

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: P454050

Luminaire Tested: **GALN-SA5A-827-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454050
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-SA5A-827-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 13793 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

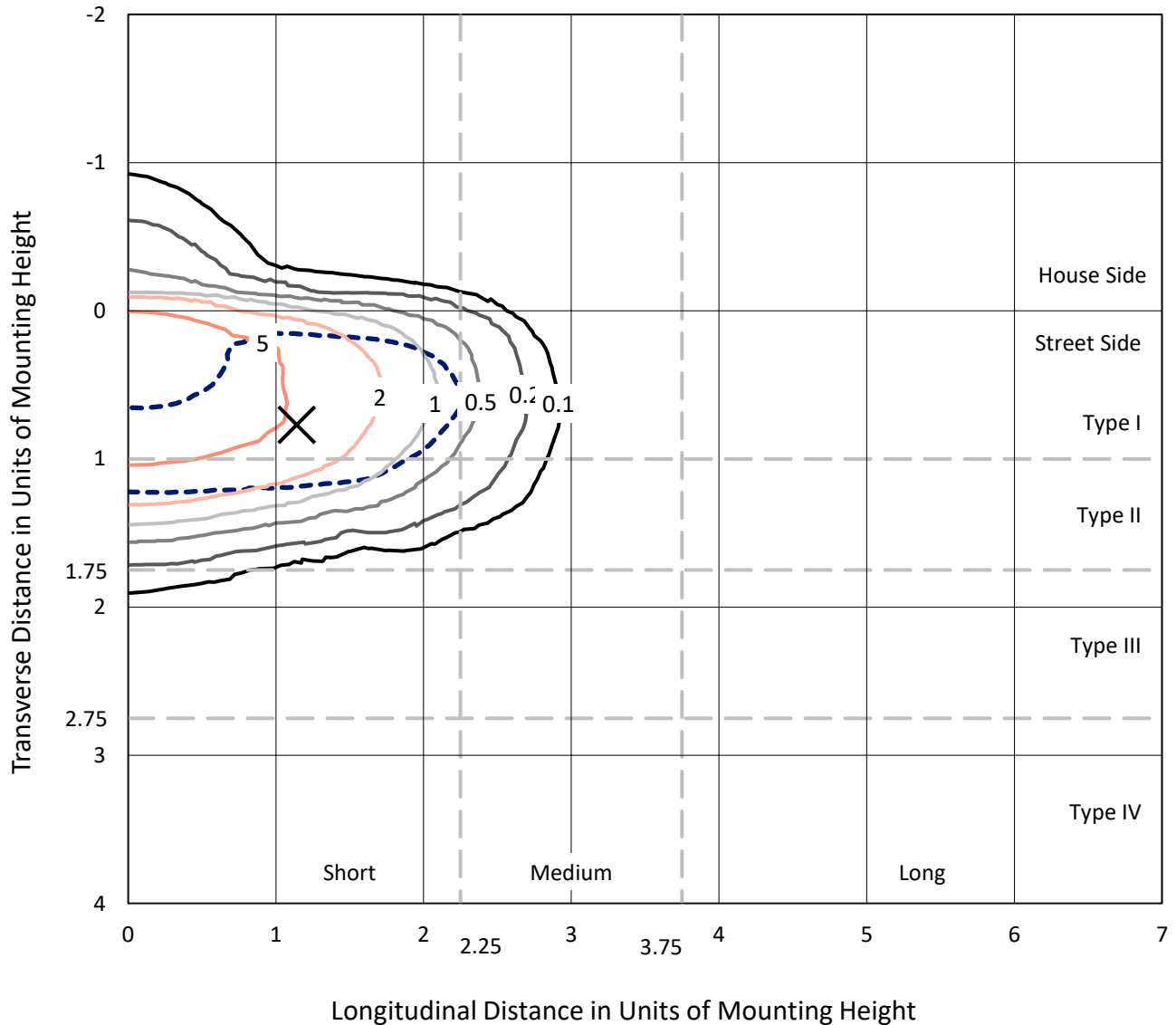
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

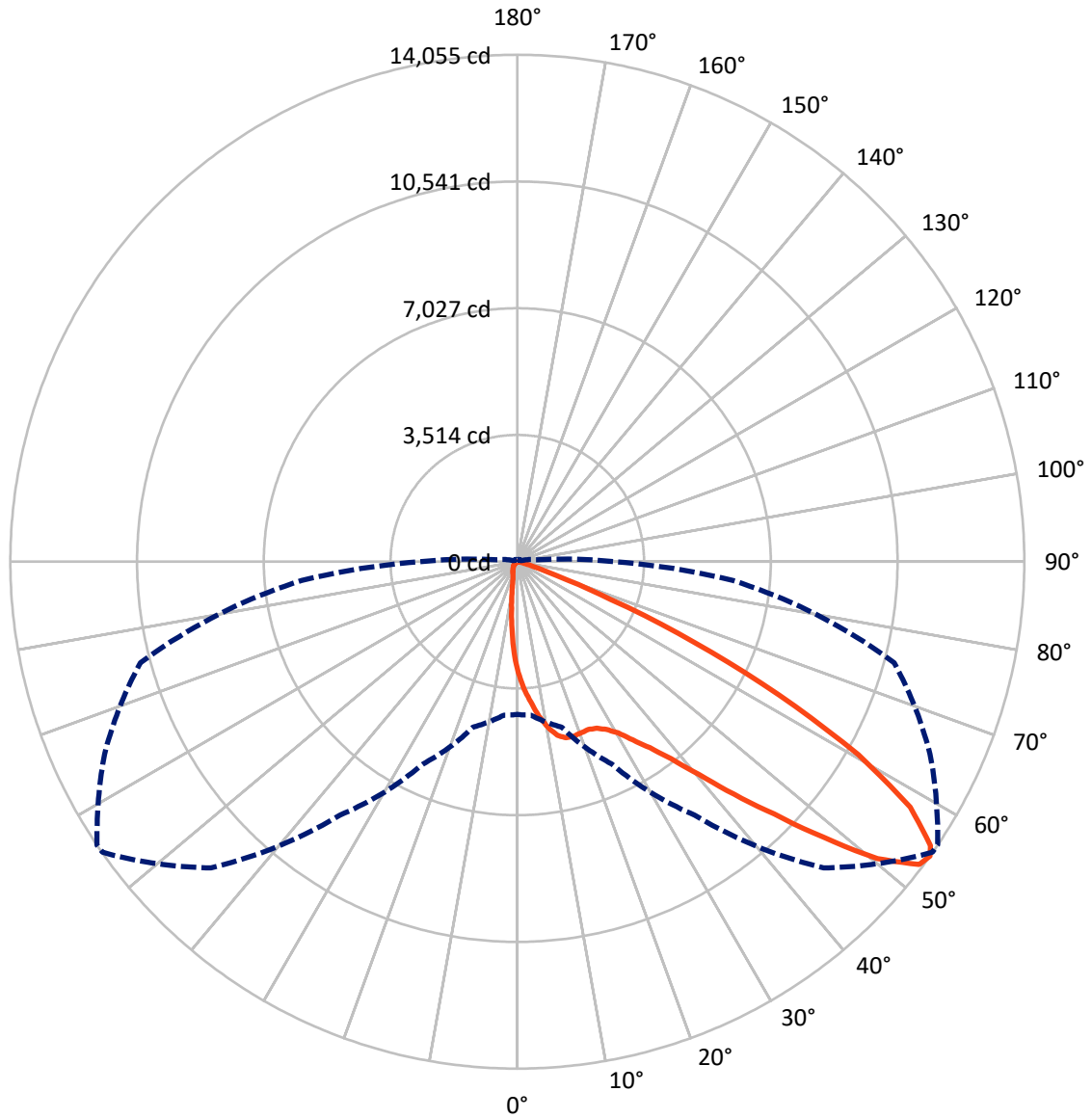
✕ Max cd
 - - - 1/2 Max cd



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	652.2	0.0	652.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	13140.8	0.0	13140.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	13793.0	0.0	13793.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.8	2.0
10°-20°	732.0	5.3
20°-30°	1267.8	9.2
30°-40°	2188.5	15.9
40°-50°	3724.8	27.0
50°-60°	3686.2	26.7
60°-70°	1682.5	12.2
70°-80°	216.1	1.6
80°-90°	24.3	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°	13793.0	100.0
0°-180°	13793.0	100.0

Coefficient of Utilization

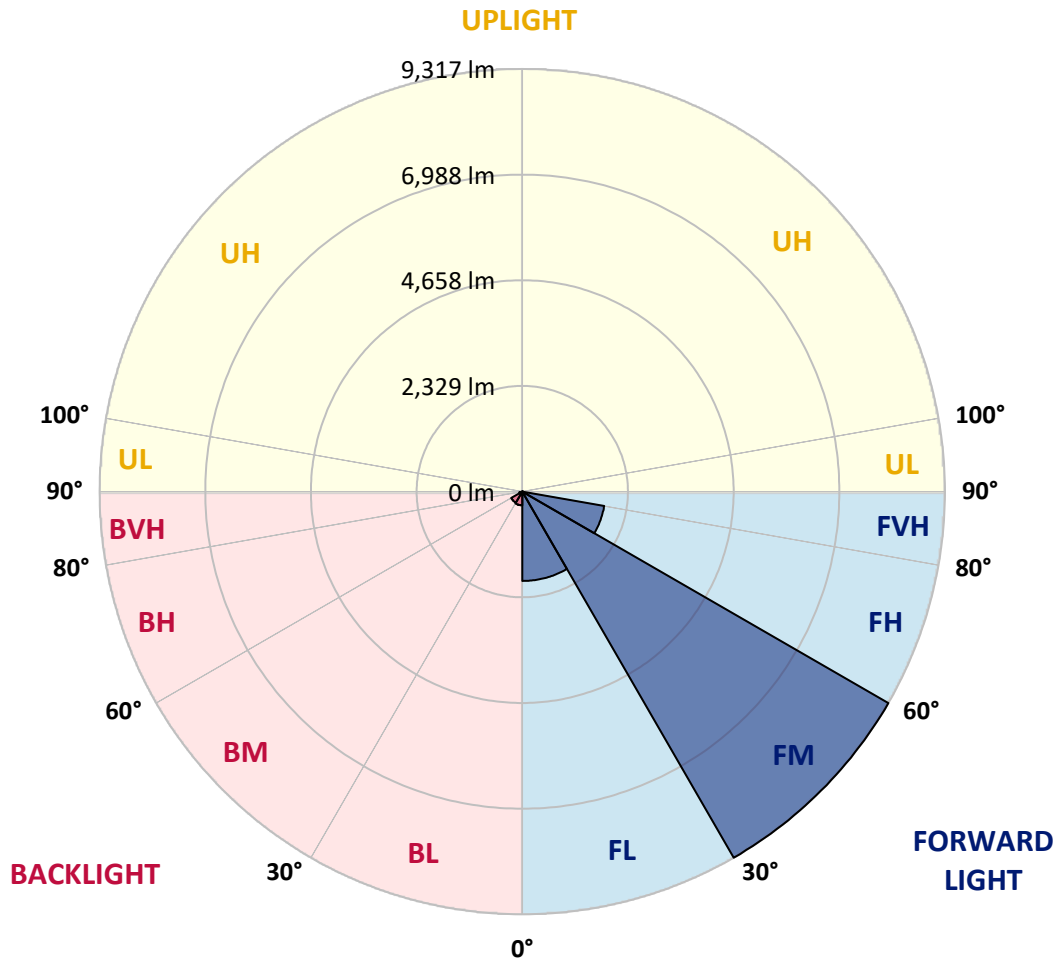


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1969.0	14.3			
FM (30°-60°)	9316.8	67.5			
FH (60°-80°)	1833.2	13.3			G2/5000
FVH (80°-90°)	21.7	0.2			G1/100
BL (0°-30°)	301.6	2.2	B1/500		
BM (30°-60°)	282.7	2.0	B1/1000		
BH (60°-80°)	65.3	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°	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4
2.5°	3894.5	3867.5	3830.3	3801.4	3733.5	3635.8	3532.5	3532.5	3432.9	3294.3	3152.8
5°	4491.9	4474.2	4437.9	4363.5	4287.2	4150.4	3942.9	3906.6	3728.8	3477.6	3213.3
7.5°	4734.8	4743.2	4745.0	4725.5	4689.2	4554.3	4348.6	4323.5	4039.7	3702.8	3292.4
10°	4502.2	4543.1	4583.1	4664.1	4778.5	4811.1	4694.8	4668.7	4389.6	3930.8	3378.0
12.5°	4156.0	4178.3	4200.6	4328.1	4558.0	4821.3	4943.3	4942.3	4706.0	4157.8	3486.9
15°	3995.0	4014.5	4016.4	4073.2	4272.3	4655.7	5049.3	5063.3	5014.9	4437.9	3604.1
17.5°	4028.5	4044.3	4031.3	4045.2	4149.5	4473.3	5037.2	5083.8	5265.2	4706.9	3710.2
20°	4247.2	4277.9	4227.6	4188.6	4220.2	4424.9	4996.3	5061.4	5442.0	4969.3	3807.0
22.5°	4639.9	4656.6	4593.4	4486.3	4430.5	4526.4	4985.1	5049.3	5592.8	5184.3	3862.8
25°	5076.3	5070.7	5001.0	4880.9	4763.7	4731.1	5058.6	5116.3	5717.5	5377.8	3879.6
27.5°	5512.8	5529.5	5412.3	5263.4	5122.9	5038.2	5223.4	5266.2	5858.0	5598.4	3900.1
30°	6019.9	5993.0	5877.6	5707.3	5546.3	5428.1	5488.6	5500.7	6051.6	5890.6	3954.0
32.5°	6679.7	6605.3	6475.9	6178.1	6062.7	5862.7	5877.6	5892.4	6287.0	6180.0	4019.2
35°	7574.9	7571.2	7318.1	6917.0	6636.0	6387.5	6322.4	6334.5	6643.4	6609.9	4163.4
37.5°	8652.6	8667.4	8379.0	7975.1	7457.7	7063.1	6929.1	6931.0	7185.0	7203.6	4383.0
40°	9530.1	9569.2	9397.0	9124.4	8613.5	7996.5	7771.3	7750.8	7946.2	7923.0	4696.6
42.5°	9907.9	9944.2	10008.4	10103.3	9822.3	9313.3	8781.9	8809.8	8869.4	8706.5	5048.4
45°	9722.7	9780.4	10032.6	10618.9	10883.2	10711.9	10078.2	9980.5	9728.3	9558.0	5402.0
47.5°	8951.3	9091.8	9513.3	10489.5	11414.5	11993.3	11541.1	11411.7	10588.2	10179.6	5627.2
50°	7682.9	7691.3	8278.5	9526.4	11139.1	12802.0	13034.7	12937.9	11389.4	10528.6	5740.8
52.5°	5569.5	5752.9	6290.7	7735.9	9946.1	12679.2	13986.7	13946.6	12215.8	10707.3	5904.5
54°	4234.2	4269.5	4747.8	6181.9	8575.3	12004.5	14045.3	14054.6	12626.1	10815.2	6001.3
55°	3471.1	3386.4	3888.9	5266.2	7640.1	11408.0	13853.6	13898.2	12810.4	10871.1	6073.0
57.5°	1645.3	1646.2	2030.5	2777.8	4785.1	8858.2	12682.0	12840.2	12830.9	10966.9	6293.5
60°	832.9	838.5	923.1	1282.3	2363.7	5888.7	10485.8	10862.7	11843.5	10980.9	6366.1
62.5°	582.5	576.0	562.1	617.0	994.8	2992.8	7806.7	8134.2	10062.4	10449.5	6135.3
65°	498.8	484.8	445.7	437.4	502.5	1192.1	4862.3	5396.4	7682.9	9048.1	5478.3
67.5°	426.2	420.6	385.3	363.9	355.5	519.3	2508.9	2789.9	5251.3	6503.8	4149.5
70°	362.0	359.2	337.8	310.8	287.5	310.8	930.6	1153.0	2926.7	3501.8	1957.9
72.5°	294.1	296.9	300.6	266.1	242.0	220.5	397.4	462.5	1224.6	1251.6	684.9
75°	257.8	255.0	255.0	231.7	201.9	163.8	218.7	235.4	375.0	348.0	159.1
77.5°	181.5	174.9	204.7	190.8	168.4	116.3	124.7	132.1	155.4	133.1	74.4
80°	125.6	125.6	131.2	171.2	151.7	84.7	76.3	81.9	92.1	79.1	42.8
82.5°	70.7	72.6	85.6	91.2	88.4	56.8	50.3	51.2	61.4	54.0	27.0
85°	8.4	14.0	49.3	48.4	36.3	25.1	27.9	28.8	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°	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4	3064.4
2.5°	3076.5	3005.8	2837.3	2641.9	2517.2	2314.4	2143.1	2019.4	1988.7	1929.1	1946.8
5°	3072.8	2925.8	2582.4	2219.4	1832.3	1543.8	1328.9	1159.5	1085.1	1035.7	1001.3
7.5°	3074.6	2844.8	2293.9	1716.0	1253.5	970.6	771.5	668.2	599.3	570.4	574.2
10°	3080.2	2753.6	1958.9	1271.2	845.9	627.2	505.3	456.0	432.7	429.0	428.1
12.5°	3093.3	2654.0	1638.8	943.6	591.9	456.0	409.5	392.7	385.3	385.3	382.5
15°	3107.2	2544.2	1372.6	701.7	456.0	391.8	370.4	362.0	357.3	357.3	356.4
17.5°	3107.2	2417.7	1124.1	544.4	392.7	360.1	343.4	332.2	328.5	328.5	327.6
20°	3087.7	2270.6	903.6	438.3	356.4	330.4	313.6	301.5	296.9	295.0	294.1
22.5°	3019.7	2074.3	719.3	376.9	326.6	304.3	282.9	268.9	265.2	263.4	264.3
25°	2898.8	1852.8	569.5	331.3	299.6	272.7	254.0	243.8	240.1	240.1	241.0
27.5°	2774.1	1621.1	451.3	296.9	267.1	242.9	228.0	221.5	220.5	223.3	224.3
30°	2658.7	1388.4	365.7	268.9	238.2	217.8	207.5	205.7	205.7	206.6	207.5
32.5°	2530.3	1184.6	306.2	244.7	215.0	197.3	191.7	191.7	193.6	193.6	195.4
35°	2449.3	1009.7	268.9	221.5	197.3	182.4	178.7	179.6	182.4	186.1	188.0
37.5°	2405.6	870.1	244.7	202.9	180.5	170.3	166.6	168.4	174.9	181.5	182.4
40°	2409.3	764.9	225.2	187.0	167.5	156.3	153.5	159.1	165.6	172.2	173.1
42.5°	2450.2	686.8	206.6	168.4	156.3	140.5	139.6	145.2	148.0	154.5	155.4
45°	2498.6	630.0	187.0	148.9	135.9	121.9	122.8	127.5	131.2	141.4	143.3
47.5°	2513.5	590.9	164.7	126.6	111.7	107.0	107.9	110.7	118.2	127.5	128.4
50°	2530.3	566.7	143.3	107.0	94.9	94.0	94.9	96.8	101.4	105.2	104.2
52.5°	2601.9	565.8	125.6	93.1	81.0	82.8	83.8	82.8	79.1	73.5	71.7
54°	2668.9	568.6	117.3	86.5	74.4	77.2	76.3	71.7	62.3	56.8	54.0
55°	2722.9	571.4	112.6	81.9	70.7	71.7	72.6	63.3	51.2	45.6	43.7
57.5°	2829.0	564.9	101.4	71.7	62.3	58.6	57.7	41.9	27.9	24.2	22.3
60°	2775.9	510.0	92.1	61.4	53.0	47.5	39.1	23.3	14.0	10.2	10.2
62.5°	2567.5	432.7	81.9	50.3	43.7	36.3	20.5	13.0	6.5	3.7	2.8
65°	2296.7	363.9	73.5	40.0	34.4	23.3	11.2	8.4	2.8	0.0	0.0
67.5°	1707.6	269.9	62.3	31.6	26.1	14.9	7.4	4.7	0.9	0.0	0.0
70°	791.0	164.7	53.0	24.2	18.6	11.2	5.6	2.8	0.0	0.0	0.0
72.5°	227.1	103.3	43.7	17.7	13.0	9.3	4.7	1.9	0.9	0.0	0.0
75°	79.1	82.8	32.6	13.0	10.2	6.5	3.7	1.9	0.9	0.0	0.0
77.5°	47.5	67.0	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	7.4	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	7.4	5.6	3.7	2.8	0.9	0.0	0.0	0.0
87.5°	9.3	7.4	7.4	7.4	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)