TRANZEO
EMC LABS INC

EMC Test Report

TR-Multi Series

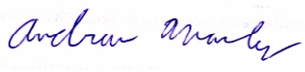
2.4 and 5 GHz Wireless Network Adapter

Tranzeo Wireless Technologies Inc.

Date: 29 June, 2006

Report No.: 200406.1

Labs: 19473 Fraser Way, Pitt Meadows, BC, Canada V3Y 2V4



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Revision History

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1.0 General Information

1.1 EUT Description

Product Name	Customer Premise Equipment
Company Name	Tranzeo Wireless Technologies Inc.
FCC ID	QRF-2458AG621
Model No.	TR-Multi-N, TR-Multi-2
Frequency Range	2400-2483.5 MHz, 5250-5850 MHz
Number of Channels	20
Transmit Rate	54 Mbps maximum bit rate specification
Type of Modulation	DSSS and OFDM
Antenna Type	Integrated and external
Antenna Gain	2400-2483.5 24 dBi MAX; 5250-5350 20 dBi MAX; 5725-5850 32 dBi MAX
Product Software	Tranzeo build 2.10
Test Software	Bandwidth test software
Operator Channel Selection	By software
Power Adapter	Tranzeo Wireless Supplied SP48-181000
	Input: AC 120V 60Hz, 25.9 W
	Output: DC 18 V, 1000 mA
	Serial: 0504

Product sample tested:

Manufacturer	Model No.	Serial No.
Tranzeo Wireless	TR-Multi-2	TR-M2f-EUT1

Frequency of each channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1	2412	Channel 5	2432	Channel 9	2452
Channel 2	2417	Channel 6	2437	Channel 10	2457
Channel 3	2422	Channel 7	2442	Channel 11	2462
Channel 4	2427	Channel 8	2447		

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 56	5280	Channel 149	5745	Channel 161	5805
Channel 60	5300	Channel 153	5765	Channel 165	5825
Channel 64	5320	Channel 157	5785		

Two products, the TR-Multi-2 and the TR-Multi-N, are a product family. They are functionally identical except for the following:

- The TR-Multi-2 is fitted with a dual band patch antenna. The gain at 2.4 GHz is 15 dBi and at 5 GHz is 20 dBi.
- The TR-Multi-N is fitted with a standard type N antenna connector.

These products include the functionality of two previously approved product families: The TR-6000 and the TR-AP5A. In particular, only the software of the TR-Multi-N has changed to allow for operation in both the 2.4 and 5 GHz bands.

The TR-Multi-N is electrically identical to both the TR-6000-N and the TR-AP5A-N, which have already been certified for operation under the FCC IDs QRF-TR-6000 and QRF-TR-AP5A-N.

Because of this, no new test data for the TR-Multi-N is supplied as it will only be sold for use with the antennas with which the hardware has already been approved, as mentioned above.

The TR-Multi-2 uses a new dual-band patch antenna. The spurious emissions data provided demonstrates that the unit complies with FCC emissions limits. This data, combined with that already filed under the FCC IDs listed above, comprises the current application for certification.

As an IEEE 802.11a/b compliant wireless bridge, this device includes a 2.4 and 5 GHz receive function as well as a 2.4 and 5 GHz digital modulation transmit function. The unit is fitted with an integrated antenna. There are no user serviceable parts inside the unit. It is factory sealed in a one-time use manner and inaccessible to the end user.

The tests were performed on production sample models to demonstrate compliance with FCC Part 15, Subpart B and Subpart C, as well as Industry Canada RSS-210 Issue 6 for digitally modulated devices.

1.2 Operational Description

The TR-Multi Series is a wireless network bridge designed specifically for outdoor applications. The device provides a bridge between IEEE802.3 wired Ethernet LANs and IEEE802.11a/b compliant wireless networks. It uses an external antenna coupled with a 802.11a/b transceiver to connect to remote wireless clients. The transceiver operates in the frequency bands 2400-2483.5; 5250-5350 and 5725-5850 MHz. The device transmits digital network data. The unit is mounted externally in fixed point-to-point installations. It is mounted on the exterior of a building or typically for broadband internet access.

The type of RF modulation is DSSS and OFDM. The device can transmit data at a bit rate of 11/54 Mbps or a real-world data rate of approximately 4/27 Mbps. A 128 bits Wired Equivalent Protection (WEP) algorithm is used for secure communications. The device's standard compliance ensures that it can communicate with any 802.11a/b network.

The firmware used with the device prevents the use of channels outside the specified frequency bands.

The TR-Multi Series product is used exclusively in a professionally installed, fixed point-to-point environment.

1.3 EUT Testing Configuration

Extensive prescanning for individual tests was performed to determine the worst case configuration. Data is presented for worst case measurements only.

The EUT was mounted to a custom non-metallic stand to ease polarization changes and to best represent a typical user installation. The EUT was connected to the host PC so that it could be cycled through the various test modes and channels. For the type N connector unit, the antenna was connected to the EUT via 1 m of coaxial shielded cable. The second Ethernet port was populated with 1 m of cable.

The EUT was tested in the following modes:

- **Standby/Receive mode:** In this mode the EUT beacons at the lowest possible rate while searching for a client with which to establish communication.
- **Data transfer mode:** In this mode the EUT is exercised with commercially available bandwidth test software. A link is established between two PCs through the unit and an access point and a transmit rate of 4 Mbps is specified reflecting the worst case data rate of the unit.

1.4 EUT Modifications

No modifications were necessary for this unit to comply with FCC Part 15 and Industry Canada RSS-210 Issue 6.

1.5 Test Facilities

Tranzeo EMC Labs
19473 Fraser Way, Pitt Meadows, BC V3Y 2V4, Canada

Phone: (604) 460-6002
Fax: (604) 460-6005

FCC registration number: 960532
Industry Canada Number: 5238A

1.6 Test Equipment

Manufacturer	Model	Description	Serial No.	Cal Due Date
Sunol Sciences	SM46C	Turntable	051204-2	N/R
Sunol Sciences	Custom	Mast Motor	TREML0001	N/R
Sunol Sciences	JB3	Antenna	A042004	02-Jun-2007
Sunol Sciences	DRH-118	Antenna	A052804	02-Jun-2007
Com-Power	LI-115	LISN	241037	30-Jan-2007
Rohde & Schwarz	FSP40	Spectrum Analyzer	100184	24-Aug-2006
Rohde & Schwarz	NRP	Power Meter	100055	02-Aug-2006
Rohde & Schwarz	ESCI	EMI Receiver	100123	02-Jun-2007

1.7 Test System Details

The following auxiliary equipment and cables were used for performing the tests:

Manufacturer	Model	Description	Serial No.
Soyo	PW-930S	Laptop PC	6188
Pheenet	SW-05P	5 port switch	C0104260954
Tranzeo	POE-1	DC injection unit	n/a

Signal Cable Type	Signal Cable Description	Length
Cat 5 LAN	EUT to DC injection unit	50 m
Cat 5 LAN	DC Block to Ethernet switch	2 m
Cat 5 LAN	Populate 2nd Ethernet port	1 m

1.8 Test Results

The EUT complies with FCC Part 15, Subparts B and C, as well as with Industry Canada RSS-210 Issue 6.

2.0 Radiated Emissions, General Requirements

2.1 Test Standard

FCC Part 15, Subpart C, Section 15.209, Radiated Emission Limits, General Requirements.

| *(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:*

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

*** Except as provided in Paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., Sections 15.231 and 15.241.*

(b) In the emission table above, the tighter limit applies at the band edges.

(c) The level of any unwanted emissions from an intentional radiator operating under these general provisions shall not exceed the level of the fundamental emission. For intentional radiators which operate under the provisions of other sections within this part and which are required to reduce their unwanted emissions to the limits specified in this table, the limits in this table are based on the frequency of the unwanted emission and not the fundamental frequency. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.

(d) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. |

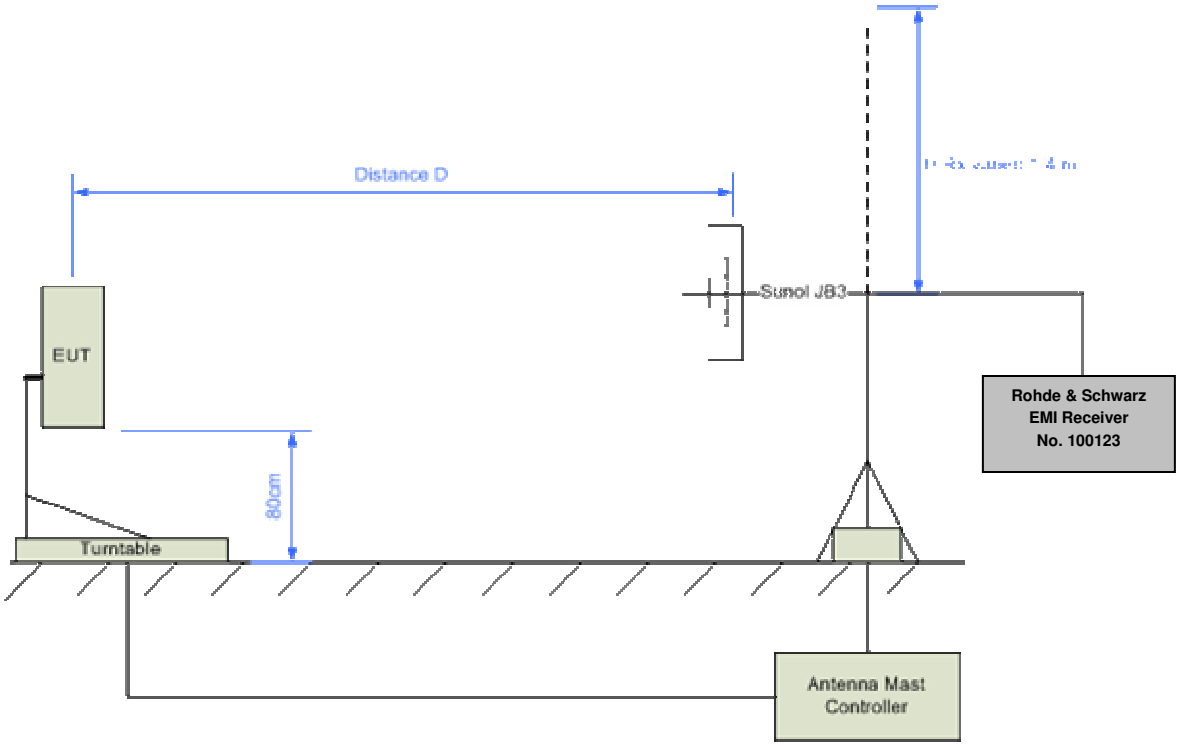
2.2 Test Limits

Frequency (MHz)	Maximum Field Strength (uV/m @ 3M)	Maximum Field Strength (dBuV/m @ 3m)
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
960-1000	500	54.0

2.3 Test Setup

The unit was tested in both horizontal and vertical orientations. The EUT was exercised with bandwidth test software at a rate of 4 Mbps reflecting the worst case data-rate. Testing was performed on low, middle, and high channels in all frequency bands. The second Ethernet port was populated with 1 m of cable. Only worst case data is shown below.

2.3.1 Test Setup Block Diagram



Note: Measurements below 1 GHz were performed with the Sunol JB3 antenna with a measurement distance of 3 m. Compliance above 1 Ghz is covered in Section 3.0.

2.4 Test Results

Frequency (Mhz)	Meter (dBuV)	Limit (dBuV)	Margin (dB)	Type	Polariza-tion	Result
30.64	32.25	40.0	-7.75	QP	V	PASS
34.08	29.78	40.0	-10.22	QP	V	PASS
34.64	33.65	40.0	-6.35	QP	V	PASS
35.32	32.10	40.0	-7.9	QP	V	PASS
62.76	21.94	40.0	-18.06	QP	V	PASS
63.64	19.73	40.0	-20.27	QP	V	PASS
70.76	23.21	40.0	-16.79	QP	V	PASS
137.24	25.31	43.5	-18.19	QP	V	PASS
225	28.44	46.0	-17.56	QP	V	PASS
248	19.05	46.0	-26.95	QP	H	PASS
248	31.47	46.0	-14.53	QP	V	PASS
250	18.98	46.0	-27.02	QP	H	PASS
250	32.11	46.0	-13.89	QP	V	PASS
372	24.35	46.0	-21.65	QP	H	PASS
372	38.11	46.0	-7.89	QP	V	PASS
375	32.37	46.0	-13.63	QP	V	PASS
496	24.32	46.0	-21.68	QP	H	PASS
525	33.17	46.0	-12.83	QP	V	PASS
558	26.52	46.0	-19.48	QP	V	PASS
625.04	26.81	46.0	-19.19	QP	V	PASS
675	26.02	46.0	-19.98	QP	V	PASS
744.04	29.07	46.0	-16.93	QP	H	PASS
744.04	37.54	46.0	-8.46	QP	V	PASS
750	37.61	46.0	-8.39	QP	V	PASS
800.04	29.52	46.0	-16.48	QP	H	PASS
800.04	35.27	46.0	-10.73	QP	V	PASS

Note: All data points are corrected for insertion loss.

3.0 Field Strength of Spurious Emissions

3.1 Test Standard

FCC CFR 47, Part 15, Subpart B 15.247d.

| *(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).* |

FCC CFR 47, Part 15, Subpart E 15.407b

| *(b) Undesireable Emission limits: Except as shown in Paragraph (b)(6) of this section, the peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:*

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of –27 dBm/MHz in the 5.15-5.25 band. |

3.2 Test Limits

5.725-5.850 GHz limits:

- Fundamental limit = 137 dBuV
- Harmonics and Spurious Emissions = 20 dBc
- Restricted Band Emissions = AVG 54 dBuV, PK 74dBuV

5.250-5.350 GHz limits:

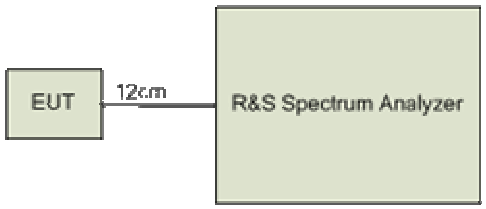
- All emissions outside of the 5.25-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- Restricted Band Emissions = AVG 54 dBuV, PK 74dBuV

3.3 Test Setup – Spurious Emissions

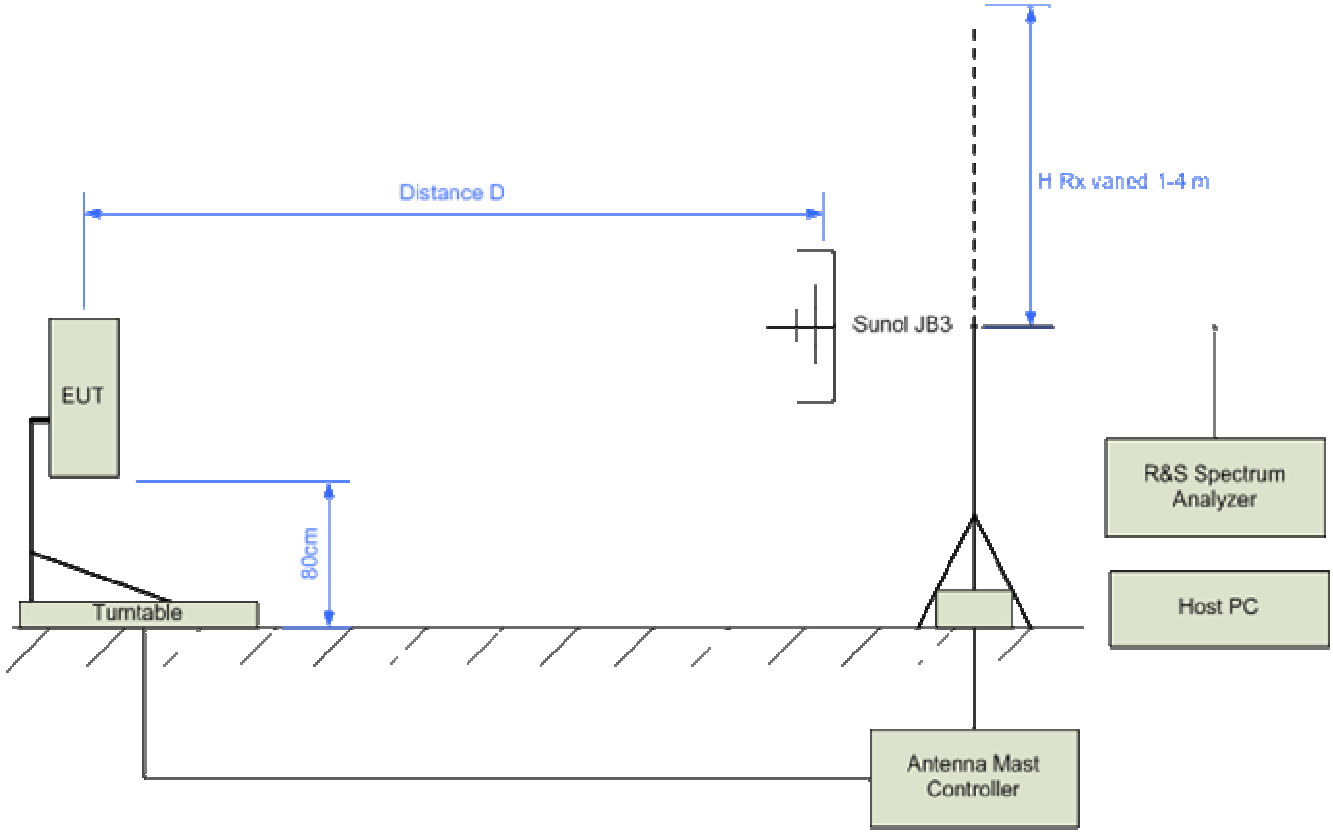
This test was performed with a modified unit. The antenna was removed and the intentional transmitter fitted with a modified production cable. The only modification to the cable was the addition of an appropriate connector that allows a direct connection to measurement equipment. The output of the EUT was connected directly to the spectrum analyzer. The unit was exercised with bandwidth test software at a rate of 4 MBps reflecting the maximum possible transmit rate. The device was tested while transmitting at low, middle and high channels in each individual frequency band, i.e., 3 channels at 2400-2483.5, 3 channels at 5250-5350 and 3 channels at 5725-5850.

In addition to conducted measurements, extensive radiated pre-testing above 2 GHz was performed. The measurement antenna was scanned around all sides of the EUT to identify signals of interest. Additional measurements at an appropriate measurement distance were performed to ensure that emissions were at maximum.

3.3.1 Test Setup Block Diagram – Conducted Measurements (Harmonics)

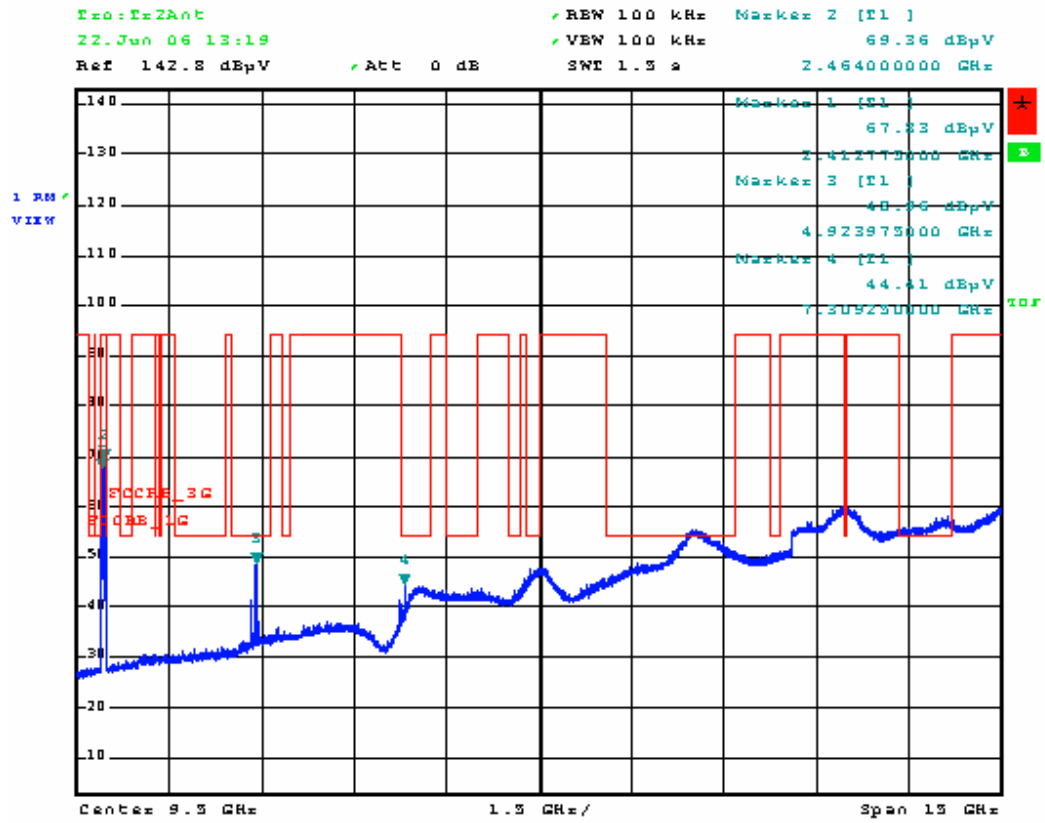


3.3.2 Test Setup Block Diagram – Radiated Measurements (Spurious)



3.4 Test Results

3.4.1 Test Results



Spurious and Harmonics 2412 2437 2462 VHF3800+ H V

Date: 22.JUN.2006 13:19:00

The plot above shows the worst case radiated output of the transmitter (all channels). All harmonics are at least -20 dBc.

3.4.2 Test Results 15.247 (Spurious Emissions)

The device was tested while transmitting at low, middle and high channels in each individual frequency band, i.e., 3 channels at 2400-2483.5, 3 channels at 5250-5350 and 3 channels at 5725-5850. The following data was taken from frequencies identified during radiated pre-testing at 1 m and across all frequency bands. The data was taken at a measurement distance of 3 m. Data from the worst case configuration, with the transmitter operating at 2462 MHz, is shown below.

Frequency (Mhz)	Meter (dBuV)	Limit (dBuV)	Margin (dB)	Type	Result
4923.975	64.8	74.0	-9.2	Peak	PASS
4923.975	51.6	54.0	-2.4	Ave	PASS
7309.250	72.4	74.0	-1.6	Peak	PASS
7309.250	53.6	54.0	-0.4	Ave	PASS

No other emissions were detected within 20 dB of the limit.

4.0 Peak Power Output Verification

4.1 Test Standard

In order to file a change in FCCID plus Class 2 permissive change, the output power of the EUT must be within 0.5 dB of that listed on the previous grant of equipment authorization.

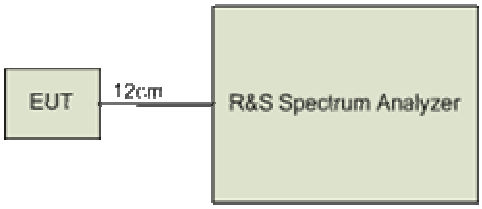
4.2 Test Limits

The output power of the EUT must be within 0.5 dB of that listed on the grant of equipment authorization for QRF-TR-6000-N and QRF-TR-AP5A-N.

4.3 Test Setup

This test was performed with a modified unit. The antenna was removed and the intentional transmitter fitted with a modified production cable. The only modification to the cable was the addition of an appropriate connector that allowed a direct connection to measurement equipment. The output of the EUT was connected directly to the spectrum analyzer through an attenuator. Measurements were made using the channel power measurement function of the spectrum analyzer.

4.3.1 Test Setup Block Diagram



4.4 Test Results

4.4.1 Maximum Conducted Output Power

Channel	Frequency (MHz)	Level (dBm)	Limit (dBm)	Result
1	2412.00	22.06	30.00	Pass
6	2437.00	22.41	30.00	Pass
11	2462.00	22.38	30.00	Pass
56	5280.00	16.10	24.00	Pass
60	5300.00	17.10	24.00	Pass
64	5320.00	15.30	24.00	Pass
149	5745.00	15.80	30.00	Pass
157	5785.00	16.10	30.00	Pass
165	5825.00	16.50	30.00	Pass

Previous Certification Comparasion: Maximum power in each band

Frequency Band	EUT (dBm)	Previous (dBm)	Delta (dB)	Result
2400-2483.5	22.41	22.31	0.10	PASS
5250-5350	17.10	16.81	0.29	PASS
5725-5850	16.50	16.89	-0.39	PASS

5.0 Band Edge

5.1 Test Standard

FCC CFR 47, Part 15, Subpart B 15.247d
| (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). |

FCC CFR 47, Part 15, Subpart E 15.407b
| (b) Undesireable Emission limits: Except as shown in Paragraph (b)(6) of this section, the peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 band.

(7) The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. |

5.2 Test Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 band.

(7) The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. |

5.3 Test Setup

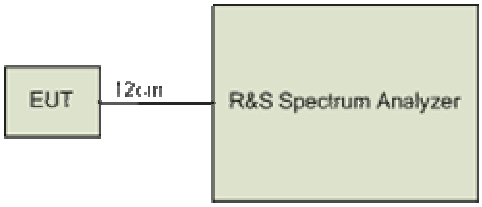
This test was performed using both radiated and conducted measurements. Radiated measurements were performed in both horizontal and vertical polarizations with the emission maximized.

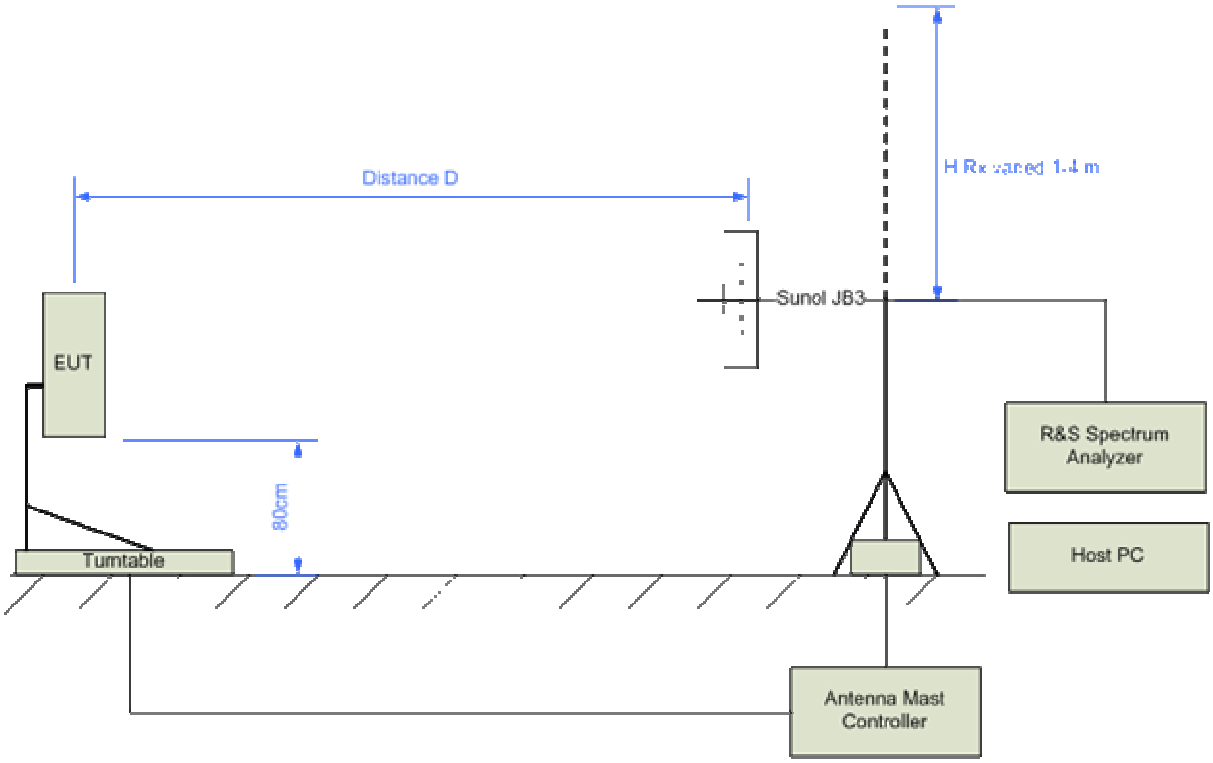
Conducted measurements were performed with a modified unit. The antenna was removed and the intentional transmitter fitted with a modified production cable. The only modification to the cable was the addition of an appropriate connector that allowed a direct connection to the measurement equipment. The output of the EUT was connected directly to the spectrum analyzer through an attenuator.

For the 15.407 requirements, a worst case antenna gain factor was added to the conducted measurement.

This test was performed on low, middle, and high channels in the 2400-2483.5, 5250-5350 and 5725-5850 MHz frequency bands..

5.3.1 Test Setup Block Diagram

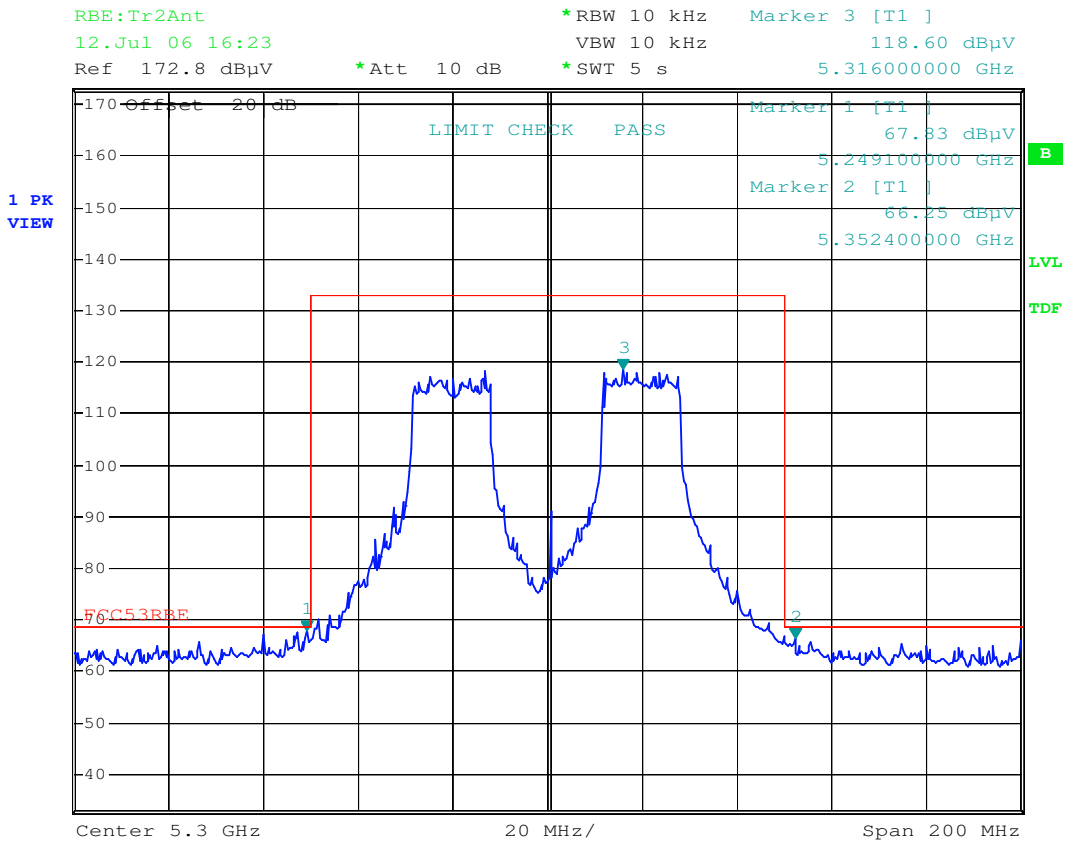




Note: Measurements below 3 GHz were performed with the Sunol JB3 antenna. Measurements above 3 GHz were performed with the Suno DRH-118 antenna.

5.4 Test Results

5.4.1 Test Results 15.407



Please note that in the above plot the EUT is transmitting on only one frequency at a time.

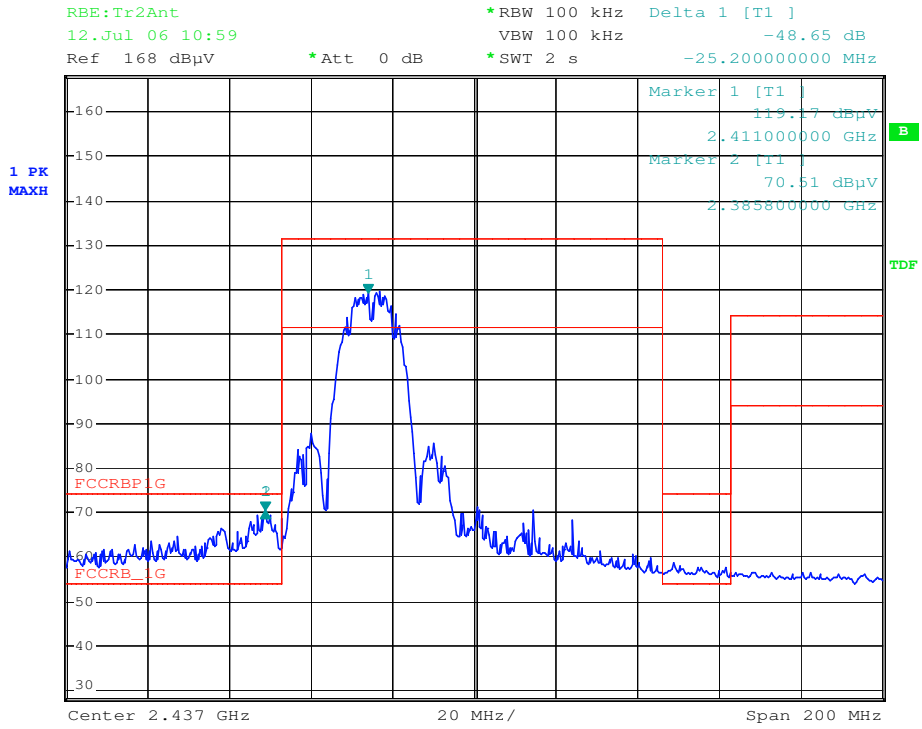
Frequency	Corrected Reading (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)	Result
5249.1	-27.37	-27	-0.37	PASS
5363.60	-28.95	-27	-1.95	PASS

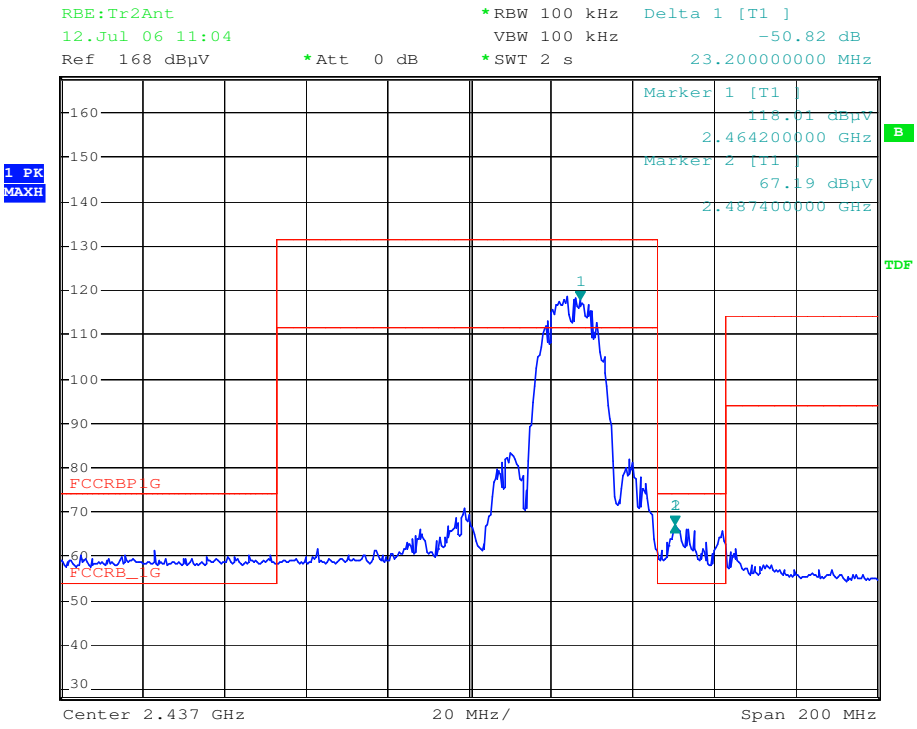
Note: Data in the above table is corrected for insertion loss and RBW.

5.4.2 Test Results 15.247

2400-2483.5 MHz Band

This measurement is performed using the peak-delta method. The delta is measured using bandwidth settings of RBW, VBW = 100 KHz. This delta is then subtracted from the peak radiated power which is measured using settings of RBW, VBW = 1 MHz.





Test result, Channel 1

Hi Reading (dBuV)	Lo Reading (dBuV)	Delta (dB)	Peak Rdg RBW,VBW = 1 MHz (dBuV)	Low Rdg RBW,VBW = 1MHz (dBuV)	Limit (dBuV)	Margin	Result
119.7	70.51	-49.19	122.84	73.65	74.0	0.35	PASS

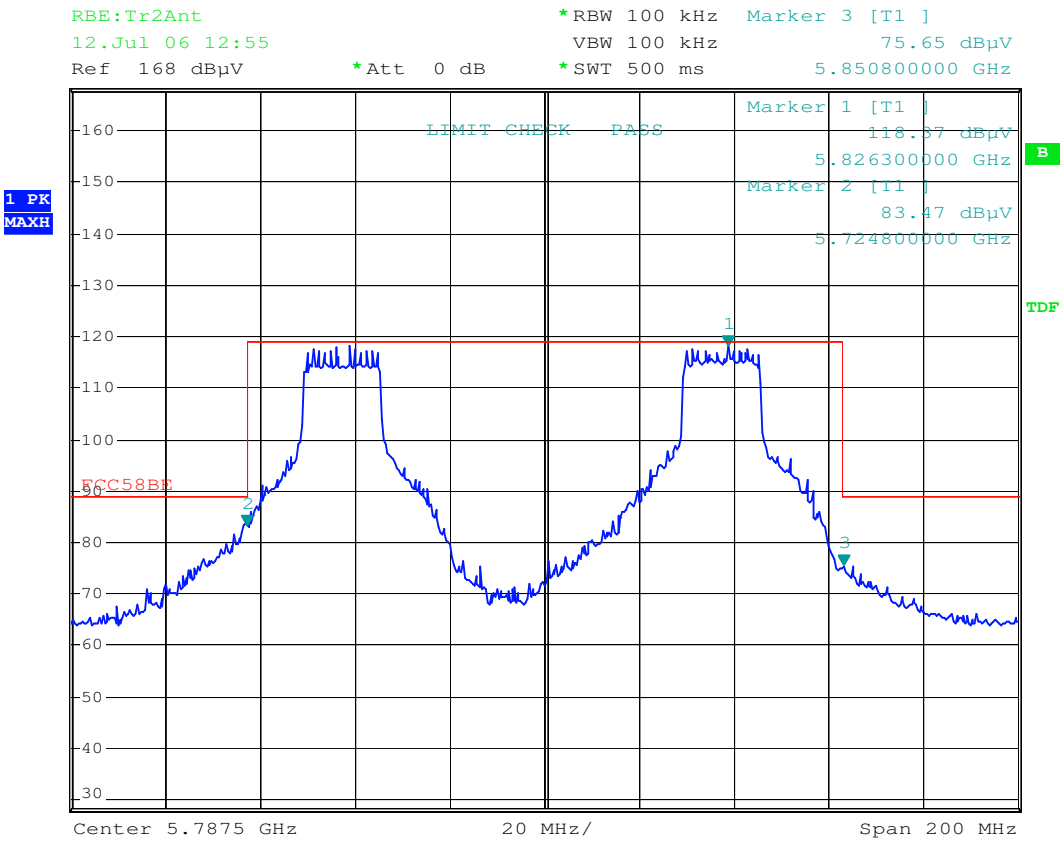
Average Value (dBuV)	Limit (dBuV)	Margin	Result
36.76	54.0	-17.24	PASS

Test result, Channel 11

Hi Reading (dBuV)	Lo Reading (dBuV)	Delta (dB)	Peak Rdg RBW,VBW = 1 MHz (dBuV)	Low Rdg RBW,VBW = 1MHz (dBuV)	Limit (dBuV)	Margin	Result
118.01	67.19	50.82	122.02	71.2	74.0	-2.8	PASS

Average Value (dBuV)	Limit (dBuV)	Margin	Result
34.31	54.0	-19.69	PASS

5725-5850 MHz Band



Please note that in the above plot the EUT is transmitting on only one frequency at a time.

Chan	Hi Reading (dBuV)	Low Reading (dBuV)	Delta	Limit (dBc)	Margin (dB)	Result
149	118.37	83.47	-34.90	-30	-4.90	PASS
165	118.37	75.65	-42.72	-30	-12.72	PASS

6.0 RF Exposure Evaluation

FCC 1.1310 states that the criteria listed in the table below shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Section 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of Section 2.1093 of this chapter. Further information on evaluating compliance with these limits can be found in the FCC's OST/OET Bulletin Number 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation".

Frequency Range (MHZ)	Electric Field Strength (V/m)	Magnetic Field Strength (A/M)	Power Density (mW/cm^2)	Averaging Time (min)
(A) Limits for Occupational/Controlled Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/Uncontrolled Exposures				
300-1500	--	--	F/1500	30
1500-100,000	--	--	1	30

6.1 EUT Operating Condition

Maximum EIRP is obtained with the 2.4 GHz 24 dBi grid and the 5.8 Ghz 32 dBi dish antenna.

6.2 RF Exposure Evaluation Distance Calculation

EUT with 32 dBi antenna

Chan	Freq (MHz)	Output Power to Antenna (dBm)	Output Power to Antenna (mW)	Antenna Gain (dBi)	r (cm)
1	2412	22.31	170	24	58.3
6	2437	21.52	142	24	53.3
11	2462	21.16	131	24	51.2
149	5745	15.65	37	32	50.978
157	5785	16.61	46	32	56.935
11	5825	16.89	49	32	58.800

As shown above, the minimum distance where the MPE limit was reached was 59 cm for the EUT.

7.0 Test Photos

Radiated Emissions Test Setup