

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: P333525-830

Luminaire Tested: **S125RDIP-S610D365U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333525-830
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: S125RDIP-S610D365U830-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3479.9 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

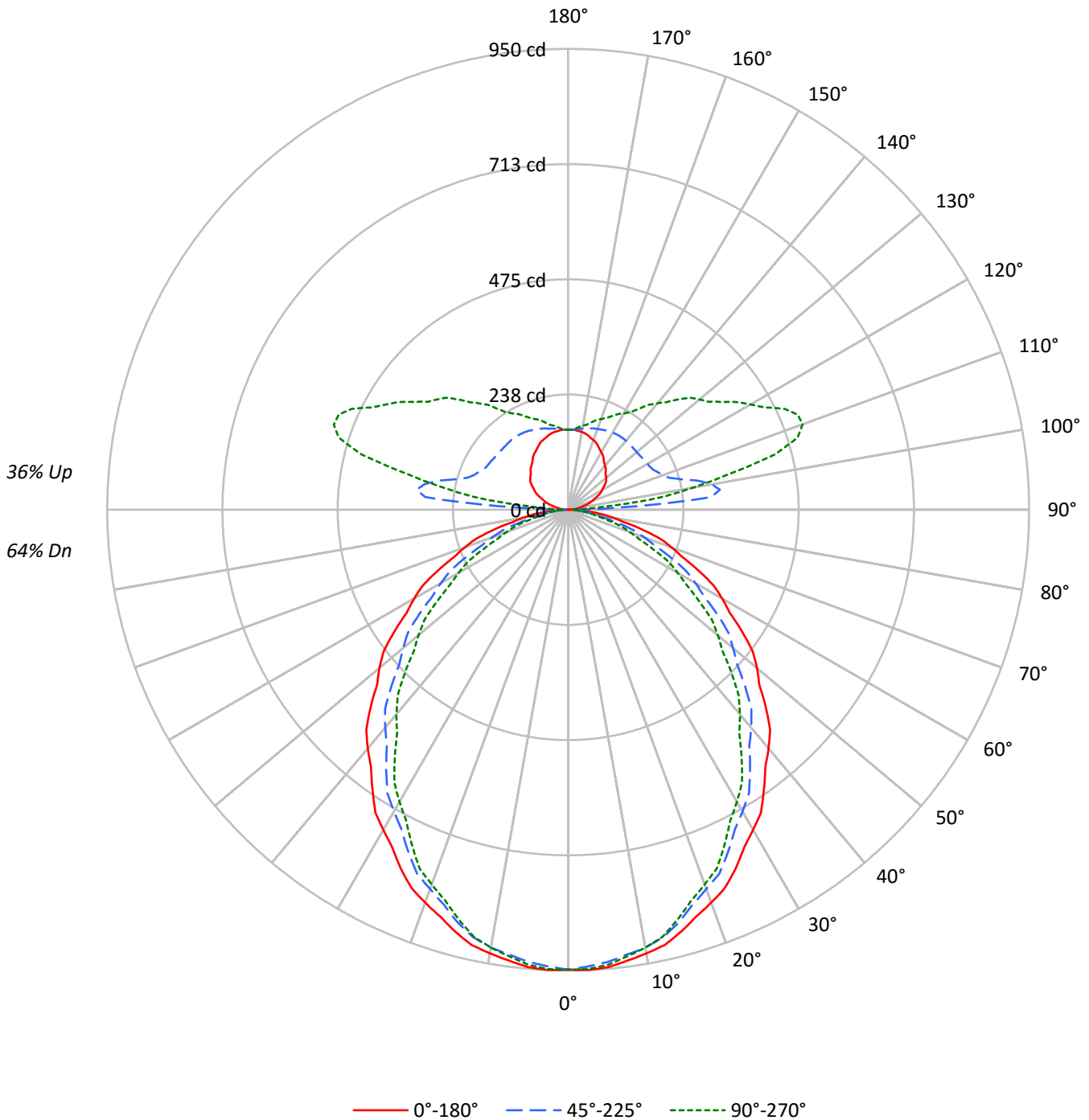
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	92	85	79	74	87	80	75	70	71	67	63	63	59	57	55	52	50	46
3	85	75	68	62	79	71	64	59	63	58	53	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	39	36	33	30
6	66	54	45	39	62	51	43	38	45	39	35	41	36	32	36	32	29	26
7	61	49	40	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	40	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	26	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	2.6
10°-20°	249.2	7.2
20°-30°	361.3	10.4
30°-40°	411.8	11.8
40°-50°	401.4	11.5
50°-60°	337.9	9.7
60°-70°	236.8	6.8
70°-80°	121.7	3.5
80°-90°	31.7	0.9
90°-100°	119.8	3.4
100°-110°	257.4	7.4
110°-120°	241.6	6.9
120°-130°	195.8	5.6
130°-140°	157.1	4.5
140°-150°	118.6	3.4
150°-160°	83.5	2.4
160°-170°	49.2	1.4
170°-180°	16.0	0.5
0°-30°	699.6	20.1
0°-40°	1111.4	31.9
0°-60°	1850.7	53.2
0°-90°	2240.9	64.4
90°-120°	618.8	17.8
90°-150°	1090.3	31.3
90°-180°	1239.0	35.6
0°-180°	3479.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	0	3	5	7	8	2
95°	11	32	295	134	78	12
105°	38	53	242	476	441	40
115°	67	81	194	418	492	66
125°	93	109	186	332	387	83
135°	109	131	184	279	322	85
145°	127	146	185	231	254	80
155°	145	156	181	204	213	67
165°	158	163	173	184	186	45
175°	165	165	166	168	168	16
180°	165	165	165	165	165	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.3	12.4	11.7	10.9	10.2	9.8	9.7	9.7	9.6	9.6	9.7
90°	0.4	0.7	1.3	2.0	2.6	3.3	3.7	4.3	4.6	5.4	5.7
92.5°	4.1	4.9	7.7	11.9	17.6	27.3	45.5	76.0	109.1	107.4	86.9
95°	11.0	11.3	13.9	17.6	25.0	40.0	75.6	148.9	240.8	295.1	288.8
97.5°	18.3	18.7	20.5	24.2	30.8	41.6	65.1	118.9	215.1	315.2	365.4
100°	23.3	23.9	25.4	28.9	35.3	45.3	64.7	107.9	191.9	300.8	384.1
102.5°	28.9	29.3	30.3	34.3	40.2	49.9	67.0	103.4	174.3	275.5	372.9
105°	37.6	37.6	39.3	42.6	48.0	57.3	71.9	101.6	157.2	241.5	337.1
107.5°	46.2	46.8	48.4	51.2	56.7	65.1	79.3	104.6	150.1	218.1	300.6
110°	52.3	53.0	54.3	57.3	62.3	71.0	84.6	107.6	147.9	207.2	279.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	58.4	59.1	60.1	63.2	68.1	76.5	89.6	111.3	147.9	200.8	264.4
115°	67.3	68.0	69.0	71.9	76.9	85.3	97.6	116.9	148.9	193.9	247.5
117.5°	75.3	76.3	77.4	80.3	86.1	94.1	105.8	123.3	151.1	190.5	237.4
120°	80.6	81.6	82.9	86.0	91.6	99.9	111.6	127.6	153.3	188.9	231.9
122.5°	86.2	86.9	88.0	91.0	97.2	105.6	117.2	132.3	155.0	187.6	227.1
125°	93.3	94.0	95.6	98.6	104.9	113.6	124.6	138.9	158.3	185.9	220.6
127.5°	98.8	99.8	101.9	105.8	112.4	121.1	131.7	144.9	161.7	185.1	214.5
130°	102.3	103.3	105.9	110.3	117.3	125.9	136.2	148.9	163.9	184.5	210.6
132.5°	104.9	106.2	109.4	114.2	121.5	130.2	140.5	152.4	166.3	184.5	207.4
135°	109.2	110.6	114.6	119.9	127.0	135.9	146.2	157.2	169.6	184.5	203.5
137.5°	114.7	115.7	119.4	124.8	131.7	140.9	150.3	160.8	172.6	184.9	200.1
140°	117.9	118.9	122.9	128.3	134.6	143.5	153.3	163.2	173.9	185.2	198.5
142.5°	121.7	122.3	126.1	131.5	137.5	146.0	155.0	164.6	174.7	185.5	197.2
145°	127.2	127.9	131.2	135.9	141.9	149.6	158.3	166.5	175.5	185.2	195.2
147.5°	133.1	133.5	136.4	140.7	145.9	152.6	160.2	167.8	175.9	184.4	193.1
150°	136.6	137.2	139.6	143.9	148.5	154.2	161.6	168.5	175.9	183.5	191.5
152.5°	140.3	140.7	142.8	146.6	151.0	156.1	162.9	169.1	175.6	182.5	189.6
155°	145.2	145.2	147.2	150.5	153.9	158.5	164.2	169.6	174.8	180.6	186.5
157.5°	149.7	149.6	151.2	154.0	156.9	160.5	165.3	169.8	174.0	178.5	183.6
160°	152.6	152.2	153.5	155.9	158.5	161.6	165.9	169.8	173.2	177.2	181.3
162.5°	155.0	154.7	156.0	158.1	160.1	162.6	166.5	169.7	172.4	175.6	179.1
165°	158.5	157.9	158.9	160.5	161.9	163.9	166.5	169.2	171.3	173.2	175.9
167.5°	161.0	160.6	161.3	162.1	163.1	164.4	166.5	168.4	169.4	170.9	172.8
170°	162.6	162.2	162.6	163.2	163.9	164.9	166.5	167.9	168.5	169.6	170.9
172.5°	163.6	163.1	163.3	164.0	164.4	164.9	166.3	167.4	167.5	168.0	169.0
175°	164.9	164.2	164.6	164.9	164.9	164.9	165.9	166.5	166.3	166.3	166.5
177.5°	165.5	164.9	164.9	165.2	164.9	164.9	165.5	165.8	165.2	165.2	165.5
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	9.8	9.9	9.9	10.0	9.9	9.7	9.7	9.5
90°	6.0	6.3	6.7	7.4	7.4	7.4	7.6	7.6
92.5°	59.0	42.8	32.2	27.3	23.1	22.2	21.8	21.2
95°	239.5	188.9	147.9	119.9	96.2	86.2	83.6	78.3
97.5°	356.7	321.2	281.3	242.3	221.8	203.1	193.5	189.2
100°	409.7	393.4	359.1	324.4	301.4	277.5	265.1	259.9
102.5°	427.5	437.6	421.2	397.8	373.2	356.1	342.7	338.7
105°	417.1	462.7	477.3	473.7	463.0	452.0	445.4	441.4
107.5°	379.5	440.4	478.0	495.4	500.8	500.8	498.5	495.9
110°	351.8	415.1	462.0	490.3	505.3	511.6	514.0	514.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	329.9	390.0	437.5	470.9	492.8	503.7	509.4	511.9
115°	302.5	354.1	399.7	436.0	462.0	478.0	487.3	491.6
117.5°	284.7	329.2	368.5	401.9	427.8	444.4	453.6	456.3
120°	275.1	315.1	351.8	381.1	405.8	421.7	430.7	433.4
122.5°	268.0	305.0	337.6	365.0	387.1	401.7	410.8	413.1
125°	257.5	291.4	320.5	344.4	363.1	376.7	384.1	387.4
127.5°	246.9	278.5	305.6	328.0	345.0	357.0	363.9	365.4
130°	240.2	269.5	295.5	317.2	333.8	344.8	351.5	353.5
132.5°	233.5	261.0	284.6	305.4	322.1	333.0	339.1	341.4
135°	224.9	247.8	269.2	288.1	302.8	313.8	319.8	321.8
137.5°	217.5	236.1	253.8	269.9	283.0	293.0	298.6	300.8
140°	213.5	229.1	244.5	258.4	270.8	279.5	284.5	286.2
142.5°	210.1	223.3	236.5	248.6	259.1	266.5	271.2	272.6
145°	205.6	215.8	226.2	235.2	243.2	248.8	252.5	253.8
147.5°	201.2	209.6	217.6	224.4	230.7	235.3	237.3	238.0
150°	198.9	206.2	212.5	218.5	223.5	227.5	228.8	229.1
152.5°	196.2	202.7	208.5	213.2	217.4	220.6	221.9	222.3
155°	192.2	197.6	202.2	205.9	209.2	211.5	212.5	212.8
157.5°	188.2	192.6	196.2	199.1	201.7	203.6	204.5	204.4
160°	185.6	188.9	192.2	194.5	196.9	198.5	199.2	198.9
162.5°	182.6	185.7	188.5	190.6	192.4	193.7	193.9	193.8
165°	178.5	180.9	182.9	184.5	185.9	186.5	186.5	186.5
167.5°	174.7	176.3	177.8	179.0	179.6	180.2	179.9	179.8
170°	172.6	173.5	174.6	175.2	175.9	176.3	176.3	175.9
172.5°	170.1	171.2	171.9	172.3	172.4	173.1	172.5	172.1
175°	167.6	167.6	168.2	168.2	168.2	168.5	167.9	167.6
177.5°	165.8	166.0	166.0	166.0	165.8	166.0	165.2	165.2
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2

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