

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: P458314

Luminaire Tested: **GALN-SA9D-727-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458314  
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-SA9D-727-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59225 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

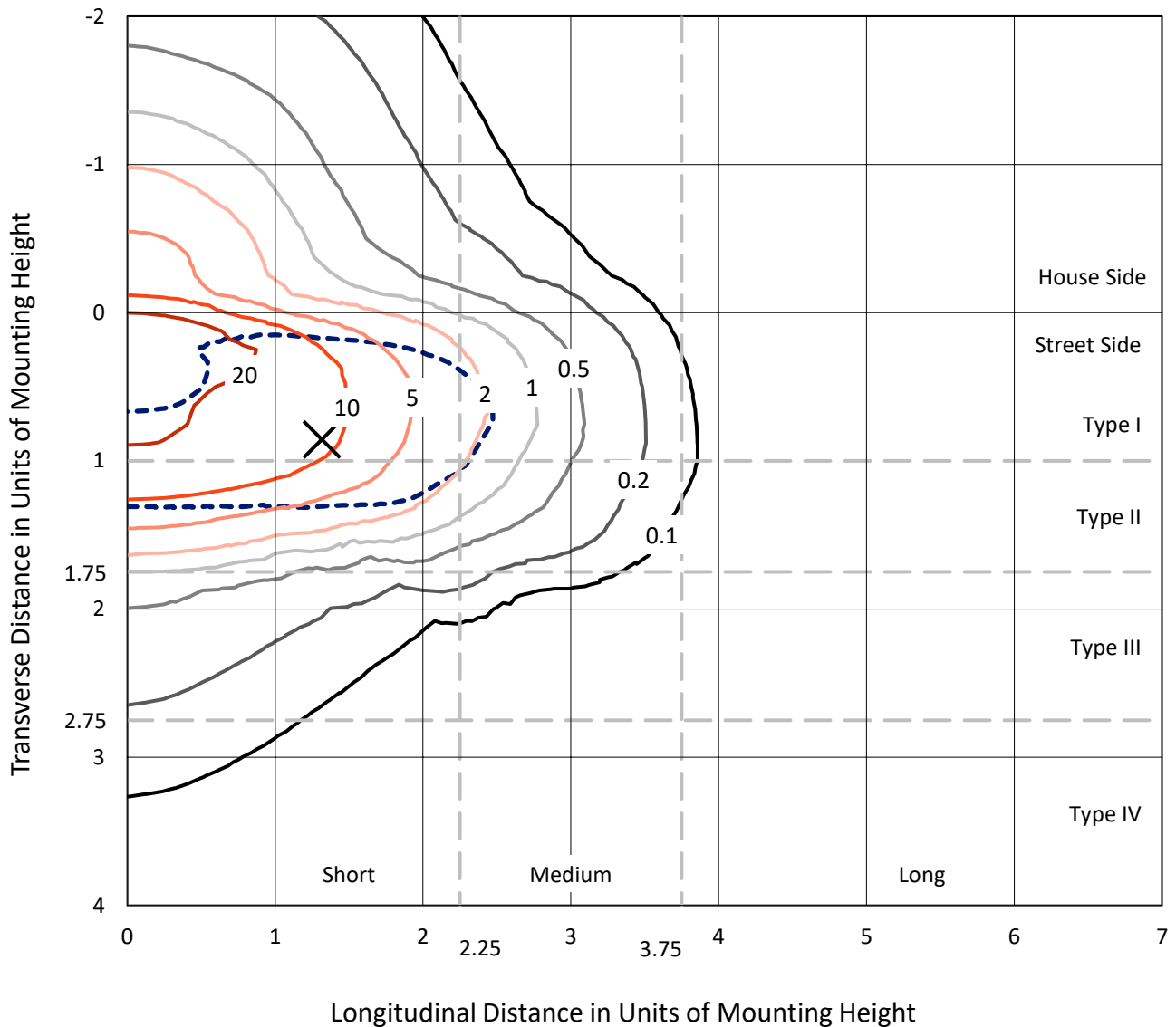
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

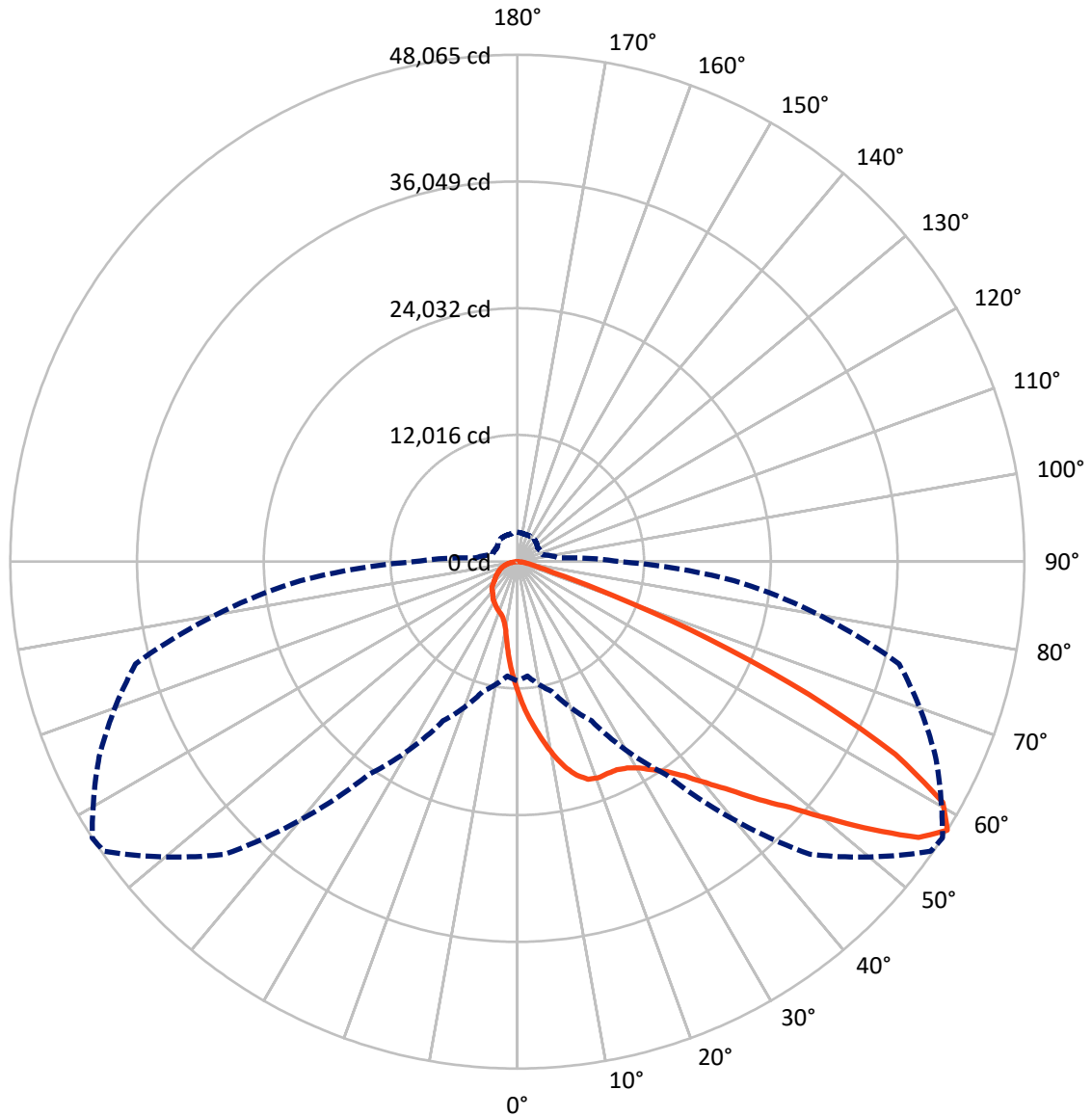
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 30.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9006.5	0.0	9006.5
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	50218.5	0.0	50218.5
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	59225.0	0.0	59225.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1195.8	2.0
10°-20°	3524.2	6.0
20°-30°	5852.0	9.9
30°-40°	8814.9	14.9
40°-50°	13234.7	22.3
50°-60°	14834.4	25.0
60°-70°	8681.8	14.7
70°-80°	2568.0	4.3
80°-90°	519.1	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°	59225.0	100.0
0°-180°	59225.0	100.0

**Coefficient of Utilization**



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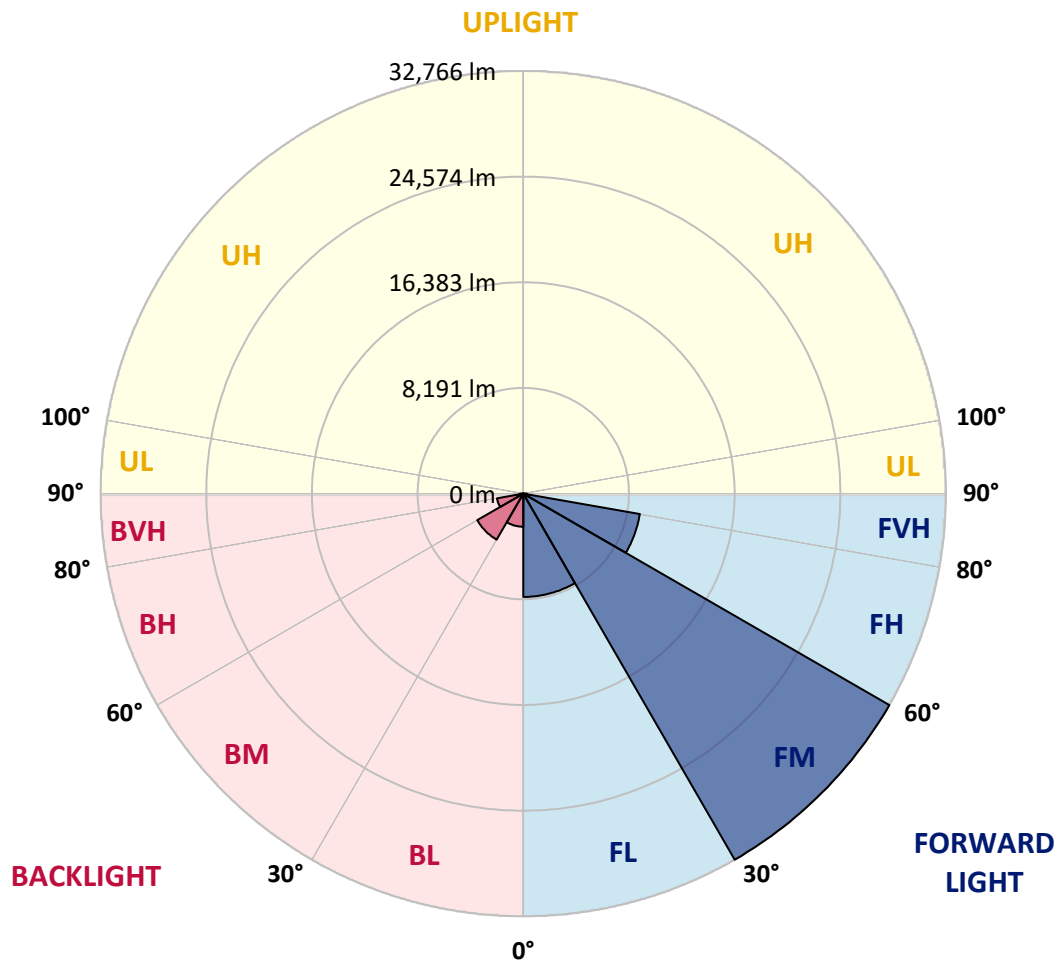
CATALOG NUMBER: GALN-SA9D-727-U-AFL

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8005.9	13.5			
FM	(30°-60°)	32765.9	55.3			
FH	(60°-80°)	9177.5	15.5			G4/12000
FVH	(80°-90°)	269.3	0.5			G3/500
BL	(0°-30°)	2566.3	4.3	B4/5000		
BM	(30°-60°)	4118.1	7.0	B3/5000		
BH	(60°-80°)	2072.3	3.5	B3/2500		G3/2500
BVH	(80°-90°)	249.7	0.4			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5
2.5°	15460.7	15292.1	15159.2	15042.5	14890.1	14478.4	14066.7	14060.2	13732.8	13227.0	12708.3
5°	17979.7	17752.8	17781.9	17418.8	17055.7	16459.2	15587.2	15541.8	14844.8	13898.1	12935.3
7.5°	19620.1	19623.4	19532.6	19325.1	18932.8	18255.3	17266.5	17042.8	16073.4	14637.3	13194.6
10°	19535.8	19623.4	19775.7	19954.0	20074.0	19740.1	18838.8	18566.5	17305.4	15532.0	13483.2
12.5°	18414.1	18550.3	18767.5	19214.9	19937.8	20488.9	20181.0	19960.5	18731.8	16423.6	13800.9
15°	17713.9	17794.9	17914.9	18216.4	18994.4	20313.9	21111.4	20994.7	20077.2	17431.8	14157.5
17.5°	17499.9	17580.9	17619.8	17804.6	18359.0	19710.9	21477.7	21685.2	21270.2	18359.0	14517.3
20°	17713.9	17752.8	17752.8	17863.0	18297.4	19357.5	21461.5	21879.7	22249.3	19471.0	14854.5
22.5°	18274.7	18290.9	18268.2	18307.1	18631.3	19454.8	21309.1	21827.9	23040.3	20414.4	15117.1
25°	19185.7	19211.6	19062.5	18971.7	19208.4	19882.7	21393.4	21870.0	23659.5	21315.6	15292.1
27.5°	20219.9	20252.3	20070.7	19860.0	19970.2	20411.1	21724.1	22152.0	24123.1	22203.9	15402.4
30°	21487.5	21500.4	21195.7	20942.8	20871.5	21198.9	22288.2	22687.0	24700.2	23251.1	15567.7
32.5°	22784.2	22881.5	22489.2	22132.6	22012.6	22113.1	23121.4	23507.2	25387.5	24376.0	15833.5
35°	24547.8	24564.0	24094.0	23659.5	23264.0	23393.7	24188.0	24466.8	26337.4	25676.0	16209.6
37.5°	26749.1	26898.2	26249.8	25439.4	24953.1	24765.0	25478.3	25783.0	27669.8	27271.0	16776.9
40°	29193.5	29248.6	28694.2	28188.5	27300.2	26755.6	27248.4	27579.0	29313.5	29174.1	17435.1
42.5°	30730.2	30850.1	30892.3	30840.4	30172.6	29258.3	29446.4	29602.0	31258.6	30960.4	18109.4
45°	31248.9	31427.2	32030.2	33307.5	33378.8	32477.6	32039.9	32189.0	33378.8	32762.9	18754.5
47.5°	30389.8	30694.5	31806.5	34426.0	36387.3	36455.4	35135.9	34808.5	35311.0	34257.4	19221.4
50°	28169.1	28233.9	29935.9	33729.0	37797.6	40258.2	38893.3	38283.9	37145.9	35362.9	19542.3
52.5°	24732.6	24807.2	26233.6	30490.3	36928.7	42916.6	43289.4	42200.1	39010.0	36222.0	19753.0
55°	18359.0	18790.2	20359.3	24473.3	32811.5	42666.9	46784.2	46165.0	41263.2	36902.8	20083.7
57.5°	11288.4	10892.9	12753.7	16650.5	24677.5	39237.0	47863.7	48064.7	43743.2	37473.4	20638.1
60°	5193.6	5271.4	6039.7	8587.9	15042.5	30694.5	45082.2	46353.0	45114.6	37453.9	20777.5
62.5°	3579.1	3507.8	3313.2	3770.4	6859.9	19412.6	38079.6	40232.2	42365.4	36290.1	20223.1
65°	3199.8	3128.5	2752.4	2626.0	3151.1	8461.4	27682.8	30399.5	35670.9	33352.9	18842.0
67.5°	2989.1	2891.8	2502.8	2256.4	2249.9	3368.4	16323.1	19594.2	26457.3	28198.2	16326.3
70°	2768.6	2690.8	2305.0	2032.7	1916.0	2117.0	7174.4	9391.8	17178.9	20320.4	12718.1
72.5°	2548.2	2457.4	2110.5	1818.7	1666.3	1585.3	2749.1	3575.8	9706.3	12183.1	7796.8
75°	2227.2	2181.8	1886.8	1646.9	1481.6	1280.6	1744.2	1990.5	4642.4	5595.6	3913.0
77.5°	1948.4	1899.8	1676.1	1439.4	1319.5	1040.7	1238.4	1351.9	1958.1	2269.3	1766.8
80°	1426.4	1475.1	1413.5	1270.8	1176.8	817.0	833.2	927.2	1163.8	1287.0	1079.6
82.5°	904.5	995.3	1089.3	979.1	891.5	645.1	577.1	612.7	794.3	842.9	479.8
85°	379.3	385.8	632.2	596.5	509.0	382.5	346.9	366.3	424.7	444.1	223.7
87.5°	145.9	142.6	223.7	207.5	158.9	110.2	110.2	123.2	168.6	155.6	71.3
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°	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5	12442.5
2.5°	12484.6	12254.5	11797.4	11230.0	10815.1	10348.2	9936.5	9641.5	9531.2	9479.4	9382.1
5°	12474.9	12021.0	11074.4	10082.4	9284.9	8467.9	7777.4	7330.0	7291.1	6992.8	6963.6
7.5°	12478.2	11784.4	10276.9	8818.0	7602.3	6765.9	6195.3	6046.2	5867.9	5822.5	5845.2
10°	12487.9	11482.9	9421.0	7566.6	6389.8	5841.9	5628.0	5569.6	5576.1	5595.6	5598.8
12.5°	12500.8	11191.1	8532.7	6616.8	5709.0	5482.1	5459.4	5511.3	5566.4	5608.5	5618.2
15°	12517.1	10857.2	7667.1	5851.7	5368.6	5349.2	5423.7	5511.3	5589.1	5650.7	5660.4
17.5°	12497.6	10468.2	6941.0	5381.6	5180.6	5274.6	5397.8	5508.0	5579.3	5637.7	5644.2
20°	12452.2	10033.7	6240.7	5050.9	5063.9	5216.3	5349.2	5452.9	5530.7	5559.9	5582.6
22.5°	12277.2	9515.0	5631.2	4794.8	4924.5	5135.2	5294.1	5355.7	5268.1	5206.5	5222.7
25°	11978.9	8840.7	5063.9	4587.3	4798.0	5021.7	5183.8	5034.7	4963.4	4937.4	4950.4
27.5°	11606.1	8101.6	4635.9	4370.1	4635.9	4895.3	4849.9	4824.0	4791.6	4749.4	4759.1
30°	11204.1	7378.6	4272.9	4201.5	4460.9	4610.0	4629.5	4671.6	4635.9	4571.1	4597.0
32.5°	10831.3	6697.8	3997.3	4058.9	4337.7	4315.0	4460.9	4509.5	4344.2	4127.0	4136.7
35°	10513.6	6065.6	3789.8	3919.5	4127.0	4136.7	4282.6	4114.0	3935.7	3832.0	3838.4
37.5°	10273.6	5572.9	3653.6	3799.5	3857.9	3981.1	3903.3	3815.7	3793.0	3721.7	3725.0
40°	10131.0	5141.7	3566.1	3705.5	3695.8	3780.1	3530.5	3618.0	3650.4	3627.7	3631.0
42.5°	9988.4	4836.9	3475.3	3575.8	3572.6	3407.3	3352.1	3426.7	3511.0	3520.7	3514.2
45°	9874.9	4600.3	3381.3	3378.1	3442.9	3183.6	3167.4	3212.7	3332.7	3391.0	3387.8
47.5°	9748.5	4402.5	3238.7	3147.9	3167.4	3044.2	3018.2	3037.7	3183.6	3277.6	3303.5
50°	9589.6	4204.8	3060.4	2937.2	2856.1	2914.5	2921.0	2924.2	3070.1	3177.1	3199.8
52.5°	9463.2	4055.6	2856.1	2765.4	2668.1	2797.8	2846.4	2852.9	2940.4	3028.0	3044.2
55°	9537.7	3971.4	2655.1	2590.3	2502.8	2677.8	2771.8	2784.8	2804.3	2869.1	2878.8
57.5°	9761.4	3990.8	2493.0	2408.7	2343.9	2535.2	2694.0	2703.8	2690.8	2768.6	2781.6
60°	9829.5	3981.1	2373.1	2207.7	2168.8	2382.8	2580.6	2600.0	2596.8	2710.2	2732.9
62.5°	9544.2	3857.9	2253.1	2039.2	2013.2	2227.2	2421.7	2499.5	2515.7	2677.8	2707.0
65°	8873.1	3605.0	2094.3	1860.9	1860.9	2061.9	2269.3	2376.3	2421.7	2638.9	2671.3
67.5°	7988.1	3306.8	1932.2	1708.5	1702.0	1903.0	2107.2	2217.5	2288.8	2583.8	2603.3
70°	6629.7	2904.8	1731.2	1543.2	1543.2	1724.7	1909.5	2042.4	2146.2	2480.1	2480.1
72.5°	4541.9	2415.2	1488.0	1355.1	1358.4	1526.9	1715.0	1864.1	1987.3	2272.6	2279.1
75°	2872.3	1886.8	1222.2	1154.1	1167.1	1325.9	1520.5	1676.1	1922.5	2246.7	2256.4
77.5°	1526.9	1325.9	972.6	956.4	972.6	1118.5	1335.7	1549.6	1928.9	1948.4	1916.0
80°	988.8	940.2	768.3	735.9	742.4	901.3	1189.8	1471.8	1549.6	1569.1	1497.8
82.5°	538.2	596.5	544.6	512.2	512.2	703.5	1014.7	1170.3	1112.0	923.9	881.8
85°	230.2	278.8	282.0	246.4	236.7	434.4	680.8	638.7	593.3	567.3	560.9
87.5°	64.8	90.8	90.8	68.1	51.9	120.0	136.2	38.9	0.0	3.2	6.5
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)