

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: P333666-927

Luminaire Tested: **S125RDIW-S610D770U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333666-927
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-S610D770U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 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: 4315.9 lumens
Efficiency: N/A
Efficacy: 114.8 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: General Diffuse

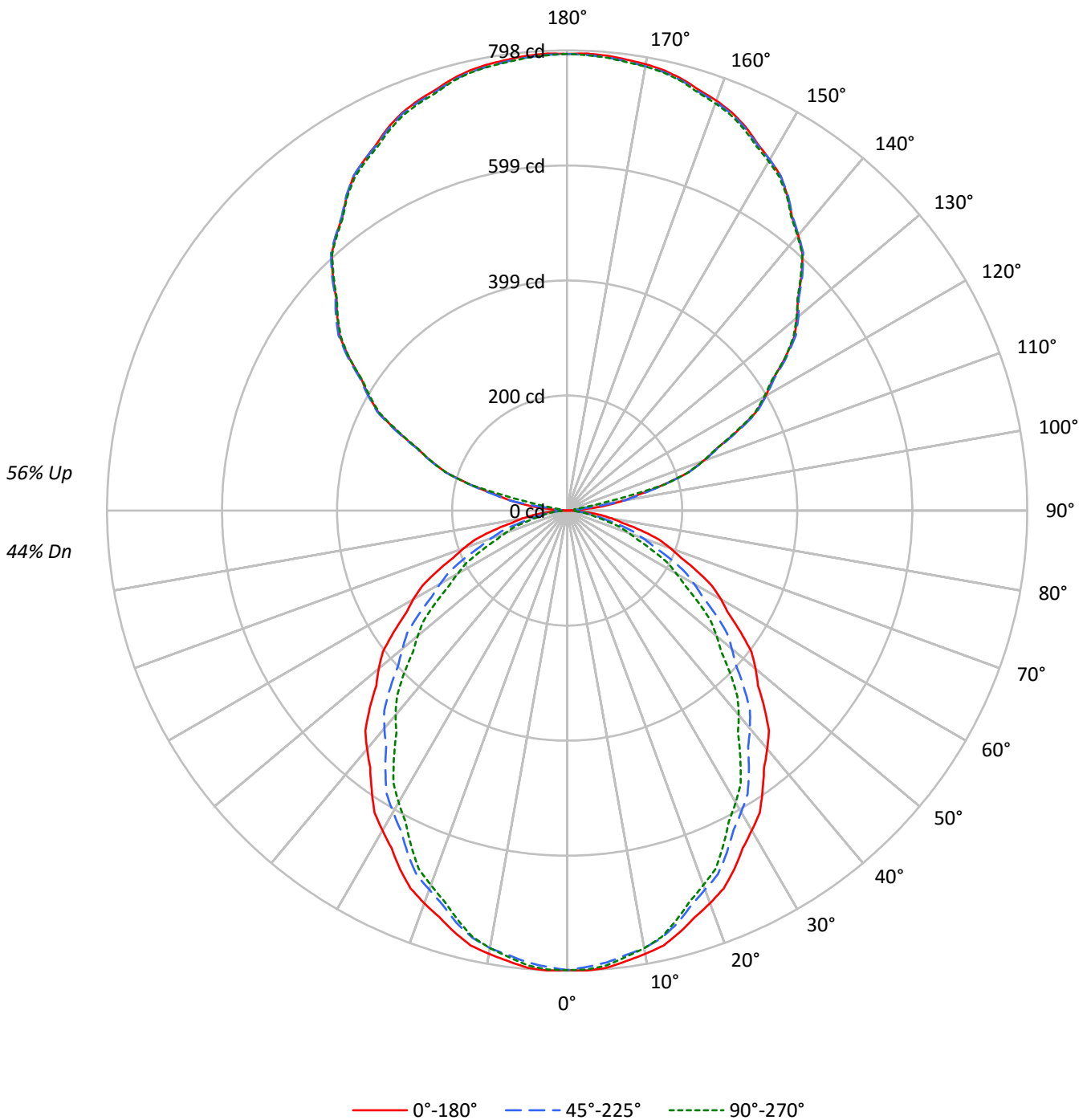
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	97	92	89	85	88	85	81	79	70	68	66	57	55	54	45	44	43	37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36	31
3	80	71	64	58	73	65	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	43	38	34	36	32	29	29	26	24	20
6	62	50	42	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	29	25	22	24	21	19	16
8	53	41	34	29	49	38	31	27	32	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	46	35	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.7
10°-20°	209.4	4.9
20°-30°	303.7	7.0
30°-40°	346.1	8.0
40°-50°	337.4	7.8
50°-60°	284.0	6.6
60°-70°	199.1	4.6
70°-80°	102.3	2.4
80°-90°	27.5	0.6
90°-100°	28.8	0.7
100°-110°	177.3	4.1
110°-120°	321.6	7.5
120°-130°	412.8	9.6
130°-140°	444.0	10.3
140°-150°	416.7	9.7
150°-160°	337.1	7.8
160°-170°	218.0	5.1
170°-180°	75.2	1.7
0°-30°	588.0	13.6
0°-40°	934.1	21.6
0°-60°	1555.4	36.0
0°-90°	1884.3	43.7
90°-120°	527.8	12.2
90°-150°	1801.3	41.7
90°-180°	2432.0	56.3
0°-180°	4315.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	5	9	12	14	3
95°	33	31	9	12	12	43
105°	172	175	175	175	174	183
115°	324	327	328	325	322	321
125°	461	465	465	463	461	411
135°	575	578	577	576	572	443
145°	666	667	667	668	664	416
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.6	10.1	9.6	9.0	8.8	8.9	9.0	9.0	9.1	9.3
90°	0.6	1.7	2.7	3.7	4.8	5.7	6.7	7.6	8.5	9.4	10.1
92.5°	9.0	8.3	7.6	6.8	6.1	6.2	7.0	7.8	8.6	9.4	10.1
95°	33.4	33.0	32.6	32.3	31.9	29.2	24.2	19.3	14.3	9.4	10.1
97.5°	69.9	70.6	71.3	71.9	72.6	68.1	58.3	48.5	38.7	28.9	25.2
100°	98.0	98.4	98.8	99.2	99.6	100.1	100.6	101.1	101.6	102.1	82.7
102.5°	126.7	127.1	127.7	128.2	128.7	129.0	129.4	129.7	130.0	130.3	126.7
105°	172.5	173.1	173.6	174.1	174.7	174.9	174.9	174.9	174.9	174.9	174.9
107.5°	220.2	220.2	220.2	220.2	220.2	220.4	220.6	220.9	221.2	221.4	221.4
110°	251.2	251.2	251.2	251.2	251.2	251.4	251.6	251.9	252.2	252.4	252.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	280.4	280.7	281.0	281.3	281.6	281.9	282.0	282.2	282.3	282.5	281.9
115°	324.0	324.6	325.3	326.0	326.6	327.0	327.2	327.3	327.4	327.6	327.0
117.5°	369.2	369.2	369.2	369.2	369.1	369.3	369.9	370.3	370.8	371.3	370.7
120°	397.4	397.3	397.1	397.0	396.9	397.0	397.4	397.8	398.2	398.5	398.3
122.5°	422.2	422.8	423.3	423.7	424.3	424.6	424.8	424.9	425.2	425.3	425.1
125°	460.8	461.7	462.6	463.5	464.5	464.9	464.9	464.9	464.9	464.9	464.4
127.5°	497.5	498.2	498.8	499.5	500.1	500.4	500.3	500.3	500.2	500.1	499.8
130°	520.1	520.7	521.3	522.0	522.7	523.1	523.2	523.3	523.5	523.6	523.2
132.5°	542.6	543.4	544.2	544.9	545.7	545.9	545.6	545.3	545.0	544.7	544.6
135°	574.6	575.4	576.2	577.0	577.8	578.1	577.8	577.5	577.3	577.0	576.7
137.5°	604.1	604.8	605.5	606.2	606.8	607.0	606.8	606.6	606.3	606.1	606.2
140°	623.4	623.6	623.9	624.2	624.4	624.5	624.3	624.2	624.1	623.9	624.2
142.5°	640.7	640.9	641.0	641.2	641.4	641.5	641.7	641.9	642.1	642.3	642.3
145°	666.2	666.5	666.8	667.0	667.3	667.4	667.4	667.4	667.4	667.4	667.5
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.1
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	9.3	9.5	9.6	9.7	9.7	9.6	9.6	9.6
90°	10.7	11.3	12.0	12.5	12.9	13.3	13.7	14.1
92.5°	10.7	11.3	12.0	12.4	12.6	12.8	13.0	13.2
95°	10.7	11.3	12.0	12.4	12.4	12.4	12.4	12.4
97.5°	21.5	17.8	14.2	12.4	12.4	12.4	12.4	12.4
100°	63.3	43.8	24.4	14.4	13.9	13.4	12.8	12.4
102.5°	122.9	119.3	115.6	109.3	100.4	91.6	82.7	73.8
105°	174.9	174.9	174.9	174.8	174.8	174.6	174.4	174.4
107.5°	221.5	221.5	221.5	221.3	220.9	220.5	220.1	219.8
110°	251.6	251.2	250.8	250.7	250.8	251.0	251.1	251.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	281.5	281.0	280.4	280.1	280.0	279.8	279.6	279.4
115°	326.5	326.0	325.4	324.8	324.0	323.2	322.4	321.6
117.5°	369.9	369.3	368.6	368.1	367.7	367.4	367.1	366.8
120°	398.1	397.8	397.5	397.0	396.4	395.8	395.1	394.4
122.5°	424.8	424.5	424.3	423.7	423.0	422.2	421.5	420.7
125°	463.8	463.3	462.8	462.3	461.9	461.5	461.2	460.8
127.5°	499.6	499.2	499.0	498.4	497.3	496.4	495.4	494.5
130°	522.8	522.4	522.0	521.5	520.9	520.2	519.5	518.9
132.5°	544.5	544.5	544.4	544.1	543.4	542.7	542.1	541.5
135°	576.5	576.2	576.0	575.4	574.6	573.9	573.1	572.3
137.5°	606.3	606.3	606.3	606.0	605.3	604.7	604.0	603.3
140°	624.5	624.7	625.0	624.7	623.9	623.2	622.4	621.6
142.5°	642.4	642.5	642.5	642.1	641.4	640.6	639.8	639.0
145°	667.7	667.8	667.9	667.6	666.8	666.0	665.3	664.5
147.5°	689.3	689.4	689.6	689.2	688.3	687.4	686.4	685.5
150°	703.1	703.4	703.7	703.3	702.2	701.2	700.1	699.1
152.5°	715.3	715.6	715.9	715.5	714.5	713.7	712.7	711.8
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

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