

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: P836321

Luminaire Tested: **ARCH3-170-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836321
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15199 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 170.6
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



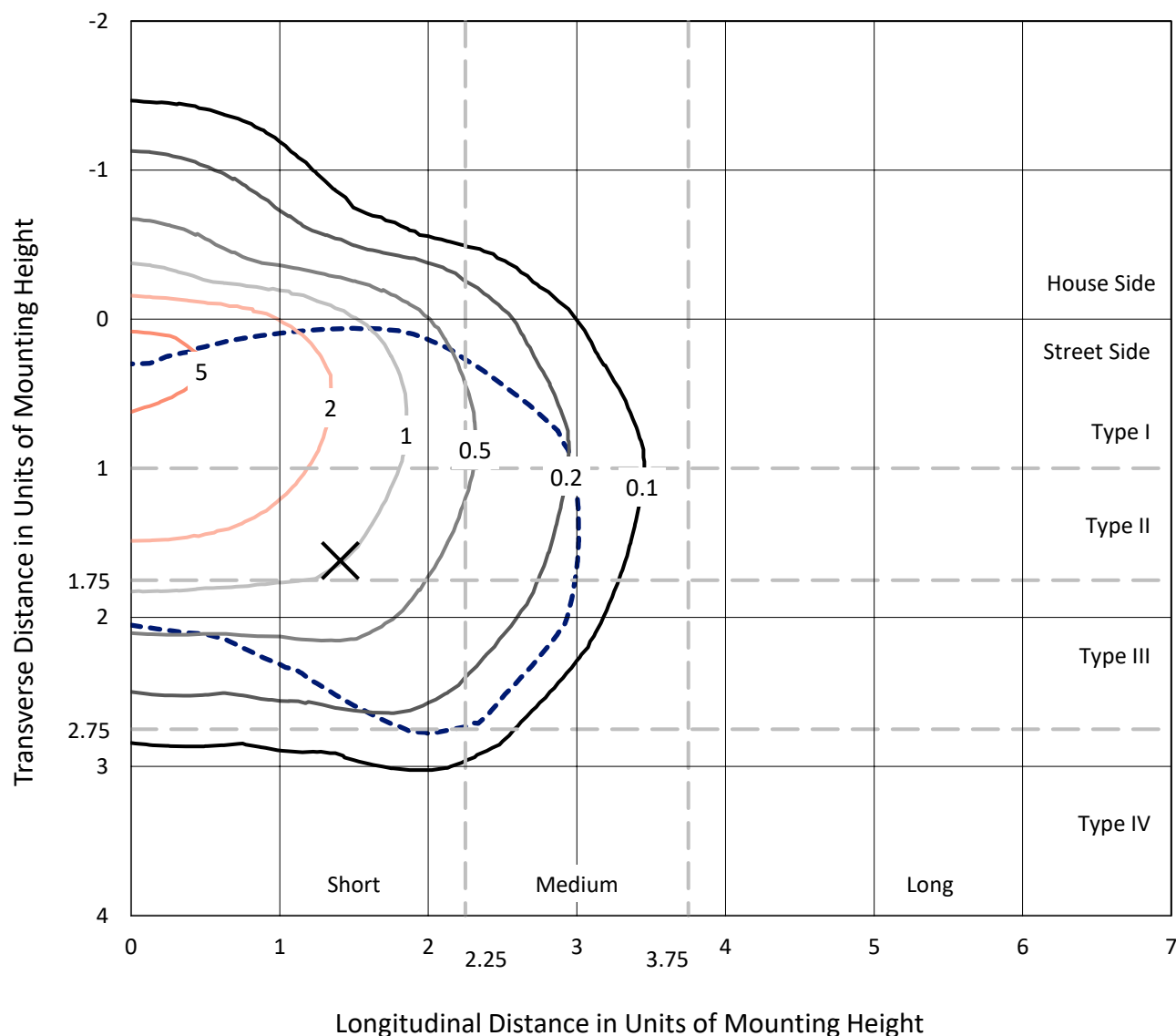
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

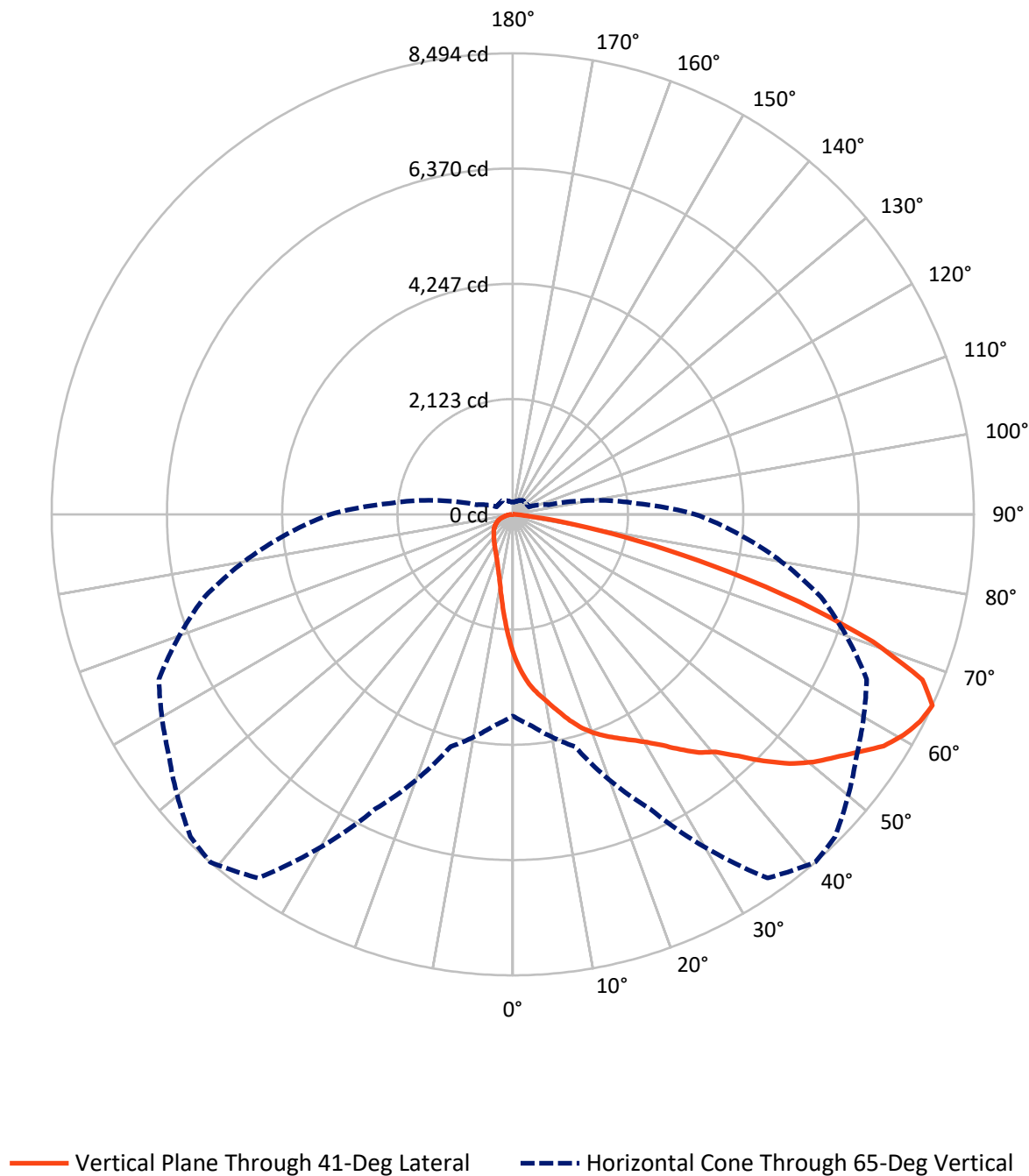


Based on 25 foot mounting height. Maximum calculated value = 6 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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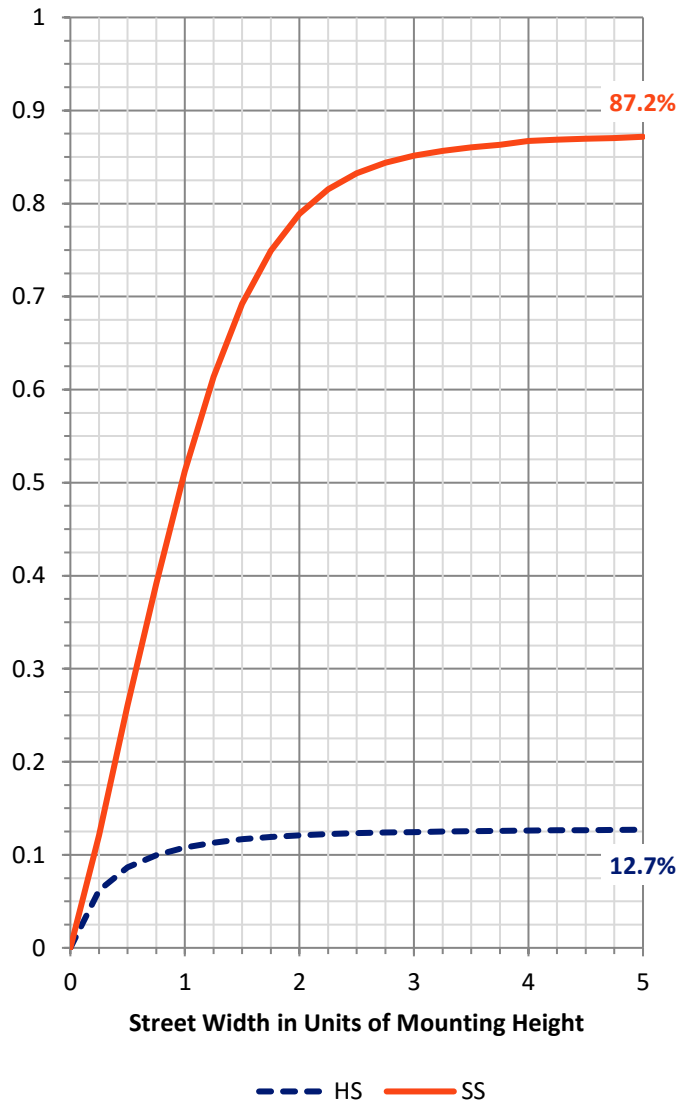
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1951.3	0.0	1951.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13247.7	0.0	13247.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	15199.0	0.0	15199.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.3	1.6
10°-20°	723.6	4.8
20°-30°	1244.8	8.2
30°-40°	1887.9	12.4
40°-50°	2765.9	18.2
50°-60°	3492.7	23.0
60°-70°	3275.0	21.5
70°-80°	1459.7	9.6
80°-90°	108.1	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°	15199.0	100.0
0°-180°	15199.0	100.0

Coefficient of Utilization



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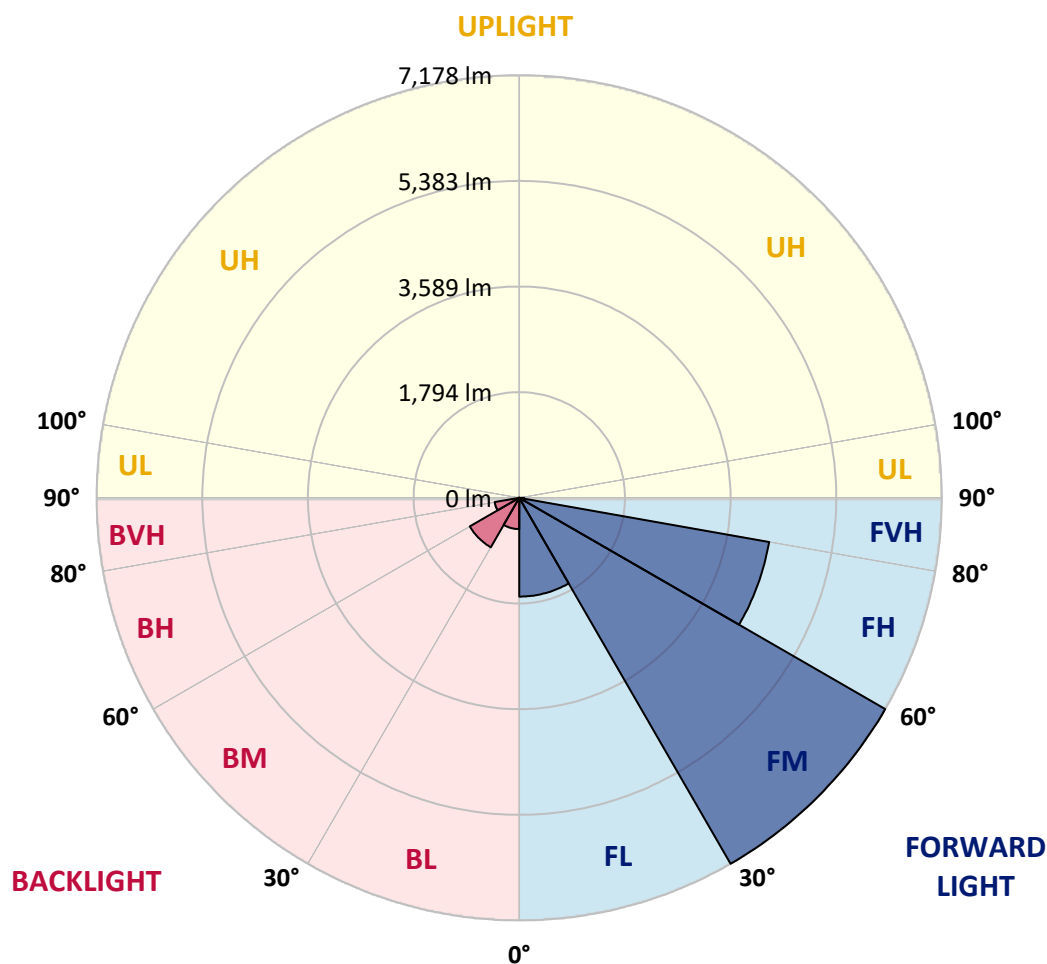
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1678.5	11.0			
FM	(30°-60°)	7177.6	47.2			
FH	(60°-80°)	4310.8	28.4			G2/5000
FVH	(80°-90°)	80.8	0.5			G1/100
BL	(0°-30°)	531.1	3.5	B2/1000		
BM	(30°-60°)	968.9	6.4	B1/1000		
BH	(60°-80°)	423.9	2.8	B1/500		G1/500
BVH	(80°-90°)	27.4	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8
2.5°	2987.3	2977.7	2971.3	2936.0	2936.0	2887.9	2891.1	2846.2	2791.8	2705.2	2612.3
5°	3269.3	3256.5	3240.5	3205.2	3192.4	3144.3	3137.9	3073.8	2980.9	2830.2	2663.6
7.5°	3516.1	3503.3	3480.9	3429.6	3394.3	3336.6	3320.6	3237.3	3134.7	2948.8	2714.8
10°	3740.5	3730.9	3702.0	3637.9	3589.9	3519.3	3490.5	3378.3	3250.1	3045.0	2756.5
12.5°	3968.1	3955.3	3916.8	3862.3	3804.6	3721.3	3686.0	3541.8	3378.3	3150.7	2817.4
15°	4179.6	4160.4	4131.5	4073.9	4022.6	3942.4	3904.0	3734.1	3535.4	3269.3	2897.5
17.5°	4317.5	4301.4	4275.8	4243.7	4202.1	4141.2	4102.7	3936.0	3692.4	3384.7	2980.9
20°	4400.8	4394.4	4384.8	4365.5	4346.3	4304.6	4275.8	4118.7	3862.3	3496.9	3061.0
22.5°	4464.9	4458.5	4455.3	4455.3	4458.5	4442.5	4423.2	4288.6	4025.8	3615.5	3134.7
25°	4564.3	4561.0	4554.6	4548.2	4570.7	4573.9	4567.5	4474.5	4230.9	3772.6	3227.7
27.5°	4702.1	4692.5	4679.6	4673.2	4695.7	4711.7	4724.5	4660.4	4448.9	3932.8	3333.4
30°	4913.6	4884.8	4852.7	4830.3	4846.3	4872.0	4900.8	4862.3	4673.2	4131.5	3442.4
32.5°	5163.6	5128.4	5054.7	5013.0	5054.7	5073.9	5096.3	5077.1	4907.2	4346.3	3551.4
35°	5468.1	5426.5	5349.5	5288.6	5362.4	5320.7	5311.1	5291.8	5128.4	4557.8	3673.2
37.5°	5974.6	5913.7	5791.9	5657.2	5657.2	5567.5	5532.2	5474.5	5327.1	4747.0	3791.8
40°	6561.1	6481.0	6323.9	6125.2	5942.5	5756.6	5734.2	5692.5	5561.1	4964.9	3926.4
42.5°	7205.4	7051.5	6833.6	6593.2	6298.3	6086.7	6035.5	5916.9	5788.7	5186.1	4061.0
45°	7920.1	7599.6	7282.3	7160.5	6673.3	6481.0	6384.8	6170.1	6025.8	5416.8	4202.1
47.5°	8035.5	7785.5	7574.0	7554.7	7022.7	6862.4	6753.4	6445.7	6282.3	5663.7	4349.5
50°	7971.4	7820.8	7843.2	7766.3	7279.1	7173.3	7090.0	6740.6	6535.5	5900.8	4484.1
52.5°	7702.2	7785.5	7913.7	7772.7	7522.7	7436.1	7394.5	7057.9	6772.7	6118.8	4605.9
55°	7381.7	7439.4	7715.0	7888.1	7804.7	7727.8	7689.4	7426.5	7006.6	6301.5	4718.1
57.5°	6913.7	6888.1	7192.5	7868.9	8099.6	8054.8	8013.1	7788.7	7224.6	6432.9	4788.6
60°	6211.7	6157.3	6541.9	7484.2	8195.8	8266.3	8247.1	8029.1	7391.3	6429.7	4759.8
62.5°	4997.0	5131.6	5663.7	6856.0	8237.5	8416.9	8381.7	8048.3	7445.8	6243.8	4577.1
65°	3714.9	3907.2	4429.6	5990.6	8179.8	8493.9	8397.7	7734.2	7192.5	5875.2	4176.4
67.5°	2676.4	2846.2	3227.7	4929.7	7625.3	8141.3	8029.1	7221.4	6609.2	5352.7	3621.9
70°	1830.2	1952.0	2211.6	3589.9	6509.8	7038.7	6968.2	6455.3	5689.3	4730.9	2942.4
72.5°	1291.7	1343.0	1509.7	2368.7	4945.7	5522.6	5439.3	5311.1	4570.7	3932.8	2288.5
75°	968.0	1000.0	1089.8	1532.1	3336.6	3827.1	3750.1	3823.8	3413.6	2977.7	1666.7
77.5°	365.4	397.4	618.6	977.6	1974.4	2349.4	2272.5	2317.4	1897.5	1503.3	830.2
80°	99.4	105.8	205.1	464.8	897.5	1169.9	1064.1	913.5	705.2	692.3	439.1
82.5°	41.7	48.1	93.0	250.0	320.5	320.5	269.2	333.3	269.2	323.7	211.5
85°	16.0	19.2	22.4	64.1	41.7	44.9	48.1	64.1	54.5	67.3	48.1
87.5°	0.0	0.0	0.0	3.2	3.2	6.4	3.2	6.4	9.6	9.6	9.6
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°	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8	2589.8
2.5°	2573.8	2538.5	2487.3	2403.9	2317.4	2269.3	2208.4	2198.8	2134.7	2128.3	2102.6
5°	2589.8	2516.1	2384.7	2224.4	2067.4	1945.6	1855.8	1807.8	1714.8	1714.8	1689.2
7.5°	2602.7	2487.3	2275.7	2038.5	1823.8	1660.3	1538.5	1487.2	1403.9	1397.5	1378.3
10°	2605.9	2452.0	2157.1	1849.4	1586.6	1419.9	1301.3	1243.6	1169.9	1163.5	1150.7
12.5°	2631.5	2432.8	2051.4	1686.0	1416.7	1237.2	1121.8	1073.8	1016.1	1009.6	996.8
15°	2673.2	2432.8	1961.6	1548.1	1266.1	1099.4	1000.0	955.2	913.5	907.1	900.7
17.5°	2714.8	2426.4	1871.9	1419.9	1141.1	990.4	903.9	868.6	836.6	833.4	827.0
20°	2753.3	2423.2	1782.1	1310.9	1044.9	900.7	833.4	801.3	775.7	775.7	772.5
22.5°	2791.8	2416.7	1695.6	1208.4	961.6	833.4	775.7	740.4	721.2	721.2	718.0
25°	2849.5	2416.7	1615.4	1121.8	894.3	782.1	724.4	698.7	682.7	679.5	679.5
27.5°	2916.8	2436.0	1544.9	1044.9	836.6	730.8	685.9	660.3	641.0	634.6	637.8
30°	2990.5	2452.0	1480.8	977.6	782.1	692.3	644.3	618.6	599.4	593.0	596.2
32.5°	3064.2	2471.2	1423.1	916.7	727.6	657.1	609.0	580.1	560.9	557.7	557.7
35°	3144.3	2490.5	1365.4	865.4	682.7	621.8	576.9	544.9	532.1	525.7	528.9
37.5°	3224.5	2522.5	1310.9	817.3	650.7	589.8	548.1	516.0	506.4	503.2	503.2
40°	3320.6	2570.6	1288.5	785.3	621.8	560.9	525.7	493.6	484.0	484.0	484.0
42.5°	3400.8	2609.1	1269.3	750.0	599.4	535.3	503.2	477.6	471.2	468.0	471.2
45°	3480.9	2644.3	1243.6	718.0	570.5	509.6	484.0	458.3	451.9	451.9	451.9
47.5°	3561.0	2663.6	1208.4	685.9	544.9	487.2	464.8	442.3	435.9	435.9	435.9
50°	3625.1	2679.6	1157.1	650.7	516.0	468.0	445.5	423.1	416.7	416.7	416.7
52.5°	3689.2	2682.8	1102.6	609.0	487.2	445.5	426.3	403.9	397.4	394.2	394.2
55°	3746.9	2679.6	1038.5	560.9	455.1	419.9	403.9	384.6	371.8	359.0	365.4
57.5°	3788.6	2676.4	964.8	512.8	423.1	394.2	387.8	362.2	336.5	304.5	310.9
60°	3772.6	2641.1	884.6	451.9	387.8	368.6	368.6	333.3	288.5	272.4	275.7
62.5°	3670.0	2541.8	801.3	387.8	352.6	343.0	339.8	301.3	266.0	250.0	253.2
65°	3362.3	2291.7	679.5	330.1	317.3	314.1	314.1	278.9	246.8	227.6	230.8
67.5°	2894.3	1923.1	554.5	278.9	282.1	288.5	288.5	256.4	224.4	205.1	208.3
70°	2320.6	1503.3	442.3	240.4	243.6	253.2	259.6	230.8	201.9	182.7	182.7
72.5°	1746.9	1141.1	355.8	201.9	218.0	218.0	227.6	205.1	176.3	157.1	160.3
75°	1266.1	817.3	282.1	169.9	189.1	185.9	185.9	173.1	150.6	137.8	137.8
77.5°	599.4	429.5	224.4	121.8	147.4	144.2	147.4	137.8	128.2	115.4	118.6
80°	294.9	211.5	144.2	86.5	102.6	105.8	115.4	109.0	105.8	96.2	96.2
82.5°	141.0	83.3	67.3	60.9	70.5	73.7	80.1	80.1	83.3	76.9	76.9
85°	38.5	22.4	28.8	38.5	44.9	48.1	54.5	57.7	57.7	54.5	57.7
87.5°	9.6	9.6	12.8	19.2	22.4	25.6	28.8	28.8	12.8	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)