

3 RESULTS

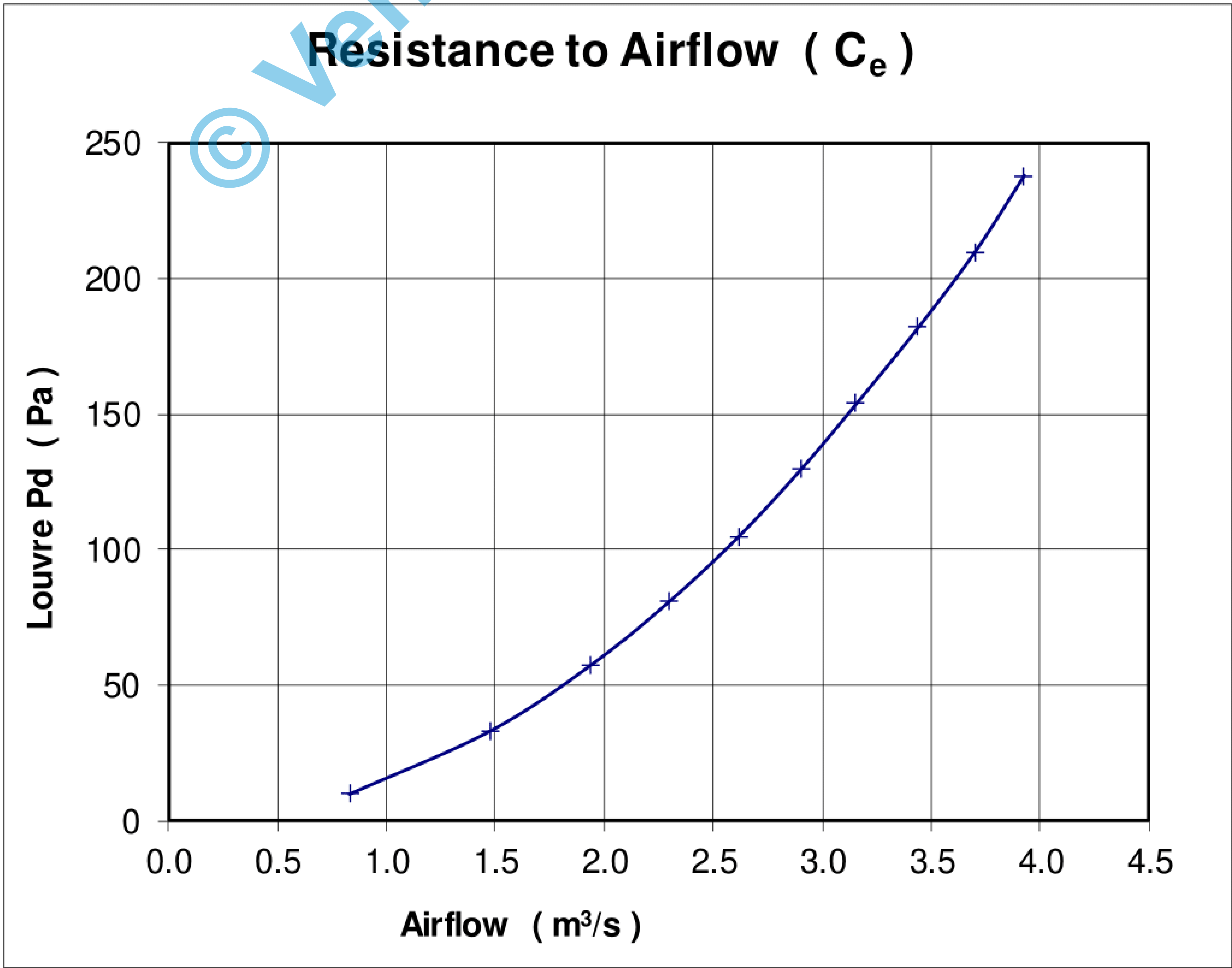
3.1 COEFFICIENT OF ENTRY

Manufacturer Ventuer
Model AL-300W

Date 14/11/2024
Contract 105677

Air Temperature	16.9	°C	Core Area Height	998	mm
Barometer	1026.8	mbar	Core Area Width	994	mm
Air Density	1.228	kg/m ³	Core Area Area	0.992	m ²

Louvre p.d. Pa	Louvre Face Velocity	Air Flow Rate		Coefficient C _e
	m/s	Test m ³ /s	Theoretical m ³ /s	
10.0	0.84	0.830	4.003	0.207
33.2	1.49	1.475	7.294	0.202
57.5	1.95	1.937	9.599	0.202
81.1	2.32	2.298	11.399	0.202
105.0	2.64	2.615	12.971	0.202
130.0	2.93	2.904	14.433	0.201
154.0	3.18	3.156	15.708	0.201
182.0	3.47	3.439	17.077	0.201
210.0	3.73	3.701	18.344	0.202
238.0	3.96	3.925	19.528	0.201
Mean C _e				0.202
Class				3



A 'trendline' for the above graph would follow $y = 14.848x^{2.033}$

3.2 COEFFICIENT OF DISCHARGE

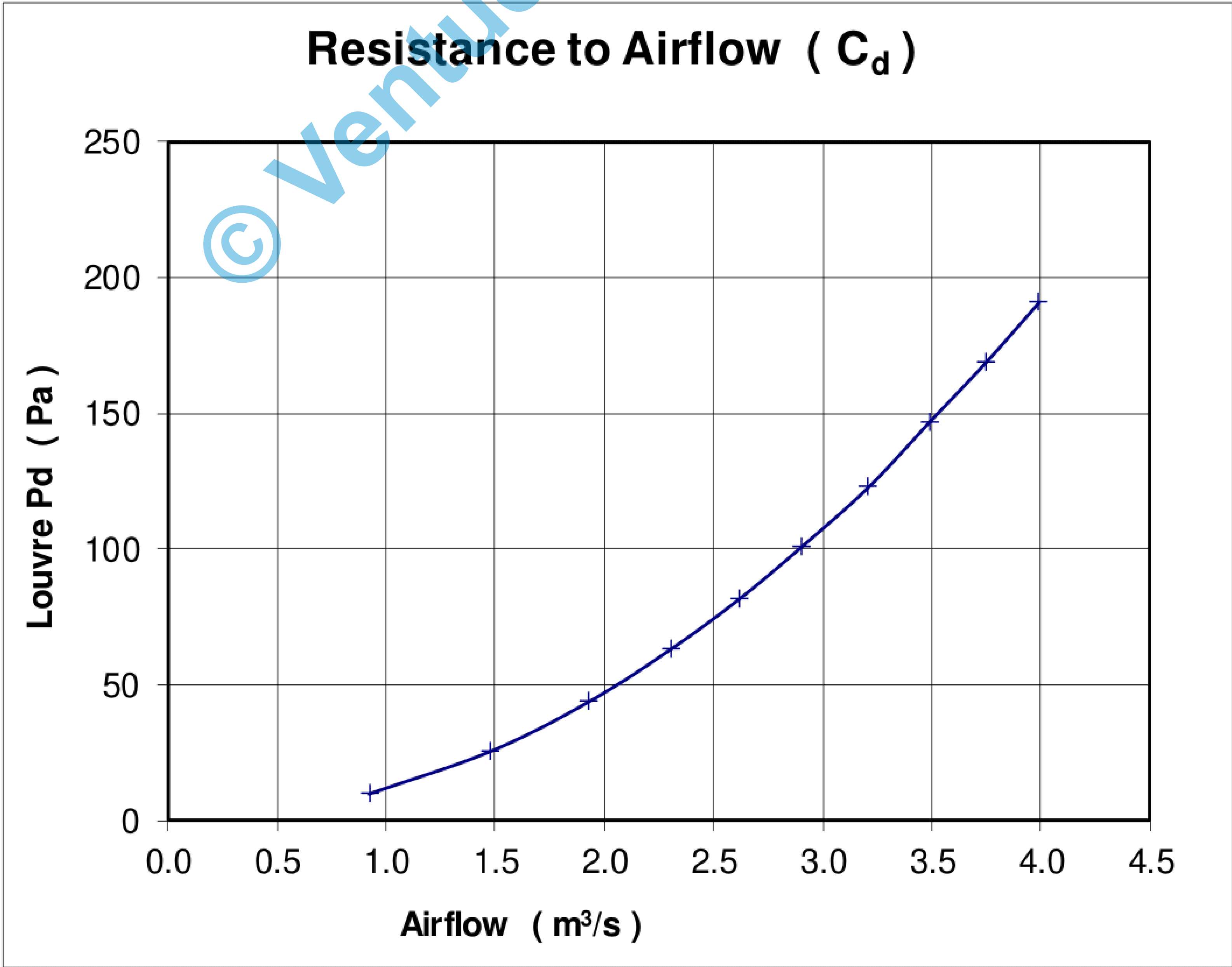
Manufacturer Ventuer
Model AL-300W

Date 14/11/2024
Contract 105677

Air Temperature17.9 °C
Barometer1026.9 mbar
Air Density1.224 kg/m³

Core Area Height998 mm
Core Area Width994 mm
Core Area Area0.992 m²

Louvre p.d. Pa	Louvre Face Velocity	Air Flow Rate		Coefficient C _d
	m/s	Test m³/s	Theoretical m³/s	
10.0	0.93	0.925	4.010	0.231
25.7	1.49	1.481	6.428	0.230
44.0	1.95	1.932	8.411	0.230
63.5	2.33	2.308	10.104	0.228
81.9	2.64	2.620	11.475	0.228
101.0	2.93	2.904	12.743	0.228
123.0	3.24	3.210	14.062	0.228
147.0	3.52	3.490	15.373	0.227
169.0	3.78	3.749	16.483	0.227
191.0	4.02	3.991	17.523	0.228
Mean C _d				0.229
Class				3



A ‘trendline’ for the above graph would follow $y = 11.664x^{2.0227}$