

Canopy dimensions REPORT

CCC

st report ref. number: **CCC_025.2020**

Name: Icepeak X-One	Place: Villeneuve	Manufacturer name: Niviuk Gliders
Size: 20	Date of measurement: 12.12.2020	Representative: Dominique Cizeau
Maximum load [kg]: 95	Inspector: Thurnheer Claude	Street: C. Del Ter, 6-Nave D
Serial number: IPXI2220V1		Post code / place: 17165 La Cellera de Ter Girona
Date of reception: 29.01.2020		Country: Spain

Canopy dimensions

	RIB nb from center	Measure mm	Tension	Tolerances
Full Span		12621.4	5 daN	2%
1/2 Trailing Edge		6487.9	5 daN	1%
Chord A	1	2008.3	1 daN	1%
Chord B	25	1746.5	1 daN	1%

Aspect ratio 4*span / (chord A+2.5*Chord B)
7.92

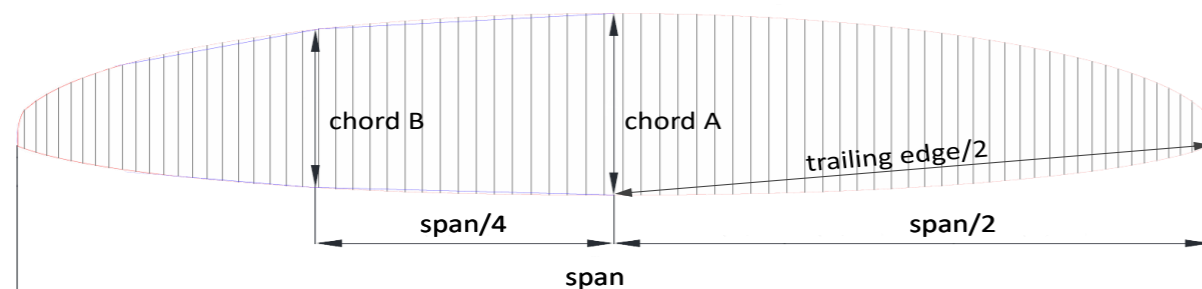
Nbr cells (total)
115

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	1987.6	1 daN	+/-10mm
Top of inlet	3	1915.3	5 daN	+/-10mm
Bottom of inlet	3	1885.4	5 daN	+/-10mm
Tab Aa	3	1728.4	5 daN	+/-10mm
Tab Ab	3	1593.9	5 daN	+/-10mm
Tab B	3	853.9	5 daN	+/-10mm
Tab C	3	640.2	5 daN	+/-10mm

First fully lined RIB of group 2 (from center)				
	Rib n°	Distance	Tension	Tolerances
Chord	23	1780.9	1 daN	+/-10mm
Top of inlet	23	1707.5	5 daN	+/-10mm
Bottom of inlet	23	1683.1	5 daN	+/-10mm
Tab Aa	23	1544.5	5 daN	+/-10mm
Tab Ab	23	1429.5	5 daN	+/-10mm
Tab B	23	751.1	5 daN	+/-10mm

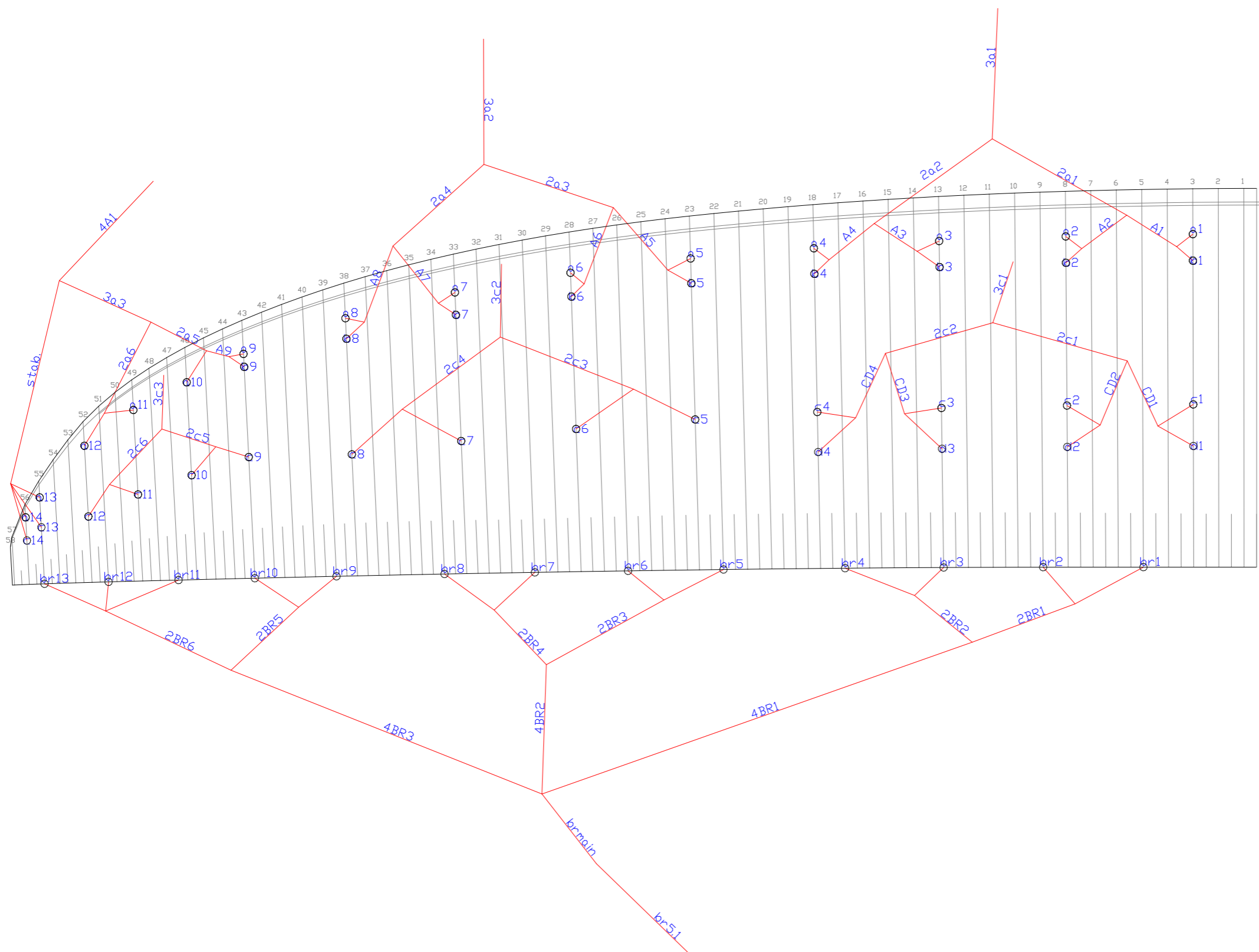
Last lined rib (stabilo) (from center)				
	Rib n°	Distance	Tension	Tolerances
Chord	56	508.5	1 daN	+/-10mm
Tab A	56	425.7	5 daN	+/-10mm
Tab B	56	286.1	5 daN	+/-10mm



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_025.2020** Sample name: **Icepeak X-One 20** Date measure: **12.02.2020** Place: **Villeneuve**
 Manufacturer: **Niviuk Gliders** S/N: **IPXI2220V1** Responsible: **Claude Thurnheer**

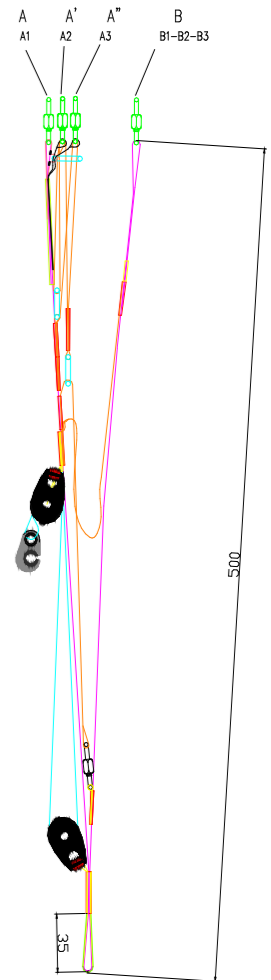
Total line length including risers [mm]

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

	A			B			C			D			E			Stab			Brake			+strap
	Manu ⁽²⁾	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Sample
Center	1	7826	7835	9	7812	7822	9	7825	7826	0	7924	7914	-10						8211	8217	6	
	2	7699	7708	8	7683	7691	8	7665	7667	1	7765	7764	-1						7930	7942	12	
	3	7667	7671	4	7652	7658	6	7635	7630	-5	7732	7721	-11						7734	7739	5	
	4	7710	7718	8	7695	7704	9	7719	7719	0	7810	7804	-6						7735	7737	2	
	5	7605	7611	6	7587	7595	8	7605	7600	-5									7541	7540	-1	
	6	7436	7444	8	7418	7424	6	7418	7418	0									7381	7382	1	
	7	7334	7339	5	7317	7325	8	7333	7331	-2									7320	7321	1	
	8	7317	7319	2	7304	7307	3	7365	7364	-2									7404	7403	-1	
	9	7089	7102	12	7075	7082	7	7113	7112	-2									7289	7291	2	
	10	7007	7014	6				7013	7013	-1									7222	7224	2	
	11	6953	6959	5				6964	6960	-4									7227	7224	-3	
	12	6964	6966	2				6986	6982	-4									7312	7310	-2	
	13	6866	6870	4				6874	6877	3									7511	7507	-4	
Wing tip	14	6857	6864	7				6881	6881	0												
	15																					
	16																					
	17																					
	18																					

Stab line to riser: **A'**

Number Cell: **115**
 Weight of the glider [kg]: **5.90**
 Tolerance [mm] ^(*): **±15**



Riser measurement - total length (inner edge) [mm] ⁽³⁾

Total length (incl. Carabiner or connect)	Risers				Total length (no carabiner or connect)	Risers		
	A	Std	Acc	Trim		A	Std	Acc
	A	522	422	n/a	A	493	393	
	A'	523	442	n/a	A'	494	413	
	B	523	449	n/a	B	494	420	
	C	523	523	n/a	C	494	494	
	D			n/a	D			
	Acc	101	*[mm]		Acc	100	*[mm]	
	Trimmer	n/a	[mm]		Trimmer	n/a	[mm]	

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

Carabiner [mm] **29**
 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] **981.2**
 Humidity [%] **37**
 Temperature [°C] **21.1**

Plausibility check :

[mm] 500 **500**
 [mm] 10000 **10002**

Remark:

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Line breaking strength report

Inspection certification number : **CCC_025.2020**
 Manufacturer name: **Niviuk Gliders**
 Model name and size : **Icepeak X-One 20**

kg daN
 Maximum weight: **95** **93.1**

Line specification and line breaking strength in daN (strongest to weakest value) ⁽¹⁾

Line number	Manufacturer	Type no.	Breaking strength (daN)
1	Edelride	8000U-470	491.85
2	Edelride	8000U-360	370.6
3	Edelride	8000U-280	270.1
4	Edelride	8000U-230	243.75
5	Edelride	8000U-190	199.85

Line number	Manufacturer	Type no.	Breaking strength (daN)
6	Edelride	8000U-130	121.75
7	Edelride	8000U-090	97.9
8	Edelride	8000U-070	65.8
9	Edelride	8000U-050	51.6
10	Liros	DC60	71.25
11	Liros	DC40	45.7
12	Liros	DC35	33.9

Line breaking strength, theoretical calculation (see details on the following pages) ⁽³⁾

		daN	g
Sum A+B+C+ Stabilo lines	Level 1	2721.10	29.23
	Level 2	2887.40	31.01
	Level 3	3221.20	34.60
	Level 4	3871.40	41.58
	Level 5	3951.00	42.44

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: **10.03.2020**
 Inspector: **Alain Zoller**

Line junction and detailed line strength calculation

Level 1			Level 2			Level 3			Level 4			Level 5					
3a1	8000U-360	370.6	2a1	8000U-190	199.85	A1	8000U-090	97.9	a1	8000U-070	65.8	b1	8000U-050	51.6	a1	8000U-070	65.8
			A2	8000U-090	97.9	a2	8000U-070	65.8	b2	8000U-050	51.6	a2	8000U-070	65.8			
			A3	8000U-090	97.9	a3	8000U-070	65.8	b3	8000U-050	51.6	a3	8000U-070	65.8			
			2a2	8000U-190	199.85	A4	8000U-090	97.9	a4	8000U-070	65.8	b4	8000U-050	51.6	a4	8000U-070	65.8
			b4	8000U-050	51.6	b4	8000U-050	51.6	b4	8000U-050	51.6	b4	8000U-050	51.6			
Total:		741.2			799.4			783.2			939.2			939.2			939.2
3a2	8000U-360	370.6	2a3	8000U-190	199.85	A54	8000U-090	97.9	a5	8000U-070	65.8	b5	8000U-050	51.6	a5	8000U-070	65.8
			A6	8000U-090	97.9	a6	8000U-070	65.8	b6	8000U-050	51.6	a6	8000U-070	65.8			
			A7	8000U-090	97.9	a7	8000U-070	65.8	b7	8000U-050	51.6	a7	8000U-070	65.8			
			2a4	8000U-190	199.85	A8	8000U-090	97.9	a8	8000U-070	65.8	b8	8000U-050	51.6	a8	8000U-070	65.8
			b8	8000U-050	51.6	b8	8000U-050	51.6	b8	8000U-050	51.6	b8	8000U-050	51.6			
Total:		741.2			799.4			783.2			939.2			939.2			939.2
4A1	8000U-130	121.75	2a5	8000U-070	65.8	A9	8000U-050	51.6	a9	DC40	45.7	b9	DC40	45.7	a9	DC40	45.7
			3a3	8000U-090	97.9	a10	DC40	45.7	a10	DC40	45.7	a10	DC40	45.7			
			2a6	8000U-070	65.8	a11	DC35	33.9	a11	DC35	33.9	a11	DC35	33.9			
			a12	DC35	33.9	a12	DC35	33.9	a12	DC35	33.9	a12	DC35	33.9			
			stab	8000U-050	51.6	a13	DC35	33.9	a13	DC35	33.9	a13	DC35	33.9			
			a14	DC35	33.9	a14	DC35	33.9	a14	DC35	33.9	a14	DC35	33.9			
			c13	DC35	33.9	c13	DC35	33.9	c13	DC35	33.9	c13	DC35	33.9			
c14	DC35	33.9	c14	DC35	33.9	c14	DC35	33.9	c14	DC35	33.9						
Total:		243.5			299			534.4			601.4			681			681
3c1	8000U-190	199.85	2c1	8000U-090	97.9	CD1	8000U-050	51.6	c1	8000U-050	51.6	c1	8000U-050	51.6	c1	8000U-050	51.6
			CD2	8000U-050	51.6	d1	DC35	33.9	d1	DC35	33.9	d1	DC35	33.9			
			CD3	8000U-050	51.6	c2	8000U-050	51.6	c2	8000U-050	51.6	c2	8000U-050	51.6			
			2c2	8000U-090	97.9	d2	DC35	33.9	d2	DC35	33.9	d2	DC35	33.9			
			CD4	8000U-050	51.6	c3	8000U-050	51.6	c3	8000U-050	51.6	c3	8000U-050	51.6			
d3	DC35	33.9	d3	DC35	33.9	d3	DC35	33.9	d3	DC35	33.9						
c4	8000U-050	51.6	c4	8000U-050	51.6	c4	8000U-050	51.6	c4	8000U-050	51.6						
d4	DC35	33.9	d4	DC35	33.9	d4	DC35	33.9	d4	DC35	33.9						
Total:		399.7			391.6			412.8			684			684			684



			c5	8000U-050	51.6	c5	8000U-050	51.6	c5	8000U-050	51.6	
	2c3	8000U-090	97.9									
3c2	8000U-190	199.85		c6	8000U-050	51.6	c6	8000U-050	51.6	c6	8000U-050	51.6
				c7	8000U-050	51.6	c7	8000U-050	51.6	c7	8000U-050	51.6
	2c4	8000U-090	97.9									
				c8	8000U-050	51.6	c8	8000U-050	51.6	c8	8000U-050	51.6
Total:		399.7	391.6		412.8		412.8		412.8		412.8	
				c9	DC40	45.7	c9	DC40	45.7	c9	DC40	45.7
	2c5	8000U-050	51.6									
3c3	8000U-090	97.9		c10	DC35	33.9	c10	DC35	33.9	c10	DC35	33.9
				c11	DC35	33.9	c11	DC35	33.9	c11	DC35	33.9
	2c6	8000U-050	51.6									
				c12	DC35	33.9	c12	DC35	33.9	c12	DC35	33.9
Total:		195.8	206.4		294.8		294.8		294.8		294.8	