

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: P640458

Luminaire Tested: GWS-SA5D-830-U-SL4-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-SL4-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22919 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

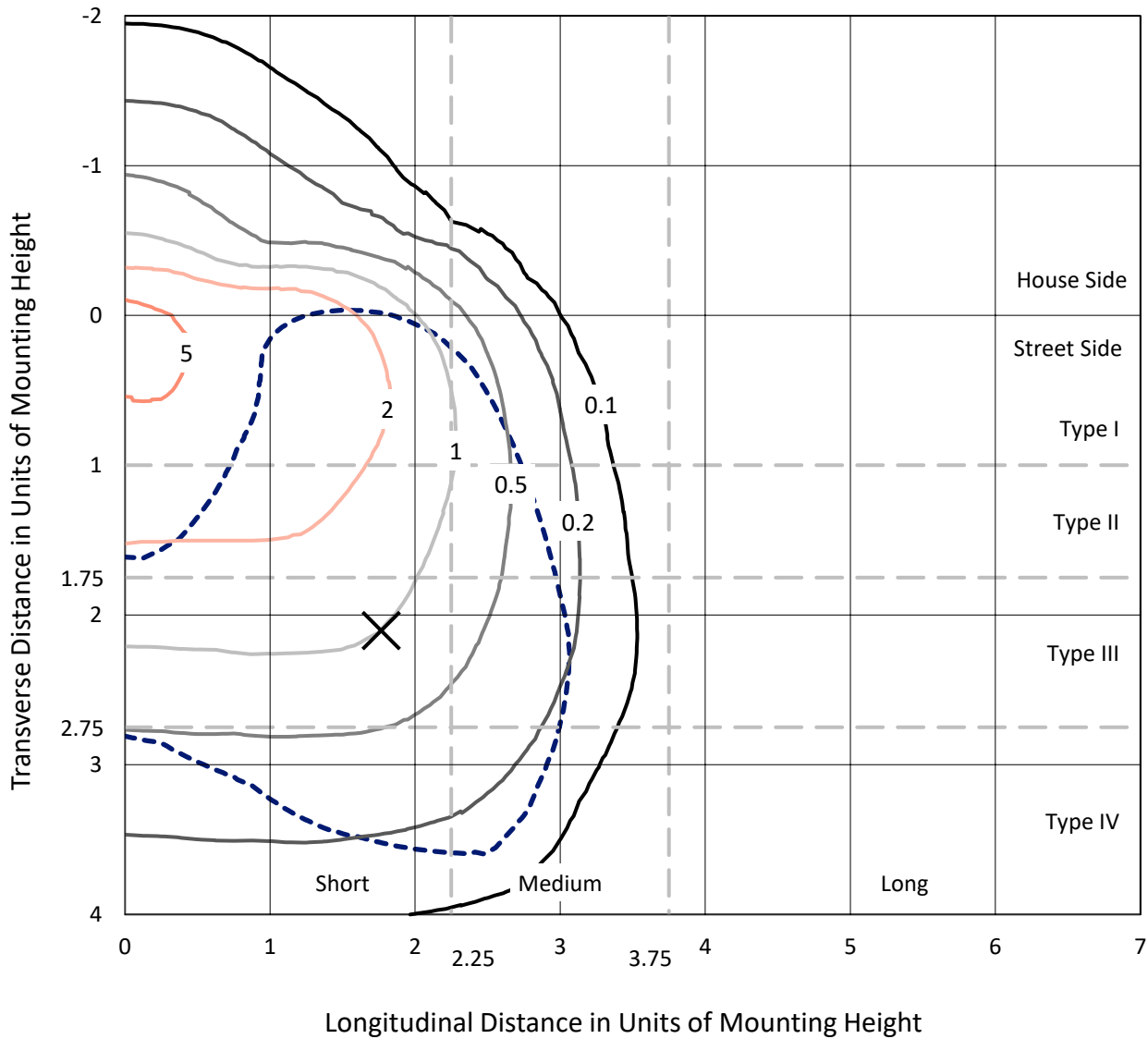
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640458
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Iso-Footcandle Lines of Horizontal Illumination

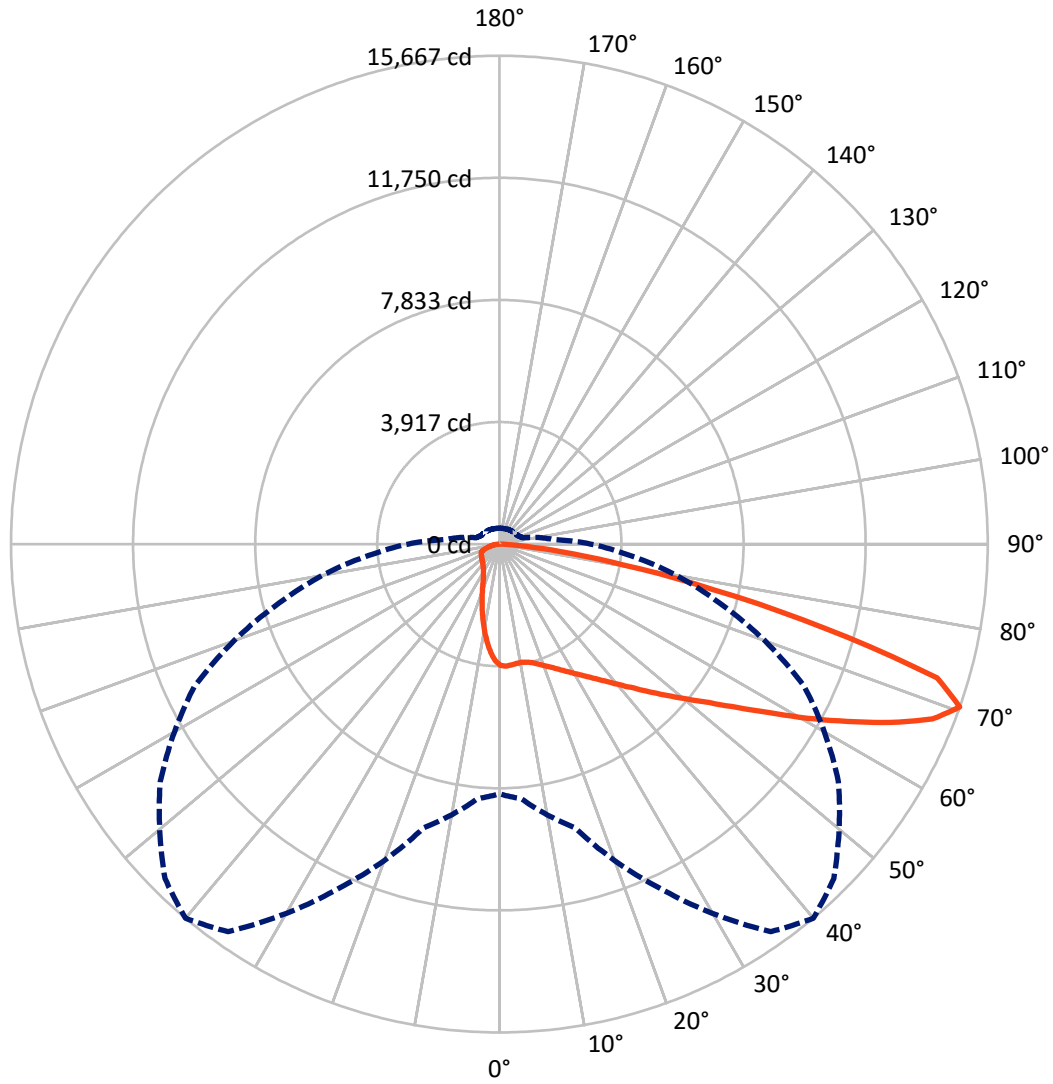
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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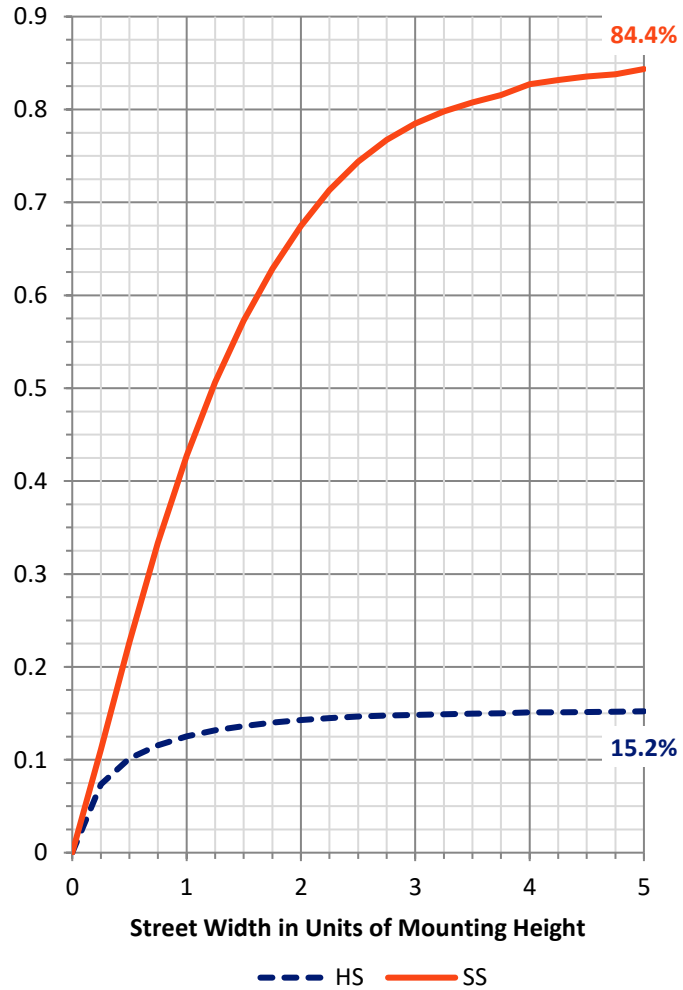
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3530.1 | 0.0 | 3530.1 |
| | % Fixture | 15.4 | 0.0 | 15.4 |
| Street Side | Lumens | 19388.9 | 0.0 | 19388.9 |
| | % Fixture | 84.6 | 0.0 | 84.6 |
| Total | Lumens | 22919.0 | 0.0 | 22919.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 343.8 | 1.5 |
| 10°-20° | 896.2 | 3.9 |
| 20°-30° | 1407.2 | 6.1 |
| 30°-40° | 2115.7 | 9.2 |
| 40°-50° | 3265.7 | 14.2 |
| 50°-60° | 4849.8 | 21.2 |
| 60°-70° | 6113.1 | 26.7 |
| 70°-80° | 3535.2 | 15.4 |
| 80°-90° | 392.3 | 1.7 |
| 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° | 22919.0 | 100.0 |
| 0°-180° | 22919.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P640458

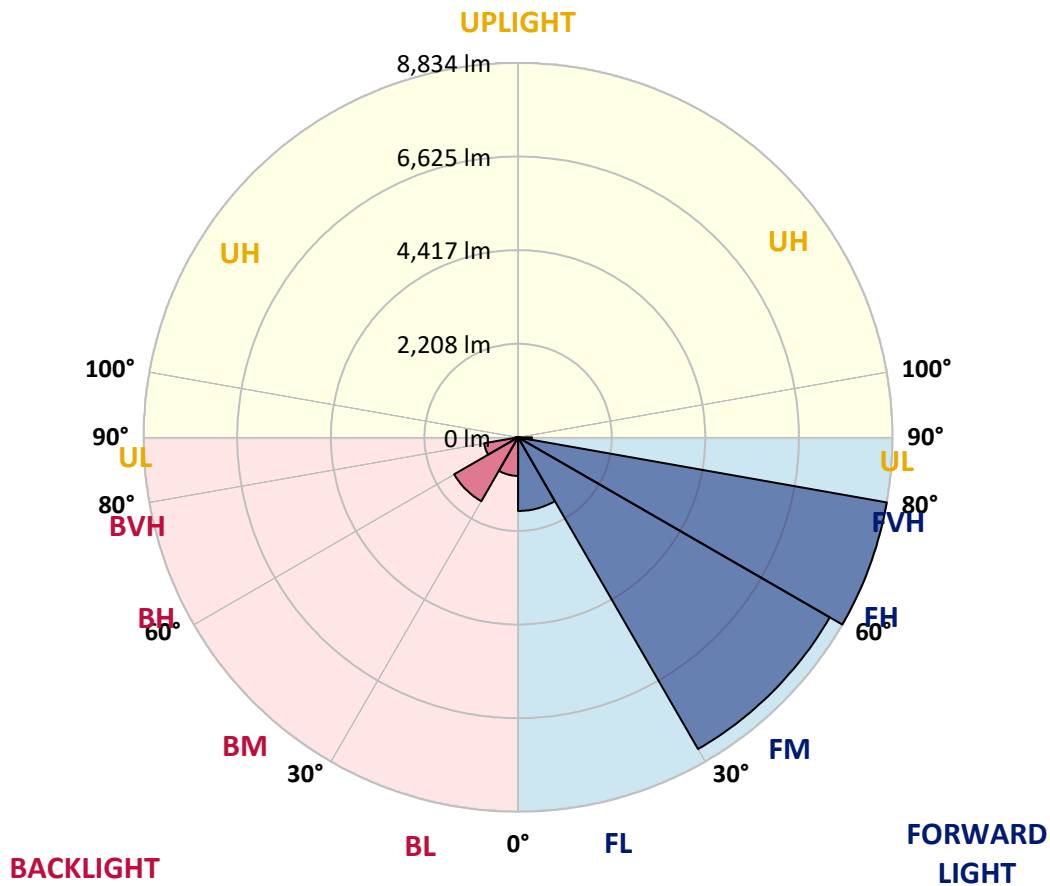
CATALOG NUMBER: GWS-SA5D-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1737.4 | 7.6 | | | |
| FM (30°-60°) | 8491.2 | 37.0 | | | |
| FH (60°-80°) | 8833.5 | 38.5 | | | G4/12000 |
| FVH (80°-90°) | 326.8 | 1.4 | | | G3/500 |
| BL (0°-30°) | 909.8 | 4.0 | B2/1000 | | |
| BM (30°-60°) | 1740.0 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 814.8 | 3.6 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 65.6 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P640458

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 |
| 2.5° | 3915.9 | 3922.7 | 3927.8 | 3934.7 | 3931.3 | 3921.0 | 3929.5 | 3929.5 | 3910.7 | 3890.2 | 3871.4 |
| 5° | 3921.0 | 3929.5 | 3927.8 | 3926.1 | 3912.4 | 3895.3 | 3895.3 | 3885.1 | 3852.6 | 3820.1 | 3789.3 |
| 7.5° | 3910.7 | 3909.0 | 3907.3 | 3902.2 | 3886.8 | 3868.0 | 3864.5 | 3844.0 | 3801.2 | 3756.8 | 3712.3 |
| 10° | 3864.5 | 3862.8 | 3868.0 | 3879.9 | 3876.5 | 3859.4 | 3859.4 | 3840.6 | 3791.0 | 3736.2 | 3678.1 |
| 12.5° | 3826.9 | 3826.9 | 3847.4 | 3879.9 | 3891.9 | 3885.1 | 3886.8 | 3873.1 | 3816.6 | 3751.6 | 3683.2 |
| 15° | 3832.0 | 3833.7 | 3878.2 | 3931.3 | 3953.5 | 3948.4 | 3950.1 | 3934.7 | 3871.4 | 3806.4 | 3714.0 |
| 17.5° | 3866.2 | 3874.8 | 3951.8 | 4025.3 | 4054.4 | 4047.6 | 4035.6 | 4009.9 | 3938.1 | 3864.5 | 3751.6 |
| 20° | 3938.1 | 3951.8 | 4051.0 | 4143.4 | 4177.6 | 4162.2 | 4141.7 | 4090.4 | 4011.7 | 3931.3 | 3792.7 |
| 22.5° | 4080.1 | 4088.6 | 4198.1 | 4288.8 | 4316.2 | 4297.4 | 4256.3 | 4182.7 | 4092.1 | 4008.2 | 3842.3 |
| 25° | 4280.2 | 4290.5 | 4394.9 | 4478.7 | 4471.8 | 4449.6 | 4393.2 | 4302.5 | 4194.7 | 4105.8 | 3914.1 |
| 27.5° | 4518.0 | 4535.1 | 4637.8 | 4704.5 | 4660.0 | 4627.5 | 4564.2 | 4454.7 | 4333.3 | 4252.9 | 4023.6 |
| 30° | 4778.1 | 4784.9 | 4872.2 | 4938.9 | 4870.4 | 4826.0 | 4749.0 | 4630.9 | 4521.5 | 4461.6 | 4187.9 |
| 32.5° | 5029.5 | 5036.4 | 5111.7 | 5149.3 | 5077.4 | 5044.9 | 4978.2 | 4853.3 | 4776.4 | 4743.9 | 4432.5 |
| 35° | 5294.7 | 5293.0 | 5354.6 | 5387.1 | 5313.5 | 5299.8 | 5231.4 | 5135.6 | 5121.9 | 5164.7 | 4790.0 |
| 37.5° | 5559.9 | 5544.5 | 5577.0 | 5619.7 | 5578.7 | 5592.4 | 5547.9 | 5515.4 | 5568.4 | 5679.6 | 5265.6 |
| 40° | 5772.0 | 5772.0 | 5806.2 | 5859.2 | 5872.9 | 5932.8 | 5907.1 | 5949.9 | 6121.0 | 6386.2 | 5854.1 |
| 42.5° | 5960.2 | 5961.9 | 6033.7 | 6115.9 | 6215.1 | 6307.5 | 6328.0 | 6439.2 | 6793.3 | 7209.0 | 6593.2 |
| 45° | 6156.9 | 6158.6 | 6256.1 | 6375.9 | 6586.3 | 6762.5 | 6803.6 | 7053.3 | 7559.7 | 8066.1 | 7395.5 |
| 47.5° | 6384.4 | 6365.6 | 6500.8 | 6700.9 | 7000.3 | 7253.5 | 7359.6 | 7713.7 | 8353.5 | 8976.2 | 8151.6 |
| 50° | 6641.1 | 6601.7 | 6752.2 | 7097.8 | 7467.3 | 7814.6 | 7992.5 | 8398.0 | 9205.4 | 9816.2 | 8863.3 |
| 52.5° | 6930.2 | 6907.9 | 7065.3 | 7486.2 | 8050.7 | 8451.0 | 8692.2 | 9224.3 | 10033.4 | 10652.7 | 9427.8 |
| 55° | 7289.4 | 7236.4 | 7463.9 | 7999.4 | 8735.0 | 9244.8 | 9530.5 | 10042.0 | 10938.4 | 11412.3 | 9858.9 |
| 57.5° | 7682.9 | 7624.7 | 7929.2 | 8640.9 | 9624.6 | 10184.0 | 10541.5 | 10962.4 | 11790.3 | 11993.9 | 10112.1 |
| 60° | 8107.1 | 8088.3 | 8449.3 | 9393.6 | 10685.2 | 11335.3 | 11593.6 | 11975.1 | 12531.1 | 12330.9 | 10048.8 |
| 62.5° | 8495.5 | 8488.6 | 9013.8 | 10209.6 | 11809.2 | 12524.2 | 12729.5 | 12830.5 | 13064.8 | 12308.7 | 9545.9 |
| 65° | 8904.3 | 8962.5 | 9672.5 | 11155.7 | 13097.3 | 13798.7 | 13884.3 | 13627.7 | 13244.5 | 11725.3 | 8516.0 |
| 67.5° | 8955.7 | 9068.6 | 10086.5 | 12041.8 | 14318.8 | 14980.9 | 14912.4 | 13930.5 | 12714.1 | 10101.9 | 6675.3 |
| 70° | 8009.6 | 8206.4 | 9426.1 | 12177.0 | 15179.3 | 15666.9 | 15172.5 | 13278.7 | 10789.6 | 7318.5 | 4198.1 |
| 72.5° | 6692.4 | 6861.7 | 7939.5 | 10384.1 | 14069.0 | 14690.0 | 14021.1 | 11239.5 | 7624.7 | 4198.1 | 2138.4 |
| 75° | 5209.2 | 5405.9 | 6399.8 | 8254.3 | 10533.0 | 10781.0 | 10445.7 | 7838.6 | 4191.3 | 1731.3 | 971.7 |
| 77.5° | 3178.5 | 3320.5 | 4093.8 | 5592.4 | 7369.8 | 6998.6 | 5931.1 | 4394.9 | 1839.0 | 829.7 | 600.5 |
| 80° | 1406.2 | 1493.5 | 2016.9 | 3004.0 | 4258.0 | 4025.3 | 3173.4 | 1876.7 | 1005.9 | 526.9 | 419.1 |
| 82.5° | 754.4 | 810.9 | 993.9 | 1189.0 | 1869.8 | 1955.4 | 1585.8 | 1081.2 | 540.6 | 301.1 | 239.5 |
| 85° | 331.9 | 364.4 | 451.6 | 431.1 | 614.2 | 603.9 | 609.0 | 742.5 | 258.3 | 138.6 | 155.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 18.8 | 99.2 | 25.7 | 41.1 | 35.9 |
| 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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 CATALOG NUMBER: GWS-SA5D-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 | 3891.9 |
| 2.5° | 3850.9 | 3820.1 | 3811.5 | 3801.2 | 3782.4 | 3749.9 | 3726.0 | 3698.6 | 3686.6 | 3672.9 | 3674.6 |
| 5° | 3755.1 | 3717.4 | 3681.5 | 3635.3 | 3577.1 | 3512.1 | 3467.6 | 3416.3 | 3389.0 | 3363.3 | 3370.1 |
| 7.5° | 3672.9 | 3614.8 | 3541.2 | 3443.7 | 3339.3 | 3223.0 | 3128.9 | 3055.4 | 3005.8 | 2971.5 | 2988.6 |
| 10° | 3621.6 | 3553.2 | 3424.9 | 3265.8 | 3089.6 | 2911.7 | 2776.5 | 2649.9 | 2571.2 | 2509.6 | 2506.2 |
| 12.5° | 3611.3 | 3522.4 | 3335.9 | 3105.0 | 2850.1 | 2612.3 | 2413.8 | 2242.8 | 2138.4 | 2061.4 | 2090.5 |
| 15° | 3621.6 | 3508.7 | 3258.9 | 2956.1 | 2634.5 | 2312.9 | 2066.6 | 1869.8 | 1744.9 | 1674.8 | 1669.7 |
| 17.5° | 3633.6 | 3495.0 | 3171.7 | 2795.3 | 2408.7 | 2040.9 | 1755.2 | 1546.5 | 1418.2 | 1348.1 | 1349.8 |
| 20° | 3643.9 | 3474.5 | 3069.0 | 2619.1 | 2179.5 | 1787.7 | 1491.8 | 1293.3 | 1178.7 | 1127.4 | 1135.9 |
| 22.5° | 3661.0 | 3454.0 | 2959.6 | 2430.9 | 1945.1 | 1543.1 | 1283.0 | 1122.2 | 1053.8 | 1019.6 | 1021.3 |
| 25° | 3693.5 | 3442.0 | 2846.7 | 2225.7 | 1714.2 | 1348.1 | 1139.3 | 1031.6 | 988.8 | 968.3 | 966.6 |
| 27.5° | 3760.2 | 3452.3 | 2728.6 | 2027.2 | 1505.4 | 1199.2 | 1047.0 | 976.8 | 947.7 | 934.1 | 932.3 |
| 30° | 3871.4 | 3493.3 | 2626.0 | 1825.3 | 1325.8 | 1082.9 | 983.7 | 940.9 | 923.8 | 911.8 | 910.1 |
| 32.5° | 4040.7 | 3570.3 | 2514.8 | 1637.2 | 1180.4 | 997.4 | 934.1 | 911.8 | 899.8 | 893.0 | 893.0 |
| 35° | 4297.4 | 3710.6 | 2405.3 | 1472.9 | 1067.5 | 930.6 | 894.7 | 886.2 | 875.9 | 872.5 | 875.9 |
| 37.5° | 4666.9 | 3934.7 | 2306.1 | 1329.2 | 987.1 | 879.3 | 851.9 | 855.4 | 846.8 | 851.9 | 857.1 |
| 40° | 5135.6 | 4234.1 | 2222.2 | 1211.2 | 927.2 | 841.7 | 814.3 | 826.3 | 821.2 | 826.3 | 834.8 |
| 42.5° | 5729.2 | 4605.3 | 2158.9 | 1118.8 | 884.4 | 810.9 | 785.2 | 797.2 | 793.8 | 800.6 | 809.2 |
| 45° | 6391.3 | 5094.6 | 2129.9 | 1053.8 | 853.7 | 788.6 | 761.3 | 769.8 | 766.4 | 771.5 | 780.1 |
| 47.5° | 7026.0 | 5539.3 | 2155.5 | 1016.2 | 828.0 | 769.8 | 740.7 | 744.2 | 742.5 | 740.7 | 745.9 |
| 50° | 7573.4 | 5893.5 | 2229.1 | 1004.2 | 810.9 | 751.0 | 723.6 | 725.3 | 720.2 | 710.0 | 713.4 |
| 52.5° | 8019.9 | 6177.4 | 2273.6 | 1004.2 | 802.3 | 730.5 | 704.8 | 706.5 | 696.3 | 682.6 | 684.3 |
| 55° | 8314.1 | 6292.1 | 2237.6 | 1002.5 | 798.9 | 713.4 | 686.0 | 687.7 | 677.4 | 660.3 | 662.1 |
| 57.5° | 8398.0 | 6180.9 | 2087.1 | 983.7 | 795.5 | 699.7 | 667.2 | 670.6 | 663.8 | 644.9 | 644.9 |
| 60° | 8163.6 | 5773.7 | 1811.7 | 940.9 | 786.9 | 691.1 | 653.5 | 658.6 | 655.2 | 636.4 | 636.4 |
| 62.5° | 7549.4 | 5050.1 | 1483.2 | 875.9 | 763.0 | 680.9 | 641.5 | 651.8 | 660.3 | 650.1 | 648.4 |
| 65° | 6399.8 | 4045.9 | 1206.1 | 804.0 | 732.2 | 663.8 | 624.4 | 650.1 | 668.9 | 682.6 | 682.6 |
| 67.5° | 4802.0 | 2896.3 | 983.7 | 728.8 | 686.0 | 629.5 | 602.2 | 626.1 | 639.8 | 648.4 | 653.5 |
| 70° | 2927.1 | 1703.9 | 775.0 | 641.5 | 619.3 | 578.2 | 557.7 | 533.7 | 514.9 | 511.5 | 513.2 |
| 72.5° | 1431.9 | 975.1 | 629.5 | 545.7 | 528.6 | 491.0 | 444.8 | 434.5 | 426.0 | 420.8 | 419.1 |
| 75° | 788.6 | 679.2 | 520.1 | 453.3 | 422.6 | 376.4 | 366.1 | 349.0 | 345.6 | 338.7 | 340.4 |
| 77.5° | 557.7 | 535.5 | 429.4 | 367.8 | 321.6 | 297.7 | 302.8 | 290.8 | 290.8 | 285.7 | 284.0 |
| 80° | 419.1 | 420.8 | 330.2 | 268.6 | 237.8 | 229.2 | 234.4 | 234.4 | 230.9 | 229.2 | 227.5 |
| 82.5° | 265.2 | 299.4 | 222.4 | 172.8 | 169.4 | 171.1 | 169.4 | 167.7 | 171.1 | 165.9 | 164.2 |
| 85° | 183.0 | 215.6 | 135.1 | 102.6 | 102.6 | 100.9 | 104.4 | 102.6 | 106.1 | 100.9 | 100.9 |
| 87.5° | 41.1 | 95.8 | 49.6 | 30.8 | 32.5 | 30.8 | 32.5 | 34.2 | 37.6 | 39.3 | 39.3 |
| 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)