

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: P651415

Luminaire Tested: **GALN-SA5D-840-U-T2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24356.2 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G4

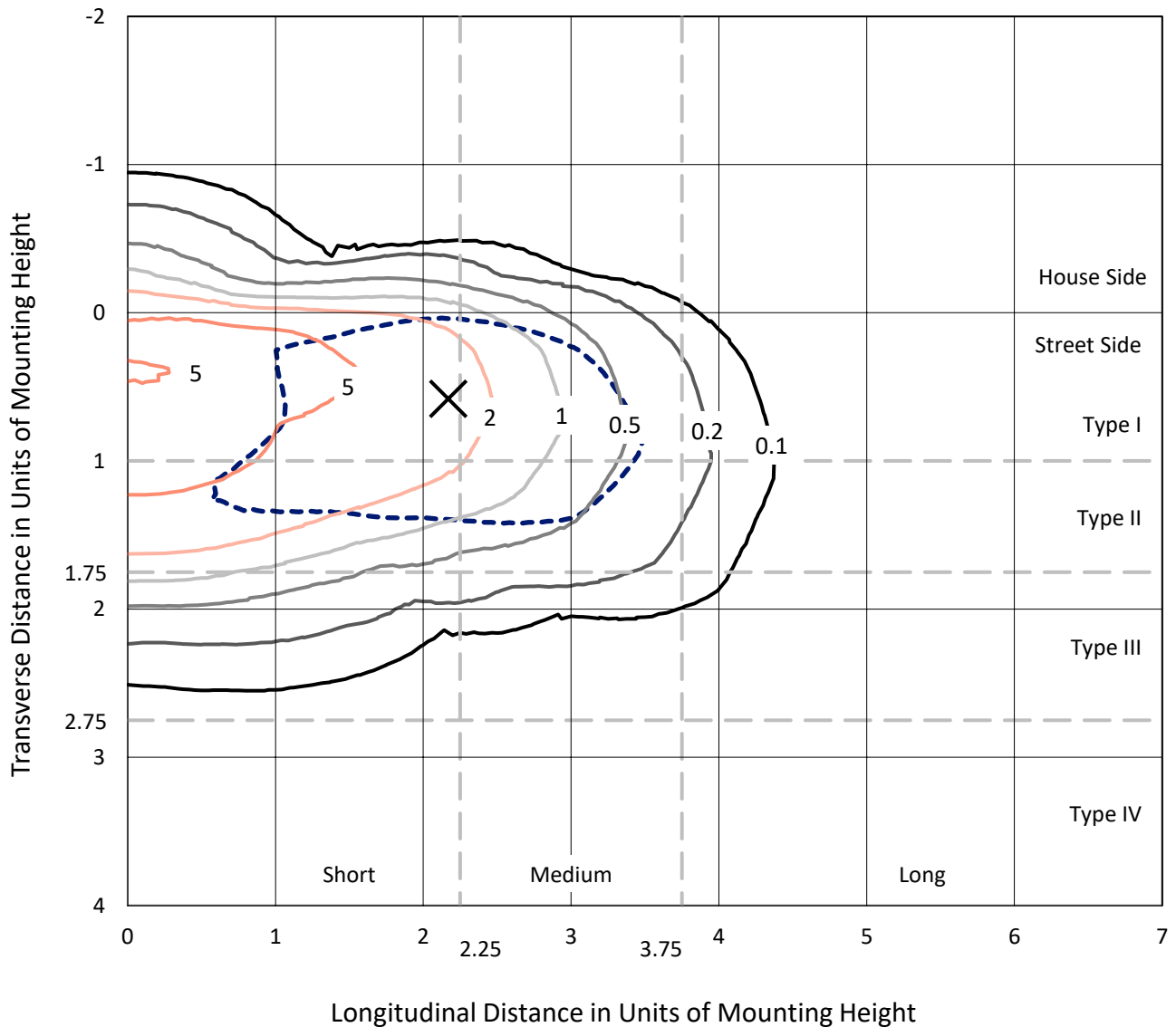
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

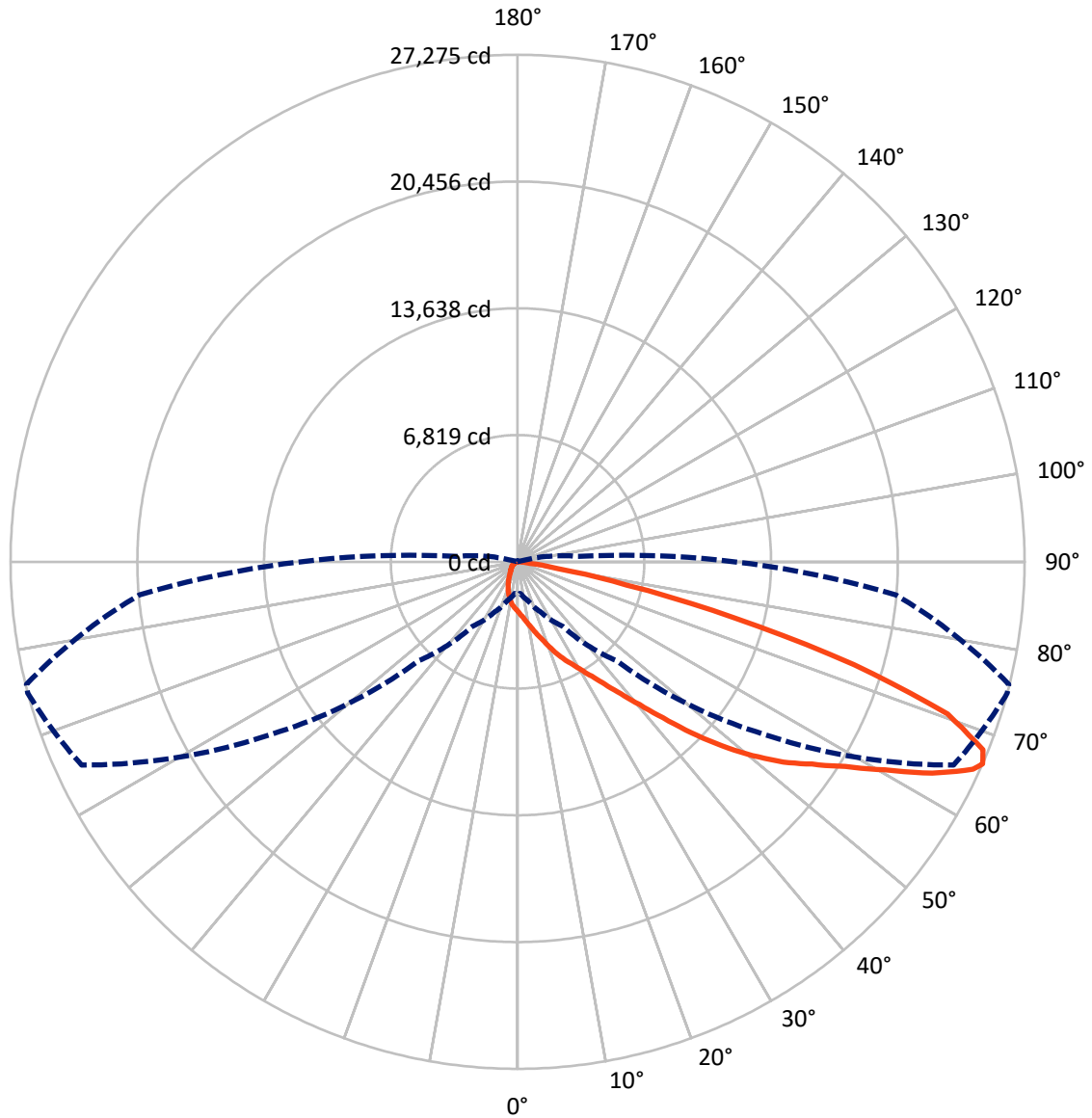
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1503.6	0.0	1503.6
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	22852.5	0.0	22852.5
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	24356.2	0.0	24356.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.9	1.1
10°-20°	756.1	3.1
20°-30°	1305.6	5.4
30°-40°	2355.0	9.7
40°-50°	4254.4	17.5
50°-60°	6632.7	27.2
60°-70°	6300.8	25.9
70°-80°	2361.4	9.7
80°-90°	133.2	0.5
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°	24356.2	100.0
0°-180°	24356.2	100.0

**Coefficient of Utilization**

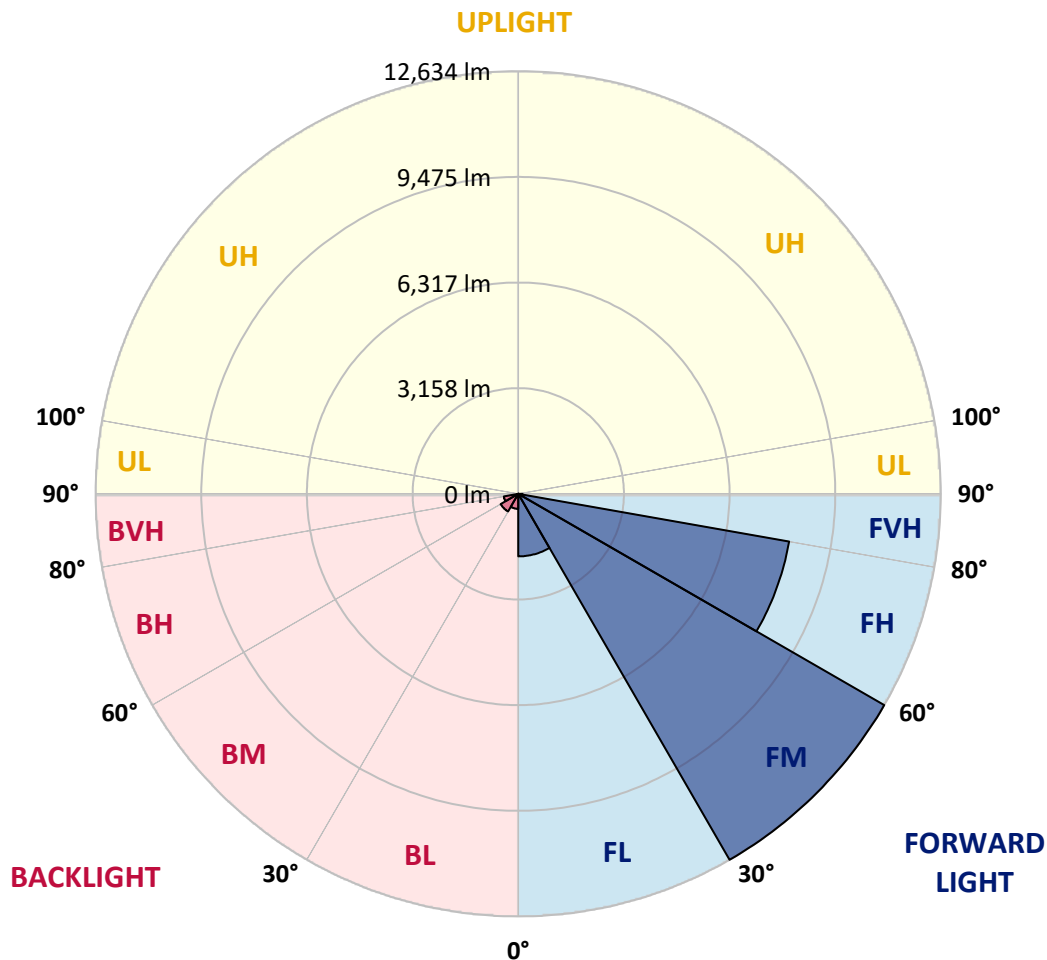


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1869.5	7.7			
FM (30°-60°)	12633.5	51.9			
FH (60°-80°)	8223.1	33.8			G4/12000
FVH (80°-90°)	126.3	0.5			G2/225
BL (0°-30°)	449.1	1.8	B1/500		
BM (30°-60°)	608.6	2.5	B1/1000		
BH (60°-80°)	439.1	1.8	B1/500		G1/500
BVH (80°-90°)	6.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6
2.5°	3182.3	3142.6	3155.3	3137.3	3095.8	3034.6	2980.6	2903.1	2825.7	2813.1	2726.6
5°	3601.9	3591.1	3576.7	3524.5	3495.6	3402.0	3290.3	3157.0	2996.7	2968.0	2811.3
7.5°	3888.2	3882.8	3890.0	3863.0	3837.8	3753.1	3634.3	3452.4	3203.9	3187.6	2926.5
10°	3981.9	3996.3	4023.3	4066.5	4106.2	4079.1	3989.1	3762.1	3472.2	3425.4	3058.0
12.5°	3927.9	3944.0	4008.9	4124.2	4252.0	4325.9	4289.9	4124.2	3756.7	3718.9	3205.6
15°	3789.2	3809.0	3900.8	4079.1	4307.9	4516.8	4606.8	4487.9	4088.1	4026.9	3383.9
17.5°	3583.8	3612.7	3744.1	3980.1	4293.5	4653.6	4907.6	4868.0	4441.2	4383.5	3578.5
20°	3429.0	3450.6	3562.2	3832.4	4232.2	4729.3	5193.9	5305.5	4877.0	4777.9	3807.2
22.5°	3531.6	3538.8	3576.7	3738.7	4122.3	4749.0	5446.1	5761.2	5339.8	5251.5	4044.9
25°	4034.1	3962.0	3924.3	3888.2	4098.9	4731.0	5674.7	6236.7	5800.8	5707.2	4280.9
27.5°	4826.5	4794.1	4603.2	4347.5	4298.9	4754.5	5826.0	6686.9	6234.8	6134.0	4511.4
30°	5689.2	5633.4	5516.3	5141.7	4765.3	4920.2	5935.9	7124.5	6748.1	6614.9	4722.0
32.5°	6481.6	6517.6	6342.9	5957.5	5521.7	5273.2	6078.2	7601.8	7337.1	7171.4	4967.0
35°	7405.5	7477.5	7209.1	6839.9	6330.3	5910.7	6355.5	8140.3	8084.4	7875.5	5345.2
37.5°	8343.7	8387.0	8223.1	7704.4	7245.2	6721.1	6877.8	8804.8	9004.7	8826.4	5797.3
40°	9132.6	9192.0	9071.4	8610.3	8120.4	7659.4	7636.0	9528.8	10099.7	9916.0	6470.7
42.5°	9735.9	9780.9	9784.5	9458.6	9017.3	8808.4	8603.1	10452.6	11472.0	11259.5	7252.4
45°	10497.7	10562.5	10524.7	10303.2	9973.6	9935.8	9829.5	11569.2	13114.5	12846.1	8266.4
47.5°	11675.5	11718.7	11625.1	11363.9	11029.0	11088.4	11025.3	12820.9	14789.3	14558.8	9316.3
50°	12493.1	12565.1	12698.4	12802.9	12559.7	12340.1	12152.8	13989.7	16379.6	16172.4	10389.6
52.5°	12484.1	12603.0	13024.4	13550.3	14081.5	14014.9	13476.4	15281.0	17897.7	17642.0	11398.2
55°	11643.1	11873.6	12493.1	13426.0	14897.4	15630.4	15385.4	16775.8	19208.9	19036.0	12567.0
57.5°	9907.0	10047.4	10908.3	12212.2	14441.7	16390.3	17597.0	18801.8	20781.0	20700.0	14382.3
60°	6663.5	6726.5	7834.1	9445.9	12295.0	15632.2	19217.9	21252.9	22717.1	22677.5	16502.0
62.5°	3818.0	3845.0	4648.2	6007.9	8749.0	13247.7	19354.7	24276.6	25038.5	25060.1	18954.9
65°	2054.9	2069.3	2717.6	3526.2	5323.6	9442.3	17404.3	25933.6	26915.0	26956.5	20474.9
66°	1773.9	1705.5	2163.0	3005.7	4235.8	7515.3	16170.7	25874.1	27275.2	27230.2	20420.8
67.5°	1348.9	1410.1	1727.1	2310.6	3139.0	5343.4	13350.4	24723.3	27001.5	26861.0	19590.7
70°	965.3	990.5	1230.0	1647.9	2137.7	2931.9	8531.0	20534.4	24541.4	24352.3	17067.5
72.5°	623.1	650.2	871.7	1192.2	1545.2	1601.0	4776.1	14836.2	18920.6	18893.7	12853.3
75°	444.8	470.0	576.3	853.6	1161.6	990.5	2299.8	9998.8	12028.5	11947.4	7951.2
77.5°	322.4	335.0	385.4	558.3	830.2	709.6	1066.1	5339.8	5988.1	6270.9	3513.6
80°	185.5	196.3	268.4	340.4	561.9	484.4	509.6	2143.1	2209.7	2103.5	1098.6
82.5°	91.8	104.5	160.3	232.3	351.2	326.0	234.1	644.7	680.8	662.7	277.4
85°	21.6	27.0	90.1	153.1	171.1	145.9	113.5	189.1	234.1	228.8	106.2
87.5°	1.8	3.6	32.4	27.0	28.8	48.6	39.6	48.6	75.6	70.2	37.8
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°	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6	2663.6
2.5°	2687.0	2652.8	2553.7	2456.5	2375.4	2290.8	2213.3	2168.4	2150.4	2130.5	2139.5
5°	2724.8	2642.0	2442.1	2269.2	2099.9	1955.8	1840.5	1766.7	1730.7	1725.3	1716.3
7.5°	2775.2	2633.0	2323.2	2053.0	1831.5	1671.2	1539.8	1433.6	1401.1	1372.3	1348.9
10°	2836.4	2616.8	2175.5	1826.1	1590.2	1388.5	1215.7	1089.6	1024.8	1006.8	1019.3
12.5°	2901.3	2586.2	2020.7	1617.2	1345.3	1087.7	927.5	864.5	846.5	839.2	841.0
15°	2966.1	2548.3	1858.6	1415.6	1071.5	868.1	794.2	778.0	770.8	767.2	763.6
17.5°	3025.6	2487.1	1676.7	1219.2	868.1	742.0	714.9	700.6	686.2	680.8	671.8
20°	3095.8	2416.9	1512.8	999.5	734.8	671.8	639.3	612.3	590.7	576.3	574.5
22.5°	3162.4	2326.8	1341.7	828.5	669.9	603.3	551.1	522.3	497.0	479.0	484.4
25°	3198.5	2217.0	1188.6	722.2	610.5	534.9	477.3	441.2	414.2	405.2	403.4
27.5°	3198.5	2081.9	1039.1	660.9	556.5	473.7	414.2	380.0	362.0	349.4	351.2
30°	3173.3	1932.4	900.5	614.1	509.6	419.7	363.8	333.2	318.7	309.7	308.0
32.5°	3153.4	1790.2	781.6	569.1	461.0	372.8	324.2	300.7	286.4	277.4	277.4
35°	3184.0	1667.7	689.8	524.1	416.0	336.7	293.6	272.0	257.5	250.4	248.5
37.5°	3265.1	1556.0	619.6	475.4	374.6	306.1	272.0	246.7	232.3	223.3	219.8
40°	3465.0	1492.9	567.3	430.4	335.0	281.0	246.7	223.3	205.3	196.3	194.5
42.5°	3785.6	1494.8	516.9	389.0	304.4	259.4	225.1	198.1	178.3	169.3	167.5
45°	4268.2	1563.3	477.3	349.4	277.4	235.9	201.7	172.9	154.9	145.9	145.9
47.5°	4846.3	1696.5	443.0	315.1	252.1	214.3	178.3	149.4	131.4	124.3	124.3
50°	5473.1	1869.4	408.8	279.1	230.5	190.9	153.1	129.7	115.3	109.8	109.8
52.5°	6112.4	2078.3	374.6	250.4	207.1	165.7	131.4	115.3	102.7	99.1	97.2
55°	6951.6	2344.8	338.6	219.8	181.9	142.3	117.1	100.8	86.5	81.1	79.2
57.5°	8242.9	2746.5	299.0	192.7	149.4	118.8	100.8	84.6	68.5	59.5	57.6
60°	9800.7	3236.3	257.5	169.3	120.7	97.2	81.1	64.8	50.5	39.6	37.8
62.5°	11259.5	3547.8	217.9	142.3	95.5	73.8	57.6	48.6	36.0	25.2	23.4
65°	11904.2	3443.4	180.1	115.3	75.6	52.2	37.8	34.2	21.6	10.8	9.0
66°	11689.9	3288.5	165.7	104.5	68.5	45.0	32.4	28.8	16.2	5.4	5.4
67.5°	11057.8	2922.9	144.1	90.1	59.5	36.0	25.2	21.6	9.0	1.8	0.0
70°	9474.8	2364.6	113.5	66.6	43.2	25.2	14.4	10.8	5.4	0.0	0.0
72.5°	7277.6	1761.3	90.1	50.5	30.6	14.4	7.2	3.6	5.4	0.0	0.0
75°	4459.2	1006.8	70.2	37.8	19.8	9.0	5.4	0.0	5.4	1.8	0.0
77.5°	1979.2	452.0	46.8	25.2	14.4	7.2	3.6	0.0	3.6	1.8	0.0
80°	500.6	147.7	27.0	18.0	10.8	5.4	1.8	0.0	3.6	3.6	1.8
82.5°	136.8	54.0	19.8	14.4	9.0	5.4	1.8	0.0	3.6	3.6	3.6
85°	54.0	25.2	18.0	14.4	10.8	5.4	1.8	0.0	3.6	3.6	3.6
87.5°	25.2	18.0	18.0	16.2	12.6	5.4	1.8	0.0	3.6	1.8	3.6
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)