

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: P621641

Luminaire Tested: VLT-FA-075U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621641  
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-935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

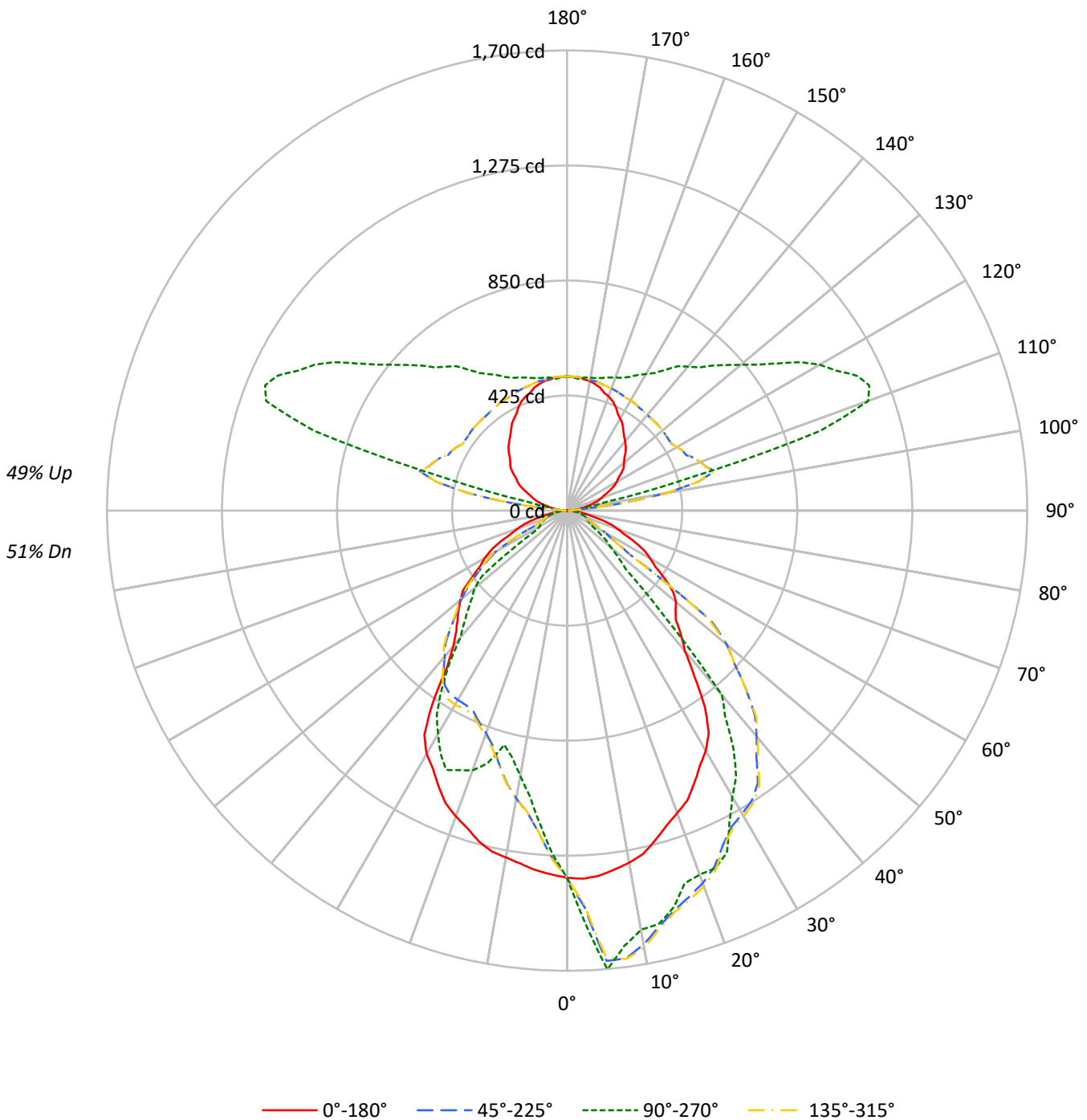
Lumens per Lamp: N/A  
Luminaire Lumens: 5458.2 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 50  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P621641  
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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	
2	91	84	78	73	84	78	73	69	67	63	60	56	54	52	47	45	44				39	
3	83	74	68	62	77	69	63	59	60	55	51	51	47	45	42	40	38				34	
4	77	66	59	53	71	62	55	50	53	48	45	46	42	39	38	36	33				30	
5	71	60	52	46	65	56	49	44	48	43	39	41	37	34	35	32	30				26	
6	65	54	46	40	60	50	43	38	44	38	34	38	33	30	32	29	26				24	
7	61	49	41	36	56	46	39	34	40	34	30	34	30	27	29	26	24				21	
8	56	44	37	32	52	42	35	30	36	31	27	32	27	24	27	24	21				19	
9	52	41	33	29	49	38	32	27	34	28	25	29	25	22	25	22	19				17	
10	49	37	30	26	46	35	29	25	31	26	22	27	23	20	23	20	18				16	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	9736	9736	9736	9736
5°	9753	12249	9604	8352
10°	9625	11455	9484	7251
15°	9361	11279	9393	6654
20°	9075	10930	9181	7799
25°	8797	11048	8896	8371
30°	8486	10110	8600	7902
35°	7775	9371	7581	7085
40°	6335	8339	6115	5767
45°	5757	3095	5813	5253
50°	5855	2358	5747	4992
55°	5526	1830	5336	2988
60°	5091	1406	5052	1663
65°	4686	1453	4593	1757
70°	4169	1536	4054	1825
75°	3560	1608	3405	1874
80°	2682	1653	2508	1938
85°	1820	1474	1589	1820

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 10660 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.9	2.4
10°-20°	358.5	6.6
20°-30°	536.5	9.8
30°-40°	610.1	11.2
40°-50°	521.8	9.6
50°-60°	351.9	6.4
60°-70°	181.6	3.3
70°-80°	82.0	1.5
80°-90°	25.5	0.5
90°-100°	60.9	1.1
100°-110°	433.8	7.9
110°-120°	588.9	10.8
120°-130°	479.3	8.8
130°-140°	385.5	7.1
140°-150°	303.9	5.6
150°-160°	222.2	4.1
160°-170°	138.0	2.5
170°-180°	47.1	0.9
0°-30°	1025.9	18.8
0°-40°	1636.0	30.0
0°-60°	2509.6	46.0
0°-90°	2798.8	51.3
90°-120°	1083.5	19.9
90°-150°	2252.2	41.3
90°-180°	2659.0	48.7
0°-180°	5458.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1357	1357	1357	1357	1357	
5°	1354	1700	1333	1159	1354	128
15°	1260	1518	1264	896	1260	355
25°	1111	1395	1124	1057	1111	511
35°	888	1070	865	809	888	543
45°	567	305	573	518	567	450
55°	442	146	426	239	442	394
65°	276	86	270	104	276	273
75°	128	58	123	68	128	137
85°	22	18	19	22	22	28
90°	0	9	0	9	0	2
95°	25	34	25	34	25	28
105°	96	476	96	476	96	102
115°	171	1180	171	1180	171	170
125°	246	947	246	947	246	219
135°	305	757	305	757	305	235
145°	361	635	361	635	361	227
155°	424	545	424	545	424	194
165°	470	508	470	508	470	132
175°	495	489	495	489	495	47
180°	495	495	495	495	495	



TEST NUMBER: P621641

CATALOG NUMBER: VLT-FA-075U-100D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7
2.5°	1361.2	1407.6	1466.0	1506.2	1523.5	1506.2	1456.1	1407.2	1345.7	1327.3	1283.9
5°	1354.0	1497.0	1670.0	1691.0	1700.4	1691.0	1654.9	1488.5	1333.3	1267.1	1195.3
7.5°	1337.4	1587.6	1668.1	1621.5	1621.7	1630.4	1670.6	1579.9	1315.9	1212.0	1123.8
10°	1320.9	1638.0	1627.3	1559.9	1572.0	1566.6	1639.7	1628.1	1301.5	1181.4	1080.7
12.5°	1298.8	1653.7	1573.2	1551.1	1564.3	1556.8	1581.2	1645.1	1289.4	1159.6	1031.0
15°	1260.1	1631.2	1527.9	1518.2	1518.2	1525.0	1534.8	1638.1	1264.3	1119.9	970.3
17.5°	1220.4	1586.4	1496.4	1448.5	1443.4	1452.3	1507.7	1597.9	1228.7	1075.9	911.5
20°	1188.4	1555.4	1464.4	1408.3	1431.3	1411.0	1476.8	1563.8	1202.2	1048.3	875.0
22.5°	1159.6	1517.0	1423.5	1399.7	1430.2	1400.2	1434.9	1525.4	1171.2	1017.4	847.4
25°	1111.1	1452.5	1362.3	1384.6	1395.4	1384.6	1367.8	1458.2	1123.5	977.7	818.5
27.5°	1062.8	1384.5	1316.4	1331.4	1298.5	1323.9	1323.9	1384.7	1074.3	931.6	809.6
30°	1024.1	1337.2	1293.2	1271.4	1220.1	1260.6	1302.9	1337.5	1037.9	901.6	807.4
32.5°	973.3	1294.0	1270.1	1194.5	1161.6	1189.1	1280.8	1293.1	981.6	874.4	805.2
35°	887.5	1232.9	1228.4	1103.4	1069.7	1095.3	1238.0	1229.8	865.4	831.6	788.1
37.5°	772.4	1178.6	1148.6	1011.3	957.6	1004.5	1157.7	1172.7	727.9	792.4	748.1
40°	676.3	1141.9	1089.0	942.9	890.2	936.1	1095.9	1138.7	652.8	764.8	703.9
42.5°	622.2	1109.4	1026.0	870.4	544.6	859.3	1032.9	1105.2	606.5	729.3	665.3
45°	567.3	1050.4	934.4	481.8	305.0	458.9	935.8	1035.7	572.8	675.3	605.9
47.5°	543.2	977.8	838.6	290.2	257.5	281.8	837.8	961.9	543.5	621.3	549.3
50°	524.5	932.0	770.2	255.7	211.2	246.3	771.5	917.0	514.8	585.0	510.7
52.5°	493.6	877.4	671.9	211.9	182.5	206.8	655.6	860.2	485.0	545.5	462.1
55°	441.7	772.3	280.2	166.5	146.3	159.8	266.4	746.3	426.5	483.2	405.8
57.5°	386.7	657.4	196.5	129.6	113.5	128.3	195.2	631.1	379.6	409.2	353.9
60°	354.7	580.1	160.1	108.8	98.0	107.4	158.7	557.1	352.0	360.0	306.4
62.5°	322.7	501.6	132.5	95.7	92.5	94.4	132.2	476.4	317.7	318.3	215.9
65°	276.0	380.0	98.0	86.9	85.6	85.6	95.2	366.3	270.5	262.4	124.2
67.5°	228.6	272.8	78.7	80.0	78.7	78.7	77.3	265.1	223.0	209.3	93.9
70°	198.7	209.5	73.2	74.5	73.2	73.2	71.8	204.0	193.2	162.2	88.3
72.5°	170.0	143.1	67.6	67.9	67.6	67.6	66.2	134.3	164.5	114.0	80.6
75°	128.4	71.7	58.0	58.0	58.0	58.0	56.6	68.9	122.8	74.3	69.0
77.5°	89.2	47.3	48.0	47.8	47.8	46.7	46.7	46.9	83.9	51.3	55.8
80°	64.9	39.2	41.4	40.0	40.0	40.0	40.0	37.8	60.7	43.2	46.9
82.5°	46.1	31.3	33.7	32.3	32.3	32.3	32.3	30.9	42.0	35.2	38.1
85°	22.1	20.7	22.1	19.3	17.9	19.3	20.7	20.7	19.3	23.4	24.8
87.5°	6.6	10.5	10.1	8.5	8.5	8.5	9.0	9.4	5.5	11.5	11.2
90°	0.0	3.0	6.2	9.3	9.3	9.3	6.2	3.0	0.0	3.0	6.2
92.5°	7.5	10.5	13.7	19.4	21.8	19.4	13.7	10.5	7.5	10.5	13.7
95°	24.9	46.2	24.9	28.2	34.3	28.2	24.9	46.2	24.9	46.2	24.9
97.5°	44.2	88.7	183.1	54.0	46.7	54.0	183.1	88.7	44.2	88.7	183.1
100°	59.2	110.9	367.4	108.2	71.6	108.2	367.4	110.9	59.2	110.9	367.4
102.5°	74.1	128.3	497.0	285.4	156.3	285.4	497.0	128.3	74.1	128.3	497.0
105°	96.5	148.3	563.6	720.0	476.4	720.0	563.6	148.3	96.5	148.3	563.6
107.5°	118.9	157.9	538.1	1047.8	981.5	1047.8	538.1	157.9	118.9	157.9	538.1
110°	133.9	170.4	523.1	1101.0	1183.2	1101.0	523.1	170.4	133.9	170.4	523.1



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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°	148.8	185.4	508.2	1069.9	1208.1	1069.9	508.2	185.4	148.8	185.4	508.2
115°	171.3	207.8	485.8	1009.6	1180.1	1009.6	485.8	207.8	171.3	207.8	485.8
117.5°	194.3	230.2	480.1	944.3	1119.7	944.3	480.1	230.2	194.3	230.2	480.1
120°	211.7	245.2	470.2	894.7	1077.4	894.7	470.2	245.2	211.7	245.2	470.2
122.5°	224.2	260.1	457.7	852.0	1020.1	852.0	457.7	260.1	224.2	260.1	457.7
125°	246.0	279.5	457.7	800.5	946.6	800.5	457.7	279.5	246.0	279.5	457.7
127.5°	264.0	298.1	458.3	740.6	884.9	740.6	458.3	298.1	264.0	298.1	458.3
130°	274.0	310.5	460.8	700.6	837.6	700.6	460.8	310.5	274.0	310.5	460.8
132.5°	286.5	323.0	460.8	682.6	795.3	682.6	460.8	323.0	286.5	323.0	460.8
135°	305.2	338.6	460.8	659.2	756.7	659.2	460.8	338.6	305.2	338.6	460.8
137.5°	320.7	356.6	460.8	633.4	716.8	633.4	460.8	356.6	320.7	356.6	460.8
140°	333.2	366.7	460.8	618.3	694.4	618.3	460.8	366.7	333.2	366.7	460.8
142.5°	345.6	376.7	463.3	600.7	672.0	600.7	463.3	376.7	345.6	376.7	463.3
145°	361.2	391.6	464.0	574.3	635.2	574.3	464.0	391.6	361.2	391.6	464.0
147.5°	379.9	406.7	467.7	555.3	602.2	555.3	467.7	406.7	379.9	406.7	467.7
150°	392.3	416.7	470.2	542.7	582.3	542.7	470.2	416.7	392.3	416.7	470.2
152.5°	404.8	426.7	470.2	532.6	564.8	532.6	470.2	426.7	404.8	426.7	470.2
155°	423.5	438.7	473.3	520.6	544.9	520.6	473.3	438.7	423.5	438.7	473.3
157.5°	438.4	453.0	477.0	512.9	530.6	512.9	477.0	453.0	438.4	453.0	477.0
160°	448.4	460.6	479.5	507.9	523.1	507.9	479.5	460.6	448.4	460.6	479.5
162.5°	455.9	468.0	482.0	505.3	515.6	505.3	482.0	468.0	455.9	468.0	482.0
165°	470.2	476.3	485.8	498.4	507.5	498.4	485.8	476.3	470.2	476.3	485.8
167.5°	478.3	483.8	488.9	495.2	500.7	495.2	488.9	483.8	478.3	483.8	488.9
170°	485.8	488.8	488.9	495.2	498.2	495.2	488.9	488.8	485.8	488.8	488.9
172.5°	488.2	493.7	491.4	492.7	495.7	492.7	491.4	493.7	488.2	493.7	491.4
175°	495.1	498.1	495.1	491.9	488.9	491.9	495.1	498.1	495.1	498.1	495.1
177.5°	495.1	497.5	495.1	495.0	492.6	495.0	495.1	497.5	495.1	497.5	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7
2.5°	1268.4	1267.3	1269.5	1288.3	1326.6	1361.2
5°	1155.3	1159.4	1163.4	1195.3	1262.2	1354.0
7.5°	1068.4	1062.5	1071.7	1123.5	1205.7	1337.4
10°	1008.6	995.1	1008.6	1079.3	1175.1	1320.9
12.5°	952.2	935.5	956.6	1034.0	1149.8	1298.8
15°	879.6	895.7	886.3	973.0	1111.7	1260.1
17.5°	896.8	978.3	914.0	920.0	1073.8	1220.4
20°	937.7	1021.3	964.7	884.7	1049.4	1188.4
22.5°	974.8	1037.9	986.6	854.9	1025.0	1159.6
25°	1003.3	1057.2	1000.6	828.1	989.6	1111.1
27.5°	1004.7	1012.2	1005.2	825.9	945.9	1062.8
30°	986.1	953.7	983.4	828.1	914.8	1024.1
32.5°	933.0	896.3	921.7	823.7	883.4	973.3
35°	857.4	808.8	843.9	800.5	834.8	887.5
37.5°	777.6	716.0	764.6	754.7	793.4	772.4
40°	723.5	615.6	712.7	709.4	770.8	676.3
42.5°	654.3	562.6	644.6	673.0	745.8	622.2
45°	528.4	517.6	523.0	611.4	692.8	567.3
47.5°	483.2	475.9	480.5	555.4	632.9	543.2
50°	456.6	447.2	453.9	519.0	594.7	524.5
52.5°	419.8	394.2	417.1	469.3	555.1	493.6
55°	315.7	238.8	314.3	412.7	495.6	441.7
57.5°	185.3	138.0	181.2	359.1	419.9	386.7
60°	125.4	115.9	126.7	316.1	369.6	354.7
62.5°	114.5	111.5	114.8	220.0	324.6	322.7
65°	104.9	103.5	104.9	127.0	267.9	276.0
67.5°	94.9	93.6	96.0	97.4	211.6	228.6
70°	88.3	87.0	88.3	89.7	162.3	198.7
72.5°	80.6	79.2	80.6	82.0	114.2	170.0
75°	69.0	67.6	69.0	70.4	75.7	128.4
77.5°	55.8	55.8	57.1	57.1	53.0	89.2
80°	46.9	46.9	48.3	48.3	46.0	64.9
82.5°	38.1	37.0	39.4	40.6	38.0	46.1
85°	23.4	22.1	24.8	26.2	24.8	22.1
87.5°	10.7	9.6	11.8	13.4	12.6	6.6
90°	9.3	9.3	9.3	6.2	3.0	0.0
92.5°	19.4	21.8	19.4	13.7	10.5	7.5
95°	28.2	34.3	28.2	24.9	46.2	24.9
97.5°	54.0	46.7	54.0	183.1	88.7	44.2
100°	108.2	71.6	108.2	367.4	110.9	59.2
102.5°	285.4	156.3	285.4	497.0	128.3	74.1
105°	720.0	476.4	720.0	563.6	148.3	96.5
107.5°	1047.8	981.5	1047.8	538.1	157.9	118.9
110°	1101.0	1183.2	1101.0	523.1	170.4	133.9





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1069.9	1208.1	1069.9	508.2	185.4	148.8
115°	1009.6	1180.1	1009.6	485.8	207.8	171.3
117.5°	944.3	1119.7	944.3	480.1	230.2	194.3
120°	894.7	1077.4	894.7	470.2	245.2	211.7
122.5°	852.0	1020.1	852.0	457.7	260.1	224.2
125°	800.5	946.6	800.5	457.7	279.5	246.0
127.5°	740.6	884.9	740.6	458.3	298.1	264.0
130°	700.6	837.6	700.6	460.8	310.5	274.0
132.5°	682.6	795.3	682.6	460.8	323.0	286.5
135°	659.2	756.7	659.2	460.8	338.6	305.2
137.5°	633.4	716.8	633.4	460.8	356.6	320.7
140°	618.3	694.4	618.3	460.8	366.7	333.2
142.5°	600.7	672.0	600.7	463.3	376.7	345.6
145°	574.3	635.2	574.3	464.0	391.6	361.2
147.5°	555.3	602.2	555.3	467.7	406.7	379.9
150°	542.7	582.3	542.7	470.2	416.7	392.3
152.5°	532.6	564.8	532.6	470.2	426.7	404.8
155°	520.6	544.9	520.6	473.3	438.7	423.5
157.5°	512.9	530.6	512.9	477.0	453.0	438.4
160°	507.9	523.1	507.9	479.5	460.6	448.4
162.5°	505.3	515.6	505.3	482.0	468.0	455.9
165°	498.4	507.5	498.4	485.8	476.3	470.2
167.5°	495.2	500.7	495.2	488.9	483.8	478.3
170°	495.2	498.2	495.2	488.9	488.8	485.8
172.5°	492.7	495.7	492.7	491.4	493.7	488.2
175°	491.9	488.9	491.9	495.1	498.1	495.1
177.5°	495.0	492.6	495.0	495.1	497.5	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1

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