

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: P333349-830

Luminaire Tested: **S125DIW-S375D770U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333349-830
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: S125DIW-S375D770U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3887.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

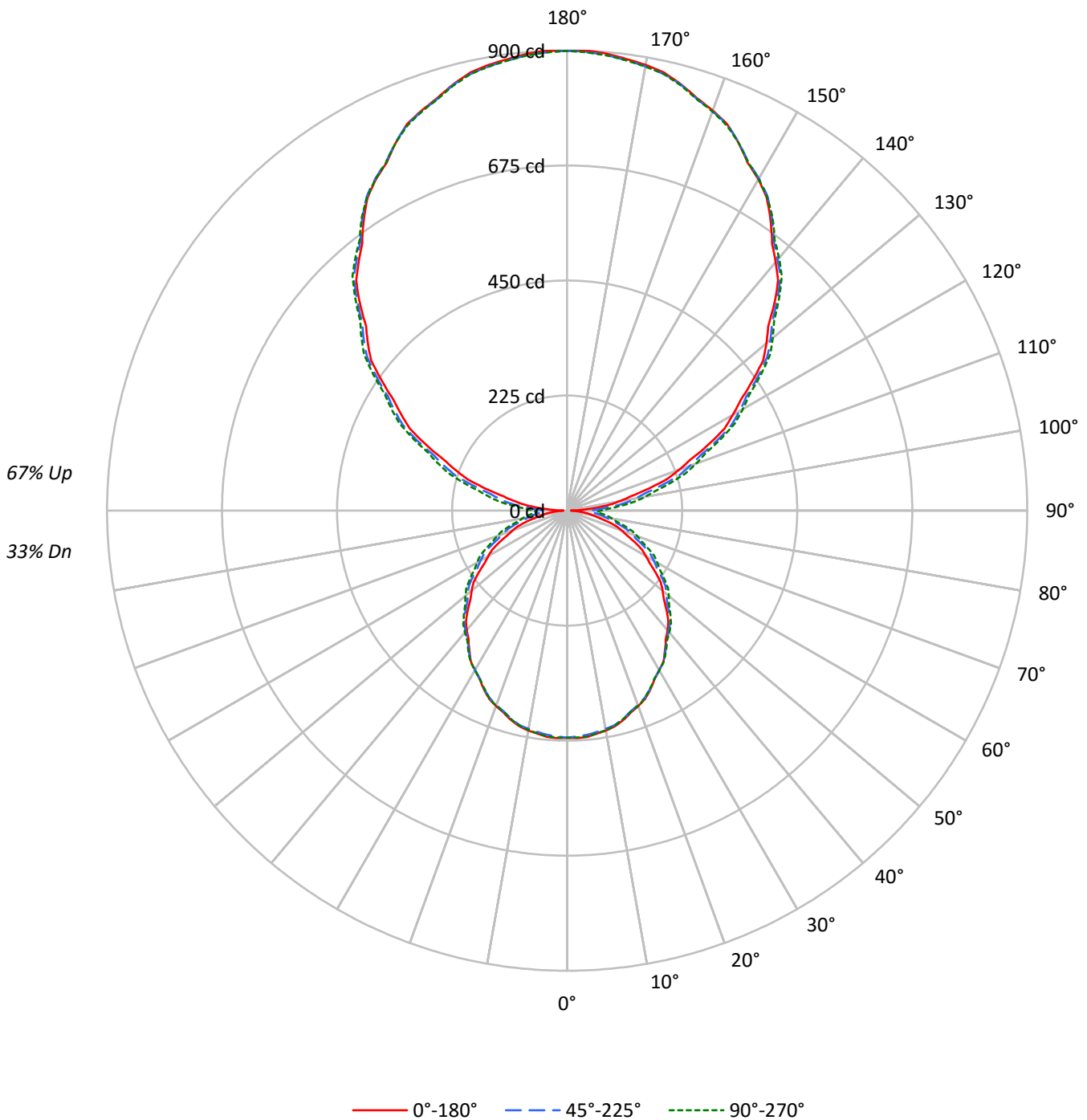
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	74	74	74	57	57	57	41	41	41	33
1	94	89	85	82	84	80	77	74	64	62	60	49	48	46	35	34	33	27
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28	22
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	27	25	23	19
4	71	60	52	46	63	54	47	42	43	38	35	33	30	27	24	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	26	23	22	19	17	14
6	59	48	40	34	53	43	36	31	35	30	26	27	23	20	20	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13	11
8	51	39	31	26	46	35	28	24	28	23	20	22	19	16	16	14	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	13	11	8
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.1
10°-20°	119.3	3.1
20°-30°	177.4	4.6
30°-40°	210.1	5.4
40°-50°	217.2	5.6
50°-60°	200.1	5.1
60°-70°	161.8	4.2
70°-80°	108.3	2.8
80°-90°	58.1	1.5
90°-100°	91.7	2.4
100°-110°	201.1	5.2
110°-120°	316.8	8.1
120°-130°	405.2	10.4
130°-140°	448.0	11.5
140°-150°	436.1	11.2
150°-160°	365.6	9.4
160°-170°	243.1	6.3
170°-180°	85.1	2.2
0°-30°	338.7	8.7
0°-40°	548.8	14.1
0°-60°	966.1	24.9
0°-90°	1294.3	33.3
90°-120°	609.6	15.7
90°-150°	1899.0	48.9
90°-180°	2593.0	66.7
0°-180°	3887.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	27	47	60	66	7
95°	51	64	86	100	105	53
105°	163	174	191	204	209	174
115°	304	310	323	330	332	301
125°	442	446	455	460	462	396
135°	573	577	581	586	586	442
145°	694	696	698	700	700	433
155°	793	793	794	797	793	365
165°	863	861	862	864	861	243
175°	897	894	894	898	894	85
180°	899	899	899	899	899	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.1	20.5	23.8	27.1	30.5	34.0	37.6	41.1	44.6	46.9
90°	7.6	12.0	16.3	20.7	25.1	29.4	33.7	38.2	42.5	46.9	50.0
92.5°	23.2	27.0	30.6	34.4	38.2	42.4	47.0	51.7	56.5	61.2	64.4
95°	51.2	54.0	56.8	59.7	62.5	66.3	71.2	76.0	80.9	85.7	88.9
97.5°	80.7	83.1	85.5	87.8	90.3	94.2	99.4	104.7	110.1	115.4	118.5
100°	102.7	104.8	106.8	108.9	110.8	114.4	119.6	124.7	129.8	135.0	138.4
102.5°	126.5	128.9	131.5	133.9	136.5	139.8	143.8	147.8	151.8	155.9	159.4
105°	163.4	165.8	168.1	170.4	172.8	175.9	179.6	183.5	187.4	191.1	194.1
107.5°	204.3	206.4	208.6	210.7	212.7	215.6	219.0	222.5	226.0	229.5	232.0
110°	232.5	234.5	236.4	238.4	240.3	242.9	246.0	249.2	252.4	255.6	257.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	261.6	263.0	264.3	265.7	267.0	269.3	272.5	275.7	278.9	282.2	284.2
115°	304.2	305.5	306.8	308.1	309.3	311.4	314.2	317.1	319.9	322.7	324.3
117.5°	346.9	347.6	348.3	349.0	349.8	351.5	354.1	356.8	359.4	362.1	363.8
120°	373.7	374.8	375.9	376.9	378.0	379.8	382.1	384.5	386.8	389.3	390.9
122.5°	402.5	402.8	403.3	403.7	404.2	405.6	408.2	410.8	413.3	415.8	417.3
125°	441.9	442.7	443.6	444.3	445.2	446.7	448.7	450.8	452.9	455.1	456.3
127.5°	483.4	483.8	484.3	484.7	485.1	486.3	488.0	489.7	491.5	493.3	494.6
130°	508.6	509.3	509.9	510.7	511.3	512.5	514.2	515.9	517.5	519.2	520.4
132.5°	533.4	534.7	535.9	537.2	538.5	539.6	540.5	541.5	542.5	543.5	544.7
135°	573.3	574.1	574.9	575.7	576.6	577.4	578.2	579.1	579.9	580.7	582.0
137.5°	610.7	611.4	612.3	613.1	614.0	614.7	615.4	616.0	616.7	617.4	618.7
140°	634.3	635.2	635.9	636.7	637.4	638.1	638.7	639.2	639.8	640.4	641.8
142.5°	658.5	659.0	659.6	660.2	660.7	661.3	661.9	662.5	663.2	663.7	664.9
145°	693.8	694.4	694.8	695.4	696.0	696.4	696.9	697.4	697.9	698.3	698.8
147.5°	726.1	726.5	726.8	727.2	727.5	727.8	728.2	728.6	729.0	729.3	729.9
150°	748.0	747.8	747.6	747.5	747.3	747.6	748.2	748.9	749.4	750.1	750.1
152.5°	765.9	766.1	766.3	766.6	766.8	766.9	767.2	767.5	767.7	768.0	768.4
155°	793.4	793.4	793.4	793.4	793.4	793.5	793.7	793.8	794.0	794.2	794.8
157.5°	818.1	817.7	817.4	817.1	816.7	816.6	816.8	816.9	817.1	817.3	817.8
160°	832.6	832.2	831.7	831.2	830.8	830.6	830.8	830.9	831.0	831.2	831.9
162.5°	845.6	845.2	844.8	844.5	844.1	844.0	844.0	844.0	844.0	844.1	844.9
165°	862.7	862.4	862.1	861.8	861.5	861.4	861.6	861.7	861.9	862.0	862.6
167.5°	877.3	876.7	876.0	875.4	874.8	874.5	874.5	874.5	874.5	874.5	875.4
170°	885.1	884.5	883.8	883.3	882.6	882.3	882.3	882.3	882.3	882.3	883.3
172.5°	890.7	890.0	889.5	888.8	888.3	887.9	887.9	887.9	887.9	887.9	888.8
175°	897.0	896.4	895.8	895.1	894.5	894.2	894.2	894.2	894.2	894.2	895.1
177.5°	900.2	899.8	899.2	898.7	898.2	898.0	897.8	897.7	897.6	897.4	898.1
180°	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	49.4	51.7	54.1	55.7	56.5	57.2	58.0	58.7
90°	52.9	55.9	58.9	61.0	62.1	63.3	64.5	65.6
92.5°	67.6	70.7	73.9	76.0	77.0	78.0	79.1	80.1
95°	92.1	95.3	98.6	100.7	101.6	102.6	103.6	104.6
97.5°	121.5	124.6	127.6	129.6	130.4	131.3	132.1	133.0
100°	141.8	145.2	148.6	150.8	151.7	152.6	153.5	154.4
102.5°	162.9	166.4	169.8	172.1	173.1	174.1	175.1	176.2
105°	196.9	199.8	202.6	204.6	205.9	207.0	208.1	209.2
107.5°	234.3	236.7	239.0	240.5	241.1	241.7	242.2	242.8
110°	260.1	262.5	264.8	266.2	266.7	267.2	267.8	268.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	286.2	288.1	290.1	291.2	291.6	292.1	292.5	292.8
115°	325.9	327.5	329.1	330.1	330.5	330.9	331.4	331.8
117.5°	365.6	367.4	369.2	370.0	370.1	370.1	370.1	370.2
120°	392.6	394.2	395.9	396.6	396.6	396.5	396.5	396.4
122.5°	418.7	420.2	421.6	422.4	422.4	422.5	422.6	422.7
125°	457.5	458.7	460.0	460.7	461.1	461.4	461.8	462.0
127.5°	495.9	497.2	498.4	499.2	499.5	499.7	499.9	500.2
130°	521.5	522.7	524.0	524.6	524.8	525.0	525.2	525.3
132.5°	545.9	547.1	548.3	548.8	548.8	548.8	548.8	548.7
135°	583.2	584.5	585.8	586.4	586.2	586.1	585.9	585.8
137.5°	620.0	621.3	622.6	623.1	622.7	622.4	622.0	621.6
140°	643.1	644.5	645.9	646.4	646.0	645.6	645.2	644.8
142.5°	666.0	667.0	668.2	668.5	668.1	667.7	667.3	666.9
145°	699.3	699.7	700.2	700.4	700.3	700.3	700.2	700.1
147.5°	730.4	730.9	731.5	731.3	730.4	729.5	728.7	727.7
150°	750.1	750.1	750.1	750.0	749.8	749.5	749.3	749.1
152.5°	768.7	769.1	769.5	769.4	768.8	768.3	767.8	767.2
155°	795.4	796.0	796.6	796.5	795.8	795.0	794.2	793.4
157.5°	818.5	819.1	819.7	819.5	818.5	817.5	816.4	815.4
160°	832.5	833.1	833.7	833.7	832.8	832.1	831.3	830.6
162.5°	845.6	846.3	847.1	847.1	846.1	845.2	844.3	843.4
165°	863.3	863.9	864.5	864.3	863.5	862.5	861.6	860.6
167.5°	876.4	877.3	878.2	878.2	877.2	876.3	875.3	874.3
170°	884.2	885.1	886.1	886.0	884.9	883.8	882.7	881.7
172.5°	889.8	890.7	891.6	891.6	890.7	889.7	888.7	887.8
175°	896.1	897.0	898.0	897.9	896.7	895.7	894.6	893.5
177.5°	898.9	899.7	900.4	900.3	899.5	898.6	897.8	896.8
180°	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1

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