Covent Test Plan

SR01	**Mandatory Ventilation**
SR08	**PEEP Pressure** **5**, **10**, **15** cmH2O in increments of 5 cmH20 (+/ 5 cmH2O) (see volume control testing)
SR09	**Mandatory Ventilation - I:E** **1:2**, **1:3**, and **1:4** options available ****1:5** & **1:1** I:E per respiratory rate requirements (see I:E column of Volume Control testing)
SR10	**Respiratory Rate** 10-30 breaths per minute in increments of 2 bpm **10**, **12**, **15**, **20**, **30** to follow I:E ratios (see volume control testing or demonstrate individually ?)
SR11	**Tidal Volume** Option #1: Input height and gender for 6cc/kg TV (+/-10% or 10mL) Option #2: 350cc (for average woman) and 450cc (for average man) (+/-10% or 10mL) Option #3: 400cc only (+/-10% or 10mL) Option #4: **300**, **400**, **500**, **600** (+/-10% or 100mL) ****200** ISO only (see TidalVolume column in Volume Control Testing)
SR02	**Spontaneous Ventilation** see spontaneous.mov
SR06	**Apnea back up** **kicks in at 30 or 60 seconds (+/ 5sec)** see spontaneous.mov
SR03	**Volume Control**

Section 201.12.1.101 from ISO 80601-2-12								
	Compliance ml/hPa ±10%	Resistance hPa/l/s ±10%	Tidal Volume ml	Breaths / min (a)	Inspire time (s)	O2	BAP (PEEP)	I:E
1	50	5	500	20	1	30	5	1:2
	Pressure Difference : -1.14% Tidal Volume Difference : +32.60%							

2	50	20	500	12	1	90	10	1:4
	Pressure Difference : +4.31% Tidal Volume Difference : +57.49%							
3	20	5	500	20	1	90	5	1:2
	Pressure Difference : -0.27% Tidal Volume Difference : +56.02%							
4	20	20	500	20	1	30	10	
5	20	20	300	20	1	30	5	
6	20	50	300	12	1	90	10	1:3
7	10	50	300	20	1	30	10	
8	10	10	200	20	1	90	5	
C200	50	5	200	15	1	20	5	1:3
	Pressure Difference : +2.15% Tidal Volume Difference : +67.67%							
C300	50	5	300	15	1	20	5	1:3
C400	50	5	400	15	1	20	5	1:3
C500	50	5	500	15	1	20	5	1:3
C600	50	5	600	15	1	20	5	1:3
P15	50	5	500	10	1	20	15	1:5
	Pressure Difference : -14.44% Tidal Volume Difference : -11.64%							
R30	50	5	200	30	1	20	5	1:1
	Pressure Difference : +2.55% Tidal Volume Difference : +46.53%							
a) if the end expiratory flow does not reach zero, reduce set rate until it does								
SR04	**Pressure Control 5-60 +/- 5 cmH2O Control Module**							
	Compliance ml/hPa ±10%	Resistance hPa/l/s ±10%	Tidal Volume ml *(a)*	Breaths / min *(b)*	Inspire time (s) *(c)*	O2	BAP (PEEP)	Δ insp pressure *(d)*
1	50	5	500	20	1	30	5	10

	Pressure Difference : -2.37% Tidal Volume Difference : +17.60%							
2	50	20	500	12	1	90	10	15
	Pressure Difference : -0.09% Tidal Volume Difference : +31.01%							
3	20	5	500	20	1	90	5	25

a) intended tidal volume for the selection of test conditions on test lung
b) if the end expiratory flow does not reach zero, reduce set rate until it does
c) the rise time of the ventilator should be set to a value that insecure pressure can be reached
d) for this test the set pressure is relative to BAP (PEEP)

SR05	**Pressure Support** **10-15 +/- 5 cmH2O flow or pressure triggered**
SR07	**Flow Rate** **> 60 liters per minute**
C600	refer to C600 test data
Alarms	
SR19	air_alarm
SR20	pressure_alarm
SR21	spontaneous
SR22	peep_alarm
SR23	air_alarm
SR24	air_alarm
SR25	decibel.MP4