

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: P621619

Luminaire Tested: VLT-FA-050U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621619
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

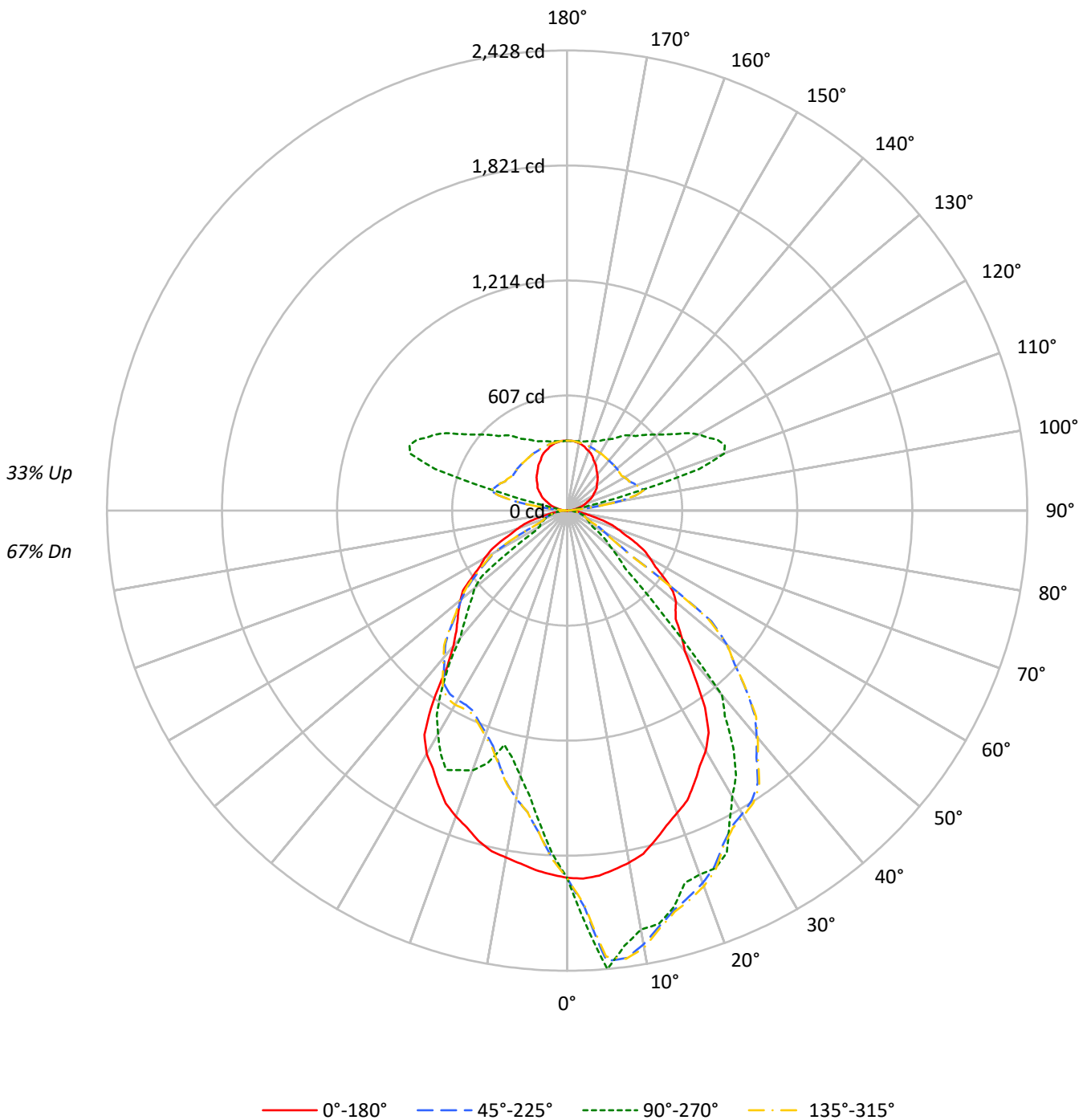
Lumens per Lamp: N/A
Luminaire Lumens: 5977.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
Input Voltage (V): 120
Input Current (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			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	0
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°	13902	13902	13902	13902
5°	13927	17490	13714	11925
10°	13743	16356	13542	10354
15°	13367	16106	13412	9503
20°	12958	15607	13109	11137
25°	12562	15776	12702	11953
30°	12117	14436	12280	11284
35°	11101	13380	10825	10117
40°	9046	11908	8732	8234
45°	8220	4420	8300	7501
50°	8361	3366	8206	7128
55°	7891	2614	7619	4265
60°	7269	2008	7213	2375
65°	6693	2075	6559	2510
70°	5954	2193	5789	2606
75°	5082	2296	4863	2678
80°	3827	2364	3583	2769
85°	2594	2108	2272	2594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15221 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	3.1
10°-20°	511.9	8.6
20°-30°	766.0	12.8
30°-40°	871.2	14.6
40°-50°	745.1	12.5
50°-60°	502.4	8.4
60°-70°	259.3	4.3
70°-80°	117.1	2.0
80°-90°	35.7	0.6
90°-100°	45.4	0.8
100°-110°	323.2	5.4
110°-120°	438.7	7.3
120°-130°	357.1	6.0
130°-140°	287.2	4.8
140°-150°	226.4	3.8
150°-160°	165.6	2.8
160°-170°	102.8	1.7
170°-180°	35.1	0.6
0°-30°	1464.9	24.5
0°-40°	2336.0	39.1
0°-60°	3583.5	60.0
0°-90°	3995.6	66.8
90°-120°	807.3	13.5
90°-150°	1677.9	28.1
90°-180°	1981.0	33.1
0°-180°	5977.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1937	1937	1937	1937	1937	
5°	1933	2428	1904	1656	1933	183
15°	1799	2168	1805	1279	1799	506
25°	1586	1992	1604	1510	1586	730
35°	1267	1527	1236	1155	1267	775
45°	810	436	818	739	810	643
55°	631	209	609	341	631	562
65°	394	122	386	148	394	390
75°	183	83	175	97	183	195
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	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°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1943.6	2009.9	2093.4	2150.7	2175.4	2150.7	2079.2	2009.4	1921.5	1895.3	1833.2
5°	1933.4	2137.6	2384.7	2414.5	2428.0	2414.5	2363.0	2125.4	1903.8	1809.4	1706.7
7.5°	1909.7	2267.0	2381.9	2315.3	2315.7	2328.0	2385.5	2255.9	1879.0	1730.6	1604.6
10°	1886.1	2338.9	2323.6	2227.4	2244.7	2237.0	2341.3	2324.8	1858.5	1687.0	1543.1
12.5°	1854.5	2361.3	2246.3	2214.8	2233.7	2222.9	2257.8	2349.1	1841.1	1655.7	1472.2
15°	1799.3	2329.3	2181.7	2167.9	2167.9	2177.5	2191.5	2339.0	1805.3	1599.1	1385.5
17.5°	1742.6	2265.2	2136.7	2068.4	2061.1	2073.8	2152.9	2281.6	1754.4	1536.3	1301.5
20°	1696.9	2221.0	2091.0	2011.0	2043.7	2014.8	2108.8	2233.0	1716.6	1496.9	1249.5
22.5°	1655.9	2166.1	2032.7	1998.6	2042.1	1999.4	2048.8	2178.1	1672.4	1452.7	1210.1
25°	1586.5	2074.0	1945.2	1977.1	1992.5	1977.1	1953.1	2082.1	1604.2	1396.1	1168.7
27.5°	1517.5	1976.9	1879.8	1901.2	1854.1	1890.4	1890.4	1977.3	1534.1	1330.2	1156.1
30°	1462.3	1909.4	1846.6	1815.4	1742.2	1800.0	1860.4	1909.8	1482.0	1287.4	1152.9
32.5°	1389.8	1847.7	1813.5	1705.6	1658.6	1697.9	1828.9	1846.4	1401.6	1248.6	1149.8
35°	1267.2	1760.5	1754.0	1575.5	1527.4	1564.0	1767.8	1756.0	1235.7	1187.5	1125.3
37.5°	1102.9	1682.9	1640.1	1444.0	1367.3	1434.4	1653.1	1674.5	1039.4	1131.5	1068.2
40°	965.7	1630.5	1555.0	1346.3	1271.2	1336.7	1564.8	1625.9	932.2	1092.1	1005.1
42.5°	888.4	1584.1	1465.1	1242.9	777.7	1227.1	1475.0	1578.2	866.0	1041.3	949.9
45°	810.0	1499.9	1334.2	688.0	435.5	655.2	1336.2	1478.8	817.9	964.3	865.2
47.5°	775.7	1396.2	1197.5	414.4	367.8	402.4	1196.3	1373.5	776.1	887.1	784.4
50°	748.9	1330.9	1099.7	365.1	301.5	351.6	1101.7	1309.4	735.1	835.3	729.2
52.5°	704.8	1252.8	959.4	302.5	260.5	295.2	936.1	1228.2	692.5	778.9	659.8
55°	630.7	1102.8	400.1	237.8	208.9	228.2	380.4	1065.7	609.0	689.9	579.4
57.5°	552.2	938.8	280.6	185.1	162.0	183.2	278.7	901.2	542.0	584.4	505.3
60°	506.5	828.3	228.6	155.3	139.9	153.4	226.6	795.5	502.6	514.1	437.5
62.5°	460.8	716.3	189.2	136.7	132.0	134.7	188.8	680.3	453.7	454.5	308.2
65°	394.2	542.5	139.9	124.1	122.2	122.2	136.0	523.1	386.3	374.7	177.4
67.5°	326.4	389.6	112.3	114.3	112.3	112.3	110.4	378.6	318.5	298.8	134.0
70°	283.8	299.2	104.5	106.4	104.5	104.5	102.5	291.3	275.9	231.6	126.1
72.5°	242.8	204.3	96.6	97.0	96.6	96.6	94.6	191.8	234.9	162.8	115.1
75°	183.3	102.4	82.8	82.8	82.8	82.8	80.8	98.3	175.4	106.0	98.5
77.5°	127.3	67.6	68.6	68.2	68.2	66.6	66.6	67.0	119.8	73.2	79.6
80°	92.6	56.0	59.1	57.2	57.2	57.2	57.2	54.0	86.7	61.7	67.0
82.5°	65.8	44.6	48.1	46.1	46.1	46.1	46.1	44.1	59.9	50.3	54.4
85°	31.5	29.6	31.5	27.5	25.6	27.5	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	14.5	13.5	10.9	10.9	10.9	12.0	13.0	7.9	16.0	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	16.2	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°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1811.1	1809.6	1812.7	1839.5	1894.3	1943.6
5°	1649.7	1655.5	1661.3	1706.7	1802.3	1933.4
7.5°	1525.6	1517.1	1530.2	1604.2	1721.6	1909.7
10°	1440.2	1421.0	1440.2	1541.2	1677.9	1886.1
12.5°	1359.7	1335.8	1365.9	1476.5	1641.8	1854.5
15°	1255.9	1279.1	1265.6	1389.4	1587.4	1799.3
17.5°	1280.5	1396.9	1305.2	1313.7	1533.3	1742.6
20°	1338.9	1458.4	1377.5	1263.3	1498.4	1696.9
22.5°	1391.9	1482.0	1408.8	1220.7	1463.6	1655.9
25°	1432.6	1509.6	1428.7	1182.5	1413.1	1586.5
27.5°	1434.6	1445.4	1435.4	1179.3	1350.6	1517.5
30°	1408.1	1361.8	1404.2	1182.5	1306.2	1462.3
32.5°	1332.3	1279.8	1316.1	1176.2	1261.5	1389.8
35°	1224.3	1154.9	1205.0	1143.1	1192.1	1267.2
37.5°	1110.3	1022.5	1091.8	1077.6	1132.9	1102.9
40°	1033.1	879.0	1017.7	1013.0	1100.6	965.7
42.5°	934.3	803.3	920.5	961.0	1065.0	888.4
45°	754.5	739.1	746.8	873.1	989.2	810.0
47.5°	689.9	679.5	686.1	793.1	903.7	775.7
50°	652.0	638.5	648.2	741.0	849.1	748.9
52.5°	599.5	562.9	595.6	670.1	792.6	704.8
55°	450.8	340.9	448.9	589.3	707.7	630.7
57.5°	264.5	197.1	258.7	512.8	599.6	552.2
60°	179.0	165.5	181.0	451.3	527.7	506.5
62.5°	163.5	159.2	163.9	314.1	463.5	460.8
65°	149.7	147.8	149.7	181.3	382.6	394.2
67.5°	135.5	133.6	137.1	139.1	302.1	326.4
70°	126.1	124.2	126.1	128.1	231.8	283.8
72.5°	115.1	113.1	115.1	117.1	163.0	242.8
75°	98.5	96.6	98.5	100.5	108.1	183.3
77.5°	79.6	79.6	81.5	81.6	75.7	127.3
80°	67.0	67.0	68.9	69.0	65.6	92.6
82.5°	54.4	52.8	56.3	57.9	54.3	65.8
85°	33.5	31.5	35.4	37.4	35.4	31.5
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	16.2	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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