

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: P453122

Luminaire Tested: **GALN-SA4A-827-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453122  
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-SA4A-827-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 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: 10896 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

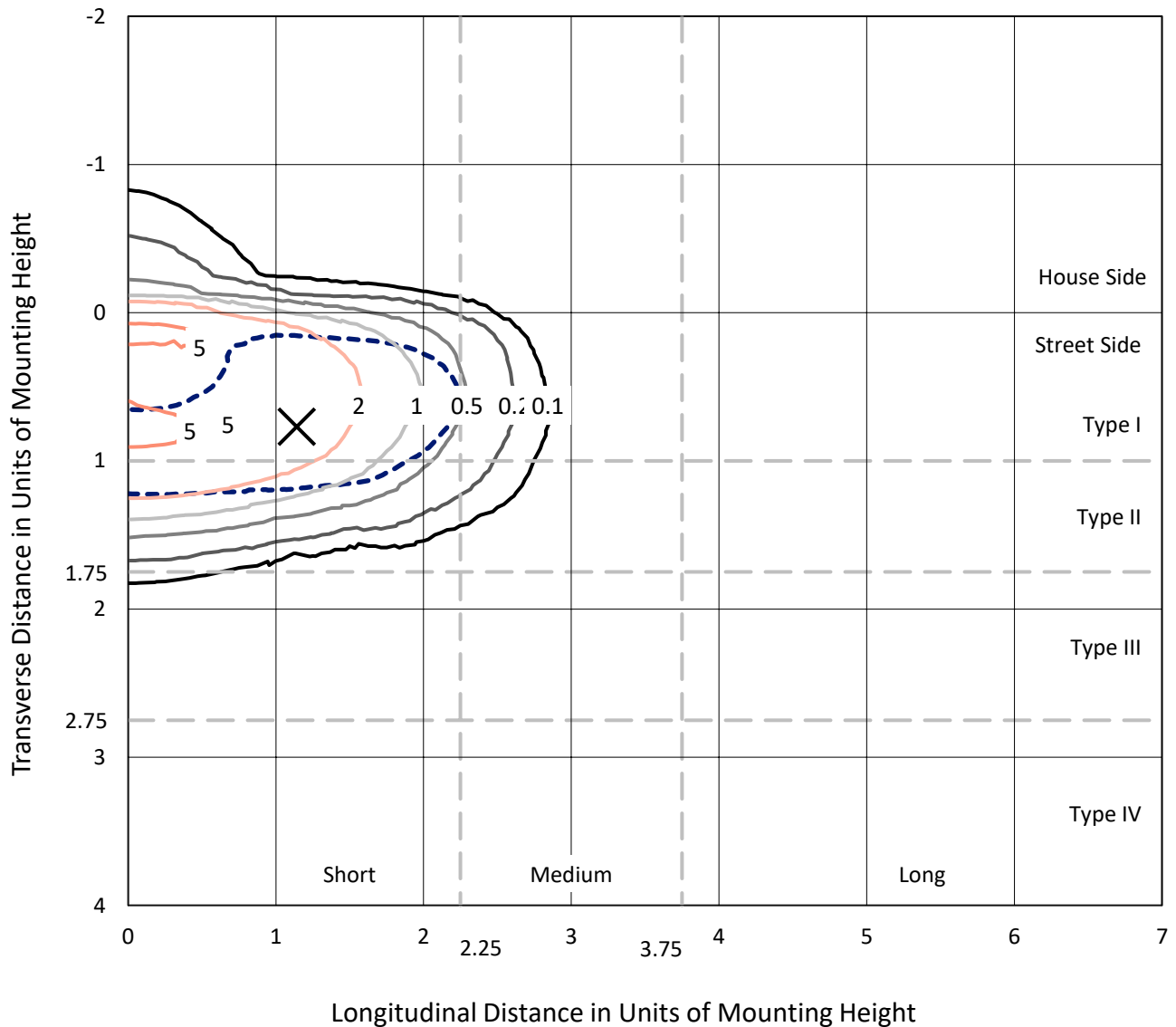
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453122  
 CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

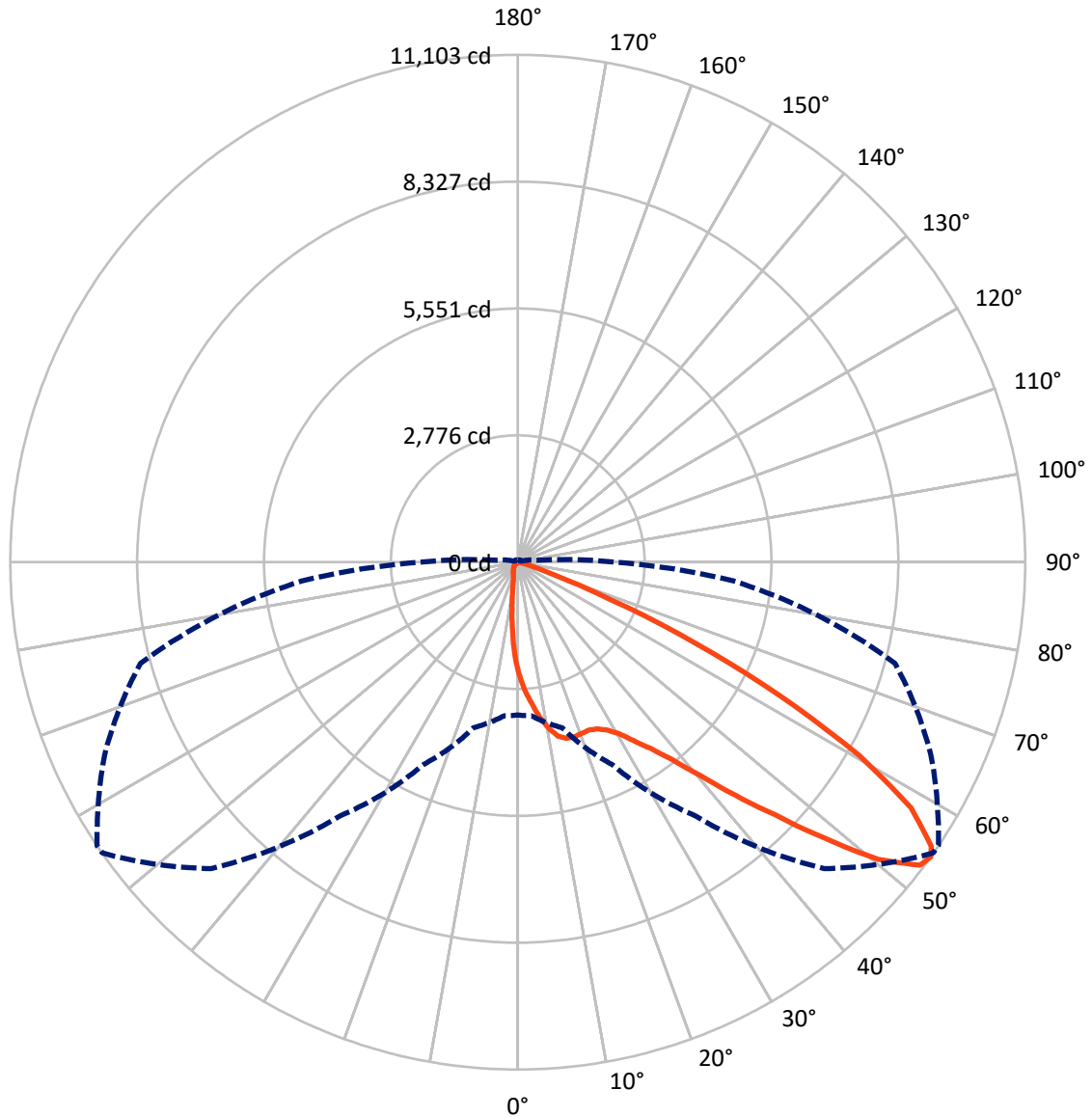
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P453122  
CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P453122  
 CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	515.2	0.0	515.2
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	10380.8	0.0	10380.8
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	10896.0	0.0	10896.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.9	2.0
10°-20°	578.3	5.3
20°-30°	1001.5	9.2
30°-40°	1728.8	15.9
40°-50°	2942.5	27.0
50°-60°	2912.0	26.7
60°-70°	1329.1	12.2
70°-80°	170.7	1.6
80°-90°	19.2	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°	10896.0	100.0
0°-180°	10896.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P453122

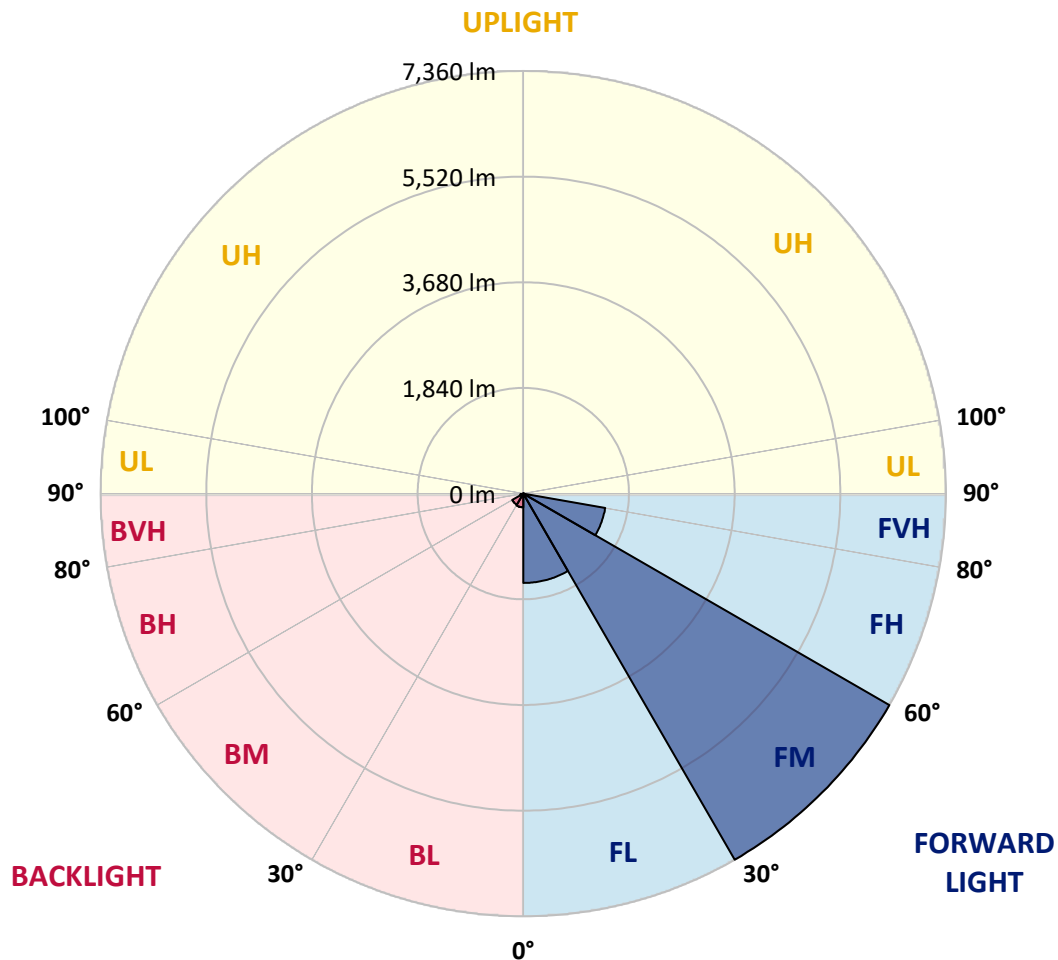
CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1555.4	14.3			
FM (30°-60°)	7360.0	67.5			
FH (60°-80°)	1448.2	13.3			G1/1800
FVH (80°-90°)	17.2	0.2			G1/100
BL (0°-30°)	238.3	2.2	B1/500		
BM (30°-60°)	223.3	2.0	B1/1000		
BH (60°-80°)	51.6	0.5	B0/110		G0/110
BVH (80°-90°)	2.1	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-G1**

Type II Short





REPORT NUMBER: P453122

CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8
2.5°	3076.5	3055.2	3025.8	3003.0	2949.3	2872.1	2790.5	2790.5	2711.9	2602.4	2490.6
5°	3548.5	3534.5	3505.8	3447.0	3386.7	3278.7	3114.7	3086.1	2945.7	2747.2	2538.4
7.5°	3740.3	3746.9	3748.4	3733.0	3704.3	3597.7	3435.3	3415.4	3191.2	2925.1	2600.9
10°	3556.6	3588.9	3620.5	3684.5	3774.9	3800.6	3708.7	3688.1	3467.6	3105.2	2668.5
12.5°	3283.1	3300.7	3318.4	3419.1	3600.7	3808.7	3905.0	3904.3	3717.5	3284.6	2754.5
15°	3155.9	3171.3	3172.8	3217.7	3375.0	3677.8	3988.8	3999.8	3961.6	3505.8	2847.2
17.5°	3182.4	3194.9	3184.6	3195.6	3277.9	3533.8	3979.3	4016.0	4159.4	3718.3	2931.0
20°	3355.1	3379.4	3339.7	3308.8	3333.8	3495.5	3946.9	3998.4	4299.0	3925.6	3007.4
22.5°	3665.4	3678.6	3628.6	3544.1	3499.9	3575.7	3938.1	3988.8	4418.1	4095.4	3051.5
25°	4010.1	4005.7	3950.6	3855.7	3763.1	3737.4	3996.2	4041.7	4516.6	4248.3	3064.8
27.5°	4354.9	4368.1	4275.5	4157.9	4046.9	3980.0	4126.3	4160.1	4627.6	4422.5	3080.9
30°	4755.5	4734.2	4643.1	4508.5	4381.4	4288.0	4335.8	4345.3	4780.5	4653.4	3123.6
32.5°	5276.8	5217.9	5115.8	4880.5	4789.4	4631.3	4643.1	4654.8	4966.5	4882.0	3175.0
35°	5983.9	5981.0	5781.1	5464.2	5242.2	5045.9	4994.5	5004.0	5248.1	5221.6	3289.0
37.5°	6835.2	6847.0	6619.1	6300.1	5891.3	5579.6	5473.8	5475.2	5675.9	5690.6	3462.5
40°	7528.5	7559.3	7423.3	7207.9	6804.3	6317.0	6139.1	6122.9	6277.3	6258.9	3710.2
42.5°	7826.9	7855.6	7906.3	7981.3	7759.3	7357.2	6937.4	6959.5	7006.5	6877.9	3988.1
45°	7680.6	7726.2	7925.4	8388.6	8597.3	8462.1	7961.4	7884.3	7685.0	7550.5	4267.4
47.5°	7071.2	7182.2	7515.2	8286.4	9017.1	9474.3	9117.1	9014.9	8364.3	8041.6	4445.3
50°	6069.2	6075.8	6539.7	7525.5	8799.5	10113.2	10296.9	10220.5	8997.2	8317.2	4535.0
52.5°	4399.7	4544.6	4969.5	6111.1	7857.1	10016.1	11049.0	11017.4	9650.0	8458.4	4664.4
54°	3344.8	3372.8	3750.6	4883.5	6774.2	9483.2	11095.3	11102.6	9974.2	8543.7	4740.8
55°	2742.0	2675.1	3072.1	4160.1	6035.4	9011.9	10943.9	10979.1	10119.8	8587.8	4797.4
57.5°	1299.7	1300.4	1604.1	2194.4	3780.0	6997.7	10018.3	10143.3	10136.0	8663.5	4971.7
60°	657.9	662.4	729.2	1013.0	1867.2	4651.9	8283.4	8581.2	9356.0	8674.5	5029.0
62.5°	460.2	455.0	444.0	487.4	785.9	2364.2	6167.0	6425.8	7948.9	8254.8	4846.7
65°	394.0	383.0	352.1	345.5	397.0	941.7	3841.0	4263.0	6069.2	7147.7	4327.7
67.5°	336.7	332.3	304.3	287.4	280.8	410.2	1981.9	2203.9	4148.3	5137.8	3277.9
70°	286.0	283.8	266.9	245.5	227.2	245.5	735.1	910.8	2312.0	2766.3	1546.7
72.5°	232.3	234.5	237.4	210.2	191.1	174.2	313.9	365.4	967.4	988.7	541.1
75°	203.6	201.4	201.4	183.0	159.5	129.4	172.8	186.0	296.3	274.9	125.7
77.5°	143.4	138.2	161.7	150.7	133.1	91.9	98.5	104.4	122.8	105.1	58.8
80°	99.2	99.2	103.7	135.3	119.8	66.9	60.3	64.7	72.8	62.5	33.8
82.5°	55.9	57.3	67.6	72.0	69.8	44.8	39.7	40.4	48.5	42.6	21.3
85°	6.6	11.0	39.0	38.2	28.7	19.8	22.1	22.8	30.1	26.5	12.5
87.5°	0.7	1.5	8.1	10.3	7.4	8.1	8.1	8.1	10.3	11.8	8.8
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: P453122

CATALOG NUMBER: GALN-SA4A-827-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8	2420.8
2.5°	2430.3	2374.5	2241.4	2087.0	1988.5	1828.3	1693.0	1595.2	1571.0	1523.9	1537.9
5°	2427.4	2311.2	2040.0	1753.3	1447.5	1219.6	1049.8	916.0	857.2	818.2	791.0
7.5°	2428.9	2247.3	1812.1	1355.6	990.2	766.7	609.4	527.8	473.4	450.6	453.6
10°	2433.3	2175.2	1547.4	1004.2	668.2	495.5	399.2	360.2	341.8	338.9	338.2
12.5°	2443.6	2096.6	1294.6	745.4	467.5	360.2	323.5	310.2	304.3	304.3	302.1
15°	2454.6	2009.8	1084.3	554.3	360.2	309.5	292.6	286.0	282.3	282.3	281.6
17.5°	2454.6	1909.9	888.0	430.1	310.2	284.5	271.3	262.4	259.5	259.5	258.8
20°	2439.2	1793.7	713.8	346.2	281.6	261.0	247.7	238.2	234.5	233.0	232.3
22.5°	2385.5	1638.6	568.3	297.7	258.0	240.4	223.5	212.5	209.5	208.0	208.8
25°	2289.9	1463.6	449.9	261.7	236.7	215.4	200.7	192.6	189.7	189.7	190.4
27.5°	2191.4	1280.6	356.5	234.5	211.0	191.9	180.1	175.0	174.2	176.4	177.2
30°	2100.3	1096.8	288.9	212.5	188.2	172.0	163.9	162.5	162.5	163.2	163.9
32.5°	1998.8	935.8	241.9	193.3	169.8	155.8	151.4	151.4	152.9	152.9	154.4
35°	1934.9	797.6	212.5	175.0	155.8	144.1	141.1	141.9	144.1	147.0	148.5
37.5°	1900.3	687.3	193.3	160.3	142.6	134.5	131.6	133.1	138.2	143.4	144.1
40°	1903.2	604.3	177.9	147.8	132.3	123.5	121.3	125.7	130.9	136.0	136.7
42.5°	1935.6	542.5	163.2	133.1	123.5	111.0	110.3	114.7	116.9	122.0	122.8
45°	1973.8	497.7	147.8	117.6	107.3	96.3	97.0	100.7	103.7	111.7	113.2
47.5°	1985.6	466.8	130.1	100.0	88.2	84.5	85.3	87.5	93.4	100.7	101.4
50°	1998.8	447.7	113.2	84.5	75.0	74.2	75.0	76.5	80.1	83.1	82.3
52.5°	2055.4	447.0	99.2	73.5	64.0	65.4	66.2	65.4	62.5	58.1	56.6
54°	2108.3	449.2	92.6	68.4	58.8	61.0	60.3	56.6	49.3	44.8	42.6
55°	2151.0	451.4	89.0	64.7	55.9	56.6	57.3	50.0	40.4	36.0	34.6
57.5°	2234.8	446.2	80.1	56.6	49.3	46.3	45.6	33.1	22.1	19.1	17.6
60°	2192.9	402.9	72.8	48.5	41.9	37.5	30.9	18.4	11.0	8.1	8.1
62.5°	2028.2	341.8	64.7	39.7	34.6	28.7	16.2	10.3	5.1	2.9	2.2
65°	1814.3	287.4	58.1	31.6	27.2	18.4	8.8	6.6	2.2	0.0	0.0
67.5°	1349.0	213.2	49.3	25.0	20.6	11.8	5.9	3.7	0.7	0.0	0.0
70°	624.9	130.1	41.9	19.1	14.7	8.8	4.4	2.2	0.0	0.0	0.0
72.5°	179.4	81.6	34.6	14.0	10.3	7.4	3.7	1.5	0.7	0.0	0.0
75°	62.5	65.4	25.7	10.3	8.1	5.1	2.9	1.5	0.7	0.0	0.0
77.5°	37.5	52.9	16.2	8.8	6.6	4.4	2.9	1.5	0.7	0.7	0.0
80°	21.3	35.3	10.3	7.4	5.9	3.7	2.2	1.5	0.7	0.7	0.0
82.5°	11.8	16.9	8.1	6.6	5.1	3.7	2.2	1.5	0.7	0.7	0.7
85°	9.6	8.8	6.6	5.9	4.4	2.9	2.2	0.7	0.0	0.0	0.0
87.5°	7.4	5.9	5.9	5.9	4.4	2.9	2.2	0.7	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)