

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: P621639

Luminaire Tested: VLT-FA-075U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621639
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-075U-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

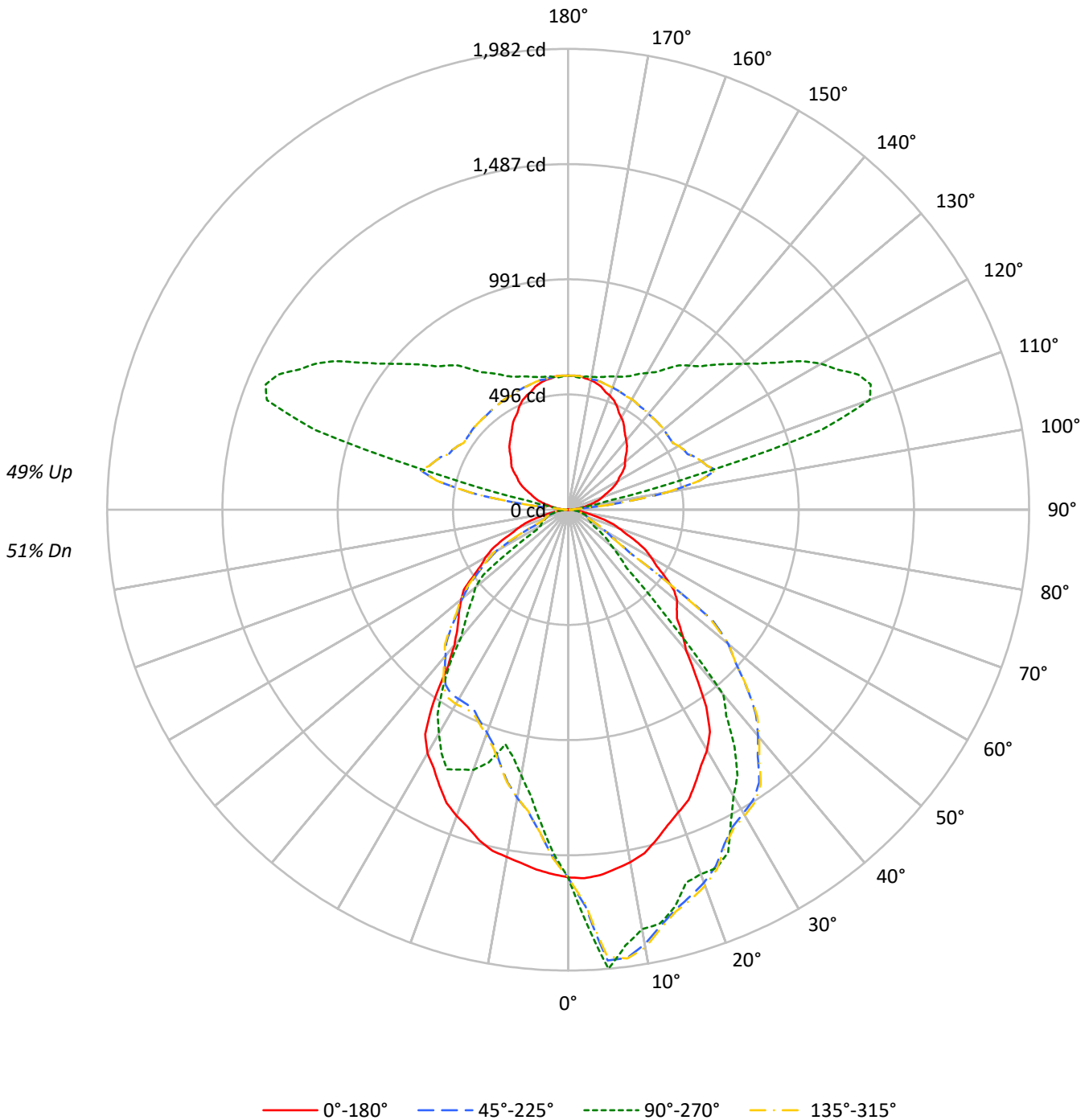
Lumens per Lamp: N/A
Luminaire Lumens: 6361.1 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	99	95	91	88	91	88	85	82	75	73	71	63	62	60	52	51	50	45				45
2	91	84	78	73	84	78	73	69	67	63	60	56	54	52	47	45	44	39				39
3	83	74	68	62	77	69	63	59	60	55	51	51	47	45	42	40	38	34				34
4	77	66	59	53	71	62	55	50	53	48	45	46	42	39	38	36	33	30				30
5	71	60	52	46	65	56	49	44	48	43	39	41	37	34	35	32	30	26				26
6	65	54	46	40	60	50	43	38	44	38	34	38	33	30	32	29	26	24				24
7	61	49	41	36	56	46	39	34	40	34	30	34	30	27	29	26	24	21				21
8	56	44	37	32	52	42	35	30	36	31	27	32	27	24	27	24	21	19				19
9	52	41	33	29	49	38	32	27	34	28	25	29	25	22	25	22	19	17				17
10	49	37	30	26	46	35	29	25	31	26	22	27	23	20	23	20	18	16				16

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	2.4
10°-20°	417.8	6.6
20°-30°	625.2	9.8
30°-40°	711.0	11.2
40°-50°	608.1	9.6
50°-60°	410.1	6.4
60°-70°	211.7	3.3
70°-80°	95.6	1.5
80°-90°	29.7	0.5
90°-100°	70.9	1.1
100°-110°	505.5	7.9
110°-120°	686.3	10.8
120°-130°	558.6	8.8
130°-140°	449.3	7.1
140°-150°	354.2	5.6
150°-160°	259.0	4.1
160°-170°	160.9	2.5
170°-180°	54.9	0.9
0°-30°	1195.6	18.8
0°-40°	1906.6	30.0
0°-60°	2924.7	46.0
0°-90°	3261.7	51.3
90°-120°	1262.7	19.9
90°-150°	2624.7	41.3
90°-180°	3099.0	48.7
0°-180°	6361.1	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	11	0	11	0	2
95°	29	40	29	40	29	32
105°	112	555	112	555	112	119
115°	200	1375	200	1375	200	198
125°	287	1103	287	1103	287	255
135°	356	882	356	882	356	274
145°	421	740	421	740	421	264
155°	494	635	494	635	494	227
165°	548	592	548	592	548	154
175°	577	570	577	570	577	55
180°	577	577	577	577	577	



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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	12.2	11.7	9.9	9.9	9.9	10.5	10.9	6.4	13.4	13.0
90°	0.0	3.5	7.3	10.9	10.9	10.9	7.3	3.5	0.0	3.5	7.3
92.5°	8.7	12.3	16.0	22.6	25.4	22.6	16.0	12.3	8.7	12.3	16.0
95°	29.0	53.9	29.0	32.8	39.9	32.8	29.0	53.9	29.0	53.9	29.0
97.5°	51.5	103.3	213.4	62.9	54.4	62.9	213.4	103.3	51.5	103.3	213.4
100°	68.9	129.3	428.2	126.0	83.5	126.0	428.2	129.3	68.9	129.3	428.2
102.5°	86.4	149.5	579.2	332.6	182.2	332.6	579.2	149.5	86.4	149.5	579.2
105°	112.5	172.8	656.8	839.1	555.2	839.1	656.8	172.8	112.5	172.8	656.8
107.5°	138.6	184.0	627.1	1221.2	1143.8	1221.2	627.1	184.0	138.6	184.0	627.1
110°	156.0	198.6	609.6	1283.1	1378.9	1283.1	609.6	198.6	156.0	198.6	609.6



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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°	173.5	216.0	592.2	1246.9	1408.0	1246.9	592.2	216.0	173.5	216.0	592.2
115°	199.6	242.2	566.1	1176.6	1375.3	1176.6	566.1	242.2	199.6	242.2	566.1
117.5°	226.4	268.3	559.6	1100.5	1304.9	1100.5	559.6	268.3	226.4	268.3	559.6
120°	246.8	285.8	548.0	1042.7	1255.6	1042.7	548.0	285.8	246.8	285.8	548.0
122.5°	261.3	303.1	533.4	992.9	1188.8	992.9	533.4	303.1	261.3	303.1	533.4
125°	286.7	325.7	533.4	932.8	1103.2	932.8	533.4	325.7	286.7	325.7	533.4
127.5°	307.7	347.5	534.2	863.1	1031.3	863.1	534.2	347.5	307.7	347.5	534.2
130°	319.3	361.9	537.1	816.5	976.2	816.5	537.1	361.9	319.3	361.9	537.1
132.5°	333.9	376.4	537.1	795.5	926.8	795.5	537.1	376.4	333.9	376.4	537.1
135°	355.6	394.7	537.1	768.3	881.8	768.3	537.1	394.7	355.6	394.7	537.1
137.5°	373.8	415.6	537.1	738.1	835.4	738.1	537.1	415.6	373.8	415.6	537.1
140°	388.3	427.3	537.1	720.5	809.2	720.5	537.1	427.3	388.3	427.3	537.1
142.5°	402.8	439.0	540.0	700.1	783.1	700.1	540.0	439.0	402.8	439.0	540.0
145°	420.9	456.4	540.7	669.3	740.3	669.3	540.7	456.4	420.9	456.4	540.7
147.5°	442.7	473.9	545.0	647.2	701.8	647.2	545.0	473.9	442.7	473.9	545.0
150°	457.2	485.6	548.0	632.5	678.6	632.5	548.0	485.6	457.2	485.6	548.0
152.5°	471.7	497.3	548.0	620.7	658.3	620.7	548.0	497.3	471.7	497.3	548.0
155°	493.5	511.3	551.6	606.7	635.0	606.7	551.6	511.3	493.5	511.3	551.6
157.5°	510.9	528.0	555.9	597.8	618.3	597.8	555.9	528.0	510.9	528.0	555.9
160°	522.5	536.7	558.8	591.9	609.6	591.9	558.8	536.7	522.5	536.7	558.8
162.5°	531.3	545.5	561.7	588.9	600.9	588.9	561.7	545.5	531.3	545.5	561.7
165°	548.0	555.0	566.1	580.9	591.5	580.9	566.1	555.0	548.0	555.0	566.1
167.5°	557.4	563.8	569.7	577.1	583.5	577.1	569.7	563.8	557.4	563.8	569.7
170°	566.1	569.6	569.7	577.1	580.6	577.1	569.7	569.6	566.1	569.6	569.7
172.5°	569.0	575.4	572.6	574.2	577.7	574.2	572.6	575.4	569.0	575.4	572.6
175°	577.0	580.5	577.0	573.3	569.7	573.3	577.0	580.5	577.0	580.5	577.0
177.5°	577.0	579.8	577.0	576.9	574.1	576.9	577.0	579.8	577.0	579.8	577.0
180°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0



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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°	12.4	11.2	13.7	15.6	14.7	7.7
90°	10.9	10.9	10.9	7.3	3.5	0.0
92.5°	22.6	25.4	22.6	16.0	12.3	8.7
95°	32.8	39.9	32.8	29.0	53.9	29.0
97.5°	62.9	54.4	62.9	213.4	103.3	51.5
100°	126.0	83.5	126.0	428.2	129.3	68.9
102.5°	332.6	182.2	332.6	579.2	149.5	86.4
105°	839.1	555.2	839.1	656.8	172.8	112.5
107.5°	1221.2	1143.8	1221.2	627.1	184.0	138.6
110°	1283.1	1378.9	1283.1	609.6	198.6	156.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1246.9	1408.0	1246.9	592.2	216.0	173.5
115°	1176.6	1375.3	1176.6	566.1	242.2	199.6
117.5°	1100.5	1304.9	1100.5	559.6	268.3	226.4
120°	1042.7	1255.6	1042.7	548.0	285.8	246.8
122.5°	992.9	1188.8	992.9	533.4	303.1	261.3
125°	932.8	1103.2	932.8	533.4	325.7	286.7
127.5°	863.1	1031.3	863.1	534.2	347.5	307.7
130°	816.5	976.2	816.5	537.1	361.9	319.3
132.5°	795.5	926.8	795.5	537.1	376.4	333.9
135°	768.3	881.8	768.3	537.1	394.7	355.6
137.5°	738.1	835.4	738.1	537.1	415.6	373.8
140°	720.5	809.2	720.5	537.1	427.3	388.3
142.5°	700.1	783.1	700.1	540.0	439.0	402.8
145°	669.3	740.3	669.3	540.7	456.4	420.9
147.5°	647.2	701.8	647.2	545.0	473.9	442.7
150°	632.5	678.6	632.5	548.0	485.6	457.2
152.5°	620.7	658.3	620.7	548.0	497.3	471.7
155°	606.7	635.0	606.7	551.6	511.3	493.5
157.5°	597.8	618.3	597.8	555.9	528.0	510.9
160°	591.9	609.6	591.9	558.8	536.7	522.5
162.5°	588.9	600.9	588.9	561.7	545.5	531.3
165°	580.9	591.5	580.9	566.1	555.0	548.0
167.5°	577.1	583.5	577.1	569.7	563.8	557.4
170°	577.1	580.6	577.1	569.7	569.6	566.1
172.5°	574.2	577.7	574.2	572.6	575.4	569.0
175°	573.3	569.7	573.3	577.0	580.5	577.0
177.5°	576.9	574.1	576.9	577.0	579.8	577.0
180°	577.0	577.0	577.0	577.0	577.0	577.0

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