

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: P333191-927

Luminaire Tested: **S125DIP-S610D1035U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333191-927  
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-S610D1035U927-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4739.6 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

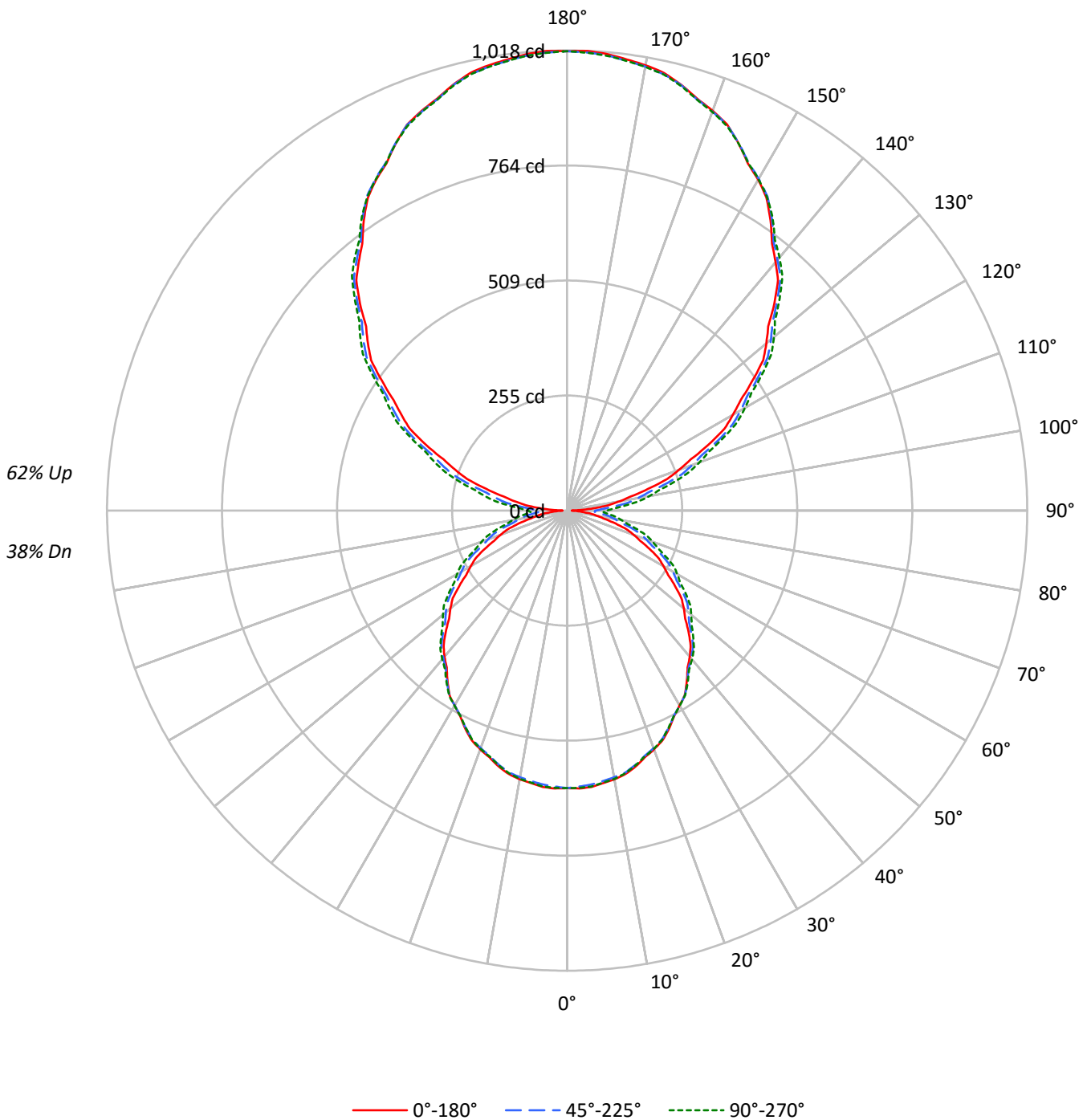
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	94	90	86	82	85	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	77	71	66	61	58	54	50	45	43	40	34	32	30	25
3	78	69	61	55	70	62	56	51	51	46	42	40	36	34	30	28	26	21
4	71	60	53	46	64	55	48	43	45	40	36	35	32	29	26	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	15
6	60	48	40	34	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	55	43	35	30	50	40	33	28	32	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	29	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

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

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.2
10°-20°	164.8	3.5
20°-30°	245.1	5.2
30°-40°	290.3	6.1
40°-50°	300.2	6.3
50°-60°	276.5	5.8
60°-70°	223.5	4.7
70°-80°	149.7	3.2
80°-90°	79.8	1.7
90°-100°	111.6	2.4
100°-110°	233.1	4.9
110°-120°	362.0	7.6
120°-130°	460.3	9.7
130°-140°	507.4	10.7
140°-150°	493.1	10.4
150°-160°	413.3	8.7
160°-170°	274.7	5.8
170°-180°	96.1	2.0
0°-30°	467.9	9.9
0°-40°	758.2	16.0
0°-60°	1334.9	28.2
0°-90°	1787.9	37.7
90°-120°	706.7	14.9
90°-150°	2167.5	45.7
90°-180°	2952.0	62.3
0°-180°	4739.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	36	62	79	86	9
95°	59	77	105	123	129	61
105°	186	200	222	238	246	198
115°	344	352	369	379	382	341
125°	500	504	517	525	527	447
135°	648	652	657	665	665	499
145°	784	787	789	792	792	490
155°	897	897	898	900	897	413
165°	975	974	974	977	973	275
175°	1014	1011	1011	1015	1010	96
180°	1016	1016	1016	1016	1016	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.5	28.0	32.6	37.2	41.8	46.7	51.4	56.2	61.0	64.3
90°	10.5	16.1	21.8	27.5	33.2	38.9	44.7	50.5	56.2	62.0	66.0
92.5°	27.8	32.7	37.7	42.6	47.6	53.2	59.3	65.4	71.6	77.8	81.9
95°	59.3	63.1	66.9	70.7	74.5	79.6	86.0	92.2	98.5	104.8	109.0
97.5°	92.5	95.8	99.0	102.3	105.6	110.7	117.5	124.3	131.1	137.9	141.9
100°	117.3	120.2	122.9	125.8	128.6	133.2	139.8	146.4	153.0	159.5	163.9
102.5°	144.1	147.3	150.7	154.0	157.2	161.6	166.9	172.2	177.6	182.9	187.4
105°	185.8	188.8	191.8	194.8	197.8	201.8	206.9	212.0	217.1	222.1	225.9
107.5°	231.9	234.6	237.3	240.0	242.6	246.3	251.0	255.6	260.3	265.0	268.2
110°	263.6	266.1	268.5	271.1	273.5	276.9	281.2	285.5	289.8	294.1	297.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.5	298.3	300.0	301.7	303.5	306.5	310.9	315.1	319.4	323.8	326.4
115°	344.4	346.1	347.8	349.4	351.0	353.8	357.6	361.4	365.3	369.1	371.3
117.5°	392.6	393.6	394.4	395.4	396.3	398.6	402.2	405.8	409.4	413.0	415.4
120°	422.9	424.2	425.6	426.8	428.1	430.3	433.6	436.9	440.1	443.4	445.6
122.5°	455.3	455.9	456.4	456.9	457.4	459.4	462.8	466.2	469.6	473.1	475.1
125°	499.9	500.8	501.7	502.6	503.6	505.4	508.3	511.1	514.0	516.8	518.6
127.5°	546.7	547.2	547.6	548.1	548.6	550.0	552.4	554.8	557.2	559.6	561.4
130°	575.2	575.9	576.7	577.4	578.1	579.6	581.9	584.1	586.3	588.5	590.3
132.5°	603.2	604.6	606.0	607.4	608.9	610.2	611.6	613.0	614.3	615.8	617.4
135°	648.2	649.0	650.0	650.9	651.8	652.8	653.9	655.1	656.2	657.3	659.0
137.5°	690.4	691.3	692.2	693.2	694.0	694.9	695.8	696.6	697.4	698.3	700.1
140°	717.2	718.0	718.9	719.8	720.6	721.4	722.1	722.7	723.4	724.1	725.9
142.5°	744.3	745.0	745.6	746.2	746.9	747.5	748.2	748.9	749.6	750.3	751.8
145°	784.3	784.9	785.5	786.1	786.6	787.2	787.7	788.2	788.8	789.3	790.0
147.5°	820.8	821.2	821.6	822.0	822.3	822.8	823.2	823.6	823.9	824.4	825.1
150°	845.4	845.3	845.1	844.9	844.8	845.0	845.7	846.4	847.1	847.8	847.8
152.5°	865.7	865.9	866.2	866.4	866.6	867.0	867.2	867.5	867.8	868.1	868.5
155°	896.8	896.8	896.8	896.8	896.8	896.9	897.1	897.3	897.5	897.6	898.3
157.5°	924.7	924.3	923.9	923.5	923.1	923.1	923.2	923.4	923.6	923.8	924.5
160°	941.1	940.6	940.1	939.5	939.1	938.9	939.1	939.2	939.4	939.5	940.2
162.5°	955.7	955.3	954.9	954.5	954.2	953.9	954.0	954.0	954.1	954.1	955.0
165°	975.2	974.8	974.5	974.1	973.8	973.7	973.8	974.0	974.1	974.4	975.1
167.5°	991.6	990.9	990.2	989.5	988.8	988.4	988.4	988.4	988.4	988.4	989.5
170°	1000.4	999.7	999.0	998.4	997.7	997.3	997.3	997.3	997.3	997.3	998.4
172.5°	1006.8	1006.1	1005.4	1004.6	1004.0	1003.6	1003.6	1003.6	1003.6	1003.6	1004.6
175°	1013.9	1013.2	1012.5	1011.8	1011.1	1010.7	1010.7	1010.7	1010.7	1010.7	1011.8
177.5°	1017.6	1017.0	1016.4	1015.8	1015.3	1014.9	1014.8	1014.6	1014.5	1014.4	1015.3
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	67.6	70.8	74.1	76.2	77.2	78.3	79.3	80.3
90°	69.9	73.9	77.8	80.6	82.0	83.5	84.9	86.4
92.5°	86.0	90.2	94.3	97.0	98.4	99.7	101.0	102.3
95°	113.2	117.3	121.5	124.3	125.6	126.8	128.1	129.4
97.5°	145.8	149.8	153.8	156.3	157.4	158.5	159.7	160.8
100°	168.3	172.7	177.1	179.8	181.0	182.2	183.3	184.5
102.5°	191.8	196.1	200.6	203.4	204.8	206.0	207.3	208.7
105°	229.6	233.3	237.0	239.6	241.1	242.6	244.0	245.5
107.5°	271.3	274.5	277.7	279.6	280.4	281.2	282.0	282.8
110°	300.2	303.2	306.3	308.2	309.0	309.7	310.5	311.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	329.1	331.8	334.5	336.1	336.8	337.3	337.9	338.6
115°	373.5	375.8	378.0	379.5	380.1	380.7	381.4	381.9
117.5°	417.9	420.3	422.7	424.0	424.2	424.4	424.6	424.8
120°	447.9	450.2	452.4	453.6	453.8	453.8	453.9	454.0
122.5°	477.1	479.1	481.2	482.3	482.5	482.8	483.0	483.2
125°	520.4	522.2	524.0	525.1	525.6	526.1	526.6	527.1
127.5°	563.2	565.1	566.8	568.0	568.4	568.8	569.3	569.7
130°	591.9	593.7	595.3	596.4	596.7	597.0	597.3	597.6
132.5°	619.1	620.8	622.5	623.4	623.4	623.5	623.6	623.7
135°	660.8	662.5	664.2	665.1	665.0	665.0	665.0	665.0
137.5°	701.9	703.7	705.4	706.2	705.8	705.5	705.1	704.8
140°	727.7	729.5	731.3	732.1	731.7	731.4	731.0	730.7
142.5°	753.2	754.7	756.2	756.8	756.4	756.1	755.7	755.3
145°	790.6	791.3	791.9	792.3	792.3	792.3	792.3	792.3
147.5°	825.7	826.3	827.0	826.8	825.9	824.9	823.9	823.0
150°	847.8	847.8	847.8	847.7	847.5	847.2	847.1	846.8
152.5°	868.9	869.3	869.7	869.7	869.0	868.5	867.8	867.2
155°	899.0	899.8	900.5	900.4	899.5	898.6	897.7	896.8
157.5°	925.1	925.8	926.5	926.3	925.2	924.0	922.8	921.7
160°	941.0	941.7	942.4	942.3	941.4	940.6	939.7	938.7
162.5°	955.8	956.6	957.5	957.4	956.4	955.4	954.3	953.3
165°	975.7	976.4	977.2	977.0	976.0	974.9	973.8	972.8
167.5°	990.5	991.6	992.7	992.6	991.6	990.5	989.4	988.2
170°	999.4	1000.4	1001.5	1001.4	1000.2	998.9	997.8	996.5
172.5°	1005.8	1006.8	1007.8	1007.8	1006.7	1005.7	1004.6	1003.5
175°	1012.9	1013.9	1014.9	1014.9	1013.7	1012.4	1011.1	1010.0
177.5°	1016.1	1016.9	1017.7	1017.7	1016.7	1015.7	1014.7	1013.8
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3

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