

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: P300349

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300349
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-10-LED-E1-AFL-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND
Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52336.8 lumens
Efficiency: N/A
Efficacy: 93.8 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 - G4

Input Watts (W): 558
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

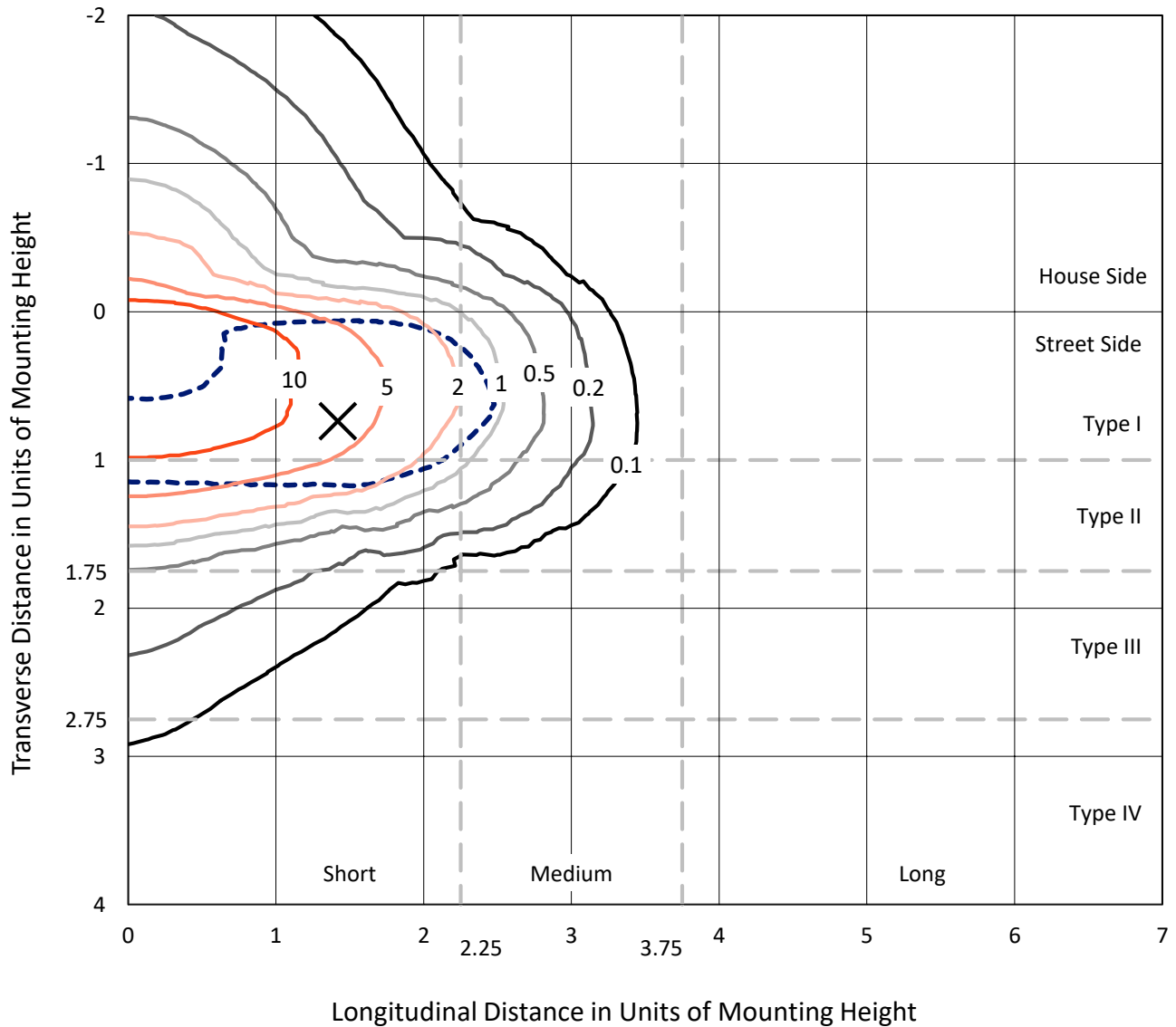


REPORT NUMBER: P300349

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

Iso-Footcandle Lines of Horizontal Illumination

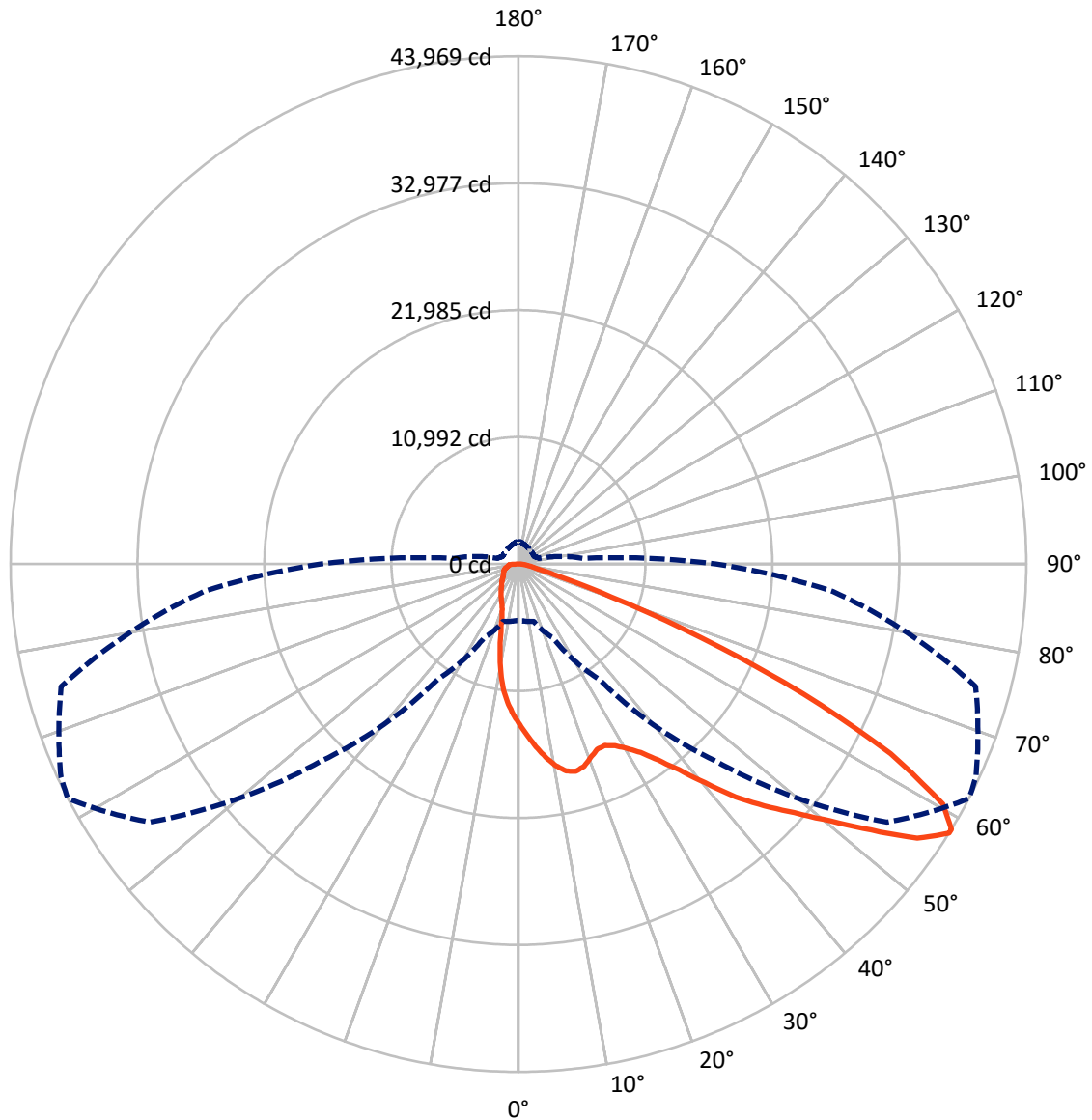
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 18.8 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300349
CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P300349

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7981.6	0.0	7981.6
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	44355.2	0.0	44355.2
	% Fixture	84.7	0.0	84.7
Total	Lumens	52336.8	0.0	52336.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1243.4	2.4
10°-20°	3178.2	6.1
20°-30°	5137.6	9.8
30°-40°	8156.0	15.6
40°-50°	11933.9	22.8
50°-60°	12481.9	23.8
60°-70°	7374.3	14.1
70°-80°	2077.4	4.0
80°-90°	754.2	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°	52336.8	100.0
0°-180°	52336.8	100.0



REPORT NUMBER: P300349

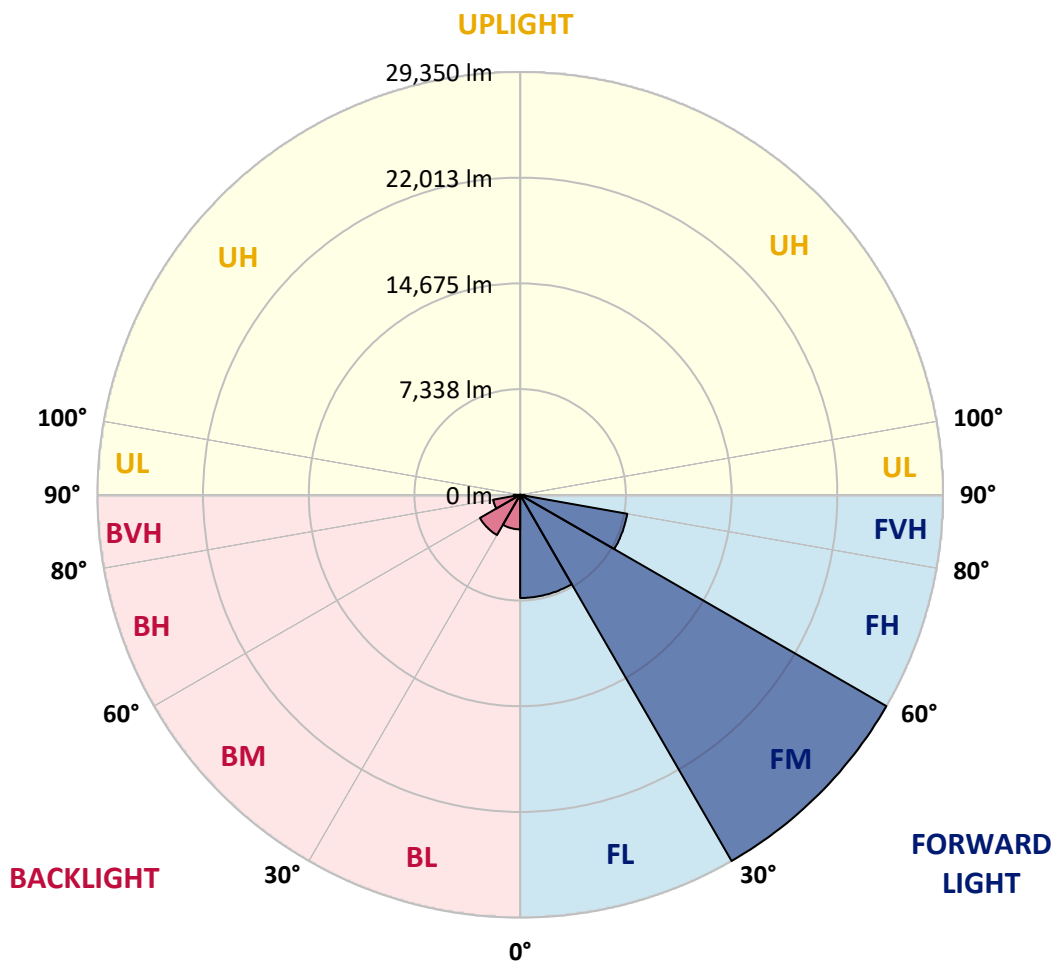
CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7160.3	13.7			
FM	(30°-60°)	29350.2	56.1			
FH	(60°-80°)	7547.2	14.4			G4/12000
FVH	(80°-90°)	297.5	0.6			G3/500
BL	(0°-30°)	2398.9	4.6	B3/2500		
BM	(30°-60°)	3221.6	6.2	B3/5000		
BH	(60°-80°)	1904.5	3.6	B3/2500		G3/2500
BVH	(80°-90°)	456.7	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-G4

Type II Short





REPORT NUMBER: P300349

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2
2.5°	15886.1	15758.0	15676.6	15605.2	15511.5	15311.9	15043.3	14873.2	14787.0	14493.7	14146.2
5°	17443.7	17330.3	17246.5	17150.4	16982.8	16669.8	16236.1	15891.0	15721.0	15134.4	14439.5
7.5°	17078.9	17125.8	17271.2	17525.0	17741.9	17700.0	17313.1	16874.4	16650.1	15834.4	14779.6
10°	14880.6	14961.9	15213.3	15807.3	16768.4	17754.2	18054.9	17751.7	17525.0	16526.9	15129.5
12.5°	14439.5	14437.0	14456.7	14614.4	15186.2	16573.7	18079.5	18385.1	18249.6	17187.4	15486.9
15°	14619.4	14624.3	14609.5	14676.0	14853.5	15403.1	17325.4	18629.1	18725.2	17852.8	15856.5
17.5°	15092.5	15080.2	15023.5	15023.5	15087.6	15302.0	16438.2	18402.4	18846.0	18441.8	16181.9
20°	15886.1	15829.4	15679.1	15541.1	15472.1	15587.9	16073.4	17879.9	18636.5	18956.9	16450.5
22.5°	16847.3	16802.9	16558.9	16263.2	16024.1	16021.7	16260.7	17424.0	18274.2	19442.4	16677.2
25°	18089.4	18017.9	17655.6	17182.4	16763.5	16603.3	16669.8	17401.8	18077.0	19969.8	16879.3
27.5°	19548.4	19417.7	18988.9	18306.2	17690.1	17367.3	17271.2	17803.5	18257.0	20622.9	17160.3
30°	21317.9	21167.5	20617.9	19728.3	18858.3	18328.4	18123.9	18515.7	18853.4	21418.9	17611.3
32.5°	23331.3	23114.5	22478.6	21497.8	20354.2	19545.9	19213.2	19457.2	19725.8	22377.6	18175.6
35°	26113.8	25855.0	24935.7	23582.7	22291.3	21179.8	20647.5	20825.0	21086.2	23807.0	18991.4
37.5°	28011.4	27895.6	27284.4	26012.7	24608.0	23328.9	22505.7	22609.2	22757.1	25593.7	20036.3
40°	27994.2	28041.0	28053.3	28065.6	27109.4	25884.6	24999.8	24891.4	24861.8	27555.5	21224.2
42.5°	26591.9	26784.1	27405.2	28664.5	29246.1	28684.2	27873.4	27560.4	27405.2	29867.2	22483.6
45°	24445.3	24548.8	25712.0	28171.6	30340.4	31456.8	30843.1	29857.3	29576.4	31991.6	23528.5
47.5°	23338.7	23452.1	24184.1	26865.4	30328.0	33697.0	34051.9	32173.9	31671.2	33839.9	24430.5
50°	20704.2	20940.8	21862.5	24593.2	29221.5	34727.2	37406.1	34934.2	33894.2	35639.0	25335.0
52.5°	15866.4	16231.1	17263.8	20857.0	26414.4	34217.0	40089.9	38281.0	36812.1	37502.2	26111.3
55°	10008.3	10279.4	11146.9	14730.3	21130.6	31562.7	41107.7	41901.3	40595.1	39266.8	26784.1
57.5°	5441.6	5562.4	5887.7	8132.8	13744.5	25694.8	39624.1	43961.6	43419.4	40765.2	27291.8
58°	4869.8	4951.2	5153.3	7048.4	12189.4	24090.4	38966.1	43969.0	43697.9	40984.5	27331.2
60°	3612.9	3571.0	3391.1	4022.1	6784.7	16642.7	34988.4	42209.4	43005.4	41253.1	27139.0
62.5°	3174.3	3073.2	2706.0	2664.1	3300.0	7667.0	26771.8	36156.6	38037.0	39720.2	25970.8
65°	2982.0	2873.6	2400.4	2247.6	2380.7	3243.3	15770.3	27116.8	29475.3	35072.2	22983.9
67.5°	2839.1	2698.6	2205.7	1996.2	2006.1	2144.1	6321.4	17078.9	19733.2	26628.8	17877.4
70°	2701.1	2548.3	2040.6	1799.1	1742.4	1695.6	2513.8	8549.3	10957.1	16820.2	11398.3
72.5°	2553.2	2402.9	1895.2	1643.8	1532.9	1377.7	1641.4	3497.1	4884.6	7957.8	5170.5
75°	2338.8	2203.3	1749.8	1505.8	1348.1	1141.1	1239.6	1826.2	2190.9	3169.3	2491.6
77.5°	2075.1	1964.2	1587.1	1392.4	1195.3	926.6	953.8	1266.7	1404.8	1813.9	1481.2
80°	1491.0	1530.4	1412.2	1252.0	1064.7	751.7	732.0	924.2	998.1	1165.7	963.6
82.5°	1047.4	1069.6	1168.2	1022.8	879.8	591.5	539.7	650.6	695.0	766.5	520.0
85°	722.1	697.5	801.0	712.2	635.8	394.3	369.7	441.1	468.3	475.6	268.6
87.5°	433.8	433.8	463.3	382.0	342.6	204.6	199.6	251.4	268.6	256.3	147.9
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: P300349

CATALOG NUMBER: GLNA-AF-10-LED-E1-AFL-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2	13902.2
2.5°	13939.2	13764.2	13392.0	13093.8	12716.8	12324.9	12105.6	11871.5	11711.3	11595.4	11780.3
5°	14045.1	13687.8	12918.9	12189.4	11383.5	10545.6	9909.7	9318.2	8906.7	8650.4	8891.9
7.5°	14212.7	13663.1	12438.3	11191.3	9744.6	8349.7	7102.7	6321.4	5865.5	5641.2	5781.7
10°	14405.0	13623.7	11873.9	9838.3	7768.1	6010.9	5079.3	4763.9	4660.4	4618.5	4638.2
12.5°	14565.1	13539.9	11181.4	8201.8	5833.5	4746.6	4478.0	4470.6	4492.8	4497.7	4505.1
15°	14678.5	13416.7	10153.7	6496.4	4665.3	4325.2	4310.4	4354.8	4396.7	4413.9	4423.8
17.5°	14754.9	13162.9	8992.9	5136.0	4179.8	4120.6	4155.1	4211.8	4256.2	4268.5	4278.4
20°	14747.5	12790.7	7610.4	4283.3	3916.1	3916.1	3975.2	4019.6	4022.1	4007.3	4014.7
22.5°	14671.1	12280.6	6269.7	3829.8	3682.0	3723.8	3783.0	3741.1	3568.6	3455.2	3462.6
25°	14543.0	11671.8	5121.2	3541.5	3465.1	3539.0	3521.8	3206.3	2959.9	2849.0	2849.0
27.5°	14429.6	10952.2	4238.9	3290.1	3248.2	3339.4	3033.8	2747.9	2644.4	2592.6	2575.4
30°	14348.3	10175.9	3649.9	3048.6	3043.6	2977.1	2632.1	2553.2	2536.0	2494.1	2479.3
32.5°	14368.0	9389.7	3272.8	2836.6	2853.9	2548.3	2439.8	2457.1	2442.3	2398.0	2378.2
35°	14530.6	8643.0	3026.4	2644.4	2592.6	2301.8	2326.5	2358.5	2353.6	2292.0	2272.3
37.5°	14821.5	7935.7	2863.7	2484.2	2262.4	2178.6	2218.0	2267.3	2255.0	2213.1	2198.3
40°	15127.1	7270.3	2730.7	2358.5	2067.7	2094.8	2129.3	2156.4	2168.8	2181.1	2171.2
42.5°	15425.3	6575.3	2568.0	2230.4	1986.4	2016.0	2030.7	2057.9	2124.4	2171.2	2168.8
45°	15602.7	5922.2	2400.4	2048.0	1922.3	1939.6	1929.7	1983.9	2065.2	2141.6	2144.1
47.5°	15799.9	5414.5	2267.3	1880.4	1860.7	1873.0	1843.4	1897.7	1971.6	2065.2	2075.1
50°	16038.9	5111.4	2161.4	1747.3	1776.9	1776.9	1769.5	1818.8	1922.3	2030.7	2050.5
52.5°	16310.0	5052.2	2072.6	1651.2	1693.1	1690.6	1698.0	1772.0	1885.3	1991.3	2008.6
55°	16640.2	5212.4	1976.5	1579.7	1611.8	1621.6	1646.3	1730.1	1826.2	1946.9	1954.3
57.5°	17024.7	5537.7	1900.1	1523.1	1537.8	1569.9	1609.3	1685.7	1789.2	1922.3	1929.7
58°	17088.8	5606.7	1887.8	1518.1	1523.1	1560.0	1604.4	1678.3	1781.8	1927.2	1934.6
60°	17091.3	5835.9	1860.7	1495.9	1466.4	1528.0	1577.3	1651.2	1769.5	1944.5	1961.7
62.5°	16485.0	5833.5	1841.0	1463.9	1407.2	1483.6	1540.3	1626.6	1757.2	1986.4	2020.9
65°	14515.9	5301.1	1747.3	1414.6	1360.4	1444.2	1508.3	1609.3	1791.7	2168.8	2190.9
67.5°	11353.9	4344.9	1572.3	1345.6	1298.8	1404.8	1488.6	1606.8	1828.7	2210.6	2225.4
70°	7506.8	3250.7	1380.1	1266.7	1234.7	1357.9	1498.4	1690.6	1786.8	2121.9	2082.5
72.5°	3896.4	2282.1	1224.9	1168.2	1160.8	1316.0	1641.4	1680.8	1744.9	1996.2	1946.9
75°	2045.5	1584.7	1089.3	1059.7	1072.1	1306.2	1937.1	1636.4	1690.6	1910.0	2003.6
77.5°	1252.0	1279.1	973.5	961.2	985.8	1276.6	1934.6	1579.7	1611.8	1757.2	1860.7
80°	837.9	1037.6	884.8	887.2	904.5	1168.2	1737.5	1491.0	1515.7	1661.1	1767.0
82.5°	529.9	613.7	803.4	845.3	823.1	963.6	1476.2	1357.9	1392.4	1900.1	2008.6
85°	268.6	384.5	697.5	813.3	741.8	675.3	1197.7	1190.3	1207.6	1370.3	1431.9
87.5°	123.2	211.9	544.7	709.8	559.4	421.4	870.0	882.3	951.3	973.5	973.5
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)