

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: P842090

Luminaire Tested: **ARCH4-270-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842090
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: ARCH4-270-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA 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: 25795 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

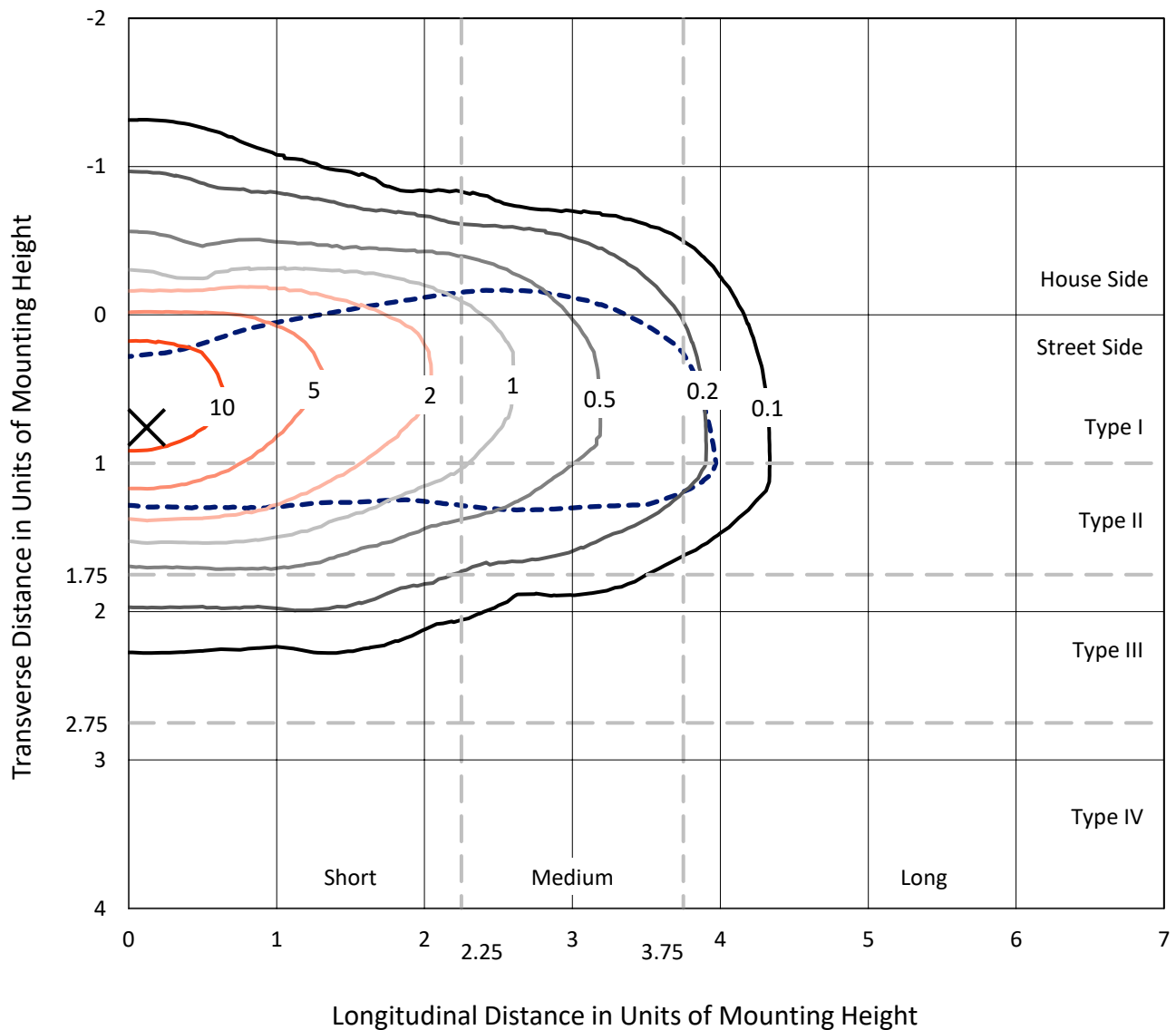
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

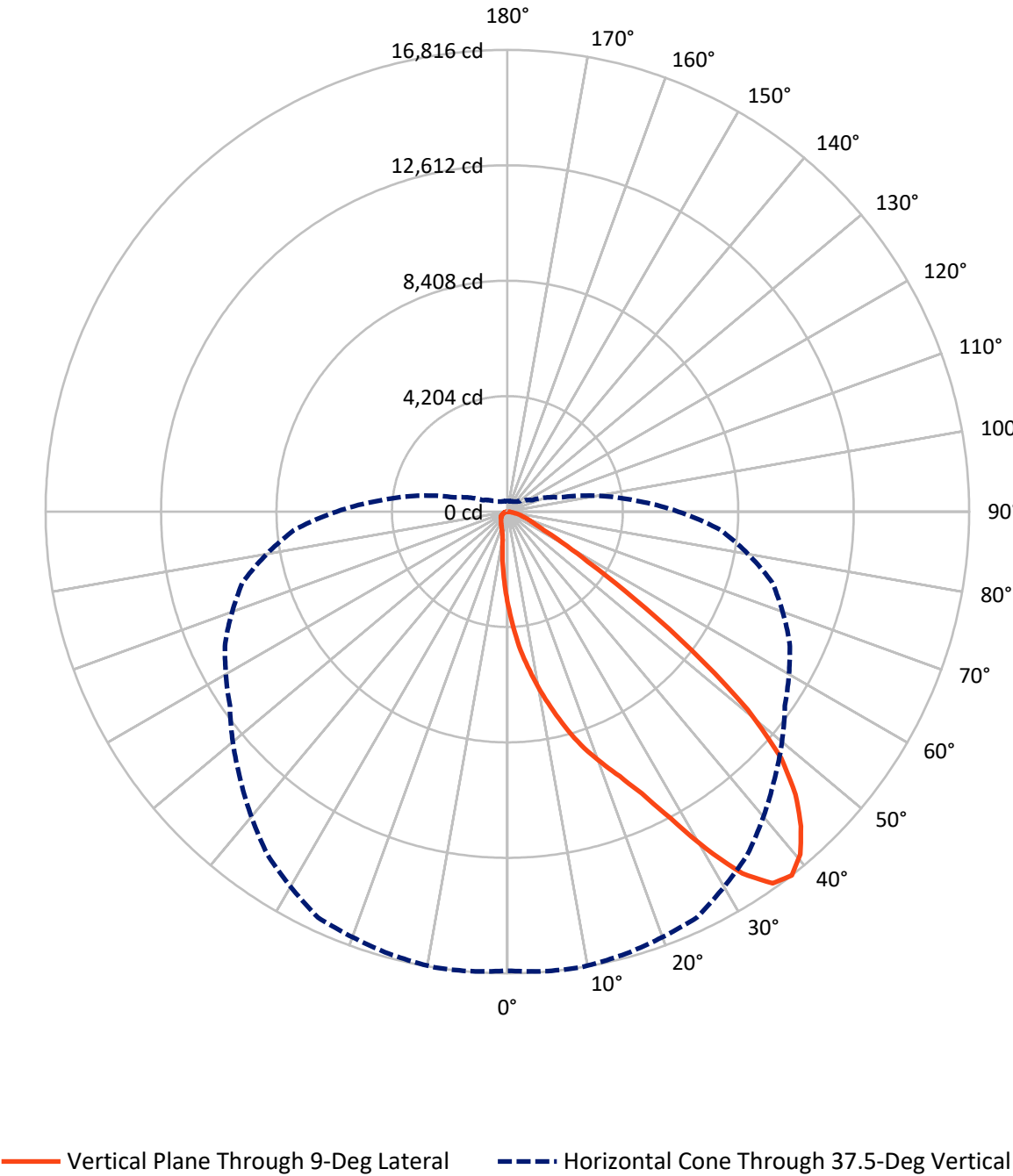
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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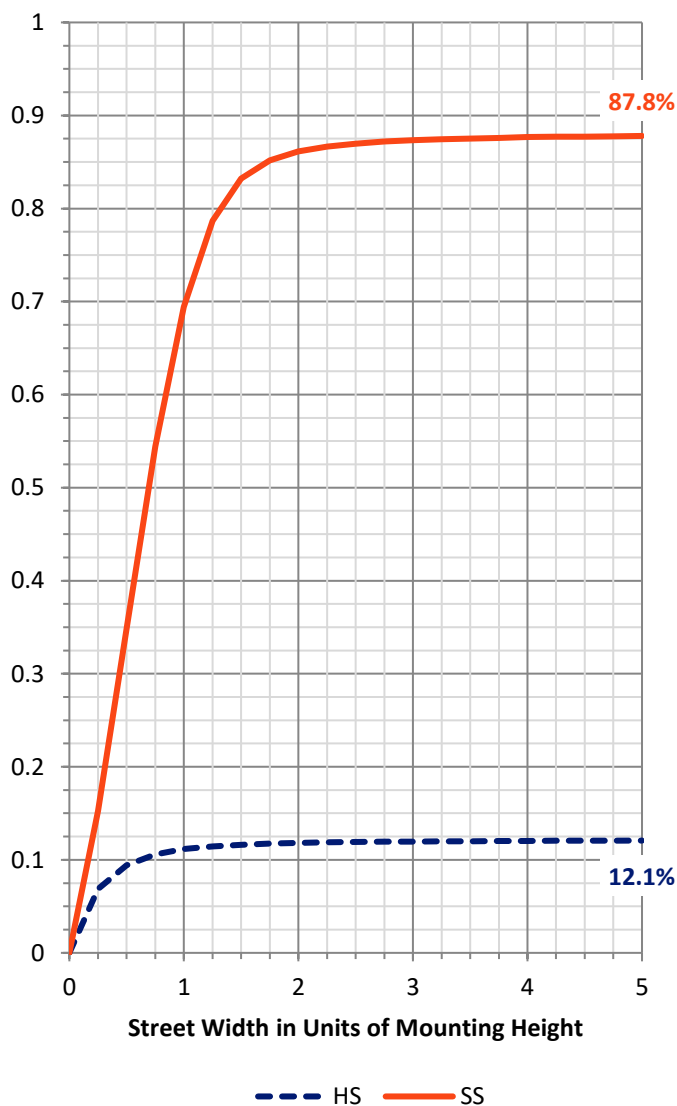
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3137.1	0.0	3137.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	22657.9	0.0	22657.9
	% Fixture	87.8	0.0	87.8
Total	Lumens	25795.0	0.0	25795.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.7	1.3
10°-20°	1191.2	4.6
20°-30°	2447.7	9.5
30°-40°	4326.5	16.8
40°-50°	5747.4	22.3
50°-60°	5451.1	21.1
60°-70°	4158.7	16.1
70°-80°	2016.1	7.8
80°-90°	113.5	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°	25795.0	100.0
0°-180°	25795.0	100.0

Coefficient of Utilization



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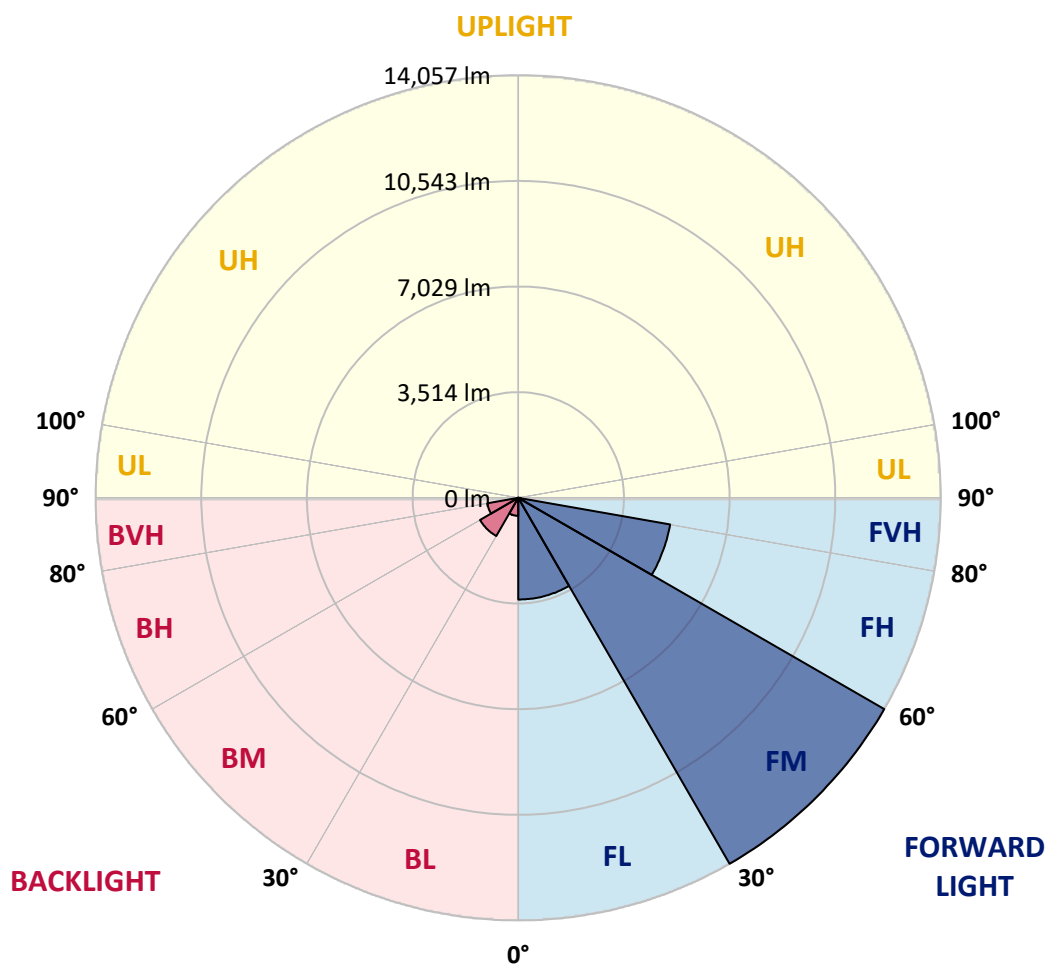
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3383.0	13.1			
FM	(30°-60°)	14057.0	54.5			
FH	(60°-80°)	5128.0	19.9			G3/7500
FVH	(80°-90°)	89.9	0.3			G1/100
BL	(0°-30°)	598.7	2.3	B2/1000		
BM	(30°-60°)	1468.0	5.7	B2/2500		
BH	(60°-80°)	1046.8	4.1	B3/2500		G3/2500
BVH	(80°-90°)	23.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8
2.5°	4225.2	4151.0	4235.8	4225.2	4151.0	4103.4	3955.1	3907.5	3732.8	3605.7	3494.5
5°	5093.5	5019.4	5093.5	5072.3	4966.4	4849.9	4606.4	4447.5	4135.2	3859.8	3611.0
7.5°	5813.6	5813.6	5845.3	5850.6	5723.6	5543.6	5241.8	5003.5	4564.0	4140.5	3743.4
10°	6591.9	6597.2	6666.0	6618.4	6448.9	6205.4	5824.2	5522.4	4992.9	4437.0	3870.4
12.5°	7423.2	7428.5	7449.6	7428.5	7227.3	6914.9	6454.2	6057.1	5448.2	4775.8	4045.2
15°	8254.4	8259.7	8286.2	8249.1	8026.8	7661.4	7137.3	6650.1	5930.1	5157.0	4256.9
17.5°	9032.8	9043.3	9064.5	9016.9	8783.9	8349.7	7815.0	7227.3	6443.7	5564.7	4495.2
20°	9731.7	9742.2	9758.1	9694.6	9461.6	9027.5	8450.3	7836.2	6967.8	5983.0	4754.6
22.5°	10435.9	10446.4	10472.9	10388.2	10128.8	9631.1	9064.5	8429.2	7523.8	6443.7	5056.4
25°	11336.0	11346.5	11367.7	11245.9	10891.2	10308.8	9710.5	9059.2	8127.4	6962.5	5427.1
27.5°	12654.3	12643.7	12643.7	12421.4	11812.5	11055.3	10361.7	9699.9	8778.6	7518.5	5834.8
30°	14285.1	14258.6	14242.7	13940.9	13072.6	11897.2	11028.9	10298.2	9403.4	8106.2	6274.2
32.5°	15746.4	15746.4	15714.7	15397.0	14475.7	13030.3	11738.4	10880.6	10007.0	8699.2	6729.6
35°	16609.5	16646.5	16630.7	16392.4	15720.0	14248.0	12696.7	11579.5	10642.3	9318.7	7274.9
37.5°	16726.0	16800.1	16816.0	16673.0	16318.3	15243.4	13760.9	12336.7	11341.2	9985.8	7804.4
40°	16254.7	16413.6	16413.6	16392.4	16265.3	15714.7	14655.7	13215.6	12061.3	10679.4	8339.2
42.5°	15529.4	15693.5	15672.3	15751.7	15720.0	15603.5	15158.7	14036.3	12781.4	11394.2	8826.3
45°	14581.6	14751.0	14708.7	14851.6	14915.2	15042.2	15105.8	14608.1	13490.9	12172.5	9371.6
47.5°	13062.0	13347.9	13411.5	13665.6	13930.4	14327.5	14629.3	14814.6	14152.7	13009.1	9964.6
50°	10817.1	11219.5	11346.5	11881.3	12606.7	13427.4	13914.5	14560.4	14618.7	13866.8	10605.3
52.5°	7746.1	8212.1	8408.0	9286.9	10780.0	12209.6	13088.5	13999.2	14798.7	14687.5	11298.9
55°	5008.8	5405.9	5596.5	6422.5	8408.0	10652.9	12114.3	13273.8	14698.1	15439.3	12093.1
57.5°	3086.8	3314.5	3441.6	4151.0	5977.7	8656.8	10838.3	12606.7	14391.0	16090.6	12919.1
60°	2080.8	2213.2	2276.7	2610.3	4061.0	6470.1	9085.7	11907.8	13988.6	16530.1	13670.9
62.5°	1381.9	1424.3	1487.8	1694.3	2679.1	4542.9	6978.4	10658.2	13686.8	16556.5	14226.9
65°	1069.5	1090.7	1117.2	1207.2	1651.9	3176.8	4908.2	8635.7	13236.8	15995.3	14401.6
67.5°	841.9	863.0	894.8	942.5	1196.6	2154.9	3341.0	6327.2	12315.5	15116.4	14115.7
70°	661.8	677.7	698.9	741.3	931.9	1561.9	2207.9	4204.0	10457.0	14279.8	13215.6
72.5°	524.2	540.1	561.2	603.6	757.1	1143.7	1514.3	2620.9	8063.8	13257.9	11484.2
75°	413.0	423.6	439.5	481.8	608.9	889.5	1027.2	1567.2	5480.0	11388.9	8948.0
77.5°	206.5	254.1	291.2	333.6	444.8	614.2	683.0	868.3	2313.8	5845.3	4267.5
80°	121.8	148.3	158.8	185.3	291.2	370.6	370.6	349.5	730.7	2245.0	1742.0
82.5°	68.8	95.3	100.6	105.9	174.7	211.8	169.4	127.1	148.3	751.8	508.3
85°	21.2	31.8	37.1	42.4	58.2	63.5	58.2	52.9	42.4	74.1	47.7
87.5°	0.0	0.0	0.0	0.0	5.3	10.6	10.6	10.6	15.9	15.9	15.9
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°	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8	3409.8
2.5°	3431.0	3362.1	3229.8	3108.0	2991.5	2906.8	2827.4	2753.2	2700.3	2657.9	2652.6
5°	3478.6	3341.0	3086.8	2848.5	2631.5	2451.4	2297.9	2176.1	2086.1	2022.6	2017.3
7.5°	3542.2	3330.4	2943.9	2589.1	2266.1	2006.7	1784.3	1620.2	1503.7	1456.0	1419.0
10°	3595.1	3319.8	2800.9	2329.7	1906.1	1577.8	1313.1	1148.9	1064.2	1032.5	1016.6
12.5°	3685.1	3330.4	2679.1	2091.4	1593.7	1207.2	1006.0	916.0	878.9	852.4	847.2
15°	3817.5	3378.0	2562.6	1858.4	1276.0	974.2	857.7	799.5	762.4	757.1	751.8
17.5°	3949.8	3420.4	2456.7	1620.2	1058.9	847.2	767.7	720.1	693.6	688.3	688.3
20°	4103.4	3473.3	2340.3	1392.5	905.4	762.4	698.9	661.8	630.1	624.8	624.8
22.5°	4283.4	3547.4	2229.1	1191.3	804.8	698.9	646.0	603.6	577.1	571.8	571.8
25°	4527.0	3658.6	2139.1	1043.1	736.0	646.0	598.3	561.2	540.1	529.5	529.5
27.5°	4797.0	3812.2	2075.5	953.0	688.3	603.6	555.9	524.2	503.0	492.4	492.4
30°	5098.8	3981.6	2033.2	916.0	661.8	566.5	524.2	492.4	465.9	460.6	460.6
32.5°	5432.4	4177.5	2006.7	921.3	656.5	540.1	492.4	460.6	439.5	428.9	428.9
35°	5803.0	4394.6	1990.8	953.0	667.1	518.9	465.9	434.2	413.0	402.4	402.4
37.5°	6216.0	4648.7	1990.8	984.8	693.6	513.6	439.5	407.7	391.8	381.2	381.2
40°	6602.5	4918.8	2012.0	1021.9	720.1	513.6	418.3	391.8	370.6	360.0	360.0
42.5°	6904.3	5072.3	2027.9	1058.9	736.0	508.3	397.1	370.6	354.7	344.2	344.2
45°	7248.4	5236.5	1996.1	1074.8	736.0	497.7	381.2	354.7	338.9	328.3	328.3
47.5°	7629.7	5437.7	1990.8	1085.4	720.1	476.5	365.3	338.9	328.3	317.7	317.7
50°	8016.2	5660.0	2001.4	1080.1	698.9	444.8	344.2	328.3	312.4	301.8	301.8
52.5°	8455.6	5893.0	2022.6	1069.5	651.2	407.7	328.3	312.4	296.5	285.9	280.6
55°	8942.7	6147.1	2064.9	1048.4	587.7	370.6	312.4	296.5	275.3	264.7	259.4
57.5°	9504.0	6459.5	2112.6	1006.0	518.9	338.9	296.5	275.3	243.6	227.7	222.4
60°	10038.8	6814.3	2165.5	905.4	450.0	307.1	280.6	248.9	217.1	206.5	201.2
62.5°	10541.7	7163.7	2192.0	725.4	381.2	280.6	264.7	227.7	195.9	185.3	180.0
65°	10864.7	7544.9	2133.8	492.4	312.4	259.4	243.6	211.8	180.0	164.1	164.1
67.5°	10885.9	7725.0	1932.6	323.0	254.1	233.0	222.4	190.6	158.8	148.3	143.0
70°	10351.1	7454.9	1477.2	254.1	211.8	201.2	201.2	169.4	137.7	127.1	121.8
72.5°	9122.8	6602.5	942.5	206.5	180.0	169.4	169.4	143.0	121.8	105.9	100.6
75°	7200.8	5093.5	503.0	169.4	148.3	143.0	132.4	116.5	100.6	90.0	84.7
77.5°	3309.2	2245.0	233.0	121.8	111.2	111.2	100.6	84.7	79.4	68.8	68.8
80°	1307.8	762.4	116.5	79.4	74.1	74.1	74.1	58.2	58.2	47.7	42.4
82.5°	360.0	158.8	58.2	47.7	47.7	47.7	42.4	37.1	37.1	31.8	31.8
85°	37.1	26.5	26.5	26.5	26.5	21.2	21.2	15.9	10.6	10.6	10.6
87.5°	15.9	15.9	15.9	15.9	15.9	10.6	5.3	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)