

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: P648362

Luminaire Tested: **GALN-SA4B-835-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648362  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-835-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13148.1 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G0

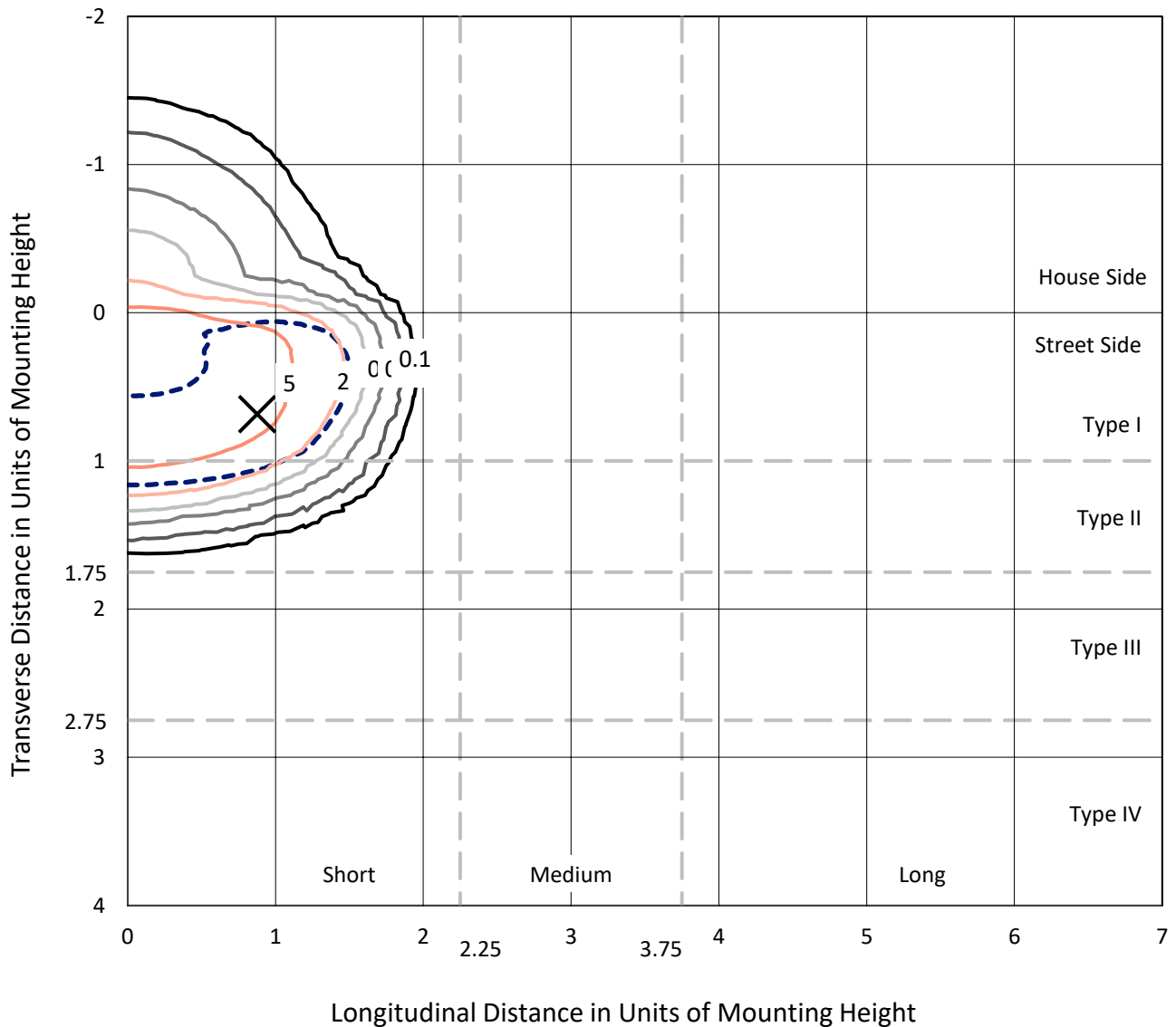
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

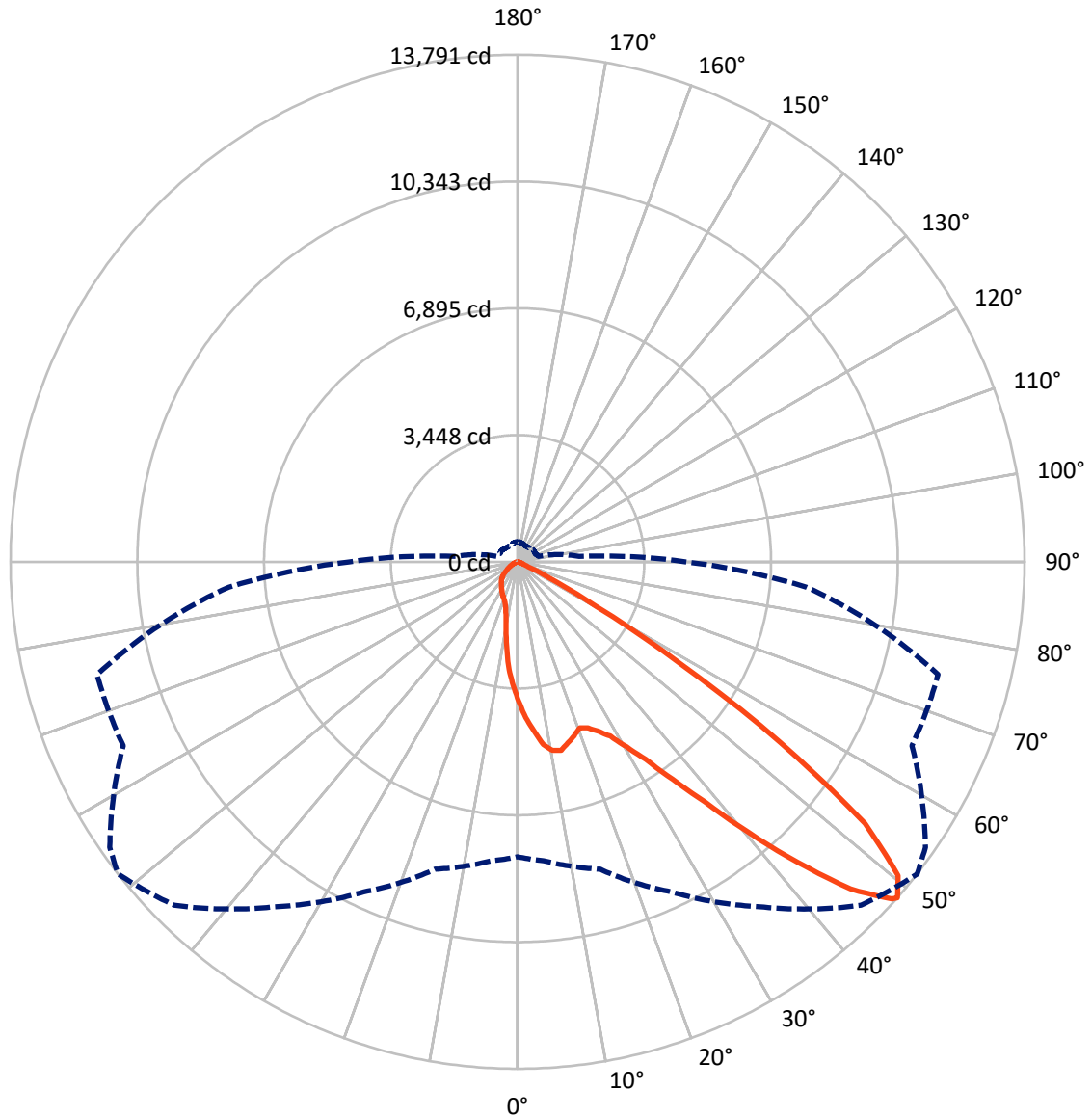
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral    - - - Horizontal Cone Through 48-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1600.9	0.0	1600.9
	% Fixture	12.2	0.0	12.2
<b>Street Side</b>	Lumens	11547.2	0.0	11547.2
	% Fixture	87.8	0.0	87.8
<b>Total</b>	Lumens	13148.1	0.0	13148.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	347.5	2.6
10°-20°	908.2	6.9
20°-30°	1550.7	11.8
30°-40°	2855.6	21.7
40°-50°	4434.8	33.7
50°-60°	2669.0	20.3
60°-70°	308.7	2.3
70°-80°	59.7	0.5
80°-90°	13.8	0.1
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°	13148.1	100.0
0°-180°	13148.1	100.0

**Coefficient of Utilization**

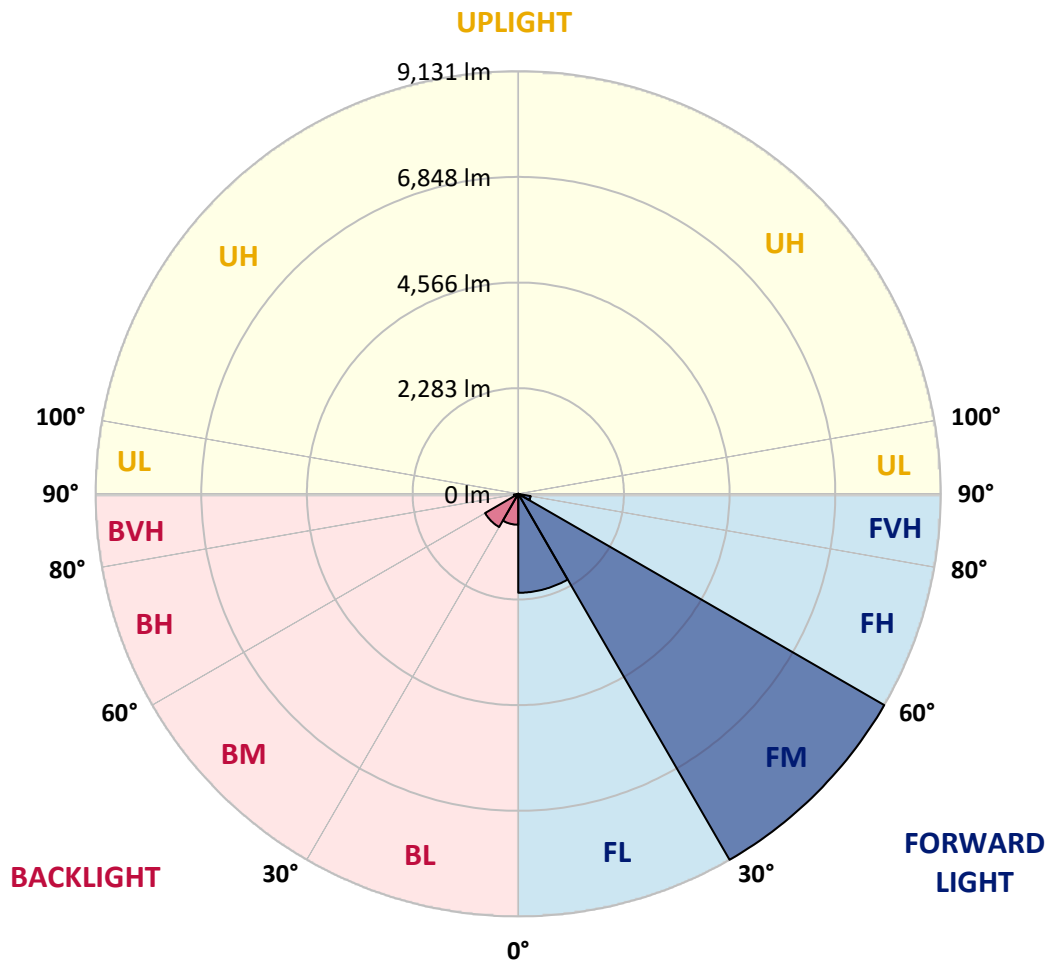


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2137.7	16.3			
FM (30°-60°)	9131.1	69.4			
FH (60°-80°)	271.8	2.1			G0/660
FVH (80°-90°)	6.6	0.0			G0/10
BL (0°-30°)	668.7	5.1	B2/1000		
BM (30°-60°)	828.3	6.3	B1/1000		
BH (60°-80°)	96.6	0.7	B0/110		G0/110
BVH (80°-90°)	7.2	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G0**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0
2.5°	4602.0	4496.5	4506.2	4437.1	4396.9	4331.7	4243.5	4226.3	4130.5	4000.1	3867.9
5°	5016.0	4991.1	5023.6	4924.0	4927.8	4820.5	4613.4	4617.3	4396.9	4184.1	3979.0
7.5°	5042.8	4985.3	5017.9	5106.1	5157.8	5138.7	5021.7	4920.1	4711.2	4398.8	4099.8
10°	4515.7	4624.9	4659.5	4805.1	5012.1	5230.7	5217.2	5223.0	5048.5	4640.3	4203.3
12.5°	4199.5	4126.6	4243.5	4331.7	4644.1	5067.7	5261.3	5303.5	5316.9	4874.2	4306.8
15°	4055.7	4055.7	4074.9	4099.8	4326.0	4716.9	5111.8	5234.5	5523.9	5180.8	4469.8
17.5°	4145.8	4142.0	4168.8	4117.0	4201.4	4502.3	4973.8	5113.7	5755.8	5481.7	4598.2
20°	4419.9	4433.3	4416.0	4266.6	4272.3	4498.5	4820.5	5040.9	5913.0	5742.4	4768.7
22.5°	4801.3	4809.0	4711.2	4548.3	4500.4	4611.6	4908.6	5077.3	6039.5	6054.9	4820.5
25°	5242.2	5211.5	5192.3	4962.3	4816.6	4912.5	5108.0	5205.7	6118.0	6323.2	4968.1
27.5°	5853.6	5792.2	5675.3	5470.3	5362.9	5226.8	5366.8	5527.7	6342.3	6698.8	5129.0
30°	6756.4	6702.6	6474.5	6210.1	5928.3	5794.1	5838.2	5926.4	6746.7	7133.9	5341.8
32.5°	8115.2	8002.2	7672.5	7168.4	6785.1	6415.2	6403.7	6497.6	7109.0	7735.7	5594.8
35°	9612.2	9577.7	9092.7	8573.4	7831.6	7260.4	7270.0	7319.9	7802.8	8525.5	5926.4
37.5°	10607.0	10796.7	10488.1	9930.4	9307.4	8490.9	8283.9	8301.2	8755.4	9460.8	6524.4
40°	11375.6	11214.5	11251.0	11120.6	10695.2	10139.3	9681.2	9591.1	9857.5	10495.8	7118.6
42.5°	11040.1	11047.8	11272.1	11580.6	11686.0	11645.8	11178.1	11007.6	10800.5	11343.0	7684.0
45°	10093.3	10290.7	10582.0	11398.5	12115.4	12788.2	12696.2	12412.5	11452.2	12013.8	8009.9
47.5°	8582.9	8575.3	9052.5	10114.4	11707.2	13282.7	13700.5	13501.2	11914.1	11939.0	7942.8
48°	8025.2	8163.2	8655.8	9905.4	11448.4	13209.8	13790.6	13539.5	11835.6	11839.4	7885.3
50°	5932.2	5907.3	6520.6	8053.9	10225.5	12412.5	13411.1	13606.6	11833.6	11335.3	7482.7
52.5°	3133.8	3241.2	3687.7	5063.9	7229.8	10158.5	11829.8	12134.5	11415.8	10511.1	6903.9
55°	1332.1	1203.7	1546.7	2286.6	4067.2	6787.0	8678.8	9357.3	9652.4	9301.7	6039.5
57.5°	475.4	519.4	598.0	860.6	1709.7	3714.6	5175.1	5702.1	6687.4	6825.3	4115.1
60°	304.7	310.5	335.4	394.9	642.1	1431.8	2455.3	2875.0	3321.6	3429.0	1920.5
62.5°	235.8	237.6	249.2	258.8	304.7	555.9	921.9	1092.5	1134.6	975.6	504.1
65°	197.4	199.4	203.2	203.2	216.6	260.7	322.0	354.6	345.0	341.2	285.6
67.5°	151.4	155.3	162.9	162.9	170.6	159.1	178.3	189.7	214.7	260.7	243.4
70°	118.9	120.7	126.5	130.4	130.4	115.0	128.4	139.9	157.1	193.6	191.7
72.5°	92.0	95.8	99.7	99.7	93.9	78.6	92.0	101.6	113.1	134.2	130.4
75°	70.9	70.9	72.8	59.4	46.0	40.2	55.6	67.1	84.3	88.2	72.8
77.5°	19.2	21.1	19.2	17.2	19.2	28.7	36.4	42.2	53.6	53.6	47.9
80°	0.0	1.9	5.7	11.5	19.2	26.9	32.6	36.4	42.2	46.0	44.1
82.5°	0.0	1.9	5.7	11.5	17.2	21.1	28.7	30.7	34.5	40.2	40.2
85°	0.0	1.9	3.8	7.7	11.5	13.4	13.4	11.5	11.5	9.6	7.7
87.5°	0.0	0.0	1.9	3.8	3.8	5.7	5.7	5.7	5.7	5.7	5.7
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°	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0	3797.0
2.5°	3816.1	3756.7	3666.6	3524.8	3388.7	3300.5	3216.2	3122.3	3070.5	3066.7	3038.0
5°	3862.1	3727.9	3513.3	3269.9	3009.2	2785.0	2558.8	2411.2	2278.9	2206.1	2192.7
7.5°	3887.0	3712.6	3365.7	2957.5	2512.8	2146.7	1893.7	1707.8	1634.9	1581.3	1579.4
10°	3938.8	3685.8	3145.3	2543.4	1993.4	1623.5	1449.0	1364.7	1324.4	1309.1	1286.1
12.5°	3977.2	3635.9	2919.1	2117.9	1575.6	1345.5	1268.9	1249.7	1251.6	1259.3	1249.7
15°	4030.8	3591.9	2614.4	1738.4	1322.5	1211.4	1211.4	1215.2	1242.0	1245.8	1244.0
17.5°	4027.0	3505.6	2300.1	1431.8	1169.2	1153.8	1159.6	1196.0	1213.3	1219.1	1205.6
20°	4072.9	3425.2	1976.1	1222.8	1083.0	1105.9	1144.3	1153.8	1175.0	1178.7	1163.5
22.5°	4059.5	3223.8	1675.2	1058.0	1017.7	1061.8	1100.2	1111.7	1105.9	1094.4	1092.5
25°	4034.6	3051.4	1399.2	948.8	969.8	1017.7	1054.2	1033.1	1021.6	1023.5	1025.4
27.5°	3990.6	2832.9	1171.1	872.1	904.7	975.6	973.7	966.0	977.5	967.9	977.5
30°	3982.9	2614.4	983.3	803.1	856.8	908.5	912.4	925.7	939.2	921.9	939.2
32.5°	3994.4	2374.8	849.1	760.9	828.0	829.9	872.1	885.5	875.9	837.6	841.4
35°	4082.6	2190.8	751.4	737.9	782.0	783.9	824.2	807.0	764.8	741.7	755.2
37.5°	4268.4	2037.4	705.3	716.8	720.7	745.6	747.5	713.0	716.8	715.0	722.6
40°	4506.2	1920.5	672.8	697.7	693.8	711.1	642.1	661.2	678.5	684.3	688.1
42.5°	4669.0	1836.2	651.7	667.0	659.4	628.7	590.3	609.5	623.0	644.0	647.9
45°	4741.9	1769.1	626.8	613.3	613.3	557.7	542.5	546.2	576.9	599.9	596.1
47.5°	4623.1	1704.0	582.7	542.5	555.9	509.8	492.6	492.6	525.2	553.9	548.2
48°	4577.0	1677.1	584.6	527.1	536.7	502.1	484.9	481.1	517.5	544.3	544.3
50°	4348.9	1577.4	534.8	484.9	465.7	461.9	450.5	454.2	477.2	502.1	502.1
52.5°	3904.3	1362.7	452.3	415.9	381.4	404.4	410.1	402.5	414.0	437.0	435.1
55°	3258.4	1046.5	362.2	345.0	318.1	343.1	354.6	345.0	333.5	350.8	350.8
57.5°	2087.2	563.5	289.4	293.2	266.5	291.4	300.9	277.9	256.8	270.3	268.3
60°	941.1	337.3	237.6	231.9	214.7	243.4	258.8	231.9	203.2	212.7	222.4
62.5°	352.7	239.6	180.2	176.3	172.5	199.4	207.0	185.9	157.1	162.9	164.8
65°	258.8	210.9	143.8	130.4	138.0	157.1	153.3	132.2	113.1	113.1	116.9
67.5°	220.4	184.0	116.9	101.6	101.6	103.5	95.8	84.3	78.6	82.4	86.3
70°	172.5	145.6	92.0	78.6	70.9	63.3	55.6	53.6	47.9	53.6	51.8
72.5°	111.2	97.7	70.9	59.4	53.6	44.1	36.4	34.5	28.7	26.9	26.9
75°	59.4	59.4	55.6	47.9	42.2	34.5	28.7	23.0	15.3	11.5	11.5
77.5°	42.2	46.0	49.8	46.0	38.4	28.7	23.0	15.3	7.7	3.8	3.8
80°	40.2	46.0	49.8	44.1	38.4	28.7	21.1	11.5	5.7	1.9	1.9
82.5°	36.4	42.2	46.0	40.2	34.5	24.9	19.2	11.5	5.7	1.9	1.9
85°	7.7	9.6	11.5	11.5	13.4	17.2	13.4	9.6	3.8	1.9	1.9
87.5°	5.7	5.7	5.7	5.7	5.7	5.7	3.8	3.8	1.9	1.9	1.9
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)