

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: P300460

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300460  
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-08-LED-E1-AFL-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

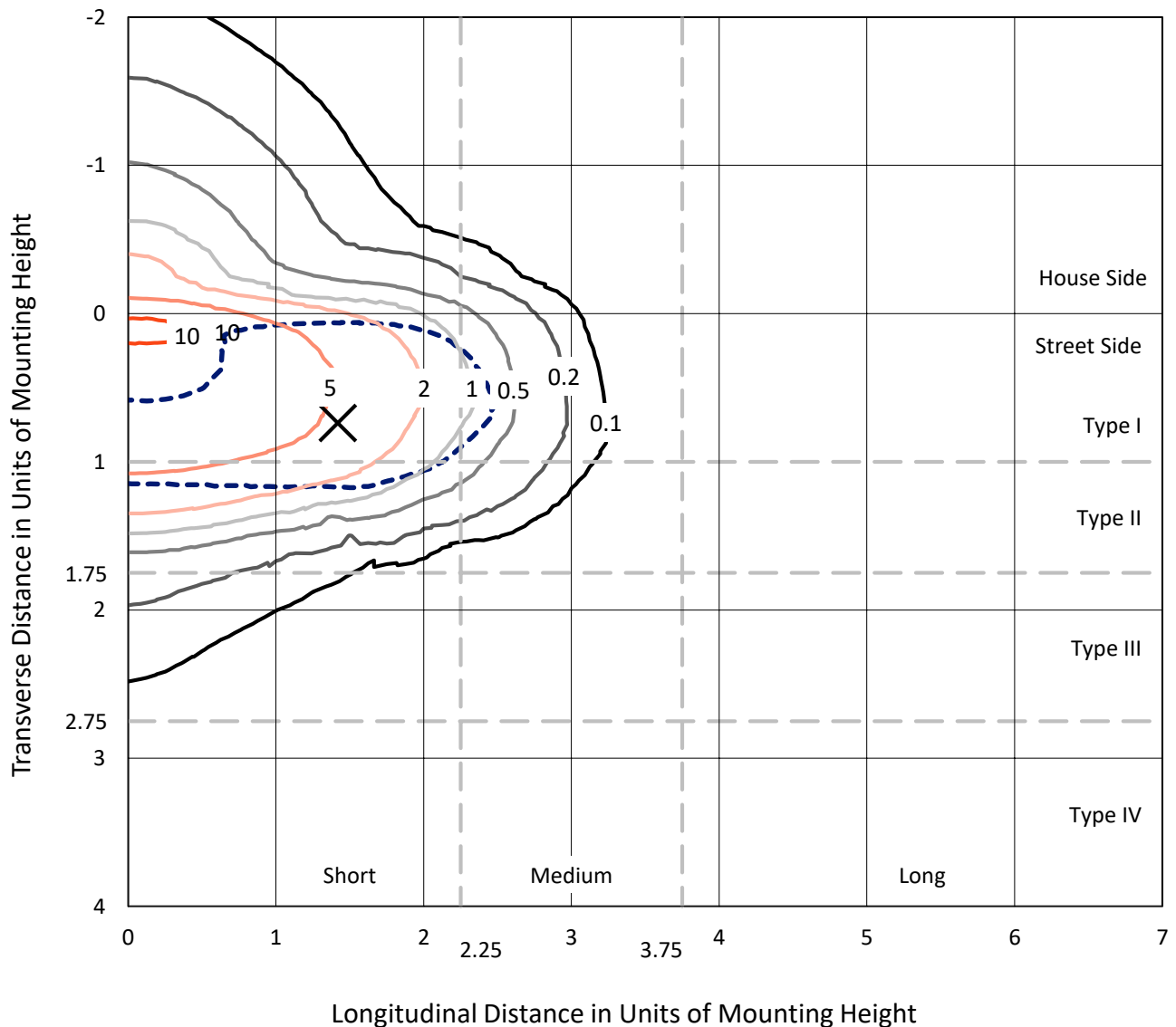
Lumens per Lamp: N/A  
Luminaire Lumens: 32130.5 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (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

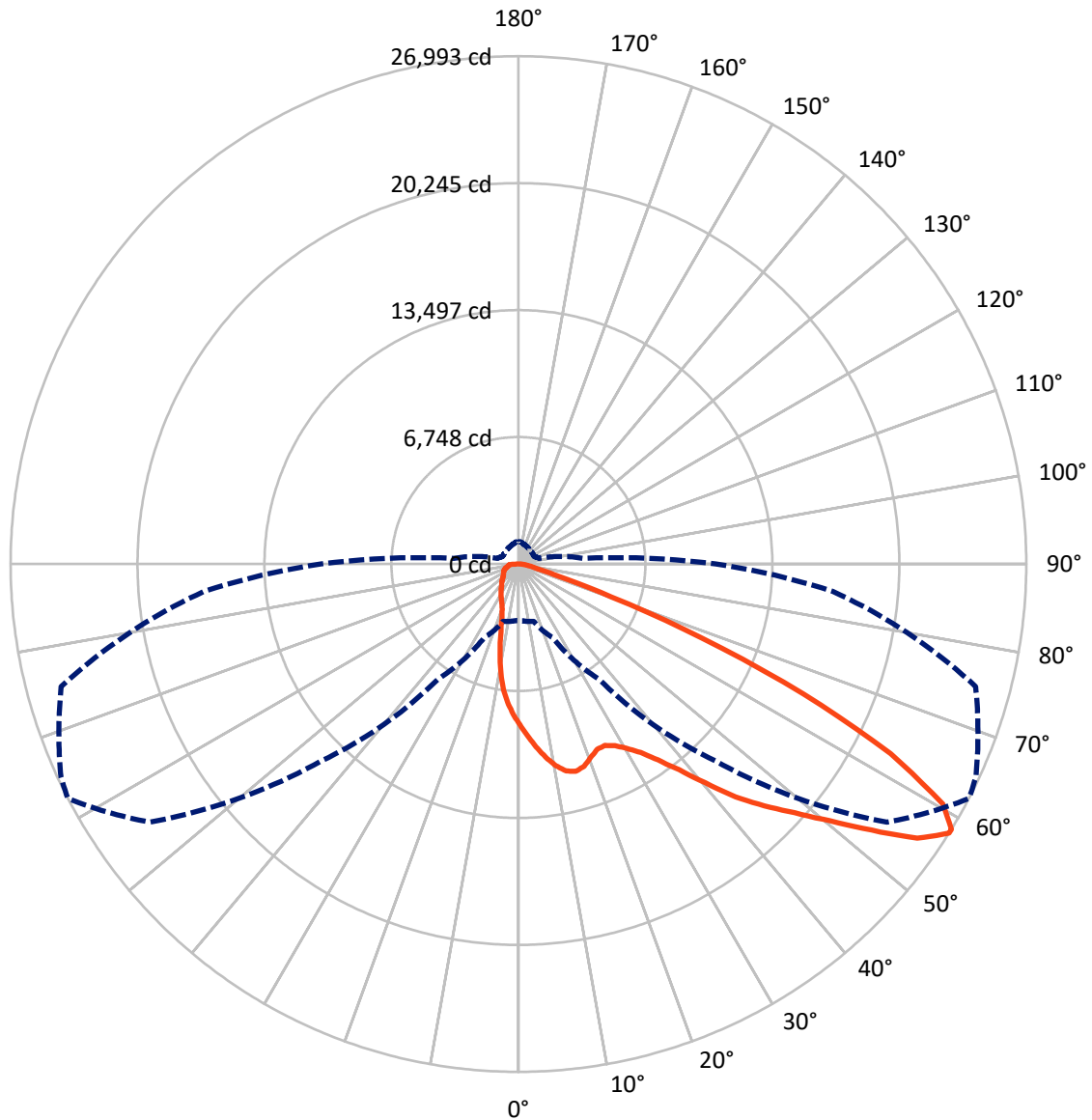
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.6 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	4900.0	0.0	4900.0
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	27230.5	0.0	27230.5
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	32130.5	0.0	32130.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	763.3	2.4
10°-20°	1951.1	6.1
20°-30°	3154.1	9.8
30°-40°	5007.1	15.6
40°-50°	7326.4	22.8
50°-60°	7662.8	23.8
60°-70°	4527.2	14.1
70°-80°	1275.3	4.0
80°-90°	463.0	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°	32130.5	100.0
0°-180°	32130.5	100.0



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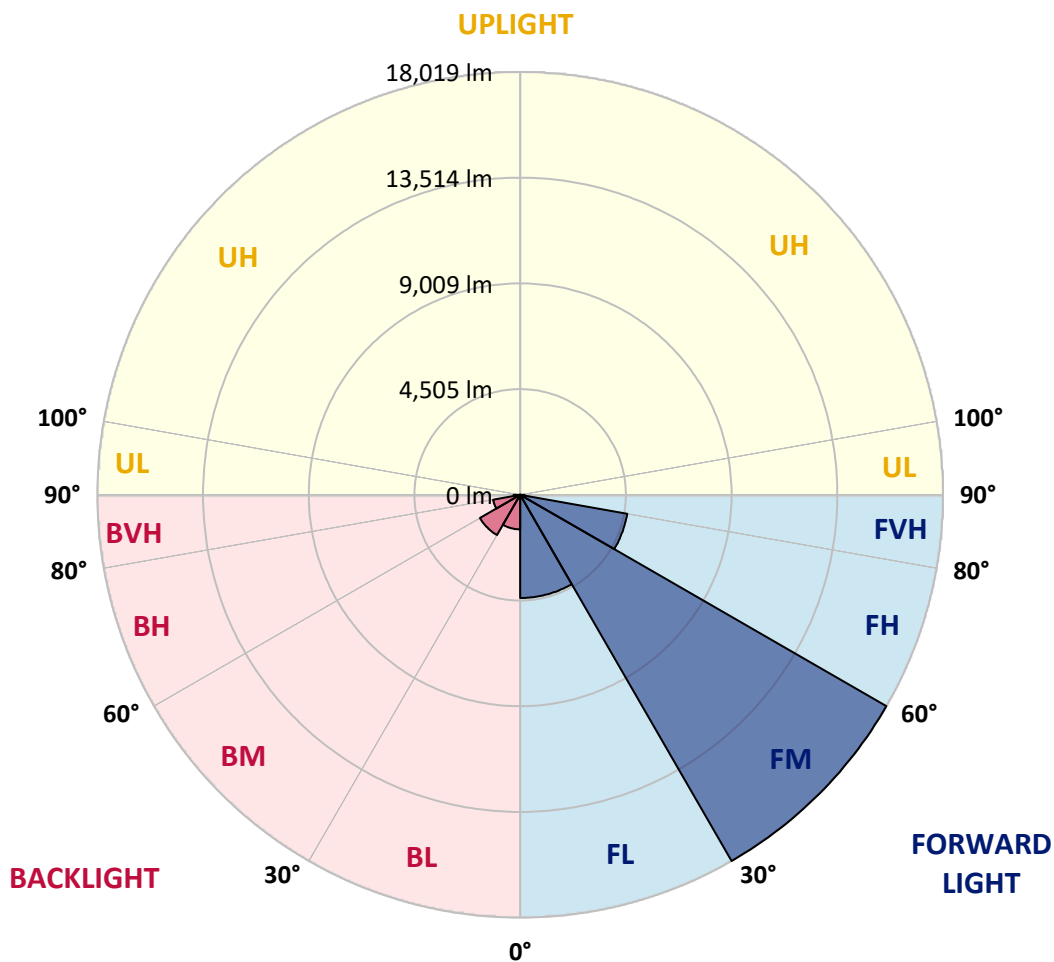
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4395.9	13.7			
FM	(30°-60°)	18018.6	56.1			
FH	(60°-80°)	4633.4	14.4			G2/5000
FVH	(80°-90°)	182.7	0.6			G2/225
BL	(0°-30°)	1472.7	4.6	B3/2500		
BM	(30°-60°)	1977.8	6.2	B2/2500		
BH	(60°-80°)	1169.2	3.6	B3/2500		G3/2500
BVH	(80°-90°)	280.4	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°	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8
2.5°	9752.8	9674.1	9624.2	9580.3	9522.8	9400.3	9235.3	9130.9	9078.0	8897.9	8684.6
5°	10709.0	10639.4	10588.0	10528.9	10426.1	10233.9	9967.6	9755.8	9651.4	9291.3	8864.7
7.5°	10485.1	10513.8	10603.1	10758.9	10892.1	10866.3	10628.8	10359.5	10221.8	9721.0	9073.4
10°	9135.5	9185.4	9339.7	9704.4	10294.4	10899.6	11084.2	10898.1	10758.9	10146.2	9288.3
12.5°	8864.7	8863.1	8875.2	8972.1	9323.1	10174.9	11099.3	11287.0	11203.7	10551.6	9507.7
15°	8975.1	8978.1	8969.0	9009.9	9118.8	9456.2	10636.4	11436.7	11495.8	10960.2	9734.6
17.5°	9265.6	9258.0	9223.2	9223.2	9262.6	9394.2	10091.7	11297.6	11569.9	11321.8	9934.3
20°	9752.8	9718.0	9625.7	9541.0	9498.6	9569.7	9867.8	10976.8	11441.3	11638.0	10099.3
22.5°	10342.9	10315.6	10165.8	9984.3	9837.5	9836.0	9982.8	10696.9	11218.9	11936.0	10238.5
25°	11105.4	11061.5	10839.1	10548.6	10291.4	10193.1	10233.9	10683.3	11097.8	12259.8	10362.5
27.5°	12001.1	11920.9	11657.6	11238.5	10860.3	10662.1	10603.1	10929.9	11208.3	12660.8	10535.0
30°	13087.4	12995.1	12657.7	12111.5	11577.5	11252.2	11126.6	11367.2	11574.4	13149.5	10811.9
32.5°	14323.5	14190.4	13800.1	13197.9	12495.8	11999.6	11795.3	11945.1	12110.0	13738.0	11158.4
35°	16031.7	15872.9	15308.5	14477.9	13685.1	13002.7	12675.9	12784.8	12945.2	14615.6	11659.2
37.5°	17196.7	17125.6	16750.4	15969.7	15107.3	14322.0	13816.7	13880.2	13971.0	15712.5	12300.7
40°	17186.1	17214.9	17222.5	17230.0	16643.0	15891.0	15347.8	15281.3	15263.1	16916.8	13029.9
42.5°	16325.2	16443.3	16824.5	17597.7	17954.7	17609.8	17112.0	16919.9	16824.5	18336.0	13803.1
45°	15007.4	15071.0	15785.1	17295.1	18626.5	19311.9	18935.2	18330.0	18157.5	19640.2	14444.6
47.5°	14328.1	14397.7	14847.0	16493.2	18618.9	20687.2	20905.1	19752.2	19443.5	20775.0	14998.3
50°	12710.7	12855.9	13421.8	15098.2	17939.6	21319.6	22964.3	21446.7	20808.3	21879.5	15553.6
52.5°	9740.7	9964.6	10598.5	12804.5	16216.3	21006.5	24611.9	23501.4	22599.6	23023.3	16030.2
55°	6144.3	6310.7	6843.3	9043.2	12972.4	19377.0	25236.8	25724.0	24922.1	24106.6	16443.3
57.5°	3340.7	3414.8	3614.6	4992.9	8438.0	15774.5	24326.0	26988.8	26656.0	25026.5	16754.9
58°	2989.7	3039.6	3163.7	4327.2	7483.3	14789.6	23922.0	26993.4	26827.0	25161.1	16779.1
60°	2218.1	2192.3	2081.9	2469.2	4165.3	10217.3	21480.0	25913.1	26401.8	25326.1	16661.1
62.5°	1948.7	1886.7	1661.3	1635.6	2025.9	4706.9	16435.7	22197.2	23351.6	24385.0	15944.0
65°	1830.7	1764.2	1473.7	1379.9	1461.6	1991.1	9681.7	16647.5	18095.4	21531.5	14110.2
67.5°	1743.0	1656.7	1354.1	1225.5	1231.6	1316.3	3880.8	10485.1	12114.6	16347.9	10975.3
70°	1658.2	1564.4	1252.8	1104.5	1069.7	1040.9	1543.3	5248.6	6726.8	10326.2	6997.6
72.5°	1567.5	1475.2	1163.5	1009.2	941.1	845.8	1007.7	2146.9	2998.8	4885.5	3174.3
75°	1435.8	1352.6	1074.2	924.4	827.6	700.5	761.0	1121.1	1345.1	1945.7	1529.6
77.5°	1273.9	1205.9	974.4	854.8	733.8	568.9	585.5	777.7	862.4	1113.6	909.3
80°	915.4	939.6	866.9	768.6	653.6	461.5	449.4	567.4	612.8	715.6	591.6
82.5°	643.0	656.6	717.2	627.9	540.1	363.1	331.3	399.4	426.7	470.5	319.2
85°	443.3	428.2	491.7	437.3	390.4	242.1	226.9	270.8	287.5	292.0	164.9
87.5°	266.3	266.3	284.4	234.5	210.3	125.6	122.6	154.3	164.9	157.4	90.8
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°	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8	8534.8
2.5°	8557.5	8450.1	8221.6	8038.6	7807.1	7566.5	7431.8	7288.1	7189.8	7118.7	7232.1
5°	8622.6	8403.2	7931.1	7483.3	6988.5	6474.1	6083.8	5720.6	5468.0	5310.6	5458.9
7.5°	8725.5	8388.1	7636.1	6870.5	5982.4	5126.0	4360.5	3880.8	3600.9	3463.3	3549.5
10°	8843.5	8363.9	7289.6	6039.9	4769.0	3690.2	3118.3	2924.6	2861.1	2835.4	2847.5
12.5°	8941.8	8312.4	6864.5	5035.3	3581.3	2914.0	2749.1	2744.6	2758.2	2761.2	2765.8
15°	9011.4	8236.8	6233.5	3988.3	2864.1	2655.3	2646.2	2673.5	2699.2	2709.8	2715.8
17.5°	9058.3	8080.9	5520.9	3153.1	2566.0	2529.7	2550.9	2585.7	2612.9	2620.5	2626.6
20°	9053.8	7852.5	4672.1	2629.6	2404.2	2404.2	2440.5	2467.7	2469.2	2460.1	2464.7
22.5°	9006.9	7539.3	3849.1	2351.2	2260.4	2286.1	2322.5	2296.7	2190.8	2121.2	2125.8
25°	8928.2	7165.6	3144.0	2174.2	2127.3	2172.7	2162.1	1968.4	1817.1	1749.0	1749.0
27.5°	8858.6	6723.8	2602.4	2019.9	1994.1	2050.1	1862.5	1687.0	1623.4	1591.7	1581.1
30°	8808.7	6247.2	2240.7	1871.6	1868.6	1827.7	1615.9	1567.5	1556.9	1531.2	1522.1
32.5°	8820.8	5764.5	2009.3	1741.5	1752.1	1564.4	1497.9	1508.5	1499.4	1472.1	1460.0
35°	8920.6	5306.1	1858.0	1623.4	1591.7	1413.1	1428.3	1447.9	1444.9	1407.1	1395.0
37.5°	9099.2	4871.9	1758.1	1525.1	1388.9	1337.5	1361.7	1392.0	1384.4	1358.7	1349.6
40°	9286.8	4463.3	1676.4	1447.9	1269.4	1286.0	1307.2	1323.9	1331.4	1339.0	1333.0
42.5°	9469.9	4036.7	1576.5	1369.3	1219.5	1237.6	1246.7	1263.4	1304.2	1333.0	1331.4
45°	9578.8	3635.7	1473.7	1257.3	1180.1	1190.7	1184.7	1218.0	1267.9	1314.8	1316.3
47.5°	9699.8	3324.1	1392.0	1154.4	1142.3	1149.9	1131.7	1165.0	1210.4	1267.9	1273.9
50°	9846.6	3138.0	1326.9	1072.7	1090.9	1090.9	1086.3	1116.6	1180.1	1246.7	1258.8
52.5°	10013.0	3101.6	1272.4	1013.7	1039.4	1037.9	1042.5	1087.8	1157.4	1222.5	1233.1
55°	10215.8	3200.0	1213.4	969.8	989.5	995.6	1010.7	1062.1	1121.1	1195.3	1199.8
57.5°	10451.8	3399.7	1166.5	935.0	944.1	963.8	988.0	1034.9	1098.4	1180.1	1184.7
58°	10491.1	3442.1	1159.0	932.0	935.0	957.7	985.0	1030.4	1093.9	1183.2	1187.7
60°	10492.6	3582.8	1142.3	918.4	900.2	938.1	968.3	1013.7	1086.3	1193.8	1204.3
62.5°	10120.4	3581.3	1130.2	898.7	863.9	910.8	945.6	998.6	1078.8	1219.5	1240.7
65°	8911.6	3254.5	1072.7	868.5	835.2	886.6	926.0	988.0	1099.9	1331.4	1345.1
67.5°	6970.4	2667.4	965.3	826.1	797.3	862.4	913.9	986.5	1122.6	1357.2	1366.2
70°	4608.6	1995.6	847.3	777.7	758.0	833.7	919.9	1037.9	1096.9	1302.7	1278.5
72.5°	2392.0	1401.0	752.0	717.2	712.6	807.9	1007.7	1031.9	1071.2	1225.5	1195.3
75°	1255.8	972.9	668.7	650.6	658.2	801.9	1189.2	1004.6	1037.9	1172.6	1230.1
77.5°	768.6	785.2	597.6	590.1	605.2	783.7	1187.7	969.8	989.5	1078.8	1142.3
80°	514.4	637.0	543.2	544.7	555.3	717.2	1066.7	915.4	930.5	1019.8	1084.8
82.5°	325.3	376.7	493.2	519.0	505.3	591.6	906.3	833.7	854.8	1166.5	1233.1
85°	164.9	236.0	428.2	499.3	455.4	414.6	735.3	730.8	741.4	841.2	879.1
87.5°	75.6	130.1	334.4	435.7	343.5	258.7	534.1	541.7	584.0	597.6	597.6
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)