

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: P841012

Luminaire Tested: **ARCH4-120-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841012
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: ARCH4-120-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1000mA 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: 13849 lumens
Efficiency: N/A
Efficacy: 113.5 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): 122
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



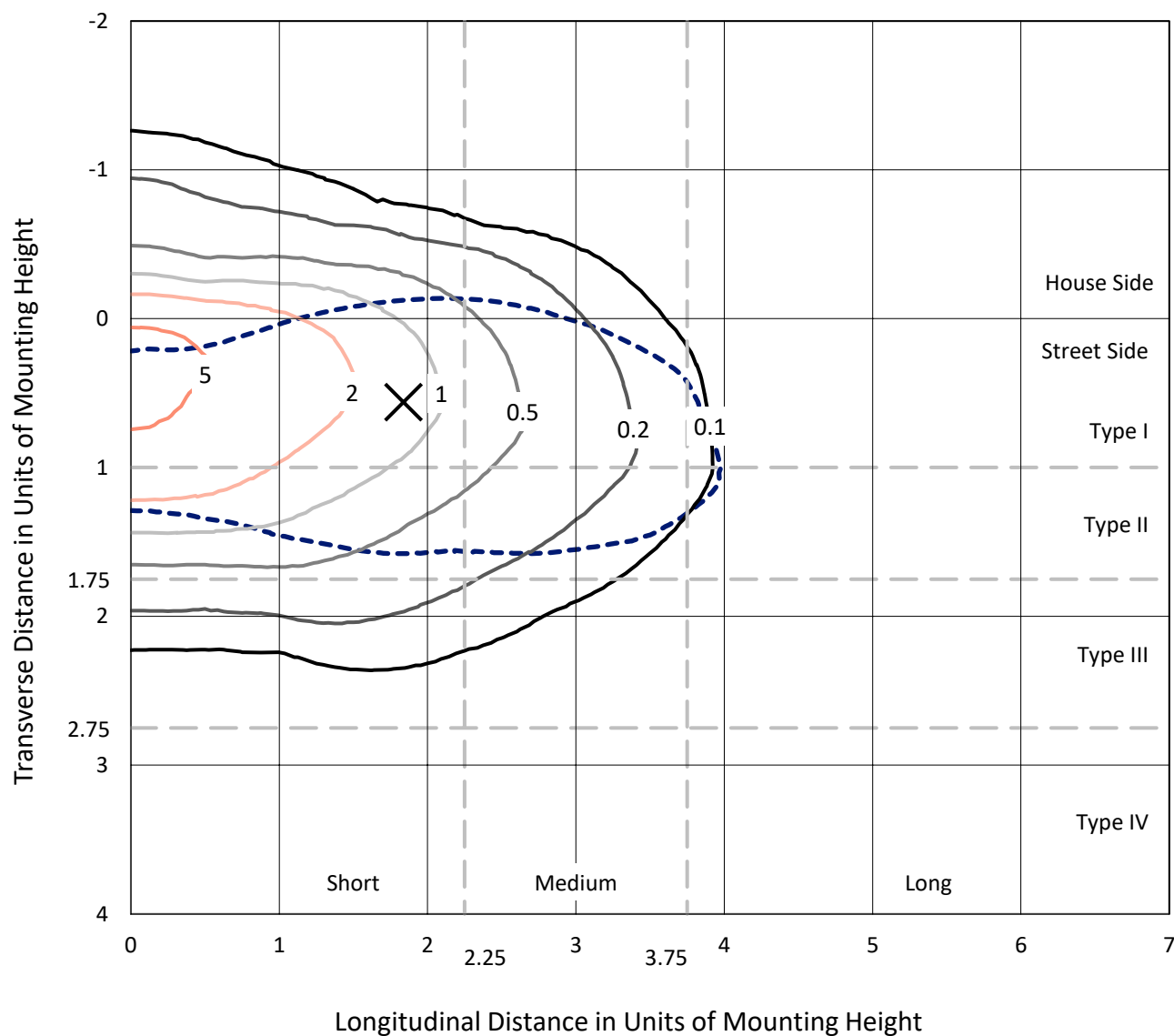
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

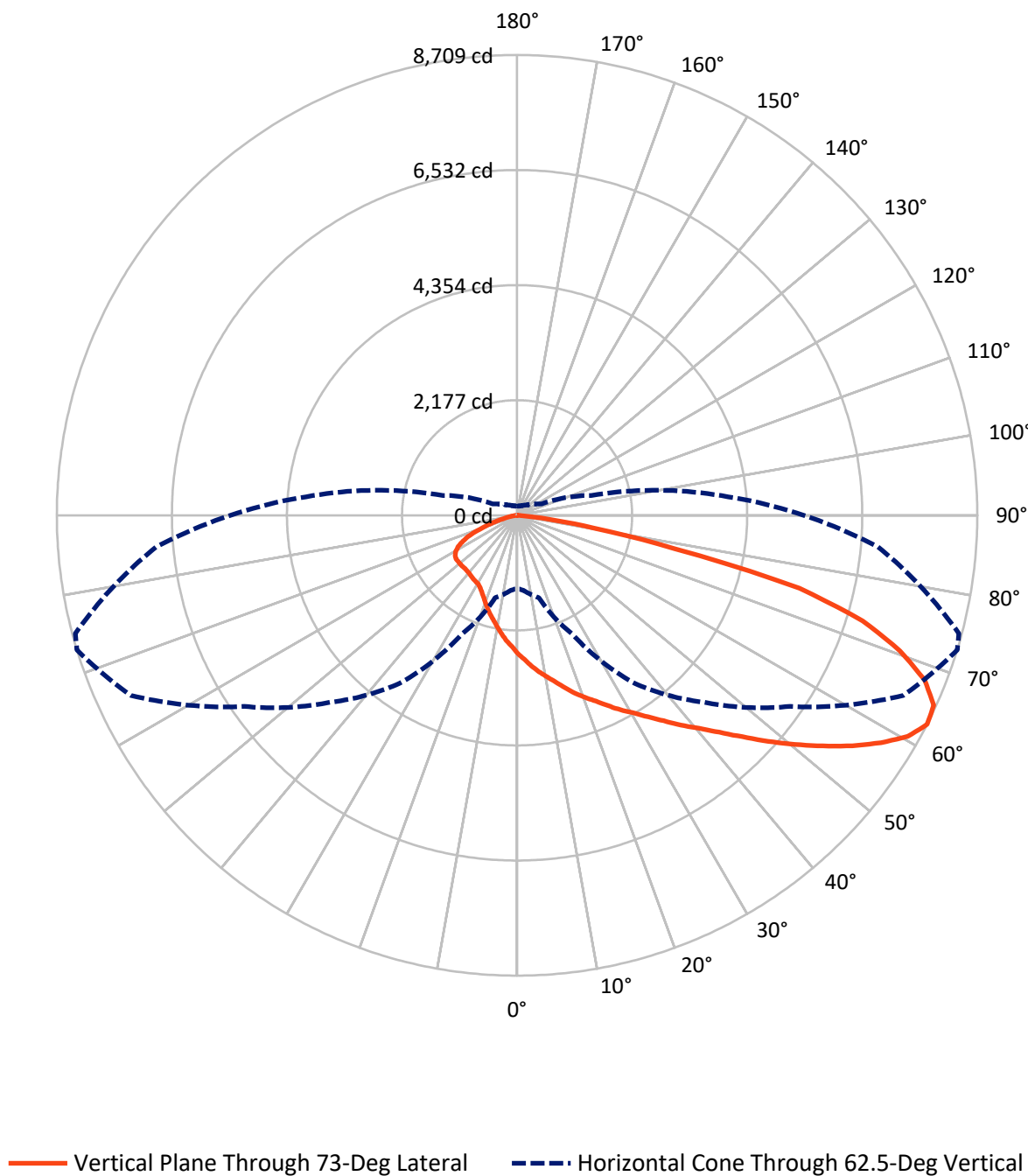


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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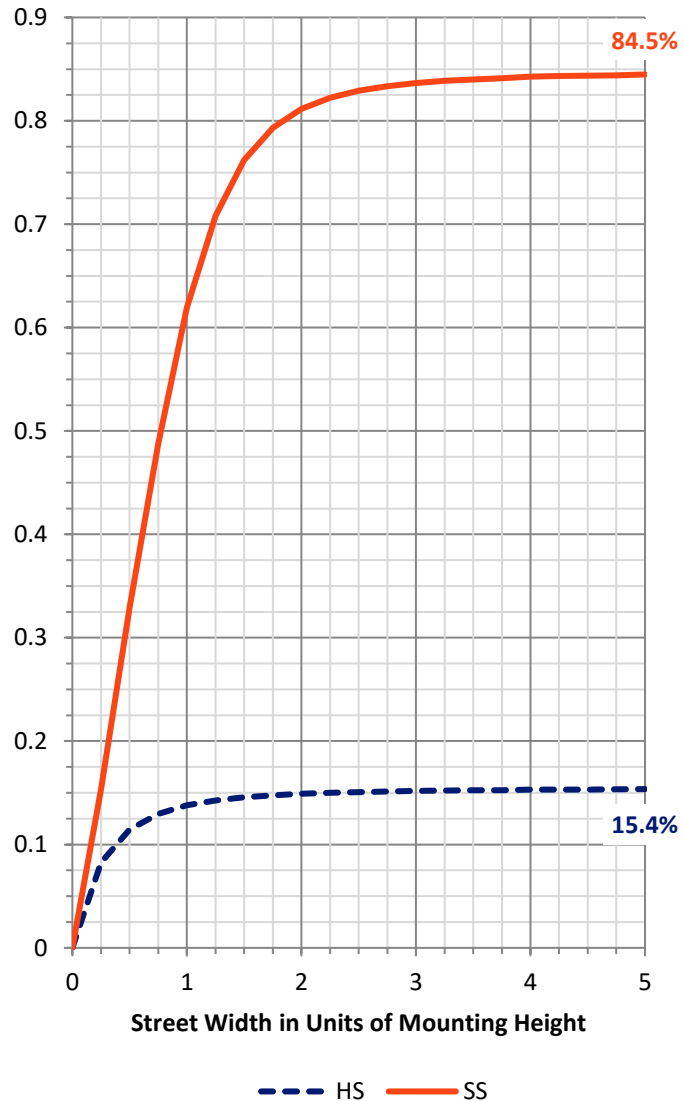
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2146.8	0.0	2146.8
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	11702.2	0.0	11702.2
	% Fixture	84.5	0.0	84.5
Total	Lumens	13849.0	0.0	13849.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.3	1.8
10°-20°	764.4	5.5
20°-30°	1272.4	9.2
30°-40°	1919.9	13.9
40°-50°	2683.5	19.4
50°-60°	2964.1	21.4
60°-70°	2582.2	18.6
70°-80°	1304.4	9.4
80°-90°	104.7	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°	13849.0	100.0
0°-180°	13849.0	100.0

Coefficient of Utilization



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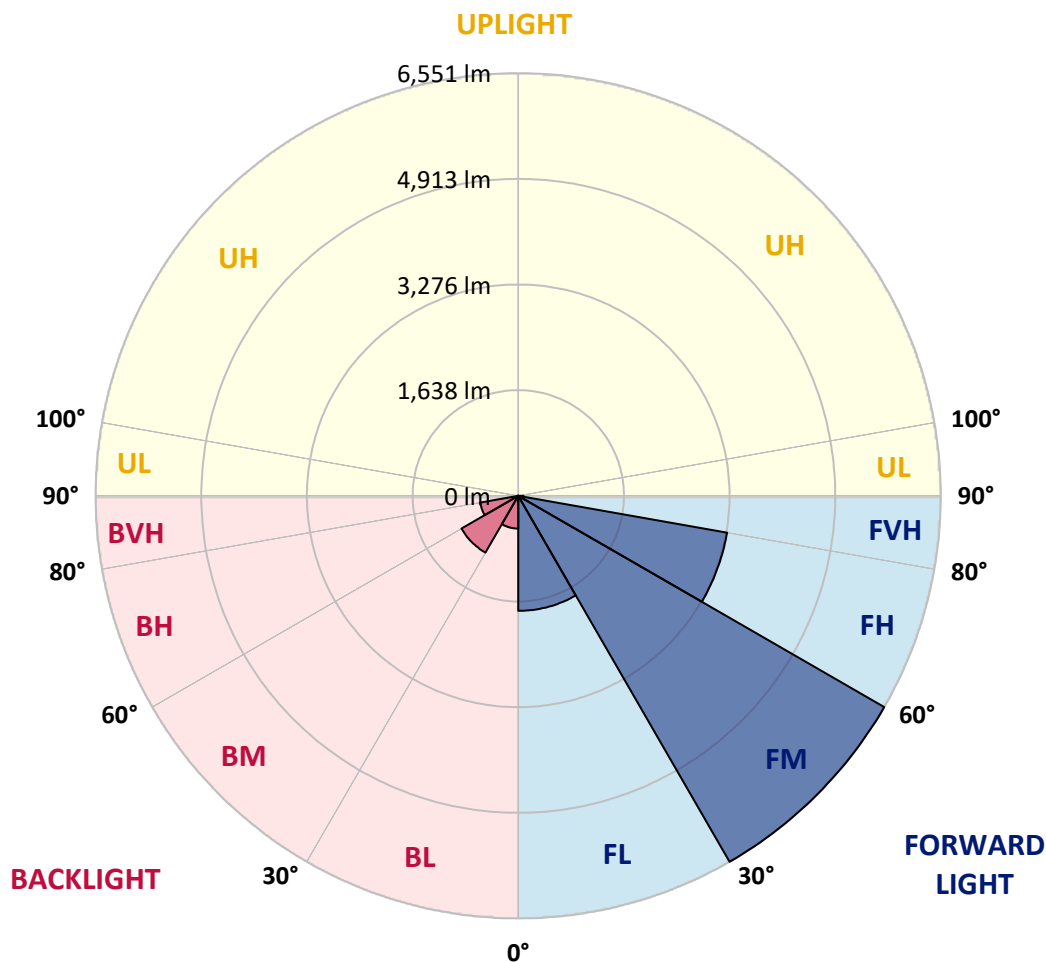
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1782.8	12.9			
FM	(30°-60°)	6551.1	47.3			
FH	(60°-80°)	3287.3	23.7			G2/5000
FVH	(80°-90°)	81.0	0.6			G1/100
BL	(0°-30°)	507.4	3.7	B2/1000		
BM	(30°-60°)	1016.5	7.3	B2/2500		
BH	(60°-80°)	599.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	23.7	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3
2.5°	2984.5	3017.6	2999.5	3011.6	2951.3	2912.0	2866.8	2779.3	2731.0	2724.9	2667.6
5°	3422.0	3458.2	3428.0	3419.0	3313.4	3222.8	3120.2	2966.3	2863.7	2845.6	2718.9
7.5°	3859.6	3892.8	3856.6	3829.4	3687.6	3527.6	3376.7	3150.4	2990.5	2960.3	2761.1
10°	4167.4	4197.6	4170.4	4143.2	3995.4	3832.4	3618.2	3322.4	3105.2	3056.9	2788.3
12.5°	4399.7	4417.8	4405.8	4381.6	4242.8	4067.8	3862.6	3515.6	3234.9	3174.6	2830.6
15°	4589.8	4620.0	4604.9	4586.8	4454.1	4279.0	4082.9	3717.7	3385.8	3310.4	2893.9
17.5°	4716.6	4737.7	4740.7	4740.7	4623.0	4451.0	4260.9	3901.8	3536.7	3440.1	2954.3
20°	4773.9	4798.1	4813.2	4837.3	4740.7	4592.9	4399.7	4058.7	3678.5	3569.9	3011.6
22.5°	4801.1	4822.2	4861.4	4915.8	4837.3	4713.6	4535.5	4203.6	3820.3	3705.7	3078.0
25°	4822.2	4849.4	4906.7	5009.3	4955.0	4849.4	4695.5	4369.6	3989.3	3871.6	3174.6
27.5°	4879.5	4912.7	4967.1	5090.8	5024.4	4973.1	4864.5	4547.6	4167.4	4046.7	3292.3
30°	5078.7	5105.9	5102.8	5181.3	5099.8	5084.7	5009.3	4719.6	4339.4	4218.7	3431.1
32.5°	5440.8	5468.0	5401.6	5371.4	5193.4	5196.4	5166.2	4903.7	4544.6	4420.9	3591.0
35°	5830.1	5860.3	5772.8	5721.5	5422.7	5335.2	5350.3	5133.0	4773.9	4650.2	3790.2
37.5°	6177.1	6213.3	6137.9	6062.5	5760.7	5558.5	5555.5	5389.5	5036.5	4909.7	4010.5
40°	6367.2	6409.5	6454.8	6412.5	6095.7	5872.3	5775.8	5652.1	5296.0	5166.2	4248.9
42.5°	6457.8	6575.5	6656.9	6629.8	6370.3	6143.9	6029.3	5926.7	5612.8	5486.1	4532.5
45°	6204.3	6207.3	6379.3	6527.2	6478.9	6328.0	6306.9	6234.5	5974.9	5854.2	4852.4
47.5°	5887.4	5863.3	5984.0	6246.5	6382.3	6421.6	6545.3	6575.5	6388.4	6267.7	5178.3
50°	5127.0	5142.1	5534.4	5911.6	6177.1	6430.6	6714.3	6925.5	6813.9	6699.2	5522.3
52.5°	4170.4	4206.6	4656.2	5486.1	5905.5	6340.1	6813.9	7275.6	7248.4	7139.8	5866.3
55°	3343.6	3400.9	3877.7	4776.9	5558.5	6137.9	6856.1	7595.4	7698.0	7598.4	6204.3
57.5°	2555.9	2616.3	3017.6	3941.1	5114.9	5809.0	6825.9	7876.1	8117.5	8054.1	6515.1
60°	1925.3	1985.6	2242.1	3195.7	4559.7	5440.8	6675.0	8060.1	8494.7	8428.3	6741.4
62.5°	1379.1	1427.3	1617.5	2486.5	3883.7	5003.3	6303.9	8063.2	8708.9	8654.6	6850.1
65°	992.8	992.8	1146.7	1774.4	3250.0	4478.2	5742.6	7692.0	8663.7	8648.6	6774.6
67.5°	715.2	721.2	844.9	1240.3	2592.2	3841.5	5015.3	7031.1	8313.6	8389.1	6503.0
70°	507.0	522.1	579.4	866.1	1958.5	3032.7	4236.8	6165.1	7682.9	7815.7	5978.0
72.5°	392.3	401.3	440.6	603.5	1430.4	2254.2	3376.7	5199.4	6841.0	6991.9	5262.8
75°	301.8	310.8	341.0	443.6	1026.0	1581.2	2399.0	4034.6	5516.3	5784.8	4227.7
77.5°	220.3	232.4	253.5	322.9	597.5	1004.9	1454.5	2269.3	3044.8	3171.5	2215.0
80°	102.6	117.7	147.9	208.2	322.9	473.8	516.0	875.1	1463.6	1529.9	1201.0
82.5°	57.3	72.4	84.5	126.7	163.0	169.0	175.0	220.3	552.2	609.6	503.9
85°	27.2	36.2	39.2	54.3	54.3	48.3	57.3	42.2	90.5	108.6	105.6
87.5°	0.0	3.0	6.0	15.1	12.1	9.1	9.1	9.1	9.1	12.1	9.1
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°	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3	2622.3
2.5°	2640.4	2601.2	2510.7	2432.2	2380.9	2335.7	2275.3	2248.1	2199.9	2208.9	2181.8
5°	2655.5	2583.1	2423.2	2275.3	2166.7	2070.1	1964.5	1904.1	1837.7	1831.7	1810.6
7.5°	2664.6	2552.9	2323.6	2115.4	1949.4	1801.5	1659.7	1581.2	1499.8	1481.7	1463.6
10°	2655.5	2507.7	2221.0	1949.4	1729.1	1545.0	1385.1	1285.5	1201.0	1179.9	1161.8
12.5°	2664.6	2483.5	2124.4	1795.5	1533.0	1324.7	1143.7	1041.1	962.6	941.5	929.4
15°	2685.7	2468.4	2042.9	1656.7	1357.9	1125.6	947.5	860.0	796.7	775.5	769.5
17.5°	2703.8	2453.3	1955.4	1520.9	1182.9	950.6	796.7	724.2	669.9	648.8	642.8
20°	2728.0	2432.2	1867.9	1391.1	1029.0	811.7	676.0	612.6	570.3	555.2	552.2
22.5°	2749.1	2417.1	1786.4	1261.4	887.2	700.1	585.4	534.1	503.9	488.9	488.9
25°	2803.4	2423.2	1717.0	1140.7	781.6	612.6	516.0	476.8	452.6	443.6	443.6
27.5°	2866.8	2447.3	1662.7	1038.1	691.0	546.2	467.7	434.5	422.5	410.4	413.4
30°	2957.3	2495.6	1626.5	953.6	624.7	494.9	428.5	404.4	392.3	389.3	389.3
32.5°	3072.0	2574.1	1623.5	899.3	576.4	455.7	401.3	380.2	374.2	371.2	371.2
35°	3207.8	2643.5	1605.4	875.1	546.2	428.5	380.2	365.1	362.1	362.1	362.1
37.5°	3370.7	2758.1	1593.3	841.9	531.1	413.4	365.1	353.1	353.1	353.1	353.1
40°	3539.7	2851.7	1575.2	811.7	525.1	404.4	356.1	341.0	341.0	341.0	341.0
42.5°	3741.9	2987.5	1569.2	796.7	516.0	398.3	344.0	325.9	328.9	328.9	331.9
45°	3986.3	3141.4	1566.2	781.6	513.0	392.3	331.9	310.8	313.8	310.8	310.8
47.5°	4233.8	3319.4	1575.2	772.5	510.0	386.3	322.9	295.7	295.7	292.7	292.7
50°	4493.3	3482.4	1581.2	763.5	503.9	374.2	307.8	283.7	277.6	271.6	274.6
52.5°	4737.7	3633.3	1584.3	748.4	485.8	356.1	295.7	268.6	259.5	250.5	253.5
55°	4982.1	3778.1	1590.3	730.3	461.7	338.0	280.6	253.5	241.4	229.3	229.3
57.5°	5202.4	3904.8	1575.2	685.0	434.5	319.9	265.6	235.4	217.3	205.2	205.2
60°	5353.3	3995.4	1529.9	618.6	398.3	298.7	250.5	217.3	196.1	187.1	187.1
62.5°	5425.7	4010.5	1448.5	510.0	353.1	277.6	232.4	199.2	181.1	175.0	175.0
65°	5356.3	3944.1	1321.7	383.2	304.8	253.5	214.3	184.1	166.0	150.9	150.9
67.5°	5114.9	3757.0	1146.7	289.7	259.5	229.3	196.1	169.0	147.9	135.8	135.8
70°	4629.1	3367.7	887.2	232.4	220.3	199.2	178.0	150.9	132.8	117.7	117.7
72.5°	3992.4	2854.7	624.7	187.1	187.1	169.0	150.9	132.8	114.7	102.6	102.6
75°	3062.9	2112.4	419.5	150.9	153.9	141.8	123.7	108.6	96.6	87.5	87.5
77.5°	1671.8	1044.1	256.5	111.7	114.7	108.6	96.6	87.5	81.5	72.4	72.4
80°	811.7	458.7	147.9	78.5	81.5	78.5	72.4	63.4	63.4	57.3	57.3
82.5°	341.0	172.0	78.5	54.3	54.3	48.3	45.3	45.3	45.3	42.2	42.2
85°	84.5	33.2	33.2	30.2	30.2	30.2	27.2	27.2	27.2	21.1	24.1
87.5°	12.1	12.1	12.1	12.1	12.1	12.1	9.1	3.0	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)