

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: P836285

Luminaire Tested: **ARCH3-160-750-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836285
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: ARCH3-160-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1245mA 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: 15946 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

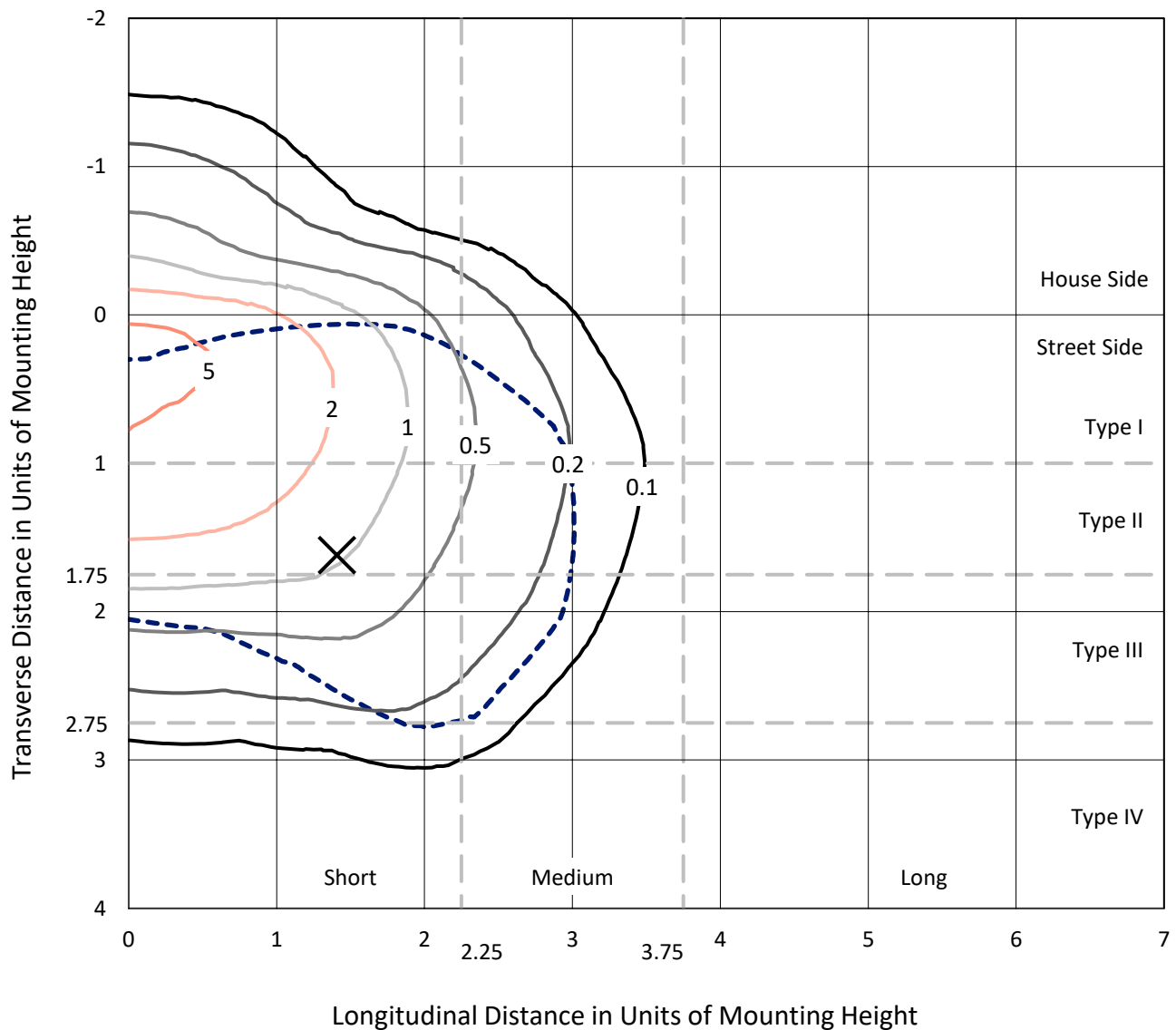
Input Watts (W): 161
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

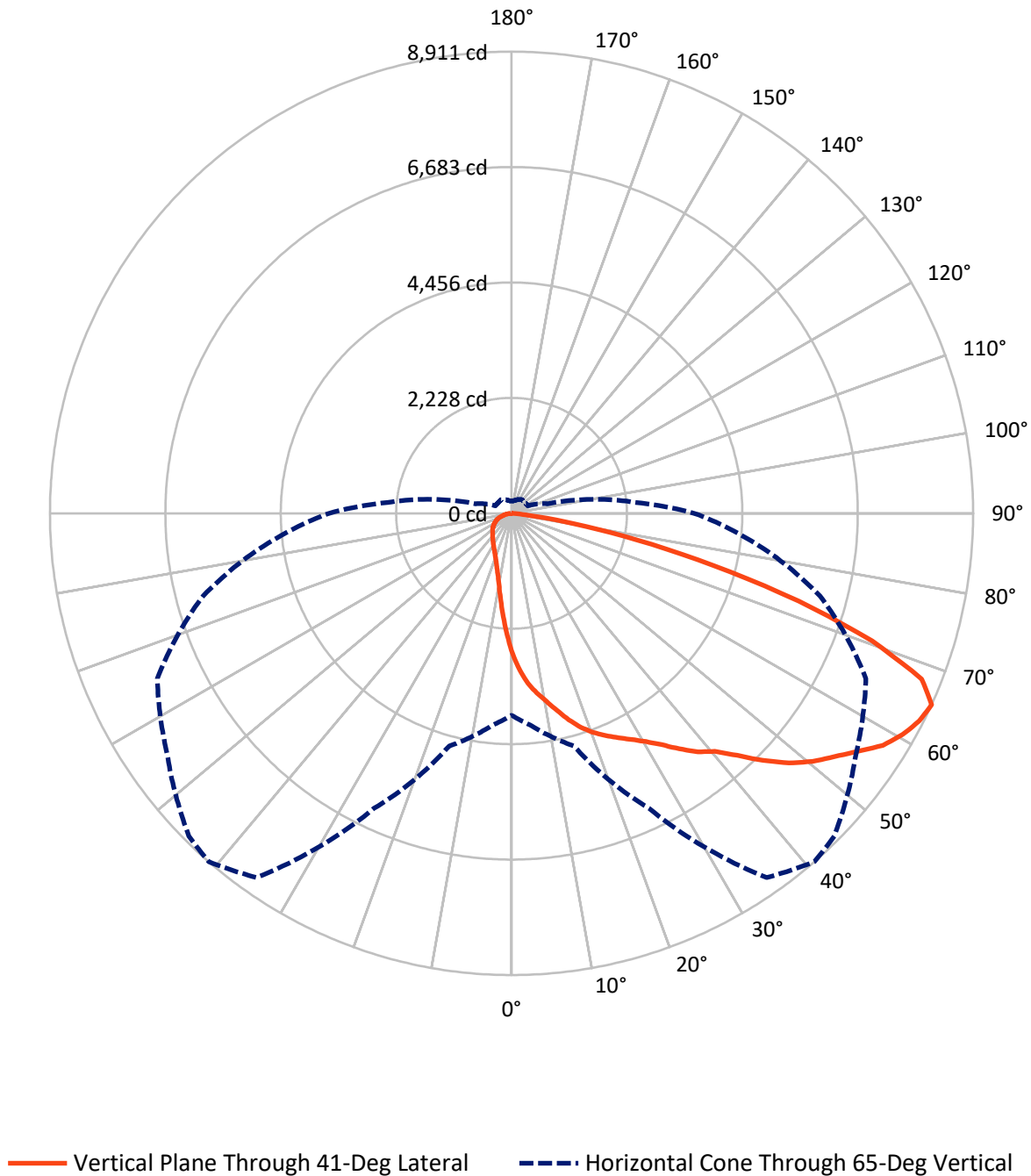
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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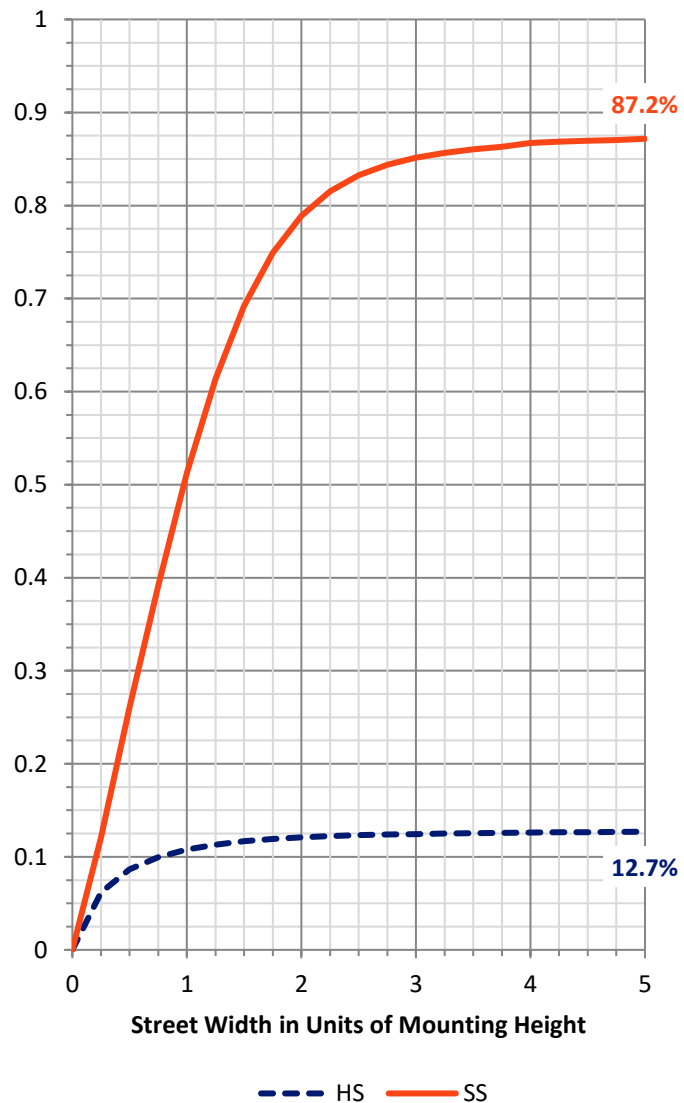
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2047.2	0.0	2047.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13898.8	0.0	13898.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	15946.0	0.0	15946.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.2	1.6
10°-20°	759.1	4.8
20°-30°	1306.0	8.2
30°-40°	1980.7	12.4
40°-50°	2901.8	18.2
50°-60°	3664.3	23.0
60°-70°	3436.0	21.5
70°-80°	1531.4	9.6
80°-90°	113.5	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°	15946.0	100.0
0°-180°	15946.0	100.0

Coefficient of Utilization



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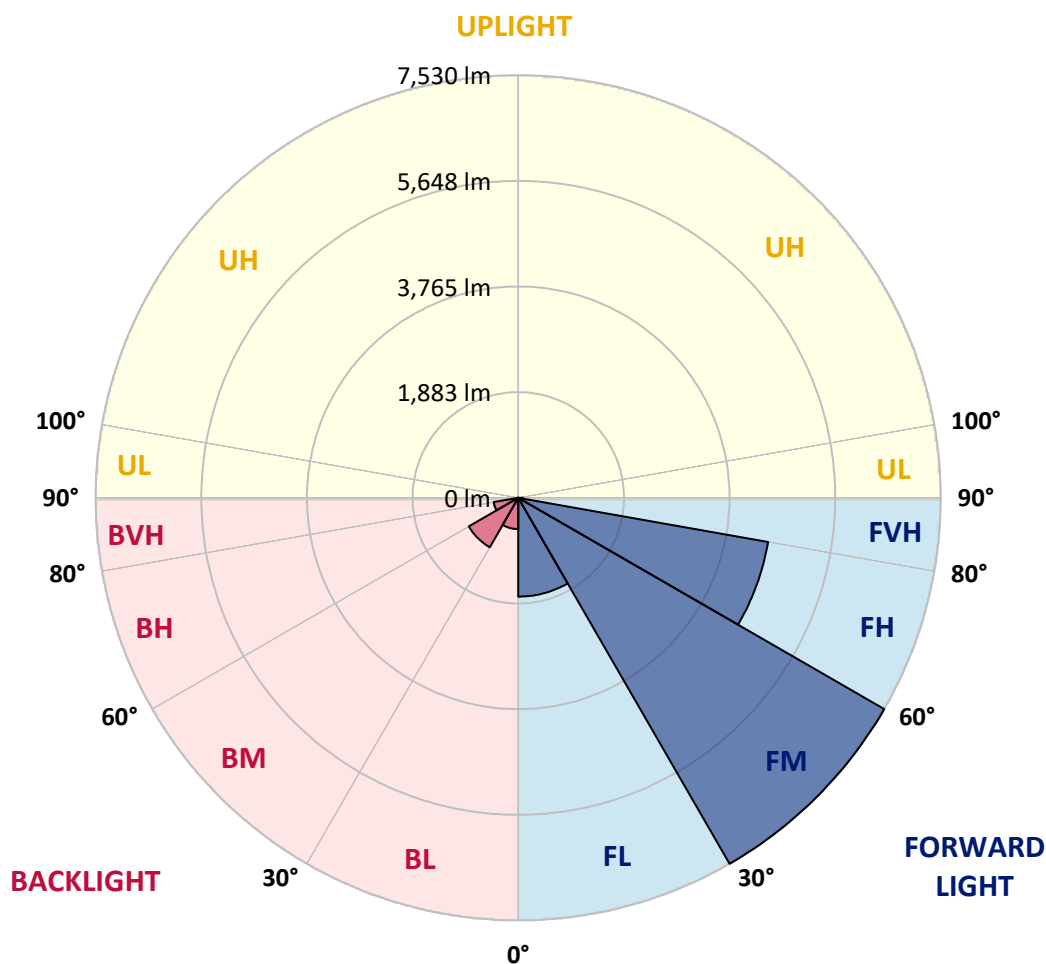
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1761.0	11.0			
FM	(30°-60°)	7530.3	47.2			
FH	(60°-80°)	4522.7	28.4			G2/5000
FVH	(80°-90°)	84.7	0.5			G1/100
BL	(0°-30°)	557.2	3.5	B2/1000		
BM	(30°-60°)	1016.6	6.4	B2/2500		
BH	(60°-80°)	444.7	2.8	B1/500		G1/500
BVH	(80°-90°)	28.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1
2.5°	3134.1	3124.0	3117.3	3080.3	3080.3	3029.9	3033.2	2986.1	2929.0	2838.2	2740.7
5°	3430.0	3416.6	3399.8	3362.8	3349.3	3298.9	3292.1	3224.9	3127.4	2969.3	2794.5
7.5°	3689.0	3675.5	3652.0	3598.2	3561.2	3500.6	3483.8	3396.4	3288.8	3093.7	2848.3
10°	3924.3	3914.3	3884.0	3816.7	3766.3	3692.3	3662.1	3544.4	3409.8	3194.6	2892.0
12.5°	4163.1	4149.7	4109.3	4052.1	3991.6	3904.2	3867.2	3715.9	3544.4	3305.6	2955.9
15°	4385.0	4364.9	4334.6	4274.1	4220.3	4136.2	4095.8	3917.6	3709.1	3430.0	3039.9
17.5°	4529.6	4512.8	4485.9	4452.3	4408.6	4344.7	4304.3	4129.5	3873.9	3551.1	3127.4
20°	4617.1	4610.4	4600.3	4580.1	4559.9	4516.2	4485.9	4321.2	4052.1	3668.8	3211.4
22.5°	4684.3	4677.6	4674.2	4674.2	4677.6	4660.8	4640.6	4499.4	4223.6	3793.2	3288.8
25°	4788.6	4785.2	4778.5	4771.8	4795.3	4798.7	4791.9	4694.4	4438.9	3958.0	3386.3
27.5°	4933.2	4923.1	4909.6	4902.9	4926.5	4943.3	4956.7	4889.5	4667.5	4126.1	3497.3
30°	5155.1	5124.9	5091.2	5067.7	5084.5	5111.4	5141.7	5101.3	4902.9	4334.6	3611.6
32.5°	5417.4	5380.4	5303.1	5259.4	5303.1	5323.3	5346.8	5326.6	5148.4	4559.9	3725.9
35°	5736.9	5693.2	5612.5	5548.6	5625.9	5582.2	5572.1	5551.9	5380.4	4781.9	3853.7
37.5°	6268.2	6204.3	6076.5	5935.3	5935.3	5841.1	5804.1	5743.6	5588.9	4980.3	3978.2
40°	6883.6	6799.5	6634.7	6426.2	6234.6	6039.5	6016.0	5972.3	5834.4	5208.9	4119.4
42.5°	7559.5	7398.1	7169.4	6917.2	6607.8	6385.9	6332.1	6207.7	6073.2	5441.0	4260.6
45°	8309.4	7973.1	7640.2	7512.4	7001.3	6799.5	6698.6	6473.3	6322.0	5683.1	4408.6
47.5°	8430.5	8168.2	7946.2	7926.0	7367.8	7199.7	7085.3	6762.5	6591.0	5942.0	4563.3
50°	8363.2	8205.1	8228.7	8148.0	7636.8	7525.9	7438.4	7071.9	6856.7	6190.9	4704.5
52.5°	8080.7	8168.2	8302.7	8154.7	7892.4	7801.6	7757.9	7404.8	7105.5	6419.5	4832.3
55°	7744.5	7805.0	8094.2	8275.8	8188.3	8107.6	8067.3	7791.5	7351.0	6611.2	4950.0
57.5°	7253.5	7226.6	7546.0	8255.6	8497.7	8450.6	8406.9	8171.5	7579.7	6749.1	5024.0
60°	6517.0	6459.9	6863.4	7852.1	8598.6	8672.6	8652.4	8423.7	7754.5	6745.7	4993.7
62.5°	5242.6	5383.8	5942.0	7193.0	8642.3	8830.6	8793.6	8443.9	7811.7	6550.7	4802.0
65°	3897.4	4099.2	4647.3	6285.0	8581.8	8911.3	8810.4	8114.4	7546.0	6164.0	4381.7
67.5°	2807.9	2986.1	3386.3	5171.9	8000.0	8541.4	8423.7	7576.3	6934.0	5615.8	3799.9
70°	1920.1	2047.9	2320.3	3766.3	6829.8	7384.6	7310.7	6772.6	5968.9	4963.4	3087.0
72.5°	1355.2	1409.0	1583.9	2485.1	5188.7	5794.0	5706.6	5572.1	4795.3	4126.1	2401.0
75°	1015.6	1049.2	1143.3	1607.4	3500.6	4015.1	3934.4	4011.8	3581.3	3124.0	1748.6
77.5°	383.4	417.0	649.0	1025.6	2071.5	2464.9	2384.2	2431.3	1990.8	1577.1	871.0
80°	104.2	111.0	215.2	487.6	941.6	1227.4	1116.4	958.4	739.8	726.4	460.7
82.5°	43.7	50.4	97.5	262.3	336.3	336.3	282.5	349.7	282.5	339.6	221.9
85°	16.8	20.2	23.5	67.3	43.7	47.1	50.4	67.3	57.2	70.6	50.4
87.5°	0.0	0.0	0.0	3.4	3.4	6.7	3.4	6.7	10.1	10.1	10.1
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°	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1	2717.1
2.5°	2700.3	2663.3	2609.5	2522.1	2431.3	2380.8	2316.9	2306.9	2239.6	2232.9	2206.0
5°	2717.1	2639.8	2501.9	2333.8	2169.0	2041.2	1947.0	1896.6	1799.1	1799.1	1772.2
7.5°	2730.6	2609.5	2387.6	2138.7	1913.4	1741.9	1614.1	1560.3	1472.9	1466.2	1446.0
10°	2733.9	2572.5	2263.1	1940.3	1664.6	1489.7	1365.3	1304.8	1227.4	1220.7	1207.2
12.5°	2760.8	2552.3	2152.2	1768.8	1486.3	1298.0	1177.0	1126.5	1066.0	1059.3	1045.8
15°	2804.5	2552.3	2058.0	1624.2	1328.3	1153.4	1049.2	1002.1	958.4	951.7	944.9
17.5°	2848.3	2545.6	1963.9	1489.7	1197.1	1039.1	948.3	911.3	877.7	874.3	867.6
20°	2888.6	2542.3	1869.7	1375.4	1096.3	944.9	874.3	840.7	813.8	813.8	810.4
22.5°	2929.0	2535.5	1778.9	1267.8	1008.8	874.3	813.8	776.8	756.6	756.6	753.3
25°	2989.5	2535.5	1694.8	1177.0	938.2	820.5	760.0	733.1	716.3	712.9	712.9
27.5°	3060.1	2555.7	1620.9	1096.3	877.7	766.7	719.6	692.7	672.6	665.8	669.2
30°	3137.5	2572.5	1553.6	1025.6	820.5	726.4	675.9	649.0	628.8	622.1	625.5
32.5°	3214.8	2592.7	1493.1	961.8	763.3	689.4	638.9	608.7	588.5	585.1	585.1
35°	3298.9	2612.9	1432.5	907.9	716.3	652.4	605.3	571.7	558.2	551.5	554.9
37.5°	3382.9	2646.5	1375.4	857.5	682.6	618.7	575.0	541.4	531.3	528.0	528.0
40°	3483.8	2696.9	1351.8	823.9	652.4	588.5	551.5	517.9	507.8	507.8	507.8
42.5°	3567.9	2737.3	1331.7	786.9	628.8	561.6	528.0	501.1	494.3	491.0	494.3
45°	3652.0	2774.3	1304.8	753.3	598.6	534.7	507.8	480.9	474.2	474.2	474.2
47.5°	3736.0	2794.5	1267.8	719.6	571.7	511.1	487.6	464.1	457.3	457.3	457.3
50°	3803.3	2811.3	1214.0	682.6	541.4	491.0	467.4	443.9	437.2	437.2	437.2
52.5°	3870.5	2814.6	1156.8	638.9	511.1	467.4	447.2	423.7	417.0	413.6	413.6
55°	3931.1	2811.3	1089.5	588.5	477.5	440.5	423.7	403.5	390.1	376.6	383.4
57.5°	3974.8	2807.9	1012.2	538.0	443.9	413.6	406.9	380.0	353.1	319.5	326.2
60°	3958.0	2770.9	928.1	474.2	406.9	386.7	386.7	349.7	302.6	285.8	289.2
62.5°	3850.4	2666.7	840.7	406.9	369.9	359.8	356.5	316.1	279.1	262.3	265.7
65°	3527.5	2404.4	712.9	346.4	332.9	329.6	329.6	292.6	258.9	238.8	242.1
67.5°	3036.6	2017.7	581.8	292.6	295.9	302.6	302.6	269.0	235.4	215.2	218.6
70°	2434.6	1577.1	464.1	252.2	255.6	265.7	272.4	242.1	211.9	191.7	191.7
72.5°	1832.7	1197.1	373.3	211.9	228.7	228.7	238.8	215.2	185.0	164.8	168.1
75°	1328.3	857.5	295.9	178.2	198.4	195.0	195.0	181.6	158.1	144.6	144.6
77.5°	628.8	450.6	235.4	127.8	154.7	151.3	154.7	144.6	134.5	121.1	124.4
80°	309.4	221.9	151.3	90.8	107.6	111.0	121.1	114.3	111.0	100.9	100.9
82.5°	148.0	87.4	70.6	63.9	74.0	77.3	84.1	84.1	87.4	80.7	80.7
85°	40.4	23.5	30.3	40.4	47.1	50.4	57.2	60.5	60.5	57.2	60.5
87.5°	10.1	10.1	13.5	20.2	23.5	26.9	30.3	30.3	13.5	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)