

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: P842753

Luminaire Tested: **ARCH4-90-730-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842753
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: ARCH4-90-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 765mA 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: 11071 lumens
Efficiency: N/A
Efficacy: 118.9 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): 93.1
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

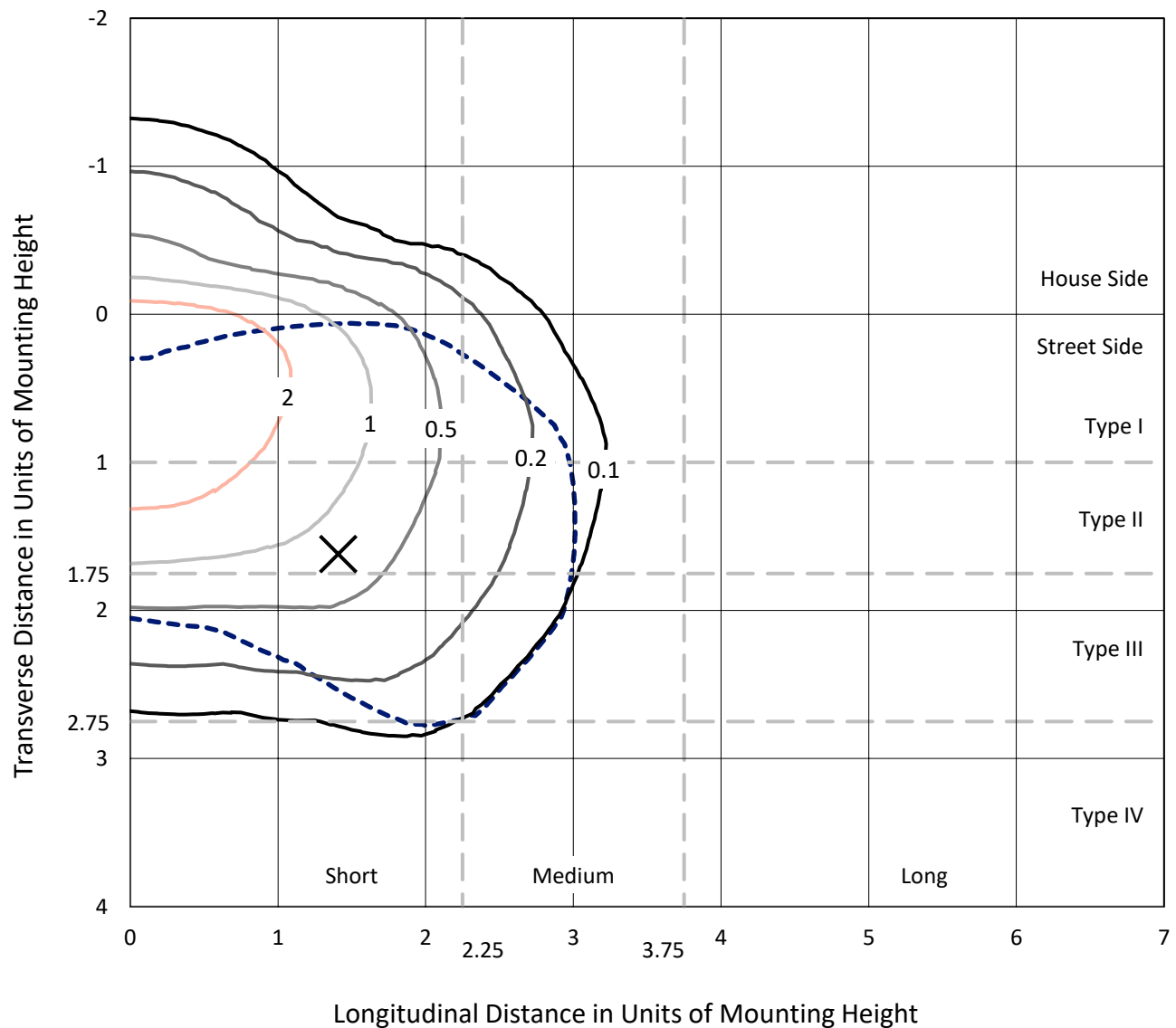


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Iso-Footcandle Lines of Horizontal Illumination

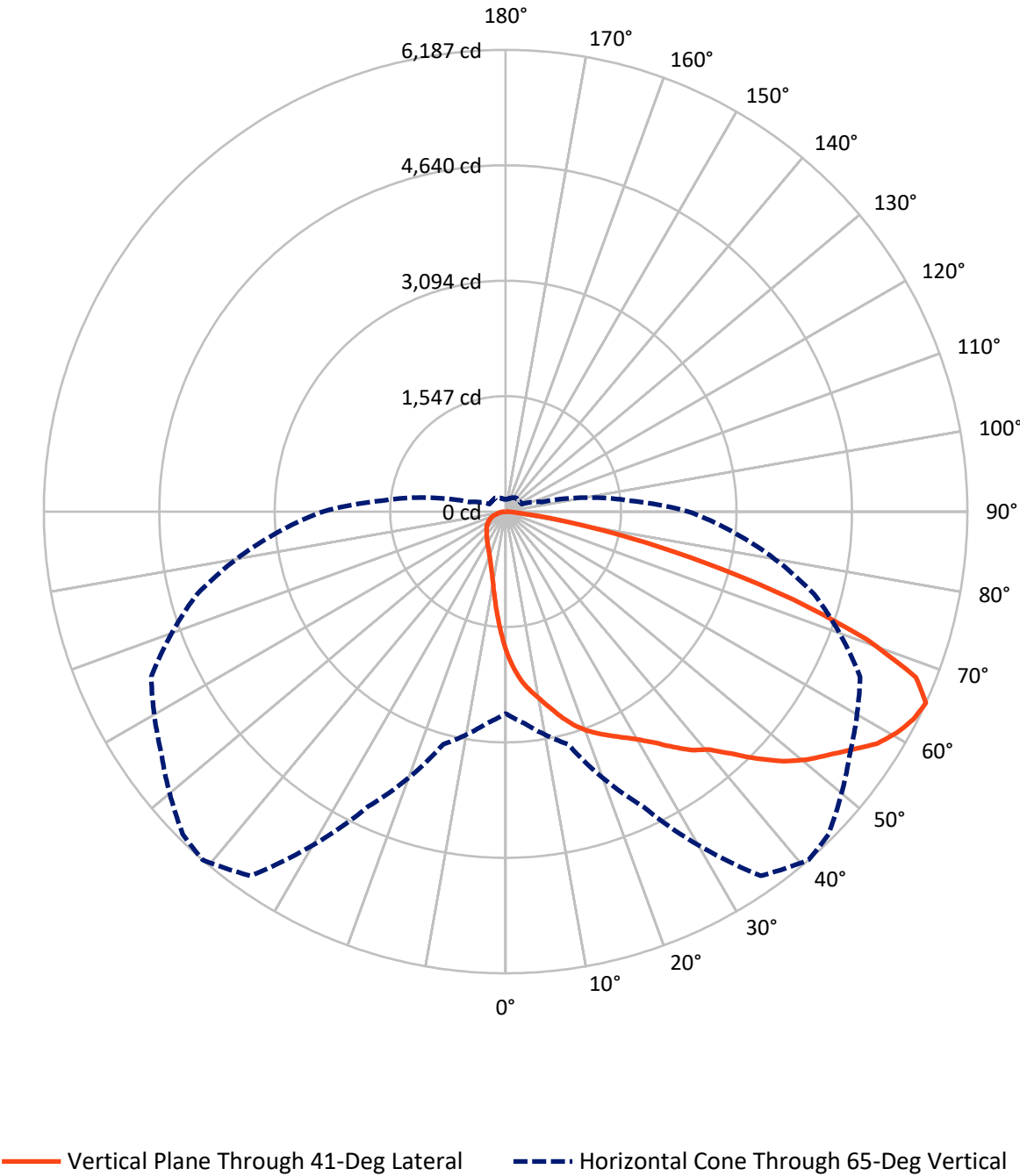
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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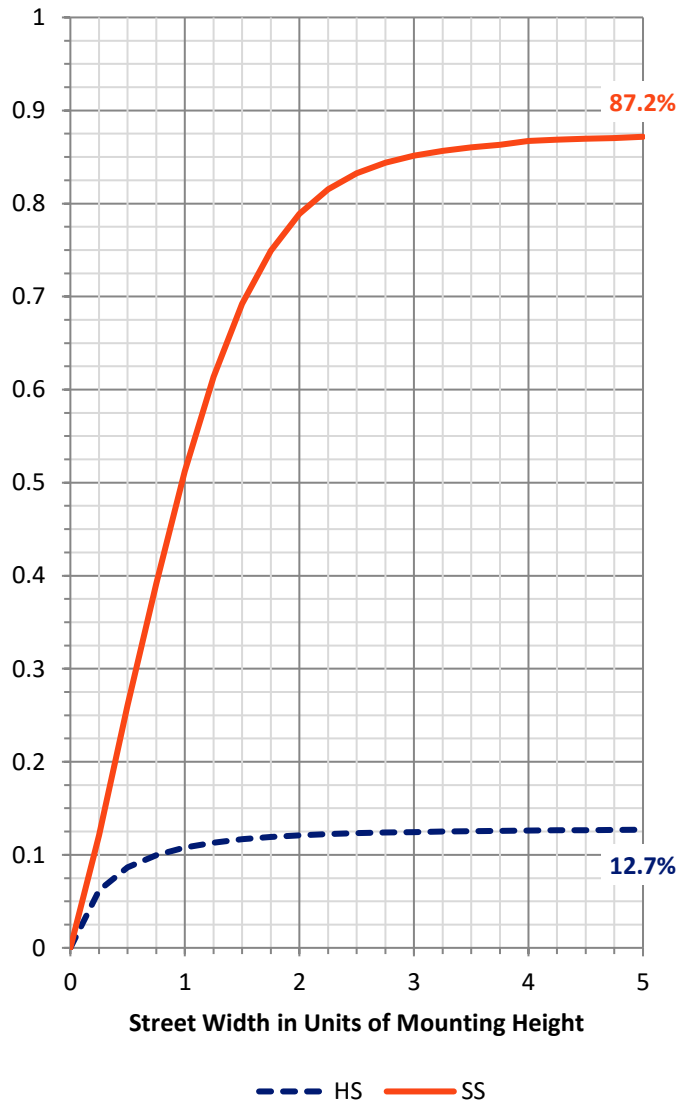
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1421.3	0.0	1421.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9649.6	0.0	9649.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	11071.0	0.0	11071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.8	1.6
10°-20°	527.0	4.8
20°-30°	906.7	8.2
30°-40°	1375.2	12.4
40°-50°	2014.7	18.2
50°-60°	2544.1	23.0
60°-70°	2385.5	21.5
70°-80°	1063.2	9.6
80°-90°	78.8	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°	11071.0	100.0
0°-180°	11071.0	100.0

Coefficient of Utilization



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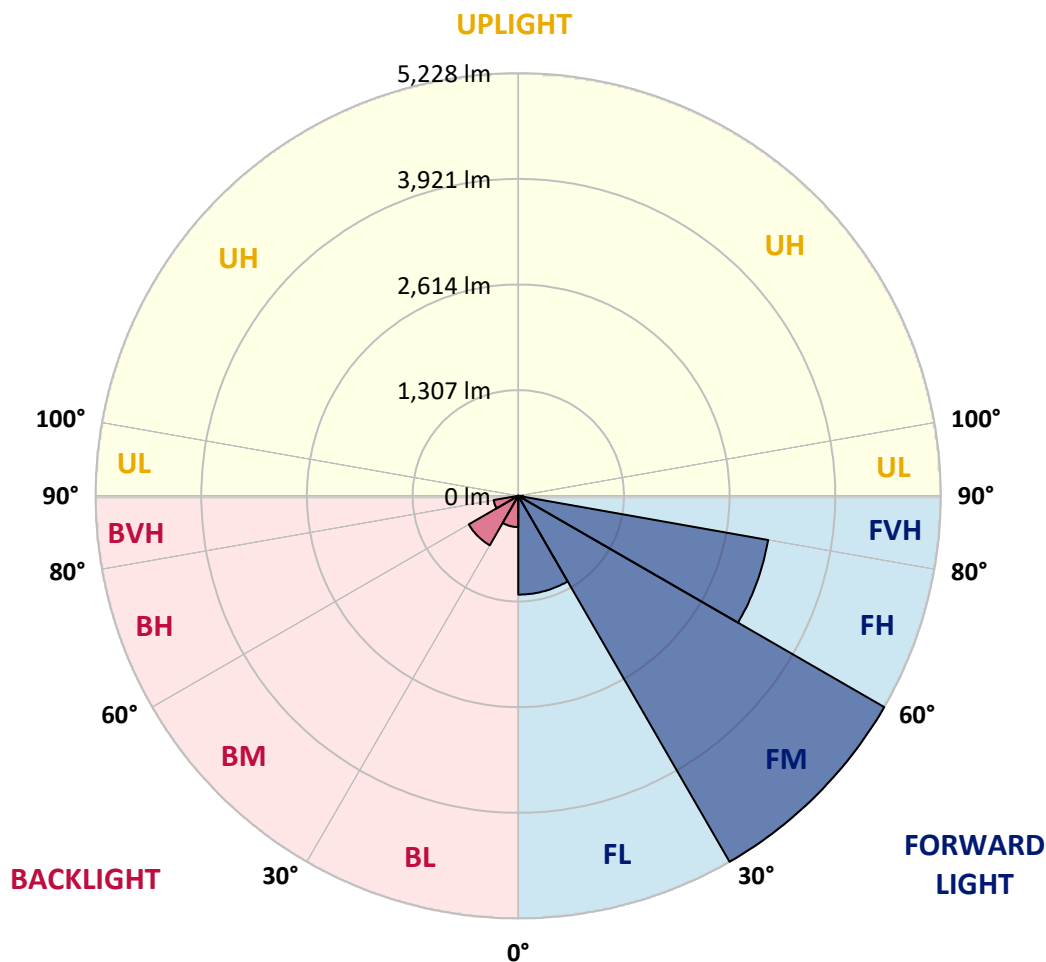
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1222.7	11.0			
FM	(30°-60°)	5228.2	47.2			
FH	(60°-80°)	3140.0	28.4			G2/5000
FVH	(80°-90°)	58.8	0.5			G1/100
BL	(0°-30°)	386.9	3.5	B1/500		
BM	(30°-60°)	705.8	6.4	B1/1000		
BH	(60°-80°)	308.8	2.8	B1/500		G1/500
BVH	(80°-90°)	19.9	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°	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4
2.5°	2175.9	2168.9	2164.3	2138.6	2138.6	2103.6	2105.9	2073.2	2033.5	1970.5	1902.8
5°	2381.4	2372.1	2360.4	2334.7	2325.4	2290.3	2285.7	2239.0	2171.3	2061.5	1940.1
7.5°	2561.2	2551.8	2535.5	2498.1	2472.5	2430.4	2418.8	2358.1	2283.3	2147.9	1977.5
10°	2724.6	2717.6	2696.6	2649.9	2614.9	2563.5	2542.5	2460.8	2367.4	2218.0	2007.8
12.5°	2890.4	2881.0	2853.0	2813.3	2771.3	2710.6	2684.9	2579.8	2460.8	2295.0	2052.2
15°	3044.5	3030.4	3009.4	2967.4	2930.1	2871.7	2843.7	2719.9	2575.2	2381.4	2110.6
17.5°	3144.8	3133.2	3114.5	3091.1	3060.8	3016.4	2988.4	2867.0	2689.6	2465.4	2171.3
20°	3205.5	3200.9	3193.9	3179.9	3165.9	3135.5	3114.5	3000.1	2813.3	2547.2	2229.6
22.5°	3252.2	3247.6	3245.2	3245.2	3247.6	3235.9	3221.9	3123.8	2932.4	2633.5	2283.3
25°	3324.6	3322.3	3317.6	3312.9	3329.3	3331.6	3327.0	3259.2	3081.8	2747.9	2351.0
27.5°	3425.0	3418.0	3408.7	3404.0	3420.3	3432.0	3441.4	3394.7	3240.6	2864.7	2428.1
30°	3579.1	3558.1	3534.7	3518.4	3530.1	3548.7	3569.8	3541.7	3404.0	3009.4	2507.5
32.5°	3761.2	3735.5	3681.8	3651.5	3681.8	3695.8	3712.2	3698.2	3574.4	3165.9	2586.9
35°	3983.0	3952.7	3896.6	3852.3	3906.0	3875.6	3868.6	3854.6	3735.5	3319.9	2675.6
37.5°	4351.9	4307.5	4218.8	4120.8	4120.8	4055.4	4029.7	3987.7	3880.3	3457.7	2762.0
40°	4779.1	4720.8	4606.4	4461.6	4328.5	4193.1	4176.8	4146.4	4050.7	3616.5	2860.0
42.5°	5248.4	5136.3	4977.6	4802.5	4587.7	4433.6	4396.2	4309.9	4216.5	3777.6	2958.1
45°	5769.1	5535.6	5304.4	5215.7	4860.9	4720.8	4650.7	4494.3	4389.2	3945.6	3060.8
47.5°	5853.1	5671.0	5516.9	5502.9	5115.3	4998.6	4919.2	4695.1	4576.0	4125.4	3168.2
50°	5806.4	5696.7	5713.0	5657.0	5302.1	5225.1	5164.4	4909.9	4760.5	4298.2	3266.3
52.5°	5610.3	5671.0	5764.4	5661.7	5479.5	5416.5	5386.2	5141.0	4933.2	4456.9	3355.0
55°	5376.8	5418.8	5619.6	5745.7	5685.0	5629.0	5601.0	5409.5	5103.7	4590.0	3436.7
57.5°	5036.0	5017.3	5239.1	5731.7	5899.8	5867.1	5836.8	5673.3	5262.4	4685.8	3488.0
60°	4524.7	4485.0	4765.1	5451.5	5969.8	6021.2	6007.2	5848.4	5383.8	4683.4	3467.0
62.5°	3639.8	3737.9	4125.4	4993.9	6000.2	6130.9	6105.2	5862.4	5423.5	4548.0	3334.0
65°	2705.9	2846.0	3226.6	4363.6	5958.2	6187.0	6116.9	5633.6	5239.1	4279.5	3042.1
67.5°	1949.5	2073.2	2351.0	3590.8	5554.3	5930.1	5848.4	5260.1	4814.2	3899.0	2638.2
70°	1333.1	1421.8	1610.9	2614.9	4741.8	5127.0	5075.6	4702.1	4144.1	3446.0	2143.3
72.5°	940.9	978.2	1099.6	1725.3	3602.4	4022.7	3962.0	3868.6	3329.3	2864.7	1667.0
75°	705.1	728.4	793.8	1116.0	2430.4	2787.6	2731.6	2785.3	2486.5	2168.9	1214.0
77.5°	266.2	289.5	450.6	712.1	1438.2	1711.3	1655.3	1688.0	1382.1	1095.0	604.7
80°	72.4	77.0	149.4	338.5	653.7	852.2	775.1	665.4	513.6	504.3	319.9
82.5°	30.4	35.0	67.7	182.1	233.5	233.5	196.1	242.8	196.1	235.8	154.1
85°	11.7	14.0	16.3	46.7	30.4	32.7	35.0	46.7	39.7	49.0	35.0
87.5°	0.0	0.0	0.0	2.3	2.3	4.7	2.3	4.7	7.0	7.0	7.0
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°	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4	1886.4
2.5°	1874.8	1849.1	1811.7	1751.0	1688.0	1653.0	1608.6	1601.6	1554.9	1550.2	1531.6
5°	1886.4	1832.7	1737.0	1620.3	1505.9	1417.2	1351.8	1316.8	1249.1	1249.1	1230.4
7.5°	1895.8	1811.7	1657.6	1484.9	1328.4	1209.4	1120.7	1083.3	1022.6	1017.9	1003.9
10°	1898.1	1786.0	1571.3	1347.1	1155.7	1034.3	947.9	905.9	852.2	847.5	838.2
12.5°	1916.8	1772.0	1494.2	1228.1	1031.9	901.2	817.1	782.1	740.1	735.4	726.1
15°	1947.1	1772.0	1428.8	1127.7	922.2	800.8	728.4	695.7	665.4	660.7	656.1
17.5°	1977.5	1767.4	1363.5	1034.3	831.2	721.4	658.4	632.7	609.4	607.0	602.4
20°	2005.5	1765.0	1298.1	954.9	761.1	656.1	607.0	583.7	565.0	565.0	562.7
22.5°	2033.5	1760.4	1235.1	880.2	700.4	607.0	565.0	539.3	525.3	525.3	523.0
25°	2075.6	1760.4	1176.7	817.1	651.4	569.7	527.6	509.0	497.3	495.0	495.0
27.5°	2124.6	1774.4	1125.3	761.1	609.4	532.3	499.6	480.9	466.9	462.3	464.6
30°	2178.3	1786.0	1078.6	712.1	569.7	504.3	469.3	450.6	436.6	431.9	434.3
32.5°	2232.0	1800.1	1036.6	667.7	530.0	478.6	443.6	422.6	408.6	406.2	406.2
35°	2290.3	1814.1	994.6	630.4	497.3	452.9	420.2	396.9	387.6	382.9	385.2
37.5°	2348.7	1837.4	954.9	595.3	473.9	429.6	399.2	375.9	368.9	366.5	366.5
40°	2418.8	1872.4	938.6	572.0	452.9	408.6	382.9	359.5	352.5	352.5	352.5
42.5°	2477.1	1900.4	924.5	546.3	436.6	389.9	366.5	347.9	343.2	340.9	343.2
45°	2535.5	1926.1	905.9	523.0	415.6	371.2	352.5	333.9	329.2	329.2	329.2
47.5°	2593.9	1940.1	880.2	499.6	396.9	354.9	338.5	322.2	317.5	317.5	317.5
50°	2640.5	1951.8	842.8	473.9	375.9	340.9	324.5	308.2	303.5	303.5	303.5
52.5°	2687.2	1954.1	803.1	443.6	354.9	324.5	310.5	294.2	289.5	287.2	287.2
55°	2729.3	1951.8	756.4	408.6	331.5	305.8	294.2	280.2	270.8	261.5	266.2
57.5°	2759.6	1949.5	702.7	373.6	308.2	287.2	282.5	263.8	245.1	221.8	226.5
60°	2747.9	1923.8	644.4	329.2	282.5	268.5	268.5	242.8	210.1	198.4	200.8
62.5°	2673.2	1851.4	583.7	282.5	256.8	249.8	247.5	219.5	193.8	182.1	184.4
65°	2449.1	1669.3	495.0	240.5	231.1	228.8	228.8	203.1	179.8	165.8	168.1
67.5°	2108.2	1400.8	403.9	203.1	205.5	210.1	210.1	186.8	163.4	149.4	151.8
70°	1690.3	1095.0	322.2	175.1	177.4	184.4	189.1	168.1	147.1	133.1	133.1
72.5°	1272.4	831.2	259.2	147.1	158.8	158.8	165.8	149.4	128.4	114.4	116.7
75°	922.2	595.3	205.5	123.7	137.7	135.4	135.4	126.1	109.7	100.4	100.4
77.5°	436.6	312.9	163.4	88.7	107.4	105.1	107.4	100.4	93.4	84.0	86.4
80°	214.8	154.1	105.1	63.0	74.7	77.0	84.0	79.4	77.0	70.0	70.0
82.5°	102.7	60.7	49.0	44.4	51.4	53.7	58.4	58.4	60.7	56.0	56.0
85°	28.0	16.3	21.0	28.0	32.7	35.0	39.7	42.0	42.0	39.7	42.0
87.5°	7.0	7.0	9.3	14.0	16.3	18.7	21.0	21.0	9.3	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)