

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: P299845

Luminaire Tested: **GLNA-AF-06-LED-E1-SL3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299845  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)  
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-SL3-7027  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Medium OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30827.7 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G4

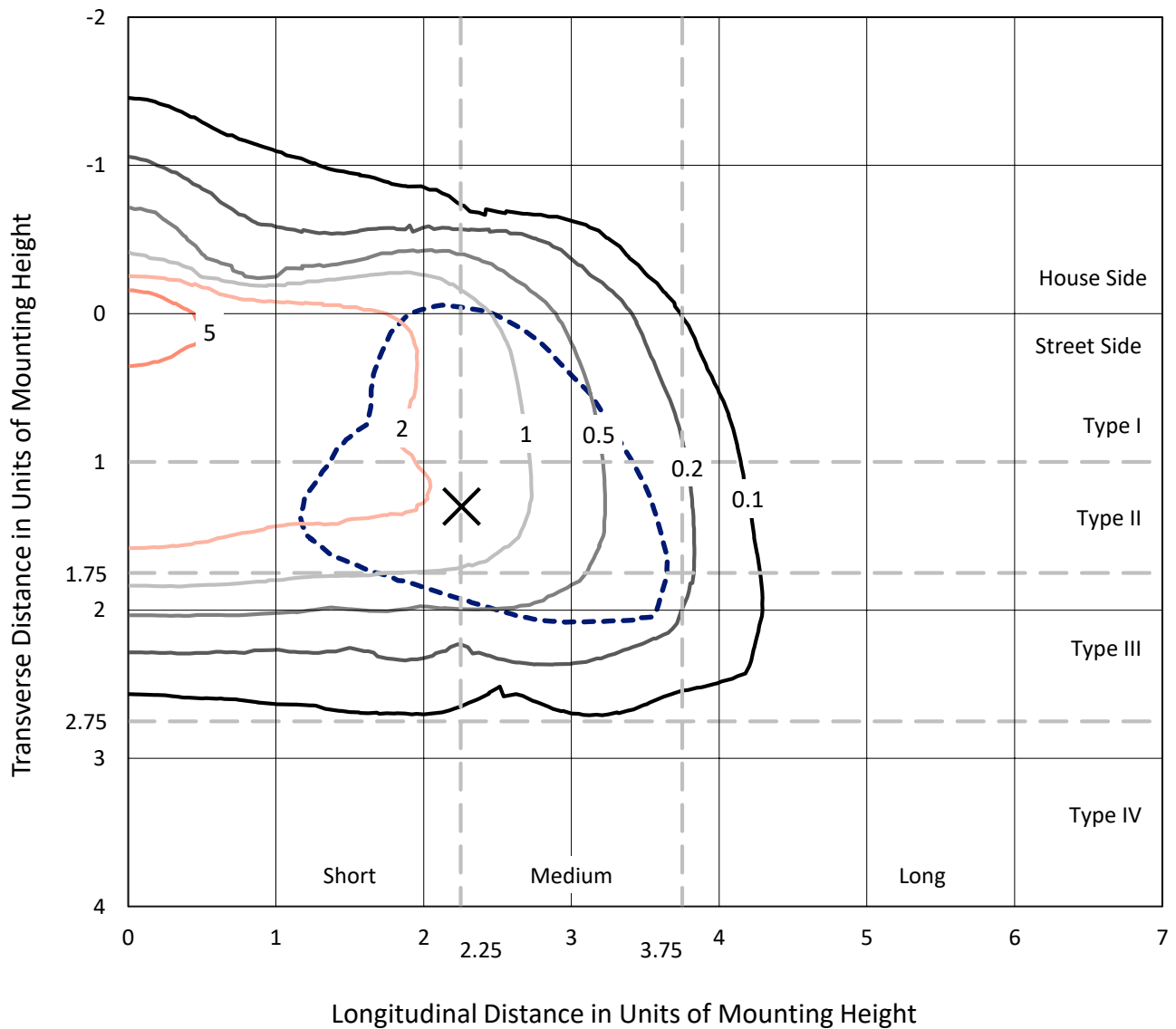
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

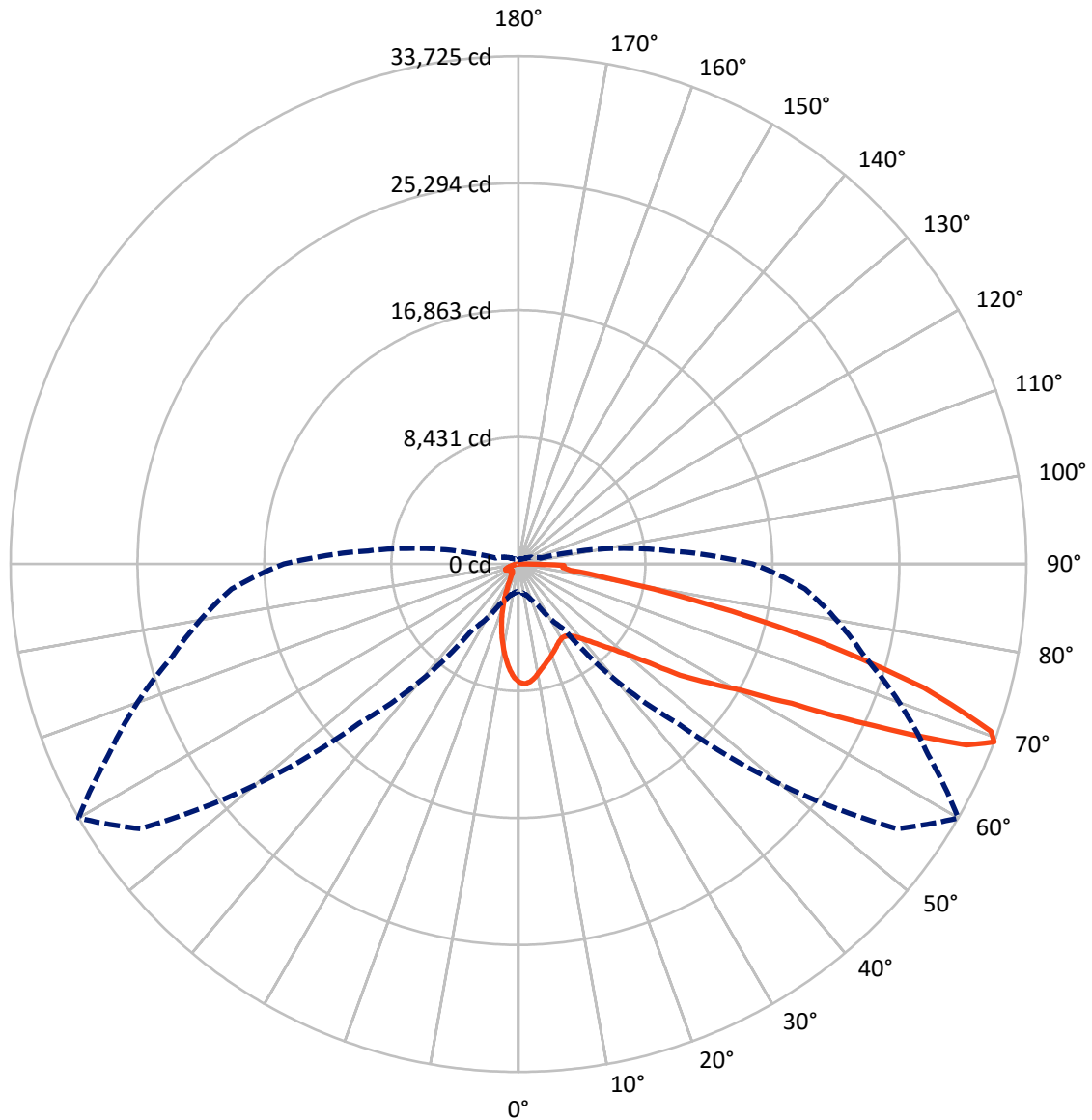
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.7 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4385.8	0.0	4385.8
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	26441.9	0.0	26441.9
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	30827.7	0.0	30827.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	664.2	2.2
10°-20°	1415.1	4.6
20°-30°	1803.1	5.8
30°-40°	2478.8	8.0
40°-50°	4022.1	13.0
50°-60°	6450.5	20.9
60°-70°	8585.1	27.8
70°-80°	4635.3	15.0
80°-90°	773.4	2.5
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°	30827.7	100.0
0°-180°	30827.7	100.0



REPORT NUMBER: P299845

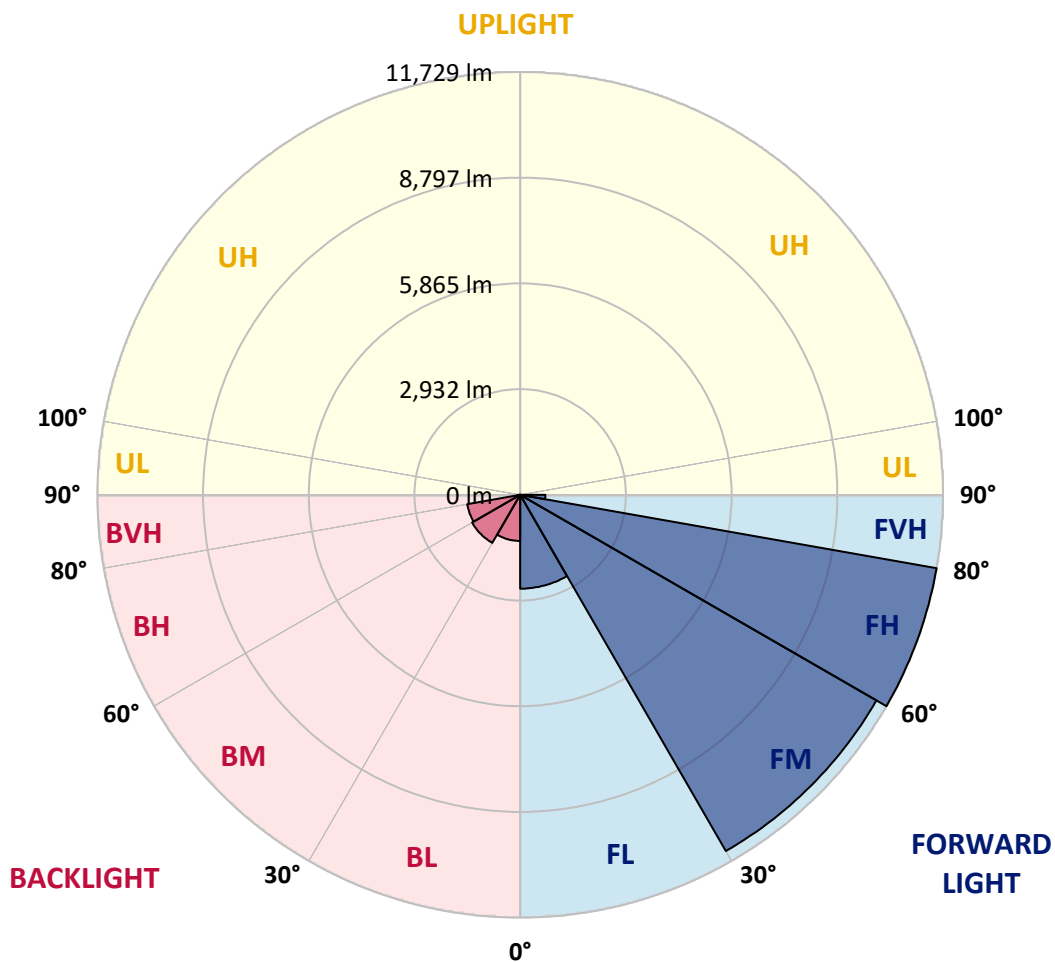
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2603.0	8.4			
FM	(30°-60°)	11410.6	37.0			
FH	(60°-80°)	11729.3	38.0			G4/12000
FVH	(80°-90°)	699.0	2.3			G4/750
BL	(0°-30°)	1279.5	4.2	B3/2500		
BM	(30°-60°)	1540.8	5.0	B2/2500		
BH	(60°-80°)	1491.0	4.8	B3/2500		G3/2500
BVH	(80°-90°)	74.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4
2.5°	8016.2	8034.1	8026.6	8022.1	8035.5	8014.7	7971.5	7958.1	7937.3	7888.1	7804.7
5°	7715.4	7769.0	7766.0	7806.2	7873.2	7891.1	7871.7	7874.7	7836.0	7774.9	7636.5
7.5°	7195.7	7218.0	7229.9	7317.8	7439.9	7538.2	7621.6	7648.4	7630.5	7578.4	7399.7
10°	6659.6	6677.4	6705.7	6808.5	6963.3	7098.9	7256.7	7347.6	7386.3	7377.3	7177.8
12.5°	6199.4	6217.3	6254.5	6370.7	6555.3	6722.1	6951.4	7064.6	7156.9	7212.0	6997.6
15°	5786.9	5825.6	5861.4	5995.4	6202.4	6421.3	6680.4	6823.4	6966.3	7089.9	6838.3
17.5°	5465.2	5504.0	5524.8	5646.9	5867.3	6135.4	6439.2	6607.4	6786.1	6988.7	6680.4
20°	5279.1	5297.0	5288.0	5356.5	5554.6	5839.0	6199.4	6394.5	6610.4	6893.4	6522.6
22.5°	5227.0	5228.5	5195.7	5188.3	5316.3	5556.1	5943.3	6180.0	6445.1	6830.8	6387.0
25°	5353.6	5349.1	5259.7	5186.8	5200.2	5340.2	5696.1	5971.6	6306.6	6817.4	6282.8
27.5°	5635.0	5648.4	5515.9	5378.9	5243.4	5238.9	5508.4	5798.8	6193.4	6878.5	6238.1
30°	6029.6	6052.0	5910.5	5736.3	5481.6	5271.7	5435.5	5696.1	6123.5	7005.0	6230.7
32.5°	6461.5	6485.3	6378.1	6194.9	5861.4	5474.2	5486.1	5705.0	6120.5	7182.3	6281.3
35°	6921.7	6948.5	6893.4	6738.5	6367.7	5848.0	5679.7	5849.5	6217.3	7453.3	6416.8
37.5°	7435.4	7477.1	7492.0	7344.6	6948.5	6340.9	5996.9	6123.5	6436.2	7830.0	6665.5
40°	8175.5	8233.6	8229.1	8017.7	7614.1	7006.5	6486.8	6519.6	6777.2	8333.4	7063.1
42.5°	9593.2	9605.1	9234.3	8774.2	8346.8	7706.4	7064.6	7037.8	7247.8	8970.7	7648.4
45°	11396.6	11347.5	10522.5	9633.4	9112.2	8510.6	7816.6	7685.6	7844.9	9748.1	8381.0
47.5°	12893.2	12780.0	11737.6	10510.5	9922.3	9384.7	8699.7	8470.4	8558.2	10629.7	9328.1
50°	13412.9	13328.1	12464.3	11240.2	10689.2	10451.0	9786.8	9462.2	9486.0	11681.0	10437.6
52.5°	13301.2	13289.3	12713.0	11721.2	11407.0	11570.8	11326.6	10887.3	10655.0	12848.5	11634.9
55°	13037.7	13063.0	12854.5	12281.2	12227.6	12652.0	13338.5	13013.8	12291.6	14026.5	12872.4
57.5°	12121.8	12187.3	12646.0	12985.5	13548.4	14179.9	14958.7	14866.4	14053.3	15299.7	14343.7
60°	9766.0	9917.9	11147.9	12848.5	14908.1	16882.7	17231.2	17016.7	15870.1	16879.7	16287.0
62.5°	6842.7	7000.6	8462.9	11124.1	14684.7	19935.5	21293.6	20368.8	18479.1	19207.3	18802.2
65°	3663.4	3739.3	4856.2	7718.4	12397.3	20565.4	27230.9	25823.7	22610.0	22076.9	20954.1
67.5°	2020.8	2062.5	2489.9	3897.2	7940.2	18109.8	31013.4	32076.7	27773.0	23987.5	20562.4
69°	1827.2	1865.9	2145.9	2951.5	5313.4	14973.6	30644.1	33725.2	30036.5	23798.4	19115.0
70°	1787.0	1822.7	2074.4	2720.7	4300.7	12342.2	29406.6	33303.7	30575.6	23120.8	17852.1
72.5°	1608.3	1647.0	1891.2	2443.7	3675.3	6153.2	23293.6	28158.7	27759.6	20047.2	13541.0
75°	1499.6	1535.3	1949.3	2393.1	3518.9	3894.2	15356.3	20753.0	20406.1	14023.5	7301.4
77.5°	641.8	638.9	903.9	2025.3	3571.0	3770.6	8251.5	12964.7	11828.5	5993.9	2096.7
80°	428.9	421.4	428.9	595.7	3274.7	3791.4	4323.1	6580.6	4970.8	1527.9	1033.5
82.5°	369.3	363.4	376.8	363.4	1151.1	4327.5	3675.3	3499.5	2363.3	868.2	512.3
85°	248.7	238.3	324.6	326.1	543.5	3845.0	4139.9	2956.0	1912.1	515.3	253.2
87.5°	119.1	116.2	189.1	230.8	318.7	1562.1	4644.7	3029.0	1928.5	263.6	120.6
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°	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4	7855.4
2.5°	7779.4	7718.4	7658.8	7587.3	7512.9	7429.5	7387.8	7346.1	7335.6	7323.7	7282.0
5°	7565.0	7478.6	7329.7	7165.9	6993.1	6824.9	6696.8	6616.4	6555.3	6524.0	6468.9
7.5°	7288.0	7161.4	6900.8	6617.9	6327.5	6062.4	5833.1	5688.6	5551.6	5487.6	5414.6
10°	7024.4	6835.3	6430.2	6013.3	5596.3	5195.7	4818.9	4552.4	4315.6	4183.1	4089.3
12.5°	6798.1	6538.9	5977.5	5413.1	4841.3	4270.9	3706.5	3262.8	2892.0	2696.9	2597.1
15°	6577.7	6264.9	5547.1	4830.9	4096.7	3320.8	2579.2	2075.9	1769.1	1647.0	1605.3
17.5°	6378.1	5977.5	5115.3	4244.1	3328.3	2390.1	1733.4	1456.4	1338.8	1298.6	1285.2
20°	6162.2	5687.1	4667.1	3630.6	2527.1	1670.8	1353.7	1231.5	1183.9	1172.0	1166.0
22.5°	5953.7	5401.2	4238.2	2973.9	1815.3	1289.6	1163.0	1112.4	1105.0	1115.4	1115.4
25°	5776.5	5145.1	3775.0	2287.4	1332.8	1085.6	1040.9	1029.0	1057.3	1096.0	1103.5
27.5°	5643.9	4935.1	3282.1	1688.7	1061.8	944.1	942.6	962.0	1032.0	1106.5	1121.3
30°	5553.1	4735.6	2755.0	1218.1	890.5	831.0	854.8	896.5	999.2	1105.0	1133.3
32.5°	5506.9	4588.1	2205.5	942.6	762.5	729.7	769.9	820.5	921.8	1020.1	1057.3
35°	5542.7	4479.4	1687.2	786.3	673.1	647.8	689.5	738.6	798.2	839.9	868.2
37.5°	5676.7	4436.2	1273.2	704.4	612.0	588.2	621.0	649.3	673.1	685.0	698.4
40°	5965.6	4482.4	1020.1	662.7	577.8	548.0	561.4	571.8	586.7	598.6	604.6
42.5°	6391.5	4620.9	914.3	646.3	559.9	516.7	513.8	518.2	537.6	559.9	564.4
45°	6987.2	4865.1	906.9	656.7	551.0	491.4	478.0	484.0	513.8	548.0	554.0
47.5°	7748.1	5237.4	966.5	688.0	558.4	478.0	455.7	463.1	500.4	546.5	554.0
50°	8669.9	5757.1	1066.2	734.2	591.2	481.0	448.2	452.7	491.4	542.1	549.5
52.5°	9758.5	6494.3	1175.0	778.8	625.5	500.4	454.2	443.8	479.5	524.2	533.1
55°	10969.2	7439.9	1286.6	819.0	643.3	524.2	466.1	431.9	457.2	494.4	501.8
57.5°	12455.4	8762.3	1480.2	857.8	655.2	540.6	478.0	419.9	428.9	455.7	461.6
60°	14467.3	10632.7	1821.3	921.8	682.0	546.5	476.5	409.5	400.6	415.5	418.5
62.5°	16878.2	12663.9	2105.7	1002.2	726.7	551.0	467.6	402.1	376.8	376.8	379.7
65°	18309.3	13207.4	1947.8	1069.2	763.9	546.5	457.2	394.6	358.9	342.5	344.0
67.5°	17095.6	11615.5	1669.4	1082.6	762.5	525.7	440.8	381.2	341.0	315.7	314.2
69°	15575.2	10022.1	1544.3	1046.9	726.7	498.9	419.9	366.3	327.6	300.8	299.3
70°	14349.6	9049.7	1462.4	1008.2	688.0	479.5	403.6	352.9	317.2	291.9	288.9
72.5°	10433.1	5929.9	1249.4	866.7	567.4	402.1	348.5	309.7	282.9	268.1	265.1
75°	5213.6	2827.9	1014.1	702.9	434.8	321.7	285.9	259.1	245.7	242.7	241.2
77.5°	1712.5	1295.6	725.2	524.2	323.1	251.7	230.8	211.5	208.5	217.4	214.4
80°	941.2	753.5	460.2	347.0	220.4	184.7	181.7	171.3	175.7	190.6	187.6
82.5°	479.5	391.7	284.4	208.5	148.9	132.5	144.4	138.5	144.4	157.9	156.4
85°	236.8	214.4	180.2	126.6	98.3	84.9	102.8	107.2	110.2	120.6	120.6
87.5°	137.0	126.6	95.3	59.6	49.1	44.7	59.6	58.1	68.5	74.5	73.0
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)