

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

Luminaire Tested: **S125RDIP-S610D365U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333525  
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-S610D365U835-4F0-1E-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: 3692.1 lumens  
Efficiency: N/A  
Efficacy: 134.3 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

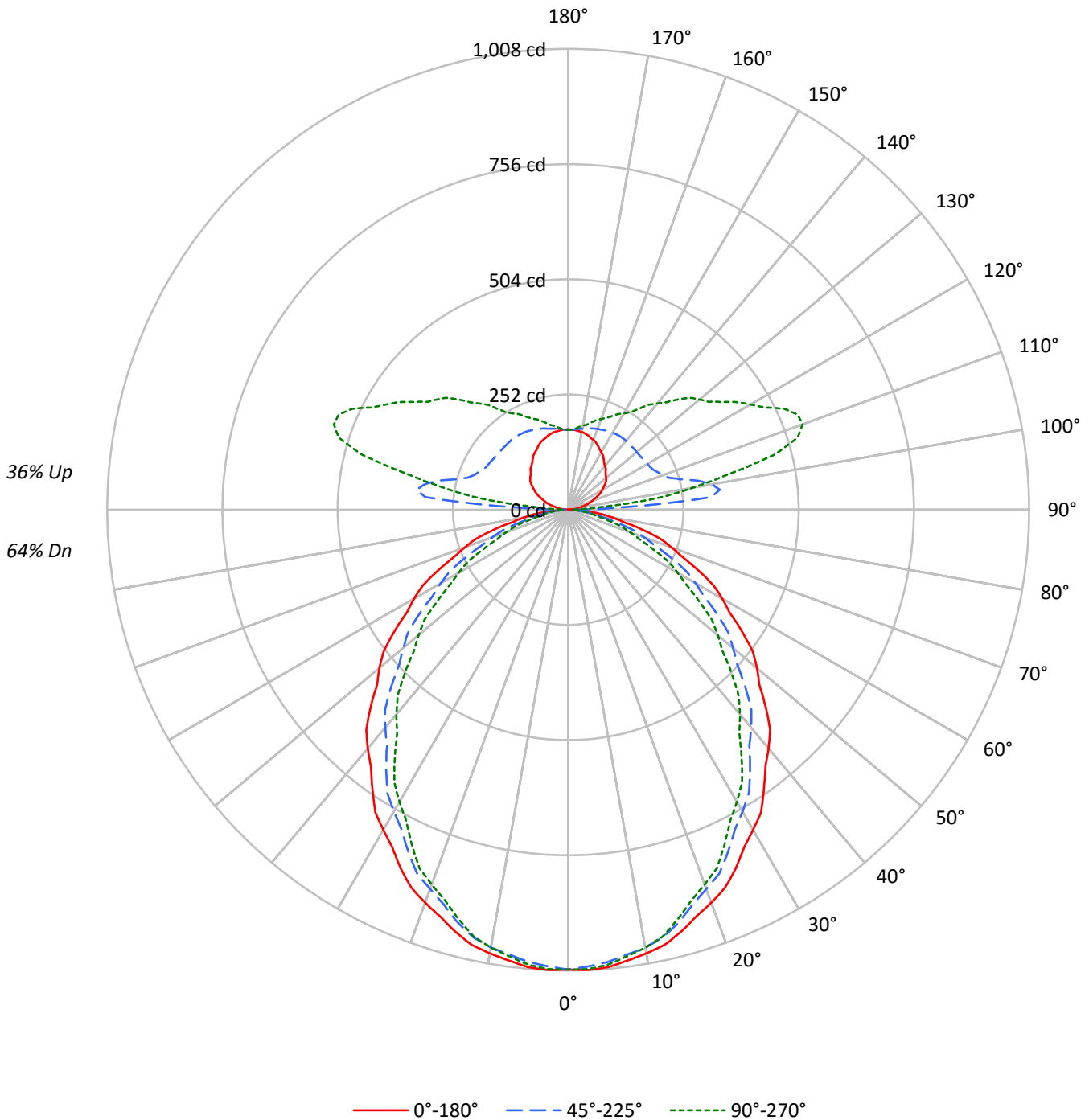
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.6	2.6
10°-20°	264.3	7.2
20°-30°	383.3	10.4
30°-40°	436.9	11.8
40°-50°	425.9	11.5
50°-60°	358.5	9.7
60°-70°	251.3	6.8
70°-80°	129.2	3.5
80°-90°	33.6	0.9
90°-100°	127.1	3.4
100°-110°	273.1	7.4
110°-120°	256.3	6.9
120°-130°	207.7	5.6
130°-140°	166.7	4.5
140°-150°	125.8	3.4
150°-160°	88.6	2.4
160°-170°	52.2	1.4
170°-180°	17.0	0.5
0°-30°	742.3	20.1
0°-40°	1179.2	31.9
0°-60°	1963.5	53.2
0°-90°	2377.5	64.4
90°-120°	656.5	17.8
90°-150°	1156.8	31.3
90°-180°	1315.0	35.6
0°-180°	3692.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	0	3	6	7	8	3
95°	12	34	313	142	83	12
105°	40	56	256	504	468	42
115°	71	86	206	443	522	70
125°	99	116	197	353	411	88
135°	116	139	196	296	341	90
145°	135	155	196	245	269	85
155°	154	166	192	216	226	71
165°	168	173	184	195	198	47
175°	175	175	176	178	178	17
180°	175	175	175	175	175	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.1	13.2	12.4	11.6	10.8	10.4	10.3	10.3	10.2	10.2	10.3
90°	0.4	0.7	1.4	2.1	2.8	3.5	3.9	4.6	4.9	5.7	6.0
92.5°	4.3	5.2	8.2	12.6	18.7	29.0	48.3	80.6	115.8	113.9	92.2
95°	11.7	12.0	14.8	18.7	26.5	42.4	80.2	158.0	255.5	313.1	306.4
97.5°	19.4	19.8	21.8	25.7	32.7	44.1	69.1	126.1	228.2	334.4	387.7
100°	24.7	25.4	26.9	30.7	37.5	48.1	68.6	114.5	203.6	319.1	407.5
102.5°	30.7	31.1	32.2	36.4	42.6	52.9	71.1	109.7	184.9	292.3	395.6
105°	39.9	39.9	41.7	45.2	50.9	60.8	76.3	107.8	166.8	256.2	357.7
107.5°	49.0	49.7	51.4	54.3	60.2	69.1	84.1	111.0	159.2	231.4	318.9
110°	55.5	56.2	57.6	60.8	66.1	75.3	89.8	114.2	156.9	219.8	296.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	62.0	62.7	63.8	67.0	72.3	81.2	95.1	118.1	156.9	213.0	280.5
115°	71.4	72.1	73.2	76.3	81.6	90.5	103.6	124.0	158.0	205.7	262.6
117.5°	79.9	80.9	82.1	85.2	91.3	99.8	112.2	130.8	160.3	202.1	251.9
120°	85.5	86.6	88.0	91.2	97.2	106.0	118.4	135.4	162.6	200.4	246.0
122.5°	91.5	92.2	93.4	96.6	103.1	112.0	124.3	140.4	164.5	199.0	240.9
125°	99.0	99.7	101.4	104.6	111.3	120.5	132.2	147.4	167.9	197.2	234.0
127.5°	104.8	105.9	108.1	112.2	119.3	128.5	139.7	153.7	171.6	196.4	227.6
130°	108.5	109.6	112.4	117.0	124.4	133.6	144.5	158.0	173.9	195.8	223.4
132.5°	111.3	112.7	116.1	121.2	128.9	138.1	149.1	161.7	176.4	195.8	220.0
135°	115.9	117.3	121.6	127.2	134.7	144.2	155.1	166.8	179.9	195.8	215.9
137.5°	121.7	122.8	126.7	132.4	139.7	149.5	159.5	170.6	183.1	196.2	212.3
140°	125.1	126.2	130.4	136.1	142.8	152.3	162.6	173.2	184.5	196.5	210.6
142.5°	129.1	129.8	133.8	139.5	145.9	154.9	164.5	174.6	185.3	196.8	209.2
145°	135.0	135.7	139.2	144.2	150.6	158.7	167.9	176.7	186.2	196.5	207.1
147.5°	141.2	141.6	144.7	149.3	154.8	161.9	170.0	178.0	186.6	195.6	204.9
150°	144.9	145.6	148.1	152.7	157.6	163.6	171.4	178.8	186.6	194.7	203.2
152.5°	148.9	149.3	151.5	155.5	160.2	165.6	172.8	179.4	186.3	193.6	201.2
155°	154.1	154.1	156.2	159.7	163.3	168.2	174.2	179.9	185.5	191.6	197.9
157.5°	158.8	158.7	160.4	163.4	166.5	170.3	175.4	180.2	184.6	189.4	194.8
160°	161.9	161.5	162.9	165.4	168.2	171.4	176.0	180.2	183.8	188.0	192.3
162.5°	164.4	164.1	165.5	167.7	169.9	172.5	176.6	180.0	182.9	186.3	190.0
165°	168.2	167.5	168.6	170.3	171.8	173.9	176.7	179.5	181.7	183.8	186.6
167.5°	170.8	170.4	171.1	172.0	173.0	174.4	176.7	178.7	179.7	181.3	183.3
170°	172.5	172.1	172.5	173.2	173.9	174.9	176.7	178.1	178.8	179.9	181.3
172.5°	173.6	173.0	173.3	174.0	174.4	174.9	176.4	177.6	177.7	178.2	179.3
175°	174.9	174.2	174.6	174.9	174.9	174.9	176.0	176.7	176.4	176.4	176.7
177.5°	175.6	175.0	175.0	175.3	175.0	175.0	175.6	175.9	175.3	175.3	175.6
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	10.4	10.5	10.5	10.6	10.5	10.3	10.3	10.1
90°	6.4	6.7	7.1	7.8	7.8	7.8	8.1	8.1
92.5°	62.6	45.4	34.2	29.0	24.5	23.6	23.1	22.5
95°	254.1	200.4	156.9	127.2	102.1	91.5	88.7	83.1
97.5°	378.4	340.8	298.4	257.1	235.3	215.5	205.3	200.7
100°	434.7	417.4	381.0	344.2	319.8	294.4	281.3	275.7
102.5°	453.6	464.3	446.9	422.0	395.9	377.8	363.6	359.4
105°	442.5	490.9	506.4	502.6	491.2	479.6	472.5	468.3
107.5°	402.6	467.2	507.1	525.6	531.3	531.3	528.9	526.1
110°	373.2	440.4	490.2	520.2	536.1	542.8	545.3	545.3





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	350.0	413.8	464.2	499.6	522.8	534.4	540.5	543.1
115°	320.9	375.7	424.1	462.6	490.2	507.1	517.0	521.6
117.5°	302.1	349.3	391.0	426.4	453.9	471.5	481.3	484.1
120°	291.9	334.3	373.2	404.3	430.5	447.4	457.0	459.8
122.5°	284.3	323.6	358.2	387.3	410.7	426.2	435.8	438.3
125°	273.2	309.2	340.0	365.4	385.2	399.7	407.5	411.0
127.5°	261.9	295.5	324.2	348.0	366.0	378.8	386.1	387.7
130°	254.8	285.9	313.5	336.5	354.1	365.8	372.9	375.0
132.5°	247.7	276.9	301.9	324.0	341.7	353.3	359.8	362.2
135°	238.6	262.9	285.6	305.7	321.3	332.9	339.3	341.4
137.5°	230.8	250.5	269.3	286.4	300.3	310.9	316.8	319.1
140°	226.5	243.1	259.4	274.2	287.3	296.5	301.8	303.6
142.5°	222.9	236.9	250.9	263.8	274.9	282.7	287.7	289.2
145°	218.1	229.0	240.0	249.5	258.0	264.0	267.9	269.3
147.5°	213.5	222.4	230.9	238.1	244.8	249.6	251.8	252.5
150°	211.0	218.8	225.5	231.8	237.1	241.4	242.8	243.1
152.5°	208.2	215.1	221.2	226.2	230.6	234.0	235.4	235.8
155°	203.9	209.6	214.5	218.4	221.9	224.4	225.5	225.8
157.5°	199.7	204.3	208.2	211.2	214.0	216.0	217.0	216.9
160°	196.9	200.4	203.9	206.4	208.9	210.6	211.3	211.0
162.5°	193.7	197.0	200.0	202.2	204.1	205.5	205.7	205.6
165°	189.4	191.9	194.0	195.8	197.2	197.9	197.9	197.9
167.5°	185.3	187.0	188.6	189.9	190.6	191.2	190.9	190.8
170°	183.1	184.1	185.2	185.9	186.6	187.0	187.0	186.6
172.5°	180.5	181.6	182.4	182.8	182.9	183.6	183.0	182.6
175°	177.8	177.8	178.5	178.5	178.5	178.8	178.1	177.8
177.5°	175.9	176.1	176.1	176.1	175.9	176.1	175.3	175.3
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3

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