

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: P333127-940

Luminaire Tested: **S125DIP-S375D590U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333127-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D590U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3411.0 lumens
Efficiency: N/A
Efficacy: 133.2 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

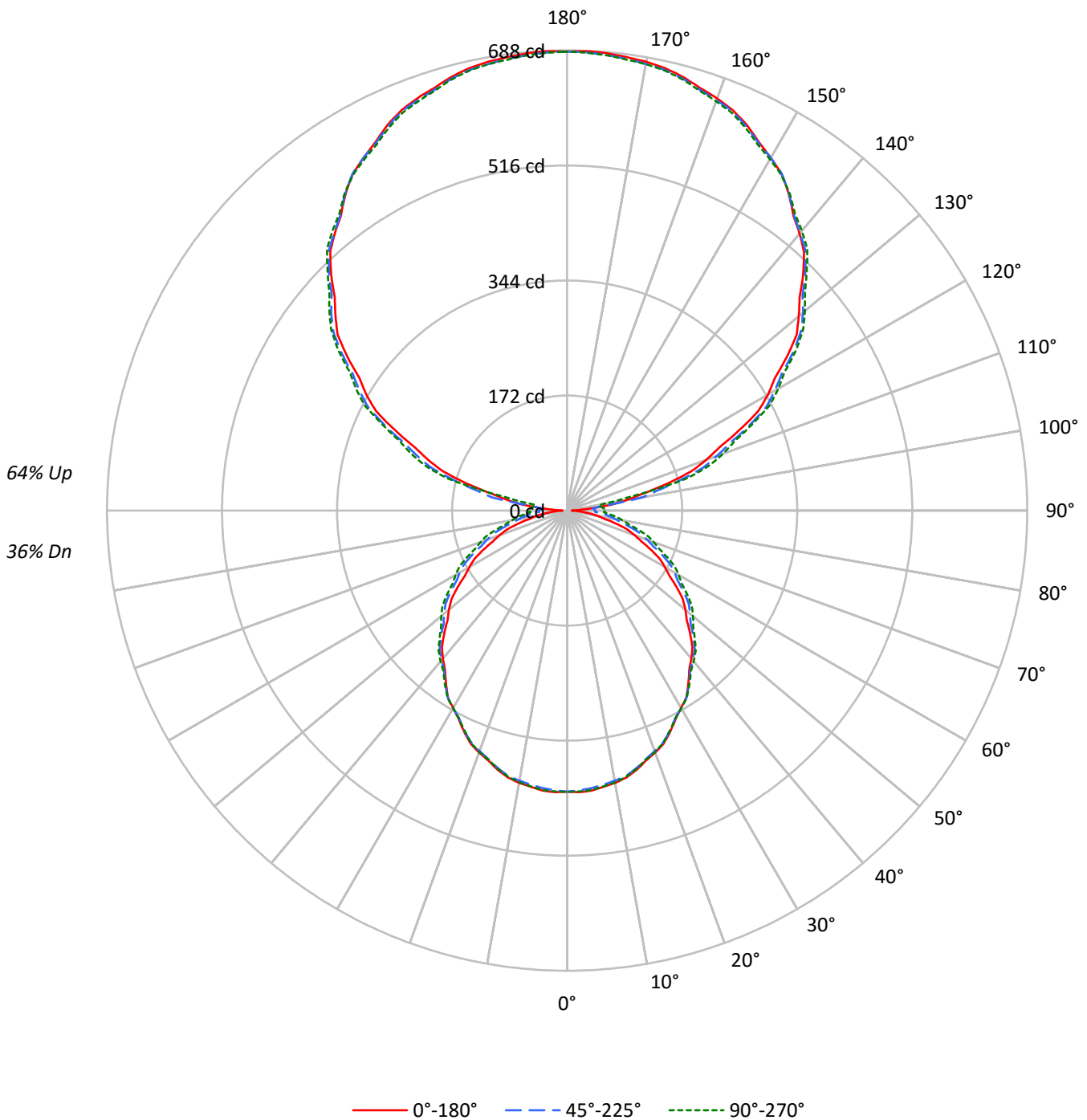
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333127-940

CATALOG NUMBER: S125DIP-S375D590U940-4F0-1E-UDD-D

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	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	42	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	19	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.2
10°-20°	112.8	3.3
20°-30°	167.8	4.9
30°-40°	198.8	5.8
40°-50°	205.5	6.0
50°-60°	189.3	5.6
60°-70°	153.0	4.5
70°-80°	102.5	3.0
80°-90°	54.6	1.6
90°-100°	54.8	1.6
100°-110°	175.7	5.2
110°-120°	293.5	8.6
120°-130°	366.1	10.7
130°-140°	388.5	11.4
140°-150°	361.9	10.6
150°-160°	292.2	8.6
160°-170°	189.0	5.5
170°-180°	65.2	1.9
0°-30°	320.4	9.4
0°-40°	519.2	15.2
0°-60°	914.0	26.8
0°-90°	1224.1	35.9
90°-120°	524.0	15.4
90°-150°	1640.5	48.1
90°-180°	2187.0	64.1
0°-180°	3411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	24	42	54	58	6
95°	34	43	38	49	53	41
105°	153	162	174	182	185	162
115°	283	289	300	305	305	281
125°	401	404	412	417	418	358
135°	499	502	503	508	507	384
145°	578	578	578	581	580	361
155°	636	633	634	635	631	293
165°	671	668	668	671	667	189
175°	686	683	684	687	683	65
180°	686	686	686	686	686	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	12.9	16.1	19.2	22.3	25.4	28.6	31.8	35.1	38.4	41.6	43.9
90°	7.1	11.0	14.8	18.6	22.5	26.3	30.2	34.2	38.0	41.9	44.6
92.5°	13.7	15.9	17.9	20.0	22.1	25.1	29.0	32.8	36.7	40.6	43.2
95°	34.3	36.4	38.4	40.5	42.5	43.0	41.7	40.6	39.4	38.3	40.8
97.5°	65.4	68.1	70.9	73.7	76.4	75.1	69.6	64.0	58.6	53.1	51.8
100°	89.5	91.8	94.0	96.3	98.5	101.4	104.8	108.2	111.6	114.9	100.0
102.5°	114.0	116.2	118.4	120.6	122.8	125.5	128.6	131.7	134.9	138.0	136.7
105°	153.3	155.2	157.1	159.0	161.0	163.3	166.0	168.8	171.6	174.2	176.1
107.5°	194.1	195.4	196.6	197.9	199.1	201.2	204.0	206.9	209.7	212.6	214.5
110°	220.6	221.8	222.8	223.9	225.1	226.9	229.8	232.6	235.3	238.2	239.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	245.8	247.0	248.2	249.3	250.5	252.4	254.9	257.6	260.2	262.9	264.1
115°	283.3	284.5	285.7	287.0	288.1	290.0	292.5	295.0	297.5	300.0	301.1
117.5°	322.1	322.4	322.9	323.2	323.7	325.2	327.9	330.6	333.2	335.9	336.9
120°	346.5	346.6	346.8	347.0	347.1	348.5	350.9	353.3	355.8	358.2	359.5
122.5°	367.7	368.3	368.8	369.4	370.0	371.3	373.5	375.7	377.9	380.1	381.4
125°	401.0	401.7	402.4	403.1	403.9	405.1	406.9	408.8	410.5	412.4	413.4
127.5°	432.5	432.9	433.4	433.9	434.4	435.3	436.8	438.2	439.6	441.0	442.1
130°	452.0	452.5	452.9	453.4	453.9	454.9	456.2	457.6	459.1	460.4	461.4
132.5°	471.2	471.8	472.5	473.1	473.8	474.5	475.2	475.9	476.6	477.4	478.6
135°	498.9	499.4	500.1	500.7	501.2	501.8	502.1	502.6	503.0	503.4	504.4
137.5°	524.3	524.9	525.4	525.9	526.4	526.7	526.8	526.9	527.1	527.2	528.2
140°	540.7	540.9	541.2	541.4	541.6	541.7	541.7	541.7	541.6	541.6	542.9
142.5°	555.8	555.8	555.9	556.0	556.0	556.2	556.3	556.5	556.7	556.9	557.8
145°	577.8	578.0	578.1	578.3	578.4	578.5	578.5	578.5	578.5	578.5	579.0
147.5°	596.7	596.7	596.6	596.6	596.6	596.6	596.7	596.9	597.0	597.2	597.4
150°	608.9	608.8	608.5	608.3	608.1	608.1	608.3	608.5	608.8	608.9	609.2
152.5°	620.8	620.3	619.8	619.3	618.8	618.7	618.8	619.1	619.3	619.6	619.8
155°	636.0	635.3	634.6	633.9	633.2	633.0	633.2	633.5	633.6	633.9	634.3
157.5°	647.6	647.2	646.8	646.4	646.0	645.9	645.9	645.9	645.9	646.0	646.3
160°	655.8	655.1	654.4	653.7	653.1	652.8	652.9	653.0	653.1	653.3	653.7
162.5°	662.3	661.6	660.9	660.2	659.6	659.3	659.4	659.5	659.6	659.8	660.4
165°	671.0	670.4	669.7	669.1	668.3	668.1	668.2	668.2	668.4	668.5	669.1
167.5°	677.5	676.9	676.2	675.5	674.8	674.5	674.6	674.7	674.8	674.9	675.7
170°	681.3	680.5	679.7	678.9	678.1	677.7	677.8	678.0	678.1	678.1	679.0
172.5°	683.7	682.9	682.1	681.3	680.5	680.2	680.4	680.6	680.8	681.0	681.8
175°	686.3	685.6	684.9	684.3	683.6	683.3	683.4	683.6	683.7	683.8	684.7
177.5°	687.5	687.0	686.4	685.9	685.4	685.1	685.2	685.3	685.4	685.5	686.2
180°	686.3	686.3	686.3	686.3	686.3	686.3	686.3	686.3	686.3	686.3	686.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	46.1	48.3	50.6	52.0	52.7	53.4	54.1	54.8
90°	47.3	49.9	52.6	54.5	55.5	56.4	57.4	58.4
92.5°	45.8	48.4	51.0	52.7	53.5	54.3	55.1	55.9
95°	43.4	45.9	48.5	50.1	50.8	51.5	52.1	52.7
97.5°	50.6	49.2	48.0	47.7	48.3	49.0	49.6	50.2
100°	85.1	70.1	55.2	47.8	47.9	48.0	48.1	48.2
102.5°	135.4	134.0	132.7	128.4	121.3	114.1	107.0	99.9
105°	177.9	179.8	181.6	182.8	183.3	183.9	184.4	184.9
107.5°	216.2	218.1	219.9	221.0	221.2	221.4	221.7	221.9
110°	240.9	242.4	243.7	244.8	245.6	246.3	247.1	247.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	265.4	266.5	267.8	268.7	269.1	269.7	270.1	270.6
115°	302.4	303.5	304.8	305.2	305.1	305.1	304.9	304.8
117.5°	337.9	338.9	339.8	340.5	340.8	341.1	341.4	341.8
120°	360.9	362.2	363.6	364.2	364.2	364.2	364.2	364.2
122.5°	382.6	383.9	385.1	385.7	385.6	385.5	385.4	385.3
125°	414.5	415.4	416.4	417.1	417.1	417.2	417.4	417.5
127.5°	443.3	444.3	445.5	445.9	445.6	445.2	445.0	444.6
130°	462.3	463.2	464.1	464.6	464.5	464.4	464.3	464.1
132.5°	479.8	481.1	482.2	482.8	482.6	482.4	482.2	482.1
135°	505.3	506.3	507.3	507.7	507.4	507.2	506.9	506.8
137.5°	529.4	530.6	531.6	532.1	531.9	531.6	531.5	531.2
140°	544.1	545.4	546.5	547.1	546.7	546.4	546.1	545.8
142.5°	558.7	559.5	560.4	560.8	560.4	560.2	559.8	559.5
145°	579.6	580.1	580.8	580.9	580.6	580.2	580.0	579.6
147.5°	597.7	598.0	598.3	598.2	597.4	596.8	596.2	595.5
150°	609.4	609.7	609.8	609.6	608.8	608.0	607.2	606.4
152.5°	620.0	620.3	620.5	620.2	619.4	618.6	617.8	617.0
155°	634.6	634.9	635.3	635.0	634.1	633.2	632.3	631.3
157.5°	646.7	647.0	647.4	647.1	646.2	645.2	644.4	643.5
160°	654.2	654.6	655.1	654.8	653.9	653.0	652.1	651.2
162.5°	661.0	661.6	662.3	662.1	661.1	660.1	659.2	658.1
165°	669.9	670.6	671.2	671.1	670.2	669.3	668.4	667.4
167.5°	676.5	677.3	678.1	678.1	677.1	676.0	675.0	674.0
170°	680.0	680.9	681.8	681.7	680.7	679.7	678.7	677.7
172.5°	682.6	683.5	684.3	684.2	683.1	682.2	681.1	680.1
175°	685.5	686.4	687.4	687.3	686.3	685.3	684.3	683.2
177.5°	686.8	687.4	688.0	688.0	687.2	686.5	685.8	685.1
180°	686.3	686.3	686.3	686.3	686.3	686.3	686.3	686.3

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