

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: P647403

Luminaire Tested: **GALN-SA4D-835-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647403  
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-SA4D-835-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 1200mA 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: 19184.3 lumens  
Efficiency: N/A  
Efficacy: 78.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

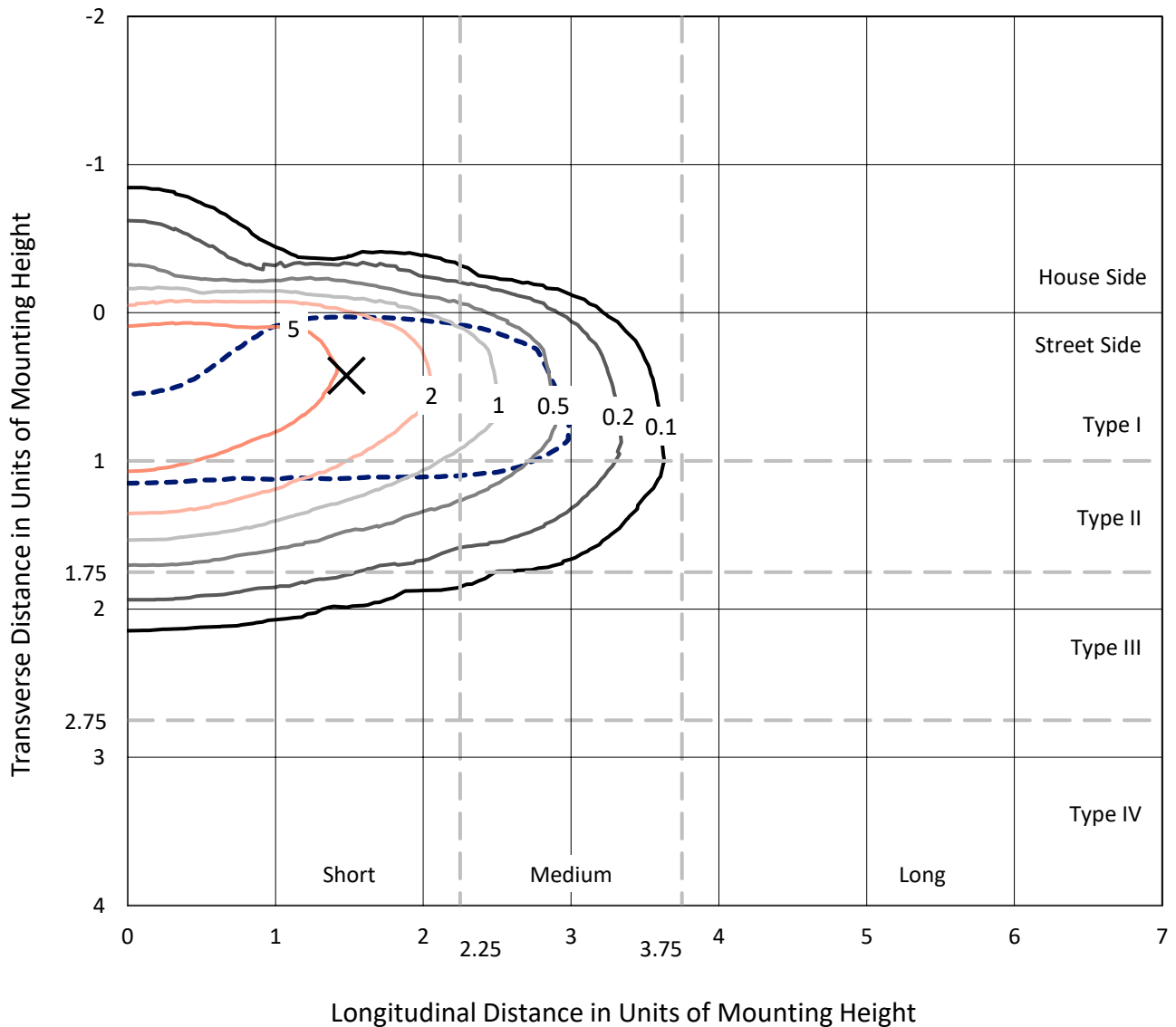
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

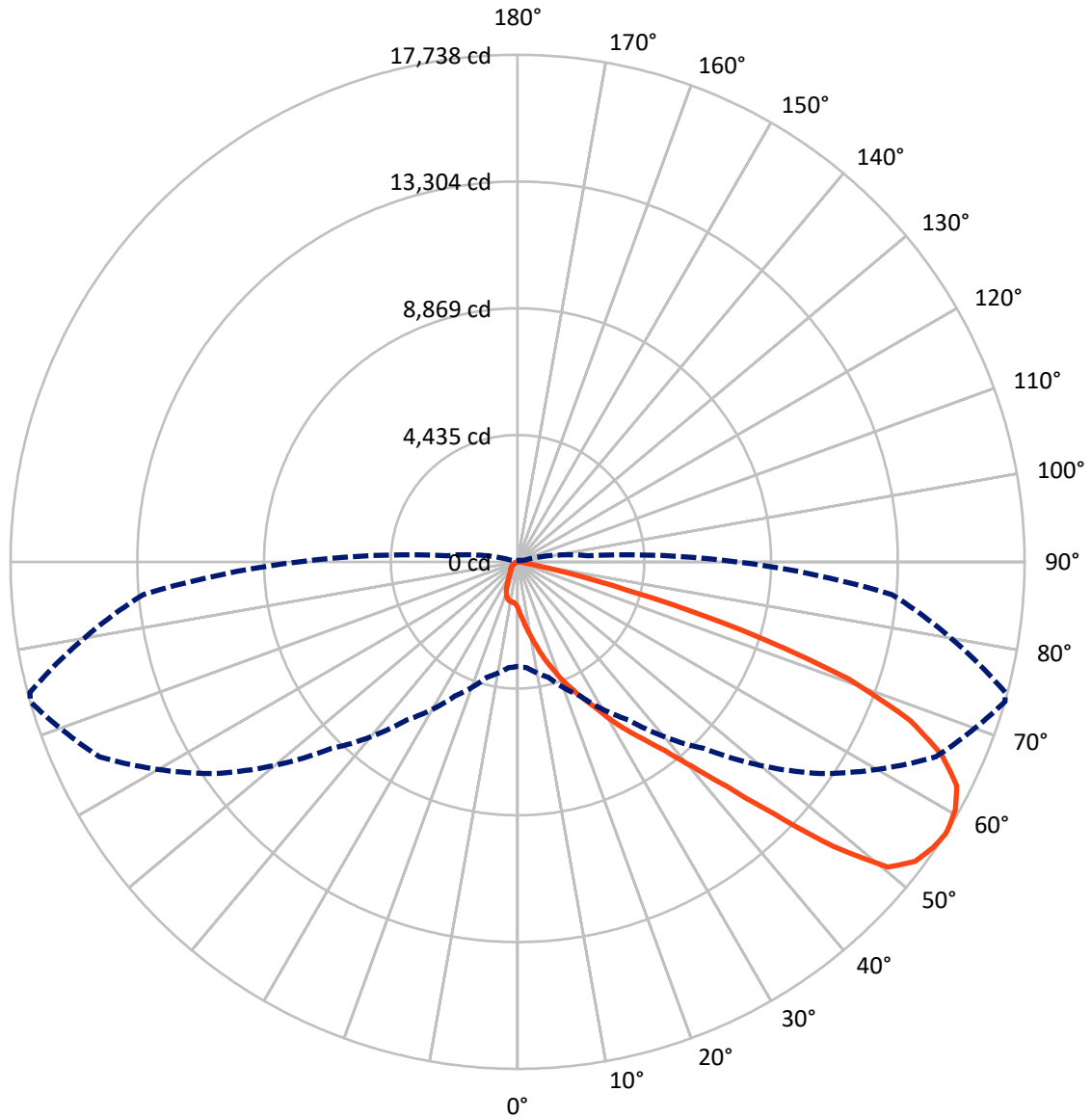
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 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	1106.5	0.0	1106.5
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	18077.8	0.0	18077.8
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	19184.3	0.0	19184.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.9	1.0
10°-20°	764.4	4.0
20°-30°	1635.6	8.5
30°-40°	3006.2	15.7
40°-50°	4608.6	24.0
50°-60°	4875.2	25.4
60°-70°	3183.7	16.6
70°-80°	869.9	4.5
80°-90°	46.8	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°	19184.3	100.0
0°-180°	19184.3	100.0

**Coefficient of Utilization**

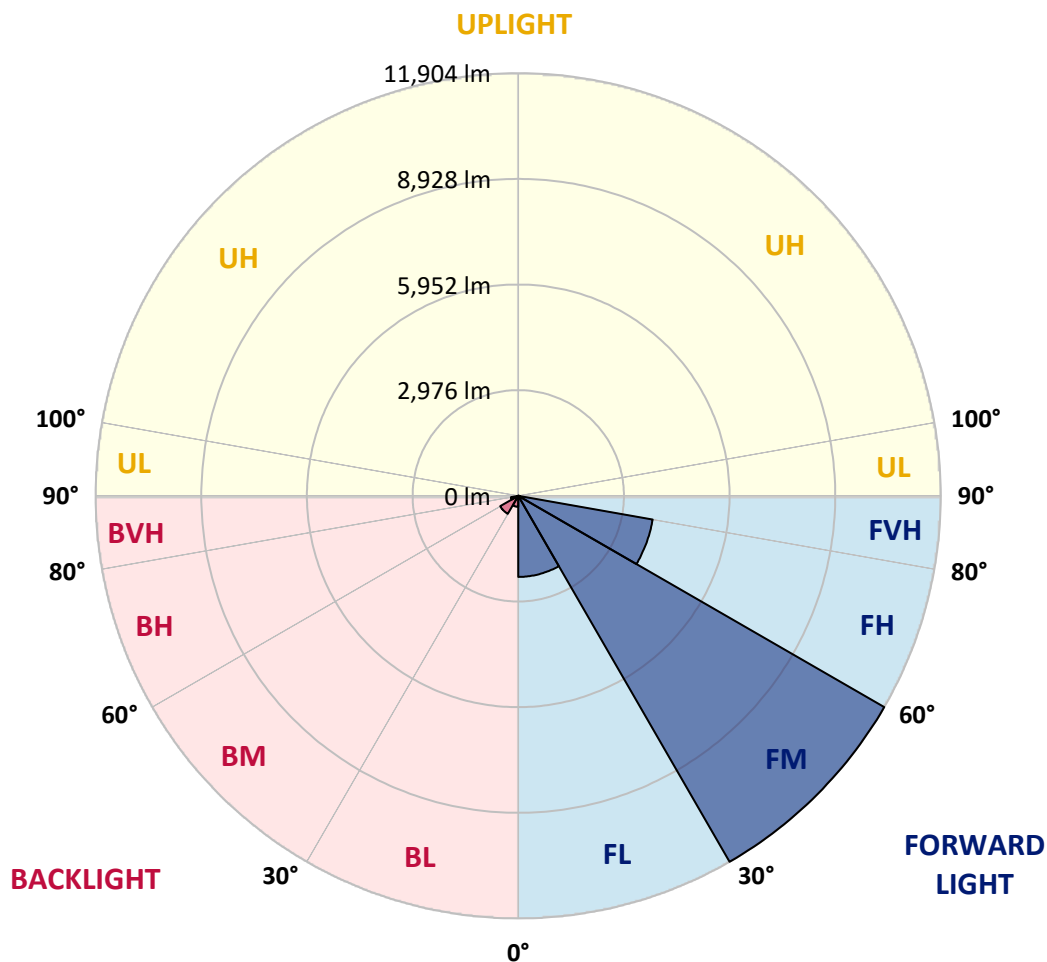


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2284.8	11.9			
FM (30°-60°)	11904.2	62.1			
FH (60°-80°)	3845.8	20.0			G2/5000
FVH (80°-90°)	43.0	0.2			G1/100
BL (0°-30°)	309.1	1.6	B1/500		
BM (30°-60°)	585.8	3.1	B1/1000		
BH (60°-80°)	207.7	1.1	B1/500		G1/500
BVH (80°-90°)	3.9	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°	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6
2.5°	2351.0	2329.8	2287.5	2272.9	2210.6	2113.9	2029.2	1915.3	1825.2	1815.9	1707.3
5°	3148.4	3100.8	3080.9	2985.5	2835.8	2695.4	2454.4	2271.6	2061.0	2045.1	1826.5
7.5°	3916.6	3850.4	3830.5	3740.5	3565.6	3344.4	3031.9	2699.4	2365.6	2335.1	1986.8
10°	4473.0	4482.2	4446.4	4386.8	4245.1	4019.9	3634.5	3180.2	2704.7	2666.3	2167.0
12.5°	4871.7	4870.3	4876.9	4875.6	4800.1	4629.3	4224.0	3700.8	3078.2	3002.7	2373.6
15°	5131.2	5135.2	5155.1	5223.9	5231.9	5125.9	4788.2	4198.8	3511.4	3417.3	2597.4
17.5°	5393.5	5421.3	5453.1	5518.0	5576.3	5533.9	5295.5	4718.0	3903.4	3833.2	2837.1
20°	5826.6	5865.1	5846.5	5886.2	5916.7	5920.7	5736.6	5197.5	4378.9	4261.0	3111.3
22.5°	6519.3	6518.0	6470.3	6398.8	6339.2	6336.6	6169.6	5690.2	4810.7	4696.8	3386.9
25°	7394.9	7398.9	7306.1	7102.1	6953.8	6772.3	6580.3	6122.0	5273.0	5132.6	3676.9
27.5°	8398.8	8373.7	8233.3	7952.5	7658.4	7348.5	7071.7	6624.0	5763.0	5646.4	4009.4
30°	9300.9	9291.6	9127.4	8784.3	8397.5	8086.3	7684.9	7253.2	6397.5	6254.4	4381.6
32.5°	10140.6	10153.9	9926.0	9571.1	9197.6	8838.6	8414.7	7854.5	7020.1	6817.3	4786.9
35°	10796.2	10809.5	10573.7	10278.4	9894.3	9596.2	9192.3	8495.6	7634.6	7463.7	5253.1
37.5°	11145.9	11163.2	11026.8	10804.2	10564.5	10414.8	10038.6	9320.8	8381.6	8278.3	5804.1
40°	11212.2	11232.1	11172.5	11112.8	11099.6	11206.8	11096.9	10292.9	9417.5	9255.8	6625.3
42.5°	11013.5	11040.0	11066.5	11198.9	11469.1	11862.5	12245.3	11612.2	10751.2	10534.0	7629.3
45°	10491.7	10489.0	10593.6	10936.7	11542.0	12381.7	13445.4	13263.9	12568.5	12310.2	9047.9
47.5°	9598.9	9585.6	9812.2	10300.9	11244.0	12477.1	14424.2	15269.2	14887.7	14649.3	10572.5
50°	8238.6	8303.5	8659.8	9341.9	10503.6	12188.3	14726.2	16584.5	16791.1	16538.1	11804.3
52.5°	6645.2	6642.5	7201.5	8127.3	9406.8	11552.6	14515.6	16822.9	17409.7	17216.3	12410.9
55°	4918.0	4952.4	5533.9	6467.7	7983.0	10392.3	13828.1	16577.8	17645.5	17509.0	12810.9
57°	3658.3	3719.2	4185.5	5173.6	6743.2	9243.9	12912.8	16139.4	17738.2	17664.0	13143.4
57.5°	3414.7	3417.3	3871.6	4769.6	6380.3	8802.9	12650.6	15956.7	17735.5	17694.5	13197.6
60°	2102.0	2168.3	2482.2	3223.9	4670.3	6870.4	10892.9	14906.3	17597.8	17657.4	13429.5
62.5°	1258.3	1286.2	1490.1	1943.1	3010.6	5014.6	8914.1	13561.9	17238.8	17420.3	13413.6
65°	809.3	815.9	908.6	1176.2	1882.2	3389.5	6869.0	11785.7	16310.3	16644.1	12889.0
67.5°	625.1	635.8	672.8	772.2	1091.4	2111.3	4858.4	9890.3	14808.3	15238.7	11617.4
70°	555.0	560.3	573.5	605.3	721.8	1192.1	3022.6	7726.0	12279.7	12401.6	9091.6
72.5°	453.0	467.5	508.6	519.2	572.2	744.4	1682.1	5185.6	8250.5	8281.0	5086.2
75°	351.0	353.7	414.6	445.1	482.1	512.6	751.0	2614.6	3963.0	3751.0	1960.3
77.5°	262.2	274.2	302.0	340.4	393.4	366.9	336.5	985.5	1230.5	1208.0	569.6
80°	168.2	174.8	210.6	255.6	306.0	239.8	189.4	288.8	270.2	278.1	136.4
82.5°	84.8	86.1	135.1	208.0	194.7	120.5	119.2	117.9	100.7	99.4	63.6
85°	9.2	19.9	87.4	119.2	87.4	39.7	55.6	54.3	53.0	54.3	37.1
87.5°	1.3	1.3	14.6	17.2	11.9	13.2	15.9	17.2	21.2	19.9	15.9
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°	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6	1606.6
2.5°	1654.3	1601.4	1503.4	1409.3	1339.1	1294.1	1235.8	1214.6	1184.1	1180.1	1165.6
5°	1725.9	1625.2	1454.3	1319.2	1210.6	1128.5	1057.0	997.4	949.7	939.1	944.4
7.5°	1827.8	1678.2	1439.8	1255.6	1104.7	964.3	850.3	780.2	729.8	711.3	713.9
10°	1943.1	1748.4	1437.1	1188.1	957.6	785.4	660.9	598.7	569.6	559.0	547.0
12.5°	2079.5	1829.2	1430.5	1083.4	796.1	626.5	537.8	500.7	472.9	464.9	464.9
15°	2233.2	1915.3	1398.7	953.7	646.4	517.9	458.3	429.2	419.8	411.9	411.9
17.5°	2393.4	2000.0	1332.5	793.4	536.4	443.7	406.6	389.4	376.2	366.9	366.9
20°	2576.2	2083.5	1226.5	651.7	453.0	396.0	366.9	347.0	336.5	328.5	325.8
22.5°	2749.7	2151.1	1091.4	535.1	394.7	356.3	329.8	308.6	298.0	294.0	294.0
25°	2929.8	2192.1	928.5	442.4	360.3	323.2	294.0	276.8	267.6	264.9	263.6
27.5°	3104.7	2216.0	785.4	386.8	328.5	292.7	264.9	251.7	242.4	239.8	241.1
30°	3316.6	2219.9	646.4	347.0	300.7	263.6	238.4	226.5	221.2	218.5	217.2
32.5°	3531.2	2214.6	543.1	323.2	274.2	238.4	217.2	208.0	204.0	200.0	200.0
35°	3772.3	2186.8	462.3	299.3	249.0	217.2	198.6	190.7	185.4	181.5	180.2
37.5°	4071.6	2172.2	415.9	272.9	226.5	197.4	180.2	172.2	168.2	162.9	161.6
40°	4543.1	2237.1	401.4	249.0	204.0	178.8	162.9	153.6	148.4	143.1	141.7
42.5°	5131.2	2351.0	377.5	225.2	184.1	161.6	145.7	135.1	125.8	119.2	116.6
45°	5892.9	2500.7	340.4	200.0	166.9	143.1	128.5	115.3	103.3	98.0	96.7
47.5°	6691.5	2645.1	307.3	180.2	148.4	127.2	111.3	96.7	86.1	82.1	80.8
50°	7181.6	2674.3	286.1	157.6	129.8	109.9	94.0	80.8	74.2	70.2	70.2
52.5°	7405.5	2627.9	257.0	137.7	112.6	96.7	80.8	70.2	66.2	63.6	62.2
55°	7561.7	2556.3	218.5	119.2	96.7	82.1	71.5	63.6	58.3	55.6	54.3
57°	7653.1	2459.6	189.4	104.6	83.5	71.5	63.6	56.9	51.7	46.4	46.4
57.5°	7657.1	2422.6	181.5	103.3	79.5	68.9	62.2	55.6	49.0	43.7	42.4
60°	7539.3	2168.3	145.7	87.4	63.6	58.3	51.7	43.7	34.5	29.1	27.8
62.5°	7160.5	1845.1	120.5	74.2	51.7	45.0	37.1	33.1	23.8	17.2	17.2
65°	6586.9	1496.7	103.3	59.6	42.4	33.1	25.1	23.8	14.6	7.9	6.7
67.5°	5757.7	1165.6	87.4	49.0	35.8	23.8	17.2	15.9	7.9	2.7	0.0
70°	4386.8	794.7	72.8	39.7	26.5	17.2	11.9	9.2	5.3	1.3	0.0
72.5°	2528.5	437.1	60.9	30.5	19.9	13.2	9.2	5.3	5.3	0.0	0.0
75°	903.3	188.1	46.4	22.6	15.9	10.6	6.7	2.7	4.0	1.3	0.0
77.5°	287.4	100.7	30.5	17.2	13.2	7.9	5.3	2.7	2.7	1.3	0.0
80°	84.8	53.0	18.6	14.6	9.2	6.7	4.0	1.3	2.7	1.3	0.0
82.5°	46.4	26.5	14.6	10.6	9.2	5.3	4.0	1.3	1.3	1.3	0.0
85°	23.8	15.9	11.9	10.6	9.2	5.3	4.0	1.3	0.0	1.3	1.3
87.5°	13.2	11.9	11.9	10.6	9.2	6.7	4.0	1.3	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)