

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: P300328

Luminaire Tested: **GLNA-AF-06-LED-E1-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300328  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36399.7 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 333  
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

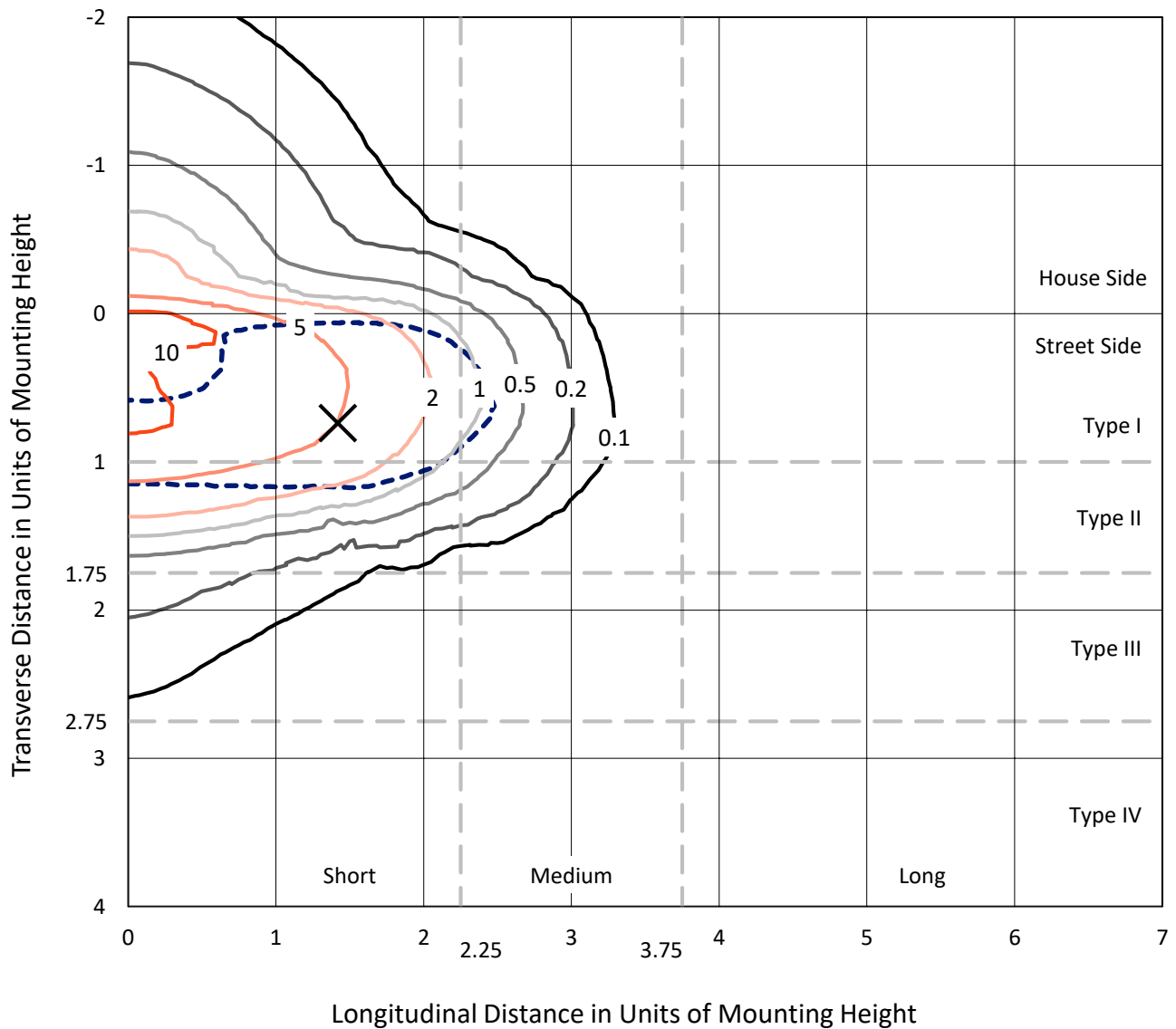


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

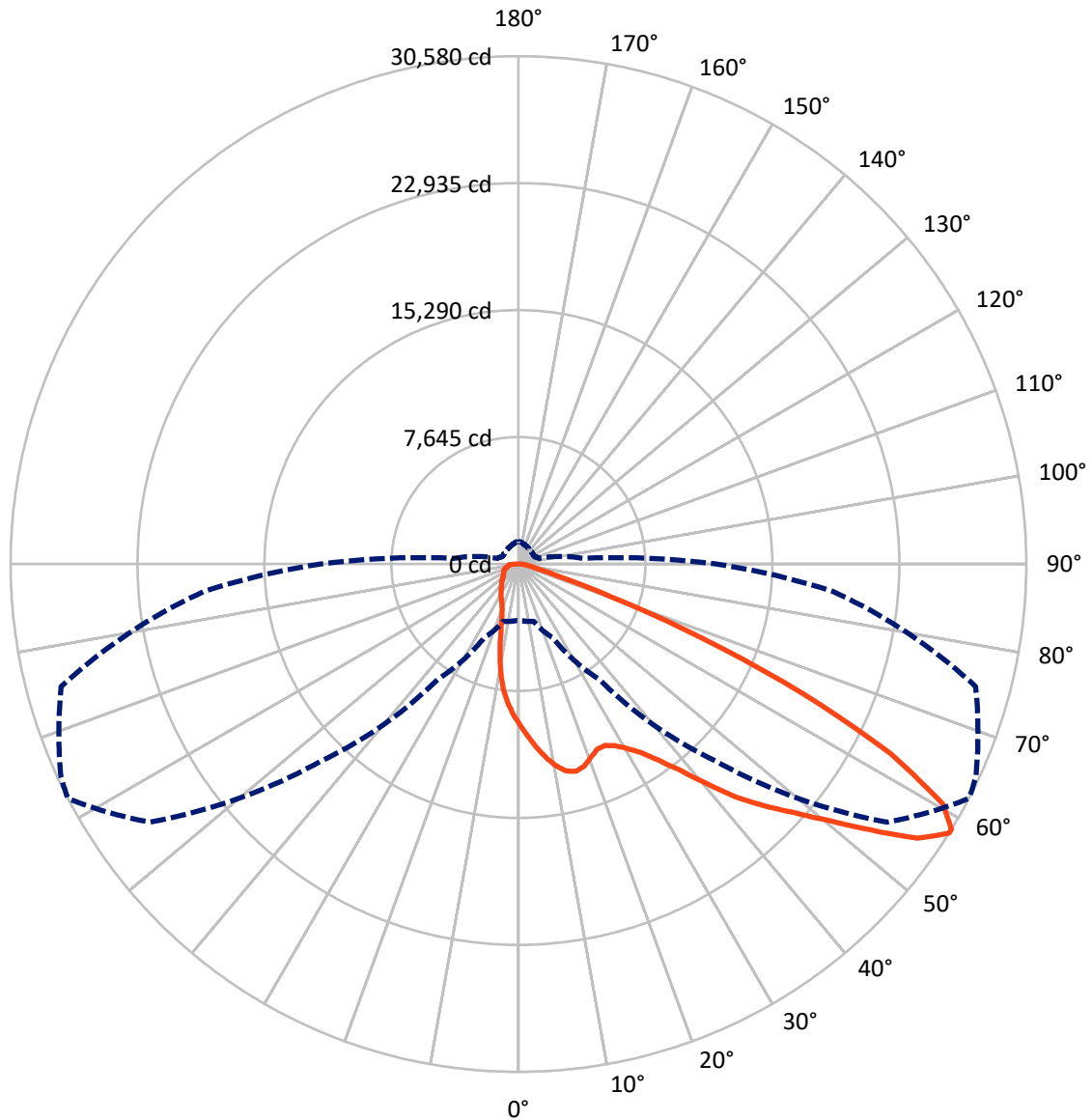


Based on 30 foot mounting height. Maximum calculated value = 13.1 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5551.1	0.0	5551.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	30848.6	0.0	30848.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	36399.7	0.0	36399.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	864.7	2.4
10°-20°	2210.4	6.1
20°-30°	3573.2	9.8
30°-40°	5672.4	15.6
40°-50°	8299.9	22.8
50°-60°	8681.0	23.8
60°-70°	5128.7	14.1
70°-80°	1444.8	4.0
80°-90°	524.5	1.4
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°	36399.7	100.0
0°-180°	36399.7	100.0



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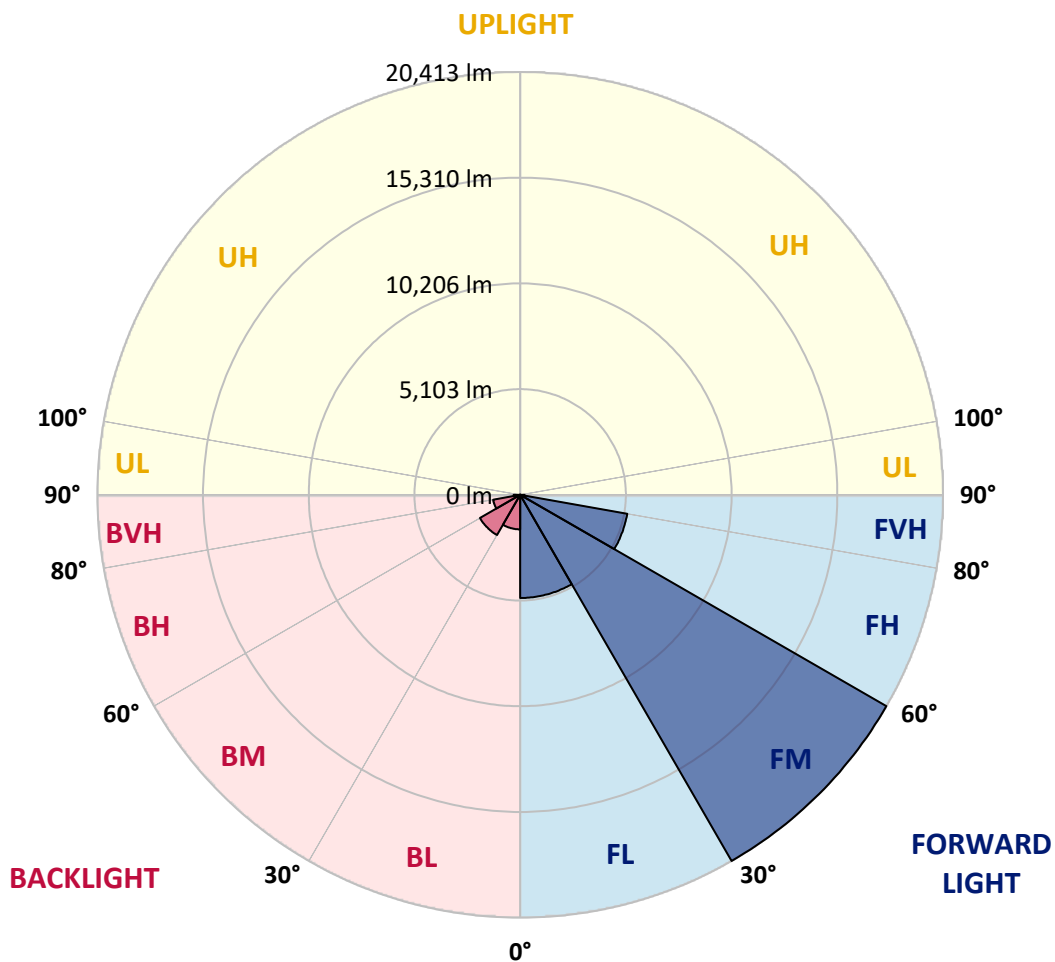
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4979.9	13.7			
FM	(30°-60°)	20412.8	56.1			
FH	(60°-80°)	5249.0	14.4			G3/7500
FVH	(80°-90°)	206.9	0.6			G2/225
BL	(0°-30°)	1668.4	4.6	B3/2500		
BM	(30°-60°)	2240.6	6.2	B2/2500		
BH	(60°-80°)	1324.5	3.6	B3/2500		G3/2500
BVH	(80°-90°)	317.6	0.9			G3/500
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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8
2.5°	11048.6	10959.5	10902.9	10853.2	10788.1	10649.3	10462.4	10344.2	10284.2	10080.2	9838.5
5°	12131.9	12053.1	11994.8	11927.9	11811.4	11593.7	11292.0	11052.1	10933.8	10525.9	10042.5
7.5°	11878.2	11910.8	12011.9	12188.5	12339.3	12310.2	12041.1	11736.0	11580.0	11012.6	10279.0
10°	10349.3	10405.9	10580.7	10993.8	11662.3	12347.9	12557.0	12346.2	12188.5	11494.3	10522.4
12.5°	10042.5	10040.8	10054.5	10164.2	10561.8	11526.8	12574.1	12786.7	12692.4	11953.6	10771.0
15°	10167.6	10171.1	10160.8	10207.0	10330.5	10712.7	12049.6	12956.3	13023.2	12416.4	11028.1
17.5°	10496.7	10488.1	10448.7	10448.7	10493.3	10642.4	11432.6	12798.7	13107.2	12826.1	11254.3
20°	11048.6	11009.2	10904.7	10808.7	10760.7	10841.2	11178.9	12435.3	12961.5	13184.3	11441.1
22.5°	11717.1	11686.3	11516.6	11310.9	11144.6	11142.9	11309.2	12118.2	12709.5	13522.0	11598.8
25°	12581.0	12531.3	12279.3	11950.2	11658.8	11547.4	11593.7	12102.8	12572.4	13888.8	11739.4
27.5°	13595.7	13504.8	13206.6	12731.8	12303.3	12078.8	12011.9	12382.1	12697.5	14343.0	11934.8
30°	14826.4	14721.8	14339.6	13720.8	13115.8	12747.2	12605.0	12877.5	13112.3	14896.6	12248.5
32.5°	16226.7	16075.9	15633.7	14951.5	14156.2	13594.0	13362.6	13532.3	13719.1	15563.4	12641.0
35°	18161.9	17981.9	17342.5	16401.5	15503.4	14730.4	14360.1	14483.5	14665.2	16557.5	13208.3
37.5°	19481.7	19401.1	18976.0	18091.6	17114.6	16225.0	15652.5	15724.5	15827.3	17800.2	13935.1
40°	19469.7	19502.2	19510.8	19519.4	18854.3	18002.5	17387.1	17311.7	17291.1	19164.6	14761.2
42.5°	18494.4	18628.1	19060.0	19935.9	20340.4	19949.6	19385.7	19168.0	19060.0	20772.3	15637.1
45°	17001.5	17073.4	17882.5	19593.1	21101.4	21877.9	21451.1	20765.5	20570.1	22249.8	16363.8
47.5°	16231.9	16310.7	16819.8	18684.6	21092.8	23435.9	23682.7	22376.7	22027.0	23535.3	16991.2
50°	14399.6	14564.1	15205.2	17104.3	20323.2	24152.4	26015.5	24296.4	23573.0	24786.6	17620.2
52.5°	11034.9	11288.6	12006.8	14505.8	18371.0	23797.6	27882.1	26624.0	25602.5	26082.4	18160.1
55°	6960.7	7149.2	7752.6	10244.8	14696.1	21951.6	28590.0	29141.9	28233.5	27309.6	18628.1
57.5°	3784.6	3868.6	4094.8	5656.3	9559.1	17870.5	27558.2	30574.9	30197.8	28351.8	18981.2
58°	3386.9	3443.5	3584.0	4902.1	8477.6	16754.6	27100.5	30580.0	30391.5	28504.3	19008.6
60°	2512.8	2483.6	2358.5	2797.3	4718.7	11574.8	24334.1	29356.2	29909.8	28691.1	18874.9
62.5°	2207.7	2137.4	1882.0	1852.9	2295.1	5332.3	18619.5	25146.5	26454.3	27625.0	18062.4
65°	2074.0	1998.6	1669.5	1563.2	1655.8	2255.7	10968.1	18859.5	20499.8	24392.4	15985.0
67.5°	1974.6	1876.9	1534.1	1388.4	1395.2	1491.2	4396.5	11878.2	13724.2	18520.1	12433.6
70°	1878.6	1772.3	1419.2	1251.2	1211.8	1179.3	1748.3	5946.0	7620.6	11698.3	7927.4
72.5°	1775.7	1671.2	1318.1	1143.3	1066.1	958.1	1141.5	2432.2	3397.2	5534.6	3596.0
75°	1626.6	1532.3	1217.0	1047.3	937.6	793.6	862.2	1270.1	1523.8	2204.2	1732.9
77.5°	1443.2	1366.1	1103.8	968.4	831.3	644.5	663.3	881.0	977.0	1261.5	1030.1
80°	1037.0	1064.4	982.1	870.7	740.5	522.8	509.1	642.8	694.2	810.7	670.2
82.5°	728.5	743.9	812.4	711.3	611.9	411.4	375.4	452.5	483.4	533.1	361.7
85°	502.2	485.1	557.1	495.4	442.2	274.2	257.1	306.8	325.7	330.8	186.8
87.5°	301.7	301.7	322.2	265.7	238.3	142.3	138.8	174.8	186.8	178.3	102.8
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°	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8	9668.8
2.5°	9694.6	9572.9	9314.0	9106.6	8844.4	8571.9	8419.3	8256.5	8145.1	8064.5	8193.1
5°	9768.3	9519.7	8984.9	8477.6	7917.1	7334.3	6892.1	6480.7	6194.5	6016.2	6184.2
7.5°	9884.8	9502.6	8650.7	7783.4	6777.3	5807.1	4939.8	4396.5	4079.4	3923.4	4021.1
10°	10018.5	9475.2	8258.2	6842.4	5402.6	4180.5	3532.6	3313.2	3241.2	3212.1	3225.8
12.5°	10129.9	9416.9	7776.6	5704.3	4057.1	3301.2	3114.4	3109.2	3124.7	3128.1	3133.2
15°	10208.8	9331.2	7061.8	4518.2	3244.7	3008.1	2997.8	3028.7	3057.8	3069.8	3076.7
17.5°	10261.9	9154.6	6254.5	3572.0	2907.0	2865.9	2889.9	2929.3	2960.1	2968.7	2975.6
20°	10256.8	8895.8	5292.9	2979.0	2723.6	2723.6	2764.7	2795.6	2797.3	2787.0	2792.2
22.5°	10203.6	8541.0	4360.5	2663.6	2560.8	2589.9	2631.0	2601.9	2481.9	2403.1	2408.2
25°	10114.5	8117.6	3561.8	2463.1	2409.9	2461.3	2449.3	2230.0	2058.5	1981.4	1981.4
27.5°	10035.6	7617.1	2948.1	2288.2	2259.1	2322.5	2110.0	1911.1	1839.2	1803.2	1791.2
30°	9979.1	7077.2	2538.5	2120.3	2116.8	2070.5	1830.6	1775.7	1763.7	1734.6	1724.3
32.5°	9992.8	6530.5	2276.2	1972.8	1984.8	1772.3	1696.9	1708.9	1698.6	1667.8	1654.0
35°	10105.9	6011.1	2104.8	1839.2	1803.2	1600.9	1618.0	1640.3	1636.9	1594.0	1580.3
37.5°	10308.2	5519.2	1991.7	1727.7	1573.5	1515.2	1542.6	1576.9	1568.3	1539.2	1528.9
40°	10520.7	5056.4	1899.1	1640.3	1438.1	1456.9	1480.9	1499.8	1508.3	1516.9	1510.1
42.5°	10728.1	4573.0	1786.0	1551.2	1381.5	1402.1	1412.4	1431.2	1477.5	1510.1	1508.3
45°	10851.5	4118.8	1669.5	1424.4	1336.9	1348.9	1342.1	1379.8	1436.4	1489.5	1491.2
47.5°	10988.6	3765.7	1576.9	1307.8	1294.1	1302.7	1282.1	1319.8	1371.2	1436.4	1443.2
50°	11154.9	3554.9	1503.2	1215.2	1235.8	1235.8	1230.7	1265.0	1336.9	1412.4	1426.1
52.5°	11343.4	3513.8	1441.5	1148.4	1177.5	1175.8	1181.0	1232.4	1311.2	1384.9	1396.9
55°	11573.1	3625.2	1374.7	1098.7	1121.0	1127.8	1145.0	1203.2	1270.1	1354.1	1359.2
57.5°	11840.5	3851.4	1321.5	1059.3	1069.6	1091.8	1119.3	1172.4	1244.4	1336.9	1342.1
58°	11885.1	3899.4	1312.9	1055.8	1059.3	1085.0	1115.8	1167.3	1239.2	1340.4	1345.5
60°	11886.8	4058.8	1294.1	1040.4	1019.8	1062.7	1097.0	1148.4	1230.7	1352.4	1364.4
62.5°	11465.1	4057.1	1280.4	1018.1	978.7	1031.8	1071.3	1131.3	1222.1	1381.5	1405.5
65°	10095.6	3686.9	1215.2	983.9	946.1	1004.4	1049.0	1119.3	1246.1	1508.3	1523.8
67.5°	7896.5	3021.8	1093.6	935.9	903.3	977.0	1035.3	1117.5	1271.8	1537.5	1547.8
70°	5220.9	2260.8	959.9	881.0	858.7	944.4	1042.1	1175.8	1242.7	1475.8	1448.4
72.5°	2709.9	1587.2	851.9	812.4	807.3	915.3	1141.5	1169.0	1213.5	1388.4	1354.1
75°	1422.6	1102.1	757.6	737.0	745.6	908.4	1347.2	1138.1	1175.8	1328.4	1393.5
77.5°	870.7	889.6	677.0	668.5	685.6	887.9	1345.5	1098.7	1121.0	1222.1	1294.1
80°	582.8	721.6	615.3	617.1	629.0	812.4	1208.4	1037.0	1054.1	1155.3	1229.0
82.5°	368.5	426.8	558.8	587.9	572.5	670.2	1026.7	944.4	968.4	1321.5	1396.9
85°	186.8	267.4	485.1	565.6	515.9	469.6	833.0	827.9	839.9	953.0	995.9
87.5°	85.7	147.4	378.8	493.6	389.1	293.1	605.1	613.6	661.6	677.0	677.0
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)