

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: P621583

Luminaire Tested: VLT-FA-025U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621583
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-075D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

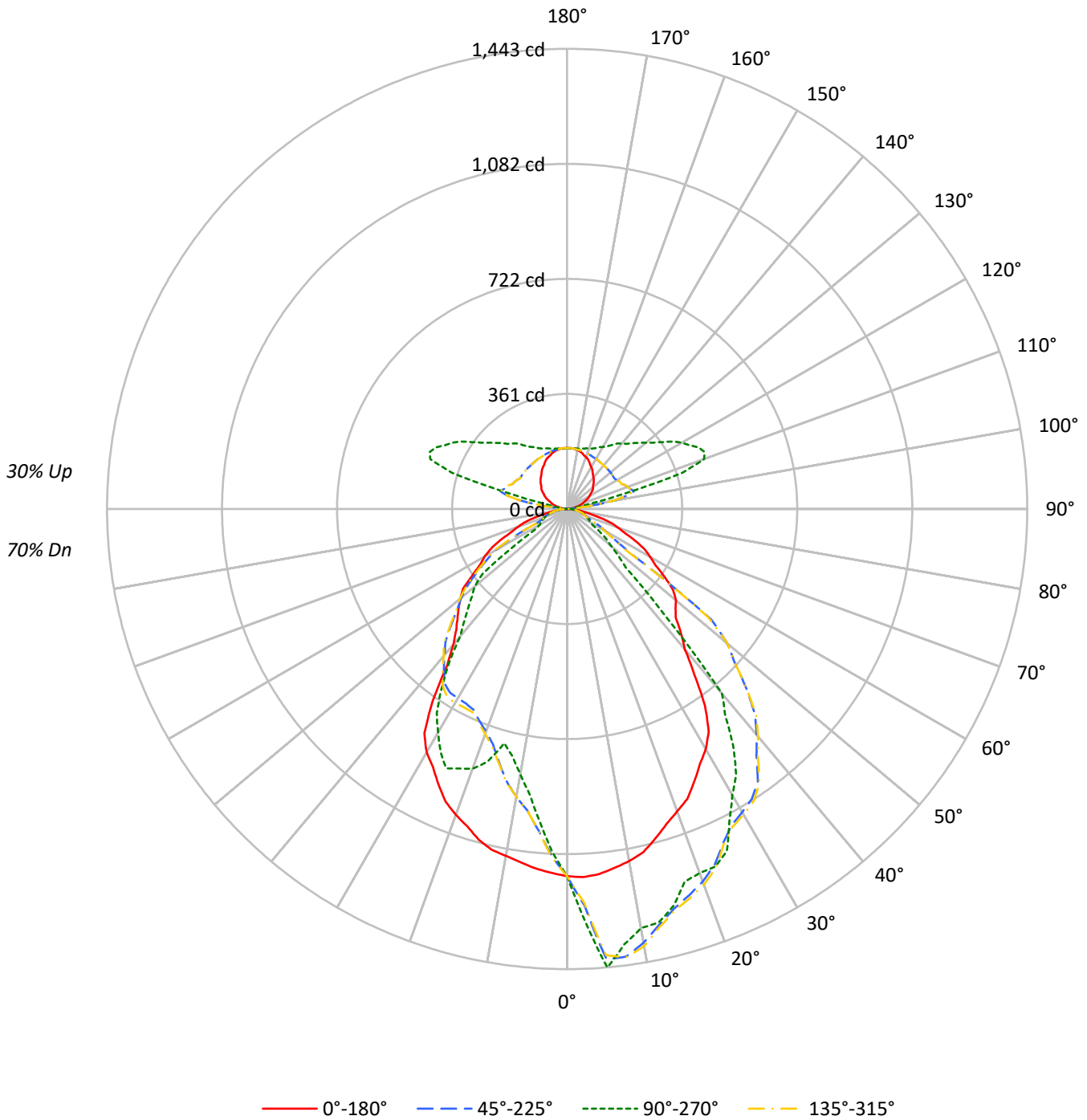
Lumens per Lamp: N/A
Luminaire Lumens: 3401.8 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 29.9
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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	74	74	74	70	
1	103	99	96	93	98	94	91	88	85	82	80	76	74	72	68	66	65	65	65	65	61	
2	95	88	82	78	90	84	79	74	76	72	68	68	65	62	61	59	57	57	57	57	53	
3	88	79	72	66	83	75	69	64	68	63	59	61	57	54	55	52	50	50	50	50	46	
4	81	70	63	57	76	67	60	55	61	55	51	55	51	47	50	46	44	44	44	44	41	
5	75	63	56	50	70	60	53	48	55	49	45	50	45	42	45	42	39	39	39	39	36	
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35	35	35	35	32	
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	38	34	31	31	31	31	29	
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	35	31	28	28	28	28	26	
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26	26	26	26	24	
10	52	40	33	29	50	39	32	28	36	30	26	33	28	25	30	26	23	23	23	23	22	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8264	8264	8264	8264
5°	8279	10397	8152	7089
10°	8170	9723	8050	6155
15°	7946	9574	7972	5648
20°	7703	9278	7792	6620
25°	7467	9378	7550	7105
30°	7203	8581	7300	6708
35°	6599	7953	6435	6014
40°	5378	7078	5191	4895
45°	4886	2627	4934	4458
50°	4970	2001	4879	4238
55°	4690	1554	4529	2536
60°	4321	1194	4287	1412
65°	3978	1233	3899	1493
70°	3540	1303	3441	1548
75°	3022	1364	2892	1591
80°	2277	1405	2128	1645
85°	1540	1251	1350	1540

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9048 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	3.3
10°-20°	304.3	8.9
20°-30°	455.4	13.4
30°-40°	517.9	15.2
40°-50°	442.9	13.0
50°-60°	298.7	8.8
60°-70°	154.2	4.5
70°-80°	69.6	2.0
80°-90°	21.1	0.6
90°-100°	23.5	0.7
100°-110°	167.4	4.9
110°-120°	227.3	6.7
120°-130°	185.0	5.4
130°-140°	148.8	4.4
140°-150°	117.3	3.4
150°-160°	85.8	2.5
160°-170°	53.3	1.6
170°-180°	18.2	0.5
0°-30°	870.8	25.6
0°-40°	1388.7	40.8
0°-60°	2130.2	62.6
0°-90°	2375.1	69.8
90°-120°	418.3	12.3
90°-150°	869.5	25.6
90°-180°	1027.0	30.2
0°-180°	3401.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1152	1152	1152	1152	1152	
5°	1149	1443	1132	984	1149	109
15°	1070	1289	1073	760	1070	301
25°	943	1184	954	897	943	434
35°	753	908	735	686	753	461
45°	482	259	486	439	482	382
55°	375	124	362	203	375	334
65°	234	73	230	88	234	232
75°	109	49	104	57	109	116
85°	19	15	16	19	19	24
90°	0	4	0	4	0	1
95°	10	13	10	13	10	11
105°	37	184	37	184	37	39
115°	66	456	66	456	66	66
125°	95	365	95	365	95	84
135°	118	292	118	292	118	91
145°	139	245	139	245	139	88
155°	164	210	164	210	164	75
165°	182	196	182	196	182	51
175°	191	189	191	189	191	18
180°	191	191	191	191	191	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6
2.5°	1155.4	1194.8	1244.4	1278.5	1293.2	1278.5	1236.0	1194.5	1142.3	1126.7	1089.8
5°	1149.3	1270.7	1417.6	1435.3	1443.3	1435.3	1404.7	1263.4	1131.7	1075.6	1014.6
7.5°	1135.2	1347.6	1415.9	1376.3	1376.6	1383.9	1418.0	1341.0	1117.0	1028.7	953.9
10°	1121.2	1390.4	1381.3	1324.1	1334.4	1329.8	1391.8	1382.0	1104.8	1002.8	917.3
12.5°	1102.4	1403.7	1335.3	1316.6	1327.8	1321.4	1342.1	1396.4	1094.5	984.3	875.1
15°	1069.6	1384.6	1296.9	1288.7	1288.7	1294.4	1302.8	1390.4	1073.1	950.6	823.6
17.5°	1035.9	1346.5	1270.2	1229.6	1225.2	1232.8	1279.8	1356.3	1042.9	913.2	773.7
20°	1008.7	1320.3	1243.0	1195.4	1214.9	1197.7	1253.6	1327.4	1020.4	889.8	742.8
22.5°	984.3	1287.7	1208.3	1188.1	1214.0	1188.5	1217.9	1294.8	994.2	863.6	719.3
25°	943.1	1232.9	1156.3	1175.3	1184.4	1175.3	1161.0	1237.7	953.6	829.9	694.7
27.5°	902.1	1175.2	1117.4	1130.1	1102.2	1123.7	1123.7	1175.4	911.9	790.7	687.2
30°	869.3	1135.0	1097.7	1079.2	1035.6	1070.0	1105.9	1135.3	881.0	765.3	685.4
32.5°	826.2	1098.3	1078.1	1013.9	986.0	1009.3	1087.2	1097.6	833.2	742.2	683.5
35°	753.3	1046.6	1042.7	936.6	907.9	929.7	1050.9	1043.8	734.6	705.9	669.0
37.5°	655.6	1000.4	975.0	858.4	812.8	852.7	982.7	995.4	617.9	672.6	635.0
40°	574.1	969.3	924.3	800.3	755.6	794.6	930.2	966.5	554.1	649.2	597.5
42.5°	528.1	941.7	870.9	738.8	462.3	729.4	876.8	938.2	514.8	619.0	564.7
45°	481.5	891.6	793.1	409.0	258.9	389.5	794.3	879.1	486.2	573.2	514.3
47.5°	461.1	830.0	711.8	246.3	218.6	239.2	711.1	816.5	461.4	527.3	466.3
50°	445.2	791.1	653.7	217.0	179.2	209.0	654.9	778.3	437.0	496.6	433.5
52.5°	418.9	744.7	570.3	179.9	154.9	175.5	556.5	730.1	411.7	463.0	392.2
55°	374.9	655.5	237.8	141.4	124.2	135.6	226.1	633.5	362.0	410.1	344.4
57.5°	328.3	558.1	166.8	110.0	96.3	108.9	165.7	535.7	322.2	347.4	300.4
60°	301.1	492.4	135.9	92.3	83.2	91.2	134.7	472.9	298.7	305.6	260.1
62.5°	273.9	425.8	112.5	81.2	78.5	80.1	112.2	404.4	269.7	270.1	183.2
65°	234.3	322.5	83.2	73.8	72.6	72.6	80.8	311.0	229.6	222.7	105.4
67.5°	194.0	231.6	66.8	67.9	66.8	66.8	65.6	225.1	189.3	177.6	79.7
70°	168.7	177.9	62.1	63.2	62.1	62.1	60.9	173.2	164.0	137.7	75.0
72.5°	144.3	121.4	57.4	57.6	57.4	57.4	56.2	114.0	139.6	96.8	68.4
75°	109.0	60.8	49.2	49.2	49.2	49.2	48.0	58.4	104.3	63.0	58.6
77.5°	75.7	40.2	40.8	40.5	40.5	39.6	39.6	39.8	71.2	43.5	47.3
80°	55.1	33.3	35.1	34.0	34.0	34.0	34.0	32.1	51.5	36.7	39.8
82.5°	39.1	26.5	28.6	27.4	27.4	27.4	27.4	26.2	35.6	29.9	32.3
85°	18.7	17.6	18.7	16.4	15.2	16.4	17.6	17.5	16.4	19.8	21.1
87.5°	5.6	8.6	8.0	6.3	6.3	6.3	7.0	7.7	4.7	9.5	8.9
90°	0.0	1.2	2.4	3.6	3.6	3.6	2.4	1.2	0.0	1.2	2.4
92.5°	2.9	4.1	5.3	7.5	8.4	7.5	5.3	4.1	2.9	4.1	5.3
95°	9.6	17.8	9.6	10.9	13.2	10.9	9.6	17.8	9.6	17.8	9.6
97.5°	17.1	34.2	70.7	20.9	18.0	20.9	70.7	34.2	17.1	34.2	70.7
100°	22.8	42.8	141.8	41.8	27.6	41.8	141.8	42.8	22.8	42.8	141.8
102.5°	28.6	49.5	191.9	110.2	60.3	110.2	191.9	49.5	28.6	49.5	191.9
105°	37.3	57.2	217.6	277.9	183.9	277.9	217.6	57.2	37.3	57.2	217.6
107.5°	45.9	61.0	207.7	404.5	378.9	404.5	207.7	61.0	45.9	61.0	207.7
110°	51.7	65.8	201.9	425.1	456.8	425.1	201.9	65.8	51.7	65.8	201.9



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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°	57.5	71.6	196.2	413.0	466.4	413.0	196.2	71.6	57.5	71.6	196.2
115°	66.1	80.2	187.5	389.8	455.6	389.8	187.5	80.2	66.1	80.2	187.5
117.5°	75.0	88.9	185.4	364.6	432.3	364.6	185.4	88.9	75.0	88.9	185.4
120°	81.7	94.7	181.5	345.4	415.9	345.4	181.5	94.7	81.7	94.7	181.5
122.5°	86.5	100.4	176.7	328.9	393.8	328.9	176.7	100.4	86.5	100.4	176.7
125°	95.0	107.9	176.7	309.0	365.4	309.0	176.7	107.9	95.0	107.9	176.7
127.5°	101.9	115.1	176.9	285.9	341.6	285.9	176.9	115.1	101.9	115.1	176.9
130°	105.8	119.9	177.9	270.5	323.4	270.5	177.9	119.9	105.8	119.9	177.9
132.5°	110.6	124.7	177.9	263.5	307.0	263.5	177.9	124.7	110.6	124.7	177.9
135°	117.8	130.7	177.9	254.5	292.1	254.5	177.9	130.7	117.8	130.7	177.9
137.5°	123.8	137.7	177.9	244.5	276.7	244.5	177.9	137.7	123.8	137.7	177.9
140°	128.6	141.6	177.9	238.7	268.1	238.7	177.9	141.6	128.6	141.6	177.9
142.5°	133.4	145.4	178.9	231.9	259.4	231.9	178.9	145.4	133.4	145.4	178.9
145°	139.4	151.2	179.1	221.7	245.2	221.7	179.1	151.2	139.4	151.2	179.1
147.5°	146.7	157.0	180.6	214.4	232.5	214.4	180.6	157.0	146.7	157.0	180.6
150°	151.5	160.9	181.5	209.5	224.8	209.5	181.5	160.9	151.5	160.9	181.5
152.5°	156.3	164.7	181.5	205.6	218.1	205.6	181.5	164.7	156.3	164.7	181.5
155°	163.5	169.4	182.7	201.0	210.4	201.0	182.7	169.4	163.5	169.4	182.7
157.5°	169.3	174.9	184.2	198.0	204.8	198.0	184.2	174.9	169.3	174.9	184.2
160°	173.1	177.8	185.1	196.1	201.9	196.1	185.1	177.8	173.1	177.8	185.1
162.5°	176.0	180.7	186.1	195.1	199.1	195.1	186.1	180.7	176.0	180.7	186.1
165°	181.5	183.9	187.5	192.4	195.9	192.4	187.5	183.9	181.5	183.9	187.5
167.5°	184.6	186.8	188.7	191.2	193.3	191.2	188.7	186.8	184.6	186.8	188.7
170°	187.5	188.7	188.7	191.2	192.3	191.2	188.7	188.7	187.5	188.7	188.7
172.5°	188.5	190.6	189.7	190.2	191.4	190.2	189.7	190.6	188.5	190.6	189.7
175°	191.1	192.3	191.1	189.9	188.7	189.9	191.1	192.3	191.1	192.3	191.1
177.5°	191.1	192.1	191.1	191.1	190.2	191.1	191.1	192.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6
2.5°	1076.6	1075.7	1077.5	1093.5	1126.1	1155.4
5°	980.7	984.1	987.5	1014.6	1071.4	1149.3
7.5°	906.9	901.9	909.6	953.6	1023.4	1135.2
10°	856.1	844.7	856.1	916.1	997.5	1121.2
12.5°	808.3	794.1	811.9	877.7	976.0	1102.4
15°	746.6	760.3	752.3	825.9	943.6	1069.6
17.5°	761.2	830.4	775.9	781.0	911.5	1035.9
20°	795.9	866.9	818.8	751.0	890.7	1008.7
22.5°	827.4	881.0	837.5	725.7	870.0	984.3
25°	851.6	897.4	849.3	702.9	840.0	943.1
27.5°	852.8	859.2	853.3	701.1	802.9	902.1
30°	837.0	809.5	834.7	702.9	776.5	869.3
32.5°	792.0	760.8	782.3	699.2	749.9	826.2
35°	727.8	686.5	716.3	679.5	708.6	753.3
37.5°	660.0	607.8	649.0	640.6	673.5	655.6
40°	614.1	522.5	605.0	602.2	654.2	574.1
42.5°	555.4	477.5	547.2	571.2	633.1	528.1
45°	448.5	439.3	443.9	519.0	588.0	481.5
47.5°	410.1	403.9	407.8	471.4	537.2	461.1
50°	387.6	379.6	385.3	440.5	504.8	445.2
52.5°	356.4	334.6	354.1	398.3	471.2	418.9
55°	268.0	202.7	266.8	350.3	420.7	374.9
57.5°	157.2	117.2	153.8	304.8	356.4	328.3
60°	106.4	98.4	107.6	268.3	313.7	301.1
62.5°	97.2	94.7	97.4	186.7	275.5	273.9
65°	89.0	87.9	89.0	107.8	227.4	234.3
67.5°	80.6	79.4	81.5	82.7	179.6	194.0
70°	75.0	73.8	75.0	76.2	137.8	168.7
72.5°	68.4	67.2	68.4	69.6	96.9	144.3
75°	58.6	57.4	58.6	59.7	64.3	109.0
77.5°	47.3	47.3	48.5	48.5	45.0	75.7
80°	39.8	39.8	41.0	41.0	39.0	55.1
82.5°	32.3	31.4	33.5	34.4	32.3	39.1
85°	19.9	18.7	21.0	22.3	21.0	18.7
87.5°	8.2	7.3	9.1	10.8	10.4	5.6
90°	3.6	3.6	3.6	2.4	1.2	0.0
92.5°	7.5	8.4	7.5	5.3	4.1	2.9
95°	10.9	13.2	10.9	9.6	17.8	9.6
97.5°	20.9	18.0	20.9	70.7	34.2	17.1
100°	41.8	27.6	41.8	141.8	42.8	22.8
102.5°	110.2	60.3	110.2	191.9	49.5	28.6
105°	277.9	183.9	277.9	217.6	57.2	37.3
107.5°	404.5	378.9	404.5	207.7	61.0	45.9
110°	425.1	456.8	425.1	201.9	65.8	51.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.0	466.4	413.0	196.2	71.6	57.5
115°	389.8	455.6	389.8	187.5	80.2	66.1
117.5°	364.6	432.3	364.6	185.4	88.9	75.0
120°	345.4	415.9	345.4	181.5	94.7	81.7
122.5°	328.9	393.8	328.9	176.7	100.4	86.5
125°	309.0	365.4	309.0	176.7	107.9	95.0
127.5°	285.9	341.6	285.9	176.9	115.1	101.9
130°	270.5	323.4	270.5	177.9	119.9	105.8
132.5°	263.5	307.0	263.5	177.9	124.7	110.6
135°	254.5	292.1	254.5	177.9	130.7	117.8
137.5°	244.5	276.7	244.5	177.9	137.7	123.8
140°	238.7	268.1	238.7	177.9	141.6	128.6
142.5°	231.9	259.4	231.9	178.9	145.4	133.4
145°	221.7	245.2	221.7	179.1	151.2	139.4
147.5°	214.4	232.5	214.4	180.6	157.0	146.7
150°	209.5	224.8	209.5	181.5	160.9	151.5
152.5°	205.6	218.1	205.6	181.5	164.7	156.3
155°	201.0	210.4	201.0	182.7	169.4	163.5
157.5°	198.0	204.8	198.0	184.2	174.9	169.3
160°	196.1	201.9	196.1	185.1	177.8	173.1
162.5°	195.1	199.1	195.1	186.1	180.7	176.0
165°	192.4	195.9	192.4	187.5	183.9	181.5
167.5°	191.2	193.3	191.2	188.7	186.8	184.6
170°	191.2	192.3	191.2	188.7	188.7	187.5
172.5°	190.2	191.4	190.2	189.7	190.6	188.5
175°	189.9	188.7	189.9	191.1	192.3	191.1
177.5°	191.1	190.2	191.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1

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