

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P197417

Luminaire Tested: **8WSL-LD2-75-UPL8-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P197417
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28106)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8WSL-LD2-75-UPL8-UNV-L830-CD1-U
Description: 8FT. Linear Wavestream System, 8% Uplight, L830
Light Source: (476) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT85W1202772A0DIML

Summary

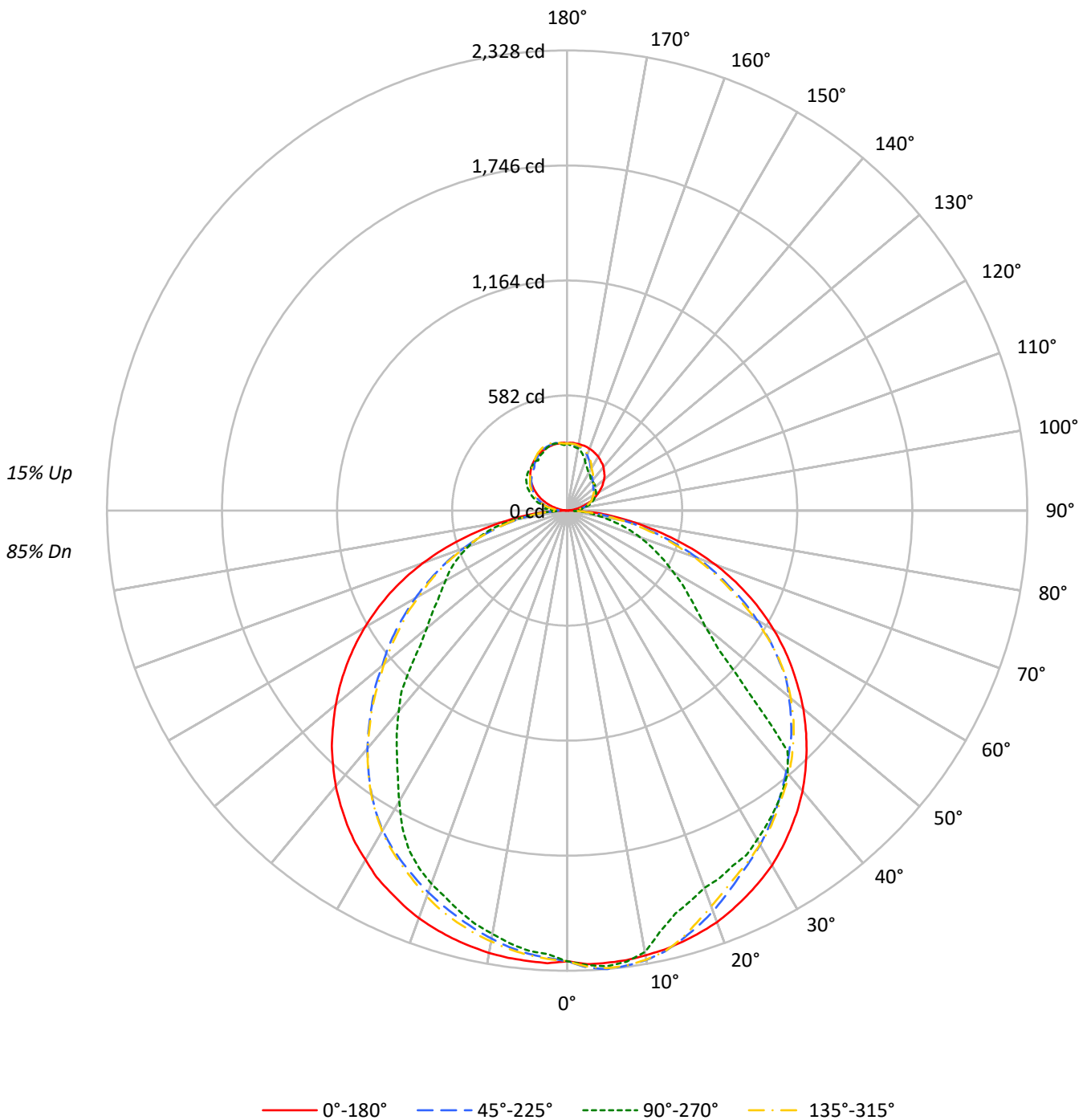
Lumens per Lamp: N/A
Luminaire Lumens: 7561.4 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.19 / 1.36
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 67.2
Input Voltage (V): NR
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: 25 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	115	115	115	115	111	111	111	111	103	103	103	95	95	95	88	88	88	85				
1	105	101	96	92	101	97	93	90	90	87	84	83	81	79	78	76	74	71				
2	96	88	81	75	92	84	78	73	78	73	69	73	69	65	68	65	62	59				
3	87	77	69	62	83	74	67	61	69	63	58	64	59	55	60	56	52	50				
4	80	68	59	53	76	66	58	52	61	55	49	57	52	47	53	49	45	42				
5	73	61	52	45	70	59	51	44	55	48	43	51	45	41	48	43	39	37				
6	68	55	46	40	65	53	45	39	50	43	37	47	40	36	44	38	34	32				
7	63	49	41	35	60	48	40	34	45	38	33	42	36	32	40	35	31	28				
8	58	45	37	31	56	44	36	30	41	34	29	39	33	28	37	31	27	25				
9	54	41	33	28	52	40	33	27	38	31	26	36	30	26	34	29	25	23				
10	51	38	30	25	49	37	30	25	35	28	24	33	27	23	31	26	22	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6457	6457	6457	6457
5°	6531	6579	6503	6357
10°	6571	6522	6536	6255
15°	6621	6191	6571	6156
20°	6681	6121	6614	6055
25°	6721	6194	6644	5920
30°	6778	6291	6674	5556
35°	6811	6355	6710	5191
40°	6850	6417	6733	4901
45°	6864	5162	6746	4478
50°	6873	4012	6733	4087
55°	6859	3713	6726	3966
60°	6845	3498	6692	4024
65°	6773	3354	6625	4221
70°	6590	3234	6428	4407
75°	6170	3045	5983	4648
80°	5613	2788	5375	4419
85°	5473	3013	4917	3965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.7	2.9
10°-20°	615.4	8.1
20°-30°	931.6	12.3
30°-40°	1124.9	14.9
40°-50°	1148.5	15.2
50°-60°	1004.1	13.3
60°-70°	778.3	10.3
70°-80°	467.9	6.2
80°-90°	144.4	1.9
90°-100°	60.9	0.8
100°-110°	116.4	1.5
110°-120°	158.2	2.1
120°-130°	179.8	2.4
130°-140°	182.4	2.4
140°-150°	167.9	2.2
150°-160°	138.5	1.8
160°-170°	93.1	1.2
170°-180°	32.4	0.4
0°-30°	1763.7	23.3
0°-40°	2888.6	38.2
0°-60°	5041.2	66.7
0°-90°	6431.8	85.1
90°-120°	335.5	4.4
90°-150°	865.6	11.4
90°-180°	1130.0	14.9
0°-180°	7561.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2280	2280	2280	2280	2280	
5°	2297	2314	2287	2236	2297	219
15°	2258	2111	2241	2099	2258	638
25°	2150	1982	2126	1894	2150	992
35°	1970	1838	1940	1501	1970	1233
45°	1713	1289	1684	1118	1713	1322
55°	1389	752	1362	803	1389	1241
65°	1010	500	988	630	1010	997
75°	564	278	547	425	564	598
85°	168	93	151	122	168	170
90°	2	51	2	59	2	11
95°	15	71	15	112	15	19
105°	78	120	76	151	78	84
115°	151	154	149	205	151	150
125°	217	176	212	251	217	193
135°	266	193	264	278	266	205
145°	300	205	298	295	300	189
155°	325	239	322	312	325	150
165°	339	298	337	339	339	96
175°	344	327	344	337	344	33
180°	339	339	339	339	339	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7
2.5°	2296.8	2284.6	2313.8	2318.7	2301.6	2306.5	2309.0	2282.1	2291.9	2255.3	2265.0
5°	2296.8	2294.3	2328.5	2323.6	2313.8	2316.3	2323.6	2291.9	2287.0	2243.1	2250.4
7.5°	2294.3	2299.2	2321.2	2316.3	2301.6	2309.0	2321.2	2296.8	2282.1	2230.9	2228.4
10°	2284.6	2291.9	2309.0	2294.3	2267.5	2279.7	2306.5	2291.9	2272.4	2211.3	2199.1
12.5°	2274.8	2279.7	2284.6	2223.5	2179.6	2208.9	2284.6	2279.7	2257.7	2189.4	2167.4
15°	2257.7	2265.0	2245.5	2157.6	2111.3	2140.6	2240.6	2260.2	2240.6	2157.6	2130.8
17.5°	2238.2	2245.5	2204.0	2106.4	2072.2	2086.9	2184.5	2235.7	2218.7	2128.3	2094.2
20°	2216.2	2223.5	2157.6	2052.7	2030.7	2042.9	2130.8	2208.9	2194.3	2094.2	2055.1
22.5°	2184.5	2196.7	2103.9	2016.1	2013.6	2013.6	2079.5	2177.2	2162.5	2052.7	2011.2
25°	2150.3	2162.5	2050.2	1981.9	1981.9	1981.9	2033.2	2135.7	2125.9	2008.8	1967.3
27.5°	2113.7	2125.9	2001.4	1957.5	1964.8	1952.6	1994.1	2089.3	2089.3	1964.8	1920.9
30°	2072.2	2084.4	1952.6	1918.4	1923.3	1918.4	1950.2	2040.5	2040.5	1913.6	1867.2
32.5°	2023.4	2035.6	1898.9	1872.1	1881.8	1877.0	1908.7	1991.7	1994.1	1859.9	1803.7
35°	1969.7	1984.3	1842.8	1828.1	1837.9	1830.6	1852.5	1940.4	1940.4	1801.3	1730.5
37.5°	1913.6	1928.2	1784.2	1779.3	1789.1	1781.8	1798.8	1886.7	1881.8	1740.3	1652.4
40°	1852.5	1869.6	1723.2	1723.2	1735.4	1730.5	1745.1	1830.6	1820.8	1679.2	1571.9
42.5°	1784.2	1806.2	1662.2	1664.6	1650.0	1669.5	1684.1	1772.0	1752.5	1610.9	1484.0
45°	1713.4	1740.3	1603.6	1559.7	1288.7	1542.6	1620.7	1713.4	1684.1	1542.6	1398.6
47.5°	1637.8	1671.9	1535.2	1374.2	1037.3	1352.2	1552.3	1640.2	1606.0	1469.3	1315.6
50°	1559.7	1598.7	1464.5	1215.5	910.4	1191.1	1476.7	1567.0	1527.9	1393.7	1220.4
52.5°	1474.2	1518.2	1396.1	1076.4	825.0	1054.4	1398.6	1496.2	1447.4	1313.1	1142.3
55°	1388.8	1435.2	1303.4	956.8	751.8	937.3	1308.3	1405.9	1361.9	1230.1	1056.9
57.5°	1300.9	1347.3	1210.6	851.8	688.3	832.3	1205.7	1322.9	1274.1	1144.7	971.4
60°	1208.2	1254.6	1110.5	756.6	617.5	742.0	1100.8	1230.1	1181.3	1056.9	888.4
62.5°	1110.5	1156.9	1015.4	668.8	558.9	656.6	986.1	1139.8	1086.1	964.1	803.0
65°	1010.5	1044.6	903.1	585.8	500.4	576.0	883.6	1027.6	988.5	866.5	722.5
67.5°	905.5	939.7	805.5	512.6	444.2	502.8	783.5	927.5	883.6	771.3	641.9
70°	795.7	825.0	702.9	441.8	390.5	434.5	678.5	815.2	776.2	671.2	556.5
72.5°	683.4	710.3	593.1	375.9	334.4	371.0	568.7	702.9	663.9	566.3	478.4
75°	563.8	590.7	490.6	310.0	278.2	305.1	468.6	583.3	546.7	466.2	397.8
77.5°	451.5	483.3	388.1	244.1	222.1	239.2	368.6	471.1	434.5	373.4	319.7
80°	344.1	371.0	288.0	185.5	170.9	183.1	268.5	358.8	329.5	288.0	249.0
82.5°	249.0	263.6	197.7	136.7	129.4	134.2	183.1	253.8	239.2	207.5	183.1
85°	168.4	166.0	122.0	95.2	92.7	95.2	109.8	153.8	151.3	139.1	117.2
87.5°	70.8	65.9	56.1	39.1	34.2	36.6	43.9	58.6	56.1	58.6	56.1
90°	2.4	24.4	39.1	48.8	51.3	48.8	39.1	24.4	2.4	26.8	43.9
92.5°	4.9	31.7	46.4	53.7	58.6	53.7	43.9	31.7	4.9	41.5	43.9
95°	14.6	43.9	53.7	65.9	70.8	65.9	53.7	41.5	14.6	36.6	65.9
97.5°	29.3	56.1	63.5	73.2	75.7	70.8	61.0	56.1	26.8	65.9	68.3
100°	43.9	70.8	83.0	83.0	85.4	83.0	80.5	68.3	41.5	73.2	83.0
102.5°	61.0	80.5	95.2	102.5	102.5	102.5	95.2	80.5	56.1	90.3	114.7
105°	78.1	87.9	105.0	114.7	119.6	114.7	105.0	90.3	75.7	105.0	122.0
107.5°	97.6	95.2	114.7	124.5	129.4	124.5	114.7	97.6	92.7	117.2	136.7
110°	117.2	105.0	124.5	134.2	136.7	134.2	124.5	105.0	112.3	131.8	151.3



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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°	134.2	112.3	134.2	144.0	146.4	144.0	134.2	114.7	129.4	141.6	166.0
115°	151.3	119.6	139.1	151.3	153.8	151.3	139.1	122.0	148.9	153.8	178.2
117.5°	168.4	129.4	144.0	158.6	161.1	158.6	146.4	131.8	166.0	168.4	190.4
120°	185.5	141.6	151.3	163.5	168.4	166.0	151.3	144.0	180.6	180.6	200.1
122.5°	200.1	151.3	158.6	168.4	173.3	168.4	158.6	156.2	197.7	192.8	212.3
125°	217.2	161.1	163.5	173.3	175.7	173.3	166.0	163.5	212.3	202.6	219.7
127.5°	229.4	173.3	168.4	178.2	180.6	178.2	170.9	175.7	227.0	222.1	227.0
130°	244.1	185.5	173.3	183.1	185.5	185.5	173.3	190.4	239.2	236.8	236.8
132.5°	256.3	197.7	178.2	187.9	190.4	190.4	180.6	200.1	251.4	249.0	244.1
135°	266.0	214.8	187.9	187.9	192.8	192.8	190.4	217.2	263.6	261.2	256.3
137.5°	275.8	229.4	195.3	190.4	192.8	192.8	200.1	231.9	273.4	273.4	263.6
140°	285.6	244.1	200.1	195.3	195.3	200.1	207.5	246.5	283.1	283.1	266.0
142.5°	295.3	256.3	207.5	202.6	197.7	207.5	214.8	261.2	290.5	292.9	273.4
145°	300.2	268.5	217.2	209.9	205.0	217.2	227.0	273.4	297.8	302.7	288.0
147.5°	307.5	280.7	229.4	214.8	214.8	222.1	236.8	283.1	305.1	310.0	295.3
150°	314.9	290.5	239.2	222.1	217.2	229.4	246.5	292.9	312.4	317.3	305.1
152.5°	319.7	300.2	253.8	231.9	227.0	241.6	263.6	300.2	317.3	322.2	314.9
155°	324.6	307.5	270.9	241.6	239.2	251.4	278.2	307.5	322.2	327.1	322.2
157.5°	329.5	314.9	283.1	256.3	246.5	266.0	290.5	317.3	327.1	331.9	329.5
160°	331.9	319.7	297.8	270.9	266.0	283.1	302.7	319.7	329.5	336.8	334.4
162.5°	336.8	324.6	307.5	288.0	283.1	297.8	312.4	327.1	334.4	339.3	339.3
165°	339.3	329.5	317.3	302.7	297.8	312.4	319.7	331.9	336.8	339.3	341.7
167.5°	339.3	334.4	324.6	312.4	310.0	322.2	329.5	336.8	339.3	339.3	344.1
170°	341.7	336.8	329.5	322.2	319.7	329.5	331.9	339.3	341.7	339.3	346.6
172.5°	341.7	339.3	334.4	327.1	322.2	334.4	336.8	339.3	341.7	339.3	344.1
175°	344.1	339.3	339.3	334.4	327.1	339.3	339.3	339.3	344.1	339.3	341.7
177.5°	344.1	339.3	339.3	336.8	331.9	339.3	339.3	339.3	344.1	339.3	341.7
180°	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3



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CATALOG NUMBER: 8WSL-LD2-75-UPL8-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2279.7	2279.7	2279.7	2279.7	2279.7	2279.7
2.5°	2262.6	2245.5	2250.4	2269.9	2262.6	2296.8
5°	2245.5	2235.7	2235.7	2257.7	2255.3	2296.8
7.5°	2218.7	2208.9	2213.8	2238.2	2243.1	2294.3
10°	2186.9	2174.7	2179.6	2213.8	2226.0	2284.6
12.5°	2152.8	2143.0	2147.9	2186.9	2204.0	2274.8
15°	2113.7	2099.1	2113.7	2155.2	2177.2	2257.7
17.5°	2069.8	2050.2	2067.3	2121.0	2147.9	2238.2
20°	2025.8	2008.8	2018.5	2077.1	2116.1	2216.2
22.5°	1981.9	1957.5	1967.3	2028.3	2077.1	2184.5
25°	1930.6	1894.0	1913.6	1979.5	2035.6	2150.3
27.5°	1862.3	1806.2	1847.7	1930.6	1986.8	2113.7
30°	1772.0	1698.8	1759.8	1872.1	1935.5	2072.2
32.5°	1671.9	1593.8	1662.2	1806.2	1881.8	2023.4
35°	1571.9	1501.1	1562.1	1732.9	1825.7	1969.7
37.5°	1476.7	1415.6	1471.8	1654.8	1767.1	1913.6
40°	1386.4	1325.3	1383.9	1569.4	1703.7	1852.5
42.5°	1296.0	1239.9	1296.0	1479.1	1637.8	1784.2
45°	1205.7	1117.9	1200.9	1391.2	1567.0	1713.4
47.5°	1108.1	1005.6	1100.8	1296.0	1491.3	1637.8
50°	1015.4	927.5	1010.5	1208.2	1413.2	1559.7
52.5°	934.8	864.0	929.9	1117.9	1332.7	1474.2
55°	859.2	803.0	859.2	1030.0	1247.2	1388.8
57.5°	790.8	754.2	793.2	954.3	1159.4	1300.9
60°	732.2	710.3	734.7	861.6	1071.5	1208.2
62.5°	676.1	673.7	678.5	788.4	978.7	1110.5
65°	617.5	629.7	617.5	710.3	886.0	1010.5
67.5°	558.9	583.3	563.8	632.2	785.9	905.5
70°	505.2	532.1	505.2	551.6	685.9	795.7
72.5°	444.2	478.4	444.2	475.9	580.9	683.4
75°	385.6	424.7	388.1	397.8	480.8	563.8
77.5°	322.2	358.8	329.5	322.2	388.1	451.5
80°	256.3	270.9	256.3	253.8	300.2	344.1
82.5°	178.2	190.4	178.2	185.5	219.7	249.0
85°	117.2	122.0	117.2	119.6	146.4	168.4
87.5°	48.8	48.8	48.8	61.0	65.9	70.8
90°	53.7	58.6	53.7	43.9	26.8	2.4
92.5°	56.1	61.0	56.1	48.8	31.7	4.9
95°	100.1	112.3	95.2	61.0	51.3	14.6
97.5°	80.5	87.9	83.0	70.8	63.5	29.3
100°	95.2	102.5	95.2	100.1	78.1	43.9
102.5°	112.3	117.2	114.7	117.2	95.2	61.0
105°	146.4	151.3	146.4	126.9	109.8	78.1
107.5°	156.2	168.4	158.6	141.6	124.5	97.6
110°	168.4	178.2	170.9	156.2	136.7	117.2



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	180.6	192.8	185.5	173.3	146.4	134.2
115°	195.3	205.0	200.1	185.5	161.1	151.3
117.5°	209.9	217.2	212.3	195.3	175.7	168.4
120°	222.1	231.9	227.0	207.5	187.9	185.5
122.5°	231.9	241.6	236.8	219.7	200.1	200.1
125°	241.6	251.4	246.5	229.4	209.9	217.2
127.5°	249.0	261.2	256.3	236.8	231.9	229.4
130°	258.7	266.0	263.6	244.1	244.1	244.1
132.5°	263.6	273.4	268.5	253.8	258.7	256.3
135°	266.0	278.2	273.4	266.0	270.9	266.0
137.5°	270.9	280.7	278.2	273.4	283.1	275.8
140°	278.2	283.1	285.6	278.2	292.9	285.6
142.5°	285.6	288.0	292.9	285.6	302.7	295.3
145°	290.5	295.3	300.2	300.2	310.0	300.2
147.5°	290.5	297.8	297.8	305.1	319.7	307.5
150°	297.8	292.9	307.5	314.9	324.6	314.9
152.5°	307.5	305.1	317.3	324.6	329.5	319.7
155°	310.0	312.4	319.7	331.9	334.4	324.6
157.5°	319.7	317.3	329.5	339.3	339.3	329.5
160°	327.1	327.1	339.3	344.1	341.7	331.9
162.5°	334.4	334.4	346.6	346.6	344.1	336.8
165°	339.3	339.3	351.5	349.0	344.1	339.3
167.5°	341.7	344.1	353.9	351.5	344.1	339.3
170°	344.1	344.1	353.9	349.0	344.1	341.7
172.5°	344.1	341.7	351.5	346.6	341.7	341.7
175°	341.7	336.8	346.6	341.7	341.7	344.1
177.5°	339.3	331.9	339.3	339.3	341.7	344.1
180°	339.3	339.3	339.3	339.3	339.3	339.3

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