

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: P651413

Luminaire Tested: **GALN-SA5D-840-U-T2-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651413  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-T2-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19219.4 lumens  
Efficiency: N/A  
Efficacy: 62.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

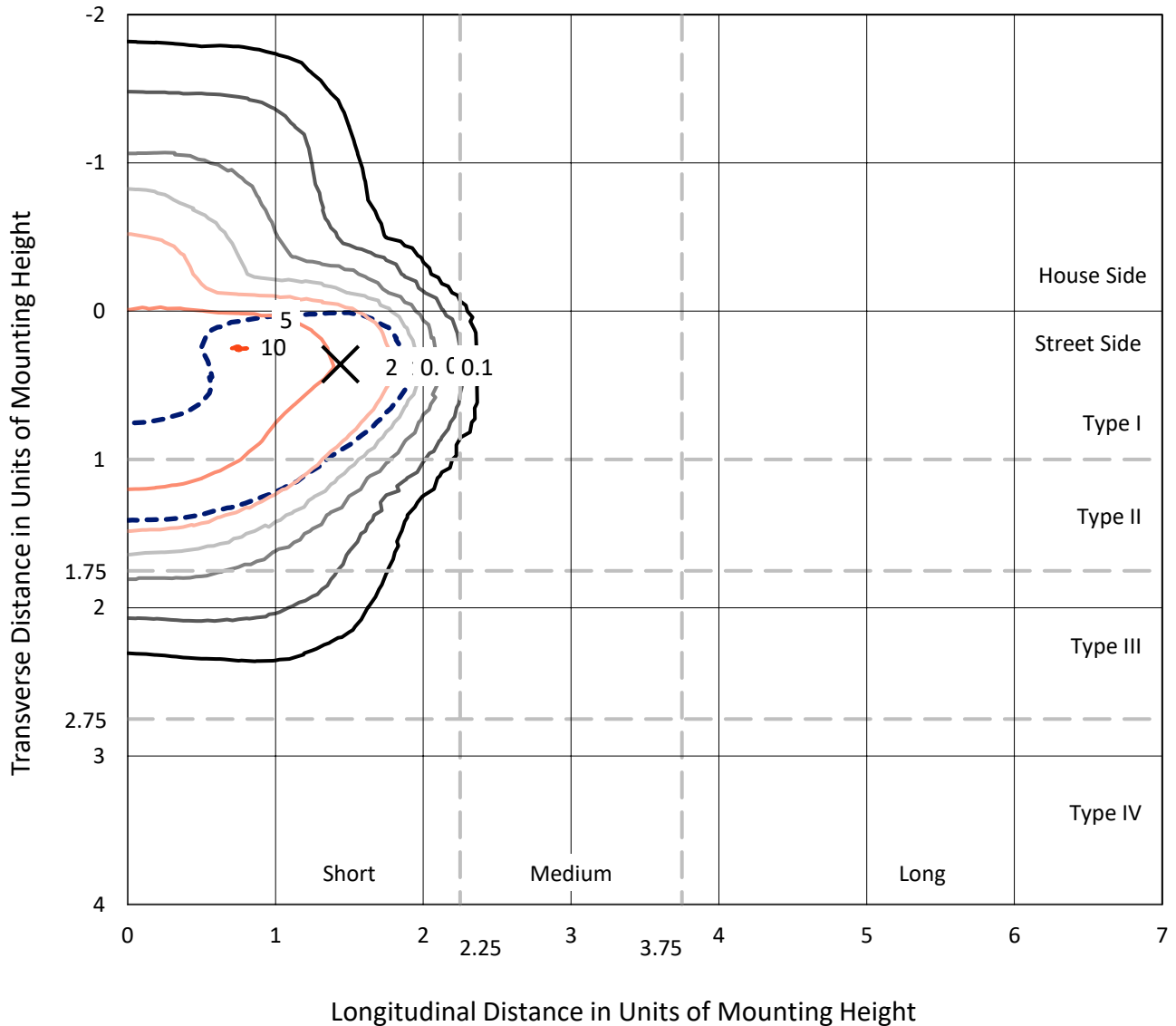
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

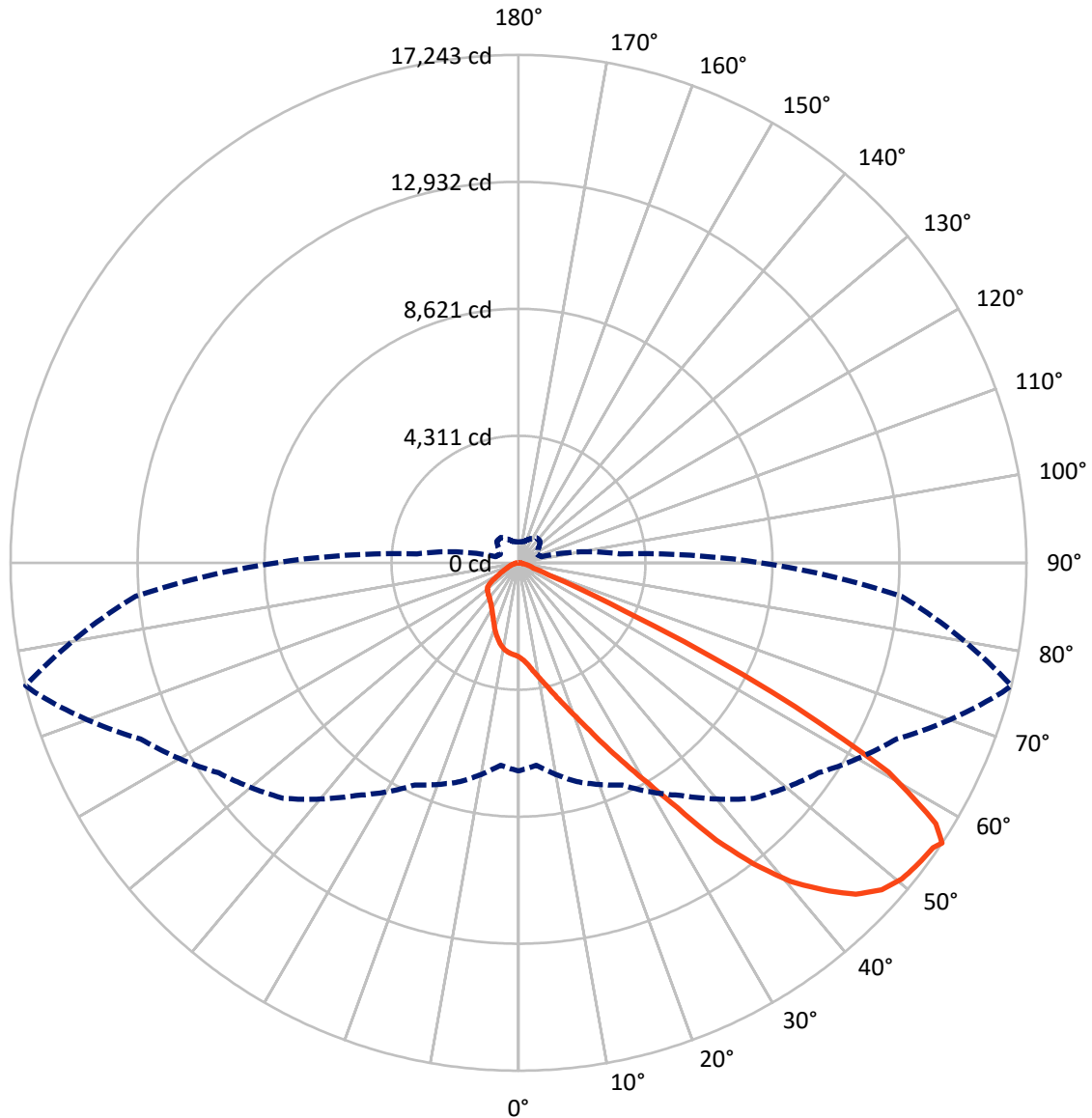
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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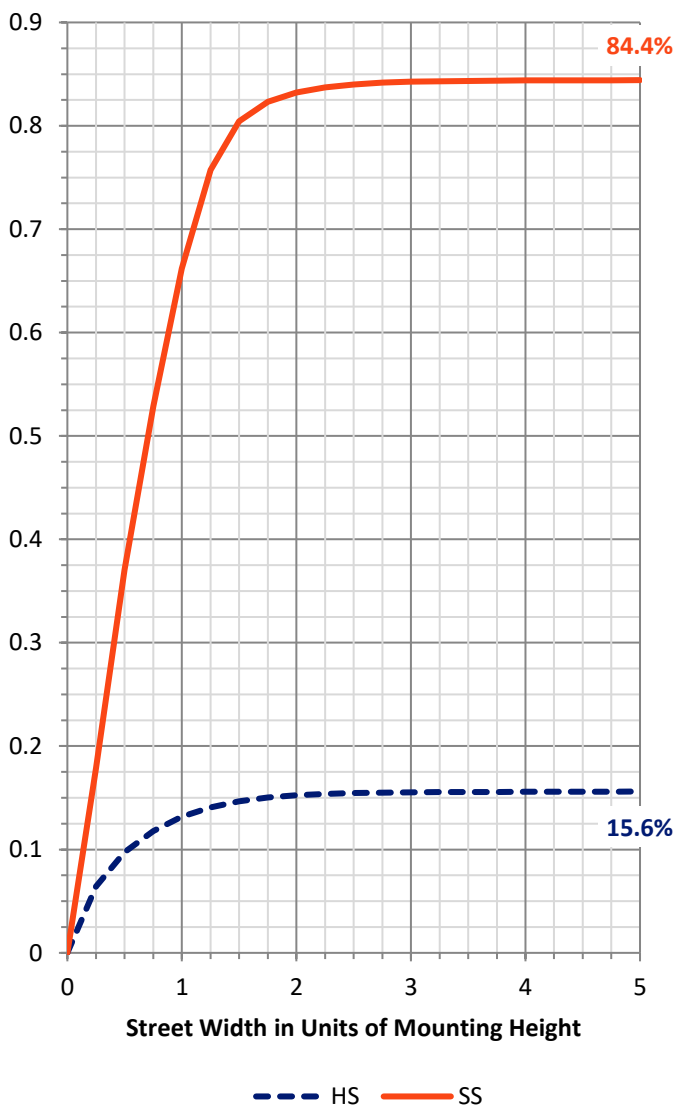
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3019.3	0.0	3019.3
	% Fixture	15.7	0.0	15.7
<b>Street Side</b>	Lumens	16200.1	0.0	16200.1
	% Fixture	84.3	0.0	84.3
<b>Total</b>	Lumens	19219.4	0.0	19219.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.3	1.7
10°-20°	1035.3	5.4
20°-30°	1877.3	9.8
30°-40°	3237.5	16.8
40°-50°	5259.4	27.4
50°-60°	5543.6	28.8
60°-70°	1693.8	8.8
70°-80°	217.1	1.1
80°-90°	33.0	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°	19219.4	100.0
0°-180°	19219.4	100.0

**Coefficient of Utilization**



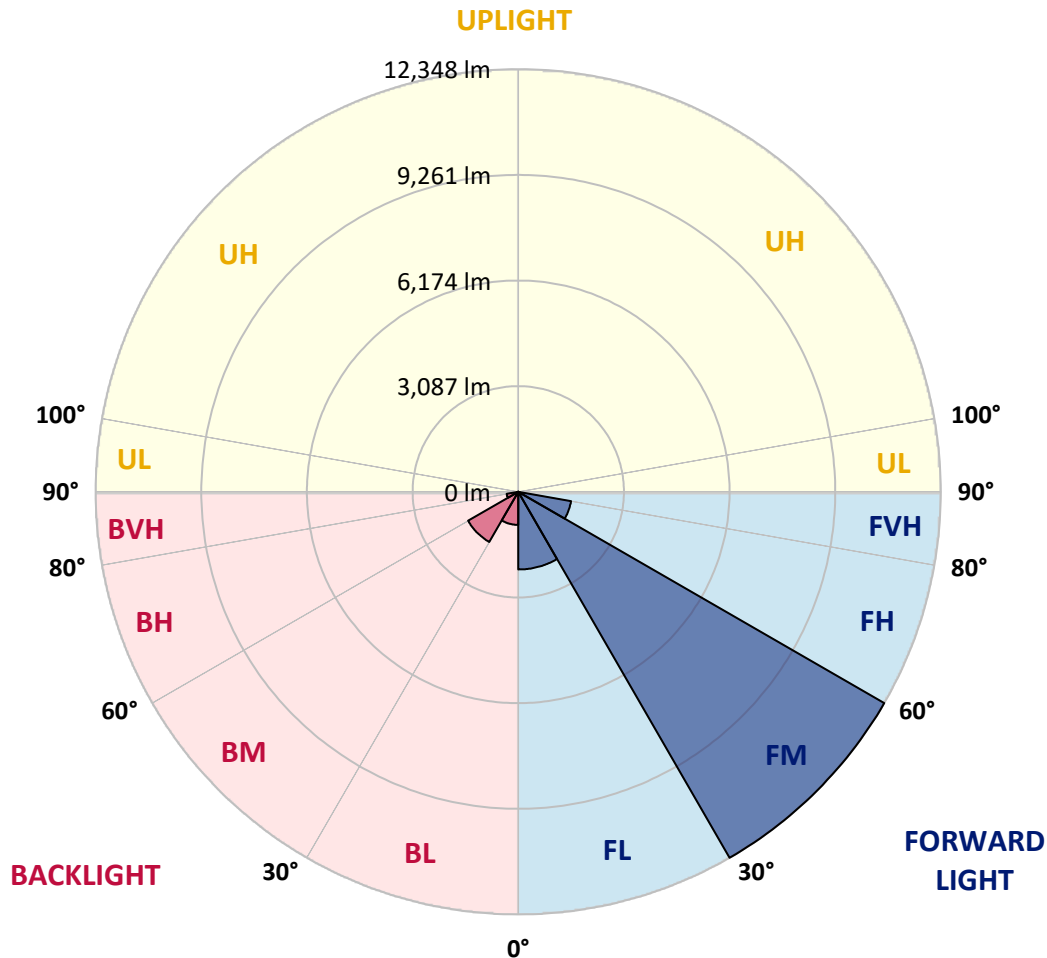
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2269.0	11.8			
FM (30°-60°)	12348.4	64.2			
FH (60°-80°)	1566.5	8.2			G1/1800
FVH (80°-90°)	16.2	0.1			G1/100
BL (0°-30°)	965.9	5.0	B2/1000		
BM (30°-60°)	1692.1	8.8	B2/2500		
BH (60°-80°)	344.4	1.8	B1/500		G1/500
BVH (80°-90°)	16.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1
2.5°	3684.4	3599.4	3602.9	3595.9	3585.3	3546.2	3429.3	3411.7	3333.7	3312.4	3241.6
5°	4127.3	4052.9	4095.4	4031.7	3971.4	3936.0	3744.6	3656.1	3532.1	3486.0	3386.9
7.5°	4403.6	4368.2	4354.0	4357.6	4300.9	4212.3	4127.3	3932.4	3765.9	3730.5	3521.5
10°	4538.3	4517.0	4538.3	4527.6	4552.4	4563.0	4414.2	4297.3	4052.9	3992.6	3666.8
12.5°	4570.2	4612.6	4630.4	4676.4	4736.7	4839.4	4828.8	4669.3	4343.4	4304.4	3890.0
15°	4648.0	4683.5	4665.8	4740.2	4853.6	5027.2	5119.3	5094.4	4743.7	4672.8	4148.6
17.5°	4718.9	4655.2	4715.4	4864.2	4977.5	5243.2	5466.4	5569.2	5179.5	5098.0	4385.9
20°	4814.6	4796.9	4786.2	4860.6	5062.6	5416.9	5859.7	6047.5	5668.4	5583.4	4726.0
22.5°	5105.1	5108.7	5101.5	4991.8	5137.0	5537.3	6203.3	6667.4	6252.9	6182.1	5112.2
25°	5487.7	5441.6	5406.2	5317.6	5299.9	5647.1	6550.5	7425.6	6954.4	6904.8	5530.2
27.5°	5891.5	5891.5	5785.3	5703.8	5590.5	5919.9	6869.4	8162.5	7801.1	7733.8	5895.2
30°	6330.9	6355.7	6341.5	6167.9	6097.1	6217.5	7195.3	9104.8	8771.8	8686.8	6497.4
32.5°	6979.2	6926.1	6986.3	6841.0	6632.0	6738.3	7709.0	9948.0	10033.0	9912.6	7287.4
35°	7836.5	7804.6	7765.7	7528.3	7280.4	7365.4	8435.2	10986.1	11616.6	11556.4	8084.5
37.5°	8605.3	8587.6	8555.7	8392.8	8105.8	8208.5	9260.8	12066.6	13161.3	12962.9	9211.1
40°	9413.1	9508.7	9406.0	9260.8	8998.5	9225.3	10231.4	12707.8	14461.5	14220.6	10072.0
42.5°	10507.8	10433.4	10479.4	10213.7	10072.0	10320.0	11205.7	13349.0	15471.1	15184.2	10986.1
45°	11673.3	11676.9	11552.9	11467.9	11099.4	11368.6	11804.4	13703.3	16275.4	16052.2	11676.9
47.5°	12420.8	12417.3	12551.9	12686.6	12307.4	12041.8	12211.8	14039.9	16689.8	16587.1	11928.4
50°	12303.9	12339.3	12513.0	13016.0	13214.4	12856.6	12594.5	13940.7	16877.6	16867.0	12144.5
52.5°	10702.7	10819.5	11110.0	11836.3	12835.3	13278.2	12994.8	14124.9	16969.7	16987.4	12466.9
55°	8148.3	8212.0	8764.7	9646.9	10752.2	12268.5	12835.3	14270.2	17040.6	17072.5	12856.6
56°	7067.8	6897.7	7694.8	8321.9	9643.3	11301.4	12431.5	14156.8	16998.0	17242.5	13051.5
57.5°	5335.4	5222.0	5866.8	6649.7	7921.5	9671.7	11177.3	13621.8	16711.1	16707.6	12771.6
60°	3245.2	3131.8	3627.7	4088.4	4800.4	5955.4	7553.1	10847.9	14128.5	14426.0	10341.3
62.5°	1930.8	2001.7	2490.5	2770.4	3000.7	3121.1	3907.6	6447.8	9427.2	9639.8	6415.9
65°	1286.0	1310.8	1679.2	2139.8	2242.5	1785.5	1590.7	2611.0	4088.4	3957.2	2646.5
67.5°	793.6	850.3	1126.6	1608.4	1782.0	1303.7	754.6	974.2	1126.6	1126.6	765.2
70°	481.8	510.2	751.1	1094.7	1222.2	839.7	549.1	549.1	542.0	531.4	457.0
72.5°	230.3	248.0	382.7	563.3	573.9	442.9	425.1	464.1	453.5	449.9	379.0
75°	99.2	106.3	134.6	177.1	201.9	187.8	258.6	333.0	343.6	333.0	272.8
77.5°	31.9	35.4	49.6	63.7	67.3	81.5	109.8	138.2	159.5	148.8	134.6
80°	3.5	7.1	14.2	31.9	49.6	63.7	81.5	92.1	102.8	102.8	95.6
82.5°	3.5	3.5	14.2	28.3	46.1	60.2	78.0	88.6	102.8	106.3	99.2
85°	0.0	3.5	10.6	24.8	38.9	38.9	35.4	35.4	24.8	24.8	24.8
87.5°	0.0	0.0	3.5	3.5	3.5	7.1	7.1	7.1	7.1	7.1	7.1
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°	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1	3199.1
2.5°	3227.4	3220.4	3124.7	3064.4	3032.6	2968.8	2929.9	2901.5	2880.3	2855.4	2859.0
5°	3270.0	3245.2	3085.7	2975.9	2844.9	2774.0	2713.7	2664.1	2632.2	2625.2	2611.0
7.5°	3390.4	3259.3	3018.4	2820.0	2653.5	2582.6	2529.5	2497.6	2511.8	2479.9	2504.8
10°	3482.5	3287.6	2936.9	2650.0	2483.5	2430.3	2402.0	2426.8	2462.2	2448.1	2430.3
12.5°	3595.9	3316.0	2805.8	2487.0	2331.1	2292.1	2341.8	2387.8	2458.7	2487.0	2451.6
15°	3723.4	3347.9	2639.3	2299.2	2200.1	2231.9	2317.0	2398.4	2469.3	2504.8	2525.9
17.5°	3879.3	3337.3	2476.4	2150.4	2076.0	2168.2	2270.9	2345.3	2451.6	2504.8	2490.5
20°	4024.5	3301.9	2295.7	2001.7	2005.2	2090.2	2175.2	2295.7	2352.4	2423.3	2398.4
22.5°	4162.7	3238.1	2108.0	1898.9	1898.9	2030.0	2072.5	2150.4	2200.1	2235.5	2231.9
25°	4357.6	3117.6	1952.0	1799.7	1842.2	1927.2	1962.6	1987.5	1966.3	1994.6	1998.1
27.5°	4495.7	2993.6	1824.5	1711.2	1789.1	1852.9	1842.2	1828.1	1778.5	1739.5	1764.2
30°	4644.5	2848.4	1714.7	1650.9	1693.4	1750.1	1707.6	1665.1	1587.1	1523.4	1526.9
32.5°	4857.1	2781.0	1619.0	1580.1	1636.8	1643.8	1597.8	1534.0	1456.1	1395.8	1392.3
35°	5253.9	2738.5	1537.5	1534.0	1544.7	1548.2	1502.1	1424.1	1392.3	1342.7	1360.4
37.5°	5650.7	2717.3	1480.8	1466.7	1463.2	1466.7	1413.6	1339.1	1399.4	1395.8	1403.0
40°	6157.3	2813.0	1399.4	1381.7	1385.2	1385.2	1317.9	1296.7	1403.0	1413.6	1417.1
42.5°	6671.0	2933.4	1346.3	1289.6	1303.7	1303.7	1268.3	1243.5	1317.9	1247.0	1236.4
45°	7117.4	3110.5	1289.6	1197.4	1232.9	1250.6	1240.0	1197.4	1151.4	1030.9	1030.9
47.5°	7262.6	3266.4	1222.2	1108.9	1137.2	1215.2	1183.3	1094.7	1013.2	914.0	906.9
50°	7517.7	3436.5	1169.1	1006.2	1066.4	1162.0	1130.1	1041.6	949.5	878.6	882.1
52.5°	7779.8	3631.3	1069.9	885.7	960.1	1119.5	1119.5	1020.3	878.6	829.0	821.9
55°	8173.1	3624.2	892.8	726.3	857.3	1055.7	1073.5	914.0	786.5	747.5	747.5
56°	8229.8	3461.2	804.2	680.2	811.3	1038.0	1041.6	885.7	751.1	708.5	708.5
57.5°	7804.6	3124.7	705.0	623.5	754.6	1006.2	1009.7	860.8	722.8	662.5	655.4
60°	6004.9	2115.0	588.1	556.2	683.7	906.9	924.7	783.0	634.1	588.1	584.6
62.5°	3390.4	1172.6	517.2	503.1	588.1	772.3	825.4	683.7	538.5	513.7	520.7
65°	1548.2	644.8	435.7	407.4	474.7	595.2	666.1	563.3	442.9	414.5	414.5
67.5°	566.8	439.3	372.0	322.4	333.0	386.2	432.2	364.9	294.0	251.5	262.1
70°	403.8	368.4	326.0	279.9	258.6	251.5	248.0	205.5	145.2	113.4	120.4
72.5°	326.0	304.7	272.8	237.3	201.9	170.1	145.2	106.3	67.3	46.1	42.6
75°	233.8	223.2	198.4	170.1	141.7	120.4	99.2	67.3	35.4	17.7	17.7
77.5°	120.4	120.4	116.9	106.3	88.6	70.9	56.7	38.9	21.3	7.1	7.1
80°	92.1	99.2	102.8	92.1	81.5	63.7	46.1	28.3	14.2	3.5	3.5
82.5°	88.6	102.8	109.8	95.6	81.5	60.2	46.1	28.3	14.2	3.5	3.5
85°	21.3	21.3	31.9	35.4	46.1	49.6	38.9	24.8	10.6	3.5	3.5
87.5°	7.1	7.1	7.1	7.1	7.1	7.1	3.5	3.5	3.5	3.5	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)