

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: P841398

Luminaire Tested: **ARCH4-170-740-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-740-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28723 lumens
Efficiency: N/A
Efficacy: 169.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 169.8
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



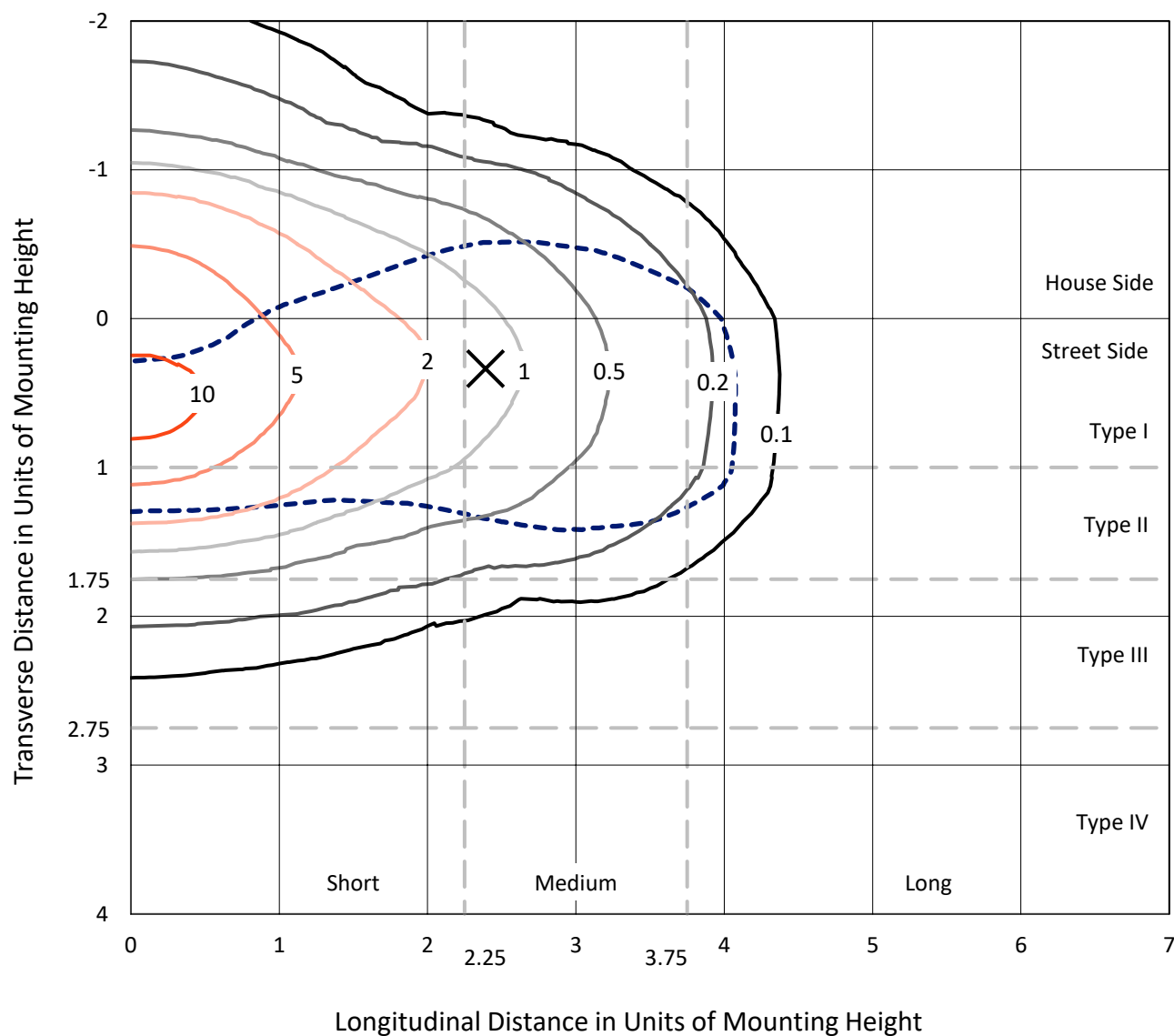
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

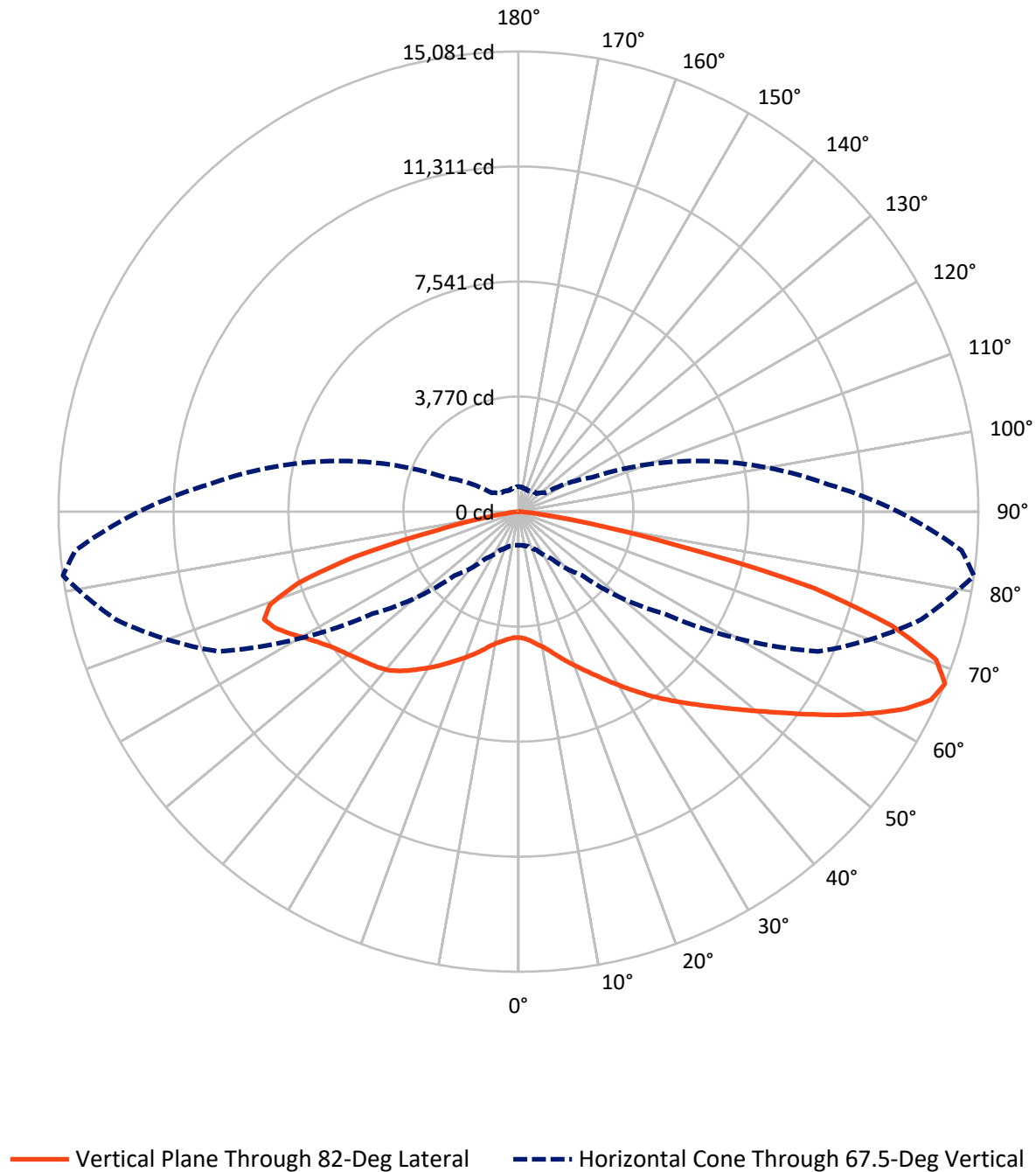
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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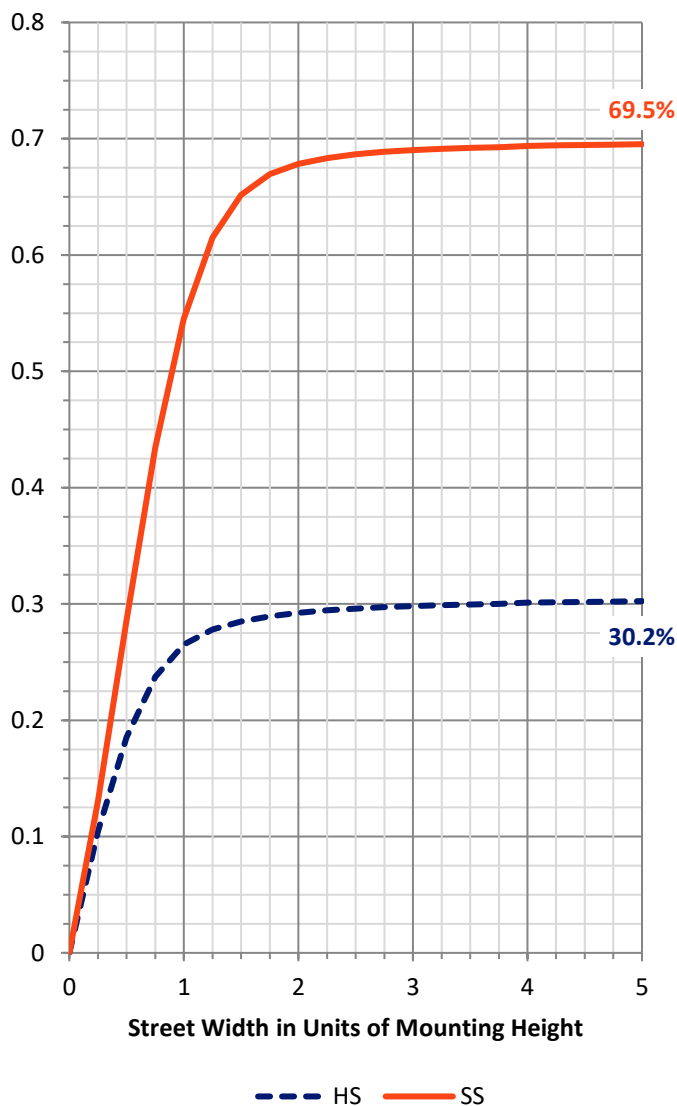
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8747.3	0.0	8747.3
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	19975.7	0.0	19975.7
	% Fixture	69.5	0.0	69.5
Total	Lumens	28723.0	0.0	28723.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.7	1.5
10°-20°	1537.0	5.4
20°-30°	3089.0	10.8
30°-40°	4852.4	16.9
40°-50°	5911.2	20.6
50°-60°	5585.4	19.4
60°-70°	4612.2	16.1
70°-80°	2511.6	8.7
80°-90°	197.5	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°	28723.0	100.0
0°-180°	28723.0	100.0

Coefficient of Utilization



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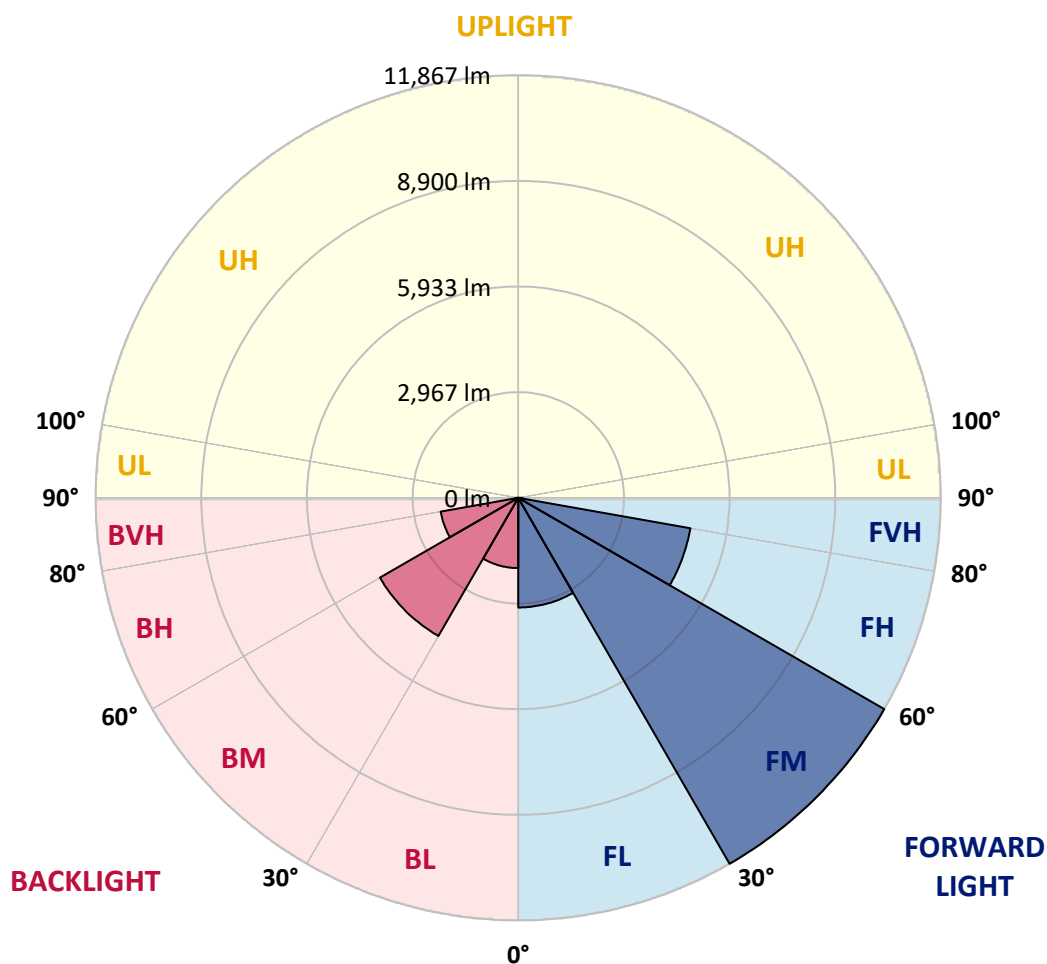
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3080.2	10.7			
FM	(30°-60°)	11866.7	41.3			
FH	(60°-80°)	4909.8	17.1			G2/5000
FVH	(80°-90°)	119.0	0.4			G2/225
BL	(0°-30°)	1972.6	6.9	B3/2500		
BM	(30°-60°)	4482.3	15.6	B3/5000		
BH	(60°-80°)	2214.0	7.7	B3/2500		G3/2500
BVH	(80°-90°)	78.4	0.3			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9
2.5°	4316.6	4316.6	4350.0	4350.0	4320.8	4274.9	4262.4	4212.3	4166.5	4166.5	4170.6
5°	4729.5	4725.3	4750.3	4717.0	4646.1	4554.3	4491.8	4383.3	4291.6	4262.4	4258.2
7.5°	5234.1	5230.0	5242.5	5188.3	5054.8	4904.7	4779.5	4604.4	4454.2	4391.7	4375.0
10°	5797.2	5793.0	5780.5	5688.7	5509.4	5275.8	5088.2	4846.3	4621.0	4521.0	4500.1
12.5°	6443.6	6435.3	6406.1	6272.6	6026.5	5726.3	5455.2	5142.4	4842.1	4704.5	4658.6
15°	7165.1	7152.6	7098.4	6935.7	6606.3	6226.7	5876.4	5476.0	5109.0	4929.7	4867.1
17.5°	7924.2	7924.2	7840.8	7598.9	7231.9	6760.6	6326.8	5818.0	5388.4	5167.4	5092.3
20°	8695.7	8691.6	8587.3	8295.4	7861.6	7319.4	6768.9	6210.1	5676.2	5409.3	5317.5
22.5°	9509.0	9500.7	9371.4	9037.7	8520.6	7907.5	7265.2	6597.9	5993.2	5672.0	5555.3
25°	10443.2	10430.7	10272.2	9863.5	9250.4	8558.1	7824.1	7052.5	6356.0	5964.0	5826.4
27.5°	11435.8	11419.2	11231.5	10756.0	10084.6	9250.4	8441.3	7578.0	6756.4	6289.3	6135.0
30°	12320.0	12307.5	12103.1	11615.2	10843.6	9938.6	9029.4	8103.5	7177.6	6635.5	6443.6
32.5°	12987.3	12987.3	12803.8	12324.2	11523.4	10597.6	9621.6	8599.8	7615.6	7006.6	6781.4
35°	13391.9	13404.4	13245.9	12862.2	12107.3	11219.0	10234.7	9183.7	8082.7	7402.9	7161.0
37.5°	13450.3	13492.0	13400.2	13141.6	12511.9	11736.1	10835.3	9746.7	8566.5	7803.2	7532.1
40°	13179.2	13208.4	13212.5	13112.4	12678.7	12107.3	11364.9	10343.1	9079.4	8224.5	7911.7
42.5°	12637.0	12657.8	12695.4	12724.6	12557.7	12270.0	11769.5	10897.8	9625.8	8654.0	8287.0
45°	11936.3	11932.2	11994.7	12119.8	12111.5	12178.2	11994.7	11402.5	10193.0	9142.0	8704.1
47.5°	10889.5	10868.6	11089.7	11373.3	11515.1	11827.9	11998.9	11798.7	10810.3	9680.0	9179.5
50°	9250.4	9229.6	9713.4	10380.7	10797.7	11273.2	11769.5	12036.4	11456.7	10284.8	9696.7
52.5°	7256.9	7236.0	7849.1	9016.9	9926.1	10618.4	11306.6	12090.6	12069.8	10960.4	10280.6
55°	5396.8	5380.1	5976.5	7240.2	8712.4	9859.4	10739.4	11948.8	12645.3	11736.1	10989.6
57.5°	3803.6	3795.3	4312.4	5359.3	7152.6	8933.5	10193.0	11673.6	13175.0	12578.6	11790.4
60°	2669.2	2656.7	3032.0	3841.1	5409.3	7536.3	9650.8	11306.6	13571.2	13408.6	12641.2
62.5°	1797.5	1789.2	2056.1	2731.8	3841.1	5801.3	8829.2	11060.5	13796.4	14242.7	13500.3
65°	1363.8	1359.6	1480.6	1851.8	2719.2	4166.5	7523.8	11031.3	13825.6	14868.3	14230.2
67.5°	1101.0	1105.2	1171.9	1384.6	1881.0	2961.1	5834.7	10847.8	13671.3	15081.0	14584.7
70°	900.9	900.9	930.0	1071.9	1388.8	1997.7	4074.7	10013.7	13241.7	14526.3	14163.4
72.5°	688.2	692.3	784.1	867.5	1046.8	1401.3	2610.8	8287.0	12228.3	12808.0	12532.7
75°	546.4	542.2	596.4	713.2	813.3	1000.9	1601.5	5943.1	10405.7	10009.5	9834.3
77.5°	392.0	387.9	429.6	529.7	617.3	709.0	955.1	2998.7	5659.5	5200.8	5071.5
80°	266.9	258.6	296.1	367.0	408.7	417.1	467.1	1151.1	2469.0	2327.2	2298.0
82.5°	137.6	137.6	158.5	208.5	212.7	216.9	208.5	371.2	817.4	763.2	729.9
85°	54.2	54.2	58.4	70.9	70.9	75.1	75.1	95.9	87.6	83.4	79.2
87.5°	4.2	4.2	8.3	8.3	12.5	12.5	12.5	16.7	20.9	20.9	20.9
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°	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9	4128.9
2.5°	4162.3	4145.6	4091.4	4078.9	4070.5	4058.0	4062.2	4033.0	4020.5	4024.7	4008.0
5°	4237.4	4208.2	4141.4	4112.2	4103.9	4091.4	4103.9	4083.0	4062.2	4070.5	4062.2
7.5°	4341.6	4299.9	4216.5	4187.3	4183.1	4170.6	4187.3	4170.6	4153.9	4162.3	4145.6
10°	4450.1	4395.8	4304.1	4274.9	4274.9	4270.7	4287.4	4262.4	4245.7	4249.9	4241.5
12.5°	4608.5	4537.6	4437.5	4412.5	4400.0	4412.5	4416.7	4383.3	4354.1	4358.3	4345.8
15°	4800.4	4721.1	4612.7	4575.2	4566.8	4562.7	4546.0	4504.3	4466.7	4462.6	4450.1
17.5°	5008.9	4908.8	4779.5	4742.0	4704.5	4692.0	4650.2	4596.0	4537.6	4537.6	4521.0
20°	5209.1	5096.5	4942.2	4888.0	4833.8	4783.7	4712.8	4625.2	4550.1	4537.6	4521.0
22.5°	5426.0	5292.5	5113.2	5033.9	4938.0	4837.9	4717.0	4600.2	4504.3	4483.4	4470.9
25°	5667.9	5501.1	5288.3	5171.6	5017.3	4862.9	4683.6	4533.5	4420.9	4387.5	4379.2
27.5°	5934.8	5734.6	5476.0	5305.0	5079.8	4837.9	4608.5	4429.2	4291.6	4249.9	4237.4
30°	6205.9	5968.2	5647.0	5396.8	5079.8	4758.7	4470.9	4262.4	4103.9	4045.5	4037.2
32.5°	6477.0	6210.1	5801.3	5446.8	5029.8	4625.2	4291.6	4045.5	3866.2	3795.3	3811.9
35°	6802.3	6477.0	5943.1	5467.7	4946.4	4462.6	4087.2	3799.4	3615.9	3553.4	3565.9
37.5°	7140.1	6743.9	6055.7	5451.0	4829.6	4279.1	3857.8	3578.4	3349.0	3240.6	3253.1
40°	7432.0	6985.8	6135.0	5392.6	4679.4	4070.5	3632.6	3265.6	2948.6	2844.4	2831.9
42.5°	7707.3	7165.1	6176.7	5305.0	4508.4	3828.6	3311.5	2840.2	2523.2	2393.9	2398.1
45°	7995.1	7340.3	6160.0	5188.3	4295.7	3545.0	2898.6	2423.1	2143.7	2026.9	2031.1
47.5°	8324.6	7528.0	6143.3	5063.1	4037.2	3178.0	2502.4	2056.1	1814.2	1730.8	1722.5
50°	8674.9	7736.5	6122.5	4908.8	3749.4	2769.3	2110.3	1714.1	1509.8	1455.5	1443.0
52.5°	9071.1	7961.7	6110.0	4725.3	3403.2	2335.5	1760.0	1413.8	1276.2	1238.7	1234.5
55°	9546.6	8224.5	6126.6	4504.3	2986.2	1926.8	1463.9	1217.8	1126.1	1105.2	1101.0
57.5°	10126.3	8562.3	6176.7	4245.7	2548.3	1572.3	1247.0	1096.9	1038.5	1021.8	1021.8
60°	10756.0	8946.0	6268.4	3953.8	2110.3	1297.1	1105.2	1000.9	975.9	996.8	996.8
62.5°	11435.8	9396.4	6431.1	3599.2	1701.6	1096.9	992.6	921.7	905.0	946.7	950.9
65°	12065.6	9834.3	6535.4	3173.8	1351.3	950.9	905.0	842.5	850.8	892.5	888.3
67.5°	12453.5	10197.2	6389.4	2640.0	1071.9	842.5	813.3	759.1	779.9	813.3	817.4
70°	12215.8	9992.8	5667.9	1993.6	838.3	734.0	713.2	679.8	696.5	738.2	754.9
72.5°	11052.1	8950.2	4408.3	1347.1	675.6	617.3	625.6	608.9	629.8	667.3	704.8
75°	8971.0	6764.7	2957.0	863.3	533.8	525.5	538.0	525.5	533.8	571.4	592.2
77.5°	4683.6	3299.0	1472.2	538.0	396.2	408.7	429.6	433.7	458.8	467.1	475.5
80°	2185.4	1484.7	613.1	300.3	262.7	287.8	329.5	333.6	342.0	354.5	358.7
82.5°	713.2	446.3	283.6	162.7	150.1	162.7	212.7	254.4	258.6	283.6	283.6
85°	75.1	45.9	62.6	66.7	58.4	70.9	95.9	91.8	41.7	25.0	25.0
87.5°	20.9	16.7	20.9	20.9	16.7	16.7	12.5	4.2	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)