

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: P299198

Luminaire Tested: **GLNA-AF-08-LED-E1-T3-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299198  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
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-T3-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37158.1 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 334  
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

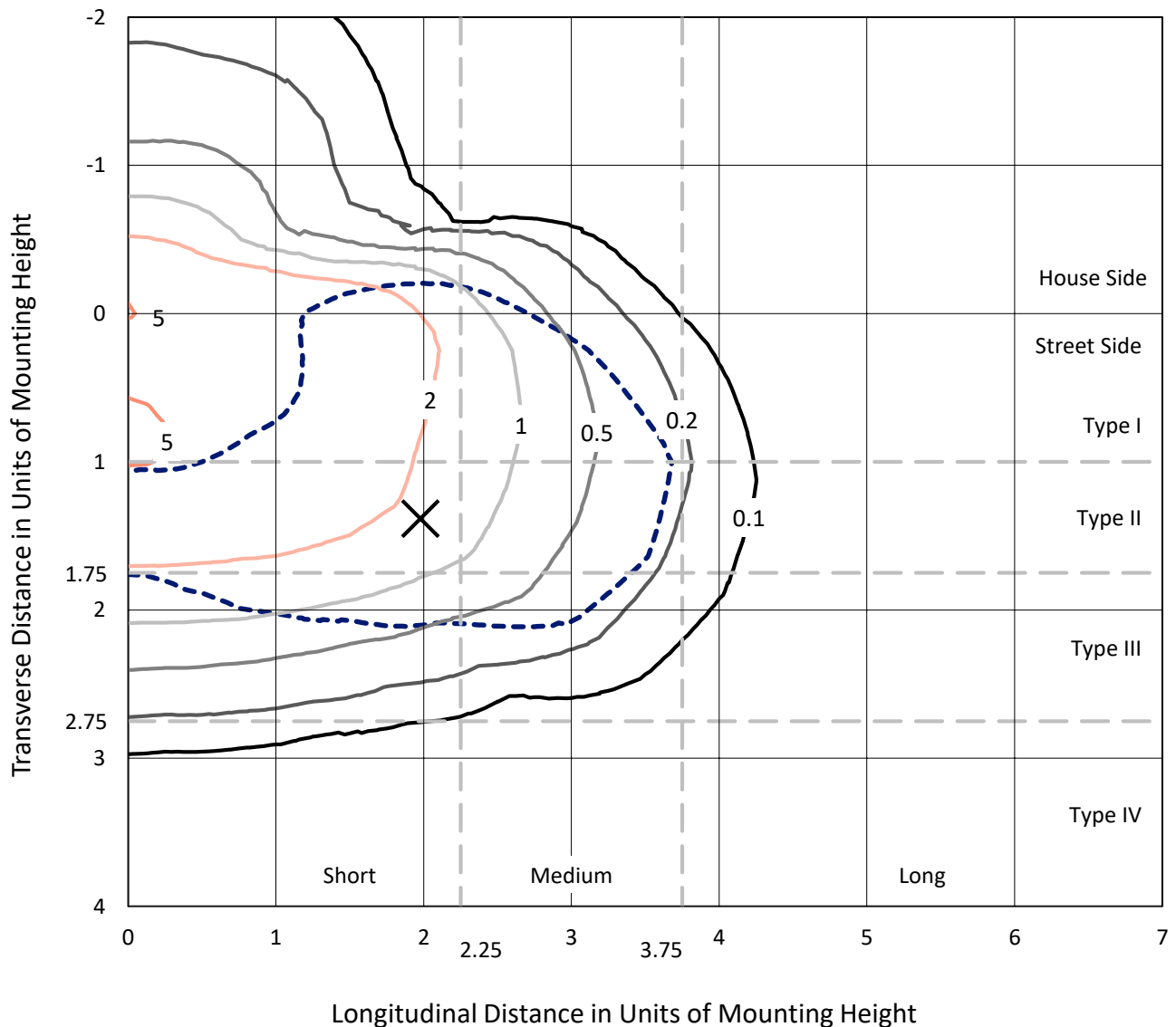


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### Iso-Footcandle Lines of Horizontal Illumination

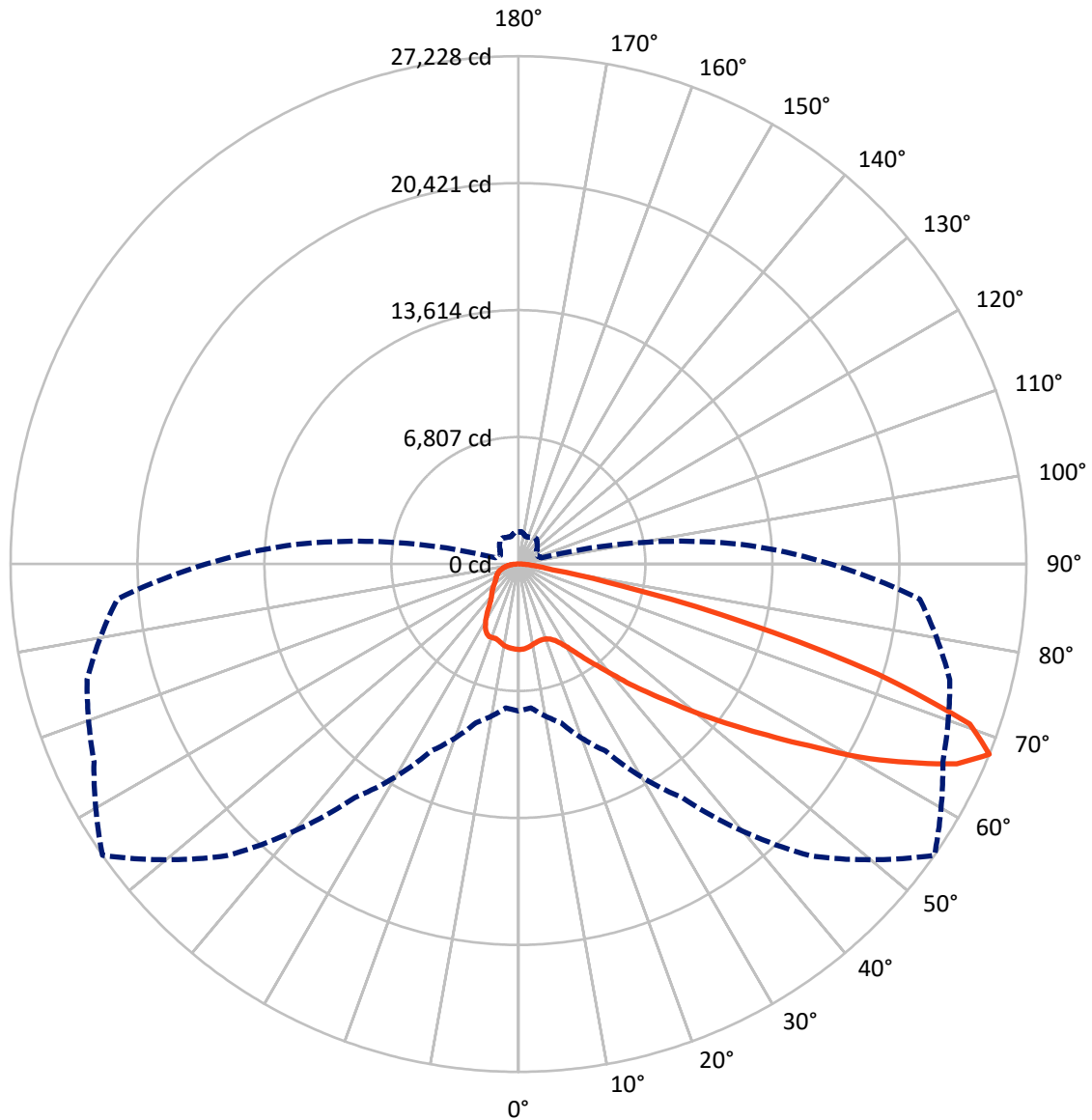
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8026.9	0.0	8026.9
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	29131.1	0.0	29131.1
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	37158.1	0.0	37158.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	427.7	1.2
10°-20°	1211.3	3.3
20°-30°	2029.0	5.5
30°-40°	3336.6	9.0
40°-50°	5616.5	15.1
50°-60°	8839.9	23.8
60°-70°	10549.5	28.4
70°-80°	4530.1	12.2
80°-90°	617.6	1.7
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°	37158.1	100.0
0°-180°	37158.1	100.0



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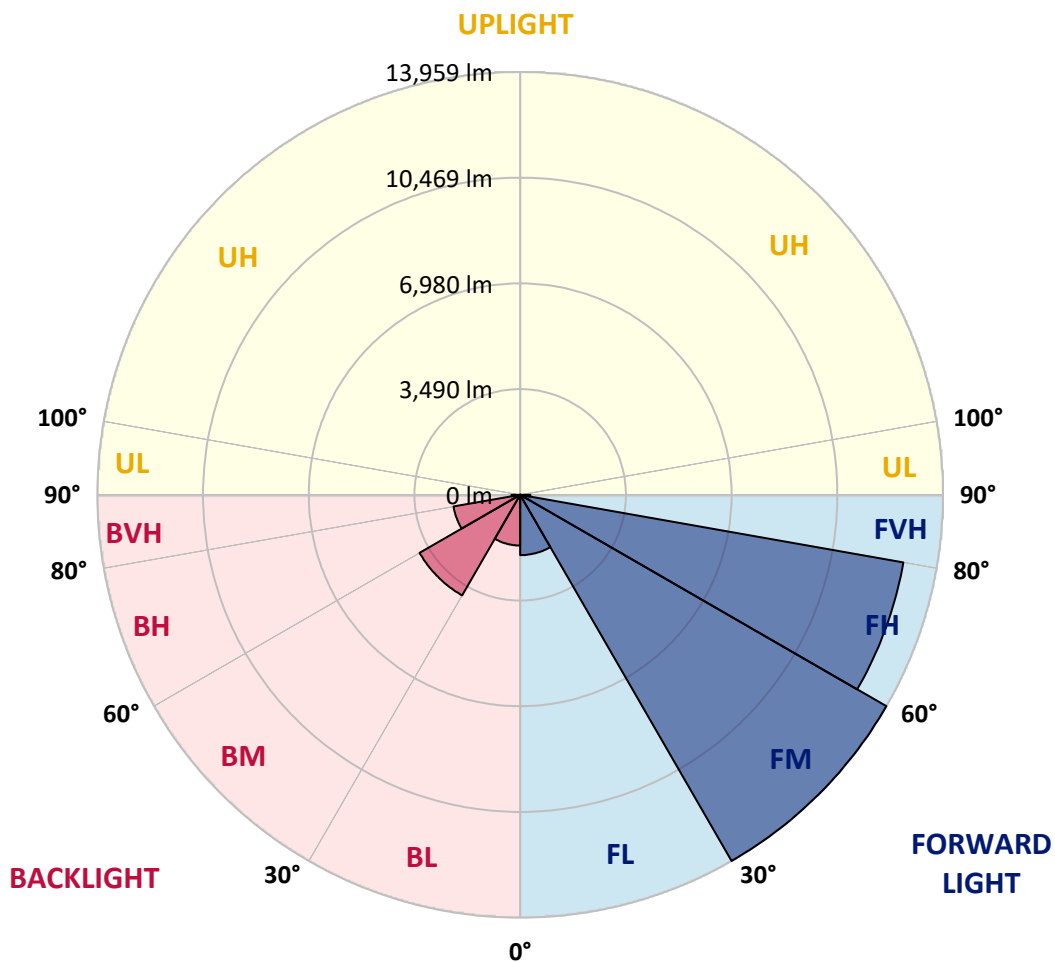
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1991.8	5.4			
FM (30°-60°)	13959.3	37.6			
FH (60°-80°)	12845.7	34.6			G5
FVH (80°-90°)	334.3	0.9			G3/500
BL (0°-30°)	1676.2	4.5	B3/2500		
BM (30°-60°)	3833.6	10.3	B3/5000		
BH (60°-80°)	2233.9	6.0	B3/2500		G3/2500
BVH (80°-90°)	283.3	0.8			G3/500
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°	85°	90°
0°	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0
2.5°	4542.5	4544.3	4547.9	4562.3	4574.8	4571.2	4573.0	4565.8	4564.0	4553.3	4564.0
5°	4485.1	4490.5	4492.3	4515.6	4529.9	4533.5	4528.2	4519.2	4508.4	4497.6	4503.0
7.5°	4354.1	4368.4	4370.2	4402.5	4425.9	4456.4	4458.2	4460.0	4454.6	4447.4	4458.2
10°	4271.5	4275.1	4273.3	4296.6	4314.6	4348.7	4368.4	4402.5	4416.9	4420.5	4427.6
12.5°	4266.1	4262.5	4257.1	4257.1	4251.8	4266.1	4302.0	4350.5	4384.6	4395.3	4404.3
15°	4323.6	4321.8	4303.8	4276.9	4242.8	4232.0	4262.5	4316.4	4361.2	4384.6	4393.5
17.5°	4452.8	4442.0	4413.3	4352.3	4278.7	4250.0	4253.6	4298.4	4350.5	4381.0	4390.0
20°	4689.7	4689.7	4628.7	4513.8	4382.8	4314.6	4282.3	4309.2	4359.4	4400.7	4413.3
22.5°	5098.9	5102.5	5000.2	4811.7	4591.0	4445.6	4364.8	4359.4	4418.7	4465.3	4479.7
25°	5678.6	5664.2	5520.6	5251.4	4915.8	4675.3	4535.3	4503.0	4553.3	4605.3	4623.3
27.5°	6353.4	6301.4	6130.9	5806.0	5371.7	5019.9	4804.5	4752.5	4801.0	4860.2	4878.1
30°	7021.1	6967.2	6764.4	6409.1	5926.3	5481.2	5172.5	5088.1	5156.3	5240.7	5251.4
32.5°	7688.7	7688.7	7462.6	7048.0	6522.1	6032.2	5662.4	5561.9	5675.0	5777.3	5800.6
35°	8487.4	8491.0	8272.0	7773.1	7207.7	6689.0	6281.6	6208.0	6378.5	6450.3	6506.0
37.5°	9469.1	9488.8	9207.1	8604.0	7984.8	7439.2	6954.7	6854.1	7024.6	7220.3	7399.8
40°	10529.8	10554.9	10244.4	9501.4	8882.2	8311.5	7787.4	7606.1	7889.7	8263.0	8494.5
42.5°	11542.0	11671.3	11371.5	10607.0	9941.1	9350.6	8819.4	8555.6	8910.9	9474.5	9675.5
45°	13004.8	13098.1	12575.8	11883.0	11256.7	10596.2	9892.7	9614.5	10111.6	10822.3	10863.6
47.5°	13979.3	13909.3	13643.7	13212.9	12816.3	12198.9	11140.0	10834.9	11495.4	12331.7	12100.2
50°	14498.0	14519.5	14483.6	14508.8	14523.1	14135.4	12669.1	12251.0	13038.9	14049.3	13516.3
52.5°	14982.6	14839.0	14957.4	15546.1	16256.8	16113.3	14332.9	13896.7	14693.6	15955.3	15013.1
55°	14971.8	14752.8	15138.7	16177.9	17719.6	17884.7	16201.2	15698.7	16443.5	17999.5	16599.6
57.5°	14442.3	14453.1	15047.2	16407.6	18739.0	19550.2	18369.3	17615.5	18299.3	20070.7	18048.0
60°	13713.7	13812.4	14668.5	16369.9	19555.6	20916.0	21029.1	19681.2	20117.3	21953.4	19246.9
62.5°	12538.1	12642.2	13823.2	15978.7	19431.8	22231.6	23434.0	22025.2	22018.0	23094.8	19598.7
65°	10684.1	10653.6	11893.8	14515.9	18392.6	23204.3	25822.9	24051.4	23450.2	23112.8	18891.5
67.5°	7878.9	7742.5	8806.8	11055.7	15287.7	22114.9	27228.1	25106.7	23938.4	21592.6	16730.7
70°	4088.4	3952.0	4813.5	6455.7	10054.2	17260.1	25672.1	24561.1	22859.7	18100.0	13107.1
72.5°	1748.1	1724.8	2074.7	2832.1	4863.8	9955.5	20129.9	21258.8	19614.8	13485.7	9011.4
75°	1175.6	1168.4	1299.4	1543.5	2187.8	4040.0	12597.3	15090.3	14350.8	8361.7	5068.4
77.5°	922.5	913.5	990.7	1109.2	1417.9	1593.7	5590.6	8101.5	7498.5	3639.8	2218.3
80°	721.5	714.3	762.8	827.4	1019.4	1005.1	1839.6	3223.4	2494.7	1394.5	1078.6
82.5°	568.9	568.9	608.4	610.2	723.3	685.6	960.2	1419.6	1245.6	813.0	660.5
85°	520.5	520.5	561.8	455.9	472.0	432.5	595.9	841.7	789.7	333.8	287.2
87.5°	262.0	254.9	472.0	403.8	256.6	229.7	290.7	407.4	437.9	184.9	143.6
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0	4582.0
2.5°	4560.5	4558.7	4562.3	4564.0	4578.4	4598.1	4607.1	4619.7	4626.9	4623.3
5°	4506.6	4510.2	4524.6	4535.3	4560.5	4592.8	4610.7	4625.1	4637.6	4632.2
7.5°	4461.7	4470.7	4492.3	4501.2	4515.6	4524.6	4522.8	4528.2	4538.9	4526.4
10°	4436.6	4447.4	4463.5	4451.0	4416.9	4368.4	4323.6	4300.2	4307.4	4298.4
12.5°	4411.5	4425.9	4413.3	4354.1	4258.9	4196.1	4162.0	4165.6	4181.8	4185.4
15°	4397.1	4402.5	4348.7	4237.4	4140.5	4131.5	4149.5	4145.9	4147.7	4147.7
17.5°	4397.1	4382.8	4282.3	4171.0	4129.7	4113.6	4057.9	3987.9	3957.4	3946.7
20°	4420.5	4382.8	4260.7	4187.2	4097.4	3959.2	3812.0	3682.8	3625.4	3609.2
22.5°	4490.5	4425.9	4321.8	4194.3	3939.5	3708.0	3474.6	3320.3	3216.2	3198.2
25°	4632.2	4560.5	4442.0	4099.2	3688.2	3358.0	3092.4	2920.1	2816.0	2801.6
27.5°	4879.9	4833.3	4506.6	3889.2	3354.4	3000.8	2754.9	2622.1	2545.0	2539.6
30°	5253.2	5229.9	4474.3	3578.7	2943.4	2654.4	2536.0	2458.8	2401.4	2399.6
32.5°	5849.1	5660.6	4368.4	3200.0	2568.3	2408.6	2360.1	2313.4	2268.6	2268.6
35°	6615.4	6008.8	4167.4	2794.4	2340.4	2272.2	2211.1	2137.5	2078.3	2074.7
37.5°	7516.4	6224.2	3806.7	2467.8	2232.7	2180.6	2090.9	1981.4	1877.3	1859.4
40°	8426.3	6288.8	3298.7	2266.8	2164.5	2089.1	1979.6	1850.4	1749.9	1744.5
42.5°	9260.9	6165.0	2760.3	2128.6	2096.3	1995.8	1880.9	1766.0	1687.1	1685.3
45°	9960.9	5843.7	2308.0	1997.6	2024.5	1911.4	1809.1	1715.8	1654.8	1642.2
47.5°	10619.5	5389.6	1990.4	1859.4	1952.7	1864.7	1778.6	1690.7	1631.4	1622.5
50°	11384.1	4899.7	1767.8	1724.8	1889.9	1848.6	1803.7	1712.2	1613.5	1602.7
52.5°	12310.2	4476.1	1593.7	1606.3	1841.4	1870.1	1868.3	1773.2	1600.9	1586.6
55°	13344.0	4005.9	1462.7	1509.4	1821.7	1909.6	1884.5	1830.6	1611.7	1590.1
57.5°	14361.6	3456.7	1371.2	1435.8	1793.0	1906.0	1807.3	1730.1	1636.8	1606.3
60°	15124.4	2719.0	1301.2	1371.2	1730.1	1846.8	1723.0	1620.7	1631.4	1608.1
62.5°	15174.6	2101.7	1216.8	1315.6	1635.0	1787.6	1667.3	1572.2	1654.8	1633.2
65°	14282.6	1588.4	1136.1	1249.1	1532.7	1749.9	1613.5	1545.3	1703.2	1679.9
67.5°	12024.8	1277.9	1067.9	1180.9	1430.4	1670.9	1565.0	1520.2	1746.3	1705.0
70°	8681.2	1089.4	1001.5	1098.4	1338.9	1581.2	1521.9	1475.3	1629.6	1565.0
72.5°	5344.8	944.0	926.1	988.9	1268.9	1487.8	1457.3	1390.9	1468.1	1416.1
75°	2668.8	818.4	841.7	881.2	1170.2	1382.0	1349.7	1283.2	1294.0	1283.2
77.5°	1277.9	700.0	743.0	773.5	1042.7	1261.7	1227.6	1159.4	1146.8	1148.6
80°	809.4	585.1	626.4	647.9	931.5	1121.7	1087.6	1019.4	1163.0	1078.6
82.5°	506.1	475.6	486.4	525.9	811.2	976.3	931.5	870.5	1048.1	829.2
85°	280.0	332.0	346.4	380.5	624.6	816.6	771.7	694.6	622.8	612.0
87.5°	166.9	197.4	202.8	227.9	420.0	590.5	522.3	495.4	411.0	409.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)