

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: P650868

Luminaire Tested: **GALN-SA4C-840-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P650868  
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-840-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 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: 18726.5 lumens  
Efficiency: N/A  
Efficacy: 87.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

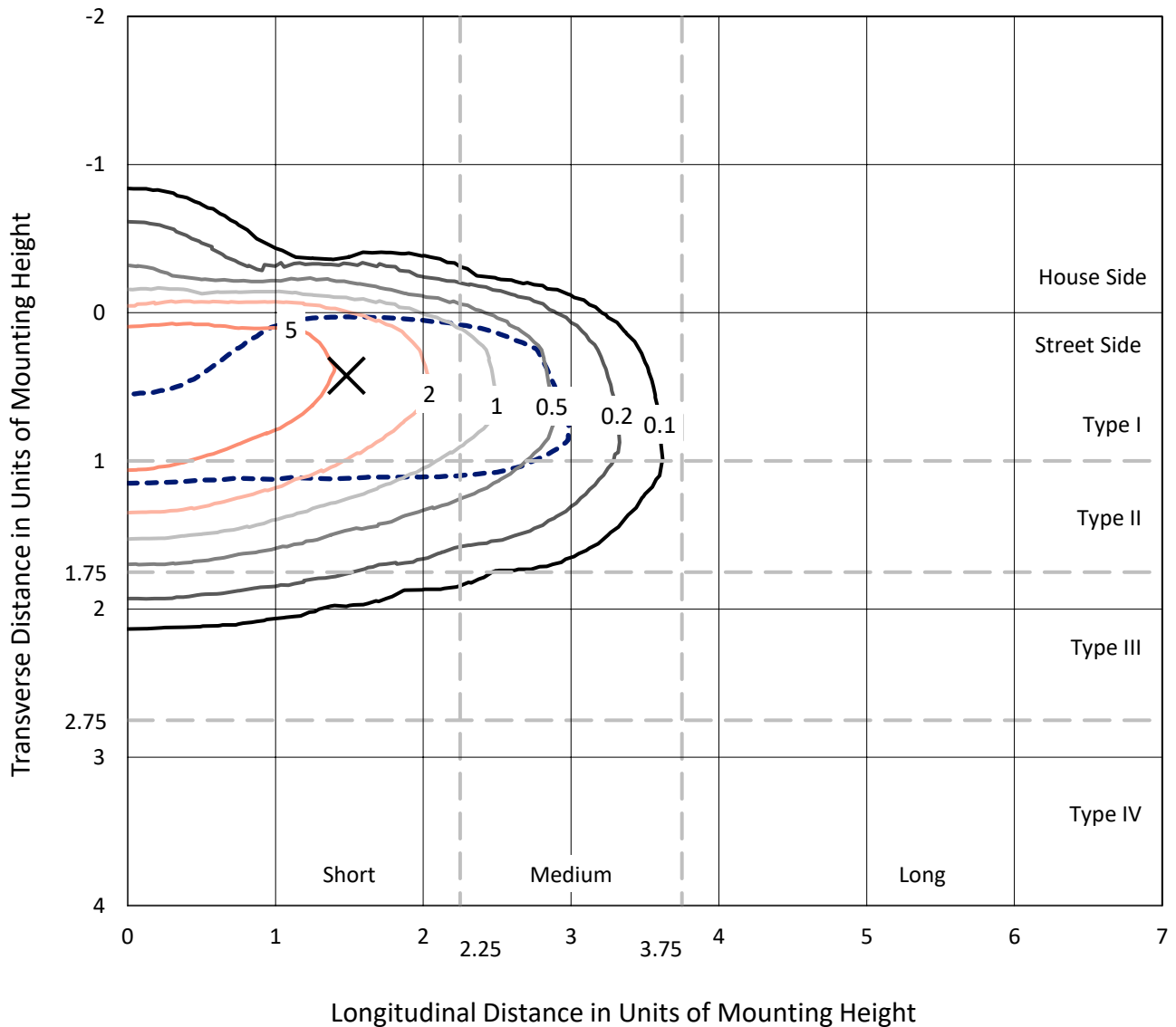
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

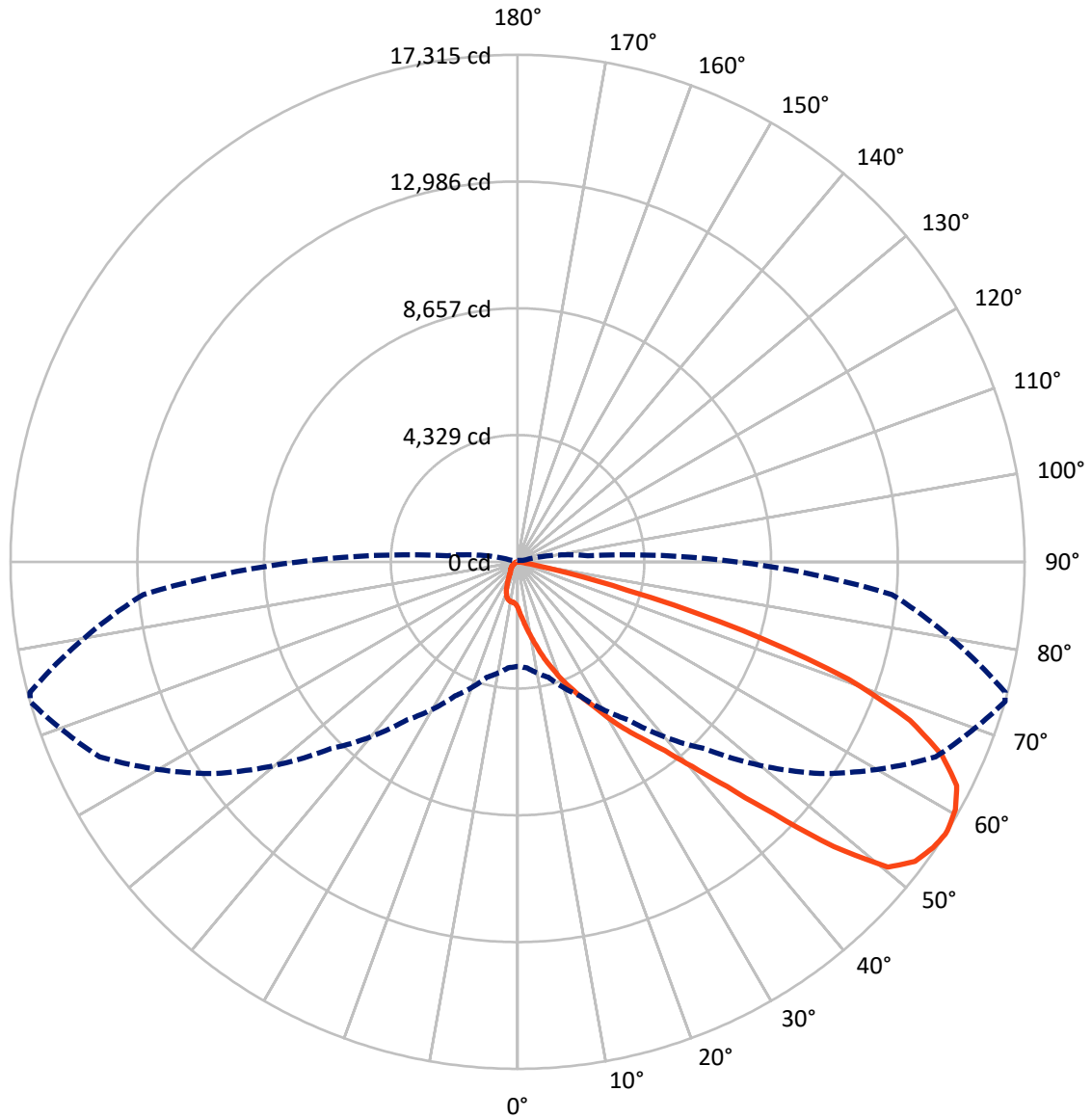
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 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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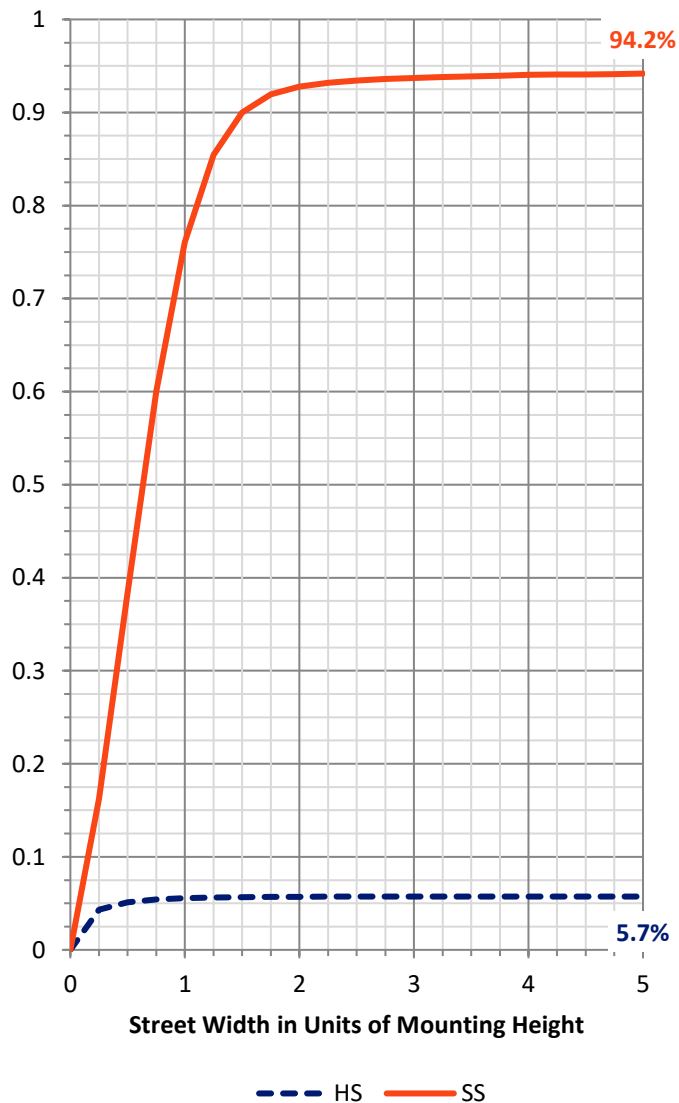
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1080.1	0.0	1080.1
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	17646.5	0.0	17646.5
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	18726.5	0.0	18726.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.3	1.0
10°-20°	746.1	4.0
20°-30°	1596.6	8.5
30°-40°	2934.5	15.7
40°-50°	4498.6	24.0
50°-60°	4758.9	25.4
60°-70°	3107.7	16.6
70°-80°	849.1	4.5
80°-90°	45.7	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°	18726.5	100.0
0°-180°	18726.5	100.0

**Coefficient of Utilization**



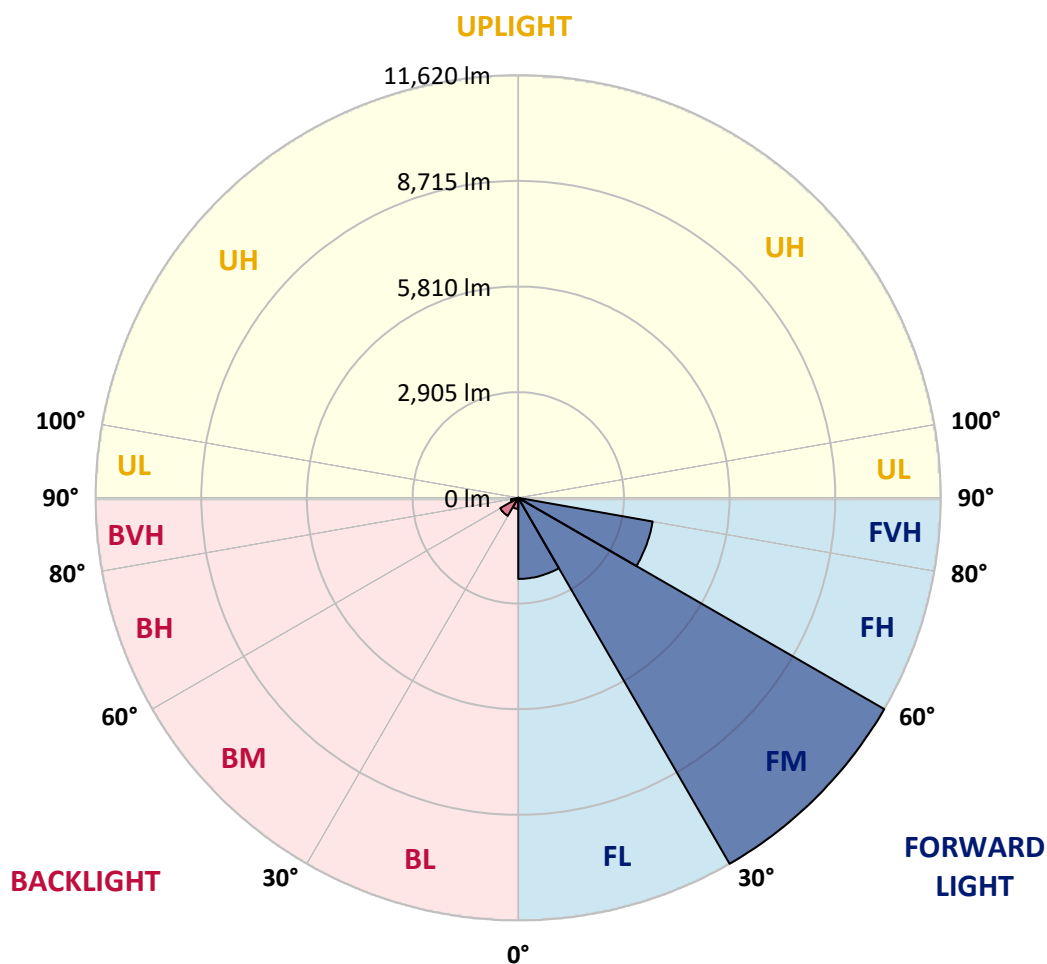
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2230.3	11.9			
FM (30°-60°)	11620.2	62.1			
FH (60°-80°)	3754.0	20.0			G2/5000
FVH (80°-90°)	41.9	0.2			G1/100
BL (0°-30°)	301.7	1.6	B1/500		
BM (30°-60°)	571.8	3.1	B1/1000		
BH (60°-80°)	202.8	1.1	B1/500		G1/500
BVH (80°-90°)	3.8	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°	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3
2.5°	2294.9	2274.2	2232.9	2218.6	2157.9	2063.5	1980.8	1869.5	1781.7	1772.6	1666.6
5°	3073.3	3026.8	3007.3	2914.2	2768.2	2631.2	2395.8	2217.4	2011.8	1996.3	1782.9
7.5°	3823.2	3758.5	3739.2	3651.2	3480.6	3264.7	2959.5	2635.0	2309.1	2279.4	1939.4
10°	4366.2	4375.3	4340.4	4282.2	4143.9	3924.0	3547.8	3104.3	2640.2	2602.6	2115.2
12.5°	4755.4	4754.1	4760.6	4759.3	4685.5	4518.8	4123.2	3612.4	3004.8	2931.1	2317.0
15°	5008.8	5012.7	5032.1	5099.3	5107.1	5003.6	4673.9	4098.6	3427.6	3335.7	2535.4
17.5°	5264.8	5292.0	5323.0	5386.4	5443.2	5401.8	5169.1	4605.4	3810.2	3741.8	2769.5
20°	5687.6	5725.1	5707.0	5745.8	5775.5	5779.4	5599.7	5073.4	4274.5	4159.3	3037.1
22.5°	6363.8	6362.5	6316.0	6246.1	6188.0	6185.4	6022.5	5554.5	4695.9	4584.7	3306.1
25°	7218.4	7222.3	7131.8	6932.7	6787.9	6610.8	6423.3	5975.9	5147.2	5010.1	3589.1
27.5°	8198.5	8173.9	8036.8	7762.8	7475.7	7173.1	6902.9	6465.9	5625.5	5511.7	3913.7
30°	9078.9	9069.9	8909.6	8574.8	8197.1	7893.4	7501.6	7080.0	6244.8	6105.2	4277.0
32.5°	9898.7	9911.6	9689.2	9342.8	8978.1	8627.7	8214.0	7667.1	6852.6	6654.7	4672.7
35°	10538.7	10551.6	10321.4	10033.1	9658.2	9367.3	8973.0	8292.8	7452.4	7285.7	5127.7
37.5°	10880.0	10896.8	10763.6	10546.4	10312.4	10166.3	9799.1	9098.4	8181.7	8080.8	5665.6
40°	10944.7	10964.0	10905.8	10847.7	10834.8	10939.5	10832.2	10047.3	9192.7	9035.0	6467.2
42.5°	10750.7	10776.6	10802.4	10931.7	11195.5	11579.5	11953.1	11335.1	10494.7	10282.7	7447.3
45°	10241.3	10238.7	10340.9	10675.7	11266.6	12086.3	13124.6	12947.4	12268.6	12016.5	8832.0
47.5°	9369.8	9357.0	9578.1	10055.1	10975.7	12179.4	14080.0	14904.9	14532.6	14299.8	10320.2
50°	8042.1	8105.4	8453.1	9119.0	10253.0	11897.5	14374.8	16188.7	16390.5	16143.5	11522.6
52.5°	6486.6	6484.0	7029.7	7933.4	9182.4	11277.0	14169.3	16421.5	16994.3	16805.5	12114.8
55°	4800.7	4834.2	5401.8	6313.4	7792.5	10144.3	13498.2	16182.3	17224.4	17091.2	12505.2
57°	3571.1	3630.5	4085.7	5050.2	6582.3	9023.3	12604.7	15754.4	17314.9	17242.5	12829.7
57.5°	3333.1	3335.7	3779.2	4655.9	6228.0	8592.8	12348.7	15575.9	17312.3	17272.3	12882.8
60°	2051.9	2116.5	2422.9	3147.0	4558.9	6706.4	10633.0	14550.6	17177.8	17236.0	13109.0
62.5°	1228.3	1255.4	1454.5	1896.7	2938.8	4895.0	8701.4	13238.3	16827.5	17004.6	13093.5
65°	790.0	796.4	886.9	1148.1	1837.2	3308.6	6705.1	11504.5	15921.1	16246.9	12581.5
67.5°	610.2	620.6	656.8	753.8	1065.4	2061.0	4742.5	9654.3	14454.9	14875.2	11340.3
70°	541.8	546.9	559.9	590.9	704.7	1163.6	2950.5	7541.7	11986.8	12105.7	8874.7
72.5°	442.2	456.4	496.5	506.8	558.5	726.6	1642.1	5061.8	8053.7	8083.4	4964.8
75°	342.6	345.2	404.7	434.5	470.6	500.4	733.1	2552.3	3868.4	3661.5	1913.5
77.5°	256.0	267.6	294.8	332.3	384.0	358.2	328.4	961.9	1201.1	1179.2	556.0
80°	164.2	170.6	205.5	249.5	298.6	234.1	184.9	281.8	263.7	271.5	133.1
82.5°	82.8	84.0	131.9	203.0	190.1	117.7	116.4	115.0	98.2	97.0	62.1
85°	9.1	19.4	85.4	116.4	85.4	38.8	54.3	53.0	51.7	53.0	36.2
87.5°	1.3	1.3	14.2	16.8	11.6	13.0	15.5	16.8	20.7	19.4	15.5
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°	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3	1568.3
2.5°	1614.9	1563.2	1467.5	1375.7	1307.2	1263.2	1206.3	1185.6	1155.9	1152.0	1137.8
5°	1684.7	1586.5	1419.6	1287.7	1181.8	1101.5	1031.7	973.5	927.0	916.7	921.8
7.5°	1784.3	1638.2	1405.4	1225.7	1078.3	941.2	830.1	761.5	712.4	694.3	696.9
10°	1896.7	1706.6	1402.8	1159.7	934.8	766.7	645.1	584.4	556.0	545.6	534.0
12.5°	2029.9	1785.5	1396.4	1057.6	777.1	611.6	525.0	488.7	461.5	453.8	453.8
15°	2179.9	1869.5	1365.4	930.9	630.9	505.5	447.3	418.9	409.8	402.1	402.1
17.5°	2336.3	1952.3	1300.7	774.5	523.6	433.1	397.0	380.1	367.2	358.2	358.2
20°	2514.8	2033.8	1197.2	636.1	442.2	386.6	358.2	338.8	328.4	320.7	318.1
22.5°	2684.1	2099.7	1065.4	522.3	385.3	347.8	321.9	301.2	290.9	287.0	287.0
25°	2860.0	2139.8	906.3	431.9	351.7	315.5	287.0	270.2	261.1	258.6	257.3
27.5°	3030.6	2163.1	766.7	377.5	320.7	285.8	258.6	245.7	236.6	234.1	235.3
30°	3237.5	2166.9	630.9	338.8	293.5	257.3	232.7	221.1	215.9	213.4	212.0
32.5°	3446.9	2161.8	530.1	315.5	267.6	232.7	212.0	203.0	199.1	195.2	195.2
35°	3682.2	2134.6	451.2	292.2	243.0	212.0	193.9	186.2	181.0	177.1	175.9
37.5°	3974.5	2120.4	406.0	266.3	221.1	192.7	175.9	168.1	164.2	159.0	157.8
40°	4434.8	2183.7	391.7	243.0	199.1	174.5	159.0	150.0	144.8	139.6	138.3
42.5°	5008.8	2294.9	368.5	219.8	179.7	157.8	142.2	131.9	122.9	116.4	113.8
45°	5752.3	2441.1	332.3	195.2	162.9	139.6	125.4	112.5	100.8	95.7	94.4
47.5°	6531.9	2582.0	300.0	175.9	144.8	124.1	108.6	94.4	84.0	80.1	78.9
50°	7010.2	2610.5	279.3	153.8	126.7	107.3	91.8	78.9	72.4	68.5	68.5
52.5°	7228.7	2565.1	250.9	134.5	109.9	94.4	78.9	68.5	64.7	62.1	60.8
55°	7381.4	2495.3	213.4	116.4	94.4	80.1	69.8	62.1	56.9	54.3	53.0
57°	7470.5	2401.0	184.9	102.2	81.5	69.8	62.1	55.6	50.5	45.2	45.2
57.5°	7474.4	2364.8	177.1	100.8	77.5	67.2	60.8	54.3	47.9	42.6	41.4
60°	7359.3	2116.5	142.2	85.4	62.1	56.9	50.5	42.6	33.6	28.4	27.2
62.5°	6989.6	1801.1	117.7	72.4	50.5	44.0	36.2	32.3	23.3	16.8	16.8
65°	6429.8	1461.0	100.8	58.2	41.4	32.3	24.6	23.3	14.2	7.7	6.5
67.5°	5620.4	1137.8	85.4	47.9	34.9	23.3	16.8	15.5	7.7	2.6	0.0
70°	4282.2	775.7	71.1	38.8	25.8	16.8	11.6	9.1	5.1	1.3	0.0
72.5°	2468.2	426.6	59.5	29.8	19.4	13.0	9.1	5.1	5.1	0.0	0.0
75°	881.8	183.6	45.2	22.0	15.5	10.3	6.5	2.6	3.9	1.3	0.0
77.5°	280.6	98.2	29.8	16.8	13.0	7.7	5.1	2.6	2.6	1.3	0.0
80°	82.8	51.7	18.1	14.2	9.1	6.5	3.9	1.3	2.6	1.3	0.0
82.5°	45.2	25.8	14.2	10.3	9.1	5.1	3.9	1.3	1.3	1.3	0.0
85°	23.3	15.5	11.6	10.3	9.1	5.1	3.9	1.3	0.0	1.3	1.3
87.5°	13.0	11.6	11.6	10.3	9.1	6.5	3.9	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)