

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: P317903

Luminaire Tested: **GLEON-SA9D-827-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317903  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA9D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52138 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5

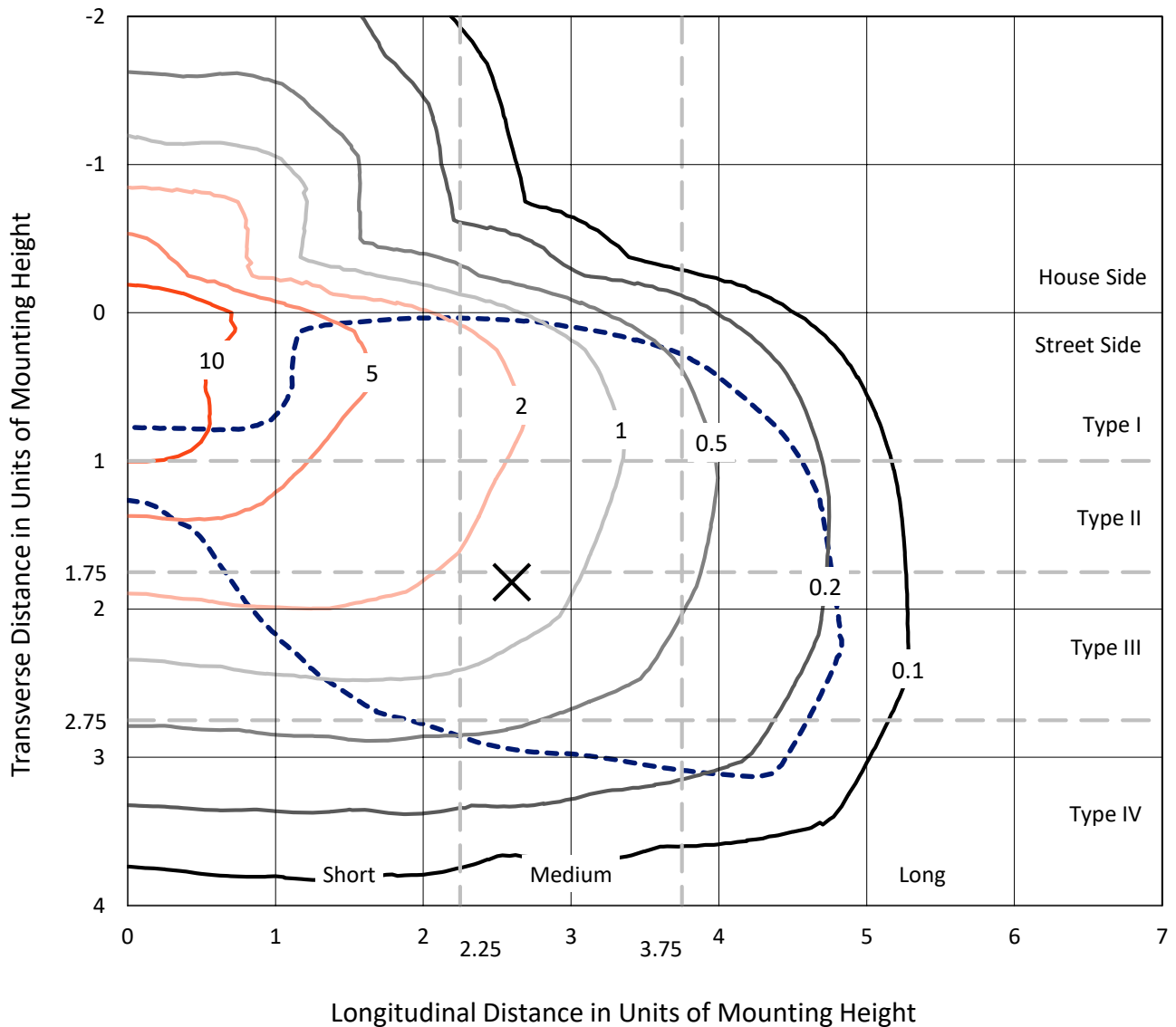
Input Watts (W): 575  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

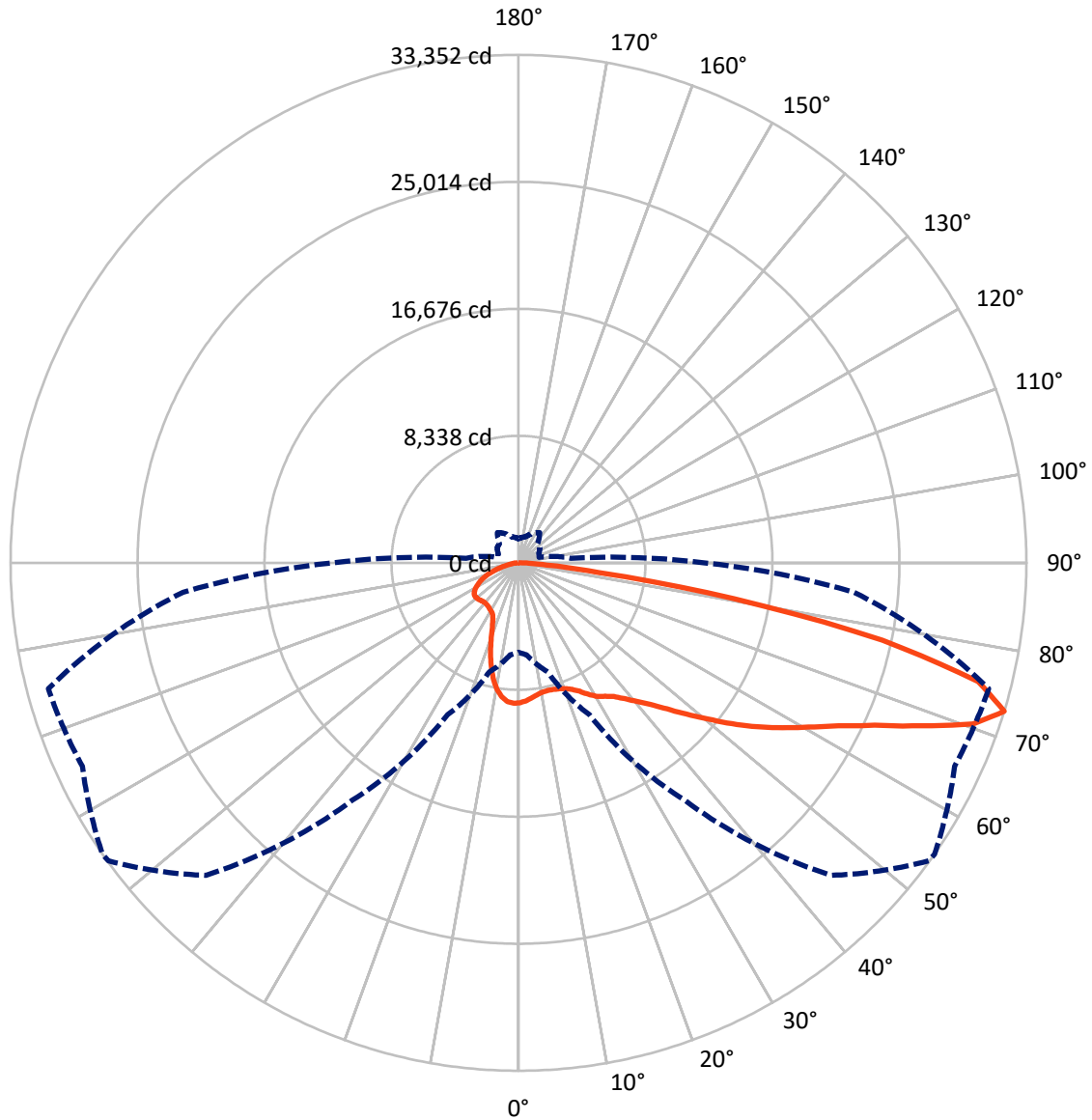
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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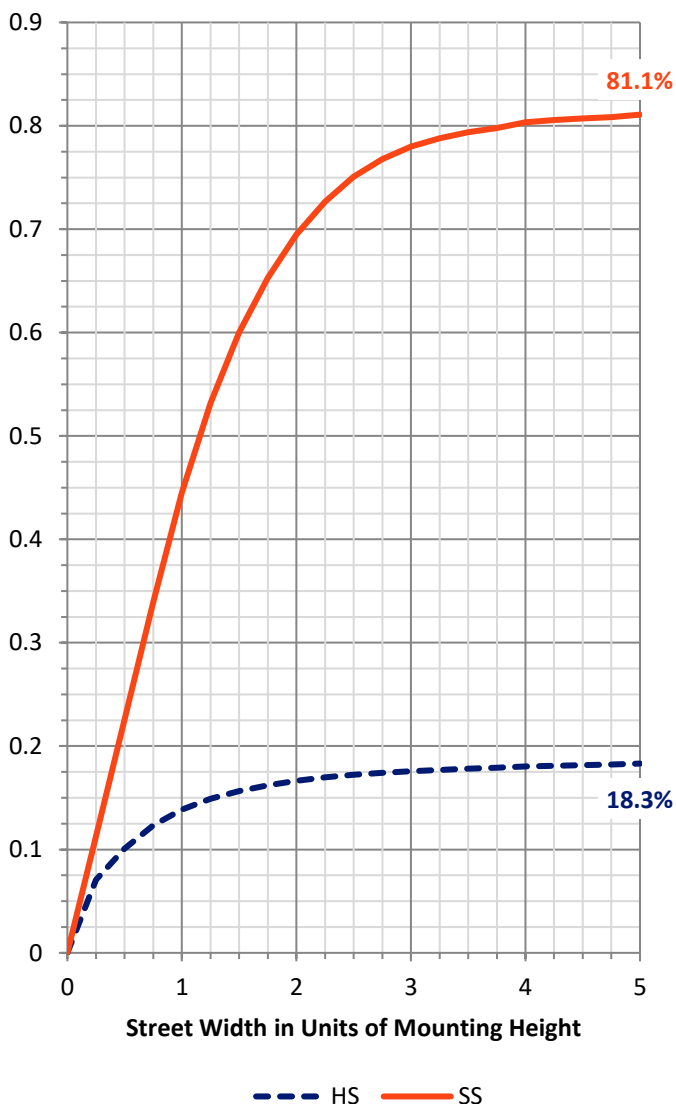
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9690.8	0.0	9690.8
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	42447.2	0.0	42447.2
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	52138.0	0.0	52138.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	832.1	1.6
10°-20°	2215.4	4.2
20°-30°	3652.7	7.0
30°-40°	5403.3	10.4
40°-50°	7541.8	14.5
50°-60°	9819.7	18.8
60°-70°	12068.1	23.1
70°-80°	9460.0	18.1
80°-90°	1144.8	2.2
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°	52138.0	100.0
0°-180°	52138.0	100.0

**Coefficient of Utilization**

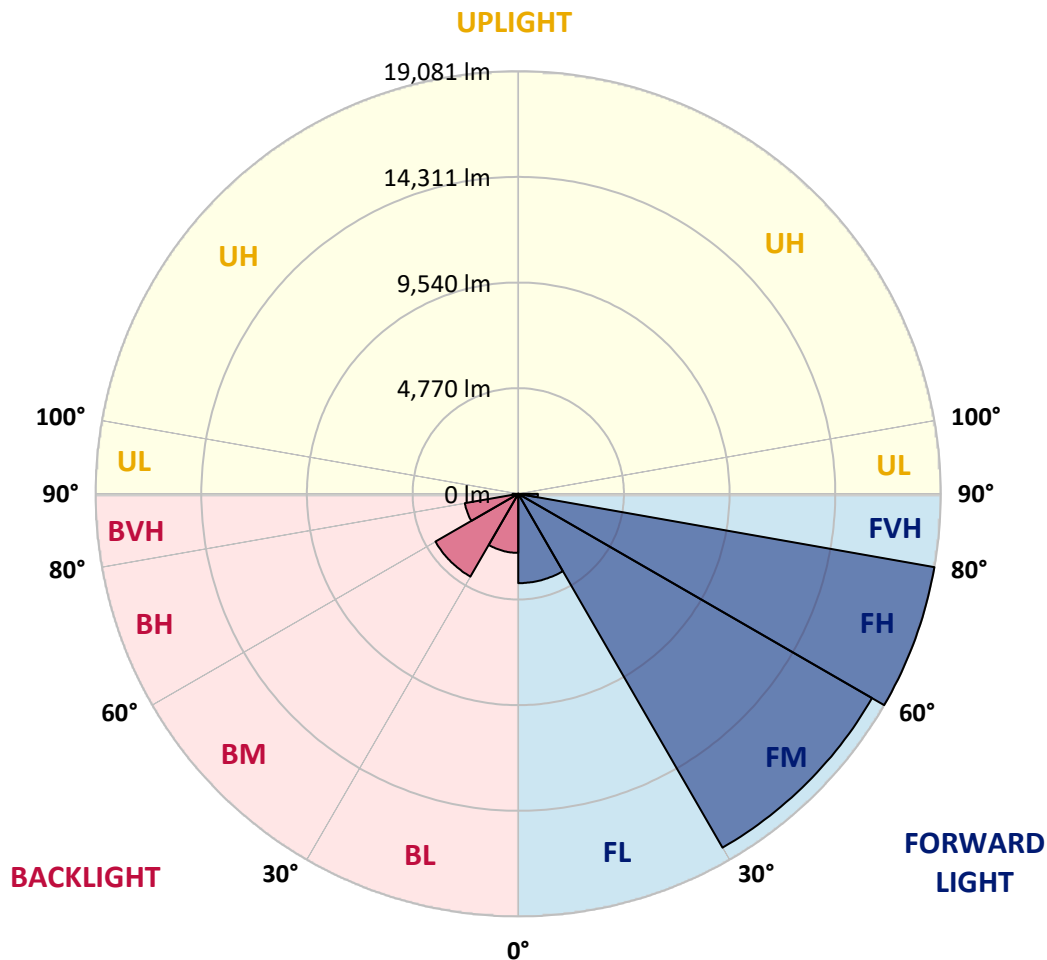


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4034.0	7.7			
FM (30°-60°)	18447.5	35.4			
FH (60°-80°)	19080.7	36.6			G5
FVH (80°-90°)	885.1	1.7			G5
BL (0°-30°)	2666.3	5.1	B4/5000		
BM (30°-60°)	4317.4	8.3	B3/5000		
BH (60°-80°)	2447.4	4.7	B3/2500		G3/2500
BVH (80°-90°)	259.7	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0
2.5°	8896.6	8875.5	8901.9	8938.9	8979.4	9034.0	9065.7	9079.8	9134.4	9155.5	9201.3
5°	8484.6	8474.0	8518.0	8581.4	8671.2	8798.0	8900.2	8919.5	9063.9	9166.1	9259.4
7.5°	8185.2	8185.2	8236.3	8312.0	8412.4	8583.2	8727.6	8754.0	8998.8	9218.9	9391.5
10°	7947.5	7956.3	8016.1	8106.0	8223.9	8405.3	8597.3	8627.2	8981.2	9342.2	9616.9
12.5°	7789.0	7810.1	7864.7	7945.7	8091.9	8312.0	8555.0	8595.5	9018.2	9518.3	9888.1
15°	7889.3	7924.6	7929.9	7963.3	8044.3	8283.8	8579.7	8621.9	9097.4	9697.9	10196.3
17.5°	8329.6	8341.9	8287.3	8216.9	8178.2	8331.4	8653.6	8697.7	9192.5	9875.8	10492.1
20°	8998.8	8991.7	8873.8	8683.6	8486.3	8511.0	8775.1	8820.9	9321.1	10032.5	10788.0
22.5°	9844.1	9819.4	9638.0	9287.6	8951.2	8810.4	8988.2	9027.0	9514.8	10256.2	11105.0
25°	10869.0	10814.4	10574.9	10104.7	9609.9	9247.1	9308.7	9345.7	9796.5	10506.2	11395.5
27.5°	11950.2	11895.7	11591.0	11022.2	10363.6	9798.3	9750.7	9782.4	10117.0	10691.1	11610.4
30°	13080.8	13022.7	12744.5	12107.0	11163.1	10368.9	10162.8	10175.1	10342.4	10791.5	11786.5
32.5°	14216.7	14162.1	13850.4	13110.8	12031.3	10981.7	10460.4	10444.6	10478.0	10895.4	11985.5
35°	15368.4	15389.5	15025.0	14206.1	12992.8	11663.2	10812.6	10779.2	10705.2	11108.5	12267.2
37.5°	16601.1	16587.0	16115.1	15259.2	13998.3	12402.8	11318.0	11312.8	11057.4	11511.8	12709.2
40°	17425.2	17434.1	17147.0	16336.9	15014.4	13221.7	11966.1	11953.8	11619.2	12115.8	13288.6
42.5°	17747.5	17805.6	17879.6	17365.4	16078.1	14170.9	12739.2	12721.6	12402.8	12982.2	13970.1
45°	17770.4	17886.6	18344.5	18279.3	17155.8	15257.4	13727.1	13677.8	13448.9	14133.9	14783.7
47.5°	17573.2	17692.9	18453.7	18823.5	18119.1	16403.9	14882.3	14843.6	14646.4	15574.4	15664.2
50°	17141.7	17256.2	18228.3	19089.4	18911.5	17506.3	16213.7	16111.5	16005.9	17238.6	16671.5
52.5°	16333.4	16553.5	17927.1	19152.8	19385.3	18485.4	17613.7	17546.8	17604.9	18994.3	17680.6
55°	14419.2	14665.7	17150.5	19100.0	19735.7	19307.8	19013.7	19010.2	19311.3	20836.3	18763.6
57.5°	13346.7	13521.1	15569.1	19010.2	20151.3	20124.9	20399.6	20433.1	21019.5	22842.1	19897.7
60°	12740.9	12924.1	14767.9	18677.3	20795.8	21181.5	21813.7	21880.6	22755.8	25062.8	21262.5
62.5°	12189.7	12390.5	14271.3	17999.3	21554.8	22692.4	23507.8	23567.7	24594.3	27345.0	22581.5
65°	11247.6	11474.8	13544.0	17553.8	22245.1	24663.0	25661.5	25702.0	26705.8	29736.5	23590.6
67.5°	9916.3	10124.1	12172.1	16569.4	22755.8	27056.2	28524.9	28547.8	28799.6	31425.3	24106.5
70°	8361.3	8440.5	10217.4	14537.2	22151.8	29294.5	31663.1	31668.3	30708.6	32506.6	24022.0
72.5°	5874.7	6061.4	7417.4	11004.6	19036.6	29021.5	33292.0	33351.9	31596.1	31960.7	22102.5
75°	3603.0	3800.3	4652.6	6669.0	12077.0	22824.5	30759.7	31175.3	29932.0	28496.7	18055.7
77.5°	2409.1	2483.0	3036.0	3888.3	5471.5	13131.9	23648.7	24430.6	24865.5	20781.7	11547.0
80°	1343.7	1484.5	2012.8	2416.1	2433.7	5217.9	14179.7	14362.8	13834.5	8275.0	3562.5
82.5°	711.5	788.9	1343.7	1419.4	1327.8	1746.9	5284.8	5290.1	4420.1	2218.9	1058.4
85°	551.2	616.4	921.0	866.4	678.0	774.8	1743.4	1838.5	1503.9	908.7	345.2
87.5°	274.7	341.6	625.2	549.4	265.9	221.9	623.4	665.7	593.5	355.7	125.0
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°	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0	9196.0
2.5°	9218.9	9234.8	9254.1	9233.0	9226.0	9197.8	9150.2	9139.7	9115.0	9116.8	9130.9
5°	9299.9	9326.3	9315.8	9234.8	9137.9	9002.3	8861.4	8741.7	8662.4	8657.2	8651.9
7.5°	9454.9	9472.5	9389.7	9159.0	8887.8	8574.4	8278.5	8019.7	7862.9	7824.2	7815.4
10°	9697.9	9694.4	9467.2	9002.3	8461.7	7901.7	7426.2	7067.0	6857.4	6795.8	6779.9
12.5°	9969.1	9928.6	9493.6	8717.0	7859.4	7082.8	6480.5	6080.8	5862.4	5792.0	5774.4
15°	10249.1	10148.7	9428.5	8290.9	7119.8	6200.5	5568.3	5198.5	5080.5	5041.8	5034.7
17.5°	10509.7	10316.0	9241.8	7713.2	6276.3	5321.8	4828.7	4680.8	4709.0	4760.0	4761.8
20°	10765.1	10428.7	8942.4	6984.2	5386.9	4598.0	4430.7	4539.9	4673.7	4777.6	4791.7
22.5°	11016.9	10508.0	8556.8	6142.4	4591.0	4191.2	4309.2	4508.2	4661.4	4774.1	4793.5
25°	11228.2	10527.3	8024.9	5244.3	4038.0	4038.0	4251.1	4439.5	4591.0	4701.9	4721.3
27.5°	11305.7	10397.0	7274.8	4413.1	3759.8	3967.6	4170.1	4326.8	4455.4	4573.4	4594.5
30°	11335.7	10155.8	6408.3	3745.7	3645.3	3891.8	4060.9	4194.7	4316.2	4427.2	4446.6
32.5°	11340.9	9865.2	5489.1	3367.1	3566.1	3812.6	3925.3	4043.3	4173.6	4217.6	4224.7
35°	11374.4	9521.8	4520.5	3173.3	3492.1	3738.6	3828.4	3913.0	3701.7	3717.5	3731.6
37.5°	11471.3	9181.9	3710.5	3064.2	3444.5	3699.9	3807.3	3500.9	3335.4	3296.6	3291.3
40°	11652.6	8819.2	3110.0	2976.1	3426.9	3719.3	3671.7	3268.4	2983.2	2770.1	2738.4
42.5°	11904.5	8428.2	2726.1	2918.0	3439.3	3812.6	3483.3	3044.8	2571.1	2433.7	2416.1
45°	12188.0	8017.9	2518.3	2877.5	3481.5	3884.8	3444.5	2747.2	2379.1	2275.2	2266.4
47.5°	12462.7	7516.0	2410.8	2859.9	3539.6	3826.7	3280.8	2655.6	2287.6	2233.0	2238.3
50°	12777.9	7063.4	2345.7	2840.5	3590.7	3789.7	3095.9	2608.1	2252.3	2319.3	2389.7
52.5°	13043.8	6595.0	2287.6	2801.8	3610.1	3724.5	3048.3	2616.9	2252.3	2380.9	2447.8
55°	13359.1	6241.0	2220.6	2720.8	3573.1	3539.6	3014.9	2669.7	2278.8	2197.7	2204.8
57.5°	13765.9	6124.8	2146.7	2594.0	3449.8	3270.2	2999.0	2720.8	2262.9	2211.8	2229.4
60°	14329.4	6248.1	2116.7	2428.4	3257.9	3058.9	3000.8	2694.4	2152.0	2063.9	2065.7
62.5°	14866.5	6385.4	2115.0	2324.5	3021.9	2870.5	2960.3	2608.1	2095.6	2044.5	2063.9
65°	15042.6	6246.3	2030.5	2208.3	2756.0	2645.0	2886.3	2516.5	2053.3	1975.9	1972.3
67.5°	14806.6	5814.9	1859.6	2019.9	2451.3	2382.7	2789.4	2407.3	1986.4	1923.0	1912.5
70°	14105.7	4851.6	1648.3	1771.6	2104.4	2086.8	2636.2	2280.5	1896.6	1842.0	1796.2
72.5°	12219.7	3456.9	1389.4	1474.0	1713.5	1769.8	2424.9	2115.0	1769.8	1651.8	1581.4
75°	10036.0	2558.8	1141.1	1158.7	1301.4	1454.6	2134.4	1921.3	1620.1	1419.4	1364.8
77.5°	6145.9	1565.5	908.7	915.7	933.3	1160.5	1757.5	1704.7	1429.9	1183.4	1144.7
80°	1989.9	854.1	656.9	690.3	637.5	850.6	1359.5	1451.1	1227.4	989.7	947.4
82.5°	757.2	498.4	443.8	466.7	442.0	570.6	991.5	1162.3	1005.5	813.6	662.1
85°	366.3	281.8	262.4	294.1	273.0	292.3	634.0	855.9	762.5	530.1	493.1
87.5°	130.3	125.0	100.4	135.6	116.2	103.9	193.7	431.4	503.7	364.5	325.8
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)