

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: P333237-927

Luminaire Tested: **S125DIP-S850D1035U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237-927
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: S125DIP-S850D1035U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 5542.9 lumens
Efficiency: N/A
Efficacy: 106.6 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: General Diffuse

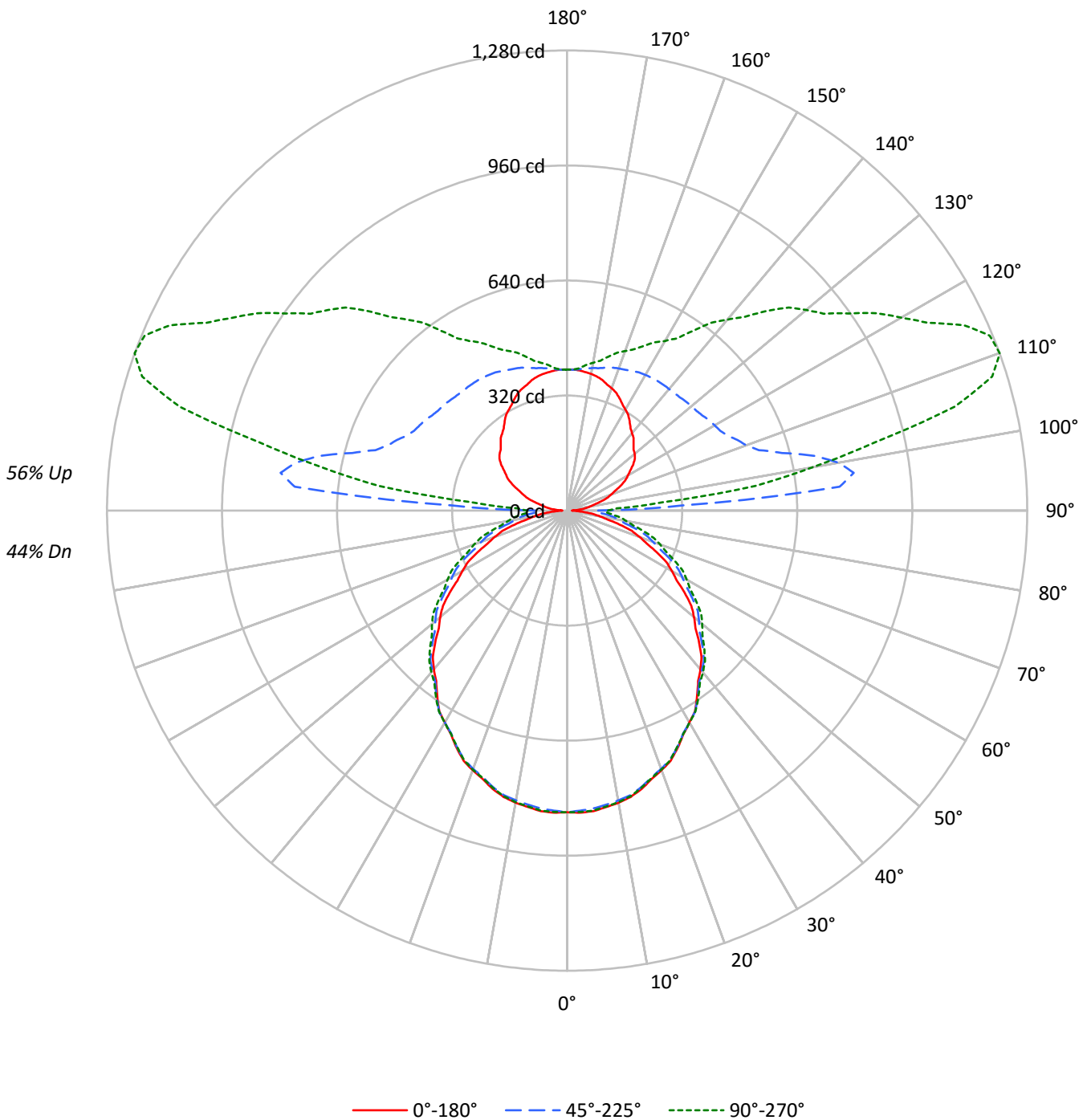
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.4
10°-20°	225.3	4.1
20°-30°	335.0	6.0
30°-40°	396.8	7.2
40°-50°	410.3	7.4
50°-60°	377.9	6.8
60°-70°	305.5	5.5
70°-80°	204.6	3.7
80°-90°	108.3	2.0
90°-100°	343.8	6.2
100°-110°	655.1	11.8
110°-120°	603.0	10.9
120°-130°	481.6	8.7
130°-140°	380.3	6.9
140°-150°	283.0	5.1
150°-160°	198.2	3.6
160°-170°	116.8	2.1
170°-180°	38.0	0.7
0°-30°	639.6	11.5
0°-40°	1036.4	18.7
0°-60°	1824.7	32.9
0°-90°	2443.1	44.1
90°-120°	1601.9	28.9
90°-150°	2746.9	49.6
90°-180°	3100.0	55.9
0°-180°	5542.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	47	80	102	110	10
95°	37	110	761	395	270	36
105°	97	146	619	1190	1115	102
115°	165	204	492	1038	1219	162
125°	225	263	460	821	956	199
135°	261	313	445	678	785	203
145°	303	346	440	552	610	190
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.8	38.0	44.2	50.3	56.7	63.1	69.6	76.0	82.5	86.9
90°	13.9	20.6	28.0	35.5	42.9	50.5	57.5	65.3	72.3	80.1	85.1
92.5°	21.5	29.0	41.0	56.2	75.3	104.3	153.8	232.6	317.5	319.8	275.3
95°	36.8	42.3	53.4	66.9	89.0	130.1	220.9	401.1	625.6	760.7	749.7
97.5°	53.1	58.3	66.9	79.9	99.9	130.6	192.7	326.1	560.5	804.2	927.3
100°	64.4	69.8	76.8	89.4	108.2	136.8	188.5	297.1	502.3	766.8	968.3
102.5°	77.0	81.5	87.6	100.4	117.8	145.5	192.0	284.1	458.0	704.0	939.0
105°	96.8	99.7	106.5	117.4	133.0	159.3	199.6	275.4	413.0	618.6	849.2
107.5°	116.1	120.1	126.4	135.4	151.0	174.8	213.7	279.2	392.2	559.1	758.5
110°	129.9	133.7	139.0	148.4	162.4	186.6	224.2	283.8	384.7	530.5	706.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	144.5	147.8	152.1	161.0	174.6	197.9	234.0	290.4	382.1	512.7	666.9
115°	164.7	167.5	171.2	179.6	192.7	215.6	249.5	300.2	380.8	492.3	623.0
117.5°	182.8	186.1	189.4	197.4	211.7	233.5	265.6	311.9	382.4	480.3	594.9
120°	195.5	198.4	202.1	209.8	223.8	245.9	277.8	320.0	385.1	473.9	579.0
122.5°	208.1	210.1	212.9	220.3	235.3	257.1	288.9	329.0	387.0	468.1	564.8
125°	224.7	226.1	229.9	236.9	251.7	273.9	303.7	341.4	390.9	460.2	545.3
127.5°	237.0	239.2	244.1	252.9	268.7	290.7	318.9	353.2	396.2	454.6	527.1
130°	245.3	247.4	253.6	263.7	280.1	301.8	328.9	361.6	399.7	451.3	515.6
132.5°	250.9	253.9	261.4	273.0	290.2	311.6	338.2	368.3	403.3	448.6	505.3
135°	261.0	264.0	273.3	285.8	302.2	324.1	349.9	377.3	407.8	444.7	492.2
137.5°	273.9	276.1	284.8	297.3	313.4	335.6	358.5	384.2	412.6	442.7	480.9
140°	280.7	283.1	292.6	305.3	320.3	341.7	364.9	388.8	414.2	441.3	475.0
142.5°	289.6	291.2	299.9	312.4	326.7	346.7	368.4	390.9	415.0	440.7	470.2
145°	302.9	304.3	312.0	322.9	337.0	355.1	375.7	395.4	416.8	439.7	464.3
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.8
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	91.3	95.6	100.0	103.0	104.3	105.6	107.0	108.3
90°	90.1	95.1	100.1	104.4	105.7	106.9	109.1	110.4
92.5°	213.1	178.7	157.6	148.6	139.7	139.1	139.3	139.3
95°	636.7	520.5	427.3	363.5	308.6	286.2	281.1	269.7
97.5°	910.5	830.0	739.1	649.3	601.6	558.6	536.9	528.0
100°	1033.0	998.1	920.5	840.7	787.3	731.4	703.2	691.7
102.5°	1072.5	1100.1	1064.7	1011.5	954.2	914.7	884.1	875.7
105°	1042.7	1154.7	1193.1	1186.8	1162.8	1138.0	1123.5	1115.3
107.5°	949.4	1097.6	1190.6	1234.2	1248.2	1249.2	1245.1	1239.9
110°	880.7	1034.4	1149.5	1219.0	1255.8	1272.2	1279.0	1280.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	825.9	971.9	1088.0	1169.6	1222.9	1249.9	1265.0	1271.9
115°	756.7	882.6	994.2	1082.6	1145.4	1184.5	1207.7	1219.1
117.5°	710.3	819.1	915.5	996.8	1059.7	1100.2	1123.4	1131.0
120°	684.9	782.9	873.1	944.8	1004.3	1043.4	1065.9	1073.2
122.5°	665.0	755.8	836.3	903.5	956.8	992.7	1015.1	1021.9
125°	636.0	719.7	791.4	850.2	895.5	928.8	947.1	955.9
127.5°	606.6	684.5	751.5	806.6	847.9	877.6	895.1	899.6
130°	588.4	660.6	724.8	778.0	818.5	845.5	862.2	867.8
132.5°	570.0	637.7	696.2	747.4	787.7	814.6	830.0	836.1
135°	545.1	602.1	655.1	701.8	737.5	764.5	779.7	785.3
137.5°	524.3	570.6	614.8	654.6	686.4	710.9	724.8	730.7
140°	512.5	551.8	590.2	624.7	654.7	676.0	688.6	693.3
142.5°	502.5	535.7	568.7	598.7	624.2	642.4	654.3	658.4
145°	489.7	515.2	540.6	562.8	582.5	596.7	606.1	610.0
147.5°	478.4	498.6	517.7	534.2	549.5	560.6	566.0	567.8
150°	472.1	489.5	504.5	518.9	530.9	540.6	543.9	544.9
152.5°	465.8	481.3	495.0	506.1	516.1	523.8	527.0	527.8
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

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