

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: P300464

Luminaire Tested: **GLNA-AF-09-LED-E1-AFL-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300464  
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-09-LED-E1-AFL-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34668.8 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

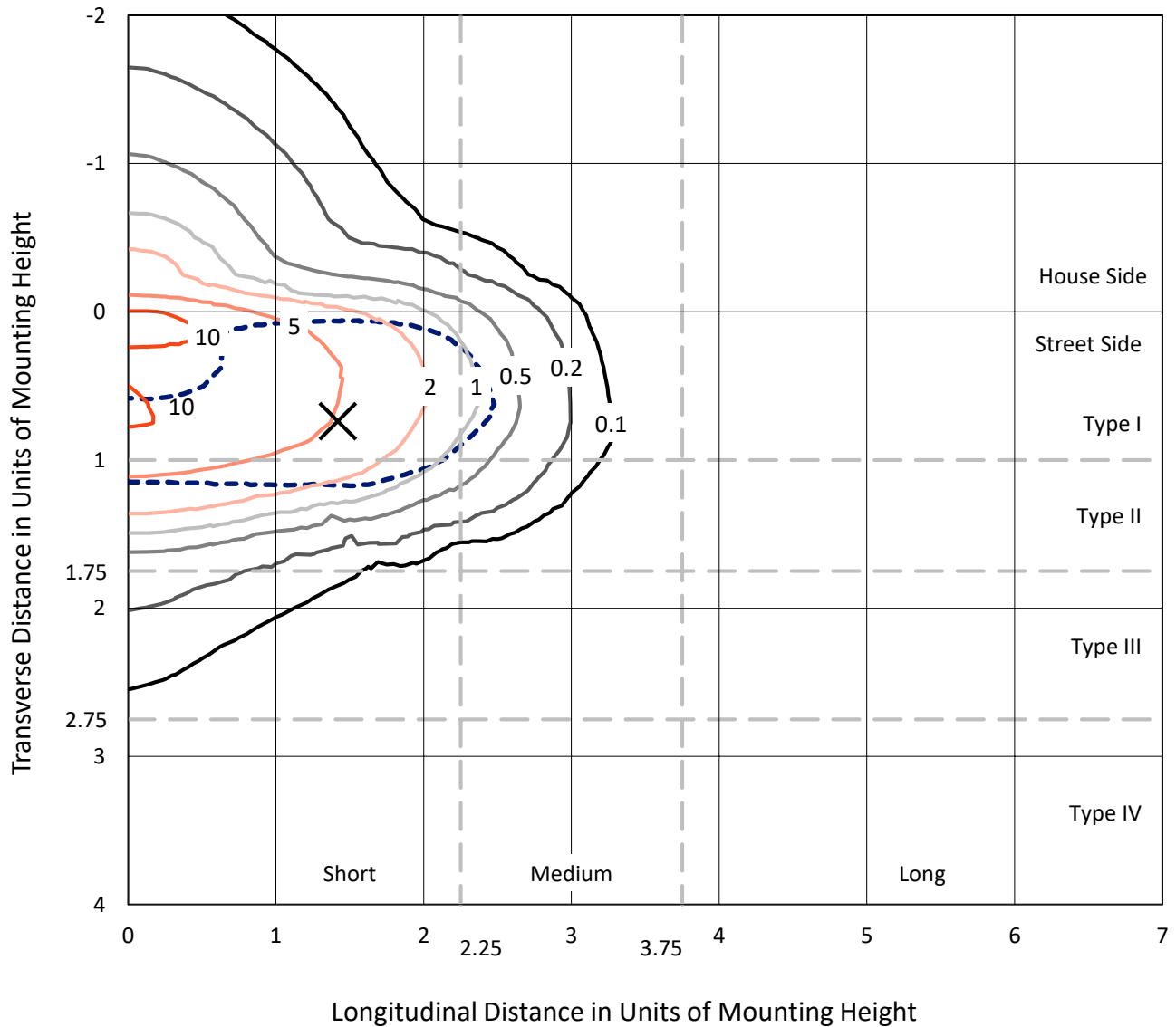
Input Watts (W): 290  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

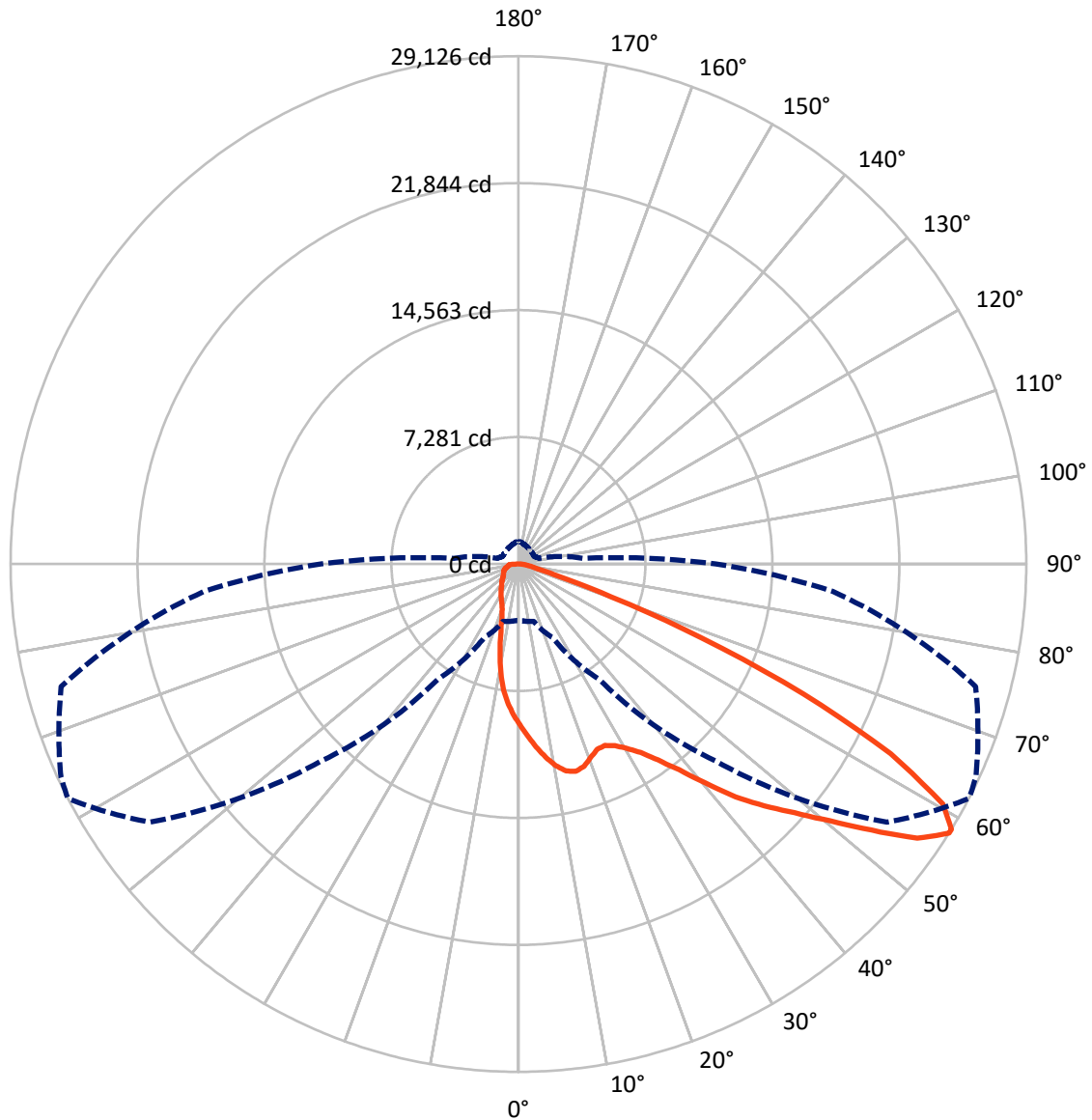
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.5 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	5287.1	0.0	5287.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	29381.7	0.0	29381.7
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	34668.8	0.0	34668.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	823.6	2.4
10°-20°	2105.3	6.1
20°-30°	3403.3	9.8
30°-40°	5402.7	15.6
40°-50°	7905.2	22.8
50°-60°	8268.2	23.8
60°-70°	4884.9	14.1
70°-80°	1376.1	4.0
80°-90°	499.6	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°	34668.8	100.0
0°-180°	34668.8	100.0



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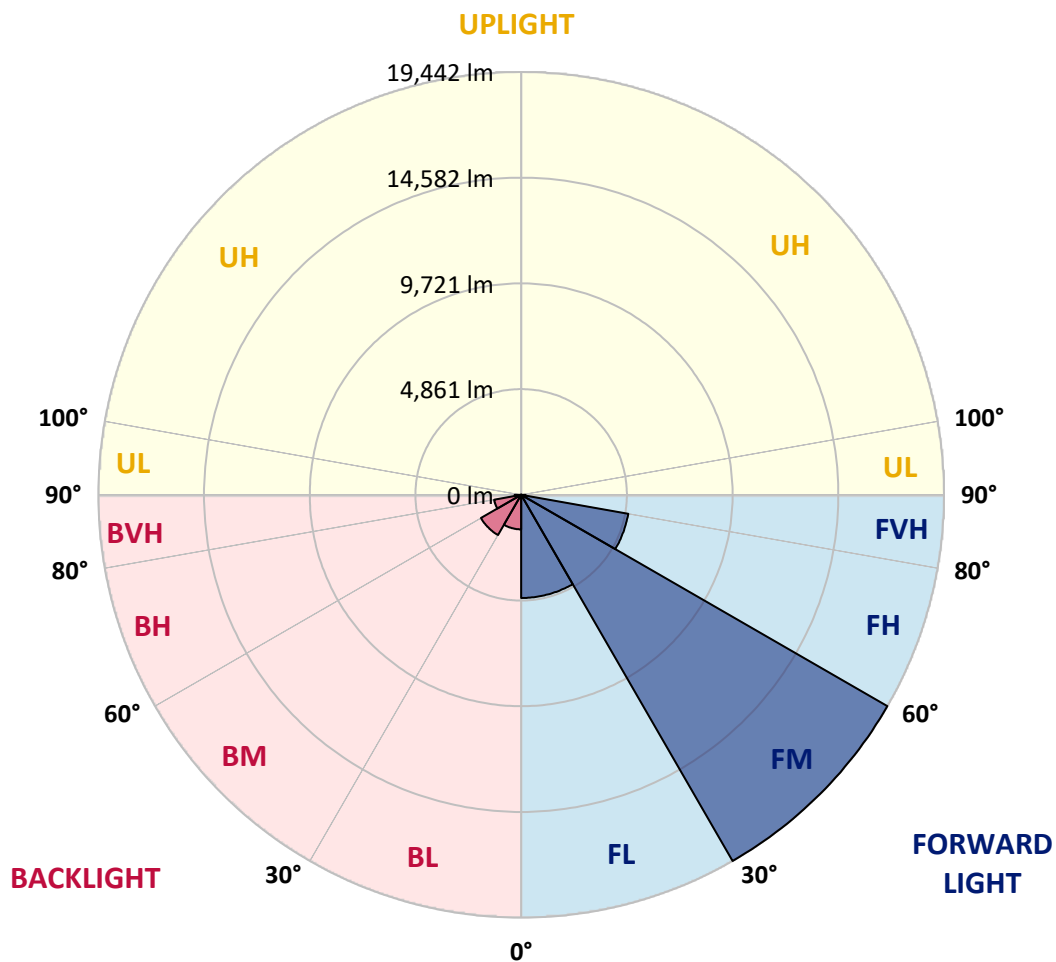
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4743.1	13.7			
FM	(30°-60°)	19442.1	56.1			
FH	(60°-80°)	4999.4	14.4			G2/5000
FVH	(80°-90°)	197.1	0.6			G2/225
BL	(0°-30°)	1589.1	4.6	B3/2500		
BM	(30°-60°)	2134.0	6.2	B2/2500		
BH	(60°-80°)	1261.6	3.6	B3/2500		G3/2500
BVH	(80°-90°)	302.5	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°	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1
2.5°	10523.2	10438.4	10384.5	10337.1	10275.1	10142.9	9964.9	9852.3	9795.1	9600.9	9370.7
5°	11555.0	11479.9	11424.4	11360.7	11249.7	11042.4	10755.1	10526.5	10413.9	10025.3	9565.0
7.5°	11313.4	11344.4	11440.7	11608.9	11752.5	11724.8	11468.5	11177.9	11029.3	10489.0	9790.2
10°	9857.2	9911.1	10077.6	10471.0	11107.7	11760.7	11959.9	11759.1	11608.9	10947.7	10022.1
12.5°	9565.0	9563.3	9576.4	9680.9	10059.6	10978.7	11976.2	12178.6	12088.8	11385.2	10258.8
15°	9684.1	9687.4	9677.6	9721.7	9839.2	10203.3	11476.6	12340.2	12403.9	11826.0	10503.7
17.5°	9997.6	9989.4	9951.9	9951.9	9994.3	10136.3	10888.9	12190.1	12483.9	12216.2	10719.2
20°	10523.2	10485.7	10386.1	10294.7	10249.0	10325.7	10647.3	11844.0	12345.1	12557.4	10897.1
22.5°	11159.9	11130.5	10968.9	10773.0	10614.7	10613.0	10771.4	11541.9	12105.2	12879.0	11047.3
25°	11982.7	11935.4	11695.4	11382.0	11104.4	10998.3	11042.4	11527.3	11974.6	13228.3	11181.2
27.5°	12949.2	12862.7	12578.6	12126.4	11718.3	11504.4	11440.7	11793.4	12093.7	13661.0	11367.3
30°	14121.3	14021.7	13657.7	13068.4	12492.1	12141.1	12005.6	12265.2	12488.8	14188.3	11666.0
32.5°	15455.1	15311.4	14890.3	14240.5	13483.0	12947.5	12727.2	12888.8	13066.7	14823.3	12039.9
35°	17298.2	17126.8	16517.9	15621.6	14766.2	14029.9	13677.3	13794.8	13967.9	15770.2	12580.2
37.5°	18555.3	18478.5	18073.7	17231.3	16300.8	15453.5	14908.2	14976.8	15074.7	16953.8	13272.4
40°	18543.8	18574.9	18583.0	18591.2	17957.8	17146.4	16560.3	16488.5	16468.9	18253.2	14059.3
42.5°	17614.9	17742.3	18153.7	18987.9	19373.2	19000.9	18463.8	18256.5	18153.7	19784.6	14893.5
45°	16193.0	16261.6	17032.1	18661.4	20098.0	20837.5	20431.0	19778.0	19591.9	21191.8	15585.7
47.5°	15460.0	15535.1	16020.0	17796.1	20089.8	22321.5	22556.6	21312.6	20979.6	22416.2	16183.2
50°	13714.8	13871.6	14482.1	16291.0	19356.8	23003.9	24778.4	23141.0	22452.1	23607.9	16782.3
52.5°	10510.2	10751.8	11435.8	13816.0	17497.4	22666.0	26556.3	25358.0	24385.0	24842.1	17296.6
55°	6629.7	6809.3	7383.9	9757.6	13997.3	20907.7	27230.5	27756.2	26890.9	26011.0	17742.3
57.5°	3604.6	3684.6	3900.1	5387.3	9104.6	17020.7	26247.7	29121.0	28761.8	27003.6	18078.6
58°	3225.9	3279.7	3413.6	4669.0	8074.5	15957.9	25811.8	29125.9	28946.3	27148.9	18104.7
60°	2393.3	2365.5	2246.4	2664.3	4494.3	11024.4	23176.9	27960.2	28487.5	27326.8	17977.4
62.5°	2102.7	2035.8	1792.5	1764.8	2185.9	5078.8	17734.1	23950.8	25196.4	26311.4	17203.5
65°	1975.4	1903.5	1590.1	1488.9	1577.0	2148.4	10446.5	17962.7	19525.0	23232.4	15224.9
67.5°	1880.7	1787.6	1461.1	1322.3	1328.9	1420.3	4187.4	11313.4	13071.6	17639.4	11842.3
70°	1789.2	1688.0	1351.7	1191.7	1154.2	1123.2	1665.2	5663.2	7258.2	11142.0	7550.4
72.5°	1691.3	1591.7	1255.4	1088.9	1015.4	912.6	1087.3	2316.6	3235.7	5271.4	3425.0
75°	1549.3	1459.5	1159.1	997.5	893.0	755.9	821.2	1209.7	1451.3	2099.4	1650.5
77.5°	1374.6	1301.1	1051.3	922.4	791.8	613.8	631.8	839.1	930.5	1201.5	981.1
80°	987.7	1013.8	935.4	829.3	705.3	497.9	484.9	612.2	661.2	772.2	638.3
82.5°	693.8	708.5	773.8	677.5	582.8	391.8	357.5	431.0	460.4	507.7	344.5
85°	478.3	462.0	530.6	471.8	421.2	261.2	244.9	292.2	310.2	315.1	177.9
87.5°	287.3	287.3	306.9	253.0	226.9	135.5	132.2	166.5	177.9	169.8	98.0
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°	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1	9209.1
2.5°	9233.6	9117.6	8871.1	8673.6	8423.8	8164.3	8019.0	7863.9	7757.8	7681.0	7803.5
5°	9303.8	9067.0	8557.7	8074.5	7540.6	6985.6	6564.4	6172.6	5899.9	5730.2	5890.1
7.5°	9414.8	9050.7	8239.3	7413.3	6455.0	5531.0	4704.9	4187.4	3885.4	3736.8	3829.9
10°	9542.1	9024.6	7865.5	6517.0	5145.7	3981.7	3364.6	3155.7	3087.1	3059.3	3072.4
12.5°	9648.2	8969.1	7406.8	5433.0	3864.2	3144.2	2966.3	2961.4	2976.1	2979.4	2984.3
15°	9723.3	8887.5	6726.0	4303.3	3090.4	2865.1	2855.3	2884.7	2912.4	2923.9	2930.4
17.5°	9773.9	8719.3	5957.1	3402.2	2768.8	2729.6	2752.4	2790.0	2819.4	2827.5	2834.1
20°	9769.0	8472.8	5041.2	2837.3	2594.1	2594.1	2633.3	2662.6	2664.3	2654.5	2659.4
22.5°	9718.4	8134.9	4153.1	2536.9	2439.0	2466.7	2505.9	2478.2	2363.9	2288.8	2293.7
25°	9633.5	7731.6	3392.4	2345.9	2295.3	2344.3	2332.9	2123.9	1960.7	1887.2	1887.2
27.5°	9558.4	7254.9	2807.9	2179.4	2151.7	2212.1	2009.6	1820.3	1751.7	1717.4	1706.0
30°	9504.6	6740.7	2417.8	2019.4	2016.2	1972.1	1743.5	1691.3	1679.9	1652.1	1642.3
32.5°	9517.6	6219.9	2168.0	1879.0	1890.5	1688.0	1616.2	1627.6	1617.8	1588.4	1575.4
35°	9625.4	5725.3	2004.7	1751.7	1717.4	1524.8	1541.1	1562.3	1559.1	1518.2	1505.2
37.5°	9818.0	5256.7	1897.0	1645.6	1498.7	1443.2	1469.3	1501.9	1493.8	1466.0	1456.2
40°	10020.4	4815.9	1808.8	1562.3	1369.7	1387.6	1410.5	1428.5	1436.6	1444.8	1438.3
42.5°	10218.0	4355.6	1701.1	1477.4	1315.8	1335.4	1345.2	1363.2	1407.2	1438.3	1436.6
45°	10335.5	3923.0	1590.1	1356.6	1273.4	1284.8	1278.3	1314.2	1368.1	1418.7	1420.3
47.5°	10466.1	3586.7	1501.9	1245.6	1232.6	1240.7	1221.1	1257.0	1306.0	1368.1	1374.6
50°	10624.5	3385.9	1431.7	1157.5	1177.0	1177.0	1172.2	1204.8	1273.4	1345.2	1358.3
52.5°	10804.0	3346.7	1373.0	1093.8	1121.5	1119.9	1124.8	1173.8	1248.9	1319.1	1330.5
55°	11022.8	3452.8	1309.3	1046.4	1067.7	1074.2	1090.5	1146.0	1209.7	1289.7	1294.6
57.5°	11277.5	3668.3	1258.7	1008.9	1018.7	1039.9	1066.0	1116.6	1185.2	1273.4	1278.3
58°	11319.9	3714.0	1250.5	1005.6	1008.9	1033.4	1062.8	1111.7	1180.3	1276.6	1281.5
60°	11321.6	3865.8	1232.6	990.9	971.4	1012.2	1044.8	1093.8	1172.2	1288.1	1299.5
62.5°	10920.0	3864.2	1219.5	969.7	932.2	982.8	1020.3	1077.5	1164.0	1315.8	1338.7
65°	9615.6	3511.6	1157.5	937.1	901.2	956.7	999.1	1066.0	1186.8	1436.6	1451.3
67.5°	7521.0	2878.1	1041.6	891.4	860.3	930.5	986.0	1064.4	1211.3	1464.4	1474.2
70°	4972.7	2153.3	914.2	839.1	817.9	899.5	992.6	1119.9	1183.6	1405.6	1379.5
72.5°	2581.0	1511.7	811.4	773.8	768.9	871.8	1087.3	1113.4	1155.8	1322.3	1289.7
75°	1355.0	1049.7	721.6	702.0	710.1	865.2	1283.2	1084.0	1119.9	1265.2	1327.2
77.5°	829.3	847.3	644.8	636.7	653.0	845.6	1281.5	1046.4	1067.7	1164.0	1232.6
80°	555.1	687.3	586.1	587.7	599.1	773.8	1150.9	987.7	1004.0	1100.3	1170.5
82.5°	351.0	406.5	532.2	560.0	545.3	638.3	977.9	899.5	922.4	1258.7	1330.5
85°	177.9	254.7	462.0	538.7	491.4	447.3	793.4	788.5	799.9	907.7	948.5
87.5°	81.6	140.4	360.8	470.2	370.6	279.2	576.3	584.4	630.2	644.8	644.8
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)