

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: P840904

Luminaire Tested: **ARCH4-100-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12897 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

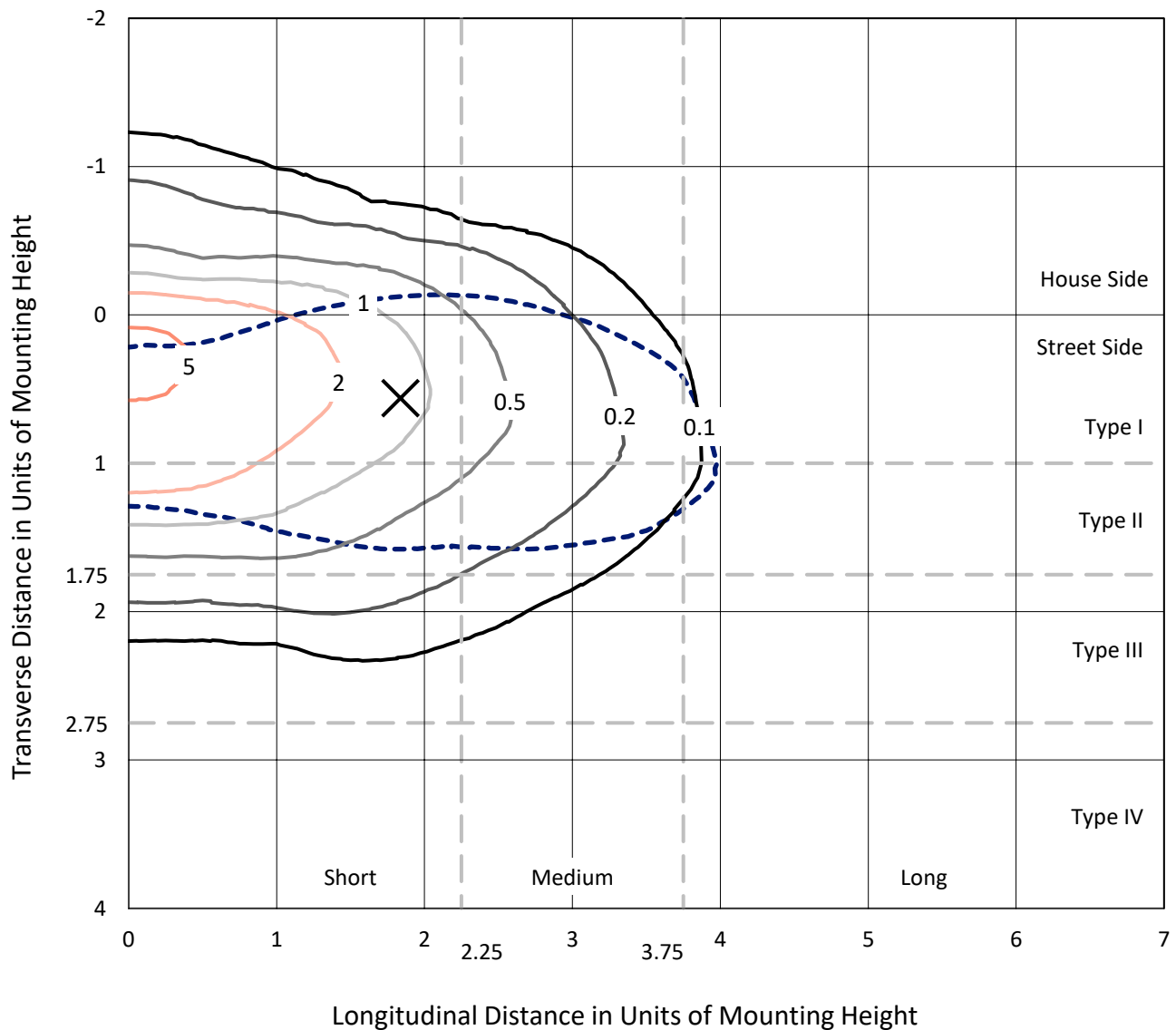
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

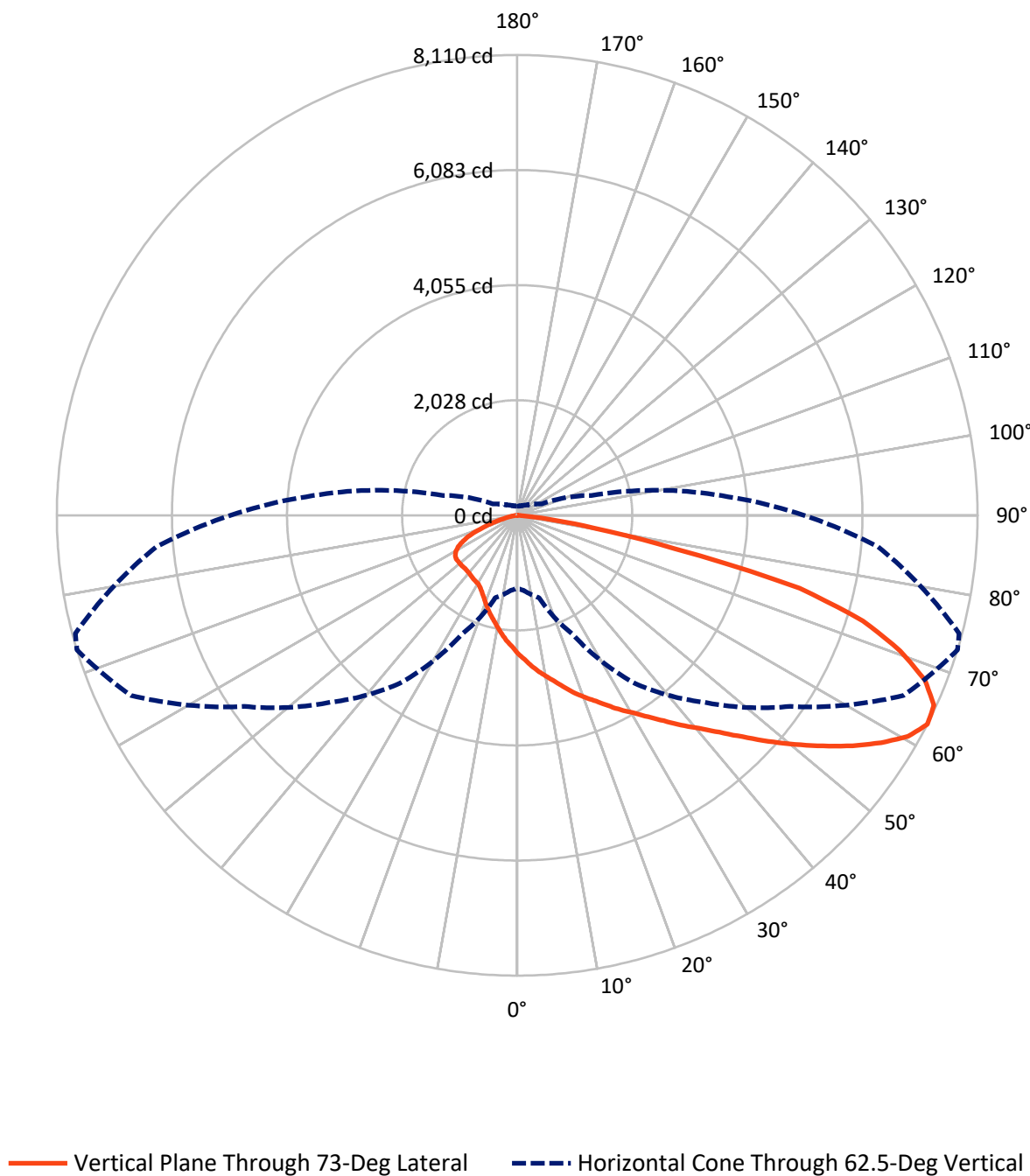
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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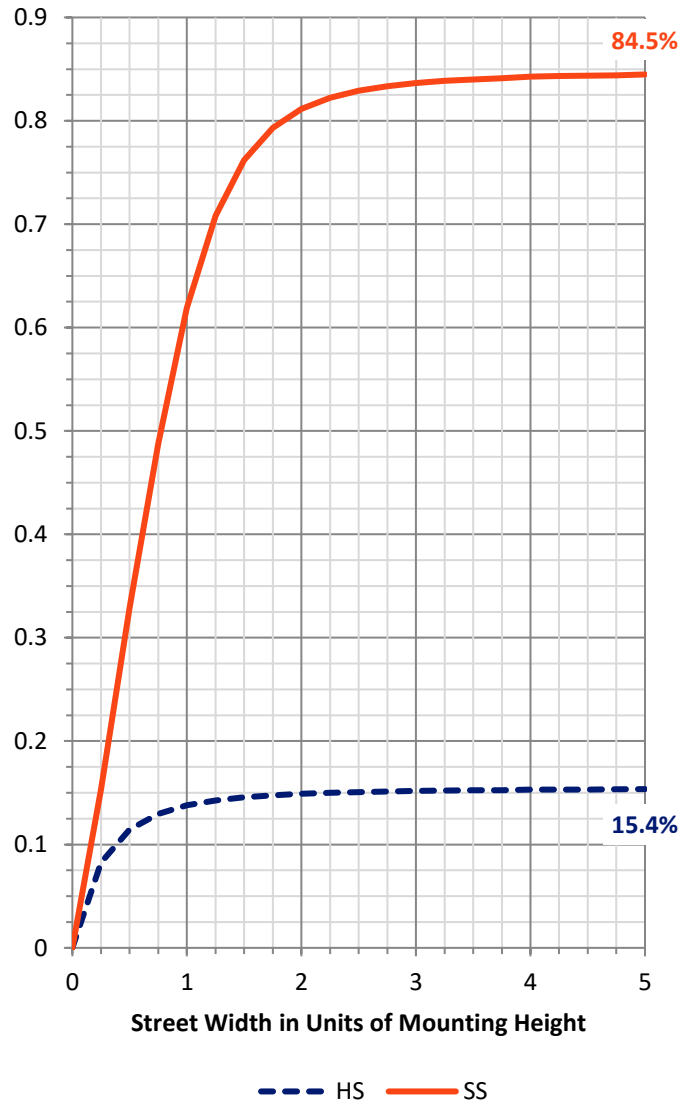
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1999.2	0.0	1999.2
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	10897.8	0.0	10897.8
	% Fixture	84.5	0.0	84.5
Total	Lumens	12897.0	0.0	12897.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.9	1.8
10°-20°	711.9	5.5
20°-30°	1185.0	9.2
30°-40°	1787.9	13.9
40°-50°	2499.1	19.4
50°-60°	2760.4	21.4
60°-70°	2404.7	18.6
70°-80°	1214.7	9.4
80°-90°	97.5	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°	12897.0	100.0
0°-180°	12897.0	100.0

Coefficient of Utilization



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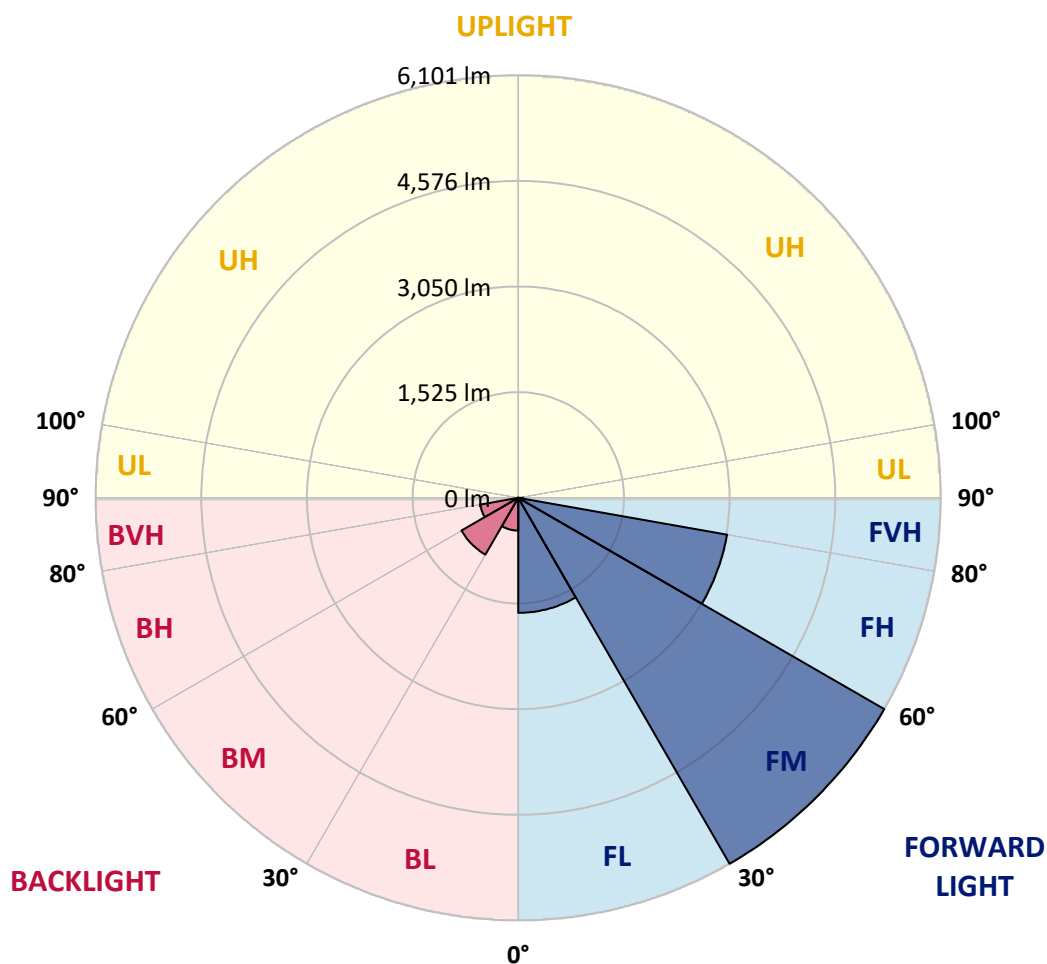
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1660.2	12.9			
FM	(30°-60°)	6100.8	47.3			
FH	(60°-80°)	3061.3	23.7			G2/5000
FVH	(80°-90°)	75.5	0.6			G1/100
BL	(0°-30°)	472.5	3.7	B1/500		
BM	(30°-60°)	946.6	7.3	B1/1000		
BH	(60°-80°)	558.0	4.3	B2/1000		G2/1000
BVH	(80°-90°)	22.0	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°	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1
2.5°	2779.3	2810.2	2793.4	2804.6	2748.4	2711.9	2669.7	2588.2	2543.2	2537.6	2484.2
5°	3186.8	3220.5	3192.4	3184.0	3085.6	3001.3	2905.8	2762.4	2666.9	2650.0	2532.0
7.5°	3594.3	3625.2	3591.5	3566.2	3434.1	3285.1	3144.6	2933.9	2784.9	2756.8	2571.3
10°	3880.9	3909.0	3883.7	3858.4	3720.7	3569.0	3369.4	3094.0	2891.7	2846.7	2596.6
12.5°	4097.3	4114.2	4102.9	4080.4	3951.2	3788.2	3597.1	3273.9	3012.5	2956.3	2636.0
15°	4274.3	4302.4	4288.4	4271.5	4147.9	3984.9	3802.2	3462.2	3153.1	3082.8	2695.0
17.5°	4392.4	4412.0	4414.8	4414.8	4305.2	4145.1	3968.0	3633.6	3293.6	3203.6	2751.2
20°	4445.8	4468.2	4482.3	4504.8	4414.8	4277.1	4097.3	3779.7	3425.6	3324.5	2804.6
22.5°	4471.0	4490.7	4527.3	4577.8	4504.8	4389.6	4223.7	3914.6	3557.7	3450.9	2866.4
25°	4490.7	4516.0	4569.4	4665.0	4614.4	4516.0	4372.7	4069.2	3715.1	3605.5	2956.3
27.5°	4544.1	4575.0	4625.6	4740.8	4679.0	4631.2	4530.1	4235.0	3880.9	3768.5	3065.9
30°	4729.6	4754.9	4752.1	4825.1	4749.3	4735.2	4665.0	4395.2	4041.1	3928.7	3195.2
32.5°	5066.8	5092.1	5030.3	5002.2	4836.4	4839.2	4811.1	4566.6	4232.2	4117.0	3344.2
35°	5429.3	5457.4	5375.9	5328.2	5050.0	4968.5	4982.5	4780.2	4445.8	4330.5	3529.6
37.5°	5752.5	5786.2	5716.0	5645.7	5364.7	5176.4	5173.6	5019.0	4690.2	4572.2	3734.8
40°	5929.5	5968.9	6011.0	5971.7	5676.6	5468.7	5378.7	5263.5	4931.9	4811.1	3956.8
42.5°	6013.9	6123.5	6199.3	6174.0	5932.4	5721.6	5614.8	5519.3	5227.0	5109.0	4220.9
45°	5777.8	5780.6	5940.8	6078.5	6033.5	5893.0	5873.3	5805.9	5564.2	5451.8	4518.8
47.5°	5482.7	5460.2	5572.7	5817.1	5943.6	5980.1	6095.3	6123.5	5949.2	5836.8	4822.3
50°	4774.6	4788.6	5153.9	5505.2	5752.5	5988.6	6252.7	6449.4	6345.5	6238.7	5142.7
52.5°	3883.7	3917.4	4336.2	5109.0	5499.6	5904.3	6345.5	6775.4	6750.1	6649.0	5463.1
55°	3113.7	3167.1	3611.1	4448.6	5176.4	5716.0	6384.8	7073.3	7168.9	7076.1	5777.8
57.5°	2380.2	2436.5	2810.2	3670.1	4763.3	5409.7	6356.7	7334.7	7559.5	7500.5	6067.2
60°	1792.9	1849.1	2088.0	2976.0	4246.2	5066.8	6216.2	7506.1	7910.7	7848.9	6278.0
62.5°	1284.3	1329.2	1506.3	2315.6	3616.7	4659.3	5870.5	7508.9	8110.3	8059.7	6379.2
65°	924.6	924.6	1067.9	1652.4	3026.6	4170.4	5347.8	7163.2	8068.1	8054.1	6308.9
67.5°	666.0	671.6	786.9	1155.0	2414.0	3577.4	4670.6	6547.8	7742.1	7812.4	6056.0
70°	472.1	486.2	539.6	806.5	1823.8	2824.3	3945.5	5741.3	7154.8	7278.4	5567.0
72.5°	365.3	373.8	410.3	562.0	1332.0	2099.2	3144.6	4842.0	6370.8	6511.3	4901.0
75°	281.0	289.5	317.6	413.1	955.5	1472.6	2234.1	3757.3	5137.1	5387.2	3937.1
77.5°	205.1	216.4	236.1	300.7	556.4	935.8	1354.5	2113.3	2835.5	2953.5	2062.7
80°	95.5	109.6	137.7	193.9	300.7	441.2	480.5	815.0	1363.0	1424.8	1118.5
82.5°	53.4	67.4	78.7	118.0	151.8	157.4	163.0	205.1	514.3	567.7	469.3
85°	25.3	33.7	36.5	50.6	50.6	45.0	53.4	39.3	84.3	101.2	98.4
87.5°	0.0	2.8	5.6	14.1	11.2	8.4	8.4	8.4	8.4	11.2	8.4
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°	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1	2442.1
2.5°	2458.9	2422.4	2338.1	2265.0	2217.3	2175.1	2118.9	2093.6	2048.6	2057.1	2031.8
5°	2473.0	2405.5	2256.6	2118.9	2017.7	1927.8	1829.4	1773.2	1711.4	1705.8	1686.1
7.5°	2481.4	2377.4	2163.9	1970.0	1815.4	1677.7	1545.6	1472.6	1396.7	1379.8	1363.0
10°	2473.0	2335.3	2068.3	1815.4	1610.3	1438.8	1289.9	1197.2	1118.5	1098.8	1081.9
12.5°	2481.4	2312.8	1978.4	1672.1	1427.6	1233.7	1065.1	969.5	896.5	876.8	865.5
15°	2501.1	2298.8	1902.5	1542.8	1264.6	1048.2	882.4	800.9	741.9	722.2	716.6
17.5°	2518.0	2284.7	1821.0	1416.3	1101.6	885.2	741.9	674.5	623.9	604.2	598.6
20°	2540.4	2265.0	1739.5	1295.5	958.3	755.9	629.5	570.5	531.1	517.1	514.3
22.5°	2560.1	2251.0	1663.6	1174.7	826.2	652.0	545.2	497.4	469.3	455.3	455.3
25°	2610.7	2256.6	1599.0	1062.3	727.8	570.5	480.5	444.0	421.5	413.1	413.1
27.5°	2669.7	2279.1	1548.4	966.7	643.5	508.6	435.6	404.7	393.4	382.2	385.0
30°	2754.0	2324.0	1514.7	888.0	581.7	460.9	399.1	376.6	365.3	362.5	362.5
32.5°	2860.8	2397.1	1511.9	837.4	536.8	424.3	373.8	354.1	348.5	345.7	345.7
35°	2987.3	2461.7	1495.0	815.0	508.6	399.1	354.1	340.0	337.2	337.2	337.2
37.5°	3139.0	2568.5	1483.8	784.0	494.6	385.0	340.0	328.8	328.8	328.8	328.8
40°	3296.4	2655.7	1466.9	755.9	489.0	376.6	331.6	317.6	317.6	317.6	317.6
42.5°	3484.7	2782.1	1461.3	741.9	480.5	370.9	320.4	303.5	306.3	306.3	309.1
45°	3712.3	2925.4	1458.5	727.8	477.7	365.3	309.1	289.5	292.3	289.5	289.5
47.5°	3942.7	3091.2	1466.9	719.4	474.9	359.7	300.7	275.4	275.4	272.6	272.6
50°	4184.4	3243.0	1472.6	711.0	469.3	348.5	286.6	264.2	258.5	252.9	255.7
52.5°	4412.0	3383.5	1475.4	696.9	452.4	331.6	275.4	250.1	241.7	233.2	236.1
55°	4639.7	3518.4	1481.0	680.1	430.0	314.7	261.3	236.1	224.8	213.6	213.6
57.5°	4844.8	3636.4	1466.9	637.9	404.7	297.9	247.3	219.2	202.3	191.1	191.1
60°	4985.3	3720.7	1424.8	576.1	370.9	278.2	233.2	202.3	182.7	174.2	174.2
62.5°	5052.8	3734.8	1348.9	474.9	328.8	258.5	216.4	185.5	168.6	163.0	163.0
65°	4988.1	3672.9	1230.9	356.9	283.8	236.1	199.5	171.4	154.6	140.5	140.5
67.5°	4763.3	3498.7	1067.9	269.8	241.7	213.6	182.7	157.4	137.7	126.5	126.5
70°	4310.9	3136.2	826.2	216.4	205.1	185.5	165.8	140.5	123.6	109.6	109.6
72.5°	3717.9	2658.5	581.7	174.2	174.2	157.4	140.5	123.6	106.8	95.5	95.5
75°	2852.4	1967.1	390.6	140.5	143.3	132.1	115.2	101.2	89.9	81.5	81.5
77.5°	1556.9	972.3	238.9	104.0	106.8	101.2	89.9	81.5	75.9	67.4	67.4
80°	755.9	427.2	137.7	73.1	75.9	73.1	67.4	59.0	59.0	53.4	53.4
82.5°	317.6	160.2	73.1	50.6	50.6	45.0	42.2	42.2	42.2	39.3	39.3
85°	78.7	30.9	30.9	28.1	28.1	28.1	25.3	25.3	25.3	19.7	22.5
87.5°	11.2	11.2	11.2	11.2	11.2	11.2	8.4	2.8	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)