

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: P621633

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621633  
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-075D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

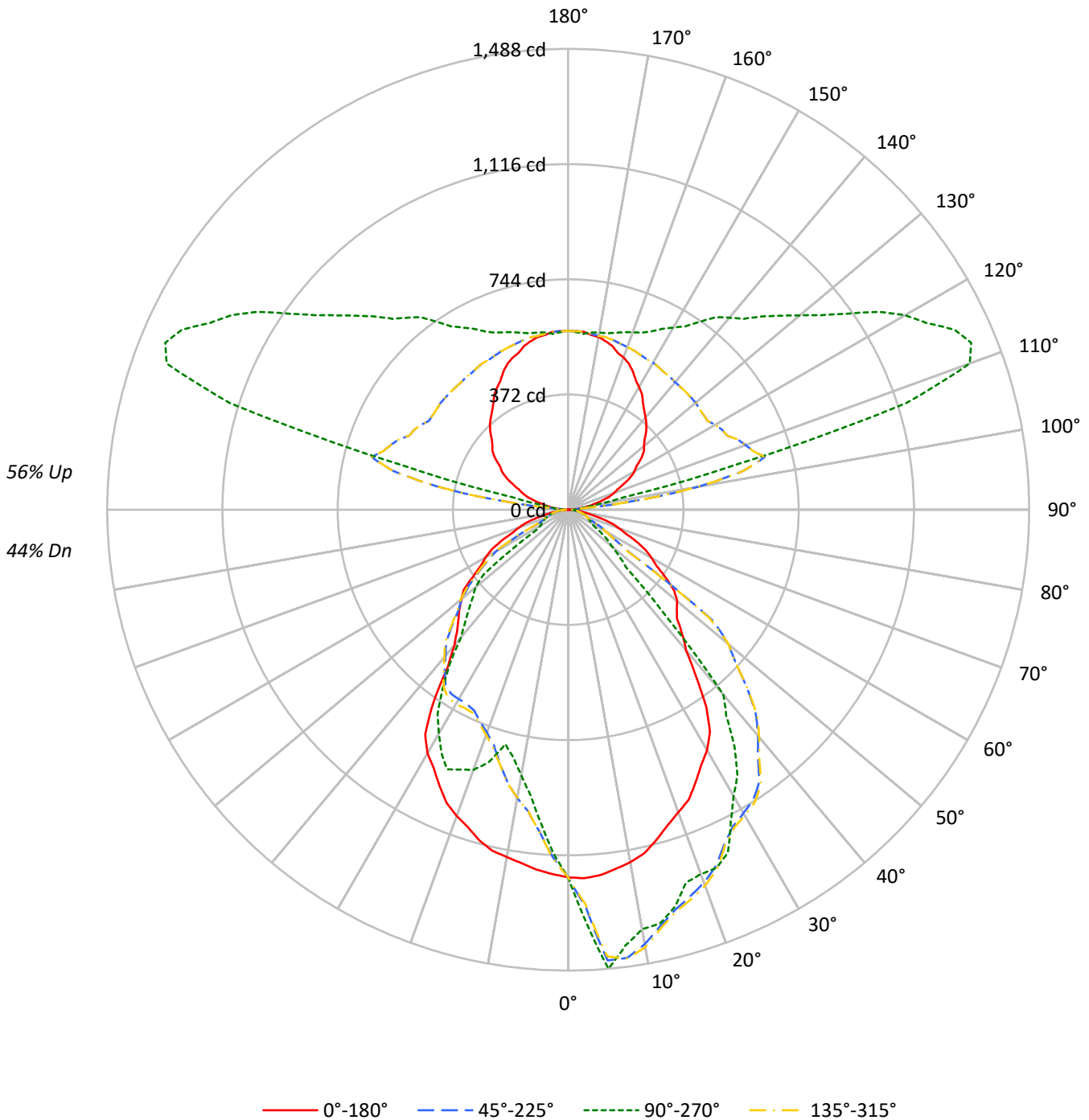
Lumens per Lamp: N/A  
Luminaire Lumens: 5548.4 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 42.4  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	93	90	86	89	86	83	80	71	69	67	58	57	55	46	45	44	39
2	89	82	77	72	81	76	71	67	63	60	57	52	50	47	41	40	38	34
3	82	73	66	61	75	67	61	57	56	52	49	47	43	41	37	35	34	29
4	75	65	58	52	69	60	54	49	51	46	42	42	38	36	34	31	29	26
5	69	58	50	45	63	54	47	42	46	40	37	38	34	31	31	28	26	23
6	64	52	45	39	58	49	42	37	41	36	32	34	31	28	28	25	23	20
7	59	47	40	34	54	44	37	32	38	32	29	31	28	25	26	23	21	18
8	55	43	36	31	50	40	33	29	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	37	30	26	32	26	23	27	23	20	22	19	17	15
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	20	18	16	14

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

	0°	90°	180°	270°
0°	8518	8518	8518	8518
5°	8533	10716	8403	7307
10°	8420	10022	8297	6344
15°	8191	9868	8217	5822
20°	7940	9562	8032	6824
25°	7697	9666	7783	7324
30°	7424	8845	7525	6914
35°	6802	8199	6632	6199
40°	5543	7296	5351	5045
45°	5037	2709	5085	4595
50°	5123	2063	5028	4367
55°	4834	1601	4668	2614
60°	4453	1230	4419	1455
65°	4101	1272	4019	1538
70°	3649	1343	3548	1597
75°	3114	1406	2981	1641
80°	2347	1446	2194	1698
85°	1589	1293	1391	1589

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 9326 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.5	2.1
10°-20°	313.7	5.7
20°-30°	469.4	8.5
30°-40°	533.8	9.6
40°-50°	456.5	8.2
50°-60°	307.9	5.5
60°-70°	158.9	2.9
70°-80°	71.7	1.3
80°-90°	22.6	0.4
90°-100°	70.9	1.3
100°-110°	505.5	9.1
110°-120°	686.3	12.4
120°-130°	558.6	10.1
130°-140°	449.3	8.1
140°-150°	354.2	6.4
150°-160°	259.0	4.7
160°-170°	160.9	2.9
170°-180°	54.9	1.0
0°-30°	897.6	16.2
0°-40°	1431.3	25.8
0°-60°	2195.7	39.6
0°-90°	2449.0	44.1
90°-120°	1262.7	22.8
90°-150°	2624.7	47.3
90°-180°	3099.0	55.9
0°-180°	5548.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1187	1187	1187	1187	1187	
5°	1185	1488	1166	1014	1185	112
15°	1102	1328	1106	784	1102	310
25°	972	1221	983	925	972	447
35°	776	936	757	708	776	475
45°	496	267	501	453	496	394
55°	386	128	373	209	386	344
65°	242	75	237	91	242	239
75°	112	51	108	59	112	120
85°	19	16	17	19	19	25
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°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1190.9	1231.5	1282.7	1317.8	1332.9	1317.8	1274.0	1231.2	1177.4	1161.3	1123.3
5°	1184.6	1309.8	1461.1	1479.4	1487.7	1479.4	1447.9	1302.3	1166.5	1108.6	1045.7
7.5°	1170.1	1389.0	1459.5	1418.6	1418.9	1426.4	1461.6	1382.2	1151.3	1060.4	983.2
10°	1155.6	1433.1	1423.7	1364.8	1375.4	1370.7	1434.6	1424.5	1138.7	1033.6	945.5
12.5°	1136.3	1446.8	1376.4	1357.1	1368.6	1362.0	1383.4	1439.3	1128.1	1014.5	902.0
15°	1102.5	1427.2	1336.8	1328.3	1328.3	1334.2	1342.8	1433.2	1106.1	979.8	848.9
17.5°	1067.7	1387.9	1309.2	1267.4	1262.9	1270.7	1319.1	1398.0	1075.0	941.3	797.5
20°	1039.7	1360.9	1281.2	1232.2	1252.2	1234.5	1292.1	1368.2	1051.8	917.2	765.6
22.5°	1014.6	1327.2	1245.5	1224.6	1251.3	1225.1	1255.4	1334.6	1024.7	890.1	741.4
25°	972.1	1270.8	1191.9	1211.4	1220.8	1211.4	1196.7	1275.8	983.0	855.4	716.1
27.5°	929.8	1211.3	1151.8	1164.9	1136.1	1158.3	1158.3	1211.5	940.0	815.0	708.4
30°	896.0	1169.9	1131.5	1112.4	1067.5	1102.9	1139.9	1170.2	908.1	788.8	706.4
32.5°	851.6	1132.1	1111.2	1045.1	1016.3	1040.4	1120.6	1131.3	858.8	765.1	704.5
35°	776.5	1078.7	1074.7	965.4	935.9	958.3	1083.2	1075.9	757.1	727.6	689.5
37.5°	675.8	1031.1	1004.9	884.8	837.8	878.9	1012.9	1026.0	636.9	693.3	654.5
40°	591.7	999.1	952.8	824.9	778.9	819.0	958.8	996.2	571.2	669.2	615.9
42.5°	544.4	970.6	897.7	761.5	476.5	751.8	903.7	967.0	530.6	638.0	582.0
45°	496.3	919.0	817.5	421.5	266.9	401.5	818.7	906.1	501.1	590.9	530.1
47.5°	475.3	855.5	733.7	253.9	225.3	246.6	733.0	841.6	475.5	543.5	480.6
50°	458.9	815.5	673.8	223.7	184.8	215.5	675.0	802.3	450.4	511.8	446.8
52.5°	431.8	767.6	587.8	185.4	159.6	180.9	573.6	752.6	424.3	477.2	404.3
55°	386.4	675.7	245.1	145.7	128.0	139.8	233.1	653.0	373.1	422.7	355.0
57.5°	338.4	575.2	172.0	113.4	99.3	112.2	170.7	552.2	332.1	358.1	309.6
60°	310.3	507.5	140.1	95.2	85.7	94.0	138.9	487.4	307.9	315.0	268.1
62.5°	282.3	438.9	115.9	83.7	80.9	82.6	115.7	416.8	278.0	278.5	188.9
65°	241.5	332.4	85.7	76.0	74.9	74.9	83.3	320.5	236.7	229.6	108.7
67.5°	200.0	238.7	68.8	70.0	68.8	68.8	67.6	232.0	195.1	183.1	82.1
70°	173.9	183.3	64.0	65.2	64.0	64.0	62.8	178.5	169.1	141.9	77.3
72.5°	148.8	125.2	59.2	59.4	59.2	59.2	58.0	117.5	143.9	99.8	70.5
75°	112.3	62.7	50.7	50.7	50.7	50.7	49.5	60.2	107.5	65.0	60.4
77.5°	78.0	41.4	42.0	41.8	41.8	40.8	40.8	41.1	73.4	44.8	48.8
80°	56.8	34.3	36.2	35.0	35.0	35.0	35.0	33.1	53.1	37.8	41.1
82.5°	40.3	27.3	29.5	28.3	28.3	28.3	28.3	27.0	36.7	30.8	33.3
85°	19.3	18.1	19.3	16.9	15.7	16.9	18.1	18.1	16.9	20.4	21.7
87.5°	5.8	9.3	9.2	8.0	8.0	8.0	8.2	8.4	4.8	10.3	10.1
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°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1109.7	1108.8	1110.7	1127.1	1160.7	1190.9
5°	1010.8	1014.4	1017.9	1045.7	1104.3	1184.6
7.5°	934.8	929.6	937.6	983.0	1054.9	1170.1
10°	882.5	870.7	882.5	944.3	1028.1	1155.6
12.5°	833.1	818.5	836.9	904.7	1006.0	1136.3
15°	769.5	783.7	775.4	851.3	972.6	1102.5
17.5°	784.6	855.9	799.7	805.0	939.5	1067.7
20°	820.4	893.6	844.0	774.0	918.1	1039.7
22.5°	852.8	908.1	863.2	748.0	896.8	1014.6
25°	877.8	925.0	875.4	724.5	865.8	972.1
27.5°	879.0	885.6	879.5	722.6	827.6	929.8
30°	862.8	834.4	860.4	724.5	800.4	896.0
32.5°	816.3	784.2	806.4	720.7	772.9	851.6
35°	750.1	707.6	738.3	700.4	730.4	776.5
37.5°	680.3	626.5	669.0	660.3	694.2	675.8
40°	633.0	538.6	623.6	620.7	674.4	591.7
42.5°	572.5	492.2	564.0	588.8	652.5	544.4
45°	462.3	452.8	457.6	534.9	606.1	496.3
47.5°	422.7	416.4	420.4	485.9	553.7	475.3
50°	399.5	391.2	397.2	454.0	520.3	458.9
52.5°	367.3	344.9	365.0	410.6	485.7	431.8
55°	276.2	208.9	275.0	361.1	433.6	386.4
57.5°	162.1	120.8	158.5	314.2	367.4	338.4
60°	109.7	101.4	110.9	276.5	323.3	310.3
62.5°	100.2	97.6	100.4	192.5	284.0	282.3
65°	91.7	90.6	91.7	111.1	234.4	241.5
67.5°	83.1	81.9	84.0	85.3	185.1	200.0
70°	77.3	76.1	77.3	78.5	142.0	173.9
72.5°	70.5	69.3	70.5	71.7	99.9	148.8
75°	60.4	59.2	60.4	61.6	66.3	112.3
77.5°	48.8	48.8	50.0	50.0	46.4	78.0
80°	41.1	41.1	42.2	42.3	40.2	56.8
82.5°	33.3	32.4	34.5	35.5	33.2	40.3
85°	20.5	19.3	21.7	22.9	21.7	19.3
87.5°	9.9	8.9	10.8	12.1	11.2	5.8
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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