

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: P333201-930

Luminaire Tested: **S125DIP-S610D1205U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333201-930
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: S125DIP-S610D1205U930-4F0-1E-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: 5483.3 lumens
Efficiency: N/A
Efficacy: 111.0 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

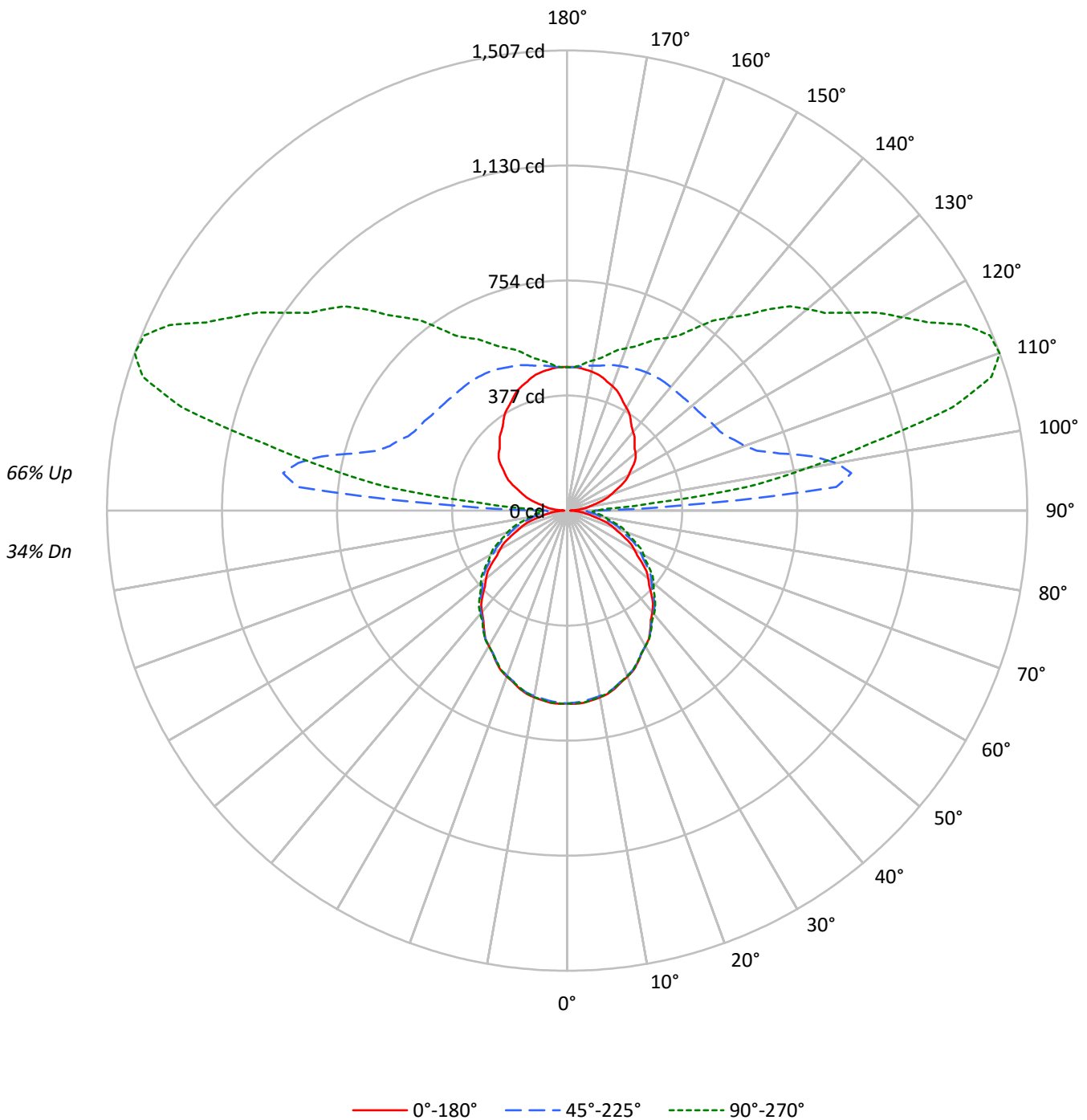
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	89	85	82	84	80	77	74	64	62	60	49	48	46	35	34	34
2	85	78	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	27	25	24
4	71	60	52	46	63	54	47	42	43	39	35	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	34	30	30	26	23	22	19	17
6	59	48	40	34	53	43	36	31	35	30	26	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	39	31	26	46	35	29	24	29	23	20	22	19	16	16	14	12
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	169.6	3.1
20°-30°	252.2	4.6
30°-40°	298.8	5.4
40°-50°	308.9	5.6
50°-60°	284.6	5.2
60°-70°	230.0	4.2
70°-80°	154.0	2.8
80°-90°	82.5	1.5
90°-100°	385.4	7.0
100°-110°	765.2	14.0
110°-120°	709.3	12.9
120°-130°	569.4	10.4
130°-140°	452.4	8.3
140°-150°	338.4	6.2
150°-160°	237.4	4.3
160°-170°	139.9	2.6
170°-180°	45.5	0.8
0°-30°	481.6	8.8
0°-40°	780.4	14.2
0°-60°	1373.8	25.1
0°-90°	1840.4	33.6
90°-120°	1859.9	33.9
90°-150°	3220.1	58.7
90°-180°	3643.0	66.4
0°-180°	5483.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	11	38	66	84	91	8
95°	39	117	885	439	286	40
105°	113	166	721	1398	1306	119
115°	195	239	576	1223	1437	192
125°	268	313	543	969	1129	237
135°	312	375	530	805	931	242
145°	362	414	527	659	727	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°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.5	24.1	28.9	33.7	38.5	43.4	48.3	53.3	58.2	63.3	66.6
90°	10.8	16.2	22.5	28.8	35.1	41.6	47.2	53.7	59.4	66.0	70.0
92.5°	20.5	27.0	39.1	54.9	75.3	107.3	163.9	255.4	354.4	354.2	299.1
95°	39.3	43.9	55.0	69.0	93.4	140.1	246.2	459.3	725.5	884.6	869.6
97.5°	59.2	63.6	72.1	85.8	107.7	142.3	213.9	371.1	649.2	938.5	1084.3
100°	73.1	77.9	84.6	97.9	118.8	150.8	210.2	337.8	580.9	895.1	1134.8
102.5°	88.5	92.4	98.1	111.9	131.1	162.2	215.4	323.1	529.0	821.1	1100.9
105°	112.6	114.8	121.8	133.5	150.8	180.5	226.3	314.8	477.1	720.9	995.6
107.5°	136.2	139.9	146.3	156.0	173.6	200.3	244.7	320.8	453.8	651.4	888.7
110°	153.0	156.6	162.1	172.3	188.1	215.5	258.2	327.4	445.9	618.3	827.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	170.5	173.7	178.1	187.9	203.4	229.8	270.9	336.2	444.0	598.2	781.5
115°	195.1	198.0	201.7	211.2	226.4	252.3	291.0	349.5	444.0	575.5	730.5
117.5°	217.2	220.7	224.4	233.5	250.2	275.2	311.7	365.1	447.5	562.9	698.8
120°	232.4	235.6	239.8	248.7	265.3	290.7	327.1	375.7	451.8	556.4	680.9
122.5°	247.8	250.1	253.3	262.0	279.8	305.1	341.4	387.6	455.3	550.6	665.1
125°	267.7	269.5	274.1	282.5	300.4	326.3	360.3	403.8	461.5	542.8	643.6
127.5°	282.8	285.5	291.5	302.1	321.1	346.8	379.2	419.0	469.2	537.8	623.5
130°	292.7	295.4	302.8	315.0	334.8	360.3	391.6	429.5	474.1	534.8	610.6
132.5°	299.8	303.4	312.4	326.2	346.8	372.2	403.1	438.3	479.4	532.7	599.5
135°	311.9	315.6	326.9	341.9	361.6	387.6	417.9	450.2	486.2	529.8	585.5
137.5°	327.3	330.1	340.6	355.6	375.0	401.6	428.8	459.2	493.0	528.7	573.5
140°	336.0	338.8	350.2	365.3	383.4	409.0	436.6	465.1	495.6	528.0	567.4
142.5°	346.6	348.5	359.1	374.1	391.3	415.2	441.2	468.1	497.0	527.7	562.4
145°	362.5	364.3	373.6	386.7	403.7	425.3	450.0	473.7	499.3	526.7	555.9
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.5
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°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	70.0	73.3	76.6	79.1	80.1	81.0	82.2	83.2
90°	74.2	78.3	82.4	86.3	87.3	88.3	90.2	91.2
92.5°	222.8	179.8	152.7	140.7	129.6	128.2	127.9	127.3
95°	732.4	591.4	477.9	400.4	334.1	306.6	300.0	285.8
97.5°	1062.3	964.3	853.6	744.9	687.3	635.2	608.6	597.5
100°	1210.6	1167.1	1072.4	975.8	911.3	843.8	809.6	795.3
102.5°	1259.2	1290.6	1246.6	1181.7	1112.6	1064.9	1027.7	1017.2
105°	1225.6	1358.2	1402.6	1394.1	1364.7	1334.4	1316.5	1306.0
107.5°	1115.7	1291.7	1401.4	1452.7	1468.8	1469.6	1464.1	1457.4
110°	1034.8	1217.3	1353.6	1435.8	1479.4	1498.4	1506.0	1507.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	970.4	1143.8	1281.4	1378.0	1441.4	1473.2	1490.6	1498.4
115°	889.3	1038.6	1170.9	1275.8	1350.5	1396.8	1424.2	1437.3
117.5°	835.7	964.6	1078.7	1175.1	1249.9	1297.8	1325.1	1333.6
120°	806.4	922.4	1029.0	1113.9	1184.9	1231.1	1257.5	1265.9
122.5°	783.7	891.3	986.3	1065.9	1129.3	1171.8	1198.2	1205.8
125°	751.0	849.8	934.4	1004.0	1057.8	1097.3	1118.8	1129.0
127.5°	717.5	809.7	888.7	953.9	1002.8	1038.0	1058.4	1063.4
130°	696.8	782.1	857.9	920.8	968.8	1000.8	1020.4	1026.8
132.5°	675.9	755.9	824.8	885.4	933.4	965.2	983.2	990.3
135°	648.0	715.2	777.6	832.8	875.1	907.1	924.9	931.2
137.5°	624.6	679.1	731.1	778.0	816.0	844.9	861.2	868.0
140°	611.5	657.5	702.6	743.5	779.1	804.2	819.0	824.3
142.5°	600.2	639.2	678.0	713.5	743.7	765.2	779.1	783.7
145°	585.9	616.0	646.0	672.2	695.5	712.2	723.1	727.4
147.5°	572.8	596.9	619.7	639.3	657.5	670.6	676.9	678.9
150°	565.6	586.4	604.4	621.5	635.9	647.3	651.3	652.4
152.5°	558.0	576.6	593.0	606.3	618.2	627.4	631.2	632.2
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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