

# Canopy dimensions REPORT

CCC

st report ref. number: **CCC\_026.2021**

Name: <b>Spectra2</b>	Place: <b>Villeneuve</b>	Manufacturer name: <b>Flow Paragliders</b>
Size: <b>XS</b>	Date of measurement: <b>05.10.2021</b>	Representative: <b>Felipe Rezende</b>
Maximum load [kg]: <b>95</b>	Inspector: <b>Thurnheer Claude</b>	Street: <b>5 Shorehaven Place</b>
Serial number: <b>F0006</b>		Post code / place: <b>Varsity Lakes 4227 QLD</b>
Date of reception: <b>03.09.2021</b>		Country: <b>Australia</b>

## Canopy dimensions

	RIB nb from center	Measure mm	Tension	Tolerances
Full Span	110	12503.7	5 daN	2%
1/2 Trailing Edge	55	6318.2	5 daN	1%
Chord A	1	2031.5	1 daN	1%
Chord B	25	1767.1	1 daN	1%

Aspect ratio
4*span / (chord A+2.5*Chord B)
<b>7.76</b>

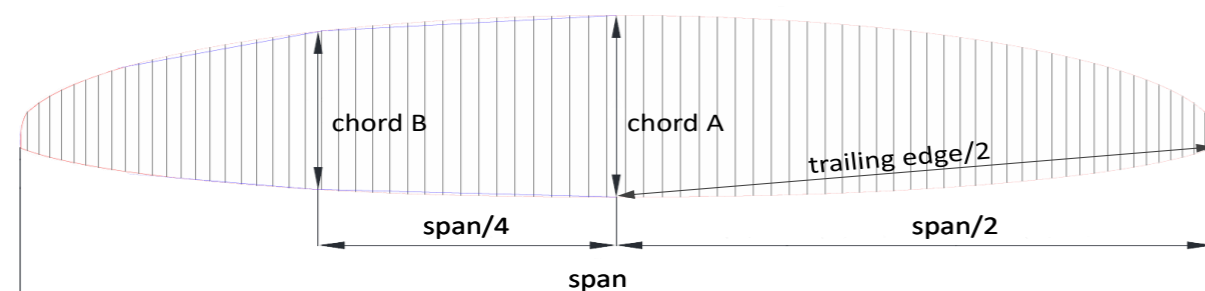
Nbr cells (total)
111

## Chord length, inlet position, tabs position measured from trailing edge.

First fully lined RIB of group 1 (from center)				
	Rib n°	Distance	Tension	Tolerances
Chord	3	2018.8	1 daN	+/-10mm
Top of inlet	3	1930.5	5 daN	+/-10mm
Bottom of inlet	3	1900	5 daN	+/-10mm
Tab Aa	3	1760.4	5 daN	+/-10mm
Tab Ab	3	1648	5 daN	+/-10mm
Tab B	3	855.9	5 daN	+/-10mm
Tab C	3	647.2	5 daN	+/-10mm

First fully lined RIB of group 2 (from center)				
	Rib n°	Distance	Tension	Tolerances
Chord	21	1838.5	1 daN	+/-10mm
Top of inlet	21	1763.6	5 daN	+/-10mm
Bottom of inlet	21	1730.7	5 daN	+/-10mm
Tab Aa	21	1614.8	5 daN	+/-10mm
Tab Ab	21	1505.3	5 daN	+/-10mm
Tab B	21	792.3	5 daN	+/-10mm

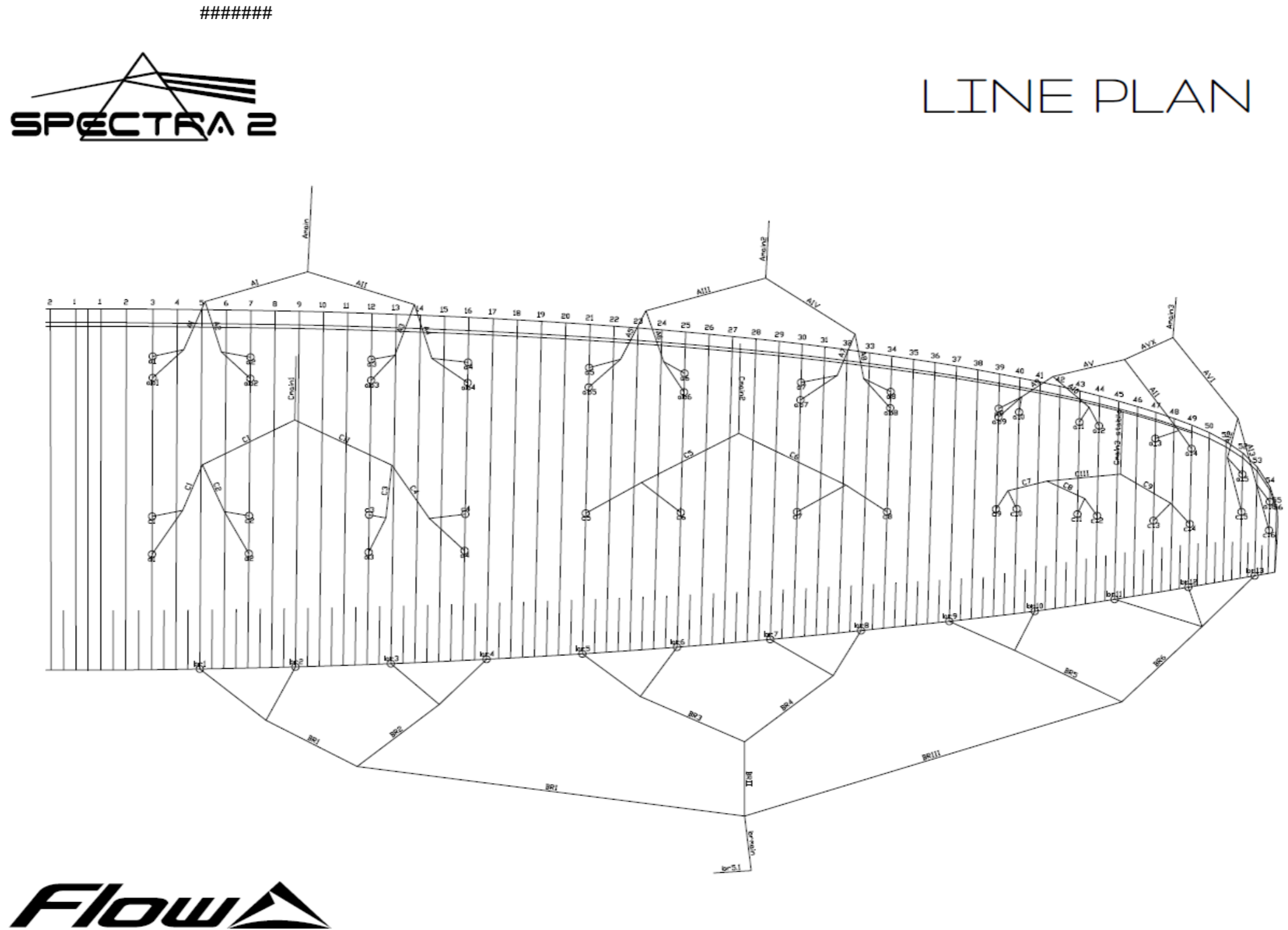
Last lined rib (stabilo) (from center)				
	Rib n°	Distance	Tension	Tolerances
Chord	54	439	1 daN	+/-10mm
Tab A	54	361.4	5 daN	+/-10mm
Tab B	54	223	5 daN	+/-10mm



The validation of this test report is given by the signature of the test manager on the Acknowledgement of conformity

# Line plan REPORT

## Line plan



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# PG MEASUREMENT REPORT

## MEASUREMENT OF FLIGHT TEST SAMPLE

CCC

Report No. : **CCC\_026.2021** Sample name: **Spectra2 XS** Date measure: **05.10.2021** Place: **Villeneuve**  
 Manufacturer: **Flow Paragliders** S/N: **F0006** Responsible: **Claude Thurnheer**

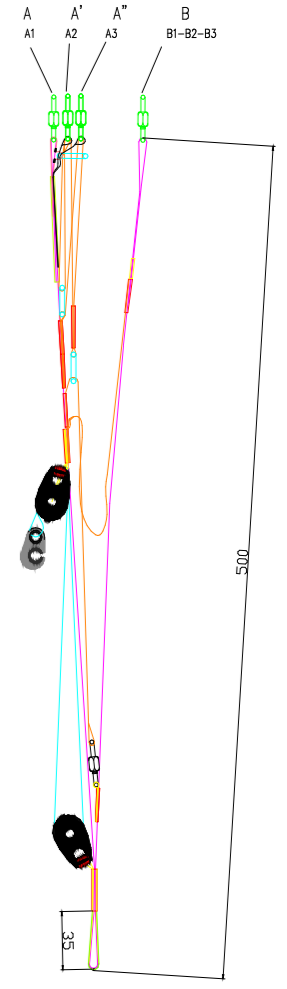
Total line length including risers [mm]

Main brake line with diff color than A,B,C main line? **Yes**

	A			B			C			D			E			Stab			Brake			+strap
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Sample
Center	1	7726	7726	0	7694	7694	0	7676	7676	0	7738	7738	0						7906	7906	0	
	2	7611	7611	0	7579	7579	0	7559	7559	0	7626	7626	0						7729	7729	0	
	3	7556	7556	0	7527	7527	0	7523	7523	0	7593	7593	0						7625	7625	0	
	4	7603	7603	0	7577	7577	0	7577	7577	0	7643	7643	0						7618	7618	0	
	5	7509	7509	0	7487	7487	0	7491	7491	0									7480	7480	0	
	6	7364	7364	0	7343	7343	0	7341	7341	0									7303	7303	0	
	7	7252	7252	0	7237	7237	0	7245	7245	0									7215	7215	0	
	8	7238	7238	0	7224	7224	0	7245	7245	0									7246	7246	0	
	9	6995	6995	0	6979	6979	0	7014	7014	0									7107	7107	0	
	10	6954	6954	0				6968	6968	0									6987	6987	0	
	11	6866	6866	0				6873	6873	0									6933	6933	0	
	12	6855	6855	0				6861	6861	0									6953	6953	0	
	13	6814	6814	0				6816	6816	0									7177	7177	0	
Wing tip	14	6839	6839	0				6830	6830	0												
	15	6765	6765	0				6784	6784	0												
	16	6784	6784	0				6843	6843	0												
	17																					
	18																					

Stab line to riser: **A'**

Number Cell: **111**  
 Weight of the glider [kg]: **5.44**  
 Tolerance [mm] <sup>(\*)</sup>: **±15**



### Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>

Total length (incl. Carabiner or connect)	Risers				Total length (no carabiner or connect)	Risers		
	A	Std	Acc	Trim		A	Std	Acc
	A	540	434	n/a	A	513	407	
	A'	536	483	n/a	A'	509	456	
	B	530	524	n/a	B	503	497	
	C			n/a	C			
	D			n/a	D			
	Acc	100	*[mm]		Acc	100	*[mm]	
	Trimmer	n/a	[mm]		Trimmer	n/a	[mm]	

No. of risers **2**  
 Tolerance [mm] **5**

Carabiner [mm] **27**  
 Tolerance [mm] **2**

\*Travel range (distance between A and rear riser)

### Acc system configuration max travel



Another trim configuration **No**  
 If yes (description):

### Test Atmosphere AGL

Pressure [hPa] **973.5**  
 Humidity [%] **68**  
 Temperature [°C] **21.5**

### Plausibility check :

[mm] 500 **500**  
 [mm] 10000 **10003**

Remark:

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## Suspension line calculation

Inspection certification number: **CCC\_026.2021** [kg] [daN]  
 Manufacturer name: 05.10.2021 **Flow Paragliders** Maximum weight: **95** **93.1**  
 Model name and size: **Spectra2 XS**  
 Report valid for the other sizes of model: **n/a**

### Line specification and line breaking strength after bending in [daN] (strongest to weakest value) <sup>(1)</sup>

	Manufacturer	Type no.	Breaking strength [daN]
1	Edelrid	8000U-360	286.1
2	Edelrid	8000U-190	165.1
3	Edelrid	8000U-130	87.4
4	Edelrid	8000U-090	85
5	Edelrid	8000U-070	56.7
6	Edelrid	8000U-050	52
7	Edelrid	8000U-025	22.4
8	Liros	PPSL-160	131.1
9			
10			
11			
12			

### Line breaking strength, theoretical calculation (see details on the following pages) <sup>(3)</sup>

	[daN]	[g]	
Sum A+B+C+D+ Stabilo lines	Level 1	2397.20	25.75
	Level 2	2195.40	23.58
	Level 3	2938.40	31.56
	Level 4	4695.20	50.43
	Level 5	5215.20	56.02

A, B and C, the sum of each level must be equal or exceed 2300daN or 23g

Result **POSITIVE**

Place of inspection: **Villeneuve**  
 Date of issue: **06.10.2021**  
 Inspector: **Andrea Wigger**

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the standards **FAI Cat. 1 Cross-Country - CIVL Competition Class (CCC) / EN 926-1:2015**  
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**Detailed line strength calculation by level**

	Level 1			Level 2			Level 3					
	Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]
1	Amain	8000U-360	286.1	AI	8000U-190	165.1	A1	8000U-130	87.4			
2	Amain2	8000U-360	286.1	AII	8000U-190	165.1	A2	8000U-130	87.4			
3	Amain3	8000U-190	165.1	AIII	8000U-190	165.1	A3	8000U-130	87.4			
4	Cmain1	8000U-190	165.1	AIV	8000U-130	87.4	A4	8000U-130	87.4			
5	Cmain2	8000U-190	165.1	AVX	8000U-130	87.4	A5	8000U-090	85			
6	stabilo	PPSL-160	131.1	AVI	8000U-050	52	A6	8000U-090	85			
7				CI	8000U-130	87.4	A7	8000U-090	85			
8				CII	8000U-130	87.4	A8	8000U-090	85			
9				C5	8000U-070	56.7	AV	8000U-130	87.4			
10				C6	8000U-070	56.7	A11	8000U-050	52			
11				Cmain3	8000U-130	87.4	A12	8000U-025	22.4			
12							A13	8000U-025	22.4			
13							C1	8000U-090	85			
14							C2	8000U-070	56.7			
15							C3	8000U-070	56.7			
16							C4	8000U-090	85			
17							c5	8000U-050	52			
18							c6	8000U-050	52			
19							c7	8000U-050	52			
20							c8	8000U-050	52			
21							CIII	8000U-050	52			
22							C9	8000U-050	52			
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
	<b>Total Level 1</b>		2397.2	<b>Total Level 2</b>		2195.4	<b>Total Level 3</b>		2938.4			



Level 4						Level 5							
Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]	Name	Type no.	Breaking strength [daN]		
1	a1	8000U-090	85	d1	8000U-025	22.4	a1	8000U-090	85	c4	8000U-090	85	
2	a2	8000U-090	85	d2	8000U-025	22.4	a2	8000U-090	85	c5	8000U-050	52	
3	a3	8000U-090	85	d3	8000U-025	22.4	a3	8000U-090	85	c6	8000U-050	52	
4	a4	8000U-090	85	d4	8000U-025	22.4	a4	8000U-090	85	c7	8000U-050	52	
5	a5	8000U-090	85	C7	8000U-050	52	a5	8000U-090	85	c8	8000U-050	52	
6	a6	8000U-090	85	C8	8000U-050	52	a6	8000U-090	85	c9	8000U-050	52	
7	a7	8000U-070	56.7	c13	8000U-050	52	a7	8000U-070	56.7	c10	8000U-050	52	
8	a8	8000U-070	56.7	c14	8000U-050	52	a8	8000U-070	56.7	c11	8000U-050	52	
9	ab1	8000U-090	85				a9	8000U-050	52	c12	8000U-050	52	
10	ab2	8000U-090	85				a10	8000U-050	52	c13	8000U-050	52	
11	ab3	8000U-090	85				a11	8000U-050	52	c14	8000U-050	52	
12	ab4	8000U-090	85				a12	8000U-050	52	c15	8000U-025	22.4	
13	ab5	8000U-090	85				a13	8000U-050	52	c16	8000U-025	22.4	
14	ab6	8000U-050	52				a14	8000U-050	52	d1	8000U-025	22.4	
15	ab7	8000U-050	52				a15	8000U-025	22.4	d2	8000U-025	22.4	
16	ab8	8000U-050	52				a16	8000U-025	22.4	d3	8000U-025	22.4	
17	A9	8000U-050	52				ab1	8000U-090	85	d4	8000U-025	22.4	
18	A10	8000U-050	52				ab2	8000U-090	85				
19	a13	8000U-050	52				ab3	8000U-090	85				
20	a14	8000U-050	52				ab4	8000U-090	85				
21	a15	8000U-025	22.4				ab5	8000U-090	85				
22	a16	8000U-025	22.4				ab6	8000U-050	52				
23	c15	8000U-025	22.4				ab7	8000U-050	52				
24	c16	8000U-025	22.4				ab8	8000U-050	52				
25	c1	8000U-090	85				ab9	8000U-050	52				
26	c2	8000U-090	85				c1	8000U-090	85				
27	c3	8000U-090	85				c2	8000U-090	85				
28	c4	8000U-090	85				c3	8000U-090	85				
29	c5	8000U-050	52										
30	c6	8000U-050	52										
31	c7	8000U-050	52										
32	c8	8000U-050	52										
					<b>Total Level 4</b>	4695.2						<b>Total Level 5</b>	5215.2