

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: P333137-940

Luminaire Tested: **S125DIP-S375D810U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333137-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D810U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.2 lumens
Efficiency: N/A
Efficacy: 121.9 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

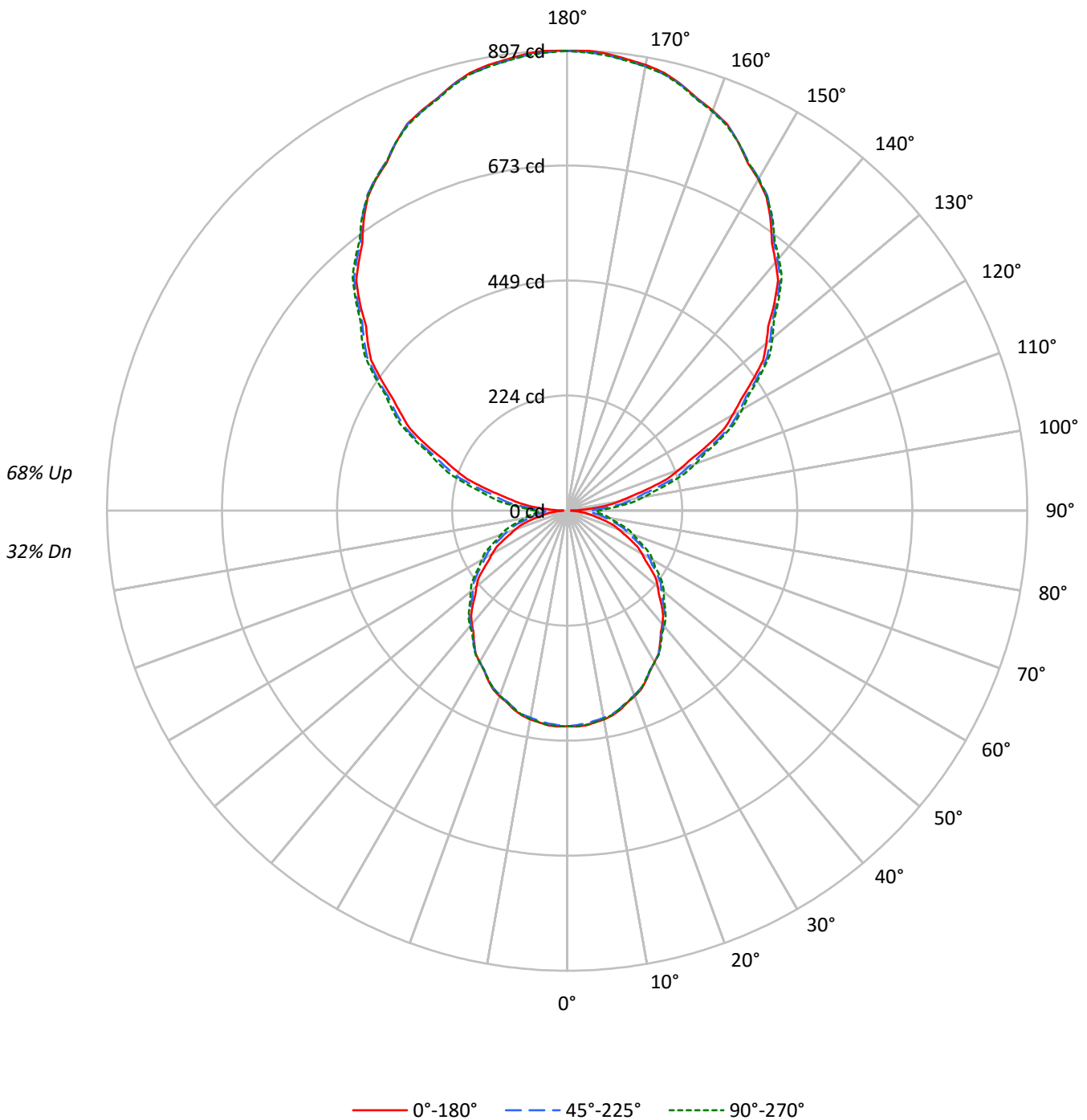
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	103	103	103	103	93	93	93	93	73	73	73		56	56	56		40	40	40	32
1	93	89	85	81	84	80	77	74	64	61	59		48	47	45		34	33	33	26
2	85	77	71	66	76	70	64	60	55	52	49		42	40	38		30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	41		37	34	31		26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34		33	30	27		23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29		29	26	23		21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25		26	23	20		19	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22		24	20	18		17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20		22	18	16		16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17		20	16	14		15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16		18	15	13		14	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	3.0
20°-30°	167.8	4.4
30°-40°	198.8	5.2
40°-50°	205.5	5.4
50°-60°	189.3	5.0
60°-70°	153.0	4.0
70°-80°	102.5	2.7
80°-90°	55.1	1.4
90°-100°	89.8	2.4
100°-110°	199.2	5.2
110°-120°	314.9	8.3
120°-130°	403.4	10.6
130°-140°	446.3	11.7
140°-150°	434.6	11.4
150°-160°	364.4	9.6
160°-170°	242.2	6.4
170°-180°	84.8	2.2
0°-30°	320.4	8.4
0°-40°	519.2	13.6
0°-60°	914.0	24.0
0°-90°	1224.6	32.2
90°-120°	604.0	15.9
90°-150°	1888.2	49.6
90°-180°	2580.0	67.8
0°-180°	3804.2	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	45	57	63	7
95°	51	63	84	97	102	53
105°	163	173	189	201	207	174
115°	303	309	321	327	329	300
125°	440	444	453	458	460	394
135°	571	575	578	584	583	440
145°	691	694	696	698	698	432
155°	791	791	791	794	791	364
165°	860	858	859	861	858	242
175°	894	891	891	895	890	85
180°	896	896	896	896	896	



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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	22.6	25.7	29.0	32.3	35.7	39.0	42.3	44.6
90°	7.3	11.5	15.6	19.8	24.0	28.2	32.4	36.6	40.8	44.9	47.8
92.5°	22.8	26.4	30.0	33.5	37.1	41.2	45.7	50.2	54.8	59.2	62.3
95°	50.6	53.4	56.1	58.8	61.4	65.1	69.8	74.5	79.1	83.7	86.9
97.5°	80.2	82.4	84.7	86.9	89.3	92.9	98.1	103.3	108.3	113.5	116.5
100°	102.2	104.1	106.0	107.9	109.9	113.2	118.2	123.1	128.1	133.0	136.3
102.5°	125.8	128.2	130.6	133.0	135.4	138.6	142.4	146.3	150.2	154.1	157.4
105°	162.6	165.0	167.2	169.4	171.7	174.6	178.3	182.0	185.7	189.3	192.1
107.5°	203.5	205.5	207.5	209.6	211.5	214.3	217.6	221.0	224.3	227.7	229.9
110°	231.6	233.4	235.3	237.2	239.1	241.6	244.6	247.6	250.7	253.7	255.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	260.6	261.9	263.1	264.5	265.7	267.9	271.0	274.0	277.1	280.3	282.1
115°	303.0	304.3	305.5	306.7	308.1	310.0	312.7	315.4	318.1	320.7	322.3
117.5°	345.5	346.3	347.0	347.7	348.3	350.0	352.5	355.0	357.6	360.1	361.8
120°	372.3	373.4	374.4	375.5	376.5	378.2	380.4	382.7	385.0	387.2	388.8
122.5°	401.0	401.4	401.8	402.3	402.6	404.0	406.4	408.9	411.3	413.8	415.2
125°	440.2	441.0	441.9	442.7	443.6	445.0	447.0	449.0	450.9	453.0	454.1
127.5°	481.7	482.1	482.5	483.0	483.4	484.5	486.2	487.9	489.5	491.2	492.4
130°	506.8	507.5	508.1	508.8	509.5	510.6	512.2	513.8	515.4	517.0	518.1
132.5°	531.5	532.8	534.0	535.3	536.5	537.6	538.6	539.5	540.4	541.4	542.4
135°	571.2	572.0	572.8	573.7	574.5	575.3	576.1	576.9	577.7	578.5	579.7
137.5°	608.5	609.3	610.1	611.0	611.8	612.5	613.1	613.9	614.5	615.1	616.4
140°	632.1	632.9	633.7	634.5	635.3	635.9	636.5	637.0	637.6	638.1	639.4
142.5°	656.1	656.7	657.3	657.9	658.4	659.1	659.6	660.2	660.8	661.5	662.5
145°	691.4	692.0	692.5	693.0	693.5	694.0	694.5	694.9	695.4	695.9	696.3
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.4
150°	745.4	745.2	745.1	744.9	744.8	745.0	745.6	746.3	746.9	747.5	747.5
152.5°	763.2	763.5	763.7	763.9	764.1	764.4	764.6	764.8	765.1	765.4	765.7
155°	790.7	790.7	790.7	790.7	790.7	790.8	790.9	791.1	791.2	791.4	792.0
157.5°	815.3	814.9	814.6	814.2	813.9	813.8	814.0	814.1	814.2	814.4	815.0
160°	829.7	829.3	828.8	828.4	827.9	827.8	827.9	828.0	828.2	828.4	829.0
162.5°	842.6	842.2	841.9	841.6	841.2	841.1	841.1	841.2	841.2	841.2	842.0
165°	859.8	859.4	859.2	858.8	858.5	858.4	858.5	858.7	858.9	859.1	859.7
167.5°	874.2	873.6	873.0	872.4	871.7	871.5	871.5	871.5	871.5	871.5	872.4
170°	882.1	881.5	880.8	880.2	879.6	879.2	879.2	879.2	879.2	879.2	880.2
172.5°	887.6	887.0	886.4	885.7	885.1	884.8	884.8	884.8	884.8	884.8	885.7
175°	893.9	893.3	892.7	892.1	891.4	891.1	891.1	891.1	891.1	891.1	892.1
177.5°	897.2	896.6	896.2	895.6	895.1	894.8	894.7	894.6	894.5	894.3	895.1
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0



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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°	46.8	49.0	51.4	52.8	53.6	54.3	55.0	55.7
90°	50.7	53.6	56.4	58.5	59.6	60.6	61.8	62.9
92.5°	65.4	68.4	71.5	73.5	74.5	75.4	76.4	77.4
95°	90.0	93.1	96.2	98.2	99.2	100.1	101.0	102.0
97.5°	119.4	122.3	125.3	127.2	128.0	128.8	129.6	130.4
100°	139.7	143.0	146.3	148.4	149.3	150.2	151.0	151.9
102.5°	160.8	164.2	167.6	169.7	170.7	171.7	172.6	173.6
105°	194.8	197.6	200.4	202.3	203.4	204.5	205.6	206.7
107.5°	232.2	234.4	236.7	238.2	238.7	239.2	239.8	240.3
110°	258.1	260.3	262.4	263.9	264.3	264.7	265.3	265.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	284.0	285.9	287.8	288.9	289.3	289.6	290.0	290.3
115°	323.8	325.3	326.7	327.7	328.1	328.5	328.9	329.3
117.5°	363.5	365.2	366.8	367.7	367.7	367.7	367.7	367.7
120°	390.3	391.9	393.4	394.2	394.1	394.0	394.0	393.9
122.5°	416.5	417.9	419.2	419.9	420.0	420.0	420.1	420.2
125°	455.2	456.4	457.5	458.3	458.6	458.9	459.2	459.5
127.5°	493.7	494.8	496.1	496.7	497.0	497.1	497.4	497.6
130°	519.2	520.4	521.5	522.2	522.3	522.5	522.6	522.7
132.5°	543.6	544.7	545.8	546.4	546.4	546.3	546.3	546.2
135°	580.9	582.1	583.4	583.8	583.6	583.5	583.4	583.2
137.5°	617.7	618.9	620.2	620.6	620.2	619.8	619.4	619.0
140°	640.8	642.1	643.4	643.8	643.5	643.0	642.7	642.2
142.5°	663.5	664.6	665.7	665.9	665.6	665.1	664.8	664.3
145°	696.8	697.2	697.7	697.9	697.8	697.7	697.6	697.5
147.5°	727.9	728.4	728.9	728.7	727.8	726.9	726.0	725.1
150°	747.5	747.5	747.5	747.3	747.2	746.9	746.7	746.5
152.5°	766.1	766.4	766.8	766.7	766.2	765.6	765.1	764.6
155°	792.6	793.3	793.9	793.8	793.0	792.3	791.5	790.7
157.5°	815.6	816.3	816.9	816.7	815.6	814.7	813.6	812.6
160°	829.6	830.2	830.8	830.8	830.0	829.2	828.4	827.7
162.5°	842.7	843.5	844.2	844.1	843.2	842.3	841.4	840.5
165°	860.3	860.9	861.5	861.4	860.4	859.5	858.5	857.6
167.5°	873.3	874.2	875.2	875.1	874.2	873.3	872.3	871.3
170°	881.1	882.1	883.0	882.9	881.8	880.7	879.7	878.6
172.5°	886.7	887.6	888.6	888.6	887.6	886.6	885.6	884.7
175°	893.0	893.9	894.8	894.7	893.7	892.6	891.5	890.5
177.5°	895.8	896.5	897.3	897.2	896.3	895.5	894.7	893.8
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0

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