

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: P333647-840

Luminaire Tested: **S125RDIW-S375D770U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333647-840  
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: S125RDIW-S375D770U840-4F0-1E-UDD-F1  
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, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4150.0 lumens  
Efficiency: N/A  
Efficacy: 136.5 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

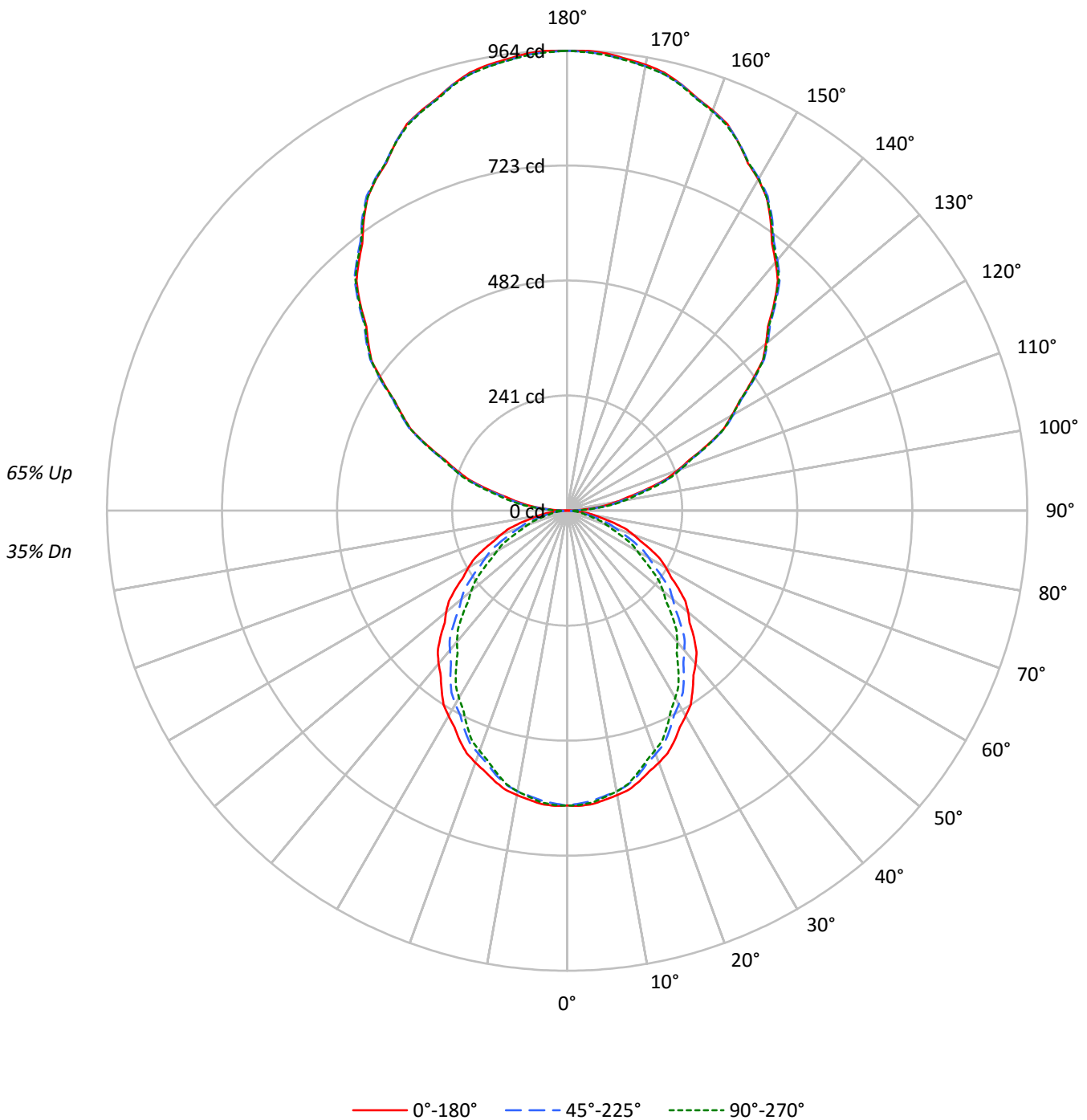
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30
2	86	79	73	68	78	72	67	63	58	54	51	45	43	41	33	32	31	25
3	79	70	63	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	62	54	48	65	56	49	44	46	41	37	36	32	30	27	24	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	36	55	45	38	33	37	32	28	29	25	23	22	19	18	14
7	56	44	37	31	51	40	34	29	33	28	24	26	23	20	20	17	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	18	16	14	11
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	14	13	10
10	45	33	26	22	41	31	25	20	25	21	17	20	17	14	16	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.4
10°-20°	162.4	3.9
20°-30°	235.5	5.7
30°-40°	268.4	6.5
40°-50°	261.6	6.3
50°-60°	220.2	5.3
60°-70°	154.3	3.7
70°-80°	79.3	1.9
80°-90°	22.1	0.5
90°-100°	64.5	1.6
100°-110°	190.5	4.6
110°-120°	322.7	7.8
120°-130°	424.7	10.2
130°-140°	475.9	11.5
140°-150°	466.4	11.2
150°-160°	391.7	9.4
160°-170°	260.4	6.3
170°-180°	91.1	2.2
0°-30°	456.0	11.0
0°-40°	724.3	17.5
0°-60°	1206.1	29.1
0°-90°	1461.9	35.2
90°-120°	577.8	13.9
90°-150°	1944.8	46.9
90°-180°	2688.0	64.8
0°-180°	4150.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	7	12	16	18	4
95°	49	51	58	63	64	52
105°	171	175	179	184	186	183
115°	323	326	328	327	326	319
125°	472	476	477	475	474	422
135°	613	618	618	618	616	472
145°	743	746	748	748	746	464
155°	850	850	851	853	850	391
165°	924	923	924	926	922	261
175°	961	958	958	962	957	91
180°	963	963	963	963	963	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.4	8.1	7.8	7.5	7.4	7.6	7.7	7.9	8.0	8.2
90°	0.7	2.1	3.4	4.7	6.1	7.4	8.5	9.7	10.8	12.0	12.8
92.5°	18.2	19.1	20.0	20.9	21.9	23.0	24.5	26.0	27.4	28.8	29.9
95°	48.8	49.1	49.4	49.7	50.1	51.1	52.7	54.4	56.0	57.8	58.9
97.5°	81.0	81.1	81.2	81.4	81.5	82.7	85.0	87.4	89.6	91.9	93.0
100°	104.9	104.9	104.9	104.9	104.9	106.0	108.2	110.4	112.5	114.7	116.2
102.5°	130.8	131.4	132.1	132.7	133.4	134.3	135.4	136.5	137.5	138.7	140.4
105°	171.0	171.8	172.6	173.4	174.3	175.2	176.2	177.1	178.1	179.2	180.2
107.5°	215.3	216.1	217.0	217.8	218.6	219.4	220.3	221.0	221.8	222.5	223.0
110°	245.9	246.7	247.5	248.4	249.2	249.8	250.3	250.9	251.4	251.9	252.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	277.1	277.5	277.9	278.4	278.8	279.3	279.9	280.6	281.2	281.9	282.2
115°	323.2	323.8	324.5	325.1	325.8	326.3	326.6	326.9	327.3	327.6	327.4
117.5°	369.3	369.6	369.9	370.2	370.5	370.8	371.1	371.4	371.7	372.0	372.1
120°	398.1	398.9	399.7	400.6	401.4	401.9	402.0	402.2	402.4	402.5	402.5
122.5°	429.3	429.6	429.9	430.2	430.5	430.8	431.2	431.7	432.1	432.5	432.4
125°	471.5	472.5	473.5	474.5	475.5	476.2	476.3	476.5	476.7	476.8	476.5
127.5°	516.5	517.1	517.7	518.3	518.8	519.2	519.4	519.6	519.8	520.0	519.8
130°	543.5	544.3	545.2	546.0	546.8	547.4	547.8	548.1	548.5	548.8	548.6
132.5°	570.5	571.9	573.2	574.6	575.9	576.6	576.5	576.4	576.4	576.3	576.2
135°	613.2	614.2	615.2	616.2	617.2	617.8	617.9	618.1	618.3	618.4	618.4
137.5°	653.4	654.4	655.3	656.3	657.3	657.9	658.3	658.6	659.0	659.4	659.6
140°	679.2	680.0	680.9	681.7	682.6	683.2	683.7	684.2	684.7	685.2	685.5
142.5°	705.0	705.7	706.4	707.1	707.8	708.4	709.1	709.7	710.3	710.9	711.1
145°	743.0	743.6	744.3	744.9	745.6	746.2	746.7	747.2	747.7	748.2	748.2
147.5°	778.0	778.4	778.7	779.1	779.5	779.8	780.2	780.6	781.0	781.4	781.8
150°	801.4	801.2	801.0	800.9	800.7	801.0	801.6	802.3	802.9	803.7	803.7
152.5°	820.6	820.8	821.0	821.3	821.5	821.7	822.0	822.3	822.5	822.8	823.2
155°	850.1	850.1	850.1	850.1	850.1	850.2	850.4	850.5	850.7	850.9	851.5
157.5°	876.6	876.2	875.8	875.5	875.0	874.9	875.1	875.3	875.5	875.7	876.3
160°	892.1	891.6	891.1	890.6	890.1	889.9	890.1	890.3	890.4	890.6	891.3
162.5°	905.9	905.5	905.1	904.8	904.4	904.2	904.3	904.3	904.3	904.4	905.2
165°	924.3	924.0	923.7	923.3	923.0	922.9	923.1	923.2	923.4	923.6	924.2
167.5°	940.0	939.3	938.6	938.0	937.3	937.0	937.0	937.0	937.0	937.0	938.0
170°	948.4	947.7	947.0	946.3	945.6	945.3	945.3	945.3	945.3	945.3	946.3
172.5°	954.3	953.6	953.0	952.3	951.7	951.3	951.3	951.3	951.3	951.3	952.3
175°	961.1	960.4	959.8	959.1	958.4	958.1	958.1	958.1	958.1	958.1	959.1
177.5°	964.5	964.0	963.4	962.9	962.4	962.1	961.9	961.8	961.7	961.5	962.3
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	8.4	8.5	8.7	8.8	8.8	8.8	8.8	8.8
90°	13.6	14.5	15.3	16.0	16.5	17.0	17.5	18.0
92.5°	31.0	32.1	33.2	33.9	34.3	34.6	35.0	35.3
95°	60.1	61.2	62.4	63.1	63.5	63.8	64.1	64.4
97.5°	94.1	95.2	96.3	96.9	97.1	97.4	97.6	97.8
100°	117.6	119.2	120.7	121.6	122.0	122.3	122.6	122.9
102.5°	142.0	143.6	145.2	146.2	146.7	147.2	147.6	148.1
105°	181.2	182.2	183.2	183.9	184.4	184.9	185.4	185.9
107.5°	223.5	224.0	224.5	224.7	224.7	224.7	224.6	224.6
110°	252.9	253.4	253.9	254.1	253.9	253.7	253.6	253.4





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	282.4	282.6	282.8	282.8	282.5	282.2	281.9	281.6
115°	327.3	327.1	326.9	326.8	326.6	326.5	326.3	326.1
117.5°	372.2	372.3	372.5	372.2	371.6	370.9	370.2	369.6
120°	402.5	402.5	402.5	402.2	401.6	400.9	400.2	399.6
122.5°	432.3	432.1	432.0	431.7	431.1	430.6	430.1	429.6
125°	476.2	475.7	475.4	475.2	475.0	474.8	474.7	474.5
127.5°	519.7	519.5	519.3	519.1	518.8	518.4	518.1	517.8
130°	548.5	548.3	548.1	547.9	547.5	547.1	546.8	546.5
132.5°	576.0	575.8	575.7	575.3	574.9	574.4	574.0	573.5
135°	618.4	618.4	618.4	618.1	617.4	616.8	616.1	615.5
137.5°	659.8	660.0	660.2	659.8	659.0	658.2	657.4	656.5
140°	685.9	686.2	686.5	686.3	685.5	684.6	683.8	683.0
142.5°	711.3	711.6	711.8	711.4	710.6	709.8	708.9	708.1
145°	748.2	748.2	748.2	747.9	747.4	746.9	746.4	745.9
147.5°	782.2	782.6	783.0	782.6	781.5	780.4	779.3	778.2
150°	803.7	803.7	803.7	803.4	803.1	802.8	802.4	802.1
152.5°	823.6	824.0	824.5	824.4	823.7	823.1	822.5	821.9
155°	852.2	852.8	853.5	853.4	852.6	851.8	850.9	850.1
157.5°	877.0	877.6	878.3	878.1	877.0	875.9	874.7	873.6
160°	891.9	892.6	893.2	893.2	892.3	891.5	890.7	889.9
162.5°	906.1	906.8	907.6	907.6	906.6	905.5	904.6	903.6
165°	924.9	925.6	926.2	926.0	925.1	924.1	923.1	922.1
167.5°	939.0	940.0	940.9	940.9	939.9	938.9	937.9	936.8
170°	947.4	948.4	949.4	949.3	948.1	947.0	945.7	944.6
172.5°	953.3	954.3	955.3	955.3	954.3	953.2	952.2	951.2
175°	960.1	961.1	962.1	962.0	960.8	959.7	958.5	957.4
177.5°	963.1	963.9	964.7	964.6	963.7	962.8	961.9	960.9
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3

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