

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: P333501-927

Luminaire Tested: **S125RDIP-S375D590U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333501-927
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-S375D590U927-4F0-1E-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: 2827.2 lumens
Efficiency: N/A
Efficacy: 110.4 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

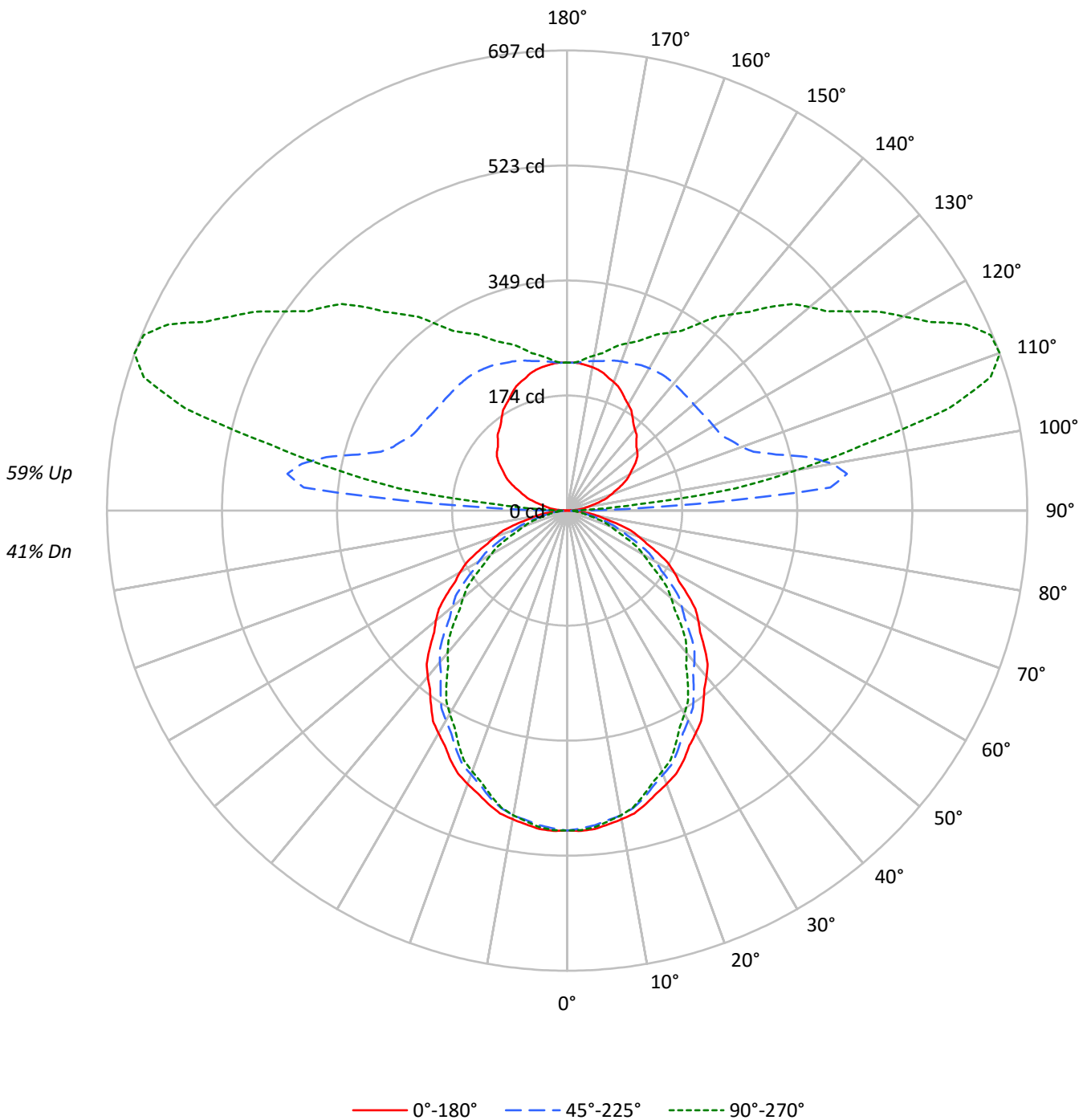
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3130	3130	3130
5°	3138	3102	3121
10°	3114	3074	3074
15°	3077	3011	2986
20°	3030	2924	2889
25°	2974	2838	2776
30°	2905	2738	2651
35°	2834	2636	2511
40°	2769	2528	2373
45°	2689	2408	2223
50°	2608	2277	2067
55°	2514	2152	1901
60°	2421	2001	1721
65°	2311	1825	1516
70°	2185	1603	1307
75°	2011	1352	1088
80°	1770	1060	915
85°	1489	867	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.6
10°-20°	127.4	4.5
20°-30°	184.7	6.5
30°-40°	210.5	7.4
40°-50°	205.2	7.3
50°-60°	172.7	6.1
60°-70°	121.1	4.3
70°-80°	62.2	2.2
80°-90°	17.0	0.6
90°-100°	162.5	5.7
100°-110°	349.2	12.4
110°-120°	327.8	11.6
120°-130°	265.6	9.4
130°-140°	213.2	7.5
140°-150°	160.9	5.7
150°-160°	113.2	4.0
160°-170°	66.7	2.4
170°-180°	21.7	0.8
0°-30°	357.7	12.7
0°-40°	568.2	20.1
0°-60°	946.1	33.5
0°-90°	1146.4	40.5
90°-120°	839.5	29.7
90°-150°	1479.1	52.3
90°-180°	1681.0	59.5
0°-180°	2827.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	484	482	478	482	481	46
15°	460	458	450	450	447	130
25°	417	411	398	394	390	192
35°	360	350	334	324	318	225
45°	294	283	264	249	243	227
55°	223	211	191	175	169	200
65°	151	138	119	105	99	150
75°	81	69	54	46	44	85
85°	20	14	12	11	11	23
90°	0	4	7	9	10	2
95°	15	44	400	182	106	16
105°	51	71	328	645	599	54
115°	91	110	263	567	667	90
125°	126	148	252	451	526	112
135°	148	178	250	378	436	115
145°	173	198	251	313	344	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°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	485.6	485.4	485.2	485.1	484.8	484.4	483.8	483.1	482.4	481.8	482.4
5°	484.0	483.7	483.4	483.0	482.7	482.1	481.2	480.3	479.4	478.5	479.3
7.5°	479.3	479.0	478.6	478.3	478.0	477.3	476.3	475.2	474.1	473.0	473.6
10°	474.8	474.6	474.4	474.1	473.9	473.2	472.1	470.9	469.8	468.7	468.9
12.5°	469.8	469.5	469.3	469.0	468.7	467.7	466.2	464.7	463.1	461.6	461.8
15°	460.2	459.7	459.2	458.8	458.3	457.2	455.4	453.8	452.0	450.4	450.3
17.5°	449.3	448.5	447.8	447.0	446.3	444.9	442.7	440.5	438.4	436.3	435.9
20°	440.8	440.0	439.2	438.4	437.5	435.9	433.2	430.6	428.0	425.4	425.0
22.5°	431.4	430.6	429.8	429.0	428.2	426.4	423.7	421.0	418.2	415.5	414.7
25°	417.4	416.1	414.9	413.7	412.5	410.4	407.3	404.3	401.3	398.3	397.3
27.5°	401.2	399.8	398.3	396.8	395.3	393.0	389.8	386.5	383.3	380.1	378.6
30°	389.5	388.0	386.4	384.9	383.3	380.9	377.5	374.1	370.7	367.2	365.4
32.5°	378.1	376.3	374.5	372.7	370.9	368.3	364.8	361.3	357.8	354.3	352.3
35°	359.5	357.6	355.6	353.6	351.7	348.9	345.2	341.6	337.9	334.3	331.9
37.5°	341.3	338.9	336.5	334.1	331.8	328.7	325.0	321.2	317.4	313.6	310.8
40°	328.4	326.0	323.5	321.1	318.6	315.4	311.6	307.7	303.7	299.8	296.8
42.5°	314.9	312.4	309.9	307.4	304.9	301.7	297.6	293.6	289.5	285.5	282.6
45°	294.4	292.0	289.6	287.2	284.9	281.5	277.0	272.6	268.1	263.6	260.3
47.5°	273.1	270.5	268.1	265.5	263.1	259.6	255.1	250.6	246.1	241.5	238.2
50°	259.6	256.9	254.2	251.5	248.8	245.2	240.5	235.9	231.2	226.6	223.2
52.5°	244.9	242.2	239.4	236.7	233.9	230.4	226.0	221.6	217.2	212.9	209.2
55°	223.3	220.7	218.1	215.6	212.9	209.4	204.8	200.2	195.7	191.1	187.4
57.5°	201.5	198.8	195.9	193.1	190.4	186.8	182.4	178.0	173.6	169.2	165.6
60°	187.4	184.6	181.7	178.9	176.0	172.5	168.0	163.7	159.2	154.9	151.3
62.5°	172.5	169.8	167.1	164.4	161.6	158.0	153.6	149.2	144.7	140.2	136.9
65°	151.2	148.5	145.7	142.9	140.1	136.6	132.3	128.0	123.7	119.4	116.1
67.5°	130.1	127.3	124.5	121.8	119.0	115.5	111.4	107.3	103.1	99.0	96.0
70°	115.7	113.0	110.2	107.4	104.6	101.2	97.1	93.1	89.0	84.9	82.4
72.5°	101.6	98.9	96.3	93.6	90.9	87.5	83.7	79.9	76.1	72.3	70.0
75°	80.6	78.1	75.7	73.2	70.8	67.9	64.4	61.0	57.6	54.2	52.4
77.5°	59.6	57.7	55.7	53.7	51.8	49.4	46.7	44.0	41.3	38.5	37.2
80°	47.6	45.6	43.7	41.7	39.8	37.7	35.4	33.1	30.8	28.5	27.8
82.5°	35.9	34.1	32.4	30.6	28.8	27.2	25.7	24.1	22.5	20.9	20.6
85°	20.1	18.7	17.2	15.8	14.3	13.3	12.9	12.5	12.1	11.7	11.6
87.5°	6.8	6.5	6.2	5.9	5.6	5.5	5.5	5.7	5.7	5.9	5.9
90°	0.5	0.9	1.8	2.7	3.6	4.5	5.0	5.9	6.3	7.2	7.7
92.5°	5.5	6.7	10.5	16.1	23.8	37.1	61.7	103.1	148.1	145.7	118.0
95°	14.9	15.4	19.0	23.9	33.9	54.3	102.6	202.0	326.7	400.4	391.8
97.5°	24.8	25.3	27.8	32.8	41.7	56.4	88.4	161.2	291.8	427.5	495.7
100°	31.6	32.6	34.4	39.3	47.9	61.5	87.7	146.4	260.3	408.1	521.0
102.5°	39.2	39.8	41.2	46.6	54.4	67.6	90.9	140.3	236.4	373.7	505.8
105°	51.1	51.1	53.3	57.8	65.0	77.7	97.6	137.8	213.3	327.6	457.3
107.5°	62.7	63.5	65.7	69.4	76.9	88.3	107.6	142.0	203.5	295.9	407.8
110°	71.0	71.9	73.7	77.7	84.5	96.3	114.8	145.9	200.7	281.1	379.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.3	80.2	81.6	85.7	92.4	103.9	121.7	151.0	200.7	272.4	358.6
115°	91.3	92.2	93.6	97.6	104.4	115.7	132.4	158.6	202.0	263.0	335.7
117.5°	102.1	103.5	105.0	109.0	116.7	127.6	143.5	167.3	204.9	258.4	322.1
120°	109.3	110.7	112.5	116.6	124.3	135.5	151.4	173.1	207.9	256.2	314.5
122.5°	116.9	118.0	119.4	123.4	131.9	143.1	159.0	179.6	210.4	254.4	308.0
125°	126.5	127.5	129.7	133.7	142.4	154.1	169.0	188.5	214.7	252.2	299.1
127.5°	134.0	135.4	138.3	143.5	152.6	164.3	178.6	196.5	219.4	251.0	291.0
130°	138.7	140.1	143.7	149.6	159.1	170.8	184.8	202.0	222.4	250.3	285.6
132.5°	142.4	144.1	148.4	155.0	164.9	176.6	190.6	206.7	225.6	250.3	281.2
135°	148.2	150.0	155.4	162.7	172.1	184.3	198.4	213.3	230.0	250.3	276.1
137.5°	155.7	157.0	162.1	169.3	178.6	191.2	203.9	218.2	234.1	250.9	271.5
140°	159.9	161.3	166.8	174.0	182.6	194.8	207.9	221.4	235.9	251.3	269.3
142.5°	165.0	166.0	171.1	178.3	186.6	198.0	210.4	223.2	236.9	251.6	267.5
145°	172.6	173.5	178.0	184.3	192.5	202.9	214.7	225.9	238.1	251.3	264.8
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.0
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°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	483.1	483.8	484.4	484.7	484.7	484.6	484.5	484.4
5°	480.1	480.9	481.7	482.1	482.0	481.7	481.6	481.4
7.5°	474.1	474.8	475.3	475.5	475.3	475.2	475.0	474.8
10°	469.1	469.4	469.6	469.6	469.4	469.1	468.9	468.7
12.5°	461.9	462.2	462.3	462.2	461.8	461.4	461.1	460.7
15°	450.1	450.0	450.0	449.6	448.9	448.1	447.4	446.6
17.5°	435.5	435.1	434.7	434.1	433.6	432.9	432.3	431.7
20°	424.6	424.2	423.8	423.3	422.5	421.8	421.0	420.3
22.5°	413.8	413.0	412.3	411.5	411.0	410.4	409.8	409.2
25°	396.2	395.1	394.1	393.2	392.2	391.3	390.5	389.5
27.5°	377.2	375.7	374.1	373.0	372.2	371.3	370.4	369.6
30°	363.5	361.6	359.7	358.5	357.7	357.0	356.2	355.5
32.5°	350.2	348.2	346.0	344.6	343.6	342.7	341.7	340.9
35°	329.5	327.2	324.8	323.1	321.9	320.8	319.6	318.5
37.5°	307.9	305.1	302.3	300.3	299.2	298.1	297.0	295.9
40°	293.7	290.6	287.5	285.4	284.5	283.5	282.5	281.5
42.5°	279.6	276.6	273.6	271.5	270.1	268.5	267.1	265.7
45°	257.1	253.8	250.6	248.3	247.2	245.9	244.7	243.4
47.5°	234.9	231.5	228.1	225.8	224.4	223.1	221.7	220.4
50°	219.8	216.3	212.9	210.6	209.5	208.2	207.0	205.7
52.5°	205.5	201.8	198.1	195.7	194.5	193.3	192.0	190.8
55°	183.8	180.1	176.5	174.0	172.7	171.3	170.1	168.8
57.5°	162.1	158.5	154.9	152.5	151.4	150.2	149.1	147.9
60°	147.7	144.1	140.5	138.2	136.9	135.7	134.5	133.2
62.5°	133.6	130.2	126.9	124.7	123.4	122.2	121.0	119.8
65°	112.8	109.6	106.3	104.1	102.9	101.6	100.4	99.2
67.5°	93.0	90.1	87.1	85.1	84.1	83.2	82.1	81.2
70°	79.9	77.4	74.9	73.1	72.1	71.1	70.2	69.2
72.5°	67.7	65.4	63.1	61.6	60.9	60.3	59.6	58.9
75°	50.6	48.8	47.1	45.9	45.3	44.7	44.1	43.6
77.5°	36.0	34.8	33.5	32.6	32.2	31.8	31.4	31.0
80°	27.1	26.4	25.7	25.2	25.0	24.9	24.7	24.6
82.5°	20.3	19.9	19.6	19.3	19.3	19.2	19.1	18.9
85°	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
87.5°	6.0	6.1	6.2	6.3	6.3	6.3	6.3	6.2
90°	8.2	8.6	9.0	9.9	9.9	9.9	10.4	10.4
92.5°	80.1	58.1	43.7	37.1	31.3	30.2	29.5	28.8
95°	324.9	256.2	200.7	162.7	130.6	117.0	113.4	106.2
97.5°	483.9	435.7	381.6	328.8	300.9	275.5	262.4	256.7
100°	555.8	533.7	487.1	440.1	408.9	376.4	359.7	352.4
102.5°	580.0	593.7	571.3	539.6	506.2	483.1	464.9	459.5
105°	565.8	627.6	647.5	642.5	628.1	613.2	604.2	598.7
107.5°	514.8	597.4	648.5	672.0	679.4	679.3	676.3	672.6
110°	477.2	563.1	626.8	665.2	685.5	694.1	697.3	697.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	447.6	529.1	593.5	638.8	668.5	683.3	691.1	694.3
115°	410.3	480.4	542.2	591.5	626.8	648.5	661.1	667.0
117.5°	386.3	446.6	499.9	545.2	580.4	602.9	615.4	619.0
120°	373.3	427.5	477.2	517.0	550.4	572.1	584.3	587.9
122.5°	363.5	413.8	458.0	495.3	525.1	544.9	557.1	560.4
125°	349.3	395.4	434.7	467.2	492.6	511.1	521.0	525.5
127.5°	334.9	377.9	414.5	445.0	467.9	484.3	493.7	495.7
130°	325.8	365.6	400.8	430.2	452.8	467.7	476.7	479.4
132.5°	316.8	354.0	386.0	414.3	436.9	451.8	460.1	463.2
135°	305.0	336.2	365.1	390.9	410.7	425.6	433.8	436.5
137.5°	295.1	320.3	344.4	366.2	384.0	397.6	405.0	408.1
140°	289.6	310.9	331.7	350.7	367.4	379.1	385.9	388.2
142.5°	284.9	302.9	320.8	337.3	351.5	361.4	367.8	369.7
145°	278.8	292.8	306.8	319.0	329.9	337.5	342.5	344.4
147.5°	273.1	284.4	295.2	304.4	313.0	319.1	322.0	322.8
150°	269.7	279.7	288.3	296.4	303.2	308.6	310.5	310.9
152.5°	266.2	275.0	282.9	289.2	294.9	299.2	301.0	301.5
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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