

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-075D-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-075D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

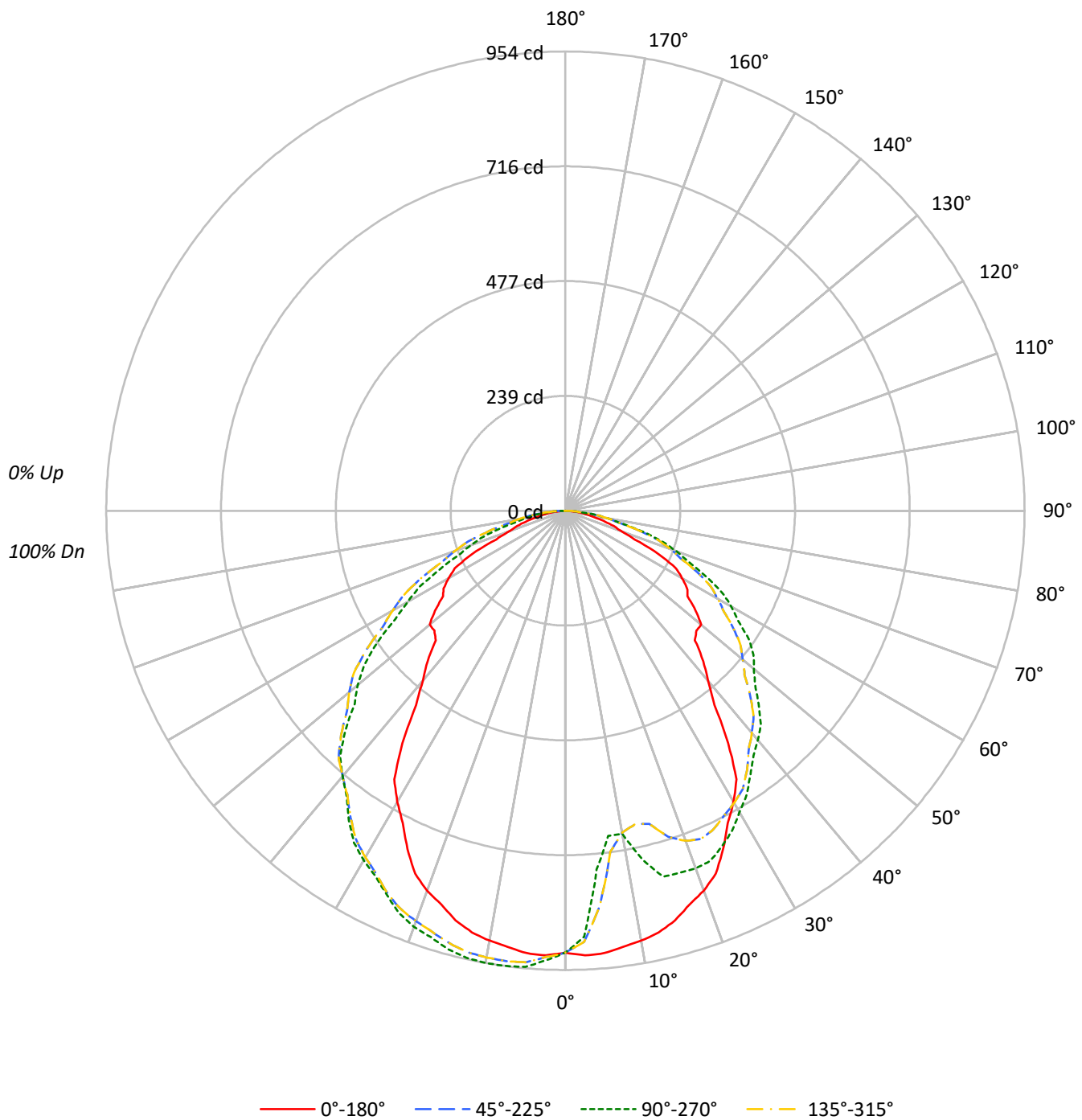
Lumens per Lamp: N/A
Luminaire Lumens: 2379.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		71
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		51
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		35
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8471	8471	8471	8471
5°	8545	6928	8545	8809
10°	8496	6388	8496	8936
15°	8414	7518	8414	9003
20°	8247	7761	8247	9033
25°	7898	7836	7898	8949
30°	7440	7709	7440	8931
35°	6644	7544	6644	8835
40°	5545	7491	5545	8674
45°	4965	7402	4965	8433
50°	5286	7332	5286	8080
55°	4988	7489	4988	7671
60°	5161	7342	5161	6973
65°	4702	7017	4702	6276
70°	3280	6585	3280	5600
75°	2912	5821	2912	4862
80°	2402	4521	2402	4155
85°	1471	3123	1471	3673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8614 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.8	3.5
10°-20°	235.2	9.9
20°-30°	363.5	15.3
30°-40°	434.3	18.3
40°-50°	437.2	18.4
50°-60°	379.5	16.0
60°-70°	268.7	11.3
70°-80°	142.1	6.0
80°-90°	36.2	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°	681.6	28.6
0°-40°	1115.9	46.9
0°-60°	1932.6	81.2
0°-90°	2379.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2379.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	918	918	918	918	918	
5°	923	748	923	951	923	87
15°	881	787	881	943	881	248
25°	776	770	776	879	776	356
35°	590	670	590	784	590	364
45°	380	567	380	646	380	306
55°	310	466	310	477	310	285
65°	215	321	215	288	215	205
75°	82	163	82	136	82	86
85°	14	30	14	35	14	20
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°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	924.5	917.5	914.8	909.2	898.8	893.2	897.4	890.4	893.2	885.6	893.2
5°	922.6	906.9	893.9	872.2	840.9	804.4	795.7	773.2	759.3	748.0	759.3
7.5°	913.9	887.1	847.3	781.0	727.6	701.6	695.1	688.7	687.0	681.2	687.0
10°	906.9	870.4	796.6	721.9	684.5	672.4	675.0	677.6	682.8	681.9	682.8
12.5°	897.2	841.3	743.8	692.0	667.2	666.8	686.1	720.7	744.7	743.1	744.7
15°	880.9	785.3	694.1	661.1	653.3	693.2	763.6	780.1	786.2	787.1	786.2
17.5°	857.4	730.6	662.3	640.6	667.2	754.0	775.4	782.9	788.1	788.4	788.1
20°	840.0	702.8	646.3	631.6	701.9	757.5	770.5	780.1	788.8	790.5	788.8
22.5°	816.4	683.3	629.6	625.3	721.4	754.0	765.7	780.1	787.4	787.1	787.4
25°	775.8	659.4	609.0	618.5	723.6	735.8	758.4	767.9	768.8	769.7	768.8
27.5°	731.1	638.3	584.8	623.0	709.6	718.3	742.6	747.4	750.7	749.4	750.7
30°	698.4	623.7	568.1	623.7	698.4	703.7	728.0	731.5	727.1	723.6	727.1
32.5°	661.6	605.7	552.2	618.9	681.8	689.1	708.5	707.1	702.8	700.0	702.8
35°	589.9	575.1	523.0	602.9	653.3	662.8	674.1	673.3	672.4	669.8	672.4
37.5°	509.1	538.9	494.1	578.0	625.8	625.1	642.0	645.6	644.8	641.5	644.8
40°	460.4	509.1	476.1	558.6	606.4	599.4	621.1	625.5	624.6	622.0	624.6
42.5°	424.3	469.5	455.2	535.0	582.7	574.4	601.0	605.3	603.1	601.1	603.1
45°	380.5	388.3	423.1	496.9	542.9	542.1	570.7	575.1	569.9	567.3	569.9
47.5°	369.0	313.1	388.0	452.8	503.5	506.8	537.6	541.4	536.7	534.4	536.7
50°	368.3	276.3	362.3	418.7	477.8	483.9	516.0	517.8	511.7	510.8	511.7
52.5°	341.2	255.4	332.4	388.8	455.6	463.0	492.4	492.0	491.5	492.7	491.5
55°	310.1	230.2	280.6	344.9	421.3	430.9	456.9	457.8	463.9	465.6	463.9
57.5°	299.9	201.7	232.6	306.8	386.9	394.4	418.9	421.0	425.1	425.0	425.1
60°	279.7	181.6	204.1	283.2	360.5	370.1	391.8	395.3	398.7	397.9	398.7
62.5°	258.9	167.7	190.2	263.7	335.5	345.7	360.5	366.8	368.2	366.6	368.2
65°	215.4	149.4	168.5	232.8	297.1	308.4	317.9	322.3	323.2	321.4	323.2
67.5°	155.7	132.6	151.5	202.2	253.0	265.7	271.2	273.8	272.9	276.1	272.9
70°	121.6	120.8	139.0	180.7	225.9	237.2	240.6	243.2	242.4	244.1	242.4
72.5°	104.9	111.0	125.8	158.5	195.3	206.6	208.7	209.2	211.8	210.1	211.8
75°	81.7	94.7	104.2	125.1	152.9	160.7	161.6	162.4	160.7	163.3	160.7
77.5°	57.0	72.1	80.6	92.6	111.4	116.2	116.1	116.6	115.2	115.0	115.2
80°	45.2	54.7	62.5	70.4	84.3	87.7	86.9	86.0	86.0	85.1	86.0
82.5°	33.4	38.7	45.9	51.6	60.6	61.3	62.5	61.0	61.0	62.2	61.0
85°	13.9	18.2	23.5	26.1	29.5	30.4	28.7	31.3	29.5	29.5	29.5
87.5°	3.5	5.6	8.3	9.7	10.4	9.7	9.7	8.3	8.3	8.3	8.3
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°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	890.4	897.4	893.2	898.8	909.2	914.8	917.5	924.5	924.5	928.7	930.0
5°	773.2	795.7	804.4	840.9	872.2	893.9	906.9	922.6	929.5	939.1	942.6
7.5°	688.7	695.1	701.6	727.6	781.0	847.3	887.1	913.9	928.0	940.5	945.5
10°	677.6	675.0	672.4	684.5	721.9	796.6	870.4	906.9	925.2	939.1	943.4
12.5°	720.7	686.1	666.8	667.2	692.0	743.8	841.3	897.2	921.0	934.2	939.3
15°	780.1	763.6	693.2	653.3	661.1	694.1	785.3	880.9	910.4	922.6	930.4
17.5°	782.9	775.4	754.0	667.2	640.6	662.3	730.6	857.4	894.9	909.4	916.3
20°	780.1	770.5	757.5	701.9	631.6	646.3	702.8	840.0	881.7	898.2	905.2
22.5°	780.1	765.7	754.0	721.4	625.3	629.6	683.3	816.4	867.8	885.0	892.0
25°	767.9	758.4	735.8	723.6	618.5	609.0	659.4	775.8	845.3	860.0	870.4
27.5°	747.4	742.6	718.3	709.6	623.0	584.8	638.3	731.1	814.2	835.2	846.5
30°	731.5	728.0	703.7	698.4	623.7	568.1	623.7	698.4	787.1	815.7	830.5
32.5°	707.1	708.5	689.1	681.8	618.9	552.2	605.7	661.6	746.7	795.6	813.1
35°	673.3	674.1	662.8	653.3	602.9	523.0	575.1	589.9	697.6	767.1	781.8
37.5°	645.6	642.0	625.1	625.8	578.0	494.1	538.9	509.1	653.1	737.0	747.8
40°	625.5	621.1	599.4	606.4	558.6	476.1	509.1	460.4	610.7	714.1	722.8
42.5°	605.3	601.0	574.4	582.7	535.0	455.2	469.5	424.3	564.1	689.8	692.2
45°	575.1	570.7	542.1	542.9	496.9	423.1	388.3	380.5	536.9	650.7	650.7
47.5°	541.4	537.6	506.8	503.5	452.8	388.0	313.1	369.0	498.6	608.6	608.3
50°	517.8	516.0	483.9	477.8	418.7	362.3	276.3	368.3	470.8	572.5	581.2
52.5°	492.0	492.4	463.0	455.6	388.8	332.4	255.4	341.2	436.8	525.9	553.4
55°	457.8	456.9	430.9	421.3	344.9	280.6	230.2	310.1	384.0	461.3	507.3
57.5°	421.0	418.9	394.4	386.9	306.8	232.6	201.7	299.9	302.0	402.2	460.9
60°	395.3	391.8	370.1	360.5	283.2	204.1	181.6	279.7	231.1	360.5	424.8
62.5°	366.8	360.5	345.7	335.5	263.7	190.2	167.7	258.9	180.3	313.3	390.1
65°	322.3	317.9	308.4	297.1	232.8	168.5	149.4	215.4	140.7	214.6	338.8
67.5°	273.8	271.2	265.7	253.0	202.2	151.5	132.6	155.7	107.0	136.2	290.0
70°	243.2	240.6	237.2	225.9	180.7	139.0	120.8	121.6	76.4	100.8	258.0
72.5°	209.2	208.7	206.6	195.3	158.5	125.8	111.0	104.9	64.6	79.2	225.3
75°	162.4	161.6	160.7	152.9	125.1	104.2	94.7	81.7	65.2	56.5	176.3
77.5°	116.6	116.1	116.2	111.4	92.6	80.6	72.1	57.0	58.2	42.9	132.0
80°	86.0	86.9	87.7	84.3	70.4	62.5	54.7	45.2	47.8	33.9	100.8
82.5°	61.0	62.5	61.3	60.6	51.6	45.9	38.7	33.4	33.9	26.9	75.1
85°	31.3	28.7	30.4	29.5	26.1	23.5	18.2	13.9	17.4	15.6	37.4
87.5°	8.3	9.7	9.7	10.4	9.7	8.3	5.6	3.5	6.3	7.6	15.3
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°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	928.0	928.0	934.2	935.6	937.0	934.9	937.0	935.6	934.2	928.0	928.0
5°	941.7	941.7	950.4	953.0	953.0	951.2	953.0	953.0	950.4	941.7	941.7
7.5°	942.9	944.3	953.0	954.9	956.5	953.8	956.5	954.9	953.0	944.3	942.9
10°	940.8	944.3	953.0	955.6	956.5	953.8	956.5	955.6	953.0	944.3	940.8
12.5°	938.0	940.8	949.5	951.4	953.0	951.1	953.0	951.4	949.5	940.8	938.0
15°	928.7	932.1	941.7	943.4	945.2	942.6	945.2	943.4	941.7	932.1	928.7
17.5°	915.6	920.0	928.7	931.4	932.3	929.0	932.3	931.4	928.7	920.0	915.6
20°	905.2	909.5	918.2	921.7	922.6	920.0	922.6	921.7	918.2	909.5	905.2
22.5°	892.0	899.1	907.1	908.5	907.3	904.7	907.3	908.5	907.1	899.1	892.0
25°	873.1	879.1	881.7	881.7	881.7	879.1	881.7	881.7	881.7	879.1	873.1
27.5°	848.9	852.0	853.6	855.0	856.7	855.0	856.7	855.0	853.6	852.0	848.9
30°	832.2	830.5	834.8	838.3	840.0	838.3	840.0	838.3	834.8	830.5	832.2
32.5°	809.3	810.3	816.8	818.8	819.2	817.5	819.2	818.8	816.8	810.3	809.3
35°	775.8	780.1	784.4	786.2	787.1	784.4	787.1	786.2	784.4	780.1	775.8
37.5°	740.3	748.0	751.1	749.2	749.4	746.6	749.4	749.2	751.1	748.0	740.3
40°	716.7	723.6	725.4	722.8	723.6	720.2	723.6	722.8	725.4	723.6	716.7
42.5°	694.4	700.0	698.3	695.0	694.4	693.1	694.4	695.0	698.3	700.0	694.4
45°	657.6	660.2	652.4	649.8	648.1	646.3	648.1	649.8	652.4	660.2	657.6
47.5°	617.3	613.8	606.4	602.4	597.5	594.2	597.5	602.4	606.4	613.8	617.3
50°	591.6	581.2	575.1	565.5	562.1	562.9	562.1	565.5	575.1	581.2	591.6
52.5°	560.3	547.8	538.3	530.1	527.3	526.8	527.3	530.1	538.3	547.8	560.3
55°	515.1	496.0	480.4	476.1	475.2	476.9	475.2	476.1	480.4	496.0	515.1
57.5°	459.7	441.0	428.1	424.6	421.7	418.9	421.7	424.6	428.1	441.0	459.7
60°	422.2	404.8	392.7	389.2	381.4	377.9	381.4	389.2	392.7	404.8	422.2
62.5°	388.8	368.0	358.6	351.7	345.9	340.4	345.9	351.7	358.6	368.0	388.8
65°	340.5	316.2	306.7	300.6	290.1	287.5	290.1	300.6	306.7	316.2	340.5
67.5°	287.7	266.5	254.5	246.4	239.8	239.6	239.8	246.4	254.5	266.5	287.7
70°	253.7	234.6	223.3	213.7	208.5	207.6	208.5	213.7	223.3	234.6	253.7
72.5°	220.3	201.9	192.0	183.1	178.6	177.7	178.6	183.1	192.0	201.9	220.3
75°	172.9	155.5	147.7	141.6	138.1	136.4	138.1	141.6	147.7	155.5	172.9
77.5°	127.9	113.8	109.8	103.6	100.6	100.4	100.6	103.6	109.8	113.8	127.9
80°	100.8	89.5	83.4	79.9	79.1	78.2	79.1	79.9	83.4	89.5	100.8
82.5°	73.0	66.5	62.5	60.5	60.3	58.7	60.3	60.5	62.5	66.5	73.0
85°	39.1	37.4	36.5	35.6	34.7	34.7	34.7	35.6	36.5	37.4	39.1
87.5°	16.0	16.7	16.7	17.4	18.1	17.4	18.1	17.4	16.7	16.7	16.0
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):

	330°	340°	350°	360°
0°	918.2	918.2	918.2	918.2
2.5°	930.0	928.7	924.5	924.5
5°	942.6	939.1	929.5	922.6
7.5°	945.5	940.5	928.0	913.9
10°	943.4	939.1	925.2	906.9
12.5°	939.3	934.2	921.0	897.2
15°	930.4	922.6	910.4	880.9
17.5°	916.3	909.4	894.9	857.4
20°	905.2	898.2	881.7	840.0
22.5°	892.0	885.0	867.8	816.4
25°	870.4	860.0	845.3	775.8
27.5°	846.5	835.2	814.2	731.1
30°	830.5	815.7	787.1	698.4
32.5°	813.1	795.6	746.7	661.6
35°	781.8	767.1	697.6	589.9
37.5°	747.8	737.0	653.1	509.1
40°	722.8	714.1	610.7	460.4
42.5°	692.2	689.8	564.1	424.3
45°	650.7	650.7	536.9	380.5
47.5°	608.3	608.6	498.6	369.0
50°	581.2	572.5	470.8	368.3
52.5°	553.4	525.9	436.8	341.2
55°	507.3	461.3	384.0	310.1
57.5°	460.9	402.2	302.0	299.9
60°	424.8	360.5	231.1	279.7
62.5°	390.1	313.3	180.3	258.9
65°	338.8	214.6	140.7	215.4
67.5°	290.0	136.2	107.0	155.7
70°	258.0	100.8	76.4	121.6
72.5°	225.3	79.2	64.6	104.9
75°	176.3	56.5	65.2	81.7
77.5°	132.0	42.9	58.2	57.0
80°	100.8	33.9	47.8	45.2
82.5°	75.1	26.9	33.9	33.4
85°	37.4	15.6	17.4	13.9
87.5°	15.3	7.6	6.3	3.5
90°	0.0	0.0	0.0	0.0

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