

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: P331307-935

Luminaire Tested: **SA2XXDIP-C485D725U935-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331307-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C485D725U935-4F0-1E-UDD-D1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 485 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 725 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3925.8 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

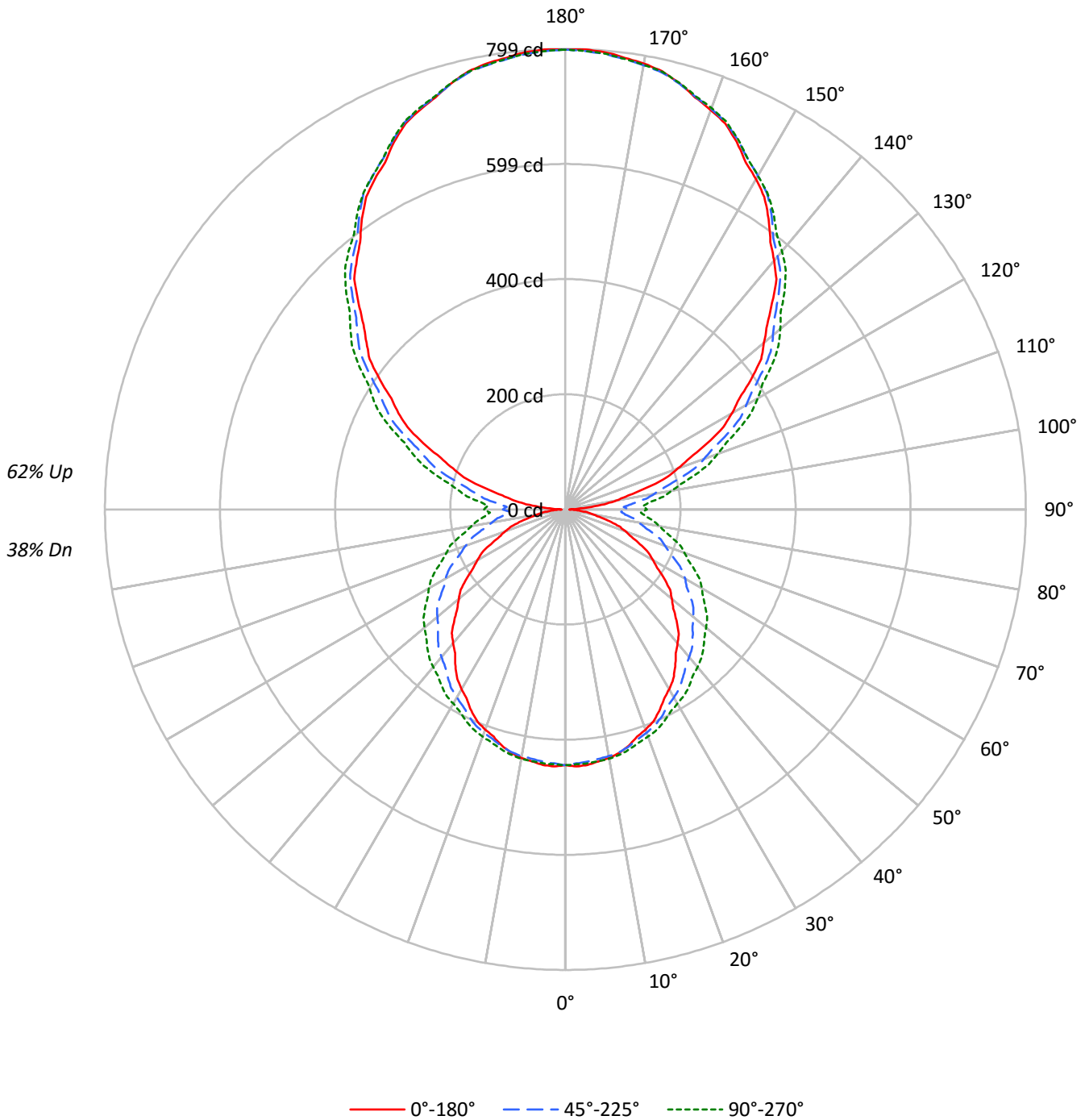
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	61	61	61	45	45	45	38
1	94	89	85	81	85	81	77	74	66	63	61	51	50	48	38	37	36	30
2	85	77	71	65	77	70	65	60	57	53	49	44	42	39	33	31	29	24
3	77	67	60	54	70	61	55	49	50	45	41	39	35	33	29	27	25	20
4	71	59	51	45	64	54	47	41	44	39	34	34	31	28	26	23	21	17
5	65	53	44	38	58	48	41	35	39	34	29	31	27	24	23	20	18	14
6	59	47	39	33	53	43	36	30	35	29	25	28	24	20	21	18	16	12
7	55	42	34	29	49	39	32	26	32	26	22	25	21	18	19	16	14	11
8	51	38	30	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7164	7164	7164
5°	7199	6896	6870
10°	7153	6692	6617
15°	7055	6477	6350
20°	6930	6245	6094
25°	6807	6022	5862
30°	6634	5793	5628
35°	6458	5572	5464
40°	6275	5384	5299
45°	6100	5215	5159
50°	5912	5062	5019
55°	5713	4898	4878
60°	5473	4730	4729
65°	5222	4530	4552
70°	4938	4315	4361
75°	4578	4106	4186
80°	4008	3889	4005
85°	3471	3705	3868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.1
10°-20°	120.6	3.1
20°-30°	182.7	4.7
30°-40°	222.5	5.7
40°-50°	239.4	6.1
50°-60°	232.5	5.9
60°-70°	203.0	5.2
70°-80°	156.3	4.0
80°-90°	108.1	2.8
90°-100°	122.8	3.1
100°-110°	209.7	5.3
110°-120°	303.1	7.7
120°-130°	372.3	9.5
130°-140°	404.1	10.3
140°-150°	389.7	9.9
150°-160°	325.7	8.3
160°-170°	216.0	5.5
170°-180°	75.5	1.9
0°-30°	345.3	8.8
0°-40°	567.8	14.5
0°-60°	1039.7	26.5
0°-90°	1507.0	38.4
90°-120°	635.6	16.2
90°-150°	1801.7	45.9
90°-180°	2419.0	61.6
0°-180°	3925.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	445	443	439	443	442	42
15°	424	426	426	431	431	119
25°	386	390	396	404	406	177
35°	332	343	356	369	374	208
45°	273	290	312	332	339	210
55°	209	233	266	288	297	187
65°	143	175	212	238	247	142
75°	79	115	156	183	192	84
85°	23	63	104	130	140	25
90°	7	53	108	132	141	6
95°	40	77	117	140	148	44
105°	148	169	203	226	234	156
115°	272	284	310	328	334	269
125°	393	400	418	432	438	351
135°	507	515	523	535	539	392
145°	615	620	624	628	629	384
155°	703	705	707	710	709	324
165°	765	765	764	769	766	216
175°	796	794	793	797	794	76
180°	798	798	798	798	798	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
2.5°	446.3	445.9	445.6	445.2	444.9	444.3	443.5	442.7	442.0	441.1	441.7
5°	445.0	444.5	444.1	443.7	443.2	442.6	441.8	440.9	440.1	439.2	440.1
7.5°	441.0	440.7	440.4	440.1	439.9	439.4	438.7	438.1	437.4	436.7	437.7
10°	437.9	437.6	437.3	437.0	436.8	436.4	436.0	435.6	435.1	434.7	435.8
12.5°	432.7	432.8	432.9	432.9	433.0	432.8	432.6	432.2	431.9	431.6	432.7
15°	424.4	424.6	425.0	425.2	425.5	425.7	425.7	425.7	425.7	425.7	427.0
17.5°	413.6	414.2	414.8	415.4	416.0	416.6	417.0	417.4	417.9	418.4	419.7
20°	406.4	407.1	407.9	408.5	409.2	409.9	410.4	411.0	411.6	412.2	413.7
22.5°	398.6	399.5	400.4	401.1	402.0	402.8	403.6	404.4	405.2	406.0	407.6
25°	385.8	386.8	387.8	388.8	389.8	391.0	392.3	393.6	394.9	396.1	397.8
27.5°	370.4	372.0	373.7	375.3	376.9	378.5	380.0	381.5	383.0	384.5	386.7
30°	360.1	362.0	363.8	365.7	367.6	369.4	371.3	373.1	375.0	376.8	379.1
32.5°	348.8	350.9	352.9	355.1	357.1	359.3	361.4	363.7	365.8	368.1	370.7
35°	332.4	334.8	337.3	339.8	342.2	344.7	347.4	350.2	352.8	355.6	358.7
37.5°	314.7	317.5	320.3	323.1	325.9	329.1	332.6	336.0	339.6	343.1	346.6
40°	302.9	306.0	309.2	312.3	315.5	318.9	322.8	326.7	330.5	334.4	338.1
42.5°	291.5	294.7	297.8	301.0	304.1	307.9	312.4	316.8	321.2	325.6	329.7
45°	272.7	276.5	280.3	284.2	288.1	292.5	297.5	302.5	307.5	312.5	316.9
47.5°	254.0	258.2	262.4	266.6	270.8	275.9	281.7	287.6	293.4	299.3	303.9
50°	241.2	245.6	250.0	254.4	258.8	264.2	270.7	277.2	283.6	290.0	294.9
52.5°	228.8	233.4	238.1	242.8	247.5	253.1	259.9	266.7	273.5	280.3	285.2
55°	209.0	214.1	219.3	224.4	229.5	235.8	243.3	250.7	258.1	265.5	270.7
57.5°	189.4	195.3	201.0	206.8	212.7	219.3	226.9	234.5	242.0	249.6	255.2
60°	175.6	181.7	187.9	194.0	200.1	207.2	215.4	223.5	231.7	239.9	245.3
62.5°	163.2	169.5	176.0	182.4	188.7	196.0	204.1	212.2	220.4	228.5	234.3
65°	142.8	149.7	156.8	163.8	170.7	178.5	186.9	195.4	203.8	212.2	218.1
67.5°	124.0	131.3	138.6	145.9	153.3	161.2	169.9	178.5	187.1	195.7	201.6
70°	110.6	118.0	125.4	132.9	140.3	148.4	157.3	166.2	175.0	183.9	190.0
72.5°	98.2	105.9	113.6	121.2	128.9	137.2	146.2	155.2	164.1	173.1	179.2
75°	79.1	87.1	95.1	103.1	111.1	119.7	128.8	137.9	147.1	156.3	162.4
77.5°	60.6	69.0	77.3	85.7	94.1	102.9	112.2	121.5	130.8	140.1	146.2
80°	48.2	56.9	65.7	74.4	83.1	92.1	101.4	110.6	119.9	129.2	135.3
82.5°	38.0	46.6	55.1	63.7	72.3	81.4	90.7	100.1	109.5	119.0	124.9
85°	23.2	32.0	40.9	49.8	58.5	67.6	76.7	85.8	95.1	104.2	110.2
87.5°	12.7	21.6	30.5	39.3	48.2	57.6	67.4	77.1	87.0	96.8	102.5
90°	7.1	17.2	27.3	37.4	47.4	58.7	71.1	83.6	96.0	108.4	113.8
92.5°	17.9	26.9	36.0	45.0	54.0	63.4	72.9	82.5	92.0	101.7	107.3
95°	40.1	48.4	56.6	64.7	73.0	81.5	90.4	99.3	108.1	117.0	122.4
97.5°	68.4	75.7	83.0	90.3	97.6	105.6	114.4	123.2	132.0	140.9	146.1
100°	90.0	96.4	103.0	109.4	115.9	123.4	131.8	140.3	148.7	157.1	162.5
102.5°	112.1	117.9	123.6	129.4	135.2	142.3	150.6	158.9	167.3	175.6	181.0
105°	147.9	152.5	157.1	161.7	166.3	172.5	180.2	187.9	195.6	203.4	208.6
107.5°	184.7	188.6	192.6	196.6	200.5	206.1	213.2	220.3	227.5	234.5	239.4
110°	207.8	211.5	215.3	219.1	222.8	228.3	235.2	242.2	249.3	256.2	260.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	233.7	236.9	240.3	243.6	246.8	251.8	258.3	264.8	271.4	277.9	282.1
115°	271.7	274.2	276.7	279.1	281.6	285.9	292.1	298.3	304.4	310.5	314.6
117.5°	309.1	311.3	313.6	315.7	318.0	321.7	326.7	331.8	337.0	342.1	345.9
120°	334.4	336.1	337.9	339.7	341.5	344.6	349.1	353.6	358.2	362.7	366.7
122.5°	357.6	359.2	360.8	362.6	364.2	367.3	371.9	376.3	380.9	385.5	389.0
125°	393.0	394.3	395.6	397.0	398.4	401.1	405.2	409.3	413.5	417.6	421.0
127.5°	428.1	429.6	431.2	432.8	434.4	436.7	439.9	443.0	446.2	449.3	452.3
130°	450.1	451.9	453.7	455.6	457.4	459.6	462.4	465.0	467.7	470.5	473.6
132.5°	474.9	476.4	477.9	479.2	480.7	482.6	485.0	487.3	489.7	492.1	494.7
135°	507.4	509.0	510.7	512.4	514.0	515.7	517.4	519.1	520.8	522.6	525.5
137.5°	542.3	543.5	544.9	546.2	547.5	548.7	549.7	550.8	551.7	552.8	555.3
140°	563.3	564.5	565.7	566.9	568.1	569.2	570.2	571.3	572.3	573.3	575.6
142.5°	584.8	586.0	587.2	588.4	589.6	590.5	591.1	591.6	592.2	592.8	594.7
145°	615.1	616.1	617.3	618.3	619.3	620.3	621.2	622.1	622.9	623.9	624.9
147.5°	642.7	643.9	645.2	646.4	647.7	648.7	649.3	649.9	650.5	651.1	651.5
150°	661.6	662.5	663.3	664.3	665.1	665.9	666.5	667.1	667.7	668.3	668.7
152.5°	678.2	679.2	680.0	681.0	681.8	682.6	683.4	684.1	684.8	685.5	686.0
155°	703.3	703.7	704.2	704.6	705.1	705.5	705.9	706.5	706.9	707.3	708.1
157.5°	724.7	725.0	725.3	725.6	725.9	726.2	726.4	726.7	726.9	727.2	728.2
160°	737.6	737.9	738.2	738.5	738.8	739.0	739.2	739.3	739.5	739.6	740.5
162.5°	749.4	749.5	749.6	749.6	749.7	749.8	749.9	750.1	750.3	750.4	751.4
165°	765.2	765.1	764.9	764.7	764.6	764.5	764.5	764.5	764.5	764.5	765.6
167.5°	778.3	777.9	777.5	777.1	776.6	776.4	776.4	776.3	776.3	776.2	777.3
170°	785.4	785.0	784.5	784.0	783.6	783.3	783.2	783.0	782.8	782.6	783.8
172.5°	790.2	789.8	789.4	788.8	788.4	788.2	788.0	787.8	787.7	787.6	788.6
175°	796.2	795.7	795.2	794.8	794.4	794.0	793.7	793.4	793.1	792.8	793.8
177.5°	798.6	798.2	797.9	797.5	797.1	796.9	796.6	796.3	796.1	795.9	796.6
180°	797.5	797.5	797.5	797.5	797.5	797.5	797.5	797.5	797.5	797.5	797.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
2.5°	442.3	442.8	443.4	443.6	443.3	443.2	442.9	442.6
5°	440.9	441.8	442.6	443.0	442.8	442.7	442.6	442.4
7.5°	438.8	439.8	440.8	441.3	441.2	441.0	440.8	440.7
10°	437.0	438.1	439.3	439.8	439.6	439.5	439.4	439.2
12.5°	433.9	435.1	436.2	436.7	436.5	436.4	436.3	436.1
15°	428.3	429.6	430.8	431.4	431.3	431.1	430.9	430.8
17.5°	421.0	422.4	423.7	424.4	424.4	424.4	424.4	424.4
20°	415.3	416.9	418.4	419.2	419.2	419.2	419.2	419.2
22.5°	409.1	410.7	412.3	413.2	413.5	413.6	413.9	414.1
25°	399.5	401.2	402.9	404.1	404.5	404.9	405.4	405.8
27.5°	388.9	391.1	393.2	394.4	394.8	395.1	395.4	395.7
30°	381.4	383.7	386.0	387.3	387.7	388.1	388.6	389.0
32.5°	373.3	375.9	378.6	380.3	381.1	381.9	382.6	383.4
35°	361.9	365.1	368.2	370.2	371.3	372.2	373.2	374.3
37.5°	350.1	353.6	357.1	359.3	360.4	361.4	362.5	363.6
40°	341.8	345.5	349.2	351.7	353.0	354.3	355.6	356.9
42.5°	333.7	337.8	341.8	344.6	345.8	347.1	348.4	349.7
45°	321.4	325.8	330.2	333.1	334.6	336.0	337.4	338.9
47.5°	308.5	313.1	317.8	320.9	322.4	324.0	325.6	327.2
50°	299.7	304.5	309.4	312.6	314.3	315.8	317.4	318.9
52.5°	290.2	295.2	300.1	303.4	305.1	306.9	308.5	310.2
55°	275.9	281.0	286.1	289.6	291.5	293.3	295.2	297.0
57.5°	260.7	266.2	271.8	275.5	277.4	279.3	281.2	283.1
60°	250.7	256.1	261.6	265.3	267.3	269.3	271.3	273.3
62.5°	240.0	245.8	251.6	255.5	257.4	259.2	261.1	263.0
65°	223.9	229.8	235.7	239.5	241.3	243.2	245.0	246.9
67.5°	207.6	213.4	219.4	223.3	225.2	227.2	229.2	231.1
70°	196.2	202.3	208.4	212.4	214.1	215.9	217.6	219.3
72.5°	185.2	191.2	197.3	201.3	203.3	205.3	207.4	209.5
75°	168.6	174.7	180.8	184.9	186.7	188.6	190.4	192.3
77.5°	152.3	158.4	164.5	168.6	170.6	172.5	174.6	176.6
80°	141.3	147.2	153.3	157.2	159.3	161.3	163.2	165.2
82.5°	131.0	137.0	142.9	146.9	148.8	150.7	152.6	154.5
85°	116.1	122.2	128.2	132.2	134.1	136.2	138.2	140.2
87.5°	108.3	114.1	119.9	123.7	125.5	127.4	129.2	131.1
90°	119.2	124.7	130.1	133.7	135.6	137.5	139.3	141.2
92.5°	113.0	118.6	124.3	128.0	129.8	131.5	133.2	135.0
95°	127.9	133.3	138.7	142.2	143.6	145.0	146.4	147.8
97.5°	151.4	156.7	162.0	165.5	167.1	168.8	170.4	172.1
100°	167.7	173.1	178.3	181.7	183.1	184.5	186.0	187.4
102.5°	186.2	191.5	196.8	200.2	201.6	203.0	204.4	205.9
105°	214.0	219.3	224.5	228.0	229.5	231.2	232.7	234.3
107.5°	244.4	249.3	254.3	257.2	258.0	258.9	259.8	260.7
110°	265.4	269.9	274.6	277.4	278.5	279.7	280.8	281.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	286.4	290.6	294.8	297.6	298.8	300.0	301.3	302.5
115°	318.7	322.9	327.0	329.7	330.8	331.9	333.0	334.2
117.5°	349.8	353.7	357.6	360.0	361.0	362.1	363.0	364.0
120°	370.7	374.7	378.7	381.3	382.4	383.5	384.6	385.7
122.5°	392.5	396.1	399.6	401.8	402.9	403.8	404.8	405.9
125°	424.4	427.8	431.2	433.5	434.6	435.8	436.9	438.1
127.5°	455.3	458.3	461.3	463.2	464.0	464.8	465.5	466.3
130°	476.7	479.8	482.9	484.8	485.3	485.9	486.5	487.0
132.5°	497.4	500.1	502.7	504.4	505.1	505.8	506.4	507.0
135°	528.3	531.2	534.0	535.8	536.5	537.2	537.9	538.6
137.5°	557.8	560.3	562.8	564.2	564.6	565.0	565.4	565.8
140°	577.9	580.2	582.5	583.8	584.0	584.3	584.5	584.8
142.5°	596.7	598.6	600.5	601.6	601.8	601.9	602.0	602.2
145°	625.9	626.9	627.9	628.4	628.5	628.7	628.8	629.0
147.5°	651.9	652.4	652.8	652.9	652.7	652.5	652.3	652.0
150°	669.2	669.6	670.1	670.1	669.6	669.2	668.7	668.3
152.5°	686.6	687.3	687.8	687.8	687.3	686.6	686.0	685.5
155°	708.8	709.6	710.3	710.5	710.0	709.6	709.1	708.7
157.5°	729.3	730.3	731.3	731.4	730.7	730.0	729.3	728.6
160°	741.4	742.4	743.2	743.4	742.8	742.2	741.6	741.0
162.5°	752.4	753.5	754.5	754.6	753.9	753.2	752.4	751.7
165°	766.6	767.7	768.7	768.9	768.1	767.3	766.6	765.9
167.5°	778.3	779.4	780.4	780.6	779.8	779.0	778.3	777.5
170°	784.8	785.8	786.9	787.0	786.1	785.1	784.3	783.3
172.5°	789.6	790.7	791.7	791.8	790.9	790.0	789.1	788.2
175°	794.9	795.9	796.9	797.0	796.2	795.2	794.4	793.5
177.5°	797.3	798.1	798.7	798.7	798.1	797.3	796.6	795.9
180°	797.5	797.5	797.5	797.5	797.5	797.5	797.5	797.5

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