

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: P333349-840

Luminaire Tested: **S125DIW-S375D770U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333349-840
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: S125DIW-S375D770U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4164.7 lumens
Efficiency: N/A
Efficacy: 137.0 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

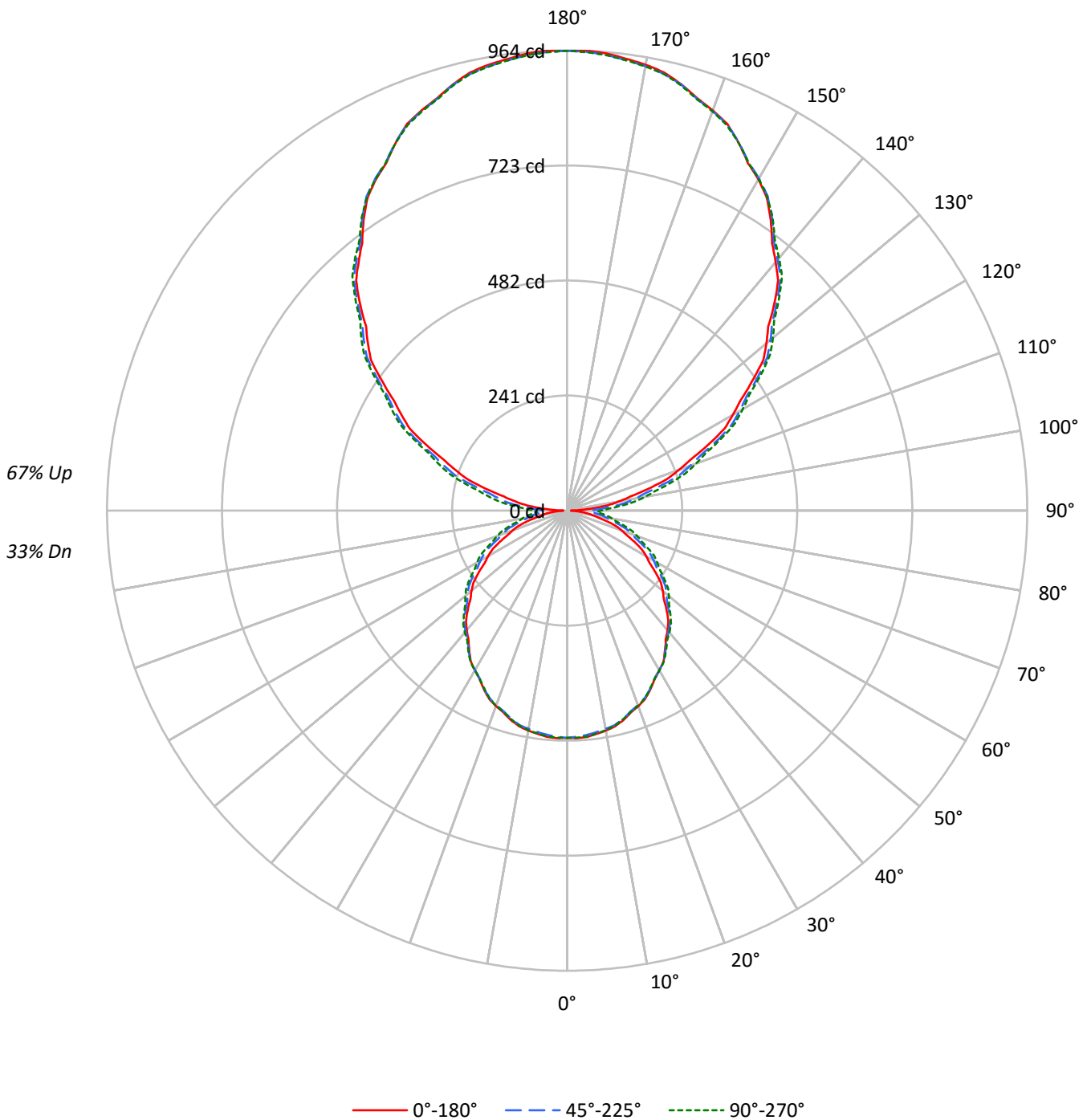
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	50	30	10	0
RCR																					
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33			33
1	94	89	85	82	84	80	77	74	64	62	60	49	48	46	35	34	33	27			27
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28	22			22
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	27	25	23	19			19
4	71	60	52	46	63	54	47	42	43	38	35	33	30	27	24	22	20	16			16
5	65	53	45	39	58	48	41	36	39	34	30	30	26	23	22	19	17	14			14
6	59	48	40	34	53	43	36	31	35	30	26	27	23	20	20	17	15	12			12
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13	11			11
8	51	39	31	26	46	35	28	24	28	23	20	22	19	16	16	14	12	9			9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	15	13	11	8			8
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	10	8			8

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	1.1
10°-20°	127.8	3.1
20°-30°	190.0	4.6
30°-40°	225.1	5.4
40°-50°	232.7	5.6
50°-60°	214.4	5.1
60°-70°	173.3	4.2
70°-80°	116.1	2.8
80°-90°	62.3	1.5
90°-100°	98.3	2.4
100°-110°	215.4	5.2
110°-120°	339.4	8.1
120°-130°	434.2	10.4
130°-140°	480.0	11.5
140°-150°	467.3	11.2
150°-160°	391.8	9.4
160°-170°	260.4	6.3
170°-180°	91.1	2.2
0°-30°	362.8	8.7
0°-40°	587.9	14.1
0°-60°	1035.1	24.9
0°-90°	1386.7	33.3
90°-120°	653.1	15.7
90°-150°	2034.6	48.9
90°-180°	2778.0	66.7
0°-180°	4164.7	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	29	50	64	70	8
95°	55	69	92	107	112	57
105°	175	187	205	218	224	187
115°	326	333	346	353	356	322
125°	473	478	488	493	495	424
135°	614	618	622	628	628	473
145°	743	746	748	750	750	464
155°	850	850	851	853	850	391
165°	924	923	924	926	922	261
175°	961	958	958	962	957	91
180°	963	963	963	963	963	



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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	18.3	21.9	25.4	29.1	32.7	36.5	40.3	44.0	47.8	50.3
90°	8.2	12.8	17.5	22.2	26.9	31.5	36.2	40.9	45.5	50.3	53.5
92.5°	24.8	28.9	32.8	36.9	40.9	45.4	50.4	55.4	60.5	65.5	69.0
95°	54.8	57.9	60.9	63.9	67.0	71.0	76.2	81.4	86.6	91.8	95.2
97.5°	86.4	89.1	91.6	94.1	96.7	100.9	106.5	112.2	118.0	123.6	126.9
100°	110.1	112.3	114.4	116.6	118.8	122.6	128.2	133.6	139.1	144.6	148.2
102.5°	135.5	138.1	140.9	143.5	146.2	149.8	154.1	158.3	162.7	167.0	170.8
105°	175.1	177.6	180.2	182.6	185.1	188.4	192.5	196.6	200.8	204.8	207.9
107.5°	218.9	221.2	223.5	225.7	227.9	231.0	234.7	238.4	242.2	245.9	248.5
110°	249.1	251.3	253.3	255.4	257.5	260.2	263.6	267.0	270.4	273.9	276.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	280.3	281.8	283.2	284.7	286.1	288.5	292.0	295.4	298.8	302.4	304.5
115°	325.9	327.3	328.7	330.1	331.4	333.7	336.7	339.7	342.7	345.8	347.5
117.5°	371.6	372.4	373.1	374.0	374.8	376.6	379.4	382.2	385.1	388.0	389.8
120°	400.4	401.5	402.7	403.8	405.0	406.9	409.4	411.9	414.4	417.1	418.8
122.5°	431.2	431.6	432.1	432.5	433.0	434.5	437.4	440.1	442.8	445.6	447.1
125°	473.4	474.3	475.2	476.1	477.0	478.6	480.8	483.0	485.2	487.6	488.9
127.5°	518.0	518.4	518.9	519.3	519.8	521.0	522.8	524.7	526.6	528.6	530.0
130°	544.9	545.6	546.3	547.1	547.9	549.1	550.9	552.7	554.4	556.2	557.5
132.5°	571.5	572.9	574.2	575.5	576.9	578.1	579.2	580.2	581.3	582.3	583.6
135°	614.2	615.1	615.9	616.8	617.7	618.6	619.6	620.5	621.3	622.2	623.6
137.5°	654.3	655.1	656.0	656.9	657.8	658.6	659.3	660.0	660.8	661.5	662.9
140°	679.6	680.5	681.4	682.2	683.0	683.7	684.3	684.9	685.5	686.1	687.6
142.5°	705.5	706.1	706.7	707.3	707.9	708.5	709.2	709.8	710.5	711.1	712.4
145°	743.4	744.0	744.5	745.1	745.7	746.2	746.7	747.2	747.7	748.2	748.7
147.5°	778.0	778.4	778.7	779.1	779.5	779.8	780.2	780.6	781.0	781.4	782.0
150°	801.4	801.2	801.0	800.9	800.7	801.0	801.6	802.3	802.9	803.7	803.7
152.5°	820.6	820.8	821.0	821.3	821.5	821.7	822.0	822.3	822.5	822.8	823.2
155°	850.1	850.1	850.1	850.1	850.1	850.2	850.4	850.5	850.7	850.9	851.5
157.5°	876.6	876.2	875.8	875.5	875.0	874.9	875.1	875.3	875.5	875.7	876.3
160°	892.1	891.6	891.1	890.6	890.1	889.9	890.1	890.3	890.4	890.6	891.3
162.5°	905.9	905.5	905.1	904.8	904.4	904.2	904.3	904.3	904.3	904.4	905.2
165°	924.3	924.0	923.7	923.3	923.0	922.9	923.1	923.2	923.4	923.6	924.2
167.5°	940.0	939.3	938.6	938.0	937.3	937.0	937.0	937.0	937.0	937.0	938.0
170°	948.4	947.7	947.0	946.3	945.6	945.3	945.3	945.3	945.3	945.3	946.3
172.5°	954.3	953.6	953.0	952.3	951.7	951.3	951.3	951.3	951.3	951.3	952.3
175°	961.1	960.4	959.8	959.1	958.4	958.1	958.1	958.1	958.1	958.1	959.1
177.5°	964.5	964.0	963.4	962.9	962.4	962.1	961.9	961.8	961.7	961.5	962.3
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3



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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°	52.9	55.4	58.0	59.7	60.5	61.3	62.1	62.9
90°	56.7	59.9	63.1	65.3	66.6	67.9	69.1	70.3
92.5°	72.4	75.7	79.2	81.4	82.5	83.6	84.7	85.8
95°	98.7	102.1	105.6	107.9	108.9	110.0	111.0	112.1
97.5°	130.2	133.5	136.7	138.9	139.8	140.7	141.6	142.5
100°	151.9	155.6	159.3	161.6	162.6	163.5	164.5	165.4
102.5°	174.5	178.2	182.0	184.4	185.5	186.5	187.6	188.7
105°	211.0	214.1	217.1	219.2	220.6	221.8	223.0	224.2
107.5°	251.1	253.6	256.1	257.7	258.3	258.9	259.5	260.1
110°	278.7	281.2	283.7	285.2	285.8	286.3	286.9	287.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	306.6	308.7	310.8	312.0	312.5	313.0	313.4	313.8
115°	349.2	350.9	352.6	353.7	354.2	354.6	355.1	355.5
117.5°	391.7	393.6	395.6	396.5	396.6	396.6	396.6	396.7
120°	420.6	422.3	424.1	425.0	425.0	424.9	424.9	424.7
122.5°	448.6	450.2	451.7	452.5	452.6	452.7	452.8	452.9
125°	490.2	491.5	492.8	493.6	494.0	494.3	494.7	495.0
127.5°	531.3	532.7	534.0	534.8	535.1	535.4	535.6	535.9
130°	558.8	560.1	561.4	562.1	562.3	562.5	562.7	562.8
132.5°	584.9	586.2	587.4	588.0	588.0	588.0	588.0	587.9
135°	624.9	626.2	627.6	628.2	628.0	627.9	627.7	627.6
137.5°	664.3	665.7	667.1	667.6	667.2	666.8	666.4	666.0
140°	689.0	690.5	692.1	692.6	692.2	691.8	691.3	690.8
142.5°	713.6	714.7	715.9	716.3	715.8	715.4	715.0	714.6
145°	749.2	749.7	750.2	750.4	750.3	750.3	750.2	750.1
147.5°	782.5	783.2	783.8	783.6	782.5	781.6	780.7	779.7
150°	803.7	803.7	803.7	803.5	803.3	803.0	802.8	802.6
152.5°	823.6	824.0	824.5	824.4	823.7	823.1	822.6	822.0
155°	852.2	852.8	853.5	853.4	852.6	851.8	850.9	850.1
157.5°	877.0	877.6	878.3	878.1	877.0	875.9	874.7	873.6
160°	891.9	892.6	893.2	893.2	892.3	891.5	890.7	889.9
162.5°	906.1	906.8	907.6	907.6	906.6	905.5	904.6	903.6
165°	924.9	925.6	926.2	926.0	925.1	924.1	923.1	922.1
167.5°	939.0	940.0	940.9	940.9	939.9	938.9	937.9	936.8
170°	947.4	948.4	949.4	949.3	948.1	947.0	945.7	944.6
172.5°	953.3	954.3	955.3	955.3	954.3	953.2	952.2	951.2
175°	960.1	961.1	962.1	962.0	960.8	959.7	958.5	957.4
177.5°	963.1	963.9	964.7	964.6	963.7	962.8	961.9	960.9
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3

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