

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: P651542

Luminaire Tested: **GALN-SA7D-840-U-T4W**

Issue Date: 5/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7D-840-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45347.5 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

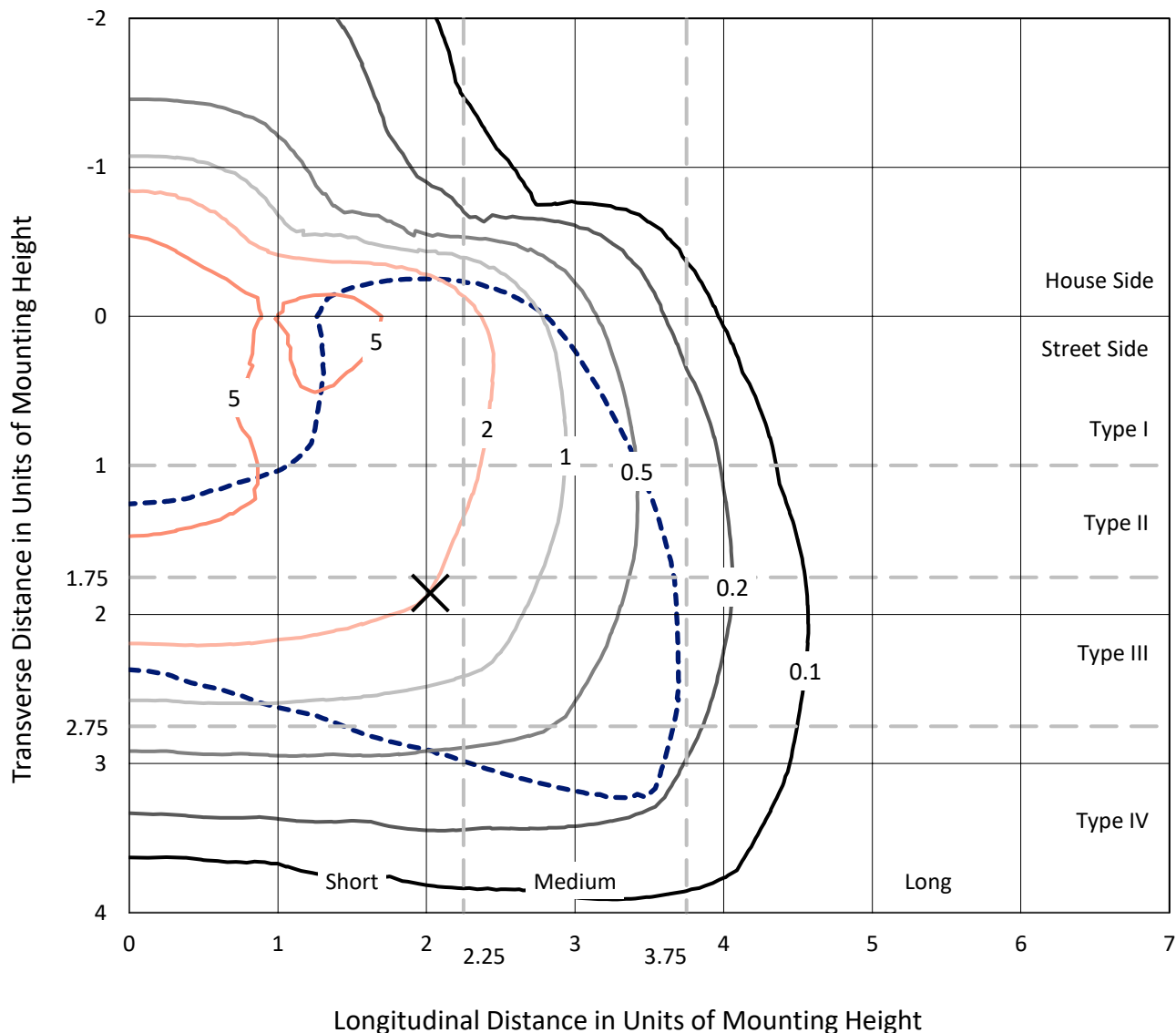
Input Watts (W): 433  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

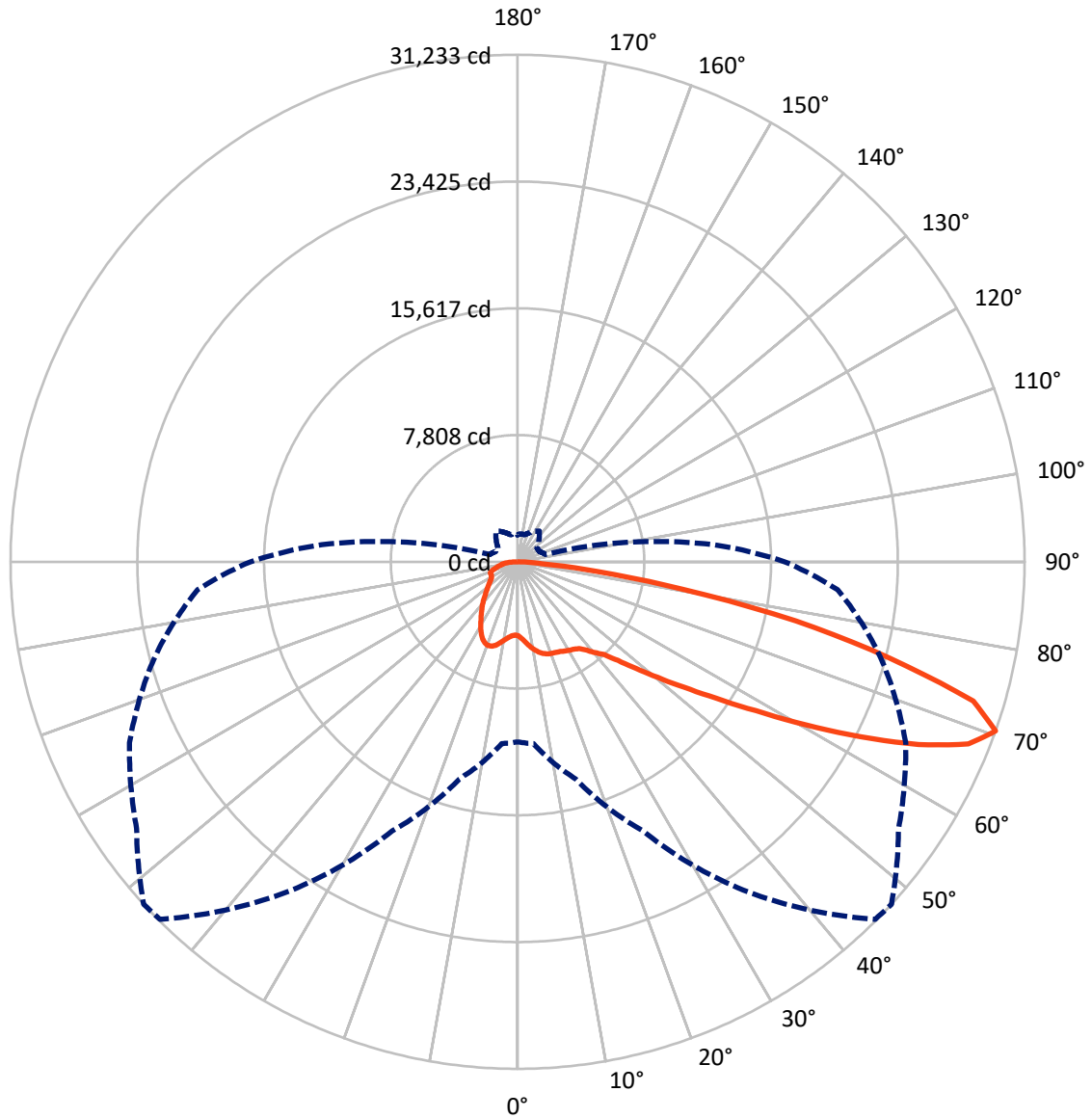
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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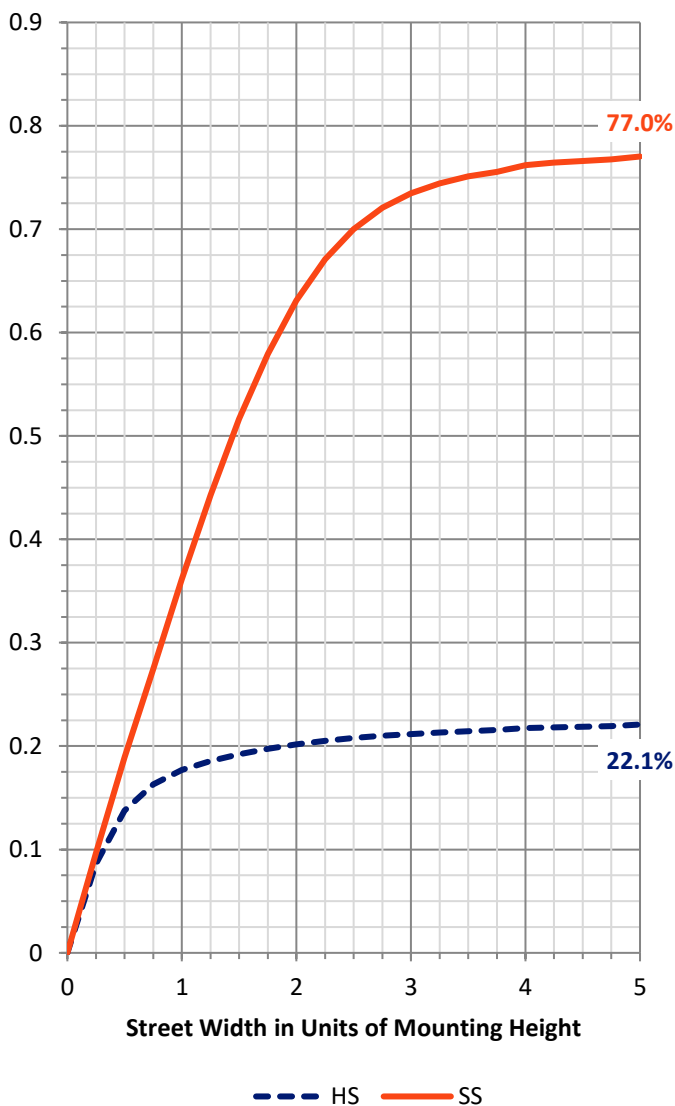
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10267.6	0.0	10267.6
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	35080.0	0.0	35080.0
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	45347.5	0.0	45347.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	469.3	1.0
10°-20°	1568.8	3.5
20°-30°	2608.8	5.8
30°-40°	3697.6	8.2
40°-50°	5458.4	12.0
50°-60°	9454.2	20.8
60°-70°	13354.4	29.4
70°-80°	7676.8	16.9
80°-90°	1059.2	2.3
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°	45347.5	100.0
0°-180°	45347.5	100.0

**Coefficient of Utilization**



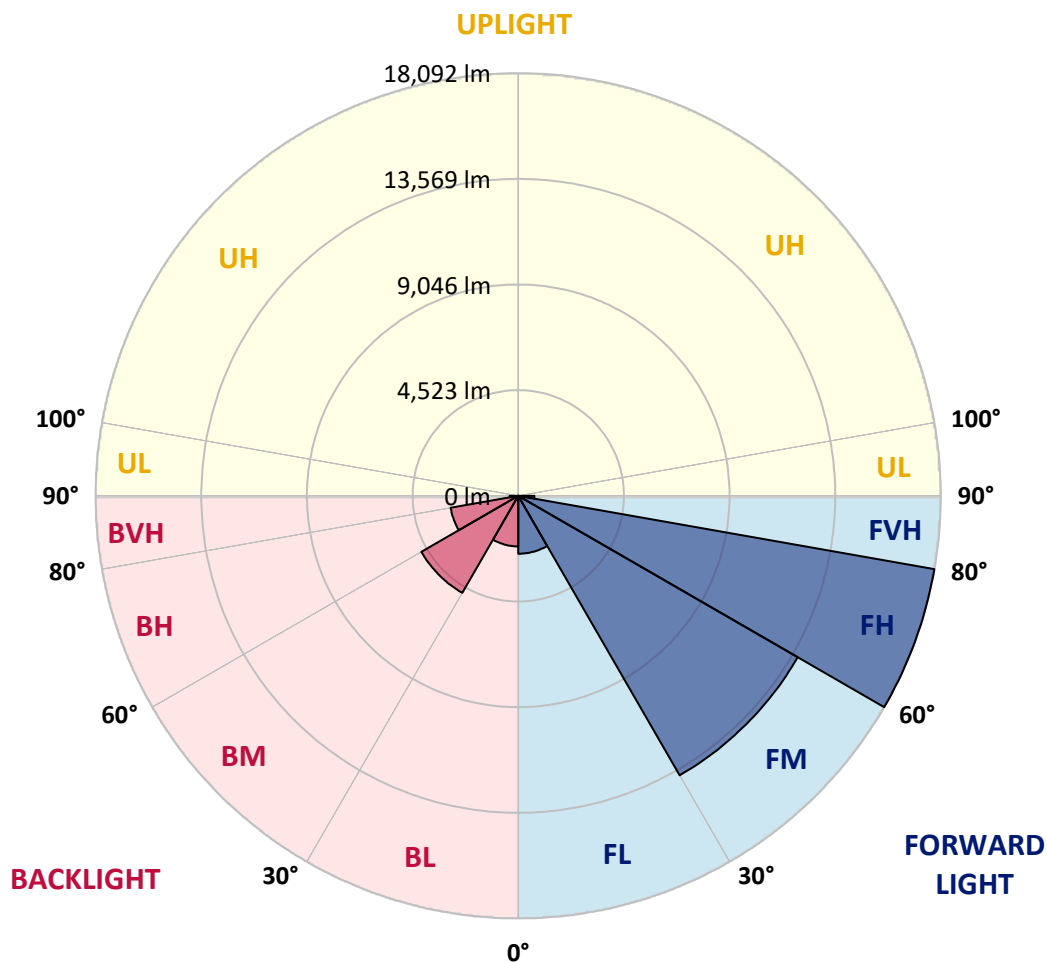
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2479.8	5.5			
FM (30°-60°)	13816.5	30.5			
FH (60°-80°)	18091.8	39.9			G5
FVH (80°-90°)	691.9	1.5			G4/750
BL (0°-30°)	2167.0	4.8	B3/2500		
BM (30°-60°)	4793.8	10.6	B3/5000		
BH (60°-80°)	2939.5	6.5	B4/5000		G4/5000
BVH (80°-90°)	367.3	0.8			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47.5°	55°	65°	75°	85°
0°	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3
2.5°	4846.0	4829.0	4826.6	4790.2	4770.7	4734.3	4719.8	4685.8	4644.6	4603.3	4564.4
5°	5227.0	5227.0	5210.0	5159.0	5079.0	4996.4	4960.0	4894.5	4778.1	4683.4	4603.3
7.5°	5617.6	5622.5	5588.5	5513.3	5399.2	5265.8	5231.8	5134.7	4969.7	4831.4	4712.5
10°	5955.0	5955.0	5908.9	5806.9	5663.7	5518.1	5484.2	5375.0	5190.6	5018.2	4863.0
12.5°	6212.1	6212.1	6151.5	6018.0	5862.7	5731.7	5692.9	5588.5	5416.2	5224.5	5028.0
15°	6379.6	6367.5	6299.5	6149.1	5998.6	5884.6	5857.9	5770.5	5612.7	5418.6	5197.8
17.5°	6386.9	6382.0	6316.5	6190.3	6059.3	5981.6	5964.6	5906.4	5782.6	5598.2	5365.2
20°	6246.1	6255.9	6212.1	6122.4	6059.3	6025.3	6018.0	5998.6	5911.2	5739.0	5506.0
22.5°	6095.7	6112.6	6071.4	6022.9	6018.0	6052.0	6056.9	6061.7	6005.9	5838.5	5624.9
25°	6059.3	6071.4	6030.1	5986.5	6013.2	6103.0	6122.4	6141.8	6098.1	5957.4	5765.6
27.5°	6243.7	6234.0	6153.9	6059.3	6076.3	6197.6	6224.3	6246.1	6224.3	6103.0	5940.4
30°	6765.4	6733.9	6573.8	6297.1	6209.8	6294.6	6321.4	6382.0	6382.0	6292.3	6129.6
32.5°	7639.1	7578.3	7284.7	6741.2	6437.9	6386.9	6413.6	6513.0	6564.0	6493.6	6316.5
35°	8699.5	8636.4	8216.6	7486.2	6855.2	6571.3	6564.0	6675.6	6811.5	6653.8	6423.3
37.5°	9764.8	9699.3	9194.5	8374.3	7464.3	6959.5	6915.9	6954.7	7012.9	6724.2	6571.3
40°	10830.1	10752.4	10310.7	9366.8	8209.3	7474.0	7359.9	7185.3	7160.9	6954.7	6857.7
42.5°	11885.6	11815.2	11592.0	10480.6	9102.3	7976.3	7801.6	7500.7	7592.9	7469.2	7384.2
45°	12950.9	12955.8	12717.9	11730.3	10179.7	8903.3	8667.9	8197.1	8415.6	8369.5	8418.0
47.5°	13894.8	13882.7	13797.8	12943.6	11516.7	10097.2	9793.9	9247.9	9621.5	9791.4	10162.7
50°	14809.7	14802.4	14807.2	14319.5	13069.8	11516.7	11181.9	10609.2	11451.2	12040.9	12705.8
52.5°	16120.0	16161.3	15867.7	15739.1	14957.7	13193.5	12824.7	12232.6	13613.4	14542.7	15841.0
55°	17435.3	17401.3	17170.8	17304.2	16933.0	15178.5	14792.7	14322.0	16020.5	17037.3	18988.4
57.5°	18209.4	18221.5	18456.9	19109.7	19371.8	17653.7	17304.2	16940.3	18726.3	19446.9	21788.7
60°	18905.8	18961.7	19638.7	20871.4	21582.4	20694.2	20383.7	20029.3	21208.7	21495.0	24220.1
62.5°	19124.3	19296.5	20478.3	22322.5	23737.2	24125.5	23739.7	22958.3	23572.2	23460.6	25867.8
65°	18034.7	18270.1	20388.5	22866.1	25661.6	27382.0	27137.0	25685.8	25586.3	24914.2	26137.2
67.5°	15166.4	15401.8	18122.0	21725.6	26457.5	30201.7	29956.7	27675.6	26809.4	25050.0	24098.9
70°	11097.0	11245.0	13846.3	18291.9	24858.4	31148.2	31233.1	28646.3	26372.6	23203.4	19786.7
72.5°	6394.1	6721.8	8544.1	12868.4	20308.5	28755.5	29345.2	26627.3	23611.1	19357.2	13834.2
75°	2749.4	2756.6	3950.5	7097.9	13754.1	23113.6	23683.9	22072.5	18541.9	13385.3	7386.7
77.5°	1307.9	1332.2	1737.4	3169.1	7571.1	15969.6	17508.1	15593.5	11858.9	6430.5	2790.6
80°	849.3	866.3	1062.9	1572.4	3712.8	9260.0	10332.6	8995.5	5231.8	2298.0	1203.6
82.5°	514.4	519.3	711.0	960.9	2043.2	4193.2	4943.1	3904.4	2232.5	1375.9	708.5
85°	313.0	315.5	431.9	594.5	1240.0	1448.7	1487.6	1475.4	1310.4	900.3	378.5
87.5°	150.5	155.3	223.3	281.5	487.8	448.9	424.6	492.6	618.8	485.3	162.6
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°	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3	4552.3
2.5°	4547.5	4540.2	4523.2	4515.9	4511.1	4513.6	4511.1	4511.1	4513.6	4513.6	4513.6
5°	4569.3	4557.2	4530.6	4530.6	4545.1	4579.1	4610.6	4634.8	4661.6	4659.1	4659.1
7.5°	4663.9	4642.2	4610.6	4620.3	4656.7	4710.1	4765.9	4819.3	4872.7	4877.5	4875.1
10°	4802.3	4780.4	4746.5	4758.6	4816.8	4896.9	4967.3	5045.0	5103.2	5120.2	5115.3
12.5°	4960.0	4916.3	4887.2	4921.2	5013.4	5120.2	5188.1	5246.3	5287.6	5311.9	5302.2
15°	5120.2	5079.0	5045.0	5115.3	5227.0	5326.5	5360.4	5370.1	5377.4	5401.7	5396.8
17.5°	5275.5	5219.7	5207.6	5299.7	5406.5	5450.2	5430.8	5389.5	5358.0	5377.4	5375.0
20°	5413.8	5370.1	5365.2	5457.5	5498.7	5457.5	5375.0	5302.2	5246.3	5251.2	5248.8
22.5°	5544.9	5510.9	5515.7	5554.6	5489.0	5348.3	5212.3	5112.9	5052.2	5064.3	5071.7
25°	5690.5	5656.5	5668.6	5605.5	5389.5	5144.5	4947.9	4863.0	4838.7	4863.0	4879.9
27.5°	5879.7	5857.9	5850.6	5608.0	5212.3	4843.6	4620.3	4588.7	4610.6	4663.9	4690.7
30°	6083.5	6083.5	6044.7	5566.7	4969.7	4481.9	4287.8	4292.7	4367.9	4443.2	4469.8
32.5°	6280.1	6321.4	6200.0	5455.1	4656.7	4130.2	3982.1	3986.9	4052.4	4144.7	4168.9
35°	6442.7	6561.6	6333.5	5251.2	4287.8	3834.0	3722.4	3656.9	3659.4	3729.8	3749.2
37.5°	6665.9	6886.8	6411.1	4947.9	3894.8	3581.7	3455.5	3341.5	3266.3	3237.1	3237.1
40°	7054.2	7379.4	6430.5	4498.9	3523.5	3341.5	3161.9	3026.0	2880.4	2749.4	2725.1
42.5°	7711.8	8122.0	6391.8	3982.1	3188.6	3077.0	2902.2	2734.8	2533.4	2349.0	2334.4
45°	8876.6	9087.7	6287.4	3445.8	2890.1	2822.1	2652.3	2470.3	2256.7	2091.7	2079.6
47.5°	10742.7	10444.2	6149.1	2970.2	2618.4	2598.9	2467.9	2256.7	2043.2	1929.2	1917.1
50°	13467.8	12579.6	6129.6	2625.6	2400.0	2409.6	2302.8	2108.7	1921.9	1827.2	1812.7
52.5°	16748.6	15159.1	6258.3	2383.0	2208.2	2244.6	2191.2	2011.7	1846.7	1766.6	1752.1
55°	19932.3	17479.0	6335.9	2193.7	2028.7	2096.6	2103.8	1953.5	1803.0	1722.9	1713.2
57.5°	22516.7	19226.2	5991.4	2021.3	1873.3	1977.7	2031.1	1919.5	1781.2	1720.5	1710.8
60°	24314.8	20051.2	5011.0	1868.5	1759.3	1883.1	2004.4	1921.9	1834.6	1841.8	1846.7
62.5°	24887.5	19684.8	3758.8	1754.4	1681.7	1851.5	2048.1	2021.3	1931.6	1987.4	1997.1
65°	23938.6	18170.6	2725.1	1664.7	1613.7	1873.3	2179.1	2094.2	1897.6	1938.8	1938.8
67.5°	20762.2	15654.1	2120.8	1582.2	1536.1	1914.6	2310.1	2086.9	1817.6	1866.1	1822.4
70°	16469.5	12108.9	1766.6	1489.9	1453.6	1853.9	2322.3	2011.7	1722.9	1732.6	1650.1
72.5°	10929.6	7961.7	1519.1	1402.6	1327.4	1667.1	2222.8	1914.6	1630.7	1574.9	1492.4
75°	5355.6	3969.9	1324.9	1293.4	1162.3	1451.1	2086.9	1822.4	1531.2	1443.8	1397.7
77.5°	2074.7	1688.9	1130.8	1155.1	1011.9	1278.8	1907.3	1691.3	1400.2	1281.3	1244.8
80°	1007.0	958.5	927.0	963.4	832.3	1089.5	1742.3	1577.3	1278.8	1147.8	1094.4
82.5°	626.0	592.1	711.0	749.8	640.6	994.9	1652.6	1480.2	1125.9	951.3	907.5
85°	317.9	339.8	475.6	512.0	458.6	791.0	1361.3	1111.4	812.9	674.6	679.4
87.5°	121.4	162.6	249.9	269.4	245.1	417.4	749.8	647.9	521.8	354.3	327.6
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)