

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: P453375

Luminaire Tested: **GALN-SA4B-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453375
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-827-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16934 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

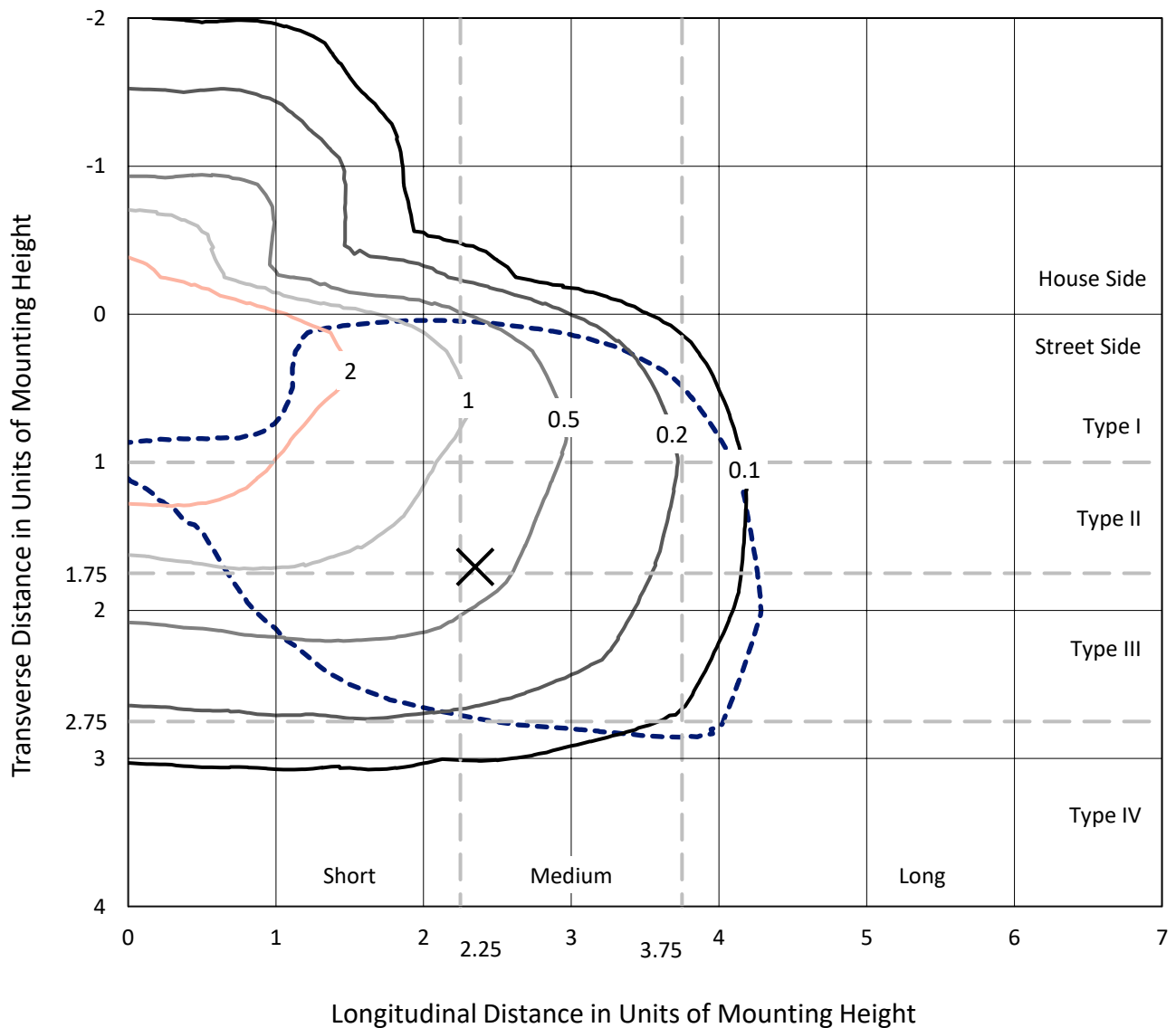
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

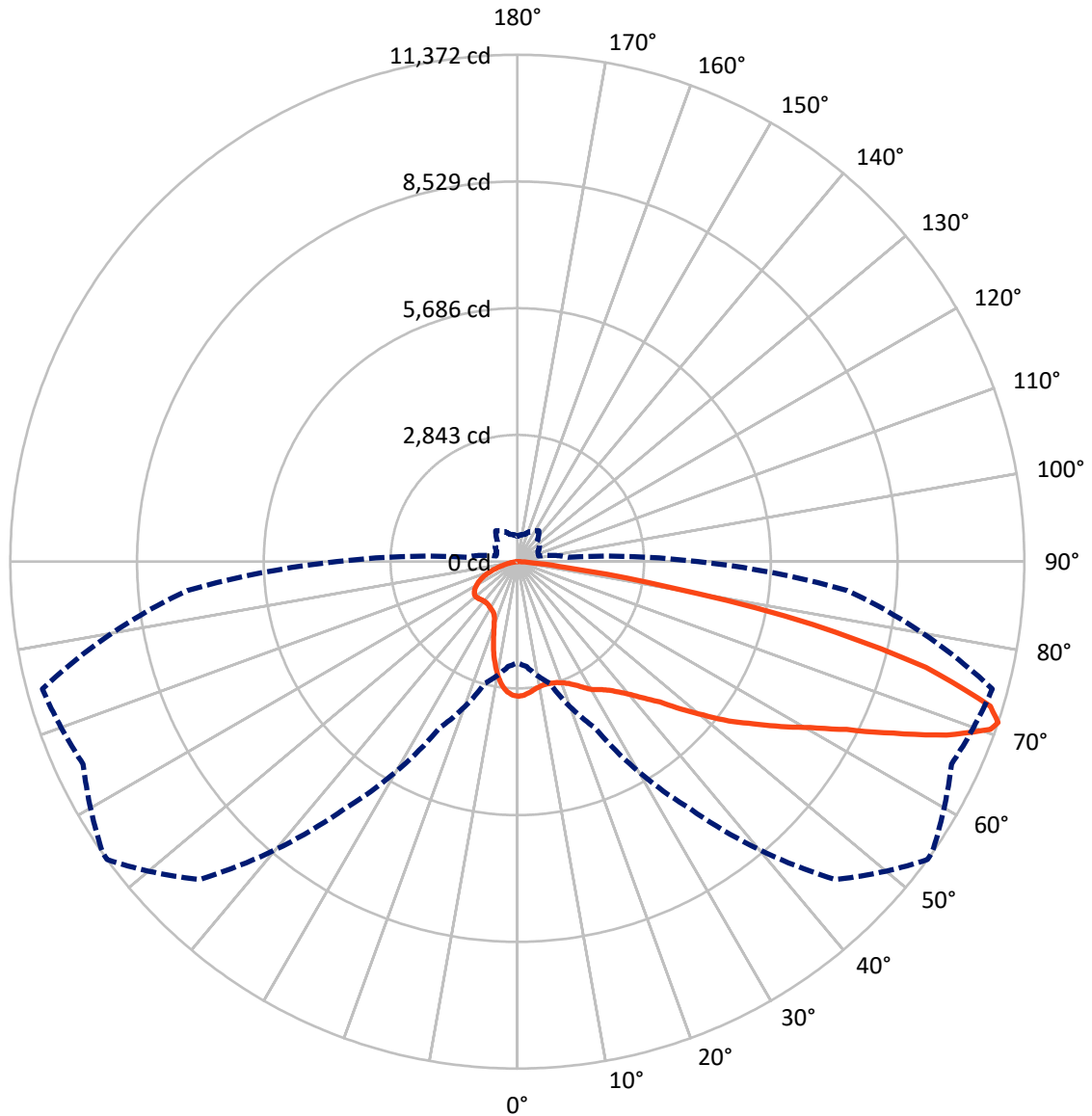
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3057.3	0.0	3057.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	13876.7	0.0	13876.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	16934.0	0.0	16934.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.2	1.6
10°-20°	710.9	4.2
20°-30°	1183.7	7.0
30°-40°	1750.4	10.3
40°-50°	2465.4	14.6
50°-60°	3301.3	19.5
60°-70°	4161.1	24.6
70°-80°	2842.0	16.8
80°-90°	249.9	1.5
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°	16934.0	100.0
0°-180°	16934.0	100.0

Coefficient of Utilization



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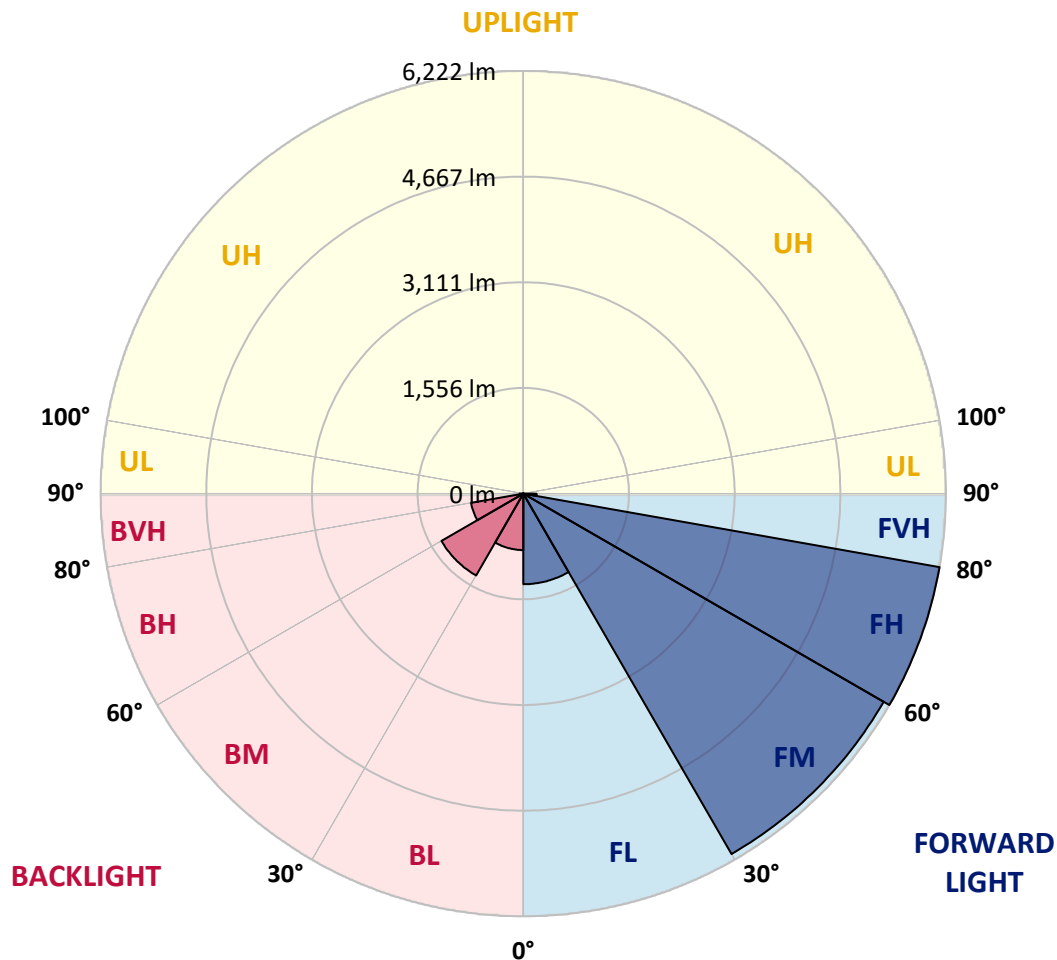
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1333.0	7.9			
FM (30°-60°)	6126.1	36.2			
FH (60°-80°)	6222.2	36.7			G3/7500
FVH (80°-90°)	195.4	1.2			G2/225
BL (0°-30°)	830.9	4.9	B2/1000		
BM (30°-60°)	1391.0	8.2	B2/2500		
BH (60°-80°)	780.8	4.6	B2/1000		G2/1000
BVH (80°-90°)	54.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3
2.5°	2918.8	2932.5	2936.2	2945.4	2964.6	2980.1	2995.7	2993.8	3015.8	3024.9	3033.2
5°	2788.9	2792.6	2806.3	2824.6	2858.5	2901.4	2943.5	2944.4	2998.4	3041.4	3062.4
7.5°	2693.8	2705.7	2714.8	2734.1	2769.7	2816.4	2883.2	2888.6	2984.7	3069.8	3114.6
10°	2631.6	2645.3	2655.4	2679.2	2714.8	2767.0	2839.2	2849.3	2974.6	3114.6	3193.2
12.5°	2574.9	2588.6	2597.8	2628.9	2675.5	2739.5	2821.0	2832.8	2978.3	3166.7	3279.2
15°	2609.7	2620.6	2617.0	2626.1	2657.2	2730.4	2828.3	2840.2	2992.0	3217.0	3364.3
17.5°	2764.2	2773.4	2743.2	2708.4	2693.8	2747.8	2851.1	2863.9	3019.4	3269.2	3451.2
20°	2992.0	3016.7	2950.8	2873.1	2802.7	2810.0	2898.7	2912.4	3057.9	3321.3	3539.9
22.5°	3288.4	3306.7	3226.2	3098.1	2968.2	2901.4	2970.1	2978.3	3115.5	3389.0	3636.9
25°	3636.9	3647.9	3536.3	3371.6	3184.1	3057.9	3067.9	3082.6	3210.6	3465.8	3722.9
27.5°	3975.3	4010.1	3881.1	3679.9	3432.9	3222.5	3202.4	3211.5	3314.0	3508.8	3782.3
30°	4376.9	4374.1	4237.8	4004.6	3688.1	3401.8	3329.5	3327.7	3369.8	3529.9	3825.3
32.5°	4697.0	4734.5	4601.0	4346.7	3979.9	3587.5	3417.3	3413.7	3412.8	3566.4	3889.3
35°	5061.1	5066.6	4944.0	4687.9	4295.5	3820.7	3539.9	3521.6	3500.6	3645.1	3976.2
37.5°	5386.7	5412.3	5299.8	5012.6	4605.5	4063.1	3708.2	3696.3	3632.3	3781.4	4115.3
40°	5641.0	5660.2	5592.5	5319.0	4911.1	4324.7	3922.3	3900.3	3822.6	4004.6	4301.0
42.5°	5724.2	5763.6	5790.1	5655.6	5262.3	4634.8	4185.7	4158.3	4098.8	4343.0	4515.0
45°	5730.6	5792.8	5932.8	5939.2	5615.4	5006.2	4493.0	4473.8	4469.3	4776.6	4815.9
47.5°	5682.2	5745.3	5980.4	6107.5	5930.0	5381.2	4936.7	4906.5	4909.2	5312.6	5153.5
50°	5565.1	5640.1	5925.5	6215.4	6176.1	5770.9	5405.0	5394.9	5451.7	5924.6	5503.8
52.5°	5344.6	5435.2	5868.8	6283.1	6359.0	6106.6	5937.4	5909.0	6052.6	6588.6	5887.1
55°	4734.5	4870.8	5661.1	6320.6	6532.8	6427.6	6416.7	6467.9	6658.2	7313.1	6308.7
57.5°	4416.2	4518.7	5210.2	6327.0	6752.4	6800.8	6976.5	6989.3	7322.2	8082.3	6785.3
60°	4242.4	4333.0	4963.2	6284.9	7058.8	7262.8	7549.1	7594.8	7970.8	8915.6	7279.2
62.5°	4090.6	4168.3	4815.0	6139.5	7404.6	7947.9	8290.9	8312.9	8707.1	9835.8	7766.8
65°	3732.9	3821.6	4516.8	5994.1	7702.7	8804.1	9275.1	9249.5	9491.0	10629.8	8072.3
67.5°	3250.9	3363.4	3959.8	5491.9	7850.0	9739.8	10383.8	10351.7	10264.8	11150.3	8160.1
70°	2635.3	2695.6	3247.2	4623.8	7261.9	10231.0	11259.1	11225.3	10744.1	11218.9	7744.8
71°	2267.6	2361.8	2827.4	4107.0	6772.5	10081.0	11371.6	11362.5	10745.1	11029.5	7432.0
72.5°	1770.0	1827.6	2239.2	3182.3	5756.2	9228.5	11093.6	11128.3	10511.8	10503.6	6787.1
75°	1119.6	1145.2	1405.0	1873.3	3158.5	6535.6	9470.0	9564.2	9333.7	8597.3	5047.4
77.5°	650.4	683.3	841.5	1104.1	1364.7	3547.2	6776.1	6878.6	6485.3	4733.6	2066.3
80°	378.7	415.3	554.3	641.2	626.6	1316.3	3450.3	3625.0	2808.1	1195.5	579.9
82.5°	210.4	235.1	389.7	390.6	333.9	429.9	1085.8	1136.1	801.3	482.1	236.9
85°	152.8	172.9	251.5	227.8	160.1	184.8	377.8	396.1	323.8	203.1	76.8
87.5°	54.0	76.8	138.1	109.8	43.9	38.4	108.9	88.7	82.3	56.7	17.4
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°	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3	3021.3
2.5°	3037.7	3039.6	3030.4	3014.0	2997.5	2976.5	2952.7	2934.4	2926.1	2925.2	2924.3
5°	3070.7	3075.2	3040.5	2989.3	2932.5	2863.0	2803.6	2735.9	2718.5	2691.1	2699.3
7.5°	3123.7	3121.0	3052.4	2943.5	2810.9	2663.6	2539.2	2467.0	2392.0	2370.9	2371.8
10°	3199.6	3182.3	3052.4	2850.2	2628.9	2410.3	2236.5	2126.7	2067.2	2017.8	1999.5
12.5°	3280.1	3236.2	3023.1	2719.4	2394.7	2126.7	1940.1	1791.9	1753.5	1713.2	1714.2
15°	3357.0	3283.8	2965.5	2535.6	2142.2	1823.9	1642.8	1554.1	1542.2	1546.8	1545.9
17.5°	3426.5	3317.6	2877.7	2330.7	1847.7	1564.1	1468.1	1474.5	1506.5	1529.4	1532.1
20°	3496.9	3337.8	2746.9	2056.3	1569.6	1406.8	1410.5	1460.8	1509.3	1540.4	1544.9
22.5°	3563.7	3346.9	2593.2	1791.0	1368.4	1340.0	1394.0	1448.0	1495.5	1525.7	1530.3
25°	3607.6	3325.9	2375.5	1513.8	1269.6	1316.3	1373.0	1418.7	1459.0	1490.1	1497.4
27.5°	3619.5	3258.2	2105.7	1289.7	1223.9	1293.4	1345.5	1379.4	1410.5	1439.7	1445.2
30°	3613.1	3158.5	1809.3	1158.0	1197.4	1266.9	1307.1	1331.8	1369.3	1392.2	1396.8
32.5°	3603.0	3042.3	1500.1	1087.6	1175.4	1242.2	1266.0	1287.9	1287.0	1277.8	1284.2
35°	3606.7	2903.3	1249.5	1045.5	1156.2	1223.9	1244.0	1216.6	1137.9	1134.2	1130.6
37.5°	3625.9	2766.1	1067.5	1016.2	1146.1	1221.1	1232.1	1105.9	1036.4	1004.3	996.1
40°	3675.3	2606.0	947.6	994.3	1145.2	1242.2	1178.1	1050.1	916.5	854.3	849.8
42.5°	3741.2	2448.7	874.5	980.6	1156.2	1274.2	1156.2	971.4	826.0	789.4	783.9
45°	3839.0	2268.5	834.2	974.2	1172.7	1286.1	1148.9	913.8	789.4	760.1	760.1
47.5°	3949.7	2096.5	812.3	969.6	1193.7	1277.8	1083.9	895.5	772.0	775.7	793.1
50°	4059.5	1947.4	795.8	959.5	1212.0	1273.3	1057.4	894.6	776.6	823.2	854.3
52.5°	4186.6	1842.2	775.7	943.1	1212.0	1244.0	1049.2	912.9	789.4	803.1	816.8
55°	4340.3	1809.3	750.1	907.4	1190.0	1170.8	1044.6	939.4	798.5	766.5	772.0
57.5°	4543.3	1862.3	725.4	862.6	1139.7	1094.9	1042.8	946.7	777.5	751.0	745.5
60°	4779.3	1967.5	718.0	816.8	1071.1	1030.0	1031.8	925.7	748.2	720.8	725.4
62.5°	4944.9	2030.6	713.5	782.1	996.1	958.6	1005.3	900.1	735.4	711.6	716.2
65°	4944.9	1953.8	671.4	729.0	899.2	872.6	973.2	868.1	719.0	691.5	686.9
67.5°	4757.4	1729.7	607.4	649.4	792.1	774.8	928.4	829.6	694.3	673.2	662.2
70°	4268.9	1311.7	526.9	556.1	656.8	672.3	870.8	777.5	653.1	627.5	611.0
71°	4054.0	1142.5	493.0	508.6	604.6	627.5	843.4	755.5	634.8	598.2	568.9
72.5°	3639.6	962.3	441.8	448.2	516.8	558.0	785.7	713.5	600.0	547.9	515.0
75°	2765.2	702.5	355.8	352.2	382.3	442.7	665.0	635.7	526.0	455.5	436.3
77.5°	1194.6	382.3	266.2	268.9	259.8	335.7	523.2	546.1	451.0	370.5	353.1
80°	362.2	220.4	182.0	185.7	173.8	225.0	368.6	428.1	362.2	288.1	264.4
82.5°	185.7	131.7	124.4	122.6	110.7	127.1	223.2	292.7	258.9	180.2	159.2
85°	80.5	70.4	61.3	59.5	52.1	45.7	79.6	146.4	137.2	100.6	96.0
87.5°	20.1	18.3	11.9	11.0	6.4	0.9	0.0	0.0	0.0	0.0	0.0
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)