

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: P841946

Luminaire Tested: **ARCH4-250-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841946
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: ARCH4-250-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA 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: 24674 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
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



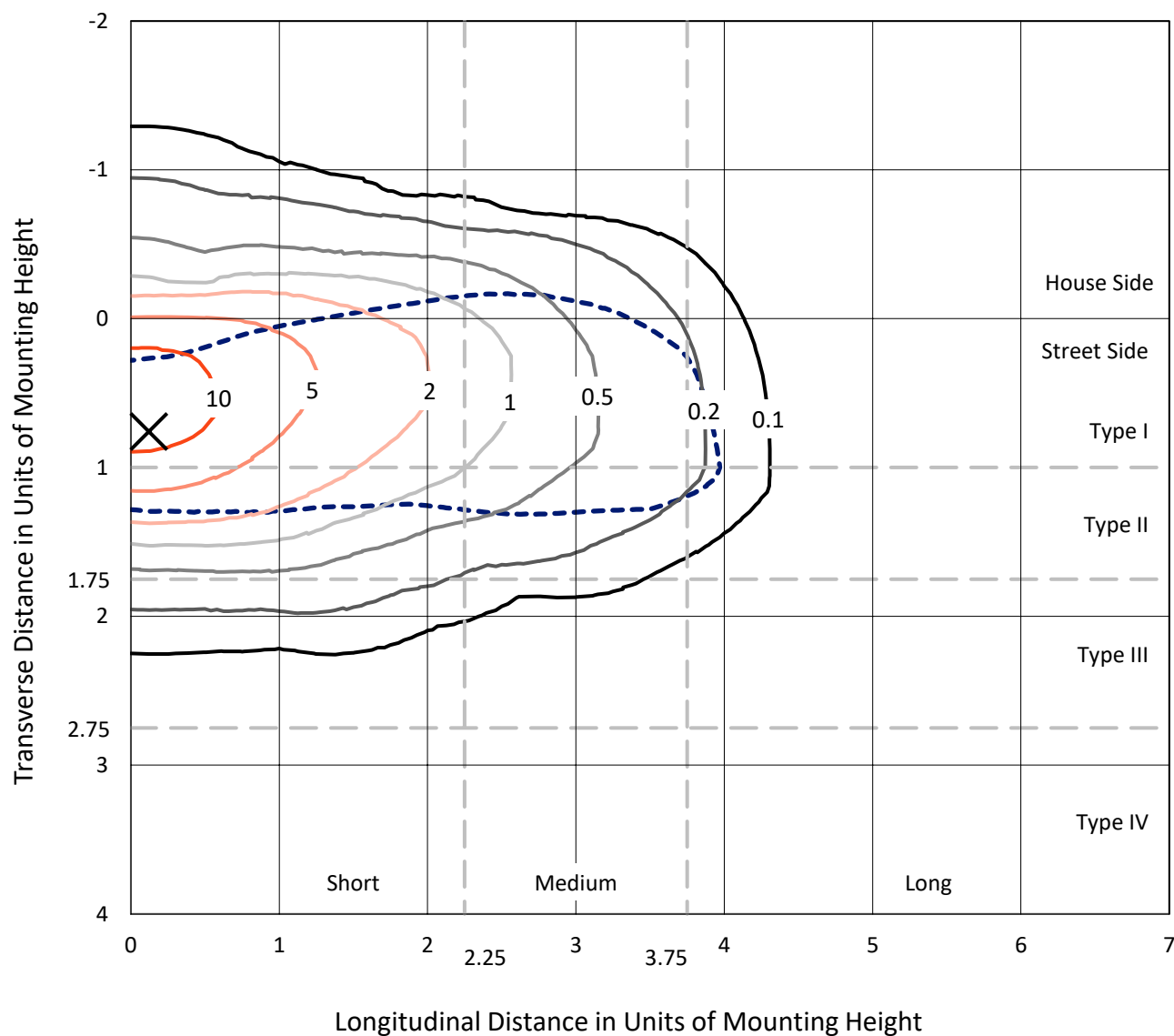
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

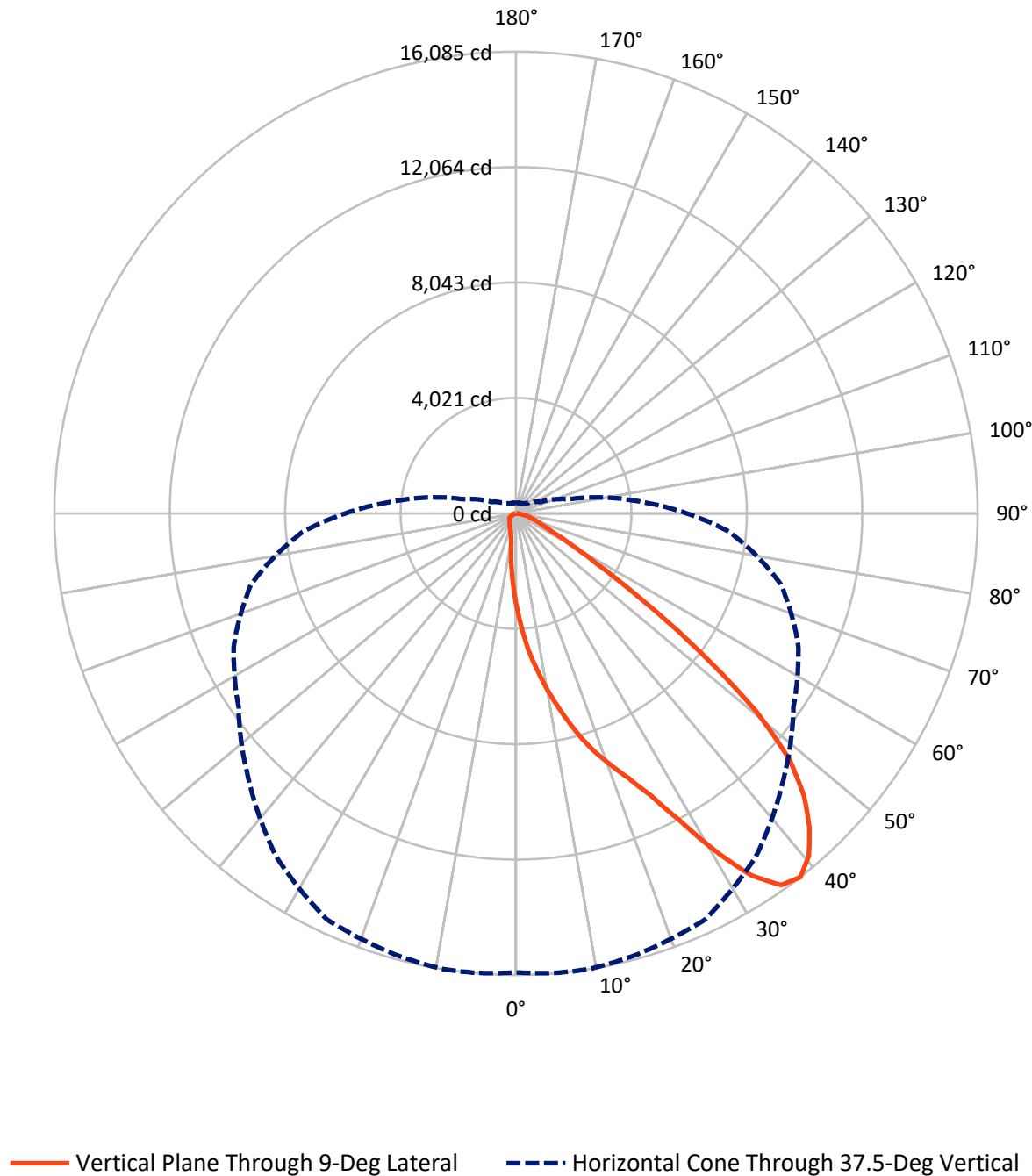


Based on 25 foot mounting height. Maximum calculated value = 14.4 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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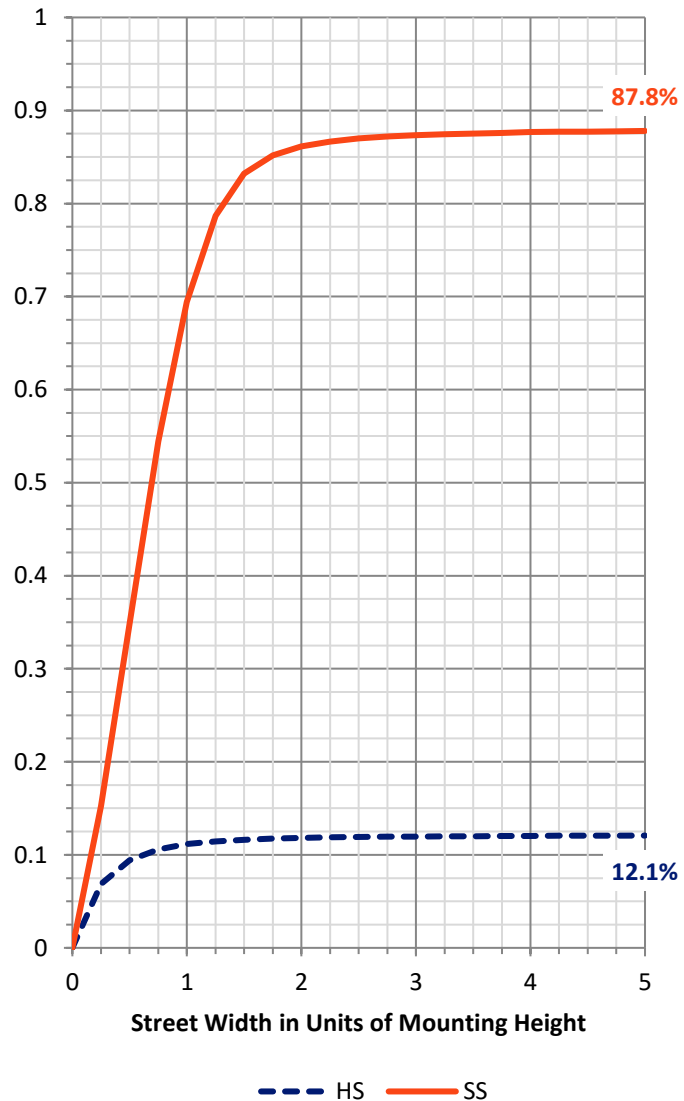
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3000.8	0.0	3000.8
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	21673.2	0.0	21673.2
	% Fixture	87.8	0.0	87.8
Total	Lumens	24674.0	0.0	24674.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.8	1.3
10°-20°	1139.5	4.6
20°-30°	2341.3	9.5
30°-40°	4138.5	16.8
40°-50°	5497.7	22.3
50°-60°	5214.2	21.1
60°-70°	3978.0	16.1
70°-80°	1928.5	7.8
80°-90°	108.6	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°	24674.0	100.0
0°-180°	24674.0	100.0

Coefficient of Utilization



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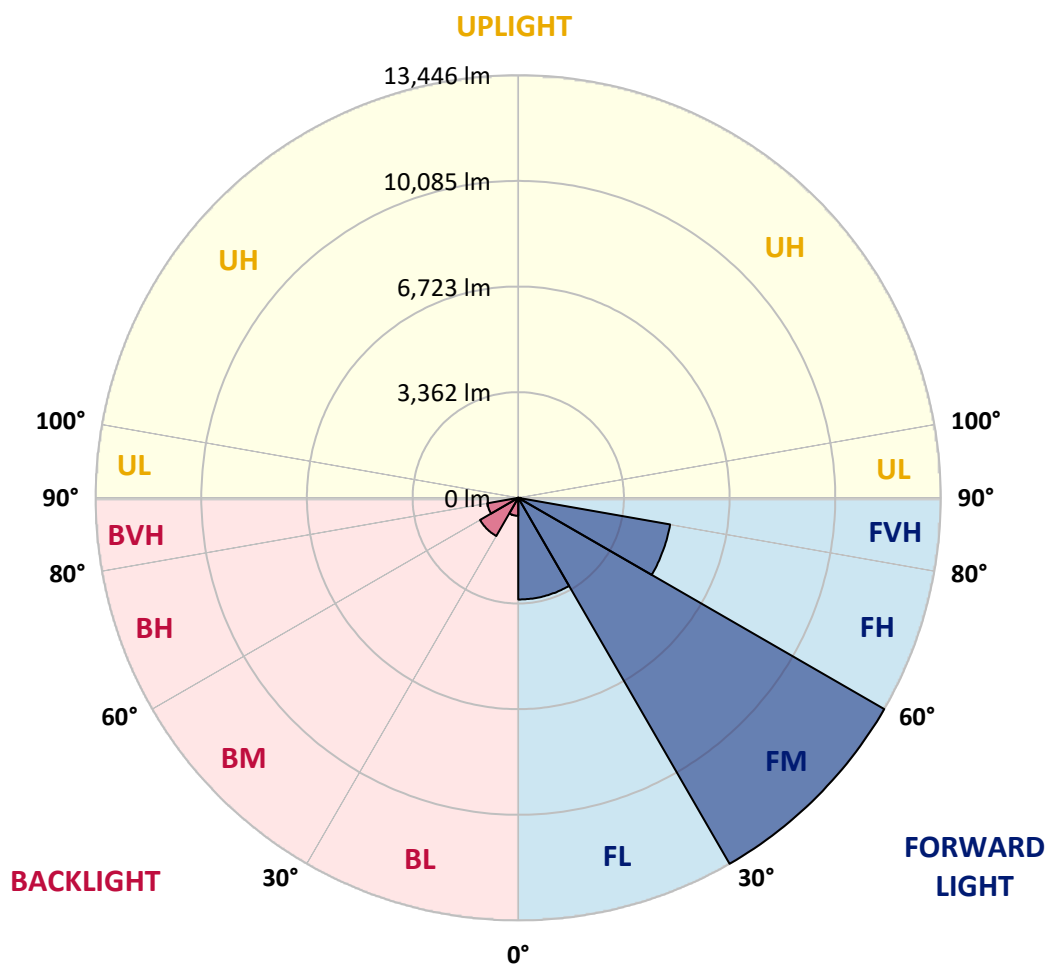
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3236.0	13.1			
FM	(30°-60°)	13446.1	54.5			
FH	(60°-80°)	4905.1	19.9			G2/5000
FVH	(80°-90°)	86.0	0.3			G1/100
BL	(0°-30°)	572.7	2.3	B2/1000		
BM	(30°-60°)	1404.2	5.7	B2/2500		
BH	(60°-80°)	1001.4	4.1	B3/2500		G3/2500
BVH	(80°-90°)	22.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6
2.5°	4041.6	3970.6	4051.7	4041.6	3970.6	3925.1	3783.3	3737.7	3570.5	3449.0	3342.6
5°	4872.1	4801.2	4872.1	4851.9	4750.6	4639.2	4406.2	4254.3	3955.5	3692.1	3454.1
7.5°	5560.9	5560.9	5591.3	5596.4	5474.8	5302.6	5014.0	4786.0	4365.7	3960.5	3580.7
10°	6305.4	6310.5	6376.3	6330.8	6168.7	5935.7	5571.1	5282.4	4775.9	4244.1	3702.2
12.5°	7100.6	7105.6	7125.9	7105.6	6913.2	6614.4	6173.8	5793.9	5211.5	4568.3	3869.4
15°	7895.7	7900.8	7926.1	7890.7	7677.9	7328.5	6827.1	6361.1	5672.4	4932.9	4071.9
17.5°	8640.2	8650.3	8670.6	8625.0	8402.2	7986.9	7475.4	6913.2	6163.6	5322.9	4299.8
20°	9308.7	9318.9	9334.1	9273.3	9050.4	8635.1	8083.1	7495.6	6665.0	5723.0	4548.0
22.5°	9982.3	9992.5	10017.8	9936.8	9688.6	9212.5	8670.6	8062.8	7196.8	6163.6	4836.7
25°	10843.3	10853.4	10873.7	10757.2	10417.9	9860.8	9288.5	8665.5	7774.2	6660.0	5191.2
27.5°	12104.4	12094.3	12094.3	11881.6	11299.1	10574.9	9911.4	9278.4	8397.1	7191.7	5581.2
30°	13664.3	13639.0	13623.8	13335.1	12504.5	11380.2	10549.6	9850.7	8994.7	7753.9	6001.6
32.5°	15062.1	15062.1	15031.7	14727.9	13846.6	12464.0	11228.2	10407.8	9572.1	8321.1	6437.1
35°	15887.7	15923.1	15907.9	15680.0	15036.8	13628.8	12144.9	11076.3	10179.9	8913.7	6958.8
37.5°	15999.1	16070.0	16085.2	15948.4	15609.1	14581.0	13162.9	11800.5	10848.4	9551.8	7465.2
40°	15548.3	15700.3	15700.3	15680.0	15558.5	15031.7	14018.8	12641.2	11537.2	10215.3	7976.7
42.5°	14854.5	15011.5	14991.2	15067.2	15036.8	14925.4	14500.0	13426.3	12226.0	10899.0	8442.7
45°	13947.9	14110.0	14069.5	14206.2	14267.0	14388.5	14449.3	13973.2	12904.6	11643.5	8964.3
47.5°	12494.4	12767.9	12828.6	13071.7	13325.0	13704.8	13993.5	14170.8	13537.7	12443.7	9531.6
50°	10347.0	10731.9	10853.4	11365.0	12058.8	12843.8	13309.8	13927.7	13983.4	13264.2	10144.4
52.5°	7409.5	7855.2	8042.6	8883.3	10311.5	11679.0	12519.7	13390.8	14155.6	14049.2	10807.9
55°	4791.1	5171.0	5353.3	6143.4	8042.6	10190.0	11587.8	12697.0	14059.3	14768.4	11567.6
57.5°	2952.7	3170.4	3292.0	3970.6	5717.9	8280.6	10367.2	12058.8	13765.6	15391.3	12357.6
60°	1990.4	2117.0	2177.8	2496.8	3884.6	6188.9	8690.9	11390.3	13380.7	15811.7	13076.8
62.5°	1321.9	1362.4	1423.2	1620.7	2562.7	4345.4	6675.1	10195.0	13092.0	15837.0	13608.6
65°	1023.0	1043.3	1068.6	1154.7	1580.2	3038.8	4694.9	8260.4	12661.5	15300.2	13775.7
67.5°	805.3	825.5	855.9	901.5	1144.6	2061.3	3195.8	6052.2	11780.3	14459.4	13502.2
70°	633.1	648.3	668.5	709.0	891.4	1494.1	2111.9	4021.3	10002.6	13659.2	12641.2
72.5°	501.4	516.6	536.8	577.4	724.2	1094.0	1448.5	2507.0	7713.4	12681.8	10985.1
75°	395.0	405.2	420.4	460.9	582.4	850.9	982.5	1499.1	5241.9	10894.0	8559.2
77.5°	197.5	243.1	278.6	319.1	425.4	587.5	653.3	830.6	2213.2	5591.3	4082.1
80°	116.5	141.8	151.9	177.3	278.6	354.5	354.5	334.3	698.9	2147.4	1666.3
82.5°	65.8	91.2	96.2	101.3	167.1	202.6	162.1	121.6	141.8	719.2	486.2
85°	20.3	30.4	35.5	40.5	55.7	60.8	55.7	50.6	40.5	70.9	45.6
87.5°	0.0	0.0	0.0	0.0	5.1	10.1	10.1	10.1	15.2	15.2	15.2
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°	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6	3261.6
2.5°	3281.9	3216.0	3089.4	2972.9	2861.5	2780.5	2704.5	2633.6	2582.9	2542.4	2537.4
5°	3327.4	3195.8	2952.7	2724.8	2517.1	2344.9	2198.0	2081.6	1995.5	1934.7	1929.6
7.5°	3388.2	3185.6	2815.9	2476.6	2167.7	1919.5	1706.8	1549.8	1438.3	1392.8	1357.3
10°	3438.9	3175.5	2679.2	2228.4	1823.3	1509.3	1256.0	1099.0	1018.0	987.6	972.4
12.5°	3525.0	3185.6	2562.7	2000.5	1524.4	1154.7	962.3	876.2	840.7	815.4	810.3
15°	3651.6	3231.2	2451.3	1777.7	1220.6	931.9	820.5	764.8	729.3	724.2	719.2
17.5°	3778.2	3271.7	2350.0	1549.8	1012.9	810.3	734.4	688.8	663.5	658.4	658.4
20°	3925.1	3322.4	2238.6	1332.0	866.0	729.3	668.5	633.1	602.7	597.6	597.6
22.5°	4097.3	3393.3	2132.2	1139.5	769.8	668.5	617.9	577.4	552.0	547.0	547.0
25°	4330.2	3499.6	2046.1	997.7	704.0	617.9	572.3	536.8	516.6	506.5	506.5
27.5°	4588.5	3646.5	1985.3	911.6	658.4	577.4	531.8	501.4	481.1	471.0	471.0
30°	4877.2	3808.6	1944.8	876.2	633.1	541.9	501.4	471.0	445.7	440.6	440.6
32.5°	5196.3	3996.0	1919.5	881.2	628.0	516.6	471.0	440.6	420.4	410.2	410.2
35°	5550.8	4203.6	1904.3	911.6	638.1	496.3	445.7	415.3	395.0	384.9	384.9
37.5°	5945.8	4446.7	1904.3	942.0	663.5	491.3	420.4	390.0	374.8	364.7	364.7
40°	6315.6	4705.0	1924.5	977.5	688.8	491.3	400.1	374.8	354.5	344.4	344.4
42.5°	6604.2	4851.9	1939.7	1012.9	704.0	486.2	379.8	354.5	339.3	329.2	329.2
45°	6933.4	5008.9	1909.4	1028.1	704.0	476.1	364.7	339.3	324.1	314.0	314.0
47.5°	7298.1	5201.3	1904.3	1038.2	688.8	455.8	349.5	324.1	314.0	303.9	303.9
50°	7667.8	5414.1	1914.4	1033.2	668.5	425.4	329.2	314.0	298.8	288.7	288.7
52.5°	8088.2	5636.9	1934.7	1023.0	622.9	390.0	314.0	298.8	283.6	273.5	268.4
55°	8554.1	5880.0	1975.2	1002.8	562.2	354.5	298.8	283.6	263.4	253.2	248.2
57.5°	9091.0	6178.8	2020.8	962.3	496.3	324.1	283.6	263.4	233.0	217.8	212.7
60°	9602.5	6518.1	2071.4	866.0	430.5	293.7	268.4	238.0	207.6	197.5	192.5
62.5°	10083.6	6852.4	2096.7	693.9	364.7	268.4	253.2	217.8	187.4	177.3	172.2
65°	10392.6	7217.1	2041.0	471.0	298.8	248.2	233.0	202.6	172.2	157.0	157.0
67.5°	10412.8	7389.3	1848.6	308.9	243.1	222.8	212.7	182.3	151.9	141.8	136.7
70°	9901.3	7131.0	1413.0	243.1	202.6	192.5	192.5	162.1	131.7	121.6	116.5
72.5°	8726.3	6315.6	901.5	197.5	172.2	162.1	162.1	136.7	116.5	101.3	96.2
75°	6887.9	4872.1	481.1	162.1	141.8	136.7	126.6	111.4	96.2	86.1	81.0
77.5°	3165.4	2147.4	222.8	116.5	106.4	106.4	96.2	81.0	76.0	65.8	65.8
80°	1251.0	729.3	111.4	76.0	70.9	70.9	70.9	55.7	55.7	45.6	40.5
82.5°	344.4	151.9	55.7	45.6	45.6	45.6	40.5	35.5	35.5	30.4	30.4
85°	35.5	25.3	25.3	25.3	25.3	20.3	20.3	15.2	10.1	10.1	10.1
87.5°	15.2	15.2	15.2	15.2	15.2	10.1	5.1	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)