

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: P451245

Luminaire Tested: **GALN-SA2A-760-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-760-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9002 lumens
Efficiency: N/A
Efficacy: 142.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

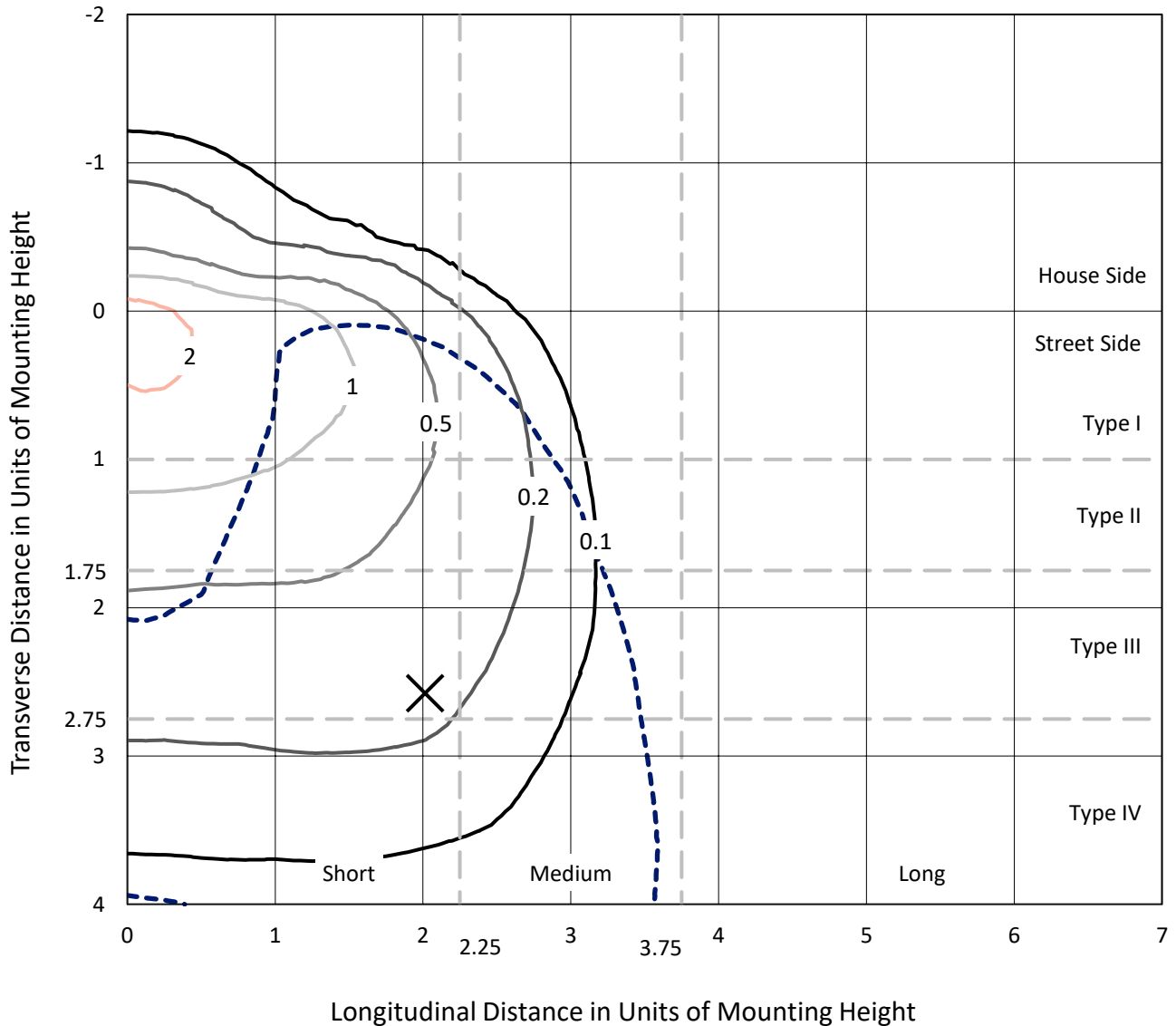
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P451245
 CATALOG NUMBER: GALN-SA2A-760-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

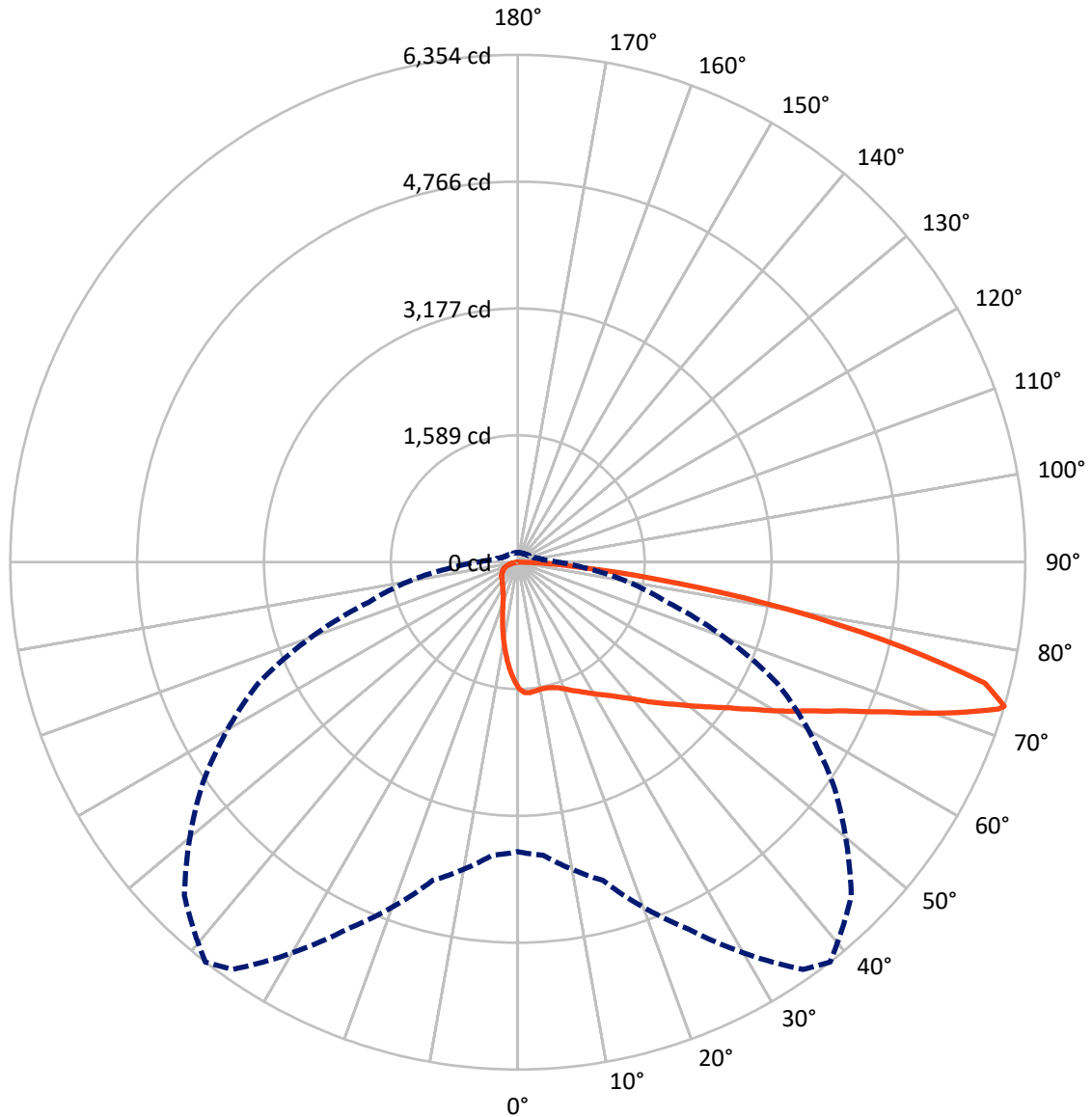
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P451245
CATALOG NUMBER: GALN-SA2A-760-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P451245

CATALOG NUMBER: GALN-SA2A-760-U-SL4

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1210.1 | 0.0 | 1210.1 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 7791.9 | 0.0 | 7791.9 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 9002.0 | 0.0 | 9002.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 138.0 | 1.5 |
| 10°-20° | 354.0 | 3.9 |
| 20°-30° | 551.2 | 6.1 |
| 30°-40° | 808.5 | 9.0 |
| 40°-50° | 1199.4 | 13.3 |
| 50°-60° | 1699.3 | 18.9 |
| 60°-70° | 2155.6 | 23.9 |
| 70°-80° | 1794.4 | 19.9 |
| 80°-90° | 301.5 | 3.3 |
| 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° | 9002.0 | 100.0 |
| 0°-180° | 9002.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P451245

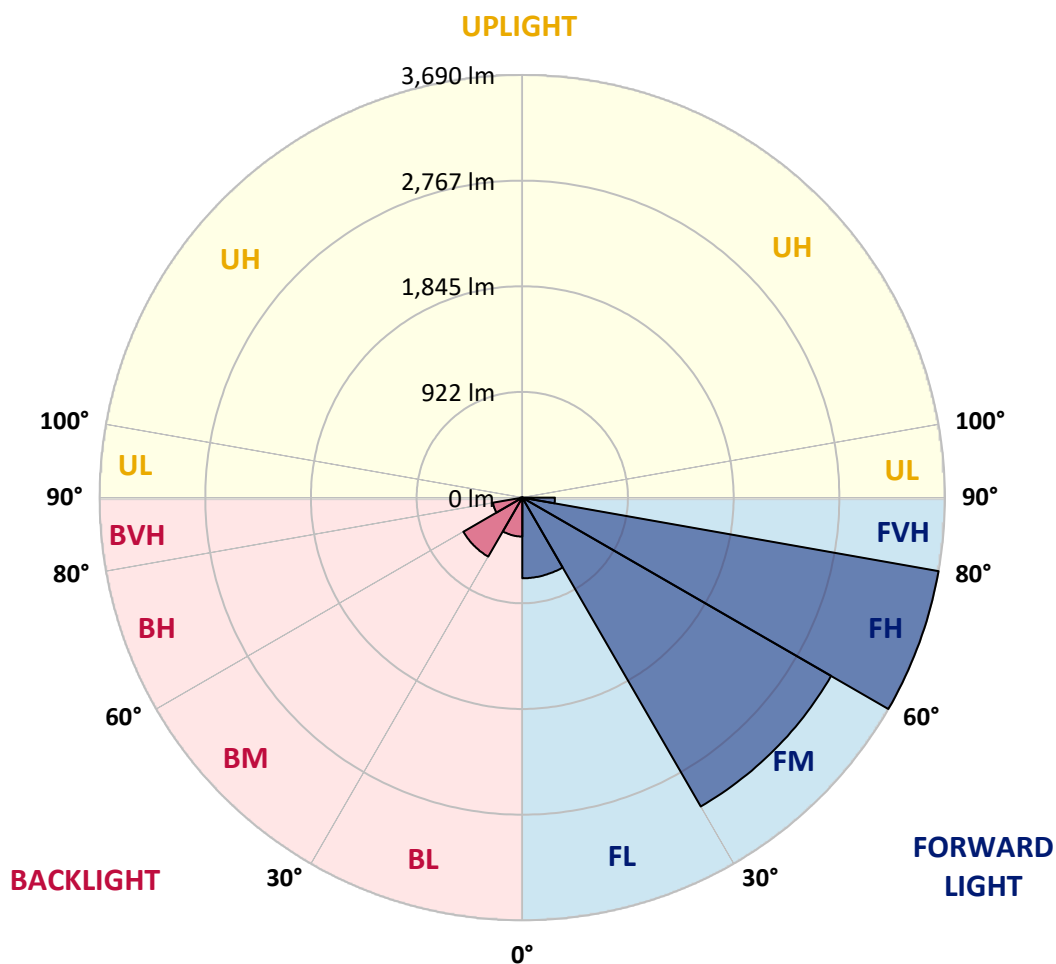
CATALOG NUMBER: GALN-SA2A-760-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 703.7 | 7.8 | | | |
| FM (30°-60°) | 3113.1 | 34.6 | | | |
| FH (60°-80°) | 3689.9 | 41.0 | | | G2/5000 |
| FVH (80°-90°) | 285.1 | 3.2 | | | G3/500 |
| BL (0°-30°) | 339.6 | 3.8 | B1/500 | | |
| BM (30°-60°) | 594.1 | 6.6 | B1/1000 | | |
| BH (60°-80°) | 260.1 | 2.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 16.4 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type IV Short





REPORT NUMBER: P451245

CATALOG NUMBER: GALN-SA2A-760-U-SL4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 38° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 |
| 2.5° | 1645.0 | 1653.2 | 1649.1 | 1643.5 | 1640.0 | 1636.4 | 1631.3 | 1616.6 | 1604.9 | 1592.2 | 1572.3 |
| 5° | 1657.2 | 1662.3 | 1658.8 | 1651.7 | 1643.5 | 1640.0 | 1630.3 | 1611.0 | 1592.2 | 1570.8 | 1541.3 |
| 7.5° | 1650.1 | 1652.2 | 1648.1 | 1639.5 | 1632.3 | 1625.7 | 1614.5 | 1593.2 | 1570.3 | 1544.4 | 1505.8 |
| 10° | 1624.7 | 1632.3 | 1632.3 | 1625.2 | 1618.1 | 1614.5 | 1603.4 | 1583.0 | 1562.2 | 1532.7 | 1486.9 |
| 12.5° | 1603.9 | 1612.0 | 1618.6 | 1616.6 | 1616.1 | 1616.1 | 1607.4 | 1592.2 | 1567.8 | 1539.8 | 1485.4 |
| 15° | 1589.6 | 1599.3 | 1613.5 | 1621.7 | 1626.7 | 1628.3 | 1624.7 | 1611.5 | 1586.6 | 1554.0 | 1491.5 |
| 17.5° | 1586.6 | 1598.3 | 1624.2 | 1642.0 | 1655.2 | 1654.7 | 1653.7 | 1635.4 | 1607.9 | 1574.4 | 1499.1 |
| 20° | 1600.3 | 1615.6 | 1651.7 | 1679.6 | 1698.9 | 1695.4 | 1689.8 | 1665.9 | 1633.9 | 1596.2 | 1506.3 |
| 22.5° | 1641.5 | 1657.2 | 1696.9 | 1727.4 | 1746.2 | 1746.2 | 1729.4 | 1697.9 | 1663.9 | 1621.7 | 1515.9 |
| 25° | 1700.5 | 1717.7 | 1759.9 | 1790.9 | 1799.6 | 1793.0 | 1776.2 | 1738.1 | 1698.9 | 1658.3 | 1536.3 |
| 27.5° | 1772.6 | 1793.5 | 1832.6 | 1858.6 | 1856.0 | 1850.9 | 1833.6 | 1784.8 | 1745.7 | 1708.6 | 1570.8 |
| 30° | 1862.6 | 1877.9 | 1918.5 | 1924.6 | 1915.5 | 1914.5 | 1890.1 | 1841.3 | 1804.7 | 1776.2 | 1620.1 |
| 32.5° | 1947.5 | 1961.2 | 1993.8 | 1996.3 | 1980.1 | 1982.1 | 1959.2 | 1914.5 | 1893.6 | 1883.5 | 1703.0 |
| 35° | 2037.5 | 2044.6 | 2072.6 | 2069.5 | 2058.8 | 2057.3 | 2048.2 | 2005.5 | 2012.1 | 2030.4 | 1820.4 |
| 37.5° | 2112.7 | 2127.0 | 2142.7 | 2145.3 | 2144.8 | 2149.8 | 2155.9 | 2135.6 | 2173.7 | 2231.2 | 1974.5 |
| 40° | 2181.9 | 2194.1 | 2217.5 | 2225.6 | 2245.4 | 2255.6 | 2276.4 | 2276.9 | 2364.9 | 2459.4 | 2164.1 |
| 42.5° | 2228.6 | 2249.5 | 2293.2 | 2307.9 | 2356.2 | 2386.7 | 2417.7 | 2450.8 | 2578.4 | 2699.9 | 2387.8 |
| 45° | 2269.3 | 2296.8 | 2369.5 | 2415.2 | 2480.8 | 2517.9 | 2583.5 | 2652.6 | 2836.1 | 2995.2 | 2615.0 |
| 47.5° | 2330.8 | 2355.2 | 2438.6 | 2519.4 | 2618.5 | 2661.2 | 2759.4 | 2862.6 | 3102.5 | 3276.9 | 2832.6 |
| 50° | 2416.2 | 2431.0 | 2515.9 | 2647.5 | 2774.1 | 2829.0 | 2958.6 | 3107.6 | 3387.2 | 3554.9 | 3023.7 |
| 52.5° | 2525.5 | 2531.6 | 2599.2 | 2774.6 | 2941.4 | 3009.5 | 3181.3 | 3355.2 | 3636.3 | 3796.4 | 3175.2 |
| 55° | 2654.6 | 2644.5 | 2697.3 | 2909.3 | 3132.5 | 3221.5 | 3406.0 | 3605.8 | 3916.4 | 3991.6 | 3285.5 |
| 57.5° | 2782.2 | 2766.5 | 2808.7 | 3073.0 | 3368.4 | 3475.6 | 3690.7 | 3864.0 | 4166.5 | 4174.1 | 3362.8 |
| 60° | 2917.5 | 2905.8 | 2956.1 | 3265.2 | 3657.6 | 3784.7 | 3983.5 | 4131.9 | 4408.5 | 4301.2 | 3375.0 |
| 62.5° | 3056.2 | 3037.4 | 3109.1 | 3481.2 | 3983.5 | 4098.9 | 4291.6 | 4416.6 | 4645.9 | 4348.5 | 3257.6 |
| 65° | 3191.0 | 3182.3 | 3293.1 | 3737.9 | 4354.6 | 4485.7 | 4672.8 | 4757.7 | 4836.0 | 4277.3 | 2966.3 |
| 67.5° | 3334.3 | 3351.6 | 3528.5 | 4080.6 | 4838.5 | 5003.3 | 5205.1 | 5125.3 | 4890.4 | 3940.3 | 2498.1 |
| 70° | 3552.9 | 3564.1 | 3837.6 | 4529.5 | 5462.3 | 5661.1 | 5758.7 | 5255.9 | 4628.1 | 3300.3 | 1877.9 |
| 72.5° | 3647.0 | 3696.3 | 4113.6 | 5000.7 | 6170.9 | 6292.4 | 5944.7 | 4964.6 | 3855.4 | 2241.9 | 986.7 |
| 73° | 3626.1 | 3685.1 | 4126.3 | 5072.4 | 6226.4 | 6354.0 | 5905.1 | 4814.6 | 3583.9 | 1930.7 | 845.9 |
| 75° | 3366.3 | 3439.0 | 3961.1 | 5012.4 | 6118.6 | 6042.3 | 5267.6 | 4103.5 | 2421.8 | 877.9 | 385.3 |
| 77.5° | 2656.2 | 2677.0 | 3138.6 | 4047.5 | 4818.2 | 4676.9 | 3942.3 | 2564.7 | 989.3 | 326.4 | 218.6 |
| 80° | 1332.4 | 1409.2 | 1769.1 | 2318.6 | 3222.0 | 3175.7 | 2488.4 | 1212.9 | 412.3 | 191.7 | 144.9 |
| 82.5° | 641.0 | 695.4 | 861.7 | 1130.6 | 1780.3 | 1738.1 | 1232.3 | 662.9 | 261.8 | 111.8 | 85.4 |
| 85° | 412.8 | 453.5 | 548.5 | 539.4 | 732.0 | 699.0 | 553.6 | 501.7 | 155.0 | 58.5 | 59.5 |
| 87.5° | 272.5 | 298.4 | 357.9 | 286.2 | 266.4 | 241.0 | 244.5 | 282.6 | 30.5 | 22.4 | 8.1 |
| 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: P451245
 CATALOG NUMBER: GALN-SA2A-760-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 | 1581.5 |
| 2.5° | 1564.2 | 1557.6 | 1535.7 | 1514.4 | 1494.1 | 1474.7 | 1462.0 | 1445.3 | 1434.1 | 1437.1 | 1441.7 |
| 5° | 1525.1 | 1510.3 | 1471.7 | 1434.1 | 1398.5 | 1356.3 | 1322.2 | 1294.8 | 1273.9 | 1266.3 | 1264.8 |
| 7.5° | 1483.9 | 1459.0 | 1403.6 | 1339.0 | 1278.5 | 1226.2 | 1165.7 | 1135.7 | 1100.6 | 1088.4 | 1084.3 |
| 10° | 1459.0 | 1425.4 | 1347.7 | 1257.7 | 1166.7 | 1079.8 | 1014.2 | 960.8 | 912.5 | 903.4 | 898.8 |
| 12.5° | 1451.9 | 1407.6 | 1302.9 | 1187.0 | 1066.0 | 959.3 | 862.2 | 792.0 | 745.3 | 734.6 | 718.8 |
| 15° | 1447.8 | 1392.9 | 1261.2 | 1115.8 | 962.3 | 832.2 | 730.0 | 648.2 | 605.5 | 577.0 | 577.5 |
| 17.5° | 1444.2 | 1376.1 | 1214.5 | 1038.1 | 872.8 | 722.9 | 610.0 | 536.3 | 497.2 | 481.9 | 480.4 |
| 20° | 1439.2 | 1356.3 | 1160.6 | 956.2 | 770.7 | 623.2 | 521.1 | 466.2 | 439.7 | 427.0 | 426.5 |
| 22.5° | 1437.1 | 1337.0 | 1107.7 | 872.8 | 680.2 | 546.5 | 462.1 | 423.5 | 406.7 | 398.0 | 398.0 |
| 25° | 1442.2 | 1323.3 | 1052.3 | 793.5 | 599.9 | 480.9 | 421.4 | 395.0 | 385.3 | 380.8 | 379.2 |
| 27.5° | 1458.0 | 1317.2 | 997.4 | 714.2 | 526.1 | 436.2 | 394.0 | 375.7 | 368.6 | 365.0 | 365.5 |
| 30° | 1488.0 | 1316.6 | 943.5 | 636.0 | 471.2 | 402.1 | 372.1 | 359.4 | 353.8 | 351.8 | 351.3 |
| 32.5° | 1536.3 | 1327.8 | 890.6 | 571.4 | 425.0 | 373.6 | 351.8 | 342.6 | 340.1 | 338.6 | 338.1 |
| 35° | 1618.1 | 1359.3 | 838.3 | 512.4 | 389.4 | 348.2 | 332.5 | 327.9 | 324.3 | 325.9 | 326.4 |
| 37.5° | 1728.4 | 1413.7 | 788.5 | 466.2 | 362.5 | 329.4 | 316.2 | 312.1 | 310.1 | 311.6 | 313.1 |
| 40° | 1876.3 | 1492.0 | 746.8 | 429.1 | 343.1 | 313.7 | 302.0 | 298.4 | 296.4 | 298.9 | 299.4 |
| 42.5° | 2039.5 | 1582.5 | 712.2 | 400.1 | 327.4 | 300.4 | 289.3 | 285.2 | 283.7 | 285.2 | 285.7 |
| 45° | 2207.3 | 1687.7 | 694.4 | 379.2 | 314.2 | 290.8 | 279.1 | 274.5 | 271.0 | 269.9 | 271.5 |
| 47.5° | 2372.5 | 1779.2 | 693.9 | 366.5 | 303.5 | 282.1 | 269.4 | 264.3 | 259.8 | 257.2 | 256.7 |
| 50° | 2507.2 | 1851.9 | 706.1 | 360.9 | 294.3 | 272.5 | 259.8 | 254.7 | 248.6 | 243.5 | 244.5 |
| 52.5° | 2608.9 | 1899.2 | 711.7 | 358.4 | 289.3 | 262.3 | 249.6 | 245.0 | 237.9 | 231.3 | 231.3 |
| 55° | 2674.5 | 1910.4 | 698.0 | 355.8 | 285.2 | 251.6 | 237.9 | 233.8 | 226.7 | 220.1 | 220.1 |
| 57.5° | 2696.8 | 1875.8 | 648.7 | 349.7 | 281.1 | 242.5 | 226.2 | 222.7 | 217.1 | 210.5 | 209.4 |
| 60° | 2645.0 | 1758.9 | 562.2 | 331.4 | 273.0 | 232.8 | 213.5 | 212.0 | 210.0 | 204.4 | 203.9 |
| 62.5° | 2445.2 | 1510.8 | 468.2 | 307.6 | 259.3 | 222.7 | 201.8 | 204.4 | 205.9 | 202.8 | 202.3 |
| 65° | 2112.7 | 1226.7 | 400.1 | 274.5 | 241.0 | 208.4 | 189.1 | 195.7 | 199.8 | 199.8 | 198.8 |
| 67.5° | 1713.7 | 942.0 | 337.0 | 246.0 | 218.1 | 189.1 | 174.9 | 180.0 | 183.0 | 182.0 | 184.5 |
| 70° | 1218.0 | 638.0 | 274.5 | 213.5 | 189.1 | 167.2 | 156.6 | 156.6 | 154.5 | 153.5 | 153.5 |
| 72.5° | 590.7 | 364.5 | 222.7 | 178.4 | 161.1 | 142.8 | 134.2 | 130.6 | 126.6 | 126.1 | 123.5 |
| 73° | 493.6 | 326.9 | 212.5 | 171.8 | 154.5 | 139.3 | 129.6 | 124.0 | 121.5 | 119.5 | 119.0 |
| 75° | 300.4 | 248.1 | 177.4 | 144.9 | 131.7 | 120.0 | 111.3 | 106.2 | 103.7 | 102.2 | 101.7 |
| 77.5° | 197.8 | 185.0 | 137.8 | 110.8 | 100.7 | 93.5 | 90.0 | 84.9 | 83.4 | 81.3 | 81.3 |
| 80° | 147.4 | 141.3 | 98.6 | 78.3 | 72.2 | 66.1 | 65.1 | 64.1 | 60.0 | 57.4 | 56.4 |
| 82.5° | 95.1 | 100.7 | 67.1 | 52.4 | 45.8 | 40.7 | 41.2 | 42.7 | 38.6 | 35.1 | 34.1 |
| 85° | 67.6 | 72.7 | 40.7 | 23.9 | 19.3 | 16.8 | 18.8 | 16.8 | 17.3 | 13.7 | 11.2 |
| 87.5° | 11.2 | 19.3 | 7.1 | 3.1 | 1.5 | 1.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)