

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: P841802

Luminaire Tested: **ARCH4-230-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841802
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: ARCH4-230-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 905mA 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: 23259 lumens
Efficiency: N/A
Efficacy: 100.6 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

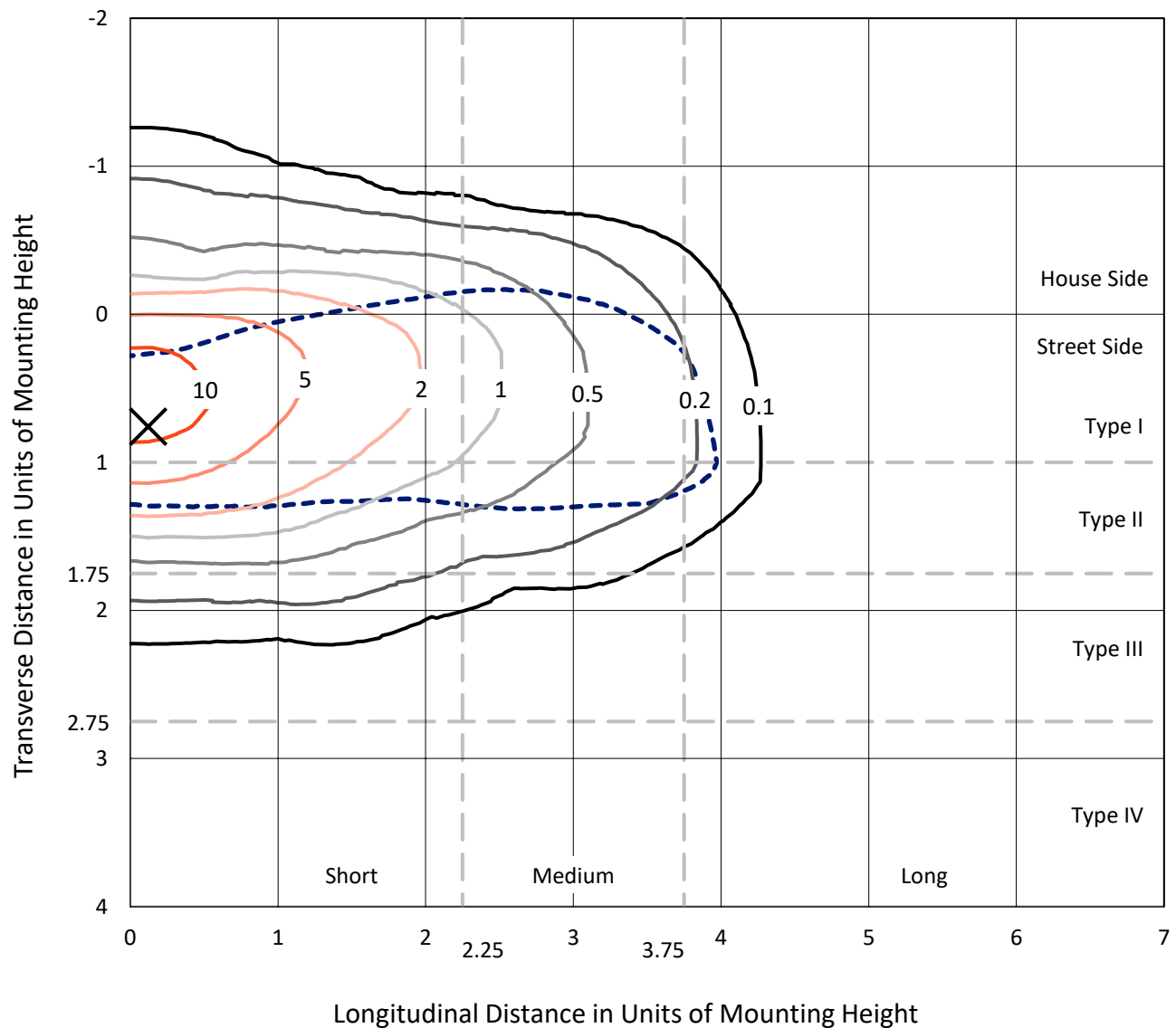
Input Watts (W): 231.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

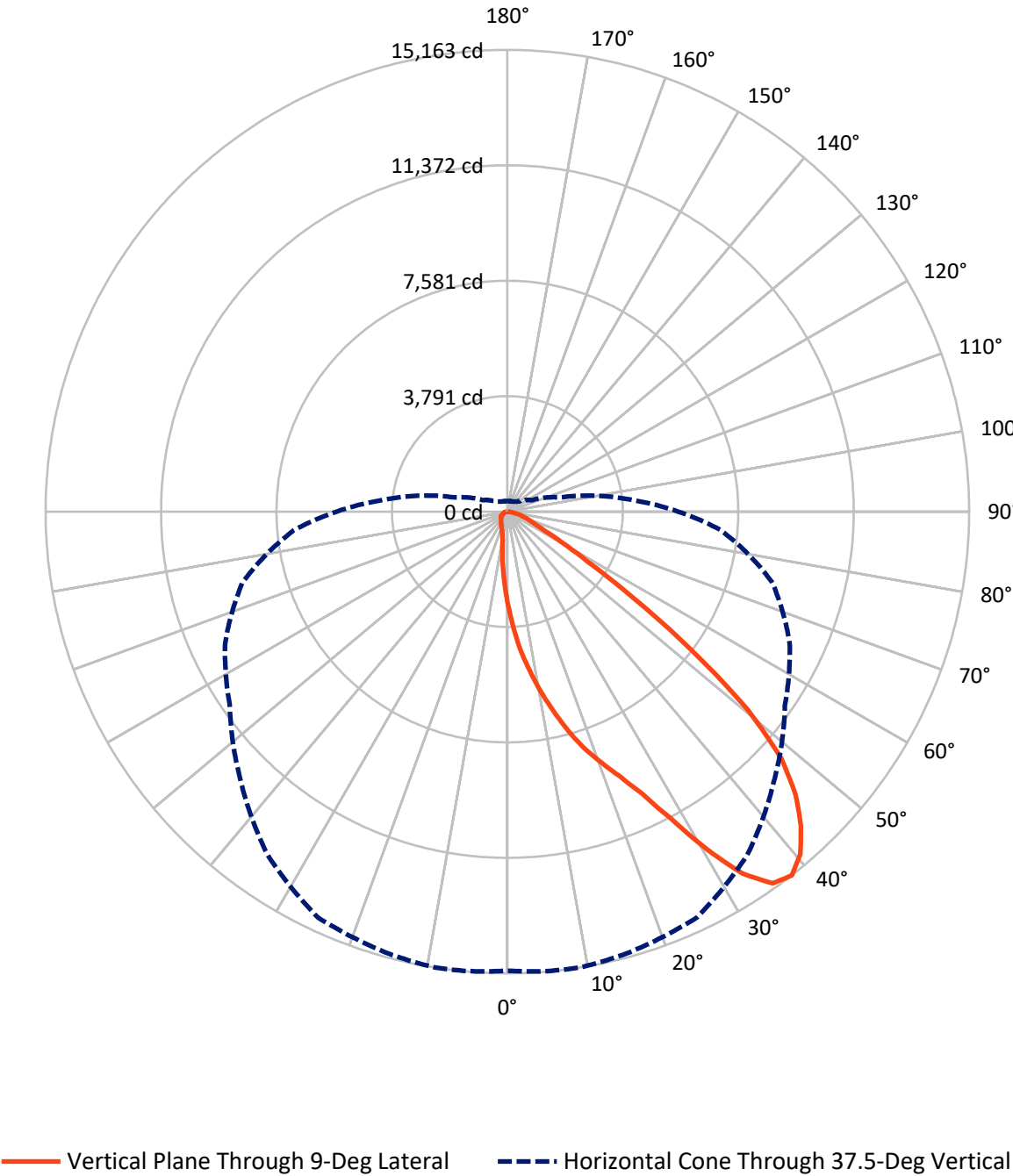
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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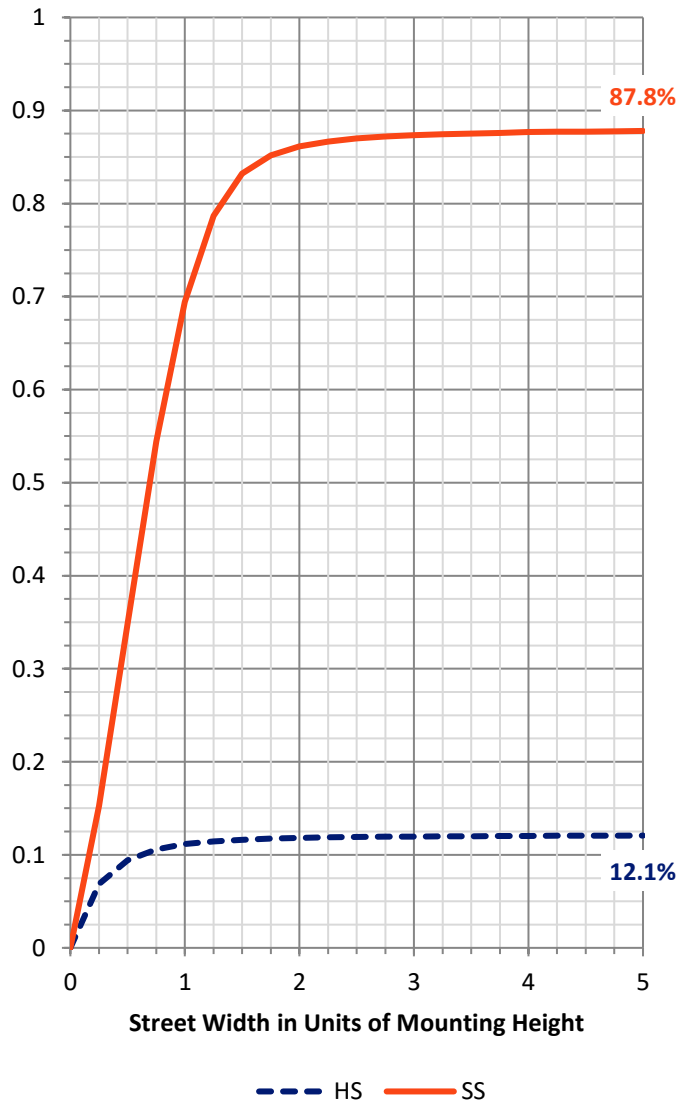
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2828.7	0.0	2828.7
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	20430.3	0.0	20430.3
	% Fixture	87.8	0.0	87.8
Total	Lumens	23259.0	0.0	23259.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.0	1.3
10°-20°	1074.1	4.6
20°-30°	2207.1	9.5
30°-40°	3901.2	16.8
40°-50°	5182.4	22.3
50°-60°	4915.1	21.1
60°-70°	3749.8	16.1
70°-80°	1817.9	7.8
80°-90°	102.3	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°	23259.0	100.0
0°-180°	23259.0	100.0

Coefficient of Utilization



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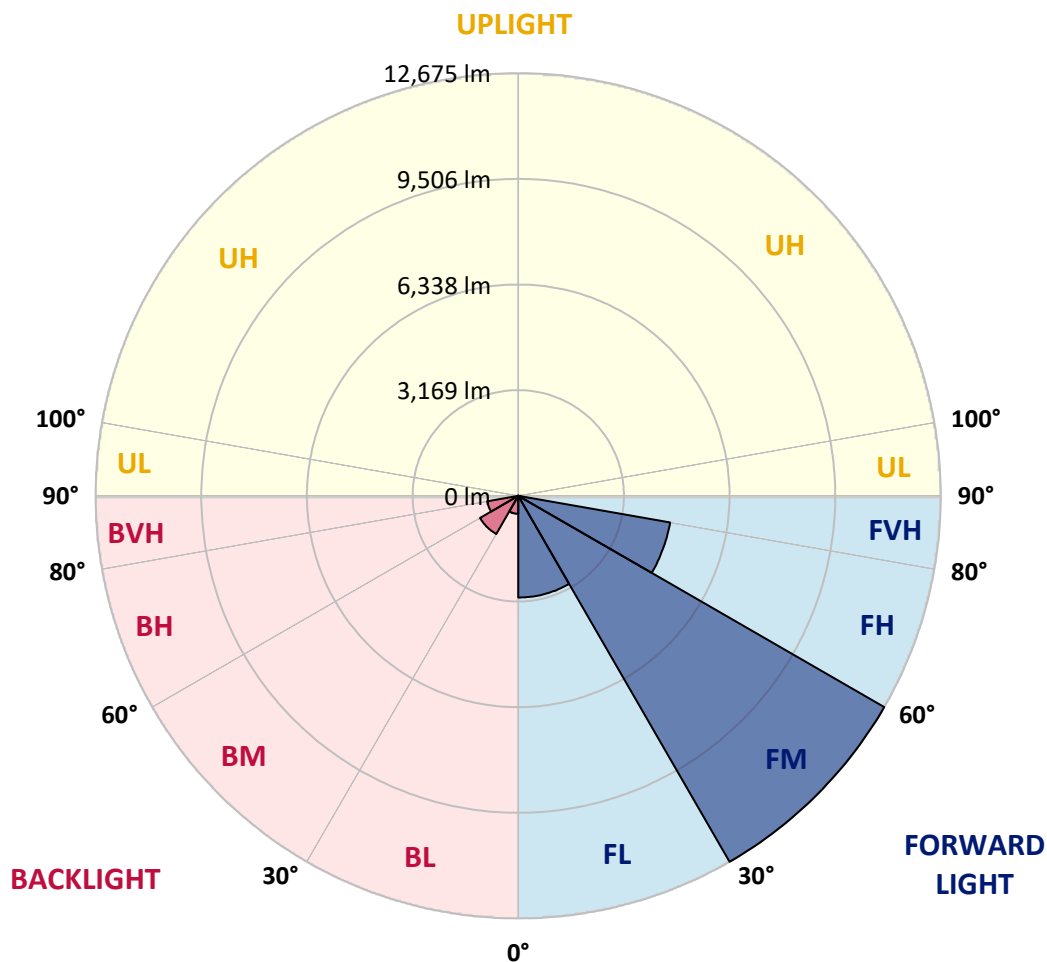
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3050.4	13.1			
FM	(30°-60°)	12675.0	54.5			
FH	(60°-80°)	4623.8	19.9			G2/5000
FVH	(80°-90°)	81.0	0.3			G1/100
BL	(0°-30°)	539.8	2.3	B2/1000		
BM	(30°-60°)	1323.7	5.7	B2/2500		
BH	(60°-80°)	943.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	21.3	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°	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6
2.5°	3809.8	3742.9	3819.3	3809.8	3742.9	3700.0	3566.3	3523.3	3365.8	3251.2	3150.9
5°	4592.7	4525.9	4592.7	4573.6	4478.2	4373.1	4153.5	4010.3	3728.6	3480.4	3256.0
7.5°	5242.0	5242.0	5270.7	5275.4	5160.9	4998.5	4726.4	4511.6	4115.3	3733.4	3375.3
10°	5943.8	5948.6	6010.7	5967.7	5814.9	5595.3	5251.6	4979.4	4502.0	4000.7	3489.9
12.5°	6693.4	6698.1	6717.2	6698.1	6516.7	6235.1	5819.7	5461.6	4912.6	4306.3	3647.5
15°	7442.9	7447.7	7471.6	7438.1	7237.6	6908.2	6435.6	5996.3	5347.1	4650.0	3838.4
17.5°	8144.7	8154.3	8173.4	8130.4	7920.3	7528.8	7046.7	6516.7	5810.2	5017.6	4053.3
20°	8774.9	8784.5	8798.8	8741.5	8531.4	8139.9	7619.6	7065.8	6282.8	5394.8	4287.2
22.5°	9409.9	9419.4	9443.3	9366.9	9133.0	8684.2	8173.4	7600.5	6784.1	5810.2	4559.3
25°	10221.5	10231.0	10250.1	10140.3	9820.4	9295.3	8755.8	8168.6	7328.3	6278.0	4893.5
27.5°	11410.2	11400.7	11400.7	11200.2	10651.1	9968.4	9343.0	8746.3	7915.6	6779.3	5261.1
30°	12880.7	12856.8	12842.5	12570.4	11787.4	10727.5	9944.6	9285.7	8478.9	7309.2	5657.4
32.5°	14198.3	14198.3	14169.7	13883.3	13052.6	11749.2	10584.3	9810.9	9023.2	7843.9	6068.0
35°	14976.5	15010.0	14995.6	14780.8	14174.5	12847.3	11448.4	10441.1	9596.1	8402.5	6559.7
37.5°	15081.6	15148.4	15162.7	15033.8	14714.0	13744.8	12408.0	11123.8	10226.2	9004.1	7037.1
40°	14656.7	14799.9	14799.9	14780.8	14666.2	14169.7	13214.9	11916.3	10875.5	9629.5	7519.3
42.5°	14002.6	14150.6	14131.5	14203.1	14174.5	14069.4	13668.4	12656.3	11524.8	10274.0	7958.5
45°	13148.0	13300.8	13262.6	13391.5	13448.8	13563.4	13620.7	13171.9	12164.6	10975.8	8450.3
47.5°	11777.9	12035.7	12092.9	12322.1	12560.8	12918.9	13191.0	13358.1	12761.3	11730.1	8985.0
50°	9753.6	10116.4	10231.0	10713.2	11367.3	12107.3	12546.5	13128.9	13181.5	12503.5	9562.6
52.5°	6984.6	7404.7	7581.4	8373.9	9720.2	11009.2	11801.7	12622.9	13343.8	13243.5	10188.1
55°	4516.4	4874.4	5046.3	5791.1	7581.4	9605.6	10923.3	11968.8	13253.1	13921.4	10904.2
57.5°	2783.3	2988.6	3103.2	3742.9	5390.0	7805.7	9772.7	11367.3	12976.2	14508.7	11648.9
60°	1876.2	1995.6	2052.9	2353.7	3661.8	5834.0	8192.5	10737.1	12613.3	14904.9	12326.9
62.5°	1246.1	1284.2	1341.5	1527.7	2415.7	4096.2	6292.3	9610.4	12341.2	14928.8	12828.2
65°	964.4	983.5	1007.3	1088.5	1489.5	2864.5	4425.6	7786.7	11935.4	14422.7	12985.7
67.5°	759.1	778.2	806.8	849.8	1079.0	1943.1	3012.5	5705.1	11104.7	13630.2	12727.9
70°	596.8	611.1	630.2	668.4	840.3	1408.4	1990.8	3790.7	9429.0	12875.9	11916.3
72.5°	472.6	487.0	506.1	544.3	682.7	1031.2	1365.4	2363.2	7271.0	11954.5	10355.2
75°	372.4	381.9	396.3	434.4	549.0	802.1	926.2	1413.2	4941.3	10269.2	8068.3
77.5°	186.2	229.2	262.6	300.8	401.0	553.8	615.9	783.0	2086.3	5270.7	3848.0
80°	109.8	133.7	143.2	167.1	262.6	334.2	334.2	315.1	658.8	2024.2	1570.7
82.5°	62.1	85.9	90.7	95.5	157.5	191.0	152.8	114.6	133.7	677.9	458.3
85°	19.1	28.6	33.4	38.2	52.5	57.3	52.5	47.7	38.2	66.8	43.0
87.5°	0.0	0.0	0.0	0.0	4.8	9.5	9.5	9.5	14.3	14.3	14.3
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°	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6	3074.6
2.5°	3093.7	3031.6	2912.2	2802.4	2697.4	2621.0	2549.4	2482.6	2434.8	2396.6	2391.9
5°	3136.6	3012.5	2783.3	2568.5	2372.8	2210.4	2072.0	1962.2	1881.0	1823.7	1819.0
7.5°	3193.9	3002.9	2654.4	2334.6	2043.3	1809.4	1608.9	1460.9	1355.9	1312.9	1279.5
10°	3241.7	2993.4	2525.5	2100.6	1718.7	1422.7	1184.0	1036.0	959.6	931.0	916.6
12.5°	3322.8	3002.9	2415.7	1885.8	1437.0	1088.5	907.1	825.9	792.5	768.6	763.9
15°	3442.2	3045.9	2310.7	1675.7	1150.6	878.4	773.4	720.9	687.5	682.7	677.9
17.5°	3561.5	3084.1	2215.2	1460.9	954.8	763.9	692.3	649.3	625.4	620.6	620.6
20°	3700.0	3131.8	2110.2	1255.6	816.4	687.5	630.2	596.8	568.1	563.4	563.4
22.5°	3862.3	3198.7	2009.9	1074.2	725.7	630.2	582.4	544.3	520.4	515.6	515.6
25°	4081.9	3298.9	1928.8	940.5	663.6	582.4	539.5	506.1	487.0	477.4	477.4
27.5°	4325.4	3437.4	1871.5	859.3	620.6	544.3	501.3	472.6	453.5	444.0	444.0
30°	4597.5	3590.2	1833.3	825.9	596.8	510.8	472.6	444.0	420.1	415.4	415.4
32.5°	4898.3	3766.8	1809.4	830.7	592.0	487.0	444.0	415.4	396.3	386.7	386.7
35°	5232.5	3962.6	1795.1	859.3	601.5	467.9	420.1	391.5	372.4	362.8	362.8
37.5°	5604.9	4191.7	1795.1	888.0	625.4	463.1	396.3	367.6	353.3	343.7	343.7
40°	5953.4	4435.2	1814.2	921.4	649.3	463.1	377.2	353.3	334.2	324.6	324.6
42.5°	6225.5	4573.6	1828.5	954.8	663.6	458.3	358.1	334.2	319.9	310.3	310.3
45°	6535.8	4721.6	1799.9	969.2	663.6	448.8	343.7	319.9	305.5	296.0	296.0
47.5°	6879.6	4903.1	1795.1	978.7	649.3	429.7	329.4	305.5	296.0	286.4	286.4
50°	7228.1	5103.6	1804.6	973.9	630.2	401.0	310.3	296.0	281.7	272.1	272.1
52.5°	7624.3	5313.6	1823.7	964.4	587.2	367.6	296.0	281.7	267.4	257.8	253.0
55°	8063.6	5542.8	1861.9	945.3	529.9	334.2	281.7	267.4	248.3	238.7	233.9
57.5°	8569.6	5824.5	1904.9	907.1	467.9	305.5	267.4	248.3	219.6	205.3	200.5
60°	9051.8	6144.3	1952.6	816.4	405.8	276.9	253.0	224.4	195.7	186.2	181.4
62.5°	9505.4	6459.4	1976.5	654.1	343.7	253.0	238.7	205.3	176.6	167.1	162.3
65°	9796.6	6803.2	1924.0	444.0	281.7	233.9	219.6	191.0	162.3	148.0	148.0
67.5°	9815.7	6965.5	1742.6	291.2	229.2	210.1	200.5	171.9	143.2	133.7	128.9
70°	9333.5	6722.0	1332.0	229.2	191.0	181.4	181.4	152.8	124.1	114.6	109.8
72.5°	8225.9	5953.4	849.8	186.2	162.3	152.8	152.8	128.9	109.8	95.5	90.7
75°	6492.9	4592.7	453.5	152.8	133.7	128.9	119.4	105.0	90.7	81.2	76.4
77.5°	2983.8	2024.2	210.1	109.8	100.3	100.3	90.7	76.4	71.6	62.1	62.1
80°	1179.2	687.5	105.0	71.6	66.8	66.8	66.8	52.5	52.5	43.0	38.2
82.5°	324.6	143.2	52.5	43.0	43.0	43.0	38.2	33.4	33.4	28.6	28.6
85°	33.4	23.9	23.9	23.9	23.9	19.1	19.1	14.3	9.5	9.5	9.5
87.5°	14.3	14.3	14.3	14.3	14.3	9.5	4.8	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)