

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: P300454

Luminaire Tested: **GLNA-AF-07-LED-E1-AFL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300454
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-07-LED-E1-AFL-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 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: 28357.7 lumens
Efficiency: N/A
Efficacy: 125.5 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

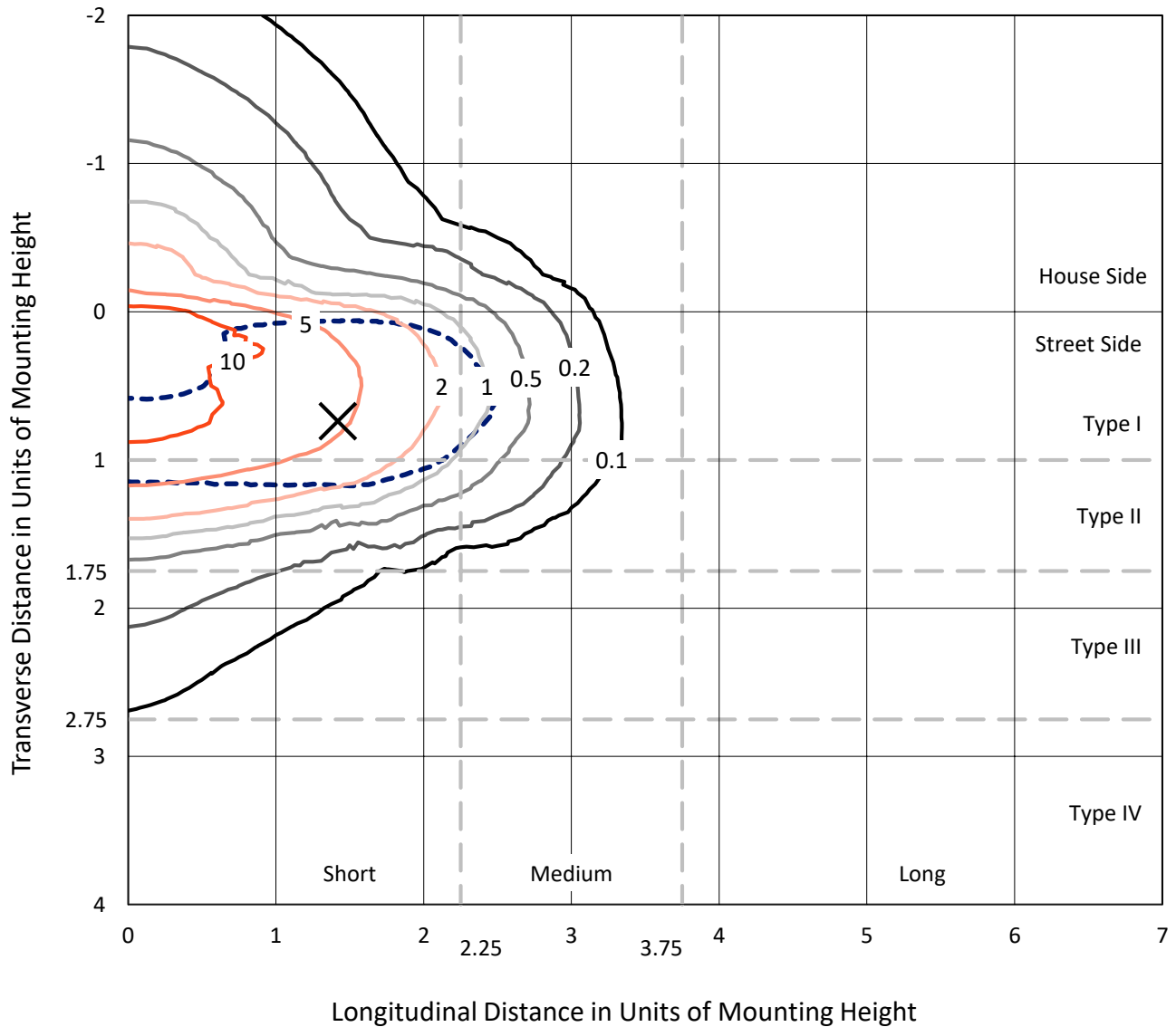
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

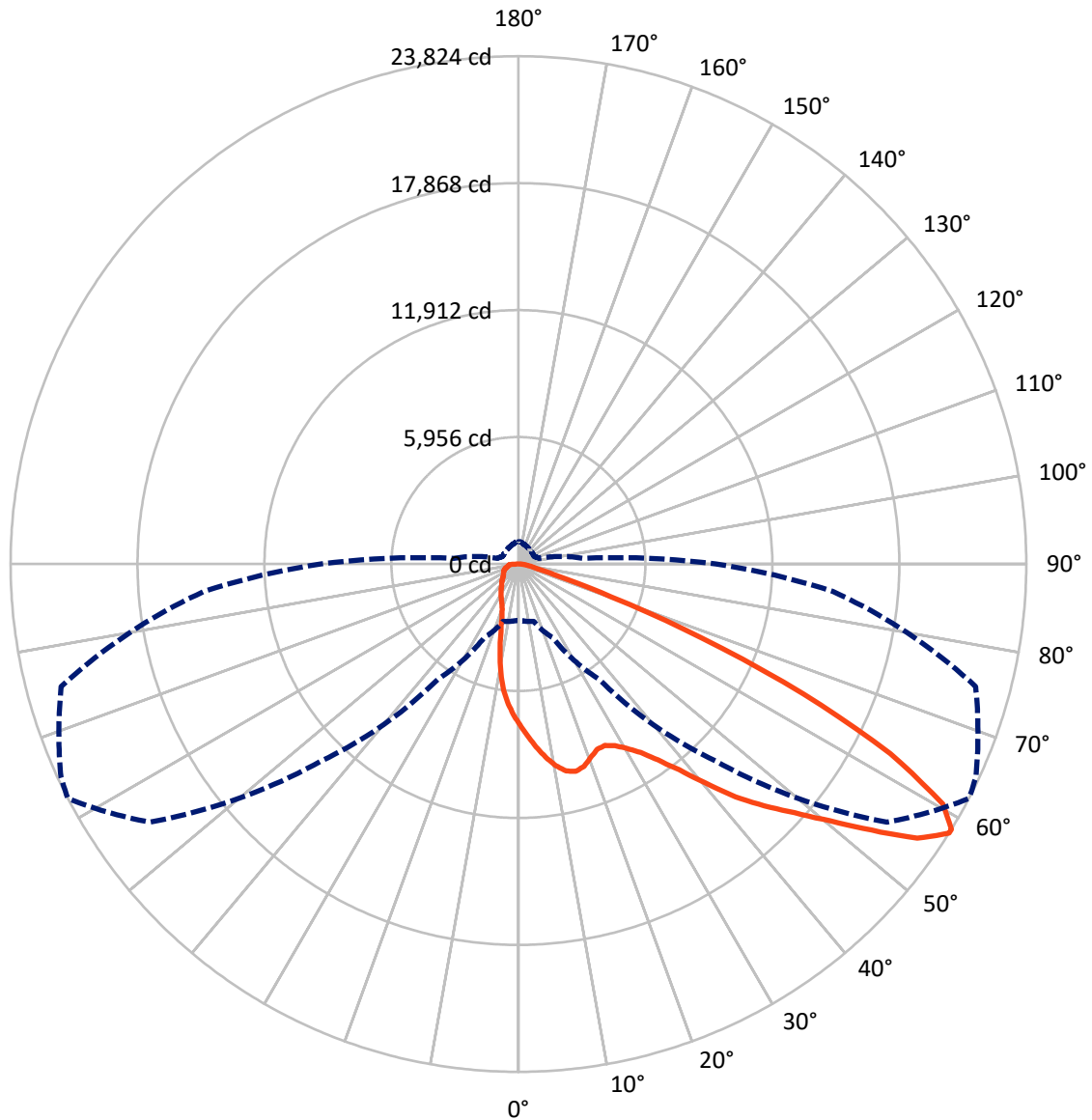
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.7 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
House Side	Lumens	4324.7	0.0	4324.7
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	24033.0	0.0	24033.0
	% Fixture	84.7	0.0	84.7
Total	Lumens	28357.7	0.0	28357.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	673.7	2.4
10°-20°	1722.0	6.1
20°-30°	2783.7	9.8
30°-40°	4419.2	15.6
40°-50°	6466.2	22.8
50°-60°	6763.1	23.8
60°-70°	3995.6	14.1
70°-80°	1125.6	4.0
80°-90°	408.7	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°	28357.7	100.0
0°-180°	28357.7	100.0



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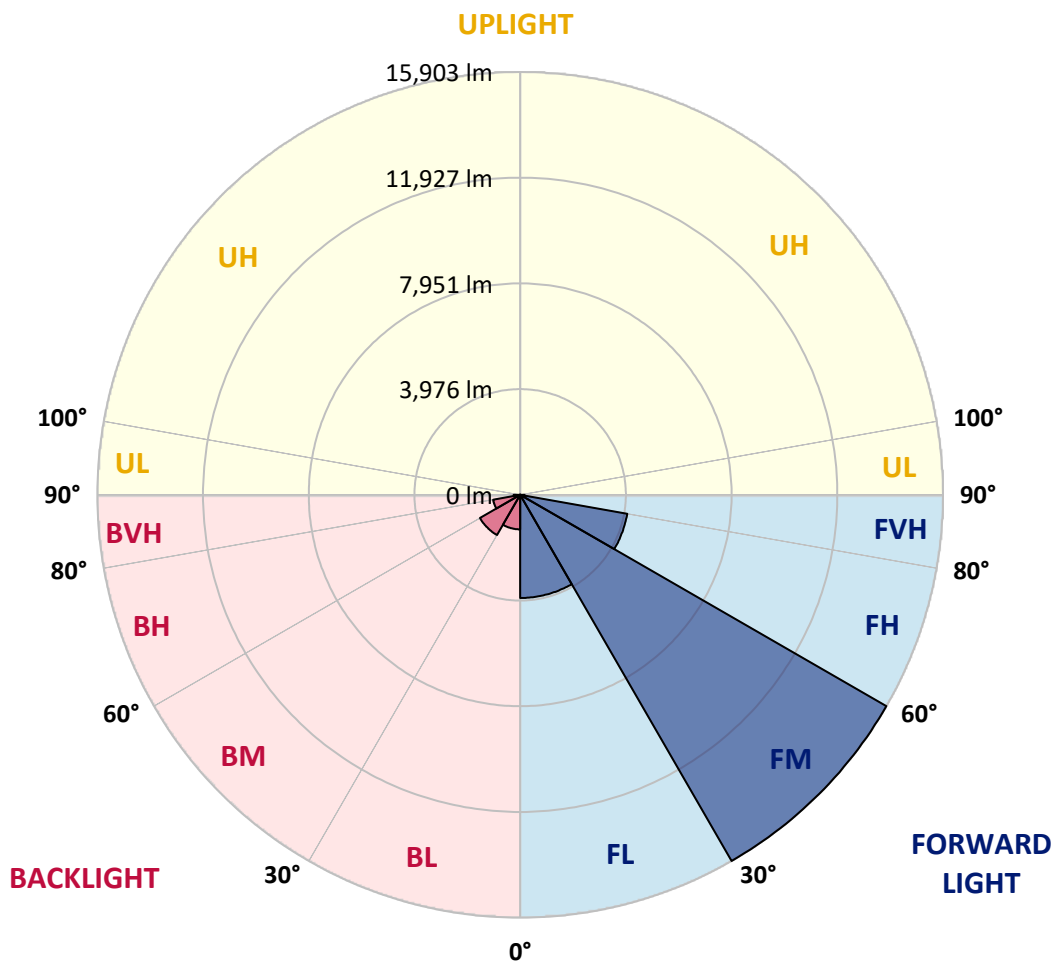
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3879.7	13.7			
FM (30°-60°)	15902.8	56.1			
FH (60°-80°)	4089.3	14.4			G2/5000
FVH (80°-90°)	161.2	0.6			G2/225
BL (0°-30°)	1299.8	4.6	B3/2500		
BM (30°-60°)	1745.5	6.2	B2/2500		
BH (60°-80°)	1031.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	247.4	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°	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6
2.5°	8607.6	8538.2	8494.1	8455.4	8404.6	8296.5	8150.9	8058.8	8012.0	7853.1	7664.8
5°	9451.5	9390.1	9344.7	9292.6	9201.8	9032.2	8797.2	8610.3	8518.1	8200.3	7823.7
7.5°	9253.9	9279.3	9358.0	9495.6	9613.1	9590.4	9380.8	9143.1	9021.5	8579.5	8008.0
10°	8062.8	8106.8	8243.0	8564.9	9085.6	9619.8	9782.7	9618.4	9495.6	8954.8	8197.6
12.5°	7823.7	7822.4	7833.1	7918.6	8228.4	8980.1	9796.0	9961.6	9888.2	9312.6	8391.3
15°	7921.2	7923.9	7915.9	7951.9	8048.1	8345.9	9387.4	10093.8	10145.9	9673.2	8591.6
17.5°	8177.6	8170.9	8140.2	8140.2	8174.9	8291.1	8906.7	9971.0	10211.3	9992.3	8767.8
20°	8607.6	8576.9	8495.4	8420.6	8383.3	8446.0	8709.1	9687.9	10097.8	10271.4	8913.4
22.5°	9128.4	9104.3	8972.1	8811.9	8682.4	8681.0	8810.6	9440.8	9901.5	10534.5	9036.2
25°	9801.4	9762.7	9566.4	9310.0	9083.0	8996.2	9032.2	9428.8	9794.7	10820.2	9145.7
27.5°	10591.9	10521.1	10288.8	9918.9	9585.1	9410.1	9358.0	9646.5	9892.2	11174.1	9298.0
30°	11550.7	11469.2	11171.4	10689.4	10218.0	9930.9	9820.1	10032.4	10215.3	11605.4	9542.3
32.5°	12641.6	12524.1	12179.6	11648.2	11028.6	10590.6	10410.3	10542.5	10688.0	12124.9	9848.1
35°	14149.2	14009.0	13511.0	12777.9	12078.1	11475.9	11187.5	11283.6	11425.2	12899.4	10290.1
37.5°	15177.5	15114.7	14783.5	14094.5	13333.4	12640.3	12194.3	12250.4	12330.5	13867.5	10856.3
40°	15168.1	15193.5	15200.2	15206.8	14688.7	14025.1	13545.7	13486.9	13470.9	14930.4	11499.9
42.5°	14408.3	14512.5	14849.0	15531.3	15846.5	15542.0	15102.7	14933.1	14849.0	16183.0	12182.3
45°	13245.2	13301.3	13931.6	15264.2	16439.3	17044.3	16711.8	16177.6	16025.4	17334.0	12748.5
47.5°	12645.7	12707.1	13103.7	14556.5	16432.7	18258.1	18450.4	17432.8	17160.4	18335.5	13237.2
50°	11218.2	11346.4	11845.8	13325.3	15833.1	18816.2	20267.8	18928.4	18364.9	19310.3	13727.3
52.5°	8596.9	8794.5	9354.0	11301.0	14312.2	18539.8	21721.9	20741.8	19945.9	20319.8	14147.9
55°	5422.8	5569.7	6039.7	7981.3	11449.2	17101.7	22273.4	22703.4	21995.7	21275.9	14512.5
57.5°	2948.4	3013.9	3190.1	4406.6	7447.2	13922.2	21469.6	23819.8	23526.0	22087.8	14787.5
58°	2638.6	2682.7	2792.2	3819.1	6604.6	13052.9	21113.0	23823.8	23676.9	22206.7	14808.9
60°	1957.6	1934.9	1837.4	2179.3	3676.2	9017.5	18957.8	22870.3	23301.6	22352.2	14704.7
62.5°	1719.9	1665.2	1466.2	1443.5	1788.0	4154.2	14505.8	19590.7	20609.6	21521.6	14071.8
65°	1615.8	1557.0	1300.6	1217.8	1289.9	1757.3	8544.8	14692.7	15970.6	19003.2	12453.4
67.5°	1538.3	1462.2	1195.1	1081.6	1087.0	1161.7	3425.1	9253.9	10692.1	14428.3	9686.5
70°	1463.5	1380.7	1105.7	974.8	944.1	918.7	1362.0	4632.3	5936.9	9113.7	6175.9
72.5°	1383.4	1302.0	1026.9	890.7	830.6	746.5	889.3	1894.8	2646.6	4311.8	2801.5
75°	1267.2	1193.8	948.1	815.9	730.4	618.3	671.7	989.5	1187.1	1717.2	1350.0
77.5°	1124.4	1064.3	860.0	754.5	647.6	502.1	516.8	686.4	761.1	982.8	802.5
80°	807.9	829.2	765.1	678.4	576.9	407.3	396.6	500.8	540.8	631.6	522.1
82.5°	567.5	579.5	633.0	554.2	476.7	320.5	292.4	352.5	376.6	415.3	281.8
85°	391.3	377.9	434.0	385.9	344.5	213.7	200.3	239.0	253.7	257.7	145.6
87.5°	235.0	235.0	251.0	207.0	185.6	110.8	108.2	136.2	145.6	138.9	80.1
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°	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6	7532.6
2.5°	7552.7	7457.9	7256.2	7094.7	6890.3	6678.0	6559.2	6432.3	6345.5	6282.8	6382.9
5°	7610.1	7416.5	6999.8	6604.6	6167.9	5713.9	5369.4	5048.9	4825.9	4687.0	4817.9
7.5°	7700.9	7403.1	6739.5	6063.8	5279.9	4524.1	3848.4	3425.1	3178.1	3056.6	3132.7
10°	7805.1	7381.7	6433.7	5330.7	4209.0	3256.9	2752.1	2581.2	2525.1	2502.4	2513.1
12.5°	7891.8	7336.3	6058.4	4444.0	3160.7	2571.9	2426.3	2422.3	2434.3	2437.0	2441.0
15°	7953.3	7269.6	5501.6	3520.0	2527.8	2343.5	2335.5	2359.5	2382.2	2391.6	2396.9
17.5°	7994.7	7132.0	4872.6	2782.8	2264.7	2232.7	2251.4	2282.1	2306.1	2312.8	2318.1
20°	7990.7	6930.4	4123.5	2320.8	2121.9	2121.9	2153.9	2177.9	2179.3	2171.3	2175.3
22.5°	7949.3	6654.0	3397.1	2075.1	1995.0	2017.7	2049.7	2027.0	1933.6	1872.1	1876.2
25°	7879.8	6324.2	2774.8	1918.9	1877.5	1917.5	1908.2	1737.3	1603.7	1543.7	1543.7
27.5°	7818.4	5934.2	2296.8	1782.7	1760.0	1809.4	1643.8	1488.9	1432.8	1404.8	1395.4
30°	7774.3	5513.6	1977.6	1651.8	1649.1	1613.1	1426.1	1383.4	1374.1	1351.4	1343.4
32.5°	7785.0	5087.6	1773.3	1537.0	1546.3	1380.7	1322.0	1331.3	1323.3	1299.3	1288.6
35°	7873.2	4683.0	1639.8	1432.8	1404.8	1247.2	1260.6	1277.9	1275.2	1241.9	1231.2
37.5°	8030.7	4299.8	1551.7	1346.0	1225.8	1180.4	1201.8	1228.5	1221.8	1199.1	1191.1
40°	8196.3	3939.2	1479.6	1277.9	1120.3	1135.0	1153.7	1168.4	1175.1	1181.8	1176.4
42.5°	8357.9	3562.7	1391.4	1208.5	1076.3	1092.3	1100.3	1115.0	1151.1	1176.4	1175.1
45°	8454.0	3208.8	1300.6	1109.7	1041.6	1050.9	1045.6	1074.9	1119.0	1160.4	1161.7
47.5°	8560.9	2933.7	1228.5	1018.9	1008.2	1014.9	998.8	1028.2	1068.3	1119.0	1124.4
50°	8690.4	2769.5	1171.1	946.8	962.8	962.8	958.8	985.5	1041.6	1100.3	1111.0
52.5°	8837.3	2737.4	1123.0	894.7	917.4	916.0	920.0	960.1	1021.5	1079.0	1088.3
55°	9016.2	2824.2	1070.9	856.0	873.3	878.7	892.0	937.4	989.5	1054.9	1058.9
57.5°	9224.5	3000.5	1029.5	825.2	833.3	850.6	872.0	913.4	969.5	1041.6	1045.6
58°	9259.2	3037.9	1022.9	822.6	825.2	845.3	869.3	909.4	965.4	1044.2	1048.2
60°	9260.6	3162.1	1008.2	810.6	794.5	827.9	854.6	894.7	958.8	1053.6	1062.9
62.5°	8932.1	3160.7	997.5	793.2	762.5	803.9	834.6	881.3	952.1	1076.3	1095.0
65°	7865.1	2872.3	946.8	766.5	737.1	782.5	817.2	872.0	970.8	1175.1	1187.1
67.5°	6151.9	2354.2	851.9	729.1	703.7	761.1	806.5	870.6	990.8	1197.8	1205.8
70°	4067.4	1761.3	747.8	686.4	669.0	735.8	811.9	916.0	968.1	1149.7	1128.4
72.5°	2111.2	1236.5	663.7	633.0	628.9	713.1	889.3	910.7	945.4	1081.6	1054.9
75°	1108.3	858.6	590.2	574.2	580.9	707.7	1049.6	886.7	916.0	1034.9	1085.6
77.5°	678.4	693.0	527.5	520.8	534.1	691.7	1048.2	856.0	873.3	952.1	1008.2
80°	454.0	562.2	479.4	480.7	490.1	633.0	941.4	807.9	821.2	900.0	957.4
82.5°	287.1	332.5	435.3	458.0	446.0	522.1	799.9	735.8	754.5	1029.5	1088.3
85°	145.6	208.3	377.9	440.7	401.9	365.9	649.0	645.0	654.3	742.4	775.8
87.5°	66.8	114.8	295.1	384.6	303.1	228.3	471.4	478.1	515.4	527.5	527.5
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)