

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: P841231

Luminaire Tested: **ARCH4-150-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-150-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1230mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23865 lumens
Efficiency: N/A
Efficacy: 158.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 150.8
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

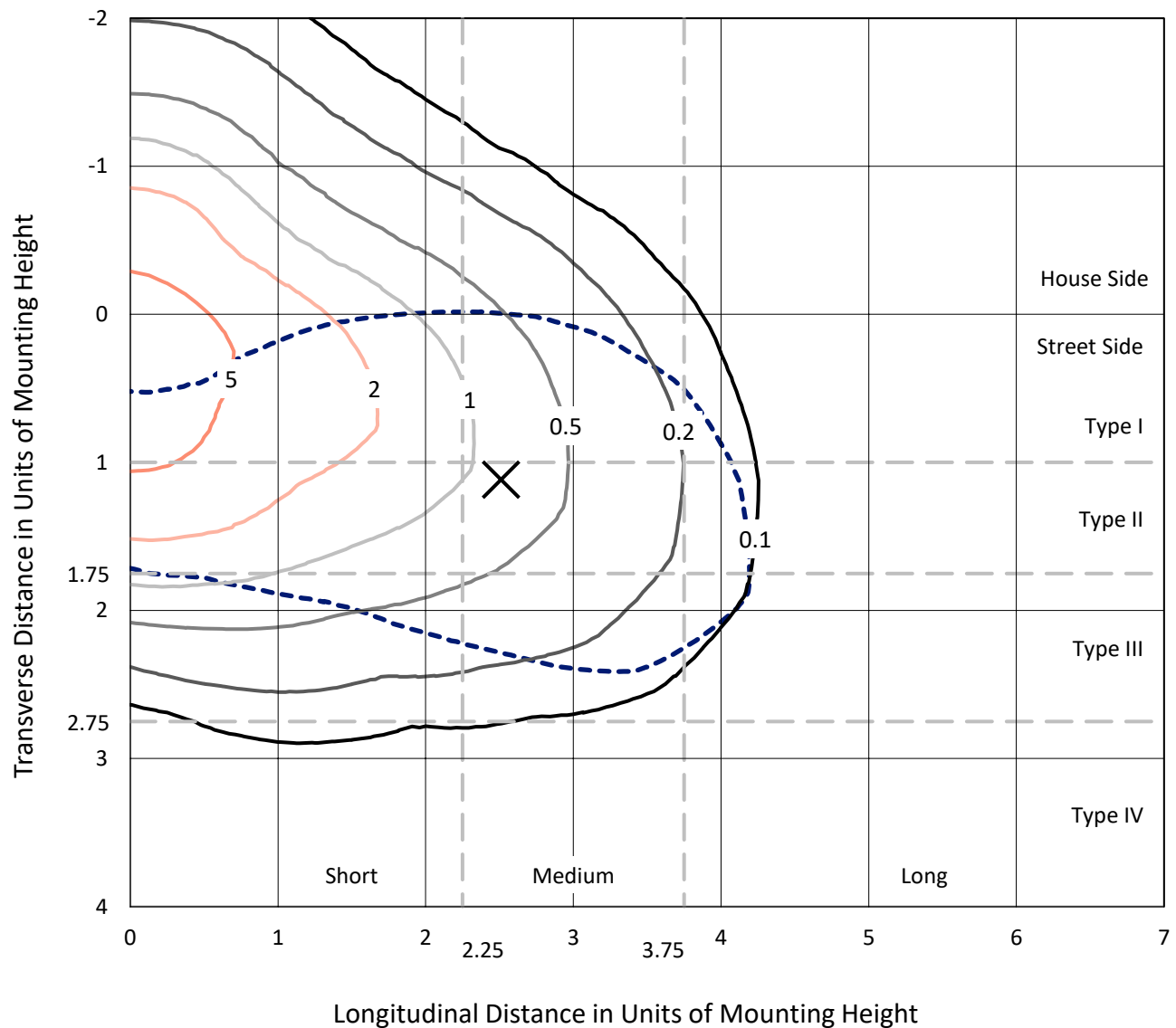


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Iso-Footcandle Lines of Horizontal Illumination

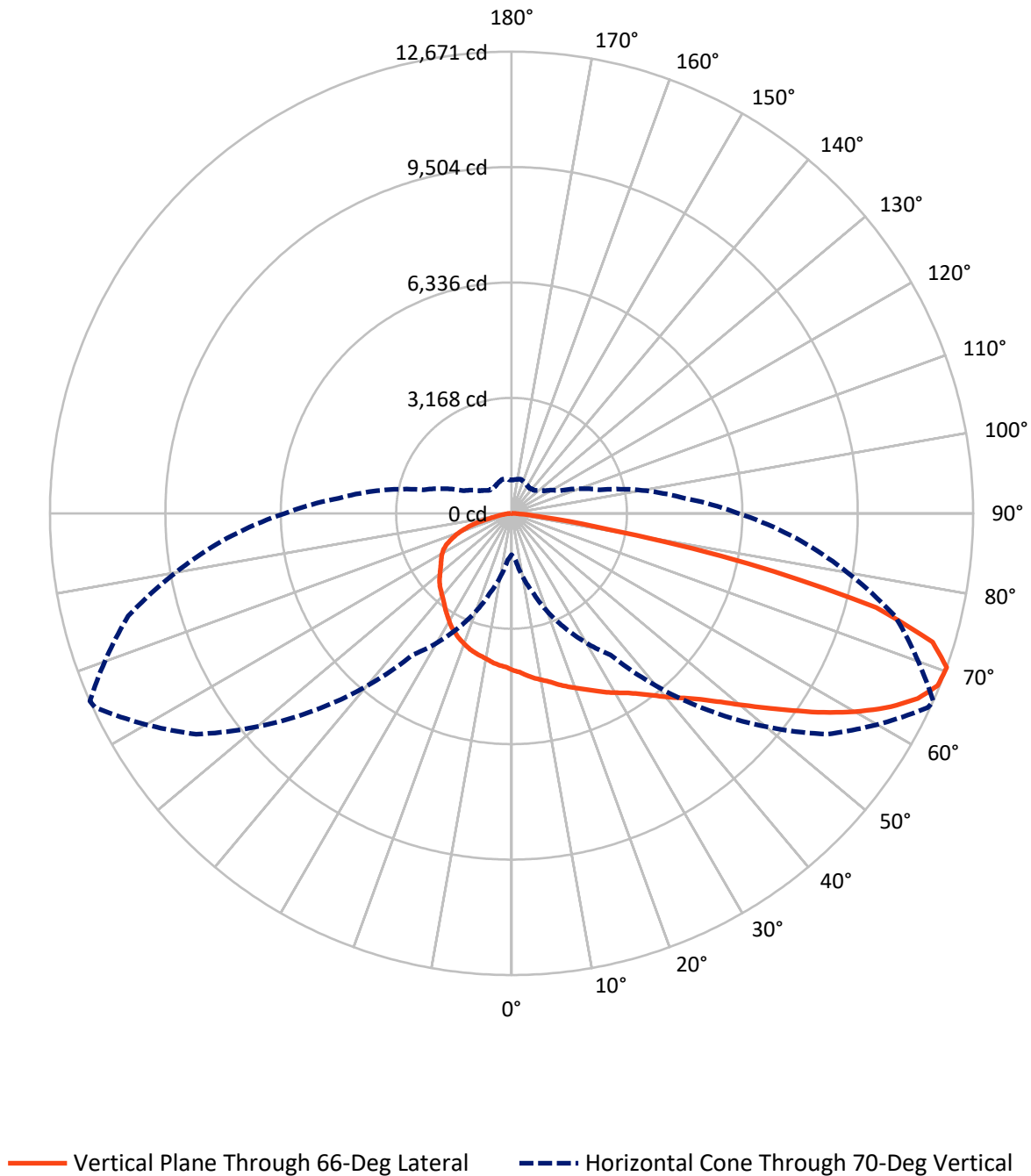
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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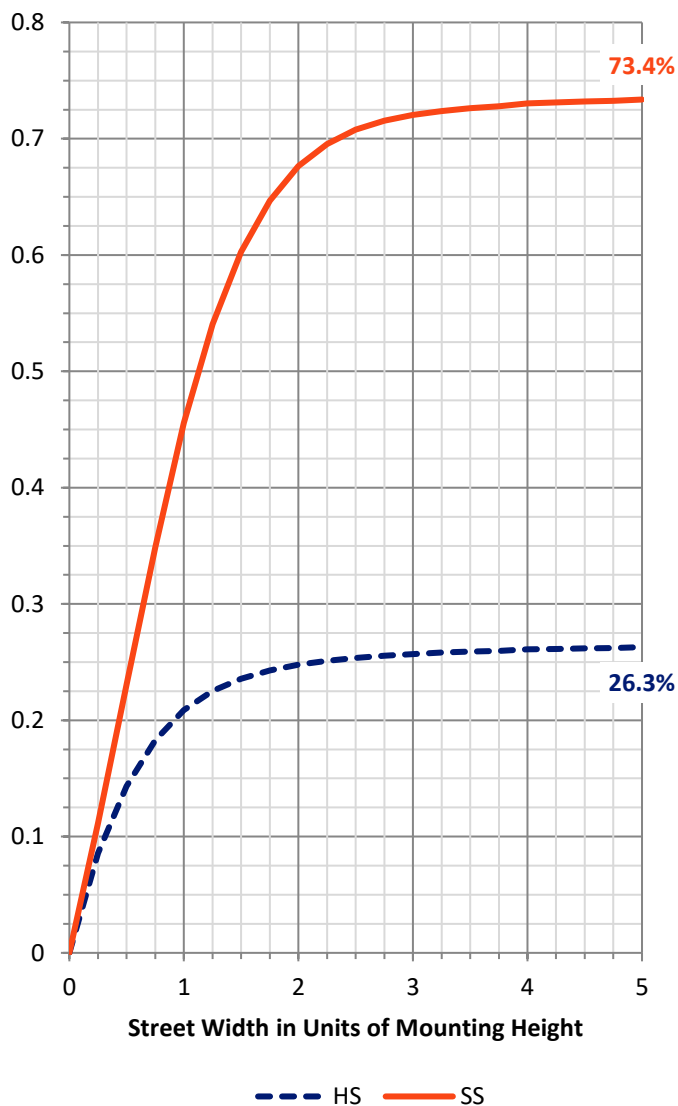
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6323.7	0.0	6323.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	17541.3	0.0	17541.3
	% Fixture	73.5	0.0	73.5
Total	Lumens	23865.0	0.0	23865.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	413.9	1.7
10°-20°	1241.4	5.2
20°-30°	2081.1	8.7
30°-40°	3116.1	13.1
40°-50°	4166.2	17.5
50°-60°	4864.2	20.4
60°-70°	4836.6	20.3
70°-80°	2863.4	12.0
80°-90°	282.2	1.2
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°	23865.0	100.0
0°-180°	23865.0	100.0

Coefficient of Utilization



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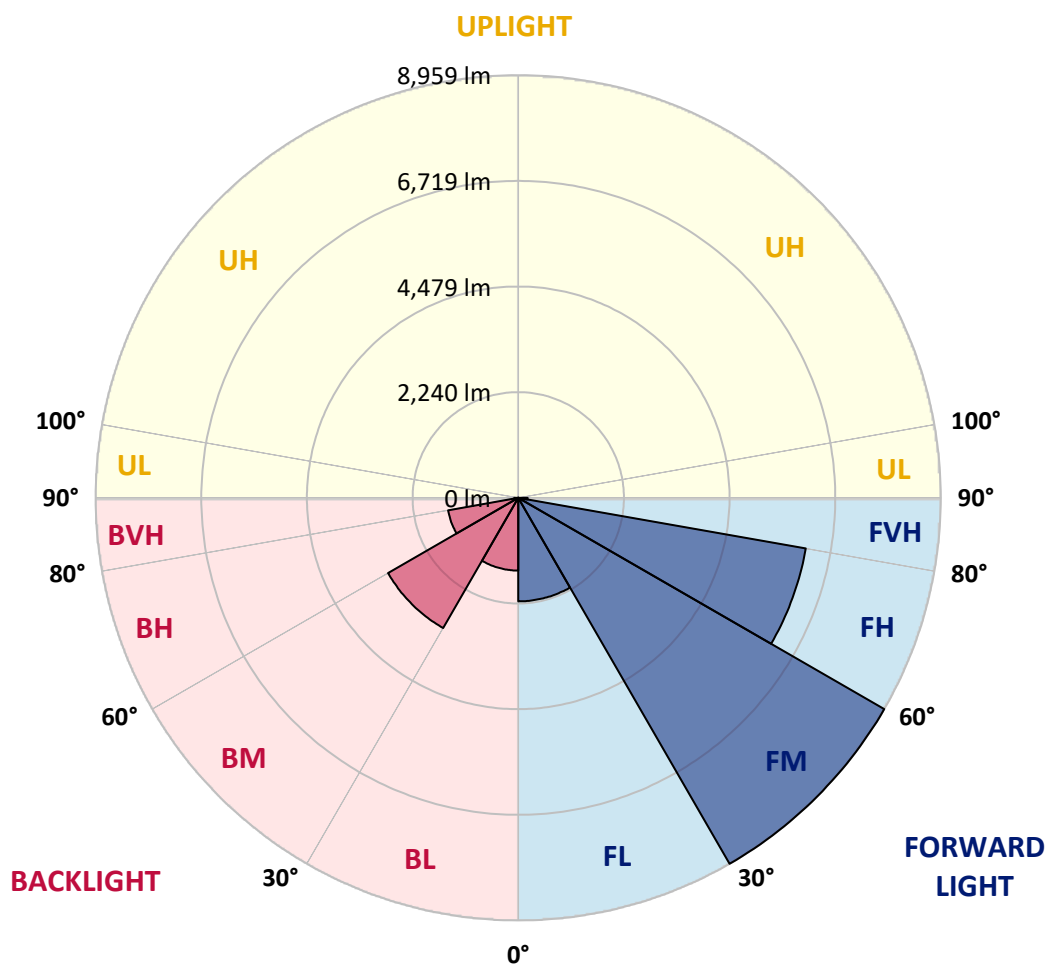
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2194.9	9.2			
FM	(30°-60°)	8958.6	37.5			
FH	(60°-80°)	6189.4	25.9			G3/7500
FVH	(80°-90°)	198.3	0.8			G2/225
BL	(0°-30°)	1541.4	6.5	B3/2500		
BM	(30°-60°)	3187.8	13.4	B3/5000		
BH	(60°-80°)	1510.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	83.9	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1
2.5°	4465.4	4458.4	4454.9	4440.8	4409.1	4423.2	4391.5	4370.4	4366.9	4317.6	4289.5
5°	4648.4	4644.9	4637.9	4616.7	4567.5	4574.5	4521.7	4483.0	4472.5	4395.1	4335.2
7.5°	4803.2	4796.2	4792.7	4764.5	4711.8	4708.2	4644.9	4588.6	4571.0	4465.4	4373.9
10°	4922.9	4912.3	4919.4	4891.2	4834.9	4824.4	4743.4	4669.5	4651.9	4518.2	4391.5
12.5°	5024.9	5017.9	5028.5	5003.8	4958.1	4947.5	4866.6	4771.6	4750.5	4595.6	4430.2
15°	5137.5	5112.9	5134.0	5123.5	5091.8	5088.3	5014.4	4908.8	4880.7	4694.2	4490.1
17.5°	5197.4	5183.3	5207.9	5211.4	5197.4	5222.0	5151.6	5024.9	5000.3	4785.7	4542.9
20°	5239.6	5218.5	5246.6	5267.7	5278.3	5327.6	5271.3	5148.1	5119.9	4873.6	4592.1
22.5°	5383.9	5338.1	5341.6	5355.7	5362.7	5433.1	5397.9	5278.3	5250.1	4982.7	4651.9
25°	5746.3	5654.8	5595.0	5552.8	5503.5	5563.3	5542.2	5426.1	5401.5	5112.9	4725.8
27.5°	6309.3	6193.2	6073.6	5950.4	5756.9	5732.2	5697.0	5591.5	5563.3	5243.1	4799.7
30°	6949.8	6833.6	6692.9	6495.8	6133.4	5943.4	5862.4	5746.3	5714.6	5359.2	4870.1
32.5°	7586.7	7484.6	7343.9	7104.6	6587.3	6200.2	6027.8	5908.2	5876.5	5485.9	4954.6
35°	8082.8	8019.5	7928.0	7628.9	7037.7	6502.9	6267.1	6122.8	6087.6	5686.5	5109.4
37.5°	8484.0	8438.2	8360.8	8047.6	7365.0	6805.5	6541.6	6376.2	6337.5	5904.7	5274.8
40°	9075.1	8955.5	8892.2	8438.2	7650.0	7080.0	6851.2	6678.8	6636.6	6136.9	5408.5
42.5°	9578.3	9490.4	9413.0	8786.6	7921.0	7315.7	7143.3	6984.9	6928.6	6365.6	5552.8
45°	9662.8	9698.0	9659.3	8959.0	8350.3	7548.0	7438.9	7336.8	7284.0	6675.3	5770.9
47.5°	9666.3	9666.3	9437.6	9057.6	8881.6	7808.4	7755.6	7790.8	7734.5	7069.4	6031.3
50°	9413.0	9458.7	9339.1	9082.2	9022.4	8068.8	8142.7	8332.7	8276.4	7488.1	6312.8
52.5°	8888.6	9040.0	9036.4	9043.5	8818.3	8290.4	8550.8	8983.7	8888.6	7959.7	6611.9
55°	7963.2	8265.8	8536.8	8769.0	8642.3	8424.2	9050.5	9676.9	9578.3	8487.5	6914.6
57.5°	7171.4	7365.0	7702.8	8360.8	8434.7	8540.3	9518.5	10401.8	10313.8	9071.6	7231.3
60°	6267.1	6534.5	6872.3	7808.4	8181.4	8691.6	10032.3	11109.1	11024.6	9662.8	7537.4
62.5°	4877.1	5222.0	5897.6	6960.3	7811.9	8786.6	10436.9	11731.9	11693.2	10222.3	7811.9
65°	3399.2	3705.4	4651.9	5918.7	7224.2	8744.4	10760.7	12287.9	12252.7	10679.8	8005.4
67.5°	1984.6	2340.0	3409.8	4764.5	6186.2	8452.3	10866.3	12615.1	12615.1	10957.7	8058.2
70°	1133.1	1298.5	2248.6	3473.1	4743.4	7646.5	10570.7	12611.6	12671.4	10894.4	7840.0
72.5°	791.7	865.6	1513.1	2336.5	3216.2	6186.2	9796.5	12002.8	12083.8	10296.2	7094.0
75°	615.8	668.6	1066.2	1594.0	2026.9	4201.5	8103.9	10120.3	10334.9	8776.0	5735.7
77.5°	468.0	506.7	622.8	995.8	1298.5	2413.9	5348.7	6636.6	6650.7	5373.3	3075.5
80°	341.3	380.0	415.2	608.8	689.7	1129.6	2019.8	2772.9	2695.4	2600.4	1664.4
82.5°	204.1	242.8	253.4	330.8	337.8	482.1	707.3	893.8	858.6	1143.6	781.2
85°	88.0	123.2	130.2	151.3	144.3	197.1	281.5	235.8	211.1	242.8	168.9
87.5°	21.1	35.2	35.2	38.7	31.7	49.3	52.8	38.7	35.2	42.2	42.2
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°	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1	4307.1
2.5°	4282.5	4271.9	4275.4	4215.6	4198.0	4180.4	4169.9	4162.8	4155.8	4166.3	4176.9
5°	4314.1	4289.5	4261.3	4173.4	4138.2	4099.5	4071.3	4046.7	4036.1	4036.1	4046.7
7.5°	4338.8	4296.5	4236.7	4120.6	4057.2	4004.5	3958.7	3927.1	3909.5	3909.5	3920.0
10°	4342.3	4282.5	4187.4	4046.7	3962.2	3884.8	3832.0	3796.9	3772.2	3772.2	3779.3
12.5°	4363.4	4282.5	4159.3	3990.4	3884.8	3789.8	3726.5	3673.7	3663.1	3663.1	3670.2
15°	4398.6	4300.1	4141.7	3941.1	3814.4	3705.4	3635.0	3578.7	3557.6	3571.6	3575.2
17.5°	4430.2	4310.6	4110.0	3877.8	3726.5	3606.8	3529.4	3480.2	3452.0	3483.7	3483.7
20°	4451.4	4310.6	4064.3	3796.9	3631.5	3497.8	3423.9	3364.0	3342.9	3381.6	3385.1
22.5°	4483.0	4307.1	4015.0	3715.9	3529.4	3388.7	3314.8	3269.0	3258.5	3300.7	3314.8
25°	4518.2	4314.1	3962.2	3624.4	3416.8	3279.6	3223.3	3202.2	3209.2	3262.0	3279.6
27.5°	4556.9	4328.2	3909.5	3522.4	3293.7	3170.5	3138.8	3149.4	3177.5	3244.4	3265.5
30°	4592.1	4331.7	3835.6	3402.7	3152.9	3036.8	3050.9	3096.6	3138.8	3205.7	3230.3
32.5°	4637.9	4335.2	3758.1	3272.5	3001.6	2917.1	2980.5	3054.4	3096.6	3159.9	3188.1
35°	4750.5	4395.1	3698.3	3145.9	2860.8	2815.1	2920.7	3015.7	3040.3	3096.6	3121.2
37.5°	4880.7	4493.6	3666.7	3015.7	2723.6	2713.0	2846.8	2941.8	2948.8	2984.0	3008.6
40°	4961.6	4535.8	3631.5	2906.6	2600.4	2607.5	2744.7	2818.6	2804.5	2829.2	2846.8
42.5°	5042.5	4549.9	3557.6	2815.1	2484.3	2491.4	2596.9	2649.7	2656.7	2709.5	2734.2
45°	5179.8	4588.6	3476.6	2730.6	2378.8	2354.1	2417.5	2487.8	2579.3	2681.4	2709.5
47.5°	5362.7	4669.5	3392.2	2628.6	2276.7	2195.8	2220.4	2343.6	2438.6	2533.6	2551.2
50°	5549.2	4750.5	3314.8	2505.4	2174.7	2026.9	2037.4	2150.0	2227.4	2301.3	2311.9
52.5°	5732.2	4820.8	3247.9	2389.3	2058.5	1826.3	1868.5	1984.6	2037.4	2072.6	2083.2
55°	5915.2	4880.7	3188.1	2290.8	1924.8	1667.9	1706.6	1815.7	1868.5	1886.1	1893.1
57.5°	6105.2	4951.0	3142.3	2206.3	1773.5	1527.2	1551.8	1629.2	1678.5	1699.6	1692.6
60°	6263.6	5010.9	3117.7	2118.4	1622.2	1397.0	1390.0	1460.3	1530.7	1551.8	1544.8
62.5°	6386.7	5049.6	3079.0	2005.8	1488.5	1266.8	1231.6	1323.1	1397.0	1411.1	1421.6
65°	6453.6	5053.1	2984.0	1861.5	1351.2	1126.0	1101.4	1192.9	1238.6	1252.7	1252.7
67.5°	6443.0	4996.8	2797.5	1667.9	1224.6	999.4	978.2	1034.5	1101.4	1112.0	1101.4
70°	6224.9	4764.5	2498.4	1463.8	1073.3	886.8	848.0	904.3	967.7	929.0	911.4
72.5°	5605.5	4162.8	2058.5	1238.6	904.3	746.0	728.4	784.7	788.2	795.3	777.7
75°	4423.2	3100.1	1541.3	964.2	731.9	626.4	622.8	612.3	626.4	654.5	633.4
77.5°	2322.4	1548.3	834.0	591.2	531.3	503.2	478.6	475.0	517.3	534.9	513.8
80°	1259.8	869.2	478.6	355.4	323.7	327.3	358.9	351.9	397.6	408.2	390.6
82.5°	548.9	411.7	235.8	214.7	214.7	211.1	221.7	246.3	295.6	295.6	235.8
85°	119.6	102.0	91.5	105.6	119.6	119.6	119.6	119.6	84.5	45.7	31.7
87.5°	38.7	38.7	38.7	42.2	45.7	45.7	38.7	28.2	17.6	3.5	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)