

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: P840870

Luminaire Tested: **ARCH4-100-727-U-T3-HSS**

Issue Date: 5/27/2024

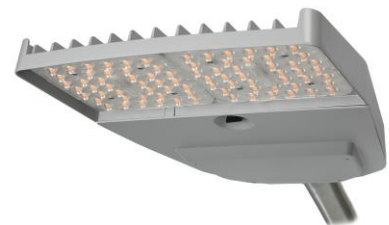
Test Information

Test Method: LM-79-08
Report Number: P840870
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: ARCH4-100-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA 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: 11488 lumens
Efficiency: N/A
Efficacy: 111.4 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): 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



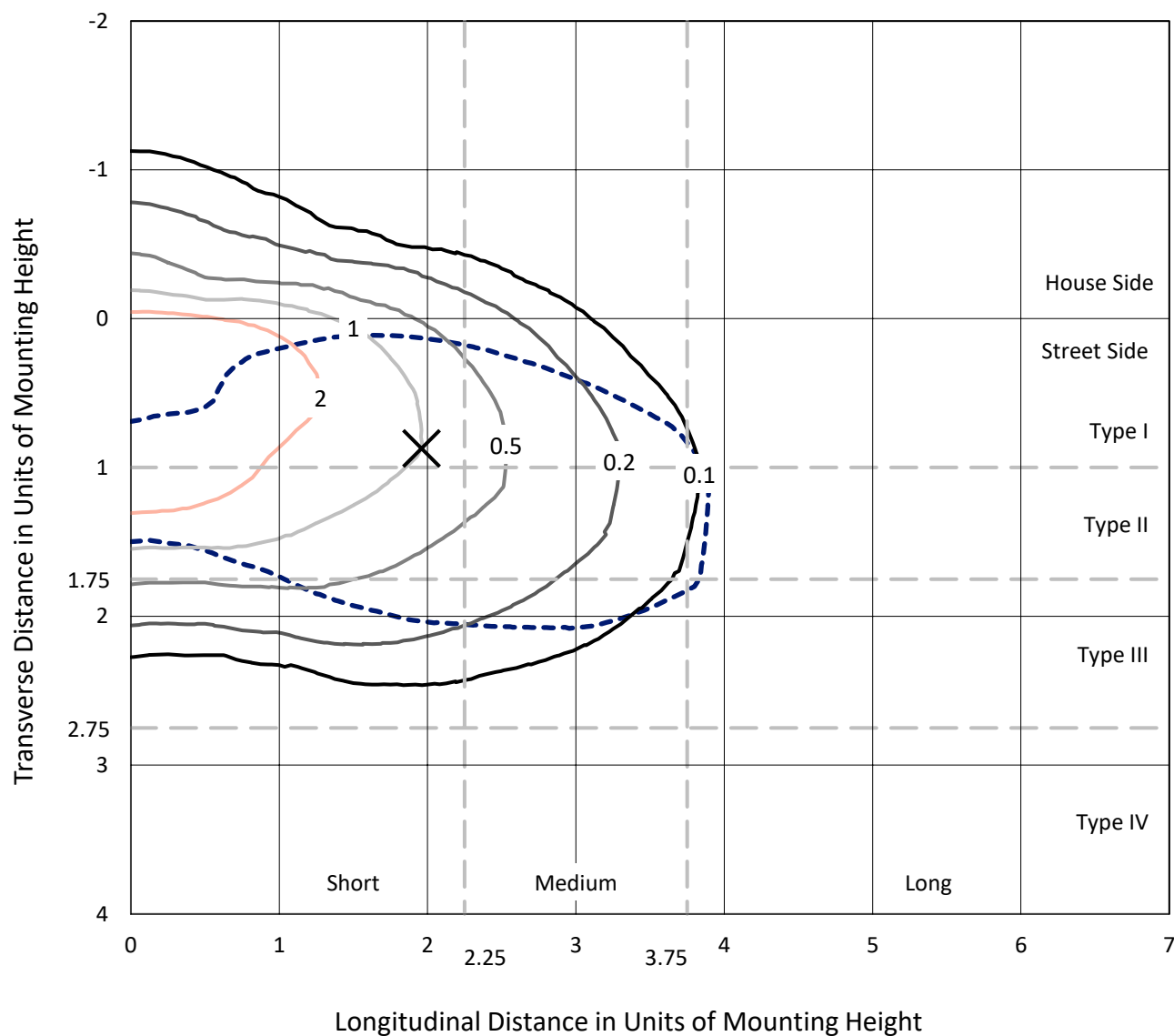
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

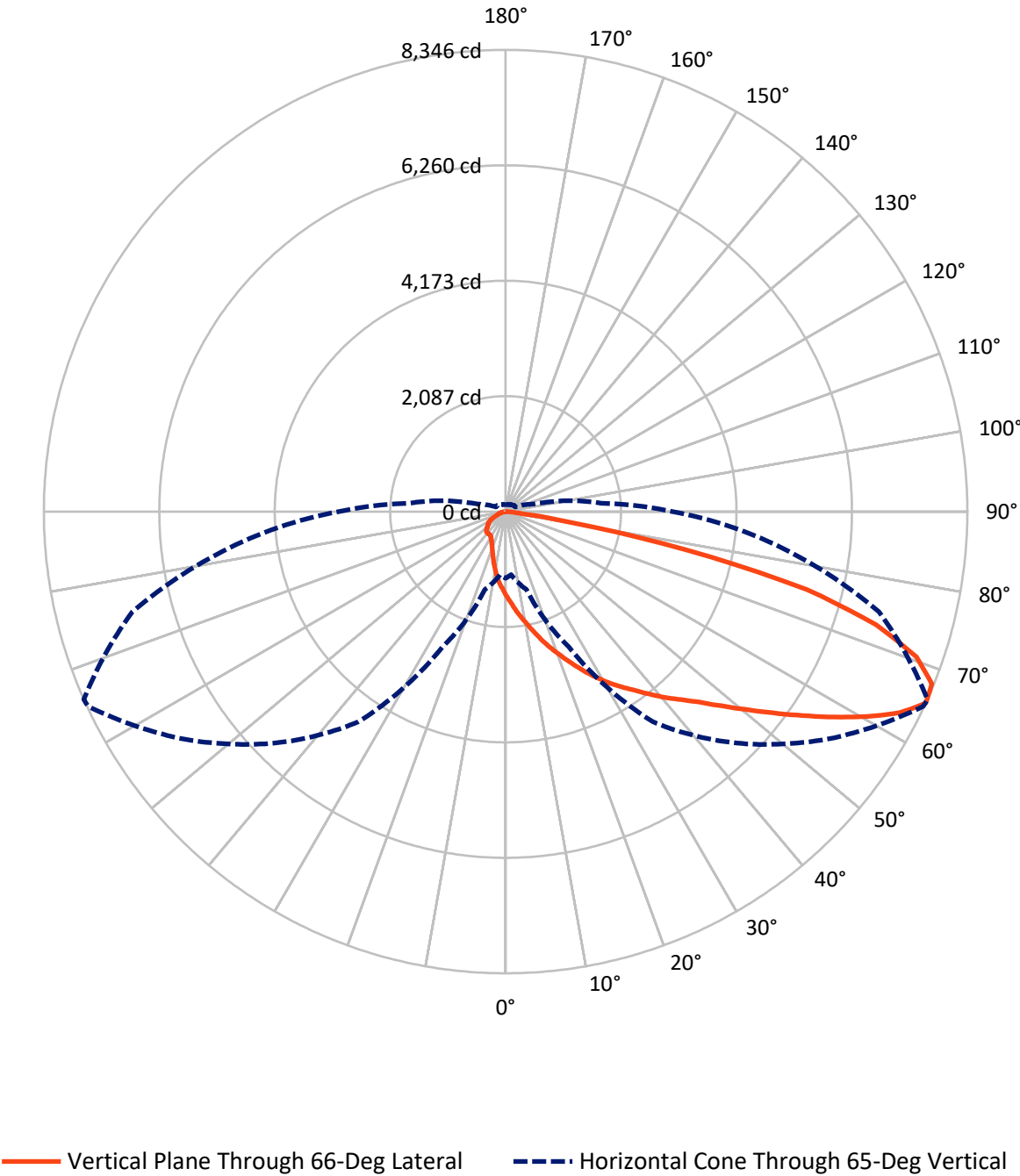


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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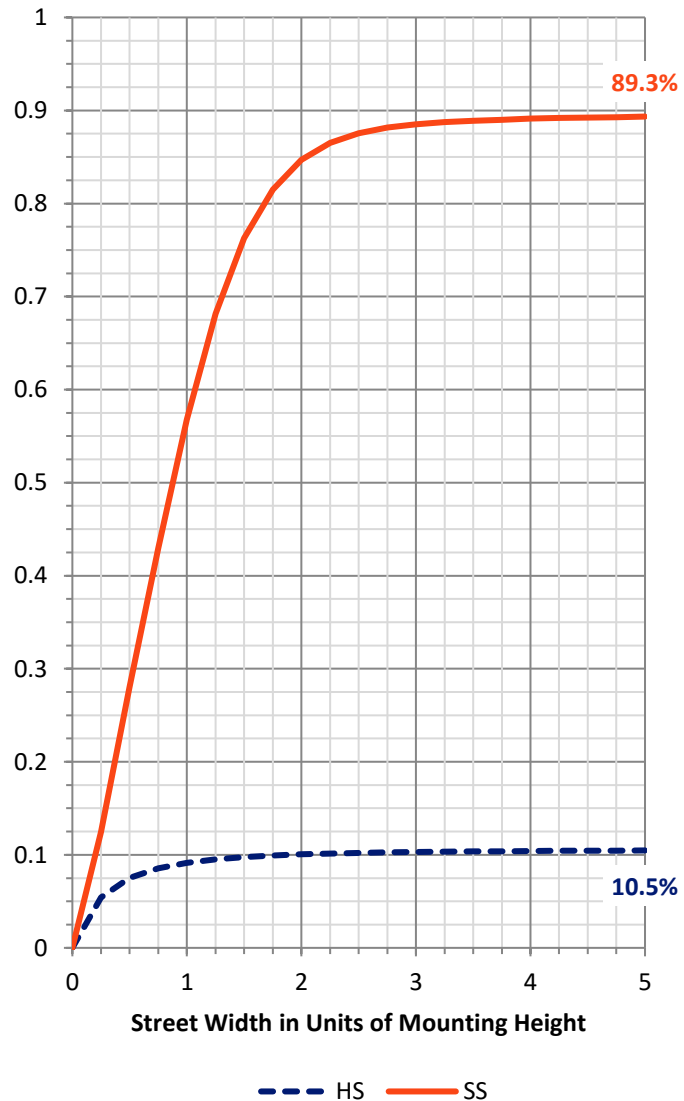
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1215.1	0.0	1215.1
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	10272.9	0.0	10272.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	11488.0	0.0	11488.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.1	1.3
10°-20°	489.1	4.3
20°-30°	884.9	7.7
30°-40°	1383.8	12.0
40°-50°	2099.2	18.3
50°-60°	2667.1	23.2
60°-70°	2492.1	21.7
70°-80°	1238.6	10.8
80°-90°	83.2	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°	11488.0	100.0
0°-180°	11488.0	100.0

Coefficient of Utilization



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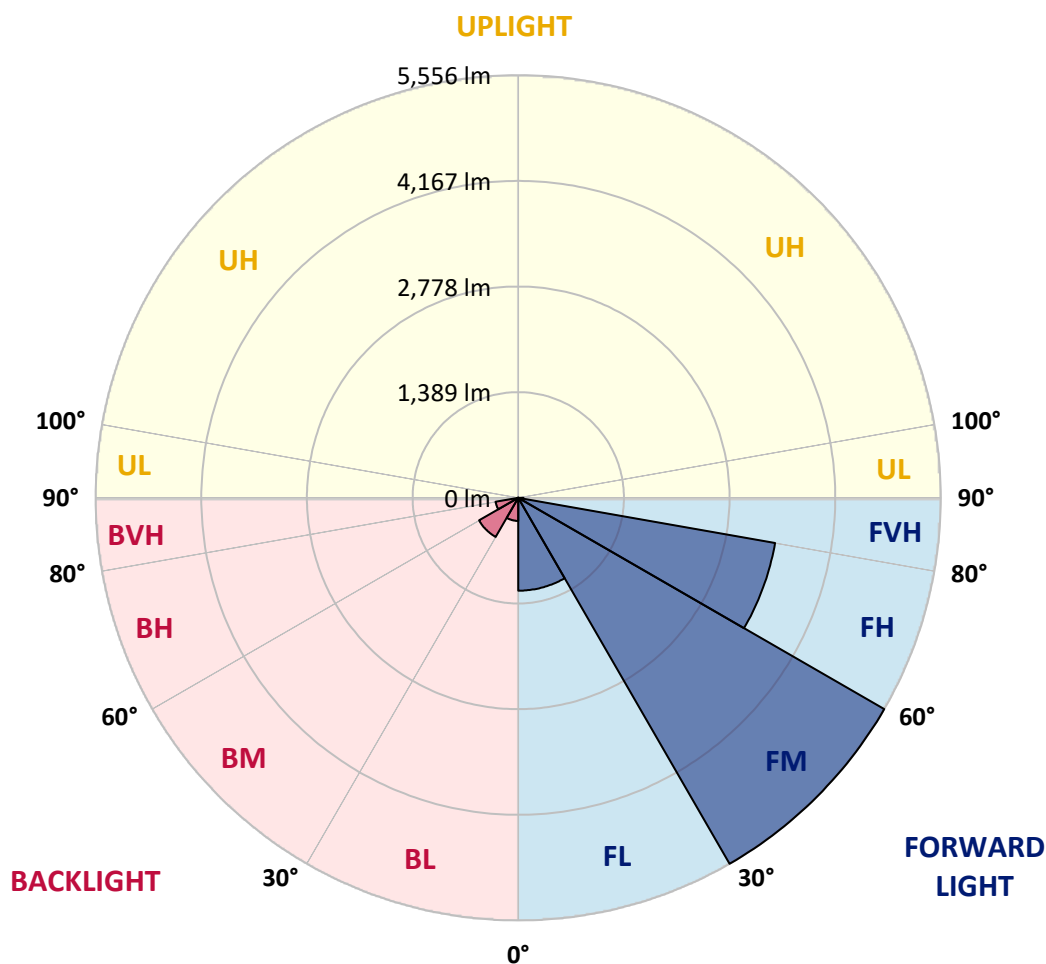
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1220.6	10.6			
FM	(30°-60°)	5555.7	48.4			
FH	(60°-80°)	3428.1	29.8			G2/5000
FVH	(80°-90°)	68.5	0.6			G1/100
BL	(0°-30°)	303.5	2.6	B1/500		
BM	(30°-60°)	594.3	5.2	B1/1000		
BH	(60°-80°)	302.6	2.6	B1/500		G1/500
BVH	(80°-90°)	14.7	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°	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4
2.5°	1775.8	1790.2	1797.5	1799.9	1744.5	1720.4	1696.3	1640.8	1628.8	1597.5	1556.5
5°	2089.0	2108.3	2103.5	2093.8	2026.4	1949.3	1886.6	1783.0	1766.1	1691.4	1599.9
7.5°	2397.4	2414.3	2409.5	2373.3	2298.6	2190.2	2086.6	1934.8	1910.7	1790.2	1643.3
10°	2655.2	2669.7	2667.3	2631.1	2542.0	2409.5	2284.2	2081.8	2052.9	1881.8	1679.4
12.5°	2867.3	2886.5	2884.1	2860.0	2780.5	2636.0	2493.8	2250.4	2214.3	1992.6	1730.0
15°	3033.5	3057.6	3057.6	3048.0	2992.6	2872.1	2710.7	2436.0	2392.6	2120.3	1792.6
17.5°	3134.7	3154.0	3170.9	3187.7	3149.2	3057.6	2910.6	2621.5	2575.7	2245.6	1857.7
20°	3187.7	3207.0	3219.0	3255.2	3262.4	3216.6	3101.0	2804.6	2756.4	2387.8	1932.4
22.5°	3274.5	3291.3	3293.7	3325.1	3339.5	3351.6	3279.3	2985.3	2946.8	2544.4	2016.7
25°	3419.0	3438.3	3431.1	3445.5	3447.9	3462.4	3455.2	3192.5	3154.0	2722.7	2117.9
27.5°	3604.6	3628.7	3623.8	3609.4	3587.7	3575.6	3607.0	3402.2	3366.0	2901.0	2221.5
30°	3804.5	3833.5	3826.2	3797.3	3739.5	3688.9	3732.3	3599.7	3566.0	3084.1	2337.2
32.5°	4006.9	4040.7	4038.3	3990.1	3891.3	3804.5	3869.6	3785.3	3761.2	3281.7	2462.5
35°	4139.5	4182.8	4178.0	4149.1	4021.4	3946.7	4026.2	3975.6	3958.8	3522.6	2643.2
37.5°	4353.9	4399.7	4358.7	4286.4	4139.5	4100.9	4197.3	4190.1	4178.0	3778.0	2833.5
40°	4874.4	4941.8	4833.4	4537.0	4296.1	4262.3	4399.7	4428.6	4416.6	4031.0	3004.6
42.5°	5418.9	5520.1	5351.4	4941.8	4580.4	4457.5	4621.4	4662.3	4647.9	4247.9	3158.8
45°	5749.0	5792.4	5623.7	5305.6	5084.0	4693.6	4857.5	4925.0	4912.9	4508.1	3356.4
47.5°	6018.8	6002.0	5809.2	5594.8	5635.7	5026.1	5124.9	5257.5	5247.8	4794.8	3573.2
50°	6076.7	6038.1	5961.0	5826.1	5934.5	5363.5	5406.8	5635.7	5626.1	5112.9	3792.5
52.5°	5669.5	5618.9	5828.5	5941.7	5905.6	5609.2	5717.7	6050.2	6045.4	5457.4	4002.1
55°	4652.7	4611.7	5175.5	5761.0	5874.3	5782.7	6062.2	6481.5	6508.0	5823.7	4192.5
57.5°	3660.0	3616.6	4170.8	5308.1	5758.6	5941.7	6464.6	6975.4	7009.1	6221.2	4373.2
60°	2917.9	2852.8	3276.9	4594.9	5541.8	6064.6	6852.5	7517.5	7522.4	6585.1	4484.0
62.5°	1983.0	1910.7	2380.6	3691.3	5177.9	6083.9	7151.3	7985.0	8004.2	6857.3	4503.3
65°	1204.7	1144.5	1462.5	2696.2	4640.6	5920.1	7156.1	8329.5	8346.4	6982.6	4387.6
67.5°	698.7	674.7	836.1	1679.4	3749.1	5479.1	6854.9	8276.5	8307.8	6929.6	4125.0
70°	407.2	404.8	465.0	831.3	2645.6	4604.5	6182.7	7830.8	7876.5	6652.5	3722.6
72.5°	298.8	303.6	327.7	445.8	1532.4	3315.4	5235.8	6934.4	7004.3	6110.4	3149.2
75°	236.1	238.5	260.2	303.6	804.8	1874.6	3922.6	5565.9	5621.3	5144.2	2460.1
77.5°	175.9	180.7	197.6	214.4	373.5	860.2	2207.1	3428.7	3337.1	2823.9	1187.9
80°	127.7	139.7	147.0	154.2	197.6	332.5	662.6	1195.1	1185.5	1233.6	561.4
82.5°	81.9	91.6	98.8	103.6	118.1	159.0	197.6	267.5	289.1	479.5	224.1
85°	36.1	41.0	45.8	55.4	50.6	55.4	81.9	53.0	45.8	72.3	41.0
87.5°	0.0	0.0	7.2	12.0	9.6	4.8	14.5	9.6	7.2	7.2	7.2
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°	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4	1520.4
2.5°	1534.8	1508.3	1452.9	1399.9	1368.6	1327.6	1291.5	1257.7	1255.3	1245.7	1228.8
5°	1554.1	1503.5	1399.9	1301.1	1226.4	1146.9	1079.4	1026.4	1007.2	992.7	973.4
7.5°	1573.4	1493.9	1339.7	1195.1	1077.0	966.2	886.7	814.4	792.7	773.4	761.4
10°	1580.6	1477.0	1269.8	1077.0	922.8	804.8	720.4	667.4	648.1	638.5	631.3
12.5°	1602.3	1467.4	1204.7	966.2	787.9	679.5	619.2	587.9	580.7	573.5	566.2
15°	1631.2	1467.4	1139.7	857.8	681.9	595.1	559.0	537.3	532.5	530.1	525.3
17.5°	1662.5	1467.4	1077.0	766.2	604.8	539.7	513.2	501.2	498.8	496.4	493.9
20°	1705.9	1469.8	1009.6	686.7	549.4	498.8	477.1	462.6	460.2	457.8	457.8
22.5°	1749.3	1474.6	944.5	626.5	513.2	467.4	440.9	426.5	421.7	421.7	421.7
25°	1804.7	1489.1	884.3	575.9	481.9	438.5	404.8	392.7	390.3	390.3	387.9
27.5°	1869.7	1505.9	831.3	537.3	450.6	404.8	371.1	359.0	354.2	354.2	351.8
30°	1939.6	1522.8	787.9	508.4	419.2	371.1	339.7	325.3	320.5	322.9	320.5
32.5°	2016.7	1546.9	754.2	489.1	390.3	342.1	313.2	296.4	294.0	294.0	291.5
35°	2146.8	1614.3	749.3	479.5	366.2	320.5	291.5	274.7	272.3	272.3	269.9
37.5°	2286.6	1691.4	771.0	474.7	347.0	301.2	274.7	257.8	255.4	255.4	255.4
40°	2404.6	1749.3	795.1	474.7	334.9	284.3	260.2	245.8	245.8	245.8	245.8
42.5°	2484.2	1754.1	790.3	474.7	325.3	272.3	250.6	236.1	236.1	238.5	236.1
45°	2602.2	1778.2	771.0	467.4	318.0	262.6	240.9	228.9	226.5	228.9	228.9
47.5°	2742.0	1821.6	751.8	438.5	315.6	253.0	233.7	219.3	216.9	219.3	216.9
50°	2874.5	1860.1	742.1	400.0	310.8	243.4	224.1	209.6	207.2	209.6	207.2
52.5°	2985.3	1877.0	725.2	373.5	298.8	233.7	214.4	200.0	195.2	197.6	197.6
55°	3074.5	1872.2	701.2	351.8	277.1	224.1	202.4	190.3	183.1	183.1	180.7
57.5°	3156.4	1874.6	679.5	330.1	253.0	209.6	192.8	178.3	168.7	166.3	163.8
60°	3187.7	1862.5	640.9	301.2	228.9	197.6	180.7	163.8	154.2	151.8	149.4
62.5°	3144.4	1819.1	590.3	250.6	207.2	183.1	168.7	151.8	142.2	139.7	137.3
65°	3021.5	1737.2	513.2	197.6	187.9	166.3	154.2	142.2	130.1	125.3	122.9
67.5°	2811.8	1619.2	416.8	159.0	166.3	151.8	144.6	130.1	115.7	110.8	108.4
70°	2513.1	1462.5	313.2	134.9	147.0	134.9	130.1	115.7	103.6	98.8	96.4
72.5°	2093.8	1209.6	219.3	115.7	127.7	118.1	113.2	103.6	91.6	84.3	84.3
75°	1583.0	867.4	144.6	98.8	106.0	101.2	94.0	86.7	79.5	74.7	72.3
77.5°	681.9	337.3	89.2	74.7	86.7	84.3	74.7	69.9	67.5	62.6	62.6
80°	294.0	137.3	55.4	55.4	62.6	60.2	57.8	53.0	53.0	50.6	48.2
82.5°	108.4	55.4	33.7	41.0	45.8	41.0	41.0	41.0	41.0	38.6	38.6
85°	26.5	16.9	16.9	24.1	26.5	24.1	26.5	24.1	24.1	24.1	21.7
87.5°	7.2	7.2	9.6	9.6	9.6	9.6	9.6	7.2	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)