

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: P300924

Luminaire Tested: **GLNA-AF-05-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300924  
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-05-LED-E1-SL4-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19773.4 lumens  
Efficiency: N/A  
Efficacy: 94.2 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

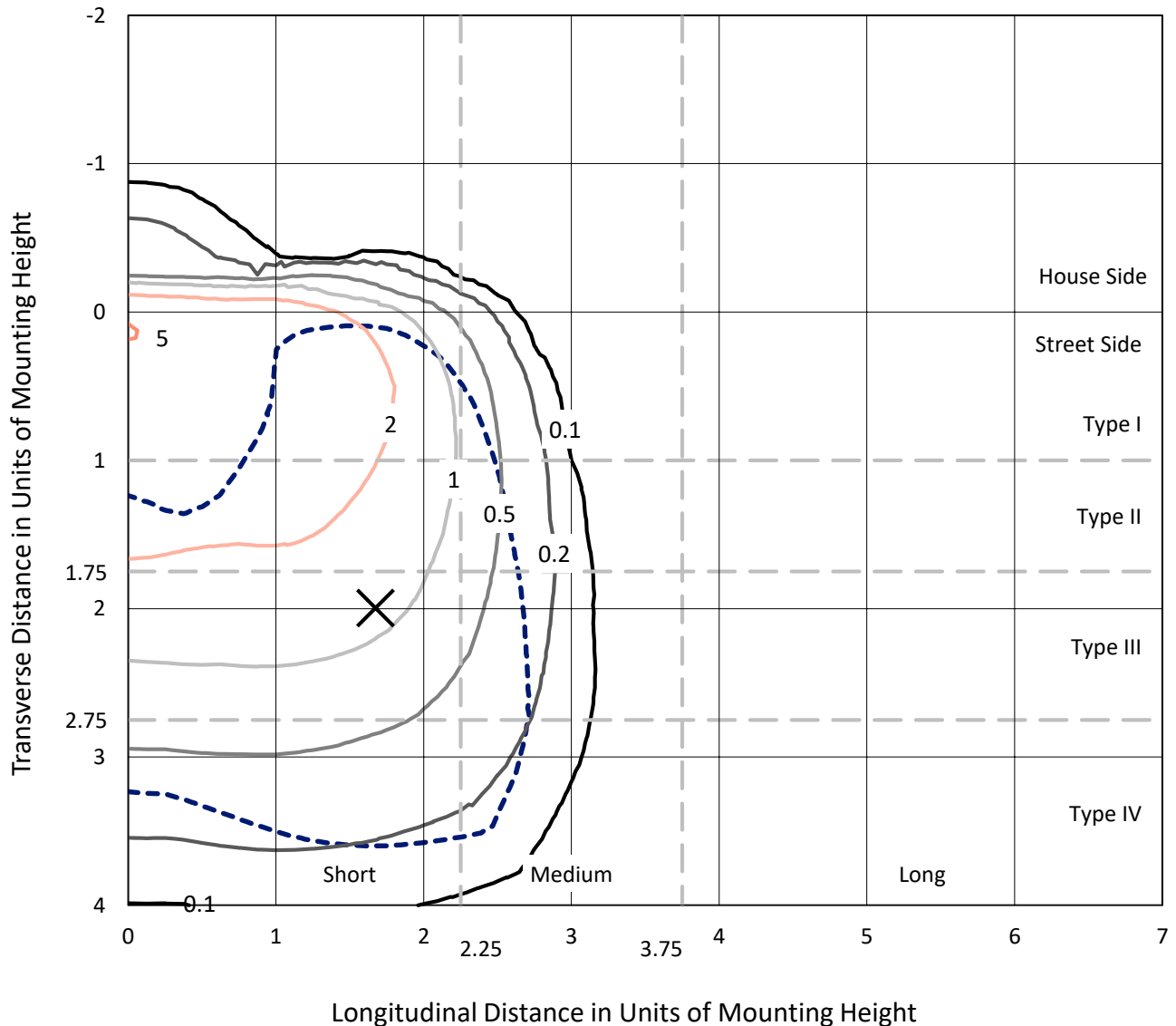
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

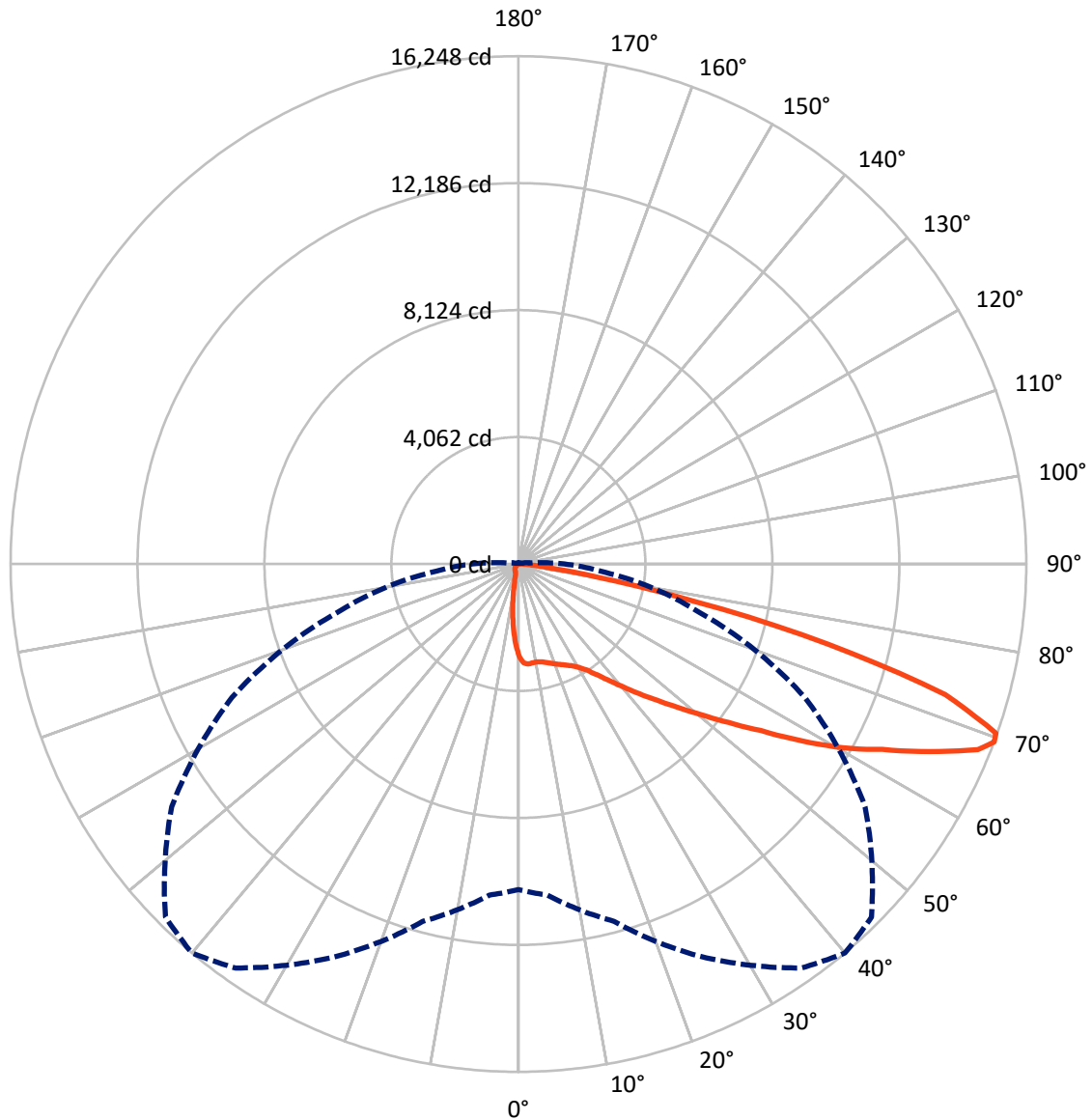
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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	1156.8	0.0	1156.8
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	18616.5	0.0	18616.5
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	19773.4	0.0	19773.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.5	1.2
10°-20°	589.0	3.0
20°-30°	992.2	5.0
30°-40°	1624.2	8.2
40°-50°	2812.3	14.2
50°-60°	4429.6	22.4
60°-70°	5784.8	29.3
70°-80°	2979.5	15.1
80°-90°	322.3	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°	19773.4	100.0
0°-180°	19773.4	100.0

**Coefficient of Utilization**



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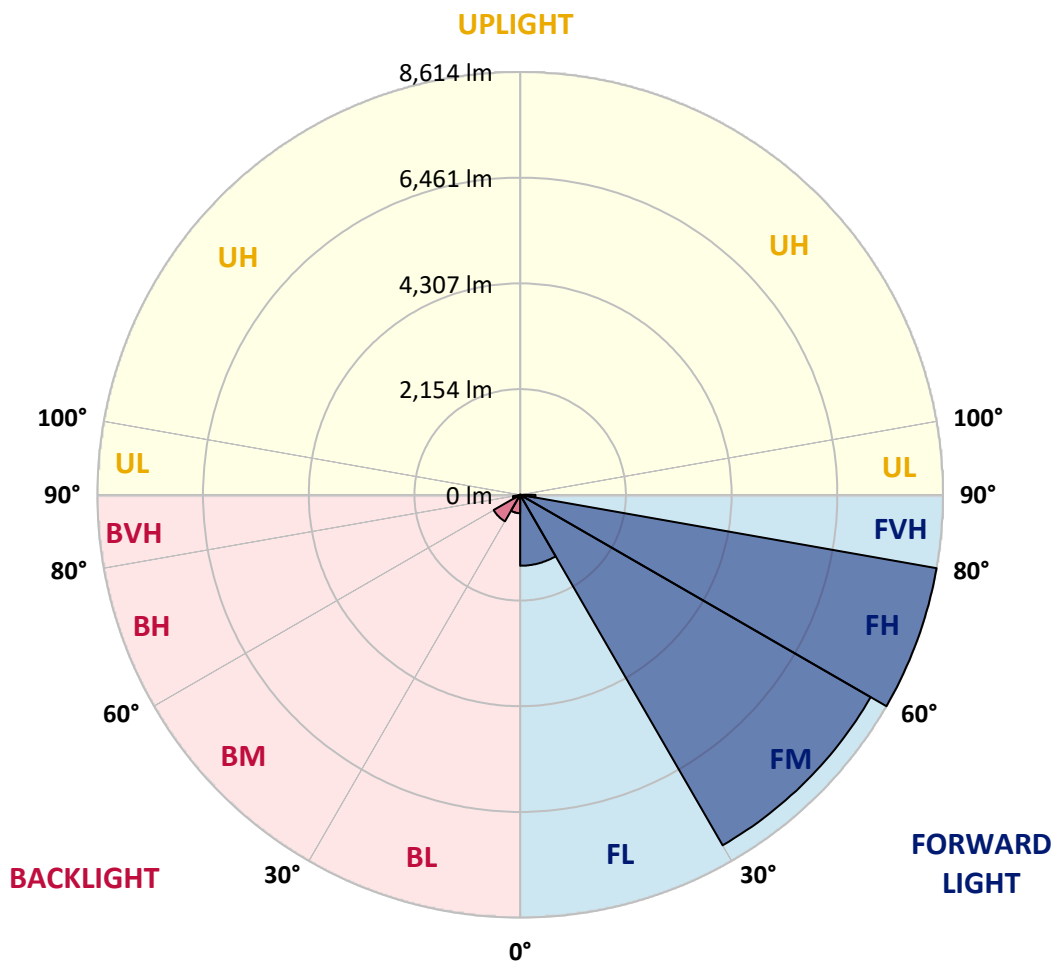
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1446.0	7.3			
FM	(30°-60°)	8244.2	41.7			
FH	(60°-80°)	8614.1	43.6			G4/12000
FVH	(80°-90°)	312.2	1.6			G3/500
BL	(0°-30°)	374.7	1.9	B1/500		
BM	(30°-60°)	621.8	3.1	B1/1000		
BH	(60°-80°)	150.2	0.8	B1/500		G1/500
BVH	(80°-90°)	10.1	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°	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2
2.5°	3243.8	3226.1	3215.5	3201.4	3183.8	3168.5	3162.6	3119.0	3077.8	3021.3	2956.6
5°	3303.8	3297.9	3279.1	3260.3	3239.1	3215.5	3202.6	3150.8	3091.9	3009.6	2896.6
7.5°	3309.7	3302.6	3279.1	3253.2	3223.8	3195.5	3173.2	3121.4	3067.2	2983.7	2846.0
10°	3300.3	3292.0	3274.4	3246.1	3209.6	3182.6	3160.2	3110.8	3064.9	2989.6	2836.5
12.5°	3289.7	3281.4	3273.2	3259.1	3227.3	3208.5	3189.6	3142.6	3101.4	3037.8	2870.7
15°	3300.3	3295.6	3305.0	3299.1	3281.4	3265.0	3246.1	3203.8	3166.1	3113.1	2933.1
17.5°	3345.0	3345.0	3374.4	3378.0	3361.5	3337.9	3310.9	3268.5	3236.7	3192.0	3007.2
20°	3449.8	3446.2	3483.9	3490.9	3450.9	3414.4	3374.4	3322.6	3297.9	3269.7	3080.2
22.5°	3629.8	3613.4	3635.7	3628.7	3549.8	3493.3	3443.9	3380.3	3367.4	3354.4	3161.4
25°	3864.1	3854.6	3869.9	3800.5	3661.6	3585.1	3526.3	3454.5	3454.5	3467.4	3253.2
27.5°	4204.2	4168.9	4117.1	3994.7	3786.4	3688.7	3625.1	3548.6	3568.6	3616.9	3374.4
30°	4552.6	4513.8	4394.9	4206.6	3938.2	3835.8	3761.7	3681.6	3728.7	3817.0	3536.9
32.5°	4896.3	4852.7	4684.4	4446.7	4155.9	4053.5	3981.8	3893.5	3972.3	4120.6	3774.6
35°	5229.4	5190.5	4996.3	4716.2	4445.5	4360.7	4294.8	4218.3	4319.5	4526.7	4110.0
37.5°	5603.6	5561.3	5324.7	5021.0	4797.4	4736.2	4687.9	4611.4	4788.0	5091.7	4577.3
40°	6063.8	5992.0	5673.1	5370.6	5204.6	5175.2	5142.3	5131.7	5405.9	5826.1	5199.9
42.5°	6591.1	6473.4	6038.0	5739.0	5651.9	5673.1	5664.8	5711.9	6179.2	6739.4	5957.9
45°	7118.4	6966.6	6444.0	6132.1	6143.9	6218.0	6263.9	6452.3	7147.9	7787.0	6773.6
47.5°	7565.7	7416.2	6833.6	6557.0	6698.2	6844.2	6968.9	7325.6	8143.6	8818.0	7408.0
50°	7948.2	7807.0	7246.7	7024.3	7342.1	7577.5	7779.9	8308.4	9214.6	9603.0	7852.9
52.5°	8261.3	8167.1	7675.1	7559.8	8077.7	8422.5	8719.1	9352.3	10163.3	10241.0	8198.9
55°	8566.1	8499.0	8135.3	8196.5	8941.6	9411.2	9786.7	10459.9	10980.1	10773.0	8530.8
57.5°	8916.9	8855.7	8660.3	9004.0	10077.4	10668.2	11077.8	11441.5	11699.3	11316.7	8843.9
60°	9274.7	9239.4	9244.1	9900.8	11381.5	11948.8	12174.8	12268.9	12405.5	11828.7	8861.5
62.5°	9616.0	9683.1	9911.4	10898.9	12630.3	13065.7	13179.9	13272.9	13112.8	11909.9	8187.1
65°	10193.9	10303.4	10848.3	12234.8	14003.8	14469.9	14587.6	14268.6	13224.6	10860.1	6659.4
67.5°	10476.4	10676.5	11648.7	13480.0	15336.2	15854.0	15810.5	14333.4	11867.6	8281.3	4273.6
69°	10417.5	10630.6	11833.4	13861.4	15778.7	16248.3	15971.7	13541.3	10110.3	5999.1	2623.5
70°	10184.5	10399.9	11738.1	13847.3	15835.2	16207.1	15672.8	12563.2	8548.5	4386.6	1640.7
72.5°	8504.9	8690.9	10421.1	12516.1	14587.6	14285.1	13111.7	8703.8	4165.4	1194.6	369.6
75°	5235.2	5338.8	7477.4	9428.9	11017.8	10241.0	8735.6	4330.1	1241.7	337.8	204.8
77.5°	2765.9	2813.0	4093.6	5557.7	6984.2	5779.0	4477.3	1689.0	572.0	211.9	148.3
80°	1634.8	1670.1	2204.5	2541.1	3022.5	2524.6	1790.2	1036.9	409.6	133.0	131.8
82.5°	935.7	958.1	1598.4	1412.4	1191.1	1016.9	891.0	982.8	246.0	89.5	136.5
85°	343.7	348.4	899.2	1074.6	708.5	421.4	442.5	814.5	65.9	56.5	107.1
87.5°	160.1	156.5	462.6	657.9	414.3	267.2	344.9	178.9	25.9	36.5	29.4
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°	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2	2954.2
2.5°	2918.9	2875.4	2796.5	2715.3	2632.9	2569.4	2507.0	2457.6	2441.1	2410.5	2412.8
5°	2829.5	2749.4	2584.7	2417.5	2243.3	2099.7	1964.4	1854.9	1802.0	1747.8	1747.8
7.5°	2751.8	2635.3	2377.5	2105.6	1824.3	1587.8	1374.7	1214.7	1126.4	1055.8	1054.6
10°	2722.4	2564.7	2204.5	1814.9	1423.0	1100.5	847.4	685.0	601.4	547.3	544.9
12.5°	2735.3	2539.9	2071.5	1546.6	1054.6	707.4	490.8	386.1	350.7	334.3	334.3
15°	2773.0	2532.9	1938.5	1284.1	745.0	442.5	326.0	297.8	295.4	295.4	295.4
17.5°	2818.9	2535.2	1802.0	1028.7	507.3	316.6	281.3	277.8	280.1	280.1	280.1
20°	2866.0	2536.4	1654.8	792.1	357.8	275.4	264.8	263.6	266.0	266.0	267.2
22.5°	2923.6	2542.3	1507.7	592.0	295.4	260.1	251.9	251.9	253.1	253.1	251.9
25°	2989.6	2554.1	1354.7	439.0	269.5	249.5	242.5	241.3	242.5	241.3	240.1
27.5°	3071.9	2570.5	1184.1	343.7	257.8	238.9	233.0	233.0	231.9	230.7	229.5
30°	3175.5	2589.4	992.2	291.9	246.0	229.5	223.6	222.5	221.3	218.9	218.9
32.5°	3333.2	2630.6	802.7	264.8	233.0	216.6	211.9	211.9	209.5	207.1	206.0
35°	3575.7	2711.8	633.2	248.3	218.9	202.4	196.6	196.6	194.2	193.0	191.8
37.5°	3911.1	2835.4	492.0	233.0	204.8	187.1	181.3	180.1	177.7	175.4	174.2
40°	4357.2	2988.4	387.2	218.9	190.7	171.8	167.1	164.8	160.1	156.5	156.5
42.5°	4917.5	3162.6	314.3	203.6	174.2	157.7	154.2	150.7	142.4	138.9	137.7
45°	5503.6	3319.1	266.0	186.0	157.7	143.6	141.2	135.4	124.8	121.2	121.2
47.5°	5926.1	3355.6	234.2	169.5	142.4	128.3	127.1	116.5	107.1	104.8	103.6
50°	6189.8	3283.8	208.3	153.0	128.3	114.2	110.6	97.7	91.8	89.5	88.3
52.5°	6367.5	3155.5	187.1	138.9	115.3	101.2	93.0	83.6	78.9	76.5	76.5
55°	6509.9	2974.2	166.0	125.9	104.8	90.6	78.9	71.8	67.1	64.7	64.7
57.5°	6549.9	2728.3	144.8	115.3	94.2	80.0	67.1	62.4	56.5	55.3	55.3
60°	6259.2	2284.5	128.3	102.4	84.7	69.4	58.8	53.0	47.1	45.9	44.7
62.5°	5493.0	1767.8	113.0	90.6	74.2	60.0	50.6	43.5	38.8	38.8	38.8
65°	4190.1	1185.2	98.9	78.9	64.7	50.6	43.5	35.3	33.0	33.0	34.1
67.5°	2508.2	645.0	84.7	67.1	55.3	42.4	36.5	30.6	29.4	30.6	30.6
69°	1470.1	379.0	76.5	60.0	48.3	37.7	31.8	27.1	29.4	30.6	30.6
70°	907.5	255.4	70.6	54.1	43.5	34.1	29.4	25.9	28.2	29.4	29.4
72.5°	253.1	131.8	56.5	42.4	35.3	28.2	23.5	23.5	27.1	28.2	28.2
75°	164.8	97.7	43.5	31.8	27.1	22.4	20.0	22.4	25.9	27.1	27.1
77.5°	136.5	80.0	35.3	25.9	22.4	21.2	18.8	20.0	23.5	24.7	24.7
80°	124.8	56.5	28.2	23.5	20.0	18.8	17.7	16.5	21.2	22.4	22.4
82.5°	118.9	44.7	24.7	21.2	18.8	16.5	15.3	16.5	18.8	20.0	21.2
85°	74.2	29.4	22.4	20.0	16.5	15.3	15.3	15.3	17.7	18.8	18.8
87.5°	27.1	23.5	20.0	16.5	14.1	14.1	14.1	14.1	15.3	17.7	17.7
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)