



REPORT FLIGHT AND STRUCTURE TEST RESCUE

EN 12491 | 2001 | NfL II 91/09

Manufacturer VITAL PARACHUTE INC.
Address 4th floor, Samjin bldg.
 596 Cheonho-daero, Gwnagjin
 Seoul 143-848 / Korea Republic

Certification number: EP 121.2015
Type/model: Cires 110
Total weight in flight: 110 kg
Serial number STRENGTH VPR-CRM140009
Serial number FLIGHT VPR-CRM140008

Measurement of Flight test rescue (5kg Tension)

Center Line mm	6085 cm
Main Line 1 mm	5301 cm
Main Line 2 mm	
Number of cell:	16
Tolerance mm	25 mm
Weight grame	1739

TESTS	place:	date:	result:
1. Deployment system strength test A load of 700 N between each components	Villeneuve	17.02.2015	OK
2. Speed of opening test - ref. A (2 times) Time from the instant of free drop until a load of 200 N is sustained Opening time Opening time	Villeneuve	05.01.2015 05.01.2015	4.86 sec 3.32 sec
3. Descent rate and stability test - ref. A and B (2 times) The paraglider is released as the parachute begins to open, minimum 100 m descent. Stability 1 Sink rate 1 Stability 2 Sink rate 2	Villeneuve	05.01.2015 05.01.2015 05.01.2015 05.01.2015	Stable 4.96 m/sec Stable 5.06 m/sec
4. Strength test 40 m/s opening shock (2 times) The drop test device is accelerated to a straight line velocity of 40 m/s. Speed of opening is less than 5 seconds and shock not exceeded 15g Test 1 Test 2 Test 3	Illarsaz	06.02.2015 06.02.2015 06.02.2015	OK OK OK
5. Interaction and stability test (piloted) - ref. C a the emergency parachute is deployed from a paraglider in normal straight flight. b the pilot shall take no action while the behaviour of the parachute and paraglider are observed 200 metres. c the pilot take action while the behaviour of the parachute and paraglider are observed 200 metres.			not available not available not available
6. Connecting strap Mininum load capacity of 2400 daN			

REPORT FLIGHT AND STRUCTURE TEST RESCUE

EN 12491 | 2001 | NfL II 91/09

Manufacturer **VITAL PARACHUTE INC.**

Certification number:

EP 121.2015

Type/model:

Cires 110

Weather data, ref. 3 and B

Date / place	hPa	wind	tem	humidity
Villeneuve, January 05, 2015	968	0	1	79.0%
Corrected mass:		110.45 kg		
Villeneuve, January 05, 2015	972	0	5	71.0%
Corrected mass:		109.51 kg		

Reference

A. At horizontal airspeed 8 m/s and vertical speed 1.5 m/s

B. Formula to be used for correcting the test mass ofr differences from ICAO standard atmosphere

$$m_{corr} := m_{dec} \cdot \frac{p \cdot T_0}{p_0 \cdot T}$$

Ground level atmospheric pressure at the test location: (p)

ICAO standard atmospheric pressure at MSL: (p₀)

Ground level température at the test location: (T)

ICAO standard temperature at MSL: (T₀)

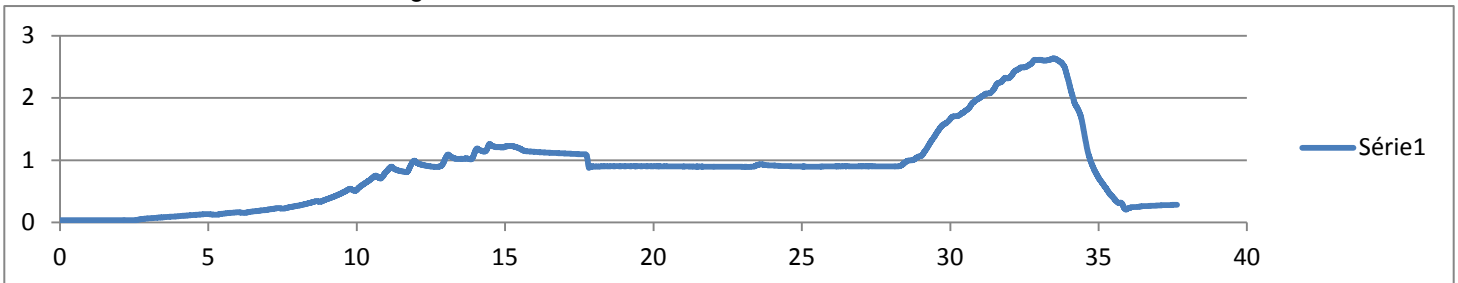
Total weight in flight: (m_{dec})

Corrected mass: (m_{corr})

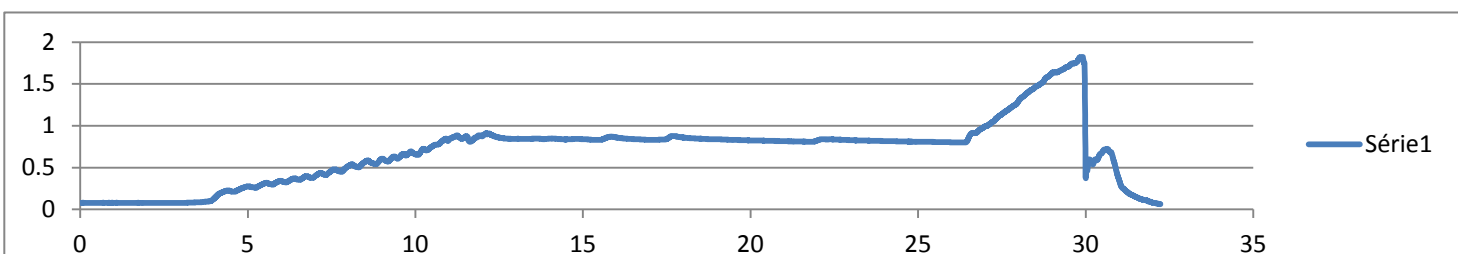
C. Only parachute with controls for steering and landing flare

GRAPHIQUE concerning Nfl II 91/09 "§ 6.1.8 inner container"

Max load attachement 1 = 263.9 kg



Max load attachement 2 = 182.4 kg





REPORT FLIGHT AND STRUCTURE TEST RESCUE

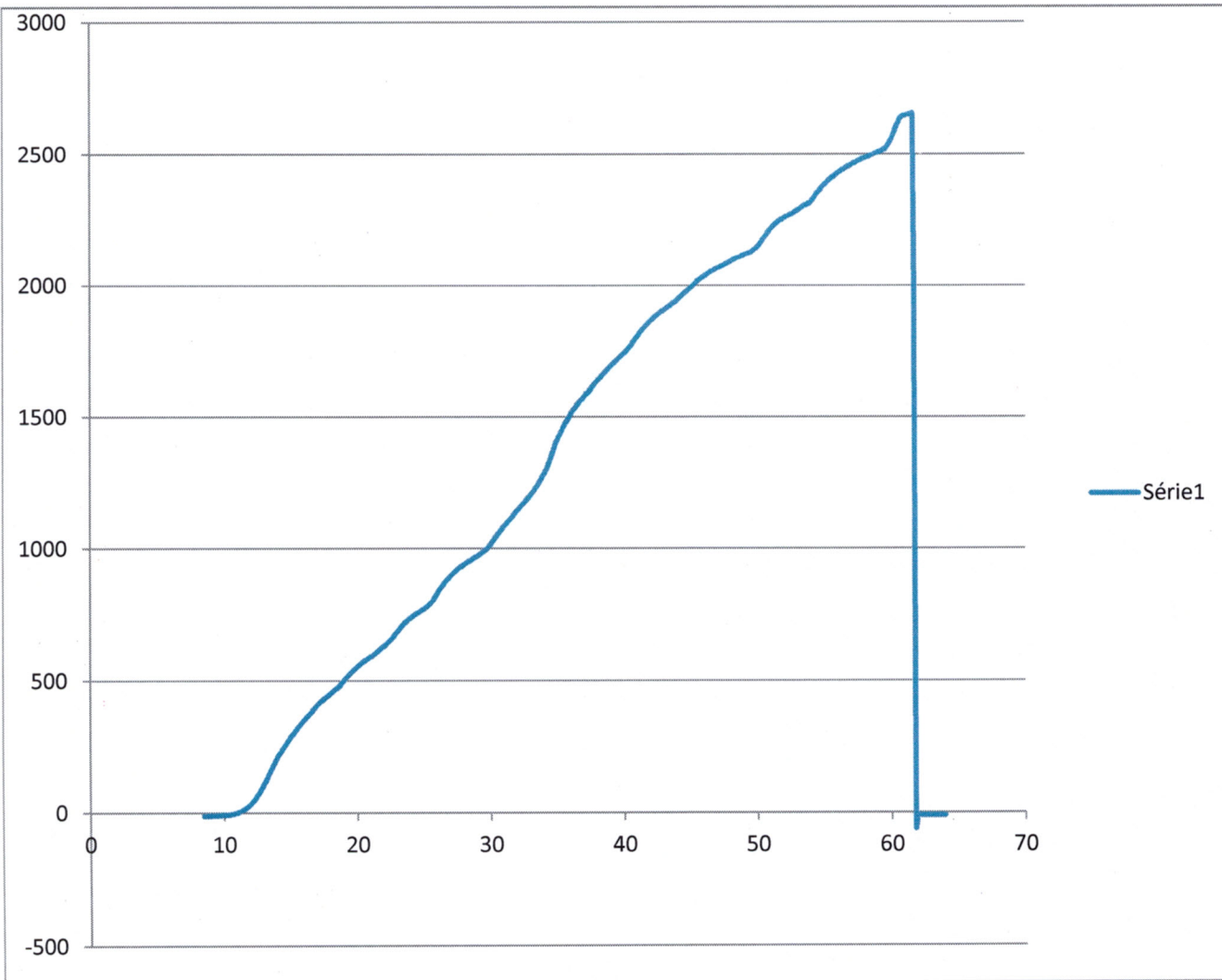
EN 12491 |2001 | Nfl II 91/09

Manufacturer VITAL PARACHUTE INC.

Certification number:
Type/model:

EP 121.2015
Cires 110

GRAPHIQUE concerning Nfl II 91/09 "§ 6.1.4 connecting strap"
Max load = 2656,1 kg



Air Turquoise SA

Route du Pré-au-Comte 8
Case postale 10
CH - 1844 Villeneuve
Switzerland
mobile: +41 79 202 52 30
Tel. no : +41 21 965 65 65
homepage: www.para-test.com

For Air Turquoise SA

Alain Zoller

Villeneuve, 17.02.2015