

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: P299731

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
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-SL2-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18131 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

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

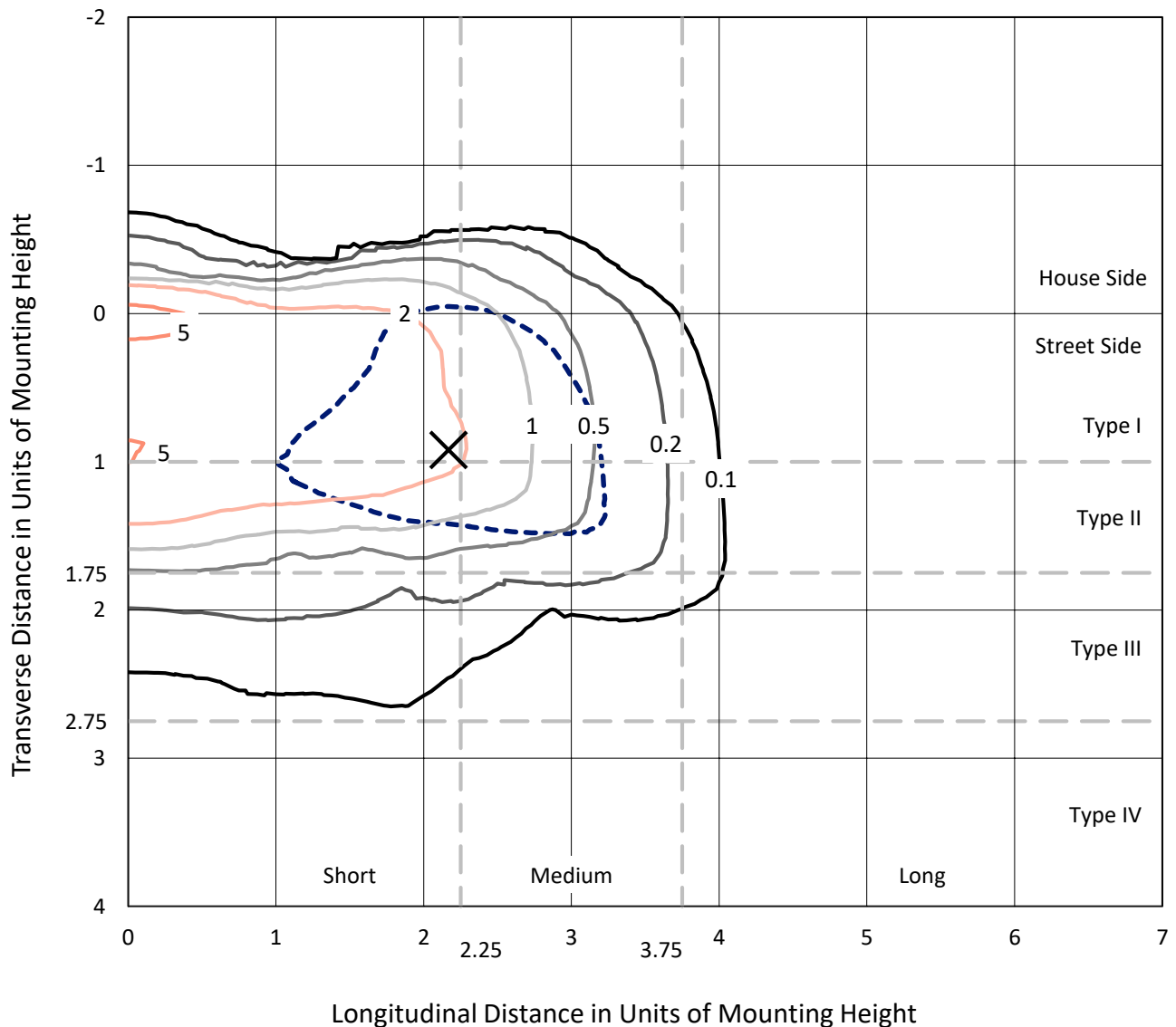


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

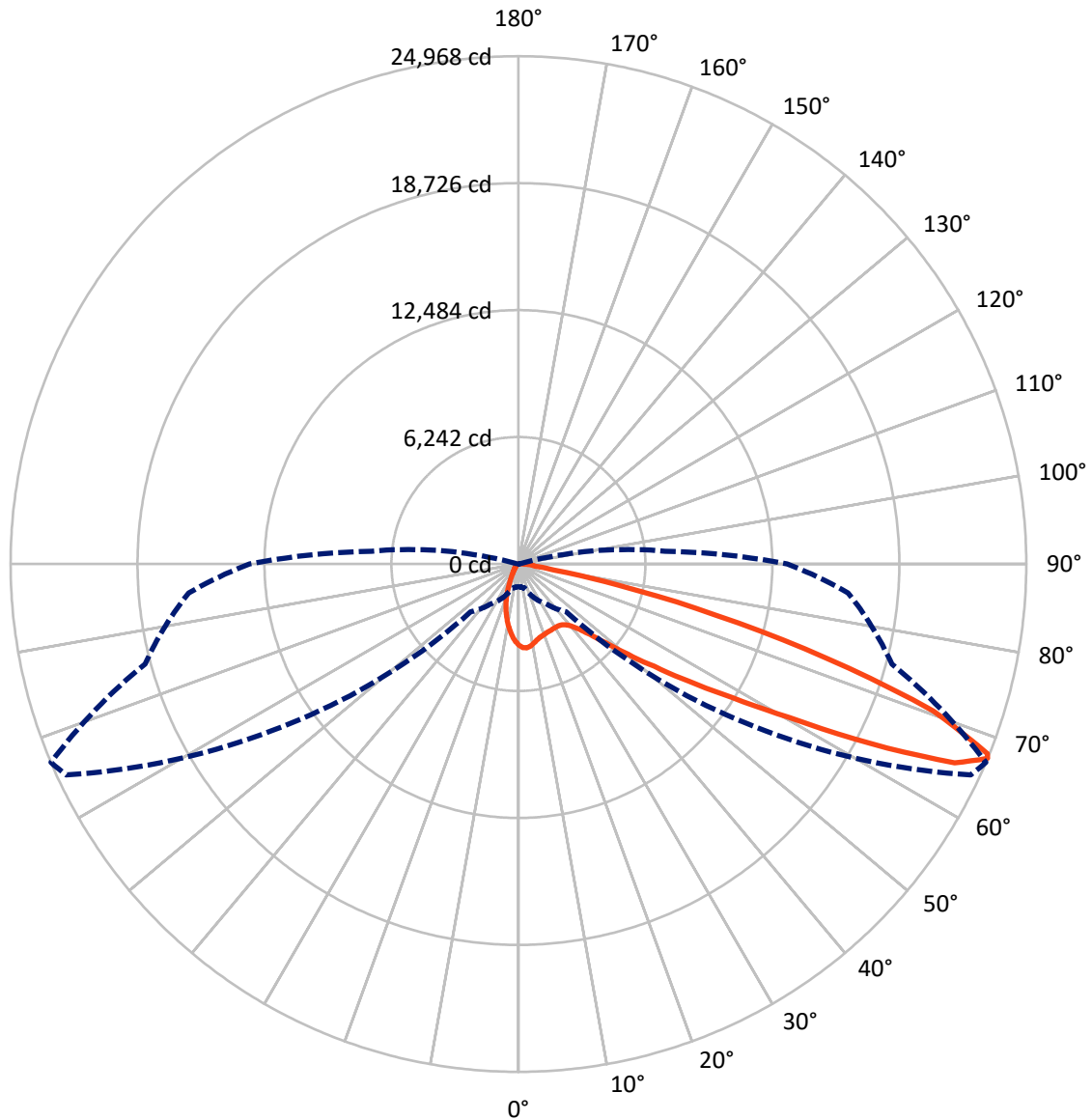


Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1882.5	0.0	1882.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16248.5	0.0	16248.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	18131.0	0.0	18131.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.4	1.8
10°-20°	692.5	3.8
20°-30°	1006.8	5.6
30°-40°	1570.7	8.7
40°-50°	2782.3	15.3
50°-60°	4402.8	24.3
60°-70°	5042.8	27.8
70°-80°	2091.7	11.5
80°-90°	216.1	1.2
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°	18131.0	100.0
0°-180°	18131.0	100.0



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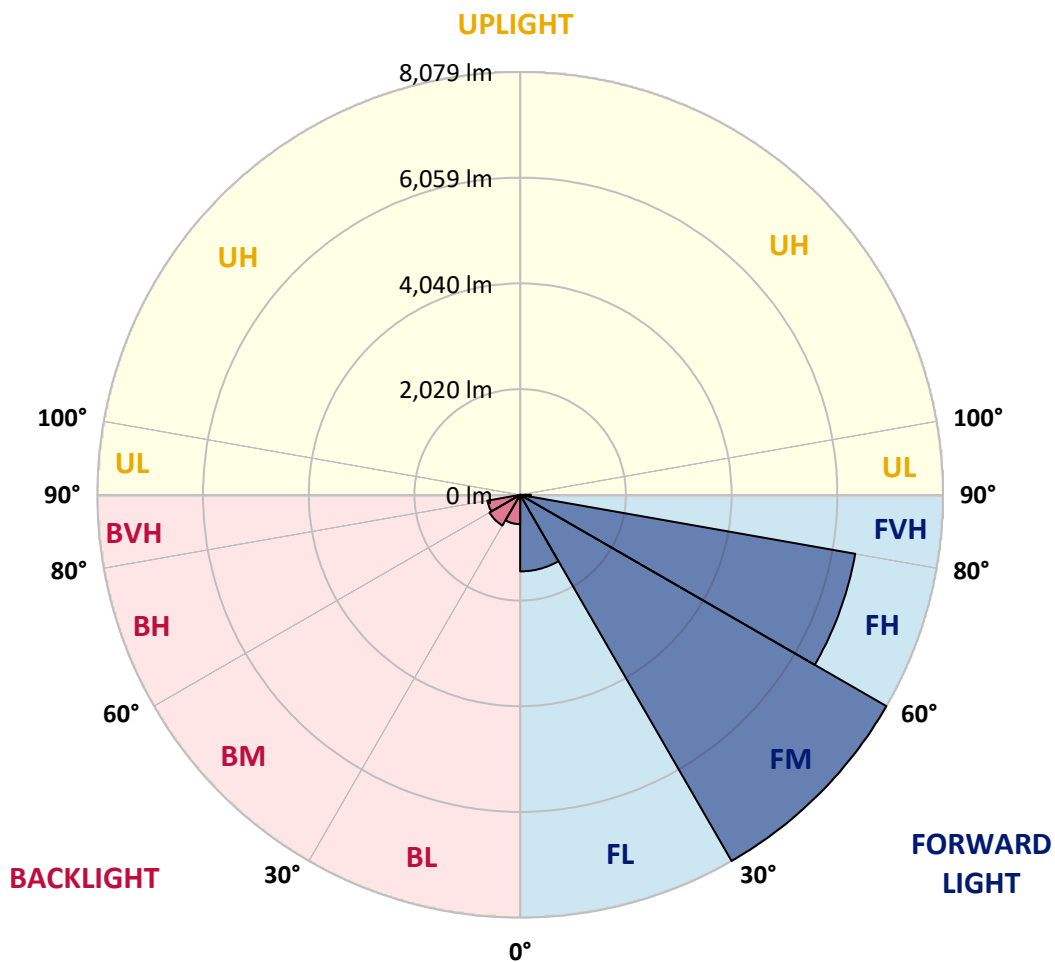
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1462.9	8.1			
FM (30°-60°)	8079.2	44.6			
FH (60°-80°)	6500.0	35.9			G3/7500
FVH (80°-90°)	206.3	1.1			G2/225
BL (0°-30°)	561.8	3.1	B2/1000		
BM (30°-60°)	676.6	3.7	B1/1000		
BH (60°-80°)	634.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	9.7	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6
2.5°	4133.9	4142.4	4141.3	4147.7	4162.5	4163.5	4148.7	4120.2	4113.8	4076.8	4012.3
5°	3812.4	3836.8	3851.6	3911.8	3979.5	4061.0	4122.3	4144.5	4141.3	4114.9	4017.6
7.5°	3445.5	3469.8	3486.7	3557.6	3647.5	3787.0	3946.7	4077.9	4089.5	4118.1	4013.4
10°	3201.2	3205.4	3228.7	3296.4	3390.5	3533.2	3723.6	3953.1	3988.0	4092.7	4002.8
12.5°	3000.2	3003.4	3034.1	3107.1	3207.5	3351.3	3551.2	3816.7	3870.6	4061.0	4000.7
15°	2857.5	2869.1	2896.6	2972.7	3079.6	3222.3	3427.5	3716.2	3780.7	4049.3	4019.7
17.5°	2809.9	2822.6	2831.0	2886.0	2983.3	3122.9	3333.4	3650.6	3723.6	4055.7	4056.7
20°	2859.6	2869.1	2850.1	2863.8	2924.1	3048.9	3254.0	3594.6	3681.3	4063.1	4104.3
22.5°	3044.7	3048.9	2997.1	2936.8	2926.2	2995.0	3191.7	3550.2	3643.2	4083.2	4160.4
25°	3361.9	3354.5	3269.9	3139.8	3017.2	2985.4	3154.6	3522.7	3624.2	4104.3	4218.5
27.5°	3744.7	3755.3	3639.0	3449.7	3216.0	3048.9	3149.4	3511.0	3615.7	4119.1	4269.3
30°	4210.1	4224.9	4091.6	3853.7	3518.4	3205.4	3198.0	3508.9	3610.4	4109.6	4273.5
32.5°	4684.9	4702.9	4598.2	4352.8	3922.4	3467.7	3308.0	3532.2	3621.0	4076.8	4249.2
35°	5181.9	5207.3	5137.5	4927.1	4470.2	3846.3	3501.5	3603.0	3670.7	4073.6	4224.9
37.5°	5868.3	5891.6	5760.4	5537.3	5133.3	4353.9	3812.4	3736.3	3788.1	4124.4	4231.2
40°	6893.0	6889.9	6551.5	6209.9	5861.9	4999.0	4249.2	3977.4	4003.8	4277.7	4309.5
42.5°	8009.8	8004.5	7504.3	6985.0	6671.0	5793.2	4823.4	4394.1	4376.1	4560.1	4512.5
45°	8870.6	8869.6	8461.4	7876.6	7645.0	6704.8	5565.8	4973.6	4946.1	5019.1	4886.9
47.5°	9237.6	9244.0	9038.8	8627.4	8724.7	7937.9	6501.8	5813.3	5772.1	5742.4	5541.5
50°	8952.1	8964.8	8981.7	8901.3	9516.8	9595.1	7757.1	6996.7	6976.6	6844.4	6530.3
52.5°	8019.3	8083.8	8282.7	8537.5	9791.8	11185.6	9725.1	8466.7	8358.8	8218.1	7872.3
55°	6447.8	6518.7	6896.2	7514.9	9382.5	12230.4	12483.2	10361.8	10182.0	9762.1	9263.0
57.5°	4267.2	4377.2	4925.0	5711.8	8193.8	12398.6	15234.9	12991.9	12365.8	11216.3	10653.7
60°	2350.9	2456.7	3051.0	3763.8	5918.0	11567.4	17085.6	16416.2	15310.0	12841.7	12342.5
62.5°	1447.8	1504.9	1943.8	2606.8	3549.1	9129.7	17468.4	20719.3	19438.6	14934.6	14382.5
65°	1152.7	1177.0	1391.7	2130.9	2544.4	5430.5	16232.2	23999.8	23572.6	17468.4	16208.9
67°	1118.9	1128.4	1229.9	1829.5	2398.5	3329.1	13598.9	24533.9	24967.5	19001.9	16266.0
67.5°	1126.3	1136.9	1233.1	1746.0	2394.3	3059.5	12691.5	24323.4	24871.2	19123.5	16013.3
70°	1086.1	1118.9	1411.8	1744.9	2276.9	2542.3	7600.5	21074.7	21644.7	17768.8	13587.3
72.5°	384.9	387.1	610.2	1411.8	2475.7	2569.8	3816.7	15449.6	15871.6	13592.6	9796.0
75°	228.4	194.6	203.0	401.9	2365.7	2495.8	2201.8	9872.1	10029.7	7788.8	4960.9
77.5°	157.6	137.5	141.7	177.7	901.0	2460.9	1749.2	5148.1	4980.0	2731.6	1056.5
80°	89.9	79.3	84.6	155.5	327.8	2295.9	1649.8	2087.6	1779.8	463.2	291.9
82.5°	47.6	40.2	48.6	128.0	228.4	1430.9	1652.9	1008.9	799.5	156.5	198.8
85°	16.9	13.7	23.3	87.8	152.3	438.9	1532.4	848.1	666.2	76.1	151.2
87.5°	3.2	3.2	9.5	36.0	61.3	134.3	906.3	503.4	337.4	45.5	103.6
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°	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6	3998.6
2.5°	3985.9	3940.4	3879.1	3804.0	3715.1	3636.9	3578.7	3518.4	3505.7	3484.6	3481.4
5°	3959.4	3881.2	3728.9	3554.4	3368.3	3200.1	3063.7	2942.1	2888.1	2841.6	2836.3
7.5°	3920.3	3802.9	3543.8	3262.5	2971.7	2707.3	2483.1	2324.5	2178.5	2108.7	2098.2
10°	3874.8	3706.7	3335.5	2945.2	2543.4	2170.1	1836.9	1557.8	1388.5	1288.1	1275.4
12.5°	3832.5	3612.6	3122.9	2616.4	2082.3	1583.1	1154.8	888.3	710.7	638.8	630.3
15°	3812.4	3536.4	2924.1	2280.1	1600.1	1007.8	631.4	488.6	430.4	413.5	412.4
17.5°	3810.3	3471.9	2729.5	1932.1	1121.0	585.9	411.4	375.4	363.8	359.6	359.6
20°	3809.3	3410.6	2534.9	1571.5	711.7	390.2	342.6	334.2	325.7	320.4	320.4
22.5°	3820.9	3355.6	2331.9	1203.5	448.4	316.2	301.4	292.9	282.4	275.0	273.9
25°	3832.5	3313.3	2124.6	856.6	324.7	275.0	260.2	248.5	233.7	224.2	223.1
27.5°	3834.6	3260.4	1902.5	573.2	271.8	240.1	221.0	203.0	186.1	176.6	175.6
30°	3802.9	3171.6	1656.1	387.1	240.1	208.3	183.0	163.9	148.1	140.7	140.7
32.5°	3740.5	3061.6	1385.4	291.9	213.6	178.7	151.2	133.2	122.7	119.5	118.4
35°	3684.5	2943.1	1107.2	247.5	191.4	151.2	123.7	112.1	105.8	104.7	103.6
37.5°	3651.7	2848.0	846.0	224.2	170.3	126.9	104.7	96.2	93.1	90.9	92.0
40°	3677.1	2768.6	625.0	205.2	149.1	105.8	88.8	84.6	81.4	80.4	80.4
42.5°	3788.1	2754.9	464.3	188.2	129.0	87.8	77.2	74.0	71.9	70.9	71.9
45°	4080.0	2839.5	360.6	172.4	108.9	74.0	65.6	64.5	63.5	63.5	63.5
47.5°	4518.9	3014.0	300.3	154.4	90.9	63.5	57.1	56.0	55.0	56.0	56.0
50°	5262.3	3333.4	268.6	136.4	75.1	53.9	48.6	48.6	48.6	48.6	49.7
52.5°	6392.8	3961.5	247.5	118.4	61.3	45.5	41.2	41.2	42.3	42.3	43.4
55°	7652.4	4794.9	228.4	100.5	51.8	38.1	33.8	34.9	36.0	37.0	37.0
57.5°	9018.7	5718.1	212.6	82.5	44.4	30.7	28.6	29.6	30.7	32.8	32.8
60°	10667.4	6717.5	189.3	64.5	37.0	24.3	22.2	24.3	27.5	29.6	30.7
62.5°	12477.9	7684.1	159.7	50.8	30.7	19.0	18.0	22.2	26.4	28.6	29.6
65°	13715.2	7987.6	122.7	41.2	23.3	13.7	14.8	20.1	25.4	28.6	28.6
67°	13214.0	7242.0	100.5	34.9	19.0	10.6	13.7	20.1	25.4	27.5	28.6
67.5°	12866.0	6950.2	96.2	33.8	18.0	10.6	13.7	20.1	25.4	28.6	28.6
70°	10468.6	5221.1	80.4	25.4	14.8	9.5	11.6	19.0	24.3	27.5	27.5
72.5°	7273.8	3219.2	71.9	18.0	12.7	8.5	10.6	18.0	23.3	26.4	27.5
75°	3458.2	1165.4	61.3	13.7	11.6	7.4	9.5	18.0	23.3	26.4	26.4
77.5°	705.4	270.7	49.7	11.6	9.5	7.4	8.5	16.9	22.2	25.4	25.4
80°	231.6	104.7	37.0	10.6	9.5	7.4	8.5	15.9	22.2	24.3	25.4
82.5°	167.1	52.9	24.3	10.6	9.5	7.4	7.4	15.9	21.2	24.3	24.3
85°	128.0	37.0	15.9	10.6	9.5	7.4	7.4	14.8	20.1	23.3	23.3
87.5°	84.6	14.8	12.7	10.6	9.5	7.4	7.4	14.8	19.0	22.2	23.3
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)