

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: P333128-940

Luminaire Tested: **S125DIP-S375D590U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333128-940  
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: S125DIP-S375D590U940-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3127.4 lumens  
Efficiency: N/A  
Efficacy: 122.2 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

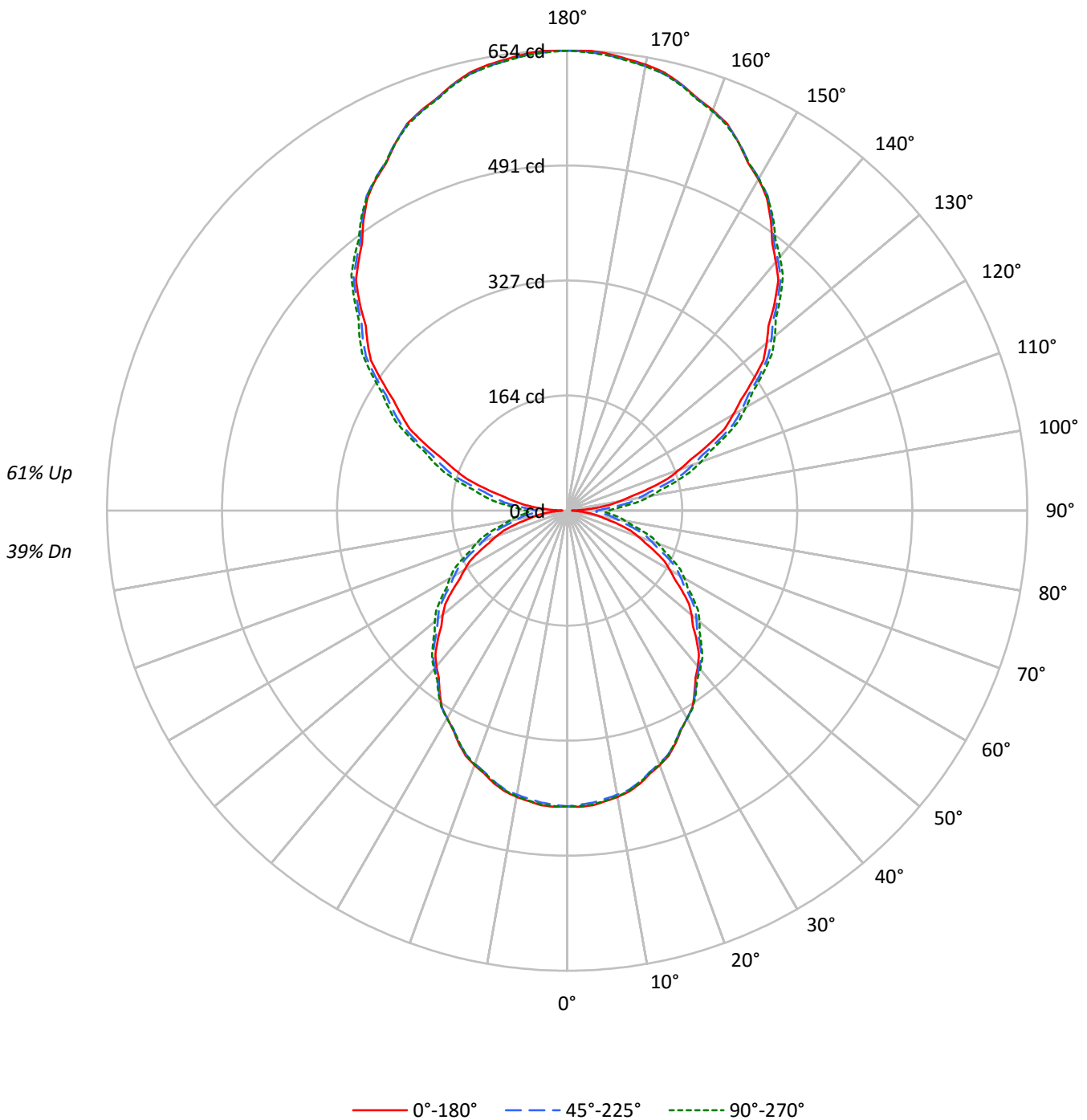
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	64	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	43	40	37	34	31	28	26	22
4	72	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	18	16	14	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

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

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.7	1.3
10°-20°	112.8	3.6
20°-30°	167.8	5.4
30°-40°	198.8	6.4
40°-50°	205.5	6.6
50°-60°	189.3	6.1
60°-70°	153.0	4.9
70°-80°	102.5	3.3
80°-90°	54.6	1.7
90°-100°	73.6	2.4
100°-110°	151.3	4.8
110°-120°	233.7	7.5
120°-130°	296.6	9.5
130°-140°	326.6	10.4
140°-150°	317.2	10.1
150°-160°	265.8	8.5
160°-170°	176.7	5.7
170°-180°	61.8	2.0
0°-30°	320.4	10.2
0°-40°	519.2	16.6
0°-60°	914.0	29.2
0°-90°	1224.1	39.1
90°-120°	458.6	14.7
90°-150°	1399.0	44.7
90°-180°	1903.0	60.8
0°-180°	3127.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	24	42	54	58	6
95°	38	51	69	81	86	39
105°	120	129	144	155	160	128
115°	222	227	238	245	247	219
125°	322	325	333	338	340	288
135°	417	420	423	428	428	321
145°	504	506	508	510	510	315
155°	577	577	577	579	577	266
165°	627	626	627	628	626	177
175°	652	650	650	653	650	62
180°	654	654	654	654	654	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	12.9	16.1	19.2	22.3	25.4	28.6	31.8	35.1	38.4	41.6	43.9
90°	7.1	11.0	14.8	18.6	22.5	26.3	30.2	34.2	38.0	41.9	44.6
92.5°	18.3	21.6	25.0	28.3	31.7	35.4	39.5	43.7	47.9	52.0	54.8
95°	38.4	41.0	43.6	46.3	48.9	52.3	56.5	60.7	65.0	69.3	72.1
97.5°	59.8	62.1	64.3	66.5	68.8	72.1	76.7	81.2	85.8	90.4	93.1
100°	75.7	77.7	79.6	81.5	83.5	86.6	91.0	95.4	99.8	104.2	107.2
102.5°	92.9	95.1	97.4	99.6	101.8	104.8	108.3	112.0	115.6	119.1	122.2
105°	119.7	121.7	123.8	125.8	127.8	130.5	133.9	137.4	140.8	144.3	146.8
107.5°	149.3	151.1	152.9	154.7	156.6	159.1	162.2	165.3	168.5	171.7	173.8
110°	169.8	171.4	173.1	174.7	176.4	178.7	181.6	184.5	187.3	190.3	192.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	190.9	192.1	193.2	194.4	195.6	197.6	200.5	203.5	206.4	209.3	211.2
115°	221.7	222.8	223.9	225.0	226.1	227.9	230.5	233.2	235.8	238.4	239.9
117.5°	252.6	253.2	253.9	254.5	255.1	256.7	259.1	261.6	264.0	266.5	268.1
120°	272.2	273.0	273.8	274.7	275.5	277.1	279.3	281.5	283.7	286.0	287.5
122.5°	293.0	293.4	293.6	294.0	294.4	295.7	298.0	300.3	302.6	305.0	306.4
125°	321.6	322.2	322.8	323.3	324.0	325.2	327.2	329.1	331.1	333.1	334.2
127.5°	351.7	352.0	352.3	352.6	352.9	353.8	355.5	357.1	358.7	360.4	361.7
130°	370.1	370.5	371.0	371.5	371.9	372.9	374.4	375.9	377.5	379.0	380.1
132.5°	388.0	389.0	389.9	390.7	391.6	392.6	393.5	394.5	395.4	396.4	397.5
135°	417.0	417.5	418.1	418.7	419.3	420.0	420.7	421.4	422.2	422.9	424.2
137.5°	444.2	444.7	445.3	445.9	446.5	447.0	447.5	448.2	448.7	449.2	450.5
140°	461.3	461.8	462.4	463.0	463.5	464.0	464.5	464.9	465.4	465.7	467.0
142.5°	478.8	479.2	479.6	480.0	480.4	480.8	481.3	481.7	482.1	482.6	483.6
145°	504.5	504.9	505.2	505.6	506.0	506.3	506.7	507.0	507.4	507.7	508.1
147.5°	527.9	528.2	528.4	528.7	529.0	529.1	529.4	529.8	530.0	530.3	530.7
150°	543.8	543.7	543.6	543.5	543.3	543.5	543.9	544.4	544.8	545.3	545.3
152.5°	556.8	557.0	557.1	557.3	557.4	557.6	557.8	557.9	558.1	558.4	558.7
155°	576.8	576.8	576.8	576.8	576.8	576.9	577.0	577.1	577.3	577.4	577.8
157.5°	594.8	594.5	594.2	594.1	593.8	593.7	593.8	594.0	594.1	594.1	594.6
160°	605.4	605.0	604.7	604.3	604.0	603.9	604.0	604.1	604.2	604.3	604.8
162.5°	614.7	614.5	614.2	613.9	613.7	613.6	613.6	613.7	613.7	613.7	614.2
165°	627.2	627.0	626.8	626.5	626.3	626.2	626.3	626.5	626.6	626.7	627.1
167.5°	637.8	637.4	636.9	636.4	636.0	635.8	635.8	635.8	635.8	635.8	636.4
170°	643.5	643.0	642.6	642.1	641.7	641.5	641.5	641.5	641.5	641.5	642.1
172.5°	647.6	647.1	646.7	646.2	645.8	645.5	645.5	645.5	645.5	645.5	646.2
175°	652.1	651.7	651.2	650.8	650.3	650.1	650.1	650.1	650.1	650.1	650.8
177.5°	654.5	654.2	653.8	653.4	653.0	652.8	652.7	652.6	652.6	652.5	653.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	46.1	48.3	50.6	52.0	52.7	53.4	54.1	54.8
90°	47.3	49.9	52.6	54.5	55.5	56.4	57.4	58.4
92.5°	57.6	60.4	63.1	64.9	65.8	66.7	67.6	68.5
95°	74.9	77.7	80.5	82.3	83.2	84.1	84.9	85.8
97.5°	95.8	98.4	101.0	102.8	103.5	104.3	105.0	105.8
100°	110.1	113.1	116.0	117.8	118.6	119.4	120.1	120.9
102.5°	125.1	128.0	131.0	132.9	133.8	134.6	135.5	136.3
105°	149.3	151.8	154.3	156.0	157.0	158.0	159.0	160.0
107.5°	175.9	178.2	180.3	181.6	182.2	182.7	183.2	183.8
110°	194.5	196.5	198.6	199.9	200.5	201.0	201.5	202.1





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	212.9	214.8	216.6	217.8	218.2	218.6	219.1	219.5
115°	241.5	243.0	244.5	245.5	245.9	246.4	246.8	247.3
117.5°	269.8	271.4	273.1	274.0	274.2	274.4	274.6	274.6
120°	289.1	290.6	292.2	293.0	293.1	293.2	293.3	293.4
122.5°	307.7	309.2	310.6	311.3	311.6	311.7	311.9	312.1
125°	335.5	336.7	338.0	338.8	339.1	339.5	339.8	340.1
127.5°	362.9	364.2	365.4	366.1	366.5	366.8	367.1	367.4
130°	381.3	382.5	383.6	384.3	384.6	384.8	385.0	385.3
132.5°	398.7	399.8	401.0	401.6	401.7	401.8	401.9	401.9
135°	425.3	426.5	427.8	428.3	428.4	428.4	428.4	428.4
137.5°	451.7	452.9	454.1	454.6	454.4	454.2	454.1	453.9
140°	468.2	469.5	470.7	471.2	471.0	470.8	470.6	470.5
142.5°	484.6	485.6	486.6	487.0	486.8	486.6	486.4	486.2
145°	508.6	509.1	509.5	509.8	509.8	509.8	509.8	509.9
147.5°	531.1	531.5	531.9	531.8	531.3	530.7	530.0	529.4
150°	545.3	545.3	545.3	545.3	545.1	545.0	544.8	544.7
152.5°	558.9	559.2	559.5	559.4	559.0	558.6	558.2	557.9
155°	578.3	578.7	579.2	579.2	578.5	578.0	577.4	576.8
157.5°	595.0	595.5	595.9	595.8	595.0	594.3	593.6	592.8
160°	605.2	605.6	606.1	606.1	605.6	604.9	604.4	603.9
162.5°	614.7	615.3	615.9	615.8	615.2	614.5	613.9	613.1
165°	627.6	628.0	628.6	628.4	627.8	627.1	626.3	625.7
167.5°	637.1	637.8	638.5	638.5	637.8	637.0	636.3	635.7
170°	642.8	643.5	644.2	644.1	643.4	642.6	641.8	641.0
172.5°	646.9	647.6	648.3	648.3	647.6	646.8	646.1	645.4
175°	651.5	652.1	652.8	652.7	652.0	651.2	650.4	649.6
177.5°	653.5	654.1	654.6	654.6	654.0	653.4	652.6	652.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7

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