

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: P333138-830

Luminaire Tested: **S125DIP-S375D810U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333138-830
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-S375D810U830-4F0-1E-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: 4119.4 lumens
Efficiency: N/A
Efficacy: 132.0 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

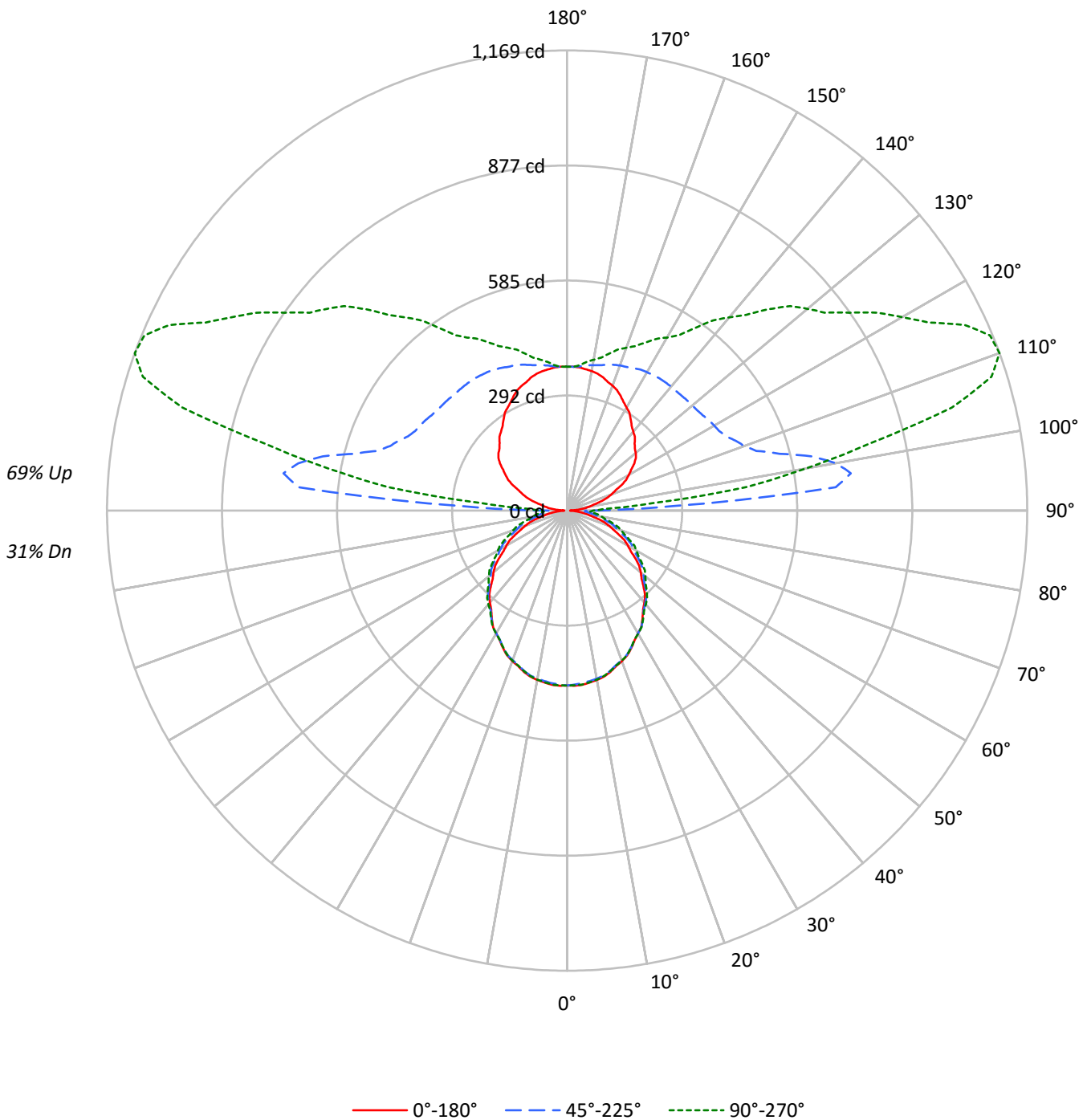
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.0
10°-20°	119.3	2.9
20°-30°	177.4	4.3
30°-40°	210.1	5.1
40°-50°	217.2	5.3
50°-60°	200.1	4.9
60°-70°	161.8	3.9
70°-80°	108.3	2.6
80°-90°	58.2	1.4
90°-100°	296.5	7.2
100°-110°	592.8	14.4
110°-120°	550.1	13.4
120°-130°	442.1	10.7
130°-140°	351.5	8.5
140°-150°	263.1	6.4
150°-160°	184.7	4.5
160°-170°	108.8	2.6
170°-180°	35.4	0.9
0°-30°	338.7	8.2
0°-40°	548.8	13.3
0°-60°	966.1	23.5
0°-90°	1294.4	31.4
90°-120°	1439.4	34.9
90°-150°	2496.1	60.6
90°-180°	2825.0	68.6
0°-180°	4119.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	28	48	61	66	6
95°	30	89	685	337	218	30
105°	87	128	558	1084	1012	92
115°	152	186	446	949	1115	149
125°	208	244	421	752	876	185
135°	243	291	412	625	723	188
145°	282	322	410	512	566	177
155°	321	346	399	451	471	148
165°	351	360	383	406	413	99
175°	365	365	368	372	371	35
180°	366	366	366	366	366	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.0	20.4	23.8	27.1	30.6	34.1	37.7	41.1	44.7	47.0
90°	7.7	11.5	16.1	20.6	25.3	29.9	33.9	38.7	42.8	47.5	50.5
92.5°	15.3	20.1	29.1	41.1	56.6	81.2	124.9	195.8	272.4	271.9	228.8
95°	30.0	33.3	41.7	52.3	71.0	107.1	189.3	354.7	561.4	684.8	672.9
97.5°	45.5	48.6	55.0	65.4	82.3	108.9	164.3	286.3	502.2	727.0	840.1
100°	56.4	59.9	64.8	75.0	91.0	115.7	161.6	260.4	449.3	693.3	879.7
102.5°	68.4	71.2	75.4	86.0	100.7	124.7	165.7	249.2	409.1	635.9	853.4
105°	87.2	88.8	94.0	102.9	116.2	139.1	174.5	242.9	368.9	558.3	771.7
107.5°	105.6	108.3	113.2	120.6	134.1	154.8	188.9	247.9	351.0	504.4	688.8
110°	118.8	121.4	125.5	133.3	145.5	166.6	199.5	253.1	345.0	478.9	641.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	132.3	134.7	138.0	145.5	157.6	177.9	209.5	260.1	343.7	463.4	605.7
115°	151.5	153.6	156.6	163.8	175.6	195.6	225.4	270.6	343.9	445.9	566.3
117.5°	168.7	171.4	174.2	181.3	194.3	213.5	241.7	283.0	346.8	436.3	541.9
120°	180.5	183.0	186.2	193.2	206.0	225.6	253.7	291.3	350.2	431.4	528.1
122.5°	192.6	194.4	196.8	203.6	217.4	237.0	264.9	300.7	353.1	427.1	516.0
125°	208.1	209.4	213.0	219.6	233.5	253.5	279.8	313.5	358.2	421.2	499.5
127.5°	219.9	222.0	226.6	235.0	249.7	269.7	294.6	325.5	364.3	417.5	484.1
130°	227.5	229.7	235.4	245.0	260.3	280.1	304.3	333.7	368.2	415.3	474.1
132.5°	233.1	235.9	242.9	253.6	269.8	289.4	313.3	340.5	372.4	413.9	465.6
135°	242.6	245.4	254.2	265.9	281.3	301.4	325.0	350.0	378.0	411.8	455.1
137.5°	254.6	256.7	264.9	276.6	291.7	312.4	333.5	357.0	383.3	411.0	445.8
140°	261.4	263.5	272.4	284.2	298.1	318.1	339.6	361.7	385.5	410.7	441.2
142.5°	269.6	271.1	279.3	291.1	304.3	323.0	343.3	364.2	386.6	410.5	437.3
145°	281.9	283.3	290.6	300.9	314.0	330.9	350.1	368.4	388.4	409.7	432.3
147.5°	294.5	295.4	301.7	311.3	322.8	337.7	354.5	371.2	389.1	407.8	427.4
150°	302.2	303.6	308.8	318.4	328.7	341.2	357.4	372.9	389.1	406.0	423.8
152.5°	310.4	311.3	315.8	324.2	334.0	345.3	360.3	374.1	388.5	403.7	419.6
155°	321.3	321.3	325.7	333.1	340.4	350.8	363.4	375.1	386.9	399.4	412.7
157.5°	331.0	330.9	334.4	340.7	347.2	355.1	365.8	375.9	385.0	395.0	406.2
160°	337.5	336.8	339.8	344.9	350.8	357.4	367.0	375.9	383.2	392.1	401.0
162.5°	342.8	342.1	345.1	349.6	354.3	359.8	368.2	375.2	381.4	388.5	396.2
165°	350.8	349.3	351.6	355.2	358.2	362.6	368.4	374.4	378.8	383.2	389.1
167.5°	356.1	355.3	356.7	358.7	360.8	363.6	368.4	372.6	374.7	378.1	382.2
170°	359.7	358.9	359.7	361.1	362.6	364.8	368.4	371.5	372.9	375.1	378.1
172.5°	362.0	360.7	361.4	362.9	363.7	364.8	367.9	370.2	370.5	371.6	373.9
175°	364.8	363.4	364.1	364.8	364.8	364.8	367.0	368.4	367.8	367.8	368.4
177.5°	366.1	365.0	365.0	365.5	365.0	365.0	366.1	366.7	365.5	365.5	366.1
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	49.5	51.8	54.2	56.0	56.6	57.3	58.2	58.8
90°	53.4	56.4	59.4	62.3	63.0	63.6	65.0	65.7
92.5°	169.2	135.5	114.2	104.8	96.0	94.9	94.5	94.1
95°	565.9	456.0	367.5	307.0	255.4	233.9	228.8	217.6
97.5°	822.8	746.3	660.1	575.3	530.5	489.8	469.1	460.3
100°	938.4	904.4	830.5	755.2	704.8	652.3	625.7	614.4
102.5°	976.4	1000.6	966.1	915.5	861.7	824.5	795.5	787.2
105°	950.6	1053.4	1087.8	1081.0	1058.1	1034.4	1020.4	1012.2
107.5°	865.3	1001.9	1087.1	1126.8	1139.3	1139.8	1135.6	1130.2
110°	802.4	944.2	1050.0	1113.9	1147.7	1162.4	1168.3	1168.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	752.5	887.2	994.1	1069.1	1118.3	1143.0	1156.5	1162.4
115°	689.7	805.6	908.3	989.9	1047.9	1083.8	1105.0	1115.2
117.5°	648.2	748.3	836.9	911.7	969.9	1007.1	1028.2	1034.7
120°	625.6	715.6	798.3	864.3	919.5	955.4	975.8	982.3
122.5°	608.0	691.5	765.3	827.2	876.4	909.4	929.9	935.8
125°	582.8	659.5	725.2	779.3	821.0	851.7	868.4	876.3
127.5°	556.9	628.6	689.8	740.6	778.5	805.8	821.6	825.5
130°	541.0	607.3	666.1	714.9	752.2	777.0	792.3	797.2
132.5°	524.9	587.0	640.6	687.5	724.8	749.5	763.5	768.9
135°	503.4	555.5	604.0	646.9	679.8	704.6	718.3	723.2
137.5°	485.4	527.7	568.1	604.5	634.0	656.4	669.0	674.3
140°	475.4	511.1	546.1	577.8	605.4	624.9	636.4	640.5
142.5°	466.7	497.0	527.1	554.5	578.1	594.7	605.5	609.0
145°	455.7	479.0	502.4	522.6	540.7	553.6	562.1	565.5
147.5°	445.5	464.3	482.0	497.2	511.4	521.6	526.5	528.0
150°	440.0	456.2	470.1	483.5	494.6	503.6	506.6	507.5
152.5°	434.0	448.6	461.4	471.6	481.0	488.0	491.1	491.8
155°	425.3	437.1	447.3	455.4	462.8	468.0	470.1	470.9
157.5°	416.4	426.1	434.0	440.5	446.2	450.4	452.5	452.3
160°	410.5	417.8	425.3	430.4	435.5	439.2	440.7	440.0
162.5°	404.0	410.8	417.0	421.5	425.6	428.6	429.0	428.8
165°	395.0	400.2	404.6	408.3	411.2	412.7	412.7	412.7
167.5°	386.4	389.8	393.2	395.9	397.4	398.7	398.1	397.9
170°	381.7	384.0	386.2	387.7	389.1	389.8	389.8	389.1
172.5°	376.5	378.6	380.3	381.2	381.4	382.8	381.6	380.9
175°	370.7	370.7	372.2	372.2	372.2	372.9	371.5	370.7
177.5°	366.7	367.3	367.3	367.3	366.7	367.3	365.5	365.5
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5

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