

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: P333343-935

Luminaire Tested: **S125DIW-S375D470U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333343-935  
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: S125DIW-S375D470U935-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2657.5 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

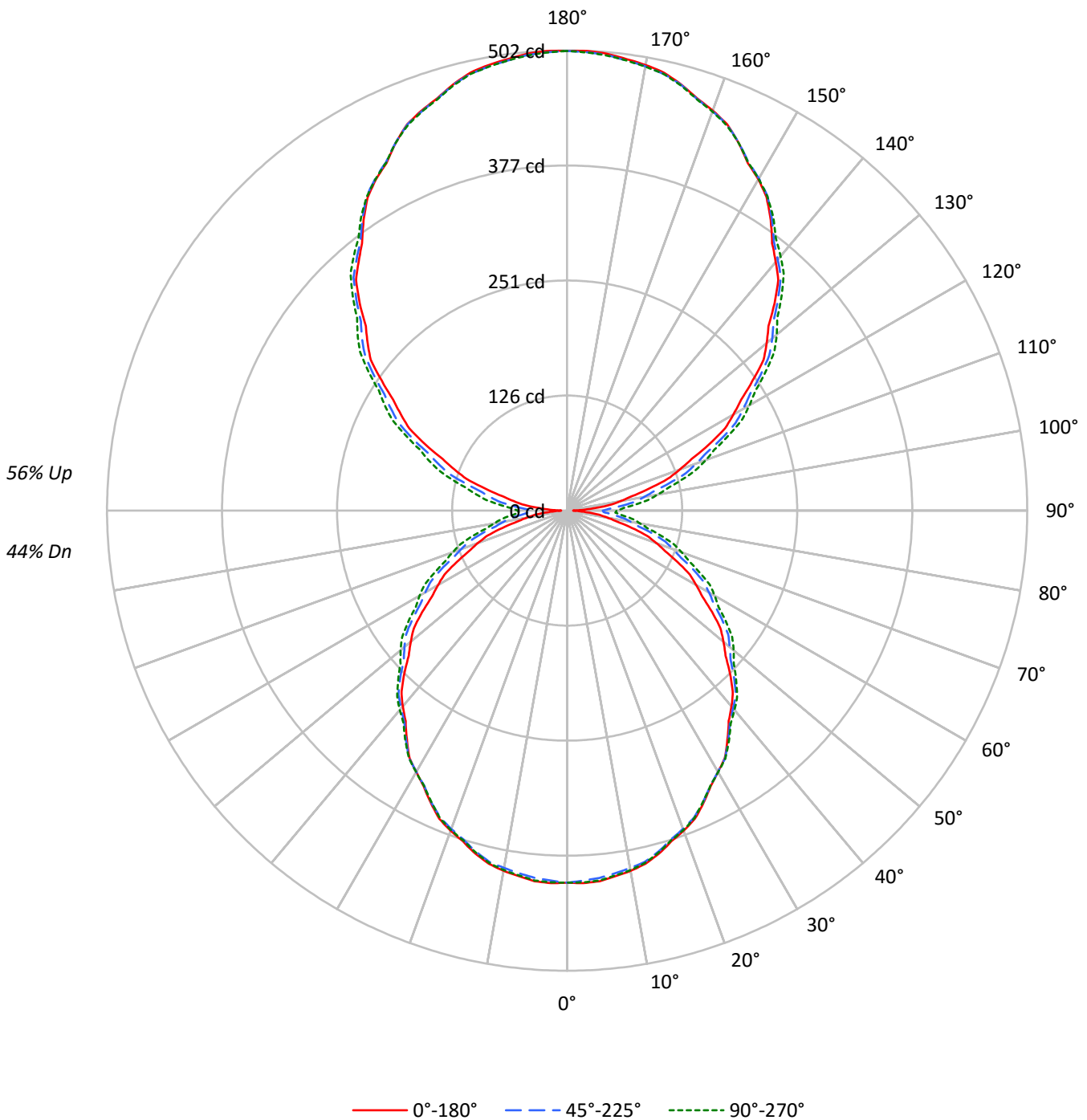
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	1.4
10°-20°	108.9	4.1
20°-30°	162.0	6.1
30°-40°	191.9	7.2
40°-50°	198.4	7.5
50°-60°	182.8	6.9
60°-70°	147.8	5.6
70°-80°	99.0	3.7
80°-90°	52.4	2.0
90°-100°	62.4	2.3
100°-110°	120.4	4.5
110°-120°	182.2	6.9
120°-130°	229.2	8.6
130°-140°	251.3	9.5
140°-150°	243.5	9.2
150°-160°	203.9	7.7
160°-170°	135.6	5.1
170°-180°	47.4	1.8
0°-30°	309.4	11.6
0°-40°	501.3	18.9
0°-60°	882.5	33.2
0°-90°	1181.6	44.5
90°-120°	365.0	13.7
90°-150°	1089.0	41.0
90°-180°	1476.0	55.5
0°-180°	2657.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	23	39	50	54	6
95°	31	42	59	70	74	31
105°	93	101	115	125	129	99
115°	171	175	186	193	195	169
125°	247	249	257	263	264	221
135°	320	322	325	330	331	247
145°	387	388	389	391	392	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.5	15.5	18.4	21.4	24.4	27.4	30.6	33.7	36.8	40.0	42.0
90°	6.7	10.2	13.8	17.3	20.8	24.5	28.1	31.7	35.3	38.8	41.3
92.5°	15.2	18.3	21.4	24.5	27.6	31.1	34.9	38.7	42.5	46.3	48.9
95°	30.6	33.0	35.5	38.0	40.5	43.6	47.4	51.3	55.2	59.1	61.6
97.5°	46.8	49.0	51.1	53.3	55.4	58.5	62.6	66.7	70.8	74.9	77.3
100°	59.0	60.9	62.8	64.6	66.5	69.3	73.3	77.2	81.2	85.2	87.8
102.5°	72.2	74.2	76.2	78.3	80.3	83.1	86.4	89.7	93.1	96.3	99.0
105°	92.6	94.4	96.3	98.1	100.0	102.5	105.6	108.8	112.0	115.1	117.4
107.5°	115.2	116.8	118.5	120.1	121.7	124.0	127.0	129.9	132.9	135.8	137.8
110°	130.8	132.2	133.8	135.3	136.7	138.9	141.6	144.4	147.1	149.8	151.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	147.1	148.1	149.1	150.2	151.3	153.3	155.9	158.7	161.4	164.2	165.9
115°	170.6	171.5	172.5	173.5	174.4	176.2	178.7	181.1	183.6	186.1	187.5
117.5°	194.2	194.8	195.4	195.9	196.5	197.9	200.3	202.6	204.9	207.2	208.8
120°	209.2	209.9	210.6	211.3	212.0	213.4	215.5	217.7	219.8	221.9	223.4
122.5°	225.2	225.4	225.7	225.9	226.3	227.5	229.6	231.9	234.0	236.3	237.5
125°	247.0	247.5	247.9	248.3	248.7	249.9	251.8	253.7	255.5	257.4	258.6
127.5°	270.1	270.3	270.4	270.7	270.9	271.7	273.4	274.9	276.5	278.0	279.2
130°	284.1	284.5	284.8	285.2	285.5	286.4	287.7	289.2	290.6	292.1	293.2
132.5°	297.8	298.5	299.2	299.9	300.7	301.4	302.4	303.2	304.2	305.1	306.3
135°	320.0	320.5	320.9	321.3	321.8	322.3	323.0	323.7	324.4	325.1	326.3
137.5°	340.9	341.3	341.7	342.2	342.6	343.0	343.5	344.1	344.5	345.0	346.1
140°	354.0	354.4	354.8	355.2	355.7	356.1	356.5	356.8	357.1	357.5	358.6
142.5°	367.4	367.6	368.0	368.2	368.6	368.9	369.2	369.5	369.9	370.2	371.2
145°	387.1	387.4	387.6	387.9	388.1	388.4	388.7	388.9	389.2	389.4	389.9
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.2
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	44.2	46.3	48.4	49.8	50.5	51.1	51.8	52.5
90°	43.8	46.2	48.7	50.5	51.3	52.2	53.0	53.9
92.5°	51.4	54.0	56.5	58.1	59.0	59.8	60.6	61.4
95°	64.2	66.7	69.3	70.9	71.8	72.6	73.4	74.1
97.5°	79.7	82.2	84.6	86.2	86.9	87.6	88.3	89.0
100°	90.5	93.1	95.7	97.4	98.1	98.8	99.5	100.2
102.5°	101.7	104.3	106.9	108.7	109.4	110.2	111.0	111.8
105°	119.8	122.0	124.3	125.9	126.7	127.7	128.5	129.4
107.5°	139.8	141.8	143.9	145.1	145.7	146.2	146.7	147.2
110°	153.7	155.7	157.6	158.9	159.4	159.9	160.4	160.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	167.6	169.4	171.1	172.2	172.6	173.1	173.6	174.0
115°	189.1	190.5	192.1	193.0	193.5	193.9	194.4	194.8
117.5°	210.4	212.0	213.5	214.5	214.7	215.0	215.2	215.5
120°	224.9	226.4	227.9	228.8	228.9	229.1	229.3	229.5
122.5°	238.9	240.3	241.7	242.5	242.7	243.0	243.2	243.5
125°	259.8	261.1	262.3	263.1	263.5	263.8	264.2	264.5
127.5°	280.4	281.6	282.8	283.7	284.0	284.3	284.6	285.0
130°	294.3	295.5	296.6	297.3	297.6	297.9	298.2	298.4
132.5°	307.4	308.6	309.7	310.4	310.5	310.6	310.7	310.9
135°	327.4	328.6	329.8	330.4	330.5	330.5	330.6	330.7
137.5°	347.3	348.4	349.6	350.2	350.1	350.0	349.9	349.8
140°	359.7	360.9	362.1	362.6	362.5	362.4	362.3	362.3
142.5°	372.1	373.1	374.0	374.4	374.4	374.3	374.2	374.1
145°	390.4	390.8	391.2	391.5	391.6	391.7	391.8	391.8
147.5°	407.5	407.9	408.2	408.1	407.7	407.3	406.8	406.4
150°	418.4	418.4	418.4	418.3	418.2	418.1	418.0	417.9
152.5°	428.8	429.0	429.1	429.1	428.8	428.5	428.3	427.9
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

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