

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: P299005

Luminaire Tested: **GLNA-AF-06-LED-E1-T2-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299005
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-06-LED-E1-T2-7027-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19927.8 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 193
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

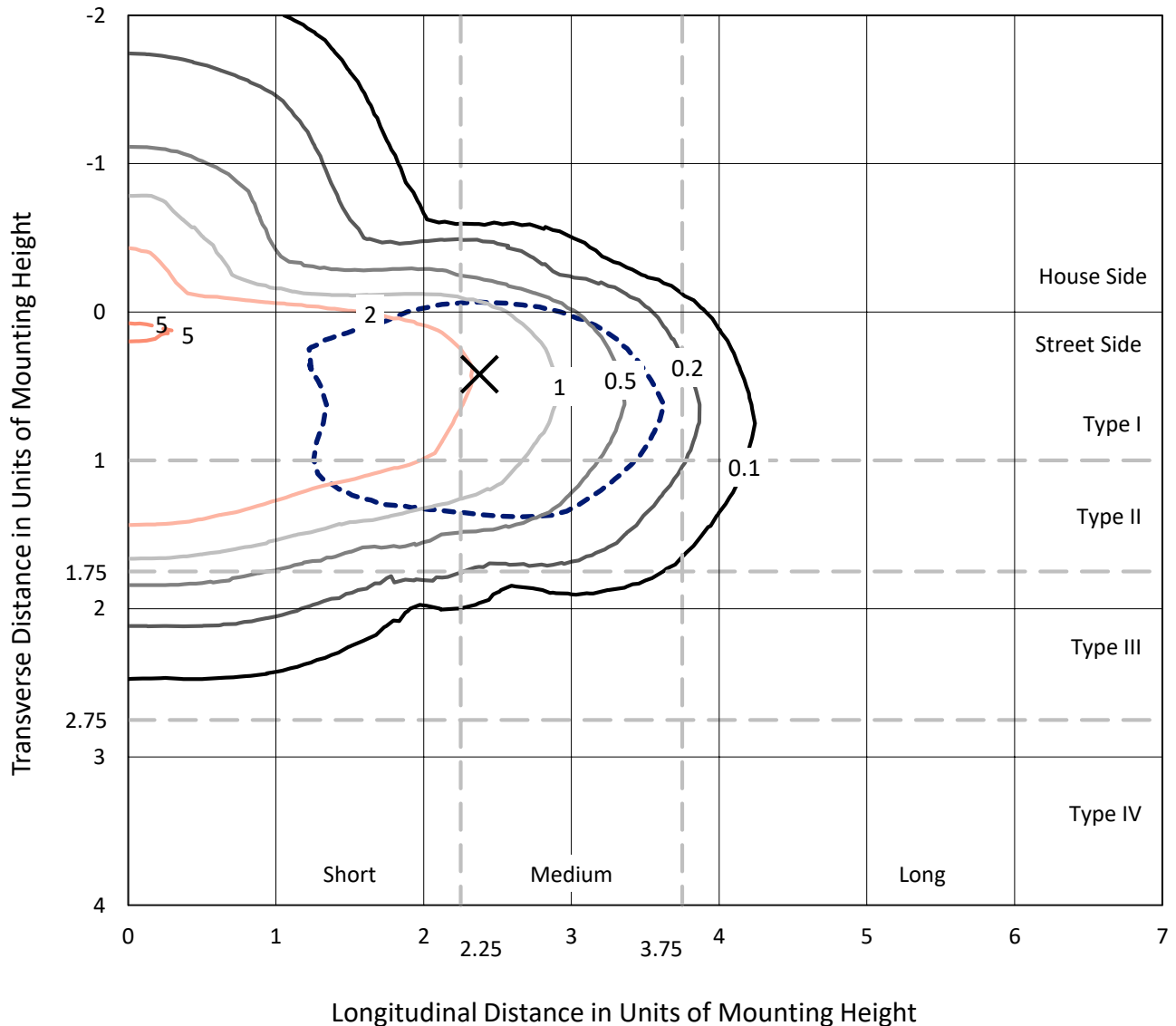


REPORT NUMBER: P299005

CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

Iso-Footcandle Lines of Horizontal Illumination

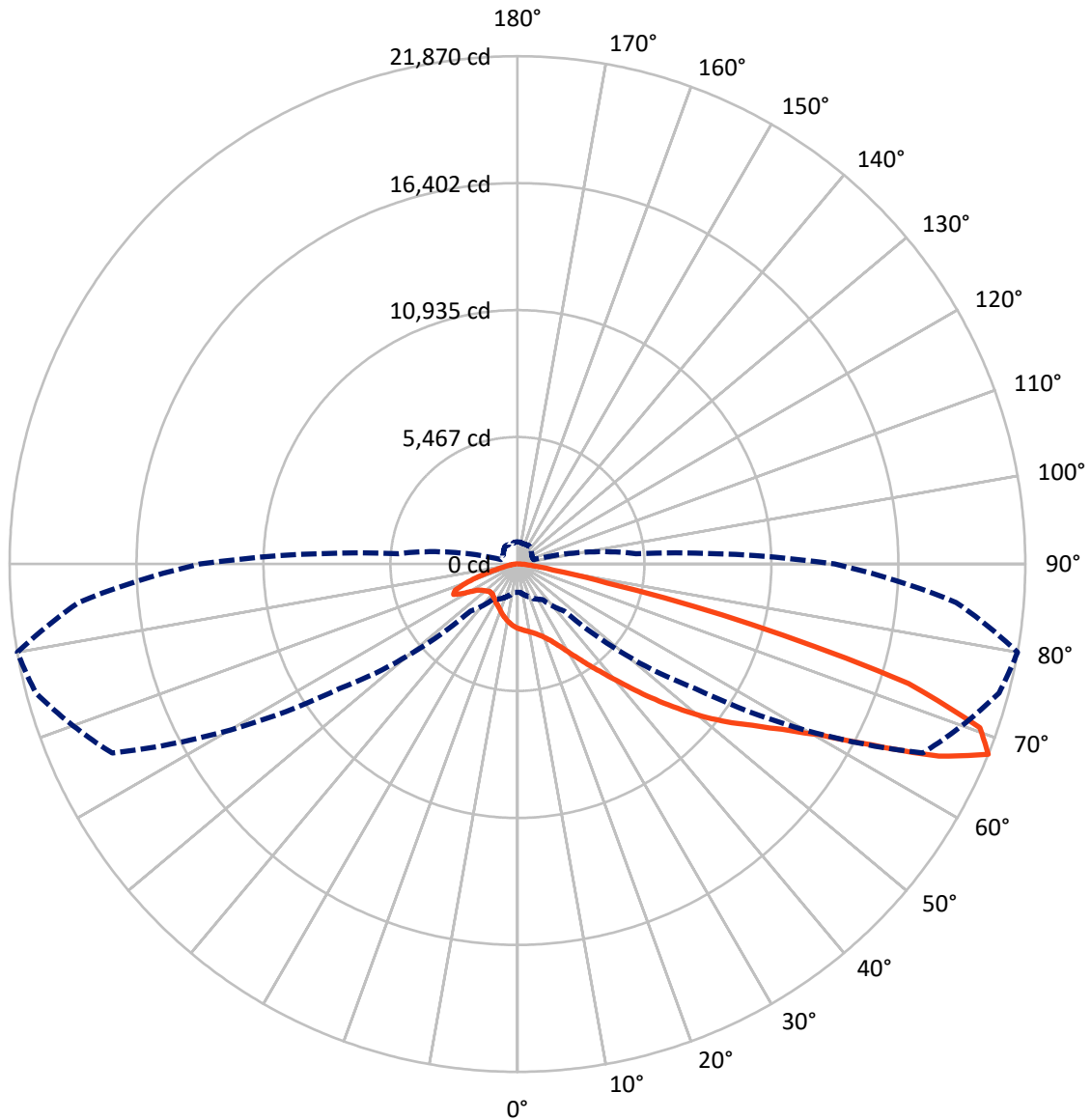
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P299005
CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299005

CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3669.9	0.0	3669.9
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	16257.8	0.0	16257.8
	% Fixture	81.6	0.0	81.6
Total	Lumens	19927.8	0.0	19927.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.4	1.3
10°-20°	735.7	3.7
20°-30°	1217.7	6.1
30°-40°	1991.9	10.0
40°-50°	3216.1	16.1
50°-60°	4643.1	23.3
60°-70°	5124.0	25.7
70°-80°	2361.8	11.9
80°-90°	382.0	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°	19927.8	100.0
0°-180°	19927.8	100.0



REPORT NUMBER: P299005

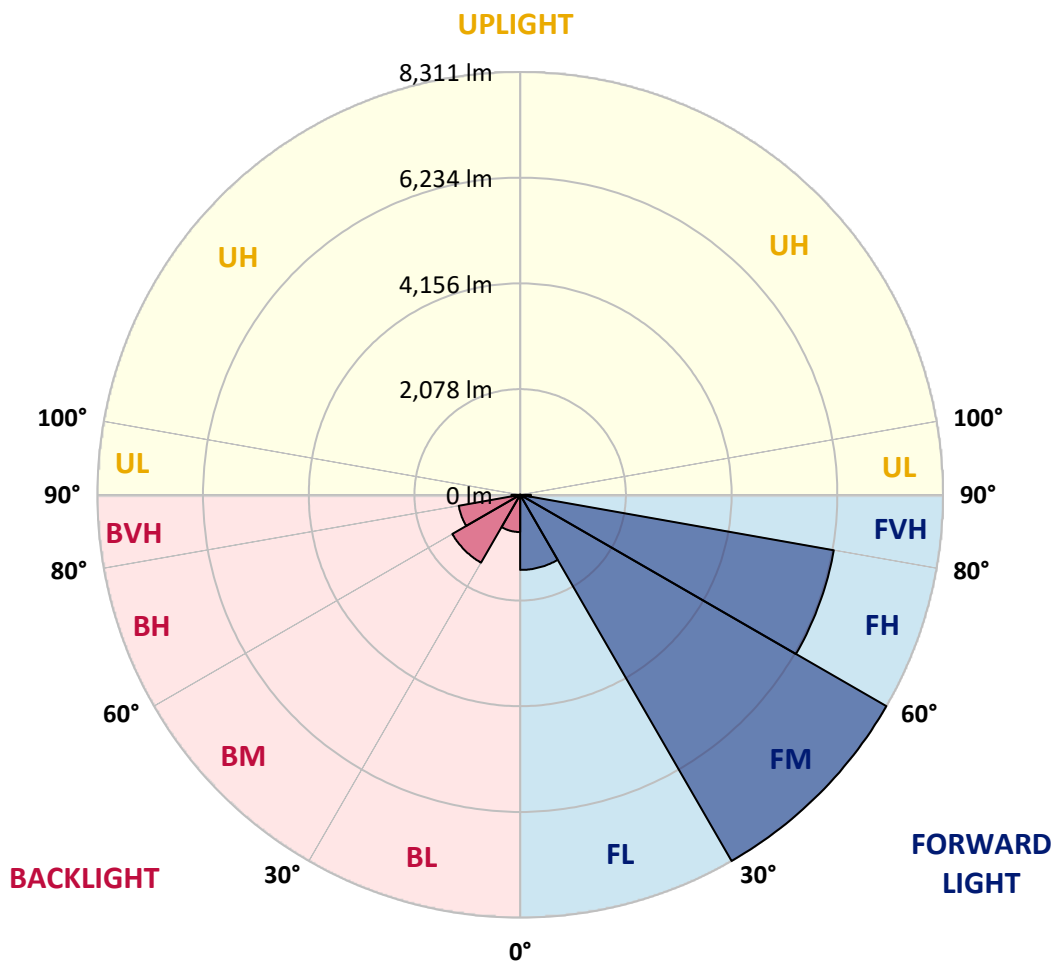
CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1476.6	7.4			
FM (30°-60°)	8311.4	41.7			
FH (60°-80°)	6259.8	31.4			G3/7500
FVH (80°-90°)	210.0	1.1			G2/225
BL (0°-30°)	732.2	3.7	B2/1000		
BM (30°-60°)	1539.8	7.7	B2/2500		
BH (60°-80°)	1226.0	6.2	B3/2500		G3/2500
BVH (80°-90°)	172.0	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: P299005

CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5
2.5°	3028.5	3010.9	3013.8	3008.9	2994.2	2968.7	2941.2	2891.2	2839.2	2811.7	2790.1
5°	3281.6	3276.7	3269.9	3254.2	3216.9	3163.9	3098.2	3009.9	2914.7	2864.7	2816.6
7.5°	3471.0	3468.0	3459.2	3449.4	3413.1	3349.3	3250.2	3124.7	2986.3	2917.7	2843.1
10°	3486.7	3491.6	3498.5	3524.9	3529.8	3495.5	3394.5	3242.4	3060.9	2972.6	2877.4
12.5°	3353.3	3364.1	3390.5	3458.2	3529.8	3572.0	3520.0	3366.0	3148.2	3041.3	2920.6
15°	3176.7	3182.6	3214.9	3308.1	3436.6	3567.1	3616.2	3502.4	3261.0	3129.6	2985.4
17.5°	3101.1	3104.1	3126.6	3188.4	3308.1	3494.5	3670.1	3650.5	3399.4	3239.5	3064.8
20°	3062.9	3069.7	3102.1	3162.9	3238.5	3401.3	3678.0	3810.4	3564.2	3376.8	3164.9
22.5°	3171.8	3168.8	3180.6	3211.0	3274.8	3372.9	3672.1	3975.3	3774.1	3553.4	3295.4
25°	3425.9	3436.6	3416.0	3381.7	3402.3	3471.0	3703.5	4153.8	4037.1	3780.0	3466.1
27.5°	3787.9	3777.1	3746.7	3666.2	3624.0	3653.5	3807.5	4346.1	4363.8	4078.3	3691.7
30°	4148.9	4140.1	4110.6	4012.5	3926.2	3901.7	4009.6	4566.8	4753.2	4436.3	3968.4
32.5°	4523.7	4513.9	4486.4	4388.3	4284.3	4227.4	4297.0	4821.9	5212.4	4864.1	4294.1
35°	4985.7	4967.1	4909.2	4772.9	4670.8	4626.7	4659.0	5142.7	5742.1	5370.3	4689.5
37.5°	5420.4	5448.8	5389.9	5201.6	5069.1	5053.4	5089.7	5534.2	6313.1	5936.4	5143.7
40°	5856.9	5861.8	5808.8	5654.8	5518.5	5492.9	5584.2	6009.0	6987.1	6613.3	5696.0
42.5°	6308.2	6318.0	6228.7	6086.5	5986.4	5991.3	6095.3	6565.2	7760.2	7410.9	6331.8
45°	6842.9	6857.6	6759.5	6573.1	6481.9	6665.3	6622.1	7189.2	8607.8	8317.4	7061.7
47.5°	7402.1	7424.7	7350.1	7175.5	7061.7	7313.8	7149.0	7880.8	9520.2	9289.6	7863.2
50°	7707.2	7739.6	7812.2	7799.4	7774.9	7732.7	7736.6	8622.5	10461.0	10302.1	8687.3
52.5°	7543.4	7542.4	7807.3	8129.1	8472.4	8497.9	8452.8	9404.4	11340.1	11292.0	9463.3
55°	6793.8	6844.8	7246.1	7869.1	8807.0	9392.7	9526.1	10300.1	12203.4	12259.3	10251.1
57.5°	5545.9	5588.1	6129.7	6997.9	8355.7	9924.4	11052.6	11602.0	13168.8	13429.7	11299.8
60°	3761.4	3812.4	4386.3	5429.2	7141.1	9628.1	12505.6	13925.2	14324.4	14918.0	12771.4
62.5°	2210.3	2256.4	2724.4	3424.9	5027.9	8251.7	13143.2	17230.3	16160.0	17163.6	15016.1
65°	1521.6	1553.0	1780.6	2131.8	2889.2	5557.7	12352.5	19512.3	18984.5	19945.9	17618.8
67.5°	1224.4	1220.4	1401.0	1640.3	1860.1	2865.7	9340.7	19254.3	21468.5	21869.8	18969.8
70°	1008.5	1004.6	1127.2	1325.4	1486.3	1613.8	5087.8	16248.3	20962.3	21125.1	17725.8
72.5°	843.7	847.6	926.1	1073.3	1219.5	1215.5	2235.8	11430.3	16490.6	17616.9	14130.2
75°	712.2	714.2	766.2	870.2	989.9	979.1	1212.6	6192.4	9585.9	10369.8	7832.8
77.5°	606.3	608.3	641.6	699.5	784.8	780.9	884.9	2675.3	3998.8	3949.7	2679.3
80°	540.6	540.6	556.3	567.1	614.1	596.5	656.3	1285.2	1690.4	1560.9	1069.4
82.5°	423.8	425.8	521.9	518.0	483.7	461.1	461.1	757.4	895.7	828.0	625.9
85°	238.4	237.4	336.5	406.2	425.8	324.7	321.8	423.8	487.6	429.7	303.1
87.5°	102.0	104.0	156.0	180.5	241.3	202.1	199.2	218.8	248.2	214.9	140.3
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: P299005

CATALOG NUMBER: GLNA-AF-06-LED-E1-T2-7027-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5	2768.5
2.5°	2769.5	2744.0	2688.1	2618.4	2555.7	2514.5	2477.2	2423.2	2426.2	2388.9	2361.4
5°	2767.6	2714.6	2585.1	2431.1	2282.9	2176.0	2095.5	2022.9	2005.3	1970.9	1950.3
7.5°	2769.5	2683.2	2465.4	2219.2	2035.7	1900.3	1831.6	1793.4	1784.5	1772.8	1773.8
10°	2776.4	2654.7	2333.9	2021.0	1828.7	1739.4	1722.7	1734.5	1748.2	1752.2	1753.2
12.5°	2792.1	2629.2	2189.7	1844.4	1699.2	1671.7	1700.2	1740.4	1766.9	1779.6	1778.7
15°	2827.4	2609.6	2051.4	1706.1	1627.6	1642.3	1695.3	1752.2	1790.4	1808.1	1809.1
17.5°	2865.7	2581.2	1909.1	1600.1	1574.6	1611.9	1677.6	1744.3	1791.4	1811.0	1815.0
20°	2915.7	2545.8	1760.0	1520.6	1524.6	1566.8	1628.6	1695.3	1747.3	1763.9	1771.8
22.5°	2981.4	2507.6	1629.5	1455.9	1467.7	1500.0	1548.1	1606.0	1651.1	1659.0	1665.8
25°	3069.7	2466.4	1525.5	1397.0	1401.9	1420.6	1452.9	1487.3	1518.7	1509.8	1516.7
27.5°	3188.4	2431.1	1448.0	1343.1	1334.2	1338.2	1354.8	1365.6	1382.3	1357.8	1360.7
30°	3327.8	2392.8	1388.2	1296.0	1271.5	1264.6	1268.5	1274.4	1287.1	1253.8	1248.9
32.5°	3489.6	2346.7	1332.3	1254.8	1220.4	1206.7	1208.7	1224.4	1273.4	1252.8	1242.0
35°	3678.0	2294.7	1273.4	1209.6	1186.1	1166.5	1164.5	1213.6	1359.7	1347.0	1337.2
37.5°	3898.7	2242.7	1214.6	1158.6	1160.6	1139.0	1132.1	1188.1	1376.4	1326.4	1319.5
40°	4179.3	2215.2	1164.5	1104.7	1129.2	1126.3	1112.5	1141.0	1266.5	1175.3	1163.5
42.5°	4526.6	2219.2	1127.2	1046.8	1091.9	1123.3	1101.7	1102.7	1147.8	1079.2	1068.4
45°	4955.3	2265.3	1100.7	1000.7	1049.7	1120.4	1097.8	1082.1	1086.0	1049.7	1043.8
47.5°	5455.7	2360.4	1082.1	962.4	1009.5	1109.6	1096.8	1076.2	1067.4	1047.8	1042.9
50°	6011.9	2498.8	1068.4	926.1	973.2	1091.9	1097.8	1070.3	1060.5	1052.7	1049.7
52.5°	6558.4	2656.7	1047.8	894.7	944.8	1070.3	1100.7	1064.4	1053.7	1047.8	1044.8
55°	7167.6	2853.9	1016.4	868.2	921.2	1042.9	1100.7	1055.6	1043.8	1044.8	1043.8
57.5°	7990.7	3172.7	979.1	845.7	892.8	1009.5	1082.1	1045.8	1031.1	1032.1	1033.1
60°	9276.9	3734.9	934.0	823.1	857.4	970.3	1056.6	1024.2	1009.5	1013.4	1014.4
62.5°	11168.4	4560.0	875.1	789.8	820.2	928.1	1021.3	996.8	982.0	991.9	991.9
65°	13134.4	5287.9	802.5	747.6	780.9	882.0	977.1	962.4	947.7	970.3	969.3
67.5°	13663.2	5125.1	729.9	701.5	741.7	831.0	924.2	916.3	908.5	947.7	945.7
70°	12137.7	4114.6	663.2	654.4	698.5	776.0	867.3	867.3	862.4	891.8	884.9
72.5°	9247.5	2917.7	599.4	604.3	649.5	716.2	805.4	812.3	804.5	819.2	813.3
75°	4950.4	1669.8	535.7	549.4	588.6	655.3	736.8	743.6	738.7	737.8	740.7
77.5°	1645.2	816.2	468.9	490.5	524.9	592.6	665.2	675.9	664.2	662.2	661.2
80°	732.9	513.1	395.4	423.8	454.2	520.9	589.6	598.4	585.7	603.4	580.8
82.5°	470.9	337.5	316.9	348.3	377.7	449.3	514.1	516.0	504.3	585.7	499.4
85°	228.6	209.0	238.4	266.8	292.4	353.2	425.8	426.8	397.3	362.0	349.3
87.5°	113.8	121.7	158.9	184.4	197.2	242.3	310.0	304.1	291.4	264.9	244.3
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)