

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: P841158

Luminaire Tested: **ARCH4-140-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841158
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15271 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

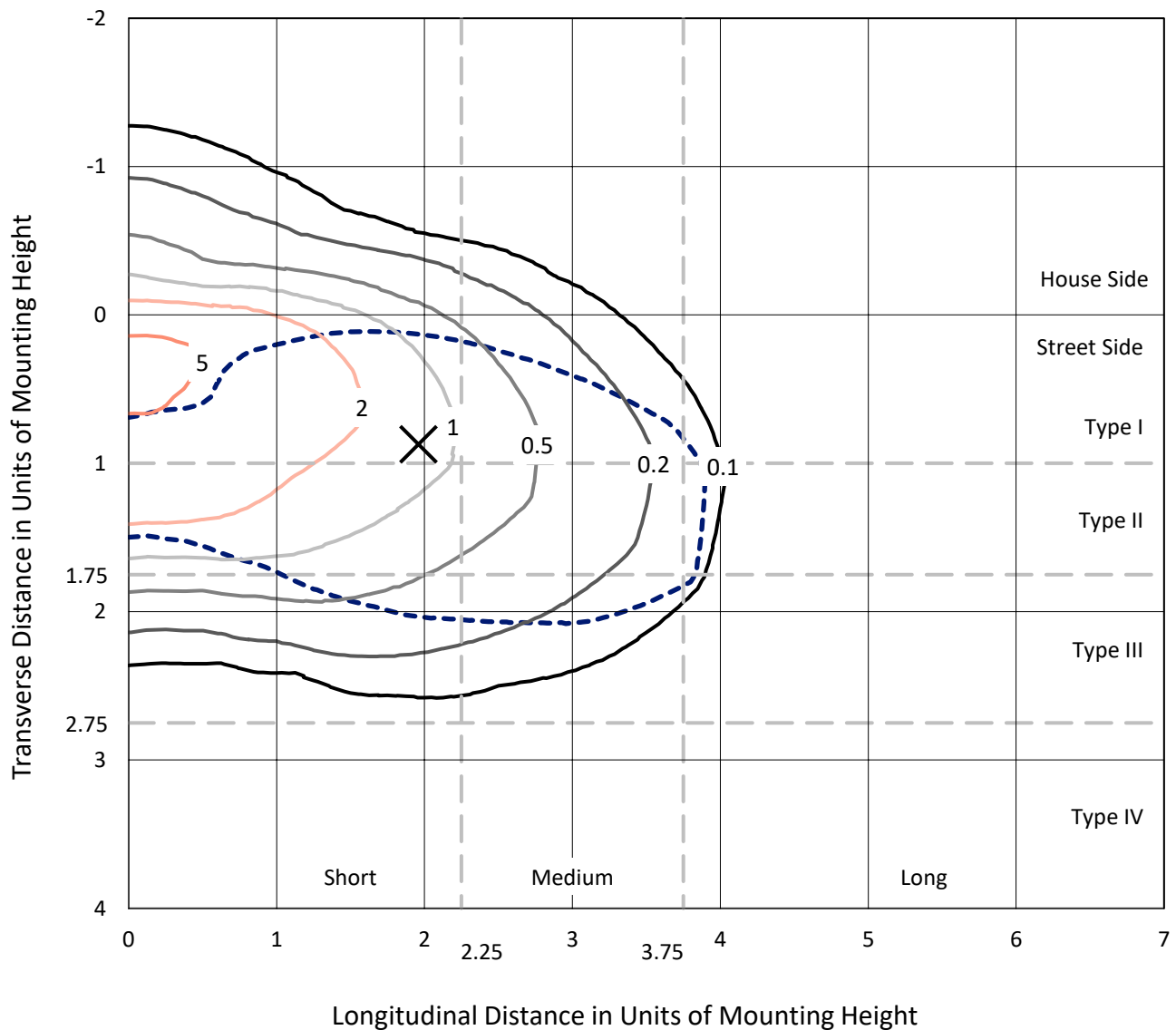
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

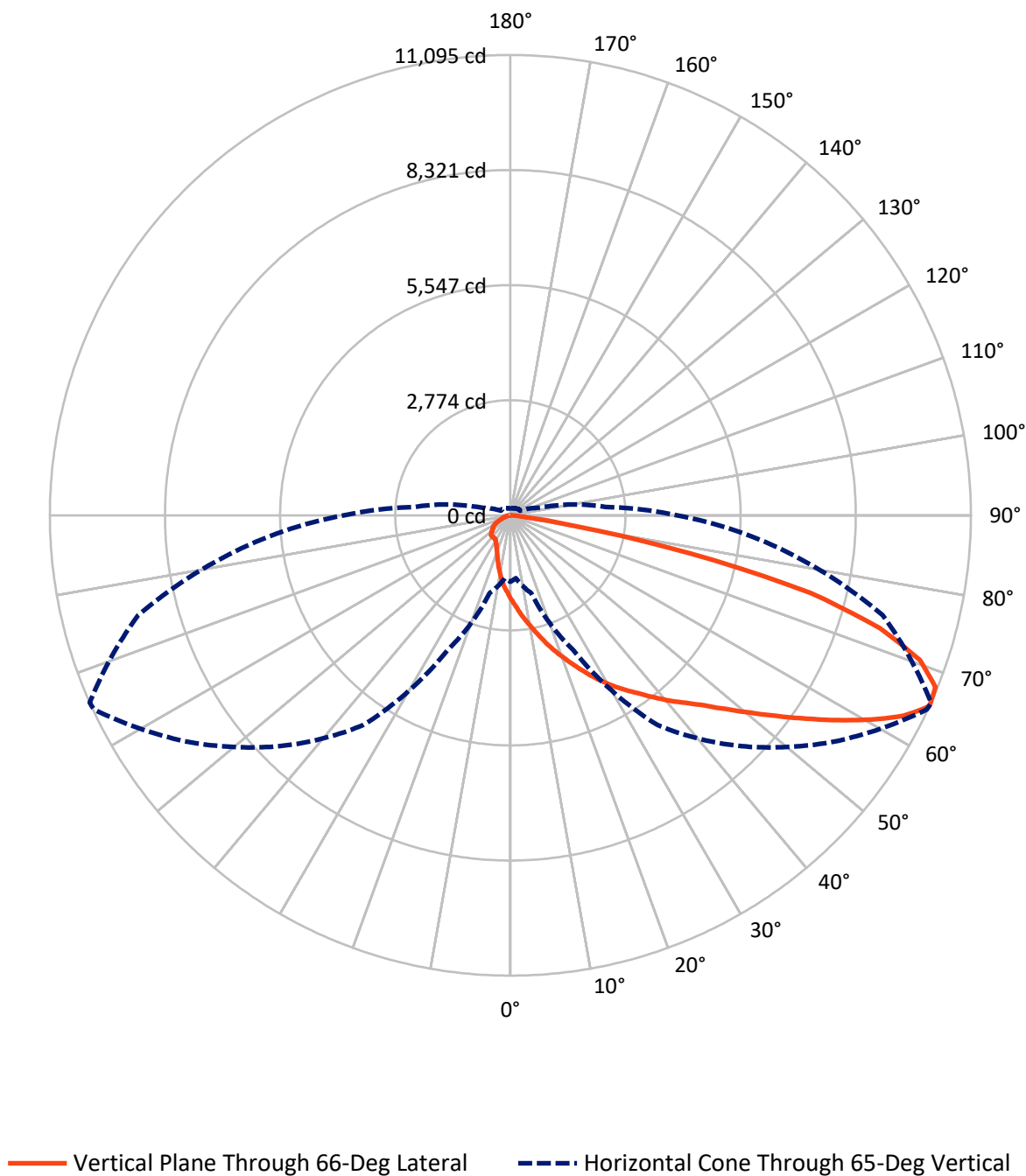
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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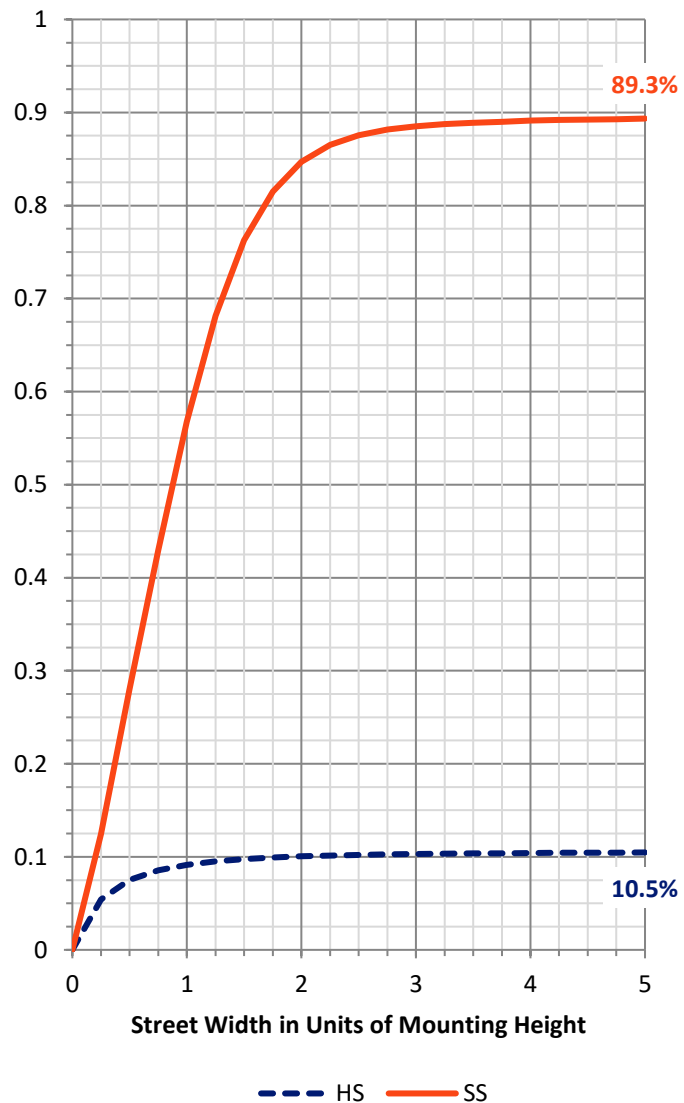
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1615.3	0.0	1615.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	13655.7	0.0	13655.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	15271.0	0.0	15271.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.5	1.3
10°-20°	650.2	4.3
20°-30°	1176.3	7.7
30°-40°	1839.5	12.0
40°-50°	2790.4	18.3
50°-60°	3545.4	23.2
60°-70°	3312.8	21.7
70°-80°	1646.4	10.8
80°-90°	110.6	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°	15271.0	100.0
0°-180°	15271.0	100.0

Coefficient of Utilization



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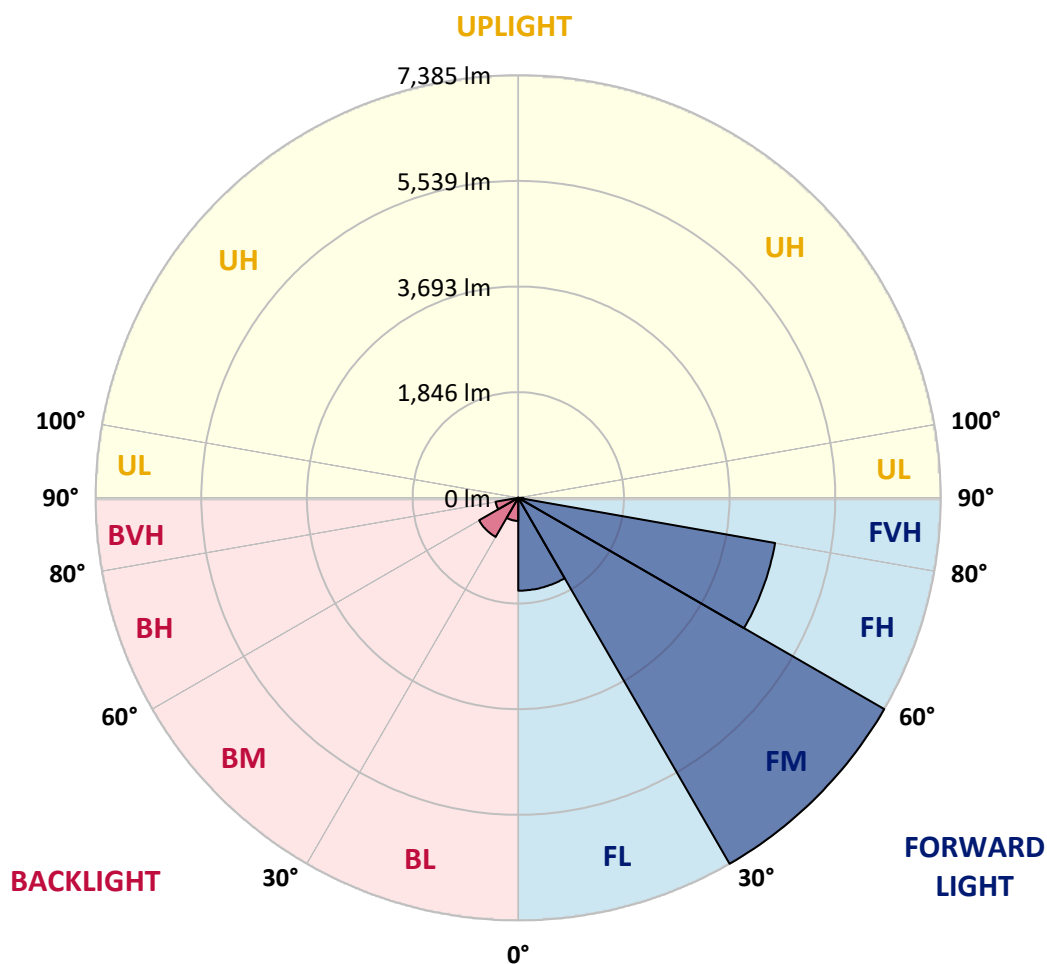
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1622.5	10.6			
FM	(30°-60°)	7385.2	48.4			
FH	(60°-80°)	4556.9	29.8			G2/5000
FVH	(80°-90°)	91.0	0.6			G1/100
BL	(0°-30°)	403.4	2.6	B1/500		
BM	(30°-60°)	790.0	5.2	B1/1000		
BH	(60°-80°)	402.3	2.6	B1/500		G1/500
BVH	(80°-90°)	19.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0
2.5°	2360.5	2379.8	2389.4	2392.6	2318.9	2286.9	2254.8	2181.2	2165.2	2123.5	2069.1
5°	2776.9	2802.5	2796.1	2783.3	2693.6	2591.2	2507.9	2370.1	2347.7	2248.4	2126.7
7.5°	3186.9	3209.3	3202.9	3154.9	3055.6	2911.4	2773.7	2571.9	2539.9	2379.8	2184.4
10°	3529.6	3548.8	3545.6	3497.6	3379.1	3202.9	3036.4	2767.3	2728.9	2501.5	2232.4
12.5°	3811.5	3837.1	3833.9	3801.8	3696.2	3504.0	3315.0	2991.5	2943.5	2648.8	2299.7
15°	4032.5	4064.5	4064.5	4051.7	3978.0	3817.9	3603.3	3238.1	3180.5	2818.6	2383.0
17.5°	4167.0	4192.6	4215.0	4237.4	4186.2	4064.5	3869.1	3484.8	3423.9	2985.1	2469.4
20°	4237.4	4263.1	4279.1	4327.1	4336.7	4275.9	4122.1	3728.2	3664.1	3174.1	2568.7
22.5°	4352.7	4375.2	4378.4	4420.0	4439.2	4455.2	4359.2	3968.4	3917.2	3382.3	2680.8
25°	4544.9	4570.5	4560.9	4580.2	4583.4	4602.6	4593.0	4243.8	4192.6	3619.3	2815.4
27.5°	4791.5	4823.6	4817.2	4798.0	4769.1	4753.1	4794.7	4522.5	4474.5	3856.3	2953.1
30°	5057.4	5095.8	5086.2	5047.8	4970.9	4903.6	4961.3	4785.1	4740.3	4099.7	3106.8
32.5°	5326.4	5371.3	5368.1	5304.0	5172.7	5057.4	5143.9	5031.8	4999.7	4362.4	3273.4
35°	5502.6	5560.2	5553.8	5515.4	5345.6	5246.4	5352.1	5284.8	5262.4	4682.6	3513.6
37.5°	5787.6	5848.5	5794.1	5698.0	5502.6	5451.3	5579.5	5569.9	5553.8	5022.2	3766.6
40°	6479.5	6569.2	6425.0	6031.1	5710.8	5665.9	5848.5	5886.9	5870.9	5358.5	3994.0
42.5°	7203.3	7337.9	7113.7	6569.2	6088.7	5925.4	6143.2	6197.6	6178.4	5646.7	4199.0
45°	7642.1	7699.8	7475.6	7052.8	6758.1	6239.3	6457.1	6546.7	6530.7	5992.6	4461.6
47.5°	8000.9	7978.4	7722.2	7437.1	7491.6	6681.3	6812.6	6988.7	6975.9	6373.8	4749.9
50°	8077.7	8026.5	7924.0	7744.6	7888.8	7129.7	7187.3	7491.6	7478.8	6796.6	5041.4
52.5°	7536.4	7469.2	7747.8	7898.4	7850.3	7456.4	7600.5	8042.5	8036.1	7254.6	5320.0
55°	6184.8	6130.4	6879.8	7658.1	7808.7	7687.0	8058.5	8615.8	8651.0	7741.4	5573.1
57.5°	4865.2	4807.6	5544.2	7056.0	7654.9	7898.4	8593.4	9272.4	9317.3	8269.9	5813.3
60°	3878.7	3792.2	4356.0	6107.9	7366.7	8061.7	9109.1	9993.1	9999.5	8753.5	5960.6
62.5°	2636.0	2539.9	3164.5	4906.9	6883.0	8087.3	9506.2	10614.4	10640.1	9115.5	5986.2
65°	1601.5	1521.4	1944.2	3584.1	6168.8	7869.5	9512.6	11072.4	11094.9	9282.0	5832.5
67.5°	928.8	896.8	1111.4	2232.4	4983.7	7283.4	9112.3	11002.0	11043.6	9211.6	5483.4
70°	541.3	538.1	618.2	1105.0	3516.8	6120.8	8218.7	10409.4	10470.3	8843.2	4948.5
72.5°	397.2	403.6	435.6	592.5	2037.0	4407.2	6959.9	9218.0	9310.8	8122.6	4186.2
75°	313.9	317.1	345.9	403.6	1069.8	2491.9	5214.3	7398.7	7472.4	6838.2	3270.2
77.5°	233.8	240.2	262.6	285.1	496.5	1143.4	2933.9	4557.7	4436.0	3753.8	1579.0
80°	169.8	185.8	195.4	205.0	262.6	442.0	880.8	1588.6	1575.8	1639.9	746.3
82.5°	108.9	121.7	131.3	137.7	156.9	211.4	262.6	355.5	384.3	637.4	297.9
85°	48.0	54.4	60.9	73.7	67.3	73.7	108.9	70.5	60.9	96.1	54.4
87.5°	0.0	0.0	9.6	16.0	12.8	6.4	19.2	12.8	9.6	9.6	9.6
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°	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0	2021.0
2.5°	2040.3	2005.0	1931.4	1860.9	1819.3	1764.8	1716.8	1671.9	1668.7	1655.9	1633.5
5°	2065.9	1998.6	1860.9	1729.6	1630.3	1524.6	1434.9	1364.4	1338.8	1319.6	1294.0
7.5°	2091.5	1985.8	1780.8	1588.6	1431.7	1284.4	1178.7	1082.6	1053.8	1028.1	1012.1
10°	2101.1	1963.4	1687.9	1431.7	1226.7	1069.8	957.7	887.2	861.6	848.8	839.2
12.5°	2129.9	1950.6	1601.5	1284.4	1047.3	903.2	823.1	781.5	771.9	762.3	752.7
15°	2168.4	1950.6	1515.0	1140.2	906.4	791.1	743.1	714.2	707.8	704.6	698.2
17.5°	2210.0	1950.6	1431.7	1018.5	803.9	717.5	682.2	666.2	663.0	659.8	656.6
20°	2267.7	1953.8	1342.0	912.8	730.3	663.0	634.2	615.0	611.8	608.6	608.6
22.5°	2325.3	1960.2	1255.5	832.8	682.2	621.4	586.1	566.9	560.5	560.5	560.5
25°	2399.0	1979.4	1175.5	765.5	640.6	582.9	538.1	522.1	518.9	518.9	515.7
27.5°	2485.5	2001.8	1105.0	714.2	598.9	538.1	493.2	477.2	470.8	470.8	467.6
30°	2578.3	2024.2	1047.3	675.8	557.3	493.2	451.6	432.4	426.0	429.2	426.0
32.5°	2680.8	2056.3	1002.5	650.2	518.9	454.8	416.4	394.0	390.8	390.8	387.6
35°	2853.8	2145.9	996.1	637.4	486.8	426.0	387.6	365.1	361.9	361.9	358.7
37.5°	3039.6	2248.4	1024.9	631.0	461.2	400.4	365.1	342.7	339.5	339.5	339.5
40°	3196.5	2325.3	1057.0	631.0	445.2	377.9	345.9	326.7	326.7	326.7	326.7
42.5°	3302.2	2331.7	1050.6	631.0	432.4	361.9	333.1	313.9	313.9	317.1	313.9
45°	3459.1	2363.7	1024.9	621.4	422.8	349.1	320.3	304.3	301.1	304.3	304.3
47.5°	3644.9	2421.4	999.3	582.9	419.6	336.3	310.7	291.5	288.3	291.5	288.3
50°	3821.1	2472.6	986.5	531.7	413.2	323.5	297.9	278.7	275.4	278.7	275.4
52.5°	3968.4	2495.1	964.1	496.5	397.2	310.7	285.1	265.8	259.4	262.6	262.6
55°	4086.9	2488.7	932.0	467.6	368.3	297.9	269.0	253.0	243.4	243.4	240.2
57.5°	4195.8	2491.9	903.2	438.8	336.3	278.7	256.2	237.0	224.2	221.0	217.8
60°	4237.4	2475.8	852.0	400.4	304.3	262.6	240.2	217.8	205.0	201.8	198.6
62.5°	4179.8	2418.2	784.7	333.1	275.4	243.4	224.2	201.8	189.0	185.8	182.6
65°	4016.4	2309.3	682.2	262.6	249.8	221.0	205.0	189.0	173.0	166.6	163.3
67.5°	3737.8	2152.4	554.1	211.4	221.0	201.8	192.2	173.0	153.7	147.3	144.1
70°	3340.6	1944.2	416.4	179.4	195.4	179.4	173.0	153.7	137.7	131.3	128.1
72.5°	2783.3	1607.9	291.5	153.7	169.8	156.9	150.5	137.7	121.7	112.1	112.1
75°	2104.3	1153.0	192.2	131.3	140.9	134.5	124.9	115.3	105.7	99.3	96.1
77.5°	906.4	448.4	118.5	99.3	115.3	112.1	99.3	92.9	89.7	83.3	83.3
80°	390.8	182.6	73.7	73.7	83.3	80.1	76.9	70.5	70.5	67.3	64.1
82.5°	144.1	73.7	44.8	54.4	60.9	54.4	54.4	54.4	54.4	51.2	51.2
85°	35.2	22.4	22.4	32.0	35.2	32.0	35.2	32.0	32.0	32.0	28.8
87.5°	9.6	9.6	12.8	12.8	12.8	12.8	12.8	9.6	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)