

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: P651403

Luminaire Tested: **GALN-SA5D-840-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-840-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31891.6 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

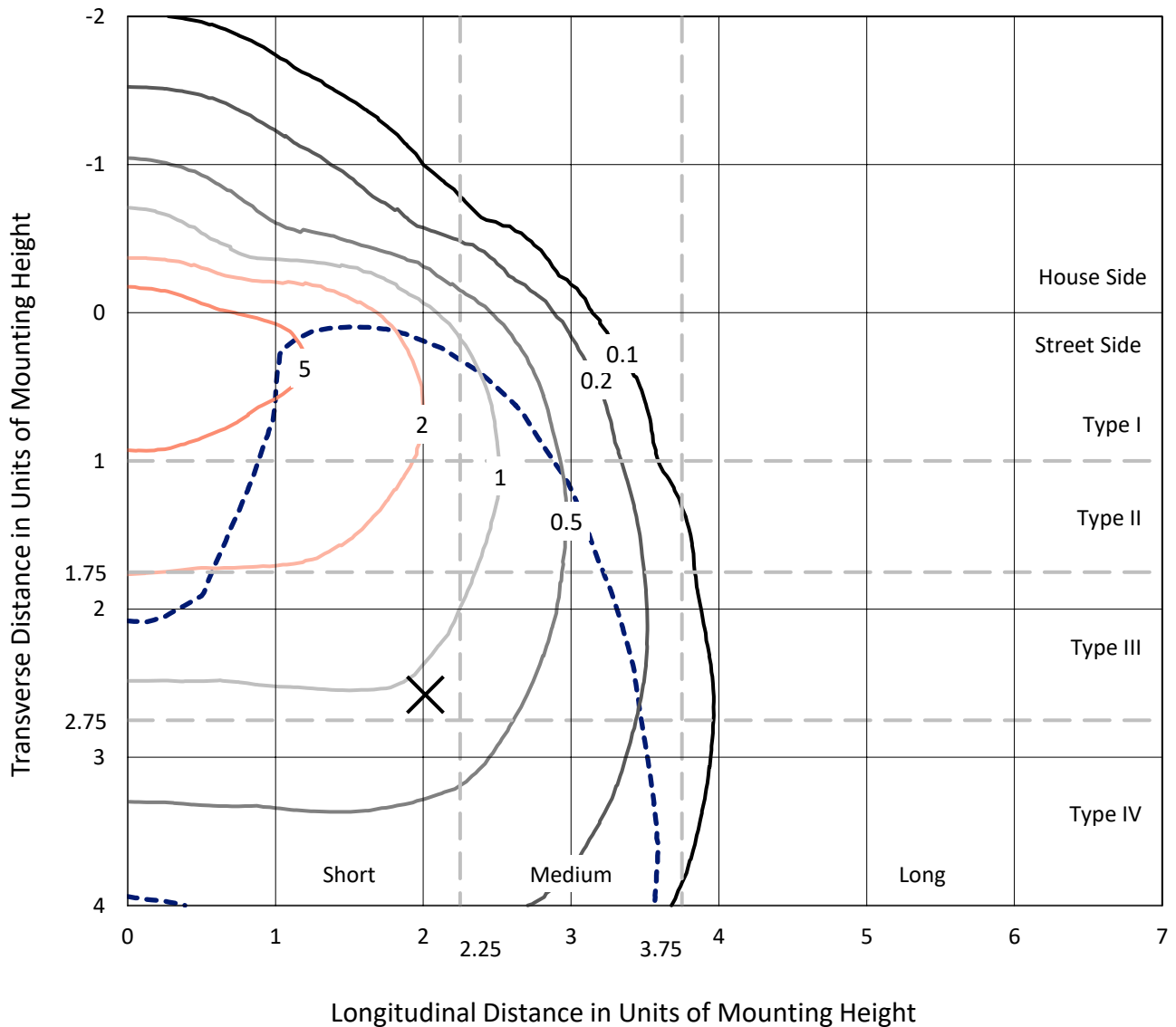
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

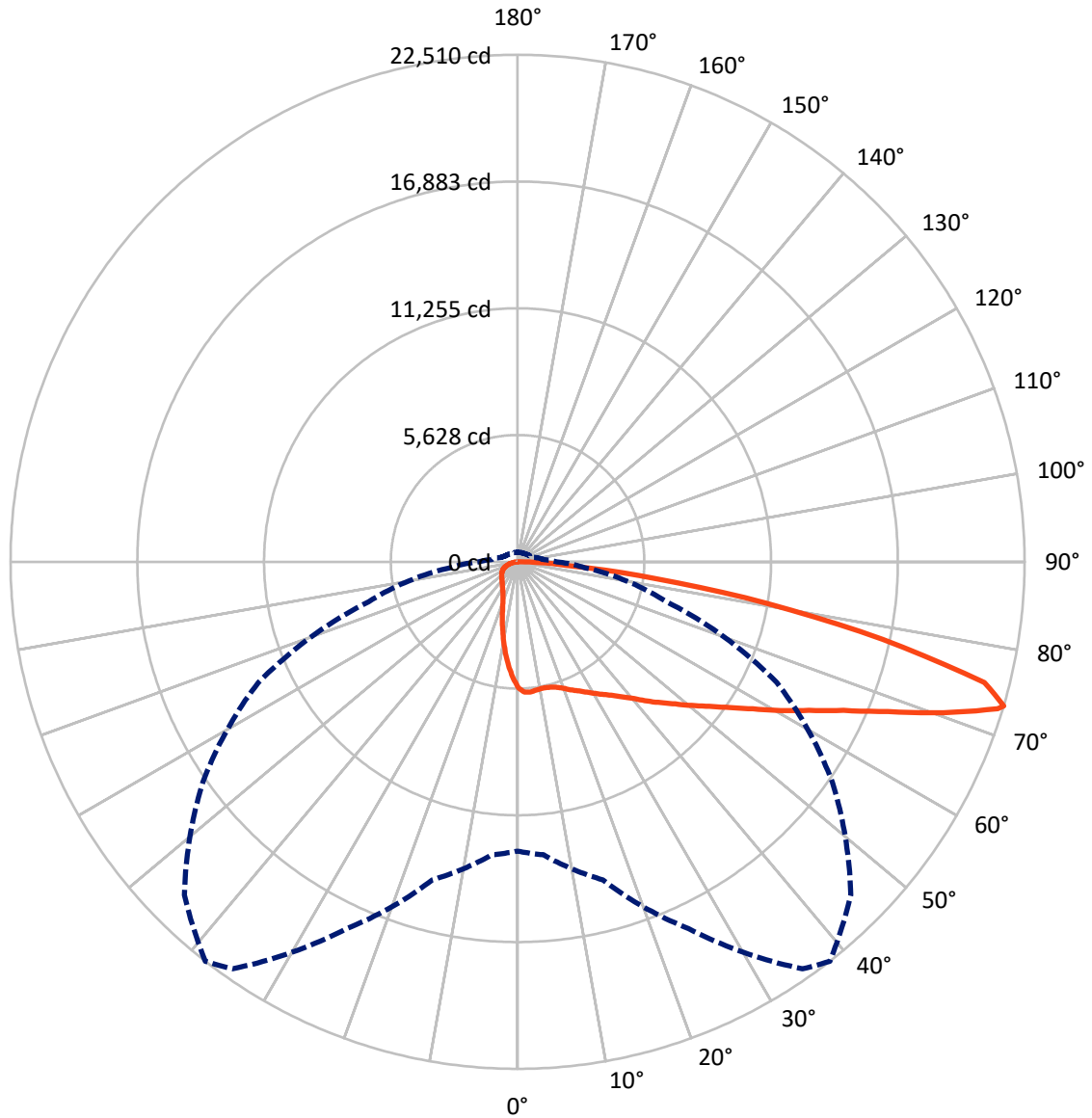
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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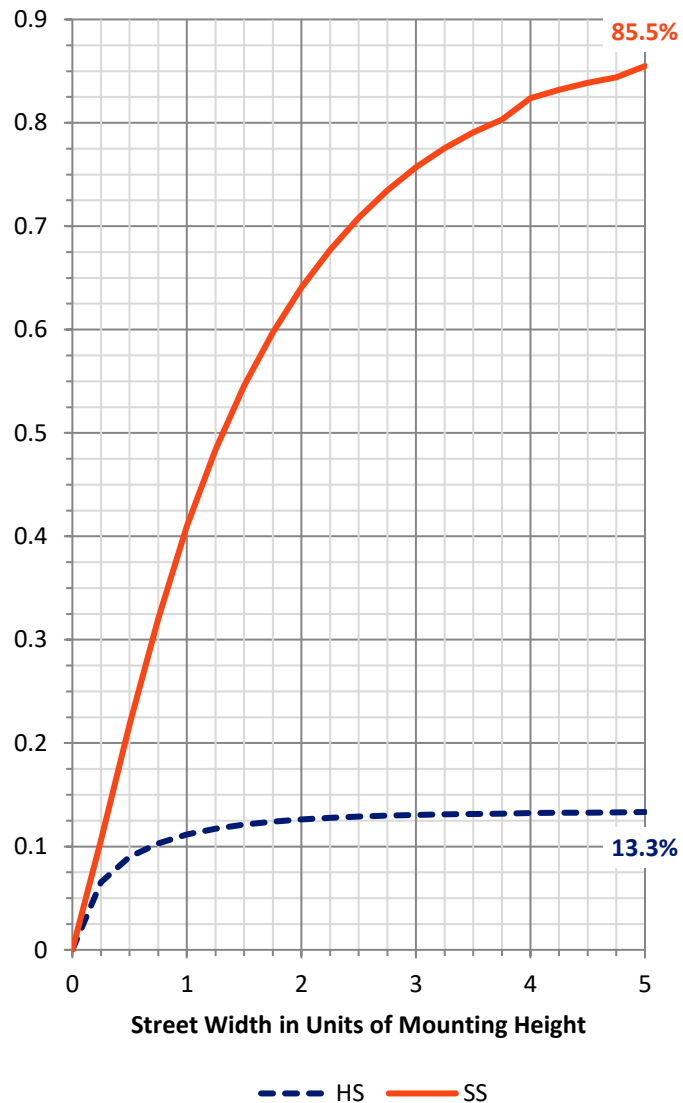
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4287.2	0.0	4287.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	27604.4	0.0	27604.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	31891.6	0.0	31891.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.1	1.5
10°-20°	1254.1	3.9
20°-30°	1952.9	6.1
30°-40°	2864.5	9.0
40°-50°	4249.1	13.3
50°-60°	6020.1	18.9
60°-70°	7636.7	23.9
70°-80°	6357.0	19.9
80°-90°	1068.1	3.3
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°	31891.6	100.0
0°-180°	31891.6	100.0

Coefficient of Utilization



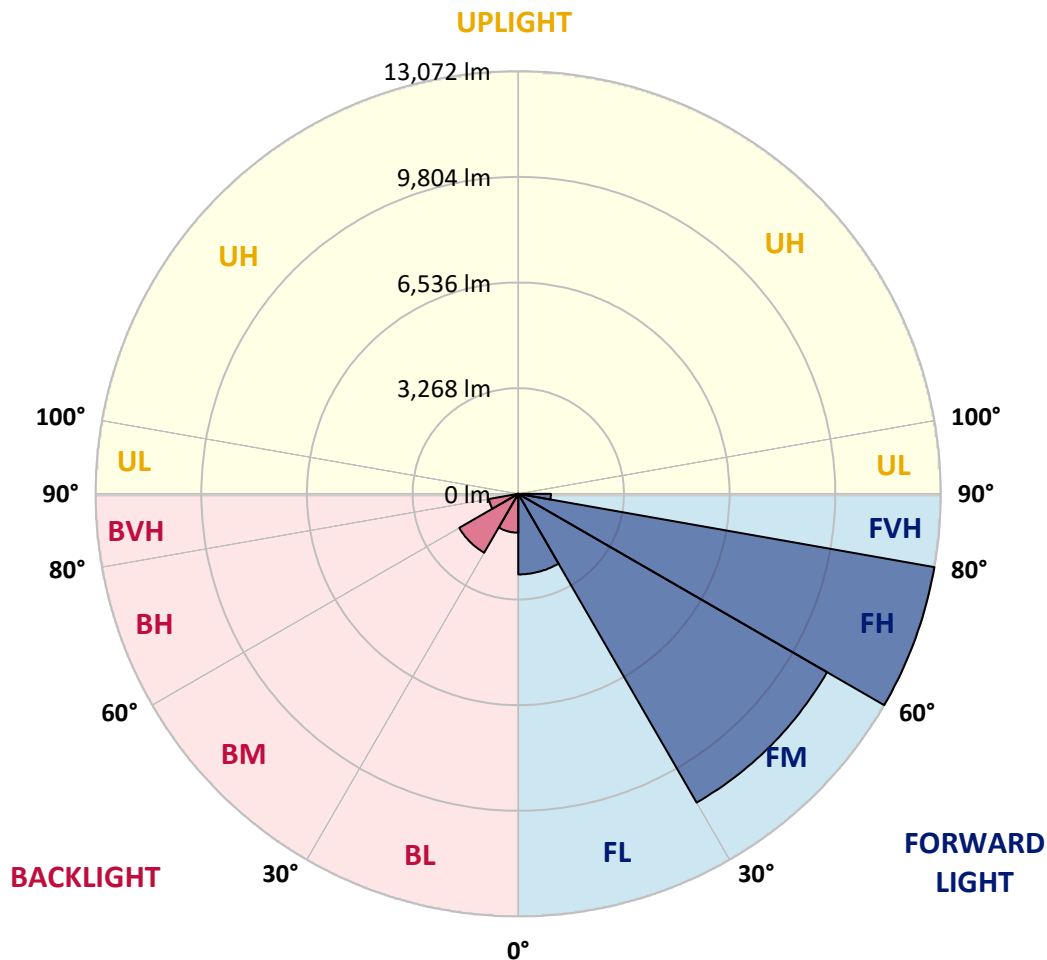
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2493.1	7.8			
FM (30°-60°)	11029.0	34.6			
FH (60°-80°)	13072.2	41.0			G5
FVH (80°-90°)	1010.2	3.2			G5
BL (0°-30°)	1203.0	3.8	B3/2500		
BM (30°-60°)	2104.7	6.6	B2/2500		
BH (60°-80°)	921.5	2.9	B2/1000		G2/1000
BVH (80°-90°)	57.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8
2.5°	5828.0	5856.7	5842.3	5822.5	5809.9	5797.3	5779.3	5727.0	5685.7	5640.6	5570.4
5°	5871.2	5889.2	5876.6	5851.3	5822.5	5809.9	5775.7	5707.3	5640.6	5565.0	5460.5
7.5°	5846.0	5853.1	5838.7	5808.1	5782.9	5759.5	5719.9	5644.2	5563.2	5471.4	5334.5
10°	5755.9	5782.9	5782.9	5757.7	5732.5	5719.9	5680.3	5608.2	5534.4	5429.9	5267.9
12.5°	5682.0	5710.9	5734.3	5727.0	5725.3	5725.3	5694.7	5640.6	5554.2	5455.1	5262.4
15°	5631.6	5665.8	5716.3	5745.1	5763.1	5768.5	5755.9	5709.0	5620.8	5505.5	5284.0
17.5°	5620.8	5662.2	5754.1	5817.1	5864.0	5862.1	5858.6	5793.7	5696.4	5577.6	5311.1
20°	5669.4	5723.5	5851.3	5950.4	6018.9	6006.3	5986.4	5901.8	5788.3	5655.1	5336.2
22.5°	5815.3	5871.2	6011.6	6119.7	6186.3	6186.3	6126.9	6015.3	5894.6	5745.1	5370.5
25°	6024.3	6085.5	6234.9	6344.8	6375.5	6352.0	6292.6	6157.5	6018.9	5874.7	5442.5
27.5°	6280.0	6353.8	6492.5	6584.4	6575.4	6557.3	6496.1	6323.2	6184.5	6053.0	5565.0
30°	6598.7	6652.7	6796.9	6818.5	6786.0	6782.4	6696.0	6523.1	6393.5	6292.6	5739.7
32.5°	6899.5	6948.1	7063.4	7072.4	7014.8	7021.9	6940.9	6782.4	6708.6	6672.6	6033.2
35°	7218.3	7243.4	7342.5	7331.8	7293.9	7288.5	7256.1	7104.9	7128.2	7193.1	6449.3
37.5°	7484.8	7535.3	7591.0	7600.1	7598.3	7616.3	7637.9	7565.9	7701.0	7904.5	6994.9
40°	7729.7	7772.9	7855.8	7884.6	7954.9	7990.9	8064.8	8066.5	8378.1	8713.1	7666.7
42.5°	7895.5	7969.3	8124.1	8176.4	8347.5	8455.5	8565.4	8682.5	9134.5	9564.9	8459.1
45°	8039.5	8136.8	8394.3	8556.4	8788.7	8920.2	9152.5	9397.4	10047.6	10611.3	9264.2
47.5°	8257.4	8343.9	8639.3	8925.6	9276.8	9428.0	9775.6	10141.3	10991.3	11609.0	10035.0
50°	8560.0	8612.3	8913.0	9379.4	9827.8	10022.4	10481.6	11009.3	11999.8	12594.1	10712.2
52.5°	8947.2	8968.8	9208.4	9829.7	10420.4	10661.7	11270.4	11886.4	12882.4	13449.6	11248.8
55°	9404.7	9368.7	9555.9	10307.0	11097.6	11412.7	12066.5	12774.3	13874.6	14141.2	11639.6
57.5°	9856.7	9800.8	9950.4	10886.8	11933.2	12313.2	13075.0	13689.1	14760.7	14787.7	11913.4
60°	10335.7	10294.3	10472.6	11567.6	12958.0	13408.2	14112.4	14638.3	15618.0	15238.0	11956.6
62.5°	10827.4	10760.8	11014.7	12333.0	14112.4	14521.2	15203.8	15646.8	16459.0	15405.4	11540.6
65°	11304.6	11274.0	11666.7	13242.5	15427.1	15891.7	16554.5	16855.2	17132.6	15153.3	10508.6
67.5°	11812.5	11873.7	12500.5	14456.4	17141.6	17725.1	18440.1	18157.4	17325.3	13959.3	8849.9
70°	12587.0	12626.6	13595.5	16046.6	19351.4	20055.6	20401.3	18620.2	16396.0	11691.8	6652.7
72.5°	12920.1	13094.8	14573.4	17716.1	21862.0	22292.4	21060.5	17588.3	13658.5	7942.2	3495.7
73°	12846.3	13055.2	14618.4	17970.1	22058.3	22510.3	20920.0	17057.0	12696.8	6840.1	2996.8
75°	11926.0	12183.6	14033.1	17757.5	21676.4	21406.3	18661.6	14537.4	8579.8	3110.3	1365.1
77.5°	9410.0	9483.9	11119.2	14339.3	17069.5	16568.9	13966.5	9085.9	3504.7	1156.2	774.4
80°	4720.4	4992.3	6267.4	8214.2	11414.6	11250.6	8815.7	4297.1	1460.6	678.9	513.3
82.5°	2271.0	2463.7	3052.7	4005.3	6307.0	6157.5	4365.5	2348.5	927.5	396.2	302.6
85°	1462.4	1606.5	1943.2	1910.8	2593.4	2476.3	1961.2	1777.5	549.3	207.1	210.8
87.5°	965.3	1057.1	1267.9	1013.9	943.7	853.7	866.2	1001.4	108.1	79.2	28.8
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°	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8	5602.8
2.5°	5541.6	5518.1	5440.7	5365.1	5293.0	5224.6	5179.6	5120.2	5080.6	5091.3	5107.6
5°	5402.9	5350.7	5213.8	5080.6	4954.5	4805.0	4684.3	4587.1	4513.2	4486.2	4480.8
7.5°	5257.0	5168.8	4972.5	4743.7	4529.5	4343.9	4129.6	4023.3	3899.1	3855.9	3841.4
10°	5168.8	5049.9	4774.4	4455.6	4133.2	3825.3	3592.9	3403.9	3232.7	3200.3	3184.1
12.5°	5143.6	4986.9	4615.9	4205.3	3776.6	3398.4	3054.4	2805.9	2640.2	2602.4	2546.5
15°	5129.2	4934.7	4468.2	3953.1	3409.2	2948.2	2586.2	2296.3	2145.0	2044.1	2045.9
17.5°	5116.6	4875.2	4302.5	3677.6	3092.3	2561.0	2161.2	1900.0	1761.3	1707.3	1701.9
20°	5098.6	4805.0	4111.6	3387.6	2730.3	2208.0	1846.0	1651.5	1557.9	1512.8	1511.0
22.5°	5091.3	4736.5	3924.3	3092.3	2409.7	1936.1	1637.1	1500.2	1440.8	1410.2	1410.2
25°	5109.3	4687.9	3728.0	2811.3	2125.1	1703.7	1493.0	1399.3	1365.1	1349.0	1343.5
27.5°	5165.2	4666.3	3533.5	2530.3	1864.0	1545.3	1395.7	1330.9	1305.7	1293.1	1294.9
30°	5271.4	4664.5	3342.6	2253.0	1669.5	1424.6	1318.3	1273.3	1253.5	1246.3	1244.4
32.5°	5442.5	4704.1	3155.3	2024.3	1505.6	1323.7	1246.3	1213.8	1204.8	1199.4	1197.7
35°	5732.5	4815.8	2969.8	1815.4	1379.6	1233.7	1177.8	1161.6	1149.1	1154.4	1156.2
37.5°	6123.3	5008.5	2793.3	1651.5	1284.1	1167.1	1120.2	1105.8	1098.6	1104.0	1109.4
40°	6647.3	5285.9	2645.6	1520.0	1215.7	1111.2	1069.8	1057.1	1050.0	1059.0	1060.8
42.5°	7225.5	5606.4	2523.2	1417.3	1159.8	1064.4	1024.8	1010.4	1004.9	1010.4	1012.1
45°	7819.8	5979.2	2460.1	1343.5	1113.0	1030.1	988.8	972.5	959.9	956.3	961.7
47.5°	8405.1	6303.4	2458.3	1298.5	1075.2	999.5	954.5	936.5	920.3	911.3	909.5
50°	8882.4	6560.9	2501.6	1278.7	1042.8	965.3	920.3	902.3	880.7	862.7	866.2
52.5°	9242.6	6728.4	2521.3	1269.7	1024.8	929.3	884.3	868.1	842.9	819.5	819.5
55°	9474.9	6768.0	2472.7	1260.7	1010.4	891.5	842.9	828.5	803.2	779.9	779.9
57.5°	9554.1	6645.6	2298.0	1239.0	995.9	859.1	801.4	788.9	769.0	745.6	742.0
60°	9370.4	6231.3	1991.9	1174.2	967.2	824.9	756.4	751.0	743.8	724.0	722.2
62.5°	8662.6	5352.5	1658.7	1089.6	918.5	788.9	715.0	724.0	729.4	718.6	716.8
65°	7484.8	4345.7	1417.3	972.5	853.7	738.4	669.9	693.4	707.8	707.8	704.2
67.5°	6071.1	3337.2	1194.1	871.7	772.6	669.9	619.6	637.6	648.3	644.7	653.7
70°	4315.1	2260.2	972.5	756.4	669.9	592.5	554.7	554.7	547.5	543.9	543.9
72.5°	2092.7	1291.3	788.9	632.2	570.9	506.0	475.4	462.9	448.4	446.7	437.7
73°	1748.8	1158.1	752.8	608.7	547.5	493.5	459.3	439.4	430.4	423.2	421.4
75°	1064.4	878.8	628.6	513.3	466.4	425.0	394.4	376.4	367.4	362.0	360.2
77.5°	700.6	655.6	488.0	392.6	356.6	331.4	318.7	300.7	295.4	288.1	288.1
80°	522.3	500.6	349.4	277.4	255.7	234.1	230.5	226.9	212.5	203.5	199.9
82.5°	336.8	356.6	237.8	185.5	162.1	144.1	145.9	151.3	136.9	124.3	120.7
85°	239.5	257.5	144.1	84.6	68.5	59.5	66.6	59.5	61.2	48.6	39.6
87.5°	39.6	68.5	25.2	10.8	5.4	3.6	0.0	0.0	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)