

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: P458011

Luminaire Tested: **GALN-SA9B-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458011
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-SA9B-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38646 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

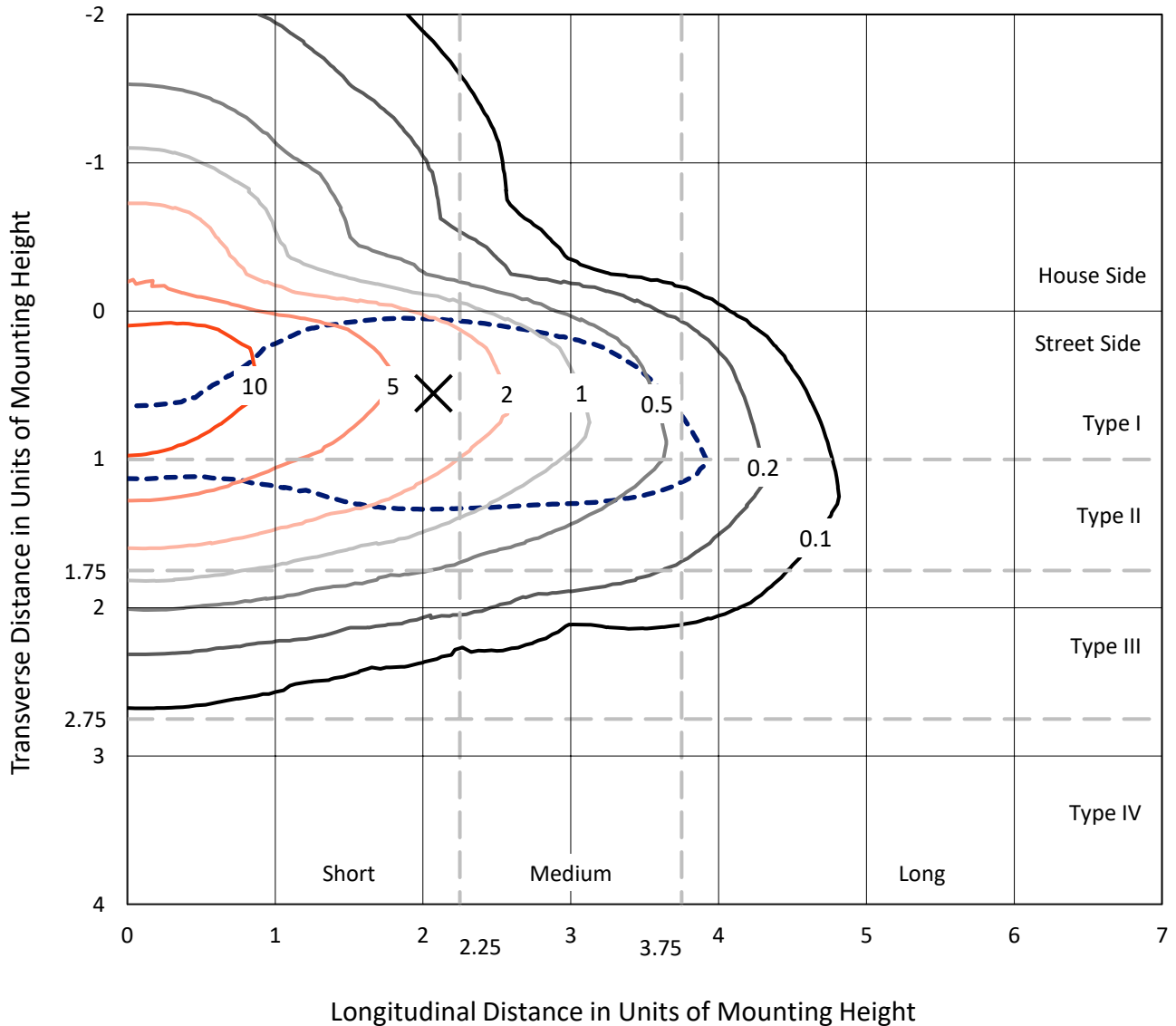
Input Watts (W): 364
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

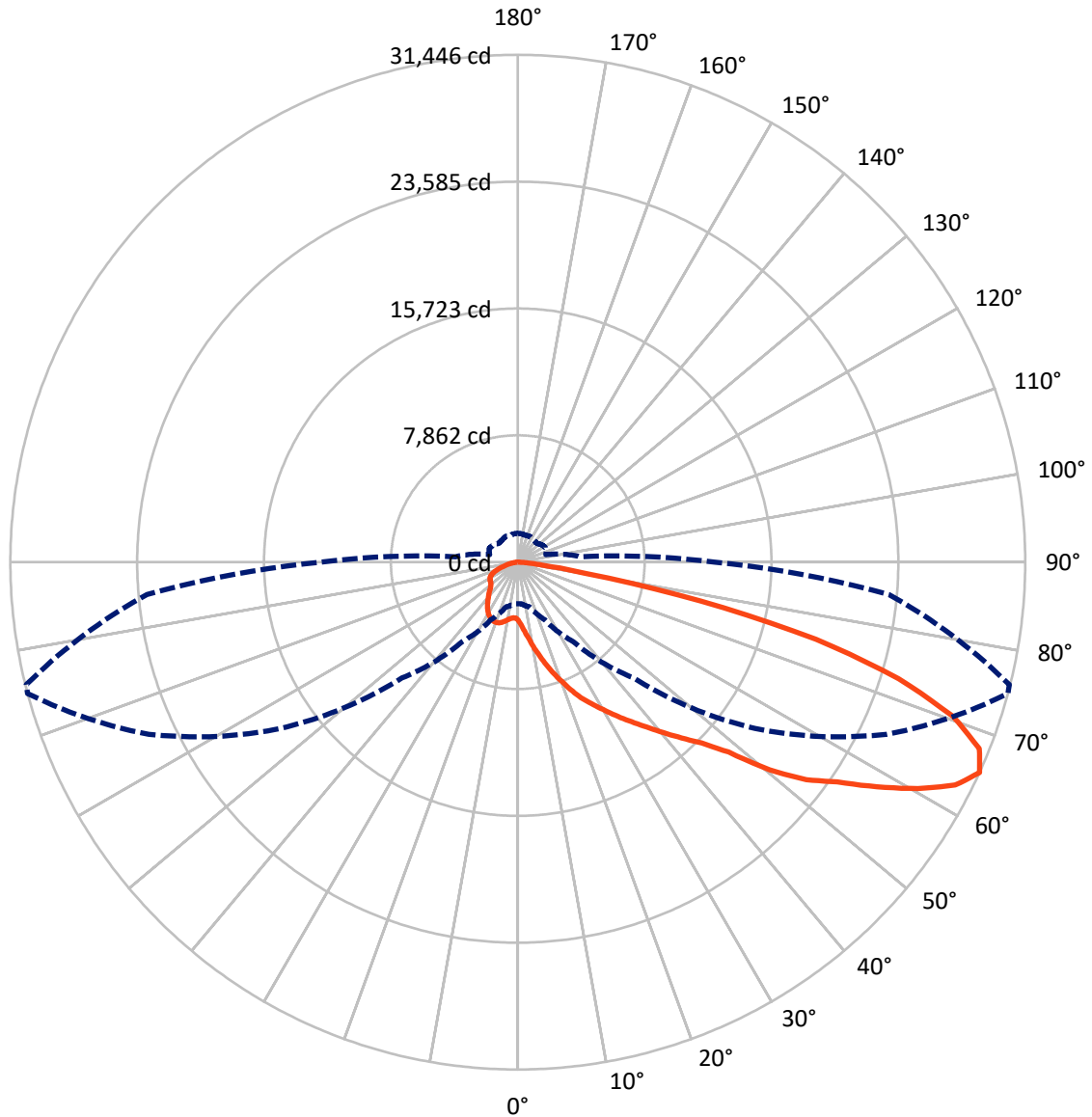
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.9 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
House Side	Lumens	6496.9	0.0	6496.9
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	32149.1	0.0	32149.1
	% Fixture	83.2	0.0	83.2
Total	Lumens	38646.0	0.0	38646.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.3	1.1
10°-20°	1708.8	4.4
20°-30°	3300.8	8.5
30°-40°	5361.4	13.9
40°-50°	7375.1	19.1
50°-60°	8707.5	22.5
60°-70°	7629.2	19.7
70°-80°	3642.3	9.4
80°-90°	484.6	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°	38646.0	100.0
0°-180°	38646.0	100.0

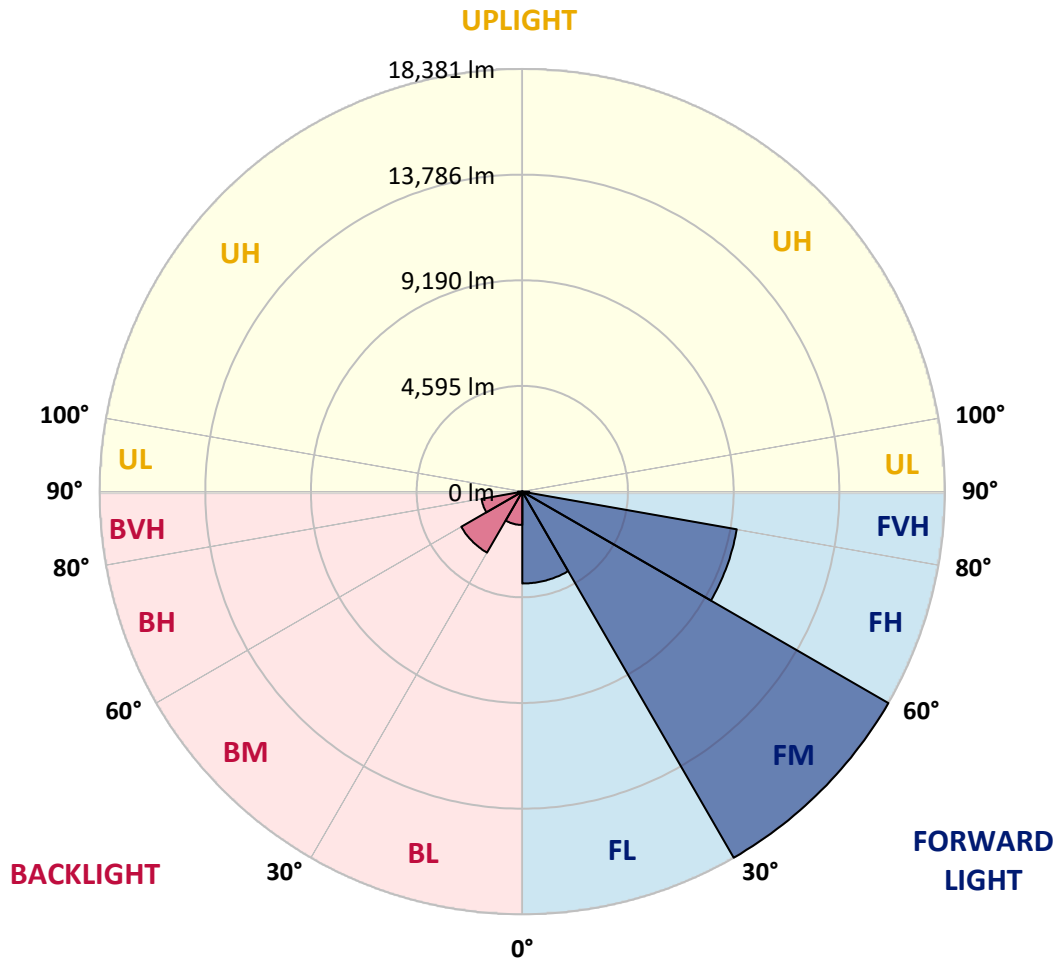


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3995.4	10.3			
FM	(30°-60°)	18380.9	47.6			
FH	(60°-80°)	9470.0	24.5			G4/12000
FVH	(80°-90°)	302.9	0.8			G3/500
BL	(0°-30°)	1450.4	3.8	B3/2500		
BM	(30°-60°)	3063.2	7.9	B3/5000		
BH	(60°-80°)	1801.5	4.7	B3/2500		G3/2500
BVH	(80°-90°)	181.8	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7
2.5°	4770.8	4739.4	4705.9	4613.6	4515.1	4404.0	4244.7	4091.7	3888.4	3882.1	3731.1
5°	6093.5	6072.5	5923.7	5837.8	5609.3	5305.4	5047.5	4647.2	4276.1	4232.1	3938.7
7.5°	7309.3	7227.5	7170.9	7015.8	6789.4	6399.5	5900.7	5359.9	4739.4	4680.7	4194.4
10°	8225.3	8216.9	8187.6	8053.4	7883.6	7495.8	6942.4	6166.9	5326.3	5211.0	4504.6
12.5°	8910.7	8917.0	8912.8	8910.7	8789.1	8460.1	7860.6	7043.1	5919.5	5837.8	4863.1
15°	9361.4	9424.3	9449.4	9554.2	9564.7	9344.6	8829.0	7889.9	6588.2	6466.6	5248.8
17.5°	9659.0	9690.5	9807.9	9986.0	10130.7	10090.9	9631.8	8673.9	7271.5	7068.2	5649.1
20°	9944.1	9998.6	10088.8	10331.9	10587.6	10705.0	10382.2	9476.7	7948.6	7818.6	6091.4
22.5°	10537.3	10614.9	10646.3	10770.0	10988.0	11195.5	11048.8	10246.0	8690.6	8514.6	6560.9
25°	11541.4	11623.1	11535.1	11505.8	11577.0	11679.7	11648.3	10971.2	9390.7	9139.2	7005.3
27.5°	12849.4	12859.9	12688.0	12524.5	12348.4	12296.0	12199.6	11614.8	9998.6	9789.0	7451.8
30°	14253.8	14203.5	13918.4	13622.9	13325.2	13031.8	12755.1	12235.2	10675.7	10434.6	7889.9
32.5°	15557.6	15530.4	15213.8	14754.8	14251.7	13975.0	13415.3	12862.0	11400.9	11168.3	8340.6
35°	16534.4	16574.2	16226.3	15725.3	15176.1	14930.9	14224.5	13520.2	12151.4	11897.7	8831.1
37.5°	17228.2	17207.3	16899.1	16465.2	15983.1	15769.3	15169.8	14239.1	12958.4	12715.2	9367.7
40°	17475.6	17463.0	17234.5	16918.0	16612.0	16536.5	16159.2	15014.7	13882.8	13597.7	10013.3
42.5°	17318.4	17345.6	17194.7	17108.8	17052.2	17106.7	17142.3	16031.3	14891.0	14629.0	10713.4
45°	16836.3	16821.6	16800.6	16941.1	17259.7	17618.1	18114.9	16991.4	15987.3	15777.7	11652.5
47.5°	15974.7	16079.6	16132.0	16519.7	17215.7	18064.6	19234.3	18278.4	17578.3	17395.9	13084.2
50°	14769.5	14853.3	15163.5	15853.2	16890.8	18232.3	20328.4	20382.9	20232.0	19890.3	14639.5
52.5°	12887.1	13017.1	13656.4	14920.4	16224.2	18163.1	20990.8	22187.7	22386.9	22131.1	16171.8
55°	10780.5	10962.9	11637.8	13295.9	15306.1	17785.8	21447.8	23233.7	24028.1	23791.3	17647.5
57.5°	8717.9	8910.7	9604.6	11210.2	13704.6	16951.5	21747.5	24399.2	26262.6	25954.5	19483.7
60°	6533.7	6734.9	7330.2	8984.1	11424.0	15320.7	21544.2	25409.5	28495.0	28363.0	21322.0
62.5°	4215.4	4437.5	4955.3	6324.1	8780.8	13092.5	20456.3	25967.1	30427.7	30268.4	22663.6
65°	2567.8	2592.9	2878.0	3926.1	6009.7	10137.0	17968.2	25227.1	31446.4	31398.2	23072.3
67.5°	1660.1	1700.0	1829.9	2351.9	3603.3	7041.0	14367.0	22785.1	30851.1	30834.3	22227.6
70°	1402.3	1414.9	1473.6	1586.8	2094.1	4269.9	10088.8	18892.6	28589.4	28589.4	20196.4
72.5°	1253.5	1270.3	1291.2	1326.9	1494.6	2419.0	6020.1	14706.6	24684.2	24847.7	17190.5
75°	1138.2	1134.0	1146.6	1152.9	1274.5	1580.5	3112.8	10876.9	19095.9	18768.9	12449.0
77.5°	974.7	981.0	974.7	1002.0	1125.6	1203.2	1580.5	7298.8	11572.8	11149.4	6248.6
80°	800.7	811.2	821.7	838.5	962.1	913.9	949.6	3326.6	4280.3	4190.2	1930.6
82.5°	601.6	616.3	633.0	672.9	756.7	603.7	599.5	1421.2	1544.9	1414.9	710.6
85°	243.2	287.2	433.9	473.7	475.8	331.2	368.9	593.2	630.9	616.3	278.8
87.5°	56.6	67.1	140.4	211.7	194.9	123.7	136.2	192.8	220.1	203.3	94.3
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°	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7	3590.7
2.5°	3662.0	3588.6	3462.8	3366.4	3297.2	3236.5	3198.7	3175.7	3167.3	3165.2	3167.3
5°	3785.6	3655.7	3456.5	3330.8	3261.6	3221.8	3198.7	3196.6	3198.7	3200.8	3194.5
7.5°	3955.4	3768.9	3509.0	3391.6	3339.2	3309.8	3299.3	3295.1	3297.2	3295.1	3295.1
10°	4181.8	3926.1	3611.7	3490.1	3446.1	3412.5	3395.8	3385.3	3376.9	3368.5	3364.3
12.5°	4431.3	4100.1	3722.8	3605.4	3542.5	3490.1	3452.4	3425.1	3406.2	3387.4	3383.2
15°	4710.0	4284.5	3846.4	3682.9	3592.8	3515.2	3450.3	3406.2	3372.7	3345.5	3343.4
17.5°	4976.3	4458.5	3930.3	3718.6	3586.5	3477.5	3391.6	3330.8	3288.9	3253.2	3249.0
20°	5261.3	4624.1	3968.0	3695.5	3523.6	3391.6	3278.4	3205.0	3156.8	3117.0	3110.7
22.5°	5548.5	4764.5	3963.8	3622.1	3414.6	3259.5	3140.0	3062.5	3005.9	2966.0	2951.4
25°	5823.1	4877.7	3911.4	3504.8	3263.7	3102.3	2980.7	2909.5	2859.1	2810.9	2810.9
27.5°	6070.4	4944.8	3812.9	3362.2	3108.6	2938.8	2842.4	2777.4	2731.3	2699.8	2681.0
30°	6313.6	4976.3	3678.7	3182.0	2945.1	2800.5	2722.9	2685.2	2643.2	2607.6	2603.4
32.5°	6531.6	4970.0	3511.0	3005.9	2790.0	2687.3	2655.8	2626.5	2582.5	2532.1	2519.6
35°	6743.3	4928.0	3311.9	2813.0	2660.0	2620.2	2628.6	2586.6	2507.0	2444.1	2433.6
37.5°	6973.9	4852.6	3093.9	2655.8	2551.0	2588.7	2609.7	2517.5	2387.5	2289.0	2265.9
40°	7240.1	4766.6	2867.5	2498.6	2465.1	2559.4	2559.4	2389.6	2211.4	2150.6	2133.9
42.5°	7552.4	4695.4	2678.9	2366.6	2393.8	2488.1	2477.6	2219.8	2146.5	2115.0	2106.6
45°	8047.1	4670.2	2483.9	2251.3	2335.1	2404.3	2318.3	2161.1	2119.2	2094.1	2085.7
47.5°	8829.0	4699.6	2312.1	2165.3	2268.0	2320.4	2140.2	2121.3	2092.0	2056.3	2052.1
50°	9554.2	4672.3	2190.5	2117.1	2209.3	2219.8	2066.8	2073.1	2056.3	2016.5	2008.1
52.5°	10147.5	4586.4	2112.9	2092.0	2159.0	2043.7	1997.6	2020.7	2014.4	1964.1	1955.7
55°	10799.4	4534.0	2075.2	2092.0	2125.5	1890.7	1932.6	1966.2	1957.8	1922.2	1920.1
57.5°	11589.6	4544.4	2047.9	2098.2	2092.0	1813.2	1867.7	1907.5	1905.4	1894.9	1894.9
60°	12398.7	4548.6	2006.0	2096.1	2052.1	1752.4	1800.6	1857.2	1861.4	1867.7	1867.7
62.5°	12667.0	4366.3	1924.3	2058.4	1964.1	1693.7	1737.7	1815.3	1811.1	1827.8	1829.9
65°	12166.0	3861.1	1802.7	1972.5	1850.9	1651.8	1689.5	1760.8	1737.7	1781.7	1790.1
67.5°	11073.9	3194.5	1614.0	1817.4	1725.1	1607.7	1658.1	1685.3	1643.4	1729.3	1731.4
70°	9571.0	2494.4	1375.1	1597.3	1582.6	1561.6	1632.9	1591.0	1532.3	1637.1	1616.1
72.5°	8003.1	1905.4	1098.4	1305.9	1391.8	1492.5	1588.9	1469.4	1387.6	1419.1	1381.4
75°	6011.8	1408.6	882.5	1022.9	1159.2	1393.9	1549.1	1322.7	1196.9	1167.6	1159.2
77.5°	3064.6	920.2	660.3	765.1	869.9	1259.8	1494.6	1150.8	991.5	945.4	924.4
80°	1094.2	572.2	465.3	528.2	586.9	1083.7	1305.9	951.7	769.3	760.9	769.3
82.5°	507.3	368.9	312.3	345.9	348.0	723.2	995.7	710.6	584.8	888.8	750.4
85°	218.0	184.5	176.1	171.9	159.3	322.8	559.7	381.5	595.3	266.2	245.2
87.5°	65.0	73.4	65.0	48.2	35.6	35.6	56.6	21.0	14.7	10.5	10.5
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)