

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: P621674

Luminaire Tested: VLT-FA-100U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621674
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-100U-050D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

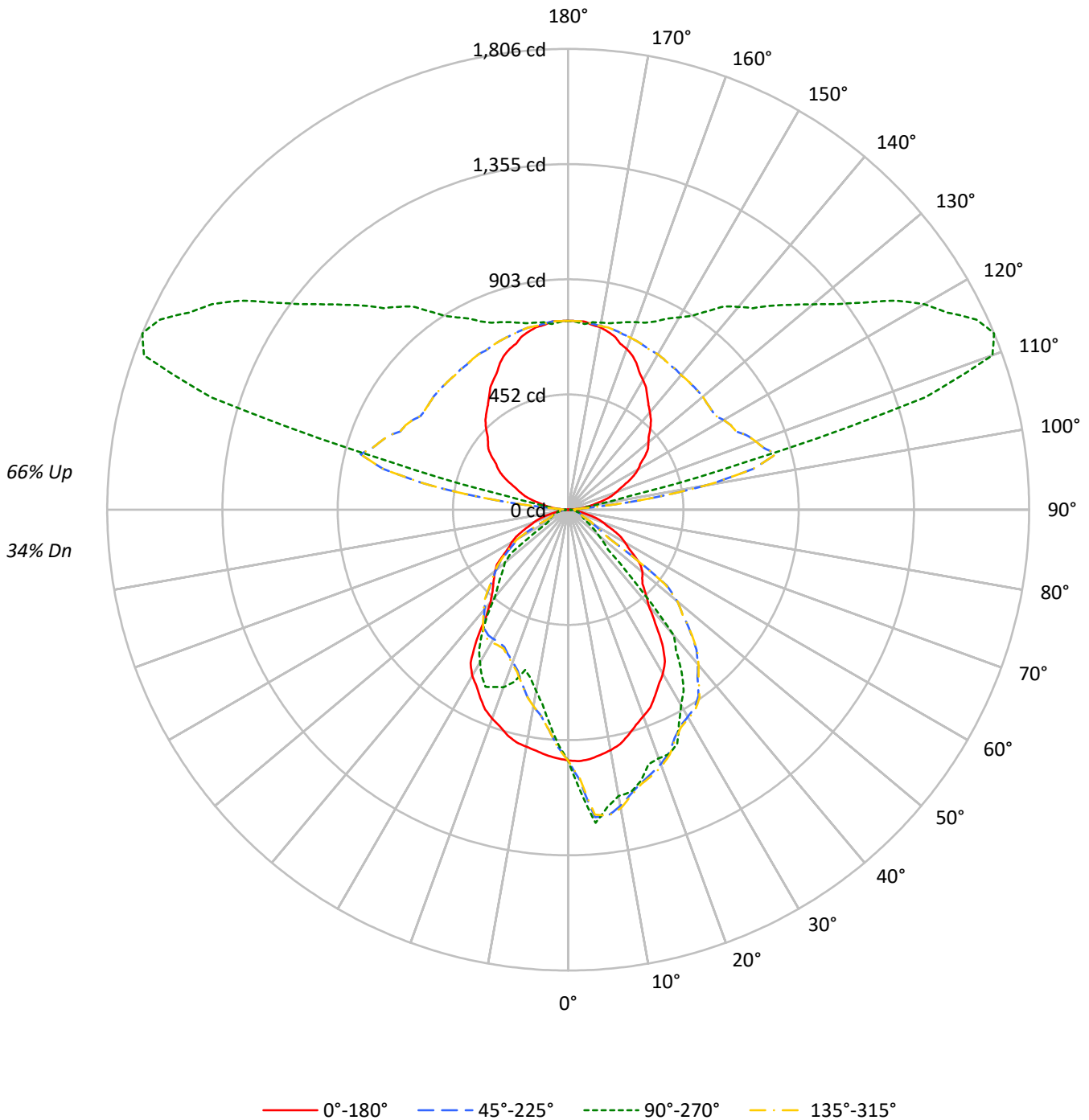
Lumens per Lamp: N/A
Luminaire Lumens: 6003.7 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
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



TEST NUMBER: P621674
CATALOG NUMBER: VLT-FA-100U-050D-835-UNV-STD-W-4

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34				
1	95	91	87	84	85	82	79	76	66	64	62	51	50	49	37	37	36	30				
2	87	80	74	69	78	72	68	64	58	55	52	45	43	41	33	32	31	26				
3	79	71	64	58	72	64	58	54	52	48	44	41	38	36	30	28	27	22				
4	73	63	55	50	66	57	51	46	46	42	38	37	33	31	27	25	24	20				
5	67	56	48	43	60	51	45	40	42	37	33	33	30	27	25	23	21	17				
6	62	50	43	37	56	46	39	35	38	33	29	30	26	24	23	20	19	16				
7	57	45	38	33	52	42	35	30	34	29	26	27	24	21	21	18	17	14				
8	53	41	34	29	48	38	31	27	31	26	23	25	21	19	19	17	15	13				
9	49	38	31	26	45	35	28	24	29	24	21	23	20	17	18	15	14	11				
10	46	35	28	23	42	32	26	22	26	22	18	21	18	15	16	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7054	7054	7054	7054
5°	7066	8875	6958	6051
10°	6973	8299	6871	5254
15°	6783	8172	6805	4821
20°	6575	7919	6651	5651
25°	6374	8005	6445	6065
30°	6148	7325	6231	5726
35°	5633	6789	5493	5133
40°	4590	6042	4431	4178
45°	4171	2243	4212	3806
50°	4242	1708	4164	3617
55°	4003	1326	3866	2164
60°	3688	1019	3660	1206
65°	3396	1053	3328	1273
70°	3021	1112	2937	1322
75°	2578	1164	2468	1359
80°	1942	1198	1818	1405
85°	1317	1070	1153	1317

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 7723 cd/sqm



TEST NUMBER: P621674

CATALOG NUMBER: VLT-FA-100U-050D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	1.6
10°-20°	259.8	4.3
20°-30°	388.7	6.5
30°-40°	442.0	7.4
40°-50°	378.0	6.3
50°-60°	254.9	4.2
60°-70°	131.6	2.2
70°-80°	59.4	1.0
80°-90°	19.4	0.3
90°-100°	91.0	1.5
100°-110°	648.3	10.8
110°-120°	880.2	14.7
120°-130°	716.4	11.9
130°-140°	576.2	9.6
140°-150°	454.2	7.6
150°-160°	332.1	5.5
160°-170°	206.3	3.4
170°-180°	70.3	1.2
0°-30°	743.3	12.4
0°-40°	1185.3	19.7
0°-60°	1818.3	30.3
0°-90°	2028.7	33.8
90°-120°	1619.5	27.0
90°-150°	3366.3	56.1
90°-180°	3975.0	66.2
0°-180°	6003.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	983	983	983	983	983	
5°	981	1232	966	840	981	93
15°	913	1100	916	649	913	257
25°	805	1011	814	766	805	370
35°	643	775	627	586	643	393
45°	411	221	415	375	411	326
55°	320	106	309	173	320	285
65°	200	62	196	75	200	198
75°	93	42	89	49	93	99
85°	16	13	14	16	16	20
90°	0	14	0	14	0	2
95°	37	51	37	51	37	42
105°	144	712	144	712	144	152
115°	256	1764	256	1764	256	254
125°	368	1415	368	1415	368	327
135°	456	1131	456	1131	456	351
145°	540	949	540	949	540	339
155°	633	814	633	814	633	291
165°	703	759	703	759	703	197
175°	740	731	740	731	740	70
180°	740	740	740	740	740	



TEST NUMBER: P621674

CATALOG NUMBER: VLT-FA-100U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	986.2	1019.8	1062.2	1091.3	1103.8	1091.3	1055.0	1019.6	975.0	961.7	930.2
5°	981.0	1084.6	1210.0	1225.2	1232.0	1225.2	1199.0	1078.4	966.0	918.1	866.0
7.5°	969.0	1150.3	1208.6	1174.8	1175.0	1181.3	1210.4	1144.7	953.4	878.1	814.2
10°	957.0	1186.8	1179.0	1130.2	1139.0	1135.1	1188.0	1179.6	943.0	856.0	783.0
12.5°	941.0	1198.2	1139.8	1123.8	1133.4	1127.9	1145.6	1191.9	934.2	840.1	747.0
15°	913.0	1181.9	1107.0	1100.0	1100.0	1104.9	1112.0	1186.8	916.0	811.4	703.0
17.5°	884.2	1149.4	1084.2	1049.5	1045.8	1052.3	1092.4	1157.7	890.2	779.5	660.4
20°	861.0	1127.0	1061.0	1020.4	1037.0	1022.3	1070.0	1133.0	871.0	759.5	634.0
22.5°	840.2	1099.1	1031.4	1014.1	1036.2	1014.5	1039.6	1105.2	848.6	737.1	614.0
25°	805.0	1052.4	987.0	1003.2	1011.0	1003.2	991.0	1056.5	814.0	708.4	593.0
27.5°	770.0	1003.1	953.8	964.7	940.8	959.2	959.2	1003.3	778.4	675.0	586.6
30°	742.0	968.8	937.0	921.2	884.0	913.3	944.0	969.1	752.0	653.2	585.0
32.5°	705.2	937.5	920.2	865.5	841.6	861.5	928.0	936.9	711.2	633.6	583.4
35°	643.0	893.3	890.0	799.4	775.0	793.6	897.0	891.0	627.0	602.6	571.0
37.5°	559.6	853.9	832.2	732.7	693.8	727.8	838.8	849.7	527.4	574.1	542.0
40°	490.0	827.3	789.0	683.1	645.0	678.2	794.0	825.0	473.0	554.2	510.0
42.5°	450.8	803.8	743.4	630.6	394.6	622.6	748.4	800.8	439.4	528.4	482.0
45°	411.0	761.0	677.0	349.1	221.0	332.5	678.0	750.4	415.0	489.3	439.0
47.5°	393.6	708.4	607.6	210.3	186.6	204.2	607.0	696.9	393.8	450.1	398.0
50°	380.0	675.3	558.0	185.3	153.0	178.4	559.0	664.4	373.0	423.8	370.0
52.5°	357.6	635.7	486.8	153.5	132.2	149.8	475.0	623.2	351.4	395.2	334.8
55°	320.0	559.6	203.0	120.7	106.0	115.8	193.0	540.7	309.0	350.1	294.0
57.5°	280.2	476.3	142.4	93.9	82.2	93.0	141.4	457.3	275.0	296.5	256.4
60°	257.0	420.3	116.0	78.8	71.0	77.8	115.0	403.6	255.0	260.9	222.0
62.5°	233.8	363.5	96.0	69.3	67.0	68.4	95.8	345.2	230.2	230.6	156.4
65°	200.0	275.3	71.0	63.0	62.0	62.0	69.0	265.4	196.0	190.1	90.0
67.5°	165.6	197.7	57.0	58.0	57.0	57.0	56.0	192.1	161.6	151.6	68.0
70°	144.0	151.8	53.0	54.0	53.0	53.0	52.0	147.8	140.0	117.5	64.0
72.5°	123.2	103.6	49.0	49.2	49.0	49.0	48.0	97.3	119.2	82.6	58.4
75°	93.0	51.9	42.0	42.0	42.0	42.0	41.0	49.9	89.0	53.8	50.0
77.5°	64.6	34.3	34.8	34.6	34.6	33.8	33.8	34.0	60.8	37.1	40.4
80°	47.0	28.4	30.0	29.0	29.0	29.0	29.0	27.4	44.0	31.3	34.0
82.5°	33.4	22.6	24.4	23.4	23.4	23.4	23.4	22.4	30.4	25.5	27.6
85°	16.0	15.0	16.0	14.0	13.0	14.0	15.0	15.0	14.0	16.9	18.0
87.5°	4.8	8.1	8.3	7.6	7.6	7.6	7.5	7.3	4.0	8.8	9.1
90°	0.0	4.6	9.3	14.0	14.0	14.0	9.3	4.6	0.0	4.6	9.3
92.5°	11.2	15.7	20.5	28.9	32.6	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.1	37.2	42.1	51.2	42.1	37.2	69.1	37.2	69.1	37.2
97.5°	66.1	132.5	273.7	80.7	69.8	80.7	273.7	132.5	66.1	132.5	273.7
100°	88.4	165.8	549.2	161.6	107.0	161.6	549.2	165.8	88.4	165.8	549.2
102.5°	110.8	191.8	742.8	426.6	233.6	426.6	742.8	191.8	110.8	191.8	742.8
105°	144.3	221.6	842.4	1076.1	712.1	1076.1	842.4	221.6	144.3	221.6	842.4
107.5°	177.8	236.0	804.2	1566.2	1466.9	1566.2	804.2	236.0	177.8	236.0	804.2
110°	200.1	254.7	781.9	1645.7	1768.5	1645.7	781.9	254.7	200.1	254.7	781.9



TEST NUMBER: P621674

CATALOG NUMBER: VLT-FA-100U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	222.5	277.1	759.5	1599.2	1805.8	1599.2	759.5	277.1	222.5	277.1	759.5
115°	256.0	310.6	726.0	1509.0	1763.9	1509.0	726.0	310.6	256.0	310.6	726.0
117.5°	290.4	344.1	717.7	1411.5	1673.6	1411.5	717.7	344.1	290.4	344.1	717.7
120°	316.5	366.5	702.8	1337.3	1610.3	1337.3	702.8	366.5	316.5	366.5	702.8
122.5°	335.1	388.8	684.1	1273.5	1524.7	1273.5	684.1	388.8	335.1	388.8	684.1
125°	367.7	417.7	684.1	1196.4	1414.8	1196.4	684.1	417.7	367.7	417.7	684.1
127.5°	394.7	445.6	685.1	1107.0	1322.7	1107.0	685.1	445.6	394.7	445.6	685.1
130°	409.6	464.2	688.8	1047.2	1251.9	1047.2	688.8	464.2	409.6	464.2	688.8
132.5°	428.2	482.8	688.8	1020.3	1188.6	1020.3	688.8	482.8	428.2	482.8	688.8
135°	456.1	506.2	688.8	985.3	1130.9	985.3	688.8	506.2	456.1	506.2	688.8
137.5°	479.4	533.1	688.8	946.7	1071.4	946.7	688.8	533.1	479.4	533.1	688.8
140°	498.0	548.0	688.8	924.1	1037.8	924.1	688.8	548.0	498.0	548.0	688.8
142.5°	516.6	563.0	692.5	897.9	1004.3	897.9	692.5	563.0	516.6	563.0	692.5
145°	539.9	585.4	693.4	858.4	949.4	858.4	693.4	585.4	539.9	585.4	693.4
147.5°	567.8	607.8	699.0	830.0	900.1	830.0	699.0	607.8	567.8	607.8	699.0
150°	586.4	622.8	702.8	811.1	870.3	811.1	702.8	622.8	586.4	622.8	702.8
152.5°	605.0	637.8	702.8	796.0	844.2	796.0	702.8	637.8	605.0	637.8	702.8
155°	632.9	655.7	707.4	778.0	814.5	778.0	707.4	655.7	632.9	655.7	707.4
157.5°	655.3	677.1	713.0	766.7	793.0	766.7	713.0	677.1	655.3	677.1	713.0
160°	670.2	688.4	716.7	759.1	781.9	759.1	716.7	688.4	670.2	688.4	716.7
162.5°	681.3	699.6	720.4	755.2	770.7	755.2	720.4	699.6	681.3	699.6	720.4
165°	702.8	711.9	726.0	745.0	758.6	745.0	726.0	711.9	702.8	711.9	726.0
167.5°	714.9	723.0	730.7	740.2	748.4	740.2	730.7	723.0	714.9	723.0	730.7
170°	726.0	730.6	730.7	740.1	744.6	740.1	730.7	730.6	726.0	730.6	730.7
172.5°	729.8	737.9	734.4	736.4	740.9	736.4	734.4	737.9	729.8	737.9	734.4
175°	740.0	744.5	740.0	735.2	730.7	735.2	740.0	744.5	740.0	744.5	740.0
177.5°	740.0	743.6	740.0	739.9	736.3	739.9	740.0	743.6	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0



TEST NUMBER: P621674

CATALOG NUMBER: VLT-FA-100U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	919.0	918.2	919.8	933.4	961.2	986.2
5°	837.1	840.0	842.9	866.0	914.5	981.0
7.5°	774.1	769.8	776.5	814.0	873.6	969.0
10°	730.8	721.0	730.8	782.0	851.4	957.0
12.5°	689.9	677.8	693.1	749.2	833.1	941.0
15°	637.3	649.0	642.2	705.0	805.4	913.0
17.5°	649.7	708.8	662.3	666.6	778.0	884.2
20°	679.4	740.0	698.9	641.0	760.3	861.0
22.5°	706.2	752.0	714.8	619.4	742.6	840.2
25°	726.9	766.0	724.9	600.0	717.0	805.0
27.5°	727.9	733.4	728.3	598.4	685.3	770.0
30°	714.5	691.0	712.5	600.0	662.8	742.0
32.5°	676.0	649.4	667.8	596.8	640.1	705.2
35°	621.2	586.0	611.4	580.0	604.9	643.0
37.5°	563.4	518.8	554.0	546.8	574.9	559.6
40°	524.2	446.0	516.4	514.0	558.4	490.0
42.5°	474.1	407.6	467.0	487.6	540.4	450.8
45°	382.8	375.0	378.9	443.0	501.9	411.0
47.5°	350.1	344.8	348.1	402.4	458.5	393.6
50°	330.8	324.0	328.9	376.0	430.8	380.0
52.5°	304.2	285.6	302.2	340.0	402.2	357.6
55°	228.7	173.0	227.8	299.0	359.1	320.0
57.5°	134.2	100.0	131.3	260.2	304.3	280.2
60°	90.8	84.0	91.8	229.0	267.8	257.0
62.5°	83.0	80.8	83.1	159.4	235.2	233.8
65°	76.0	75.0	76.0	92.0	194.1	200.0
67.5°	68.8	67.8	69.6	70.6	153.3	165.6
70°	64.0	63.0	64.0	65.0	117.6	144.0
72.5°	58.4	57.4	58.4	59.4	82.7	123.2
75°	50.0	49.0	50.0	51.0	54.9	93.0
77.5°	40.4	40.4	41.4	41.4	38.4	64.6
80°	34.0	34.0	35.0	35.0	33.3	47.0
82.5°	27.6	26.8	28.6	29.4	27.5	33.4
85°	17.0	16.0	18.0	19.0	18.0	16.0
87.5°	9.2	8.4	10.0	10.7	9.6	4.8
90°	14.0	14.0	14.0	9.3	4.6	0.0
92.5°	28.9	32.6	28.9	20.5	15.7	11.2
95°	42.1	51.2	42.1	37.2	69.1	37.2
97.5°	80.7	69.8	80.7	273.7	132.5	66.1
100°	161.6	107.0	161.6	549.2	165.8	88.4
102.5°	426.6	233.6	426.6	742.8	191.8	110.8
105°	1076.1	712.1	1076.1	842.4	221.6	144.3
107.5°	1566.2	1466.9	1566.2	804.2	236.0	177.8
110°	1645.7	1768.5	1645.7	781.9	254.7	200.1



TEST NUMBER: P621674

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1599.2	1805.8	1599.2	759.5	277.1	222.5
115°	1509.0	1763.9	1509.0	726.0	310.6	256.0
117.5°	1411.5	1673.6	1411.5	717.7	344.1	290.4
120°	1337.3	1610.3	1337.3	702.8	366.5	316.5
122.5°	1273.5	1524.7	1273.5	684.1	388.8	335.1
125°	1196.4	1414.8	1196.4	684.1	417.7	367.7
127.5°	1107.0	1322.7	1107.0	685.1	445.6	394.7
130°	1047.2	1251.9	1047.2	688.8	464.2	409.6
132.5°	1020.3	1188.6	1020.3	688.8	482.8	428.2
135°	985.3	1130.9	985.3	688.8	506.2	456.1
137.5°	946.7	1071.4	946.7	688.8	533.1	479.4
140°	924.1	1037.8	924.1	688.8	548.0	498.0
142.5°	897.9	1004.3	897.9	692.5	563.0	516.6
145°	858.4	949.4	858.4	693.4	585.4	539.9
147.5°	830.0	900.1	830.0	699.0	607.8	567.8
150°	811.1	870.3	811.1	702.8	622.8	586.4
152.5°	796.0	844.2	796.0	702.8	637.8	605.0
155°	778.0	814.5	778.0	707.4	655.7	632.9
157.5°	766.7	793.0	766.7	713.0	677.1	655.3
160°	759.1	781.9	759.1	716.7	688.4	670.2
162.5°	755.2	770.7	755.2	720.4	699.6	681.3
165°	745.0	758.6	745.0	726.0	711.9	702.8
167.5°	740.2	748.4	740.2	730.7	723.0	714.9
170°	740.1	744.6	740.1	730.7	730.6	726.0
172.5°	736.4	740.9	736.4	734.4	737.9	729.8
175°	735.2	730.7	735.2	740.0	744.5	740.0
177.5°	739.9	736.3	739.9	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0

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