

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P621726

Luminaire Tested: VLT-FA-150U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621726
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-150U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

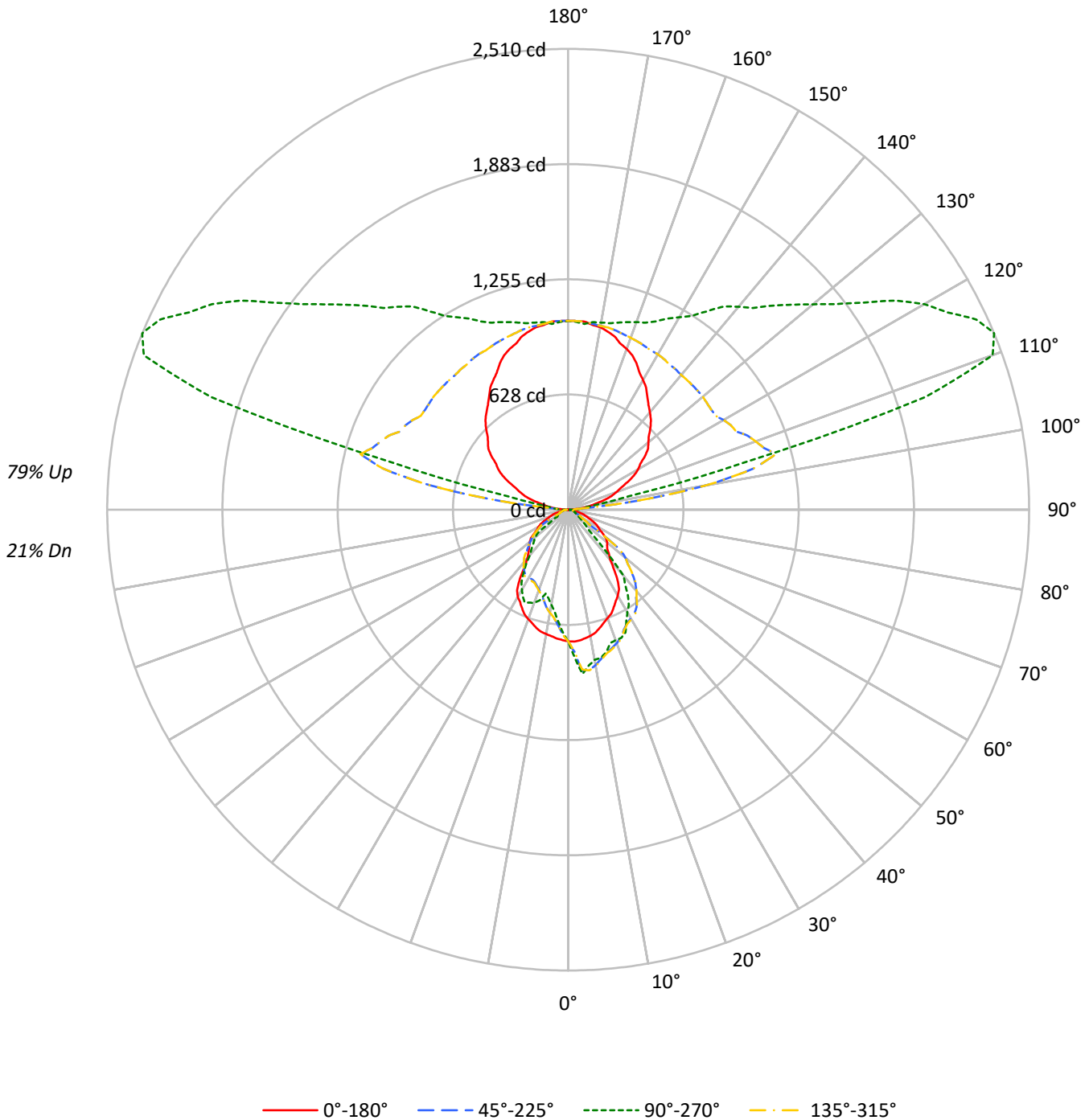
Lumens per Lamp: N/A
Luminaire Lumens: 7005.8 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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	0
RCR																		
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	18
2	84	77	71	67	74	68	64	60	52	49	47	38	36	34	24	23	22	16
3	77	68	61	56	68	60	55	50	46	43	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	24	21	19	16	14	13	10
7	55	43	36	31	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	24	27	23	20	20	17	15	13	12	10	8
9	47	36	28	24	42	32	26	22	25	21	18	19	16	13	12	11	9	7
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5142	5142	5142	5142
5°	5151	6469	5073	4411
10°	5083	6050	5009	3830
15°	4944	5957	4960	3515
20°	4793	5772	4848	4119
25°	4646	5835	4698	4421
30°	4482	5340	4542	4174
35°	4106	4949	4004	3742
40°	3346	4405	3230	3045
45°	3040	1635	3070	2775
50°	3092	1245	3035	2637
55°	2919	967	2817	1578
60°	2688	743	2668	878
65°	2476	767	2426	929
70°	2203	810	2142	963
75°	1880	848	1799	990
80°	1417	872	1327	1025
85°	963	782	840	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 5630 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.0
10°-20°	189.4	2.7
20°-30°	283.3	4.0
30°-40°	322.2	4.6
40°-50°	275.6	3.9
50°-60°	185.8	2.7
60°-70°	95.9	1.4
70°-80°	43.3	0.6
80°-90°	15.2	0.2
90°-100°	126.5	1.8
100°-110°	901.3	12.9
110°-120°	1223.6	17.5
120°-130°	995.9	14.2
130°-140°	800.9	11.4
140°-150°	631.5	9.0
150°-160°	461.7	6.6
160°-170°	286.8	4.1
170°-180°	97.8	1.4
0°-30°	541.8	7.7
0°-40°	864.1	12.3
0°-60°	1325.5	18.9
0°-90°	1479.9	21.1
90°-120°	2251.3	32.1
90°-150°	4679.6	66.8
90°-180°	5526.0	78.9
0°-180°	7005.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	717	717	717	717	717	
5°	715	898	704	612	715	68
15°	666	802	668	473	666	187
25°	587	737	593	558	587	270
35°	469	565	457	427	469	287
45°	300	161	302	273	300	238
55°	233	77	225	126	233	208
65°	146	45	143	55	146	144
75°	68	31	65	36	68	72
85°	12	10	10	12	12	15
90°	0	19	0	19	0	3
95°	52	71	52	71	52	58
105°	201	990	201	990	201	212
115°	356	2452	356	2452	356	353
125°	511	1967	511	1967	511	454
135°	634	1572	634	1572	634	488
145°	750	1320	750	1320	750	471
155°	880	1132	880	1132	880	404
165°	977	1055	977	1055	977	274
175°	1029	1016	1029	1016	1029	97
180°	1029	1029	1029	1029	1029	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	718.9	743.4	774.3	795.5	804.6	795.5	769.1	743.2	710.7	701.0	678.1
5°	715.1	790.7	882.0	893.1	898.1	893.1	874.0	786.1	704.2	669.3	631.3
7.5°	706.4	838.5	881.0	856.4	856.5	861.1	882.3	834.4	695.0	640.1	593.5
10°	697.6	865.1	859.4	823.9	830.3	827.4	866.0	859.9	687.4	624.0	570.8
12.5°	686.0	873.4	830.9	819.2	826.2	822.2	835.1	868.9	681.0	612.4	544.5
15°	665.5	861.6	807.0	801.9	801.9	805.4	810.6	865.2	667.7	591.5	512.5
17.5°	644.5	837.8	790.3	765.1	762.3	767.1	796.3	843.9	648.9	568.2	481.4
20°	627.6	821.5	773.4	743.8	755.9	745.2	780.0	825.9	634.9	553.7	462.2
22.5°	612.5	801.2	751.9	739.2	755.4	739.5	757.8	805.6	618.6	537.3	447.6
25°	586.8	767.1	719.5	731.3	737.0	731.3	722.4	770.1	593.4	516.4	432.3
27.5°	561.3	731.2	695.3	703.2	685.8	699.2	699.2	731.4	567.4	492.0	427.6
30°	540.9	706.3	683.0	671.5	644.4	665.8	688.1	706.4	548.2	476.2	426.4
32.5°	514.1	683.4	670.8	630.9	613.5	628.0	676.5	682.9	518.4	461.8	425.3
35°	468.7	651.2	648.8	582.8	564.9	578.5	653.9	649.5	457.1	439.2	416.2
37.5°	407.9	622.5	606.6	534.1	505.8	530.6	611.5	619.4	384.5	418.5	395.1
40°	357.2	603.1	575.2	498.0	470.2	494.4	578.8	601.4	344.8	404.0	371.8
42.5°	328.6	585.9	541.9	459.7	287.6	453.9	545.6	583.7	320.3	385.2	351.4
45°	299.6	554.8	493.5	254.5	161.1	242.4	494.2	547.0	302.5	356.7	320.0
47.5°	286.9	516.4	442.9	153.3	136.0	148.9	442.5	508.0	287.1	328.1	290.1
50°	277.0	492.3	406.8	135.1	111.5	130.1	407.5	484.3	271.9	309.0	269.7
52.5°	260.7	463.4	354.9	111.9	96.4	109.2	346.3	454.3	256.2	288.1	244.1
55°	233.3	407.9	148.0	88.0	77.3	84.4	140.7	394.2	225.2	255.2	214.3
57.5°	204.3	347.2	103.8	68.5	59.9	67.8	103.1	333.3	200.5	216.1	186.9
60°	187.3	306.4	84.6	57.5	51.8	56.7	83.8	294.2	185.9	190.2	161.8
62.5°	170.4	264.9	70.0	50.6	48.8	49.8	69.8	251.6	167.8	168.1	114.0
65°	145.8	200.7	51.8	45.9	45.2	45.2	50.3	193.5	142.9	138.6	65.6
67.5°	120.7	144.1	41.6	42.3	41.6	41.6	40.8	140.0	117.8	110.5	49.6
70°	105.0	110.7	38.6	39.3	38.6	38.6	37.9	107.8	102.1	85.7	46.7
72.5°	89.8	75.6	35.7	35.9	35.7	35.7	35.0	70.9	86.9	60.2	42.6
75°	67.8	37.9	30.6	30.6	30.6	30.6	29.9	36.4	64.9	39.2	36.4
77.5°	47.1	25.0	25.4	25.2	25.2	24.7	24.6	24.8	44.3	27.1	29.5
80°	34.3	20.7	21.9	21.1	21.1	21.1	21.1	20.0	32.1	22.8	24.8
82.5°	24.3	16.5	17.8	17.1	17.1	17.1	17.1	16.3	22.2	18.6	20.1
85°	11.7	11.0	11.7	10.2	9.5	10.2	10.9	10.9	10.2	12.3	13.1
87.5°	3.5	6.5	7.3	7.4	7.4	7.4	6.7	5.9	2.9	7.0	7.8
90°	0.0	6.3	12.9	19.4	19.4	19.4	12.9	6.3	0.0	6.3	12.9
92.5°	15.5	21.9	28.5	40.2	45.3	40.2	28.5	21.9	15.5	21.9	28.5
95°	51.8	96.0	51.8	58.5	71.2	58.5	51.8	96.0	51.8	96.0	51.8
97.5°	91.9	184.2	380.4	112.2	97.0	112.2	380.4	184.2	91.9	184.2	380.4
100°	122.9	230.5	763.4	224.7	148.8	224.7	763.4	230.5	122.9	230.5	763.4
102.5°	154.0	266.6	1032.6	593.0	324.8	593.0	1032.6	266.6	154.0	266.6	1032.6
105°	200.6	308.1	1171.0	1496.0	989.9	1496.0	1171.0	308.1	200.6	308.1	1171.0
107.5°	247.1	328.1	1118.0	2177.2	2039.3	2177.2	1118.0	328.1	247.1	328.1	1118.0
110°	278.2	354.1	1086.9	2287.7	2458.5	2287.7	1086.9	354.1	278.2	354.1	1086.9



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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°	309.3	385.2	1055.9	2223.1	2510.3	2223.1	1055.9	385.2	309.3	385.2	1055.9
115°	355.8	431.7	1009.3	2097.8	2452.0	2097.8	1009.3	431.7	355.8	431.7	1009.3
117.5°	403.7	478.4	997.6	1962.2	2326.5	1962.2	997.6	478.4	403.7	478.4	997.6
120°	439.9	509.5	976.9	1859.0	2238.5	1859.0	976.9	509.5	439.9	509.5	976.9
122.5°	465.8	540.5	951.1	1770.3	2119.5	1770.3	951.1	540.5	465.8	540.5	951.1
125°	511.1	580.7	951.1	1663.2	1966.8	1663.2	951.1	580.7	511.1	580.7	951.1
127.5°	548.6	619.5	952.3	1538.9	1838.7	1538.9	952.3	619.5	548.6	619.5	952.3
130°	569.3	645.3	957.5	1455.7	1740.4	1455.7	957.5	645.3	569.3	645.3	957.5
132.5°	595.2	671.1	957.5	1418.3	1652.4	1418.3	957.5	671.1	595.2	671.1	957.5
135°	634.0	703.6	957.5	1369.7	1572.2	1369.7	957.5	703.6	634.0	703.6	957.5
137.5°	666.4	741.0	957.5	1316.0	1489.3	1316.0	957.5	741.0	666.4	741.0	957.5
140°	692.3	761.9	957.5	1284.6	1442.8	1284.6	957.5	761.9	692.3	761.9	957.5
142.5°	718.1	782.7	962.7	1248.1	1396.2	1248.1	962.7	782.7	718.1	782.7	962.7
145°	750.5	813.8	964.0	1193.3	1319.8	1193.3	964.0	813.8	750.5	813.8	964.0
147.5°	789.3	845.0	971.8	1153.8	1251.3	1153.8	971.8	845.0	789.3	845.0	971.8
150°	815.2	865.8	976.9	1127.6	1209.8	1127.6	976.9	865.8	815.2	865.8	976.9
152.5°	841.1	886.6	976.9	1106.6	1173.6	1106.6	976.9	886.6	841.1	886.6	976.9
155°	879.9	911.5	983.4	1081.6	1132.2	1081.6	983.4	911.5	879.9	911.5	983.4
157.5°	910.9	941.3	991.2	1065.8	1102.4	1065.8	991.2	941.3	910.9	941.3	991.2
160°	931.6	957.0	996.3	1055.3	1086.9	1055.3	996.3	957.0	931.6	957.0	996.3
162.5°	947.2	972.5	1001.5	1049.9	1071.4	1049.9	1001.5	972.5	947.2	972.5	1001.5
165°	976.9	989.6	1009.3	1035.6	1054.6	1035.6	1009.3	989.6	976.9	989.6	1009.3
167.5°	993.8	1005.1	1015.8	1029.0	1040.3	1029.0	1015.8	1005.1	993.8	1005.1	1015.8
170°	1009.3	1015.6	1015.8	1028.8	1035.2	1028.8	1015.8	1015.6	1009.3	1015.6	1015.8
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0	1023.7	1020.9	1025.8	1014.5	1025.8	1020.9
175°	1028.7	1035.0	1028.7	1022.1	1015.8	1022.1	1028.7	1035.0	1028.7	1035.0	1028.7
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5	1028.6	1028.7	1033.8	1028.7	1033.8	1028.7
180°	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	716.6	716.6	716.6	716.6	716.6	716.6
2.5°	669.9	669.3	670.5	680.4	700.7	718.9
5°	610.2	612.3	614.5	631.3	666.6	715.1
7.5°	564.3	561.2	566.0	593.4	636.8	706.4
10°	532.7	525.6	532.7	570.0	620.6	697.6
12.5°	502.9	494.1	505.2	546.1	607.3	686.0
15°	464.5	473.1	468.1	513.9	587.1	665.5
17.5°	473.6	516.7	482.8	485.9	567.1	644.5
20°	495.2	539.4	509.5	467.3	554.2	627.6
22.5°	514.8	548.2	521.1	451.5	541.3	612.5
25°	529.9	558.4	528.4	437.4	522.7	586.8
27.5°	530.6	534.6	530.9	436.2	499.6	561.3
30°	520.8	503.7	519.4	437.4	483.2	540.9
32.5°	492.8	473.4	486.8	435.0	466.6	514.1
35°	452.8	427.2	445.7	422.8	440.9	468.7
37.5°	410.7	378.2	403.8	398.6	419.0	407.9
40°	382.1	325.1	376.4	374.7	407.1	357.2
42.5°	345.6	297.1	340.5	355.4	393.9	328.6
45°	279.1	273.4	276.2	322.9	365.9	299.6
47.5°	255.2	251.3	253.8	293.3	334.2	286.9
50°	241.2	236.2	239.7	274.1	314.1	277.0
52.5°	221.7	208.2	220.3	247.8	293.2	260.7
55°	166.7	126.1	166.0	218.0	261.8	233.3
57.5°	97.8	72.9	95.7	189.7	221.8	204.3
60°	66.2	61.2	66.9	166.9	195.2	187.3
62.5°	60.5	58.9	60.6	116.2	171.4	170.4
65°	55.4	54.7	55.4	67.1	141.5	145.8
67.5°	50.1	49.4	50.7	51.5	111.7	120.7
70°	46.6	45.9	46.6	47.4	85.7	105.0
72.5°	42.6	41.8	42.6	43.3	60.3	89.8
75°	36.4	35.7	36.4	37.2	40.0	67.8
77.5°	29.5	29.5	30.2	30.2	28.0	47.1
80°	24.8	24.8	25.5	25.5	24.3	34.3
82.5°	20.1	19.5	20.8	21.4	20.1	24.3
85°	12.4	11.7	13.1	13.9	13.1	11.7
87.5°	8.5	8.0	9.1	9.0	7.6	3.5
90°	19.4	19.4	19.4	12.9	6.3	0.0
92.5°	40.2	45.3	40.2	28.5	21.9	15.5
95°	58.5	71.2	58.5	51.8	96.0	51.8
97.5°	112.2	97.0	112.2	380.4	184.2	91.9
100°	224.7	148.8	224.7	763.4	230.5	122.9
102.5°	593.0	324.8	593.0	1032.6	266.6	154.0
105°	1496.0	989.9	1496.0	1171.0	308.1	200.6
107.5°	2177.2	2039.3	2177.2	1118.0	328.1	247.1
110°	2287.7	2458.5	2287.7	1086.9	354.1	278.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2223.1	2510.3	2223.1	1055.9	385.2	309.3
115°	2097.8	2452.0	2097.8	1009.3	431.7	355.8
117.5°	1962.2	2326.5	1962.2	997.6	478.4	403.7
120°	1859.0	2238.5	1859.0	976.9	509.5	439.9
122.5°	1770.3	2119.5	1770.3	951.1	540.5	465.8
125°	1663.2	1966.8	1663.2	951.1	580.7	511.1
127.5°	1538.9	1838.7	1538.9	952.3	619.5	548.6
130°	1455.7	1740.4	1455.7	957.5	645.3	569.3
132.5°	1418.3	1652.4	1418.3	957.5	671.1	595.2
135°	1369.7	1572.2	1369.7	957.5	703.6	634.0
137.5°	1316.0	1489.3	1316.0	957.5	741.0	666.4
140°	1284.6	1442.8	1284.6	957.5	761.9	692.3
142.5°	1248.1	1396.2	1248.1	962.7	782.7	718.1
145°	1193.3	1319.8	1193.3	964.0	813.8	750.5
147.5°	1153.8	1251.3	1153.8	971.8	845.0	789.3
150°	1127.6	1209.8	1127.6	976.9	865.8	815.2
152.5°	1106.6	1173.6	1106.6	976.9	886.6	841.1
155°	1081.6	1132.2	1081.6	983.4	911.5	879.9
157.5°	1065.8	1102.4	1065.8	991.2	941.3	910.9
160°	1055.3	1086.9	1055.3	996.3	957.0	931.6
162.5°	1049.9	1071.4	1049.9	1001.5	972.5	947.2
165°	1035.6	1054.6	1035.6	1009.3	989.6	976.9
167.5°	1029.0	1040.3	1029.0	1015.8	1005.1	993.8
170°	1028.8	1035.2	1028.8	1015.8	1015.6	1009.3
172.5°	1023.7	1030.0	1023.7	1020.9	1025.8	1014.5
175°	1022.1	1015.8	1022.1	1028.7	1035.0	1028.7
177.5°	1028.6	1023.5	1028.6	1028.7	1033.8	1028.7
180°	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7

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