

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: P333643-940

Luminaire Tested: **S125RDIW-S375D470U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333643-940  
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: S125RDIW-S375D470U940-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2739.4 lumens  
Efficiency: N/A  
Efficacy: 119.1 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

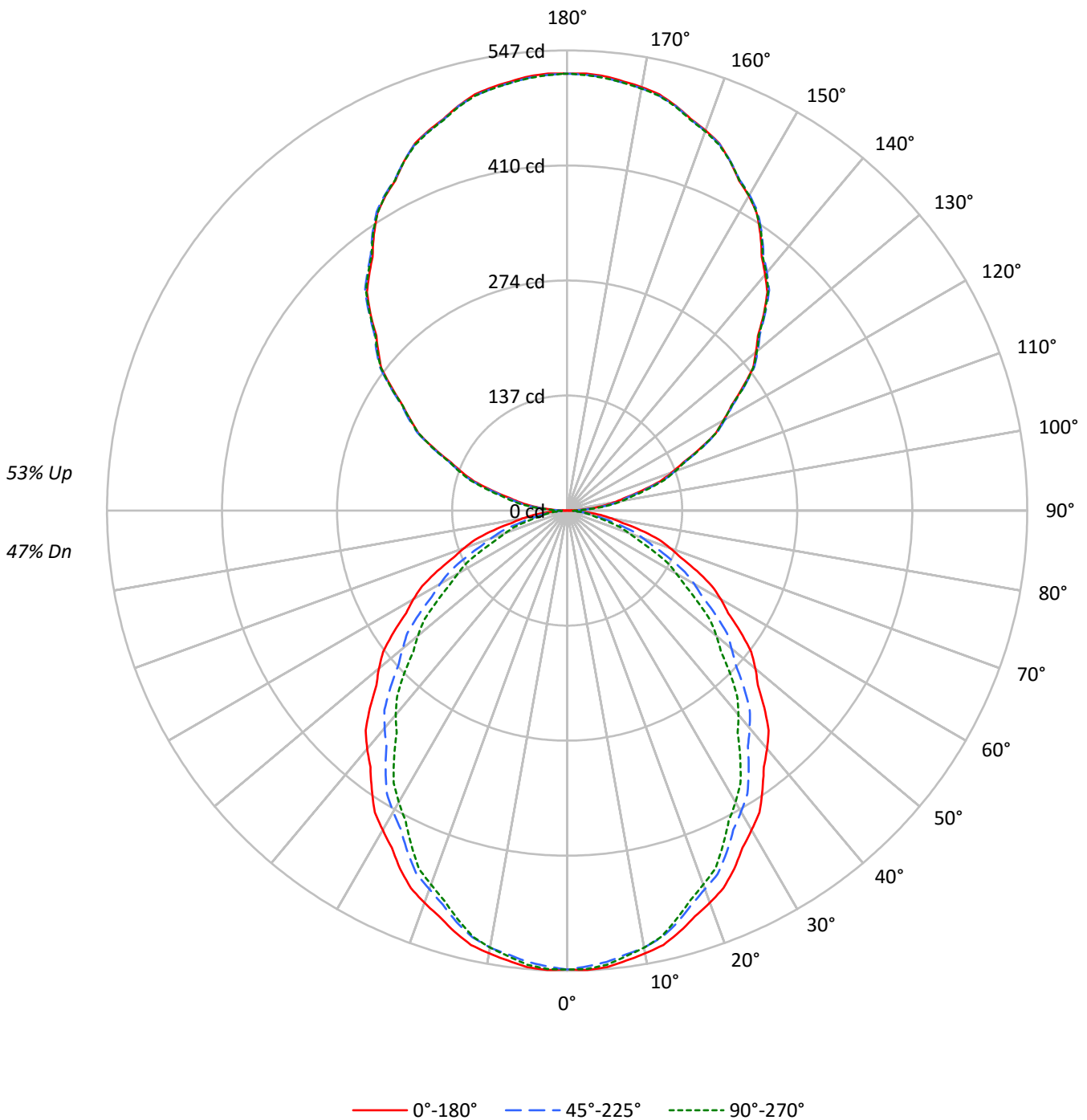
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46				40	
2	89	82	76	70	81	75	70	66	63	59	56	52	50	47	42	40	39				34	
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33				29	
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29				25	
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22				19	
7	58	46	38	33	53	43	36	31	37	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15				13	

**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	1.9
10°-20°	143.4	5.2
20°-30°	207.9	7.6
30°-40°	237.0	8.7
40°-50°	231.0	8.4
50°-60°	194.4	7.1
60°-70°	136.3	5.0
70°-80°	70.1	2.6
80°-90°	18.8	0.7
90°-100°	34.8	1.3
100°-110°	102.7	3.7
110°-120°	174.0	6.4
120°-130°	229.0	8.4
130°-140°	256.6	9.4
140°-150°	251.5	9.2
150°-160°	211.2	7.7
160°-170°	140.4	5.1
170°-180°	49.1	1.8
0°-30°	402.6	14.7
0°-40°	639.6	23.3
0°-60°	1065.0	38.9
0°-90°	1290.2	47.1
90°-120°	311.5	11.4
90°-150°	1048.5	38.3
90°-180°	1449.0	52.9
0°-180°	2739.4	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°	0	4	6	8	10	3
95°	26	27	31	34	35	28
105°	92	94	97	99	100	98
115°	174	176	177	176	176	172
125°	254	257	257	256	256	228
135°	331	333	333	333	332	255
145°	401	402	403	403	402	250
155°	458	458	459	460	458	211
165°	498	498	498	499	497	141
175°	518	517	516	519	516	49
180°	519	519	519	519	519	



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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°	7.7	7.3	7.0	6.6	6.2	6.1	6.1	6.2	6.2	6.2	6.3
90°	0.4	1.2	1.9	2.6	3.3	3.9	4.5	5.2	5.8	6.5	7.0
92.5°	9.8	10.3	10.8	11.3	11.8	12.4	13.2	14.0	14.7	15.5	16.1
95°	26.3	26.5	26.7	26.8	27.0	27.6	28.4	29.3	30.2	31.1	31.7
97.5°	43.6	43.7	43.8	43.9	44.0	44.6	45.8	47.1	48.3	49.6	50.1
100°	56.6	56.6	56.6	56.6	56.6	57.2	58.3	59.5	60.6	61.8	62.7
102.5°	70.4	70.8	71.2	71.6	72.0	72.4	73.0	73.6	74.2	74.7	75.6
105°	92.1	92.6	93.0	93.5	94.0	94.4	95.0	95.5	96.0	96.6	97.1
107.5°	116.1	116.5	117.0	117.4	117.9	118.3	118.7	119.1	119.6	119.9	120.2
110°	132.6	133.0	133.5	133.9	134.4	134.7	135.0	135.3	135.5	135.8	136.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	149.4	149.6	149.8	150.1	150.3	150.6	151.0	151.3	151.6	151.9	152.1
115°	174.2	174.5	175.0	175.3	175.7	175.9	176.1	176.3	176.5	176.6	176.6
117.5°	199.1	199.2	199.4	199.6	199.7	199.9	200.1	200.2	200.4	200.5	200.6
120°	214.6	215.1	215.5	216.0	216.4	216.7	216.8	216.9	217.0	217.0	217.0
122.5°	231.4	231.6	231.8	231.9	232.0	232.3	232.5	232.7	233.0	233.2	233.1
125°	254.2	254.8	255.3	255.8	256.4	256.7	256.8	256.9	257.0	257.1	256.9
127.5°	278.5	278.7	279.1	279.4	279.7	279.9	280.0	280.1	280.2	280.4	280.3
130°	293.0	293.5	293.9	294.4	294.8	295.2	295.3	295.5	295.7	295.9	295.8
132.5°	307.6	308.3	309.1	309.8	310.5	310.9	310.9	310.8	310.8	310.7	310.6
135°	330.6	331.2	331.7	332.3	332.8	333.1	333.1	333.2	333.3	333.4	333.4
137.5°	352.2	352.8	353.3	353.8	354.4	354.7	354.9	355.1	355.3	355.5	355.6
140°	366.1	366.6	367.0	367.5	367.9	368.4	368.6	368.9	369.2	369.4	369.6
142.5°	380.0	380.4	380.8	381.2	381.6	381.9	382.3	382.6	383.0	383.3	383.4
145°	400.6	400.9	401.3	401.6	402.0	402.3	402.5	402.8	403.1	403.3	403.3
147.5°	419.5	419.6	419.8	420.0	420.3	420.4	420.6	420.9	421.1	421.3	421.5
150°	432.0	431.9	431.9	431.8	431.7	431.9	432.2	432.6	432.9	433.3	433.3
152.5°	442.4	442.6	442.6	442.7	442.9	443.0	443.2	443.4	443.4	443.6	443.8
155°	458.3	458.3	458.3	458.3	458.3	458.3	458.4	458.5	458.6	458.7	459.1
157.5°	472.5	472.3	472.2	472.0	471.7	471.7	471.8	471.9	472.0	472.1	472.4
160°	481.0	480.7	480.4	480.1	479.8	479.7	479.8	479.9	480.0	480.1	480.5
162.5°	488.4	488.2	488.0	487.8	487.6	487.5	487.5	487.5	487.6	487.6	488.0
165°	498.3	498.1	497.9	497.8	497.6	497.6	497.7	497.8	497.8	497.9	498.3
167.5°	506.8	506.4	506.0	505.7	505.3	505.2	505.2	505.2	505.2	505.2	505.7
170°	511.2	510.9	510.5	510.1	509.8	509.6	509.6	509.6	509.6	509.6	510.1
172.5°	514.5	514.2	513.8	513.4	513.1	512.9	512.9	512.9	512.9	512.9	513.4
175°	518.2	517.7	517.4	517.0	516.7	516.5	516.5	516.5	516.5	516.5	517.0
177.5°	520.0	519.7	519.4	519.2	518.8	518.6	518.6	518.5	518.4	518.4	518.8
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3



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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°	6.4	6.5	6.6	6.6	6.6	6.6	6.6	6.6
90°	7.4	7.8	8.3	8.6	8.9	9.2	9.5	9.7
92.5°	16.7	17.3	17.9	18.3	18.5	18.6	18.9	19.1
95°	32.4	33.0	33.6	34.1	34.2	34.4	34.6	34.8
97.5°	50.7	51.4	51.9	52.3	52.3	52.5	52.6	52.7
100°	63.5	64.3	65.1	65.5	65.7	65.9	66.1	66.3
102.5°	76.5	77.4	78.3	78.8	79.1	79.4	79.6	79.9
105°	97.6	98.2	98.7	99.2	99.4	99.7	100.0	100.2
107.5°	120.5	120.7	121.0	121.2	121.2	121.1	121.1	121.1
110°	136.3	136.6	136.9	137.0	136.9	136.8	136.7	136.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	152.2	152.3	152.5	152.5	152.3	152.1	151.9	151.8
115°	176.5	176.4	176.3	176.2	176.1	176.0	175.9	175.8
117.5°	200.7	200.7	200.8	200.7	200.4	200.0	199.6	199.2
120°	217.0	217.0	217.0	216.9	216.5	216.2	215.8	215.4
122.5°	233.1	233.0	232.9	232.7	232.5	232.2	231.8	231.6
125°	256.7	256.5	256.4	256.2	256.1	256.0	255.9	255.8
127.5°	280.2	280.1	280.0	279.8	279.6	279.5	279.3	279.1
130°	295.7	295.6	295.5	295.3	295.2	295.0	294.8	294.6
132.5°	310.5	310.4	310.3	310.2	310.0	309.7	309.4	309.2
135°	333.4	333.4	333.4	333.2	332.9	332.5	332.2	331.8
137.5°	355.7	355.8	356.0	355.8	355.3	354.9	354.4	353.9
140°	369.8	370.0	370.1	370.0	369.5	369.1	368.6	368.2
142.5°	383.5	383.6	383.7	383.5	383.1	382.6	382.2	381.7
145°	403.3	403.3	403.3	403.2	403.0	402.7	402.4	402.2
147.5°	421.7	422.0	422.1	422.0	421.3	420.7	420.1	419.5
150°	433.3	433.3	433.3	433.2	433.0	432.8	432.7	432.5
152.5°	444.1	444.3	444.4	444.4	444.1	443.8	443.4	443.1
155°	459.4	459.8	460.1	460.1	459.7	459.2	458.8	458.3
157.5°	472.8	473.1	473.5	473.4	472.8	472.2	471.6	471.0
160°	480.9	481.3	481.6	481.5	481.1	480.6	480.2	479.7
162.5°	488.5	488.8	489.3	489.3	488.7	488.2	487.7	487.1
165°	498.6	499.0	499.4	499.3	498.7	498.2	497.7	497.1
167.5°	506.2	506.8	507.3	507.3	506.7	506.1	505.6	505.1
170°	510.7	511.2	511.8	511.8	511.1	510.5	509.9	509.3
172.5°	514.0	514.5	515.1	515.1	514.4	513.9	513.4	512.8
175°	517.5	518.2	518.7	518.6	518.0	517.4	516.7	516.1
177.5°	519.2	519.7	520.1	520.0	519.6	519.1	518.5	518.1
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3

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