

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: P333138-840

Luminaire Tested: **S125DIP-S375D810U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333138-840
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-S375D810U840-4F0-1E-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: 4413.7 lumens
Efficiency: N/A
Efficacy: 141.5 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

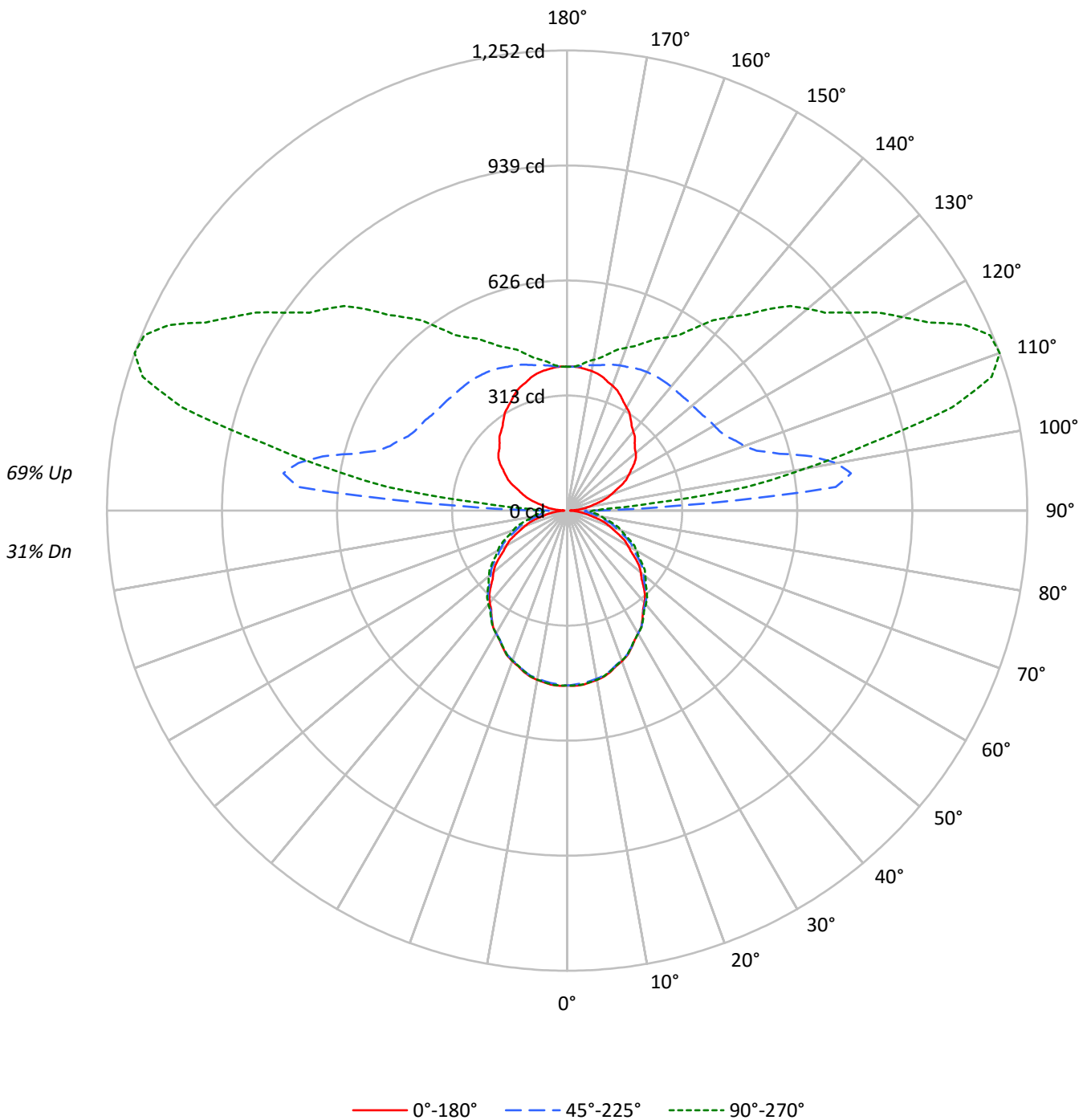
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.0
10°-20°	127.8	2.9
20°-30°	190.0	4.3
30°-40°	225.1	5.1
40°-50°	232.7	5.3
50°-60°	214.4	4.9
60°-70°	173.3	3.9
70°-80°	116.1	2.6
80°-90°	62.4	1.4
90°-100°	317.7	7.2
100°-110°	635.2	14.4
110°-120°	589.4	13.4
120°-130°	473.6	10.7
130°-140°	376.6	8.5
140°-150°	281.9	6.4
150°-160°	197.9	4.5
160°-170°	116.6	2.6
170°-180°	37.9	0.9
0°-30°	362.8	8.2
0°-40°	587.9	13.3
0°-60°	1035.1	23.5
0°-90°	1386.8	31.4
90°-120°	1542.2	34.9
90°-150°	2674.4	60.6
90°-180°	3027.0	68.6
0°-180°	4413.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	30	51	65	70	7
95°	32	95	734	361	233	32
105°	93	137	598	1162	1084	99
115°	162	199	478	1017	1195	160
125°	223	261	451	806	939	198
135°	260	312	441	670	775	202
145°	302	346	439	549	606	189
155°	344	370	428	484	504	158
165°	376	386	411	436	442	106
175°	391	391	394	399	397	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.7	18.2	21.8	25.4	29.1	32.8	36.6	40.4	44.0	47.9	50.4
90°	8.3	12.3	17.3	22.1	27.1	32.0	36.4	41.5	45.8	50.9	54.1
92.5°	16.4	21.5	31.2	44.0	60.7	87.1	133.8	209.7	291.9	291.3	245.2
95°	32.1	35.6	44.6	56.0	76.0	114.7	202.8	380.0	601.5	733.7	720.9
97.5°	48.8	52.1	59.0	70.1	88.2	116.6	176.0	306.7	538.1	778.9	900.1
100°	60.4	64.1	69.5	80.4	97.6	124.0	173.1	279.0	481.4	742.9	942.5
102.5°	73.3	76.2	80.8	92.1	107.9	133.6	177.5	267.0	438.3	681.4	914.3
105°	93.4	95.1	100.7	110.3	124.5	149.1	186.9	260.2	395.3	598.1	826.8
107.5°	113.1	116.0	121.3	129.2	143.7	165.8	202.4	265.6	376.1	540.5	738.0
110°	127.2	130.1	134.4	142.8	155.9	178.5	213.8	271.1	369.6	513.1	687.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	141.8	144.3	147.8	155.9	168.8	190.6	224.5	278.7	368.2	496.4	648.9
115°	162.3	164.6	167.7	175.5	188.1	209.5	241.5	289.9	368.5	477.8	606.7
117.5°	180.8	183.6	186.6	194.2	208.1	228.7	258.9	303.2	371.5	467.5	580.6
120°	193.4	196.1	199.5	207.0	220.8	241.8	271.9	312.1	375.3	462.2	565.8
122.5°	206.3	208.2	210.9	218.1	233.0	253.9	283.9	322.1	378.3	457.6	552.9
125°	223.0	224.4	228.2	235.3	250.1	271.7	299.8	335.9	383.7	451.3	535.1
127.5°	235.6	237.8	242.8	251.8	267.5	288.9	315.7	348.7	390.3	447.3	518.7
130°	243.8	246.1	252.3	262.5	278.9	300.1	326.1	357.5	394.5	444.9	508.0
132.5°	249.7	252.8	260.2	271.8	289.0	310.0	335.7	364.9	399.0	443.4	498.9
135°	259.9	263.0	272.4	284.9	301.3	323.0	348.2	375.0	405.0	441.2	487.6
137.5°	272.8	275.1	283.9	296.4	312.6	334.7	357.3	382.5	410.7	440.4	477.7
140°	280.0	282.4	291.9	304.5	319.4	340.8	363.9	387.6	413.0	440.0	472.7
142.5°	288.8	290.4	299.2	311.8	326.1	346.1	367.8	390.2	414.2	439.8	468.6
145°	302.1	303.6	311.3	322.3	336.4	354.6	375.1	394.8	416.2	439.0	463.2
147.5°	315.5	316.5	323.3	333.6	345.9	361.8	379.8	397.7	416.9	437.0	458.0
150°	323.8	325.3	330.8	341.1	352.1	365.6	382.9	399.5	416.9	435.0	454.0
152.5°	332.5	333.6	338.4	347.4	357.9	370.0	386.1	400.8	416.3	432.5	449.6
155°	344.3	344.3	349.0	356.9	364.8	375.9	389.3	401.9	414.5	428.0	442.2
157.5°	354.7	354.6	358.3	365.1	372.0	380.4	391.9	402.7	412.5	423.2	435.3
160°	361.6	360.8	364.1	369.5	375.9	382.9	393.2	402.7	410.6	420.1	429.6
162.5°	367.3	366.6	369.7	374.6	379.6	385.5	394.5	402.0	408.7	416.3	424.4
165°	375.9	374.3	376.7	380.6	383.7	388.5	394.8	401.1	405.9	410.6	416.9
167.5°	381.5	380.7	382.1	384.4	386.6	389.6	394.8	399.2	401.4	405.1	409.5
170°	385.4	384.6	385.4	386.9	388.5	390.8	394.8	398.0	399.5	401.9	405.1
172.5°	387.9	386.5	387.2	388.8	389.7	390.8	394.2	396.7	397.0	398.1	400.6
175°	390.8	389.3	390.1	390.8	390.8	390.8	393.2	394.8	394.0	394.0	394.8
177.5°	392.2	391.0	391.0	391.6	391.0	391.0	392.2	392.9	391.6	391.6	392.2
180°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	53.0	55.5	58.1	60.0	60.7	61.4	62.3	63.0
90°	57.3	60.4	63.6	66.8	67.5	68.2	69.7	70.4
92.5°	181.3	145.2	122.4	112.3	102.9	101.7	101.3	100.8
95°	606.3	488.6	393.7	328.9	273.7	250.6	245.1	233.2
97.5°	881.6	799.6	707.2	616.4	568.4	524.8	502.6	493.2
100°	1005.4	969.0	889.8	809.1	755.2	698.9	670.3	658.3
102.5°	1046.1	1072.1	1035.1	980.9	923.2	883.4	852.3	843.4
105°	1018.4	1128.6	1165.5	1158.2	1133.7	1108.3	1093.3	1084.5
107.5°	927.1	1073.5	1164.8	1207.3	1220.7	1221.2	1216.7	1210.9
110°	859.7	1011.7	1125.0	1193.5	1229.7	1245.5	1251.7	1252.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	806.3	950.6	1065.1	1145.5	1198.2	1224.7	1239.1	1245.5
115°	738.9	863.1	973.2	1060.6	1122.8	1161.2	1184.0	1194.9
117.5°	694.5	801.7	896.7	976.8	1039.2	1079.0	1101.7	1108.6
120°	670.2	766.7	855.4	926.0	985.1	1023.6	1045.5	1052.5
122.5°	651.5	740.9	820.0	886.3	939.0	974.3	996.3	1002.6
125°	624.4	706.6	777.0	835.0	879.7	912.5	930.4	938.9
127.5°	596.7	673.5	739.1	793.5	834.1	863.3	880.3	884.4
130°	579.7	650.7	713.7	766.0	806.0	832.5	848.9	854.1
132.5°	562.4	628.9	686.3	736.6	776.6	803.0	818.0	823.8
135°	539.4	595.2	647.1	693.1	728.3	754.9	769.6	774.9
137.5°	520.1	565.4	608.6	647.6	679.2	703.3	716.8	722.5
140°	509.4	547.6	585.1	619.0	648.6	669.5	681.9	686.2
142.5°	500.1	532.5	564.7	594.1	619.4	637.1	648.7	652.5
145°	488.3	513.2	538.3	560.0	579.4	593.2	602.3	605.9
147.5°	477.4	497.5	516.4	532.7	548.0	558.9	564.1	565.7
150°	471.4	488.8	503.7	518.1	530.0	539.6	542.8	543.7
152.5°	465.0	480.6	494.3	505.3	515.3	522.9	526.1	526.9
155°	455.7	468.3	479.3	488.0	495.8	501.4	503.7	504.5
157.5°	446.2	456.6	465.0	471.9	478.1	482.6	484.8	484.6
160°	439.8	447.7	455.7	461.1	466.7	470.6	472.2	471.4
162.5°	432.8	440.1	446.8	451.6	456.0	459.2	459.6	459.4
165°	423.2	428.8	433.5	437.5	440.6	442.2	442.2	442.2
167.5°	414.0	417.7	421.3	424.1	425.8	427.2	426.6	426.4
170°	409.0	411.4	413.7	415.4	416.9	417.7	417.7	416.9
172.5°	403.3	405.7	407.5	408.4	408.7	410.1	408.9	408.1
175°	397.2	397.2	398.8	398.8	398.8	399.5	398.0	397.2
177.5°	392.9	393.5	393.5	393.5	392.9	393.5	391.6	391.6
180°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6

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