

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: P458864

Luminaire Tested: **GALN-SA4A-735-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458864
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-735-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 13807 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

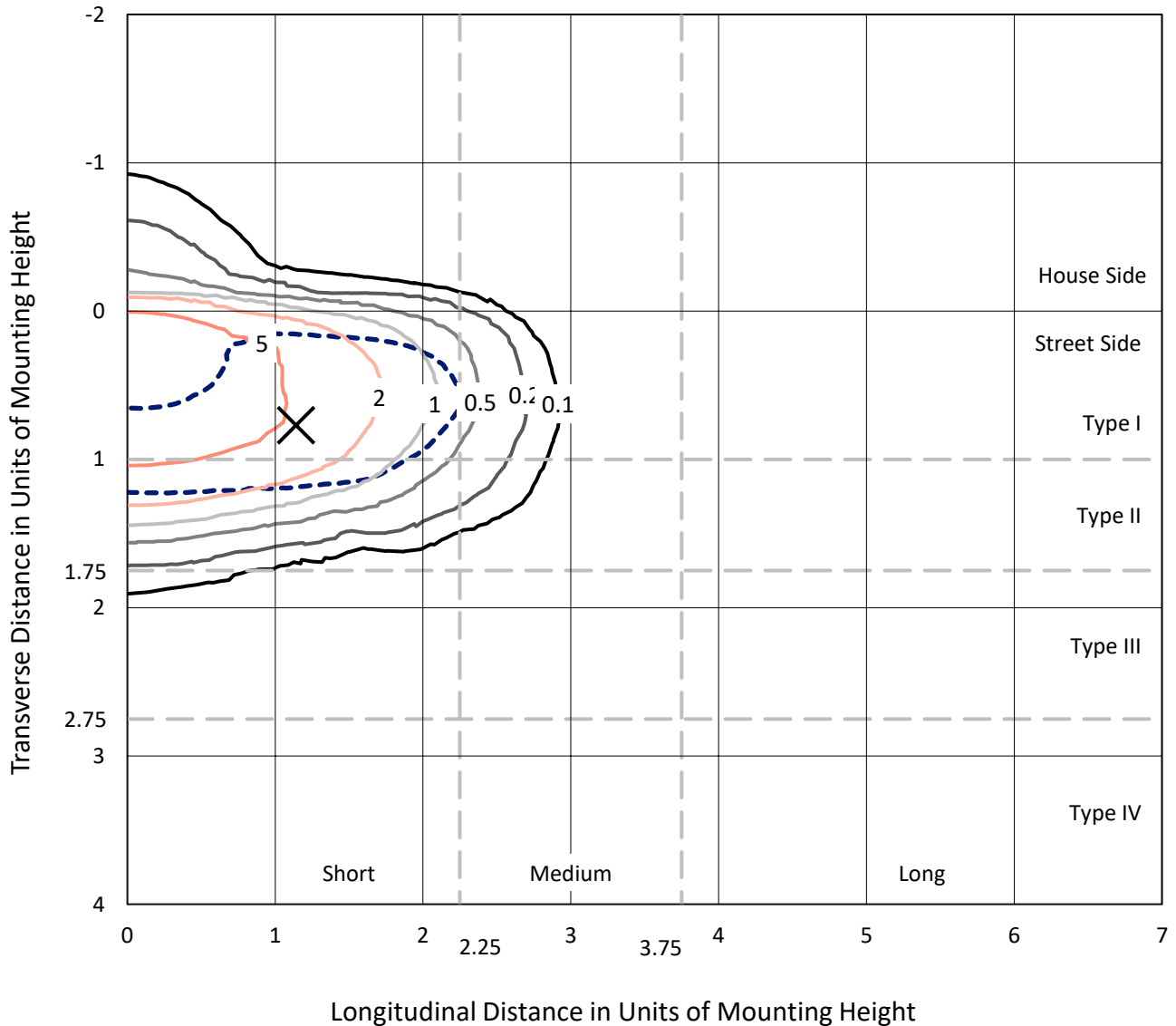
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

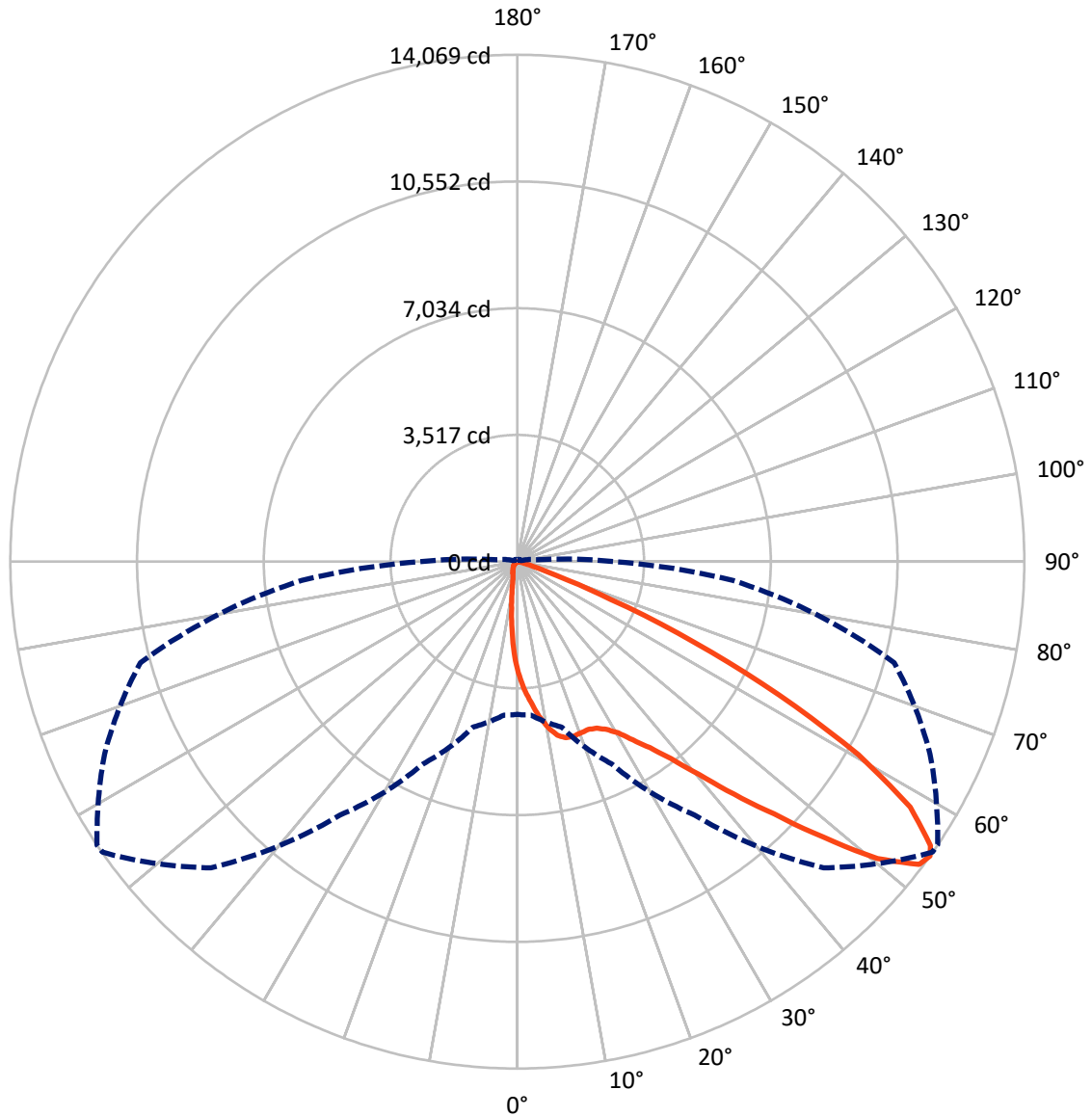
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	652.9	0.0	652.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	13154.1	0.0	13154.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	13807.0	0.0	13807.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.1	2.0
10°-20°	732.8	5.3
20°-30°	1269.1	9.2
30°-40°	2190.7	15.9
40°-50°	3728.6	27.0
50°-60°	3689.9	26.7
60°-70°	1684.2	12.2
70°-80°	216.3	1.6
80°-90°	24.4	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°	13807.0	100.0
0°-180°	13807.0	100.0

Coefficient of Utilization



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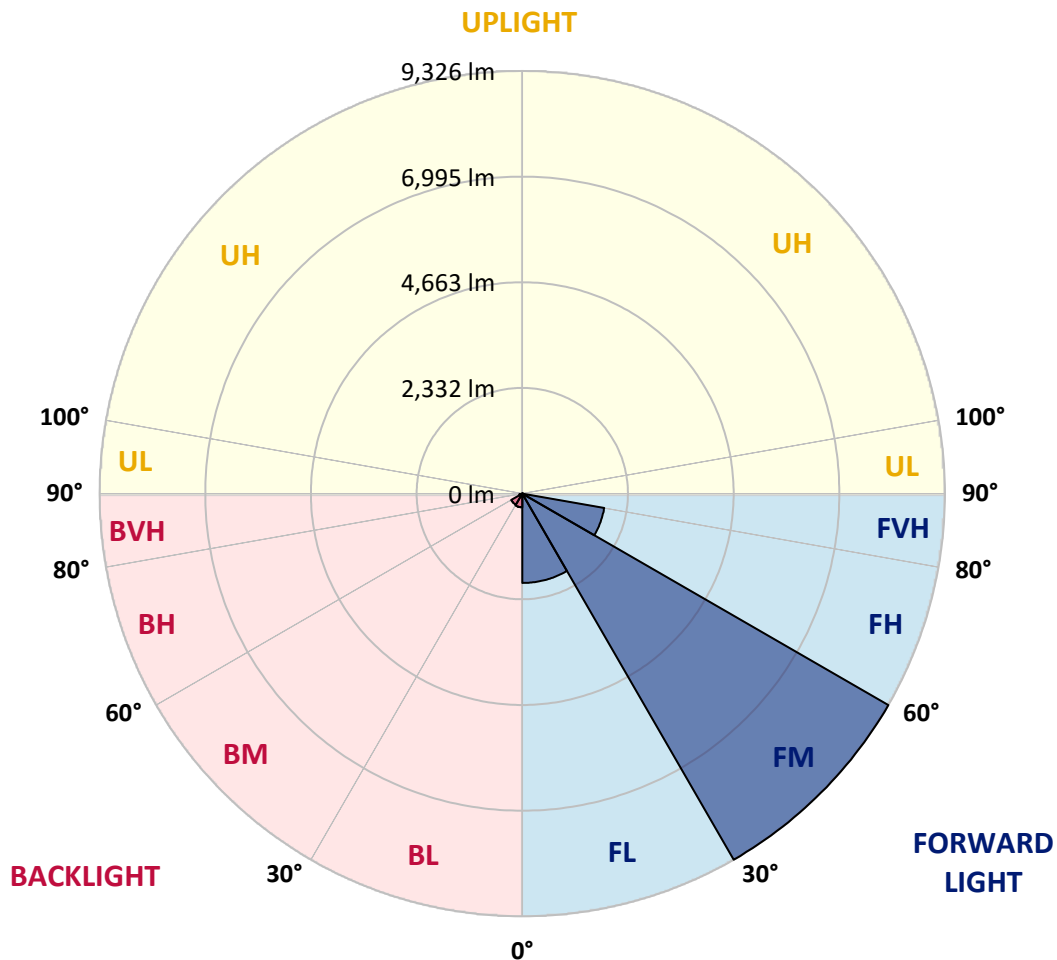
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1971.0	14.3			
FM (30°-60°)	9326.3	67.5			
FH (60°-80°)	1835.1	13.3			G2/5000
FVH (80°-90°)	21.8	0.2			G1/100
BL (0°-30°)	302.0	2.2	B1/500		
BM (30°-60°)	283.0	2.0	B1/1000		
BH (60°-80°)	65.4	0.5	B0/110		G0/110
BVH (80°-90°)	2.6	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5
2.5°	3898.4	3871.4	3834.2	3805.3	3737.3	3639.5	3536.1	3536.1	3436.4	3297.6	3156.0
5°	4496.5	4478.8	4442.5	4367.9	4291.5	4154.6	3946.9	3910.6	3732.6	3481.1	3216.6
7.5°	4739.6	4748.0	4749.9	4730.3	4694.0	4558.9	4353.0	4327.9	4043.8	3706.5	3295.7
10°	4506.7	4547.7	4587.8	4668.8	4783.4	4816.0	4699.6	4673.5	4394.0	3934.8	3381.4
12.5°	4160.2	4182.6	4204.9	4332.5	4562.6	4826.2	4948.3	4947.3	4710.7	4162.1	3490.4
15°	3999.0	4018.6	4020.5	4077.3	4276.6	4660.4	5054.5	5068.4	5020.0	4442.5	3607.8
17.5°	4032.6	4048.4	4035.4	4049.3	4153.7	4477.9	5042.4	5088.9	5270.6	4711.7	3714.0
20°	4251.5	4282.2	4231.9	4192.8	4224.5	4429.4	5001.4	5066.6	5447.6	4974.4	3810.9
22.5°	4644.6	4661.4	4598.0	4490.9	4435.0	4530.9	4990.2	5054.5	5598.5	5189.5	3866.8
25°	5081.5	5075.9	5006.0	4885.9	4768.5	4735.9	5063.8	5121.5	5723.3	5383.3	3883.5
27.5°	5518.4	5535.1	5417.8	5268.7	5128.1	5043.3	5228.7	5271.5	5864.0	5604.1	3904.0
30°	6026.0	5999.0	5883.5	5713.1	5551.9	5433.6	5494.1	5506.3	6057.7	5896.6	3958.1
32.5°	6686.5	6612.0	6482.5	6184.4	6068.9	5868.6	5883.5	5898.4	6293.4	6186.3	4023.3
35°	7582.6	7578.9	7325.5	6924.0	6642.7	6394.0	6328.8	6340.9	6650.2	6616.6	4167.7
37.5°	8661.3	8676.2	8387.5	7983.2	7465.3	7070.3	6936.2	6938.0	7192.3	7211.0	4387.5
40°	9539.8	9578.9	9406.6	9133.6	8622.2	8004.6	7779.2	7758.7	7954.3	7931.0	4701.4
42.5°	9918.0	9954.3	10018.6	10113.6	9832.3	9322.7	8790.8	8818.8	8878.4	8715.4	5053.5
45°	9732.6	9790.3	10042.8	10629.7	10894.2	10722.8	10088.4	9990.6	9738.2	9567.7	5407.5
47.5°	8960.4	9101.0	9523.0	10500.2	11426.1	12005.5	11552.8	11423.3	10598.9	10190.0	5632.9
50°	7690.7	7699.1	8286.9	9536.0	11150.4	12815.0	13047.9	12951.0	11401.0	10539.3	5746.6
52.5°	5575.2	5758.7	6297.1	7743.8	9956.2	12692.1	14000.9	13960.8	12228.2	10718.1	5910.5
54°	4238.4	4273.8	4752.7	6188.1	8584.0	12016.7	14059.5	14068.9	12639.0	10826.2	6007.4
55°	3474.6	3389.8	3892.9	5271.5	7647.8	11419.6	13867.6	13912.4	12823.4	10882.1	6079.1
57.5°	1646.9	1647.9	2032.6	2780.6	4789.9	8867.2	12694.9	12853.2	12843.9	10978.0	6299.9
60°	833.7	839.3	924.1	1283.6	2366.1	5894.7	10496.4	10873.7	11855.5	10992.0	6372.6
62.5°	583.1	576.6	562.6	617.6	995.8	2995.8	7814.6	8142.5	10072.6	10460.1	6141.6
65°	499.3	485.3	446.2	437.8	503.0	1193.3	4867.2	5401.9	7690.7	9057.2	5483.9
67.5°	426.6	421.1	385.7	364.2	355.8	519.8	2511.4	2792.7	5256.6	6510.4	4153.7
70°	362.4	359.6	338.1	311.1	287.8	311.1	931.5	1154.2	2929.7	3505.3	1959.9
72.5°	294.4	297.2	300.9	266.4	242.2	220.8	397.8	463.0	1225.9	1252.9	685.6
75°	258.0	255.2	255.2	232.0	202.1	163.9	218.9	235.7	375.4	348.4	159.3
77.5°	181.6	175.1	204.9	191.0	168.6	116.4	124.8	132.3	155.6	133.2	74.5
80°	125.8	125.8	131.3	171.4	151.8	84.8	76.4	82.0	92.2	79.2	42.9
82.5°	70.8	72.7	85.7	91.3	88.5	56.8	50.3	51.2	61.5	54.0	27.0
85°	8.4	14.0	49.4	48.4	36.3	25.2	27.9	28.9	38.2	33.5	15.8
87.5°	0.9	1.9	10.2	13.0	9.3	10.2	10.2	10.2	13.0	14.9	11.2
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°	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5	3067.5
2.5°	3079.6	3008.8	2840.2	2644.6	2519.8	2316.7	2145.3	2021.4	1990.7	1931.1	1948.8
5°	3075.9	2928.7	2585.0	2221.7	1834.2	1545.4	1330.2	1160.7	1086.2	1036.8	1002.3
7.5°	3077.8	2847.7	2296.2	1717.7	1254.8	971.6	772.2	668.8	599.9	571.0	574.8
10°	3083.4	2756.4	1960.9	1272.5	846.8	627.8	505.8	456.4	433.2	429.4	428.5
12.5°	3096.4	2656.7	1640.4	944.6	592.5	456.4	409.9	393.1	385.7	385.7	382.9
15°	3110.4	2546.8	1374.0	702.4	456.4	392.2	370.7	362.4	357.7	357.7	356.8
17.5°	3110.4	2420.1	1125.3	544.9	393.1	360.5	343.7	332.6	328.8	328.8	327.9
20°	3090.8	2272.9	904.5	438.7	356.8	330.7	313.9	301.8	297.2	295.3	294.4
22.5°	3022.8	2076.4	720.1	377.3	327.0	304.6	283.2	269.2	265.5	263.6	264.6
25°	2901.7	1854.7	570.1	331.6	300.0	272.9	254.3	244.1	240.3	240.3	241.3
27.5°	2776.9	1622.7	451.8	297.2	267.3	243.1	228.2	221.7	220.8	223.6	224.5
30°	2661.4	1389.8	366.1	269.2	238.5	218.0	207.7	205.9	205.9	206.8	207.7
32.5°	2532.8	1185.8	306.5	245.0	215.2	197.5	191.9	191.9	193.8	193.8	195.6
35°	2451.8	1010.7	269.2	221.7	197.5	182.6	178.9	179.8	182.6	186.3	188.2
37.5°	2408.0	871.0	245.0	203.1	180.7	170.5	166.7	168.6	175.1	181.6	182.6
40°	2411.7	765.7	225.4	187.2	167.7	156.5	153.7	159.3	165.8	172.3	173.3
42.5°	2452.7	687.5	206.8	168.6	156.5	140.7	139.7	145.3	148.1	154.6	155.6
45°	2501.2	630.6	187.2	149.0	136.0	122.0	123.0	127.6	131.3	141.6	143.5
47.5°	2516.1	591.5	164.9	126.7	111.8	107.1	108.1	110.9	118.3	127.6	128.6
50°	2532.8	567.3	143.5	107.1	95.0	94.1	95.0	96.9	101.5	105.3	104.3
52.5°	2604.5	566.4	125.8	93.2	81.0	82.9	83.8	82.9	79.2	73.6	71.7
54°	2671.6	569.2	117.4	86.6	74.5	77.3	76.4	71.7	62.4	56.8	54.0
55°	2725.6	572.0	112.7	82.0	70.8	71.7	72.7	63.3	51.2	45.6	43.8
57.5°	2831.8	565.4	101.5	71.7	62.4	58.7	57.8	41.9	27.9	24.2	22.4
60°	2778.7	510.5	92.2	61.5	53.1	47.5	39.1	23.3	14.0	10.2	10.2
62.5°	2570.1	433.2	82.0	50.3	43.8	36.3	20.5	13.0	6.5	3.7	2.8
65°	2299.0	364.2	73.6	40.1	34.5	23.3	11.2	8.4	2.8	0.0	0.0
67.5°	1709.4	270.1	62.4	31.7	26.1	14.9	7.5	4.7	0.9	0.0	0.0
70°	791.8	164.9	53.1	24.2	18.6	11.2	5.6	2.8	0.0	0.0	0.0
72.5°	227.3	103.4	43.8	17.7	13.0	9.3	4.7	1.9	0.9	0.0	0.0
75°	79.2	82.9	32.6	13.0	10.2	6.5	3.7	1.9	0.9	0.0	0.0
77.5°	47.5	67.1	20.5	11.2	8.4	5.6	3.7	1.9	0.9	0.9	0.0
80°	27.0	44.7	13.0	9.3	7.5	4.7	2.8	1.9	0.9	0.9	0.0
82.5°	14.9	21.4	10.2	8.4	6.5	4.7	2.8	1.9	0.9	0.9	0.9
85°	12.1	11.2	8.4	7.5	5.6	3.7	2.8	0.9	0.0	0.0	0.0
87.5°	9.3	7.5	7.5	7.5	5.6	3.7	2.8	0.9	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)