

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: P454678

Luminaire Tested: **GALN-SA5D-740-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454678
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-SA5D-740-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38418 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

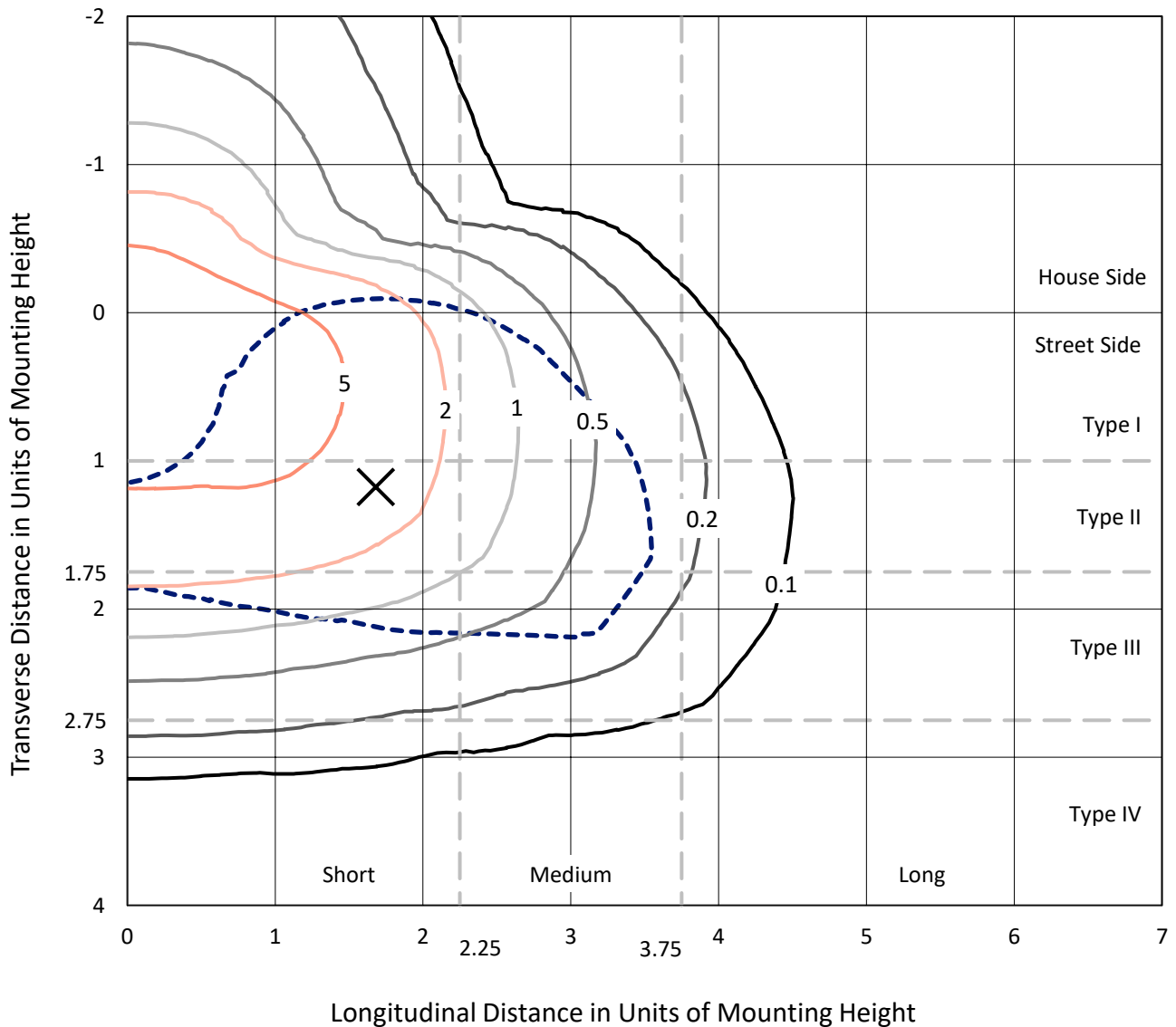
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

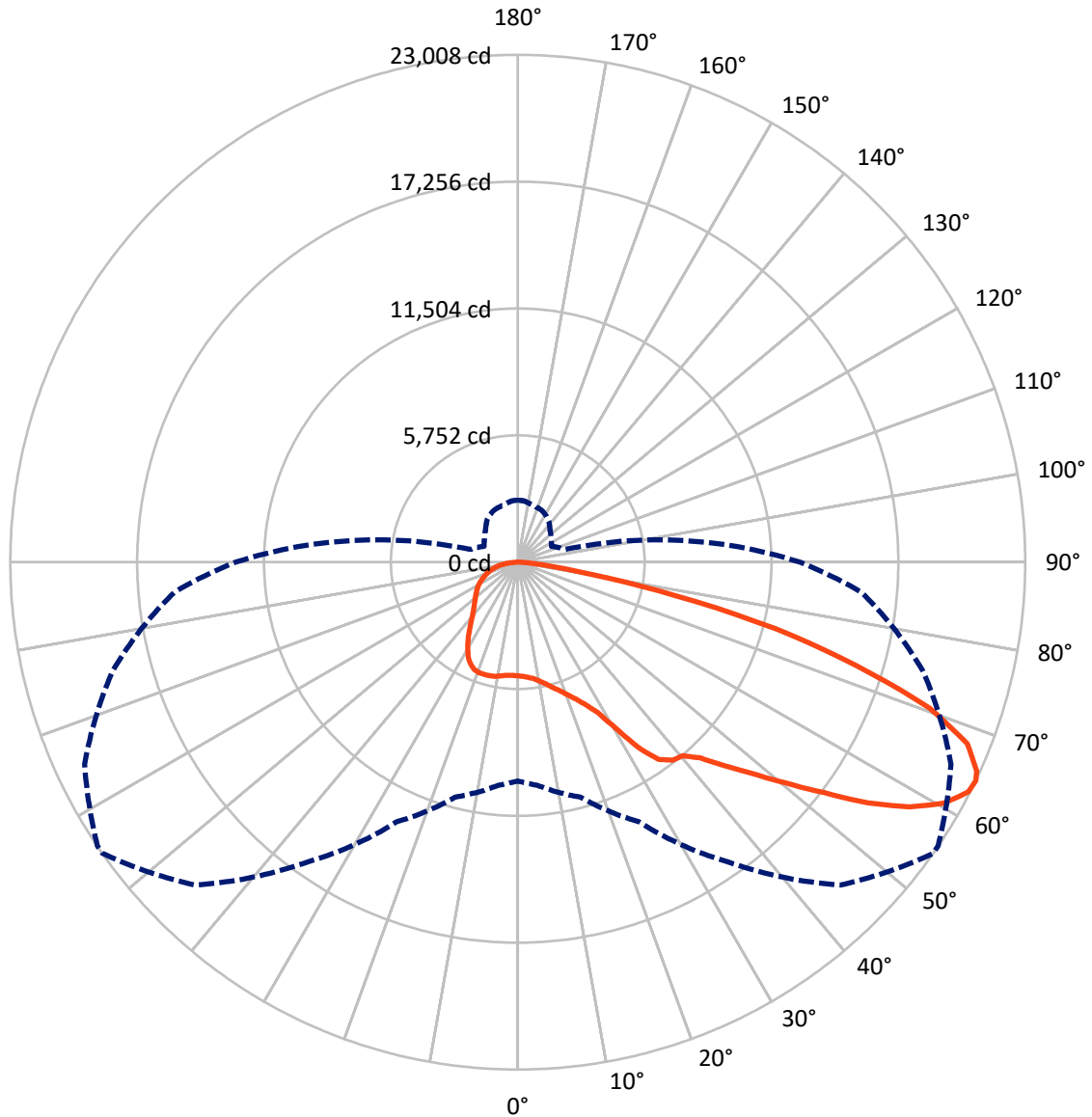
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9332.5	0.0	9332.5
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	29085.5	0.0	29085.5
	% Fixture	75.7	0.0	75.7
Total	Lumens	38418.0	0.0	38418.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	501.4	1.3
10°-20°	1582.1	4.1
20°-30°	2816.5	7.3
30°-40°	4333.5	11.3
40°-50°	6143.1	16.0
50°-60°	8891.9	23.1
60°-70°	9202.2	24.0
70°-80°	4309.4	11.2
80°-90°	638.0	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°	38418.0	100.0
0°-180°	38418.0	100.0

Coefficient of Utilization



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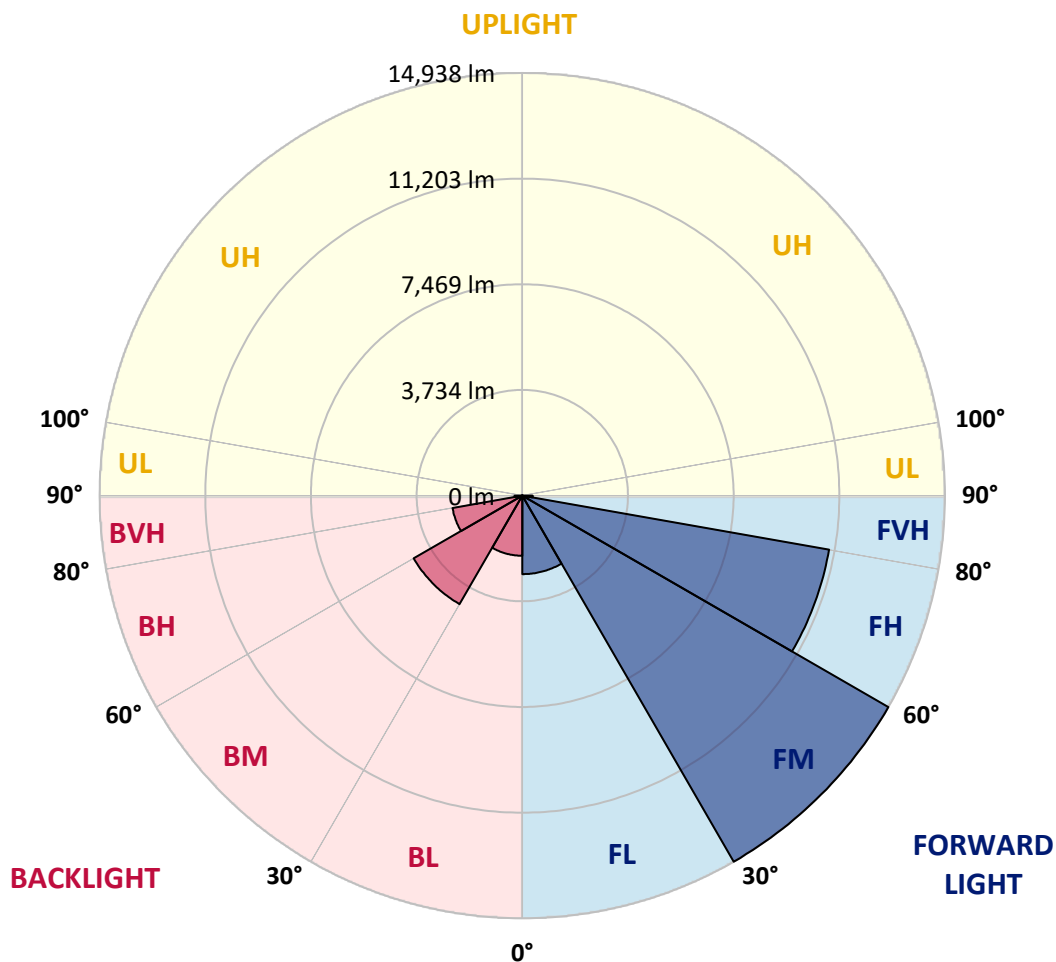
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2774.4	7.2			
FM	(30°-60°)	14938.0	38.9			
FH	(60°-80°)	11007.9	28.7			G4/12000
FVH	(80°-90°)	365.3	1.0			G3/500
BL	(0°-30°)	2125.6	5.5	B3/2500		
BM	(30°-60°)	4430.5	11.5	B3/5000		
BH	(60°-80°)	2503.7	6.5	B4/5000		G4/5000
BVH	(80°-90°)	272.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5
2.5°	5212.4	5210.2	5216.6	5210.2	5214.5	5199.5	5193.1	5197.4	5190.9	5180.2	5161.0
5°	5276.6	5274.5	5276.6	5268.0	5272.3	5263.8	5248.8	5253.0	5242.3	5218.8	5190.9
7.5°	5385.8	5377.2	5377.2	5375.1	5366.5	5353.7	5343.0	5338.7	5328.0	5298.0	5255.2
10°	5527.2	5527.2	5529.3	5512.2	5522.9	5499.3	5488.6	5486.5	5450.1	5411.5	5351.6
12.5°	5713.5	5724.2	5717.7	5709.2	5704.9	5696.3	5659.9	5668.5	5627.8	5561.4	5488.6
15°	5944.7	5961.9	5951.2	5946.9	5936.2	5904.1	5889.1	5882.6	5829.1	5732.7	5636.4
17.5°	6251.0	6229.6	6221.0	6210.3	6165.3	6141.8	6116.1	6111.8	6064.7	5951.2	5801.3
20°	6518.7	6548.6	6531.5	6520.8	6475.8	6430.9	6411.6	6405.2	6364.5	6240.3	6000.4
22.5°	6837.7	6844.2	6850.6	6824.9	6803.5	6769.2	6734.9	6724.2	6709.2	6580.8	6287.4
25°	7178.2	7203.9	7182.5	7156.8	7131.1	7129.0	7161.1	7156.8	7150.4	7026.2	6668.6
27.5°	7732.9	7756.4	7762.9	7735.0	7636.5	7645.1	7717.9	7741.4	7839.9	7634.4	7159.0
30°	8045.5	8069.1	8122.6	8227.6	8383.9	8520.9	8696.5	8750.1	8844.3	8456.7	7741.4
32.5°	8238.3	8246.8	8343.2	8538.1	9007.1	9518.9	9996.4	10015.7	10075.7	9531.7	8274.7
35°	8542.4	8548.8	8625.9	8840.0	9390.4	10242.7	10981.5	11005.1	10955.8	9865.8	8523.1
37.5°	8917.1	8934.2	8983.5	9161.2	9818.7	10848.7	11390.5	11373.4	10936.5	10131.3	8962.1
40°	9463.2	9463.2	9405.4	9645.2	10270.5	11195.6	11534.0	11504.0	11388.4	10900.1	9630.2
42.5°	9945.0	9936.5	10073.5	10236.3	10835.9	11731.0	12135.8	12185.0	12375.6	11865.9	10390.4
45°	10572.5	10611.0	10688.1	10983.6	11797.4	12645.4	13167.9	13215.1	13484.9	13003.1	11279.2
47.5°	11206.4	11219.2	11461.2	11855.2	12988.1	13885.3	14313.6	14390.7	14637.0	14332.9	12236.4
50°	11656.1	11778.1	12165.7	12786.8	14215.1	15397.2	15731.3	15823.4	16258.1	15780.5	13352.1
52.5°	12131.5	12251.4	12724.7	13671.2	15624.2	16943.4	17354.5	17416.6	17868.5	17245.3	14493.5
55°	12538.3	12649.7	13187.2	14455.0	16746.4	18521.6	19266.9	19194.1	19410.4	18373.9	15373.7
57.5°	12604.7	12694.7	13371.4	14956.1	17590.1	19875.1	20943.6	20986.5	20735.9	19217.6	16099.6
60°	12090.8	12274.9	13052.3	14902.5	17969.1	20817.3	22194.3	22224.3	21513.3	19650.2	16388.7
62.5°	11180.7	11161.4	12101.5	14041.7	17438.1	21031.4	22930.9	22898.8	21817.4	19442.5	16108.2
64°	9923.6	10154.9	11032.9	12983.8	16581.5	20701.7	23008.0	22990.9	21671.8	19009.9	15630.6
65°	9157.0	9144.1	10011.4	12118.6	15729.2	20204.8	22871.0	22847.4	21367.7	18622.3	15260.2
67.5°	6610.7	6640.7	7497.3	9351.8	12786.8	18262.5	21978.0	21890.2	20168.4	17337.4	13851.1
70°	4004.6	4021.7	4694.1	6203.9	9178.4	14763.3	19810.8	19815.1	18333.2	15418.6	11788.8
72.5°	2109.4	2154.3	2424.2	3522.7	5574.3	10358.3	16071.8	16453.0	15739.9	13159.4	9313.3
75°	1173.5	1180.0	1370.5	1736.7	2843.9	5797.0	12080.1	12189.3	12461.3	10591.7	6887.0
77.5°	895.1	908.0	967.9	1122.1	1548.3	2687.6	7311.0	7859.2	8782.2	7467.3	3929.6
80°	726.0	738.8	790.2	882.3	1030.1	1274.2	3396.4	3691.9	4700.5	3315.0	1533.3
82.5°	565.4	556.8	623.2	683.1	749.5	753.8	1394.1	1541.9	1914.5	1426.2	663.9
85°	419.7	419.7	473.3	460.4	484.0	441.1	614.6	678.8	766.6	606.0	308.4
87.5°	167.0	184.2	310.5	278.4	216.3	173.5	227.0	239.8	265.5	237.7	128.5
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°	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5	5154.5
2.5°	5163.1	5169.5	5154.5	5143.8	5139.5	5133.1	5126.7	5128.8	5137.4	5146.0	5143.8
5°	5188.8	5190.9	5165.2	5152.4	5143.8	5135.3	5135.3	5141.7	5158.8	5171.7	5171.7
7.5°	5253.0	5253.0	5216.6	5193.1	5180.2	5165.2	5161.0	5163.1	5176.0	5193.1	5195.2
10°	5353.7	5345.1	5298.0	5261.6	5238.1	5201.6	5169.5	5152.4	5158.8	5169.5	5169.5
12.5°	5475.8	5452.2	5392.2	5343.0	5285.2	5216.6	5150.3	5116.0	5113.8	5124.6	5120.3
15°	5606.4	5580.7	5497.2	5407.2	5306.6	5205.9	5126.7	5077.4	5038.9	5028.2	5051.7
17.5°	5758.4	5704.9	5589.3	5465.1	5315.1	5184.5	5060.3	4959.7	4891.1	4871.9	4878.3
20°	5942.6	5871.9	5715.6	5520.7	5308.7	5107.4	4914.7	4779.8	4668.4	4634.2	4638.4
22.5°	6197.4	6075.4	5846.2	5548.6	5255.2	4961.8	4694.1	4518.5	4383.6	4330.1	4362.2
25°	6486.5	6353.8	5970.4	5542.1	5116.0	4728.4	4432.9	4203.7	4081.7	4002.4	4019.6
27.5°	6884.8	6649.3	6103.2	5484.3	4916.8	4443.6	4100.9	3884.6	3773.3	3732.6	3751.9
30°	7394.5	7032.6	6246.7	5328.0	4602.0	4083.8	3766.9	3625.5	3559.1	3507.7	3524.9
32.5°	7762.9	7302.4	6278.8	5064.6	4261.5	3756.2	3539.9	3434.9	3362.1	3312.9	3323.6
35°	8026.3	7531.6	6263.8	4741.2	3906.1	3486.3	3360.0	3274.3	3156.5	3049.5	3030.2
37.5°	8379.6	7818.5	6154.6	4387.9	3554.9	3304.3	3214.4	3055.9	2886.7	2743.2	2736.8
40°	8921.4	8154.7	5921.2	3972.4	3255.0	3169.4	3060.2	2854.6	2672.6	2556.9	2548.4
42.5°	9480.3	8465.3	5604.2	3535.6	3008.8	3028.0	2895.3	2691.8	2580.5	2505.5	2497.0
45°	10163.5	8801.5	5261.6	3156.5	2826.8	2895.3	2751.8	2634.0	2567.6	2518.4	2505.5
47.5°	10902.3	9146.2	4876.1	2816.0	2672.6	2773.2	2691.8	2638.3	2601.9	2567.6	2552.6
50°	11698.9	9531.7	4514.2	2541.9	2533.4	2646.9	2685.4	2666.1	2644.7	2634.0	2621.2
52.5°	12572.6	9925.7	4210.1	2349.2	2411.3	2556.9	2687.6	2702.5	2702.5	2696.1	2687.6
55°	13163.7	10199.9	3901.8	2192.9	2287.1	2484.1	2683.3	2741.1	2762.5	2753.9	2745.4
57.5°	13600.5	10349.8	3514.2	2058.0	2182.2	2413.4	2659.7	2745.4	2766.8	2777.5	2773.2
60°	13690.5	10210.6	3006.6	1916.6	2068.7	2310.7	2574.1	2681.1	2709.0	2775.4	2781.8
62.5°	13285.7	9782.3	2501.2	1777.4	1929.5	2154.3	2458.4	2608.3	2664.0	2766.8	2777.5
64°	12788.9	9302.6	2220.7	1689.6	1839.5	2066.5	2400.6	2589.0	2661.9	2798.9	2807.5
65°	12424.9	8953.5	2045.1	1633.9	1781.7	2008.7	2368.5	2595.5	2681.1	2848.2	2861.0
67.5°	11084.3	7752.1	1691.8	1503.3	1644.7	1910.2	2374.9	2649.0	2676.8	2867.4	2865.3
70°	9171.9	6171.7	1417.7	1383.4	1511.9	1831.0	2349.2	2563.3	2565.5	2691.8	2661.9
72.5°	6867.7	4561.3	1229.2	1259.2	1364.1	1642.5	2218.6	2447.7	2411.3	2428.4	2398.5
75°	4717.7	3017.3	1057.9	1126.4	1209.9	1451.9	2034.4	2222.9	2165.0	2143.6	2122.2
77.5°	2518.4	1668.2	880.1	995.8	1051.5	1254.9	1775.3	1957.3	1897.3	1813.8	1786.0
80°	1019.3	785.9	708.8	824.5	856.6	1010.8	1477.6	1591.1	1546.1	1400.5	1353.4
82.5°	511.8	471.1	556.8	648.9	651.0	721.7	1098.6	1205.7	1105.0	927.3	886.6
85°	267.7	276.3	383.3	456.1	402.6	389.7	659.6	730.2	670.3	582.5	524.7
87.5°	96.4	111.4	201.3	199.2	141.3	75.0	145.6	70.7	38.5	23.6	30.0
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)