

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: P333140-940

Luminaire Tested: **S125DIP-S375D810U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333140-940
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-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH 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: 3857.7 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

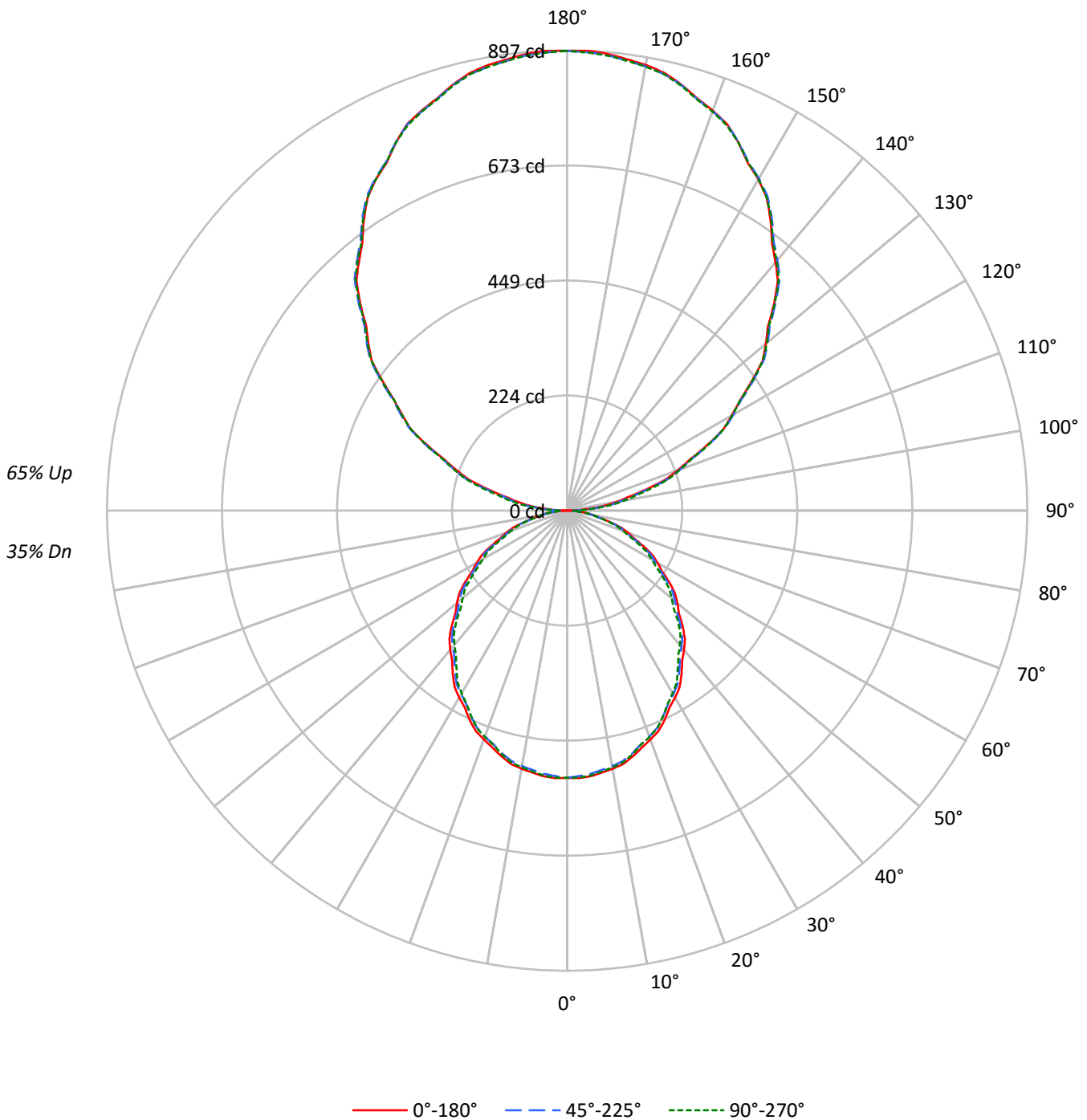
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	94	90	86	83	85	82	78	75	66	63	61	51	50	48	37	37	36	30
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26	21
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	16
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3364	3364	3364
5°	3371	3339	3361
10°	3351	3316	3335
15°	3315	3276	3290
20°	3263	3221	3226
25°	3207	3154	3151
30°	3138	3082	3067
35°	3064	3005	2964
40°	2989	2922	2880
45°	2906	2846	2789
50°	2816	2753	2671
55°	2728	2649	2575
60°	2623	2545	2454
65°	2500	2419	2337
70°	2381	2274	2194
75°	2168	2099	2024
80°	1930	1901	1852
85°	1675	1712	1615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	1.3
10°-20°	138.7	3.6
20°-30°	204.9	5.3
30°-40°	239.0	6.2
40°-50°	240.1	6.2
50°-60°	210.7	5.5
60°-70°	157.0	4.1
70°-80°	89.8	2.3
80°-90°	28.1	0.7
90°-100°	60.0	1.6
100°-110°	177.2	4.6
110°-120°	300.2	7.8
120°-130°	395.0	10.2
130°-140°	442.6	11.5
140°-150°	433.8	11.2
150°-160°	364.4	9.4
160°-170°	242.2	6.3
170°-180°	84.8	2.2
0°-30°	392.7	10.2
0°-40°	631.7	16.4
0°-60°	1082.6	28.1
0°-90°	1357.5	35.2
90°-120°	537.4	13.9
90°-150°	1808.9	46.9
90°-180°	2500.0	64.8
0°-180°	3857.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	519	515	519	518	49
15°	496	494	490	492	492	140
25°	450	448	443	443	442	207
35°	389	387	381	379	376	243
45°	318	316	312	307	305	245
55°	242	241	235	232	229	216
65°	164	163	158	155	153	162
75°	87	86	84	83	81	93
85°	23	23	23	23	22	25
90°	1	6	11	15	17	4
95°	45	47	54	58	60	48
105°	159	162	167	171	173	170
115°	300	303	305	304	303	297
125°	438	443	443	442	441	393
135°	570	574	575	575	572	439
145°	691	694	696	696	694	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°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	522.2	522.0	521.8	521.6	521.4	520.8	520.1	519.4	518.7	517.9	518.7
5°	520.0	519.9	519.7	519.5	519.3	518.8	517.9	517.0	516.0	515.1	515.9
7.5°	515.3	515.1	515.0	514.8	514.6	514.0	513.0	511.9	511.0	510.0	510.8
10°	511.0	510.9	510.7	510.5	510.3	509.7	508.7	507.7	506.7	505.7	506.4
12.5°	505.8	505.4	505.1	504.8	504.4	503.8	502.8	501.9	501.0	500.1	500.6
15°	495.8	495.5	495.3	495.0	494.6	494.0	493.0	492.0	491.0	490.0	490.4
17.5°	484.3	483.9	483.5	483.1	482.7	482.0	480.9	479.9	478.8	477.8	478.4
20°	474.7	474.6	474.4	474.2	474.0	473.3	472.2	470.9	469.8	468.6	469.2
22.5°	465.2	464.8	464.5	464.2	463.9	463.2	462.0	460.9	459.8	458.7	459.1
25°	450.0	449.6	449.1	448.6	448.2	447.4	446.2	445.0	443.8	442.6	442.8
27.5°	432.3	432.0	431.8	431.5	431.2	430.4	429.3	428.0	426.8	425.5	425.6
30°	420.8	420.5	420.2	419.9	419.6	418.8	417.5	416.1	414.7	413.3	413.1
32.5°	408.2	407.8	407.4	407.0	406.5	405.7	404.5	403.2	402.1	400.8	400.5
35°	388.6	388.3	387.9	387.5	387.2	386.3	385.0	383.8	382.5	381.2	380.8
37.5°	368.3	367.8	367.4	366.8	366.4	365.6	364.4	363.2	361.9	360.8	360.1
40°	354.5	353.9	353.5	353.0	352.6	351.7	350.4	349.2	347.9	346.6	345.8
42.5°	339.6	339.2	338.9	338.4	338.0	337.2	335.9	334.7	333.3	332.1	331.4
45°	318.2	317.8	317.4	317.1	316.6	315.9	314.9	313.8	312.6	311.6	310.5
47.5°	295.1	295.1	295.1	295.2	295.2	294.5	293.2	291.9	290.5	289.2	288.1
50°	280.3	280.0	279.7	279.4	279.1	278.5	277.3	276.3	275.2	274.0	272.9
52.5°	265.1	264.8	264.7	264.5	264.3	263.6	262.4	261.3	260.0	258.9	257.9
55°	242.3	242.0	241.7	241.5	241.2	240.4	239.2	237.9	236.6	235.3	234.5
57.5°	218.4	218.2	218.0	217.9	217.8	217.1	216.1	215.0	213.9	212.9	211.8
60°	203.1	202.8	202.4	202.1	201.7	201.0	200.0	199.0	198.0	197.0	196.1
62.5°	187.3	187.1	186.7	186.5	186.2	185.6	184.8	183.9	183.0	182.2	181.2
65°	163.6	163.5	163.3	163.1	162.9	162.3	161.3	160.2	159.3	158.3	157.4
67.5°	140.6	140.3	139.8	139.5	139.1	138.5	137.8	137.0	136.3	135.5	134.8
70°	126.1	125.6	125.2	124.8	124.3	123.6	122.8	122.0	121.2	120.4	119.8
72.5°	110.3	109.9	109.7	109.3	109.1	108.6	108.1	107.5	107.0	106.5	105.8
75°	86.9	86.8	86.6	86.4	86.2	85.9	85.4	85.0	84.5	84.1	83.8
77.5°	65.5	65.4	65.3	65.2	65.2	65.0	64.7	64.5	64.2	63.9	63.8
80°	51.9	51.9	51.9	51.9	51.9	51.8	51.6	51.5	51.3	51.1	51.0
82.5°	40.0	39.9	39.8	39.6	39.5	39.4	39.3	39.3	39.2	39.2	39.1
85°	22.6	22.7	22.8	22.9	23.0	23.1	23.1	23.1	23.1	23.1	23.0
87.5°	9.0	9.3	9.5	9.8	10.1	10.3	10.3	10.5	10.7	10.8	11.0
90°	0.7	2.0	3.2	4.5	5.6	6.8	7.9	9.0	10.1	11.1	11.9
92.5°	16.9	17.7	18.6	19.4	20.3	21.4	22.7	24.1	25.4	26.8	27.8
95°	45.3	45.7	45.9	46.3	46.5	47.5	49.0	50.6	52.2	53.7	54.8
97.5°	75.3	75.4	75.5	75.7	75.8	77.0	79.1	81.2	83.4	85.5	86.5
100°	97.6	97.6	97.6	97.6	97.6	98.6	100.7	102.6	104.7	106.6	108.1
102.5°	121.6	122.3	122.9	123.5	124.1	124.9	125.9	127.0	128.0	129.0	130.5
105°	159.0	159.8	160.5	161.3	162.1	162.9	163.9	164.8	165.7	166.7	167.6
107.5°	200.3	201.0	201.8	202.6	203.4	204.1	204.8	205.5	206.3	207.0	207.4
110°	228.7	229.5	230.2	231.0	231.8	232.5	232.9	233.4	233.8	234.3	234.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	257.7	258.2	258.5	259.0	259.3	259.8	260.4	261.0	261.6	262.2	262.4
115°	300.5	301.1	301.8	302.4	303.0	303.4	303.8	304.1	304.4	304.7	304.5
117.5°	343.5	343.8	344.0	344.3	344.6	344.9	345.2	345.4	345.7	346.0	346.1
120°	370.2	371.0	371.8	372.6	373.4	373.8	374.0	374.2	374.3	374.4	374.4
122.5°	399.2	399.6	399.8	400.1	400.4	400.7	401.1	401.5	401.9	402.3	402.2
125°	438.5	439.5	440.4	441.4	442.3	442.8	443.0	443.2	443.3	443.4	443.2
127.5°	480.5	481.0	481.4	482.0	482.5	482.9	483.0	483.2	483.5	483.7	483.5
130°	505.5	506.3	507.1	507.8	508.6	509.2	509.4	509.8	510.1	510.4	510.2
132.5°	530.7	531.9	533.2	534.4	535.7	536.3	536.3	536.2	536.1	536.1	535.9
135°	570.3	571.3	572.2	573.2	574.1	574.6	574.8	575.0	575.1	575.2	575.2
137.5°	607.8	608.7	609.6	610.5	611.4	612.0	612.3	612.6	613.0	613.3	613.5
140°	631.8	632.5	633.3	634.1	634.8	635.4	635.9	636.4	636.9	637.3	637.7
142.5°	655.8	656.4	657.0	657.6	658.4	659.0	659.5	660.1	660.7	661.3	661.5
145°	691.0	691.6	692.2	692.9	693.5	694.0	694.5	694.9	695.4	695.9	695.9
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.2
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°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	519.4	520.1	520.8	521.2	521.1	521.0	521.0	520.9
5°	516.7	517.6	518.4	518.8	518.7	518.6	518.5	518.4
7.5°	511.6	512.4	513.2	513.5	513.4	513.4	513.3	513.2
10°	507.1	507.8	508.6	508.9	508.8	508.7	508.6	508.5
12.5°	501.2	501.9	502.4	502.7	502.7	502.7	502.7	502.6
15°	490.9	491.3	491.9	492.0	492.0	492.0	492.0	492.0
17.5°	478.9	479.5	480.1	480.1	479.7	479.2	478.8	478.3
20°	469.8	470.5	471.1	471.3	470.7	470.3	469.8	469.4
22.5°	459.5	459.9	460.4	460.4	460.1	459.8	459.5	459.1
25°	443.0	443.2	443.4	443.3	443.0	442.7	442.5	442.2
27.5°	425.6	425.6	425.7	425.6	425.3	425.0	424.7	424.5
30°	413.0	412.8	412.6	412.4	412.1	411.9	411.5	411.3
32.5°	400.2	399.8	399.5	399.1	398.6	398.1	397.6	397.1
35°	380.3	379.9	379.3	378.8	378.1	377.3	376.6	375.9
37.5°	359.4	358.7	358.0	357.5	357.0	356.7	356.2	355.8
40°	344.9	344.1	343.3	342.8	342.5	342.1	341.9	341.6
42.5°	330.6	329.8	329.0	328.5	328.1	327.6	327.3	326.8
45°	309.3	308.3	307.2	306.5	306.2	305.9	305.7	305.4
47.5°	287.0	285.9	284.7	283.8	283.2	282.6	282.0	281.3
50°	271.7	270.5	269.3	268.4	267.7	267.1	266.4	265.8
52.5°	256.8	255.7	254.7	253.9	253.2	252.4	251.7	251.0
55°	233.6	232.8	232.0	231.3	230.7	230.0	229.3	228.7
57.5°	210.7	209.6	208.6	207.9	207.5	207.1	206.8	206.4
60°	195.2	194.2	193.3	192.5	191.9	191.3	190.6	190.0
62.5°	180.2	179.1	178.2	177.5	177.0	176.5	175.9	175.5
65°	156.6	155.8	155.0	154.4	154.0	153.6	153.3	152.9
67.5°	134.1	133.4	132.7	132.2	132.1	131.8	131.6	131.3
70°	119.2	118.7	118.2	117.7	117.3	117.0	116.5	116.2
72.5°	105.2	104.6	104.0	103.5	103.2	102.8	102.4	102.0
75°	83.6	83.3	82.9	82.7	82.3	81.9	81.6	81.1
77.5°	63.7	63.5	63.3	63.1	62.9	62.6	62.3	62.1
80°	50.9	50.8	50.7	50.6	50.4	50.2	50.0	49.8
82.5°	38.9	38.7	38.6	38.4	38.4	38.4	38.3	38.3
85°	22.9	22.8	22.7	22.6	22.4	22.2	22.0	21.8
87.5°	11.1	11.2	11.4	11.5	11.4	11.3	11.3	11.2
90°	12.7	13.5	14.3	14.9	15.3	15.8	16.2	16.8
92.5°	28.8	29.9	30.9	31.6	31.9	32.2	32.5	32.9
95°	55.8	57.0	58.1	58.8	59.0	59.4	59.7	59.9
97.5°	87.6	88.5	89.6	90.2	90.3	90.5	90.8	91.0
100°	109.5	110.8	112.3	113.2	113.4	113.7	114.0	114.3
102.5°	132.1	133.6	135.1	136.1	136.5	136.9	137.3	137.8
105°	168.5	169.4	170.4	171.0	171.6	172.0	172.5	172.9
107.5°	207.9	208.3	208.8	209.0	209.0	208.9	208.9	208.9
110°	235.2	235.7	236.1	236.3	236.1	235.9	235.9	235.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	262.6	262.8	263.1	263.1	262.7	262.4	262.2	261.9
115°	304.4	304.3	304.1	303.9	303.8	303.6	303.4	303.4
117.5°	346.3	346.3	346.5	346.3	345.6	345.0	344.4	343.8
120°	374.4	374.4	374.4	374.2	373.5	372.9	372.3	371.7
122.5°	402.1	402.0	401.8	401.5	401.0	400.6	400.0	399.6
125°	442.8	442.6	442.2	442.0	441.8	441.7	441.6	441.4
127.5°	483.3	483.1	483.0	482.8	482.5	482.1	481.9	481.5
130°	510.1	510.0	509.8	509.5	509.3	508.9	508.6	508.3
132.5°	535.7	535.6	535.5	535.1	534.8	534.3	533.9	533.4
135°	575.2	575.2	575.2	575.0	574.4	573.7	573.1	572.5
137.5°	613.7	613.9	614.0	613.8	613.0	612.2	611.4	610.6
140°	637.9	638.2	638.6	638.3	637.6	636.8	636.0	635.3
142.5°	661.6	661.8	662.0	661.7	660.9	660.2	659.4	658.6
145°	695.9	695.9	695.9	695.6	695.2	694.7	694.3	693.8
147.5°	727.5	728.0	728.3	728.0	726.9	725.9	724.9	723.8
150°	747.5	747.5	747.5	747.3	747.0	746.7	746.4	746.1
152.5°	766.1	766.4	766.8	766.7	766.2	765.6	765.1	764.5
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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