

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: P841325

Luminaire Tested: **ARCH4-160-740-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841325
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-740-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18996 lumens
Efficiency: N/A
Efficacy: 118.2 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

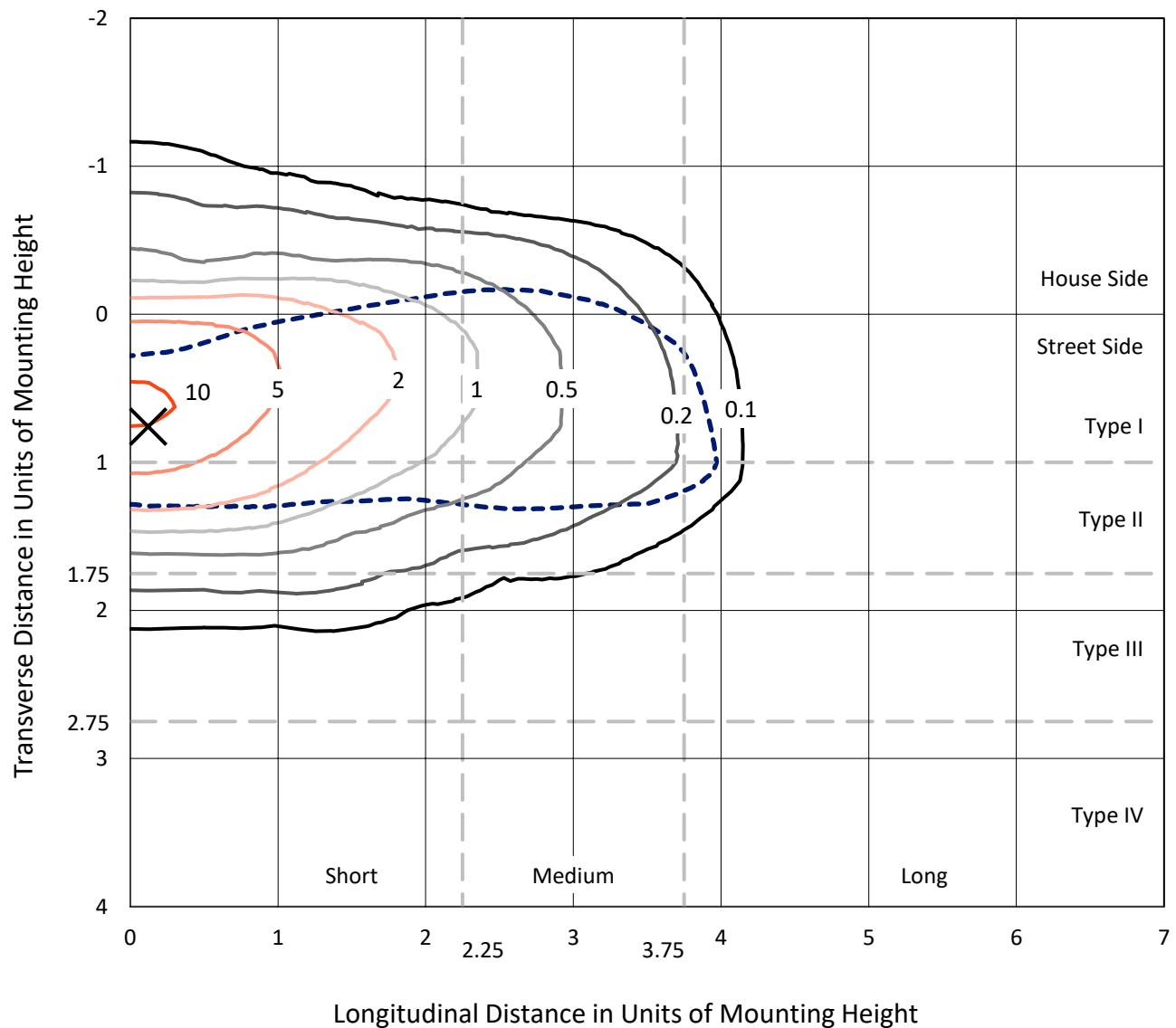
Input Watts (W): 160.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

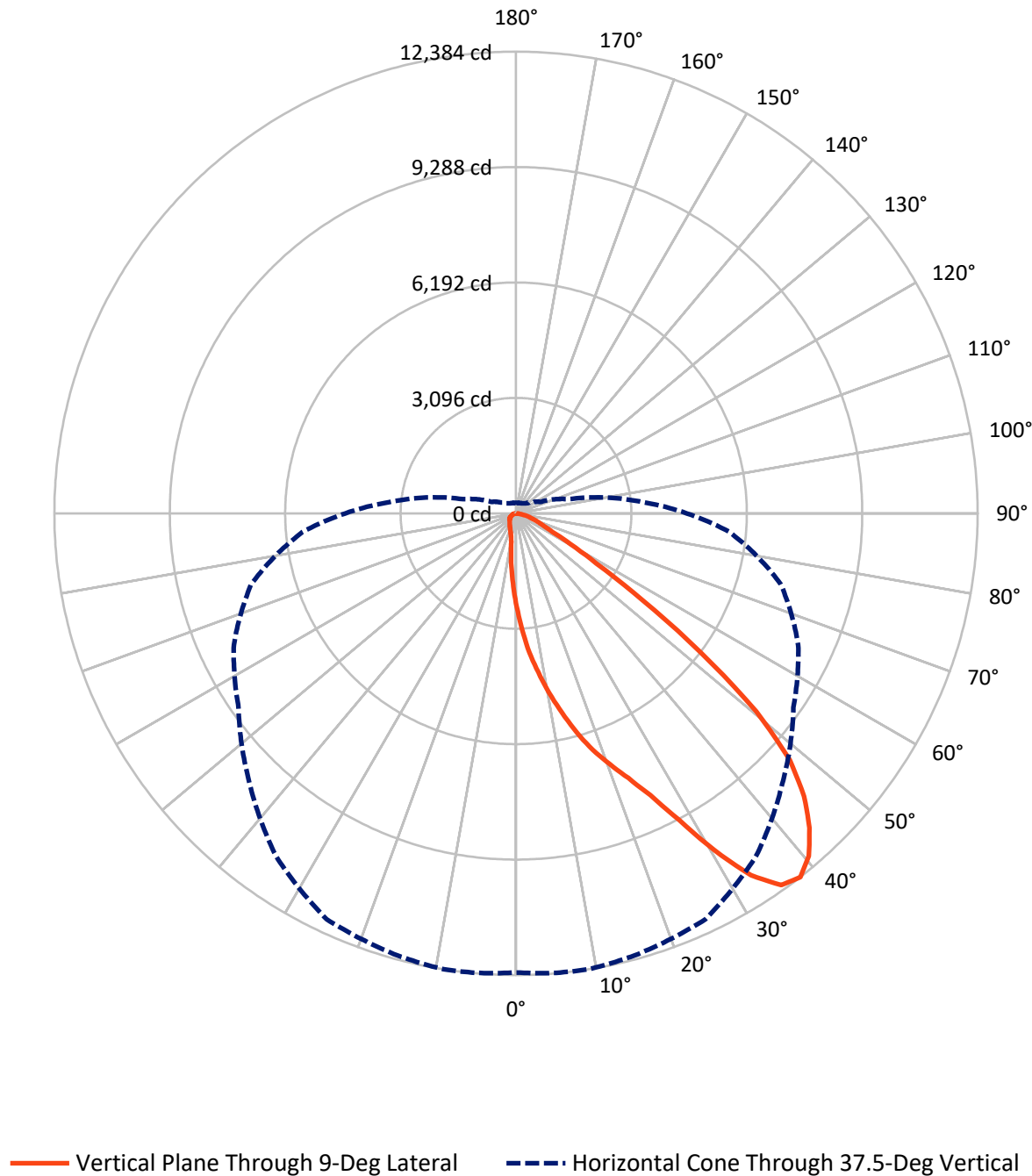
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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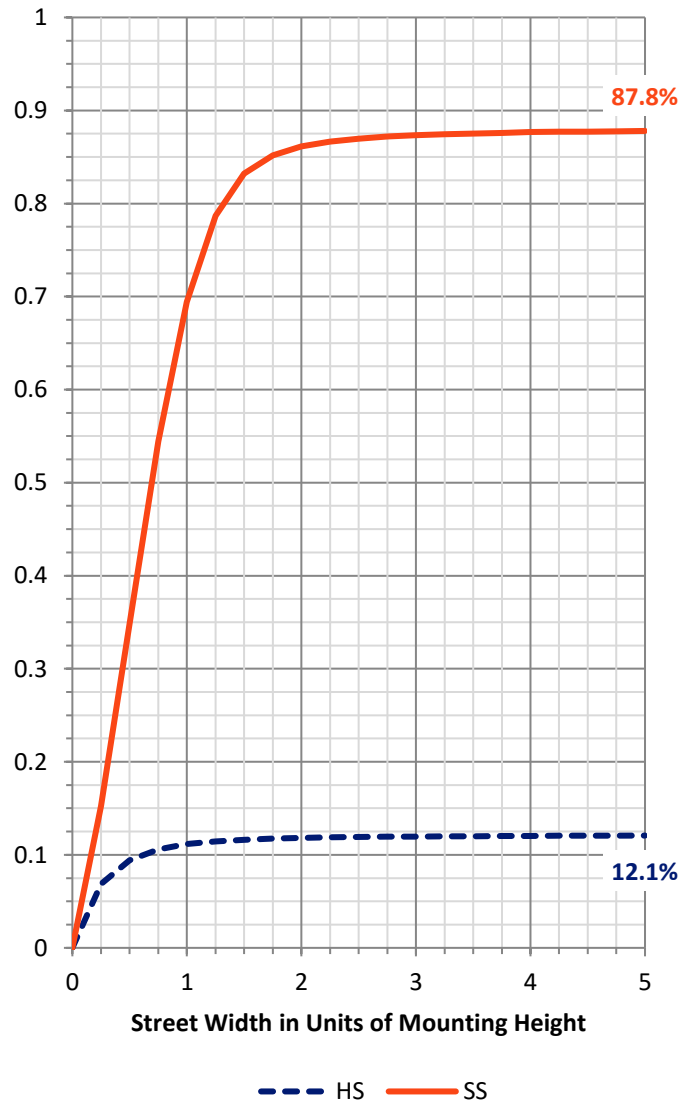
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2310.3	0.0	2310.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	16685.7	0.0	16685.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	18996.0	0.0	18996.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.4	1.3
10°-20°	877.3	4.6
20°-30°	1802.6	9.5
30°-40°	3186.1	16.8
40°-50°	4232.5	22.3
50°-60°	4014.3	21.1
60°-70°	3062.6	16.1
70°-80°	1484.7	7.8
80°-90°	83.6	0.4
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°	18996.0	100.0
0°-180°	18996.0	100.0

Coefficient of Utilization



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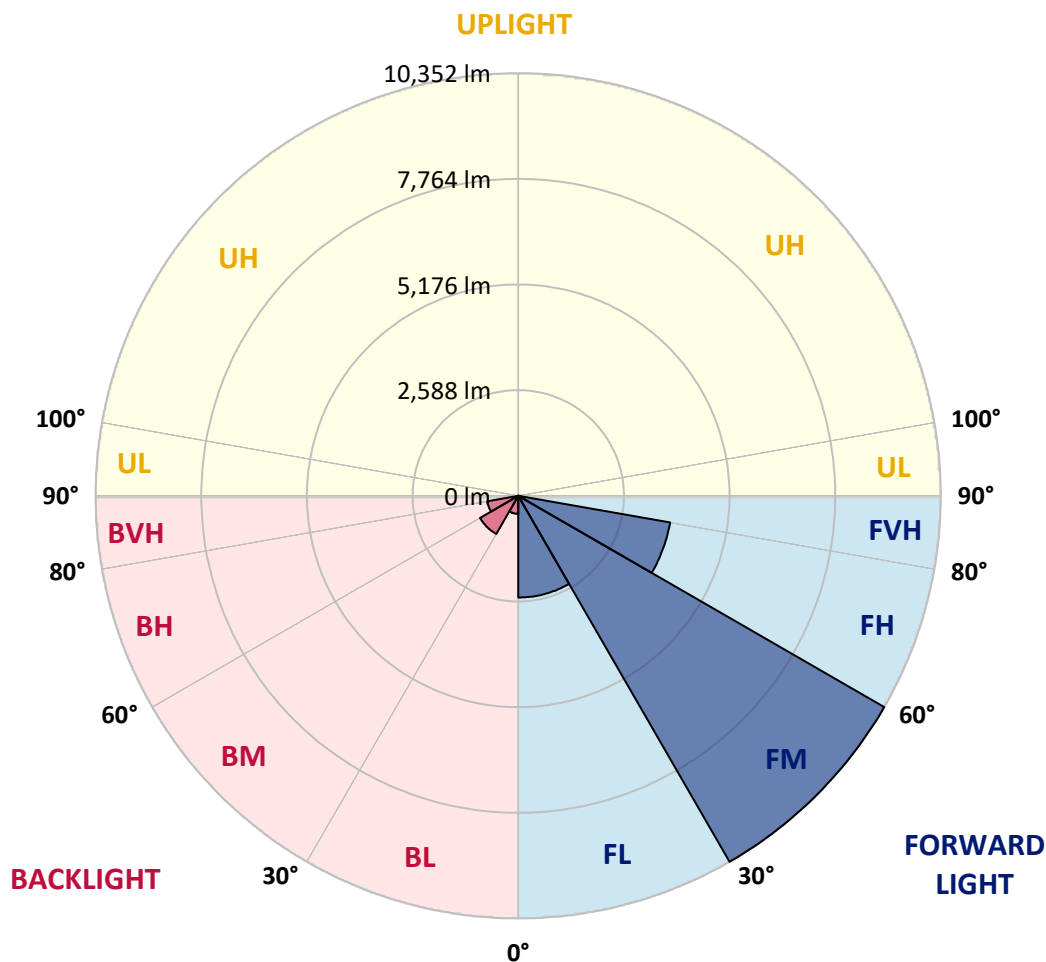
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2491.3	13.1			
FM	(30°-60°)	10351.9	54.5			
FH	(60°-80°)	3776.3	19.9			G2/5000
FVH	(80°-90°)	66.2	0.3			G1/100
BL	(0°-30°)	440.9	2.3	B1/500		
BM	(30°-60°)	1081.0	5.7	B2/2500		
BH	(60°-80°)	770.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	17.4	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0
2.5°	3111.5	3056.9	3119.3	3111.5	3056.9	3021.8	2912.7	2877.6	2748.9	2655.3	2573.4
5°	3751.0	3696.4	3751.0	3735.4	3657.4	3571.6	3392.2	3275.3	3045.2	2842.5	2659.2
7.5°	4281.2	4281.2	4304.6	4308.5	4215.0	4082.4	3860.1	3684.7	3361.1	3049.1	2756.7
10°	4854.4	4858.3	4909.0	4873.9	4749.1	4569.8	4289.0	4066.8	3676.9	3267.5	2850.3
12.5°	5466.6	5470.5	5486.1	5470.5	5322.3	5092.3	4753.0	4460.6	4012.2	3517.0	2978.9
15°	6078.7	6082.6	6102.1	6074.8	5911.1	5642.0	5256.0	4897.3	4367.0	3797.8	3134.9
17.5°	6651.9	6659.7	6675.3	6640.2	6468.7	6148.9	5755.1	5322.3	4745.2	4098.0	3310.4
20°	7166.6	7174.4	7186.1	7139.3	6967.7	6648.0	6223.0	5770.7	5131.3	4406.0	3501.4
22.5°	7685.2	7693.0	7712.5	7650.1	7459.0	7092.5	6675.3	6207.4	5540.7	4745.2	3723.7
25°	8348.0	8355.8	8371.4	8281.8	8020.5	7591.6	7151.0	6671.4	5985.2	5127.4	3996.6
27.5°	9318.9	9311.1	9311.1	9147.4	8699.0	8141.4	7630.6	7143.2	6464.8	5536.8	4296.8
30°	10519.9	10500.4	10488.7	10266.4	9627.0	8761.4	8121.9	7583.8	6924.9	5969.6	4620.5
32.5°	11596.0	11596.0	11572.6	11338.7	10660.2	9595.8	8644.4	8012.7	7369.4	6406.3	4955.8
35°	12231.6	12258.9	12247.2	12071.7	11576.5	10492.6	9350.1	8527.4	7837.3	6862.5	5357.4
37.5°	12317.4	12371.9	12383.6	12278.4	12017.1	11225.6	10133.8	9085.0	8351.9	7353.8	5747.3
40°	11970.3	12087.3	12087.3	12071.7	11978.1	11572.6	10792.8	9732.2	8882.2	7864.6	6141.1
42.5°	11436.2	11557.0	11541.4	11599.9	11576.5	11490.7	11163.2	10336.6	9412.5	8390.9	6499.9
45°	10738.2	10863.0	10831.8	10937.1	10983.9	11077.4	11124.2	10757.7	9935.0	8964.1	6901.5
47.5°	9619.2	9829.7	9876.5	10063.7	10258.6	10551.1	10773.3	10909.8	10422.4	9580.2	7338.2
50°	7965.9	8262.3	8355.8	8749.7	9283.8	9888.2	10246.9	10722.6	10765.5	10211.8	7810.0
52.5°	5704.4	6047.6	6191.8	6839.1	7938.6	8991.4	9638.7	10309.3	10898.1	10816.2	8320.7
55°	3688.6	3981.0	4121.4	4729.6	6191.8	7845.1	8921.2	9775.1	10824.0	11369.9	8905.6
57.5°	2273.2	2440.9	2534.4	3056.9	4402.1	6375.1	7981.5	9283.8	10597.8	11849.5	9513.9
60°	1532.4	1629.8	1676.6	1922.3	2990.6	4764.7	6690.9	8769.1	10301.5	12173.1	10067.6
62.5°	1017.7	1048.9	1095.7	1247.7	1973.0	3345.5	5139.1	7849.0	10079.3	12192.6	10477.0
65°	787.6	803.2	822.7	889.0	1216.5	2339.5	3614.5	6359.5	9747.8	11779.3	10605.6
67.5°	620.0	635.6	659.0	694.0	881.2	1586.9	2460.4	4659.5	9069.4	11132.0	10395.1
70°	487.4	499.1	514.7	545.9	686.2	1150.2	1625.9	3095.9	7700.8	10516.0	9732.2
72.5°	386.0	397.7	413.3	444.5	557.6	842.2	1115.2	1930.1	5938.4	9763.4	8457.2
75°	304.1	311.9	323.6	354.8	448.4	655.1	756.4	1154.1	4035.6	8387.0	6589.5
77.5°	152.1	187.2	214.5	245.6	327.5	452.3	503.0	639.5	1703.9	4304.6	3142.7
80°	89.7	109.2	117.0	136.5	214.5	272.9	272.9	257.3	538.1	1653.2	1282.8
82.5°	50.7	70.2	74.1	78.0	128.7	156.0	124.8	93.6	109.2	553.7	374.3
85°	15.6	23.4	27.3	31.2	42.9	46.8	42.9	39.0	31.2	54.6	35.1
87.5°	0.0	0.0	0.0	0.0	3.9	7.8	7.8	7.8	11.7	11.7	11.7
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°	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0	2511.0
2.5°	2526.6	2475.9	2378.5	2288.8	2203.0	2140.6	2082.1	2027.5	1988.6	1957.4	1953.5
5°	2561.7	2460.4	2273.2	2097.7	1937.9	1805.3	1692.2	1602.5	1536.3	1489.5	1485.6
7.5°	2608.5	2452.6	2167.9	1906.7	1668.8	1477.8	1314.0	1193.1	1107.4	1072.3	1045.0
10°	2647.5	2444.8	2062.6	1715.6	1403.7	1161.9	967.0	846.1	783.7	760.3	748.6
12.5°	2713.8	2452.6	1973.0	1540.2	1173.6	889.0	740.8	674.5	647.3	627.8	623.9
15°	2811.3	2487.6	1887.2	1368.6	939.7	717.4	631.7	588.8	561.5	557.6	553.7
17.5°	2908.8	2518.8	1809.2	1193.1	779.8	623.9	565.4	530.3	510.8	506.9	506.9
20°	3021.8	2557.8	1723.4	1025.5	666.8	561.5	514.7	487.4	464.0	460.1	460.1
22.5°	3154.4	2612.4	1641.5	877.3	592.7	514.7	475.7	444.5	425.0	421.1	421.1
25°	3333.8	2694.3	1575.2	768.1	542.0	475.7	440.6	413.3	397.7	389.9	389.9
27.5°	3532.6	2807.4	1528.5	701.8	506.9	444.5	409.4	386.0	370.4	362.6	362.6
30°	3754.9	2932.1	1497.3	674.5	487.4	417.2	386.0	362.6	343.1	339.2	339.2
32.5°	4000.5	3076.4	1477.8	678.4	483.5	397.7	362.6	339.2	323.6	315.8	315.8
35°	4273.4	3236.3	1466.1	701.8	491.3	382.1	343.1	319.7	304.1	296.3	296.3
37.5°	4577.6	3423.4	1466.1	725.2	510.8	378.2	323.6	300.2	288.5	280.7	280.7
40°	4862.2	3622.3	1481.7	752.5	530.3	378.2	308.0	288.5	272.9	265.1	265.1
42.5°	5084.5	3735.4	1493.4	779.8	542.0	374.3	292.4	272.9	261.2	253.4	253.4
45°	5337.9	3856.2	1470.0	791.5	542.0	366.5	280.7	261.2	249.5	241.7	241.7
47.5°	5618.6	4004.4	1466.1	799.3	530.3	350.9	269.0	249.5	241.7	233.9	233.9
50°	5903.3	4168.2	1473.9	795.4	514.7	327.5	253.4	241.7	230.0	222.3	222.3
52.5°	6226.9	4339.7	1489.5	787.6	479.6	300.2	241.7	230.0	218.4	210.6	206.7
55°	6585.6	4526.9	1520.7	772.0	432.8	272.9	230.0	218.4	202.8	195.0	191.1
57.5°	6998.9	4756.9	1555.8	740.8	382.1	249.5	218.4	202.8	179.4	167.7	163.8
60°	7392.8	5018.2	1594.7	666.8	331.4	226.1	206.7	183.3	159.9	152.1	148.2
62.5°	7763.2	5275.5	1614.2	534.2	280.7	206.7	195.0	167.7	144.3	136.5	132.6
65°	8001.0	5556.3	1571.4	362.6	230.0	191.1	179.4	156.0	132.6	120.9	120.9
67.5°	8016.6	5688.8	1423.2	237.8	187.2	171.6	163.8	140.4	117.0	109.2	105.3
70°	7622.8	5490.0	1087.9	187.2	156.0	148.2	148.2	124.8	101.4	93.6	89.7
72.5°	6718.2	4862.2	694.0	152.1	132.6	124.8	124.8	105.3	89.7	78.0	74.1
75°	5302.8	3751.0	370.4	124.8	109.2	105.3	97.5	85.8	74.1	66.3	62.4
77.5°	2437.0	1653.2	171.6	89.7	81.9	81.9	74.1	62.4	58.5	50.7	50.7
80°	963.1	561.5	85.8	58.5	54.6	54.6	54.6	42.9	42.9	35.1	31.2
82.5°	265.1	117.0	42.9	35.1	35.1	35.1	31.2	27.3	27.3	23.4	23.4
85°	27.3	19.5	19.5	19.5	19.5	15.6	15.6	11.7	7.8	7.8	7.8
87.5°	11.7	11.7	11.7	11.7	11.7	7.8	3.9	0.0	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)