

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: P840897

Luminaire Tested: **ARCH4-100-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840897
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: ARCH4-100-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 12500 lumens
Efficiency: N/A
Efficacy: 121.2 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



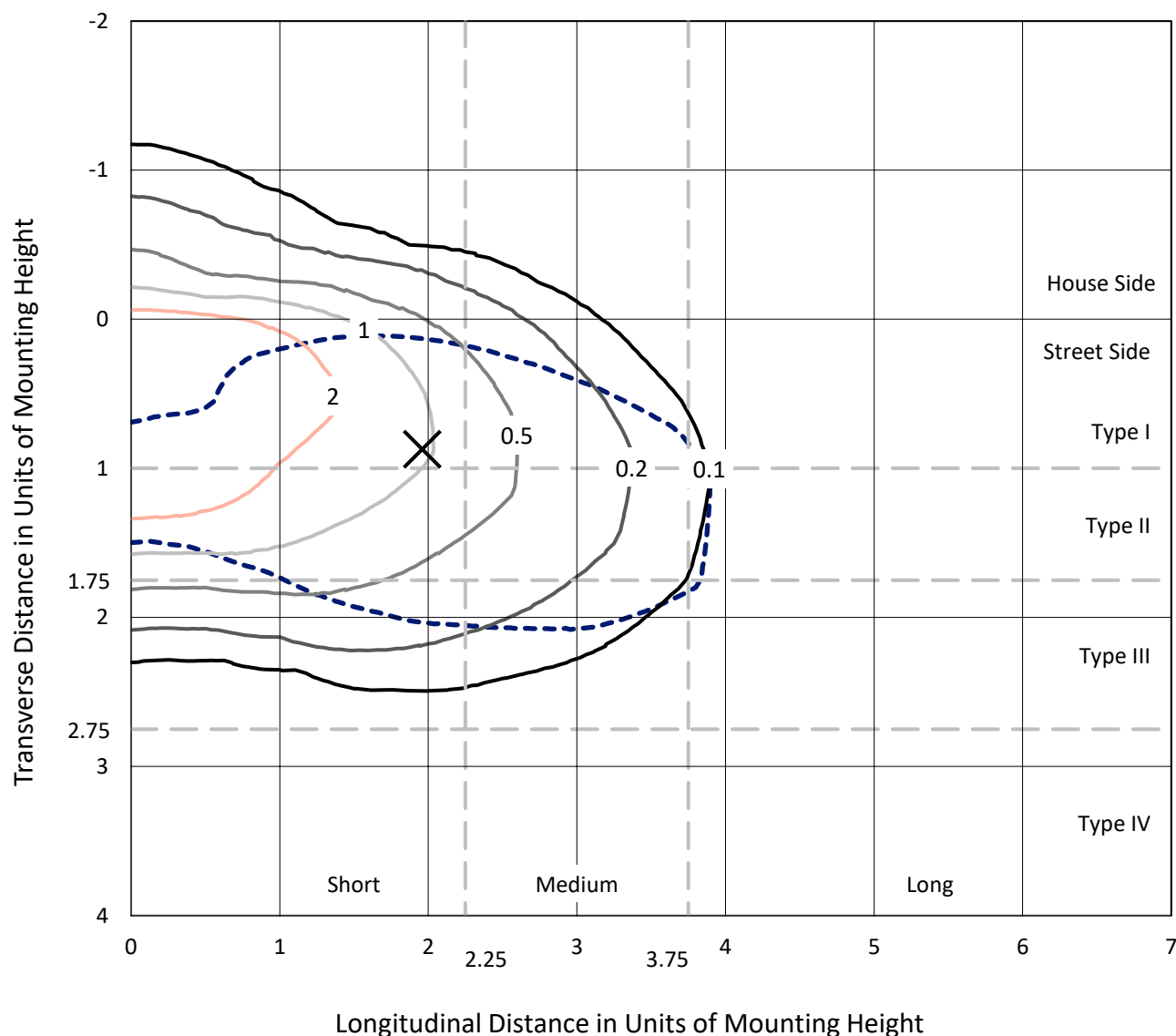
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

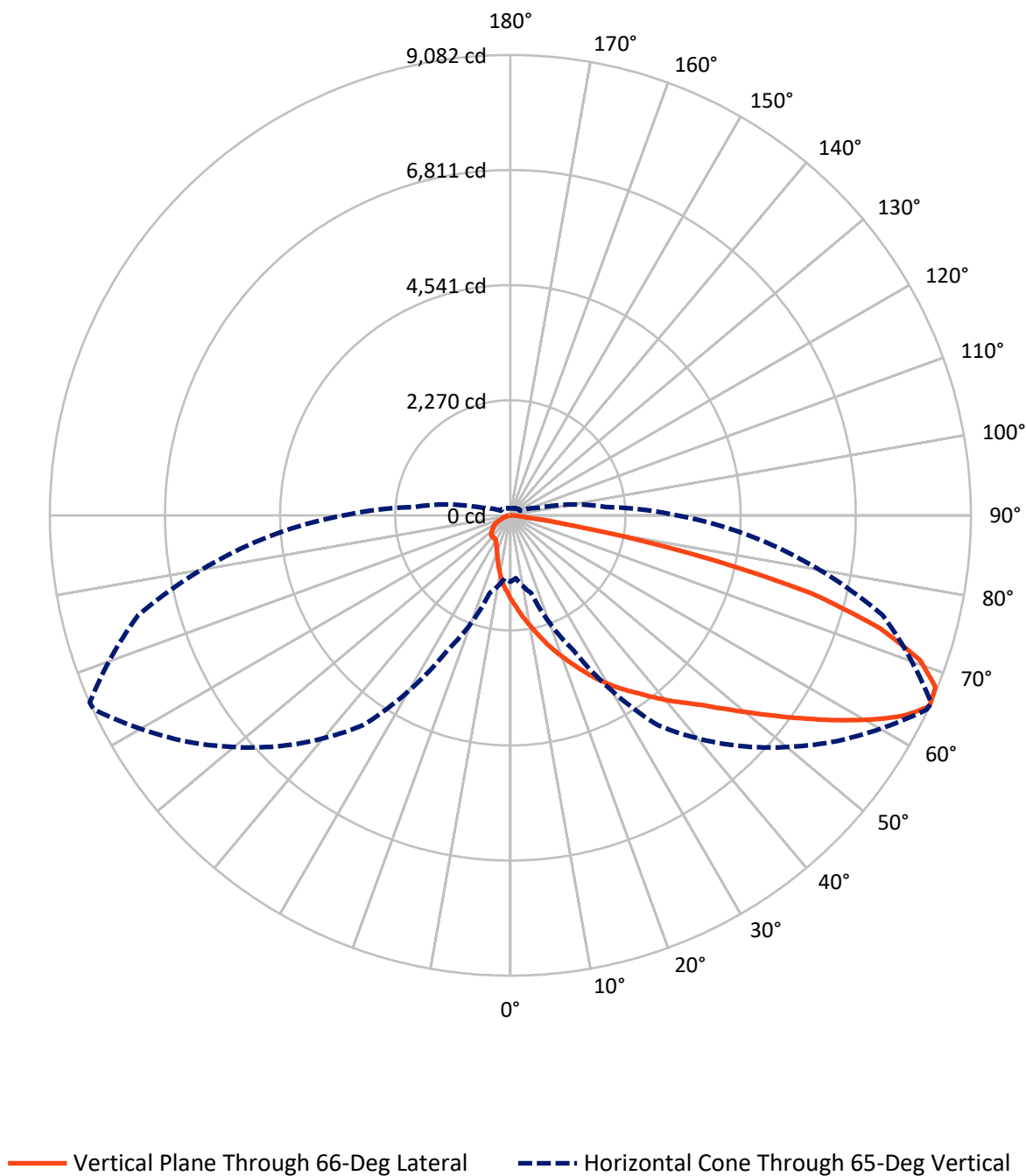


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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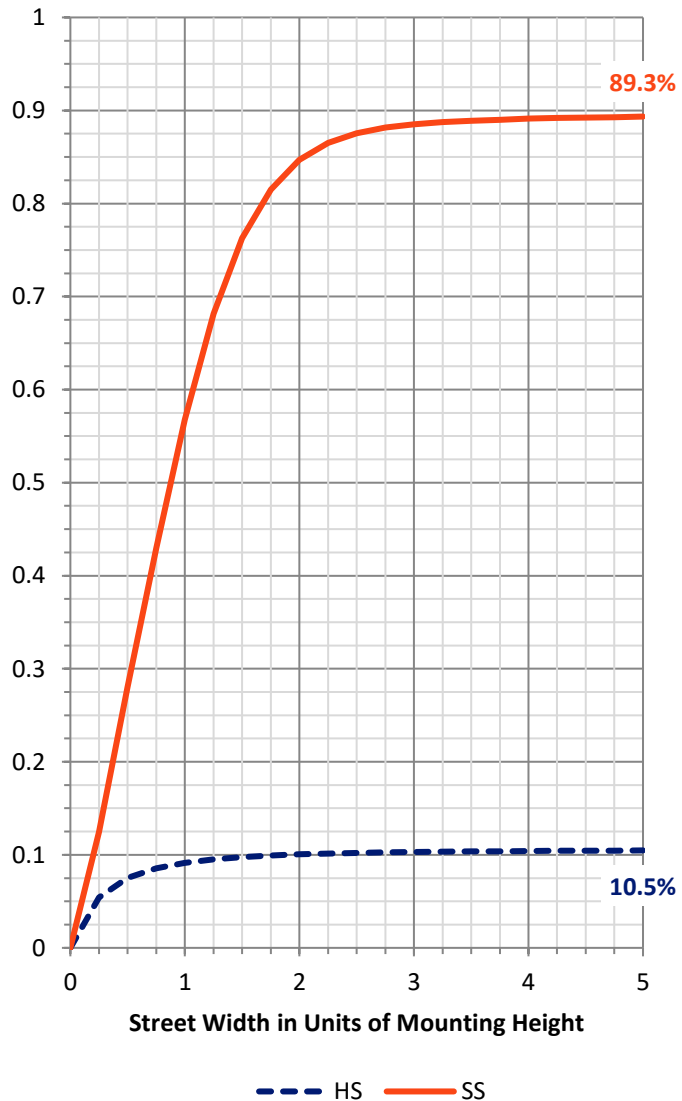
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1322.2	0.0	1322.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	11177.8	0.0	11177.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	12500.0	0.0	12500.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	1.3
10°-20°	532.2	4.3
20°-30°	962.9	7.7
30°-40°	1505.7	12.0
40°-50°	2284.1	18.3
50°-60°	2902.0	23.2
60°-70°	2711.6	21.7
70°-80°	1347.7	10.8
80°-90°	90.5	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°	12500.0	100.0
0°-180°	12500.0	100.0

Coefficient of Utilization



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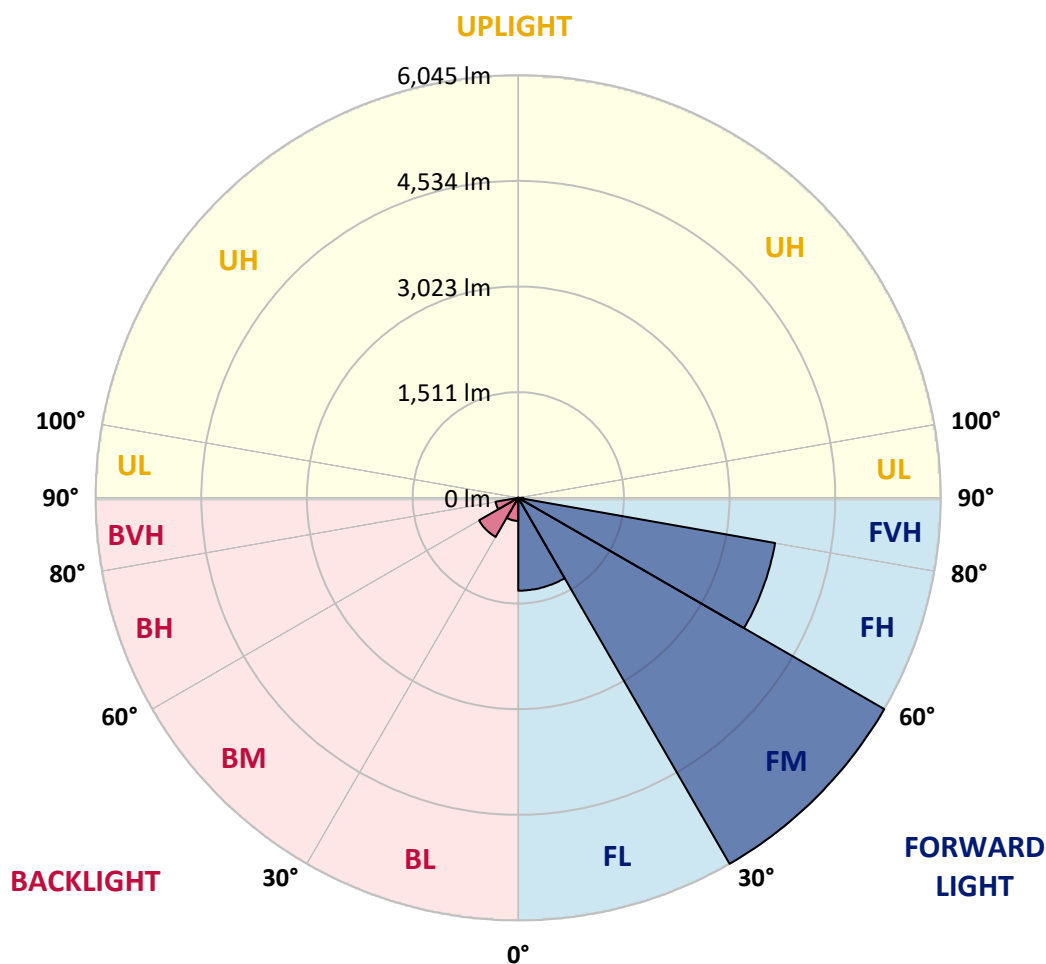
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1328.1	10.6			
FM	(30°-60°)	6045.1	48.4			
FH	(60°-80°)	3730.1	29.8			G2/5000
FVH	(80°-90°)	74.5	0.6			G1/100
BL	(0°-30°)	330.2	2.6	B1/500		
BM	(30°-60°)	646.7	5.2	B1/1000		
BH	(60°-80°)	329.3	2.6	B1/500		G1/500
BVH	(80°-90°)	16.0	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°	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3
2.5°	1932.2	1947.9	1955.8	1958.4	1898.1	1871.9	1845.7	1785.4	1772.3	1738.2	1693.6
5°	2273.0	2294.0	2288.8	2278.3	2204.9	2121.0	2052.8	1940.1	1921.7	1840.4	1740.8
7.5°	2608.6	2627.0	2621.7	2582.4	2501.1	2383.1	2270.4	2105.2	2079.0	1947.9	1788.0
10°	2889.1	2904.9	2902.2	2862.9	2765.9	2621.7	2485.4	2265.2	2233.7	2047.6	1827.3
12.5°	3119.8	3140.8	3138.2	3112.0	3025.5	2868.2	2713.5	2448.7	2409.4	2168.2	1882.4
15°	3300.7	3327.0	3327.0	3316.5	3256.2	3125.1	2949.4	2650.6	2603.4	2307.1	1950.6
17.5°	3410.9	3431.8	3450.2	3468.5	3426.6	3327.0	3167.0	2852.4	2802.6	2443.4	2021.3
20°	3468.5	3489.5	3502.6	3541.9	3549.8	3500.0	3374.2	3051.7	2999.2	2598.1	2102.6
22.5°	3562.9	3581.3	3583.9	3618.0	3633.7	3646.8	3568.2	3248.3	3206.4	2768.5	2194.4
25°	3720.2	3741.2	3733.3	3749.1	3751.7	3767.4	3759.5	3473.8	3431.8	2962.5	2304.5
27.5°	3922.1	3948.3	3943.1	3927.3	3903.7	3890.6	3924.7	3701.9	3662.5	3156.6	2417.2
30°	4139.7	4171.2	4163.3	4131.8	4068.9	4013.9	4061.0	3916.9	3880.1	3355.8	2543.1
32.5°	4359.9	4396.6	4394.0	4341.6	4234.1	4139.7	4210.5	4118.7	4092.5	3570.8	2679.4
35°	4504.1	4551.3	4546.1	4514.6	4375.7	4294.4	4380.9	4325.8	4307.5	3833.0	2876.0
37.5°	4737.5	4787.3	4742.7	4664.0	4504.1	4462.2	4567.0	4559.2	4546.1	4110.9	3083.1
40°	5303.7	5377.2	5259.2	4936.7	4674.5	4637.8	4787.3	4818.7	4805.6	4386.1	3269.3
42.5°	5896.3	6006.4	5822.8	5377.2	4983.9	4850.2	5028.5	5073.0	5057.3	4622.1	3437.1
45°	6255.4	6302.6	6119.1	5773.0	5531.8	5107.1	5285.4	5358.8	5345.7	4905.2	3652.1
47.5°	6549.1	6530.7	6321.0	6087.6	6132.2	5468.9	5576.4	5720.6	5710.1	5217.2	3888.0
50°	6612.0	6570.0	6486.1	6339.3	6457.3	5836.0	5883.1	6132.2	6121.7	5563.3	4126.6
52.5°	6168.9	6113.9	6341.9	6465.2	6425.8	6103.4	6221.3	6583.1	6577.9	5938.2	4354.7
55°	5062.5	5018.0	5631.5	6268.5	6391.8	6292.1	6596.3	7052.4	7081.3	6336.7	4561.8
57.5°	3982.4	3935.2	4538.2	5775.7	6265.9	6465.2	7034.1	7589.9	7626.6	6769.3	4758.4
60°	3174.9	3104.1	3565.5	4999.6	6030.0	6598.9	7456.2	8179.8	8185.0	7165.2	4879.0
62.5°	2157.7	2079.0	2590.3	4016.5	5634.1	6619.8	7781.3	8688.4	8709.4	7461.4	4900.0
65°	1310.9	1245.3	1591.4	2933.7	5049.4	6441.6	7786.5	9063.3	9081.6	7597.7	4774.2
67.5°	760.3	734.1	909.7	1827.3	4079.4	5961.8	7458.8	9005.6	9039.7	7540.1	4488.4
70°	443.1	440.4	506.0	904.5	2878.7	5010.1	6727.3	8520.6	8570.4	7238.6	4050.6
72.5°	325.1	330.3	356.6	485.0	1667.4	3607.5	5697.0	7545.3	7621.3	6648.7	3426.6
75°	256.9	259.6	283.1	330.3	875.7	2039.7	4268.2	6056.2	6116.5	5597.4	2676.8
77.5°	191.4	196.6	215.0	233.3	406.4	936.0	2401.5	3730.7	3631.1	3072.7	1292.5
80°	139.0	152.1	159.9	167.8	215.0	361.8	721.0	1300.4	1289.9	1342.3	610.9
82.5°	89.1	99.6	107.5	112.7	128.5	173.0	215.0	291.0	314.6	521.7	243.8
85°	39.3	44.6	49.8	60.3	55.1	60.3	89.1	57.7	49.8	78.7	44.6
87.5°	0.0	0.0	7.9	13.1	10.5	5.2	15.7	10.5	7.9	7.9	7.9
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°	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3	1654.3
2.5°	1670.0	1641.2	1580.9	1523.2	1489.1	1444.6	1405.2	1368.5	1365.9	1355.4	1337.1
5°	1691.0	1636.0	1523.2	1415.7	1334.5	1247.9	1174.5	1116.9	1095.9	1080.1	1059.2
7.5°	1712.0	1625.5	1457.7	1300.4	1171.9	1051.3	964.8	886.1	862.5	841.6	828.5
10°	1719.8	1607.1	1381.6	1171.9	1004.1	875.7	783.9	726.2	705.2	694.8	686.9
12.5°	1743.4	1596.6	1310.9	1051.3	857.3	739.3	673.8	639.7	631.8	624.0	616.1
15°	1774.9	1596.6	1240.1	933.3	741.9	647.6	608.2	584.6	579.4	576.8	571.5
17.5°	1809.0	1596.6	1171.9	833.7	658.1	587.3	558.4	545.3	542.7	540.1	537.5
20°	1856.2	1599.3	1098.5	747.2	597.8	542.7	519.1	503.4	500.7	498.1	498.1
22.5°	1903.4	1604.5	1027.7	681.6	558.4	508.6	479.8	464.0	458.8	458.8	458.8
25°	1963.7	1620.2	962.2	626.6	524.3	477.2	440.4	427.3	424.7	424.7	422.1
27.5°	2034.5	1638.6	904.5	584.6	490.3	440.4	403.7	390.6	385.4	385.4	382.8
30°	2110.5	1656.9	857.3	553.2	456.2	403.7	369.7	353.9	348.7	351.3	348.7
32.5°	2194.4	1683.1	820.6	532.2	424.7	372.3	340.8	322.5	319.9	319.9	317.2
35°	2336.0	1756.6	815.4	521.7	398.5	348.7	317.2	298.9	296.3	296.3	293.6
37.5°	2488.0	1840.4	839.0	516.5	377.5	327.7	298.9	280.5	277.9	277.9	277.9
40°	2616.5	1903.4	865.2	516.5	364.4	309.4	283.1	267.4	267.4	267.4	267.4
42.5°	2703.0	1908.6	859.9	516.5	353.9	296.3	272.7	256.9	256.9	259.6	256.9
45°	2831.5	1934.8	839.0	508.6	346.1	285.8	262.2	249.1	246.4	249.1	249.1
47.5°	2983.5	1982.0	818.0	477.2	343.4	275.3	254.3	238.6	236.0	238.6	236.0
50°	3127.7	2024.0	807.5	435.2	338.2	264.8	243.8	228.1	225.5	228.1	225.5
52.5°	3248.3	2042.3	789.1	406.4	325.1	254.3	233.3	217.6	212.4	215.0	215.0
55°	3345.3	2037.1	762.9	382.8	301.5	243.8	220.2	207.1	199.3	199.3	196.6
57.5°	3434.5	2039.7	739.3	359.2	275.3	228.1	209.7	194.0	183.5	180.9	178.3
60°	3468.5	2026.6	697.4	327.7	249.1	215.0	196.6	178.3	167.8	165.2	162.5
62.5°	3421.3	1979.4	642.3	272.7	225.5	199.3	183.5	165.2	154.7	152.1	149.4
65°	3287.6	1890.3	558.4	215.0	204.5	180.9	167.8	154.7	141.6	136.3	133.7
67.5°	3059.5	1761.8	453.6	173.0	180.9	165.2	157.3	141.6	125.8	120.6	118.0
70°	2734.5	1591.4	340.8	146.8	159.9	146.8	141.6	125.8	112.7	107.5	104.9
72.5°	2278.3	1316.1	238.6	125.8	139.0	128.5	123.2	112.7	99.6	91.8	91.8
75°	1722.5	943.8	157.3	107.5	115.4	110.1	102.2	94.4	86.5	81.3	78.7
77.5°	741.9	367.0	97.0	81.3	94.4	91.8	81.3	76.0	73.4	68.2	68.2
80°	319.9	149.4	60.3	60.3	68.2	65.5	62.9	57.7	57.7	55.1	52.4
82.5°	118.0	60.3	36.7	44.6	49.8	44.6	44.6	44.6	44.6	41.9	41.9
85°	28.8	18.4	18.4	26.2	28.8	26.2	28.8	26.2	26.2	26.2	23.6
87.5°	7.9	7.9	10.5	10.5	10.5	10.5	10.5	7.9	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)