

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: P401289

Luminaire Tested: **ENT-SA1C-735-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401289
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1C-735-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3551 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 33.3
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

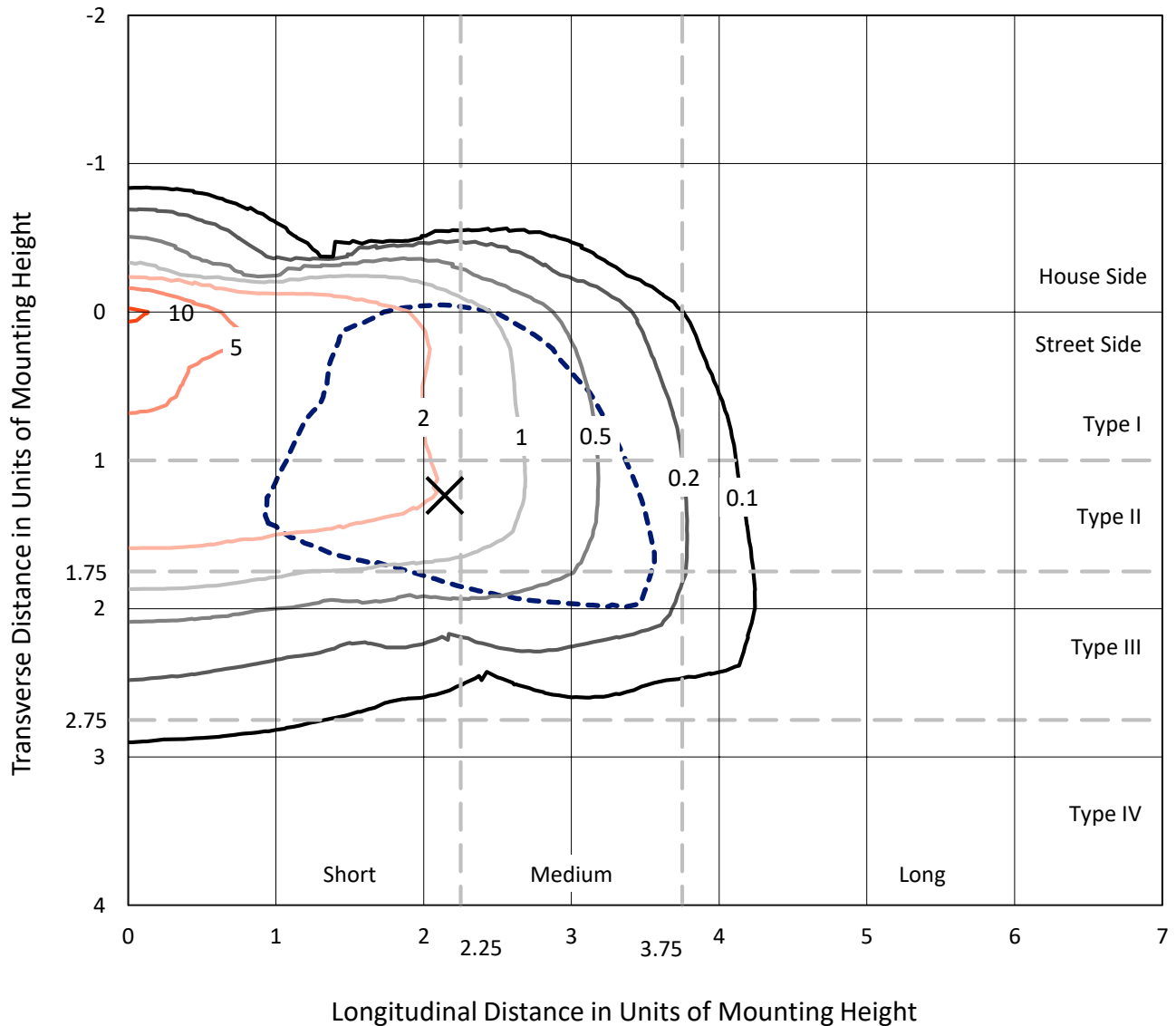


REPORT NUMBER: P401289

CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

Iso-Footcandle Lines of Horizontal Illumination

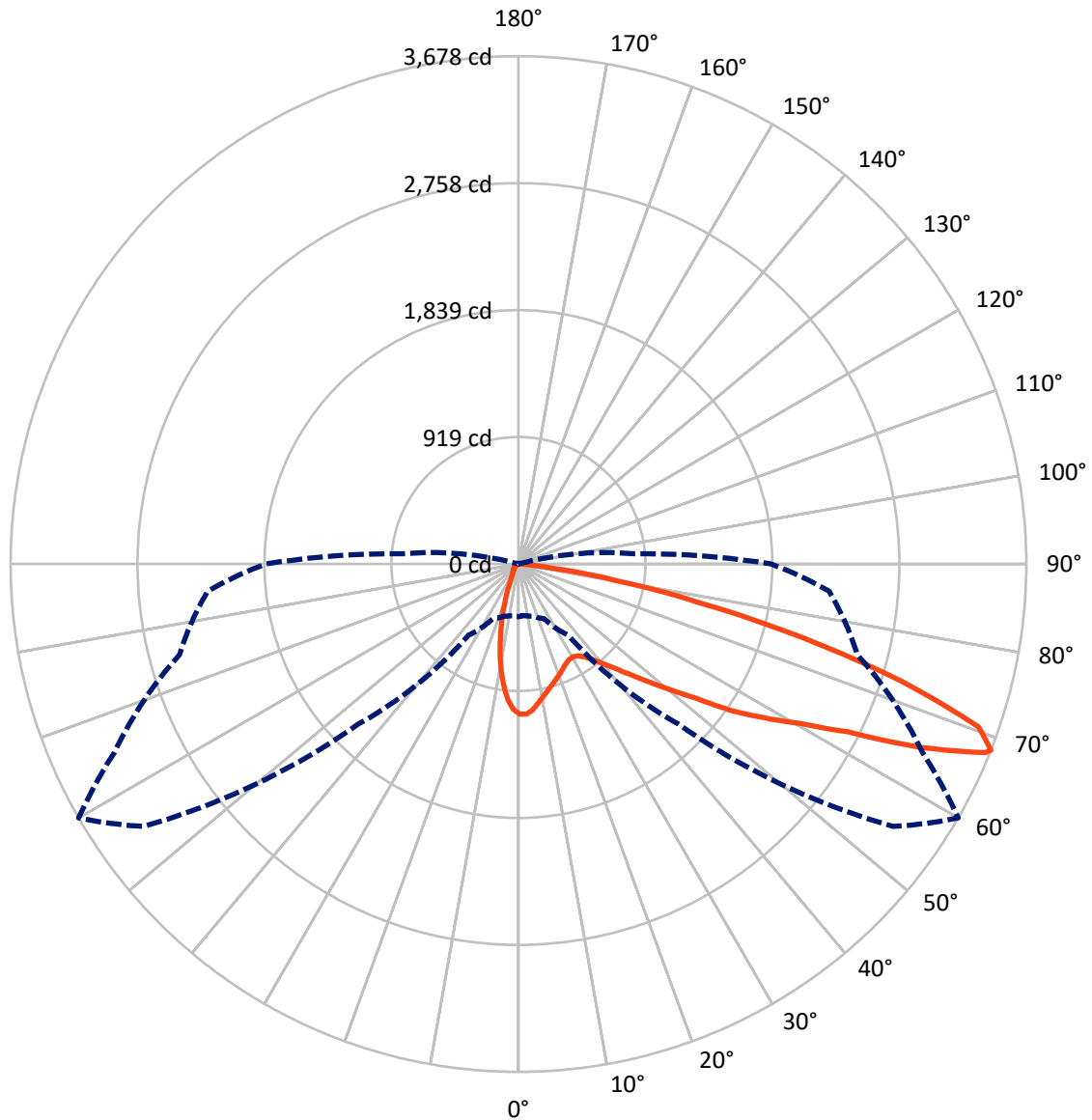
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.9 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P401289
CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P401289

CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 397.0 | 0.0 | 397.0 |
| | % Fixture | 11.2 | 0.0 | 11.2 |
| Street Side | Lumens | 3154.0 | 0.0 | 3154.0 |
| | % Fixture | 88.8 | 0.0 | 88.8 |
| Total | Lumens | 3551.0 | 0.0 | 3551.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 88.2 | 2.5 |
| 10°-20° | 179.9 | 5.1 |
| 20°-30° | 236.9 | 6.7 |
| 30°-40° | 326.9 | 9.2 |
| 40°-50° | 495.5 | 14.0 |
| 50°-60° | 799.5 | 22.5 |
| 60°-70° | 949.8 | 26.7 |
| 70°-80° | 447.7 | 12.6 |
| 80°-90° | 26.7 | 0.8 |
| 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° | 3551.0 | 100.0 |
| 0°-180° | 3551.0 | 100.0 |



REPORT NUMBER: P401289

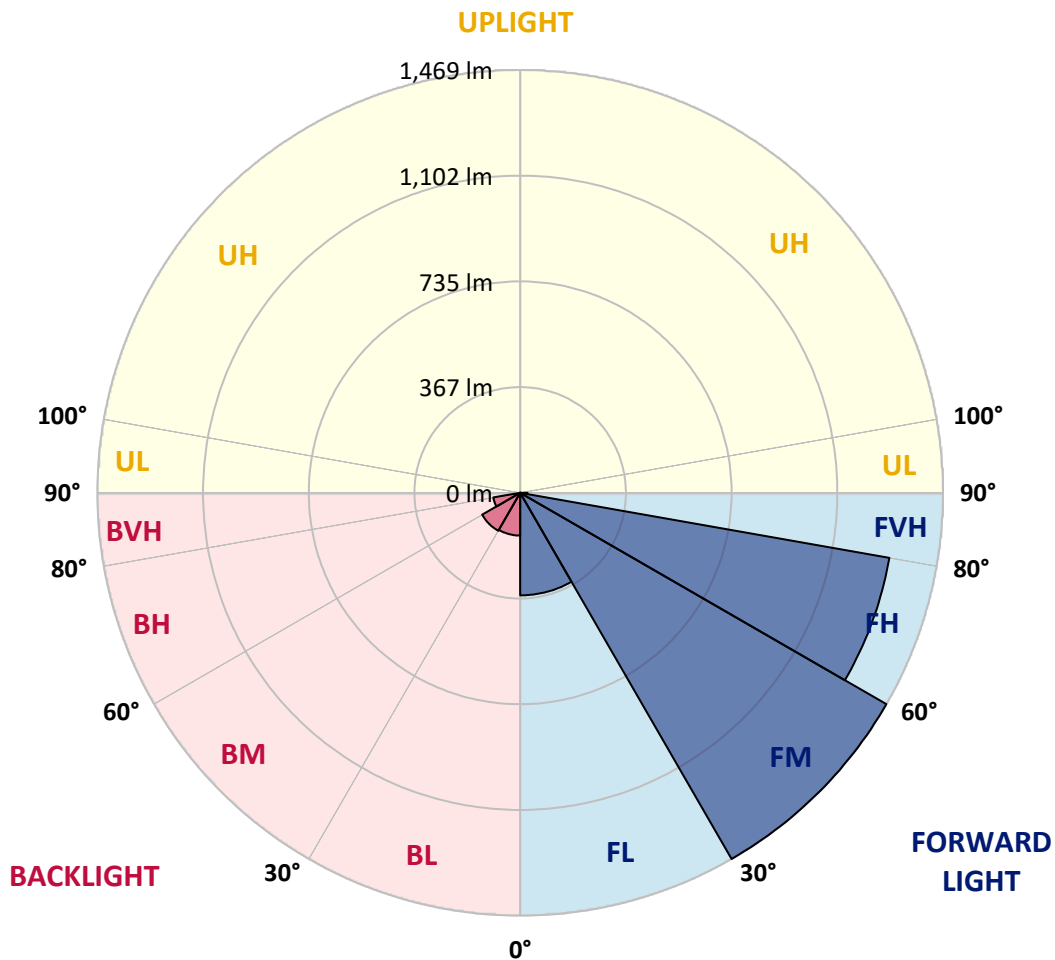
CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 356.4 | 10.0 | | | |
| FM | (30°-60°) | 1469.2 | 41.4 | | | |
| FH | (60°-80°) | 1302.7 | 36.7 | | | G1/1800 |
| FVH | (80°-90°) | 25.6 | 0.7 | | | G1/100 |
| BL | (0°-30°) | 148.6 | 4.2 | B1/500 | | |
| BM | (30°-60°) | 152.6 | 4.3 | B0/220 | | |
| BH | (60°-80°) | 94.7 | 2.7 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.1 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type III Short





REPORT NUMBER: P401289

CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 |
| 2.5° | 1077.3 | 1074.9 | 1081.5 | 1083.3 | 1085.1 | 1088.7 | 1088.1 | 1088.7 | 1089.3 | 1088.1 | 1080.9 |
| 5° | 1003.8 | 1008.0 | 1014.0 | 1021.9 | 1029.7 | 1047.8 | 1055.0 | 1062.2 | 1067.0 | 1070.7 | 1064.0 |
| 7.5° | 931.5 | 939.9 | 944.7 | 959.2 | 971.2 | 989.9 | 1005.6 | 1018.2 | 1030.3 | 1043.5 | 1036.9 |
| 10° | 873.6 | 876.6 | 880.9 | 894.1 | 912.2 | 940.5 | 961.0 | 976.7 | 991.1 | 1013.4 | 1008.0 |
| 12.5° | 817.0 | 818.8 | 827.2 | 841.7 | 860.4 | 895.3 | 922.4 | 940.5 | 956.8 | 984.5 | 985.1 |
| 15° | 775.4 | 776.0 | 781.5 | 794.7 | 816.4 | 853.8 | 888.7 | 908.6 | 931.5 | 965.2 | 967.0 |
| 17.5° | 748.3 | 747.7 | 748.9 | 757.4 | 777.8 | 813.4 | 855.6 | 879.1 | 906.2 | 949.5 | 951.4 |
| 20° | 739.9 | 738.7 | 736.3 | 734.5 | 747.1 | 777.8 | 825.4 | 851.3 | 883.3 | 938.1 | 938.7 |
| 22.5° | 747.1 | 744.7 | 739.3 | 729.0 | 732.6 | 752.5 | 792.3 | 823.6 | 862.8 | 932.1 | 927.9 |
| 25° | 764.6 | 764.6 | 757.4 | 741.1 | 732.6 | 736.9 | 768.8 | 798.9 | 842.3 | 929.1 | 920.0 |
| 27.5° | 793.5 | 792.3 | 782.7 | 765.8 | 750.1 | 738.7 | 754.3 | 782.7 | 827.2 | 932.7 | 916.4 |
| 30° | 828.4 | 824.8 | 814.6 | 802.5 | 783.3 | 758.6 | 757.4 | 778.4 | 820.0 | 944.1 | 918.8 |
| 32.5° | 861.6 | 861.6 | 857.4 | 845.9 | 827.2 | 794.7 | 776.0 | 792.9 | 829.0 | 962.8 | 926.7 |
| 35° | 902.6 | 902.0 | 903.2 | 898.9 | 882.7 | 848.3 | 818.2 | 826.6 | 856.8 | 994.1 | 945.3 |
| 37.5° | 935.1 | 935.7 | 945.9 | 953.2 | 945.9 | 909.8 | 878.5 | 878.5 | 903.8 | 1041.1 | 977.3 |
| 40° | 967.0 | 968.2 | 987.5 | 1008.6 | 1010.4 | 981.5 | 951.4 | 950.8 | 965.2 | 1099.0 | 1026.7 |
| 42.5° | 995.9 | 1000.8 | 1028.5 | 1064.6 | 1085.7 | 1066.4 | 1044.1 | 1036.9 | 1044.1 | 1186.3 | 1106.8 |
| 45° | 1026.7 | 1036.3 | 1074.9 | 1127.3 | 1161.6 | 1162.2 | 1153.8 | 1145.4 | 1149.0 | 1284.5 | 1214.1 |
| 47.5° | 1066.4 | 1077.3 | 1125.5 | 1189.9 | 1255.0 | 1271.9 | 1279.7 | 1276.7 | 1267.1 | 1408.7 | 1352.6 |
| 50° | 1130.9 | 1141.1 | 1186.3 | 1258.6 | 1347.8 | 1408.7 | 1429.7 | 1433.4 | 1420.7 | 1546.0 | 1509.9 |
| 52.5° | 1240.6 | 1246.6 | 1288.8 | 1346.0 | 1446.0 | 1559.9 | 1615.3 | 1615.9 | 1587.6 | 1706.9 | 1679.8 |
| 55° | 1358.0 | 1373.7 | 1423.1 | 1489.4 | 1592.4 | 1720.2 | 1858.7 | 1873.8 | 1786.4 | 1847.9 | 1803.9 |
| 57.5° | 1359.9 | 1374.9 | 1456.9 | 1584.0 | 1799.7 | 1969.0 | 2092.5 | 2103.3 | 2006.3 | 1961.2 | 1920.8 |
| 60° | 1216.5 | 1224.3 | 1338.2 | 1524.3 | 1873.8 | 2304.6 | 2358.8 | 2342.5 | 2160.6 | 2078.0 | 2067.2 |
| 62.5° | 858.6 | 862.2 | 997.1 | 1242.4 | 1709.9 | 2464.9 | 2764.3 | 2676.9 | 2379.9 | 2250.4 | 2286.5 |
| 65° | 540.4 | 538.6 | 594.7 | 790.5 | 1271.9 | 2307.0 | 3265.6 | 3201.7 | 2783.0 | 2466.1 | 2457.6 |
| 67.5° | 398.9 | 389.2 | 404.3 | 465.1 | 726.6 | 1811.1 | 3357.8 | 3645.8 | 3166.8 | 2555.8 | 2309.4 |
| 68° | 382.6 | 374.2 | 389.8 | 436.8 | 628.4 | 1639.4 | 3313.2 | 3677.7 | 3227.6 | 2541.4 | 2258.8 |
| 70° | 324.8 | 316.9 | 330.2 | 365.7 | 437.4 | 1064.0 | 2923.4 | 3536.1 | 3283.1 | 2418.5 | 1990.7 |
| 72.5° | 230.8 | 235.0 | 269.9 | 313.9 | 370.5 | 545.9 | 2152.8 | 2904.1 | 2823.9 | 2150.9 | 1514.7 |
| 75° | 136.8 | 144.6 | 190.4 | 253.1 | 340.4 | 360.3 | 1388.8 | 2111.2 | 2072.0 | 1489.4 | 820.6 |
| 77.5° | 48.2 | 51.2 | 94.6 | 168.7 | 280.8 | 285.6 | 773.6 | 1327.3 | 1234.5 | 608.5 | 242.2 |
| 80° | 17.5 | 17.5 | 34.9 | 94.0 | 181.4 | 218.1 | 410.9 | 708.5 | 487.4 | 157.9 | 66.9 |
| 82.5° | 3.0 | 3.0 | 7.8 | 31.9 | 80.1 | 116.3 | 191.0 | 251.8 | 144.6 | 34.9 | 33.1 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 1.2 | 56.0 | 56.6 | 26.5 | 4.8 | 14.5 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.2 | 1.2 | 1.2 | 1.2 | 1.8 |
| 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: P401289

CATALOG NUMBER: ENT-SA1C-735-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 | 1086.9 |
| 2.5° | 1077.9 | 1076.7 | 1070.1 | 1058.0 | 1047.8 | 1030.9 | 1027.9 | 1011.6 | 1005.6 | 1000.8 | 1005.6 |
| 5° | 1059.2 | 1052.6 | 1030.3 | 1003.2 | 966.4 | 923.0 | 897.7 | 862.8 | 855.6 | 836.3 | 847.7 |
| 7.5° | 1028.5 | 1013.4 | 971.8 | 913.4 | 845.9 | 779.6 | 729.0 | 680.2 | 638.7 | 624.2 | 620.0 |
| 10° | 995.9 | 974.9 | 905.0 | 814.6 | 717.0 | 615.2 | 539.8 | 469.4 | 430.2 | 393.4 | 392.2 |
| 12.5° | 965.2 | 933.3 | 832.1 | 706.1 | 570.0 | 448.9 | 351.3 | 277.2 | 230.8 | 205.5 | 212.1 |
| 15° | 940.5 | 897.7 | 758.6 | 597.7 | 425.4 | 289.2 | 198.8 | 151.2 | 135.0 | 127.1 | 128.3 |
| 17.5° | 916.4 | 859.8 | 687.5 | 484.4 | 303.1 | 178.3 | 128.9 | 112.7 | 107.8 | 106.0 | 104.8 |
| 20° | 894.7 | 823.0 | 612.7 | 382.0 | 200.0 | 123.5 | 106.0 | 100.6 | 98.8 | 97.6 | 97.6 |
| 22.5° | 873.0 | 784.5 | 538.0 | 283.2 | 136.8 | 101.2 | 95.2 | 92.8 | 91.6 | 89.8 | 89.8 |
| 25° | 853.1 | 747.1 | 463.3 | 198.2 | 104.8 | 90.4 | 86.2 | 83.7 | 81.3 | 79.5 | 79.5 |
| 27.5° | 838.1 | 718.8 | 394.0 | 140.4 | 88.0 | 81.3 | 77.1 | 72.9 | 69.9 | 67.5 | 67.5 |
| 30° | 828.4 | 691.1 | 327.2 | 106.0 | 78.3 | 72.3 | 66.9 | 61.5 | 56.6 | 53.6 | 53.0 |
| 32.5° | 823.0 | 668.2 | 265.1 | 86.8 | 69.9 | 63.3 | 56.6 | 50.6 | 45.2 | 41.6 | 41.6 |
| 35° | 825.4 | 650.1 | 203.0 | 73.5 | 63.3 | 55.4 | 48.2 | 41.0 | 36.2 | 33.1 | 32.5 |
| 37.5° | 841.1 | 639.9 | 151.2 | 65.1 | 56.6 | 48.2 | 41.0 | 33.7 | 28.9 | 26.5 | 25.9 |
| 40° | 870.6 | 642.3 | 115.1 | 59.0 | 51.8 | 42.2 | 33.7 | 27.7 | 23.5 | 21.1 | 21.1 |
| 42.5° | 930.3 | 659.7 | 91.0 | 54.2 | 46.4 | 36.2 | 28.3 | 22.9 | 19.3 | 17.5 | 16.9 |
| 45° | 1009.2 | 692.9 | 74.7 | 50.0 | 41.0 | 30.7 | 24.1 | 19.3 | 15.7 | 13.9 | 13.9 |
| 47.5° | 1128.5 | 745.9 | 64.5 | 45.8 | 35.5 | 25.9 | 19.9 | 15.7 | 12.1 | 10.8 | 10.2 |
| 50° | 1266.5 | 820.0 | 56.6 | 41.0 | 31.3 | 21.7 | 16.9 | 12.1 | 9.6 | 7.8 | 7.8 |
| 52.5° | 1407.5 | 902.6 | 51.2 | 36.8 | 27.1 | 18.7 | 13.3 | 9.0 | 6.6 | 5.4 | 5.4 |
| 55° | 1537.0 | 971.8 | 45.8 | 33.1 | 22.9 | 15.7 | 10.8 | 7.2 | 4.8 | 3.6 | 3.6 |
| 57.5° | 1662.3 | 1035.1 | 39.8 | 28.9 | 18.7 | 12.7 | 8.4 | 5.4 | 3.6 | 2.4 | 2.4 |
| 60° | 1819.6 | 1117.0 | 34.3 | 24.7 | 15.1 | 10.2 | 6.6 | 4.2 | 2.4 | 1.8 | 1.2 |
| 62.5° | 2009.4 | 1176.7 | 28.9 | 19.9 | 12.1 | 7.8 | 4.8 | 3.0 | 1.8 | 0.6 | 0.6 |
| 65° | 2079.2 | 1097.8 | 24.1 | 16.3 | 9.6 | 6.0 | 3.6 | 2.4 | 1.2 | 0.6 | 0.6 |
| 67.5° | 1884.0 | 884.5 | 19.3 | 12.7 | 7.2 | 4.2 | 3.0 | 1.8 | 1.2 | 0.6 | 0.6 |
| 68° | 1829.8 | 841.1 | 18.7 | 12.1 | 6.6 | 4.2 | 2.4 | 1.8 | 0.6 | 0.6 | 0.0 |
| 70° | 1544.8 | 675.4 | 15.1 | 9.0 | 5.4 | 3.6 | 2.4 | 1.2 | 0.6 | 0.6 | 0.0 |
| 72.5° | 1145.4 | 465.7 | 10.8 | 6.0 | 3.6 | 2.4 | 1.8 | 1.2 | 0.6 | 0.6 | 0.0 |
| 75° | 604.3 | 181.4 | 8.4 | 4.8 | 3.0 | 2.4 | 1.8 | 1.2 | 0.6 | 0.6 | 0.6 |
| 77.5° | 173.5 | 57.2 | 6.6 | 3.6 | 3.0 | 3.0 | 3.0 | 2.4 | 2.4 | 1.8 | 1.2 |
| 80° | 50.6 | 18.7 | 4.2 | 2.4 | 3.0 | 3.0 | 3.6 | 3.0 | 3.0 | 2.4 | 2.4 |
| 82.5° | 27.1 | 7.2 | 2.4 | 1.8 | 1.8 | 2.4 | 3.0 | 2.4 | 1.8 | 1.2 | 0.6 |
| 85° | 11.4 | 2.4 | 1.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 0.6 | 0.6 |
| 87.5° | 0.6 | 1.2 | 1.2 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)