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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



## Speed of opening, stability, descent rate

Inspection certificate number: EP\_273.2019 Test Report

Manufacturer data

Manufacturer name: Davinci Products Inc.

Representative: Jihun Lee

Street: 53 sinchon-gil, Okcheon-myeon, Yangpyeong-gun

Post code / Place: Gyeonggi-do 12505
Country: Republic of Korea

Sample data

Name: Comma Light Size: M

Steerable <sup>(1)</sup>
Weight <sup>(3)</sup> [kg]

n/a

Maximum weight in flight <sup>(2)</sup> [kg]: 105

volume packed [cm³]: 3900

Serial number: SCM-M10211

Test data <sup>(4)</sup> Test no. 1 Test no. 2

Place of test Villeneuve

Date of test 23.05.2019 05.06.2019

Inspector: Sandi Marinčič Alain Zoller

**Atmosphere AGL** 

user's manual

 [°C]
 15.5
 19.8

 RH [%]
 66
 64

 [hPa]
 973.4
 966

 Wind [m/s]
 0.1
 0.1

Summary of both results (5) **EN LTF** Time of opening test [s]: 3.25 3.25 Calculated descent rate test [m/s]: 5.08 5.08 Stability test: **POSITIVE POSITIVE** Behaviour during descent test: **Stable Stable** Glider ratio: **POSITIVE** If steerable: N/A Any flight procedure and/or N/A configuration described in the

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# Strength test - 40 m/s opening shock

Inspection certificate number: EP\_273.2019 Test Report

Manufacturer data

Manufacturer name: Davinci Products Inc.

Representative: Jihun Lee

Street: 53 sinchon-gil, Okcheon-myeon, Yangpyeong-gun

Post code / Place: Gyeonggi-do 12505
Country: Republic of Korea

Sample data

 Name:
 Comma Light
 Size:
 M

 Steerable
 n/a
 Maximum weight [kg]:
 105

 Weight [kg]
 1.295
 volume packed [cm³]:
 3900

Serial number: SCM-M10212

Test data <sup>(1)</sup> Test no. 1 Test no. 2

 Place of test
 Muraz
 Muraz

 Date of test
 06.08.2019
 06.08.2019

 Corrected mass [kg]
 97.51
 97.51

Inspector: Alain Zoller Alain Zoller

**Atmosphere AGL** 

 [°C]
 26.8
 26.8

 RH [%]
 47
 47

 [hPa]
 970.5
 970.5

 Wind [m/s]
 0.2
 0.2

Test results Test no. 1 Test no. 2

Strength test (40m/s shock) POSITIVE POSITIVE
Aircraft speed uncertainty K=2

[m/s] <sup>(2)</sup> 2.9 2.9

Item / type no.	Validity	Manufacturer	S/N
Weight	2020	Air Turquoise SA	N/A
Geos n° 11	08.05.2020	JDC elec.	22
Weak link	2020	Tost	N/A

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Identification number:

MISC 124.2019

Davinci Products Inc. Comma Light

#### Result summary

Inner container strength test. Applied minimum 700 N for at least 10 seconds and at maximum strength.

Duration at the required strength:

10.7 [s]

The maximum strength before broken:

782.3 [N]

Place of declaration

Date of issue:

Managing director

Villeneuve 29.05.2019

Randi Eriksen

Signature:

Randi Enlose

This signature approve the validity of the test report, and can be included in the inspection certificate 71.5.1

Air Turquoise SA has thoroughly tested the sample of riser/bridle mentioned above and certifies its conformity with the standards: EN 12491: 2015 chapter 5.3.2 and LTF NfL 91/09 chapter 6.1.8

Instrument	Validity		Manufacturer	Type no.	S/N
Load Cell (axial)		04/09/2023	Burster GmbH (DE)	8431-10000	1185483
Winch	check every 12 month		Arwin	300/600	N/A
Geos n° 11 Skywatch		08/05/2020	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Inner container: container of the folded emergency parachute.

<sup>(2)</sup> Inner container (the connection between handgrip and inner container) is loaded at min 700 [N] over 10 seconds. The deployment system is loaded until breaking. Each

<sup>(3)</sup> Calculated value include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measured lies within the assigned range of values with a probability of 95%.

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Identification number:

MISC\_125.2019

Davinci Products Inc. Comma Light Riser

**Result summary** 

Maximum strength for riser, bridle

26247.1 [N]

Place of declaration Date of issue: Managing director Villeneuve 29.05.2019 Alain Zoller

Signature:

This signature approve the validity of the test report, and can be included in the inspection certificate 71.5.1

Air Turquoise SA has thoroughly tested the sample of emergency parachute mentioned above and certifies its conformity with the standards: LTF NfL II 91/09 chapter 6.1.4

Instrument	Validity		Manufacturer	Type no.	S/N
Load sensor		04.09.2023	HBM	1-S9M/50KN-1	31314652
Geos n° 11 Skywatch		08.05.2020	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Riser: lowest part of the parachute system, which is connected to harness. Bridle: connection between riser and harness, can also be a strap.

<sup>(2)</sup> The connecting strap has to have a minimum load capacity of 24000 [N]. The exposed part of the connecting belt has to be protected against environmental factors.

<sup>(3)</sup> Calculated value include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measured lies within the assigned range of values with a probability of 95%.