

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: P333138

Luminaire Tested: **S125DIP-S375D810U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333138  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
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-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4370.6 lumens  
Efficiency: N/A  
Efficacy: 140.1 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

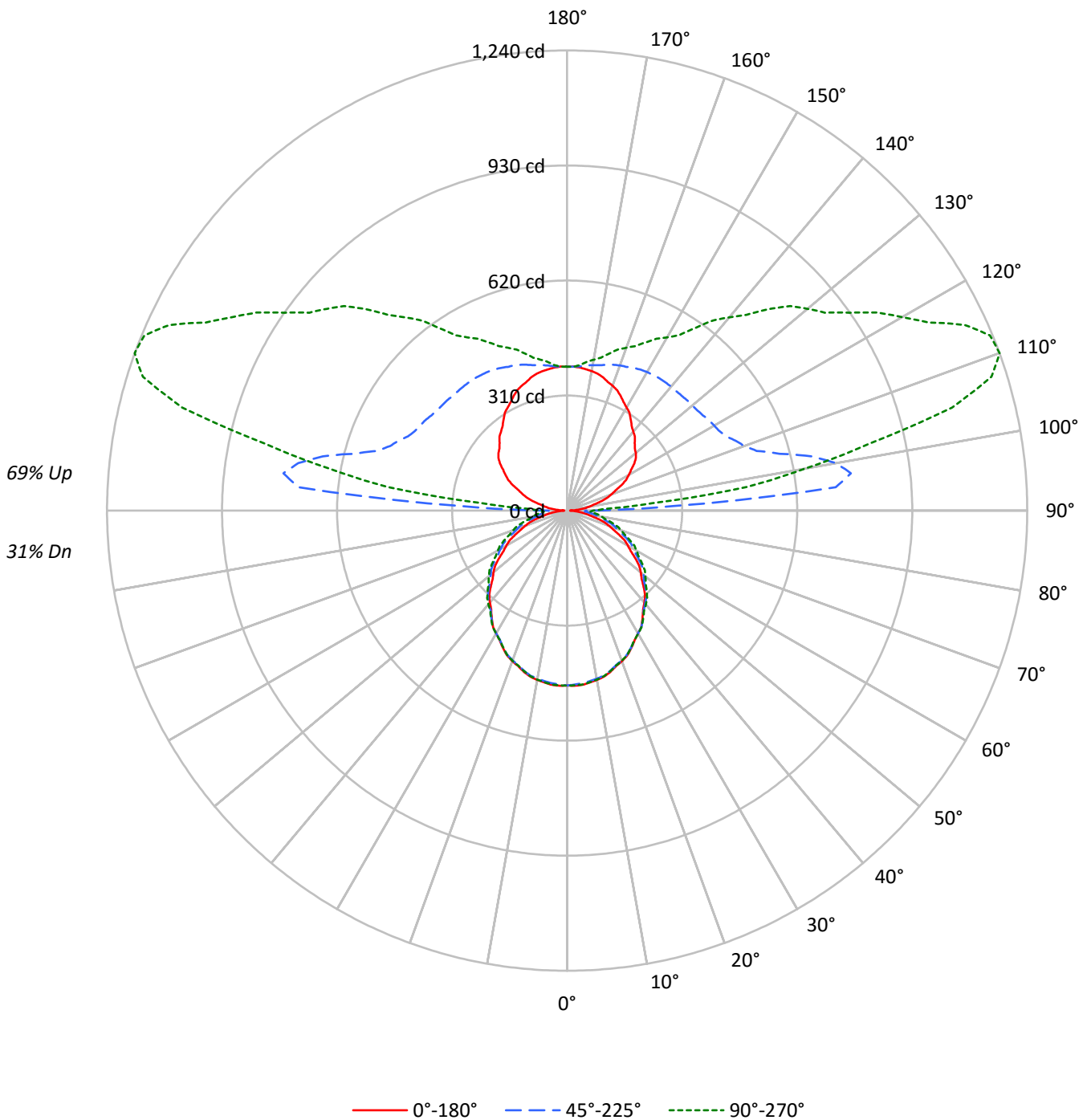
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	93	89	85	81	84	80	76	73	63	61	59	48	46	45	34	33	32	25
2	85	77	71	66	76	69	64	60	55	51	48	42	39	37	29	28	27	21
3	77	68	60	55	69	61	55	50	48	44	40	37	34	31	26	24	22	18
4	70	60	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	18	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	16	14	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	17	17	15	13	10
8	51	38	31	26	45	35	28	24	28	23	20	22	18	15	16	13	11	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	24	19	15	18	15	12	13	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	2.9
20°-30°	188.2	4.3
30°-40°	222.9	5.1
40°-50°	230.5	5.3
50°-60°	212.3	4.9
60°-70°	171.6	3.9
70°-80°	114.9	2.6
80°-90°	61.8	1.4
90°-100°	314.5	7.2
100°-110°	629.0	14.4
110°-120°	583.7	13.4
120°-130°	469.0	10.7
130°-140°	372.9	8.5
140°-150°	279.2	6.4
150°-160°	195.9	4.5
160°-170°	115.5	2.6
170°-180°	37.6	0.9
0°-30°	359.3	8.2
0°-40°	582.2	13.3
0°-60°	1025.0	23.5
0°-90°	1373.3	31.4
90°-120°	1527.2	34.9
90°-150°	2648.3	60.6
90°-180°	2997.0	68.6
0°-180°	4370.6	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	65	70	6
95°	32	94	726	358	231	32
105°	92	135	592	1150	1074	98
115°	161	197	473	1007	1183	158
125°	221	258	447	798	930	196
135°	257	309	437	664	767	200
145°	299	342	435	544	600	187
155°	341	367	424	479	500	157
165°	372	382	407	431	438	105
175°	387	387	390	395	393	37
180°	388	388	388	388	388	



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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	18.0	21.6	25.2	28.8	32.5	36.2	40.0	43.6	47.4	49.9
90°	8.2	12.2	17.1	21.9	26.8	31.7	36.0	41.1	45.4	50.4	53.6
92.5°	16.2	21.3	30.9	43.6	60.1	86.2	132.5	207.7	289.0	288.5	242.8
95°	31.8	35.3	44.2	55.5	75.3	113.6	200.8	376.3	595.6	726.5	713.9
97.5°	48.3	51.6	58.4	69.4	87.3	115.5	174.3	303.7	532.8	771.3	891.3
100°	59.8	63.5	68.8	79.6	96.6	122.8	171.4	276.3	476.7	735.6	933.3
102.5°	72.6	75.5	80.0	91.2	106.8	132.3	175.8	264.4	434.0	674.7	905.4
105°	92.5	94.2	99.7	109.2	123.3	147.6	185.1	257.7	391.4	592.3	818.7
107.5°	112.0	114.9	120.1	127.9	142.3	164.2	200.4	263.0	372.4	535.2	730.8
110°	126.0	128.8	133.1	141.4	154.4	176.8	211.7	268.5	366.0	508.1	680.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	140.4	142.9	146.4	154.4	167.2	188.7	222.3	276.0	364.6	491.6	642.6
115°	160.7	163.0	166.1	173.8	186.3	207.5	239.1	287.1	364.9	473.1	600.8
117.5°	179.0	181.8	184.8	192.3	206.1	226.5	256.4	300.2	367.9	462.9	574.9
120°	191.5	194.2	197.6	205.0	218.6	239.4	269.2	309.1	371.6	457.7	560.3
122.5°	204.3	206.2	208.8	216.0	230.7	251.4	281.1	319.0	374.6	453.1	547.5
125°	220.8	222.2	226.0	233.0	247.7	269.0	296.9	332.6	380.0	446.9	529.9
127.5°	233.3	235.5	240.4	249.3	264.9	286.1	312.6	345.3	386.5	442.9	513.6
130°	241.4	243.7	249.8	259.9	276.2	297.2	322.9	354.0	390.6	440.6	503.0
132.5°	247.3	250.3	257.7	269.1	286.2	307.0	332.4	361.3	395.1	439.1	494.0
135°	257.4	260.4	269.7	282.1	298.4	319.8	344.8	371.3	401.0	436.9	482.8
137.5°	270.1	272.4	281.1	293.5	309.5	331.4	353.8	378.8	406.7	436.1	473.0
140°	277.3	279.6	289.0	301.5	316.3	337.5	360.3	383.8	409.0	435.7	468.1
142.5°	286.0	287.6	296.3	308.8	322.9	342.7	364.2	386.4	410.2	435.5	464.0
145°	299.1	300.6	308.3	319.2	333.1	351.1	371.4	390.9	412.1	434.7	458.7
147.5°	312.4	313.4	320.1	330.3	342.5	358.3	376.1	393.8	412.8	432.7	453.5
150°	320.6	322.1	327.6	337.8	348.7	362.0	379.2	395.6	412.8	430.8	449.6
152.5°	329.3	330.3	335.1	344.0	354.4	366.4	382.3	396.9	412.2	428.3	445.2
155°	340.9	340.9	345.6	353.4	361.2	372.2	385.5	398.0	410.5	423.8	437.9
157.5°	351.2	351.1	354.8	361.5	368.4	376.7	388.1	398.8	408.5	419.1	431.0
160°	358.1	357.3	360.5	365.9	372.2	379.2	389.4	398.8	406.6	416.0	425.4
162.5°	363.7	363.0	366.1	370.9	375.9	381.7	390.6	398.1	404.7	412.2	420.3
165°	372.2	370.6	373.0	376.9	380.0	384.7	390.9	397.2	401.9	406.6	412.8
167.5°	377.8	377.0	378.4	380.6	382.8	385.8	390.9	395.3	397.5	401.1	405.5
170°	381.6	380.8	381.6	383.1	384.7	387.0	390.9	394.1	395.6	398.0	401.1
172.5°	384.1	382.7	383.4	385.0	385.9	387.0	390.3	392.8	393.1	394.2	396.7
175°	387.0	385.5	386.3	387.0	387.0	387.0	389.4	390.9	390.2	390.2	390.9
177.5°	388.4	387.2	387.2	387.8	387.2	387.2	388.4	389.1	387.8	387.8	388.4
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8



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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	57.5	59.4	60.1	60.8	61.7	62.4
90°	56.7	59.8	63.0	66.1	66.8	67.5	69.0	69.7
92.5°	179.5	143.8	121.2	111.2	101.9	100.7	100.3	99.8
95°	600.4	483.8	389.9	325.7	271.0	248.2	242.7	230.9
97.5°	873.0	791.8	700.3	610.4	562.8	519.7	497.7	488.4
100°	995.6	959.5	881.1	801.2	747.8	692.1	663.8	651.9
102.5°	1035.9	1061.6	1025.0	971.3	914.2	874.8	844.0	835.2
105°	1008.5	1117.6	1154.1	1146.9	1122.6	1097.5	1082.6	1073.9
107.5°	918.0	1063.0	1153.4	1195.5	1208.8	1209.3	1204.8	1199.1
110°	851.3	1001.8	1114.0	1181.8	1217.7	1233.3	1239.5	1240.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	798.4	941.3	1054.7	1134.3	1186.5	1212.7	1227.0	1233.3
115°	731.7	854.7	963.7	1050.2	1111.8	1149.9	1172.4	1183.2
117.5°	687.7	793.9	887.9	967.3	1029.0	1068.5	1090.9	1097.8
120°	663.7	759.2	847.0	917.0	975.5	1013.6	1035.3	1042.2
122.5°	645.1	733.7	812.0	877.6	929.8	964.8	986.6	992.8
125°	618.3	699.7	769.4	826.8	871.1	903.6	921.3	929.7
127.5°	590.9	666.9	731.9	785.7	826.0	854.9	871.7	875.8
130°	574.0	644.3	706.7	758.5	798.1	824.4	840.6	845.8
132.5°	556.9	622.8	679.6	729.4	769.0	795.2	810.0	815.8
135°	534.1	589.4	640.8	686.3	721.2	747.5	762.1	767.3
137.5°	515.0	559.9	602.7	641.3	672.6	696.4	709.8	715.4
140°	504.4	542.3	579.4	613.0	642.3	663.0	675.2	679.5
142.5°	495.2	527.3	559.2	588.3	613.3	630.9	642.4	646.1
145°	483.5	508.2	533.0	554.5	573.7	587.4	596.4	600.0
147.5°	472.7	492.6	511.4	527.5	542.6	553.4	558.6	560.2
150°	466.8	484.0	498.8	513.0	524.8	534.3	537.5	538.4
152.5°	460.5	475.9	489.5	500.4	510.3	517.8	521.0	521.8
155°	451.2	463.7	474.6	483.2	491.0	496.5	498.8	499.6
157.5°	441.8	452.1	460.5	467.3	473.4	477.9	480.1	479.9
160°	435.5	443.3	451.2	456.6	462.1	466.0	467.6	466.8
162.5°	428.6	435.8	442.4	447.2	451.5	454.7	455.1	454.9
165°	419.1	424.6	429.3	433.2	436.3	437.9	437.9	437.9
167.5°	410.0	413.6	417.2	420.0	421.6	423.0	422.4	422.2
170°	405.0	407.4	409.7	411.3	412.8	413.6	413.6	412.8
172.5°	399.4	401.7	403.5	404.4	404.7	406.1	404.9	404.1
175°	393.3	393.3	394.9	394.9	394.9	395.6	394.1	393.3
177.5°	389.1	389.7	389.7	389.7	389.1	389.7	387.8	387.8
180°	387.8	387.8	387.8	387.8	387.8	387.8	387.8	387.8

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