

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: P333525-935

Luminaire Tested: **S125RDIP-S610D365U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333525-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S610D365U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3178.9 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

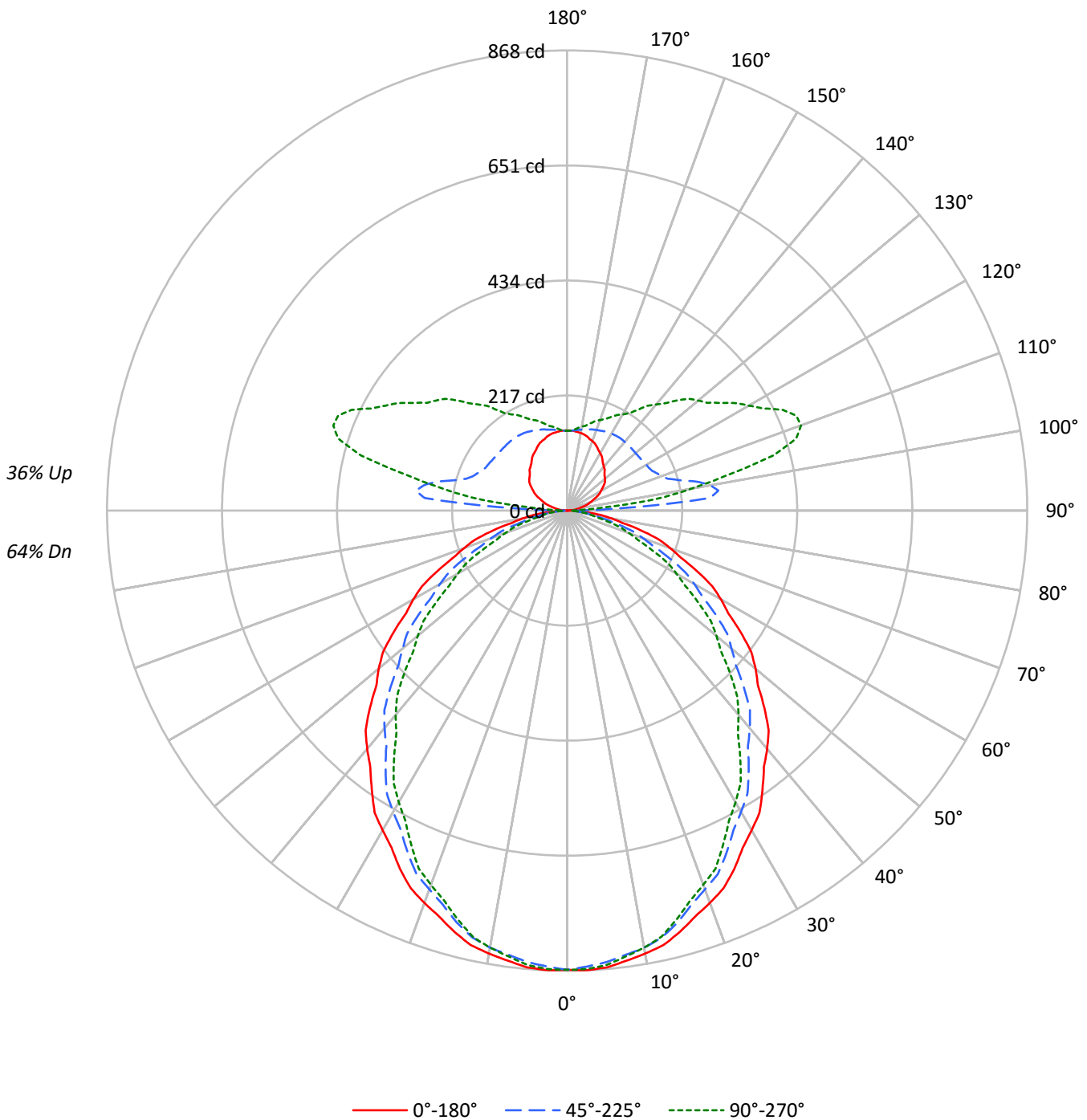
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	92	85	79	74	87	80	75	70	71	67	63	63	59	57	55	52	50	46
3	85	75	68	62	79	71	64	59	63	58	53	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	39	36	33	30
6	66	54	45	39	62	51	43	38	45	39	35	41	36	32	36	32	29	26
7	61	49	40	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	40	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	26	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	2.6
10°-20°	227.6	7.2
20°-30°	330.1	10.4
30°-40°	376.2	11.8
40°-50°	366.7	11.5
50°-60°	308.6	9.7
60°-70°	216.4	6.8
70°-80°	111.2	3.5
80°-90°	28.9	0.9
90°-100°	109.4	3.4
100°-110°	235.2	7.4
110°-120°	220.7	6.9
120°-130°	178.9	5.6
130°-140°	143.5	4.5
140°-150°	108.3	3.4
150°-160°	76.2	2.4
160°-170°	44.9	1.4
170°-180°	14.6	0.5
0°-30°	639.1	20.1
0°-40°	1015.3	31.9
0°-60°	1690.5	53.2
0°-90°	2047.0	64.4
90°-120°	565.3	17.8
90°-150°	996.0	31.3
90°-180°	1132.0	35.6
0°-180°	3178.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	0	3	5	6	7	2
95°	10	30	270	122	72	11
105°	34	48	221	434	403	36
115°	62	74	177	382	449	60
125°	85	100	170	304	354	76
135°	100	120	169	255	294	77
145°	116	133	169	211	232	73
155°	133	143	165	186	194	61
165°	145	149	158	168	170	41
175°	151	151	152	154	153	14
180°	151	151	151	151	151	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.1	11.4	10.7	10.0	9.3	9.0	8.9	8.9	8.8	8.8	8.9
90°	0.3	0.6	1.2	1.8	2.4	3.0	3.4	4.0	4.2	4.9	5.2
92.5°	3.7	4.5	7.1	10.8	16.1	25.0	41.6	69.4	99.7	98.1	79.4
95°	10.1	10.3	12.7	16.1	22.8	36.5	69.1	136.0	220.0	269.6	263.8
97.5°	16.7	17.0	18.8	22.1	28.2	38.0	59.5	108.6	196.5	287.9	333.8
100°	21.3	21.9	23.2	26.4	32.3	41.4	59.1	98.6	175.3	274.7	350.9
102.5°	26.4	26.8	27.7	31.3	36.7	45.5	61.2	94.5	159.2	251.7	340.6
105°	34.4	34.4	35.9	38.9	43.8	52.3	65.7	92.8	143.6	220.6	308.0
107.5°	42.2	42.8	44.3	46.8	51.8	59.5	72.4	95.6	137.1	199.2	274.6
110°	47.8	48.4	49.6	52.3	56.9	64.8	77.3	98.3	135.1	189.2	255.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	53.4	54.0	54.9	57.7	62.3	69.9	81.9	101.7	135.1	183.4	241.5
115°	61.5	62.1	63.0	65.7	70.3	77.9	89.2	106.8	136.0	177.1	226.1
117.5°	68.8	69.7	70.7	73.4	78.6	85.9	96.6	112.6	138.0	174.0	216.9
120°	73.6	74.6	75.8	78.5	83.7	91.3	101.9	116.6	140.0	172.5	211.8
122.5°	78.8	79.4	80.4	83.2	88.8	96.4	107.0	120.9	141.6	171.3	207.4
125°	85.2	85.8	87.3	90.1	95.8	103.8	113.8	126.9	144.6	169.8	201.5
127.5°	90.2	91.2	93.1	96.6	102.7	110.6	120.3	132.3	147.7	169.1	196.0
130°	93.4	94.4	96.8	100.7	107.1	115.0	124.4	136.0	149.7	168.6	192.3
132.5°	95.8	97.0	100.0	104.4	111.0	118.9	128.4	139.2	151.9	168.6	189.4
135°	99.8	101.0	104.7	109.5	116.0	124.2	133.5	143.6	154.9	168.6	185.9
137.5°	104.8	105.7	109.1	114.0	120.3	128.7	137.3	146.9	157.6	168.9	182.8
140°	107.7	108.7	112.3	117.2	123.0	131.1	140.0	149.1	158.9	169.2	181.3
142.5°	111.2	111.8	115.2	120.1	125.6	133.4	141.6	150.3	159.5	169.4	180.1
145°	116.2	116.8	119.9	124.2	129.7	136.6	144.6	152.1	160.3	169.2	178.3
147.5°	121.6	121.9	124.6	128.5	133.3	139.4	146.4	153.3	160.7	168.4	176.4
150°	124.8	125.4	127.5	131.5	135.7	140.9	147.6	153.9	160.7	167.6	175.0
152.5°	128.2	128.5	130.4	133.9	137.9	142.6	148.8	154.5	160.4	166.7	173.2
155°	132.7	132.7	134.5	137.5	140.6	144.8	150.0	154.9	159.7	165.0	170.4
157.5°	136.7	136.6	138.1	140.7	143.4	146.6	151.0	155.2	158.9	163.1	167.7
160°	139.4	139.1	140.3	142.4	144.8	147.6	151.5	155.2	158.3	161.9	165.6
162.5°	141.5	141.3	142.5	144.4	146.3	148.5	152.1	155.0	157.5	160.4	163.6
165°	144.8	144.2	145.2	146.6	147.9	149.7	152.1	154.5	156.4	158.3	160.7
167.5°	147.1	146.7	147.3	148.1	149.0	150.2	152.1	153.9	154.7	156.1	157.8
170°	148.5	148.2	148.5	149.1	149.7	150.6	152.1	153.3	153.9	154.9	156.1
172.5°	149.5	149.0	149.2	149.8	150.2	150.6	151.9	152.9	153.0	153.4	154.4
175°	150.6	150.0	150.3	150.6	150.6	150.6	151.5	152.1	151.9	151.9	152.1
177.5°	151.2	150.7	150.7	150.9	150.7	150.7	151.2	151.4	150.9	150.9	151.2
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	9.0	9.0	9.0	9.1	9.0	8.9	8.9	8.7
90°	5.5	5.8	6.1	6.7	6.7	6.7	7.0	7.0
92.5°	53.9	39.1	29.4	25.0	21.1	20.3	19.9	19.4
95°	218.8	172.5	135.1	109.5	87.9	78.8	76.4	71.5
97.5°	325.8	293.4	256.9	221.4	202.6	185.5	176.8	172.8
100°	374.3	359.4	328.0	296.4	275.3	253.5	242.2	237.4
102.5°	390.5	399.8	384.8	363.3	340.9	325.3	313.1	309.4
105°	381.0	422.7	436.0	432.7	422.9	412.9	406.8	403.2
107.5°	346.6	402.3	436.6	452.5	457.4	457.4	455.4	453.0
110°	321.3	379.2	422.1	447.9	461.6	467.4	469.5	469.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	301.4	356.3	399.7	430.2	450.1	460.1	465.4	467.6
115°	276.3	323.5	365.2	398.3	422.1	436.6	445.1	449.1
117.5°	260.1	300.7	336.7	367.1	390.8	406.0	414.4	416.8
120°	251.3	287.8	321.3	348.1	370.7	385.2	393.5	395.9
122.5°	244.8	278.6	308.4	333.5	353.6	367.0	375.2	377.4
125°	235.2	266.2	292.7	314.6	331.7	344.1	350.9	353.9
127.5°	225.5	254.4	279.1	299.6	315.1	326.1	332.4	333.8
130°	219.4	246.2	269.9	289.7	304.9	315.0	321.1	322.9
132.5°	213.3	238.4	259.9	279.0	294.2	304.2	309.8	311.9
135°	205.4	226.4	245.9	263.2	276.6	286.6	292.1	293.9
137.5°	198.7	215.7	231.9	246.6	258.6	267.7	272.8	274.7
140°	195.0	209.3	223.3	236.1	247.4	255.3	259.8	261.4
142.5°	191.9	204.0	216.0	227.1	236.7	243.4	247.7	249.0
145°	187.8	197.2	206.6	214.8	222.1	227.3	230.7	231.9
147.5°	183.8	191.5	198.8	205.0	210.8	214.9	216.8	217.4
150°	181.7	188.4	194.2	199.6	204.1	207.8	209.1	209.3
152.5°	179.3	185.2	190.5	194.8	198.5	201.5	202.7	203.0
155°	175.6	180.5	184.7	188.0	191.1	193.2	194.2	194.4
157.5°	171.9	175.9	179.3	181.8	184.3	186.0	186.8	186.8
160°	169.5	172.5	175.6	177.7	179.9	181.3	181.9	181.7
162.5°	166.8	169.6	172.2	174.1	175.7	176.9	177.1	177.0
165°	163.1	165.2	167.0	168.6	169.8	170.4	170.4	170.4
167.5°	159.5	161.0	162.4	163.5	164.1	164.6	164.4	164.3
170°	157.6	158.5	159.5	160.1	160.7	161.0	161.0	160.7
172.5°	155.4	156.4	157.0	157.4	157.5	158.1	157.6	157.2
175°	153.1	153.1	153.7	153.7	153.7	153.9	153.3	153.1
177.5°	151.4	151.6	151.6	151.6	151.4	151.6	150.9	150.9
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9

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