

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: P638477

Luminaire Tested: GWS-SA4E-830-U-SL4-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638477  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-SL4-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

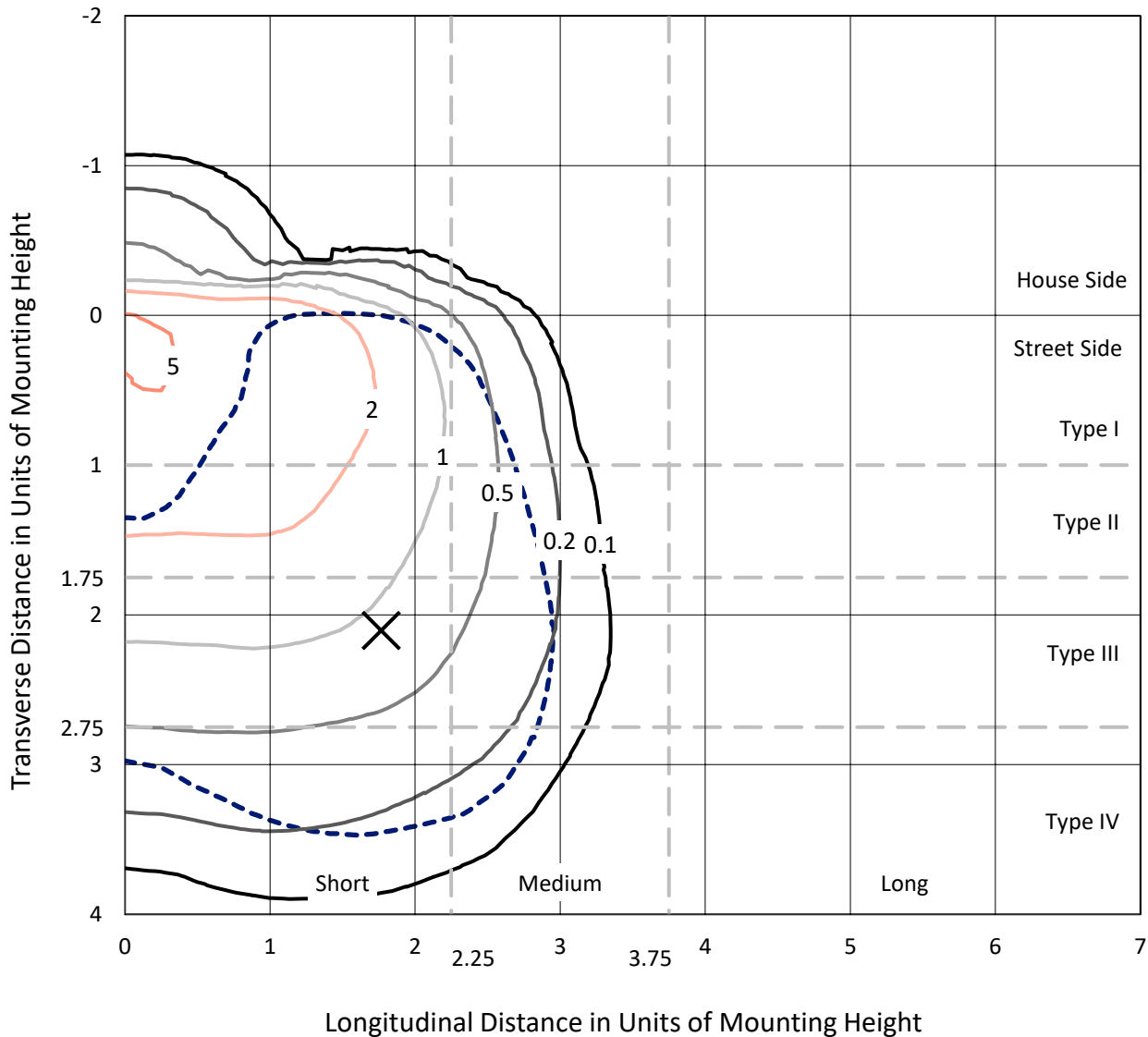
Lumens per Lamp: N/A  
Luminaire Lumens: 19154.5 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



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### Iso-Footcandle Lines of Horizontal Illumination

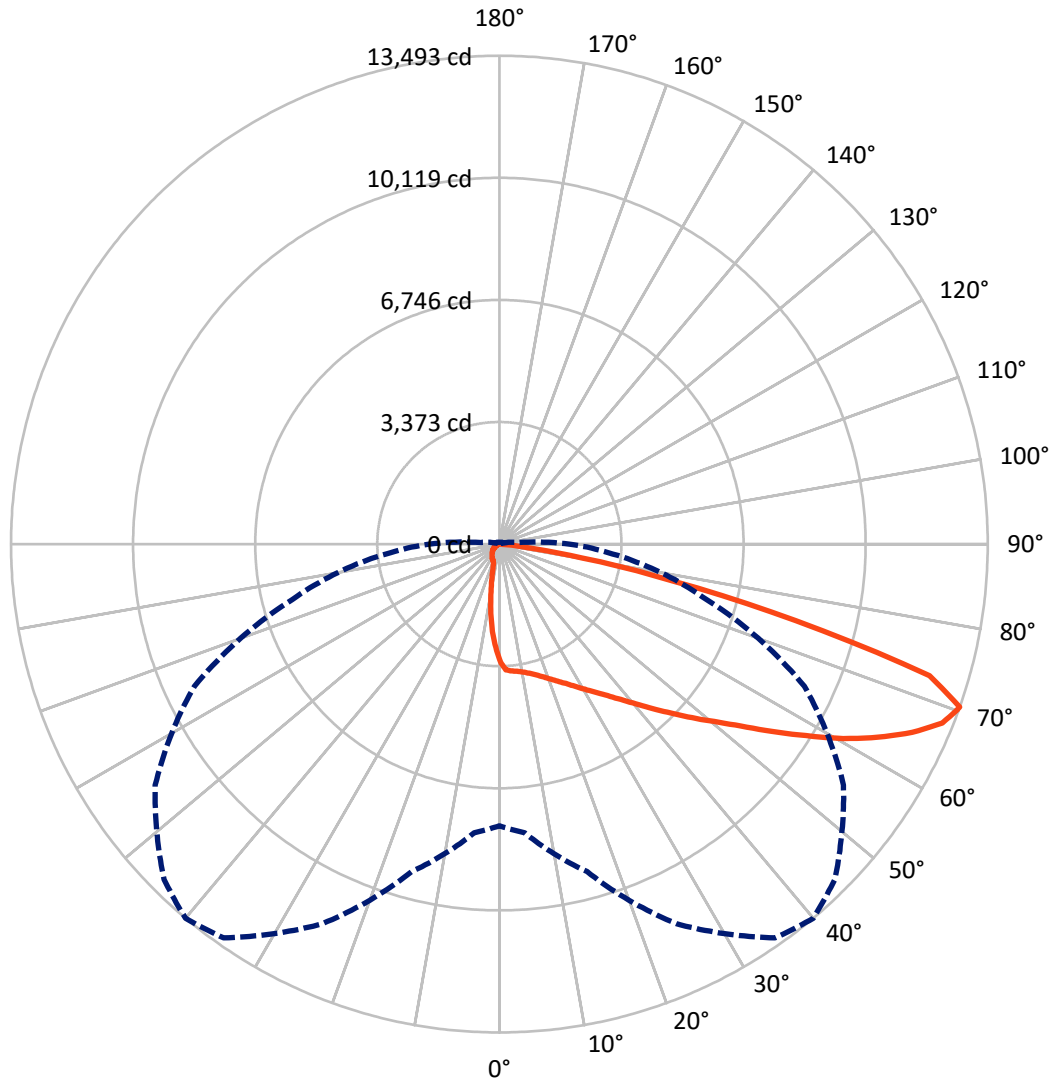
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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
<b>House Side</b>	Lumens	1566.3	0.0	1566.3
	% Fixture	8.2	0.0	8.2
<b>Street Side</b>	Lumens	17588.2	0.0	17588.2
	% Fixture	91.8	0.0	91.8
<b>Total</b>	Lumens	19154.5	0.0	19154.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.7	1.4
10°-20°	696.7	3.6
20°-30°	1166.1	6.1
30°-40°	1831.5	9.6
40°-50°	2897.0	15.1
50°-60°	4226.0	22.1
60°-70°	5238.8	27.4
70°-80°	2650.5	13.8
80°-90°	173.0	0.9
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°	19154.5	100.0
0°-180°	19154.5	100.0

**Coefficient of Utilization**



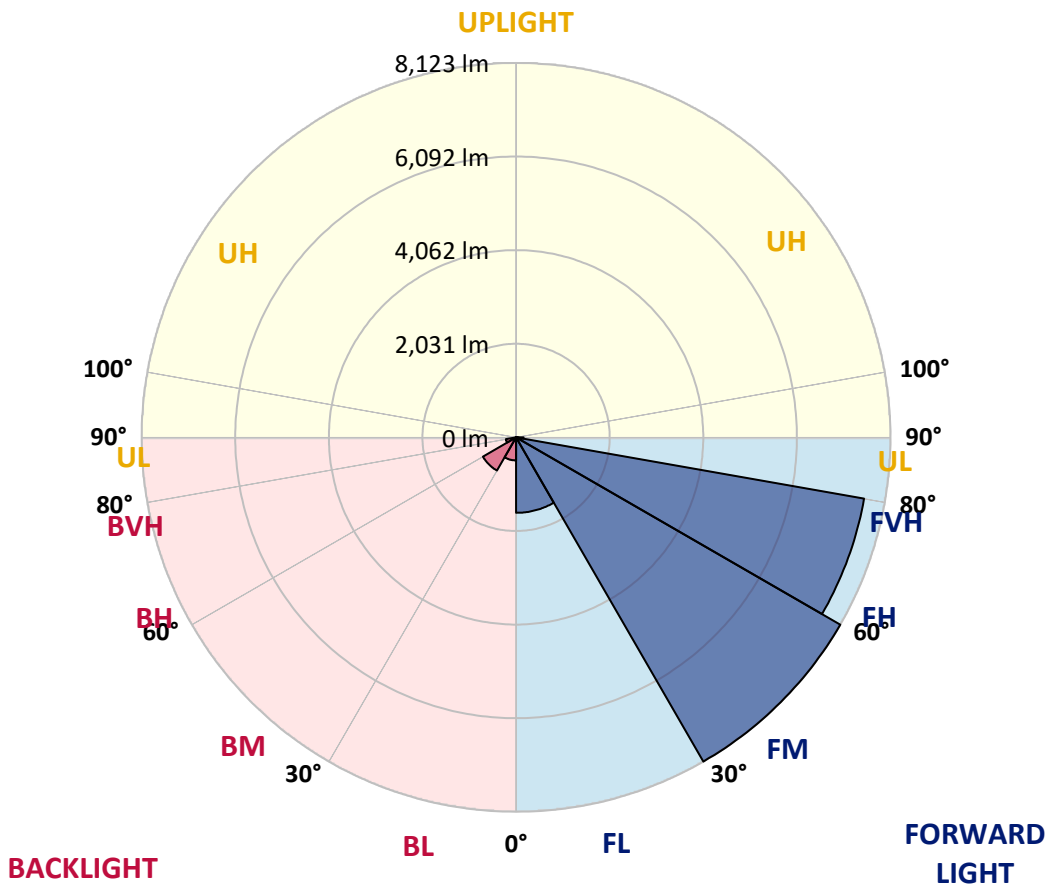
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CATALOG NUMBER: GWS-SA4E-830-U-SL4-W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1637.4	8.5			
FM (30°-60°)	8123.2	42.4			
FH (60°-80°)	7666.0	40.0			G4/12000
FVH (80°-90°)	161.6	0.8			G2/225
BL (0°-30°)	500.2	2.6	B2/1000		
BM (30°-60°)	831.4	4.3	B1/1000		
BH (60°-80°)	223.3	1.2	B1/500		G1/500
BVH (80°-90°)	11.4	0.1			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3
2.5°	3494.3	3506.5	3504.7	3510.0	3497.8	3478.6	3475.1	3449.0	3401.9	3342.7	3276.4
5°	3565.7	3579.7	3569.2	3564.0	3541.3	3520.4	3515.2	3487.3	3433.3	3353.1	3238.1
7.5°	3626.7	3630.2	3623.2	3611.0	3577.9	3550.0	3530.9	3492.5	3428.1	3347.9	3215.4
10°	3637.2	3635.4	3638.9	3640.7	3619.8	3595.4	3579.7	3527.4	3445.5	3360.1	3217.2
12.5°	3625.0	3625.0	3647.6	3673.8	3673.8	3661.6	3645.9	3598.8	3503.0	3401.9	3252.0
15°	3640.7	3645.9	3689.5	3738.3	3754.0	3741.8	3734.8	3686.0	3586.6	3475.1	3314.8
17.5°	3696.4	3701.7	3771.4	3844.6	3863.7	3849.8	3835.9	3787.1	3680.8	3558.8	3386.2
20°	3778.4	3792.3	3881.2	3975.3	3992.7	3975.3	3947.4	3879.4	3773.1	3649.4	3454.2
22.5°	3928.2	3936.9	4032.8	4132.1	4140.9	4113.0	4071.1	3977.0	3865.5	3745.2	3530.9
25°	4126.9	4139.1	4235.0	4330.8	4308.2	4266.3	4208.8	4102.5	3975.3	3858.5	3628.5
27.5°	4363.9	4377.9	4472.0	4555.6	4496.4	4447.6	4383.1	4250.6	4121.7	4015.4	3754.0
30°	4620.1	4632.3	4716.0	4790.9	4712.5	4655.0	4578.3	4442.4	4311.6	4231.5	3931.7
32.5°	4867.6	4865.8	4946.0	5007.0	4926.8	4881.5	4811.8	4674.1	4569.6	4534.7	4196.6
35°	5097.6	5097.6	5163.9	5224.9	5167.3	5143.0	5078.5	4968.7	4909.4	4951.2	4550.4
37.5°	5329.4	5317.2	5380.0	5447.9	5442.7	5444.5	5407.9	5355.6	5359.1	5507.2	5036.6
40°	5521.1	5515.9	5589.1	5678.0	5747.7	5803.5	5780.8	5800.0	5909.8	6186.9	5658.8
42.5°	5674.5	5686.7	5780.8	5922.0	6098.0	6211.3	6227.0	6305.4	6587.7	7016.4	6361.2
45°	5850.5	5852.3	5983.0	6199.1	6479.7	6659.2	6721.9	6924.1	7324.9	7877.4	7131.5
47.5°	6066.6	6045.7	6192.1	6495.3	6901.4	7166.3	7277.9	7530.6	8151.0	8717.4	7758.9
50°	6305.4	6267.0	6432.6	6845.6	7373.7	7704.8	7931.4	8300.9	8970.1	9407.5	8225.9
52.5°	6582.5	6545.9	6734.1	7248.2	7940.1	8342.7	8633.7	9006.7	9672.4	9933.9	8504.8
55°	6934.5	6897.9	7096.6	7731.0	8609.3	9132.2	9437.2	9750.9	10326.0	10322.5	8706.9
57.5°	7324.9	7274.4	7549.7	8341.0	9444.1	9987.9	10298.1	10451.5	10822.7	10624.0	8842.9
60°	7772.8	7727.5	8109.2	9067.7	10407.9	10911.6	11106.8	11044.0	11230.5	10801.8	8795.8
62.5°	8177.1	8156.2	8630.3	9838.0	11326.3	11751.6	11805.6	11532.0	11530.2	10805.3	8478.6
65°	8597.1	8637.2	9341.3	10725.1	12250.0	12535.8	12443.5	12016.5	11650.5	10378.3	7541.0
67.5°	8754.0	8870.8	9810.1	11526.8	12978.5	13201.6	13039.5	12258.7	11150.3	8942.2	5742.5
70°	7785.0	8004.6	9367.5	11572.1	13280.0	13492.6	13104.0	11606.9	9296.0	5923.7	3145.7
72.5°	5920.2	6176.4	7805.9	9475.5	11943.3	12427.8	11763.8	9456.3	5991.7	2595.0	1056.1
75°	3313.0	3590.1	5813.9	7135.0	8018.5	8461.2	8217.2	6066.6	2654.3	677.9	315.4
77.5°	1120.6	1213.0	2704.8	4414.5	5292.8	4895.5	4144.3	3013.3	976.0	257.9	167.3
80°	664.0	698.9	1007.3	2197.6	2785.0	2309.2	1823.0	1113.6	496.7	137.7	116.8
82.5°	198.7	235.3	555.9	815.6	1091.0	679.7	575.1	636.1	257.9	74.9	97.6
85°	0.0	0.0	118.5	252.7	285.8	111.5	111.5	360.8	47.1	31.4	71.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.7	5.2	7.0	15.7
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°	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3	3250.3
2.5°	3229.4	3168.4	3096.9	3029.0	2964.5	2880.8	2840.7	2791.9	2750.1	2727.5	2739.7
5°	3164.9	3069.0	2922.6	2774.5	2624.6	2483.5	2356.2	2270.8	2194.2	2154.1	2162.8
7.5°	3109.1	2980.2	2751.9	2509.6	2269.1	2026.9	1829.9	1676.6	1558.0	1509.2	1500.5
10°	3084.7	2922.6	2600.2	2251.7	1882.2	1556.3	1277.5	1108.4	988.2	928.9	939.4
12.5°	3096.9	2893.0	2471.3	1999.0	1519.7	1139.8	873.1	714.5	629.1	594.3	585.6
15°	3131.8	2886.0	2356.2	1741.0	1172.9	796.5	603.0	538.5	521.1	517.6	517.6
17.5°	3171.9	2887.8	2237.7	1479.6	890.6	590.8	515.9	503.7	498.4	495.0	496.7
20°	3211.9	2887.8	2101.8	1214.7	669.2	510.6	491.5	482.8	477.5	475.8	475.8
22.5°	3260.7	2887.8	1950.2	969.0	536.8	484.5	468.8	463.6	458.4	456.6	454.9
25°	3320.0	2889.5	1782.9	758.1	488.0	461.8	449.6	444.4	439.2	435.7	435.7
27.5°	3405.4	2903.5	1598.1	590.8	460.1	440.9	430.5	425.2	420.0	414.8	414.8
30°	3529.1	2938.3	1390.7	488.0	434.0	418.3	407.8	404.3	399.1	393.9	392.1
32.5°	3713.9	2999.3	1176.4	437.4	409.6	393.9	381.7	378.2	373.0	367.7	366.0
35°	3971.8	3110.9	967.2	406.1	378.2	362.5	355.5	353.8	346.8	341.6	341.6
37.5°	4350.0	3292.1	766.8	374.7	352.0	339.8	331.1	327.6	320.7	315.4	313.7
40°	4811.8	3527.4	596.0	350.3	327.6	315.4	306.7	301.5	292.8	285.8	282.3
42.5°	5400.9	3815.0	470.6	324.2	305.0	292.8	285.8	275.4	263.2	252.7	251.0
45°	6014.3	4111.2	388.6	299.8	284.1	273.6	264.9	251.0	233.5	221.3	217.8
47.5°	6484.9	4296.0	339.8	273.6	261.4	252.7	242.2	224.8	203.9	190.0	186.5
50°	6821.3	4323.8	303.2	249.2	242.2	233.5	217.8	196.9	174.3	160.3	156.9
52.5°	6986.8	4198.4	273.6	226.6	221.3	212.6	193.4	170.8	146.4	132.5	129.0
55°	7061.8	3961.3	245.7	207.4	200.4	190.0	169.0	144.7	120.3	108.1	104.6
57.5°	7032.1	3611.0	221.3	188.2	179.5	167.3	144.7	118.5	99.3	87.1	85.4
60°	6812.5	3119.6	196.9	169.0	158.6	144.7	122.0	97.6	80.2	71.5	69.7
62.5°	6338.5	2509.6	172.5	146.4	139.4	125.5	104.6	80.2	66.2	61.0	59.3
65°	5367.8	1774.2	148.1	123.7	120.3	106.3	87.1	66.2	57.5	54.0	52.3
67.5°	3858.5	1078.8	125.5	106.3	102.8	90.6	73.2	57.5	52.3	50.5	50.5
70°	1939.7	510.6	99.3	87.1	87.1	74.9	62.7	52.3	50.5	48.8	48.8
72.5°	658.8	217.8	74.9	68.0	71.5	64.5	54.0	48.8	48.8	48.8	48.8
75°	224.8	115.0	52.3	48.8	52.3	52.3	47.1	47.1	48.8	48.8	48.8
77.5°	146.4	76.7	36.6	33.1	40.1	40.1	40.1	43.6	47.1	47.1	47.1
80°	120.3	41.8	24.4	22.7	29.6	29.6	33.1	40.1	43.6	43.6	43.6
82.5°	102.8	26.1	13.9	15.7	20.9	22.7	27.9	33.1	38.3	40.1	40.1
85°	69.7	13.9	10.5	12.2	13.9	17.4	22.7	27.9	31.4	34.9	34.9
87.5°	19.2	5.2	7.0	8.7	8.7	12.2	17.4	20.9	24.4	26.1	26.1
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)