

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: P459053

Luminaire Tested: **GALN-SA5C-735-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5C-735-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32985 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

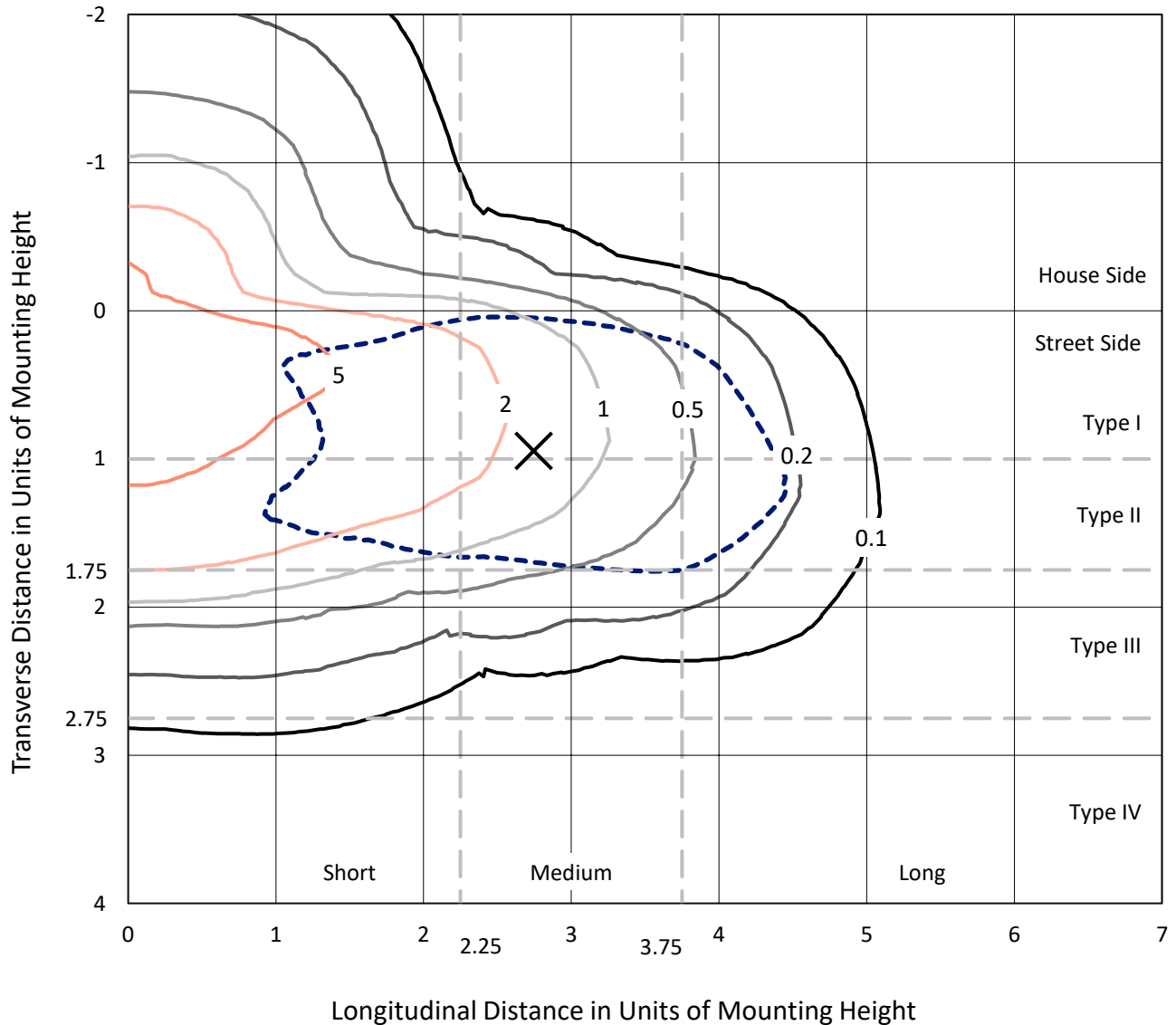
Input Watts (W): 269
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

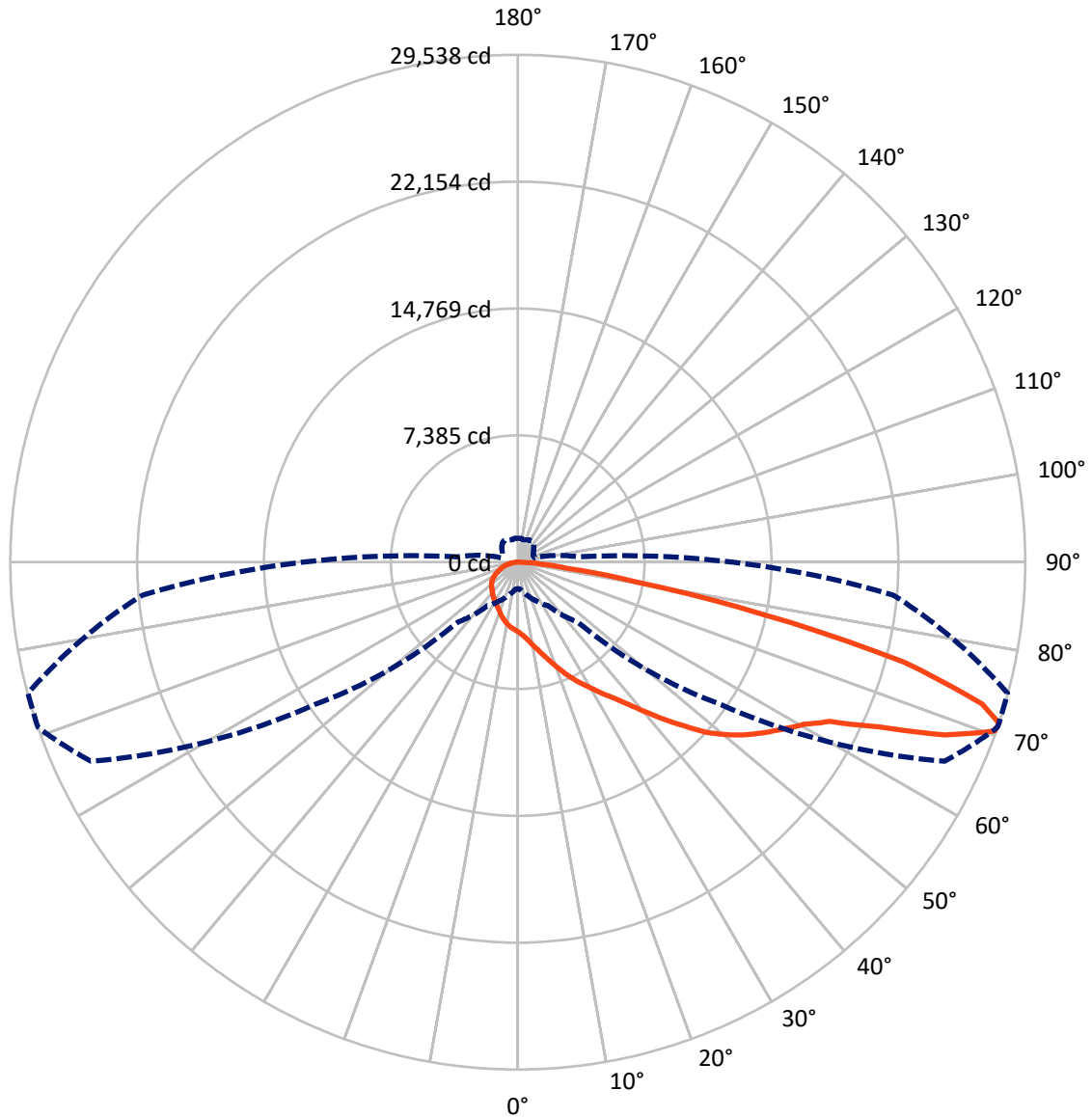
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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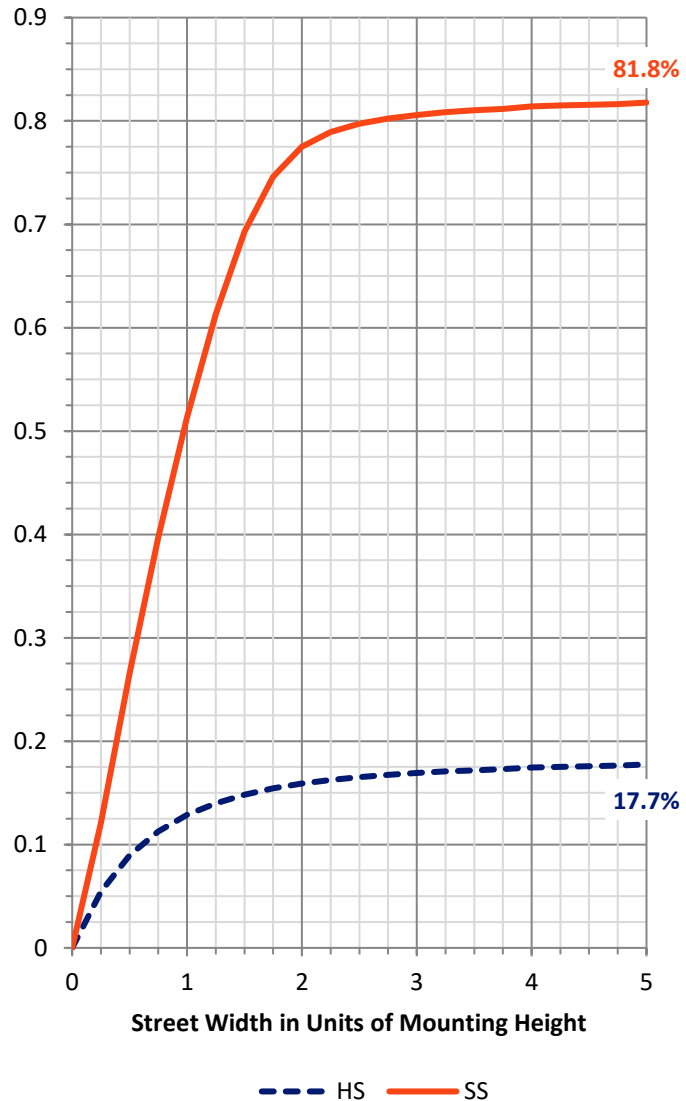
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5932.3 | 0.0 | 5932.3 |
| | % Fixture | 18.0 | 0.0 | 18.0 |
| Street Side | Lumens | 27052.7 | 0.0 | 27052.7 |
| | % Fixture | 82.0 | 0.0 | 82.0 |
| Total | Lumens | 32985.0 | 0.0 | 32985.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 406.5 | 1.2 |
| 10°-20° | 1320.6 | 4.0 |
| 20°-30° | 2307.9 | 7.0 |
| 30°-40° | 3432.6 | 10.4 |
| 40°-50° | 5057.5 | 15.3 |
| 50°-60° | 7080.6 | 21.5 |
| 60°-70° | 7919.5 | 24.0 |
| 70°-80° | 4837.5 | 14.7 |
| 80°-90° | 622.3 | 1.9 |
| 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° | 32985.0 | 100.0 |
| 0°-180° | 32985.0 | 100.0 |

Coefficient of Utilization



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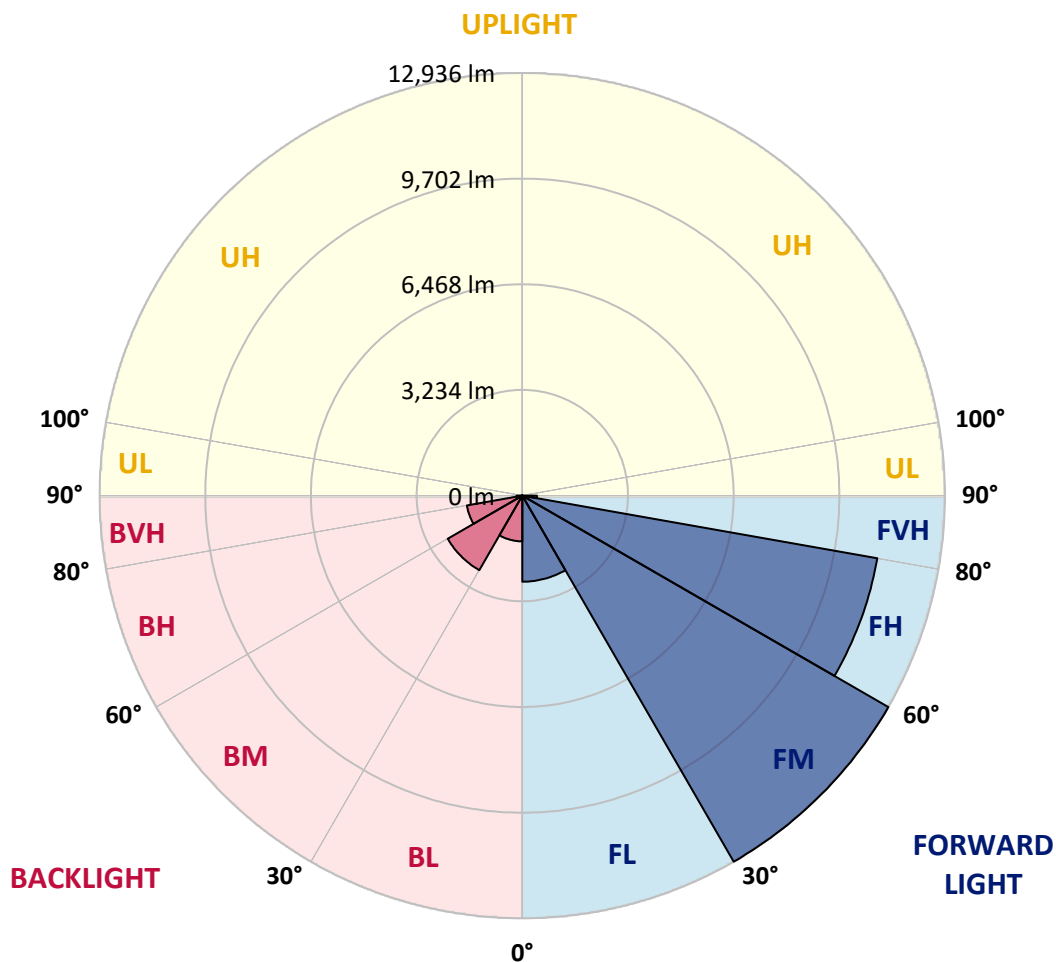
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 2635.5 | 8.0 | | | |
| FM | (30°-60°) | 12936.1 | 39.2 | | | |
| FH | (60°-80°) | 11033.4 | 33.4 | | | G4/12000 |
| FVH | (80°-90°) | 447.8 | 1.4 | | | G3/500 |
| BL | (0°-30°) | 1399.4 | 4.2 | B3/2500 | | |
| BM | (30°-60°) | 2634.8 | 8.0 | B3/5000 | | |
| BH | (60°-80°) | 1723.6 | 5.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 174.5 | 0.5 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 71° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 |
| 2.5° | 4494.2 | 4472.5 | 4474.3 | 4443.5 | 4403.6 | 4360.1 | 4298.4 | 4244.1 | 4200.5 | 4175.2 | 4100.8 |
| 5° | 4980.1 | 4958.3 | 4931.2 | 4864.1 | 4835.1 | 4728.1 | 4592.1 | 4468.9 | 4374.6 | 4322.0 | 4173.3 |
| 7.5° | 5373.5 | 5368.1 | 5360.8 | 5322.7 | 5248.4 | 5099.8 | 4983.7 | 4769.8 | 4630.2 | 4530.5 | 4276.7 |
| 10° | 5616.4 | 5625.5 | 5630.9 | 5638.2 | 5607.4 | 5529.4 | 5369.9 | 5099.8 | 4922.1 | 4795.2 | 4410.8 |
| 12.5° | 5739.7 | 5748.8 | 5779.6 | 5846.7 | 5888.4 | 5879.3 | 5748.8 | 5484.1 | 5239.3 | 5072.6 | 4554.1 |
| 15° | 5815.9 | 5830.4 | 5884.7 | 5973.6 | 6113.2 | 6202.0 | 6138.6 | 5893.8 | 5625.5 | 5427.9 | 4724.5 |
| 17.5° | 5899.3 | 5915.6 | 5975.4 | 6102.3 | 6285.4 | 6477.6 | 6546.5 | 6336.2 | 6044.3 | 5808.6 | 4914.8 |
| 20° | 5946.4 | 5968.1 | 6053.4 | 6220.1 | 6434.1 | 6713.3 | 6941.7 | 6831.1 | 6512.0 | 6251.0 | 5134.2 |
| 22.5° | 6022.5 | 6040.7 | 6113.2 | 6290.8 | 6546.5 | 6896.4 | 7336.9 | 7313.3 | 7032.3 | 6695.1 | 5375.3 |
| 25° | 6229.2 | 6258.2 | 6294.5 | 6401.4 | 6648.0 | 7083.1 | 7665.0 | 7828.2 | 7536.3 | 7159.2 | 5596.5 |
| 27.5° | 6619.0 | 6642.6 | 6640.7 | 6655.2 | 6794.8 | 7244.4 | 7949.7 | 8337.6 | 8036.7 | 7628.8 | 5810.4 |
| 30° | 7063.1 | 7072.2 | 7079.5 | 7046.8 | 7077.7 | 7409.4 | 8210.7 | 8841.6 | 8540.7 | 8111.0 | 5997.2 |
| 32.5° | 7603.4 | 7621.5 | 7559.9 | 7476.5 | 7451.1 | 7654.2 | 8426.5 | 9345.6 | 9137.1 | 8600.5 | 6182.1 |
| 35° | 8241.6 | 8288.7 | 8163.6 | 8016.7 | 7913.4 | 8005.9 | 8716.5 | 9860.5 | 9748.1 | 9226.0 | 6426.8 |
| 37.5° | 8970.3 | 9028.4 | 8912.3 | 8624.1 | 8477.2 | 8502.6 | 9095.4 | 10496.8 | 10520.4 | 9938.4 | 6791.2 |
| 40° | 9566.8 | 9642.9 | 9646.6 | 9238.7 | 9015.7 | 9044.7 | 9575.9 | 11182.1 | 11452.2 | 10819.5 | 7220.9 |
| 42.5° | 9960.2 | 10034.5 | 10112.5 | 9873.2 | 9639.3 | 9804.3 | 10136.1 | 11925.4 | 12500.1 | 11889.2 | 7821.0 |
| 45° | 10391.7 | 10458.8 | 10502.3 | 10393.5 | 10263.0 | 10690.8 | 10812.3 | 12715.8 | 13616.9 | 13083.9 | 8477.2 |
| 47.5° | 10892.0 | 10966.4 | 11008.1 | 10904.7 | 10855.8 | 11468.6 | 11541.1 | 13453.7 | 14809.8 | 14244.1 | 9202.4 |
| 50° | 11559.2 | 11615.4 | 11593.6 | 11528.4 | 11517.5 | 12065.0 | 12240.9 | 14144.4 | 15794.2 | 15493.2 | 9954.8 |
| 52.5° | 12389.5 | 12456.6 | 12480.2 | 12387.7 | 12346.0 | 12491.0 | 12804.7 | 14773.5 | 16689.8 | 16566.5 | 10757.9 |
| 55° | 12891.7 | 12998.7 | 13357.6 | 13502.7 | 13602.4 | 13042.2 | 13412.0 | 15467.9 | 17492.9 | 17697.8 | 11620.8 |
| 57.5° | 12248.1 | 12385.9 | 13189.0 | 13914.2 | 14851.5 | 14420.0 | 14273.1 | 16193.0 | 18296.0 | 18794.6 | 12654.2 |
| 60° | 10678.1 | 10708.9 | 11744.1 | 13080.2 | 14965.7 | 16191.2 | 16069.8 | 17346.1 | 19166.2 | 19900.5 | 14015.7 |
| 62.5° | 7407.6 | 7472.9 | 8696.6 | 10828.6 | 13555.2 | 16829.4 | 19126.3 | 19336.6 | 20413.5 | 21555.7 | 16011.7 |
| 65° | 3819.8 | 3734.6 | 4849.6 | 6805.7 | 10219.4 | 15313.8 | 21602.8 | 22996.9 | 23118.4 | 24144.5 | 18821.8 |
| 67.5° | 2351.4 | 2389.4 | 2911.6 | 3973.9 | 6042.5 | 11129.5 | 21343.5 | 27469.4 | 26829.5 | 27322.6 | 21430.6 |
| 70° | 1765.8 | 1812.9 | 2171.9 | 2719.4 | 3683.9 | 6363.4 | 17164.8 | 28553.5 | 29447.3 | 29320.4 | 22224.6 |
| 71° | 1535.5 | 1584.5 | 1958.0 | 2474.6 | 3094.7 | 4911.2 | 14461.7 | 27418.7 | 29538.0 | 29516.2 | 21925.5 |
| 72.5° | 1308.9 | 1339.8 | 1631.6 | 2095.7 | 2608.8 | 3442.7 | 10864.9 | 24590.5 | 28278.0 | 29001.3 | 20857.7 |
| 75° | 1027.9 | 1051.5 | 1182.0 | 1599.0 | 2054.0 | 2113.9 | 5830.4 | 18435.6 | 23225.4 | 24603.2 | 17364.2 |
| 77.5° | 837.6 | 853.9 | 921.0 | 1187.5 | 1584.5 | 1497.5 | 3058.4 | 11999.7 | 14550.5 | 15937.4 | 10228.5 |
| 80° | 665.3 | 683.5 | 723.4 | 804.9 | 1187.5 | 1067.8 | 1459.4 | 6080.5 | 7028.7 | 7014.2 | 4082.7 |
| 82.5° | 516.7 | 522.1 | 569.3 | 591.0 | 812.2 | 757.8 | 790.4 | 2574.4 | 2851.7 | 2946.0 | 1473.9 |
| 85° | 326.3 | 342.6 | 504.0 | 453.2 | 485.9 | 444.2 | 389.8 | 1022.5 | 1260.0 | 1241.9 | 589.2 |
| 87.5° | 99.7 | 105.1 | 170.4 | 192.2 | 215.7 | 194.0 | 143.2 | 300.9 | 368.0 | 398.8 | 146.8 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 | 4048.3 |
| 2.5° | 4071.8 | 4051.9 | 3981.2 | 3923.2 | 3868.8 | 3809.0 | 3758.2 | 3743.7 | 3731.0 | 3725.6 | 3723.7 |
| 5° | 4109.9 | 4050.1 | 3910.5 | 3796.3 | 3705.6 | 3622.2 | 3569.6 | 3546.1 | 3522.5 | 3522.5 | 3529.8 |
| 7.5° | 4164.3 | 4055.5 | 3839.8 | 3669.4 | 3555.1 | 3477.2 | 3439.1 | 3435.5 | 3440.9 | 3446.4 | 3448.2 |
| 10° | 4224.1 | 4051.9 | 3736.4 | 3524.3 | 3422.8 | 3386.5 | 3388.4 | 3419.2 | 3448.2 | 3469.9 | 3473.6 |
| 12.5° | 4282.1 | 4030.1 | 3615.0 | 3388.4 | 3323.1 | 3330.3 | 3381.1 | 3450.0 | 3506.2 | 3537.0 | 3538.8 |
| 15° | 4347.4 | 3995.7 | 3468.1 | 3259.6 | 3237.9 | 3294.1 | 3388.4 | 3493.5 | 3578.7 | 3629.5 | 3634.9 |
| 17.5° | 4401.8 | 3937.7 | 3314.0 | 3134.5 | 3161.7 | 3265.1 | 3395.6 | 3531.6 | 3634.9 | 3698.4 | 3709.2 |
| 20° | 4463.4 | 3863.3 | 3154.5 | 3014.9 | 3092.8 | 3232.4 | 3381.1 | 3527.9 | 3634.9 | 3696.6 | 3711.1 |
| 22.5° | 4512.4 | 3758.2 | 3002.2 | 2917.0 | 3031.2 | 3192.6 | 3332.2 | 3450.0 | 3537.0 | 3569.6 | 3591.4 |
| 25° | 4532.3 | 3625.8 | 2859.0 | 2837.2 | 2982.3 | 3127.3 | 3221.6 | 3288.6 | 3315.8 | 3312.2 | 3321.3 |
| 27.5° | 4521.4 | 3473.6 | 2735.7 | 2773.8 | 2920.6 | 3025.8 | 3072.9 | 3067.5 | 3018.5 | 2973.2 | 2994.9 |
| 30° | 4476.1 | 3292.3 | 2632.4 | 2708.5 | 2840.9 | 2898.9 | 2891.6 | 2820.9 | 2728.4 | 2643.2 | 2648.7 |
| 32.5° | 4394.5 | 3096.5 | 2536.3 | 2634.2 | 2728.4 | 2753.8 | 2704.9 | 2612.4 | 2480.1 | 2369.5 | 2353.2 |
| 35° | 4325.6 | 2909.7 | 2451.1 | 2549.0 | 2616.0 | 2603.4 | 2556.2 | 2436.6 | 2316.9 | 2219.0 | 2202.7 |
| 37.5° | 4314.8 | 2750.2 | 2369.5 | 2452.9 | 2491.0 | 2472.8 | 2414.8 | 2313.3 | 2269.8 | 2195.5 | 2186.4 |
| 40° | 4372.8 | 2637.8 | 2286.1 | 2351.4 | 2369.5 | 2355.0 | 2291.5 | 2233.5 | 2273.4 | 2255.3 | 2255.3 |
| 42.5° | 4530.5 | 2578.0 | 2211.8 | 2249.8 | 2264.3 | 2275.2 | 2229.9 | 2180.9 | 2229.9 | 2146.5 | 2119.3 |
| 45° | 4780.7 | 2579.8 | 2144.7 | 2150.1 | 2193.6 | 2231.7 | 2200.9 | 2128.4 | 2103.0 | 1936.2 | 1903.6 |
| 47.5° | 5148.7 | 2641.4 | 2090.3 | 2055.9 | 2133.8 | 2197.3 | 2153.8 | 2048.6 | 1936.2 | 1825.6 | 1805.7 |
| 50° | 5578.4 | 2752.0 | 2041.4 | 1958.0 | 2054.0 | 2153.8 | 2121.1 | 1997.8 | 1881.8 | 1814.7 | 1802.0 |
| 52.5° | 6055.2 | 2891.6 | 1981.5 | 1849.2 | 1956.1 | 2133.8 | 2128.4 | 1990.6 | 1831.1 | 1785.7 | 1774.9 |
| 55° | 6644.4 | 3029.4 | 1907.2 | 1722.3 | 1869.1 | 2117.5 | 2108.4 | 1930.8 | 1820.2 | 1787.5 | 1783.9 |
| 57.5° | 7329.6 | 3228.8 | 1800.2 | 1593.6 | 1769.4 | 2050.4 | 2030.5 | 1894.5 | 1783.9 | 1760.3 | 1758.5 |
| 60° | 8433.7 | 3538.8 | 1647.9 | 1475.7 | 1667.9 | 1932.6 | 1958.0 | 1832.9 | 1725.9 | 1720.5 | 1718.7 |
| 62.5° | 9885.9 | 3973.9 | 1490.2 | 1354.3 | 1550.0 | 1780.3 | 1852.8 | 1749.5 | 1664.3 | 1691.5 | 1695.1 |
| 65° | 11891.0 | 4340.1 | 1327.1 | 1250.9 | 1419.5 | 1633.4 | 1753.1 | 1671.5 | 1595.4 | 1647.9 | 1647.9 |
| 67.5° | 13198.1 | 4347.4 | 1178.4 | 1144.0 | 1287.2 | 1510.2 | 1647.9 | 1579.1 | 1506.5 | 1595.4 | 1599.0 |
| 70° | 12926.1 | 3809.0 | 1055.1 | 1031.6 | 1158.5 | 1377.8 | 1531.9 | 1477.5 | 1394.1 | 1473.9 | 1444.9 |
| 71° | 12487.4 | 3509.8 | 1006.2 | 988.0 | 1107.7 | 1314.4 | 1477.5 | 1432.2 | 1348.8 | 1401.4 | 1385.1 |
| 72.5° | 11787.6 | 3047.5 | 926.4 | 930.0 | 1031.6 | 1234.6 | 1401.4 | 1354.3 | 1270.9 | 1299.9 | 1294.4 |
| 75° | 9963.8 | 2661.4 | 792.2 | 808.6 | 886.5 | 1098.6 | 1249.1 | 1212.8 | 1127.6 | 1127.6 | 1122.2 |
| 77.5° | 6229.2 | 1860.1 | 658.1 | 667.2 | 752.4 | 940.9 | 1073.3 | 1042.4 | 960.8 | 933.7 | 926.4 |
| 80° | 2324.2 | 960.8 | 514.9 | 525.7 | 578.3 | 741.5 | 888.3 | 859.3 | 775.9 | 745.1 | 716.1 |
| 82.5° | 879.3 | 482.2 | 378.9 | 369.8 | 426.0 | 565.6 | 696.2 | 661.7 | 596.5 | 522.1 | 500.4 |
| 85° | 331.8 | 239.3 | 232.1 | 224.8 | 250.2 | 335.4 | 431.5 | 424.2 | 355.3 | 302.8 | 297.3 |
| 87.5° | 87.0 | 78.0 | 90.6 | 67.1 | 70.7 | 63.5 | 65.3 | 27.2 | 12.7 | 5.4 | 3.6 |
| 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)