Scope

Outline description of the sequence and procedures to be used during the SPIRE CQM EMC Test once integrated into the Herschel EQM Payload Module at EADS Astrium in Ottobrun. The pre-requisites for the test are briefly described followed by a table setting out the steps in the test sequence; the names of the procedures to be executed from CCS and the references to any manual procedures required for, for instance, switching on the DRCU; and the estimated duration of each part of the test.

Change notes

1.0   15 April 2005   First issue

Applicable Documents

AD1   SPIRE Functional Test Specification - SPIRE-RAL-DOC-001652
AD2   SPIRE COOLER RECYCLING SCOS PROCEDURE - SPIRE-RAL-PRC-002267

Reference Documents

Prerequisites for carry out the Short Performance Test

FPU is integrated onto HOB
WE integrated with CCE
WE integrated with harness and FPU
Warm functional test done
Cold functional test done at "4K" and "1.7K" as per AD1
FP is at nominal temperature and left in REDY mode – see transition diagram in AD1

Prerequisites for data analysis

SCOS is running and display screens are available with conversion curves loaded
QLA sequences ready for display of data and FITS output
IDL V 6.0 or later present on local machine (laptop if necessary) with access to FITS filestore via FTP or other method

Outline Test sequence:

Step	Description	Procedure Name	Estimated Duration
	EMC test set up		
E0	Start from REDY mode		
E1	Recycle cooler	CCS-SPT-CREC	2 hours
E2	Switch to Photometer Standby	CCS-SPT-PDET-ON CCS-SPT-RESET-OFFSETS-P *Requires manual procedure to set equivalent power in BSM coils*	10 minutes
E3	Wait until temperature stabilises	N/A	TBD
E4	Set up for nominal bias and sampling	CCS-SPT-NOMSETTINGS-P	10 sec
	Instrument ready for EMC Testing Standard test procedure as follows		

Step	Description	Procedure Name	Estimated Duration
S1	Set OBSID for this test EMC set up	CCS-SPT-STARTTEST	10 sec
S2	Set STEP number for this frequency/power/polarisation etc setting	CCS-SPT-SETSTEPNO *At present we pass parameters through the SCOS system – this may not be possible with CCS and we need to discuss how to implement ths.*	10 sec
S3	Dwell for required amount of time at given setting	N/A	TBD
S4	Set EMC equipment to next setting – if not last step go to S2 Else continue	N/A	TBD
S5	Stop test - unset OBSID	CCS-SPT-ENDTEST	10 sec