

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: P333137

Luminaire Tested: **S125DIP-S375D810U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333137  
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: S125DIP-S375D810U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4266.1 lumens  
Efficiency: N/A  
Efficacy: 136.7 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: Semi-Indirect

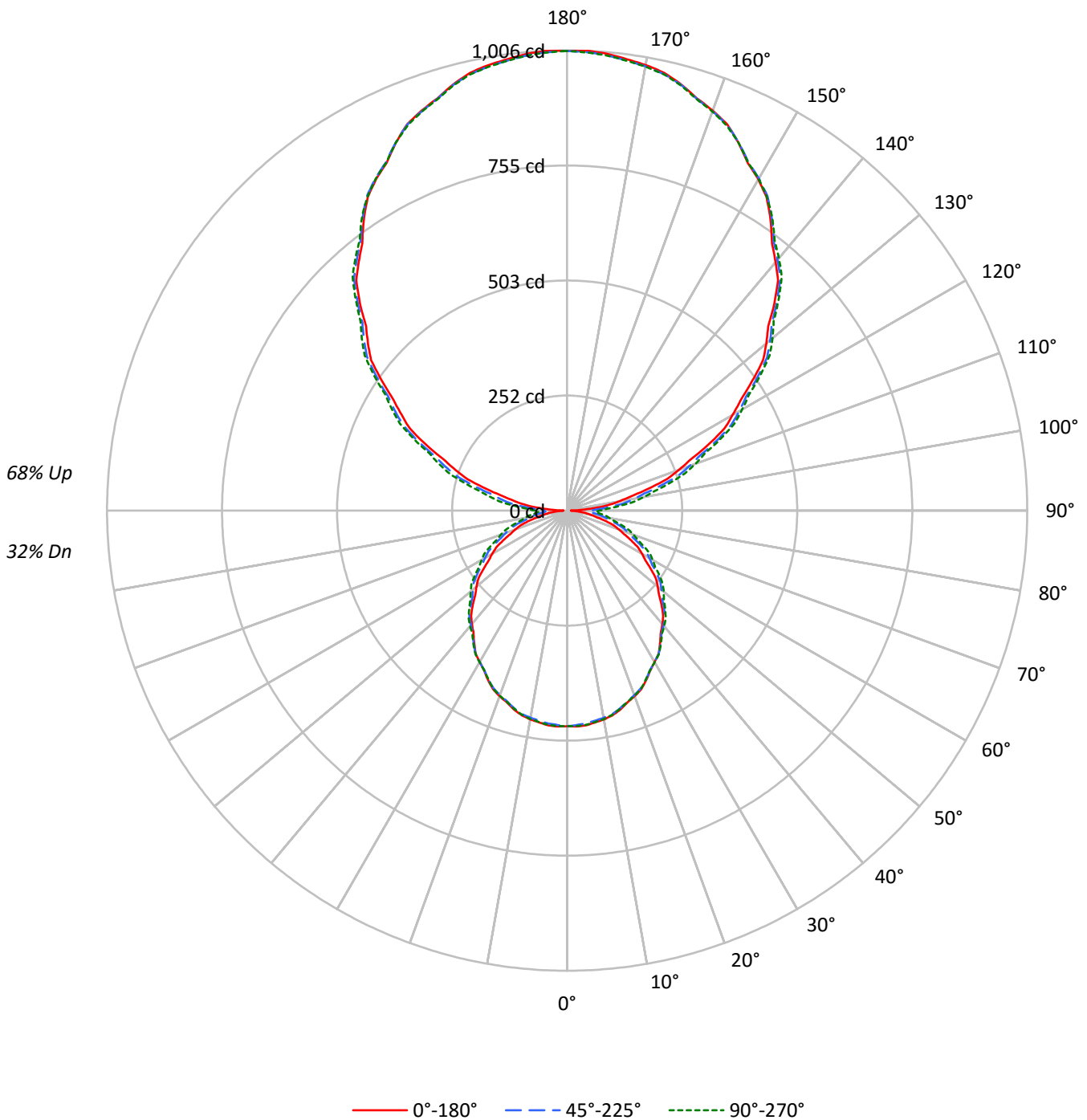
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89	85	81	84	80	77	74	64	61	59	48	47	45	34	33	33	26
2	85	77	71	66	76	70	64	60	55	52	49	42	40	38	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	41	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	13	14	11	9	7

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

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	1.0
10°-20°	126.5	3.0
20°-30°	188.2	4.4
30°-40°	222.9	5.2
40°-50°	230.5	5.4
50°-60°	212.3	5.0
60°-70°	171.6	4.0
70°-80°	114.9	2.7
80°-90°	61.8	1.4
90°-100°	100.7	2.4
100°-110°	223.4	5.2
110°-120°	353.1	8.3
120°-130°	452.4	10.6
130°-140°	500.5	11.7
140°-150°	487.3	11.4
150°-160°	408.6	9.6
160°-170°	271.6	6.4
170°-180°	95.1	2.2
0°-30°	359.3	8.4
0°-40°	582.2	13.6
0°-60°	1025.0	24.0
0°-90°	1373.3	32.2
90°-120°	677.3	15.9
90°-150°	2117.5	49.6
90°-180°	2893.0	67.8
0°-180°	4266.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	29	50	64	70	8
95°	57	71	94	109	114	59
105°	182	194	212	226	232	195
115°	340	347	360	367	369	336
125°	494	498	508	514	515	442
135°	641	645	649	654	654	494
145°	775	778	780	782	782	484
155°	887	887	888	890	887	408
165°	964	963	963	966	962	272
175°	1002	1000	999	1003	999	95
180°	1005	1005	1005	1005	1005	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.6	18.1	21.7	25.3	28.8	32.5	36.2	40.0	43.7	47.4	50.0
90°	8.2	12.9	17.5	22.2	26.9	31.6	36.3	41.0	45.7	50.4	53.6
92.5°	25.6	29.6	33.6	37.6	41.6	46.2	51.2	56.3	61.4	66.4	69.9
95°	56.8	59.9	62.9	65.9	68.9	73.0	78.3	83.5	88.7	93.9	97.4
97.5°	89.9	92.4	95.0	97.5	100.1	104.2	110.0	115.8	121.5	127.3	130.6
100°	114.6	116.7	118.9	121.0	123.2	127.0	132.6	138.1	143.7	149.2	152.9
102.5°	141.1	143.8	146.5	149.1	151.8	155.4	159.7	164.1	168.4	172.8	176.5
105°	182.4	185.0	187.5	190.0	192.5	195.8	199.9	204.1	208.2	212.3	215.4
107.5°	228.2	230.4	232.7	235.0	237.2	240.3	244.0	247.8	251.5	255.3	257.8
110°	259.7	261.8	263.9	266.0	268.1	270.9	274.3	277.7	281.1	284.5	286.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	292.2	293.7	295.1	296.6	298.0	300.4	303.9	307.3	310.8	314.3	316.4
115°	339.8	341.2	342.6	344.0	345.5	347.7	350.7	353.7	356.7	359.7	361.4
117.5°	387.5	388.3	389.1	389.9	390.6	392.5	395.3	398.1	401.0	403.8	405.7
120°	417.5	418.7	419.9	421.1	422.2	424.1	426.6	429.2	431.7	434.2	436.0
122.5°	449.7	450.1	450.6	451.1	451.5	453.1	455.8	458.6	461.3	464.0	465.6
125°	493.7	494.6	495.6	496.5	497.5	499.0	501.3	503.5	505.7	508.0	509.2
127.5°	540.2	540.6	541.1	541.6	542.1	543.3	545.2	547.1	549.0	550.9	552.2
130°	568.3	569.1	569.8	570.6	571.4	572.6	574.4	576.2	578.0	579.8	581.0
132.5°	596.1	597.5	598.9	600.3	601.7	602.9	604.0	605.0	606.0	607.1	608.3
135°	640.6	641.5	642.4	643.4	644.3	645.2	646.1	647.0	647.9	648.8	650.1
137.5°	682.4	683.3	684.2	685.2	686.1	686.9	687.6	688.4	689.1	689.8	691.3
140°	708.9	709.8	710.7	711.5	712.4	713.1	713.8	714.4	715.0	715.6	717.1
142.5°	735.8	736.5	737.1	737.8	738.4	739.1	739.7	740.4	741.1	741.8	743.0
145°	775.4	776.0	776.6	777.2	777.7	778.3	778.8	779.3	779.9	780.4	780.9
147.5°	811.5	811.9	812.3	812.7	813.0	813.4	813.9	814.3	814.7	815.1	815.7
150°	835.9	835.7	835.6	835.4	835.2	835.5	836.2	836.9	837.6	838.3	838.3
152.5°	855.9	856.2	856.4	856.7	856.9	857.2	857.4	857.7	858.0	858.3	858.7
155°	886.7	886.7	886.7	886.7	886.7	886.8	887.0	887.2	887.3	887.5	888.2
157.5°	914.3	913.9	913.5	913.1	912.7	912.6	912.8	913.0	913.1	913.3	914.0
160°	930.5	930.0	929.5	929.0	928.4	928.3	928.4	928.6	928.8	929.0	929.7
162.5°	944.9	944.5	944.1	943.8	943.4	943.2	943.2	943.3	943.3	943.4	944.2
165°	964.2	963.8	963.5	963.1	962.8	962.7	962.8	963.0	963.2	963.4	964.1
167.5°	980.4	979.7	979.0	978.3	977.6	977.3	977.3	977.3	977.3	977.3	978.3
170°	989.2	988.5	987.8	987.1	986.4	986.0	986.0	986.0	986.0	986.0	987.1
172.5°	995.4	994.7	994.0	993.3	992.6	992.3	992.3	992.3	992.3	992.3	993.3
175°	1002.5	1001.8	1001.1	1000.4	999.7	999.3	999.3	999.3	999.3	999.3	1000.4
177.5°	1006.1	1005.5	1005.0	1004.4	1003.8	1003.5	1003.4	1003.2	1003.1	1002.9	1003.8
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	52.5	55.0	57.6	59.2	60.1	60.9	61.7	62.5
90°	56.9	60.1	63.3	65.6	66.8	68.0	69.3	70.5
92.5°	73.3	76.7	80.2	82.4	83.5	84.6	85.7	86.8
95°	100.9	104.4	107.9	110.1	111.2	112.3	113.3	114.4
97.5°	133.9	137.2	140.5	142.6	143.5	144.4	145.3	146.2
100°	156.7	160.4	164.1	166.4	167.4	168.4	169.3	170.3
102.5°	180.3	184.1	187.9	190.3	191.4	192.5	193.6	194.7
105°	218.5	221.6	224.7	226.9	228.1	229.3	230.6	231.8
107.5°	260.4	262.9	265.5	267.1	267.7	268.3	268.9	269.5
110°	289.4	291.9	294.3	295.9	296.4	296.9	297.5	298.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	318.5	320.6	322.7	324.0	324.4	324.8	325.2	325.6
115°	363.1	364.8	366.4	367.5	367.9	368.4	368.8	369.3
117.5°	407.6	409.5	411.4	412.3	412.3	412.3	412.3	412.3
120°	437.7	439.5	441.2	442.1	442.0	441.9	441.8	441.7
122.5°	467.1	468.6	470.1	470.9	471.0	471.0	471.1	471.2
125°	510.5	511.8	513.1	514.0	514.3	514.6	515.0	515.3
127.5°	553.6	554.9	556.3	557.0	557.3	557.5	557.8	558.0
130°	582.3	583.6	584.8	585.6	585.7	585.9	586.1	586.2
132.5°	609.6	610.9	612.1	612.7	612.7	612.6	612.6	612.5
135°	651.5	652.8	654.2	654.7	654.5	654.4	654.2	654.0
137.5°	692.7	694.1	695.5	696.0	695.5	695.1	694.6	694.2
140°	718.6	720.1	721.5	722.0	721.6	721.1	720.7	720.2
142.5°	744.1	745.3	746.5	746.8	746.4	745.9	745.5	745.0
145°	781.4	781.9	782.4	782.6	782.5	782.4	782.3	782.2
147.5°	816.3	816.9	817.4	817.2	816.2	815.2	814.2	813.2
150°	838.3	838.3	838.3	838.1	837.9	837.6	837.4	837.2
152.5°	859.1	859.5	859.9	859.8	859.2	858.6	858.0	857.4
155°	888.9	889.6	890.3	890.2	889.3	888.5	887.6	886.7
157.5°	914.7	915.4	916.1	915.9	914.7	913.6	912.4	911.3
160°	930.4	931.0	931.7	931.7	930.8	929.9	929.0	928.2
162.5°	945.0	945.9	946.7	946.6	945.6	944.6	943.6	942.6
165°	964.8	965.5	966.1	966.0	964.9	963.9	962.8	961.8
167.5°	979.4	980.4	981.5	981.4	980.4	979.3	978.2	977.1
170°	988.1	989.2	990.2	990.1	988.9	987.7	986.5	985.3
172.5°	994.4	995.4	996.5	996.5	995.4	994.3	993.2	992.1
175°	1001.4	1002.5	1003.5	1003.4	1002.2	1001.0	999.8	998.6
177.5°	1004.6	1005.4	1006.3	1006.2	1005.2	1004.3	1003.3	1002.3
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8

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