

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: P333174-935

Luminaire Tested: **S125DIP-S610D590U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333174-935
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-S610D590U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 3894.9 lumens
Efficiency: N/A
Efficacy: 118.7 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

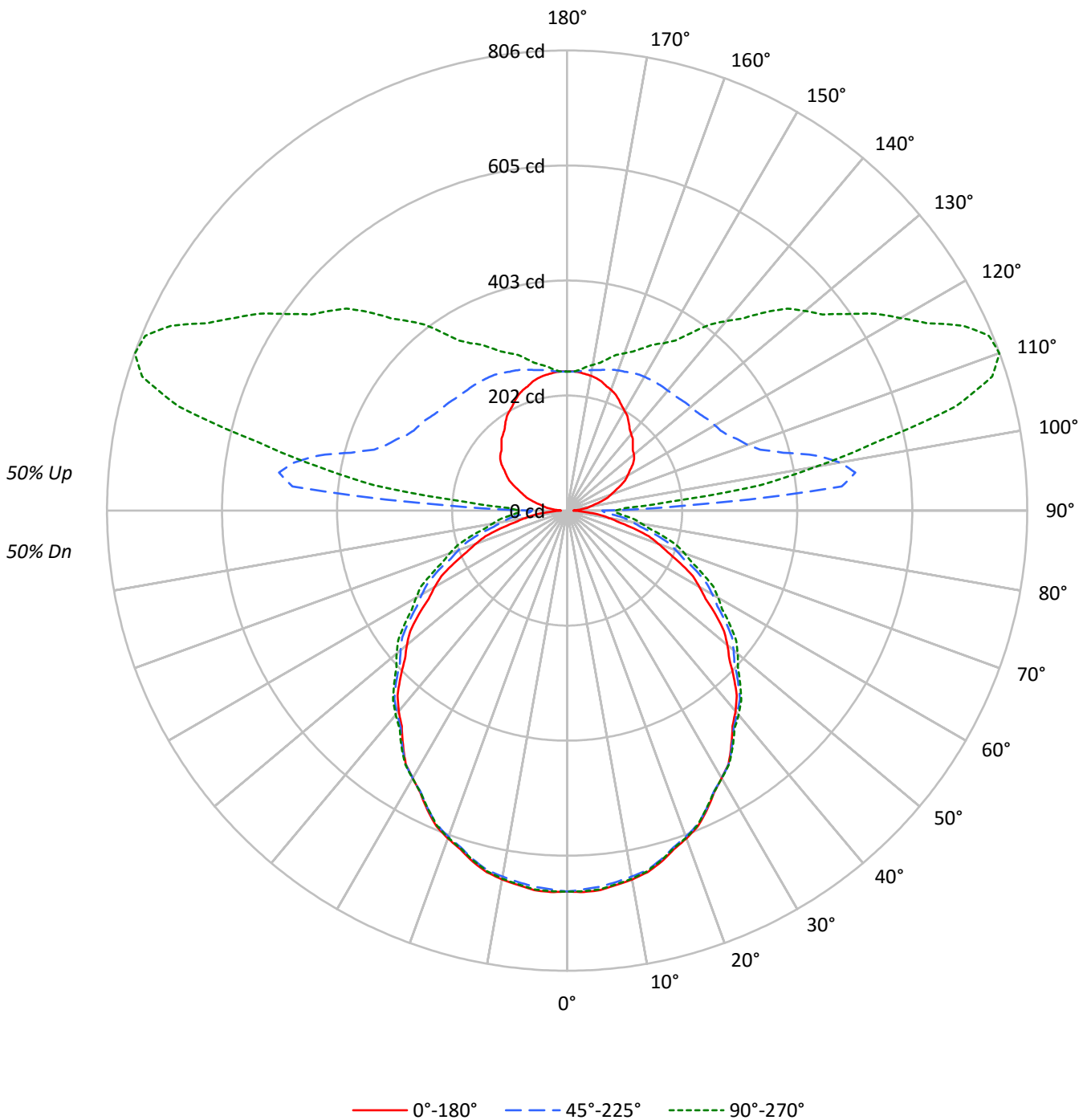
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	40
2	88	80	74	68	81	74	68	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	73	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	20
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	23	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	24	21	18	16
8	53	40	33	27	49	38	30	26	32	27	22	27	23	19	22	19	16	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.6
10°-20°	179.1	4.6
20°-30°	266.4	6.8
30°-40°	315.5	8.1
40°-50°	326.2	8.4
50°-60°	300.5	7.7
60°-70°	242.9	6.2
70°-80°	162.7	4.2
80°-90°	85.7	2.2
90°-100°	223.9	5.7
100°-110°	414.5	10.6
110°-120°	379.6	9.7
120°-130°	302.0	7.8
130°-140°	237.5	6.1
140°-150°	176.0	4.5
150°-160°	123.1	3.2
160°-170°	72.5	1.9
170°-180°	23.6	0.6
0°-30°	508.6	13.1
0°-40°	824.1	21.2
0°-60°	1450.8	37.2
0°-90°	1942.2	49.9
90°-120°	1018.0	26.1
90°-150°	1733.5	44.5
90°-180°	1953.0	50.1
0°-180°	3894.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	36	62	78	85	8
95°	25	74	483	259	182	24
105°	61	94	392	750	704	65
115°	103	129	311	653	766	101
125°	140	164	289	515	600	124
135°	162	195	277	424	492	126
145°	188	215	273	343	380	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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.5	25.2	30.1	35.0	39.8	44.8	49.9	55.0	60.0	65.2	68.6
90°	10.9	16.1	21.7	27.4	33.0	38.7	44.3	50.1	55.5	61.5	65.3
92.5°	15.4	21.0	29.4	39.8	52.6	71.5	103.5	153.5	207.4	209.9	183.0
95°	24.7	29.0	36.7	45.9	60.4	87.0	144.4	257.4	397.9	482.9	476.7
97.5°	34.6	38.7	44.8	53.6	66.7	86.7	126.2	210.2	356.8	509.2	586.3
100°	41.6	45.6	50.6	59.1	71.5	90.1	123.2	191.7	320.1	485.3	611.2
102.5°	49.3	52.7	57.1	65.7	77.1	95.1	125.0	183.1	292.2	445.9	592.5
105°	61.4	63.7	68.5	75.8	85.9	103.0	129.0	177.0	263.5	392.0	535.9
107.5°	73.2	76.1	80.5	86.4	96.6	112.1	137.2	178.7	249.9	354.5	478.9
110°	81.7	84.4	88.2	94.3	103.4	119.1	143.3	181.2	244.8	336.2	446.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	90.7	93.1	96.1	101.9	110.6	125.7	149.0	184.9	242.8	324.7	421.0
115°	103.1	105.1	107.6	113.0	121.5	136.1	158.1	190.4	241.3	311.3	393.0
117.5°	114.3	116.4	118.6	123.7	132.8	146.8	167.6	197.1	241.6	303.2	375.0
120°	122.1	124.1	126.4	131.3	140.1	154.2	174.8	201.7	242.9	298.8	364.5
122.5°	129.8	131.1	132.9	137.5	146.9	160.8	181.3	206.9	243.7	294.7	355.3
125°	140.2	140.9	143.3	147.6	156.7	170.9	190.0	214.0	245.5	289.1	342.5
127.5°	147.7	149.0	152.0	157.4	167.2	181.1	199.1	220.9	248.1	284.9	330.5
130°	152.7	154.0	157.8	164.1	174.3	188.0	205.3	225.9	250.0	282.6	322.9
132.5°	156.2	158.0	162.6	169.8	180.5	194.1	210.9	229.9	252.0	280.4	316.1
135°	162.4	164.2	170.0	177.7	187.9	201.6	217.8	235.1	254.2	277.3	307.2
137.5°	170.3	171.7	177.1	184.8	194.8	208.6	223.0	239.0	256.8	275.5	299.6
140°	174.5	176.0	181.8	189.8	199.1	212.4	226.8	241.7	257.5	274.4	295.7
142.5°	180.0	181.0	186.4	194.1	202.9	215.3	228.9	242.8	257.8	273.7	292.4
145°	188.3	189.1	193.9	200.6	209.3	220.5	233.3	245.6	258.8	273.1	288.5
147.5°	196.2	196.8	201.0	207.4	215.1	225.1	236.3	247.4	259.3	271.8	285.0
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°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.1	75.5	79.0	81.3	82.3	83.3	84.5	85.5
90°	69.1	73.0	76.8	80.0	81.0	82.1	83.5	84.6
92.5°	145.0	124.4	112.0	106.9	101.6	101.4	101.8	102.0
95°	407.3	335.8	278.6	239.4	205.6	191.9	189.0	182.1
97.5°	576.5	527.2	471.4	416.0	386.7	360.2	346.9	341.6
100°	652.0	631.0	583.5	534.4	501.4	466.9	449.6	442.6
102.5°	676.1	693.9	672.5	639.8	604.5	580.2	561.3	556.3
105°	656.7	726.9	751.4	748.0	733.3	718.1	709.3	704.4
107.5°	598.1	690.8	749.2	776.6	785.5	786.4	784.0	780.9
110°	554.9	651.0	723.0	766.6	789.8	800.1	804.6	805.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	520.4	611.7	684.3	735.4	768.7	785.7	795.3	799.8
115°	476.7	555.4	625.3	680.6	719.8	744.2	758.9	766.1
117.5°	447.1	515.2	575.7	626.5	665.8	691.1	705.8	710.7
120°	430.9	492.3	548.8	593.7	630.9	655.4	669.5	674.3
122.5°	417.9	474.9	525.4	567.5	600.8	623.3	637.4	641.8
125°	399.3	451.8	496.8	533.7	562.0	582.8	594.3	599.9
127.5°	380.3	429.2	471.2	505.8	531.6	550.3	561.3	564.3
130°	368.7	413.9	454.3	487.6	512.8	529.8	540.3	544.0
132.5°	356.7	399.2	436.0	468.1	493.3	510.1	519.8	523.7
135°	340.5	376.3	409.7	438.9	461.2	478.2	487.8	491.5
137.5°	327.0	356.1	384.0	408.9	428.9	444.2	452.9	456.7
140°	319.3	344.0	368.2	389.9	408.6	422.1	430.0	433.0
142.5°	312.7	333.6	354.5	373.3	389.3	400.7	408.2	410.9
145°	304.4	320.5	336.4	350.3	362.7	371.6	377.5	380.1
147.5°	297.2	309.8	321.8	332.0	341.6	348.5	352.0	353.1
150°	293.2	304.0	313.3	322.3	329.8	335.8	337.9	338.5
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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