

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: P299995

Luminaire Tested: **GLNA-AF-06-LED-E1-SL3-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7027-600-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15813.3 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 193  
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

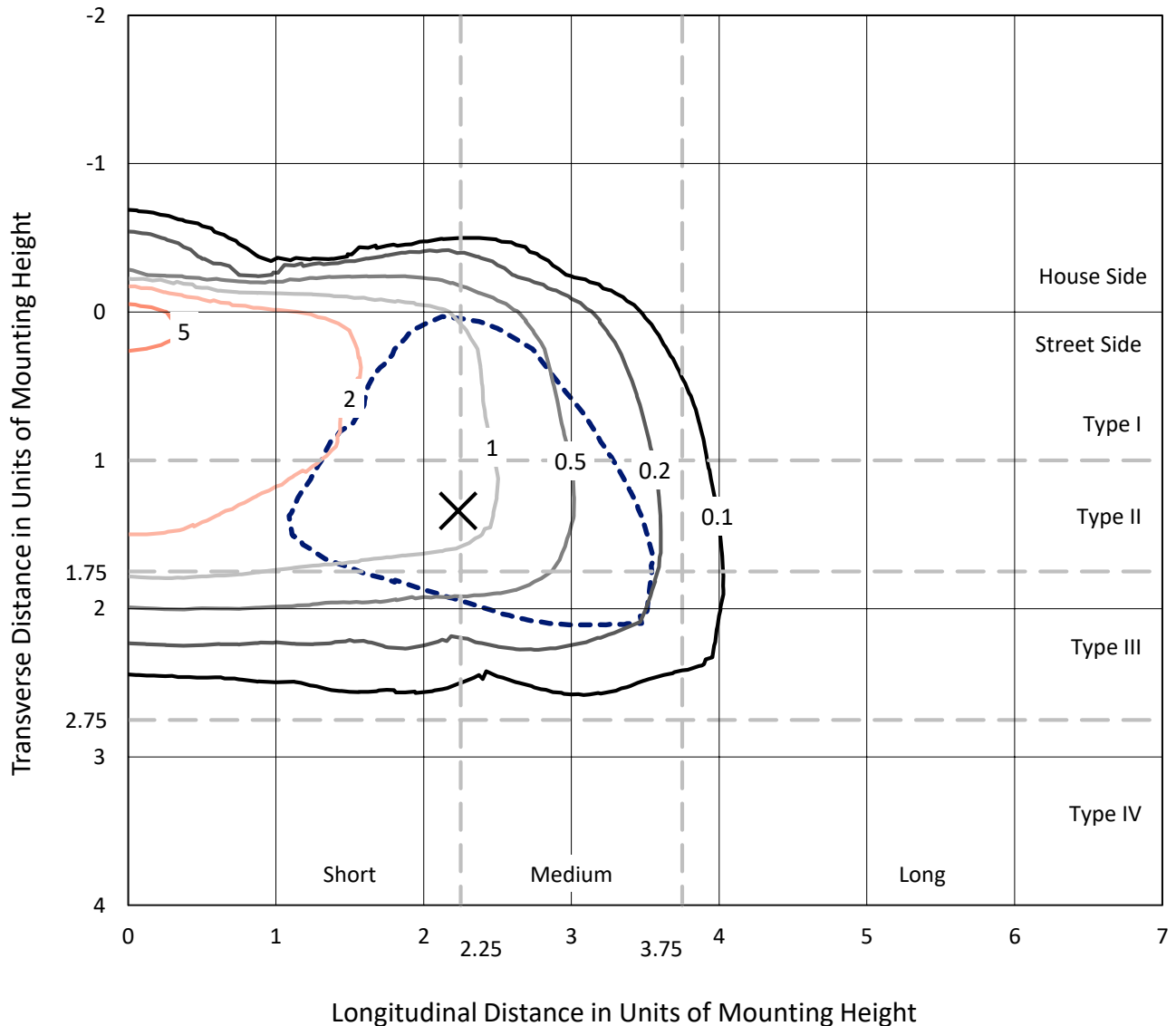


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

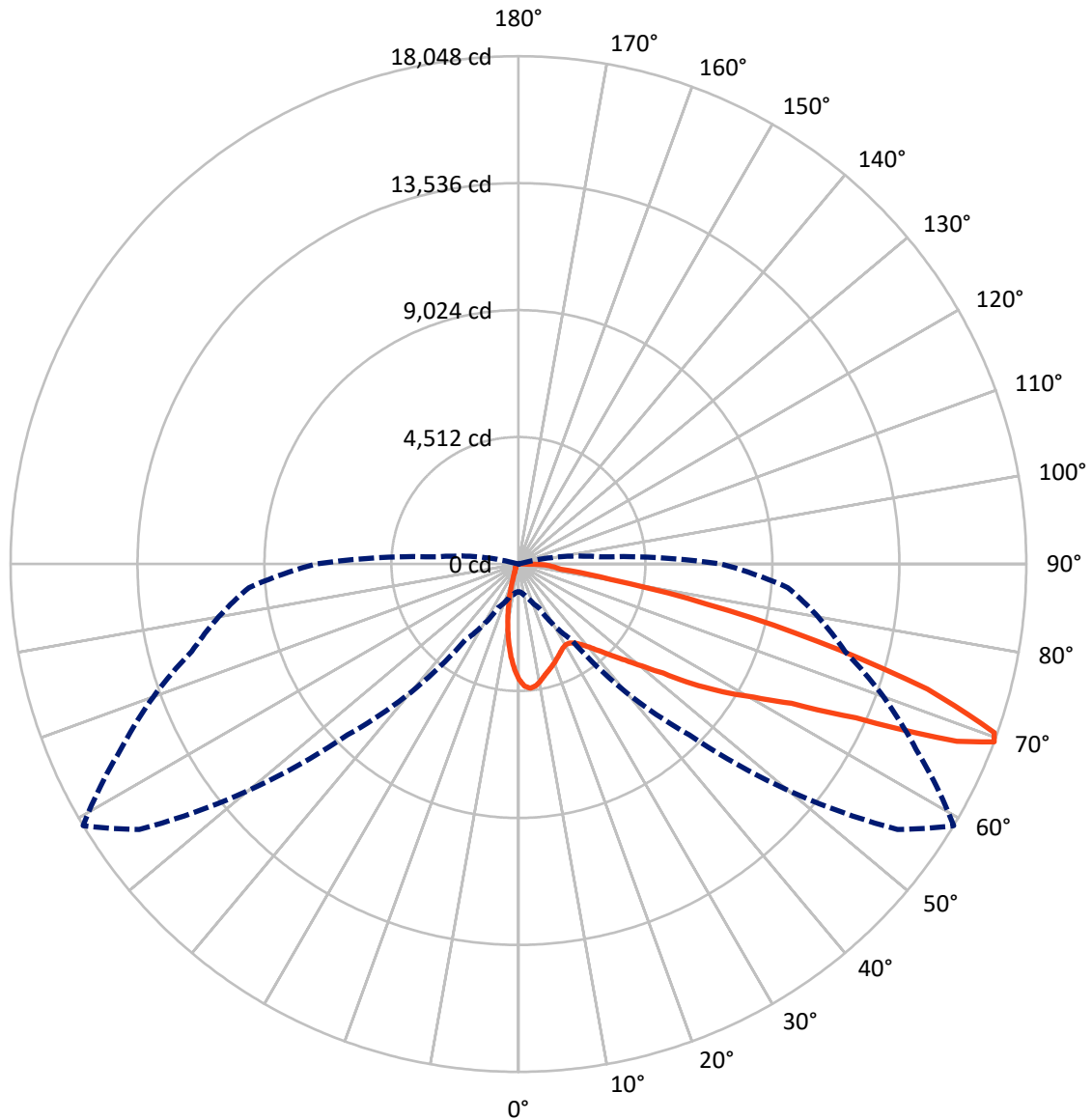


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1287.8	0.0	1287.8
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	14525.5	0.0	14525.5
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	15813.3	0.0	15813.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.1	2.1
10°-20°	690.3	4.4
20°-30°	928.9	5.9
30°-40°	1348.8	8.5
40°-50°	2245.8	14.2
50°-60°	3503.4	22.2
60°-70°	4335.2	27.4
70°-80°	2197.0	13.9
80°-90°	229.9	1.5
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°	15813.3	100.0
0°-180°	15813.3	100.0



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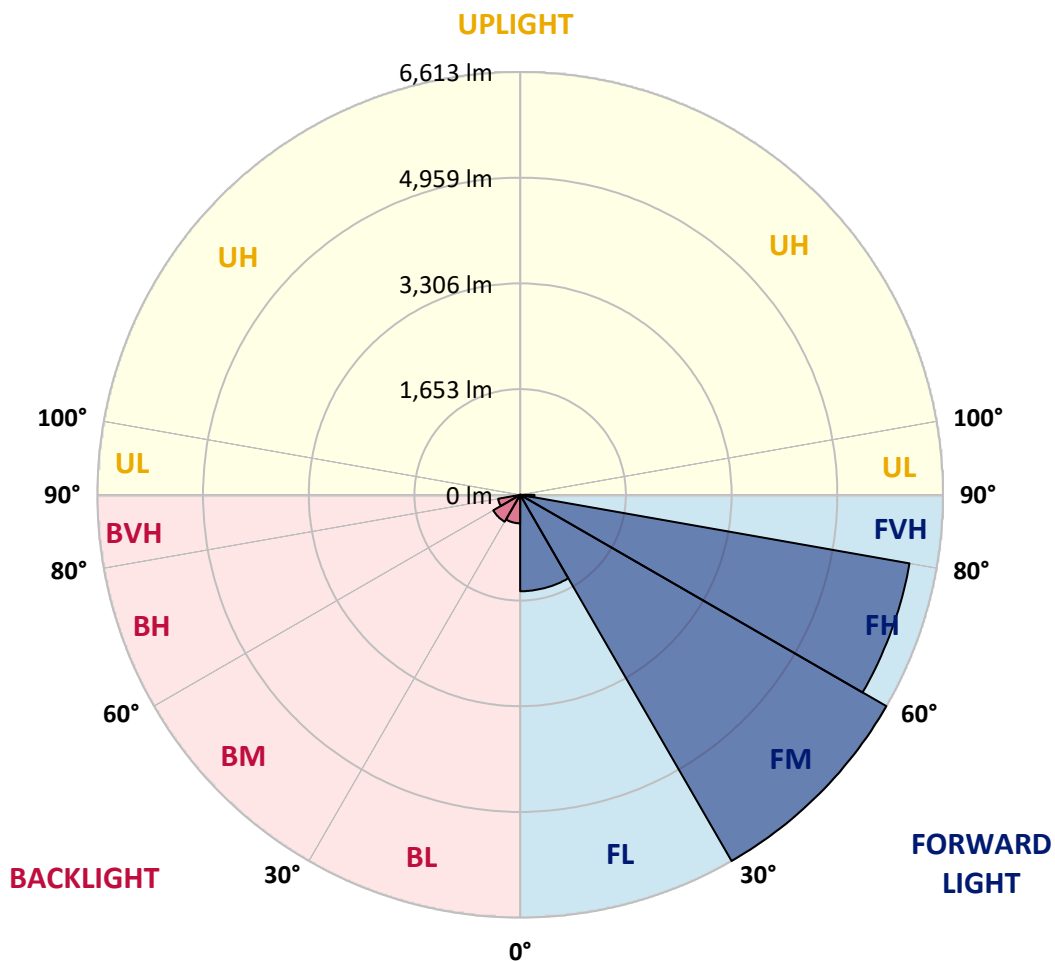
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1507.6	9.5			
FM	(30°-60°)	6612.7	41.8			
FH	(60°-80°)	6182.4	39.1			G3/7500
FVH	(80°-90°)	222.8	1.4			G2/225
BL	(0°-30°)	445.7	2.8	B1/500		
BM	(30°-60°)	485.2	3.1	B1/1000		
BH	(60°-80°)	349.7	2.2	B1/500		G1/500
BVH	(80°-90°)	7.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9
2.5°	4511.2	4509.5	4489.8	4480.8	4464.6	4430.8	4378.0	4350.4	4305.7	4227.7	4123.2
5°	4470.0	4491.7	4503.0	4504.1	4515.8	4503.0	4455.7	4432.7	4370.9	4245.6	4058.0
7.5°	4191.2	4199.0	4232.3	4260.7	4316.2	4369.0	4386.1	4376.1	4339.5	4205.5	3955.9
10°	3892.5	3900.4	3939.9	3977.3	4052.5	4133.8	4219.6	4237.7	4252.9	4148.1	3857.6
12.5°	3634.8	3642.9	3683.3	3732.3	3820.0	3920.2	4053.4	4082.9	4150.0	4093.7	3778.8
15°	3413.1	3416.6	3456.1	3516.8	3621.5	3750.1	3901.5	3948.9	4051.7	4055.3	3710.1
17.5°	3224.4	3233.3	3257.7	3315.6	3430.1	3589.3	3765.6	3833.5	3954.0	4023.0	3642.9
20°	3109.1	3118.0	3117.2	3149.4	3252.3	3422.0	3629.7	3710.9	3857.6	3990.0	3583.1
22.5°	3086.9	3086.9	3063.6	3059.0	3119.9	3262.0	3488.3	3587.4	3770.7	3975.7	3541.1
25°	3166.5	3162.7	3104.7	3057.3	3060.1	3144.8	3351.4	3469.4	3697.6	3985.4	3518.7
27.5°	3334.6	3330.0	3256.6	3166.5	3093.9	3093.1	3247.7	3374.6	3639.4	4032.0	3527.6
30°	3566.9	3565.2	3485.6	3371.9	3240.6	3119.9	3211.9	3327.3	3601.8	4115.9	3548.2
32.5°	3820.8	3818.1	3758.3	3638.6	3472.1	3240.6	3249.6	3346.2	3612.6	4227.7	3598.3
35°	4090.2	4085.6	4059.6	3955.1	3771.8	3463.2	3373.0	3448.0	3680.6	4395.0	3696.5
37.5°	4381.5	4386.1	4404.8	4304.6	4112.4	3775.3	3579.6	3630.5	3817.3	4622.2	3856.5
40°	4811.7	4810.9	4817.1	4685.5	4500.6	4157.1	3868.2	3884.4	4046.3	4923.5	4099.9
42.5°	5592.2	5537.8	5372.4	5104.1	4918.1	4593.5	4232.3	4215.3	4326.3	5296.3	4440.5
45°	6641.3	6524.9	6095.7	5581.6	5343.7	5085.4	4680.1	4625.7	4696.3	5744.3	4860.9
47.5°	7543.3	7422.6	6815.6	6078.7	5795.2	5552.1	5205.0	5106.8	5130.1	6246.0	5393.7
50°	7850.1	7791.1	7261.0	6511.6	6232.5	6139.6	5814.2	5694.3	5661.2	6826.2	6011.5
52.5°	7743.7	7739.3	7386.0	6792.3	6633.1	6747.7	6580.4	6441.7	6320.2	7438.0	6640.2
55°	7572.8	7595.3	7436.9	7038.2	7032.7	7302.9	7628.3	7513.0	7160.8	8102.4	7182.2
57.5°	7101.8	7197.3	7408.5	7503.3	7723.1	7999.5	8501.2	8569.1	8152.5	8611.1	7631.9
60°	5762.2	5972.3	6662.7	7570.1	8613.0	9301.5	9554.6	9612.5	8966.0	9034.0	8239.1
62.5°	4090.2	4304.6	5180.1	6715.4	8626.3	11011.9	11123.7	10895.8	9862.1	9661.0	9286.3
65°	2171.0	2336.7	3051.9	4847.4	7479.2	11409.1	13868.1	13188.6	11442.9	10893.9	10639.1
67.5°	1110.5	1160.6	1445.2	2372.4	5141.7	10133.9	16328.0	16806.3	14167.5	12117.3	10573.9
69°	982.7	1012.3	1201.0	1715.1	3292.3	8583.5	16447.9	18048.4	15594.0	12015.2	9609.0
70°	951.3	977.3	1149.0	1552.4	2573.6	7198.2	15989.0	17939.3	15958.7	11627.3	8888.3
72.5°	807.6	829.8	1023.1	1371.8	2091.7	3573.1	12988.2	15201.5	14320.5	9685.9	6433.6
75°	540.1	613.5	981.9	1286.0	1945.7	2029.9	8562.9	10985.1	10204.6	6533.0	3351.4
77.5°	129.7	139.4	277.2	1023.1	1779.5	1786.5	4404.0	6828.9	5570.0	2328.5	792.2
80°	69.8	67.1	77.7	203.0	1656.9	1676.6	1982.6	3314.8	1988.8	386.3	261.0
82.5°	49.3	46.6	50.1	85.0	521.4	1527.2	1434.3	1500.4	824.4	148.4	117.2
85°	17.9	17.1	27.6	76.9	163.5	878.0	1473.6	1237.5	667.9	68.0	85.8
87.5°	6.2	5.4	10.8	42.0	50.1	373.9	909.4	935.4	262.9	41.2	40.3
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°	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9	4115.9
2.5°	4079.4	4023.9	3922.1	3817.3	3720.6	3604.5	3546.3	3489.2	3465.1	3456.1	3414.2
5°	3961.3	3867.4	3651.1	3433.7	3233.3	3020.5	2880.3	2767.7	2701.3	2669.1	2618.2
7.5°	3810.2	3656.5	3328.1	2992.9	2680.8	2373.2	2145.3	1969.8	1849.1	1791.1	1738.4
10°	3663.5	3458.8	2992.1	2535.1	2111.1	1703.4	1388.6	1160.6	1015.0	947.8	905.0
12.5°	3532.2	3266.6	2667.5	2088.9	1556.7	1079.4	759.1	577.7	487.3	455.9	440.7
15°	3415.0	3089.6	2360.8	1665.0	1054.2	617.0	415.0	353.3	339.0	339.0	337.1
17.5°	3304.0	2916.0	2064.6	1267.0	661.7	377.4	315.7	307.5	307.5	311.1	311.1
20°	3197.6	2750.6	1778.4	909.4	416.7	299.4	285.3	283.5	285.3	289.7	289.7
22.5°	3106.3	2600.4	1511.2	624.0	309.4	269.9	262.9	260.2	261.0	263.7	265.6
25°	3038.4	2473.4	1259.2	422.9	266.4	245.8	238.0	233.4	229.8	229.8	231.5
27.5°	2995.6	2366.2	1015.0	307.5	239.6	223.6	210.9	203.9	195.7	191.4	193.0
30°	2964.2	2264.1	785.9	251.2	214.7	198.4	182.5	170.8	159.2	153.8	155.7
32.5°	2952.6	2181.8	587.5	221.7	192.2	174.3	154.6	139.4	127.0	122.4	123.5
35°	2984.0	2116.6	430.2	200.3	174.3	151.9	129.7	112.6	102.9	100.2	101.0
37.5°	3066.3	2081.6	321.9	182.5	158.4	133.2	108.3	92.0	85.8	85.8	86.6
40°	3221.7	2080.8	258.5	170.0	144.0	115.3	89.3	77.7	74.2	76.1	76.9
42.5°	3448.8	2128.2	225.2	158.4	131.6	98.3	74.2	66.1	65.2	67.1	68.0
45°	3759.1	2214.8	207.4	148.4	118.0	82.3	62.5	57.1	57.1	59.8	60.9
47.5°	4139.2	2341.8	192.2	138.6	104.5	68.8	53.6	50.1	50.9	53.6	54.4
50°	4597.0	2502.1	177.1	127.8	94.8	57.1	46.6	43.9	44.7	48.2	49.3
52.5°	5118.4	2717.6	164.6	118.0	82.3	47.4	39.3	37.6	39.3	43.0	43.9
55°	5565.4	2910.6	149.4	109.9	66.1	39.3	32.2	32.2	34.1	38.4	39.3
57.5°	5995.6	3112.6	135.9	94.8	52.0	31.4	26.8	27.6	30.3	34.9	35.7
60°	6626.9	3455.0	119.9	79.6	39.3	24.9	22.5	23.3	26.8	31.4	32.2
62.5°	7699.0	3976.5	103.7	66.1	30.3	19.8	17.9	19.8	24.1	29.5	30.3
65°	8666.6	4188.5	85.0	55.5	23.3	15.2	15.2	17.9	23.3	28.7	29.5
67.5°	8127.3	3525.7	66.1	43.9	17.9	11.6	12.5	17.1	22.5	28.7	29.5
69°	7187.6	2883.0	56.3	34.9	15.2	10.8	11.6	17.1	22.5	27.6	28.7
70°	6455.3	2434.1	50.1	29.5	13.5	10.8	11.6	16.0	22.5	27.6	28.7
72.5°	4323.5	1314.4	40.3	21.4	12.5	9.7	9.7	16.0	21.4	26.8	27.6
75°	1858.0	363.0	32.2	15.2	10.8	8.9	8.9	15.2	20.6	26.0	27.6
77.5°	339.8	92.0	26.0	13.5	10.8	8.9	8.1	14.3	19.8	24.9	26.0
80°	135.1	45.5	20.6	11.6	9.7	8.1	7.0	13.5	18.7	24.1	24.9
82.5°	81.5	26.0	17.1	10.8	9.7	7.0	6.2	11.6	17.9	23.3	24.1
85°	66.1	17.9	13.5	10.8	8.9	7.0	5.4	10.8	16.0	22.5	23.3
87.5°	32.2	12.5	12.5	9.7	8.9	7.0	5.4	9.7	15.2	21.4	22.5
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)