

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: P333506-940

Luminaire Tested: **S125RDIP-S375D810U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333506-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S375D810U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3791.2 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

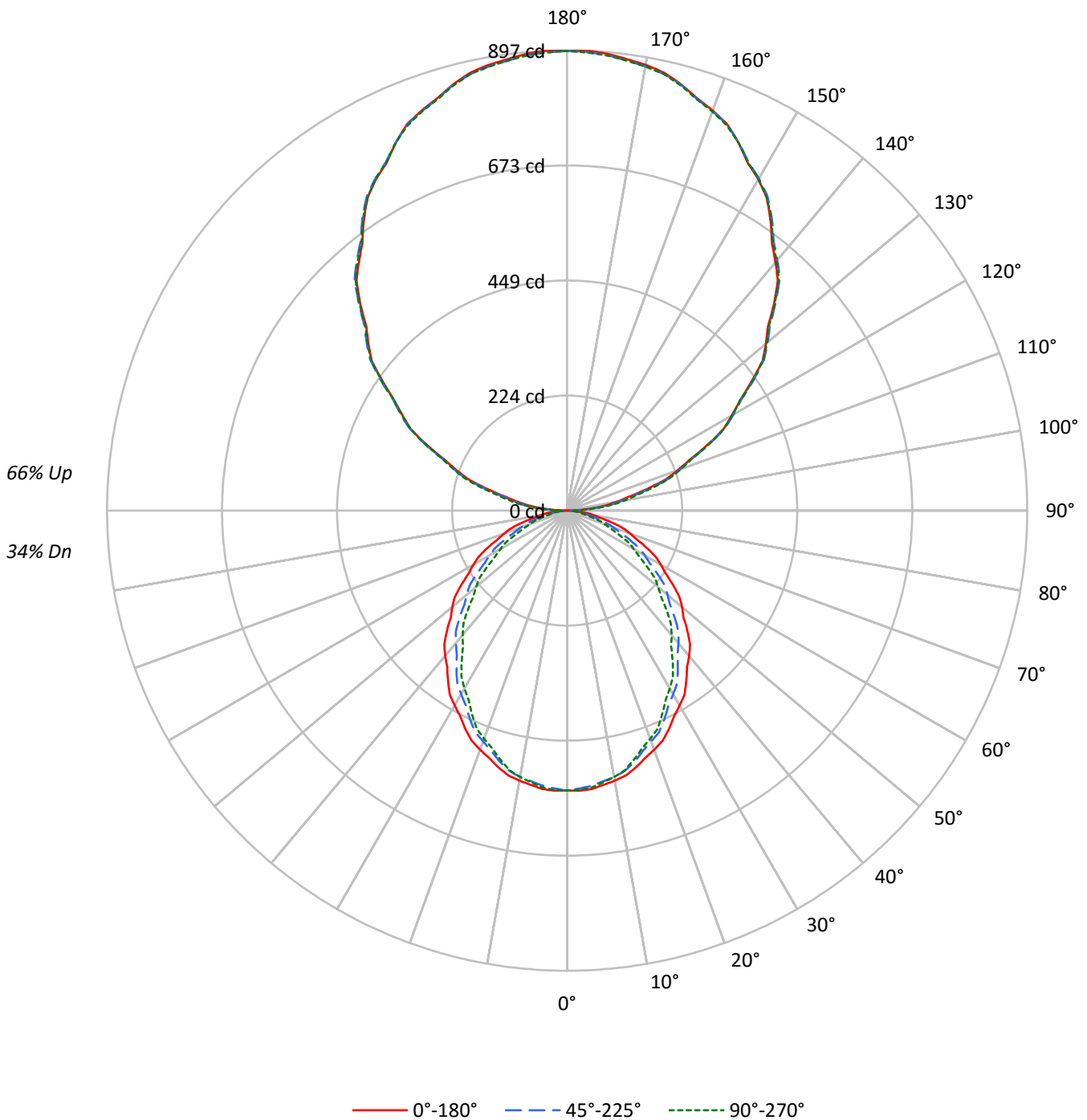
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	82	78	76	65	63	61	51	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	37	34	29	27	26	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	29	25	22	21	19	17	14
7	56	44	36	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	27	47	37	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	1.4
10°-20°	143.4	3.8
20°-30°	207.9	5.5
30°-40°	237.0	6.3
40°-50°	231.0	6.1
50°-60°	194.4	5.1
60°-70°	136.3	3.6
70°-80°	70.1	1.8
80°-90°	19.7	0.5
90°-100°	60.0	1.6
100°-110°	177.2	4.7
110°-120°	300.2	7.9
120°-130°	395.0	10.4
130°-140°	442.6	11.7
140°-150°	433.8	11.4
150°-160°	364.4	9.6
160°-170°	242.2	6.4
170°-180°	84.8	2.2
0°-30°	402.6	10.6
0°-40°	639.6	16.9
0°-60°	1065.0	28.1
0°-90°	1291.0	34.1
90°-120°	537.4	14.2
90°-150°	1808.9	47.7
90°-180°	2500.0	65.9
0°-180°	3791.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	25
90°	1	6	11	15	17	4
95°	45	47	54	58	60	48
105°	159	162	167	171	173	170
115°	300	303	305	304	303	297
125°	438	443	443	442	441	393
135°	570	574	575	575	572	439
145°	691	694	696	696	694	432
155°	791	791	791	794	791	364
165°	860	858	859	861	858	242
175°	894	891	891	895	890	85
180°	896	896	896	896	896	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.8	7.5	7.2	7.0	6.7	6.6	6.8	6.9	7.0	7.1	7.3
90°	0.7	2.0	3.2	4.5	5.6	6.8	7.9	9.0	10.1	11.1	11.9
92.5°	16.9	17.7	18.6	19.4	20.3	21.4	22.7	24.1	25.4	26.8	27.8
95°	45.3	45.7	45.9	46.3	46.5	47.5	49.0	50.6	52.2	53.7	54.8
97.5°	75.3	75.4	75.5	75.7	75.8	77.0	79.1	81.2	83.4	85.5	86.5
100°	97.6	97.6	97.6	97.6	97.6	98.6	100.7	102.6	104.7	106.6	108.1
102.5°	121.6	122.3	122.9	123.5	124.1	124.9	125.9	127.0	128.0	129.0	130.5
105°	159.0	159.8	160.5	161.3	162.1	162.9	163.9	164.8	165.7	166.7	167.6
107.5°	200.3	201.0	201.8	202.6	203.4	204.1	204.8	205.5	206.3	207.0	207.4
110°	228.7	229.5	230.2	231.0	231.8	232.5	232.9	233.4	233.8	234.3	234.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	257.7	258.2	258.5	259.0	259.3	259.8	260.4	261.0	261.6	262.2	262.4
115°	300.5	301.1	301.8	302.4	303.0	303.4	303.8	304.1	304.4	304.7	304.5
117.5°	343.5	343.8	344.0	344.3	344.6	344.9	345.2	345.4	345.7	346.0	346.1
120°	370.2	371.0	371.8	372.6	373.4	373.8	374.0	374.2	374.3	374.4	374.4
122.5°	399.2	399.6	399.8	400.1	400.4	400.7	401.1	401.5	401.9	402.3	402.2
125°	438.5	439.5	440.4	441.4	442.3	442.8	443.0	443.2	443.3	443.4	443.2
127.5°	480.5	481.0	481.4	482.0	482.5	482.9	483.0	483.2	483.5	483.7	483.5
130°	505.5	506.3	507.1	507.8	508.6	509.2	509.4	509.8	510.1	510.4	510.2
132.5°	530.7	531.9	533.2	534.4	535.7	536.3	536.3	536.2	536.1	536.1	535.9
135°	570.3	571.3	572.2	573.2	574.1	574.6	574.8	575.0	575.1	575.2	575.2
137.5°	607.8	608.7	609.6	610.5	611.4	612.0	612.3	612.6	613.0	613.3	613.5
140°	631.8	632.5	633.3	634.1	634.8	635.4	635.9	636.4	636.9	637.3	637.7
142.5°	655.8	656.4	657.0	657.6	658.4	659.0	659.5	660.1	660.7	661.3	661.5
145°	691.0	691.6	692.2	692.9	693.5	694.0	694.5	694.9	695.4	695.9	695.9
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.2
150°	745.4	745.2	745.1	744.9	744.8	745.0	745.6	746.3	746.9	747.5	747.5
152.5°	763.2	763.5	763.7	763.9	764.1	764.4	764.6	764.8	765.1	765.4	765.7
155°	790.7	790.7	790.7	790.7	790.7	790.8	790.9	791.1	791.2	791.4	792.0
157.5°	815.3	814.9	814.6	814.2	813.9	813.8	814.0	814.1	814.2	814.4	815.0
160°	829.7	829.3	828.8	828.4	827.9	827.8	827.9	828.0	828.2	828.4	829.0
162.5°	842.6	842.2	841.9	841.6	841.2	841.1	841.1	841.2	841.2	841.2	842.0
165°	859.8	859.4	859.2	858.8	858.5	858.4	858.5	858.7	858.9	859.1	859.7
167.5°	874.2	873.6	873.0	872.4	871.7	871.5	871.5	871.5	871.5	871.5	872.4
170°	882.1	881.5	880.8	880.2	879.6	879.2	879.2	879.2	879.2	879.2	880.2
172.5°	887.6	887.0	886.4	885.7	885.1	884.8	884.8	884.8	884.8	884.8	885.7
175°	893.9	893.3	892.7	892.1	891.4	891.1	891.1	891.1	891.1	891.1	892.1
177.5°	897.2	896.6	896.2	895.6	895.1	894.8	894.7	894.6	894.5	894.3	895.1
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	7.5	7.7	7.8	7.8	7.9	7.9	7.9	7.9
90°	12.7	13.5	14.3	14.9	15.3	15.8	16.2	16.8
92.5°	28.8	29.9	30.9	31.6	31.9	32.2	32.5	32.9
95°	55.8	57.0	58.1	58.8	59.0	59.4	59.7	59.9
97.5°	87.6	88.5	89.6	90.2	90.3	90.5	90.8	91.0
100°	109.5	110.8	112.3	113.2	113.4	113.7	114.0	114.3
102.5°	132.1	133.6	135.1	136.1	136.5	136.9	137.3	137.8
105°	168.5	169.4	170.4	171.0	171.6	172.0	172.5	172.9
107.5°	207.9	208.3	208.8	209.0	209.0	208.9	208.9	208.9
110°	235.2	235.7	236.1	236.3	236.1	235.9	235.9	235.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	262.6	262.8	263.1	263.1	262.7	262.4	262.2	261.9
115°	304.4	304.3	304.1	303.9	303.8	303.6	303.4	303.4
117.5°	346.3	346.3	346.5	346.3	345.6	345.0	344.4	343.8
120°	374.4	374.4	374.4	374.2	373.5	372.9	372.3	371.7
122.5°	402.1	402.0	401.8	401.5	401.0	400.6	400.0	399.6
125°	442.8	442.6	442.2	442.0	441.8	441.7	441.6	441.4
127.5°	483.3	483.1	483.0	482.8	482.5	482.1	481.9	481.5
130°	510.1	510.0	509.8	509.5	509.3	508.9	508.6	508.3
132.5°	535.7	535.6	535.5	535.1	534.8	534.3	533.9	533.4
135°	575.2	575.2	575.2	575.0	574.4	573.7	573.1	572.5
137.5°	613.7	613.9	614.0	613.8	613.0	612.2	611.4	610.6
140°	637.9	638.2	638.6	638.3	637.6	636.8	636.0	635.3
142.5°	661.6	661.8	662.0	661.7	660.9	660.2	659.4	658.6
145°	695.9	695.9	695.9	695.6	695.2	694.7	694.3	693.8
147.5°	727.5	728.0	728.3	728.0	726.9	725.9	724.9	723.8
150°	747.5	747.5	747.5	747.3	747.0	746.7	746.4	746.1
152.5°	766.1	766.4	766.8	766.7	766.2	765.6	765.1	764.5
155°	792.6	793.3	793.9	793.8	793.0	792.3	791.5	790.7
157.5°	815.6	816.3	816.9	816.7	815.6	814.7	813.6	812.6
160°	829.6	830.2	830.8	830.8	830.0	829.2	828.4	827.7
162.5°	842.7	843.5	844.2	844.1	843.2	842.3	841.4	840.5
165°	860.3	860.9	861.5	861.4	860.4	859.5	858.5	857.6
167.5°	873.3	874.2	875.2	875.1	874.2	873.3	872.3	871.3
170°	881.1	882.1	883.0	882.9	881.8	880.7	879.7	878.6
172.5°	886.7	887.6	888.6	888.6	887.6	886.6	885.6	884.7
175°	893.0	893.9	894.8	894.7	893.7	892.6	891.5	890.5
177.5°	895.8	896.5	897.3	897.2	896.3	895.5	894.7	893.8
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0

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