

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: P299995

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18651.9 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

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

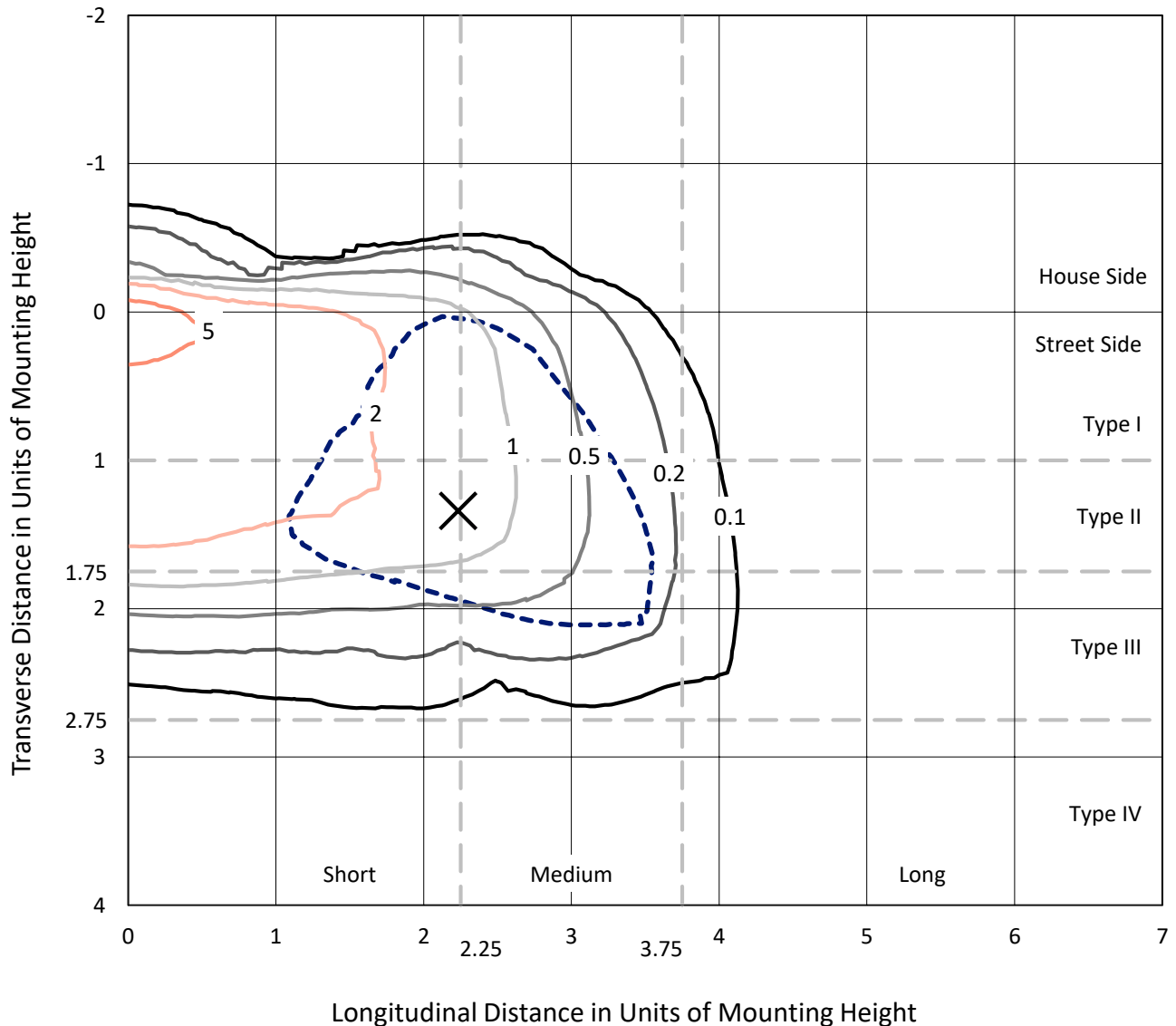


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

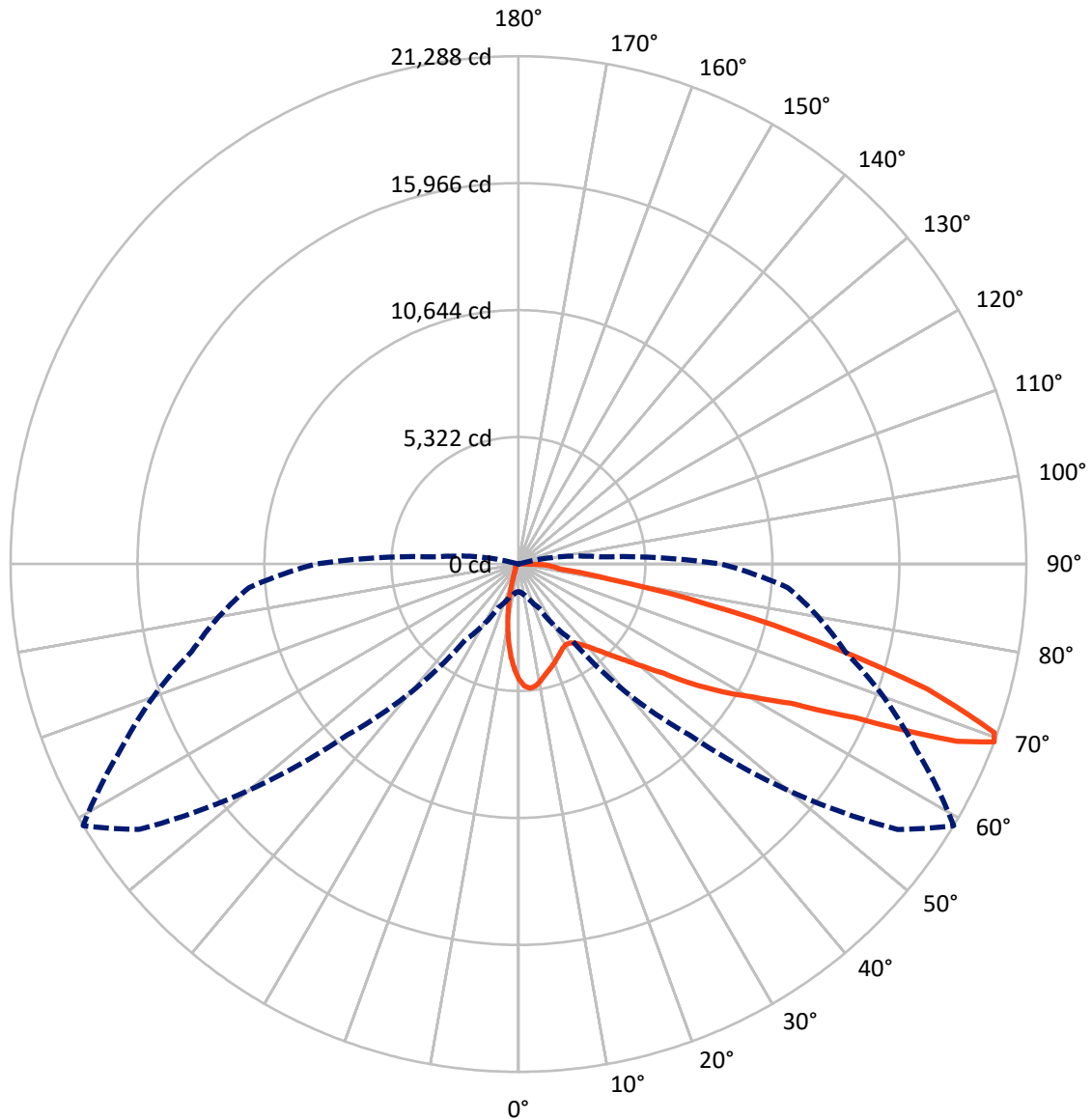


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1518.9	0.0	1518.9
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	17133.0	0.0	17133.0
	% Fixture	91.9	0.0	91.9
Total	Lumens	18651.9	0.0	18651.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.1	2.1
10°-20°	814.3	4.4
20°-30°	1095.7	5.9
30°-40°	1590.9	8.5
40°-50°	2648.9	14.2
50°-60°	4132.3	22.2
60°-70°	5113.4	27.4
70°-80°	2591.4	13.9
80°-90°	271.1	1.5
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°	18651.9	100.0
0°-180°	18651.9	100.0



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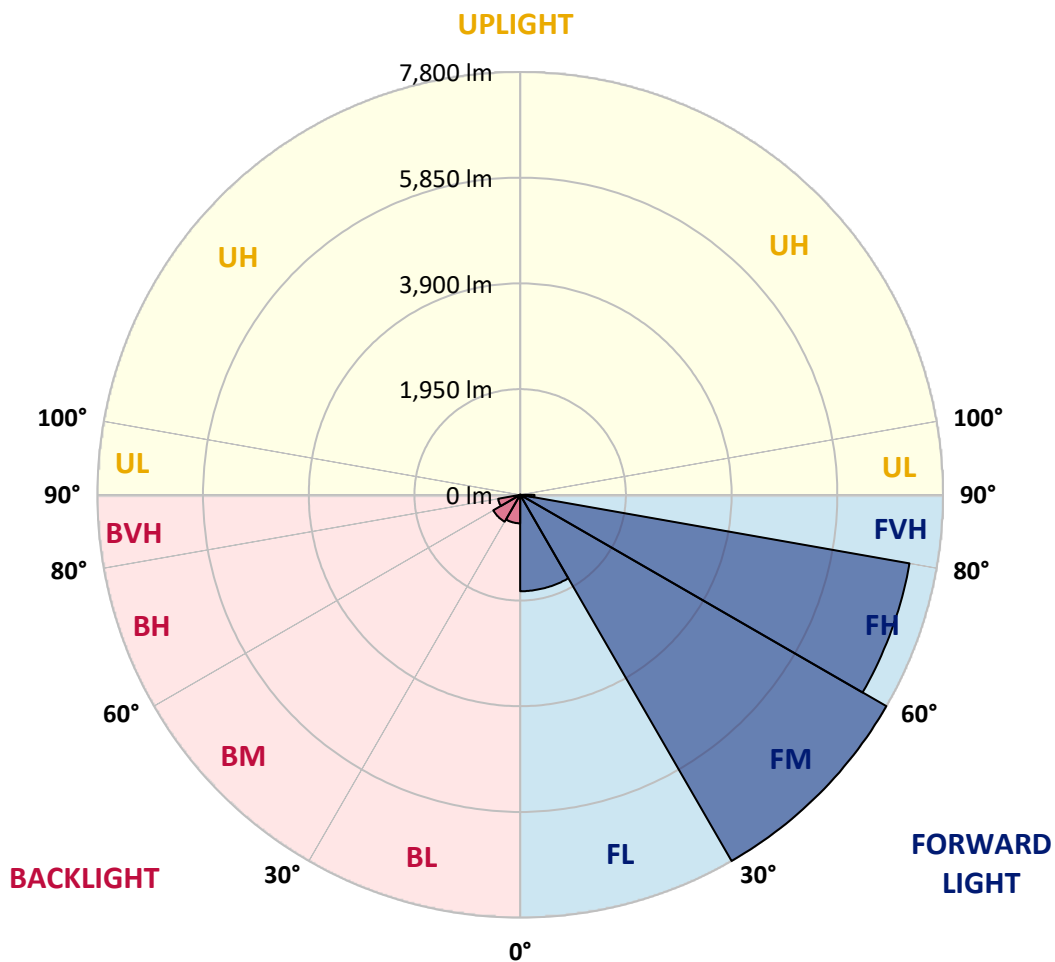
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1778.3	9.5			
FM	(30°-60°)	7799.7	41.8			
FH	(60°-80°)	7292.2	39.1			G3/7500
FVH	(80°-90°)	262.8	1.4			G3/500
BL	(0°-30°)	525.8	2.8	B2/1000		
BM	(30°-60°)	572.3	3.1	B1/1000		
BH	(60°-80°)	412.5	2.2	B1/500		G1/500
BVH	(80°-90°)	8.3	0.0			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7
2.5°	5321.0	5319.0	5295.7	5285.2	5266.0	5226.1	5163.9	5131.3	5078.6	4986.6	4863.4
5°	5272.4	5298.0	5311.4	5312.7	5326.4	5311.4	5255.5	5228.4	5155.5	5007.7	4786.4
7.5°	4943.5	4952.8	4992.1	5025.6	5091.0	5153.3	5173.4	5161.6	5118.5	4960.4	4666.0
10°	4591.3	4600.6	4647.2	4691.2	4780.0	4875.8	4977.0	4998.4	5016.3	4892.7	4550.1
12.5°	4287.3	4296.9	4344.5	4402.3	4505.7	4623.9	4781.0	4815.8	4895.0	4828.6	4457.2
15°	4025.8	4029.9	4076.5	4148.1	4271.6	4423.3	4601.8	4657.7	4779.1	4783.2	4376.1
17.5°	3803.2	3813.7	3842.5	3910.8	4045.9	4233.6	4441.5	4521.7	4663.8	4745.2	4296.9
20°	3667.2	3677.7	3676.7	3714.7	3836.1	4036.3	4281.2	4377.0	4550.1	4706.3	4226.3
22.5°	3641.0	3641.0	3613.5	3608.1	3679.9	3847.6	4114.5	4231.4	4447.6	4689.3	4176.8
25°	3734.9	3730.4	3662.1	3606.2	3609.4	3709.3	3953.0	4092.2	4361.4	4700.8	4150.3
27.5°	3933.2	3927.7	3841.2	3734.9	3649.3	3648.3	3830.7	3980.4	4292.7	4755.7	4160.8
30°	4207.1	4205.2	4111.3	3977.2	3822.4	3679.9	3788.5	3924.5	4248.3	4854.7	4185.1
32.5°	4506.7	4503.5	4432.9	4291.8	4095.4	3822.4	3832.9	3946.9	4261.1	4986.6	4244.2
35°	4824.4	4819.0	4788.3	4665.1	4448.9	4084.8	3978.5	4067.0	4341.3	5184.0	4360.1
37.5°	5168.0	5173.4	5195.5	5077.3	4850.6	4453.0	4222.2	4282.2	4502.5	5451.9	4548.8
40°	5675.4	5674.5	5681.8	5526.6	5308.5	4903.3	4562.6	4581.7	4772.7	5807.3	4835.9
42.5°	6596.0	6531.9	6336.7	6020.3	5800.9	5418.0	4992.1	4971.9	5102.9	6247.0	5237.6
45°	7833.4	7696.1	7190.0	6583.6	6302.9	5998.3	5520.2	5456.0	5539.4	6775.5	5733.5
47.5°	8897.4	8755.0	8039.1	7169.9	6835.5	6548.8	6139.4	6023.5	6050.9	7367.2	6362.0
50°	9259.2	9189.6	8564.4	7680.5	7351.2	7241.7	6857.9	6716.4	6677.5	8051.5	7090.7
52.5°	9133.7	9128.6	8711.9	8011.6	7823.9	7958.9	7761.6	7598.1	7454.7	8773.2	7832.2
55°	8932.2	8958.7	8771.9	8301.6	8295.2	8613.9	8997.7	8861.7	8446.2	9556.8	8471.4
57.5°	8376.6	8489.3	8738.4	8850.2	9109.5	9435.5	10027.2	10107.4	9615.9	10156.9	9001.9
60°	6796.6	7044.4	7858.7	8929.0	10159.1	10971.1	11269.7	11338.1	10575.5	10655.7	9718.1
62.5°	4824.4	5077.3	6110.0	7920.9	10174.7	12988.7	13120.5	12851.7	11632.5	11395.2	10953.3
65°	2560.7	2756.1	3599.8	5717.6	8821.8	13457.1	16357.6	15556.1	13497.0	12849.4	12548.9
67.5°	1309.9	1369.0	1704.6	2798.3	6064.7	11953.1	19259.0	19823.2	16710.7	14292.5	12472.0
69°	1159.2	1194.0	1416.5	2022.9	3883.3	10124.3	19400.4	21288.3	18393.3	14172.1	11333.9
70°	1122.1	1152.8	1355.2	1831.0	3035.5	8490.3	18859.2	21159.6	18823.4	13714.5	10483.9
72.5°	952.6	978.7	1206.7	1618.0	2467.1	4214.5	15319.8	17930.3	16891.2	11424.6	7588.5
75°	637.1	723.6	1158.2	1516.8	2295.0	2394.3	10100.0	12957.0	12036.4	7705.7	3953.0
77.5°	153.0	164.5	327.0	1206.7	2098.9	2107.2	5194.5	8054.7	6569.9	2746.5	934.4
80°	82.4	79.2	91.6	239.5	1954.3	1977.6	2338.4	3909.9	2345.8	455.7	307.8
82.5°	58.1	54.9	59.1	100.3	615.0	1801.3	1691.8	1769.7	972.4	175.0	138.3
85°	21.1	20.1	32.6	90.7	192.9	1035.6	1738.1	1459.6	787.8	80.2	101.2
87.5°	7.3	6.4	12.8	49.5	59.1	441.0	1072.6	1103.3	310.1	48.5	47.6
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°	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7	4854.7
2.5°	4811.6	4746.2	4626.1	4502.5	4388.5	4251.5	4182.9	4115.5	4087.1	4076.5	4027.0
5°	4672.4	4561.6	4306.5	4050.0	3813.7	3562.7	3397.3	3264.5	3186.3	3148.3	3088.2
7.5°	4494.2	4312.8	3925.5	3530.2	3162.0	2799.2	2530.4	2323.4	2181.0	2112.7	2050.4
10°	4321.1	4079.7	3529.2	2990.2	2490.1	2009.2	1637.8	1369.0	1197.2	1118.0	1067.5
12.5°	4166.3	3853.0	3146.3	2463.9	1836.1	1273.2	895.4	681.4	574.8	537.7	519.9
15°	4028.0	3644.2	2784.5	1963.9	1243.5	727.7	489.5	416.7	399.8	399.8	397.6
17.5°	3897.1	3439.5	2435.2	1494.5	780.4	445.1	372.3	362.8	362.8	366.9	366.9
20°	3771.6	3244.4	2097.7	1072.6	491.4	353.2	336.6	334.3	336.6	341.7	341.7
22.5°	3664.0	3067.1	1782.5	736.1	365.0	318.4	310.1	306.9	307.8	311.0	313.3
25°	3583.8	2917.4	1485.2	498.8	314.2	289.9	280.7	275.3	271.1	271.1	273.0
27.5°	3533.4	2790.9	1197.2	362.8	282.6	263.8	248.8	240.5	230.9	225.8	227.7
30°	3496.3	2670.5	927.0	296.3	253.2	234.1	215.2	201.5	187.8	181.4	183.6
32.5°	3482.6	2573.5	692.9	261.5	226.7	205.6	182.3	164.5	149.8	144.3	145.6
35°	3519.6	2496.5	507.4	236.3	205.6	179.1	153.0	132.8	121.3	118.2	119.1
37.5°	3616.7	2455.3	379.7	215.2	186.8	157.1	127.7	108.6	101.2	101.2	102.2
40°	3800.0	2454.4	305.0	200.5	169.9	136.0	105.4	91.6	87.5	89.7	90.7
42.5°	4067.9	2510.2	265.7	186.8	155.2	115.9	87.5	77.9	77.0	79.2	80.2
45°	4433.9	2612.4	244.6	175.0	139.2	97.1	73.8	67.4	67.4	70.6	71.8
47.5°	4882.2	2762.2	226.7	163.5	123.3	81.1	63.2	59.1	60.0	63.2	64.2
50°	5422.2	2951.2	208.8	150.7	111.8	67.4	54.9	51.7	52.7	56.8	58.1
52.5°	6037.2	3205.4	194.2	139.2	97.1	55.9	46.3	44.4	46.3	50.8	51.7
55°	6564.4	3433.1	176.3	129.6	77.9	46.3	38.0	38.0	40.2	45.3	46.3
57.5°	7071.8	3671.3	160.3	111.8	61.3	37.0	31.6	32.6	35.8	41.2	42.2
60°	7816.5	4075.3	141.5	93.9	46.3	29.4	26.5	27.5	31.6	37.0	38.0
62.5°	9081.0	4690.3	122.3	77.9	35.8	23.3	21.1	23.3	28.4	34.8	35.8
65°	10222.3	4940.3	100.3	65.5	27.5	17.9	17.9	21.1	27.5	33.8	34.8
67.5°	9586.2	4158.6	77.9	51.7	21.1	13.7	14.7	20.1	26.5	33.8	34.8
69°	8477.8	3400.5	66.4	41.2	17.9	12.8	13.7	20.1	26.5	32.6	33.8
70°	7614.1	2871.1	59.1	34.8	16.0	12.8	13.7	18.8	26.5	32.6	33.8
72.5°	5099.7	1550.3	47.6	25.2	14.7	11.5	11.5	18.8	25.2	31.6	32.6
75°	2191.5	428.2	38.0	17.9	12.8	10.5	10.5	17.9	24.3	30.7	32.6
77.5°	400.8	108.6	30.7	16.0	12.8	10.5	9.6	16.9	23.3	29.4	30.7
80°	159.3	53.6	24.3	13.7	11.5	9.6	8.3	16.0	22.0	28.4	29.4
82.5°	96.1	30.7	20.1	12.8	11.5	8.3	7.3	13.7	21.1	27.5	28.4
85°	77.9	21.1	16.0	12.8	10.5	8.3	6.4	12.8	18.8	26.5	27.5
87.5°	38.0	14.7	14.7	11.5	10.5	8.3	6.4	11.5	17.9	25.2	26.5
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)