

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: P333129-940

Luminaire Tested: **S125DIP-S375D590U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129-940
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-S375D590U940-4F0-1E-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: 3195.4 lumens
Efficiency: N/A
Efficacy: 124.8 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

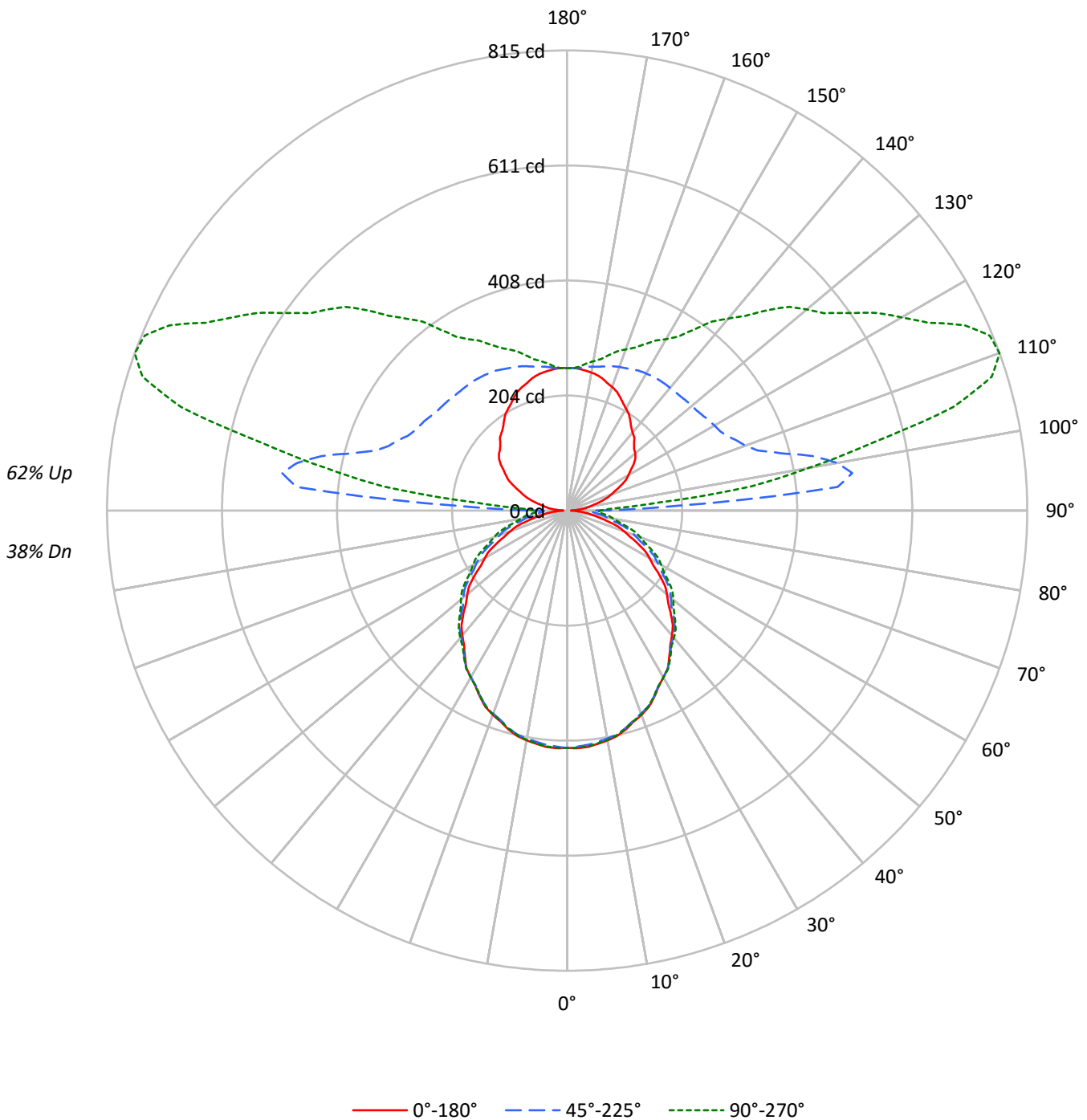
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.2
10°-20°	112.8	3.5
20°-30°	167.8	5.3
30°-40°	198.8	6.2
40°-50°	205.5	6.4
50°-60°	189.3	5.9
60°-70°	153.0	4.8
70°-80°	102.5	3.2
80°-90°	54.6	1.7
90°-100°	212.7	6.7
100°-110°	415.1	13.0
110°-120°	383.7	12.0
120°-130°	307.4	9.6
130°-140°	243.6	7.6
140°-150°	181.8	5.7
150°-160°	127.5	4.0
160°-170°	75.1	2.4
170°-180°	24.4	0.8
0°-30°	320.4	10.0
0°-40°	519.2	16.2
0°-60°	914.0	28.6
0°-90°	1224.1	38.3
90°-120°	1011.5	31.7
90°-150°	1744.3	54.6
90°-180°	1971.0	61.7
0°-180°	3195.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	24	42	54	58	5
95°	22	66	481	243	162	22
105°	61	91	392	757	708	65
115°	105	130	312	661	777	104
125°	144	169	293	523	610	128
135°	168	201	285	434	502	130
145°	195	223	283	354	391	122
155°	222	239	276	312	325	102
165°	242	249	264	281	285	68
175°	252	252	254	257	256	24
180°	252	252	252	252	252	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	12.9	16.0	19.1	22.3	25.4	28.6	31.8	35.1	38.3	41.6	43.9
90°	7.1	10.5	14.4	18.5	22.4	26.4	30.1	34.2	37.8	41.9	44.6
92.5°	12.1	16.1	23.2	32.2	43.6	61.4	92.4	142.1	195.9	196.4	167.3
95°	22.1	25.1	31.5	39.5	53.1	78.6	136.2	251.2	394.8	480.7	473.1
97.5°	32.7	35.5	40.5	48.2	60.5	79.5	118.5	203.5	353.4	509.3	587.9
100°	40.1	43.1	47.0	54.6	66.2	83.8	116.3	185.3	316.5	485.7	614.7
102.5°	48.3	50.7	54.1	61.9	72.6	89.7	118.9	177.3	288.3	445.7	596.3
105°	61.2	62.7	66.7	73.2	82.8	99.2	124.3	172.3	260.0	391.5	539.2
107.5°	73.7	76.0	79.6	85.1	94.8	109.5	133.8	175.2	247.2	353.7	481.5
110°	82.8	84.9	88.0	93.6	102.4	117.4	140.9	178.5	242.6	335.7	448.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	92.1	94.0	96.5	101.9	110.5	125.0	147.5	183.1	241.4	324.7	423.4
115°	105.2	106.9	109.1	114.2	122.5	136.8	157.9	189.8	241.0	312.1	395.7
117.5°	117.0	119.0	121.0	126.0	135.1	148.7	168.8	197.9	242.5	305.0	378.3
120°	125.2	127.0	129.3	134.1	143.0	156.9	176.8	203.4	244.7	301.2	368.4
122.5°	133.4	134.6	136.3	141.1	150.7	164.4	184.3	209.6	246.3	297.8	359.6
125°	144.1	145.0	147.5	151.9	161.5	175.6	194.2	217.9	249.2	293.3	347.7
127.5°	152.1	153.6	156.7	162.4	172.6	186.5	204.2	225.9	253.1	290.2	336.5
130°	157.4	158.8	162.8	169.3	179.9	193.8	210.8	231.4	255.6	288.4	329.3
132.5°	161.1	163.0	167.9	175.3	186.4	200.1	216.9	235.9	258.2	287.0	323.2
135°	167.6	169.6	175.6	183.7	194.2	208.3	224.7	242.1	261.5	285.1	315.3
137.5°	175.9	177.4	183.0	191.1	201.4	215.7	230.4	246.7	265.0	284.2	308.5
140°	180.5	182.0	188.2	196.3	205.9	219.7	234.5	249.9	266.3	283.7	305.0
142.5°	186.2	187.3	192.9	200.9	210.1	223.0	236.9	251.4	266.9	283.4	302.1
145°	194.7	195.6	200.6	207.7	216.8	228.4	241.7	254.3	268.0	282.9	298.5
147.5°	203.2	203.8	208.2	214.8	222.7	233.1	244.7	256.2	268.6	281.5	295.1
150°	208.6	209.6	213.1	219.7	226.9	235.5	246.7	257.3	268.6	280.3	292.5
152.5°	214.3	214.8	218.0	223.8	230.5	238.4	248.7	258.2	268.1	278.7	289.6
155°	221.8	221.8	224.8	229.9	235.0	242.1	250.7	258.9	267.1	275.7	284.8
157.5°	228.5	228.4	230.9	235.2	239.7	245.0	252.5	259.4	265.7	272.6	280.4
160°	233.0	232.5	234.5	238.1	242.1	246.7	253.3	259.4	264.5	270.6	276.7
162.5°	236.7	236.1	238.2	241.3	244.6	248.3	254.1	259.0	263.3	268.1	273.5
165°	242.1	241.1	242.6	245.1	247.2	250.3	254.3	258.4	261.4	264.5	268.6
167.5°	245.8	245.3	246.2	247.6	249.1	250.9	254.3	257.2	258.6	260.9	263.8
170°	248.3	247.7	248.3	249.2	250.3	251.8	254.3	256.4	257.3	258.9	260.9
172.5°	249.9	249.0	249.4	250.5	251.1	251.8	254.0	255.6	255.7	256.5	258.1
175°	251.8	250.7	251.3	251.8	251.8	251.8	253.3	254.3	253.8	253.8	254.3
177.5°	252.7	251.9	251.9	252.3	251.9	251.9	252.7	253.1	252.3	252.3	252.7
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	46.1	48.3	50.6	52.1	52.7	53.4	54.1	54.8
90°	47.2	49.8	52.4	54.8	55.5	56.1	57.2	57.9
92.5°	126.7	104.0	89.9	83.6	77.8	77.2	77.1	77.0
95°	399.8	324.5	263.9	222.6	187.1	172.5	169.1	161.6
97.5°	576.6	524.2	465.2	407.1	376.3	348.4	334.3	328.4
100°	655.9	632.8	582.4	530.7	496.1	460.1	441.8	434.3
102.5°	681.6	698.9	675.6	641.0	604.0	578.5	558.6	553.0
105°	663.2	734.7	758.9	754.6	738.9	722.7	713.2	707.8
107.5°	603.8	698.6	757.9	785.6	794.4	794.9	792.1	788.6
110°	560.0	658.4	731.8	776.2	799.8	810.1	814.3	814.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	525.1	618.6	692.8	744.9	779.0	796.2	805.7	810.0
115°	481.3	561.7	633.0	689.6	729.9	754.7	769.5	776.8
117.5°	452.0	521.6	583.1	635.1	675.4	701.2	716.0	720.7
120°	436.0	498.6	556.2	602.0	640.2	665.1	679.4	684.0
122.5°	423.6	481.6	533.0	575.9	610.0	632.9	647.2	651.5
125°	405.6	459.0	504.7	542.2	571.2	592.5	604.1	609.7
127.5°	387.2	437.0	479.7	514.9	541.3	560.2	571.3	574.1
130°	375.9	422.0	462.9	496.9	522.7	539.9	550.6	554.1
132.5°	364.4	407.6	444.9	477.6	503.4	520.6	530.3	534.1
135°	349.0	385.3	419.0	448.9	471.7	488.9	498.6	502.0
137.5°	336.1	365.6	393.7	419.1	439.5	455.1	464.0	467.6
140°	328.9	353.8	378.2	400.3	419.5	433.0	441.0	444.0
142.5°	322.6	343.8	364.8	383.9	400.2	411.8	419.4	421.9
145°	314.8	331.0	347.2	361.3	373.9	382.9	388.9	391.3
147.5°	307.6	320.6	332.9	343.4	353.2	360.3	363.7	364.8
150°	303.6	314.9	324.5	333.8	341.4	347.7	349.7	350.4
152.5°	299.6	309.6	318.4	325.6	332.0	336.9	338.9	339.5
155°	293.5	301.7	308.7	314.3	319.4	323.0	324.5	325.0
157.5°	287.4	294.1	299.6	304.0	307.9	310.9	312.3	312.2
160°	283.3	288.4	293.5	297.0	300.6	303.2	304.2	303.6
162.5°	278.8	283.6	287.8	291.0	293.7	295.9	296.0	296.0
165°	272.6	276.2	279.3	281.8	283.8	284.8	284.8	284.8
167.5°	266.7	269.1	271.4	273.2	274.3	275.2	274.7	274.6
170°	263.5	265.0	266.5	267.5	268.6	269.1	269.1	268.6
172.5°	259.8	261.4	262.4	263.1	263.3	264.2	263.4	262.9
175°	255.8	255.8	256.9	256.9	256.9	257.3	256.4	255.8
177.5°	253.1	253.5	253.5	253.5	253.1	253.5	252.3	252.3
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3

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