

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: P301833

Luminaire Tested: **GLNA-AF-06-LED-E1-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301833  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
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-SL4-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

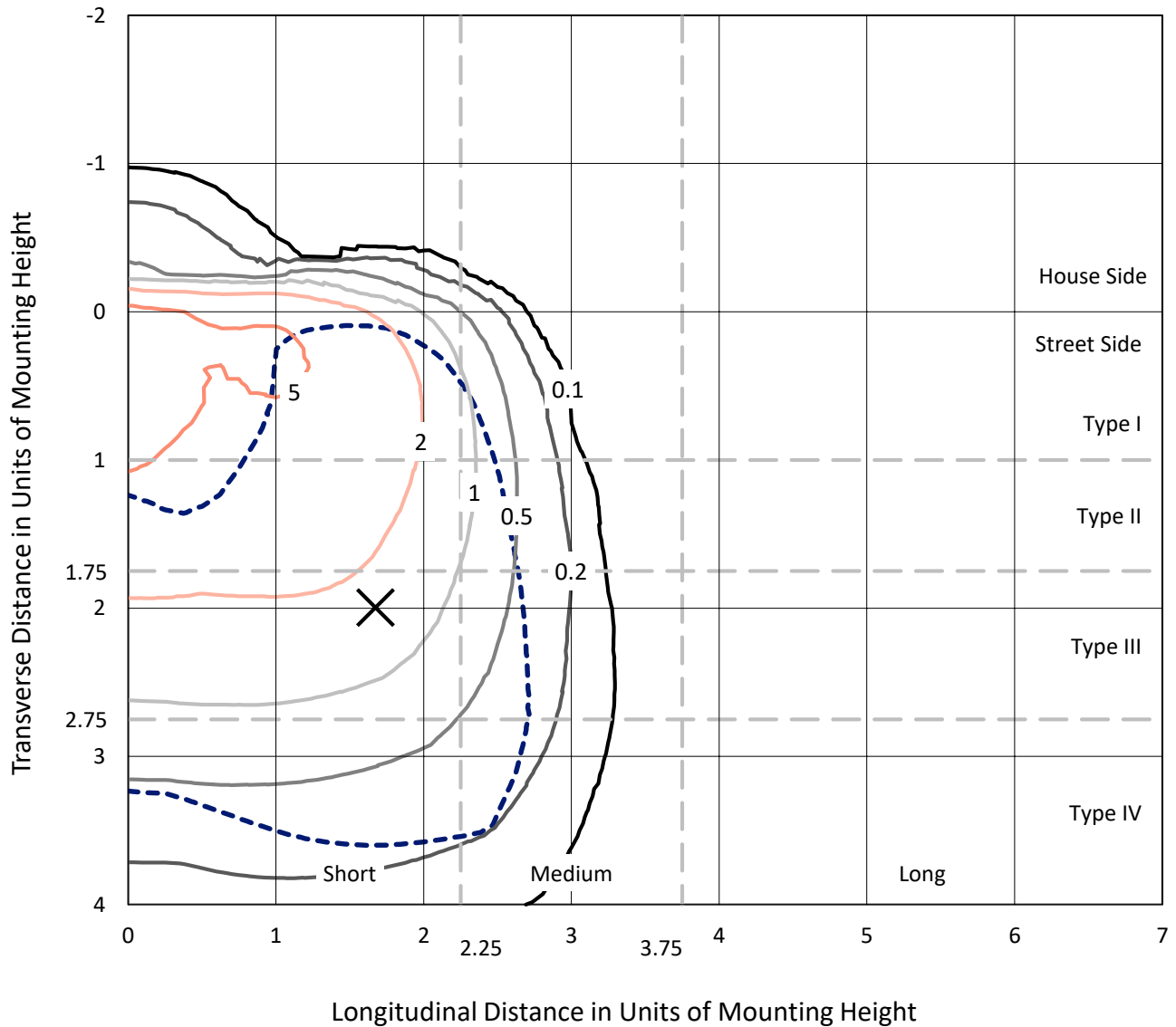
Lumens per Lamp: N/A  
Luminaire Lumens: 26253.4 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4  
  
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (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



REPORT NUMBER: P301833  
 CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

### Iso-Footcandle Lines of Horizontal Illumination

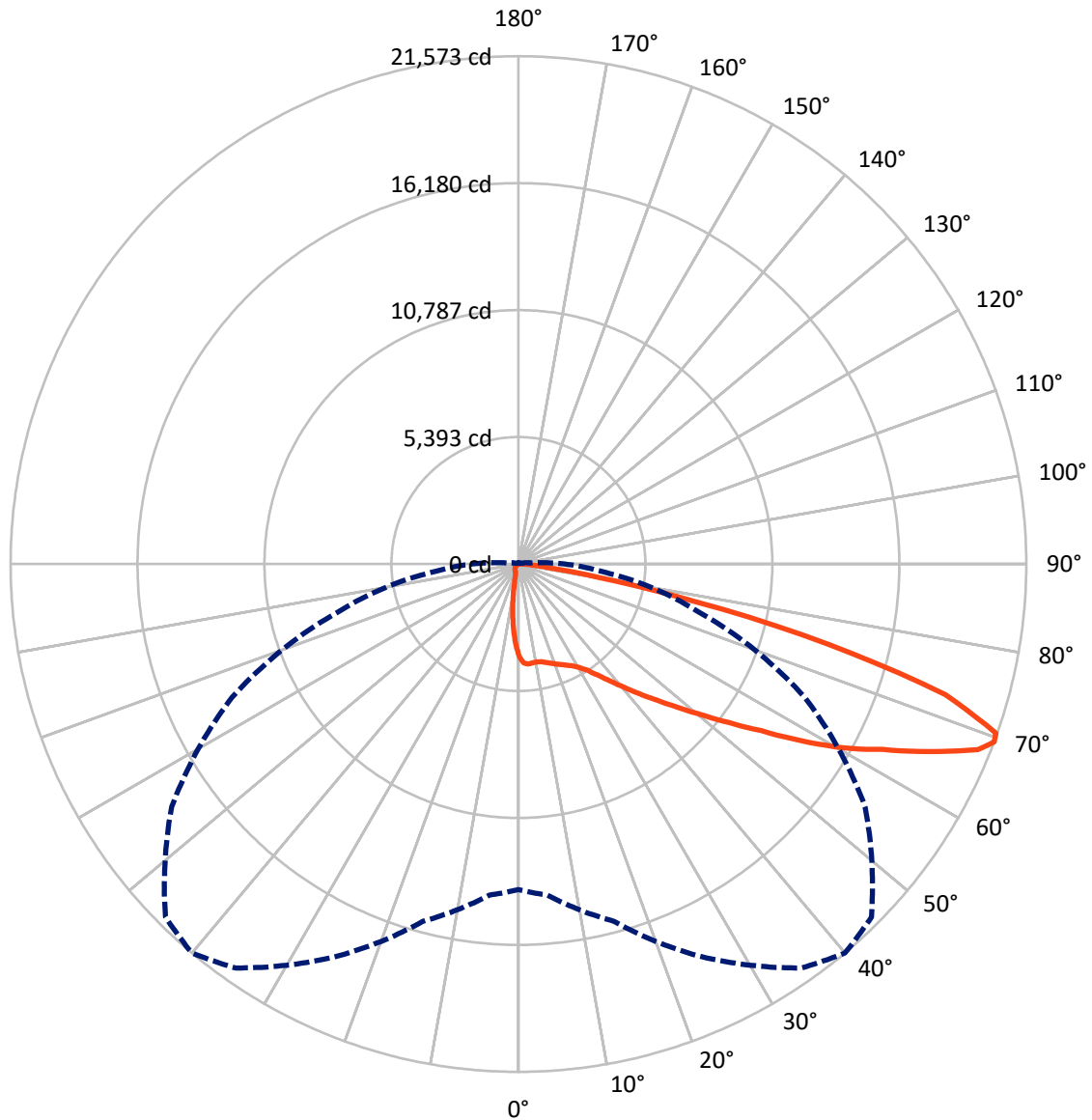
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301833  
CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P301833

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1536.0	0.0	1536.0
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	24717.5	0.0	24717.5
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	26253.4	0.0	26253.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.0	1.2
10°-20°	782.1	3.0
20°-30°	1317.3	5.0
30°-40°	2156.5	8.2
40°-50°	3733.9	14.2
50°-60°	5881.2	22.4
60°-70°	7680.7	29.3
70°-80°	3955.9	15.1
80°-90°	427.9	1.6
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°	26253.4	100.0
0°-180°	26253.4	100.0

**Coefficient of Utilization**



REPORT NUMBER: P301833

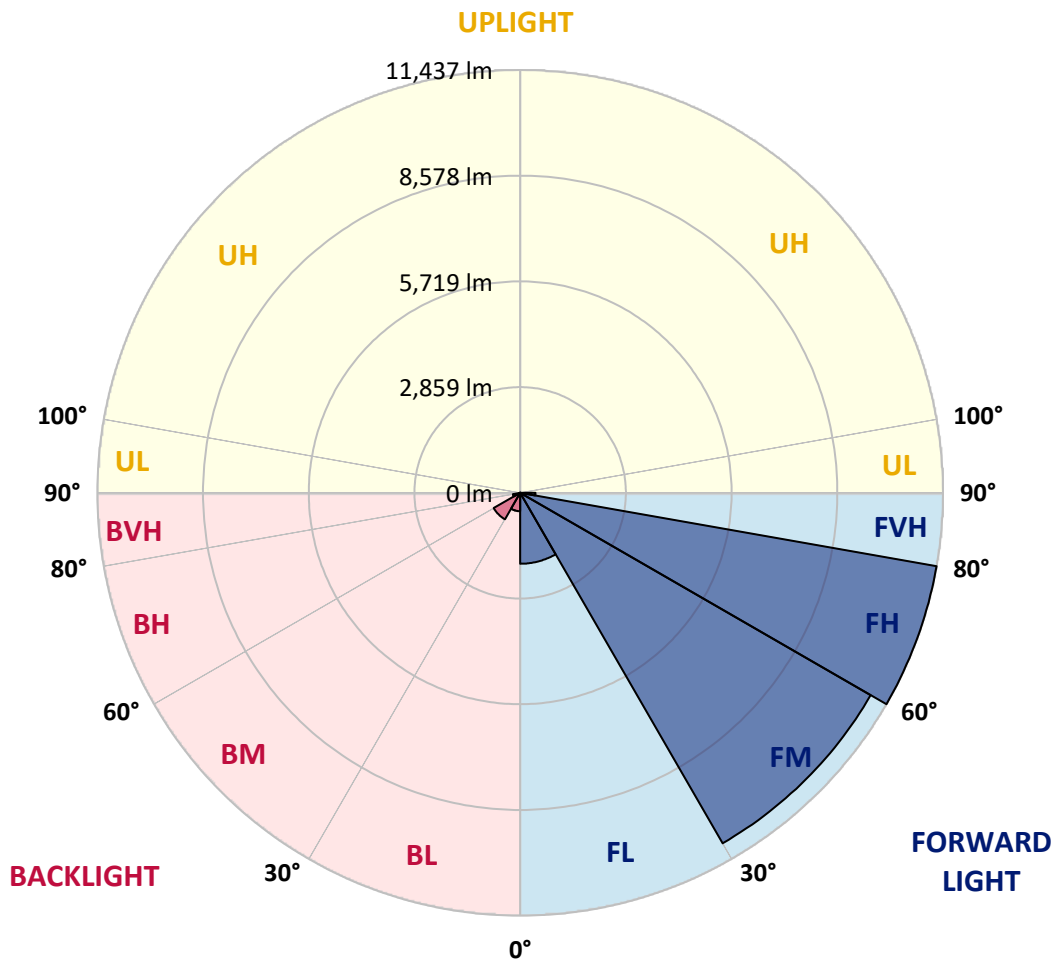
CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1919.9	7.3			
FM	(30°-60°)	10946.0	41.7			
FH	(60°-80°)	11437.1	43.6			G4/12000
FVH	(80°-90°)	414.5	1.6			G3/500
BL	(0°-30°)	497.5	1.9	B1/500		
BM	(30°-60°)	825.5	3.1	B1/1000		
BH	(60°-80°)	199.4	0.8	B1/500		G1/500
BVH	(80°-90°)	13.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Short





REPORT NUMBER: P301833

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4
2.5°	4306.8	4283.4	4269.3	4250.6	4227.1	4206.8	4199.0	4141.2	4086.5	4011.5	3925.5
5°	4386.5	4378.7	4353.7	4328.7	4300.6	4269.3	4252.1	4183.4	4105.2	3995.8	3845.8
7.5°	4394.3	4385.0	4353.7	4319.3	4280.3	4242.8	4213.1	4144.3	4072.4	3961.5	3778.6
10°	4381.8	4370.9	4347.5	4310.0	4261.5	4225.6	4195.9	4130.2	4069.3	3969.3	3766.1
12.5°	4367.8	4356.8	4345.9	4327.1	4284.9	4259.9	4234.9	4172.4	4117.7	4033.4	3811.4
15°	4381.8	4375.6	4388.1	4380.3	4356.8	4335.0	4310.0	4253.7	4203.7	4133.4	3894.3
17.5°	4441.2	4441.2	4480.3	4485.0	4463.1	4431.8	4395.9	4339.6	4297.4	4238.1	3992.7
20°	4580.3	4575.6	4625.6	4635.0	4581.9	4533.4	4480.3	4411.5	4378.7	4341.2	4089.6
22.5°	4819.4	4797.5	4827.2	4817.8	4713.1	4638.1	4572.5	4488.1	4470.9	4453.7	4197.4
25°	5130.4	5117.9	5138.2	5046.0	4861.6	4760.0	4681.9	4586.6	4586.6	4603.7	4319.3
27.5°	5582.0	5535.1	5466.4	5303.8	5027.2	4897.5	4813.1	4711.6	4738.1	4802.2	4480.3
30°	6044.6	5993.0	5835.2	5585.1	5228.8	5092.9	4994.4	4888.2	4950.7	5067.9	4695.9
32.5°	6500.9	6443.0	6219.6	5903.9	5517.9	5382.0	5286.6	5169.4	5274.1	5471.0	5011.6
35°	6943.1	6891.5	6633.7	6261.8	5902.4	5789.8	5702.3	5600.7	5735.1	6010.2	5457.0
37.5°	7440.1	7383.8	7069.7	6666.5	6369.6	6288.3	6224.3	6122.7	6357.1	6760.3	6077.4
40°	8051.1	7955.8	7532.3	7130.6	6910.3	6871.2	6827.5	6813.4	7177.5	7735.4	6904.0
42.5°	8751.2	8594.9	8016.7	7619.8	7504.1	7532.3	7521.3	7583.8	8204.2	8948.1	7910.4
45°	9451.3	9249.7	8555.8	8141.7	8157.3	8255.8	8316.7	8566.8	9490.3	10338.9	8993.4
47.5°	10045.1	9846.6	9073.1	8705.9	8893.4	9087.2	9252.8	9726.3	10812.4	11707.8	9835.7
50°	10553.0	10365.4	9621.6	9326.2	9748.2	10060.7	10329.5	11031.2	12234.4	12750.1	10426.4
52.5°	10968.7	10843.6	10190.4	10037.3	10724.9	11182.7	11576.5	12417.3	13494.0	13597.1	10885.8
55°	11373.4	11284.3	10801.4	10882.7	11871.9	12495.4	12993.9	13887.8	14578.5	14303.5	11326.5
57.5°	11839.1	11757.8	11498.4	11954.7	13379.9	14164.4	14708.2	15191.1	15533.3	15025.4	11742.2
60°	12314.1	12267.3	12273.5	13145.5	15111.4	15864.6	16164.7	16289.7	16471.0	15705.2	11765.6
62.5°	12767.3	12856.4	13159.6	14470.7	16769.4	17347.6	17499.2	17622.7	17410.1	15813.1	10870.2
65°	13534.6	13680.0	14403.5	16244.4	18593.1	19211.9	19368.2	18944.7	17558.6	14419.1	8841.8
67.5°	13909.7	14175.3	15466.1	17897.7	20362.1	21049.7	20991.9	19030.7	15756.8	10995.2	5674.2
69°	13831.5	14114.4	15711.5	18404.0	20949.7	21573.2	21206.0	17979.0	13423.7	7965.1	3483.3
70°	13522.1	13808.1	15584.9	18385.3	21024.7	21518.5	20809.0	16680.4	11350.0	5824.2	2178.4
72.5°	11292.1	11539.0	13836.2	16617.8	19368.2	18966.6	17408.6	11556.2	5530.4	1586.1	490.7
75°	6950.9	7088.4	9927.9	12518.9	14628.5	13597.1	11598.4	5749.2	1648.7	448.5	271.9
77.5°	3672.4	3734.9	5435.1	7379.1	9273.1	7672.9	5944.5	2242.5	759.5	281.3	196.9
80°	2170.6	2217.5	2927.0	3373.9	4013.0	3352.0	2376.9	1376.7	543.8	176.6	175.0
82.5°	1242.4	1272.0	2122.2	1875.3	1581.5	1350.2	1183.0	1304.9	326.6	118.8	181.3
85°	456.3	462.6	1193.9	1426.8	940.8	559.4	587.6	1081.4	87.5	75.0	142.2
87.5°	212.5	207.8	614.1	873.6	550.1	354.7	457.9	237.5	34.4	48.4	39.1
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: P301833

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4	3922.4
2.5°	3875.5	3817.7	3713.0	3605.2	3495.8	3411.4	3328.6	3262.9	3241.1	3200.4	3203.6
5°	3756.8	3650.5	3431.7	3209.8	2978.5	2787.9	2608.2	2462.8	2392.5	2320.6	2320.6
7.5°	3653.6	3498.9	3156.7	2795.7	2422.2	2108.1	1825.2	1612.7	1495.5	1401.7	1400.2
10°	3614.5	3405.1	2927.0	2409.7	1889.3	1461.1	1125.2	909.5	798.5	726.7	723.5
12.5°	3631.7	3372.3	2750.4	2053.4	1400.2	939.2	651.6	512.6	465.7	443.8	443.8
15°	3681.7	3362.9	2573.8	1704.9	989.2	587.6	432.9	395.4	392.2	392.2	392.2
17.5°	3742.7	3366.1	2392.5	1365.8	673.5	420.4	373.5	368.8	371.9	371.9	371.9
20°	3805.2	3367.6	2197.2	1051.7	475.1	365.7	351.6	350.0	353.2	353.2	354.7
22.5°	3881.8	3375.5	2001.8	786.0	392.2	345.4	334.4	334.4	336.0	336.0	334.4
25°	3969.3	3391.1	1798.7	582.9	357.9	331.3	321.9	320.4	321.9	320.4	318.8
27.5°	4078.7	3413.0	1572.1	456.3	342.2	317.2	309.4	309.4	307.9	306.3	304.7
30°	4216.2	3438.0	1317.4	387.6	326.6	304.7	296.9	295.4	293.8	290.7	290.7
32.5°	4425.6	3492.7	1065.8	351.6	309.4	287.5	281.3	281.3	278.2	275.0	273.5
35°	4747.5	3600.5	840.7	329.7	290.7	268.8	261.0	261.0	257.8	256.3	254.7
37.5°	5192.9	3764.6	653.2	309.4	271.9	248.5	240.7	239.1	236.0	232.8	231.3
40°	5785.1	3967.7	514.1	290.7	253.2	228.2	221.9	218.8	212.5	207.8	207.8
42.5°	6529.0	4199.0	417.2	270.3	231.3	209.4	204.7	200.0	189.1	184.4	182.8
45°	7307.2	4406.8	353.2	246.9	209.4	190.7	187.5	179.7	165.6	161.0	161.0
47.5°	7868.2	4455.3	311.0	225.0	189.1	170.3	168.8	154.7	142.2	139.1	137.5
50°	8218.3	4360.0	276.6	203.2	170.3	151.6	146.9	129.7	121.9	118.8	117.2
52.5°	8454.3	4189.6	248.5	184.4	153.1	134.4	123.5	111.0	104.7	101.6	101.6
55°	8643.3	3949.0	220.3	167.2	139.1	120.3	104.7	95.3	89.1	85.9	85.9
57.5°	8696.5	3622.4	192.2	153.1	125.0	106.3	89.1	82.8	75.0	73.4	73.4
60°	8310.5	3033.2	170.3	136.0	112.5	92.2	78.1	70.3	62.5	60.9	59.4
62.5°	7293.2	2347.2	150.0	120.3	98.5	79.7	67.2	57.8	51.6	51.6	51.6
65°	5563.2	1573.6	131.3	104.7	85.9	67.2	57.8	46.9	43.8	43.8	45.3
67.5°	3330.1	856.4	112.5	89.1	73.4	56.3	48.4	40.6	39.1	40.6	40.6
69°	1951.8	503.2	101.6	79.7	64.1	50.0	42.2	35.9	39.1	40.6	40.6
70°	1204.8	339.1	93.8	71.9	57.8	45.3	39.1	34.4	37.5	39.1	39.1
72.5°	336.0	175.0	75.0	56.3	46.9	37.5	31.3	31.3	35.9	37.5	37.5
75°	218.8	129.7	57.8	42.2	35.9	29.7	26.6	29.7	34.4	35.9	35.9
77.5°	181.3	106.3	46.9	34.4	29.7	28.1	25.0	26.6	31.3	32.8	32.8
80°	165.6	75.0	37.5	31.3	26.6	25.0	23.4	21.9	28.1	29.7	29.7
82.5°	157.8	59.4	32.8	28.1	25.0	21.9	20.3	21.9	25.0	26.6	28.1
85°	98.5	39.1	29.7	26.6	21.9	20.3	20.3	20.3	23.4	25.0	25.0
87.5°	35.9	31.3	26.6	21.9	18.8	18.8	18.8	18.8	20.3	23.4	23.4
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)