

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: P836283

Luminaire Tested: **ARCH3-160-750-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836283
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: ARCH3-160-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16114 lumens
Efficiency: N/A
Efficacy: 100.1 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): 161
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



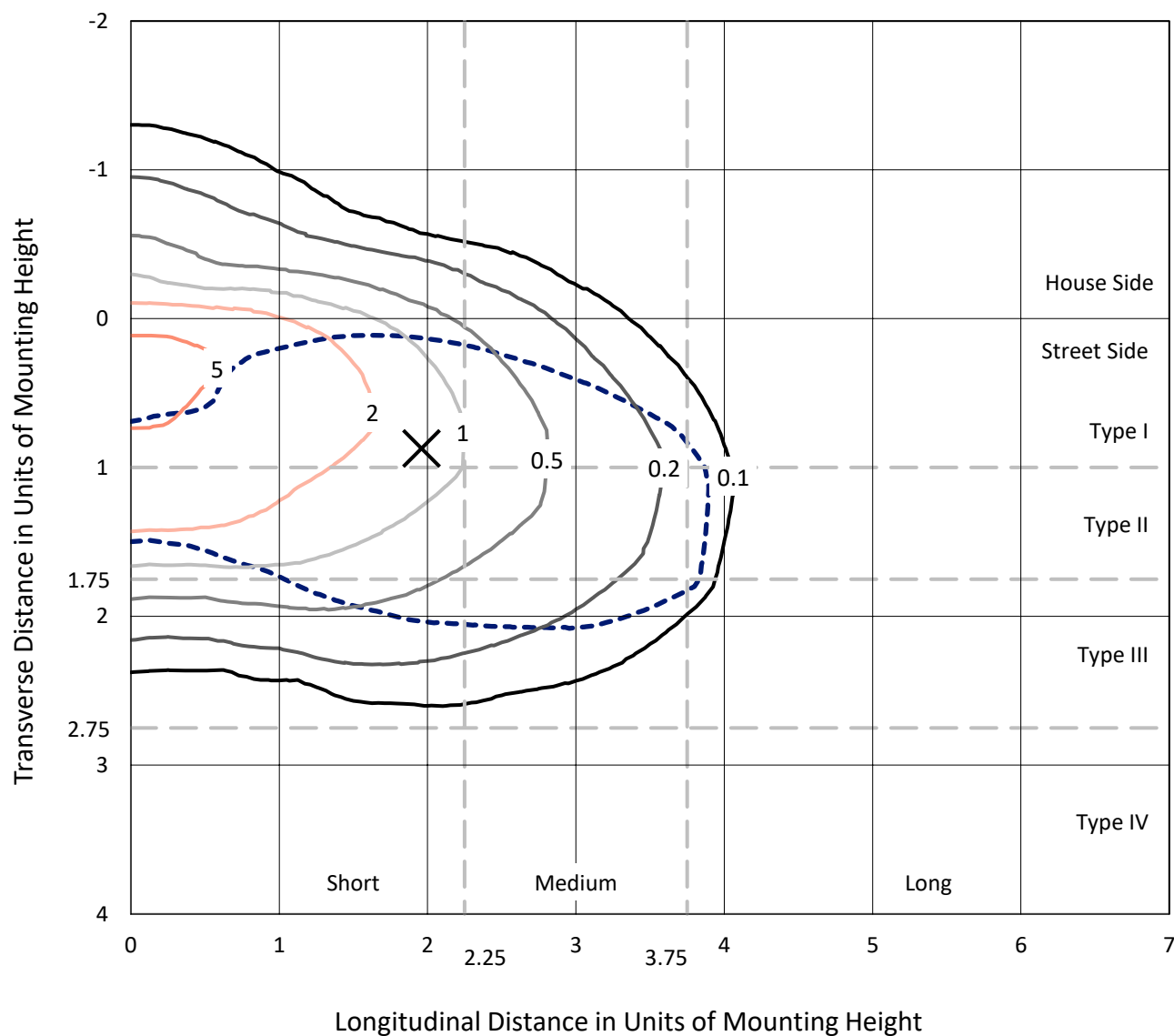
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

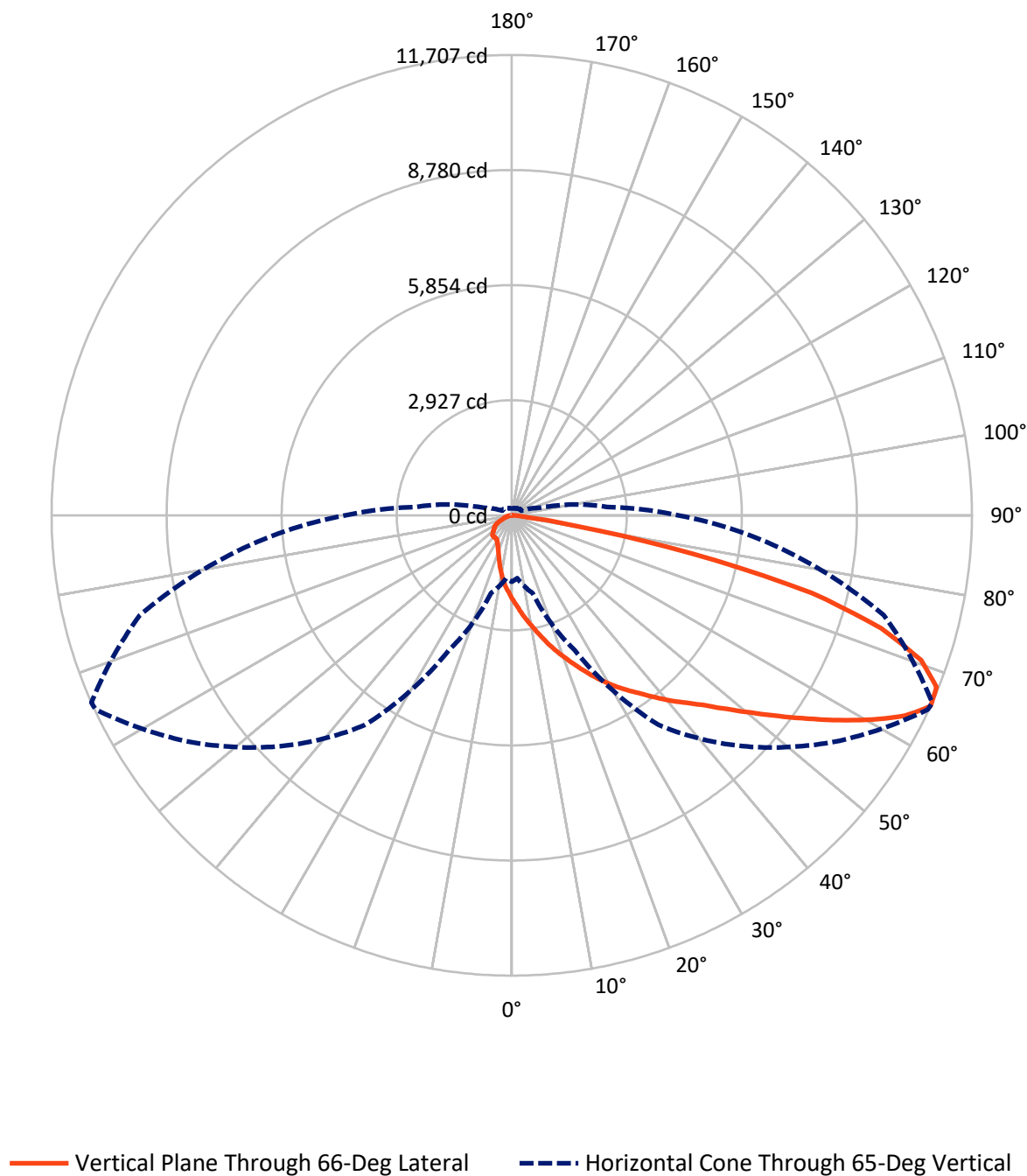


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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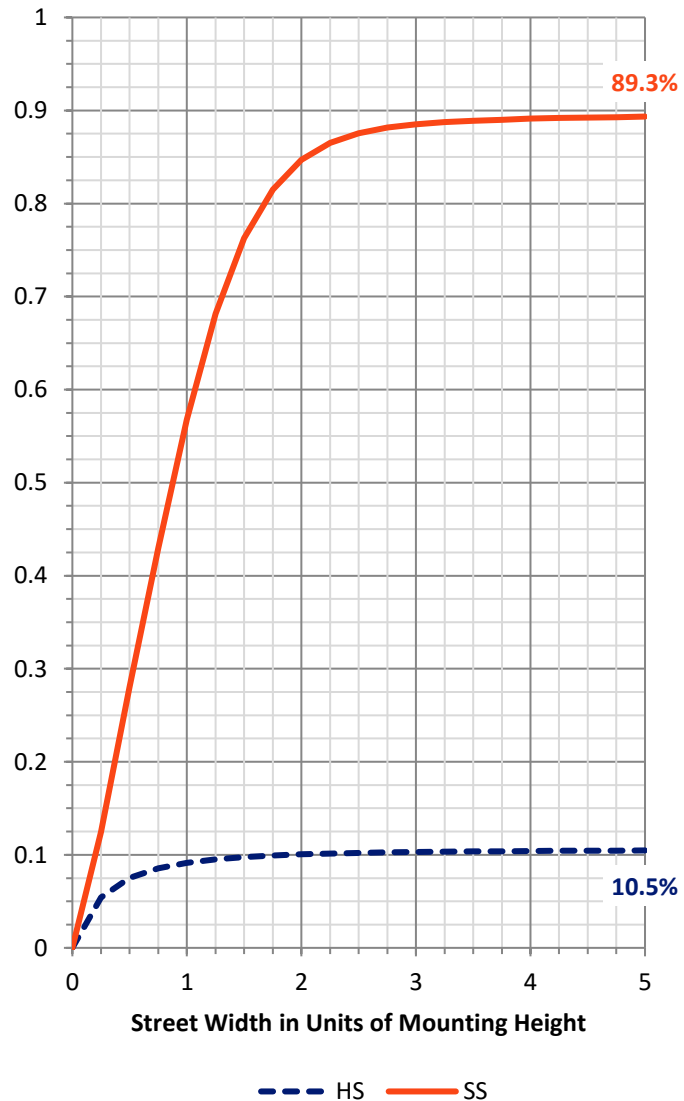
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1704.4	0.0	1704.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	14409.6	0.0	14409.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	16114.0	0.0	16114.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.5	1.3
10°-20°	686.0	4.3
20°-30°	1241.3	7.7
30°-40°	1941.0	12.0
40°-50°	2944.5	18.3
50°-60°	3741.1	23.2
60°-70°	3495.6	21.7
70°-80°	1737.3	10.8
80°-90°	116.7	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°	16114.0	100.0
0°-180°	16114.0	100.0

Coefficient of Utilization



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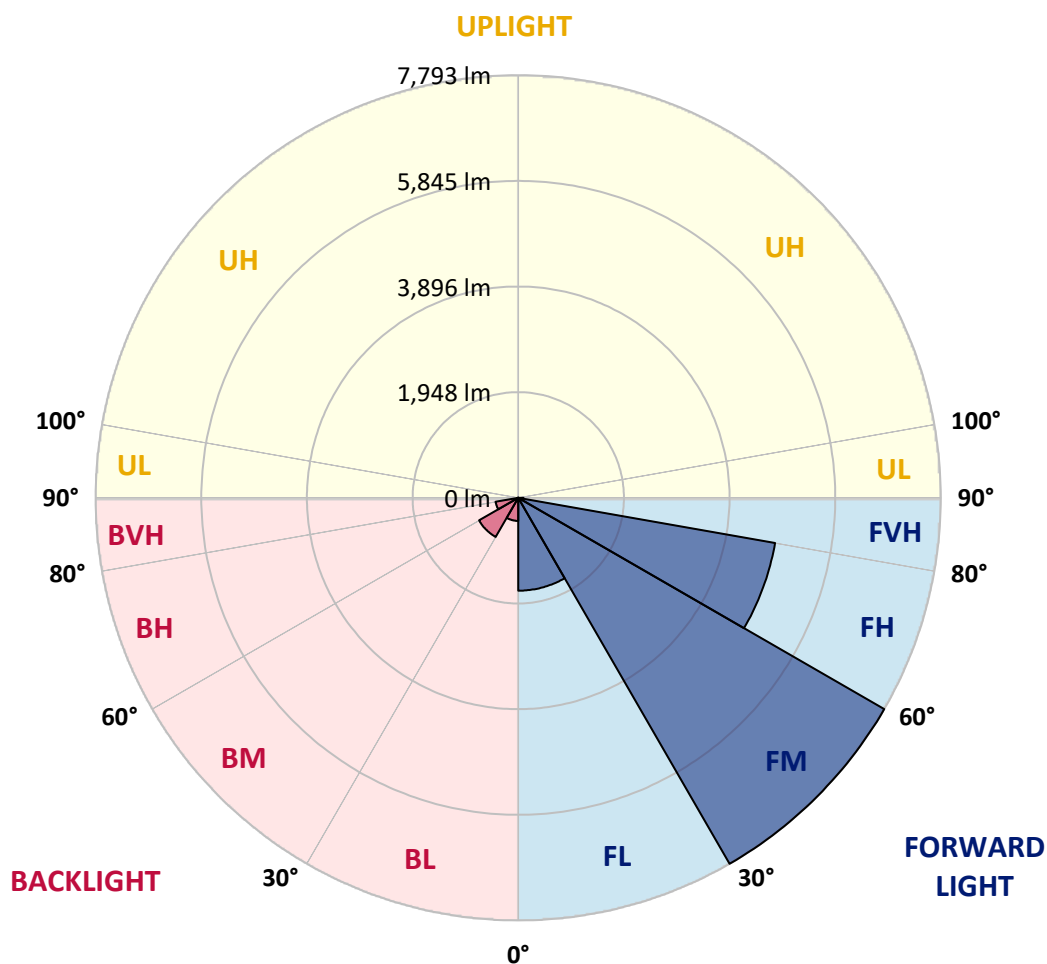
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1712.1	10.6			
FM	(30°-60°)	7792.9	48.4			
FH	(60°-80°)	4808.5	29.8			G2/5000
FVH	(80°-90°)	96.1	0.6			G1/100
BL	(0°-30°)	425.7	2.6	B1/500		
BM	(30°-60°)	833.6	5.2	B1/1000		
BH	(60°-80°)	424.5	2.6	B1/500		G1/500
BVH	(80°-90°)	20.7	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°	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6
2.5°	2490.8	2511.1	2521.3	2524.6	2446.9	2413.1	2379.3	2301.6	2284.7	2240.8	2183.3
5°	2930.2	2957.2	2950.5	2937.0	2842.3	2734.2	2646.3	2501.0	2477.3	2372.6	2244.1
7.5°	3362.8	3386.5	3379.7	3329.0	3224.2	3072.2	2926.8	2713.9	2680.1	2511.1	2305.0
10°	3724.4	3744.7	3741.3	3690.6	3565.6	3379.7	3204.0	2920.1	2879.5	2639.6	2355.7
12.5°	4021.9	4048.9	4045.5	4011.7	3900.2	3697.4	3498.0	3156.7	3106.0	2795.0	2426.6
15°	4255.1	4288.9	4288.9	4275.3	4197.6	4028.6	3802.2	3416.9	3356.1	2974.1	2514.5
17.5°	4397.0	4424.0	4447.7	4471.4	4417.3	4288.9	4082.7	3677.1	3612.9	3149.9	2605.8
20°	4471.4	4498.4	4515.3	4566.0	4576.1	4511.9	4349.7	3934.0	3866.4	3349.3	2710.5
22.5°	4593.0	4616.7	4620.1	4664.0	4684.3	4701.2	4599.8	4187.5	4133.4	3569.0	2828.8
25°	4795.8	4822.9	4812.7	4833.0	4836.4	4856.6	4846.5	4478.1	4424.0	3819.1	2970.8
27.5°	5056.1	5089.8	5083.1	5062.8	5032.4	5015.5	5059.4	4772.2	4721.5	4069.2	3116.1
30°	5336.6	5377.1	5367.0	5326.4	5245.3	5174.3	5235.2	5049.3	5002.0	4326.0	3278.3
32.5°	5620.5	5667.8	5664.4	5596.8	5458.2	5336.6	5427.8	5309.5	5275.7	4603.2	3454.1
35°	5806.3	5867.2	5860.4	5819.9	5640.7	5536.0	5647.5	5576.5	5552.9	4941.1	3707.5
37.5°	6107.1	6171.4	6113.9	6012.5	5806.3	5752.3	5887.5	5877.3	5860.4	5299.4	3974.5
40°	6837.2	6931.8	6779.7	6364.0	6026.0	5978.7	6171.4	6211.9	6195.0	5654.3	4214.5
42.5°	7601.0	7742.9	7506.3	6931.8	6424.8	6252.5	6482.3	6539.7	6519.5	5958.4	4430.8
45°	8064.0	8124.8	7888.3	7442.1	7131.2	6583.7	6813.5	6908.1	6891.2	6323.4	4707.9
47.5°	8442.5	8418.9	8148.5	7847.7	7905.2	7050.1	7188.7	7374.5	7361.0	6725.6	5012.1
50°	8523.6	8469.6	8361.4	8172.1	8324.2	7523.2	7584.1	7905.2	7891.6	7171.8	5319.7
52.5°	7952.5	7881.5	8175.5	8334.4	8283.7	7868.0	8020.1	8486.5	8479.7	7655.1	5613.7
55°	6526.2	6468.8	7259.6	8080.9	8239.7	8111.3	8503.4	9091.4	9128.6	8168.8	5880.7
57.5°	5133.8	5073.0	5850.3	7445.5	8077.5	8334.4	9067.8	9784.3	9831.6	8726.4	6134.2
60°	4092.8	4001.6	4596.4	6445.1	7773.3	8506.7	9611.9	10544.7	10551.5	9236.8	6289.6
62.5°	2781.5	2680.1	3339.2	5177.7	7263.0	8533.8	10031.0	11200.4	11227.4	9618.7	6316.7
65°	1689.9	1605.4	2051.5	3781.9	6509.3	8304.0	10037.8	11683.7	11707.3	9794.4	6154.5
67.5°	980.1	946.3	1172.8	2355.7	5258.8	7685.5	9615.3	11609.3	11653.3	9720.1	5786.1
70°	571.2	567.8	652.3	1166.0	3710.9	6458.6	8672.3	10984.1	11048.3	9331.4	5221.7
72.5°	419.1	425.8	459.6	625.2	2149.5	4650.5	7344.1	9726.8	9824.8	8571.0	4417.3
75°	331.2	334.6	365.0	425.8	1128.8	2629.4	5502.2	7807.1	7884.9	7215.7	3450.7
77.5°	246.7	253.5	277.1	300.8	523.9	1206.6	3095.8	4809.3	4680.9	3961.0	1666.2
80°	179.1	196.0	206.2	216.3	277.1	466.4	929.4	1676.3	1662.8	1730.4	787.5
82.5°	114.9	128.4	138.6	145.3	165.6	223.1	277.1	375.1	405.6	672.6	314.3
85°	50.7	57.5	64.2	77.7	71.0	77.7	114.9	74.4	64.2	101.4	57.5
87.5°	0.0	0.0	10.1	16.9	13.5	6.8	20.3	13.5	10.1	10.1	10.1
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°	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6	2132.6
2.5°	2152.9	2115.7	2038.0	1963.6	1919.7	1862.2	1811.5	1764.2	1760.8	1747.3	1723.7
5°	2179.9	2108.9	1963.6	1825.0	1720.3	1608.7	1514.1	1439.8	1412.7	1392.4	1365.4
7.5°	2207.0	2095.4	1879.1	1676.3	1510.7	1355.3	1243.7	1142.3	1111.9	1084.9	1068.0
10°	2217.1	2071.8	1781.1	1510.7	1294.4	1128.8	1010.5	936.2	909.1	895.6	885.5
12.5°	2247.5	2058.2	1689.9	1355.3	1105.2	953.1	868.6	824.7	814.5	804.4	794.2
15°	2288.1	2058.2	1598.6	1203.2	956.5	834.8	784.1	753.7	746.9	743.5	736.8
17.5°	2332.0	2058.2	1510.7	1074.7	848.3	757.1	719.9	703.0	699.6	696.2	692.8
20°	2392.8	2061.6	1416.1	963.2	770.6	699.6	669.2	648.9	645.5	642.1	642.1
22.5°	2453.7	2068.4	1324.8	878.7	719.9	655.7	618.5	598.2	591.4	591.4	591.4
25°	2531.4	2088.7	1240.4	807.8	675.9	615.1	567.8	550.9	547.5	547.5	544.1
27.5°	2622.7	2112.3	1166.0	753.7	632.0	567.8	520.5	503.6	496.8	496.8	493.4
30°	2720.7	2136.0	1105.2	713.1	588.1	520.5	476.5	456.3	449.5	452.9	449.5
32.5°	2828.8	2169.8	1057.9	686.1	547.5	479.9	439.4	415.7	412.3	412.3	408.9
35°	3011.3	2264.4	1051.1	672.6	513.7	449.5	408.9	385.3	381.9	381.9	378.5
37.5°	3207.3	2372.6	1081.5	665.8	486.7	422.5	385.3	361.6	358.2	358.2	358.2
40°	3373.0	2453.7	1115.3	665.8	469.8	398.8	365.0	344.7	344.7	344.7	344.7
42.5°	3484.5	2460.4	1108.5	665.8	456.3	381.9	351.5	331.2	331.2	334.6	331.2
45°	3650.1	2494.2	1081.5	655.7	446.1	368.4	338.0	321.1	317.7	321.1	321.1
47.5°	3846.1	2555.1	1054.5	615.1	442.7	354.9	327.8	307.6	304.2	307.6	304.2
50°	4032.0	2609.1	1041.0	561.0	436.0	341.4	314.3	294.0	290.7	294.0	290.7
52.5°	4187.5	2632.8	1017.3	523.9	419.1	327.8	300.8	280.5	273.8	277.1	277.1
55°	4312.5	2626.0	983.5	493.4	388.7	314.3	283.9	267.0	256.9	256.9	253.5
57.5°	4427.4	2629.4	953.1	463.0	354.9	294.0	270.4	250.1	236.6	233.2	229.8
60°	4471.4	2612.5	899.0	422.5	321.1	277.1	253.5	229.8	216.3	212.9	209.5
62.5°	4410.5	2551.7	828.0	351.5	290.7	256.9	236.6	212.9	199.4	196.0	192.6
65°	4238.2	2436.8	719.9	277.1	263.6	233.2	216.3	199.4	182.5	175.7	172.4
67.5°	3944.1	2271.2	584.7	223.1	233.2	212.9	202.8	182.5	162.2	155.5	152.1
70°	3525.0	2051.5	439.4	189.3	206.2	189.3	182.5	162.2	145.3	138.6	135.2
72.5°	2937.0	1696.6	307.6	162.2	179.1	165.6	158.8	145.3	128.4	118.3	118.3
75°	2220.5	1216.7	202.8	138.6	148.7	141.9	131.8	121.7	111.5	104.8	101.4
77.5°	956.5	473.2	125.0	104.8	121.7	118.3	104.8	98.0	94.6	87.9	87.9
80°	412.3	192.6	77.7	77.7	87.9	84.5	81.1	74.4	74.4	71.0	67.6
82.5°	152.1	77.7	47.3	57.5	64.2	57.5	57.5	57.5	57.5	54.1	54.1
85°	37.2	23.7	23.7	33.8	37.2	33.8	37.2	33.8	33.8	33.8	30.4
87.5°	10.1	10.1	13.5	13.5	13.5	13.5	13.5	10.1	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)