

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: P621621

Luminaire Tested: VLT-FA-050U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621621
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-840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

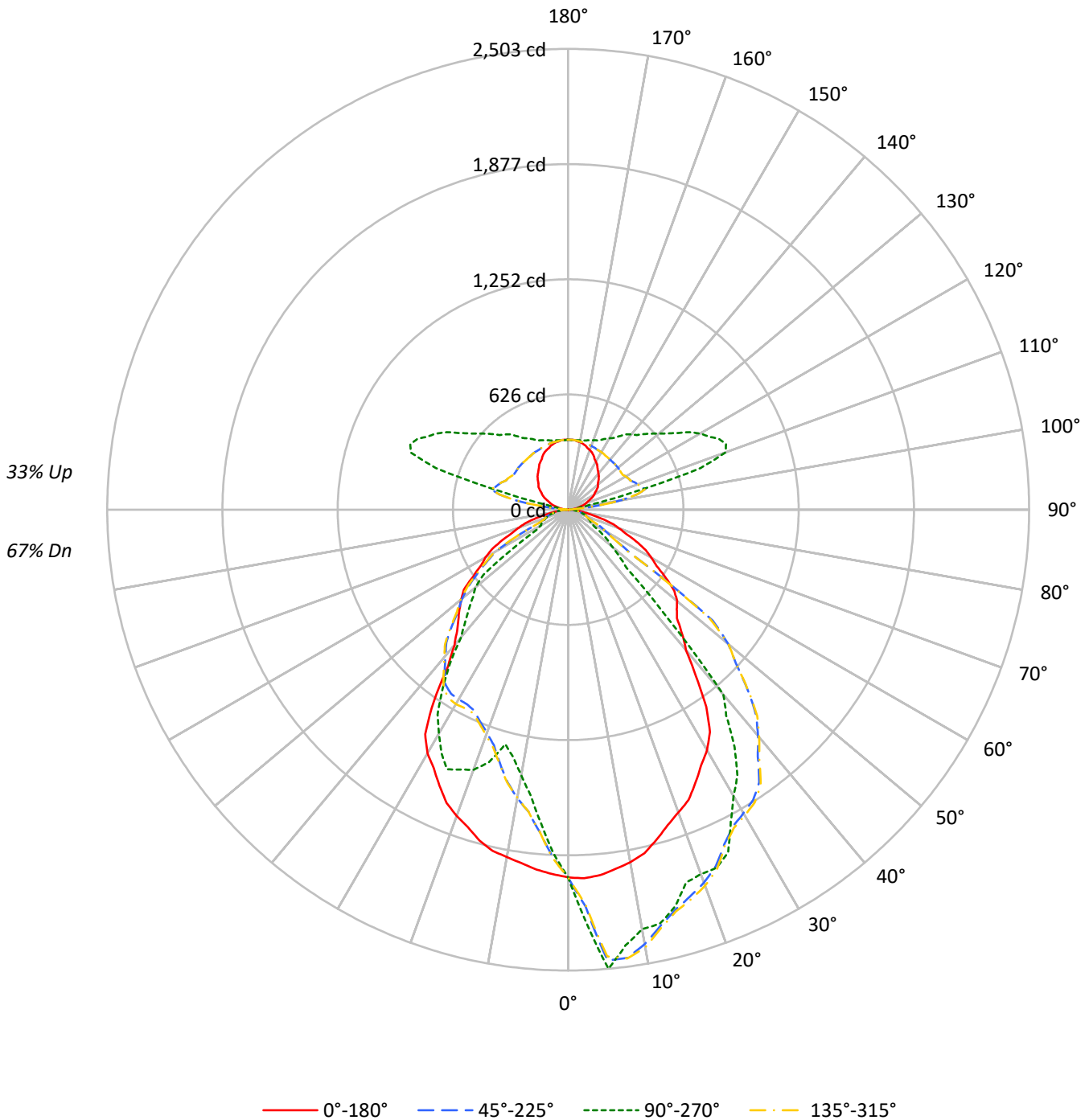
Lumens per Lamp: N/A
Luminaire Lumens: 6160.8 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	
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	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°	14330	14330	14330	14330
5°	14355	18028	14135	12292
10°	14165	16860	13958	10672
15°	13779	16600	13824	9795
20°	13356	16087	13511	11479
25°	12948	16261	13093	12320
30°	12490	14880	12658	11631
35°	11443	13791	11158	10428
40°	9324	12273	9000	8487
45°	8473	4556	8555	7731
50°	8617	3470	8459	7348
55°	8132	2694	7853	4396
60°	7493	2070	7434	2448
65°	6899	2138	6761	2588
70°	6137	2260	5967	2686
75°	5237	2365	5013	2759
80°	3947	2434	3694	2856
85°	2676	2174	2338	2676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15689 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	3.1
10°-20°	527.7	8.6
20°-30°	789.6	12.8
30°-40°	898.0	14.6
40°-50°	768.0	12.5
50°-60°	517.9	8.4
60°-70°	267.3	4.3
70°-80°	120.7	2.0
80°-90°	36.8	0.6
90°-100°	46.8	0.8
100°-110°	333.1	5.4
110°-120°	452.2	7.3
120°-130°	368.1	6.0
130°-140°	296.0	4.8
140°-150°	233.4	3.8
150°-160°	170.7	2.8
160°-170°	106.0	1.7
170°-180°	36.1	0.6
0°-30°	1509.9	24.5
0°-40°	2407.9	39.1
0°-60°	3693.7	60.0
0°-90°	4118.4	66.8
90°-120°	832.1	13.5
90°-150°	1729.6	28.1
90°-180°	2042.0	33.1
0°-180°	6160.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1997	1997	1997	1997	1997	
5°	1993	2503	1962	1706	1993	188
15°	1855	2234	1861	1318	1855	522
25°	1635	2054	1654	1556	1635	753
35°	1306	1574	1274	1190	1306	799
45°	835	449	843	762	835	662
55°	650	215	628	351	650	579
65°	406	126	398	152	406	402
75°	189	85	181	100	189	201
85°	32	26	28	32	32	42
90°	0	7	0	7	0	2
95°	19	26	19	26	19	21
105°	74	366	74	366	74	78
115°	132	906	132	906	132	131
125°	189	727	189	727	189	168
135°	234	581	234	581	234	180
145°	277	488	277	488	277	174
155°	325	418	325	418	325	149
165°	361	390	361	390	361	101
175°	380	375	380	375	380	36
180°	380	380	380	380	380	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	2003.4	2071.7	2157.7	2216.8	2242.3	2216.8	2143.1	2071.2	1980.6	1953.6	1889.6
5°	1992.8	2203.3	2458.0	2488.8	2502.7	2488.8	2435.6	2190.7	1962.3	1865.0	1759.2
7.5°	1968.4	2336.7	2455.1	2386.5	2386.9	2399.6	2458.8	2325.2	1936.7	1783.8	1654.0
10°	1944.0	2410.8	2395.0	2295.9	2313.8	2305.8	2413.3	2396.3	1915.6	1738.8	1590.6
12.5°	1911.5	2433.9	2315.4	2282.9	2302.4	2291.3	2327.2	2421.3	1897.7	1706.6	1517.4
15°	1854.7	2400.9	2248.8	2234.5	2234.5	2244.5	2258.9	2410.9	1860.8	1648.2	1428.1
17.5°	1796.2	2334.8	2202.4	2132.0	2124.4	2137.5	2219.1	2351.8	1808.3	1583.5	1341.5
20°	1749.0	2289.3	2155.3	2072.8	2106.6	2076.8	2173.6	2301.7	1769.3	1542.9	1287.9
22.5°	1706.8	2232.7	2095.2	2060.0	2104.9	2060.8	2111.8	2245.0	1723.8	1497.4	1247.3
25°	1635.3	2137.8	2005.0	2037.8	2053.7	2037.8	2013.1	2146.1	1653.6	1439.0	1204.6
27.5°	1564.2	2037.7	1937.5	1959.6	1911.1	1948.5	1948.5	2038.1	1581.2	1371.1	1191.6
30°	1507.3	1968.1	1903.4	1871.2	1795.8	1855.3	1917.6	1968.6	1527.6	1327.0	1188.4
32.5°	1432.5	1904.5	1869.3	1758.1	1709.6	1750.1	1885.1	1903.2	1444.7	1287.0	1185.1
35°	1306.2	1814.7	1807.9	1624.0	1574.3	1612.1	1822.2	1810.0	1273.7	1224.0	1159.9
37.5°	1136.8	1734.6	1690.5	1488.4	1409.4	1478.5	1703.9	1726.0	1071.4	1166.3	1101.0
40°	995.4	1680.6	1602.8	1387.7	1310.2	1377.8	1612.9	1675.9	960.8	1125.7	1036.0
42.5°	915.8	1632.8	1510.1	1281.1	801.6	1264.8	1520.3	1626.7	892.6	1073.3	979.1
45°	834.9	1546.0	1375.3	709.1	448.9	675.4	1377.3	1524.3	843.0	994.0	891.8
47.5°	799.6	1439.1	1234.3	427.1	379.1	414.8	1233.1	1415.7	800.0	914.4	808.5
50°	771.9	1371.8	1133.5	376.3	310.8	362.4	1135.5	1349.6	757.7	861.0	751.6
52.5°	726.4	1291.3	988.9	311.9	268.6	304.3	964.9	1266.0	713.8	802.8	680.1
55°	650.0	1136.7	412.4	245.1	215.3	235.2	392.1	1098.4	627.7	711.1	597.2
57.5°	569.2	967.6	289.3	190.8	167.0	188.8	287.2	928.9	558.6	602.3	520.8
60°	522.1	853.8	235.6	160.1	144.2	158.1	233.6	819.9	518.0	529.9	451.0
62.5°	474.9	738.3	195.0	140.9	136.1	138.9	194.6	701.2	467.6	468.4	317.7
65°	406.3	559.2	144.2	127.9	125.9	125.9	140.2	539.2	398.2	386.2	182.8
67.5°	336.4	401.5	115.8	117.8	115.8	115.8	113.8	390.2	328.3	308.0	138.1
70°	292.5	308.4	107.7	109.7	107.7	107.7	105.6	300.3	284.4	238.7	130.0
72.5°	250.3	210.5	99.5	99.9	99.5	99.5	97.5	197.6	242.1	167.9	118.6
75°	188.9	105.5	85.3	85.3	85.3	85.3	83.3	101.3	180.8	109.3	101.6
77.5°	131.2	69.7	70.7	70.3	70.3	68.7	68.7	69.1	123.5	75.4	82.1
80°	95.5	57.7	60.9	58.9	58.9	58.9	58.9	55.6	89.4	63.6	69.1
82.5°	67.8	46.0	49.6	47.5	47.5	47.5	47.5	45.5	61.8	51.8	56.1
85°	32.5	30.5	32.5	28.4	26.4	28.4	30.5	30.4	28.4	34.4	36.6
87.5°	9.8	15.0	14.0	11.2	11.2	11.2	12.3	13.4	8.1	16.5	15.6
90°	0.0	2.3	4.8	7.2	7.2	7.2	4.8	2.3	0.0	2.3	4.8
92.5°	5.7	8.1	10.5	14.9	16.7	14.9	10.5	8.1	5.7	8.1	10.5
95°	19.1	35.5	19.1	21.6	26.3	21.6	19.1	35.5	19.1	35.5	19.1
97.5°	34.0	68.1	140.6	41.5	35.9	41.5	140.6	68.1	34.0	68.1	140.6
100°	45.4	85.2	282.2	83.1	55.0	83.1	282.2	85.2	45.4	85.2	282.2
102.5°	56.9	98.5	381.6	219.2	120.0	219.2	381.6	98.5	56.9	98.5	381.6
105°	74.1	113.9	432.8	552.9	365.9	552.9	432.8	113.9	74.1	113.9	432.8
107.5°	91.3	121.3	413.2	804.7	753.7	804.7	413.2	121.3	91.3	121.3	413.2
110°	102.8	130.9	401.7	845.5	908.7	845.5	401.7	130.9	102.8	130.9	401.7



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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°	114.3	142.4	390.2	821.6	927.8	821.6	390.2	142.4	114.3	142.4	390.2
115°	131.5	159.6	373.0	775.3	906.3	775.3	373.0	159.6	131.5	159.6	373.0
117.5°	149.2	176.8	368.7	725.2	859.9	725.2	368.7	176.8	149.2	176.8	368.7
120°	162.6	188.3	361.1	687.1	827.4	687.1	361.1	188.3	162.6	188.3	361.1
122.5°	172.2	199.8	351.5	654.3	783.4	654.3	351.5	199.8	172.2	199.8	351.5
125°	188.9	214.6	351.5	614.7	726.9	614.7	351.5	214.6	188.9	214.6	351.5
127.5°	202.8	229.0	352.0	568.8	679.6	568.8	352.0	229.0	202.8	229.0	352.0
130°	210.4	238.5	353.9	538.0	643.2	538.0	353.9	238.5	210.4	238.5	353.9
132.5°	220.0	248.0	353.9	524.2	610.7	524.2	353.9	248.0	220.0	248.0	353.9
135°	234.3	260.1	353.9	506.2	581.1	506.2	353.9	260.1	234.3	260.1	353.9
137.5°	246.3	273.9	353.9	486.4	550.5	486.4	353.9	273.9	246.3	273.9	353.9
140°	255.9	281.6	353.9	474.8	533.2	474.8	353.9	281.6	255.9	281.6	353.9
142.5°	265.4	289.3	355.8	461.3	516.0	461.3	355.8	289.3	265.4	289.3	355.8
145°	277.4	300.8	356.3	441.0	487.8	441.0	356.3	300.8	277.4	300.8	356.3
147.5°	291.7	312.3	359.2	426.5	462.5	426.5	359.2	312.3	291.7	312.3	359.2
150°	301.3	320.0	361.1	416.8	447.2	416.8	361.1	320.0	301.3	320.0	361.1
152.5°	310.9	327.7	361.1	409.0	433.8	409.0	361.1	327.7	310.9	327.7	361.1
155°	325.2	336.9	363.5	399.8	418.5	399.8	363.5	336.9	325.2	336.9	363.5
157.5°	336.7	347.9	366.3	393.9	407.5	393.9	366.3	347.9	336.7	347.9	366.3
160°	344.3	353.7	368.2	390.0	401.7	390.0	368.2	353.7	344.3	353.7	368.2
162.5°	350.1	359.4	370.2	388.0	396.0	388.0	370.2	359.4	350.1	359.4	370.2
165°	361.1	365.7	373.0	382.8	389.8	382.8	373.0	365.7	361.1	365.7	373.0
167.5°	367.3	371.5	375.4	380.3	384.5	380.3	375.4	371.5	367.3	371.5	375.4
170°	373.0	375.4	375.4	380.3	382.6	380.3	375.4	375.4	373.0	375.4	375.4
172.5°	374.9	379.1	377.3	378.3	380.7	378.3	377.3	379.1	374.9	379.1	377.3
175°	380.2	382.5	380.2	377.8	375.4	377.8	380.2	382.5	380.2	382.5	380.2
177.5°	380.2	382.1	380.2	380.2	378.3	380.2	380.2	382.1	380.2	382.1	380.2
180°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	1866.8	1865.2	1868.4	1896.1	1952.5	2003.4
5°	1700.4	1706.4	1712.3	1759.2	1857.7	1992.8
7.5°	1572.5	1563.8	1577.3	1653.6	1774.6	1968.4
10°	1484.5	1464.6	1484.5	1588.5	1729.5	1944.0
12.5°	1401.5	1376.9	1407.9	1521.9	1692.3	1911.5
15°	1294.5	1318.4	1304.5	1432.1	1636.2	1854.7
17.5°	1319.9	1439.9	1345.3	1354.1	1580.5	1796.2
20°	1380.1	1503.2	1419.8	1302.1	1544.4	1749.0
22.5°	1434.7	1527.6	1452.1	1258.2	1508.5	1706.8
25°	1476.6	1556.0	1472.6	1218.8	1456.5	1635.3
27.5°	1478.7	1489.8	1479.5	1215.6	1392.2	1564.2
30°	1451.4	1403.7	1447.4	1218.8	1346.4	1507.3
32.5°	1373.2	1319.2	1356.5	1212.3	1300.3	1432.5
35°	1261.9	1190.4	1242.0	1178.2	1228.7	1306.2
37.5°	1144.5	1053.9	1125.4	1110.8	1167.8	1136.8
40°	1064.9	906.0	1049.0	1044.1	1134.4	995.4
42.5°	963.1	828.0	948.8	990.5	1097.7	915.8
45°	777.7	761.8	769.7	899.9	1019.6	834.9
47.5°	711.1	700.4	707.2	817.4	931.4	799.6
50°	672.1	658.2	668.1	763.8	875.2	771.9
52.5°	617.9	580.2	613.9	690.7	817.0	726.4
55°	464.6	351.4	462.7	607.4	729.5	650.0
57.5°	272.7	203.1	266.7	528.6	618.1	569.2
60°	184.5	170.6	186.5	465.2	543.9	522.1
62.5°	168.5	164.1	168.9	323.8	477.7	474.9
65°	154.3	152.4	154.3	186.9	394.4	406.3
67.5°	139.7	137.7	141.3	143.4	311.4	336.4
70°	130.0	128.0	130.0	132.0	238.9	292.5
72.5°	118.6	116.6	118.6	120.7	168.0	250.3
75°	101.5	99.5	101.5	103.6	111.5	188.9
77.5°	82.1	82.1	84.1	84.1	78.0	131.2
80°	69.1	69.1	71.1	71.1	67.7	95.5
82.5°	56.0	54.4	58.0	59.7	55.9	67.8
85°	34.5	32.5	36.5	38.6	36.5	32.5
87.5°	14.4	12.8	16.0	18.8	18.2	9.8
90°	7.2	7.2	7.2	4.8	2.3	0.0
92.5°	14.9	16.7	14.9	10.5	8.1	5.7
95°	21.6	26.3	21.6	19.1	35.5	19.1
97.5°	41.5	35.9	41.5	140.6	68.1	34.0
100°	83.1	55.0	83.1	282.2	85.2	45.4
102.5°	219.2	120.0	219.2	381.6	98.5	56.9
105°	552.9	365.9	552.9	432.8	113.9	74.1
107.5°	804.7	753.7	804.7	413.2	121.3	91.3
110°	845.5	908.7	845.5	401.7	130.9	102.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	821.6	927.8	821.6	390.2	142.4	114.3
115°	775.3	906.3	775.3	373.0	159.6	131.5
117.5°	725.2	859.9	725.2	368.7	176.8	149.2
120°	687.1	827.4	687.1	361.1	188.3	162.6
122.5°	654.3	783.4	654.3	351.5	199.8	172.2
125°	614.7	726.9	614.7	351.5	214.6	188.9
127.5°	568.8	679.6	568.8	352.0	229.0	202.8
130°	538.0	643.2	538.0	353.9	238.5	210.4
132.5°	524.2	610.7	524.2	353.9	248.0	220.0
135°	506.2	581.1	506.2	353.9	260.1	234.3
137.5°	486.4	550.5	486.4	353.9	273.9	246.3
140°	474.8	533.2	474.8	353.9	281.6	255.9
142.5°	461.3	516.0	461.3	355.8	289.3	265.4
145°	441.0	487.8	441.0	356.3	300.8	277.4
147.5°	426.5	462.5	426.5	359.2	312.3	291.7
150°	416.8	447.2	416.8	361.1	320.0	301.3
152.5°	409.0	433.8	409.0	361.1	327.7	310.9
155°	399.8	418.5	399.8	363.5	336.9	325.2
157.5°	393.9	407.5	393.9	366.3	347.9	336.7
160°	390.0	401.7	390.0	368.2	353.7	344.3
162.5°	388.0	396.0	388.0	370.2	359.4	350.1
165°	382.8	389.8	382.8	373.0	365.7	361.1
167.5°	380.3	384.5	380.3	375.4	371.5	367.3
170°	380.3	382.6	380.3	375.4	375.4	373.0
172.5°	378.3	380.7	378.3	377.3	379.1	374.9
175°	377.8	375.4	377.8	380.2	382.5	380.2
177.5°	380.2	378.3	380.2	380.2	382.1	380.2
180°	380.2	380.2	380.2	380.2	380.2	380.2

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