CCLRC Rutherford Appleton Laboratory			PRODUCT ASSURANCE Space Science and Technology Department			
Spacecraft/Project	HERSCHEL	Document No	SPIRE-RAL RI	EP-00180	00	
Instrument/Model	SPIRE/CQM	Issue No	1	REV	0	
Subsystem	300mk Parts	Date	8 <sup>th</sup> Sept 2003			

# Report at receipt/delivery or other major movement of instrument/hardware and associated GSE.

Inspection Report	1117-717111111	Comprising of: LTS CQM2 311 Photometer Baffle, LTS CQM2 411 Spectrometer Baffle, 300mK bus bars / straps.
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FROM	ТО
Peter Hargrave	Eric Sawyer
University of Wales Cardiff	SPIRE SSTD RAL

Inspection conducted by		Witnessed by (Pr	oduct Assurance)
Name	Signature / Date	Name	Signature / Date
Peter Hargrave		Eric Clark	

pp Peter Hargrave.

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#### INTRODUCTION

This inspection report shall be completed for formal transfers of hardware between RAL and customers, agencies or collaborating organisations

The following must be inspected:

Documentation	SECTION	1
Containers		2
Visual Inspection of Hardware		3
Interface Verification		4

Each section contains a checklist that shall be completed.

Unused boxes should have N/A entered.

Deviations e.g. items not delivered or incomplete documentation must be noted in the comments column.

For previously agreed deviations refer to the Delivery Review Board (DRB) minutes of meeting (MOM) or similar.

NCR's must be raised for other deviations, damage or defects noted.

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## **SECTION 1: DOCUMENTATION**

Documentation shall be checked for completeness, any items not received or to be delivered later should be noted.

**Note 1:** The delivery review board minutes should list outstanding items, e.g. open work, open NCRs and Waivers etc. A copy should accompany or form part of the EIDP. If there is no EIDP then it should be referenced on this report.

**Note 2:** All items dispatched from the Laboratory must have a Dispatch Note completed and signed, with a copy filed in the appropriate section of the EIDP.

No.	Procedure	Comments (Include NCR Number if applicable)	Check N/A or ✓
1.1	Is the documentation complete	None Supplied Documentation to follow	
1.2	Is the accompanying documentation compliant with project requirements	None supplied Documentation to follow	
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.		N/A
1.4	Additional Remarks	ITEMS ARE NOT ACCEPTED UNTIL DOCUMENTATION IS COMPLETE. HR-SP-UWC-NCR-001: Raised regarding cooler to Spectrometer Bus-bar incorrectly formed.	

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# **SECTION 2: INSPECTION OF CONTAINERS**

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
	Transport Containers – External condition.		
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	Delivered By Hand	N/A
2.2	Markings for description and destination		N/A
2.3	Packing / unpacking instructions		N/A
2.4	Warning labels relating to handling, lifting, stacking limits		N/A
2.5	Additional Remarks Check security of container		N/A
	Transport Containers – Internal condition		N/A
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection		N/A
2.7	Check mounting fixtures or brackets and screws, padding and packing.		N/A
2.8	Additional Remarks Check security of container		N/A

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# **SECTION 3: VISUAL INSPECTION OF HARDWARE**

Insert one copy of the following section for each configuration item, OR Individual unit.

**Note:** Section 3 when used with the front sheet may be used as a complete report for small units prior to final closure, if this is done confirm unit interior check carried out before closure. Interior check will be limited to visible items.

CI NUMBER	Light Baffles	SERIAL NUMBER	
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No.	Procedure	Remarks (Include any NCR Numbers if Applicable	Check N/A or ✓
3.1	Check contents against shipping list	None Supplied Documents to follow	
3.2	Note external contamination		✓
3.3	Inspect the outside for physical damage, cracks, dents, scratches		✓
3.4	Degradation of painting		N/A
3.5	Mounting provisions		N/A
3.6	Fasteners correctly locked		N/A
3.7	Check for protective covers on all electrical and fluid connectors and on optical and sensor apertures		N/A



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## **Check All Connectors**

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.8.1	Bent pins		N/A
3.8.2.	Internal / external damage		N/A
3.8.3	Internal debris		N/A
3.8.4	Connector covers fitted		N/A
3.8.5	Connector savers in position		N/A
3.8.6	EMC Covers Fitted		N/A
3.8.7	RED tag items/covers fitted		N/A
3.8.8	Any other damage		N/A



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### Check any harness and associated connectors associated with the Hardware

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.9.1	Bent pins		N/A
3.9.2	Internal / external damage		N/A
3.9.3	Internal debris		N/A
3.9.4	Protection caps fitted		N/A
3.9.5	Connector Savers fitted		N/A
3.9.6	EMC Covers Fitted		N/A
3.9.7	RED tag items/covers fitted		N/A
3.9.8	Any other damage		N/A



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### **Pre Closure Checks**

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
3.10.1	All internal units securely fastened locked		N/A
3.10.2	All internal connector fasteners locked		N/A
3.10.3	All cabling secure		N/A
3.10.4	No internal debris		N/A
3.10.5	Check packaging is correct		N/A
3.10.6	Shock recorders reset		N/A
3.9.7	Additional remarks		N/A

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## **SECTION 4: VERIFICATION OF INTERFACES**

Confirm all required interface-checking activities have been carried out.

- **4.1 Mechanical interface** dimensions specified in the interface control documents such as mass, flatness of surfaces, location of fixing holes and overall dimensions should be measured accurately and recorded. **Record Test Report Number**, or confirm that measurement result is included in delivery documentation, (EIDP).
- **4.2 Electrical interfaces:** verifying the location and types of connectors against interface control document is normally carried as part of mechanical verification, confirm this has been done.

  Functional testing: final functional test report number should be noted.

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
4.1	Mechanical Interfaces Verification		N/A
4.2	Electrical Interfaces Verification		N/A