

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: P301962

Luminaire Tested: **GLNA-AF-08-LED-E1-SL4-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301962
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-08-LED-E1-SL4-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA 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: 20134.7 lumens
Efficiency: N/A
Efficacy: 78.3 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): 257
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

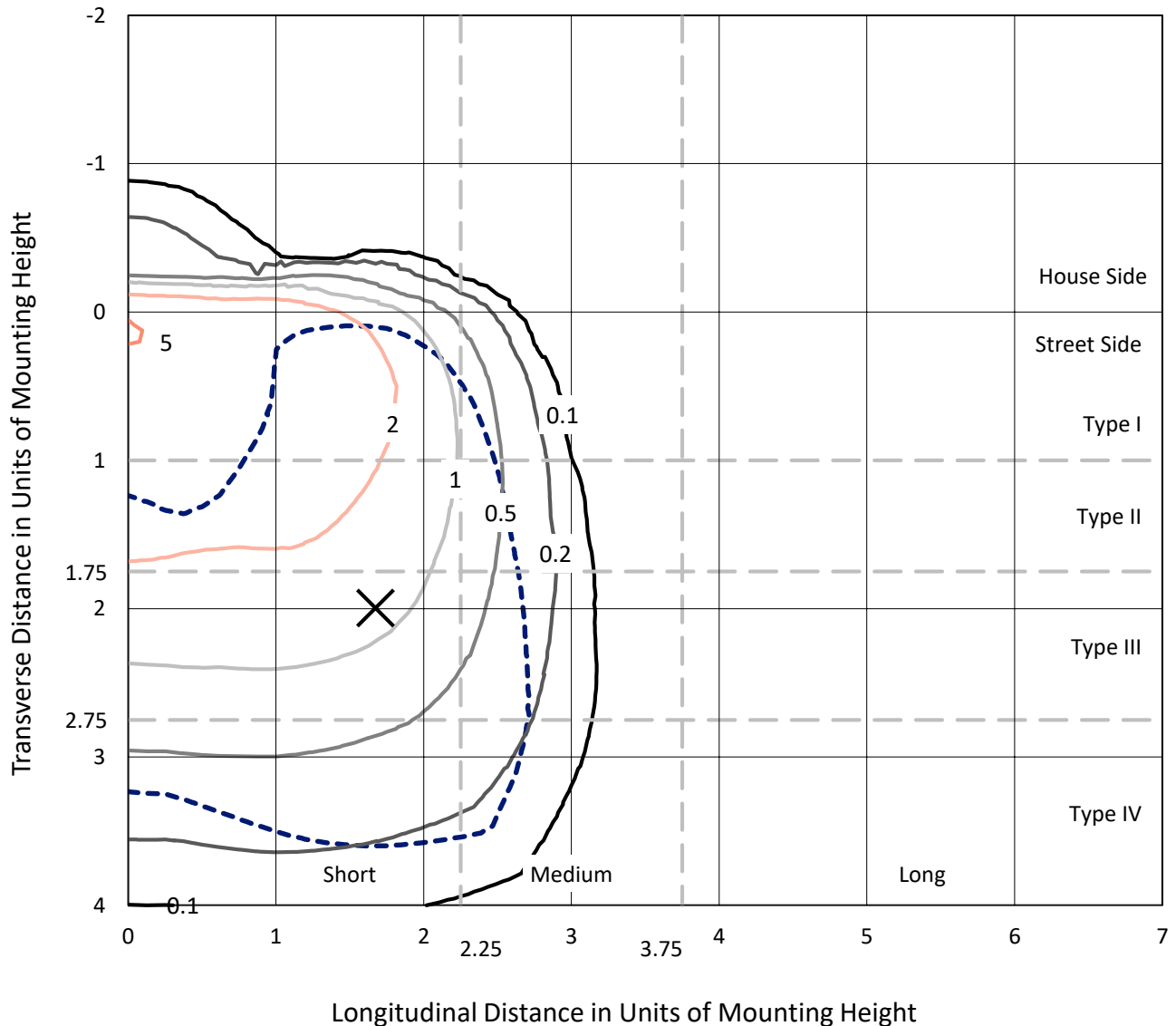


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

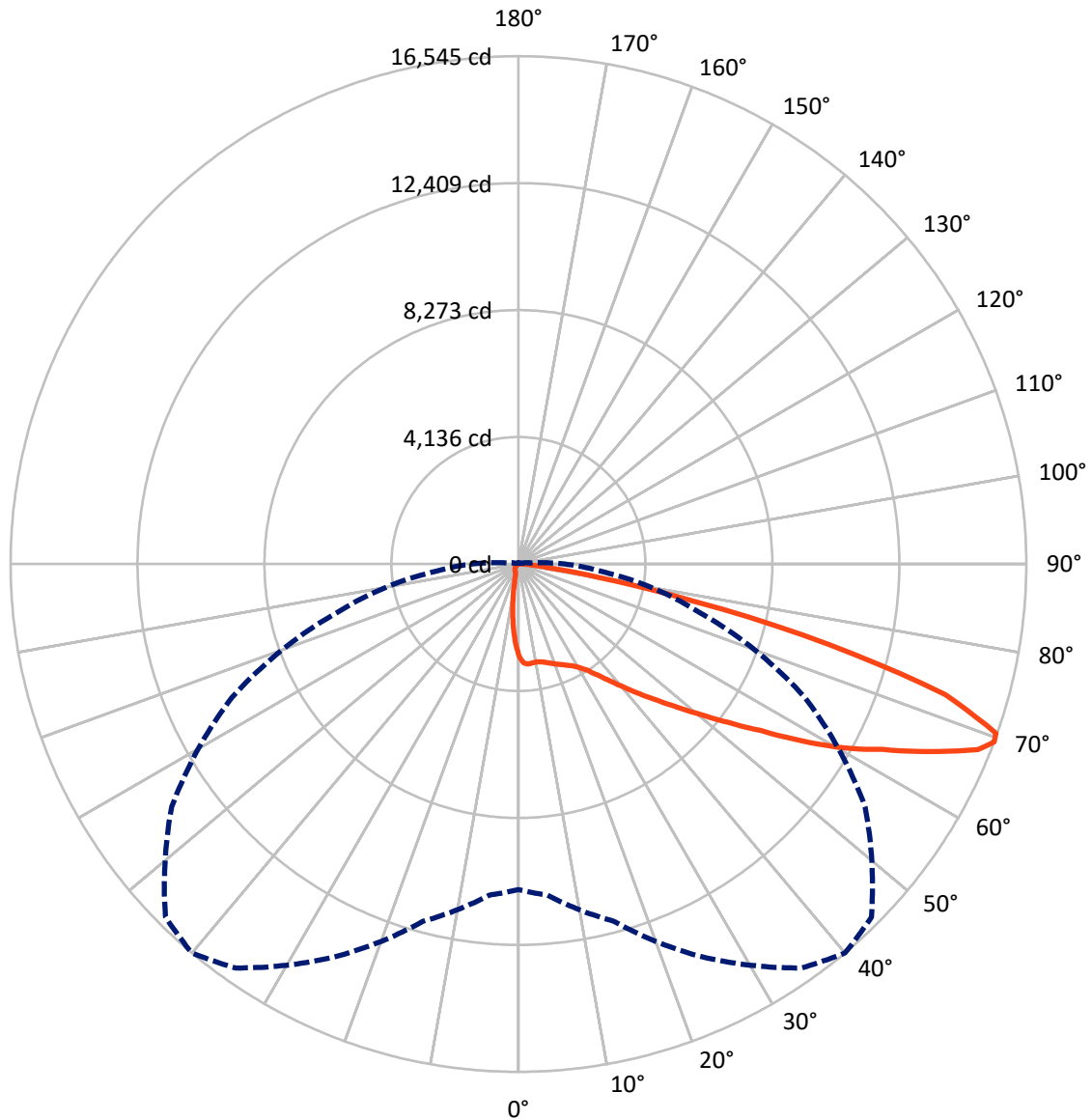


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - Semi-Cutoff

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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
House Side	Lumens	1178.0	0.0	1178.0
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	18956.7	0.0	18956.7
	% Fixture	94.1	0.0	94.1
Total	Lumens	20134.7	0.0	20134.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.9	1.2
10°-20°	599.8	3.0
20°-30°	1010.3	5.0
30°-40°	1653.9	8.2
40°-50°	2863.6	14.2
50°-60°	4510.5	22.4
60°-70°	5890.6	29.3
70°-80°	3033.9	15.1
80°-90°	328.2	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°	20134.7	100.0
0°-180°	20134.7	100.0

Coefficient of Utilization



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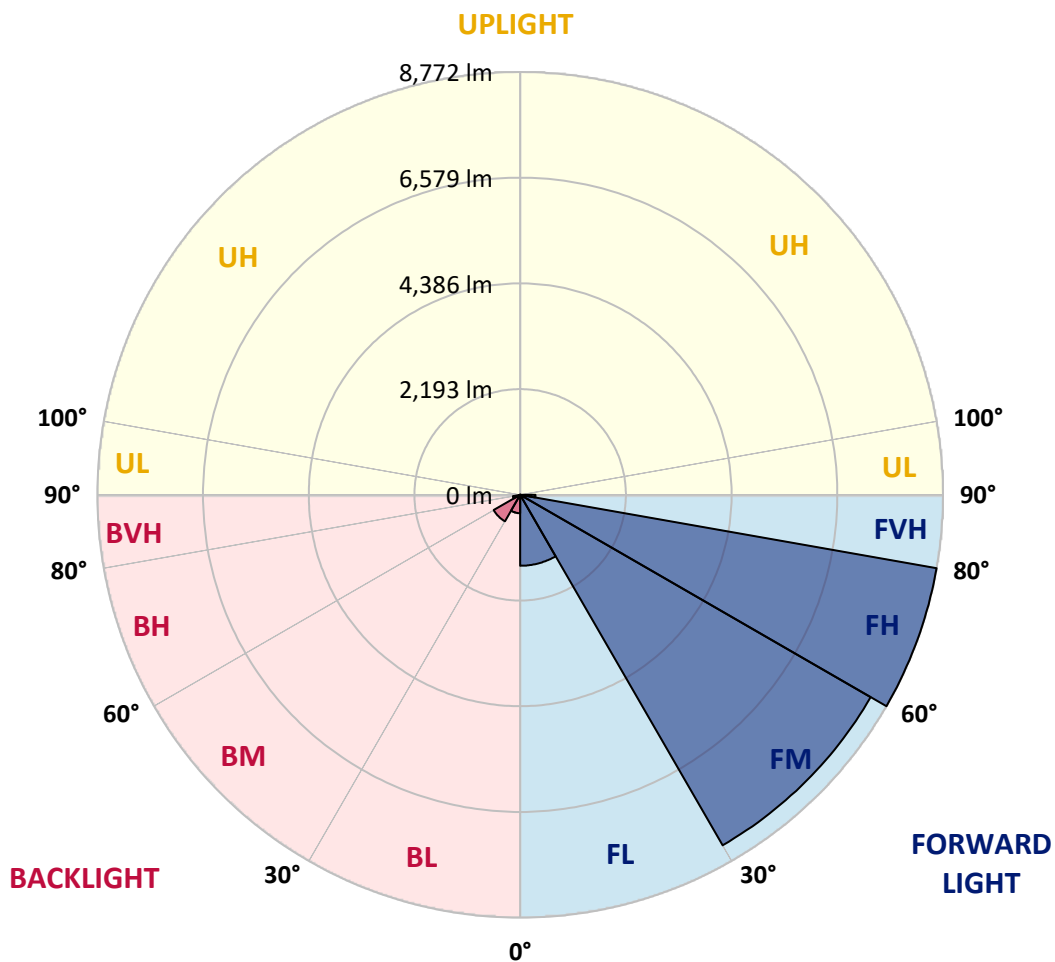
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1472.4	7.3			
FM	(30°-60°)	8394.9	41.7			
FH	(60°-80°)	8771.5	43.6			G4/12000
FVH	(80°-90°)	317.9	1.6			G3/500
BL	(0°-30°)	381.6	1.9	B1/500		
BM	(30°-60°)	633.1	3.1	B1/1000		
BH	(60°-80°)	153.0	0.8	B1/500		G1/500
BVH	(80°-90°)	10.3	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°	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2
2.5°	3303.1	3285.1	3274.3	3259.9	3241.9	3226.4	3220.4	3176.0	3134.1	3076.5	3010.6
5°	3364.2	3358.2	3339.0	3319.8	3298.3	3274.3	3261.1	3208.4	3148.5	3064.6	2949.5
7.5°	3370.2	3363.0	3339.0	3312.6	3282.7	3253.9	3231.2	3178.4	3123.3	3038.2	2898.0
10°	3360.6	3352.2	3334.2	3305.5	3268.3	3240.7	3218.0	3167.6	3120.9	3044.2	2888.4
12.5°	3349.8	3341.4	3333.0	3318.6	3286.3	3267.1	3247.9	3200.0	3158.0	3093.3	2923.1
15°	3360.6	3355.8	3365.4	3359.4	3341.4	3324.6	3305.5	3262.3	3224.0	3170.0	2986.7
17.5°	3406.1	3406.1	3436.1	3439.7	3422.9	3398.9	3371.4	3328.2	3295.9	3250.3	3062.2
20°	3512.8	3509.2	3547.6	3554.7	3514.0	3476.8	3436.1	3383.4	3358.2	3329.4	3136.5
22.5°	3696.2	3679.4	3702.2	3695.0	3614.7	3557.1	3506.8	3442.1	3428.9	3415.7	3219.2
25°	3934.7	3925.1	3940.7	3869.9	3728.5	3650.6	3590.7	3517.6	3517.6	3530.8	3312.6
27.5°	4281.0	4245.1	4192.3	4067.7	3855.6	3756.1	3691.4	3613.5	3633.8	3683.0	3436.1
30°	4635.8	4596.2	4475.2	4283.4	4010.2	3905.9	3830.4	3748.9	3796.8	3886.7	3601.5
32.5°	4985.8	4941.4	4770.0	4527.9	4231.9	4127.6	4054.5	3964.6	4044.9	4195.9	3843.6
35°	5324.9	5285.4	5087.6	4802.4	4526.7	4440.4	4373.3	4295.4	4398.5	4609.4	4185.2
37.5°	5706.0	5662.9	5422.0	5112.8	4885.1	4822.8	4773.6	4695.7	4875.5	5184.7	4661.0
40°	6174.7	6101.6	5776.8	5468.7	5299.8	5269.8	5236.2	5225.5	5504.7	5932.6	5295.0
42.5°	6711.6	6591.7	6148.3	5843.9	5755.2	5776.8	5768.4	5816.3	6292.1	6862.6	6066.8
45°	7248.5	7093.9	6561.8	6244.2	6256.2	6331.7	6378.4	6570.2	7278.5	7929.3	6897.4
47.5°	7703.9	7551.7	6958.5	6676.8	6820.7	6969.3	7096.3	7459.5	8292.4	8979.1	7543.3
50°	8093.5	7949.6	7379.2	7152.6	7476.2	7715.9	7922.1	8460.2	9383.0	9778.5	7996.4
52.5°	8412.3	8316.4	7815.4	7698.0	8225.3	8576.5	8878.5	9523.3	10349.0	10428.1	8348.7
55°	8722.7	8654.4	8284.0	8346.3	9105.0	9583.2	9965.5	10651.0	11180.8	10969.9	8686.7
57.5°	9079.8	9017.5	8818.5	9168.5	10261.5	10863.2	11280.3	11650.6	11913.1	11523.6	9005.5
60°	9444.2	9408.2	9413.0	10081.8	11589.5	12167.1	12397.3	12493.1	12632.2	12044.9	9023.5
62.5°	9791.7	9860.0	10092.5	11098.1	12861.1	13304.5	13420.8	13515.5	13352.5	12127.6	8336.8
65°	10380.2	10491.6	11046.6	12458.4	14259.7	14734.3	14854.2	14529.4	13466.3	11058.5	6781.1
67.5°	10667.8	10871.6	11861.5	13726.4	15616.4	16143.8	16099.4	14595.3	12084.5	8432.6	4351.7
69°	10607.9	10824.8	12049.7	14114.7	16067.1	16545.3	16263.6	13788.7	10295.1	6108.7	2671.5
70°	10370.6	10589.9	11952.6	14100.3	16124.6	16503.3	15959.2	12792.8	8704.7	4466.8	1670.7
72.5°	8660.3	8849.7	10611.5	12744.8	14854.2	14546.2	13351.3	8862.9	4241.5	1216.5	376.3
75°	5330.9	5436.4	7614.1	9601.2	11219.1	10428.1	8895.3	4409.3	1264.4	344.0	208.5
77.5°	2816.5	2864.4	4168.4	5659.3	7111.9	5884.6	4559.1	1719.8	582.5	215.7	151.0
80°	1664.7	1700.7	2244.8	2587.6	3077.7	2570.8	1822.9	1055.9	417.1	135.4	134.2
82.5°	952.8	975.6	1627.6	1438.2	1212.9	1035.5	907.3	1000.7	250.5	91.1	139.0
85°	350.0	354.8	915.7	1094.2	721.5	429.1	450.6	829.4	67.1	57.5	109.1
87.5°	163.0	159.4	471.0	670.0	421.9	272.1	351.2	182.2	26.4	37.2	30.0
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°	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2	3008.2
2.5°	2972.3	2927.9	2847.6	2764.9	2681.0	2616.3	2552.8	2502.5	2485.7	2454.5	2456.9
5°	2881.2	2799.7	2631.9	2461.7	2284.3	2138.1	2000.3	1888.8	1834.9	1779.8	1779.8
7.5°	2802.1	2683.4	2421.0	2144.1	1857.7	1616.8	1399.8	1236.8	1147.0	1075.1	1073.9
10°	2772.1	2611.5	2244.8	1848.1	1449.0	1120.6	862.9	697.5	612.4	557.3	554.9
12.5°	2785.3	2586.4	2109.4	1574.8	1073.9	720.3	499.8	393.1	357.2	340.4	340.4
15°	2823.7	2579.2	1973.9	1307.6	758.6	450.6	332.0	303.2	300.8	300.8	300.8
17.5°	2870.4	2581.6	1834.9	1047.5	516.6	322.4	286.4	282.8	285.2	285.2	285.2
20°	2918.3	2582.8	1685.1	806.6	364.3	280.4	269.7	268.5	270.9	270.9	272.1
22.5°	2977.1	2588.8	1535.3	602.8	300.8	264.9	256.5	256.5	257.7	257.7	256.5
25°	3044.2	2600.7	1379.5	447.0	274.5	254.1	246.9	245.7	246.9	245.7	244.5
27.5°	3128.1	2617.5	1205.7	350.0	262.5	243.3	237.3	237.3	236.1	234.9	233.7
30°	3233.5	2636.7	1010.3	297.2	250.5	233.7	227.7	226.5	225.3	222.9	222.9
32.5°	3394.1	2678.6	817.4	269.7	237.3	220.5	215.7	215.7	213.3	210.9	209.7
35°	3641.0	2761.3	644.8	252.9	222.9	206.1	200.1	200.1	197.8	196.6	195.4
37.5°	3982.6	2887.2	501.0	237.3	208.5	190.6	184.6	183.4	181.0	178.6	177.4
40°	4436.8	3043.0	394.3	222.9	194.2	175.0	170.2	167.8	163.0	159.4	159.4
42.5°	5007.3	3220.4	320.0	207.3	177.4	160.6	157.0	153.4	145.0	141.4	140.2
45°	5604.2	3379.8	270.9	189.4	160.6	146.2	143.8	137.8	127.0	123.4	123.4
47.5°	6034.4	3416.9	238.5	172.6	145.0	130.6	129.4	118.7	109.1	106.7	105.5
50°	6302.9	3343.8	212.1	155.8	130.6	116.3	112.7	99.5	93.5	91.1	89.9
52.5°	6483.9	3213.2	190.6	141.4	117.5	103.1	94.7	85.1	80.3	77.9	77.9
55°	6628.9	3028.6	169.0	128.2	106.7	92.3	80.3	73.1	68.3	65.9	65.9
57.5°	6669.6	2778.1	147.4	117.5	95.9	81.5	68.3	63.5	57.5	56.3	56.3
60°	6373.6	2326.3	130.6	104.3	86.3	70.7	59.9	53.9	47.9	46.7	45.5
62.5°	5593.4	1800.1	115.1	92.3	75.5	61.1	51.5	44.3	39.6	39.6	39.6
65°	4266.7	1206.9	100.7	80.3	65.9	51.5	44.3	36.0	33.6	33.6	34.8
67.5°	2554.0	656.8	86.3	68.3	56.3	43.1	37.2	31.2	30.0	31.2	31.2
69°	1496.9	385.9	77.9	61.1	49.1	38.4	32.4	27.6	30.0	31.2	31.2
70°	924.0	260.1	71.9	55.1	44.3	34.8	30.0	26.4	28.8	30.0	30.0
72.5°	257.7	134.2	57.5	43.1	36.0	28.8	24.0	24.0	27.6	28.8	28.8
75°	167.8	99.5	44.3	32.4	27.6	22.8	20.4	22.8	26.4	27.6	27.6
77.5°	139.0	81.5	36.0	26.4	22.8	21.6	19.2	20.4	24.0	25.2	25.2
80°	127.0	57.5	28.8	24.0	20.4	19.2	18.0	16.8	21.6	22.8	22.8
82.5°	121.0	45.5	25.2	21.6	19.2	16.8	15.6	16.8	19.2	20.4	21.6
85°	75.5	30.0	22.8	20.4	16.8	15.6	15.6	15.6	18.0	19.2	19.2
87.5°	27.6	24.0	20.4	16.8	14.4	14.4	14.4	14.4	15.6	18.0	18.0
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)