

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: P333192-940

Luminaire Tested: **S125DIP-S610D1035U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333192-940
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-S610D1035U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5453.9 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

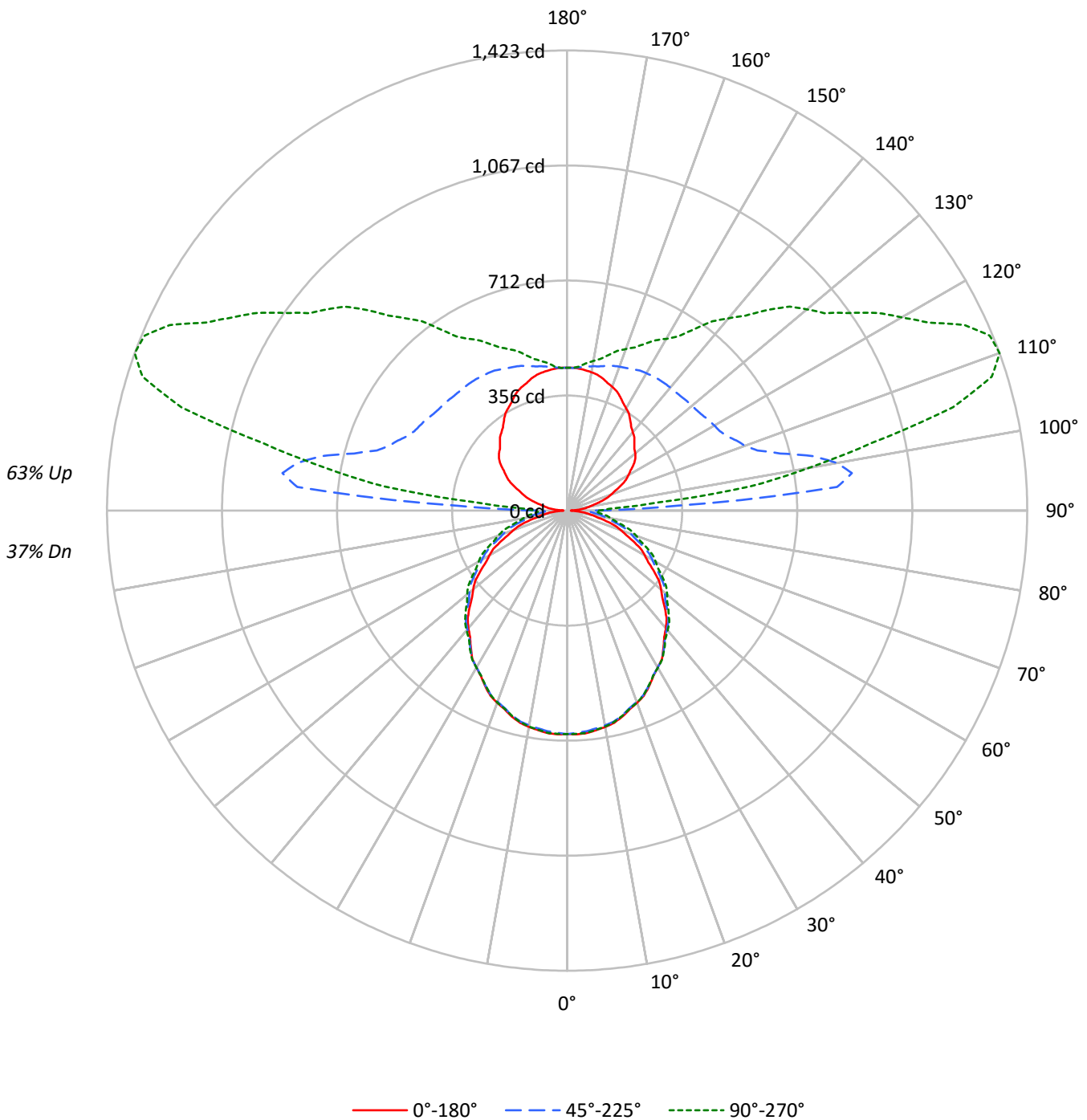
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30
2	86	78	72	67	77	71	66	61	57	53	50	45	42	40	33	31	30	25
3	78	68	61	55	70	62	56	51	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	43	45	39	35	35	31	28	26	24	22	18
5	65	54	46	40	59	49	42	36	40	34	30	31	27	24	23	21	19	15
6	60	48	40	34	54	44	37	31	36	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	26	22	19	19	17	14	12
8	51	39	31	26	46	36	29	24	29	24	20	23	19	17	18	15	13	10
9	48	36	28	23	43	33	26	21	27	22	18	21	18	15	16	14	12	9
10	44	33	25	21	40	30	23	19	25	20	16	20	16	13	15	12	11	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.2
10°-20°	185.5	3.4
20°-30°	275.9	5.1
30°-40°	326.8	6.0
40°-50°	337.9	6.2
50°-60°	311.2	5.7
60°-70°	251.6	4.6
70°-80°	168.5	3.1
80°-90°	89.8	1.6
90°-100°	369.1	6.8
100°-110°	724.1	13.3
110°-120°	669.9	12.3
120°-130°	537.0	9.8
130°-140°	425.9	7.8
140°-150°	318.1	5.8
150°-160°	223.1	4.1
160°-170°	131.5	2.4
170°-180°	42.8	0.8
0°-30°	526.7	9.7
0°-40°	853.5	15.6
0°-60°	1502.6	27.6
0°-90°	2012.5	36.9
90°-120°	1763.1	32.3
90°-150°	3044.1	55.8
90°-180°	3441.0	63.1
0°-180°	5453.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	12	41	70	89	96	9
95°	38	114	838	422	278	38
105°	107	158	683	1321	1235	113
115°	184	226	544	1155	1357	181
125°	252	295	512	914	1065	223
135°	293	352	499	759	878	228
145°	341	389	495	620	684	213
155°	388	418	482	545	569	179
165°	424	435	463	491	498	119
175°	441	441	444	450	448	42
180°	442	442	442	442	442	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.3	26.3	31.5	36.6	41.8	47.2	52.4	58.0	63.2	68.7	72.3
90°	11.8	17.5	24.1	30.7	37.3	44.0	50.0	56.9	62.9	69.8	74.2
92.5°	20.6	27.4	39.3	54.8	74.5	105.4	159.3	246.0	339.7	340.4	289.1
95°	38.2	43.0	54.0	67.8	91.2	135.8	236.2	437.1	688.0	838.1	824.6
97.5°	56.8	61.3	69.9	83.2	104.3	137.4	205.4	353.8	615.8	888.3	1025.7
100°	69.7	74.7	81.4	94.3	114.5	145.2	201.6	322.2	551.3	847.2	1072.9
102.5°	84.2	88.2	93.9	107.4	125.7	155.6	206.2	308.1	502.2	777.4	1040.7
105°	106.6	109.1	115.9	127.2	143.9	172.3	216.0	299.7	452.9	682.6	941.1
107.5°	128.7	132.5	138.8	148.1	165.0	190.6	232.8	305.1	430.6	616.9	840.3
110°	144.5	148.1	153.5	163.3	178.4	204.6	245.3	310.9	422.8	585.5	782.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	160.9	164.1	168.4	177.9	192.6	217.8	257.0	319.0	420.8	566.2	738.9
115°	183.9	186.7	190.5	199.5	213.9	238.6	275.5	331.0	420.4	544.5	690.5
117.5°	204.6	207.9	211.5	220.2	236.0	259.8	294.6	345.3	423.2	532.2	660.2
120°	218.8	221.9	226.0	234.4	250.0	274.2	308.8	355.0	427.0	525.8	643.1
122.5°	233.2	235.4	238.4	246.6	263.4	287.5	322.0	365.9	430.0	520.0	628.0
125°	252.0	253.6	257.9	265.7	282.5	307.1	339.5	380.8	435.4	512.3	607.3
127.5°	266.1	268.6	274.1	284.1	301.9	326.3	357.0	394.8	442.3	507.0	588.0
130°	275.3	277.9	284.8	296.2	314.8	338.9	368.6	404.6	446.7	504.0	575.5
132.5°	281.9	285.3	293.7	306.7	326.1	350.1	379.2	412.6	451.4	501.9	564.8
135°	293.4	296.8	307.3	321.4	339.9	364.4	393.1	423.5	457.4	498.6	551.3
137.5°	307.8	310.3	320.2	334.3	352.5	377.5	403.1	431.8	463.6	497.2	539.6
140°	315.8	318.4	329.1	343.4	360.3	384.4	410.4	437.2	465.8	496.3	533.5
142.5°	325.7	327.6	337.4	351.6	367.7	390.2	414.6	440.0	467.1	495.9	528.7
145°	340.7	342.3	351.1	363.4	379.2	399.7	422.8	445.1	469.1	494.9	522.4
147.5°	355.7	356.8	364.4	376.0	389.9	407.9	428.2	448.3	470.0	492.6	516.4
150°	365.0	366.8	373.0	384.6	397.0	412.1	431.8	450.4	470.0	490.4	511.8
152.5°	375.0	376.0	381.6	391.6	403.4	417.1	435.3	451.8	469.3	487.7	506.8
155°	388.1	388.1	393.4	402.3	411.3	423.7	438.8	453.1	467.3	482.5	498.5
157.5°	399.8	399.7	403.9	411.6	419.5	428.9	441.8	454.0	465.0	477.2	490.6
160°	407.7	406.8	410.4	416.6	423.7	431.8	443.3	454.0	462.9	473.6	484.3
162.5°	414.1	413.2	416.8	422.3	428.0	434.6	444.7	453.3	460.7	469.3	478.6
165°	423.7	422.0	424.6	429.1	432.7	438.0	445.1	452.2	457.5	462.9	470.0
167.5°	430.2	429.3	430.9	433.4	435.9	439.2	445.1	450.0	452.5	456.6	461.6
170°	434.4	433.5	434.4	436.2	438.0	440.6	445.1	448.6	450.4	453.1	456.6
172.5°	437.3	435.7	436.6	438.3	439.3	440.6	444.3	447.2	447.5	448.8	451.7
175°	440.6	438.8	439.7	440.6	440.6	440.6	443.3	445.1	444.2	444.2	445.1
177.5°	442.2	440.8	440.8	441.5	440.8	440.8	442.2	442.9	441.5	441.5	442.2
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	76.0	79.6	83.3	85.9	86.9	88.0	89.3	90.2
90°	78.5	82.8	87.2	91.2	92.3	93.4	95.3	96.4
92.5°	217.8	177.9	152.9	142.0	131.6	130.5	130.4	129.9
95°	696.2	564.1	458.0	385.3	323.2	297.6	291.5	278.3
97.5°	1005.6	913.8	810.4	708.5	654.5	605.6	580.9	570.5
100°	1144.6	1104.1	1015.6	925.1	864.5	801.4	769.4	756.0
102.5°	1189.9	1219.9	1178.9	1118.2	1053.4	1008.7	973.8	964.0
105°	1157.8	1282.7	1324.9	1317.1	1289.8	1261.4	1244.6	1235.0
107.5°	1054.1	1219.8	1323.3	1371.7	1387.1	1387.9	1383.0	1376.7
110°	977.6	1149.6	1277.9	1355.6	1396.7	1414.6	1421.9	1423.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	916.8	1080.1	1209.8	1300.9	1360.5	1390.6	1407.1	1414.6
115°	840.1	980.8	1105.5	1204.3	1274.6	1318.3	1344.1	1356.6
117.5°	789.2	910.7	1018.3	1109.1	1179.6	1224.8	1250.5	1258.6
120°	761.4	870.8	971.3	1051.3	1118.1	1161.7	1186.7	1194.7
122.5°	739.8	841.2	930.9	1005.8	1065.5	1105.6	1130.5	1137.8
125°	708.5	801.7	881.5	947.3	997.8	1035.1	1055.4	1065.1
127.5°	676.5	763.5	838.0	899.6	945.7	978.7	998.2	1002.9
130°	656.8	737.4	808.9	868.2	913.4	943.5	962.1	968.2
132.5°	636.9	712.4	777.5	834.6	879.8	909.7	926.8	933.4
135°	610.2	673.6	732.5	784.6	824.6	854.6	871.5	877.5
137.5°	587.8	639.3	688.4	732.6	768.4	795.7	811.0	817.5
140°	575.2	618.8	661.4	699.9	733.4	757.2	771.2	776.1
142.5°	564.5	601.3	637.9	671.4	699.9	720.1	733.3	737.7
145°	550.7	579.1	607.4	632.1	654.2	669.9	680.3	684.4
147.5°	538.3	561.0	582.5	600.8	618.0	630.4	636.3	638.2
150°	531.5	551.0	567.9	584.1	597.5	608.3	612.1	613.1
152.5°	524.3	541.7	557.2	569.7	580.9	589.5	593.2	594.1
155°	513.6	527.9	540.4	550.1	559.0	565.3	567.9	568.8
157.5°	502.9	514.7	524.3	532.0	539.0	544.0	546.5	546.4
160°	495.8	504.7	513.6	519.9	526.1	530.6	532.4	531.5
162.5°	488.0	496.1	503.6	509.2	514.0	517.7	518.1	517.9
165°	477.2	483.4	488.7	493.1	496.7	498.5	498.5	498.5
167.5°	466.8	470.9	475.0	478.2	480.0	481.6	480.9	480.7
170°	461.1	463.8	466.5	468.2	470.0	470.9	470.9	470.0
172.5°	454.7	457.4	459.3	460.4	460.7	462.4	460.9	460.0
175°	447.7	447.7	449.5	449.5	449.5	450.4	448.6	447.7
177.5°	442.9	443.6	443.6	443.6	442.9	443.6	441.5	441.5
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5

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