

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: P301895

Luminaire Tested: **GLNA-AF-06-LED-E1-SL4-7060-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301895  
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-SL4-7060-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 5700K CCT 800mA 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: 21209.6 lumens  
Efficiency: N/A  
Efficacy: 85.2 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): 249  
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

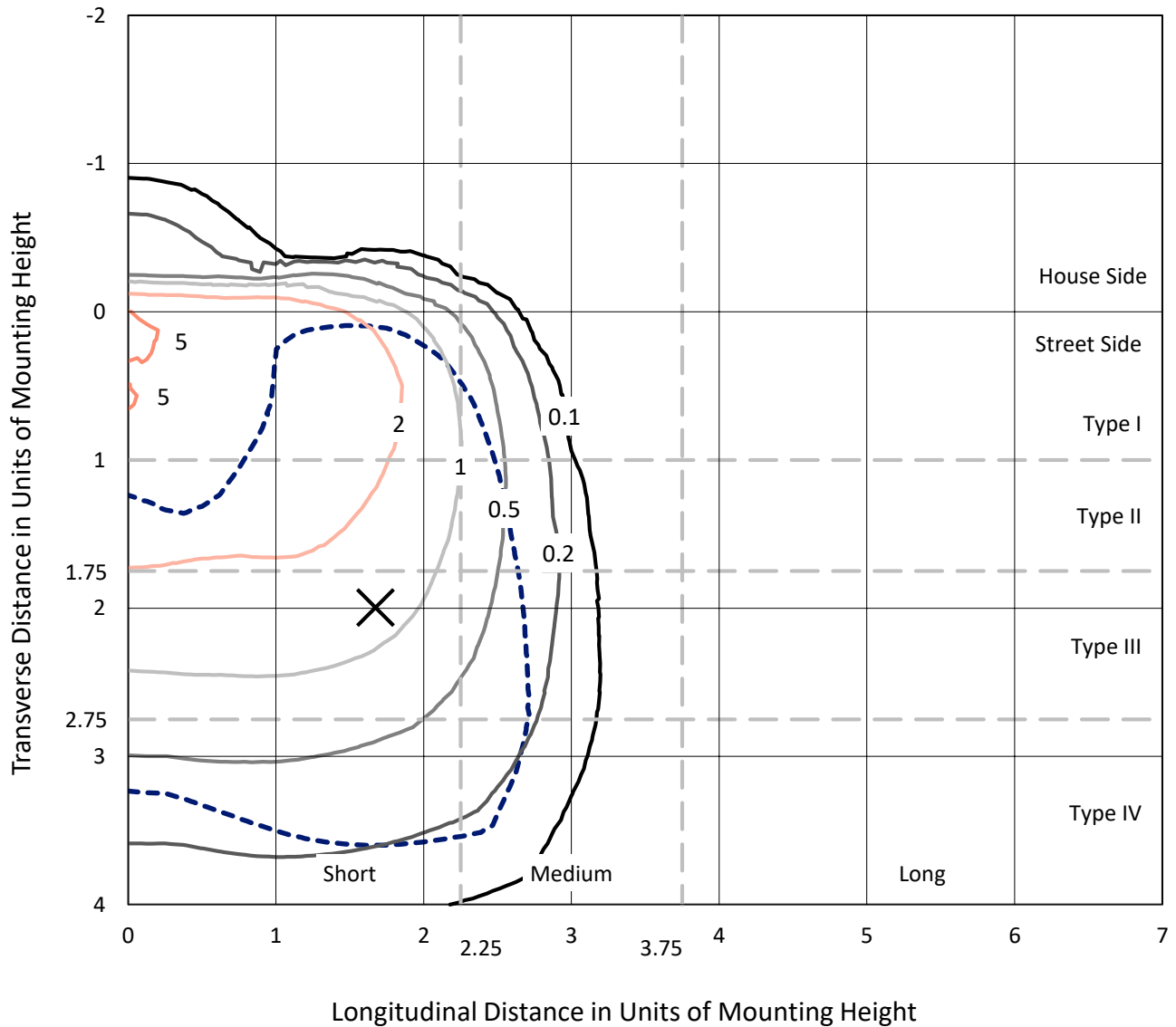


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

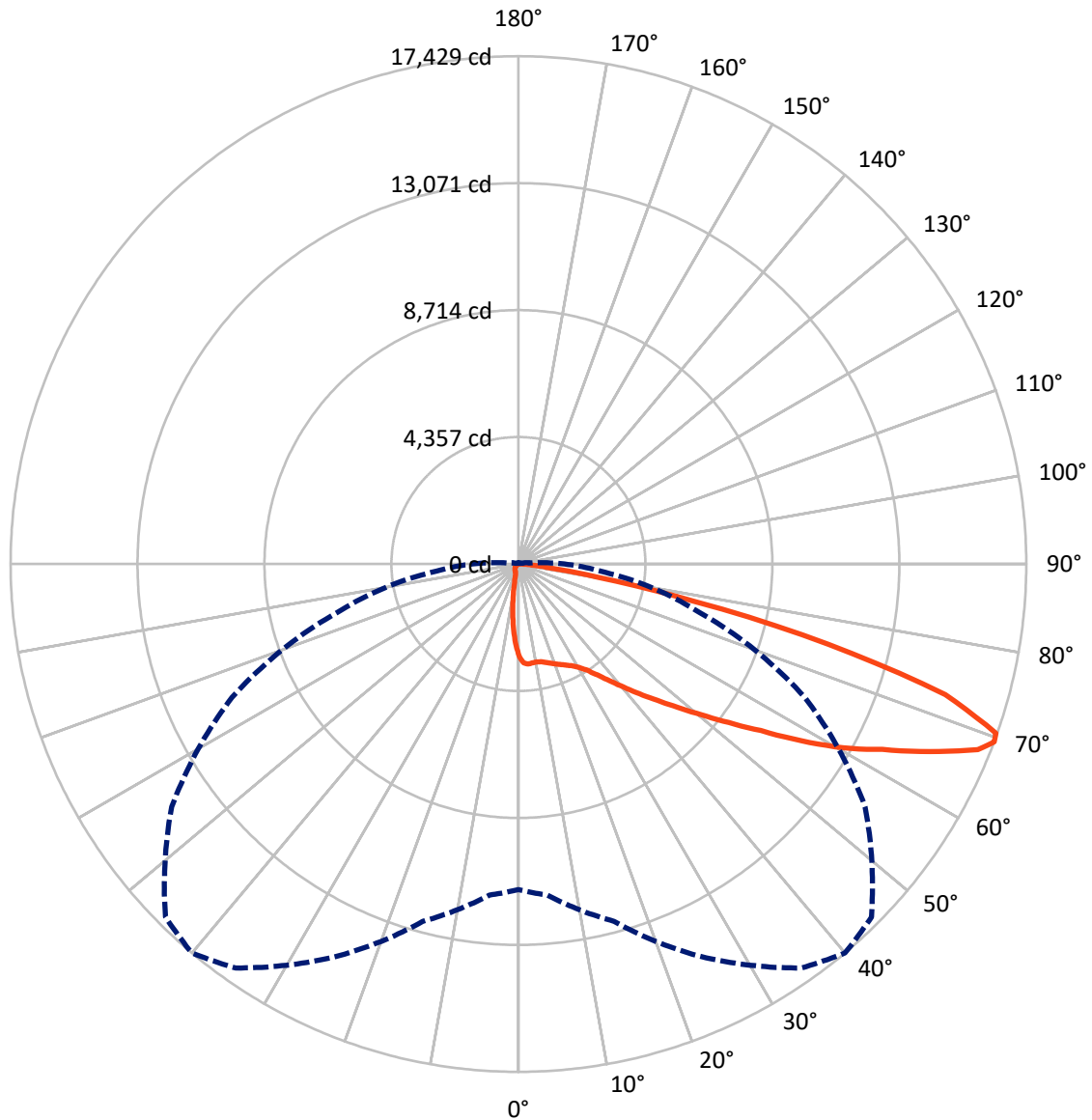


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - Semi-Cutoff

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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	1240.9	0.0	1240.9
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	19968.8	0.0	19968.8
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	21209.6	0.0	21209.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.9	1.2
10°-20°	631.8	3.0
20°-30°	1064.2	5.0
30°-40°	1742.2	8.2
40°-50°	3016.5	14.2
50°-60°	4751.3	22.4
60°-70°	6205.0	29.3
70°-80°	3195.9	15.1
80°-90°	345.7	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°	21209.6	100.0
0°-180°	21209.6	100.0



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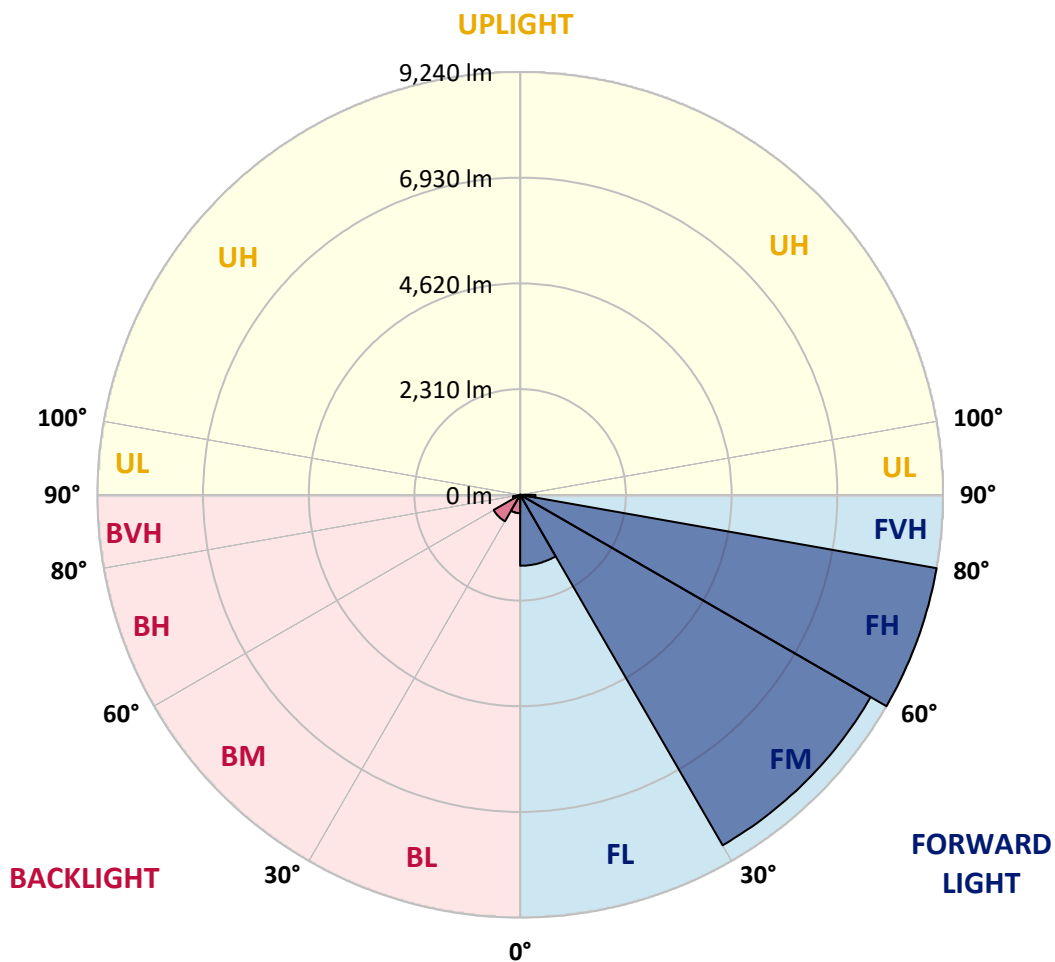
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1551.0	7.3			
FM	(30°-60°)	8843.1	41.7			
FH	(60°-80°)	9239.8	43.6			G4/12000
FVH	(80°-90°)	334.8	1.6			G3/500
BL	(0°-30°)	402.0	1.9	B1/500		
BM	(30°-60°)	666.9	3.1	B1/1000		
BH	(60°-80°)	161.1	0.8	B1/500		G1/500
BVH	(80°-90°)	10.8	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°	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8
2.5°	3479.4	3460.5	3449.1	3434.0	3415.0	3398.6	3392.3	3345.6	3301.4	3240.8	3171.4
5°	3543.8	3537.5	3517.3	3497.1	3474.4	3449.1	3435.2	3379.7	3316.5	3228.2	3107.0
7.5°	3550.1	3542.5	3517.3	3489.5	3457.9	3427.6	3403.7	3348.1	3290.0	3200.4	3052.7
10°	3540.0	3531.2	3512.2	3481.9	3442.8	3413.8	3389.8	3336.7	3287.5	3206.7	3042.6
12.5°	3528.6	3519.8	3511.0	3495.8	3461.7	3441.5	3421.3	3370.8	3326.6	3258.5	3079.2
15°	3540.0	3535.0	3545.1	3538.7	3519.8	3502.1	3481.9	3436.5	3396.1	3339.3	3146.1
17.5°	3588.0	3588.0	3619.5	3623.3	3605.7	3580.4	3551.4	3505.9	3471.8	3423.9	3225.6
20°	3700.3	3696.5	3736.9	3744.5	3701.6	3662.5	3619.5	3564.0	3537.5	3507.2	3303.9
22.5°	3893.5	3875.8	3899.8	3892.2	3807.6	3747.0	3694.0	3625.9	3612.0	3598.1	3391.0
25°	4144.7	4134.6	4151.0	4076.6	3927.6	3845.5	3782.4	3705.4	3705.4	3719.3	3489.5
27.5°	4509.6	4471.7	4416.2	4284.9	4061.4	3956.6	3888.4	3806.4	3827.8	3879.6	3619.5
30°	4883.3	4841.6	4714.1	4512.1	4224.3	4114.4	4034.9	3949.0	3999.5	4094.2	3793.8
32.5°	5251.9	5205.2	5024.7	4769.7	4457.8	4348.0	4271.0	4176.3	4260.9	4420.0	4048.8
35°	5609.2	5567.5	5359.2	5058.8	4768.4	4677.5	4606.8	4524.7	4633.3	4855.5	4408.6
37.5°	6010.7	5965.2	5711.5	5385.8	5145.9	5080.2	5028.5	4946.4	5135.8	5461.5	4909.8
40°	6504.3	6427.3	6085.2	5760.7	5582.7	5551.1	5515.8	5504.4	5798.6	6249.3	5577.6
42.5°	7069.9	6943.7	6476.5	6155.9	6062.4	6085.2	6076.3	6126.8	6628.0	7229.0	6390.7
45°	7635.5	7472.6	6912.1	6577.5	6590.2	6669.7	6718.9	6920.9	7667.1	8352.6	7265.6
47.5°	8115.2	7954.9	7330.0	7033.3	7184.8	7341.3	7475.2	7857.7	8735.1	9458.5	7946.1
50°	8525.5	8374.0	7773.1	7534.5	7875.4	8127.9	8345.0	8911.9	9884.0	10300.6	8423.3
52.5°	8861.4	8760.4	8232.7	8108.9	8664.4	9034.3	9352.5	10031.7	10901.5	10984.9	8794.5
55°	9188.4	9116.4	8726.3	8791.9	9591.1	10094.8	10497.5	11219.7	11777.7	11555.5	9150.5
57.5°	9564.6	9498.9	9289.3	9658.0	10809.4	11443.1	11882.5	12272.6	12549.1	12138.8	9486.3
60°	9948.4	9910.5	9915.5	10620.0	12208.2	12816.7	13059.1	13160.1	13306.6	12688.0	9505.2
62.5°	10314.5	10386.4	10631.4	11690.6	13547.7	14014.8	14137.3	14237.0	14065.3	12775.1	8781.8
65°	10934.4	11051.8	11636.3	13123.5	15021.0	15521.0	15647.2	15305.1	14185.3	11648.9	7143.1
67.5°	11237.4	11452.0	12494.8	14459.2	16450.2	17005.6	16958.9	15374.5	12729.6	8882.8	4584.1
69°	11174.2	11402.7	12693.0	14868.3	16924.8	17428.6	17131.9	14524.9	10844.7	6434.9	2814.1
70°	10924.3	11155.3	12590.7	14853.1	16985.4	17384.4	16811.2	13475.7	9169.4	4705.3	1759.9
72.5°	9122.7	9322.2	11178.0	13425.2	15647.2	15322.8	14064.1	9336.1	4467.9	1281.4	396.4
75°	5615.5	5726.6	8020.6	10113.8	11818.1	10984.9	9370.1	4644.7	1331.9	362.3	219.7
77.5°	2966.8	3017.3	4390.9	5961.4	7491.6	6198.8	4802.5	1811.7	613.6	227.2	159.1
80°	1753.6	1791.5	2364.6	2725.7	3242.1	2708.0	1920.2	1112.2	439.3	142.7	141.4
82.5°	1003.7	1027.7	1714.5	1515.0	1277.6	1090.8	955.7	1054.2	263.9	95.9	146.4
85°	368.6	373.7	964.5	1152.6	760.0	452.0	474.7	873.6	70.7	60.6	114.9
87.5°	171.7	167.9	496.2	705.7	444.4	286.6	369.9	191.9	27.8	39.1	31.6
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°	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8	3168.8
2.5°	3131.0	3084.2	2999.7	2912.5	2824.2	2756.0	2689.1	2636.1	2618.4	2585.6	2588.1
5°	3035.0	2949.2	2772.4	2593.1	2406.3	2252.3	2107.1	1989.7	1932.9	1874.8	1874.8
7.5°	2951.7	2826.7	2550.2	2258.6	1956.8	1703.1	1474.6	1302.9	1208.2	1132.4	1131.2
10°	2920.1	2751.0	2364.6	1946.7	1526.3	1180.4	909.0	734.8	645.1	587.1	584.5
12.5°	2934.0	2724.4	2222.0	1658.9	1131.2	758.8	526.5	414.1	376.2	358.5	358.5
15°	2974.4	2716.9	2079.3	1377.4	799.2	474.7	349.7	319.4	316.9	316.9	316.9
17.5°	3023.6	2719.4	1932.9	1103.4	544.1	339.6	301.7	297.9	300.5	300.5	300.5
20°	3074.1	2720.7	1775.1	849.7	383.8	295.4	284.1	282.8	285.3	285.3	286.6
22.5°	3136.0	2727.0	1617.2	635.0	316.9	279.0	270.2	270.2	271.4	271.4	270.2
25°	3206.7	2739.6	1453.1	470.9	289.1	267.6	260.1	258.8	260.1	258.8	257.5
27.5°	3295.1	2757.3	1270.1	368.6	276.5	256.3	250.0	250.0	248.7	247.4	246.2
30°	3406.2	2777.5	1064.3	313.1	263.9	246.2	239.9	238.6	237.3	234.8	234.8
32.5°	3575.4	2821.6	861.0	284.1	250.0	232.3	227.2	227.2	224.7	222.2	220.9
35°	3835.4	2908.8	679.2	266.4	234.8	217.1	210.8	210.8	208.3	207.0	205.8
37.5°	4195.2	3041.3	527.7	250.0	219.7	200.7	194.4	193.2	190.6	188.1	186.8
40°	4673.7	3205.4	415.4	234.8	204.5	184.3	179.3	176.7	171.7	167.9	167.9
42.5°	5274.7	3392.3	337.1	218.4	186.8	169.2	165.4	161.6	152.8	149.0	147.7
45°	5903.4	3560.2	285.3	199.5	169.2	154.0	151.5	145.2	133.8	130.0	130.0
47.5°	6356.6	3599.3	251.2	181.8	152.8	137.6	136.3	125.0	114.9	112.4	111.1
50°	6639.4	3522.3	223.5	164.1	137.6	122.5	118.7	104.8	98.5	95.9	94.7
52.5°	6830.0	3384.7	200.7	149.0	123.7	108.6	99.7	89.6	84.6	82.1	82.1
55°	6982.8	3190.3	178.0	135.1	112.4	97.2	84.6	77.0	72.0	69.4	69.4
57.5°	7025.7	2926.4	155.3	123.7	101.0	85.8	72.0	66.9	60.6	59.3	59.3
60°	6713.9	2450.5	137.6	109.8	90.9	74.5	63.1	56.8	50.5	49.2	48.0
62.5°	5892.0	1896.2	121.2	97.2	79.5	64.4	54.3	46.7	41.7	41.7	41.7
65°	4494.4	1271.3	106.0	84.6	69.4	54.3	46.7	37.9	35.3	35.3	36.6
67.5°	2690.4	691.8	90.9	72.0	59.3	45.4	39.1	32.8	31.6	32.8	32.8
69°	1576.8	406.5	82.1	64.4	51.8	40.4	34.1	29.0	31.6	32.8	32.8
70°	973.4	274.0	75.7	58.1	46.7	36.6	31.6	27.8	30.3	31.6	31.6
72.5°	271.4	141.4	60.6	45.4	37.9	30.3	25.2	25.2	29.0	30.3	30.3
75°	176.7	104.8	46.7	34.1	29.0	24.0	21.5	24.0	27.8	29.0	29.0
77.5°	146.4	85.8	37.9	27.8	24.0	22.7	20.2	21.5	25.2	26.5	26.5
80°	133.8	60.6	30.3	25.2	21.5	20.2	18.9	17.7	22.7	24.0	24.0
82.5°	127.5	48.0	26.5	22.7	20.2	17.7	16.4	17.7	20.2	21.5	22.7
85°	79.5	31.6	24.0	21.5	17.7	16.4	16.4	16.4	18.9	20.2	20.2
87.5°	29.0	25.2	21.5	17.7	15.1	15.1	15.1	15.1	16.4	18.9	18.9
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)