

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: P162293

Luminaire Tested: **ECM-F03-LED-E1-SL2-HSS-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162293
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F03-LED-E1-SL2-HSS-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4430.1 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

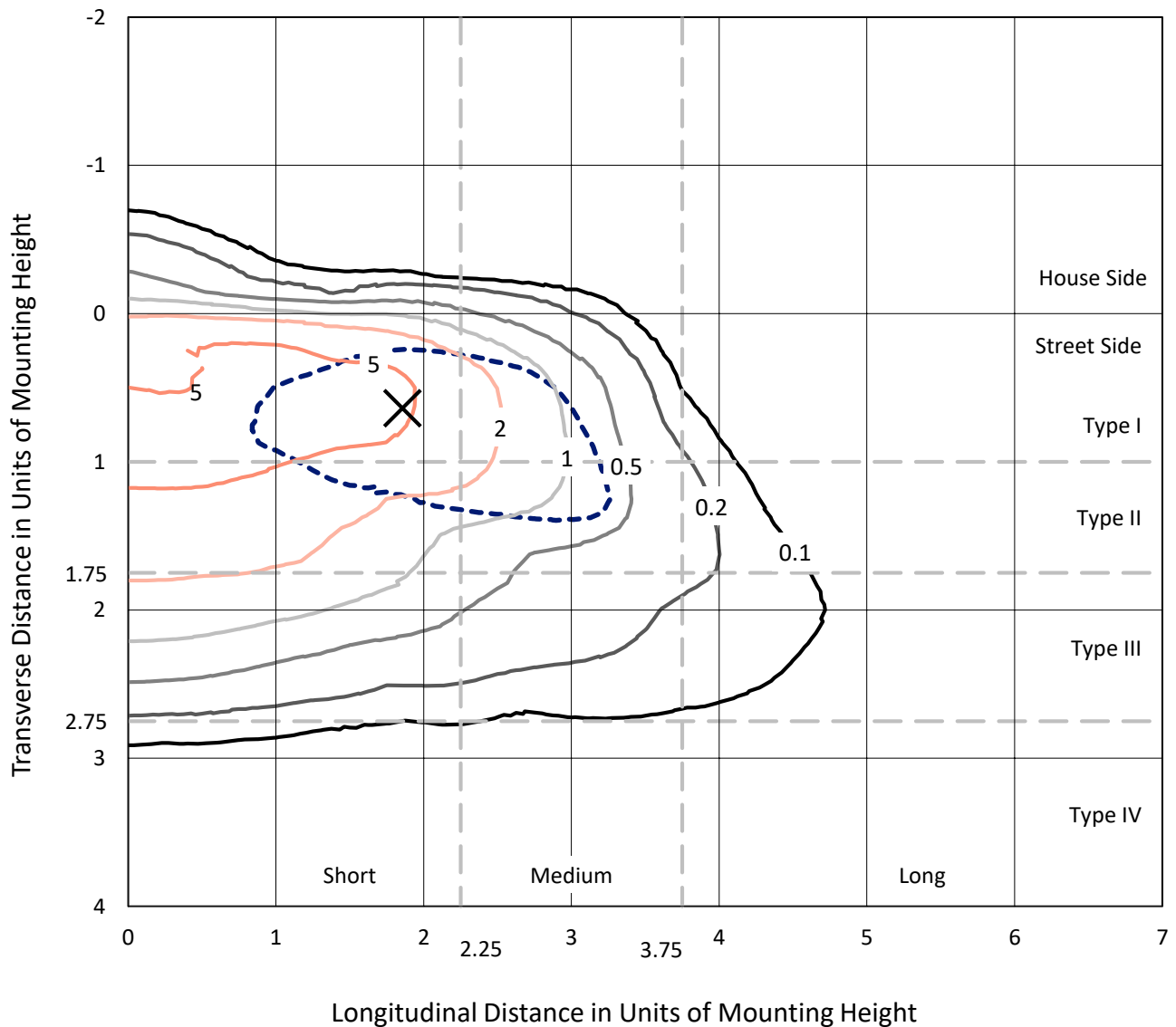
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

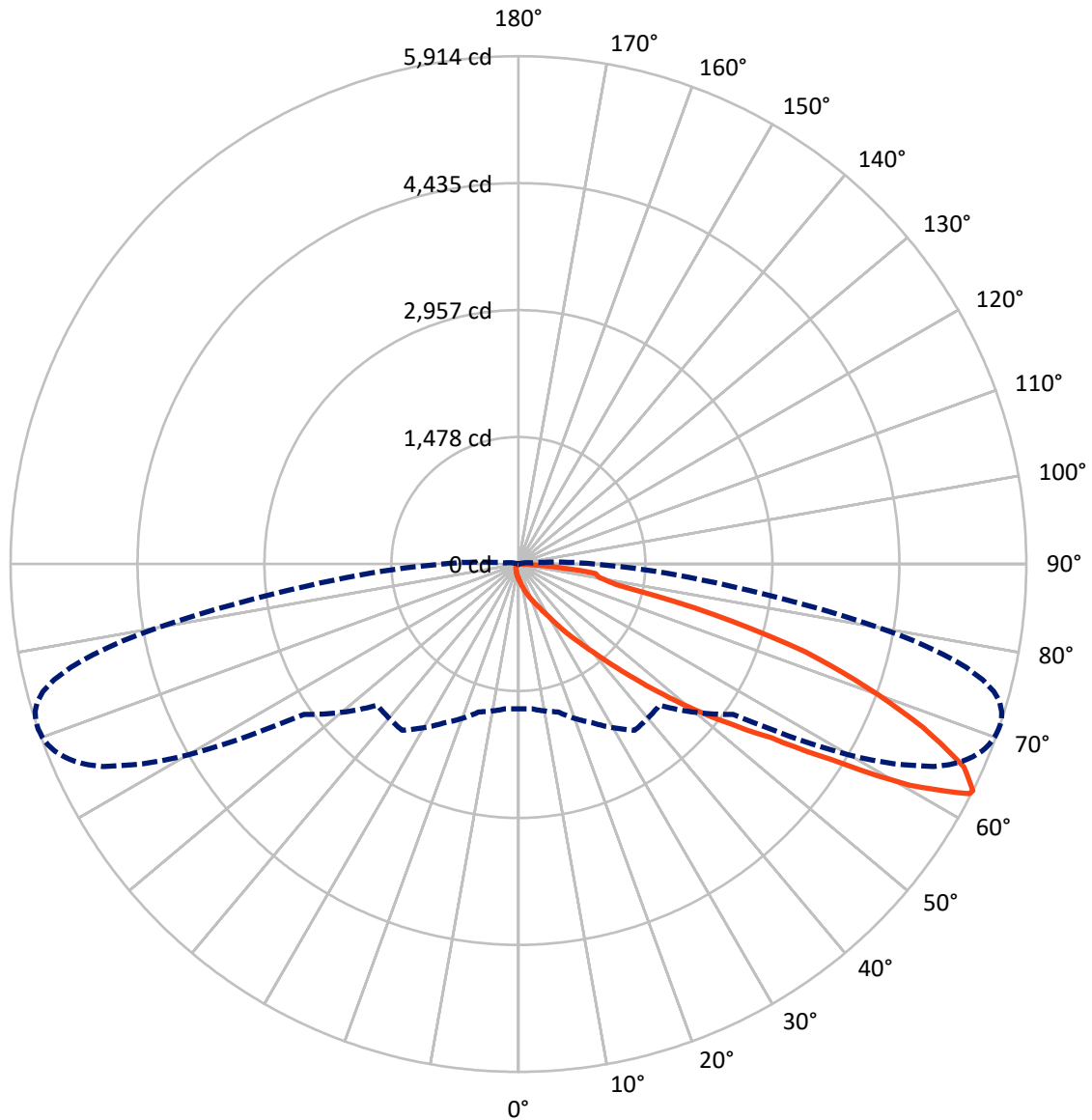
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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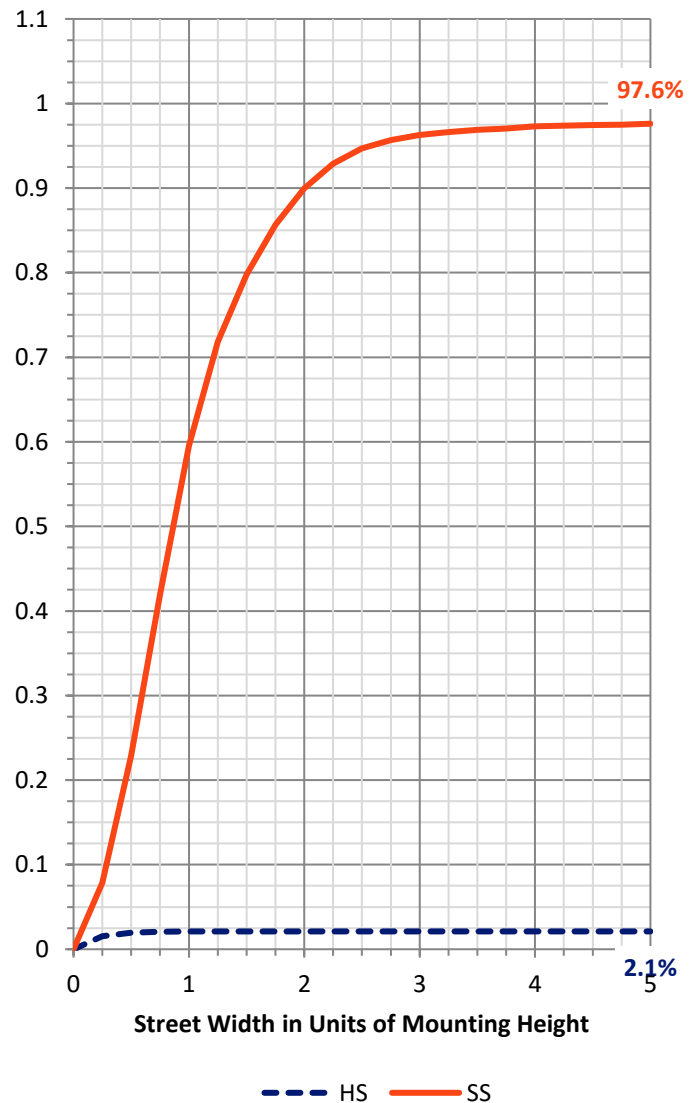
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 94.1 | 0.0 | 94.1 |
| | % Fixture | 2.1 | 0.0 | 2.1 |
| Street Side | Lumens | 4336.1 | 0.0 | 4336.1 |
| | % Fixture | 97.9 | 0.0 | 97.9 |
| Total | Lumens | 4430.1 | 0.0 | 4430.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 18.8 | 0.4 |
| 10°-20° | 72.8 | 1.6 |
| 20°-30° | 148.0 | 3.3 |
| 30°-40° | 361.5 | 8.2 |
| 40°-50° | 808.4 | 18.2 |
| 50°-60° | 1136.7 | 25.7 |
| 60°-70° | 1336.7 | 30.2 |
| 70°-80° | 482.7 | 10.9 |
| 80°-90° | 64.6 | 1.5 |
| 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° | 4430.1 | 100.0 |
| 0°-180° | 4430.1 | 100.0 |



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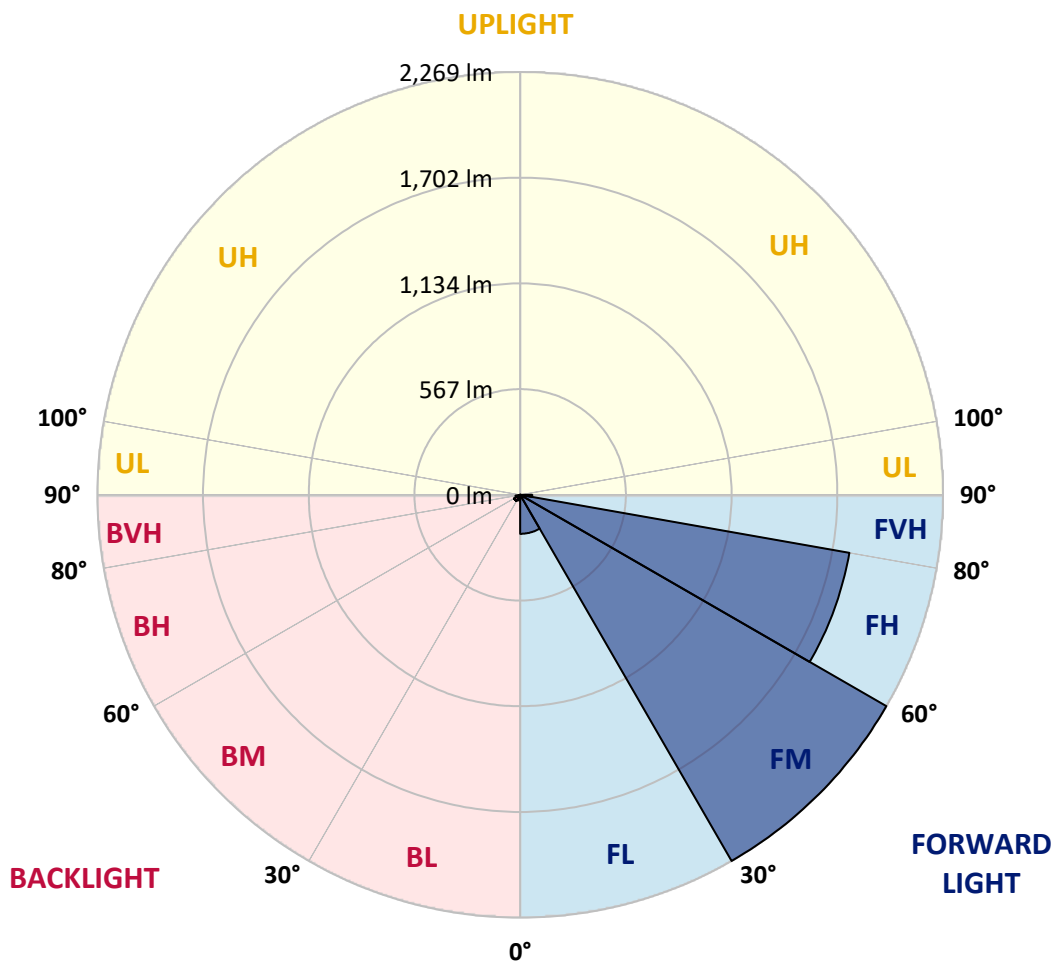
CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 209.3 | 4.7 | | | |
| FM | (30°-60°) | 2268.7 | 51.2 | | | |
| FH | (60°-80°) | 1793.6 | 40.5 | | | G1/1800 |
| FVH | (80°-90°) | 64.4 | 1.5 | | | G1/100 |
| BL | (0°-30°) | 30.2 | 0.7 | B0/110 | | |
| BM | (30°-60°) | 37.9 | 0.9 | B0/220 | | |
| BH | (60°-80°) | 25.8 | 0.6 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.1 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type II Short





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CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 57° | 58° | 59° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 |
| 2.5° | 222.3 | 224.7 | 223.1 | 219.1 | 214.2 | 207.8 | 202.1 | 202.1 | 201.3 | 198.9 | 199.7 |
| 5° | 291.6 | 292.3 | 289.1 | 279.5 | 270.6 | 256.9 | 241.6 | 240.0 | 238.4 | 236.0 | 235.1 |
| 7.5° | 359.2 | 362.4 | 359.2 | 348.7 | 331.0 | 310.0 | 285.9 | 283.5 | 278.7 | 278.7 | 275.5 |
| 10° | 428.5 | 428.5 | 425.2 | 413.1 | 397.0 | 367.2 | 336.6 | 332.6 | 327.0 | 325.4 | 320.5 |
| 12.5° | 477.6 | 477.6 | 476.0 | 469.5 | 456.7 | 430.1 | 393.0 | 389.0 | 381.8 | 379.3 | 373.7 |
| 15° | 496.9 | 496.9 | 497.7 | 503.3 | 504.2 | 492.1 | 453.4 | 450.2 | 442.9 | 436.5 | 434.1 |
| 17.5° | 509.0 | 508.2 | 508.2 | 516.2 | 530.8 | 538.8 | 513.8 | 510.6 | 502.6 | 499.4 | 491.3 |
| 20° | 535.6 | 534.0 | 529.1 | 529.1 | 542.8 | 571.0 | 571.0 | 570.2 | 561.4 | 558.9 | 554.9 |
| 22.5° | 575.0 | 573.4 | 558.9 | 546.9 | 553.3 | 588.7 | 621.8 | 620.1 | 616.9 | 613.7 | 611.2 |
| 25° | 639.5 | 633.8 | 608.9 | 573.4 | 567.8 | 605.7 | 660.4 | 664.4 | 666.8 | 666.8 | 668.4 |
| 27.5° | 736.9 | 729.7 | 685.4 | 619.3 | 594.4 | 633.0 | 703.1 | 711.1 | 718.4 | 720.0 | 727.2 |
| 30° | 872.2 | 859.4 | 795.7 | 699.1 | 641.9 | 673.3 | 765.9 | 774.7 | 785.2 | 788.5 | 799.7 |
| 32.5° | 1094.5 | 1087.2 | 1026.1 | 881.0 | 758.6 | 752.2 | 853.7 | 864.9 | 878.7 | 884.3 | 898.0 |
| 35° | 1432.7 | 1434.4 | 1384.5 | 1253.9 | 1084.8 | 996.2 | 1010.7 | 1020.4 | 1025.2 | 1042.2 | 1049.4 |
| 37.5° | 1662.3 | 1666.3 | 1677.5 | 1626.0 | 1505.3 | 1415.0 | 1301.4 | 1312.0 | 1287.0 | 1289.4 | 1290.2 |
| 40° | 1787.9 | 1800.8 | 1866.9 | 1916.8 | 1907.1 | 1854.8 | 1763.8 | 1769.4 | 1722.7 | 1712.2 | 1661.5 |
| 42.5° | 1871.7 | 1888.6 | 1994.1 | 2148.7 | 2227.6 | 2275.2 | 2254.2 | 2251.8 | 2215.5 | 2201.9 | 2159.2 |
| 45° | 1924.0 | 1939.3 | 2072.2 | 2300.1 | 2482.1 | 2620.7 | 2677.9 | 2684.3 | 2653.7 | 2640.0 | 2604.6 |
| 47.5° | 1921.6 | 1939.3 | 2081.9 | 2356.5 | 2624.7 | 2846.2 | 3007.2 | 3015.3 | 3033.8 | 3021.8 | 3024.1 |
| 50° | 1815.3 | 1832.2 | 1975.5 | 2260.7 | 2582.8 | 2949.3 | 3244.0 | 3269.8 | 3299.6 | 3319.7 | 3329.3 |
| 52.5° | 1686.4 | 1698.6 | 1825.8 | 2096.3 | 2404.0 | 2906.6 | 3384.2 | 3428.5 | 3472.8 | 3510.6 | 3537.1 |
| 55° | 1638.9 | 1652.6 | 1752.5 | 1977.2 | 2260.7 | 2727.8 | 3449.4 | 3514.6 | 3577.5 | 3639.5 | 3690.2 |
| 57.5° | 1663.9 | 1676.8 | 1748.4 | 1920.8 | 2175.3 | 2539.3 | 3467.9 | 3569.4 | 3672.5 | 3773.1 | 3873.0 |
| 60° | 1755.7 | 1769.4 | 1830.6 | 1973.2 | 2152.8 | 2430.6 | 3395.4 | 3563.7 | 3735.3 | 3910.9 | 4076.0 |
| 62.5° | 1719.5 | 1725.1 | 1815.3 | 2064.9 | 2313.8 | 2338.0 | 3132.1 | 3367.2 | 3629.0 | 3899.6 | 4166.2 |
| 63° | 1684.8 | 1691.3 | 1783.1 | 2040.0 | 2362.9 | 2324.3 | 3050.7 | 3298.8 | 3575.0 | 3866.6 | 4156.5 |
| 65° | 1527.8 | 1528.5 | 1598.7 | 1801.6 | 2308.2 | 2348.4 | 2688.3 | 2925.1 | 3242.4 | 3591.9 | 3958.4 |
| 67.5° | 1140.4 | 1134.7 | 1202.4 | 1357.0 | 1812.1 | 2349.3 | 2307.3 | 2440.3 | 2660.9 | 2971.0 | 3299.6 |
| 70° | 404.3 | 395.4 | 504.9 | 719.2 | 1129.2 | 1921.6 | 1982.8 | 1991.6 | 2052.9 | 2220.4 | 2426.5 |
| 72.5° | 131.3 | 133.7 | 161.1 | 263.4 | 520.3 | 1293.4 | 1795.1 | 1767.8 | 1751.7 | 1750.9 | 1778.3 |
| 75° | 52.3 | 53.2 | 64.5 | 116.8 | 233.5 | 623.4 | 1572.1 | 1587.3 | 1593.0 | 1601.1 | 1610.0 |
| 77.5° | 25.0 | 27.4 | 36.3 | 65.2 | 116.0 | 308.4 | 1125.1 | 1254.8 | 1328.9 | 1386.1 | 1420.6 |
| 80° | 8.9 | 10.5 | 20.2 | 40.2 | 54.0 | 141.7 | 592.8 | 715.2 | 823.9 | 964.1 | 1084.8 |
| 82.5° | 0.0 | 0.0 | 4.1 | 28.2 | 29.8 | 57.2 | 243.2 | 285.1 | 326.2 | 422.8 | 542.8 |
| 85° | 0.0 | 0.0 | 0.0 | 8.0 | 8.9 | 9.7 | 82.2 | 99.0 | 111.1 | 129.7 | 149.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.5 | 4.8 | 12.1 | 18.6 |
| 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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 CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 60° | 61° | 62° | 64° | 65° | 66° | 67° | 68° | 69° | 70° | 71° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 |
| 2.5° | 198.1 | 197.3 | 197.3 | 195.7 | 194.9 | 193.3 | 192.5 | 190.1 | 189.2 | 189.2 | 189.2 |
| 5° | 234.4 | 231.2 | 229.6 | 225.5 | 223.1 | 222.3 | 218.3 | 216.7 | 214.2 | 215.1 | 211.0 |
| 7.5° | 274.6 | 269.0 | 266.6 | 260.9 | 259.3 | 253.7 | 252.1 | 248.0 | 245.7 | 240.8 | 239.2 |
| 10° | 318.9 | 311.6 | 307.7 | 298.8 | 296.4 | 292.3 | 287.5 | 282.7 | 278.7 | 273.9 | 271.4 |
| 12.5° | 369.7 | 363.2 | 360.0 | 347.9 | 342.3 | 336.6 | 330.2 | 323.8 | 317.3 | 313.2 | 307.7 |
| 15° | 429.3 | 418.8 | 415.6 | 404.3 | 394.7 | 387.4 | 378.6 | 370.4 | 365.6 | 357.6 | 352.0 |
| 17.5° | 488.1 | 477.6 | 475.1 | 458.3 | 447.8 | 442.9 | 433.3 | 422.8 | 414.0 | 405.9 | 397.0 |
| 20° | 546.9 | 539.6 | 533.1 | 517.1 | 505.8 | 497.7 | 484.9 | 474.4 | 467.1 | 455.8 | 444.5 |
| 22.5° | 605.7 | 598.4 | 593.5 | 576.6 | 566.2 | 554.9 | 543.7 | 532.4 | 521.9 | 508.2 | 495.3 |
| 25° | 666.1 | 661.2 | 658.8 | 643.5 | 633.8 | 623.4 | 612.1 | 599.2 | 586.3 | 571.0 | 557.3 |
| 27.5° | 728.8 | 730.4 | 725.6 | 722.4 | 712.0 | 704.7 | 687.0 | 678.1 | 668.4 | 650.0 | 633.0 |
| 30° | 808.6 | 813.4 | 811.8 | 814.2 | 807.8 | 802.9 | 789.2 | 778.0 | 766.7 | 749.0 | 729.7 |
| 32.5° | 909.3 | 915.7 | 918.9 | 927.8 | 924.6 | 923.0 | 918.9 | 902.8 | 894.8 | 864.2 | 856.1 |
| 35° | 1064.7 | 1061.5 | 1075.2 | 1082.4 | 1079.2 | 1077.6 | 1072.7 | 1063.9 | 1054.2 | 1032.5 | 1012.3 |
| 37.5° | 1266.8 | 1270.0 | 1274.9 | 1260.4 | 1250.7 | 1249.9 | 1235.5 | 1226.6 | 1212.8 | 1188.7 | 1164.6 |
| 40° | 1637.3 | 1617.2 | 1594.6 | 1533.4 | 1506.9 | 1491.5 | 1448.8 | 1436.8 | 1413.4 | 1380.4 | 1355.4 |
| 42.5° | 2118.9 | 2098.8 | 2031.1 | 1928.9 | 1874.1 | 1798.3 | 1763.8 | 1721.1 | 1688.1 | 1634.1 | 1605.1 |
| 45° | 2597.3 | 2539.3 | 2531.2 | 2412.0 | 2344.5 | 2244.6 | 2182.6 | 2110.8 | 2035.9 | 1965.1 | 1913.5 |
| 47.5° | 3000.8 | 2987.9 | 2948.4 | 2876.0 | 2813.1 | 2729.4 | 2649.7 | 2539.3 | 2462.0 | 2361.3 | 2268.7 |
| 50° | 3323.8 | 3322.9 | 3308.4 | 3266.6 | 3214.2 | 3146.5 | 3076.5 | 2983.1 | 2895.3 | 2772.1 | 2673.0 |
| 52.5° | 3565.3 | 3578.2 | 3583.0 | 3570.2 | 3550.1 | 3490.5 | 3455.1 | 3376.9 | 3302.8 | 3198.1 | 3091.0 |
| 55° | 3742.5 | 3790.1 | 3814.2 | 3841.6 | 3836.0 | 3815.1 | 3813.4 | 3762.7 | 3728.8 | 3645.9 | 3570.2 |
| 57.5° | 3961.6 | 4039.7 | 4114.6 | 4247.5 | 4252.3 | 4299.1 | 4323.2 | 4347.4 | 4353.8 | 4320.8 | 4295.9 |
| 60° | 4240.3 | 4399.7 | 4541.4 | 4819.3 | 4891.8 | 5006.1 | 5080.3 | 5160.8 | 5229.3 | 5234.8 | 5233.2 |
| 62.5° | 4436.7 | 4682.4 | 4911.1 | 5323.4 | 5464.4 | 5596.5 | 5695.6 | 5773.7 | 5821.2 | 5869.5 | 5892.1 |
| 63° | 4442.4 | 4711.3 | 4954.6 | 5379.9 | 5528.0 | 5653.6 | 5747.9 | 5820.3 | 5870.3 | 5899.3 | 5913.8 |
| 65° | 4306.3 | 4632.5 | 4922.4 | 5346.0 | 5485.3 | 5611.8 | 5660.9 | 5708.4 | 5732.6 | 5743.9 | 5701.2 |
| 67.5° | 3649.9 | 3968.8 | 4307.1 | 4780.6 | 4899.8 | 5051.3 | 5091.5 | 5115.7 | 5126.9 | 5124.6 | 5088.3 |
| 70° | 2729.4 | 2996.8 | 3372.9 | 3914.1 | 4071.9 | 4220.1 | 4312.0 | 4351.4 | 4364.3 | 4360.2 | 4306.3 |
| 72.5° | 1905.5 | 2062.5 | 2372.6 | 2975.0 | 3190.1 | 3380.1 | 3493.7 | 3552.5 | 3564.6 | 3540.4 | 3490.5 |
| 75° | 1600.3 | 1608.3 | 1678.4 | 2007.7 | 2209.1 | 2412.0 | 2540.1 | 2577.1 | 2553.0 | 2479.7 | 2352.5 |
| 77.5° | 1428.7 | 1446.5 | 1446.5 | 1495.6 | 1535.0 | 1591.4 | 1603.5 | 1513.3 | 1408.6 | 1273.3 | 1163.7 |
| 80° | 1198.4 | 1260.4 | 1303.9 | 1340.2 | 1344.1 | 1332.9 | 1303.1 | 1252.3 | 1171.8 | 1068.8 | 954.4 |
| 82.5° | 728.1 | 850.5 | 900.4 | 1087.2 | 1179.0 | 1241.1 | 1236.2 | 1168.6 | 1107.4 | 1000.2 | 902.8 |
| 85° | 183.6 | 198.1 | 215.1 | 279.5 | 313.2 | 382.5 | 426.1 | 446.2 | 453.4 | 416.3 | 376.9 |
| 87.5° | 17.7 | 12.1 | 20.2 | 15.3 | 21.8 | 16.1 | 21.8 | 20.2 | 25.0 | 26.6 | 29.0 |
| 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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CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 72° | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 |
| 2.5° | 187.6 | 186.9 | 186.0 | 185.3 | 184.4 | 183.6 | 182.0 | 182.0 | 180.4 | 179.6 | 178.8 |
| 5° | 208.6 | 206.9 | 206.2 | 204.6 | 202.1 | 200.5 | 198.1 | 194.9 | 192.5 | 191.7 | 190.1 |
| 7.5° | 235.1 | 231.2 | 229.6 | 227.1 | 223.9 | 219.1 | 215.8 | 213.5 | 209.4 | 206.9 | 202.1 |
| 10° | 265.0 | 260.9 | 256.1 | 251.2 | 246.4 | 240.8 | 236.8 | 233.5 | 227.1 | 223.9 | 218.3 |
| 12.5° | 302.8 | 295.5 | 290.0 | 283.5 | 277.1 | 270.6 | 265.8 | 256.1 | 250.5 | 243.2 | 238.4 |
| 15° | 341.5 | 335.0 | 328.6 | 320.5 | 310.9 | 300.4 | 295.5 | 286.7 | 279.5 | 268.2 | 261.7 |
| 17.5° | 388.2 | 376.1 | 366.4 | 356.8 | 347.9 | 338.2 | 328.6 | 314.9 | 304.4 | 294.8 | 281.9 |
| 20° | 434.1 | 419.6 | 409.1 | 396.3 | 383.4 | 368.1 | 356.8 | 347.1 | 332.6 | 319.8 | 306.0 |
| 22.5° | 483.3 | 468.7 | 451.8 | 439.0 | 421.2 | 409.1 | 393.8 | 377.7 | 363.2 | 346.3 | 329.4 |
| 25° | 542.8 | 527.5 | 508.2 | 491.3 | 471.1 | 454.2 | 435.7 | 417.2 | 399.5 | 380.2 | 358.4 |
| 27.5° | 616.1 | 600.0 | 579.1 | 558.9 | 532.4 | 511.4 | 493.7 | 468.7 | 446.2 | 422.0 | 397.0 |
| 30° | 708.7 | 691.0 | 665.2 | 636.2 | 609.6 | 586.3 | 561.4 | 528.3 | 503.3 | 474.4 | 442.2 |
| 32.5° | 829.5 | 808.6 | 774.0 | 746.6 | 713.6 | 682.9 | 648.4 | 615.3 | 579.8 | 542.0 | 504.9 |
| 35° | 981.8 | 962.4 | 922.1 | 881.9 | 845.6 | 809.4 | 765.9 | 728.1 | 678.1 | 632.2 | 584.7 |
| 37.5° | 1139.6 | 1104.9 | 1067.9 | 1024.5 | 979.3 | 935.8 | 882.7 | 830.3 | 773.1 | 723.2 | 663.6 |
| 40° | 1320.0 | 1278.2 | 1247.5 | 1200.8 | 1137.2 | 1075.2 | 1026.1 | 960.8 | 889.1 | 822.3 | 752.2 |
| 42.5° | 1567.3 | 1520.5 | 1465.8 | 1394.9 | 1349.0 | 1276.5 | 1212.8 | 1135.6 | 1041.3 | 966.4 | 881.9 |
| 45° | 1853.1 | 1789.5 | 1736.3 | 1667.9 | 1612.3 | 1522.1 | 1448.1 | 1345.0 | 1250.7 | 1152.4 | 1049.4 |
| 47.5° | 2179.4 | 2100.4 | 2023.1 | 1955.4 | 1866.9 | 1778.3 | 1684.0 | 1574.5 | 1453.7 | 1345.7 | 1223.3 |
| 50° | 2553.8 | 2441.9 | 2334.8 | 2247.8 | 2126.2 | 2023.9 | 1921.6 | 1798.3 | 1664.7 | 1540.7 | 1401.3 |
| 52.5° | 2970.2 | 2840.5 | 2698.8 | 2565.1 | 2424.2 | 2292.9 | 2169.6 | 2027.9 | 1878.9 | 1727.5 | 1572.1 |
| 55° | 3472.8 | 3375.3 | 3208.6 | 3038.6 | 2850.2 | 2674.6 | 2516.0 | 2340.4 | 2159.2 | 1960.2 | 1796.7 |
| 57.5° | 4259.6 | 4212.1 | 4072.7 | 3902.8 | 3657.2 | 3443.7 | 3174.8 | 2959.7 | 2697.2 | 2423.3 | 2212.3 |
| 60° | 5325.9 | 5267.1 | 5188.9 | 5051.3 | 4856.4 | 4566.4 | 4270.0 | 3935.9 | 3536.4 | 3157.1 | 2797.0 |
| 62.5° | 5894.5 | 5873.5 | 5809.9 | 5714.9 | 5532.8 | 5304.1 | 5005.4 | 4638.1 | 4187.1 | 3726.5 | 3267.3 |
| 63° | 5911.4 | 5884.8 | 5830.1 | 5733.4 | 5573.2 | 5351.7 | 5058.5 | 4701.7 | 4260.4 | 3790.8 | 3322.1 |
| 65° | 5682.7 | 5672.2 | 5616.6 | 5511.2 | 5401.5 | 5232.5 | 5005.4 | 4698.5 | 4328.0 | 3884.3 | 3418.0 |
| 67.5° | 5040.0 | 5008.6 | 4923.2 | 4891.0 | 4814.4 | 4696.9 | 4523.7 | 4312.7 | 4047.8 | 3699.0 | 3296.4 |
| 70° | 4262.8 | 4216.1 | 4109.0 | 4051.8 | 3958.4 | 3884.3 | 3778.8 | 3628.2 | 3464.7 | 3221.4 | 2921.1 |
| 72.5° | 3438.9 | 3342.3 | 3244.0 | 3095.0 | 2964.5 | 2832.5 | 2715.7 | 2609.4 | 2429.8 | 2331.6 | 2103.6 |
| 75° | 2233.3 | 2057.7 | 1889.4 | 1663.9 | 1461.0 | 1281.4 | 1106.5 | 1018.0 | 833.5 | 758.6 | 651.6 |
| 77.5° | 1059.9 | 961.6 | 829.5 | 727.2 | 596.8 | 487.2 | 397.9 | 298.8 | 234.4 | 183.6 | 140.1 |
| 80° | 855.3 | 772.4 | 692.7 | 600.0 | 501.7 | 400.2 | 306.8 | 229.6 | 162.7 | 112.7 | 79.7 |
| 82.5° | 762.7 | 672.5 | 574.2 | 510.6 | 443.8 | 363.2 | 298.0 | 243.2 | 179.6 | 131.3 | 89.4 |
| 85° | 296.4 | 249.6 | 192.5 | 157.0 | 122.4 | 100.6 | 91.0 | 62.9 | 49.1 | 38.6 | 29.8 |
| 87.5° | 25.8 | 20.9 | 16.9 | 11.3 | 12.1 | 6.4 | 7.3 | 4.8 | 4.1 | 4.1 | 3.2 |
| 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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CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 83° | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 95° | 105° | 115° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0° | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 |
| 2.5° | 178.0 | 177.2 | 176.4 | 174.8 | 174.8 | 173.1 | 172.4 | 171.5 | 167.6 | 158.7 | 151.4 |
| 5° | 186.9 | 185.3 | 183.6 | 181.2 | 179.6 | 177.2 | 175.6 | 173.1 | 164.3 | 147.4 | 132.9 |
| 7.5° | 199.7 | 196.5 | 194.1 | 189.2 | 186.9 | 183.6 | 181.2 | 177.2 | 162.7 | 136.9 | 116.8 |
| 10° | 215.1 | 209.4 | 205.3 | 199.7 | 194.9 | 190.8 | 186.9 | 181.2 | 161.1 | 125.6 | 102.2 |
| 12.5° | 233.5 | 227.1 | 219.1 | 212.6 | 206.2 | 200.5 | 194.9 | 187.6 | 158.7 | 116.0 | 91.0 |
| 15° | 252.1 | 242.4 | 236.8 | 227.9 | 219.1 | 211.0 | 203.0 | 196.5 | 159.5 | 105.5 | 81.3 |
| 17.5° | 273.0 | 263.4 | 251.2 | 241.6 | 231.9 | 221.5 | 211.8 | 198.9 | 155.4 | 97.4 | 74.1 |
| 20° | 293.2 | 279.5 | 268.2 | 256.1 | 242.4 | 229.6 | 217.4 | 206.2 | 152.2 | 89.4 | 67.7 |
| 22.5° | 314.9 | 298.8 | 284.3 | 269.0 | 252.1 | 237.6 | 223.1 | 208.6 | 146.5 | 82.2 | 62.0 |
| 25° | 341.5 | 323.0 | 302.0 | 283.5 | 265.8 | 248.0 | 229.6 | 211.8 | 141.0 | 75.7 | 58.0 |
| 27.5° | 373.7 | 349.5 | 328.6 | 305.2 | 280.3 | 257.7 | 237.6 | 218.3 | 135.3 | 70.9 | 54.0 |
| 30° | 414.7 | 386.6 | 356.8 | 327.0 | 300.4 | 274.6 | 246.4 | 222.3 | 129.7 | 66.1 | 49.9 |
| 32.5° | 469.5 | 434.1 | 397.9 | 363.2 | 327.8 | 294.8 | 265.0 | 233.5 | 126.5 | 62.0 | 45.9 |
| 35° | 542.0 | 496.1 | 451.8 | 408.3 | 365.6 | 325.4 | 286.7 | 251.2 | 126.5 | 57.2 | 41.1 |
| 37.5° | 610.5 | 557.3 | 501.0 | 447.0 | 396.3 | 349.5 | 303.6 | 260.9 | 120.0 | 53.2 | 37.0 |
| 40° | 684.5 | 620.9 | 554.9 | 491.3 | 430.1 | 372.1 | 319.8 | 270.6 | 114.4 | 48.3 | 33.0 |
| 42.5° | 798.1 | 717.6 | 631.4 | 557.3 | 484.0 | 412.4 | 347.1 | 289.1 | 107.2 | 43.5 | 29.0 |
| 45° | 947.1 | 844.8 | 743.4 | 653.2 | 559.7 | 471.9 | 394.7 | 323.0 | 105.5 | 39.5 | 25.0 |
| 47.5° | 1106.5 | 985.7 | 866.6 | 751.4 | 641.9 | 539.6 | 447.0 | 360.8 | 105.5 | 35.4 | 21.8 |
| 50° | 1265.2 | 1113.8 | 986.6 | 852.9 | 729.7 | 608.9 | 498.5 | 400.2 | 106.3 | 32.2 | 17.7 |
| 52.5° | 1408.6 | 1246.7 | 1104.2 | 949.5 | 813.4 | 673.3 | 553.3 | 439.0 | 104.7 | 28.2 | 14.5 |
| 55° | 1607.5 | 1417.4 | 1252.3 | 1081.6 | 922.1 | 764.3 | 628.2 | 496.9 | 105.5 | 25.0 | 12.1 |
| 57.5° | 1973.9 | 1750.9 | 1551.9 | 1328.0 | 1144.4 | 940.7 | 775.6 | 616.1 | 115.2 | 20.9 | 8.9 |
| 60° | 2499.9 | 2209.9 | 1930.5 | 1657.5 | 1423.8 | 1181.5 | 967.3 | 779.6 | 135.3 | 16.9 | 6.4 |
| 62.5° | 2853.4 | 2474.1 | 2140.6 | 1839.4 | 1568.0 | 1314.3 | 1080.8 | 867.4 | 149.0 | 13.7 | 4.1 |
| 63° | 2889.6 | 2497.4 | 2162.4 | 1851.5 | 1574.5 | 1320.8 | 1085.6 | 873.8 | 149.8 | 12.9 | 4.1 |
| 65° | 2958.1 | 2537.7 | 2174.5 | 1853.9 | 1568.0 | 1312.0 | 1082.4 | 873.0 | 151.4 | 10.5 | 3.2 |
| 67.5° | 2880.0 | 2475.7 | 2104.4 | 1784.7 | 1511.7 | 1259.6 | 1042.2 | 840.8 | 150.6 | 7.3 | 2.5 |
| 70° | 2575.5 | 2240.5 | 1914.4 | 1616.4 | 1368.3 | 1140.4 | 948.7 | 766.7 | 138.5 | 4.8 | 1.6 |
| 72.5° | 1891.0 | 1663.1 | 1410.2 | 1195.1 | 1030.9 | 856.1 | 730.4 | 575.8 | 107.2 | 3.2 | 0.8 |
| 75° | 560.5 | 510.6 | 429.3 | 378.6 | 334.3 | 276.2 | 245.7 | 191.7 | 54.8 | 1.6 | 0.0 |
| 77.5° | 112.0 | 101.5 | 91.0 | 82.9 | 78.1 | 66.8 | 63.6 | 52.3 | 22.5 | 0.8 | 0.0 |
| 80° | 58.8 | 48.3 | 41.1 | 36.3 | 31.4 | 25.8 | 21.8 | 17.7 | 4.1 | 0.0 | 0.0 |
| 82.5° | 56.4 | 37.9 | 27.4 | 22.5 | 19.3 | 15.3 | 12.1 | 8.9 | 2.5 | 0.0 | 0.0 |
| 85° | 20.9 | 16.1 | 12.1 | 9.7 | 8.0 | 7.3 | 5.7 | 4.8 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.2 | 2.5 | 2.5 | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 |
| 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: P162293

CATALOG NUMBER: ECM-F03-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 | 169.9 |
| 2.5° | 144.2 | 137.7 | 134.5 | 130.4 | 130.4 | 129.7 | 131.3 |
| 5° | 120.0 | 111.1 | 104.7 | 99.9 | 100.6 | 98.3 | 99.0 |
| 7.5° | 101.5 | 92.6 | 87.0 | 83.8 | 82.9 | 82.2 | 82.2 |
| 10° | 87.8 | 79.7 | 74.9 | 72.5 | 71.7 | 71.7 | 71.7 |
| 12.5° | 78.1 | 70.1 | 66.1 | 64.5 | 64.5 | 63.6 | 63.6 |
| 15° | 70.1 | 63.6 | 59.6 | 58.0 | 58.0 | 57.2 | 58.0 |
| 17.5° | 63.6 | 57.2 | 54.0 | 52.3 | 52.3 | 51.5 | 51.5 |
| 20° | 58.0 | 52.3 | 49.1 | 46.7 | 46.7 | 45.9 | 46.7 |
| 22.5° | 53.2 | 47.5 | 43.5 | 41.8 | 41.1 | 40.2 | 41.1 |
| 25° | 48.3 | 42.7 | 38.6 | 36.3 | 35.4 | 35.4 | 34.6 |
| 27.5° | 44.3 | 38.6 | 33.8 | 31.4 | 30.6 | 30.6 | 29.8 |
| 30° | 40.2 | 33.8 | 29.0 | 26.6 | 25.8 | 25.8 | 25.8 |
| 32.5° | 36.3 | 29.0 | 25.0 | 22.5 | 21.8 | 21.8 | 21.8 |
| 35° | 32.2 | 25.0 | 20.9 | 18.6 | 17.7 | 17.7 | 17.7 |
| 37.5° | 27.4 | 20.9 | 16.1 | 14.5 | 13.7 | 12.9 | 12.9 |
| 40° | 23.4 | 16.1 | 12.1 | 10.5 | 8.9 | 8.9 | 8.9 |
| 42.5° | 19.3 | 12.9 | 8.9 | 6.4 | 5.7 | 4.8 | 5.7 |
| 45° | 16.1 | 9.7 | 5.7 | 3.2 | 2.5 | 2.5 | 2.5 |
| 47.5° | 12.9 | 6.4 | 2.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| 50° | 9.7 | 4.1 | 0.8 | 0.0 | 0.0 | 0.8 | 0.8 |
| 52.5° | 7.3 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55° | 4.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 57.5° | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 63° | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)