

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: P301113

Luminaire Tested: **GLNA-AF-06-LED-E1-T3R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-T3R
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36272.9 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 333
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

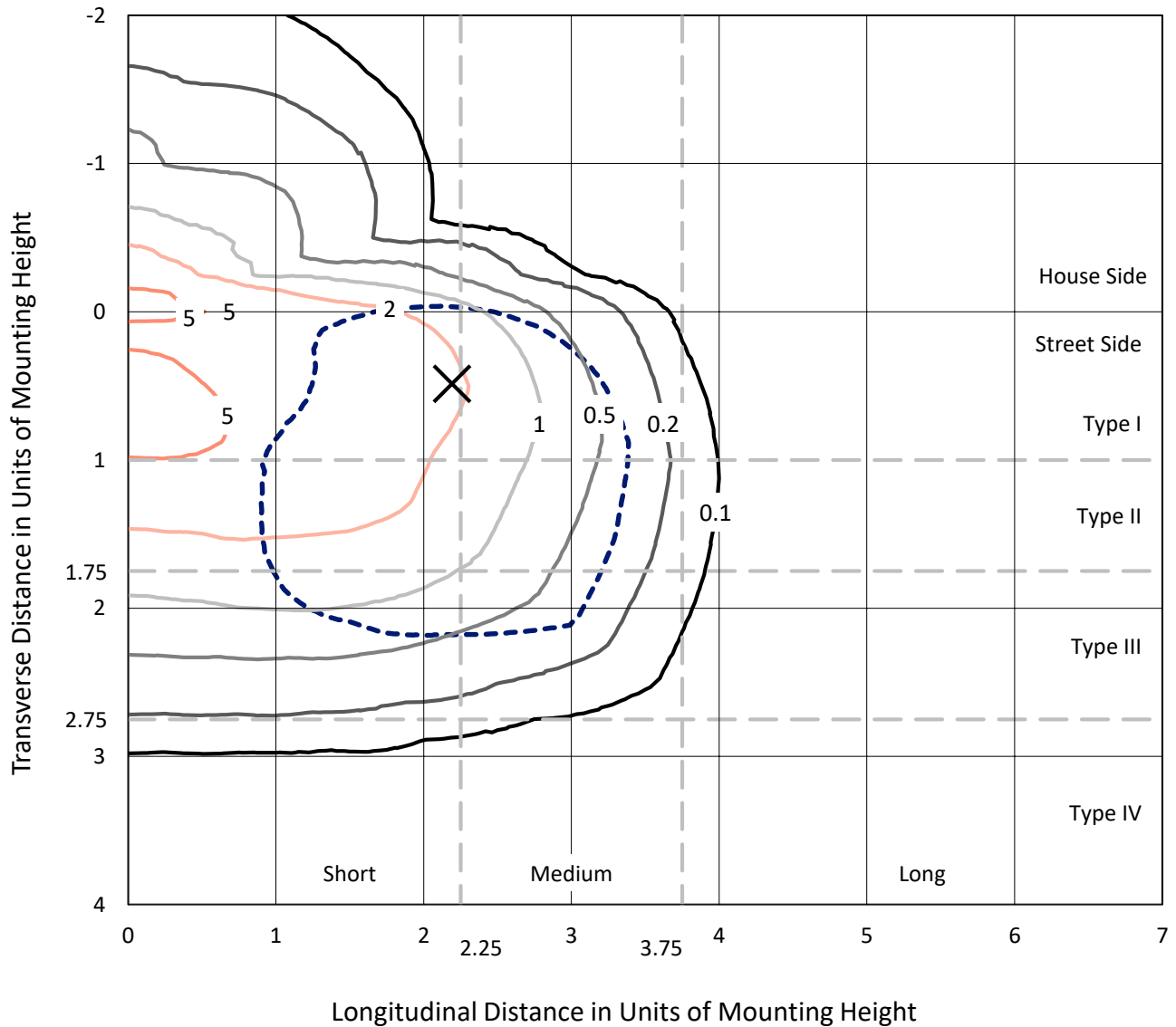


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

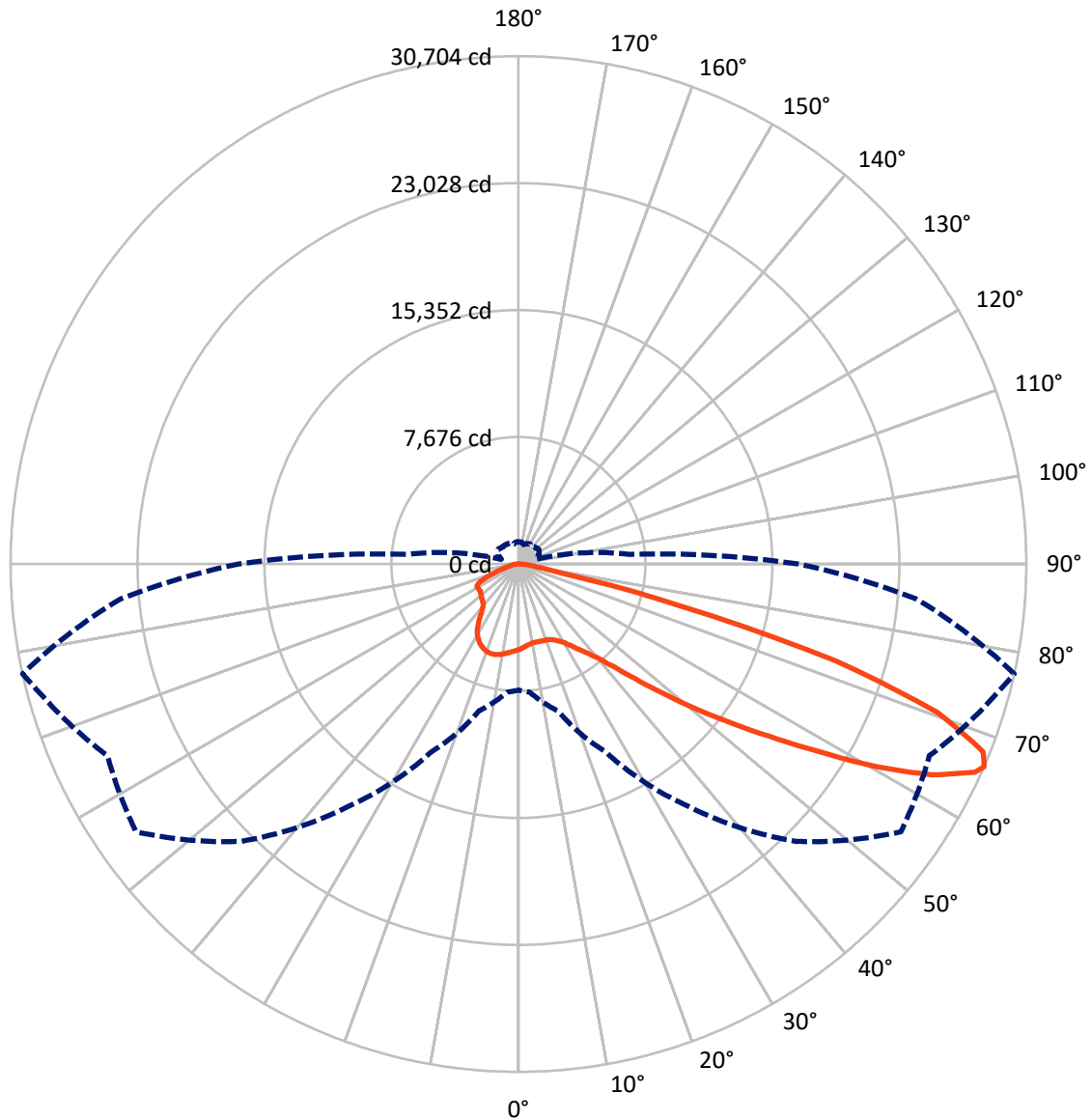


Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6197.0	0.0	6197.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	30075.9	0.0	30075.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	36272.9	0.0	36272.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.8	1.3
10°-20°	1302.9	3.6
20°-30°	2223.5	6.1
30°-40°	3559.4	9.8
40°-50°	5499.0	15.2
50°-60°	7799.5	21.5
60°-70°	10433.6	28.8
70°-80°	4531.1	12.5
80°-90°	462.0	1.3
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°	36272.9	100.0
0°-180°	36272.9	100.0



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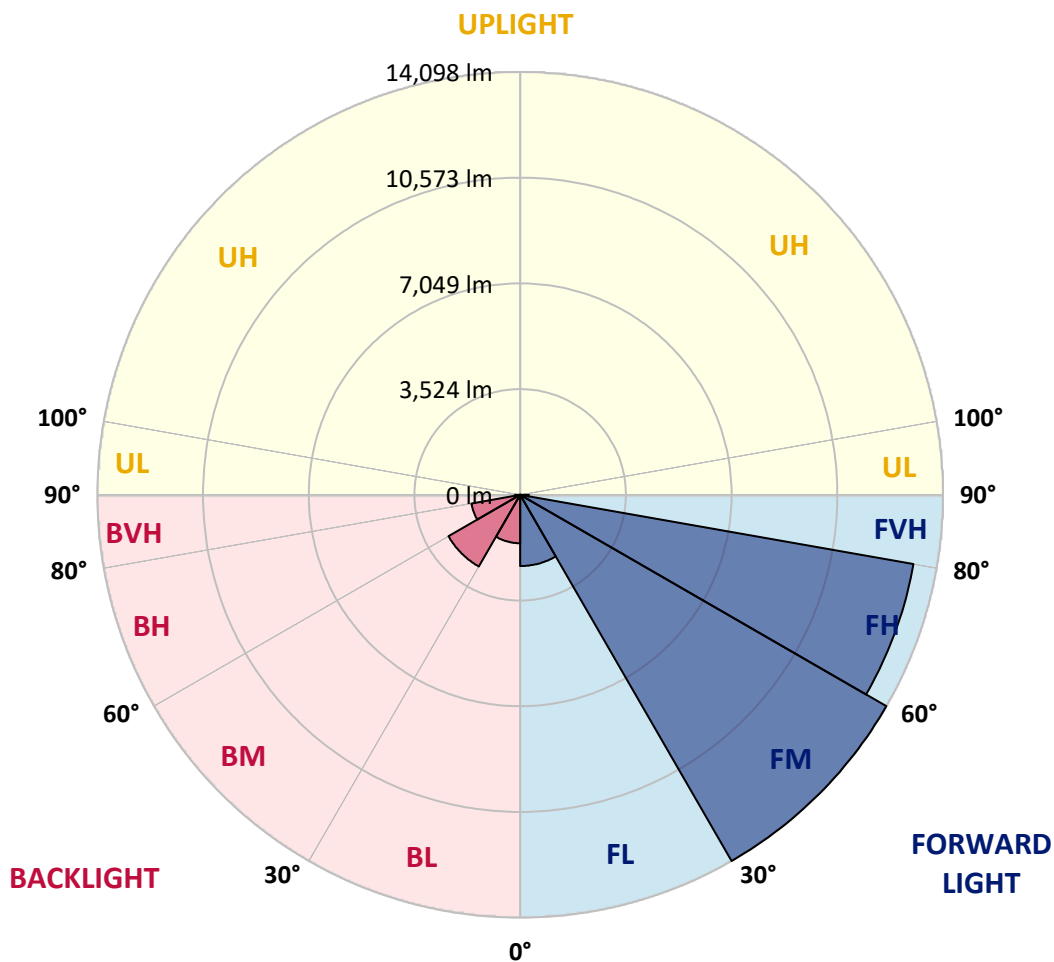
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2374.2	6.5			
FM	(30°-60°)	14097.5	38.9			
FH	(60°-80°)	13314.3	36.7			G5
FVH	(80°-90°)	289.8	0.8			G3/500
BL	(0°-30°)	1614.0	4.4	B3/2500		
BM	(30°-60°)	2760.4	7.6	B3/5000		
BH	(60°-80°)	1650.4	4.5	B3/2500		G3/2500
BVH	(80°-90°)	172.3	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0
2.5°	4572.8	4603.4	4629.3	4653.2	4700.9	4779.8	4870.6	4944.3	5050.7	5071.4	5128.0
5°	4153.0	4153.0	4173.2	4209.5	4274.4	4392.7	4516.2	4680.7	4912.1	4966.6	5117.6
7.5°	3949.0	3950.6	3962.5	3993.1	4049.7	4157.6	4293.1	4487.1	4800.6	4891.4	5148.2
10°	4024.3	4007.1	3981.2	3966.1	3974.4	4037.7	4166.4	4382.3	4732.1	4848.3	5217.3
12.5°	4445.6	4413.5	4324.2	4205.9	4092.8	4046.6	4121.8	4332.5	4703.0	4838.4	5308.1
15°	5134.8	5121.3	4954.7	4709.8	4435.8	4205.9	4154.5	4313.8	4706.1	4850.4	5416.0
17.5°	5998.8	5979.6	5760.6	5404.1	4956.8	4509.5	4269.2	4329.4	4718.1	4870.6	5520.3
20°	6871.1	6812.4	6576.3	6151.3	5576.9	4922.0	4459.6	4368.8	4733.6	4892.9	5630.3
22.5°	7522.3	7474.1	7261.8	6848.8	6187.1	5400.4	4714.9	4437.3	4783.4	4958.3	5765.2
25°	8094.7	8097.8	7887.1	7488.1	6804.1	5908.0	5043.9	4620.5	4910.1	5091.7	5950.5
27.5°	8802.5	8761.5	8564.3	8168.4	7414.4	6420.1	5441.4	4872.7	5098.9	5282.1	6193.9
30°	9648.9	9619.8	9392.0	8943.1	8091.1	6970.2	5895.5	5165.4	5342.3	5532.3	6512.5
32.5°	10644.7	10631.2	10394.6	9817.0	8872.6	7618.3	6429.0	5553.0	5705.6	5902.8	6970.2
35°	11813.8	11815.4	11536.2	10841.9	9727.8	8372.3	7033.5	6051.7	6147.7	6353.2	7515.6
37.5°	12533.6	12620.8	12516.5	11808.6	10696.1	9215.6	7818.6	6713.3	6651.6	6859.1	8099.9
40°	12687.7	12794.1	13124.6	12765.0	11779.6	10144.5	8514.5	7349.0	7272.2	7525.4	8852.3
42.5°	12471.8	12619.2	13318.7	13571.9	12929.5	11289.2	9450.1	8293.4	8195.9	8536.8	9787.9
45°	12343.1	12453.1	13262.1	13992.3	13926.9	12583.4	10641.6	9479.2	9443.4	9890.7	10867.8
47.5°	12120.5	12220.1	12998.0	14089.8	14513.3	13769.1	12072.8	10929.6	10999.6	11586.0	12086.3
50°	12240.4	12281.4	12703.3	13841.3	14683.0	14638.3	13671.6	12608.8	12849.1	13580.8	13466.1
52.5°	12223.3	12329.6	12669.0	13433.4	14705.3	15174.9	15246.5	14482.1	14988.1	15827.7	14996.4
55°	9882.4	10077.5	12266.3	13330.6	14783.6	15700.6	16648.6	16456.6	17399.0	18377.7	16723.9
57.5°	9436.6	9560.1	10773.4	13546.5	15201.9	16705.2	18208.0	18629.9	20206.4	21342.8	18828.6
60°	9348.9	9501.5	10757.8	13810.7	16050.3	18341.9	20520.3	21260.8	23622.5	24866.9	21269.1
62.5°	9076.5	9241.0	10656.6	13775.9	17255.3	20606.0	23480.3	24057.8	26861.6	28071.7	23310.6
65°	8213.0	8367.1	9832.6	13222.7	18067.9	23022.6	26983.0	26621.9	29418.9	30328.5	24328.2
66°	7621.4	7772.4	9182.9	12571.5	17879.0	23708.1	28224.3	27415.3	29991.2	30704.2	24129.5
67.5°	6540.0	6658.3	7921.4	11112.8	16876.5	23900.1	29267.8	28011.5	30050.9	30303.1	22993.5
70°	4132.2	4166.4	5148.2	7671.3	12775.4	20727.4	27678.9	26531.0	27573.0	26890.7	19276.0
72.5°	1792.9	1780.9	2471.6	3902.3	7232.8	13908.2	22390.0	21891.3	21629.3	20073.0	13493.6
75°	997.4	1011.4	1283.8	1811.6	2939.2	6831.6	14646.6	14016.1	11834.1	10098.3	6118.6
77.5°	800.2	819.4	1064.3	1285.4	1319.6	2382.4	6854.0	5576.9	3357.4	2694.3	1700.0
80°	632.6	666.8	928.9	1001.0	889.4	981.8	2214.2	1770.6	1328.4	1218.4	881.1
82.5°	500.2	524.6	797.1	757.6	622.2	661.6	1060.7	1033.7	864.0	786.7	509.1
85°	360.1	404.2	654.9	570.8	407.9	445.8	704.2	675.1	495.1	404.2	224.7
87.5°	147.4	192.0	462.9	378.8	227.8	207.6	351.3	330.6	234.6	171.2	111.6
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°	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0	5169.0
2.5°	5163.8	5204.8	5258.3	5291.0	5308.1	5320.0	5338.7	5337.1	5342.3	5343.9	5350.6
5°	5198.1	5266.6	5343.9	5364.6	5364.6	5345.4	5326.8	5295.6	5283.7	5280.6	5283.7
7.5°	5287.3	5362.6	5429.5	5405.6	5354.3	5278.5	5180.9	5095.3	5049.1	5033.6	5030.5
10°	5400.4	5491.3	5518.8	5427.9	5276.9	5095.3	4901.8	4761.1	4680.7	4658.4	4651.6
12.5°	5537.4	5623.1	5585.7	5393.7	5114.0	4821.3	4553.6	4329.4	4161.3	4108.3	4104.7
15°	5688.4	5755.4	5623.1	5287.3	4870.6	4438.9	3962.5	3575.4	3366.3	3299.3	3294.1
17.5°	5829.1	5863.3	5600.7	5102.1	4512.6	3813.6	3181.0	2882.6	2811.0	2828.1	2831.3
20°	5948.9	5948.9	5525.5	4836.4	3949.0	2989.0	2589.4	2584.8	2636.1	2687.5	2697.9
22.5°	6080.8	6001.9	5393.7	4461.2	3149.9	2445.7	2387.6	2435.3	2493.4	2550.0	2558.8
25°	6243.7	6044.9	5210.0	3892.5	2476.3	2221.0	2243.3	2282.7	2311.8	2348.1	2353.3
27.5°	6425.3	6099.4	4968.7	3108.9	2149.4	2080.9	2098.0	2111.5	2107.9	2121.9	2125.0
30°	6642.7	6163.3	4637.6	2430.1	2013.9	1960.5	1929.9	1917.9	1917.9	1940.3	1948.6
32.5°	6934.4	6257.2	4162.8	2082.4	1948.6	1874.9	1775.8	1731.1	1748.3	1823.5	1840.6
35°	7255.1	6358.4	3520.4	1964.1	1935.1	1835.4	1681.3	1598.8	1600.9	1670.9	1693.2
37.5°	7604.3	6487.1	2815.7	1941.8	1965.7	1837.5	1631.5	1518.4	1472.2	1472.2	1481.0
40°	8051.6	6618.9	2279.6	1957.4	2031.1	1857.7	1606.1	1455.1	1324.8	1328.4	1335.2
42.5°	8634.4	6732.0	1991.6	1989.6	2109.9	1885.3	1604.0	1371.0	1257.9	1335.2	1405.2
45°	9282.5	6788.6	1864.5	2019.1	2173.3	1902.4	1577.0	1357.5	1266.7	1496.1	1629.9
47.5°	10027.7	6755.9	1794.4	2029.0	2188.8	1902.4	1545.9	1390.2	1326.4	1732.7	1888.9
50°	10845.5	6661.9	1725.9	2008.8	2183.6	1898.7	1574.9	1422.4	1348.7	1773.7	1881.6
52.5°	11807.1	6583.1	1653.8	1964.1	2147.3	1880.1	1609.2	1408.9	1278.6	1612.8	1688.1
55°	12903.6	6605.4	1573.4	1900.8	2090.7	1844.3	1597.2	1353.9	1204.9	1420.8	1467.0
57.5°	14305.7	6871.1	1477.4	1820.4	2013.9	1784.1	1554.7	1328.4	1182.6	1289.0	1316.5
60°	15870.3	7333.4	1357.5	1739.4	1917.9	1688.1	1522.0	1340.4	1193.0	1278.6	1292.1
62.5°	17018.6	7602.8	1254.8	1621.1	1787.7	1581.7	1481.0	1355.4	1220.5	1314.4	1311.3
65°	17330.5	7160.6	1126.1	1448.3	1611.3	1470.6	1429.1	1372.6	1232.4	1343.5	1328.4
66°	16893.6	6684.3	1069.5	1367.9	1522.0	1415.6	1403.7	1371.0	1227.3	1347.1	1321.2
67.5°	15832.9	5707.1	971.9	1249.6	1379.8	1333.6	1362.7	1355.4	1213.2	1343.5	1307.7
70°	12912.4	3894.0	831.3	1040.4	1148.4	1173.8	1283.8	1300.9	1168.6	1283.8	1204.9
72.5°	9022.0	2372.0	735.3	807.4	928.9	1001.0	1175.9	1225.2	1108.9	1120.9	1045.6
75°	4360.0	1259.9	666.8	625.8	721.3	836.5	1045.6	1122.4	1014.5	937.7	910.2
77.5°	1359.1	769.6	565.6	503.9	565.6	675.1	873.9	983.9	903.4	785.1	774.8
80°	730.1	565.6	435.4	404.2	447.3	529.8	687.1	820.9	776.3	704.2	628.9
82.5°	481.6	366.9	322.3	313.4	340.9	404.2	510.6	680.3	680.3	603.5	439.0
85°	248.6	224.7	221.1	221.1	238.2	269.3	347.7	524.6	558.9	318.6	264.1
87.5°	123.5	128.7	119.9	125.1	133.9	131.8	166.1	264.1	315.5	193.6	160.9
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)