

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: INVUE

Report Number: P162620

Luminaire Tested: **ECM-F04-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162620  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F04-LED-E1-SL4-HSS-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (28) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

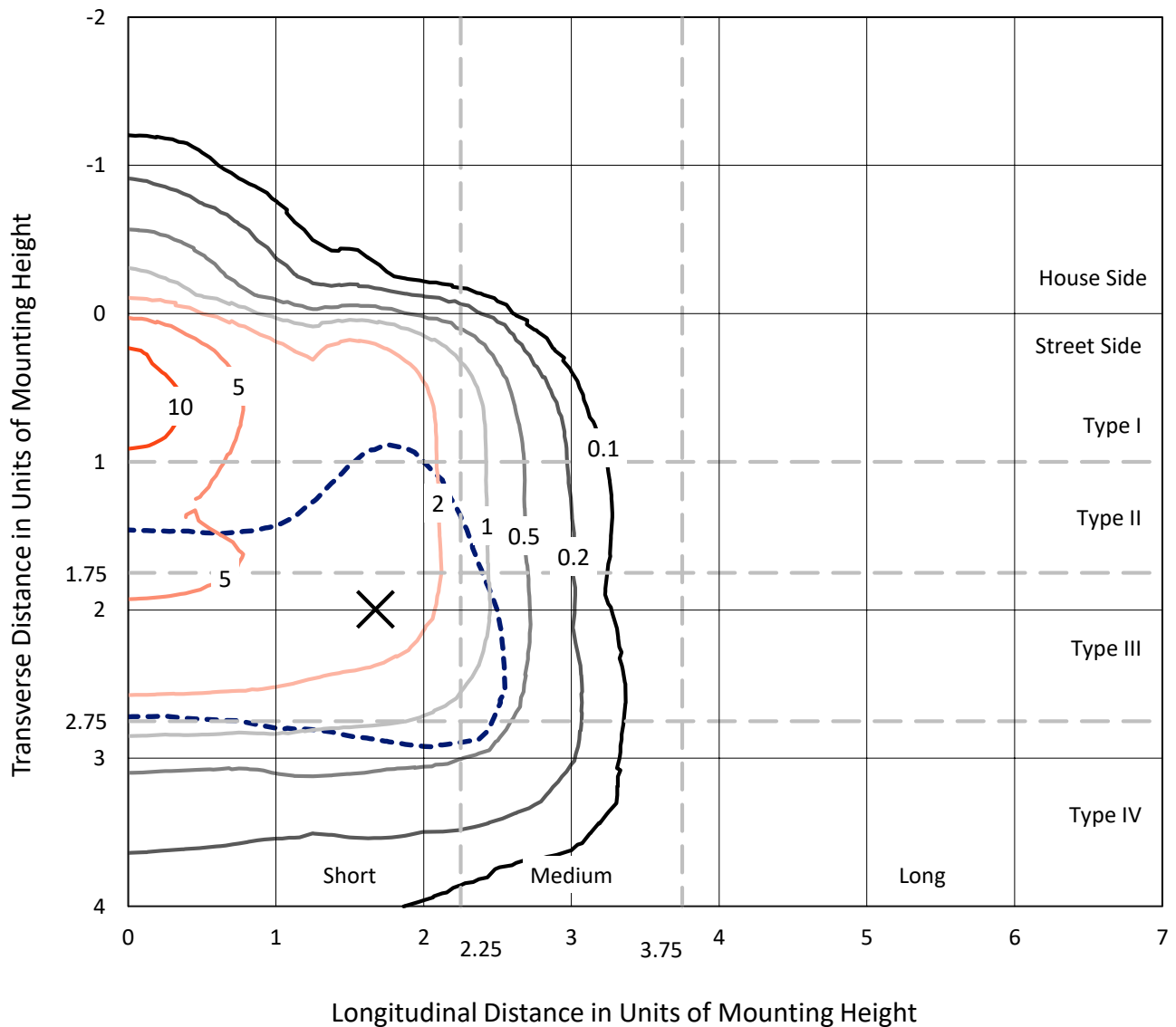
Lumens per Lamp: N/A  
Luminaire Lumens: 5391.7 lumens  
Efficiency: N/A  
Efficacy: 52.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G2  
  
Input Watts (W): 102.2  
Input Voltage (V): NR  
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

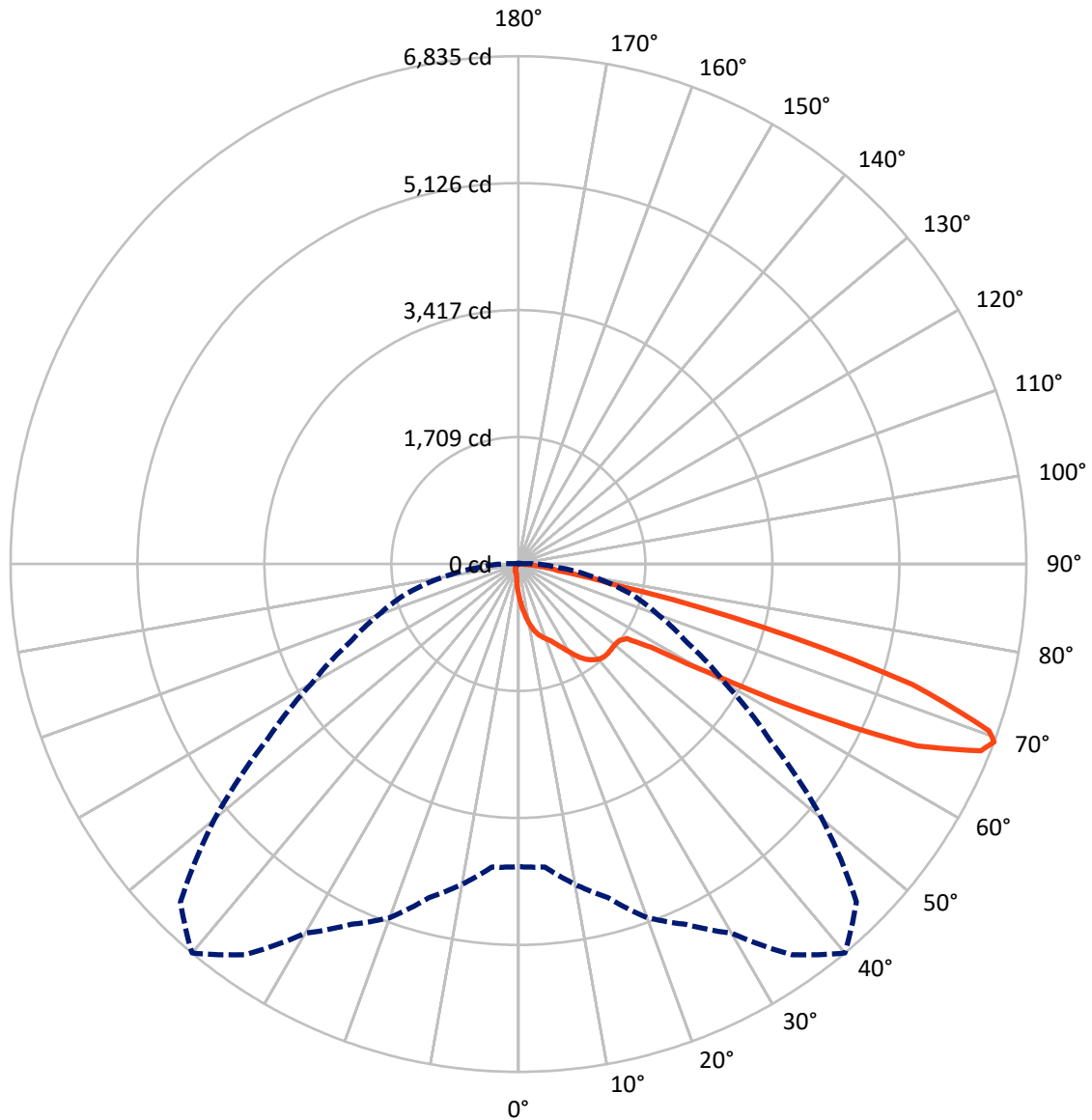
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 160.6    | 0.0    | 160.6  |
|                    | % Fixture | 3.0      | 0.0    | 3.0    |
| <b>Street Side</b> | Lumens    | 5231.1   | 0.0    | 5231.1 |
|                    | % Fixture | 97.0     | 0.0    | 97.0   |
| <b>Total</b>       | Lumens    | 5391.7   | 0.0    | 5391.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 41.9   | 0.8       |
| 10°-20°   | 144.3  | 2.7       |
| 20°-30°   | 276.2  | 5.1       |
| 30°-40°   | 459.3  | 8.5       |
| 40°-50°   | 621.5  | 11.5      |
| 50°-60°   | 971.9  | 18.0      |
| 60°-70°   | 1998.2 | 37.1      |
| 70°-80°   | 804.1  | 14.9      |
| 80°-90°   | 74.4   | 1.4       |
| 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°    | 5391.7 | 100.0     |
| 0°-180°   | 5391.7 | 100.0     |



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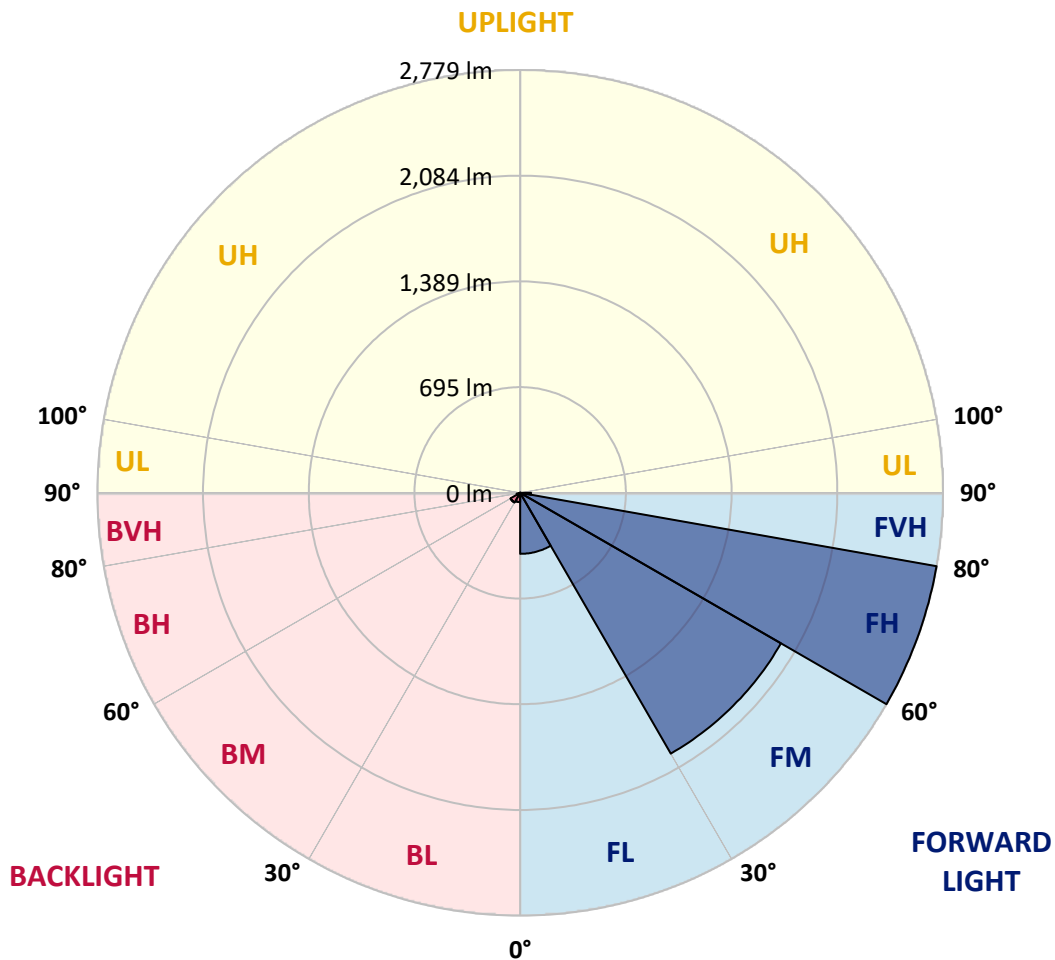
CATALOG NUMBER: ECM-F04-LED-E1-SL4-HSS-8030

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 401.2  | 7.4       |                         |      |         |
| FM (30°-60°)   | 1979.4 | 36.7      |                         |      |         |
| FH (60°-80°)   | 2778.9 | 51.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 71.6   | 1.3       |                         |      | G1/100  |
| BL (0°-30°)    | 61.1   | 1.1       | B0/110                  |      |         |
| BM (30°-60°)   | 73.3   | 1.4       | B0/220                  |      |         |
| BH (60°-80°)   | 23.4   | 0.4       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 2.8    | 0.1       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  |
| 2.5°  | 543.2  | 537.0  | 530.0  | 530.0  | 521.1  | 521.1  | 515.8  | 501.6  | 499.9  | 492.0  | 484.0  |
| 5°    | 693.3  | 688.0  | 679.2  | 671.3  | 664.2  | 651.9  | 643.0  | 626.2  | 607.6  | 590.0  | 574.1  |
| 7.5°  | 840.0  | 837.3  | 821.4  | 818.8  | 807.3  | 786.9  | 769.3  | 744.6  | 712.8  | 688.0  | 658.9  |
| 10°   | 976.0  | 969.8  | 966.2  | 951.3  | 934.5  | 912.4  | 885.0  | 854.9  | 817.9  | 779.0  | 737.5  |
| 12.5° | 1083.7 | 1080.2 | 1064.3 | 1058.1 | 1040.5 | 1018.3 | 983.9  | 945.1  | 908.0  | 857.6  | 809.0  |
| 15°   | 1164.1 | 1157.9 | 1147.3 | 1137.6 | 1116.4 | 1096.9 | 1065.2 | 1022.8 | 977.8  | 922.9  | 864.7  |
| 17.5° | 1231.3 | 1219.8 | 1217.1 | 1202.1 | 1180.0 | 1157.0 | 1121.7 | 1082.8 | 1029.9 | 975.1  | 911.5  |
| 20°   | 1321.3 | 1305.4 | 1300.1 | 1278.0 | 1252.5 | 1220.7 | 1180.0 | 1131.4 | 1075.8 | 1015.7 | 950.3  |
| 22.5° | 1427.3 | 1415.9 | 1404.3 | 1384.9 | 1352.2 | 1307.2 | 1248.0 | 1195.0 | 1124.3 | 1058.1 | 987.4  |
| 25°   | 1577.5 | 1567.7 | 1549.2 | 1522.7 | 1482.1 | 1428.2 | 1356.7 | 1278.9 | 1195.9 | 1111.2 | 1028.1 |
| 27.5° | 1723.2 | 1714.3 | 1701.1 | 1680.8 | 1634.9 | 1575.7 | 1487.4 | 1388.5 | 1283.4 | 1180.9 | 1089.0 |
| 30°   | 1860.1 | 1852.1 | 1838.9 | 1818.6 | 1778.0 | 1719.6 | 1619.9 | 1513.9 | 1383.2 | 1263.9 | 1153.5 |
| 32.5° | 2007.6 | 2004.9 | 1990.0 | 1960.8 | 1925.5 | 1846.8 | 1738.2 | 1624.2 | 1491.8 | 1354.0 | 1225.0 |
| 35°   | 2174.6 | 2154.2 | 2140.1 | 2110.9 | 2050.9 | 1966.9 | 1839.8 | 1715.3 | 1575.7 | 1434.3 | 1290.4 |
| 37.5° | 2315.9 | 2296.4 | 2278.8 | 2241.6 | 2168.3 | 2061.5 | 1917.5 | 1780.6 | 1636.7 | 1492.7 | 1346.1 |
| 40°   | 2419.2 | 2409.5 | 2388.3 | 2339.7 | 2257.5 | 2130.3 | 1974.9 | 1825.6 | 1680.8 | 1536.0 | 1391.1 |
| 42.5° | 2496.0 | 2481.0 | 2457.2 | 2406.8 | 2309.6 | 2164.8 | 1997.9 | 1844.2 | 1701.1 | 1562.5 | 1420.2 |
| 45°   | 2524.3 | 2512.0 | 2489.9 | 2435.0 | 2330.0 | 2174.6 | 1997.0 | 1838.9 | 1702.0 | 1570.4 | 1439.6 |
| 47.5° | 2507.5 | 2495.1 | 2475.7 | 2424.5 | 2321.2 | 2163.0 | 1981.1 | 1823.9 | 1693.2 | 1573.0 | 1457.4 |
| 50°   | 2451.9 | 2444.8 | 2429.7 | 2386.6 | 2293.7 | 2140.9 | 1966.9 | 1816.0 | 1691.4 | 1586.3 | 1482.1 |
| 52.5° | 2446.6 | 2442.2 | 2423.6 | 2380.3 | 2285.8 | 2133.9 | 1965.2 | 1820.3 | 1706.4 | 1603.0 | 1499.7 |
| 55°   | 2989.7 | 2927.0 | 2786.6 | 2667.4 | 2471.3 | 2238.1 | 2054.4 | 1891.9 | 1770.0 | 1669.3 | 1596.9 |
| 57.5° | 4249.3 | 4155.6 | 3971.0 | 3744.1 | 3293.6 | 2851.1 | 2496.9 | 2240.8 | 2114.5 | 2068.6 | 2096.0 |
| 60°   | 4839.2 | 4822.4 | 4793.4 | 4685.6 | 4455.0 | 4074.4 | 3650.4 | 3192.0 | 3008.3 | 2992.4 | 3048.1 |
| 62.5° | 5119.2 | 5108.7 | 5117.5 | 5104.2 | 5032.7 | 4921.4 | 4799.5 | 4601.7 | 4419.7 | 4302.3 | 4053.1 |
| 65°   | 5248.2 | 5255.2 | 5305.6 | 5345.4 | 5354.2 | 5383.4 | 5472.5 | 5719.0 | 5899.1 | 5596.2 | 4904.6 |
| 67.5° | 4920.5 | 4962.1 | 5077.7 | 5222.5 | 5392.2 | 5556.4 | 5821.5 | 6340.8 | 6710.9 | 6354.9 | 5372.8 |
| 69°   | 4073.5 | 4093.8 | 4376.4 | 4649.4 | 5063.6 | 5353.3 | 5737.5 | 6418.5 | 6834.5 | 6432.6 | 5335.6 |
| 70°   | 3207.0 | 3225.6 | 3528.5 | 3899.5 | 4599.9 | 4972.6 | 5475.2 | 6286.9 | 6718.8 | 6329.2 | 5144.9 |
| 72.5° | 1446.7 | 1420.2 | 1527.2 | 1725.9 | 2487.2 | 3078.9 | 3957.8 | 5093.6 | 5543.2 | 5070.7 | 3849.1 |
| 75°   | 1010.5 | 998.9  | 1010.5 | 1011.3 | 1129.6 | 1457.4 | 1838.9 | 2761.0 | 3414.6 | 2946.4 | 1838.9 |
| 77.5° | 782.6  | 774.6  | 766.7  | 757.9  | 772.0  | 864.7  | 901.8  | 979.5  | 1271.9 | 1202.9 | 701.3  |
| 80°   | 619.2  | 612.1  | 631.5  | 625.3  | 625.3  | 635.9  | 628.8  | 599.7  | 544.9  | 505.2  | 452.2  |
| 82.5° | 287.9  | 289.7  | 289.7  | 314.5  | 378.9  | 442.5  | 462.8  | 433.6  | 385.1  | 327.7  | 264.1  |
| 85°   | 27.4   | 30.9   | 52.1   | 80.4   | 159.9  | 180.2  | 181.1  | 150.1  | 150.1  | 118.4  | 95.4   |
| 87.5° | 0.0    | 0.9    | 0.9    | 0.9    | 8.0    | 22.1   | 18.6   | 5.3    | 2.7    | 2.7    | 4.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°   | 95°   | 100°  | 105°  |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0°    | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2  | 407.2 | 407.2 | 407.2 | 407.2 |
| 2.5°  | 469.9  | 467.3  | 456.6  | 446.0  | 436.3  | 425.8  | 416.0  | 406.2 | 395.7 | 387.8 | 378.0 |
| 5°    | 549.4  | 530.0  | 507.9  | 486.7  | 465.5  | 443.4  | 420.5  | 400.1 | 378.9 | 359.5 | 340.9 |
| 7.5°  | 629.8  | 591.8  | 561.8  | 523.8  | 489.3  | 454.8  | 423.1  | 390.4 | 360.4 | 332.1 | 305.6 |
| 10°   | 697.8  | 651.9  | 605.0  | 556.5  | 506.9  | 461.1  | 416.9  | 378.0 | 338.2 | 303.9 | 271.2 |
| 12.5° | 753.4  | 695.1  | 637.7  | 576.7  | 521.1  | 462.8  | 408.1  | 361.3 | 314.5 | 275.5 | 242.0 |
| 15°   | 803.8  | 736.6  | 667.8  | 597.1  | 526.5  | 460.1  | 399.2  | 340.9 | 293.3 | 249.1 | 211.1 |
| 17.5° | 844.4  | 767.5  | 689.8  | 610.3  | 534.3  | 456.6  | 387.8  | 326.8 | 271.2 | 225.2 | 188.1 |
| 20°   | 879.7  | 799.3  | 715.4  | 626.2  | 539.6  | 455.8  | 378.0  | 309.2 | 251.8 | 203.2 | 166.9 |
| 22.5° | 912.4  | 832.0  | 741.9  | 646.6  | 547.6  | 454.8  | 369.2  | 295.9 | 234.9 | 186.4 | 150.1 |
| 25°   | 949.5  | 864.7  | 770.2  | 667.8  | 561.8  | 458.4  | 363.9  | 285.3 | 219.9 | 170.5 | 136.9 |
| 27.5° | 991.0  | 901.8  | 803.8  | 694.2  | 580.2  | 465.5  | 362.1  | 273.8 | 206.7 | 155.4 | 126.3 |
| 30°   | 1049.3 | 946.0  | 837.3  | 720.7  | 597.1  | 473.4  | 360.4  | 266.7 | 193.4 | 144.0 | 115.7 |
| 32.5° | 1100.5 | 989.3  | 874.4  | 748.1  | 615.6  | 481.4  | 359.5  | 257.0 | 181.1 | 132.5 | 107.8 |
| 35°   | 1154.4 | 1028.9 | 906.2  | 774.6  | 631.5  | 490.2  | 358.6  | 250.0 | 169.5 | 121.0 | 99.8  |
| 37.5° | 1201.2 | 1062.6 | 930.9  | 797.5  | 649.2  | 498.1  | 359.5  | 243.8 | 158.9 | 111.3 | 92.7  |
| 40°   | 1240.9 | 1096.9 | 958.3  | 818.8  | 667.8  | 510.5  | 360.4  | 237.6 | 148.4 | 102.5 | 86.6  |
| 42.5° | 1276.2 | 1129.6 | 987.4  | 842.6  | 688.9  | 524.7  | 365.6  | 232.2 | 139.5 | 94.5  | 80.4  |
| 45°   | 1303.6 | 1159.6 | 1019.3 | 876.2  | 723.4  | 547.6  | 375.4  | 228.7 | 130.7 | 87.4  | 75.1  |
| 47.5° | 1331.9 | 1203.9 | 1073.2 | 929.2  | 773.7  | 583.9  | 392.1  | 227.9 | 123.6 | 82.1  | 70.7  |
| 50°   | 1370.8 | 1248.0 | 1120.8 | 983.0  | 819.6  | 620.9  | 412.5  | 228.7 | 114.8 | 76.8  | 66.2  |
| 52.5° | 1399.0 | 1293.0 | 1182.7 | 1076.7 | 929.2  | 734.0  | 491.1  | 244.7 | 110.4 | 72.5  | 60.9  |
| 55°   | 1566.0 | 1547.4 | 1550.1 | 1567.7 | 1453.9 | 1248.9 | 821.4  | 353.3 | 129.9 | 82.1  | 60.1  |
| 57.5° | 2208.1 | 2273.5 | 2311.4 | 2310.6 | 2122.4 | 1760.3 | 1103.2 | 454.0 | 144.8 | 95.4  | 71.5  |
| 60°   | 3052.4 | 3003.0 | 2933.3 | 2761.0 | 2511.0 | 2009.4 | 1233.9 | 488.5 | 125.4 | 76.0  | 65.4  |
| 62.5° | 3798.8 | 3509.1 | 3252.1 | 2973.0 | 2645.3 | 2096.0 | 1260.3 | 485.8 | 109.5 | 57.4  | 45.9  |
| 65°   | 4264.3 | 3743.1 | 3328.1 | 2978.3 | 2592.3 | 2023.5 | 1192.3 | 446.0 | 92.7  | 46.8  | 38.0  |
| 67.5° | 4375.6 | 3616.9 | 3029.5 | 2583.5 | 2165.7 | 1574.8 | 875.3  | 335.6 | 72.5  | 38.8  | 33.5  |
| 69°   | 4132.7 | 3215.0 | 2510.2 | 2004.1 | 1575.7 | 1044.8 | 541.4  | 212.0 | 55.6  | 35.3  | 30.9  |
| 70°   | 3801.5 | 2796.3 | 2044.7 | 1608.3 | 1166.8 | 734.0  | 378.9  | 149.3 | 45.1  | 32.7  | 28.2  |
| 72.5° | 2445.7 | 1468.8 | 1005.2 | 699.5  | 481.4  | 292.4  | 148.4  | 67.2  | 34.5  | 27.4  | 22.9  |
| 75°   | 948.6  | 543.2  | 393.9  | 299.4  | 234.1  | 162.5  | 90.1   | 43.3  | 29.2  | 22.9  | 17.7  |
| 77.5° | 467.3  | 357.8  | 292.4  | 200.5  | 116.6  | 72.5   | 48.6   | 33.5  | 23.9  | 16.8  | 11.5  |
| 80°   | 369.2  | 245.5  | 146.6  | 90.9   | 68.9   | 52.1   | 37.1   | 27.4  | 17.7  | 10.6  | 8.0   |
| 82.5° | 189.0  | 103.3  | 76.0   | 61.9   | 51.2   | 40.6   | 30.0   | 19.4  | 11.5  | 7.1   | 6.2   |
| 85°   | 59.2   | 43.3   | 38.8   | 38.0   | 35.3   | 29.2   | 21.2   | 12.4  | 7.1   | 4.5   | 4.5   |
| 87.5° | 4.5    | 6.2    | 8.0    | 6.2    | 7.1    | 6.2    | 8.0    | 5.3   | 3.5   | 3.5   | 2.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |





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**CANDELA DISTRIBUTION (continued):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 | 407.2 |
| 2.5°  | 370.9 | 360.4 | 350.7 | 344.5 | 332.9 | 328.6 | 324.1 | 322.4 | 314.5 | 316.2 | 309.2 |
| 5°    | 324.1 | 305.6 | 291.5 | 277.3 | 264.1 | 254.4 | 246.5 | 236.7 | 228.7 | 225.2 | 218.1 |
| 7.5°  | 281.8 | 257.9 | 239.4 | 224.3 | 208.5 | 196.1 | 185.5 | 178.5 | 171.3 | 164.2 | 160.7 |
| 10°   | 244.7 | 219.1 | 197.9 | 182.8 | 167.8 | 157.2 | 149.3 | 144.0 | 139.5 | 136.9 | 136.0 |
| 12.5° | 210.2 | 185.5 | 166.0 | 152.8 | 141.3 | 136.0 | 132.5 | 129.9 | 128.9 | 128.1 | 128.1 |
| 15°   | 183.8 | 158.9 | 144.0 | 134.2 | 128.9 | 126.3 | 125.4 | 123.6 | 121.9 | 121.0 | 121.0 |
| 17.5° | 158.9 | 140.5 | 129.9 | 124.6 | 121.9 | 120.1 | 118.4 | 116.6 | 114.8 | 113.9 | 113.9 |
| 20°   | 142.2 | 127.2 | 121.9 | 118.4 | 115.7 | 113.9 | 111.3 | 109.5 | 108.6 | 107.8 | 106.8 |
| 22.5° | 128.9 | 119.3 | 115.7 | 113.1 | 109.5 | 106.8 | 105.1 | 103.3 | 101.5 | 100.7 | 99.8  |
| 25°   | 119.3 | 113.1 | 110.4 | 106.8 | 103.3 | 100.7 | 98.0  | 95.4  | 93.6  | 92.7  | 90.9  |
| 27.5° | 112.1 | 107.8 | 104.2 | 99.8  | 96.2  | 93.6  | 90.9  | 88.3  | 86.6  | 84.8  | 83.9  |
| 30°   | 106.0 | 101.5 | 97.2  | 93.6  | 89.2  | 86.6  | 83.1  | 80.4  | 79.5  | 77.8  | 76.0  |
| 32.5° | 99.8  | 95.4  | 90.9  | 86.6  | 82.1  | 78.6  | 76.8  | 73.3  | 71.5  | 70.7  | 68.9  |
| 35°   | 92.7  | 88.3  | 83.1  | 79.5  | 75.1  | 71.5  | 68.9  | 66.2  | 64.5  | 62.7  | 61.9  |
| 37.5° | 86.6  | 81.3  | 76.0  | 71.5  | 68.0  | 64.5  | 61.9  | 59.2  | 57.4  | 55.6  | 54.7  |
| 40°   | 79.5  | 74.2  | 68.9  | 64.5  | 60.9  | 58.3  | 55.6  | 53.0  | 51.2  | 50.4  | 50.4  |
| 42.5° | 73.3  | 67.2  | 61.9  | 58.3  | 55.6  | 52.1  | 49.4  | 46.8  | 45.9  | 45.1  | 45.9  |
| 45°   | 67.2  | 60.9  | 56.5  | 53.0  | 50.4  | 46.8  | 44.1  | 42.4  | 41.5  | 42.4  | 43.3  |
| 47.5° | 61.9  | 55.6  | 51.2  | 48.6  | 45.9  | 43.3  | 40.6  | 38.8  | 38.8  | 40.6  | 42.4  |
| 50°   | 56.5  | 50.4  | 46.8  | 45.1  | 42.4  | 39.8  | 36.2  | 35.3  | 36.2  | 38.0  | 39.8  |
| 52.5° | 51.2  | 44.1  | 41.5  | 40.6  | 38.0  | 35.3  | 32.7  | 31.8  | 32.7  | 34.5  | 33.5  |
| 55°   | 45.9  | 38.8  | 38.0  | 37.1  | 34.5  | 30.9  | 28.2  | 28.2  | 28.2  | 27.4  | 25.6  |
| 57.5° | 44.1  | 34.5  | 33.5  | 32.7  | 30.0  | 26.5  | 24.7  | 22.9  | 22.1  | 19.4  | 18.6  |
| 60°   | 45.9  | 30.9  | 30.9  | 29.2  | 26.5  | 22.9  | 20.3  | 17.7  | 15.9  | 14.1  | 14.1  |
| 62.5° | 37.1  | 28.2  | 27.4  | 25.6  | 22.1  | 18.6  | 15.9  | 13.3  | 12.4  | 11.5  | 11.5  |
| 65°   | 30.0  | 25.6  | 23.9  | 21.2  | 18.6  | 15.0  | 12.4  | 10.6  | 9.8   | 9.8   | 10.6  |
| 67.5° | 27.4  | 22.9  | 20.3  | 17.7  | 15.0  | 11.5  | 9.8   | 8.8   | 8.8   | 9.8   | 9.8   |
| 69°   | 25.6  | 21.2  | 18.6  | 15.9  | 13.3  | 10.6  | 8.8   | 8.8   | 8.8   | 8.8   | 9.8   |
| 70°   | 23.9  | 20.3  | 17.7  | 15.0  | 11.5  | 8.8   | 8.0   | 8.0   | 8.8   | 8.8   | 9.8   |
| 72.5° | 18.6  | 15.9  | 15.0  | 12.4  | 8.8   | 8.0   | 7.1   | 8.0   | 8.0   | 8.8   | 8.8   |
| 75°   | 14.1  | 11.5  | 11.5  | 9.8   | 7.1   | 6.2   | 6.2   | 7.1   | 7.1   | 8.0   | 8.0   |
| 77.5° | 9.8   | 8.0   | 8.0   | 7.1   | 6.2   | 5.3   | 5.3   | 6.2   | 7.1   | 7.1   | 8.0   |
| 80°   | 7.1   | 6.2   | 5.3   | 6.2   | 5.3   | 4.5   | 5.3   | 6.2   | 6.2   | 7.1   | 7.1   |
| 82.5° | 5.3   | 5.3   | 5.3   | 5.3   | 4.5   | 4.5   | 5.3   | 5.3   | 6.2   | 7.1   | 7.1   |
| 85°   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 5.3   | 5.3   | 6.2   | 6.2   |
| 87.5° | 2.7   | 2.7   | 2.7   | 3.5   | 3.5   | 4.5   | 4.5   | 4.5   | 4.5   | 5.3   | 5.3   |
| 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: P162620

CATALOG NUMBER: ECM-F04-LED-E1-SL4-HSS-8030

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 407.2 | 407.2 | 407.2 | 407.2 |
| 2.5°  | 307.4 | 306.5 | 302.9 | 303.9 |
| 5°    | 215.5 | 210.2 | 213.8 | 212.8 |
| 7.5°  | 158.1 | 157.2 | 156.3 | 158.1 |
| 10°   | 135.2 | 135.2 | 134.2 | 135.2 |
| 12.5° | 127.2 | 127.2 | 127.2 | 127.2 |
| 15°   | 121.0 | 121.0 | 120.1 | 120.1 |
| 17.5° | 113.9 | 113.9 | 113.9 | 113.1 |
| 20°   | 106.8 | 106.0 | 106.0 | 106.0 |
| 22.5° | 98.9  | 98.0  | 98.0  | 98.0  |
| 25°   | 90.9  | 90.1  | 90.1  | 90.1  |
| 27.5° | 83.1  | 82.1  | 81.3  | 81.3  |
| 30°   | 75.1  | 74.2  | 73.3  | 73.3  |
| 32.5° | 67.2  | 66.2  | 65.4  | 65.4  |
| 35°   | 60.1  | 60.1  | 59.2  | 58.3  |
| 37.5° | 53.9  | 53.9  | 53.9  | 53.9  |
| 40°   | 49.4  | 50.4  | 50.4  | 50.4  |
| 42.5° | 46.8  | 47.7  | 48.6  | 49.4  |
| 45°   | 45.1  | 46.8  | 47.7  | 47.7  |
| 47.5° | 44.1  | 45.1  | 45.9  | 45.9  |
| 50°   | 40.6  | 39.8  | 39.8  | 39.8  |
| 52.5° | 32.7  | 30.9  | 30.0  | 29.2  |
| 55°   | 23.9  | 22.9  | 21.2  | 21.2  |
| 57.5° | 16.8  | 16.8  | 15.9  | 15.9  |
| 60°   | 13.3  | 13.3  | 12.4  | 13.3  |
| 62.5° | 11.5  | 11.5  | 11.5  | 11.5  |
| 65°   | 10.6  | 10.6  | 10.6  | 10.6  |
| 67.5° | 10.6  | 10.6  | 10.6  | 10.6  |
| 69°   | 9.8   | 9.8   | 9.8   | 9.8   |
| 70°   | 9.8   | 9.8   | 9.8   | 9.8   |
| 72.5° | 8.8   | 8.8   | 8.8   | 8.8   |
| 75°   | 8.0   | 8.8   | 8.8   | 8.8   |
| 77.5° | 8.0   | 8.0   | 8.0   | 8.0   |
| 80°   | 7.1   | 7.1   | 8.0   | 8.0   |
| 82.5° | 7.1   | 7.1   | 7.1   | 7.1   |
| 85°   | 6.2   | 6.2   | 7.1   | 7.1   |
| 87.5° | 5.3   | 5.3   | 6.2   | 6.2   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)