

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: P456371

Luminaire Tested: **GALN-SA7C-827-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456371  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36350 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

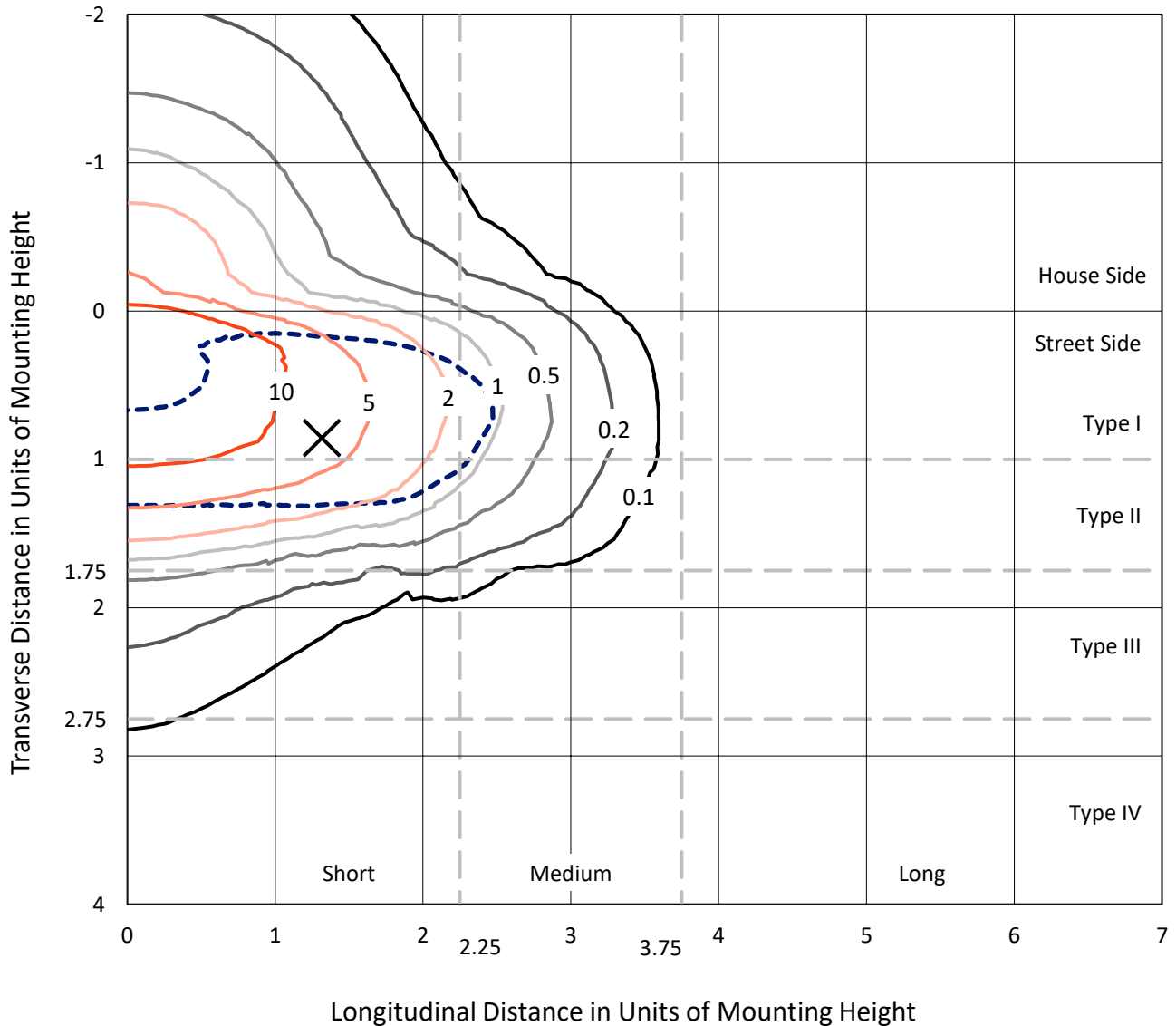
Input Watts (W): 377  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P456371  
 CATALOG NUMBER: GALN-SA7C-827-U-AFL

### Iso-Footcandle Lines of Horizontal Illumination

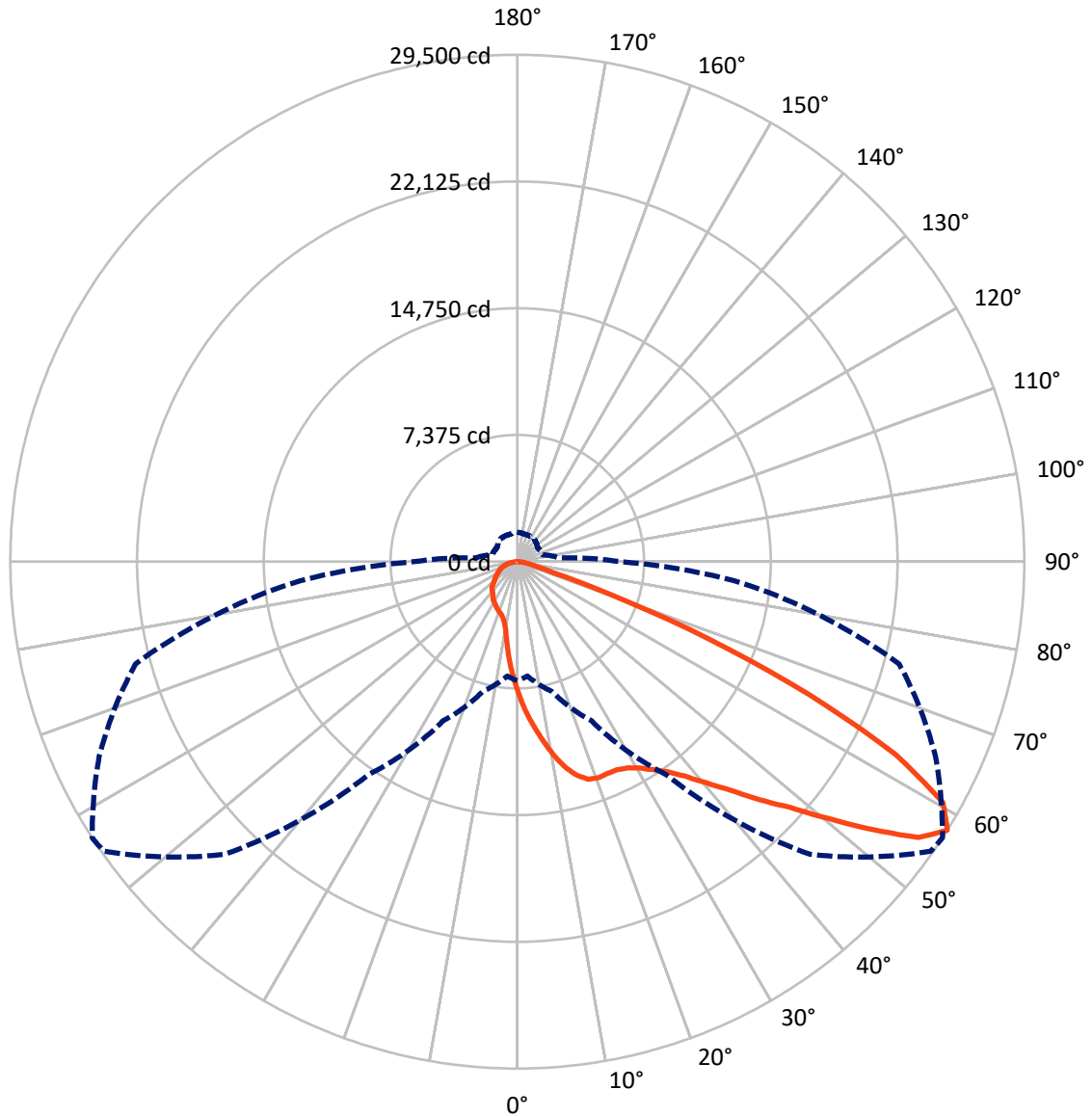
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.6 fc  
 Type II - Short - N/A

REPORT NUMBER: P456371  
CATALOG NUMBER: GALN-SA7C-827-U-AFL

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P456371

CATALOG NUMBER: GALN-SA7C-827-U-AFL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5527.8	0.0	5527.8
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	30822.2	0.0	30822.2
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	36350.0	0.0	36350.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	734.0	2.0
10°-20°	2163.0	6.0
20°-30°	3591.8	9.9
30°-40°	5410.2	14.9
40°-50°	8122.9	22.3
50°-60°	9104.8	25.0
60°-70°	5328.6	14.7
70°-80°	1576.1	4.3
80°-90°	318.6	0.9
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°	36350.0	100.0
0°-180°	36350.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P456371

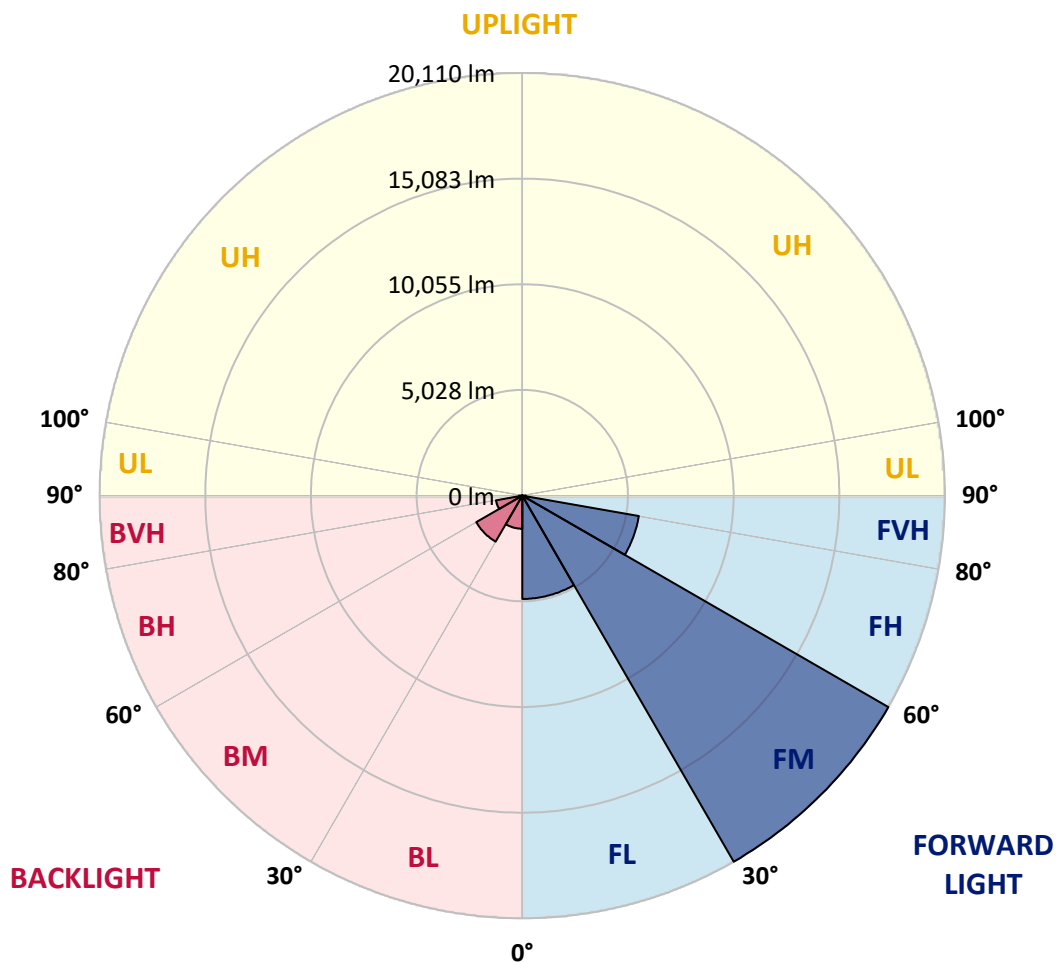
CATALOG NUMBER: GALN-SA7C-827-U-AFL

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4913.7	13.5			
FM	(30°-60°)	20110.4	55.3			
FH	(60°-80°)	5632.8	15.5			G3/7500
FVH	(80°-90°)	165.3	0.5			G2/225
BL	(0°-30°)	1575.1	4.3	B3/2500		
BM	(30°-60°)	2527.5	7.0	B3/5000		
BH	(60°-80°)	1271.9	3.5	B3/2500		G3/2500
BVH	(80°-90°)	153.3	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





REPORT NUMBER: P456371

CATALOG NUMBER: GALN-SA7C-827-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7
2.5°	9489.2	9385.7	9304.1	9232.5	9139.0	8886.3	8633.6	8629.6	8428.6	8118.2	7799.9
5°	11035.2	10896.0	10913.9	10691.0	10468.2	10102.0	9566.8	9538.9	9111.1	8530.1	7939.2
7.5°	12042.1	12044.0	11988.3	11861.0	11620.2	11204.4	10597.5	10460.2	9865.3	8983.8	8098.3
10°	11990.3	12044.0	12137.6	12247.0	12320.6	12115.7	11562.5	11395.4	10621.4	9533.0	8275.4
12.5°	11301.9	11385.4	11518.8	11793.3	12237.1	12575.3	12386.3	12251.0	11496.9	10080.2	8470.4
15°	10872.1	10921.8	10995.4	11180.5	11658.0	12467.9	12957.4	12885.7	12322.6	10699.0	8689.3
17.5°	10740.8	10790.5	10814.4	10927.8	11268.0	12097.8	13182.2	13309.5	13054.8	11268.0	8910.2
20°	10872.1	10896.0	10896.0	10963.6	11230.2	11880.9	13172.2	13428.9	13655.8	11950.5	9117.1
22.5°	11216.3	11226.3	11212.3	11236.2	11435.2	11940.6	13078.7	13397.1	14141.3	12529.6	9278.3
25°	11775.4	11791.3	11699.8	11644.1	11789.4	12203.2	13130.5	13423.0	14521.3	13082.7	9385.7
27.5°	12410.2	12430.1	12318.6	12189.3	12257.0	12527.6	13333.4	13596.1	14805.8	13627.9	9453.4
30°	13188.2	13196.1	13009.1	12853.9	12810.1	13011.1	13679.6	13924.4	15160.0	14270.6	9554.9
32.5°	13984.1	14043.8	13803.0	13584.1	13510.5	13572.2	14191.0	14427.8	15581.9	14961.0	9718.0
35°	15066.5	15076.5	14787.9	14521.3	14278.6	14358.1	14845.6	15016.8	16164.9	15758.9	9948.8
37.5°	16417.6	16509.1	16111.1	15613.7	15315.2	15199.8	15637.6	15824.6	16982.6	16737.9	10297.0
40°	17917.8	17951.7	17611.4	17301.0	16755.8	16421.5	16724.0	16926.9	17991.5	17905.9	10701.0
42.5°	18861.0	18934.6	18960.5	18928.6	18518.7	17957.6	18073.0	18168.5	19185.3	19002.3	11114.8
45°	19179.3	19288.8	19658.9	20442.8	20486.6	19933.5	19664.8	19756.4	20486.6	20108.6	11510.8
47.5°	18652.1	18839.1	19521.6	21129.3	22333.1	22374.9	21565.1	21364.1	21672.5	21025.8	11797.3
50°	17289.1	17328.9	18373.5	20701.5	23198.7	24708.9	23871.2	23497.1	22798.7	21704.4	11994.3
52.5°	15179.9	15225.7	16101.2	18713.7	22665.4	26340.5	26569.3	25900.8	23942.8	22231.6	12123.6
55°	11268.0	11532.7	12495.7	15020.7	20138.4	26187.3	28714.3	28334.3	25325.7	22649.5	12326.6
57.5°	6928.4	6685.6	7827.7	10219.4	15146.1	24082.1	29376.9	29500.3	26847.9	22999.7	12666.8
60°	3187.6	3235.4	3706.9	5270.9	9232.5	18839.1	27669.7	28449.7	27689.6	22987.8	12752.4
62.5°	2196.7	2152.9	2033.5	2314.1	4210.3	11914.7	23371.8	24693.0	26002.3	22273.4	12412.2
65°	1963.9	1920.1	1689.3	1611.7	1934.1	5193.3	16990.6	18658.0	21893.4	20470.7	11564.5
67.5°	1834.6	1774.9	1536.1	1384.9	1380.9	2067.4	10018.5	12026.1	16238.5	17307.0	10020.5
70°	1699.3	1651.5	1414.7	1247.6	1176.0	1299.3	4403.4	5764.3	10543.8	12471.8	7805.8
72.5°	1564.0	1508.2	1295.3	1116.3	1022.7	973.0	1687.3	2194.7	5957.4	7477.5	4785.4
75°	1367.0	1339.1	1158.0	1010.8	909.3	786.0	1070.5	1221.7	2849.3	3434.3	2401.6
77.5°	1195.8	1166.0	1028.7	883.5	809.8	638.7	760.1	829.7	1201.8	1392.8	1084.4
80°	875.5	905.3	867.5	780.0	722.3	501.4	511.4	569.1	714.3	789.9	662.6
82.5°	555.1	610.9	668.6	600.9	547.2	396.0	354.2	376.1	487.5	517.3	294.5
85°	232.8	236.8	388.0	366.1	312.4	234.8	212.9	224.8	260.7	272.6	137.3
87.5°	89.5	87.5	137.3	127.3	97.5	67.7	67.7	75.6	103.5	95.5	43.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P456371  
 CATALOG NUMBER: GALN-SA7C-827-U-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7	7636.7
2.5°	7662.6	7521.3	7240.8	6892.5	6637.9	6351.3	6098.6	5917.6	5849.9	5818.1	5758.4
5°	7656.6	7378.0	6797.0	6188.2	5698.7	5197.3	4773.4	4498.9	4475.0	4291.9	4274.0
7.5°	7658.6	7232.8	6307.6	5412.2	4666.0	4152.6	3802.4	3710.9	3601.5	3573.6	3587.5
10°	7664.6	7047.7	5782.3	4644.1	3921.8	3585.6	3454.2	3418.4	3422.4	3434.3	3436.3
12.5°	7672.5	6868.7	5237.1	4061.1	3504.0	3364.7	3350.8	3382.6	3416.4	3442.3	3448.3
15°	7682.5	6663.7	4705.8	3591.5	3295.1	3283.1	3328.9	3382.6	3430.4	3468.2	3474.1
17.5°	7670.5	6425.0	4260.1	3303.0	3179.6	3237.3	3313.0	3380.6	3424.4	3460.2	3464.2
20°	7642.7	6158.3	3830.3	3100.1	3108.0	3201.5	3283.1	3346.8	3394.5	3412.4	3426.4
22.5°	7535.2	5840.0	3456.2	2942.9	3022.5	3151.8	3249.3	3287.1	3233.4	3195.6	3205.5
25°	7352.2	5426.1	3108.0	2815.5	2944.9	3082.1	3181.6	3090.1	3046.3	3030.4	3038.4
27.5°	7123.4	4972.4	2845.4	2682.2	2845.4	3004.5	2976.7	2960.8	2940.9	2915.0	2921.0
30°	6876.6	4528.7	2622.5	2578.7	2737.9	2829.4	2841.4	2867.3	2845.4	2805.6	2821.5
32.5°	6647.8	4110.9	2453.4	2491.2	2662.3	2648.4	2737.9	2767.8	2666.3	2533.0	2538.9
35°	6452.8	3722.9	2326.0	2405.6	2533.0	2538.9	2628.5	2525.0	2415.6	2351.9	2355.9
37.5°	6305.6	3420.4	2242.5	2332.0	2367.8	2443.4	2395.7	2342.0	2328.0	2284.3	2286.2
40°	6218.0	3155.8	2188.7	2274.3	2268.3	2320.1	2166.9	2220.6	2240.5	2226.5	2228.5
42.5°	6130.5	2968.7	2133.0	2194.7	2192.7	2091.2	2057.4	2103.2	2154.9	2160.9	2156.9
45°	6060.8	2823.5	2075.3	2073.3	2113.1	1953.9	1944.0	1971.9	2045.5	2081.3	2079.3
47.5°	5983.2	2702.1	1987.8	1932.1	1944.0	1868.4	1852.5	1864.4	1953.9	2011.7	2027.6
50°	5885.7	2580.7	1878.3	1802.7	1753.0	1788.8	1792.8	1794.8	1884.3	1950.0	1963.9
52.5°	5808.1	2489.2	1753.0	1697.3	1637.6	1717.2	1747.0	1751.0	1804.7	1858.4	1868.4
55°	5853.9	2437.5	1629.6	1589.8	1536.1	1643.5	1701.2	1709.2	1721.1	1760.9	1766.9
57.5°	5991.2	2449.4	1530.1	1478.4	1438.6	1556.0	1653.5	1659.5	1651.5	1699.3	1707.2
60°	6033.0	2443.4	1456.5	1355.0	1331.2	1462.5	1583.9	1595.8	1593.8	1663.4	1677.4
62.5°	5857.9	2367.8	1382.9	1251.6	1235.6	1367.0	1486.4	1534.1	1544.1	1643.5	1661.5
65°	5446.0	2212.6	1285.4	1142.1	1142.1	1265.5	1392.8	1458.5	1486.4	1619.7	1639.6
67.5°	4902.8	2029.6	1185.9	1048.6	1044.6	1168.0	1293.3	1361.0	1404.8	1585.8	1597.8
70°	4069.1	1782.8	1062.5	947.1	947.1	1058.6	1172.0	1253.6	1317.2	1522.2	1522.2
72.5°	2787.7	1482.4	913.3	831.7	833.7	937.2	1052.6	1144.1	1219.7	1394.8	1398.8
75°	1762.9	1158.0	750.1	708.4	716.3	813.8	933.2	1028.7	1179.9	1378.9	1384.9
77.5°	937.2	813.8	596.9	587.0	596.9	686.5	819.8	951.1	1183.9	1195.8	1176.0
80°	606.9	577.0	471.6	451.7	455.7	553.2	730.2	903.4	951.1	963.0	919.3
82.5°	330.3	366.1	334.3	314.4	314.4	431.8	622.8	718.3	682.5	567.1	541.2
85°	141.3	171.1	173.1	151.2	145.3	266.6	417.9	392.0	364.1	348.2	344.2
87.5°	39.8	55.7	55.7	41.8	31.8	73.6	83.6	23.9	0.0	2.0	4.0
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)