

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: P836416

Luminaire Tested: **ARCH3-180-740-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-740-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17300 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180.5
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



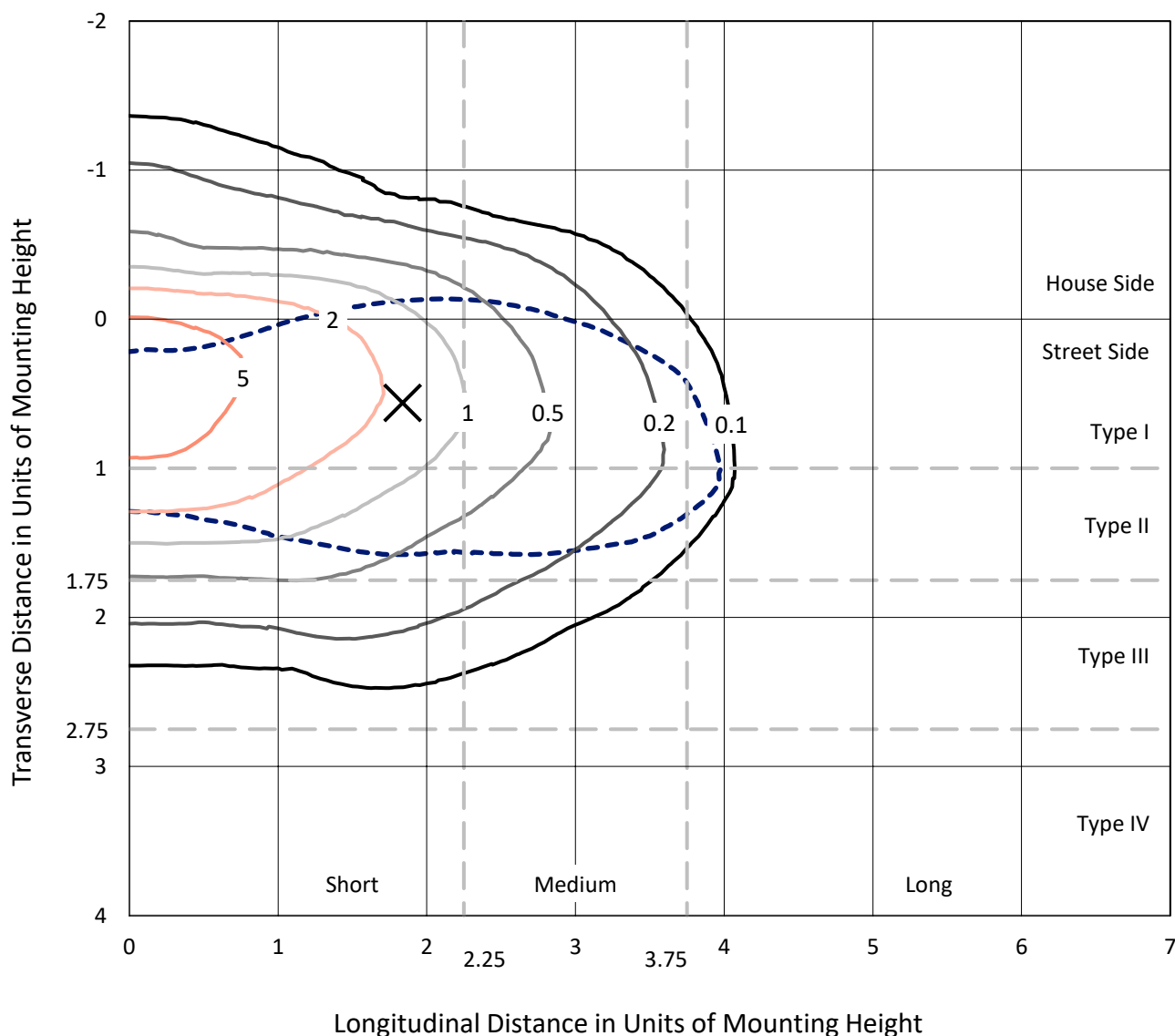
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

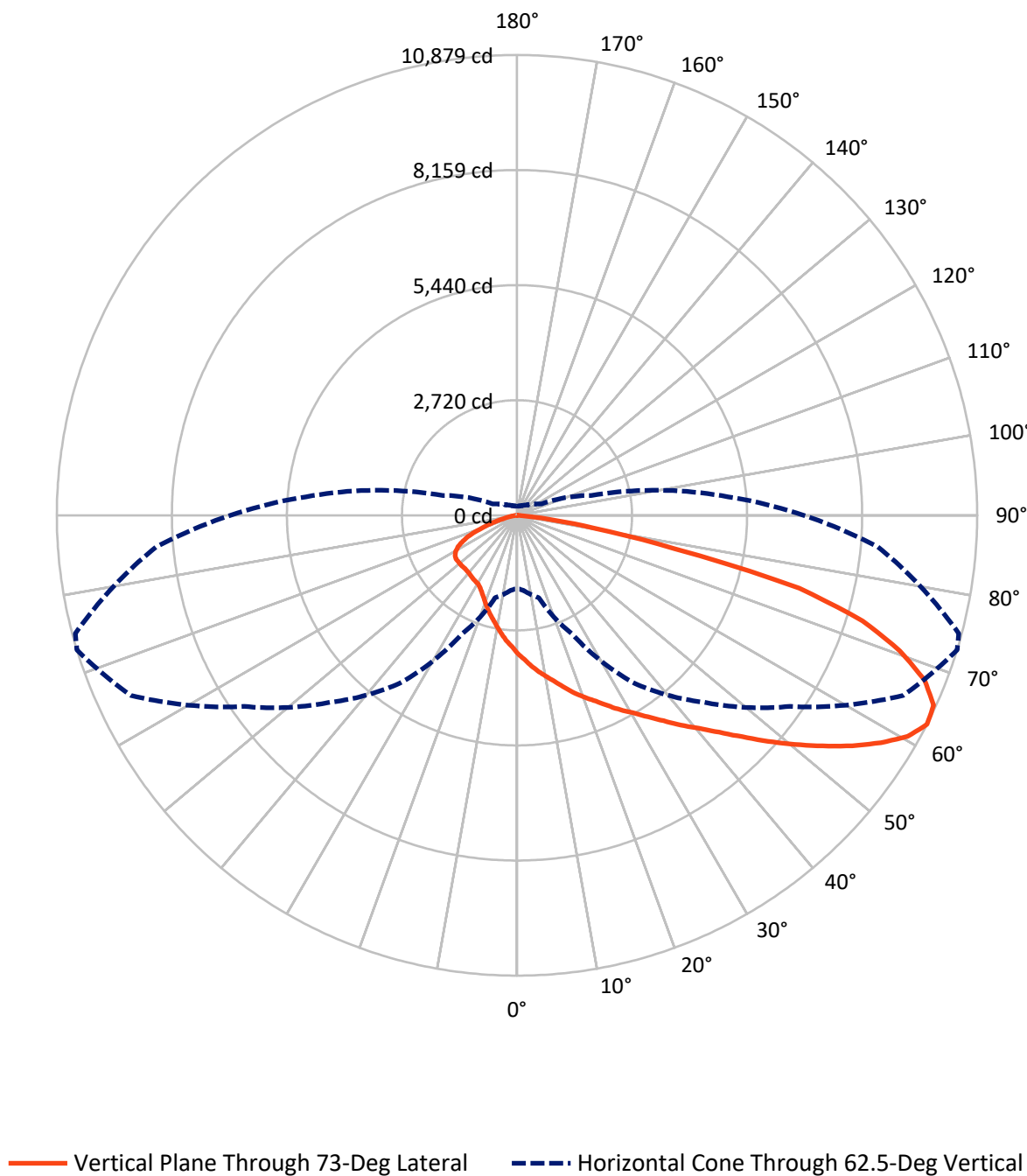


Based on 25 foot mounting height. Maximum calculated value = 8.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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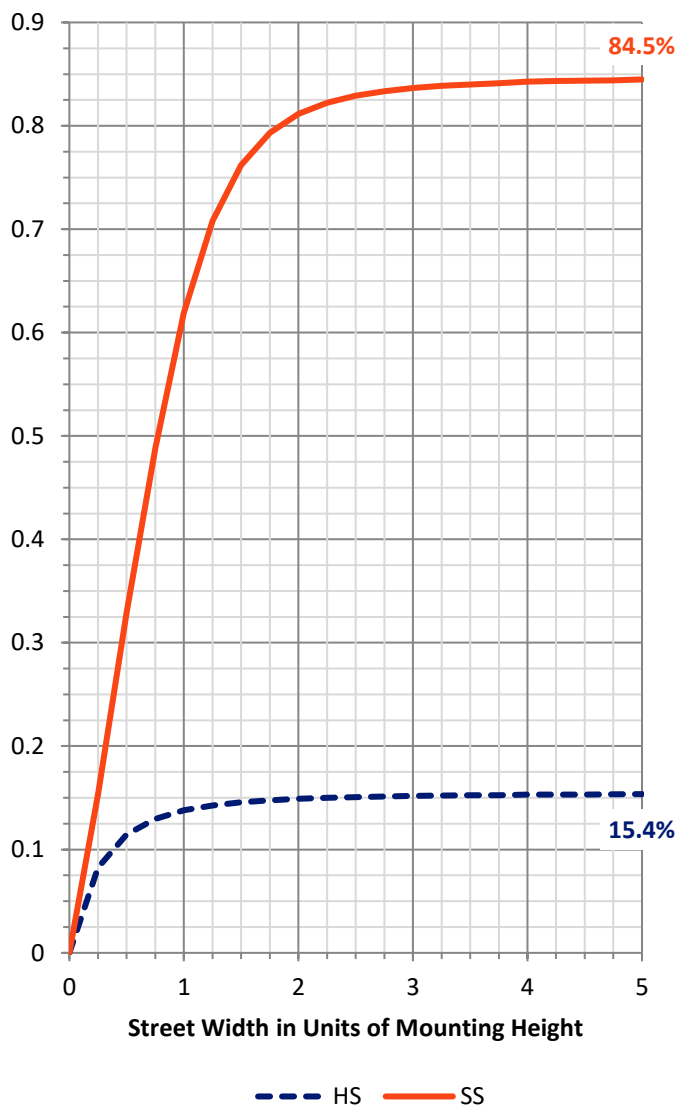
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2681.8	0.0	2681.8
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	14618.3	0.0	14618.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	17300.0	0.0	17300.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.5	1.8
10°-20°	954.9	5.5
20°-30°	1589.5	9.2
30°-40°	2398.3	13.9
40°-50°	3352.2	19.4
50°-60°	3702.8	21.4
60°-70°	3225.6	18.6
70°-80°	1629.4	9.4
80°-90°	130.8	0.8
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°	17300.0	100.0
0°-180°	17300.0	100.0

Coefficient of Utilization



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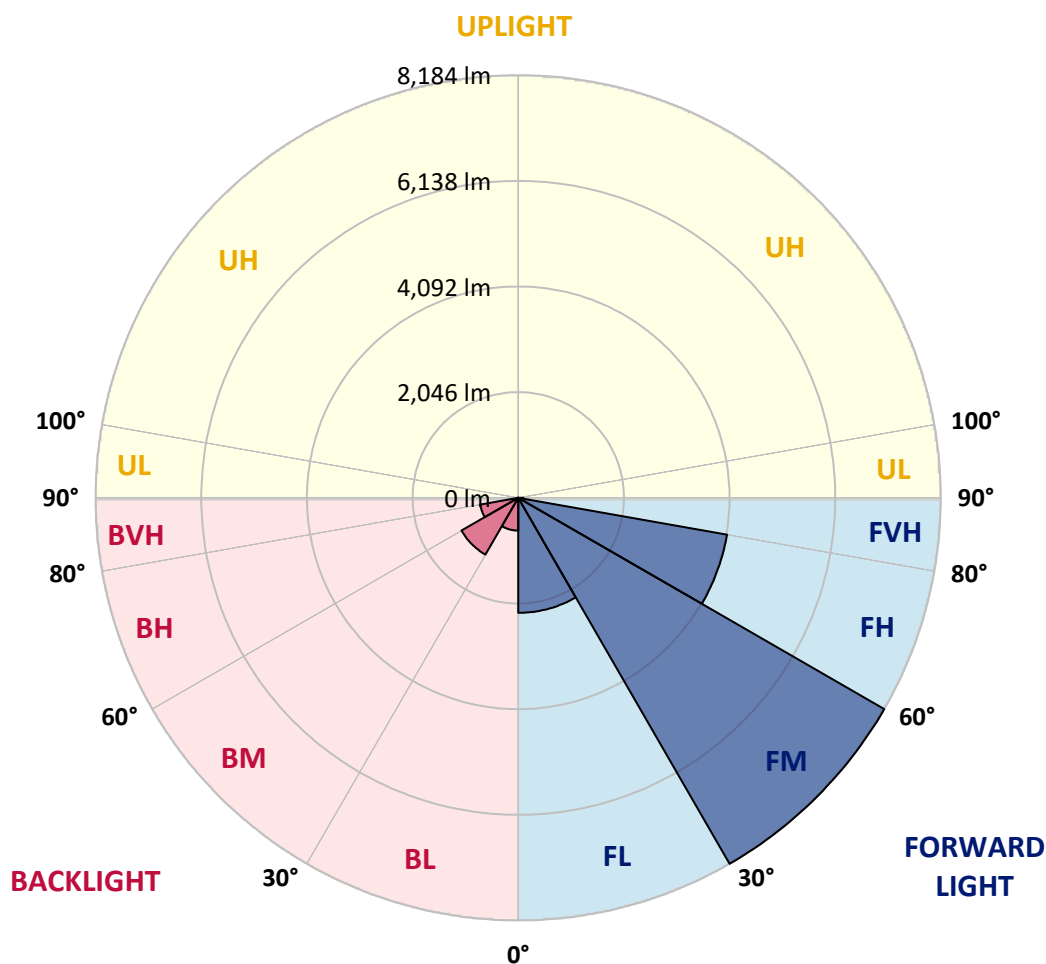
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2227.0	12.9			
FM	(30°-60°)	8183.5	47.3			
FH	(60°-80°)	4106.5	23.7			G2/5000
FVH	(80°-90°)	101.2	0.6			G2/225
BL	(0°-30°)	633.9	3.7	B2/1000		
BM	(30°-60°)	1269.8	7.3	B2/2500		
BH	(60°-80°)	748.5	4.3	B2/1000		G2/1000
BVH	(80°-90°)	29.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8
2.5°	3728.1	3769.6	3747.0	3762.1	3686.7	3637.7	3581.1	3471.8	3411.5	3404.0	3332.3
5°	4274.7	4320.0	4282.3	4271.0	4139.0	4025.9	3897.8	3705.5	3577.4	3554.7	3396.4
7.5°	4821.3	4862.8	4817.6	4783.6	4606.5	4406.7	4218.2	3935.5	3735.7	3698.0	3449.2
10°	5205.8	5243.5	5209.6	5175.7	4991.0	4787.4	4519.8	4150.3	3878.9	3818.6	3483.1
12.5°	5496.1	5518.7	5503.6	5473.5	5300.1	5081.4	4825.1	4391.6	4041.0	3965.6	3535.9
15°	5733.6	5771.3	5752.4	5729.8	5563.9	5345.3	5100.3	4644.2	4229.5	4135.3	3615.1
17.5°	5891.9	5918.3	5922.1	5922.1	5775.0	5560.2	5322.7	4874.1	4418.0	4297.4	3690.4
20°	5963.5	5993.7	6012.5	6042.7	5922.1	5737.3	5496.1	5070.1	4595.2	4459.4	3762.1
22.5°	5997.5	6023.8	6072.8	6140.7	6042.7	5888.1	5665.7	5251.1	4772.3	4629.1	3845.0
25°	6023.8	6057.8	6129.4	6257.6	6189.7	6057.8	5865.5	5458.4	4983.4	4836.4	3965.6
27.5°	6095.5	6136.9	6204.8	6359.3	6276.4	6212.3	6076.6	5680.8	5205.8	5055.0	4112.6
30°	6344.3	6378.2	6374.4	6472.4	6370.6	6351.8	6257.6	5895.7	5420.7	5269.9	4286.0
32.5°	6796.6	6830.5	6747.6	6709.9	6487.5	6491.3	6453.6	6125.6	5677.0	5522.5	4485.8
35°	7282.9	7320.6	7211.3	7147.2	6774.0	6664.7	6683.5	6412.1	5963.5	5809.0	4734.6
37.5°	7716.4	7761.6	7667.4	7573.1	7196.2	6943.6	6939.9	6732.5	6291.5	6133.2	5009.8
40°	7953.9	8006.7	8063.2	8010.4	7614.6	7335.7	7215.0	7060.5	6615.7	6453.6	5307.6
42.5°	8067.0	8214.0	8315.8	8281.8	7957.6	7674.9	7531.7	7403.5	7011.5	6853.2	5662.0
45°	7750.3	7754.1	7969.0	8153.7	8093.4	7904.9	7878.5	7788.0	7463.8	7313.0	6061.5
47.5°	7354.5	7324.4	7475.1	7803.1	7972.7	8021.7	8176.3	8214.0	7980.3	7829.5	6468.7
50°	6404.6	6423.4	6913.5	7384.7	7716.4	8033.0	8387.4	8651.3	8511.8	8368.5	6898.4
52.5°	5209.6	5254.8	5816.5	6853.2	7377.1	7920.0	8511.8	9088.5	9054.6	8918.9	7328.1
55°	4176.7	4248.4	4843.9	5967.3	6943.6	7667.4	8564.6	9488.1	9616.3	9491.9	7750.3
57.5°	3192.9	3268.3	3769.6	4923.1	6389.5	7256.5	8526.9	9838.7	10140.3	10061.1	8138.6
60°	2405.0	2480.4	2800.8	3992.0	5695.9	6796.6	8338.4	10068.6	10611.5	10528.5	8421.3
62.5°	1722.7	1783.0	2020.5	3106.2	4851.5	6250.0	7874.7	10072.4	10879.1	10811.2	8557.0
65°	1240.2	1240.2	1432.5	2216.5	4059.9	5594.1	7173.6	9608.7	10822.6	10803.7	8462.8
67.5°	893.4	900.9	1055.5	1549.3	3238.1	4798.7	6265.1	8783.2	10385.3	10479.5	8123.5
70°	633.3	652.1	723.8	1081.9	2446.5	3788.5	5292.5	7701.3	9597.4	9763.3	7467.6
72.5°	490.0	501.4	550.4	753.9	1786.8	2815.9	4218.2	6495.0	8545.7	8734.2	6574.2
75°	377.0	388.3	426.0	554.1	1281.7	1975.3	2996.8	5040.0	6890.8	7226.3	5281.2
77.5°	275.2	290.3	316.6	403.3	746.4	1255.3	1817.0	2834.7	3803.5	3961.9	2766.9
80°	128.2	147.0	184.7	260.1	403.3	591.8	644.6	1093.2	1828.3	1911.2	1500.3
82.5°	71.6	90.5	105.5	158.3	203.6	211.1	218.6	275.2	689.8	761.5	629.5
85°	33.9	45.2	49.0	67.9	67.9	60.3	71.6	52.8	113.1	135.7	131.9
87.5°	0.0	3.8	7.5	18.8	15.1	11.3	11.3	11.3	11.3	15.1	11.3
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°	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8	3275.8
2.5°	3298.4	3249.4	3136.3	3038.3	2974.2	2917.7	2842.3	2808.4	2748.0	2759.4	2725.4
5°	3317.3	3226.8	3027.0	2842.3	2706.6	2586.0	2454.0	2378.6	2295.7	2288.2	2261.8
7.5°	3328.6	3189.1	2902.6	2642.5	2435.2	2250.5	2073.3	1975.3	1873.5	1850.9	1828.3
10°	3317.3	3132.5	2774.4	2435.2	2160.0	1930.0	1730.3	1605.9	1500.3	1473.9	1451.3
12.5°	3328.6	3102.4	2653.8	2242.9	1915.0	1654.9	1428.7	1300.5	1202.5	1176.1	1161.0
15°	3355.0	3083.5	2552.0	2069.5	1696.3	1406.1	1183.7	1074.3	995.2	968.8	961.3
17.5°	3377.6	3064.7	2442.7	1899.9	1477.7	1187.4	995.2	904.7	836.9	810.5	802.9
20°	3407.7	3038.3	2333.4	1737.8	1285.4	1014.0	844.4	765.2	712.5	693.6	689.8
22.5°	3434.1	3019.5	2231.6	1575.7	1108.3	874.5	731.3	667.2	629.5	610.7	610.7
25°	3502.0	3027.0	2144.9	1424.9	976.3	765.2	644.6	595.6	565.4	554.1	554.1
27.5°	3581.1	3057.2	2077.1	1296.7	863.2	682.3	584.3	542.8	527.7	512.7	516.4
30°	3694.2	3117.5	2031.8	1191.2	780.3	618.2	535.3	505.1	490.0	486.3	486.3
32.5°	3837.5	3215.5	2028.1	1123.3	720.0	569.2	501.4	475.0	467.4	463.7	463.7
35°	4007.1	3302.2	2005.4	1093.2	682.3	535.3	475.0	456.1	452.4	452.4	452.4
37.5°	4210.7	3445.4	1990.4	1051.7	663.5	516.4	456.1	441.0	441.0	441.0	441.0
40°	4421.8	3562.3	1967.7	1014.0	655.9	505.1	444.8	426.0	426.0	426.0	426.0
42.5°	4674.3	3731.9	1960.2	995.2	644.6	497.6	429.7	407.1	410.9	410.9	414.7
45°	4979.7	3924.2	1956.4	976.3	640.8	490.0	414.7	388.3	392.0	388.3	388.3
47.5°	5288.8	4146.6	1967.7	965.0	637.1	482.5	403.3	369.4	369.4	365.7	365.7
50°	5613.0	4350.1	1975.3	953.7	629.5	467.4	384.5	354.3	346.8	339.3	343.0
52.5°	5918.3	4538.6	1979.0	934.9	606.9	444.8	369.4	335.5	324.2	312.9	316.6
55°	6223.6	4719.6	1986.6	912.2	576.8	422.2	350.6	316.6	301.6	286.5	286.5
57.5°	6498.8	4877.9	1967.7	855.7	542.8	399.6	331.7	294.0	271.4	256.3	256.3
60°	6687.3	4991.0	1911.2	772.8	497.6	373.2	312.9	271.4	245.0	233.7	233.7
62.5°	6777.8	5009.8	1809.4	637.1	441.0	346.8	290.3	248.8	226.2	218.6	218.6
65°	6691.1	4926.9	1651.1	478.7	380.7	316.6	267.6	229.9	207.3	188.5	188.5
67.5°	6389.5	4693.2	1432.5	361.9	324.2	286.5	245.0	211.1	184.7	169.6	169.6
70°	5782.6	4206.9	1108.3	290.3	275.2	248.8	222.4	188.5	165.9	147.0	147.0
72.5°	4987.2	3566.1	780.3	233.7	233.7	211.1	188.5	165.9	143.2	128.2	128.2
75°	3826.2	2638.7	524.0	188.5	192.3	177.2	154.6	135.7	120.6	109.3	109.3
77.5°	2088.4	1304.3	320.4	139.5	143.2	135.7	120.6	109.3	101.8	90.5	90.5
80°	1014.0	573.0	184.7	98.0	101.8	98.0	90.5	79.2	79.2	71.6	71.6
82.5°	426.0	214.9	98.0	67.9	67.9	60.3	56.5	56.5	56.5	52.8	52.8
85°	105.5	41.5	41.5	37.7	37.7	37.7	33.9	33.9	33.9	26.4	30.2
87.5°	15.1	15.1	15.1	15.1	15.1	15.1	11.3	3.8	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)