

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: P456621

Luminaire Tested: **GALN-SA7D-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39279 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

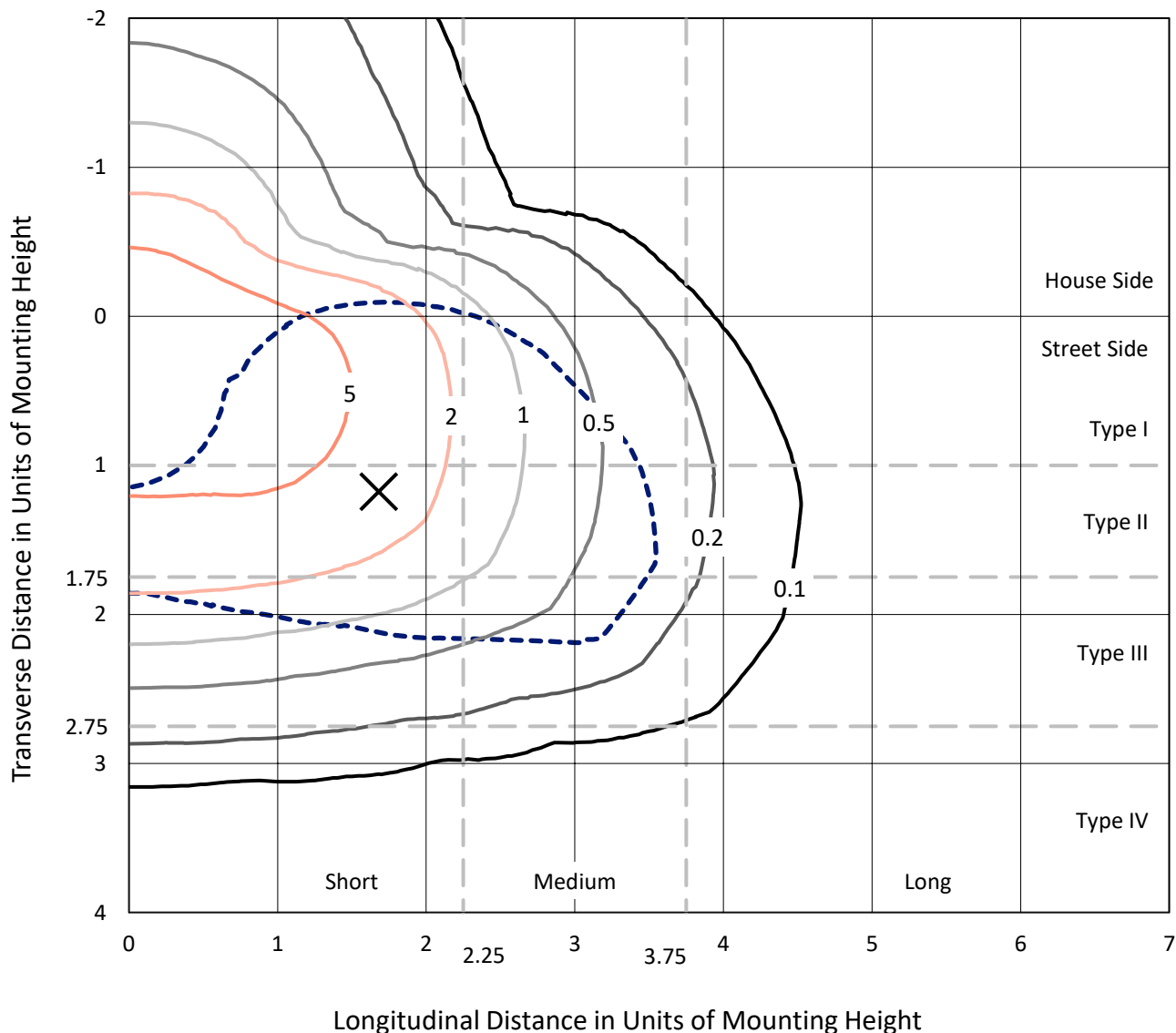
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P456621
 CATALOG NUMBER: GALN-SA7D-827-U-T3

Iso-Footcandle Lines of Horizontal Illumination

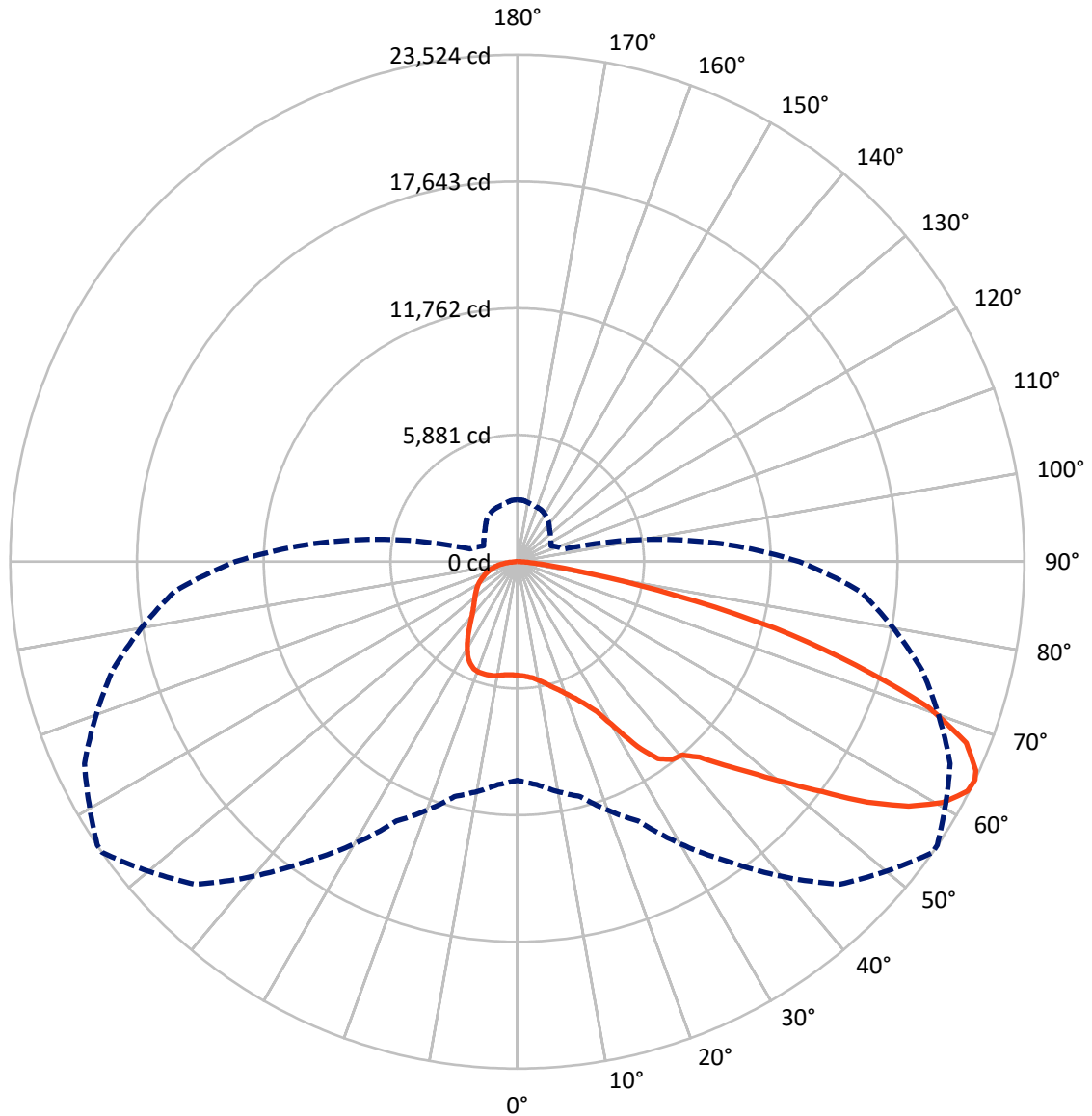
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - N/A

REPORT NUMBER: P456621
CATALOG NUMBER: GALN-SA7D-827-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P456621

CATALOG NUMBER: GALN-SA7D-827-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9541.6	0.0	9541.6
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	29737.4	0.0	29737.4
	% Fixture	75.7	0.0	75.7
Total	Lumens	39279.0	0.0	39279.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	512.6	1.3
10°-20°	1617.5	4.1
20°-30°	2879.6	7.3
30°-40°	4430.6	11.3
40°-50°	6280.7	16.0
50°-60°	9091.2	23.1
60°-70°	9408.4	24.0
70°-80°	4406.0	11.2
80°-90°	652.3	1.7
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°	39279.0	100.0
0°-180°	39279.0	100.0

Coefficient of Utilization



REPORT NUMBER: P456621

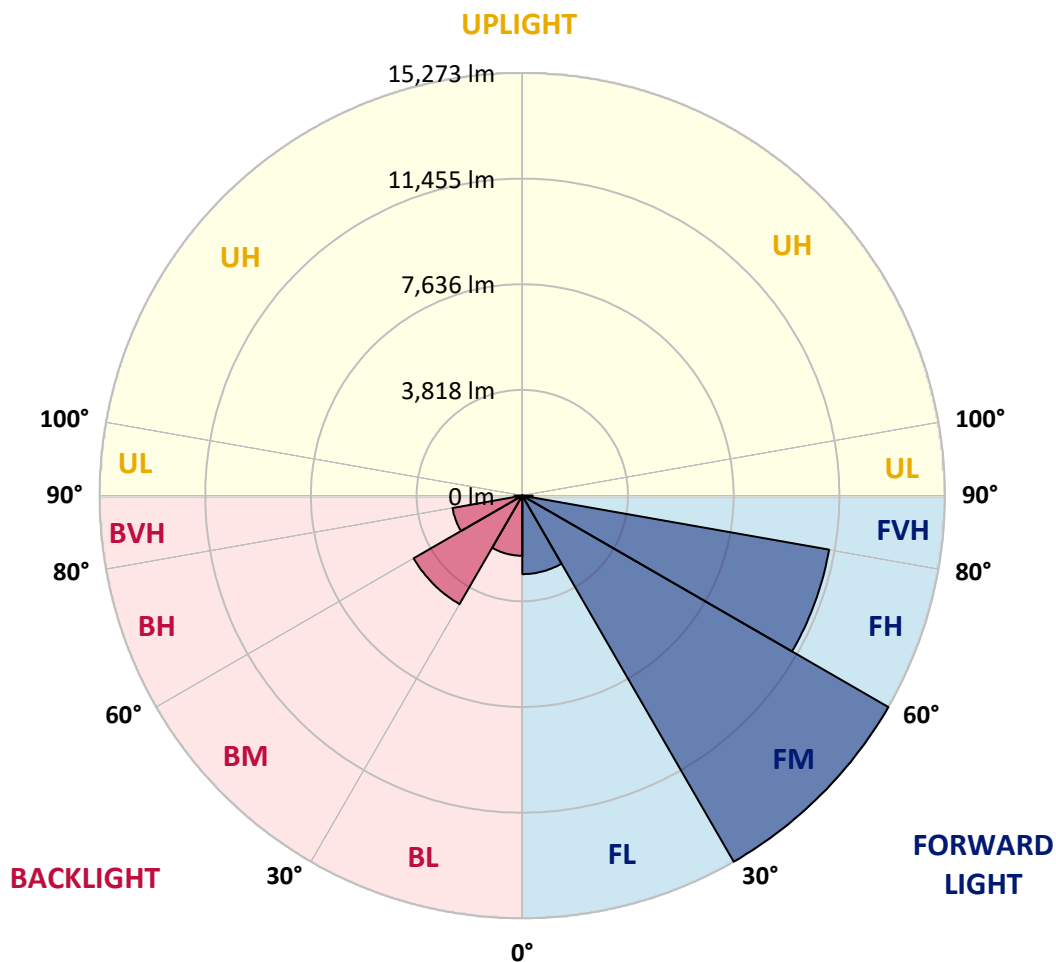
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2836.6	7.2			
FM	(30°-60°)	15272.7	38.9			
FH	(60°-80°)	11254.6	28.7			G4/12000
FVH	(80°-90°)	373.5	1.0			G3/500
BL	(0°-30°)	2173.2	5.5	B3/2500		
BM	(30°-60°)	4529.8	11.5	B3/5000		
BH	(60°-80°)	2559.8	6.5	B4/5000		G4/5000
BVH	(80°-90°)	278.8	0.7			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 III Short





REPORT NUMBER: P456621

CATALOG NUMBER: GALN-SA7D-827-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1
2.5°	5329.2	5327.0	5333.6	5327.0	5331.4	5316.0	5309.5	5313.8	5307.3	5296.3	5276.6
5°	5394.9	5392.7	5394.9	5386.1	5390.5	5381.7	5366.4	5370.8	5359.8	5335.7	5307.3
7.5°	5506.5	5497.8	5497.8	5495.6	5486.8	5473.7	5462.7	5458.4	5447.4	5416.8	5373.0
10°	5651.0	5651.0	5653.2	5635.7	5646.6	5622.6	5611.6	5609.4	5572.2	5532.8	5471.5
12.5°	5841.5	5852.5	5845.9	5837.1	5832.8	5824.0	5786.8	5795.5	5753.9	5686.1	5611.6
15°	6078.0	6095.5	6084.5	6080.2	6069.2	6036.4	6021.0	6014.5	5959.7	5861.2	5762.7
17.5°	6391.1	6369.2	6360.4	6349.5	6303.5	6279.4	6253.1	6248.7	6200.6	6084.5	5931.3
20°	6664.7	6695.4	6677.9	6666.9	6621.0	6575.0	6555.3	6548.7	6507.1	6380.1	6134.9
22.5°	6991.0	6997.5	7004.1	6977.8	6955.9	6920.9	6885.9	6874.9	6859.6	6728.2	6428.3
25°	7339.1	7365.4	7343.5	7317.2	7290.9	7288.7	7321.6	7317.2	7310.6	7183.7	6818.0
27.5°	7906.2	7930.3	7936.8	7908.4	7807.7	7816.4	7890.9	7914.9	8015.7	7805.5	7319.4
30°	8225.8	8249.9	8304.7	8411.9	8571.8	8711.9	8891.4	8946.2	9042.5	8646.2	7914.9
32.5°	8422.9	8431.7	8530.2	8729.4	9208.9	9732.2	10220.4	10240.2	10301.5	9745.3	8460.1
35°	8733.8	8740.4	8819.2	9038.1	9600.8	10472.2	11227.6	11251.7	11201.3	10086.9	8714.1
37.5°	9117.0	9134.5	9184.8	9366.6	10038.7	11091.9	11645.8	11628.3	11181.6	10358.4	9162.9
40°	9675.3	9675.3	9616.2	9861.4	10500.7	11446.6	11792.5	11761.8	11643.6	11144.4	9846.1
42.5°	10167.9	10159.1	10299.3	10465.7	11078.7	11993.9	12407.7	12458.1	12653.0	12131.9	10623.3
45°	10809.4	10848.8	10927.6	11229.8	12061.8	12928.8	13463.1	13511.2	13787.1	13294.5	11531.9
47.5°	11457.5	11470.6	11718.0	12120.9	13279.1	14196.5	14634.4	14713.2	14965.0	14654.1	12510.6
50°	11917.3	12042.1	12438.4	13073.3	14533.7	15742.3	16083.9	16178.0	16622.5	16134.2	13651.4
52.5°	12403.4	12526.0	13009.8	13977.6	15974.4	17323.1	17743.5	17807.0	18268.9	17631.8	14818.3
55°	12819.4	12933.2	13482.8	14778.9	17121.7	18936.7	19698.7	19624.2	19845.4	18785.7	15718.2
57.5°	12887.2	12979.2	13671.1	15291.3	17984.3	20320.5	21413.0	21456.8	21200.6	19648.3	16460.4
60°	12361.8	12550.0	13344.8	15236.5	18371.8	21283.8	22691.7	22722.3	21995.4	20090.6	16756.0
62.5°	11431.2	11411.5	12372.7	14356.4	17828.9	21502.8	23444.9	23412.0	22306.3	19878.2	16469.2
64°	10146.0	10382.5	11280.2	13274.8	16953.1	21165.6	23523.7	23506.2	22157.4	19435.9	15980.9
65°	9362.2	9349.0	10235.8	12390.2	16081.7	20657.7	23383.5	23359.5	21846.5	19039.6	15602.2
67.5°	6758.9	6789.5	7665.3	9561.4	13073.3	18671.8	22470.5	22380.8	20620.4	17726.0	14161.5
70°	4094.3	4111.8	4799.3	6342.9	9384.1	15094.2	20254.8	20259.2	18744.1	15764.2	12053.0
72.5°	2156.6	2202.6	2478.5	3601.7	5699.2	10590.5	16432.0	16821.7	16092.6	13454.3	9522.0
75°	1199.8	1206.4	1401.3	1775.7	2907.6	5926.9	12350.8	12462.5	12740.5	10829.1	7041.3
77.5°	915.2	928.3	989.6	1147.3	1583.0	2747.8	7474.9	8035.4	8979.0	7634.7	4017.7
80°	742.2	755.4	807.9	902.1	1053.1	1302.7	3472.5	3774.6	4805.9	3389.3	1567.7
82.5°	578.0	569.3	637.1	698.4	766.3	770.7	1425.3	1576.4	1957.4	1458.2	678.7
85°	429.1	429.1	483.9	470.7	494.8	451.0	628.4	694.1	783.8	619.6	315.3
87.5°	170.8	188.3	317.5	284.6	221.1	177.3	232.1	245.2	271.5	243.0	131.4
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: P456621
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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1	5270.1
2.5°	5278.8	5285.4	5270.1	5259.1	5254.7	5248.2	5241.6	5243.8	5252.5	5261.3	5259.1
5°	5305.1	5307.3	5281.0	5267.9	5259.1	5250.4	5250.4	5256.9	5274.4	5287.6	5287.6
7.5°	5370.8	5370.8	5333.6	5309.5	5296.3	5281.0	5276.6	5278.8	5292.0	5309.5	5311.7
10°	5473.7	5464.9	5416.8	5379.5	5355.4	5318.2	5285.4	5267.9	5274.4	5285.4	5285.4
12.5°	5598.5	5574.4	5513.1	5462.7	5403.6	5333.6	5265.7	5230.6	5228.5	5239.4	5235.0
15°	5732.0	5705.8	5620.4	5528.4	5425.5	5322.6	5241.6	5191.2	5151.8	5140.9	5165.0
17.5°	5887.5	5832.8	5714.5	5587.5	5434.3	5300.7	5173.7	5070.8	5000.8	4981.0	4987.6
20°	6075.8	6003.5	5843.7	5644.5	5427.7	5221.9	5024.8	4886.9	4773.0	4738.0	4742.4
22.5°	6336.3	6211.5	5977.3	5672.9	5373.0	5073.0	4799.3	4619.8	4481.8	4427.1	4460.0
25°	6631.9	6496.2	6104.2	5666.4	5230.6	4834.4	4532.2	4297.9	4173.1	4092.1	4109.6
27.5°	7039.1	6798.3	6240.0	5607.2	5027.0	4543.2	4192.8	3971.7	3857.8	3816.2	3836.0
30°	7560.2	7190.2	6386.7	5447.4	4705.2	4175.3	3851.3	3706.8	3638.9	3586.4	3603.9
32.5°	7936.8	7466.1	6419.5	5178.1	4357.0	3840.3	3619.2	3511.9	3437.5	3387.1	3398.1
35°	8206.1	7700.4	6404.2	4847.5	3993.6	3564.5	3435.3	3347.7	3227.3	3117.8	3098.1
37.5°	8567.4	7993.8	6292.5	4486.2	3634.5	3378.4	3286.4	3124.4	2951.4	2804.7	2798.1
40°	9121.3	8337.5	6053.9	4061.5	3328.0	3240.4	3128.8	2918.6	2732.5	2614.2	2605.5
42.5°	9692.8	8655.0	5729.8	3614.8	3076.2	3095.9	2960.2	2752.2	2638.3	2561.7	2552.9
45°	10391.2	8998.7	5379.5	3227.3	2890.1	2960.2	2813.5	2693.0	2625.2	2574.8	2561.7
47.5°	11146.6	9351.2	4985.4	2879.2	2732.5	2835.4	2752.2	2697.4	2660.2	2625.2	2609.8
50°	11961.1	9745.3	4615.4	2598.9	2590.1	2706.2	2745.6	2725.9	2704.0	2693.0	2679.9
52.5°	12854.4	10148.2	4304.5	2401.8	2465.3	2614.2	2747.8	2763.1	2763.1	2756.5	2747.8
55°	13458.7	10428.4	3989.2	2242.0	2338.4	2539.8	2743.4	2802.5	2824.4	2815.7	2806.9
57.5°	13905.3	10581.7	3592.9	2104.1	2231.1	2467.5	2719.3	2806.9	2828.8	2839.7	2835.4
60°	13997.3	10439.4	3074.0	1959.6	2115.0	2362.4	2631.7	2741.2	2769.7	2837.6	2844.1
62.5°	13583.5	10001.5	2557.3	1817.3	1972.7	2202.6	2513.5	2666.8	2723.7	2828.8	2839.7
64°	13075.5	9511.1	2270.5	1727.5	1880.8	2112.8	2454.4	2647.1	2721.5	2861.6	2870.4
65°	12703.3	9154.2	2090.9	1670.6	1821.6	2053.7	2421.6	2653.6	2741.2	2912.0	2925.1
67.5°	11332.7	7925.9	1729.7	1537.0	1681.5	1953.0	2428.1	2708.4	2736.8	2931.7	2929.5
70°	9377.5	6310.1	1449.4	1414.4	1545.8	1872.0	2401.8	2620.8	2623.0	2752.2	2721.5
72.5°	7021.6	4663.6	1256.8	1287.4	1394.7	1679.3	2268.3	2502.6	2465.3	2482.9	2452.2
75°	4823.4	3085.0	1081.6	1151.7	1237.1	1484.5	2080.0	2272.7	2213.6	2191.7	2169.8
77.5°	2574.8	1705.6	899.9	1018.1	1075.0	1283.0	1815.1	2001.2	1939.9	1854.5	1826.0
80°	1042.2	803.5	724.7	842.9	875.8	1033.4	1510.7	1626.8	1580.8	1431.9	1383.7
82.5°	523.3	481.7	569.3	663.4	665.6	737.9	1123.2	1232.7	1129.8	948.0	906.4
85°	273.7	282.4	391.9	466.4	411.6	398.5	674.4	746.6	685.3	595.5	536.4
87.5°	98.5	113.9	205.8	203.6	144.5	76.6	148.9	72.3	39.4	24.1	30.7
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)