

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: P162271

Luminaire Tested: **ECM-F01-LED-E1-SL2-HSS-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162271
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-F01-LED-E1-SL2-HSS-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1314.4 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

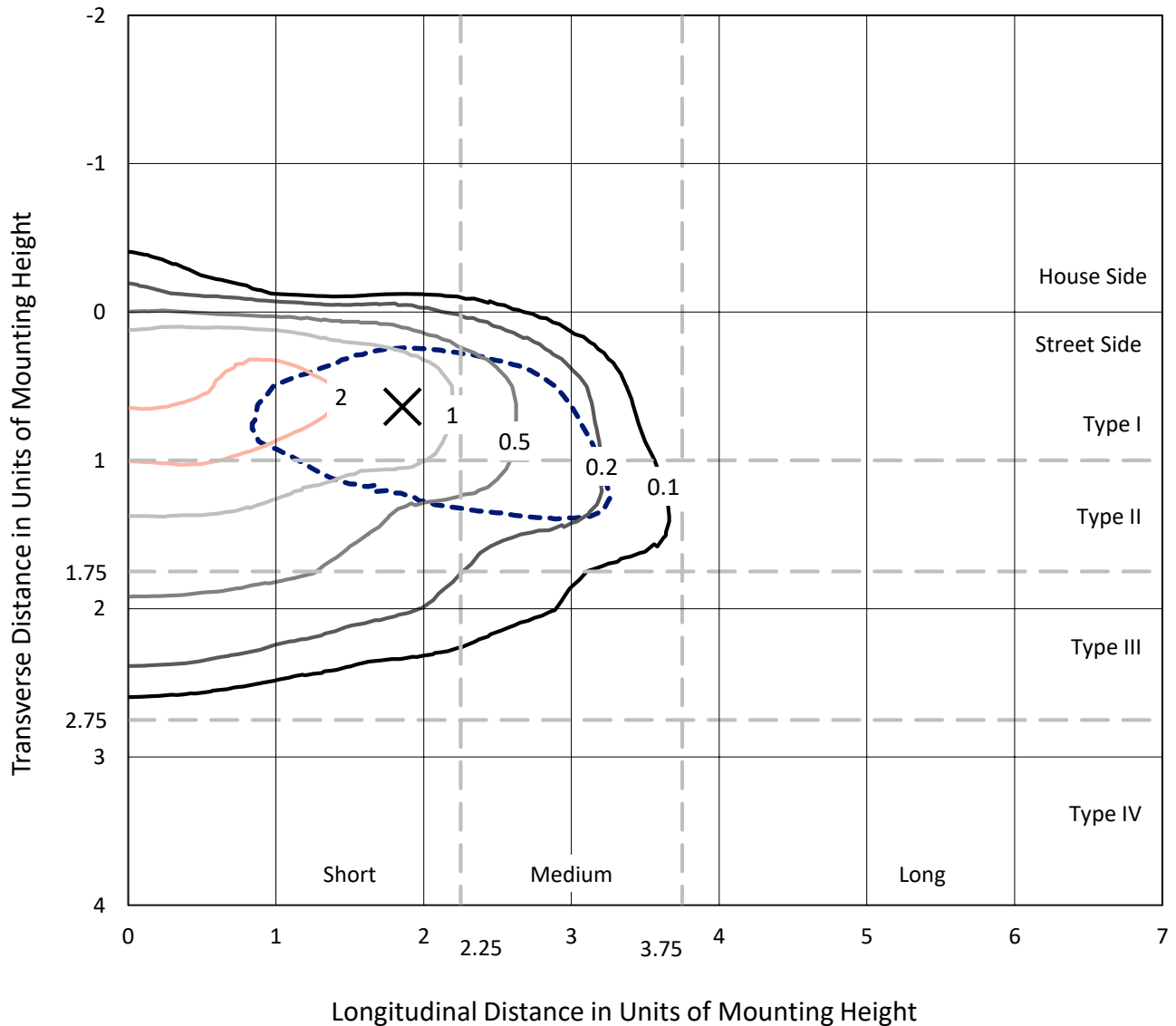
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

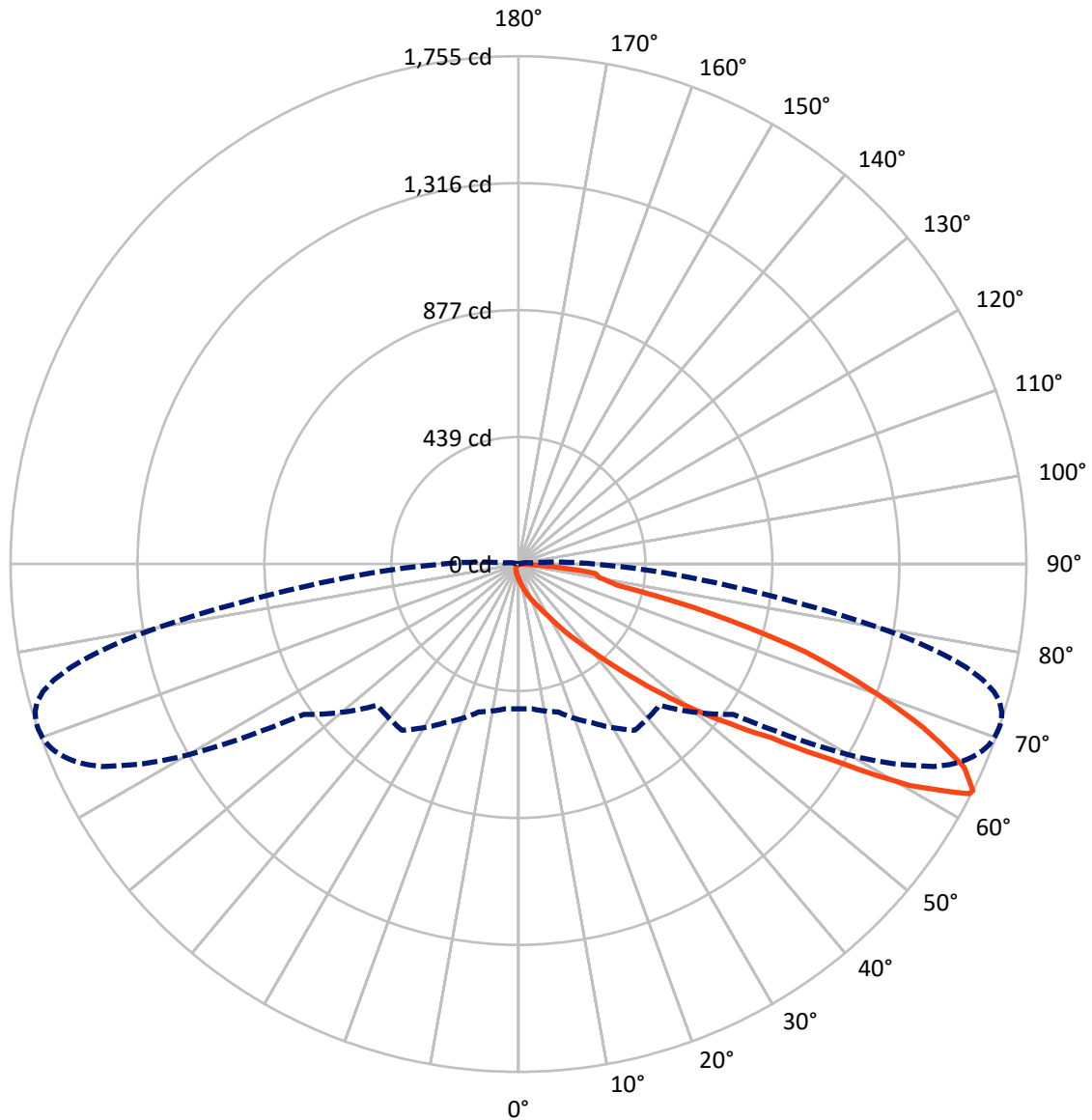
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.8 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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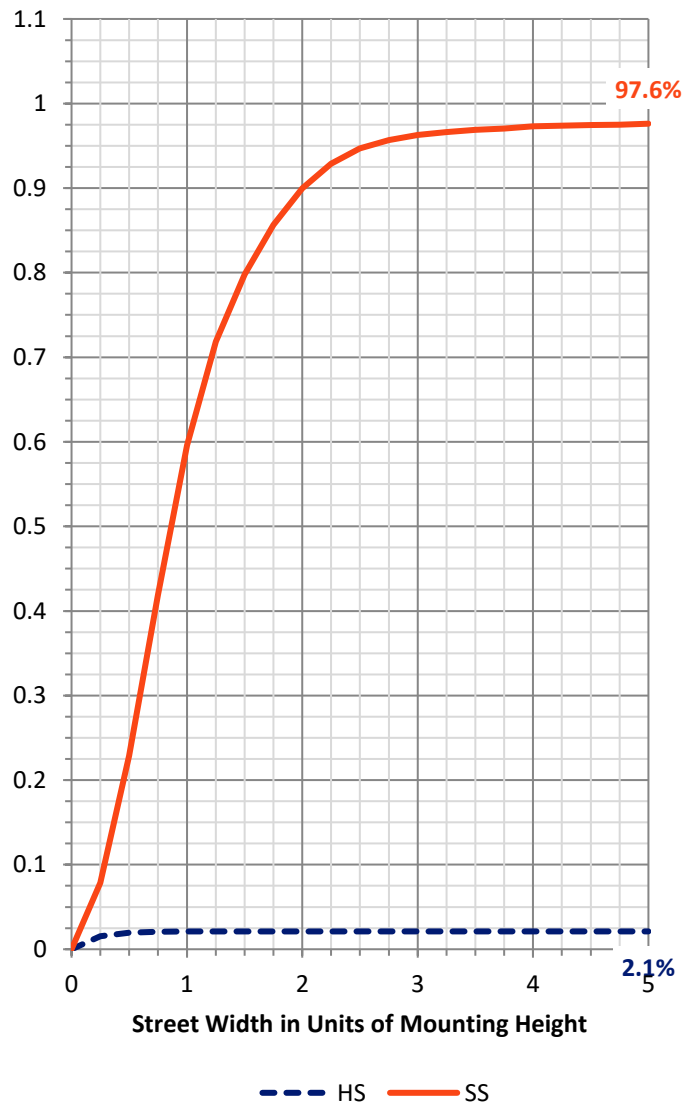
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 27.9 | 0.0 | 27.9 |
| | % Fixture | 2.1 | 0.0 | 2.1 |
| Street Side | Lumens | 1286.5 | 0.0 | 1286.5 |
| | % Fixture | 97.9 | 0.0 | 97.9 |
| Total | Lumens | 1314.4 | 0.0 | 1314.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 5.6 | 0.4 |
| 10°-20° | 21.6 | 1.6 |
| 20°-30° | 43.9 | 3.3 |
| 30°-40° | 107.3 | 8.2 |
| 40°-50° | 239.9 | 18.2 |
| 50°-60° | 337.3 | 25.7 |
| 60°-70° | 396.6 | 30.2 |
| 70°-80° | 143.2 | 10.9 |
| 80°-90° | 19.2 | 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° | 1314.4 | 100.0 |
| 0°-180° | 1314.4 | 100.0 |



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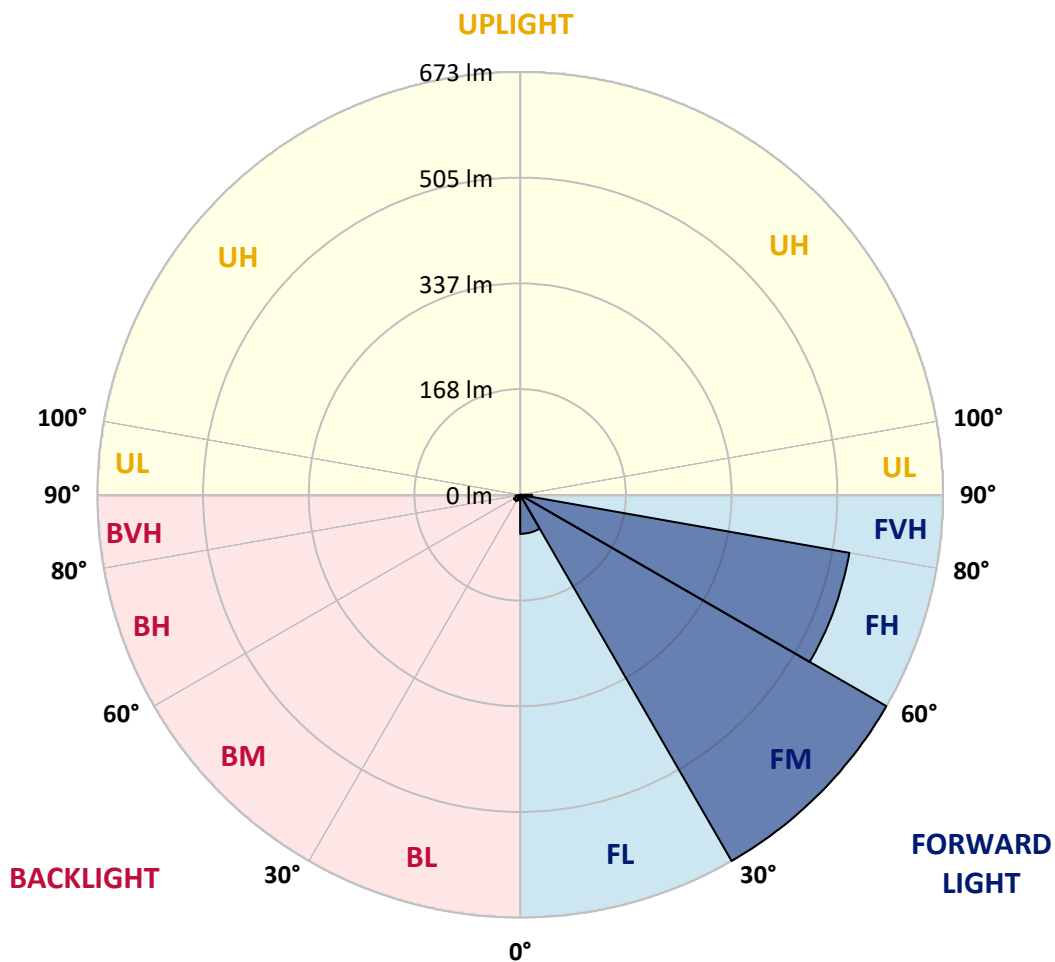
CATALOG NUMBER: ECM-F01-LED-E1-SL2-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 62.1 | 4.7 | | | |
| FM | (30°-60°) | 673.1 | 51.2 | | | |
| FH | (60°-80°) | 532.2 | 40.5 | | | G0/660 |
| FVH | (80°-90°) | 19.1 | 1.5 | | | G1/100 |
| BL | (0°-30°) | 9.0 | 0.7 | B0/110 | | |
| BM | (30°-60°) | 11.2 | 0.9 | B0/220 | | |
| BH | (60°-80°) | 7.7 | 0.6 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.0 | 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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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 57° | 58° | 59° |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| 0° | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 |
| 2.5° | 65.9 | 66.7 | 66.2 | 65.0 | 63.6 | 61.7 | 60.0 | 60.0 | 59.7 | 59.0 | 59.3 |
| 5° | 86.5 | 86.7 | 85.8 | 82.9 | 80.3 | 76.2 | 71.7 | 71.2 | 70.7 | 70.0 | 69.8 |
| 7.5° | 106.6 | 107.5 | 106.6 | 103.5 | 98.2 | 92.0 | 84.8 | 84.1 | 82.7 | 82.7 | 81.7 |
| 10° | 127.1 | 127.1 | 126.2 | 122.6 | 117.8 | 109.0 | 99.9 | 98.7 | 97.0 | 96.5 | 95.1 |
| 12.5° | 141.7 | 141.7 | 141.2 | 139.3 | 135.5 | 127.6 | 116.6 | 115.4 | 113.3 | 112.5 | 110.9 |
| 15° | 147.4 | 147.4 | 147.7 | 149.3 | 149.6 | 146.0 | 134.5 | 133.6 | 131.4 | 129.5 | 128.8 |
| 17.5° | 151.0 | 150.8 | 150.8 | 153.2 | 157.5 | 159.9 | 152.5 | 151.5 | 149.1 | 148.2 | 145.8 |
| 20° | 158.9 | 158.4 | 157.0 | 157.0 | 161.1 | 169.4 | 169.4 | 169.2 | 166.6 | 165.8 | 164.6 |
| 22.5° | 170.6 | 170.1 | 165.8 | 162.3 | 164.2 | 174.7 | 184.5 | 184.0 | 183.0 | 182.1 | 181.4 |
| 25° | 189.7 | 188.0 | 180.7 | 170.1 | 168.5 | 179.7 | 195.9 | 197.1 | 197.8 | 197.8 | 198.3 |
| 27.5° | 218.6 | 216.5 | 203.4 | 183.7 | 176.4 | 187.8 | 208.6 | 211.0 | 213.2 | 213.6 | 215.8 |
| 30° | 258.8 | 255.0 | 236.1 | 207.4 | 190.5 | 199.8 | 227.3 | 229.9 | 233.0 | 233.9 | 237.3 |
| 32.5° | 324.7 | 322.6 | 304.4 | 261.4 | 225.1 | 223.2 | 253.3 | 256.6 | 260.7 | 262.4 | 266.4 |
| 35° | 425.1 | 425.6 | 410.8 | 372.0 | 321.9 | 295.6 | 299.9 | 302.8 | 304.2 | 309.2 | 311.3 |
| 37.5° | 493.2 | 494.4 | 497.7 | 482.5 | 446.6 | 419.8 | 386.1 | 389.3 | 381.8 | 382.6 | 382.8 |
| 40° | 530.5 | 534.3 | 553.9 | 568.7 | 565.8 | 550.3 | 523.3 | 525.0 | 511.1 | 508.0 | 493.0 |
| 42.5° | 555.3 | 560.3 | 591.7 | 637.5 | 661.0 | 675.1 | 668.8 | 668.1 | 657.4 | 653.3 | 640.6 |
| 45° | 570.9 | 575.4 | 614.8 | 682.5 | 736.5 | 777.6 | 794.5 | 796.4 | 787.4 | 783.3 | 772.8 |
| 47.5° | 570.1 | 575.4 | 617.7 | 699.2 | 778.7 | 844.5 | 892.3 | 894.6 | 900.1 | 896.6 | 897.3 |
| 50° | 538.6 | 543.6 | 586.2 | 670.8 | 766.3 | 875.1 | 962.5 | 970.2 | 979.0 | 985.0 | 987.8 |
| 52.5° | 500.4 | 504.0 | 541.7 | 622.0 | 713.3 | 862.4 | 1004.1 | 1017.2 | 1030.4 | 1041.6 | 1049.5 |
| 55° | 486.3 | 490.3 | 520.0 | 586.6 | 670.8 | 809.3 | 1023.4 | 1042.8 | 1061.4 | 1079.8 | 1094.9 |
| 57.5° | 493.7 | 497.5 | 518.8 | 569.9 | 645.4 | 753.4 | 1028.9 | 1059.1 | 1089.6 | 1119.5 | 1149.1 |
| 60° | 520.9 | 525.0 | 543.2 | 585.5 | 638.7 | 721.2 | 1007.4 | 1057.4 | 1108.3 | 1160.4 | 1209.4 |
| 62.5° | 510.2 | 511.8 | 538.6 | 612.7 | 686.5 | 693.7 | 929.3 | 999.1 | 1076.7 | 1157.0 | 1236.1 |
| 63° | 499.9 | 501.8 | 529.1 | 605.3 | 701.1 | 689.6 | 905.2 | 978.8 | 1060.7 | 1147.2 | 1233.3 |
| 65° | 453.3 | 453.5 | 474.3 | 534.6 | 684.9 | 696.8 | 797.6 | 867.9 | 962.0 | 1065.7 | 1174.5 |
| 67.5° | 338.4 | 336.7 | 356.8 | 402.6 | 537.6 | 697.0 | 684.6 | 724.0 | 789.5 | 881.5 | 979.0 |
| 70° | 120.0 | 117.3 | 149.8 | 213.4 | 335.0 | 570.1 | 588.3 | 590.9 | 609.1 | 658.8 | 720.0 |
| 72.5° | 39.0 | 39.7 | 47.8 | 78.1 | 154.4 | 383.8 | 532.6 | 524.5 | 519.7 | 519.5 | 527.6 |
| 75° | 15.5 | 15.8 | 19.1 | 34.7 | 69.3 | 185.0 | 466.4 | 471.0 | 472.7 | 475.0 | 477.7 |
| 77.5° | 7.4 | 8.1 | 10.8 | 19.4 | 34.4 | 91.5 | 333.8 | 372.3 | 394.3 | 411.3 | 421.5 |
| 80° | 2.6 | 3.1 | 6.0 | 11.9 | 16.0 | 42.0 | 175.9 | 212.2 | 244.4 | 286.0 | 321.9 |
| 82.5° | 0.0 | 0.0 | 1.2 | 8.4 | 8.8 | 17.0 | 72.2 | 84.6 | 96.8 | 125.4 | 161.1 |
| 85° | 0.0 | 0.0 | 0.0 | 2.4 | 2.6 | 2.9 | 24.4 | 29.4 | 33.0 | 38.5 | 44.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.7 | 1.4 | 3.6 | 5.5 |
| 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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CATALOG NUMBER: ECM-F01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

| | 60° | 61° | 62° | 64° | 65° | 66° | 67° | 68° | 69° | 70° | 71° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 |
| 2.5° | 58.8 | 58.5 | 58.5 | 58.1 | 57.8 | 57.4 | 57.1 | 56.4 | 56.1 | 56.1 | 56.1 |
| 5° | 69.5 | 68.6 | 68.1 | 66.9 | 66.2 | 65.9 | 64.8 | 64.3 | 63.6 | 63.8 | 62.6 |
| 7.5° | 81.5 | 79.8 | 79.1 | 77.4 | 76.9 | 75.3 | 74.8 | 73.6 | 72.9 | 71.5 | 71.0 |
| 10° | 94.6 | 92.5 | 91.3 | 88.6 | 87.9 | 86.7 | 85.3 | 83.9 | 82.7 | 81.3 | 80.5 |
| 12.5° | 109.7 | 107.8 | 106.8 | 103.2 | 101.6 | 99.9 | 98.0 | 96.1 | 94.1 | 92.9 | 91.3 |
| 15° | 127.4 | 124.3 | 123.3 | 120.0 | 117.1 | 114.9 | 112.3 | 109.9 | 108.5 | 106.1 | 104.4 |
| 17.5° | 144.8 | 141.7 | 141.0 | 136.0 | 132.9 | 131.4 | 128.6 | 125.4 | 122.8 | 120.4 | 117.8 |
| 20° | 162.3 | 160.1 | 158.2 | 153.4 | 150.1 | 147.7 | 143.9 | 140.7 | 138.6 | 135.2 | 131.9 |
| 22.5° | 179.7 | 177.5 | 176.1 | 171.1 | 168.0 | 164.6 | 161.3 | 158.0 | 154.8 | 150.8 | 147.0 |
| 25° | 197.6 | 196.2 | 195.5 | 190.9 | 188.0 | 185.0 | 181.6 | 177.8 | 174.0 | 169.4 | 165.4 |
| 27.5° | 216.2 | 216.7 | 215.3 | 214.3 | 211.2 | 209.1 | 203.8 | 201.2 | 198.3 | 192.8 | 187.8 |
| 30° | 239.9 | 241.4 | 240.9 | 241.6 | 239.7 | 238.2 | 234.2 | 230.8 | 227.5 | 222.2 | 216.5 |
| 32.5° | 269.8 | 271.7 | 272.6 | 275.3 | 274.3 | 273.9 | 272.6 | 267.9 | 265.5 | 256.4 | 254.0 |
| 35° | 315.9 | 314.9 | 319.0 | 321.2 | 320.2 | 319.7 | 318.3 | 315.7 | 312.8 | 306.3 | 300.4 |
| 37.5° | 375.9 | 376.8 | 378.3 | 374.0 | 371.1 | 370.9 | 366.6 | 363.9 | 359.9 | 352.7 | 345.5 |
| 40° | 485.8 | 479.8 | 473.1 | 455.0 | 447.1 | 442.5 | 429.9 | 426.3 | 419.4 | 409.6 | 402.2 |
| 42.5° | 628.7 | 622.7 | 602.6 | 572.3 | 556.0 | 533.6 | 523.3 | 510.7 | 500.9 | 484.8 | 476.2 |
| 45° | 770.6 | 753.4 | 751.0 | 715.7 | 695.6 | 666.0 | 647.6 | 626.3 | 604.1 | 583.1 | 567.8 |
| 47.5° | 890.3 | 886.5 | 874.8 | 853.3 | 834.7 | 809.8 | 786.2 | 753.4 | 730.5 | 700.6 | 673.1 |
| 50° | 986.2 | 985.9 | 981.6 | 969.2 | 953.7 | 933.6 | 912.8 | 885.1 | 859.0 | 822.5 | 793.1 |
| 52.5° | 1057.9 | 1061.7 | 1063.1 | 1059.3 | 1053.3 | 1035.6 | 1025.1 | 1001.9 | 980.0 | 948.9 | 917.1 |
| 55° | 1110.4 | 1124.5 | 1131.7 | 1139.8 | 1138.2 | 1131.9 | 1131.4 | 1116.4 | 1106.4 | 1081.8 | 1059.3 |
| 57.5° | 1175.4 | 1198.6 | 1220.8 | 1260.2 | 1261.7 | 1275.6 | 1282.7 | 1289.9 | 1291.8 | 1282.0 | 1274.6 |
| 60° | 1258.1 | 1305.4 | 1347.5 | 1429.9 | 1451.4 | 1485.3 | 1507.3 | 1531.2 | 1551.5 | 1553.2 | 1552.7 |
| 62.5° | 1316.4 | 1389.3 | 1457.1 | 1579.5 | 1621.3 | 1660.5 | 1689.9 | 1713.1 | 1727.2 | 1741.5 | 1748.2 |
| 63° | 1318.1 | 1397.9 | 1470.1 | 1596.2 | 1640.2 | 1677.5 | 1705.4 | 1726.9 | 1741.8 | 1750.3 | 1754.6 |
| 65° | 1277.7 | 1374.5 | 1460.5 | 1586.2 | 1627.5 | 1665.0 | 1679.6 | 1693.7 | 1700.9 | 1704.2 | 1691.6 |
| 67.5° | 1082.9 | 1177.6 | 1277.9 | 1418.4 | 1453.8 | 1498.7 | 1510.7 | 1517.8 | 1521.2 | 1520.5 | 1509.7 |
| 70° | 809.8 | 889.2 | 1000.8 | 1161.3 | 1208.1 | 1252.1 | 1279.4 | 1291.1 | 1294.9 | 1293.7 | 1277.7 |
| 72.5° | 565.4 | 612.0 | 704.0 | 882.7 | 946.5 | 1002.9 | 1036.6 | 1054.0 | 1057.6 | 1050.4 | 1035.6 |
| 75° | 474.8 | 477.2 | 498.0 | 595.7 | 655.4 | 715.7 | 753.7 | 764.6 | 757.5 | 735.7 | 698.0 |
| 77.5° | 423.9 | 429.2 | 429.2 | 443.8 | 455.4 | 472.2 | 475.8 | 449.0 | 417.9 | 377.8 | 345.3 |
| 80° | 355.6 | 374.0 | 386.9 | 397.6 | 398.8 | 395.5 | 386.6 | 371.6 | 347.7 | 317.1 | 283.2 |
| 82.5° | 216.0 | 252.3 | 267.1 | 322.6 | 349.8 | 368.2 | 366.8 | 346.7 | 328.6 | 296.8 | 267.9 |
| 85° | 54.5 | 58.8 | 63.8 | 82.9 | 92.9 | 113.5 | 126.4 | 132.4 | 134.5 | 123.5 | 111.8 |
| 87.5° | 5.3 | 3.6 | 6.0 | 4.5 | 6.5 | 4.8 | 6.5 | 6.0 | 7.4 | 7.9 | 8.6 |
| 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-F01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

| | 72° | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 |
| 2.5° | 55.7 | 55.4 | 55.2 | 55.0 | 54.7 | 54.5 | 54.0 | 54.0 | 53.5 | 53.3 | 53.1 |
| 5° | 61.9 | 61.4 | 61.2 | 60.7 | 60.0 | 59.5 | 58.8 | 57.8 | 57.1 | 56.9 | 56.4 |
| 7.5° | 69.8 | 68.6 | 68.1 | 67.4 | 66.4 | 65.0 | 64.0 | 63.3 | 62.1 | 61.4 | 60.0 |
| 10° | 78.6 | 77.4 | 76.0 | 74.5 | 73.1 | 71.5 | 70.2 | 69.3 | 67.4 | 66.4 | 64.8 |
| 12.5° | 89.9 | 87.7 | 86.0 | 84.1 | 82.2 | 80.3 | 78.9 | 76.0 | 74.3 | 72.2 | 70.7 |
| 15° | 101.3 | 99.4 | 97.5 | 95.1 | 92.2 | 89.1 | 87.7 | 85.1 | 82.9 | 79.6 | 77.7 |
| 17.5° | 115.2 | 111.6 | 108.7 | 105.9 | 103.2 | 100.4 | 97.5 | 93.4 | 90.3 | 87.5 | 83.6 |
| 20° | 128.8 | 124.5 | 121.4 | 117.6 | 113.8 | 109.2 | 105.9 | 103.0 | 98.7 | 94.9 | 90.8 |
| 22.5° | 143.4 | 139.1 | 134.1 | 130.2 | 125.0 | 121.4 | 116.8 | 112.1 | 107.8 | 102.7 | 97.7 |
| 25° | 161.1 | 156.5 | 150.8 | 145.8 | 139.8 | 134.8 | 129.3 | 123.8 | 118.5 | 112.8 | 106.3 |
| 27.5° | 182.8 | 178.0 | 171.8 | 165.8 | 158.0 | 151.7 | 146.5 | 139.1 | 132.4 | 125.2 | 117.8 |
| 30° | 210.3 | 205.0 | 197.4 | 188.8 | 180.9 | 174.0 | 166.6 | 156.8 | 149.3 | 140.7 | 131.2 |
| 32.5° | 246.1 | 239.9 | 229.6 | 221.5 | 211.7 | 202.6 | 192.4 | 182.6 | 172.0 | 160.8 | 149.8 |
| 35° | 291.3 | 285.6 | 273.6 | 261.7 | 250.9 | 240.1 | 227.3 | 216.0 | 201.2 | 187.6 | 173.5 |
| 37.5° | 338.1 | 327.8 | 316.9 | 304.0 | 290.6 | 277.7 | 261.9 | 246.4 | 229.4 | 214.6 | 196.9 |
| 40° | 391.6 | 379.2 | 370.1 | 356.3 | 337.4 | 319.0 | 304.4 | 285.1 | 263.8 | 244.0 | 223.2 |
| 42.5° | 465.0 | 451.1 | 434.9 | 413.9 | 400.2 | 378.8 | 359.9 | 336.9 | 309.0 | 286.7 | 261.7 |
| 45° | 549.8 | 531.0 | 515.2 | 494.9 | 478.4 | 451.6 | 429.7 | 399.1 | 371.1 | 341.9 | 311.3 |
| 47.5° | 646.6 | 623.2 | 600.3 | 580.2 | 553.9 | 527.6 | 499.6 | 467.1 | 431.3 | 399.3 | 363.0 |
| 50° | 757.7 | 724.5 | 692.7 | 666.9 | 630.8 | 600.5 | 570.1 | 533.6 | 493.9 | 457.1 | 415.8 |
| 52.5° | 881.3 | 842.8 | 800.7 | 761.1 | 719.3 | 680.3 | 643.7 | 601.7 | 557.5 | 512.6 | 466.4 |
| 55° | 1030.4 | 1001.5 | 952.0 | 901.6 | 845.7 | 793.6 | 746.5 | 694.4 | 640.6 | 581.6 | 533.1 |
| 57.5° | 1263.8 | 1249.7 | 1208.4 | 1158.0 | 1085.1 | 1021.8 | 942.0 | 878.2 | 800.3 | 719.0 | 656.4 |
| 60° | 1580.2 | 1562.8 | 1539.6 | 1498.7 | 1440.9 | 1354.9 | 1266.9 | 1167.8 | 1049.3 | 936.7 | 829.9 |
| 62.5° | 1748.9 | 1742.7 | 1723.8 | 1695.6 | 1641.6 | 1573.8 | 1485.1 | 1376.1 | 1242.3 | 1105.7 | 969.4 |
| 63° | 1753.9 | 1746.0 | 1729.8 | 1701.1 | 1653.6 | 1587.9 | 1500.9 | 1395.0 | 1264.1 | 1124.8 | 985.7 |
| 65° | 1686.1 | 1683.0 | 1666.5 | 1635.2 | 1602.7 | 1552.5 | 1485.1 | 1394.1 | 1284.2 | 1152.5 | 1014.1 |
| 67.5° | 1495.4 | 1486.1 | 1460.7 | 1451.2 | 1428.5 | 1393.6 | 1342.2 | 1279.6 | 1201.0 | 1097.5 | 978.1 |
| 70° | 1264.8 | 1250.9 | 1219.2 | 1202.2 | 1174.5 | 1152.5 | 1121.2 | 1076.5 | 1028.0 | 955.8 | 866.7 |
| 72.5° | 1020.3 | 991.7 | 962.5 | 918.3 | 879.6 | 840.4 | 805.8 | 774.2 | 720.9 | 691.8 | 624.2 |
| 75° | 662.6 | 610.5 | 560.6 | 493.7 | 433.5 | 380.2 | 328.3 | 302.0 | 247.3 | 225.1 | 193.3 |
| 77.5° | 314.5 | 285.3 | 246.1 | 215.8 | 177.1 | 144.6 | 118.1 | 88.6 | 69.5 | 54.5 | 41.6 |
| 80° | 253.8 | 229.2 | 205.5 | 178.0 | 148.9 | 118.8 | 91.0 | 68.1 | 48.3 | 33.5 | 23.7 |
| 82.5° | 226.3 | 199.5 | 170.4 | 151.5 | 131.7 | 107.8 | 88.4 | 72.2 | 53.3 | 39.0 | 26.5 |
| 85° | 87.9 | 74.1 | 57.1 | 46.6 | 36.3 | 29.9 | 27.0 | 18.6 | 14.6 | 11.5 | 8.8 |
| 87.5° | 7.6 | 6.2 | 5.0 | 3.3 | 3.6 | 1.9 | 2.2 | 1.4 | 1.2 | 1.2 | 1.0 |
| 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: P162271

CATALOG NUMBER: ECM-F01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

| | 83° | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 95° | 105° | 115° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 0° | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 |
| 2.5° | 52.8 | 52.6 | 52.3 | 51.8 | 51.8 | 51.4 | 51.1 | 50.9 | 49.7 | 47.1 | 44.9 |
| 5° | 55.4 | 55.0 | 54.5 | 53.8 | 53.3 | 52.6 | 52.1 | 51.4 | 48.8 | 43.7 | 39.4 |
| 7.5° | 59.3 | 58.3 | 57.6 | 56.1 | 55.4 | 54.5 | 53.8 | 52.6 | 48.3 | 40.6 | 34.7 |
| 10° | 63.8 | 62.1 | 60.9 | 59.3 | 57.8 | 56.6 | 55.4 | 53.8 | 47.8 | 37.3 | 30.3 |
| 12.5° | 69.3 | 67.4 | 65.0 | 63.1 | 61.2 | 59.5 | 57.8 | 55.7 | 47.1 | 34.4 | 27.0 |
| 15° | 74.8 | 71.9 | 70.2 | 67.6 | 65.0 | 62.6 | 60.2 | 58.3 | 47.3 | 31.3 | 24.1 |
| 17.5° | 81.0 | 78.1 | 74.5 | 71.7 | 68.8 | 65.7 | 62.8 | 59.0 | 46.1 | 28.9 | 22.0 |
| 20° | 87.0 | 82.9 | 79.6 | 76.0 | 71.9 | 68.1 | 64.5 | 61.2 | 45.2 | 26.5 | 20.1 |
| 22.5° | 93.4 | 88.6 | 84.3 | 79.8 | 74.8 | 70.5 | 66.2 | 61.9 | 43.5 | 24.4 | 18.4 |
| 25° | 101.3 | 95.8 | 89.6 | 84.1 | 78.9 | 73.6 | 68.1 | 62.8 | 41.8 | 22.5 | 17.2 |
| 27.5° | 110.9 | 103.7 | 97.5 | 90.6 | 83.2 | 76.5 | 70.5 | 64.8 | 40.1 | 21.0 | 16.0 |
| 30° | 123.1 | 114.7 | 105.9 | 97.0 | 89.1 | 81.5 | 73.1 | 65.9 | 38.5 | 19.6 | 14.8 |
| 32.5° | 139.3 | 128.8 | 118.1 | 107.8 | 97.3 | 87.5 | 78.6 | 69.3 | 37.5 | 18.4 | 13.6 |
| 35° | 160.8 | 147.2 | 134.1 | 121.1 | 108.5 | 96.5 | 85.1 | 74.5 | 37.5 | 17.0 | 12.2 |
| 37.5° | 181.1 | 165.4 | 148.6 | 132.6 | 117.6 | 103.7 | 90.1 | 77.4 | 35.6 | 15.8 | 11.0 |
| 40° | 203.1 | 184.2 | 164.6 | 145.8 | 127.6 | 110.4 | 94.9 | 80.3 | 33.9 | 14.3 | 9.8 |
| 42.5° | 236.8 | 212.9 | 187.3 | 165.4 | 143.6 | 122.3 | 103.0 | 85.8 | 31.8 | 12.9 | 8.6 |
| 45° | 281.0 | 250.7 | 220.6 | 193.8 | 166.1 | 140.0 | 117.1 | 95.8 | 31.3 | 11.7 | 7.4 |
| 47.5° | 328.3 | 292.5 | 257.1 | 223.0 | 190.5 | 160.1 | 132.6 | 107.0 | 31.3 | 10.5 | 6.5 |
| 50° | 375.4 | 330.5 | 292.7 | 253.1 | 216.5 | 180.7 | 147.9 | 118.8 | 31.5 | 9.6 | 5.3 |
| 52.5° | 417.9 | 369.9 | 327.6 | 281.7 | 241.4 | 199.8 | 164.2 | 130.2 | 31.1 | 8.4 | 4.3 |
| 55° | 477.0 | 420.6 | 371.6 | 320.9 | 273.6 | 226.8 | 186.4 | 147.4 | 31.3 | 7.4 | 3.6 |
| 57.5° | 585.7 | 519.5 | 460.5 | 394.0 | 339.5 | 279.1 | 230.1 | 182.8 | 34.2 | 6.2 | 2.6 |
| 60° | 741.7 | 655.7 | 572.8 | 491.8 | 422.5 | 350.6 | 287.0 | 231.3 | 40.1 | 5.0 | 1.9 |
| 62.5° | 846.6 | 734.1 | 635.1 | 545.8 | 465.2 | 390.0 | 320.7 | 257.4 | 44.2 | 4.1 | 1.2 |
| 63° | 857.4 | 741.0 | 641.6 | 549.4 | 467.1 | 391.9 | 322.1 | 259.3 | 44.4 | 3.8 | 1.2 |
| 65° | 877.7 | 752.9 | 645.2 | 550.1 | 465.2 | 389.3 | 321.2 | 259.0 | 44.9 | 3.1 | 1.0 |
| 67.5° | 854.5 | 734.5 | 624.4 | 529.5 | 448.5 | 373.7 | 309.2 | 249.5 | 44.7 | 2.2 | 0.7 |
| 70° | 764.2 | 664.8 | 568.0 | 479.6 | 406.0 | 338.4 | 281.5 | 227.5 | 41.1 | 1.4 | 0.5 |
| 72.5° | 561.1 | 493.4 | 418.4 | 354.6 | 305.9 | 254.0 | 216.7 | 170.9 | 31.8 | 1.0 | 0.3 |
| 75° | 166.3 | 151.5 | 127.4 | 112.3 | 99.2 | 82.0 | 72.9 | 56.9 | 16.3 | 0.5 | 0.0 |
| 77.5° | 33.2 | 30.1 | 27.0 | 24.6 | 23.2 | 19.8 | 18.9 | 15.5 | 6.7 | 0.3 | 0.0 |
| 80° | 17.4 | 14.3 | 12.2 | 10.8 | 9.3 | 7.6 | 6.5 | 5.3 | 1.2 | 0.0 | 0.0 |
| 82.5° | 16.7 | 11.2 | 8.1 | 6.7 | 5.7 | 4.5 | 3.6 | 2.6 | 0.7 | 0.0 | 0.0 |
| 85° | 6.2 | 4.8 | 3.6 | 2.9 | 2.4 | 2.2 | 1.7 | 1.4 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 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: P162271

CATALOG NUMBER: ECM-F01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

| | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|------|------|------|------|------|------|------|
| 0° | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 |
| 2.5° | 42.8 | 40.9 | 39.9 | 38.7 | 38.7 | 38.5 | 39.0 |
| 5° | 35.6 | 33.0 | 31.1 | 29.6 | 29.9 | 29.2 | 29.4 |
| 7.5° | 30.1 | 27.5 | 25.8 | 24.9 | 24.6 | 24.4 | 24.4 |
| 10° | 26.0 | 23.7 | 22.2 | 21.5 | 21.3 | 21.3 | 21.3 |
| 12.5° | 23.2 | 20.8 | 19.6 | 19.1 | 19.1 | 18.9 | 18.9 |
| 15° | 20.8 | 18.9 | 17.7 | 17.2 | 17.2 | 17.0 | 17.2 |
| 17.5° | 18.9 | 17.0 | 16.0 | 15.5 | 15.5 | 15.3 | 15.3 |
| 20° | 17.2 | 15.5 | 14.6 | 13.8 | 13.8 | 13.6 | 13.8 |
| 22.5° | 15.8 | 14.1 | 12.9 | 12.4 | 12.2 | 11.9 | 12.2 |
| 25° | 14.3 | 12.7 | 11.5 | 10.8 | 10.5 | 10.5 | 10.3 |
| 27.5° | 13.1 | 11.5 | 10.0 | 9.3 | 9.1 | 9.1 | 8.8 |
| 30° | 11.9 | 10.0 | 8.6 | 7.9 | 7.6 | 7.6 | 7.6 |
| 32.5° | 10.8 | 8.6 | 7.4 | 6.7 | 6.5 | 6.5 | 6.5 |
| 35° | 9.6 | 7.4 | 6.2 | 5.5 | 5.3 | 5.3 | 5.3 |
| 37.5° | 8.1 | 6.2 | 4.8 | 4.3 | 4.1 | 3.8 | 3.8 |
| 40° | 6.9 | 4.8 | 3.6 | 3.1 | 2.6 | 2.6 | 2.6 |
| 42.5° | 5.7 | 3.8 | 2.6 | 1.9 | 1.7 | 1.4 | 1.7 |
| 45° | 4.8 | 2.9 | 1.7 | 1.0 | 0.7 | 0.7 | 0.7 |
| 47.5° | 3.8 | 1.9 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 |
| 50° | 2.9 | 1.2 | 0.3 | 0.0 | 0.0 | 0.3 | 0.3 |
| 52.5° | 2.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55° | 1.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 57.5° | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 63° | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 0.3 | 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)