

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: P333192-927

Luminaire Tested: **S125DIP-S610D1035U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333192-927
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-S610D1035U927-4F0-1E-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: 4845.2 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

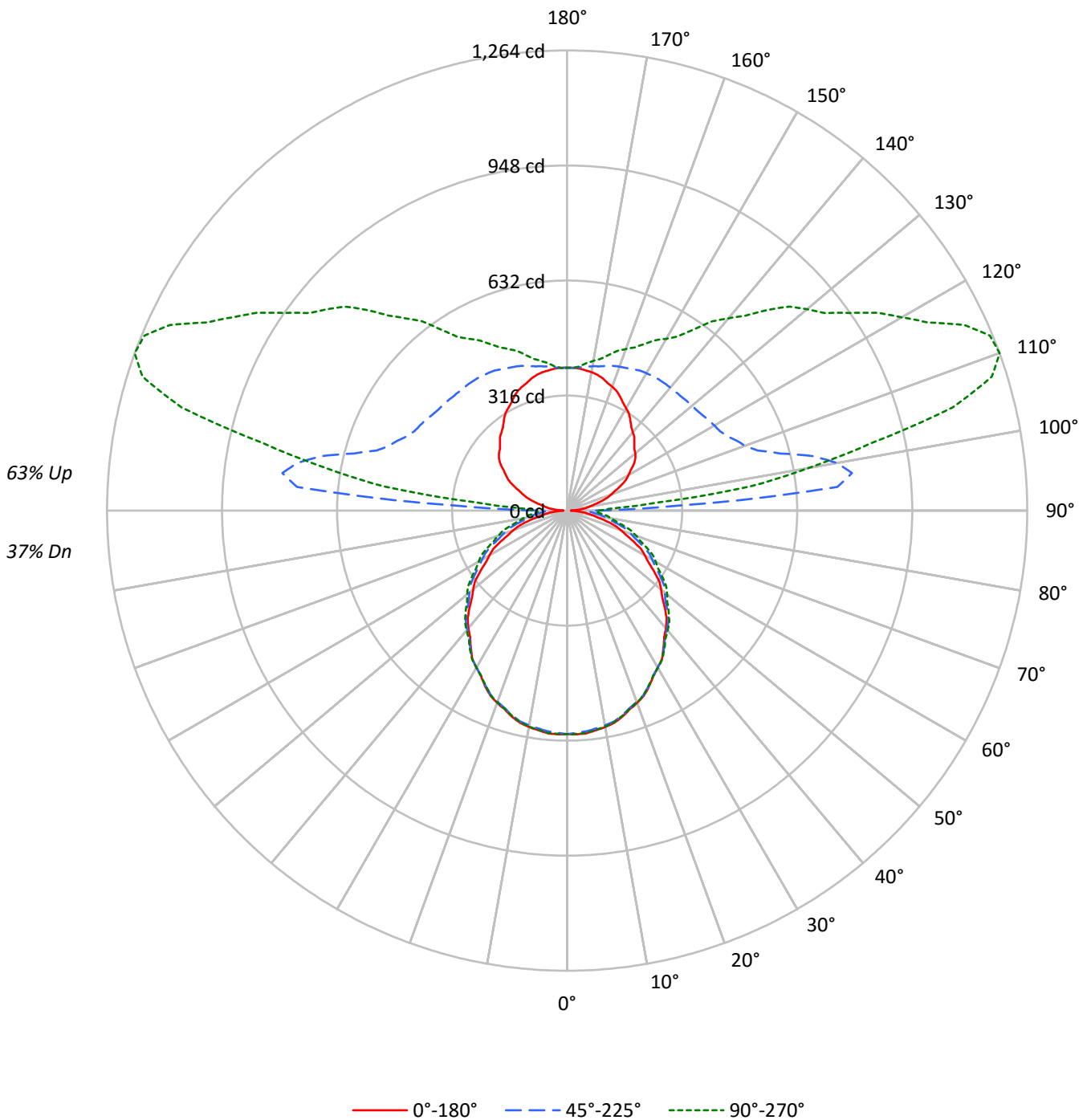
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.2
10°-20°	164.8	3.4
20°-30°	245.1	5.1
30°-40°	290.3	6.0
40°-50°	300.2	6.2
50°-60°	276.5	5.7
60°-70°	223.5	4.6
70°-80°	149.7	3.1
80°-90°	79.8	1.6
90°-100°	327.9	6.8
100°-110°	643.3	13.3
110°-120°	595.1	12.3
120°-130°	477.1	9.8
130°-140°	378.4	7.8
140°-150°	282.6	5.8
150°-160°	198.2	4.1
160°-170°	116.8	2.4
170°-180°	38.0	0.8
0°-30°	467.9	9.7
0°-40°	758.2	15.6
0°-60°	1334.9	27.6
0°-90°	1787.9	36.9
90°-120°	1566.3	32.3
90°-150°	2704.4	55.8
90°-180°	3057.0	63.1
0°-180°	4845.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	36	62	79	86	8
95°	34	101	745	375	247	34
105°	95	140	606	1174	1097	100
115°	163	201	484	1026	1205	161
125°	224	262	455	812	946	198
135°	261	313	443	674	780	202
145°	303	346	440	551	608	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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.4	28.0	32.6	37.2	41.9	46.6	51.5	56.2	61.0	64.2
90°	10.5	15.5	21.4	27.3	33.1	39.1	44.4	50.5	55.8	62.0	65.9
92.5°	18.3	24.3	34.9	48.7	66.2	93.6	141.5	218.6	301.8	302.4	256.8
95°	33.9	38.2	48.0	60.2	81.0	120.6	209.8	388.3	611.2	744.6	732.5
97.5°	50.5	54.5	62.1	73.9	92.7	122.1	182.4	314.3	547.1	789.2	911.2
100°	61.9	66.4	72.3	83.8	101.7	129.0	179.1	286.2	489.7	752.7	953.2
102.5°	74.8	78.3	83.4	95.4	111.7	138.2	183.2	273.7	446.2	690.6	924.6
105°	94.7	96.9	103.0	113.0	127.9	153.0	191.9	266.3	402.3	606.4	836.1
107.5°	114.3	117.7	123.3	131.6	146.6	169.4	206.8	271.0	382.5	548.0	746.5
110°	128.3	131.6	136.3	145.0	158.5	181.7	217.9	276.2	375.7	520.1	695.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.9	145.8	149.6	158.0	171.1	193.5	228.3	283.4	373.8	503.0	656.4
115°	163.3	165.9	169.2	177.2	190.0	212.0	244.8	294.1	373.5	483.7	613.5
117.5°	181.7	184.7	187.9	195.6	209.7	230.8	261.7	306.7	376.0	472.8	586.5
120°	194.4	197.2	200.7	208.3	222.1	243.6	274.3	315.4	379.4	467.1	571.3
122.5°	207.2	209.1	211.8	219.1	234.0	255.4	286.1	325.0	382.0	462.0	557.9
125°	223.9	225.3	229.1	236.1	251.0	272.8	301.6	338.3	386.8	455.1	539.5
127.5°	236.4	238.6	243.5	252.4	268.2	289.9	317.2	350.7	392.9	450.4	522.4
130°	244.5	246.8	253.0	263.2	279.6	301.0	327.5	359.4	396.8	447.7	511.3
132.5°	250.4	253.4	260.9	272.5	289.7	311.0	336.9	366.5	401.0	445.8	501.8
135°	260.6	263.6	273.0	285.5	302.0	323.7	349.2	376.2	406.4	442.9	489.7
137.5°	273.5	275.7	284.5	297.0	313.1	335.3	358.1	383.6	411.9	441.7	479.3
140°	280.5	282.9	292.4	305.1	320.1	341.5	364.6	388.4	413.8	440.9	474.0
142.5°	289.4	291.0	299.8	312.4	326.6	346.7	368.4	390.9	414.9	440.5	469.7
145°	302.7	304.1	311.9	322.8	336.9	355.1	375.7	395.4	416.8	439.7	464.1
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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	67.5	70.7	74.0	76.3	77.2	78.2	79.3	80.2
90°	69.7	73.6	77.5	81.0	82.0	82.9	84.7	85.6
92.5°	193.5	158.0	135.9	126.1	116.9	116.0	115.8	115.4
95°	618.5	501.1	406.9	342.3	287.2	264.4	259.0	247.2
97.5°	893.3	811.8	719.9	629.4	581.5	538.1	516.0	506.8
100°	1016.8	980.9	902.2	821.8	768.0	711.9	683.5	671.6
102.5°	1057.1	1083.7	1047.3	993.4	935.8	896.1	865.1	856.4
105°	1028.6	1139.6	1177.0	1170.1	1145.8	1120.6	1105.7	1097.2
107.5°	936.4	1083.6	1175.6	1218.6	1232.3	1233.0	1228.6	1223.1
110°	868.5	1021.3	1135.3	1204.3	1240.8	1256.7	1263.2	1264.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	814.4	959.6	1074.8	1155.7	1208.6	1235.4	1250.1	1256.7
115°	746.3	871.3	982.1	1069.9	1132.3	1171.2	1194.1	1205.1
117.5°	701.1	809.1	904.7	985.3	1047.9	1088.1	1111.0	1118.2
120°	676.4	773.6	862.8	934.0	993.3	1032.1	1054.2	1061.4
122.5°	657.2	747.3	827.0	893.6	946.6	982.2	1004.3	1010.8
125°	629.4	712.3	783.2	841.5	886.5	919.6	937.6	946.2
127.5°	601.0	678.3	744.5	799.2	840.1	869.5	886.8	891.0
130°	583.5	655.1	718.6	771.3	811.4	838.2	854.7	860.2
132.5°	565.8	632.9	690.7	741.4	781.6	808.2	823.3	829.3
135°	542.1	598.4	650.8	697.0	732.5	759.2	774.2	779.6
137.5°	522.2	567.9	611.6	650.9	682.6	706.9	720.5	726.3
140°	511.0	549.7	587.6	621.8	651.6	672.6	685.1	689.5
142.5°	501.5	534.2	566.7	596.4	621.8	639.8	651.5	655.4
145°	489.3	514.4	539.6	561.6	581.1	595.1	604.4	608.0
147.5°	478.2	498.4	517.5	533.8	549.1	560.1	565.3	567.0
150°	472.1	489.5	504.5	518.9	530.8	540.4	543.8	544.7
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	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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