

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: P841484

Luminaire Tested: **ARCH4-180-750-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841484
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: ARCH4-180-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA 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: 20714 lumens
Efficiency: N/A
Efficacy: 115.1 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

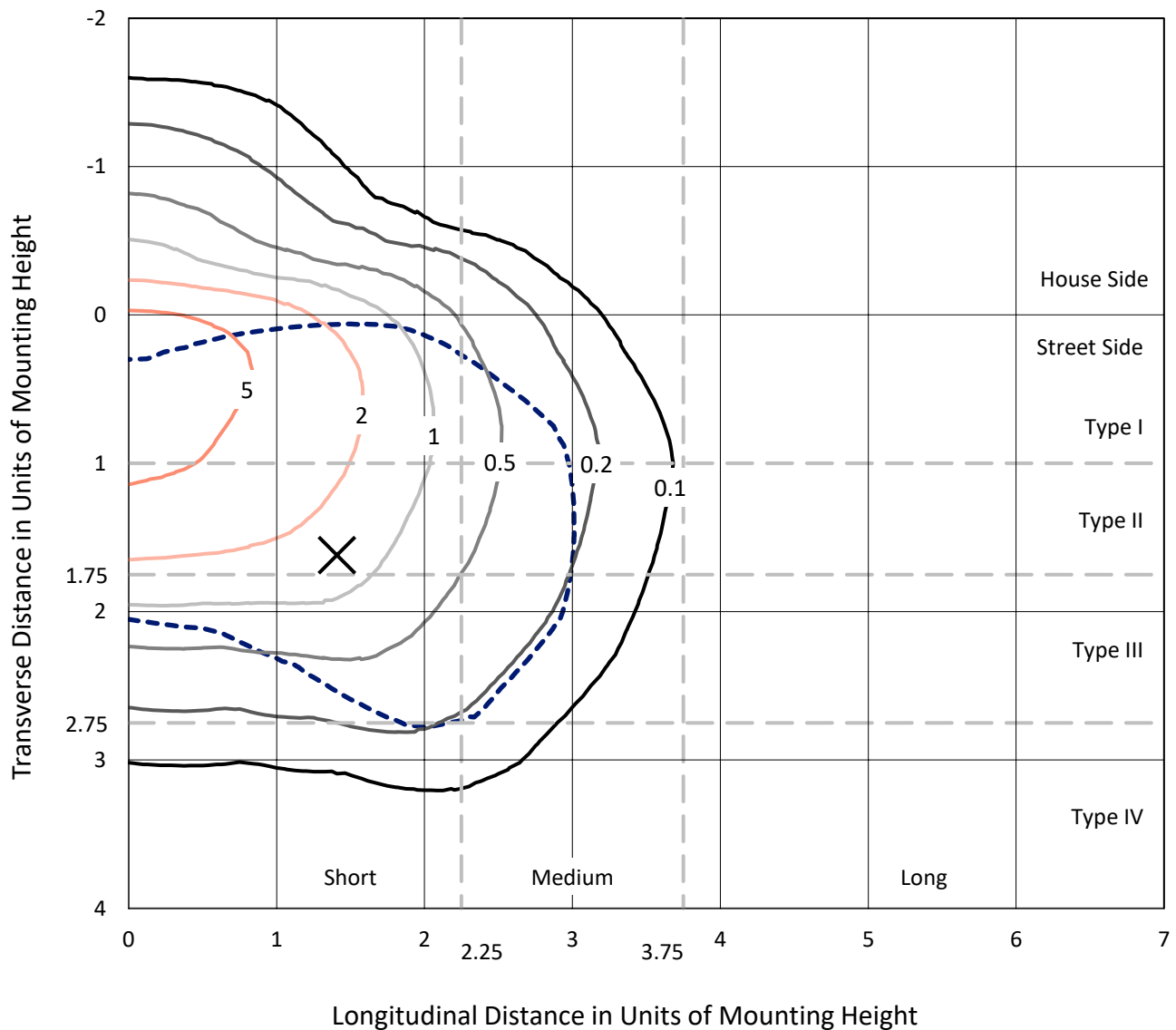


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Iso-Footcandle Lines of Horizontal Illumination

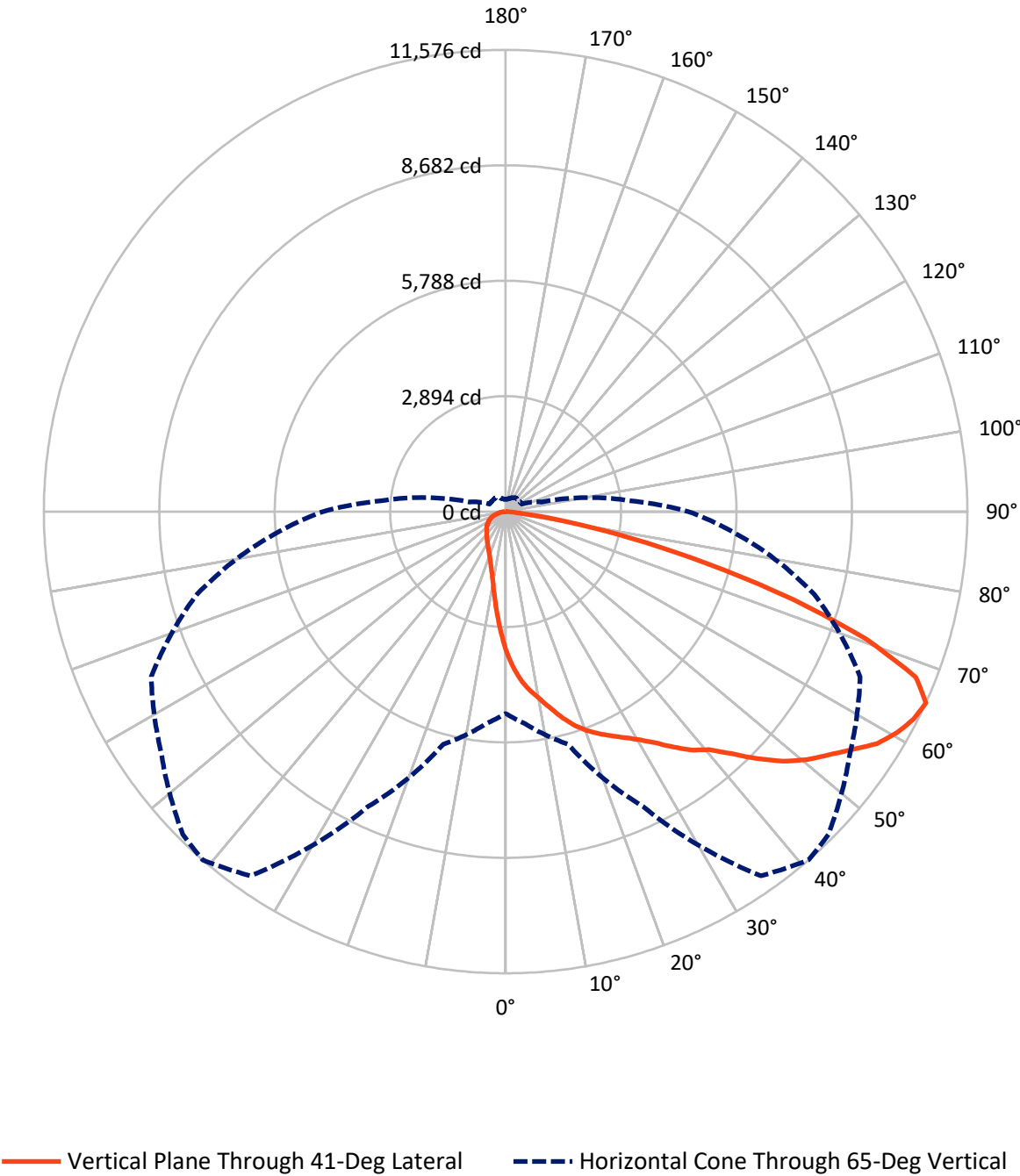
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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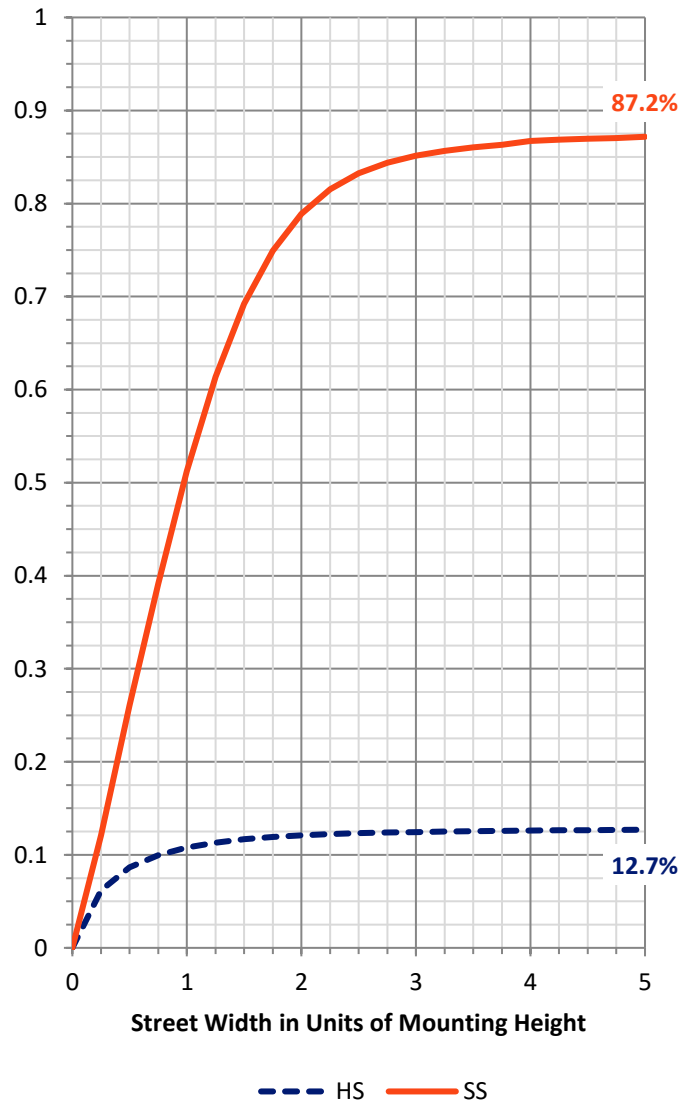
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2659.4	0.0	2659.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	18054.6	0.0	18054.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	20714.0	0.0	20714.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.9	1.6
10°-20°	986.1	4.8
20°-30°	1696.5	8.2
30°-40°	2573.0	12.4
40°-50°	3769.5	18.2
50°-60°	4760.0	23.0
60°-70°	4463.4	21.5
70°-80°	1989.3	9.6
80°-90°	147.4	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°	20714.0	100.0
0°-180°	20714.0	100.0

Coefficient of Utilization



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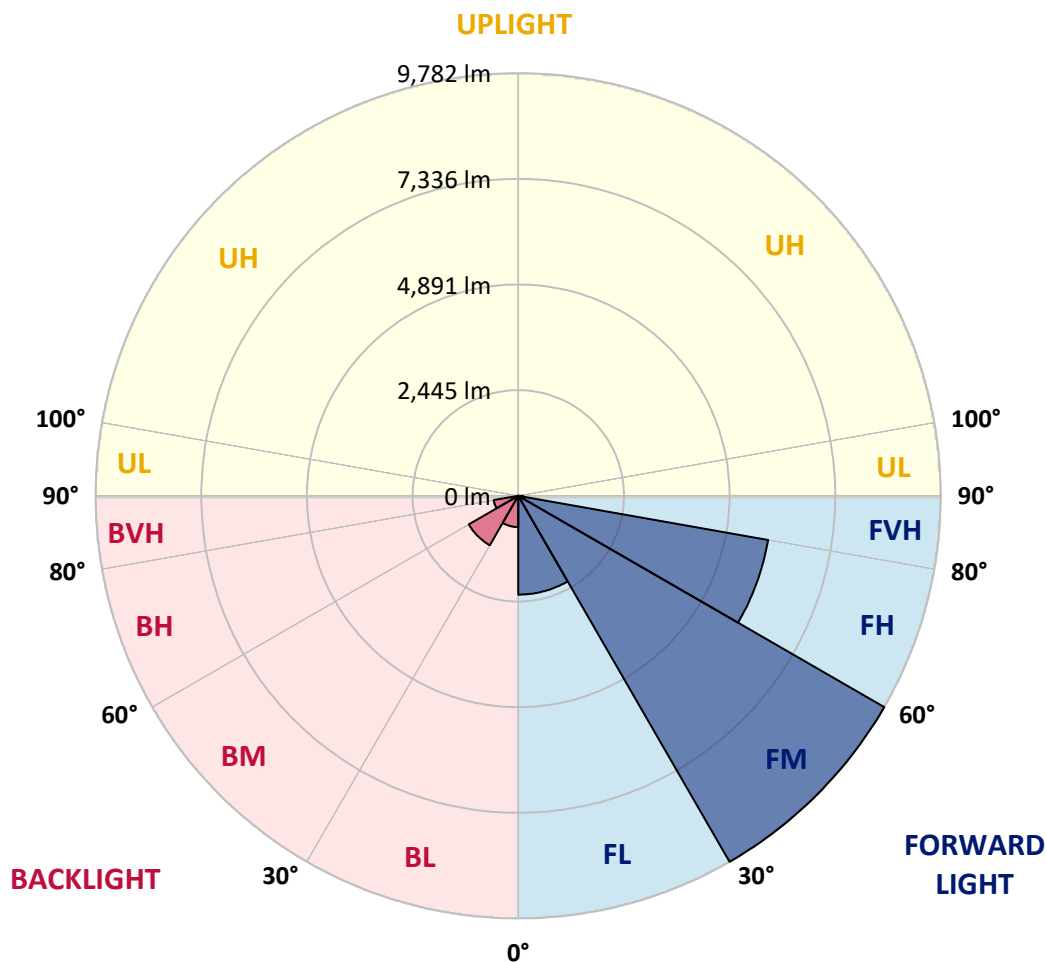
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2287.6	11.0			
FM	(30°-60°)	9782.0	47.2			
FH	(60°-80°)	5875.0	28.4			G3/7500
FVH	(80°-90°)	110.1	0.5			G2/225
BL	(0°-30°)	723.8	3.5	B2/1000		
BM	(30°-60°)	1320.5	6.4	B2/2500		
BH	(60°-80°)	577.7	2.8	B2/1000		G2/1000
BVH	(80°-90°)	37.3	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6
2.5°	4071.2	4058.1	4049.4	4001.3	4001.3	3935.8	3940.2	3879.0	3804.8	3686.8	3560.1
5°	4455.6	4438.2	4416.3	4368.3	4350.8	4285.3	4276.5	4189.2	4062.5	3857.2	3630.0
7.5°	4792.0	4774.5	4743.9	4674.0	4626.0	4547.4	4525.5	4411.9	4272.2	4018.8	3699.9
10°	5097.8	5084.7	5045.3	4958.0	4892.5	4796.4	4757.0	4604.2	4429.4	4149.9	3756.7
12.5°	5407.9	5390.4	5338.0	5263.8	5185.1	5071.6	5023.5	4826.9	4604.2	4294.0	3839.7
15°	5696.2	5670.0	5630.7	5552.1	5482.2	5373.0	5320.5	5089.0	4818.2	4455.6	3948.9
17.5°	5884.1	5862.2	5827.3	5783.6	5726.8	5643.8	5591.4	5364.2	5032.2	4612.9	4062.5
20°	5997.6	5988.9	5975.8	5949.6	5923.4	5866.6	5827.3	5613.2	5263.8	4765.8	4171.7
22.5°	6085.0	6076.3	6071.9	6071.9	6076.3	6054.4	6028.2	5844.7	5486.5	4927.4	4272.2
25°	6220.4	6216.0	6207.3	6198.6	6229.1	6233.5	6224.8	6098.1	5766.1	5141.4	4398.8
27.5°	6408.2	6395.1	6377.7	6368.9	6399.5	6421.3	6438.8	6351.5	6063.2	5359.9	4543.0
30°	6696.5	6657.2	6613.6	6583.0	6604.8	6639.8	6679.1	6626.7	6368.9	5630.7	4691.5
32.5°	7037.3	6989.2	6888.8	6832.0	6888.8	6915.0	6945.5	6919.3	6687.8	5923.4	4840.0
35°	7452.3	7395.5	7290.6	7207.6	7308.1	7251.3	7238.2	7212.0	6989.2	6211.7	5006.0
37.5°	8142.4	8059.4	7893.5	7710.0	7710.0	7587.7	7539.6	7461.0	7260.1	6469.4	5167.7
40°	8941.8	8832.6	8618.6	8347.8	8098.8	7845.4	7814.8	7758.0	7578.9	6766.4	5351.1
42.5°	9819.9	9610.2	9313.1	8985.5	8583.6	8295.3	8225.4	8063.8	7889.1	7067.9	5534.6
45°	10794.0	10357.2	9924.7	9758.7	9094.7	8832.6	8701.6	8408.9	8212.3	7382.4	5726.8
47.5°	10951.2	10610.5	10322.2	10296.0	9570.9	9352.5	9203.9	8784.6	8561.8	7718.7	5927.7
50°	10863.9	10658.6	10689.1	10584.3	9920.3	9776.2	9662.6	9186.5	8906.9	8042.0	6111.2
52.5°	10496.9	10610.5	10785.2	10593.0	10252.3	10134.4	10077.6	9618.9	9230.1	8339.0	6277.2
55°	10060.1	10138.7	10514.4	10750.3	10636.7	10531.9	10479.5	10121.3	9549.0	8588.0	6430.1
57.5°	9422.3	9387.4	9802.4	10724.1	11038.6	10977.4	10920.7	10614.9	9846.1	8767.1	6526.2
60°	8465.7	8391.4	8915.6	10199.9	11169.7	11265.8	11239.5	10942.5	10073.2	8762.7	6486.9
62.5°	6810.1	6993.6	7718.7	9343.7	11226.4	11471.1	11423.0	10968.7	10147.5	8509.4	6237.9
65°	5062.8	5324.9	6036.9	8164.3	11147.8	11575.9	11444.9	10540.6	9802.4	8007.0	5691.8
67.5°	3647.5	3879.0	4398.8	6718.4	10392.1	11095.4	10942.5	9841.7	9007.4	7295.0	4936.1
70°	2494.3	2660.3	3014.1	4892.5	8871.9	9592.7	9496.6	8797.7	7753.7	6447.6	4010.1
72.5°	1760.4	1830.3	2057.5	3228.1	6740.2	7526.5	7412.9	7238.2	6229.1	5359.9	3118.9
75°	1319.2	1362.9	1485.2	2088.0	4547.4	5215.7	5110.9	5211.3	4652.2	4058.1	2271.5
77.5°	498.0	541.7	843.1	1332.3	2690.9	3201.9	3097.1	3158.3	2586.0	2048.7	1131.4
80°	135.4	144.2	279.6	633.4	1223.1	1594.4	1450.3	1245.0	961.0	943.5	598.5
82.5°	56.8	65.5	126.7	340.7	436.8	436.8	366.9	454.3	366.9	441.2	288.3
85°	21.8	26.2	30.6	87.4	56.8	61.2	65.5	87.4	74.3	91.7	65.5
87.5°	0.0	0.0	0.0	4.4	4.4	8.7	4.4	8.7	13.1	13.1	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°	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6	3529.6
2.5°	3507.7	3459.7	3389.8	3276.2	3158.3	3092.7	3009.7	2996.6	2909.3	2900.5	2865.6
5°	3529.6	3429.1	3250.0	3031.6	2817.5	2651.5	2529.2	2463.7	2337.0	2337.0	2302.1
7.5°	3547.0	3389.8	3101.5	2778.2	2485.5	2262.8	2096.8	2026.9	1913.3	1904.6	1878.4
10°	3551.4	3341.7	2939.8	2520.5	2162.3	1935.1	1773.5	1694.9	1594.4	1585.7	1568.2
12.5°	3586.3	3315.5	2795.7	2297.7	1930.8	1686.1	1528.9	1463.4	1384.7	1376.0	1358.5
15°	3643.1	3315.5	2673.4	2109.9	1725.5	1498.3	1362.9	1301.7	1245.0	1236.2	1227.5
17.5°	3699.9	3306.8	2551.1	1935.1	1555.1	1349.8	1231.9	1183.8	1140.1	1135.7	1127.0
20°	3752.3	3302.4	2428.8	1786.6	1424.1	1227.5	1135.7	1092.1	1057.1	1057.1	1052.8
22.5°	3804.8	3293.7	2310.8	1646.8	1310.5	1135.7	1057.1	1009.1	982.9	982.9	978.5
25°	3883.4	3293.7	2201.6	1528.9	1218.7	1065.9	987.2	952.3	930.4	926.1	926.1
27.5°	3975.1	3319.9	2105.5	1424.1	1140.1	996.0	934.8	899.9	873.7	864.9	869.3
30°	4075.6	3341.7	2018.1	1332.3	1065.9	943.5	878.0	843.1	816.9	808.1	812.5
32.5°	4176.1	3367.9	1939.5	1249.3	991.6	895.5	830.0	790.7	764.4	760.1	760.1
35°	4285.3	3394.1	1860.9	1179.4	930.4	847.4	786.3	742.6	725.1	716.4	720.8
37.5°	4394.5	3437.8	1786.6	1113.9	886.8	803.8	747.0	703.3	690.2	685.8	685.8
40°	4525.5	3503.3	1756.0	1070.2	847.4	764.4	716.4	672.7	659.6	659.6	659.6
42.5°	4634.7	3555.8	1729.8	1022.2	816.9	729.5	685.8	650.9	642.1	637.8	642.1
45°	4743.9	3603.8	1694.9	978.5	777.6	694.6	659.6	624.7	615.9	615.9	615.9
47.5°	4853.1	3630.0	1646.8	934.8	742.6	664.0	633.4	602.8	594.1	594.1	594.1
50°	4940.5	3651.9	1576.9	886.8	703.3	637.8	607.2	576.6	567.9	567.9	567.9
52.5°	5027.9	3656.2	1502.7	830.0	664.0	607.2	581.0	550.4	541.7	537.3	537.3
55°	5106.5	3651.9	1415.3	764.4	620.3	572.2	550.4	524.2	506.7	489.2	498.0
57.5°	5163.3	3647.5	1314.8	698.9	576.6	537.3	528.6	493.6	458.7	415.0	423.7
60°	5141.4	3599.4	1205.6	615.9	528.6	502.4	502.4	454.3	393.1	371.3	375.7
62.5°	5001.7	3464.0	1092.1	528.6	480.5	467.4	463.0	410.6	362.6	340.7	345.1
65°	4582.3	3123.3	926.1	449.9	432.5	428.1	428.1	380.0	336.4	310.1	314.5
67.5°	3944.5	2621.0	755.7	380.0	384.4	393.1	393.1	349.5	305.8	279.6	283.9
70°	3162.6	2048.7	602.8	327.6	332.0	345.1	353.8	314.5	275.2	249.0	249.0
72.5°	2380.7	1555.1	484.9	275.2	297.0	297.0	310.1	279.6	240.3	214.0	218.4
75°	1725.5	1113.9	384.4	231.5	257.7	253.4	253.4	235.9	205.3	187.8	187.8
77.5°	816.9	585.3	305.8	166.0	200.9	196.6	200.9	187.8	174.7	157.3	161.6
80°	401.9	288.3	196.6	117.9	139.8	144.2	157.3	148.5	144.2	131.0	131.0
82.5°	192.2	113.6	91.7	83.0	96.1	100.5	109.2	109.2	113.6	104.8	104.8
85°	52.4	30.6	39.3	52.4	61.2	65.5	74.3	78.6	78.6	74.3	78.6
87.5°	13.1	13.1	17.5	26.2	30.6	34.9	39.3	39.3	17.5	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)