

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: P299624

Luminaire Tested: **GLNA-AF-09-LED-E1-SL2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299624
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-09-LED-E1-SL2-7030-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 1050mA 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: 38727.7 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 501
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

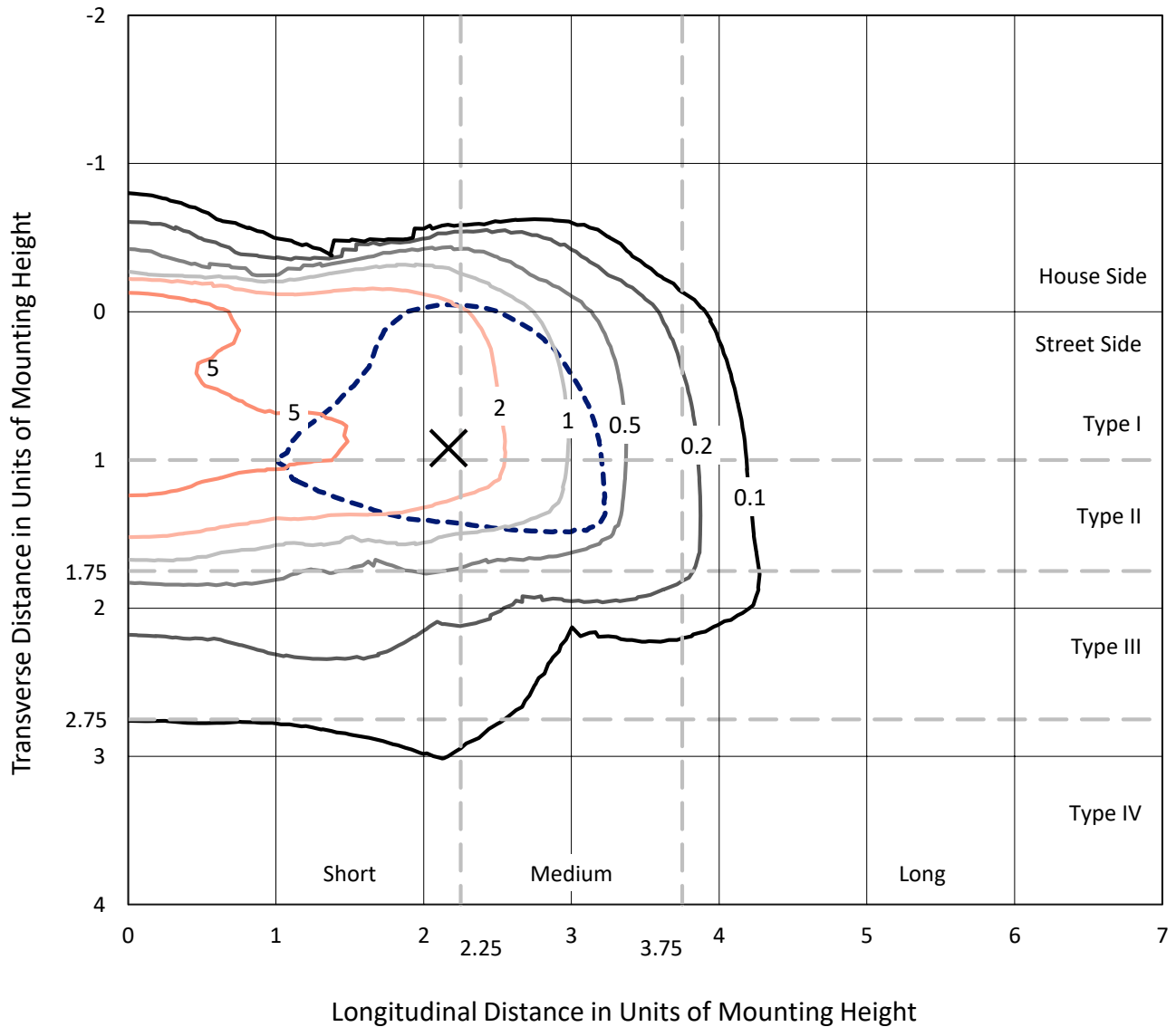


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

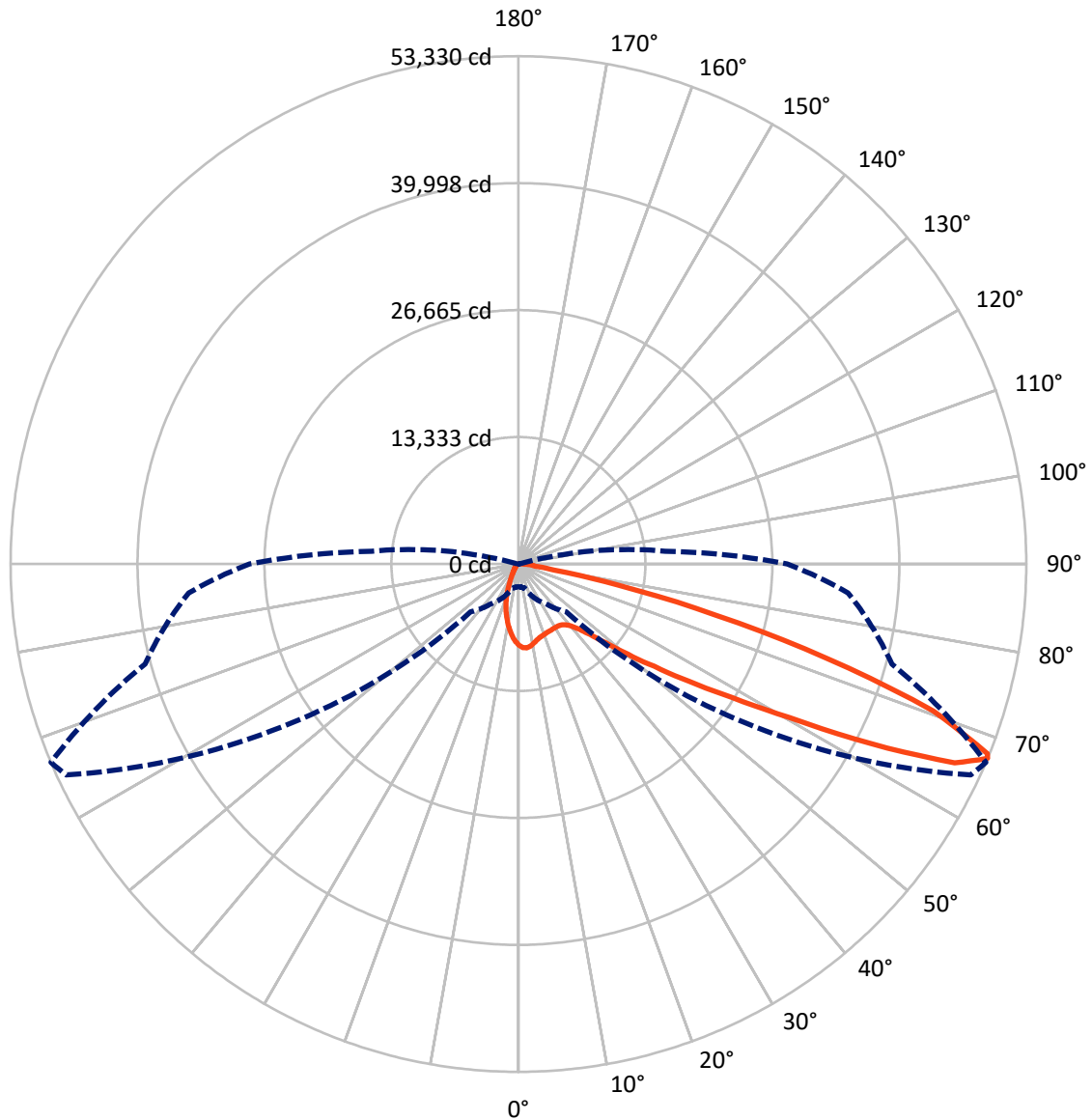


Based on 30 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Short - Semi-Cutoff

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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	4021.1	0.0	4021.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	34706.6	0.0	34706.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	38727.7	0.0	38727.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	695.0	1.8
10°-20°	1479.1	3.8
20°-30°	2150.5	5.6
30°-40°	3354.9	8.7
40°-50°	5943.1	15.3
50°-60°	9404.3	24.3
60°-70°	10771.3	27.8
70°-80°	4467.9	11.5
80°-90°	461.5	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°	38727.7	100.0
0°-180°	38727.7	100.0

Coefficient of Utilization



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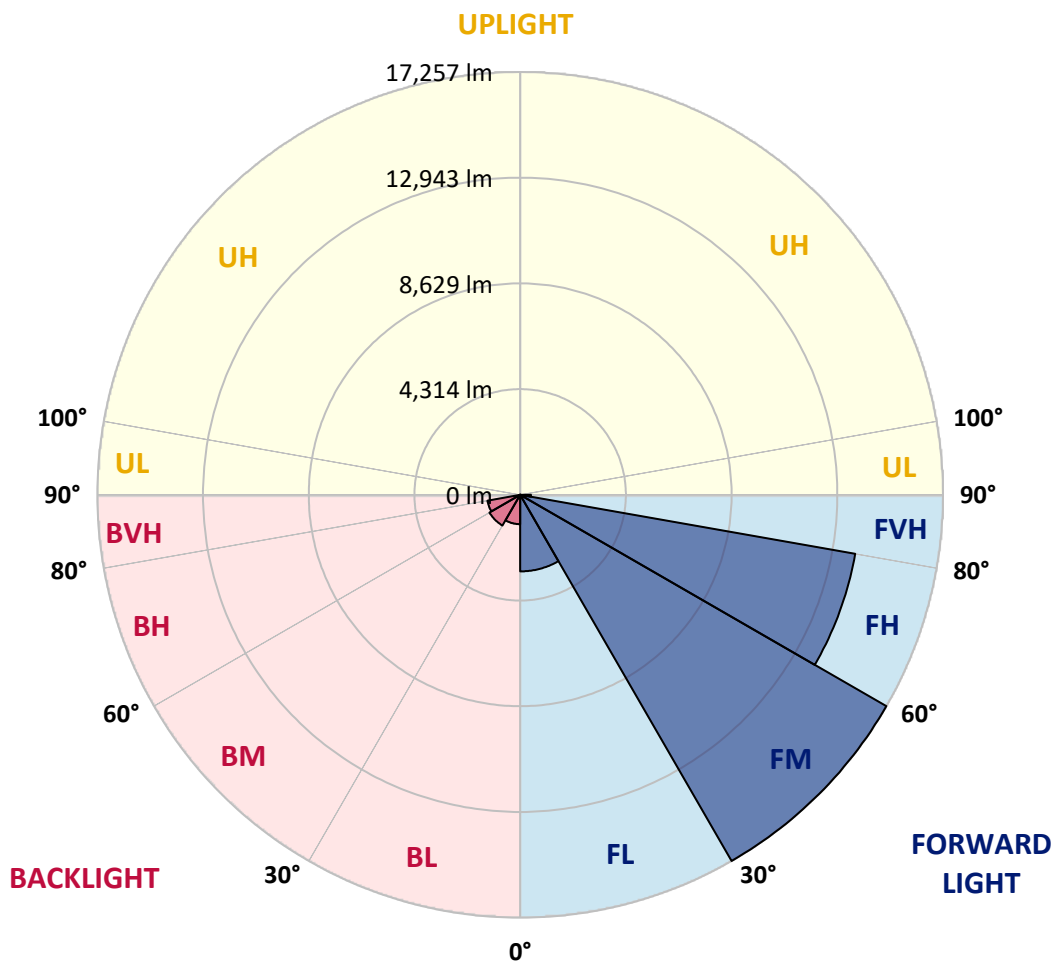
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3124.7	8.1			
FM (30°-60°)	17257.2	44.6			
FH (60°-80°)	13884.0	35.9			G5
FVH (80°-90°)	440.7	1.1			G3/500
BL (0°-30°)	1199.9	3.1	B3/2500		
BM (30°-60°)	1445.2	3.7	B2/2500		
BH (60°-80°)	1355.3	3.5	B3/2500		G3/2500
BVH (80°-90°)	20.8	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9
2.5°	8830.0	8848.1	8845.8	8859.4	8891.0	8893.3	8861.6	8800.7	8787.1	8708.0	8570.2
5°	8143.3	8195.3	8226.9	8355.7	8500.2	8674.2	8805.2	8852.6	8845.8	8789.4	8581.5
7.5°	7359.5	7411.4	7447.6	7598.9	7790.9	8089.1	8430.2	8710.3	8735.1	8796.1	8572.5
10°	6837.7	6846.7	6896.4	7041.0	7242.0	7547.0	7953.6	8443.7	8518.3	8741.9	8549.9
12.5°	6408.5	6415.3	6480.8	6636.6	6851.2	7158.4	7585.4	8152.4	8267.6	8674.2	8545.4
15°	6103.5	6128.4	6187.1	6349.8	6577.9	6882.9	7321.1	7937.8	8075.5	8649.3	8586.1
17.5°	6001.9	6029.0	6047.1	6164.5	6372.3	6670.5	7120.0	7797.7	7953.6	8662.9	8665.1
20°	6108.1	6128.4	6087.7	6117.1	6245.8	6512.4	6950.6	7678.0	7863.2	8678.7	8766.8
22.5°	6503.4	6512.4	6401.7	6273.0	6250.4	6397.2	6817.3	7583.1	7781.9	8721.6	8886.5
25°	7181.0	7165.2	6984.5	6706.7	6444.6	6376.9	6738.3	7524.4	7741.2	8766.8	9010.7
27.5°	7998.7	8021.3	7772.9	7368.5	6869.3	6512.4	6727.0	7499.5	7723.2	8798.4	9119.2
30°	8992.7	9024.3	8739.7	8231.4	7515.3	6846.7	6830.9	7495.0	7711.9	8778.1	9128.2
32.5°	10006.9	10045.3	9821.7	9297.6	8378.2	7406.9	7065.8	7544.7	7734.5	8708.0	9076.2
35°	11068.6	11122.8	10973.7	10524.2	9548.3	8215.6	7479.2	7696.1	7840.6	8701.3	9024.3
37.5°	12534.6	12584.3	12304.2	11827.6	10964.7	9299.9	8143.3	7980.7	8091.4	8809.7	9037.8
40°	14723.5	14716.7	13993.9	13264.2	12521.1	10677.8	9076.2	8495.7	8552.2	9137.2	9205.0
42.5°	17108.9	17097.6	16029.1	14920.0	14249.1	12374.2	10302.8	9385.7	9347.3	9740.4	9638.7
45°	18947.6	18945.3	18073.4	16824.2	16329.5	14321.4	11888.6	10623.6	10564.9	10720.7	10438.4
47.5°	19731.4	19745.0	19306.8	18428.1	18635.9	16955.3	13887.7	12417.1	12329.0	12265.8	11836.6
50°	19121.5	19148.7	19184.8	19013.1	20327.8	20495.0	16569.0	14944.8	14901.9	14619.6	13948.7
52.5°	17129.2	17267.0	17691.7	18236.1	20915.1	23892.3	20772.8	18084.7	17854.3	17553.9	16815.2
55°	13772.5	13923.8	14730.3	16051.7	20040.9	26124.1	26664.0	22132.7	21748.6	20851.9	19785.7
57.5°	9114.6	9349.6	10519.7	12200.3	17501.9	26483.3	32541.6	27750.5	26413.3	23957.8	22756.1
60°	5021.5	5247.4	6516.9	8039.4	12640.8	24707.8	36494.7	35064.8	32702.0	27429.8	26363.6
62.5°	3092.4	3214.4	4151.8	5568.2	7580.9	19501.0	37312.4	44256.3	41520.7	31900.1	30721.0
65°	2462.2	2514.1	2972.7	4551.7	5434.9	11599.4	34671.8	51263.4	50350.8	37312.4	34622.1
67°	2389.9	2410.2	2627.1	3907.9	5123.2	7111.0	29047.1	52404.1	53330.2	40587.8	34744.1
67.5°	2405.7	2428.3	2633.9	3729.4	5114.1	6535.0	27109.0	51954.6	53124.7	40847.6	34204.2
70°	2319.9	2389.9	3015.6	3727.2	4863.4	5430.4	16234.7	45015.3	46232.8	37953.9	29022.3
72.5°	822.2	826.8	1303.4	3015.6	5288.1	5489.1	8152.4	33000.2	33901.5	29033.6	20924.1
75°	487.9	415.6	433.7	858.4	5053.1	5331.0	4703.0	21086.8	21423.4	16636.8	10596.5
77.5°	336.6	293.7	302.7	379.5	1924.6	5256.4	3736.2	10996.3	10637.1	5834.7	2256.6
80°	192.0	169.4	180.7	332.1	700.3	4904.1	3523.9	4459.1	3801.7	989.4	623.5
82.5°	101.7	85.8	103.9	273.3	487.9	3056.3	3530.7	2155.0	1707.7	334.3	424.7
85°	36.1	29.4	49.7	187.5	325.3	937.4	3273.1	1811.6	1423.1	162.6	323.0
87.5°	6.8	6.8	20.3	76.8	131.0	286.9	1935.9	1075.2	720.6	97.1	221.4
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°	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9	8540.9
2.5°	8513.8	8416.6	8285.6	8125.2	7935.5	7768.3	7644.1	7515.3	7488.2	7443.1	7436.3
5°	8457.3	8290.1	7964.9	7592.1	7194.6	6835.4	6544.0	6284.2	6169.0	6069.7	6058.4
7.5°	8373.7	8123.0	7569.6	6968.7	6347.5	5782.8	5303.9	4965.1	4653.3	4504.2	4481.6
10°	8276.6	7917.4	7124.6	6291.0	5432.6	4635.3	3923.7	3327.4	2965.9	2751.3	2724.2
12.5°	8186.2	7716.4	6670.5	5588.5	4447.8	3381.6	2466.7	1897.5	1518.0	1364.4	1346.3
15°	8143.3	7553.7	6245.8	4870.2	3417.7	2152.7	1348.6	1043.6	919.4	883.2	881.0
17.5°	8138.8	7416.0	5830.2	4127.0	2394.4	1251.4	878.7	801.9	777.1	768.0	768.0
20°	8136.5	7284.9	5414.6	3356.7	1520.2	833.5	731.9	713.8	695.7	684.4	684.4
22.5°	8161.4	7167.5	4980.9	2570.6	957.8	675.4	643.8	625.7	603.1	587.3	585.1
25°	8186.2	7077.1	4538.1	1829.7	693.5	587.3	555.7	530.8	499.2	478.9	476.6
27.5°	8190.8	6964.2	4063.8	1224.3	580.5	512.8	472.1	433.7	397.6	377.2	375.0
30°	8123.0	6774.4	3537.4	826.8	512.8	445.0	390.8	350.1	316.2	300.4	300.4
32.5°	7989.7	6539.5	2959.2	623.5	456.3	381.8	323.0	284.6	262.0	255.3	253.0
35°	7870.0	6286.5	2365.1	528.6	408.9	323.0	264.3	239.4	225.9	223.6	221.4
37.5°	7800.0	6083.2	1807.1	478.9	363.7	271.1	223.6	205.6	198.8	194.3	196.5
40°	7854.2	5913.8	1335.0	438.2	318.5	225.9	189.7	180.7	173.9	171.7	171.7
42.5°	8091.4	5884.4	991.7	402.1	275.6	187.5	164.9	158.1	153.6	151.3	153.6
45°	8714.8	6065.1	770.3	368.2	232.7	158.1	140.1	137.8	135.5	135.5	135.5
47.5°	9652.3	6437.8	641.5	329.8	194.3	135.5	122.0	119.7	117.5	119.7	119.7
50°	11240.3	7120.0	573.8	291.4	160.4	115.2	103.9	103.9	103.9	103.9	106.2
52.5°	13655.0	8461.8	528.6	253.0	131.0	97.1	88.1	88.1	90.4	90.4	92.6
55°	16345.4	10241.8	487.9	214.6	110.7	81.3	72.3	74.5	76.8	79.1	79.1
57.5°	19263.9	12213.8	454.0	176.2	94.9	65.5	61.0	63.2	65.5	70.0	70.0
60°	22785.5	14348.5	404.3	137.8	79.1	52.0	47.4	52.0	58.7	63.2	65.5
62.5°	26652.7	16413.1	341.1	108.4	65.5	40.7	38.4	47.4	56.5	61.0	63.2
65°	29295.6	17061.4	262.0	88.1	49.7	29.4	31.6	42.9	54.2	61.0	61.0
67°	28224.9	15468.9	214.6	74.5	40.7	22.6	29.4	42.9	54.2	58.7	61.0
67.5°	27481.7	14845.5	205.6	72.3	38.4	22.6	29.4	42.9	54.2	61.0	61.0
70°	22360.8	11152.2	171.7	54.2	31.6	20.3	24.8	40.7	52.0	58.7	58.7
72.5°	15536.7	6876.1	153.6	38.4	27.1	18.1	22.6	38.4	49.7	56.5	58.7
75°	7386.6	2489.3	131.0	29.4	24.8	15.8	20.3	38.4	49.7	56.5	56.5
77.5°	1506.7	578.3	106.2	24.8	20.3	15.8	18.1	36.1	47.4	54.2	54.2
80°	494.7	223.6	79.1	22.6	20.3	15.8	18.1	33.9	47.4	52.0	54.2
82.5°	356.9	112.9	52.0	22.6	20.3	15.8	15.8	33.9	45.2	52.0	52.0
85°	273.3	79.1	33.9	22.6	20.3	15.8	15.8	31.6	42.9	49.7	49.7
87.5°	180.7	31.6	27.1	22.6	20.3	15.8	15.8	31.6	40.7	47.4	49.7
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)