

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: P401820

Luminaire Tested: **ENT-SA1F-730-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401820
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1F-730-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7057 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

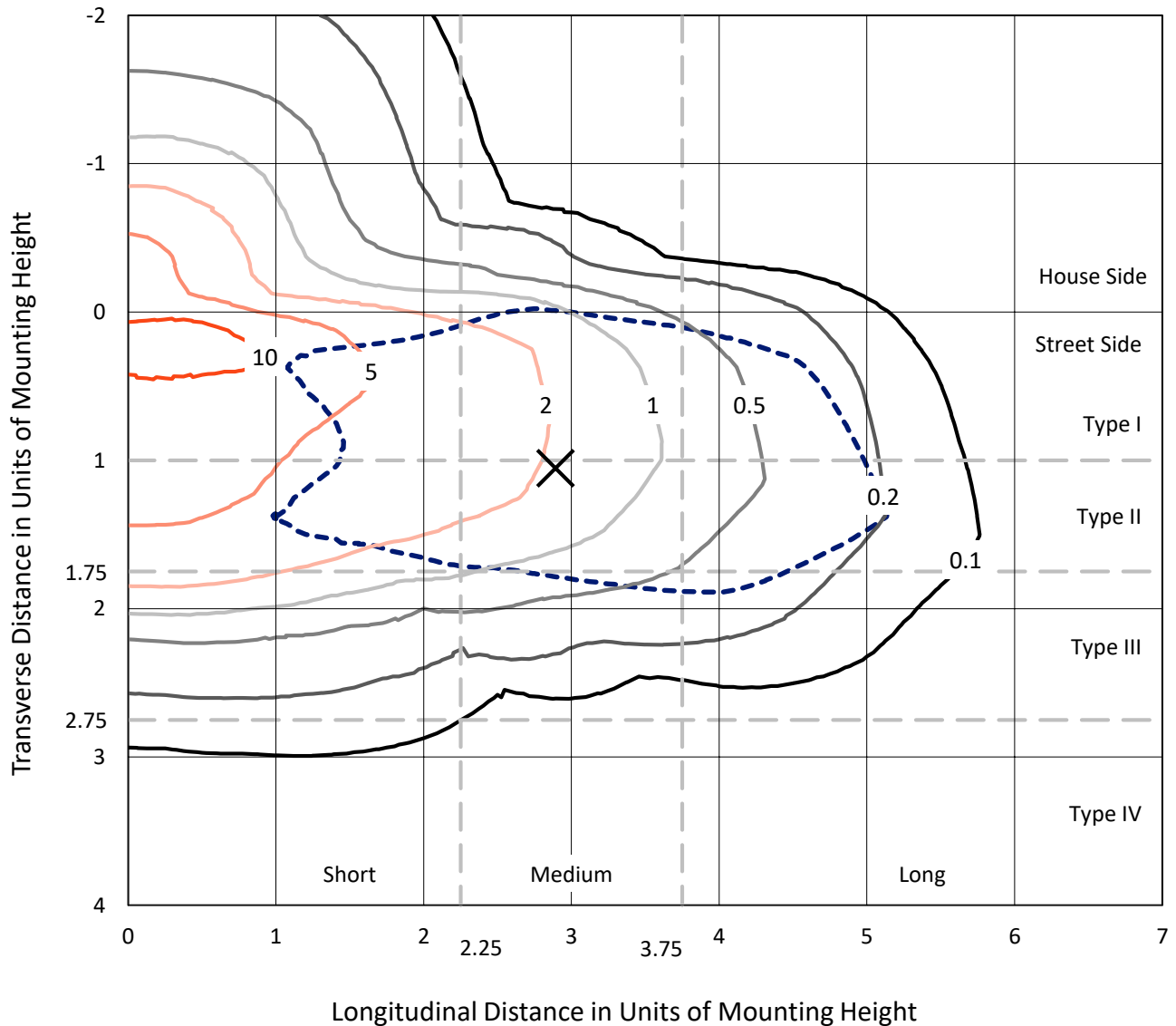
Input Watts (W): 66.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401820
 CATALOG NUMBER: ENT-SA1F-730-U-T2

Iso-Footcandle Lines of Horizontal Illumination

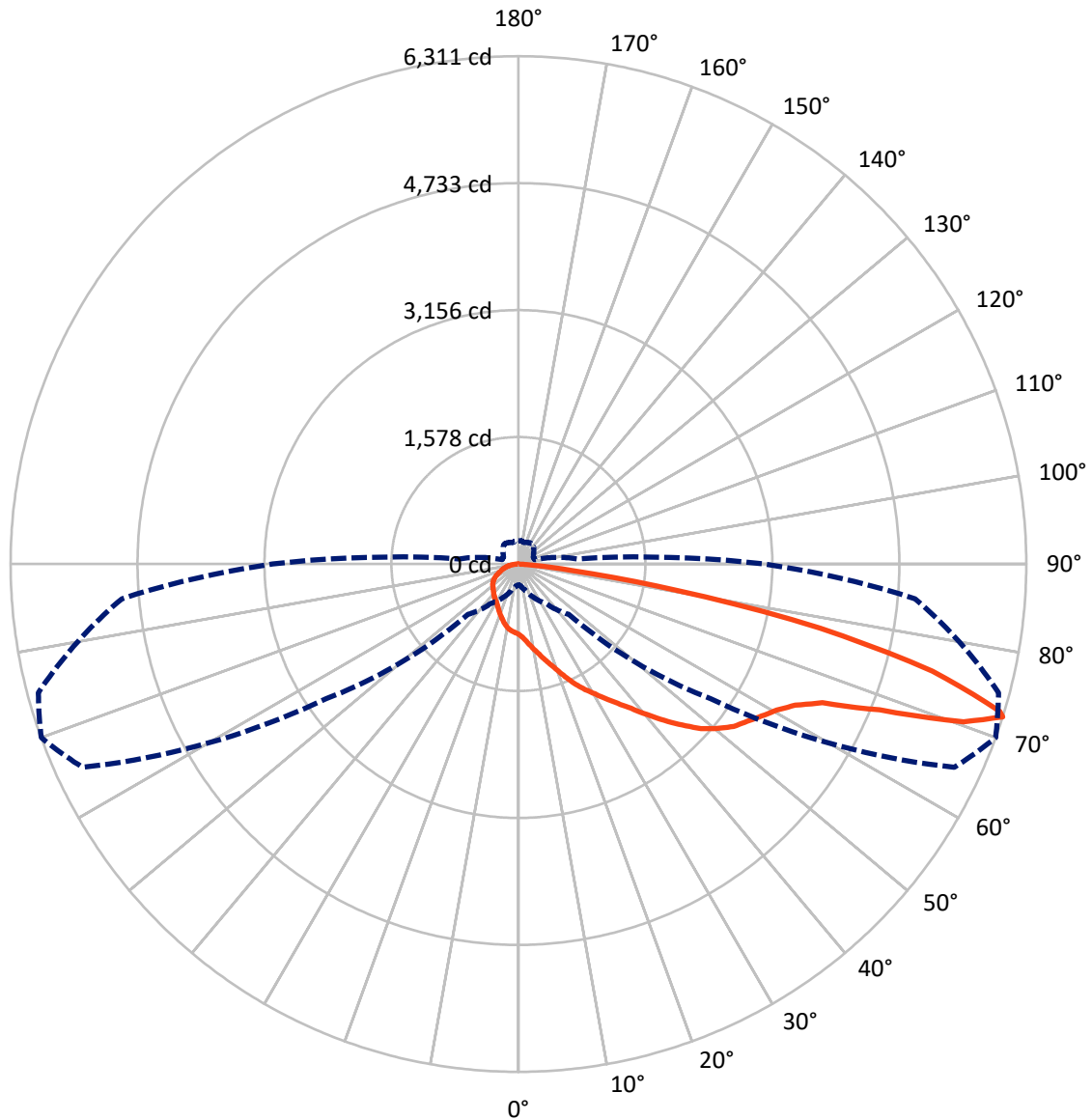
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401820
CATALOG NUMBER: ENT-SA1F-730-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P401820

CATALOG NUMBER: ENT-SA1F-730-U-T2

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1311.3 | 0.0 | 1311.3 |
| | % Fixture | 18.6 | 0.0 | 18.6 |
| Street Side | Lumens | 5745.7 | 0.0 | 5745.7 |
| | % Fixture | 81.4 | 0.0 | 81.4 |
| Total | Lumens | 7057.0 | 0.0 | 7057.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 87.9 | 1.2 |
| 10°-20° | 281.8 | 4.0 |
| 20°-30° | 499.1 | 7.1 |
| 30°-40° | 742.0 | 10.5 |
| 40°-50° | 1076.4 | 15.3 |
| 50°-60° | 1470.6 | 20.8 |
| 60°-70° | 1610.1 | 22.8 |
| 70°-80° | 1145.2 | 16.2 |
| 80°-90° | 143.8 | 2.0 |
| 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° | 7057.0 | 100.0 |
| 0°-180° | 7057.0 | 100.0 |



REPORT NUMBER: P401820

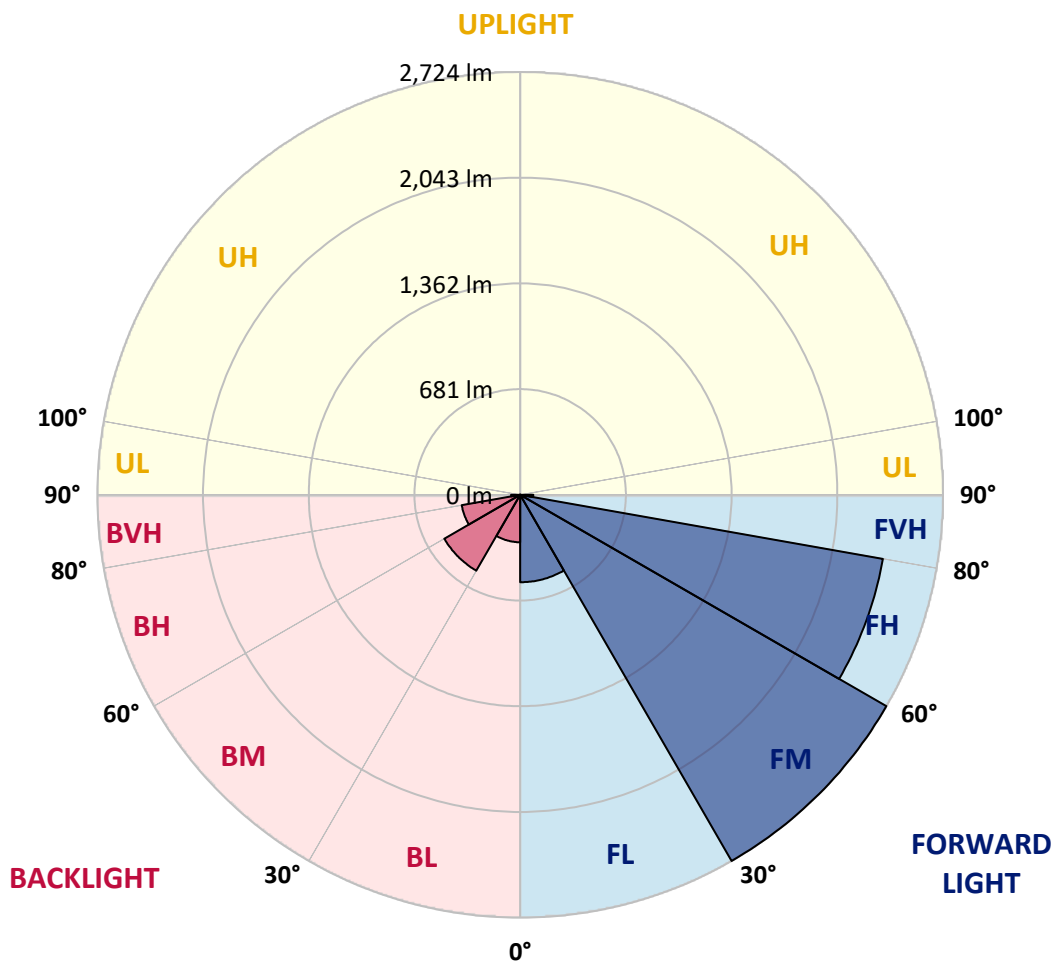
CATALOG NUMBER: ENT-SA1F-730-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 563.2 | 8.0 | | | |
| FM | (30°-60°) | 2724.4 | 38.6 | | | |
| FH | (60°-80°) | 2373.1 | 33.6 | | | G2/5000 |
| FVH | (80°-90°) | 84.9 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 305.5 | 4.3 | B1/500 | | |
| BM | (30°-60°) | 564.6 | 8.0 | B1/1000 | | |
| BH | (60°-80°) | 382.3 | 5.4 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 58.9 | 0.8 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type III Medium





REPORT NUMBER: P401820

CATALOG NUMBER: ENT-SA1F-730-U-T2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 |
| 2.5° | 971.7 | 966.7 | 967.7 | 958.6 | 953.6 | 941.5 | 928.4 | 914.3 | 907.2 | 902.2 | 885.0 |
| 5° | 1066.5 | 1066.5 | 1070.5 | 1063.5 | 1044.3 | 1024.2 | 1001.0 | 969.7 | 956.6 | 938.5 | 904.2 |
| 7.5° | 1145.1 | 1147.1 | 1147.1 | 1145.1 | 1128.0 | 1105.8 | 1075.6 | 1037.3 | 1016.1 | 989.9 | 936.5 |
| 10° | 1185.4 | 1190.5 | 1194.5 | 1197.5 | 1195.5 | 1182.4 | 1148.1 | 1108.8 | 1079.6 | 1045.3 | 973.8 |
| 12.5° | 1205.6 | 1207.6 | 1214.7 | 1229.8 | 1241.9 | 1252.0 | 1226.8 | 1180.4 | 1151.2 | 1109.8 | 1014.1 |
| 15° | 1227.8 | 1227.8 | 1234.8 | 1254.0 | 1277.2 | 1304.4 | 1301.4 | 1265.1 | 1233.8 | 1182.4 | 1065.5 |
| 17.5° | 1241.9 | 1245.9 | 1259.0 | 1279.2 | 1311.4 | 1356.8 | 1380.0 | 1359.8 | 1319.5 | 1265.1 | 1120.9 |
| 20° | 1233.8 | 1236.8 | 1263.1 | 1302.4 | 1343.7 | 1402.2 | 1460.6 | 1460.6 | 1422.3 | 1359.8 | 1182.4 |
| 22.5° | 1248.9 | 1254.0 | 1272.1 | 1309.4 | 1365.9 | 1441.5 | 1537.2 | 1570.5 | 1537.2 | 1468.7 | 1254.0 |
| 25° | 1307.4 | 1305.4 | 1320.5 | 1335.6 | 1384.0 | 1477.8 | 1602.8 | 1688.4 | 1658.2 | 1582.6 | 1323.5 |
| 27.5° | 1392.1 | 1392.1 | 1400.1 | 1399.1 | 1416.3 | 1508.0 | 1660.2 | 1792.3 | 1767.1 | 1676.3 | 1381.0 |
| 30° | 1489.9 | 1491.9 | 1489.9 | 1488.9 | 1485.8 | 1549.3 | 1711.6 | 1885.0 | 1871.9 | 1782.2 | 1433.4 |
| 32.5° | 1608.8 | 1613.9 | 1605.8 | 1585.6 | 1573.5 | 1608.8 | 1755.0 | 1988.8 | 1992.9 | 1887.0 | 1484.8 |
| 35° | 1758.0 | 1766.1 | 1735.8 | 1706.6 | 1676.3 | 1692.5 | 1805.4 | 2086.6 | 2126.9 | 2006.0 | 1547.3 |
| 37.5° | 1907.2 | 1920.3 | 1915.3 | 1836.6 | 1794.3 | 1793.3 | 1880.0 | 2208.6 | 2276.1 | 2161.2 | 1636.0 |
| 40° | 2033.2 | 2044.3 | 2050.3 | 1978.8 | 1920.3 | 1918.3 | 1989.8 | 2335.6 | 2459.6 | 2339.6 | 1740.9 |
| 42.5° | 2116.9 | 2126.9 | 2145.1 | 2102.7 | 2048.3 | 2073.5 | 2110.8 | 2461.6 | 2657.2 | 2557.4 | 1869.9 |
| 45° | 2207.6 | 2215.6 | 2226.7 | 2202.5 | 2174.3 | 2246.9 | 2264.0 | 2601.7 | 2854.7 | 2791.2 | 2021.1 |
| 47.5° | 2304.3 | 2312.4 | 2318.5 | 2300.3 | 2290.2 | 2392.0 | 2414.2 | 2744.9 | 3054.3 | 3033.2 | 2168.3 |
| 50° | 2411.2 | 2414.2 | 2420.3 | 2411.2 | 2414.2 | 2524.1 | 2538.2 | 2870.9 | 3212.6 | 3285.2 | 2321.5 |
| 52.5° | 2594.7 | 2598.7 | 2600.7 | 2557.4 | 2542.2 | 2607.8 | 2638.0 | 3004.9 | 3351.7 | 3494.8 | 2456.6 |
| 55° | 2739.8 | 2753.9 | 2817.4 | 2789.2 | 2752.9 | 2667.2 | 2720.7 | 3112.8 | 3450.5 | 3690.4 | 2597.7 |
| 57.5° | 2620.9 | 2653.1 | 2811.4 | 2944.4 | 3046.3 | 2841.6 | 2818.4 | 3223.7 | 3564.4 | 3858.7 | 2762.0 |
| 60° | 2275.1 | 2322.5 | 2552.3 | 2829.5 | 3159.2 | 3241.8 | 3019.0 | 3361.8 | 3688.4 | 4034.1 | 2938.4 |
| 62.5° | 1577.6 | 1625.9 | 1943.5 | 2386.0 | 2968.6 | 3470.6 | 3568.4 | 3606.7 | 3860.7 | 4213.6 | 3168.2 |
| 65° | 756.0 | 805.4 | 1067.5 | 1534.2 | 2344.7 | 3323.5 | 4208.5 | 4114.8 | 4151.1 | 4441.4 | 3506.9 |
| 67.5° | 480.8 | 507.0 | 609.9 | 835.7 | 1363.9 | 2588.6 | 4438.3 | 5126.8 | 4838.5 | 4966.5 | 4181.3 |
| 70° | 351.8 | 357.8 | 446.6 | 578.6 | 809.4 | 1512.0 | 3919.2 | 6095.5 | 5869.7 | 5855.6 | 4994.8 |
| 72° | 260.1 | 270.2 | 338.7 | 461.7 | 598.8 | 884.0 | 2916.2 | 5977.6 | 6311.3 | 6177.2 | 4946.4 |
| 72.5° | 245.0 | 253.0 | 312.5 | 436.5 | 565.5 | 776.2 | 2612.8 | 5840.5 | 6256.8 | 6186.3 | 4853.6 |
| 75° | 178.4 | 184.5 | 213.7 | 310.5 | 437.5 | 449.6 | 1395.1 | 4482.7 | 5313.3 | 5906.0 | 4400.0 |
| 77.5° | 123.0 | 127.0 | 142.1 | 190.5 | 299.4 | 304.4 | 591.7 | 3060.4 | 3834.5 | 4722.6 | 3383.9 |
| 80° | 74.6 | 76.6 | 85.7 | 103.8 | 190.5 | 180.4 | 243.9 | 1599.7 | 2000.9 | 2567.4 | 1569.5 |
| 82.5° | 31.2 | 32.3 | 37.3 | 41.3 | 80.6 | 85.7 | 98.8 | 522.2 | 662.3 | 802.4 | 452.6 |
| 85° | 0.0 | 0.0 | 1.0 | 1.0 | 2.0 | 9.1 | 14.1 | 64.5 | 97.8 | 116.9 | 81.7 |
| 87.5° | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 3.0 | 4.0 | 4.0 | 6.0 |
| 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: P401820

CATALOG NUMBER: ENT-SA1F-730-U-T2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 | 874.0 |
| 2.5° | 877.0 | 873.0 | 860.9 | 850.8 | 842.7 | 829.6 | 828.6 | 818.5 | 818.5 | 815.5 | 813.5 |
| 5° | 891.1 | 878.0 | 853.8 | 831.6 | 815.5 | 796.3 | 787.3 | 776.2 | 769.1 | 765.1 | 766.1 |
| 7.5° | 909.2 | 887.1 | 845.7 | 808.4 | 778.2 | 754.0 | 739.9 | 730.8 | 725.8 | 723.8 | 723.8 |
| 10° | 934.4 | 900.2 | 832.6 | 776.2 | 737.9 | 719.7 | 712.7 | 711.7 | 712.7 | 713.7 | 714.7 |
| 12.5° | 962.7 | 909.2 | 808.4 | 737.9 | 707.6 | 700.6 | 704.6 | 713.7 | 721.7 | 724.8 | 724.8 |
| 15° | 991.9 | 915.3 | 775.2 | 702.6 | 684.5 | 691.5 | 705.6 | 722.8 | 735.9 | 743.9 | 745.9 |
| 17.5° | 1022.1 | 916.3 | 739.9 | 670.3 | 664.3 | 682.4 | 707.6 | 734.9 | 756.0 | 769.1 | 771.1 |
| 20° | 1054.4 | 914.3 | 698.6 | 641.1 | 644.1 | 674.4 | 709.7 | 746.9 | 775.2 | 792.3 | 794.3 |
| 22.5° | 1089.7 | 906.2 | 658.2 | 612.9 | 627.0 | 666.3 | 707.6 | 751.0 | 781.2 | 801.4 | 805.4 |
| 25° | 1123.9 | 890.1 | 617.9 | 587.7 | 614.9 | 658.2 | 697.6 | 734.9 | 764.1 | 783.2 | 788.3 |
| 27.5° | 1142.1 | 855.8 | 579.6 | 568.5 | 605.8 | 646.1 | 674.4 | 699.6 | 715.7 | 727.8 | 732.8 |
| 30° | 1145.1 | 807.4 | 548.4 | 555.4 | 595.7 | 629.0 | 645.1 | 649.2 | 646.1 | 650.2 | 645.1 |
| 32.5° | 1139.1 | 755.0 | 523.2 | 545.3 | 579.6 | 604.8 | 608.8 | 596.8 | 578.6 | 553.4 | 554.4 |
| 35° | 1135.0 | 697.6 | 503.0 | 531.2 | 558.4 | 574.6 | 567.5 | 548.4 | 514.1 | 483.9 | 481.8 |
| 37.5° | 1142.1 | 645.1 | 485.9 | 513.1 | 531.2 | 538.3 | 528.2 | 503.0 | 472.8 | 446.6 | 443.5 |
| 40° | 1162.3 | 606.8 | 469.7 | 492.9 | 502.0 | 507.0 | 494.9 | 472.8 | 460.7 | 441.5 | 438.5 |
| 42.5° | 1201.6 | 580.6 | 454.6 | 470.7 | 474.8 | 479.8 | 467.7 | 452.6 | 463.7 | 459.7 | 459.7 |
| 45° | 1256.0 | 568.5 | 441.5 | 449.6 | 453.6 | 461.7 | 454.6 | 441.5 | 453.6 | 430.4 | 426.4 |
| 47.5° | 1326.6 | 572.6 | 432.4 | 428.4 | 440.5 | 454.6 | 446.6 | 430.4 | 426.4 | 385.1 | 378.0 |
| 50° | 1401.2 | 593.7 | 423.4 | 411.3 | 426.4 | 445.5 | 435.5 | 410.3 | 386.1 | 364.9 | 360.9 |
| 52.5° | 1488.9 | 629.0 | 415.3 | 392.1 | 410.3 | 435.5 | 428.4 | 401.2 | 376.0 | 360.9 | 357.8 |
| 55° | 1585.6 | 663.3 | 405.2 | 369.9 | 389.1 | 432.4 | 430.4 | 395.1 | 361.9 | 354.8 | 352.8 |
| 57.5° | 1694.5 | 691.5 | 393.1 | 344.7 | 367.9 | 423.4 | 421.4 | 381.0 | 357.8 | 351.8 | 350.8 |
| 60° | 1830.6 | 724.8 | 372.0 | 315.5 | 346.8 | 406.2 | 404.2 | 374.0 | 348.8 | 343.7 | 341.7 |
| 62.5° | 2016.1 | 786.3 | 335.7 | 288.3 | 324.6 | 376.0 | 388.1 | 359.9 | 335.7 | 334.7 | 334.7 |
| 65° | 2321.5 | 905.2 | 298.4 | 265.1 | 299.4 | 346.8 | 366.9 | 343.7 | 323.6 | 328.6 | 328.6 |
| 67.5° | 2899.1 | 1065.5 | 260.1 | 242.9 | 275.2 | 318.5 | 348.8 | 327.6 | 310.5 | 320.6 | 320.6 |
| 70° | 3344.6 | 1006.0 | 229.8 | 221.8 | 251.0 | 293.3 | 325.6 | 310.5 | 294.3 | 311.5 | 309.5 |
| 72° | 3051.3 | 736.9 | 209.7 | 204.6 | 230.8 | 272.2 | 305.4 | 294.3 | 277.2 | 291.3 | 287.3 |
| 72.5° | 2929.3 | 669.3 | 203.6 | 199.6 | 224.8 | 268.1 | 301.4 | 290.3 | 272.2 | 286.3 | 280.2 |
| 75° | 2555.3 | 564.5 | 177.4 | 175.4 | 199.6 | 240.9 | 275.2 | 269.1 | 251.0 | 259.1 | 253.0 |
| 77.5° | 2114.8 | 475.8 | 149.2 | 153.2 | 170.4 | 214.7 | 248.0 | 241.9 | 224.8 | 223.8 | 222.8 |
| 80° | 991.9 | 265.1 | 123.0 | 126.0 | 143.1 | 183.5 | 213.7 | 209.7 | 193.5 | 191.5 | 188.5 |
| 82.5° | 287.3 | 127.0 | 94.8 | 96.8 | 114.9 | 150.2 | 183.5 | 181.4 | 169.3 | 166.3 | 159.3 |
| 85° | 53.4 | 41.3 | 51.4 | 60.5 | 83.7 | 125.0 | 167.3 | 163.3 | 145.2 | 132.1 | 122.0 |
| 87.5° | 3.0 | 8.1 | 17.1 | 29.2 | 53.4 | 93.7 | 135.1 | 132.1 | 115.9 | 99.8 | 100.8 |
| 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)