

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: P454535

Luminaire Tested: **GALN-SA5C-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454535
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-SA5C-827-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26486 lumens
Efficiency: N/A
Efficacy: 98.5 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): 269
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

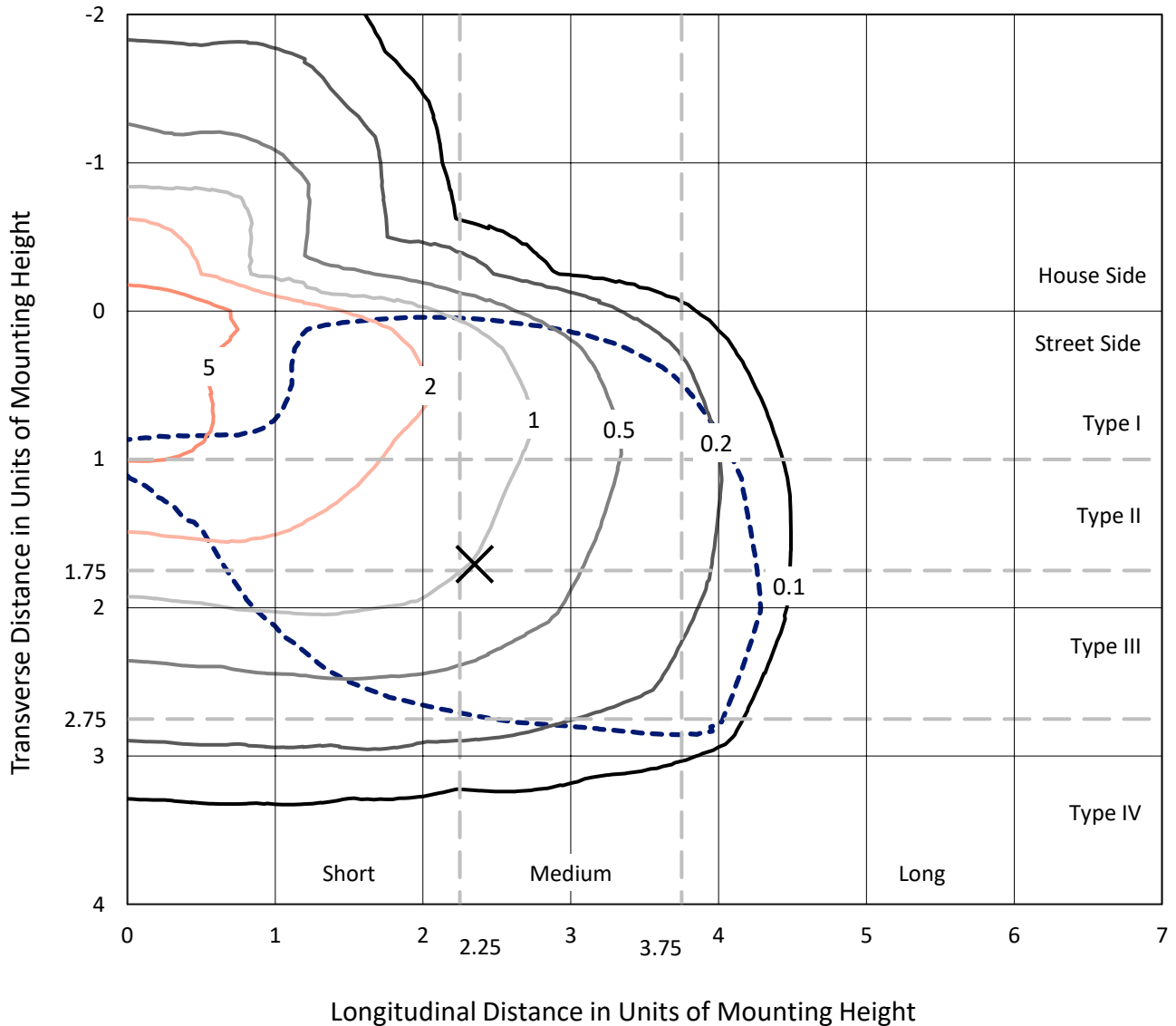




REPORT NUMBER: P454535
 CATALOG NUMBER: GALN-SA5C-827-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

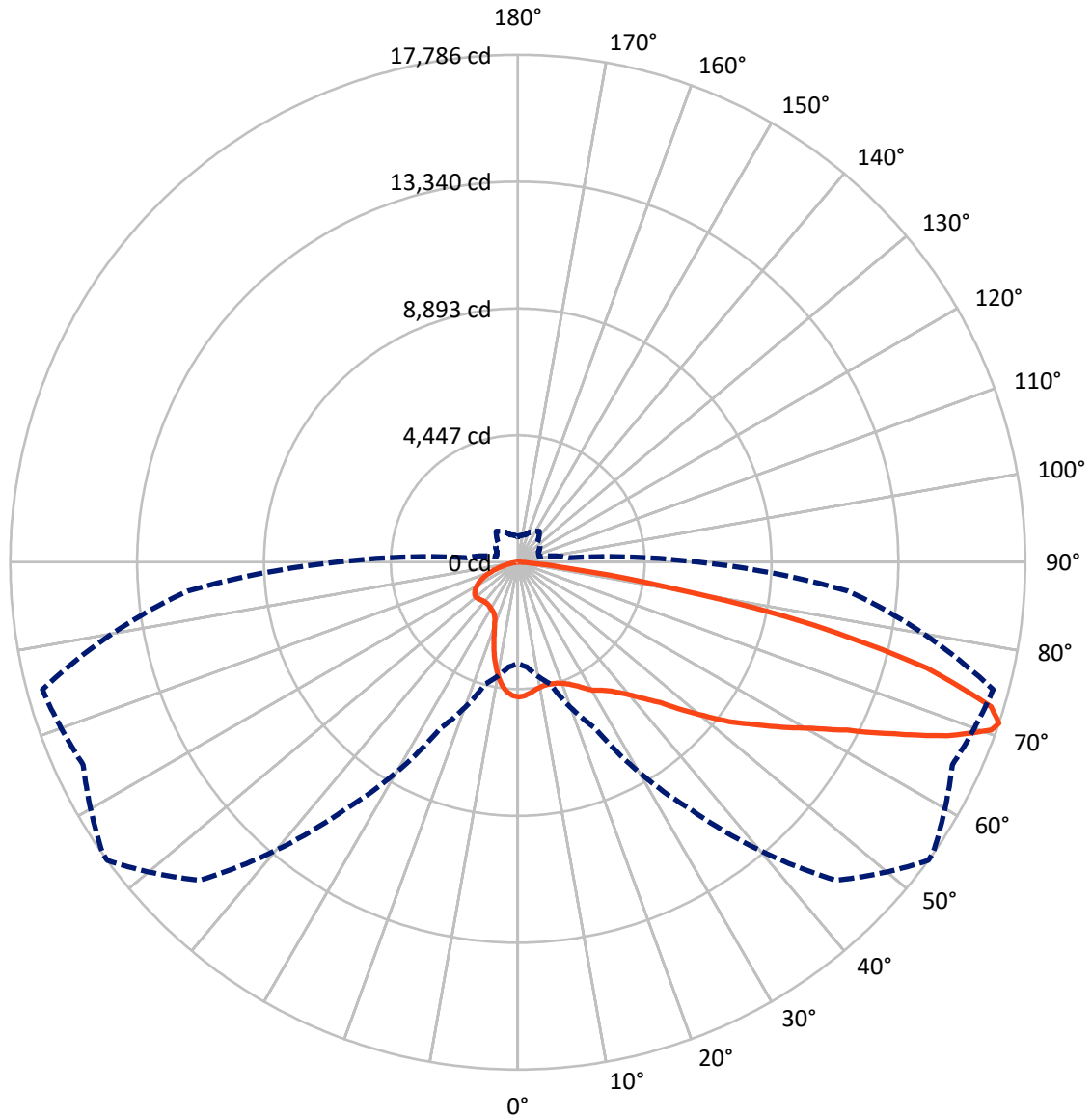
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P454535
CATALOG NUMBER: GALN-SA5C-827-U-T3R

Luminous Intensity Polar Plot



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

REPORT NUMBER: P454535

CATALOG NUMBER: GALN-SA5C-827-U-T3R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4781.9	0.0	4781.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	21704.1	0.0	21704.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	26486.0	0.0	26486.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.1	1.6
10°-20°	1111.9	4.2
20°-30°	1851.4	7.0
30°-40°	2737.7	10.3
40°-50°	3856.1	14.6
50°-60°	5163.5	19.5
60°-70°	6508.2	24.6
70°-80°	4445.1	16.8
80°-90°	390.9	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°	26486.0	100.0
0°-180°	26486.0	100.0

Coefficient of Utilization

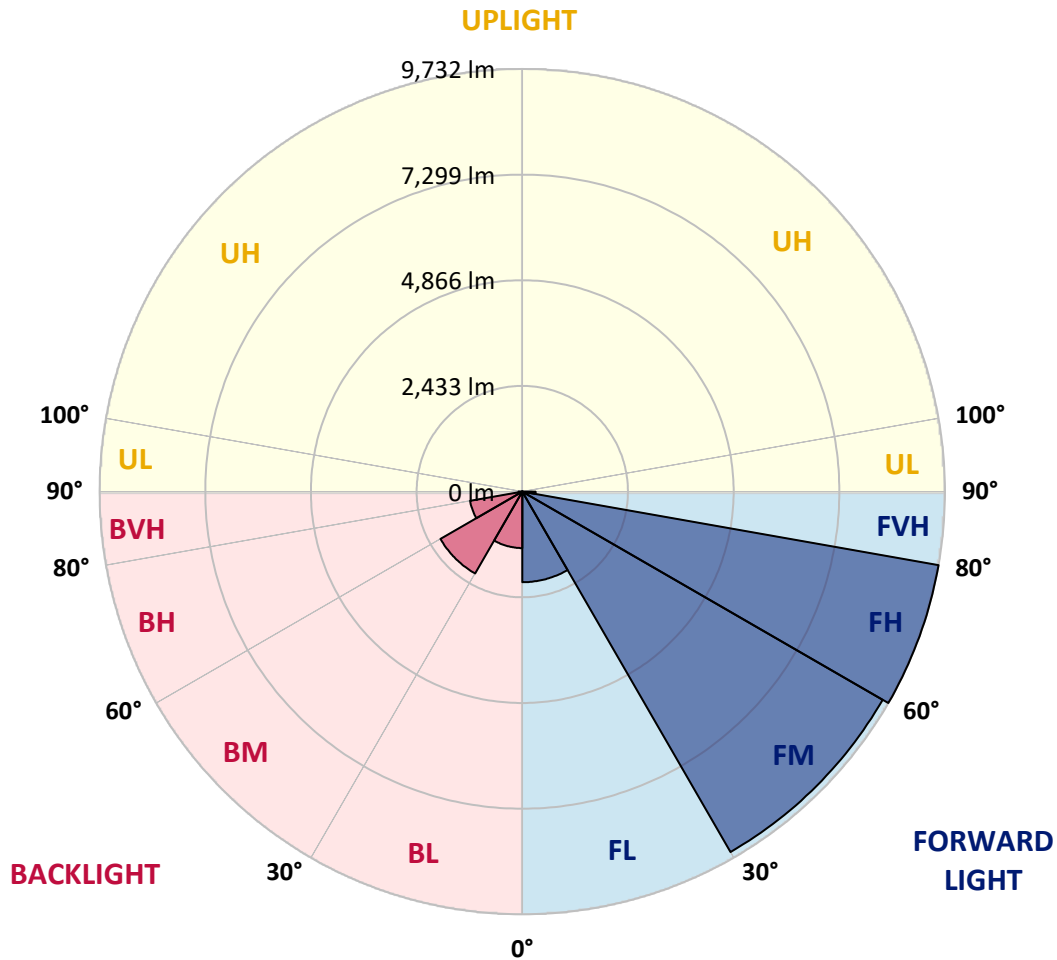


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2084.9	7.9			
FM	(30°-60°)	9581.7	36.2			
FH	(60°-80°)	9732.0	36.7			G4/12000
FVH	(80°-90°)	305.6	1.2			G3/500
BL	(0°-30°)	1299.6	4.9	B3/2500		
BM	(30°-60°)	2175.6	8.2	B2/2500		
BH	(60°-80°)	1221.3	4.6	B3/2500		G3/2500
BVH	(80°-90°)	85.4	0.3			G1/100
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: P454535

CATALOG NUMBER: GALN-SA5C-827-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5
2.5°	4565.3	4586.7	4592.4	4606.7	4636.8	4661.1	4685.4	4682.6	4716.9	4731.2	4744.1
5°	4362.1	4367.8	4389.3	4417.9	4470.8	4538.1	4603.9	4605.3	4689.7	4757.0	4789.9
7.5°	4213.3	4231.9	4246.2	4276.3	4332.1	4405.0	4509.5	4518.0	4668.3	4801.3	4871.4
10°	4116.0	4137.5	4153.2	4190.4	4246.2	4327.8	4440.8	4456.5	4652.5	4871.4	4994.5
12.5°	4027.3	4048.8	4063.1	4111.7	4184.7	4284.8	4412.2	4430.8	4658.3	4953.0	5128.9
15°	4081.7	4098.9	4093.1	4107.4	4156.1	4270.5	4423.6	4442.2	4679.7	5031.7	5262.0
17.5°	4323.5	4337.8	4290.6	4236.2	4213.3	4297.7	4459.4	4479.4	4722.6	5113.2	5397.9
20°	4679.7	4718.3	4615.3	4493.7	4383.6	4395.0	4533.8	4555.2	4782.7	5194.8	5536.7
22.5°	5143.2	5171.9	5046.0	4845.7	4642.5	4538.1	4645.4	4658.3	4872.9	5300.6	5688.3
25°	5688.3	5705.5	5531.0	5273.4	4980.2	4782.7	4798.5	4821.3	5021.6	5420.8	5822.8
27.5°	6217.7	6272.0	6070.3	5755.6	5369.3	5040.2	5008.8	5023.1	5183.3	5488.0	5915.8
30°	6845.7	6841.5	6628.3	6263.5	5768.5	5320.7	5207.6	5204.8	5270.6	5520.9	5983.1
32.5°	7346.5	7405.1	7196.3	6798.5	6224.8	5611.1	5345.0	5339.3	5337.8	5578.2	6083.2
35°	7915.9	7924.5	7732.8	7332.2	6718.4	5975.9	5536.7	5508.1	5475.2	5701.2	6219.1
37.5°	8425.2	8465.3	8289.3	7840.1	7203.4	6355.0	5799.9	5781.3	5681.2	5914.4	6436.6
40°	8822.9	8853.0	8747.1	8319.3	7681.3	6764.2	6134.7	6100.4	5978.8	6263.5	6727.0
42.5°	8953.1	9014.6	9056.1	8845.8	8230.6	7249.2	6546.7	6503.8	6410.8	6792.8	7061.8
45°	8963.1	9060.4	9279.3	9289.3	8782.9	7830.0	7027.4	6997.4	6990.2	7470.9	7532.5
47.5°	8887.3	8986.0	9353.7	9552.6	9275.0	8416.6	7721.3	7674.1	7678.4	8309.3	8060.4
50°	8704.2	8821.5	9267.9	9721.4	9659.9	9026.1	8453.8	8438.1	8526.8	9266.4	8608.3
52.5°	8359.4	8501.0	9179.2	9827.3	9946.0	9551.1	9286.5	9242.1	9466.7	10305.1	9207.8
55°	7405.1	7618.3	8854.4	9885.9	10217.8	10053.3	10036.1	10116.2	10413.8	11438.2	9867.3
57.5°	6907.3	7067.5	8149.1	9895.9	10561.2	10637.0	10911.7	10931.7	11452.5	12641.4	10612.7
60°	6635.4	6777.1	7762.8	9830.1	11040.5	11359.5	11807.3	11878.8	12466.8	13944.7	11385.3
62.5°	6397.9	6519.6	7531.0	9602.6	11581.3	12431.1	12967.6	13001.9	13618.5	15384.0	12147.8
65°	5838.6	5977.3	7064.6	9375.2	12047.7	13770.2	14507.0	14466.9	14844.6	16625.8	12625.6
67.5°	5084.6	5260.6	6193.4	8589.7	12278.0	15233.7	16240.9	16190.9	16055.0	17439.8	12763.0
70°	4121.8	4216.2	5078.9	7232.0	11358.1	16002.0	17610.1	17557.2	16804.6	17547.1	12113.5
71°	3546.6	3694.0	4422.2	6423.7	10592.7	15767.4	17786.1	17771.8	16806.1	17251.0	11624.2
72.5°	2768.3	2858.5	3502.3	4977.3	9003.2	14434.0	17351.1	17405.5	16441.2	16428.4	10615.6
75°	1751.1	1791.2	2197.5	2930.0	4940.1	10222.1	14811.7	14959.1	14598.5	13446.8	7894.4
77.5°	1017.2	1068.7	1316.2	1726.8	2134.6	5548.1	10598.4	10758.6	10143.4	7403.7	3231.9
80°	592.3	649.5	867.0	1002.9	980.0	2058.7	5396.5	5669.7	4392.1	1869.9	907.0
82.5°	329.1	367.7	609.5	610.9	522.2	672.4	1698.2	1776.9	1253.3	754.0	370.5
85°	238.9	270.4	393.4	356.2	250.4	289.0	590.9	619.5	506.5	317.6	120.2
87.5°	84.4	120.2	216.0	171.7	68.7	60.1	170.2	138.8	128.8	88.7	27.2
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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 CATALOG NUMBER: GALN-SA5C-827-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5	4725.5
2.5°	4751.2	4754.1	4739.8	4714.0	4688.3	4655.4	4618.2	4589.6	4576.7	4575.3	4573.8
5°	4802.8	4809.9	4755.5	4675.4	4586.7	4478.0	4385.0	4279.1	4251.9	4209.0	4221.9
7.5°	4885.7	4881.4	4774.1	4603.9	4396.4	4166.1	3971.5	3858.5	3741.2	3708.3	3709.7
10°	5004.5	4977.3	4774.1	4458.0	4111.7	3769.8	3498.0	3326.3	3233.3	3156.1	3127.4
12.5°	5130.4	5061.7	4728.4	4253.4	3745.5	3326.3	3034.4	2802.7	2742.6	2679.6	2681.1
15°	5250.5	5136.1	4638.2	3965.8	3350.6	2852.8	2569.5	2430.7	2412.1	2419.3	2417.8
17.5°	5359.3	5189.0	4500.9	3645.3	2889.9	2446.4	2296.2	2306.2	2356.3	2392.1	2396.4
20°	5469.4	5220.5	4296.3	3216.1	2455.0	2200.4	2206.1	2284.8	2360.6	2409.2	2416.4
22.5°	5573.9	5234.8	4055.9	2801.2	2140.3	2095.9	2180.3	2264.7	2339.1	2386.4	2393.5
25°	5642.6	5201.9	3715.4	2367.8	1985.8	2058.7	2147.4	2219.0	2281.9	2330.6	2342.0
27.5°	5661.2	5096.0	3293.4	2017.2	1914.2	2023.0	2104.5	2157.4	2206.1	2251.9	2260.5
30°	5651.1	4940.1	2829.9	1811.2	1872.7	1981.5	2044.4	2083.1	2141.7	2177.5	2184.6
32.5°	5635.4	4758.4	2346.3	1701.1	1838.4	1942.8	1980.0	2014.4	2012.9	1998.6	2008.7
35°	5641.1	4540.9	1954.3	1635.3	1808.4	1914.2	1945.7	1902.8	1779.8	1774.0	1768.3
37.5°	5671.2	4326.3	1669.6	1589.5	1792.6	1909.9	1927.1	1729.7	1620.9	1570.9	1558.0
40°	5748.4	4076.0	1482.2	1555.1	1791.2	1942.8	1842.7	1642.4	1433.5	1336.2	1329.1
42.5°	5851.4	3829.9	1367.7	1533.7	1808.4	1992.9	1808.4	1519.4	1291.9	1234.7	1226.1
45°	6004.5	3548.1	1304.8	1523.7	1834.1	2011.5	1796.9	1429.2	1234.7	1188.9	1188.9
47.5°	6177.6	3279.1	1270.4	1516.5	1867.0	1998.6	1695.3	1400.6	1207.5	1213.2	1240.4
50°	6349.3	3045.9	1244.7	1500.8	1895.6	1991.5	1653.9	1399.2	1214.6	1287.6	1336.2
52.5°	6548.2	2881.4	1213.2	1475.0	1895.6	1945.7	1641.0	1427.8	1234.7	1256.1	1277.6
55°	6788.5	2829.9	1173.1	1419.2	1861.3	1831.3	1633.8	1469.3	1249.0	1198.9	1207.5
57.5°	7106.1	2912.8	1134.5	1349.1	1782.6	1712.5	1631.0	1480.7	1216.1	1174.6	1166.0
60°	7475.2	3077.4	1123.1	1277.6	1675.3	1610.9	1613.8	1447.8	1170.3	1127.4	1134.5
62.5°	7734.2	3176.1	1115.9	1223.2	1558.0	1499.3	1572.3	1407.8	1150.3	1113.1	1120.2
65°	7734.2	3055.9	1050.1	1140.2	1406.3	1364.9	1522.2	1357.7	1124.5	1081.6	1074.4
67.5°	7440.9	2705.4	950.0	1015.8	1239.0	1211.8	1452.1	1297.6	1085.9	1053.0	1035.8
70°	6676.9	2051.6	824.1	869.8	1027.2	1051.5	1362.0	1216.1	1021.5	981.4	955.7
71°	6340.7	1786.9	771.1	795.5	945.7	981.4	1319.1	1181.7	992.9	935.7	889.9
72.5°	5692.6	1505.1	691.0	701.0	808.3	872.7	1228.9	1115.9	938.5	857.0	805.5
75°	4324.9	1098.8	556.5	550.8	598.0	692.4	1040.1	994.3	822.6	712.5	682.4
77.5°	1868.5	598.0	416.3	420.6	406.3	525.1	818.3	854.1	705.3	579.4	552.2
80°	566.5	344.8	284.7	290.4	271.8	351.9	576.6	669.6	566.5	450.7	413.5
82.5°	290.4	206.0	194.6	191.7	173.1	198.9	349.1	457.8	404.9	281.8	248.9
85°	125.9	110.2	95.9	93.0	81.5	71.5	124.5	228.9	214.6	157.4	150.2
87.5°	31.5	28.6	18.6	17.2	10.0	1.4	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)