

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: P333381-840

Luminaire Tested: **S125DIW-S610D770U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333381-840
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-S610D770U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH 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: 5213.9 lumens
Efficiency: N/A
Efficacy: 138.7 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: General Diffuse

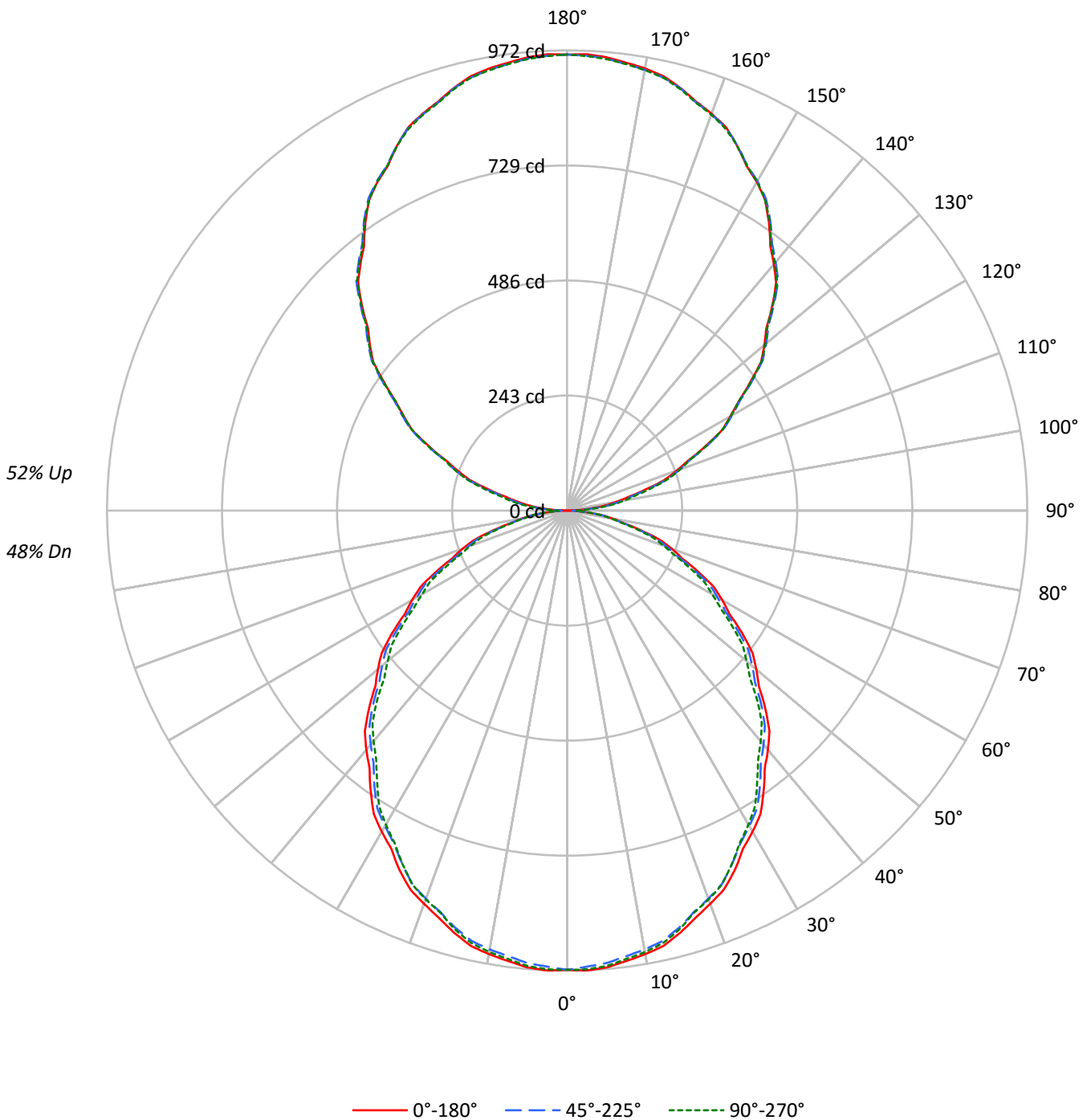
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	93	89	86	89	86	82	79	72	70	68	60	58	56	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	30	30	27	25	21
6	62	50	42	36	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	31	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	13
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.8
10°-20°	258.3	5.0
20°-30°	381.4	7.3
30°-40°	445.0	8.5
40°-50°	447.0	8.6
50°-60°	392.4	7.5
60°-70°	292.4	5.6
70°-80°	167.2	3.2
80°-90°	50.7	1.0
90°-100°	64.5	1.2
100°-110°	190.5	3.7
110°-120°	322.7	6.2
120°-130°	424.7	8.1
130°-140°	475.9	9.1
140°-150°	466.4	8.9
150°-160°	391.7	7.5
160°-170°	260.4	5.0
170°-180°	91.1	1.7
0°-30°	731.2	14.0
0°-40°	1176.2	22.6
0°-60°	2015.6	38.7
0°-90°	2525.8	48.4
90°-120°	577.8	11.1
90°-150°	1944.8	37.3
90°-180°	2688.0	51.6
0°-180°	5213.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	1	7	12	16	18	5
95°	49	51	58	63	64	52
105°	171	175	179	184	186	183
115°	323	326	328	327	326	319
125°	472	476	477	475	474	422
135°	613	618	618	618	616	472
145°	743	746	748	748	746	464
155°	850	850	851	853	850	391
165°	924	923	924	926	922	261
175°	961	958	958	962	957	91
180°	963	963	963	963	963	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.8	17.0	17.3	17.6	17.8	18.0	18.1	18.2	18.3	18.4	18.5
90°	0.7	2.1	3.4	4.7	6.1	7.4	8.5	9.7	10.8	12.0	12.8
92.5°	18.2	19.1	20.0	20.9	21.9	23.0	24.5	26.0	27.4	28.8	29.9
95°	48.8	49.1	49.4	49.7	50.1	51.1	52.7	54.4	56.0	57.8	58.9
97.5°	81.0	81.1	81.2	81.4	81.5	82.7	85.0	87.4	89.6	91.9	93.0
100°	104.9	104.9	104.9	104.9	104.9	106.0	108.2	110.4	112.5	114.7	116.2
102.5°	130.8	131.4	132.1	132.7	133.4	134.3	135.4	136.5	137.5	138.7	140.4
105°	171.0	171.8	172.6	173.4	174.3	175.2	176.2	177.1	178.1	179.2	180.2
107.5°	215.3	216.1	217.0	217.8	218.6	219.4	220.3	221.0	221.8	222.5	223.0
110°	245.9	246.7	247.5	248.4	249.2	249.8	250.3	250.9	251.4	251.9	252.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	277.1	277.5	277.9	278.4	278.8	279.3	279.9	280.6	281.2	281.9	282.2
115°	323.2	323.8	324.5	325.1	325.8	326.3	326.6	326.9	327.3	327.6	327.4
117.5°	369.3	369.6	369.9	370.2	370.5	370.8	371.1	371.4	371.7	372.0	372.1
120°	398.1	398.9	399.7	400.6	401.4	401.9	402.0	402.2	402.4	402.5	402.5
122.5°	429.3	429.6	429.9	430.2	430.5	430.8	431.2	431.7	432.1	432.5	432.4
125°	471.5	472.5	473.5	474.5	475.5	476.2	476.3	476.5	476.7	476.8	476.5
127.5°	516.5	517.1	517.7	518.3	518.8	519.2	519.4	519.6	519.8	520.0	519.8
130°	543.5	544.3	545.2	546.0	546.8	547.4	547.8	548.1	548.5	548.8	548.6
132.5°	570.5	571.9	573.2	574.6	575.9	576.6	576.5	576.4	576.4	576.3	576.2
135°	613.2	614.2	615.2	616.2	617.2	617.8	617.9	618.1	618.3	618.4	618.4
137.5°	653.4	654.4	655.3	656.3	657.3	657.9	658.3	658.6	659.0	659.4	659.6
140°	679.2	680.0	680.9	681.7	682.6	683.2	683.7	684.2	684.7	685.2	685.5
142.5°	705.0	705.7	706.4	707.1	707.8	708.4	709.1	709.7	710.3	710.9	711.1
145°	743.0	743.6	744.3	744.9	745.6	746.2	746.7	747.2	747.7	748.2	748.2
147.5°	778.0	778.4	778.7	779.1	779.5	779.8	780.2	780.6	781.0	781.4	781.8
150°	801.4	801.2	801.0	800.9	800.7	801.0	801.6	802.3	802.9	803.7	803.7
152.5°	820.6	820.8	821.0	821.3	821.5	821.7	822.0	822.3	822.5	822.8	823.2
155°	850.1	850.1	850.1	850.1	850.1	850.2	850.4	850.5	850.7	850.9	851.5
157.5°	876.6	876.2	875.8	875.5	875.0	874.9	875.1	875.3	875.5	875.7	876.3
160°	892.1	891.6	891.1	890.6	890.1	889.9	890.1	890.3	890.4	890.6	891.3
162.5°	905.9	905.5	905.1	904.8	904.4	904.2	904.3	904.3	904.3	904.4	905.2
165°	924.3	924.0	923.7	923.3	923.0	922.9	923.1	923.2	923.4	923.6	924.2
167.5°	940.0	939.3	938.6	938.0	937.3	937.0	937.0	937.0	937.0	937.0	938.0
170°	948.4	947.7	947.0	946.3	945.6	945.3	945.3	945.3	945.3	945.3	946.3
172.5°	954.3	953.6	953.0	952.3	951.7	951.3	951.3	951.3	951.3	951.3	952.3
175°	961.1	960.4	959.8	959.1	958.4	958.1	958.1	958.1	958.1	958.1	959.1
177.5°	964.5	964.0	963.4	962.9	962.4	962.1	961.9	961.8	961.7	961.5	962.3
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	18.7	18.9	19.0	19.0	18.9	18.7	18.5	18.4
90°	13.6	14.5	15.3	16.0	16.5	17.0	17.5	18.0
92.5°	31.0	32.1	33.2	33.9	34.3	34.6	35.0	35.3
95°	60.1	61.2	62.4	63.1	63.5	63.8	64.1	64.4
97.5°	94.1	95.2	96.3	96.9	97.1	97.4	97.6	97.8
100°	117.6	119.2	120.7	121.6	122.0	122.3	122.6	122.9
102.5°	142.0	143.6	145.2	146.2	146.7	147.2	147.6	148.1
105°	181.2	182.2	183.2	183.9	184.4	184.9	185.4	185.9
107.5°	223.5	224.0	224.5	224.7	224.7	224.7	224.6	224.6
110°	252.9	253.4	253.9	254.1	253.9	253.7	253.6	253.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	282.4	282.6	282.8	282.8	282.5	282.2	281.9	281.6
115°	327.3	327.1	326.9	326.8	326.6	326.5	326.3	326.1
117.5°	372.2	372.3	372.5	372.2	371.6	370.9	370.2	369.6
120°	402.5	402.5	402.5	402.2	401.6	400.9	400.2	399.6
122.5°	432.3	432.1	432.0	431.7	431.1	430.6	430.1	429.6
125°	476.2	475.7	475.4	475.2	475.0	474.8	474.7	474.5
127.5°	519.7	519.5	519.3	519.1	518.8	518.4	518.1	517.8
130°	548.5	548.3	548.1	547.9	547.5	547.1	546.8	546.5
132.5°	576.0	575.8	575.7	575.3	574.9	574.4	574.0	573.5
135°	618.4	618.4	618.4	618.1	617.4	616.8	616.1	615.5
137.5°	659.8	660.0	660.2	659.8	659.0	658.2	657.4	656.5
140°	685.9	686.2	686.5	686.3	685.5	684.6	683.8	683.0
142.5°	711.3	711.6	711.8	711.4	710.6	709.8	708.9	708.1
145°	748.2	748.2	748.2	747.9	747.4	746.9	746.4	745.9
147.5°	782.2	782.6	783.0	782.6	781.5	780.4	779.3	778.2
150°	803.7	803.7	803.7	803.4	803.1	802.8	802.4	802.1
152.5°	823.6	824.0	824.5	824.4	823.7	823.1	822.5	821.9
155°	852.2	852.8	853.5	853.4	852.6	851.8	850.9	850.1
157.5°	877.0	877.6	878.3	878.1	877.0	875.9	874.7	873.6
160°	891.9	892.6	893.2	893.2	892.3	891.5	890.7	889.9
162.5°	906.1	906.8	907.6	907.6	906.6	905.5	904.6	903.6
165°	924.9	925.6	926.2	926.0	925.1	924.1	923.1	922.1
167.5°	939.0	940.0	940.9	940.9	939.9	938.9	937.9	936.8
170°	947.4	948.4	949.4	949.3	948.1	947.0	945.7	944.6
172.5°	953.3	954.3	955.3	955.3	954.3	953.2	952.2	951.2
175°	960.1	961.1	962.1	962.0	960.8	959.7	958.5	957.4
177.5°	963.1	963.9	964.7	964.6	963.7	962.8	961.9	960.9
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3

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