

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: P333192-830

Luminaire Tested: **S125DIP-S610D1035U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333192-830
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-S610D1035U830-4F0-1E-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: 5764.9 lumens
Efficiency: N/A
Efficacy: 129.5 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

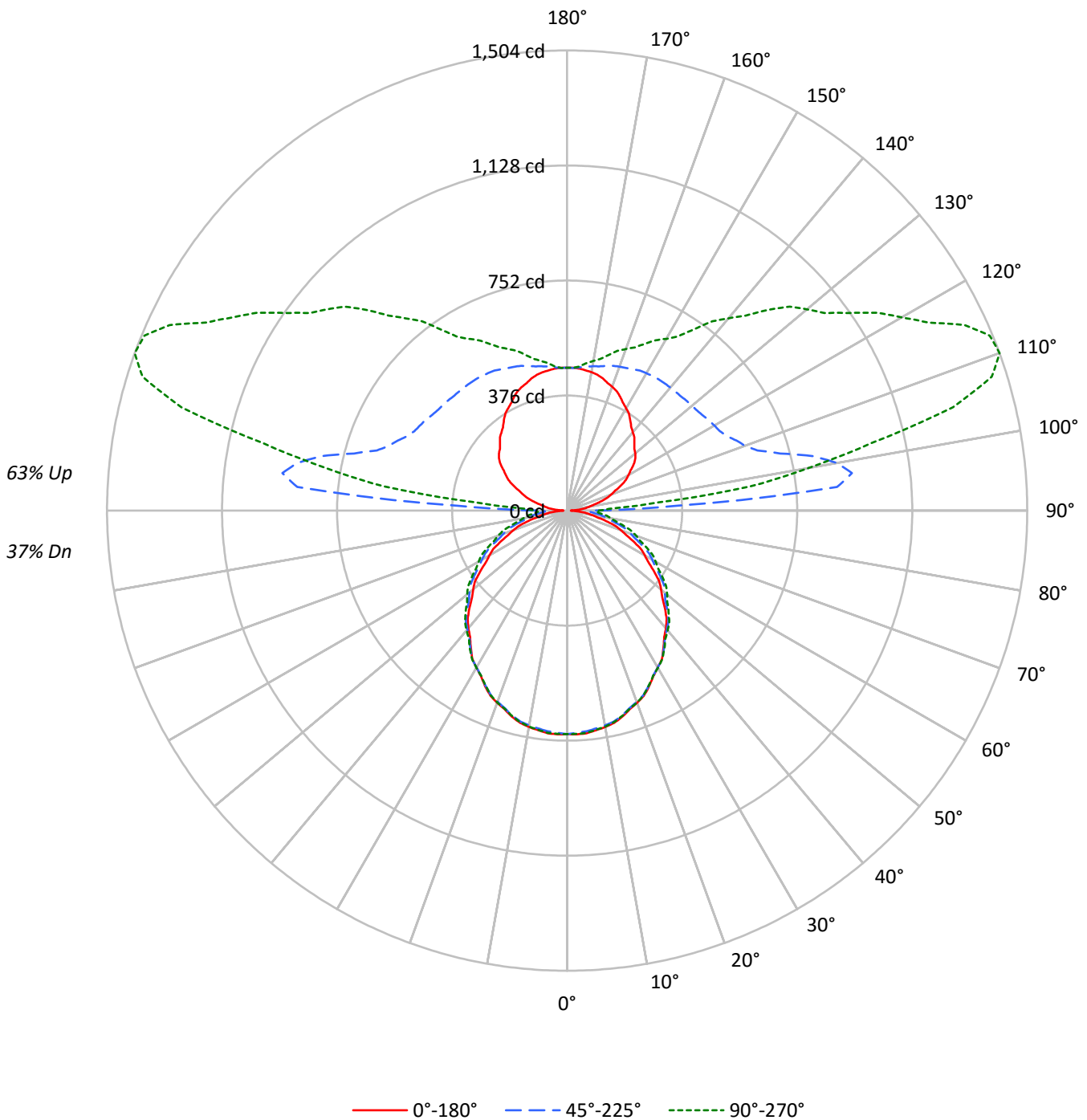
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.2
10°-20°	196.1	3.4
20°-30°	291.6	5.1
30°-40°	345.4	6.0
40°-50°	357.1	6.2
50°-60°	329.0	5.7
60°-70°	265.9	4.6
70°-80°	178.1	3.1
80°-90°	95.0	1.6
90°-100°	390.1	6.8
100°-110°	765.4	13.3
110°-120°	708.1	12.3
120°-130°	567.6	9.8
130°-140°	450.2	7.8
140°-150°	336.2	5.8
150°-160°	235.8	4.1
160°-170°	139.0	2.4
170°-180°	45.2	0.8
0°-30°	556.7	9.7
0°-40°	902.2	15.6
0°-60°	1588.2	27.6
0°-90°	2127.2	36.9
90°-120°	1863.6	32.3
90°-150°	3217.7	55.8
90°-180°	3638.0	63.1
0°-180°	5764.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	43	74	94	102	9
95°	40	120	886	446	294	40
105°	113	167	722	1396	1305	119
115°	194	239	576	1221	1434	191
125°	266	312	542	967	1126	236
135°	310	372	527	802	928	241
145°	360	412	523	655	723	225
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.5	27.8	33.3	38.7	44.2	49.9	55.4	61.3	66.8	72.6	76.4
90°	12.4	18.5	25.4	32.4	39.4	46.5	52.9	60.1	66.4	73.8	78.4
92.5°	21.8	28.9	41.6	58.0	78.8	111.4	168.3	260.0	359.1	359.8	305.6
95°	40.3	45.4	57.1	71.6	96.4	143.5	249.7	462.0	727.2	885.9	871.6
97.5°	60.0	64.8	73.9	87.9	110.3	145.2	217.1	374.0	650.9	939.0	1084.2
100°	73.7	79.0	86.1	99.7	121.0	153.4	213.1	340.5	582.7	895.5	1134.1
102.5°	89.0	93.2	99.2	113.5	132.9	164.5	217.9	325.6	530.8	821.7	1100.0
105°	112.7	115.3	122.5	134.5	152.1	182.1	228.3	316.8	478.7	721.5	994.8
107.5°	136.0	140.1	146.8	156.6	174.4	201.5	246.1	322.4	455.2	652.1	888.2
110°	152.7	156.6	162.2	172.6	188.6	216.2	259.3	328.7	447.0	618.9	827.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	170.0	173.4	178.0	188.0	203.6	230.3	271.6	337.1	444.8	598.5	781.0
115°	194.4	197.4	201.3	210.8	226.1	252.2	291.2	349.9	444.4	575.5	729.9
117.5°	216.2	219.8	223.6	232.7	249.5	274.6	311.4	365.0	447.3	562.5	697.9
120°	231.3	234.6	238.8	247.8	264.3	289.8	326.4	375.2	451.4	555.7	679.8
122.5°	246.5	248.8	252.0	260.7	278.4	303.9	340.4	386.7	454.5	549.7	663.8
125°	266.4	268.1	272.6	280.9	298.6	324.6	358.8	402.5	460.2	541.5	641.9
127.5°	281.3	283.9	289.7	300.3	319.1	344.9	377.4	417.3	467.5	535.9	621.5
130°	291.0	293.7	301.0	313.1	332.7	358.2	389.6	427.6	472.1	532.7	608.3
132.5°	297.9	301.5	310.5	324.2	344.7	370.0	400.9	436.1	477.1	530.5	597.0
135°	310.1	313.7	324.8	339.7	359.3	385.1	415.5	447.6	483.5	527.0	582.7
137.5°	325.4	328.0	338.5	353.4	372.6	399.0	426.0	456.4	490.0	525.6	570.3
140°	333.8	336.6	347.9	363.0	380.9	406.3	433.8	462.1	492.4	524.6	563.9
142.5°	344.3	346.3	356.7	371.6	388.6	412.5	438.3	465.1	493.7	524.1	558.8
145°	360.1	361.8	371.1	384.1	400.9	422.4	447.0	470.4	495.9	523.1	552.1
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.8
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	80.3	84.2	88.0	90.8	91.9	93.0	94.3	95.4
90°	82.9	87.6	92.2	96.4	97.6	98.7	100.8	101.9
92.5°	230.3	188.0	161.6	150.1	139.1	138.0	137.8	137.3
95°	735.8	596.3	484.1	407.3	341.7	314.5	308.1	294.2
97.5°	1062.9	965.9	856.6	748.9	691.8	640.2	614.0	603.0
100°	1209.8	1167.1	1073.5	977.8	913.8	847.1	813.2	799.1
102.5°	1257.7	1289.4	1246.1	1181.9	1113.4	1066.2	1029.4	1019.0
105°	1223.8	1355.8	1400.4	1392.2	1363.3	1333.3	1315.6	1305.4
107.5°	1114.2	1289.3	1398.7	1449.9	1466.2	1467.0	1461.8	1455.2
110°	1033.3	1215.1	1350.8	1432.9	1476.3	1495.2	1503.0	1504.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	969.0	1141.7	1278.7	1375.1	1438.0	1469.9	1487.3	1495.2
115°	888.0	1036.7	1168.5	1273.0	1347.3	1393.5	1420.7	1433.9
117.5°	834.2	962.6	1076.4	1172.3	1246.8	1294.6	1321.8	1330.4
120°	804.8	920.4	1026.6	1111.3	1181.9	1227.9	1254.3	1262.8
122.5°	781.9	889.1	983.9	1063.2	1126.2	1168.7	1195.0	1202.7
125°	748.9	847.4	931.8	1001.3	1054.7	1094.1	1115.6	1125.8
127.5°	715.1	807.0	885.8	950.8	999.6	1034.5	1055.1	1060.1
130°	694.3	779.4	855.0	917.7	965.4	997.3	1016.9	1023.4
132.5°	673.2	753.0	821.8	882.1	929.9	961.6	979.6	986.7
135°	645.0	712.0	774.3	829.3	871.6	903.3	921.1	927.6
137.5°	621.3	675.7	727.6	774.4	812.2	841.0	857.2	864.1
140°	608.0	654.0	699.1	739.8	775.2	800.3	815.1	820.4
142.5°	596.6	635.6	674.3	709.6	739.8	761.2	775.1	779.8
145°	582.1	612.1	642.1	668.2	691.4	708.0	719.1	723.4
147.5°	569.0	593.0	615.7	635.1	653.3	666.4	672.6	674.6
150°	561.8	582.4	600.3	617.4	631.6	643.0	647.0	648.1
152.5°	554.2	572.6	589.0	602.2	614.1	623.1	627.0	627.9
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

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