

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: P454100

Luminaire Tested: **GALN-SA5A-830-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454100
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-SA5A-830-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18623 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

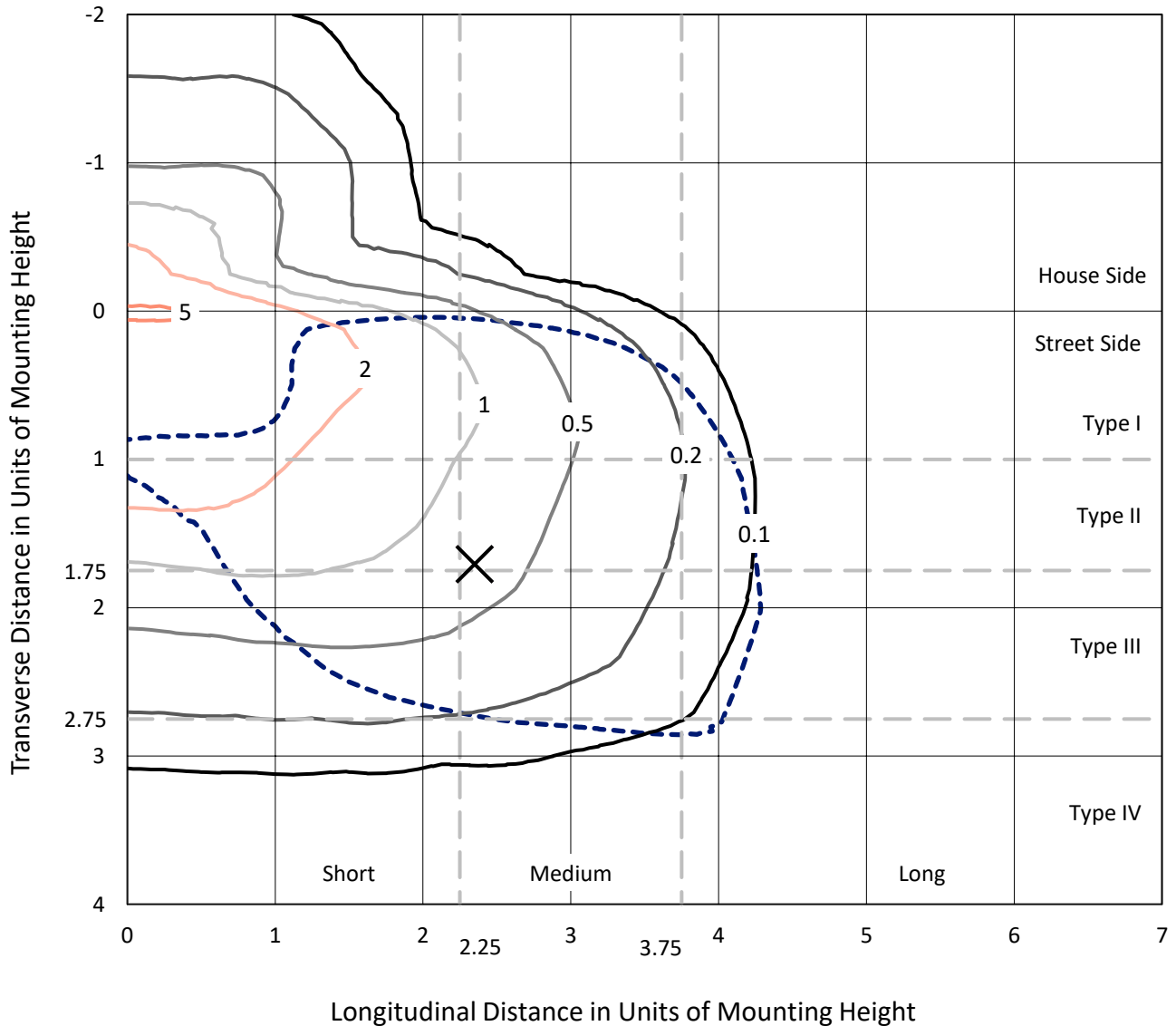
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

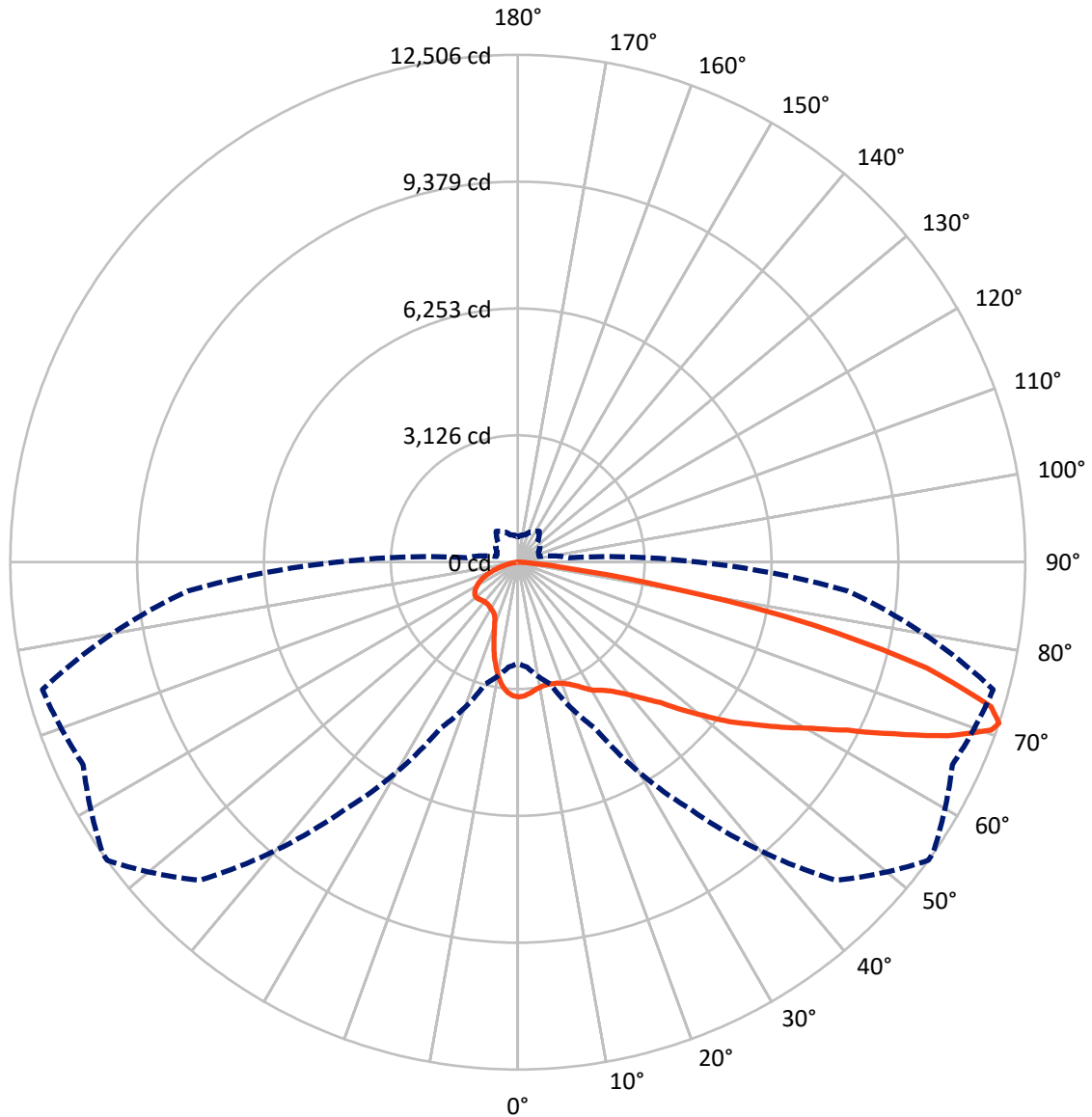
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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	3362.3	0.0	3362.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15260.7	0.0	15260.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	18623.0	0.0	18623.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.1	1.6
10°-20°	781.8	4.2
20°-30°	1301.8	7.0
30°-40°	1924.9	10.3
40°-50°	2711.3	14.6
50°-60°	3630.6	19.5
60°-70°	4576.1	24.6
70°-80°	3125.5	16.8
80°-90°	274.9	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°	18623.0	100.0
0°-180°	18623.0	100.0

Coefficient of Utilization



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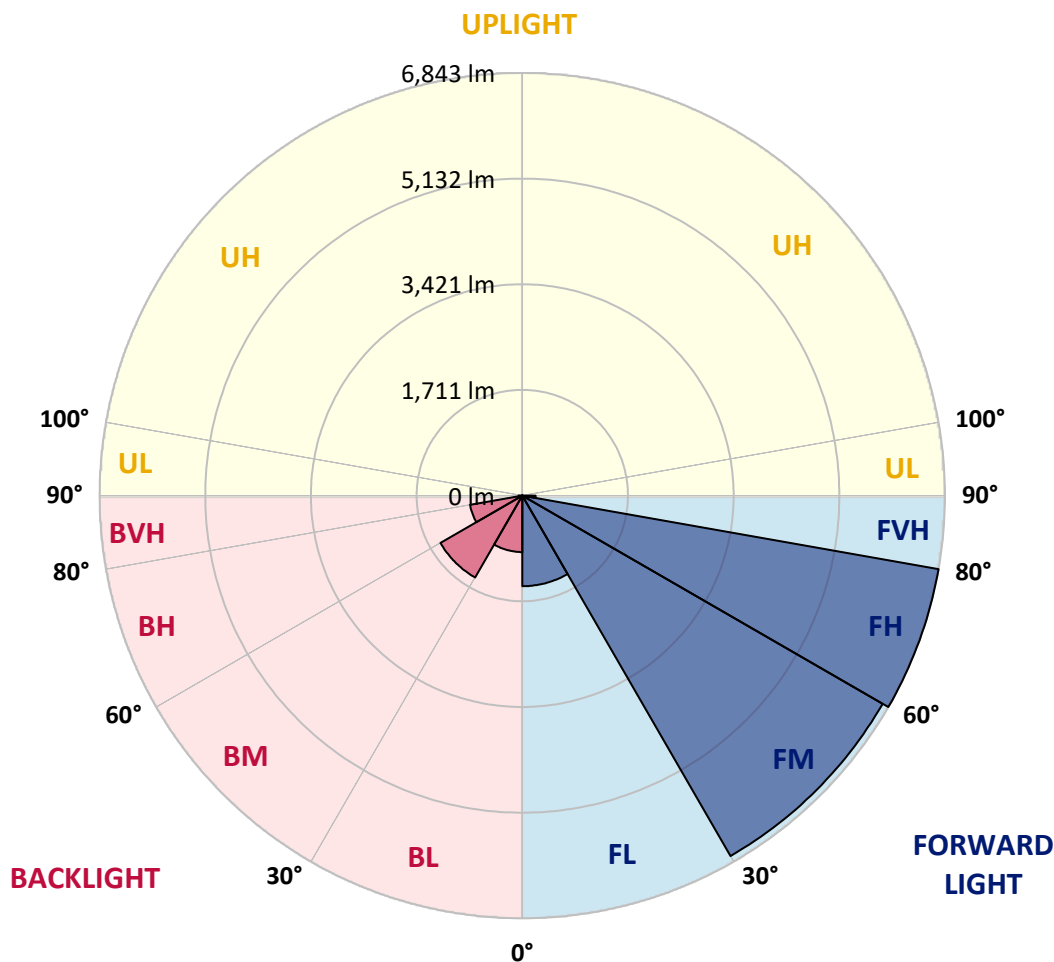
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1465.9	7.9			
FM (30°-60°)	6737.1	36.2			
FH (60°-80°)	6842.8	36.7			G3/7500
FVH (80°-90°)	214.8	1.2			G2/225
BL (0°-30°)	913.8	4.9	B2/1000		
BM (30°-60°)	1529.7	8.2	B2/2500		
BH (60°-80°)	858.7	4.6	B2/1000		G2/1000
BVH (80°-90°)	60.0	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°	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6
2.5°	3210.0	3225.0	3229.1	3239.1	3260.3	3277.4	3294.5	3292.4	3316.6	3326.6	3335.7
5°	3067.1	3071.1	3086.2	3106.3	3143.6	3190.8	3237.1	3238.1	3297.5	3344.7	3367.9
7.5°	2962.5	2975.6	2985.6	3006.8	3046.0	3097.3	3170.7	3176.8	3282.4	3375.9	3425.2
10°	2894.1	2909.2	2920.2	2946.4	2985.6	3043.0	3122.4	3133.5	3271.3	3425.2	3511.7
12.5°	2831.7	2846.8	2856.9	2891.1	2942.4	3012.8	3102.3	3115.4	3275.3	3482.6	3606.3
15°	2869.9	2882.0	2878.0	2888.1	2922.3	3002.7	3110.4	3123.4	3290.4	3537.9	3699.8
17.5°	3039.9	3050.0	3016.8	2978.6	2962.5	3021.8	3135.5	3149.6	3320.6	3595.2	3795.4
20°	3290.4	3317.6	3245.2	3159.7	3082.2	3090.2	3187.8	3202.9	3362.9	3652.6	3893.0
22.5°	3616.4	3636.5	3547.9	3407.1	3264.3	3190.8	3266.3	3275.3	3426.2	3727.0	3999.6
25°	3999.6	4011.7	3889.0	3707.9	3501.7	3362.9	3373.9	3390.0	3530.8	3811.5	4094.2
27.5°	4371.8	4410.0	4268.2	4046.9	3775.3	3543.9	3521.8	3531.9	3644.5	3858.8	4159.6
30°	4813.4	4810.4	4660.5	4404.0	4055.9	3741.1	3661.6	3659.6	3705.9	3881.9	4206.8
32.5°	5165.5	5206.7	5059.9	4780.2	4376.8	3945.3	3758.2	3754.2	3753.2	3922.2	4277.3
35°	5565.9	5571.9	5437.1	5155.4	4723.9	4201.8	3893.0	3872.9	3849.7	4008.7	4372.8
37.5°	5924.0	5952.1	5828.4	5512.5	5064.9	4468.4	4078.1	4065.0	3994.6	4158.6	4525.7
40°	6203.6	6224.8	6150.3	5849.5	5400.9	4756.1	4313.5	4289.3	4203.8	4404.0	4729.9
42.5°	6295.2	6338.4	6367.6	6219.7	5787.2	5097.1	4603.2	4573.0	4507.6	4776.2	4965.3
45°	6302.2	6370.6	6524.5	6531.6	6175.5	5505.5	4941.2	4920.1	4915.0	5253.0	5296.3
47.5°	6248.9	6318.3	6576.8	6716.7	6521.5	5917.9	5429.1	5395.9	5398.9	5842.5	5667.5
50°	6120.1	6202.6	6516.5	6835.4	6792.1	6346.5	5944.1	5933.0	5995.4	6515.5	6052.7
52.5°	5877.7	5977.3	6454.1	6909.8	6993.3	6715.7	6529.6	6498.4	6656.3	7245.8	6474.2
55°	5206.7	5356.6	6225.8	6951.0	7184.4	7068.7	7056.7	7113.0	7322.2	8042.5	6938.0
57.5°	4856.7	4969.3	5729.8	6958.1	7425.8	7479.2	7672.3	7686.4	8052.5	8888.5	7462.1
60°	4665.5	4765.1	5458.2	6911.8	7762.8	7987.2	8302.0	8352.3	8765.8	9804.9	8005.3
62.5°	4498.6	4584.1	5295.3	6751.9	8143.1	8740.6	9117.8	9142.0	9575.5	10816.9	8541.4
65°	4105.2	4202.8	4967.3	6591.9	8471.0	9682.2	10200.2	10172.1	10437.6	11690.0	8877.4
67.5°	3575.1	3698.8	4354.7	6039.7	8633.0	10711.2	11419.4	11384.2	11288.7	12262.4	8974.0
70°	2898.1	2964.5	3571.1	5085.0	7986.2	11251.4	12382.1	12344.9	11815.8	12337.9	8517.3
71°	2493.7	2597.3	3109.4	4516.7	7448.0	11086.5	12505.8	12495.8	11816.8	12129.6	8173.3
72.5°	1946.5	2009.9	2462.5	3499.7	6330.4	10148.9	12200.0	12238.3	11560.3	11551.2	7464.1
75°	1231.3	1259.4	1545.1	2060.2	3473.5	7187.4	10414.5	10518.1	10264.6	9454.8	5550.8
77.5°	715.2	751.4	925.5	1214.2	1500.9	3901.0	7452.0	7564.7	7132.1	5205.7	2272.4
80°	416.5	456.7	609.6	705.2	689.1	1447.5	3794.4	3986.5	3088.2	1314.8	637.8
82.5°	231.4	258.5	428.5	429.5	367.2	472.8	1194.1	1249.4	881.2	530.1	260.5
85°	168.0	190.1	276.6	250.5	176.0	203.2	415.5	435.6	356.1	223.3	84.5
87.5°	59.4	84.5	151.9	120.7	48.3	42.2	119.7	97.6	90.5	62.4	19.1
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°	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6	3322.6
2.5°	3340.7	3342.7	3332.7	3314.6	3296.5	3273.3	3247.2	3227.1	3218.0	3217.0	3216.0
5°	3376.9	3382.0	3343.7	3287.4	3225.0	3148.6	3083.2	3008.8	2989.7	2959.5	2968.5
7.5°	3435.3	3432.3	3356.8	3237.1	3091.3	2929.3	2792.5	2713.0	2630.5	2607.4	2608.4
10°	3518.8	3499.7	3356.8	3134.5	2891.1	2650.7	2459.5	2338.8	2273.4	2219.1	2199.0
12.5°	3607.3	3559.0	3324.6	2990.7	2633.6	2338.8	2133.6	1970.6	1928.4	1884.1	1885.1
15°	3691.8	3611.3	3261.3	2788.5	2355.9	2005.8	1806.7	1709.1	1696.0	1701.0	1700.0
17.5°	3768.3	3648.5	3164.7	2563.1	2032.0	1720.2	1614.5	1621.6	1656.8	1681.9	1684.9
20°	3845.7	3670.7	3020.8	2261.4	1726.2	1547.1	1551.2	1606.5	1659.8	1694.0	1699.0
22.5°	3919.1	3680.7	2851.8	1969.6	1504.9	1473.7	1533.1	1592.4	1644.7	1677.9	1682.9
25°	3967.4	3657.6	2612.4	1664.8	1396.2	1447.5	1509.9	1560.2	1604.5	1638.7	1646.7
27.5°	3980.5	3583.2	2315.7	1418.4	1345.9	1422.4	1479.7	1517.0	1551.2	1583.3	1589.4
30°	3973.5	3473.5	1989.7	1273.5	1316.8	1393.2	1437.5	1464.6	1505.9	1531.0	1536.1
32.5°	3962.4	3345.8	1649.7	1196.1	1292.6	1366.1	1392.2	1416.4	1415.4	1405.3	1412.3
35°	3966.4	3192.9	1374.1	1149.8	1271.5	1345.9	1368.1	1337.9	1251.4	1247.4	1243.3
37.5°	3987.5	3042.0	1173.9	1117.6	1260.4	1342.9	1355.0	1216.2	1139.7	1104.5	1095.5
40°	4041.9	2865.9	1042.2	1093.5	1259.4	1366.1	1295.7	1154.8	1008.0	939.5	934.5
42.5°	4114.3	2692.9	961.7	1078.4	1271.5	1401.3	1271.5	1068.3	908.4	868.1	862.1
45°	4221.9	2494.7	917.4	1071.3	1289.6	1414.4	1263.5	1004.9	868.1	835.9	835.9
47.5°	4343.6	2305.6	893.3	1066.3	1312.8	1405.3	1192.0	984.8	849.0	853.0	872.1
50°	4464.4	2141.6	875.2	1055.2	1332.9	1400.3	1162.9	983.8	854.0	905.3	939.5
52.5°	4604.2	2026.0	853.0	1037.1	1332.9	1368.1	1153.8	1003.9	868.1	883.2	898.3
55°	4773.2	1989.7	824.9	997.9	1308.7	1287.6	1148.8	1033.1	878.2	843.0	849.0
57.5°	4996.5	2048.1	797.7	948.6	1253.4	1204.1	1146.8	1041.1	855.0	825.9	819.8
60°	5256.0	2163.8	789.7	898.3	1178.0	1132.7	1134.7	1018.0	822.9	792.7	797.7
62.5°	5438.1	2233.2	784.6	860.1	1095.5	1054.2	1105.5	989.8	808.8	782.6	787.7
65°	5438.1	2148.7	738.4	801.7	988.8	959.7	1070.3	954.6	790.7	760.5	755.5
67.5°	5231.9	1902.2	667.9	714.2	871.1	852.0	1021.0	912.4	763.5	740.4	728.3
70°	4694.7	1442.5	579.4	611.6	722.3	739.4	957.7	855.0	718.2	690.1	672.0
71°	4458.3	1256.4	542.2	559.3	664.9	690.1	927.5	830.9	698.1	657.9	625.7
72.5°	4002.6	1058.2	485.9	492.9	568.4	613.6	864.1	784.6	659.9	602.6	566.3
75°	3041.0	772.6	391.3	387.3	420.5	486.9	731.3	699.1	578.4	501.0	479.8
77.5°	1313.8	420.5	292.7	295.7	285.7	369.2	575.4	600.5	495.9	407.4	388.3
80°	398.4	242.4	200.2	204.2	191.1	247.5	405.4	470.8	398.4	316.9	290.7
82.5°	204.2	144.9	136.8	134.8	121.7	139.8	245.4	321.9	284.7	198.2	175.0
85°	88.5	77.5	67.4	65.4	57.3	50.3	87.5	161.0	150.9	110.7	105.6
87.5°	22.1	20.1	13.1	12.1	7.0	1.0	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)