

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-4

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-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

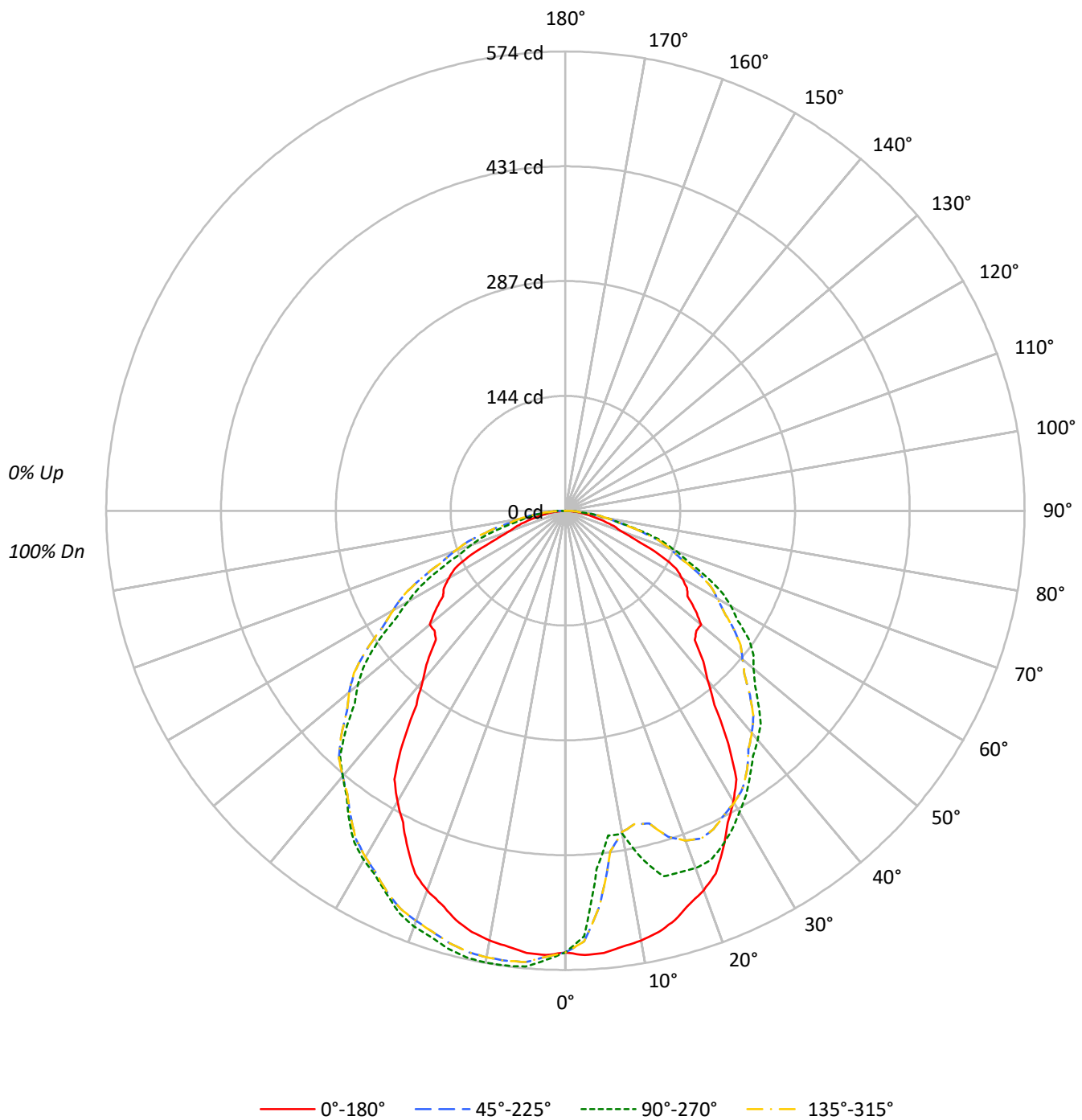
Lumens per Lamp: N/A
Luminaire Lumens: 1430.6 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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°	5094	5094	5094	5094
5°	5137	4165	5137	5297
10°	5109	3841	5109	5373
15°	5059	4520	5059	5413
20°	4959	4667	4959	5431
25°	4748	4711	4748	5381
30°	4473	4635	4473	5369
35°	3994	4536	3994	5312
40°	3334	4504	3334	5215
45°	2985	4451	2985	5070
50°	3179	4408	3179	4859
55°	3000	4504	3000	4612
60°	3104	4414	3104	4192
65°	2827	4220	2827	3775
70°	1972	3960	1972	3367
75°	1750	3501	1750	2923
80°	1445	2720	1445	2497
85°	889	1884	889	2212

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.8	3.5
10°-20°	141.4	9.9
20°-30°	218.6	15.3
30°-40°	261.1	18.3
40°-50°	262.8	18.4
50°-60°	228.2	16.0
60°-70°	161.5	11.3
70°-80°	85.4	6.0
80°-90°	21.7	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°	409.8	28.6
0°-40°	670.9	46.9
0°-60°	1161.9	81.2
0°-90°	1430.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1430.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	552	552	552	552	552	
5°	555	450	555	572	555	53
15°	530	473	530	567	530	149
25°	466	463	466	529	466	214
35°	355	403	355	472	355	219
45°	229	341	229	389	229	184
55°	186	280	186	287	186	172
65°	130	193	130	173	130	123
75°	49	98	49	82	49	52
85°	8	18	8	21	8	12
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°	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1
2.5°	555.8	551.7	550.0	546.6	540.4	537.0	539.5	535.4	537.0	532.4	537.0
5°	554.7	545.3	537.5	524.4	505.6	483.7	478.4	464.9	456.5	449.7	456.5
7.5°	549.5	533.4	509.5	469.6	437.5	421.8	417.9	414.1	413.0	409.6	413.0
10°	545.3	523.3	479.0	434.0	411.6	404.3	405.8	407.4	410.5	410.0	410.5
12.5°	539.4	505.8	447.2	416.1	401.1	400.9	412.5	433.3	447.7	446.8	447.7
15°	529.6	472.2	417.3	397.5	392.8	416.8	459.1	469.0	472.7	473.2	472.7
17.5°	515.5	439.3	398.2	385.1	401.1	453.4	466.2	470.7	473.8	474.0	473.8
20°	505.1	422.5	388.6	379.7	422.0	455.4	463.3	469.0	474.3	475.3	474.3
22.5°	490.9	410.8	378.6	376.0	433.7	453.4	460.4	469.0	473.4	473.2	473.4
25°	466.4	396.4	366.1	371.9	435.1	442.4	456.0	461.7	462.2	462.8	462.2
27.5°	439.6	383.8	351.6	374.6	426.6	431.8	446.5	449.4	451.4	450.5	451.4
30°	419.9	375.0	341.6	375.0	419.9	423.1	437.7	439.8	437.2	435.1	437.2
32.5°	397.8	364.2	332.0	372.1	409.9	414.3	426.0	425.2	422.5	420.9	422.5
35°	354.6	345.8	314.4	362.5	392.8	398.5	405.3	404.8	404.3	402.7	404.3
37.5°	306.1	324.0	297.1	347.5	376.3	375.9	386.0	388.2	387.7	385.7	387.7
40°	276.8	306.1	286.2	335.8	364.6	360.4	373.4	376.1	375.5	374.0	375.5
42.5°	255.1	282.3	273.7	321.6	350.4	345.3	361.3	363.9	362.6	361.4	362.6
45°	228.8	233.5	254.4	298.8	326.4	325.9	343.2	345.8	342.6	341.1	342.6
47.5°	221.9	188.2	233.3	272.2	302.7	304.7	323.2	325.5	322.7	321.3	322.7
50°	221.5	166.1	217.8	251.8	287.3	290.9	310.2	311.3	307.6	307.1	307.6
52.5°	205.2	153.6	199.8	233.8	273.9	278.4	296.0	295.8	295.5	296.3	295.5
55°	186.5	138.4	168.7	207.4	253.3	259.1	274.7	275.3	278.9	280.0	278.9
57.5°	180.3	121.3	139.9	184.5	232.6	237.1	251.9	253.1	255.6	255.5	255.6
60°	168.2	109.2	122.7	170.3	216.8	222.5	235.6	237.6	239.7	239.2	239.7
62.5°	155.6	100.8	114.4	158.6	201.7	207.9	216.8	220.5	221.4	220.4	221.4
65°	129.5	89.8	101.3	140.0	178.6	185.4	191.2	193.8	194.3	193.3	194.3
67.5°	93.6	79.7	91.1	121.6	152.1	159.7	163.1	164.6	164.1	166.0	164.1
70°	73.1	72.6	83.6	108.6	135.8	142.6	144.7	146.2	145.7	146.8	145.7
72.5°	63.1	66.8	75.6	95.3	117.4	124.2	125.5	125.8	127.3	126.3	127.3
75°	49.1	56.9	62.7	75.2	91.9	96.6	97.1	97.7	96.6	98.2	96.6
77.5°	34.3	43.4	48.5	55.7	67.0	69.9	69.8	70.1	69.3	69.2	69.3
80°	27.2	32.9	37.6	42.3	50.7	52.8	52.2	51.7	51.7	51.2	51.7
82.5°	20.1	23.3	27.6	31.0	36.5	36.9	37.6	36.7	36.7	37.4	36.7
85°	8.4	11.0	14.1	15.7	17.8	18.3	17.2	18.8	17.8	17.8	17.8
87.5°	2.1	3.3	5.0	5.8	6.3	5.8	5.8	5.0	5.0	5.0	5.0
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°	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1
2.5°	535.4	539.5	537.0	540.4	546.6	550.0	551.7	555.8	555.8	558.3	559.2
5°	464.9	478.4	483.7	505.6	524.4	537.5	545.3	554.7	558.9	564.6	566.7
7.5°	414.1	417.9	421.8	437.5	469.6	509.5	533.4	549.5	557.9	565.4	568.5
10°	407.4	405.8	404.3	411.6	434.0	479.0	523.3	545.3	556.3	564.6	567.2
12.5°	433.3	412.5	400.9	401.1	416.1	447.2	505.8	539.4	553.7	561.7	564.7
15°	469.0	459.1	416.8	392.8	397.5	417.3	472.2	529.6	547.4	554.7	559.4
17.5°	470.7	466.2	453.4	401.1	385.1	398.2	439.3	515.5	538.1	546.7	550.9
20°	469.0	463.3	455.4	422.0	379.7	388.6	422.5	505.1	530.1	540.1	544.2
22.5°	469.0	460.4	453.4	433.7	376.0	378.6	410.8	490.9	521.8	532.1	536.3
25°	461.7	456.0	442.4	435.1	371.9	366.1	396.4	466.4	508.2	517.1	523.3
27.5°	449.4	446.5	431.8	426.6	374.6	351.6	383.8	439.6	489.5	502.1	508.9
30°	439.8	437.7	423.1	419.9	375.0	341.6	375.0	419.9	473.2	490.4	499.3
32.5°	425.2	426.0	414.3	409.9	372.1	332.0	364.2	397.8	449.0	478.3	488.9
35°	404.8	405.3	398.5	392.8	362.5	314.4	345.8	354.6	419.4	461.2	470.1
37.5°	388.2	386.0	375.9	376.3	347.5	297.1	324.0	306.1	392.7	443.1	449.6
40°	376.1	373.4	360.4	364.6	335.8	286.2	306.1	276.8	367.2	429.3	434.6
42.5°	363.9	361.3	345.3	350.4	321.6	273.7	282.3	255.1	339.2	414.7	416.2
45°	345.8	343.2	325.9	326.4	298.8	254.4	233.5	228.8	322.8	391.2	391.2
47.5°	325.5	323.2	304.7	302.7	272.2	233.3	188.2	221.9	299.8	365.9	365.7
50°	311.3	310.2	290.9	287.3	251.8	217.8	166.1	221.5	283.1	344.2	349.4
52.5°	295.8	296.0	278.4	273.9	233.8	199.8	153.6	205.2	262.6	316.2	332.7
55°	275.3	274.7	259.1	253.3	207.4	168.7	138.4	186.5	230.9	277.3	305.0
57.5°	253.1	251.9	237.1	232.6	184.5	139.9	121.3	180.3	181.6	241.8	277.1
60°	237.6	235.6	222.5	216.8	170.3	122.7	109.2	168.2	138.9	216.8	255.4
62.5°	220.5	216.8	207.9	201.7	158.6	114.4	100.8	155.6	108.4	188.3	234.5
65°	193.8	191.2	185.4	178.6	140.0	101.3	89.8	129.5	84.6	129.0	203.7
67.5°	164.6	163.1	159.7	152.1	121.6	91.1	79.7	93.6	64.3	81.9	174.3
70°	146.2	144.7	142.6	135.8	108.6	83.6	72.6	73.1	46.0	60.6	155.1
72.5°	125.8	125.5	124.2	117.4	95.3	75.6	66.8	63.1	38.9	47.6	135.5
75°	97.7	97.1	96.6	91.9	75.2	62.7	56.9	49.1	39.2	33.9	106.0
77.5°	70.1	69.8	69.9	67.0	55.7	48.5	43.4	34.3	35.0	25.8	79.4
80°	51.7	52.2	52.8	50.7	42.3	37.6	32.9	27.2	28.7	20.4	60.6
82.5°	36.7	37.6	36.9	36.5	31.0	27.6	23.3	20.1	20.4	16.2	45.1
85°	18.8	17.2	18.3	17.8	15.7	14.1	11.0	8.4	10.4	9.4	22.5
87.5°	5.0	5.8	5.8	6.3	5.8	5.0	3.3	2.1	3.8	4.6	9.2
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1	552.1
2.5°	557.9	557.9	561.7	562.5	563.4	562.1	563.4	562.5	561.7	557.9	557.9
5°	566.2	566.2	571.4	573.0	573.0	571.9	573.0	573.0	571.4	566.2	566.2
7.5°	566.9	567.7	573.0	574.1	575.1	573.5	575.1	574.1	573.0	567.7	566.9
10°	565.7	567.7	573.0	574.5	575.1	573.5	575.1	574.5	573.0	567.7	565.7
12.5°	564.0	565.7	570.9	572.0	573.0	571.8	573.0	572.0	570.9	565.7	564.0
15°	558.3	560.4	566.2	567.2	568.3	566.7	568.3	567.2	566.2	560.4	558.3
17.5°	550.5	553.1	558.3	560.0	560.5	558.6	560.5	560.0	558.3	553.1	550.5
20°	544.2	546.9	552.1	554.2	554.7	553.1	554.7	554.2	552.1	546.9	544.2
22.5°	536.3	540.6	545.4	546.2	545.5	543.9	545.5	546.2	545.4	540.6	536.3
25°	524.9	528.6	530.1	530.1	530.1	528.6	530.1	530.1	530.1	528.6	524.9
27.5°	510.4	512.3	513.2	514.1	515.1	514.1	515.1	514.1	513.2	512.3	510.4
30°	500.4	499.3	501.9	504.0	505.1	504.0	505.1	504.0	501.9	499.3	500.4
32.5°	486.6	487.2	491.1	492.3	492.5	491.5	492.5	492.3	491.1	487.2	486.6
35°	466.4	469.0	471.6	472.7	473.2	471.6	473.2	472.7	471.6	469.0	466.4
37.5°	445.1	449.7	451.6	450.4	450.5	448.9	450.5	450.4	451.6	449.7	445.1
40°	430.9	435.1	436.1	434.6	435.1	433.0	435.1	434.6	436.1	435.1	430.9
42.5°	417.5	420.9	419.8	417.8	417.5	416.7	417.5	417.8	419.8	420.9	417.5
45°	395.4	397.0	392.3	390.7	389.6	388.6	389.6	390.7	392.3	397.0	395.4
47.5°	371.1	369.1	364.6	362.2	359.2	357.3	359.2	362.2	364.6	369.1	371.1
50°	355.7	349.4	345.8	340.0	337.9	338.5	337.9	340.0	345.8	349.4	355.7
52.5°	336.9	329.4	323.6	318.7	317.0	316.7	317.0	318.7	323.6	329.4	336.9
55°	309.7	298.2	288.8	286.2	285.7	286.7	285.7	286.2	288.8	298.2	309.7
57.5°	276.4	265.1	257.4	255.3	253.5	251.9	253.5	255.3	257.4	265.1	276.4
60°	253.8	243.4	236.1	234.0	229.3	227.2	229.3	234.0	236.1	243.4	253.8
62.5°	233.8	221.2	215.6	211.4	208.0	204.6	208.0	211.4	215.6	221.2	233.8
65°	204.7	190.1	184.4	180.7	174.4	172.9	174.4	180.7	184.4	190.1	204.7
67.5°	173.0	160.2	153.0	148.1	144.2	144.1	144.2	148.1	153.0	160.2	173.0
70°	152.5	141.0	134.2	128.5	125.4	124.8	125.4	128.5	134.2	141.0	152.5
72.5°	132.5	121.4	115.4	110.1	107.4	106.9	107.4	110.1	115.4	121.4	132.5
75°	103.9	93.5	88.8	85.1	83.0	82.0	83.0	85.1	88.8	93.5	103.9
77.5°	76.9	68.4	66.0	62.3	60.5	60.4	60.5	62.3	66.0	68.4	76.9
80°	60.6	53.8	50.1	48.1	47.5	47.0	47.5	48.1	50.1	53.8	60.6
82.5°	43.9	40.0	37.6	36.4	36.2	35.3	36.2	36.4	37.6	40.0	43.9
85°	23.5	22.5	21.9	21.4	20.9	20.9	20.9	21.4	21.9	22.5	23.5
87.5°	9.6	10.0	10.0	10.4	10.9	10.4	10.9	10.4	10.0	10.0	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):

	330°	340°	350°	360°
0°	552.1	552.1	552.1	552.1
2.5°	559.2	558.3	555.8	555.8
5°	566.7	564.6	558.9	554.7
7.5°	568.5	565.4	557.9	549.5
10°	567.2	564.6	556.3	545.3
12.5°	564.7	561.7	553.7	539.4
15°	559.4	554.7	547.4	529.6
17.5°	550.9	546.7	538.1	515.5
20°	544.2	540.1	530.1	505.1
22.5°	536.3	532.1	521.8	490.9
25°	523.3	517.1	508.2	466.4
27.5°	508.9	502.1	489.5	439.6
30°	499.3	490.4	473.2	419.9
32.5°	488.9	478.3	449.0	397.8
35°	470.1	461.2	419.4	354.6
37.5°	449.6	443.1	392.7	306.1
40°	434.6	429.3	367.2	276.8
42.5°	416.2	414.7	339.2	255.1
45°	391.2	391.2	322.8	228.8
47.5°	365.7	365.9	299.8	221.9
50°	349.4	344.2	283.1	221.5
52.5°	332.7	316.2	262.6	205.2
55°	305.0	277.3	230.9	186.5
57.5°	277.1	241.8	181.6	180.3
60°	255.4	216.8	138.9	168.2
62.5°	234.5	188.3	108.4	155.6
65°	203.7	129.0	84.6	129.5
67.5°	174.3	81.9	64.3	93.6
70°	155.1	60.6	46.0	73.1
72.5°	135.5	47.6	38.9	63.1
75°	106.0	33.9	39.2	49.1
77.5°	79.4	25.8	35.0	34.3
80°	60.6	20.4	28.7	27.2
82.5°	45.1	16.2	20.4	20.1
85°	22.5	9.4	10.4	8.4
87.5°	9.2	4.6	3.8	2.1
90°	0.0	0.0	0.0	0.0

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