

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: P300735

Luminaire Tested: **GLNA-AF-03-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-AFL-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8902.9 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 96
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

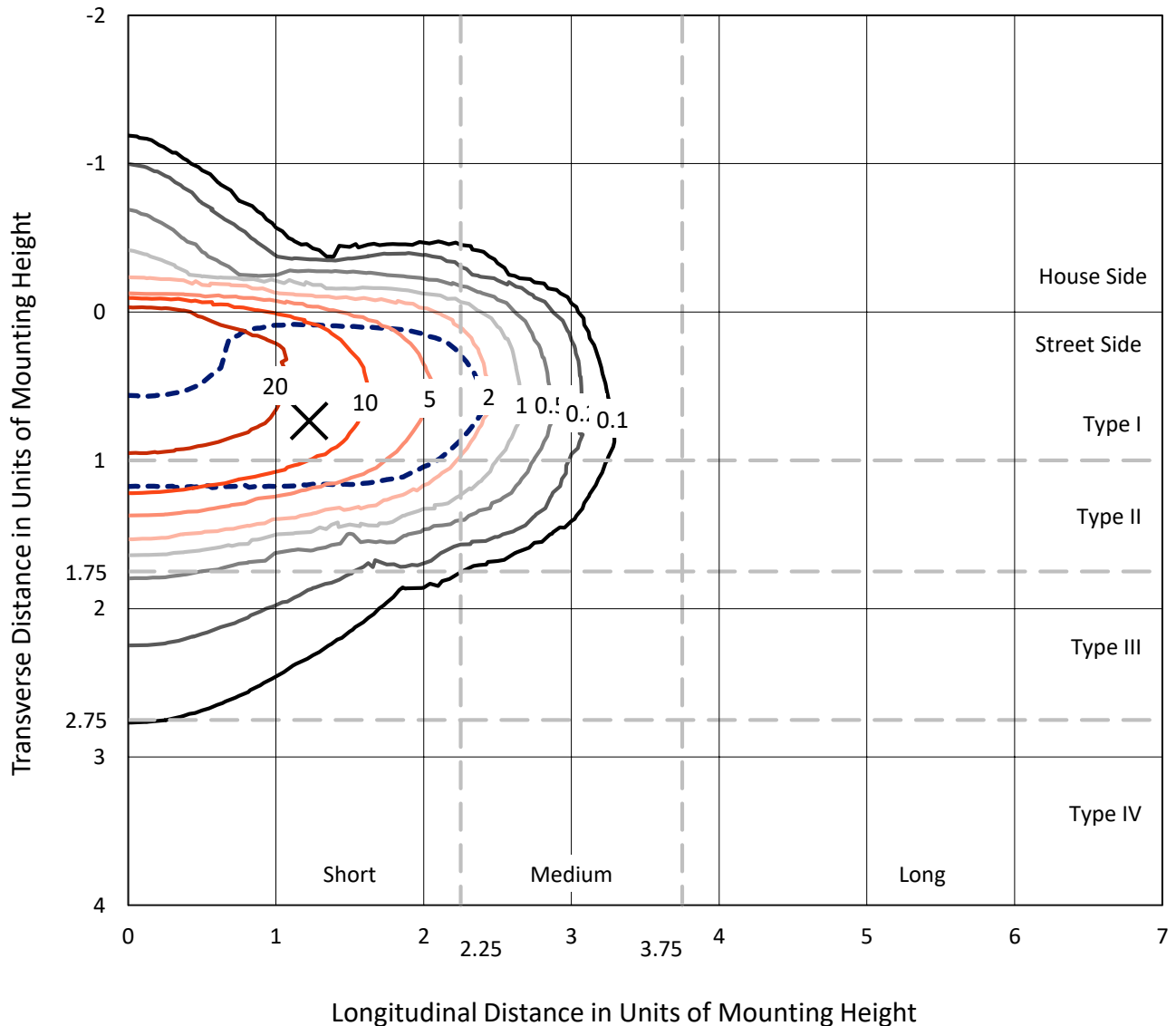


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Iso-Footcandle Lines of Horizontal Illumination

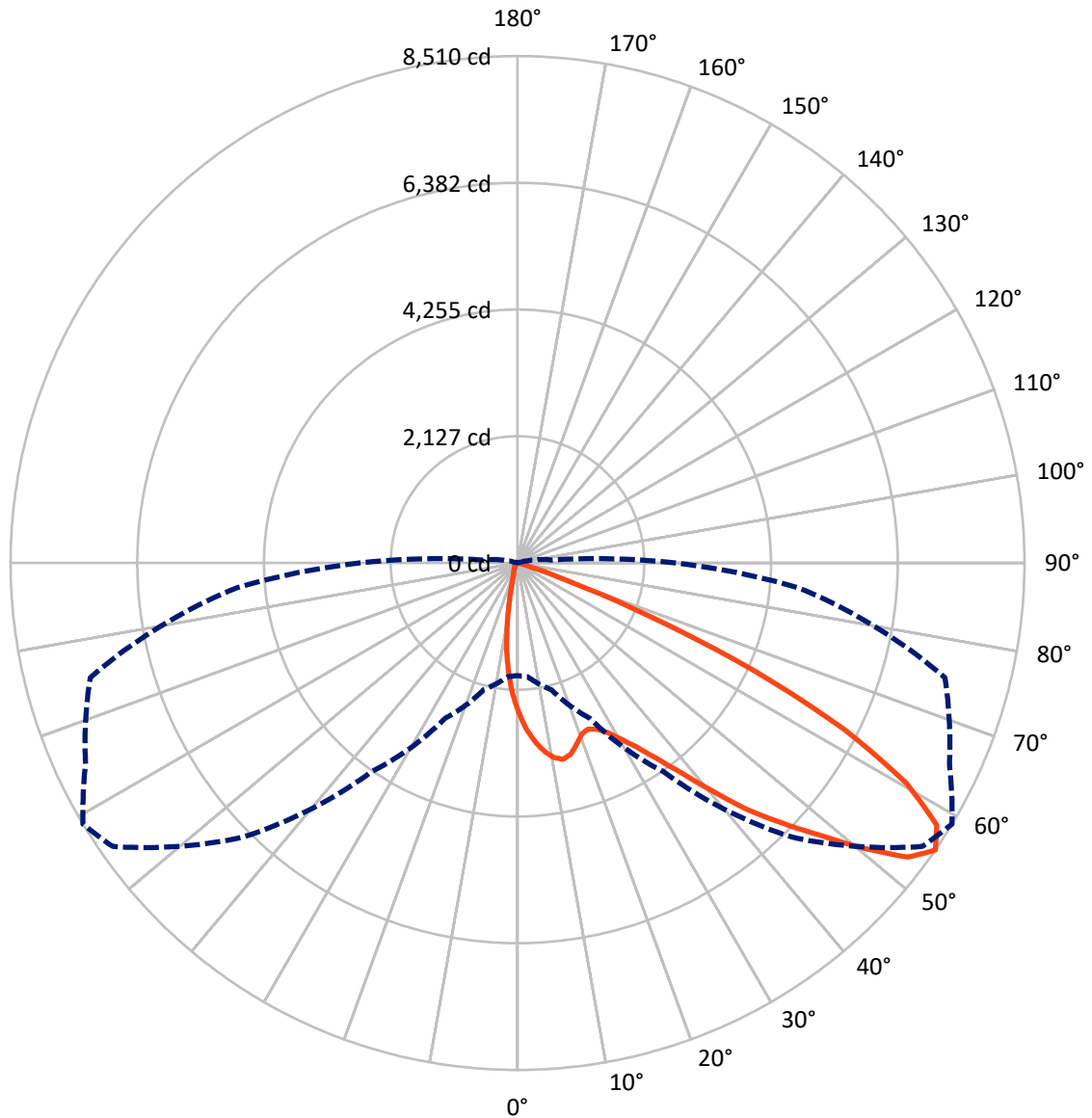
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 31.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	497.3	0.0	497.3
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	8405.6	0.0	8405.6
	% Fixture	94.4	0.0	94.4
Total	Lumens	8902.9	0.0	8902.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.9	2.4
10°-20°	502.6	5.6
20°-30°	855.2	9.6
30°-40°	1470.8	16.5
40°-50°	2270.8	25.5
50°-60°	2282.8	25.6
60°-70°	1170.6	13.1
70°-80°	126.9	1.4
80°-90°	13.3	0.1
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°	8902.9	100.0
0°-180°	8902.9	100.0



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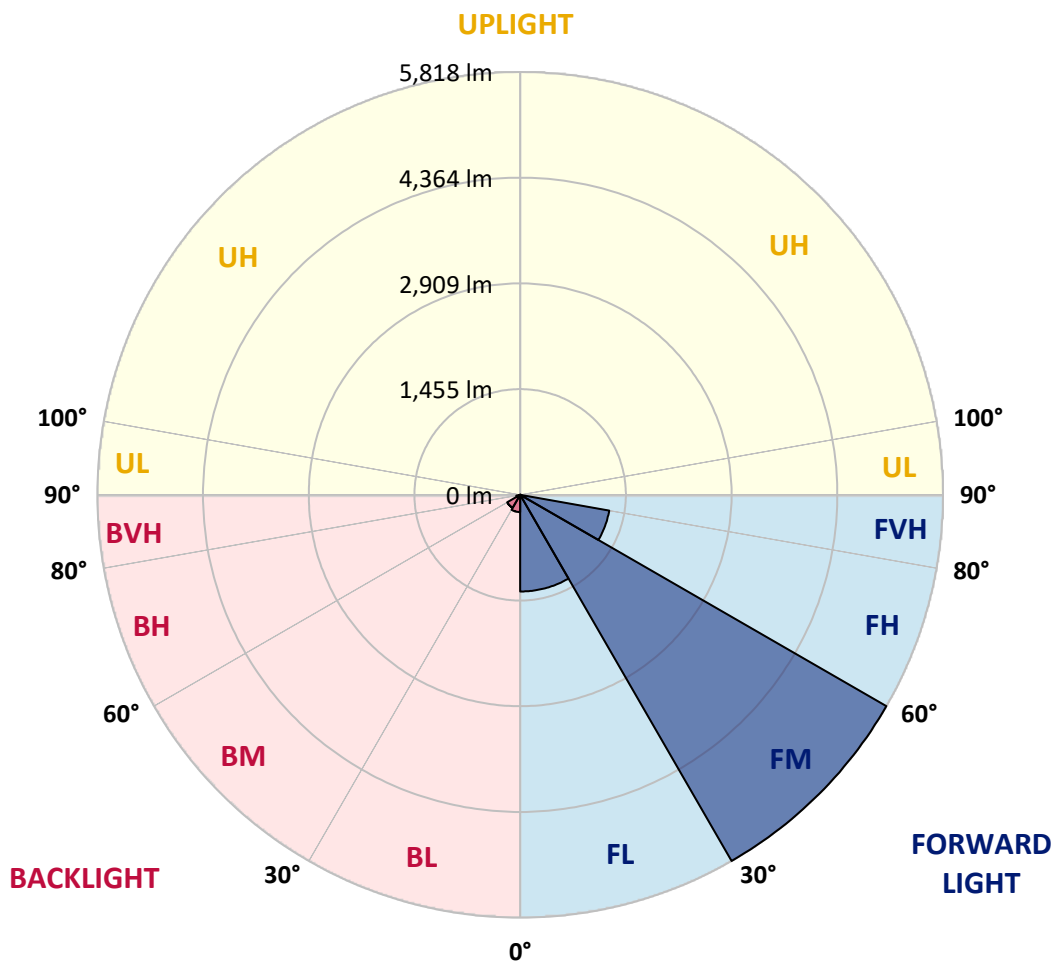
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1330.4	14.9			
FM	(30°-60°)	5818.0	65.3			
FH	(60°-80°)	1244.2	14.0			G1/1800
FVH	(80°-90°)	13.0	0.1			G1/100
BL	(0°-30°)	237.4	2.7	B1/500		
BM	(30°-60°)	206.4	2.3	B0/220		
BH	(60°-80°)	53.3	0.6	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1
2.5°	2965.3	2933.8	2924.4	2918.0	2889.1	2852.9	2803.5	2780.4	2733.1	2656.9	2563.4
5°	3237.0	3231.2	3210.2	3198.6	3167.6	3116.1	3037.3	2999.5	2924.4	2796.2	2628.6
7.5°	3118.2	3154.5	3183.4	3231.7	3292.7	3290.6	3224.4	3184.9	3100.9	2931.7	2701.1
10°	2659.6	2689.0	2736.3	2846.1	3069.9	3267.4	3345.2	3316.8	3249.6	3056.2	2770.9
12.5°	2569.7	2566.6	2575.0	2607.0	2724.2	3005.8	3324.7	3382.0	3368.3	3170.2	2837.1
15°	2617.5	2613.8	2612.8	2623.8	2652.2	2770.9	3170.8	3335.2	3440.8	3275.8	2893.4
17.5°	2751.5	2735.7	2727.3	2718.4	2710.0	2739.4	2985.8	3204.4	3451.8	3368.3	2940.1
20°	2981.1	2954.8	2923.8	2873.4	2826.1	2811.4	2908.1	3069.9	3412.4	3438.7	2970.6
22.5°	3269.5	3235.9	3182.3	3090.4	2994.2	2938.5	2946.4	3027.3	3353.6	3515.4	2984.8
25°	3593.7	3550.6	3479.2	3351.5	3210.2	3111.4	3059.9	3088.3	3326.8	3605.3	3001.1
27.5°	3941.0	3893.2	3799.7	3625.8	3465.5	3332.1	3227.0	3223.3	3372.5	3723.0	3027.3
30°	4285.1	4277.8	4155.9	3972.0	3759.7	3597.4	3446.1	3426.6	3500.2	3885.8	3079.3
32.5°	4744.3	4689.2	4539.9	4350.8	4106.0	3911.0	3731.9	3686.7	3696.2	4075.5	3159.7
35°	5323.3	5262.9	5052.7	4791.6	4517.9	4287.8	4089.7	4028.2	4005.1	4386.0	3295.3
37.5°	5697.4	5696.3	5564.5	5298.6	5004.9	4751.2	4535.7	4463.8	4417.0	4761.1	3505.4
40°	5707.4	5732.1	5749.4	5746.8	5537.7	5303.9	5112.6	5023.8	4915.1	5262.4	3777.1
42.5°	5401.1	5464.6	5617.5	5877.1	6001.1	5908.1	5746.8	5659.6	5497.7	5798.8	4108.1
45°	4987.1	5031.2	5298.6	5776.7	6252.2	6507.0	6384.1	6228.0	6014.7	6358.3	4404.9
47.5°	4801.6	4809.5	4982.3	5507.2	6271.1	6997.7	7072.3	6818.6	6484.4	6809.1	4637.1
50°	4247.3	4261.5	4500.0	5040.1	6049.4	7229.4	7763.8	7523.1	6996.7	7156.4	4721.7
52.5°	3201.2	3221.2	3523.8	4272.5	5439.9	7130.7	8258.7	8200.4	7557.8	7326.1	4726.5
55°	1888.8	1915.1	2204.0	2876.0	4278.8	6502.3	8295.5	8509.8	8000.7	7426.5	4719.1
57.5°	882.1	900.5	1066.0	1481.6	2661.1	5138.9	7741.7	8297.6	8245.0	7479.5	4771.1
60°	468.7	473.9	513.8	641.5	1202.6	3258.5	6661.0	7492.7	8022.3	7553.1	4834.7
62.5°	358.3	359.9	357.8	373.0	505.4	1446.4	5034.9	6159.7	7125.4	7497.9	4764.3
65°	310.5	313.1	298.4	294.7	324.2	515.9	2991.1	4390.7	5599.1	6753.4	4284.6
67.5°	278.5	279.5	261.6	246.4	251.7	279.0	1180.0	2403.7	3706.1	4950.3	3105.6
70°	256.4	255.3	235.9	211.7	204.9	190.7	375.1	881.1	1771.1	2510.3	1444.3
72.5°	227.0	227.5	218.0	186.5	170.2	133.5	173.9	256.9	528.5	684.1	338.4
75°	201.2	198.6	187.0	167.1	140.3	87.7	86.2	114.5	162.9	161.8	73.0
77.5°	145.5	142.9	146.6	137.1	107.7	56.7	43.1	55.2	66.2	64.1	20.5
80°	106.7	105.1	94.6	114.0	95.1	38.9	26.8	29.4	34.2	28.9	6.3
82.5°	73.0	72.5	66.7	63.0	54.1	23.6	16.8	18.4	22.1	16.3	3.2
85°	11.6	13.1	48.3	38.4	32.0	10.5	11.6	12.6	14.7	8.9	1.1
87.5°	0.0	0.0	22.6	20.0	6.3	4.2	6.8	7.4	7.4	4.7	0.0
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°	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1	2506.1
2.5°	2515.6	2463.1	2365.9	2265.5	2172.5	2061.7	1985.5	1928.2	1862.0	1844.1	1883.0
5°	2532.9	2433.6	2224.5	1997.0	1783.2	1546.2	1365.0	1221.5	1091.8	1047.6	1087.6
7.5°	2560.3	2412.6	2071.6	1697.0	1325.0	955.2	701.9	535.4	429.2	397.7	414.5
10°	2587.6	2382.1	1894.6	1341.9	833.3	465.0	302.6	241.7	219.1	214.4	217.0
12.5°	2610.2	2341.2	1678.6	954.1	445.5	249.0	198.1	188.1	184.9	184.9	186.0
15°	2623.8	2279.2	1422.8	606.8	256.4	188.1	172.9	169.7	169.7	170.2	171.3
17.5°	2622.2	2200.4	1142.7	367.3	191.8	166.6	157.6	155.0	154.5	155.5	156.0
20°	2602.8	2097.4	861.6	242.2	167.1	151.8	142.9	138.2	137.7	138.7	139.8
22.5°	2566.0	1970.2	616.3	186.5	150.8	137.7	126.6	122.4	122.4	123.5	124.5
25°	2521.4	1814.7	421.4	158.1	136.1	122.4	111.9	108.2	109.3	111.9	112.4
27.5°	2465.7	1639.8	286.3	135.6	118.2	107.2	99.3	96.7	99.3	103.0	104.0
30°	2417.9	1457.4	204.4	117.2	100.4	92.5	87.7	87.7	91.4	98.2	99.8
32.5°	2381.1	1280.9	157.6	103.5	87.2	80.4	77.8	80.4	86.2	93.0	94.6
35°	2376.4	1135.4	133.5	92.5	77.8	70.9	69.9	74.6	80.4	85.6	86.7
37.5°	2412.6	1000.9	120.3	83.5	69.4	63.0	62.0	67.8	73.6	79.9	81.4
40°	2481.4	895.3	110.9	75.1	62.5	55.7	53.6	57.8	65.7	74.1	76.2
42.5°	2570.8	808.1	100.4	66.7	55.7	46.2	43.6	48.3	56.7	65.7	68.3
45°	2655.9	732.9	88.8	57.3	46.8	35.7	34.7	41.0	45.2	54.1	56.2
47.5°	2702.6	666.7	78.8	46.8	36.3	28.9	28.9	30.5	34.7	45.2	47.3
50°	2686.9	613.7	68.3	34.7	25.2	22.1	22.1	21.5	27.8	36.3	37.8
52.5°	2655.3	583.2	58.8	26.8	17.3	15.8	14.2	15.8	19.4	23.1	23.6
55°	2650.6	577.9	49.4	21.5	12.1	10.5	7.9	7.9	7.9	7.4	6.3
57.5°	2687.4	586.3	41.5	17.3	8.9	6.8	4.2	0.0	0.0	0.0	0.0
60°	2725.2	595.3	35.7	12.1	6.3	3.7	0.5	0.0	0.0	0.0	0.0
62.5°	2662.2	575.3	29.9	7.4	4.7	1.6	0.0	0.0	0.0	0.0	0.0
65°	2338.5	489.7	23.6	5.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1663.4	327.8	15.8	3.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	759.2	137.1	10.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	162.3	42.6	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	33.1	31.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	10.5	48.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	6.3	35.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.1	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)