5° | 216.0 | 214.0 | 221.0 | 220.0 | 230.0 | 238.2 | 241.0 | 242.0 | 235.0 | 219.0 | 215.0 |
| 155°   | 208.0 | 207.0 | 219.0 | 224.0 | 237.0 | 241.4 | 243.0 | 238.0 | 234.0 | 224.0 | 220.0 |
| 157.5° | 203.0 | 203.0 | 216.0 | 224.0 | 234.0 | 233.8 | 235.0 | 228.0 | 229.0 | 226.0 | 222.0 |
| 160°   | 199.0 | 198.0 | 210.0 | 213.0 | 219.0 | 217.8 | 219.0 | 215.0 | 219.0 | 221.0 | 218.0 |
| 162.5° | 185.0 | 184.0 | 193.0 | 193.0 | 198.0 | 196.8 | 198.0 | 196.0 | 200.0 | 204.0 | 207.0 |
| 165°   | 169.0 | 167.0 | 173.0 | 173.0 | 176.0 | 175.8 | 177.0 | 176.0 | 181.0 | 185.0 | 190.0 |
| 167.5° | 154.0 | 152.0 | 156.0 | 155.0 | 159.0 | 158.2 | 159.0 | 160.0 | 165.0 | 168.0 | 172.0 |
| 170°   | 142.0 | 141.0 | 145.0 | 144.0 | 147.0 | 146.6 | 147.0 | 148.0 | 152.0 | 155.0 | 159.0 |
| 172.5° | 137.0 | 135.0 | 139.0 | 138.0 | 141.0 | 140.6 | 141.0 | 141.0 | 145.0 | 146.0 | 149.0 |
| 175°   | 136.0 | 134.0 | 137.0 | 137.0 | 139.0 | 138.6 | 139.0 | 138.0 | 141.0 | 141.0 | 143.0 |
| 177.5° | 137.0 | 136.0 | 139.0 | 138.0 | 140.0 | 139.0 | 139.0 | 138.0 | 140.0 | 140.0 | 141.0 |
| 180°   | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 | 132.8 |
| 2.5°   | 135.2 | 134.6 | 134.0 | 132.8 | 131.6 | 131.0 | 130.5 | 129.9 | 129.9 | 129.9 | 129.9 |
| 5°     | 137.5 | 136.9 | 135.2 | 134.0 | 132.2 | 131.0 | 129.9 | 129.3 | 128.1 | 127.5 | 128.1 |
| 7.5°   | 140.4 | 139.3 | 136.3 | 134.0 | 132.2 | 130.5 | 129.3 | 128.7 | 128.1 | 126.9 | 126.9 |
| 10°    | 145.1 | 143.4 | 139.3 | 135.7 | 133.4 | 131.0 | 129.3 | 128.7 | 128.1 | 127.5 | 127.5 |
| 12.5°  | 151.6 | 148.1 | 143.4 | 139.3 | 135.2 | 132.2 | 131.0 | 129.9 | 129.3 | 129.3 | 129.3 |
| 15°    | 158.1 | 155.1 | 148.7 | 142.2 | 138.1 | 135.7 | 134.0 | 132.2 | 132.2 | 132.2 | 132.2 |
| 17.5°  | 166.9 | 161.6 | 154.0 | 146.9 | 142.2 | 138.7 | 137.5 | 136.3 | 136.3 | 136.9 | 136.9 |
| 20°    | 176.3 | 170.4 | 161.0 | 153.4 | 147.5 | 143.4 | 142.2 | 141.6 | 141.6 | 142.2 | 142.2 |
| 22.5°  | 186.9 | 179.8 | 168.1 | 159.2 | 153.4 | 150.4 | 148.1 | 148.1 | 148.1 | 148.7 | 149.3 |
| 25°    | 201.0 | 191.0 | 176.9 | 166.9 | 159.8 | 156.3 | 155.1 | 155.1 | 155.1 | 156.3 | 156.3 |
| 27.5°  | 215.7 | 205.1 | 186.9 | 174.5 | 167.5 | 163.9 | 162.2 | 162.8 | 163.4 | 163.9 | 163.9 |
| 30°    | 232.7 | 220.4 | 198.0 | 185.1 | 176.3 | 172.2 | 170.4 | 171.0 | 171.6 | 172.8 | 171.6 |
| 32.5°  | 253.9 | 238.6 | 213.3 | 196.3 | 186.3 | 182.2 | 181.0 | 181.6 | 181.6 | 181.6 | 182.2 |
| 35°    | 282.1 | 262.7 | 231.5 | 209.8 | 199.8 | 193.9 | 192.7 | 192.7 | 192.7 | 192.2 | 192.2 |
| 37.5°  | 309.7 | 285.0 | 249.7 | 228.0 | 215.1 | 208.0 | 204.5 | 204.5 | 204.5 | 204.5 | 204.5 |
| 40°    | 342.0 | 313.2 | 273.2 | 247.4 | 232.1 | 223.3 | 218.6 | 216.8 | 216.2 | 215.7 | 214.5 |
| 42.5°  | 383.7 | 350.8 | 300.3 | 268.5 | 250.3 | 240.9 | 233.9 | 230.4 | 228.0 | 227.4 | 225.7 |
| 45°    | 439.5 | 399.0 | 340.8 | 299.7 | 273.2 | 260.3 | 252.1 | 245.0 | 240.9 | 239.8 | 236.8 |
| 47.5°  | 480.7 | 433.7 | 369.0 | 326.7 | 299.1 | 282.7 | 270.3 | 260.9 | 255.0 | 252.1 | 250.3 |
| 50°    | 523.6 | 479.5 | 408.4 | 356.1 | 327.9 | 309.1 | 293.2 | 280.3 | 269.7 | 265.6 | 265.0 |
| 52.5°  | 617.6 | 558.8 | 462.5 | 397.8 | 357.3 | 336.1 | 319.7 | 304.4 | 287.9 | 280.9 | 282.7 |
| 55°    | 647.0 | 585.9 | 496.0 | 438.4 | 396.7 | 372.0 | 348.5 | 328.5 | 309.7 | 297.3 | 297.9 |
| 57.5°  | 650.5 | 588.2 | 503.0 | 451.9 | 423.7 | 403.7 | 383.1 | 355.5 | 332.6 | 315.6 | 315.0 |
| 60°    | 645.8 | 584.1 | 501.2 | 450.1 | 429.0 | 423.1 | 410.2 | 386.1 | 353.2 | 333.2 | 330.8 |
| 62.5°  | 682.8 | 617.0 | 520.1 | 456.6 | 430.1 | 427.8 | 423.7 | 409.6 | 376.1 | 350.2 | 346.1 |
| 65°    | 689.9 | 621.1 | 530.0 | 473.6 | 448.9 | 440.1 | 435.4 | 419.0 | 397.2 | 364.3 | 361.4 |
| 67.5°  | 649.9 | 588.2 | 503.0 | 452.5 | 437.2 | 440.1 | 441.3 | 429.0 | 404.9 | 379.0 | 373.1 |
| 70°    | 602.3 | 540.6 | 467.2 | 418.4 | 407.8 | 413.7 | 424.9 | 424.9 | 407.2 | 385.5 | 386.1 |
| 72.5°  | 531.2 | 481.3 | 414.3 | 379.0 | 368.4 | 376.1 | 389.0 | 399.0 | 394.3 | 386.7 | 387.2 |
| 75°    | 454.8 | 411.3 | 356.1 | 330.2 | 322.6 | 332.0 | 344.9 | 356.7 | 363.7 | 369.0 | 372.6 |
| 77.5°  | 374.3 | 342.0 | 295.6 | 270.9 | 270.9 | 279.7 | 292.1 | 302.6 | 314.4 | 327.9 | 330.2 |
| 80°    | 287.9 | 262.1 | 228.0 | 211.0 | 212.7 | 219.8 | 232.7 | 242.1 | 249.2 | 260.9 | 262.7 |
| 82.5°  | 203.3 | 188.0 | 159.2 | 146.9 | 149.8 | 159.2 | 165.1 | 171.6 | 176.9 | 179.8 | 183.3 |
| 85°    | 119.9 | 108.1 | 95.2  | 91.1  | 91.1  | 94.6  | 102.2 | 103.4 | 104.0 | 104.6 | 104.0 |
| 87.5°  | 30.0  | 32.9  | 28.2  | 27.6  | 27.6  | 30.0  | 28.8  | 31.1  | 31.1  | 32.3  | 30.0  |
| 90°    | 34.0  | 34.0  | 34.0  | 32.0  | 27.0  | 21.0  | 25.0  | 30.0  | 33.0  | 34.0  | 34.0  |
| 92.5°  | 36.0  | 35.0  | 33.0  | 31.0  | 27.0  | 23.0  | 25.0  | 29.0  | 34.0  | 36.0  | 36.0  |
| 95°    | 38.0  | 38.0  | 35.0  | 33.0  | 29.0  | 26.0  | 27.0  | 31.0  | 34.0  | 35.0  | 36.0  |
| 97.5°  | 36.0  | 35.0  | 35.0  | 34.0  | 30.0  | 25.0  | 26.0  | 30.0  | 33.0  | 35.0  | 35.0  |
| 100°   | 37.0  | 37.0  | 38.0  | 38.0  | 33.0  | 27.0  | 28.0  | 32.0  | 35.0  | 36.0  | 36.0  |
| 102.5° | 41.0  | 42.0  | 43.0  | 45.0  | 39.0  | 32.0  | 33.0  | 35.0  | 38.0  | 40.0  | 41.0  |
| 105°   | 49.0  | 49.0  | 52.0  | 54.0  | 48.0  | 39.0  | 38.0  | 41.0  | 44.0  | 48.0  | 49.0  |
| 107.5° | 60.0  | 61.0  | 65.0  | 65.0  | 58.0  | 50.0  | 47.0  | 50.0  | 54.0  | 60.0  | 61.0  |
| 110°   | 75.0  | 77.0  | 78.0  | 75.0  | 71.0  | 65.0  | 60.0  | 62.0  | 67.0  | 73.0  | 74.0  |

REPORT NUMBER: P198245

CATALOG NUMBER: TT-C1-LED-E1-DL-MS/DIM-UPL

**CANDELA DISTRIBUTION (continued):**

|        | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 94.0  | 94.0  | 91.0  | 86.0  | 84.0  | 82.0  | 77.0  | 80.0  | 85.0  | 87.0  | 87.0  |
| 115°   | 113.0 | 111.0 | 104.0 | 100.0 | 99.0  | 102.0 | 99.0  | 103.0 | 106.0 | 102.0 | 102.0 |
| 117.5° | 129.0 | 128.0 | 121.0 | 117.0 | 116.0 | 120.0 | 121.0 | 125.0 | 125.0 | 120.0 | 120.0 |
| 120°   | 142.0 | 142.0 | 137.0 | 134.0 | 134.0 | 137.0 | 137.0 | 139.0 | 139.0 | 134.0 | 136.0 |
| 122.5° | 150.0 | 153.0 | 151.0 | 148.0 | 149.0 | 149.0 | 145.0 | 148.0 | 149.0 | 145.0 | 146.0 |
| 125°   | 158.0 | 162.0 | 162.0 | 159.0 | 160.0 | 159.0 | 149.0 | 154.0 | 156.0 | 154.0 | 154.0 |
| 127.5° | 163.0 | 169.0 | 170.0 | 168.0 | 168.0 | 169.0 | 154.0 | 158.0 | 163.0 | 160.0 | 161.0 |
| 130°   | 169.0 | 176.0 | 178.0 | 174.0 | 175.0 | 175.0 | 159.0 | 164.0 | 169.0 | 164.0 | 167.0 |
| 132.5° | 176.0 | 182.0 | 186.0 | 181.0 | 183.0 | 181.0 | 165.0 | 171.0 | 176.0 | 171.0 | 174.0 |
| 135°   | 184.0 | 190.0 | 195.0 | 190.0 | 191.0 | 187.0 | 170.0 | 177.0 | 184.0 | 179.0 | 179.0 |
| 137.5° | 190.0 | 196.0 | 204.0 | 200.0 | 199.0 | 191.0 | 175.0 | 182.0 | 192.0 | 187.0 | 187.0 |
| 140°   | 195.0 | 201.0 | 213.0 | 212.0 | 206.0 | 195.0 | 180.0 | 186.0 | 200.0 | 195.0 | 196.0 |
| 142.5° | 198.0 | 204.0 | 220.0 | 222.0 | 212.0 | 197.0 | 184.0 | 190.0 | 205.0 | 204.0 | 205.0 |
| 145°   | 202.0 | 208.0 | 225.0 | 230.0 | 216.0 | 199.0 | 187.0 | 193.0 | 208.0 | 211.0 | 214.0 |
| 147.5° | 206.0 | 212.0 | 230.0 | 236.0 | 219.0 | 202.0 | 191.0 | 195.0 | 212.0 | 220.0 | 225.0 |
| 150°   | 211.0 | 216.0 | 231.0 | 235.0 | 219.0 | 205.0 | 194.0 | 199.0 | 215.0 | 227.0 | 233.0 |
| 152.5° | 216.0 | 220.0 | 229.0 | 230.0 | 220.0 | 208.0 | 201.0 | 205.0 | 219.0 | 232.0 | 239.0 |
| 155°   | 219.0 | 221.0 | 224.0 | 222.0 | 220.0 | 213.0 | 208.0 | 212.0 | 224.0 | 234.0 | 240.0 |
| 157.5° | 219.0 | 219.0 | 216.0 | 213.0 | 216.0 | 219.0 | 215.0 | 220.0 | 229.0 | 232.0 | 235.0 |
| 160°   | 215.0 | 214.0 | 210.0 | 208.0 | 213.0 | 223.0 | 224.0 | 228.0 | 233.0 | 229.0 | 232.0 |
| 162.5° | 207.0 | 207.0 | 204.0 | 204.0 | 209.0 | 221.0 | 227.0 | 231.0 | 230.0 | 224.0 | 226.0 |
| 165°   | 192.0 | 194.0 | 196.0 | 198.0 | 203.0 | 212.0 | 216.0 | 219.0 | 220.0 | 215.0 | 217.0 |
| 167.5° | 174.0 | 177.0 | 181.0 | 184.0 | 189.0 | 195.0 | 196.0 | 199.0 | 200.0 | 197.0 | 200.0 |
| 170°   | 160.0 | 163.0 | 166.0 | 168.0 | 172.0 | 177.0 | 178.0 | 180.0 | 181.0 | 178.0 | 181.0 |
| 172.5° | 151.0 | 153.0 | 155.0 | 156.0 | 159.0 | 162.0 | 162.0 | 164.0 | 165.0 | 163.0 | 166.0 |
| 175°   | 144.0 | 146.0 | 147.0 | 148.0 | 149.0 | 151.0 | 151.0 | 152.0 | 153.0 | 151.0 | 153.0 |
| 177.5° | 141.0 | 142.0 | 142.0 | 142.0 | 143.0 | 144.0 | 143.0 | 144.0 | 145.0 | 143.0 | 145.0 |
| 180°   | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 |

(END OF REPORT)