

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P640977

Luminaire Tested: GWS-SA5E-830-U-T3R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-T3R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23345.2 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

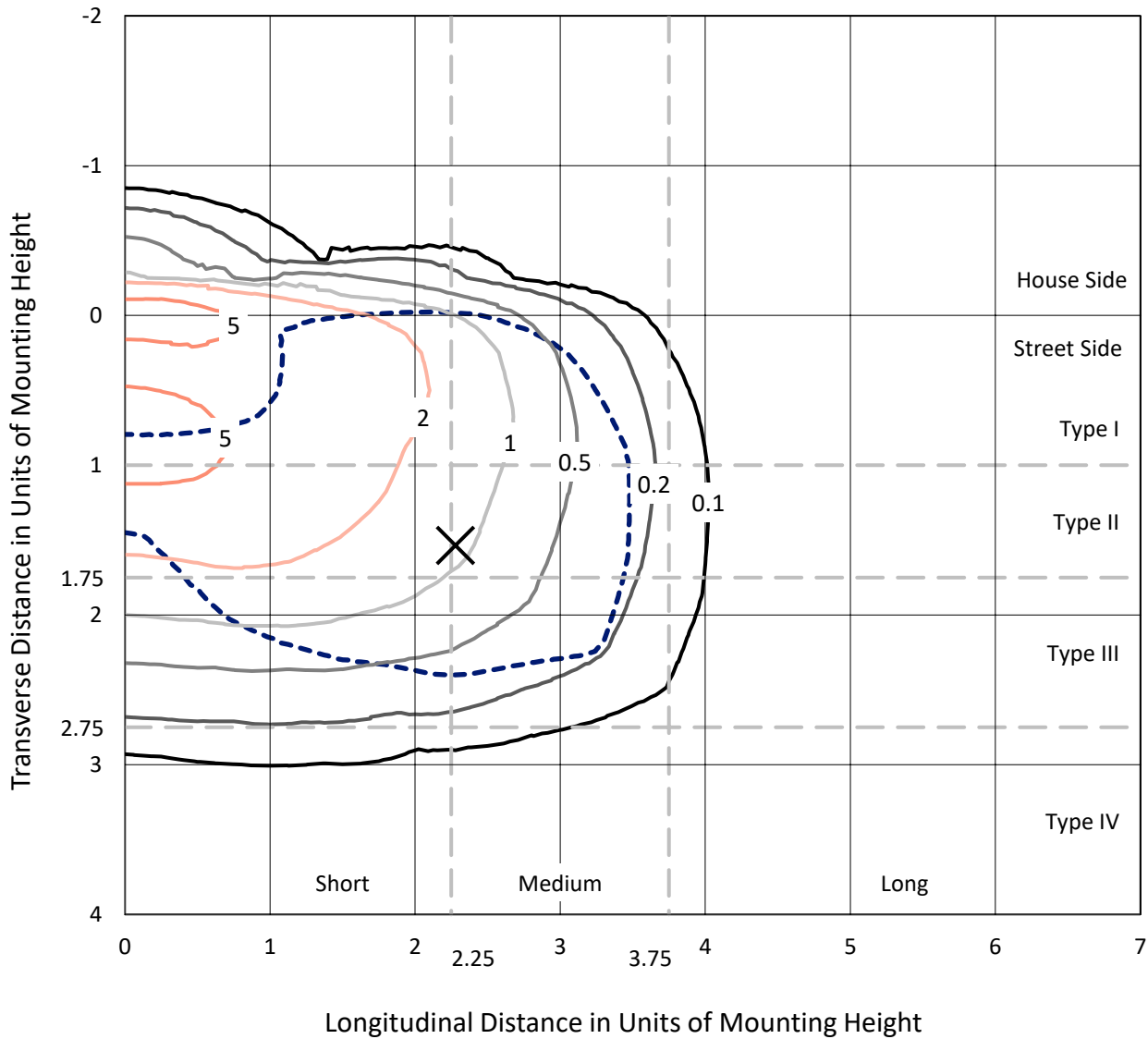
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640977
 CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

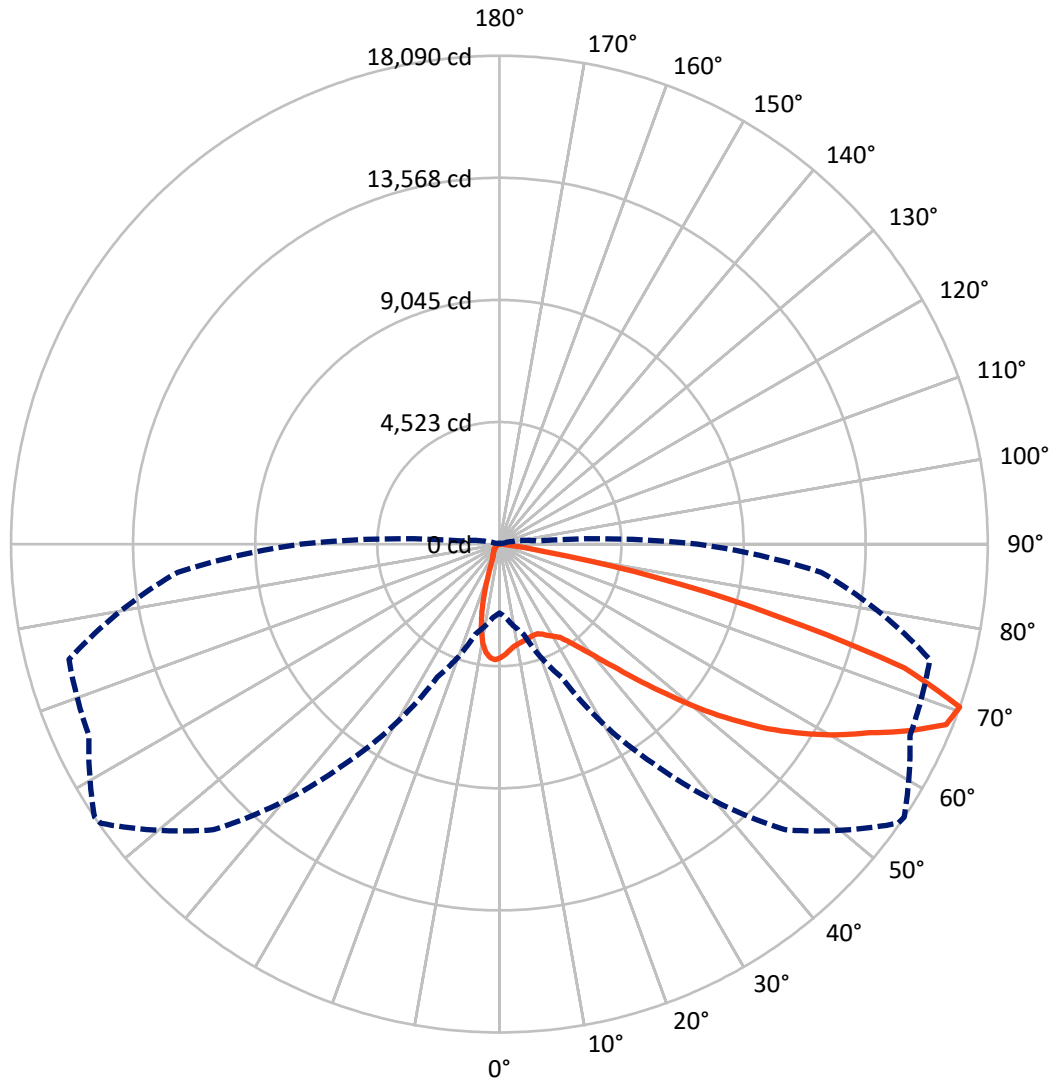
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P640977
CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P640977
 CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

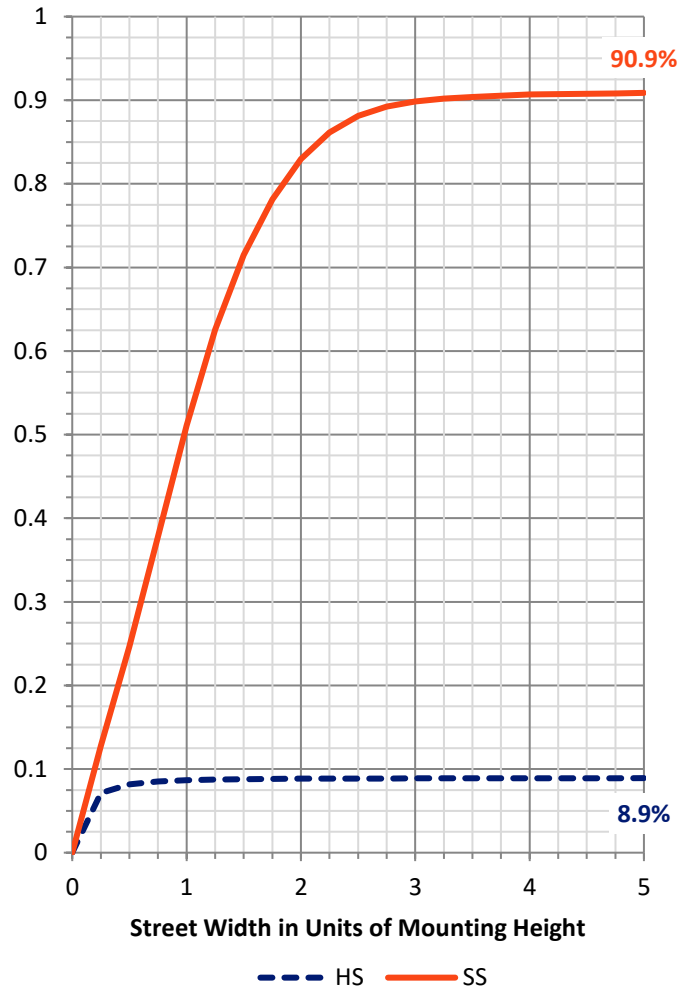
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2096.8 | 0.0 | 2096.8 |
| | % Fixture | 9.0 | 0.0 | 9.0 |
| Street Side | Lumens | 21248.4 | 0.0 | 21248.4 |
| | % Fixture | 91.0 | 0.0 | 91.0 |
| Total | Lumens | 23345.2 | 0.0 | 23345.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 361.4 | 1.5 |
| 10°-20° | 812.9 | 3.5 |
| 20°-30° | 1287.6 | 5.5 |
| 30°-40° | 2220.4 | 9.5 |
| 40°-50° | 3749.5 | 16.1 |
| 50°-60° | 5509.2 | 23.6 |
| 60°-70° | 6531.5 | 28.0 |
| 70°-80° | 2785.3 | 11.9 |
| 80°-90° | 87.5 | 0.4 |
| 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° | 23345.2 | 100.0 |
| 0°-180° | 23345.2 | 100.0 |

Coefficient of Utilization



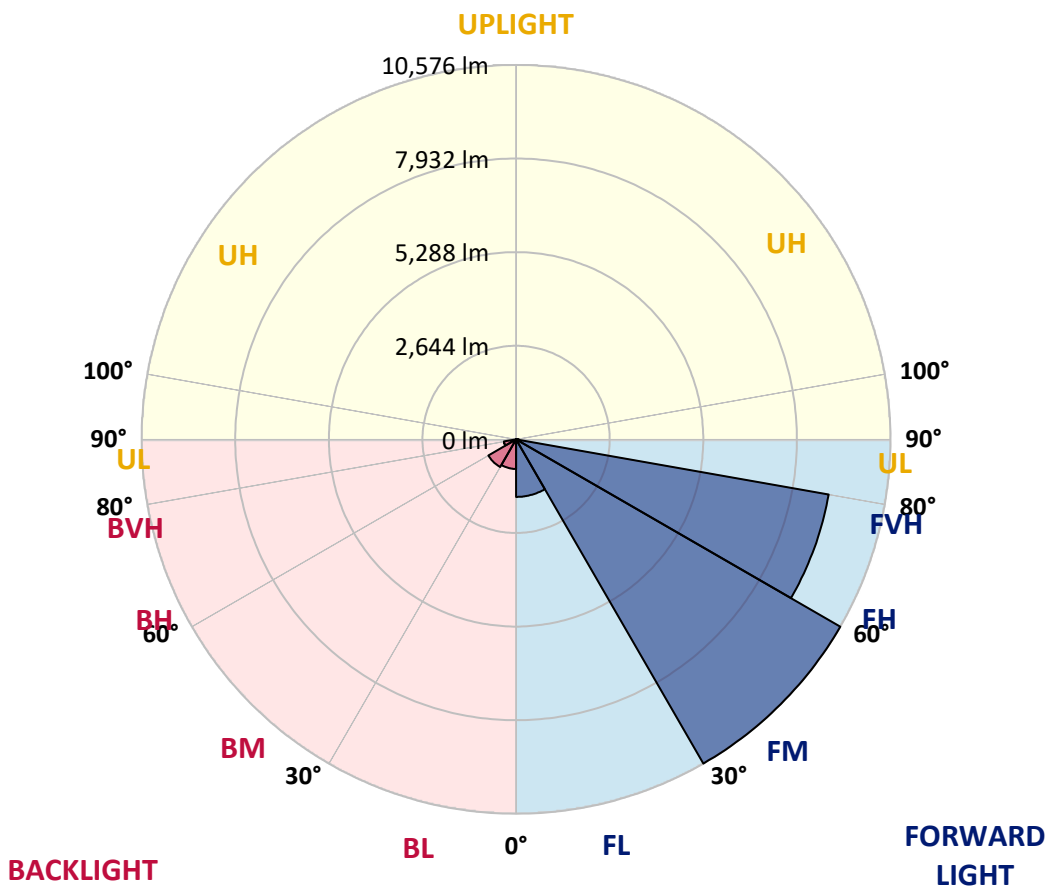
REPORT NUMBER: P640977

CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1626.7 | 7.0 | | | |
| FM (30°-60°) | 10576.0 | 45.3 | | | |
| FH (60°-80°) | 8967.1 | 38.4 | | | G4/12000 |
| FVH (80°-90°) | 78.6 | 0.3 | | | G1/100 |
| BL (0°-30°) | 835.1 | 3.6 | B2/1000 | | |
| BM (30°-60°) | 903.1 | 3.9 | B1/1000 | | |
| BH (60°-80°) | 349.7 | 1.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 8.9 | 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 Medium





REPORT NUMBER: P640977

CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 |
| 2.5° | 3918.6 | 3912.2 | 3916.5 | 3948.6 | 4008.4 | 4036.2 | 4083.2 | 4091.8 | 4130.3 | 4179.4 | 4198.7 |
| 5° | 3664.2 | 3642.9 | 3653.5 | 3698.4 | 3766.8 | 3843.8 | 3931.5 | 3955.0 | 4051.2 | 4160.2 | 4241.4 |
| 7.5° | 3431.2 | 3407.7 | 3433.3 | 3503.9 | 3600.1 | 3683.5 | 3813.9 | 3828.8 | 3982.8 | 4175.2 | 4322.7 |
| 10° | 3065.6 | 3072.1 | 3123.4 | 3247.4 | 3394.9 | 3568.0 | 3743.3 | 3764.7 | 3955.0 | 4224.3 | 4453.1 |
| 12.5° | 2785.6 | 2770.6 | 2826.2 | 2967.3 | 3174.7 | 3426.9 | 3689.9 | 3717.7 | 3957.1 | 4299.2 | 4619.8 |
| 15° | 2655.2 | 2650.9 | 2674.4 | 2777.0 | 2978.0 | 3275.1 | 3640.7 | 3677.1 | 3984.9 | 4367.6 | 4778.0 |
| 17.5° | 2659.5 | 2653.0 | 2650.9 | 2710.8 | 2860.4 | 3161.8 | 3587.3 | 3634.3 | 4008.4 | 4442.4 | 4944.8 |
| 20° | 2845.4 | 2815.5 | 2762.1 | 2734.3 | 2824.1 | 3089.2 | 3550.9 | 3604.4 | 4042.6 | 4521.5 | 5122.2 |
| 22.5° | 3234.5 | 3245.2 | 3102.0 | 2952.3 | 2909.6 | 3097.7 | 3546.6 | 3608.6 | 4117.4 | 4645.5 | 5340.3 |
| 25° | 4012.7 | 3995.6 | 3730.5 | 3394.9 | 3161.8 | 3196.0 | 3621.5 | 3696.3 | 4265.0 | 4822.9 | 5545.5 |
| 27.5° | 4987.5 | 5002.5 | 4639.1 | 4104.6 | 3617.2 | 3399.1 | 3758.3 | 3833.1 | 4436.0 | 4934.1 | 5682.3 |
| 30° | 6050.0 | 6035.1 | 5646.0 | 5053.8 | 4262.8 | 3736.9 | 3895.1 | 3961.4 | 4521.5 | 4994.0 | 5823.4 |
| 32.5° | 7054.8 | 7020.6 | 6635.8 | 6015.8 | 5085.9 | 4269.2 | 4083.2 | 4121.7 | 4634.8 | 5124.4 | 6013.7 |
| 35° | 7912.1 | 7909.9 | 7574.3 | 6913.7 | 5932.5 | 4936.2 | 4406.1 | 4438.1 | 4846.4 | 5331.7 | 6293.8 |
| 37.5° | 8797.1 | 8767.2 | 8391.0 | 7788.1 | 6802.6 | 5667.4 | 4899.9 | 4887.1 | 5179.9 | 5637.4 | 6637.9 |
| 40° | 9524.0 | 9504.8 | 9216.2 | 8636.8 | 7706.9 | 6475.5 | 5498.5 | 5460.0 | 5575.4 | 6060.7 | 7116.8 |
| 42.5° | 10062.7 | 10064.9 | 9975.1 | 9622.3 | 8664.6 | 7409.7 | 6251.0 | 6191.1 | 6189.0 | 6699.9 | 7749.6 |
| 45° | 10471.1 | 10498.9 | 10633.5 | 10580.1 | 9795.5 | 8497.8 | 7215.2 | 7153.2 | 7048.4 | 7529.4 | 8474.3 |
| 47.5° | 10661.3 | 10697.7 | 11103.9 | 11317.6 | 10785.3 | 9577.4 | 8363.2 | 8232.8 | 8027.5 | 8632.5 | 9284.6 |
| 50° | 10642.1 | 10706.2 | 11272.7 | 11922.6 | 11683.2 | 10672.0 | 9613.8 | 9551.8 | 9216.2 | 9799.8 | 10086.3 |
| 52.5° | 10206.0 | 10342.8 | 11283.4 | 12290.3 | 12373.7 | 11681.1 | 10907.2 | 10791.7 | 10629.3 | 11018.3 | 10838.8 |
| 55° | 9021.6 | 9188.4 | 10832.4 | 12407.9 | 12912.5 | 12561.9 | 12172.8 | 12078.7 | 11809.3 | 12168.5 | 11495.1 |
| 57.5° | 8378.1 | 8521.4 | 9883.2 | 12350.2 | 13369.9 | 13376.4 | 13299.4 | 13222.4 | 13000.1 | 13305.8 | 12264.7 |
| 60° | 7991.2 | 8134.4 | 9376.5 | 12138.6 | 13784.7 | 14235.8 | 14357.6 | 14349.1 | 14028.4 | 14599.2 | 13166.9 |
| 62.5° | 7424.7 | 7621.3 | 8848.5 | 11589.1 | 14079.7 | 15082.3 | 15450.1 | 15392.3 | 15035.3 | 15946.0 | 14060.5 |
| 65° | 6280.9 | 6452.0 | 7766.7 | 10682.7 | 13906.5 | 15783.6 | 16634.4 | 16664.3 | 16251.7 | 17213.8 | 14765.9 |
| 67.5° | 4403.9 | 4530.0 | 5836.3 | 8780.0 | 12730.7 | 16014.4 | 17846.6 | 17844.4 | 17141.1 | 17863.7 | 14453.8 |
| 70° | 2552.6 | 2725.7 | 3448.3 | 5427.9 | 9904.5 | 14964.8 | 18028.3 | 18090.3 | 16779.8 | 16506.1 | 11961.1 |
| 72.5° | 987.7 | 1130.9 | 1954.0 | 2883.9 | 5165.0 | 11463.0 | 15507.8 | 15689.5 | 14043.4 | 12732.9 | 8324.7 |
| 75° | 295.0 | 329.2 | 919.3 | 1535.0 | 2073.7 | 5537.0 | 10498.9 | 10550.2 | 9633.0 | 7942.0 | 4267.1 |
| 77.5° | 220.2 | 243.7 | 401.9 | 776.0 | 726.9 | 1678.2 | 5432.2 | 5932.5 | 5113.7 | 2836.9 | 1175.8 |
| 80° | 149.6 | 177.4 | 286.5 | 378.4 | 269.4 | 446.8 | 1526.4 | 1676.1 | 1560.6 | 637.1 | 295.0 |
| 82.5° | 66.3 | 85.5 | 203.1 | 190.3 | 98.3 | 128.3 | 470.3 | 500.3 | 322.8 | 192.4 | 102.6 |
| 85° | 6.4 | 8.6 | 77.0 | 83.4 | 36.3 | 29.9 | 98.3 | 98.3 | 70.5 | 66.3 | 42.8 |
| 87.5° | 0.0 | 0.0 | 2.1 | 4.3 | 4.3 | 6.4 | 8.6 | 10.7 | 12.8 | 17.1 | 21.4 |
| 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: P640977

CATALOG NUMBER: GWS-SA5E-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 | 4209.4 |
| 2.5° | 4247.9 | 4222.2 | 4254.3 | 4279.9 | 4286.3 | 4239.3 | 4211.5 | 4170.9 | 4162.3 | 4164.5 | 4153.8 |
| 5° | 4305.6 | 4292.7 | 4316.3 | 4288.5 | 4215.8 | 4079.0 | 3961.4 | 3831.0 | 3760.4 | 3719.8 | 3715.5 |
| 7.5° | 4412.5 | 4406.1 | 4380.4 | 4254.3 | 4027.7 | 3724.1 | 3431.2 | 3144.7 | 2967.3 | 2903.2 | 2892.5 |
| 10° | 4570.7 | 4557.8 | 4453.1 | 4153.8 | 3670.6 | 3087.0 | 2595.3 | 2184.9 | 1934.7 | 1862.0 | 1772.3 |
| 12.5° | 4752.4 | 4726.7 | 4498.0 | 3937.9 | 3131.9 | 2323.8 | 1710.3 | 1250.6 | 1034.7 | 970.6 | 970.6 |
| 15° | 4927.7 | 4872.1 | 4472.3 | 3580.9 | 2469.2 | 1511.4 | 955.6 | 722.6 | 656.3 | 639.2 | 639.2 |
| 17.5° | 5107.3 | 5000.4 | 4371.8 | 3093.4 | 1706.0 | 893.6 | 637.1 | 592.2 | 583.6 | 585.8 | 587.9 |
| 20° | 5276.1 | 5109.4 | 4194.4 | 2507.7 | 1088.2 | 624.2 | 570.8 | 560.1 | 555.8 | 560.1 | 558.0 |
| 22.5° | 5460.0 | 5209.9 | 3925.0 | 1868.5 | 707.6 | 562.2 | 543.0 | 534.5 | 530.2 | 536.6 | 536.6 |
| 25° | 5641.7 | 5282.6 | 3568.0 | 1257.0 | 562.2 | 523.8 | 513.1 | 504.5 | 500.3 | 502.4 | 502.4 |
| 27.5° | 5735.8 | 5254.8 | 3099.8 | 801.7 | 504.5 | 485.3 | 474.6 | 463.9 | 457.5 | 455.4 | 457.5 |
| 30° | 5799.9 | 5169.3 | 2526.9 | 570.8 | 457.5 | 434.0 | 423.3 | 414.7 | 397.6 | 386.9 | 391.2 |
| 32.5° | 5900.4 | 5083.7 | 1904.8 | 478.9 | 419.0 | 382.7 | 365.6 | 344.2 | 320.7 | 310.0 | 310.0 |
| 35° | 6020.1 | 4966.2 | 1336.1 | 431.8 | 378.4 | 339.9 | 307.8 | 271.5 | 243.7 | 235.2 | 235.2 |
| 37.5° | 6178.3 | 4855.0 | 889.3 | 399.8 | 344.2 | 303.6 | 258.7 | 215.9 | 186.0 | 181.7 | 179.6 |
| 40° | 6415.6 | 4760.9 | 626.4 | 376.3 | 314.3 | 265.1 | 211.6 | 166.8 | 145.4 | 139.0 | 139.0 |
| 42.5° | 6723.5 | 4664.7 | 496.0 | 352.7 | 288.6 | 228.7 | 168.9 | 132.5 | 115.4 | 111.2 | 109.0 |
| 45° | 7104.0 | 4551.4 | 431.8 | 331.4 | 263.0 | 190.3 | 134.7 | 111.2 | 98.3 | 94.1 | 94.1 |
| 47.5° | 7516.6 | 4397.5 | 401.9 | 303.6 | 233.0 | 153.9 | 113.3 | 96.2 | 89.8 | 87.7 | 85.5 |
| 50° | 7922.8 | 4190.1 | 376.3 | 277.9 | 198.8 | 126.1 | 98.3 | 87.7 | 83.4 | 81.2 | 81.2 |
| 52.5° | 8277.7 | 3948.6 | 344.2 | 248.0 | 162.5 | 109.0 | 87.7 | 81.2 | 77.0 | 72.7 | 70.5 |
| 55° | 8581.2 | 3685.6 | 303.6 | 213.8 | 132.5 | 96.2 | 81.2 | 74.8 | 70.5 | 66.3 | 64.1 |
| 57.5° | 8972.4 | 3536.0 | 243.7 | 173.2 | 109.0 | 85.5 | 74.8 | 68.4 | 64.1 | 57.7 | 57.7 |
| 60° | 9406.4 | 3426.9 | 181.7 | 136.8 | 94.1 | 79.1 | 68.4 | 62.0 | 57.7 | 51.3 | 51.3 |
| 62.5° | 9754.9 | 3264.5 | 143.2 | 111.2 | 81.2 | 70.5 | 62.0 | 55.6 | 51.3 | 44.9 | 44.9 |
| 65° | 9887.4 | 2928.8 | 117.6 | 87.7 | 66.3 | 62.0 | 55.6 | 51.3 | 44.9 | 38.5 | 38.5 |
| 67.5° | 9288.8 | 2257.5 | 98.3 | 70.5 | 55.6 | 53.4 | 49.2 | 47.0 | 38.5 | 34.2 | 32.1 |
| 70° | 7356.3 | 1376.8 | 81.2 | 57.7 | 47.0 | 44.9 | 44.9 | 40.6 | 34.2 | 32.1 | 29.9 |
| 72.5° | 5041.0 | 709.8 | 66.3 | 47.0 | 40.6 | 40.6 | 38.5 | 36.3 | 32.1 | 29.9 | 29.9 |
| 75° | 2618.8 | 237.3 | 51.3 | 36.3 | 32.1 | 34.2 | 34.2 | 32.1 | 29.9 | 29.9 | 27.8 |
| 77.5° | 750.4 | 106.9 | 38.5 | 27.8 | 25.7 | 25.7 | 27.8 | 27.8 | 27.8 | 25.7 | 25.7 |
| 80° | 194.5 | 62.0 | 27.8 | 21.4 | 21.4 | 21.4 | 21.4 | 23.5 | 25.7 | 23.5 | 23.5 |
| 82.5° | 79.1 | 34.2 | 19.2 | 17.1 | 17.1 | 17.1 | 17.1 | 19.2 | 21.4 | 21.4 | 21.4 |
| 85° | 49.2 | 17.1 | 15.0 | 15.0 | 15.0 | 12.8 | 12.8 | 15.0 | 15.0 | 17.1 | 17.1 |
| 87.5° | 29.9 | 12.8 | 12.8 | 12.8 | 12.8 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 |
| 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)