

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: P333132-930

Luminaire Tested: **S125DIP-S375D590U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333132-930
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-S375D590U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2970.5 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

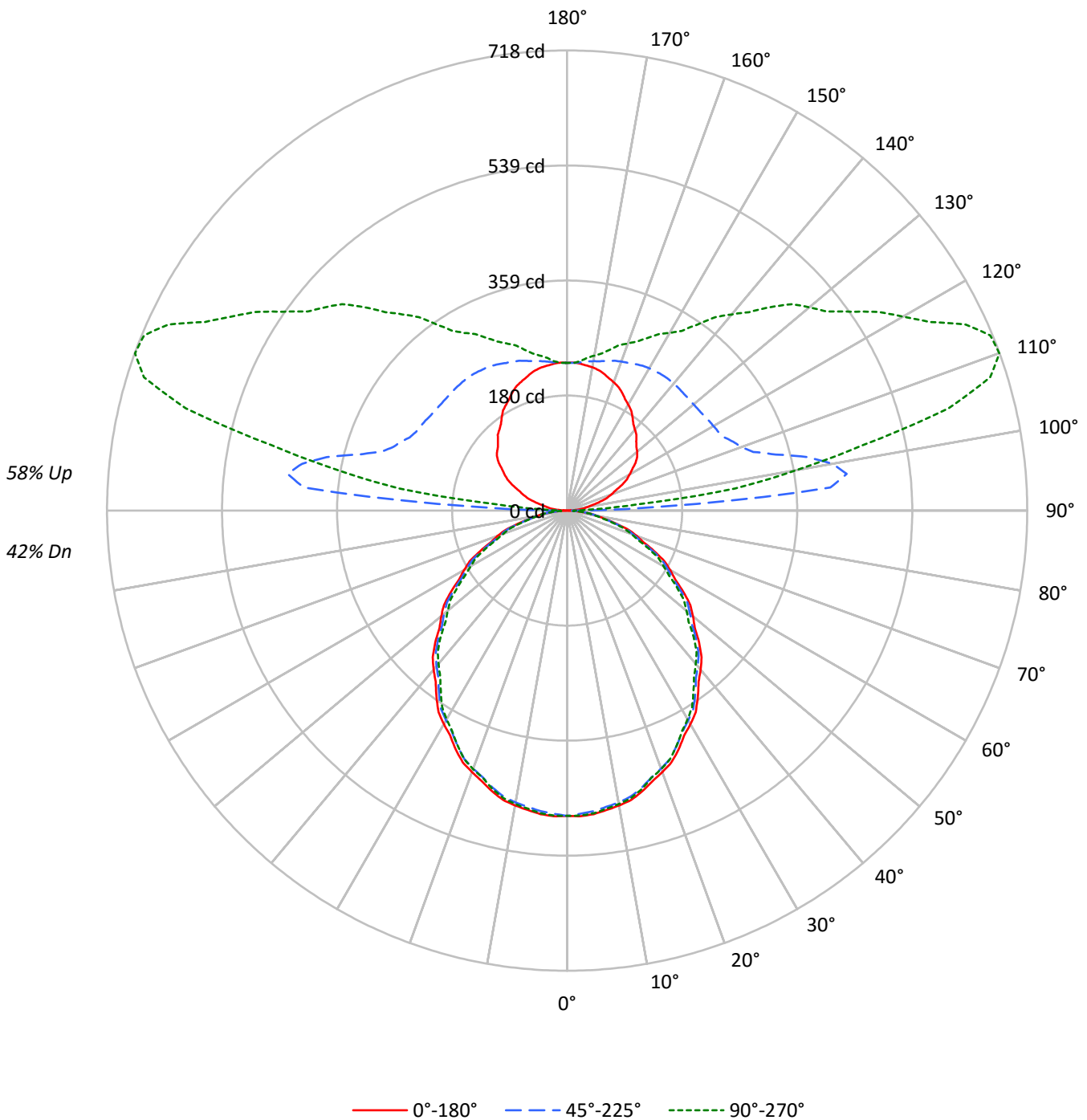
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	79	79	79	63	63	63	49	49	49	42
1	96	92	88	84	87	84	80	77	69	67	64	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	34	29
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	32	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	21	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	26	22	19	20	17	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.5
10°-20°	126.9	4.3
20°-30°	187.3	6.3
30°-40°	218.5	7.4
40°-50°	219.5	7.4
50°-60°	192.7	6.5
60°-70°	143.6	4.8
70°-80°	82.1	2.8
80°-90°	25.2	0.8
90°-100°	167.2	5.6
100°-110°	359.4	12.1
110°-120°	337.3	11.4
120°-130°	273.4	9.2
130°-140°	219.4	7.4
140°-150°	165.6	5.6
150°-160°	116.5	3.9
160°-170°	68.7	2.3
170°-180°	22.3	0.8
0°-30°	359.1	12.1
0°-40°	577.6	19.4
0°-60°	989.8	33.3
0°-90°	1240.6	41.8
90°-120°	864.0	29.1
90°-150°	1522.3	51.2
90°-180°	1730.0	58.2
0°-180°	2970.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	0	4	7	10	11	2
95°	15	45	412	187	109	16
105°	53	73	337	664	616	55
115°	94	113	271	583	686	92
125°	130	153	260	464	541	115
135°	152	183	258	389	449	118
145°	178	203	259	322	354	111
155°	203	218	252	285	297	93
165°	221	227	242	256	260	62
175°	230	230	232	235	234	22
180°	231	231	231	231	231	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.2	8.3	8.5	8.7	8.9	9.0	9.0	9.2	9.2	9.3	9.5
90°	0.5	0.9	1.9	2.8	3.8	4.6	5.1	6.0	6.5	7.4	7.9
92.5°	5.7	6.8	10.8	16.6	24.5	38.2	63.5	106.2	152.4	149.9	121.4
95°	15.3	15.8	19.6	24.6	34.9	55.8	105.6	207.9	336.2	412.1	403.2
97.5°	25.5	26.0	28.6	33.8	43.0	58.0	91.0	165.9	300.3	440.0	510.2
100°	32.5	33.5	35.4	40.4	49.3	63.3	90.3	150.7	267.9	420.0	536.2
102.5°	40.4	40.9	42.4	47.9	56.0	69.5	93.6	144.4	243.3	384.6	520.6
105°	52.6	52.6	54.9	59.5	66.9	80.0	100.4	141.9	219.5	337.2	470.7
107.5°	64.5	65.4	67.6	71.4	79.2	90.9	110.7	146.1	209.5	304.5	419.7
110°	73.1	73.9	75.8	80.0	87.0	99.1	118.1	150.2	206.5	289.3	390.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	81.6	82.5	84.0	88.2	95.1	106.9	125.2	155.4	206.5	280.4	369.1
115°	93.9	94.9	96.3	100.4	107.5	119.0	136.2	163.2	207.9	270.7	345.5
117.5°	105.1	106.5	108.0	112.2	120.1	131.3	147.7	172.2	210.9	266.0	331.5
120°	112.5	114.0	115.8	120.0	127.9	139.5	155.8	178.1	213.9	263.7	323.7
122.5°	120.3	121.4	122.9	127.0	135.7	147.3	163.6	184.8	216.5	261.9	317.0
125°	130.2	131.2	133.5	137.6	146.5	158.6	173.9	194.0	220.9	259.5	307.9
127.5°	137.9	139.3	142.4	147.7	157.0	169.1	183.8	202.3	225.8	258.4	299.5
130°	142.8	144.1	147.9	153.9	163.7	175.8	190.2	207.9	228.9	257.6	293.9
132.5°	146.5	148.3	152.7	159.6	169.7	181.7	196.2	212.7	232.2	257.6	289.4
135°	152.5	154.4	160.0	167.5	177.2	189.7	204.2	219.5	236.7	257.6	284.1
137.5°	160.2	161.6	166.8	174.2	183.8	196.7	209.9	224.5	240.9	258.2	279.4
140°	164.6	166.0	171.6	179.0	187.9	200.5	213.9	227.9	242.8	258.6	277.2
142.5°	169.8	170.9	176.1	183.5	192.0	203.8	216.5	229.8	243.9	258.9	275.3
145°	177.7	178.6	183.2	189.7	198.1	208.8	220.9	232.5	245.1	258.6	272.6
147.5°	185.8	186.4	190.4	196.4	203.7	213.1	223.7	234.2	245.6	257.4	269.6
150°	190.7	191.6	194.9	200.9	207.4	215.3	225.6	235.3	245.6	256.2	267.4
152.5°	195.9	196.4	199.3	204.6	210.8	217.9	227.4	236.0	245.2	254.8	264.8
155°	202.8	202.8	205.5	210.2	214.8	221.4	229.3	236.7	244.2	252.1	260.4
157.5°	208.9	208.8	211.1	215.1	219.2	224.0	230.9	237.2	243.0	249.2	256.3
160°	213.0	212.5	214.4	217.7	221.4	225.6	231.6	237.2	241.8	247.4	253.0
162.5°	216.4	215.9	217.8	220.6	223.6	227.1	232.4	236.8	240.8	245.2	250.1
165°	221.4	220.5	221.8	224.1	226.0	228.9	232.5	236.3	239.0	241.8	245.6
167.5°	224.7	224.3	225.1	226.4	227.7	229.4	232.5	235.1	236.4	238.6	241.2
170°	227.0	226.5	227.0	227.9	228.9	230.2	232.5	234.4	235.3	236.7	238.6
172.5°	228.4	227.6	228.0	229.0	229.6	230.2	232.2	233.7	233.8	234.5	235.9
175°	230.2	229.3	229.8	230.2	230.2	230.2	231.6	232.5	232.0	232.0	232.5
177.5°	231.1	230.3	230.3	230.6	230.3	230.3	231.1	231.4	230.6	230.6	231.1
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	9.5	9.6	9.7	9.8	9.7	9.5	9.5	9.4
90°	8.4	8.8	9.3	10.2	10.2	10.2	10.7	10.7
92.5°	82.4	59.8	45.0	38.2	32.2	31.1	30.4	29.7
95°	334.4	263.7	206.5	167.5	134.4	120.4	116.8	109.3
97.5°	498.0	448.4	392.7	338.3	309.7	283.6	270.1	264.2
100°	572.0	549.3	501.3	453.0	420.9	387.4	370.2	362.7
102.5°	597.0	611.0	588.0	555.3	521.0	497.2	478.5	472.9
105°	582.3	646.0	666.4	661.3	646.5	631.1	621.8	616.2
107.5°	529.8	614.8	667.4	691.6	699.2	699.1	696.0	692.3
110°	491.1	579.5	645.1	684.6	705.5	714.4	717.6	717.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.6	544.5	610.8	657.5	688.0	703.2	711.3	714.6
115°	422.2	494.4	558.1	608.8	645.1	667.4	680.4	686.5
117.5°	397.5	459.7	514.5	561.1	597.4	620.4	633.3	637.1
120°	384.2	439.9	491.1	532.1	566.5	588.8	601.4	605.0
122.5°	374.1	425.8	471.4	509.7	540.4	560.8	573.4	576.7
125°	359.5	406.9	447.4	480.9	507.0	526.0	536.2	540.9
127.5°	344.6	388.9	426.6	458.0	481.6	498.5	508.1	510.2
130°	335.3	376.3	412.5	442.7	466.0	481.4	490.6	493.4
132.5°	326.0	364.4	397.3	426.4	449.6	465.0	473.5	476.7
135°	313.9	346.0	375.8	402.3	422.7	438.1	446.5	449.2
137.5°	303.7	329.6	354.4	376.9	395.2	409.2	416.9	420.0
140°	298.1	320.0	341.4	360.9	378.1	390.2	397.1	399.5
142.5°	293.3	311.8	330.2	347.2	361.7	371.9	378.5	380.5
145°	287.0	301.3	315.8	328.3	339.5	347.4	352.5	354.4
147.5°	281.0	292.7	303.8	313.2	322.1	328.4	331.4	332.2
150°	277.6	287.9	296.7	305.1	312.1	317.6	319.5	320.0
152.5°	273.9	283.1	291.1	297.7	303.5	307.9	309.8	310.3
155°	268.3	275.8	282.3	287.4	292.0	295.3	296.7	297.2
157.5°	262.8	268.9	273.9	277.9	281.5	284.2	285.5	285.4
160°	259.0	263.7	268.3	271.6	274.8	277.2	278.1	277.6
162.5°	254.9	259.3	263.1	266.0	268.6	270.5	270.7	270.6
165°	249.2	252.5	255.4	257.6	259.5	260.4	260.4	260.4
167.5°	243.9	246.1	248.2	249.8	250.8	251.6	251.2	251.1
170°	240.9	242.3	243.7	244.6	245.6	246.1	246.1	245.6
172.5°	237.6	239.0	239.9	240.5	240.8	241.6	240.8	240.4
175°	233.9	233.9	234.9	234.9	234.9	235.3	234.4	233.9
177.5°	231.4	231.8	231.8	231.8	231.4	231.8	230.6	230.6
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6

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