

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: P333147-940

Luminaire Tested: **S125DIP-S375D1035U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333147-940
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-S375D1035U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4615.5 lumens
Efficiency: N/A
Efficacy: 123.7 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

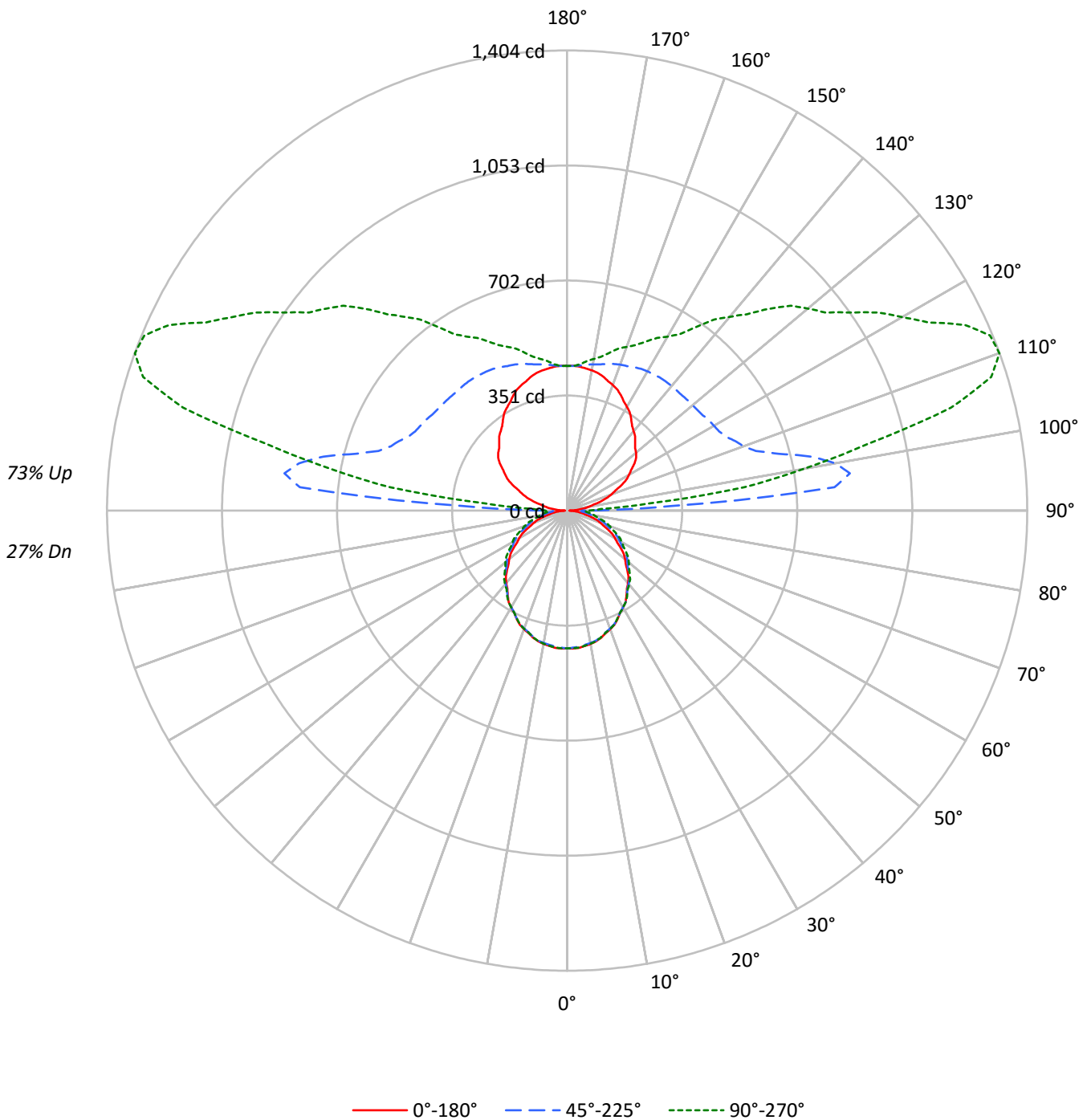
Input Watts (W): 37.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	92	88	84	80	82	78	75	72	61	59	57	45	43	42	30	29	28	22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	42	39	34	32	29	23	21	20	15
4	70	59	51	45	62	53	46	41	41	37	33	30	27	25	20	19	17	13
5	64	52	44	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11
6	58	47	39	33	52	42	35	30	33	28	24	24	21	19	17	14	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10	7
9	46	35	27	22	41	31	25	20	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	38	28	22	18	23	18	15	17	14	11	12	10	8	6

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	0.9
10°-20°	112.8	2.4
20°-30°	167.8	3.6
30°-40°	198.8	4.3
40°-50°	205.5	4.5
50°-60°	189.3	4.1
60°-70°	153.0	3.3
70°-80°	102.5	2.2
80°-90°	55.6	1.2
90°-100°	349.9	7.6
100°-110°	710.0	15.4
110°-120°	660.4	14.3
120°-130°	531.6	11.5
130°-140°	423.6	9.2
140°-150°	317.6	6.9
150°-160°	223.1	4.8
160°-170°	131.5	2.8
170°-180°	42.8	0.9
0°-30°	320.4	6.9
0°-40°	519.2	11.2
0°-60°	914.0	19.8
0°-90°	1225.1	26.5
90°-120°	1720.2	37.3
90°-150°	2993.1	64.8
90°-180°	3390.0	73.4
0°-180°	4615.5	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°	8	28	48	62	67	6
95°	35	103	819	397	251	35
105°	104	151	668	1301	1213	110
115°	182	222	534	1140	1340	179
125°	251	294	506	904	1053	223
135°	293	352	496	753	871	227
145°	340	389	495	618	682	213
155°	388	418	482	545	569	179
165°	424	435	463	491	498	119
175°	441	441	444	450	448	42
180°	442	442	442	442	442	



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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°	13.0	16.1	19.4	22.7	26.0	29.4	32.6	36.1	39.4	42.9	45.2
90°	7.5	11.3	16.1	20.7	25.4	30.2	34.2	39.1	43.2	48.1	51.0
92.5°	16.8	21.8	32.0	45.7	63.8	92.7	144.5	229.3	320.9	319.5	266.8
95°	34.8	38.0	47.5	59.7	81.7	124.5	222.8	421.8	670.6	818.8	803.9
97.5°	53.7	56.9	64.0	75.9	95.7	127.1	193.1	339.7	599.7	870.3	1006.5
100°	66.9	70.5	76.1	87.7	106.6	135.7	190.3	308.9	536.2	830.2	1054.6
102.5°	81.5	84.4	88.9	101.2	118.5	146.8	195.6	295.7	487.9	761.3	1023.3
105°	104.3	105.8	111.6	122.1	137.8	164.8	206.7	288.6	440.1	668.1	925.3
107.5°	126.6	129.7	135.1	143.7	159.7	184.0	224.6	295.1	419.0	603.6	825.8
110°	142.7	145.5	150.2	159.3	173.7	198.8	237.8	301.8	412.1	573.0	768.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	159.0	161.7	165.4	174.3	188.5	212.7	250.2	310.6	410.8	554.6	726.1
115°	182.3	184.7	188.1	196.7	210.6	234.4	269.7	323.8	411.6	534.1	679.1
117.5°	203.2	206.3	209.6	218.0	233.6	256.5	289.9	339.1	415.6	523.1	650.1
120°	217.5	220.4	224.3	232.6	248.0	271.4	304.7	349.5	420.2	517.5	633.9
122.5°	232.1	234.2	237.2	245.3	262.0	285.3	318.5	361.1	423.9	512.6	619.6
125°	250.9	252.6	256.9	264.8	281.7	305.7	336.9	377.0	430.5	506.2	600.2
127.5°	265.3	267.9	273.5	283.5	301.4	325.2	355.1	391.8	438.4	502.1	582.2
130°	274.6	277.1	284.1	295.6	314.2	338.0	366.8	401.9	443.3	499.7	570.4
132.5°	281.3	284.6	293.2	306.2	325.6	349.2	377.8	410.5	448.6	498.5	560.6
135°	292.8	296.2	306.8	321.0	339.7	363.9	392.2	422.1	455.8	496.4	548.4
137.5°	307.3	309.9	319.8	333.9	352.2	377.1	402.5	431.0	462.6	496.1	537.7
140°	315.6	318.2	328.9	343.1	360.1	384.1	410.0	436.8	465.4	495.8	532.4
142.5°	325.5	327.3	337.2	351.4	367.6	390.1	414.6	439.9	467.0	495.8	528.0
145°	340.5	342.1	351.0	363.3	379.2	399.7	422.8	445.1	469.1	494.9	522.1
147.5°	355.7	356.8	364.4	376.0	389.9	407.9	428.2	448.3	470.0	492.6	516.3
150°	365.0	366.8	373.0	384.6	397.0	412.1	431.8	450.4	470.0	490.4	511.8
152.5°	375.0	376.0	381.6	391.6	403.4	417.1	435.3	451.8	469.3	487.7	506.8
155°	388.1	388.1	393.4	402.3	411.3	423.7	438.8	453.1	467.3	482.5	498.5
157.5°	399.8	399.7	403.9	411.6	419.5	428.9	441.8	454.0	465.0	477.2	490.6
160°	407.7	406.8	410.4	416.6	423.7	431.8	443.3	454.0	462.9	473.6	484.3
162.5°	414.1	413.2	416.8	422.3	428.0	434.6	444.7	453.3	460.7	469.3	478.6
165°	423.7	422.0	424.6	429.1	432.7	438.0	445.1	452.2	457.5	462.9	470.0
167.5°	430.2	429.3	430.9	433.4	435.9	439.2	445.1	450.0	452.5	456.6	461.6
170°	434.4	433.5	434.4	436.2	438.0	440.6	445.1	448.6	450.4	453.1	456.6
172.5°	437.3	435.7	436.6	438.3	439.3	440.6	444.3	447.2	447.5	448.8	451.7
175°	440.6	438.8	439.7	440.6	440.6	440.6	443.3	445.1	444.2	444.2	445.1
177.5°	442.2	440.8	440.8	441.5	440.8	440.8	442.2	442.9	441.5	441.5	442.2
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5



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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°	47.4	49.8	52.1	53.8	54.4	55.0	55.9	56.5
90°	54.0	57.1	60.0	63.1	63.8	64.5	66.0	66.6
92.5°	194.3	153.0	126.8	114.9	104.2	102.7	102.1	101.3
95°	674.1	540.8	433.4	359.9	297.4	271.3	264.8	251.2
97.5°	985.1	892.1	787.4	684.7	630.3	581.0	555.9	545.1
100°	1125.2	1083.4	993.6	902.3	841.4	777.9	745.6	731.8
102.5°	1171.4	1200.2	1158.0	1096.5	1031.4	986.3	951.1	941.0
105°	1140.9	1264.6	1305.6	1297.1	1269.2	1240.5	1223.3	1213.3
107.5°	1038.4	1202.9	1305.4	1353.0	1368.0	1368.3	1363.1	1356.5
110°	962.9	1133.7	1261.0	1337.8	1378.6	1396.1	1403.0	1403.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	903.0	1065.2	1193.9	1284.2	1343.5	1373.1	1389.2	1396.2
115°	827.7	967.2	1090.8	1189.0	1259.0	1302.3	1327.8	1339.9
117.5°	778.1	898.6	1005.2	1095.3	1165.4	1210.1	1235.6	1243.2
120°	751.2	859.5	959.0	1038.4	1104.8	1148.1	1172.7	1180.4
122.5°	730.5	831.0	919.7	994.1	1053.4	1093.1	1117.7	1124.6
125°	700.5	792.7	871.6	936.7	987.0	1024.0	1044.0	1053.4
127.5°	669.9	756.0	829.6	890.6	936.3	969.1	988.1	992.6
130°	650.9	730.6	801.3	860.1	905.0	934.9	953.1	958.9
132.5°	631.9	706.5	770.8	827.3	872.3	902.0	918.7	925.2
135°	606.5	669.1	727.3	778.9	818.5	848.4	864.8	870.6
137.5°	585.2	636.0	684.5	728.3	763.7	790.8	805.9	812.2
140°	573.5	616.3	658.3	696.3	729.6	753.1	766.9	771.7
142.5°	563.2	599.5	635.6	668.6	697.0	716.9	730.0	734.1
145°	550.2	578.2	606.3	630.7	652.5	667.9	678.1	682.0
147.5°	538.1	560.7	582.0	600.4	617.4	629.7	635.6	637.3
150°	531.5	551.0	567.9	584.0	597.4	608.2	611.9	612.9
152.5°	524.3	541.7	557.2	569.7	580.9	589.5	593.1	594.0
155°	513.6	527.9	540.4	550.1	559.0	565.3	567.9	568.8
157.5°	502.9	514.7	524.3	532.0	539.0	544.0	546.5	546.4
160°	495.8	504.7	513.6	519.9	526.1	530.6	532.4	531.5
162.5°	488.0	496.1	503.6	509.2	514.0	517.7	518.1	517.9
165°	477.2	483.4	488.7	493.1	496.7	498.5	498.5	498.5
167.5°	466.8	470.9	475.0	478.2	480.0	481.6	480.9	480.7
170°	461.1	463.8	466.5	468.2	470.0	470.9	470.9	470.0
172.5°	454.7	457.4	459.3	460.4	460.7	462.4	460.9	460.0
175°	447.7	447.7	449.5	449.5	449.5	450.4	448.6	447.7
177.5°	442.9	443.6	443.6	443.6	442.9	443.6	441.5	441.5
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5

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