

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: P333372-940

Luminaire Tested: **S125DIW-S610D470U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333372-940
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-S610D470U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3812.7 lumens
Efficiency: N/A
Efficacy: 126.2 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: General Diffuse

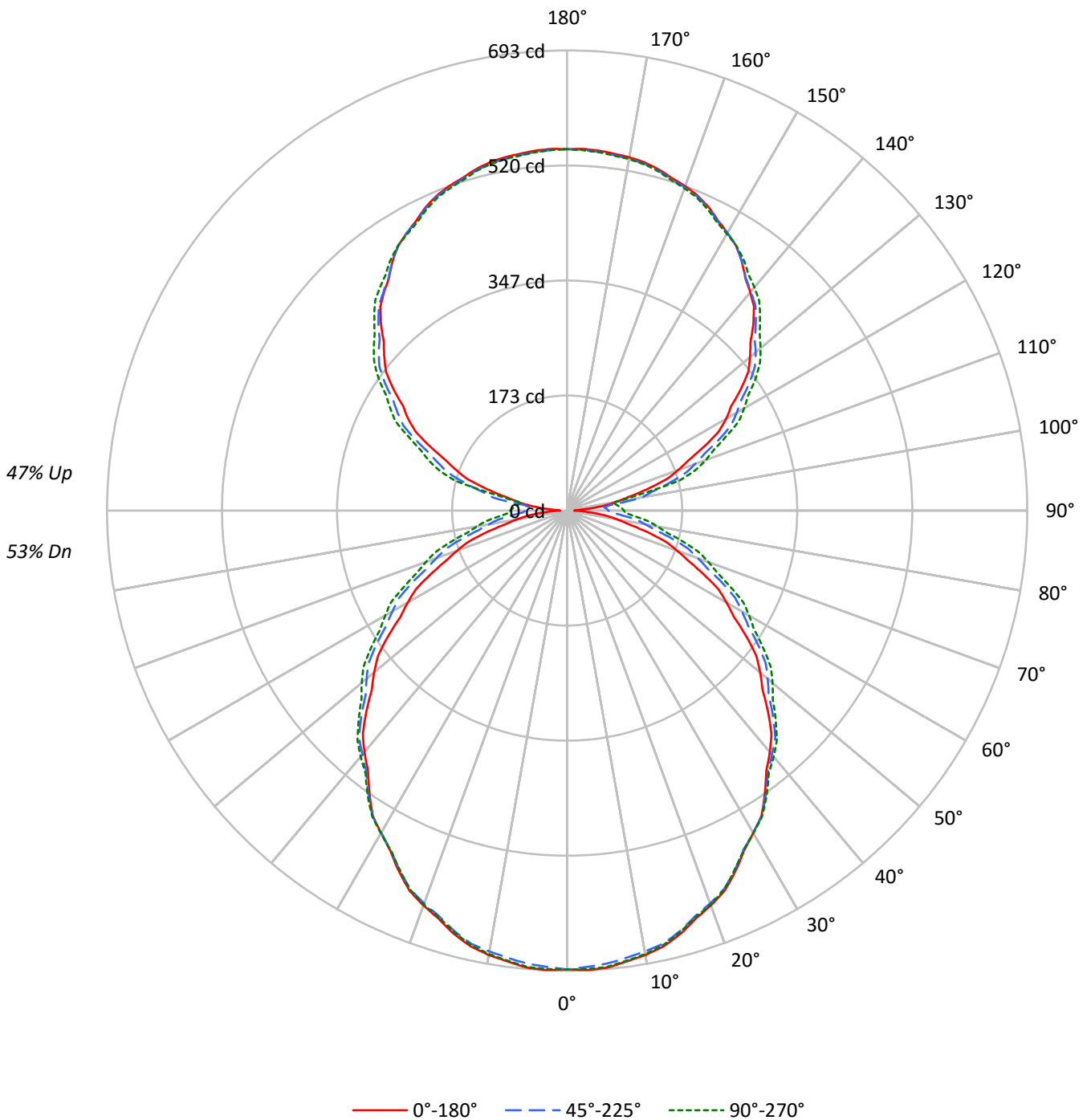
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	98	93	89	85	90	86	82	79	73	71	68	61	60	58	51	49	48	43
2	89	81	74	69	82	75	69	64	64	59	56	54	50	48	44	42	40	35
3	81	71	63	57	74	66	59	53	56	51	47	47	43	40	39	36	34	29
4	74	62	54	48	68	58	51	45	50	44	39	42	37	34	35	31	29	25
5	68	56	47	41	62	52	44	39	44	38	34	37	33	29	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	29	34	29	26	28	25	22	19
7	57	45	37	31	53	42	34	29	36	30	26	31	26	23	26	22	19	17
8	53	41	33	27	49	38	31	26	33	27	23	28	23	20	24	20	17	15
9	50	37	29	24	46	35	28	23	30	24	21	26	21	18	22	18	16	13
10	46	34	27	22	43	32	25	21	28	22	18	24	19	16	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.7
10°-20°	185.5	4.9
20°-30°	275.9	7.2
30°-40°	326.8	8.6
40°-50°	337.9	8.9
50°-60°	311.2	8.2
60°-70°	251.6	6.6
70°-80°	168.5	4.4
80°-90°	88.5	2.3
90°-100°	68.8	1.8
100°-110°	158.0	4.1
110°-120°	245.3	6.4
120°-130°	297.4	7.8
130°-140°	311.1	8.2
140°-150°	287.6	7.5
150°-160°	231.7	6.1
160°-170°	149.8	3.9
170°-180°	51.7	1.4
0°-30°	526.7	13.8
0°-40°	853.5	22.4
0°-60°	1502.6	39.4
0°-90°	2011.2	52.7
90°-120°	472.1	12.4
90°-150°	1368.3	35.9
90°-180°	1802.0	47.3
0°-180°	3812.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	11	36	62	79	86	8
95°	32	48	56	72	78	36
105°	125	138	158	170	175	132
115°	227	234	252	262	264	225
125°	319	322	335	344	346	285
135°	396	398	402	410	411	305
145°	458	459	459	462	463	286
155°	504	502	503	504	501	232
165°	532	530	530	532	529	150
175°	544	542	542	545	542	52
180°	544	544	544	544	544	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.2	26.2	31.1	36.1	41.1	46.2	51.5	56.6	61.9	67.1	70.7
90°	11.2	16.8	22.3	27.8	33.3	39.1	44.8	50.6	56.3	62.0	65.9
92.5°	16.0	19.9	23.9	27.8	31.7	36.6	42.4	48.2	54.0	59.8	63.7
95°	31.8	35.5	39.1	42.7	46.4	49.0	50.7	52.5	54.2	55.9	59.7
97.5°	56.0	60.0	64.0	68.0	72.1	73.1	71.3	69.6	67.7	65.9	66.5
100°	74.8	78.3	81.7	85.1	88.5	92.8	98.0	103.2	108.3	113.5	103.3
102.5°	94.0	97.2	100.5	103.7	107.0	111.1	116.0	120.9	125.8	130.7	131.3
105°	124.7	127.4	130.2	133.0	135.8	139.4	143.9	148.5	152.9	157.5	160.5
107.5°	156.7	158.7	160.8	162.8	164.8	168.1	172.6	177.2	181.6	186.2	189.1
110°	177.4	179.2	181.0	182.8	184.6	187.7	192.2	196.5	200.9	205.3	207.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	197.4	199.0	200.7	202.4	204.0	207.0	211.2	215.3	219.6	223.8	226.2
115°	226.8	228.3	229.7	231.2	232.7	235.5	239.5	243.5	247.5	251.6	253.9
117.5°	257.2	257.8	258.5	259.1	259.8	262.2	266.3	270.3	274.3	278.4	280.4
120°	276.5	276.9	277.2	277.6	277.9	280.0	283.7	287.5	291.1	294.9	297.3
122.5°	293.0	293.6	294.2	294.7	295.2	297.3	300.8	304.2	307.6	311.1	313.4
125°	319.4	319.9	320.3	320.8	321.3	323.1	326.0	329.0	332.1	335.1	337.2
127.5°	343.9	344.3	344.6	344.8	345.2	346.5	348.9	351.3	353.7	356.1	358.2
130°	359.4	359.7	360.1	360.3	360.6	361.9	364.1	366.3	368.5	370.7	372.6
132.5°	374.4	374.9	375.4	375.9	376.4	377.3	378.7	380.1	381.6	383.0	385.1
135°	396.3	396.6	397.1	397.4	397.9	398.5	399.3	400.2	401.1	402.0	403.8
137.5°	416.4	416.8	417.1	417.4	417.8	418.1	418.5	418.8	419.2	419.5	421.3
140°	429.1	429.3	429.4	429.6	429.8	429.9	430.0	430.1	430.1	430.2	432.0
142.5°	441.0	441.0	441.0	441.0	441.0	441.0	441.2	441.4	441.5	441.7	443.1
145°	458.5	458.6	458.6	458.6	458.7	458.7	458.7	458.7	458.7	458.7	459.5
147.5°	473.2	473.1	473.1	473.1	473.1	473.1	473.2	473.3	473.4	473.5	473.9
150°	482.9	482.7	482.5	482.3	482.1	482.1	482.3	482.5	482.7	482.9	483.0
152.5°	492.2	491.9	491.4	491.1	490.6	490.5	490.7	490.9	491.1	491.2	491.4
155°	504.3	503.7	503.2	502.7	502.1	501.9	502.1	502.3	502.5	502.7	502.9
157.5°	513.5	513.2	512.9	512.6	512.2	512.1	512.1	512.1	512.1	512.2	512.5
160°	520.0	519.4	518.9	518.4	517.8	517.6	517.7	517.8	517.9	518.0	518.4
162.5°	525.1	524.6	524.1	523.5	523.0	522.8	522.9	523.0	523.1	523.2	523.6
165°	532.1	531.5	531.0	530.5	529.9	529.7	529.8	529.9	529.9	530.0	530.6
167.5°	537.3	536.7	536.2	535.6	535.0	534.8	534.8	534.9	535.0	535.1	535.8
170°	540.2	539.6	538.9	538.2	537.6	537.3	537.4	537.5	537.6	537.7	538.4
172.5°	542.1	541.4	540.8	540.2	539.6	539.4	539.5	539.7	539.8	540.0	540.6
175°	544.2	543.7	543.1	542.6	542.1	541.8	541.9	542.0	542.1	542.2	542.9
177.5°	545.2	544.7	544.3	543.9	543.4	543.2	543.3	543.4	543.5	543.6	544.0
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	74.3	77.8	81.3	83.6	84.8	85.9	87.0	88.1
90°	69.8	73.7	77.7	80.3	81.6	82.9	84.3	85.6
92.5°	67.4	71.2	75.0	77.5	78.6	79.8	81.1	82.2
95°	63.4	67.2	71.0	73.4	74.5	75.4	76.5	77.6
97.5°	67.1	67.9	68.5	69.3	70.3	71.3	72.3	73.4
100°	93.2	82.9	72.8	67.9	68.5	69.0	69.6	70.1
102.5°	131.8	132.3	132.8	130.5	125.3	120.1	114.9	109.7
105°	163.5	166.5	169.5	171.5	172.5	173.4	174.4	175.4
107.5°	192.2	195.2	198.1	200.0	200.6	201.3	202.0	202.7
110°	210.5	213.1	215.7	217.6	218.6	219.8	221.0	222.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	228.6	231.0	233.4	235.1	235.9	236.9	237.8	238.8
115°	256.2	258.6	260.9	262.3	262.6	263.1	263.4	263.8
117.5°	282.6	284.6	286.8	288.2	289.0	289.8	290.5	291.3
120°	299.7	302.0	304.4	305.9	306.3	306.7	307.2	307.6
122.5°	315.7	317.9	320.2	321.5	321.9	322.3	322.6	323.1
125°	339.2	341.3	343.3	344.6	345.0	345.5	346.0	346.5
127.5°	360.3	362.3	364.3	365.4	365.6	365.9	366.0	366.2
130°	374.3	376.2	378.0	379.1	379.4	379.7	380.0	380.3
132.5°	387.2	389.2	391.3	392.4	392.5	392.7	392.9	393.1
135°	405.6	407.3	409.1	410.1	410.3	410.5	410.7	410.9
137.5°	423.2	425.0	426.8	427.8	427.9	428.0	428.2	428.3
140°	433.8	435.7	437.5	438.5	438.5	438.6	438.6	438.7
142.5°	444.6	446.0	447.5	448.3	448.3	448.4	448.4	448.5
145°	460.4	461.2	462.1	462.5	462.5	462.6	462.7	462.7
147.5°	474.2	474.6	474.9	474.9	474.5	474.1	473.8	473.4
150°	483.2	483.4	483.6	483.4	482.9	482.2	481.7	481.2
152.5°	491.6	491.8	492.0	491.8	491.2	490.5	489.9	489.3
155°	503.2	503.5	503.7	503.5	502.7	502.0	501.3	500.6
157.5°	512.7	513.0	513.3	513.1	512.4	511.7	511.0	510.2
160°	518.7	519.1	519.4	519.2	518.5	517.8	517.1	516.4
162.5°	524.1	524.7	525.1	525.0	524.2	523.4	522.6	521.8
165°	531.2	531.7	532.3	532.2	531.5	530.7	529.9	529.2
167.5°	536.5	537.1	537.7	537.7	536.8	536.0	535.2	534.4
170°	539.1	539.9	540.6	540.6	539.8	539.0	538.1	537.3
172.5°	541.3	541.9	542.6	542.5	541.7	540.9	540.1	539.3
175°	543.6	544.3	545.0	545.0	544.2	543.4	542.6	541.8
177.5°	544.6	545.0	545.5	545.5	544.9	544.4	543.8	543.2
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2

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