

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: P321416

Luminaire Tested: **GLEON-SA2D-827-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P321416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA2D-827-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9421 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 129  
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

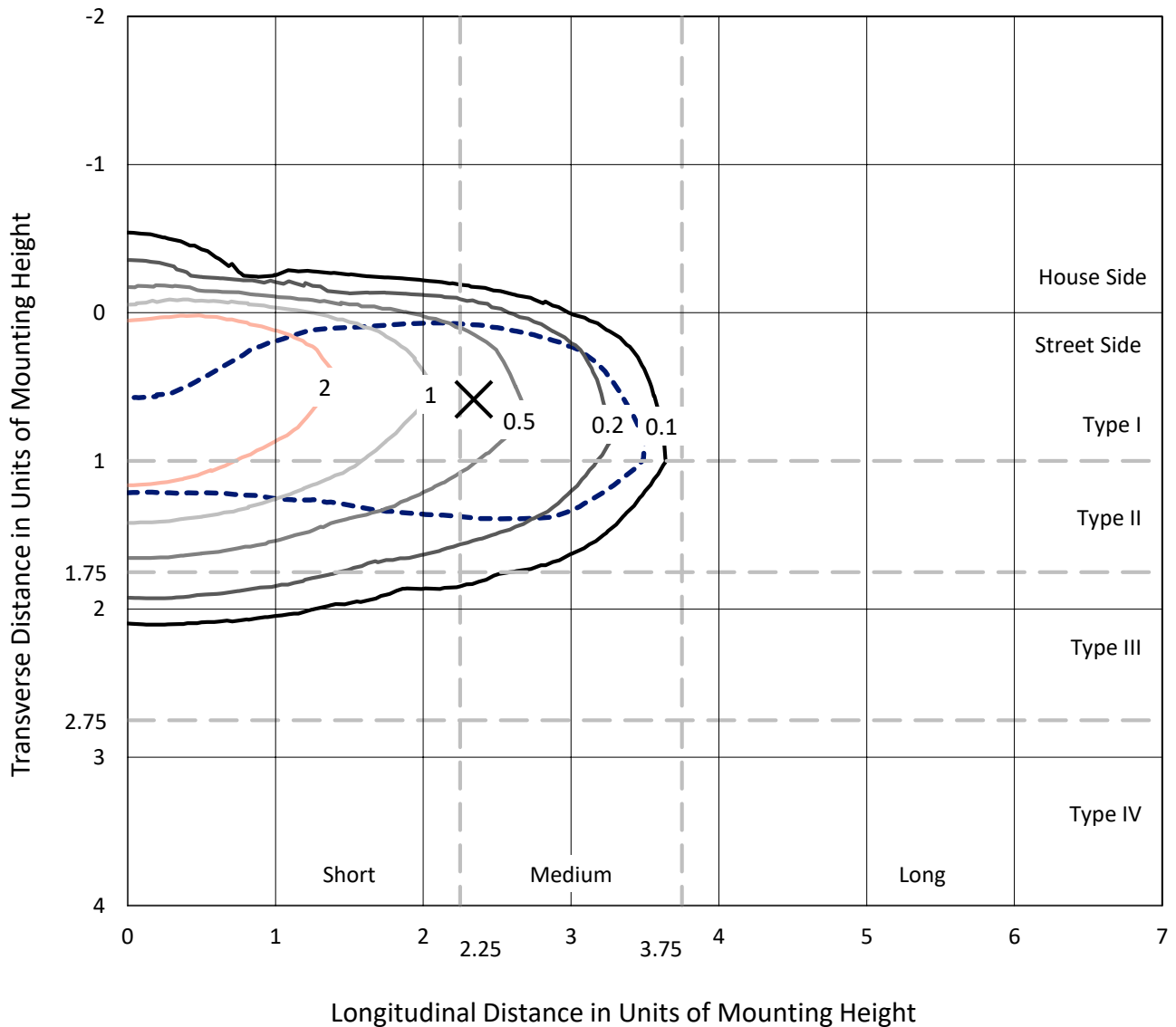




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### Iso-Footcandle Lines of Horizontal Illumination

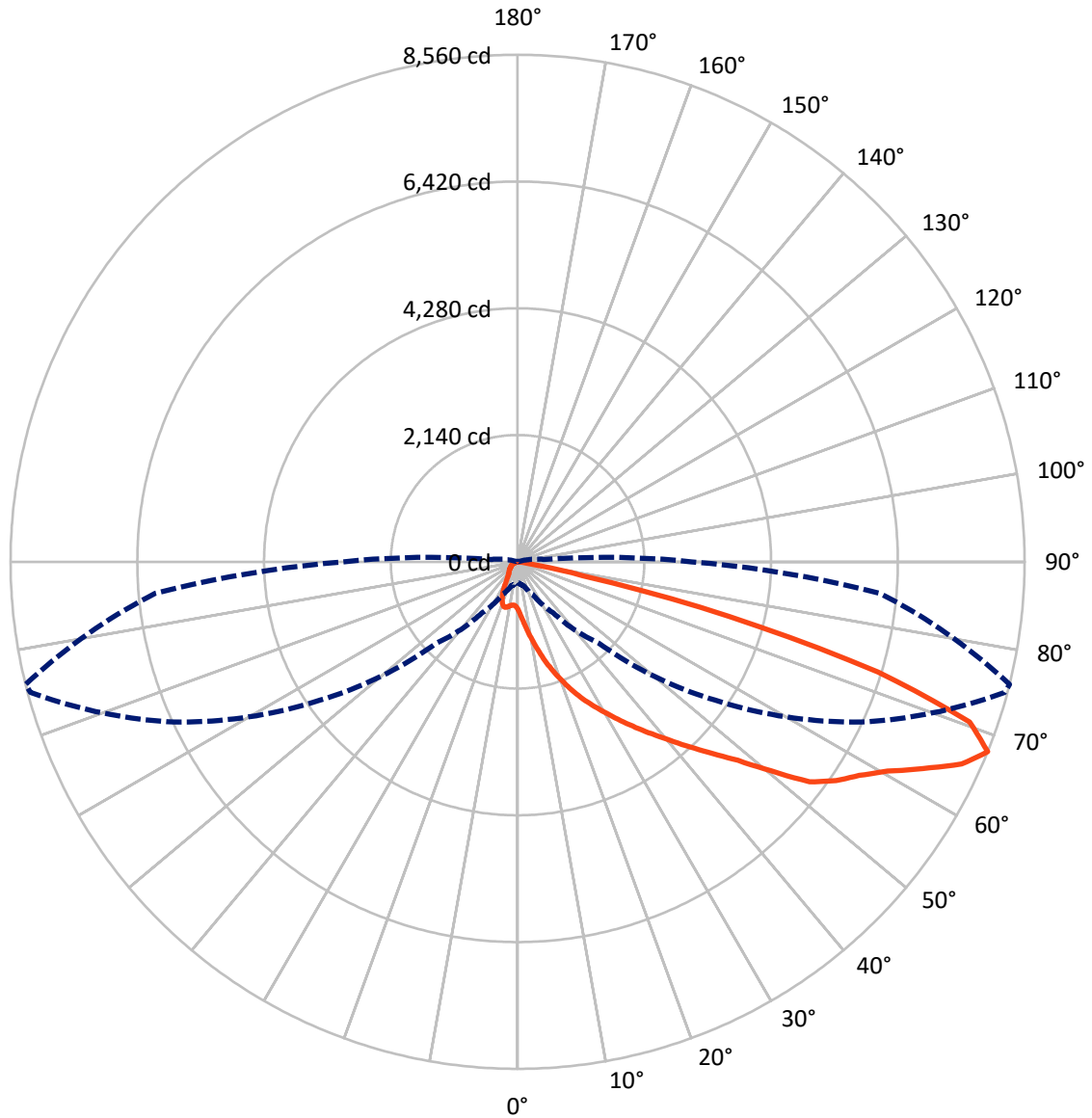
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	467.8	0.0	467.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	8953.2	0.0	8953.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	9421.0	0.0	9421.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	1.1
10°-20°	393.9	4.2
20°-30°	801.5	8.5
30°-40°	1391.2	14.8
40°-50°	1965.6	20.9
50°-60°	2229.1	23.7
60°-70°	1848.8	19.6
70°-80°	669.7	7.1
80°-90°	21.7	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°	9421.0	100.0
0°-180°	9421.0	100.0

**Coefficient of Utilization**

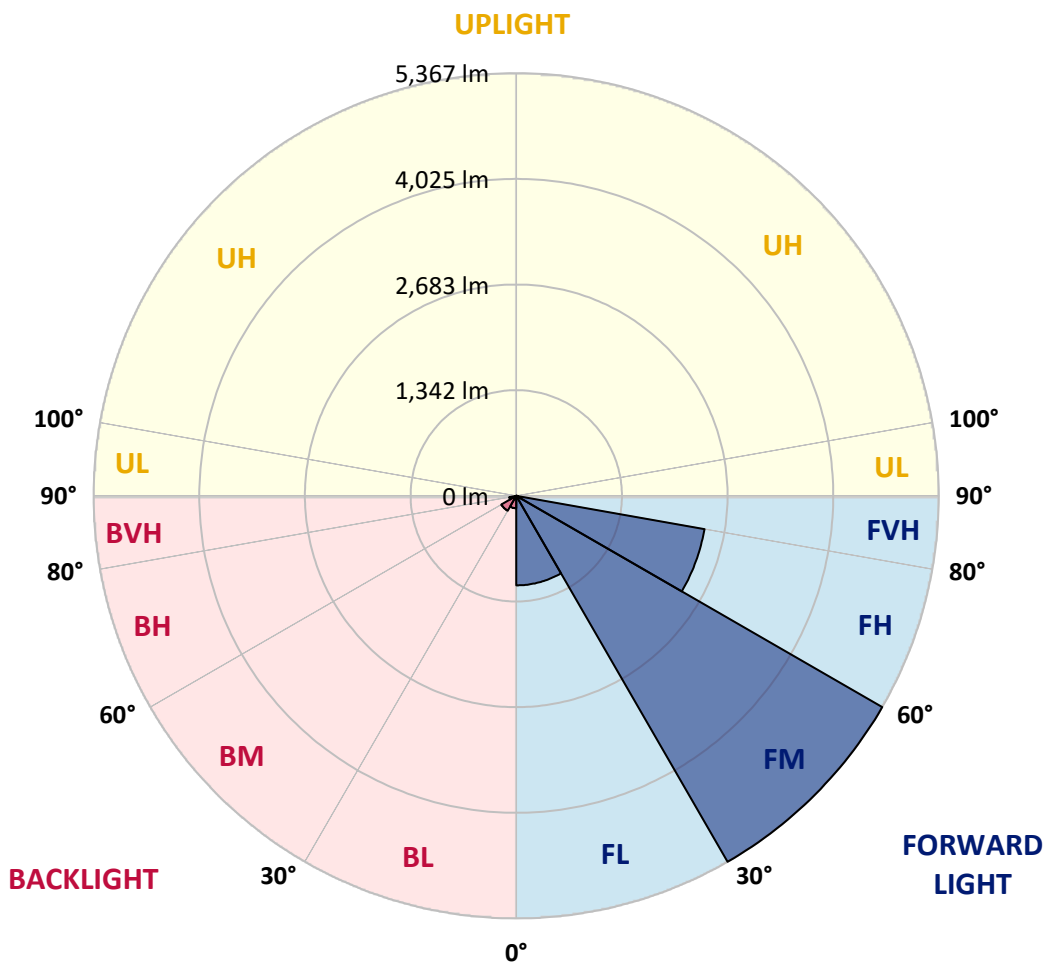


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1137.1	12.1			
FM (30°-60°)	5366.9	57.0			
FH (60°-80°)	2428.1	25.8			G2/5000
FVH (80°-90°)	21.0	0.2			G1/100
BL (0°-30°)	157.8	1.7	B1/500		
BM (30°-60°)	219.0	2.3	B0/220		
BH (60°-80°)	90.4	1.0	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2
2.5°	1193.0	1166.1	1172.3	1155.0	1123.6	1059.2	1004.3	952.3	891.6	889.6	839.6
5°	1608.7	1586.0	1583.1	1548.0	1491.0	1381.6	1275.1	1153.8	1018.4	1008.5	902.4
7.5°	1986.0	1967.8	1961.2	1919.5	1813.4	1706.9	1568.2	1389.9	1178.1	1160.0	987.0
10°	2275.7	2267.1	2268.7	2239.0	2148.2	2049.1	1867.1	1639.6	1359.3	1331.3	1088.5
12.5°	2495.4	2497.4	2512.3	2494.1	2443.3	2369.9	2175.4	1905.9	1560.0	1521.6	1204.5
15°	2656.8	2667.1	2694.3	2717.0	2713.3	2649.7	2471.4	2176.3	1773.0	1730.4	1333.7
17.5°	2761.2	2772.8	2812.4	2862.7	2909.0	2894.1	2757.1	2437.1	1988.4	1939.3	1472.0
20°	2852.8	2866.5	2909.0	2975.4	3061.7	3080.3	2990.3	2690.2	2203.5	2143.7	1614.9
22.5°	3051.4	3051.0	3077.0	3115.8	3197.9	3245.8	3188.9	2925.1	2416.1	2353.8	1760.6
25°	3410.5	3396.9	3387.8	3357.3	3375.4	3405.2	3373.4	3144.7	2629.9	2566.8	1908.4
27.5°	3837.4	3845.6	3772.1	3690.0	3626.4	3595.9	3543.9	3348.2	2835.5	2766.1	2052.8
30°	4287.7	4290.2	4203.5	4098.7	3958.7	3842.7	3752.7	3542.6	3046.8	2971.3	2193.2
32.5°	4693.9	4677.8	4591.9	4449.1	4272.4	4142.0	3955.0	3759.7	3270.6	3197.5	2349.2
35°	5015.9	4996.9	4892.5	4762.4	4579.1	4447.9	4222.9	3976.5	3505.9	3434.5	2505.7
37.5°	5251.2	5228.9	5121.6	4987.8	4829.7	4753.3	4533.7	4212.2	3762.6	3685.9	2670.4
40°	5332.9	5313.5	5246.2	5148.4	5021.3	5003.9	4863.6	4483.4	4042.1	3960.4	2857.0
42.5°	5284.2	5265.2	5241.3	5208.3	5155.4	5171.9	5174.8	4792.6	4352.5	4272.0	3062.9
45°	5091.0	5074.1	5098.9	5147.2	5212.8	5294.5	5458.8	5124.9	4699.3	4613.4	3301.1
47.5°	4806.6	4794.2	4862.7	4983.3	5175.2	5400.6	5718.5	5474.1	5088.5	5008.9	3598.3
50°	4402.1	4400.0	4537.0	4757.1	5052.2	5451.8	5986.8	5871.2	5629.3	5545.5	4011.6
52.5°	3772.1	3776.3	4045.8	4397.9	4836.3	5417.1	6159.3	6381.4	6258.4	6171.3	4369.4
55°	3172.3	3197.1	3388.2	3896.0	4505.3	5288.3	6218.8	6619.6	6605.6	6523.0	4568.4
57.5°	2584.9	2629.9	2814.0	3288.3	4021.9	4991.5	6186.2	6722.8	6864.0	6800.8	4831.0
60°	1948.4	1969.0	2181.2	2624.6	3401.4	4449.9	5949.6	6778.9	7217.3	7173.6	5212.0
62.5°	1239.6	1291.2	1479.5	1907.1	2648.5	3697.8	5550.9	6778.1	7659.4	7683.4	5703.6
65°	653.0	713.3	813.2	1181.8	1820.0	2857.8	4951.1	6714.5	8201.8	8235.3	6087.9
67.5°	352.1	369.5	422.3	613.4	1055.5	1936.0	4069.8	6400.8	8516.0	8560.2	6141.6
70°	257.6	267.1	286.9	339.3	531.3	1124.5	2969.7	5689.6	8111.0	8094.5	5456.8
72.5°	197.7	212.6	227.5	248.5	305.5	600.2	1848.9	4455.3	6471.8	6362.8	4078.8
75°	156.0	158.5	179.6	198.6	229.1	341.8	821.1	2594.8	3950.0	3692.1	2115.2
77.5°	124.7	126.3	138.7	155.2	184.1	224.6	254.3	1020.8	1261.1	1125.3	459.0
80°	73.9	78.0	103.2	119.7	152.7	141.6	92.9	221.7	196.9	178.3	77.2
82.5°	41.3	44.6	58.2	94.5	106.5	67.7	46.2	59.9	46.2	45.0	21.9
85°	0.0	2.1	37.6	58.6	43.3	14.9	19.4	19.8	13.6	12.8	8.7
87.5°	0.0	0.0	11.6	11.1	1.7	2.5	4.5	6.6	5.4	5.4	4.5
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°	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2	799.2
2.5°	814.9	792.6	750.5	709.2	674.5	646.0	620.4	610.1	601.9	600.6	594.0
5°	851.2	806.2	725.7	659.6	615.5	584.1	557.3	540.8	528.0	523.0	518.5
7.5°	906.1	838.0	722.4	646.4	593.6	540.8	491.2	437.6	404.1	391.3	383.9
10°	973.0	880.1	734.8	642.7	550.3	438.8	356.7	288.5	260.9	251.8	249.3
12.5°	1051.0	932.5	756.2	619.6	457.8	311.7	246.0	222.9	216.7	213.8	213.8
15°	1140.6	989.9	771.5	552.7	338.5	235.7	213.0	202.3	195.7	192.0	192.4
17.5°	1232.2	1046.0	764.1	455.7	249.7	209.7	192.8	181.2	172.1	168.4	167.6
20°	1324.7	1098.0	722.8	339.3	211.4	190.3	171.3	158.5	149.4	145.7	144.9
22.5°	1420.4	1142.2	650.2	248.9	189.9	168.8	150.3	137.5	128.8	125.5	123.8
25°	1513.7	1178.1	548.6	201.4	169.7	148.6	130.9	118.9	111.0	107.7	107.3
27.5°	1600.8	1200.8	431.0	177.9	151.9	130.4	114.3	103.6	97.0	94.5	94.1
30°	1679.3	1202.9	318.7	160.6	136.2	114.8	99.9	90.4	84.6	82.1	81.3
32.5°	1758.5	1185.6	232.0	144.9	121.8	101.1	86.7	79.3	75.1	73.1	73.1
35°	1833.2	1145.5	180.8	131.3	107.7	87.9	76.4	71.0	68.5	66.5	66.5
37.5°	1906.3	1088.1	153.6	119.3	94.5	76.8	67.3	64.0	61.9	59.9	59.9
40°	1980.6	1015.9	139.5	108.2	83.8	68.1	59.9	57.0	54.9	53.3	52.8
42.5°	2071.8	932.5	130.4	97.8	74.3	60.3	52.8	49.5	47.9	46.2	45.4
45°	2177.5	860.7	123.0	87.5	66.5	53.7	45.8	42.5	40.0	38.0	37.6
47.5°	2329.8	808.7	113.1	76.4	59.0	46.6	39.6	35.9	32.2	30.1	29.7
50°	2524.2	765.7	100.3	66.5	51.6	39.6	33.0	28.5	25.2	23.1	23.1
52.5°	2620.8	709.6	88.8	57.8	43.3	33.4	26.8	21.5	19.8	17.8	17.8
55°	2659.6	666.7	77.2	49.1	35.9	27.7	21.1	16.5	15.3	14.0	13.6
57.5°	2768.6	654.3	67.3	41.7	29.7	21.9	16.1	12.4	11.6	9.9	9.9
60°	2944.1	660.5	58.2	35.5	23.9	16.9	12.0	9.5	8.7	7.0	7.0
62.5°	3133.5	652.6	49.1	30.5	18.6	12.4	8.3	7.0	7.0	4.1	3.7
65°	3169.9	581.2	42.1	25.2	14.4	9.1	5.4	4.5	6.2	0.8	0.0
67.5°	2942.0	450.8	36.3	19.4	10.7	7.0	4.1	2.1	5.4	0.0	0.0
70°	2352.5	286.5	29.3	14.0	8.3	5.8	3.3	0.8	4.1	0.0	0.0
72.5°	1663.6	166.4	23.1	9.9	7.0	4.5	2.5	0.0	2.5	0.0	0.0
75°	841.3	88.8	14.4	7.4	5.4	3.3	1.7	0.0	0.4	0.0	0.0
77.5°	182.0	41.3	9.1	5.4	3.7	2.1	0.8	0.0	0.0	0.0	0.0
80°	39.6	18.2	5.8	3.3	2.1	1.2	0.0	0.0	0.0	0.0	0.0
82.5°	14.4	9.5	2.9	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.8	5.0	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	1.7	0.4	0.4	0.0	0.0	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)