

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: P190957

Luminaire Tested: **GLEON-AF-09-LED-E1-AFL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190957
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: GLEON-AF-09-LED-E1-AFL-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36794.5 lumens
Efficiency: N/A
Efficacy: 126.9 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

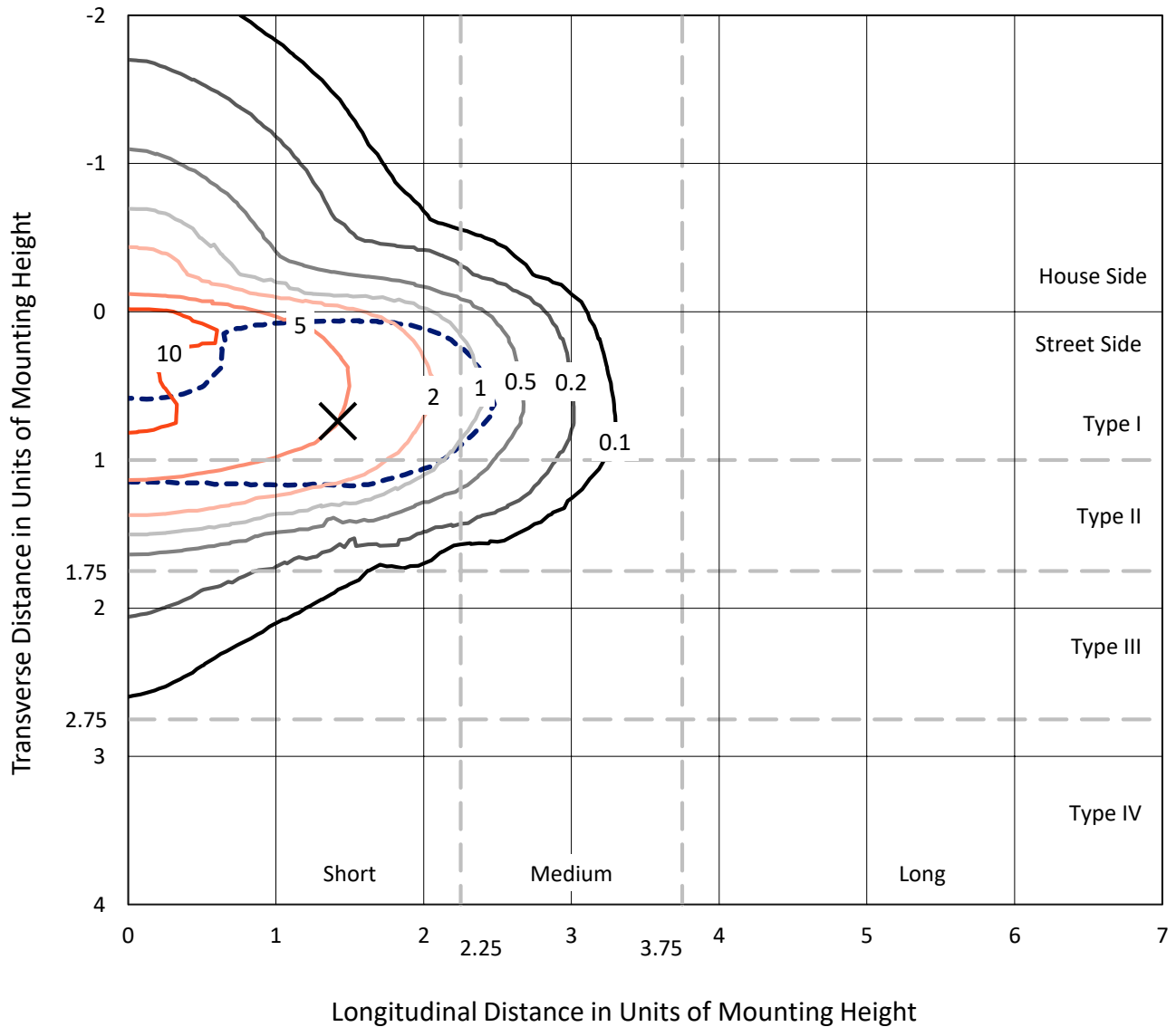


REPORT NUMBER: P190957

CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-600

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

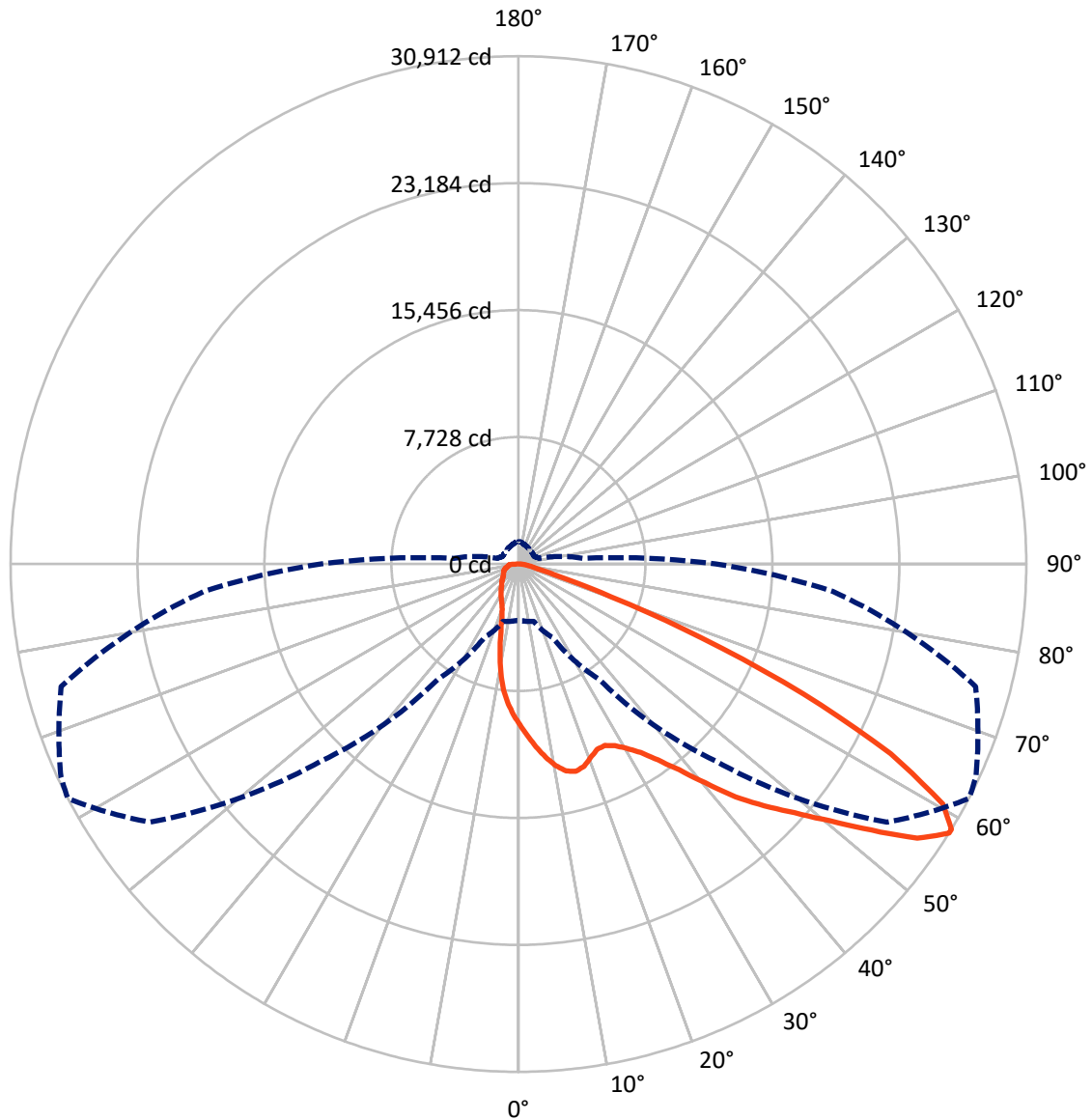


Based on 30 foot mounting height. Maximum calculated value = 13.2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P190957

CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-600

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	5611.3	0.0	5611.3
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	31183.2	0.0	31183.2
	% Fixture	84.7	0.0	84.7
Total	Lumens	36794.5	0.0	36794.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	874.1	2.4
10°-20°	2234.4	6.1
20°-30°	3611.9	9.8
30°-40°	5733.9	15.6
40°-50°	8389.9	22.8
50°-60°	8775.2	23.8
60°-70°	5184.4	14.1
70°-80°	1460.5	4.0
80°-90°	530.2	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°	36794.5	100.0
0°-180°	36794.5	100.0



REPORT NUMBER: P190957

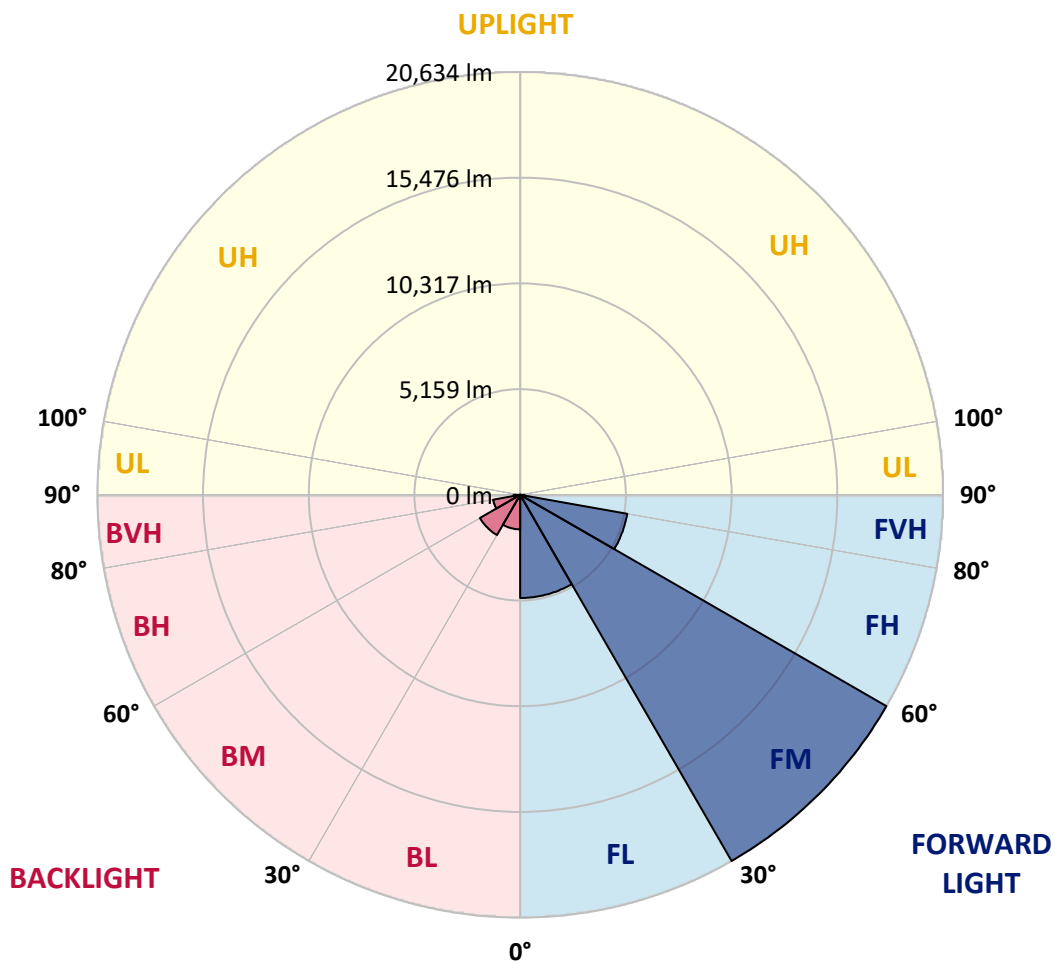
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5033.9	13.7			
FM (30°-60°)	20634.2	56.1			
FH (60°-80°)	5305.9	14.4			G3/7500
FVH (80°-90°)	209.2	0.6			G2/225
BL (0°-30°)	1686.5	4.6	B3/2500		
BM (30°-60°)	2264.9	6.2	B2/2500		
BH (60°-80°)	1338.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	321.1	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





REPORT NUMBER: P190957

CATALOG NUMBER: GLEON-AF-09-LED-E1-AFL-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7
2.5°	11168.5	11078.4	11021.2	10970.9	10905.1	10764.8	10575.9	10456.4	10395.7	10189.5	9945.2
5°	12263.4	12183.8	12124.8	12057.3	11939.5	11719.4	11414.5	11172.0	11052.4	10640.0	10151.5
7.5°	12007.1	12040.0	12142.2	12320.6	12473.1	12443.7	12171.7	11863.3	11705.6	11132.1	10390.5
10°	10461.6	10518.7	10695.5	11113.0	11788.8	12481.8	12693.2	12480.1	12320.6	11619.0	10636.5
12.5°	10151.5	10149.7	10163.5	10274.4	10676.4	11651.9	12710.5	12925.4	12830.1	12083.3	10887.8
15°	10277.9	10281.4	10270.9	10317.8	10442.5	10828.9	12180.3	13096.8	13164.5	12551.1	11147.7
17.5°	10610.6	10601.9	10562.1	10562.1	10607.1	10757.9	11556.6	12937.5	13249.4	12965.2	11376.3
20°	11168.5	11128.6	11022.9	10925.9	10877.3	10958.9	11300.1	12570.1	13102.1	13327.3	11565.3
22.5°	11844.2	11813.0	11641.5	11433.5	11265.5	11263.8	11431.8	12249.6	12847.3	13668.7	11724.7
25°	12717.4	12667.2	12412.5	12079.8	11785.3	11672.7	11719.4	12234.1	12708.7	14039.4	11866.7
27.5°	13743.1	13651.3	13349.8	12869.9	12436.7	12209.7	12142.2	12516.4	12835.3	14498.6	12064.3
30°	14987.2	14881.5	14495.1	13869.7	13258.1	12885.5	12741.7	13017.2	13254.6	15058.2	12381.3
32.5°	16402.7	16250.3	15803.3	15113.7	14309.8	13741.4	13507.6	13679.0	13867.9	15732.2	12778.1
35°	18358.9	18176.9	17530.6	16579.5	15671.6	14890.2	14515.9	14640.7	14824.3	16737.1	13351.6
37.5°	19692.9	19611.5	19181.9	18287.8	17300.2	16401.0	15822.3	15895.0	15999.1	17993.3	14086.2
40°	19680.9	19713.8	19722.4	19731.1	19058.8	18197.7	17575.7	17499.5	17478.6	19372.4	14921.4
42.5°	18694.9	18830.2	19266.8	20152.1	20561.0	20165.9	19596.0	19375.9	19266.8	20997.6	15806.7
45°	17185.9	17258.6	18076.5	19805.6	21330.3	22115.2	21683.8	20990.7	20793.2	22491.1	16541.3
47.5°	16407.9	16487.6	17002.2	18887.3	21321.7	23690.1	23939.6	22619.4	22266.0	23790.7	17175.4
50°	14555.8	14722.1	15370.0	17289.8	20543.7	24414.4	26297.7	24559.9	23828.7	25055.4	17811.3
52.5°	11154.6	11411.0	12137.0	14663.2	18570.2	24055.7	28184.5	26912.8	25880.1	26365.3	18357.2
55°	7036.2	7226.7	7836.6	10355.8	14855.5	22189.6	28900.1	29458.0	28539.7	27605.9	18830.2
57.5°	3825.6	3910.5	4139.3	5717.7	9662.8	18064.3	27857.1	30906.5	30525.4	28659.3	19187.1
58°	3423.6	3480.8	3622.9	4955.3	8569.6	16936.4	27394.4	30911.7	30721.1	28813.5	19214.8
60°	2540.0	2510.5	2384.1	2827.6	4769.9	11700.4	24598.0	29674.6	30234.2	29002.3	19079.7
62.5°	2231.6	2160.6	1902.4	1872.9	2320.0	5390.1	18821.5	25419.3	26741.3	27924.6	18258.3
65°	2096.4	2020.2	1687.6	1580.2	1673.8	2280.2	11087.0	19064.0	20722.1	24656.9	16158.4
67.5°	1996.0	1897.3	1550.7	1403.4	1410.3	1507.4	4444.2	12007.1	13873.1	18720.9	12568.4
70°	1898.9	1791.5	1434.6	1264.8	1225.0	1192.0	1767.2	6010.4	7703.2	11825.1	8013.4
72.5°	1795.0	1689.3	1332.4	1155.6	1077.7	968.5	1153.9	2458.6	3434.0	5594.6	3635.1
75°	1644.3	1549.0	1230.2	1058.7	947.8	802.2	871.6	1283.9	1540.3	2228.2	1751.7
77.5°	1458.8	1380.9	1115.8	979.0	840.4	651.4	670.5	890.6	987.6	1275.2	1041.3
80°	1048.2	1075.9	992.8	880.1	748.5	528.5	514.5	649.8	701.7	819.5	677.5
82.5°	736.3	752.0	821.2	719.0	618.6	415.8	379.4	457.4	488.6	538.9	365.6
85°	507.7	490.3	563.1	500.7	447.0	277.2	259.9	310.2	329.2	334.4	188.8
87.5°	304.9	304.9	325.7	268.5	240.8	143.8	140.3	176.8	188.8	180.1	103.9
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: P190957

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7	9773.7
2.5°	9799.7	9676.7	9415.0	9205.4	8940.3	8664.8	8510.6	8346.1	8233.4	8152.0	8281.9
5°	9874.2	9623.0	9082.4	8569.6	8003.0	7413.8	6966.9	6551.1	6261.7	6081.5	6251.3
7.5°	9992.0	9605.6	8744.5	7867.8	6850.8	5870.1	4993.4	4444.2	4123.6	3966.0	4064.7
10°	10127.2	9577.9	8347.8	6916.6	5461.2	4225.9	3570.9	3349.1	3276.4	3246.9	3260.8
12.5°	10239.8	9519.1	7860.9	5766.2	4101.1	3337.1	3148.1	3143.0	3158.6	3162.0	3167.3
15°	10319.5	9432.4	7138.4	4567.2	3279.9	3040.7	3030.4	3061.6	3090.9	3103.1	3110.1
17.5°	10373.2	9253.9	6322.3	3610.8	2938.5	2896.9	2921.2	2961.0	2992.2	3000.9	3007.8
20°	10368.0	8992.4	5350.3	3011.3	2753.2	2753.2	2794.7	2825.9	2827.6	2817.2	2822.4
22.5°	10314.3	8633.6	4407.8	2692.5	2588.6	2618.0	2659.6	2630.1	2508.8	2429.1	2434.3
25°	10224.2	8205.7	3600.4	2489.8	2436.1	2488.0	2476.0	2254.2	2080.9	2002.9	2002.9
27.5°	10144.5	7699.8	2980.1	2313.1	2283.6	2347.7	2132.9	1931.8	1859.1	1822.7	1810.6
30°	10087.3	7154.0	2566.0	2143.3	2139.8	2093.0	1850.4	1795.0	1782.9	1753.4	1743.0
32.5°	10101.2	6601.3	2300.9	1994.2	2006.4	1791.5	1715.3	1727.5	1717.0	1685.8	1672.0
35°	10215.5	6076.3	2127.6	1859.1	1822.7	1618.3	1635.6	1658.1	1654.6	1611.4	1597.4
37.5°	10420.0	5579.1	2013.3	1746.5	1590.6	1531.7	1559.4	1594.0	1585.4	1555.9	1545.5
40°	10634.8	5111.3	1919.8	1658.1	1453.7	1472.7	1497.0	1516.0	1524.7	1533.4	1526.4
42.5°	10844.5	4622.6	1805.4	1568.0	1396.5	1417.3	1427.6	1446.8	1493.5	1526.4	1524.7
45°	10969.2	4163.5	1687.6	1439.8	1351.4	1363.6	1356.6	1394.8	1452.0	1505.7	1507.4
47.5°	11107.8	3806.6	1594.0	1322.0	1308.1	1316.7	1296.0	1334.1	1386.1	1452.0	1458.8
50°	11275.9	3593.4	1519.5	1228.5	1249.2	1249.2	1244.0	1278.7	1351.4	1427.6	1441.5
52.5°	11466.5	3551.9	1457.1	1160.8	1190.3	1188.6	1193.8	1245.7	1325.4	1399.9	1412.1
55°	11698.7	3664.5	1389.6	1110.6	1133.1	1140.1	1157.4	1216.3	1283.9	1368.8	1373.9
57.5°	11968.9	3893.2	1335.9	1070.7	1081.2	1103.7	1131.4	1185.1	1257.9	1351.4	1356.6
58°	12013.9	3941.7	1327.2	1067.2	1070.7	1096.7	1127.9	1179.9	1252.7	1354.9	1360.1
60°	12015.7	4102.9	1308.1	1051.7	1030.9	1074.2	1108.9	1160.8	1244.0	1367.1	1379.1
62.5°	11589.5	4101.1	1294.2	1029.2	989.3	1043.0	1082.9	1143.6	1235.3	1396.5	1420.8
65°	10205.2	3726.9	1228.5	994.5	956.4	1015.3	1060.4	1131.4	1259.7	1524.7	1540.3
67.5°	7982.2	3054.6	1105.4	946.0	913.1	987.6	1046.5	1129.6	1285.6	1554.2	1564.6
70°	5277.6	2285.4	970.3	890.6	868.1	954.7	1053.4	1188.6	1256.2	1491.8	1464.0
72.5°	2739.3	1604.4	861.1	821.2	816.1	925.3	1153.9	1181.6	1226.7	1403.4	1368.8
75°	1438.1	1114.1	765.8	745.0	753.7	918.3	1361.9	1150.4	1188.6	1342.8	1408.6
77.5°	880.1	899.3	684.4	675.8	693.0	897.5	1360.1	1110.6	1133.1	1235.3	1308.1
80°	589.1	729.5	622.1	623.7	635.9	821.2	1221.5	1048.2	1065.6	1167.8	1242.3
82.5°	372.6	431.4	564.9	594.3	578.7	677.5	1037.9	954.7	979.0	1335.9	1412.1
85°	188.8	270.3	490.3	571.7	521.5	474.8	842.1	836.9	848.9	963.3	1006.7
87.5°	86.6	149.0	382.9	499.0	393.3	296.2	611.6	620.3	668.8	684.4	684.4
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)