

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-940-1D-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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

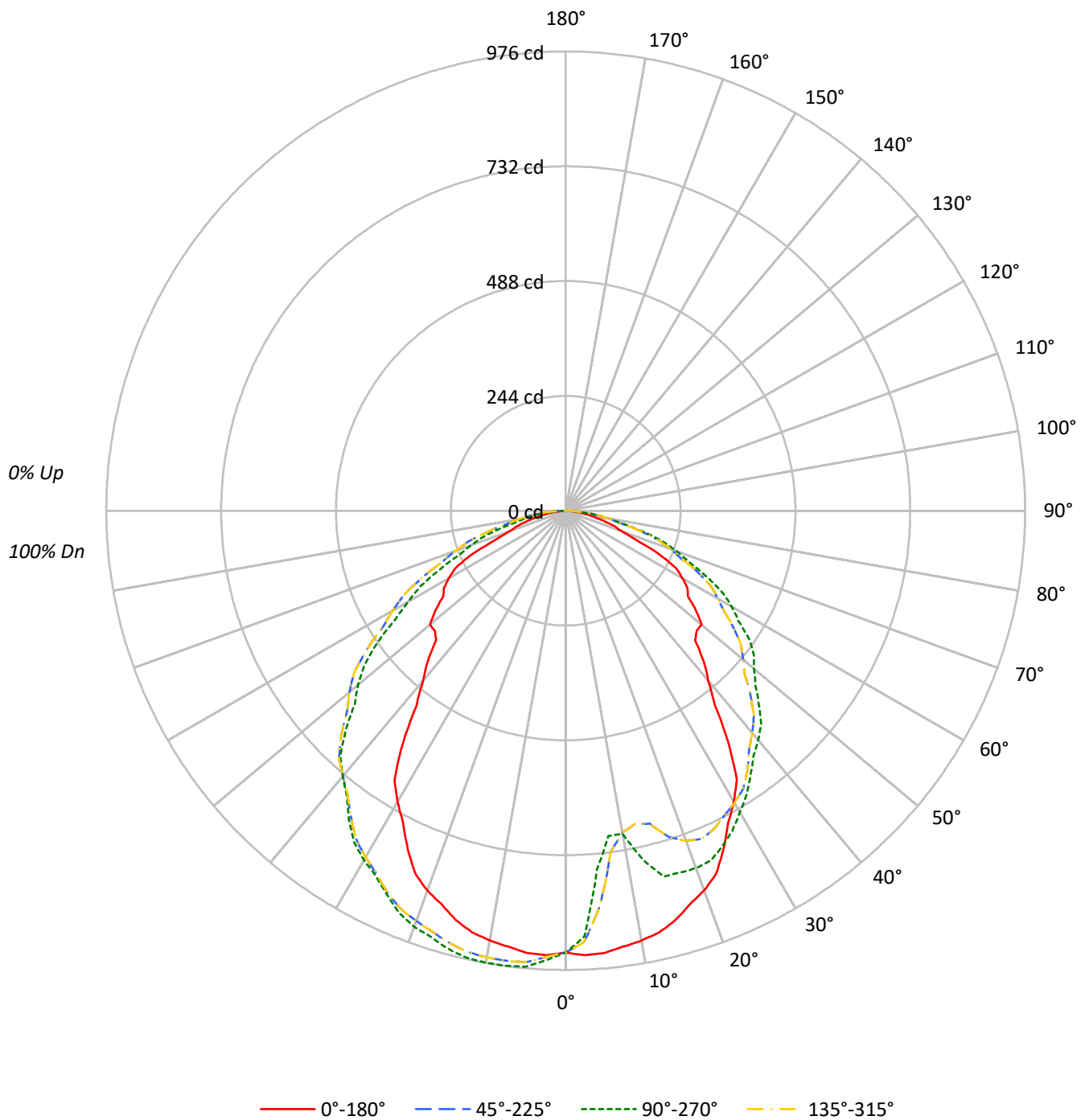
Lumens per Lamp: N/A
Luminaire Lumens: 2433.5 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5776	5776	5776	5776
5°	5825	4723	5825	6006
10°	5793	4356	5793	6093
15°	5737	5125	5737	6139
20°	5623	5292	5623	6159
25°	5385	5342	5385	6102
30°	5073	5256	5073	6089
35°	4530	5143	4530	6024
40°	3781	5107	3781	5914
45°	3385	5047	3385	5750
50°	3605	4999	3605	5509
55°	3402	5107	3402	5231
60°	3519	5006	3519	4755
65°	3206	4784	3206	4280
70°	2237	4491	2237	3818
75°	1984	3969	1984	3315
80°	1636	3085	1636	2834
85°	1002	2131	1002	2505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5873 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	3.5
10°-20°	240.6	9.9
20°-30°	371.8	15.3
30°-40°	444.2	18.3
40°-50°	447.1	18.4
50°-60°	388.1	16.0
60°-70°	274.8	11.3
70°-80°	145.3	6.0
80°-90°	37.0	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°	697.0	28.6
0°-40°	1141.2	46.9
0°-60°	1976.5	81.2
0°-90°	2433.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2433.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	939	939	939	939	939	
5°	944	765	944	973	944	89
15°	901	805	901	964	901	253
25°	793	787	793	899	793	364
35°	603	685	603	802	603	373
45°	389	580	389	661	389	313
55°	317	476	317	488	317	292
65°	220	329	220	294	220	210
75°	84	167	84	140	84	88
85°	14	30	14	36	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°	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1
2.5°	945.5	938.4	935.5	929.8	919.2	913.5	917.8	910.7	913.5	905.7	913.5
5°	943.5	927.5	914.2	892.0	860.0	822.7	813.8	790.7	776.5	764.9	776.5
7.5°	934.6	907.3	866.6	798.7	744.2	717.5	710.9	704.4	702.6	696.7	702.6
10°	927.5	890.2	814.7	738.3	700.1	687.7	690.3	693.0	698.3	697.4	698.3
12.5°	917.6	860.4	760.7	707.7	682.3	682.0	701.7	737.1	761.6	760.0	761.6
15°	900.9	803.2	709.9	676.1	668.1	709.0	780.9	797.8	804.0	804.9	804.0
17.5°	876.9	747.2	677.3	655.1	682.3	771.2	793.0	800.7	806.0	806.3	806.0
20°	859.1	718.7	661.0	645.9	717.9	774.7	788.0	797.8	806.7	808.5	806.7
22.5°	835.0	698.8	643.9	639.5	737.8	771.2	783.1	797.8	805.3	804.9	805.3
25°	793.4	674.3	622.8	632.6	740.1	752.5	775.6	785.4	786.3	787.2	786.3
27.5°	747.7	652.8	598.1	637.2	725.7	734.6	759.4	764.4	767.8	766.4	767.8
30°	714.3	637.9	581.0	637.9	714.3	719.6	744.5	748.1	743.6	740.1	743.6
32.5°	676.6	619.4	564.7	632.9	697.2	704.7	724.6	723.2	718.7	715.9	718.7
35°	603.3	588.1	534.8	616.6	668.1	677.9	689.4	688.5	687.7	685.0	687.7
37.5°	520.6	551.2	505.3	591.2	640.0	639.3	656.6	660.3	659.4	656.0	659.4
40°	470.9	520.6	486.9	571.3	620.1	613.0	635.2	639.7	638.8	636.1	638.8
42.5°	433.9	480.1	465.5	547.1	596.0	587.4	614.6	619.1	616.8	614.8	616.8
45°	389.1	397.1	432.7	508.2	555.3	554.4	583.7	588.1	582.8	580.2	582.8
47.5°	377.4	320.2	396.8	463.1	514.9	518.3	549.8	553.7	548.9	546.6	548.9
50°	376.7	282.5	370.5	428.2	488.6	494.9	527.7	529.5	523.3	522.4	523.3
52.5°	349.0	261.2	339.9	397.7	465.9	473.5	503.6	503.2	502.7	503.9	502.7
55°	317.2	235.4	287.0	352.7	430.9	440.7	467.3	468.2	474.4	476.2	474.4
57.5°	306.7	206.3	237.9	313.8	395.7	403.4	428.4	430.5	434.8	434.6	434.8
60°	286.1	185.7	208.8	289.6	368.7	378.5	400.7	404.2	407.8	406.9	407.8
62.5°	264.8	171.5	194.6	269.7	343.1	353.6	368.7	375.1	376.5	374.9	376.5
65°	220.3	152.8	172.4	238.1	303.8	315.4	325.2	329.6	330.5	328.7	330.5
67.5°	159.2	135.6	154.9	206.8	258.7	271.7	277.4	280.0	279.1	282.3	279.1
70°	124.4	123.5	142.2	184.8	231.0	242.5	246.1	248.8	247.9	249.7	247.9
72.5°	107.3	113.5	128.6	162.1	199.7	211.3	213.4	213.9	216.6	214.8	216.6
75°	83.5	96.8	106.6	127.9	156.4	164.4	165.3	166.1	164.4	167.0	164.4
77.5°	58.3	73.7	82.4	94.7	113.9	118.9	118.7	119.2	117.8	117.6	117.8
80°	46.2	56.0	64.0	72.0	86.2	89.7	88.8	88.0	88.0	87.1	88.0
82.5°	34.1	39.6	46.9	52.8	62.0	62.7	64.0	62.4	62.4	63.6	62.4
85°	14.2	18.7	24.0	26.7	30.2	31.1	29.3	32.0	30.2	30.2	30.2
87.5°	3.6	5.7	8.5	10.0	10.7	10.0	10.0	8.5	8.5	8.5	8.5
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°	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1
2.5°	910.7	917.8	913.5	919.2	929.8	935.5	938.4	945.5	945.5	949.7	951.2
5°	790.7	813.8	822.7	860.0	892.0	914.2	927.5	943.5	950.6	960.4	964.0
7.5°	704.4	710.9	717.5	744.2	798.7	866.6	907.3	934.6	949.0	961.8	967.0
10°	693.0	690.3	687.7	700.1	738.3	814.7	890.2	927.5	946.2	960.4	964.8
12.5°	737.1	701.7	682.0	682.3	707.7	760.7	860.4	917.6	941.9	955.4	960.6
15°	797.8	780.9	709.0	668.1	676.1	709.9	803.2	900.9	931.1	943.5	951.5
17.5°	800.7	793.0	771.2	682.3	655.1	677.3	747.2	876.9	915.3	930.0	937.1
20°	797.8	788.0	774.7	717.9	645.9	661.0	718.7	859.1	901.8	918.6	925.8
22.5°	797.8	783.1	771.2	737.8	639.5	643.9	698.8	835.0	887.6	905.1	912.3
25°	785.4	775.6	752.5	740.1	632.6	622.8	674.3	793.4	864.5	879.6	890.2
27.5°	764.4	759.4	734.6	725.7	637.2	598.1	652.8	747.7	832.6	854.1	865.7
30°	748.1	744.5	719.6	714.3	637.9	581.0	637.9	714.3	804.9	834.2	849.4
32.5°	723.2	724.6	704.7	697.2	632.9	564.7	619.4	676.6	763.7	813.6	831.6
35°	688.5	689.4	677.9	668.1	616.6	534.8	588.1	603.3	713.4	784.5	799.6
37.5°	660.3	656.6	639.3	640.0	591.2	505.3	551.2	520.6	667.9	753.8	764.8
40°	639.7	635.2	613.0	620.1	571.3	486.9	520.6	470.9	624.6	730.3	739.2
42.5°	619.1	614.6	587.4	596.0	547.1	465.5	480.1	433.9	577.0	705.4	707.9
45°	588.1	583.7	554.4	555.3	508.2	432.7	397.1	389.1	549.1	665.4	665.4
47.5°	553.7	549.8	518.3	514.9	463.1	396.8	320.2	377.4	510.0	622.4	622.1
50°	529.5	527.7	494.9	488.6	428.2	370.5	282.5	376.7	481.5	585.5	594.4
52.5°	503.2	503.6	473.5	465.9	397.7	339.9	261.2	349.0	446.7	537.9	565.9
55°	468.2	467.3	440.7	430.9	352.7	287.0	235.4	317.2	392.7	471.8	518.8
57.5°	430.5	428.4	403.4	395.7	313.8	237.9	206.3	306.7	308.8	411.3	471.4
60°	404.2	400.7	378.5	368.7	289.6	208.8	185.7	286.1	236.3	368.7	434.4
62.5°	375.1	368.7	353.6	343.1	269.7	194.6	171.5	264.8	184.4	320.4	398.9
65°	329.6	325.2	315.4	303.8	238.1	172.4	152.8	220.3	143.9	219.4	346.5
67.5°	280.0	277.4	271.7	258.7	206.8	154.9	135.6	159.2	109.5	139.3	296.6
70°	248.8	246.1	242.5	231.0	184.8	142.2	123.5	124.4	78.2	103.1	263.9
72.5°	213.9	213.4	211.3	199.7	162.1	128.6	113.5	107.3	66.1	81.0	230.5
75°	166.1	165.3	164.4	156.4	127.9	106.6	96.8	83.5	66.6	57.7	180.4
77.5°	119.2	118.7	118.9	113.9	94.7	82.4	73.7	58.3	59.5	43.9	135.0
80°	88.0	88.8	89.7	86.2	72.0	64.0	56.0	46.2	48.9	34.6	103.1
82.5°	62.4	64.0	62.7	62.0	52.8	46.9	39.6	34.1	34.6	27.5	76.8
85°	32.0	29.3	31.1	30.2	26.7	24.0	18.7	14.2	17.8	16.0	38.2
87.5°	8.5	10.0	10.0	10.7	10.0	8.5	5.7	3.6	6.4	7.8	15.6
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1	939.1
2.5°	949.0	949.0	955.4	956.9	958.3	956.1	958.3	956.9	955.4	949.0	949.0
5°	963.1	963.1	972.0	974.6	974.6	972.8	974.6	974.6	972.0	963.1	963.1
7.5°	964.3	965.7	974.6	976.6	978.2	975.5	978.2	976.6	974.6	965.7	964.3
10°	962.2	965.7	974.6	977.3	978.2	975.5	978.2	977.3	974.6	965.7	962.2
12.5°	959.3	962.2	971.1	973.0	974.6	972.7	974.6	973.0	971.1	962.2	959.3
15°	949.7	953.3	963.1	964.8	966.6	964.0	966.6	964.8	963.1	953.3	949.7
17.5°	936.4	940.9	949.7	952.6	953.5	950.1	953.5	952.6	949.7	940.9	936.4
20°	925.8	930.2	939.1	942.6	943.5	940.9	943.5	942.6	939.1	930.2	925.8
22.5°	912.3	919.5	927.7	929.1	927.9	925.2	927.9	929.1	927.7	919.5	912.3
25°	892.9	899.1	901.8	901.8	901.8	899.1	901.8	901.8	901.8	899.1	892.9
27.5°	868.2	871.4	873.0	874.4	876.2	874.4	876.2	874.4	873.0	871.4	868.2
30°	851.1	849.4	853.8	857.3	859.1	857.3	859.1	857.3	853.8	849.4	851.1
32.5°	827.7	828.7	835.3	837.4	837.8	836.0	837.8	837.4	835.3	828.7	827.7
35°	793.4	797.8	802.3	804.0	804.9	802.3	804.9	804.0	802.3	797.8	793.4
37.5°	757.1	764.9	768.1	766.2	766.4	763.5	766.4	766.2	768.1	764.9	757.1
40°	733.0	740.1	741.8	739.2	740.1	736.5	740.1	739.2	741.8	740.1	733.0
42.5°	710.2	715.9	714.1	710.8	710.2	708.8	710.2	710.8	714.1	715.9	710.2
45°	672.6	675.2	667.2	664.6	662.8	661.0	662.8	664.6	667.2	675.2	672.6
47.5°	631.3	627.8	620.1	616.0	611.1	607.7	611.1	616.0	620.1	627.8	631.3
50°	605.0	594.4	588.1	578.4	574.8	575.7	574.8	578.4	588.1	594.4	605.0
52.5°	573.0	560.3	550.5	542.1	539.3	538.8	539.3	542.1	550.5	560.3	573.0
55°	526.8	507.3	491.3	486.9	486.0	487.8	486.0	486.9	491.3	507.3	526.8
57.5°	470.2	451.0	437.8	434.3	431.2	428.4	431.2	434.3	437.8	451.0	470.2
60°	431.8	414.0	401.6	398.0	390.0	386.5	390.0	398.0	401.6	414.0	431.8
62.5°	397.7	376.3	366.7	359.6	353.8	348.1	353.8	359.6	366.7	376.3	397.7
65°	348.3	323.4	313.6	307.4	296.7	294.1	296.7	307.4	313.6	323.4	348.3
67.5°	294.3	272.6	260.3	252.0	245.2	245.0	245.2	252.0	260.3	272.6	294.3
70°	259.4	239.9	228.3	218.6	213.2	212.3	213.2	218.6	228.3	239.9	259.4
72.5°	225.3	206.5	196.3	187.3	182.7	181.8	182.7	187.3	196.3	206.5	225.3
75°	176.8	159.0	151.0	144.8	141.3	139.5	141.3	144.8	151.0	159.0	176.8
77.5°	130.8	116.4	112.3	105.9	102.9	102.7	102.9	105.9	112.3	116.4	130.8
80°	103.1	91.5	85.3	81.7	80.8	80.0	80.8	81.7	85.3	91.5	103.1
82.5°	74.6	68.1	64.0	61.8	61.7	60.1	61.7	61.8	64.0	68.1	74.6
85°	40.0	38.2	37.3	36.4	35.5	35.5	35.5	36.4	37.3	38.2	40.0
87.5°	16.3	17.1	17.1	17.8	18.5	17.8	18.5	17.8	17.1	17.1	16.3
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):

	330°	340°	350°	360°
0°	939.1	939.1	939.1	939.1
2.5°	951.2	949.7	945.5	945.5
5°	964.0	960.4	950.6	943.5
7.5°	967.0	961.8	949.0	934.6
10°	964.8	960.4	946.2	927.5
12.5°	960.6	955.4	941.9	917.6
15°	951.5	943.5	931.1	900.9
17.5°	937.1	930.0	915.3	876.9
20°	925.8	918.6	901.8	859.1
22.5°	912.3	905.1	887.6	835.0
25°	890.2	879.6	864.5	793.4
27.5°	865.7	854.1	832.6	747.7
30°	849.4	834.2	804.9	714.3
32.5°	831.6	813.6	763.7	676.6
35°	799.6	784.5	713.4	603.3
37.5°	764.8	753.8	667.9	520.6
40°	739.2	730.3	624.6	470.9
42.5°	707.9	705.4	577.0	433.9
45°	665.4	665.4	549.1	389.1
47.5°	622.1	622.4	510.0	377.4
50°	594.4	585.5	481.5	376.7
52.5°	565.9	537.9	446.7	349.0
55°	518.8	471.8	392.7	317.2
57.5°	471.4	411.3	308.8	306.7
60°	434.4	368.7	236.3	286.1
62.5°	398.9	320.4	184.4	264.8
65°	346.5	219.4	143.9	220.3
67.5°	296.6	139.3	109.5	159.2
70°	263.9	103.1	78.2	124.4
72.5°	230.5	81.0	66.1	107.3
75°	180.4	57.7	66.6	83.5
77.5°	135.0	43.9	59.5	58.3
80°	103.1	34.6	48.9	46.2
82.5°	76.8	27.5	34.6	34.1
85°	38.2	16.0	17.8	14.2
87.5°	15.6	7.8	6.4	3.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)