

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: P621591

Luminaire Tested: VLT-FA-025U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621591
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-840-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

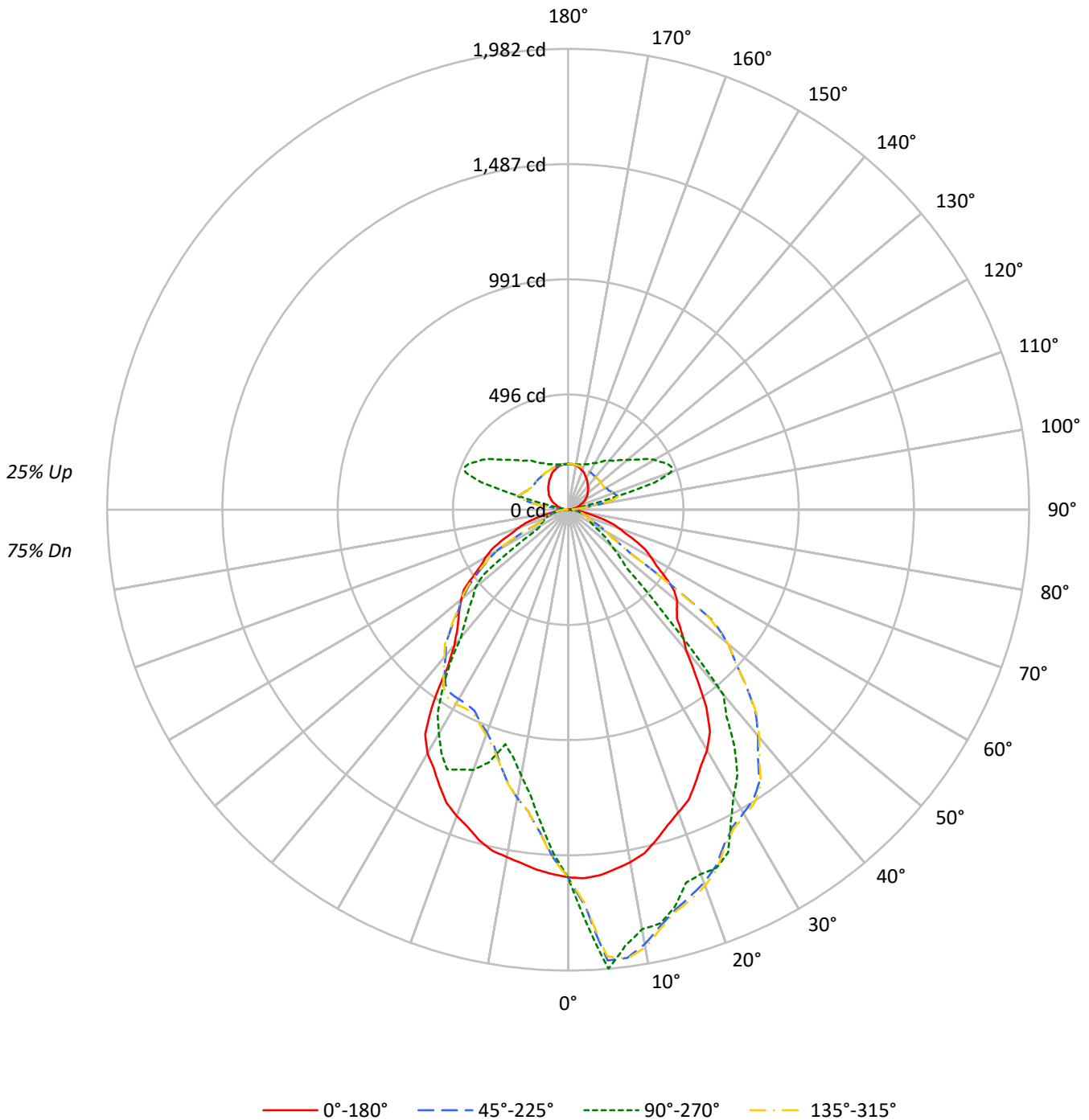
Lumens per Lamp: N/A
Luminaire Lumens: 4319.1 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



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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	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	81	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°	11346	11346	11346	11346
5°	11366	14275	11193	9732
10°	11216	13350	11052	8450
15°	10910	13144	10946	7755
20°	10576	12738	10699	9090
25°	10252	12876	10367	9755
30°	9889	11782	10023	9210
35°	9061	10920	8835	8257
40°	7383	9719	7127	6720
45°	6709	3608	6774	6121
50°	6823	2747	6698	5817
55°	6439	2133	6218	3482
60°	5933	1639	5887	1939
65°	5462	1693	5354	2048
70°	4859	1788	4725	2125
75°	4148	1874	3970	2185
80°	3124	1926	2926	2260
85°	2116	1721	1853	2116

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12423 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.5	3.5
10°-20°	417.8	9.7
20°-30°	625.2	14.5
30°-40°	711.0	16.5
40°-50°	608.1	14.1
50°-60°	410.1	9.5
60°-70°	211.7	4.9
70°-80°	95.6	2.2
80°-90°	28.9	0.7
90°-100°	24.2	0.6
100°-110°	172.6	4.0
110°-120°	234.3	5.4
120°-130°	190.7	4.4
130°-140°	153.4	3.6
140°-150°	120.9	2.8
150°-160°	88.4	2.0
160°-170°	54.9	1.3
170°-180°	18.7	0.4
0°-30°	1195.6	27.7
0°-40°	1906.6	44.1
0°-60°	2924.7	67.7
0°-90°	3260.8	75.5
90°-120°	431.2	10.0
90°-150°	896.2	20.7
90°-180°	1058.0	24.5
0°-180°	4319.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1581	1581	1581	1581	1581	
5°	1578	1982	1554	1351	1578	149
15°	1468	1769	1473	1044	1468	413
25°	1295	1626	1309	1232	1295	596
35°	1034	1247	1008	943	1034	632
45°	661	356	668	603	661	525
55°	515	170	497	278	515	459
65°	322	100	315	121	322	318
75°	150	68	143	79	150	159
85°	26	21	22	26	26	33
90°	0	4	0	4	0	1
95°	10	14	10	14	10	11
105°	38	190	38	190	38	40
115°	68	470	68	470	68	68
125°	98	377	98	377	98	87
135°	121	301	121	301	121	93
145°	144	253	144	253	144	90
155°	168	217	168	217	168	77
165°	187	202	187	202	187	53
175°	197	194	197	194	197	19
180°	197	197	197	197	197	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1586.3	1640.4	1708.5	1755.3	1775.4	1755.3	1697.0	1640.0	1568.3	1546.9	1496.2
5°	1577.9	1744.6	1946.3	1970.6	1981.7	1970.6	1928.6	1734.7	1553.8	1476.7	1392.9
7.5°	1558.6	1850.2	1944.0	1889.7	1890.0	1900.0	1946.9	1841.2	1533.5	1412.4	1309.6
10°	1539.3	1908.9	1896.4	1817.9	1832.1	1825.8	1910.9	1897.4	1516.8	1376.8	1259.4
12.5°	1513.6	1927.2	1833.4	1807.6	1823.1	1814.3	1842.7	1917.2	1502.6	1351.4	1201.5
15°	1468.5	1901.1	1780.6	1769.3	1769.3	1777.2	1788.6	1909.0	1473.4	1305.1	1130.8
17.5°	1422.2	1848.8	1743.9	1688.1	1682.2	1692.5	1757.1	1862.2	1431.9	1253.8	1062.2
20°	1384.9	1812.7	1706.6	1641.3	1668.0	1644.4	1721.1	1822.5	1401.0	1221.7	1019.8
22.5°	1351.5	1767.9	1659.0	1631.2	1666.7	1631.8	1672.2	1777.6	1365.0	1185.7	987.6
25°	1294.8	1692.7	1587.6	1613.6	1626.2	1613.6	1594.0	1699.3	1309.3	1139.5	953.8
27.5°	1238.5	1613.5	1534.2	1551.6	1513.3	1542.8	1542.9	1613.8	1252.0	1085.6	943.5
30°	1193.5	1558.4	1507.2	1481.7	1421.9	1469.1	1518.4	1558.7	1209.6	1050.7	941.0
32.5°	1134.3	1508.0	1480.1	1392.1	1353.7	1385.8	1492.7	1506.9	1144.0	1019.1	938.4
35°	1034.3	1436.9	1431.6	1285.9	1246.6	1276.5	1442.8	1433.2	1008.5	969.2	918.4
37.5°	900.1	1373.5	1338.6	1178.6	1116.0	1170.7	1349.2	1366.7	848.3	923.5	871.8
40°	788.2	1330.8	1269.1	1098.8	1037.5	1090.9	1277.1	1327.0	760.8	891.4	820.3
42.5°	725.1	1292.9	1195.7	1014.4	634.7	1001.5	1203.8	1288.1	706.8	849.9	775.3
45°	661.1	1224.1	1088.9	561.5	355.5	534.8	1090.6	1207.0	667.5	787.1	706.1
47.5°	633.1	1139.5	977.3	338.2	300.1	328.5	976.4	1121.0	633.4	724.0	640.2
50°	611.2	1086.2	897.5	298.0	246.1	287.0	899.1	1068.6	600.0	681.7	595.1
52.5°	575.2	1022.5	783.0	246.9	212.6	241.0	764.0	1002.4	565.2	635.7	538.5
55°	514.7	900.0	326.5	194.1	170.5	186.2	310.4	869.8	497.0	563.1	472.9
57.5°	450.7	766.2	229.0	151.1	132.2	149.5	227.4	735.5	442.3	476.9	412.4
60°	413.4	676.0	186.6	126.8	114.2	125.2	185.0	649.2	410.2	419.6	357.1
62.5°	376.1	584.6	154.4	111.5	107.8	110.0	154.1	555.2	370.3	370.9	251.6
65°	321.7	442.8	114.2	101.3	99.7	99.7	111.0	426.9	315.3	305.8	144.8
67.5°	266.4	318.0	91.7	93.3	91.7	91.7	90.1	309.0	259.9	243.9	109.4
70°	231.6	244.2	85.2	86.8	85.2	85.2	83.6	237.8	225.2	189.0	102.9
72.5°	198.2	166.7	78.8	79.1	78.8	78.8	77.2	156.5	191.7	132.9	93.9
75°	149.6	83.5	67.6	67.6	67.6	67.6	65.9	80.2	143.2	86.5	80.4
77.5°	103.9	55.2	56.0	55.7	55.7	54.4	54.4	54.7	97.8	59.7	65.0
80°	75.6	45.7	48.3	46.6	46.6	46.6	46.6	44.0	70.8	50.3	54.7
82.5°	53.7	36.4	39.2	37.6	37.6	37.6	37.6	36.0	48.9	41.0	44.4
85°	25.7	24.2	25.7	22.5	20.9	22.5	24.1	24.1	22.5	27.2	29.0
87.5°	7.7	11.7	10.8	8.5	8.5	8.5	9.5	10.5	6.4	13.0	12.1
90°	0.0	1.2	2.5	3.7	3.7	3.7	2.5	1.2	0.0	1.2	2.5
92.5°	3.0	4.2	5.5	7.7	8.7	7.7	5.5	4.2	3.0	4.2	5.5
95°	9.9	18.4	9.9	11.2	13.6	11.2	9.9	18.4	9.9	18.4	9.9
97.5°	17.6	35.3	72.9	21.5	18.6	21.5	72.9	35.3	17.6	35.3	72.9
100°	23.5	44.1	146.2	43.0	28.5	43.0	146.2	44.1	23.5	44.1	146.2
102.5°	29.5	51.1	197.8	113.6	62.2	113.6	197.8	51.1	29.5	51.1	197.8
105°	38.4	59.0	224.3	286.5	189.6	286.5	224.3	59.0	38.4	59.0	224.3
107.5°	47.3	62.8	214.1	417.0	390.5	417.0	214.1	62.8	47.3	62.8	214.1
110°	53.3	67.8	208.2	438.1	470.8	438.1	208.2	67.8	53.3	67.8	208.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	59.2	73.8	202.2	425.7	480.7	425.7	202.2	73.8	59.2	73.8	202.2
115°	68.1	82.7	193.3	401.8	469.6	401.8	193.3	82.7	68.1	82.7	193.3
117.5°	77.3	91.6	191.1	375.8	445.6	375.8	191.1	91.6	77.3	91.6	191.1
120°	84.3	97.6	187.1	356.0	428.7	356.0	187.1	97.6	84.3	97.6	187.1
122.5°	89.2	103.5	182.1	339.0	405.9	339.0	182.1	103.5	89.2	103.5	182.1
125°	97.9	111.2	182.1	318.5	376.7	318.5	182.1	111.2	97.9	111.2	182.1
127.5°	105.1	118.6	182.4	294.7	352.1	294.7	182.4	118.6	105.1	118.6	182.4
130°	109.0	123.6	183.4	278.8	333.3	278.8	183.4	123.6	109.0	123.6	183.4
132.5°	114.0	128.5	183.4	271.6	316.4	271.6	183.4	128.5	114.0	128.5	183.4
135°	121.4	134.8	183.4	262.3	301.1	262.3	183.4	134.8	121.4	134.8	183.4
137.5°	127.6	141.9	183.4	252.0	285.2	252.0	183.4	141.9	127.6	141.9	183.4
140°	132.6	145.9	183.4	246.0	276.3	246.0	183.4	145.9	132.6	145.9	183.4
142.5°	137.5	149.9	184.4	239.0	267.4	239.0	184.4	149.9	137.5	149.9	184.4
145°	143.7	155.8	184.6	228.5	252.8	228.5	184.6	155.8	143.7	155.8	184.6
147.5°	151.2	161.8	186.1	221.0	239.6	221.0	186.1	161.8	151.2	161.8	186.1
150°	156.1	165.8	187.1	216.0	231.7	216.0	187.1	165.8	156.1	165.8	187.1
152.5°	161.1	169.8	187.1	211.9	224.8	211.9	187.1	169.8	161.1	169.8	187.1
155°	168.5	174.6	188.3	207.1	216.8	207.1	188.3	174.6	168.5	174.6	188.3
157.5°	174.5	180.3	189.8	204.1	211.1	204.1	189.8	180.3	174.5	180.3	189.8
160°	178.4	183.3	190.8	202.1	208.2	202.1	190.8	183.3	178.4	183.3	190.8
162.5°	181.4	186.2	191.8	201.1	205.2	201.1	191.8	186.2	181.4	186.2	191.8
165°	187.1	189.5	193.3	198.3	202.0	198.3	193.3	189.5	187.1	189.5	193.3
167.5°	190.3	192.5	194.5	197.1	199.2	197.1	194.5	192.5	190.3	192.5	194.5
170°	193.3	194.5	194.5	197.0	198.2	197.0	194.5	194.5	193.3	194.5	194.5
172.5°	194.3	196.5	195.5	196.0	197.3	196.0	195.5	196.5	194.3	196.5	195.5
175°	197.0	198.2	197.0	195.7	194.5	195.7	197.0	198.2	197.0	198.2	197.0
177.5°	197.0	198.0	197.0	197.0	196.0	197.0	197.0	198.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1478.2	1476.9	1479.4	1501.4	1546.0	1586.3
5°	1346.4	1351.1	1355.8	1392.9	1471.0	1577.9
7.5°	1245.1	1238.2	1248.9	1309.3	1405.1	1558.6
10°	1175.4	1159.7	1175.4	1257.8	1369.5	1539.3
12.5°	1109.7	1090.2	1114.8	1205.1	1340.0	1513.6
15°	1025.0	1043.9	1032.9	1134.0	1295.5	1468.5
17.5°	1045.1	1140.1	1065.2	1072.2	1251.4	1422.2
20°	1092.8	1190.3	1124.2	1031.0	1222.9	1384.9
22.5°	1136.0	1209.6	1149.8	996.3	1194.5	1351.5
25°	1169.2	1232.1	1166.0	965.1	1153.3	1294.8
27.5°	1170.9	1179.7	1171.5	962.5	1102.3	1238.5
30°	1149.2	1111.5	1146.1	965.1	1066.1	1193.5
32.5°	1087.3	1044.6	1074.1	959.9	1029.6	1134.3
35°	999.2	942.6	983.5	932.9	972.9	1034.3
37.5°	906.2	834.5	891.1	879.5	924.6	900.1
40°	843.2	717.4	830.6	826.8	898.3	788.2
42.5°	762.6	655.6	751.2	784.3	869.2	725.1
45°	615.8	603.2	609.5	712.6	807.4	661.1
47.5°	563.1	554.6	560.0	647.3	737.5	633.1
50°	532.2	521.1	529.0	604.8	693.0	611.2
52.5°	489.3	459.4	486.1	546.9	646.9	575.2
55°	367.9	278.3	366.3	480.9	577.6	514.7
57.5°	215.9	160.8	211.2	418.5	489.4	450.7
60°	146.1	135.1	147.7	368.3	430.7	413.4
62.5°	133.4	130.0	133.7	256.4	378.3	376.1
65°	122.2	120.6	122.2	148.0	312.3	321.7
67.5°	110.6	109.1	111.9	113.6	246.5	266.4
70°	102.9	101.3	102.9	104.6	189.2	231.6
72.5°	93.9	92.3	93.9	95.5	133.1	198.2
75°	80.4	78.8	80.4	82.0	88.3	149.6
77.5°	65.0	65.0	66.6	66.6	61.8	103.9
80°	54.7	54.7	56.3	56.3	53.6	75.6
82.5°	44.4	43.1	45.9	47.3	44.3	53.7
85°	27.3	25.7	28.9	30.6	28.9	25.7
87.5°	11.0	9.8	12.3	14.7	14.3	7.7
90°	3.7	3.7	3.7	2.5	1.2	0.0
92.5°	7.7	8.7	7.7	5.5	4.2	3.0
95°	11.2	13.6	11.2	9.9	18.4	9.9
97.5°	21.5	18.6	21.5	72.9	35.3	17.6
100°	43.0	28.5	43.0	146.2	44.1	23.5
102.5°	113.6	62.2	113.6	197.8	51.1	29.5
105°	286.5	189.6	286.5	224.3	59.0	38.4
107.5°	417.0	390.5	417.0	214.1	62.8	47.3
110°	438.1	470.8	438.1	208.2	67.8	53.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	425.7	480.7	425.7	202.2	73.8	59.2
115°	401.8	469.6	401.8	193.3	82.7	68.1
117.5°	375.8	445.6	375.8	191.1	91.6	77.3
120°	356.0	428.7	356.0	187.1	97.6	84.3
122.5°	339.0	405.9	339.0	182.1	103.5	89.2
125°	318.5	376.7	318.5	182.1	111.2	97.9
127.5°	294.7	352.1	294.7	182.4	118.6	105.1
130°	278.8	333.3	278.8	183.4	123.6	109.0
132.5°	271.6	316.4	271.6	183.4	128.5	114.0
135°	262.3	301.1	262.3	183.4	134.8	121.4
137.5°	252.0	285.2	252.0	183.4	141.9	127.6
140°	246.0	276.3	246.0	183.4	145.9	132.6
142.5°	239.0	267.4	239.0	184.4	149.9	137.5
145°	228.5	252.8	228.5	184.6	155.8	143.7
147.5°	221.0	239.6	221.0	186.1	161.8	151.2
150°	216.0	231.7	216.0	187.1	165.8	156.1
152.5°	211.9	224.8	211.9	187.1	169.8	161.1
155°	207.1	216.8	207.1	188.3	174.6	168.5
157.5°	204.1	211.1	204.1	189.8	180.3	174.5
160°	202.1	208.2	202.1	190.8	183.3	178.4
162.5°	201.1	205.2	201.1	191.8	186.2	181.4
165°	198.3	202.0	198.3	193.3	189.5	187.1
167.5°	197.1	199.2	197.1	194.5	192.5	190.3
170°	197.0	198.2	197.0	194.5	194.5	193.3
172.5°	196.0	197.3	196.0	195.5	196.5	194.3
175°	195.7	194.5	195.7	197.0	198.2	197.0
177.5°	197.0	196.0	197.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0

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