

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: P333525-930

Luminaire Tested: **S125RDIP-S610D365U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333525-930  
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-S610D365U930-4F0-1E-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: 3010.1 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

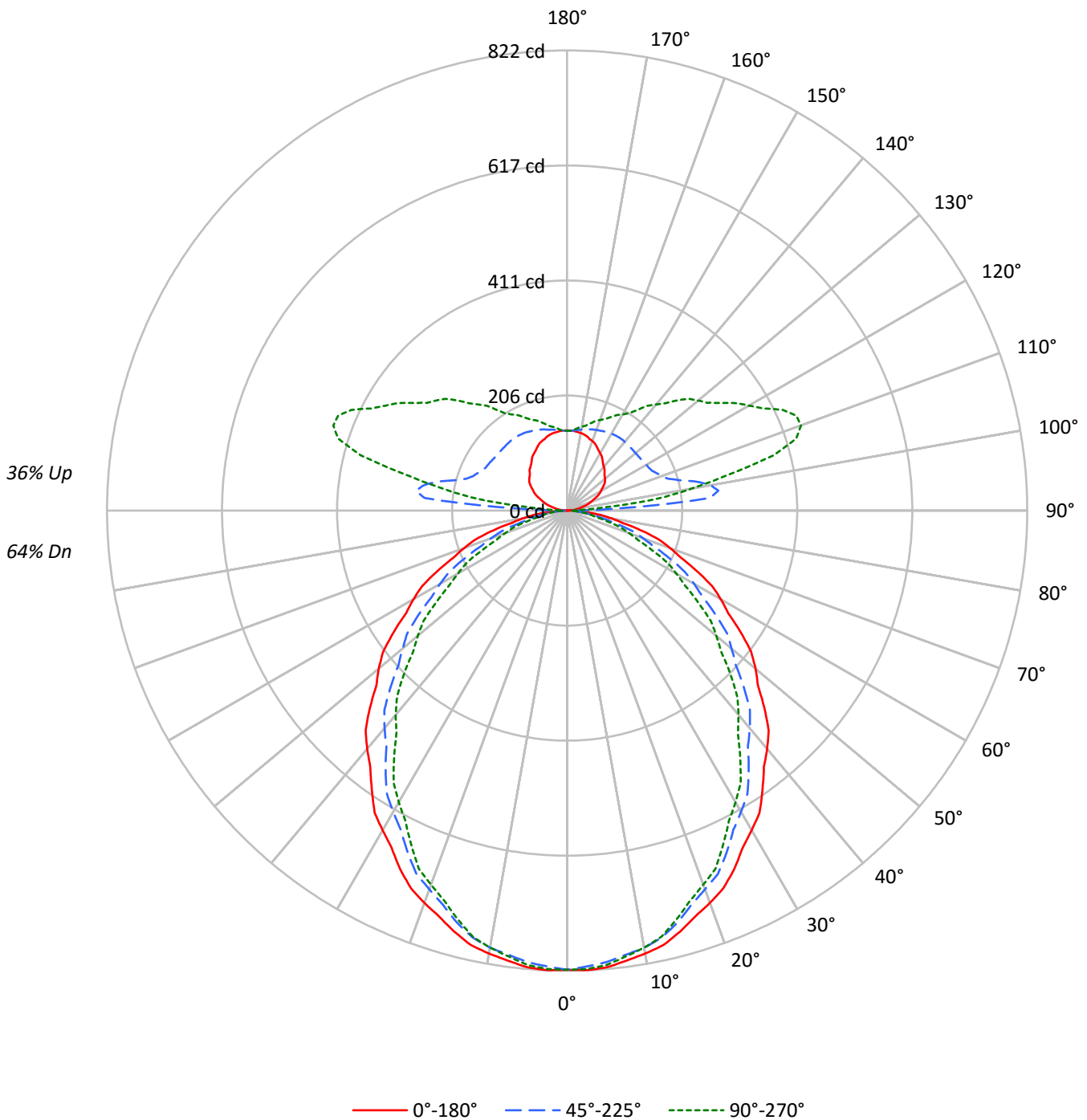
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	2.6
10°-20°	215.5	7.2
20°-30°	312.5	10.4
30°-40°	356.2	11.8
40°-50°	347.2	11.5
50°-60°	292.3	9.7
60°-70°	204.9	6.8
70°-80°	105.3	3.5
80°-90°	27.4	0.9
90°-100°	103.6	3.4
100°-110°	222.7	7.4
110°-120°	209.0	6.9
120°-130°	169.4	5.6
130°-140°	135.9	4.5
140°-150°	102.6	3.4
150°-160°	72.2	2.4
160°-170°	42.6	1.4
170°-180°	13.8	0.5
0°-30°	605.2	20.1
0°-40°	961.4	31.9
0°-60°	1600.8	53.2
0°-90°	1938.4	64.4
90°-120°	535.3	17.8
90°-150°	943.1	31.3
90°-180°	1072.0	35.6
0°-180°	3010.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	0	3	5	6	7	2
95°	10	28	255	116	68	10
105°	32	46	209	411	382	34
115°	58	70	168	362	425	57
125°	81	94	161	288	335	72
135°	94	114	160	241	278	73
145°	110	126	160	200	220	69
155°	126	135	156	176	184	58
165°	137	141	150	159	161	39
175°	143	143	144	146	145	14
180°	143	143	143	143	143	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.5	10.8	10.1	9.5	8.8	8.5	8.4	8.4	8.3	8.3	8.4
90°	0.3	0.6	1.1	1.7	2.3	2.9	3.2	3.8	4.0	4.6	4.9
92.5°	3.5	4.2	6.7	10.3	15.2	23.6	39.4	65.7	94.4	92.9	75.2
95°	9.5	9.8	12.1	15.2	21.6	34.6	65.4	128.8	208.3	255.3	249.8
97.5°	15.8	16.1	17.8	21.0	26.7	36.0	56.3	102.8	186.1	272.6	316.1
100°	20.1	20.7	21.9	25.0	30.6	39.2	55.9	93.4	166.0	260.2	332.2
102.5°	25.0	25.4	26.3	29.7	34.7	43.1	58.0	89.4	150.7	238.3	322.5
105°	32.5	32.5	34.0	36.9	41.5	49.6	62.2	87.9	136.0	208.9	291.6
107.5°	39.9	40.5	41.9	44.3	49.1	56.3	68.6	90.5	129.8	188.7	260.0
110°	45.2	45.8	47.0	49.6	53.9	61.4	73.2	93.1	127.9	179.2	242.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	50.5	51.1	52.0	54.6	58.9	66.2	77.5	96.3	127.9	173.7	228.7
115°	58.2	58.8	59.7	62.2	66.5	73.8	84.5	101.1	128.8	167.7	214.1
117.5°	65.1	66.0	66.9	69.5	74.4	81.4	91.5	106.6	130.7	164.8	205.4
120°	69.7	70.6	71.7	74.4	79.2	86.4	96.5	110.4	132.6	163.4	200.6
122.5°	74.6	75.2	76.1	78.8	84.1	91.3	101.3	114.5	134.1	162.2	196.4
125°	80.7	81.3	82.7	85.3	90.7	98.2	107.8	120.2	136.9	160.8	190.8
127.5°	85.4	86.3	88.1	91.5	97.3	104.8	113.9	125.3	139.9	160.1	185.6
130°	88.5	89.4	91.6	95.4	101.4	108.9	117.8	128.8	141.8	159.6	182.1
132.5°	90.7	91.9	94.7	98.8	105.1	112.6	121.6	131.8	143.8	159.6	179.4
135°	94.5	95.6	99.1	103.7	109.8	117.6	126.5	136.0	146.7	159.6	176.0
137.5°	99.2	100.1	103.3	107.9	113.9	121.9	130.0	139.1	149.3	160.0	173.1
140°	102.0	102.9	106.3	111.0	116.4	124.2	132.6	141.2	150.4	160.2	171.7
142.5°	105.3	105.8	109.1	113.7	119.0	126.3	134.1	142.4	151.1	160.5	170.6
145°	110.1	110.6	113.5	117.6	122.8	129.4	136.9	144.1	151.8	160.2	168.8
147.5°	115.1	115.4	118.0	121.7	126.2	132.0	138.6	145.1	152.1	159.5	167.1
150°	118.1	118.7	120.7	124.5	128.5	133.4	139.7	145.8	152.1	158.7	165.7
152.5°	121.4	121.7	123.5	126.8	130.6	135.0	140.9	146.3	151.9	157.8	164.0
155°	125.6	125.6	127.3	130.2	133.1	137.1	142.0	146.7	151.2	156.2	161.3
157.5°	129.5	129.4	130.8	133.2	135.7	138.8	143.0	146.9	150.5	154.4	158.8
160°	132.0	131.7	132.8	134.9	137.1	139.7	143.5	146.9	149.9	153.3	156.8
162.5°	134.0	133.8	134.9	136.7	138.5	140.6	144.0	146.8	149.1	151.9	154.9
165°	137.1	136.6	137.5	138.8	140.1	141.8	144.1	146.3	148.1	149.9	152.1
167.5°	139.3	138.9	139.5	140.2	141.0	142.2	144.1	145.7	146.5	147.8	149.4
170°	140.6	140.3	140.6	141.2	141.8	142.6	144.1	145.2	145.8	146.7	147.8
172.5°	141.5	141.0	141.3	141.9	142.2	142.6	143.8	144.8	144.9	145.3	146.2
175°	142.6	142.0	142.4	142.6	142.6	142.6	143.5	144.1	143.8	143.8	144.1
177.5°	143.2	142.7	142.7	142.9	142.7	142.7	143.2	143.4	142.9	142.9	143.2
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	8.5	8.6	8.6	8.6	8.6	8.4	8.4	8.2
90°	5.2	5.5	5.8	6.4	6.4	6.4	6.6	6.6
92.5°	51.0	37.0	27.9	23.6	20.0	19.2	18.8	18.3
95°	207.2	163.4	127.9	103.7	83.2	74.6	72.3	67.8
97.5°	308.5	277.9	243.3	209.6	191.8	175.7	167.4	163.6
100°	354.4	340.3	310.6	280.6	260.7	240.0	229.3	224.8
102.5°	369.8	378.5	364.4	344.1	322.8	308.0	296.4	293.0
105°	360.8	400.2	412.9	409.8	400.5	391.0	385.2	381.8
107.5°	328.2	380.9	413.4	428.5	433.2	433.2	431.2	428.9
110°	304.3	359.1	399.7	424.1	437.1	442.5	444.6	444.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	285.4	337.4	378.5	407.3	426.2	435.7	440.7	442.8
115°	261.6	306.3	345.8	377.2	399.7	413.4	421.5	425.3
117.5°	246.3	284.8	318.8	347.6	370.1	384.4	392.4	394.7
120°	238.0	272.6	304.3	329.6	351.0	364.8	372.6	374.9
122.5°	231.8	263.8	292.0	315.8	334.8	347.5	355.3	357.3
125°	222.7	252.1	277.2	297.9	314.1	325.9	332.2	335.1
127.5°	213.5	240.9	264.3	283.7	298.4	308.8	314.8	316.1
130°	207.7	233.1	255.6	274.3	288.7	298.2	304.0	305.7
132.5°	201.9	225.8	246.1	264.2	278.6	288.0	293.3	295.3
135°	194.5	214.3	232.8	249.2	262.0	271.4	276.6	278.3
137.5°	188.2	204.2	219.6	233.5	244.8	253.5	258.3	260.2
140°	184.7	198.2	211.5	223.6	234.2	241.7	246.1	247.5
142.5°	181.7	193.1	204.6	215.1	224.1	230.5	234.6	235.8
145°	177.8	186.7	195.7	203.4	210.3	215.2	218.4	219.6
147.5°	174.1	181.3	188.3	194.1	199.6	203.5	205.3	205.9
150°	172.0	178.4	183.8	189.0	193.3	196.8	198.0	198.2
152.5°	169.7	175.4	180.3	184.4	188.0	190.8	191.9	192.2
155°	166.2	170.9	174.9	178.1	180.9	183.0	183.8	184.1
157.5°	162.8	166.6	169.7	172.2	174.5	176.1	176.9	176.8
160°	160.5	163.4	166.2	168.3	170.3	171.7	172.3	172.0
162.5°	157.9	160.6	163.1	164.9	166.4	167.5	167.7	167.6
165°	154.4	156.5	158.2	159.6	160.8	161.3	161.3	161.3
167.5°	151.1	152.5	153.8	154.8	155.4	155.9	155.6	155.6
170°	149.3	150.1	151.0	151.6	152.1	152.5	152.5	152.1
172.5°	147.2	148.1	148.7	149.0	149.1	149.7	149.2	148.9
175°	145.0	145.0	145.5	145.5	145.5	145.8	145.2	145.0
177.5°	143.4	143.6	143.6	143.6	143.4	143.6	142.9	142.9
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9

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