

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: P333129-927

Luminaire Tested: **S125DIP-S375D590U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129-927
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-S375D590U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2838.7 lumens
Efficiency: N/A
Efficacy: 110.9 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

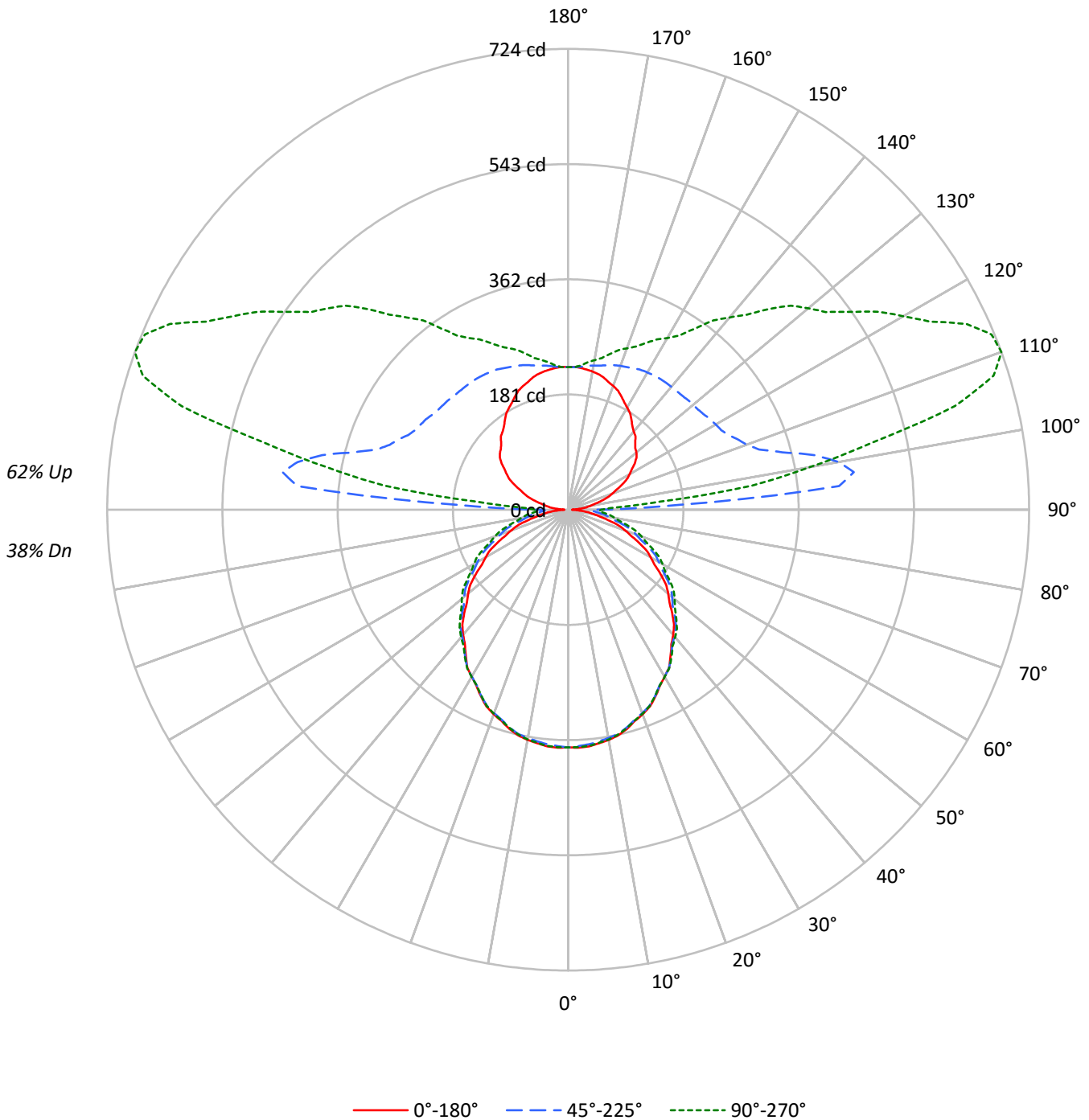
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	32	31	26
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	36	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	1.2
10°-20°	100.2	3.5
20°-30°	149.1	5.3
30°-40°	176.6	6.2
40°-50°	182.6	6.4
50°-60°	168.2	5.9
60°-70°	135.9	4.8
70°-80°	91.0	3.2
80°-90°	48.5	1.7
90°-100°	189.0	6.7
100°-110°	368.8	13.0
110°-120°	340.9	12.0
120°-130°	273.1	9.6
130°-140°	216.4	7.6
140°-150°	161.5	5.7
150°-160°	113.2	4.0
160°-170°	66.7	2.4
170°-180°	21.7	0.8
0°-30°	284.6	10.0
0°-40°	461.2	16.2
0°-60°	812.0	28.6
0°-90°	1087.4	38.3
90°-120°	898.6	31.7
90°-150°	1549.6	54.6
90°-180°	1751.0	61.7
0°-180°	2838.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	6	22	37	48	51	5
95°	20	58	427	216	144	20
105°	54	81	348	672	629	57
115°	94	115	277	588	690	92
125°	128	150	260	465	542	113
135°	149	179	253	386	446	116
145°	173	198	251	315	348	108
155°	197	212	245	277	289	91
165°	215	221	235	249	253	61
175°	224	224	226	228	227	21
180°	224	224	224	224	224	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.5	14.2	17.0	19.8	22.6	25.4	28.3	31.2	34.1	37.0	39.0
90°	6.3	9.3	12.8	16.4	19.9	23.4	26.7	30.3	33.6	37.2	39.6
92.5°	10.8	14.3	20.6	28.6	38.7	54.6	82.1	126.3	174.0	174.5	148.6
95°	19.6	22.3	28.0	35.1	47.1	69.9	121.0	223.2	350.7	427.1	420.3
97.5°	29.1	31.5	36.0	42.9	53.7	70.6	105.3	180.8	313.9	452.5	522.3
100°	35.6	38.3	41.7	48.5	58.8	74.5	103.3	164.6	281.1	431.5	546.1
102.5°	42.9	45.1	48.1	55.0	64.5	79.7	105.6	157.5	256.1	395.9	529.7
105°	54.3	55.7	59.3	65.0	73.6	88.1	110.4	153.0	231.0	347.8	479.0
107.5°	65.5	67.5	70.7	75.6	84.2	97.3	118.9	155.7	219.6	314.3	427.8
110°	73.5	75.4	78.2	83.2	90.9	104.3	125.2	158.6	215.6	298.3	398.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	81.8	83.5	85.7	90.5	98.2	111.1	131.0	162.6	214.4	288.4	376.1
115°	93.5	95.0	96.9	101.5	108.8	121.5	140.3	168.7	214.1	277.3	351.5
117.5°	103.9	105.7	107.5	111.9	120.0	132.1	150.0	175.8	215.5	270.9	336.0
120°	111.2	112.8	114.9	119.1	127.1	139.4	157.1	180.7	217.4	267.6	327.3
122.5°	118.5	119.6	121.1	125.3	133.9	146.1	163.7	186.2	218.8	264.6	319.5
125°	128.0	128.8	131.0	135.0	143.5	156.0	172.5	193.6	221.4	260.5	308.9
127.5°	135.1	136.4	139.2	144.3	153.4	165.7	181.4	200.7	224.8	257.8	299.0
130°	139.8	141.1	144.7	150.4	159.9	172.1	187.3	205.6	227.0	256.2	292.6
132.5°	143.1	144.8	149.2	155.7	165.6	177.8	192.7	209.6	229.4	255.0	287.1
135°	148.9	150.7	156.0	163.2	172.5	185.1	199.6	215.1	232.3	253.3	280.1
137.5°	156.3	157.6	162.6	169.8	179.0	191.6	204.7	219.2	235.4	252.5	274.1
140°	160.3	161.7	167.2	174.4	182.9	195.2	208.3	222.0	236.5	252.0	270.9
142.5°	165.4	166.4	171.3	178.5	186.6	198.1	210.5	223.3	237.1	251.8	268.4
145°	173.0	173.8	178.2	184.5	192.6	202.9	214.7	225.9	238.1	251.3	265.2
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.1
150°	185.3	186.2	189.3	195.2	201.5	209.2	219.2	228.6	238.6	249.0	259.8
152.5°	190.4	190.8	193.7	198.8	204.8	211.8	220.9	229.3	238.2	247.6	257.3
155°	197.0	197.0	199.7	204.2	208.7	215.1	222.8	230.0	237.3	244.9	253.0
157.5°	203.0	202.9	205.1	209.0	212.9	217.7	224.3	230.4	236.1	242.2	249.1
160°	207.0	206.5	208.3	211.5	215.1	219.2	225.1	230.4	235.0	240.4	245.8
162.5°	210.2	209.8	211.6	214.4	217.3	220.6	225.8	230.1	233.9	238.2	243.0
165°	215.1	214.2	215.6	217.8	219.6	222.4	225.9	229.6	232.3	235.0	238.6
167.5°	218.3	217.9	218.7	220.0	221.3	222.9	225.9	228.5	229.7	231.8	234.3
170°	220.5	220.1	220.5	221.4	222.4	223.7	225.9	227.8	228.6	230.0	231.8
172.5°	222.0	221.2	221.6	222.5	223.1	223.7	225.6	227.0	227.2	227.8	229.3
175°	223.7	222.8	223.2	223.7	223.7	223.7	225.1	225.9	225.5	225.5	225.9
177.5°	224.5	223.8	223.8	224.1	223.8	223.8	224.5	224.8	224.1	224.1	224.5
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	41.0	42.9	44.9	46.3	46.8	47.5	48.1	48.6
90°	41.9	44.2	46.6	48.6	49.3	49.8	50.9	51.4
92.5°	112.6	92.4	79.9	74.3	69.1	68.6	68.5	68.4
95°	355.2	288.3	234.5	197.7	166.2	153.2	150.2	143.5
97.5°	512.2	465.7	413.3	361.6	334.3	309.5	297.0	291.8
100°	582.7	562.2	517.4	471.5	440.8	408.8	392.5	385.8
102.5°	605.5	620.9	600.2	569.4	536.6	514.0	496.2	491.3
105°	589.1	652.7	674.2	670.3	656.4	642.1	633.6	628.8
107.5°	536.4	620.6	673.3	697.9	705.8	706.2	703.7	700.6
110°	497.5	584.9	650.1	689.6	710.5	719.7	723.4	724.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	466.5	549.5	615.4	661.8	692.1	707.3	715.8	719.6
115°	427.5	499.0	562.4	612.6	648.4	670.5	683.7	690.1
117.5°	401.6	463.3	518.0	564.2	600.0	623.0	636.0	640.2
120°	387.4	443.0	494.1	534.8	568.7	590.9	603.6	607.7
122.5°	376.3	427.9	473.5	511.6	541.9	562.3	575.0	578.8
125°	360.4	407.7	448.4	481.7	507.5	526.4	536.7	541.6
127.5°	344.0	388.2	426.1	457.4	480.9	497.6	507.6	510.0
130°	333.9	374.9	411.2	441.4	464.4	479.7	489.2	492.3
132.5°	323.8	362.1	395.2	424.3	447.2	462.5	471.1	474.5
135°	310.1	342.3	372.2	398.8	419.1	434.4	442.9	446.0
137.5°	298.6	324.8	349.7	372.3	390.5	404.3	412.2	415.4
140°	292.2	314.3	336.0	355.6	372.6	384.7	391.8	394.4
142.5°	286.6	305.4	324.1	341.0	355.5	365.8	372.6	374.8
145°	279.6	294.1	308.5	321.0	332.2	340.2	345.5	347.6
147.5°	273.3	284.8	295.7	305.1	313.8	320.0	323.1	324.1
150°	269.7	279.7	288.3	296.5	303.3	308.9	310.7	311.2
152.5°	266.2	275.0	282.9	289.2	294.9	299.3	301.1	301.6
155°	260.7	268.0	274.3	279.2	283.8	286.9	288.3	288.8
157.5°	255.3	261.3	266.2	270.1	273.5	276.2	277.4	277.3
160°	251.7	256.2	260.7	263.9	267.0	269.3	270.2	269.7
162.5°	247.7	251.9	255.6	258.5	260.9	262.8	263.0	262.9
165°	242.2	245.3	248.1	250.3	252.2	253.0	253.0	253.0
167.5°	236.9	239.1	241.1	242.7	243.7	244.5	244.1	244.0
170°	234.1	235.4	236.8	237.7	238.6	239.1	239.1	238.6
172.5°	230.8	232.2	233.1	233.7	233.9	234.7	234.0	233.5
175°	227.3	227.3	228.2	228.2	228.2	228.6	227.8	227.3
177.5°	224.8	225.2	225.2	225.2	224.8	225.2	224.1	224.1
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1

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