

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-935-1D-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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

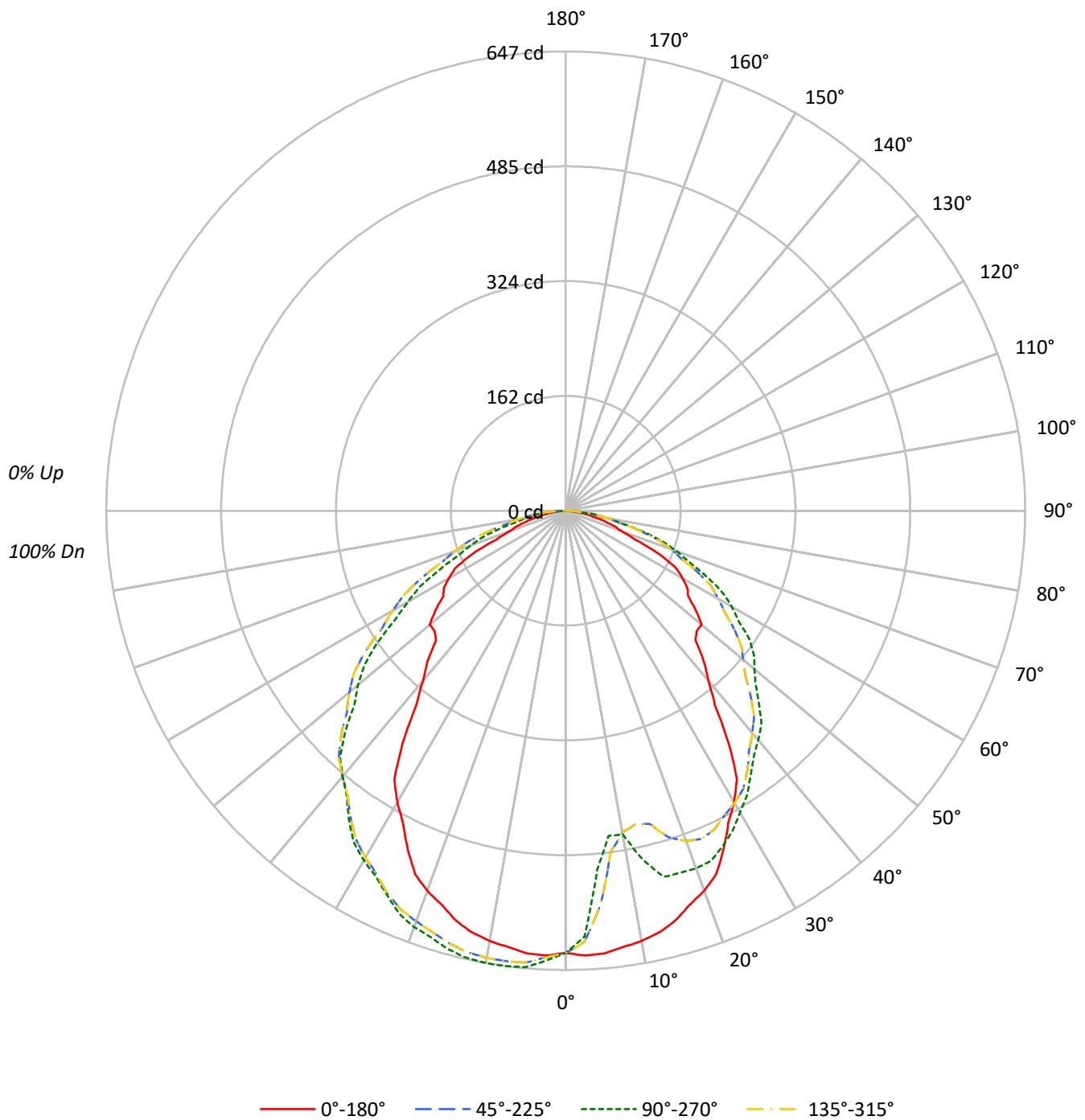
Lumens per Lamp: N/A
Luminaire Lumens: 1614.4 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	5748	5748	5748	5748
5°	5797	4700	5797	5977
10°	5764	4335	5764	6062
15°	5708	5101	5708	6108
20°	5595	5266	5595	6129
25°	5358	5316	5358	6072
30°	5049	5231	5049	6060
35°	4507	5118	4507	5994
40°	3763	5083	3763	5885
45°	3369	5022	3369	5721
50°	3587	4975	3587	5482
55°	3384	5081	3384	5205
60°	3502	4980	3502	4731
65°	3192	4761	3192	4259
70°	2225	4467	2225	3801
75°	1975	3950	1975	3297
80°	1626	3071	1626	2816
85°	995	2117	995	2498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.5
10°-20°	159.6	9.9
20°-30°	246.6	15.3
30°-40°	294.7	18.3
40°-50°	296.6	18.4
50°-60°	257.5	16.0
60°-70°	182.3	11.3
70°-80°	96.4	6.0
80°-90°	24.5	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°	462.4	28.6
0°-40°	757.1	46.9
0°-60°	1311.2	81.2
0°-90°	1614.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1614.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	623	623	623	623	623	
5°	626	508	626	645	626	59
15°	598	534	598	640	598	168
25°	526	522	526	596	526	241
35°	400	454	400	532	400	247
45°	258	385	258	438	258	208
55°	210	316	210	324	210	194
65°	146	218	146	195	146	139
75°	55	111	55	92	55	58
85°	9	20	9	24	9	14
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°	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0
2.5°	627.2	622.5	620.6	616.9	609.8	606.0	608.8	604.1	606.0	600.8	606.0
5°	625.9	615.3	606.5	591.7	570.5	545.8	539.9	524.6	515.1	507.5	515.1
7.5°	620.0	601.9	574.9	529.9	493.7	476.0	471.6	467.3	466.1	462.2	466.1
10°	615.3	590.6	540.5	489.8	464.4	456.2	458.0	459.7	463.3	462.7	463.3
12.5°	608.7	570.8	504.6	469.5	452.6	452.4	465.5	489.0	505.2	504.2	505.2
15°	597.6	532.8	470.9	448.5	443.2	470.3	518.1	529.3	533.4	534.0	533.4
17.5°	581.7	495.7	449.3	434.6	452.6	511.6	526.1	531.2	534.7	534.9	534.7
20°	569.9	476.8	438.5	428.5	476.2	513.9	522.8	529.3	535.2	536.3	535.2
22.5°	553.9	463.6	427.2	424.2	489.4	511.6	519.5	529.3	534.2	534.0	534.2
25°	526.3	447.3	413.2	419.6	491.0	499.2	514.5	521.0	521.6	522.2	521.6
27.5°	496.0	433.1	396.8	422.7	481.4	487.3	503.8	507.1	509.3	508.4	509.3
30°	473.9	423.2	385.5	423.2	473.9	477.4	493.9	496.3	493.3	491.0	493.3
32.5°	448.9	410.9	374.6	419.9	462.6	467.5	480.7	479.8	476.8	474.9	476.8
35°	400.2	390.2	354.8	409.0	443.2	449.7	457.4	456.8	456.2	454.4	456.2
37.5°	345.4	365.7	335.2	392.2	424.6	424.1	435.6	438.0	437.4	435.2	437.4
40°	312.4	345.4	323.0	379.0	411.4	406.7	421.4	424.4	423.8	422.0	423.8
42.5°	287.9	318.5	308.8	362.9	395.4	389.7	407.7	410.7	409.2	407.9	409.2
45°	258.2	263.5	287.0	337.1	368.4	367.8	387.2	390.2	386.6	384.9	386.6
47.5°	250.4	212.4	263.2	307.2	341.6	343.8	364.7	367.3	364.1	362.6	364.1
50°	249.9	187.4	245.8	284.1	324.2	328.3	350.1	351.3	347.1	346.6	347.1
52.5°	231.5	173.3	225.5	263.8	309.1	314.1	334.1	333.8	333.5	334.3	333.5
55°	210.4	156.2	190.4	234.0	285.9	292.3	310.0	310.6	314.7	315.9	314.7
57.5°	203.5	136.9	157.8	208.2	262.5	267.6	284.2	285.6	288.4	288.3	288.4
60°	189.8	123.2	138.5	192.1	244.6	251.1	265.8	268.2	270.5	269.9	270.5
62.5°	175.6	113.8	129.1	178.9	227.6	234.6	244.6	248.8	249.8	248.7	249.8
65°	146.2	101.4	114.3	158.0	201.6	209.2	215.7	218.7	219.3	218.1	219.3
67.5°	105.6	89.9	102.8	137.2	171.6	180.2	184.0	185.8	185.2	187.3	185.2
70°	82.5	81.9	94.3	122.6	153.2	160.9	163.3	165.0	164.4	165.6	164.4
72.5°	71.2	75.3	85.3	107.5	132.5	140.2	141.6	141.9	143.7	142.5	143.7
75°	55.4	64.2	70.7	84.9	103.7	109.0	109.6	110.2	109.0	110.8	109.0
77.5°	38.7	48.9	54.7	62.8	75.6	78.9	78.7	79.1	78.2	78.0	78.2
80°	30.6	37.1	42.4	47.7	57.2	59.5	58.9	58.3	58.3	57.8	58.3
82.5°	22.6	26.3	31.1	35.0	41.1	41.6	42.4	41.4	41.4	42.2	41.4
85°	9.4	12.4	15.9	17.7	20.0	20.6	19.4	21.2	20.0	20.0	20.0
87.5°	2.4	3.8	5.7	6.6	7.1	6.6	6.6	5.7	5.7	5.7	5.7
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°	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0
2.5°	604.1	608.8	606.0	609.8	616.9	620.6	622.5	627.2	627.2	630.1	631.0
5°	524.6	539.9	545.8	570.5	591.7	606.5	615.3	625.9	630.6	637.1	639.5
7.5°	467.3	471.6	476.0	493.7	529.9	574.9	601.9	620.0	629.6	638.1	641.5
10°	459.7	458.0	456.2	464.4	489.8	540.5	590.6	615.3	627.7	637.1	640.1
12.5°	489.0	465.5	452.4	452.6	469.5	504.6	570.8	608.7	624.9	633.8	637.2
15°	529.3	518.1	470.3	443.2	448.5	470.9	532.8	597.6	617.7	625.9	631.2
17.5°	531.2	526.1	511.6	452.6	434.6	449.3	495.7	581.7	607.2	617.0	621.7
20°	529.3	522.8	513.9	476.2	428.5	438.5	476.8	569.9	598.2	609.4	614.1
22.5°	529.3	519.5	511.6	489.4	424.2	427.2	463.6	553.9	588.8	600.5	605.2
25°	521.0	514.5	499.2	491.0	419.6	413.2	447.3	526.3	573.5	583.5	590.6
27.5°	507.1	503.8	487.3	481.4	422.7	396.8	433.1	496.0	552.4	566.6	574.3
30°	496.3	493.9	477.4	473.9	423.2	385.5	423.2	473.9	534.0	553.4	563.5
32.5°	479.8	480.7	467.5	462.6	419.9	374.6	410.9	448.9	506.6	539.8	551.7
35°	456.8	457.4	449.7	443.2	409.0	354.8	390.2	400.2	473.3	520.4	530.4
37.5°	438.0	435.6	424.1	424.6	392.2	335.2	365.7	345.4	443.1	500.0	507.3
40°	424.4	421.4	406.7	411.4	379.0	323.0	345.4	312.4	414.3	484.5	490.4
42.5°	410.7	407.7	389.7	395.4	362.9	308.8	318.5	287.9	382.7	468.0	469.6
45°	390.2	387.2	367.8	368.4	337.1	287.0	263.5	258.2	364.2	441.5	441.5
47.5°	367.3	364.7	343.8	341.6	307.2	263.2	212.4	250.4	338.3	412.9	412.7
50°	351.3	350.1	328.3	324.2	284.1	245.8	187.4	249.9	319.4	388.4	394.3
52.5°	333.8	334.1	314.1	309.1	263.8	225.5	173.3	231.5	296.3	356.8	375.4
55°	310.6	310.0	292.3	285.9	234.0	190.4	156.2	210.4	260.5	313.0	344.2
57.5°	285.6	284.2	267.6	262.5	208.2	157.8	136.9	203.5	204.9	272.9	312.7
60°	268.2	265.8	251.1	244.6	192.1	138.5	123.2	189.8	156.8	244.6	288.2
62.5°	248.8	244.6	234.6	227.6	178.9	129.1	113.8	175.6	122.4	212.5	264.6
65°	218.7	215.7	209.2	201.6	158.0	114.3	101.4	146.2	95.5	145.6	229.9
67.5°	185.8	184.0	180.2	171.6	137.2	102.8	89.9	105.6	72.6	92.4	196.7
70°	165.0	163.3	160.9	153.2	122.6	94.3	81.9	82.5	51.9	68.4	175.0
72.5°	141.9	141.6	140.2	132.5	107.5	85.3	75.3	71.2	43.9	53.8	152.9
75°	110.2	109.6	109.0	103.7	84.9	70.7	64.2	55.4	44.2	38.3	119.6
77.5°	79.1	78.7	78.9	75.6	62.8	54.7	48.9	38.7	39.5	29.1	89.6
80°	58.3	58.9	59.5	57.2	47.7	42.4	37.1	30.6	32.4	23.0	68.4
82.5°	41.4	42.4	41.6	41.1	35.0	31.1	26.3	22.6	23.0	18.3	50.9
85°	21.2	19.4	20.6	20.0	17.7	15.9	12.4	9.4	11.8	10.6	25.3
87.5°	5.7	6.6	6.6	7.1	6.6	5.7	3.8	2.4	4.2	5.2	10.4
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0	623.0
2.5°	629.6	629.6	633.8	634.8	635.7	634.3	635.7	634.8	633.8	629.6	629.6
5°	638.9	638.9	644.8	646.6	646.6	645.4	646.6	646.6	644.8	638.9	638.9
7.5°	639.7	640.7	646.6	647.9	648.9	647.1	648.9	647.9	646.6	640.7	639.7
10°	638.3	640.7	646.6	648.3	648.9	647.1	648.9	648.3	646.6	640.7	638.3
12.5°	636.4	638.3	644.2	645.5	646.6	645.3	646.6	645.5	644.2	638.3	636.4
15°	630.1	632.4	638.9	640.1	641.3	639.5	641.3	640.1	638.9	632.4	630.1
17.5°	621.2	624.2	630.1	631.9	632.5	630.3	632.5	631.9	630.1	624.2	621.2
20°	614.1	617.1	623.0	625.3	625.9	624.2	625.9	625.3	623.0	617.1	614.1
22.5°	605.2	610.0	615.4	616.4	615.6	613.8	615.6	616.4	615.4	610.0	605.2
25°	592.3	596.5	598.2	598.2	598.2	596.5	598.2	598.2	598.2	596.5	592.3
27.5°	575.9	578.1	579.1	580.1	581.3	580.1	581.3	580.1	579.1	578.1	575.9
30°	564.6	563.5	566.4	568.8	569.9	568.8	569.9	568.8	566.4	563.5	564.6
32.5°	549.1	549.8	554.1	555.6	555.8	554.6	555.8	555.6	554.1	549.8	549.1
35°	526.3	529.3	532.2	533.4	534.0	532.2	534.0	533.4	532.2	529.3	526.3
37.5°	502.3	507.5	509.6	508.3	508.4	506.5	508.4	508.3	509.6	507.5	502.3
40°	486.2	491.0	492.1	490.4	491.0	488.6	491.0	490.4	492.1	491.0	486.2
42.5°	471.2	474.9	473.7	471.5	471.2	470.2	471.2	471.5	473.7	474.9	471.2
45°	446.2	447.9	442.6	440.9	439.7	438.5	439.7	440.9	442.6	447.9	446.2
47.5°	418.8	416.5	411.4	408.7	405.4	403.1	405.4	408.7	411.4	416.5	418.8
50°	401.4	394.3	390.2	383.7	381.3	381.9	381.3	383.7	390.2	394.3	401.4
52.5°	380.2	371.7	365.2	359.6	357.8	357.4	357.8	359.6	365.2	371.7	380.2
55°	349.5	336.5	325.9	323.0	322.4	323.6	322.4	323.0	325.9	336.5	349.5
57.5°	311.9	299.2	290.4	288.1	286.1	284.2	286.1	288.1	290.4	299.2	311.9
60°	286.4	274.7	266.4	264.0	258.7	256.4	258.7	264.0	266.4	274.7	286.4
62.5°	263.8	249.7	243.3	238.6	234.7	230.9	234.7	238.6	243.3	249.7	263.8
65°	231.0	214.5	208.1	203.9	196.9	195.1	196.9	203.9	208.1	214.5	231.0
67.5°	195.2	180.8	172.7	167.2	162.7	162.6	162.7	167.2	172.7	180.8	195.2
70°	172.1	159.1	151.5	145.0	141.5	140.9	141.5	145.0	151.5	159.1	172.1
72.5°	149.5	137.0	130.3	124.2	121.2	120.6	121.2	124.2	130.3	137.0	149.5
75°	117.3	105.5	100.2	96.1	93.7	92.5	93.7	96.1	100.2	105.5	117.3
77.5°	86.8	77.2	74.5	70.3	68.3	68.1	68.3	70.3	74.5	77.2	86.8
80°	68.4	60.7	56.6	54.2	53.6	53.0	53.6	54.2	56.6	60.7	68.4
82.5°	49.5	45.1	42.4	41.0	40.9	39.8	40.9	41.0	42.4	45.1	49.5
85°	26.5	25.3	24.8	24.2	23.6	23.6	23.6	24.2	24.8	25.3	26.5
87.5°	10.8	11.3	11.3	11.8	12.3	11.8	12.3	11.8	11.3	11.3	10.8
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):

	330°	340°	350°	360°
0°	623.0	623.0	623.0	623.0
2.5°	631.0	630.1	627.2	627.2
5°	639.5	637.1	630.6	625.9
7.5°	641.5	638.1	629.6	620.0
10°	640.1	637.1	627.7	615.3
12.5°	637.2	633.8	624.9	608.7
15°	631.2	625.9	617.7	597.6
17.5°	621.7	617.0	607.2	581.7
20°	614.1	609.4	598.2	569.9
22.5°	605.2	600.5	588.8	553.9
25°	590.6	583.5	573.5	526.3
27.5°	574.3	566.6	552.4	496.0
30°	563.5	553.4	534.0	473.9
32.5°	551.7	539.8	506.6	448.9
35°	530.4	520.4	473.3	400.2
37.5°	507.3	500.0	443.1	345.4
40°	490.4	484.5	414.3	312.4
42.5°	469.6	468.0	382.7	287.9
45°	441.5	441.5	364.2	258.2
47.5°	412.7	412.9	338.3	250.4
50°	394.3	388.4	319.4	249.9
52.5°	375.4	356.8	296.3	231.5
55°	344.2	313.0	260.5	210.4
57.5°	312.7	272.9	204.9	203.5
60°	288.2	244.6	156.8	189.8
62.5°	264.6	212.5	122.4	175.6
65°	229.9	145.6	95.5	146.2
67.5°	196.7	92.4	72.6	105.6
70°	175.0	68.4	51.9	82.5
72.5°	152.9	53.8	43.9	71.2
75°	119.6	38.3	44.2	55.4
77.5°	89.6	29.1	39.5	38.7
80°	68.4	23.0	32.4	30.6
82.5°	50.9	18.3	23.0	22.6
85°	25.3	10.6	11.8	9.4
87.5°	10.4	5.2	4.2	2.4
90°	0.0	0.0	0.0	0.0

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