

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: P641463

Luminaire Tested: GWS-SA5F-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641463  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5F-830-U-T2R-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (80) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

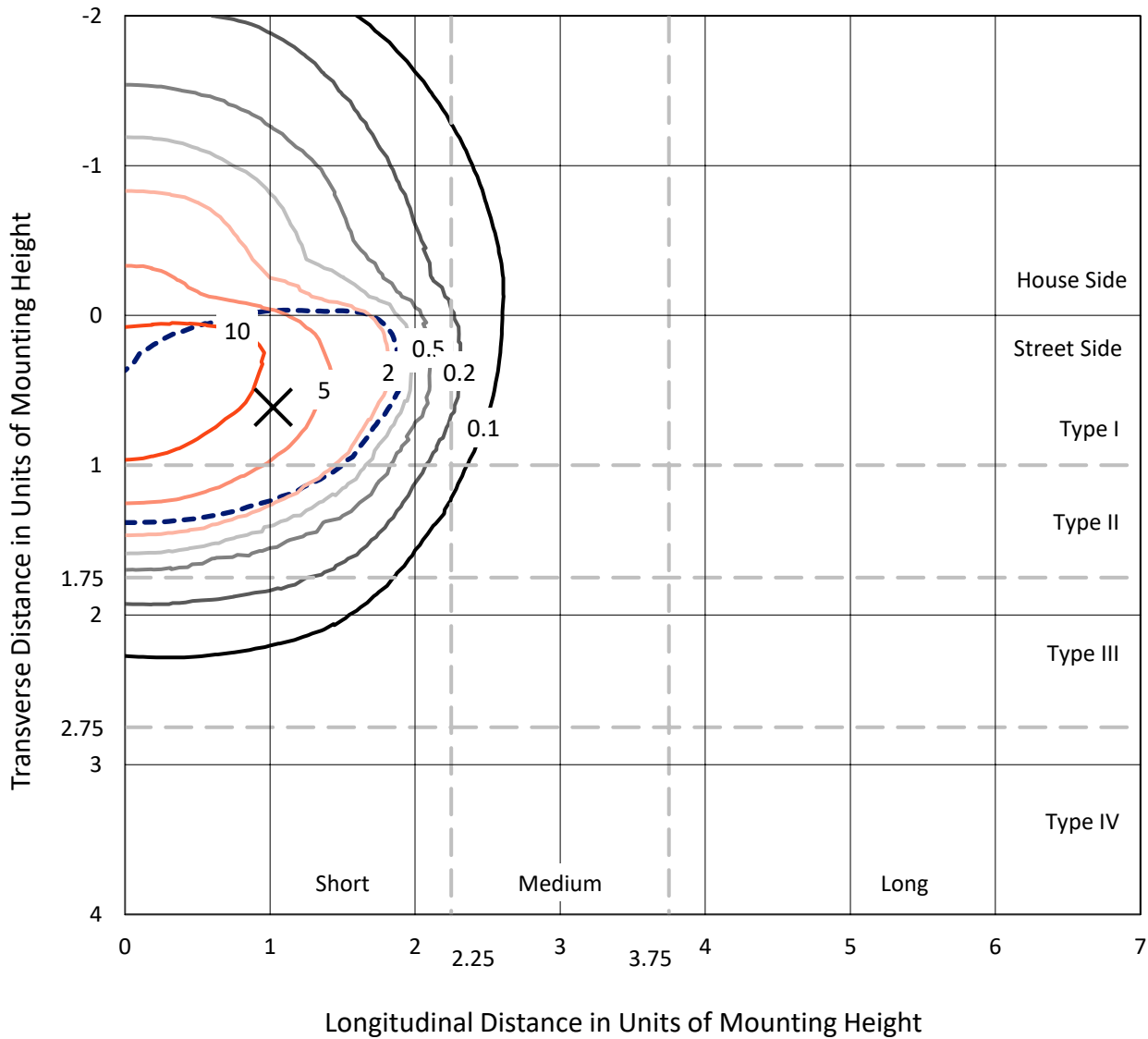
Lumens per Lamp: N/A  
Luminaire Lumens: 29181.1 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 310.3  
Input Voltage (V): 120  
Input Current (Ain): 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: P641463  
 CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

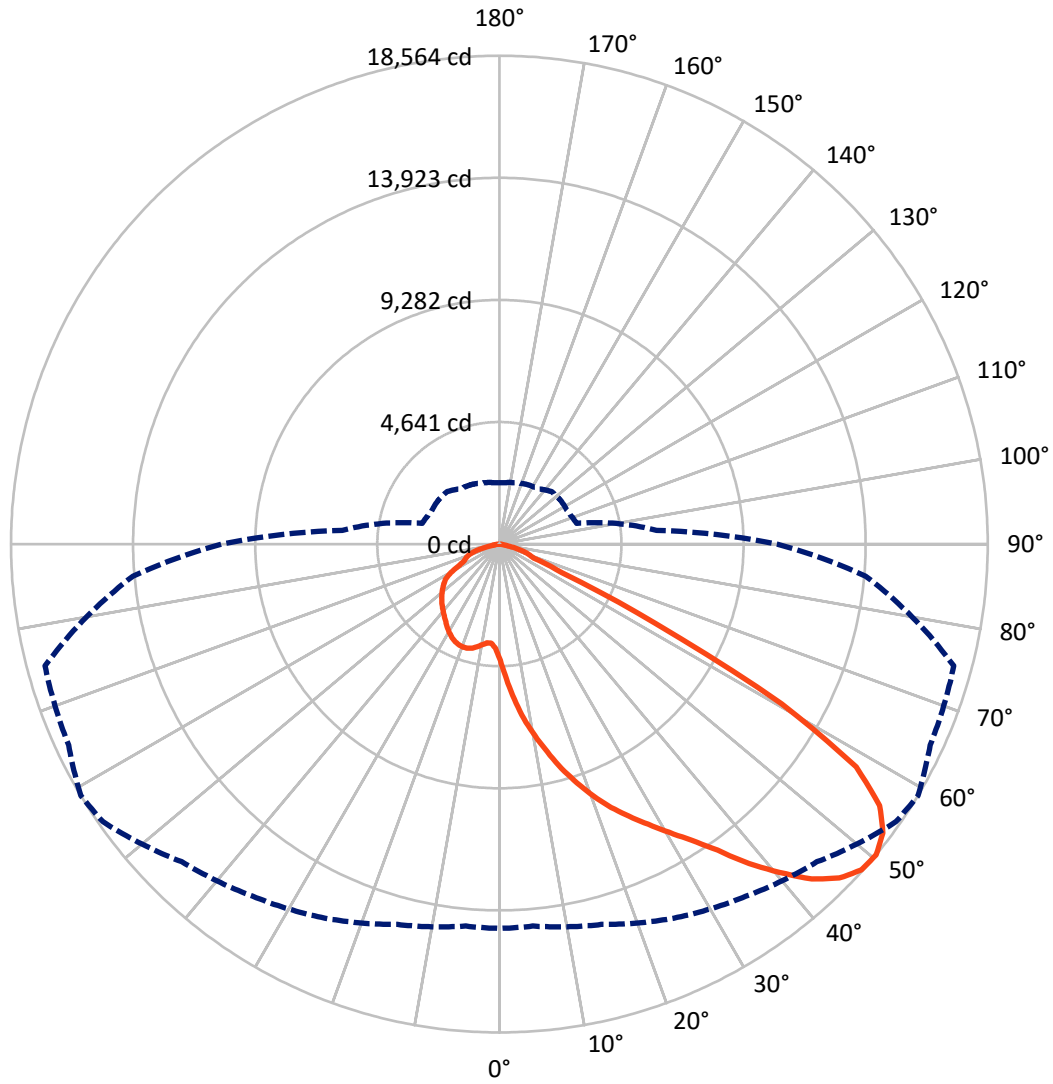
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14 fc  
 Type II - Short - N/A

REPORT NUMBER: P641463  
CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P641463

CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6712.2	0.0	6712.2
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	22468.9	0.0	22468.9
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	29181.1	0.0	29181.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	496.0	1.7
10°-20°	1800.5	6.2
20°-30°	3409.4	11.7
30°-40°	5653.8	19.4
40°-50°	7723.4	26.5
50°-60°	7010.9	24.0
60°-70°	2334.7	8.0
70°-80°	680.9	2.3
80°-90°	71.5	0.2
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°	29181.1	100.0
0°-180°	29181.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P641463

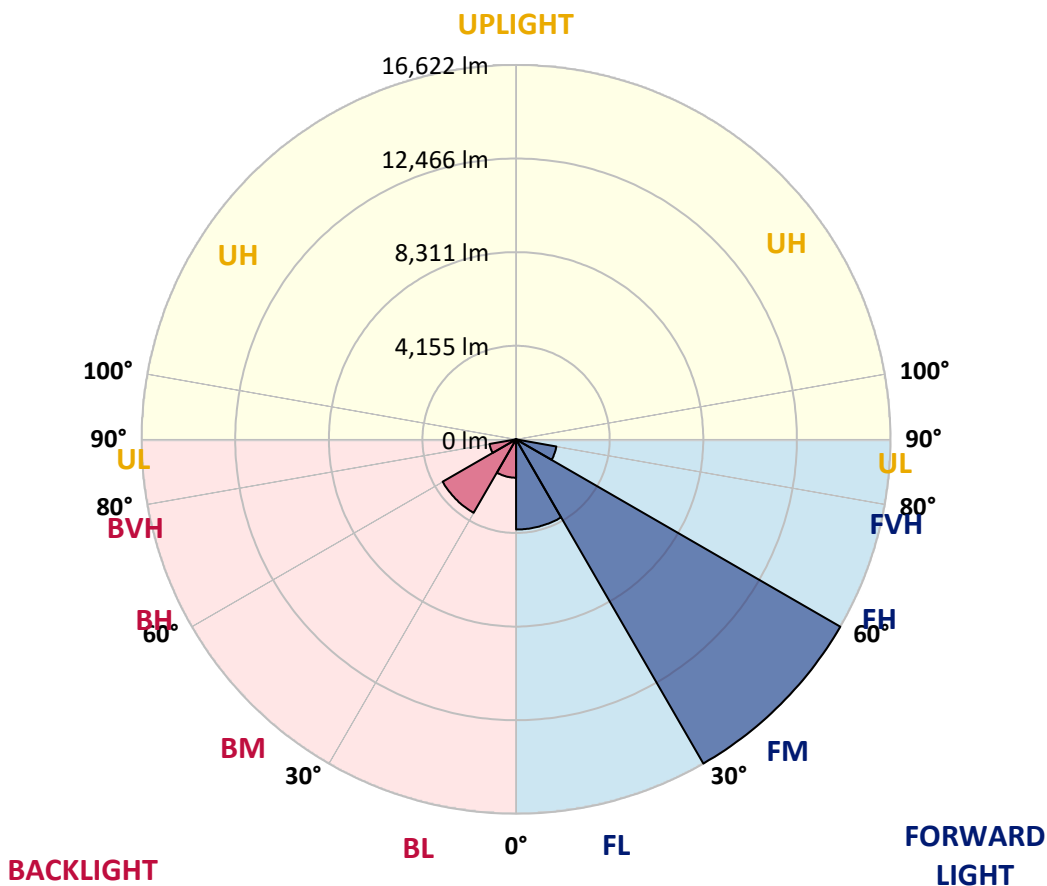
CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4001.4	13.7			
FM (30°-60°)	16621.9	57.0			
FH (60°-80°)	1817.6	6.2			G2/5000
FVH (80°-90°)	28.0	0.1			G1/100
BL (0°-30°)	1704.4	5.8	B3/2500		
BM (30°-60°)	3766.2	12.9	B3/5000		
BH (60°-80°)	1198.1	4.1	B3/2500		G3/2500
BVH (80°-90°)	43.6	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





REPORT NUMBER: P641463

CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1
2.5°	5728.5	5771.3	5704.7	5709.5	5543.1	5467.0	5253.1	5127.1	5043.9	4811.0	4599.4
5°	6883.7	6833.8	6781.5	6750.6	6605.6	6401.1	6134.9	5923.4	5728.5	5272.1	4832.4
7.5°	7592.0	7565.9	7530.2	7511.2	7368.6	7154.6	6888.4	6707.8	6424.9	5806.9	5115.2
10°	8193.4	8162.5	8141.1	8155.3	8038.9	7901.0	7611.0	7404.2	7085.7	6372.6	5457.5
12.5°	8659.3	8675.9	8683.0	8759.1	8709.2	8626.0	8326.5	8107.8	7753.6	6969.2	5859.2
15°	9027.7	9022.9	9106.1	9251.1	9331.9	9279.6	9039.6	8856.5	8423.9	7556.4	6291.8
17.5°	9113.3	9118.0	9248.7	9503.1	9766.9	9895.3	9759.8	9541.1	9113.3	8136.3	6741.1
20°	9182.2	9191.7	9327.2	9617.2	10002.2	10361.2	10382.6	10225.7	9857.2	8763.8	7197.4
22.5°	9617.2	9638.6	9674.2	9857.2	10204.3	10658.3	10907.9	10874.6	10565.6	9422.3	7689.5
25°	10760.5	10696.3	10522.8	10470.5	10603.6	10972.0	11397.5	11461.7	11309.6	10147.2	8219.5
27.5°	12172.4	12103.5	11846.8	11575.8	11288.2	11416.5	11870.5	12063.1	12065.4	10945.9	8752.0
30°	13453.6	13398.9	13189.7	12802.3	12305.5	12120.1	12455.3	12714.4	12868.9	11868.2	9358.1
32.5°	14549.4	14499.4	14216.6	13900.5	13415.6	13042.4	13163.6	13413.2	13774.5	13061.4	10111.6
35°	15471.6	15421.7	15150.7	14832.2	14383.0	14159.5	14116.8	14287.9	14756.2	14306.9	10976.8
37.5°	16220.4	16170.4	15887.6	15588.1	15245.8	15260.1	15324.3	15407.4	15676.0	15640.4	11901.4
40°	16705.3	16653.0	16450.9	16237.0	16020.7	16191.8	16510.4	16410.5	16553.1	16717.1	12752.4
42.5°	16921.6	16855.0	16738.5	16691.0	16624.4	16890.7	17503.9	17404.1	17232.9	17435.0	13384.7
45°	16705.3	16648.2	16645.8	16790.8	16945.3	17287.6	18190.9	18110.0	17677.4	17782.0	13762.6
47.5°	16042.1	15992.2	16127.7	16508.0	16888.3	17387.5	18497.5	18511.8	17993.6	17927.0	14007.4
50°	14608.8	14575.5	14967.7	15687.9	16344.0	17076.1	18400.0	18564.0	18069.6	17881.9	13976.5
52.5°	11694.6	11849.1	12702.5	13905.2	15179.3	16529.4	18038.7	18252.7	17703.6	17584.7	13810.1
55°	8005.6	8076.9	8930.2	10686.8	12707.2	15345.6	17209.2	17539.6	17271.0	17534.8	13983.6
57.5°	4145.4	4202.5	4875.1	6434.4	8618.9	12127.2	14905.9	15989.8	16398.6	17786.8	14523.2
60°	1701.9	1749.4	2027.5	2781.0	4347.5	7061.9	10727.2	12334.0	13294.3	16244.1	12897.4
62.5°	1236.0	1259.8	1392.9	1659.1	2277.1	3460.9	6070.8	6662.6	7337.7	10180.5	8188.6
65°	1041.1	1067.3	1174.2	1335.9	1661.5	2122.6	2593.3	2607.5	2873.7	4147.8	3035.4
67.5°	872.3	896.1	991.2	1129.1	1343.0	1507.0	1392.9	1395.3	1390.5	1504.6	1454.7
70°	679.8	698.8	793.9	941.3	1053.0	967.4	1088.6	1205.1	1155.2	1200.4	1269.3
72.5°	496.8	518.2	601.4	713.1	684.6	689.3	881.9	1000.7	972.2	1022.1	1086.3
75°	358.9	373.2	416.0	356.5	375.6	454.0	620.4	684.6	713.1	755.9	812.9
77.5°	116.5	116.5	130.7	164.0	204.4	252.0	316.1	342.3	385.1	432.6	473.0
80°	59.4	61.8	73.7	90.3	114.1	145.0	185.4	197.3	218.7	244.8	261.5
82.5°	28.5	30.9	35.7	45.2	59.4	76.1	102.2	114.1	128.4	145.0	156.9
85°	7.1	7.1	9.5	14.3	19.0	28.5	38.0	45.2	57.0	68.9	76.1
87.5°	0.0	0.0	0.0	0.0	0.0	2.4	7.1	9.5	11.9	14.3	19.0
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: P641463

CATALOG NUMBER: GWS-SA5F-830-U-T2R-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1	4421.1
2.5°	4504.3	4371.2	4200.1	4055.1	3922.0	3819.8	3731.8	3689.0	3648.6	3620.1	3629.6
5°	4627.9	4399.8	4081.2	3860.2	3724.7	3655.8	3608.2	3584.5	3579.7	3560.7	3553.6
7.5°	4808.6	4482.9	4057.5	3834.0	3743.7	3708.1	3681.9	3667.6	3674.8	3655.8	3648.6
10°	5032.0	4620.8	4116.9	3919.6	3841.2	3815.0	3786.5	3767.5	3758.0	3729.4	3724.7
12.5°	5310.1	4791.9	4223.9	4028.9	3950.5	3905.3	3867.3	3834.0	3812.6	3777.0	3767.5
15°	5609.6	4982.1	4349.8	4135.9	4043.2	3976.7	3914.9	3864.9	3826.9	3779.4	3772.2
17.5°	5935.3	5181.8	4454.4	4209.6	4090.7	4002.8	3912.5	3838.8	3786.5	3724.7	3717.6
20°	6275.2	5383.8	4532.9	4245.2	4093.1	3974.3	3853.0	3755.6	3689.0	3627.2	3622.5
22.5°	6627.0	5569.2	4580.4	4235.7	4055.1	3907.7	3762.7	3653.4	3574.9	3501.3	3496.5
25°	6981.1	5747.5	4592.3	4197.7	3979.0	3807.9	3662.9	3534.5	3446.6	3363.4	3353.9
27.5°	7340.0	5897.2	4563.8	4121.6	3876.8	3691.4	3546.4	3420.4	3330.1	3246.9	3232.7
30°	7722.7	6025.6	4502.0	4021.8	3758.0	3567.8	3425.2	3330.1	3244.5	3161.4	3147.1
32.5°	8131.6	6137.3	4414.0	3900.6	3620.1	3444.2	3339.6	3254.1	3168.5	3094.8	3080.5
35°	8618.9	6211.0	4283.3	3743.7	3491.8	3353.9	3282.6	3182.7	3078.2	2997.3	2990.2
37.5°	9122.8	6268.0	4126.4	3594.0	3380.0	3301.6	3242.2	3106.7	2976.0	2878.5	2866.6
40°	9610.0	6315.6	3931.5	3453.7	3277.8	3263.6	3182.7	3014.0	2788.2	2678.8	2669.3
42.5°	10064.0	6329.8	3727.1	3304.0	3185.1	3178.0	3087.7	2826.2	2652.7	2583.8	2574.2
45°	10375.4	6318.0	3515.5	3163.7	3092.4	3054.4	2959.3	2690.7	2583.8	2522.0	2510.1
47.5°	10606.0	6256.2	3277.8	3016.4	2987.8	2935.5	2731.1	2605.1	2505.3	2443.5	2431.6
50°	10565.6	5999.4	3037.8	2873.7	2861.9	2816.7	2564.7	2498.2	2410.2	2343.7	2334.2
52.5°	10356.4	5512.2	2792.9	2716.9	2740.6	2652.7	2445.9	2369.8	2293.8	2217.7	2201.1
55°	10408.7	5160.4	2607.5	2564.7	2607.5	2407.9	2312.8	2232.0	2160.7	2087.0	2072.7
57.5°	10636.9	4813.3	2410.2	2400.7	2445.9	2220.1	2141.6	2039.4	1937.2	1877.8	1877.8
60°	8932.6	3508.4	2063.2	2087.0	2189.2	2068.0	1999.0	1894.4	1782.7	1730.4	1730.4
62.5°	5281.6	2201.1	1711.4	1685.3	1749.4	1825.5	1863.5	1778.0	1644.9	1575.9	1578.3
65°	2327.0	1602.1	1509.4	1488.0	1469.0	1521.3	1625.8	1633.0	1492.7	1411.9	1414.3
67.5°	1433.3	1449.9	1411.9	1395.3	1378.6	1369.1	1359.6	1364.4	1326.3	1252.7	1250.3
70°	1293.1	1338.2	1312.1	1297.8	1276.4	1259.8	1202.7	1110.0	1045.9	1026.8	1048.2
72.5°	1112.4	1174.2	1160.0	1152.8	1126.7	1086.3	1010.2	919.9	843.8	796.3	805.8
75°	839.1	889.0	896.1	898.5	870.0	831.9	753.5	677.4	610.9	561.0	572.8
77.5°	482.5	511.0	518.2	525.3	503.9	489.7	437.4	382.7	347.0	294.7	309.0
80°	268.6	280.5	280.5	282.9	271.0	254.3	218.7	187.8	171.1	147.4	149.7
82.5°	161.6	166.4	168.8	171.1	164.0	147.4	121.2	99.8	90.3	78.4	76.1
85°	78.4	83.2	83.2	85.6	73.7	64.2	49.9	38.0	33.3	23.8	26.1
87.5°	19.0	21.4	21.4	19.0	16.6	11.9	7.1	2.4	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)