

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-835-1D-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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

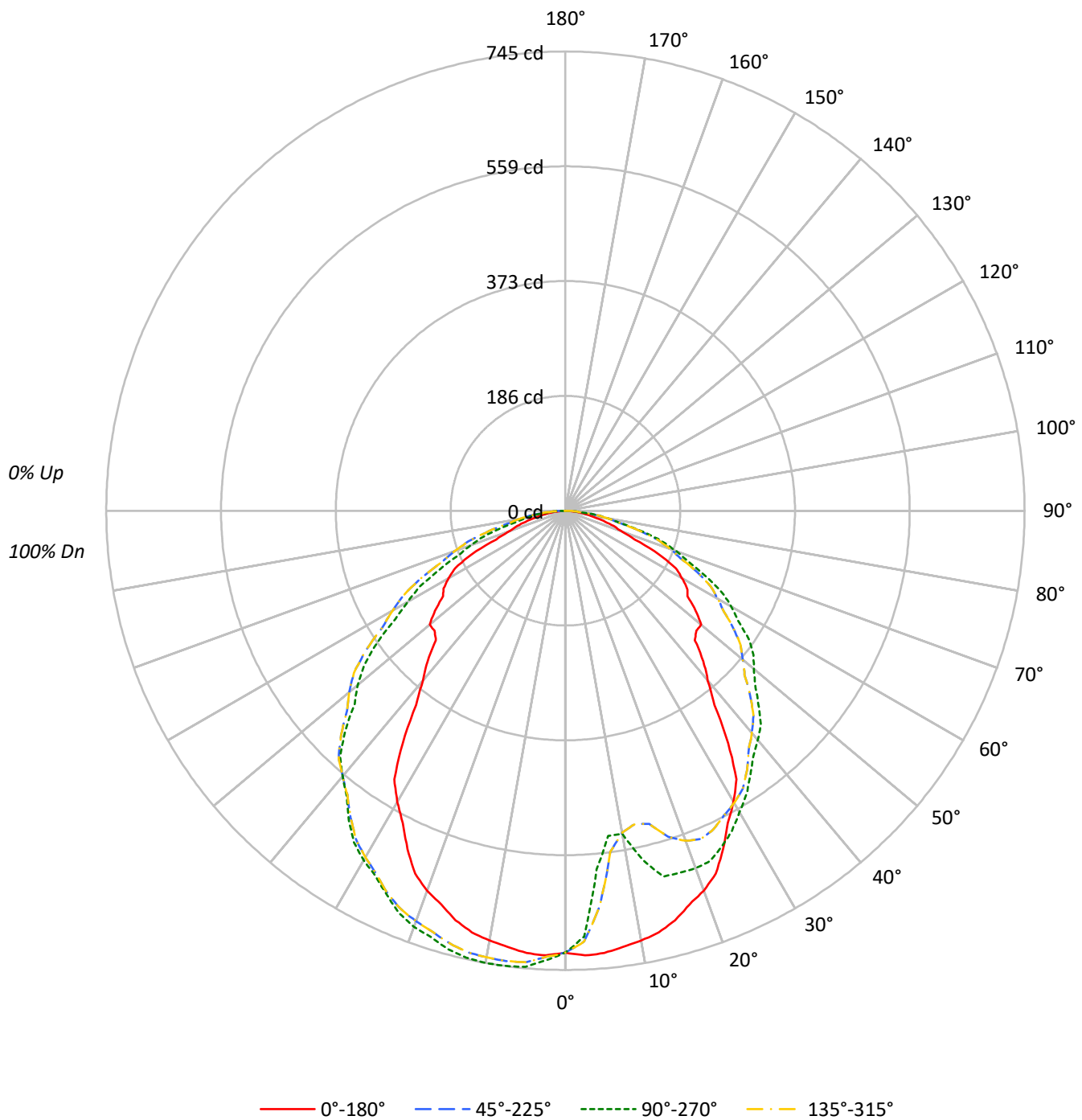
Lumens per Lamp: N/A
Luminaire Lumens: 1858.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	6615	6615	6615	6615
5°	6672	5409	6672	6879
10°	6635	4989	6635	6978
15°	6570	5870	6570	7030
20°	6440	6061	6440	7052
25°	6166	6118	6166	6989
30°	5810	6019	5810	6974
35°	5188	5891	5188	6899
40°	4330	5850	4330	6772
45°	3877	5779	3877	6585
50°	4128	5726	4128	6310
55°	3896	5849	3896	5990
60°	4030	5733	4030	5445
65°	3672	5480	3672	4901
70°	2563	5142	2563	4373
75°	2274	4545	2274	3796
80°	1876	3533	1876	3241
85°	1154	2445	1154	2869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 6726 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.6	3.5
10°-20°	183.7	9.9
20°-30°	283.9	15.3
30°-40°	339.1	18.3
40°-50°	341.3	18.4
50°-60°	296.4	16.0
60°-70°	209.8	11.3
70°-80°	111.0	6.0
80°-90°	28.2	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°	532.2	28.6
0°-40°	871.3	46.9
0°-60°	1509.0	81.2
0°-90°	1858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	717	717	717	717	717	
5°	720	584	720	743	720	68
15°	688	615	688	736	688	193
25°	606	601	606	686	606	278
35°	461	523	461	612	461	284
45°	297	443	297	505	297	239
55°	242	364	242	372	242	223
65°	168	251	168	224	168	160
75°	64	128	64	106	64	67
85°	11	23	11	27	11	16
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°	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0
2.5°	721.9	716.4	714.3	709.9	701.8	697.4	700.7	695.3	697.4	691.5	697.4
5°	720.4	708.2	698.0	681.0	656.6	628.1	621.3	603.7	592.9	584.0	592.9
7.5°	713.6	692.7	661.6	609.8	568.2	547.8	542.8	537.8	536.4	531.9	536.4
10°	708.2	679.7	622.0	563.7	534.5	525.0	527.1	529.1	533.2	532.5	533.2
12.5°	700.6	656.9	580.8	540.3	520.9	520.7	535.7	562.7	581.5	580.2	581.5
15°	687.8	613.2	542.0	516.2	510.1	541.3	596.2	609.1	613.9	614.6	613.9
17.5°	669.5	570.5	517.2	500.2	520.9	588.8	605.5	611.3	615.4	615.6	615.4
20°	655.9	548.8	504.7	493.1	548.1	591.5	601.7	609.1	615.9	617.3	615.9
22.5°	637.5	533.6	491.6	488.3	563.3	588.8	597.9	609.1	614.8	614.6	614.8
25°	605.7	514.8	475.5	483.0	565.0	574.5	592.2	599.6	600.3	601.0	600.3
27.5°	570.9	498.4	456.6	486.5	554.1	560.8	579.8	583.6	586.2	585.1	586.2
30°	545.4	487.0	443.6	487.0	545.4	549.4	568.4	571.1	567.8	565.0	567.8
32.5°	516.6	472.9	431.1	483.2	532.3	538.0	553.2	552.2	548.8	546.6	548.8
35°	460.6	449.0	408.3	470.8	510.1	517.6	526.4	525.7	525.0	523.0	525.0
37.5°	397.5	420.8	385.8	451.4	488.7	488.1	501.3	504.1	503.4	500.9	503.4
40°	359.5	397.5	371.7	436.2	473.5	468.0	485.0	488.4	487.7	485.7	487.7
42.5°	331.3	366.6	355.4	417.7	455.0	448.5	469.3	472.7	470.9	469.4	470.9
45°	297.1	303.2	330.3	388.0	423.9	423.3	445.7	449.0	445.0	442.9	445.0
47.5°	288.1	244.5	302.9	353.5	393.2	395.7	419.7	422.7	419.1	417.3	419.1
50°	287.6	215.7	282.9	326.9	373.1	377.8	402.9	404.3	399.5	398.9	399.5
52.5°	266.4	199.4	259.5	303.6	355.7	361.5	384.5	384.2	383.8	384.7	383.8
55°	242.2	179.8	219.1	269.3	329.0	336.4	356.8	357.5	362.2	363.6	362.2
57.5°	234.2	157.5	181.7	239.6	302.1	308.0	327.1	328.7	332.0	331.8	332.0
60°	218.4	141.8	159.4	221.1	281.5	289.0	305.9	308.6	311.3	310.7	311.3
62.5°	202.1	130.9	148.6	205.9	262.0	270.0	281.5	286.4	287.5	286.3	287.5
65°	168.2	116.7	131.6	181.8	232.0	240.8	248.3	251.7	252.3	251.0	252.3
67.5°	121.6	103.5	118.3	157.9	197.5	207.4	211.8	213.8	213.1	215.6	213.1
70°	95.0	94.3	108.5	141.1	176.4	185.2	187.9	189.9	189.3	190.6	189.3
72.5°	81.9	86.7	98.2	123.7	152.5	161.3	162.9	163.3	165.4	164.0	165.4
75°	63.8	73.9	81.4	97.7	119.4	125.5	126.2	126.8	125.5	127.5	125.5
77.5°	44.5	56.3	62.9	72.3	87.0	90.8	90.6	91.0	89.9	89.8	89.9
80°	35.3	42.7	48.8	54.9	65.8	68.5	67.8	67.2	67.2	66.5	67.2
82.5°	26.0	30.3	35.8	40.3	47.3	47.9	48.8	47.6	47.6	48.6	47.6
85°	10.9	14.2	18.3	20.3	23.1	23.7	22.4	24.4	23.1	23.1	23.1
87.5°	2.7	4.3	6.5	7.6	8.1	7.6	7.6	6.5	6.5	6.5	6.5
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°	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0
2.5°	695.3	700.7	697.4	701.8	709.9	714.3	716.4	721.9	721.9	725.1	726.2
5°	603.7	621.3	628.1	656.6	681.0	698.0	708.2	720.4	725.8	733.3	736.0
7.5°	537.8	542.8	547.8	568.2	609.8	661.6	692.7	713.6	724.6	734.3	738.3
10°	529.1	527.1	525.0	534.5	563.7	622.0	679.7	708.2	722.4	733.3	736.7
12.5°	562.7	535.7	520.7	520.9	540.3	580.8	656.9	700.6	719.2	729.5	733.4
15°	609.1	596.2	541.3	510.1	516.2	542.0	613.2	687.8	710.9	720.4	726.5
17.5°	611.3	605.5	588.8	520.9	500.2	517.2	570.5	669.5	698.8	710.1	715.5
20°	609.1	601.7	591.5	548.1	493.1	504.7	548.8	655.9	688.5	701.4	706.8
22.5°	609.1	597.9	588.8	563.3	488.3	491.6	533.6	637.5	677.6	691.1	696.5
25°	599.6	592.2	574.5	565.0	483.0	475.5	514.8	605.7	660.0	671.5	679.7
27.5°	583.6	579.8	560.8	554.1	486.5	456.6	498.4	570.9	635.7	652.1	661.0
30°	571.1	568.4	549.4	545.4	487.0	443.6	487.0	545.4	614.6	636.9	648.5
32.5°	552.2	553.2	538.0	532.3	483.2	431.1	472.9	516.6	583.1	621.2	634.9
35°	525.7	526.4	517.6	510.1	470.8	408.3	449.0	460.6	544.7	599.0	610.5
37.5°	504.1	501.3	488.1	488.7	451.4	385.8	420.8	397.5	510.0	575.5	583.9
40°	488.4	485.0	468.0	473.5	436.2	371.7	397.5	359.5	476.9	557.6	564.4
42.5°	472.7	469.3	448.5	455.0	417.7	355.4	366.6	331.3	440.5	538.6	540.5
45°	449.0	445.7	423.3	423.9	388.0	330.3	303.2	297.1	419.2	508.1	508.1
47.5°	422.7	419.7	395.7	393.2	353.5	302.9	244.5	288.1	389.4	475.2	475.0
50°	404.3	402.9	377.8	373.1	326.9	282.9	215.7	287.6	367.6	447.0	453.8
52.5°	384.2	384.5	361.5	355.7	303.6	259.5	199.4	266.4	341.1	410.7	432.1
55°	357.5	356.8	336.4	329.0	269.3	219.1	179.8	242.2	299.8	360.2	396.1
57.5°	328.7	327.1	308.0	302.1	239.6	181.7	157.5	234.2	235.8	314.1	359.9
60°	308.6	305.9	289.0	281.5	221.1	159.4	141.8	218.4	180.4	281.5	331.7
62.5°	286.4	281.5	270.0	262.0	205.9	148.6	130.9	202.1	140.8	244.6	304.6
65°	251.7	248.3	240.8	232.0	181.8	131.6	116.7	168.2	109.9	167.5	264.5
67.5°	213.8	211.8	207.4	197.5	157.9	118.3	103.5	121.6	83.6	106.4	226.4
70°	189.9	187.9	185.2	176.4	141.1	108.5	94.3	95.0	59.7	78.7	201.5
72.5°	163.3	162.9	161.3	152.5	123.7	98.2	86.7	81.9	50.5	61.9	176.0
75°	126.8	126.2	125.5	119.4	97.7	81.4	73.9	63.8	50.9	44.1	137.7
77.5°	91.0	90.6	90.8	87.0	72.3	62.9	56.3	44.5	45.4	33.5	103.1
80°	67.2	67.8	68.5	65.8	54.9	48.8	42.7	35.3	37.3	26.5	78.7
82.5°	47.6	48.8	47.9	47.3	40.3	35.8	30.3	26.0	26.5	21.0	58.6
85°	24.4	22.4	23.7	23.1	20.3	18.3	14.2	10.9	13.6	12.2	29.2
87.5°	6.5	7.6	7.6	8.1	7.6	6.5	4.3	2.7	4.9	6.0	11.9
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°	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0	717.0
2.5°	724.6	724.6	729.5	730.5	731.6	730.0	731.6	730.5	729.5	724.6	724.6
5°	735.3	735.3	742.1	744.1	744.1	742.8	744.1	744.1	742.1	735.3	735.3
7.5°	736.2	737.3	744.1	745.6	746.8	744.8	746.8	745.6	744.1	737.3	736.2
10°	734.6	737.3	744.1	746.2	746.8	744.8	746.8	746.2	744.1	737.3	734.6
12.5°	732.4	734.6	741.4	742.9	744.1	742.6	744.1	742.9	741.4	734.6	732.4
15°	725.1	727.8	735.3	736.7	738.0	736.0	738.0	736.7	735.3	727.8	725.1
17.5°	714.9	718.3	725.1	727.3	728.0	725.4	728.0	727.3	725.1	718.3	714.9
20°	706.8	710.2	717.0	719.7	720.4	718.3	720.4	719.7	717.0	710.2	706.8
22.5°	696.5	702.1	708.3	709.4	708.4	706.4	708.4	709.4	708.3	702.1	696.5
25°	681.7	686.5	688.5	688.5	688.5	686.5	688.5	688.5	688.5	686.5	681.7
27.5°	662.9	665.3	666.5	667.6	669.0	667.6	669.0	667.6	666.5	665.3	662.9
30°	649.8	648.5	651.9	654.6	655.9	654.6	655.9	654.6	651.9	648.5	649.8
32.5°	631.9	632.7	637.8	639.4	639.7	638.3	639.7	639.4	637.8	632.7	631.9
35°	605.7	609.1	612.5	613.9	614.6	612.5	614.6	613.9	612.5	609.1	605.7
37.5°	578.1	584.0	586.5	585.0	585.1	582.9	585.1	585.0	586.5	584.0	578.1
40°	559.6	565.0	566.4	564.4	565.0	562.3	565.0	564.4	566.4	565.0	559.6
42.5°	542.2	546.6	545.2	542.7	542.2	541.2	542.2	542.7	545.2	546.6	542.2
45°	513.5	515.5	509.4	507.4	506.0	504.7	506.0	507.4	509.4	515.5	513.5
47.5°	482.0	479.3	473.5	470.3	466.5	464.0	466.5	470.3	473.5	479.3	482.0
50°	461.9	453.8	449.0	441.6	438.9	439.6	438.9	441.6	449.0	453.8	461.9
52.5°	437.5	427.7	420.3	413.9	411.7	411.3	411.7	413.9	420.3	427.7	437.5
55°	402.2	387.3	375.1	371.7	371.0	372.4	371.0	371.7	375.1	387.3	402.2
57.5°	359.0	344.3	334.3	331.6	329.3	327.1	329.3	331.6	334.3	344.3	359.0
60°	329.7	316.1	306.6	303.9	297.8	295.1	297.8	303.9	306.6	316.1	329.7
62.5°	303.6	287.3	280.0	274.6	270.1	265.8	270.1	274.6	280.0	287.3	303.6
65°	265.9	246.9	239.4	234.7	226.6	224.5	226.6	234.7	239.4	246.9	265.9
67.5°	224.7	208.1	198.7	192.4	187.2	187.1	187.2	192.4	198.7	208.1	224.7
70°	198.1	183.1	174.3	166.9	162.8	162.1	162.8	166.9	174.3	183.1	198.1
72.5°	172.0	157.6	149.9	143.0	139.5	138.8	139.5	143.0	149.9	157.6	172.0
75°	135.0	121.4	115.3	110.6	107.9	106.5	107.9	110.6	115.3	121.4	135.0
77.5°	99.8	88.9	85.7	80.9	78.5	78.4	78.5	80.9	85.7	88.9	99.8
80°	78.7	69.9	65.1	62.4	61.7	61.0	61.7	62.4	65.1	69.9	78.7
82.5°	57.0	52.0	48.8	47.2	47.1	45.9	47.1	47.2	48.8	52.0	57.0
85°	30.5	29.2	28.5	27.8	27.1	27.1	27.1	27.8	28.5	29.2	30.5
87.5°	12.5	13.0	13.0	13.6	14.1	13.6	14.1	13.6	13.0	13.0	12.5
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):

	330°	340°	350°	360°
0°	717.0	717.0	717.0	717.0
2.5°	726.2	725.1	721.9	721.9
5°	736.0	733.3	725.8	720.4
7.5°	738.3	734.3	724.6	713.6
10°	736.7	733.3	722.4	708.2
12.5°	733.4	729.5	719.2	700.6
15°	726.5	720.4	710.9	687.8
17.5°	715.5	710.1	698.8	669.5
20°	706.8	701.4	688.5	655.9
22.5°	696.5	691.1	677.6	637.5
25°	679.7	671.5	660.0	605.7
27.5°	661.0	652.1	635.7	570.9
30°	648.5	636.9	614.6	545.4
32.5°	634.9	621.2	583.1	516.6
35°	610.5	599.0	544.7	460.6
37.5°	583.9	575.5	510.0	397.5
40°	564.4	557.6	476.9	359.5
42.5°	540.5	538.6	440.5	331.3
45°	508.1	508.1	419.2	297.1
47.5°	475.0	475.2	389.4	288.1
50°	453.8	447.0	367.6	287.6
52.5°	432.1	410.7	341.1	266.4
55°	396.1	360.2	299.8	242.2
57.5°	359.9	314.1	235.8	234.2
60°	331.7	281.5	180.4	218.4
62.5°	304.6	244.6	140.8	202.1
65°	264.5	167.5	109.9	168.2
67.5°	226.4	106.4	83.6	121.6
70°	201.5	78.7	59.7	95.0
72.5°	176.0	61.9	50.5	81.9
75°	137.7	44.1	50.9	63.8
77.5°	103.1	33.5	45.4	44.5
80°	78.7	26.5	37.3	35.3
82.5°	58.6	21.0	26.5	26.0
85°	29.2	12.2	13.6	10.9
87.5°	11.9	6.0	4.9	2.7
90°	0.0	0.0	0.0	0.0

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