

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: P647898

Luminaire Tested: **GALN-SA4A-835-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647898  
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-SA4A-835-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 615mA 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: 11341 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

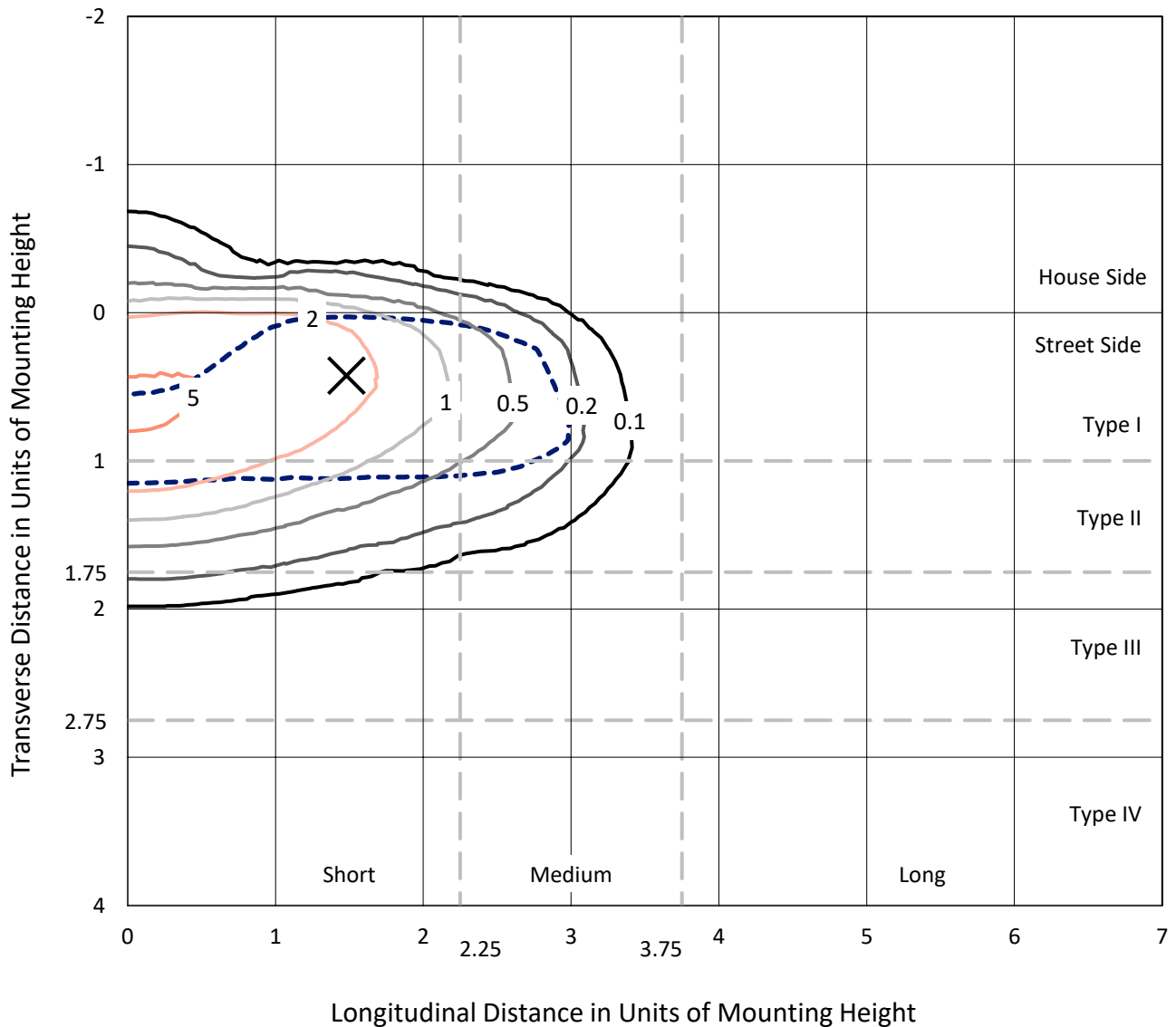
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

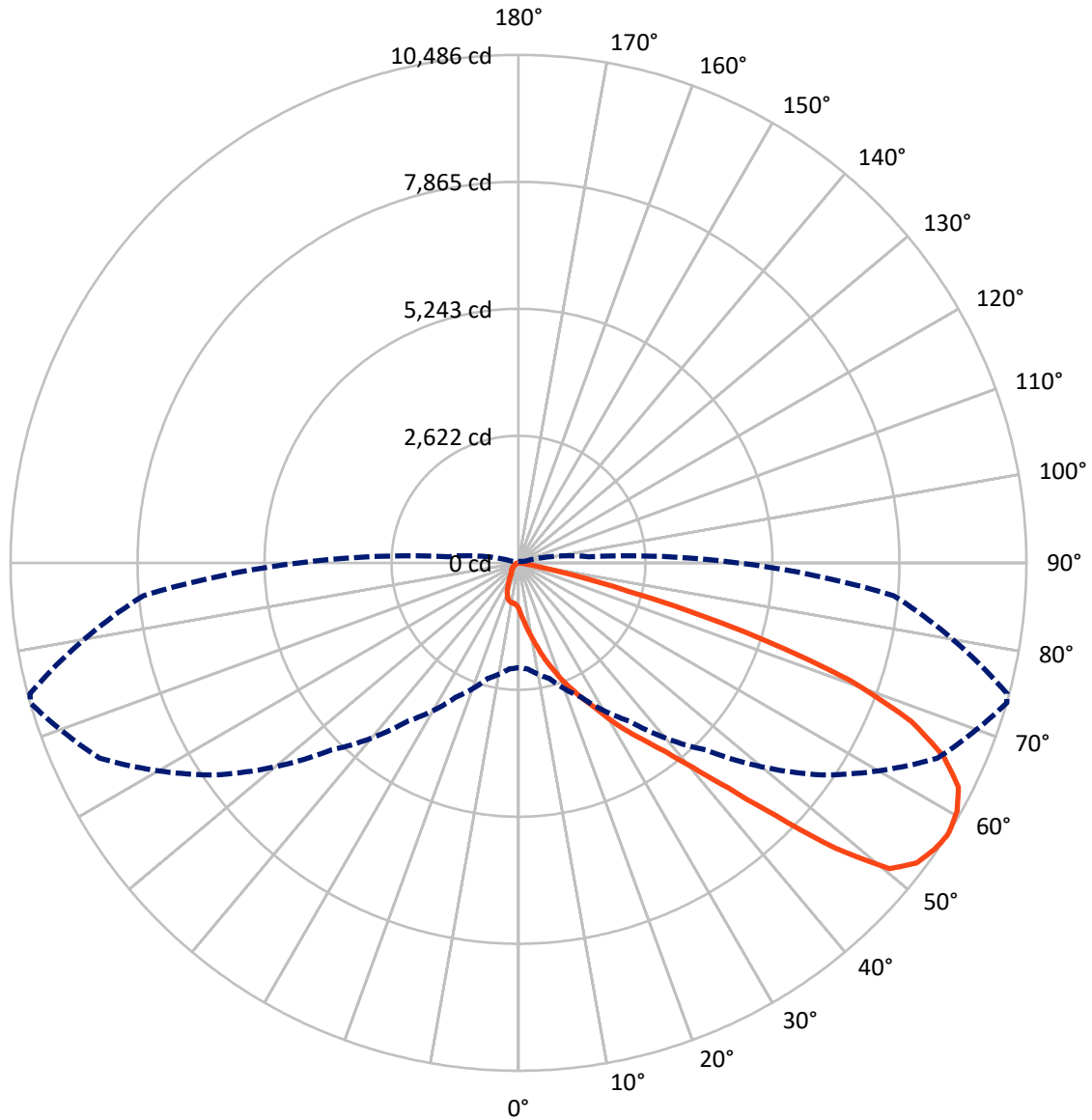
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 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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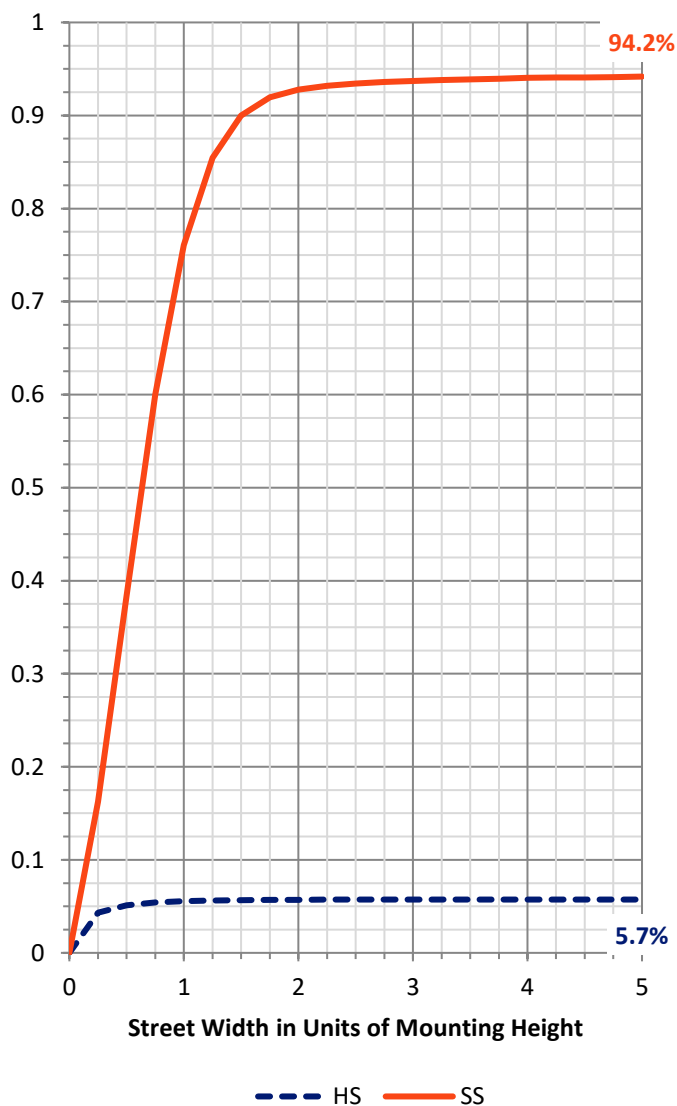
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	654.1	0.0	654.1
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	10686.9	0.0	10686.9
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	11341.0	0.0	11341.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.6	1.0
10°-20°	451.9	4.0
20°-30°	966.9	8.5
30°-40°	1777.1	15.7
40°-50°	2724.4	24.0
50°-60°	2882.0	25.4
60°-70°	1882.0	16.6
70°-80°	514.2	4.5
80°-90°	27.7	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°	11341.0	100.0
0°-180°	11341.0	100.0

**Coefficient of Utilization**



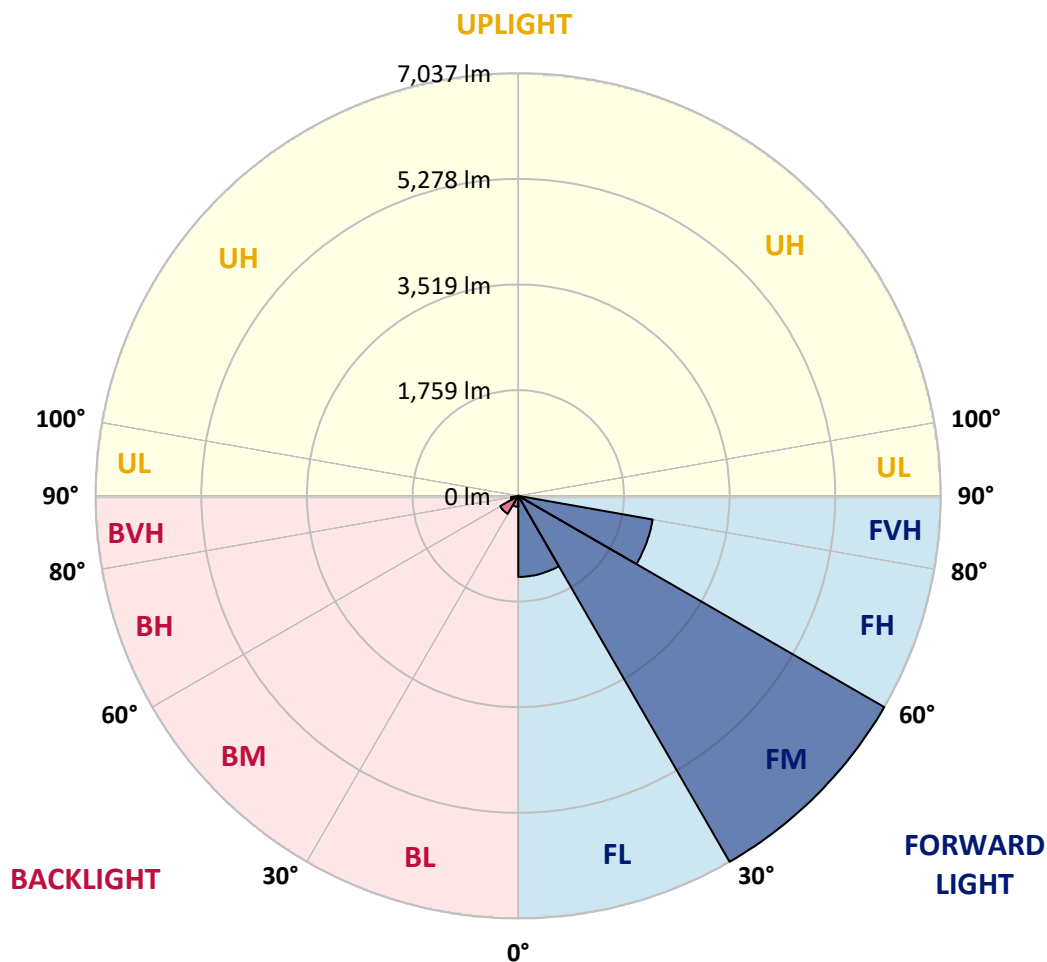
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1350.7	11.9			
FM (30°-60°)	7037.3	62.1			
FH (60°-80°)	2273.5	20.0			G2/5000
FVH (80°-90°)	25.4	0.2			G1/100
BL (0°-30°)	182.7	1.6	B1/500		
BM (30°-60°)	346.3	3.1	B1/1000		
BH (60°-80°)	122.8	1.1	B1/500		G1/500
BVH (80°-90°)	2.3	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°	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8
2.5°	1389.8	1377.3	1352.2	1343.6	1306.8	1249.7	1199.6	1132.2	1079.0	1073.5	1009.3
5°	1861.2	1833.0	1821.3	1764.9	1676.4	1593.4	1450.9	1342.8	1218.3	1209.0	1079.8
7.5°	2315.3	2276.2	2264.4	2211.2	2107.8	1977.1	1792.3	1595.8	1398.4	1380.4	1174.5
10°	2644.2	2649.7	2628.5	2593.3	2509.5	2376.4	2148.6	1880.0	1598.9	1576.2	1281.0
12.5°	2879.9	2879.1	2883.0	2882.2	2837.6	2736.6	2497.0	2187.7	1819.7	1775.1	1403.1
15°	3033.4	3035.8	3047.5	3088.2	3092.9	3030.3	2830.5	2482.1	2075.7	2020.1	1535.5
17.5°	3188.5	3204.9	3223.7	3262.1	3296.5	3271.5	3130.5	2789.0	2307.5	2266.0	1677.2
20°	3444.5	3467.2	3456.2	3479.7	3497.7	3500.1	3391.3	3072.6	2588.6	2518.9	1839.3
22.5°	3854.0	3853.2	3825.0	3782.8	3747.5	3746.0	3647.3	3363.8	2843.9	2776.5	2002.1
25°	4371.6	4373.9	4319.1	4198.5	4110.8	4003.6	3890.0	3619.1	3117.2	3034.2	2173.6
27.5°	4965.1	4950.2	4867.2	4701.2	4527.4	4344.2	4180.5	3915.9	3406.9	3338.0	2370.1
30°	5498.3	5492.8	5395.7	5192.9	4964.3	4780.3	4543.0	4287.8	3782.0	3697.4	2590.2
32.5°	5994.7	6002.6	5867.9	5658.0	5437.2	5225.0	4974.5	4643.3	4150.0	4030.2	2829.8
35°	6382.3	6390.1	6250.8	6076.2	5849.1	5672.9	5434.1	5022.2	4513.3	4412.3	3105.5
37.5°	6589.0	6599.2	6518.6	6387.0	6245.3	6156.8	5934.4	5510.0	4954.9	4893.8	3431.2
40°	6628.2	6639.9	6604.7	6569.4	6561.6	6625.0	6560.1	6084.8	5567.2	5471.7	3916.6
42.5°	6510.7	6526.4	6542.0	6620.3	6780.1	7012.6	7238.9	6864.6	6355.7	6227.3	4510.2
45°	6202.2	6200.7	6262.5	6465.3	6823.1	7319.6	7948.3	7841.0	7430.0	7277.3	5348.8
47.5°	5674.5	5666.6	5800.5	6089.5	6647.0	7375.9	8526.9	9026.6	8801.0	8660.1	6250.0
50°	4870.3	4908.7	5119.3	5522.6	6209.3	7205.2	8705.5	9804.1	9926.2	9776.7	6978.2
52.5°	3928.4	3926.8	4257.2	4804.6	5560.9	6829.4	8581.0	9945.0	10291.9	10177.6	7336.8
55°	2907.3	2927.6	3271.5	3823.5	4719.2	6143.5	8174.6	9800.2	10431.3	10350.6	7573.3
57°	2162.6	2198.7	2474.3	3058.5	3986.3	5464.6	7633.5	9541.0	10486.1	10442.2	7769.8
57.5°	2018.6	2020.1	2288.7	2819.6	3771.8	5203.9	7478.5	9433.0	10484.5	10460.3	7801.9
60°	1242.6	1281.8	1467.3	1905.8	2760.9	4061.5	6439.5	8812.0	10403.1	10438.3	7938.9
62.5°	743.8	760.3	880.9	1148.7	1779.8	2964.5	5269.7	8017.2	10190.9	10298.2	7929.5
65°	478.4	482.3	537.1	695.3	1112.6	2003.7	4060.7	6967.2	9642.0	9839.3	7619.5
67.5°	369.6	375.8	397.8	456.5	645.2	1248.1	2872.0	5846.7	8754.0	9008.6	6867.8
70°	328.1	331.2	339.0	357.8	426.7	704.7	1786.8	4567.3	7259.3	7331.3	5374.6
72.5°	267.8	276.4	300.7	306.9	338.3	440.0	994.4	3065.5	4877.4	4895.4	3006.8
75°	207.5	209.1	245.1	263.1	285.0	303.0	444.0	1545.6	2342.7	2217.5	1158.8
77.5°	155.0	162.1	178.5	201.2	232.6	216.9	198.9	582.6	727.4	714.1	336.7
80°	99.4	103.4	124.5	151.1	180.9	141.7	112.0	170.7	159.7	164.4	80.6
82.5°	50.1	50.9	79.9	122.9	115.1	71.3	70.5	69.7	59.5	58.7	37.6
85°	5.5	11.7	51.7	70.5	51.7	23.5	32.9	32.1	31.3	32.1	21.9
87.5°	0.8	0.8	8.6	10.2	7.0	7.8	9.4	10.2	12.5	11.7	9.4
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°	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8	949.8
2.5°	978.0	946.6	888.7	833.1	791.6	765.0	730.5	718.0	700.0	697.7	689.0
5°	1020.2	960.7	859.7	779.9	715.7	667.1	624.8	589.6	561.4	555.1	558.3
7.5°	1080.5	992.1	851.1	742.3	653.0	570.0	502.7	461.2	431.4	420.5	422.0
10°	1148.7	1033.6	849.6	702.4	566.1	464.3	390.7	353.9	336.7	330.4	323.4
12.5°	1229.3	1081.3	845.6	640.5	470.6	370.4	317.9	296.0	279.5	274.8	274.8
15°	1320.1	1132.2	826.8	563.8	382.1	306.2	270.9	253.7	248.2	243.5	243.5
17.5°	1414.9	1182.3	787.7	469.0	317.1	262.3	240.4	230.2	222.4	216.9	216.9
20°	1522.9	1231.7	725.1	385.2	267.8	234.1	216.9	205.1	198.9	194.2	192.6
22.5°	1625.5	1271.6	645.2	316.3	233.3	210.6	195.0	182.4	176.2	173.8	173.8
25°	1732.0	1295.9	548.9	261.5	213.0	191.1	173.8	163.6	158.2	156.6	155.8
27.5°	1835.4	1310.0	464.3	228.6	194.2	173.0	156.6	148.8	143.3	141.7	142.5
30°	1960.6	1312.3	382.1	205.1	177.7	155.8	140.9	133.9	130.8	129.2	128.4
32.5°	2087.5	1309.2	321.0	191.1	162.1	140.9	128.4	122.9	120.6	118.2	118.2
35°	2230.0	1292.7	273.3	177.0	147.2	128.4	117.4	112.8	109.6	107.3	106.5
37.5°	2406.9	1284.1	245.9	161.3	133.9	116.7	106.5	101.8	99.4	96.3	95.5
40°	2685.7	1322.5	237.2	147.2	120.6	105.7	96.3	90.8	87.7	84.6	83.8
42.5°	3033.4	1389.8	223.2	133.1	108.8	95.5	86.1	79.9	74.4	70.5	68.9
45°	3483.6	1478.3	201.2	118.2	98.7	84.6	76.0	68.1	61.1	57.9	57.2
47.5°	3955.8	1563.7	181.7	106.5	87.7	75.2	65.8	57.2	50.9	48.5	47.8
50°	4245.5	1580.9	169.1	93.2	76.7	65.0	55.6	47.8	43.8	41.5	41.5
52.5°	4377.8	1553.5	151.9	81.4	66.6	57.2	47.8	41.5	39.2	37.6	36.8
55°	4470.2	1511.2	129.2	70.5	57.2	48.5	42.3	37.6	34.5	32.9	32.1
57°	4524.3	1454.0	112.0	61.9	49.3	42.3	37.6	33.7	30.5	27.4	27.4
57.5°	4526.6	1432.1	107.3	61.1	47.0	40.7	36.8	32.9	29.0	25.8	25.1
60°	4456.9	1281.8	86.1	51.7	37.6	34.5	30.5	25.8	20.4	17.2	16.4
62.5°	4233.0	1090.7	71.3	43.8	30.5	26.6	21.9	19.6	14.1	10.2	10.2
65°	3893.9	884.8	61.1	35.2	25.1	19.6	14.9	14.1	8.6	4.7	3.9
67.5°	3403.8	689.0	51.7	29.0	21.1	14.1	10.2	9.4	4.7	1.6	0.0
70°	2593.3	469.8	43.1	23.5	15.7	10.2	7.0	5.5	3.1	0.8	0.0
72.5°	1494.7	258.4	36.0	18.0	11.7	7.8	5.5	3.1	3.1	0.0	0.0
75°	534.0	111.2	27.4	13.3	9.4	6.3	3.9	1.6	2.3	0.8	0.0
77.5°	169.9	59.5	18.0	10.2	7.8	4.7	3.1	1.6	1.6	0.8	0.0
80°	50.1	31.3	11.0	8.6	5.5	3.9	2.3	0.8	1.6	0.8	0.0
82.5°	27.4	15.7	8.6	6.3	5.5	3.1	2.3	0.8	0.8	0.8	0.0
85°	14.1	9.4	7.0	6.3	5.5	3.1	2.3	0.8	0.0	0.8	0.8
87.5°	7.8	7.0	7.0	6.3	5.5	3.9	2.3	0.8	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)