

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: P841590

Luminaire Tested: **ARCH4-200-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841590
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-200-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20442 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 203.7
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

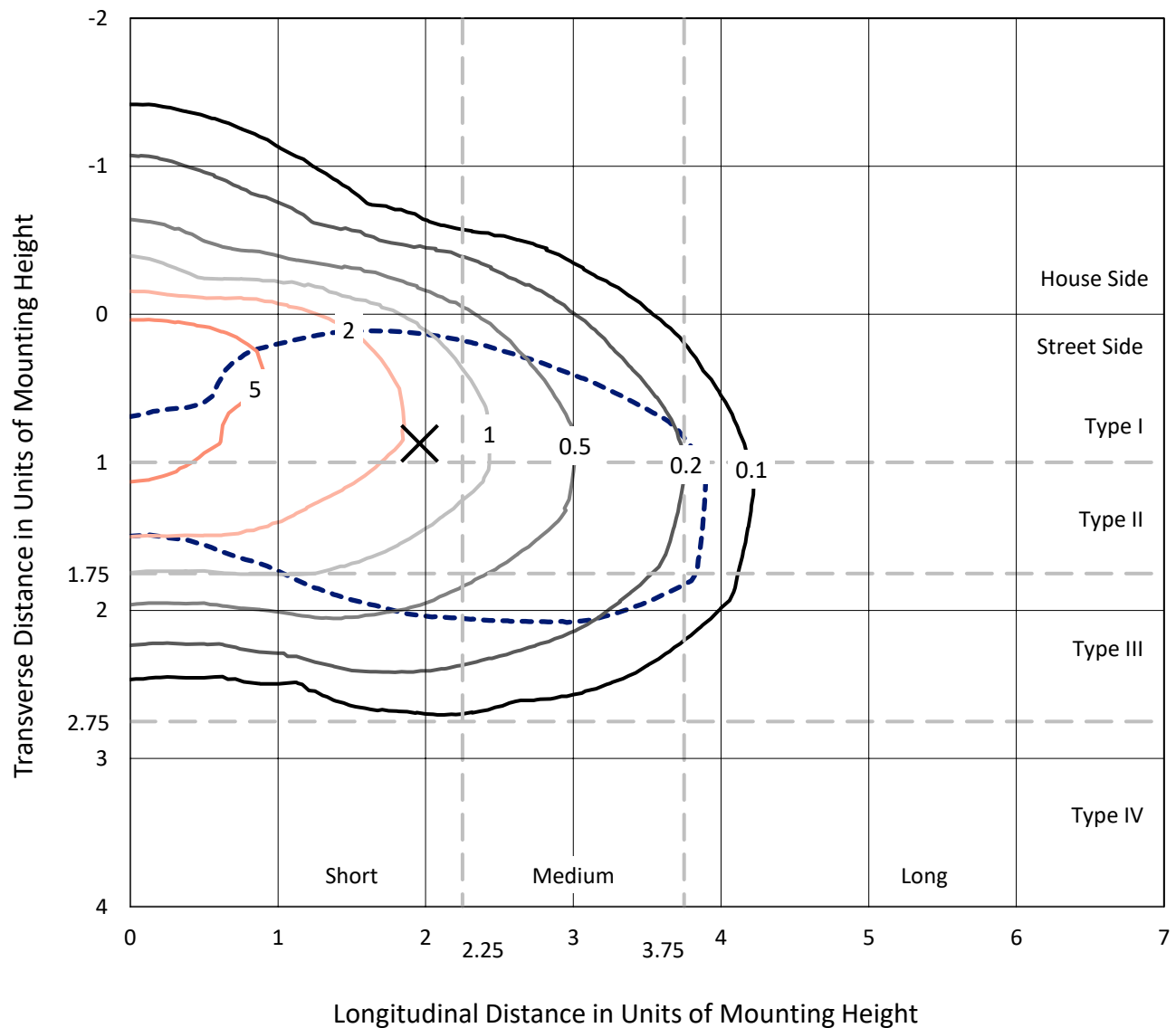


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Iso-Footcandle Lines of Horizontal Illumination

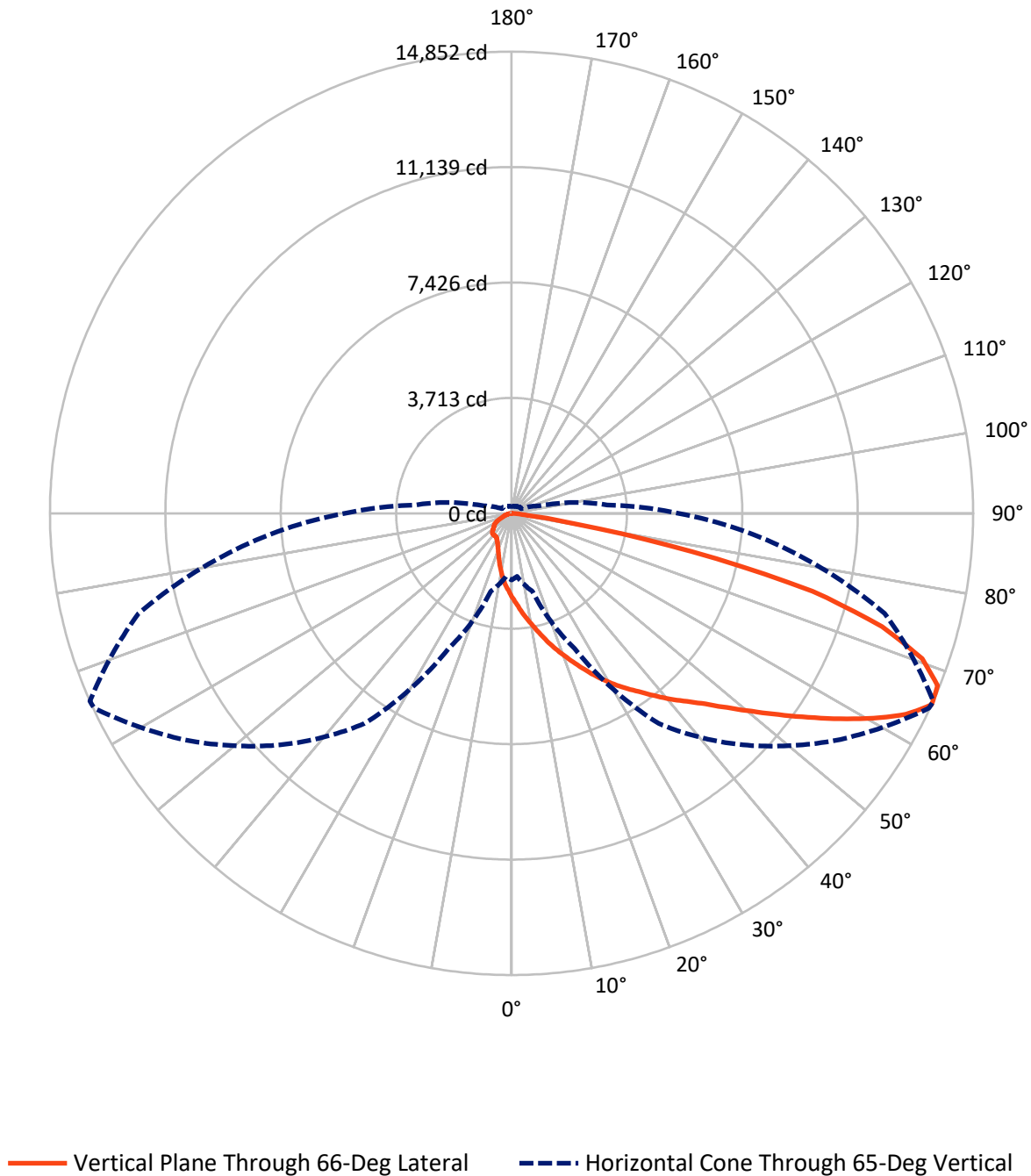
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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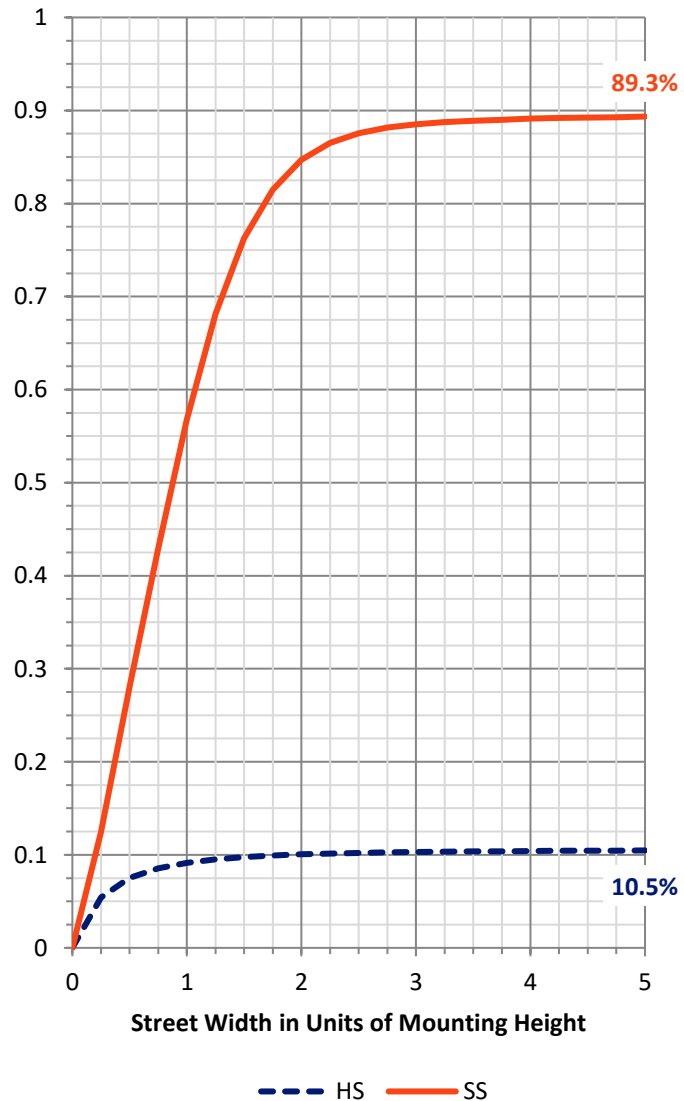
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2162.2	0.0	2162.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	18279.8	0.0	18279.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	20442.0	0.0	20442.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.0	1.3
10°-20°	870.3	4.3
20°-30°	1574.6	7.7
30°-40°	2462.3	12.0
40°-50°	3735.3	18.3
50°-60°	4745.9	23.2
60°-70°	4434.5	21.7
70°-80°	2203.9	10.8
80°-90°	148.1	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°	20442.0	100.0
0°-180°	20442.0	100.0

Coefficient of Utilization



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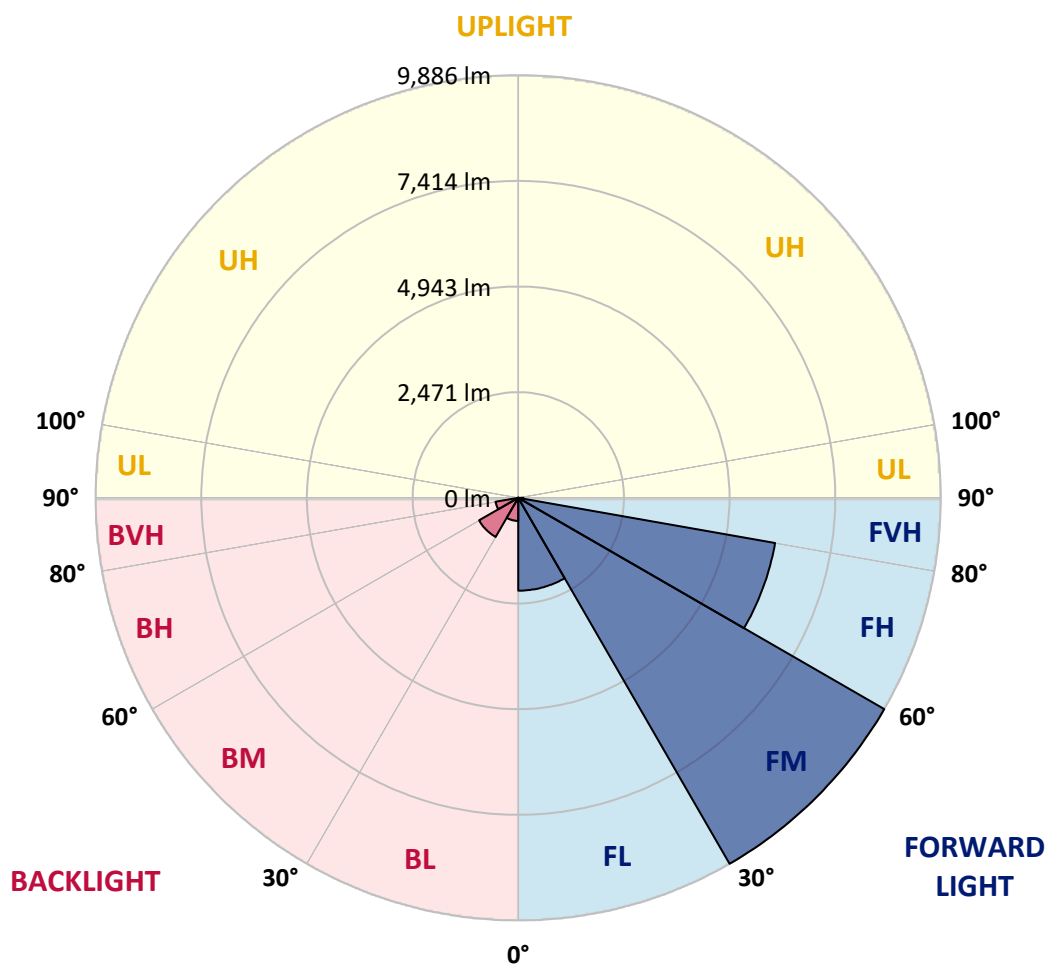
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2172.0	10.6			
FM	(30°-60°)	9886.0	48.4			
FH	(60°-80°)	6100.0	29.8			G3/7500
FVH	(80°-90°)	121.9	0.6			G2/225
BL	(0°-30°)	540.0	2.6	B2/1000		
BM	(30°-60°)	1057.5	5.2	B2/2500		
BH	(60°-80°)	538.5	2.6	B2/1000		G2/1000
BVH	(80°-90°)	26.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4
2.5°	3159.9	3185.6	3198.4	3202.7	3104.1	3061.2	3018.4	2919.8	2898.3	2842.6	2769.7
5°	3717.2	3751.5	3743.0	3725.8	3605.8	3468.6	3357.1	3172.7	3142.7	3009.8	2846.9
7.5°	4266.0	4296.0	4287.5	4223.1	4090.2	3897.3	3712.9	3442.8	3400.0	3185.6	2924.0
10°	4724.8	4750.5	4746.2	4681.9	4523.3	4287.5	4064.5	3704.4	3652.9	3348.5	2988.4
12.5°	5102.1	5136.4	5132.1	5089.2	4947.7	4690.5	4437.5	4004.5	3940.2	3545.7	3078.4
15°	5397.9	5440.8	5440.8	5423.6	5325.0	5110.7	4823.4	4334.6	4257.4	3773.0	3189.9
17.5°	5578.0	5612.3	5642.3	5672.3	5603.7	5440.8	5179.3	4664.8	4583.3	3995.9	3305.6
20°	5672.3	5706.6	5728.0	5792.4	5805.2	5723.8	5518.0	4990.6	4904.9	4248.9	3438.5
22.5°	5826.7	5856.7	5861.0	5916.7	5942.4	5963.9	5835.2	5312.2	5243.6	4527.6	3588.6
25°	6083.9	6118.2	6105.3	6131.1	6135.4	6161.1	6148.2	5680.9	5612.3	4844.8	3768.7
27.5°	6414.0	6456.9	6448.3	6422.6	6384.0	6362.6	6418.3	6053.9	5989.6	5162.1	3953.0
30°	6769.9	6821.3	6808.5	6757.0	6654.1	6564.1	6641.3	6405.5	6345.4	5487.9	4158.8
32.5°	7130.0	7190.1	7185.8	7100.0	6924.2	6769.9	6885.7	6735.6	6692.7	5839.5	4381.8
35°	7365.9	7443.0	7434.5	7383.0	7155.8	7022.9	7164.3	7074.3	7044.3	6268.3	4703.3
37.5°	7747.4	7828.9	7756.0	7627.4	7365.9	7297.3	7468.8	7455.9	7434.5	6722.7	5042.1
40°	8673.5	8793.6	8600.6	8073.3	7644.5	7584.5	7828.9	7880.3	7858.9	7172.9	5346.5
42.5°	9642.5	9822.6	9522.4	8793.6	8150.5	7931.8	8223.3	8296.2	8270.5	7558.8	5620.9
45°	10229.9	10307.1	10006.9	9441.0	9046.5	8352.0	8643.5	8763.6	8742.1	8021.8	5972.4
47.5°	10710.1	10680.1	10337.1	9955.5	10028.4	8943.6	9119.4	9355.2	9338.1	8532.0	6358.3
50°	10813.0	10744.4	10607.2	10367.1	10560.0	9543.9	9621.1	10028.4	10011.2	9098.0	6748.5
52.5°	10088.4	9998.4	10371.4	10572.9	10508.6	9981.2	10174.1	10765.8	10757.2	9711.1	7121.5
55°	8279.1	8206.2	9209.5	10251.3	10452.8	10289.9	10787.2	11533.3	11580.4	10362.8	7460.2
57.5°	6512.7	6435.5	7421.6	9445.3	10247.0	10572.9	11503.3	12412.2	12472.2	11070.2	7781.7
60°	5192.1	5076.4	5830.9	8176.2	9861.2	10791.5	12193.5	13376.9	13385.4	11717.6	7979.0
62.5°	3528.6	3400.0	4236.0	6568.4	9213.7	10825.8	12725.2	14208.6	14242.9	12202.1	8013.3
65°	2143.7	2036.5	2602.5	4797.7	8257.6	10534.3	12733.8	14821.7	14851.8	12425.1	7807.5
67.5°	1243.4	1200.5	1487.7	2988.4	6671.3	9749.7	12197.8	14727.4	14783.2	12330.7	7340.1
70°	724.6	720.3	827.5	1479.2	4707.6	8193.3	11001.6	13934.2	14015.7	11837.7	6624.1
72.5°	531.6	540.2	583.1	793.2	2726.8	5899.5	9316.6	12339.3	12463.6	10873.0	5603.7
75°	420.2	424.5	463.0	540.2	1432.0	3335.6	6980.0	9904.0	10002.6	9153.7	4377.5
77.5°	313.0	321.6	351.6	381.6	664.6	1530.6	3927.3	6101.1	5938.1	5024.9	2113.7
80°	227.2	248.7	261.5	274.4	351.6	591.7	1179.1	2126.6	2109.4	2195.2	999.0
82.5°	145.8	162.9	175.8	184.4	210.1	283.0	351.6	475.9	514.5	853.2	398.7
85°	64.3	72.9	81.5	98.6	90.0	98.6	145.8	94.3	81.5	128.6	72.9
87.5°	0.0	0.0	12.9	21.4	17.1	8.6	25.7	17.1	12.9	12.9	12.9
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°	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4
2.5°	2731.1	2683.9	2585.3	2491.0	2435.3	2362.4	2298.1	2238.1	2233.8	2216.6	2186.6
5°	2765.4	2675.4	2491.0	2315.2	2182.3	2040.8	1920.8	1826.5	1792.2	1766.4	1732.1
7.5°	2799.7	2658.2	2383.8	2126.6	1916.5	1719.3	1577.8	1449.2	1410.6	1376.3	1354.8
10°	2812.6	2628.2	2259.5	1916.5	1642.1	1432.0	1282.0	1187.6	1153.3	1136.2	1123.3
12.5°	2851.2	2611.1	2143.7	1719.3	1402.0	1209.1	1101.9	1046.1	1033.3	1020.4	1007.6
15°	2902.6	2611.1	2028.0	1526.3	1213.4	1059.0	994.7	956.1	947.5	943.2	934.7
17.5°	2958.3	2611.1	1916.5	1363.4	1076.2	960.4	913.2	891.8	887.5	883.2	878.9
20°	3035.5	2615.3	1796.4	1221.9	977.5	887.5	848.9	823.2	818.9	814.6	814.6
22.5°	3112.7	2623.9	1680.7	1114.7	913.2	831.8	784.6	758.9	750.3	750.3	750.3
25°	3211.3	2649.6	1573.5	1024.7	857.5	780.3	720.3	698.9	694.6	694.6	690.3
27.5°	3327.1	2679.7	1479.2	956.1	801.8	720.3	660.3	638.8	630.3	630.3	626.0
30°	3451.4	2709.7	1402.0	904.7	746.0	660.3	604.5	578.8	570.2	574.5	570.2
32.5°	3588.6	2752.5	1342.0	870.4	694.6	608.8	557.4	527.4	523.1	523.1	518.8
35°	3820.1	2872.6	1333.4	853.2	651.7	570.2	518.8	488.8	484.5	484.5	480.2
37.5°	4068.8	3009.8	1372.0	844.6	617.4	535.9	488.8	458.8	454.5	454.5	454.5
40°	4278.9	3112.7	1414.9	844.6	596.0	505.9	463.0	437.3	437.3	437.3	437.3
42.5°	4420.4	3121.3	1406.3	844.6	578.8	484.5	445.9	420.2	420.2	424.5	420.2
45°	4630.5	3164.1	1372.0	831.8	565.9	467.3	428.7	407.3	403.0	407.3	407.3
47.5°	4879.1	3241.3	1337.7	780.3	561.7	450.2	415.9	390.2	385.9	390.2	385.9
50°	5114.9	3309.9	1320.5	711.7	553.1	433.0	398.7	373.0	368.7	373.0	368.7
52.5°	5312.2	3339.9	1290.5	664.6	531.6	415.9	381.6	355.9	347.3	351.6	351.6
55°	5470.8	3331.4	1247.7	626.0	493.1	398.7	360.1	338.7	325.8	325.8	321.6
57.5°	5616.6	3335.6	1209.1	587.4	450.2	373.0	343.0	317.3	300.1	295.8	291.5
60°	5672.3	3314.2	1140.5	535.9	407.3	351.6	321.6	291.5	274.4	270.1	265.8
62.5°	5595.1	3237.0	1050.4	445.9	368.7	325.8	300.1	270.1	253.0	248.7	244.4
65°	5376.5	3091.3	913.2	351.6	334.4	295.8	274.4	253.0	231.5	222.9	218.7
67.5°	5003.5	2881.2	741.7	283.0	295.8	270.1	257.2	231.5	205.8	197.2	192.9
70°	4471.8	2602.5	557.4	240.1	261.5	240.1	231.5	205.8	184.4	175.8	171.5
72.5°	3725.8	2152.3	390.2	205.8	227.2	210.1	201.5	184.4	162.9	150.1	150.1
75°	2816.9	1543.5	257.2	175.8	188.6	180.1	167.2	154.3	141.5	132.9	128.6
77.5°	1213.4	600.2	158.6	132.9	154.3	150.1	132.9	124.3	120.0	111.5	111.5
80°	523.1	244.4	98.6	98.6	111.5	107.2	102.9	94.3	94.3	90.0	85.7
82.5°	192.9	98.6	60.0	72.9	81.5	72.9	72.9	72.9	72.9	68.6	68.6
85°	47.2	30.0	30.0	42.9	47.2	42.9	47.2	42.9	42.9	42.9	38.6
87.5°	12.9	12.9	17.1	17.1	17.1	17.1	17.1	12.9	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)