

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: P333129-935

Luminaire Tested: **S125DIP-S375D590U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129-935
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-S375D590U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 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: 3085.3 lumens
Efficiency: N/A
Efficacy: 120.5 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: Semi-Indirect

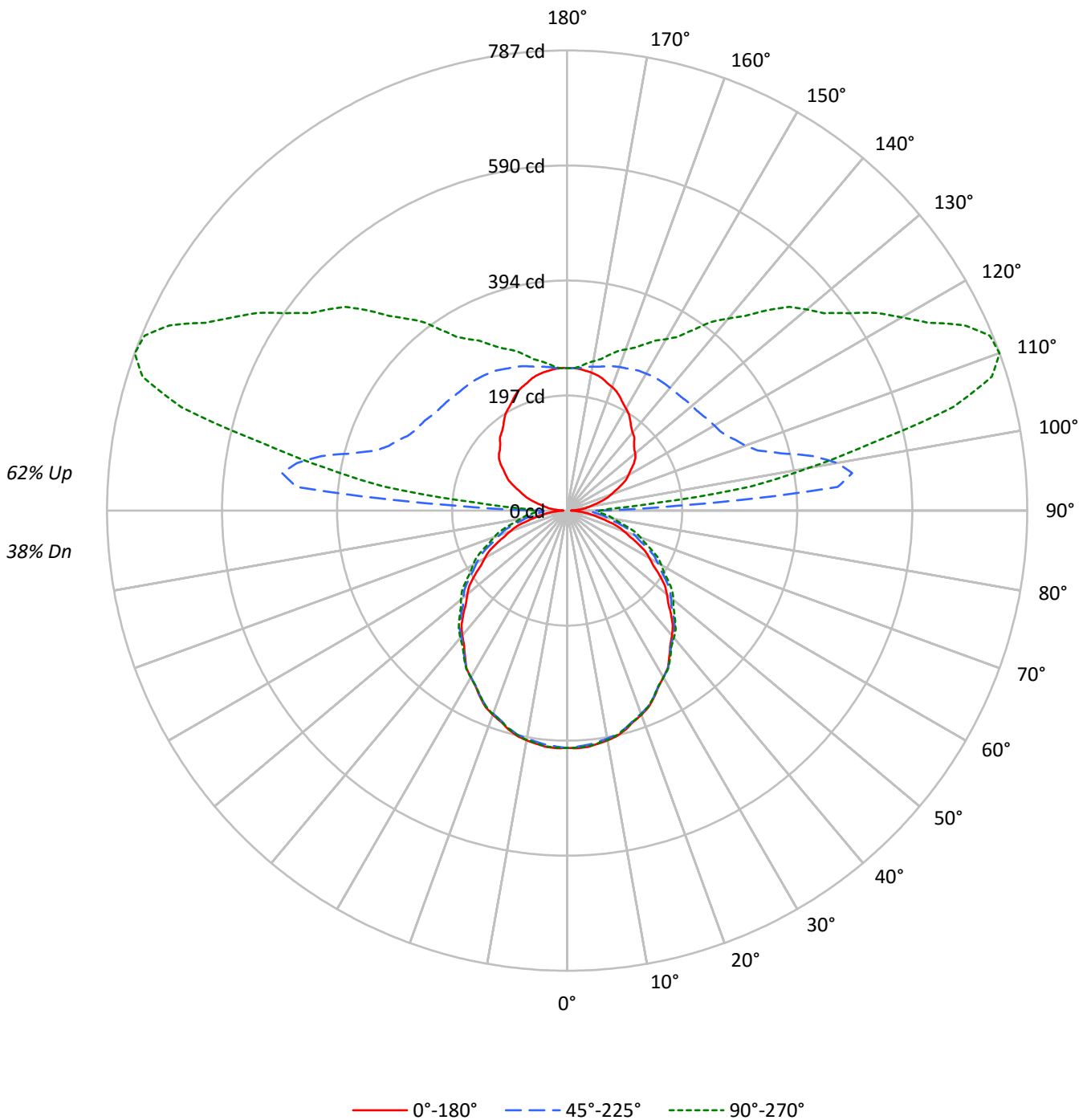
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	32	31	26
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	36	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	1.2
10°-20°	108.9	3.5
20°-30°	162.0	5.3
30°-40°	191.9	6.2
40°-50°	198.4	6.4
50°-60°	182.8	5.9
60°-70°	147.8	4.8
70°-80°	99.0	3.2
80°-90°	52.7	1.7
90°-100°	205.4	6.7
100°-110°	400.8	13.0
110°-120°	370.5	12.0
120°-130°	296.8	9.6
130°-140°	235.2	7.6
140°-150°	175.6	5.7
150°-160°	123.1	4.0
160°-170°	72.5	2.4
170°-180°	23.6	0.8
0°-30°	309.4	10.0
0°-40°	501.3	16.2
0°-60°	882.5	28.6
0°-90°	1181.9	38.3
90°-120°	976.6	31.7
90°-150°	1684.2	54.6
90°-180°	1903.0	61.7
0°-180°	3085.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	24	40	52	56	5
95°	21	64	464	235	156	21
105°	59	88	378	731	683	62
115°	102	125	301	638	750	100
125°	139	163	283	505	589	123
135°	162	194	275	419	485	126
145°	188	215	273	342	378	118
155°	214	230	266	301	314	99
165°	234	240	255	271	275	66
175°	243	243	245	248	247	23
180°	244	244	244	244	244	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.5	15.4	18.4	21.5	24.5	27.6	30.7	33.9	37.0	40.2	42.4
90°	6.9	10.2	13.9	17.8	21.6	25.5	29.0	33.0	36.5	40.5	43.0
92.5°	11.7	15.6	22.4	31.1	42.1	59.3	89.2	137.2	189.2	189.7	161.5
95°	21.4	24.2	30.4	38.1	51.2	75.9	131.5	242.5	381.2	464.2	456.8
97.5°	31.6	34.3	39.1	46.6	58.4	76.7	114.4	196.5	341.2	491.8	567.7
100°	38.7	41.6	45.4	52.7	63.9	80.9	112.3	178.9	305.6	469.0	593.6
102.5°	46.7	49.0	52.3	59.8	70.1	86.6	114.8	171.2	278.4	430.3	575.8
105°	59.1	60.5	64.4	70.7	80.0	95.7	120.0	166.3	251.1	378.0	520.6
107.5°	71.2	73.4	76.9	82.1	91.5	105.7	129.2	169.2	238.7	341.6	464.9
110°	79.9	82.0	85.0	90.4	98.8	113.4	136.0	172.4	234.3	324.2	432.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	88.9	90.7	93.2	98.4	106.7	120.7	142.4	176.8	233.1	313.5	408.8
115°	101.6	103.2	105.3	110.3	118.3	132.1	152.5	183.3	232.7	301.4	382.0
117.5°	113.0	114.9	116.8	121.7	130.4	143.6	163.0	191.1	234.2	294.5	365.2
120°	120.9	122.6	124.8	129.5	138.1	151.5	170.7	196.4	236.3	290.8	355.7
122.5°	128.8	130.0	131.6	136.2	145.5	158.8	178.0	202.3	237.8	287.6	347.2
125°	139.1	140.0	142.4	146.7	155.9	169.5	187.5	210.4	240.6	283.2	335.7
127.5°	146.9	148.3	151.3	156.8	166.7	180.1	197.2	218.1	244.4	280.2	324.9
130°	152.0	153.3	157.2	163.5	173.7	187.1	203.5	223.4	246.8	278.4	318.0
132.5°	155.6	157.4	162.1	169.3	179.9	193.2	209.4	227.8	249.3	277.2	312.0
135°	161.9	163.8	169.5	177.4	187.5	201.1	217.0	233.8	252.5	275.3	304.4
137.5°	169.9	171.3	176.7	184.5	194.5	208.3	222.5	238.2	255.9	274.4	297.9
140°	174.3	175.7	181.7	189.5	198.8	212.2	226.4	241.3	257.1	273.9	294.5
142.5°	179.8	180.8	186.2	194.0	202.9	215.3	228.8	242.7	257.7	273.6	291.7
145°	188.0	188.9	193.7	200.5	209.3	220.5	233.3	245.6	258.8	273.1	288.3
147.5°	196.2	196.8	201.0	207.4	215.1	225.1	236.3	247.4	259.3	271.8	284.9
150°	201.4	202.3	205.8	212.2	219.0	227.4	238.2	248.5	259.3	270.6	282.4
152.5°	206.9	207.4	210.5	216.1	222.6	230.1	240.1	249.3	258.9	269.1	279.7
155°	214.1	214.1	217.1	222.0	226.9	233.8	242.1	249.9	257.9	266.2	275.0
157.5°	220.6	220.5	222.9	227.1	231.4	236.6	243.8	250.5	256.6	263.2	270.7
160°	225.0	224.5	226.4	229.9	233.8	238.2	244.6	250.5	255.4	261.3	267.2
162.5°	228.5	228.0	230.0	233.0	236.2	239.8	245.4	250.1	254.3	258.9	264.1
165°	233.8	232.8	234.3	236.7	238.7	241.7	245.6	249.5	252.4	255.4	259.3
167.5°	237.3	236.9	237.7	239.1	240.5	242.3	245.6	248.3	249.7	251.9	254.7
170°	239.7	239.2	239.7	240.6	241.7	243.1	245.6	247.5	248.5	249.9	251.9
172.5°	241.3	240.4	240.8	241.9	242.5	243.1	245.2	246.8	246.9	247.6	249.2
175°	243.1	242.1	242.6	243.1	243.1	243.1	244.6	245.6	245.0	245.0	245.6
177.5°	244.0	243.2	243.2	243.6	243.2	243.2	244.0	244.4	243.6	243.6	244.0
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	44.5	46.7	48.8	50.3	50.9	51.6	52.3	52.9
90°	45.5	48.0	50.6	52.9	53.6	54.2	55.3	55.9
92.5°	122.3	100.4	86.8	80.8	75.1	74.6	74.5	74.3
95°	386.1	313.3	254.9	214.9	180.6	166.5	163.2	156.0
97.5°	556.7	506.2	449.2	393.0	363.3	336.4	322.8	317.1
100°	633.3	611.1	562.3	512.5	479.1	444.3	426.6	419.3
102.5°	658.1	674.9	652.3	618.9	583.2	558.6	539.3	534.0
105°	640.3	709.4	732.8	728.6	713.4	697.8	688.6	683.4
107.5°	583.0	674.5	731.8	758.5	767.1	767.5	764.8	761.5
110°	540.7	635.7	706.6	749.5	772.2	782.2	786.3	786.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	507.0	597.3	668.9	719.3	752.2	768.8	778.0	782.1
115°	464.7	542.3	611.2	665.8	704.7	728.8	743.0	750.0
117.5°	436.4	503.6	563.0	613.2	652.1	677.1	691.3	695.9
120°	421.0	481.5	537.0	581.3	618.1	642.2	656.0	660.5
122.5°	409.0	465.0	514.6	556.0	589.0	611.1	624.9	629.0
125°	391.7	443.2	487.3	523.6	551.6	572.1	583.3	588.7
127.5°	373.8	422.0	463.1	497.1	522.6	540.9	551.6	554.3
130°	362.9	407.4	446.9	479.7	504.7	521.3	531.7	535.0
132.5°	351.9	393.6	429.6	461.2	486.0	502.7	512.0	515.7
135°	337.0	372.0	404.6	433.4	455.5	472.1	481.4	484.7
137.5°	324.5	353.0	380.1	404.7	424.4	439.5	448.0	451.5
140°	317.5	341.6	365.2	386.5	405.0	418.1	425.9	428.7
142.5°	311.5	331.9	352.2	370.7	386.4	397.6	404.9	407.3
145°	303.9	319.6	335.3	348.9	361.0	369.7	375.5	377.8
147.5°	297.0	309.5	321.4	331.6	341.0	347.8	351.2	352.2
150°	293.2	304.0	313.3	322.3	329.7	335.7	337.7	338.3
152.5°	289.3	298.9	307.5	314.4	320.6	325.3	327.3	327.8
155°	283.4	291.3	298.1	303.5	308.4	311.9	313.3	313.8
157.5°	277.5	284.0	289.3	293.5	297.3	300.1	301.5	301.4
160°	273.5	278.4	283.4	286.8	290.2	292.7	293.7	293.2
162.5°	269.2	273.8	277.8	280.9	283.6	285.7	285.9	285.8
165°	263.2	266.7	269.7	272.1	274.1	275.0	275.0	275.0
167.5°	257.5	259.8	262.1	263.8	264.8	265.7	265.3	265.2
170°	254.4	255.9	257.4	258.3	259.3	259.8	259.8	259.3
172.5°	250.9	252.4	253.4	254.0	254.3	255.1	254.3	253.8
175°	247.0	247.0	248.1	248.1	248.1	248.5	247.5	247.0
177.5°	244.4	244.8	244.8	244.8	244.4	244.8	243.6	243.6
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6

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