

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: P454531

Luminaire Tested: **GALN-SA5C-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454531  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
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-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26377 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

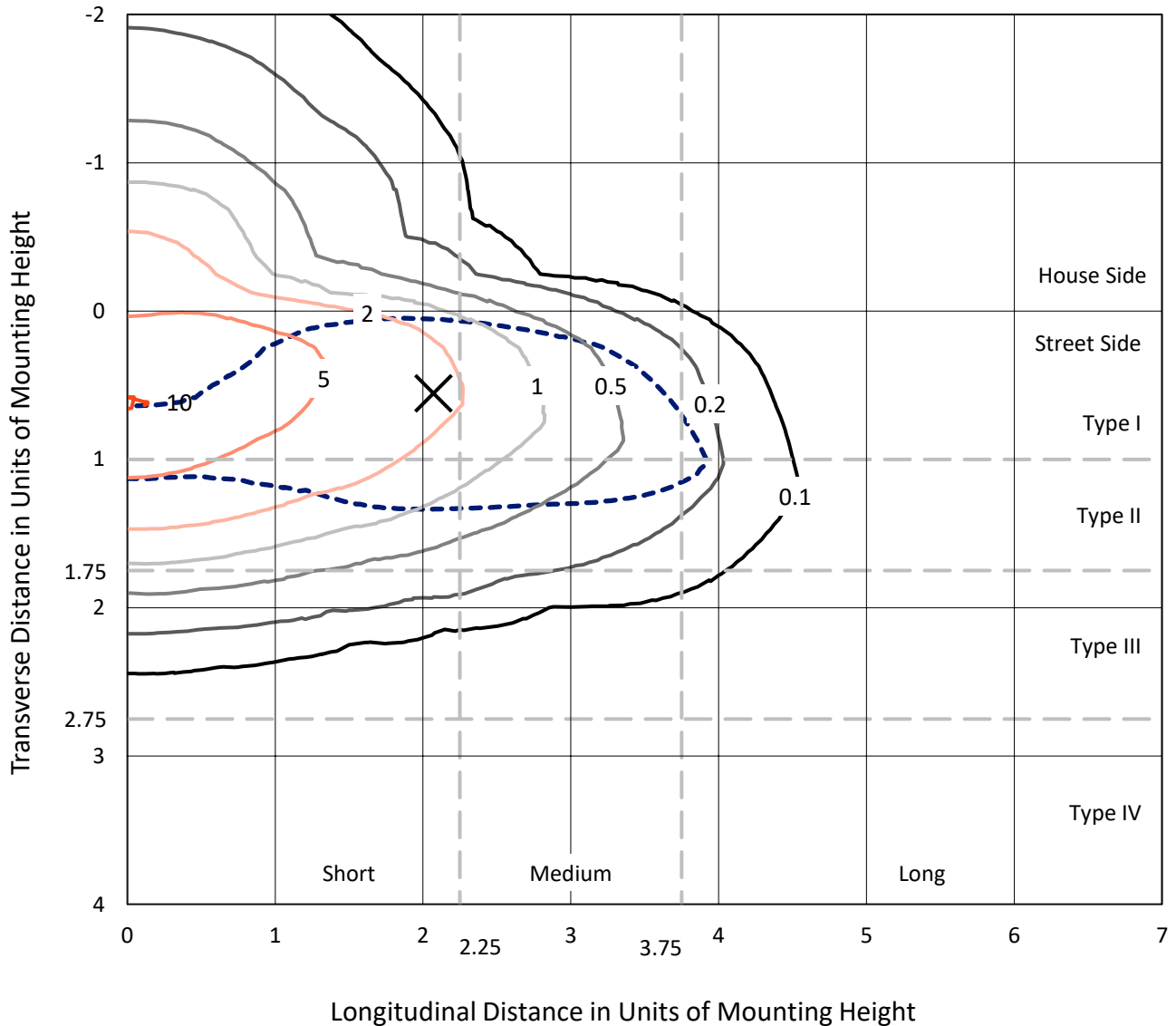
Input Watts (W): 269  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

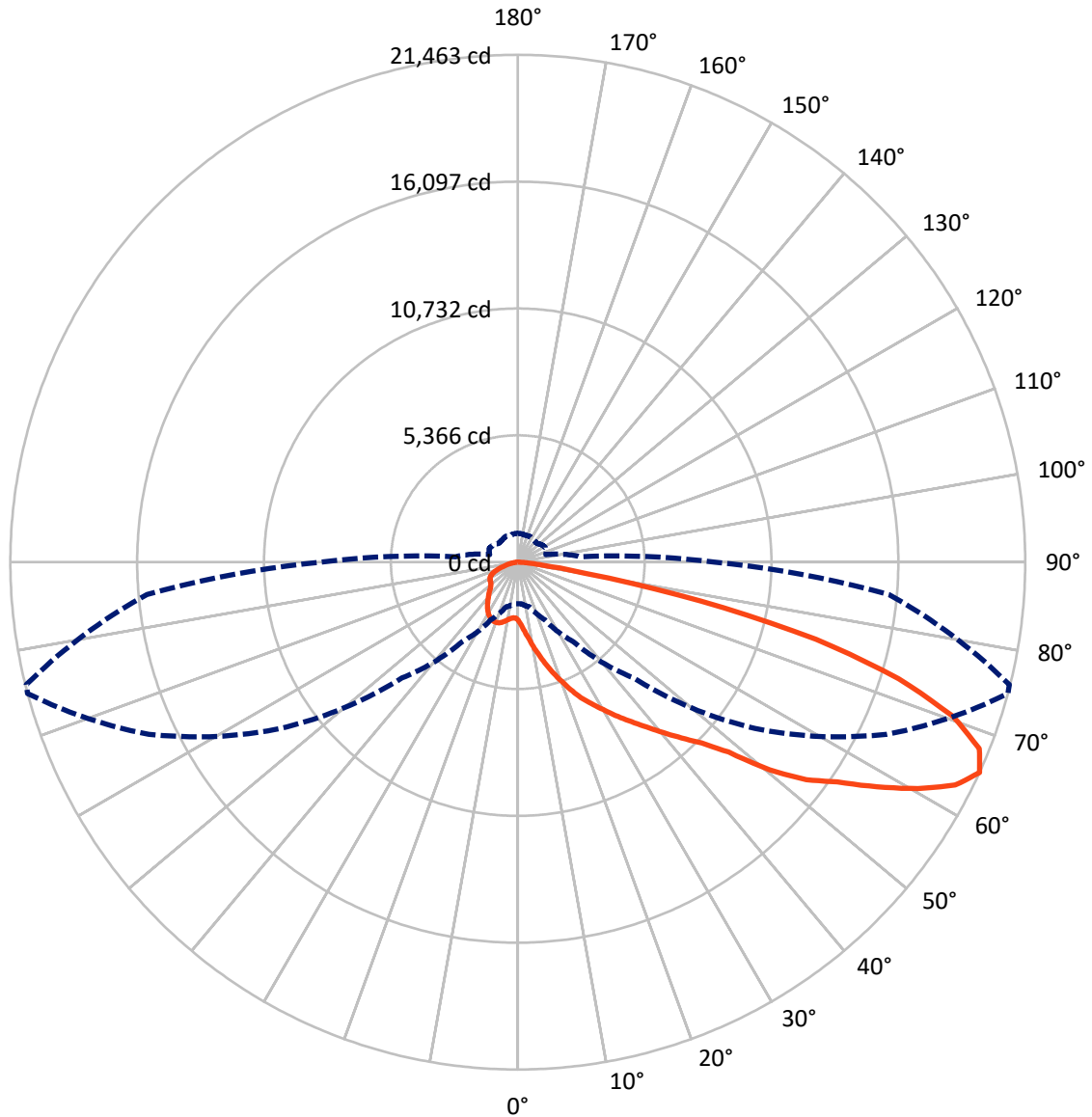
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4434.3	0.0	4434.3
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	21942.7	0.0	21942.7
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	26377.0	0.0	26377.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	297.8	1.1
10°-20°	1166.3	4.4
20°-30°	2252.9	8.5
30°-40°	3659.3	13.9
40°-50°	5033.7	19.1
50°-60°	5943.1	22.5
60°-70°	5207.2	19.7
70°-80°	2485.9	9.4
80°-90°	330.8	1.3
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°	26377.0	100.0
0°-180°	26377.0	100.0

**Coefficient of Utilization**



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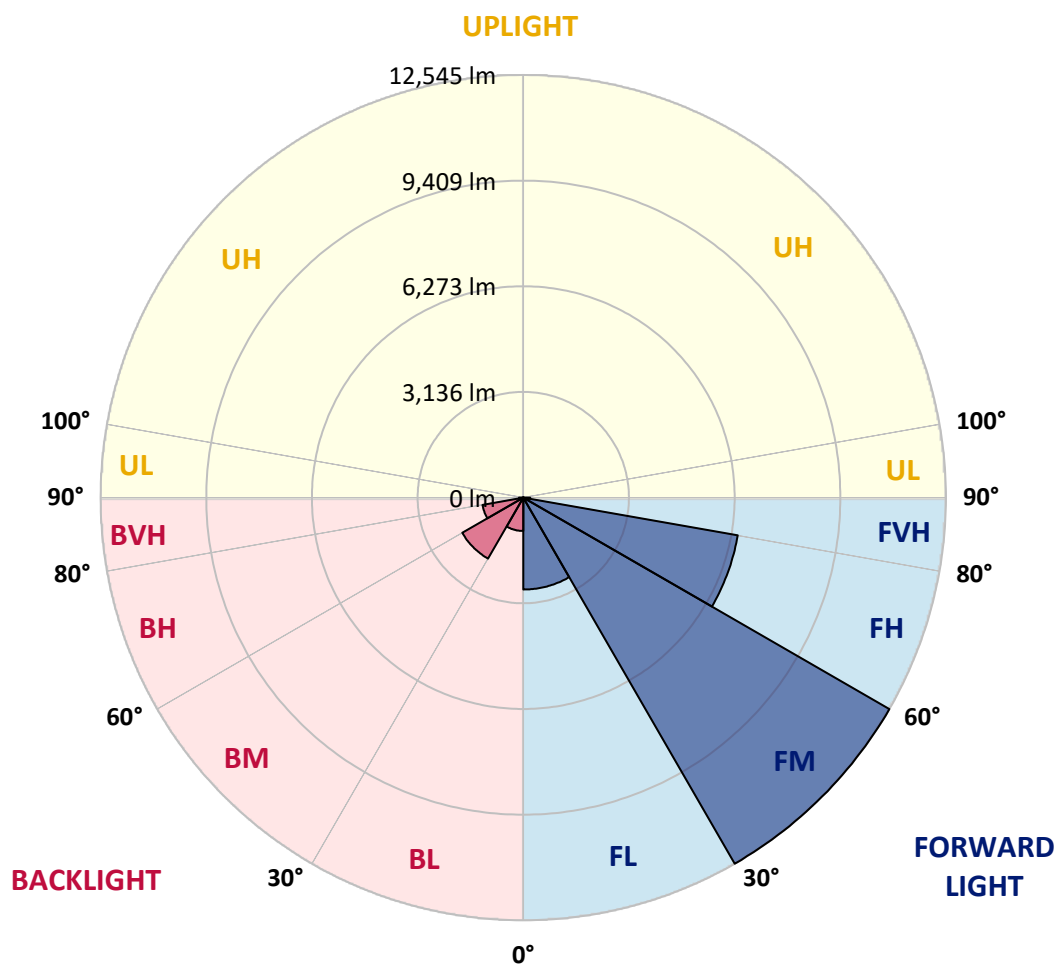
CATALOG NUMBER: GALN-SA5C-827-U-T2R

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2727.0	10.3			
FM	(30°-60°)	12545.5	47.6			
FH	(60°-80°)	6463.6	24.5			G3/7500
FVH	(80°-90°)	206.7	0.8			G2/225
BL	(0°-30°)	989.9	3.8	B2/1000		
BM	(30°-60°)	2090.7	7.9	B2/2500		
BH	(60°-80°)	1229.6	4.7	B3/2500		G3/2500
BVH	(80°-90°)	124.1	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-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8
2.5°	3256.2	3234.8	3211.9	3148.9	3081.7	3005.9	2897.1	2792.7	2653.9	2649.6	2546.6
5°	4159.0	4144.7	4043.1	3984.4	3828.5	3621.1	3445.1	3171.8	2918.6	2888.5	2688.2
7.5°	4988.8	4933.0	4894.4	4788.5	4634.0	4367.9	4027.4	3658.3	3234.8	3194.7	2862.8
10°	5614.0	5608.3	5588.2	5496.7	5380.8	5116.1	4738.4	4209.1	3635.4	3556.7	3074.5
12.5°	6081.8	6086.1	6083.3	6081.8	5998.8	5774.2	5365.1	4807.1	4040.2	3984.4	3319.2
15°	6389.4	6432.3	6449.5	6521.0	6528.2	6378.0	6026.0	5385.1	4496.6	4413.7	3582.4
17.5°	6592.6	6614.0	6694.2	6815.8	6914.5	6887.3	6574.0	5920.2	4963.0	4824.3	3855.7
20°	6787.2	6824.3	6885.9	7051.8	7226.4	7306.5	7086.2	6468.1	5425.1	5336.4	4157.6
22.5°	7192.0	7245.0	7266.4	7350.8	7499.6	7641.3	7541.1	6993.2	5931.6	5811.4	4478.0
25°	7877.3	7933.1	7873.0	7853.0	7901.7	7971.8	7950.3	7488.2	6409.5	6237.8	4781.3
27.5°	8770.1	8777.2	8659.9	8548.3	8428.1	8392.4	8326.6	7927.4	6824.3	6681.3	5086.1
30°	9728.6	9694.3	9499.7	9298.0	9094.8	8894.5	8705.7	8350.9	7286.5	7121.9	5385.1
32.5°	10618.5	10599.9	10383.9	10070.6	9727.2	9538.3	9156.4	8778.7	7781.5	7622.7	5692.7
35°	11285.2	11312.4	11074.9	10733.0	10358.1	10190.7	9708.6	9227.9	8293.7	8120.5	6027.5
37.5°	11758.8	11744.5	11534.1	11238.0	10908.9	10763.0	10353.8	9718.6	8844.5	8678.5	6393.7
40°	11927.6	11919.0	11763.1	11547.0	11338.1	11286.6	11029.1	10248.0	9475.4	9280.8	6834.4
42.5°	11820.3	11838.9	11735.9	11677.2	11638.6	11675.8	11700.1	10941.8	10163.6	9984.7	7312.2
45°	11491.2	11481.2	11466.9	11562.8	11780.2	12024.9	12363.9	11597.1	10911.8	10768.7	7953.2
47.5°	10903.2	10974.8	11010.5	11275.2	11750.2	12329.6	13127.9	12475.5	11997.7	11873.2	8930.3
50°	10080.6	10137.8	10349.5	10820.2	11528.4	12444.1	13874.7	13911.9	13808.9	13575.7	9991.9
52.5°	8795.8	8884.5	9320.9	10183.6	11073.5	12396.9	14326.8	15143.8	15279.7	15105.1	11037.7
55°	7358.0	7482.5	7943.1	9074.8	10446.8	12139.3	14638.7	15857.7	16399.9	16238.2	12044.9
57.5°	5950.2	6081.8	6555.4	7651.3	9353.8	11569.9	14843.3	16653.1	17925.0	17714.7	13298.2
60°	4459.4	4596.8	5003.1	6131.9	7797.2	10456.8	14704.5	17342.7	19448.7	19358.5	14552.9
62.5°	2877.1	3028.8	3382.1	4316.4	5993.1	8936.0	13962.0	17723.3	20767.8	20659.0	15468.5
65°	1752.6	1769.8	1964.3	2679.7	4101.8	6918.8	12263.8	17218.2	21463.1	21430.2	15747.5
67.5°	1133.1	1160.3	1249.0	1605.2	2459.3	4805.7	9805.9	15551.5	21056.8	21045.3	15170.9
70°	957.1	965.7	1005.8	1083.0	1429.3	2914.3	6885.9	12894.7	19513.1	19513.1	13784.6
72.5°	855.5	867.0	881.3	905.6	1020.1	1651.0	4108.9	10037.7	16847.7	16959.3	11733.0
75°	776.9	774.0	782.6	786.9	869.9	1078.7	2124.6	7423.8	13033.5	12810.3	8496.8
77.5°	665.3	669.6	665.3	683.9	768.3	821.2	1078.7	4981.6	7898.8	7609.8	4264.9
80°	546.5	553.7	560.8	572.3	656.7	623.8	648.1	2270.5	2921.5	2859.9	1317.7
82.5°	410.6	420.6	432.1	459.2	516.5	412.0	409.2	970.0	1054.4	965.7	485.0
85°	166.0	196.0	296.2	323.3	324.8	226.0	251.8	404.9	430.6	420.6	190.3
87.5°	38.6	45.8	95.9	144.5	133.1	84.4	93.0	131.6	150.2	138.8	64.4
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°	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8	2450.8
2.5°	2499.4	2449.3	2363.5	2297.7	2250.5	2209.0	2183.2	2167.5	2161.8	2160.3	2161.8
5°	2583.8	2495.1	2359.2	2273.4	2226.1	2199.0	2183.2	2181.8	2183.2	2184.6	2180.4
7.5°	2699.7	2572.4	2395.0	2314.8	2279.1	2259.0	2251.9	2249.0	2250.5	2249.0	2249.0
10°	2854.2	2679.7	2465.1	2382.1	2352.0	2329.1	2317.7	2310.5	2304.8	2299.1	2296.2
12.5°	3024.5	2798.4	2540.9	2460.8	2417.9	2382.1	2356.3	2337.7	2324.9	2312.0	2309.1
15°	3214.7	2924.3	2625.3	2513.7	2452.2	2399.3	2354.9	2324.9	2302.0	2283.4	2281.9
17.5°	3396.4	3043.1	2682.5	2538.0	2447.9	2373.5	2314.8	2273.4	2244.7	2220.4	2217.6
20°	3591.0	3156.1	2708.3	2522.3	2405.0	2314.8	2237.6	2187.5	2154.6	2127.4	2123.1
22.5°	3787.0	3251.9	2705.4	2472.2	2330.6	2224.7	2143.2	2090.2	2051.6	2024.4	2014.4
25°	3974.4	3329.2	2669.7	2392.1	2227.6	2117.4	2034.4	1985.8	1951.4	1918.5	1918.5
27.5°	4143.3	3375.0	2602.4	2294.8	2121.7	2005.8	1940.0	1895.7	1864.2	1842.7	1829.8
30°	4309.2	3396.4	2510.8	2171.8	2010.1	1911.4	1858.5	1832.7	1804.1	1779.8	1776.9
32.5°	4458.0	3392.1	2396.4	2051.6	1904.2	1834.1	1812.7	1792.6	1762.6	1728.3	1719.7
35°	4602.5	3363.5	2260.5	1920.0	1815.5	1788.4	1794.1	1765.5	1711.1	1668.2	1661.0
37.5°	4759.9	3312.0	2111.7	1812.7	1741.1	1766.9	1781.2	1718.2	1629.5	1562.3	1546.6
40°	4941.6	3253.4	1957.2	1705.4	1682.5	1746.9	1746.9	1631.0	1509.4	1467.9	1456.4
42.5°	5154.7	3204.7	1828.4	1615.2	1633.8	1698.2	1691.1	1515.1	1465.0	1443.6	1437.8
45°	5492.4	3187.6	1695.4	1536.6	1593.8	1641.0	1582.3	1475.0	1446.4	1429.3	1423.5
47.5°	6026.0	3207.6	1578.0	1477.9	1548.0	1583.8	1460.7	1447.8	1427.8	1403.5	1400.6
50°	6521.0	3189.0	1495.1	1445.0	1507.9	1515.1	1410.7	1414.9	1403.5	1376.3	1370.6
52.5°	6925.9	3130.3	1442.1	1427.8	1473.6	1394.9	1363.4	1379.2	1374.9	1340.5	1334.8
55°	7370.9	3094.6	1416.4	1427.8	1450.7	1290.5	1319.1	1342.0	1336.3	1311.9	1310.5
57.5°	7910.2	3101.7	1397.8	1432.1	1427.8	1237.5	1274.7	1301.9	1300.5	1293.3	1293.3
60°	8462.5	3104.6	1369.2	1430.7	1400.6	1196.0	1229.0	1267.6	1270.4	1274.7	1274.7
62.5°	8645.6	2980.1	1313.4	1404.9	1340.5	1156.0	1186.0	1239.0	1236.1	1247.6	1249.0
65°	8303.7	2635.3	1230.4	1346.3	1263.3	1127.4	1153.1	1201.8	1186.0	1216.1	1221.8
67.5°	7558.3	2180.4	1101.6	1240.4	1177.5	1097.3	1131.7	1150.3	1121.7	1180.3	1181.7
70°	6532.5	1702.5	938.5	1090.2	1080.2	1065.9	1114.5	1085.9	1045.8	1117.4	1103.1
72.5°	5462.3	1300.5	749.7	891.3	950.0	1018.6	1084.5	1002.9	947.1	968.6	942.8
75°	4103.2	961.4	602.3	698.2	791.2	951.4	1057.3	902.8	816.9	796.9	791.2
77.5°	2091.7	628.1	450.7	522.2	593.7	859.8	1020.1	785.4	676.7	645.2	630.9
80°	746.8	390.6	317.6	360.5	400.6	739.7	891.3	649.5	525.1	519.3	525.1
82.5°	346.2	251.8	213.2	236.1	237.5	493.6	679.6	485.0	399.2	606.6	512.2
85°	148.8	125.9	120.2	117.3	108.7	220.3	382.0	260.4	406.3	181.7	167.4
87.5°	44.4	50.1	44.4	32.9	24.3	24.3	38.6	14.3	10.0	7.2	7.2
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)