

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: P454654

Luminaire Tested: **GALN-SA5D-730-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454654
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-SA5D-730-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K, 1200mA 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: 25523 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

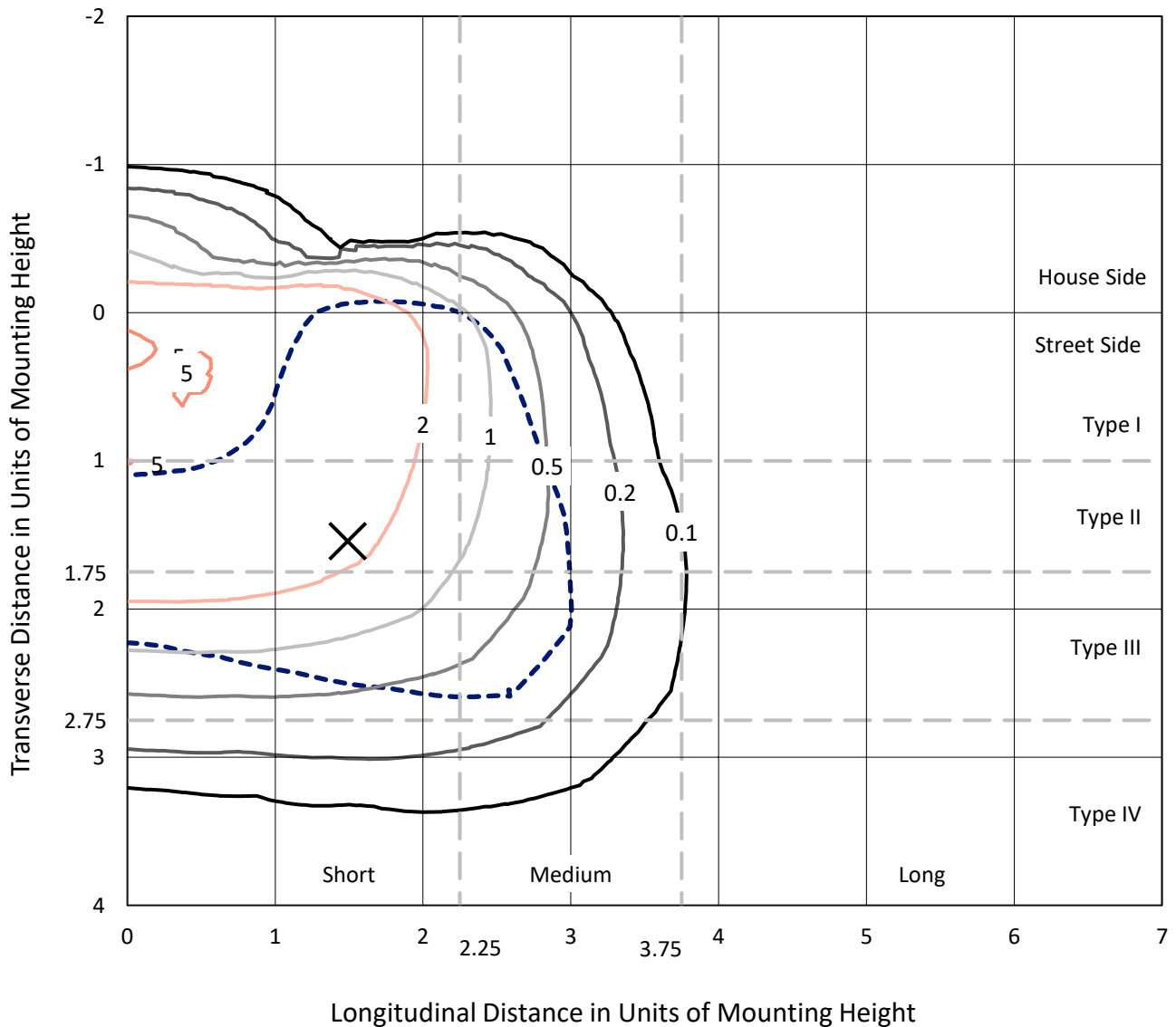
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P454654
 CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

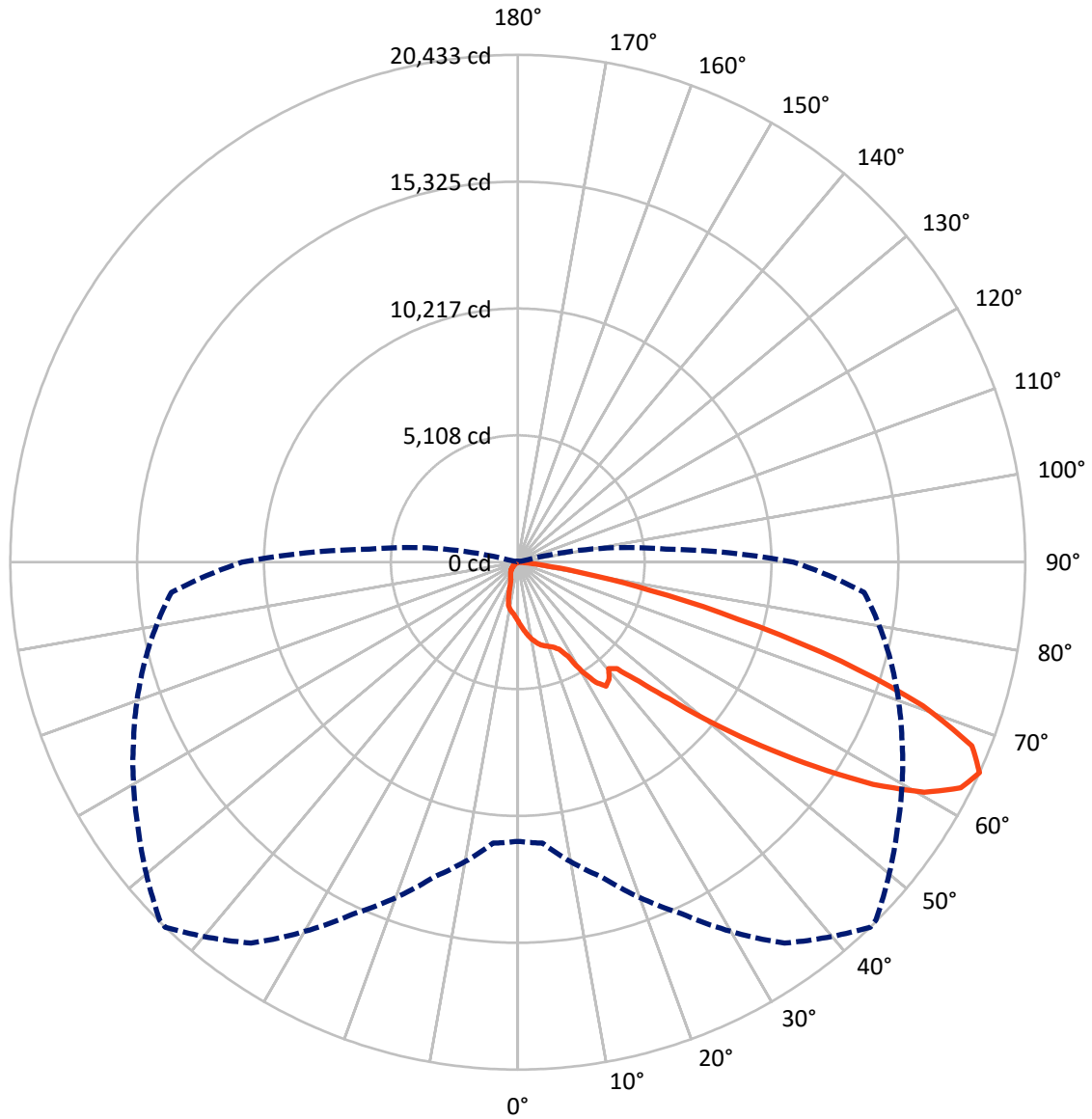
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

REPORT NUMBER: P454654
CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P454654
 CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

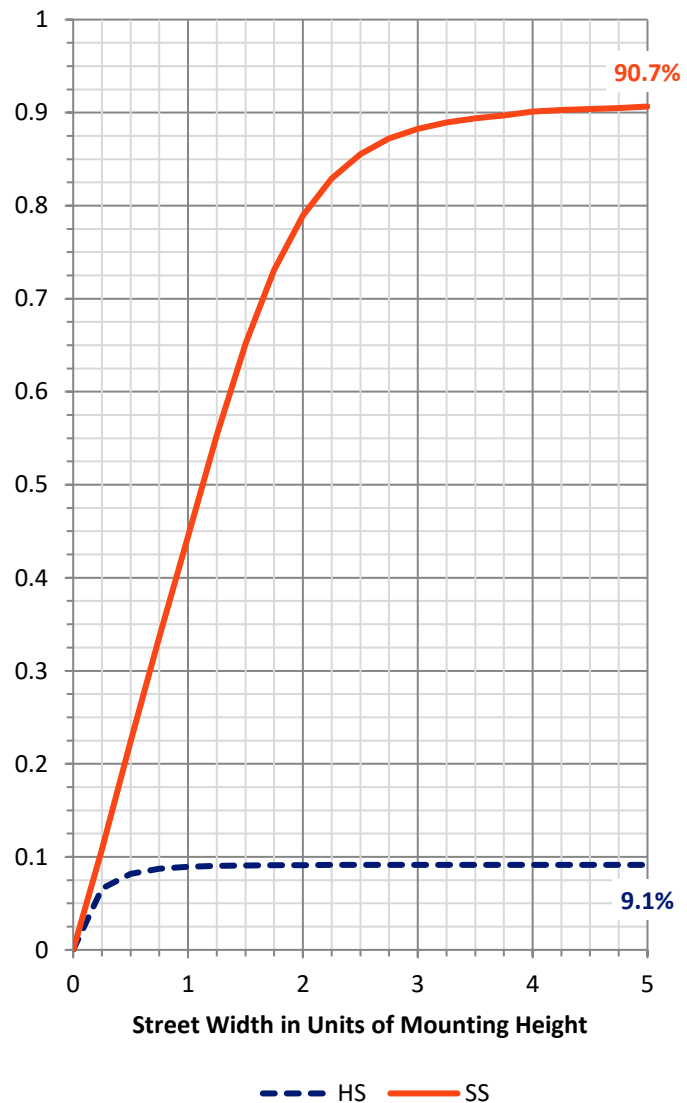
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2351.6 | 0.0 | 2351.6 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 23171.5 | 0.0 | 23171.5 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 25523.0 | 0.0 | 25523.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 236.3 | 0.9 |
| 10°-20° | 711.1 | 2.8 |
| 20°-30° | 1205.7 | 4.7 |
| 30°-40° | 2004.7 | 7.9 |
| 40°-50° | 3500.3 | 13.7 |
| 50°-60° | 6838.3 | 26.8 |
| 60°-70° | 7934.0 | 31.1 |
| 70°-80° | 2889.2 | 11.3 |
| 80°-90° | 203.6 | 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° | 25523.0 | 100.0 |
| 0°-180° | 25523.0 | 100.0 |

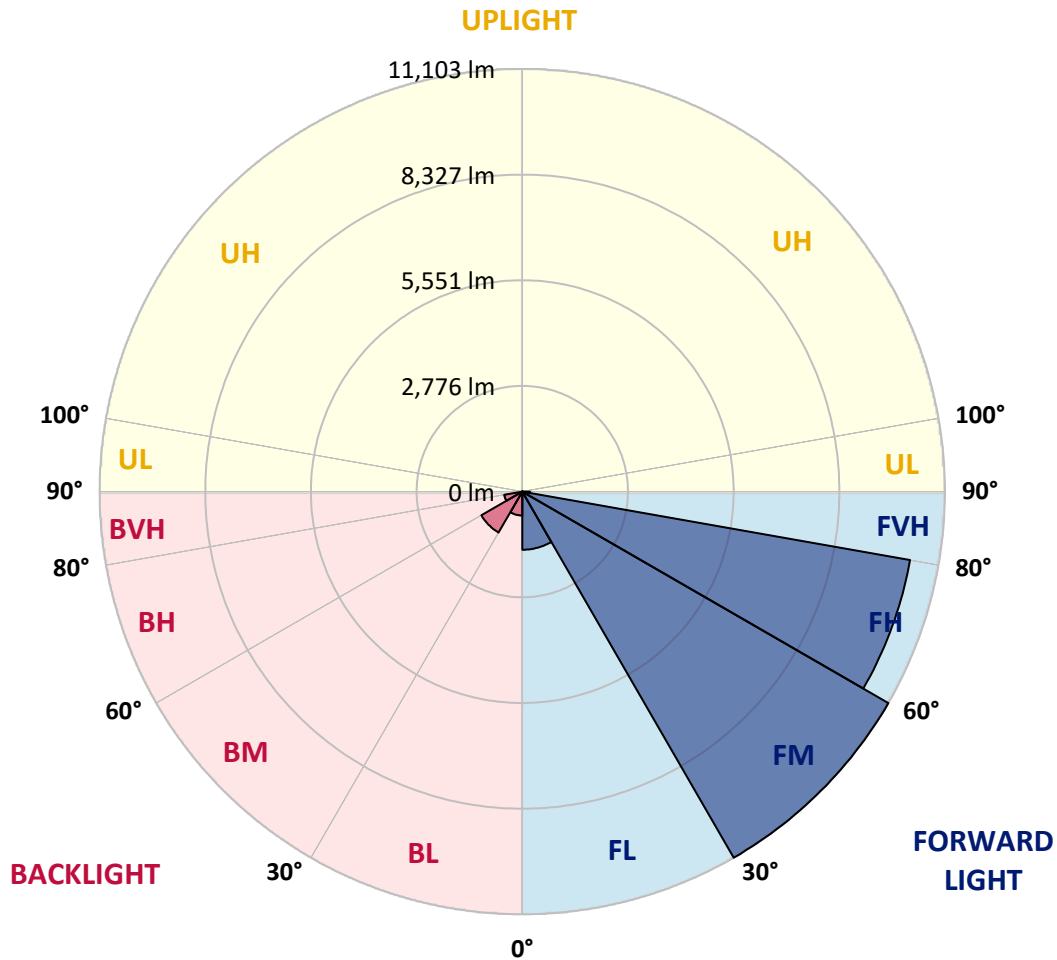


REPORT NUMBER: P454654
 CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1526.5 | 6.0 | | | |
| FM (30°-60°) | 11102.5 | 43.5 | | | |
| FH (60°-80°) | 10341.6 | 40.5 | | | G4/12000 |
| FVH (80°-90°) | 200.8 | 0.8 | | | G2/225 |
| BL (0°-30°) | 626.5 | 2.5 | B2/1000 | | |
| BM (30°-60°) | 1240.7 | 4.9 | B2/2500 | | |
| BH (60°-80°) | 481.6 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.8 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4
 Type III Short





REPORT NUMBER: P454654

CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 |
| 2.5° | 2673.8 | 2662.1 | 2656.3 | 2625.1 | 2601.7 | 2572.4 | 2572.4 | 2535.4 | 2492.4 | 2445.6 | 2402.7 |
| 5° | 2972.2 | 2952.7 | 2927.4 | 2900.1 | 2845.4 | 2767.4 | 2767.4 | 2689.4 | 2599.7 | 2519.8 | 2432.0 |
| 7.5° | 3258.9 | 3241.4 | 3198.4 | 3145.8 | 3056.1 | 2974.2 | 2968.3 | 2855.2 | 2747.9 | 2627.0 | 2502.2 |
| 10° | 3510.5 | 3496.8 | 3459.8 | 3358.4 | 3264.8 | 3157.5 | 3155.5 | 3028.8 | 2904.0 | 2755.7 | 2601.7 |
| 12.5° | 3686.0 | 3688.0 | 3639.2 | 3541.7 | 3420.8 | 3319.4 | 3311.6 | 3186.7 | 3056.1 | 2896.2 | 2707.0 |
| 15° | 3810.8 | 3810.8 | 3760.1 | 3650.9 | 3541.7 | 3452.0 | 3444.2 | 3335.0 | 3200.4 | 3026.8 | 2822.0 |
| 17.5° | 3845.9 | 3857.6 | 3803.0 | 3705.5 | 3617.8 | 3539.7 | 3537.8 | 3446.1 | 3338.9 | 3171.1 | 2939.1 |
| 20° | 3832.3 | 3844.0 | 3801.1 | 3725.0 | 3664.6 | 3619.7 | 3613.9 | 3576.8 | 3477.3 | 3319.4 | 3063.9 |
| 22.5° | 3803.0 | 3814.7 | 3783.5 | 3738.7 | 3709.4 | 3723.1 | 3713.3 | 3744.5 | 3691.9 | 3500.7 | 3212.1 |
| 25° | 3808.9 | 3820.6 | 3797.2 | 3771.8 | 3797.2 | 3881.0 | 3906.4 | 4041.0 | 3994.2 | 3730.9 | 3372.0 |
| 27.5° | 3992.2 | 4015.6 | 3982.5 | 3994.2 | 4083.9 | 4278.9 | 4327.7 | 4559.7 | 4353.0 | 4023.4 | 3621.7 |
| 30° | 4399.8 | 4384.2 | 4321.8 | 4378.4 | 4690.4 | 5103.9 | 5090.2 | 5053.2 | 4729.4 | 4360.8 | 3918.1 |
| 32.5° | 4770.4 | 4756.7 | 4752.8 | 4996.6 | 5562.2 | 5763.1 | 5753.3 | 5394.4 | 5066.8 | 4747.0 | 4210.6 |
| 35° | 4920.5 | 4867.9 | 4856.2 | 5447.1 | 6393.0 | 6127.8 | 6067.3 | 5534.9 | 5476.4 | 5168.2 | 4509.0 |
| 37.5° | 5373.0 | 5335.9 | 5154.6 | 5521.2 | 6061.4 | 5973.7 | 5926.9 | 5776.7 | 5913.2 | 5540.7 | 4846.4 |
| 40° | 6305.2 | 6201.9 | 6038.0 | 5679.2 | 5591.4 | 5628.5 | 5675.3 | 6086.8 | 6430.0 | 6049.7 | 5296.9 |
| 42.5° | 7463.7 | 7440.3 | 7136.0 | 6467.1 | 5809.9 | 5860.6 | 5921.0 | 6734.3 | 7173.1 | 6816.2 | 6032.2 |
| 45° | 8854.2 | 8887.4 | 8448.6 | 7658.7 | 6796.7 | 6839.6 | 6927.4 | 7689.9 | 8179.4 | 8007.8 | 7188.7 |
| 47.5° | 10118.0 | 10092.7 | 9944.4 | 9123.4 | 8327.7 | 8232.1 | 8374.5 | 8916.6 | 9571.9 | 9599.2 | 8624.1 |
| 50° | 11389.6 | 11524.2 | 11303.8 | 10982.0 | 10391.0 | 10190.2 | 10137.5 | 10402.7 | 11401.3 | 11270.6 | 10348.1 |
| 52.5° | 13217.0 | 13287.2 | 12873.7 | 12791.8 | 12926.4 | 12275.0 | 12222.3 | 12286.7 | 13179.9 | 12731.4 | 11639.2 |
| 55° | 14365.7 | 14324.7 | 14170.7 | 14810.4 | 15342.8 | 14529.5 | 14463.2 | 14203.8 | 14656.3 | 13763.1 | 12881.5 |
| 57.5° | 14728.4 | 14787.0 | 15145.8 | 16302.3 | 17562.2 | 16871.8 | 16750.9 | 16013.7 | 15721.1 | 14724.5 | 14024.4 |
| 60° | 14566.6 | 14673.8 | 15448.1 | 17168.2 | 18915.7 | 18812.3 | 18709.0 | 17470.5 | 16485.6 | 15528.1 | 14826.0 |
| 62.5° | 13414.0 | 13564.1 | 14802.6 | 17014.2 | 19374.0 | 20019.5 | 19890.8 | 18379.4 | 16994.7 | 15918.1 | 14966.4 |
| 65° | 11241.4 | 11352.5 | 13131.2 | 15615.8 | 18722.6 | 20433.0 | 20386.2 | 18664.1 | 17074.6 | 15561.2 | 14004.9 |
| 67.5° | 8013.7 | 8392.0 | 10040.0 | 13160.4 | 16795.7 | 19727.0 | 19807.0 | 18322.8 | 16323.8 | 14018.5 | 11598.3 |
| 70° | 5037.6 | 5295.0 | 6476.9 | 9421.8 | 13464.7 | 17306.7 | 17570.0 | 16760.6 | 14166.8 | 10927.4 | 7764.0 |
| 72.5° | 2402.7 | 2593.9 | 3436.4 | 5963.9 | 9503.7 | 13616.8 | 13825.5 | 13759.2 | 10954.7 | 6884.5 | 4005.9 |
| 75° | 1070.7 | 1142.9 | 1640.2 | 3044.4 | 6135.6 | 9152.6 | 9692.8 | 9782.6 | 6845.5 | 3368.1 | 1558.3 |
| 77.5° | 546.1 | 548.0 | 768.4 | 1474.4 | 3063.9 | 5460.8 | 5568.0 | 5882.0 | 3711.4 | 1484.2 | 542.2 |
| 80° | 290.6 | 310.1 | 407.6 | 696.2 | 1589.5 | 2689.4 | 2675.8 | 2941.0 | 1646.0 | 727.5 | 181.4 |
| 82.5° | 130.7 | 144.3 | 230.1 | 364.7 | 776.2 | 1020.0 | 1100.0 | 1203.3 | 706.0 | 464.2 | 80.0 |
| 85° | 39.0 | 46.8 | 113.1 | 183.3 | 280.8 | 294.5 | 329.6 | 425.2 | 399.8 | 329.6 | 41.0 |
| 87.5° | 5.9 | 5.9 | 46.8 | 50.7 | 41.0 | 52.7 | 54.6 | 60.5 | 128.7 | 120.9 | 21.5 |
| 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: P454654

CATALOG NUMBER: GALN-SA5D-730-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 | 2375.4 |
| 2.5° | 2379.3 | 2365.7 | 2316.9 | 2276.0 | 2240.9 | 2219.4 | 2194.1 | 2178.5 | 2170.7 | 2164.8 | 2166.8 |
| 5° | 2389.1 | 2355.9 | 2272.1 | 2205.8 | 2155.0 | 2100.4 | 2063.4 | 2041.9 | 2032.2 | 2016.6 | 2016.6 |
| 7.5° | 2443.7 | 2391.0 | 2274.0 | 2172.6 | 2084.8 | 2010.7 | 1940.5 | 1915.2 | 1897.6 | 1893.7 | 1889.8 |
| 10° | 2521.7 | 2455.4 | 2295.5 | 2155.0 | 2030.2 | 1928.8 | 1829.4 | 1741.6 | 1673.3 | 1632.4 | 1626.5 |
| 12.5° | 2619.2 | 2523.7 | 2328.6 | 2143.3 | 1983.4 | 1804.0 | 1540.7 | 1363.2 | 1244.3 | 1207.2 | 1213.1 |
| 15° | 2708.9 | 2605.6 | 2361.8 | 2133.6 | 1897.6 | 1495.9 | 1197.5 | 994.6 | 934.2 | 928.3 | 930.3 |
| 17.5° | 2816.2 | 2693.3 | 2400.8 | 2119.9 | 1661.6 | 1142.9 | 889.3 | 834.7 | 846.4 | 865.9 | 864.0 |
| 20° | 2927.4 | 2786.9 | 2447.6 | 2038.0 | 1326.2 | 860.1 | 786.0 | 791.8 | 809.4 | 826.9 | 830.8 |
| 22.5° | 3046.3 | 2894.2 | 2502.2 | 1841.1 | 1012.2 | 748.9 | 745.0 | 752.8 | 770.4 | 789.9 | 793.8 |
| 25° | 3210.1 | 3028.8 | 2543.2 | 1583.6 | 766.5 | 692.3 | 700.1 | 713.8 | 729.4 | 750.9 | 754.8 |
| 27.5° | 3420.8 | 3210.1 | 2564.6 | 1248.2 | 663.1 | 641.6 | 643.6 | 663.1 | 682.6 | 702.1 | 702.1 |
| 30° | 3693.8 | 3426.6 | 2521.7 | 943.9 | 612.4 | 592.9 | 585.1 | 596.8 | 622.1 | 641.6 | 643.6 |
| 32.5° | 3937.6 | 3631.4 | 2408.6 | 721.6 | 575.3 | 548.0 | 528.5 | 530.5 | 540.2 | 551.9 | 553.9 |
| 35° | 4181.4 | 3830.3 | 2215.5 | 606.5 | 536.3 | 505.1 | 475.9 | 460.3 | 452.5 | 446.6 | 452.5 |
| 37.5° | 4493.4 | 4078.0 | 1958.1 | 551.9 | 503.2 | 464.2 | 423.2 | 390.1 | 362.8 | 345.2 | 349.1 |
| 40° | 4895.2 | 4421.3 | 1653.8 | 516.8 | 472.0 | 425.2 | 370.6 | 327.6 | 280.8 | 265.2 | 257.4 |
| 42.5° | 5558.3 | 4942.0 | 1334.0 | 487.6 | 440.8 | 384.2 | 315.9 | 257.4 | 214.5 | 198.9 | 202.8 |
| 45° | 6605.6 | 5599.2 | 1027.8 | 456.4 | 409.6 | 339.3 | 265.2 | 202.8 | 167.7 | 159.9 | 163.8 |
| 47.5° | 7994.2 | 6449.5 | 791.8 | 421.3 | 370.6 | 290.6 | 208.7 | 159.9 | 138.5 | 136.5 | 134.6 |
| 50° | 9300.8 | 7241.4 | 661.1 | 382.3 | 323.7 | 241.8 | 171.6 | 134.6 | 120.9 | 119.0 | 119.0 |
| 52.5° | 10482.7 | 7808.9 | 538.3 | 337.4 | 273.0 | 198.9 | 144.3 | 119.0 | 107.3 | 101.4 | 101.4 |
| 55° | 11533.9 | 8179.4 | 436.9 | 282.8 | 214.5 | 158.0 | 124.8 | 107.3 | 93.6 | 85.8 | 83.9 |
| 57.5° | 12327.7 | 8224.3 | 327.6 | 226.2 | 159.9 | 122.9 | 107.3 | 93.6 | 78.0 | 68.3 | 64.4 |
| 60° | 12667.0 | 7836.2 | 241.8 | 171.6 | 119.0 | 97.5 | 85.8 | 76.1 | 58.5 | 48.8 | 46.8 |
| 62.5° | 12325.7 | 7081.4 | 179.4 | 130.7 | 91.7 | 72.2 | 60.5 | 56.6 | 41.0 | 29.3 | 27.3 |
| 65° | 11102.9 | 5991.2 | 142.4 | 99.5 | 68.3 | 52.7 | 39.0 | 37.1 | 25.4 | 13.7 | 11.7 |
| 67.5° | 8895.2 | 4692.4 | 113.1 | 74.1 | 48.8 | 35.1 | 25.4 | 23.4 | 13.7 | 3.9 | 3.9 |
| 70° | 5784.5 | 2999.5 | 91.7 | 54.6 | 31.2 | 23.4 | 15.6 | 11.7 | 7.8 | 2.0 | 0.0 |
| 72.5° | 2861.0 | 1402.2 | 74.1 | 42.9 | 21.5 | 11.7 | 5.9 | 3.9 | 5.9 | 0.0 | 0.0 |
| 75° | 1109.7 | 499.3 | 54.6 | 29.3 | 11.7 | 5.9 | 3.9 | 0.0 | 2.0 | 0.0 | 0.0 |
| 77.5° | 368.6 | 165.8 | 33.2 | 15.6 | 7.8 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 136.5 | 64.4 | 17.6 | 9.8 | 3.9 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 54.6 | 25.4 | 11.7 | 7.8 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 27.3 | 15.6 | 7.8 | 5.9 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 19.5 | 11.7 | 7.8 | 5.9 | 3.9 | 2.0 | 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)