

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: P300996

Luminaire Tested: **GLNA-AF-07-LED-E1-SL4-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300996  
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-07-LED-E1-SL4-7027-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22818.3 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4

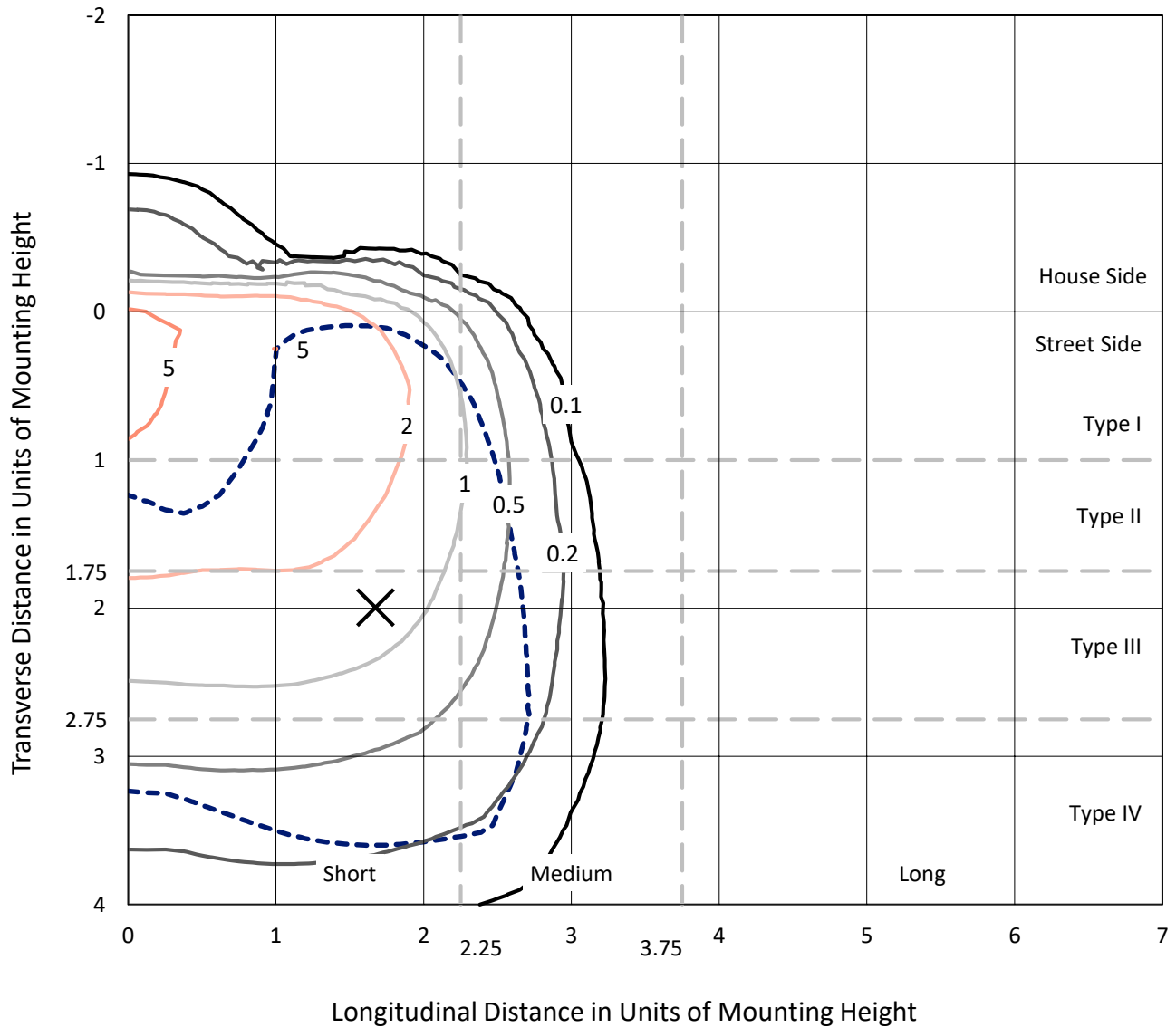
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

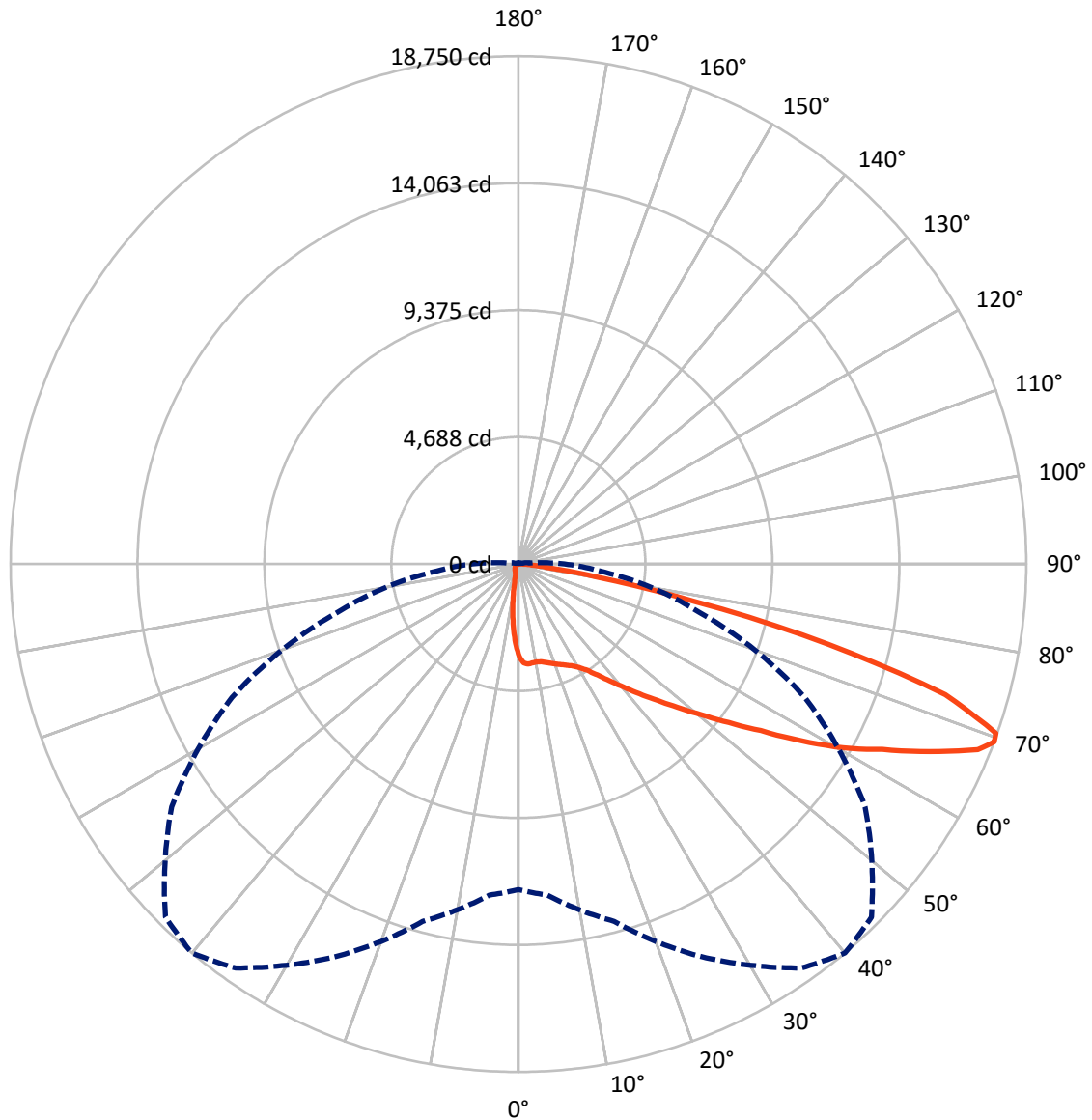
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1335.0	0.0	1335.0
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	21483.3	0.0	21483.3
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	22818.3	0.0	22818.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.4	1.2
10°-20°	679.8	3.0
20°-30°	1144.9	5.0
30°-40°	1874.3	8.2
40°-50°	3245.3	14.2
50°-60°	5111.7	22.4
60°-70°	6675.7	29.3
70°-80°	3438.3	15.1
80°-90°	371.9	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°	22818.3	100.0
0°-180°	22818.3	100.0

**Coefficient of Utilization**



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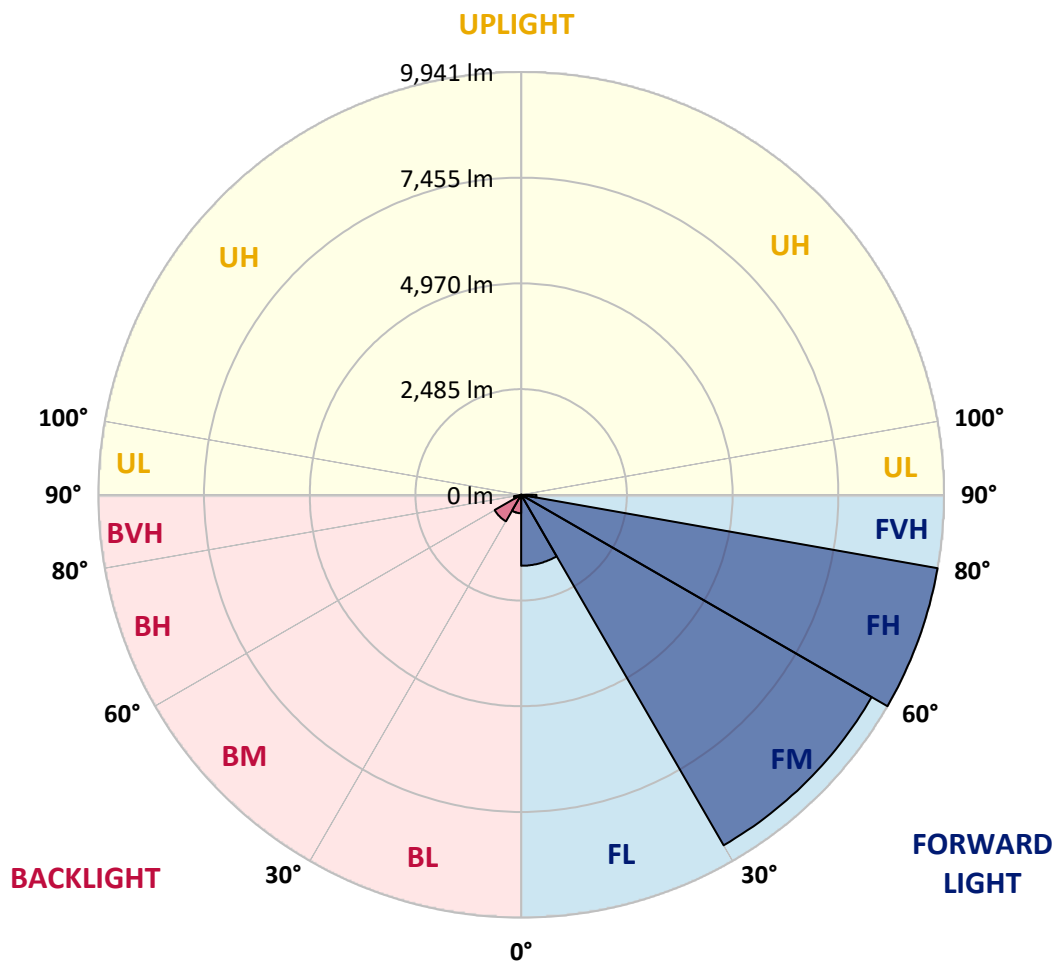
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1668.7	7.3			
FM	(30°-60°)	9513.8	41.7			
FH	(60°-80°)	9940.6	43.6			G4/12000
FVH	(80°-90°)	360.2	1.6			G3/500
BL	(0°-30°)	432.4	1.9	B1/500		
BM	(30°-60°)	717.5	3.1	B1/1000		
BH	(60°-80°)	173.3	0.8	B1/500		G1/500
BVH	(80°-90°)	11.7	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2
2.5°	3743.3	3722.9	3710.7	3694.4	3674.0	3656.4	3649.6	3599.3	3551.8	3486.6	3411.9
5°	3812.6	3805.8	3784.0	3762.3	3737.9	3710.7	3695.8	3636.0	3568.1	3473.0	3342.6
7.5°	3819.4	3811.2	3784.0	3754.2	3720.2	3687.6	3661.8	3602.0	3539.6	3443.1	3284.2
10°	3808.5	3799.0	3778.6	3746.0	3703.9	3672.7	3646.9	3589.8	3536.8	3449.9	3273.3
12.5°	3796.3	3786.8	3777.3	3761.0	3724.3	3702.5	3680.8	3626.5	3578.9	3505.6	3312.7
15°	3808.5	3803.1	3813.9	3807.1	3786.8	3767.7	3746.0	3697.1	3653.7	3592.5	3384.7
17.5°	3860.1	3860.1	3894.1	3898.1	3879.1	3852.0	3820.7	3771.8	3735.1	3683.5	3470.3
20°	3981.0	3976.9	4020.4	4028.5	3982.3	3940.2	3894.1	3834.3	3805.8	3773.2	3554.5
22.5°	4188.8	4169.8	4195.6	4187.4	4096.4	4031.2	3974.2	3900.9	3885.9	3871.0	3648.2
25°	4459.1	4448.2	4465.9	4385.7	4225.5	4137.2	4069.3	3986.4	3986.4	4001.4	3754.2
27.5°	4851.6	4810.9	4751.1	4609.8	4369.4	4256.7	4183.4	4095.1	4118.2	4173.9	3894.1
30°	5253.7	5208.8	5071.6	4854.3	4544.7	4426.5	4340.9	4248.6	4302.9	4404.8	4081.5
32.5°	5650.3	5600.0	5405.8	5131.4	4795.9	4677.8	4594.9	4493.0	4584.0	4755.2	4355.9
35°	6034.6	5989.8	5765.7	5442.4	5130.1	5032.3	4956.2	4867.9	4984.7	5223.8	4743.0
37.5°	6466.6	6417.7	6144.7	5794.2	5536.2	5465.5	5409.8	5321.6	5525.3	5875.7	5282.2
40°	6997.6	6914.8	6546.7	6197.6	6006.1	5972.2	5934.1	5921.9	6238.4	6723.3	6000.7
42.5°	7606.1	7470.3	6967.7	6622.8	6522.2	6546.7	6537.2	6591.5	7130.7	7777.3	6875.4
45°	8214.6	8039.4	7436.3	7076.4	7090.0	7175.6	7228.5	7445.8	8248.6	8986.1	7816.6
47.5°	8730.7	8558.2	7885.9	7566.7	7729.7	7898.1	8042.1	8453.7	9397.6	10175.9	8548.7
50°	9172.2	9009.2	8362.7	8105.9	8472.7	8744.3	8977.9	9587.8	10633.6	11081.8	9062.1
52.5°	9533.5	9424.8	8857.1	8723.9	9321.6	9719.5	10061.8	10792.5	11728.4	11818.0	9461.5
55°	9885.2	9807.8	9388.1	9458.7	10318.5	10860.4	11293.7	12070.6	12671.0	12431.9	9844.5
57.5°	10290.0	10219.4	9993.9	10390.5	11629.2	12311.0	12783.7	13203.4	13500.9	13059.4	10205.8
60°	10702.9	10662.1	10667.6	11425.5	13134.1	13788.8	14049.6	14158.2	14315.8	13650.3	10226.2
62.5°	11096.8	11174.2	11437.7	12577.3	14575.2	15077.8	15209.5	15316.8	15132.1	13744.0	9447.9
65°	11763.7	11890.0	12518.9	14118.9	16160.3	16698.1	16834.0	16465.9	15261.1	12532.4	7684.9
67.5°	12089.6	12320.5	13442.5	15555.9	17697.8	18295.4	18245.2	16540.6	13695.1	9556.5	4931.8
69°	12021.7	12267.6	13655.7	15995.9	18208.5	18750.4	18431.2	15626.5	11667.2	6922.9	3027.5
70°	11752.8	12001.4	13545.7	15979.6	18273.7	18702.9	18086.3	14497.8	9864.9	5062.1	1893.4
72.5°	9814.6	10029.2	12025.8	14443.5	16834.0	16484.9	15130.7	10044.1	4806.8	1378.6	426.5
75°	6041.4	6161.0	8628.9	10880.8	12714.4	11818.0	10080.8	4996.9	1432.9	389.8	236.3
77.5°	3191.9	3246.2	4723.9	6413.6	8059.8	6668.9	5166.7	1949.1	660.1	244.5	171.1
80°	1886.6	1927.3	2544.0	2932.4	3487.9	2913.4	2065.9	1196.6	472.7	153.5	152.1
82.5°	1079.8	1105.6	1844.5	1629.9	1374.5	1173.5	1028.2	1134.1	283.9	103.2	157.6
85°	396.6	402.0	1037.7	1240.1	817.7	486.2	510.7	939.9	76.1	65.2	123.6
87.5°	184.7	180.6	533.8	759.3	478.1	308.3	398.0	206.5	29.9	42.1	34.0
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°	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2	3409.2
2.5°	3368.4	3318.2	3227.2	3133.4	3038.4	2965.0	2893.0	2836.0	2817.0	2781.7	2784.4
5°	3265.2	3172.8	2982.7	2789.8	2588.8	2423.1	2266.9	2140.6	2079.5	2017.0	2017.0
7.5°	3175.6	3041.1	2743.6	2429.9	2105.3	1832.3	1586.4	1401.7	1299.8	1218.3	1217.0
10°	3141.6	2959.6	2544.0	2094.4	1642.1	1269.9	977.9	790.5	694.1	631.6	628.9
12.5°	3156.5	2931.1	2390.5	1784.7	1217.0	816.3	566.4	445.5	404.8	385.7	385.7
15°	3200.0	2922.9	2237.0	1481.8	859.8	510.7	376.2	343.6	340.9	340.9	340.9
17.5°	3253.0	2925.6	2079.5	1187.1	585.4	365.4	324.6	320.5	323.3	323.3	323.3
20°	3307.3	2927.0	1909.7	914.1	412.9	317.8	305.6	304.2	307.0	307.0	308.3
22.5°	3373.9	2933.8	1739.9	683.2	340.9	300.2	290.7	290.7	292.0	292.0	290.7
25°	3449.9	2947.4	1563.3	506.6	311.0	287.9	279.8	278.4	279.8	278.4	277.1
27.5°	3545.0	2966.4	1366.4	396.6	297.5	275.7	268.9	268.9	267.6	266.2	264.9
30°	3664.5	2988.1	1145.0	336.8	283.9	264.9	258.1	256.7	255.3	252.6	252.6
32.5°	3846.5	3035.7	926.3	305.6	268.9	249.9	244.5	244.5	241.8	239.0	237.7
35°	4126.3	3129.4	730.7	286.6	252.6	233.6	226.8	226.8	224.1	222.8	221.4
37.5°	4513.4	3272.0	567.7	268.9	236.3	216.0	209.2	207.8	205.1	202.4	201.0
40°	5028.2	3448.6	446.9	252.6	220.0	198.3	192.9	190.2	184.7	180.6	180.6
42.5°	5674.7	3649.6	362.6	235.0	201.0	182.0	177.9	173.9	164.3	160.3	158.9
45°	6351.1	3830.2	307.0	214.6	182.0	165.7	163.0	156.2	144.0	139.9	139.9
47.5°	6838.7	3872.3	270.3	195.6	164.3	148.0	146.7	134.5	123.6	120.9	119.5
50°	7143.0	3789.5	240.4	176.6	148.0	131.7	127.7	112.7	105.9	103.2	101.9
52.5°	7348.1	3641.4	216.0	160.3	133.1	116.8	107.3	96.4	91.0	88.3	88.3
55°	7512.4	3432.3	191.5	145.3	120.9	104.6	91.0	82.9	77.4	74.7	74.7
57.5°	7558.6	3148.4	167.1	133.1	108.7	92.4	77.4	72.0	65.2	63.8	63.8
60°	7223.1	2636.3	148.0	118.2	97.8	80.1	67.9	61.1	54.3	53.0	51.6
62.5°	6338.9	2040.1	130.4	104.6	85.6	69.3	58.4	50.3	44.8	44.8	44.8
65°	4835.3	1367.7	114.1	91.0	74.7	58.4	50.3	40.7	38.0	38.0	39.4
67.5°	2894.4	744.3	97.8	77.4	63.8	48.9	42.1	35.3	34.0	35.3	35.3
69°	1696.4	437.4	88.3	69.3	55.7	43.5	36.7	31.2	34.0	35.3	35.3
70°	1047.2	294.7	81.5	62.5	50.3	39.4	34.0	29.9	32.6	34.0	34.0
72.5°	292.0	152.1	65.2	48.9	40.7	32.6	27.2	27.2	31.2	32.6	32.6
75°	190.2	112.7	50.3	36.7	31.2	25.8	23.1	25.8	29.9	31.2	31.2
77.5°	157.6	92.4	40.7	29.9	25.8	24.4	21.7	23.1	27.2	28.5	28.5
80°	144.0	65.2	32.6	27.2	23.1	21.7	20.4	19.0	24.4	25.8	25.8
82.5°	137.2	51.6	28.5	24.4	21.7	19.0	17.7	19.0	21.7	23.1	24.4
85°	85.6	34.0	25.8	23.1	19.0	17.7	17.7	17.7	20.4	21.7	21.7
87.5°	31.2	27.2	23.1	19.0	16.3	16.3	16.3	16.3	17.7	20.4	20.4
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)