

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: P333549-930

Luminaire Tested: **S125RDIP-S610D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333549-930
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: S125RDIP-S610D1205U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5463.9 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

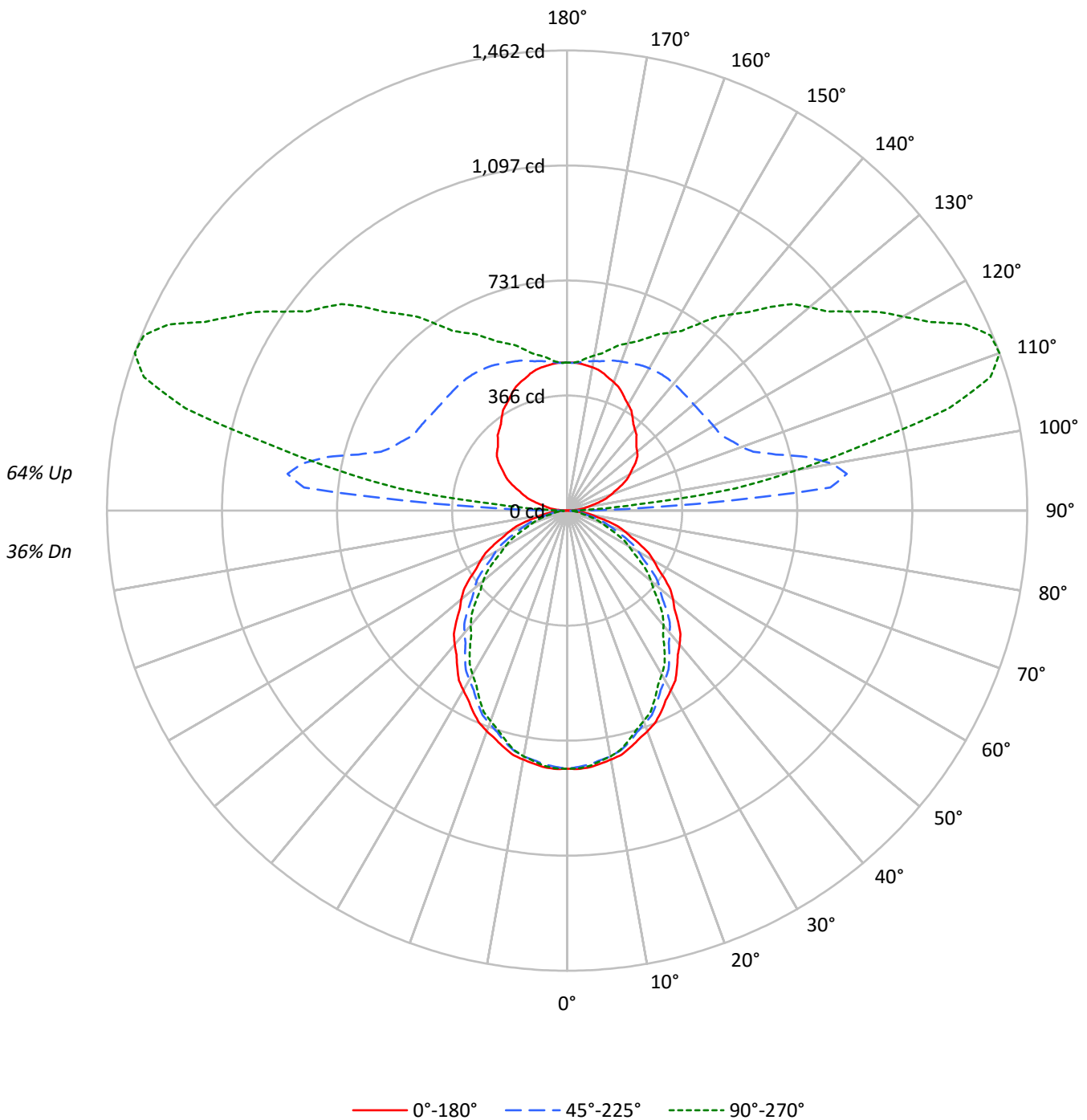
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	75	75	58	58	58	43	43	43	36
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	37	36	30
2	86	79	73	68	78	72	67	63	58	55	52	45	43	41	34	32	31	26
3	79	70	63	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	62	54	48	65	56	50	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	36	55	45	38	33	37	32	28	29	25	23	22	20	18	14
7	56	44	37	31	51	41	34	29	33	28	24	26	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	21	18	18	16	14	12
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	15	13	10
10	45	34	27	22	41	31	25	20	25	21	17	21	17	14	16	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.4
10°-20°	215.5	3.9
20°-30°	312.5	5.7
30°-40°	356.2	6.5
40°-50°	347.2	6.4
50°-60°	292.3	5.3
60°-70°	204.9	3.7
70°-80°	105.3	1.9
80°-90°	29.2	0.5
90°-100°	340.6	6.2
100°-110°	732.2	13.4
110°-120°	687.1	12.6
120°-130°	556.9	10.2
130°-140°	446.9	8.2
140°-150°	337.2	6.2
150°-160°	237.4	4.3
160°-170°	139.9	2.6
170°-180°	45.5	0.8
0°-30°	605.2	11.1
0°-40°	961.4	17.6
0°-60°	1600.8	29.3
0°-90°	1940.2	35.5
90°-120°	1759.9	32.2
90°-150°	3100.9	56.8
90°-180°	3524.0	64.5
0°-180°	5463.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	9	15	20	22	3
95°	31	92	839	381	223	33
105°	107	150	687	1352	1255	113
115°	191	231	551	1188	1398	188
125°	265	311	529	945	1102	235
135°	311	374	525	792	915	241
145°	362	414	527	656	722	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	11.0	10.6	10.2	9.9	9.8	9.9	10.1	10.2	10.4	10.7
90°	1.0	1.9	3.8	5.7	7.6	9.5	10.4	12.3	13.3	15.2	16.1
92.5°	11.6	14.0	22.0	33.8	50.1	77.7	129.4	216.2	310.4	305.4	247.3
95°	31.2	32.2	39.8	50.2	71.0	113.7	215.1	423.5	684.9	839.4	821.3
97.5°	51.9	53.1	58.4	68.8	87.6	118.2	185.3	338.0	611.6	896.3	1039.3
100°	66.3	68.2	72.0	82.4	100.4	128.8	183.8	307.0	545.7	855.4	1092.3
102.5°	82.3	83.4	86.4	97.6	114.1	141.7	190.6	294.1	495.6	783.4	1060.5
105°	107.0	107.0	111.8	121.2	136.4	163.0	204.6	288.9	447.1	686.8	958.7
107.5°	131.3	133.2	137.7	145.5	161.3	185.1	225.4	297.7	426.6	620.3	854.9
110°	148.7	150.7	154.4	163.0	177.2	201.8	240.6	306.0	420.6	589.2	795.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.2	168.0	171.0	179.6	193.8	217.7	255.0	316.6	420.6	571.0	751.8
115°	191.4	193.2	196.1	204.6	218.8	242.6	277.6	332.5	423.5	551.4	703.8
117.5°	214.1	217.0	220.0	228.5	244.6	267.5	300.7	350.7	429.7	541.7	675.2
120°	229.3	232.1	235.9	244.4	260.5	284.2	317.4	362.8	435.8	537.1	659.3
122.5°	245.2	247.3	250.3	258.8	276.5	300.1	333.3	376.5	441.1	533.4	645.7
125°	265.2	267.2	271.9	280.4	298.4	323.0	354.3	395.0	450.0	528.6	627.1
127.5°	281.0	283.8	289.9	300.7	319.8	344.5	374.5	412.1	460.0	526.4	610.1
130°	290.8	293.7	301.3	313.6	333.5	358.1	387.4	423.5	466.1	524.8	598.8
132.5°	298.4	302.0	311.1	325.0	345.6	370.2	399.6	433.3	472.9	524.8	589.6
135°	310.7	314.5	325.9	341.0	360.9	386.5	415.9	447.1	482.2	524.8	578.9
137.5°	326.3	329.1	339.7	354.9	374.4	400.7	427.5	457.4	490.7	525.9	569.2
140°	335.3	338.2	349.6	364.8	382.7	408.3	435.8	464.2	494.5	526.7	564.6
142.5°	345.9	348.1	358.7	373.8	391.1	415.2	441.1	468.0	496.8	527.5	560.8
145°	361.9	363.8	373.2	386.5	403.6	425.3	450.0	473.7	499.3	526.7	555.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.3
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	10.8	11.0	11.3	11.6	11.4	11.3	11.4	11.3
90°	17.0	18.0	18.9	20.9	20.9	20.9	21.8	21.8
92.5°	167.9	121.8	91.7	77.7	65.6	63.3	62.0	60.4
95°	681.1	537.1	420.6	341.0	273.8	245.3	237.8	222.7
97.5°	1014.4	913.5	800.0	689.3	630.7	577.7	550.2	538.1
100°	1165.2	1118.8	1021.2	922.7	857.4	789.1	754.1	738.9
102.5°	1216.0	1244.6	1197.8	1131.1	1061.2	1012.7	974.6	963.3
105°	1186.1	1315.9	1357.6	1347.1	1316.8	1285.6	1266.6	1255.2
107.5°	1079.2	1252.4	1359.4	1408.9	1424.2	1424.1	1417.8	1410.2
110°	1000.4	1180.4	1313.9	1394.5	1437.1	1455.1	1461.8	1461.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	938.2	1109.1	1244.2	1339.1	1401.5	1432.4	1448.9	1455.7
115°	860.2	1007.1	1136.8	1240.1	1313.9	1359.4	1385.9	1398.2
117.5°	809.8	936.4	1048.1	1142.9	1216.8	1263.8	1290.1	1297.6
120°	782.5	896.2	1000.4	1083.8	1153.9	1199.3	1224.9	1232.5
122.5°	762.1	867.4	960.3	1038.3	1100.8	1142.5	1168.1	1174.9
125°	732.3	828.9	911.3	979.6	1032.6	1071.5	1092.3	1101.8
127.5°	702.0	792.1	869.1	932.9	981.0	1015.4	1035.1	1039.3
130°	683.1	766.4	840.3	901.9	949.3	980.5	999.5	1005.1
132.5°	664.1	742.2	809.2	868.5	915.9	947.1	964.6	971.0
135°	639.4	704.8	765.5	819.5	861.1	892.4	909.5	915.2
137.5°	618.6	671.5	721.9	767.8	805.0	833.5	849.2	855.4
140°	607.2	651.8	695.4	735.2	770.2	794.8	809.0	813.8
142.5°	597.4	635.1	672.6	707.1	736.9	757.7	771.1	775.1
145°	584.5	613.8	643.3	668.8	691.5	707.7	718.1	721.9
147.5°	572.4	596.2	618.8	638.1	656.2	669.0	675.1	676.8
150°	565.6	586.4	604.4	621.4	635.7	647.0	650.9	651.8
152.5°	558.0	576.6	593.0	606.3	618.2	627.3	631.1	632.1
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

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