

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: P841016

Luminaire Tested: **ARCH4-120-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841016
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: ARCH4-120-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1000mA 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: 13691 lumens
Efficiency: N/A
Efficacy: 112.2 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): 122
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



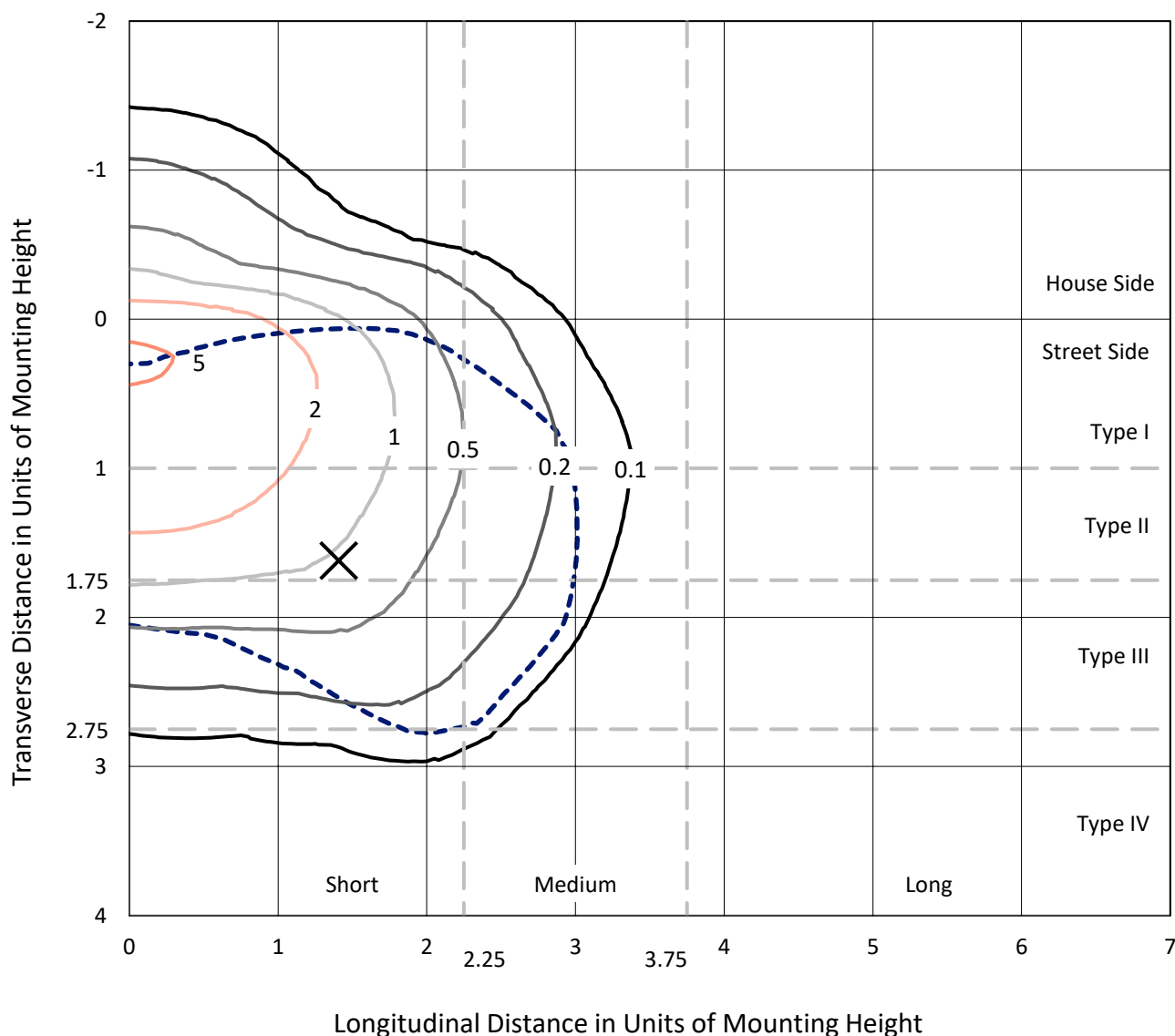
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

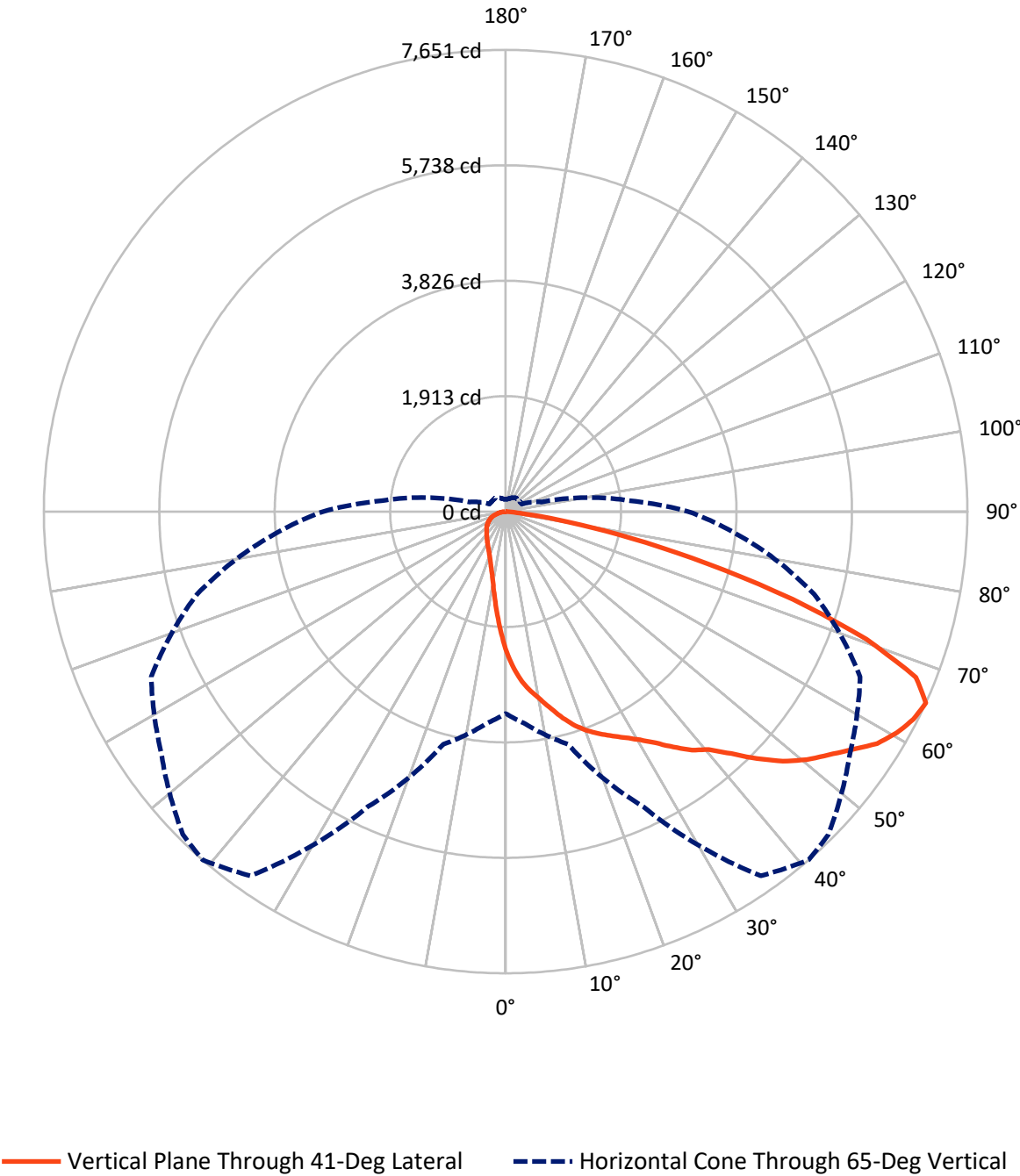


Based on 25 foot mounting height. Maximum calculated value = 5.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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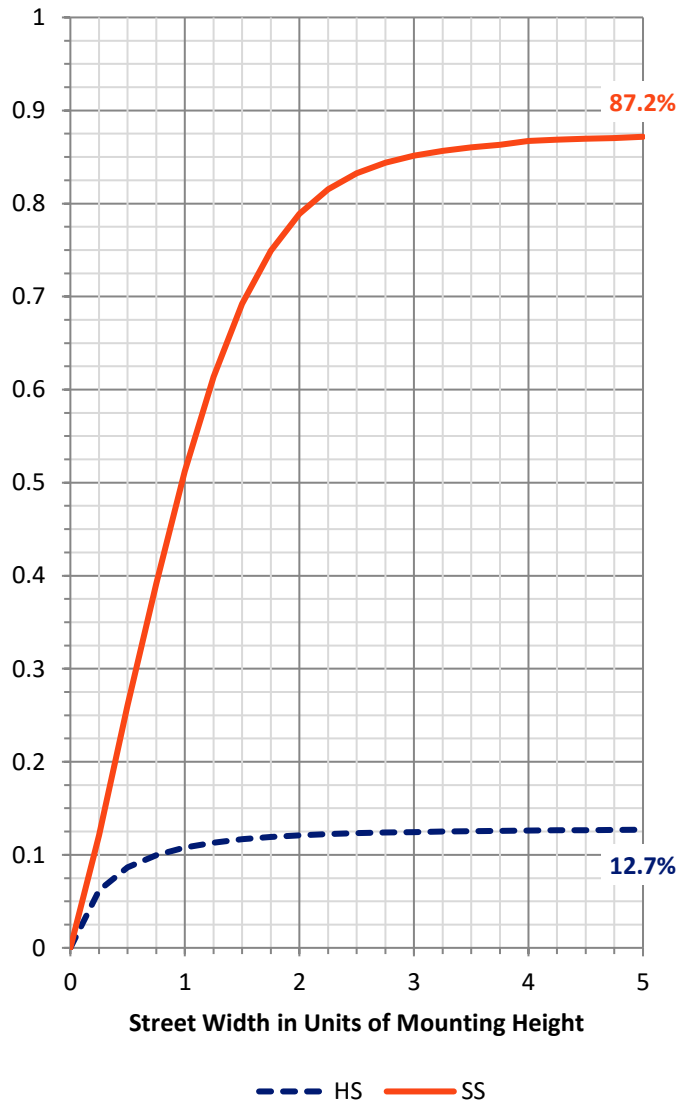
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1757.7	0.0	1757.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11933.3	0.0	11933.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	13691.0	0.0	13691.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.4	1.6
10°-20°	651.8	4.8
20°-30°	1121.3	8.2
30°-40°	1700.6	12.4
40°-50°	2491.4	18.2
50°-60°	3146.2	23.0
60°-70°	2950.1	21.5
70°-80°	1314.8	9.6
80°-90°	97.4	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°	13691.0	100.0
0°-180°	13691.0	100.0

Coefficient of Utilization



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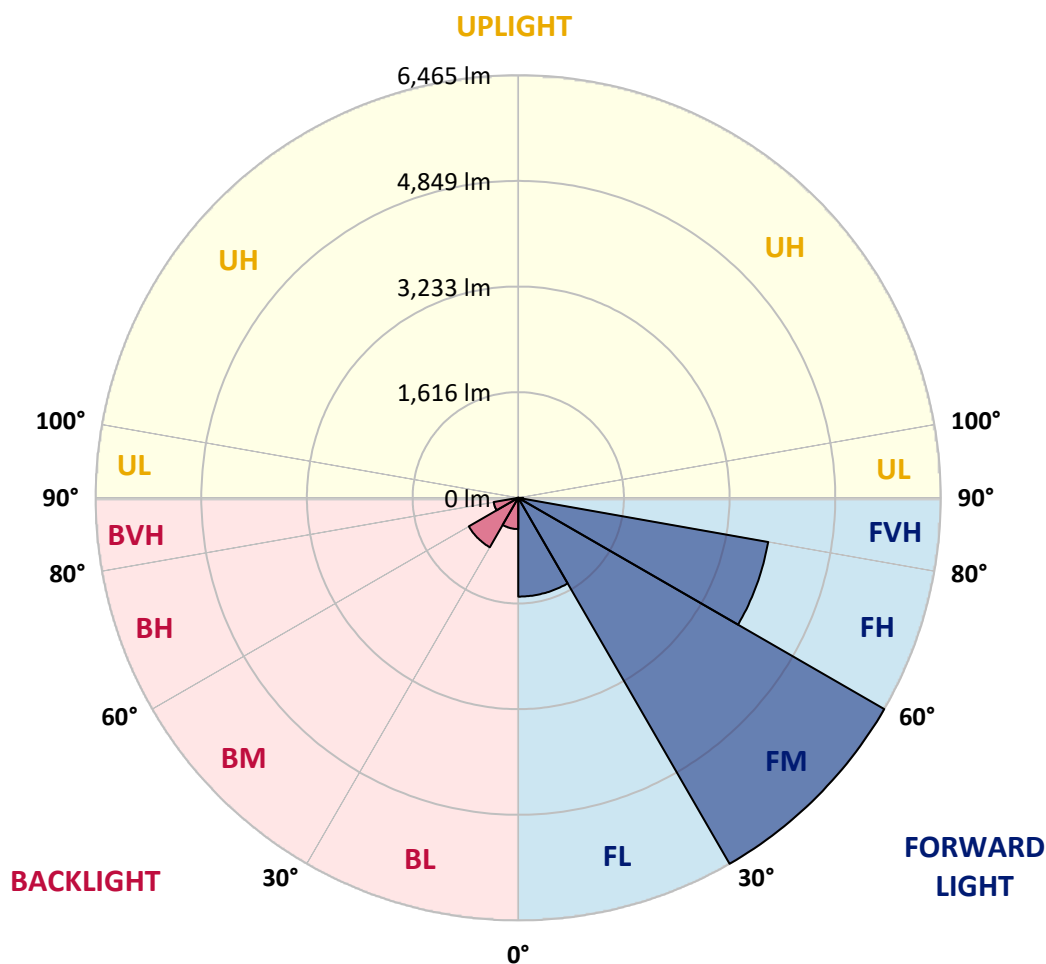
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1512.0	11.0			
FM	(30°-60°)	6465.4	47.2			
FH	(60°-80°)	3883.1	28.4			G2/5000
FVH	(80°-90°)	72.7	0.5			G1/100
BL	(0°-30°)	478.4	3.5	B1/500		
BM	(30°-60°)	872.8	6.4	B1/1000		
BH	(60°-80°)	381.8	2.8	B1/500		G1/500
BVH	(80°-90°)	24.7	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°	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9
2.5°	2690.9	2682.2	2676.5	2644.7	2644.7	2601.4	2604.3	2563.9	2514.8	2436.8	2353.1
5°	2945.0	2933.4	2919.0	2887.2	2875.7	2832.4	2826.6	2768.8	2685.1	2549.4	2399.3
7.5°	3167.3	3155.7	3135.5	3089.3	3057.6	3005.6	2991.2	2916.1	2823.7	2656.2	2445.5
10°	3369.4	3360.7	3334.7	3277.0	3233.7	3170.2	3144.2	3043.1	2927.6	2742.9	2483.0
12.5°	3574.4	3562.8	3528.2	3479.1	3427.1	3352.1	3320.3	3190.4	3043.1	2838.1	2537.9
15°	3764.9	3747.6	3721.6	3669.7	3623.5	3551.3	3516.6	3363.6	3184.6	2945.0	2610.0
17.5°	3889.1	3874.7	3851.6	3822.7	3785.1	3730.3	3695.6	3545.5	3326.1	3048.9	2685.1
20°	3964.2	3958.4	3949.7	3932.4	3915.1	3877.5	3851.6	3710.1	3479.1	3150.0	2757.3
22.5°	4021.9	4016.1	4013.2	4013.2	4016.1	4001.7	3984.4	3863.1	3626.3	3256.8	2823.7
25°	4111.4	4108.5	4102.7	4097.0	4117.2	4120.1	4114.3	4030.6	3811.1	3398.3	2907.4
27.5°	4235.6	4226.9	4215.3	4209.6	4229.8	4244.2	4255.8	4198.0	4007.5	3542.6	3002.7
30°	4426.1	4400.1	4371.3	4351.0	4365.5	4388.6	4414.6	4379.9	4209.6	3721.6	3100.9
32.5°	4651.3	4619.6	4553.1	4515.6	4553.1	4570.5	4590.7	4573.4	4420.3	3915.1	3199.0
35°	4925.6	4888.1	4818.8	4763.9	4830.3	4792.8	4784.1	4766.8	4619.6	4105.6	3308.8
37.5°	5381.8	5326.9	5217.2	5095.9	5095.9	5015.1	4983.3	4931.4	4798.6	4276.0	3415.6
40°	5910.1	5838.0	5696.5	5517.5	5352.9	5185.4	5165.2	5127.7	5009.3	4472.3	3536.8
42.5°	6490.5	6351.9	6155.6	5939.0	5673.4	5482.8	5436.6	5329.8	5214.3	4671.5	3658.1
45°	7134.3	6845.6	6559.8	6450.1	6011.2	5838.0	5751.3	5557.9	5428.0	4879.4	3785.1
47.5°	7238.3	7013.1	6822.5	6805.2	6325.9	6181.5	6083.4	5806.2	5659.0	5101.7	3918.0
50°	7180.5	7044.8	7065.0	6995.7	6556.9	6461.6	6386.5	6071.8	5887.0	5315.4	4039.2
52.5°	6938.0	7013.1	7128.5	7001.5	6776.3	6698.4	6660.8	6357.7	6100.7	5511.7	4148.9
55°	6649.3	6701.2	6949.5	7105.5	7030.4	6961.1	6926.4	6689.7	6311.5	5676.3	4250.0
57.5°	6227.7	6204.6	6478.9	7088.1	7296.0	7255.6	7218.1	7015.9	6507.8	5794.7	4313.5
60°	5595.4	5546.4	5892.8	6741.7	7382.6	7446.1	7428.8	7232.5	6657.9	5791.8	4287.5
62.5°	4501.2	4622.4	5101.7	6175.8	7420.2	7581.8	7550.1	7249.8	6707.0	5624.3	4123.0
65°	3346.3	3519.5	3990.1	5396.2	7368.2	7651.1	7564.5	6966.9	6478.9	5292.3	3762.0
67.5°	2410.8	2563.9	2907.4	4440.5	6868.7	7333.5	7232.5	6504.9	5953.5	4821.7	3262.6
70°	1648.6	1758.3	1992.2	3233.7	5863.9	6340.3	6276.8	5814.9	5124.8	4261.5	2650.5
72.5°	1163.6	1209.7	1359.9	2133.7	4455.0	4974.7	4899.6	4784.1	4117.2	3542.6	2061.5
75°	871.9	900.8	981.7	1380.1	3005.6	3447.3	3378.0	3444.5	3074.9	2682.2	1501.4
77.5°	329.1	358.0	557.2	880.6	1778.5	2116.3	2047.0	2087.5	1709.2	1354.1	747.8
80°	89.5	95.3	184.8	418.6	808.4	1053.8	958.6	822.9	635.2	623.6	395.5
82.5°	37.5	43.3	83.7	225.2	288.7	288.7	242.5	300.3	242.5	291.6	190.6
85°	14.4	17.3	20.2	57.7	37.5	40.4	43.3	57.7	49.1	60.6	43.3
87.5°	0.0	0.0	0.0	2.9	2.9	5.8	2.9	5.8	8.7	8.7	8.7
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°	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9	2332.9
2.5°	2318.4	2286.7	2240.5	2165.4	2087.5	2044.2	1989.3	1980.6	1922.9	1917.1	1894.0
5°	2332.9	2266.5	2148.1	2003.7	1862.3	1752.5	1671.7	1628.4	1544.7	1544.7	1521.6
7.5°	2344.4	2240.5	2049.9	1836.3	1642.8	1495.6	1385.9	1339.7	1264.6	1258.8	1241.5
10°	2347.3	2208.7	1943.1	1665.9	1429.2	1279.0	1172.2	1120.2	1053.8	1048.1	1036.5
12.5°	2370.4	2191.4	1847.8	1518.7	1276.2	1114.5	1010.5	967.2	915.2	909.5	897.9
15°	2407.9	2191.4	1767.0	1394.5	1140.5	990.3	900.8	860.4	822.9	817.1	811.3
17.5°	2445.5	2185.6	1686.1	1279.0	1027.9	892.2	814.2	782.4	753.6	750.7	744.9
20°	2480.1	2182.7	1605.3	1180.9	941.2	811.3	750.7	721.8	698.7	698.7	695.8
22.5°	2514.8	2177.0	1527.3	1088.5	866.2	750.7	698.7	666.9	649.6	649.6	646.7
25°	2566.7	2177.0	1455.2	1010.5	805.5	704.5	652.5	629.4	615.0	612.1	612.1
27.5°	2627.4	2194.3	1391.6	941.2	753.6	658.3	617.9	594.8	577.4	571.7	574.6
30°	2693.8	2208.7	1333.9	880.6	704.5	623.6	580.3	557.2	539.9	534.1	537.0
32.5°	2760.2	2226.0	1281.9	825.7	655.4	591.9	548.6	522.6	505.3	502.4	502.4
35°	2832.4	2243.4	1230.0	779.5	615.0	560.1	519.7	490.8	479.3	473.5	476.4
37.5°	2904.5	2272.2	1180.9	736.2	586.1	531.2	493.7	464.8	456.2	453.3	453.3
40°	2991.2	2315.6	1160.7	707.4	560.1	505.3	473.5	444.6	436.0	436.0	436.0
42.5°	3063.3	2350.2	1143.3	675.6	539.9	482.2	453.3	430.2	424.4	421.5	424.4
45°	3135.5	2382.0	1120.2	646.7	513.9	459.1	436.0	412.9	407.1	407.1	407.1
47.5°	3207.7	2399.3	1088.5	617.9	490.8	438.9	418.6	398.4	392.7	392.7	392.7
50°	3265.4	2413.7	1042.3	586.1	464.8	421.5	401.3	381.1	375.3	375.3	375.3
52.5°	3323.2	2416.6	993.2	548.6	438.9	401.3	384.0	363.8	358.0	355.1	355.1
55°	3375.2	2413.7	935.5	505.3	410.0	378.2	363.8	346.5	334.9	323.4	329.1
57.5°	3412.7	2410.8	869.1	462.0	381.1	355.1	349.4	326.3	303.2	274.3	280.1
60°	3398.3	2379.1	796.9	407.1	349.4	332.0	332.0	300.3	259.8	245.4	248.3
62.5°	3305.9	2289.6	721.8	349.4	317.6	308.9	306.0	271.4	239.6	225.2	228.1
65°	3028.7	2064.4	612.1	297.4	285.8	282.9	282.9	251.2	222.3	205.0	207.9
67.5°	2607.2	1732.3	499.5	251.2	254.1	259.8	259.8	231.0	202.1	184.8	187.7
70°	2090.3	1354.1	398.4	216.5	219.4	228.1	233.9	207.9	181.9	164.6	164.6
72.5°	1573.5	1027.9	320.5	181.9	196.3	196.3	205.0	184.8	158.8	141.5	144.4
75°	1140.5	736.2	254.1	153.0	170.3	167.5	167.5	155.9	135.7	124.2	124.2
77.5°	539.9	386.9	202.1	109.7	132.8	129.9	132.8	124.2	115.5	103.9	106.8
80°	265.6	190.6	129.9	78.0	92.4	95.3	103.9	98.2	95.3	86.6	86.6
82.5°	127.0	75.1	60.6	54.9	63.5	66.4	72.2	72.2	75.1	69.3	69.3
85°	34.6	20.2	26.0	34.6	40.4	43.3	49.1	52.0	52.0	49.1	52.0
87.5°	8.7	8.7	11.5	17.3	20.2	23.1	26.0	26.0	11.5	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)