

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: P842598

Luminaire Tested: **ARCH4-70-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842598
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: ARCH4-70-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 605mA 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: 8397 lumens
Efficiency: N/A
Efficacy: 113.8 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): 73.8
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

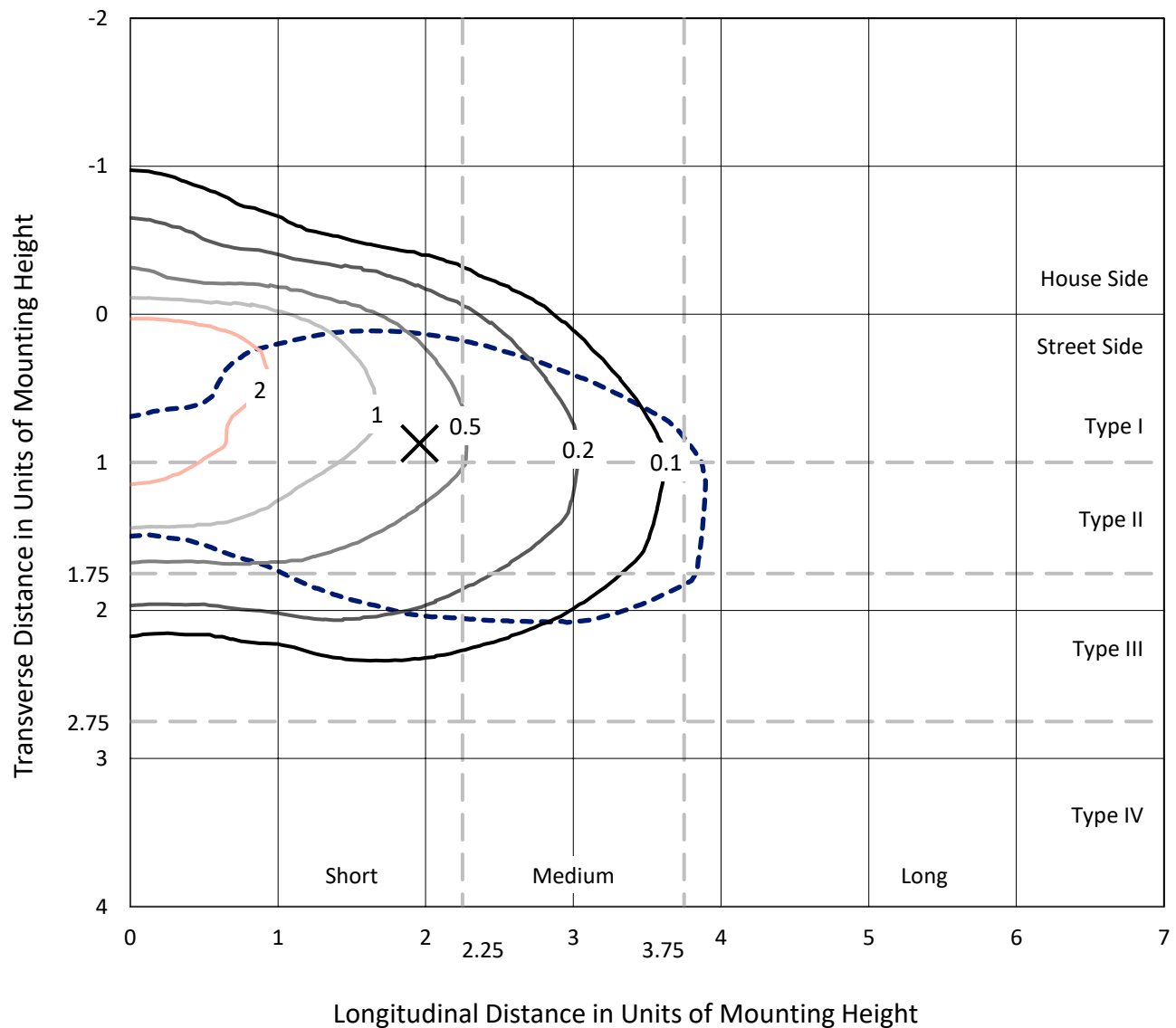


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Iso-Footcandle Lines of Horizontal Illumination

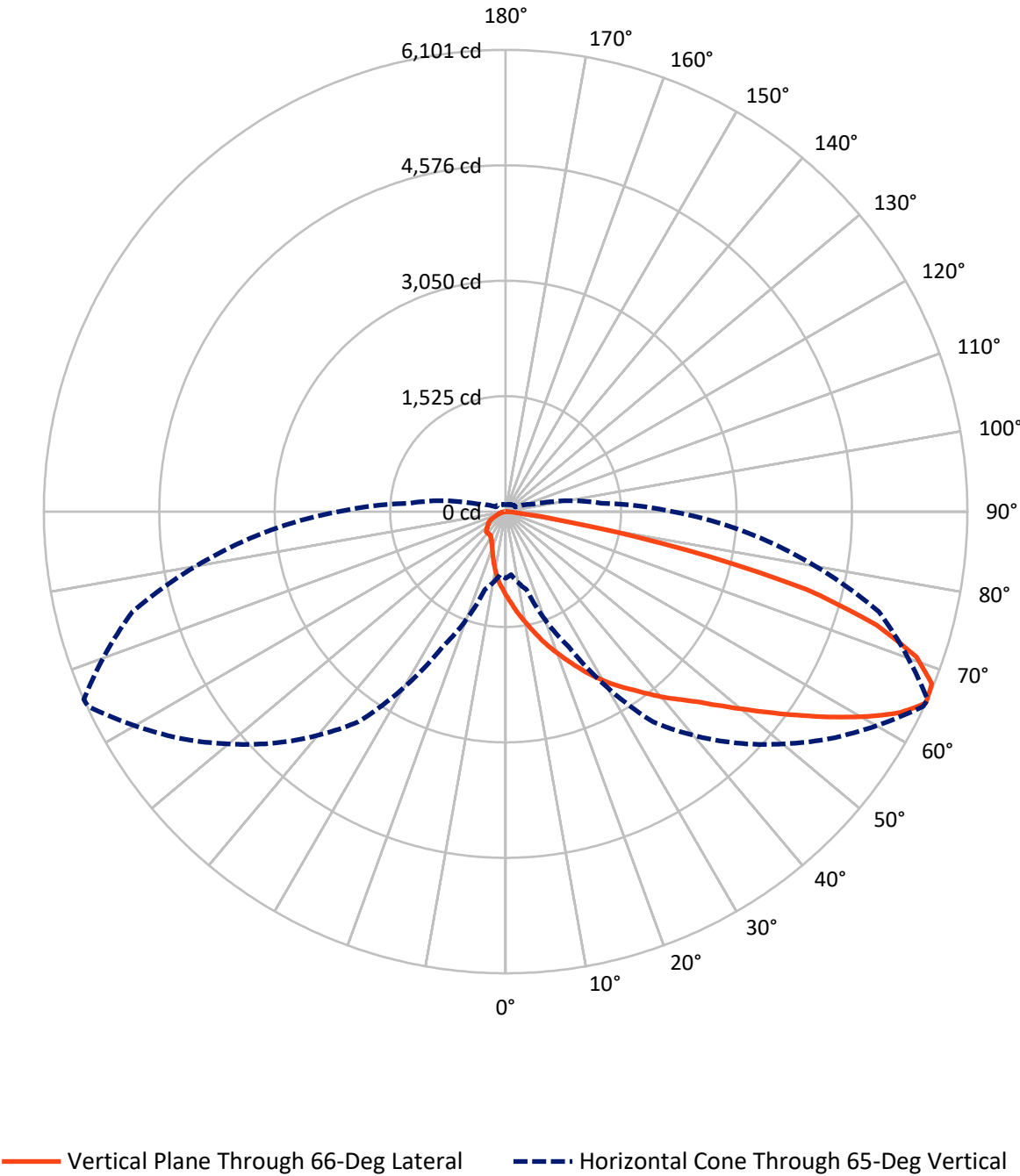
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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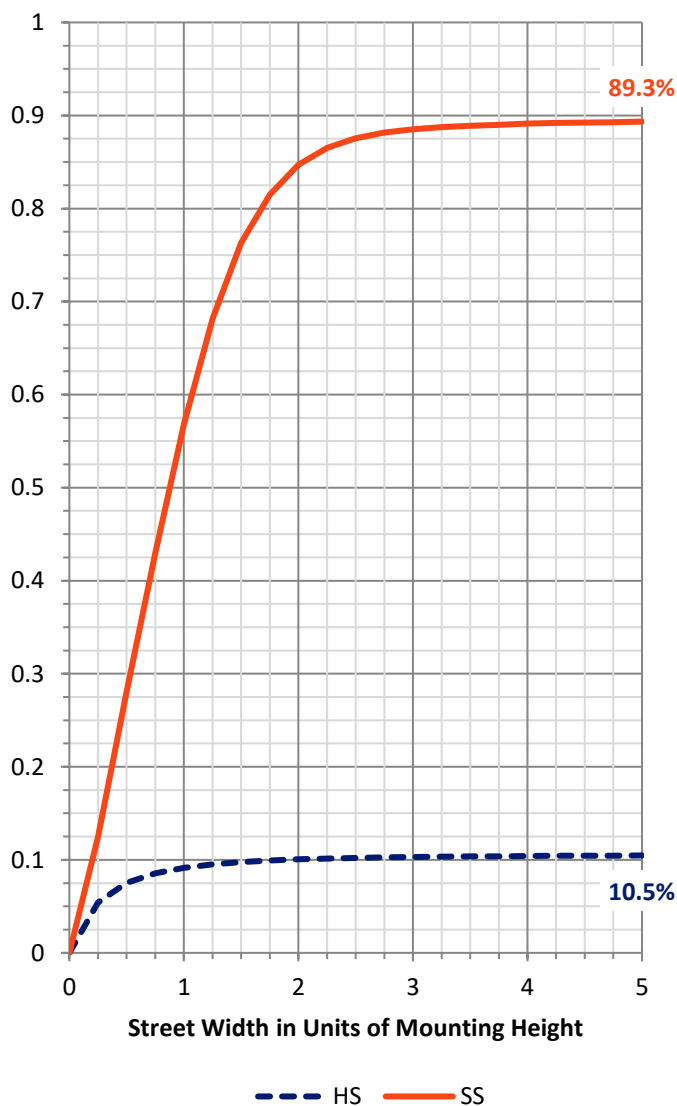
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	888.2	0.0	888.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7508.8	0.0	7508.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	8397.0	0.0	8397.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	1.3
10°-20°	357.5	4.3
20°-30°	646.8	7.7
30°-40°	1011.5	12.0
40°-50°	1534.4	18.3
50°-60°	1949.5	23.2
60°-70°	1821.6	21.7
70°-80°	905.3	10.8
80°-90°	60.8	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°	8397.0	100.0
0°-180°	8397.0	100.0

Coefficient of Utilization



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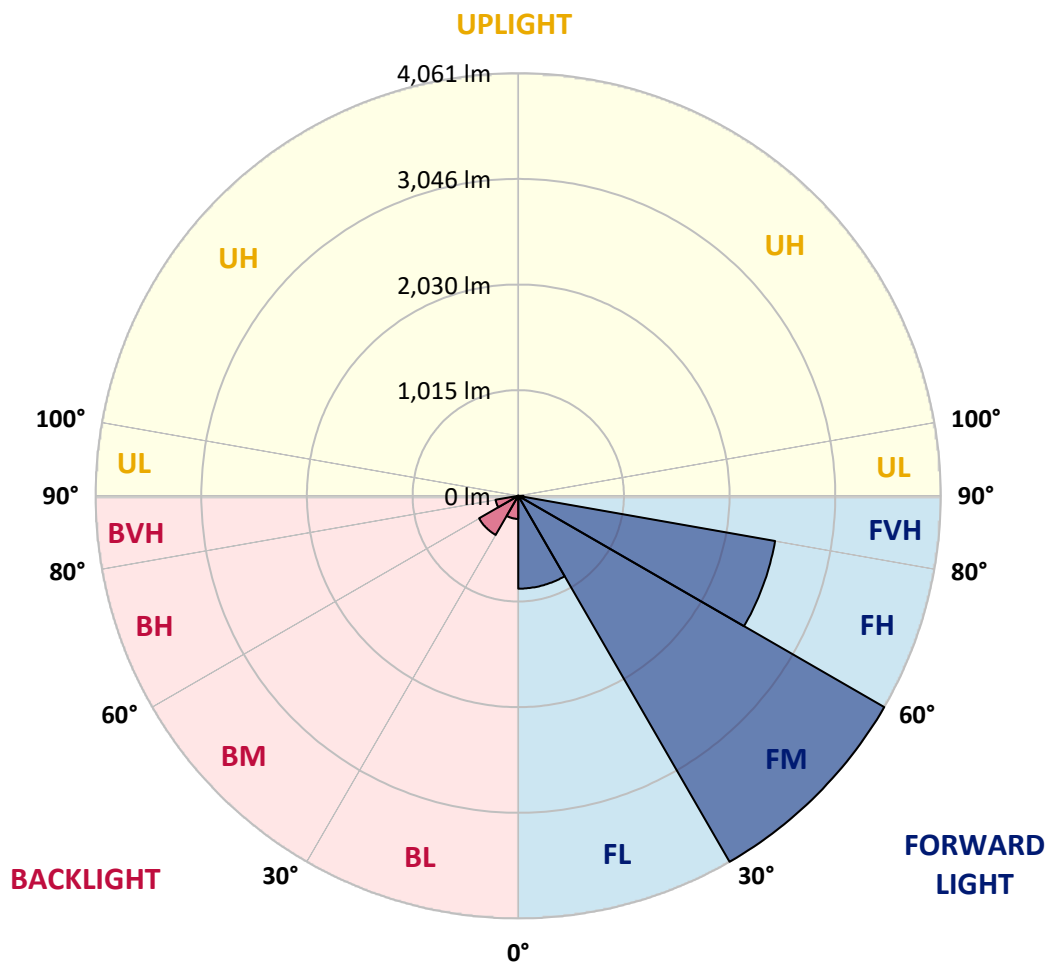
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	892.2	10.6			
FM	(30°-60°)	4060.9	48.4			
FH	(60°-80°)	2505.7	29.8			G2/5000
FVH	(80°-90°)	50.1	0.6			G1/100
BL	(0°-30°)	221.8	2.6	B1/500		
BM	(30°-60°)	434.4	5.2	B1/1000		
BH	(60°-80°)	221.2	2.6	B1/500		G1/500
BVH	(80°-90°)	10.8	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°	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3
2.5°	1298.0	1308.5	1313.8	1315.6	1275.1	1257.5	1239.9	1199.4	1190.5	1167.7	1137.7
5°	1526.9	1541.0	1537.5	1530.5	1481.1	1424.8	1379.0	1303.3	1290.9	1236.3	1169.4
7.5°	1752.4	1764.7	1761.2	1734.8	1680.2	1600.9	1525.2	1414.2	1396.6	1308.5	1201.1
10°	1940.8	1951.4	1949.6	1923.2	1858.0	1761.2	1669.6	1521.6	1500.5	1375.5	1227.5
12.5°	2095.8	2109.9	2108.1	2090.5	2032.4	1926.7	1822.8	1644.9	1618.5	1456.5	1264.5
15°	2217.3	2234.9	2234.9	2227.9	2187.4	2099.3	1981.3	1780.5	1748.8	1549.8	1310.3
17.5°	2291.3	2305.4	2317.7	2330.0	2301.8	2234.9	2127.5	1916.2	1882.7	1641.4	1357.9
20°	2330.0	2344.1	2352.9	2379.3	2384.6	2351.2	2266.6	2050.0	2014.8	1745.3	1412.5
22.5°	2393.4	2405.8	2407.5	2430.4	2441.0	2449.8	2396.9	2182.1	2153.9	1859.8	1474.1
25°	2499.1	2513.2	2507.9	2518.5	2520.2	2530.8	2525.5	2333.5	2305.4	1990.1	1548.1
27.5°	2634.7	2652.3	2648.8	2638.2	2622.4	2613.6	2636.5	2486.8	2460.4	2120.4	1623.8
30°	2780.9	2802.0	2796.7	2775.6	2733.3	2696.3	2728.0	2631.2	2606.5	2254.3	1708.3
32.5°	2928.8	2953.5	2951.7	2916.5	2844.3	2780.9	2828.4	2766.8	2749.2	2398.7	1799.9
35°	3025.7	3057.4	3053.9	3032.7	2939.4	2884.8	2942.9	2905.9	2893.6	2574.8	1932.0
37.5°	3182.4	3215.9	3186.0	3133.1	3025.7	2997.5	3068.0	3062.7	3053.9	2761.5	2071.1
40°	3562.8	3612.2	3532.9	3316.3	3140.2	3115.5	3215.9	3237.0	3228.2	2946.4	2196.2
42.5°	3960.9	4034.8	3911.6	3612.2	3348.0	3258.2	3377.9	3407.9	3397.3	3104.9	2308.9
45°	4202.1	4233.8	4110.6	3878.1	3716.1	3430.8	3550.5	3599.8	3591.0	3295.1	2453.3
47.5°	4399.4	4387.1	4246.2	4089.4	4119.4	3673.8	3746.0	3842.9	3835.8	3504.7	2611.8
50°	4441.7	4413.5	4357.1	4258.5	4337.8	3920.4	3952.1	4119.4	4112.3	3737.2	2772.1
52.5°	4144.0	4107.0	4260.3	4343.0	4316.6	4100.0	4179.3	4422.3	4418.8	3989.0	2925.3
55°	3400.8	3370.9	3783.0	4211.0	4293.7	4226.8	4431.1	4737.5	4756.9	4256.7	3064.4
57.5°	2675.2	2643.5	3048.6	3879.9	4209.2	4343.0	4725.2	5098.6	5123.2	4547.3	3196.5
60°	2132.8	2085.2	2395.2	3358.5	4050.7	4432.9	5008.8	5494.8	5498.4	4813.3	3277.5
62.5°	1449.4	1396.6	1740.0	2698.1	3784.7	4446.9	5227.1	5836.5	5850.6	5012.3	3291.6
65°	880.6	836.6	1069.0	1970.7	3392.0	4327.2	5230.7	6088.4	6100.7	5103.9	3207.1
67.5°	510.7	493.1	611.1	1227.5	2740.4	4004.9	5010.5	6049.6	6072.5	5065.1	3015.1
70°	297.6	295.9	339.9	607.6	1933.8	3365.6	4519.2	5723.8	5757.3	4862.6	2721.0
72.5°	218.4	221.9	239.5	325.8	1120.1	2423.4	3827.0	5068.6	5119.7	4466.3	2301.8
75°	172.6	174.4	190.2	221.9	588.2	1370.2	2867.2	4068.3	4108.8	3760.1	1798.2
77.5°	128.6	132.1	144.4	156.7	273.0	628.7	1613.2	2506.1	2439.2	2064.1	868.3
80°	93.3	102.1	107.4	112.7	144.4	243.0	484.3	873.5	866.5	901.7	410.4
82.5°	59.9	66.9	72.2	75.7	86.3	116.2	144.4	195.5	211.3	350.5	163.8
85°	26.4	29.9	33.5	40.5	37.0	40.5	59.9	38.7	33.5	52.8	29.9
87.5°	0.0	0.0	5.3	8.8	7.0	3.5	10.6	7.0	5.3	5.3	5.3
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°	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3	1111.3
2.5°	1121.9	1102.5	1062.0	1023.2	1000.3	970.4	944.0	919.3	917.6	910.5	898.2
5°	1136.0	1099.0	1023.2	951.0	896.4	838.3	789.0	750.3	736.2	725.6	711.5
7.5°	1150.0	1091.9	979.2	873.5	787.2	706.2	648.1	595.3	579.4	565.3	556.5
10°	1155.3	1079.6	928.1	787.2	674.5	588.2	526.6	487.8	473.8	466.7	461.4
12.5°	1171.2	1072.6	880.6	706.2	575.9	496.6	452.6	429.7	424.4	419.2	413.9
15°	1192.3	1072.6	833.0	627.0	498.4	435.0	408.6	392.7	389.2	387.5	383.9
17.5°	1215.2	1072.6	787.2	560.1	442.1	394.5	375.1	366.3	364.6	362.8	361.0
20°	1246.9	1074.3	737.9	501.9	401.5	364.6	348.7	338.1	336.4	334.6	334.6
22.5°	1278.6	1077.8	690.4	457.9	375.1	341.7	322.3	311.7	308.2	308.2	308.2
25°	1319.1	1088.4	646.3	420.9	352.2	320.5	295.9	287.1	285.3	285.3	283.5
27.5°	1366.7	1100.7	607.6	392.7	329.3	295.9	271.2	262.4	258.9	258.9	257.1
30°	1417.7	1113.1	575.9	371.6	306.4	271.2	248.3	237.8	234.2	236.0	234.2
32.5°	1474.1	1130.7	551.2	357.5	285.3	250.1	229.0	216.6	214.9	214.9	213.1
35°	1569.2	1180.0	547.7	350.5	267.7	234.2	213.1	200.8	199.0	199.0	197.3
37.5°	1671.3	1236.3	563.6	347.0	253.6	220.1	200.8	188.4	186.7	186.7	186.7
40°	1757.6	1278.6	581.2	347.0	244.8	207.8	190.2	179.6	179.6	179.6	179.6
42.5°	1815.8	1282.1	577.7	347.0	237.8	199.0	183.2	172.6	172.6	174.4	172.6
45°	1902.1	1299.7	563.6	341.7	232.5	192.0	176.1	167.3	165.5	167.3	167.3
47.5°	2004.2	1331.4	549.5	320.5	230.7	184.9	170.8	160.3	158.5	160.3	158.5
50°	2101.1	1359.6	542.4	292.4	227.2	177.9	163.8	153.2	151.5	153.2	151.5
52.5°	2182.1	1371.9	530.1	273.0	218.4	170.8	156.7	146.2	142.7	144.4	144.4
55°	2247.3	1368.4	512.5	257.1	202.5	163.8	147.9	139.1	133.8	133.8	132.1
57.5°	2307.1	1370.2	496.6	241.3	184.9	153.2	140.9	130.3	123.3	121.5	119.8
60°	2330.0	1361.4	468.5	220.1	167.3	144.4	132.1	119.8	112.7	111.0	109.2
62.5°	2298.3	1329.7	431.5	183.2	151.5	133.8	123.3	111.0	103.9	102.1	100.4
65°	2208.5	1269.8	375.1	144.4	137.4	121.5	112.7	103.9	95.1	91.6	89.8
67.5°	2055.3	1183.5	304.7	116.2	121.5	111.0	105.7	95.1	84.5	81.0	79.3
70°	1836.9	1069.0	229.0	98.6	107.4	98.6	95.1	84.5	75.7	72.2	70.4
72.5°	1530.5	884.1	160.3	84.5	93.3	86.3	82.8	75.7	66.9	61.6	61.6
75°	1157.1	634.0	105.7	72.2	77.5	74.0	68.7	63.4	58.1	54.6	52.8
77.5°	498.4	246.6	65.2	54.6	63.4	61.6	54.6	51.1	49.3	45.8	45.8
80°	214.9	100.4	40.5	40.5	45.8	44.0	42.3	38.7	38.7	37.0	35.2
82.5°	79.3	40.5	24.7	29.9	33.5	29.9	29.9	29.9	29.9	28.2	28.2
85°	19.4	12.3	12.3	17.6	19.4	17.6	19.4	17.6	17.6	17.6	15.9
87.5°	5.3	5.3	7.0	7.0	7.0	7.0	7.0	5.3	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)