

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: P647467

Luminaire Tested: **GALN-SA5D-835-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-835-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3500K, 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: 31042 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

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

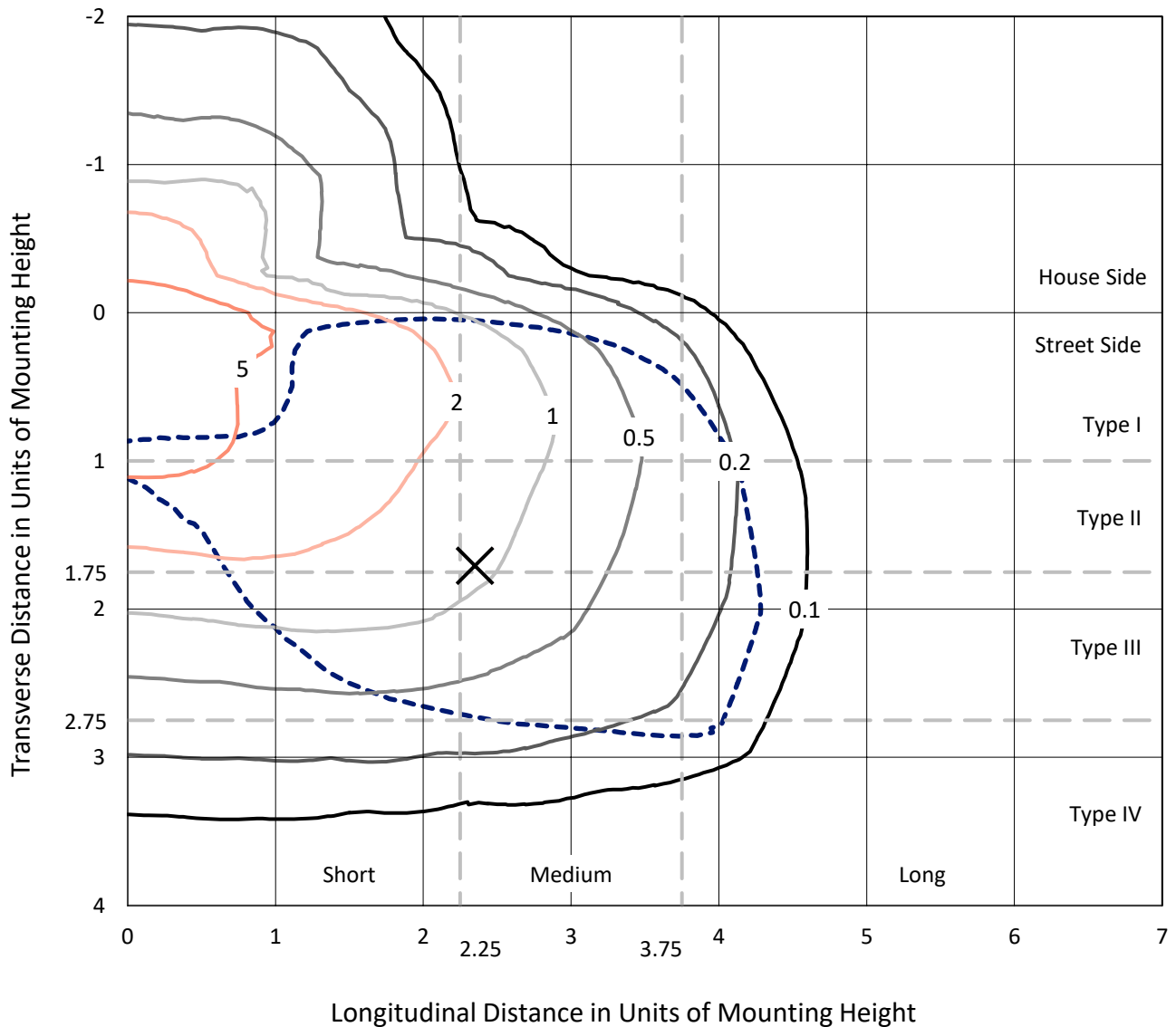




REPORT NUMBER: P647467
 CATALOG NUMBER: GALN-SA5D-835-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

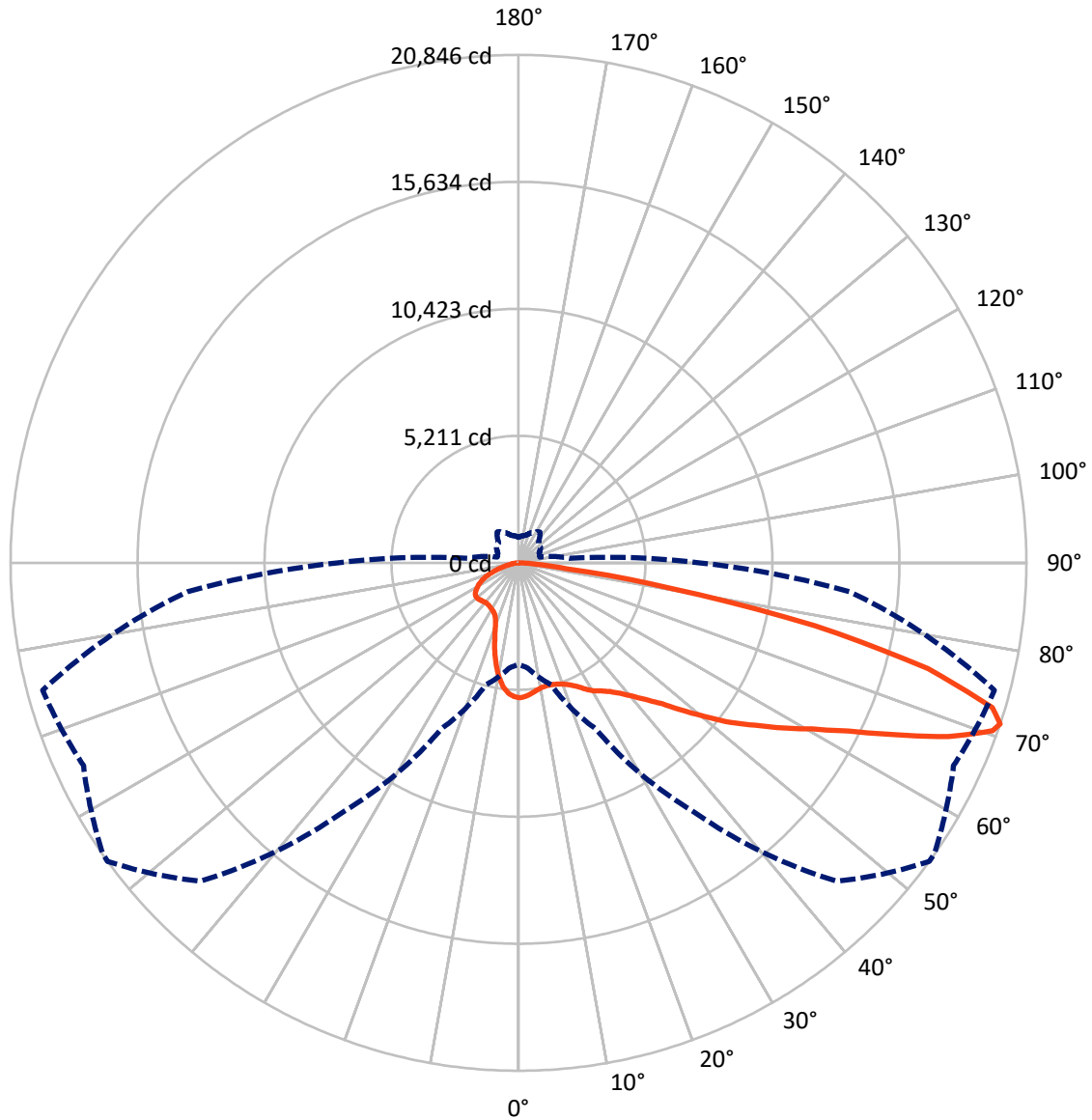
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P647467
CATALOG NUMBER: GALN-SA5D-835-U-T3R

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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 CATALOG NUMBER: GALN-SA5D-835-U-T3R

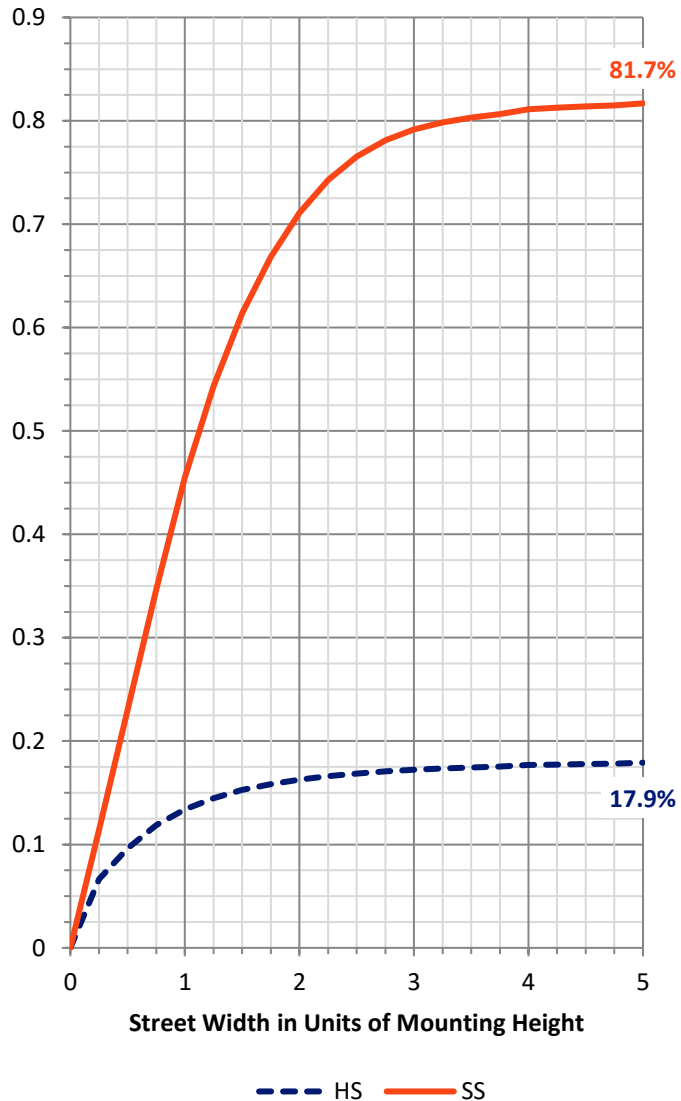
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5604.4	0.0	5604.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	25437.6	0.0	25437.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	31042.0	0.0	31042.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.6	1.6
10°-20°	1303.2	4.2
20°-30°	2169.9	7.0
30°-40°	3208.6	10.3
40°-50°	4519.4	14.6
50°-60°	6051.7	19.5
60°-70°	7627.7	24.6
70°-80°	5209.7	16.8
80°-90°	458.2	1.5
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°	31042.0	100.0
0°-180°	31042.0	100.0

Coefficient of Utilization

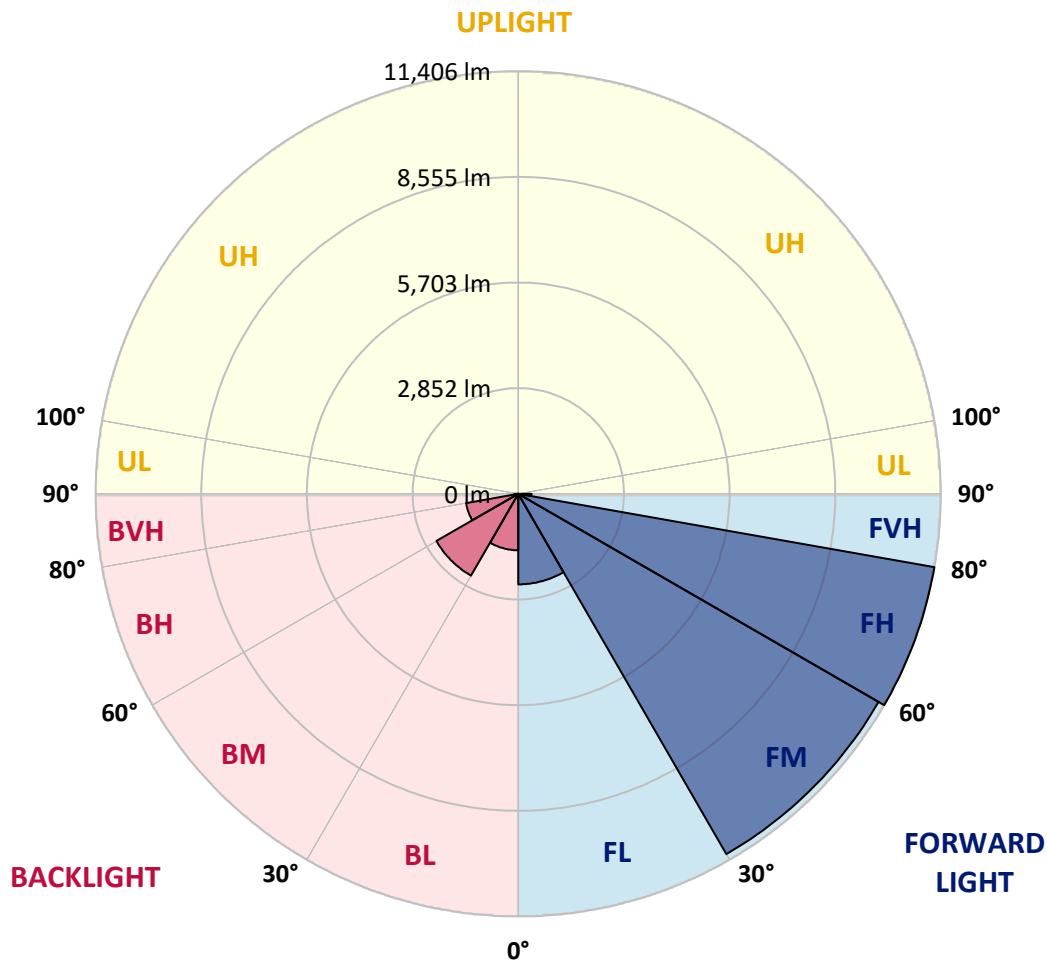


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2443.5	7.9			
FM (30°-60°)	11229.9	36.2			
FH (60°-80°)	11406.1	36.7			G4/12000
FVH (80°-90°)	358.1	1.2			G3/500
BL (0°-30°)	1523.2	4.9	B3/2500		
BM (30°-60°)	2549.9	8.2	B3/5000		
BH (60°-80°)	1431.4	4.6	B3/2500		G3/2500
BVH (80°-90°)	100.0	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type IV Medium





REPORT NUMBER: P647467

CATALOG NUMBER: GALN-SA5D-835-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4
2.5°	5350.6	5375.7	5382.4	5399.2	5434.4	5462.9	5491.4	5488.0	5528.3	5545.0	5560.2
5°	5112.4	5119.2	5144.3	5177.8	5239.9	5318.7	5395.8	5397.5	5496.4	5575.3	5613.8
7.5°	4938.1	4959.8	4976.7	5011.8	5077.3	5162.8	5285.2	5295.2	5471.3	5627.3	5709.4
10°	4824.1	4849.2	4867.7	4911.2	4976.7	5072.2	5204.7	5223.2	5452.8	5709.4	5853.6
12.5°	4720.1	4745.2	4762.0	4819.1	4904.6	5021.9	5171.2	5192.9	5459.5	5804.9	6011.2
15°	4783.8	4803.9	4797.2	4814.0	4871.0	5005.2	5184.6	5206.3	5484.7	5897.2	6167.1
17.5°	5067.2	5083.9	5028.7	4964.9	4938.1	5037.0	5226.4	5249.9	5535.0	5992.8	6326.4
20°	5484.7	5529.9	5409.3	5266.7	5137.6	5151.0	5313.7	5338.8	5605.4	6088.4	6489.1
22.5°	6028.0	6061.5	5913.9	5679.2	5441.1	5318.7	5444.4	5459.5	5711.0	6212.4	6666.9
25°	6666.9	6687.0	6482.4	6180.5	5836.8	5605.4	5623.9	5650.7	5885.4	6353.3	6824.5
27.5°	7287.2	7351.0	7114.5	6745.6	6292.9	5907.3	5870.4	5887.1	6074.9	6432.1	6933.5
30°	8023.3	8018.3	7768.5	7340.9	6760.7	6235.9	6103.4	6100.0	6177.2	6470.6	7012.2
32.5°	8610.2	8678.9	8434.2	7968.0	7295.6	6576.3	6264.4	6257.7	6256.0	6537.7	7129.6
35°	9277.5	9287.6	9062.9	8593.4	7874.1	7003.9	6489.1	6455.5	6417.0	6681.9	7288.9
37.5°	9874.5	9921.4	9715.2	9188.7	8442.5	7448.2	6797.6	6775.8	6658.5	6931.7	7543.7
40°	10340.6	10375.8	10251.7	9750.4	9002.5	7927.7	7190.0	7149.7	7007.2	7340.9	7884.2
42.5°	10493.2	10565.3	10614.0	10367.5	9646.4	8496.2	7672.9	7622.6	7513.6	7961.3	8276.5
45°	10505.0	10619.0	10875.5	10887.2	10293.6	9176.9	8236.3	8201.1	8192.7	8756.1	8828.2
47.5°	10416.1	10531.7	10962.7	11195.8	10870.5	9864.4	9049.5	8994.2	8999.2	9738.6	9446.9
50°	10201.5	10339.0	10862.1	11393.6	11321.6	10578.7	9908.0	9889.6	9993.5	10860.4	10089.1
52.5°	9797.4	9963.4	10758.1	11517.7	11656.9	11194.1	10883.9	10831.9	11095.2	12077.8	10791.7
55°	8678.9	8928.8	10377.5	11586.4	11975.4	11782.7	11762.5	11856.4	12205.2	13405.7	11564.7
57.5°	8095.4	8283.2	9550.9	11598.2	12377.9	12466.8	12788.7	12812.2	13422.5	14815.9	12438.3
60°	7776.8	7942.8	9098.1	11521.1	12939.6	13313.5	13838.4	13922.2	14611.3	16343.4	13343.7
62.5°	7498.5	7641.1	8826.5	11254.5	13573.4	14569.4	15198.2	15238.4	15961.1	18030.3	14237.4
65°	6842.9	7005.5	8279.8	10987.8	14120.1	16138.9	17002.4	16955.5	17398.1	19485.7	14797.4
67.5°	5959.3	6165.5	7258.7	10067.3	14390.0	17854.2	19034.7	18975.9	18816.7	20439.7	14958.4
70°	4830.8	4941.4	5952.5	8476.1	13311.9	18754.7	20639.3	20577.2	19695.3	20565.6	14197.2
71°	4156.7	4329.4	5182.9	7528.7	12414.8	18479.7	20845.6	20828.8	19697.0	20218.5	13623.7
72.5°	3244.5	3350.1	4104.7	5833.5	10551.9	16916.9	20335.8	20399.5	19269.4	19254.3	12441.6
75°	2052.4	2099.3	2575.5	3434.0	5789.9	11980.5	17359.6	17532.2	17109.7	15759.9	9252.4
77.5°	1192.2	1252.6	1542.6	2023.8	2501.8	6502.5	12421.5	12609.3	11888.3	8677.3	3787.8
80°	694.2	761.2	1016.1	1175.4	1148.6	2412.9	6324.8	6645.0	5147.7	2191.5	1063.1
82.5°	385.6	431.0	714.3	716.0	612.0	788.1	1990.3	2082.5	1468.8	883.7	434.3
85°	280.0	316.9	461.1	417.5	293.5	338.7	692.5	726.1	593.6	372.2	140.9
87.5°	98.9	140.9	253.2	201.2	80.5	70.4	199.5	162.6	150.9	104.0	31.9
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°	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4	5538.4
2.5°	5568.5	5571.9	5555.2	5524.9	5494.8	5456.2	5412.6	5379.1	5363.9	5362.3	5360.7
5°	5628.9	5637.3	5573.6	5479.7	5375.7	5248.3	5139.3	5015.2	4983.3	4933.1	4948.2
7.5°	5726.2	5721.1	5595.4	5395.8	5152.7	4882.7	4654.7	4522.2	4384.7	4346.2	4347.8
10°	5865.3	5833.5	5595.4	5224.8	4819.1	4418.3	4099.7	3898.5	3789.5	3699.0	3665.4
12.5°	6012.9	5932.4	5541.7	4985.0	4389.8	3898.5	3556.4	3284.8	3214.4	3140.6	3142.3
15°	6153.8	6019.6	5436.1	4648.0	3927.0	3343.5	3011.5	2848.8	2827.0	2835.4	2833.8
17.5°	6281.1	6081.6	5275.1	4272.4	3387.1	2867.3	2691.2	2702.9	2761.6	2803.5	2808.6
20°	6410.3	6118.5	5035.3	3769.4	2877.4	2578.9	2585.5	2677.8	2766.7	2823.7	2832.0
22.5°	6532.6	6135.3	4753.6	3283.1	2508.4	2456.4	2555.4	2654.3	2741.5	2796.9	2805.3
25°	6613.1	6096.8	4354.6	2775.0	2327.4	2412.9	2516.8	2600.7	2674.4	2731.4	2744.9
27.5°	6635.0	5972.6	3859.9	2364.3	2243.5	2370.9	2466.5	2528.5	2585.5	2639.3	2649.3
30°	6623.2	5789.9	3316.6	2122.8	2194.9	2322.3	2396.1	2441.4	2510.1	2552.0	2560.4
32.5°	6604.8	5576.9	2749.9	1993.7	2154.7	2277.0	2320.7	2360.9	2359.2	2342.4	2354.2
35°	6611.5	5322.1	2290.4	1916.5	2119.4	2243.5	2280.4	2230.1	2085.9	2079.2	2072.4
37.5°	6646.7	5070.6	1956.8	1862.9	2101.0	2238.5	2258.6	2027.2	1899.8	1841.1	1826.0
40°	6737.2	4777.1	1737.2	1822.7	2099.3	2277.0	2159.7	1924.9	1680.1	1566.1	1557.7
42.5°	6858.0	4488.7	1603.0	1797.5	2119.4	2335.8	2119.4	1780.7	1514.1	1447.1	1437.0
45°	7037.4	4158.4	1529.2	1785.8	2149.6	2357.5	2106.0	1675.1	1447.1	1393.4	1393.4
47.5°	7240.2	3843.1	1489.0	1777.4	2188.2	2342.4	1986.9	1641.6	1415.2	1421.9	1453.7
50°	7441.5	3569.9	1458.8	1758.9	2221.7	2334.0	1938.3	1639.9	1423.6	1509.1	1566.1
52.5°	7674.6	3377.0	1421.9	1728.7	2221.7	2280.4	1923.3	1673.4	1447.1	1472.2	1497.3
55°	7956.2	3316.6	1374.9	1663.3	2181.4	2146.3	1914.9	1722.1	1463.8	1405.1	1415.2
57.5°	8328.5	3413.9	1329.7	1581.2	2089.3	2007.1	1911.5	1735.4	1425.2	1376.6	1366.6
60°	8761.1	3606.7	1316.2	1497.3	1963.5	1888.0	1891.4	1696.9	1371.6	1321.3	1329.7
62.5°	9064.6	3722.4	1307.8	1433.7	1826.0	1757.3	1842.8	1649.9	1348.1	1304.6	1312.9
65°	9064.6	3581.6	1230.7	1336.3	1648.3	1599.7	1784.1	1591.2	1317.9	1267.6	1259.2
67.5°	8720.9	3170.8	1113.3	1190.5	1452.1	1420.2	1701.9	1520.8	1272.7	1234.1	1214.0
70°	7825.5	2404.5	965.8	1019.5	1203.9	1232.4	1596.3	1425.2	1197.2	1150.2	1120.1
71°	7431.5	2094.3	903.7	932.3	1108.3	1150.2	1546.0	1385.0	1163.7	1096.6	1043.0
72.5°	6671.9	1763.9	809.9	821.6	947.4	1022.8	1440.3	1307.8	1100.0	1004.4	944.0
75°	5068.8	1287.7	652.2	645.6	700.9	811.6	1219.0	1165.3	964.1	835.0	799.8
77.5°	2189.9	700.9	488.0	493.0	476.2	615.4	959.1	1001.1	826.6	679.1	647.2
80°	664.0	404.1	333.7	340.4	318.6	412.5	675.7	784.7	664.0	528.2	484.6
82.5°	340.4	241.5	228.0	224.7	202.9	233.1	409.1	536.6	474.5	330.3	291.7
85°	147.5	129.1	112.4	109.0	95.6	83.9	145.9	268.3	251.5	184.5	176.1
87.5°	36.9	33.5	21.8	20.1	11.7	1.6	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)