

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: P333183-840

Luminaire Tested: **S125DIP-S610D810U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333183-840
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-S610D810U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5363.3 lumens
Efficiency: N/A
Efficacy: 139.7 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

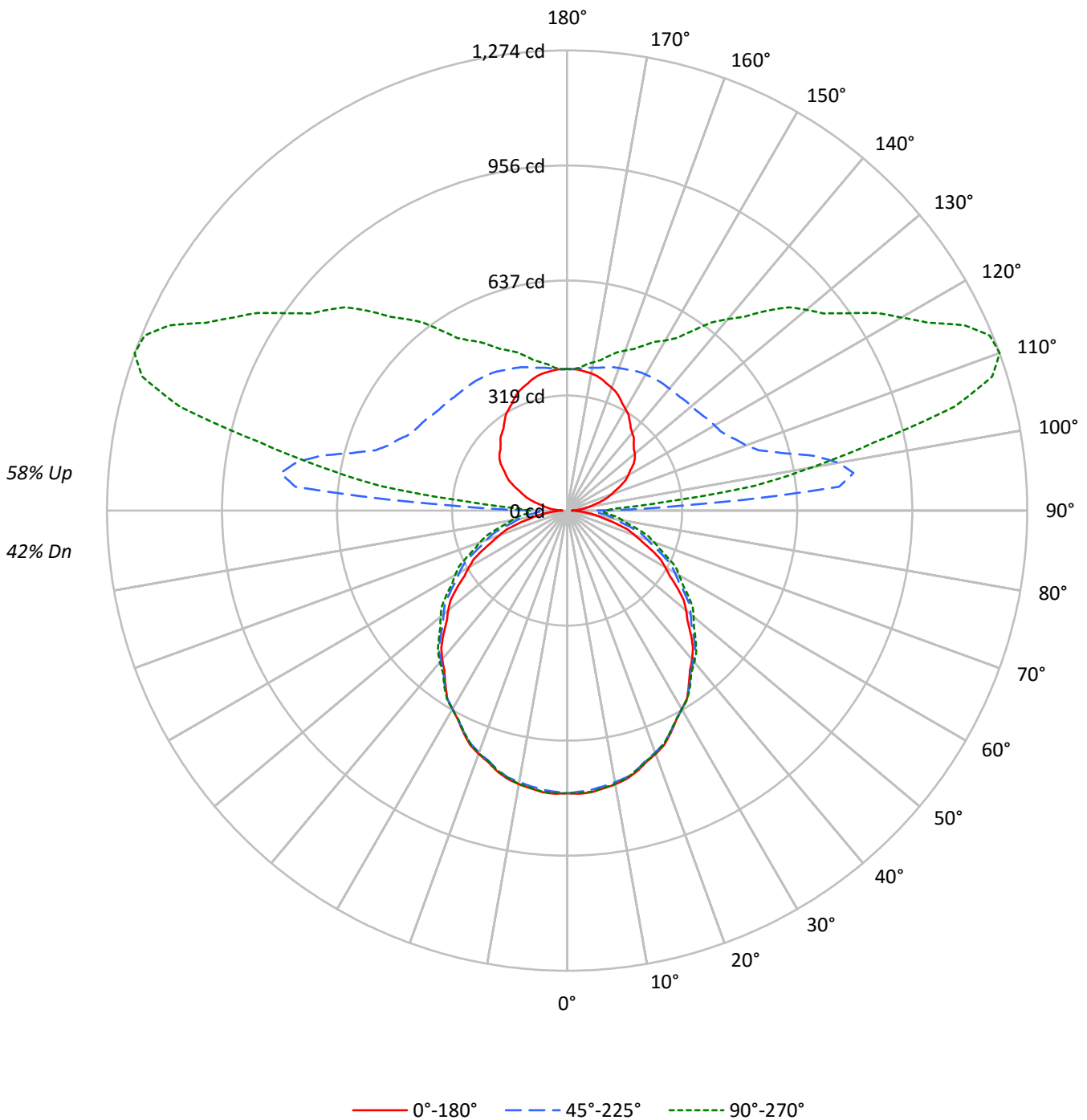
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	95	91	87	83	87	83	80	76	68	66	64	55	53	52	42	41	40	34
2	87	79	73	67	79	72	67	62	60	56	52	48	45	43	37	35	33	28
3	79	69	62	56	72	63	57	52	52	47	44	42	39	36	33	30	28	24
4	72	61	53	47	65	56	49	44	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	43	37	41	36	32	33	29	26	26	23	21	17
6	61	49	40	35	55	45	37	32	37	32	27	30	26	23	24	21	18	15
7	56	44	36	30	51	40	33	28	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	21	25	21	18	20	17	14	12
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.4
10°-20°	210.1	3.9
20°-30°	312.4	5.8
30°-40°	370.1	6.9
40°-50°	382.6	7.1
50°-60°	352.5	6.6
60°-70°	284.9	5.3
70°-80°	190.8	3.6
80°-90°	101.1	1.9
90°-100°	339.4	6.3
100°-110°	651.2	12.1
110°-120°	600.2	11.2
120°-130°	479.7	8.9
130°-140°	379.3	7.1
140°-150°	282.5	5.3
150°-160°	197.9	3.7
160°-170°	116.6	2.2
170°-180°	37.9	0.7
0°-30°	596.5	11.1
0°-40°	966.6	18.0
0°-60°	1701.7	31.7
0°-90°	2278.6	42.5
90°-120°	1590.8	29.7
90°-150°	2732.3	50.9
90°-180°	3085.0	57.5
0°-180°	5363.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	44	76	96	104	10
95°	36	107	756	390	264	36
105°	96	144	615	1184	1109	101
115°	164	203	490	1034	1214	161
125°	224	262	458	818	952	199
135°	260	313	444	676	783	202
145°	302	346	439	551	608	189
155°	344	370	428	484	504	158
165°	376	386	411	436	442	106
175°	391	391	394	399	397	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°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.1	29.7	35.4	41.3	47.1	53.0	58.9	65.0	71.0	77.2	81.2
90°	13.0	19.3	26.4	33.4	40.4	47.7	54.2	61.6	68.2	75.5	80.3
92.5°	20.7	27.8	39.5	54.3	72.9	101.5	150.6	228.7	313.2	315.1	270.3
95°	36.1	41.3	52.0	65.1	86.9	127.5	217.8	397.4	621.1	755.6	744.4
97.5°	52.3	57.3	65.6	78.4	98.0	128.4	189.9	322.8	556.3	799.3	921.9
100°	63.7	68.9	75.6	87.9	106.4	134.7	185.9	294.1	498.5	762.1	963.1
102.5°	76.3	80.6	86.4	99.1	116.1	143.5	189.6	281.1	454.4	699.6	934.0
105°	96.1	98.9	105.5	116.1	131.5	157.5	197.4	272.8	409.8	614.7	844.7
107.5°	115.4	119.4	125.4	134.2	149.7	173.2	211.7	276.8	389.2	555.5	754.5
110°	129.4	133.0	138.1	147.3	161.2	185.1	222.3	281.6	381.8	527.1	702.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	143.9	147.0	151.3	160.0	173.5	196.5	232.3	288.2	379.5	509.6	663.4
115°	164.1	166.8	170.5	178.7	191.8	214.3	248.0	298.2	378.4	489.5	619.7
117.5°	182.3	185.4	188.7	196.6	210.9	232.5	264.3	310.1	380.2	477.8	592.0
120°	194.9	197.8	201.5	209.0	223.0	245.0	276.5	318.4	383.0	471.5	576.2
122.5°	207.5	209.5	212.3	219.6	234.6	256.3	287.7	327.6	385.2	465.9	562.3
125°	224.2	225.6	229.3	236.3	251.2	273.3	302.8	340.1	389.3	458.3	543.1
127.5°	236.5	238.7	243.6	252.4	268.2	290.0	317.9	352.0	394.8	452.8	525.1
130°	244.7	246.9	253.1	263.2	279.5	301.2	328.1	360.4	398.4	449.7	513.7
132.5°	250.4	253.4	260.9	272.5	289.6	311.0	337.4	367.3	402.1	447.3	503.6
135°	260.5	263.5	272.9	285.3	301.6	323.6	349.2	376.5	406.9	443.5	490.8
137.5°	273.4	275.6	284.3	296.8	312.9	335.1	357.9	383.4	411.8	441.8	479.8
140°	280.3	282.7	292.2	304.8	319.7	341.1	364.3	388.1	413.5	440.6	474.0
142.5°	289.1	290.7	299.4	311.9	326.2	346.2	367.9	390.3	414.3	440.0	469.4
145°	302.4	303.8	311.5	322.4	336.5	354.6	375.1	394.8	416.2	439.0	463.5
147.5°	315.5	316.5	323.3	333.6	345.9	361.8	379.8	397.7	416.9	437.0	458.1
150°	323.8	325.3	330.8	341.1	352.1	365.6	382.9	399.5	416.9	435.0	454.0
152.5°	332.5	333.6	338.4	347.4	357.9	370.0	386.1	400.8	416.3	432.5	449.6
155°	344.3	344.3	349.0	356.9	364.8	375.9	389.3	401.9	414.5	428.0	442.2
157.5°	354.7	354.6	358.3	365.1	372.0	380.4	391.9	402.7	412.5	423.2	435.3
160°	361.6	360.8	364.1	369.5	375.9	382.9	393.2	402.7	410.6	420.1	429.6
162.5°	367.3	366.6	369.7	374.6	379.6	385.5	394.5	402.0	408.7	416.3	424.4
165°	375.9	374.3	376.7	380.6	383.7	388.5	394.8	401.1	405.9	410.6	416.9
167.5°	381.5	380.7	382.1	384.4	386.6	389.6	394.8	399.2	401.4	405.1	409.5
170°	385.4	384.6	385.4	386.9	388.5	390.8	394.8	398.0	399.5	401.9	405.1
172.5°	387.9	386.5	387.2	388.8	389.7	390.8	394.2	396.7	397.0	398.1	400.6
175°	390.8	389.3	390.1	390.8	390.8	390.8	393.2	394.8	394.0	394.0	394.8
177.5°	392.2	391.0	391.0	391.6	391.0	391.0	392.2	392.9	391.6	391.6	392.2
180°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	85.2	89.4	93.4	96.3	97.5	98.7	100.1	101.2
90°	84.9	89.7	94.4	98.6	99.8	100.9	102.9	104.1
92.5°	207.9	173.4	152.1	142.8	133.9	133.2	133.3	133.2
95°	631.3	514.9	421.6	357.8	302.9	280.3	275.3	263.8
97.5°	904.8	824.3	733.3	643.4	595.7	552.7	531.0	522.0
100°	1027.4	992.4	914.6	834.9	781.3	725.5	697.3	685.7
102.5°	1067.1	1094.4	1058.8	1005.4	948.2	908.8	878.1	869.6
105°	1037.6	1149.2	1187.3	1180.9	1156.9	1132.1	1117.4	1109.1
107.5°	944.8	1092.5	1185.1	1228.5	1242.4	1243.2	1239.1	1233.9
110°	876.4	1029.7	1144.2	1213.6	1250.3	1266.5	1273.1	1274.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	821.8	967.3	1083.1	1164.4	1217.5	1244.5	1259.4	1266.3
115°	753.1	878.5	989.8	1077.8	1140.4	1179.4	1202.5	1213.8
117.5°	707.0	815.4	911.5	992.5	1055.2	1095.5	1118.6	1126.1
120°	681.8	779.4	869.2	940.7	1000.1	1039.1	1061.4	1068.7
122.5°	662.0	752.6	832.7	899.7	952.8	988.6	1011.0	1017.6
125°	633.5	716.7	788.2	846.8	891.9	925.1	943.3	952.1
127.5°	604.3	682.0	748.6	803.5	844.7	874.2	891.6	896.2
130°	586.3	658.2	722.3	775.2	815.5	842.4	859.0	864.6
132.5°	568.2	635.6	693.9	744.9	785.1	811.8	827.1	833.1
135°	543.5	600.3	653.0	699.5	735.2	762.0	777.1	782.7
137.5°	523.0	569.1	613.1	652.7	684.5	708.8	722.7	728.5
140°	511.4	550.4	588.7	623.1	653.0	674.2	686.7	691.4
142.5°	501.4	534.4	567.3	597.2	622.7	640.8	652.7	656.6
145°	488.9	514.2	539.6	561.7	581.3	595.4	604.7	608.5
147.5°	477.7	497.8	516.8	533.3	548.6	559.6	565.0	566.7
150°	471.4	488.8	503.7	518.1	530.1	539.8	543.1	544.0
152.5°	465.0	480.6	494.3	505.3	515.3	523.0	526.1	526.9
155°	455.7	468.3	479.3	488.0	495.8	501.4	503.7	504.5
157.5°	446.2	456.6	465.0	471.9	478.1	482.6	484.8	484.6
160°	439.8	447.7	455.7	461.1	466.7	470.6	472.2	471.4
162.5°	432.8	440.1	446.8	451.6	456.0	459.2	459.6	459.4
165°	423.2	428.8	433.5	437.5	440.6	442.2	442.2	442.2
167.5°	414.0	417.7	421.3	424.1	425.8	427.2	426.6	426.4
170°	409.0	411.4	413.7	415.4	416.9	417.7	417.7	416.9
172.5°	403.3	405.7	407.5	408.4	408.7	410.1	408.9	408.1
175°	397.2	397.2	398.8	398.8	398.8	399.5	398.0	397.2
177.5°	392.9	393.5	393.5	393.5	392.9	393.5	391.6	391.6
180°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6

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