

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: P459087

Luminaire Tested: **GALN-SA5D-735-U-T3R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5D-735-U-T3R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28255 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

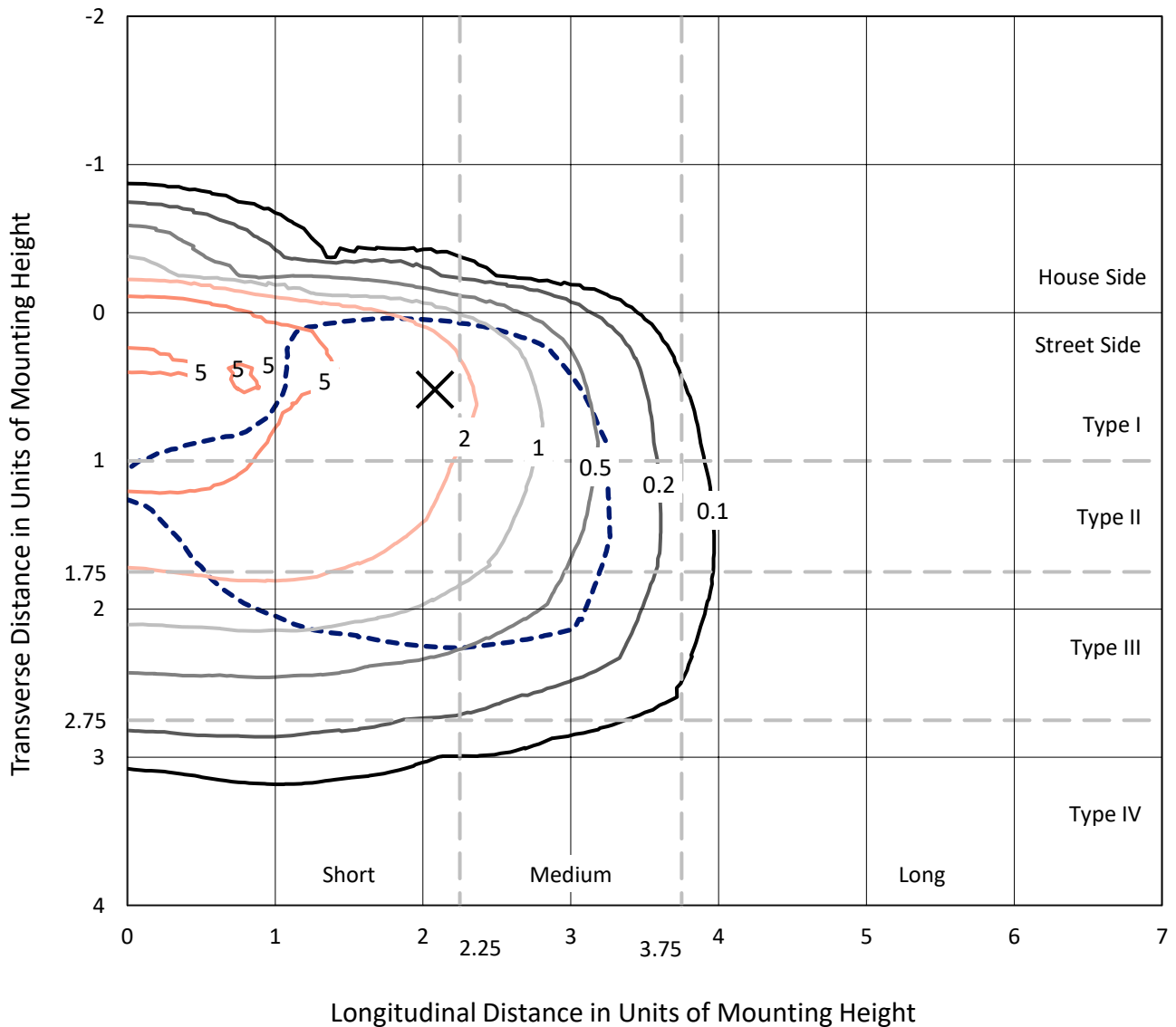
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

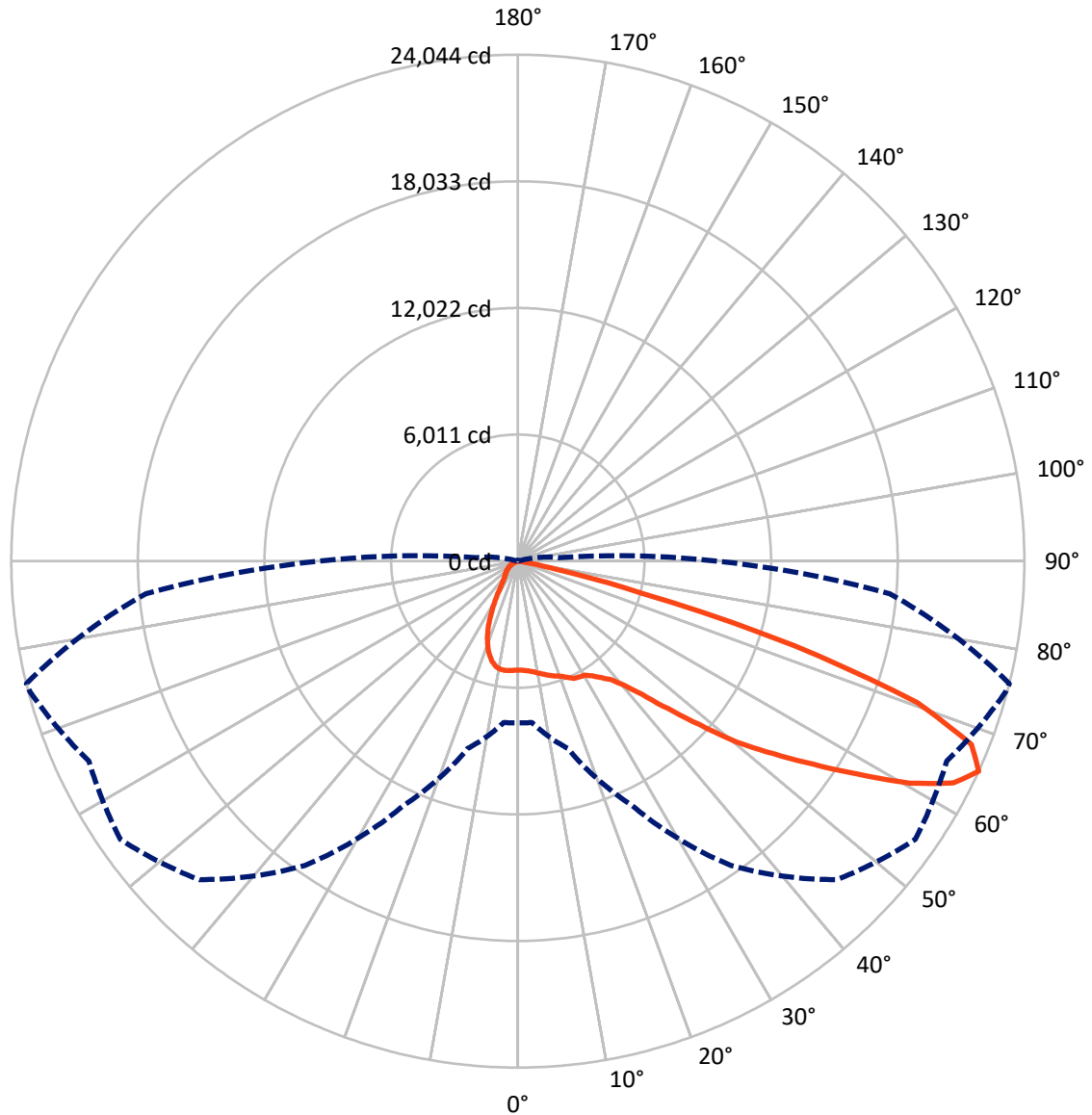
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2040.6	0.0	2040.6
	% Fixture	7.2	0.0	7.2
<b>Street Side</b>	Lumens	26214.4	0.0	26214.4
	% Fixture	92.8	0.0	92.8
<b>Total</b>	Lumens	28255.0	0.0	28255.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	425.8	1.5
10°-20°	948.0	3.4
20°-30°	1527.7	5.4
30°-40°	2656.3	9.4
40°-50°	4389.3	15.5
50°-60°	6780.6	24.0
60°-70°	8280.0	29.3
70°-80°	3142.5	11.1
80°-90°	104.9	0.4
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°	28255.0	100.0
0°-180°	28255.0	100.0

**Coefficient of Utilization**



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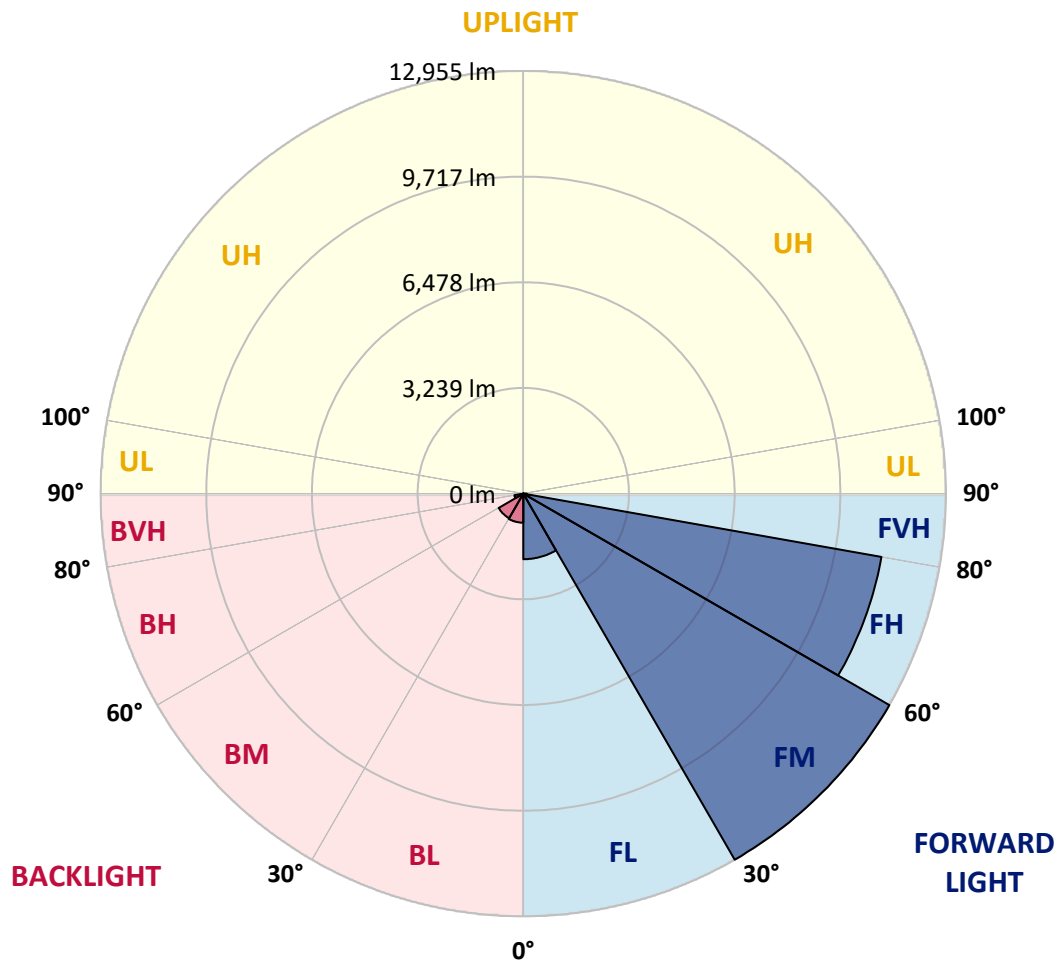
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2010.0	7.1			
FM (30°-60°)	12955.3	45.9			
FH (60°-80°)	11145.6	39.4			G4/12000
FVH (80°-90°)	103.4	0.4			G2/225
BL (0°-30°)	891.5	3.2	B2/1000		
BM (30°-60°)	870.8	3.1	B1/1000		
BH (60°-80°)	276.9	1.0	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7
2.5°	4939.3	4941.3	4953.3	4983.2	5029.1	5067.0	5098.9	5150.8	5186.7	5190.7	5202.7
5°	4598.2	4574.3	4598.2	4676.0	4745.8	4851.6	4981.2	5110.9	5226.6	5234.6	5290.4
7.5°	4215.2	4235.1	4273.0	4352.8	4484.5	4646.1	4833.6	5065.0	5284.4	5304.4	5414.1
10°	3826.2	3870.1	3931.9	4053.6	4237.1	4446.6	4701.9	5033.1	5376.2	5404.1	5593.7
12.5°	3467.1	3487.1	3562.9	3726.4	3953.9	4249.1	4602.2	5015.1	5477.9	5511.9	5785.2
15°	3191.8	3217.7	3283.6	3431.2	3684.5	4063.6	4520.4	5009.2	5577.7	5625.6	5976.7
17.5°	3139.9	3155.9	3183.8	3283.6	3505.0	3916.0	4446.6	5007.2	5673.4	5731.3	6154.2
20°	3353.4	3339.4	3311.5	3301.5	3423.2	3802.2	4392.7	5023.1	5765.2	5831.0	6341.7
22.5°	3888.0	3906.0	3742.4	3548.9	3509.0	3784.3	4384.8	5098.9	5910.8	5988.6	6551.2
25°	5023.1	4885.5	4630.1	4167.3	3818.2	3894.0	4474.5	5278.5	6080.4	6166.2	6740.7
27.5°	6277.9	6236.0	5839.0	5077.0	4426.6	4125.4	4634.1	5416.1	6136.3	6224.0	6848.4
30°	7510.7	7560.6	7105.8	6263.9	5310.4	4554.3	4783.7	5468.0	6186.1	6277.9	6986.1
32.5°	8653.8	8713.6	8314.7	7480.8	6351.7	5296.4	5041.1	5669.5	6395.6	6489.4	7215.5
35°	9553.5	9561.5	9260.2	8595.9	7488.8	6198.1	5597.6	6022.6	6678.9	6788.6	7458.9
37.5°	10379.4	10367.4	10014.3	9441.8	8436.4	7093.8	6297.8	6429.5	7002.0	7115.7	7810.0
40°	10991.8	10999.8	10886.1	10347.5	9320.1	7921.7	6852.4	6810.5	7544.6	7722.2	8320.7
42.5°	11400.8	11474.6	11530.4	11257.1	10431.2	8941.1	7704.2	7626.4	8486.2	8633.9	9042.8
45°	11731.9	11863.6	12142.9	12128.9	11498.5	10191.9	8873.2	8713.6	9820.8	9978.4	9962.4
47.5°	11973.3	12106.9	12569.8	12849.0	12501.9	11404.7	10343.5	10205.8	11414.7	11586.3	10977.8
50°	12097.0	12256.6	12847.0	13387.7	13285.9	12573.7	12019.2	12027.1	13339.8	13505.4	12154.8
52.5°	11807.7	12015.2	12994.7	13968.2	14165.7	13692.9	13589.1	13852.5	15053.4	15195.0	13218.1
55°	10884.1	11145.4	12793.2	14462.9	15185.0	15013.5	15372.6	15773.5	16926.6	17018.3	14309.3
57.5°	10299.6	10576.9	12198.7	14883.8	16409.9	16673.2	17241.8	17535.0	18859.6	19093.0	15562.1
60°	9806.8	10024.3	11710.0	14973.6	17654.7	18704.0	19256.6	19559.8	21245.5	21397.1	16940.5
62.5°	8986.9	9236.3	10884.1	14347.2	18281.1	20329.9	21474.9	21339.3	23090.8	23196.5	17786.4
65°	7668.3	7690.3	9208.4	12773.2	17634.8	21385.1	23032.9	22464.4	23972.5	24044.3	17720.5
67.5°	5723.3	5934.8	7083.8	10040.2	14895.8	20483.5	23537.6	22494.3	23415.9	23216.4	16314.2
70°	3686.5	3848.1	4801.7	6962.1	10740.4	17094.2	21863.9	20952.3	20551.3	20108.4	13353.7
72.5°	1701.6	1909.1	2852.7	3977.8	6369.7	12176.8	17748.5	17022.3	14792.1	13698.9	8488.2
75°	742.1	794.0	1408.4	2098.6	2986.3	6439.5	11702.0	10566.9	6680.9	6102.3	3397.3
77.5°	452.8	486.8	738.1	1125.1	1173.0	2453.7	6303.8	4610.2	2064.7	1821.3	921.6
80°	307.2	345.1	536.6	588.5	401.0	684.2	2365.9	1230.8	416.9	399.0	197.5
82.5°	149.6	189.5	397.0	329.2	173.6	219.4	688.2	263.3	121.7	113.7	69.8
85°	21.9	37.9	223.4	215.4	77.8	51.9	121.7	65.8	41.9	39.9	31.9
87.5°	0.0	0.0	75.8	33.9	8.0	8.0	14.0	14.0	16.0	14.0	16.0
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°	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7	5168.7
2.5°	5208.6	5218.6	5180.7	5126.8	5069.0	5011.1	4929.4	4855.5	4811.7	4837.6	4773.8
5°	5302.4	5294.4	5194.7	5031.1	4813.7	4552.3	4293.0	4071.6	3999.7	3892.0	3880.0
7.5°	5432.1	5410.1	5198.7	4823.6	4332.9	3842.1	3363.4	3046.2	2864.7	2711.0	2715.0
10°	5613.6	5549.8	5152.8	4458.6	3650.6	2910.5	2300.1	1881.2	1699.6	1641.8	1595.9
12.5°	5801.1	5677.4	5025.1	3965.8	2842.7	1988.9	1398.4	1143.1	1031.4	995.4	991.5
15°	5968.7	5773.2	4801.7	3373.3	2066.7	1270.7	953.6	869.8	855.8	857.8	855.8
17.5°	6134.3	5849.0	4492.5	2745.0	1404.4	911.7	819.9	799.9	805.9	813.9	811.9
20°	6271.9	5865.0	4097.5	2094.6	993.5	799.9	770.0	766.0	772.0	778.0	778.0
22.5°	6421.5	5876.9	3628.7	1450.3	811.9	744.1	728.1	728.1	736.1	744.1	746.1
25°	6533.2	5811.1	3068.1	1041.3	716.2	690.2	682.2	684.2	692.2	696.2	694.2
27.5°	6551.2	5625.6	2473.7	798.0	650.3	624.4	616.4	624.4	614.4	620.4	616.4
30°	6567.2	5390.2	1871.2	672.3	590.5	550.6	538.6	526.6	518.7	508.7	506.7
32.5°	6617.0	5112.9	1366.5	604.4	534.6	490.7	462.8	428.9	403.0	395.0	393.0
35°	6639.0	4779.7	1003.4	550.6	484.8	436.9	387.0	339.1	301.2	287.3	297.2
37.5°	6722.8	4456.6	778.0	510.7	440.9	381.0	317.2	257.3	221.4	213.5	217.4
40°	6894.3	4105.5	652.3	476.8	403.0	329.2	251.4	193.5	169.6	161.6	159.6
42.5°	7169.6	3756.4	580.5	444.9	365.1	277.3	197.5	151.6	131.7	125.7	125.7
45°	7504.7	3421.2	530.6	410.9	325.2	223.4	155.6	121.7	109.7	105.7	105.7
47.5°	7945.6	3128.0	488.7	377.0	281.3	177.5	125.7	105.7	97.7	99.7	101.7
50°	8392.5	2910.5	442.9	339.1	231.4	145.6	107.7	93.8	91.8	93.8	93.8
52.5°	8729.6	2782.9	381.0	287.3	181.5	121.7	95.8	87.8	85.8	81.8	81.8
55°	9184.4	2754.9	303.2	233.4	143.6	101.7	85.8	79.8	73.8	69.8	67.8
57.5°	9768.9	2786.9	233.4	181.5	111.7	83.8	75.8	65.8	57.9	49.9	49.9
60°	10132.0	2715.0	181.5	139.6	81.8	67.8	57.9	47.9	37.9	31.9	29.9
62.5°	10016.3	2411.8	143.6	103.7	57.9	49.9	37.9	31.9	21.9	16.0	14.0
65°	9419.8	1947.0	115.7	71.8	41.9	29.9	19.9	19.9	10.0	2.0	0.0
67.5°	8244.9	1442.3	91.8	47.9	23.9	14.0	10.0	6.0	0.0	0.0	0.0
70°	6710.8	1041.3	71.8	29.9	14.0	10.0	4.0	2.0	0.0	0.0	0.0
72.5°	4261.1	596.5	55.9	18.0	10.0	4.0	0.0	0.0	0.0	0.0	0.0
75°	1647.8	233.4	37.9	12.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	466.8	109.7	21.9	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	121.7	47.9	12.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.9	19.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	33.9	8.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.0	2.0	0.0	0.0	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)