

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: P333543-927

Luminaire Tested: **S125RDIP-S610D1035U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333543-927
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-S610D1035U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4826.3 lumens
Efficiency: N/A
Efficacy: 108.5 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

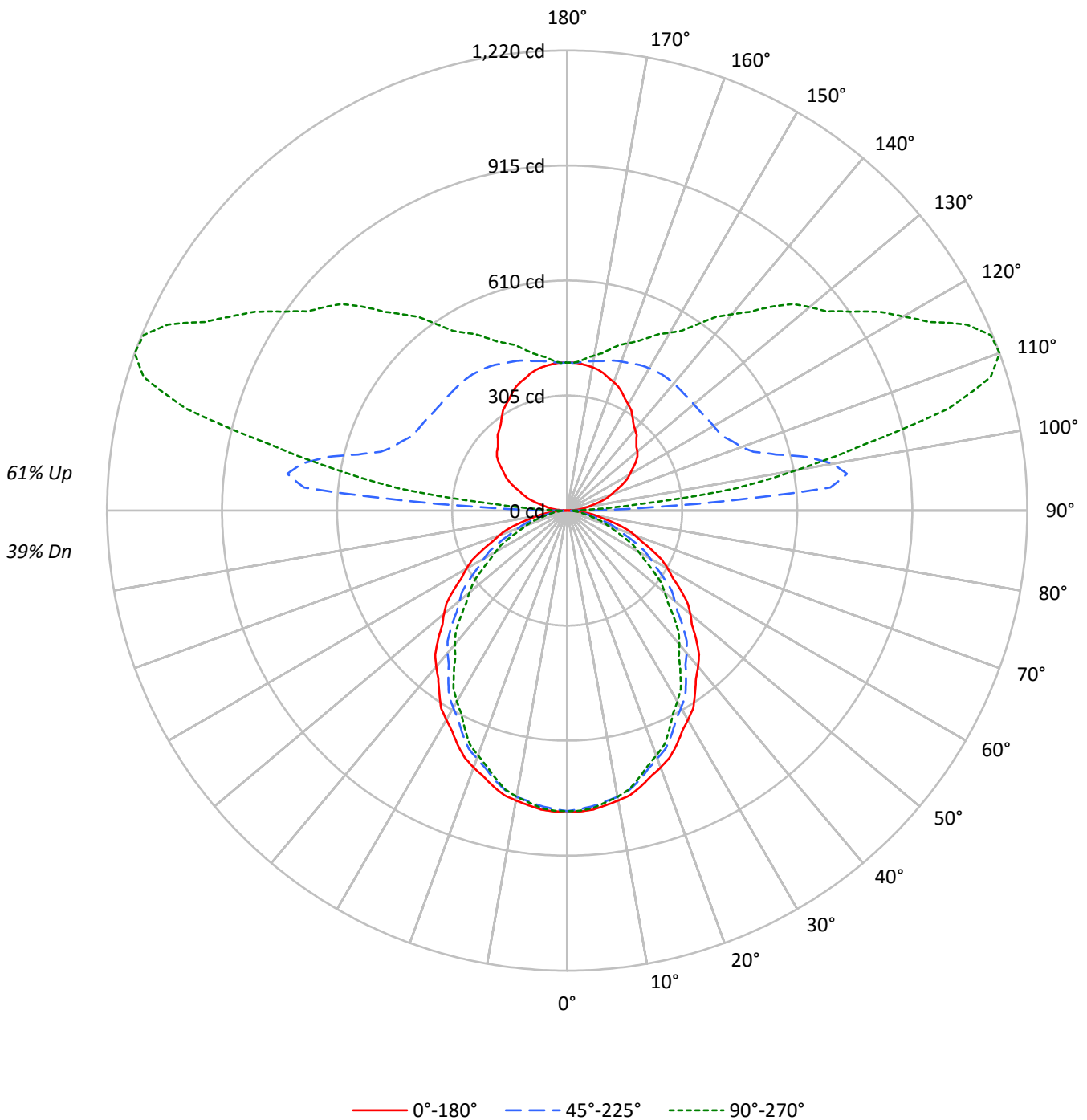
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333543-927

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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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	96	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	79	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	48	42	60	51	44	39	42	37	33	34	30	27	26	24	22	18
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.6
10°-20°	209.4	4.3
20°-30°	303.7	6.3
30°-40°	346.1	7.2
40°-50°	337.4	7.0
50°-60°	284.0	5.9
60°-70°	199.1	4.1
70°-80°	102.3	2.1
80°-90°	28.0	0.6
90°-100°	284.3	5.9
100°-110°	611.2	12.7
110°-120°	573.6	11.9
120°-130°	464.9	9.6
130°-140°	373.0	7.7
140°-150°	281.5	5.8
150°-160°	198.2	4.1
160°-170°	116.8	2.4
170°-180°	38.0	0.8
0°-30°	588.0	12.2
0°-40°	934.1	19.4
0°-60°	1555.4	32.2
0°-90°	1884.8	39.1
90°-120°	1469.1	30.4
90°-150°	2588.5	53.6
90°-180°	2941.0	60.9
0°-180°	4826.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	7	13	17	18	3
95°	26	77	701	318	186	28
105°	89	125	573	1129	1048	94
115°	160	193	460	992	1167	157
125°	221	259	441	789	920	196
135°	259	312	438	662	764	201
145°	302	346	440	548	603	189
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	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°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.6	10.2	9.7	9.3	9.3	9.3	9.5	9.5	9.7	9.9
90°	0.8	1.6	3.2	4.8	6.3	7.9	8.7	10.3	11.1	12.7	13.5
92.5°	9.7	11.7	18.4	28.1	41.7	64.9	108.1	180.5	259.0	254.9	206.4
95°	26.1	26.9	33.2	41.9	59.3	94.9	179.5	353.5	571.8	700.7	685.6
97.5°	43.3	44.3	48.7	57.4	73.0	98.7	154.7	282.2	510.6	748.3	867.5
100°	55.4	57.0	60.1	68.8	83.8	107.6	153.4	256.2	455.5	714.1	911.8
102.5°	68.7	69.6	72.1	81.4	95.2	118.3	159.1	245.5	413.8	654.0	885.3
105°	89.4	89.4	93.3	101.2	113.9	136.0	170.8	241.2	373.3	573.3	800.3
107.5°	109.6	111.2	114.9	121.4	134.6	154.6	188.2	248.5	356.2	517.8	713.6
110°	124.1	125.7	128.9	136.0	147.9	168.4	200.9	255.4	351.1	491.9	664.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	138.7	140.3	142.8	150.0	161.8	181.7	212.9	264.3	351.1	476.7	627.6
115°	159.8	161.3	163.7	170.8	182.7	202.5	231.7	277.6	353.5	460.3	587.6
117.5°	178.7	181.1	183.6	190.8	204.2	223.3	251.0	292.8	358.7	452.2	563.7
120°	191.4	193.8	196.9	204.1	217.5	237.3	264.9	302.9	363.8	448.4	550.4
122.5°	204.7	206.4	208.9	216.0	230.8	250.6	278.2	314.3	368.2	445.2	539.0
125°	221.4	223.0	227.0	234.1	249.1	269.7	295.8	329.8	375.7	441.2	523.6
127.5°	234.6	236.9	242.0	251.0	267.0	287.6	312.7	344.0	384.0	439.3	509.3
130°	242.8	245.2	251.5	261.7	278.4	298.9	323.4	353.5	389.1	438.1	499.8
132.5°	249.1	252.1	259.7	271.2	288.5	309.0	333.6	361.7	394.7	438.1	492.2
135°	259.4	262.5	272.0	284.7	301.3	322.7	347.1	373.3	402.5	438.1	483.2
137.5°	272.4	274.7	283.6	296.3	312.5	334.5	356.8	381.8	409.6	439.0	475.2
140°	280.0	282.3	291.8	304.4	319.5	340.9	363.8	387.5	412.8	439.7	471.3
142.5°	288.8	290.6	299.4	312.0	326.5	346.5	368.2	390.6	414.7	440.3	468.2
145°	302.1	303.6	311.6	322.7	336.9	355.1	375.7	395.4	416.8	439.7	463.4
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.5
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	10.1	10.2	10.4	10.6	10.5	10.5	10.5	10.4
90°	14.3	15.1	15.8	17.4	17.4	17.4	18.2	18.2
92.5°	140.1	101.7	76.5	64.9	54.7	52.8	51.7	50.5
95°	568.6	448.4	351.1	284.7	228.5	204.9	198.5	185.8
97.5°	846.8	762.5	667.7	575.4	526.6	482.2	459.3	449.2
100°	972.7	934.0	852.5	770.2	715.7	658.8	629.5	616.9
102.5°	1015.1	1038.9	999.9	944.2	885.9	845.4	813.6	804.1
105°	990.1	1098.4	1133.2	1124.5	1099.2	1073.2	1057.3	1047.8
107.5°	900.9	1045.4	1134.8	1176.1	1188.9	1188.7	1183.5	1177.2
110°	835.1	985.3	1096.9	1164.1	1199.7	1214.7	1220.2	1220.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	783.2	925.9	1038.6	1117.9	1169.9	1195.7	1209.5	1215.1
115°	718.0	840.7	949.0	1035.1	1096.9	1134.8	1157.0	1167.3
117.5°	676.0	781.6	875.0	954.0	1015.7	1054.9	1076.9	1083.2
120°	653.2	748.1	835.1	904.7	963.2	1001.2	1022.5	1028.9
122.5°	636.1	724.1	801.5	866.7	918.9	953.7	975.1	980.8
125°	611.3	692.0	760.7	817.7	862.0	894.4	911.8	919.7
127.5°	586.0	661.3	725.5	778.8	819.0	847.6	864.0	867.5
130°	570.2	639.8	701.5	752.9	792.4	818.5	834.3	839.1
132.5°	554.4	619.5	675.5	725.0	764.5	790.7	805.2	810.6
135°	533.8	588.4	639.0	684.0	718.8	745.0	759.1	763.9
137.5°	516.4	560.5	602.6	640.9	672.0	695.8	708.9	714.1
140°	506.9	544.1	580.4	613.7	642.9	663.5	675.3	679.3
142.5°	498.7	530.1	561.5	590.3	615.1	632.5	643.7	647.1
145°	487.9	512.5	536.9	558.3	577.3	590.7	599.4	602.6
147.5°	477.8	497.7	516.6	532.7	547.7	558.5	563.6	565.0
150°	472.1	489.5	504.5	518.8	530.6	540.1	543.3	544.1
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	526.8	527.6
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

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