

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-830-1D-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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

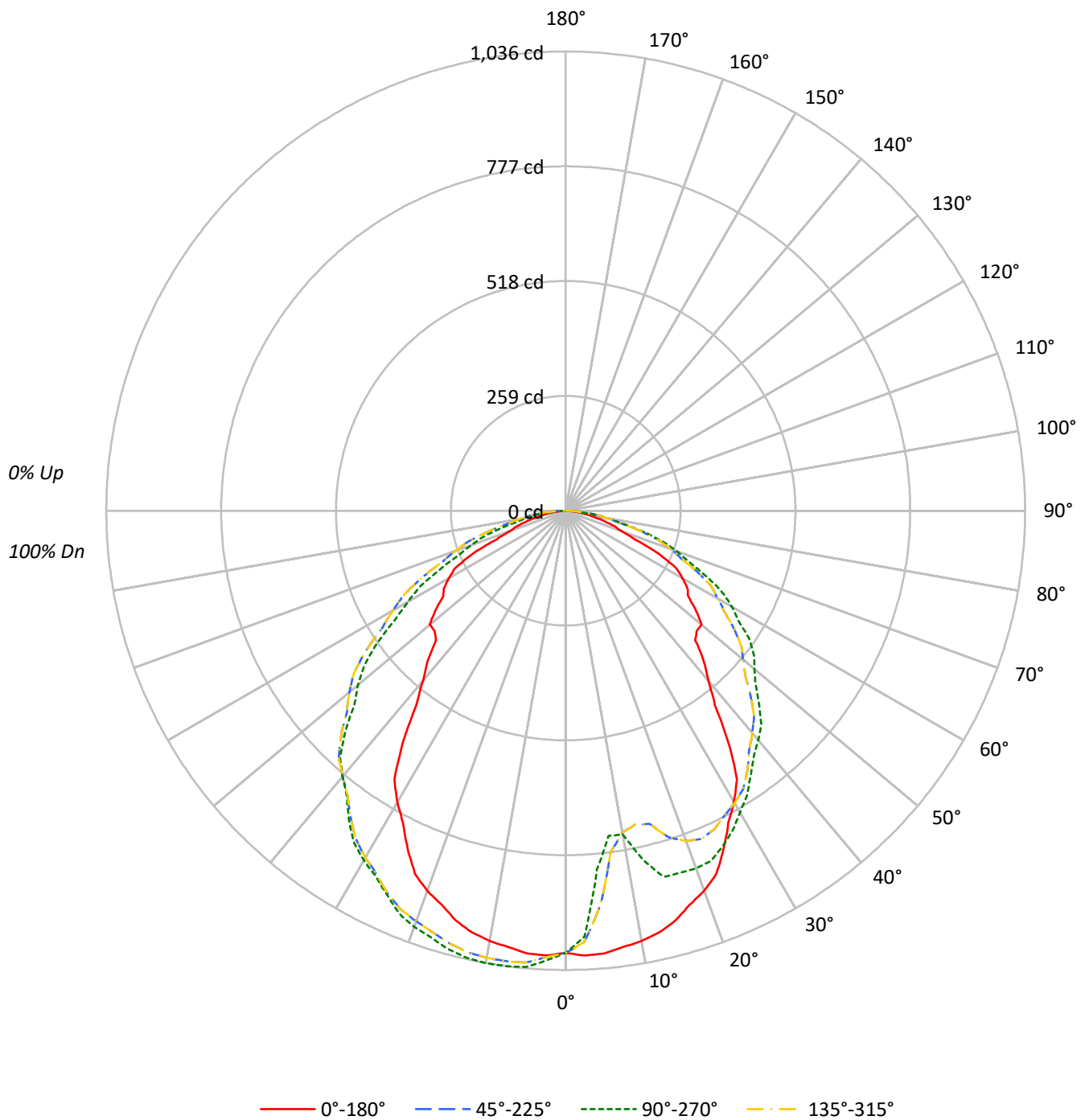
Lumens per Lamp: N/A
Luminaire Lumens: 2584.9 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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°	9203	9203	9203	9203
5°	9282	7525	9282	9570
10°	9230	6940	9230	9708
15°	9140	8167	9140	9780
20°	8960	8432	8960	9812
25°	8579	8511	8579	9722
30°	8083	8375	8083	9702
35°	7217	8195	7217	9598
40°	6024	8138	6024	9422
45°	5393	8040	5393	9161
50°	5743	7965	5743	8777
55°	5419	8136	5419	8334
60°	5608	7975	5608	7575
65°	5108	7623	5108	6820
70°	3563	7154	3563	6083
75°	3162	6324	3162	5283
80°	2609	4915	2609	4511
85°	1598	3398	1598	3991

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 9358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	3.5
10°-20°	255.5	9.9
20°-30°	394.9	15.3
30°-40°	471.8	18.3
40°-50°	474.9	18.4
50°-60°	412.3	16.0
60°-70°	291.9	11.3
70°-80°	154.4	6.0
80°-90°	39.3	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°	740.4	28.6
0°-40°	1212.2	46.9
0°-60°	2099.4	81.2
0°-90°	2584.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2584.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	998	998	998	998	998	
5°	1002	812	1002	1033	1002	95
15°	957	855	957	1024	957	269
25°	843	836	843	955	843	386
35°	641	728	641	852	641	396
45°	413	616	413	702	413	333
55°	337	506	337	518	337	310
65°	234	349	234	312	234	223
75°	89	177	89	148	89	94
85°	15	32	15	38	15	22
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°	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5
2.5°	1004.3	996.7	993.7	987.7	976.3	970.3	974.8	967.3	970.3	962.0	970.3
5°	1002.2	985.2	971.1	947.5	913.5	873.9	864.4	839.9	824.8	812.5	824.8
7.5°	992.8	963.7	920.5	848.4	790.4	762.1	755.1	748.2	746.3	740.0	746.3
10°	985.2	945.6	865.4	784.2	743.6	730.4	733.3	736.1	741.7	740.8	741.7
12.5°	974.6	913.9	808.0	751.7	724.8	724.4	745.3	782.9	808.9	807.2	808.9
15°	956.9	853.1	754.0	718.2	709.7	753.1	829.5	847.4	854.0	855.0	854.0
17.5°	931.4	793.6	719.5	695.9	724.8	819.1	842.3	850.5	856.1	856.5	856.1
20°	912.6	763.4	702.1	686.1	762.5	822.9	837.1	847.4	856.9	858.8	856.9
22.5°	886.9	742.3	684.0	679.3	783.6	819.1	831.8	847.4	855.4	855.0	855.4
25°	842.7	716.3	661.5	671.9	786.1	799.3	823.8	834.2	835.2	836.1	835.2
27.5°	794.2	693.4	635.3	676.8	770.8	780.2	806.7	812.0	815.5	814.0	815.5
30°	758.7	677.6	617.2	677.6	758.7	764.4	790.8	794.6	789.9	786.1	789.9
32.5°	718.7	657.9	599.8	672.3	740.6	748.5	769.7	768.2	763.4	760.4	763.4
35°	640.8	624.7	568.1	654.9	709.7	720.0	732.3	731.4	730.4	727.6	730.4
37.5°	553.0	585.5	536.8	627.9	679.8	679.1	697.4	701.4	700.4	696.8	700.4
40°	500.2	553.0	517.1	606.8	658.7	651.1	674.7	679.5	678.5	675.7	678.5
42.5°	460.9	510.0	494.5	581.1	633.0	624.0	652.8	657.6	655.1	653.0	655.1
45°	413.3	421.8	459.6	539.8	589.8	588.9	620.0	624.7	619.1	616.2	619.1
47.5°	400.9	340.1	421.5	491.9	547.0	550.6	584.0	588.1	583.0	580.6	583.0
50°	400.1	300.1	393.5	454.9	519.0	525.6	560.6	562.4	555.8	554.9	555.8
52.5°	370.7	277.4	361.1	422.4	494.9	503.0	534.9	534.5	533.9	535.3	533.9
55°	336.9	250.1	304.8	374.6	457.7	468.1	496.4	497.3	503.9	505.8	503.9
57.5°	325.8	219.1	252.7	333.3	420.3	428.4	455.0	457.3	461.8	461.7	461.8
60°	303.9	197.2	221.8	307.6	391.6	402.0	425.6	429.4	433.2	432.2	433.2
62.5°	281.2	182.1	206.7	286.5	364.5	375.6	391.6	398.4	399.9	398.2	399.9
65°	234.0	162.3	183.1	252.9	322.7	335.0	345.4	350.1	351.1	349.2	351.1
67.5°	169.1	144.0	164.6	219.7	274.8	288.6	294.6	297.5	296.5	299.9	296.5
70°	132.1	131.2	151.0	196.3	245.4	257.6	261.4	264.2	263.3	265.2	263.3
72.5°	114.0	120.6	136.6	172.1	212.1	224.4	226.7	227.2	230.1	228.2	230.1
75°	88.7	102.9	113.2	135.9	166.1	174.6	175.5	176.5	174.6	177.4	174.6
77.5°	61.9	78.3	87.6	100.6	121.0	126.3	126.1	126.6	125.1	124.9	125.1
80°	49.1	59.5	67.9	76.4	91.5	95.3	94.4	93.4	93.4	92.5	93.4
82.5°	36.2	42.1	49.8	56.1	65.9	66.6	67.9	66.2	66.2	67.6	66.2
85°	15.1	19.8	25.5	28.3	32.1	33.0	31.1	34.0	32.1	32.1	32.1
87.5°	3.8	6.0	9.1	10.6	11.3	10.6	10.6	9.1	9.1	9.1	9.1
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5
2.5°	967.3	974.8	970.3	976.3	987.7	993.7	996.7	1004.3	1004.3	1008.8	1010.3
5°	839.9	864.4	873.9	913.5	947.5	971.1	985.2	1002.2	1009.8	1020.1	1023.9
7.5°	748.2	755.1	762.1	790.4	848.4	920.5	963.7	992.8	1008.1	1021.6	1027.1
10°	736.1	733.3	730.4	743.6	784.2	865.4	945.6	985.2	1005.0	1020.1	1024.9
12.5°	782.9	745.3	724.4	724.8	751.7	808.0	913.9	974.6	1000.5	1014.8	1020.3
15°	847.4	829.5	753.1	709.7	718.2	754.0	853.1	956.9	989.0	1002.2	1010.7
17.5°	850.5	842.3	819.1	724.8	695.9	719.5	793.6	931.4	972.2	987.9	995.4
20°	847.4	837.1	822.9	762.5	686.1	702.1	763.4	912.6	957.9	975.8	983.3
22.5°	847.4	831.8	819.1	783.6	679.3	684.0	742.3	886.9	942.8	961.4	969.0
25°	834.2	823.8	799.3	786.1	671.9	661.5	716.3	842.7	918.2	934.3	945.6
27.5°	812.0	806.7	780.2	770.8	676.8	635.3	693.4	794.2	884.4	907.3	919.5
30°	794.6	790.8	764.4	758.7	677.6	617.2	677.6	758.7	855.0	886.1	902.2
32.5°	768.2	769.7	748.5	740.6	672.3	599.8	657.9	718.7	811.2	864.2	883.3
35°	731.4	732.3	720.0	709.7	654.9	568.1	624.7	640.8	757.8	833.3	849.3
37.5°	701.4	697.4	679.1	679.8	627.9	536.8	585.5	553.0	709.5	800.6	812.3
40°	679.5	674.7	651.1	658.7	606.8	517.1	553.0	500.2	663.4	775.7	785.2
42.5°	657.6	652.8	624.0	633.0	581.1	494.5	510.0	460.9	612.8	749.3	751.9
45°	624.7	620.0	588.9	589.8	539.8	459.6	421.8	413.3	583.2	706.8	706.8
47.5°	588.1	584.0	550.6	547.0	491.9	421.5	340.1	400.9	541.7	661.2	660.8
50°	562.4	560.6	525.6	519.0	454.9	393.5	300.1	400.1	511.5	621.9	631.3
52.5°	534.5	534.9	503.0	494.9	422.4	361.1	277.4	370.7	474.5	571.3	601.1
55°	497.3	496.4	468.1	457.7	374.6	304.8	250.1	336.9	417.1	501.1	551.1
57.5°	457.3	455.0	428.4	420.3	333.3	252.7	219.1	325.8	328.0	436.9	500.7
60°	429.4	425.6	402.0	391.6	307.6	221.8	197.2	303.9	251.0	391.6	461.5
62.5°	398.4	391.6	375.6	364.5	286.5	206.7	182.1	281.2	195.9	340.3	423.7
65°	350.1	345.4	335.0	322.7	252.9	183.1	162.3	234.0	152.9	233.1	368.0
67.5°	297.5	294.6	288.6	274.8	219.7	164.6	144.0	169.1	116.3	148.0	315.0
70°	264.2	261.4	257.6	245.4	196.3	151.0	131.2	132.1	83.0	109.5	280.3
72.5°	227.2	226.7	224.4	212.1	172.1	136.6	120.6	114.0	70.2	86.1	244.8
75°	176.5	175.5	174.6	166.1	135.9	113.2	102.9	88.7	70.8	61.3	191.6
77.5°	126.6	126.1	126.3	121.0	100.6	87.6	78.3	61.9	63.2	46.6	143.4
80°	93.4	94.4	95.3	91.5	76.4	67.9	59.5	49.1	51.9	36.8	109.5
82.5°	66.2	67.9	66.6	65.9	56.1	49.8	42.1	36.2	36.8	29.3	81.5
85°	34.0	31.1	33.0	32.1	28.3	25.5	19.8	15.1	18.9	17.0	40.6
87.5°	9.1	10.6	10.6	11.3	10.6	9.1	6.0	3.8	6.8	8.3	16.6
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°	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5	997.5
2.5°	1008.1	1008.1	1014.8	1016.4	1017.9	1015.6	1017.9	1016.4	1014.8	1008.1	1008.1
5°	1023.0	1023.0	1032.4	1035.2	1035.2	1033.3	1035.2	1035.2	1032.4	1023.0	1023.0
7.5°	1024.3	1025.8	1035.2	1037.3	1039.0	1036.2	1039.0	1037.3	1035.2	1025.8	1024.3
10°	1022.0	1025.8	1035.2	1038.1	1039.0	1036.2	1039.0	1038.1	1035.2	1025.8	1022.0
12.5°	1019.0	1022.0	1031.5	1033.5	1035.2	1033.2	1035.2	1033.5	1031.5	1022.0	1019.0
15°	1008.8	1012.6	1023.0	1024.9	1026.7	1023.9	1026.7	1024.9	1023.0	1012.6	1008.8
17.5°	994.7	999.4	1008.8	1011.8	1012.8	1009.2	1012.8	1011.8	1008.8	999.4	994.7
20°	983.3	988.0	997.5	1001.3	1002.2	999.4	1002.2	1001.3	997.5	988.0	983.3
22.5°	969.0	976.7	985.4	986.9	985.6	982.8	985.6	986.9	985.4	976.7	969.0
25°	948.4	955.0	957.9	957.9	957.9	955.0	957.9	957.9	957.9	955.0	948.4
27.5°	922.2	925.6	927.3	928.8	930.7	928.8	930.7	928.8	927.3	925.6	922.2
30°	904.1	902.2	906.9	910.7	912.6	910.7	912.6	910.7	906.9	902.2	904.1
32.5°	879.1	880.3	887.3	889.5	889.9	888.0	889.9	889.5	887.3	880.3	879.1
35°	842.7	847.4	852.2	854.0	855.0	852.2	855.0	854.0	852.2	847.4	842.7
37.5°	804.2	812.5	815.9	813.8	814.0	811.0	814.0	813.8	815.9	812.5	804.2
40°	778.5	786.1	788.0	785.2	786.1	782.3	786.1	785.2	788.0	786.1	778.5
42.5°	754.4	760.4	758.5	755.0	754.4	752.9	754.4	755.0	758.5	760.4	754.4
45°	714.4	717.2	708.7	705.9	704.0	702.1	704.0	705.9	708.7	717.2	714.4
47.5°	670.6	666.8	658.7	654.4	649.1	645.5	649.1	654.4	658.7	666.8	670.6
50°	642.7	631.3	624.7	614.3	610.6	611.5	610.6	614.3	624.7	631.3	642.7
52.5°	608.7	595.1	584.7	575.8	572.8	572.3	572.8	575.8	584.7	595.1	608.7
55°	559.6	538.9	521.9	517.1	516.2	518.1	516.2	517.1	521.9	538.9	559.6
57.5°	499.4	479.0	465.1	461.3	458.1	455.0	458.1	461.3	465.1	479.0	499.4
60°	458.6	439.8	426.6	422.8	414.3	410.5	414.3	422.8	426.6	439.8	458.6
62.5°	422.4	399.7	389.6	382.0	375.8	369.7	375.8	382.0	389.6	399.7	422.4
65°	369.9	343.5	333.1	326.5	315.2	312.4	315.2	326.5	333.1	343.5	369.9
67.5°	312.6	289.5	276.5	267.6	260.5	260.3	260.5	267.6	276.5	289.5	312.6
70°	275.6	254.8	242.5	232.1	226.5	225.5	226.5	232.1	242.5	254.8	275.6
72.5°	239.3	219.3	208.6	198.9	194.0	193.1	194.0	198.9	208.6	219.3	239.3
75°	187.8	168.9	160.4	153.8	150.0	148.2	150.0	153.8	160.4	168.9	187.8
77.5°	138.9	123.6	119.3	112.5	109.3	109.1	109.3	112.5	119.3	123.6	138.9
80°	109.5	97.2	90.6	86.8	85.9	84.9	85.9	86.8	90.6	97.2	109.5
82.5°	79.3	72.3	67.9	65.7	65.5	63.8	65.5	65.7	67.9	72.3	79.3
85°	42.5	40.6	39.6	38.7	37.7	37.7	37.7	38.7	39.6	40.6	42.5
87.5°	17.4	18.1	18.1	18.9	19.6	18.9	19.6	18.9	18.1	18.1	17.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	997.5	997.5	997.5	997.5
2.5°	1010.3	1008.8	1004.3	1004.3
5°	1023.9	1020.1	1009.8	1002.2
7.5°	1027.1	1021.6	1008.1	992.8
10°	1024.9	1020.1	1005.0	985.2
12.5°	1020.3	1014.8	1000.5	974.6
15°	1010.7	1002.2	989.0	956.9
17.5°	995.4	987.9	972.2	931.4
20°	983.3	975.8	957.9	912.6
22.5°	969.0	961.4	942.8	886.9
25°	945.6	934.3	918.2	842.7
27.5°	919.5	907.3	884.4	794.2
30°	902.2	886.1	855.0	758.7
32.5°	883.3	864.2	811.2	718.7
35°	849.3	833.3	757.8	640.8
37.5°	812.3	800.6	709.5	553.0
40°	785.2	775.7	663.4	500.2
42.5°	751.9	749.3	612.8	460.9
45°	706.8	706.8	583.2	413.3
47.5°	660.8	661.2	541.7	400.9
50°	631.3	621.9	511.5	400.1
52.5°	601.1	571.3	474.5	370.7
55°	551.1	501.1	417.1	336.9
57.5°	500.7	436.9	328.0	325.8
60°	461.5	391.6	251.0	303.9
62.5°	423.7	340.3	195.9	281.2
65°	368.0	233.1	152.9	234.0
67.5°	315.0	148.0	116.3	169.1
70°	280.3	109.5	83.0	132.1
72.5°	244.8	86.1	70.2	114.0
75°	191.6	61.3	70.8	88.7
77.5°	143.4	46.6	63.2	61.9
80°	109.5	36.8	51.9	49.1
82.5°	81.5	29.3	36.8	36.2
85°	40.6	17.0	18.9	15.1
87.5°	16.6	8.3	6.8	3.8
90°	0.0	0.0	0.0	0.0

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