



**TELECON
MINUTES OF MEETINGS
(MoM)**

**PRODUCT ASSURANCE
Space Science and Technology
Department**

Subject / Title:	HR-SP-RAL- NCR 136 NRB	Document No:	SPIRE-RAL-MoM-002549	Date	6 Dec 05	Page 1 of 3
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Spacecraft / Project	Herschel / SPIRE	Meeting Place	Eric Sawyers Office
Instrument / Model	SPIRE PFM	Subsystem	COLD Vibration Test Anomaly

Participants		Agenda
<i>Print Name & Company</i>	<i>Signature Required</i>	
RAL Eric Sawyer		Summary of status Thermal impacts Options Way Forward
RAL Eric Clark		
<i>RAL</i>		
<i>RAL</i>		
<i>Company</i>		
<i>ESA</i> Carsten Scharmberg		
<i>Company</i>		
<i>Company</i>		Additional Distribution
<i>Company</i>		
<i>Company</i>		

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Action			Title & Description
No	Responsibility	Due Date	
			<p>Y-axis test completed, pre and post resonance search matched well. Changed to Z-axis, fist mode was 100Hz, this is less than expected. Full level sine completed, post test search 86.4 Hz. Test stopped. Fitted steel cone and replaced A frames with new CFRP units. Resonance search repeated, 134 Hz.</p> <p>Thermal impacts. 15 mW is the requirement Current model 13.8 mW Change to SS cone 16.14 mW These are worst case spectrometer mode. And not time averaged.</p> <p>On EQM results L1 temp is 4.65K for 24 mW at 2.4mg/sec.</p> <p>A more likely scenario is 50/50 or 60/40 phot/spec mode. Radiative loads need to be qualified,</p>

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Action			Title & Description
No	Responsibility	Due Date	
			<p>Vibration test Z axis. first mode was 100Hz, this is less than expected. Full level sine completed, post test search 86.4 Hz. Test stopped. No changes to higher frequencies which suggests that main mounting feet have been damaged. Most likely the cone because that takes most of the load is in Z. After warm up. Full inspection at CSL showed no evidence of damages to the cone. Further investigation needed, possibly ultra sonic. The test was notched on response so there should be no damage to internal parts. Cone to M8 spigot is bolted and glued.</p>