3 RESULTS

3.1 COEFFICIENT OF ENTRY
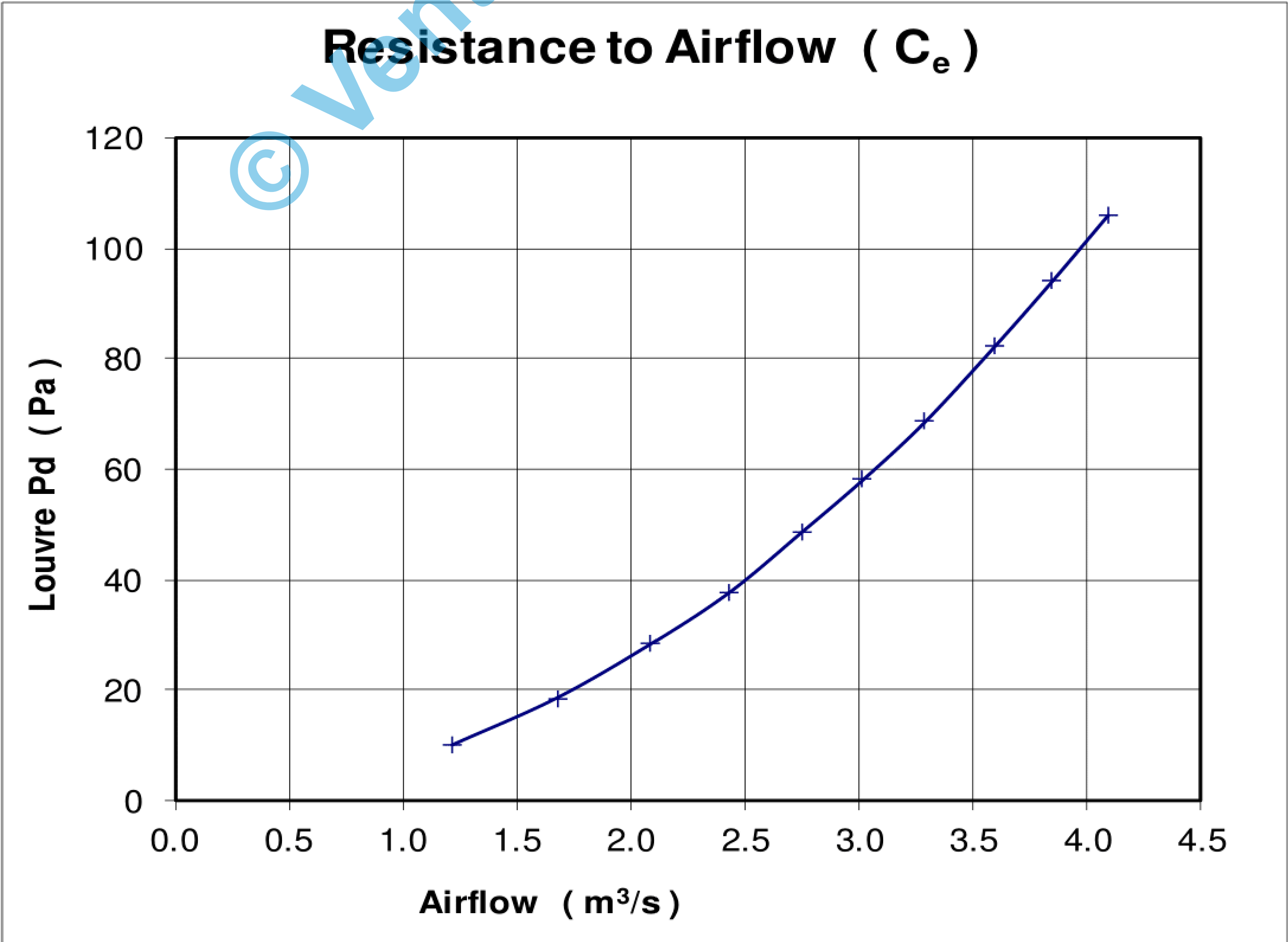
Manufacturer Ventuer   Date 25/04/2022
Model VL-50PL1   Contract 103725

Air Temperature   16.1   °C   Core Area Height   1021   mm
        Barometer 1013.2 mbar   Core Area Width   1072   mm
        Air Density 1.215 kg/m^3 Core Area Area   1.095   m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Theoretical m^3/s	Coefficient C_e
10.0	1.11	1.217	4.440	0.274
18.5	1.53	1.675	6.039	0.277
28.3	1.91	2.088	7.469	0.280
37.6	2.22	2.430	8.609	0.282
48.5	2.51	2.747	9.778	0.281
58.0	2.75	3.015	10.693	0.282
68.6	3.01	3.290	11.629	0.283
82.5	3.29	3.600	12.753	0.282
94.0	3.51	3.845	13.612	0.282
106.0	3.74	4.091	14.455	0.283

	Mean C_e	0.281
	Class	3

Resistance to Airflow (C_e)

A 'trendline' for the above graph would follow y = 6.7574x$^{1.9502}$

3   RESULTS

3.1   COEFFICIENT OF ENTRY

Manufacturer Ventuer   Date 25/04/2022
          Model VL-50PL2   Contract 103725

Air Temperature   16.4   °C   Core Area Height   1021   mm
      Barometer 1013.4 mbar   Core Area Width   1072   mm
      Air Density   1.214 kg/m^3 Core Area Area   1.095   m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate		Coefficient C_e
		Test m^3/s	Theoretical m^3/s	
10.0	1.13	1.242	4.442	0.280
19.8	1.61	1.767	6.250	0.283
29.6	1.99	2.177	7.642	0.285
39.1	2.29	2.507	8.783	0.285
48.7	2.56	2.805	9.802	0.286
59.0	2.81	3.078	10.789	0.285
68.3	3.04	3.329	11.608	0.287
79.5	3.28	3.588	12.524	0.287
91.8	3.52	3.855	13.458	0.286
104.0	3.74	4.096	14.324	0.286

	Mean C_e	0.285
	Class	3

Resistance to Airflow (C_e)

A 'trendline' for the above graph would follow y = 6.4814x$^{1.9617}$

3.2 COEFFICIENT OF ENTRY

Manufacturer Ventuer   Date 25/04/2022
        Model VL-50PL3   Contract 103725

Air Temperature   17.1   °C   Core Area Height   1021   mm
        Barometer   1013.1   mbar   Core Area Width   1072   mm
        Air Density   1.211   kg/m^3 Core Area Area   1.095   m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Theoretical m^3/s	Coefficient C_e
10.0	1.03	1.124	4.448	0.253
22.4	1.54	1.682	6.657	0.253
34.6	1.92	2.099	8.273	0.254
47.8	2.24	2.447	9.724	0.252
59.4	2.51	2.752	10.840	0.254
72.2	2.77	3.031	11.951	0.254
84.2	2.99	3.276	12.906	0.254
98.9	3.25	3.554	13.988	0.254
115.0	3.48	3.811	15.083	0.253
129.0	3.71	4.059	15.975	0.254

	Mean C_e	0.253
	Class	3

Resistance to Airflow (C_e)
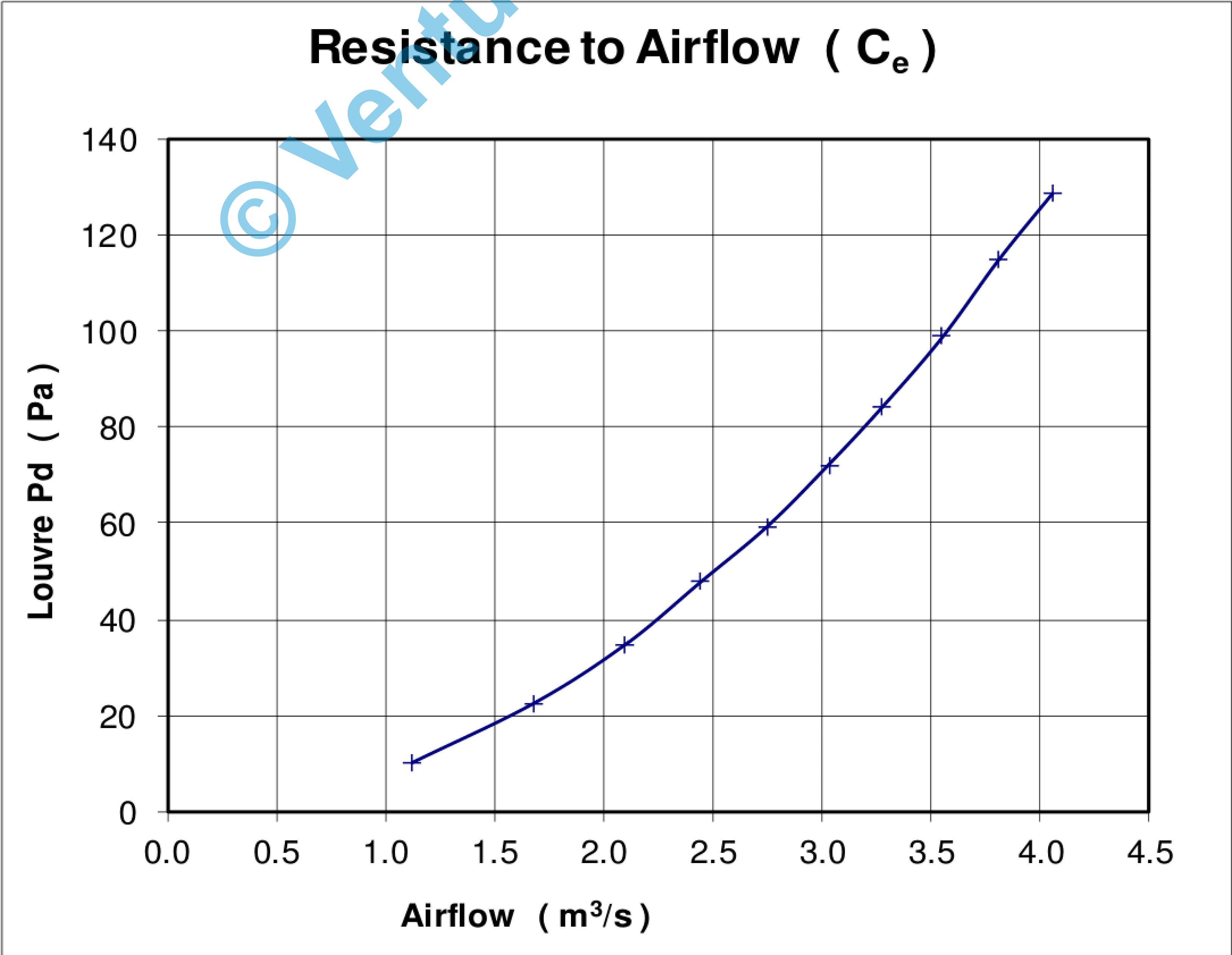
A 'trendline' for the above graph would follow y = 7.9303x$^{1.9932}$

3 RESULTS

3.1 COEFFICIENT OF ENTRY

Manufacturer Ventuer   Date 25/04/2022
          Model VL-50PL4   Contract 103725

Air Temperature	17.0	°C	Core Area Height	1021	mm
Barometer	1013.2	mbar	Core Area Width	1072	mm
Air Density	1.212	kg/m^3	Core Area Area	1.095	m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Theoretical m^3/s	Coefficient C_e
10.0	1.14	1.249	4.447	0.281
19.4	1.62	1.768	6.194	0.285
29.4	1.98	2.173	7.625	0.285
38.6	2.30	2.517	8.737	0.288
48.2	2.56	2.802	9.763	0.287
57.7	2.82	3.082	10.682	0.289
66.9	3.04	3.328	11.502	0.289
77.7	3.28	3.592	12.395	0.290
89.2	3.52	3.851	13.281	0.290
102.0	3.75	4.105	14.202	0.289

	Mean C_e	0.287
	Class	3

Resistance to Airflow (C_e)
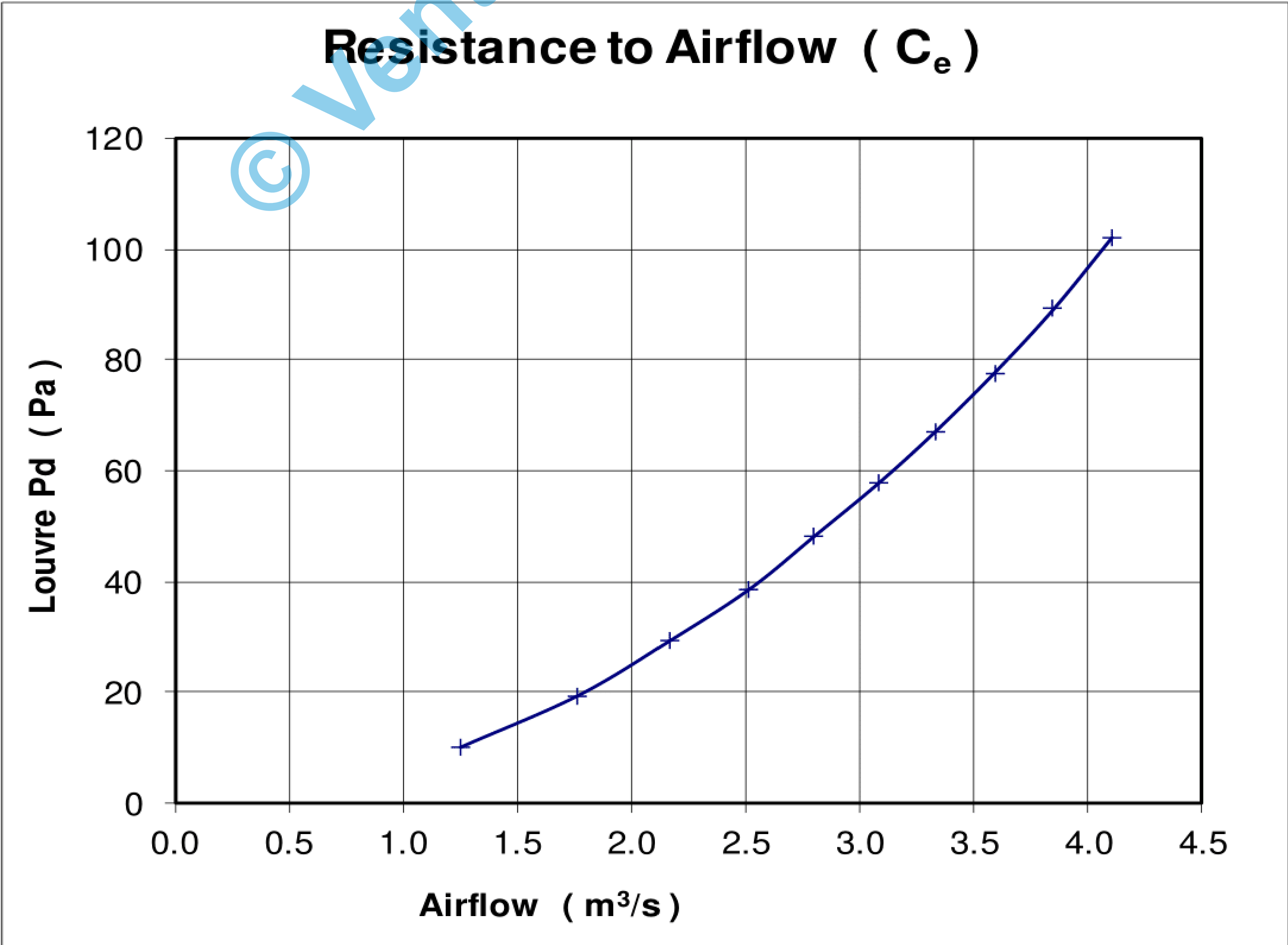
A 'trendline' for the above graph would follow $y = 6.444x^{1.9491}$

3 RESULTS

3.1 COEFFICIENT OF ENTRY

Manufacturer Ventuer   Date 25/04/2022
     Model VL-50PL5   Contract 103725

Air Temperature	17.1	°C	Core Area Height	1021	mm
Barometer	1013.2	mbar	Core Area Width	1072	mm
Air Density	1.211	kg/m^3	Core Area Area	1.095	m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Air Flow Rate Theoretical m^3/s	Coefficient C_e
10.1	1.04	1.144	4.470	0.256
22.0	1.53	1.679	6.597	0.255
33.4	1.91	2.091	8.128	0.257
45.0	2.24	2.447	9.435	0.259
57.1	2.51	2.752	10.628	0.259
69.4	2.77	3.031	11.717	0.259
81.3	2.99	3.276	12.681	0.258
95.4	3.24	3.549	13.737	0.258
110.0	3.48	3.806	14.751	0.258
124.0	3.71	4.059	15.661	0.259

	Mean C_e	0.258
	Class	3

Resistance to Airflow (C_e)
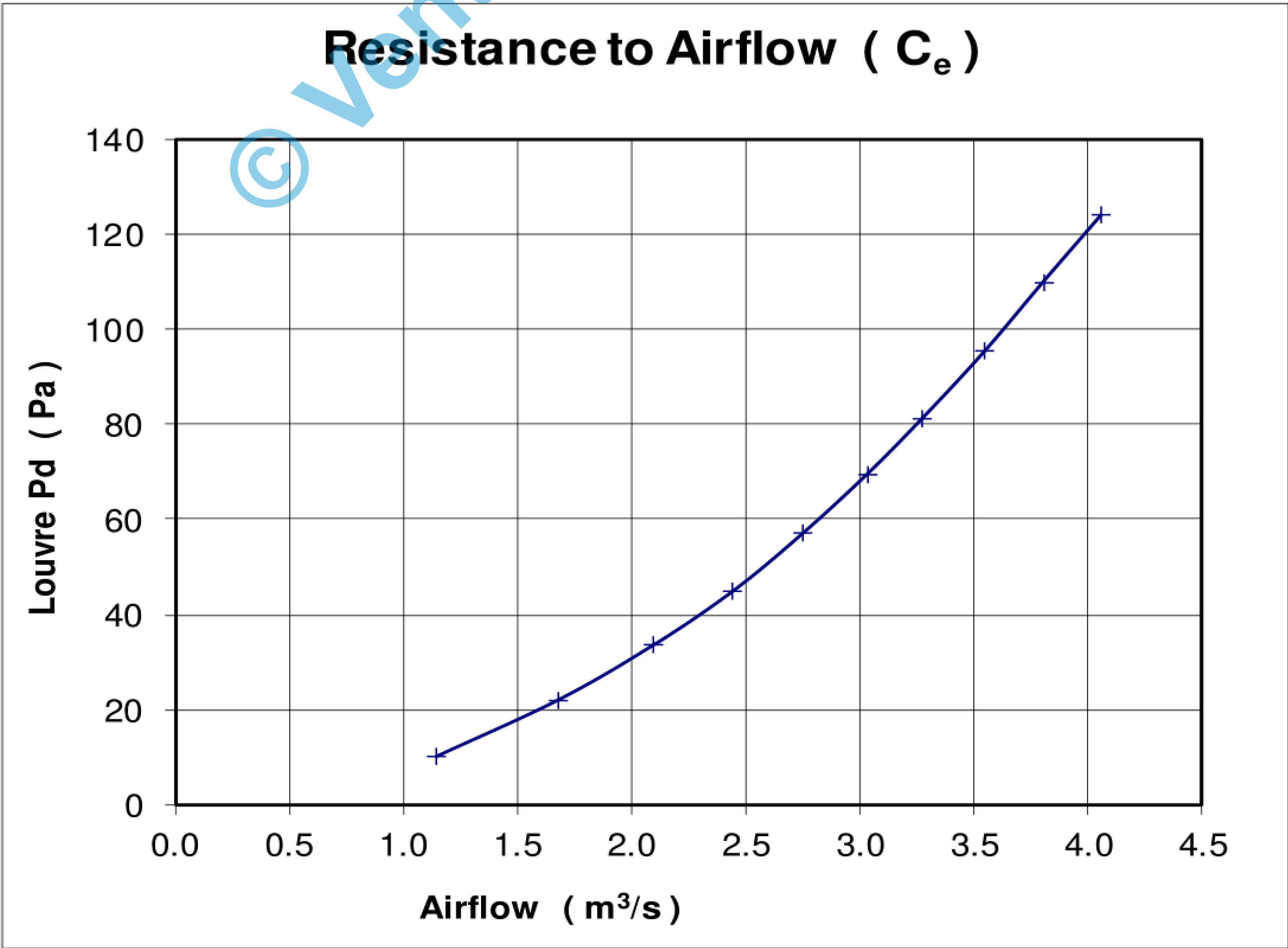
A 'trendline' for the above graph would follow $y = 7.7717x^{1.9772}$

3 RESULTS

3.1 COEFFICIENT OF ENTRY

Manufacturer Ventuer   Date 25/04/2022
Model VL-50PL6   Contract 103725

Air Temperature	17.2	°C
Barometer	1013.2	mbar
Air Density	1.211	kg/m^3

Core Area Height	1021	mm
Core Area Width	1072	mm
Core Area Area	1.095	m^2

Louvre p.d. Pa	Louvre Face Velocity m/s	Air Flow Rate Test m^3/s	Air Flow Rate Theoretical m^3/s	Coefficient C_e
10.0	1.06	1.155	4.448	0.260
20.7	1.54	1.683	6.400	0.263
32.4	1.92	2.107	8.007	0.263
43.4	2.25	2.467	9.267	0.266
54.7	2.51	2.752	10.404	0.265
66.2	2.77	3.031	11.445	0.265
78.4	3.00	3.286	12.455	0.264
91.5	3.25	3.558	13.456	0.264
106.0	3.48	3.807	14.483	0.263
120.0	3.71	4.060	15.409	0.263

Mean C_e	0.264
Class	3

Resistance to Airflow (C_e)
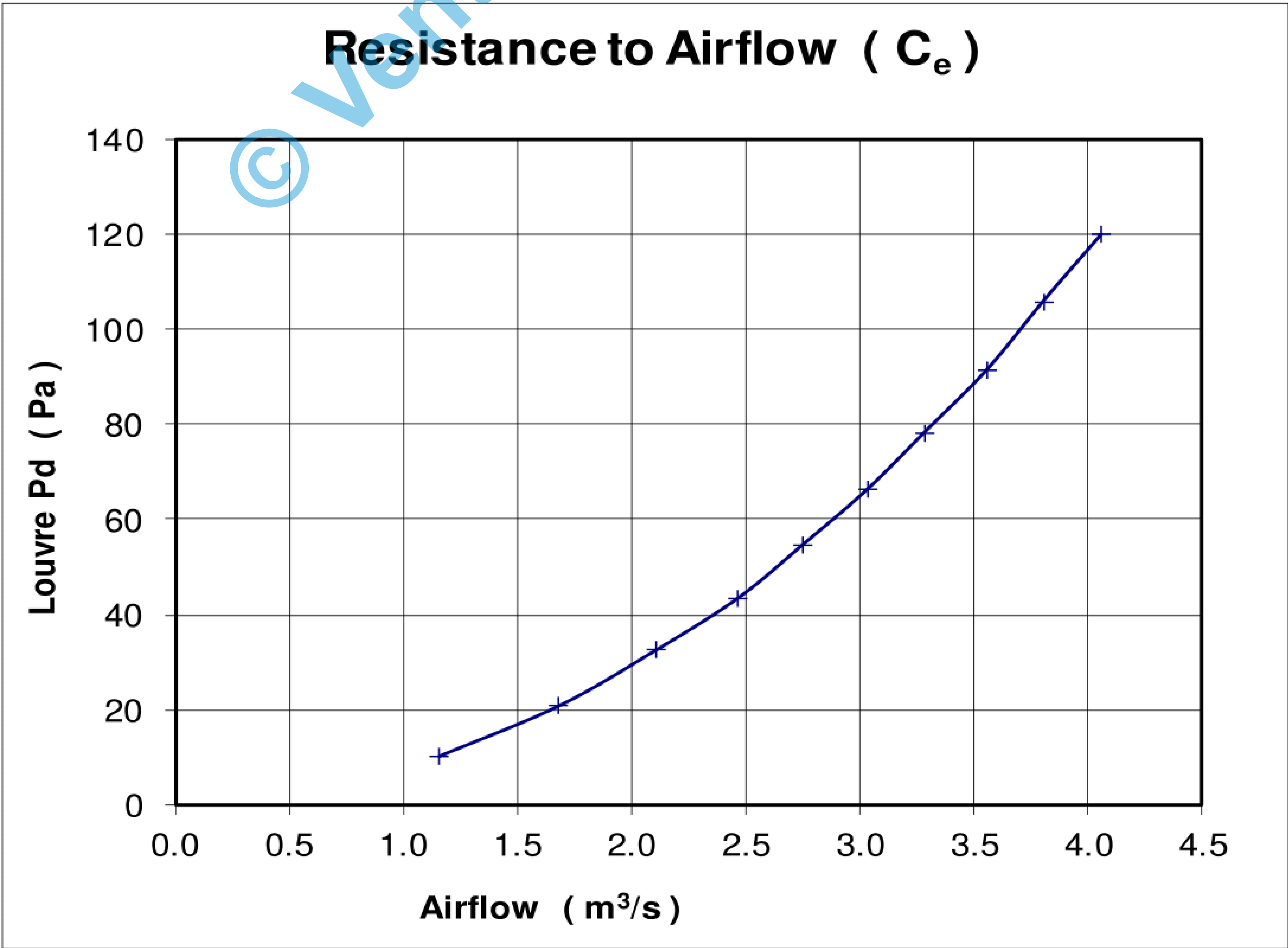
A 'trendline' for the above graph would follow $y = 7.4142x^{1.9801}$