



## Flight and Load test report - EN 12491:2001

**Manufacturer** Ozone Gliders  
**Address** 2, Queens Drive  
 LA46LN  
 UK

**Certification number:** EP 037.2011  
**Type/model:** Angel 29  
**Total weight in flight:** 110 kg

Description of tests	place:	date:	result:
<b>1. Deployment system strength test</b> A load of 700 N between each components	Villeneuve	17.12.10	ok
<b>2. Speed of opening test - ref. A (2 times)</b> Time from the instant of free drop until a load of 200 N is sustained Opening time Opening time	Villeneuve Villeneuve	13.12.2010 21.12.2010	2.84 s 2.92 s
<b>3. Descent rate and stability test - ref. A and B (2 times)</b> 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 Villeneuve Villeneuve Villeneuve	13.12.2010 13.12.2010 21.12.2010 21.12.2010	ok 5.0 m/s ok 5.2 m/s
<b>4. Strength test 40 m/s opening shock (2 times)</b> The drop test device is accelerated to a straight line velocity of 40 m/s and the parachute deployment handle activated using a static line attached to a drogue chute. Speed of opening is less than 5 seconds Test 1 Test 2	Collombey Collombey	26.01.2011 26.01.2011	ok ok
<b>5. Interaction and stability test (piloted) - ref. C</b> 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

The model described is in conformity with the flight and load tests carried out by Air Turquoise SA.



For Air Turquoise SA

  
 Alain Zoller

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## Weather data, ref. 3 and B

Date / place	hPa	wind	temp	humidity
13.12.10 / Villeneuve	964	0 m/s	2.4°	65.0%
<i>Corrected mass:</i>		<b>109.21 kg</b>		
21.12.10 / Villeneuve	953.4	0 m/s	4.8°	71.0%
<i>Corrected mass:</i>		<b>107.30 kg</b>		

## 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

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

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

ICAO standard atmospheric pressure at MSL: (p<sub>0</sub>)

Ground level température at the test location: (T)

ICAO standard temperature at MSL: (T<sub>0</sub>)

Total weight in flight: (m<sub>dec</sub>)

Corrected mass: (m<sub>corr</sub>)

C. Only parachute with controls for steering and landing flare



## Air Turquoise SA

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