

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: P621596

Luminaire Tested: VLT-FA-025U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621596
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-125D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

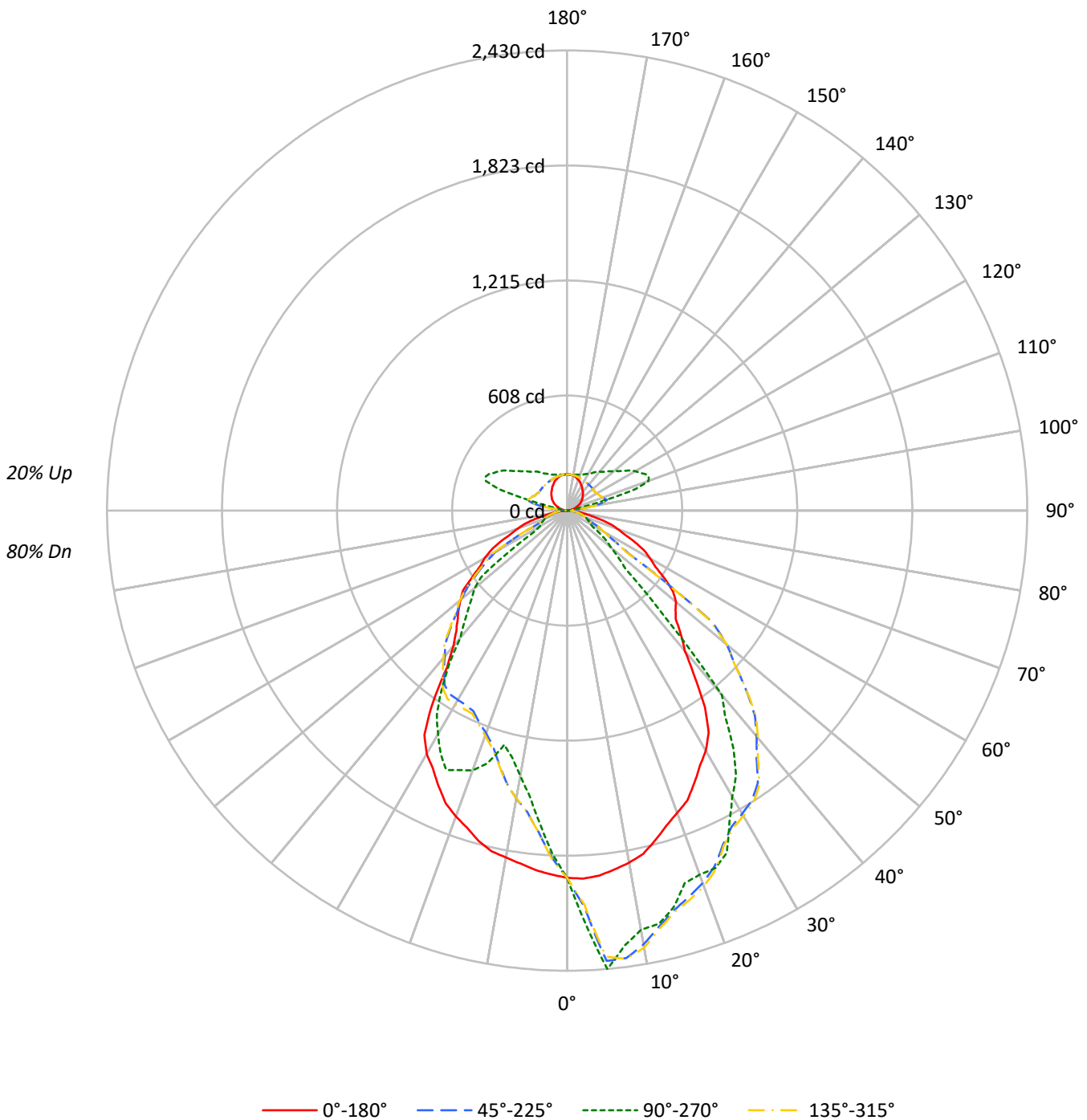
Lumens per Lamp: N/A
Luminaire Lumens: 5026.5 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47
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										
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	50	30	10	0														
RCR																																						
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80																				
1	106	102	98	95	101	98	94	92	90	87	85	82	81	79	76	74	73	70																				
2	97	90	85	80	93	87	82	77	80	76	73	74	71	68	68	66	64	61																				
3	90	81	74	68	86	78	71	66	72	67	63	67	63	59	62	58	56	53																				
4	83	72	65	59	79	70	63	57	65	59	55	60	56	52	56	52	49	46																				
5	77	65	57	52	73	63	56	50	59	53	48	55	50	46	51	47	43	41																				
6	71	59	51	46	68	57	50	45	53	47	43	50	45	41	47	42	39	37																				
7	66	54	46	41	63	52	45	40	49	43	38	46	41	37	43	38	35	33																				
8	62	49	42	36	59	48	41	36	45	39	34	42	37	33	40	35	32	30																				
9	58	45	38	33	55	44	37	32	42	35	31	39	34	30	37	32	29	27																				
10	54	42	35	30	52	41	34	29	38	33	28	36	31	27	34	30	26	25																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13915	13915	13915	13915
5°	13939	17506	13726	11936
10°	13756	16372	13554	10363
15°	13380	16120	13424	9511
20°	12970	15621	13120	11147
25°	12573	15790	12714	11964
30°	12128	14449	12292	11295
35°	11111	13393	10835	10126
40°	9055	11918	8740	8242
45°	8227	4424	8307	7507
50°	8368	3369	8214	7135
55°	7897	2616	7625	4270
60°	7276	2011	7219	2378
65°	6699	2077	6564	2511
70°	5961	2193	5795	2608
75°	5088	2296	4869	2681
80°	3831	2364	3587	2773
85°	2602	2108	2272	2602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15235 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.1	3.7
10°-20°	512.4	10.2
20°-30°	766.7	15.3
30°-40°	872.0	17.3
40°-50°	745.7	14.8
50°-60°	502.9	10.0
60°-70°	259.6	5.2
70°-80°	117.2	2.3
80°-90°	35.3	0.7
90°-100°	23.5	0.5
100°-110°	167.6	3.3
110°-120°	227.5	4.5
120°-130°	185.2	3.7
130°-140°	149.0	3.0
140°-150°	117.4	2.3
150°-160°	85.9	1.7
160°-170°	53.3	1.1
170°-180°	18.2	0.4
0°-30°	1466.2	29.2
0°-40°	2338.2	46.5
0°-60°	3586.8	71.4
0°-90°	3998.9	79.6
90°-120°	418.7	8.3
90°-150°	870.3	17.3
90°-180°	1028.0	20.5
0°-180°	5026.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1939	1939	1939	1939	1939	
5°	1935	2430	1906	1657	1935	183
15°	1801	2170	1807	1280	1801	507
25°	1588	1994	1606	1511	1588	731
35°	1268	1529	1237	1156	1268	775
45°	811	436	819	740	811	643
55°	631	209	610	341	631	562
65°	394	122	387	148	394	390
75°	184	83	176	97	184	196
85°	32	26	28	32	32	40
90°	0	4	0	4	0	2
95°	10	13	10	13	10	11
105°	37	184	37	184	37	39
115°	66	456	66	456	66	66
125°	95	366	95	366	95	84
135°	118	292	118	292	118	91
145°	140	245	140	245	140	88
155°	164	211	164	211	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°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1945.4	2011.7	2095.3	2152.7	2177.3	2152.7	2081.1	2011.2	1923.3	1897.0	1834.9
5°	1935.1	2139.6	2386.8	2416.7	2430.2	2416.7	2365.1	2127.3	1905.5	1811.0	1708.3
7.5°	1911.4	2269.0	2384.1	2317.4	2317.8	2330.1	2387.6	2257.9	1880.7	1732.1	1606.1
10°	1887.8	2341.0	2325.7	2229.4	2246.8	2239.1	2343.4	2326.9	1860.1	1688.5	1544.5
12.5°	1856.2	2363.5	2248.4	2216.8	2235.7	2224.9	2259.8	2351.2	1842.8	1657.2	1473.5
15°	1801.0	2331.4	2183.7	2169.8	2169.8	2179.5	2193.5	2341.2	1806.9	1600.5	1386.7
17.5°	1744.2	2267.2	2138.7	2070.3	2062.9	2075.7	2154.9	2283.7	1756.0	1537.7	1302.7
20°	1698.4	2223.0	2092.9	2012.8	2045.6	2016.6	2110.7	2235.0	1718.1	1498.2	1250.6
22.5°	1657.4	2168.1	2034.5	2000.4	2044.0	2001.2	2050.7	2180.0	1673.9	1454.1	1211.2
25°	1587.9	2075.9	1946.9	1978.9	1994.3	1978.9	1954.8	2084.0	1605.7	1397.4	1169.7
27.5°	1518.9	1978.7	1881.5	1902.9	1855.8	1892.1	1892.1	1979.1	1535.5	1331.4	1157.1
30°	1463.7	1911.1	1848.3	1817.1	1743.8	1801.6	1862.1	1911.6	1483.4	1288.6	1154.0
32.5°	1391.1	1849.3	1815.2	1707.2	1660.1	1699.5	1830.6	1848.1	1402.9	1249.8	1150.8
35°	1268.4	1762.1	1755.6	1577.0	1528.8	1565.4	1769.4	1757.6	1236.8	1188.6	1126.3
37.5°	1103.9	1684.4	1641.6	1445.3	1368.6	1435.7	1654.6	1676.1	1040.3	1132.5	1069.1
40°	966.6	1632.0	1556.4	1347.5	1272.3	1337.9	1566.2	1627.4	933.0	1093.1	1006.0
42.5°	889.2	1585.5	1466.4	1244.0	778.4	1228.2	1476.3	1579.6	866.8	1042.3	950.8
45°	810.7	1501.2	1335.4	688.6	435.9	655.8	1337.4	1480.2	818.6	965.2	866.0
47.5°	776.4	1397.5	1198.5	414.8	368.1	402.8	1197.4	1374.7	776.8	887.9	785.1
50°	749.6	1332.1	1100.7	365.5	301.8	352.0	1102.7	1310.5	735.8	836.1	729.9
52.5°	705.4	1253.9	960.3	302.8	260.8	295.5	937.0	1229.4	693.2	779.6	660.4
55°	631.2	1103.8	400.4	238.0	209.1	228.4	380.7	1066.6	609.5	690.5	579.9
57.5°	552.7	939.6	280.9	185.3	162.1	183.4	278.9	902.0	542.5	584.9	505.8
60°	507.0	829.1	228.8	155.5	140.1	153.6	226.8	796.2	503.0	514.6	437.9
62.5°	461.2	716.9	189.4	136.8	132.2	134.9	189.0	680.9	454.1	454.9	308.5
65°	394.5	543.0	140.1	124.2	122.3	122.3	136.1	523.6	386.6	375.1	177.5
67.5°	326.7	389.9	112.4	114.4	112.4	112.4	110.5	378.9	318.8	299.1	134.1
70°	284.1	299.5	104.5	106.5	104.5	104.5	102.6	291.6	276.2	231.8	126.2
72.5°	243.0	204.4	96.7	97.0	96.7	96.7	94.7	191.9	235.1	163.0	115.2
75°	183.5	102.4	82.8	82.8	82.8	82.8	80.9	98.4	175.6	106.1	98.6
77.5°	127.4	67.6	68.6	68.3	68.3	66.7	66.7	67.1	119.9	73.3	79.7
80°	92.7	56.1	59.2	57.2	57.2	57.2	57.2	54.0	86.8	61.7	67.1
82.5°	65.9	44.7	48.1	46.2	46.2	46.2	46.2	44.2	60.0	50.3	54.4
85°	31.6	29.6	31.6	27.6	25.6	27.6	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	14.3	13.1	10.2	10.2	10.2	11.5	12.8	7.9	15.8	14.7
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	17.9	9.6	10.9	13.2	10.9	9.6	17.9	9.6	17.9	9.6
97.5°	17.1	34.3	70.7	20.9	18.0	20.9	70.7	34.3	17.1	34.3	70.7
100°	22.9	42.9	142.0	41.8	27.7	41.8	142.0	42.9	22.9	42.9	142.0
102.5°	28.6	49.6	192.0	110.3	60.4	110.3	192.0	49.6	28.6	49.6	192.0
105°	37.3	57.3	217.8	278.2	184.1	278.2	217.8	57.3	37.3	57.3	217.8
107.5°	46.0	61.0	207.9	404.9	379.2	404.9	207.9	61.0	46.0	61.0	207.9
110°	51.7	65.9	202.1	425.4	457.2	425.4	202.1	65.9	51.7	65.9	202.1



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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	196.4	413.4	466.8	413.4	196.4	71.6	57.5	71.6	196.4
115°	66.2	80.3	187.7	390.1	456.0	390.1	187.7	80.3	66.2	80.3	187.7
117.5°	75.1	89.0	185.5	364.9	432.7	364.9	185.5	89.0	75.1	89.0	185.5
120°	81.8	94.8	181.7	345.7	416.3	345.7	181.7	94.8	81.8	94.8	181.7
122.5°	86.6	100.5	176.9	329.2	394.2	329.2	176.9	100.5	86.6	100.5	176.9
125°	95.1	108.0	176.9	309.3	365.8	309.3	176.9	108.0	95.1	108.0	176.9
127.5°	102.0	115.2	177.1	286.2	341.9	286.2	177.1	115.2	102.0	115.2	177.1
130°	105.9	120.0	178.1	270.7	323.7	270.7	178.1	120.0	105.9	120.0	178.1
132.5°	110.7	124.8	178.1	263.8	307.3	263.8	178.1	124.8	110.7	124.8	178.1
135°	117.9	130.9	178.1	254.7	292.4	254.7	178.1	130.9	117.9	130.9	178.1
137.5°	123.9	137.8	178.1	244.7	277.0	244.7	178.1	137.8	123.9	137.8	178.1
140°	128.7	141.7	178.1	238.9	268.3	238.9	178.1	141.7	128.7	141.7	178.1
142.5°	133.6	145.6	179.0	232.1	259.6	232.1	179.0	145.6	133.6	145.6	179.0
145°	139.6	151.3	179.3	221.9	245.4	221.9	179.3	151.3	139.6	151.3	179.3
147.5°	146.8	157.1	180.7	214.6	232.7	214.6	180.7	157.1	146.8	157.1	180.7
150°	151.6	161.0	181.7	209.7	225.0	209.7	181.7	161.0	151.6	161.0	181.7
152.5°	156.4	164.9	181.7	205.8	218.3	205.8	181.7	164.9	156.4	164.9	181.7
155°	163.6	169.5	182.9	201.1	210.6	201.1	182.9	169.5	163.6	169.5	182.9
157.5°	169.4	175.1	184.3	198.2	205.0	198.2	184.3	175.1	169.4	175.1	184.3
160°	173.3	178.0	185.3	196.2	202.1	196.2	185.3	178.0	173.3	178.0	185.3
162.5°	176.1	180.8	186.3	195.2	199.2	195.2	186.3	180.8	176.1	180.8	186.3
165°	181.7	184.0	187.7	192.6	196.1	192.6	187.7	184.0	181.7	184.0	187.7
167.5°	184.8	186.9	188.9	191.4	193.5	191.4	188.9	186.9	184.8	186.9	188.9
170°	187.7	188.9	188.9	191.3	192.5	191.3	188.9	188.9	187.7	188.9	188.9
172.5°	188.7	190.8	189.9	190.4	191.5	190.4	189.9	190.8	188.7	190.8	189.9
175°	191.3	192.5	191.3	190.1	188.9	190.1	191.3	192.5	191.3	192.5	191.3
177.5°	191.3	192.2	191.3	191.3	190.3	191.3	191.3	192.2	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1812.8	1811.2	1814.3	1841.2	1896.0	1945.4
5°	1651.2	1657.0	1662.8	1708.3	1804.0	1935.1
7.5°	1527.0	1518.5	1531.6	1605.7	1723.2	1911.4
10°	1441.5	1422.2	1441.5	1542.6	1679.5	1887.8
12.5°	1360.9	1337.0	1367.1	1477.9	1643.3	1856.2
15°	1257.1	1280.2	1266.7	1390.7	1588.8	1801.0
17.5°	1281.7	1398.2	1306.4	1314.9	1534.7	1744.2
20°	1340.1	1459.7	1378.7	1264.4	1499.7	1698.4
22.5°	1393.1	1483.4	1410.1	1221.8	1464.9	1657.4
25°	1433.9	1511.0	1430.0	1183.6	1414.3	1587.9
27.5°	1435.9	1446.7	1436.7	1180.4	1351.9	1518.9
30°	1409.3	1363.1	1405.5	1183.6	1307.4	1463.7
32.5°	1333.5	1281.0	1317.3	1177.2	1262.6	1391.1
35°	1225.4	1155.9	1206.1	1144.1	1193.2	1268.4
37.5°	1111.3	1023.4	1092.8	1078.6	1133.9	1103.9
40°	1034.1	879.8	1018.6	1013.9	1101.6	966.6
42.5°	935.2	804.0	921.3	961.8	1065.9	889.2
45°	755.1	739.7	747.4	873.9	990.1	810.7
47.5°	690.6	680.1	686.7	793.8	904.5	776.4
50°	652.6	639.1	648.8	741.7	849.9	749.6
52.5°	600.0	563.4	596.2	670.7	793.3	705.4
55°	451.2	341.3	449.3	589.8	708.4	631.2
57.5°	264.8	197.3	259.0	513.3	600.2	552.7
60°	179.2	165.7	181.1	451.7	528.2	507.0
62.5°	163.6	159.4	164.0	314.4	463.9	461.2
65°	149.9	147.9	149.9	181.5	382.9	394.5
67.5°	135.7	133.7	137.2	139.3	302.4	326.7
70°	126.2	124.3	126.2	128.2	232.0	284.1
72.5°	115.2	113.2	115.2	117.2	163.2	243.0
75°	98.6	96.7	98.6	100.6	108.2	183.5
77.5°	79.7	79.7	81.6	81.7	75.7	127.4
80°	67.1	67.1	69.0	69.0	65.7	92.7
82.5°	54.4	52.9	56.3	58.0	54.3	65.9
85°	33.5	31.6	35.4	37.5	35.4	31.6
87.5°	13.3	11.8	14.9	17.8	17.4	9.5
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	17.9	9.6
97.5°	20.9	18.0	20.9	70.7	34.3	17.1
100°	41.8	27.7	41.8	142.0	42.9	22.9
102.5°	110.3	60.4	110.3	192.0	49.6	28.6
105°	278.2	184.1	278.2	217.8	57.3	37.3
107.5°	404.9	379.2	404.9	207.9	61.0	46.0
110°	425.4	457.2	425.4	202.1	65.9	51.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.4	466.8	413.4	196.4	71.6	57.5
115°	390.1	456.0	390.1	187.7	80.3	66.2
117.5°	364.9	432.7	364.9	185.5	89.0	75.1
120°	345.7	416.3	345.7	181.7	94.8	81.8
122.5°	329.2	394.2	329.2	176.9	100.5	86.6
125°	309.3	365.8	309.3	176.9	108.0	95.1
127.5°	286.2	341.9	286.2	177.1	115.2	102.0
130°	270.7	323.7	270.7	178.1	120.0	105.9
132.5°	263.8	307.3	263.8	178.1	124.8	110.7
135°	254.7	292.4	254.7	178.1	130.9	117.9
137.5°	244.7	277.0	244.7	178.1	137.8	123.9
140°	238.9	268.3	238.9	178.1	141.7	128.7
142.5°	232.1	259.6	232.1	179.0	145.6	133.6
145°	221.9	245.4	221.9	179.3	151.3	139.6
147.5°	214.6	232.7	214.6	180.7	157.1	146.8
150°	209.7	225.0	209.7	181.7	161.0	151.6
152.5°	205.8	218.3	205.8	181.7	164.9	156.4
155°	201.1	210.6	201.1	182.9	169.5	163.6
157.5°	198.2	205.0	198.2	184.3	175.1	169.4
160°	196.2	202.1	196.2	185.3	178.0	173.3
162.5°	195.2	199.2	195.2	186.3	180.8	176.1
165°	192.6	196.1	192.6	187.7	184.0	181.7
167.5°	191.4	193.5	191.4	188.9	186.9	184.8
170°	191.3	192.5	191.3	188.9	188.9	187.7
172.5°	190.4	191.5	190.4	189.9	190.8	188.7
175°	190.1	188.9	190.1	191.3	192.5	191.3
177.5°	191.3	190.3	191.3	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3

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