

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: P333132-927

Luminaire Tested: **S125DIP-S375D590U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333132-927
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-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2886.3 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

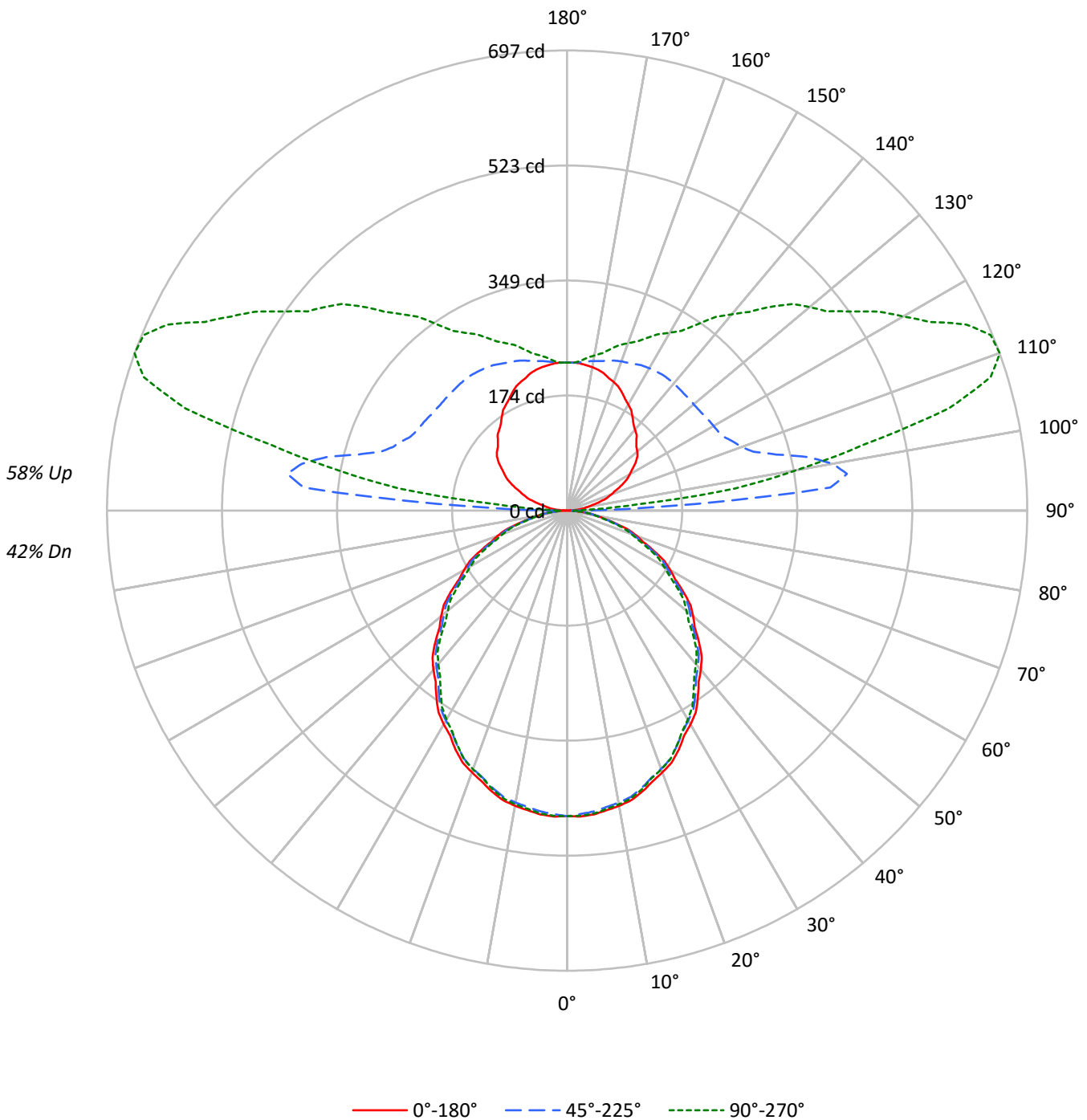
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42
1	96	92	88	84	87	84	80	77	69	67	64	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	34	29
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	32	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	21	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	26	22	19	20	17	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2989	2989	2989
5°	2995	2967	2986
10°	2977	2946	2963
15°	2945	2910	2923
20°	2899	2861	2866
25°	2849	2802	2799
30°	2788	2738	2725
35°	2722	2670	2633
40°	2655	2596	2559
45°	2582	2528	2478
50°	2502	2446	2372
55°	2423	2354	2288
60°	2331	2260	2180
65°	2222	2149	2077
70°	2115	2019	1949
75°	1926	1864	1799
80°	1715	1689	1648
85°	1489	1519	1438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	1.5
10°-20°	123.3	4.3
20°-30°	182.0	6.3
30°-40°	212.4	7.4
40°-50°	213.3	7.4
50°-60°	187.2	6.5
60°-70°	139.5	4.8
70°-80°	79.8	2.8
80°-90°	24.5	0.8
90°-100°	162.5	5.6
100°-110°	349.2	12.1
110°-120°	327.8	11.4
120°-130°	265.6	9.2
130°-140°	213.2	7.4
140°-150°	160.9	5.6
150°-160°	113.2	3.9
160°-170°	66.7	2.3
170°-180°	21.7	0.8
0°-30°	348.9	12.1
0°-40°	561.2	19.4
0°-60°	961.7	33.3
0°-90°	1205.4	41.8
90°-120°	839.5	29.1
90°-150°	1479.1	51.2
90°-180°	1681.0	58.2
0°-180°	2886.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	458	461	461	44
15°	440	439	435	437	437	124
25°	400	398	393	394	393	184
35°	345	344	339	337	334	216
45°	283	281	277	273	271	218
55°	215	214	209	206	203	192
65°	145	144	141	137	136	144
75°	77	76	75	74	72	82
85°	20	20	20	20	19	23
90°	0	4	7	9	10	2
95°	15	44	400	182	106	16
105°	51	71	328	645	599	54
115°	91	110	263	567	667	90
125°	126	148	252	451	526	112
135°	148	178	250	378	436	115
145°	173	198	251	313	344	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°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	463.9	463.7	463.6	463.3	463.2	462.7	462.1	461.4	460.8	460.1	460.8
5°	462.0	461.8	461.7	461.5	461.4	460.9	460.1	459.3	458.4	457.6	458.4
7.5°	457.8	457.6	457.5	457.3	457.2	456.6	455.7	454.8	453.9	453.0	453.8
10°	454.0	453.8	453.7	453.5	453.4	452.8	451.9	451.0	450.1	449.2	449.9
12.5°	449.3	449.0	448.7	448.5	448.1	447.6	446.7	445.9	445.0	444.3	444.7
15°	440.5	440.2	440.0	439.7	439.4	438.9	438.0	437.1	436.2	435.3	435.7
17.5°	430.2	429.9	429.5	429.2	428.8	428.2	427.2	426.4	425.4	424.5	425.0
20°	421.8	421.6	421.4	421.3	421.1	420.5	419.5	418.4	417.3	416.3	416.8
22.5°	413.3	413.0	412.6	412.4	412.1	411.5	410.4	409.5	408.4	407.5	407.9
25°	399.8	399.4	398.9	398.5	398.2	397.4	396.4	395.3	394.3	393.2	393.4
27.5°	384.0	383.8	383.6	383.3	383.1	382.4	381.4	380.2	379.1	378.0	378.1
30°	373.8	373.6	373.3	373.0	372.8	372.1	370.9	369.6	368.4	367.2	367.0
32.5°	362.7	362.3	361.9	361.6	361.2	360.4	359.3	358.2	357.2	356.1	355.8
35°	345.2	344.9	344.6	344.3	344.0	343.2	342.1	341.0	339.8	338.7	338.3
37.5°	327.2	326.8	326.4	325.9	325.5	324.8	323.7	322.7	321.5	320.5	319.9
40°	314.9	314.4	314.0	313.6	313.2	312.4	311.3	310.2	309.0	307.9	307.2
42.5°	301.7	301.3	301.0	300.6	300.3	299.6	298.4	297.3	296.1	295.0	294.4
45°	282.7	282.3	282.0	281.7	281.3	280.7	279.7	278.8	277.7	276.8	275.8
47.5°	262.1	262.1	262.1	262.2	262.2	261.7	260.5	259.3	258.1	256.9	256.0
50°	249.0	248.7	248.5	248.2	248.0	247.4	246.4	245.4	244.5	243.4	242.4
52.5°	235.5	235.3	235.1	235.0	234.8	234.2	233.1	232.1	231.0	230.0	229.1
55°	215.2	215.0	214.8	214.5	214.3	213.6	212.5	211.4	210.2	209.1	208.3
57.5°	194.0	193.8	193.7	193.6	193.5	192.9	191.9	191.0	190.0	189.1	188.1
60°	180.5	180.1	179.8	179.5	179.2	178.6	177.7	176.8	175.9	175.0	174.2
62.5°	166.4	166.2	165.9	165.6	165.4	164.9	164.1	163.3	162.6	161.8	161.0
65°	145.4	145.2	145.0	144.9	144.7	144.2	143.3	142.4	141.5	140.6	139.8
67.5°	124.9	124.6	124.2	123.9	123.6	123.0	122.4	121.7	121.0	120.4	119.8
70°	112.0	111.6	111.2	110.8	110.4	109.8	109.1	108.4	107.7	106.9	106.4
72.5°	98.0	97.7	97.4	97.1	96.9	96.5	96.0	95.5	95.1	94.6	94.0
75°	77.2	77.1	76.9	76.8	76.6	76.3	75.9	75.5	75.1	74.7	74.5
77.5°	58.1	58.1	58.0	57.9	57.9	57.8	57.5	57.3	57.0	56.8	56.6
80°	46.1	46.1	46.1	46.1	46.1	46.0	45.9	45.7	45.6	45.4	45.3
82.5°	35.6	35.5	35.3	35.2	35.1	35.0	34.9	34.9	34.9	34.9	34.7
85°	20.1	20.2	20.3	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.4
87.5°	8.0	8.1	8.2	8.5	8.6	8.8	8.8	9.0	9.0	9.0	9.2
90°	0.5	0.9	1.8	2.7	3.6	4.5	5.0	5.9	6.3	7.2	7.7
92.5°	5.5	6.7	10.5	16.1	23.8	37.1	61.7	103.1	148.1	145.7	118.0
95°	14.9	15.4	19.0	23.9	33.9	54.3	102.6	202.0	326.7	400.4	391.8
97.5°	24.8	25.3	27.8	32.8	41.7	56.4	88.4	161.2	291.8	427.5	495.7
100°	31.6	32.6	34.4	39.3	47.9	61.5	87.7	146.4	260.3	408.1	521.0
102.5°	39.2	39.8	41.2	46.6	54.4	67.6	90.9	140.3	236.4	373.7	505.8
105°	51.1	51.1	53.3	57.8	65.0	77.7	97.6	137.8	213.3	327.6	457.3
107.5°	62.7	63.5	65.7	69.4	76.9	88.3	107.6	142.0	203.5	295.9	407.8
110°	71.0	71.9	73.7	77.7	84.5	96.3	114.8	145.9	200.7	281.1	379.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.3	80.2	81.6	85.7	92.4	103.9	121.7	151.0	200.7	272.4	358.6
115°	91.3	92.2	93.6	97.6	104.4	115.7	132.4	158.6	202.0	263.0	335.7
117.5°	102.1	103.5	105.0	109.0	116.7	127.6	143.5	167.3	204.9	258.4	322.1
120°	109.3	110.7	112.5	116.6	124.3	135.5	151.4	173.1	207.9	256.2	314.5
122.5°	116.9	118.0	119.4	123.4	131.9	143.1	159.0	179.6	210.4	254.4	308.0
125°	126.5	127.5	129.7	133.7	142.4	154.1	169.0	188.5	214.7	252.2	299.1
127.5°	134.0	135.4	138.3	143.5	152.6	164.3	178.6	196.5	219.4	251.0	291.0
130°	138.7	140.1	143.7	149.6	159.1	170.8	184.8	202.0	222.4	250.3	285.6
132.5°	142.4	144.1	148.4	155.0	164.9	176.6	190.6	206.7	225.6	250.3	281.2
135°	148.2	150.0	155.4	162.7	172.1	184.3	198.4	213.3	230.0	250.3	276.1
137.5°	155.7	157.0	162.1	169.3	178.6	191.2	203.9	218.2	234.1	250.9	271.5
140°	159.9	161.3	166.8	174.0	182.6	194.8	207.9	221.4	235.9	251.3	269.3
142.5°	165.0	166.0	171.1	178.3	186.6	198.0	210.4	223.2	236.9	251.6	267.5
145°	172.6	173.5	178.0	184.3	192.5	202.9	214.7	225.9	238.1	251.3	264.8
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.0
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°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	461.4	462.1	462.7	463.0	463.0	462.9	462.9	462.8
5°	459.1	459.9	460.6	460.9	460.8	460.7	460.7	460.6
7.5°	454.5	455.2	455.9	456.2	456.1	456.1	456.0	455.9
10°	450.5	451.1	451.9	452.1	452.0	451.9	451.9	451.8
12.5°	445.3	445.8	446.3	446.6	446.6	446.6	446.6	446.5
15°	436.1	436.5	437.0	437.1	437.1	437.1	437.1	437.1
17.5°	425.5	426.0	426.5	426.5	426.1	425.7	425.3	424.9
20°	417.4	418.0	418.5	418.7	418.2	417.8	417.4	417.0
22.5°	408.2	408.6	409.0	409.0	408.8	408.4	408.2	407.9
25°	393.6	393.7	393.9	393.8	393.6	393.3	393.1	392.8
27.5°	378.1	378.1	378.2	378.1	377.8	377.6	377.3	377.1
30°	366.9	366.7	366.5	366.4	366.1	365.9	365.6	365.4
32.5°	355.5	355.2	354.9	354.6	354.1	353.6	353.2	352.8
35°	337.9	337.5	337.0	336.5	335.9	335.2	334.5	333.9
37.5°	319.3	318.7	318.1	317.6	317.2	316.9	316.5	316.1
40°	306.4	305.7	305.0	304.5	304.3	304.0	303.7	303.5
42.5°	293.7	293.0	292.3	291.8	291.4	291.0	290.7	290.3
45°	274.8	273.9	272.9	272.3	272.0	271.8	271.6	271.3
47.5°	254.9	254.0	252.9	252.2	251.6	251.0	250.5	249.9
50°	241.4	240.3	239.2	238.4	237.8	237.3	236.7	236.1
52.5°	228.1	227.2	226.2	225.5	224.9	224.3	223.6	223.0
55°	207.6	206.8	206.1	205.5	204.9	204.3	203.7	203.2
57.5°	187.2	186.2	185.3	184.7	184.3	184.0	183.7	183.4
60°	173.4	172.5	171.7	171.0	170.5	169.9	169.4	168.8
62.5°	160.1	159.1	158.3	157.6	157.2	156.8	156.3	155.9
65°	139.1	138.4	137.7	137.1	136.8	136.5	136.2	135.9
67.5°	119.1	118.5	117.9	117.5	117.3	117.1	116.9	116.7
70°	105.9	105.4	105.0	104.6	104.3	103.9	103.5	103.2
72.5°	93.5	92.9	92.4	92.0	91.7	91.3	90.9	90.6
75°	74.2	74.0	73.7	73.4	73.1	72.8	72.5	72.1
77.5°	56.6	56.4	56.2	56.1	55.8	55.6	55.4	55.1
80°	45.2	45.2	45.1	44.9	44.8	44.6	44.4	44.3
82.5°	34.5	34.4	34.3	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.3	20.2	20.0	19.9	19.7	19.6	19.4
87.5°	9.3	9.3	9.4	9.5	9.4	9.3	9.3	9.1
90°	8.2	8.6	9.0	9.9	9.9	9.9	10.4	10.4
92.5°	80.1	58.1	43.7	37.1	31.3	30.2	29.5	28.8
95°	324.9	256.2	200.7	162.7	130.6	117.0	113.4	106.2
97.5°	483.9	435.7	381.6	328.8	300.9	275.5	262.4	256.7
100°	555.8	533.7	487.1	440.1	408.9	376.4	359.7	352.4
102.5°	580.0	593.7	571.3	539.6	506.2	483.1	464.9	459.5
105°	565.8	627.6	647.5	642.5	628.1	613.2	604.2	598.7
107.5°	514.8	597.4	648.5	672.0	679.4	679.3	676.3	672.6
110°	477.2	563.1	626.8	665.2	685.5	694.1	697.3	697.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	447.6	529.1	593.5	638.8	668.5	683.3	691.1	694.3
115°	410.3	480.4	542.2	591.5	626.8	648.5	661.1	667.0
117.5°	386.3	446.6	499.9	545.2	580.4	602.9	615.4	619.0
120°	373.3	427.5	477.2	517.0	550.4	572.1	584.3	587.9
122.5°	363.5	413.8	458.0	495.3	525.1	544.9	557.1	560.4
125°	349.3	395.4	434.7	467.2	492.6	511.1	521.0	525.5
127.5°	334.9	377.9	414.5	445.0	467.9	484.3	493.7	495.7
130°	325.8	365.6	400.8	430.2	452.8	467.7	476.7	479.4
132.5°	316.8	354.0	386.0	414.3	436.9	451.8	460.1	463.2
135°	305.0	336.2	365.1	390.9	410.7	425.6	433.8	436.5
137.5°	295.1	320.3	344.4	366.2	384.0	397.6	405.0	408.1
140°	289.6	310.9	331.7	350.7	367.4	379.1	385.9	388.2
142.5°	284.9	302.9	320.8	337.3	351.5	361.4	367.8	369.7
145°	278.8	292.8	306.8	319.0	329.9	337.5	342.5	344.4
147.5°	273.1	284.4	295.2	304.4	313.0	319.1	322.0	322.8
150°	269.7	279.7	288.3	296.4	303.2	308.6	310.5	310.9
152.5°	266.2	275.0	282.9	289.2	294.9	299.2	301.0	301.5
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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