

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: P841446

Luminaire Tested: **ARCH4-180-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18663 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 180
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

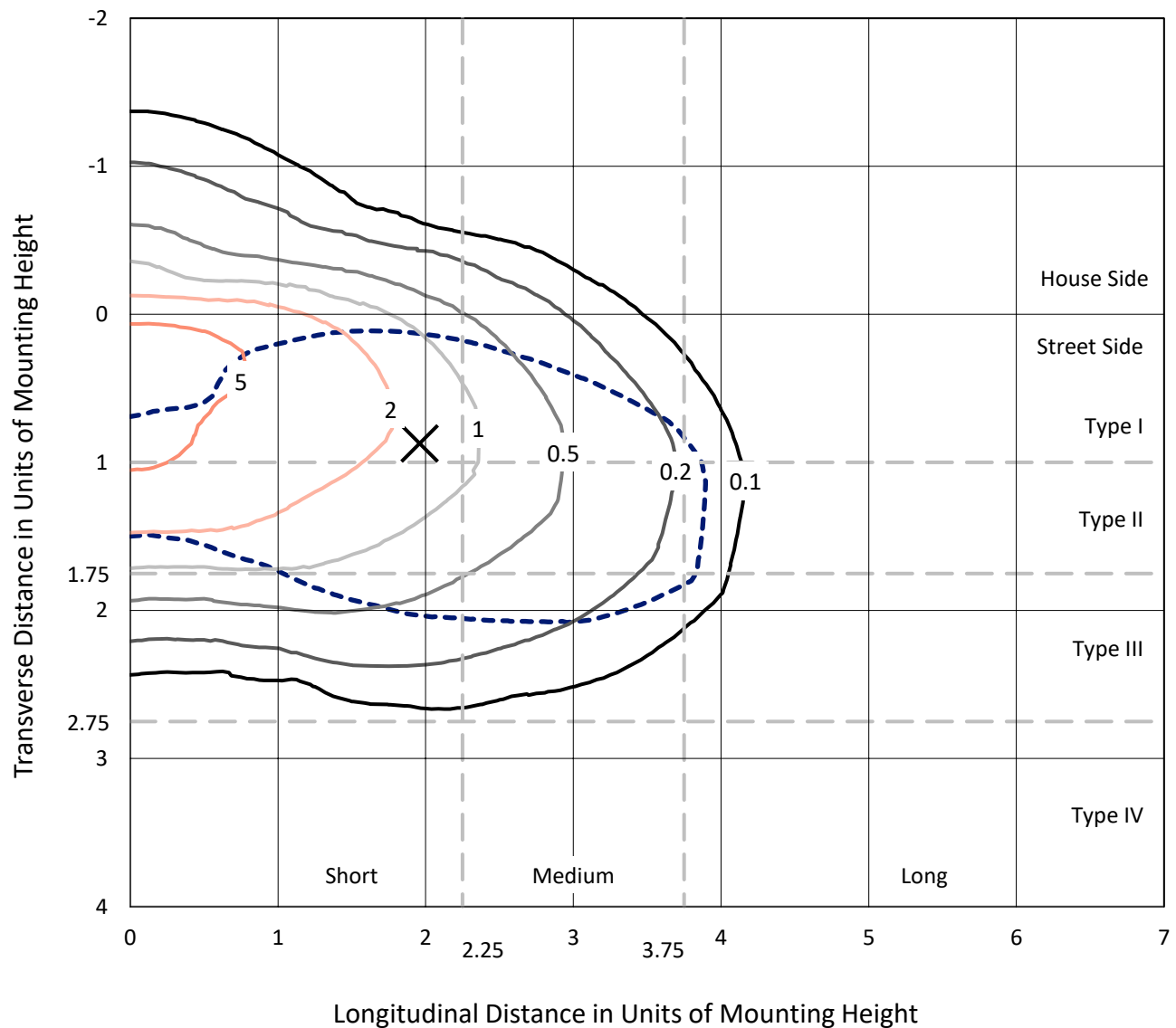


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Iso-Footcandle Lines of Horizontal Illumination

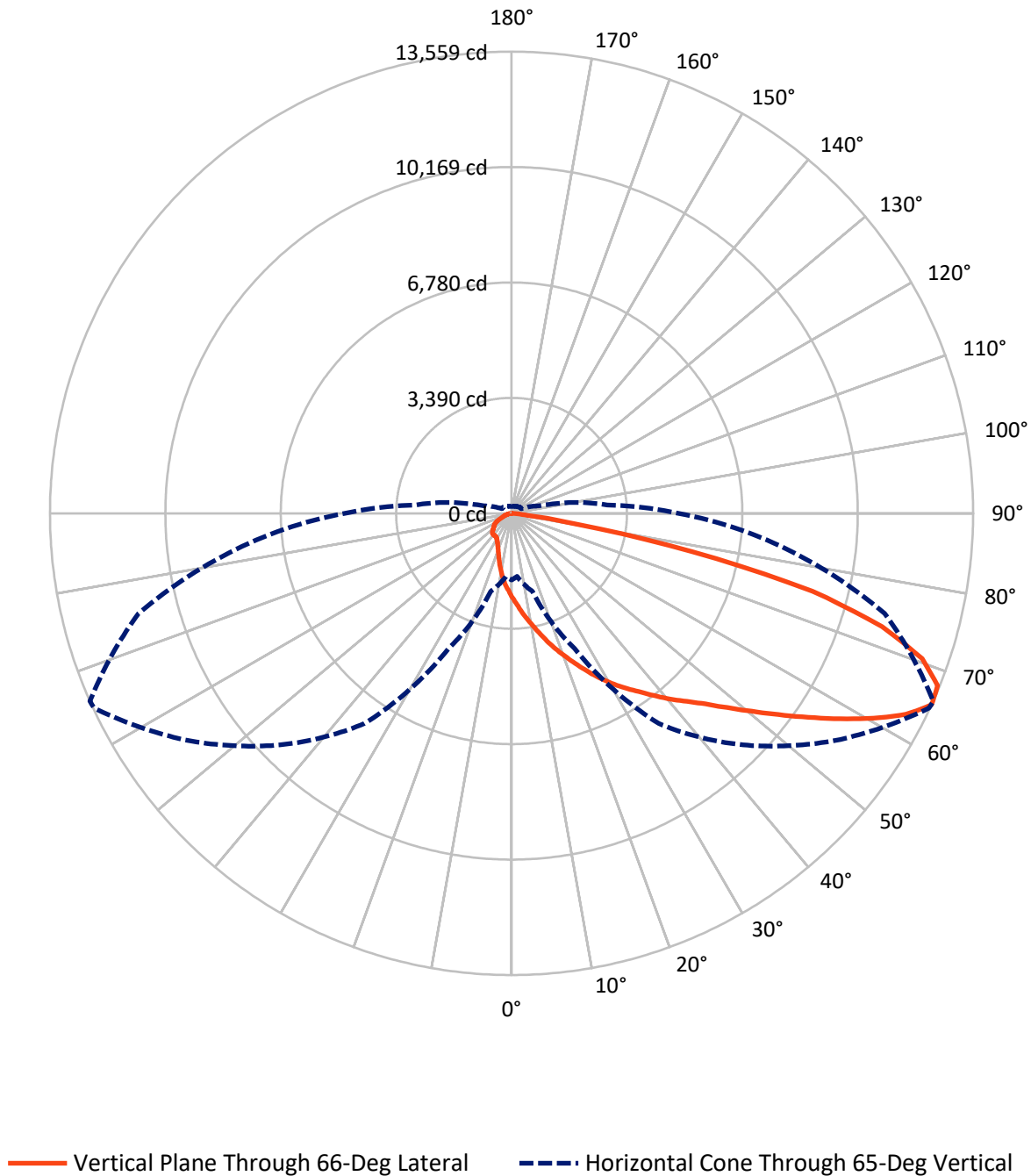
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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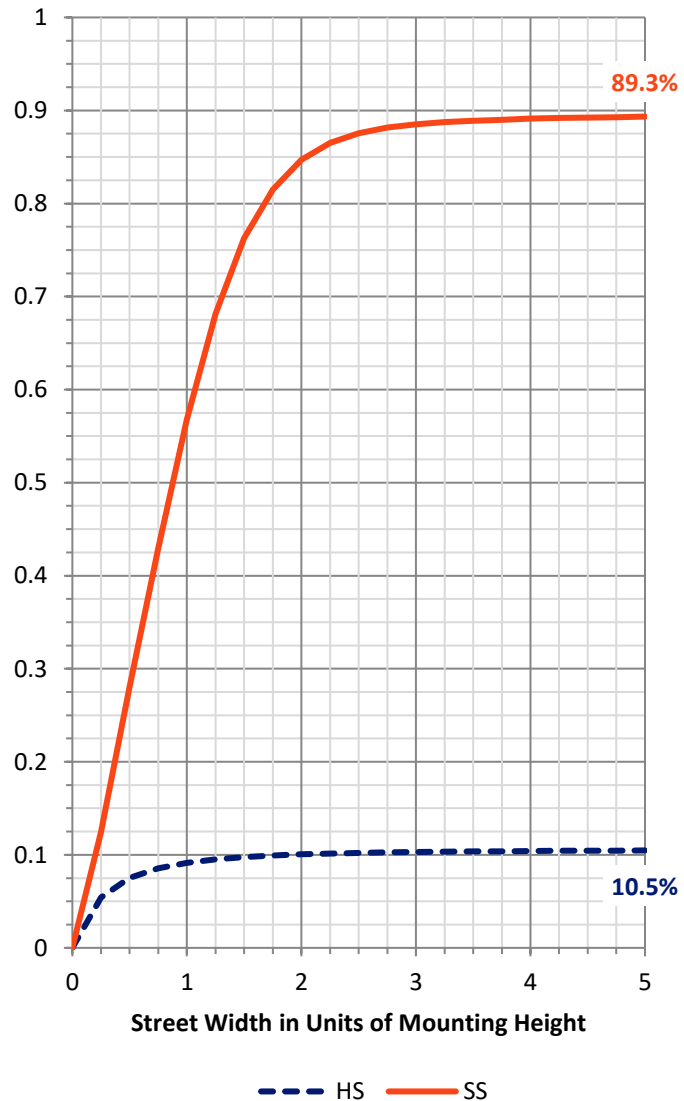
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1974.0	0.0	1974.0
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	16689.0	0.0	16689.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	18663.0	0.0	18663.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.8	1.3
10°-20°	794.6	4.3
20°-30°	1437.6	7.7
30°-40°	2248.0	12.0
40°-50°	3410.3	18.3
50°-60°	4332.8	23.2
60°-70°	4048.6	21.7
70°-80°	2012.1	10.8
80°-90°	135.2	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°	18663.0	100.0
0°-180°	18663.0	100.0

Coefficient of Utilization



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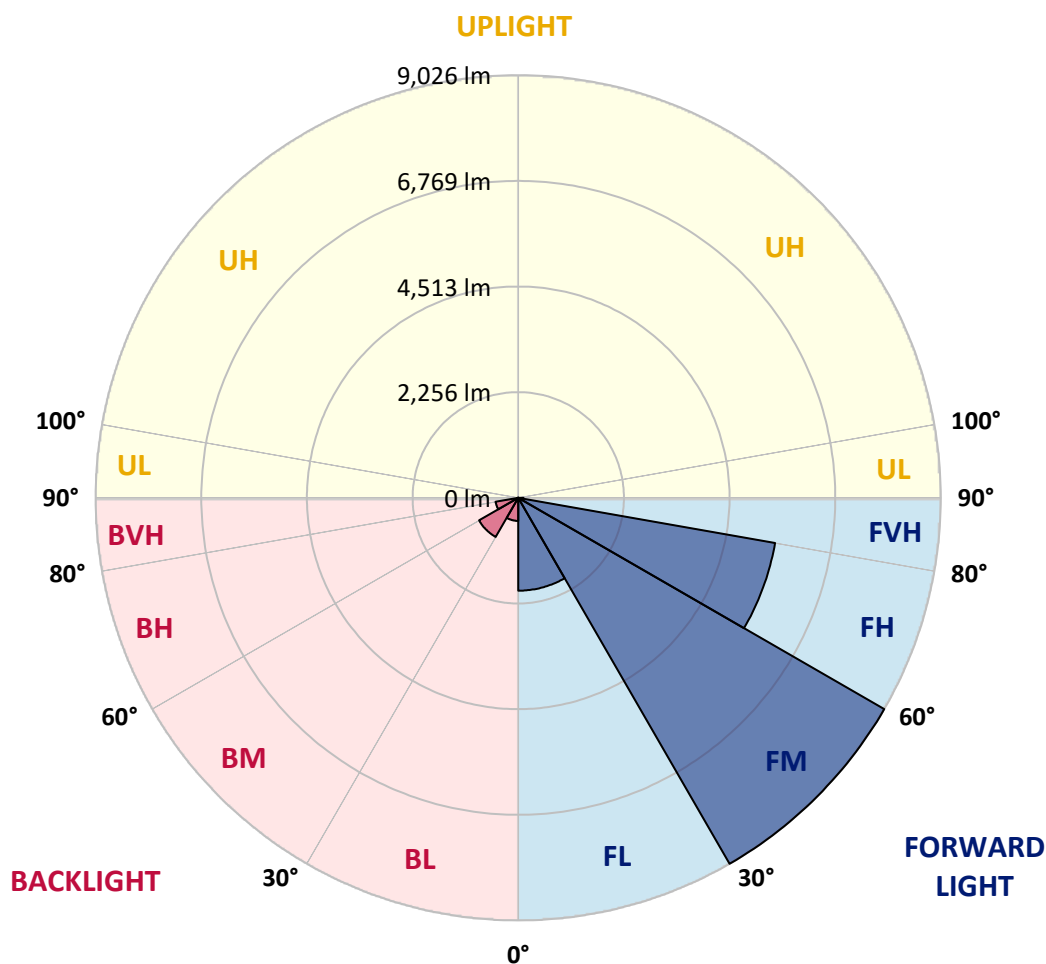
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1982.9	10.6			
FM	(30°-60°)	9025.6	48.4			
FH	(60°-80°)	5569.1	29.8			G3/7500
FVH	(80°-90°)	111.3	0.6			G2/225
BL	(0°-30°)	493.0	2.6	B1/500		
BM	(30°-60°)	965.5	5.2	B1/1000		
BH	(60°-80°)	491.6	2.6	B1/500		G1/500
BVH	(80°-90°)	23.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9
2.5°	2884.9	2908.4	2920.1	2924.0	2834.0	2794.8	2755.7	2665.7	2646.1	2595.2	2528.7
5°	3393.7	3425.0	3417.2	3401.6	3292.0	3166.7	3064.9	2896.6	2869.2	2747.9	2599.1
7.5°	3894.8	3922.2	3914.3	3855.6	3734.3	3558.1	3389.8	3143.2	3104.1	2908.4	2669.6
10°	4313.6	4337.1	4333.2	4274.5	4129.6	3914.3	3710.8	3382.0	3335.0	3057.1	2728.3
12.5°	4658.1	4689.4	4685.5	4646.3	4517.1	4282.3	4051.3	3656.0	3597.3	3237.2	2810.5
15°	4928.1	4967.3	4967.3	4951.6	4861.6	4665.9	4403.6	3957.4	3886.9	3444.6	2912.3
17.5°	5092.6	5123.9	5151.3	5178.7	5116.0	4967.3	4728.5	4258.8	4184.4	3648.2	3018.0
20°	5178.7	5210.0	5229.6	5288.3	5300.0	5225.6	5037.7	4556.3	4478.0	3879.1	3139.3
22.5°	5319.6	5347.0	5350.9	5401.8	5425.3	5444.8	5327.4	4849.9	4787.2	4133.5	3276.3
25°	5554.4	5585.8	5574.0	5597.5	5601.4	5624.9	5613.2	5186.5	5123.9	4423.2	3440.7
27.5°	5855.8	5895.0	5887.2	5863.7	5828.4	5808.9	5859.8	5527.0	5468.3	4712.9	3609.0
30°	6180.7	6227.7	6216.0	6169.0	6075.0	5992.8	6063.3	5848.0	5793.2	5010.3	3796.9
32.5°	6509.5	6564.3	6560.4	6482.1	6321.7	6180.7	6286.4	6149.4	6110.3	5331.3	4000.5
35°	6724.8	6795.3	6787.5	6740.5	6533.0	6411.7	6540.9	6458.7	6431.3	5722.8	4294.0
37.5°	7073.2	7147.6	7081.0	6963.6	6724.8	6662.2	6818.8	6807.0	6787.5	6137.7	4603.3
40°	7918.7	8028.3	7852.2	7370.7	6979.3	6924.5	7147.6	7194.5	7175.0	6548.7	4881.2
42.5°	8803.3	8967.7	8693.7	8028.3	7441.2	7241.5	7507.7	7574.2	7550.8	6901.0	5131.7
45°	9339.6	9410.1	9136.1	8619.4	8259.2	7625.1	7891.3	8000.9	7981.3	7323.7	5452.7
47.5°	9778.0	9750.6	9437.5	9089.1	9155.6	8165.3	8325.8	8541.1	8525.4	7789.5	5805.0
50°	9872.0	9809.3	9684.1	9464.9	9641.0	8713.3	8783.8	9155.6	9140.0	8306.2	6161.2
52.5°	9210.4	9128.2	9468.8	9652.8	9594.0	9112.6	9288.7	9828.9	9821.1	8866.0	6501.7
55°	7558.6	7492.0	8408.0	9359.2	9543.1	9394.4	9848.5	10529.6	10572.6	9460.9	6810.9
57.5°	5945.9	5875.4	6775.7	8623.3	9355.3	9652.8	10502.2	11332.0	11386.8	10106.8	7104.5
60°	4740.3	4634.6	5323.5	7464.6	9003.0	9852.4	11132.4	12212.7	12220.6	10697.9	7284.6
62.5°	3221.5	3104.1	3867.4	5996.8	8411.9	9883.7	11617.7	12972.1	13003.4	11140.2	7315.9
65°	1957.2	1859.3	2376.0	4380.1	7539.0	9617.5	11625.6	13531.9	13559.3	11343.7	7128.0
67.5°	1135.2	1096.0	1358.3	2728.3	6090.7	8901.2	11136.3	13445.7	13496.6	11257.6	6701.3
70°	661.5	657.6	755.5	1350.4	4297.9	7480.3	10044.2	12721.6	12796.0	10807.5	6047.6
72.5°	485.4	493.2	532.3	724.2	2489.5	5386.1	8505.9	11265.5	11379.0	9926.8	5116.0
75°	383.6	387.5	422.7	493.2	1307.4	3045.4	6372.5	9042.1	9132.1	8357.1	3996.5
77.5°	285.7	293.6	321.0	348.4	606.7	1397.4	3585.5	5570.1	5421.4	4587.6	1929.8
80°	207.5	227.0	238.8	250.5	321.0	540.2	1076.4	1941.5	1925.9	2004.1	912.0
82.5°	133.1	148.7	160.5	168.3	191.8	258.3	321.0	434.5	469.7	779.0	364.0
85°	58.7	66.5	74.4	90.0	82.2	90.0	133.1	86.1	74.4	117.4	66.5
87.5°	0.0	0.0	11.7	19.6	15.7	7.8	23.5	15.7	11.7	11.7	11.7
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°	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9	2469.9
2.5°	2493.4	2450.4	2360.3	2274.2	2223.3	2156.8	2098.1	2043.3	2039.4	2023.7	1996.3
5°	2524.7	2442.5	2274.2	2113.7	1992.4	1863.2	1753.6	1667.5	1636.2	1612.7	1581.4
7.5°	2556.1	2426.9	2176.4	1941.5	1749.7	1569.6	1440.5	1323.0	1287.8	1256.5	1236.9
10°	2567.8	2399.5	2062.9	1749.7	1499.2	1307.4	1170.4	1084.3	1053.0	1037.3	1025.6
12.5°	2603.0	2383.8	1957.2	1569.6	1280.0	1103.8	1006.0	955.1	943.4	931.6	919.9
15°	2650.0	2383.8	1851.5	1393.5	1107.8	966.8	908.1	872.9	865.1	861.2	853.3
17.5°	2700.9	2383.8	1749.7	1244.8	982.5	876.8	833.8	814.2	810.3	806.4	802.4
20°	2771.3	2387.7	1640.1	1115.6	892.5	810.3	775.0	751.6	747.6	743.7	743.7
22.5°	2841.8	2395.6	1534.4	1017.7	833.8	759.4	716.3	692.8	685.0	685.0	685.0
25°	2931.8	2419.1	1436.6	935.5	782.9	712.4	657.6	638.0	634.1	634.1	630.2
27.5°	3037.5	2446.5	1350.4	872.9	732.0	657.6	602.8	583.2	575.4	575.4	571.5
30°	3151.0	2473.9	1280.0	825.9	681.1	602.8	551.9	528.4	520.6	524.5	520.6
32.5°	3276.3	2513.0	1225.2	794.6	634.1	555.8	508.9	481.5	477.5	477.5	473.6
35°	3487.7	2622.6	1217.4	779.0	595.0	520.6	473.6	446.2	442.3	442.3	438.4
37.5°	3714.7	2747.9	1252.6	771.1	563.7	489.3	446.2	418.8	414.9	414.9	414.9
40°	3906.5	2841.8	1291.7	771.1	544.1	461.9	422.7	399.3	399.3	399.3	399.3
42.5°	4035.7	2849.6	1283.9	771.1	528.4	442.3	407.1	383.6	383.6	387.5	383.6
45°	4227.5	2888.8	1252.6	759.4	516.7	426.7	391.4	371.9	367.9	371.9	371.9
47.5°	4454.5	2959.2	1221.3	712.4	512.8	411.0	379.7	356.2	352.3	356.2	352.3
50°	4669.8	3021.9	1205.6	649.8	504.9	395.3	364.0	340.5	336.6	340.5	336.6
52.5°	4849.9	3049.3	1178.2	606.7	485.4	379.7	348.4	324.9	317.1	321.0	321.0
55°	4994.7	3041.4	1139.1	571.5	450.1	364.0	328.8	309.2	297.5	297.5	293.6
57.5°	5127.8	3045.4	1103.8	536.3	411.0	340.5	313.1	289.7	274.0	270.1	266.2
60°	5178.7	3025.8	1041.2	489.3	371.9	321.0	293.6	266.2	250.5	246.6	242.7
62.5°	5108.2	2955.3	959.0	407.1	336.6	297.5	274.0	246.6	230.9	227.0	223.1
65°	4908.6	2822.2	833.8	321.0	305.3	270.1	250.5	230.9	211.4	203.5	199.6
67.5°	4568.0	2630.4	677.2	258.3	270.1	246.6	234.9	211.4	187.9	180.1	176.1
70°	4082.7	2376.0	508.9	219.2	238.8	219.2	211.4	187.9	168.3	160.5	156.6
72.5°	3401.6	1965.0	356.2	187.9	207.5	191.8	184.0	168.3	148.7	137.0	137.0
75°	2571.7	1409.2	234.9	160.5	172.2	164.4	152.7	140.9	129.2	121.3	117.4
77.5°	1107.8	548.0	144.8	121.3	140.9	137.0	121.3	113.5	109.6	101.8	101.8
80°	477.5	223.1	90.0	90.0	101.8	97.9	93.9	86.1	86.1	82.2	78.3
82.5°	176.1	90.0	54.8	66.5	74.4	66.5	66.5	66.5	66.5	62.6	62.6
85°	43.1	27.4	27.4	39.1	43.1	39.1	43.1	39.1	39.1	39.1	35.2
87.5°	11.7	11.7	15.7	15.7	15.7	15.7	15.7	11.7	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)