



Summary of transport & thermal analyses of the HOM antennas

Eduardo Cano
CERN, EN-MME

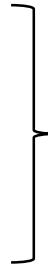


CERN – 03/06/2019

Summary of calculations

- **TRANSPORT**

- DQW old PU – **EDMS 2112661**
- RFD FPC
- DQW FPC
- RFD PU
- RFD V-HOM
- RFD H-HOM antenna – Problematic



EDMS 2112803 with transport summary (.xls) and slides from EN/MME meetings
(EDMS 2134455 (FPCs), EDMS 2144037)

- **THERMAL**

- DQW PU “mushroom” – Analyses in Cu and Cu+Nb: Need of Nb to reduce heat loss. **EDMS 2114211**
- DQW PU “hook” – Ok in Cu. **EDMS 2114211**
- RFD V-HOM – Needs a part in Nb. The amount of Nb in the current design could be reduced. **EDMS 2144038**
- RFD PU – Ok in Cu. **EDMS 2144038**
- RFD H-HOM – Ok in Nb. Need to improve the simulation and compare the results with Zenghai’s model. **EDMS 2144038**