

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: STREETWORKS

Report Number: P836114

Luminaire Tested: **ARCH3-140-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13948 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 142.5
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: 24 FT



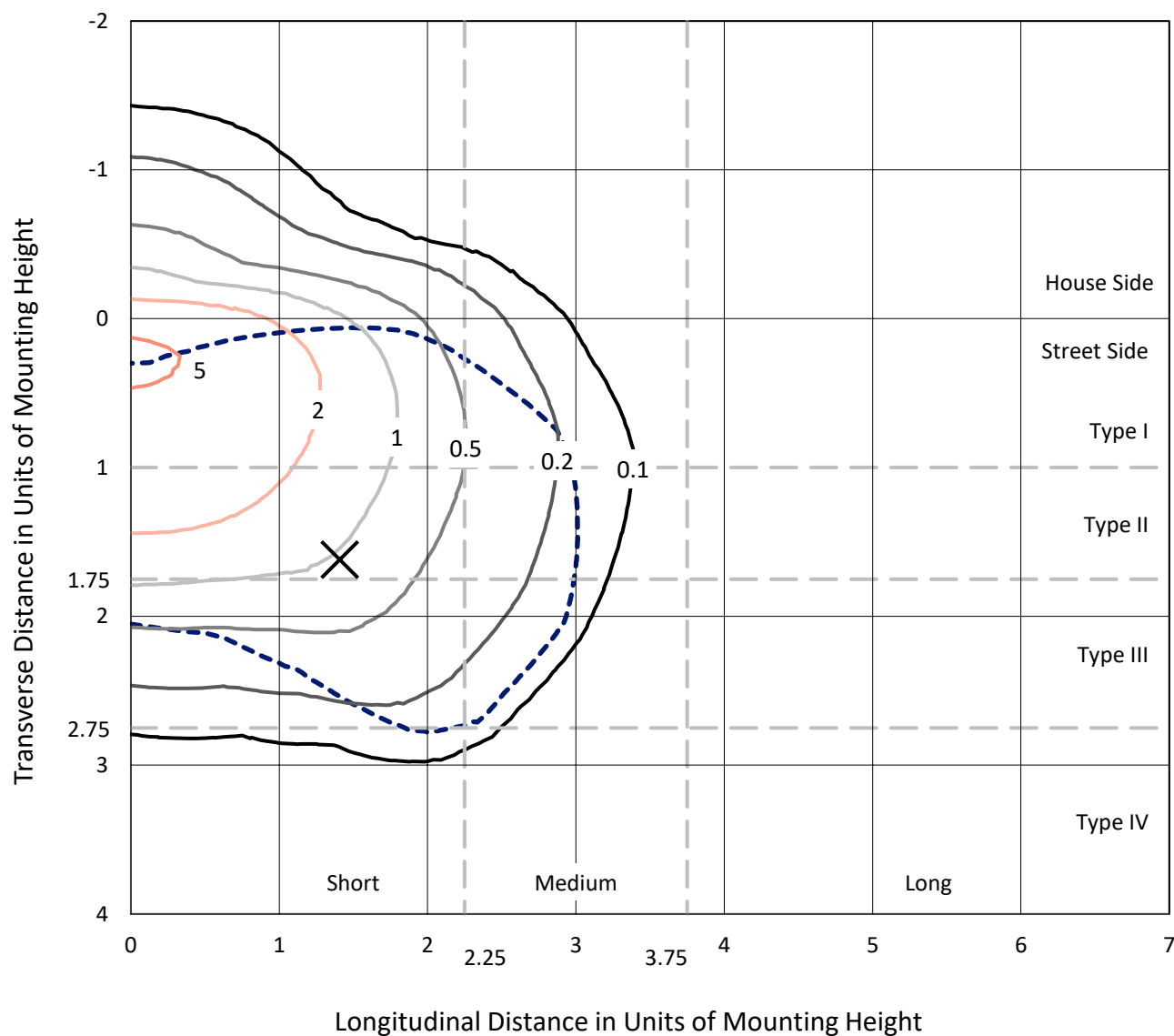
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

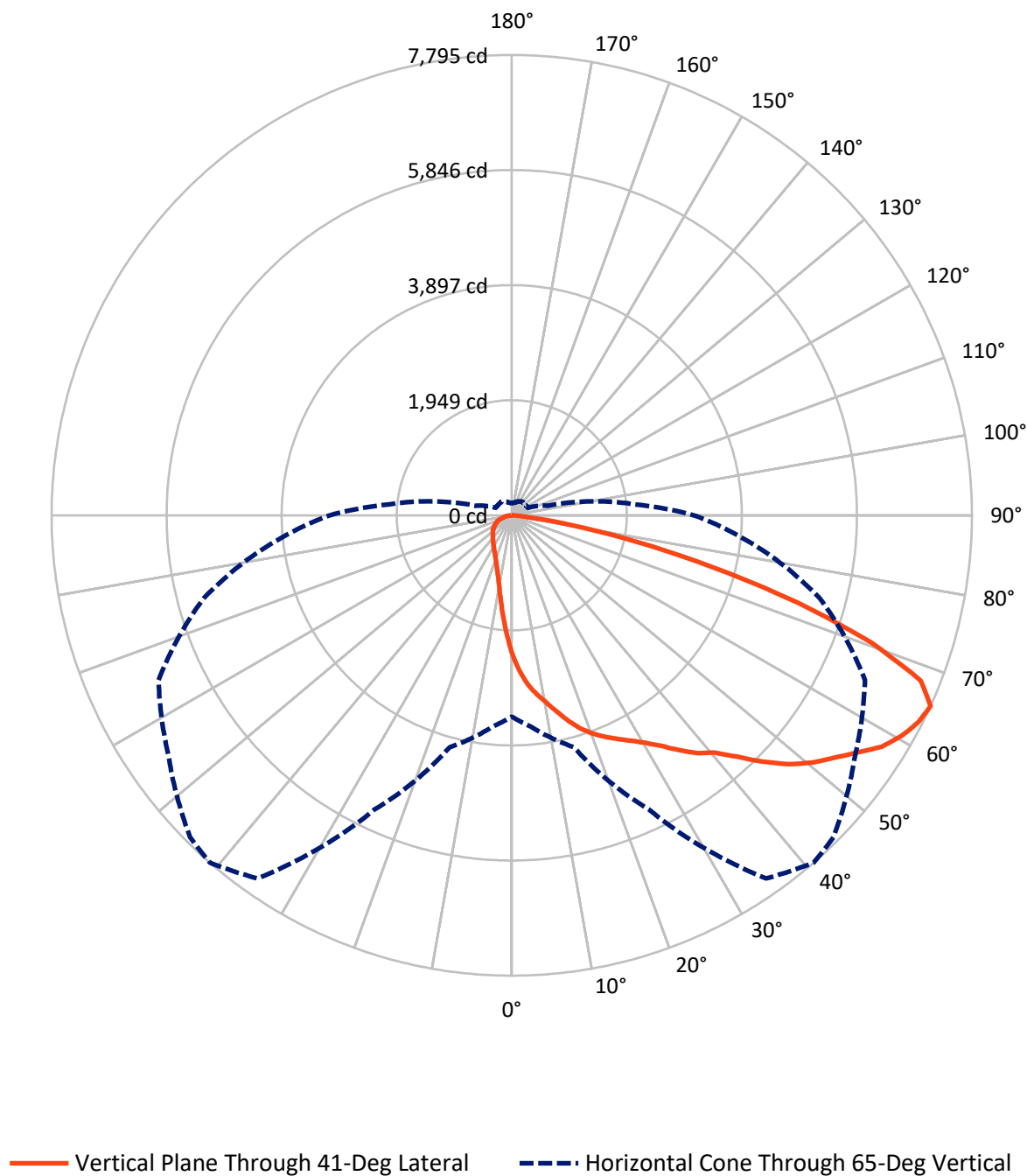


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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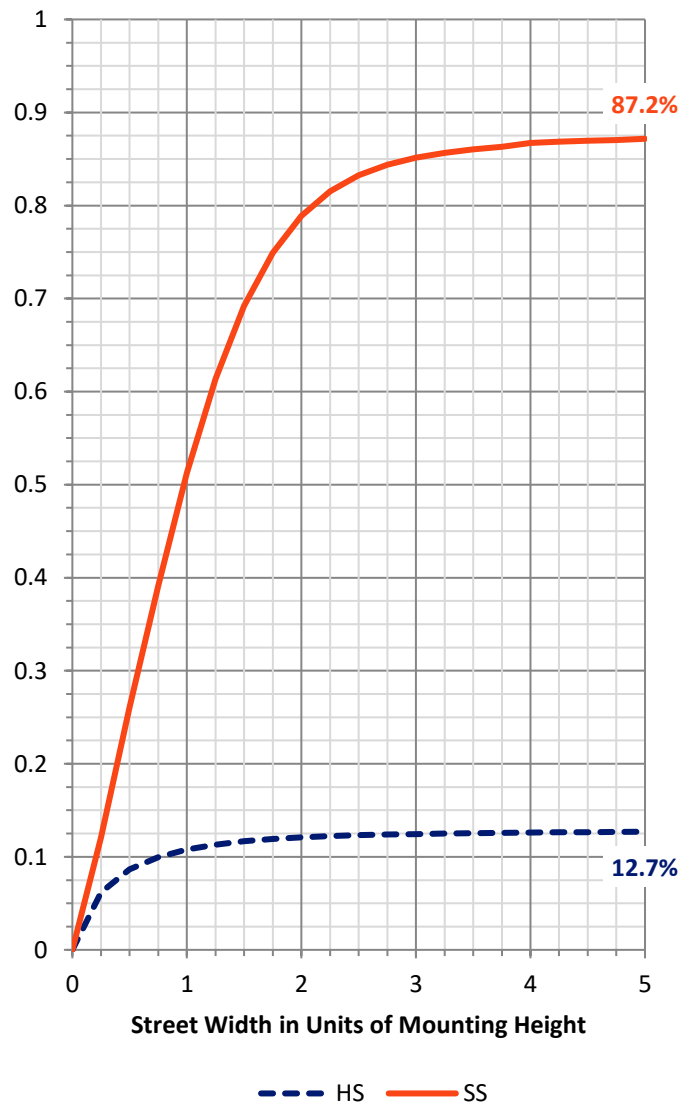
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1790.7	0.0	1790.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12157.3	0.0	12157.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	13948.0	0.0	13948.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.4	1.6
10°-20°	664.0	4.8
20°-30°	1142.3	8.2
30°-40°	1732.5	12.4
40°-50°	2538.2	18.2
50°-60°	3205.2	23.0
60°-70°	3005.5	21.5
70°-80°	1339.5	9.6
80°-90°	99.2	0.7
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°	13948.0	100.0
0°-180°	13948.0	100.0

Coefficient of Utilization



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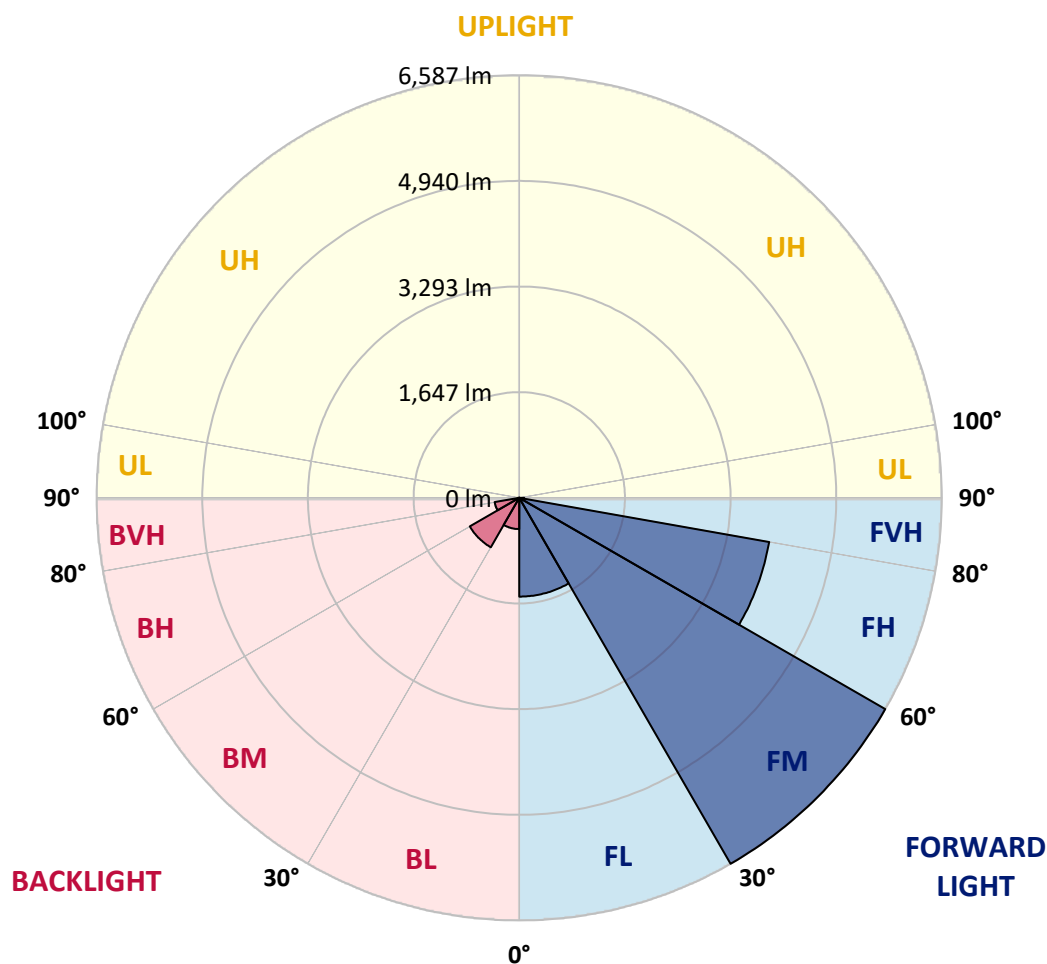
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1540.4	11.0			
FM	(30°-60°)	6586.8	47.2			
FH	(60°-80°)	3956.0	28.4			G2/5000
FVH	(80°-90°)	74.1	0.5			G1/100
BL	(0°-30°)	487.4	3.5	B1/500		
BM	(30°-60°)	889.2	6.4	B1/1000		
BH	(60°-80°)	389.0	2.8	B1/500		G1/500
BVH	(80°-90°)	25.1	0.2			G1/100
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°	41°	45°	55°	65°	75°	85°
0°	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7
2.5°	2741.4	2732.6	2726.7	2694.3	2694.3	2650.2	2653.2	2612.0	2562.0	2482.6	2397.3
5°	3000.2	2988.5	2973.8	2941.4	2929.7	2885.5	2879.6	2820.8	2735.5	2597.3	2444.3
7.5°	3226.7	3215.0	3194.4	3147.3	3115.0	3062.0	3047.3	2970.8	2876.7	2706.1	2491.4
10°	3432.6	3423.8	3397.3	3338.5	3294.4	3229.7	3203.2	3100.3	2982.6	2794.3	2529.6
12.5°	3641.5	3629.7	3594.4	3544.4	3491.5	3415.0	3382.6	3250.3	3100.3	2891.4	2585.5
15°	3835.6	3818.0	3791.5	3738.5	3691.5	3617.9	3582.6	3426.8	3244.4	3000.2	2659.0
17.5°	3962.1	3947.4	3923.9	3894.4	3856.2	3800.3	3765.0	3612.1	3388.5	3106.1	2735.5
20°	4038.6	4032.7	4023.9	4006.2	3988.6	3950.3	3923.9	3779.7	3544.4	3209.1	2809.1
22.5°	4097.4	4091.5	4088.6	4088.6	4091.5	4076.8	4059.2	3935.6	3694.4	3317.9	2876.7
25°	4188.6	4185.6	4179.8	4173.9	4194.5	4197.4	4191.5	4106.2	3882.7	3462.0	2962.0
27.5°	4315.1	4306.2	4294.5	4288.6	4309.2	4323.9	4335.7	4276.8	4082.7	3609.1	3059.1
30°	4509.2	4482.7	4453.3	4432.7	4447.4	4471.0	4497.4	4462.1	4288.6	3791.5	3159.1
32.5°	4738.6	4706.3	4638.6	4600.4	4638.6	4656.3	4676.9	4659.2	4503.3	3988.6	3259.1
35°	5018.1	4979.8	4909.2	4853.3	4921.0	4882.8	4873.9	4856.3	4706.3	4182.7	3370.9
37.5°	5482.8	5426.9	5315.1	5191.6	5191.6	5109.2	5076.9	5023.9	4888.6	4356.2	3479.7
40°	6021.1	5947.5	5803.4	5621.1	5453.4	5282.8	5262.2	5224.0	5103.4	4556.3	3603.2
42.5°	6612.3	6471.1	6271.1	6050.5	5779.9	5585.8	5538.7	5429.9	5312.2	4759.2	3726.8
45°	7268.2	6974.1	6682.9	6571.1	6124.0	5947.5	5859.3	5662.2	5529.9	4971.0	3856.2
47.5°	7374.1	7144.7	6950.6	6932.9	6444.6	6297.6	6197.6	5915.2	5765.2	5197.5	3991.5
50°	7315.3	7177.1	7197.7	7127.1	6680.0	6582.9	6506.4	6185.8	5997.6	5415.2	4115.0
52.5°	7068.2	7144.7	7262.4	7132.9	6903.5	6824.1	6785.9	6477.0	6215.2	5615.2	4226.8
55°	6774.1	6827.0	7080.0	7238.8	7162.4	7091.8	7056.5	6815.3	6429.9	5782.8	4329.8
57.5°	6344.6	6321.1	6600.5	7221.2	7433.0	7391.8	7353.5	7147.6	6630.0	5903.4	4394.5
60°	5700.5	5650.5	6003.4	6868.2	7521.2	7585.9	7568.3	7368.3	6782.9	5900.5	4368.0
62.5°	4585.7	4709.2	5197.5	6291.7	7559.4	7724.2	7691.8	7385.9	6832.9	5729.9	4200.3
65°	3409.1	3585.6	4065.0	5497.5	7506.5	7794.8	7706.5	7097.6	6600.5	5391.6	3832.7
67.5°	2456.1	2612.0	2962.0	4523.9	6997.6	7471.2	7368.3	6627.0	6065.2	4912.2	3323.8
70°	1679.6	1791.3	2029.6	3294.4	5974.0	6459.4	6394.6	5924.0	5221.0	4341.5	2700.2
72.5°	1185.4	1232.5	1385.4	2173.7	4538.6	5068.1	4991.6	4873.9	4194.5	3609.1	2100.2
75°	888.3	917.7	1000.1	1406.0	3062.0	3512.1	3441.5	3509.1	3132.6	2732.6	1529.5
77.5°	335.3	364.7	567.7	897.1	1811.9	2156.1	2085.5	2126.6	1741.3	1379.5	761.8
80°	91.2	97.1	188.3	426.5	823.6	1073.6	976.6	838.3	647.1	635.3	403.0
82.5°	38.2	44.1	85.3	229.4	294.1	294.1	247.1	305.9	247.1	297.1	194.1
85°	14.7	17.6	20.6	58.8	38.2	41.2	44.1	58.8	50.0	61.8	44.1
87.5°	0.0	0.0	0.0	2.9	2.9	5.9	2.9	5.9	8.8	8.8	8.8
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°	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7	2376.7
2.5°	2362.0	2329.6	2282.5	2206.1	2126.6	2082.5	2026.6	2017.8	1959.0	1953.1	1929.6
5°	2376.7	2309.0	2188.4	2041.3	1897.2	1785.4	1703.1	1659.0	1573.7	1573.7	1550.1
7.5°	2388.4	2282.5	2088.4	1870.7	1673.7	1523.7	1411.9	1364.8	1288.3	1282.5	1264.8
10°	2391.4	2250.2	1979.6	1697.2	1456.0	1303.0	1194.2	1141.3	1073.6	1067.7	1056.0
12.5°	2414.9	2232.5	1882.5	1547.2	1300.1	1135.4	1029.5	985.4	932.4	926.5	914.8
15°	2453.1	2232.5	1800.1	1420.7	1161.9	1008.9	917.7	876.5	838.3	832.4	826.5
17.5°	2491.4	2226.7	1717.8	1303.0	1047.1	908.9	829.5	797.1	767.7	764.8	758.9
20°	2526.7	2223.7	1635.4	1203.0	958.9	826.5	764.8	735.4	711.8	711.8	708.9
22.5°	2562.0	2217.8	1556.0	1108.9	882.4	764.8	711.8	679.5	661.8	661.8	658.9
25°	2614.9	2217.8	1482.5	1029.5	820.7	717.7	664.8	641.2	626.5	623.6	623.6
27.5°	2676.7	2235.5	1417.8	958.9	767.7	670.6	629.5	605.9	588.3	582.4	585.3
30°	2744.3	2250.2	1358.9	897.1	717.7	635.3	591.2	567.7	550.0	544.2	547.1
32.5°	2812.0	2267.8	1306.0	841.2	667.7	603.0	558.9	532.4	514.7	511.8	511.8
35°	2885.5	2285.5	1253.0	794.2	626.5	570.6	529.5	500.0	488.3	482.4	485.3
37.5°	2959.1	2314.9	1203.0	750.1	597.1	541.2	503.0	473.6	464.7	461.8	461.8
40°	3047.3	2359.0	1182.5	720.6	570.6	514.7	482.4	453.0	444.2	444.2	444.2
42.5°	3120.8	2394.3	1164.8	688.3	550.0	491.2	461.8	438.3	432.4	429.4	432.4
45°	3194.4	2426.7	1141.3	658.9	523.6	467.7	444.2	420.6	414.7	414.7	414.7
47.5°	3267.9	2444.3	1108.9	629.5	500.0	447.1	426.5	405.9	400.0	400.0	400.0
50°	3326.7	2459.0	1061.9	597.1	473.6	429.4	408.9	388.3	382.4	382.4	382.4
52.5°	3385.6	2462.0	1011.8	558.9	447.1	408.9	391.2	370.6	364.7	361.8	361.8
55°	3438.5	2459.0	953.0	514.7	417.7	385.3	370.6	353.0	341.2	329.4	335.3
57.5°	3476.8	2456.1	885.4	470.6	388.3	361.8	355.9	332.4	308.8	279.4	285.3
60°	3462.0	2423.7	811.8	414.7	355.9	338.3	338.3	305.9	264.7	250.0	253.0
62.5°	3367.9	2332.5	735.4	355.9	323.6	314.7	311.8	276.5	244.1	229.4	232.4
65°	3085.5	2103.1	623.6	303.0	291.2	288.3	288.3	255.9	226.5	208.8	211.8
67.5°	2656.1	1764.9	508.9	255.9	258.8	264.7	264.7	235.3	205.9	188.3	191.2
70°	2129.6	1379.5	405.9	220.6	223.5	232.4	238.3	211.8	185.3	167.7	167.7
72.5°	1603.1	1047.1	326.5	185.3	200.0	200.0	208.8	188.3	161.8	144.1	147.1
75°	1161.9	750.1	258.8	155.9	173.5	170.6	170.6	158.8	138.2	126.5	126.5
77.5°	550.0	394.2	205.9	111.8	135.3	132.4	135.3	126.5	117.7	105.9	108.8
80°	270.6	194.1	132.4	79.4	94.1	97.1	105.9	100.0	97.1	88.2	88.2
82.5°	129.4	76.5	61.8	55.9	64.7	67.7	73.5	73.5	76.5	70.6	70.6
85°	35.3	20.6	26.5	35.3	41.2	44.1	50.0	52.9	52.9	50.0	52.9
87.5°	8.8	8.8	11.8	17.6	20.6	23.5	26.5	26.5	11.8	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)