

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: P333646-935

Luminaire Tested: **S125RDIW-S375D770U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333646-935  
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-S375D770U935-4F0-1E-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: 3889.2 lumens  
Efficiency: N/A  
Efficacy: 127.9 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

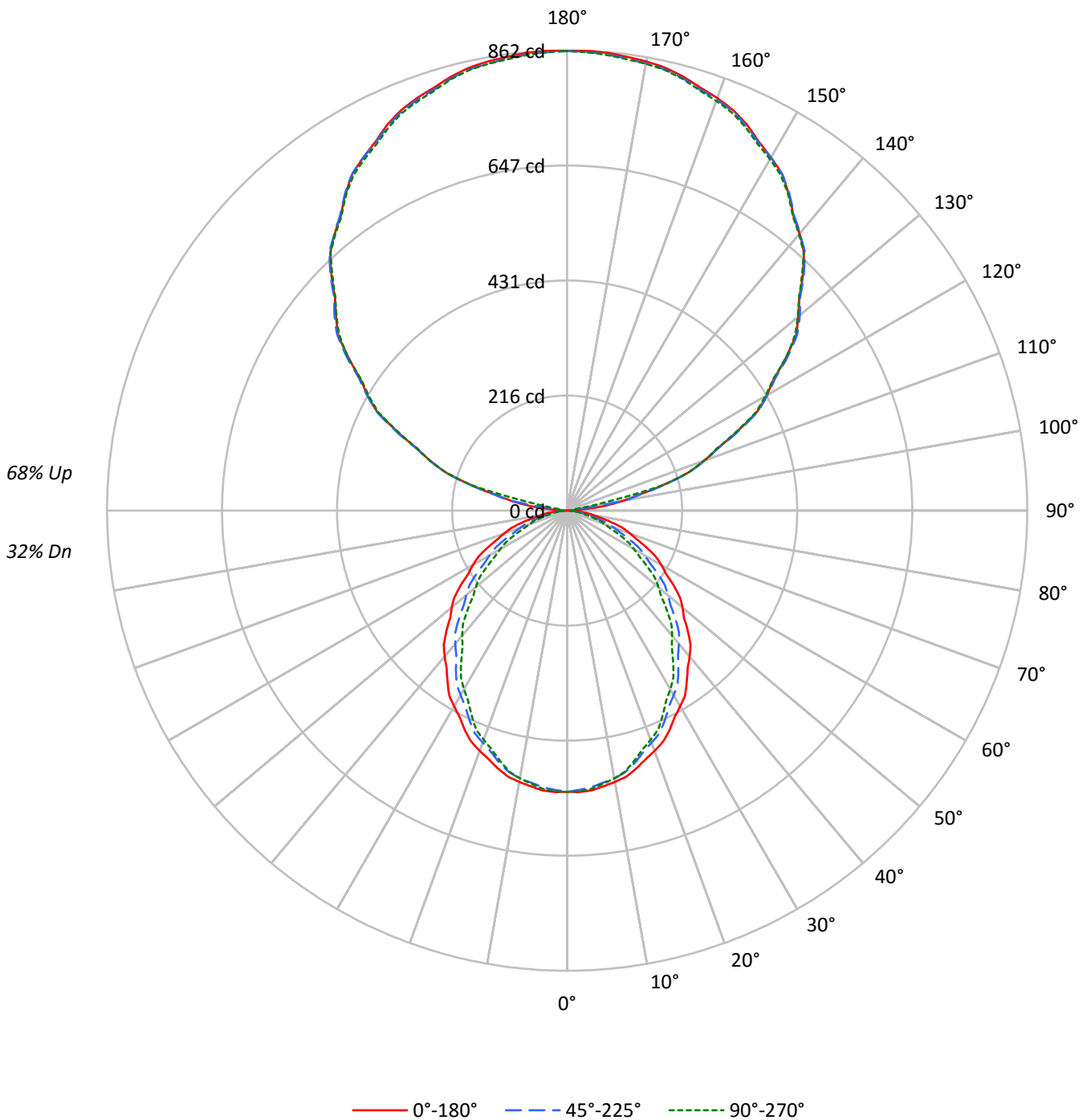
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3402	3402	3402
5°	3411	3371	3392
10°	3385	3341	3341
15°	3344	3273	3245
20°	3293	3178	3140
25°	3233	3085	3017
30°	3157	2976	2882
35°	3080	2864	2730
40°	3010	2748	2580
45°	2922	2617	2417
50°	2834	2475	2247
55°	2733	2339	2066
60°	2631	2174	1870
65°	2512	1984	1647
70°	2374	1743	1420
75°	2186	1470	1183
80°	1923	1153	993
85°	1623	941	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	1.3
10°-20°	138.4	3.6
20°-30°	200.8	5.2
30°-40°	228.8	5.9
40°-50°	223.0	5.7
50°-60°	187.7	4.8
60°-70°	131.6	3.4
70°-80°	67.6	1.7
80°-90°	18.9	0.5
90°-100°	31.3	0.8
100°-110°	192.7	5.0
110°-120°	349.6	9.0
120°-130°	448.6	11.5
130°-140°	482.6	12.4
140°-150°	452.9	11.6
150°-160°	366.4	9.4
160°-170°	237.0	6.1
170°-180°	81.7	2.1
0°-30°	388.7	10.0
0°-40°	617.6	15.9
0°-60°	1028.3	26.4
0°-90°	1246.4	32.0
90°-120°	573.6	14.7
90°-150°	1957.7	50.3
90°-180°	2643.0	68.0
0°-180°	3889.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	526	524	520	524	523	50
15°	500	498	490	489	485	141
25°	454	447	433	428	423	209
35°	391	381	363	352	346	245
45°	320	308	286	271	265	247
55°	243	230	208	190	184	217
65°	164	150	130	114	108	163
75°	88	75	59	50	47	93
85°	22	15	13	12	12	25
90°	1	6	10	13	15	3
95°	36	33	10	13	13	46
105°	188	190	190	190	190	199
115°	352	355	356	353	350	349
125°	501	505	505	503	501	447
135°	625	628	627	626	622	481
145°	724	725	725	726	722	453
155°	798	794	795	796	792	367
165°	842	838	838	842	837	238
175°	861	857	858	862	857	82
180°	861	861	861	861	861	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	527.8	527.6	527.4	527.2	526.9	526.5	525.8	525.0	524.3	523.7	524.3
5°	526.1	525.7	525.4	525.0	524.6	524.0	523.0	522.0	521.1	520.0	521.0
7.5°	520.9	520.6	520.2	519.9	519.5	518.8	517.6	516.4	515.3	514.1	514.7
10°	516.1	515.8	515.6	515.3	515.1	514.3	513.1	511.8	510.6	509.4	509.6
12.5°	510.7	510.3	510.1	509.7	509.4	508.3	506.7	505.1	503.3	501.7	501.9
15°	500.2	499.6	499.1	498.6	498.1	496.9	495.0	493.2	491.3	489.5	489.4
17.5°	488.4	487.5	486.7	485.9	485.1	483.5	481.1	478.8	476.5	474.2	473.7
20°	479.1	478.2	477.3	476.5	475.5	473.7	470.9	468.0	465.2	462.4	461.9
22.5°	468.9	468.0	467.2	466.2	465.4	463.5	460.5	457.5	454.5	451.6	450.7
25°	453.7	452.3	451.0	449.6	448.3	446.0	442.7	439.5	436.2	432.9	431.8
27.5°	436.1	434.5	432.9	431.3	429.6	427.1	423.6	420.1	416.6	413.1	411.5
30°	423.4	421.7	420.0	418.4	416.6	414.0	410.3	406.6	402.9	399.1	397.1
32.5°	411.0	409.0	407.1	405.1	403.1	400.3	396.5	392.7	388.9	385.1	382.9
35°	390.7	388.7	386.5	384.4	382.3	379.2	375.2	371.3	367.3	363.3	360.8
37.5°	370.9	368.3	365.8	363.2	360.6	357.2	353.2	349.0	345.0	340.9	337.8
40°	357.0	354.3	351.6	349.0	346.3	342.9	338.6	334.4	330.1	325.9	322.5
42.5°	342.2	339.6	336.8	334.2	331.4	327.9	323.5	319.1	314.7	310.3	307.1
45°	319.9	317.4	314.8	312.2	309.7	305.9	301.1	296.3	291.4	286.5	282.9
47.5°	296.8	294.0	291.4	288.6	285.9	282.1	277.2	272.3	267.4	262.5	258.9
50°	282.1	279.2	276.3	273.4	270.4	266.5	261.4	256.4	251.3	246.3	242.6
52.5°	266.2	263.2	260.2	257.3	254.3	250.4	245.6	240.8	236.1	231.4	227.4
55°	242.7	239.9	237.0	234.3	231.4	227.6	222.6	217.6	212.7	207.7	203.7
57.5°	219.0	216.0	212.9	209.9	206.9	203.0	198.2	193.5	188.7	183.9	180.0
60°	203.7	200.6	197.5	194.4	191.3	187.4	182.6	177.9	173.1	168.3	164.5
62.5°	187.5	184.5	181.6	178.7	175.6	171.8	166.9	162.1	157.2	152.4	148.8
65°	164.4	161.4	158.3	155.3	152.3	148.4	143.8	139.1	134.4	129.8	126.2
67.5°	141.4	138.4	135.3	132.3	129.3	125.5	121.1	116.6	112.1	107.6	104.4
70°	125.7	122.8	119.8	116.8	113.7	110.0	105.6	101.2	96.8	92.3	89.5
72.5°	110.5	107.5	104.6	101.7	98.8	95.1	91.0	86.9	82.7	78.6	76.1
75°	87.6	84.9	82.2	79.6	77.0	73.8	70.0	66.3	62.6	58.9	56.9
77.5°	64.7	62.7	60.5	58.4	56.3	53.7	50.8	47.8	44.9	41.8	40.5
80°	51.7	49.6	47.5	45.4	43.2	41.0	38.5	36.0	33.5	31.0	30.2
82.5°	39.0	37.1	35.2	33.2	31.3	29.5	27.9	26.2	24.5	22.7	22.4
85°	21.9	20.3	18.7	17.1	15.5	14.5	14.0	13.6	13.2	12.7	12.7
87.5°	7.5	7.1	6.9	6.6	6.4	6.3	6.5	6.5	6.7	6.8	7.0
90°	0.6	1.8	2.9	4.0	5.2	6.2	7.2	8.3	9.2	10.2	10.9
92.5°	9.8	9.0	8.3	7.4	6.6	6.7	7.6	8.4	9.3	10.2	10.9
95°	36.3	35.9	35.5	35.1	34.7	31.8	26.3	21.0	15.6	10.2	10.9
97.5°	75.9	76.7	77.5	78.2	79.0	74.0	63.4	52.7	42.0	31.4	27.4
100°	106.5	106.9	107.4	107.8	108.2	108.7	109.3	109.9	110.5	111.0	89.9
102.5°	137.7	138.2	138.8	139.3	139.8	140.3	140.6	140.9	141.3	141.6	137.7
105°	187.5	188.1	188.7	189.2	189.9	190.1	190.1	190.1	190.1	190.1	190.1
107.5°	239.4	239.4	239.4	239.4	239.4	239.5	239.8	240.0	240.4	240.6	240.6
110°	273.0	273.0	273.0	273.0	273.0	273.2	273.5	273.8	274.1	274.3	273.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.7	305.1	305.4	305.7	306.1	306.3	306.5	306.7	306.9	307.0	306.4
115°	352.1	352.8	353.6	354.3	355.0	355.4	355.6	355.7	355.9	356.0	355.4
117.5°	401.3	401.2	401.2	401.2	401.1	401.4	402.0	402.5	403.0	403.6	402.9
120°	431.9	431.8	431.6	431.4	431.4	431.4	431.9	432.3	432.7	433.2	432.9
122.5°	458.9	459.5	460.0	460.5	461.2	461.5	461.7	461.8	462.1	462.3	462.0
125°	500.8	501.8	502.8	503.8	504.8	505.2	505.2	505.2	505.2	505.2	504.7
127.5°	540.7	541.5	542.2	542.9	543.5	543.9	543.8	543.7	543.6	543.5	543.2
130°	565.2	565.9	566.6	567.4	568.1	568.5	568.6	568.8	568.9	569.0	568.6
132.5°	589.7	590.6	591.4	592.2	593.1	593.3	593.0	592.6	592.4	592.0	591.9
135°	624.6	625.4	626.3	627.2	628.0	628.3	628.0	627.7	627.4	627.2	626.8
137.5°	656.6	657.4	658.1	658.8	659.5	659.8	659.5	659.3	659.0	658.8	658.8
140°	677.5	677.8	678.1	678.4	678.6	678.7	678.6	678.5	678.3	678.1	678.5
142.5°	696.4	696.5	696.7	696.9	697.1	697.2	697.5	697.7	697.8	698.1	698.1
145°	724.1	724.4	724.7	725.0	725.2	725.4	725.4	725.4	725.4	725.4	725.5
147.5°	748.4	748.3	748.2	748.2	748.1	748.2	748.4	748.5	748.6	748.8	749.0
150°	763.6	763.4	763.1	762.8	762.5	762.5	762.8	763.1	763.4	763.6	764.0
152.5°	778.4	777.8	777.2	776.6	775.9	775.8	776.1	776.4	776.6	776.9	777.2
155°	797.5	796.6	795.7	794.9	794.1	793.8	794.1	794.4	794.6	794.9	795.3
157.5°	812.1	811.7	811.1	810.6	810.1	809.9	809.9	809.9	809.9	809.9	810.5
160°	822.3	821.5	820.6	819.8	819.0	818.6	818.7	818.9	819.0	819.2	819.8
162.5°	830.5	829.7	828.8	827.9	827.1	826.7	826.9	827.1	827.2	827.3	828.1
165°	841.5	840.6	839.8	839.0	838.1	837.8	837.8	838.0	838.2	838.3	839.1
167.5°	849.6	848.8	847.9	847.1	846.1	845.8	845.9	846.0	846.2	846.4	847.3
170°	854.3	853.3	852.2	851.3	850.2	849.8	850.0	850.2	850.2	850.4	851.5
172.5°	857.3	856.4	855.3	854.3	853.3	853.0	853.3	853.5	853.8	854.0	855.0
175°	860.7	859.8	858.9	858.1	857.2	856.9	857.0	857.1	857.3	857.5	858.6
177.5°	862.1	861.4	860.8	860.1	859.5	859.1	859.3	859.4	859.5	859.6	860.4
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	525.0	525.8	526.5	526.8	526.8	526.7	526.6	526.5
5°	521.9	522.7	523.6	524.0	523.8	523.6	523.4	523.2
7.5°	515.3	516.0	516.6	516.8	516.6	516.4	516.3	516.0
10°	509.9	510.1	510.4	510.4	510.1	509.9	509.6	509.4
12.5°	502.0	502.3	502.5	502.4	502.0	501.5	501.2	500.8
15°	489.2	489.1	489.0	488.6	487.8	487.1	486.3	485.4
17.5°	473.3	472.9	472.4	471.8	471.2	470.5	469.8	469.2
20°	461.5	461.1	460.6	460.0	459.2	458.4	457.6	456.8
22.5°	449.8	448.9	448.1	447.3	446.7	446.0	445.4	444.7
25°	430.7	429.5	428.3	427.3	426.3	425.3	424.4	423.4
27.5°	409.9	408.3	406.7	405.4	404.5	403.6	402.6	401.7
30°	395.0	393.0	391.0	389.6	388.7	388.0	387.2	386.4
32.5°	380.6	378.4	376.1	374.5	373.5	372.5	371.4	370.5
35°	358.2	355.6	353.0	351.1	349.9	348.7	347.4	346.2
37.5°	334.7	331.7	328.6	326.4	325.2	324.0	322.8	321.6
40°	319.2	315.8	312.5	310.2	309.2	308.2	307.0	306.0
42.5°	303.8	300.7	297.4	295.1	293.5	291.9	290.3	288.8
45°	279.4	275.9	272.3	269.9	268.6	267.3	266.0	264.6
47.5°	255.3	251.6	248.0	245.4	243.9	242.5	241.0	239.5
50°	238.8	235.1	231.4	228.9	227.6	226.3	225.0	223.6
52.5°	223.3	219.4	215.3	212.7	211.4	210.1	208.7	207.4
55°	199.8	195.8	191.8	189.1	187.7	186.2	184.9	183.5
57.5°	176.2	172.3	168.3	165.7	164.5	163.2	162.0	160.7
60°	160.6	156.6	152.7	150.2	148.8	147.5	146.2	144.8
62.5°	145.2	141.5	137.9	135.5	134.1	132.9	131.6	130.2
65°	122.6	119.1	115.5	113.1	111.8	110.5	109.2	107.8
67.5°	101.1	97.9	94.6	92.5	91.4	90.4	89.3	88.3
70°	86.9	84.1	81.4	79.5	78.4	77.3	76.3	75.2
72.5°	73.5	71.0	68.5	66.9	66.2	65.5	64.7	64.1
75°	55.0	53.0	51.1	49.9	49.2	48.6	48.0	47.4
77.5°	39.2	37.8	36.4	35.5	35.0	34.6	34.1	33.7
80°	29.4	28.7	27.9	27.4	27.2	27.0	26.9	26.7
82.5°	22.0	21.6	21.3	21.0	20.9	20.8	20.8	20.6
85°	12.6	12.5	12.4	12.3	12.2	12.1	12.1	12.0
87.5°	7.1	7.2	7.4	7.5	7.5	7.5	7.5	7.5
90°	11.6	12.3	13.0	13.6	14.0	14.5	14.9	15.3
92.5°	11.6	12.3	13.0	13.5	13.7	13.9	14.1	14.3
95°	11.6	12.3	13.0	13.4	13.4	13.4	13.4	13.4
97.5°	23.4	19.4	15.4	13.4	13.4	13.4	13.4	13.4
100°	68.8	47.6	26.5	15.7	15.1	14.6	13.9	13.4
102.5°	133.6	129.7	125.6	118.8	109.2	99.5	89.9	80.2
105°	190.1	190.1	190.1	190.0	189.9	189.8	189.6	189.5
107.5°	240.7	240.7	240.7	240.6	240.1	239.7	239.3	238.8
110°	273.5	273.0	272.6	272.5	272.6	272.8	272.9	273.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	305.9	305.4	304.8	304.4	304.3	304.1	303.8	303.7
115°	354.8	354.3	353.7	353.0	352.1	351.3	350.4	349.6
117.5°	402.1	401.4	400.6	400.1	399.7	399.3	399.0	398.6
120°	432.7	432.3	432.0	431.5	430.8	430.2	429.5	428.7
122.5°	461.7	461.4	461.2	460.5	459.8	458.9	458.1	457.3
125°	504.1	503.6	503.0	502.5	502.0	501.6	501.3	500.8
127.5°	542.9	542.6	542.3	541.7	540.5	539.5	538.5	537.4
130°	568.3	567.8	567.4	566.8	566.1	565.4	564.6	564.0
132.5°	591.9	591.8	591.7	591.3	590.6	589.9	589.2	588.5
135°	626.5	626.3	626.0	625.4	624.6	623.7	622.8	622.0
137.5°	658.9	658.9	659.0	658.7	657.9	657.2	656.4	655.7
140°	678.7	679.0	679.3	679.0	678.1	677.3	676.5	675.6
142.5°	698.2	698.3	698.3	697.9	697.1	696.2	695.3	694.5
145°	725.7	725.8	725.9	725.6	724.7	723.8	723.1	722.2
147.5°	749.2	749.3	749.5	749.1	748.1	747.1	746.1	745.0
150°	764.2	764.5	764.8	764.4	763.2	762.1	761.0	759.8
152.5°	777.5	777.7	778.1	777.7	776.6	775.7	774.6	773.6
155°	795.7	796.2	796.6	796.3	795.1	794.0	792.9	791.7
157.5°	810.9	811.3	811.8	811.4	810.3	809.2	808.0	806.9
160°	820.3	820.9	821.4	821.1	820.0	818.9	817.8	816.6
162.5°	828.9	829.7	830.5	830.3	829.1	827.8	826.6	825.3
165°	840.0	840.9	841.7	841.5	840.4	839.3	838.2	837.0
167.5°	848.3	849.4	850.4	850.3	849.0	847.7	846.4	845.2
170°	852.6	853.9	855.0	854.9	853.6	852.3	851.0	849.8
172.5°	856.0	857.0	858.1	857.9	856.7	855.4	854.1	852.8
175°	859.7	860.8	861.9	861.9	860.7	859.4	858.1	856.8
177.5°	861.2	861.9	862.8	862.7	861.8	860.9	860.0	859.1
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7

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