

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: P836387

Luminaire Tested: **ARCH3-180-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16257 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180.5
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



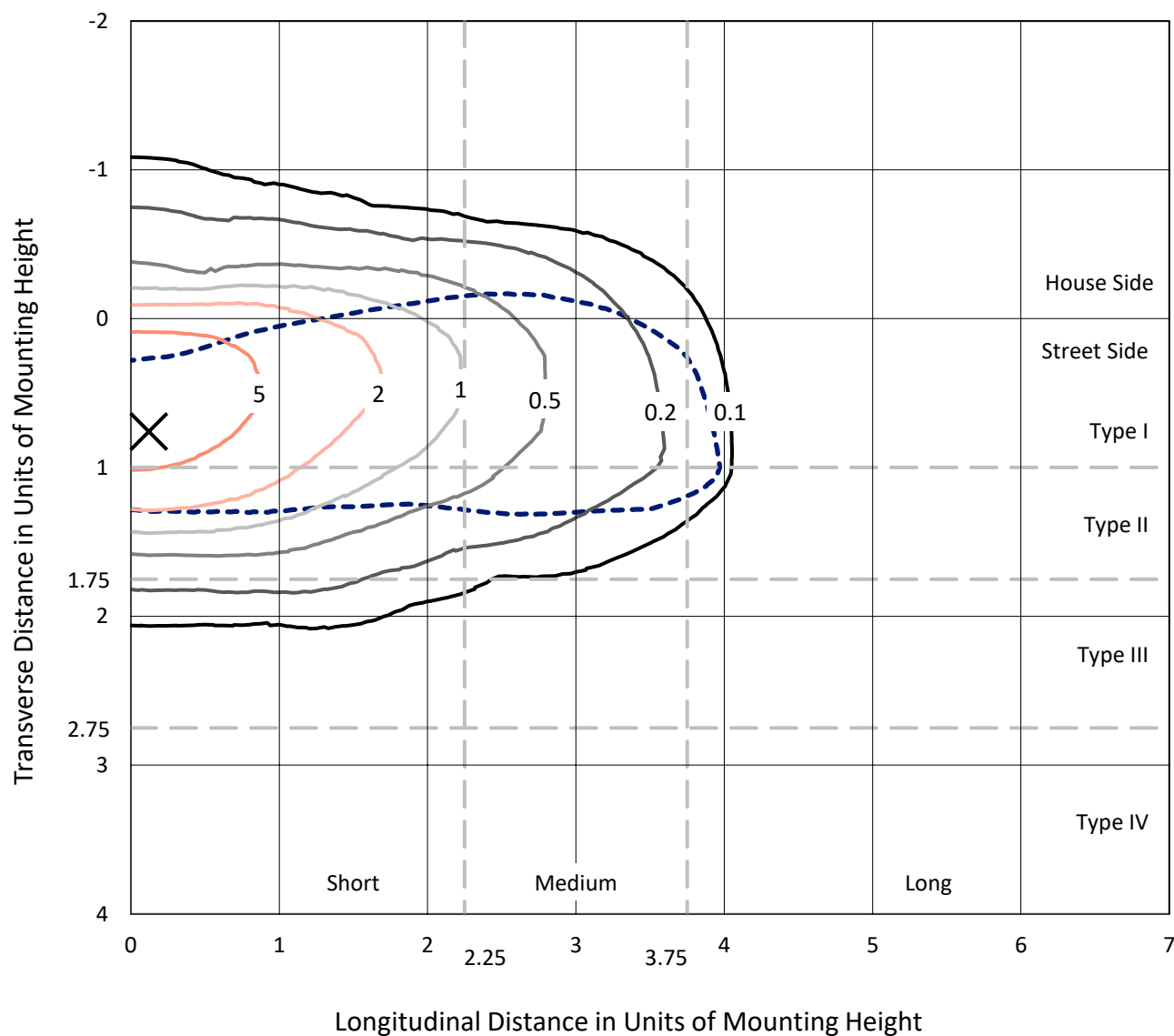
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

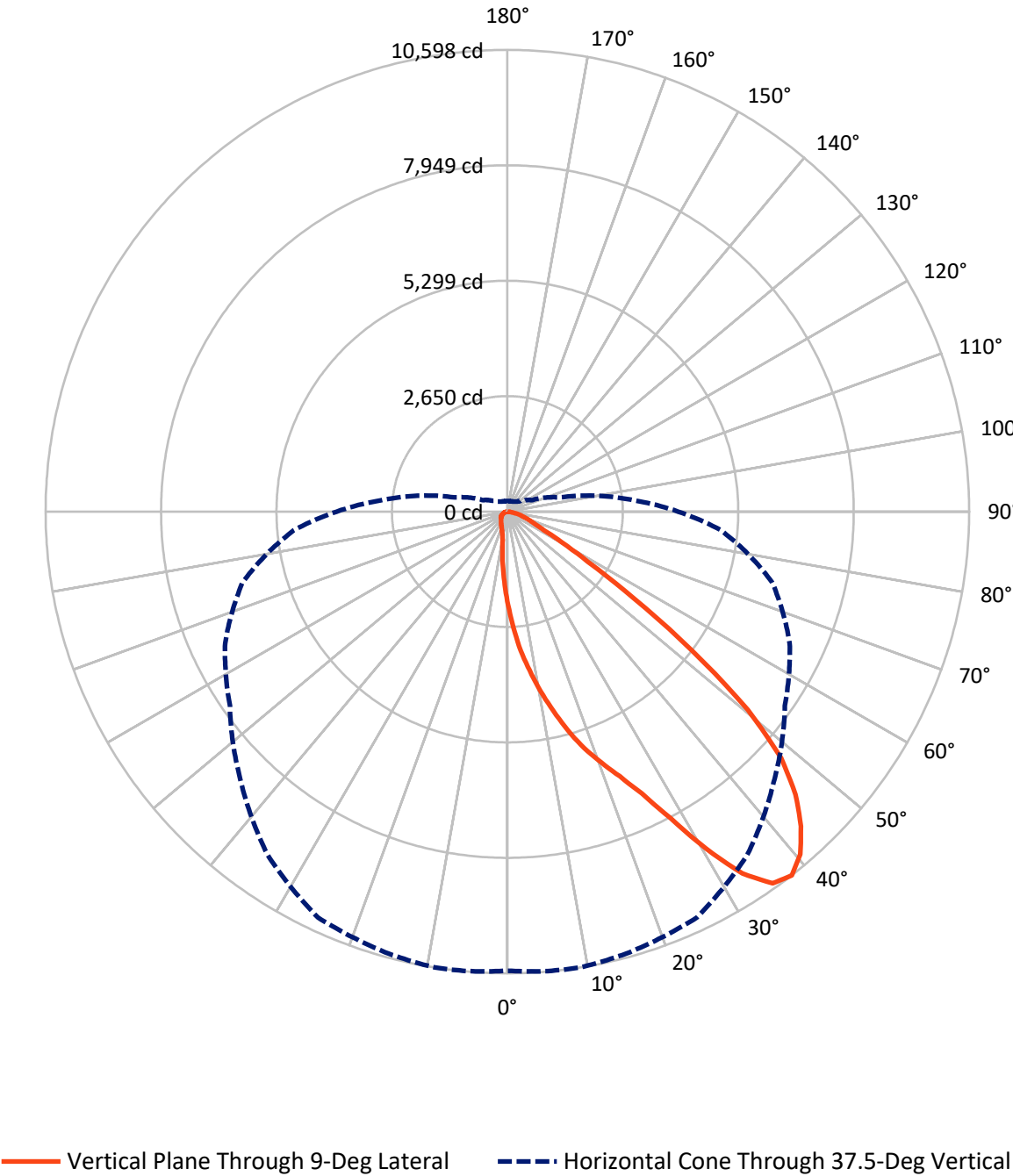


Based on 25 foot mounting height. Maximum calculated value = 9.5 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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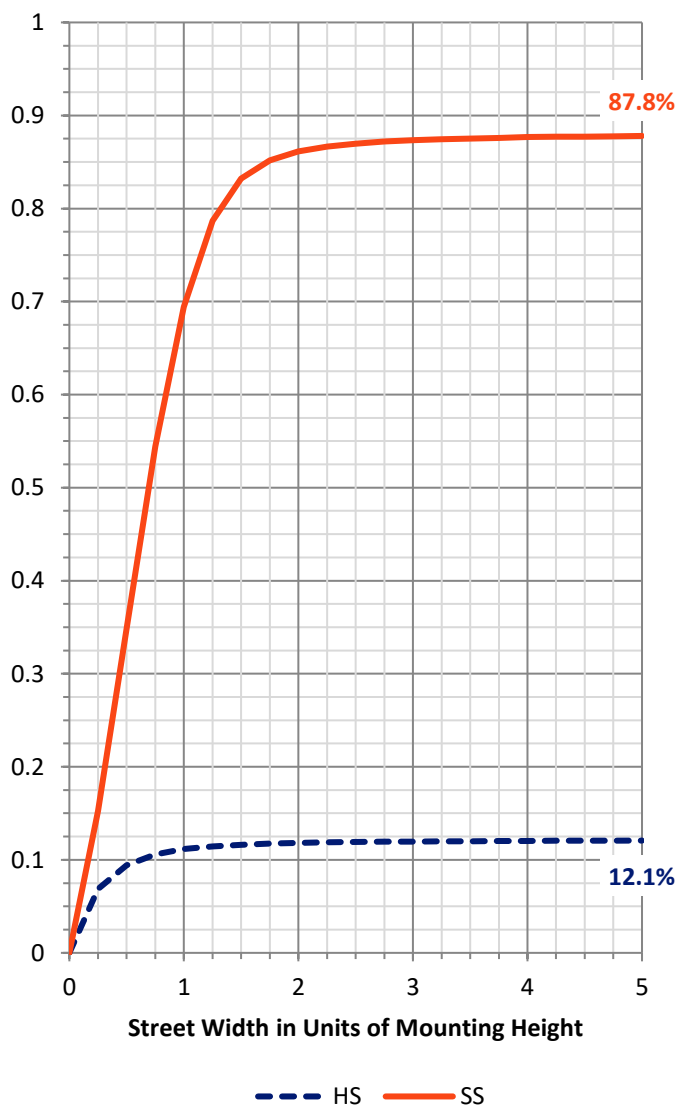
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1977.1	0.0	1977.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	14279.9	0.0	14279.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	16257.0	0.0	16257.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	1.3
10°-20°	750.8	4.6
20°-30°	1542.6	9.5
30°-40°	2726.7	16.8
40°-50°	3622.2	22.3
50°-60°	3435.5	21.1
60°-70°	2621.0	16.1
70°-80°	1270.6	7.8
80°-90°	71.5	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°	16257.0	100.0
0°-180°	16257.0	100.0

Coefficient of Utilization



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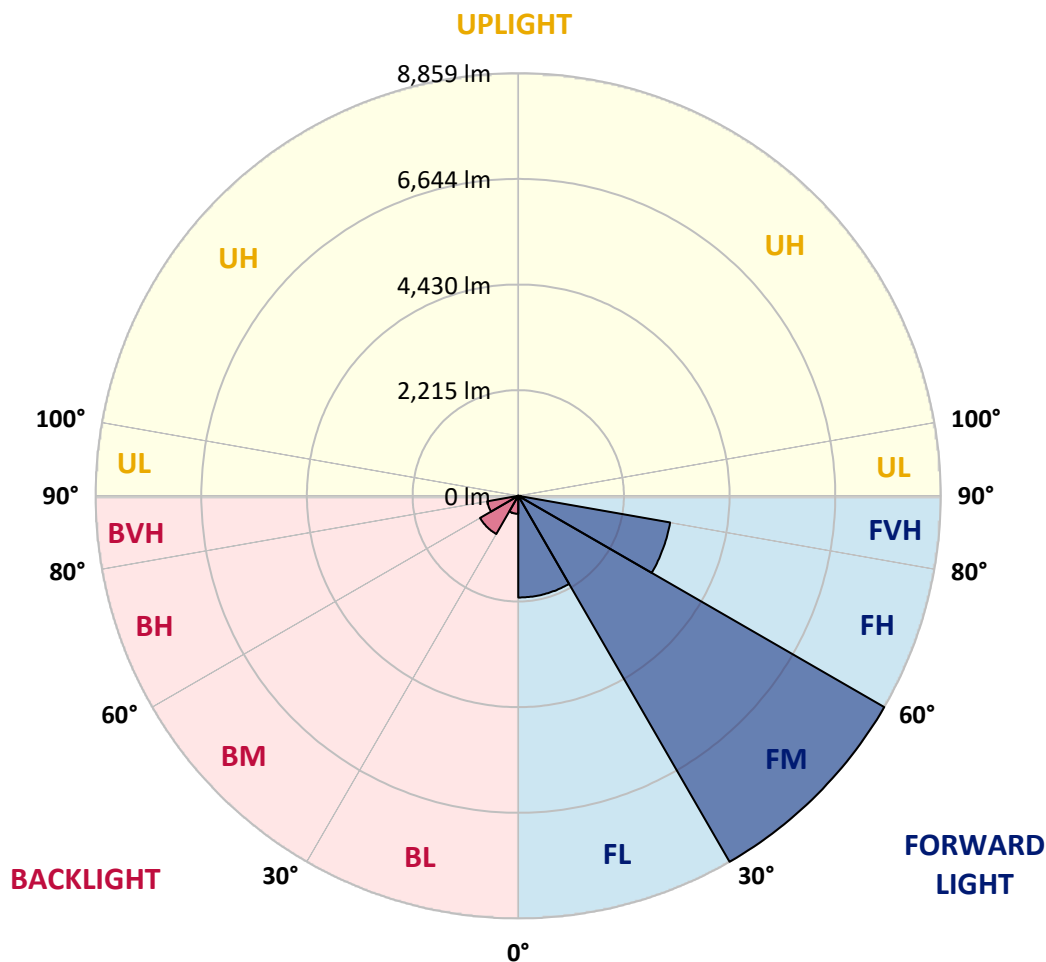
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2132.1	13.1			
FM	(30°-60°)	8859.3	54.5			
FH	(60°-80°)	3231.8	19.9			G2/5000
FVH	(80°-90°)	56.6	0.3			G1/100
BL	(0°-30°)	377.3	2.3	B1/500		
BM	(30°-60°)	925.2	5.7	B1/1000		
BH	(60°-80°)	659.8	4.1	B2/1000		G2/1000
BVH	(80°-90°)	14.9	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°	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0
2.5°	2662.9	2616.1	2669.5	2662.9	2616.1	2586.1	2492.7	2462.6	2352.5	2272.4	2202.4
5°	3210.1	3163.4	3210.1	3196.8	3130.0	3056.6	2903.1	2803.0	2606.1	2432.6	2275.8
7.5°	3663.9	3663.9	3684.0	3687.3	3607.2	3493.8	3303.6	3153.4	2876.4	2609.5	2359.2
10°	4154.5	4157.8	4201.2	4171.2	4064.4	3910.9	3670.6	3480.4	3146.7	2796.3	2439.3
12.5°	4678.4	4681.7	4695.1	4681.7	4554.9	4358.0	4067.7	3817.4	3433.7	3009.9	2549.4
15°	5202.3	5205.6	5222.3	5198.9	5058.8	4828.5	4498.2	4191.2	3737.4	3250.2	2682.9
17.5°	5692.8	5699.5	5712.8	5682.8	5536.0	5262.3	4925.3	4554.9	4061.0	3507.1	2833.0
20°	6133.3	6139.9	6149.9	6109.9	5963.1	5689.5	5325.7	4938.6	4391.4	3770.7	2996.6
22.5°	6577.1	6583.7	6600.4	6547.0	6383.5	6069.9	5712.8	5312.4	4741.8	4061.0	3186.8
25°	7144.4	7151.0	7164.4	7087.6	6864.1	6497.0	6119.9	5709.5	5122.2	4388.1	3420.3
27.5°	7975.2	7968.6	7968.6	7828.4	7444.7	6967.5	6530.4	6113.2	5532.6	4738.4	3677.3
30°	9003.0	8986.3	8976.3	8786.1	8238.9	7498.1	6950.8	6490.3	5926.4	5108.8	3954.3
32.5°	9924.0	9924.0	9904.0	9703.8	9123.1	8212.2	7398.0	6857.4	6306.8	5482.6	4241.2
35°	10467.9	10491.3	10481.3	10331.1	9907.3	8979.7	8001.9	7297.9	6707.2	5873.0	4584.9
37.5°	10541.3	10588.1	10598.1	10508.0	10284.4	9607.0	8672.7	7775.0	7147.7	6293.4	4918.6
40°	10244.4	10344.5	10344.5	10331.1	10251.0	9904.0	9236.6	8329.0	7601.5	6730.6	5255.7
42.5°	9787.2	9890.6	9877.3	9927.3	9907.3	9833.9	9553.6	8846.2	8055.3	7181.1	5562.7
45°	9189.9	9296.7	9270.0	9360.1	9400.1	9480.2	9520.2	9206.6	8502.5	7671.6	5906.4
47.5°	8232.2	8412.4	8452.4	8612.6	8779.4	9029.7	9219.9	9336.7	8919.6	8198.8	6280.1
50°	6817.3	7070.9	7151.0	7488.1	7945.2	8462.4	8769.4	9176.5	9213.2	8739.4	6683.9
52.5°	4881.9	5175.6	5299.0	5853.0	6794.0	7694.9	8248.9	8822.8	9326.7	9256.6	7121.0
55°	3156.7	3407.0	3527.1	4047.7	5299.0	6713.9	7634.9	8365.7	9263.3	9730.5	7621.5
57.5°	1945.4	2088.9	2169.0	2616.1	3767.4	5455.9	6830.7	7945.2	9069.8	10140.9	8142.1
60°	1311.4	1394.8	1434.9	1645.1	2559.4	4077.7	5726.2	7504.7	8816.2	10417.9	8615.9
62.5°	870.9	897.6	937.7	1067.8	1688.5	2863.1	4398.1	6717.2	8625.9	10434.6	8966.3
65°	674.1	687.4	704.1	760.8	1041.1	2002.2	3093.3	5442.5	8342.3	10080.8	9076.4
67.5°	530.6	543.9	563.9	594.0	754.1	1358.1	2105.6	3987.6	7761.7	9526.9	8896.2
70°	417.1	427.1	440.5	467.2	587.3	984.4	1391.5	2649.5	6590.4	8999.7	8329.0
72.5°	330.4	340.4	353.7	380.4	477.2	720.8	954.4	1651.8	5082.1	8355.7	7237.8
75°	260.3	267.0	277.0	303.7	383.7	560.6	647.4	987.7	3453.7	7177.7	5639.4
77.5°	130.1	160.2	183.5	210.2	280.3	387.1	430.5	547.3	1458.2	3684.0	2689.6
80°	76.7	93.4	100.1	116.8	183.5	233.6	233.6	220.2	460.5	1414.9	1097.8
82.5°	43.4	60.1	63.4	66.7	110.1	133.5	106.8	80.1	93.4	473.8	320.3
85°	13.3	20.0	23.4	26.7	36.7	40.0	36.7	33.4	26.7	46.7	30.0
87.5°	0.0	0.0	0.0	0.0	3.3	6.7	6.7	6.7	10.0	10.0	10.0
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°	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0	2149.0
2.5°	2162.3	2118.9	2035.5	1958.8	1885.4	1832.0	1781.9	1735.2	1701.8	1675.1	1671.8
5°	2192.4	2105.6	1945.4	1795.3	1658.5	1545.0	1448.2	1371.5	1314.7	1274.7	1271.4
7.5°	2232.4	2098.9	1855.3	1631.8	1428.2	1264.7	1124.5	1021.1	947.7	917.7	894.3
10°	2265.8	2092.3	1765.2	1468.2	1201.3	994.4	827.6	724.1	670.7	650.7	640.7
12.5°	2322.5	2098.9	1688.5	1318.1	1004.4	760.8	634.0	577.3	553.9	537.2	533.9
15°	2405.9	2129.0	1615.1	1171.3	804.2	614.0	540.6	503.9	480.5	477.2	473.8
17.5°	2489.3	2155.7	1548.3	1021.1	667.4	533.9	483.9	453.8	437.1	433.8	433.8
20°	2586.1	2189.0	1474.9	877.6	570.6	480.5	440.5	417.1	397.1	393.8	393.8
22.5°	2699.6	2235.7	1404.8	750.8	507.2	440.5	407.1	380.4	363.7	360.4	360.4
25°	2853.1	2305.8	1348.1	657.4	463.8	407.1	377.1	353.7	340.4	333.7	333.7
27.5°	3023.3	2402.6	1308.1	600.6	433.8	380.4	350.4	330.4	317.0	310.3	310.3
30°	3213.5	2509.4	1281.4	577.3	417.1	357.1	330.4	310.3	293.6	290.3	290.3
32.5°	3423.7	2632.8	1264.7	580.6	413.8	340.4	310.3	290.3	277.0	270.3	270.3
35°	3657.3	2769.6	1254.7	600.6	420.5	327.0	293.6	273.6	260.3	253.6	253.6
37.5°	3917.5	2929.8	1254.7	620.7	437.1	323.7	277.0	256.9	246.9	240.3	240.3
40°	4161.1	3100.0	1268.0	644.0	453.8	323.7	263.6	246.9	233.6	226.9	226.9
42.5°	4351.3	3196.8	1278.0	667.4	463.8	320.3	250.3	233.6	223.6	216.9	216.9
45°	4568.2	3300.2	1258.0	677.4	463.8	313.7	240.3	223.6	213.6	206.9	206.9
47.5°	4808.5	3427.0	1254.7	684.1	453.8	300.3	230.2	213.6	206.9	200.2	200.2
50°	5052.1	3567.2	1261.4	680.7	440.5	280.3	216.9	206.9	196.9	190.2	190.2
52.5°	5329.1	3714.0	1274.7	674.1	410.4	256.9	206.9	196.9	186.9	180.2	176.9
55°	5636.1	3874.2	1301.4	660.7	370.4	233.6	196.9	186.9	173.5	166.8	163.5
57.5°	5989.8	4071.0	1331.4	634.0	327.0	213.6	186.9	173.5	153.5	143.5	140.2
60°	6326.8	4294.6	1364.8	570.6	283.6	193.5	176.9	156.8	136.8	130.1	126.8
62.5°	6643.8	4514.9	1381.5	457.2	240.3	176.9	166.8	143.5	123.5	116.8	113.5
65°	6847.4	4755.1	1344.8	310.3	196.9	163.5	153.5	133.5	113.5	103.4	103.4
67.5°	6860.7	4868.6	1218.0	203.6	160.2	146.8	140.2	120.1	100.1	93.4	90.1
70°	6523.7	4698.4	931.0	160.2	133.5	126.8	126.8	106.8	86.8	80.1	76.7
72.5°	5749.5	4161.1	594.0	130.1	113.5	106.8	106.8	90.1	76.7	66.7	63.4
75°	4538.2	3210.1	317.0	106.8	93.4	90.1	83.4	73.4	63.4	56.7	53.4
77.5°	2085.6	1414.9	146.8	76.7	70.1	70.1	63.4	53.4	50.1	43.4	43.4
80°	824.2	480.5	73.4	50.1	46.7	46.7	46.7	36.7	36.7	30.0	26.7
82.5°	226.9	100.1	36.7	30.0	30.0	30.0	26.7	23.4	23.4	20.0	20.0
85°	23.4	16.7	16.7	16.7	16.7	13.3	13.3	10.0	6.7	6.7	6.7
87.5°	10.0	10.0	10.0	10.0	10.0	6.7	3.3	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)