

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: NEO-RAY

Report Number: P333348-940

Luminaire Tested: **S125DIW-S375D770U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333348-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D770U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4040.9 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

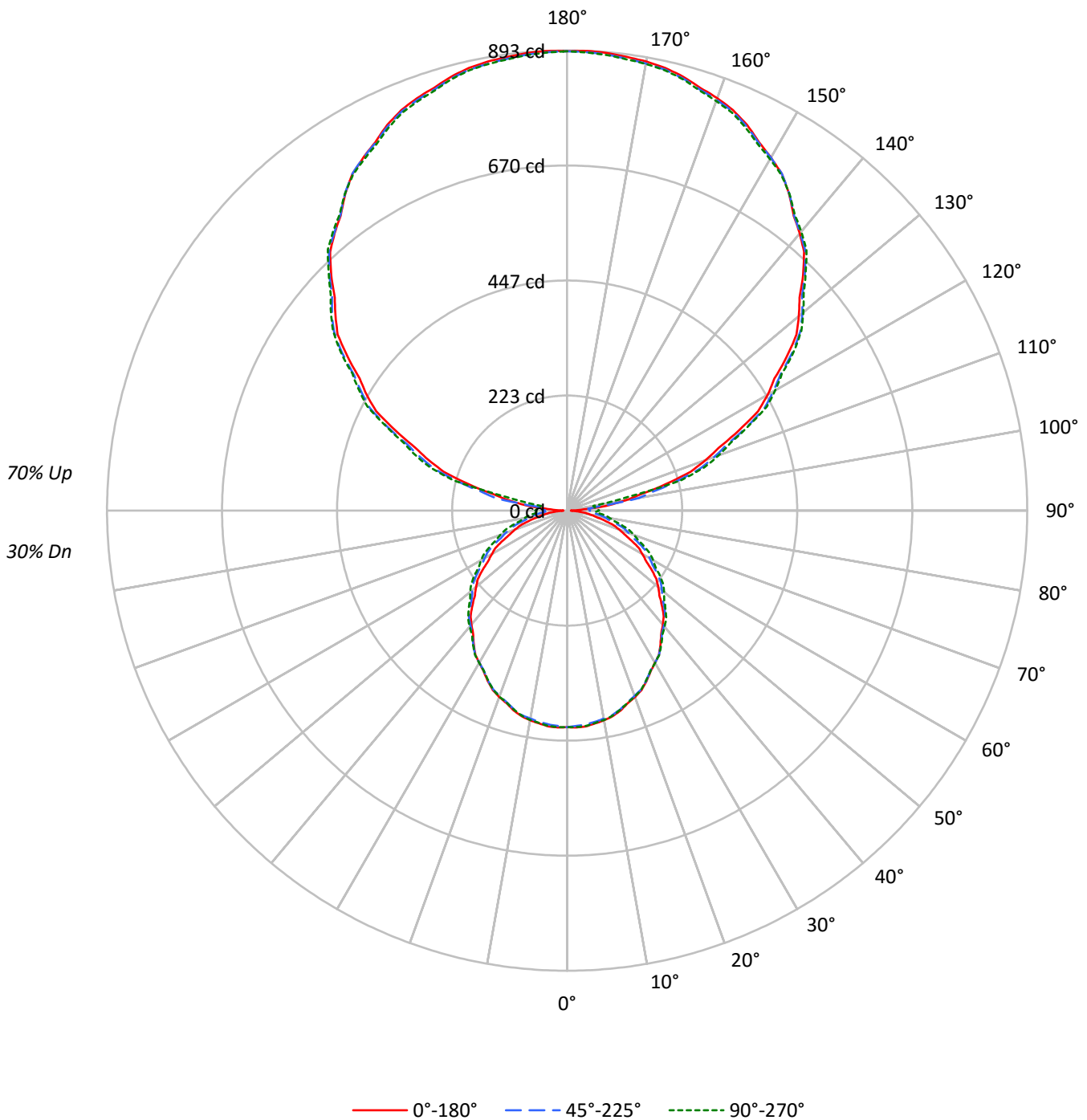
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333348-940

CATALOG NUMBER: S125DIW-S375D770U940-4F0-1E-UDD-D

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	81	83	80	76	73	63	60	58	47	46	44	33	32	31	25
2	84	77	71	66	75	69	64	60	55	51	48	41	39	37	29	27	26	20
3	77	67	60	54	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14
5	64	53	45	39	57	48	41	36	38	33	29	29	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	54	42	35	29	49	38	32	27	31	26	22	23	20	17	17	14	12	10
8	50	38	31	26	45	35	28	24	28	23	19	21	18	15	15	13	11	9
9	47	35	28	23	42	32	25	21	25	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.0
10°-20°	112.8	2.8
20°-30°	167.8	4.2
30°-40°	198.8	4.9
40°-50°	205.5	5.1
50°-60°	189.3	4.7
60°-70°	153.0	3.8
70°-80°	102.5	2.5
80°-90°	55.0	1.4
90°-100°	62.2	1.5
100°-110°	221.6	5.5
110°-120°	376.8	9.3
120°-130°	473.0	11.7
130°-140°	503.4	12.5
140°-150°	469.8	11.6
150°-160°	379.5	9.4
160°-170°	245.4	6.1
170°-180°	84.6	2.1
0°-30°	320.4	7.9
0°-40°	519.2	12.8
0°-60°	914.0	22.6
0°-90°	1224.5	30.3
90°-120°	660.6	16.3
90°-150°	2106.9	52.1
90°-180°	2816.0	69.7
0°-180°	4040.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	26	44	57	62	6
95°	43	51	41	52	56	52
105°	198	207	220	227	230	210
115°	367	374	385	389	388	364
125°	520	525	533	536	537	464
135°	648	651	653	657	655	499
145°	750	751	751	754	752	469
155°	826	822	823	825	820	380
165°	872	868	868	872	867	246
175°	891	888	888	893	887	85
180°	891	891	891	891	891	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.0	16.1	19.4	22.5	25.7	28.9	32.2	35.5	38.9	42.2	44.4
90°	7.2	11.3	15.4	19.5	23.7	27.8	31.9	36.1	40.2	44.4	47.2
92.5°	16.1	18.0	19.9	21.8	23.6	26.7	30.8	34.9	39.0	43.1	45.8
95°	43.0	44.9	46.9	48.9	50.7	50.6	48.1	45.6	43.2	40.7	43.4
97.5°	83.5	86.4	89.3	92.3	95.2	92.6	84.6	76.6	68.6	60.5	58.3
100°	114.9	117.3	119.6	122.0	124.3	127.2	130.8	134.3	137.9	141.3	121.4
102.5°	146.8	149.1	151.5	153.8	156.1	158.9	162.1	165.3	168.5	171.7	169.4
105°	198.0	200.0	202.1	204.1	206.2	208.6	211.3	214.1	216.8	219.5	221.4
107.5°	251.1	252.4	253.6	254.9	256.1	258.2	261.1	264.0	267.0	269.9	271.8
110°	285.7	286.8	287.8	289.0	290.1	292.0	294.9	297.7	300.6	303.4	304.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	318.4	319.7	320.9	322.2	323.3	325.3	328.0	330.6	333.3	336.0	337.1
115°	367.2	368.5	370.0	371.3	372.7	374.6	377.2	379.7	382.2	384.8	385.8
117.5°	417.7	418.0	418.5	418.8	419.2	420.8	423.7	426.4	429.3	432.0	432.8
120°	449.3	449.5	449.6	449.8	449.9	451.2	453.8	456.3	458.9	461.4	462.7
122.5°	477.1	477.8	478.4	479.1	479.8	481.3	483.5	485.7	487.9	490.3	491.4
125°	520.3	521.3	522.2	523.2	524.1	525.5	527.3	529.1	530.9	532.8	533.7
127.5°	561.2	561.9	562.6	563.2	563.8	564.9	566.2	567.7	569.1	570.5	571.6
130°	586.7	587.3	587.9	588.5	589.2	590.2	591.7	593.1	594.5	595.9	596.8
132.5°	611.7	612.5	613.3	614.2	615.0	615.7	616.4	617.1	617.8	618.4	619.6
135°	647.6	648.5	649.3	650.1	650.9	651.4	651.8	652.1	652.5	652.8	653.7
137.5°	680.7	681.4	682.2	682.9	683.5	683.9	683.9	683.9	684.0	684.1	685.2
140°	702.1	702.4	702.7	703.0	703.3	703.4	703.4	703.3	703.2	703.2	704.5
142.5°	721.7	721.8	721.8	721.9	722.1	722.2	722.5	722.6	722.9	723.1	724.1
145°	750.4	750.6	750.7	750.9	751.2	751.3	751.3	751.3	751.3	751.3	751.9
147.5°	775.1	775.0	774.9	774.9	774.8	774.9	775.1	775.2	775.3	775.5	775.9
150°	790.9	790.6	790.3	790.0	789.7	789.7	790.0	790.3	790.6	790.9	791.2
152.5°	806.2	805.6	804.9	804.3	803.6	803.4	803.8	804.1	804.3	804.6	804.9
155°	825.9	825.0	824.1	823.2	822.4	822.1	822.4	822.7	823.0	823.2	823.7
157.5°	841.1	840.6	840.1	839.5	839.0	838.7	838.7	838.8	838.8	838.8	839.4
160°	851.7	850.8	849.9	849.0	848.2	847.7	847.9	848.1	848.2	848.4	849.0
162.5°	860.1	859.3	858.4	857.5	856.6	856.2	856.4	856.6	856.7	856.8	857.6
165°	871.5	870.6	869.8	868.9	868.0	867.6	867.7	867.9	868.1	868.2	869.1
167.5°	879.9	879.0	878.2	877.3	876.3	875.9	876.1	876.2	876.4	876.6	877.5
170°	884.8	883.7	882.6	881.6	880.6	880.1	880.3	880.5	880.6	880.7	881.9
172.5°	887.9	886.9	885.8	884.8	883.8	883.4	883.7	884.0	884.2	884.5	885.5
175°	891.4	890.5	889.6	888.7	887.8	887.4	887.6	887.7	887.9	888.1	889.2
177.5°	892.9	892.2	891.5	890.8	890.1	889.7	889.9	890.0	890.1	890.3	891.1
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	46.6	49.0	51.2	52.7	53.4	54.1	54.8	55.6
90°	50.0	52.9	55.7	57.7	58.8	59.8	60.9	62.0
92.5°	48.6	51.4	54.1	55.9	56.8	57.6	58.5	59.3
95°	46.2	48.9	51.6	53.3	53.9	54.7	55.3	55.9
97.5°	56.1	53.9	51.6	50.8	51.5	52.1	52.7	53.3
100°	101.5	81.5	61.5	51.5	51.5	51.5	51.5	51.4
102.5°	167.2	164.9	162.6	156.7	147.3	137.9	128.4	119.0
105°	223.2	225.1	226.9	228.0	228.5	229.1	229.5	230.1
107.5°	273.6	275.4	277.3	278.3	278.4	278.5	278.7	278.7
110°	306.1	307.4	308.7	309.7	310.5	311.3	312.1	312.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	338.2	339.3	340.5	341.2	341.6	342.1	342.5	343.0
115°	386.9	388.0	389.0	389.4	389.1	388.7	388.3	388.1
117.5°	433.6	434.4	435.2	435.8	436.0	436.2	436.5	436.8
120°	464.0	465.2	466.5	467.0	466.8	466.6	466.5	466.3
122.5°	492.6	493.8	495.0	495.4	495.1	494.8	494.5	494.2
125°	534.5	535.4	536.3	536.7	536.7	536.8	536.8	536.8
127.5°	572.6	573.6	574.6	574.9	574.4	573.8	573.2	572.7
130°	597.6	598.5	599.3	599.6	599.3	599.1	598.8	598.5
132.5°	620.8	622.0	623.2	623.7	623.3	622.9	622.6	622.2
135°	654.6	655.5	656.4	656.7	656.2	655.8	655.3	655.0
137.5°	686.3	687.5	688.7	689.0	688.6	688.2	687.8	687.4
140°	705.8	707.0	708.4	708.7	708.3	707.8	707.2	706.7
142.5°	725.0	725.9	726.8	727.0	726.5	725.9	725.5	725.0
145°	752.4	753.0	753.7	753.7	753.2	752.7	752.2	751.6
147.5°	776.2	776.5	776.9	776.6	775.7	774.8	773.9	773.0
150°	791.5	791.8	792.1	791.7	790.6	789.5	788.5	787.4
152.5°	805.2	805.5	805.8	805.4	804.4	803.3	802.4	801.3
155°	824.1	824.6	825.0	824.7	823.5	822.3	821.2	819.9
157.5°	839.8	840.3	840.7	840.3	839.2	838.0	836.9	835.7
160°	849.5	850.2	850.7	850.4	849.3	848.1	846.9	845.7
162.5°	858.4	859.3	860.1	859.9	858.6	857.3	856.0	854.7
165°	870.0	870.8	871.7	871.6	870.4	869.2	868.1	866.8
167.5°	878.6	879.7	880.7	880.7	879.3	878.0	876.6	875.3
170°	883.1	884.3	885.5	885.4	884.0	882.7	881.4	880.1
172.5°	886.5	887.6	888.7	888.5	887.3	885.9	884.6	883.2
175°	890.4	891.5	892.7	892.6	891.4	890.0	888.7	887.3
177.5°	891.9	892.7	893.6	893.5	892.5	891.6	890.6	889.7
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4

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