

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: P651856

Luminaire Tested: **GALN-SA4A-840-U-T2R-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651856  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-T2R-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10062.6 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B1 - U0 - G1

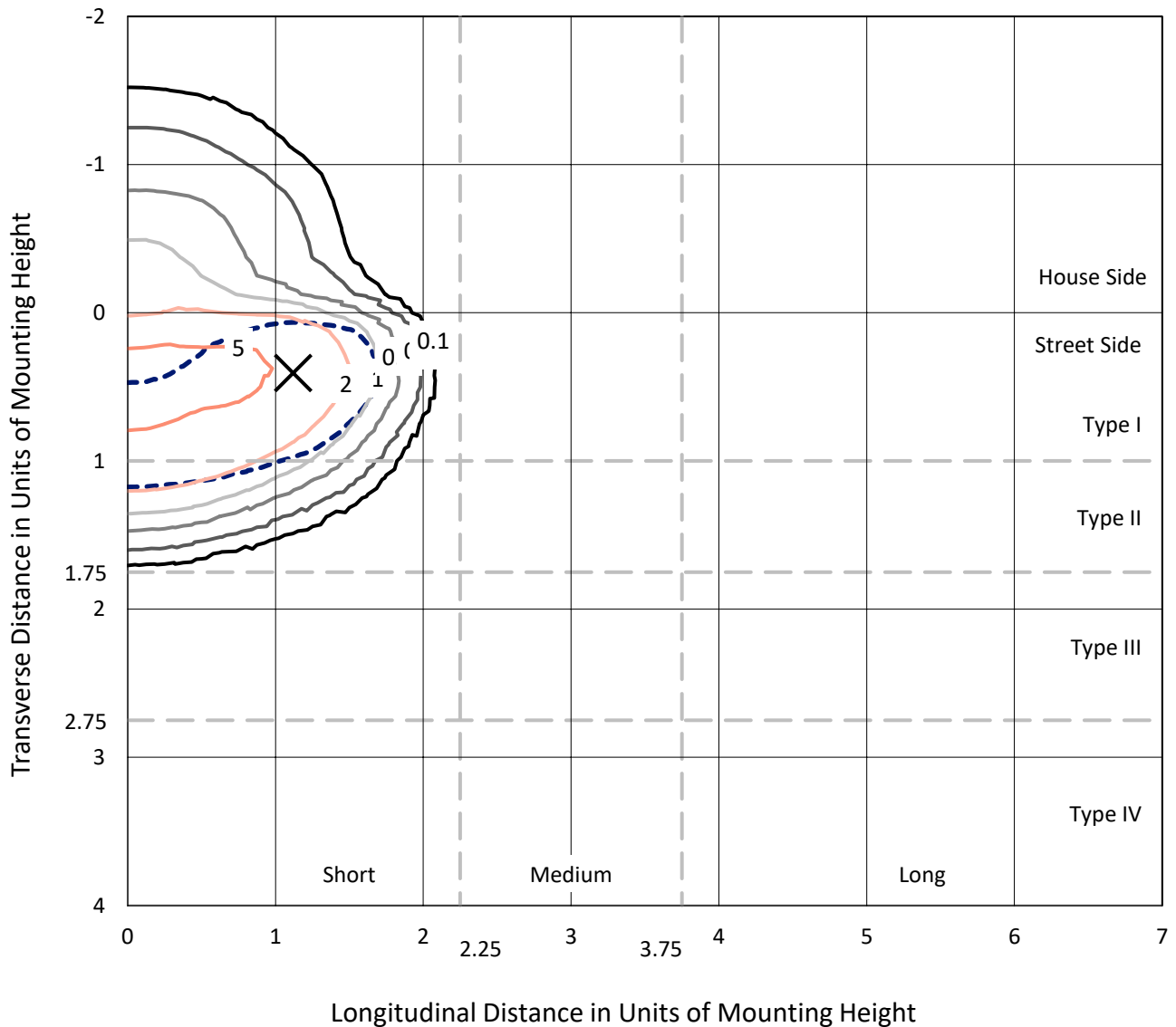
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

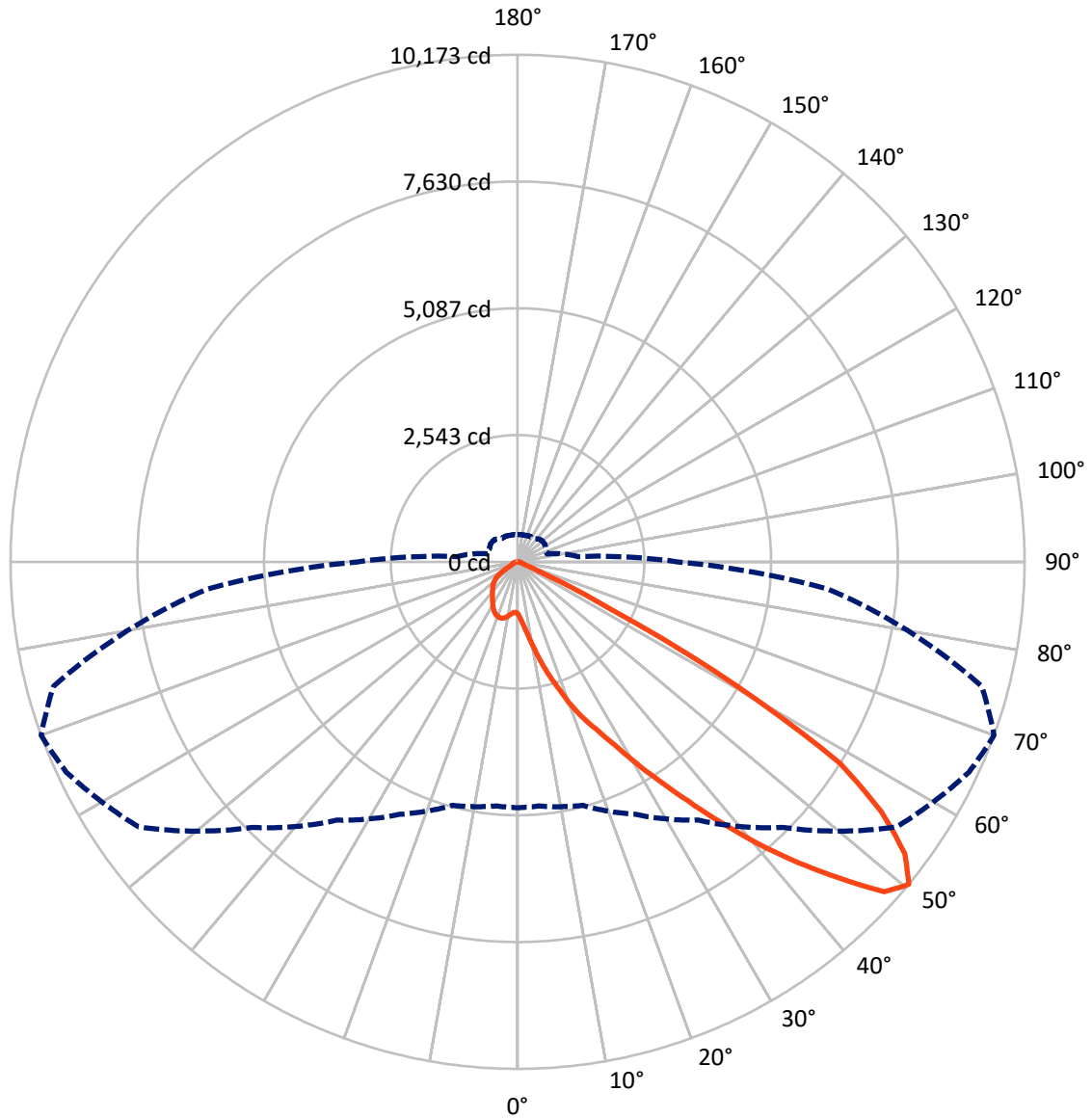
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1405.3	0.0	1405.3
	% Fixture	14.0	0.0	14.0
<b>Street Side</b>	Lumens	8657.3	0.0	8657.3
	% Fixture	86.0	0.0	86.0
<b>Total</b>	Lumens	10062.6	0.0	10062.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.5	1.3
10°-20°	586.3	5.8
20°-30°	1229.9	12.2
30°-40°	2119.9	21.1
40°-50°	3098.3	30.8
50°-60°	2413.1	24.0
60°-70°	408.8	4.1
70°-80°	56.2	0.6
80°-90°	14.6	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°	10062.6	100.0
0°-180°	10062.6	100.0

**Coefficient of Utilization**



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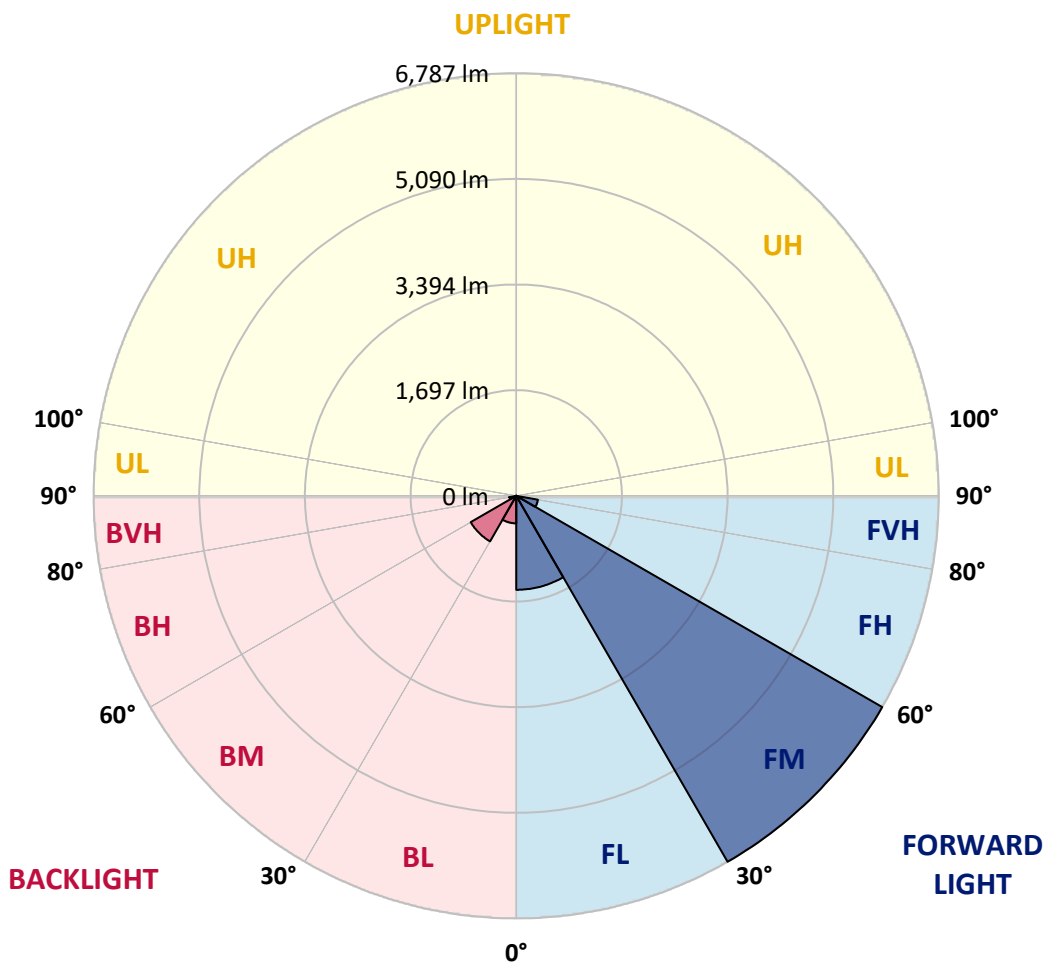
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1509.5	15.0			
FM (30°-60°)	6787.0	67.4			
FH (60°-80°)	354.0	3.5			G0/660
FVH (80°-90°)	6.7	0.1			G0/10
BL (0°-30°)	442.2	4.4	B1/500		
BM (30°-60°)	844.3	8.4	B1/1000		
BH (60°-80°)	111.0	1.1	B1/500		G1/500
BVH (80°-90°)	7.8	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3
2.5°	1364.9	1354.9	1333.5	1293.8	1277.2	1237.5	1214.3	1169.7	1141.6	1110.1	1075.4
5°	1922.4	1871.1	1839.7	1795.0	1664.3	1583.3	1449.3	1335.1	1282.2	1224.2	1144.9
7.5°	2498.2	2465.1	2422.1	2326.1	2236.8	2068.0	1838.1	1586.5	1479.1	1379.7	1222.6
10°	2974.6	2882.0	2877.1	2805.9	2708.3	2506.4	2230.2	1917.5	1725.6	1580.0	1333.5
12.5°	3307.1	3222.8	3260.9	3252.6	3161.6	2976.3	2657.0	2243.4	2043.2	1816.6	1447.6
15°	3609.9	3575.2	3563.7	3553.7	3517.3	3380.0	3093.8	2640.5	2350.9	2077.9	1576.6
17.5°	3906.1	3816.7	3859.8	3868.0	3864.7	3740.6	3472.7	3017.7	2676.8	2354.2	1712.4
20°	4169.2	4177.4	4119.5	4107.9	4098.0	4093.1	3831.6	3391.6	3077.2	2643.8	1889.3
22.5°	4506.7	4448.7	4500.0	4467.0	4402.4	4362.7	4162.5	3722.4	3424.6	2992.9	2069.7
25°	4905.4	4951.6	4830.9	4817.7	4746.5	4609.2	4428.9	4093.1	3758.8	3317.1	2264.9
27.5°	5396.7	5315.6	5284.2	5211.4	5082.4	5024.5	4812.7	4475.2	4162.5	3657.9	2453.5
30°	5818.6	5797.1	5639.9	5553.9	5441.4	5439.8	5143.6	4993.0	4688.7	4192.3	2713.2
32.5°	6162.7	6068.4	6010.5	5950.9	5859.9	5884.7	5635.0	5555.6	5249.4	4688.7	3019.3
35°	6392.7	6324.8	6290.1	6199.1	6172.6	6283.4	6179.2	6146.2	5894.7	5386.8	3378.3
37.5°	6465.4	6487.0	6480.3	6366.2	6422.5	6721.9	6855.9	6769.9	6637.5	6123.0	3767.1
40°	6530.0	6544.9	6511.8	6645.8	6806.3	7147.1	7631.8	7489.5	7439.9	6869.1	4308.1
42.5°	6566.4	6554.8	6554.8	6786.4	7029.6	7714.6	8381.3	8287.0	8248.9	7663.3	4933.5
45°	6409.2	6296.7	6417.5	6731.9	7221.5	7994.1	8980.2	9110.9	9056.3	8608.0	5664.7
47.5°	5821.9	5891.4	5959.2	6379.4	6988.3	7908.1	9347.5	9792.5	9893.4	9402.0	6144.5
50°	4933.5	4918.6	5059.2	5588.6	6328.2	7537.5	9276.3	9989.4	10173.0	9640.3	6245.4
52.5°	3588.5	3697.6	3849.8	4376.0	5252.8	6578.0	8358.1	9481.4	9726.3	9347.5	6179.2
55°	2089.5	1968.8	2311.2	2756.3	3583.5	4961.6	7066.0	8404.4	8857.7	8814.8	5845.0
57.5°	837.1	810.6	928.1	1250.7	1869.5	3075.5	5138.6	6905.5	7631.8	8073.6	5137.0
60°	367.3	359.0	421.8	509.6	764.3	1417.8	2810.9	4294.9	5052.6	5641.6	3535.5
62.5°	264.7	261.4	292.8	324.3	403.7	617.1	1181.3	1730.5	2157.3	2605.7	1583.3
65°	213.4	221.7	243.2	259.8	297.8	342.5	416.9	481.5	590.6	612.2	349.1
67.5°	173.8	180.3	200.2	218.4	225.0	185.3	191.9	168.8	168.8	150.5	120.8
70°	127.4	129.0	152.2	173.8	138.9	74.4	130.7	130.7	117.5	112.5	102.6
72.5°	94.3	96.0	114.1	107.6	54.6	46.3	96.0	105.9	96.0	91.0	82.8
75°	69.5	71.1	59.5	24.8	23.1	29.8	56.3	72.8	69.5	67.9	62.9
77.5°	13.2	9.9	8.2	11.6	16.6	24.8	36.4	44.7	46.3	49.6	46.3
80°	1.7	1.7	5.0	9.9	18.2	26.5	38.0	43.0	44.7	46.3	43.0
82.5°	0.0	1.7	5.0	9.9	18.2	24.8	33.1	38.0	41.4	43.0	41.4
85°	0.0	1.7	3.3	8.2	14.9	18.2	16.6	11.6	9.9	11.6	8.2
87.5°	0.0	0.0	1.7	1.7	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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°	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3	1042.3
2.5°	1055.5	1048.9	1025.8	1001.0	979.4	989.4	979.4	971.1	974.5	971.1	967.8
5°	1113.4	1083.6	1034.0	1012.5	994.3	992.6	987.7	986.1	987.7	987.7	972.8
7.5°	1168.0	1120.0	1067.1	1043.9	1022.4	1024.1	1012.5	1012.5	1010.9	1002.6	999.3
10°	1250.7	1186.2	1118.4	1077.0	1050.6	1045.6	1034.0	1022.4	1022.4	1022.4	1005.9
12.5°	1341.7	1260.7	1168.0	1120.0	1088.6	1063.8	1045.6	1042.3	1024.1	1020.8	1012.5
15°	1421.1	1318.6	1201.1	1134.9	1095.2	1062.1	1034.0	1015.8	1007.5	1002.6	996.0
17.5°	1498.9	1368.2	1219.3	1134.9	1092.0	1053.9	1024.1	1007.5	987.7	991.0	977.7
20°	1603.1	1421.1	1224.2	1113.4	1060.5	1024.1	984.4	976.1	964.5	954.6	957.9
22.5°	1704.0	1459.2	1209.4	1087.0	1010.9	967.8	948.0	938.1	933.1	924.8	913.2
25°	1795.0	1500.6	1186.2	1039.0	957.9	926.4	908.3	906.6	895.1	895.1	873.5
27.5°	1887.7	1515.5	1146.5	982.7	911.6	893.4	885.2	881.8	876.8	865.2	850.3
30°	1993.6	1520.4	1088.6	924.8	870.2	850.3	861.9	870.2	848.7	827.2	833.9
32.5°	2081.2	1508.8	1019.1	870.2	840.4	830.5	853.7	861.9	837.1	814.0	802.4
35°	2187.1	1480.7	951.3	827.2	810.6	830.5	850.3	850.3	800.7	772.6	766.0
37.5°	2347.7	1449.3	888.4	790.8	779.3	820.6	847.1	828.9	751.1	716.4	708.1
40°	2519.7	1429.4	827.2	754.4	762.7	804.1	819.0	762.7	683.3	661.8	655.1
42.5°	2769.5	1389.8	772.6	723.0	747.8	780.9	780.9	679.9	650.2	638.6	637.0
45°	3080.5	1361.6	724.6	696.5	726.3	734.5	708.1	637.0	615.4	612.2	613.8
47.5°	3232.7	1307.0	675.0	665.1	686.6	688.3	618.7	602.2	584.0	579.0	575.7
50°	3209.6	1209.4	610.5	623.7	653.5	637.0	564.1	567.5	550.9	549.3	541.0
52.5°	3047.4	1055.5	546.0	577.4	610.5	562.5	519.5	516.2	516.2	494.7	486.4
55°	2701.6	850.3	468.2	507.9	547.6	473.1	461.5	458.3	450.0	430.2	425.2
57.5°	2139.2	623.7	352.4	395.4	464.9	402.0	400.4	385.5	364.0	349.1	349.1
60°	1272.3	359.0	221.7	241.5	307.7	325.9	362.3	355.7	319.3	296.1	289.6
62.5°	580.7	185.3	140.6	143.9	165.4	211.8	284.6	329.3	278.0	238.3	234.9
65°	195.2	137.3	115.8	110.8	114.1	127.4	170.4	233.3	221.7	183.7	177.0
67.5°	119.1	122.4	109.2	100.9	100.9	99.2	97.6	105.9	130.7	127.4	129.0
70°	102.6	112.5	100.9	91.0	87.7	82.8	69.5	57.9	49.6	57.9	61.2
72.5°	82.8	89.3	86.0	77.8	69.5	62.9	49.6	38.0	28.1	24.8	24.8
75°	61.2	66.2	69.5	59.5	53.0	44.7	36.4	24.8	14.9	9.9	9.9
77.5°	44.7	49.6	51.3	46.3	39.7	31.5	23.1	16.6	8.2	3.3	3.3
80°	38.0	44.7	49.6	46.3	41.4	29.8	21.5	11.6	6.6	1.7	1.7
82.5°	36.4	44.7	49.6	44.7	39.7	28.1	21.5	13.2	5.0	1.7	1.7
85°	8.2	11.6	14.9	18.2	21.5	21.5	16.6	9.9	5.0	1.7	1.7
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	1.7	1.7	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)