

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: P842699

Luminaire Tested: **ARCH4-80-740-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10478 lumens
Efficiency: N/A
Efficacy: 125.6 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): 83.4
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



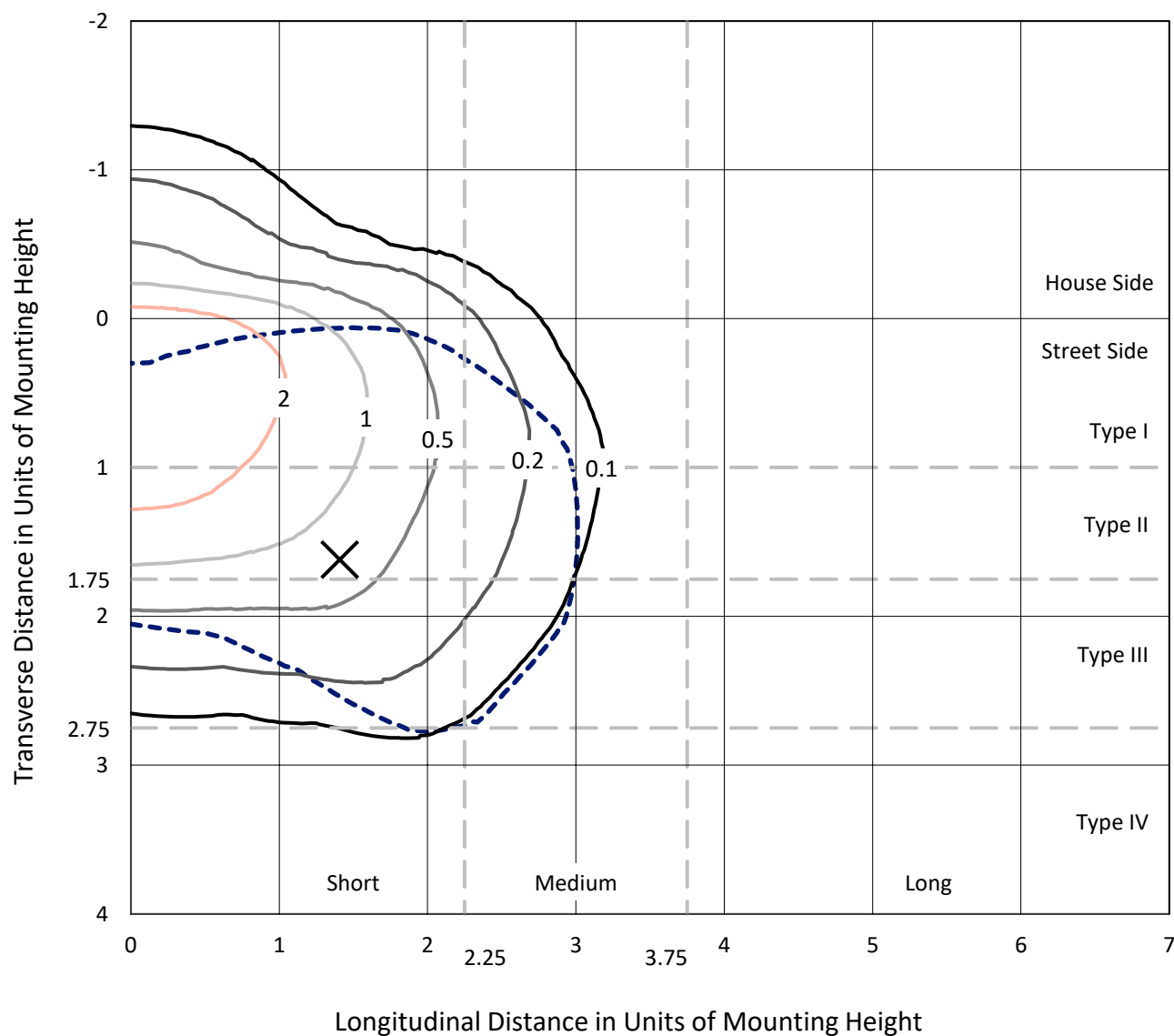
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

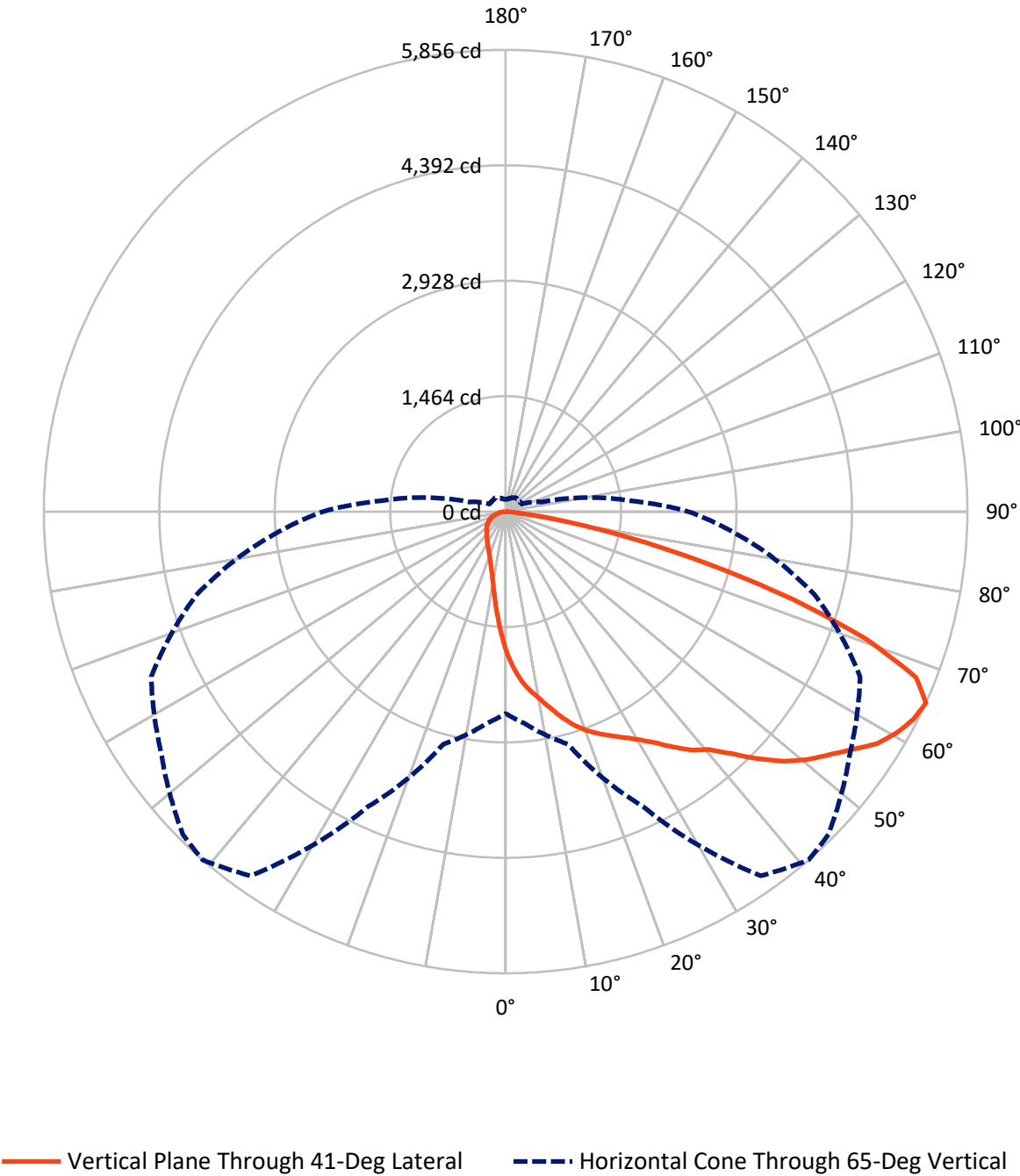


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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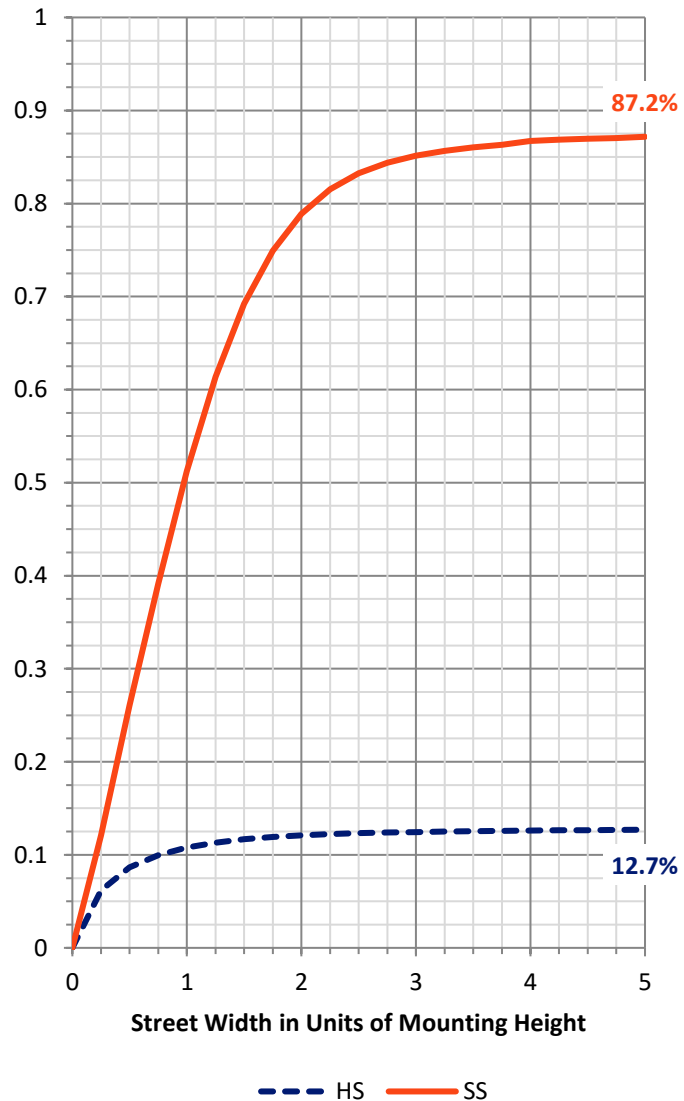
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1345.2	0.0	1345.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9132.8	0.0	9132.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	10478.0	0.0	10478.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.4	1.6
10°-20°	498.8	4.8
20°-30°	858.1	8.2
30°-40°	1301.5	12.4
40°-50°	1906.8	18.2
50°-60°	2407.8	23.0
60°-70°	2257.8	21.5
70°-80°	1006.3	9.6
80°-90°	74.5	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°	10478.0	100.0
0°-180°	10478.0	100.0

Coefficient of Utilization



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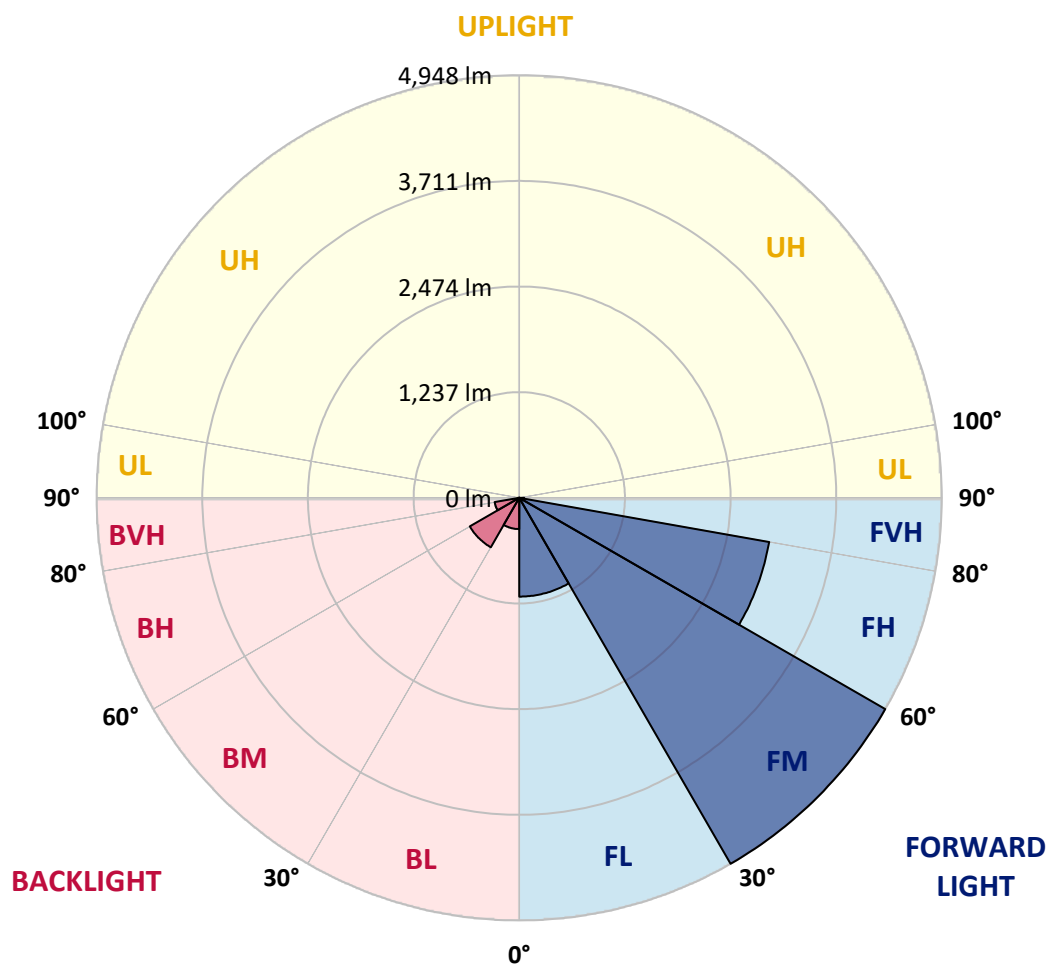
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1157.2	11.0			
FM	(30°-60°)	4948.1	47.2			
FH	(60°-80°)	2971.8	28.4			G2/5000
FVH	(80°-90°)	55.7	0.5			G1/100
BL	(0°-30°)	366.2	3.5	B1/500		
BM	(30°-60°)	668.0	6.4	B1/1000		
BH	(60°-80°)	292.2	2.8	B1/500		G1/500
BVH	(80°-90°)	18.9	0.2			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°	41°	45°	55°	65°	75°	85°
0°	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4
2.5°	2059.4	2052.8	2048.3	2024.0	2024.0	1990.9	1993.1	1962.2	1924.6	1864.9	1800.9
5°	2253.8	2245.0	2234.0	2209.6	2200.8	2167.7	2163.2	2119.1	2055.0	1951.1	1836.2
7.5°	2424.0	2415.1	2399.7	2364.3	2340.0	2300.2	2289.2	2231.7	2161.0	2032.9	1871.6
10°	2578.7	2572.0	2552.1	2508.0	2474.8	2426.2	2406.3	2329.0	2240.6	2099.2	1900.3
12.5°	2735.5	2726.7	2700.2	2662.6	2622.9	2565.4	2541.1	2441.7	2329.0	2172.1	1942.3
15°	2881.4	2868.1	2848.2	2808.5	2773.1	2717.9	2691.4	2574.2	2437.2	2253.8	1997.5
17.5°	2976.4	2965.3	2947.7	2925.6	2896.8	2854.9	2828.4	2713.4	2545.5	2333.4	2055.0
20°	3033.8	3029.4	3022.8	3009.5	2996.3	2967.6	2947.7	2839.4	2662.6	2410.7	2110.2
22.5°	3078.0	3073.6	3071.4	3071.4	3073.6	3062.6	3049.3	2956.5	2775.3	2492.5	2161.0
25°	3146.5	3144.3	3139.9	3135.5	3151.0	3153.2	3148.7	3084.7	2916.7	2600.8	2225.1
27.5°	3241.6	3234.9	3226.1	3221.7	3237.1	3248.2	3257.0	3212.8	3067.0	2711.2	2298.0
30°	3387.4	3367.5	3345.4	3329.9	3341.0	3358.7	3378.6	3352.0	3221.7	2848.2	2373.2
32.5°	3559.7	3535.4	3484.6	3455.9	3484.6	3497.9	3513.3	3500.1	3383.0	2996.3	2448.3
35°	3769.7	3740.9	3687.9	3645.9	3696.7	3668.0	3661.4	3648.1	3535.4	3142.1	2532.3
37.5°	4118.8	4076.8	3992.8	3900.0	3900.0	3838.2	3813.9	3774.1	3672.4	3272.5	2614.0
40°	4523.2	4467.9	4359.6	4222.6	4096.7	3968.5	3953.1	3924.3	3833.7	3422.7	2706.8
42.5°	4967.3	4861.2	4711.0	4545.2	4342.0	4196.1	4160.8	4079.0	3990.6	3575.2	2799.6
45°	5460.0	5239.1	5020.3	4936.4	4600.5	4467.9	4401.6	4253.6	4154.1	3734.3	2896.8
47.5°	5539.6	5367.2	5221.4	5208.1	4841.3	4730.9	4655.7	4443.6	4330.9	3904.4	2998.5
50°	5495.4	5391.5	5407.0	5354.0	5018.1	4945.2	4887.7	4646.9	4505.5	4068.0	3091.3
52.5°	5309.8	5367.2	5455.6	5358.4	5186.0	5126.4	5097.7	4865.6	4669.0	4218.2	3175.3
55°	5088.8	5128.6	5318.6	5437.9	5380.5	5327.5	5300.9	5119.8	4830.3	4344.2	3252.6
57.5°	4766.2	4748.5	4958.5	5424.7	5583.8	5552.8	5524.1	5369.4	4980.5	4434.8	3301.2
60°	4282.3	4244.7	4509.9	5159.5	5650.1	5698.7	5685.4	5535.2	5095.5	4432.6	3281.3
62.5°	3444.8	3537.6	3904.4	4726.4	5678.8	5802.5	5778.2	5548.4	5133.0	4304.4	3155.4
65°	2561.0	2693.6	3053.7	4129.8	5639.0	5855.6	5789.3	5331.9	4958.5	4050.3	2879.2
67.5°	1845.1	1962.2	2225.1	3398.4	5256.8	5612.5	5535.2	4978.3	4556.3	3690.1	2496.9
70°	1261.7	1345.7	1524.7	2474.8	4487.8	4852.4	4803.8	4450.2	3922.1	3261.4	2028.5
72.5°	890.5	925.8	1040.7	1632.9	3409.5	3807.2	3749.8	3661.4	3151.0	2711.2	1577.7
75°	667.3	689.4	751.3	1056.2	2300.2	2638.3	2585.3	2636.1	2353.3	2052.8	1149.0
77.5°	251.9	274.0	426.5	673.9	1361.1	1619.7	1566.6	1597.6	1308.1	1036.3	572.3
80°	68.5	72.9	141.4	320.4	618.7	806.5	733.6	629.7	486.1	477.3	302.7
82.5°	28.7	33.1	64.1	172.4	221.0	221.0	185.6	229.8	185.6	223.2	145.8
85°	11.0	13.3	15.5	44.2	28.7	30.9	33.1	44.2	37.6	46.4	33.1
87.5°	0.0	0.0	0.0	2.2	2.2	4.4	2.2	4.4	6.6	6.6	6.6
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°	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4	1785.4
2.5°	1774.3	1750.0	1714.7	1657.2	1597.6	1564.4	1522.4	1515.8	1471.6	1467.2	1449.5
5°	1785.4	1734.6	1644.0	1533.5	1425.2	1341.3	1279.4	1246.2	1182.2	1182.2	1164.5
7.5°	1794.2	1714.7	1568.9	1405.3	1257.3	1144.6	1060.6	1025.3	967.8	963.4	950.1
10°	1796.4	1690.4	1487.1	1275.0	1093.8	978.9	897.1	857.3	806.5	802.1	793.3
12.5°	1814.1	1677.1	1414.2	1162.3	976.7	852.9	773.4	740.2	700.5	696.0	687.2
15°	1842.8	1677.1	1352.3	1067.3	872.8	757.9	689.4	658.5	629.7	625.3	620.9
17.5°	1871.6	1672.7	1290.4	978.9	786.6	682.8	623.1	598.8	576.7	574.5	570.1
20°	1898.1	1670.5	1228.6	903.7	720.3	620.9	574.5	552.4	534.7	534.7	532.5
22.5°	1924.6	1666.1	1168.9	833.0	662.9	574.5	534.7	510.4	497.2	497.2	495.0
25°	1964.4	1666.1	1113.7	773.4	616.5	539.2	499.4	481.7	470.7	468.4	468.4
27.5°	2010.8	1679.3	1065.1	720.3	576.7	503.8	472.9	455.2	441.9	437.5	439.7
30°	2061.6	1690.4	1020.9	673.9	539.2	477.3	444.1	426.5	413.2	408.8	411.0
32.5°	2112.4	1703.6	981.1	632.0	501.6	453.0	419.8	399.9	386.7	384.5	384.5
35°	2167.7	1716.9	941.3	596.6	470.7	428.7	397.7	375.6	366.8	362.4	364.6
37.5°	2222.9	1739.0	903.7	563.5	448.6	406.6	377.8	355.8	349.1	346.9	346.9
40°	2289.2	1772.1	888.3	541.4	428.7	386.7	362.4	340.3	333.7	333.7	333.7
42.5°	2344.4	1798.7	875.0	517.1	413.2	369.0	346.9	329.2	324.8	322.6	324.8
45°	2399.7	1823.0	857.3	495.0	393.3	351.3	333.7	316.0	311.6	311.6	311.6
47.5°	2454.9	1836.2	833.0	472.9	375.6	335.9	320.4	304.9	300.5	300.5	300.5
50°	2499.1	1847.3	797.7	448.6	355.8	322.6	307.1	291.7	287.3	287.3	287.3
52.5°	2543.3	1849.5	760.1	419.8	335.9	307.1	293.9	278.4	274.0	271.8	271.8
55°	2583.1	1847.3	715.9	386.7	313.8	289.5	278.4	265.2	256.3	247.5	251.9
57.5°	2611.8	1845.1	665.1	353.5	291.7	271.8	267.4	249.7	232.0	209.9	214.3
60°	2600.8	1820.8	609.9	311.6	267.4	254.1	254.1	229.8	198.9	187.8	190.0
62.5°	2530.0	1752.3	552.4	267.4	243.1	236.4	234.2	207.7	183.4	172.4	174.6
65°	2317.9	1579.9	468.4	227.6	218.8	216.5	216.5	192.2	170.1	156.9	159.1
67.5°	1995.3	1325.8	382.3	192.2	194.4	198.9	198.9	176.8	154.7	141.4	143.6
70°	1599.8	1036.3	304.9	165.7	167.9	174.6	179.0	159.1	139.2	125.9	125.9
72.5°	1204.3	786.6	245.3	139.2	150.3	150.3	156.9	141.4	121.5	108.3	110.5
75°	872.8	563.5	194.4	117.1	130.4	128.2	128.2	119.3	103.9	95.0	95.0
77.5°	413.2	296.1	154.7	84.0	101.6	99.4	101.6	95.0	88.4	79.5	81.8
80°	203.3	145.8	99.4	59.7	70.7	72.9	79.5	75.1	72.9	66.3	66.3
82.5°	97.2	57.5	46.4	42.0	48.6	50.8	55.2	55.2	57.5	53.0	53.0
85°	26.5	15.5	19.9	26.5	30.9	33.1	37.6	39.8	39.8	37.6	39.8
87.5°	6.6	6.6	8.8	13.3	15.5	17.7	19.9	19.9	8.8	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)