

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: P453602

Luminaire Tested: **GALN-SA4C-827-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453602  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4C-827-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16369 lumens  
Efficiency: N/A  
Efficacy: 76.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

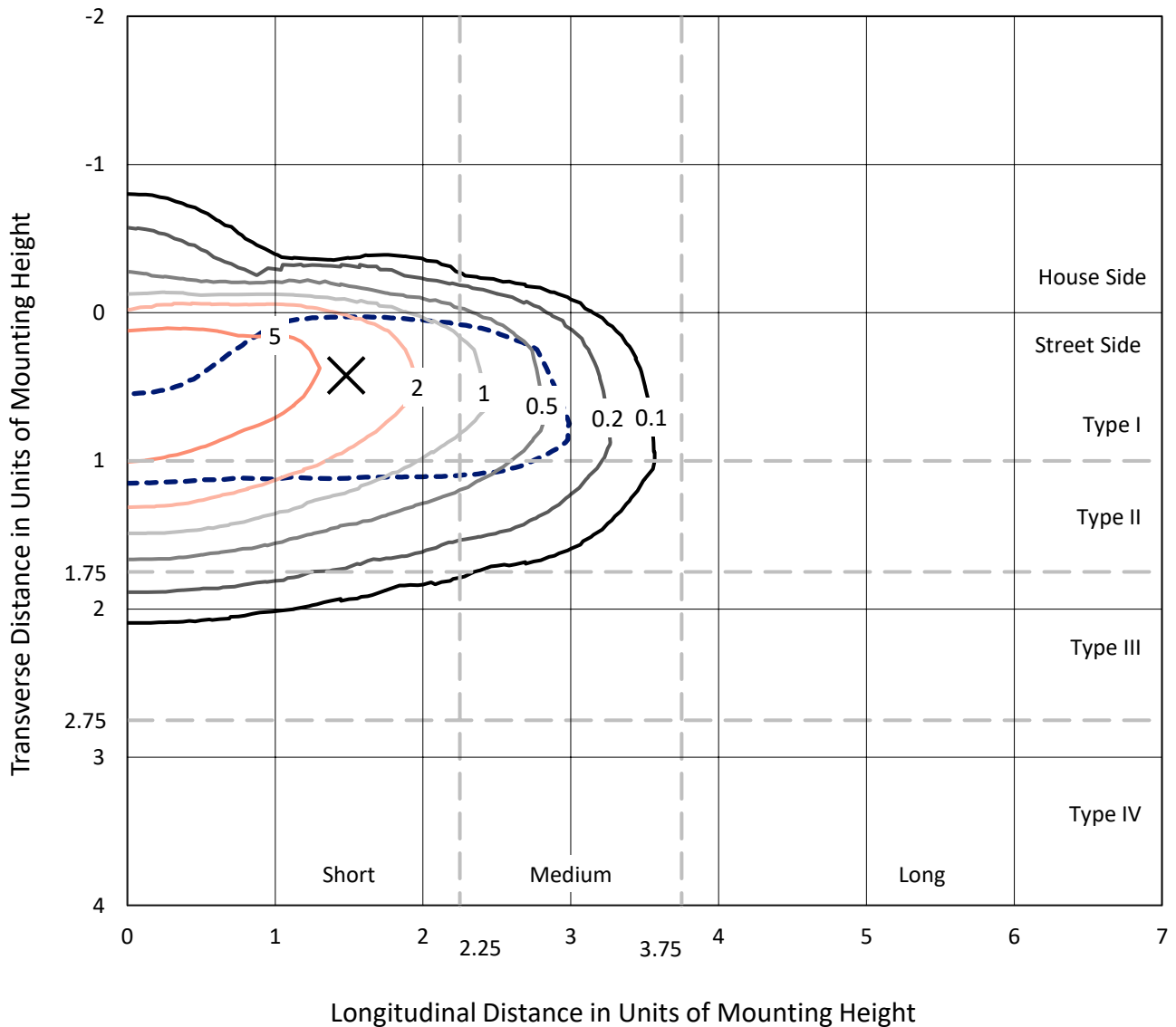
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

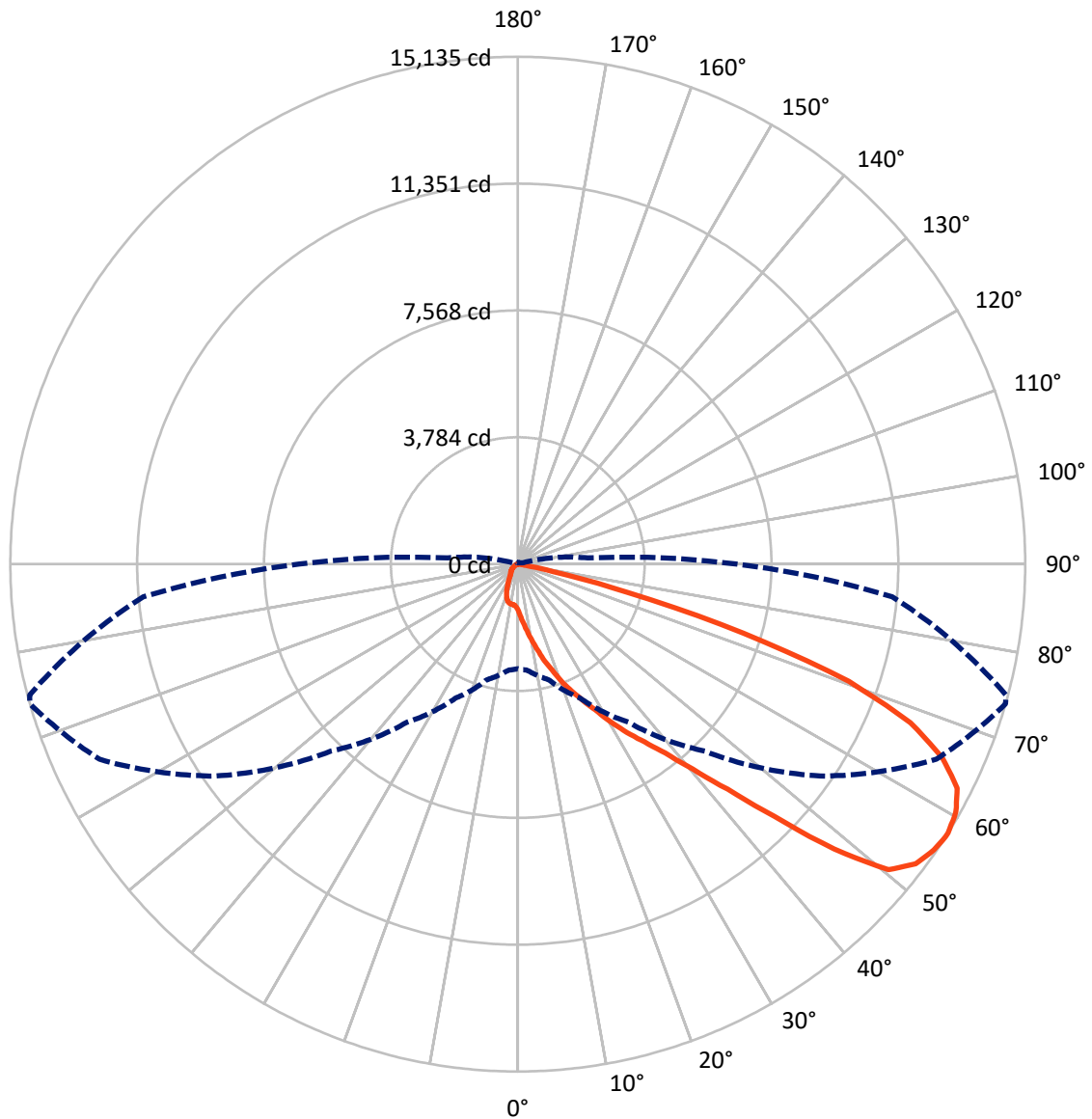
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 57-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	944.1	0.0	944.1
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	15424.9	0.0	15424.9
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	16369.0	0.0	16369.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.5	1.0
10°-20°	652.2	4.0
20°-30°	1395.6	8.5
30°-40°	2565.0	15.7
40°-50°	3932.3	24.0
50°-60°	4159.8	25.4
60°-70°	2716.5	16.6
70°-80°	742.2	4.5
80°-90°	40.0	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°	16369.0	100.0
0°-180°	16369.0	100.0

**Coefficient of Utilization**

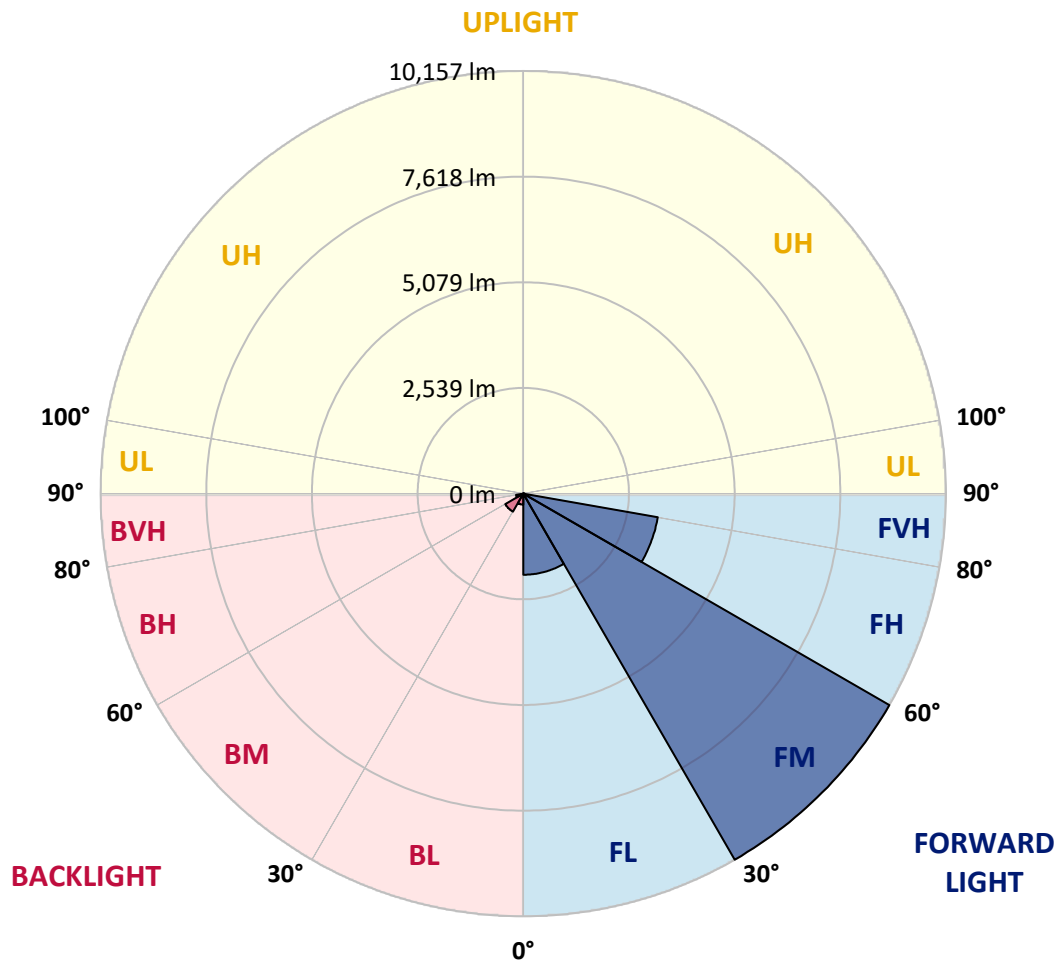


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1949.5	11.9			
FM	(30°-60°)	10157.3	62.1			
FH	(60°-80°)	3281.4	20.0			G2/5000
FVH	(80°-90°)	36.7	0.2			G1/100
BL	(0°-30°)	263.7	1.6	B1/500		
BM	(30°-60°)	499.8	3.1	B1/1000		
BH	(60°-80°)	177.3	1.1	B1/500		G1/500
BVH	(80°-90°)	3.3	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°	65°	74°	75°	85°
0°	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9
2.5°	2006.0	1987.9	1951.8	1939.4	1886.2	1803.7	1731.4	1634.2	1557.4	1549.4	1456.8
5°	2686.4	2645.7	2628.7	2547.4	2419.7	2299.9	2094.2	1938.2	1758.5	1745.0	1558.5
7.5°	3341.9	3285.4	3268.4	3191.6	3042.4	2853.7	2586.9	2303.3	2018.5	1992.5	1695.2
10°	3816.5	3824.5	3793.9	3743.1	3622.2	3430.0	3101.2	2713.5	2307.8	2275.0	1848.9
12.5°	4156.7	4155.6	4161.2	4160.1	4095.7	3949.9	3604.1	3157.7	2626.5	2562.1	2025.2
15°	4378.2	4381.6	4398.6	4457.3	4464.1	4373.7	4085.5	3582.6	2996.1	2915.8	2216.2
17.5°	4602.0	4625.7	4652.9	4708.2	4758.0	4721.8	4518.4	4025.6	3330.6	3270.7	2420.8
20°	4971.6	5004.3	4988.5	5022.4	5048.4	5051.8	4894.7	4434.7	3736.3	3635.7	2654.7
22.5°	5562.6	5561.5	5520.8	5459.8	5408.9	5406.7	5264.3	4855.2	4104.7	4007.5	2889.8
25°	6309.7	6313.1	6234.0	6059.9	5933.3	5778.5	5614.6	5223.6	4499.2	4379.4	3137.3
27.5°	7166.3	7144.9	7025.1	6785.5	6534.6	6270.1	6033.9	5651.9	4917.3	4817.9	3421.0
30°	7936.0	7928.1	7787.9	7495.2	7165.2	6899.6	6557.2	6188.7	5458.7	5336.6	3738.6
32.5°	8652.5	8663.8	8469.4	8166.5	7847.8	7541.5	7179.9	6701.8	5989.8	5816.9	4084.4
35°	9211.9	9223.2	9022.1	8770.0	8442.3	8188.0	7843.3	7248.8	6514.2	6368.4	4482.2
37.5°	9510.3	9525.0	9408.6	9218.7	9014.1	8886.4	8565.5	7952.9	7151.6	7063.5	4952.4
40°	9566.8	9583.7	9532.9	9482.0	9470.7	9562.3	9468.5	8782.5	8035.4	7897.5	5653.1
42.5°	9397.3	9419.9	9442.5	9555.5	9786.0	10121.7	10448.3	9908.1	9173.5	8988.2	6509.7
45°	8952.0	8949.7	9039.0	9331.7	9848.2	10564.7	11472.2	11317.4	10724.1	10503.7	7720.1
47.5°	8190.3	8179.0	8372.2	8789.2	9593.9	10646.1	12307.4	13028.5	12703.0	12499.6	9020.9
50°	7029.6	7085.0	7389.0	7971.0	8962.2	10399.7	12565.1	14150.7	14327.0	14111.2	10072.0
52.5°	5670.0	5667.7	6144.7	6934.7	8026.4	9857.2	12385.4	14354.1	14854.8	14689.8	10589.6
55°	4196.3	4225.7	4721.8	5518.6	6811.5	8867.2	11798.9	14145.1	15056.0	14939.6	10930.9
57°	3121.5	3173.5	3571.3	4414.4	5753.6	7887.4	11017.9	13771.0	15135.1	15071.8	11214.6
57.5°	2913.5	2915.8	3303.5	4069.7	5444.0	7511.0	10794.1	13615.0	15132.8	15097.8	11260.9
60°	1793.6	1850.1	2117.9	2750.8	3984.9	5862.1	9294.4	12718.8	15015.3	15066.1	11458.7
62.5°	1073.7	1097.4	1271.4	1657.9	2568.9	4278.8	7606.0	11571.7	14709.0	14863.8	11445.1
65°	690.5	696.2	775.3	1003.6	1606.0	2892.1	5861.0	10056.2	13916.8	14201.6	10997.6
67.5°	533.4	542.5	574.1	658.9	931.3	1801.5	4145.4	8438.9	12635.2	13002.5	9912.6
70°	473.5	478.1	489.4	516.5	615.9	1017.1	2579.0	6592.2	10477.7	10581.7	7757.4
72.5°	386.5	398.9	434.0	443.0	488.2	635.1	1435.3	4424.6	7039.8	7065.8	4339.8
75°	299.5	301.8	353.7	379.7	411.4	437.4	640.8	2230.9	3381.4	3200.6	1672.6
77.5°	223.8	233.9	257.7	290.5	335.7	313.1	287.1	840.8	1049.9	1030.7	486.0
80°	143.5	149.2	179.7	218.1	261.1	204.6	161.6	246.4	230.6	237.3	116.4
82.5°	72.3	73.5	115.3	177.4	166.1	102.8	101.7	100.6	85.9	84.8	54.2
85°	7.9	17.0	74.6	101.7	74.6	33.9	47.5	46.3	45.2	46.3	31.6
87.5°	1.1	1.1	12.4	14.7	10.2	11.3	13.6	14.7	18.1	17.0	13.6
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°	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9	1370.9
2.5°	1411.6	1366.4	1282.7	1202.5	1142.6	1104.2	1054.4	1036.4	1010.4	1007.0	994.5
5°	1472.6	1386.7	1240.9	1125.6	1033.0	962.9	901.9	851.0	810.3	801.3	805.8
7.5°	1559.6	1431.9	1228.5	1071.4	942.6	822.8	725.6	665.7	622.7	606.9	609.2
10°	1657.9	1491.8	1226.2	1013.8	817.1	670.2	563.9	510.8	486.0	476.9	466.8
12.5°	1774.3	1560.7	1220.6	924.5	679.2	534.6	458.8	427.2	403.5	396.7	396.7
15°	1905.4	1634.2	1193.4	813.7	551.5	441.9	391.0	366.2	358.3	351.5	351.5
17.5°	2042.2	1706.5	1136.9	677.0	457.7	378.6	347.0	332.3	321.0	313.1	313.1
20°	2198.2	1777.7	1046.5	556.0	386.5	337.9	313.1	296.1	287.1	280.3	278.0
22.5°	2346.2	1835.4	931.3	456.6	336.8	304.0	281.4	263.3	254.3	250.9	250.9
25°	2499.9	1870.4	792.2	377.5	307.4	275.8	250.9	236.2	228.3	226.0	224.9
27.5°	2649.1	1890.8	670.2	330.0	280.3	249.8	226.0	214.7	206.8	204.6	205.7
30°	2829.9	1894.1	551.5	296.1	256.5	224.9	203.4	193.3	188.7	186.5	185.3
32.5°	3013.0	1889.6	463.4	275.8	233.9	203.4	185.3	177.4	174.0	170.7	170.7
35°	3218.7	1865.9	394.4	255.4	212.5	185.3	169.5	162.7	158.2	154.8	153.7
37.5°	3474.1	1853.5	354.9	232.8	193.3	168.4	153.7	146.9	143.5	139.0	137.9
40°	3876.4	1908.8	342.4	212.5	174.0	152.6	139.0	131.1	126.6	122.1	120.9
42.5°	4378.2	2006.0	322.1	192.1	157.1	137.9	124.3	115.3	107.4	101.7	99.5
45°	5028.1	2133.7	290.5	170.7	142.4	122.1	109.6	98.3	88.2	83.6	82.5
47.5°	5709.6	2256.9	262.2	153.7	126.6	108.5	94.9	82.5	73.5	70.1	68.9
50°	6127.7	2281.8	244.1	134.5	110.8	93.8	80.2	68.9	63.3	59.9	59.9
52.5°	6318.7	2242.2	219.3	117.5	96.1	82.5	68.9	59.9	56.5	54.2	53.1
55°	6452.1	2181.2	186.5	101.7	82.5	70.1	61.0	54.2	49.7	47.5	46.3
57°	6530.1	2098.7	161.6	89.3	71.2	61.0	54.2	48.6	44.1	39.6	39.6
57.5°	6533.4	2067.1	154.8	88.2	67.8	58.8	53.1	47.5	41.8	37.3	36.2
60°	6432.9	1850.1	124.3	74.6	54.2	49.7	44.1	37.3	29.4	24.9	23.7
62.5°	6109.6	1574.3	102.8	63.3	44.1	38.4	31.6	28.3	20.3	14.7	14.7
65°	5620.3	1277.1	88.2	50.9	36.2	28.3	21.5	20.3	12.4	6.8	5.7
67.5°	4912.8	994.5	74.6	41.8	30.5	20.3	14.7	13.6	6.8	2.3	0.0
70°	3743.1	678.1	62.2	33.9	22.6	14.7	10.2	7.9	4.5	1.1	0.0
72.5°	2157.5	373.0	52.0	26.0	17.0	11.3	7.9	4.5	4.5	0.0	0.0
75°	770.8	160.5	39.6	19.2	13.6	9.0	5.7	2.3	3.4	1.1	0.0
77.5°	245.2	85.9	26.0	14.7	11.3	6.8	4.5	2.3	2.3	1.1	0.0
80°	72.3	45.2	15.8	12.4	7.9	5.7	3.4	1.1	2.3	1.1	0.0
82.5°	39.6	22.6	12.4	9.0	7.9	4.5	3.4	1.1	1.1	1.1	0.0
85°	20.3	13.6	10.2	9.0	7.9	4.5	3.4	1.1	0.0	1.1	1.1
87.5°	11.3	10.2	10.2	9.0	7.9	5.7	3.4	1.1	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)