

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: P454529

Luminaire Tested: **GALN-SA5C-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454529
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
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-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26029 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

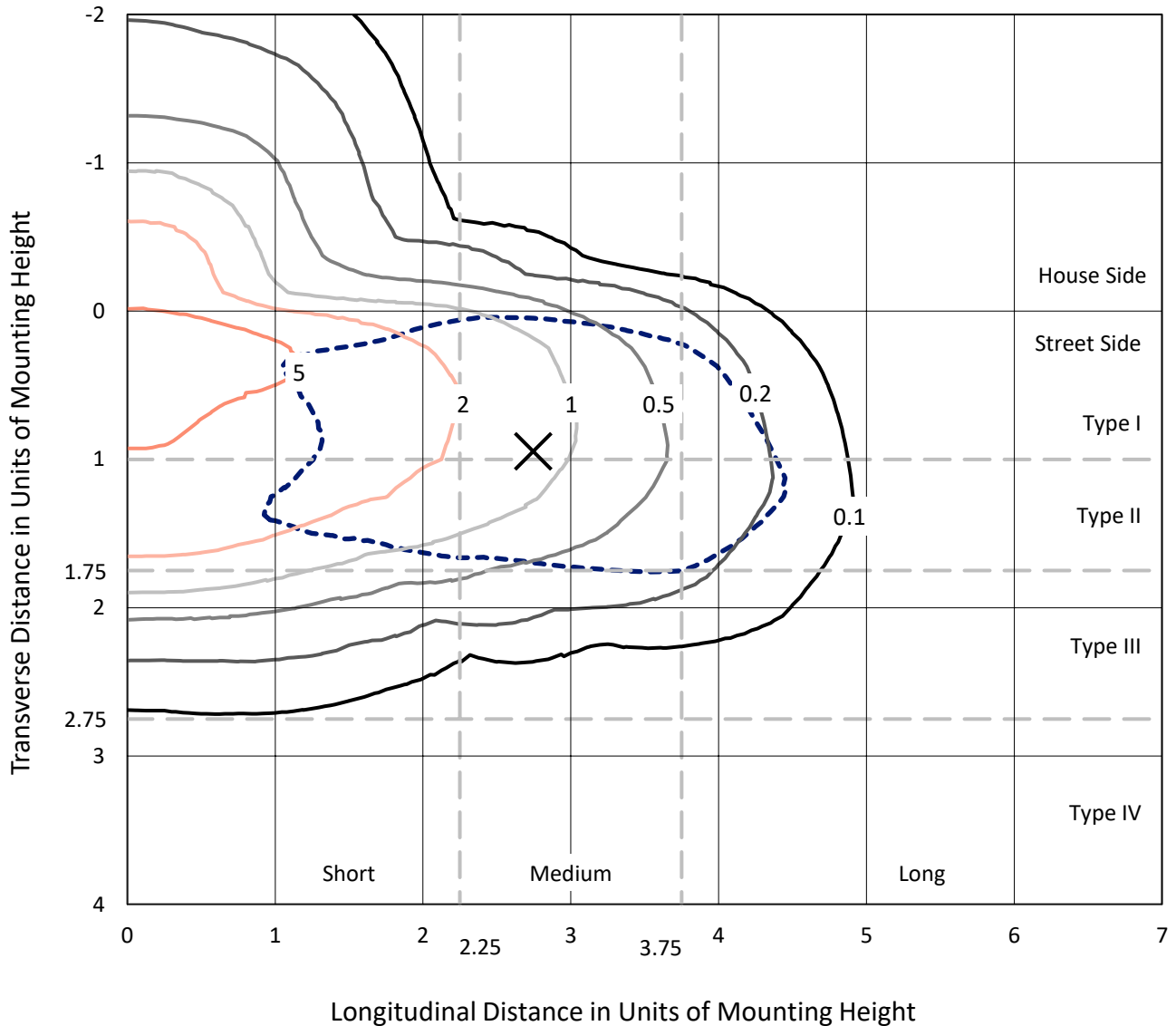
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

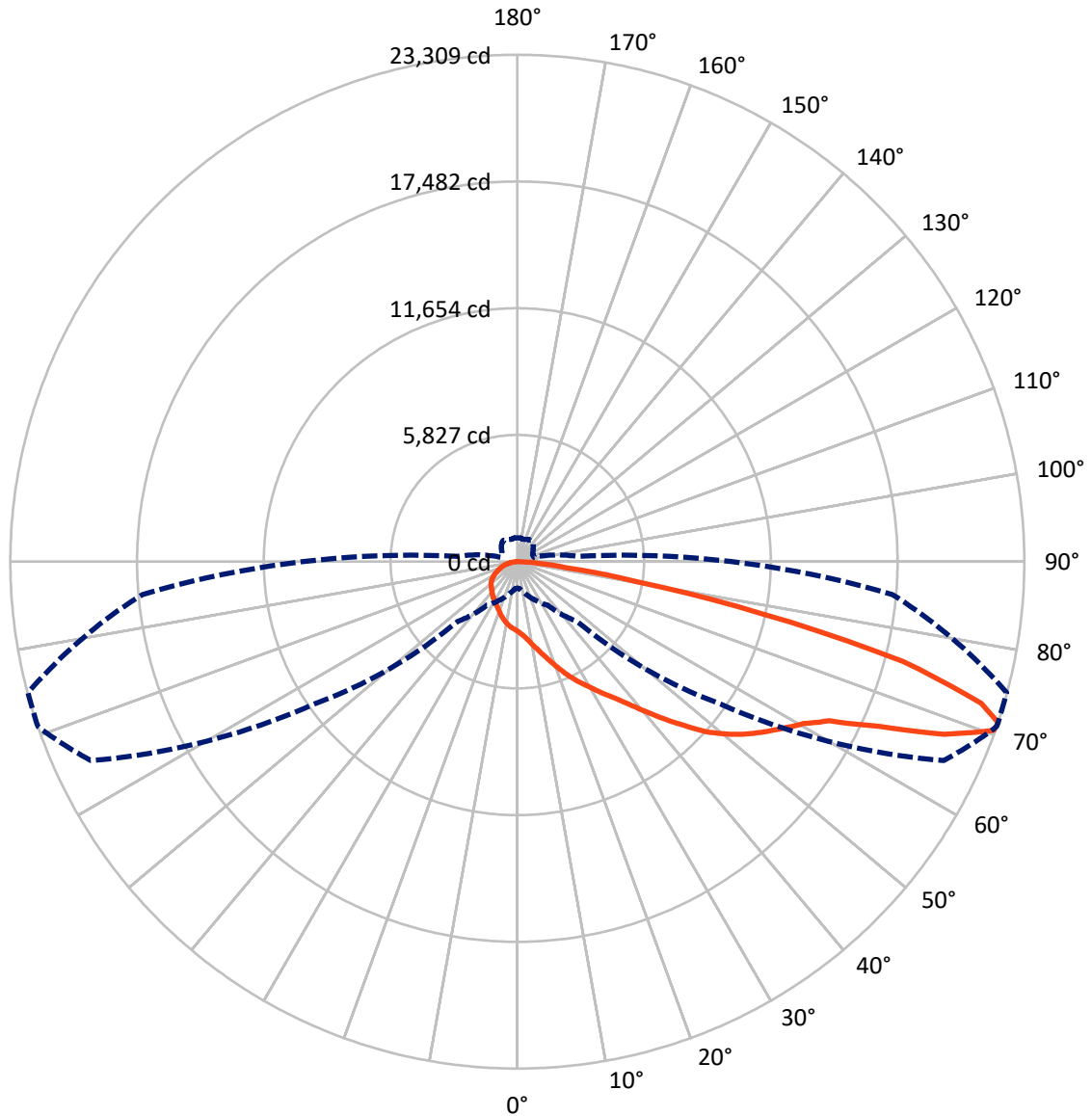
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4681.3	0.0	4681.3
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	21347.7	0.0	21347.7
	% Fixture	82.0	0.0	82.0
Total	Lumens	26029.0	0.0	26029.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.8	1.2
10°-20°	1042.1	4.0
20°-30°	1821.2	7.0
30°-40°	2708.7	10.4
40°-50°	3991.0	15.3
50°-60°	5587.4	21.5
60°-70°	6249.4	24.0
70°-80°	3817.4	14.7
80°-90°	491.1	1.9
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°	26029.0	100.0
0°-180°	26029.0	100.0

Coefficient of Utilization



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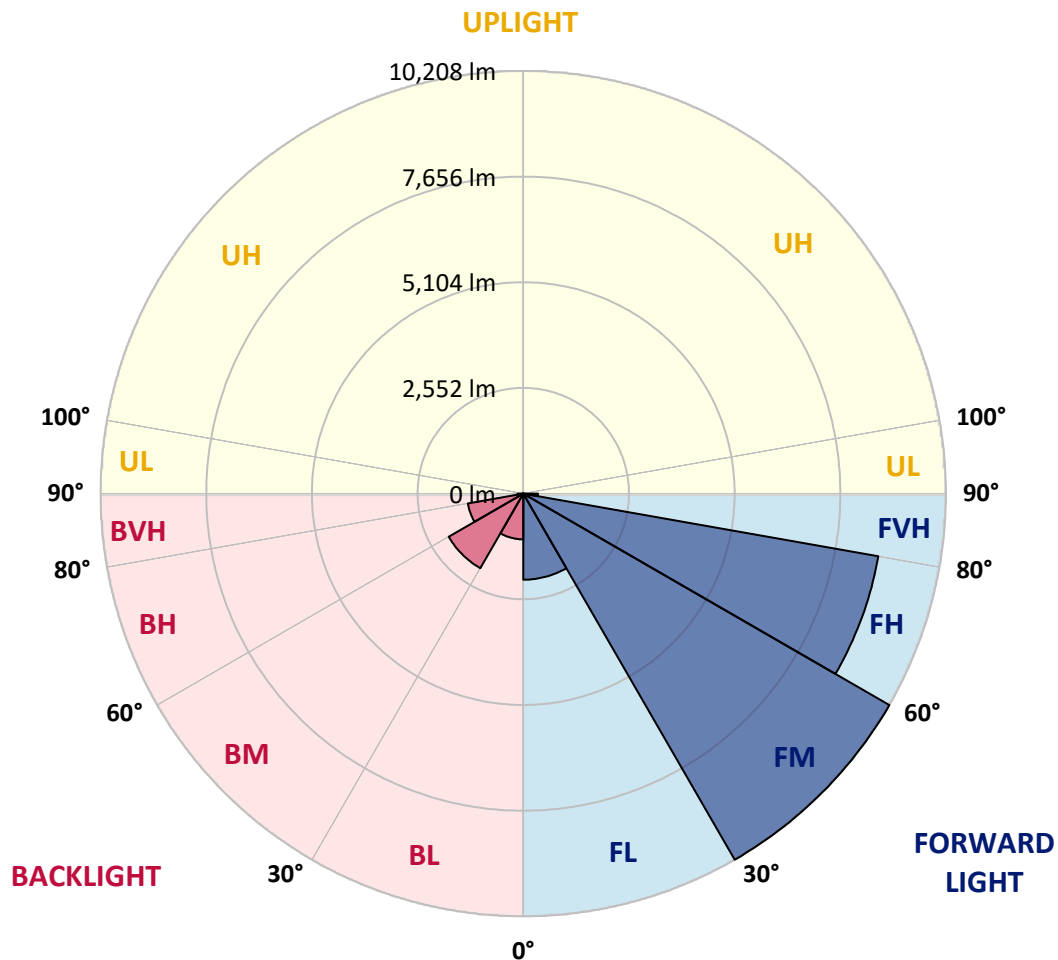
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2079.7	8.0			
FM	(30°-60°)	10208.1	39.2			
FH	(60°-80°)	8706.6	33.4			G4/12000
FVH	(80°-90°)	353.3	1.4			G3/500
BL	(0°-30°)	1104.3	4.2	B3/2500		
BM	(30°-60°)	2079.1	8.0	B2/2500		
BH	(60°-80°)	1360.1	5.2	B3/2500		G3/2500
BVH	(80°-90°)	137.7	0.5			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5
2.5°	3546.5	3529.3	3530.7	3506.4	3474.9	3440.6	3392.0	3349.1	3314.7	3294.7	3236.0
5°	3929.9	3912.7	3891.3	3838.3	3815.4	3731.0	3623.7	3526.4	3452.1	3410.6	3293.3
7.5°	4240.3	4236.0	4230.3	4200.3	4141.6	4024.3	3932.7	3763.9	3653.8	3575.1	3374.8
10°	4432.0	4439.2	4443.5	4449.2	4424.9	4363.4	4237.5	4024.3	3884.1	3784.0	3480.7
12.5°	4529.3	4536.5	4560.8	4613.7	4646.6	4639.5	4536.5	4327.6	4134.5	4002.8	3593.7
15°	4589.4	4600.8	4643.8	4713.9	4824.0	4894.1	4844.0	4650.9	4439.2	4283.2	3728.2
17.5°	4655.2	4668.1	4715.3	4815.4	4959.9	5111.6	5165.9	5000.0	4769.6	4583.7	3878.4
20°	4692.4	4709.6	4776.8	4908.4	5077.2	5297.5	5477.8	5390.5	5138.7	4932.7	4051.5
22.5°	4752.5	4766.8	4824.0	4964.2	5165.9	5442.0	5789.7	5771.1	5549.3	5283.2	4241.8
25°	4915.6	4938.5	4967.1	5051.5	5246.0	5589.4	6048.6	6177.4	5947.0	5649.5	4416.3
27.5°	5223.1	5241.7	5240.3	5251.8	5361.9	5716.7	6273.2	6579.4	6341.9	6020.0	4585.1
30°	5573.6	5580.8	5586.5	5560.8	5585.1	5846.9	6479.2	6977.1	6739.6	6400.5	4732.4
32.5°	6000.0	6014.3	5965.6	5899.8	5879.8	6040.0	6649.5	7374.8	7210.3	6786.8	4878.4
35°	6503.5	6540.7	6442.0	6326.1	6244.6	6317.6	6878.4	7781.1	7692.4	7280.4	5071.5
37.5°	7078.6	7124.4	7032.9	6805.4	6689.5	6709.5	7177.4	8283.2	8301.8	7842.6	5359.1
40°	7549.3	7609.4	7612.3	7290.4	7114.4	7137.3	7556.5	8824.0	9037.1	8537.9	5698.1
42.5°	7859.8	7918.4	7979.9	7791.1	7606.5	7736.7	7998.5	9410.5	9864.0	9381.9	6171.6
45°	8200.2	8253.2	8287.5	8201.7	8098.7	8436.3	8532.1	10034.3	10745.3	10324.7	6689.5
47.5°	8595.1	8653.7	8686.6	8605.1	8566.5	9050.0	9107.2	10616.5	11686.6	11240.3	7261.8
50°	9121.6	9165.9	9148.7	9097.2	9088.6	9520.7	9659.5	11161.6	12463.5	12226.0	7855.5
52.5°	9776.8	9829.7	9848.3	9775.3	9742.4	9856.9	10104.4	11658.0	13170.2	13072.9	8489.2
55°	10173.0	10257.5	10540.7	10655.2	10733.8	10291.8	10583.6	12205.9	13803.9	13965.6	9170.2
57.5°	9665.2	9773.9	10407.7	10979.9	11719.5	11379.1	11263.2	12778.2	14437.7	14831.1	9985.6
60°	8426.3	8450.6	9267.5	10321.8	11809.7	12776.8	12680.9	13688.1	15124.4	15703.8	11060.0
62.5°	5845.5	5897.0	6862.6	8545.0	10696.7	13280.3	15092.9	15258.9	16108.6	17009.9	12635.1
65°	3014.3	2947.1	3826.9	5370.5	8064.3	12084.3	17047.1	18147.3	18243.1	19052.8	14852.6
67.5°	1855.5	1885.5	2297.6	3135.9	4768.2	8782.5	16842.5	21676.6	21171.6	21560.7	16911.2
70°	1393.4	1430.6	1713.9	2145.9	2907.0	5021.4	13545.0	22532.1	23237.4	23137.2	17537.8
71°	1211.7	1250.4	1545.1	1952.8	2442.0	3875.5	11412.0	21636.5	23308.9	23291.7	17301.8
72.5°	1032.9	1057.2	1287.5	1653.8	2058.6	2716.7	8573.6	19404.8	22314.6	22885.4	16459.1
75°	811.2	829.8	932.8	1261.8	1620.9	1668.1	4600.8	14547.8	18327.5	19414.8	13702.4
77.5°	660.9	673.8	726.7	937.0	1250.4	1181.7	2413.4	9469.2	11482.1	12576.5	8071.5
80°	525.0	539.3	570.8	635.2	937.0	842.6	1151.6	4798.3	5546.5	5535.0	3221.7
82.5°	407.7	412.0	449.2	466.4	640.9	598.0	623.7	2031.5	2250.3	2324.7	1163.1
85°	257.5	270.4	397.7	357.7	383.4	350.5	307.6	806.9	994.3	980.0	464.9
87.5°	78.7	83.0	134.5	151.6	170.2	153.1	113.0	237.5	290.4	314.7	115.9
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°	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5	3194.5
2.5°	3213.1	3197.4	3141.6	3095.8	3052.9	3005.7	2965.6	2954.2	2944.2	2939.9	2938.5
5°	3243.2	3196.0	3085.8	2995.7	2924.2	2858.4	2816.9	2798.3	2779.7	2779.7	2785.4
7.5°	3286.1	3200.3	3030.0	2895.5	2805.4	2743.9	2713.9	2711.0	2715.3	2719.6	2721.0
10°	3333.3	3197.4	2948.5	2781.1	2701.0	2672.4	2673.8	2698.1	2721.0	2738.2	2741.0
12.5°	3379.1	3180.2	2852.6	2673.8	2622.3	2628.0	2668.1	2722.4	2766.8	2791.1	2792.5
15°	3430.6	3153.1	2736.8	2572.2	2555.1	2599.4	2673.8	2756.8	2824.0	2864.1	2868.4
17.5°	3473.5	3107.3	2615.2	2473.5	2495.0	2576.5	2679.5	2786.8	2868.4	2918.4	2927.0
20°	3522.2	3048.6	2489.3	2379.1	2440.6	2550.8	2668.1	2784.0	2868.4	2917.0	2928.5
22.5°	3560.8	2965.6	2369.1	2301.8	2392.0	2519.3	2629.5	2722.4	2791.1	2816.9	2834.0
25°	3576.5	2861.2	2256.1	2238.9	2353.3	2467.8	2542.2	2595.1	2616.6	2613.7	2620.9
27.5°	3567.9	2741.0	2158.8	2188.8	2304.7	2387.7	2424.9	2420.6	2382.0	2346.2	2363.4
30°	3532.2	2598.0	2077.2	2137.3	2241.8	2287.5	2281.8	2226.0	2153.1	2085.8	2090.1
32.5°	3467.8	2443.5	2001.4	2078.7	2153.1	2173.1	2134.5	2061.5	1957.1	1869.8	1856.9
35°	3413.4	2296.1	1934.2	2011.4	2064.4	2054.4	2017.2	1922.7	1828.3	1751.1	1738.2
37.5°	3404.8	2170.2	1869.8	1935.6	1965.7	1951.3	1905.6	1825.5	1791.1	1732.5	1725.3
40°	3450.6	2081.5	1804.0	1855.5	1869.8	1858.4	1808.3	1762.5	1794.0	1779.7	1779.7
42.5°	3575.1	2034.3	1745.3	1775.4	1786.8	1795.4	1759.6	1721.0	1759.6	1693.8	1672.4
45°	3772.5	2035.8	1692.4	1696.7	1731.0	1761.1	1736.8	1679.5	1659.5	1527.9	1502.1
47.5°	4062.9	2084.4	1649.5	1622.3	1683.8	1733.9	1699.6	1616.6	1527.9	1440.6	1424.9
50°	4402.0	2171.7	1610.9	1545.1	1620.9	1699.6	1673.8	1576.5	1485.0	1432.0	1422.0
52.5°	4778.2	2281.8	1563.7	1459.2	1543.6	1683.8	1679.5	1570.8	1444.9	1409.1	1400.6
55°	5243.2	2390.5	1505.0	1359.1	1475.0	1670.9	1663.8	1523.6	1436.3	1410.6	1407.7
57.5°	5783.9	2547.9	1420.6	1257.5	1396.3	1618.0	1602.3	1495.0	1407.7	1389.1	1387.7
60°	6655.2	2792.5	1300.4	1164.5	1316.2	1525.0	1545.1	1446.3	1361.9	1357.6	1356.2
62.5°	7801.1	3135.9	1176.0	1068.7	1223.2	1404.9	1462.1	1380.5	1313.3	1334.8	1337.6
65°	9383.4	3424.9	1047.2	987.1	1120.2	1289.0	1383.4	1319.0	1258.9	1300.4	1300.4
67.5°	10414.8	3430.6	929.9	902.7	1015.7	1191.7	1300.4	1246.1	1188.8	1258.9	1261.8
70°	10200.2	3005.7	832.6	814.0	914.2	1087.3	1208.9	1165.9	1100.1	1163.1	1140.2
71°	9854.0	2769.7	794.0	779.7	874.1	1037.2	1165.9	1130.2	1064.4	1105.9	1093.0
72.5°	9301.8	2404.9	731.0	733.9	814.0	974.2	1105.9	1068.7	1002.9	1025.7	1021.5
75°	7862.6	2100.1	625.2	638.1	699.6	866.9	985.7	957.1	889.8	889.8	885.5
77.5°	4915.6	1467.8	519.3	526.5	593.7	742.5	846.9	822.6	758.2	736.8	731.0
80°	1834.0	758.2	406.3	414.9	456.4	585.1	701.0	678.1	612.3	588.0	565.1
82.5°	693.8	380.5	299.0	291.8	336.2	446.3	549.4	522.2	470.7	412.0	394.8
85°	261.8	188.8	183.1	177.4	197.4	264.7	340.5	334.8	280.4	238.9	234.6
87.5°	68.7	61.5	71.5	52.9	55.8	50.1	51.5	21.5	10.0	4.3	2.9
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)