

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: P840944

Luminaire Tested: **ARCH4-110-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-110-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12731 lumens
Efficiency: N/A
Efficacy: 113.1 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): 112.6
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

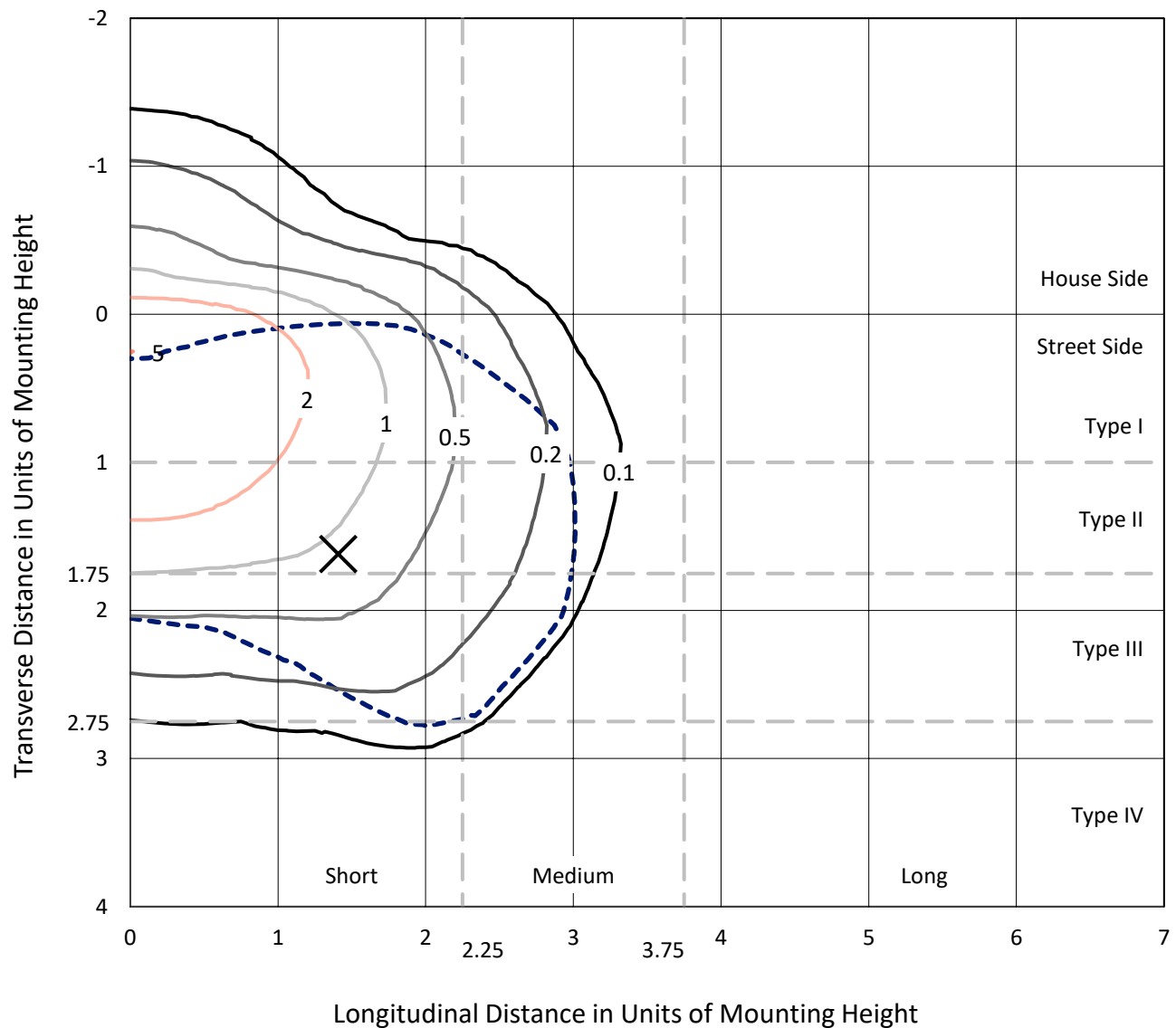


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

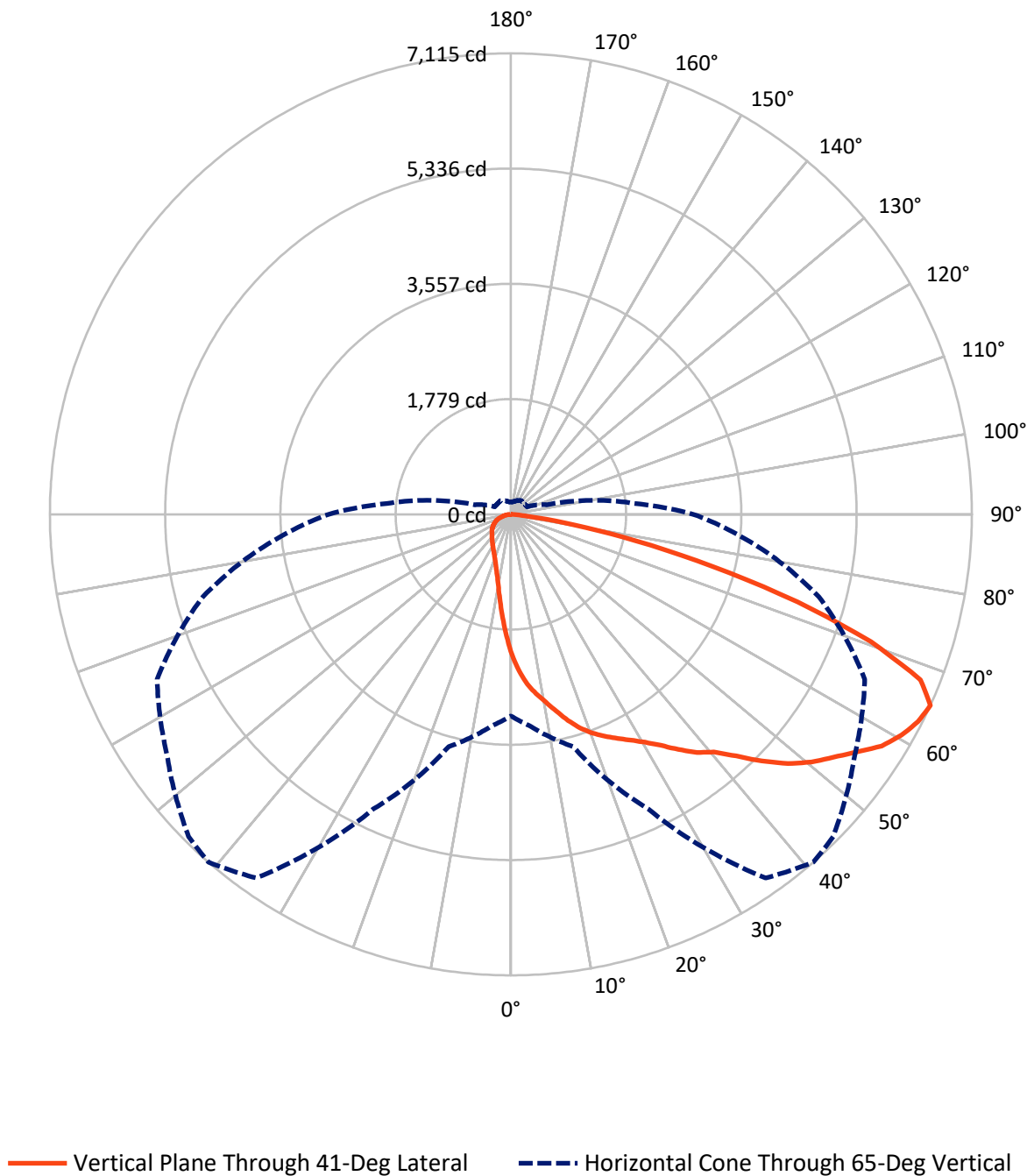


Based on 25 foot mounting height. Maximum calculated value = 5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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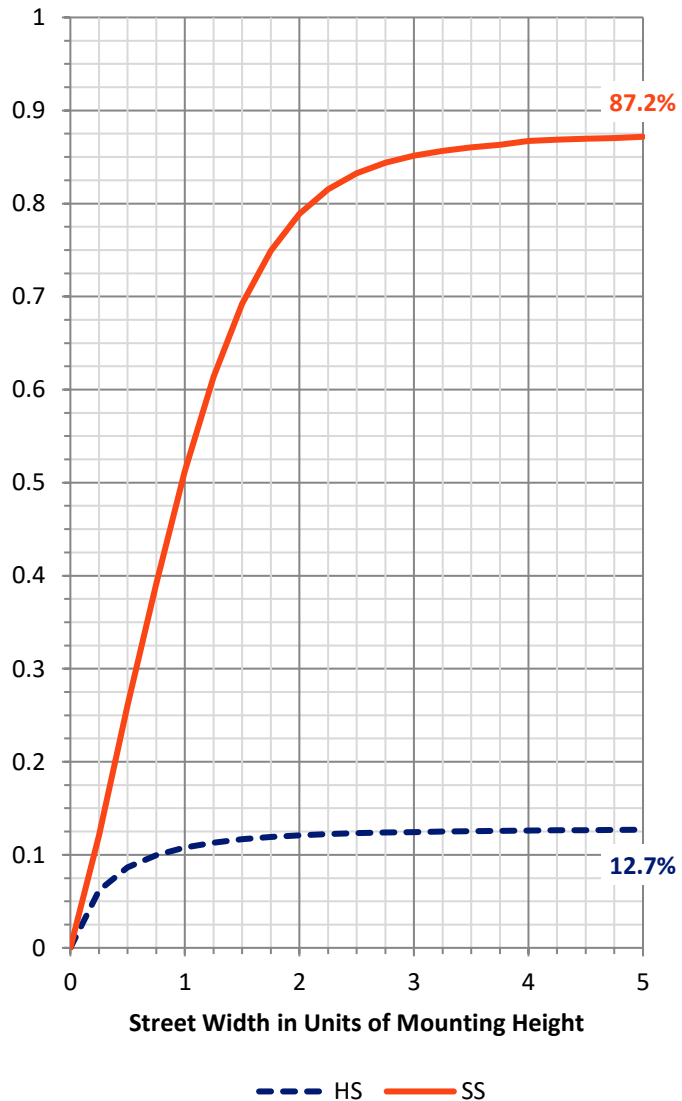
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1634.5	0.0	1634.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11096.5	0.0	11096.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	12731.0	0.0	12731.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	1.6
10°-20°	606.1	4.8
20°-30°	1042.7	8.2
30°-40°	1581.4	12.4
40°-50°	2316.8	18.2
50°-60°	2925.6	23.0
60°-70°	2743.2	21.5
70°-80°	1222.7	9.6
80°-90°	90.6	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°	12731.0	100.0
0°-180°	12731.0	100.0

Coefficient of Utilization



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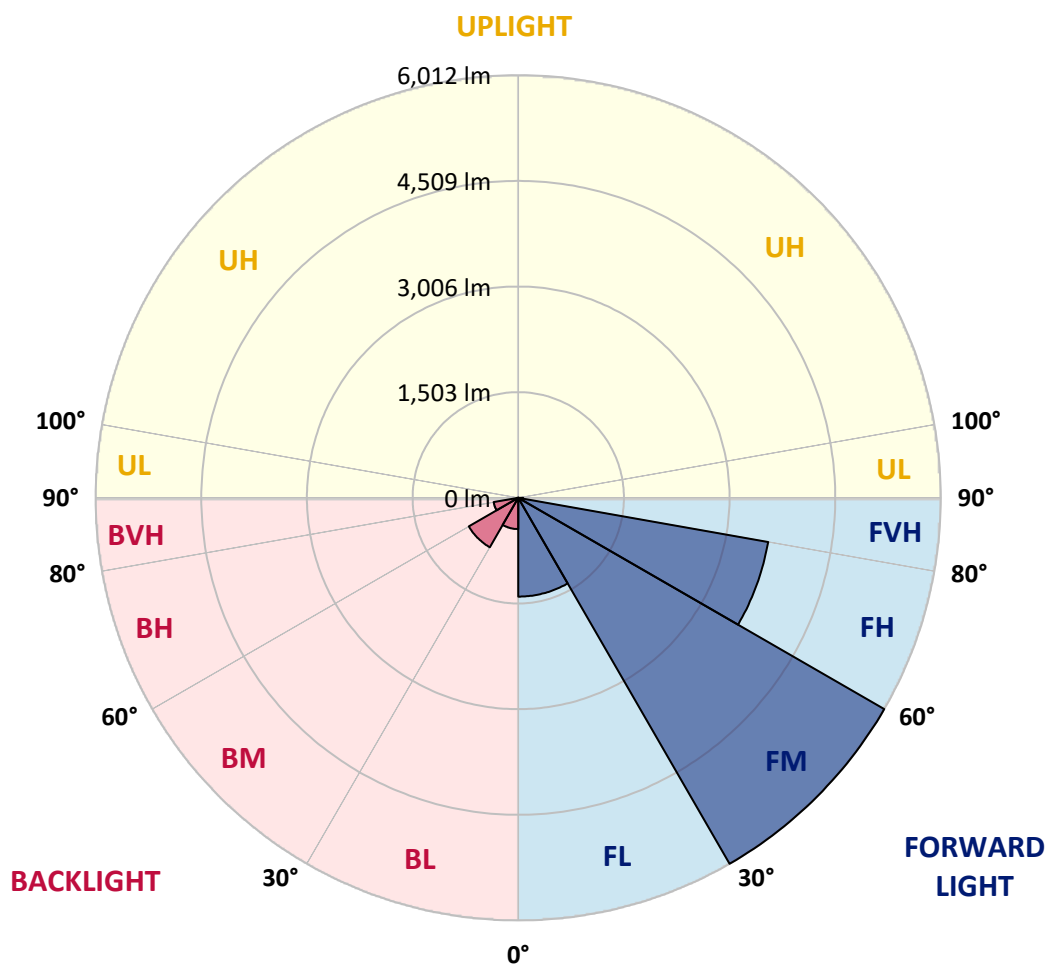
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1406.0	11.0			
FM	(30°-60°)	6012.1	47.2			
FH	(60°-80°)	3610.8	28.4			G2/5000
FVH	(80°-90°)	67.6	0.5			G1/100
BL	(0°-30°)	444.9	3.5	B1/500		
BM	(30°-60°)	811.6	6.4	B1/1000		
BH	(60°-80°)	355.1	2.8	B1/500		G1/500
BVH	(80°-90°)	22.9	0.2			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°	41°	45°	55°	65°	75°	85°
0°	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3
2.5°	2502.2	2494.2	2488.8	2459.3	2459.3	2419.0	2421.7	2384.1	2338.4	2265.9	2188.1
5°	2738.5	2727.7	2714.3	2684.8	2674.0	2633.8	2628.4	2574.7	2496.8	2370.7	2231.0
7.5°	2945.2	2934.5	2915.7	2872.7	2843.2	2794.8	2781.4	2711.6	2625.7	2470.0	2274.0
10°	3133.1	3125.1	3100.9	3047.2	3006.9	2947.9	2923.7	2829.7	2722.4	2550.5	2308.9
12.5°	3323.7	3313.0	3280.8	3235.2	3186.8	3117.0	3087.5	2966.7	2829.7	2639.1	2359.9
15°	3500.9	3484.8	3460.7	3412.3	3369.4	3302.3	3270.1	3127.8	2961.3	2738.5	2427.0
17.5°	3616.4	3603.0	3581.5	3554.6	3519.7	3468.7	3436.5	3296.9	3092.9	2835.1	2496.8
20°	3686.2	3680.8	3672.8	3656.7	3640.6	3605.6	3581.5	3449.9	3235.2	2929.1	2564.0
22.5°	3739.9	3734.5	3731.8	3731.8	3734.5	3721.1	3705.0	3592.2	3372.1	3028.4	2625.7
25°	3823.1	3820.4	3815.1	3809.7	3828.5	3831.2	3825.8	3747.9	3543.9	3160.0	2703.6
27.5°	3938.6	3930.5	3919.8	3914.4	3933.2	3946.6	3957.4	3903.7	3726.5	3294.2	2792.2
30°	4115.8	4091.6	4064.7	4046.0	4059.4	4080.9	4105.0	4072.8	3914.4	3460.7	2883.4
32.5°	4325.2	4295.6	4233.9	4199.0	4233.9	4250.0	4268.8	4252.7	4110.4	3640.6	2974.7
35°	4580.2	4545.3	4480.9	4429.9	4491.6	4456.7	4448.7	4432.6	4295.6	3817.7	3076.7
37.5°	5004.4	4953.4	4851.4	4738.6	4738.6	4663.4	4633.9	4585.6	4462.1	3976.1	3176.1
40°	5495.7	5428.6	5297.1	5130.6	4977.6	4821.9	4803.1	4768.2	4658.1	4158.7	3288.8
42.5°	6035.4	5906.5	5723.9	5522.6	5275.6	5098.4	5055.4	4956.1	4848.7	4344.0	3401.6
45°	6634.1	6365.6	6099.8	5997.8	5589.7	5428.6	5348.1	5168.2	5047.4	4537.3	3519.7
47.5°	6730.7	6521.3	6344.1	6328.0	5882.3	5748.1	5656.8	5399.1	5262.2	4744.0	3643.2
50°	6677.0	6550.8	6569.6	6505.2	6097.1	6008.5	5938.7	5646.1	5474.3	4942.7	3756.0
52.5°	6451.5	6521.3	6628.7	6510.6	6301.2	6228.7	6193.8	5911.9	5672.9	5125.2	3858.0
55°	6183.0	6231.4	6462.2	6607.2	6537.4	6473.0	6440.8	6220.6	5868.9	5278.3	3952.0
57.5°	5791.1	5769.6	6024.6	6591.1	6784.4	6746.8	6711.9	6524.0	6051.5	5388.3	4011.0
60°	5203.1	5157.4	5479.6	6268.9	6865.0	6924.0	6907.9	6725.4	6191.1	5385.7	3986.9
62.5°	4185.6	4298.3	4744.0	5742.7	6899.9	7050.2	7020.7	6741.5	6236.7	5229.9	3833.9
65°	3111.7	3272.7	3710.4	5017.8	6851.5	7114.6	7034.1	6478.4	6024.6	4921.2	3498.3
67.5°	2241.8	2384.1	2703.6	4129.2	6387.1	6819.3	6725.4	6048.8	5536.0	4483.6	3033.8
70°	1533.0	1635.0	1852.5	3006.9	5452.8	5895.8	5836.7	5407.1	4765.5	3962.7	2464.6
72.5°	1082.0	1124.9	1264.5	1984.0	4142.6	4625.9	4556.1	4448.7	3828.5	3294.2	1916.9
75°	810.8	837.6	912.8	1283.3	2794.8	3205.6	3141.2	3202.9	2859.3	2494.2	1396.1
77.5°	306.1	332.9	518.2	818.9	1653.8	1967.9	1903.5	1941.1	1589.4	1259.2	695.4
80°	83.2	88.6	171.8	389.3	751.7	979.9	891.3	765.2	590.6	579.9	367.8
82.5°	34.9	40.3	77.9	209.4	268.5	268.5	225.5	279.2	225.5	271.2	177.2
85°	13.4	16.1	18.8	53.7	34.9	37.6	40.3	53.7	45.6	56.4	40.3
87.5°	0.0	0.0	0.0	2.7	2.7	5.4	2.7	5.4	8.1	8.1	8.1
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°	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3	2169.3
2.5°	2155.9	2126.3	2083.4	2013.6	1941.1	1900.8	1849.8	1841.8	1788.1	1782.7	1761.2
5°	2169.3	2107.5	1997.5	1863.2	1731.7	1629.7	1554.5	1514.2	1436.4	1436.4	1414.9
7.5°	2180.0	2083.4	1906.2	1707.5	1527.6	1390.7	1288.7	1245.7	1175.9	1170.6	1154.5
10°	2182.7	2053.9	1806.9	1549.1	1329.0	1189.4	1090.0	1041.7	979.9	974.6	963.8
12.5°	2204.2	2037.7	1718.3	1412.2	1186.7	1036.3	939.7	899.4	851.1	845.7	835.0
15°	2239.1	2037.7	1643.1	1296.7	1060.5	920.9	837.6	800.1	765.2	759.8	754.4
17.5°	2274.0	2032.4	1567.9	1189.4	955.8	829.6	757.1	727.6	700.7	698.0	692.7
20°	2306.2	2029.7	1492.7	1098.1	875.2	754.4	698.0	671.2	649.7	649.7	647.0
22.5°	2338.4	2024.3	1420.2	1012.2	805.4	698.0	649.7	620.2	604.1	604.1	601.4
25°	2386.8	2024.3	1353.1	939.7	749.1	655.1	606.8	585.3	571.9	569.2	569.2
27.5°	2443.1	2040.4	1294.1	875.2	700.7	612.1	574.5	553.1	537.0	531.6	534.3
30°	2504.9	2053.9	1240.4	818.9	655.1	579.9	539.6	518.2	502.1	496.7	499.4
32.5°	2566.6	2070.0	1192.0	767.8	609.4	550.4	510.1	485.9	469.8	467.2	467.2
35°	2633.8	2086.1	1143.7	724.9	571.9	520.8	483.3	456.4	445.7	440.3	443.0
37.5°	2700.9	2112.9	1098.1	684.6	545.0	494.0	459.1	432.2	424.2	421.5	421.5
40°	2781.4	2153.2	1079.3	657.8	520.8	469.8	440.3	413.5	405.4	405.4	405.4
42.5°	2848.5	2185.4	1063.2	628.2	502.1	448.4	421.5	400.0	394.7	392.0	394.7
45°	2915.7	2214.9	1041.7	601.4	477.9	426.9	405.4	383.9	378.6	378.6	378.6
47.5°	2982.8	2231.0	1012.2	574.5	456.4	408.1	389.3	370.5	365.1	365.1	365.1
50°	3036.5	2244.5	969.2	545.0	432.2	392.0	373.2	354.4	349.0	349.0	349.0
52.5°	3090.2	2247.2	923.6	510.1	408.1	373.2	357.1	338.3	332.9	330.2	330.2
55°	3138.5	2244.5	869.9	469.8	381.2	351.7	338.3	322.2	311.4	300.7	306.1
57.5°	3173.4	2241.8	808.1	429.6	354.4	330.2	324.9	303.4	281.9	255.1	260.4
60°	3160.0	2212.3	741.0	378.6	324.9	308.7	308.7	279.2	241.6	228.2	230.9
62.5°	3074.1	2129.0	671.2	324.9	295.3	287.3	284.6	252.4	222.8	209.4	212.1
65°	2816.3	1919.6	569.2	276.5	265.8	263.1	263.1	233.6	206.7	190.6	193.3
67.5°	2424.3	1610.9	464.5	233.6	236.3	241.6	241.6	214.8	187.9	171.8	174.5
70°	1943.8	1259.2	370.5	201.4	204.0	212.1	217.5	193.3	169.1	153.0	153.0
72.5°	1463.2	955.8	298.0	169.1	182.6	182.6	190.6	171.8	147.7	131.6	134.2
75°	1060.5	684.6	236.3	142.3	158.4	155.7	155.7	145.0	126.2	115.4	115.4
77.5°	502.1	359.8	187.9	102.0	123.5	120.8	123.5	115.4	107.4	96.7	99.3
80°	247.0	177.2	120.8	72.5	85.9	88.6	96.7	91.3	88.6	80.5	80.5
82.5°	118.1	69.8	56.4	51.0	59.1	61.7	67.1	67.1	69.8	64.4	64.4
85°	32.2	18.8	24.2	32.2	37.6	40.3	45.6	48.3	48.3	45.6	48.3
87.5°	8.1	8.1	10.7	16.1	18.8	21.5	24.2	24.2	10.7	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)