

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: P621620

Luminaire Tested: VLT-FA-050U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621620
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-125D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5982.5 lumens
Efficiency: N/A
Efficacy: 112.2 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

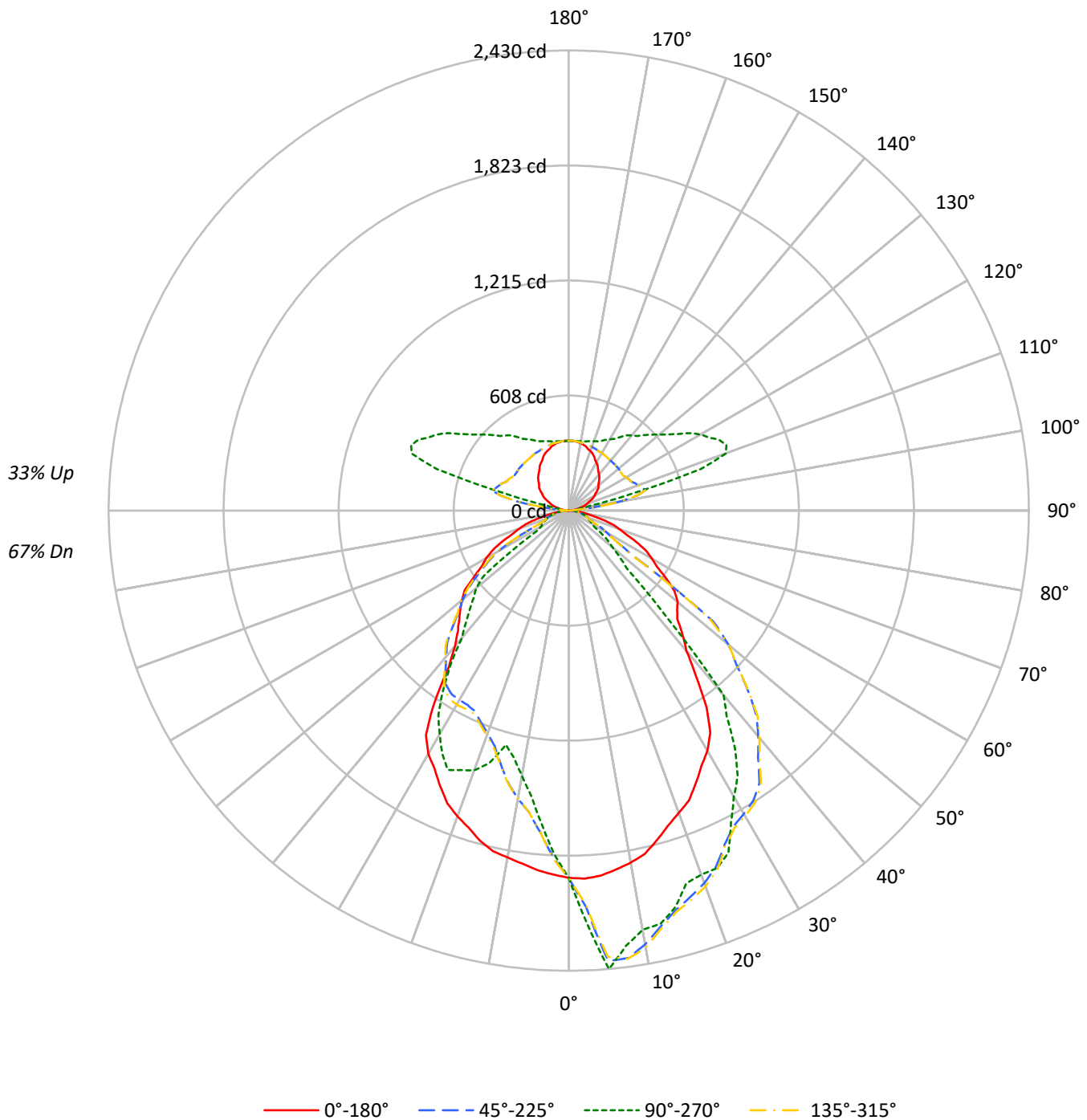
Input Watts (W): 53.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67		
1	103	99	95	92	97	93	90	87	83	81	79	74	72	70	65	64	63	59		
2	94	88	82	77	89	83	78	74	74	70	67	66	63	61	59	56	55	51		
3	87	78	71	65	82	74	68	63	66	62	58	59	56	53	53	50	48	44		
4	80	70	62	56	75	66	60	54	60	54	50	54	49	46	48	45	42	39		
5	74	63	55	49	70	60	53	47	54	48	44	49	44	41	44	40	37	34		
6	68	57	49	43	65	54	47	42	49	43	39	44	40	36	40	36	33	31		
7	64	52	44	38	60	49	42	37	45	39	35	41	36	32	37	33	30	28		
8	59	47	40	34	56	45	38	33	41	35	31	37	33	29	34	30	27	25		
9	55	43	36	31	52	41	35	30	38	32	28	35	30	26	31	28	25	23		
10	52	40	33	28	49	38	32	27	35	30	26	32	27	24	29	25	23	21		

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	3.1
10°-20°	512.4	8.6
20°-30°	766.7	12.8
30°-40°	872.0	14.6
40°-50°	745.7	12.5
50°-60°	502.9	8.4
60°-70°	259.6	4.3
70°-80°	117.2	2.0
80°-90°	35.7	0.6
90°-100°	45.4	0.8
100°-110°	323.5	5.4
110°-120°	439.1	7.3
120°-130°	357.4	6.0
130°-140°	287.5	4.8
140°-150°	226.6	3.8
150°-160°	165.7	2.8
160°-170°	102.9	1.7
170°-180°	35.1	0.6
0°-30°	1466.2	24.5
0°-40°	2338.2	39.1
0°-60°	3586.8	60.0
0°-90°	3999.3	66.8
90°-120°	808.0	13.5
90°-150°	1679.5	28.1
90°-180°	1983.0	33.1
0°-180°	5982.5	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	7	0	7	0	2
95°	19	26	19	26	19	21
105°	72	355	72	355	72	76
115°	128	880	128	880	128	127
125°	183	706	183	706	183	163
135°	228	564	228	564	228	175
145°	269	474	269	474	269	169
155°	316	406	316	406	316	145
165°	351	378	351	378	351	98
175°	369	365	369	365	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°	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	14.6	13.6	10.9	10.9	10.9	12.0	13.0	7.9	16.1	15.1
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	16.3	14.4	10.2	7.8	5.6	7.8	10.2
95°	18.6	34.5	18.6	21.0	25.5	21.0	18.6	34.5	18.6	34.5	18.6
97.5°	33.0	66.1	136.5	40.3	34.8	40.3	136.5	66.1	33.0	66.1	136.5
100°	44.1	82.7	274.0	80.7	53.4	80.7	274.0	82.7	44.1	82.7	274.0
102.5°	55.3	95.7	370.6	212.8	116.6	212.8	370.6	95.7	55.3	95.7	370.6
105°	72.0	110.6	420.3	536.9	355.3	536.9	420.3	110.6	72.0	110.6	420.3
107.5°	88.7	117.8	401.2	781.4	731.9	781.4	401.2	117.8	88.7	117.8	401.2
110°	99.8	127.1	390.1	821.1	882.4	821.1	390.1	127.1	99.8	127.1	390.1

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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°	111.0	138.2	378.9	797.9	900.9	797.9	378.9	138.2	111.0	138.2	378.9
115°	127.7	155.0	362.2	752.9	880.0	752.9	362.2	155.0	127.7	155.0	362.2
117.5°	144.9	171.7	358.0	704.2	835.0	704.2	358.0	171.7	144.9	171.7	358.0
120°	157.9	182.9	350.6	667.2	803.4	667.2	350.6	182.9	157.9	182.9	350.6
122.5°	167.2	194.0	341.3	635.4	760.7	635.4	341.3	194.0	167.2	194.0	341.3
125°	183.4	208.4	341.3	596.9	705.9	596.9	341.3	208.4	183.4	208.4	341.3
127.5°	196.9	222.3	341.8	552.3	659.9	552.3	341.8	222.3	196.9	222.3	341.8
130°	204.3	231.6	343.7	522.4	624.6	522.4	343.7	231.6	204.3	231.6	343.7
132.5°	213.6	240.9	343.7	509.0	593.0	509.0	343.7	240.9	213.6	240.9	343.7
135°	227.6	252.5	343.7	491.6	564.2	491.6	343.7	252.5	227.6	252.5	343.7
137.5°	239.2	266.0	343.7	472.3	534.5	472.3	343.7	266.0	239.2	266.0	343.7
140°	248.5	273.4	343.7	461.0	517.8	461.0	343.7	273.4	248.5	273.4	343.7
142.5°	257.7	280.9	345.5	448.0	501.1	448.0	345.5	280.9	257.7	280.9	345.5
145°	269.4	292.1	346.0	428.3	473.7	428.3	346.0	292.1	269.4	292.1	346.0
147.5°	283.3	303.3	348.8	414.1	449.1	414.1	348.8	303.3	283.3	303.3	348.8
150°	292.6	310.7	350.6	404.7	434.2	404.7	350.6	310.7	292.6	310.7	350.6
152.5°	301.9	318.2	350.6	397.1	421.2	397.1	350.6	318.2	301.9	318.2	350.6
155°	315.8	327.1	352.9	388.2	406.3	388.2	352.9	327.1	315.8	327.1	352.9
157.5°	326.9	337.8	355.7	382.5	395.7	382.5	355.7	337.8	326.9	337.8	355.7
160°	334.4	343.4	357.6	378.7	390.1	378.7	357.6	343.4	334.4	343.4	357.6
162.5°	339.9	349.0	359.4	376.8	384.5	376.8	359.4	349.0	339.9	349.0	359.4
165°	350.6	355.2	362.2	371.7	378.5	371.7	362.2	355.2	350.6	355.2	362.2
167.5°	356.7	360.7	364.6	369.3	373.4	369.3	364.6	360.7	356.7	360.7	364.6
170°	362.2	364.5	364.6	369.2	371.5	369.2	364.6	364.5	362.2	364.5	364.6
172.5°	364.1	368.2	366.4	367.4	369.7	367.4	366.4	368.2	364.1	368.2	366.4
175°	369.2	371.5	369.2	366.8	364.6	366.8	369.2	371.5	369.2	371.5	369.2
177.5°	369.2	371.0	369.2	369.2	367.3	369.2	369.2	371.0	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2

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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°	14.0	12.4	15.5	18.3	17.6	9.5
90°	7.0	7.0	7.0	4.6	2.3	0.0
92.5°	14.4	16.3	14.4	10.2	7.8	5.6
95°	21.0	25.5	21.0	18.6	34.5	18.6
97.5°	40.3	34.8	40.3	136.5	66.1	33.0
100°	80.7	53.4	80.7	274.0	82.7	44.1
102.5°	212.8	116.6	212.8	370.6	95.7	55.3
105°	536.9	355.3	536.9	420.3	110.6	72.0
107.5°	781.4	731.9	781.4	401.2	117.8	88.7
110°	821.1	882.4	821.1	390.1	127.1	99.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	797.9	900.9	797.9	378.9	138.2	111.0
115°	752.9	880.0	752.9	362.2	155.0	127.7
117.5°	704.2	835.0	704.2	358.0	171.7	144.9
120°	667.2	803.4	667.2	350.6	182.9	157.9
122.5°	635.4	760.7	635.4	341.3	194.0	167.2
125°	596.9	705.9	596.9	341.3	208.4	183.4
127.5°	552.3	659.9	552.3	341.8	222.3	196.9
130°	522.4	624.6	522.4	343.7	231.6	204.3
132.5°	509.0	593.0	509.0	343.7	240.9	213.6
135°	491.6	564.2	491.6	343.7	252.5	227.6
137.5°	472.3	534.5	472.3	343.7	266.0	239.2
140°	461.0	517.8	461.0	343.7	273.4	248.5
142.5°	448.0	501.1	448.0	345.5	280.9	257.7
145°	428.3	473.7	428.3	346.0	292.1	269.4
147.5°	414.1	449.1	414.1	348.8	303.3	283.3
150°	404.7	434.2	404.7	350.6	310.7	292.6
152.5°	397.1	421.2	397.1	350.6	318.2	301.9
155°	388.2	406.3	388.2	352.9	327.1	315.8
157.5°	382.5	395.7	382.5	355.7	337.8	326.9
160°	378.7	390.1	378.7	357.6	343.4	334.4
162.5°	376.8	384.5	376.8	359.4	349.0	339.9
165°	371.7	378.5	371.7	362.2	355.2	350.6
167.5°	369.3	373.4	369.3	364.6	360.7	356.7
170°	369.2	371.5	369.2	364.6	364.5	362.2
172.5°	367.4	369.7	367.4	366.4	368.2	364.1
175°	366.8	364.6	366.8	369.2	371.5	369.2
177.5°	369.2	367.3	369.2	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2

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