

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: McGRAW-EDISON

Report Number: P651761

Luminaire Tested: **GALN-SA2A-840-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA2A-840-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5595.2 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

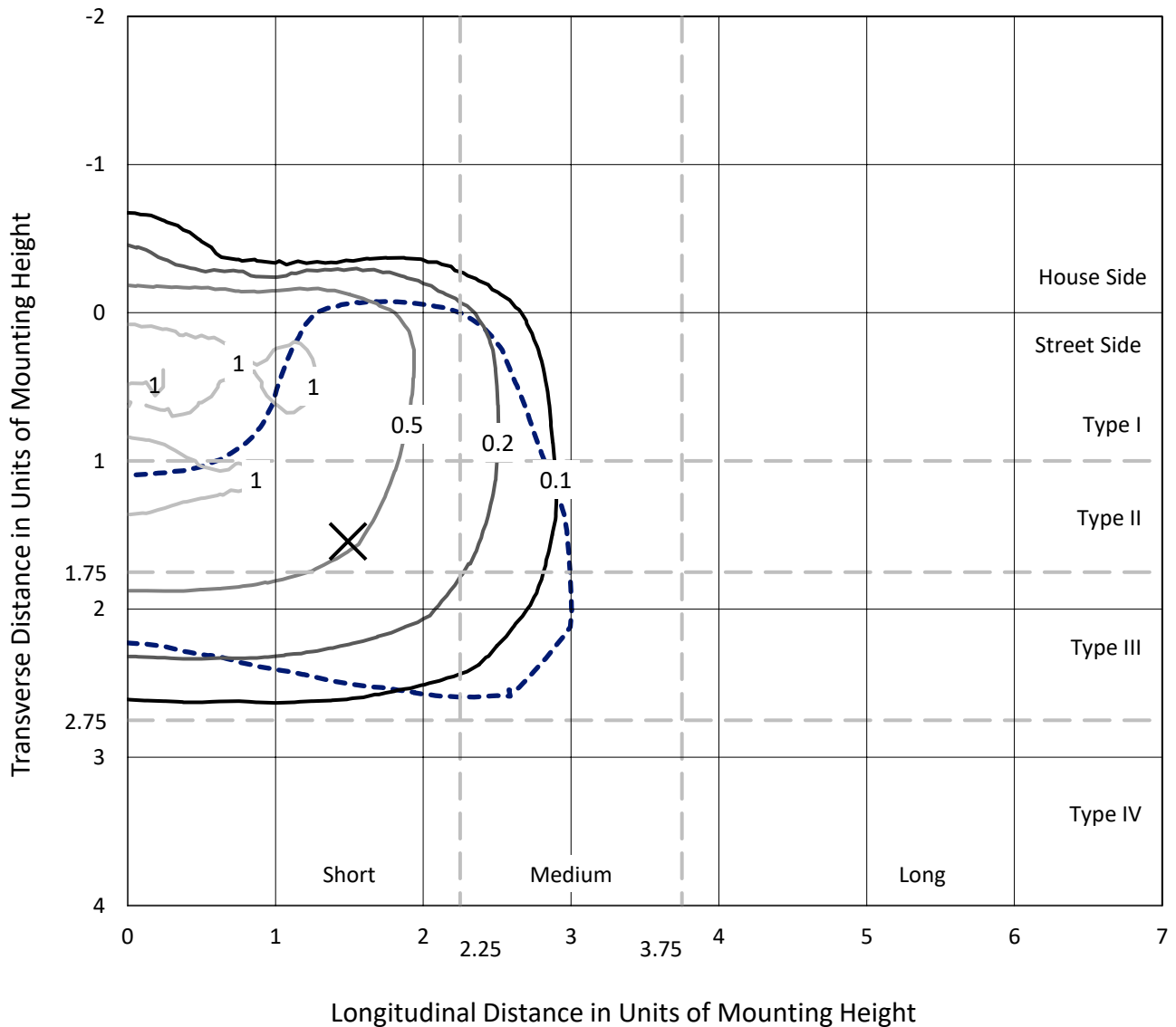
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651761
 CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

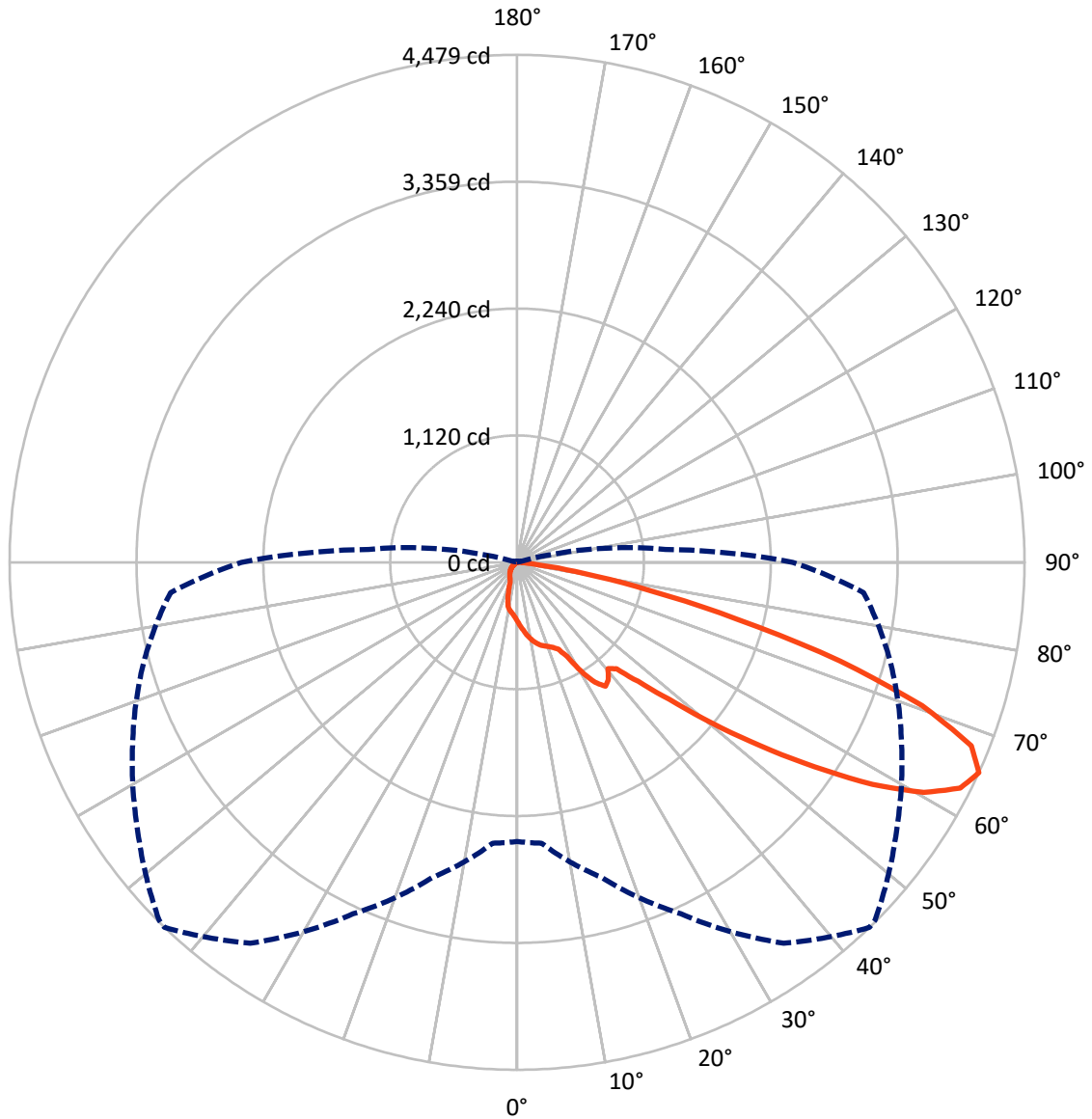
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

REPORT NUMBER: P651761
CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P651761
 CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

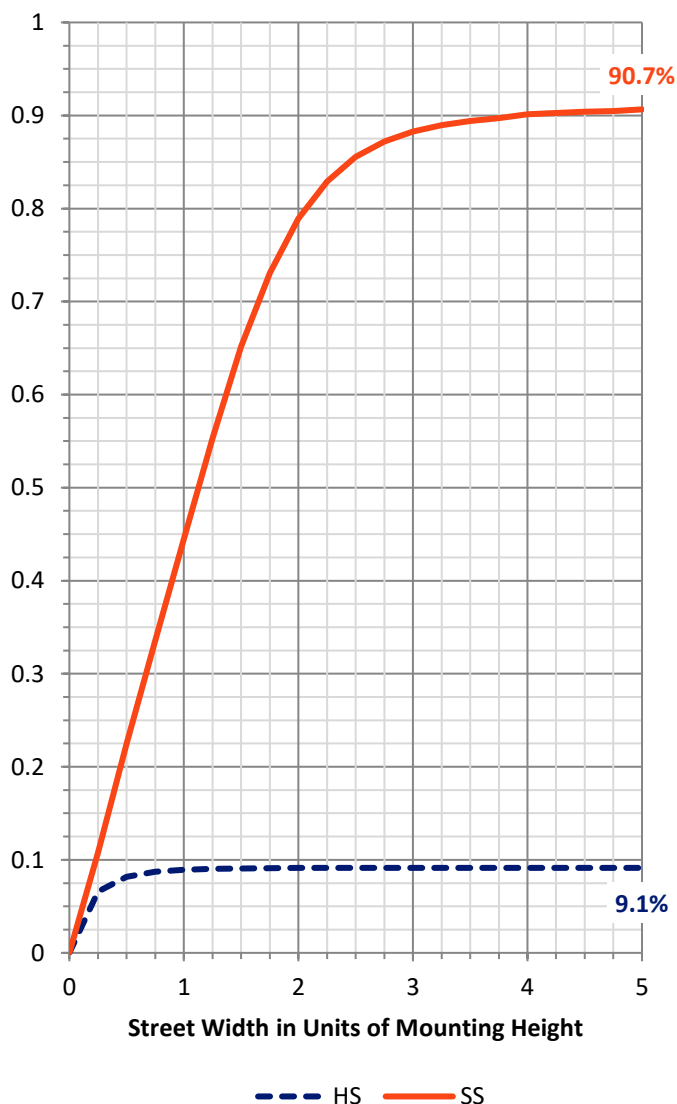
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 515.5 | 0.0 | 515.5 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 5079.7 | 0.0 | 5079.7 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 5595.2 | 0.0 | 5595.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.8 | 0.9 |
| 10°-20° | 155.9 | 2.8 |
| 20°-30° | 264.3 | 4.7 |
| 30°-40° | 439.5 | 7.9 |
| 40°-50° | 767.3 | 13.7 |
| 50°-60° | 1499.1 | 26.8 |
| 60°-70° | 1739.3 | 31.1 |
| 70°-80° | 633.4 | 11.3 |
| 80°-90° | 44.6 | 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° | 5595.2 | 100.0 |
| 0°-180° | 5595.2 | 100.0 |

Coefficient of Utilization

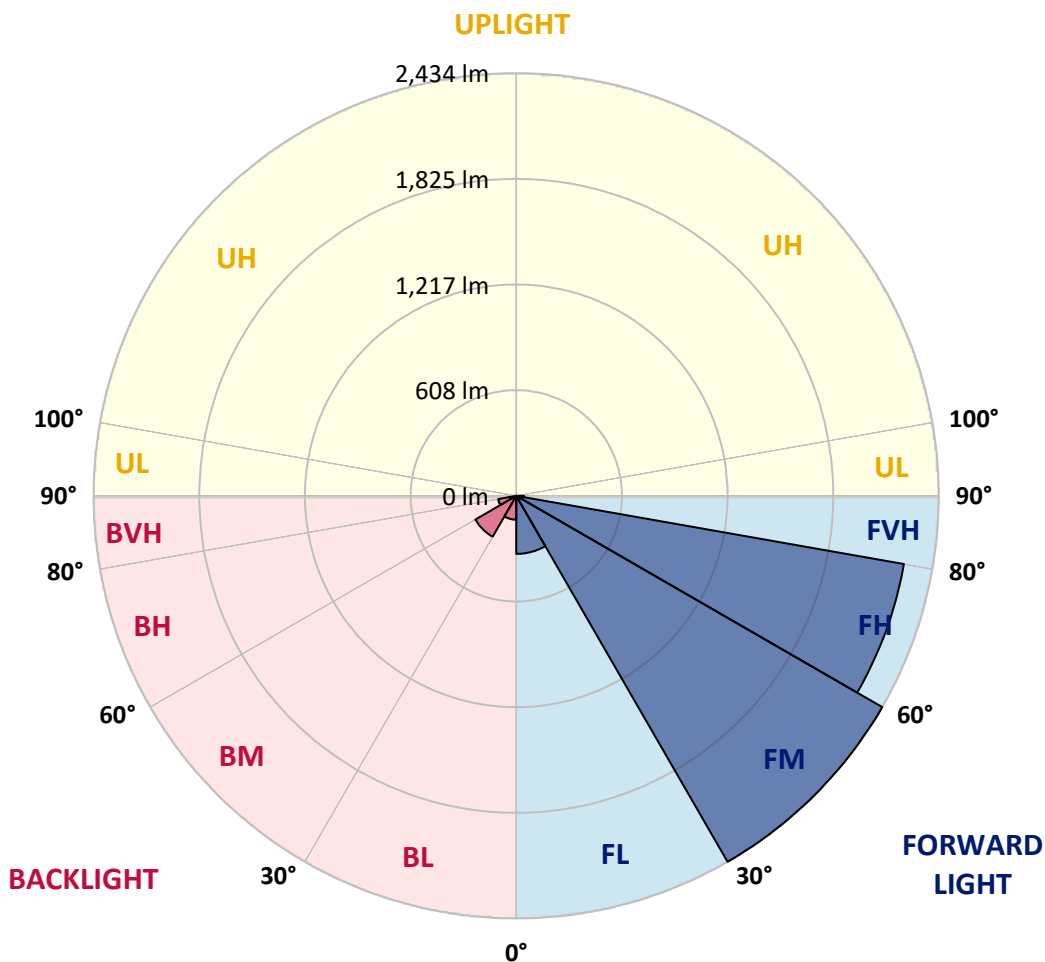


REPORT NUMBER: P651761
 CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 334.6 | 6.0 | | | |
| FM (30°-60°) | 2433.9 | 43.5 | | | |
| FH (60°-80°) | 2267.1 | 40.5 | | | G2/5000 |
| FVH (80°-90°) | 44.0 | 0.8 | | | G1/100 |
| BL (0°-30°) | 137.3 | 2.5 | B1/500 | | |
| BM (30°-60°) | 272.0 | 4.9 | B1/1000 | | |
| BH (60°-80°) | 105.6 | 1.9 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.6 | 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-G2
 Type III Short





REPORT NUMBER: P651761

CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 |
| 2.5° | 586.2 | 583.6 | 582.3 | 575.5 | 570.4 | 563.9 | 563.9 | 555.8 | 546.4 | 536.1 | 526.7 |
| 5° | 651.6 | 647.3 | 641.8 | 635.7 | 623.8 | 606.7 | 606.7 | 589.5 | 569.9 | 552.4 | 533.1 |
| 7.5° | 714.4 | 710.6 | 701.1 | 689.6 | 669.9 | 652.0 | 650.7 | 626.0 | 602.4 | 575.9 | 548.5 |
| 10° | 769.6 | 766.6 | 758.5 | 736.2 | 715.7 | 692.2 | 691.7 | 664.0 | 636.6 | 604.1 | 570.4 |
| 12.5° | 808.0 | 808.5 | 797.8 | 776.4 | 749.9 | 727.6 | 726.0 | 698.6 | 669.9 | 634.9 | 593.4 |
| 15° | 835.4 | 835.4 | 824.3 | 800.4 | 776.4 | 756.7 | 755.0 | 731.1 | 701.6 | 663.5 | 618.6 |
| 17.5° | 843.1 | 845.7 | 833.7 | 812.3 | 793.1 | 776.0 | 775.6 | 755.5 | 731.9 | 695.2 | 644.3 |
| 20° | 840.1 | 842.7 | 833.3 | 816.6 | 803.3 | 793.5 | 792.2 | 784.1 | 762.3 | 727.6 | 671.7 |
| 22.5° | 833.7 | 836.3 | 829.4 | 819.6 | 813.2 | 816.2 | 814.0 | 820.9 | 809.3 | 767.4 | 704.2 |
| 25° | 834.9 | 837.6 | 832.4 | 826.9 | 832.4 | 850.8 | 856.4 | 885.8 | 875.6 | 817.9 | 739.2 |
| 27.5° | 875.1 | 880.3 | 873.0 | 875.6 | 895.2 | 938.1 | 948.7 | 999.6 | 954.3 | 882.0 | 793.9 |
| 30° | 964.5 | 961.1 | 947.5 | 959.8 | 1028.2 | 1118.9 | 1115.8 | 1107.8 | 1036.8 | 956.0 | 858.9 |
| 32.5° | 1045.8 | 1042.8 | 1041.9 | 1095.3 | 1219.4 | 1263.4 | 1261.2 | 1182.6 | 1110.7 | 1040.7 | 923.1 |
| 35° | 1078.7 | 1067.1 | 1064.5 | 1194.1 | 1401.4 | 1343.3 | 1330.0 | 1213.4 | 1200.5 | 1133.0 | 988.5 |
| 37.5° | 1177.9 | 1169.7 | 1130.0 | 1210.4 | 1328.8 | 1309.5 | 1299.3 | 1266.4 | 1296.3 | 1214.7 | 1062.4 |
| 40° | 1382.3 | 1359.6 | 1323.6 | 1245.0 | 1225.8 | 1233.9 | 1244.2 | 1334.3 | 1409.6 | 1326.3 | 1161.2 |
| 42.5° | 1636.2 | 1631.0 | 1564.3 | 1417.8 | 1273.6 | 1284.8 | 1298.0 | 1476.3 | 1572.5 | 1494.3 | 1322.4 |
| 45° | 1941.0 | 1948.3 | 1852.1 | 1679.0 | 1490.0 | 1499.4 | 1518.6 | 1685.8 | 1793.1 | 1755.5 | 1575.9 |
| 47.5° | 2218.1 | 2212.5 | 2180.0 | 2000.1 | 1825.6 | 1804.6 | 1835.8 | 1954.7 | 2098.4 | 2104.4 | 1890.6 |
| 50° | 2496.8 | 2526.4 | 2478.0 | 2407.4 | 2277.9 | 2233.9 | 2222.3 | 2280.5 | 2499.4 | 2470.8 | 2268.5 |
| 52.5° | 2897.4 | 2912.8 | 2822.2 | 2804.2 | 2833.7 | 2690.9 | 2679.4 | 2693.5 | 2889.3 | 2790.9 | 2551.6 |
| 55° | 3149.3 | 3140.3 | 3106.5 | 3246.8 | 3363.5 | 3185.2 | 3170.7 | 3113.8 | 3213.0 | 3017.2 | 2823.9 |
| 57.5° | 3228.8 | 3241.6 | 3320.3 | 3573.8 | 3850.0 | 3698.6 | 3672.1 | 3510.5 | 3446.4 | 3227.9 | 3074.4 |
| 60° | 3193.3 | 3216.8 | 3386.5 | 3763.6 | 4146.7 | 4124.0 | 4101.4 | 3829.9 | 3614.0 | 3404.0 | 3250.1 |
| 62.5° | 2940.6 | 2973.5 | 3245.0 | 3729.8 | 4247.2 | 4388.7 | 4360.5 | 4029.1 | 3725.5 | 3489.6 | 3280.9 |
| 65° | 2464.4 | 2488.7 | 2878.7 | 3423.3 | 4104.4 | 4479.3 | 4469.1 | 4091.5 | 3743.1 | 3411.3 | 3070.2 |
| 67.5° | 1756.8 | 1839.7 | 2201.0 | 2885.1 | 3682.0 | 4324.6 | 4342.1 | 4016.7 | 3578.5 | 3073.2 | 2542.6 |
| 70° | 1104.3 | 1160.7 | 1419.9 | 2065.4 | 2951.7 | 3794.0 | 3851.7 | 3674.2 | 3105.6 | 2395.5 | 1702.0 |
| 72.5° | 526.7 | 568.6 | 753.3 | 1307.4 | 2083.4 | 2985.0 | 3030.8 | 3016.3 | 2401.5 | 1509.2 | 878.2 |
| 75° | 234.7 | 250.5 | 359.5 | 667.4 | 1345.0 | 2006.5 | 2124.9 | 2144.5 | 1500.7 | 738.4 | 341.6 |
| 77.5° | 119.7 | 120.2 | 168.5 | 323.2 | 671.7 | 1197.1 | 1220.6 | 1289.4 | 813.6 | 325.4 | 118.8 |
| 80° | 63.7 | 68.0 | 89.3 | 152.6 | 348.4 | 589.5 | 586.6 | 644.7 | 360.9 | 159.5 | 39.8 |
| 82.5° | 28.7 | 31.6 | 50.5 | 80.0 | 170.1 | 223.6 | 241.1 | 263.8 | 154.7 | 101.8 | 17.5 |
| 85° | 8.6 | 10.3 | 24.8 | 40.2 | 61.6 | 64.6 | 72.2 | 93.2 | 87.6 | 72.2 | 9.0 |
| 87.5° | 1.3 | 1.3 | 10.3 | 11.1 | 9.0 | 11.5 | 11.9 | 13.3 | 28.3 | 26.5 | 4.7 |
| 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: P651761

CATALOG NUMBER: GALN-SA2A-840-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 | 520.7 |
| 2.5° | 521.6 | 518.6 | 507.9 | 499.0 | 491.2 | 486.5 | 481.0 | 477.6 | 475.8 | 474.6 | 475.0 |
| 5° | 523.8 | 516.5 | 498.1 | 483.6 | 472.4 | 460.4 | 452.4 | 447.7 | 445.5 | 442.1 | 442.1 |
| 7.5° | 535.7 | 524.2 | 498.5 | 476.3 | 457.0 | 440.8 | 425.4 | 419.8 | 416.0 | 415.1 | 414.3 |
| 10° | 552.8 | 538.2 | 503.3 | 472.4 | 445.1 | 422.9 | 401.1 | 381.8 | 366.8 | 357.8 | 356.6 |
| 12.5° | 574.2 | 553.2 | 510.5 | 469.9 | 434.8 | 395.4 | 337.7 | 298.9 | 272.7 | 264.7 | 265.9 |
| 15° | 593.8 | 571.2 | 517.7 | 467.8 | 416.0 | 327.9 | 262.5 | 218.1 | 204.8 | 203.5 | 203.9 |
| 17.5° | 617.4 | 590.5 | 526.3 | 464.7 | 364.2 | 250.5 | 194.9 | 183.0 | 185.5 | 189.8 | 189.4 |
| 20° | 641.8 | 611.0 | 536.6 | 446.7 | 290.7 | 188.6 | 172.3 | 173.6 | 177.5 | 181.2 | 182.2 |
| 22.5° | 667.8 | 634.5 | 548.5 | 403.6 | 221.9 | 164.2 | 163.3 | 165.0 | 168.9 | 173.2 | 174.0 |
| 25° | 703.7 | 664.0 | 557.5 | 347.2 | 168.0 | 151.8 | 153.5 | 156.5 | 159.9 | 164.6 | 165.4 |
| 27.5° | 749.9 | 703.7 | 562.2 | 273.7 | 145.3 | 140.7 | 141.1 | 145.3 | 149.6 | 153.9 | 153.9 |
| 30° | 809.8 | 751.2 | 552.8 | 207.0 | 134.2 | 129.9 | 128.3 | 130.9 | 136.4 | 140.7 | 141.1 |
| 32.5° | 863.2 | 796.1 | 528.0 | 158.2 | 126.2 | 120.2 | 115.9 | 116.3 | 118.4 | 121.0 | 121.4 |
| 35° | 916.6 | 839.7 | 485.7 | 133.0 | 117.6 | 110.8 | 104.3 | 100.9 | 99.2 | 97.9 | 99.2 |
| 37.5° | 985.1 | 894.0 | 429.2 | 121.0 | 110.3 | 101.8 | 92.8 | 85.5 | 79.6 | 75.7 | 76.5 |
| 40° | 1073.1 | 969.3 | 362.6 | 113.3 | 103.4 | 93.2 | 81.2 | 71.8 | 61.6 | 58.1 | 56.4 |
| 42.5° | 1218.5 | 1083.4 | 292.4 | 106.9 | 96.6 | 84.2 | 69.3 | 56.4 | 47.0 | 43.6 | 44.5 |
| 45° | 1448.1 | 1227.4 | 225.3 | 100.1 | 89.8 | 74.4 | 58.1 | 44.5 | 36.8 | 35.1 | 35.9 |
| 47.5° | 1752.5 | 1413.9 | 173.6 | 92.3 | 81.2 | 63.7 | 45.8 | 35.1 | 30.4 | 29.9 | 29.5 |
| 50° | 2038.9 | 1587.5 | 144.9 | 83.8 | 71.0 | 53.0 | 37.6 | 29.5 | 26.5 | 26.1 | 26.1 |
| 52.5° | 2298.0 | 1711.9 | 118.0 | 73.9 | 59.9 | 43.6 | 31.6 | 26.1 | 23.5 | 22.2 | 22.2 |
| 55° | 2528.5 | 1793.1 | 95.8 | 62.0 | 47.0 | 34.6 | 27.3 | 23.5 | 20.5 | 18.8 | 18.4 |
| 57.5° | 2702.5 | 1802.9 | 71.8 | 49.6 | 35.1 | 26.9 | 23.5 | 20.5 | 17.1 | 15.0 | 14.1 |
| 60° | 2776.9 | 1717.8 | 53.0 | 37.6 | 26.1 | 21.4 | 18.8 | 16.7 | 12.9 | 10.7 | 10.3 |
| 62.5° | 2702.0 | 1552.4 | 39.4 | 28.7 | 20.1 | 15.8 | 13.3 | 12.4 | 9.0 | 6.4 | 6.0 |
| 65° | 2434.0 | 1313.4 | 31.2 | 21.8 | 15.0 | 11.5 | 8.6 | 8.2 | 5.6 | 3.0 | 2.6 |
| 67.5° | 1950.0 | 1028.6 | 24.8 | 16.2 | 10.7 | 7.7 | 5.6 | 5.1 | 3.0 | 0.8 | 0.8 |
| 70° | 1268.1 | 657.6 | 20.1 | 11.9 | 6.8 | 5.1 | 3.4 | 2.6 | 1.7 | 0.4 | 0.0 |
| 72.5° | 627.2 | 307.4 | 16.2 | 9.4 | 4.7 | 2.6 | 1.3 | 0.8 | 1.3 | 0.0 | 0.0 |
| 75° | 243.3 | 109.4 | 11.9 | 6.4 | 2.6 | 1.3 | 0.8 | 0.0 | 0.4 | 0.0 | 0.0 |
| 77.5° | 80.8 | 36.3 | 7.2 | 3.4 | 1.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 29.9 | 14.1 | 3.9 | 2.1 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 11.9 | 5.6 | 2.6 | 1.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 6.0 | 3.4 | 1.7 | 1.3 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.3 | 2.6 | 1.7 | 1.3 | 0.8 | 0.4 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)