

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: P333204-935

Luminaire Tested: **S125DIP-S610D1205U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333204-935
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: S125DIP-S610D1205U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5875.7 lumens
Efficiency: N/A
Efficacy: 118.9 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: Semi-Indirect

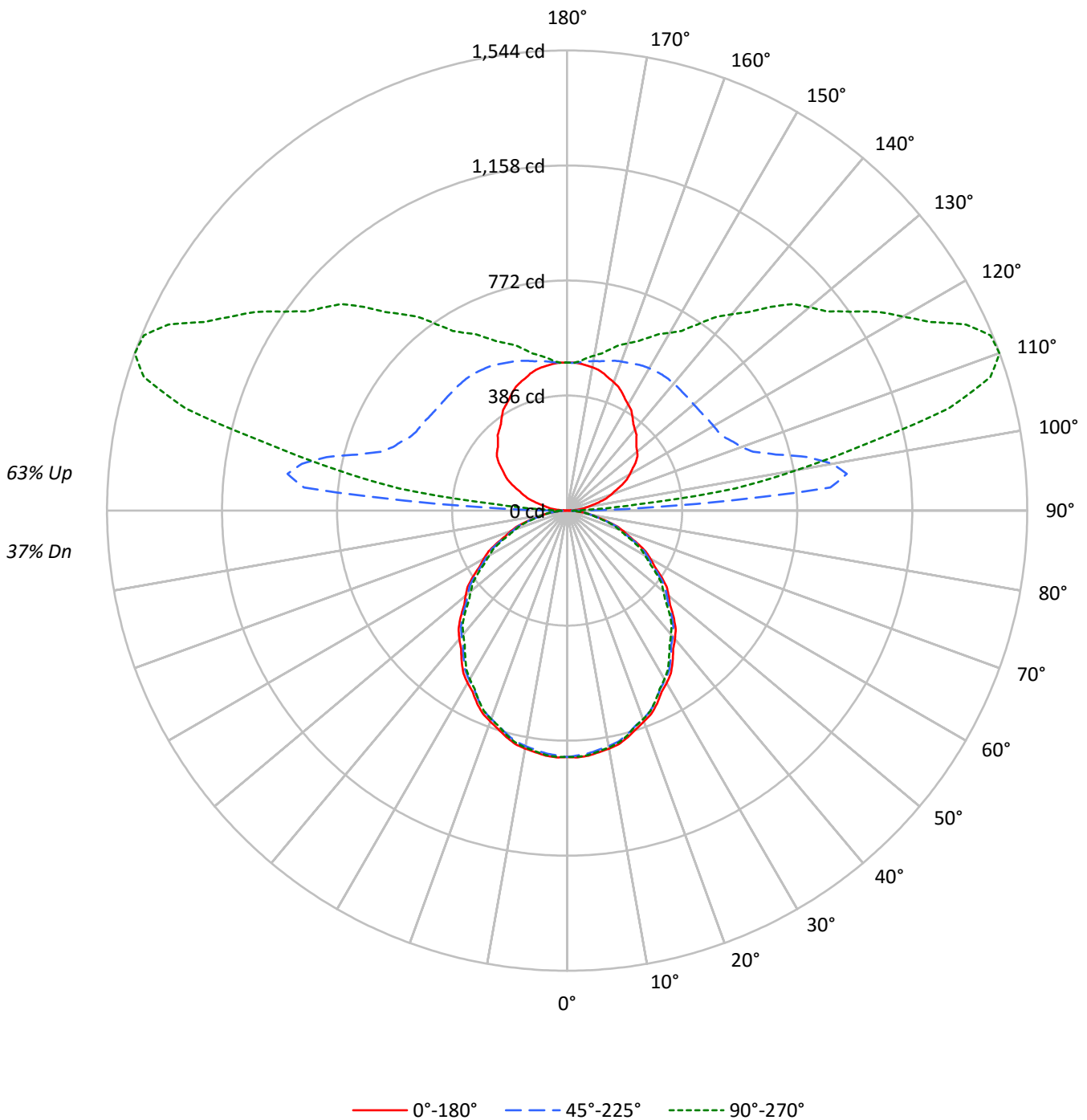
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76		59	59	59		44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62		52	50	49		39	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51		46	43	41		34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43		40	37	35		30	28	26	22
4	72	61	54	48	65	56	49	44	45	41	37		36	32	30		27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	31		32	28	26		24	22	20	16
6	61	49	41	35	55	45	38	33	36	31	27		29	25	22		22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24		26	23	20		20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21		24	20	17		18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19		22	18	16		17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17		20	17	14		16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	1.3
10°-20°	220.2	3.7
20°-30°	325.2	5.5
30°-40°	379.4	6.5
40°-50°	381.1	6.5
50°-60°	334.5	5.7
60°-70°	249.3	4.2
70°-80°	142.5	2.4
80°-90°	44.2	0.8
90°-100°	359.7	6.1
100°-110°	773.2	13.2
110°-120°	725.6	12.3
120°-130°	588.1	10.0
130°-140°	471.9	8.0
140°-150°	356.1	6.1
150°-160°	250.7	4.3
160°-170°	147.8	2.5
170°-180°	48.1	0.8
0°-30°	623.4	10.6
0°-40°	1002.8	17.1
0°-60°	1718.4	29.2
0°-90°	2154.4	36.7
90°-120°	1858.5	31.6
90°-150°	3274.7	55.7
90°-180°	3721.0	63.3
0°-180°	5875.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	1	9	16	21	23	4
95°	33	98	886	402	235	35
105°	113	158	725	1428	1326	119
115°	202	244	582	1255	1477	199
125°	280	328	558	998	1164	248
135°	328	395	554	837	966	255
145°	382	438	556	693	762	239
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.3	14.6	14.9	15.3	15.8	16.1	16.2	16.4	16.5	16.8	17.0
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.6	52.9	82.1	136.6	228.3	327.8	322.5	261.1
95°	33.0	34.0	42.0	53.0	75.0	120.0	227.1	447.2	723.3	886.4	867.4
97.5°	54.8	56.1	61.6	72.7	92.5	124.8	195.7	357.0	645.9	946.6	1097.5
100°	70.0	72.1	76.0	87.0	106.1	136.0	194.1	324.2	576.3	903.4	1153.5
102.5°	86.9	88.1	91.3	103.1	120.5	149.6	201.3	310.6	523.4	827.3	1119.9
105°	113.0	113.0	118.0	128.0	144.0	172.1	216.1	305.1	472.2	725.3	1012.4
107.5°	138.6	140.7	145.4	153.7	170.3	195.4	238.1	314.4	450.6	655.0	902.8
110°	157.0	159.1	163.1	172.1	187.1	213.1	254.1	323.1	444.2	622.2	840.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.5	177.5	180.6	189.7	204.7	229.9	269.3	334.3	444.2	603.0	793.9
115°	202.1	204.1	207.1	216.1	231.1	256.1	293.2	351.1	447.2	582.3	743.3
117.5°	226.1	229.1	232.3	241.3	258.3	282.5	317.5	370.4	453.8	572.0	713.1
120°	242.1	245.1	249.1	258.1	275.1	300.1	335.2	383.1	460.2	567.2	696.3
122.5°	258.9	261.1	264.3	273.3	292.0	316.9	352.0	397.6	465.8	563.3	681.9
125°	280.1	282.1	287.1	296.1	315.1	341.1	374.2	417.2	475.2	558.3	662.3
127.5°	296.7	299.7	306.2	317.5	337.8	363.8	395.5	435.2	485.8	555.9	644.3
130°	307.1	310.1	318.1	331.1	352.1	378.2	409.1	447.2	492.2	554.2	632.3
132.5°	315.1	318.9	328.6	343.2	365.0	391.0	422.0	457.6	499.4	554.2	622.7
135°	328.1	332.2	344.1	360.2	381.2	408.2	439.2	472.2	509.2	554.2	611.3
137.5°	344.6	347.6	358.8	374.8	395.4	423.2	451.4	483.0	518.2	555.4	601.1
140°	354.1	357.1	369.2	385.2	404.2	431.2	460.2	490.3	522.2	556.2	596.2
142.5°	365.3	367.6	378.8	394.8	413.0	438.4	465.8	494.2	524.6	557.1	592.3
145°	382.2	384.2	394.2	408.2	426.2	449.2	475.2	500.2	527.3	556.2	586.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.1
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	17.2	17.4	17.7	17.9	17.7	17.4	17.4	17.1
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	177.3	128.6	96.9	82.1	69.2	66.8	65.4	63.8
95°	719.3	567.2	444.2	360.2	289.1	259.1	251.2	235.1
97.5°	1071.3	964.7	844.8	727.9	666.1	610.1	581.1	568.3
100°	1230.5	1181.6	1078.5	974.4	905.4	833.4	796.3	780.3
102.5°	1284.2	1314.4	1265.0	1194.6	1120.7	1069.4	1029.2	1017.3
105°	1252.6	1389.7	1433.7	1422.6	1390.6	1357.6	1337.6	1325.6
107.5°	1139.7	1322.6	1435.6	1487.9	1504.1	1503.9	1497.3	1489.3
110°	1056.4	1246.6	1387.6	1472.7	1517.7	1536.7	1543.7	1543.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	990.8	1171.3	1314.0	1414.2	1480.1	1512.7	1530.1	1537.3
115°	908.4	1063.5	1200.5	1309.6	1387.6	1435.6	1463.6	1476.6
117.5°	855.1	988.9	1106.9	1206.9	1285.0	1334.6	1362.4	1370.4
120°	826.4	946.4	1056.4	1144.5	1218.6	1266.5	1293.6	1301.6
122.5°	804.8	916.0	1014.1	1096.5	1162.5	1206.5	1233.6	1240.8
125°	773.4	875.4	962.4	1034.5	1090.5	1131.5	1153.5	1163.6
127.5°	741.3	836.5	917.8	985.2	1036.0	1072.3	1093.1	1097.5
130°	721.3	809.3	887.4	952.4	1002.5	1035.4	1055.5	1061.4
132.5°	701.3	783.8	854.5	917.2	967.2	1000.2	1018.6	1025.5
135°	675.3	744.3	808.4	865.4	909.4	942.5	960.4	966.5
137.5°	653.3	709.1	762.3	810.8	850.2	880.2	896.8	903.4
140°	641.3	688.3	734.3	776.4	813.4	839.4	854.4	859.4
142.5°	630.9	670.7	710.3	746.7	778.2	800.1	814.3	818.6
145°	617.3	648.2	679.3	706.3	730.3	747.3	758.4	762.3
147.5°	604.5	629.6	653.5	673.9	692.9	706.5	712.9	714.7
150°	597.3	619.3	638.3	656.3	671.3	683.3	687.3	688.3
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.5	667.5
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

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