

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: P836751

Luminaire Tested: **ARCH3-70-727-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-70-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 580mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7879 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - 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

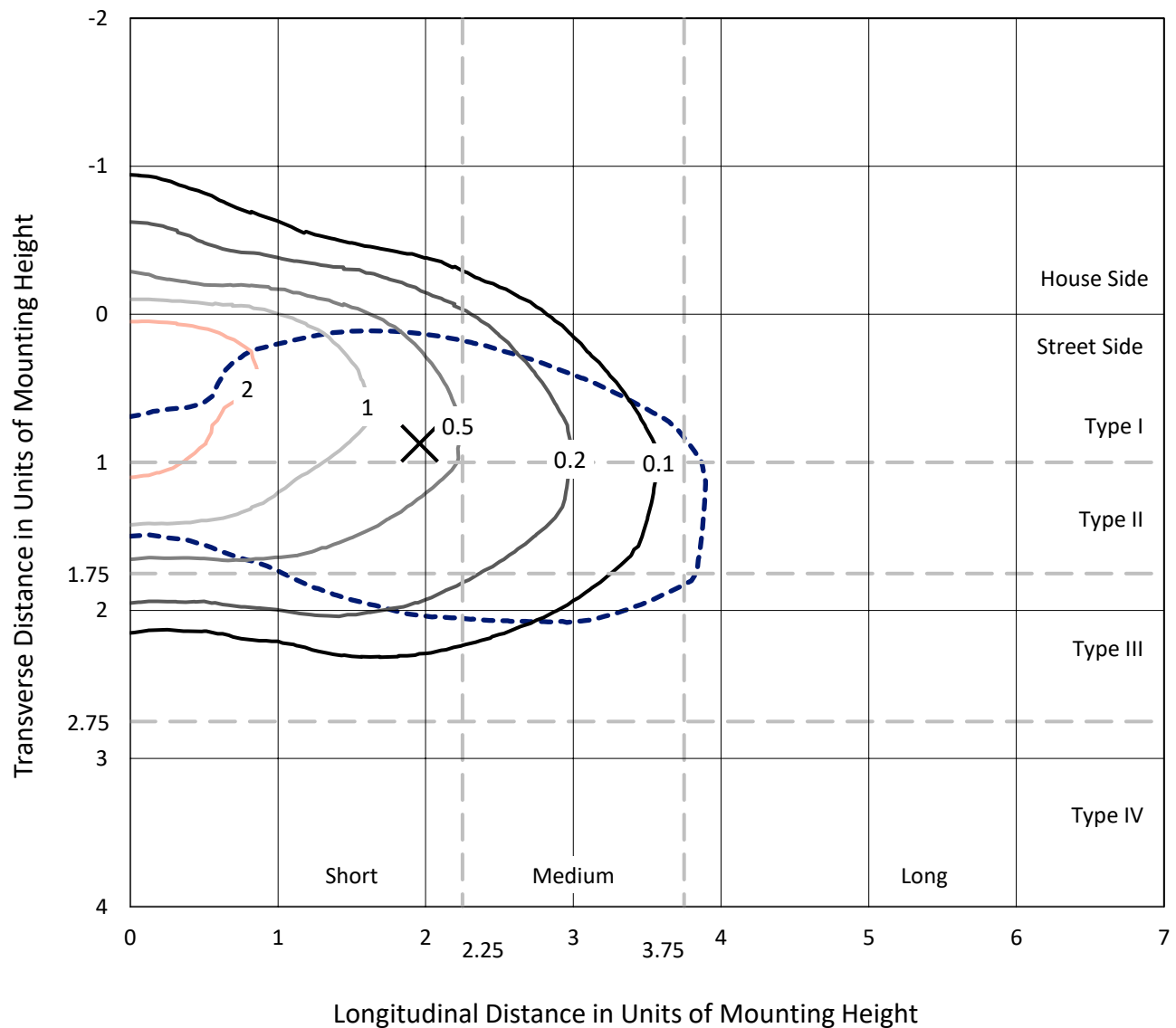


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Iso-Footcandle Lines of Horizontal Illumination

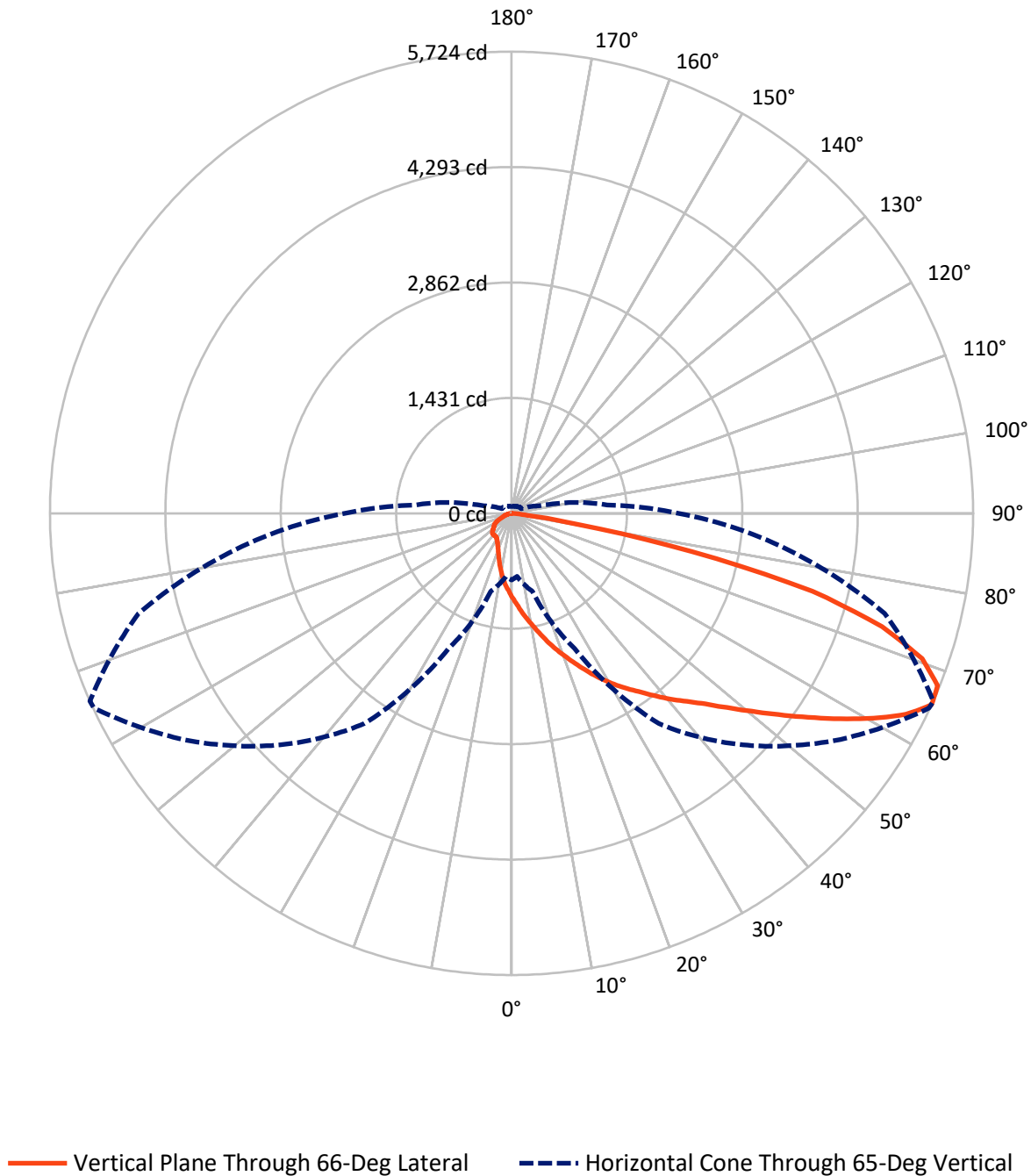
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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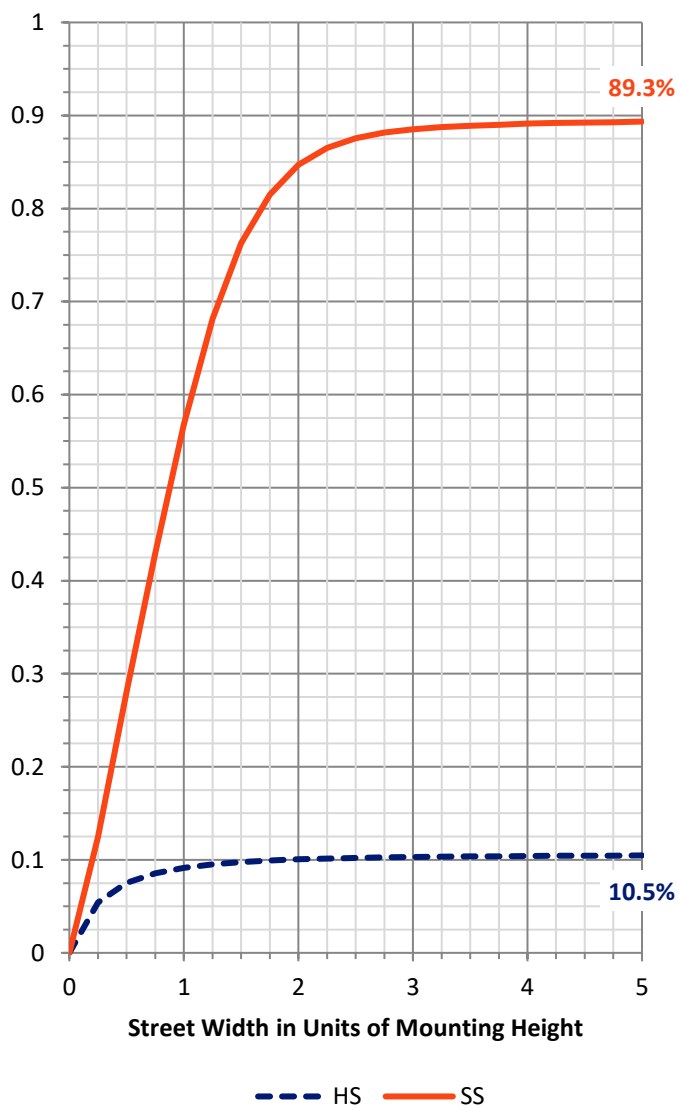
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	833.4	0.0	833.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7045.6	0.0	7045.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	7879.0	0.0	7879.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	1.3
10°-20°	335.4	4.3
20°-30°	606.9	7.7
30°-40°	949.1	12.0
40°-50°	1439.7	18.3
50°-60°	1829.2	23.2
60°-70°	1709.2	21.7
70°-80°	849.5	10.8
80°-90°	57.1	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°	7879.0	100.0
0°-180°	7879.0	100.0

Coefficient of Utilization



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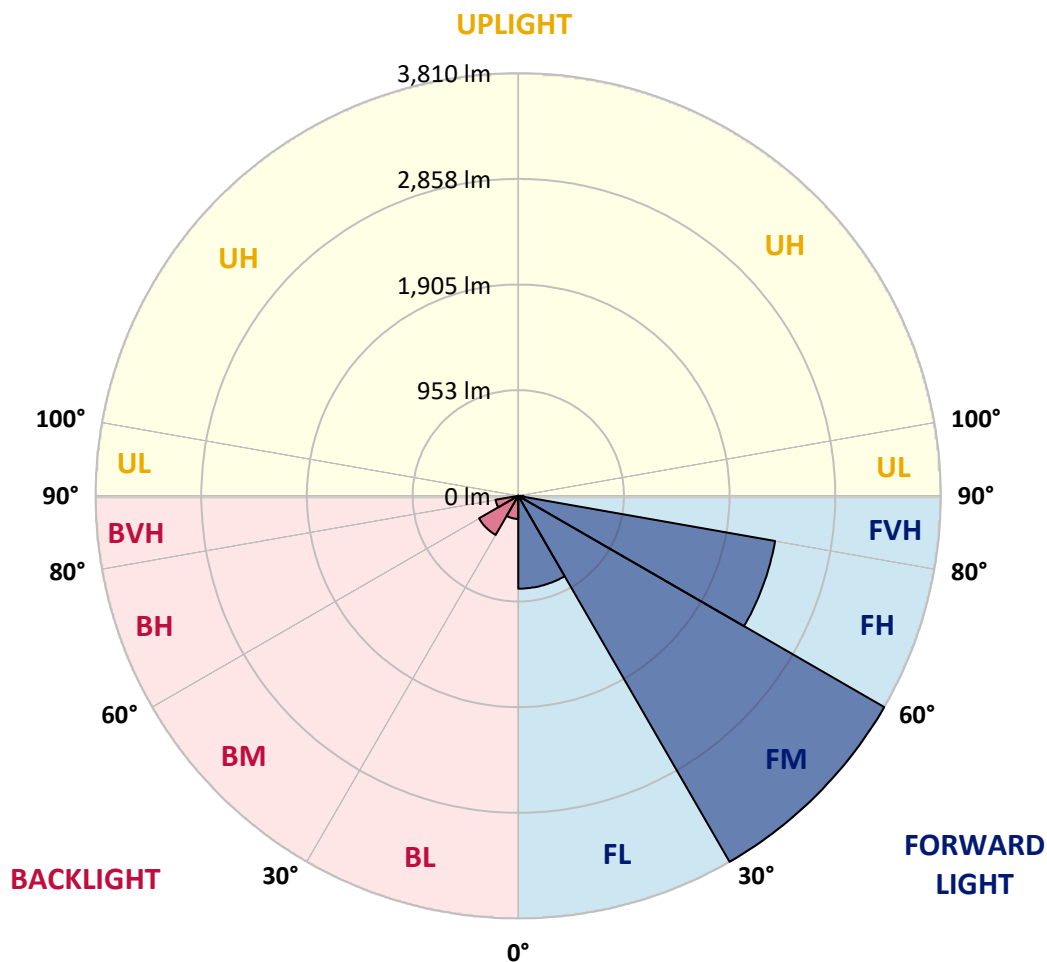
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	837.1	10.6			
FM	(30°-60°)	3810.4	48.4			
FH	(60°-80°)	2351.1	29.8			G2/5000
FVH	(80°-90°)	47.0	0.6			G1/100
BL	(0°-30°)	208.1	2.6	B1/500		
BM	(30°-60°)	407.6	5.2	B1/1000		
BH	(60°-80°)	207.5	2.6	B1/500		G1/500
BVH	(80°-90°)	10.1	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°	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7
2.5°	1217.9	1227.8	1232.8	1234.4	1196.4	1179.9	1163.4	1125.4	1117.1	1095.6	1067.5
5°	1432.7	1446.0	1442.7	1436.0	1389.8	1336.9	1293.9	1222.9	1211.3	1160.1	1097.3
7.5°	1644.3	1655.8	1652.5	1627.7	1576.5	1502.1	1431.1	1327.0	1310.5	1227.8	1127.0
10°	1821.1	1831.0	1829.3	1804.6	1743.4	1652.5	1566.6	1427.8	1408.0	1290.6	1151.8
12.5°	1966.5	1979.7	1978.1	1961.5	1907.0	1807.9	1710.4	1543.5	1518.7	1366.6	1186.5
15°	2080.5	2097.1	2097.1	2090.4	2052.4	1969.8	1859.1	1670.7	1641.0	1454.2	1229.5
17.5°	2149.9	2163.2	2174.7	2186.3	2159.8	2097.1	1996.2	1797.9	1766.5	1540.2	1274.1
20°	2186.3	2199.5	2207.8	2232.6	2237.5	2206.1	2126.8	1923.5	1890.5	1637.7	1325.3
22.5°	2245.8	2257.3	2259.0	2280.5	2290.4	2298.7	2249.1	2047.5	2021.0	1745.1	1383.2
25°	2344.9	2358.2	2353.2	2363.1	2364.8	2374.7	2369.7	2189.6	2163.2	1867.4	1452.6
27.5°	2472.2	2488.7	2485.4	2475.5	2460.6	2452.3	2473.8	2333.4	2308.6	1989.6	1523.6
30°	2609.3	2629.2	2624.2	2604.4	2564.7	2530.0	2559.8	2468.9	2445.7	2115.2	1602.9
32.5°	2748.1	2771.3	2769.6	2736.6	2668.8	2609.3	2654.0	2596.1	2579.6	2250.7	1688.9
35°	2839.0	2868.8	2865.5	2845.6	2758.1	2706.8	2761.4	2726.7	2715.1	2416.0	1812.8
37.5°	2986.1	3017.5	2989.4	2939.8	2839.0	2812.6	2878.7	2873.7	2865.5	2591.2	1943.4
40°	3343.1	3389.3	3315.0	3111.7	2946.4	2923.3	3017.5	3037.3	3029.1	2764.7	2060.7
42.5°	3716.5	3785.9	3670.3	3389.3	3141.4	3057.2	3169.5	3197.6	3187.7	2913.4	2166.5
45°	3942.9	3972.7	3857.0	3638.9	3486.8	3219.1	3331.5	3377.8	3369.5	3091.9	2302.0
47.5°	4128.0	4116.4	3984.2	3837.2	3865.3	3447.2	3514.9	3605.8	3599.2	3288.5	2450.7
50°	4167.7	4141.2	4088.3	3995.8	4070.2	3678.5	3708.3	3865.3	3858.6	3506.7	2601.1
52.5°	3888.4	3853.7	3997.5	4075.1	4050.3	3847.1	3921.4	4149.5	4146.2	3743.0	2744.8
55°	3191.0	3162.9	3549.6	3951.2	4028.9	3966.1	4157.7	4445.3	4463.5	3994.1	2875.4
57.5°	2510.2	2480.4	2860.5	3640.5	3949.5	4075.1	4433.7	4784.1	4807.2	4266.8	2999.3
60°	2001.2	1956.6	2247.4	3151.4	3800.8	4159.4	4699.8	5155.9	5159.2	4516.3	3075.3
62.5°	1360.0	1310.5	1632.7	2531.7	3551.3	4172.6	4904.7	5476.5	5489.7	4703.1	3088.6
65°	826.3	784.9	1003.1	1849.2	3182.8	4060.3	4908.0	5712.8	5724.3	4789.0	3009.2
67.5°	479.2	462.7	573.4	1151.8	2571.3	3757.8	4701.4	5676.4	5697.9	4752.7	2829.1
70°	279.3	277.6	318.9	570.1	1814.5	3158.0	4240.4	5370.7	5402.1	4562.6	2553.1
72.5°	204.9	208.2	224.7	305.7	1051.0	2273.9	3590.9	4756.0	4803.9	4190.8	2159.8
75°	161.9	163.6	178.5	208.2	551.9	1285.7	2690.3	3817.3	3855.3	3528.1	1687.2
77.5°	120.6	123.9	135.5	147.1	256.1	590.0	1513.7	2351.5	2288.7	1936.8	814.7
80°	87.6	95.8	100.8	105.8	135.5	228.0	454.4	819.7	813.0	846.1	385.0
82.5°	56.2	62.8	67.8	71.1	81.0	109.1	135.5	183.4	198.3	328.9	153.7
85°	24.8	28.1	31.4	38.0	34.7	38.0	56.2	36.4	31.4	49.6	28.1
87.5°	0.0	0.0	5.0	8.3	6.6	3.3	9.9	6.6	5.0	5.0	5.0
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°	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7	1042.7
2.5°	1052.7	1034.5	996.5	960.1	938.6	910.5	885.8	862.6	861.0	854.4	842.8
5°	1065.9	1031.2	960.1	892.4	841.1	786.6	740.3	704.0	690.8	680.8	667.6
7.5°	1079.1	1024.6	918.8	819.7	738.7	662.7	608.1	558.6	543.7	530.5	522.2
10°	1084.1	1013.0	870.9	738.7	632.9	551.9	494.1	457.7	444.5	437.9	433.0
12.5°	1098.9	1006.4	826.3	662.7	540.4	466.0	424.7	403.2	398.3	393.3	388.3
15°	1118.8	1006.4	781.6	588.3	467.7	408.2	383.4	368.5	365.2	363.6	360.3
17.5°	1140.2	1006.4	738.7	525.5	414.8	370.2	352.0	343.7	342.1	340.4	338.8
20°	1170.0	1008.0	692.4	471.0	376.8	342.1	327.2	317.3	315.6	314.0	314.0
22.5°	1199.7	1011.3	647.8	429.7	352.0	320.6	302.4	292.5	289.2	289.2	289.2
25°	1237.7	1021.3	606.5	395.0	330.5	300.8	277.6	269.4	267.7	267.7	266.1
27.5°	1282.4	1032.8	570.1	368.5	309.0	277.6	254.5	246.2	242.9	242.9	241.3
30°	1330.3	1044.4	540.4	348.7	287.5	254.5	233.0	223.1	219.8	221.4	219.8
32.5°	1383.2	1060.9	517.2	335.5	267.7	234.7	214.8	203.3	201.6	201.6	200.0
35°	1472.4	1107.2	513.9	328.9	251.2	219.8	200.0	188.4	186.7	186.7	185.1
37.5°	1568.2	1160.1	528.8	325.5	238.0	206.6	188.4	176.8	175.2	175.2	175.2
40°	1649.2	1199.7	545.3	325.5	229.7	195.0	178.5	168.6	168.6	168.6	168.6
42.5°	1703.8	1203.0	542.0	325.5	223.1	186.7	171.9	161.9	161.9	163.6	161.9
45°	1784.7	1219.6	528.8	320.6	218.1	180.1	165.3	157.0	155.3	157.0	157.0
47.5°	1880.6	1249.3	515.6	300.8	216.5	173.5	160.3	150.4	148.7	150.4	148.7
50°	1971.5	1275.7	509.0	274.3	213.2	166.9	153.7	143.8	142.1	143.8	142.1
52.5°	2047.5	1287.3	497.4	256.1	204.9	160.3	147.1	137.2	133.9	135.5	135.5
55°	2108.6	1284.0	480.9	241.3	190.0	153.7	138.8	130.5	125.6	125.6	123.9
57.5°	2164.8	1285.7	466.0	226.4	173.5	143.8	132.2	122.3	115.7	114.0	112.4
60°	2186.3	1277.4	439.6	206.6	157.0	135.5	123.9	112.4	105.8	104.1	102.5
62.5°	2156.5	1247.7	404.9	171.9	142.1	125.6	115.7	104.1	97.5	95.8	94.2
65°	2072.3	1191.5	352.0	135.5	128.9	114.0	105.8	97.5	89.2	85.9	84.3
67.5°	1928.5	1110.5	285.9	109.1	114.0	104.1	99.2	89.2	79.3	76.0	74.4
70°	1723.6	1003.1	214.8	92.5	100.8	92.5	89.2	79.3	71.1	67.8	66.1
72.5°	1436.0	829.6	150.4	79.3	87.6	81.0	77.7	71.1	62.8	57.8	57.8
75°	1085.7	594.9	99.2	67.8	72.7	69.4	64.4	59.5	54.5	51.2	49.6
77.5°	467.7	231.4	61.1	51.2	59.5	57.8	51.2	47.9	46.3	43.0	43.0
80°	201.6	94.2	38.0	38.0	43.0	41.3	39.7	36.4	36.4	34.7	33.1
82.5°	74.4	38.0	23.1	28.1	31.4	28.1	28.1	28.1	28.1	26.4	26.4
85°	18.2	11.6	11.6	16.5	18.2	16.5	18.2	16.5	16.5	16.5	14.9
87.5°	5.0	5.0	6.6	6.6	6.6	6.6	6.6	5.0	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)