

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: P333219-927

Luminaire Tested: **S125DIP-S850D590U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333219-927
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: S125DIP-S850D590U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4281.3 lumens
Efficiency: N/A
Efficacy: 106.2 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

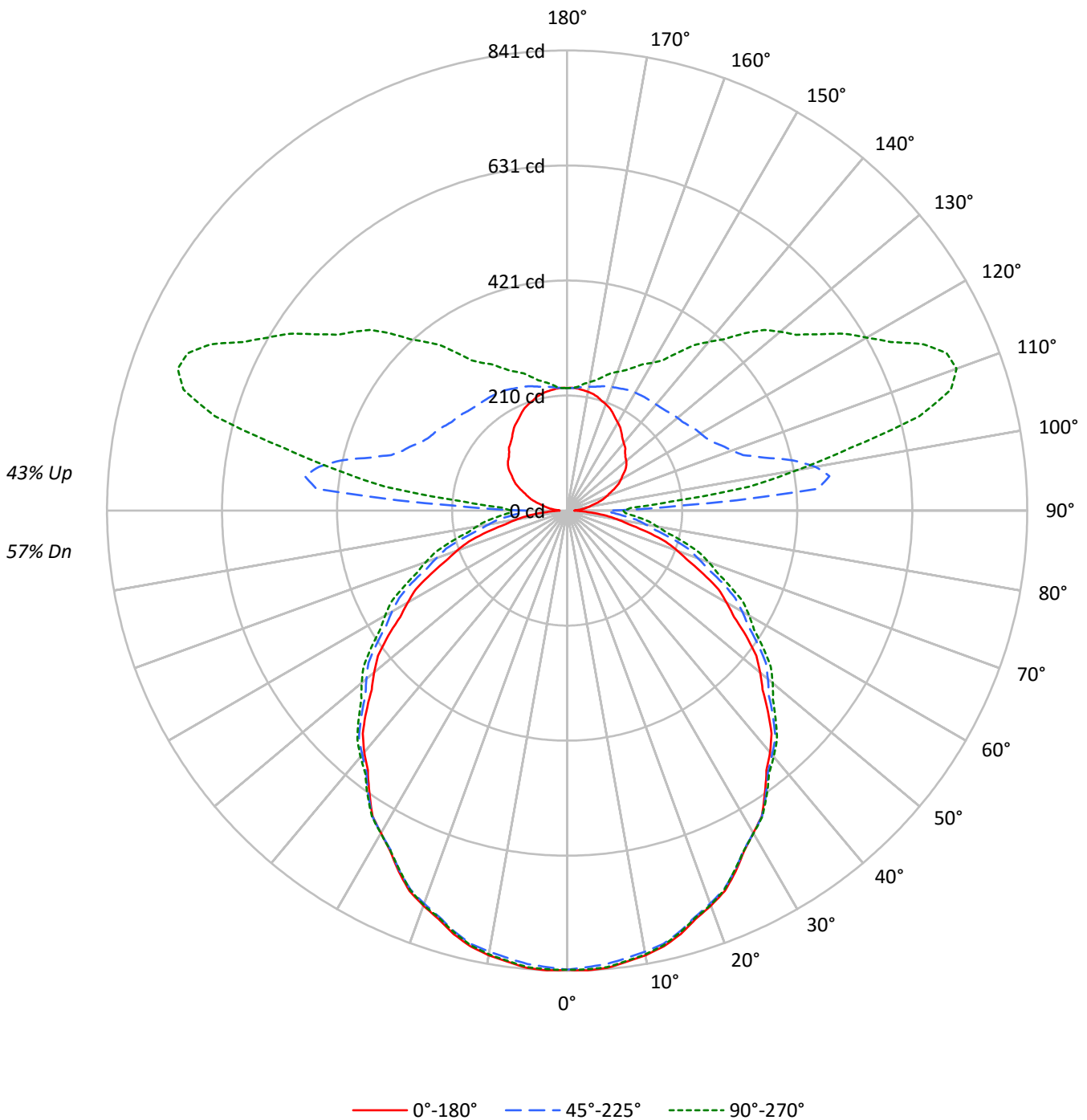
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333219-927

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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57
1	99	94	90	86	91	87	84	80	75	72	70	64	62	60	54	53	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	53	50	47	45	42	38
3	81	71	64	57	75	67	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	41	44	39	35	37	33	31	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	27	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	25	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.9
10°-20°	225.3	5.3
20°-30°	335.0	7.8
30°-40°	396.8	9.3
40°-50°	410.3	9.6
50°-60°	377.9	8.8
60°-70°	305.5	7.1
70°-80°	204.6	4.8
80°-90°	107.4	2.5
90°-100°	222.0	5.2
100°-110°	393.1	9.2
110°-120°	357.2	8.3
120°-130°	282.3	6.6
130°-140°	220.5	5.1
140°-150°	162.3	3.8
150°-160°	113.2	2.6
160°-170°	66.7	1.6
170°-180°	21.7	0.5
0°-30°	639.6	14.9
0°-40°	1036.4	24.2
0°-60°	1824.7	42.6
0°-90°	2442.1	57.0
90°-120°	972.3	22.7
90°-150°	1637.5	38.2
90°-180°	1839.0	43.0
0°-180°	4281.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	44	75	95	102	10
95°	26	76	460	259	190	24
105°	58	93	373	706	666	62
115°	96	122	295	613	719	95
125°	130	152	271	483	562	115
135°	150	179	257	395	458	116
145°	173	198	251	317	352	108
155°	197	212	245	277	289	91
165°	215	221	235	249	253	61
175°	224	224	226	228	227	21
180°	224	224	224	224	224	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.7	31.7	37.7	43.7	49.8	56.0	62.3	68.7	75.0	81.4	85.7
90°	13.6	19.9	26.7	33.4	40.2	47.1	53.8	60.9	67.6	74.7	79.4
92.5°	17.3	23.9	33.2	44.2	57.4	76.4	107.5	155.2	206.5	210.5	186.8
95°	25.6	30.8	39.2	48.9	63.6	89.4	144.0	249.6	380.6	460.4	455.9
97.5°	34.5	39.3	46.1	55.4	68.6	88.3	126.4	205.2	341.7	483.5	555.5
100°	40.7	45.4	51.1	59.9	72.3	90.7	122.8	187.4	307.0	460.7	577.5
102.5°	47.6	51.7	56.7	65.6	77.0	94.8	123.8	178.9	280.7	423.7	559.5
105°	58.5	61.4	66.5	74.0	84.2	101.0	126.4	172.1	253.0	372.9	506.2
107.5°	69.1	72.4	77.1	83.3	93.2	108.5	133.1	172.8	239.6	337.2	452.7
110°	76.7	79.8	83.8	90.1	99.0	114.5	138.1	174.4	234.2	319.7	421.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	85.0	87.7	90.9	96.7	105.2	120.0	142.8	177.1	231.7	308.4	398.0
115°	96.3	98.4	101.0	106.4	114.5	128.7	150.2	181.2	229.3	295.1	371.1
117.5°	106.2	108.4	110.7	115.7	124.1	137.8	158.0	186.4	228.6	286.5	353.3
120°	113.4	115.3	117.7	122.3	130.6	144.3	164.3	190.2	229.2	281.7	343.1
122.5°	120.4	121.7	123.3	127.7	136.3	149.8	169.7	194.3	229.2	277.3	333.8
125°	129.8	130.6	132.6	136.5	144.9	158.4	177.0	200.0	229.9	271.1	321.0
127.5°	136.5	137.7	140.4	145.4	154.3	167.5	184.8	205.7	231.6	266.2	308.9
130°	141.2	142.4	145.8	151.5	160.8	173.7	190.3	210.0	232.9	263.5	301.3
132.5°	144.2	145.8	150.1	156.7	166.5	179.2	195.2	213.3	234.2	260.9	294.4
135°	149.9	151.5	156.7	163.7	173.1	185.8	201.1	217.3	235.3	256.9	285.0
137.5°	157.1	158.4	163.3	170.3	179.5	192.3	205.7	220.5	237.1	254.5	277.3
140°	160.8	162.2	167.5	174.8	183.4	195.7	209.0	222.7	237.3	252.9	273.0
142.5°	165.9	166.7	171.6	178.7	186.8	198.2	210.6	223.5	237.3	251.9	269.6
145°	173.4	174.2	178.5	184.7	192.6	202.9	214.7	225.9	238.1	251.3	265.7
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.3
150°	185.3	186.2	189.3	195.2	201.5	209.2	219.2	228.6	238.6	249.0	259.8
152.5°	190.4	190.8	193.7	198.8	204.8	211.8	220.9	229.3	238.2	247.6	257.3
155°	197.0	197.0	199.7	204.2	208.7	215.1	222.8	230.0	237.3	244.9	253.0
157.5°	203.0	202.9	205.1	209.0	212.9	217.7	224.3	230.4	236.1	242.2	249.1
160°	207.0	206.5	208.3	211.5	215.1	219.2	225.1	230.4	235.0	240.4	245.8
162.5°	210.2	209.8	211.6	214.4	217.3	220.6	225.8	230.1	233.9	238.2	243.0
165°	215.1	214.2	215.6	217.8	219.6	222.4	225.9	229.6	232.3	235.0	238.6
167.5°	218.3	217.9	218.7	220.0	221.3	222.9	225.9	228.5	229.7	231.8	234.3
170°	220.5	220.1	220.5	221.4	222.4	223.7	225.9	227.8	228.6	230.0	231.8
172.5°	222.0	221.2	221.6	222.5	223.1	223.7	225.6	227.0	227.2	227.8	229.3
175°	223.7	222.8	223.2	223.7	223.7	223.7	225.1	225.9	225.5	225.5	225.9
177.5°	224.5	223.8	223.8	224.1	223.8	223.8	224.5	224.8	224.1	224.1	224.5
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	90.0	94.3	98.6	101.6	102.8	104.1	105.4	106.7
90°	84.0	88.6	93.3	97.0	98.2	99.5	101.2	102.5
92.5°	153.0	135.1	124.8	120.8	116.3	116.5	117.2	117.7
95°	393.0	328.4	276.8	241.5	210.6	198.4	196.1	190.1
97.5°	547.5	503.2	452.9	402.7	376.0	351.9	340.0	335.5
100°	616.2	597.9	555.2	510.6	480.5	449.1	433.5	427.3
102.5°	637.5	654.8	636.1	606.7	574.5	552.5	535.4	531.1
105°	618.3	683.9	707.4	704.9	691.7	678.1	670.3	666.2
107.5°	563.3	649.6	704.3	730.2	738.6	739.7	737.8	735.4
110°	522.8	612.1	679.3	720.1	741.7	751.6	756.1	757.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	490.2	575.0	642.9	690.5	721.4	737.4	746.6	751.1
115°	449.0	522.3	587.5	639.0	675.3	698.1	711.9	718.8
117.5°	420.6	484.1	540.5	587.9	624.4	648.0	661.9	666.7
120°	405.0	462.3	515.2	557.0	591.5	614.3	627.6	632.3
122.5°	392.3	445.5	492.7	532.0	562.9	583.9	597.2	601.6
125°	374.1	423.1	465.3	499.8	526.0	545.4	556.3	561.7
127.5°	355.4	401.1	440.5	472.9	496.9	514.3	524.7	527.8
130°	344.1	386.4	424.2	455.3	478.9	494.6	504.6	508.3
132.5°	332.4	372.2	406.8	436.7	460.1	475.8	484.8	488.7
135°	316.3	349.9	381.2	408.6	429.4	445.2	454.3	457.9
137.5°	303.0	330.4	356.6	379.9	398.5	412.7	421.0	424.7
140°	295.3	318.5	341.4	361.7	379.1	391.7	399.2	402.2
142.5°	288.8	308.4	328.0	345.7	360.6	371.3	378.4	381.1
145°	280.7	295.6	310.5	323.5	335.1	343.5	349.2	351.7
147.5°	273.6	285.3	296.4	305.9	314.8	321.2	324.5	325.6
150°	269.7	279.7	288.3	296.5	303.5	309.1	311.1	311.7
152.5°	266.2	275.0	282.9	289.2	294.9	299.4	301.2	301.7
155°	260.7	268.0	274.3	279.2	283.8	286.9	288.3	288.8
157.5°	255.3	261.3	266.2	270.1	273.5	276.2	277.4	277.3
160°	251.7	256.2	260.7	263.9	267.0	269.3	270.2	269.7
162.5°	247.7	251.9	255.6	258.5	260.9	262.8	263.0	262.9
165°	242.2	245.3	248.1	250.3	252.2	253.0	253.0	253.0
167.5°	236.9	239.1	241.1	242.7	243.7	244.5	244.1	244.0
170°	234.1	235.4	236.8	237.7	238.6	239.1	239.1	238.6
172.5°	230.8	232.2	233.1	233.7	233.9	234.7	234.0	233.5
175°	227.3	227.3	228.2	228.2	228.2	228.6	227.8	227.3
177.5°	224.8	225.2	225.2	225.2	224.8	225.2	224.1	224.1
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1

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