



**MET Laboratories, Inc.** *Safety Certification - EMI - Telecom Environmental Simulation*  
3162 BELICK STREET • SANTA CLARA, CA 95054 • PHONE (408) 748-3585 • FAX (510) 489-6372

July 15, 2008

MET Laboratories, Inc.  
TCB Reviewer  
914 West Patapsco Ave,  
Baltimore, MD 21230

RE: RT Response 80673 Ubiquiti Networks, IC: 6545A-SR71

Dear Chris,

Please see our response below:

1. Please provide a label exhibit for the IC application that contains the IC Certification number.  
[Revised. Please see label exhibit.](#)
2. Please provide an RSS-102 Declaration exhibit.  
[Please RSS\\_102 Form.pdf](#)
3. Please provide a Modular Approval letter addressing the RSS-GEN requirements for IC Modular approval.  
[Please see Modular Approval RSS-GEN exhibit.](#)
4. The most recently submitted SR71 Guide document (attached) indicates a 2x2 MIMO operation using the Parabolic and Dish antennas. There is no test documentation for this 2x2 MIMO operation, and the only MIMO operations are for use with the 5dBi antennas. Please update the Guide document to remove the 2x2 MIMO and indicate the single chain operations as documented in the test report.  
[Please see revised manual.](#)



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5. The Appendix II is not clear in the combinations of the following items for the Grant. Please confirm the entries already and complete the following table:

Completed, see below.

Mode	Frequency range - (MHz)	Occupied Bandwidth - 99%	RF Power - Watts
802.11b	2412 - 2462	11.0MHz	0.238W
802.11g	2412 - 2462	16.2MHz	0.156W
802.11a	5745 - 5825	16.6MHz	0.298W
802.11n (HT20)	2422 - 2452	17.5MHz	0.275W
802.11n (HT40)	2437 - 2437	36.3MHz	0.275W

If you need any additional information, please let us know.

Thank you,

Shawn McMillen  
Wireless Manager  
MET Laboratories, Inc.  
410-949-1914  
[smcmillen@metlabs.com](mailto:smcmillen@metlabs.com)

## Jennifer Sanchez

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**From:** Jennifer Sanchez  
**Sent:** Tuesday, July 08, 2008 4:15 PM  
**To:** Chris Harvey  
**Cc:** Angela Kekovski; Jenn Warnell; Jennifer Sanchez  
**Subject:** RE: Additional Information needed FCC ID: SWX-SR71, MT#80673  
**Importance:** High  
**Attachments:** SR71\_guide\_updated.pdf

Hi Chris,

Please find attached the revised Marketing Literature. If you need any additional information, please let me know.

Thanks~  
JSan

J. Sanchez  
408-207-4785  
MET Laboratories, Santa Clara CA

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## Request for Additional Information for EMC Certification

Company:	<a href="#">Ubiquiti Networks</a>	Composite Device:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
MT#:	80673	FCC Direct Filing:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
		Permit But Ask:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
FCC ID:	<a href="#">SWX-SR71</a>	FCC Rule Part:	<a href="#">15.247</a>	
UPN:	<a href="#">6545A-SR71</a>	RSS Standard:	<a href="#">RSS-210</a>	
FRN:	<a href="#">0012268215</a>	Class II PC/Reassessment:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>

June 30, 2008

Dear Robert,

Thank you for your application. In order for us to process your approval, the following must be addressed. Please provide a response in a timely manner to avoid delays or dismissals.

### **Technical Review:**

Please note that the response to question number 2 (see below) is not technically correct. The Marketing Literature exhibit shows HT20 mode but not HT40 mode. Please re-address that question.

*2. The marketing Literature exhibit (Technical Specifications) indicates that this device operates in 802.11n (HT20) mode, but there seems to be a 40MHz channel bandwidth (36MHz wide occupied bandwidth). Please update the Marketing Literature exhibit accordingly (Technical Specifications).*

If you have any questions or concerns, please contact us.

Thank you!

Jennifer Sanchez  
TCB Administrator  
MET Laboratories, Inc.  
[tcbinfo@metlabs.com](mailto:tcbinfo@metlabs.com)  
[www.metlabs.com](http://www.metlabs.com)

Admin Review By: Jennifer Sanchez  
Technical Review By: Chris Harvey

*Please note that partial responses increase processing time and should not be submitted. The items indicated above must be provided before processing can continue on the above referenced application. Failure to provide the requested information in a timely manner may result in application dismissal.*



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June 23, 2008

MET Laboratories, Inc.  
TCB Reviewer: Chris Harvey  
914 West Patapsco Ave,  
Baltimore, MD 21230

RE: RT Response: 80673 Ubiquiti Networks, FCC ID: SWX-SR71

Dear Chris,

Please see our response below:

1. Modular Approvals should now reference FCC 51.212 and not DA00-1407, which has been superseded. Please update your Modular Approval request letter.

[Updated, please see revise Modular approval letter.](#)

2. The marketing Literature exhibit (Technical Specifications) indicates that this device operates in 802.11n (HT20) mode, but there seems to be a 40MHz channel bandwidth (36MHz wide occupied bandwidth). Please update the Marketing Literature exhibit accordingly (Technical Specifications).

[There is no mention of HT20 or HT40, but there is a mention of "802.11n" standard which incorporates both modes](#)

3. The 3 antenna connectors are for either 2.4GHz or 5.8GHz RF, but each antenna is only rated for one of the bands. How is this controlled? How is the professional Installer informed about which antennas are acceptable for each band/port?

[The antennas we sell are marketed for that particular band. The specifications will say an antenna if for a particular frequency band.](#)

4. The Test Report indicates that this device is restricted to professional installation. Please provide the guidance provided to the professional installers regarding RF Power, antenna selection and which RF Ports are used for each mode of operation and whether the use is restricted to point-to-point operation. Which chain was used for each test?

[Please refer to the revised manual.](#)



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5. The test report implies that only one RF port is used when the panel or Dish antennas are used, and the all 3 ports are used for MIMO operation with the 5dBi antenna. The block diagrams show that all 3 chains can be used for 2.4GHz and 5GHz operation. Please confirm whether this device can operate in MIMO mode using the single 40MHz channel (confirm a single channel at 2437MHz), or in the 5.8 GHz band.

[Only the 5dBi antenna is used for MIMO. MIMO is only for the 2.4GHz and the 40MHz channel is 2437MHz.](#)

6. This application does not indicate that the panel and dish antennas are used exclusively for Point-to-Point or point-to-multi-point operation. Please confirm and update accordingly.

[Please refer to the revised antenna info.](#)

7. The antenna specification exhibit should specify the exact bands of operation for each antenna. Please update accordingly.

[Please refer to the revised antenna info.](#)

8. The Modular Approval letter states that OEM's will obtain their own FCC ID number. Please clarify if there will be a label with the FCC ID: SWX-SR71 on the outside of the OEM device, and if so, please provide the guidance to the OEM. If the OEM's will always obtain their own FCC ID number, please provide the guidance to the OEM to indicate so.

[Please refer to the revised manual.](#)

9. The MPE calculation does not take into account the MIMO operation using the multiple (5dBi) antennas. Please update.

[The separation of the MIMO antennas is >20cm](#)

10. The RF Test report Power measurement states that a Power Meter is used, but the diagram shows a Spectrum Analyzer. Please correct to be consistent.

[Corrected. Please see revised report.](#)

If you need any additional information, please let us know.

Thank you,

Shawn McMillen  
Wireless Manager  
MET Laboratories, Inc.  
410-949-1914  
[smcmillen@metlabs.com](mailto:smcmillen@metlabs.com)