

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: P841050

Luminaire Tested: **ARCH4-120-750-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841050
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: ARCH4-120-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1000mA 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: 14604 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - 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



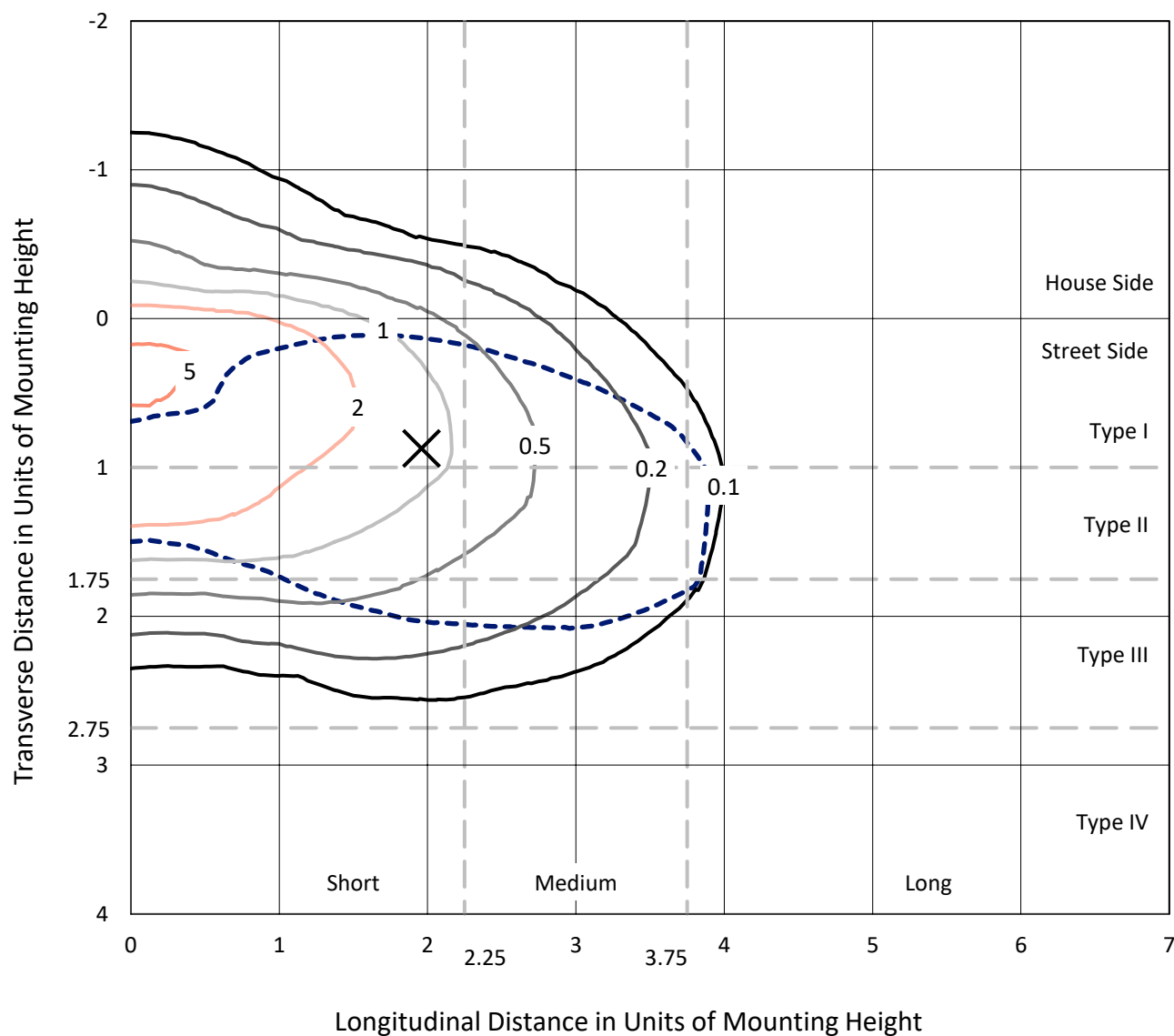
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

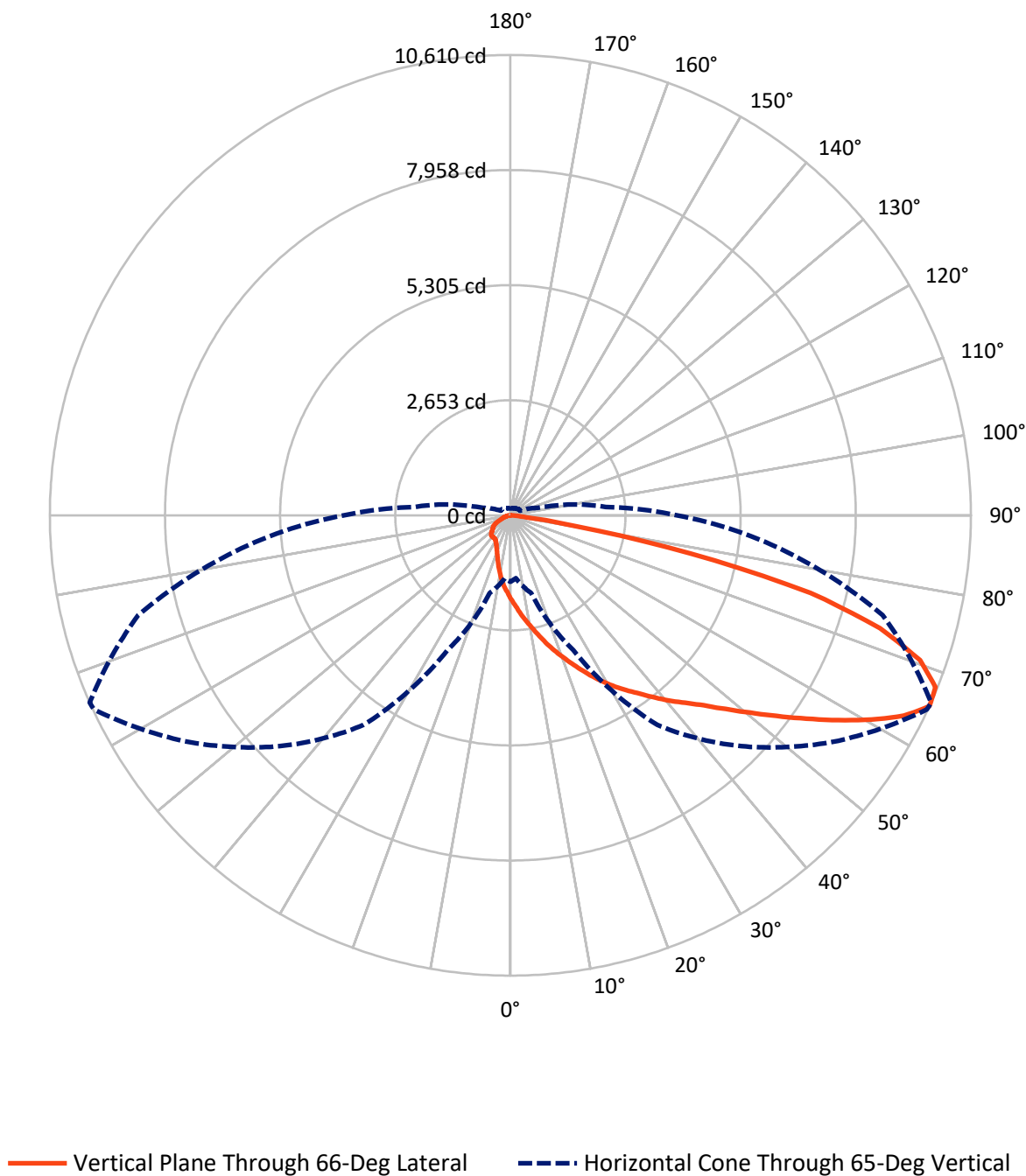


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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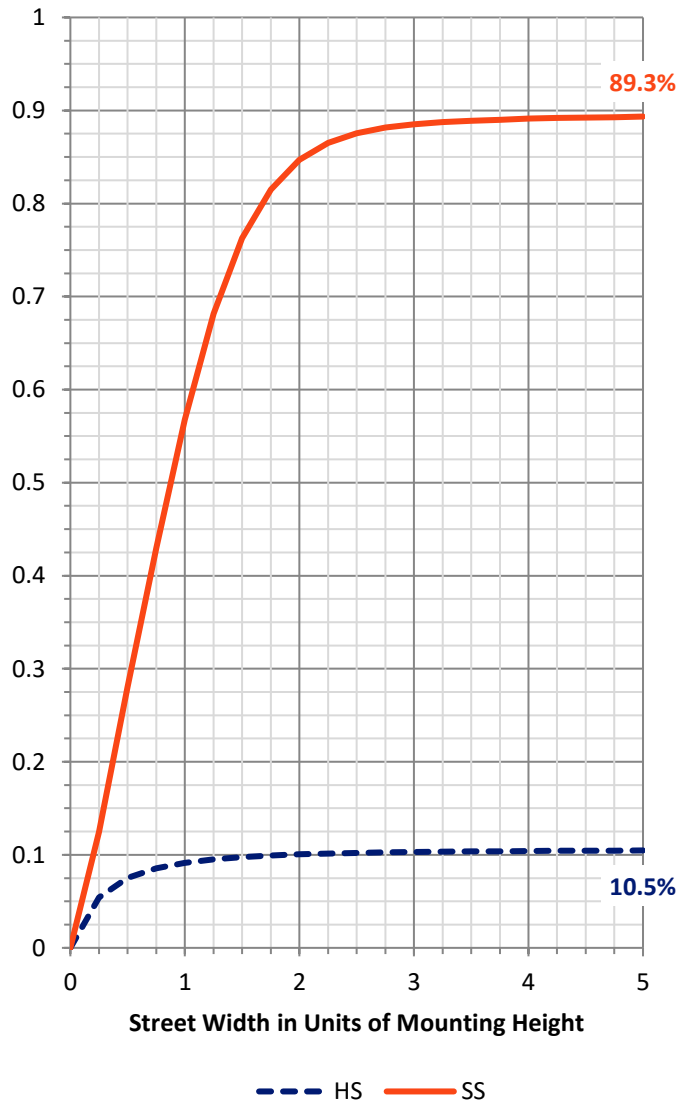
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1544.7	0.0	1544.7
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	13059.3	0.0	13059.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	14604.0	0.0	14604.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	1.3
10°-20°	621.8	4.3
20°-30°	1124.9	7.7
30°-40°	1759.1	12.0
40°-50°	2668.6	18.3
50°-60°	3390.5	23.2
60°-70°	3168.1	21.7
70°-80°	1574.5	10.8
80°-90°	105.8	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°	14604.0	100.0
0°-180°	14604.0	100.0

Coefficient of Utilization



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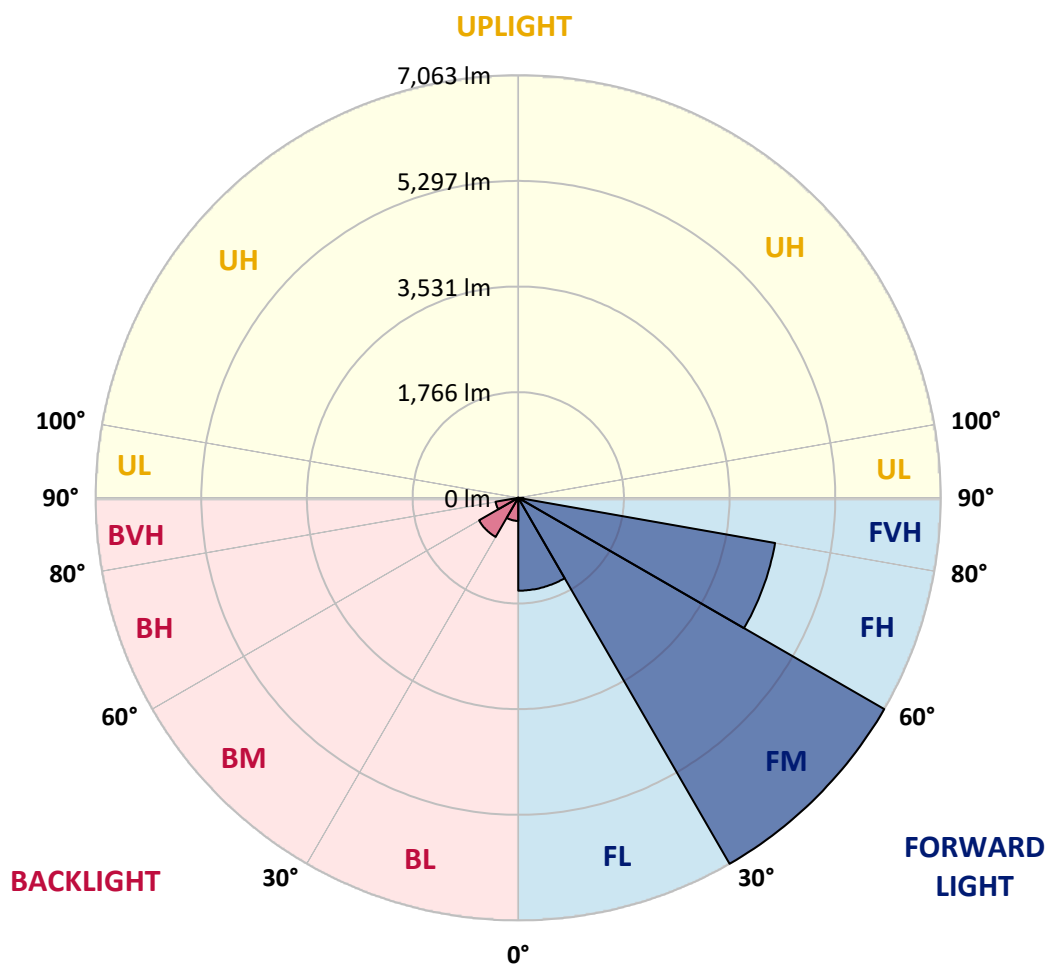
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1551.7	10.6			
FM	(30°-60°)	7062.7	48.4			
FH	(60°-80°)	4357.9	29.8			G2/5000
FVH	(80°-90°)	87.1	0.6			G1/100
BL	(0°-30°)	385.8	2.6	B1/500		
BM	(30°-60°)	755.5	5.2	B1/1000		
BH	(60°-80°)	384.7	2.6	B1/500		G1/500
BVH	(80°-90°)	18.7	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8
2.5°	2257.4	2275.8	2285.0	2288.1	2217.6	2187.0	2156.4	2085.9	2070.6	2030.8	1978.7
5°	2655.6	2680.1	2674.0	2661.8	2576.0	2478.0	2398.3	2266.6	2245.2	2150.2	2033.8
7.5°	3047.7	3069.1	3063.0	3017.1	2922.1	2784.3	2652.6	2459.6	2429.0	2275.8	2089.0
10°	3375.4	3393.8	3390.8	3344.8	3231.5	3063.0	2903.7	2646.4	2609.7	2392.2	2134.9
12.5°	3645.0	3669.5	3666.4	3635.8	3534.7	3350.9	3170.2	2860.9	2814.9	2533.1	2199.2
15°	3856.3	3887.0	3887.0	3874.7	3804.3	3651.1	3445.9	3096.7	3041.6	2695.4	2278.9
17.5°	3985.0	4009.5	4030.9	4052.4	4003.4	3887.0	3700.1	3332.6	3274.4	2854.7	2361.6
20°	4052.4	4076.9	4092.2	4138.1	4147.3	4089.1	3942.1	3565.3	3504.1	3035.4	2456.5
22.5°	4162.6	4184.1	4187.1	4227.0	4245.3	4260.6	4168.8	3795.1	3746.1	3234.5	2563.7
25°	4346.4	4370.9	4361.7	4380.1	4383.2	4401.5	4392.4	4058.5	4009.5	3461.2	2692.4
27.5°	4582.3	4612.9	4606.8	4588.4	4560.8	4545.5	4585.3	4325.0	4279.0	3687.9	2824.1
30°	4836.5	4873.2	4864.1	4827.3	4753.8	4689.5	4744.6	4576.1	4533.3	3920.7	2971.1
32.5°	5093.8	5136.7	5133.6	5072.3	4946.8	4836.5	4919.2	4812.0	4781.4	4171.8	3130.4
35°	5262.3	5317.4	5311.3	5274.5	5112.2	5017.2	5118.3	5054.0	5032.5	4478.1	3360.1
37.5°	5534.9	5593.1	5541.0	5449.1	5262.3	5213.2	5335.8	5326.6	5311.3	4802.8	3602.1
40°	6196.5	6282.2	6144.4	5767.6	5461.3	5418.5	5593.1	5629.8	5614.5	5124.4	3819.6
42.5°	6888.7	7017.4	6802.9	6282.2	5822.8	5666.6	5874.9	5926.9	5908.5	5400.1	4015.6
45°	7308.3	7363.5	7149.1	6744.7	6463.0	5966.7	6175.0	6260.8	6245.5	5730.9	4266.8
47.5°	7651.4	7630.0	7384.9	7112.3	7164.4	6389.4	6515.0	6683.5	6671.2	6095.4	4542.4
50°	7724.9	7675.9	7577.9	7406.4	7544.2	6818.3	6873.4	7164.4	7152.1	6499.7	4821.2
52.5°	7207.3	7142.9	7409.4	7553.4	7507.4	7130.7	7268.5	7691.2	7685.1	6937.7	5087.7
55°	5914.7	5862.6	6579.3	7323.7	7467.6	7351.2	7706.5	8239.5	8273.2	7403.3	5329.6
57.5°	4652.7	4597.6	5302.1	6747.8	7320.6	7553.4	8218.1	8867.4	8910.3	7908.7	5559.4
60°	3709.3	3626.6	4165.7	5841.2	7044.9	7709.6	8711.2	9556.6	9562.7	8371.2	5700.3
62.5°	2520.9	2429.0	3026.3	4692.5	6582.4	7734.1	9091.0	10150.8	10175.3	8717.3	5724.8
65°	1531.5	1454.9	1859.2	3427.5	5899.4	7525.8	9097.1	10588.8	10610.3	8876.6	5577.7
67.5°	888.3	857.6	1062.9	2134.9	4766.0	6965.3	8714.3	10521.4	10561.3	8809.2	5243.9
70°	517.6	514.6	591.2	1056.7	3363.2	5853.4	7859.7	9954.8	10013.0	8457.0	4732.4
72.5°	379.8	385.9	416.6	566.7	1948.1	4214.7	6655.9	8815.3	8904.2	7767.8	4003.4
75°	300.2	303.2	330.8	385.9	1023.0	2383.0	4986.6	7075.6	7146.0	6539.5	3127.3
77.5°	223.6	229.7	251.2	272.6	474.8	1093.5	2805.7	4358.7	4242.3	3589.8	1510.1
80°	162.3	177.7	186.8	196.0	251.2	422.7	842.3	1519.3	1507.0	1568.3	713.7
82.5°	104.1	116.4	125.6	131.7	150.1	202.2	251.2	340.0	367.6	609.5	284.9
85°	45.9	52.1	58.2	70.4	64.3	70.4	104.1	67.4	58.2	91.9	52.1
87.5°	0.0	0.0	9.2	15.3	12.3	6.1	18.4	12.3	9.2	9.2	9.2
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°	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8	1932.8
2.5°	1951.1	1917.4	1847.0	1779.6	1739.8	1687.7	1641.8	1598.9	1595.8	1583.6	1562.1
5°	1975.6	1911.3	1779.6	1654.0	1559.1	1458.0	1372.2	1304.8	1280.3	1262.0	1237.5
7.5°	2000.1	1899.1	1703.0	1519.3	1369.2	1228.3	1127.2	1035.3	1007.7	983.2	967.9
10°	2009.3	1877.6	1614.2	1369.2	1173.1	1023.0	915.8	848.5	823.9	811.7	802.5
12.5°	2036.9	1865.4	1531.5	1228.3	1001.6	863.8	787.2	747.4	738.2	729.0	719.8
15°	2073.7	1865.4	1448.8	1090.4	866.8	756.6	710.6	683.1	676.9	673.9	667.7
17.5°	2113.5	1865.4	1369.2	974.0	768.8	686.1	652.4	637.1	634.0	631.0	627.9
20°	2168.6	1868.4	1283.4	873.0	698.4	634.0	606.5	588.1	585.0	582.0	582.0
22.5°	2223.7	1874.6	1200.7	796.4	652.4	594.2	560.5	542.2	536.0	536.0	536.0
25°	2294.2	1892.9	1124.1	732.1	612.6	557.5	514.6	499.3	496.2	496.2	493.1
27.5°	2376.9	1914.4	1056.7	683.1	572.8	514.6	471.7	456.4	450.3	450.3	447.2
30°	2465.7	1935.8	1001.6	646.3	533.0	471.7	431.9	413.5	407.4	410.4	407.4
32.5°	2563.7	1966.5	958.7	621.8	496.2	434.9	398.2	376.8	373.7	373.7	370.6
35°	2729.1	2052.2	952.6	609.5	465.6	407.4	370.6	349.2	346.1	346.1	343.1
37.5°	2906.8	2150.2	980.2	603.4	441.1	382.9	349.2	327.7	324.7	324.7	324.7
40°	3056.9	2223.7	1010.8	603.4	425.8	361.4	330.8	312.4	312.4	312.4	312.4
42.5°	3158.0	2229.9	1004.7	603.4	413.5	346.1	318.6	300.2	300.2	303.2	300.2
45°	3308.1	2260.5	980.2	594.2	404.3	333.9	306.3	291.0	287.9	291.0	291.0
47.5°	3485.7	2315.6	955.7	557.5	401.3	321.6	297.1	278.7	275.7	278.7	275.7
50°	3654.2	2364.6	943.4	508.5	395.1	309.4	284.9	266.5	263.4	266.5	263.4
52.5°	3795.1	2386.1	922.0	474.8	379.8	297.1	272.6	254.2	248.1	251.2	251.2
55°	3908.4	2380.0	891.3	447.2	352.2	284.9	257.3	242.0	232.8	232.8	229.7
57.5°	4012.5	2383.0	863.8	419.6	321.6	266.5	245.0	226.7	214.4	211.3	208.3
60°	4052.4	2367.7	814.8	382.9	291.0	251.2	229.7	208.3	196.0	193.0	189.9
62.5°	3997.2	2312.6	750.4	318.6	263.4	232.8	214.4	193.0	180.7	177.7	174.6
65°	3841.0	2208.4	652.4	251.2	238.9	211.3	196.0	180.7	165.4	159.3	156.2
67.5°	3574.5	2058.3	529.9	202.2	211.3	193.0	183.8	165.4	147.0	140.9	137.8
70°	3194.7	1859.2	398.2	171.5	186.8	171.5	165.4	147.0	131.7	125.6	122.5
72.5°	2661.8	1537.6	278.7	147.0	162.3	150.1	144.0	131.7	116.4	107.2	107.2
75°	2012.4	1102.7	183.8	125.6	134.8	128.6	119.5	110.3	101.1	95.0	91.9
77.5°	866.8	428.8	113.3	95.0	110.3	107.2	95.0	88.8	85.8	79.6	79.6
80°	373.7	174.6	70.4	70.4	79.6	76.6	73.5	67.4	67.4	64.3	61.3
82.5°	137.8	70.4	42.9	52.1	58.2	52.1	52.1	52.1	52.1	49.0	49.0
85°	33.7	21.4	21.4	30.6	33.7	30.6	33.7	30.6	30.6	30.6	27.6
87.5°	9.2	9.2	12.3	12.3	12.3	12.3	12.3	9.2	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)