

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-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-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

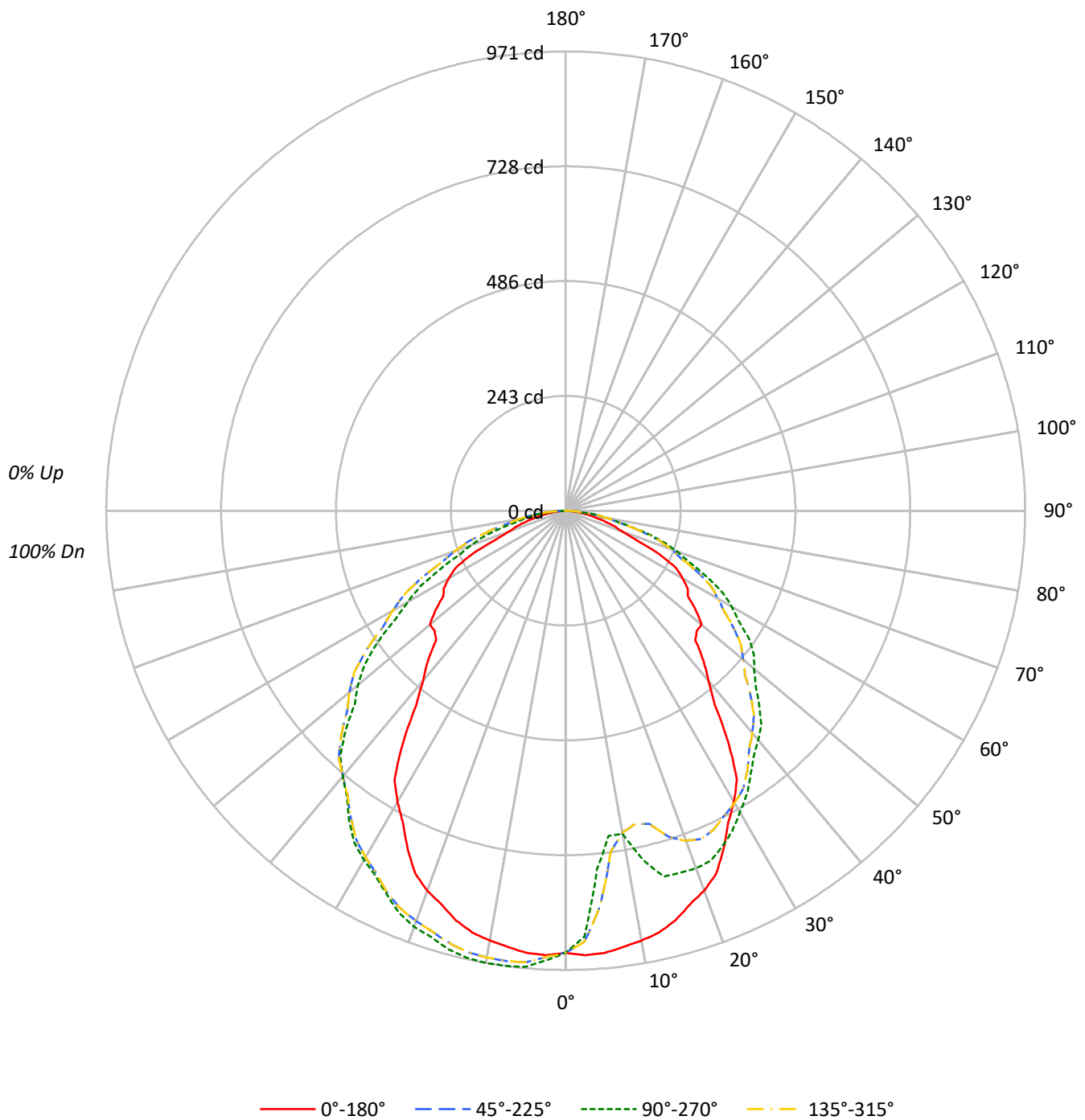
Lumens per Lamp: N/A
Luminaire Lumens: 2421.6 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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



TEST NUMBER:

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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°	5748	5748	5748	5748
5°	5797	4700	5797	5977
10°	5765	4335	5765	6063
15°	5709	5101	5709	6108
20°	5596	5266	5596	6128
25°	5358	5316	5358	6072
30°	5048	5230	5048	6059
35°	4507	5118	4507	5994
40°	3763	5083	3763	5885
45°	3368	5022	3368	5722
50°	3586	4974	3586	5482
55°	3384	5082	3384	5205
60°	3502	4981	3502	4731
65°	3192	4761	3192	4259
70°	2226	4467	2226	3800
75°	1975	3950	1975	3299
80°	1629	3067	1629	2820
85°	995	2124	995	2498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	3.5
10°-20°	239.4	9.9
20°-30°	370.0	15.3
30°-40°	442.0	18.3
40°-50°	444.9	18.4
50°-60°	386.2	16.0
60°-70°	273.4	11.3
70°-80°	144.6	6.0
80°-90°	36.8	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°	693.6	28.6
0°-40°	1135.6	46.9
0°-60°	1966.8	81.2
0°-90°	2421.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2421.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	934	934	934	934	934	
5°	939	761	939	968	939	89
15°	896	801	896	959	896	252
25°	790	783	790	895	790	362
35°	600	682	600	798	600	371
45°	387	577	387	658	387	312
55°	316	474	316	485	316	290
65°	219	327	219	293	219	209
75°	83	166	83	139	83	88
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°	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5
2.5°	940.8	933.8	930.9	925.3	914.7	909.0	913.3	906.2	909.0	901.2	909.0
5°	938.9	923.0	909.7	887.6	855.8	818.7	809.8	786.8	772.7	761.2	772.7
7.5°	930.1	902.8	862.3	794.8	740.5	714.0	707.4	700.9	699.1	693.3	699.1
10°	923.0	885.8	810.7	734.7	696.7	684.3	686.9	689.6	694.9	694.0	694.9
12.5°	913.1	856.1	756.9	704.3	679.0	678.6	698.2	733.4	757.8	756.2	757.8
15°	896.5	799.2	706.4	672.8	664.8	705.5	777.1	793.9	800.1	801.0	800.1
17.5°	872.6	743.5	674.0	651.9	679.0	767.4	789.1	796.7	802.0	802.4	802.0
20°	854.9	715.2	657.8	642.7	714.3	770.9	784.2	793.9	802.7	804.5	802.7
22.5°	830.9	695.4	640.8	636.4	734.1	767.4	779.2	793.9	801.3	801.0	801.3
25°	789.5	671.0	619.7	629.5	736.4	748.8	771.8	781.5	782.4	783.3	782.4
27.5°	744.0	649.6	595.2	634.1	722.1	731.0	755.7	760.7	764.0	762.6	764.0
30°	710.8	634.8	578.2	634.8	710.8	716.1	740.9	744.4	740.0	736.4	740.0
32.5°	673.3	616.4	561.9	629.8	693.8	701.3	721.1	719.6	715.2	712.4	715.2
35°	600.3	585.3	532.2	613.6	664.8	674.6	686.0	685.2	684.3	681.6	684.3
37.5°	518.1	548.5	502.9	588.3	636.9	636.2	653.3	657.0	656.2	652.8	656.2
40°	468.6	518.1	484.5	568.5	617.1	610.0	632.1	636.5	635.7	633.0	635.7
42.5°	431.8	477.8	463.3	544.4	593.0	584.6	611.6	616.0	613.7	611.8	613.7
45°	387.2	395.2	430.5	505.7	552.5	551.7	580.8	585.3	580.0	577.3	580.0
47.5°	375.6	318.6	394.8	460.8	512.4	515.8	547.1	551.0	546.2	543.9	546.2
50°	374.8	281.1	368.7	426.1	486.2	492.4	525.1	526.9	520.7	519.8	520.7
52.5°	347.3	259.9	338.2	395.7	463.6	471.2	501.1	500.7	500.2	501.5	500.2
55°	315.6	234.3	285.6	351.0	428.8	438.5	465.0	465.9	472.1	473.9	472.1
57.5°	305.2	205.3	236.8	312.3	393.8	401.4	426.3	428.4	432.7	432.5	432.7
60°	284.7	184.8	207.8	288.2	366.9	376.6	398.7	402.3	405.8	404.9	405.8
62.5°	263.5	170.6	193.6	268.4	341.4	351.9	366.9	373.3	374.7	373.1	374.7
65°	219.3	152.1	171.5	236.9	302.4	313.8	323.6	328.0	328.9	327.1	328.9
67.5°	158.4	134.9	154.2	205.8	257.4	270.4	276.0	278.7	277.8	281.0	277.8
70°	123.8	122.9	141.5	183.9	229.9	241.4	244.9	247.5	246.7	248.4	246.7
72.5°	106.8	113.0	128.0	161.3	198.7	210.2	212.4	212.9	215.5	213.8	215.5
75°	83.1	96.4	106.1	127.3	155.6	163.6	164.4	165.3	163.6	166.2	163.6
77.5°	58.0	73.4	82.0	94.2	113.3	118.3	118.1	118.6	117.2	117.1	117.2
80°	46.0	55.7	63.7	71.6	85.8	89.3	88.4	87.5	87.5	86.6	87.5
82.5°	33.9	39.4	46.7	52.5	61.7	62.4	63.7	62.1	62.1	63.3	62.1
85°	14.1	18.6	23.9	26.5	30.1	30.9	29.2	31.8	30.1	30.1	30.1
87.5°	3.5	5.7	8.5	9.9	10.6	9.9	9.9	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°	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5
2.5°	906.2	913.3	909.0	914.7	925.3	930.9	933.8	940.8	940.8	945.1	946.5
5°	786.8	809.8	818.7	855.8	887.6	909.7	923.0	938.9	946.0	955.7	959.2
7.5°	700.9	707.4	714.0	740.5	794.8	862.3	902.8	930.1	944.4	957.1	962.2
10°	689.6	686.9	684.3	696.7	734.7	810.7	885.8	923.0	941.5	955.7	960.1
12.5°	733.4	698.2	678.6	679.0	704.3	756.9	856.1	913.1	937.3	950.7	955.9
15°	793.9	777.1	705.5	664.8	672.8	706.4	799.2	896.5	926.5	938.9	946.8
17.5°	796.7	789.1	767.4	679.0	651.9	674.0	743.5	872.6	910.8	925.5	932.5
20°	793.9	784.2	770.9	714.3	642.7	657.8	715.2	854.9	897.3	914.1	921.2
22.5°	793.9	779.2	767.4	734.1	636.4	640.8	695.4	830.9	883.2	900.7	907.8
25°	781.5	771.8	748.8	736.4	629.5	619.7	671.0	789.5	860.2	875.2	885.8
27.5°	760.7	755.7	731.0	722.1	634.1	595.2	649.6	744.0	828.6	850.0	861.4
30°	744.4	740.9	716.1	710.8	634.8	578.2	634.8	710.8	801.0	830.2	845.2
32.5°	719.6	721.1	701.3	693.8	629.8	561.9	616.4	673.3	760.0	809.6	827.5
35°	685.2	686.0	674.6	664.8	613.6	532.2	585.3	600.3	709.9	780.6	795.7
37.5°	657.0	653.3	636.2	636.9	588.3	502.9	548.5	518.1	664.7	750.1	761.0
40°	636.5	632.1	610.0	617.1	568.5	484.5	518.1	468.6	621.5	726.7	735.6
42.5°	616.0	611.6	584.6	593.0	544.4	463.3	477.8	431.8	574.1	702.0	704.4
45°	585.3	580.8	551.7	552.5	505.7	430.5	395.2	387.2	546.4	662.2	662.2
47.5°	551.0	547.1	515.8	512.4	460.8	394.8	318.6	375.6	507.5	619.4	619.0
50°	526.9	525.1	492.4	486.2	426.1	368.7	281.1	374.8	479.2	582.6	591.4
52.5°	500.7	501.1	471.2	463.6	395.7	338.2	259.9	347.3	444.5	535.2	563.2
55°	465.9	465.0	438.5	428.8	351.0	285.6	234.3	315.6	390.8	469.4	516.3
57.5°	428.4	426.3	401.4	393.8	312.3	236.8	205.3	305.2	307.3	409.3	469.1
60°	402.3	398.7	376.6	366.9	288.2	207.8	184.8	284.7	235.2	366.9	432.3
62.5°	373.3	366.9	351.9	341.4	268.4	193.6	170.6	263.5	183.5	318.8	397.0
65°	328.0	323.6	313.8	302.4	236.9	171.5	152.1	219.3	143.2	218.4	344.8
67.5°	278.7	276.0	270.4	257.4	205.8	154.2	134.9	158.4	108.9	138.6	295.1
70°	247.5	244.9	241.4	229.9	183.9	141.5	122.9	123.8	77.8	102.6	262.6
72.5°	212.9	212.4	210.2	198.7	161.3	128.0	113.0	106.8	65.8	80.6	229.3
75°	165.3	164.4	163.6	155.6	127.3	106.1	96.4	83.1	66.3	57.5	179.5
77.5°	118.6	118.1	118.3	113.3	94.2	82.0	73.4	58.0	59.2	43.7	134.4
80°	87.5	88.4	89.3	85.8	71.6	63.7	55.7	46.0	48.6	34.5	102.6
82.5°	62.1	63.7	62.4	61.7	52.5	46.7	39.4	33.9	34.5	27.4	76.4
85°	31.8	29.2	30.9	30.1	26.5	23.9	18.6	14.1	17.7	15.9	38.0
87.5°	8.5	9.9	9.9	10.6	9.9	8.5	5.7	3.5	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°	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5	934.5
2.5°	944.4	944.4	950.7	952.2	953.6	951.4	953.6	952.2	950.7	944.4	944.4
5°	958.3	958.3	967.2	969.8	969.8	968.1	969.8	969.8	967.2	958.3	958.3
7.5°	959.6	961.0	969.8	971.8	973.4	970.7	973.4	971.8	969.8	961.0	959.6
10°	957.5	961.0	969.8	972.5	973.4	970.7	973.4	972.5	969.8	961.0	957.5
12.5°	954.6	957.5	966.3	968.2	969.8	967.9	969.8	968.2	966.3	957.5	954.6
15°	945.1	948.6	958.3	960.1	961.9	959.2	961.9	960.1	958.3	948.6	945.1
17.5°	931.8	936.2	945.1	947.9	948.8	945.4	948.8	947.9	945.1	936.2	931.8
20°	921.2	925.6	934.5	938.0	938.9	936.2	938.9	938.0	934.5	925.6	921.2
22.5°	907.8	915.0	923.2	924.6	923.3	920.7	923.3	924.6	923.2	915.0	907.8
25°	888.5	894.7	897.3	897.3	897.3	894.7	897.3	897.3	897.3	894.7	888.5
27.5°	863.9	867.1	868.7	870.1	871.9	870.1	871.9	870.1	868.7	867.1	863.9
30°	846.9	845.2	849.6	853.1	854.9	853.1	854.9	853.1	849.6	845.2	846.9
32.5°	823.6	824.7	831.2	833.3	833.7	831.9	833.7	833.3	831.2	824.7	823.6
35°	789.5	793.9	798.3	800.1	801.0	798.3	801.0	800.1	798.3	793.9	789.5
37.5°	753.4	761.2	764.4	762.4	762.6	759.8	762.6	762.4	764.4	761.2	753.4
40°	729.4	736.4	738.2	735.6	736.4	732.9	736.4	735.6	738.2	736.4	729.4
42.5°	706.7	712.4	710.6	707.3	706.7	705.3	706.7	707.3	710.6	712.4	706.7
45°	669.2	671.9	663.9	661.3	659.5	657.8	659.5	661.3	663.9	671.9	669.2
47.5°	628.2	624.7	617.1	613.0	608.1	604.7	608.1	613.0	617.1	624.7	628.2
50°	602.1	591.4	585.3	575.5	572.0	572.9	572.0	575.5	585.3	591.4	602.1
52.5°	570.2	557.5	547.8	539.5	536.6	536.1	536.6	539.5	547.8	557.5	570.2
55°	524.3	504.8	488.9	484.5	483.6	485.4	483.6	484.5	488.9	504.8	524.3
57.5°	467.9	448.8	435.7	432.1	429.1	426.3	429.1	432.1	435.7	448.8	467.9
60°	429.7	412.0	399.6	396.1	388.1	384.6	388.1	396.1	399.6	412.0	429.7
62.5°	395.7	374.5	364.9	357.9	352.0	346.4	352.0	357.9	364.9	374.5	395.7
65°	346.6	321.8	312.1	305.9	295.3	292.6	295.3	305.9	312.1	321.8	346.6
67.5°	292.8	271.2	259.0	250.7	244.0	243.8	244.0	250.7	259.0	271.2	292.8
70°	258.2	238.7	227.2	217.5	212.2	211.3	212.2	217.5	227.2	238.7	258.2
72.5°	224.2	205.5	195.4	186.4	181.8	180.9	181.8	186.4	195.4	205.5	224.2
75°	175.9	158.3	150.3	144.1	140.6	138.8	140.6	144.1	150.3	158.3	175.9
77.5°	130.1	115.8	111.7	105.4	102.4	102.2	102.4	105.4	111.7	115.8	130.1
80°	102.6	91.1	84.9	81.3	80.5	79.6	80.5	81.3	84.9	91.1	102.6
82.5°	74.3	67.7	63.7	61.5	61.4	59.8	61.4	61.5	63.7	67.7	74.3
85°	39.8	38.0	37.1	36.2	35.4	35.4	35.4	36.2	37.1	38.0	39.8
87.5°	16.3	17.0	17.0	17.7	18.4	17.7	18.4	17.7	17.0	17.0	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°	934.5	934.5	934.5	934.5
2.5°	946.5	945.1	940.8	940.8
5°	959.2	955.7	946.0	938.9
7.5°	962.2	957.1	944.4	930.1
10°	960.1	955.7	941.5	923.0
12.5°	955.9	950.7	937.3	913.1
15°	946.8	938.9	926.5	896.5
17.5°	932.5	925.5	910.8	872.6
20°	921.2	914.1	897.3	854.9
22.5°	907.8	900.7	883.2	830.9
25°	885.8	875.2	860.2	789.5
27.5°	861.4	850.0	828.6	744.0
30°	845.2	830.2	801.0	710.8
32.5°	827.5	809.6	760.0	673.3
35°	795.7	780.6	709.9	600.3
37.5°	761.0	750.1	664.7	518.1
40°	735.6	726.7	621.5	468.6
42.5°	704.4	702.0	574.1	431.8
45°	662.2	662.2	546.4	387.2
47.5°	619.0	619.4	507.5	375.6
50°	591.4	582.6	479.2	374.8
52.5°	563.2	535.2	444.5	347.3
55°	516.3	469.4	390.8	315.6
57.5°	469.1	409.3	307.3	305.2
60°	432.3	366.9	235.2	284.7
62.5°	397.0	318.8	183.5	263.5
65°	344.8	218.4	143.2	219.3
67.5°	295.1	138.6	108.9	158.4
70°	262.6	102.6	77.8	123.8
72.5°	229.3	80.6	65.8	106.8
75°	179.5	57.5	66.3	83.1
77.5°	134.4	43.7	59.2	58.0
80°	102.6	34.5	48.6	46.0
82.5°	76.4	27.4	34.5	33.9
85°	38.0	15.9	17.7	14.1
87.5°	15.6	7.8	6.4	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)