

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: P621617

Luminaire Tested: VLT-FA-050U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621617  
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-050U-100D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

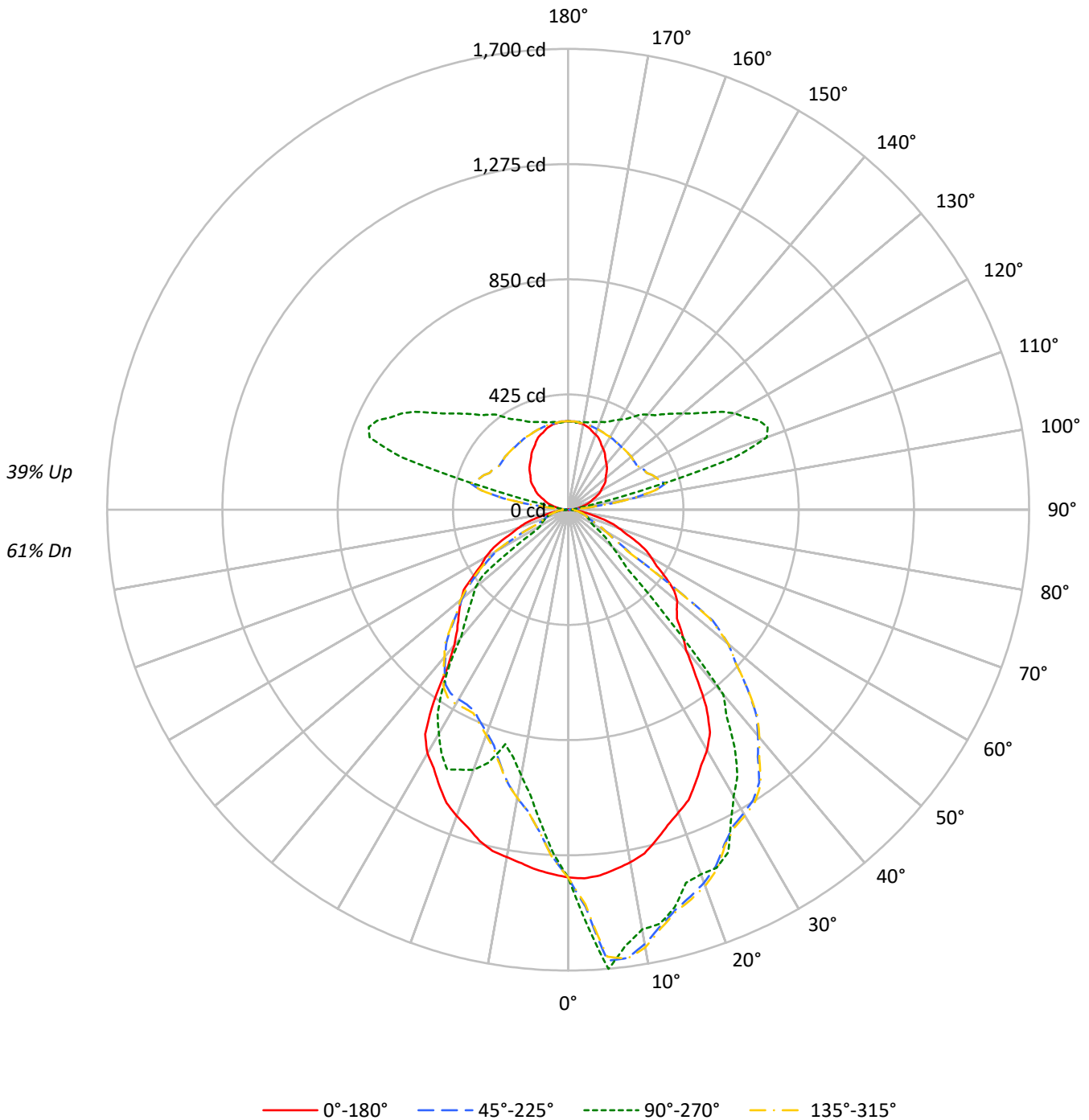
Lumens per Lamp: N/A  
Luminaire Lumens: 4550.9 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 43.8  
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



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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	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	97	94	91	95	91	88	86	80	78	76	70	68	67	61	59	58	54
2	93	86	81	76	87	81	76	72	72	68	65	63	60	57	55	53	51	47
3	86	77	70	64	80	72	66	61	64	59	55	56	53	50	49	47	44	41
4	79	69	61	55	74	65	58	53	58	52	48	51	47	44	45	42	39	36
5	73	62	54	48	68	58	51	46	52	46	42	46	42	38	41	37	35	32
6	67	56	48	42	63	53	46	41	47	42	37	42	38	34	37	34	31	28
7	63	51	43	37	59	48	41	36	43	37	33	38	34	30	34	31	28	25
8	58	46	39	33	55	44	37	32	40	34	30	35	31	27	32	28	25	23
9	54	42	35	30	51	40	34	29	36	31	27	33	28	25	29	26	23	21
10	51	39	32	27	48	37	31	26	34	28	25	30	26	23	27	24	21	19

**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	2.9
10°-20°	358.5	7.9
20°-30°	536.5	11.8
30°-40°	610.1	13.4
40°-50°	521.8	11.5
50°-60°	351.9	7.7
60°-70°	181.6	4.0
70°-80°	82.0	1.8
80°-90°	25.1	0.6
90°-100°	40.1	0.9
100°-110°	285.8	6.3
110°-120°	388.0	8.5
120°-130°	315.8	6.9
130°-140°	254.0	5.6
140°-150°	200.3	4.4
150°-160°	146.4	3.2
160°-170°	90.9	2.0
170°-180°	31.0	0.7
0°-30°	1025.9	22.5
0°-40°	1636.0	35.9
0°-60°	2509.6	55.1
0°-90°	2798.4	61.5
90°-120°	714.0	15.7
90°-150°	1484.1	32.6
90°-180°	1752.0	38.5
0°-180°	4550.9	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	6	0	6	0	2
95°	16	23	16	23	16	18
105°	64	314	64	314	64	67
115°	113	778	113	778	113	112
125°	162	624	162	624	162	144
135°	201	499	201	499	201	155
145°	238	419	238	419	238	149
155°	279	359	279	359	279	128
165°	310	334	310	334	310	87
175°	326	322	326	322	326	31
180°	326	326	326	326	326	



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**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	10.3	9.7	7.9	7.9	7.9	8.5	9.2	5.5	11.3	10.8
90°	0.0	2.0	4.1	6.2	6.2	6.2	4.1	2.0	0.0	2.0	4.1
92.5°	4.9	6.9	9.0	12.8	14.4	12.8	9.0	6.9	4.9	6.9	9.0
95°	16.4	30.5	16.4	18.6	22.6	18.6	16.4	30.5	16.4	30.5	16.4
97.5°	29.1	58.4	120.6	35.6	30.8	35.6	120.6	58.4	29.1	58.4	120.6
100°	39.0	73.1	242.1	71.3	47.2	71.3	242.1	73.1	39.0	73.1	242.1
102.5°	48.8	84.5	327.5	188.1	103.0	188.1	327.5	84.5	48.8	84.5	327.5
105°	63.6	97.7	371.4	474.4	313.9	474.4	371.4	97.7	63.6	97.7	371.4
107.5°	78.4	104.1	354.6	690.5	646.7	690.5	354.6	104.1	78.4	104.1	354.6
110°	88.2	112.3	344.7	725.5	779.7	725.5	344.7	112.3	88.2	112.3	344.7



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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°	98.1	122.2	334.9	705.0	796.1	705.0	334.9	122.2	98.1	122.2	334.9
115°	112.9	136.9	320.1	665.3	777.6	665.3	320.1	136.9	112.9	136.9	320.1
117.5°	128.0	151.7	316.4	622.3	737.8	622.3	316.4	151.7	128.0	151.7	316.4
120°	139.5	161.6	309.8	589.6	709.9	589.6	309.8	161.6	139.5	161.6	309.8
122.5°	147.7	171.4	301.6	561.4	672.2	561.4	301.6	171.4	147.7	171.4	301.6
125°	162.1	184.2	301.6	527.5	623.8	527.5	301.6	184.2	162.1	184.2	301.6
127.5°	174.0	196.5	302.0	488.0	583.1	488.0	302.0	196.5	174.0	196.5	302.0
130°	180.6	204.6	303.7	461.7	551.9	461.7	303.7	204.6	180.6	204.6	303.7
132.5°	188.8	212.8	303.7	449.8	524.0	449.8	303.7	212.8	188.8	212.8	303.7
135°	201.1	223.1	303.7	434.4	498.6	434.4	303.7	223.1	201.1	223.1	303.7
137.5°	211.3	235.0	303.7	417.4	472.3	417.4	303.7	235.0	211.3	235.0	303.7
140°	219.5	241.6	303.7	407.4	457.6	407.4	303.7	241.6	219.5	241.6	303.7
142.5°	227.8	248.2	305.3	395.8	442.8	395.8	305.3	248.2	227.8	248.2	305.3
145°	238.0	258.1	305.7	378.4	418.6	378.4	305.7	258.1	238.0	258.1	305.7
147.5°	250.3	268.0	308.2	365.9	396.8	365.9	308.2	268.0	250.3	268.0	308.2
150°	258.5	274.6	309.8	357.6	383.7	357.6	309.8	274.6	258.5	274.6	309.8
152.5°	266.7	281.2	309.8	350.9	372.2	350.9	309.8	281.2	266.7	281.2	309.8
155°	279.0	289.1	311.9	343.0	359.1	343.0	311.9	289.1	279.0	289.1	311.9
157.5°	288.9	298.5	314.3	338.0	349.6	338.0	314.3	298.5	288.9	298.5	314.3
160°	295.5	303.5	316.0	334.7	344.7	334.7	316.0	303.5	295.5	303.5	316.0
162.5°	300.4	308.4	317.6	333.0	339.8	333.0	317.6	308.4	300.4	308.4	317.6
165°	309.8	313.8	320.1	328.4	334.4	328.4	320.1	313.8	309.8	313.8	320.1
167.5°	315.2	318.8	322.1	326.3	329.9	326.3	322.1	318.8	315.2	318.8	322.1
170°	320.1	322.1	322.1	326.3	328.3	326.3	322.1	322.1	320.1	322.1	322.1
172.5°	321.7	325.3	323.8	324.6	326.7	324.6	323.8	325.3	321.7	325.3	323.8
175°	326.2	328.2	326.2	324.1	322.1	324.1	326.2	328.2	326.2	328.2	326.2
177.5°	326.2	327.8	326.2	326.2	324.6	326.2	326.2	327.8	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2



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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°	10.0	9.0	11.1	13.0	12.4	6.6
90°	6.2	6.2	6.2	4.1	2.0	0.0
92.5°	12.8	14.4	12.8	9.0	6.9	4.9
95°	18.6	22.6	18.6	16.4	30.5	16.4
97.5°	35.6	30.8	35.6	120.6	58.4	29.1
100°	71.3	47.2	71.3	242.1	73.1	39.0
102.5°	188.1	103.0	188.1	327.5	84.5	48.8
105°	474.4	313.9	474.4	371.4	97.7	63.6
107.5°	690.5	646.7	690.5	354.6	104.1	78.4
110°	725.5	779.7	725.5	344.7	112.3	88.2





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	705.0	796.1	705.0	334.9	122.2	98.1
115°	665.3	777.6	665.3	320.1	136.9	112.9
117.5°	622.3	737.8	622.3	316.4	151.7	128.0
120°	589.6	709.9	589.6	309.8	161.6	139.5
122.5°	561.4	672.2	561.4	301.6	171.4	147.7
125°	527.5	623.8	527.5	301.6	184.2	162.1
127.5°	488.0	583.1	488.0	302.0	196.5	174.0
130°	461.7	551.9	461.7	303.7	204.6	180.6
132.5°	449.8	524.0	449.8	303.7	212.8	188.8
135°	434.4	498.6	434.4	303.7	223.1	201.1
137.5°	417.4	472.3	417.4	303.7	235.0	211.3
140°	407.4	457.6	407.4	303.7	241.6	219.5
142.5°	395.8	442.8	395.8	305.3	248.2	227.8
145°	378.4	418.6	378.4	305.7	258.1	238.0
147.5°	365.9	396.8	365.9	308.2	268.0	250.3
150°	357.6	383.7	357.6	309.8	274.6	258.5
152.5°	350.9	372.2	350.9	309.8	281.2	266.7
155°	343.0	359.1	343.0	311.9	289.1	279.0
157.5°	338.0	349.6	338.0	314.3	298.5	288.9
160°	334.7	344.7	334.7	316.0	303.5	295.5
162.5°	333.0	339.8	333.0	317.6	308.4	300.4
165°	328.4	334.4	328.4	320.1	313.8	309.8
167.5°	326.3	329.9	326.3	322.1	318.8	315.2
170°	326.3	328.3	326.3	322.1	322.1	320.1
172.5°	324.6	326.7	324.6	323.8	325.3	321.7
175°	324.1	322.1	324.1	326.2	328.2	326.2
177.5°	326.2	324.6	326.2	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2

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