

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: P459444

Luminaire Tested: **GALN-SA9A-735-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9A-735-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31642 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

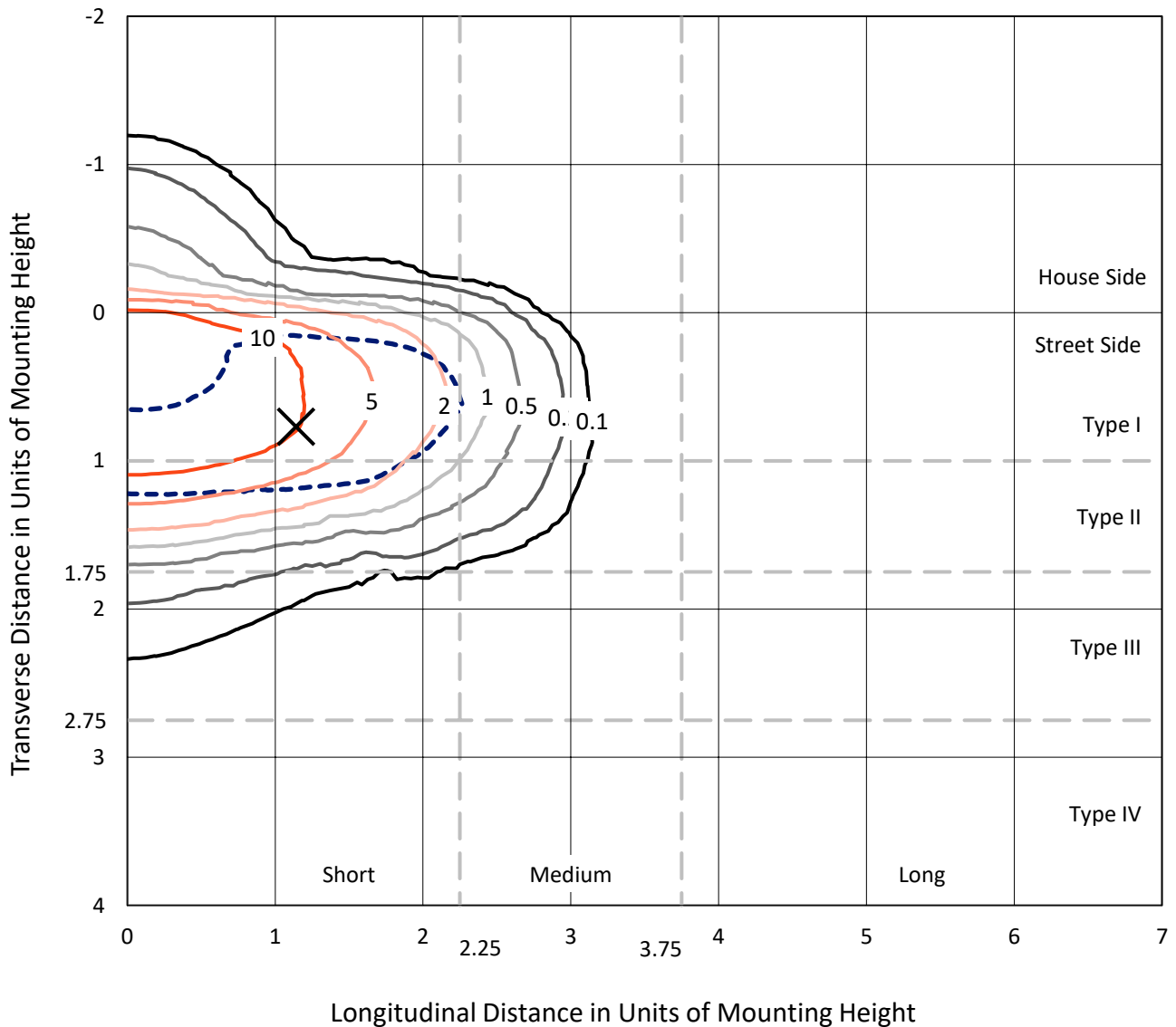
Input Watts (W): 274  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459444  
 CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

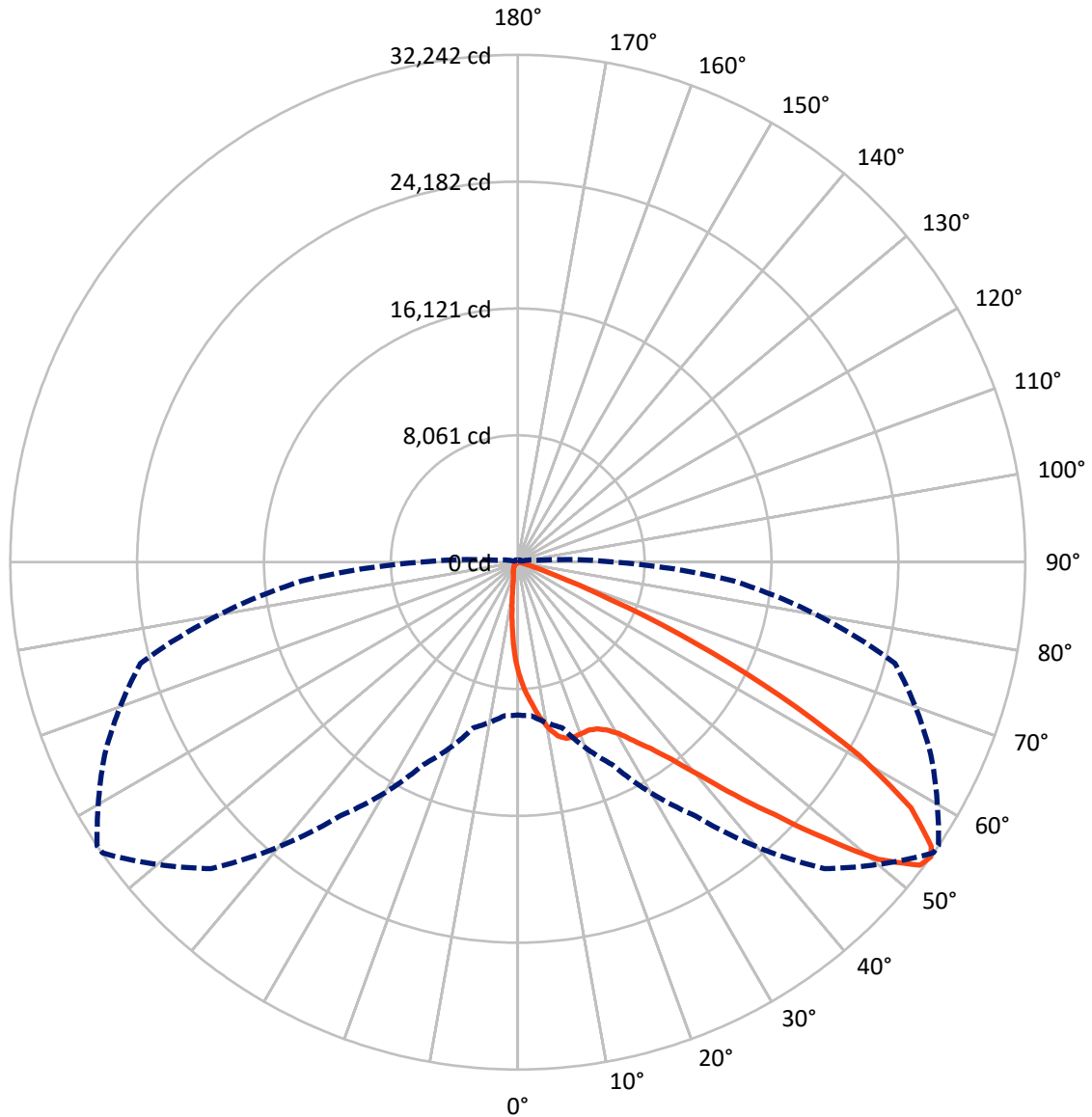
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P459444  
CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 54-Deg Vertical

REPORT NUMBER: P459444

CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1496.3	0.0	1496.3
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	30145.7	0.0	30145.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	31642.0	0.0	31642.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	621.2	2.0
10°-20°	1679.3	5.3
20°-30°	2908.5	9.2
30°-40°	5020.5	15.9
40°-50°	8545.0	27.0
50°-60°	8456.3	26.7
60°-70°	3859.7	12.2
70°-80°	495.7	1.6
80°-90°	55.9	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°	31642.0	100.0
0°-180°	31642.0	100.0



REPORT NUMBER: P459444

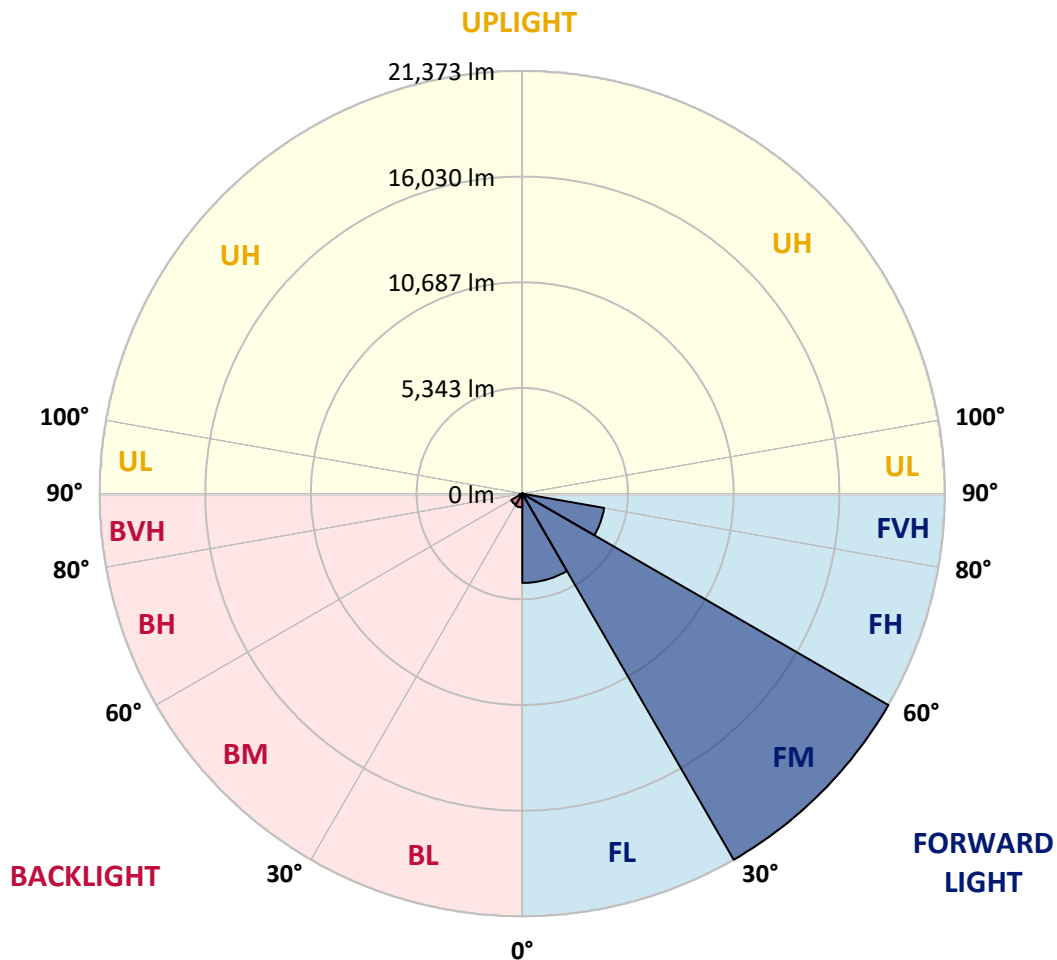
CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4517.0	14.3			
FM (30°-60°)	21373.4	67.5			
FH (60°-80°)	4205.5	13.3			G2/5000
FVH (80°-90°)	49.9	0.2			G1/100
BL (0°-30°)	692.0	2.2	B2/1000		
BM (30°-60°)	648.5	2.0	B1/1000		
BH (60°-80°)	149.8	0.5	B1/500		G1/500
BVH (80°-90°)	6.0	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-G2**

Type II Short





REPORT NUMBER: P459444

CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9
2.5°	8934.2	8872.3	8786.9	8720.7	8564.9	8340.7	8103.8	8103.8	7875.3	7557.2	7232.8
5°	10304.7	10264.2	10180.9	10010.1	9835.1	9521.3	9045.2	8961.9	8554.2	7977.8	7371.5
7.5°	10861.9	10881.1	10885.4	10840.6	10757.3	10447.8	9976.0	9918.3	9267.2	8494.4	7553.0
10°	10328.2	10422.2	10514.0	10699.7	10962.3	11037.0	10770.1	10710.4	10069.9	9017.5	7749.4
12.5°	9534.1	9585.3	9636.6	9929.0	10456.3	11060.5	11340.1	11338.0	10795.8	9538.3	7999.1
15°	9164.8	9209.6	9213.9	9344.1	9800.9	10680.5	11583.5	11615.5	11504.5	10180.9	8268.1
17.5°	9241.6	9277.9	9248.0	9280.0	9519.1	10262.1	11555.7	11662.5	12078.8	10797.9	8511.5
20°	9743.3	9813.7	9698.5	9608.8	9681.4	10151.0	11461.8	11611.3	12484.4	11399.9	8733.5
22.5°	10644.2	10682.6	10537.4	10291.9	10163.8	10383.7	11436.2	11583.5	12830.2	11893.0	8861.6
25°	11645.4	11632.6	11472.5	11197.1	10928.1	10853.4	11604.8	11737.2	13116.3	12337.1	8900.0
27.5°	12646.6	12685.1	12416.1	12074.5	11752.2	11557.9	11982.7	12080.9	13438.7	12843.0	8947.0
30°	13810.1	13748.2	13483.5	13092.8	12723.5	12452.4	12591.1	12618.9	13882.7	13513.4	9070.8
32.5°	15323.7	15152.9	14856.2	14173.0	13908.3	13449.3	13483.5	13517.6	14422.8	14177.3	9220.3
35°	17377.4	17368.8	16788.2	15868.1	15223.4	14653.4	14503.9	14531.7	15240.4	15163.6	9551.2
37.5°	19849.5	19883.7	19221.9	18295.4	17108.4	16203.2	15895.8	15900.1	16482.9	16525.6	10055.0
40°	21862.6	21952.3	21557.4	20931.9	19759.8	18344.5	17827.8	17780.9	18229.2	18175.8	10774.4
42.5°	22729.4	22812.6	22959.9	23177.7	22533.0	21365.2	20146.2	20210.3	20346.9	19973.3	11581.4
45°	22304.5	22436.9	23015.4	24360.4	24966.7	24573.8	23120.0	22895.9	22317.3	21926.7	12392.6
47.5°	20534.8	20857.1	21824.2	24063.6	26185.6	27513.5	26476.0	26179.2	24289.9	23352.7	12909.2
50°	17625.0	17644.2	18991.3	21854.1	25553.7	29368.6	29902.3	29680.3	26128.0	24153.3	13169.7
52.5°	12776.9	13197.4	14431.3	17746.7	22816.9	29086.8	32086.3	31994.5	28023.7	24563.2	13545.4
54°	9713.4	9794.5	10891.8	14181.6	19672.3	27539.1	32220.7	32242.1	28965.2	24810.8	13767.4
55°	7962.9	7768.6	8921.4	12080.9	17526.8	26170.7	31781.0	31883.4	29387.9	24938.9	13931.8
57.5°	3774.4	3776.5	4658.2	6372.4	10977.2	20321.3	29093.2	29456.2	29434.8	25158.8	14437.7
60°	1910.7	1923.5	2117.7	2941.8	5422.4	13509.1	24055.1	24919.7	27169.8	25190.8	14604.3
62.5°	1336.4	1321.4	1289.4	1415.4	2282.1	6865.6	17909.0	18660.4	23083.7	23971.8	14074.8
65°	1144.3	1112.2	1022.6	1003.4	1152.8	2734.7	11154.4	12379.8	17625.0	20756.8	12567.7
67.5°	977.7	964.9	883.8	834.7	815.5	1191.2	5755.5	6400.2	12046.8	14920.2	9519.1
70°	830.4	824.0	774.9	713.0	659.7	713.0	2134.8	2645.0	6714.0	8033.3	4491.6
72.5°	674.6	681.0	689.5	610.6	555.1	506.0	911.6	1061.0	2809.4	2871.3	1571.2
75°	591.3	584.9	584.9	531.6	463.3	375.7	501.7	540.1	860.3	798.4	365.1
77.5°	416.3	401.3	469.7	437.6	386.4	266.9	286.1	303.1	356.5	305.3	170.8
80°	288.2	288.2	301.0	392.8	348.0	194.3	175.1	187.9	211.3	181.5	98.2
82.5°	162.2	166.5	196.4	209.2	202.8	130.2	115.3	117.4	140.9	123.8	61.9
85°	19.2	32.0	113.1	111.0	83.3	57.6	64.0	66.2	87.5	76.9	36.3
87.5°	2.1	4.3	23.5	29.9	21.3	23.5	23.5	23.5	29.9	34.2	25.6
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: P459444

CATALOG NUMBER: GALN-SA9A-735-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9	7029.9
2.5°	7057.7	6895.4	6509.0	6060.7	5774.7	5309.3	4916.5	4632.5	4562.1	4425.5	4466.0
5°	7049.2	6711.9	5924.1	5091.5	4203.4	3541.7	3048.5	2660.0	2489.2	2376.0	2297.1
7.5°	7053.4	6526.1	5262.3	3936.6	2875.6	2226.6	1769.8	1532.8	1374.8	1308.6	1317.2
10°	7066.2	6316.9	4493.8	2916.2	1940.5	1438.9	1159.2	1046.1	992.7	984.1	982.0
12.5°	7096.1	6088.5	3759.4	2164.7	1357.7	1046.1	939.3	900.9	883.8	883.8	877.4
15°	7128.1	5836.6	3148.9	1609.6	1046.1	898.8	849.7	830.4	819.8	819.8	817.6
17.5°	7128.1	5546.2	2578.9	1248.9	900.9	826.2	787.7	762.1	753.6	753.6	751.5
20°	7083.3	5208.9	2072.9	1005.5	817.6	757.9	719.4	691.7	681.0	676.7	674.6
22.5°	6927.5	4758.5	1650.2	864.6	749.3	698.1	649.0	617.0	608.4	604.2	606.3
25°	6649.9	4250.4	1306.5	760.0	687.4	625.5	582.8	559.3	550.8	550.8	552.9
27.5°	6363.9	3718.8	1035.4	681.0	612.7	557.2	523.0	508.1	506.0	512.4	514.5
30°	6099.2	3185.1	839.0	617.0	546.5	499.5	476.1	471.8	471.8	473.9	476.1
32.5°	5804.6	2717.6	702.4	561.5	493.1	452.6	439.8	439.8	444.0	444.0	448.3
35°	5618.8	2316.3	617.0	508.1	452.6	418.4	409.9	412.0	418.4	427.0	431.2
37.5°	5518.5	1996.1	561.5	465.4	414.2	390.7	382.1	386.4	401.3	416.3	418.4
40°	5527.0	1754.8	516.6	429.1	384.3	358.6	352.2	365.1	380.0	394.9	397.1
42.5°	5621.0	1575.5	473.9	386.4	358.6	322.4	320.2	333.0	339.4	354.4	356.5
45°	5732.0	1445.3	429.1	341.6	311.7	279.7	281.8	292.5	301.0	324.5	328.8
47.5°	5766.1	1355.6	377.9	290.3	256.2	245.5	247.6	254.0	271.1	292.5	294.6
50°	5804.6	1300.1	328.8	245.5	217.8	215.6	217.8	222.0	232.7	241.2	239.1
52.5°	5968.9	1298.0	288.2	213.5	185.7	190.0	192.1	190.0	181.5	168.7	164.4
54°	6122.6	1304.4	269.0	198.5	170.8	177.2	175.1	164.4	143.0	130.2	123.8
55°	6246.5	1310.8	258.3	187.9	162.2	164.4	166.5	145.2	117.4	104.6	100.3
57.5°	6489.8	1295.8	232.7	164.4	143.0	134.5	132.4	96.1	64.0	55.5	51.2
60°	6368.2	1169.9	211.3	140.9	121.7	108.9	89.7	53.4	32.0	23.5	23.5
62.5°	5890.0	992.7	187.9	115.3	100.3	83.3	47.0	29.9	14.9	8.5	6.4
65°	5268.7	834.7	168.7	91.8	79.0	53.4	25.6	19.2	6.4	0.0	0.0
67.5°	3917.4	619.1	143.0	72.6	59.8	34.2	17.1	10.7	2.1	0.0	0.0
70°	1814.6	377.9	121.7	55.5	42.7	25.6	12.8	6.4	0.0	0.0	0.0
72.5°	520.9	237.0	100.3	40.6	29.9	21.3	10.7	4.3	2.1	0.0	0.0
75°	181.5	190.0	74.7	29.9	23.5	14.9	8.5	4.3	2.1	0.0	0.0
77.5°	108.9	153.7	47.0	25.6	19.2	12.8	8.5	4.3	2.1	2.1	0.0
80°	61.9	102.5	29.9	21.3	17.1	10.7	6.4	4.3	2.1	2.1	0.0
82.5°	34.2	49.1	23.5	19.2	14.9	10.7	6.4	4.3	2.1	2.1	2.1
85°	27.8	25.6	19.2	17.1	12.8	8.5	6.4	2.1	0.0	0.0	0.0
87.5°	21.3	17.1	17.1	17.1	12.8	8.5	6.4	2.1	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)