

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-03-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-03-LED-E1-SL3-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 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: 11393 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

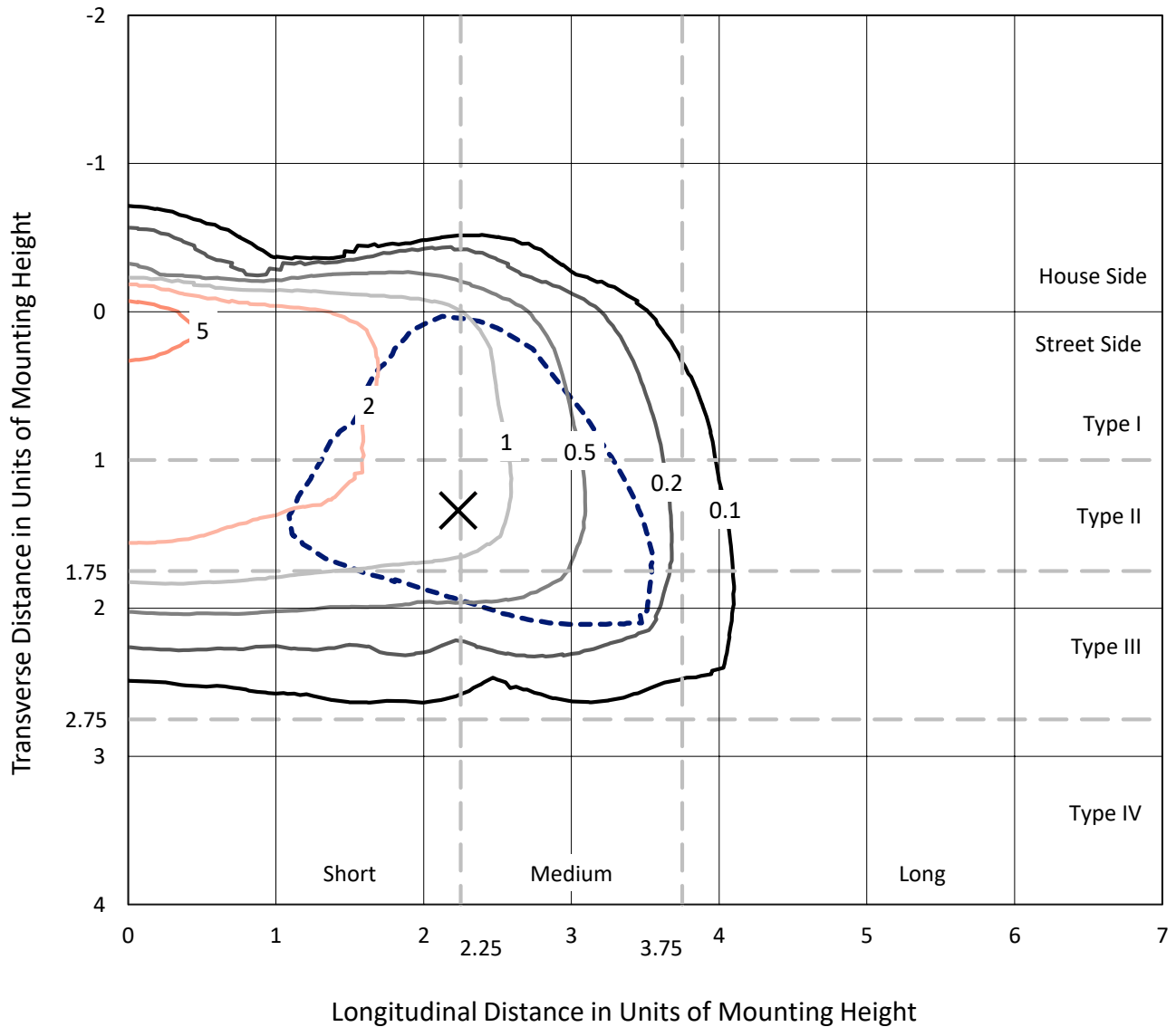
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

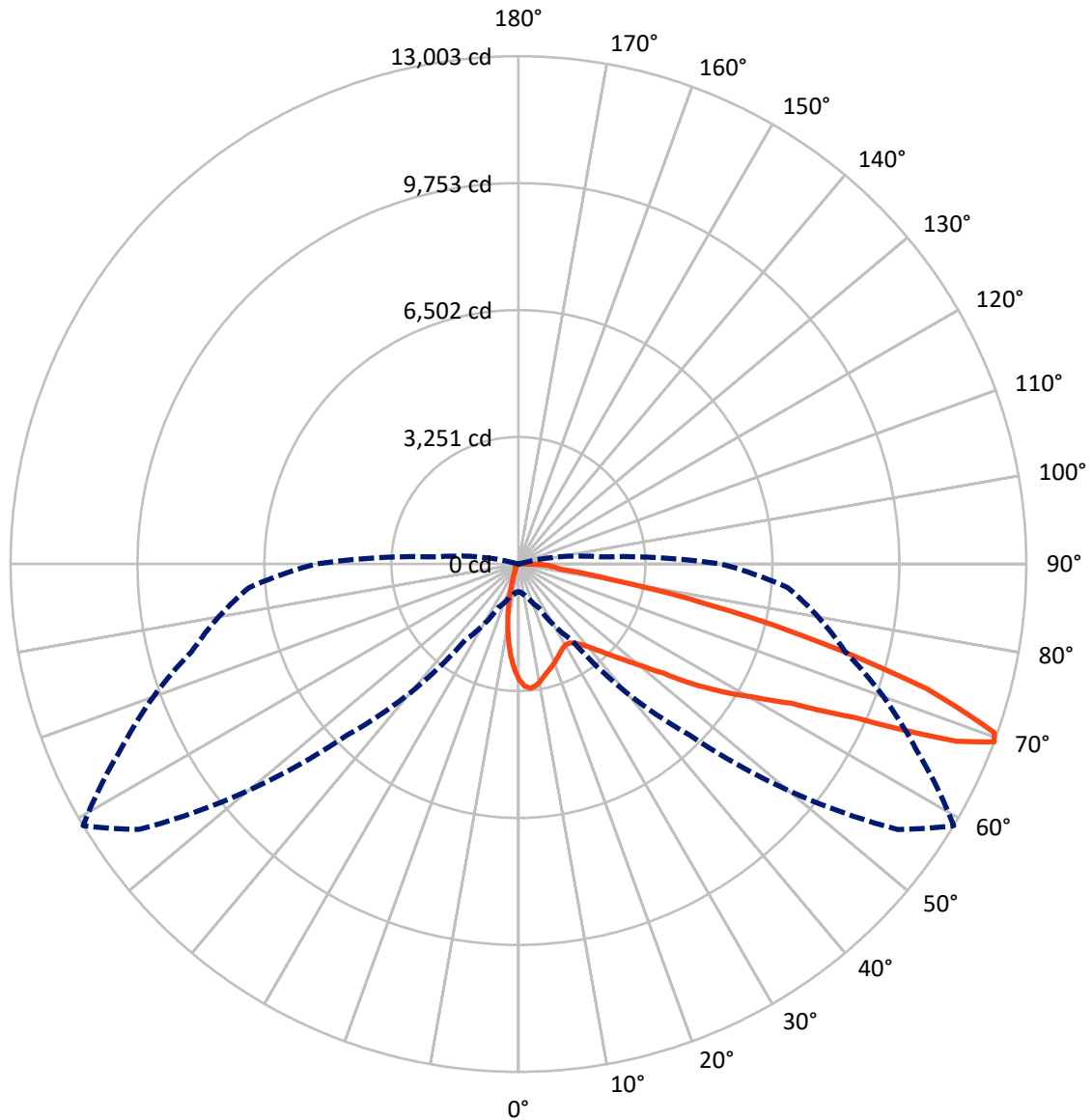


Based on 20 foot mounting height. Maximum calculated value = 7.4 fc
 Type III - Short - Non-Cutoff

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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	927.8	0.0	927.8
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	10465.2	0.0	10465.2
	% Fixture	91.9	0.0	91.9
Total	Lumens	11393.0	0.0	11393.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.7	2.1
10°-20°	497.4	4.4
20°-30°	669.3	5.9
30°-40°	971.7	8.5
40°-50°	1618.0	14.2
50°-60°	2524.1	22.2
60°-70°	3123.4	27.4
70°-80°	1582.9	13.9
80°-90°	165.6	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°	11393.0	100.0
0°-180°	11393.0	100.0



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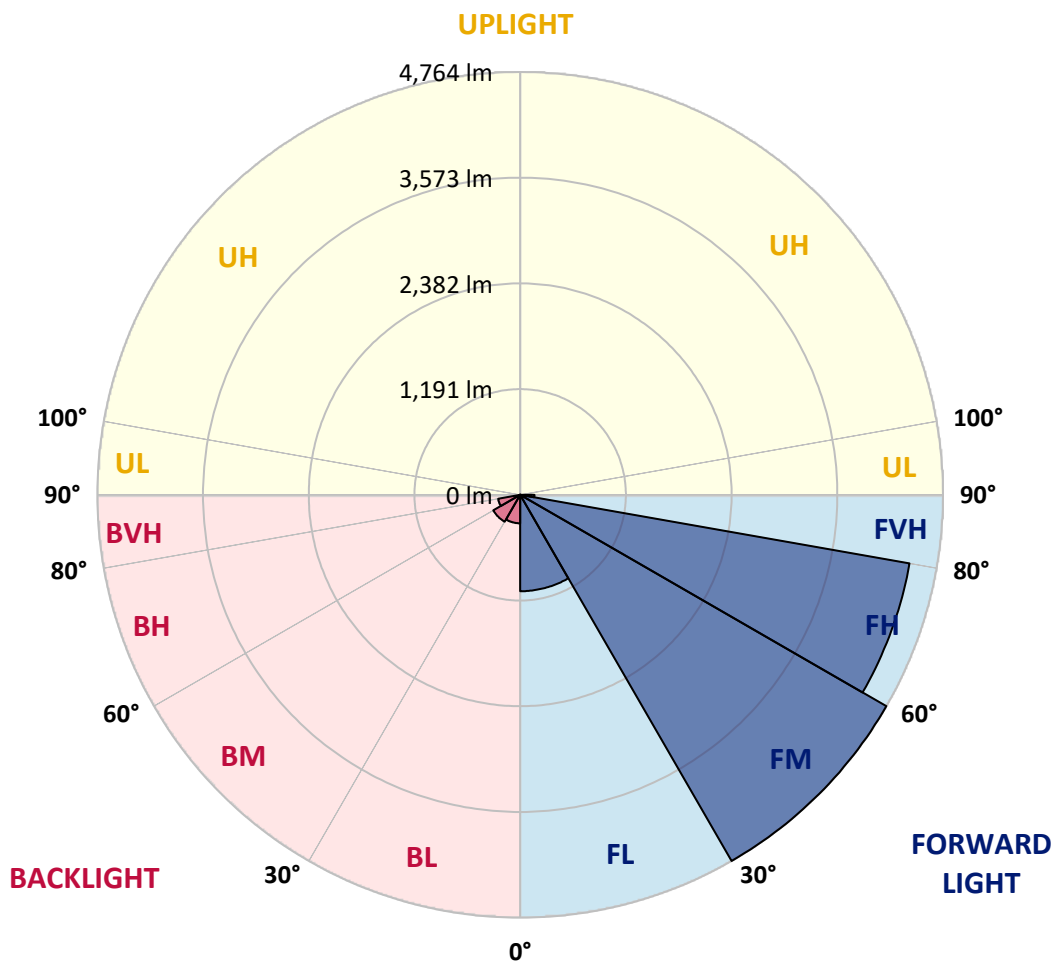
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1086.2	9.5			
FM	(30°-60°)	4764.2	41.8			
FH	(60°-80°)	4454.3	39.1			G2/5000
FVH	(80°-90°)	160.5	1.4			G2/225
BL	(0°-30°)	321.1	2.8	B1/500		
BM	(30°-60°)	349.6	3.1	B1/1000		
BH	(60°-80°)	252.0	2.2	B1/500		G1/500
BVH	(80°-90°)	5.1	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4
2.5°	3250.2	3249.0	3234.8	3228.3	3216.6	3192.2	3154.2	3134.3	3102.1	3045.9	2970.7
5°	3220.5	3236.1	3244.3	3245.1	3253.5	3244.3	3210.2	3193.6	3149.1	3058.8	2923.6
7.5°	3019.6	3025.3	3049.3	3069.7	3109.7	3147.8	3160.1	3152.8	3126.5	3030.0	2850.1
10°	2804.5	2810.1	2838.6	2865.5	2919.7	2978.3	3040.1	3053.2	3064.1	2988.6	2779.3
12.5°	2618.8	2624.6	2653.7	2689.0	2752.2	2824.4	2920.3	2941.6	2990.0	2949.4	2722.6
15°	2459.0	2461.6	2490.0	2533.7	2609.2	2701.9	2810.9	2845.0	2919.2	2921.7	2673.0
17.5°	2323.1	2329.5	2347.1	2388.8	2471.3	2586.0	2713.0	2762.0	2848.7	2898.5	2624.6
20°	2240.0	2246.4	2245.8	2269.1	2343.2	2465.5	2615.1	2673.6	2779.3	2874.7	2581.5
22.5°	2224.0	2224.0	2207.2	2203.9	2247.8	2350.2	2513.3	2584.6	2716.7	2864.4	2551.3
25°	2281.3	2278.6	2236.9	2202.7	2204.7	2265.7	2414.6	2499.6	2664.0	2871.4	2535.1
27.5°	2402.5	2399.2	2346.3	2281.3	2229.1	2228.5	2339.9	2431.3	2622.1	2904.9	2541.5
30°	2569.8	2568.7	2511.3	2429.4	2334.8	2247.8	2314.1	2397.2	2595.0	2965.4	2556.4
32.5°	2752.8	2750.8	2707.7	2621.5	2501.6	2334.8	2341.2	2410.9	2602.8	3045.9	2592.4
35°	2946.9	2943.5	2924.8	2849.5	2717.5	2495.1	2430.2	2484.2	2651.7	3166.5	2663.3
37.5°	3156.7	3160.1	3173.5	3101.3	2962.9	2720.0	2579.0	2615.7	2750.2	3330.1	2778.5
40°	3466.7	3466.1	3470.6	3375.8	3242.6	2995.0	2786.9	2798.6	2915.3	3547.2	2953.9
42.5°	4029.0	3989.8	3870.6	3677.3	3543.3	3309.5	3049.3	3037.0	3116.9	3815.8	3199.3
45°	4784.8	4701.0	4391.8	4021.4	3850.0	3663.9	3371.9	3332.7	3383.6	4138.6	3502.2
47.5°	5434.8	5347.8	4910.5	4379.5	4175.3	4000.1	3750.1	3679.3	3696.1	4500.1	3886.0
50°	5655.8	5613.2	5231.3	4691.4	4490.3	4423.4	4189.0	4102.6	4078.8	4918.1	4331.2
52.5°	5579.1	5576.0	5321.4	4893.7	4779.0	4861.5	4741.0	4641.1	4553.5	5358.9	4784.1
55°	5456.0	5472.2	5358.1	5070.8	5066.9	5261.6	5496.0	5412.9	5159.2	5837.5	5174.6
57.5°	5116.6	5185.5	5337.6	5405.9	5564.3	5763.4	6124.9	6173.8	5873.6	6204.1	5498.5
60°	4151.5	4302.9	4800.3	5454.1	6205.4	6701.4	6883.8	6925.6	6459.8	6508.7	5936.0
62.5°	2946.9	3101.3	3732.1	4838.3	6215.0	7933.8	8014.3	7850.1	7105.4	6960.5	6690.5
65°	1564.1	1683.5	2198.8	3492.4	5388.5	8219.9	9991.6	9502.0	8244.3	7848.7	7665.2
67.5°	800.1	836.2	1041.2	1709.2	3704.4	7301.2	11763.8	12108.5	10207.3	8730.2	7618.2
69°	708.0	729.3	865.3	1235.7	2372.0	6184.2	11850.3	13003.4	11235.1	8656.6	6923.0
70°	685.4	704.1	827.8	1118.4	1854.2	5186.1	11519.6	12924.8	11497.8	8377.1	6403.8
72.5°	581.8	597.8	737.1	988.3	1507.0	2574.3	9357.7	10952.2	10317.5	6978.4	4635.2
75°	389.1	442.0	707.5	926.5	1401.8	1462.5	6169.3	7914.5	7352.1	4706.8	2414.6
77.5°	93.4	100.5	199.7	737.1	1282.1	1287.2	3172.9	4920.0	4013.0	1677.7	570.7
80°	50.3	48.4	56.0	146.3	1193.7	1208.0	1428.4	2388.2	1432.9	278.3	188.0
82.5°	35.5	33.5	36.1	61.2	375.7	1100.3	1033.4	1081.0	593.9	106.9	84.5
85°	12.9	12.3	19.9	55.4	117.8	632.6	1061.7	891.6	481.2	49.0	61.8
87.5°	4.5	3.9	7.8	30.2	36.1	269.4	655.2	673.9	189.4	29.6	29.1
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°	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4	2965.4
2.5°	2939.1	2899.1	2825.7	2750.2	2680.6	2596.9	2555.0	2513.8	2496.5	2490.0	2459.8
5°	2854.0	2786.3	2630.5	2473.9	2329.5	2176.2	2075.2	1994.0	1946.2	1923.0	1886.4
7.5°	2745.2	2634.4	2397.8	2156.3	1931.4	1709.8	1545.6	1419.2	1332.2	1290.5	1252.4
10°	2639.5	2492.0	2155.7	1826.5	1521.0	1227.3	1000.4	836.2	731.3	682.9	652.1
12.5°	2544.9	2353.5	1921.9	1505.0	1121.6	777.7	546.9	416.2	351.1	328.5	317.5
15°	2460.4	2225.9	1700.9	1199.6	759.5	444.5	299.0	254.5	244.2	244.2	242.8
17.5°	2380.4	2100.9	1487.5	912.8	476.7	271.9	227.4	221.6	221.6	224.1	224.1
20°	2303.8	1981.7	1281.3	655.2	300.2	215.7	205.6	204.2	205.6	208.7	208.7
22.5°	2238.0	1873.5	1088.8	449.6	222.9	194.5	189.4	187.4	188.0	190.0	191.3
25°	2189.1	1782.0	907.2	304.7	191.9	177.1	171.5	168.1	165.6	165.6	166.8
27.5°	2158.3	1704.8	731.3	221.6	172.6	161.1	151.9	146.9	141.0	137.9	139.1
30°	2135.6	1631.2	566.2	181.0	154.7	143.0	131.5	123.1	114.7	110.8	112.2
32.5°	2127.2	1571.9	423.3	159.7	138.5	125.6	111.4	100.5	91.5	88.2	88.9
35°	2149.9	1524.9	309.9	144.3	125.6	109.4	93.4	81.1	74.1	72.2	72.8
37.5°	2209.2	1499.8	231.9	131.5	114.1	96.0	78.0	66.3	61.8	61.8	62.4
40°	2321.1	1499.2	186.3	122.5	103.8	83.1	64.4	56.0	53.4	54.8	55.4
42.5°	2484.8	1533.3	162.3	114.1	94.8	70.8	53.4	47.6	47.0	48.4	49.0
45°	2708.3	1595.7	149.4	106.9	85.0	59.3	45.1	41.2	41.2	43.1	43.9
47.5°	2982.2	1687.2	138.5	99.9	75.3	49.5	38.6	36.1	36.7	38.6	39.2
50°	3312.0	1802.7	127.6	92.1	68.3	41.2	33.5	31.6	32.2	34.7	35.5
52.5°	3687.7	1957.9	118.6	85.0	59.3	34.1	28.3	27.1	28.3	31.0	31.6
55°	4009.7	2097.0	107.7	79.2	47.6	28.3	23.2	23.2	24.6	27.7	28.3
57.5°	4319.6	2242.5	97.9	68.3	37.5	22.6	19.3	19.9	21.8	25.2	25.7
60°	4774.5	2489.3	86.4	57.3	28.3	17.9	16.2	16.8	19.3	22.6	23.2
62.5°	5546.9	2864.9	74.7	47.6	21.8	14.2	12.9	14.2	17.4	21.3	21.8
65°	6244.0	3017.7	61.2	40.0	16.8	10.9	10.9	12.9	16.8	20.7	21.3
67.5°	5855.5	2540.2	47.6	31.6	12.9	8.4	9.0	12.3	16.2	20.7	21.3
69°	5178.5	2077.1	40.6	25.2	10.9	7.8	8.4	12.3	16.2	19.9	20.7
70°	4650.8	1753.7	36.1	21.3	9.8	7.8	8.4	11.5	16.2	19.9	20.7
72.5°	3115.0	947.0	29.1	15.4	9.0	7.0	7.0	11.5	15.4	19.3	19.9
75°	1338.6	261.6	23.2	10.9	7.8	6.4	6.4	10.9	14.8	18.7	19.9
77.5°	244.8	66.3	18.7	9.8	7.8	6.4	5.9	10.3	14.2	17.9	18.7
80°	97.3	32.8	14.8	8.4	7.0	5.9	5.1	9.8	13.5	17.4	17.9
82.5°	58.7	18.7	12.3	7.8	7.0	5.1	4.5	8.4	12.9	16.8	17.4
85°	47.6	12.9	9.8	7.8	6.4	5.1	3.9	7.8	11.5	16.2	16.8
87.5°	23.2	9.0	9.0	7.0	6.4	5.1	3.9	7.0	10.9	15.4	16.2
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)