

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: P333501-940

Luminaire Tested: **S125RDIP-S375D590U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333501-940
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-S375D590U940-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3182.5 lumens
Efficiency: N/A
Efficacy: 124.3 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: General Diffuse

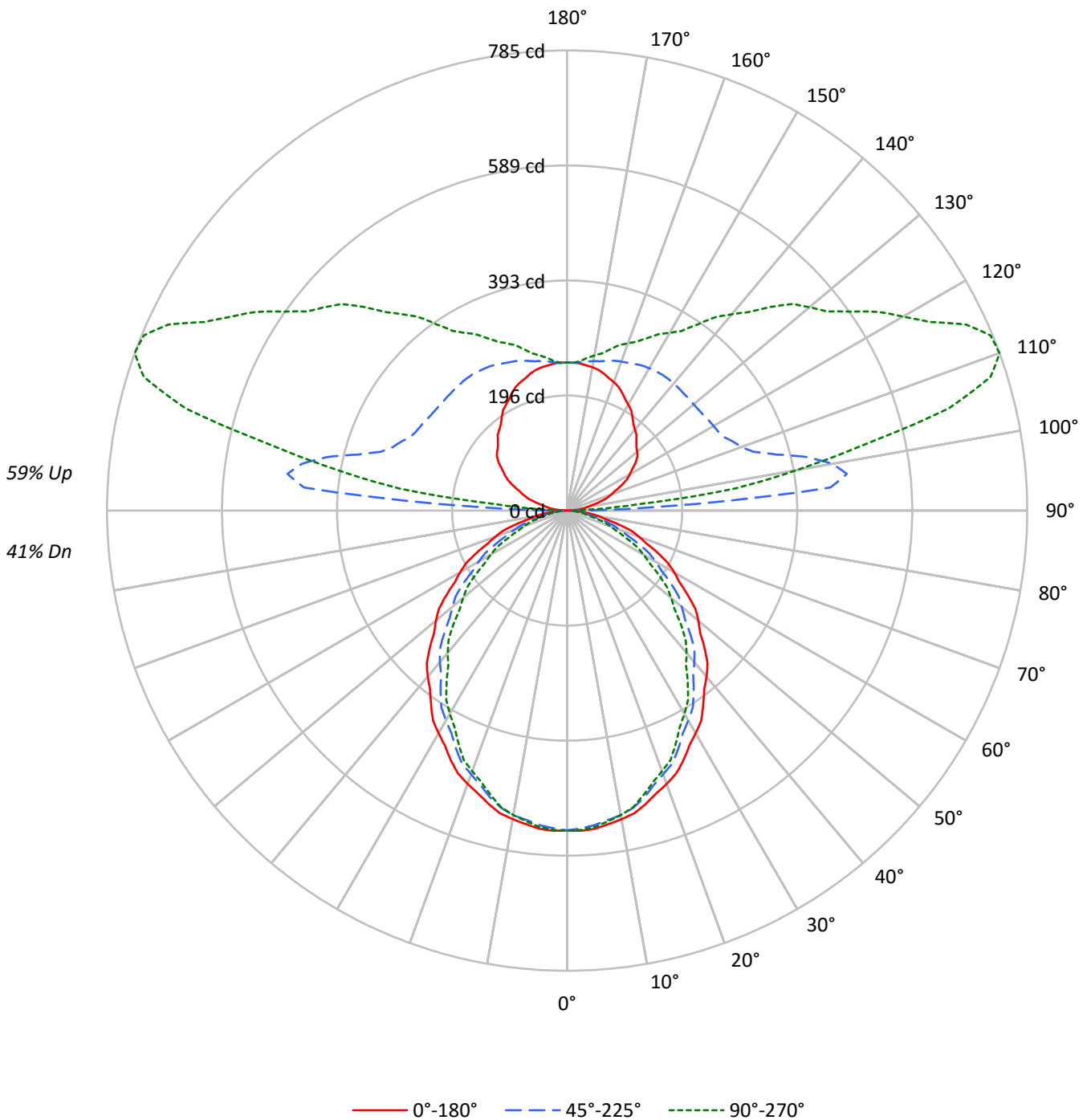
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	35
2	87	80	74	69	79	73	68	64	60	57	54	48	46	44	37	36	34	29
3	80	71	63	58	72	65	58	54	53	49	45	43	40	37	33	31	29	25
4	73	63	55	49	66	57	51	45	47	42	39	38	35	32	30	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	20	17
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	20	17	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	1.6
10°-20°	143.4	4.5
20°-30°	207.9	6.5
30°-40°	237.0	7.4
40°-50°	231.0	7.3
50°-60°	194.4	6.1
60°-70°	136.3	4.3
70°-80°	70.1	2.2
80°-90°	19.1	0.6
90°-100°	182.9	5.7
100°-110°	393.1	12.4
110°-120°	369.0	11.6
120°-130°	299.0	9.4
130°-140°	240.0	7.5
140°-150°	181.1	5.7
150°-160°	127.5	4.0
160°-170°	75.1	2.4
170°-180°	24.4	0.8
0°-30°	402.6	12.7
0°-40°	639.6	20.1
0°-60°	1065.0	33.5
0°-90°	1290.4	40.5
90°-120°	945.0	29.7
90°-150°	1665.0	52.3
90°-180°	1892.0	59.5
0°-180°	3182.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	25
90°	0	5	8	11	12	2
95°	17	50	451	205	120	18
105°	58	80	369	726	674	61
115°	103	124	296	638	751	101
125°	142	167	284	508	592	126
135°	167	201	282	426	491	129
145°	194	223	283	352	388	122
155°	222	239	276	312	325	102
165°	242	249	264	281	285	68
175°	252	252	254	257	256	24
180°	252	252	252	252	252	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.7	7.3	7.0	6.7	6.3	6.2	6.2	6.4	6.4	6.6	6.7
90°	0.5	1.0	2.1	3.0	4.1	5.1	5.6	6.6	7.1	8.1	8.6
92.5°	6.2	7.5	11.8	18.1	26.8	41.7	69.5	116.1	166.7	164.0	132.8
95°	16.8	17.3	21.4	26.9	38.2	61.1	115.5	227.4	367.7	450.7	441.0
97.5°	27.9	28.4	31.3	36.9	47.0	63.5	99.5	181.5	328.4	481.3	558.0
100°	35.6	36.6	38.7	44.2	53.9	69.2	98.7	164.8	293.0	459.3	586.5
102.5°	44.1	44.8	46.4	52.4	61.3	76.1	102.4	157.9	266.1	420.6	569.4
105°	57.5	57.5	60.0	65.1	73.2	87.5	109.9	155.2	240.0	368.8	514.8
107.5°	70.5	71.5	73.9	78.1	86.6	99.4	121.1	159.8	229.1	333.1	459.1
110°	79.9	80.9	82.9	87.5	95.1	108.3	129.2	164.3	225.9	316.4	427.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	89.3	90.2	91.8	96.5	104.1	116.9	137.0	170.0	225.9	306.7	403.7
115°	102.7	103.8	105.3	109.9	117.5	130.2	149.0	178.5	227.4	296.0	377.9
117.5°	114.9	116.5	118.2	122.7	131.3	143.7	161.5	188.3	230.7	290.9	362.6
120°	123.1	124.7	126.6	131.3	139.9	152.6	170.4	194.8	234.0	288.4	354.0
122.5°	131.6	132.8	134.4	138.9	148.5	161.1	179.0	202.2	236.8	286.4	346.7
125°	142.4	143.5	146.0	150.5	160.2	173.4	190.2	212.1	241.7	283.8	336.7
127.5°	150.9	152.4	155.7	161.5	171.7	184.9	201.1	221.2	247.0	282.6	327.6
130°	156.1	157.7	161.8	168.4	179.1	192.3	208.0	227.4	250.3	281.8	321.5
132.5°	160.2	162.2	167.0	174.5	185.6	198.8	214.5	232.6	254.0	281.8	316.6
135°	166.8	168.9	175.0	183.2	193.8	207.5	223.3	240.0	258.9	281.8	310.8
137.5°	175.2	176.7	182.4	190.6	201.0	215.2	229.5	245.6	263.5	282.4	305.6
140°	180.0	181.6	187.7	195.8	205.5	219.3	234.0	249.2	265.6	282.9	303.2
142.5°	185.7	186.9	192.6	200.7	210.0	222.9	236.8	251.3	266.7	283.2	301.1
145°	194.3	195.3	200.4	207.5	216.7	228.4	241.7	254.3	268.0	282.9	298.1
147.5°	203.2	203.8	208.2	214.8	222.7	233.1	244.7	256.2	268.6	281.5	294.9
150°	208.6	209.6	213.1	219.7	226.9	235.5	246.7	257.3	268.6	280.3	292.5
152.5°	214.3	214.8	218.0	223.8	230.5	238.4	248.7	258.2	268.1	278.7	289.6
155°	221.8	221.8	224.8	229.9	235.0	242.1	250.7	258.9	267.1	275.7	284.8
157.5°	228.5	228.4	230.9	235.2	239.7	245.0	252.5	259.4	265.7	272.6	280.4
160°	233.0	232.5	234.5	238.1	242.1	246.7	253.3	259.4	264.5	270.6	276.7
162.5°	236.7	236.1	238.2	241.3	244.6	248.3	254.1	259.0	263.3	268.1	273.5
165°	242.1	241.1	242.6	245.1	247.2	250.3	254.3	258.4	261.4	264.5	268.6
167.5°	245.8	245.3	246.2	247.6	249.1	250.9	254.3	257.2	258.6	260.9	263.8
170°	248.3	247.7	248.3	249.2	250.3	251.8	254.3	256.4	257.3	258.9	260.9
172.5°	249.9	249.0	249.4	250.5	251.1	251.8	254.0	255.6	255.7	256.5	258.1
175°	251.8	250.7	251.3	251.8	251.8	251.8	253.3	254.3	253.8	253.8	254.3
177.5°	252.7	251.9	251.9	252.3	251.9	251.9	252.7	253.1	252.3	252.3	252.7
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	6.8	6.9	7.0	7.1	7.0	7.0	7.0	7.0
90°	9.2	9.6	10.2	11.1	11.1	11.1	11.7	11.7
92.5°	90.2	65.5	49.2	41.7	35.2	34.0	33.3	32.5
95°	365.7	288.4	225.9	183.2	147.0	131.7	127.7	119.6
97.5°	544.7	490.4	429.5	370.1	338.7	310.1	295.4	288.9
100°	625.6	600.7	548.3	495.4	460.3	423.7	404.9	396.7
102.5°	652.9	668.2	643.1	607.3	569.8	543.8	523.3	517.2
105°	636.9	706.5	728.9	723.3	707.0	690.3	680.1	674.0
107.5°	579.4	672.4	730.0	756.4	764.7	764.6	761.3	757.2
110°	537.2	633.8	705.5	748.8	771.6	781.3	784.9	784.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	503.8	595.6	668.1	719.1	752.5	769.1	777.9	781.6
115°	461.8	540.7	610.4	665.8	705.5	730.0	744.1	750.8
117.5°	434.8	502.7	562.8	613.7	653.4	678.6	692.7	696.8
120°	420.2	481.2	537.2	581.9	619.6	644.0	657.7	661.7
122.5°	409.2	465.7	515.6	557.5	591.0	613.4	627.1	630.8
125°	393.2	445.1	489.4	525.9	554.5	575.3	586.5	591.6
127.5°	376.9	425.3	466.6	501.0	526.7	545.2	555.7	558.0
130°	366.8	411.5	451.2	484.2	509.7	526.5	536.6	539.7
132.5°	356.6	398.5	434.5	466.4	491.8	508.5	517.9	521.4
135°	343.3	378.4	411.0	440.0	462.4	479.1	488.3	491.3
137.5°	332.2	360.5	387.6	412.2	432.2	447.5	455.9	459.3
140°	326.0	350.0	373.4	394.8	413.6	426.8	434.4	436.9
142.5°	320.7	341.0	361.1	379.7	395.7	406.8	414.0	416.2
145°	313.9	329.6	345.4	359.1	371.3	380.0	385.6	387.6
147.5°	307.4	320.1	332.3	342.6	352.3	359.2	362.5	363.4
150°	303.6	314.9	324.5	333.7	341.3	347.4	349.5	350.0
152.5°	299.6	309.6	318.4	325.6	332.0	336.8	338.9	339.4
155°	293.5	301.7	308.7	314.3	319.4	323.0	324.5	325.0
157.5°	287.4	294.1	299.6	304.0	307.9	310.9	312.3	312.2
160°	283.3	288.4	293.5	297.0	300.6	303.2	304.2	303.6
162.5°	278.8	283.6	287.8	291.0	293.7	295.9	296.0	296.0
165°	272.6	276.2	279.3	281.8	283.8	284.8	284.8	284.8
167.5°	266.7	269.1	271.4	273.2	274.3	275.2	274.7	274.6
170°	263.5	265.0	266.5	267.5	268.6	269.1	269.1	268.6
172.5°	259.8	261.4	262.4	263.1	263.3	264.2	263.4	262.9
175°	255.8	255.8	256.9	256.9	256.9	257.3	256.4	255.8
177.5°	253.1	253.5	253.5	253.5	253.1	253.5	252.3	252.3
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3

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