

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: P300738

Luminaire Tested: **GLNA-AF-04-LED-E1-AFL-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300738
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-04-LED-E1-AFL-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K 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: 10220.6 lumens
Efficiency: N/A
Efficacy: 79.2 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): 129
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

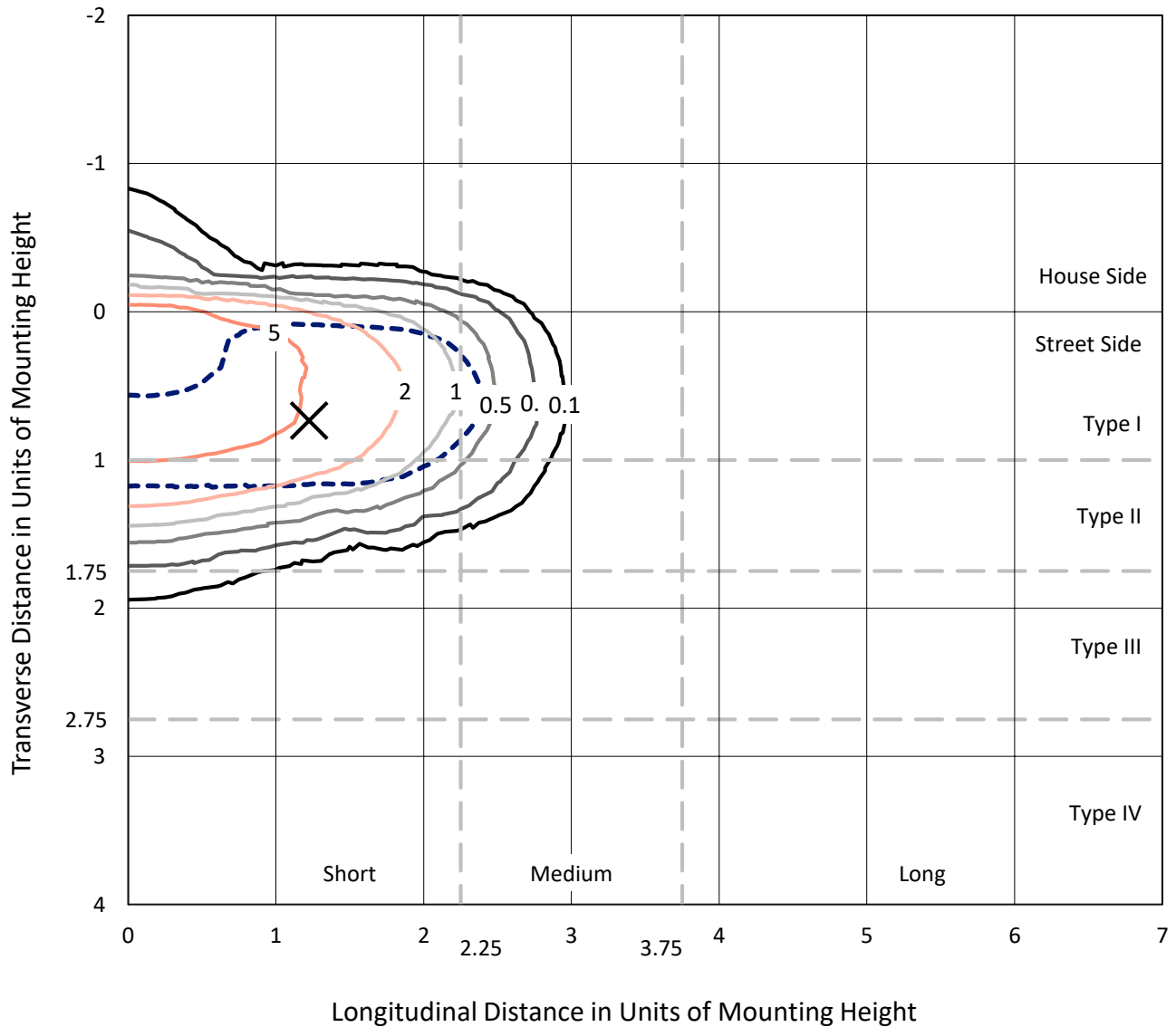


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

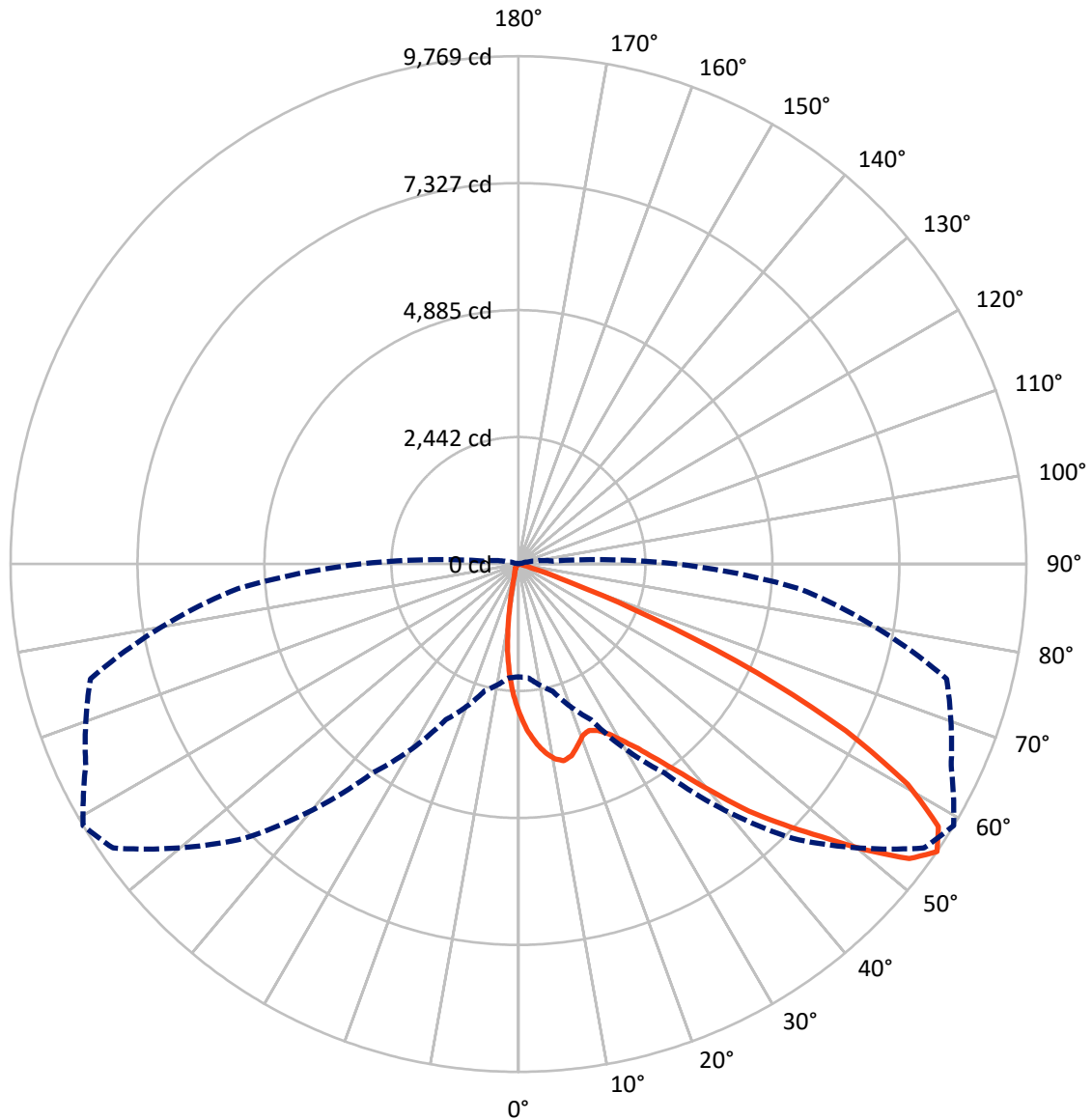


Based on 20 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Short - Full Cutoff

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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	570.9	0.0	570.9
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	9649.7	0.0	9649.7
	% Fixture	94.4	0.0	94.4
Total	Lumens	10220.6	0.0	10220.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	2.4
10°-20°	577.0	5.6
20°-30°	981.8	9.6
30°-40°	1688.5	16.5
40°-50°	2606.9	25.5
50°-60°	2620.7	25.6
60°-70°	1343.9	13.1
70°-80°	145.6	1.4
80°-90°	15.2	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°	10220.6	100.0
0°-180°	10220.6	100.0

Coefficient of Utilization



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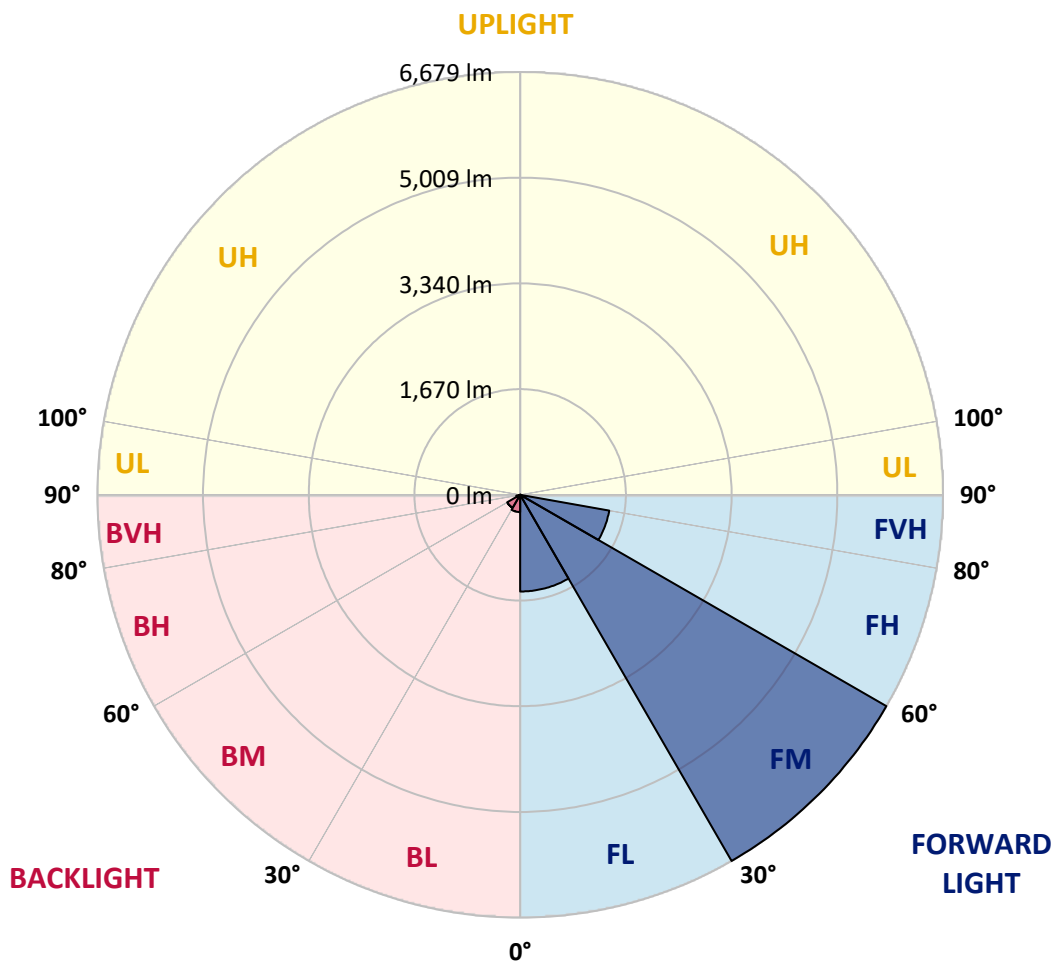
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1527.3	14.9			
FM	(30°-60°)	6679.1	65.3			
FH	(60°-80°)	1428.4	14.0			G1/1800
FVH	(80°-90°)	14.9	0.1			G1/100
BL	(0°-30°)	272.5	2.7	B1/500		
BM	(30°-60°)	236.9	2.3	B1/1000		
BH	(60°-80°)	61.2	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°	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1
2.5°	3404.2	3368.0	3357.2	3349.9	3316.8	3275.2	3218.5	3191.9	3137.6	3050.2	2942.8
5°	3716.1	3709.4	3685.3	3672.0	3636.4	3577.3	3486.9	3443.4	3357.2	3210.0	3017.6
7.5°	3579.7	3621.4	3654.5	3710.0	3780.0	3777.6	3701.6	3656.3	3559.8	3365.6	3100.8
10°	3053.2	3087.0	3141.3	3267.3	3524.3	3751.0	3840.3	3807.7	3730.5	3508.6	3181.1
12.5°	2950.0	2946.4	2956.1	2992.9	3127.4	3450.7	3816.8	3882.5	3866.9	3639.5	3257.1
15°	3004.9	3000.7	2999.5	3012.2	3044.7	3181.1	3640.1	3828.9	3950.1	3760.7	3321.6
17.5°	3158.7	3140.6	3131.0	3120.7	3111.1	3144.9	3427.8	3678.7	3962.8	3866.9	3375.3
20°	3422.3	3392.2	3356.6	3298.7	3244.4	3227.5	3338.5	3524.3	3917.5	3947.7	3410.3
22.5°	3753.5	3714.9	3653.3	3547.8	3437.4	3373.5	3382.5	3475.4	3850.0	4035.7	3426.5
25°	4125.6	4076.1	3994.1	3847.5	3685.3	3571.9	3512.8	3545.4	3819.2	4138.9	3445.2
27.5°	4524.3	4469.4	4362.0	4162.4	3978.4	3825.2	3704.6	3700.4	3871.7	4274.0	3475.4
30°	4919.4	4910.9	4771.0	4559.9	4316.2	4129.8	3956.1	3933.8	4018.2	4461.0	3535.1
32.5°	5446.5	5383.2	5211.9	4994.8	4713.7	4489.9	4284.2	4232.4	4243.2	4678.7	3627.4
35°	6111.2	6041.8	5800.6	5500.8	5186.6	4922.4	4695.0	4624.4	4597.9	5035.2	3783.0
37.5°	6540.7	6539.4	6388.1	6082.9	5745.7	5454.4	5207.1	5124.4	5070.8	5465.8	4024.3
40°	6552.1	6580.5	6600.4	6597.4	6357.3	6088.9	5869.3	5767.4	5642.6	6041.2	4336.1
42.5°	6200.5	6273.5	6449.0	6746.9	6889.3	6782.5	6597.4	6497.2	6311.5	6657.1	4716.1
45°	5725.2	5775.8	6082.9	6631.7	7177.6	7470.1	7329.0	7149.8	6905.0	7299.4	5056.9
47.5°	5512.3	5521.3	5719.8	6322.3	7199.3	8033.5	8119.1	7827.8	7444.2	7816.9	5323.5
50°	4875.9	4892.2	5166.1	5786.1	6944.8	8299.5	8912.9	8636.6	8032.3	8215.6	5420.6
52.5°	3675.0	3698.0	4045.4	4904.9	6245.1	8186.1	9481.1	9414.1	8676.4	8410.4	5426.0
55°	2168.4	2198.5	2530.3	3301.7	4912.1	7464.7	9523.3	9769.4	9184.9	8525.6	5417.6
57.5°	1012.7	1033.8	1223.8	1700.9	3055.0	5899.5	8887.5	9525.7	9465.4	8586.6	5477.3
60°	538.0	544.0	589.9	736.5	1380.6	3740.8	7646.8	8601.6	9209.6	8671.0	5550.3
62.5°	411.4	413.2	410.8	428.2	580.2	1660.5	5780.1	7071.4	8180.0	8607.7	5469.4
65°	356.5	359.5	342.6	338.4	372.1	592.3	3433.8	5040.6	6427.9	7753.0	4918.8
67.5°	319.7	320.9	300.4	282.9	288.9	320.3	1354.7	2759.5	4254.7	5683.0	3565.3
70°	294.3	293.1	270.8	243.1	235.2	218.9	430.7	1011.5	2033.2	2881.9	1658.1
72.5°	260.6	261.2	250.3	214.1	195.4	153.2	199.6	294.9	606.8	785.3	388.4
75°	231.0	228.0	214.7	191.8	161.0	100.7	98.9	131.5	187.0	185.8	83.8
77.5°	167.1	164.1	168.3	157.4	123.6	65.1	49.5	63.3	76.0	73.6	23.5
80°	122.4	120.6	108.6	130.9	109.2	44.6	30.8	33.8	39.2	33.2	7.2
82.5°	83.8	83.2	76.6	72.4	62.1	27.1	19.3	21.1	25.3	18.7	3.6
85°	13.3	15.1	55.5	44.0	36.8	12.1	13.3	14.5	16.9	10.3	1.2
87.5°	0.0	0.0	25.9	22.9	7.2	4.8	7.8	8.4	8.4	5.4	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°	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1	2877.1
2.5°	2887.9	2827.6	2716.0	2600.8	2494.1	2366.8	2279.3	2213.6	2137.6	2117.1	2161.7
5°	2907.8	2793.8	2553.8	2292.6	2047.1	1775.1	1567.0	1402.3	1253.4	1202.7	1248.5
7.5°	2939.2	2769.7	2378.3	1948.2	1521.2	1096.5	805.8	614.6	492.8	456.6	475.9
10°	2970.6	2734.7	2175.0	1540.5	956.6	533.8	347.4	277.5	251.5	246.1	249.1
12.5°	2996.5	2687.7	1927.1	1095.3	511.5	285.9	227.4	215.9	212.3	212.3	213.5
15°	3012.2	2616.5	1633.4	696.6	294.3	215.9	198.4	194.8	194.8	195.4	196.6
17.5°	3010.4	2526.0	1311.9	421.6	220.2	191.2	180.9	177.9	177.3	178.5	179.1
20°	2988.0	2407.8	989.2	278.1	191.8	174.3	164.1	158.6	158.0	159.2	160.4
22.5°	2945.8	2261.8	707.5	214.1	173.1	158.0	145.4	140.5	140.5	141.7	142.9
25°	2894.6	2083.3	483.7	181.6	156.2	140.5	128.5	124.3	125.5	128.5	129.1
27.5°	2830.6	1882.5	328.7	155.6	135.7	123.0	114.0	111.0	114.0	118.2	119.4
30°	2775.7	1673.2	234.6	134.5	115.2	106.2	100.7	100.7	104.9	112.8	114.6
32.5°	2733.5	1470.5	180.9	118.8	100.1	92.3	89.3	92.3	98.9	106.8	108.6
35°	2728.1	1303.4	153.2	106.2	89.3	81.4	80.2	85.6	92.3	98.3	99.5
37.5°	2769.7	1149.0	138.1	95.9	79.6	72.4	71.2	77.8	84.4	91.7	93.5
40°	2848.7	1027.8	127.3	86.3	71.8	63.9	61.5	66.3	75.4	85.0	87.5
42.5°	2951.3	927.7	115.2	76.6	63.9	53.1	50.1	55.5	65.1	75.4	78.4
45°	3049.0	841.4	101.9	65.7	53.7	41.0	39.8	47.0	51.9	62.1	64.5
47.5°	3102.6	765.4	90.5	53.7	41.6	33.2	33.2	35.0	39.8	51.9	54.3
50°	3084.6	704.5	78.4	39.8	29.0	25.3	25.3	24.7	32.0	41.6	43.4
52.5°	3048.4	669.5	67.6	30.8	19.9	18.1	16.3	18.1	22.3	26.5	27.1
55°	3042.9	663.5	56.7	24.7	13.9	12.1	9.0	9.0	9.0	8.4	7.2
57.5°	3085.2	673.1	47.6	19.9	10.3	7.8	4.8	0.0	0.0	0.0	0.0
60°	3128.6	683.4	41.0	13.9	7.2	4.2	0.6	0.0	0.0	0.0	0.0
62.5°	3056.2	660.5	34.4	8.4	5.4	1.8	0.0	0.0	0.0	0.0	0.0
65°	2684.7	562.1	27.1	6.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1909.6	376.4	18.1	3.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	871.6	157.4	11.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	186.4	48.9	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	38.0	35.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	12.1	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	7.2	40.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.2	6.0	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)