

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: P333537-927

Luminaire Tested: **S125RDIP-S610D810U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333537-927  
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-S610D810U927-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4188.3 lumens  
Efficiency: N/A  
Efficacy: 109.1 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: General Diffuse

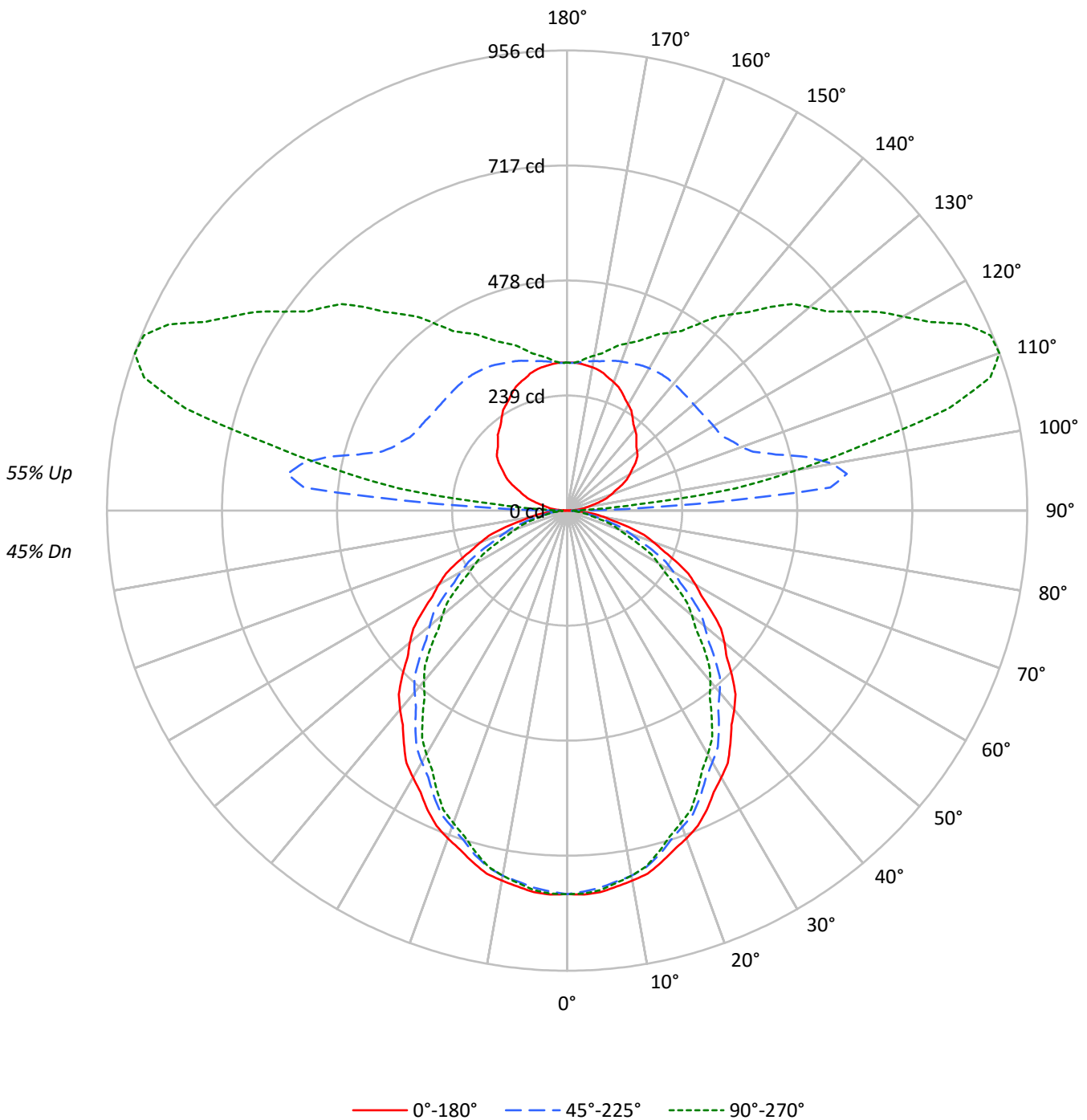
Input Watts (W): 38.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44	38
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	41	39	37	32
3	81	71	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32	28
4	74	63	56	50	67	58	52	46	49	44	40	40	37	34	32	30	28	24
5	68	56	48	43	62	52	45	40	44	39	34	36	32	29	29	26	24	21
6	62	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	21	18
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	24	21	19	16
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	15	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	1.8
10°-20°	209.4	5.0
20°-30°	303.7	7.3
30°-40°	346.1	8.3
40°-50°	337.4	8.1
50°-60°	284.0	6.8
60°-70°	199.1	4.8
70°-80°	102.3	2.4
80°-90°	27.6	0.7
90°-100°	222.7	5.3
100°-110°	478.7	11.4
110°-120°	449.3	10.7
120°-130°	364.1	8.7
130°-140°	292.2	7.0
140°-150°	220.5	5.3
150°-160°	155.2	3.7
160°-170°	91.5	2.2
170°-180°	29.8	0.7
0°-30°	588.0	14.0
0°-40°	934.1	22.3
0°-60°	1555.4	37.1
0°-90°	1884.4	45.0
90°-120°	1150.7	27.5
90°-150°	2027.5	48.4
90°-180°	2304.0	55.0
0°-180°	4188.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	6	10	13	14	3
95°	20	60	549	249	146	22
105°	70	98	449	884	821	74
115°	125	151	360	777	914	123
125°	173	203	346	618	720	154
135°	203	244	343	518	598	158
145°	237	271	344	429	472	148
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.5	10.1	9.6	9.0	8.9	8.9	9.0	9.0	9.2	9.3
90°	0.6	1.3	2.5	3.7	5.0	6.2	6.8	8.1	8.6	9.9	10.5
92.5°	7.5	9.2	14.3	22.0	32.7	50.8	84.6	141.3	202.9	199.7	161.7
95°	20.4	21.1	26.0	32.8	46.4	74.3	140.6	276.9	447.8	548.8	537.0
97.5°	33.9	34.7	38.2	45.0	57.2	77.3	121.1	221.0	399.9	586.1	679.5
100°	43.3	44.6	47.1	53.9	65.7	84.2	120.2	200.7	356.8	559.4	714.2
102.5°	53.8	54.5	56.5	63.8	74.5	92.7	124.6	192.3	324.1	512.2	693.4
105°	70.0	70.0	73.1	79.3	89.2	106.5	133.8	188.9	292.4	449.1	626.9
107.5°	85.9	87.1	90.1	95.1	105.4	121.0	147.4	194.6	279.0	405.6	559.0
110°	97.3	98.5	100.9	106.5	115.8	131.9	157.3	200.1	275.0	385.2	520.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	108.6	109.9	111.9	117.4	126.7	142.4	166.8	207.0	275.0	373.4	491.5
115°	125.1	126.4	128.3	133.8	143.1	158.6	181.5	217.4	276.9	360.5	460.2
117.5°	140.0	141.9	143.9	149.4	159.9	174.9	196.6	229.3	281.0	354.2	441.5
120°	149.9	151.8	154.2	159.8	170.3	185.8	207.5	237.3	284.9	351.2	431.1
122.5°	160.3	161.7	163.7	169.2	180.8	196.2	217.9	246.1	288.4	348.7	422.2
125°	173.4	174.7	177.8	183.3	195.1	211.2	231.6	258.3	294.2	345.6	410.0
127.5°	183.7	185.6	189.6	196.6	209.1	225.2	244.9	269.4	300.8	344.1	398.9
130°	190.1	192.0	196.9	205.0	218.0	234.2	253.3	276.9	304.8	343.2	391.5
132.5°	195.1	197.5	203.4	212.5	225.9	242.1	261.3	283.3	309.2	343.2	385.6
135°	203.2	205.7	213.1	223.0	236.0	252.7	272.0	292.4	315.3	343.2	378.4
137.5°	213.3	215.2	222.1	232.0	244.8	262.0	279.5	299.0	320.8	343.9	372.2
140°	219.3	221.1	228.5	238.4	250.3	267.0	284.9	303.5	323.3	344.4	369.2
142.5°	226.2	227.6	234.5	244.4	255.7	271.4	288.4	306.0	324.8	344.9	366.7
145°	236.6	237.8	244.1	252.7	263.9	278.1	294.2	309.7	326.5	344.4	363.0
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.1
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	9.4	9.6	9.7	9.9	9.8	9.7	9.7	9.6
90°	11.2	11.8	12.4	13.6	13.6	13.6	14.3	14.3
92.5°	109.8	79.7	60.0	50.8	42.9	41.4	40.5	39.5
95°	445.4	351.2	275.0	223.0	179.0	160.4	155.5	145.5
97.5°	663.3	597.2	523.0	450.7	412.4	377.7	359.7	351.8
100°	761.8	731.5	667.7	603.3	560.5	515.9	493.1	483.2
102.5°	795.0	813.8	783.2	739.6	693.9	662.1	637.2	629.8
105°	775.5	860.4	887.6	880.8	860.9	840.5	828.1	820.7
107.5°	705.6	818.9	888.8	921.1	931.2	931.1	927.0	922.0
110°	654.1	771.7	859.1	911.7	939.6	951.4	955.8	955.8





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	613.5	725.2	813.5	875.6	916.3	936.5	947.3	951.8
115°	562.4	658.5	743.3	810.8	859.1	888.8	906.2	914.3
117.5°	529.5	612.2	685.3	747.3	795.6	826.2	843.5	848.4
120°	511.6	586.0	654.1	708.6	754.4	784.2	800.9	805.8
122.5°	498.3	567.1	627.8	678.9	719.8	747.0	763.7	768.2
125°	478.8	542.0	595.9	640.5	675.2	700.5	714.2	720.3
127.5°	459.0	517.9	568.2	610.0	641.4	663.8	676.8	679.5
130°	446.6	501.1	549.4	589.7	620.7	641.1	653.5	657.2
132.5°	434.2	485.2	529.1	567.8	598.8	619.2	630.7	634.9
135°	418.1	460.8	500.5	535.8	563.0	583.4	594.6	598.3
137.5°	404.5	439.0	472.0	501.9	526.4	544.9	555.2	559.4
140°	397.0	426.1	454.6	480.6	503.6	519.7	528.9	532.0
142.5°	390.6	415.3	439.7	462.3	481.8	495.4	504.2	506.8
145°	382.1	401.4	420.6	437.3	452.2	462.7	469.5	472.0
147.5°	374.2	389.8	404.6	417.2	429.0	437.4	441.4	442.5
150°	369.8	383.4	395.1	406.3	415.7	423.0	425.6	426.1
152.5°	364.8	377.0	387.8	396.4	404.3	410.2	412.6	413.3
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

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