

2016/11/29: Tuesday

Hydrogen Gas

Helion only

SEC

X-Ray:

- Count rate radial profiles in SEC with 0.5mm slit width.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			Date:	11/24/16														
2			Run description:	FRC/RMFO	helium	/SEC/	x-ray											
3			Base pressures: Main IG (T)	1.7e-6														
4			ER IG (T)	7.4e-6														
5			Satellite IG (T)	9.9e-7														
6			Main chamber Baratron (T)	1.0237														
7			Expansion region Baratron (T)															
8			Antennas/delay lines	2-turn, RG-217, 15" long														
9			RMF frequency & phase															
10			Magnet configuration & PS	4x8 + 8x4 coils; RR PS; eight BN-covered FCs														
11			RMF system	SRS-> duty factor limiter-> AR100LM9-> 2KD-> four 8K Ultras														
12			Wall Time	9:53	11:02	10:20		11:02	11:10	11:10	11:14	12:04	12:04		1:08	2:06	2:30	3:10
13			Main magnets I (A)	100	100	100		100	100	100	100	100	100		100	130	100	60
14			Nozzle coils I (A)	0	300	300		300	300	300	300	300	300		300	100	300	300
15			MC IG (T)															
16			MC Slow Baratron (T)	1.0237	1.0242	1.0242		1.0242	1.0239		1.0236	1.0243	1.0243		1.0244	1.0242	1.0243	1.0241
17			MC FB (T)						1.0240		1.0238							
18			ER IG (T)															
19			ER slow Baratron (T)	1.007	1.327	1.359		1.389	1.5831		1.6521	1.640	1.617		1.340	1.282	1.242	1.307
20			ER FB (T)															
21			Satellite IG (T)	5.7e-6	2.2e-5	2.0e-5		2.0e-5	2.5e-5		2.7e-5	2.6e-5	2.5e-5		1.7e-5	1.7e-5	1.7	1.7e-5
22			Satellite FB (T)															
23			Bias voltage: paddle															
24			Main valve	C	C	C												
25			Navigator valve	M	M	M												
26			End turbo valve															
27			Gases/feed location/sccm		H <sub>2</sub> HL													
28			PV-10 (V)	END	PLATE	FLAT		FLAT	FLAT		FLAT	FLAT	FLAT		FLAT	FLAT	FLAT	FLAT
29			Pulse	A to/Δ	TA	PLATE	FLAT	FLAT	FLAT		FLAT	FLAT	FLAT		FLAT	FLAT	FLAT	FLAT
30			B to/Δ		VTA	-947V		-947	-947		-947	-947	-947		-947	-947	-947	-947
31			C to/Δ		VER	-1.36kV		-1374	-300		-247	-247	-247		-1.13kV	-1.43	-1.48	-740
32			Diagnostics	LeCroy time														
33			Spectr	PM Tube (V)														
34			Wavelength	Port/LOS														
35			170 GHz	dia (mV)/IM freq														
36			X-ray	Amptek														
37			RMFO system	main SRS														
38			Pulse width (ms)/ rep rate (Hz)															
39			Frequency: Center(MHz)/Span(KHz)															
40			Pa															
41			Pr/% refl															
42			ΦM															
43			Satellite probe															
44			ER Probe															
45			Helicon Pf/Pr															
46			Helicon (SRS/mod)															
47			Comments/changes:	for Δφ = π/2, n <sub>e</sub> = 2.1e12 cm <sup>-3</sup>														