

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: P621594

Luminaire Tested: VLT-FA-025U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621594
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FA-025U-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

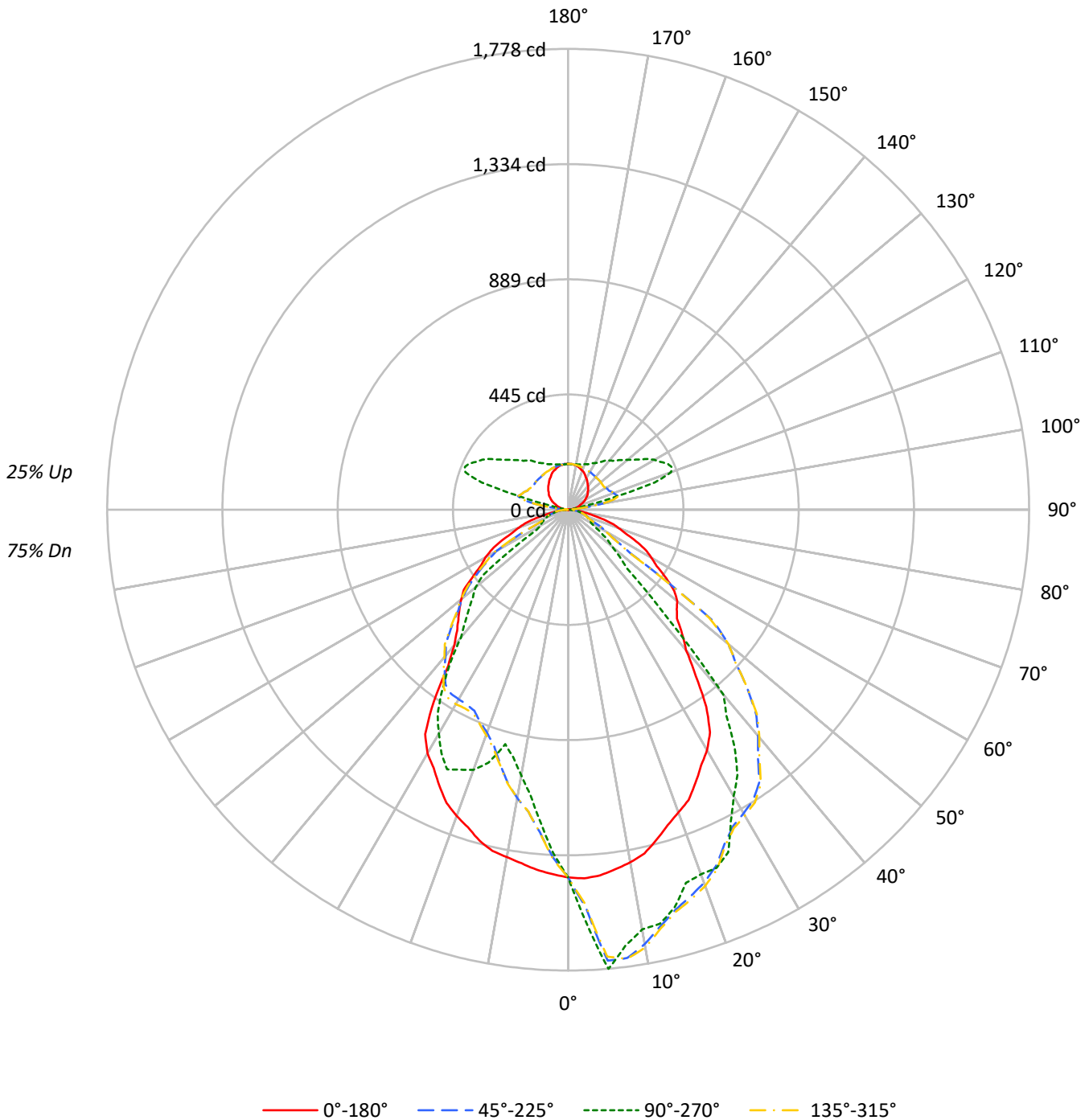
Lumens per Lamp: N/A
Luminaire Lumens: 3876.1 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 37.5
Input Voltage (V): 120
Input Current (A_{in}): 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



TEST NUMBER: P621594
CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	80	80	80	80	80	80	75	
1	105	101	97	94	100	96	93	90	88	85	83	80	78	76	72	71	70	70	70	70	66	
2	96	90	84	79	92	86	80	76	78	74	71	71	68	66	65	63	61	61	61	61	57	
3	89	80	73	67	84	76	70	65	70	65	61	64	60	57	59	56	53	53	53	53	50	
4	82	72	64	58	78	69	62	56	63	58	53	58	54	50	53	50	47	47	47	47	44	
5	76	64	57	51	72	62	55	49	57	51	47	53	48	44	49	45	41	41	41	41	39	
6	70	58	51	45	67	56	49	44	52	46	41	48	43	39	45	40	37	37	37	37	35	
7	65	53	45	40	62	51	44	39	48	42	37	44	39	35	41	37	33	33	33	33	31	
8	61	49	41	36	58	47	40	35	44	38	33	41	36	32	38	33	30	30	30	30	28	
9	57	45	37	32	54	43	36	32	40	34	30	38	33	29	35	31	27	27	27	27	26	
10	53	41	34	29	51	40	33	29	37	32	28	35	30	26	33	28	25	25	25	25	23	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10182	10182	10182	10182
5°	10201	12810	10044	8734
10°	10066	11980	9919	7583
15°	9791	11796	9823	6960
20°	9491	11431	9601	8157
25°	9200	11555	9303	8755
30°	8875	10573	8995	8265
35°	8131	9800	7929	7410
40°	6626	8721	6396	6031
45°	6021	3237	6079	5493
50°	6123	2466	6011	5221
55°	5779	1914	5580	3124
60°	5325	1471	5283	1741
65°	4902	1520	4804	1839
70°	4362	1605	4240	1907
75°	3721	1680	3563	1960
80°	2802	1732	2624	2029
85°	1902	1548	1663	1902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 11149 cd/sqm



TEST NUMBER: P621594

CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	3.5
10°-20°	375.0	9.7
20°-30°	561.1	14.5
30°-40°	638.1	16.5
40°-50°	545.7	14.1
50°-60°	368.0	9.5
60°-70°	189.9	4.9
70°-80°	85.8	2.2
80°-90°	25.9	0.7
90°-100°	21.7	0.6
100°-110°	154.9	4.0
110°-120°	210.3	5.4
120°-130°	171.2	4.4
130°-140°	137.7	3.6
140°-150°	108.5	2.8
150°-160°	79.4	2.0
160°-170°	49.3	1.3
170°-180°	16.8	0.4
0°-30°	1072.9	27.7
0°-40°	1711.0	44.1
0°-60°	2624.7	67.7
0°-90°	2926.3	75.5
90°-120°	386.9	10.0
90°-150°	804.3	20.8
90°-180°	950.0	24.5
0°-180°	3876.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1419	1419	1419	1419	1419	
5°	1416	1778	1394	1212	1416	134
15°	1318	1588	1322	937	1318	371
25°	1162	1459	1175	1106	1162	535
35°	928	1119	905	846	928	567
45°	593	319	599	541	593	471
55°	462	153	446	250	462	412
65°	289	90	283	108	289	285
75°	134	61	128	71	134	143
85°	23	19	20	23	23	30
90°	0	3	0	3	0	1
95°	9	12	9	12	9	10
105°	34	170	34	170	34	36
115°	61	421	61	421	61	61
125°	88	338	88	338	88	78
135°	109	270	109	270	109	84
145°	129	227	129	227	129	81
155°	151	195	151	195	151	69
165°	168	181	168	181	168	47
175°	177	175	177	175	177	17
180°	177	177	177	177	177	



TEST NUMBER: P621594

CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1423.6	1472.1	1533.3	1575.2	1593.3	1575.2	1522.9	1471.8	1407.4	1388.2	1342.7
5°	1416.1	1565.7	1746.6	1768.5	1778.4	1768.5	1730.7	1556.7	1394.4	1325.2	1250.1
7.5°	1398.7	1660.4	1744.6	1695.8	1696.1	1705.1	1747.2	1652.3	1376.2	1267.5	1175.3
10°	1381.4	1713.1	1701.9	1631.4	1644.1	1638.5	1714.9	1702.8	1361.2	1235.6	1130.2
12.5°	1358.3	1729.5	1645.3	1622.2	1636.0	1628.1	1653.7	1720.5	1348.5	1212.7	1078.3
15°	1317.9	1706.0	1597.9	1587.8	1587.8	1594.9	1605.2	1713.2	1322.2	1171.2	1014.8
17.5°	1276.3	1659.1	1565.0	1515.0	1509.6	1518.9	1576.9	1671.1	1285.0	1125.2	953.3
20°	1242.8	1626.7	1531.5	1472.9	1496.9	1475.7	1544.5	1635.5	1257.3	1096.4	915.2
22.5°	1212.8	1586.6	1488.8	1463.8	1495.7	1464.4	1500.6	1595.3	1224.9	1064.0	886.3
25°	1162.0	1519.1	1424.7	1448.1	1459.4	1448.1	1430.5	1525.0	1175.0	1022.6	856.0
27.5°	1111.5	1448.0	1376.8	1392.5	1358.0	1384.6	1384.6	1448.2	1123.6	974.3	846.7
30°	1071.1	1398.5	1352.5	1329.7	1276.0	1318.4	1362.6	1398.8	1085.5	942.9	844.4
32.5°	1017.9	1353.3	1328.3	1249.3	1214.8	1243.6	1339.6	1352.4	1026.6	914.5	842.1
35°	928.2	1289.5	1284.7	1154.0	1118.7	1145.5	1294.8	1286.1	905.1	869.8	824.2
37.5°	807.8	1232.6	1201.3	1057.7	1001.5	1050.6	1210.8	1226.5	761.3	828.8	782.4
40°	707.3	1194.2	1138.9	986.1	931.0	979.0	1146.1	1190.9	682.8	799.9	736.2
42.5°	650.7	1160.2	1073.1	910.3	569.6	898.7	1080.3	1155.9	634.3	762.7	695.8
45°	593.3	1098.6	977.2	503.9	319.0	479.9	978.7	1083.2	599.0	706.3	633.7
47.5°	568.2	1022.6	877.1	303.5	269.4	294.8	876.2	1006.0	568.4	649.7	574.5
50°	548.5	974.8	805.5	267.4	220.9	257.5	806.9	959.0	538.4	611.8	534.1
52.5°	516.2	917.6	702.7	221.6	190.8	216.2	685.7	899.6	507.2	570.5	483.3
55°	461.9	807.7	293.0	174.2	153.0	167.1	278.6	780.5	446.0	505.3	424.4
57.5°	404.5	687.6	205.6	135.6	118.7	134.2	204.1	660.0	397.0	428.0	370.1
60°	371.0	606.7	167.4	113.8	102.5	112.4	166.0	582.6	368.1	376.6	320.5
62.5°	337.5	524.6	138.6	100.1	96.7	98.7	138.3	498.3	332.3	332.9	225.8
65°	288.7	397.4	102.5	90.9	89.5	89.5	99.6	383.1	282.9	274.5	129.9
67.5°	239.0	285.3	82.3	83.7	82.3	82.3	80.8	277.3	233.3	218.9	98.2
70°	207.9	219.2	76.5	77.9	76.5	76.5	75.1	213.4	202.1	169.6	92.4
72.5°	177.8	149.6	70.7	71.0	70.7	70.7	69.3	140.4	172.1	119.3	84.3
75°	134.2	75.0	60.6	60.6	60.6	60.6	59.2	72.0	128.5	77.7	72.2
77.5°	93.2	49.5	50.2	49.9	49.9	48.8	48.8	49.1	87.8	53.6	58.3
80°	67.8	41.0	43.3	41.9	41.9	41.9	41.9	39.5	63.5	45.2	49.1
82.5°	48.2	32.7	35.2	33.8	33.8	33.8	33.8	32.3	43.9	36.8	39.8
85°	23.1	21.7	23.1	20.2	18.8	20.2	21.7	21.6	20.2	24.4	26.0
87.5°	6.9	10.5	9.7	7.6	7.6	7.6	8.5	9.4	5.8	11.6	10.8
90°	0.0	1.1	2.2	3.3	3.3	3.3	2.2	1.1	0.0	1.1	2.2
92.5°	2.7	3.8	4.9	6.9	7.8	6.9	4.9	3.8	2.7	3.8	4.9
95°	8.9	16.5	8.9	10.1	12.2	10.1	8.9	16.5	8.9	16.5	8.9
97.5°	15.8	31.7	65.4	19.3	16.7	19.3	65.4	31.7	15.8	31.7	65.4
100°	21.1	39.6	131.2	38.6	25.6	38.6	131.2	39.6	21.1	39.6	131.2
102.5°	26.5	45.8	177.5	101.9	55.8	101.9	177.5	45.8	26.5	45.8	177.5
105°	34.5	53.0	201.3	257.1	170.1	257.1	201.3	53.0	34.5	53.0	201.3
107.5°	42.5	56.4	192.1	374.2	350.5	374.2	192.1	56.4	42.5	56.4	192.1
110°	47.8	60.9	186.8	393.2	422.5	393.2	186.8	60.9	47.8	60.9	186.8



TEST NUMBER: P621594

CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	53.2	66.2	181.5	382.1	431.4	382.1	181.5	66.2	53.2	66.2	181.5
115°	61.2	74.2	173.5	360.5	421.4	360.5	173.5	74.2	61.2	74.2	173.5
117.5°	69.4	82.2	171.5	337.2	399.9	337.2	171.5	82.2	69.4	82.2	171.5
120°	75.6	87.6	167.9	319.5	384.7	319.5	167.9	87.6	75.6	87.6	167.9
122.5°	80.1	92.9	163.5	304.3	364.3	304.3	163.5	92.9	80.1	92.9	163.5
125°	87.8	99.8	163.5	285.8	338.0	285.8	163.5	99.8	87.8	99.8	163.5
127.5°	94.3	106.5	163.7	264.5	316.0	264.5	163.7	106.5	94.3	106.5	163.7
130°	97.8	110.9	164.6	250.2	299.1	250.2	164.6	110.9	97.8	110.9	164.6
132.5°	102.3	115.3	164.6	243.8	284.0	243.8	164.6	115.3	102.3	115.3	164.6
135°	109.0	120.9	164.6	235.4	270.2	235.4	164.6	120.9	109.0	120.9	164.6
137.5°	114.5	127.4	164.6	226.2	256.0	226.2	164.6	127.4	114.5	127.4	164.6
140°	119.0	130.9	164.6	220.8	248.0	220.8	164.6	130.9	119.0	130.9	164.6
142.5°	123.4	134.5	165.5	214.5	240.0	214.5	165.5	134.5	123.4	134.5	165.5
145°	129.0	139.9	165.7	205.1	226.8	205.1	165.7	139.9	129.0	139.9	165.7
147.5°	135.7	145.2	167.0	198.3	215.0	198.3	167.0	145.2	135.7	145.2	167.0
150°	140.1	148.8	167.9	193.8	207.9	193.8	167.9	148.8	140.1	148.8	167.9
152.5°	144.6	152.4	167.9	190.2	201.7	190.2	167.9	152.4	144.6	152.4	167.9
155°	151.2	156.7	169.0	185.9	194.6	185.9	169.0	156.7	151.2	156.7	169.0
157.5°	156.6	161.8	170.3	183.2	189.5	183.2	170.3	161.8	156.6	161.8	170.3
160°	160.1	164.5	171.2	181.4	186.8	181.4	171.2	164.5	160.1	164.5	171.2
162.5°	162.8	167.1	172.1	180.4	184.1	180.4	172.1	167.1	162.8	167.1	172.1
165°	167.9	170.1	173.5	178.0	181.2	178.0	173.5	170.1	167.9	170.1	173.5
167.5°	170.8	172.7	174.6	176.8	178.8	176.8	174.6	172.7	170.8	172.7	174.6
170°	173.5	174.5	174.6	176.8	177.9	176.8	174.6	174.5	173.5	174.5	174.6
172.5°	174.4	176.3	175.5	175.9	177.0	175.9	175.5	176.3	174.4	176.3	175.5
175°	176.8	177.9	176.8	175.7	174.6	175.7	176.8	177.9	176.8	177.9	176.8
177.5°	176.8	177.7	176.8	176.8	175.9	176.8	176.8	177.7	176.8	177.7	176.8
180°	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8	176.8

TEST NUMBER: P621594

CATALOG NUMBER: VLT-FA-025U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1326.5	1325.4	1327.7	1347.3	1387.4	1423.6
5°	1208.3	1212.5	1216.8	1250.1	1320.1	1416.1
7.5°	1117.4	1111.2	1120.8	1175.0	1261.0	1398.7
10°	1054.9	1040.7	1054.9	1128.8	1229.0	1381.4
12.5°	995.9	978.4	1000.4	1081.5	1202.5	1358.3
15°	919.9	936.8	926.9	1017.7	1162.6	1317.9
17.5°	937.9	1023.1	956.0	962.2	1123.0	1276.3
20°	980.7	1068.2	1008.9	925.3	1097.5	1242.8
22.5°	1019.4	1085.5	1031.9	894.1	1072.0	1212.8
25°	1049.3	1105.7	1046.4	866.1	1035.0	1162.0
27.5°	1050.7	1058.6	1051.3	863.8	989.3	1111.5
30°	1031.3	997.4	1028.5	866.1	956.7	1071.1
32.5°	975.8	937.4	963.9	861.5	923.9	1017.9
35°	896.7	845.9	882.6	837.2	873.1	928.2
37.5°	813.2	748.9	799.7	789.3	829.8	807.8
40°	756.7	643.8	745.4	741.9	806.1	707.3
42.5°	684.3	588.4	674.2	703.8	780.0	650.7
45°	552.6	541.3	547.0	639.5	724.5	593.3
47.5°	505.3	497.7	502.5	580.9	661.9	568.2
50°	477.6	467.7	474.7	542.7	621.9	548.5
52.5°	439.1	412.3	436.3	490.8	580.5	516.2
55°	330.2	249.7	328.8	431.6	518.4	461.9
57.5°	193.7	144.3	189.5	375.6	439.2	404.5
60°	131.1	121.3	132.5	330.6	386.5	371.0
62.5°	119.7	116.6	120.0	230.1	339.5	337.5
65°	109.7	108.3	109.7	132.8	280.2	288.7
67.5°	99.3	97.9	100.4	101.9	221.3	239.0
70°	92.4	90.9	92.4	93.8	169.8	207.9
72.5°	84.3	82.9	84.3	85.7	119.4	177.8
75°	72.1	70.7	72.1	73.6	79.2	134.2
77.5°	58.3	58.3	59.7	59.8	55.4	93.2
80°	49.1	49.1	50.5	50.5	48.1	67.8
82.5°	39.8	38.7	41.2	42.4	39.7	48.2
85°	24.5	23.1	25.9	27.4	25.9	23.1
87.5°	9.9	8.8	11.0	13.1	12.8	6.9
90°	3.3	3.3	3.3	2.2	1.1	0.0
92.5°	6.9	7.8	6.9	4.9	3.8	2.7
95°	10.1	12.2	10.1	8.9	16.5	8.9
97.5°	19.3	16.7	19.3	65.4	31.7	15.8
100°	38.6	25.6	38.6	131.2	39.6	21.1
102.5°	101.9	55.8	101.9	177.5	45.8	26.5
105°	257.1	170.1	257.1	201.3	53.0	34.5
107.5°	374.2	350.5	374.2	192.1	56.4	42.5
110°	393.2	422.5	393.2	186.8	60.9	47.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	382.1	431.4	382.1	181.5	66.2	53.2
115°	360.5	421.4	360.5	173.5	74.2	61.2
117.5°	337.2	399.9	337.2	171.5	82.2	69.4
120°	319.5	384.7	319.5	167.9	87.6	75.6
122.5°	304.3	364.3	304.3	163.5	92.9	80.1
125°	285.8	338.0	285.8	163.5	99.8	87.8
127.5°	264.5	316.0	264.5	163.7	106.5	94.3
130°	250.2	299.1	250.2	164.6	110.9	97.8
132.5°	243.8	284.0	243.8	164.6	115.3	102.3
135°	235.4	270.2	235.4	164.6	120.9	109.0
137.5°	226.2	256.0	226.2	164.6	127.4	114.5
140°	220.8	248.0	220.8	164.6	130.9	119.0
142.5°	214.5	240.0	214.5	165.5	134.5	123.4
145°	205.1	226.8	205.1	165.7	139.9	129.0
147.5°	198.3	215.0	198.3	167.0	145.2	135.7
150°	193.8	207.9	193.8	167.9	148.8	140.1
152.5°	190.2	201.7	190.2	167.9	152.4	144.6
155°	185.9	194.6	185.9	169.0	156.7	151.2
157.5°	183.2	189.5	183.2	170.3	161.8	156.6
160°	181.4	186.8	181.4	171.2	164.5	160.1
162.5°	180.4	184.1	180.4	172.1	167.1	162.8
165°	178.0	181.2	178.0	173.5	170.1	167.9
167.5°	176.8	178.8	176.8	174.6	172.7	170.8
170°	176.8	177.9	176.8	174.6	174.5	173.5
172.5°	175.9	177.0	175.9	175.5	176.3	174.4
175°	175.7	174.6	175.7	176.8	177.9	176.8
177.5°	176.8	175.9	176.8	176.8	177.7	176.8
180°	176.8	176.8	176.8	176.8	176.8	176.8

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