

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: P333201-935

Luminaire Tested: **S125DIP-S610D1205U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201-935
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5790.7 lumens
Efficiency: N/A
Efficacy: 117.2 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

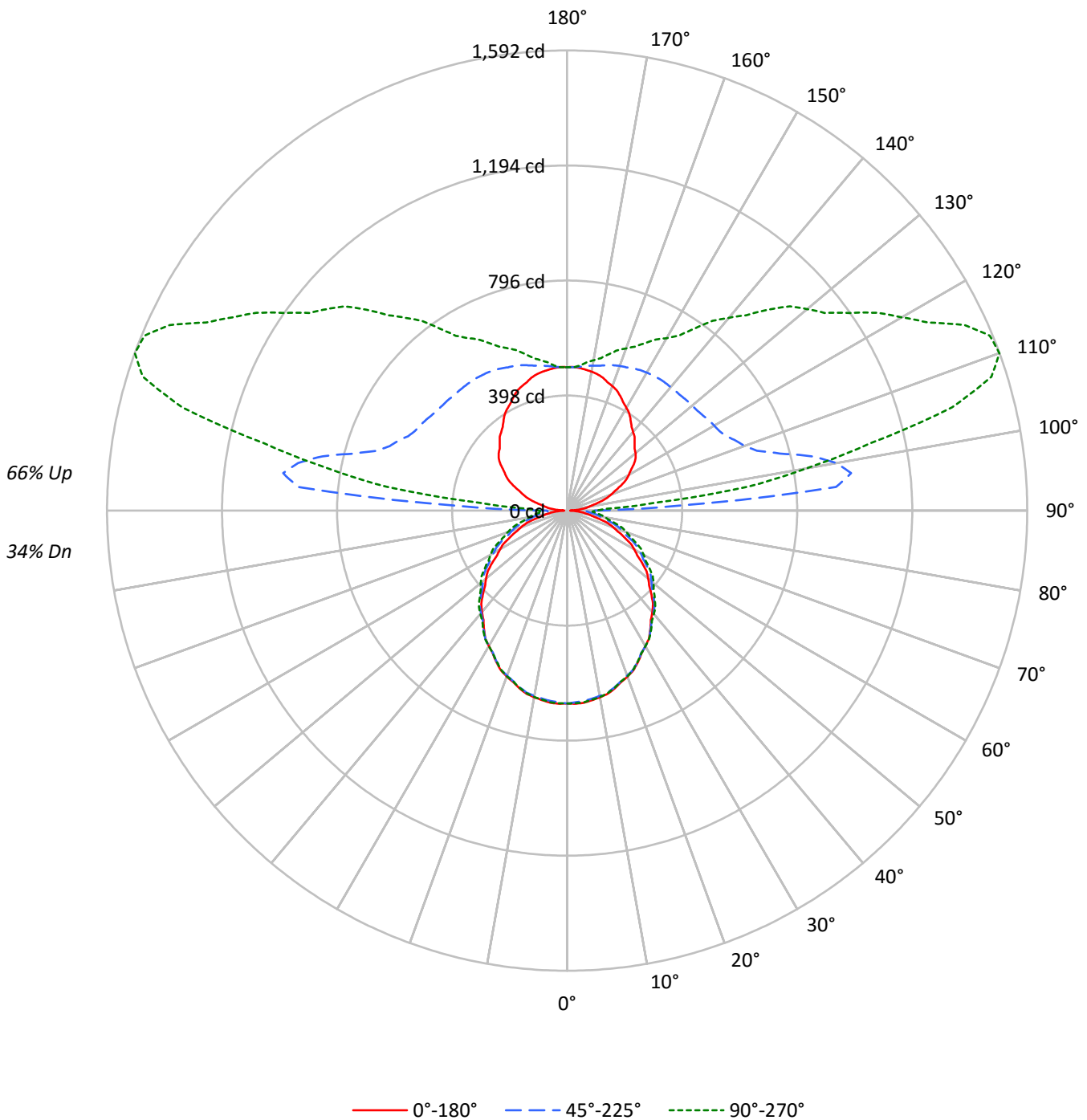
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74		57	57	57		41	41	41	34
1	94	89	85	82	84	80	77	74	64	62	60		49	48	46		35	34	34	27
2	85	78	71	66	76	70	65	60	56	52	49		43	40	38		31	29	28	22
3	77	68	61	55	69	61	55	50	49	45	41		38	35	32		27	25	24	19
4	71	60	52	46	63	54	47	42	43	39	35		33	30	27		24	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30		30	26	23		22	19	17	14
6	59	48	40	34	53	43	36	31	35	30	26		27	23	20		20	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22		24	21	18		18	15	13	11
8	51	39	31	26	46	35	29	24	29	23	20		22	19	16		16	14	12	9
9	47	35	28	23	42	32	26	21	26	21	18		20	17	14		15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16		19	15	13		14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.1
10°-20°	179.1	3.1
20°-30°	266.4	4.6
30°-40°	315.5	5.4
40°-50°	326.2	5.6
50°-60°	300.5	5.2
60°-70°	242.9	4.2
70°-80°	162.7	2.8
80°-90°	87.1	1.5
90°-100°	407.0	7.0
100°-110°	808.1	14.0
110°-120°	749.0	12.9
120°-130°	601.4	10.4
130°-140°	477.7	8.3
140°-150°	357.3	6.2
150°-160°	250.7	4.3
160°-170°	147.8	2.6
170°-180°	48.1	0.8
0°-30°	508.6	8.8
0°-40°	824.1	14.2
0°-60°	1450.8	25.1
0°-90°	1943.6	33.6
90°-120°	1964.2	33.9
90°-150°	3400.6	58.7
90°-180°	3847.0	66.4
0°-180°	5790.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	12	40	70	89	96	9
95°	42	123	934	464	302	42
105°	119	175	761	1477	1379	125
115°	206	253	608	1292	1518	203
125°	283	331	573	1024	1192	251
135°	329	396	560	850	983	256
145°	383	438	556	696	768	240
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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.5	30.5	35.6	40.6	45.8	51.0	56.3	61.5	66.8	70.3
90°	11.5	17.1	23.8	30.4	37.1	43.9	49.9	56.7	62.7	69.7	74.0
92.5°	21.6	28.5	41.2	57.9	79.5	113.3	173.1	269.8	374.3	374.1	315.9
95°	41.5	46.3	58.1	72.8	98.7	148.0	260.0	485.1	766.1	934.2	918.3
97.5°	62.5	67.2	76.1	90.6	113.7	150.2	225.8	391.9	685.6	991.1	1145.0
100°	77.2	82.3	89.4	103.4	125.4	159.3	222.0	356.7	613.5	945.3	1198.4
102.5°	93.5	97.6	103.6	118.2	138.4	171.3	227.5	341.2	558.7	867.1	1162.6
105°	118.9	121.2	128.6	140.9	159.3	190.6	239.0	332.4	503.9	761.3	1051.4
107.5°	143.8	147.7	154.5	164.7	183.3	211.5	258.4	338.8	479.2	687.9	938.5
110°	161.6	165.4	171.2	181.9	198.6	227.6	272.7	345.8	470.9	653.0	873.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	180.0	183.5	188.0	198.5	214.8	242.7	286.1	355.1	468.9	631.7	825.3
115°	206.0	209.1	213.0	223.1	239.1	266.5	307.3	369.1	468.9	607.8	771.5
117.5°	229.4	233.1	236.9	246.6	264.2	290.6	329.2	385.6	472.6	594.4	738.0
120°	245.4	248.8	253.2	262.7	280.2	307.0	345.4	396.7	477.2	587.5	719.0
122.5°	261.7	264.1	267.5	276.6	295.5	322.2	360.5	409.3	480.8	581.4	702.4
125°	282.8	284.6	289.5	298.3	317.2	344.6	380.5	426.5	487.3	573.3	679.7
127.5°	298.7	301.5	307.8	319.1	339.1	366.3	400.5	442.5	495.5	567.9	658.5
130°	309.1	311.9	319.8	332.7	353.5	380.5	413.5	453.6	500.7	564.7	644.8
132.5°	316.6	320.4	329.9	344.5	366.3	393.0	425.7	462.9	506.3	562.6	633.1
135°	329.4	333.3	345.2	361.0	381.9	409.3	441.3	475.4	513.4	559.5	618.4
137.5°	345.7	348.6	359.7	375.6	396.1	424.1	452.8	484.9	520.6	558.4	605.6
140°	354.8	357.8	369.8	385.8	404.8	431.9	461.1	491.2	523.4	557.6	599.2
142.5°	366.0	368.1	379.2	395.1	413.2	438.5	466.0	494.4	524.9	557.3	593.9
145°	382.8	384.7	394.5	408.4	426.3	449.2	475.2	500.2	527.3	556.2	587.0
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.3
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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	73.9	77.4	80.9	83.5	84.6	85.6	86.8	87.8
90°	78.4	82.7	87.0	91.2	92.2	93.2	95.2	96.3
92.5°	235.3	189.9	161.3	148.6	136.8	135.4	135.1	134.5
95°	773.4	624.6	504.7	422.8	352.8	323.8	316.8	301.9
97.5°	1121.9	1018.3	901.5	786.6	725.8	670.8	642.7	630.9
100°	1278.5	1232.5	1132.6	1030.4	962.3	891.1	855.0	839.9
102.5°	1329.8	1363.0	1316.5	1247.9	1175.0	1124.6	1085.3	1074.2
105°	1294.3	1434.3	1481.3	1472.2	1441.2	1409.2	1390.3	1379.2
107.5°	1178.3	1364.1	1480.0	1534.1	1551.2	1552.0	1546.2	1539.1
110°	1092.8	1285.6	1429.4	1516.3	1562.4	1582.4	1590.4	1591.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1024.8	1207.9	1353.2	1455.3	1522.2	1555.7	1574.2	1582.4
115°	939.2	1096.8	1236.5	1347.3	1426.2	1475.1	1504.0	1517.9
117.5°	882.5	1018.6	1139.2	1241.0	1319.9	1370.5	1399.4	1408.3
120°	851.6	974.1	1086.7	1176.4	1251.3	1300.1	1328.0	1336.9
122.5°	827.7	941.2	1041.6	1125.7	1192.6	1237.5	1265.4	1273.4
125°	793.1	897.4	986.8	1060.3	1117.1	1158.8	1181.6	1192.3
127.5°	757.7	855.1	938.5	1007.4	1059.0	1096.1	1117.8	1123.0
130°	735.9	826.0	906.0	972.4	1023.1	1056.9	1077.6	1084.3
132.5°	713.8	798.2	871.1	935.0	985.7	1019.3	1038.3	1045.8
135°	684.3	755.3	821.1	879.5	924.2	957.9	976.7	983.4
137.5°	659.6	717.1	772.1	821.7	861.7	892.3	909.5	916.6
140°	645.8	694.4	742.0	785.1	822.8	849.3	865.0	870.5
142.5°	633.9	675.0	716.0	753.5	785.4	808.0	822.8	827.6
145°	618.7	650.5	682.2	709.9	734.4	752.1	763.6	768.2
147.5°	604.9	630.3	654.4	675.1	694.3	708.2	714.9	717.0
150°	597.3	619.3	638.3	656.3	671.5	683.6	687.9	689.0
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.6	667.6
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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