

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: P836749

Luminaire Tested: **ARCH3-70-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-70-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 580mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7869 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.1
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

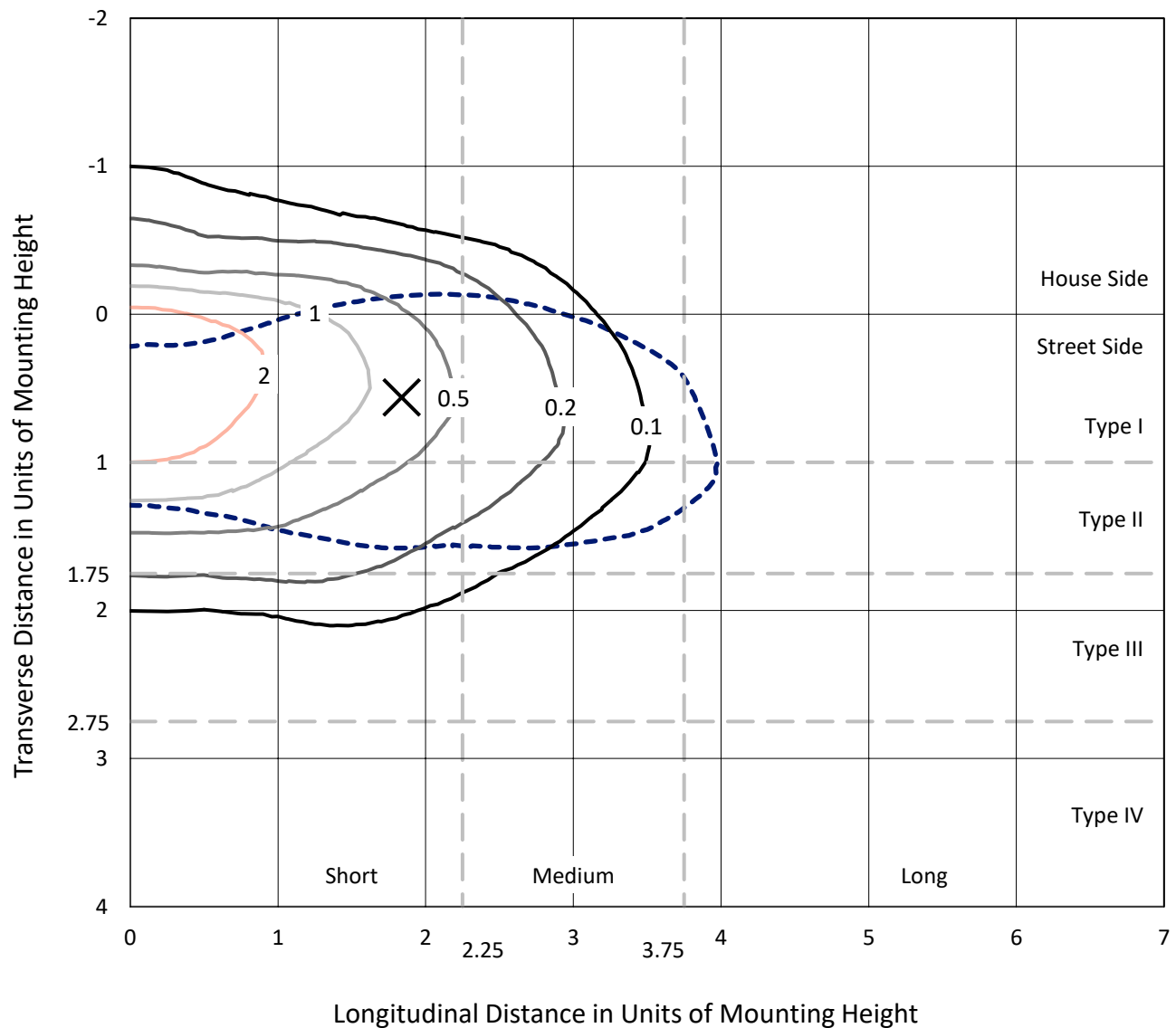


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Iso-Footcandle Lines of Horizontal Illumination

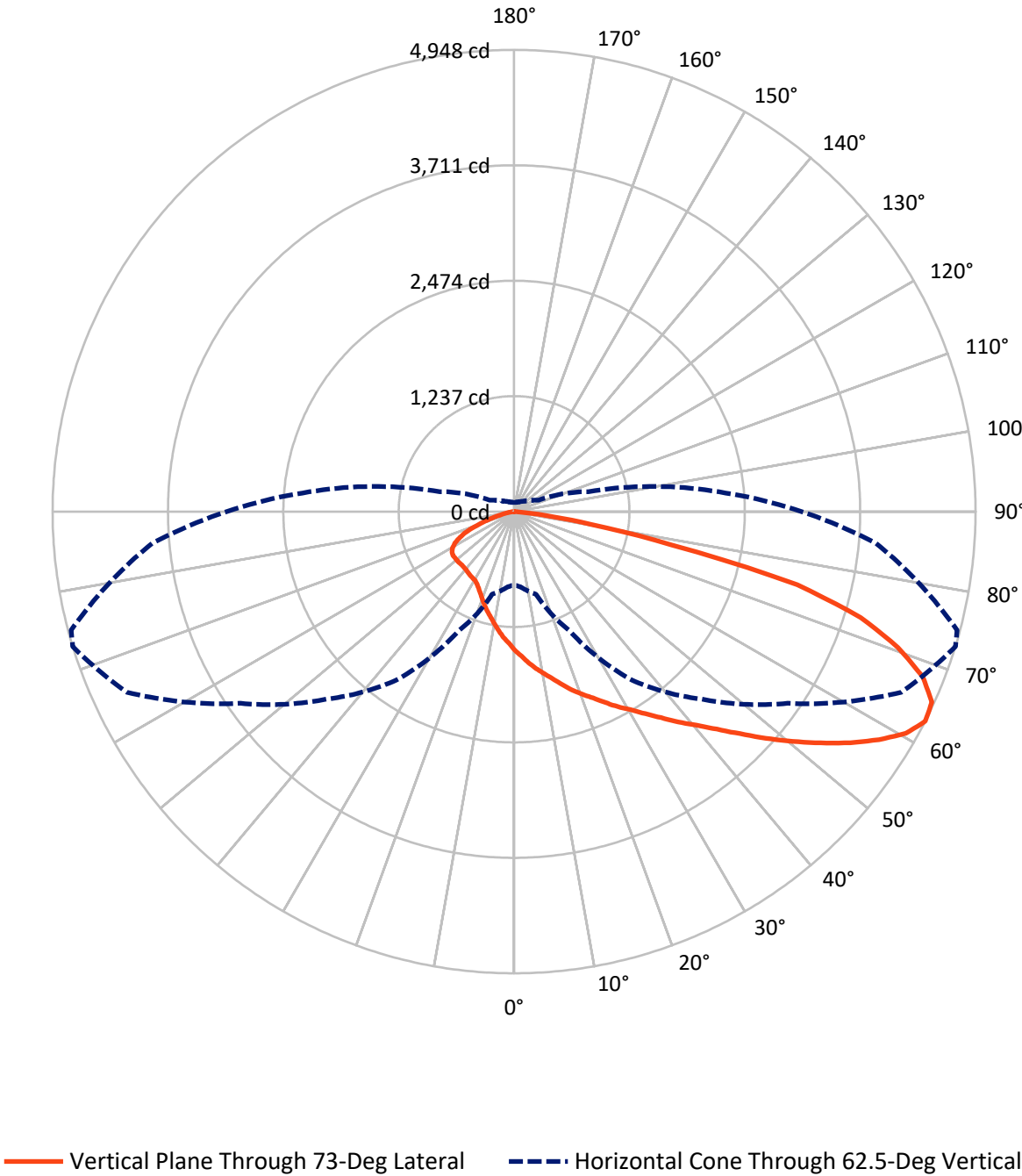
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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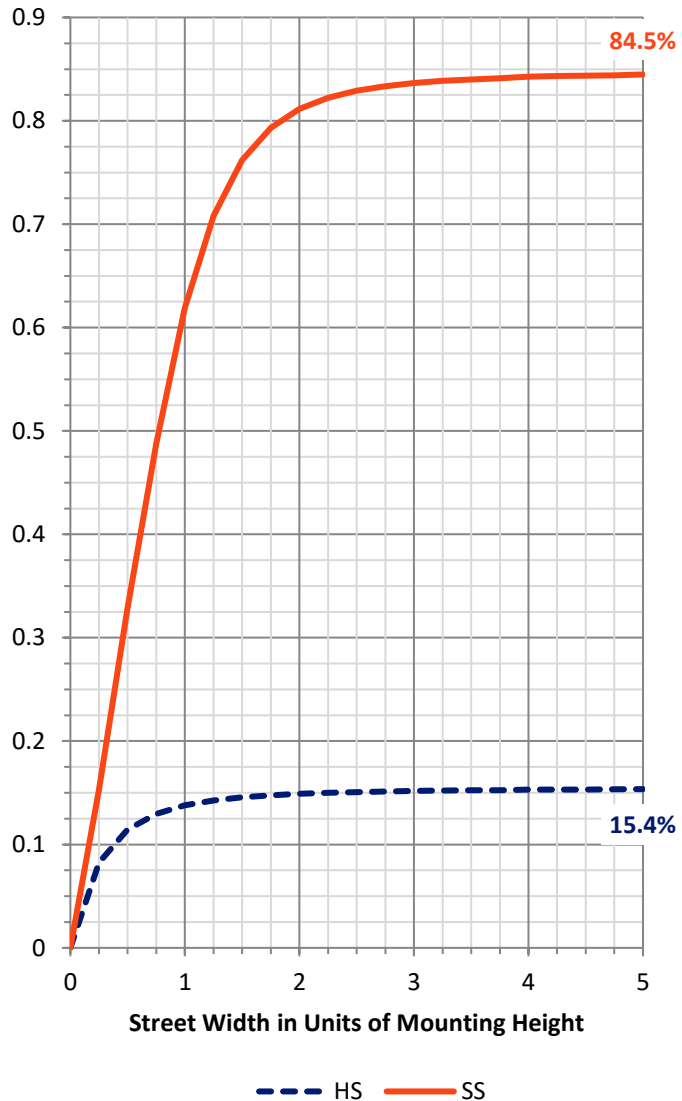
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1219.8	0.0	1219.8
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	6649.2	0.0	6649.2
	% Fixture	84.5	0.0	84.5
Total	Lumens	7869.0	0.0	7869.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.9	1.8
10°-20°	434.4	5.5
20°-30°	723.0	9.2
30°-40°	1090.9	13.9
40°-50°	1524.8	19.4
50°-60°	1684.2	21.4
60°-70°	1467.2	18.6
70°-80°	741.1	9.4
80°-90°	59.5	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°	7869.0	100.0
0°-180°	7869.0	100.0

Coefficient of Utilization



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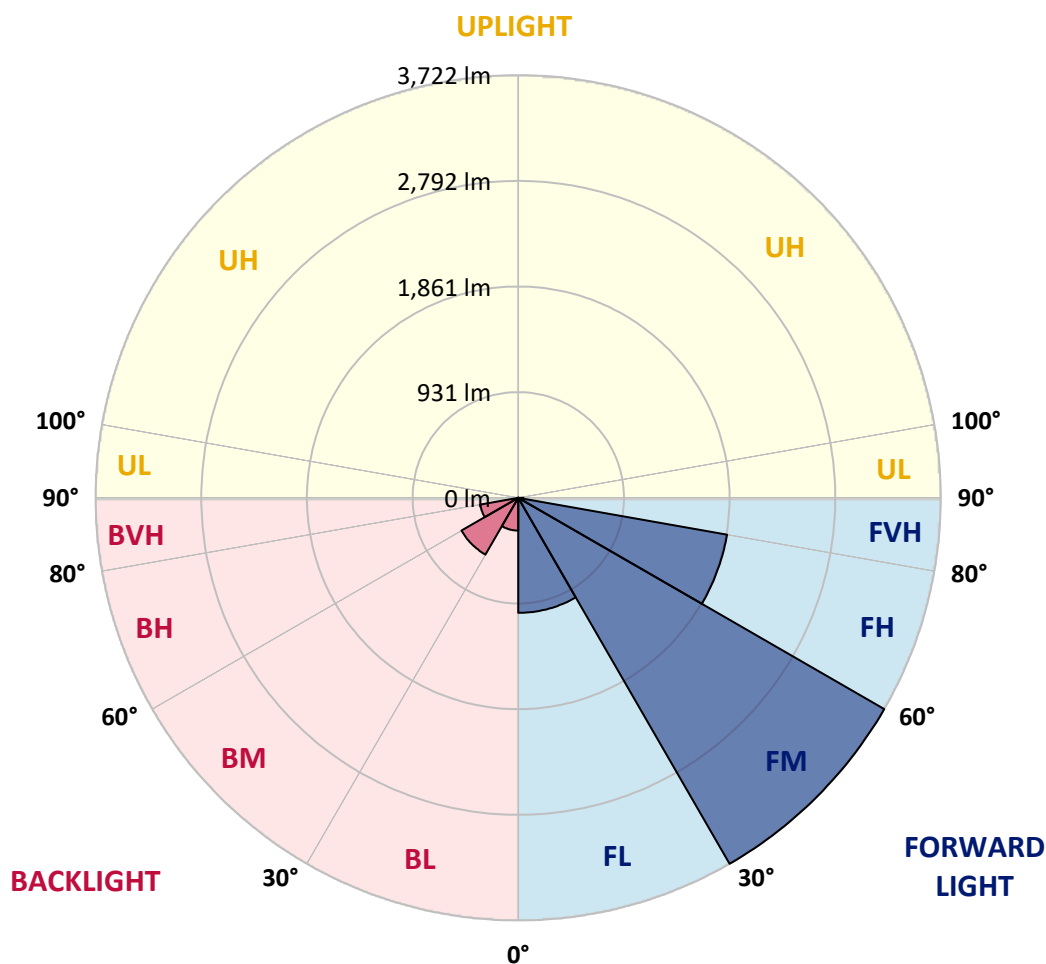
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1013.0	12.9			
FM	(30°-60°)	3722.3	47.3			
FH	(60°-80°)	1867.8	23.7			G2/5000
FVH	(80°-90°)	46.0	0.6			G1/100
BL	(0°-30°)	288.3	3.7	B1/500		
BM	(30°-60°)	577.6	7.3	B1/1000		
BH	(60°-80°)	340.5	4.3	B1/500		G1/500
BVH	(80°-90°)	13.5	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0
2.5°	1695.8	1714.6	1704.3	1711.2	1676.9	1654.6	1628.9	1579.2	1551.7	1548.3	1515.7
5°	1944.4	1965.0	1947.8	1942.7	1882.7	1831.2	1772.9	1685.5	1627.2	1616.9	1544.9
7.5°	2193.0	2211.9	2191.3	2175.9	2095.3	2004.4	1918.7	1790.1	1699.2	1682.1	1568.9
10°	2367.9	2385.0	2369.6	2354.2	2270.2	2177.6	2055.8	1887.8	1764.4	1736.9	1584.3
12.5°	2499.9	2510.2	2503.4	2489.6	2410.8	2311.3	2194.7	1997.5	1838.1	1803.8	1608.3
15°	2607.9	2625.1	2616.5	2606.2	2530.8	2431.3	2319.9	2112.4	1923.8	1880.9	1644.3
17.5°	2680.0	2692.0	2693.7	2693.7	2626.8	2529.1	2421.1	2217.0	2009.5	1954.7	1678.6
20°	2712.5	2726.3	2734.8	2748.5	2693.7	2609.7	2499.9	2306.2	2090.1	2028.4	1711.2
22.5°	2728.0	2740.0	2762.3	2793.1	2748.5	2678.2	2577.1	2388.5	2170.7	2105.6	1748.9
25°	2740.0	2755.4	2788.0	2846.3	2815.4	2755.4	2668.0	2482.8	2266.7	2199.9	1803.8
27.5°	2772.6	2791.4	2822.3	2892.6	2854.9	2825.7	2764.0	2583.9	2367.9	2299.3	1870.7
30°	2885.7	2901.2	2899.4	2944.0	2897.7	2889.1	2846.3	2681.7	2465.6	2397.1	1949.5
32.5°	3091.5	3106.9	3069.2	3052.0	2950.9	2952.6	2935.4	2786.3	2582.2	2511.9	2040.4
35°	3312.7	3329.8	3280.1	3250.9	3081.2	3031.5	3040.0	2916.6	2712.5	2642.2	2153.6
37.5°	3509.8	3530.4	3487.6	3444.7	3273.2	3158.3	3156.6	3062.3	2861.7	2789.7	2278.7
40°	3617.9	3641.9	3667.6	3643.6	3463.5	3336.7	3281.8	3211.5	3009.2	2935.4	2414.2
42.5°	3669.3	3736.2	3782.5	3767.0	3619.6	3491.0	3425.8	3367.5	3189.2	3117.2	2575.4
45°	3525.3	3527.0	3624.7	3708.7	3681.3	3595.6	3583.6	3542.4	3395.0	3326.4	2757.1
47.5°	3345.2	3331.5	3400.1	3549.3	3626.4	3648.7	3719.0	3736.2	3629.9	3561.3	2942.3
50°	2913.2	2921.7	3144.6	3359.0	3509.8	3653.9	3815.0	3935.1	3871.6	3806.5	3137.8
52.5°	2369.6	2390.2	2645.7	3117.2	3355.5	3602.4	3871.6	4134.0	4118.5	4056.8	3333.2
55°	1899.8	1932.4	2203.3	2714.3	3158.3	3487.6	3895.6	4315.7	4374.0	4317.4	3525.3
57.5°	1452.3	1486.6	1714.6	2239.3	2906.3	3300.7	3878.5	4475.2	4612.3	4576.3	3701.9
60°	1093.9	1128.2	1274.0	1815.8	2590.8	3091.5	3792.8	4579.8	4826.7	4789.0	3830.5
62.5°	783.6	811.0	919.0	1412.9	2206.7	2842.9	3581.9	4581.5	4948.4	4917.6	3892.2
65°	564.1	564.1	651.6	1008.2	1846.7	2544.5	3262.9	4370.6	4922.7	4914.1	3849.3
67.5°	406.4	409.8	480.1	704.7	1472.9	2182.7	2849.7	3995.1	4723.8	4766.7	3695.0
70°	288.1	296.6	329.2	492.1	1112.8	1723.2	2407.3	3503.0	4365.4	4440.9	3396.7
72.5°	222.9	228.0	250.3	342.9	812.7	1280.8	1918.7	2954.3	3887.1	3972.8	2990.3
75°	171.5	176.6	193.8	252.1	583.0	898.5	1363.1	2292.5	3134.3	3286.9	2402.2
77.5°	125.2	132.0	144.0	183.5	339.5	571.0	826.5	1289.4	1730.1	1802.1	1258.5
80°	58.3	66.9	84.0	118.3	183.5	269.2	293.2	497.2	831.6	869.3	682.4
82.5°	32.6	41.2	48.0	72.0	92.6	96.0	99.4	125.2	313.8	346.4	286.3
85°	15.4	20.6	22.3	30.9	30.9	27.4	32.6	24.0	51.4	61.7	60.0
87.5°	0.0	1.7	3.4	8.6	6.9	5.1	5.1	5.1	5.1	6.9	5.1
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°	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0	1490.0
2.5°	1500.3	1478.0	1426.6	1382.0	1352.8	1327.1	1292.8	1277.4	1250.0	1255.1	1239.7
5°	1508.9	1467.7	1376.8	1292.8	1231.1	1176.2	1116.2	1081.9	1044.2	1040.8	1028.8
7.5°	1514.0	1450.6	1320.3	1202.0	1107.6	1023.6	943.0	898.5	852.2	841.9	831.6
10°	1508.9	1424.9	1262.0	1107.6	982.5	877.9	787.0	730.4	682.4	670.4	660.1
12.5°	1514.0	1411.1	1207.1	1020.2	871.0	752.7	649.8	591.5	547.0	535.0	528.1
15°	1526.0	1402.6	1160.8	941.3	771.6	639.6	538.4	488.7	452.7	440.7	437.2
17.5°	1536.3	1394.0	1111.1	864.2	672.1	540.1	452.7	411.5	380.6	368.6	365.2
20°	1550.0	1382.0	1061.4	790.4	584.7	461.2	384.1	348.1	324.1	315.5	313.8
22.5°	1562.0	1373.4	1015.1	716.7	504.1	397.8	332.6	303.5	286.3	277.8	277.8
25°	1592.9	1376.8	975.6	648.1	444.1	348.1	293.2	270.9	257.2	252.1	252.1
27.5°	1628.9	1390.6	944.8	589.8	392.6	310.3	265.8	246.9	240.0	233.2	234.9
30°	1680.3	1418.0	924.2	541.8	354.9	281.2	243.5	229.8	222.9	221.2	221.2
32.5°	1745.5	1462.6	922.5	511.0	327.5	258.9	228.0	216.0	212.6	210.9	210.9
35°	1822.6	1502.0	912.2	497.2	310.3	243.5	216.0	207.5	205.8	205.8	205.8
37.5°	1915.2	1567.2	905.3	478.4	301.8	234.9	207.5	200.6	200.6	200.6	200.6
40°	2011.3	1620.3	895.0	461.2	298.3	229.8	202.3	193.8	193.8	193.8	193.8
42.5°	2126.1	1697.5	891.6	452.7	293.2	226.3	195.5	185.2	186.9	186.9	188.6
45°	2265.0	1784.9	889.9	444.1	291.5	222.9	188.6	176.6	178.3	176.6	176.6
47.5°	2405.6	1886.1	895.0	438.9	289.8	219.5	183.5	168.0	168.0	166.3	166.3
50°	2553.1	1978.7	898.5	433.8	286.3	212.6	174.9	161.2	157.7	154.3	156.0
52.5°	2692.0	2064.4	900.2	425.2	276.1	202.3	168.0	152.6	147.5	142.3	144.0
55°	2830.9	2146.7	903.6	414.9	262.3	192.0	159.5	144.0	137.2	130.3	130.3
57.5°	2956.0	2218.7	895.0	389.2	246.9	181.8	150.9	133.7	123.5	116.6	116.6
60°	3041.8	2270.2	869.3	351.5	226.3	169.7	142.3	123.5	111.5	106.3	106.3
62.5°	3082.9	2278.7	823.0	289.8	200.6	157.7	132.0	113.2	102.9	99.4	99.4
65°	3043.5	2241.0	751.0	217.8	173.2	144.0	121.7	104.6	94.3	85.7	85.7
67.5°	2906.3	2134.7	651.6	164.6	147.5	130.3	111.5	96.0	84.0	77.2	77.2
70°	2630.2	1913.5	504.1	132.0	125.2	113.2	101.2	85.7	75.4	66.9	66.9
72.5°	2268.5	1622.0	354.9	106.3	106.3	96.0	85.7	75.4	65.2	58.3	58.3
75°	1740.3	1200.2	238.3	85.7	87.4	80.6	70.3	61.7	54.9	49.7	49.7
77.5°	949.9	593.3	145.7	63.4	65.2	61.7	54.9	49.7	46.3	41.2	41.2
80°	461.2	260.6	84.0	44.6	46.3	44.6	41.2	36.0	36.0	32.6	32.6
82.5°	193.8	97.7	44.6	30.9	30.9	27.4	25.7	25.7	25.7	24.0	24.0
85°	48.0	18.9	18.9	17.1	17.1	17.1	15.4	15.4	15.4	12.0	13.7
87.5°	6.9	6.9	6.9	6.9	6.9	6.9	5.1	1.7	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)