

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: P333183

Luminaire Tested: **S125DIP-S610D810U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333183
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-S610D810U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5310.8 lumens
Efficiency: N/A
Efficacy: 138.3 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: General Diffuse

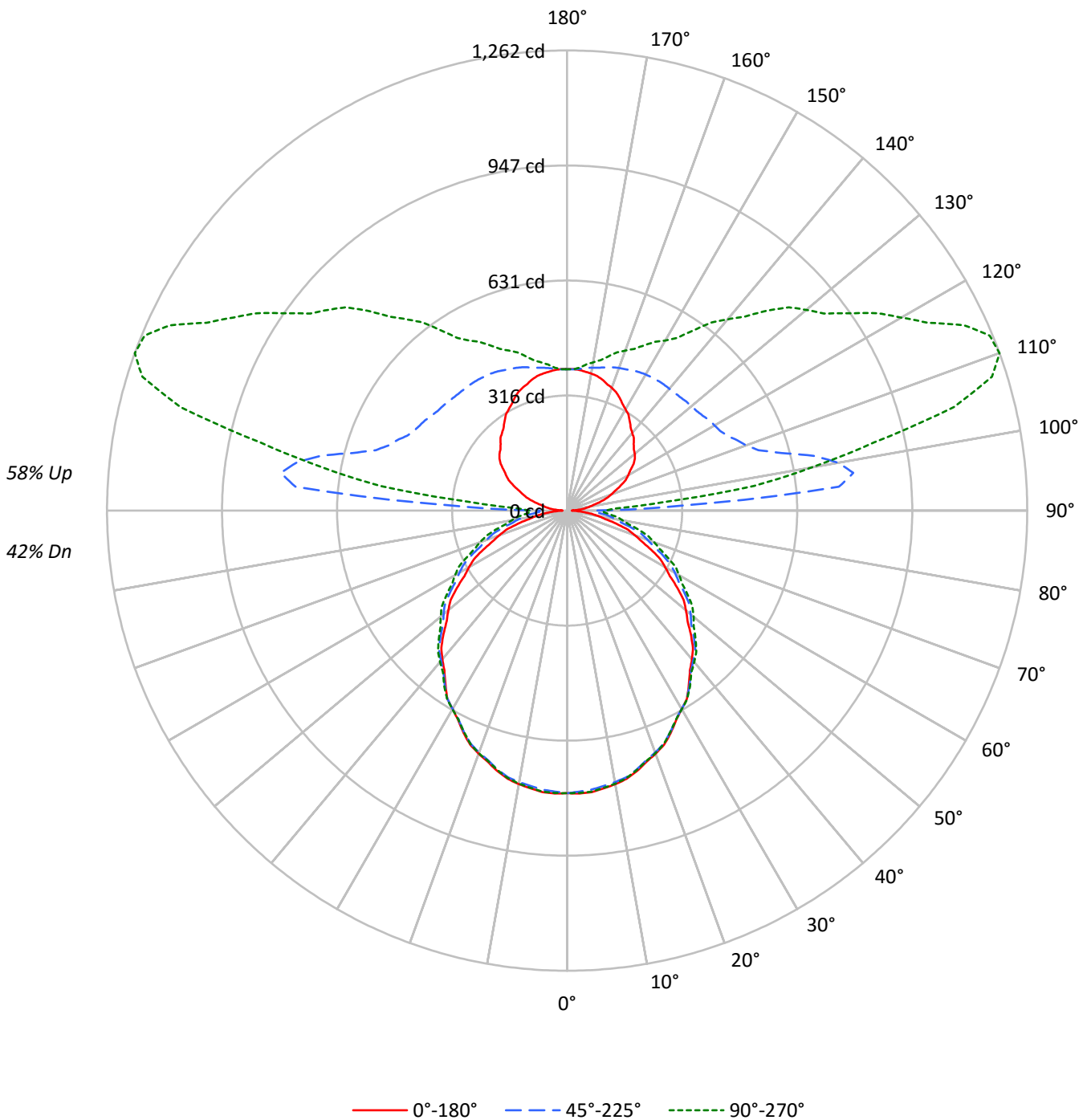
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	95	91	87	83	87	83	80	76	68	66	64	55	53	52	42	41	40	34
2	87	79	73	67	79	72	67	62	60	56	52	48	45	43	37	35	33	28
3	79	69	62	56	72	63	57	52	52	47	44	42	39	36	33	30	28	24
4	72	61	53	47	65	56	49	44	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	43	37	41	36	32	33	29	26	26	23	21	17
6	61	49	40	35	55	45	37	32	37	32	27	30	26	23	24	21	18	15
7	56	44	36	30	51	40	33	28	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	21	25	21	18	20	17	14	12
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.4
10°-20°	208.0	3.9
20°-30°	309.4	5.8
30°-40°	366.5	6.9
40°-50°	378.9	7.1
50°-60°	349.0	6.6
60°-70°	282.1	5.3
70°-80°	189.0	3.6
80°-90°	100.1	1.9
90°-100°	336.1	6.3
100°-110°	644.8	12.1
110°-120°	594.3	11.2
120°-130°	475.0	8.9
130°-140°	375.6	7.1
140°-150°	279.7	5.3
150°-160°	195.9	3.7
160°-170°	115.5	2.2
170°-180°	37.6	0.7
0°-30°	590.7	11.1
0°-40°	957.1	18.0
0°-60°	1685.1	31.7
0°-90°	2256.3	42.5
90°-120°	1575.2	29.7
90°-150°	2705.6	50.9
90°-180°	3055.0	57.5
0°-180°	5310.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	44	75	96	103	10
95°	36	106	748	386	261	35
105°	95	143	609	1173	1098	100
115°	162	201	485	1024	1202	160
125°	222	260	454	810	943	197
135°	258	310	439	670	775	200
145°	299	342	435	545	603	187
155°	341	367	424	479	500	157
165°	372	382	407	431	438	105
175°	387	387	390	395	393	37
180°	388	388	388	388	388	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.9	29.4	35.1	40.9	46.6	52.5	58.3	64.4	70.3	76.4	80.4
90°	12.9	19.1	26.1	33.1	40.0	47.2	53.7	61.0	67.5	74.8	79.5
92.5°	20.5	27.5	39.1	53.8	72.2	100.5	149.1	226.5	310.1	312.0	267.7
95°	35.7	40.9	51.5	64.5	86.1	126.3	215.7	393.5	615.0	748.2	737.1
97.5°	51.8	56.7	65.0	77.6	97.0	127.1	188.0	319.6	550.9	791.5	912.9
100°	63.1	68.2	74.9	87.0	105.4	133.4	184.1	291.2	493.6	754.7	953.7
102.5°	75.6	79.8	85.6	98.1	115.0	142.1	187.7	278.4	450.0	692.8	924.9
105°	95.2	97.9	104.5	115.0	130.2	156.0	195.5	270.1	405.8	608.7	836.4
107.5°	114.3	118.2	124.2	132.9	148.2	171.5	209.6	274.1	385.4	550.1	747.1
110°	128.1	131.7	136.8	145.9	159.6	183.3	220.1	278.8	378.1	522.0	695.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.5	145.6	149.8	158.4	171.8	194.6	230.0	285.4	375.8	504.6	656.9
115°	162.5	165.2	168.8	177.0	189.9	212.2	245.6	295.3	374.7	484.7	613.6
117.5°	180.5	183.6	186.9	194.7	208.8	230.2	261.7	307.1	376.5	473.1	586.2
120°	193.0	195.9	199.5	207.0	220.8	242.6	273.8	315.3	379.3	466.9	570.6
122.5°	205.5	207.5	210.2	217.5	232.3	253.8	284.9	324.4	381.4	461.3	556.8
125°	222.0	223.4	227.1	234.0	248.7	270.6	299.8	336.8	385.5	453.8	537.8
127.5°	234.2	236.4	241.2	249.9	265.6	287.2	314.8	348.6	390.9	448.4	520.0
130°	242.3	244.5	250.6	260.6	276.8	298.3	324.9	356.9	394.5	445.3	508.7
132.5°	248.0	250.9	258.4	269.8	286.8	308.0	334.1	363.7	398.2	442.9	498.7
135°	258.0	260.9	270.2	282.5	298.7	320.4	345.8	372.8	402.9	439.2	486.0
137.5°	270.7	272.9	281.5	293.9	309.8	331.8	354.4	379.7	407.8	437.5	475.1
140°	277.6	279.9	289.3	301.8	316.6	337.8	360.7	384.3	409.5	436.3	469.4
142.5°	286.3	287.9	296.5	308.9	323.0	342.8	364.3	386.5	410.3	435.7	464.8
145°	299.4	300.8	308.5	319.3	333.2	351.1	371.4	390.9	412.1	434.7	459.0
147.5°	312.4	313.4	320.1	330.3	342.5	358.3	376.1	393.8	412.8	432.7	453.6
150°	320.6	322.1	327.6	337.8	348.7	362.0	379.2	395.6	412.8	430.8	449.6
152.5°	329.3	330.3	335.1	344.0	354.4	366.4	382.3	396.9	412.2	428.3	445.2
155°	340.9	340.9	345.6	353.4	361.2	372.2	385.5	398.0	410.5	423.8	437.9
157.5°	351.2	351.1	354.8	361.5	368.4	376.7	388.1	398.8	408.5	419.1	431.0
160°	358.1	357.3	360.5	365.9	372.2	379.2	389.4	398.8	406.6	416.0	425.4
162.5°	363.7	363.0	366.1	370.9	375.9	381.7	390.6	398.1	404.7	412.2	420.3
165°	372.2	370.6	373.0	376.9	380.0	384.7	390.9	397.2	401.9	406.6	412.8
167.5°	377.8	377.0	378.4	380.6	382.8	385.8	390.9	395.3	397.5	401.1	405.5
170°	381.6	380.8	381.6	383.1	384.7	387.0	390.9	394.1	395.6	398.0	401.1
172.5°	384.1	382.7	383.4	385.0	385.9	387.0	390.3	392.8	393.1	394.2	396.7
175°	387.0	385.5	386.3	387.0	387.0	387.0	389.4	390.9	390.2	390.2	390.9
177.5°	388.4	387.2	387.2	387.8	387.2	387.2	388.4	389.1	387.8	387.8	388.4
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	84.4	88.5	92.5	95.4	96.5	97.7	99.1	100.2
90°	84.1	88.8	93.5	97.6	98.8	99.9	101.9	103.1
92.5°	205.9	171.7	150.6	141.4	132.6	131.9	132.0	131.9
95°	625.1	509.9	417.5	354.3	299.9	277.6	272.6	261.2
97.5°	896.0	816.2	726.1	637.1	589.9	547.3	525.8	516.9
100°	1017.4	982.7	905.7	826.7	773.7	718.4	690.5	679.0
102.5°	1056.7	1083.7	1048.5	995.6	938.9	899.9	869.5	861.1
105°	1027.5	1138.0	1175.7	1169.4	1145.6	1121.0	1106.5	1098.3
107.5°	935.6	1081.8	1173.5	1216.5	1230.3	1231.1	1227.0	1221.8
110°	867.8	1019.6	1133.0	1201.7	1238.1	1254.1	1260.7	1261.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	813.8	957.9	1072.5	1153.0	1205.6	1232.3	1247.1	1253.9
115°	745.7	869.9	980.1	1067.3	1129.3	1167.9	1190.8	1201.9
117.5°	700.1	807.4	902.6	982.8	1044.9	1084.8	1107.7	1115.1
120°	675.1	771.8	860.7	931.5	990.3	1028.9	1051.0	1058.3
122.5°	655.5	745.2	824.6	890.9	943.5	978.9	1001.1	1007.7
125°	627.3	709.7	780.5	838.5	883.2	916.1	934.1	942.8
127.5°	598.4	675.3	741.3	795.7	836.4	865.7	882.9	887.4
130°	580.6	651.8	715.2	767.6	807.5	834.2	850.6	856.2
132.5°	562.6	629.4	687.1	737.6	777.4	803.9	819.0	825.0
135°	538.2	594.4	646.6	692.7	728.0	754.6	769.5	775.1
137.5°	517.9	563.5	607.1	646.3	677.8	701.9	715.6	721.4
140°	506.4	545.0	582.9	617.0	646.6	667.6	680.0	684.6
142.5°	496.5	529.2	561.8	591.4	616.6	634.5	646.3	650.2
145°	484.1	509.2	534.3	556.2	575.6	589.6	598.8	602.6
147.5°	473.0	492.9	511.8	528.1	543.2	554.1	559.5	561.2
150°	466.8	484.0	498.8	513.0	524.9	534.5	537.8	538.7
152.5°	460.5	475.9	489.5	500.4	510.3	517.9	521.0	521.8
155°	451.2	463.7	474.6	483.2	491.0	496.5	498.8	499.6
157.5°	441.8	452.1	460.5	467.3	473.4	477.9	480.1	479.9
160°	435.5	443.3	451.2	456.6	462.1	466.0	467.6	466.8
162.5°	428.6	435.8	442.4	447.2	451.5	454.7	455.1	454.9
165°	419.1	424.6	429.3	433.2	436.3	437.9	437.9	437.9
167.5°	410.0	413.6	417.2	420.0	421.6	423.0	422.4	422.2
170°	405.0	407.4	409.7	411.3	412.8	413.6	413.6	412.8
172.5°	399.4	401.7	403.5	404.4	404.7	406.1	404.9	404.1
175°	393.3	393.3	394.9	394.9	394.9	395.6	394.1	393.3
177.5°	389.1	389.7	389.7	389.7	389.1	389.7	387.8	387.8
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8

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