

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-FA-0U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-0U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

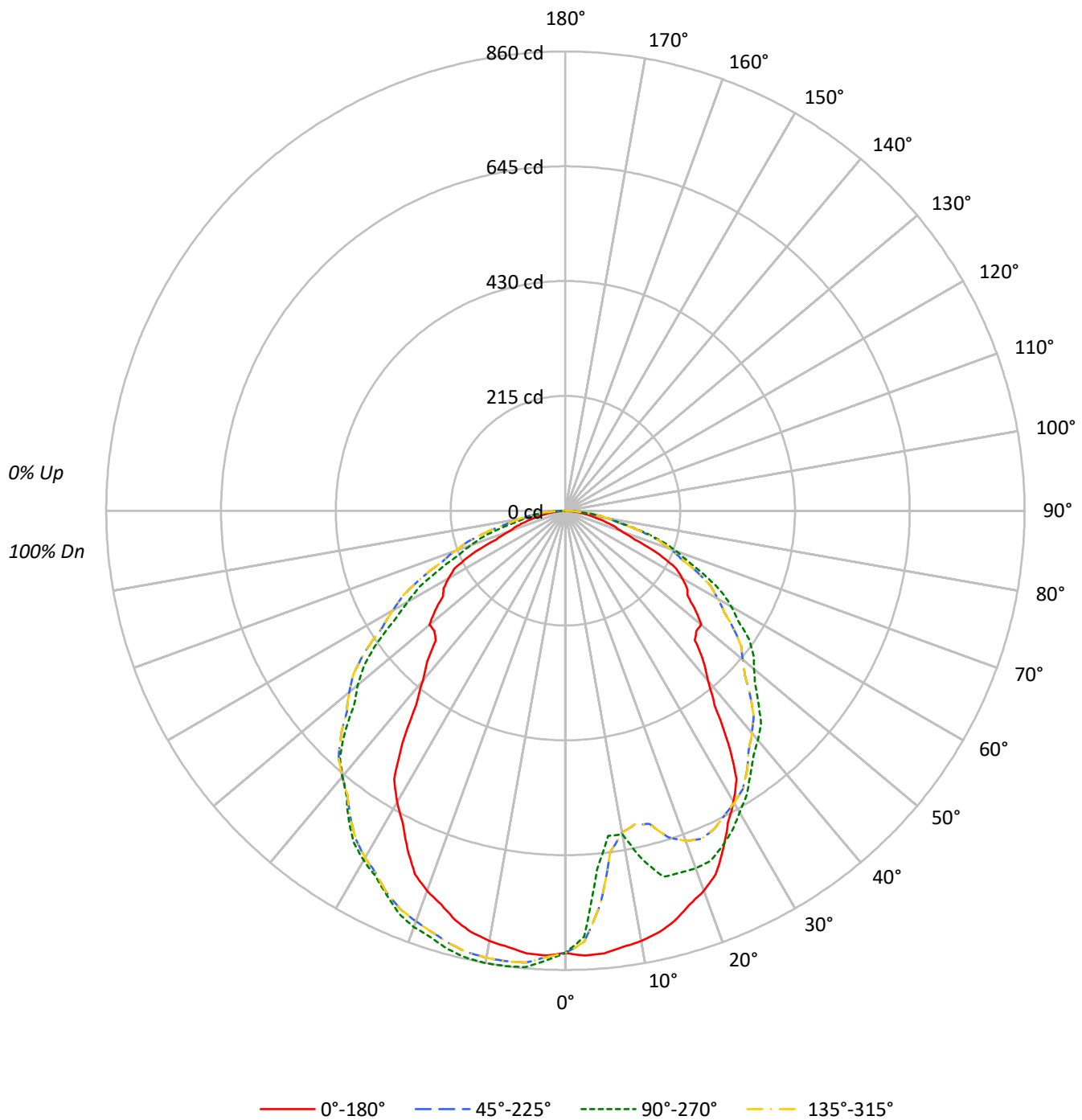
Lumens per Lamp: N/A
Luminaire Lumens: 2146.0 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
Input Voltage (V): 120
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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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		91
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5093	5093	5093	5093
5°	5137	4165	5137	5297
10°	5108	3841	5108	5373
15°	5059	4520	5059	5413
20°	4959	4666	4959	5431
25°	4748	4711	4748	5381
30°	4474	4635	4474	5369
35°	3995	4535	3995	5312
40°	3334	4504	3334	5215
45°	2985	4450	2985	5070
50°	3179	4408	3179	4858
55°	2999	4503	2999	4612
60°	3104	4414	3104	4192
65°	2828	4219	2828	3774
70°	1973	3960	1973	3367
75°	1749	3501	1749	2923
80°	1442	2720	1442	2497
85°	882	1877	882	2209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5179 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	3.5
10°-20°	212.2	9.9
20°-30°	327.9	15.3
30°-40°	391.7	18.3
40°-50°	394.2	18.4
50°-60°	342.3	16.0
60°-70°	242.3	11.3
70°-80°	128.2	6.0
80°-90°	32.6	1.5
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°-30°	614.7	28.6
0°-40°	1006.4	46.9
0°-60°	1742.9	81.2
0°-90°	2146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	828	828	828	828	828	
5°	832	675	832	858	832	79
15°	794	710	794	850	794	223
25°	700	694	700	793	700	321
35°	532	604	532	708	532	329
45°	343	512	343	583	343	276
55°	280	420	280	430	280	257
65°	194	290	194	259	194	185
75°	74	147	74	123	74	78
85°	12	27	12	31	12	18
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1
2.5°	833.8	827.5	825.0	820.0	810.6	805.6	809.3	803.0	805.6	798.7	805.6
5°	832.0	817.9	806.2	786.6	758.4	725.5	717.6	697.3	684.7	674.6	684.7
7.5°	824.2	800.1	764.2	704.3	656.2	632.7	626.9	621.1	619.6	614.4	619.6
10°	817.9	785.0	718.4	651.1	617.4	606.4	608.7	611.1	615.8	615.0	615.8
12.5°	809.2	758.7	670.8	624.1	601.7	601.4	618.8	650.0	671.6	670.2	671.6
15°	794.4	708.2	626.0	596.2	589.2	625.2	688.7	703.5	709.0	709.8	709.0
17.5°	773.3	658.9	597.3	577.7	601.7	680.0	699.3	706.1	710.8	711.1	710.8
20°	757.6	633.8	582.9	569.6	633.0	683.2	694.9	703.5	711.4	712.9	711.4
22.5°	736.3	616.3	567.8	563.9	650.6	680.0	690.5	703.5	710.1	709.8	710.1
25°	699.6	594.6	549.2	557.8	652.6	663.6	684.0	692.6	693.4	694.1	693.4
27.5°	659.4	575.7	527.4	561.9	639.9	647.8	669.7	674.1	677.1	675.8	677.1
30°	629.9	562.5	512.4	562.5	629.9	634.6	656.5	659.7	655.8	652.6	655.8
32.5°	596.7	546.2	498.0	558.1	614.9	621.4	639.0	637.7	633.8	631.3	633.8
35°	532.0	518.6	471.6	543.7	589.2	597.8	608.0	607.2	606.4	604.0	606.4
37.5°	459.1	486.1	445.6	521.3	564.4	563.8	579.0	582.3	581.5	578.5	581.5
40°	415.2	459.1	429.3	503.8	546.9	540.6	560.2	564.1	563.3	561.0	563.3
42.5°	382.6	423.4	410.5	482.5	525.5	518.0	542.0	545.9	543.9	542.2	543.9
45°	343.2	350.2	381.5	448.1	489.7	488.9	514.7	518.6	513.9	511.6	513.9
47.5°	332.8	282.4	349.9	408.3	454.1	457.1	484.8	488.3	484.0	482.0	484.0
50°	332.2	249.1	326.7	377.6	430.9	436.4	465.4	466.9	461.5	460.7	461.5
52.5°	307.7	230.3	299.8	350.7	410.8	417.6	444.1	443.7	443.3	444.4	443.3
55°	279.7	207.6	253.1	311.0	380.0	388.6	412.1	412.9	418.4	419.9	418.4
57.5°	270.4	181.9	209.8	276.7	349.0	355.7	377.8	379.7	383.4	383.3	383.4
60°	252.3	163.7	184.1	255.4	325.1	333.8	353.3	356.5	359.6	358.8	359.6
62.5°	233.5	151.2	171.6	237.9	302.6	311.8	325.1	330.8	332.0	330.6	332.0
65°	194.3	134.8	152.0	210.0	267.9	278.1	286.7	290.7	291.4	289.9	291.4
67.5°	140.4	119.6	136.6	182.4	228.1	239.6	244.6	246.9	246.2	249.0	246.2
70°	109.7	108.9	125.4	163.0	203.7	213.9	217.0	219.4	218.6	220.2	218.6
72.5°	94.6	100.1	113.4	142.9	176.1	186.3	188.2	188.7	191.0	189.4	191.0
75°	73.6	85.4	94.0	112.8	137.9	144.9	145.7	146.5	144.9	147.3	144.9
77.5°	51.4	65.0	72.7	83.5	100.4	104.8	104.7	105.1	103.9	103.7	103.9
80°	40.7	49.4	56.4	63.5	76.0	79.1	78.3	77.6	77.6	76.8	77.6
82.5°	30.1	34.9	41.4	46.5	54.7	55.3	56.4	55.0	55.0	56.1	55.0
85°	12.5	16.5	21.2	23.5	26.6	27.4	25.9	28.2	26.6	26.6	26.6
87.5°	3.1	5.0	7.5	8.8	9.4	8.8	8.8	7.5	7.5	7.5	7.5
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1
2.5°	803.0	809.3	805.6	810.6	820.0	825.0	827.5	833.8	833.8	837.5	838.8
5°	697.3	717.6	725.5	758.4	786.6	806.2	817.9	832.0	838.3	846.9	850.1
7.5°	621.1	626.9	632.7	656.2	704.3	764.2	800.1	824.2	836.9	848.2	852.7
10°	611.1	608.7	606.4	617.4	651.1	718.4	785.0	817.9	834.4	846.9	850.8
12.5°	650.0	618.8	601.4	601.7	624.1	670.8	758.7	809.2	830.6	842.5	847.1
15°	703.5	688.7	625.2	589.2	596.2	626.0	708.2	794.4	821.1	832.0	839.1
17.5°	706.1	699.3	680.0	601.7	577.7	597.3	658.9	773.3	807.1	820.1	826.4
20°	703.5	694.9	683.2	633.0	569.6	582.9	633.8	757.6	795.2	810.1	816.4
22.5°	703.5	690.5	680.0	650.6	563.9	567.8	616.3	736.3	782.7	798.2	804.5
25°	692.6	684.0	663.6	652.6	557.8	549.2	594.6	699.6	762.3	775.6	785.0
27.5°	674.1	669.7	647.8	639.9	561.9	527.4	575.7	659.4	734.3	753.2	763.4
30°	659.7	656.5	634.6	629.9	562.5	512.4	562.5	629.9	709.8	735.7	749.0
32.5°	637.7	639.0	621.4	614.9	558.1	498.0	546.2	596.7	673.5	717.5	733.3
35°	607.2	608.0	597.8	589.2	543.7	471.6	518.6	532.0	629.1	691.8	705.1
37.5°	582.3	579.0	563.8	564.4	521.3	445.6	486.1	459.1	589.0	664.7	674.4
40°	564.1	560.2	540.6	546.9	503.8	429.3	459.1	415.2	550.8	644.0	651.8
42.5°	545.9	542.0	518.0	525.5	482.5	410.5	423.4	382.6	508.8	622.1	624.3
45°	518.6	514.7	488.9	489.7	448.1	381.5	350.2	343.2	484.2	586.8	586.8
47.5°	488.3	484.8	457.1	454.1	408.3	349.9	282.4	332.8	449.7	548.9	548.6
50°	466.9	465.4	436.4	430.9	377.6	326.7	249.1	332.2	424.6	516.3	524.1
52.5°	443.7	444.1	417.6	410.8	350.7	299.8	230.3	307.7	393.9	474.3	499.1
55°	412.9	412.1	388.6	380.0	311.0	253.1	207.6	279.7	346.3	416.0	457.5
57.5°	379.7	377.8	355.7	349.0	276.7	209.8	181.9	270.4	272.3	362.7	415.7
60°	356.5	353.3	333.8	325.1	255.4	184.1	163.7	252.3	208.4	325.1	383.1
62.5°	330.8	325.1	311.8	302.6	237.9	171.6	151.2	233.5	162.6	282.5	351.8
65°	290.7	286.7	278.1	267.9	210.0	152.0	134.8	194.3	126.9	193.5	305.5
67.5°	246.9	244.6	239.6	228.1	182.4	136.6	119.6	140.4	96.5	122.8	261.5
70°	219.4	217.0	213.9	203.7	163.0	125.4	108.9	109.7	68.9	90.9	232.7
72.5°	188.7	188.2	186.3	176.1	142.9	113.4	100.1	94.6	58.3	71.5	203.2
75°	146.5	145.7	144.9	137.9	112.8	94.0	85.4	73.6	58.8	50.9	159.0
77.5°	105.1	104.7	104.8	100.4	83.5	72.7	65.0	51.4	52.5	38.7	119.1
80°	77.6	78.3	79.1	76.0	63.5	56.4	49.4	40.7	43.1	30.6	90.9
82.5°	55.0	56.4	55.3	54.7	46.5	41.4	34.9	30.1	30.6	24.3	67.7
85°	28.2	25.9	27.4	26.6	23.5	21.2	16.5	12.5	15.7	14.1	33.7
87.5°	7.5	8.8	8.8	9.4	8.8	7.5	5.0	3.1	5.6	6.9	13.8
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1
2.5°	836.9	836.9	842.5	843.8	845.0	843.2	845.0	843.8	842.5	836.9	836.9
5°	849.3	849.3	857.1	859.5	859.5	857.9	859.5	859.5	857.1	849.3	849.3
7.5°	850.4	851.6	859.5	861.2	862.6	860.2	862.6	861.2	859.5	851.6	850.4
10°	848.5	851.6	859.5	861.8	862.6	860.2	862.6	861.8	859.5	851.6	848.5
12.5°	846.0	848.5	856.3	858.0	859.5	857.7	859.5	858.0	856.3	848.5	846.0
15°	837.5	840.6	849.3	850.8	852.4	850.1	852.4	850.8	849.3	840.6	837.5
17.5°	825.8	829.7	837.5	840.0	840.8	837.8	840.8	840.0	837.5	829.7	825.8
20°	816.4	820.3	828.1	831.2	832.0	829.7	832.0	831.2	828.1	820.3	816.4
22.5°	804.5	810.9	818.1	819.3	818.2	815.9	818.2	819.3	818.1	810.9	804.5
25°	787.4	792.9	795.2	795.2	795.2	792.9	795.2	795.2	795.2	792.9	787.4
27.5°	765.6	768.4	769.8	771.1	772.6	771.1	772.6	771.1	769.8	768.4	765.6
30°	750.6	749.0	752.9	756.0	757.6	756.0	757.6	756.0	752.9	749.0	750.6
32.5°	729.9	730.8	736.6	738.5	738.8	737.2	738.8	738.5	736.6	730.8	729.9
35°	699.6	703.5	707.5	709.0	709.8	707.5	709.8	709.0	707.5	703.5	699.6
37.5°	667.7	674.6	677.4	675.7	675.8	673.3	675.8	675.7	677.4	674.6	667.7
40°	646.4	652.6	654.2	651.8	652.6	649.5	652.6	651.8	654.2	652.6	646.4
42.5°	626.3	631.3	629.7	626.8	626.3	625.0	626.3	626.8	629.7	631.3	626.3
45°	593.1	595.4	588.4	586.0	584.5	582.9	584.5	586.0	588.4	595.4	593.1
47.5°	556.7	553.6	546.9	543.2	538.9	535.9	538.9	543.2	546.9	553.6	556.7
50°	533.5	524.1	518.6	510.0	506.9	507.7	506.9	510.0	518.6	524.1	533.5
52.5°	505.3	494.0	485.4	478.1	475.6	475.1	475.6	478.1	485.4	494.0	505.3
55°	464.6	447.4	433.3	429.3	428.6	430.1	428.6	429.3	433.3	447.4	464.6
57.5°	414.6	397.7	386.1	383.0	380.3	377.8	380.3	383.0	386.1	397.7	414.6
60°	380.8	365.1	354.1	351.0	343.9	340.8	343.9	351.0	354.1	365.1	380.8
62.5°	350.7	331.9	323.4	317.1	312.0	307.0	312.0	317.1	323.4	331.9	350.7
65°	307.1	285.2	276.6	271.1	261.7	259.3	261.7	271.1	276.6	285.2	307.1
67.5°	259.5	240.4	229.6	222.2	216.2	216.1	216.2	222.2	229.6	240.4	259.5
70°	228.8	211.5	201.3	192.7	188.0	187.2	188.0	192.7	201.3	211.5	228.8
72.5°	198.7	182.1	173.1	165.2	161.1	160.3	161.1	165.2	173.1	182.1	198.7
75°	155.9	140.2	133.2	127.7	124.6	123.0	124.6	127.7	133.2	140.2	155.9
77.5°	115.3	102.6	99.0	93.4	90.7	90.6	90.7	93.4	99.0	102.6	115.3
80°	90.9	80.7	75.2	72.1	71.3	70.5	71.3	72.1	75.2	80.7	90.9
82.5°	65.8	60.0	56.4	54.5	54.4	53.0	54.4	54.5	56.4	60.0	65.8
85°	35.3	33.7	32.9	32.1	31.3	31.3	31.3	32.1	32.9	33.7	35.3
87.5°	14.4	15.0	15.0	15.7	16.3	15.7	16.3	15.7	15.0	15.0	14.4
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):

	330°	340°	350°	360°
0°	828.1	828.1	828.1	828.1
2.5°	838.8	837.5	833.8	833.8
5°	850.1	846.9	838.3	832.0
7.5°	852.7	848.2	836.9	824.2
10°	850.8	846.9	834.4	817.9
12.5°	847.1	842.5	830.6	809.2
15°	839.1	832.0	821.1	794.4
17.5°	826.4	820.1	807.1	773.3
20°	816.4	810.1	795.2	757.6
22.5°	804.5	798.2	782.7	736.3
25°	785.0	775.6	762.3	699.6
27.5°	763.4	753.2	734.3	659.4
30°	749.0	735.7	709.8	629.9
32.5°	733.3	717.5	673.5	596.7
35°	705.1	691.8	629.1	532.0
37.5°	674.4	664.7	589.0	459.1
40°	651.8	644.0	550.8	415.2
42.5°	624.3	622.1	508.8	382.6
45°	586.8	586.8	484.2	343.2
47.5°	548.6	548.9	449.7	332.8
50°	524.1	516.3	424.6	332.2
52.5°	499.1	474.3	393.9	307.7
55°	457.5	416.0	346.3	279.7
57.5°	415.7	362.7	272.3	270.4
60°	383.1	325.1	208.4	252.3
62.5°	351.8	282.5	162.6	233.5
65°	305.5	193.5	126.9	194.3
67.5°	261.5	122.8	96.5	140.4
70°	232.7	90.9	68.9	109.7
72.5°	203.2	71.5	58.3	94.6
75°	159.0	50.9	58.8	73.6
77.5°	119.1	38.7	52.5	51.4
80°	90.9	30.6	43.1	40.7
82.5°	67.7	24.3	30.6	30.1
85°	33.7	14.1	15.7	12.5
87.5°	13.8	6.9	5.6	3.1
90°	0.0	0.0	0.0	0.0

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