

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: P621607

Luminaire Tested: VLT-FA-050U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621607
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-075D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

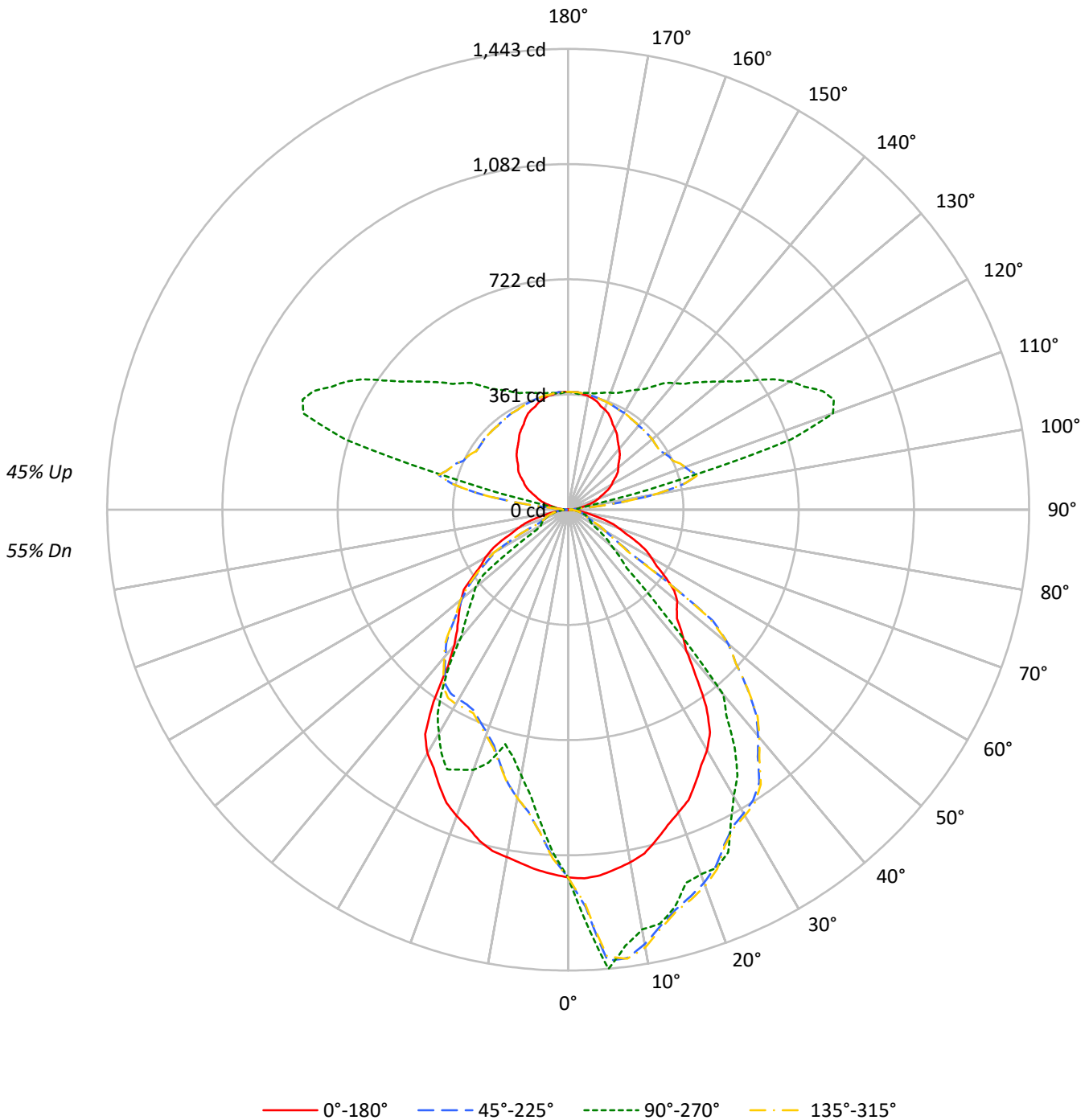
Lumens per Lamp: N/A
Luminaire Lumens: 4356.9 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.2
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				
1	100	96	92	89	92	89	86	83	77	74	72	65	64	62	55	54	53	48				
2	92	85	79	74	85	79	74	70	68	65	61	58	56	53	49	47	46	41				
3	84	75	68	63	78	70	64	59	61	56	53	52	49	46	44	42	40	36				
4	77	67	60	54	72	63	56	51	55	50	46	47	43	40	40	37	35	32				
5	71	60	53	47	66	57	50	44	49	44	40	43	39	36	37	34	31	28				
6	66	54	47	41	61	51	44	39	45	39	35	39	35	31	34	30	28	25				
7	61	49	42	36	57	46	40	35	41	35	31	36	31	28	31	28	25	23				
8	57	45	37	32	53	42	36	31	37	32	28	33	28	25	28	25	23	20				
9	53	41	34	29	49	39	32	28	34	29	25	30	26	23	26	23	21	18				
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	24	21	19	17				

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	2.6
10°-20°	304.3	7.0
20°-30°	455.4	10.5
30°-40°	517.9	11.9
40°-50°	442.9	10.2
50°-60°	298.7	6.9
60°-70°	154.2	3.5
70°-80°	69.6	1.6
80°-90°	21.5	0.5
90°-100°	45.4	1.0
100°-110°	323.2	7.4
110°-120°	438.7	10.1
120°-130°	357.1	8.2
130°-140°	287.2	6.6
140°-150°	226.4	5.2
150°-160°	165.6	3.8
160°-170°	102.8	2.4
170°-180°	35.1	0.8
0°-30°	870.8	20.0
0°-40°	1388.7	31.9
0°-60°	2130.2	48.9
0°-90°	2375.5	54.5
90°-120°	807.3	18.5
90°-150°	1677.9	38.5
90°-180°	1981.0	45.5
0°-180°	4356.9	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	7	0	7	0	2
95°	19	26	19	26	19	21
105°	72	355	72	355	72	76
115°	128	879	128	879	128	127
125°	183	705	183	705	183	163
135°	227	564	227	564	227	175
145°	269	473	269	473	269	169
155°	316	406	316	406	316	145
165°	350	378	350	378	350	98
175°	369	364	369	364	369	35
180°	369	369	369	369	369	



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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	8.8	8.4	7.0	7.0	7.0	7.5	7.9	4.7	9.7	9.4
90°	0.0	2.3	4.6	7.0	7.0	7.0	4.6	2.3	0.0	2.3	4.6
92.5°	5.6	7.8	10.2	14.4	16.2	14.4	10.2	7.8	5.6	7.8	10.2
95°	18.6	34.4	18.6	21.0	25.5	21.0	18.6	34.4	18.6	34.4	18.6
97.5°	32.9	66.1	136.4	40.2	34.8	40.2	136.4	66.1	32.9	66.1	136.4
100°	44.1	82.6	273.7	80.6	53.4	80.6	273.7	82.6	44.1	82.6	273.7
102.5°	55.2	95.6	370.3	212.6	116.5	212.6	370.3	95.6	55.2	95.6	370.3
105°	71.9	110.5	419.9	536.4	354.9	536.4	419.9	110.5	71.9	110.5	419.9
107.5°	88.6	117.7	400.9	780.7	731.2	780.7	400.9	117.7	88.6	117.7	400.9
110°	99.8	127.0	389.7	820.3	881.6	820.3	389.7	127.0	99.8	127.0	389.7



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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°	110.9	138.1	378.6	797.1	900.1	797.1	378.6	138.1	110.9	138.1	378.6
115°	127.6	154.8	361.9	752.2	879.2	752.2	361.9	154.8	127.6	154.8	361.9
117.5°	144.8	171.5	357.7	703.6	834.2	703.6	357.7	171.5	144.8	171.5	357.7
120°	157.8	182.7	350.3	666.6	802.7	666.6	350.3	182.7	157.8	182.7	350.3
122.5°	167.0	193.8	341.0	634.8	760.0	634.8	341.0	193.8	167.0	193.8	341.0
125°	183.3	208.2	341.0	596.4	705.2	596.4	341.0	208.2	183.3	208.2	341.0
127.5°	196.7	222.1	341.5	551.8	659.3	551.8	341.5	222.1	196.7	222.1	341.5
130°	204.2	231.4	343.3	522.0	624.1	522.0	343.3	231.4	204.2	231.4	343.3
132.5°	213.4	240.6	343.3	508.6	592.5	508.6	343.3	240.6	213.4	240.6	343.3
135°	227.3	252.3	343.3	491.1	563.7	491.1	343.3	252.3	227.3	252.3	343.3
137.5°	238.9	265.7	343.3	471.9	534.0	471.9	343.3	265.7	238.9	265.7	343.3
140°	248.2	273.2	343.3	460.6	517.3	460.6	343.3	273.2	248.2	273.2	343.3
142.5°	257.5	280.6	345.2	447.6	500.6	447.6	345.2	280.6	257.5	280.6	345.2
145°	269.1	291.8	345.7	427.9	473.3	427.9	345.7	291.8	269.1	291.8	345.7
147.5°	283.0	303.0	348.4	413.7	448.7	413.7	348.4	303.0	283.0	303.0	348.4
150°	292.3	310.5	350.3	404.3	433.8	404.3	350.3	310.5	292.3	310.5	350.3
152.5°	301.6	317.9	350.3	396.8	420.8	396.8	350.3	317.9	301.6	317.9	350.3
155°	315.5	326.8	352.6	387.8	406.0	387.8	352.6	326.8	315.5	326.8	352.6
157.5°	326.6	337.5	355.4	382.2	395.3	382.2	355.4	337.5	326.6	337.5	355.4
160°	334.1	343.1	357.3	378.4	389.7	378.4	357.3	343.1	334.1	343.1	357.3
162.5°	339.6	348.7	359.1	376.5	384.2	376.5	359.1	348.7	339.6	348.7	359.1
165°	350.3	354.8	361.9	371.3	378.1	371.3	361.9	354.8	350.3	354.8	361.9
167.5°	356.3	360.4	364.2	369.0	373.0	369.0	364.2	360.4	356.3	360.4	364.2
170°	361.9	364.2	364.2	368.9	371.2	368.9	364.2	364.2	361.9	364.2	364.2
172.5°	363.8	367.8	366.1	367.1	369.3	367.1	366.1	367.8	363.8	367.8	366.1
175°	368.9	371.1	368.9	366.5	364.2	366.5	368.9	371.1	368.9	371.1	368.9
177.5°	368.9	370.7	368.9	368.8	367.0	368.8	368.9	370.7	368.9	370.7	368.9
180°	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9



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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°	8.9	8.0	9.8	11.2	10.7	5.6
90°	7.0	7.0	7.0	4.6	2.3	0.0
92.5°	14.4	16.2	14.4	10.2	7.8	5.6
95°	21.0	25.5	21.0	18.6	34.4	18.6
97.5°	40.2	34.8	40.2	136.4	66.1	32.9
100°	80.6	53.4	80.6	273.7	82.6	44.1
102.5°	212.6	116.5	212.6	370.3	95.6	55.2
105°	536.4	354.9	536.4	419.9	110.5	71.9
107.5°	780.7	731.2	780.7	400.9	117.7	88.6
110°	820.3	881.6	820.3	389.7	127.0	99.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	797.1	900.1	797.1	378.6	138.1	110.9
115°	752.2	879.2	752.2	361.9	154.8	127.6
117.5°	703.6	834.2	703.6	357.7	171.5	144.8
120°	666.6	802.7	666.6	350.3	182.7	157.8
122.5°	634.8	760.0	634.8	341.0	193.8	167.0
125°	596.4	705.2	596.4	341.0	208.2	183.3
127.5°	551.8	659.3	551.8	341.5	222.1	196.7
130°	522.0	624.1	522.0	343.3	231.4	204.2
132.5°	508.6	592.5	508.6	343.3	240.6	213.4
135°	491.1	563.7	491.1	343.3	252.3	227.3
137.5°	471.9	534.0	471.9	343.3	265.7	238.9
140°	460.6	517.3	460.6	343.3	273.2	248.2
142.5°	447.6	500.6	447.6	345.2	280.6	257.5
145°	427.9	473.3	427.9	345.7	291.8	269.1
147.5°	413.7	448.7	413.7	348.4	303.0	283.0
150°	404.3	433.8	404.3	350.3	310.5	292.3
152.5°	396.8	420.8	396.8	350.3	317.9	301.6
155°	387.8	406.0	387.8	352.6	326.8	315.5
157.5°	382.2	395.3	382.2	355.4	337.5	326.6
160°	378.4	389.7	378.4	357.3	343.1	334.1
162.5°	376.5	384.2	376.5	359.1	348.7	339.6
165°	371.3	378.1	371.3	361.9	354.8	350.3
167.5°	369.0	373.0	369.0	364.2	360.4	356.3
170°	368.9	371.2	368.9	364.2	364.2	361.9
172.5°	367.1	369.3	367.1	366.1	367.8	363.8
175°	366.5	364.2	366.5	368.9	371.1	368.9
177.5°	368.8	367.0	368.8	368.9	370.7	368.9
180°	368.9	368.9	368.9	368.9	368.9	368.9

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