

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: P841408

Luminaire Tested: **ARCH4-170-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20021 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

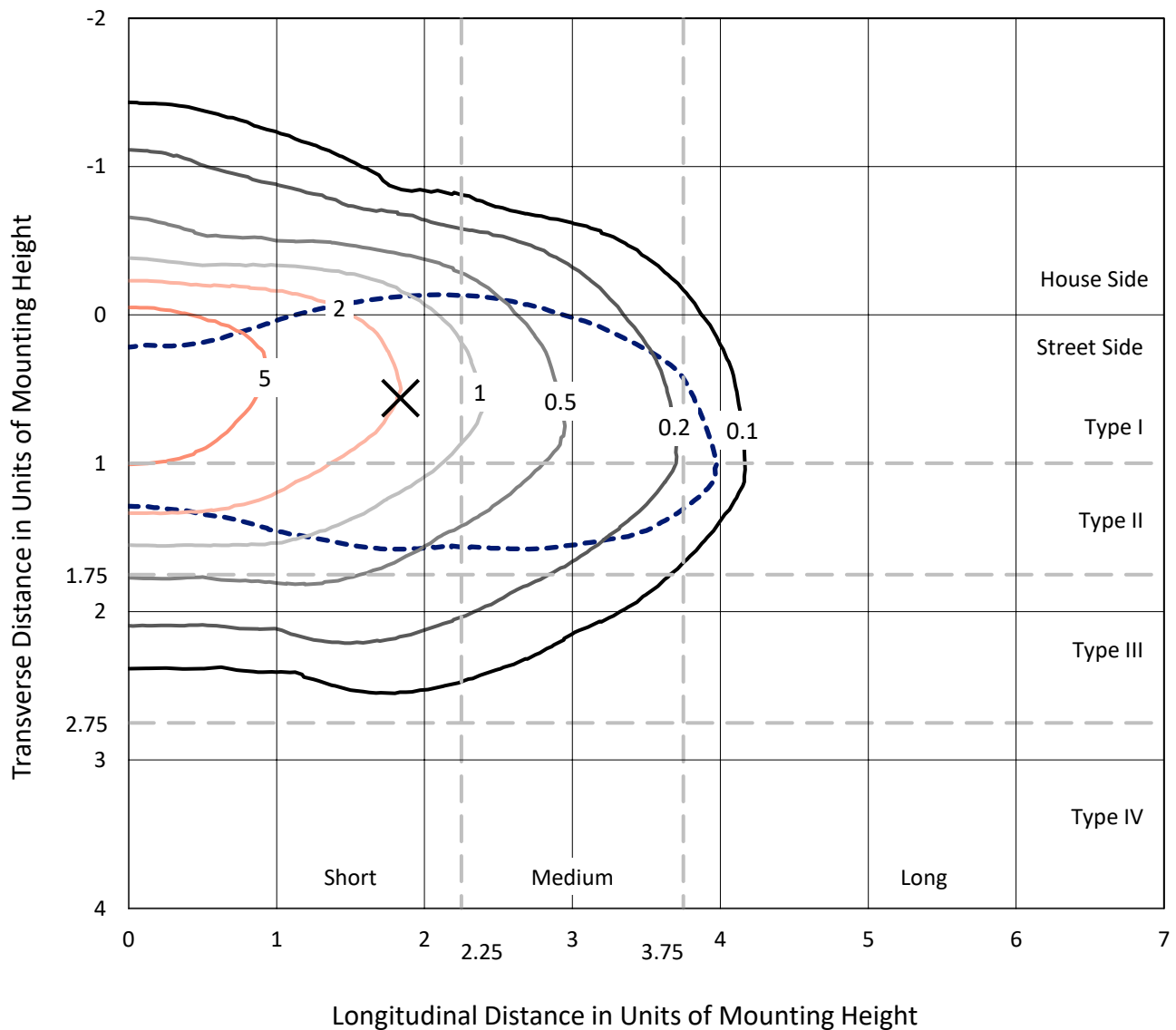
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

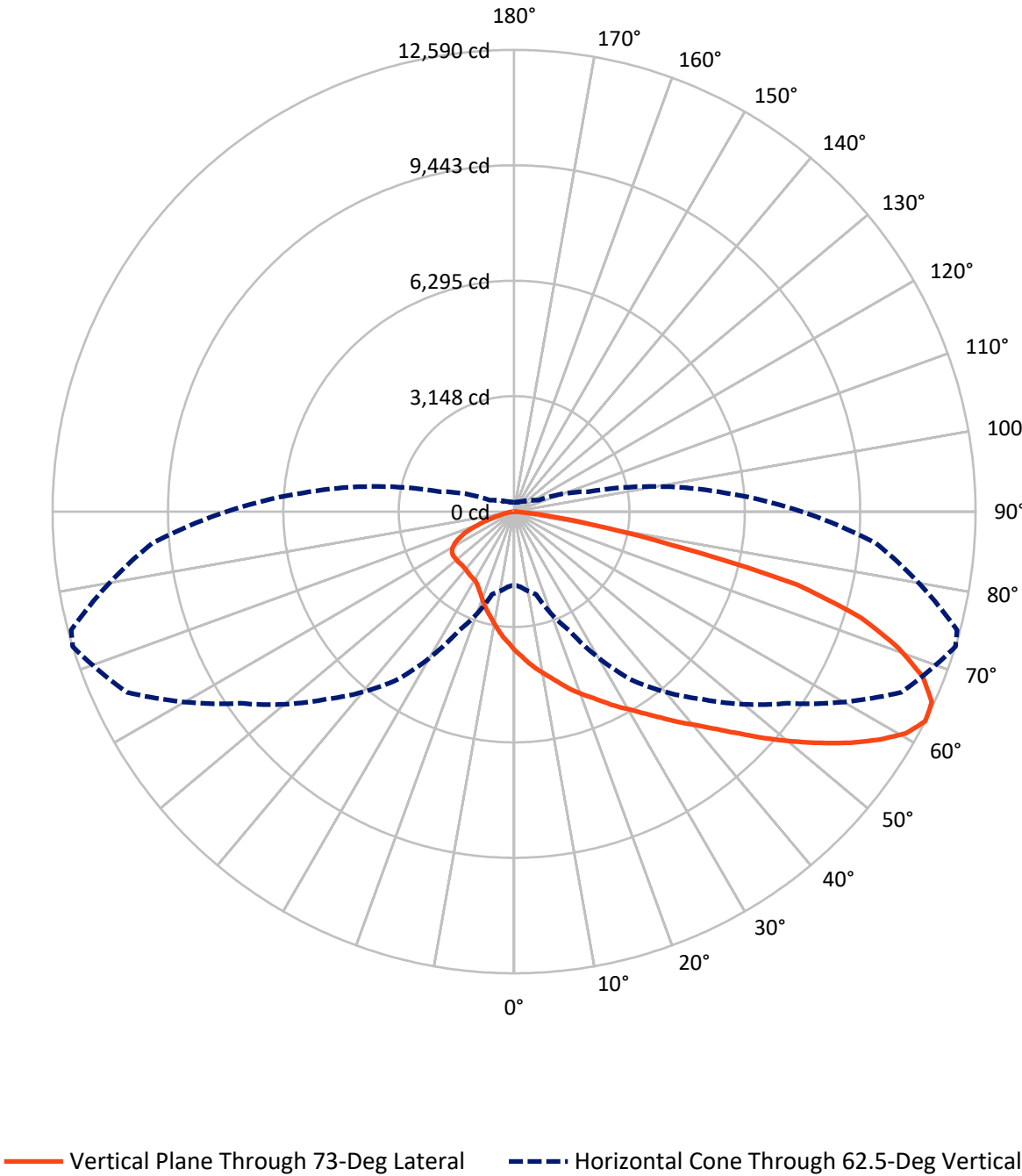
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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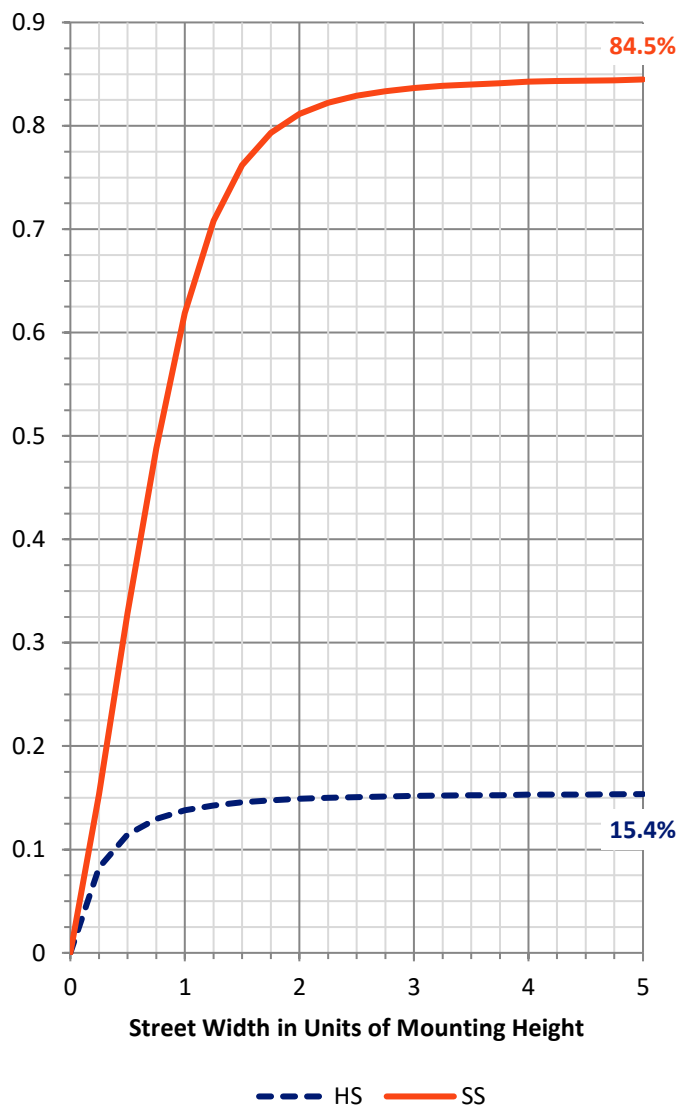
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3103.6	0.0	3103.6
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	16917.5	0.0	16917.5
	% Fixture	84.5	0.0	84.5
Total	Lumens	20021.0	0.0	20021.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.2	1.8
10°-20°	1105.1	5.5
20°-30°	1839.5	9.2
30°-40°	2775.6	13.9
40°-50°	3879.5	19.4
50°-60°	4285.1	21.4
60°-70°	3732.9	18.6
70°-80°	1885.7	9.4
80°-90°	151.4	0.8
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°	20021.0	100.0
0°-180°	20021.0	100.0

Coefficient of Utilization



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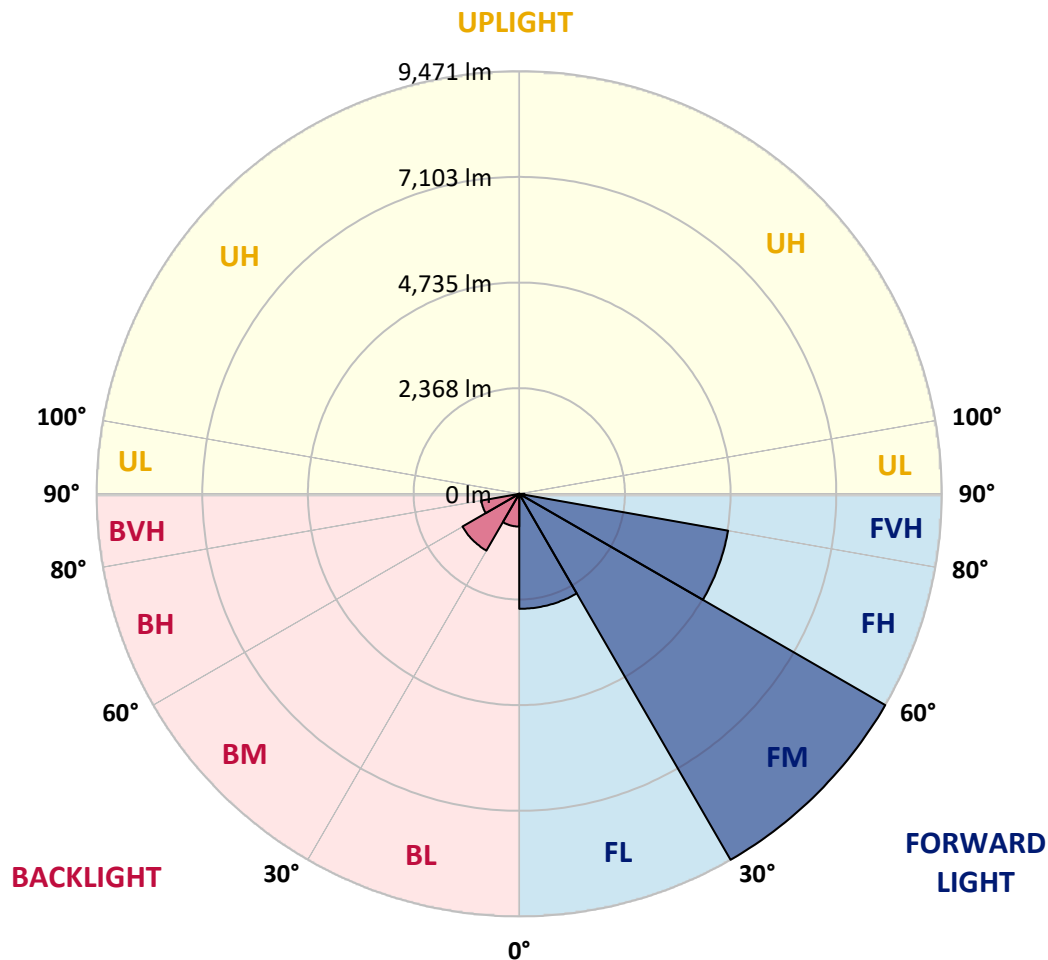
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2577.3	12.9			
FM	(30°-60°)	9470.7	47.3			
FH	(60°-80°)	4752.3	23.7			G2/5000
FVH	(80°-90°)	117.1	0.6			G2/225
BL	(0°-30°)	733.6	3.7	B2/1000		
BM	(30°-60°)	1469.5	7.3	B2/2500		
BH	(60°-80°)	866.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	34.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0
2.5°	4314.5	4362.5	4336.3	4353.8	4266.5	4209.8	4144.4	4017.9	3948.1	3939.3	3856.5
5°	4947.1	4999.4	4955.8	4942.7	4790.0	4659.2	4510.8	4288.3	4140.0	4113.8	3930.6
7.5°	5579.6	5627.6	5575.3	5536.0	5331.0	5099.8	4881.6	4554.5	4323.2	4279.6	3991.7
10°	6024.6	6068.2	6029.0	5989.7	5776.0	5540.4	5230.6	4803.1	4489.0	4419.2	4031.0
12.5°	6360.5	6386.7	6369.3	6334.4	6133.7	5880.7	5584.0	5082.3	4676.6	4589.4	4092.0
15°	6635.4	6679.0	6657.2	6631.0	6439.1	6186.0	5902.5	5374.6	4894.7	4785.7	4183.6
17.5°	6818.6	6849.1	6853.5	6853.5	6683.4	6434.7	6159.9	5640.7	5112.9	4973.3	4270.9
20°	6901.5	6936.4	6958.2	6993.1	6853.5	6639.7	6360.5	5867.6	5317.9	5160.8	4353.8
22.5°	6940.7	6971.3	7028.0	7106.5	6993.1	6814.2	6556.8	6077.0	5522.9	5357.2	4449.8
25°	6971.3	7010.5	7093.4	7241.8	7163.2	7010.5	6788.1	6316.9	5767.2	5597.1	4589.4
27.5°	7054.2	7102.2	7180.7	7359.5	7263.6	7189.4	7032.4	6574.3	6024.6	5850.1	4759.5
30°	7342.1	7381.4	7377.0	7490.4	7372.6	7350.8	7241.8	6823.0	6273.3	6098.8	4960.2
32.5°	7865.6	7904.9	7808.9	7765.3	7507.9	7512.2	7468.6	7089.1	6569.9	6391.1	5191.4
35°	8428.4	8472.0	8345.5	8271.3	7839.4	7712.9	7734.7	7420.6	6901.5	6722.6	5479.3
37.5°	8930.1	8982.4	8873.3	8764.3	8328.0	8035.7	8031.4	7791.4	7281.0	7097.8	5797.8
40°	9204.9	9266.0	9331.4	9270.3	8812.3	8489.4	8349.8	8171.0	7656.2	7468.6	6142.4
42.5°	9335.8	9505.9	9623.7	9584.4	9209.3	8882.1	8716.3	8568.0	8114.3	7931.0	6552.5
45°	8969.3	8973.7	9222.3	9436.1	9366.3	9148.2	9117.6	9012.9	8637.8	8463.3	7014.9
47.5°	8511.3	8476.4	8650.9	9030.4	9226.7	9283.4	9462.3	9505.9	9235.4	9060.9	7486.1
50°	7411.9	7433.7	8000.8	8546.2	8930.1	9296.5	9706.6	10012.0	9850.5	9684.8	7983.4
52.5°	6029.0	6081.3	6731.3	7931.0	8537.4	9165.6	9850.5	10518.0	10478.7	10321.7	8480.7
55°	4833.7	4916.5	5605.8	6905.8	8035.7	8873.3	9911.6	10980.4	11128.8	10984.8	8969.3
57.5°	3695.0	3782.3	4362.5	5697.4	7394.4	8397.8	9868.0	11386.1	11735.1	11643.5	9418.7
60°	2783.3	2870.5	3241.3	4619.9	6591.7	7865.6	9649.9	11652.3	12280.5	12184.5	9745.8
62.5°	1993.7	2063.5	2338.3	3594.7	5614.5	7233.0	9113.3	11656.6	12590.2	12511.7	9902.9
65°	1435.3	1435.3	1657.8	2565.2	4698.4	6474.0	8301.9	11120.0	12524.8	12502.9	9793.8
67.5°	1033.9	1042.6	1221.5	1793.0	3747.4	5553.5	7250.5	10164.6	12018.7	12127.8	9401.2
70°	732.9	754.7	837.6	1252.0	2831.3	4384.3	6125.0	8912.6	11106.9	11298.9	8642.1
72.5°	567.1	580.2	636.9	872.5	2067.8	3258.8	4881.6	7516.6	9889.8	10107.9	7608.2
75°	436.3	449.3	493.0	641.3	1483.3	2286.0	3468.2	5832.7	7974.7	8362.9	6111.9
77.5°	318.5	335.9	366.5	466.8	863.8	1452.7	2102.7	3280.6	4401.8	4585.0	3202.1
80°	148.3	170.1	213.8	301.0	466.8	684.9	746.0	1265.1	2115.8	2211.8	1736.3
82.5°	82.9	104.7	122.2	183.2	235.6	244.3	253.0	318.5	798.3	881.2	728.5
85°	39.3	52.4	56.7	78.5	78.5	69.8	82.9	61.1	130.9	157.1	152.7
87.5°	0.0	4.4	8.7	21.8	17.5	13.1	13.1	13.1	13.1	17.5	13.1
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°	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0	3791.0
2.5°	3817.2	3760.5	3629.6	3516.2	3442.0	3376.6	3289.3	3250.1	3180.3	3193.4	3154.1
5°	3839.0	3734.3	3503.1	3289.3	3132.3	2992.7	2840.0	2752.7	2656.8	2648.0	2617.5
7.5°	3852.1	3690.7	3359.1	3058.1	2818.2	2604.4	2399.4	2286.0	2168.2	2142.0	2115.8
10°	3839.0	3625.2	3210.8	2818.2	2499.7	2233.6	2002.4	1858.4	1736.3	1705.7	1679.6
12.5°	3852.1	3590.3	3071.2	2595.7	2216.2	1915.1	1653.4	1505.1	1391.6	1361.1	1343.7
15°	3882.6	3568.5	2953.4	2395.0	1963.1	1627.2	1369.8	1243.3	1151.7	1121.2	1112.4
17.5°	3908.8	3546.7	2826.9	2198.7	1710.1	1374.2	1151.7	1047.0	968.5	937.9	929.2
20°	3943.7	3516.2	2700.4	2011.1	1487.6	1173.5	977.2	885.6	824.5	802.7	798.3
22.5°	3974.2	3494.4	2582.6	1823.5	1282.6	1012.1	846.3	772.2	728.5	706.7	706.7
25°	4052.8	3503.1	2482.3	1649.0	1129.9	885.6	746.0	689.3	654.4	641.3	641.3
27.5°	4144.4	3538.0	2403.7	1500.7	999.0	789.6	676.2	628.2	610.8	593.3	597.7
30°	4275.3	3607.8	2351.4	1378.6	903.0	715.5	619.5	584.6	567.1	562.8	562.8
32.5°	4441.0	3721.2	2347.0	1300.0	833.2	658.7	580.2	549.7	541.0	536.6	536.6
35°	4637.3	3821.6	2320.9	1265.1	789.6	619.5	549.7	527.9	523.5	523.5	523.5
37.5°	4872.9	3987.3	2303.4	1217.1	767.8	597.7	527.9	510.4	510.4	510.4	510.4
40°	5117.2	4122.6	2277.2	1173.5	759.1	584.6	514.8	493.0	493.0	493.0	493.0
42.5°	5409.5	4318.9	2268.5	1151.7	746.0	575.9	497.3	471.2	475.5	475.5	479.9
45°	5762.9	4541.4	2264.1	1129.9	741.6	567.1	479.9	449.3	453.7	449.3	449.3
47.5°	6120.6	4798.8	2277.2	1116.8	737.3	558.4	466.8	427.5	427.5	423.2	423.2
50°	6495.8	5034.3	2286.0	1103.7	728.5	541.0	445.0	410.1	401.4	392.6	397.0
52.5°	6849.1	5252.5	2290.3	1081.9	702.4	514.8	427.5	388.3	375.2	362.1	366.5
55°	7202.5	5461.9	2299.0	1055.7	667.5	488.6	405.7	366.5	349.0	331.6	331.6
57.5°	7521.0	5645.1	2277.2	990.3	628.2	462.4	383.9	340.3	314.1	296.7	296.7
60°	7739.1	5776.0	2211.8	894.3	575.9	431.9	362.1	314.1	283.6	270.5	270.5
62.5°	7843.8	5797.8	2094.0	737.3	510.4	401.4	335.9	287.9	261.8	253.0	253.0
65°	7743.5	5701.8	1910.8	554.0	440.6	366.5	309.7	266.1	239.9	218.1	218.1
67.5°	7394.4	5431.3	1657.8	418.8	375.2	331.6	283.6	244.3	213.8	196.3	196.3
70°	6692.1	4868.6	1282.6	335.9	318.5	287.9	257.4	218.1	192.0	170.1	170.1
72.5°	5771.6	4126.9	903.0	270.5	270.5	244.3	218.1	192.0	165.8	148.3	148.3
75°	4427.9	3053.8	606.4	218.1	222.5	205.0	178.9	157.1	139.6	126.5	126.5
77.5°	2416.8	1509.4	370.8	161.4	165.8	157.1	139.6	126.5	117.8	104.7	104.7
80°	1173.5	663.1	213.8	113.4	117.8	113.4	104.7	91.6	91.6	82.9	82.9
82.5°	493.0	248.7	113.4	78.5	78.5	69.8	65.4	65.4	65.4	61.1	61.1
85°	122.2	48.0	48.0	43.6	43.6	43.6	39.3	39.3	39.3	30.5	34.9
87.5°	17.5	17.5	17.5	17.5	17.5	17.5	13.1	4.4	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)