

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: P841376

Luminaire Tested: **ARCH4-170-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18191 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 169.8
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



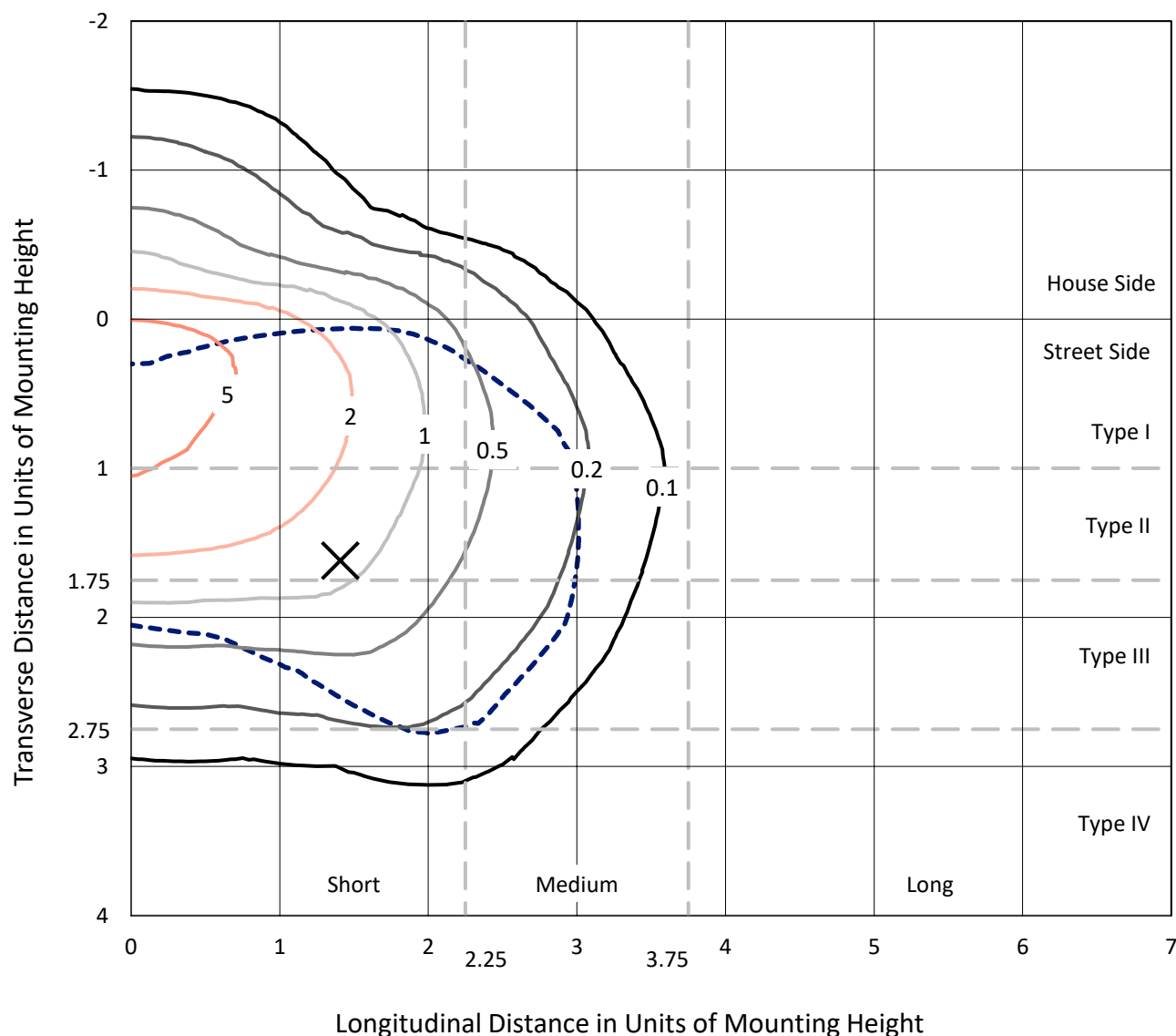
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

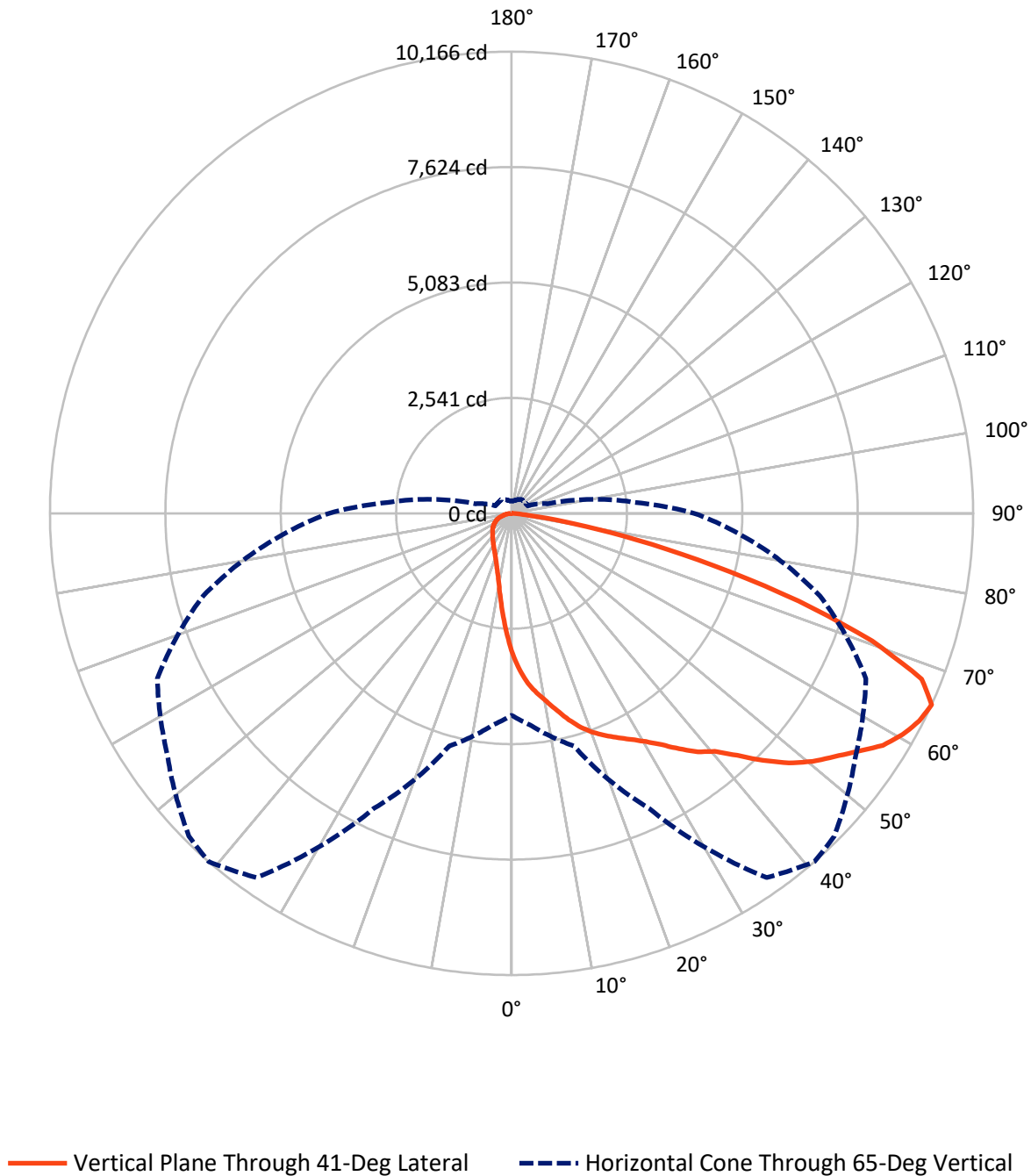


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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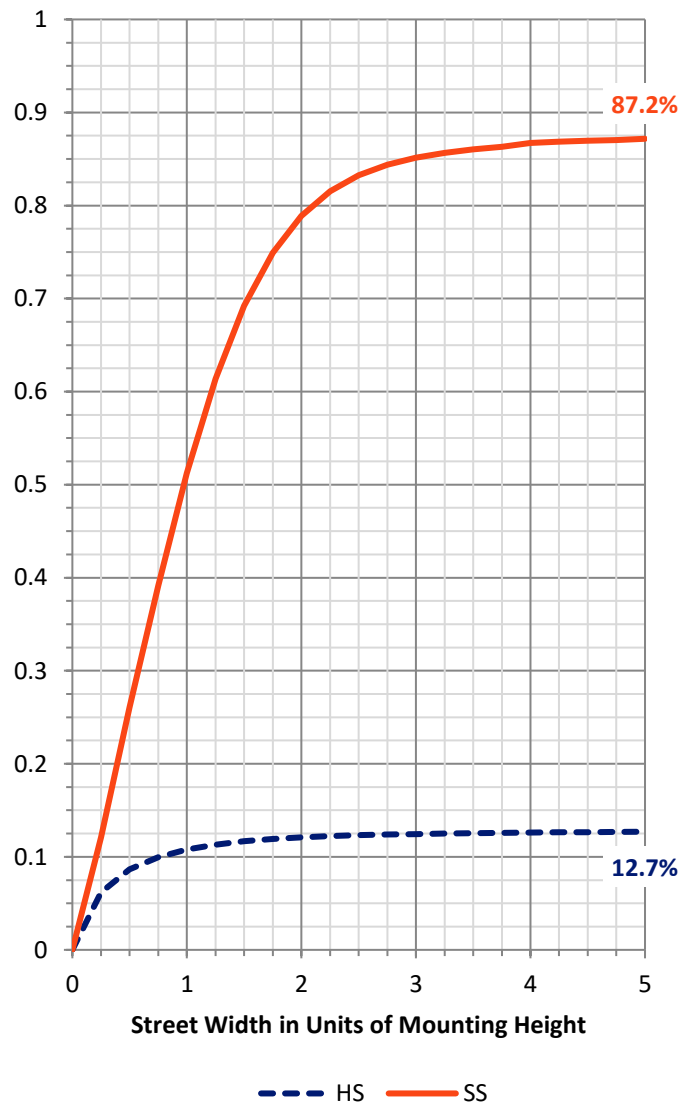
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2335.4	0.0	2335.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15855.6	0.0	15855.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	18191.0	0.0	18191.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.8	1.6
10°-20°	866.0	4.8
20°-30°	1489.8	8.2
30°-40°	2259.6	12.4
40°-50°	3310.3	18.2
50°-60°	4180.2	23.0
60°-70°	3919.7	21.5
70°-80°	1747.0	9.6
80°-90°	129.4	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°	18191.0	100.0
0°-180°	18191.0	100.0

Coefficient of Utilization



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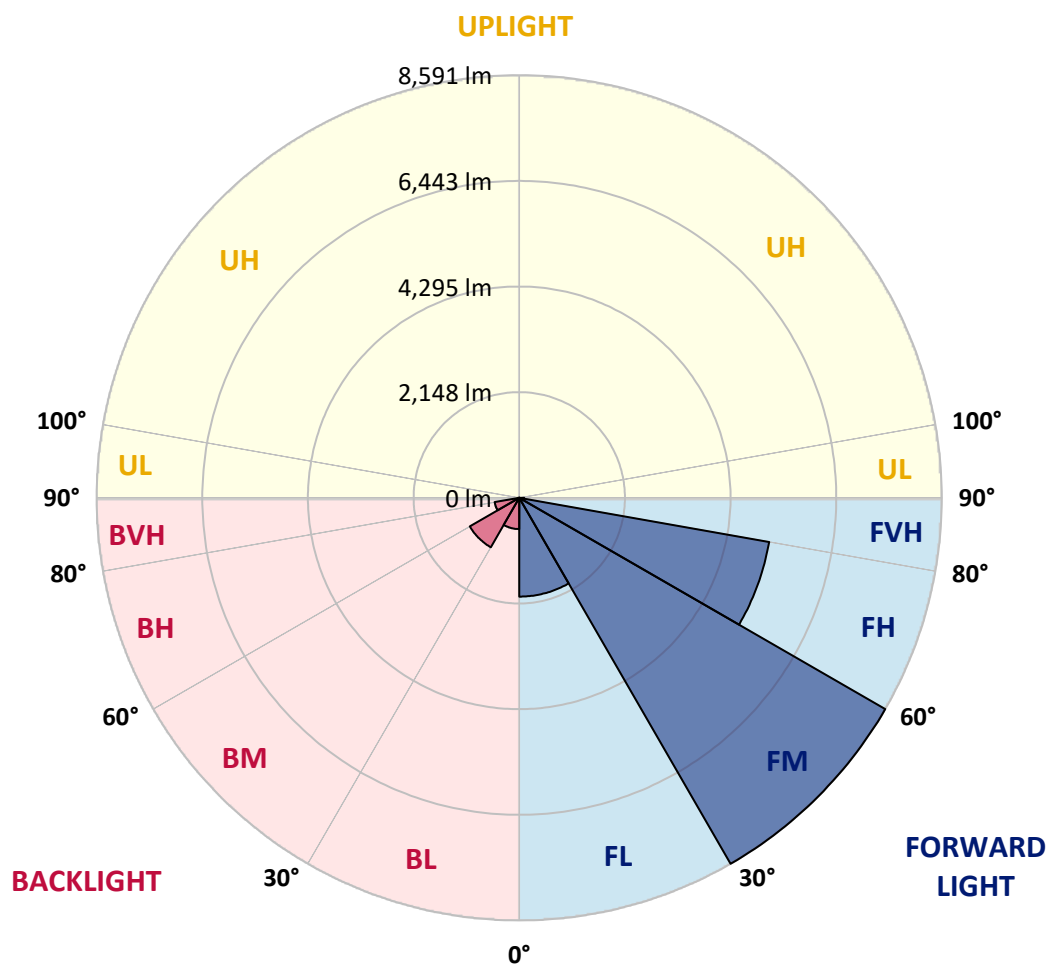
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2009.0	11.0			
FM	(30°-60°)	8590.5	47.2			
FH	(60°-80°)	5159.4	28.4			G3/7500
FVH	(80°-90°)	96.7	0.5			G1/100
BL	(0°-30°)	635.7	3.5	B2/1000		
BM	(30°-60°)	1159.7	6.4	B2/2500		
BH	(60°-80°)	507.3	2.8	B2/1000		G2/1000
BVH	(80°-90°)	32.8	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7
2.5°	3575.3	3563.8	3556.2	3514.0	3514.0	3456.4	3460.3	3406.5	3341.3	3237.8	3126.5
5°	3912.9	3897.6	3878.4	3836.2	3820.9	3763.3	3755.6	3678.9	3567.7	3387.4	3187.9
7.5°	4208.3	4193.0	4166.1	4104.7	4062.5	3993.5	3974.3	3874.6	3751.8	3529.3	3249.3
10°	4476.8	4465.3	4430.8	4354.1	4296.5	4212.1	4177.6	4043.4	3889.9	3644.4	3299.1
12.5°	4749.2	4733.9	4687.8	4622.6	4553.6	4453.8	4411.6	4239.0	4043.4	3771.0	3372.0
15°	5002.4	4979.4	4944.9	4875.8	4814.4	4718.5	4672.5	4469.2	4231.3	3912.9	3467.9
17.5°	5167.4	5148.2	5117.5	5079.1	5029.3	4956.4	4910.3	4710.9	4419.3	4051.0	3567.7
20°	5267.1	5259.4	5247.9	5224.9	5201.9	5152.0	5117.5	4929.5	4622.6	4185.3	3663.6
22.5°	5343.8	5336.2	5332.3	5332.3	5336.2	5317.0	5294.0	5132.8	4818.3	4327.2	3751.8
25°	5462.8	5458.9	5451.2	5443.6	5470.4	5474.3	5466.6	5355.3	5063.8	4515.2	3863.1
27.5°	5627.7	5616.2	5600.9	5593.2	5620.0	5639.2	5654.6	5577.8	5324.6	4707.0	3989.7
30°	5880.9	5846.4	5808.0	5781.2	5800.3	5831.0	5865.6	5819.5	5593.2	4944.9	4120.1
32.5°	6180.1	6137.9	6049.7	5999.8	6049.7	6072.7	6099.6	6076.5	5873.2	5201.9	4250.5
35°	6544.6	6494.7	6402.6	6329.7	6418.0	6368.1	6356.6	6333.6	6137.9	5455.1	4396.3
37.5°	7150.7	7077.8	6932.0	6770.9	6770.9	6663.5	6621.3	6552.2	6375.8	5681.4	4538.2
40°	7852.7	7756.8	7568.8	7331.0	7112.3	6889.8	6863.0	6813.1	6655.8	5942.3	4699.3
42.5°	8623.8	8439.6	8178.8	7891.1	7538.1	7284.9	7223.6	7081.6	6928.2	6207.0	4860.5
45°	9479.3	9095.6	8715.9	8570.1	7987.0	7756.8	7641.7	7384.7	7212.1	6483.2	5029.3
47.5°	9617.4	9318.1	9064.9	9041.9	8405.1	8213.3	8082.9	7714.6	7519.0	6778.6	5205.7
50°	9540.6	9360.3	9387.2	9295.1	8712.0	8585.4	8485.7	8067.5	7822.0	7062.4	5366.8
52.5°	9218.4	9318.1	9471.6	9302.8	9003.6	8900.0	8850.1	8447.3	8105.9	7323.3	5512.6
55°	8834.8	8903.8	9233.7	9440.9	9341.2	9249.1	9203.0	8888.5	8385.9	7542.0	5646.9
57.5°	8274.7	8244.0	8608.4	9417.9	9694.1	9640.4	9590.5	9322.0	8646.8	7699.3	5731.3
60°	7434.6	7369.3	7829.7	8957.5	9809.2	9893.6	9870.5	9609.7	8846.3	7695.4	5696.8
62.5°	5980.6	6141.8	6778.6	8205.6	9859.0	10073.9	10031.7	9632.7	8911.5	7472.9	5478.1
65°	4446.2	4676.3	5301.6	7169.9	9790.0	10165.9	10050.8	9256.8	8608.4	7031.8	4998.6
67.5°	3203.2	3406.5	3863.1	5900.1	9126.3	9744.0	9609.7	8643.0	7910.2	6406.5	4334.9
70°	2190.5	2336.2	2647.0	4296.5	7791.3	8424.3	8339.9	7726.1	6809.3	5662.2	3521.6
72.5°	1546.0	1607.4	1806.9	2835.0	5919.3	6609.8	6510.0	6356.6	5470.4	4707.0	2739.0
75°	1158.5	1196.9	1304.3	1833.7	3993.5	4580.4	4488.4	4576.6	4085.6	3563.8	1994.8
77.5°	437.3	475.7	740.4	1170.0	2363.1	2811.9	2719.9	2773.6	2271.0	1799.2	993.6
80°	118.9	126.6	245.5	556.2	1074.1	1400.2	1273.6	1093.3	844.0	828.6	525.6
82.5°	49.9	57.5	111.2	299.2	383.6	383.6	322.2	399.0	322.2	387.5	253.2
85°	19.2	23.0	26.9	76.7	49.9	53.7	57.5	76.7	65.2	80.6	57.5
87.5°	0.0	0.0	0.0	3.8	3.8	7.7	3.8	7.7	11.5	11.5	11.5
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°	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7	3099.7
2.5°	3080.5	3038.3	2976.9	2877.2	2773.6	2716.0	2643.1	2631.6	2554.9	2547.2	2516.5
5°	3099.7	3011.4	2854.1	2662.3	2474.4	2328.6	2221.2	2163.6	2052.4	2052.4	2021.7
7.5°	3115.0	2976.9	2723.7	2439.8	2182.8	1987.2	1841.4	1780.0	1680.3	1672.6	1649.6
10°	3118.8	2934.7	2581.8	2213.5	1898.9	1699.4	1557.5	1488.4	1400.2	1392.5	1377.2
12.5°	3149.5	2911.7	2455.2	2017.8	1695.6	1480.8	1342.7	1285.1	1216.1	1208.4	1193.1
15°	3199.4	2911.7	2347.8	1852.9	1515.3	1315.8	1196.9	1143.2	1093.3	1085.6	1078.0
17.5°	3249.3	2904.0	2240.3	1699.4	1365.7	1185.4	1081.8	1039.6	1001.2	997.4	989.7
20°	3295.3	2900.2	2132.9	1569.0	1250.6	1078.0	997.4	959.1	928.4	928.4	924.5
22.5°	3341.3	2892.5	2029.4	1446.2	1150.9	997.4	928.4	886.2	863.1	863.1	859.3
25°	3410.4	2892.5	1933.4	1342.7	1070.3	936.0	867.0	836.3	817.1	813.3	813.3
27.5°	3490.9	2915.5	1849.0	1250.6	1001.2	874.7	820.9	790.3	767.2	759.6	763.4
30°	3579.2	2934.7	1772.3	1170.0	936.0	828.6	771.1	740.4	717.4	709.7	713.5
32.5°	3667.4	2957.7	1703.3	1097.2	870.8	786.4	728.9	694.4	671.3	667.5	667.5
35°	3763.3	2980.7	1634.2	1035.8	817.1	744.2	690.5	652.2	636.8	629.1	633.0
37.5°	3859.2	3019.1	1569.0	978.2	778.7	705.9	656.0	617.6	606.1	602.3	602.3
40°	3974.3	3076.6	1542.2	939.9	744.2	671.3	629.1	590.8	579.3	579.3	579.3
42.5°	4070.2	3122.7	1519.1	897.7	717.4	640.6	602.3	571.6	563.9	560.1	563.9
45°	4166.1	3164.9	1488.4	859.3	682.8	610.0	579.3	548.6	540.9	540.9	540.9
47.5°	4262.0	3187.9	1446.2	820.9	652.2	583.1	556.2	529.4	521.7	521.7	521.7
50°	4338.7	3207.1	1384.9	778.7	617.6	560.1	533.2	506.4	498.7	498.7	498.7
52.5°	4415.5	3210.9	1319.7	728.9	583.1	533.2	510.2	483.4	475.7	471.9	471.9
55°	4484.5	3207.1	1242.9	671.3	544.7	502.5	483.4	460.3	445.0	429.7	437.3
57.5°	4534.4	3203.2	1154.7	613.8	506.4	471.9	464.2	433.5	402.8	364.4	372.1
60°	4515.2	3161.0	1058.8	540.9	464.2	441.2	441.2	399.0	345.3	326.1	329.9
62.5°	4392.5	3042.1	959.1	464.2	422.0	410.5	406.6	360.6	318.4	299.2	303.1
65°	4024.2	2742.9	813.3	395.1	379.8	375.9	375.9	333.7	295.4	272.4	276.2
67.5°	3464.1	2301.7	663.7	333.7	337.6	345.3	345.3	306.9	268.5	245.5	249.4
70°	2777.4	1799.2	529.4	287.7	291.6	303.1	310.7	276.2	241.7	218.7	218.7
72.5°	2090.7	1365.7	425.8	241.7	260.9	260.9	272.4	245.5	211.0	188.0	191.8
75°	1515.3	978.2	337.6	203.3	226.3	222.5	222.5	207.2	180.3	165.0	165.0
77.5°	717.4	514.1	268.5	145.8	176.5	172.6	176.5	165.0	153.4	138.1	141.9
80°	352.9	253.2	172.6	103.6	122.8	126.6	138.1	130.4	126.6	115.1	115.1
82.5°	168.8	99.7	80.6	72.9	84.4	88.2	95.9	95.9	99.7	92.1	92.1
85°	46.0	26.9	34.5	46.0	53.7	57.5	65.2	69.1	69.1	65.2	69.1
87.5°	11.5	11.5	15.3	23.0	26.9	30.7	34.5	34.5	15.3	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)