

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-940-1D-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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

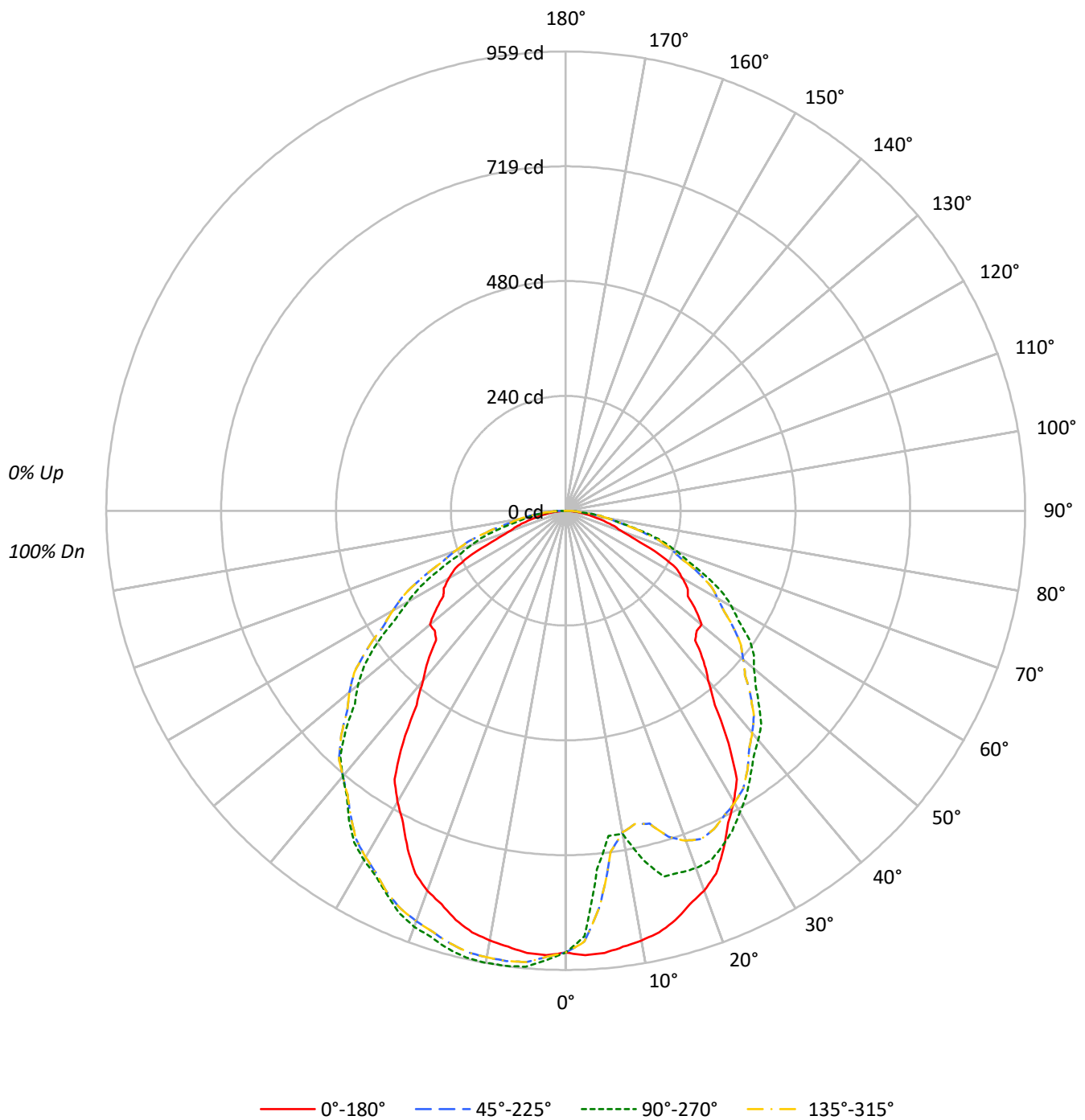
Lumens per Lamp: N/A
Luminaire Lumens: 2391.2 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	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°	8514	8514	8514	8514
5°	8586	6962	8586	8853
10°	8538	6420	8538	8981
15°	8455	7554	8455	9047
20°	8289	7800	8289	9077
25°	7936	7874	7936	8994
30°	7478	7747	7478	8975
35°	6677	7581	6677	8879
40°	5573	7529	5573	8716
45°	4989	7439	4989	8475
50°	5314	7368	5314	8120
55°	5014	7526	5014	7710
60°	5187	7377	5187	7008
65°	4726	7051	4726	6309
70°	3296	6617	3296	5627
75°	2927	5850	2927	4887
80°	2412	4548	2412	4176
85°	1482	3144	1482	3694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8657 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	3.5
10°-20°	236.4	9.9
20°-30°	365.3	15.3
30°-40°	436.5	18.3
40°-50°	439.3	18.4
50°-60°	381.4	16.0
60°-70°	270.0	11.3
70°-80°	142.8	6.0
80°-90°	36.3	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°	684.9	28.6
0°-40°	1121.4	46.9
0°-60°	1942.1	81.2
0°-90°	2391.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2391.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	923	923	923	923	923	
5°	927	752	927	956	927	88
15°	885	791	885	947	885	249
25°	780	774	780	884	780	358
35°	593	673	593	788	593	366
45°	382	570	382	650	382	308
55°	312	468	312	479	312	287
65°	216	323	216	289	216	206
75°	82	164	82	137	82	87
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°	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8
2.5°	929.0	922.1	919.3	913.7	903.2	897.6	901.8	894.8	897.6	889.9	897.6
5°	927.1	911.4	898.3	876.5	845.1	808.4	799.7	777.0	763.0	751.7	763.0
7.5°	918.4	891.5	851.5	784.8	731.2	705.0	698.6	692.1	690.4	684.6	690.4
10°	911.4	874.7	800.5	725.5	687.9	675.7	678.3	680.9	686.2	685.3	686.2
12.5°	901.6	845.4	747.5	695.4	670.5	670.1	689.5	724.2	748.3	746.8	748.3
15°	885.2	789.2	697.5	664.4	656.5	696.7	767.4	784.0	790.1	790.9	790.1
17.5°	861.6	734.2	665.6	643.7	670.5	757.8	779.2	786.7	792.0	792.3	792.0
20°	844.2	706.3	649.5	634.7	705.4	761.3	774.3	784.0	792.7	794.4	792.7
22.5°	820.4	686.7	632.7	628.4	724.9	757.8	769.5	784.0	791.3	790.9	791.3
25°	779.6	662.6	612.0	621.6	727.2	739.4	762.1	771.7	772.6	773.5	772.6
27.5°	734.7	641.5	587.7	626.1	713.1	721.8	746.2	751.1	754.4	753.0	754.4
30°	701.9	626.8	570.9	626.8	701.9	707.1	731.6	735.1	730.7	727.2	730.7
32.5°	664.9	608.7	554.9	621.9	685.1	692.5	712.0	710.6	706.3	703.5	706.3
35°	592.8	577.9	525.5	605.9	656.5	666.1	677.4	676.6	675.7	673.1	675.7
37.5°	511.6	541.6	496.6	580.9	628.9	628.2	645.1	648.8	647.9	644.6	647.9
40°	462.7	511.6	478.4	561.3	609.4	602.4	624.2	628.6	627.7	625.1	627.7
42.5°	426.4	471.8	457.5	537.6	585.6	577.2	603.9	608.3	606.0	604.1	606.0
45°	382.4	390.2	425.1	499.4	545.6	544.8	573.6	577.9	572.7	570.1	572.7
47.5°	370.8	314.6	389.9	455.0	506.0	509.3	540.2	544.1	539.3	537.1	539.3
50°	370.2	277.6	364.0	420.8	480.1	486.3	518.6	520.3	514.2	513.3	514.2
52.5°	342.9	256.7	334.0	390.8	457.8	465.3	494.8	494.5	493.9	495.2	493.9
55°	311.7	231.3	282.0	346.6	423.4	433.0	459.2	460.1	466.2	467.9	466.2
57.5°	301.4	202.7	233.8	308.3	388.8	396.3	421.0	423.1	427.2	427.1	427.2
60°	281.1	182.5	205.2	284.6	362.3	371.9	393.7	397.2	400.7	399.8	400.7
62.5°	260.2	168.5	191.2	265.0	337.2	347.5	362.3	368.6	370.0	368.4	370.0
65°	216.5	150.2	169.4	234.0	298.6	309.9	319.5	323.9	324.8	323.0	324.8
67.5°	156.4	133.2	152.3	203.2	254.2	267.0	272.5	275.2	274.3	277.4	274.3
70°	122.2	121.3	139.7	181.6	227.0	238.3	241.8	244.4	243.6	245.3	243.6
72.5°	105.5	111.6	126.4	159.2	196.2	207.6	209.7	210.2	212.8	211.1	212.8
75°	82.1	95.2	104.8	125.7	153.6	161.5	162.4	163.3	161.5	164.1	161.5
77.5°	57.3	72.5	81.0	93.1	111.9	116.8	116.6	117.2	115.8	115.6	115.8
80°	45.4	55.0	62.9	70.7	84.7	88.2	87.3	86.4	86.4	85.6	86.4
82.5°	33.5	38.9	46.1	51.9	60.9	61.6	62.9	61.3	61.3	62.5	61.3
85°	14.0	18.3	23.6	26.2	29.7	30.6	28.8	31.4	29.7	29.7	29.7
87.5°	3.5	5.6	8.4	9.8	10.5	9.8	9.8	8.4	8.4	8.4	8.4
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8
2.5°	894.8	901.8	897.6	903.2	913.7	919.3	922.1	929.0	929.0	933.2	934.6
5°	777.0	799.7	808.4	845.1	876.5	898.3	911.4	927.1	934.1	943.7	947.2
7.5°	692.1	698.6	705.0	731.2	784.8	851.5	891.5	918.4	932.5	945.1	950.2
10°	680.9	678.3	675.7	687.9	725.5	800.5	874.7	911.4	929.7	943.7	948.1
12.5°	724.2	689.5	670.1	670.5	695.4	747.5	845.4	901.6	925.6	938.8	943.9
15°	784.0	767.4	696.7	656.5	664.4	697.5	789.2	885.2	914.9	927.1	935.0
17.5°	786.7	779.2	757.8	670.5	643.7	665.6	734.2	861.6	899.4	913.9	920.8
20°	784.0	774.3	761.3	705.4	634.7	649.5	706.3	844.2	886.1	902.7	909.7
22.5°	784.0	769.5	757.8	724.9	628.4	632.7	686.7	820.4	872.1	889.4	896.4
25°	771.7	762.1	739.4	727.2	621.6	612.0	662.6	779.6	849.4	864.3	874.7
27.5°	751.1	746.2	721.8	713.1	626.1	587.7	641.5	734.7	818.2	839.3	850.6
30°	735.1	731.6	707.1	701.9	626.8	570.9	626.8	701.9	790.9	819.7	834.6
32.5°	710.6	712.0	692.5	685.1	621.9	554.9	608.7	664.9	750.4	799.5	817.1
35°	676.6	677.4	666.1	656.5	605.9	525.5	577.9	592.8	701.0	770.9	785.7
37.5°	648.8	645.1	628.2	628.9	580.9	496.6	541.6	511.6	656.3	740.7	751.5
40°	628.6	624.2	602.4	609.4	561.3	478.4	511.6	462.7	613.7	717.6	726.3
42.5°	608.3	603.9	577.2	585.6	537.6	457.5	471.8	426.4	566.9	693.2	695.6
45°	577.9	573.6	544.8	545.6	499.4	425.1	390.2	382.4	539.5	653.9	653.9
47.5°	544.1	540.2	509.3	506.0	455.0	389.9	314.6	370.8	501.1	611.6	611.3
50°	520.3	518.6	486.3	480.1	420.8	364.0	277.6	370.2	473.2	575.3	584.0
52.5°	494.5	494.8	465.3	457.8	390.8	334.0	256.7	342.9	438.9	528.5	556.1
55°	460.1	459.2	433.0	423.4	346.6	282.0	231.3	311.7	385.9	463.6	509.8
57.5°	423.1	421.0	396.3	388.8	308.3	233.8	202.7	301.4	303.5	404.2	463.2
60°	397.2	393.7	371.9	362.3	284.6	205.2	182.5	281.1	232.2	362.3	426.9
62.5°	368.6	362.3	347.5	337.2	265.0	191.2	168.5	260.2	181.2	314.8	392.0
65°	323.9	319.5	309.9	298.6	234.0	169.4	150.2	216.5	141.4	215.6	340.5
67.5°	275.2	272.5	267.0	254.2	203.2	152.3	133.2	156.4	107.6	136.9	291.4
70°	244.4	241.8	238.3	227.0	181.6	139.7	121.3	122.2	76.8	101.3	259.3
72.5°	210.2	209.7	207.6	196.2	159.2	126.4	111.6	105.5	65.0	79.6	226.5
75°	163.3	162.4	161.5	153.6	125.7	104.8	95.2	82.1	65.5	56.7	177.2
77.5°	117.2	116.6	116.8	111.9	93.1	81.0	72.5	57.3	58.5	43.1	132.7
80°	86.4	87.3	88.2	84.7	70.7	62.9	55.0	45.4	48.0	34.0	101.3
82.5°	61.3	62.9	61.6	60.9	51.9	46.1	38.9	33.5	34.0	27.1	75.4
85°	31.4	28.8	30.6	29.7	26.2	23.6	18.3	14.0	17.5	15.7	37.5
87.5°	8.4	9.8	9.8	10.5	9.8	8.4	5.6	3.5	6.3	7.7	15.4
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°	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8	922.8
2.5°	932.5	932.5	938.8	940.2	941.6	939.5	941.6	940.2	938.8	932.5	932.5
5°	946.3	946.3	955.1	957.7	957.7	955.9	957.7	957.7	955.1	946.3	946.3
7.5°	947.6	948.9	957.7	959.6	961.2	958.6	961.2	959.6	957.7	948.9	947.6
10°	945.5	948.9	957.7	960.3	961.2	958.6	961.2	960.3	957.7	948.9	945.5
12.5°	942.7	945.5	954.2	956.1	957.7	955.8	957.7	956.1	954.2	945.5	942.7
15°	933.2	936.7	946.3	948.1	949.8	947.2	949.8	948.1	946.3	936.7	933.2
17.5°	920.1	924.5	933.2	936.0	936.9	933.6	936.9	936.0	933.2	924.5	920.1
20°	909.7	914.0	922.8	926.3	927.1	924.5	927.1	926.3	922.8	914.0	909.7
22.5°	896.4	903.6	911.6	913.0	911.8	909.1	911.8	913.0	911.6	903.6	896.4
25°	877.4	883.5	886.1	886.1	886.1	883.5	886.1	886.1	886.1	883.5	877.4
27.5°	853.1	856.2	857.8	859.2	861.0	859.2	861.0	859.2	857.8	856.2	853.1
30°	836.3	834.6	839.0	842.4	844.2	842.4	844.2	842.4	839.0	834.6	836.3
32.5°	813.3	814.3	820.8	822.9	823.2	821.5	823.2	822.9	820.8	814.3	813.3
35°	779.6	784.0	788.3	790.1	790.9	788.3	790.9	790.1	788.3	784.0	779.6
37.5°	744.0	751.7	754.8	752.9	753.0	750.3	753.0	752.9	754.8	751.7	744.0
40°	720.2	727.2	729.0	726.3	727.2	723.7	727.2	726.3	729.0	727.2	720.2
42.5°	697.9	703.5	701.7	698.4	697.9	696.5	697.9	698.4	701.7	703.5	697.9
45°	660.9	663.5	655.6	653.0	651.3	649.5	651.3	653.0	655.6	663.5	660.9
47.5°	620.4	616.9	609.4	605.3	600.4	597.1	600.4	605.3	609.4	616.9	620.4
50°	594.5	584.0	577.9	568.3	564.8	565.7	564.8	568.3	577.9	584.0	594.5
52.5°	563.1	550.5	540.9	532.7	529.9	529.4	529.9	532.7	540.9	550.5	563.1
55°	517.7	498.5	482.8	478.4	477.5	479.3	477.5	478.4	482.8	498.5	517.7
57.5°	462.0	443.1	430.2	426.7	423.8	421.0	423.8	426.7	430.2	443.1	462.0
60°	424.3	406.8	394.6	391.1	383.2	379.8	383.2	391.1	394.6	406.8	424.3
62.5°	390.8	369.8	360.4	353.4	347.6	342.0	347.6	353.4	360.4	369.8	390.8
65°	342.2	317.8	308.2	302.1	291.6	289.0	291.6	302.1	308.2	317.8	342.2
67.5°	289.1	267.8	255.8	247.6	240.9	240.8	240.9	247.6	255.8	267.8	289.1
70°	254.9	235.7	224.4	214.8	209.5	208.6	209.5	214.8	224.4	235.7	254.9
72.5°	221.4	202.9	192.9	184.0	179.5	178.6	179.5	184.0	192.9	202.9	221.4
75°	173.7	156.3	148.4	142.3	138.8	137.1	138.8	142.3	148.4	156.3	173.7
77.5°	128.5	114.4	110.3	104.1	101.1	100.9	101.1	104.1	110.3	114.4	128.5
80°	101.3	89.9	83.8	80.3	79.4	78.6	79.4	80.3	83.8	89.9	101.3
82.5°	73.3	66.9	62.9	60.8	60.6	59.0	60.6	60.8	62.9	66.9	73.3
85°	39.3	37.5	36.7	35.8	34.9	34.9	34.9	35.8	36.7	37.5	39.3
87.5°	16.1	16.8	16.8	17.5	18.2	17.5	18.2	17.5	16.8	16.8	16.1
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°	922.8	922.8	922.8	922.8
2.5°	934.6	933.2	929.0	929.0
5°	947.2	943.7	934.1	927.1
7.5°	950.2	945.1	932.5	918.4
10°	948.1	943.7	929.7	911.4
12.5°	943.9	938.8	925.6	901.6
15°	935.0	927.1	914.9	885.2
17.5°	920.8	913.9	899.4	861.6
20°	909.7	902.7	886.1	844.2
22.5°	896.4	889.4	872.1	820.4
25°	874.7	864.3	849.4	779.6
27.5°	850.6	839.3	818.2	734.7
30°	834.6	819.7	790.9	701.9
32.5°	817.1	799.5	750.4	664.9
35°	785.7	770.9	701.0	592.8
37.5°	751.5	740.7	656.3	511.6
40°	726.3	717.6	613.7	462.7
42.5°	695.6	693.2	566.9	426.4
45°	653.9	653.9	539.5	382.4
47.5°	611.3	611.6	501.1	370.8
50°	584.0	575.3	473.2	370.2
52.5°	556.1	528.5	438.9	342.9
55°	509.8	463.6	385.9	311.7
57.5°	463.2	404.2	303.5	301.4
60°	426.9	362.3	232.2	281.1
62.5°	392.0	314.8	181.2	260.2
65°	340.5	215.6	141.4	216.5
67.5°	291.4	136.9	107.6	156.4
70°	259.3	101.3	76.8	122.2
72.5°	226.5	79.6	65.0	105.5
75°	177.2	56.7	65.5	82.1
77.5°	132.7	43.1	58.5	57.3
80°	101.3	34.0	48.0	45.4
82.5°	75.4	27.1	34.0	33.5
85°	37.5	15.7	17.5	14.0
87.5°	15.4	7.7	6.3	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)