

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: P841473

Luminaire Tested: **ARCH4-180-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841473
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: ARCH4-180-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1455mA 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: 20307 lumens
Efficiency: N/A
Efficacy: 112.8 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

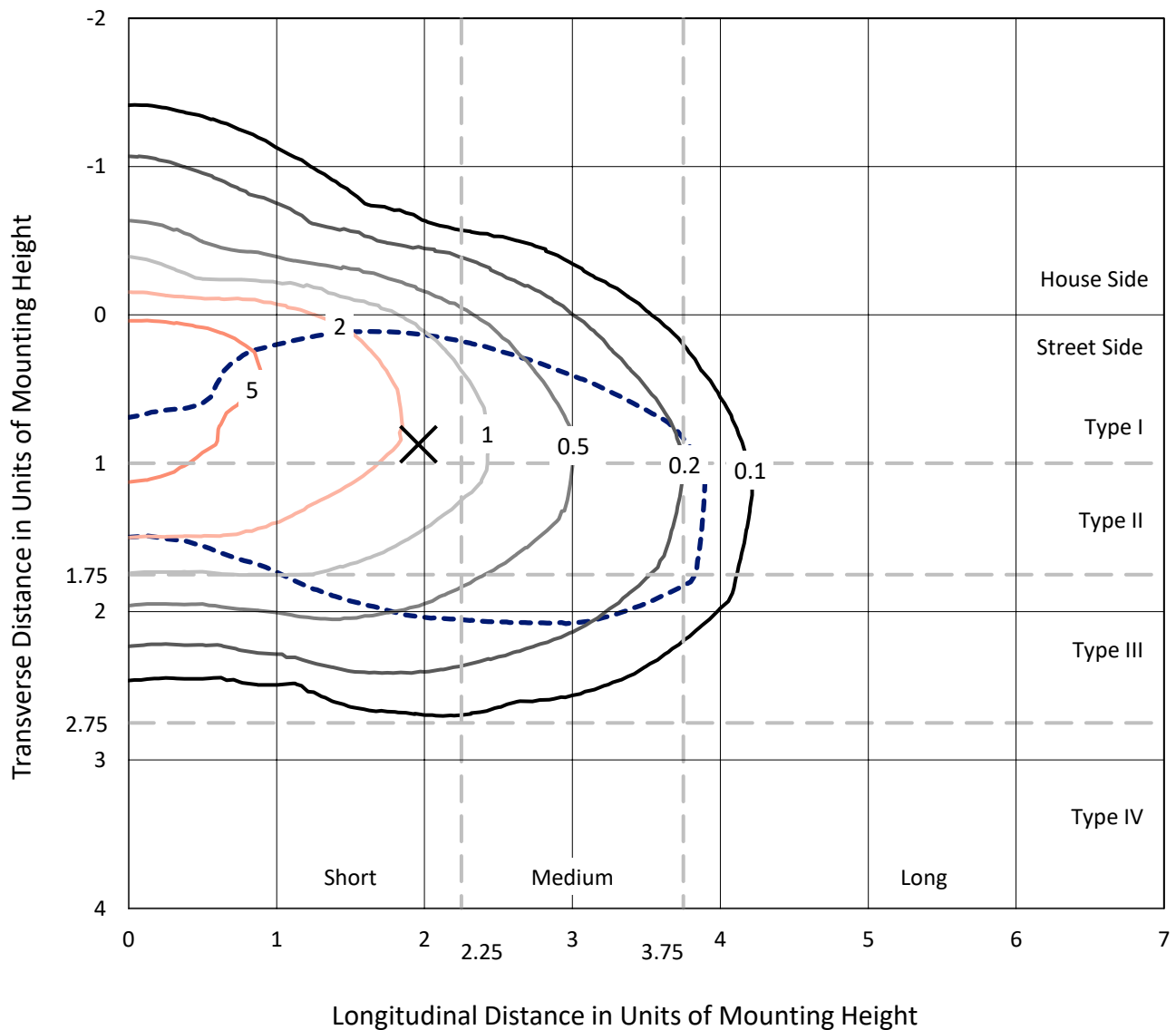
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

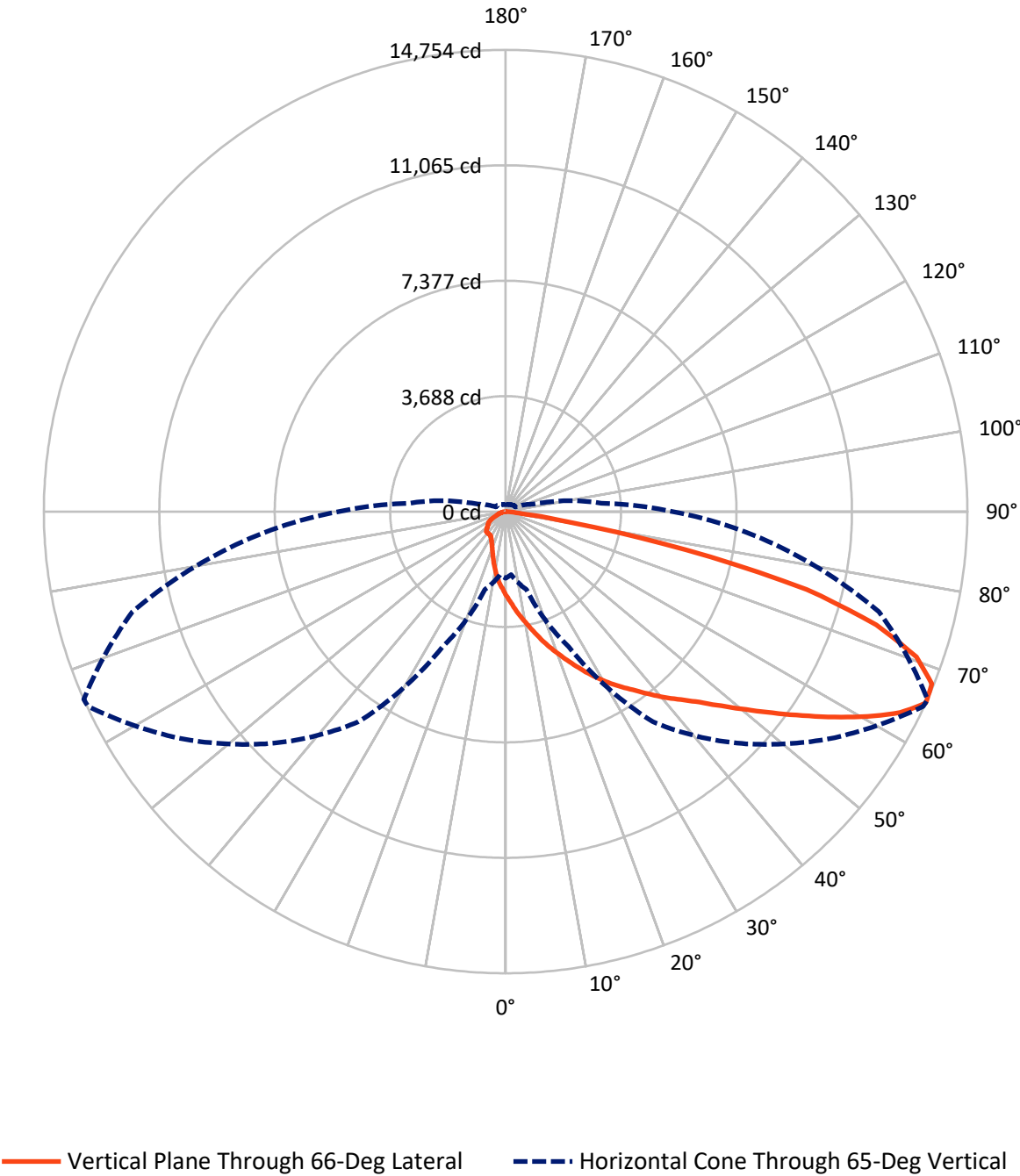
× Max cd
 - - - 1/2 Max cd



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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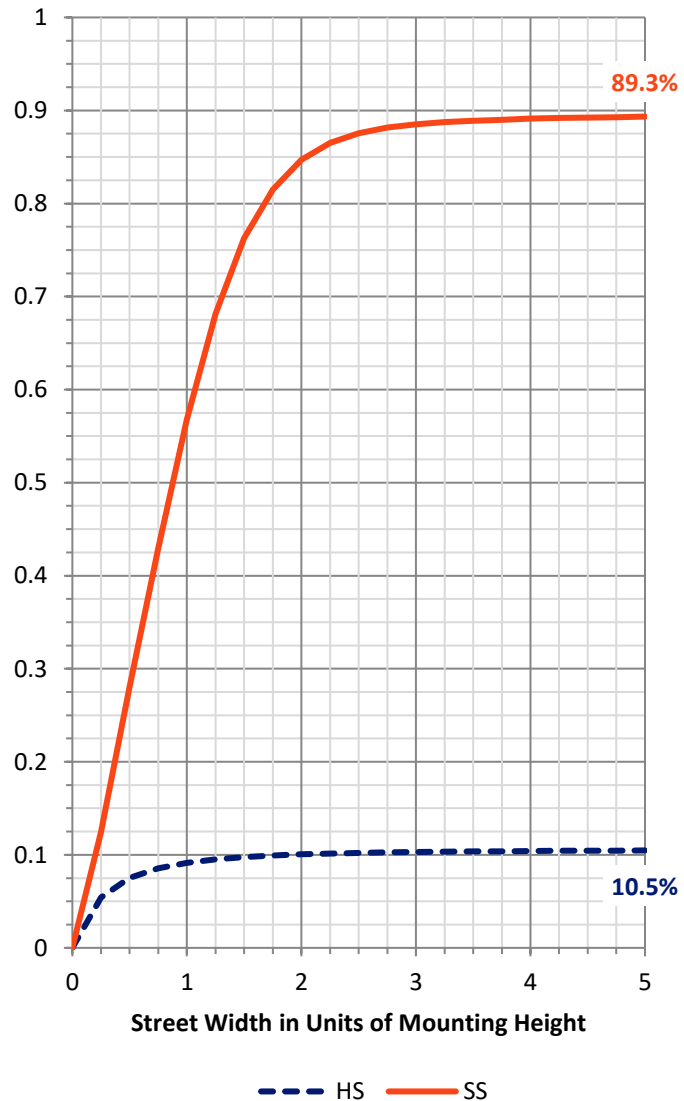
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2147.9	0.0	2147.9
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	18159.1	0.0	18159.1
	% Fixture	89.4	0.0	89.4
Total	Lumens	20307.0	0.0	20307.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.3	1.3
10°-20°	864.6	4.3
20°-30°	1564.2	7.7
30°-40°	2446.1	12.0
40°-50°	3710.7	18.3
50°-60°	4714.5	23.2
60°-70°	4405.2	21.7
70°-80°	2189.4	10.8
80°-90°	147.1	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°	20307.0	100.0
0°-180°	20307.0	100.0

Coefficient of Utilization



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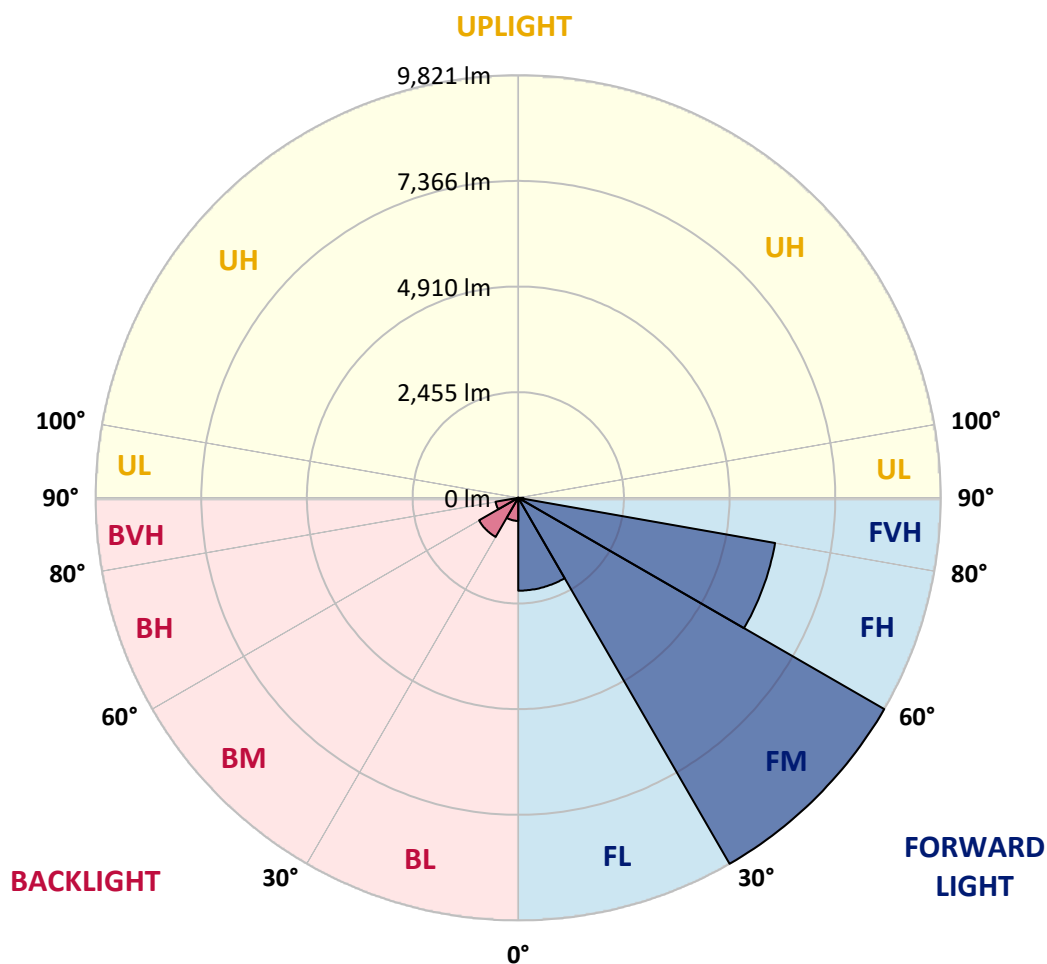
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2157.6	10.6			
FM	(30°-60°)	9820.7	48.4			
FH	(60°-80°)	6059.7	29.8			G3/7500
FVH	(80°-90°)	121.1	0.6			G2/225
BL	(0°-30°)	536.4	2.6	B2/1000		
BM	(30°-60°)	1050.6	5.2	B2/2500		
BH	(60°-80°)	534.9	2.6	B2/1000		G2/1000
BVH	(80°-90°)	26.0	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°	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5
2.5°	3139.0	3164.5	3177.3	3181.6	3083.6	3041.0	2998.4	2900.5	2879.2	2823.8	2751.4
5°	3692.7	3726.8	3718.2	3701.2	3581.9	3445.6	3334.9	3151.8	3122.0	2989.9	2828.1
7.5°	4237.8	4267.7	4259.1	4195.3	4063.2	3871.6	3688.4	3420.1	3377.5	3164.5	2904.7
10°	4693.6	4719.1	4714.9	4651.0	4493.4	4259.1	4037.7	3679.9	3628.8	3326.4	2968.6
12.5°	5068.4	5102.5	5098.2	5055.6	4915.1	4659.5	4408.2	3978.0	3914.2	3522.3	3058.1
15°	5362.3	5404.9	5404.9	5387.8	5289.9	5076.9	4791.5	4306.0	4229.3	3748.0	3168.8
17.5°	5541.1	5575.2	5605.0	5634.8	5566.7	5404.9	5145.0	4633.9	4553.0	3969.5	3283.8
20°	5634.8	5668.9	5690.2	5754.1	5766.9	5686.0	5481.5	4957.6	4872.5	4220.8	3415.8
22.5°	5788.2	5818.0	5822.3	5877.6	5903.2	5924.5	5796.7	5277.1	5208.9	4497.7	3564.9
25°	6043.7	6077.8	6065.0	6090.6	6094.8	6120.4	6107.6	5643.4	5575.2	4812.8	3743.8
27.5°	6371.7	6414.3	6405.8	6380.2	6341.9	6320.6	6375.9	6013.9	5950.0	5128.0	3926.9
30°	6725.2	6776.3	6763.5	6712.4	6610.2	6520.7	6597.4	6363.2	6303.5	5451.7	4131.4
32.5°	7083.0	7142.6	7138.3	7053.1	6878.5	6725.2	6840.2	6691.1	6648.5	5801.0	4352.8
35°	7317.2	7393.9	7385.4	7334.2	7108.5	6976.5	7117.0	7027.6	6997.8	6226.9	4672.3
37.5°	7696.3	7777.2	7704.8	7577.0	7317.2	7249.1	7419.4	7406.7	7385.4	6678.3	5008.8
40°	8616.2	8735.5	8543.8	8020.0	7594.1	7534.4	7777.2	7828.3	7807.0	7125.5	5311.2
42.5°	9578.8	9757.7	9459.6	8735.5	8096.6	7879.4	8169.0	8241.4	8215.9	7508.9	5583.7
45°	10162.3	10239.0	9940.8	9378.6	8986.8	8296.8	8586.4	8705.7	8684.4	7968.9	5933.0
47.5°	10639.3	10609.5	10268.8	9889.7	9962.1	8884.6	9059.2	9293.5	9276.4	8475.7	6316.3
50°	10741.6	10673.4	10537.1	10298.6	10490.3	9480.9	9557.5	9962.1	9945.1	9037.9	6703.9
52.5°	10021.8	9932.3	10302.9	10503.0	10439.2	9915.3	10106.9	10694.7	10686.2	9647.0	7074.4
55°	8224.4	8152.0	9148.6	10183.6	10383.8	10221.9	10716.0	11457.1	11503.9	10294.4	7410.9
57.5°	6469.6	6393.0	7372.6	9382.9	10179.4	10503.0	11427.3	12330.2	12389.9	10997.1	7730.3
60°	5157.8	5042.8	5792.4	8122.2	9796.0	10720.3	12113.0	13288.5	13297.0	11640.2	7926.3
62.5°	3505.3	3377.5	4208.0	6525.0	9152.9	10754.3	12641.1	14114.8	14148.9	12121.5	7960.3
65°	2129.6	2023.1	2585.3	4766.0	8203.1	10464.7	12649.7	14723.9	14753.7	12343.0	7755.9
67.5°	1235.2	1192.6	1477.9	2968.6	6627.2	9685.3	12117.3	14630.2	14685.5	12249.3	7291.7
70°	719.8	715.5	822.0	1469.4	4676.5	8139.2	10929.0	13842.2	13923.1	11759.5	6580.4
72.5°	528.1	536.7	579.2	787.9	2708.8	5860.6	9255.1	12257.8	12381.3	10801.2	5566.7
75°	417.4	421.7	460.0	536.7	1422.6	3313.6	6933.9	9838.6	9936.6	9093.3	4348.6
77.5°	310.9	319.4	349.2	379.1	660.2	1520.5	3901.4	6060.8	5898.9	4991.7	2099.8
80°	225.7	247.0	259.8	272.6	349.2	587.8	1171.3	2112.5	2095.5	2180.7	992.4
82.5°	144.8	161.8	174.6	183.1	208.7	281.1	349.2	472.8	511.1	847.6	396.1
85°	63.9	72.4	80.9	98.0	89.4	98.0	144.8	93.7	80.9	127.8	72.4
87.5°	0.0	0.0	12.8	21.3	17.0	8.5	25.6	17.0	12.8	12.8	12.8
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°	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5	2687.5
2.5°	2713.1	2666.2	2568.3	2474.6	2419.2	2346.8	2282.9	2223.3	2219.0	2202.0	2172.2
5°	2747.1	2657.7	2474.6	2299.9	2167.9	2027.4	1908.1	1814.4	1780.3	1754.8	1720.7
7.5°	2781.2	2640.7	2368.1	2112.5	1903.8	1707.9	1567.4	1439.6	1401.3	1367.2	1345.9
10°	2794.0	2610.9	2244.6	1903.8	1631.3	1422.6	1273.5	1179.8	1145.7	1128.7	1115.9
12.5°	2832.3	2593.8	2129.6	1707.9	1392.7	1201.1	1094.6	1039.2	1026.5	1013.7	1000.9
15°	2883.4	2593.8	2014.6	1516.3	1205.3	1052.0	988.1	949.8	941.3	937.0	928.5
17.5°	2938.8	2593.8	1903.8	1354.4	1069.0	954.0	907.2	885.9	881.6	877.4	873.1
20°	3015.5	2598.1	1784.6	1213.9	971.1	881.6	843.3	817.8	813.5	809.2	809.2
22.5°	3092.1	2606.6	1669.6	1107.4	907.2	826.3	779.4	753.9	745.4	745.4	745.4
25°	3190.1	2632.2	1563.1	1017.9	851.8	775.2	715.5	694.2	690.0	690.0	685.7
27.5°	3305.1	2662.0	1469.4	949.8	796.5	715.5	655.9	634.6	626.1	626.1	621.8
30°	3428.6	2691.8	1392.7	898.7	741.1	655.9	600.5	575.0	566.5	570.7	566.5
32.5°	3564.9	2734.4	1333.1	864.6	690.0	604.8	553.7	523.9	519.6	519.6	515.4
35°	3794.9	2853.6	1324.6	847.6	647.4	566.5	515.4	485.5	481.3	481.3	477.0
37.5°	4041.9	2989.9	1362.9	839.1	613.3	532.4	485.5	455.7	451.5	451.5	451.5
40°	4250.6	3092.1	1405.5	839.1	592.0	502.6	460.0	434.4	434.4	434.4	434.4
42.5°	4391.2	3100.7	1397.0	839.1	575.0	481.3	443.0	417.4	417.4	421.7	417.4
45°	4599.9	3143.2	1362.9	826.3	562.2	464.2	425.9	404.6	400.4	404.6	404.6
47.5°	4846.9	3219.9	1328.9	775.2	557.9	447.2	413.1	387.6	383.3	387.6	383.3
50°	5081.2	3288.1	1311.8	707.0	549.4	430.2	396.1	370.5	366.3	370.5	366.3
52.5°	5277.1	3317.9	1282.0	660.2	528.1	413.1	379.1	353.5	345.0	349.2	349.2
55°	5434.7	3309.4	1239.4	621.8	489.8	396.1	357.8	336.5	323.7	323.7	319.4
57.5°	5579.5	3313.6	1201.1	583.5	447.2	370.5	340.7	315.2	298.1	293.9	289.6
60°	5634.8	3292.3	1132.9	532.4	404.6	349.2	319.4	289.6	272.6	268.3	264.1
62.5°	5558.2	3215.7	1043.5	443.0	366.3	323.7	298.1	268.3	251.3	247.0	242.8
65°	5341.0	3070.8	907.2	349.2	332.2	293.9	272.6	251.3	230.0	221.5	217.2
67.5°	4970.4	2862.1	736.8	281.1	293.9	268.3	255.5	230.0	204.4	195.9	191.7
70°	4442.3	2585.3	553.7	238.5	259.8	238.5	230.0	204.4	183.1	174.6	170.4
72.5°	3701.2	2138.1	387.6	204.4	225.7	208.7	200.2	183.1	161.8	149.1	149.1
75°	2798.3	1533.3	255.5	174.6	187.4	178.9	166.1	153.3	140.6	132.0	127.8
77.5°	1205.3	596.3	157.6	132.0	153.3	149.1	132.0	123.5	119.3	110.7	110.7
80°	519.6	242.8	98.0	98.0	110.7	106.5	102.2	93.7	93.7	89.4	85.2
82.5°	191.7	98.0	59.6	72.4	80.9	72.4	72.4	72.4	72.4	68.1	68.1
85°	46.9	29.8	29.8	42.6	46.9	42.6	46.9	42.6	42.6	42.6	38.3
87.5°	12.8	12.8	17.0	17.0	17.0	17.0	17.0	12.8	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)