

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|----|-------------------|--|---|--------|---|---|---|---|---|---|---|---|---|---|---|-------|----|
| 1 | | Date: | 5/30/2023 | | | | | | | | | | | | | | |
| 2 | | Run description: | FRC/RMFo | X-MADA | | | | | | | | | | | | | |
| 3 | | Base pressures: SEC IG (T) | | | | | | | | | | | | | | | |
| 4 | | CC IG (T) | | | | | | | | | | | | | | | |
| 5 | | FEC IG (T) | 6.1e-7 | | | | | | | | | | | | | | |
| 6 | | SEC Slow Baratron (T) | .0002 | | | | | | | | | | | | | | |
| 7 | | CC Slow Baratron (T) | .019 | | | | | | | | | | | | | | |
| 8 | | RMF frequency & phase | 1.7994 | | | | | | | | | | | | | | |
| 9 | | Magnet configuration & PS | 4x8 + 8x4 coils; BB PS & 2 Magna powers inside 8; eight BN-covered FCs | | | | | | | | | | | | | | |
| 10 | | RMF system | SRS -> duty factor limiters -> AR100LM9 -> 8KD -> 200 kW home made | | | | | | | | | | | | | | |
| 11 | | Time | 10:17 10:25 10:28 10:30 10:32 10:36 10:37 10:41 10:49 10:49:30 10:49:30 10:49:30 10:49:30 10:49:30 10:49:30 10:49:30 10:49:30 | | | | | | | | | | | | | | |
| 12 | Magnapower | L-2 Coils I (A) | 8 | | | | | | | | | | | | | | |
| 13 | Big Blue | L-2 Coils I (A) | 8 | | | | | | | | | | | | | | |
| 14 | | Nozzle coils I (A) | 0 | | | | | | | | | | | | | | |
| 15 | | SEC IG (T) | / | | | | | | | | | | | | | | |
| 16 | | SEC Slow Baratron (T) | .0002 | | | | | | | | | | | | | | |
| 17 | | CC IG (T) | .019 | | | | | | | | | | | | | | |
| 18 | | CC slow Baratron (T) | .019 | | | | | | | | | | | | | | |
| 19 | | FEC IG (T) | .019 | | | | | | | | | | | | | | |
| 20 | | FEC FB (T) | .0-7 | | | | | | | | | | | | | | |
| 21 | | Ta paddle voltage | / | | | | | | | | | | | | | | |
| 22 | | Main valve | 0 | | | | | | | | | | | | | | |
| 23 | | Navigator valve | 0 | | | | | | | | | | | | | | |
| 24 | | End turbo valve | 0 | | | | | | | | | | | | | | |
| 25 | | Gases/feed location/sccm | NONE | | | | | | | | | | | | | | |
| 26 | | PV-10 (V) | / | | | | | | | | | | | | | | |
| 27 | Pulse | A to/ Δt | 5-10 | | | | | | | | | | | | | | |
| 28 | | B to/ Δt | 5-10 | | | | | | | | | | | | | | |
| 29 | CC Pressure (mT) | P _b | / | | | | | | | | | | | | | | |
| 30 | | (Fast Baratron) | P _a | | | | | | | | | | | | | | |
| 31 | 170 GHz | dia (mV)/IM freq | 13.7 | | | | | | | | | | | | | | |
| 32 | Glassman | High Voltage (kV) | 13.7 | | | | | | | | | | | | | | |
| 33 | RMFo system | main SRS | 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 | | | | | | | | | | | | | | |
| 34 | | Pulse width (ms) | 1 10 20 50 100 100 200 300 200 100 100 200 300 200 100 200 300 | | | | | | | | | | | | | | |
| 35 | | Time between pulses (s) | 1 1 1 1 2 4 8 16 16 16 16 16 16 16 16 16 | | | | | | | | | | | | | | |
| 36 | | Frequency: Center(MHz)/Span(KHz) | 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 1.7994 | | | | | | | | | | | | | | |
| 37 | | Phase ° | 32 | | | | | | | | | | | | | | |
| 38 | | P _a | 0 | | | | | | | | | | | | | | |
| 39 | | P _f (kW) | 21 | | | | | | | | | | | | | | |
| 40 | | ΩM or % reflected | | | | | | | | | | | | | | | |
| 41 | V _f | | | | | | | | | | | | | | | | |
| 42 | V _r | | | | | | | | | | | | | | | | |
| 43 | | Helicon Pf/Pr | | | | | | | | | | | | | | | |
| 44 | | Helicon (SRS/mod) | | | | | | | | | | | | | | | |
| 45 | Comments/changes: | for $\Delta\phi = \pi/2$, $n_e = 2.1 \times 10^{12} \text{ cm}^{-3}$ for 16-cm dia plasma | | | | | | | | | | | | | | sheet | of |

13102

1.4

50

16