

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: P333646-940

Luminaire Tested: **S125RDIW-S375D770U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333646-940
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: S125RDIW-S375D770U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4028.0 lumens
Efficiency: N/A
Efficacy: 132.5 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

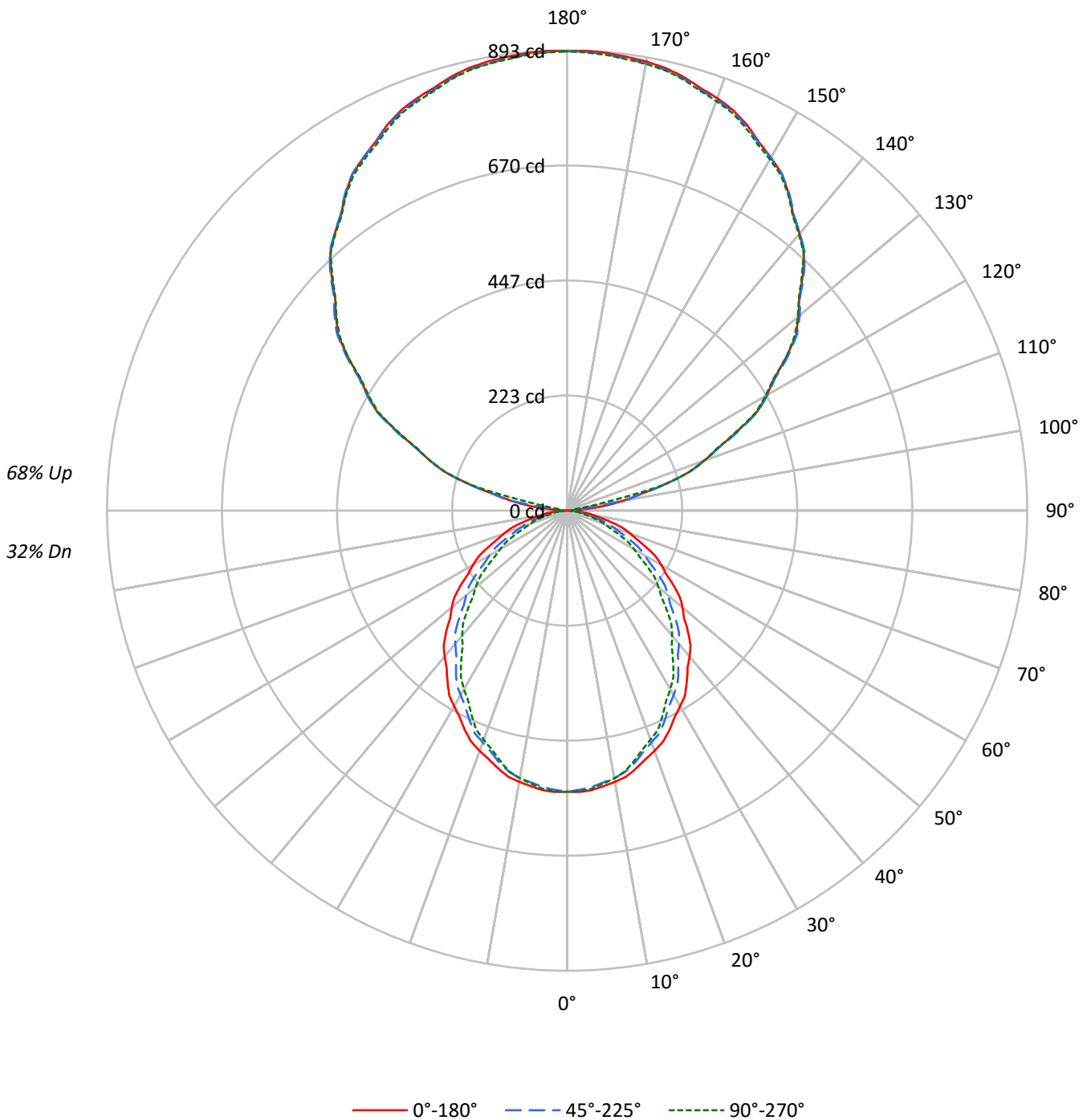
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	78	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	52	50	46	42	38	36	33	28	26	24	20
4	71	61	53	48	64	55	49	44	44	40	36	34	31	28	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	22	20	18	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	14	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	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	1.3
10°-20°	143.4	3.6
20°-30°	207.9	5.2
30°-40°	237.0	5.9
40°-50°	231.0	5.7
50°-60°	194.4	4.8
60°-70°	136.3	3.4
70°-80°	70.1	1.7
80°-90°	19.6	0.5
90°-100°	32.4	0.8
100°-110°	199.6	5.0
110°-120°	362.0	9.0
120°-130°	464.6	11.5
130°-140°	499.8	12.4
140°-150°	469.1	11.6
150°-160°	379.5	9.4
160°-170°	245.4	6.1
170°-180°	84.6	2.1
0°-30°	402.6	10.0
0°-40°	639.6	15.9
0°-60°	1065.0	26.4
0°-90°	1290.9	32.0
90°-120°	594.1	14.7
90°-150°	2027.6	50.3
90°-180°	2737.0	67.9
0°-180°	4028.0	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	14	16	3
95°	38	34	11	14	14	48
105°	194	197	197	197	196	206
115°	365	368	369	366	362	361
125°	519	523	523	521	519	463
135°	647	651	650	648	644	498
145°	750	751	751	752	748	469
155°	826	822	823	825	820	380
165°	872	868	868	872	867	246
175°	891	888	888	893	887	85
180°	891	891	891	891	891	



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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	7.4	7.1	6.9	6.6	6.5	6.7	6.8	7.0	7.0	7.2
90°	0.6	1.9	3.0	4.2	5.4	6.4	7.5	8.6	9.5	10.6	11.3
92.5°	10.2	9.4	8.6	7.7	6.9	7.0	7.8	8.7	9.6	10.6	11.3
95°	37.6	37.2	36.7	36.4	35.9	32.9	27.3	21.8	16.1	10.6	11.3
97.5°	78.6	79.5	80.3	81.0	81.8	76.7	65.6	54.6	43.5	32.5	28.4
100°	110.3	110.8	111.2	111.6	112.1	112.6	113.2	113.8	114.4	114.9	93.1
102.5°	142.6	143.1	143.7	144.3	144.8	145.3	145.6	146.0	146.3	146.7	142.6
105°	194.2	194.8	195.5	196.0	196.6	196.9	196.9	196.9	196.9	196.9	196.9
107.5°	247.9	247.9	247.9	247.9	247.9	248.1	248.3	248.6	249.0	249.2	249.2
110°	282.8	282.8	282.8	282.8	282.8	282.9	283.2	283.6	283.8	284.1	283.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	315.6	315.9	316.3	316.6	317.0	317.3	317.4	317.6	317.8	318.0	317.4
115°	364.7	365.4	366.2	366.9	367.7	368.1	368.3	368.4	368.5	368.7	368.1
117.5°	415.6	415.5	415.5	415.5	415.4	415.7	416.3	416.9	417.4	417.9	417.2
120°	447.3	447.2	447.0	446.8	446.7	446.8	447.3	447.7	448.2	448.6	448.4
122.5°	475.3	475.9	476.4	477.0	477.6	478.0	478.1	478.3	478.6	478.8	478.5
125°	518.7	519.7	520.8	521.7	522.8	523.3	523.3	523.3	523.3	523.3	522.7
127.5°	560.0	560.8	561.5	562.2	562.9	563.3	563.2	563.1	563.0	562.9	562.6
130°	585.4	586.1	586.8	587.6	588.4	588.8	588.9	589.1	589.2	589.3	588.9
132.5°	610.7	611.6	612.5	613.3	614.2	614.5	614.1	613.8	613.5	613.1	613.1
135°	646.8	647.7	648.6	649.5	650.4	650.7	650.4	650.1	649.8	649.5	649.2
137.5°	680.0	680.8	681.5	682.3	683.1	683.3	683.1	682.8	682.5	682.2	682.3
140°	701.7	702.0	702.3	702.6	702.8	702.9	702.8	702.7	702.5	702.3	702.7
142.5°	721.2	721.4	721.6	721.8	721.9	722.1	722.4	722.6	722.7	723.0	723.0
145°	749.9	750.2	750.6	750.8	751.1	751.3	751.3	751.3	751.3	751.3	751.4
147.5°	775.1	775.0	774.9	774.9	774.8	774.9	775.1	775.2	775.3	775.5	775.7
150°	790.9	790.6	790.3	790.0	789.7	789.7	790.0	790.3	790.6	790.9	791.2
152.5°	806.2	805.6	804.9	804.3	803.6	803.4	803.8	804.1	804.3	804.6	804.9
155°	825.9	825.0	824.1	823.2	822.4	822.1	822.4	822.7	823.0	823.2	823.7
157.5°	841.1	840.6	840.1	839.5	839.0	838.7	838.7	838.8	838.8	838.8	839.4
160°	851.7	850.8	849.9	849.0	848.2	847.7	847.9	848.1	848.2	848.4	849.0
162.5°	860.1	859.3	858.4	857.5	856.6	856.2	856.4	856.6	856.7	856.8	857.6
165°	871.5	870.6	869.8	868.9	868.0	867.6	867.7	867.9	868.1	868.2	869.1
167.5°	879.9	879.0	878.2	877.3	876.3	875.9	876.1	876.2	876.4	876.6	877.5
170°	884.8	883.7	882.6	881.6	880.6	880.1	880.3	880.5	880.6	880.7	881.9
172.5°	887.9	886.9	885.8	884.8	883.8	883.4	883.7	884.0	884.2	884.5	885.5
175°	891.4	890.5	889.6	888.7	887.8	887.4	887.6	887.7	887.9	888.1	889.2
177.5°	892.9	892.2	891.5	890.8	890.1	889.7	889.9	890.0	890.1	890.3	891.1
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4



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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°	7.3	7.5	7.7	7.8	7.8	7.8	7.8	7.8
90°	12.0	12.8	13.5	14.1	14.5	15.0	15.4	15.9
92.5°	12.0	12.8	13.5	14.0	14.2	14.4	14.6	14.8
95°	12.0	12.8	13.5	13.9	13.9	13.9	13.9	13.9
97.5°	24.3	20.1	16.0	13.9	13.9	13.9	13.9	13.9
100°	71.2	49.3	27.5	16.2	15.6	15.1	14.4	13.9
102.5°	138.4	134.3	130.1	123.1	113.1	103.1	93.1	83.1
105°	196.9	196.9	196.9	196.8	196.7	196.5	196.4	196.3
107.5°	249.3	249.3	249.3	249.1	248.7	248.3	247.8	247.4
110°	283.2	282.8	282.3	282.2	282.3	282.5	282.7	282.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	316.8	316.3	315.7	315.3	315.1	315.0	314.7	314.5
115°	367.5	366.9	366.3	365.6	364.7	363.8	362.9	362.0
117.5°	416.4	415.7	414.9	414.4	413.9	413.6	413.2	412.9
120°	448.1	447.7	447.5	446.9	446.2	445.5	444.8	444.0
122.5°	478.1	477.9	477.6	477.0	476.2	475.3	474.5	473.6
125°	522.1	521.6	520.9	520.4	520.0	519.5	519.2	518.7
127.5°	562.3	562.0	561.7	561.0	559.8	558.7	557.7	556.6
130°	588.5	588.1	587.6	587.0	586.3	585.6	584.8	584.1
132.5°	613.0	612.9	612.8	612.4	611.6	610.9	610.2	609.5
135°	648.9	648.6	648.4	647.7	646.8	646.0	645.1	644.2
137.5°	682.4	682.4	682.5	682.2	681.4	680.6	679.8	679.1
140°	702.9	703.2	703.6	703.2	702.3	701.5	700.6	699.7
142.5°	723.1	723.2	723.2	722.8	721.9	721.0	720.1	719.3
145°	751.5	751.7	751.8	751.4	750.6	749.7	748.9	748.0
147.5°	775.9	776.1	776.2	775.8	774.8	773.7	772.7	771.6
150°	791.5	791.8	792.1	791.7	790.4	789.3	788.1	786.9
152.5°	805.2	805.5	805.8	805.4	804.3	803.3	802.3	801.2
155°	824.1	824.6	825.0	824.7	823.5	822.3	821.2	819.9
157.5°	839.8	840.3	840.7	840.3	839.2	838.0	836.9	835.7
160°	849.5	850.2	850.7	850.4	849.3	848.1	846.9	845.7
162.5°	858.4	859.3	860.1	859.9	858.6	857.3	856.0	854.7
165°	870.0	870.8	871.7	871.6	870.4	869.2	868.1	866.8
167.5°	878.6	879.7	880.7	880.7	879.3	878.0	876.6	875.3
170°	883.1	884.3	885.5	885.4	884.0	882.7	881.4	880.1
172.5°	886.5	887.6	888.7	888.5	887.3	885.9	884.6	883.2
175°	890.4	891.5	892.7	892.6	891.4	890.0	888.7	887.3
177.5°	891.9	892.7	893.6	893.5	892.5	891.6	890.6	889.7
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4

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