

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: P319178

Luminaire Tested: **GLEON-SA4D-827-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4D-827-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22848 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

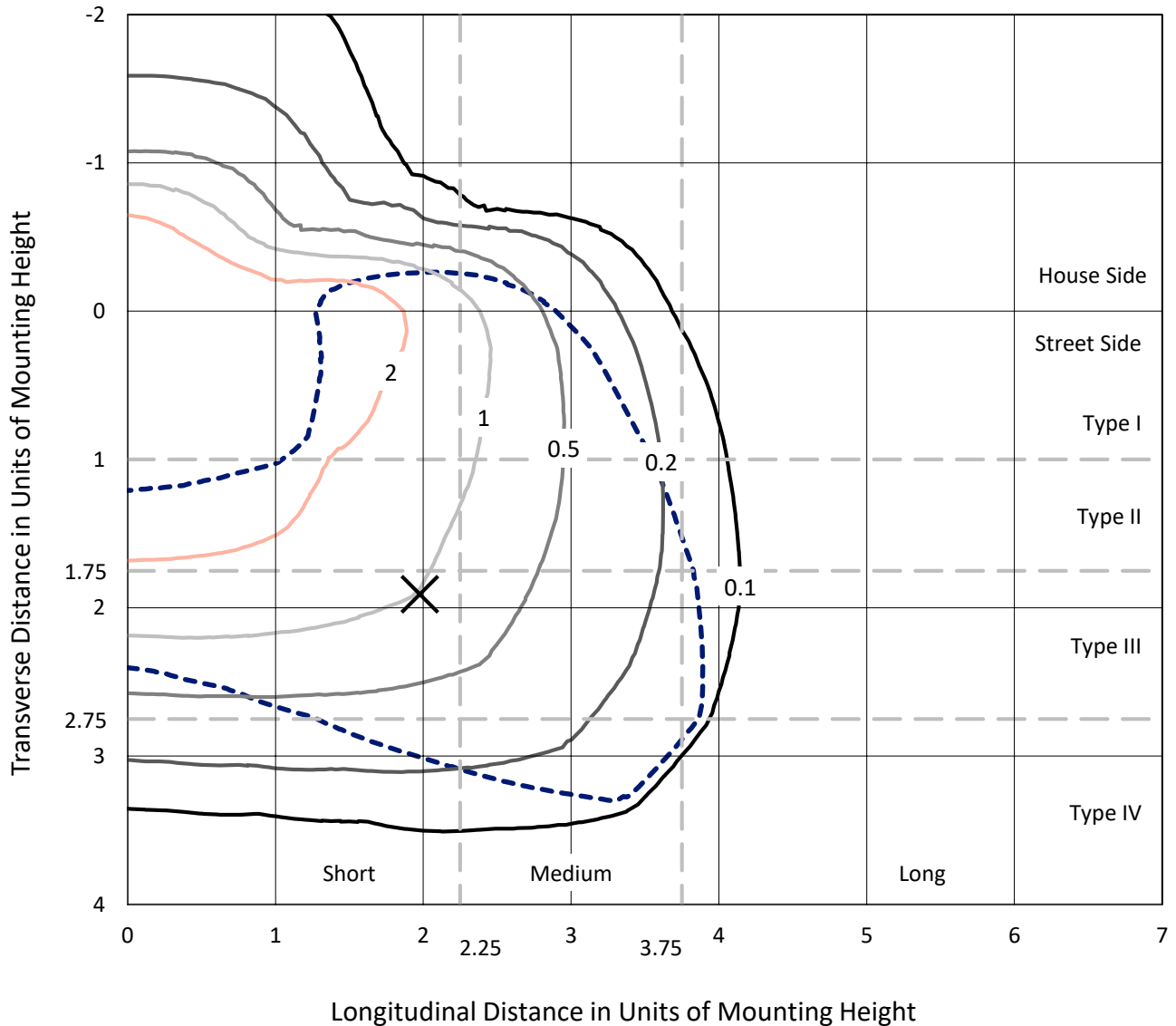
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P319178  
 CATALOG NUMBER: GLEON-SA4D-827-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

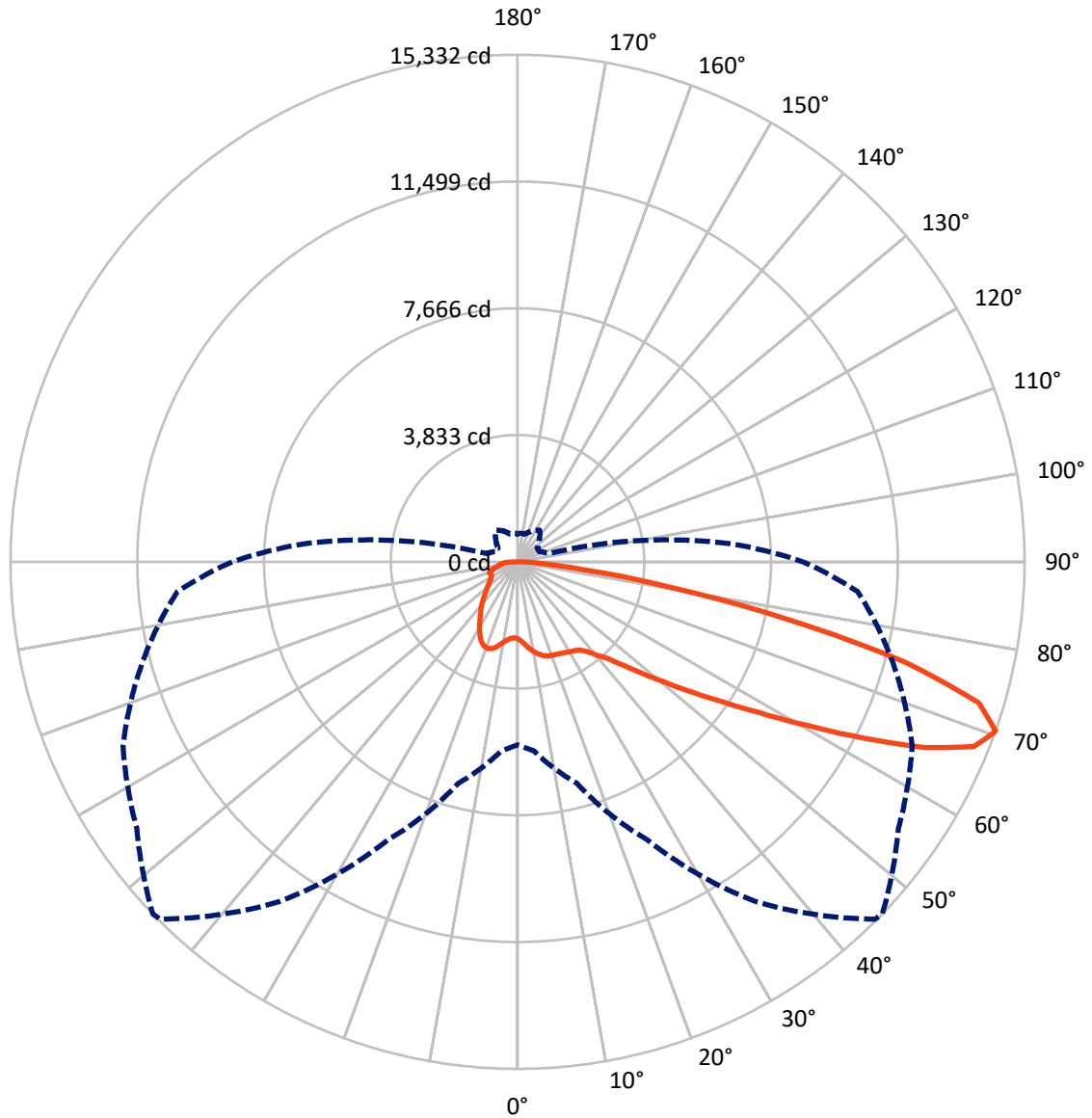
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P319178  
CATALOG NUMBER: GLEON-SA4D-827-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P319178  
 CATALOG NUMBER: GLEON-SA4D-827-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5236.7	0.0	5236.7
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	17611.3	0.0	17611.3
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	22848.0	0.0	22848.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.3	1.0
10°-20°	790.6	3.5
20°-30°	1318.2	5.8
30°-40°	1870.7	8.2
40°-50°	2751.7	12.0
50°-60°	4659.9	20.4
60°-70°	6614.7	29.0
70°-80°	4018.5	17.6
80°-90°	586.5	2.6
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°	22848.0	100.0
0°-180°	22848.0	100.0

**Coefficient of Utilization**

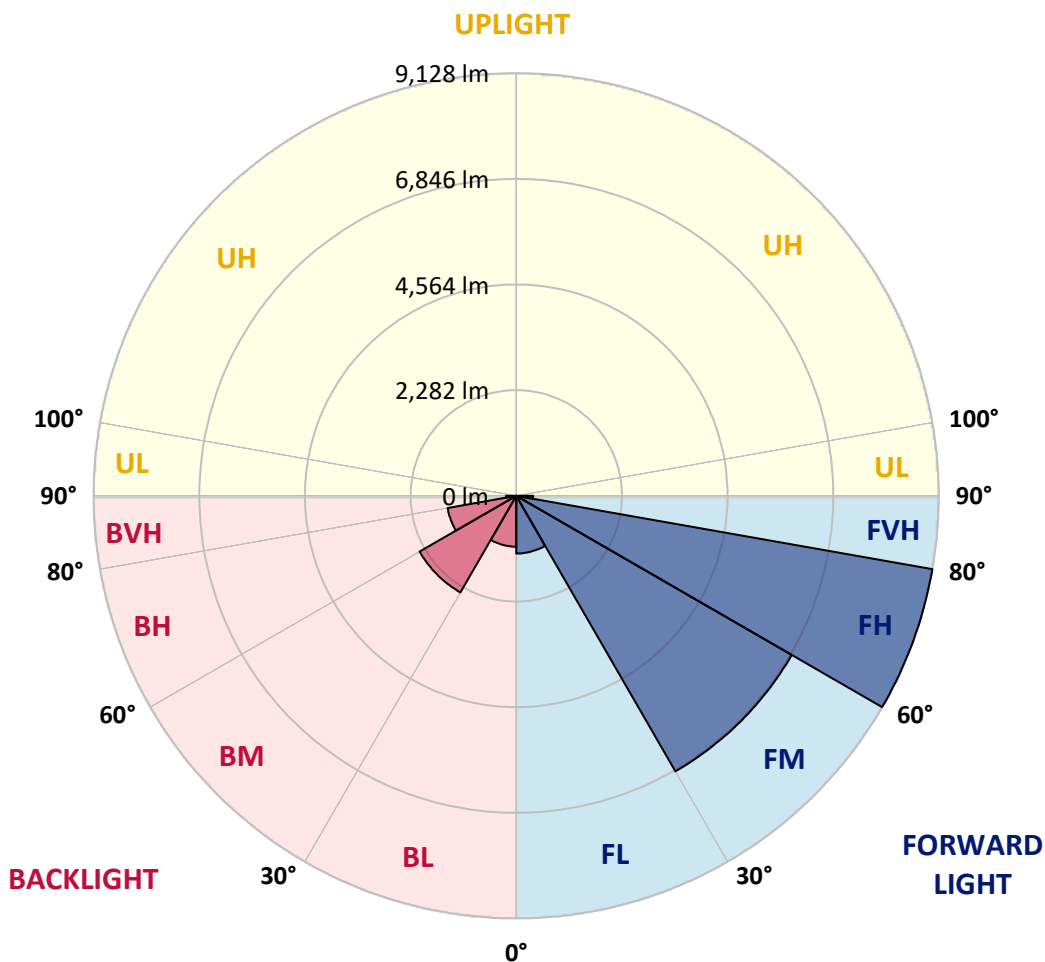


REPORT NUMBER: P319178  
 CATALOG NUMBER: GLEON-SA4D-827-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1246.7	5.5			
FM (30°-60°)	6871.7	30.1			
FH (60°-80°)	9127.6	39.9			G4/12000
FVH (80°-90°)	365.3	1.6			G3/500
BL (0°-30°)	1099.5	4.8	B3/2500		
BM (30°-60°)	2410.6	10.6	B2/2500		
BH (60°-80°)	1505.5	6.6	B3/2500		G3/2500
BVH (80°-90°)	221.1	1.0			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 IV Short





REPORT NUMBER: P319178

CATALOG NUMBER: GLEON-SA4D-827-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8
2.5°	2444.3	2445.8	2449.0	2441.1	2419.2	2413.0	2410.6	2388.0	2373.1	2351.2	2332.5
5°	2639.7	2641.3	2636.6	2614.7	2566.2	2530.3	2527.2	2475.5	2428.6	2378.6	2341.1
7.5°	2843.8	2846.2	2831.3	2789.9	2721.8	2659.3	2655.4	2585.0	2513.9	2438.0	2381.7
10°	3024.5	3015.1	2990.8	2933.0	2852.4	2775.8	2772.7	2699.2	2617.1	2525.6	2450.5
12.5°	3144.9	3137.0	3105.8	3035.4	2947.0	2876.7	2870.4	2802.4	2722.6	2622.5	2532.6
15°	3211.3	3216.8	3174.6	3094.8	3008.8	2949.4	2943.9	2895.4	2824.3	2723.4	2620.2
17.5°	3219.9	3224.6	3184.0	3105.0	3034.6	2994.0	2991.6	2959.6	2907.9	2811.0	2703.1
20°	3169.9	3173.0	3139.4	3074.5	3028.4	3015.9	3015.1	3001.0	2962.7	2876.7	2771.9
22.5°	3097.2	3099.5	3075.3	3028.4	3012.7	3032.3	3037.7	3032.3	3004.9	2924.4	2825.8
25°	3079.2	3077.6	3052.6	3004.9	3018.2	3059.6	3066.7	3069.0	3050.3	2979.9	2894.7
27.5°	3166.0	3160.5	3112.8	3036.2	3044.8	3094.8	3104.2	3126.9	3115.2	3053.4	2972.8
30°	3417.0	3407.6	3309.9	3155.0	3112.8	3138.6	3150.3	3186.3	3188.7	3137.0	3076.8
32.5°	3840.8	3829.0	3653.9	3377.1	3227.7	3183.2	3194.1	3248.1	3277.0	3237.1	3172.2
35°	4376.4	4363.1	4133.2	3754.8	3420.1	3268.4	3276.2	3319.2	3377.1	3320.8	3234.8
37.5°	4934.7	4902.6	4681.3	4198.9	3725.8	3450.6	3450.6	3456.1	3483.4	3366.1	3308.3
40°	5489.8	5457.8	5257.6	4721.2	4121.5	3737.6	3719.6	3598.4	3576.5	3475.6	3456.1
42.5°	6005.9	5996.5	5878.4	5311.6	4585.9	4019.8	3994.8	3789.2	3793.9	3731.3	3732.1
45°	6554.8	6554.8	6458.6	5907.4	5127.0	4473.3	4448.3	4145.7	4192.6	4163.7	4233.3
47.5°	7002.8	7016.9	7003.6	6528.2	5756.5	5049.6	5004.3	4639.9	4771.3	4870.6	5073.1
50°	7460.3	7482.2	7484.5	7209.3	6517.3	5734.6	5683.0	5295.9	5589.1	5873.8	6271.7
52.5°	8124.1	8173.4	7977.1	7888.8	7449.3	6547.8	6496.9	6139.6	6629.1	7028.6	7714.4
55°	8739.5	8696.5	8556.5	8611.2	8447.0	7473.6	7435.2	7121.7	7787.9	8307.1	9197.7
57.5°	9072.6	9069.4	9210.2	9444.8	9523.0	8615.2	8583.1	8278.1	9094.5	9484.6	10590.3
60°	9463.5	9469.0	9817.7	10350.2	10672.4	10036.7	10022.6	9791.2	10363.5	10584.0	11682.6
62.5°	9518.3	9616.8	10217.3	11133.7	11748.3	11697.5	11728.7	11154.0	11498.9	11461.3	12498.1
65°	8888.8	9018.6	10105.5	11370.6	12817.9	13513.9	13542.8	12524.7	12394.2	12211.2	12789.8
67.5°	7598.7	7791.0	8971.7	10855.3	13170.6	14856.4	14897.1	13587.4	13137.0	12465.3	12087.6
70°	5529.7	5743.2	6931.7	9271.2	12541.9	15285.7	15331.8	14057.3	13165.1	11742.0	10318.9
72.5°	3340.3	3507.7	4487.4	6825.3	10585.6	14503.8	14585.9	13461.5	12019.6	9946.0	7619.8
75°	1466.9	1576.3	2169.8	3933.0	7578.3	12000.1	12102.5	11522.3	9766.1	7228.0	4503.8
77.5°	624.8	656.0	889.8	1708.5	4284.1	8200.0	8340.7	8418.9	6626.0	3933.0	1903.2
80°	389.4	401.9	503.6	773.3	2004.8	4605.5	4757.2	4953.4	3290.3	1445.8	664.6
82.5°	236.9	251.0	334.7	467.6	1043.9	2087.7	2160.4	2298.8	1276.9	624.8	344.0
85°	142.3	152.5	204.9	295.6	594.3	821.0	820.2	907.0	601.3	401.9	181.4
87.5°	68.0	75.8	109.5	153.3	299.5	308.1	288.5	326.8	365.2	263.5	91.5
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: P319178  
 CATALOG NUMBER: GLEON-SA4D-827-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8	2327.8
2.5°	2326.2	2323.1	2312.9	2305.1	2303.5	2298.8	2294.9	2297.3	2300.4	2301.2	2301.2
5°	2325.4	2316.8	2303.5	2298.1	2305.1	2314.5	2326.2	2341.8	2351.2	2358.3	2363.0
7.5°	2363.0	2346.5	2331.7	2328.5	2342.6	2367.6	2394.2	2427.1	2449.7	2465.4	2468.5
10°	2425.5	2405.2	2390.3	2393.4	2418.5	2454.4	2492.0	2534.2	2568.6	2589.7	2591.3
12.5°	2497.4	2477.9	2463.8	2477.1	2518.6	2562.3	2601.4	2638.2	2669.5	2690.6	2690.6
15°	2580.3	2566.2	2549.8	2580.3	2636.6	2675.7	2692.1	2710.1	2727.3	2743.0	2739.8
17.5°	2660.1	2646.8	2638.2	2674.2	2732.8	2750.8	2739.8	2726.5	2726.5	2735.1	2736.7
20°	2728.9	2717.2	2722.6	2757.8	2788.3	2769.5	2728.9	2686.7	2669.5	2674.2	2678.8
22.5°	2789.1	2783.6	2800.0	2816.5	2794.6	2728.9	2653.8	2596.7	2575.6	2574.1	2575.6
25°	2859.5	2858.7	2879.0	2849.3	2752.3	2631.1	2530.3	2474.8	2463.0	2472.4	2488.1
27.5°	2947.0	2955.6	2965.8	2857.1	2666.3	2483.4	2380.9	2342.6	2354.3	2377.0	2391.9
30°	3058.9	3082.3	3060.4	2837.6	2542.8	2314.5	2216.7	2205.8	2237.8	2269.9	2285.5
32.5°	3167.5	3204.3	3151.1	2786.7	2383.3	2135.4	2059.6	2056.4	2095.5	2126.8	2148.7
35°	3255.1	3327.8	3219.1	2685.9	2198.7	1970.4	1914.9	1893.8	1907.9	1944.6	1969.6
37.5°	3369.3	3490.5	3266.1	2531.8	1998.6	1834.4	1769.5	1721.0	1708.5	1723.3	1735.9
40°	3578.0	3738.3	3288.0	2316.8	1803.1	1698.3	1632.6	1561.5	1512.2	1476.3	1477.0
42.5°	3919.0	4061.3	3273.9	2055.7	1622.5	1565.4	1491.1	1409.0	1329.3	1247.9	1241.7
45°	4472.6	4541.4	3231.7	1778.9	1463.7	1426.2	1356.6	1274.5	1168.2	1075.9	1067.3
47.5°	5358.5	5206.0	3166.0	1537.2	1323.8	1308.1	1244.0	1149.4	1036.8	962.5	956.3
50°	6566.5	6165.4	3133.9	1344.9	1200.2	1204.9	1152.5	1052.5	946.1	891.4	885.1
52.5°	8011.5	7282.8	3195.7	1196.3	1100.9	1117.4	1078.3	984.4	895.3	852.3	846.0
55°	9510.4	8440.0	3262.2	1088.4	1007.1	1039.2	1025.9	948.5	867.9	828.0	822.6
57.5°	10793.6	9304.0	3129.2	1000.9	923.4	973.5	985.2	925.8	853.9	817.9	811.6
60°	11601.3	9652.0	2780.5	918.8	857.0	921.1	961.8	919.5	859.3	856.2	851.5
62.5°	11984.4	9621.5	2257.4	853.9	815.5	898.4	979.0	954.7	921.9	950.0	952.4
65°	11812.4	9161.7	1681.1	810.8	785.8	907.0	1030.6	1021.2	939.9	968.0	971.9
67.5°	10680.2	8064.7	1244.8	773.3	753.0	931.3	1124.4	1043.1	904.7	925.0	912.5
70°	8632.4	6393.7	960.2	731.1	719.4	928.1	1166.6	1029.8	866.4	871.1	837.4
72.5°	5952.7	4360.0	781.1	692.0	670.9	846.0	1136.9	996.9	834.3	798.3	753.8
75°	3237.1	2340.3	663.8	651.3	585.7	742.8	1082.2	973.5	805.4	757.7	732.7
77.5°	1273.7	971.1	576.3	595.8	512.2	656.0	1021.2	928.9	765.5	702.9	690.4
80°	520.0	495.7	477.8	515.3	440.2	573.9	947.7	876.5	717.8	652.1	627.1
82.5°	294.8	308.1	371.4	406.6	357.3	528.6	912.5	834.3	660.7	584.1	554.4
85°	150.9	180.6	258.8	291.7	262.7	449.6	840.6	730.3	530.1	447.3	449.6
87.5°	72.7	100.9	163.4	183.0	170.5	325.3	627.9	529.4	412.9	326.8	316.7
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)