

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: P298873

Luminaire Tested: **GLNA-AF-04-LED-E1-T2-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-T2-7027
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20402.1 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

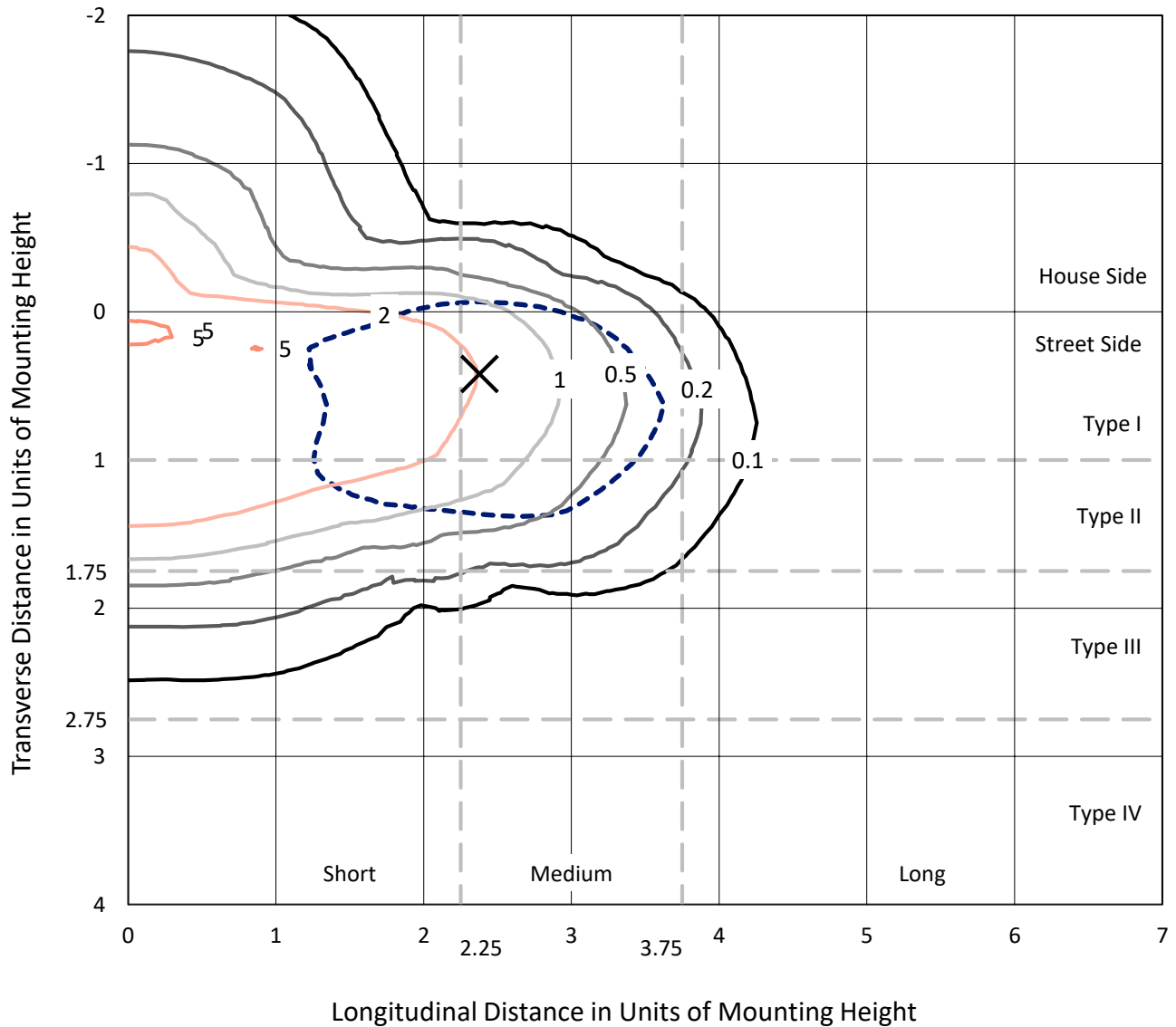
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P298873
 CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

Iso-Footcandle Lines of Horizontal Illumination

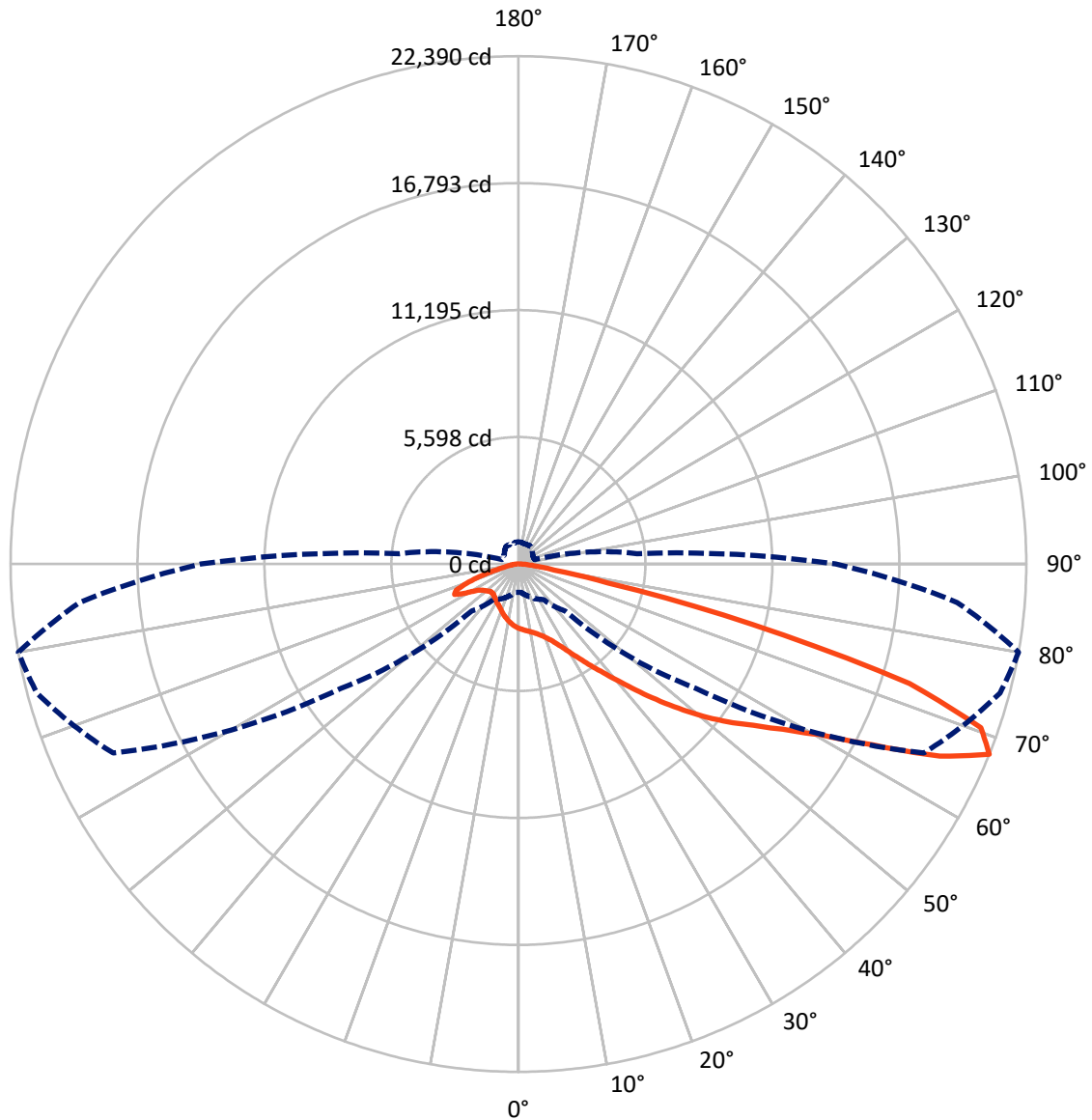
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P298873
CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P298873

CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3757.3	0.0	3757.3
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	16644.8	0.0	16644.8
	% Fixture	81.6	0.0	81.6
Total	Lumens	20402.1	0.0	20402.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.5	1.3
10°-20°	753.2	3.7
20°-30°	1246.7	6.1
30°-40°	2039.3	10.0
40°-50°	3292.7	16.1
50°-60°	4753.6	23.3
60°-70°	5245.9	25.7
70°-80°	2418.0	11.9
80°-90°	391.1	1.9
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°	20402.1	100.0
0°-180°	20402.1	100.0



REPORT NUMBER: P298873

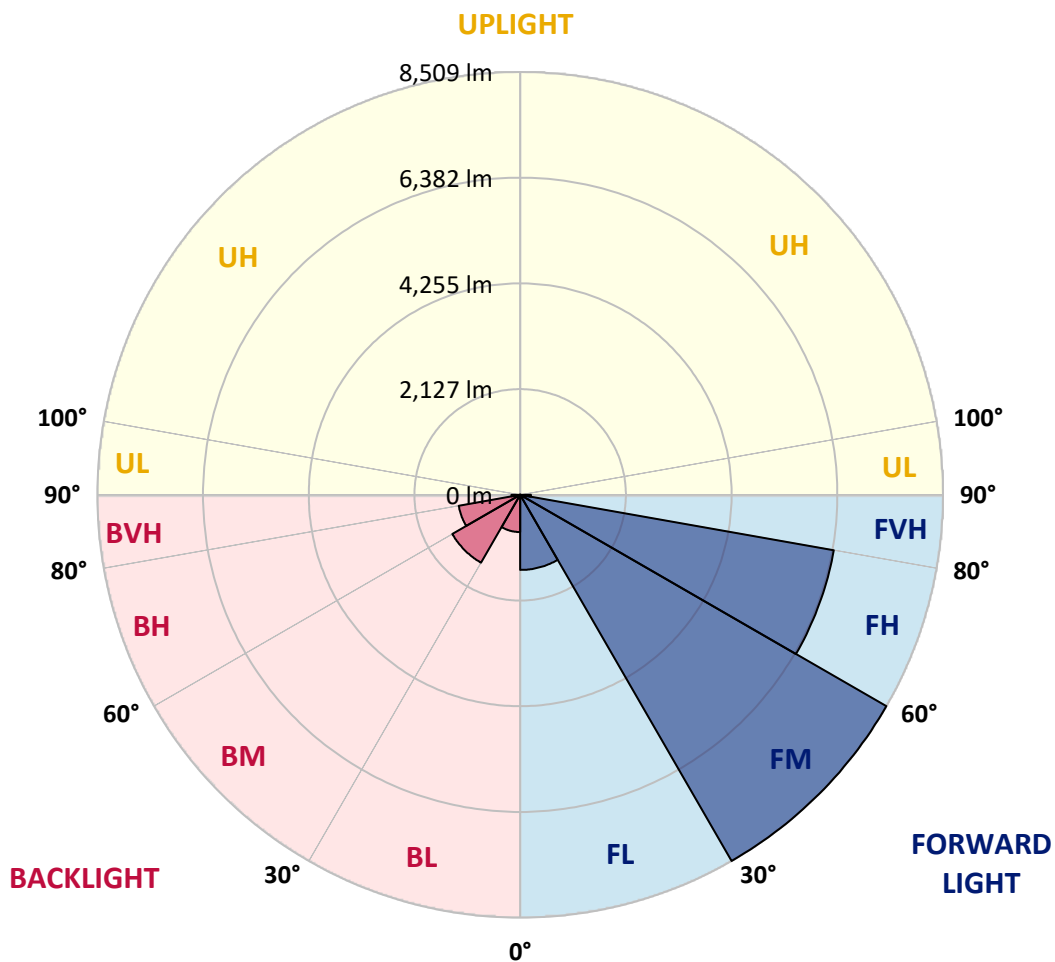
CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1511.8	7.4			
FM (30°-60°)	8509.2	41.7			
FH (60°-80°)	6408.8	31.4			G3/7500
FVH (80°-90°)	215.0	1.1			G2/225
BL (0°-30°)	749.6	3.7	B2/1000		
BM (30°-60°)	1576.4	7.7	B2/2500		
BH (60°-80°)	1255.2	6.2	B3/2500		G3/2500
BVH (80°-90°)	176.1	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





REPORT NUMBER: P298873

CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4
2.5°	3100.6	3082.5	3085.5	3080.5	3065.5	3039.3	3011.2	2960.0	2906.8	2878.6	2856.5
5°	3359.7	3354.7	3347.7	3331.6	3293.5	3239.2	3171.9	3081.5	2984.1	2932.9	2883.7
7.5°	3553.6	3550.6	3541.5	3531.5	3494.3	3429.0	3327.6	3199.0	3057.4	2987.1	2910.8
10°	3569.7	3574.7	3581.7	3608.8	3613.9	3578.7	3475.3	3319.6	3133.8	3043.4	2945.9
12.5°	3433.1	3444.1	3471.2	3540.5	3613.9	3657.1	3603.8	3446.1	3223.1	3113.7	2990.1
15°	3252.3	3258.3	3291.4	3386.9	3518.4	3652.0	3702.2	3585.7	3338.7	3204.1	3056.4
17.5°	3174.9	3177.9	3201.0	3264.3	3386.9	3577.7	3757.5	3737.4	3480.3	3316.6	3137.8
20°	3135.8	3142.8	3175.9	3238.2	3315.6	3482.3	3765.5	3901.1	3649.0	3457.2	3240.2
22.5°	3247.3	3244.2	3256.3	3287.4	3352.7	3453.2	3759.5	4069.9	3864.0	3638.0	3373.8
25°	3507.4	3518.4	3497.3	3462.2	3483.3	3553.6	3791.6	4252.7	4133.1	3870.0	3548.6
27.5°	3878.0	3867.0	3835.8	3753.5	3710.3	3740.4	3898.1	4449.5	4467.6	4175.3	3779.6
30°	4247.6	4238.6	4208.5	4108.0	4019.6	3994.5	4105.0	4675.5	4866.4	4541.9	4062.8
32.5°	4631.3	4621.3	4593.2	4492.7	4386.3	4328.0	4399.3	4936.7	5336.4	4979.9	4396.3
35°	5104.4	5085.3	5026.1	4886.4	4782.0	4736.8	4769.9	5265.1	5878.8	5498.1	4801.1
37.5°	5549.4	5578.5	5518.2	5325.4	5189.8	5173.7	5210.9	5665.9	6463.4	6077.7	5266.1
40°	5996.3	6001.3	5947.1	5789.4	5649.8	5623.7	5717.1	6152.0	7153.4	6770.7	5831.6
42.5°	6458.3	6468.4	6377.0	6231.3	6128.9	6133.9	6240.4	6721.5	7944.9	7587.3	6482.5
45°	7005.7	7020.8	6920.4	6729.5	6636.1	6823.9	6779.8	7360.3	8812.7	8515.4	7229.7
47.5°	7578.3	7601.4	7525.0	7346.2	7229.7	7487.9	7319.1	8068.4	9746.8	9510.7	8050.3
50°	7890.6	7923.8	7998.1	7985.0	7959.9	7916.7	7920.8	8827.7	10710.0	10547.3	8894.0
52.5°	7722.9	7721.9	7993.1	8322.5	8674.1	8700.2	8654.0	9628.3	11610.0	11560.7	9688.5
55°	6955.5	7007.8	7418.6	8056.4	9016.6	9616.2	9752.8	10545.3	12493.8	12551.1	10495.1
57.5°	5677.9	5721.1	6275.5	7164.4	8554.5	10160.6	11315.7	11878.1	13482.2	13749.3	11568.8
60°	3850.9	3903.1	4490.7	5558.4	7311.1	9857.3	12803.2	14256.6	14665.4	15273.0	13075.4
62.5°	2262.9	2310.1	2789.2	3506.4	5147.6	8448.1	13456.1	17640.4	16544.6	17572.1	15373.5
65°	1557.8	1590.0	1823.0	2182.6	2958.0	5690.0	12646.5	19976.7	19436.3	20420.6	18038.2
67.5°	1253.5	1249.5	1434.3	1679.4	1904.4	2933.9	9563.0	19712.5	21979.5	22390.3	19421.2
70°	1032.5	1028.5	1154.1	1357.0	1521.7	1652.3	5208.9	16635.0	21461.2	21627.9	18147.6
72.5°	863.8	867.8	948.2	1098.8	1248.5	1244.5	2289.0	11702.4	16883.1	18036.2	14466.5
75°	729.2	731.2	784.4	890.9	1013.4	1002.4	1241.4	6339.8	9814.1	10616.6	8019.2
77.5°	620.7	622.7	656.9	716.1	803.5	799.5	906.0	2739.0	4094.0	4043.7	2743.0
80°	553.4	553.4	569.5	580.5	628.8	610.7	671.9	1315.8	1730.6	1598.0	1094.8
82.5°	433.9	435.9	534.3	530.3	495.2	472.1	472.1	775.4	917.0	847.7	640.8
85°	244.1	243.1	344.5	415.8	435.9	332.5	329.4	433.9	499.2	439.9	310.4
87.5°	104.5	106.5	159.7	184.8	247.1	206.9	203.9	224.0	254.1	220.0	143.6
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: P298873

CATALOG NUMBER: GLNA-AF-04-LED-E1-T2-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4	2834.4
2.5°	2835.4	2809.3	2752.1	2680.8	2616.5	2574.3	2536.1	2480.9	2483.9	2445.7	2417.6
5°	2833.4	2779.2	2646.6	2488.9	2337.3	2227.8	2145.4	2071.1	2053.0	2017.9	1996.8
7.5°	2835.4	2747.1	2524.1	2272.0	2084.1	1945.5	1875.2	1836.1	1827.0	1815.0	1816.0
10°	2842.5	2717.9	2389.5	2069.1	1872.2	1780.8	1763.7	1775.8	1789.9	1793.9	1794.9
12.5°	2858.5	2691.8	2241.8	1888.3	1739.6	1711.5	1740.6	1781.8	1808.9	1822.0	1821.0
15°	2894.7	2671.7	2100.2	1746.7	1666.3	1681.4	1735.6	1793.9	1833.0	1851.1	1852.1
17.5°	2933.9	2642.6	1954.6	1638.2	1612.1	1650.2	1717.5	1785.8	1834.0	1854.1	1858.2
20°	2985.1	2606.4	1801.9	1556.8	1560.9	1604.0	1667.3	1735.6	1788.9	1805.9	1814.0
22.5°	3052.4	2567.3	1668.3	1490.5	1502.6	1535.7	1585.0	1644.2	1690.4	1698.5	1705.5
25°	3142.8	2525.1	1561.9	1430.3	1435.3	1454.4	1487.5	1522.7	1554.8	1545.8	1552.8
27.5°	3264.3	2488.9	1482.5	1375.0	1366.0	1370.0	1387.1	1398.1	1415.2	1390.1	1393.1
30°	3407.0	2449.8	1421.2	1326.8	1301.7	1294.7	1298.7	1304.7	1317.8	1283.6	1278.6
32.5°	3572.7	2402.5	1364.0	1284.6	1249.5	1235.4	1237.4	1253.5	1303.7	1282.6	1271.6
35°	3765.5	2349.3	1303.7	1238.4	1214.3	1194.2	1192.2	1242.5	1392.1	1379.1	1369.0
37.5°	3991.5	2296.1	1243.5	1186.2	1188.2	1166.1	1159.1	1216.3	1409.2	1358.0	1350.9
40°	4278.8	2268.0	1192.2	1131.0	1156.1	1153.1	1139.0	1168.1	1296.7	1203.3	1191.2
42.5°	4634.3	2272.0	1154.1	1071.7	1117.9	1150.0	1128.0	1129.0	1175.2	1104.8	1093.8
45°	5073.3	2319.2	1126.9	1024.5	1074.7	1147.0	1123.9	1107.9	1111.9	1074.7	1068.7
47.5°	5585.5	2416.6	1107.9	985.3	1033.5	1136.0	1122.9	1101.8	1092.8	1072.7	1067.7
50°	6155.0	2558.2	1093.8	948.2	996.4	1117.9	1123.9	1095.8	1085.8	1077.7	1074.7
52.5°	6714.5	2719.9	1072.7	916.0	967.2	1095.8	1126.9	1089.8	1078.7	1072.7	1069.7
55°	7338.2	2921.8	1040.6	888.9	943.1	1067.7	1126.9	1080.7	1068.7	1069.7	1068.7
57.5°	8180.9	3248.3	1002.4	865.8	914.0	1033.5	1107.9	1070.7	1055.6	1056.6	1057.6
60°	9497.7	3823.8	956.2	842.7	877.9	993.4	1081.7	1048.6	1033.5	1037.6	1038.6
62.5°	11434.2	4668.5	895.9	808.5	839.7	950.2	1045.6	1020.5	1005.4	1015.5	1015.5
65°	13447.0	5413.8	821.6	765.4	799.5	903.0	1000.4	985.3	970.3	993.4	992.4
67.5°	13988.4	5247.0	747.3	718.2	759.3	850.7	946.2	938.1	930.1	970.3	968.2
70°	12426.5	4212.5	679.0	669.9	715.1	794.5	887.9	887.9	882.9	913.0	906.0
72.5°	9467.6	2987.1	613.7	618.7	664.9	733.2	824.6	831.7	823.6	838.7	832.7
75°	5068.2	1709.5	548.4	562.5	602.6	670.9	754.3	761.3	756.3	755.3	758.3
77.5°	1684.4	835.7	480.1	502.2	537.4	606.7	681.0	692.0	680.0	678.0	677.0
80°	750.3	525.3	404.8	433.9	465.0	533.3	603.6	612.7	599.6	617.7	594.6
82.5°	482.1	345.5	324.4	356.6	386.7	460.0	526.3	528.3	516.3	599.6	511.2
85°	234.0	213.9	244.1	273.2	299.3	361.6	435.9	436.9	406.8	370.6	357.6
87.5°	116.5	124.5	162.7	188.8	201.9	248.1	317.4	311.4	298.3	271.2	250.1
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)