

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: P842666

Luminaire Tested: **ARCH4-80-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9687 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 83.4
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

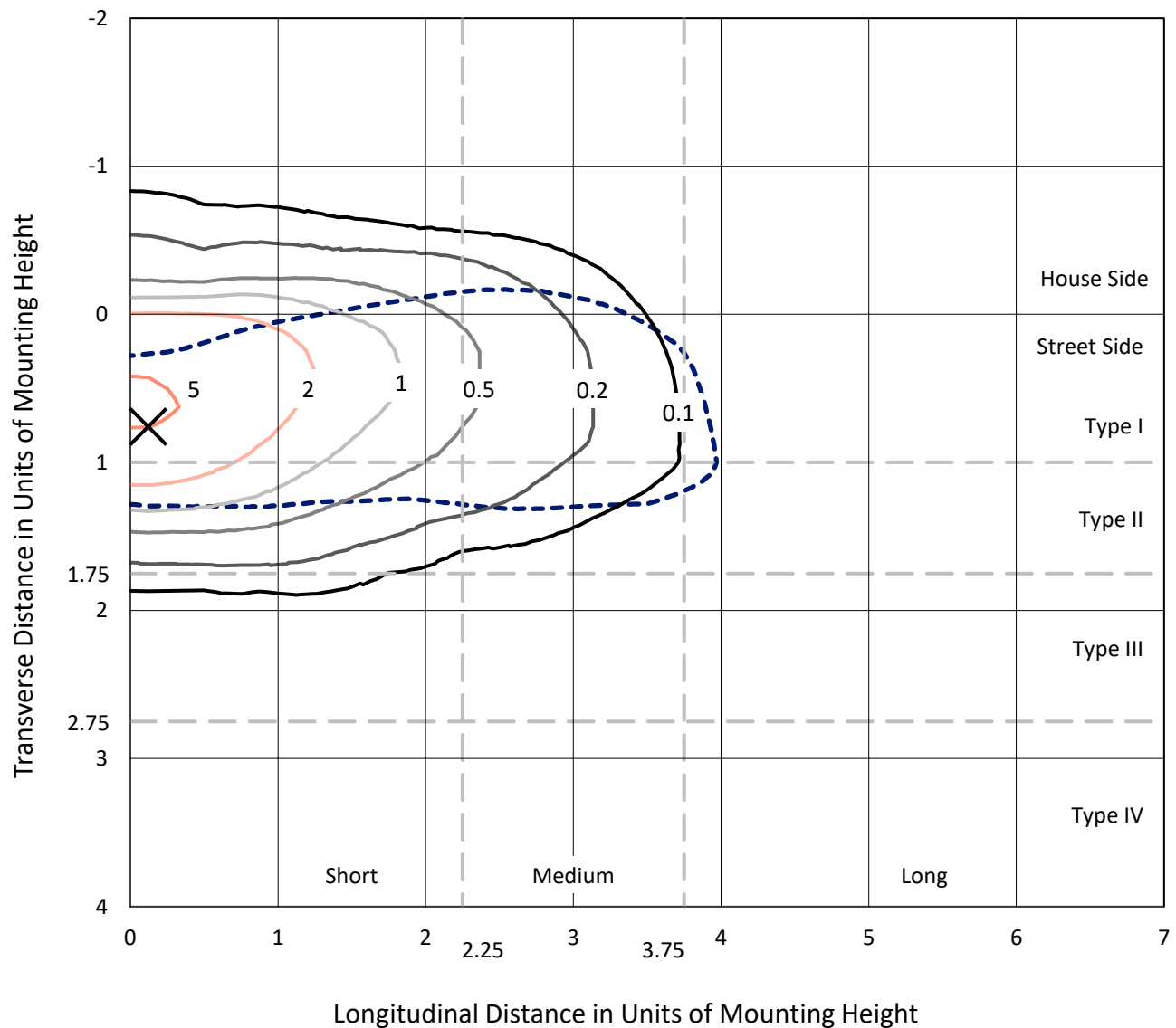


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

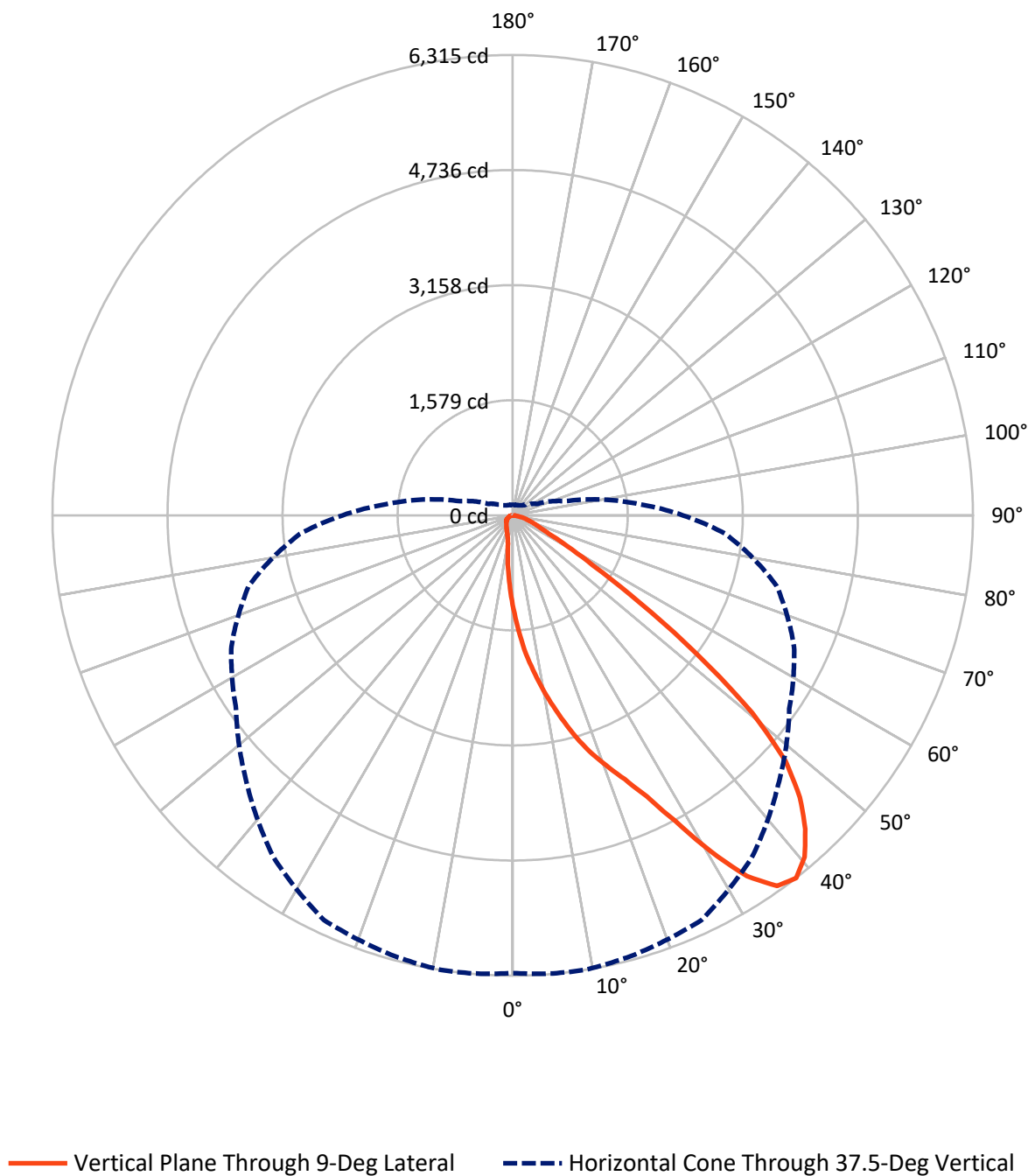


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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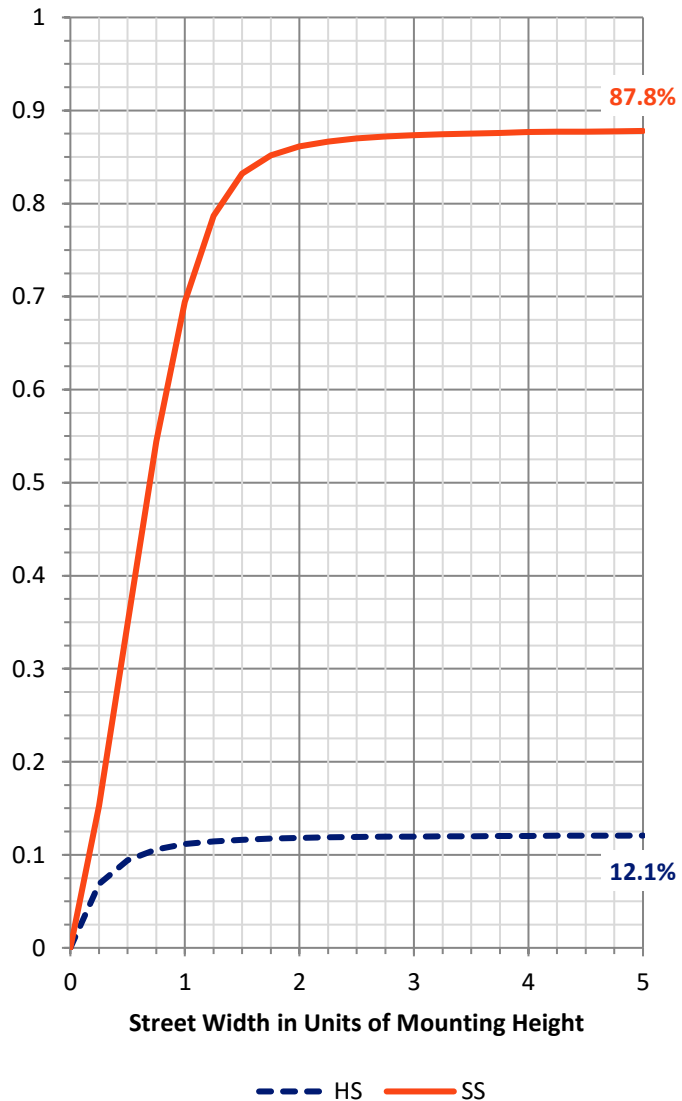
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1178.1	0.0	1178.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	8508.9	0.0	8508.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	9687.0	0.0	9687.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	1.3
10°-20°	447.4	4.6
20°-30°	919.2	9.5
30°-40°	1624.8	16.8
40°-50°	2158.4	22.3
50°-60°	2047.1	21.1
60°-70°	1561.7	16.1
70°-80°	757.1	7.8
80°-90°	42.6	0.4
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°	9687.0	100.0
0°-180°	9687.0	100.0

Coefficient of Utilization



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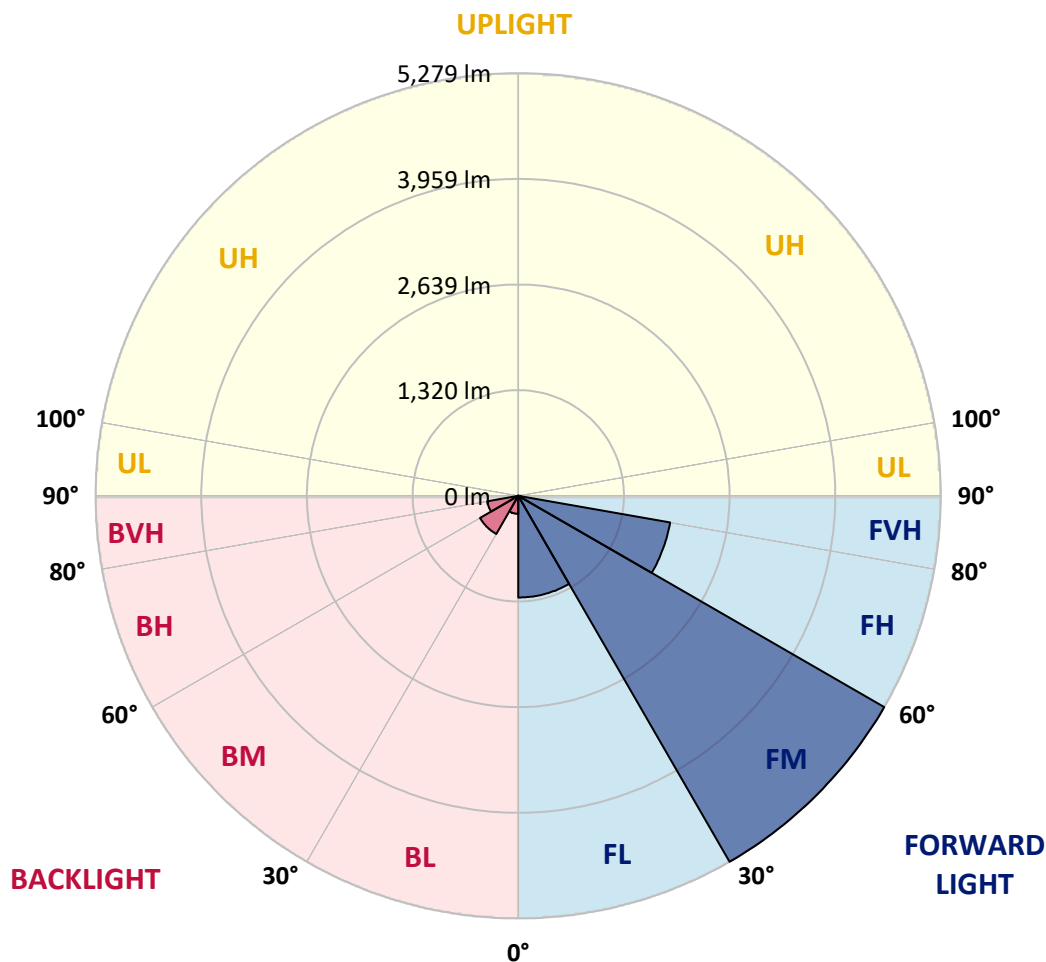
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1270.5	13.1			
FM	(30°-60°)	5278.9	54.5			
FH	(60°-80°)	1925.7	19.9			G2/5000
FVH	(80°-90°)	33.7	0.3			G1/100
BL	(0°-30°)	224.8	2.3	B1/500		
BM	(30°-60°)	551.3	5.7	B1/1000		
BH	(60°-80°)	393.1	4.1	B1/500		G1/500
BVH	(80°-90°)	8.9	0.1			G0/10
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°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5
2.5°	1586.7	1558.9	1590.7	1586.7	1558.9	1541.0	1485.3	1467.4	1401.8	1354.1	1312.3
5°	1912.8	1885.0	1912.8	1904.8	1865.1	1821.3	1729.9	1670.2	1552.9	1449.5	1356.1
7.5°	2183.2	2183.2	2195.2	2197.1	2149.4	2081.8	1968.5	1879.0	1714.0	1554.9	1405.8
10°	2475.5	2477.5	2503.3	2485.5	2421.8	2330.4	2187.2	2073.9	1875.0	1666.2	1453.5
12.5°	2787.7	2789.7	2797.6	2789.7	2714.1	2596.8	2423.8	2274.7	2046.0	1793.5	1519.1
15°	3099.9	3101.8	3111.8	3097.9	3014.4	2877.2	2680.3	2497.4	2227.0	1936.7	1598.6
17.5°	3392.1	3396.1	3404.1	3386.2	3298.7	3135.6	2934.8	2714.1	2419.8	2089.8	1688.1
20°	3654.6	3658.6	3664.5	3640.7	3553.2	3390.2	3173.4	2942.8	2616.7	2246.8	1785.5
22.5°	3919.1	3923.0	3933.0	3901.2	3803.7	3616.8	3404.1	3165.5	2825.5	2419.8	1898.9
25°	4257.1	4261.1	4269.0	4223.3	4090.1	3871.3	3646.7	3402.1	3052.1	2614.7	2038.1
27.5°	4752.2	4748.2	4748.2	4664.7	4436.0	4151.7	3891.2	3642.7	3296.7	2823.5	2191.2
30°	5364.6	5354.7	5348.7	5235.4	4909.3	4467.8	4141.8	3867.4	3531.3	3044.2	2356.2
32.5°	5913.4	5913.4	5901.5	5782.2	5436.2	4893.4	4408.2	4086.1	3758.0	3266.9	2527.2
35°	6237.5	6251.4	6245.4	6156.0	5903.4	5350.7	4768.1	4348.5	3996.6	3499.5	2732.0
37.5°	6281.2	6309.1	6315.0	6261.3	6128.1	5724.5	5167.7	4632.9	4259.1	3750.0	2930.8
40°	6104.3	6163.9	6163.9	6156.0	6108.2	5901.5	5503.8	4962.9	4529.5	4010.5	3131.7
42.5°	5831.9	5893.5	5885.5	5915.4	5903.4	5859.7	5692.7	5271.1	4799.9	4279.0	3314.6
45°	5475.9	5539.6	5523.7	5577.4	5601.2	5648.9	5672.8	5485.9	5066.3	4571.2	3519.4
47.5°	4905.3	5012.7	5036.5	5132.0	5231.4	5380.5	5493.8	5563.4	5314.9	4885.4	3742.1
50°	4062.2	4213.3	4261.1	4461.9	4734.3	5042.5	5225.4	5468.0	5489.9	5207.5	3982.7
52.5°	2909.0	3083.9	3157.5	3487.6	4048.3	4585.2	4915.2	5257.2	5557.5	5515.7	4243.2
55°	1881.0	2030.1	2101.7	2411.9	3157.5	4000.6	4549.4	4984.8	5519.7	5798.1	4541.4
57.5°	1159.2	1244.7	1292.4	1558.9	2244.9	3251.0	4070.2	4734.3	5404.4	6042.6	4851.6
60°	781.4	831.1	855.0	980.3	1525.1	2429.8	3412.0	4471.8	5253.2	6207.7	5133.9
62.5°	519.0	534.9	558.7	636.3	1006.1	1706.0	2620.7	4002.6	5139.9	6217.6	5342.7
65°	401.6	409.6	419.5	453.3	620.4	1193.0	1843.2	3243.0	4970.9	6006.8	5408.3
67.5°	316.1	324.1	336.0	353.9	449.4	809.3	1254.7	2376.1	4624.9	5676.8	5301.0
70°	248.5	254.5	262.5	278.4	350.0	586.6	829.1	1578.8	3927.0	5362.6	4962.9
72.5°	196.8	202.8	210.8	226.7	284.3	429.5	568.7	984.2	3028.3	4978.9	4312.8
75°	155.1	159.1	165.0	180.9	228.7	334.0	385.7	588.6	2058.0	4277.0	3360.3
77.5°	77.5	95.4	109.4	125.3	167.0	230.6	256.5	326.1	868.9	2195.2	1602.6
80°	45.7	55.7	59.7	69.6	109.4	139.2	139.2	131.2	274.4	843.1	654.2
82.5°	25.8	35.8	37.8	39.8	65.6	79.5	63.6	47.7	55.7	282.3	190.9
85°	8.0	11.9	13.9	15.9	21.9	23.9	21.9	19.9	15.9	27.8	17.9
87.5°	0.0	0.0	0.0	0.0	2.0	4.0	4.0	4.0	6.0	6.0	6.0
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°	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5	1280.5
2.5°	1288.5	1262.6	1212.9	1167.2	1123.4	1091.6	1061.8	1033.9	1014.1	998.2	996.2
5°	1306.4	1254.7	1159.2	1069.7	988.2	920.6	862.9	817.2	783.4	759.6	757.6
7.5°	1330.2	1250.7	1105.5	972.3	851.0	753.6	670.1	608.4	564.7	546.8	532.9
10°	1350.1	1246.7	1051.8	874.9	715.8	592.5	493.1	431.5	399.7	387.7	381.8
12.5°	1383.9	1250.7	1006.1	785.4	598.5	453.3	377.8	344.0	330.1	320.1	318.1
15°	1433.6	1268.6	962.4	697.9	479.2	365.9	322.1	300.2	286.3	284.3	282.3
17.5°	1483.3	1284.5	922.6	608.4	397.7	318.1	288.3	270.4	260.5	258.5	258.5
20°	1541.0	1304.4	878.9	522.9	340.0	286.3	262.5	248.5	236.6	234.6	234.6
22.5°	1608.6	1332.2	837.1	447.4	302.2	262.5	242.6	226.7	216.7	214.7	214.7
25°	1700.0	1374.0	803.3	391.7	276.4	242.6	224.7	210.8	202.8	198.8	198.8
27.5°	1801.5	1431.6	779.4	357.9	258.5	226.7	208.8	196.8	188.9	184.9	184.9
30°	1914.8	1495.2	763.5	344.0	248.5	212.8	196.8	184.9	175.0	173.0	173.0
32.5°	2040.1	1568.8	753.6	346.0	246.6	202.8	184.9	173.0	165.0	161.1	161.1
35°	2179.2	1650.3	747.6	357.9	250.5	194.9	175.0	163.0	155.1	151.1	151.1
37.5°	2334.3	1745.8	747.6	369.8	260.5	192.9	165.0	153.1	147.1	143.2	143.2
40°	2479.5	1847.2	755.6	383.8	270.4	192.9	157.1	147.1	139.2	135.2	135.2
42.5°	2592.8	1904.8	761.5	397.7	276.4	190.9	149.1	139.2	133.2	129.2	129.2
45°	2722.1	1966.5	749.6	403.6	276.4	186.9	143.2	133.2	127.3	123.3	123.3
47.5°	2865.2	2042.0	747.6	407.6	270.4	179.0	137.2	127.3	123.3	119.3	119.3
50°	3010.4	2125.6	751.6	405.6	262.5	167.0	129.2	123.3	117.3	113.3	113.3
52.5°	3175.4	2213.0	759.6	401.6	244.6	153.1	123.3	117.3	111.3	107.4	105.4
55°	3358.3	2308.5	775.5	393.7	220.7	139.2	117.3	111.3	103.4	99.4	97.4
57.5°	3569.1	2425.8	793.4	377.8	194.9	127.3	111.3	103.4	91.5	85.5	83.5
60°	3769.9	2559.0	813.2	340.0	169.0	115.3	105.4	93.5	81.5	77.5	75.6
62.5°	3958.8	2690.3	823.2	272.4	143.2	105.4	99.4	85.5	73.6	69.6	67.6
65°	4080.1	2833.4	801.3	184.9	117.3	97.4	91.5	79.5	67.6	61.6	61.6
67.5°	4088.1	2901.0	725.8	121.3	95.4	87.5	83.5	71.6	59.7	55.7	53.7
70°	3887.2	2799.6	554.8	95.4	79.5	75.6	75.6	63.6	51.7	47.7	45.7
72.5°	3425.9	2479.5	353.9	77.5	67.6	63.6	63.6	53.7	45.7	39.8	37.8
75°	2704.2	1912.8	188.9	63.6	55.7	53.7	49.7	43.7	37.8	33.8	31.8
77.5°	1242.7	843.1	87.5	45.7	41.8	41.8	37.8	31.8	29.8	25.8	25.8
80°	491.1	286.3	43.7	29.8	27.8	27.8	27.8	21.9	21.9	17.9	15.9
82.5°	135.2	59.7	21.9	17.9	17.9	17.9	15.9	13.9	13.9	11.9	11.9
85°	13.9	9.9	9.9	9.9	9.9	8.0	8.0	6.0	4.0	4.0	4.0
87.5°	6.0	6.0	6.0	6.0	6.0	4.0	2.0	0.0	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)