EMC Technologies (NZ) Ltd
47 MacKelvie St
Grey Lynn, Auckland 1021
PO Box 68-307
Newton, Auckland 1145
Phone 09 360 0862
Fax 09 360 0861
E-Mail Address: aucklab@ihug.co.nz
Web Site: www.emctech.com.au

TEST REPORT

ELPRO 905U-LT and 905U-LR
900 MHz Telemetry Radio

tested to

47 Code of Federal Regulations

Part 15 - Radio Frequency Devices

Subpart C – Intentional Radiators

including

Section 15.247 - Operation in the band 902-928 MHz

for

ELPRO Technologies Pty Ltd

This Test Report is issued with the authority of:

Andrew Cutler - General Manager

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

Table of Contents

1. STATEMENT OF COMPLIANCE

The **ELPRO 905U-LT and 905U-LR 900 MHz Telemtery Radio** complies with FCC Part 15 Subpart C including Section 15.247 as an Intentional Radiator when the methods as described in ANSI C63.4 - 2003 are applied.

2. RESULTS SUMMARY

The results of testing, carried out between 24th October & 9th November 2011, are summarised below.

Clause	Parameter	Result
15.201	Equipment authorisation requirement	Certification required.
15.203	Antenna requirement	Complies. Antenna port is not unique but installation is required by a professional installer.
15.204	External PA and antenna modifications	Noted.
15.205	Restricted bands of operation	Complies.
15.207	Conducted limits	Not applicable
15.209	Radiated emission limits	Noted. See 15.247 requirements.
15.111	Antenna power conduction limits for receivers.	Complies
15.247		
(a)(1)	Hopping channel separation	Complies
(a)(1)(i)(iii)	Channel occupancy / Bandwidth	Complies
(b)(1)(2)	Peak output power	Complies
(b)(4)	Antenna gain less than 6 dBi	Complies
(d)	Out of band emissions	Complies
(g)	Use of all channels	Not applicable
(h)	Intelligent frequency hopping	Not applicable
(i)	Radio frequency hazards	Complies

3. INTRODUCTION

This report describes the tests and measurements performed for the purpose of determining compliance with the specification.

The client selected the test sample.

This report relates only to the sample tested.

This report contains no corrections or erasures.

Measurement uncertainties with statistical confidence intervals of 95% are shown below test results. Both Class A and Class B uncertainties have been accounted for, as well as influence uncertainties where appropriate.

This report replaces report number 111008.2b to correct the Radiation Hazard Safe Distance calculation and also to correct the spurious emission result tables with regard the FCC restricted bands and the applicable limits.

4. CLIENT INFORMATION

Company Name	ELPRO Technologies
Address	Unit 9/12 Billabong Street Strafford, Queensland 4053
Country	Australia
Contact	Mr Scott Bowman

5. DESCRIPTION OF TEST SYSTEM

Brand Name	ELPRO
Model	905U-LT and 905U-LR
Product	900 MHz Telemetry Radio
Manufacturer	ELPRO
Country of Origin	Australia
Serial Numbers	0811 1110849, 1011 112 0145, 1011 112 0144
FCC ID	O9P-905UL

The devices tested have the following RF specifications:

FCC Band:	902 to 928 MHz
Channel spacing:	250 kHz
Number of Channels:	50
Operating Frequency Bands:	902.625 MHz to 914.875 MHz 915.125 MHz to 927.375 MHz
Rated Power:	1000.0 mW (+30 dBm)
Antenna Type:	a) CC20 (20 Metre cable) and 6 element Yagi antenna giving a combined gain of 4.4 dBi b) cc10 (10 metre cable) and Collinear antenna giving a combined gain of 5.0 dBi
Power Supply:	9 Vdc to 30 Vdc
Equipment Class:	Class B digital device. Receiver Class 2 (function critical but not safety critical)
Modulation:	Binary FM
Clock Circuit speed:	16 MHz, 10 MHz, 30 kHz
Microprocessors:	Atmel ATMEGA32

Main Assembly:	Main Part # 905U-L
PCB Part #:	PCB-905LT Revision 1.4J PCB-905LR Revision 1.2E
Firmware:	905LT V1.12 905LR V1.11

An overview of the system is as follows:

The ELPRO 905 U-L is a small I/O count transmitter and receiver pair delivered pre-configured for ease of installation.

The transmitter unit, 905U-L-T has:

1) 2 digital inputs
2) 1 analogue input
3) 2 pulse inputs (same ports as digital input)
4) 1 thermocouple input
5) 1 RS-232 port for configuration and diagnostics

The receiver unit, 905U-L-R has:

1) 3 digital output relay outputs (250VAC 1A, 50 VDC 1A);(2500 V RMS isolated)
2) 1 analogue sourcing current output (0-20 mA; 12 bit resolution, accuracy 0.1%
3) 1 RS232 port for configuration and diagnostics.

6. RESULTS

Standard

The sample was tested in accordance with 47 CFR Part 15 Subpart C.

Methods and Procedures

The measurement methods and procedures as described in ANSI C63.4 - 2003 were used.

Section 15.111: Antenna power conduction limits for receivers

Result: Complies.

Section 15.201: Equipment authorisation requirement

Certification as detailed in Subpart J of Part 2 is required for this device.

Section 15.203: Antenna requirement

The sample tested has a standard SMA antenna connector. The user manual will state "End user products that have this device embedded must be installed by experienced radio and antenna personnel, or supplied with non standard antenna connectors and antennas available from vendors specified by ELPRO"

The following antenna combinations are supplied which were tested with this transmitter
- CC20 (20 metre cable) with 6 element Yagi antenna giving a combined gain of 4 dBi
- CC10 (10 metre cable) with Collinear antenna giving a combined gain of 5 dBi

Result: Complies.

Section 15.204: External radio frequency power amplifiers and antenna modifications

It is explicitly noted in the installation manual this radio must be carried out by trained personnel only and must be carried out in accordance with the instructions listed in the installation guide and applicable regulatory codes.

Result: Complies.

Section 15.205: Restricted bands of operation

Refer to measurements made with reference to Section 15.247 (d).

Result: Complies.

Section 15.207 – Conducted emissions

Testing has been carried out using a representative 110 Vac to 24 Vdc power supply when operating in transmit and receive modes.

Testing was carried out over the frequency range of 150 kHz to 30 MHz at the Laboratory's MacKelvie Street premises in a 2.4 m x 2.4 m x 2.4 m screened room.

Testing was carried out in accordance with section 15.207 using a measuring receiver and a 50 uH / 50 ohm artificial mains network which is also known as a line impedance stabilisation network (LISN).

Measurements on both the phase and neutral lines were made using either a Quasi Peak or an Average detector with a 9 kHz bandwidth.

The supplied conducted emission plot is a combined plot showing the worst case of the Peak, Quasi Peak and Average levels for both phase and neutral.

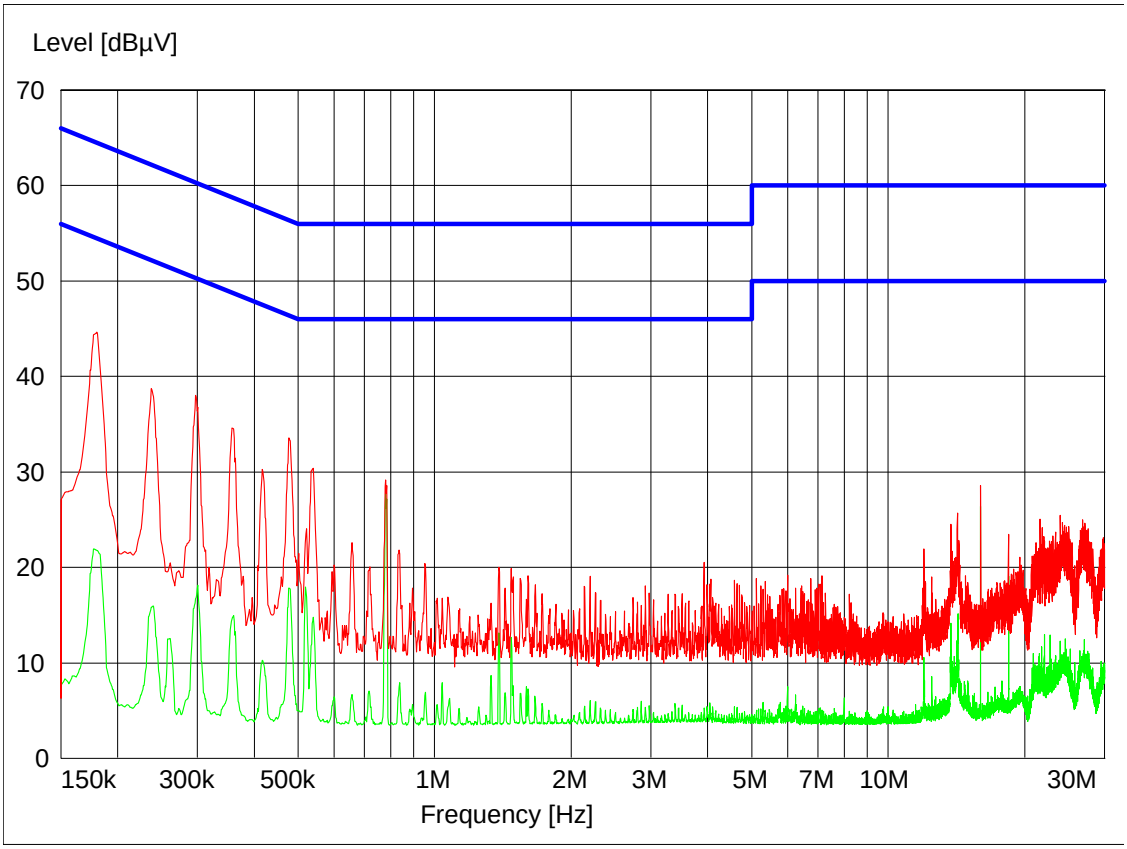
The class B limits have been applied.

Result: Complies.
Measurement uncertainty with a confidence interval of 95% is:
- Mains terminal tests (0.15 - 30 MHz) ± 2.2 dB

Conducted Emissions – AC Input Power Port

Setup:	Receiver tested when receiving continuously between 902-928 MHz when powered by a 110 Vac DC adapter.

Peak ---	Average --	Quasi Peak X	Average +



Final Quasi-Peak Measurements

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Phase	Rechecks dBµV
	No emissions within 15 dB of the limit.				

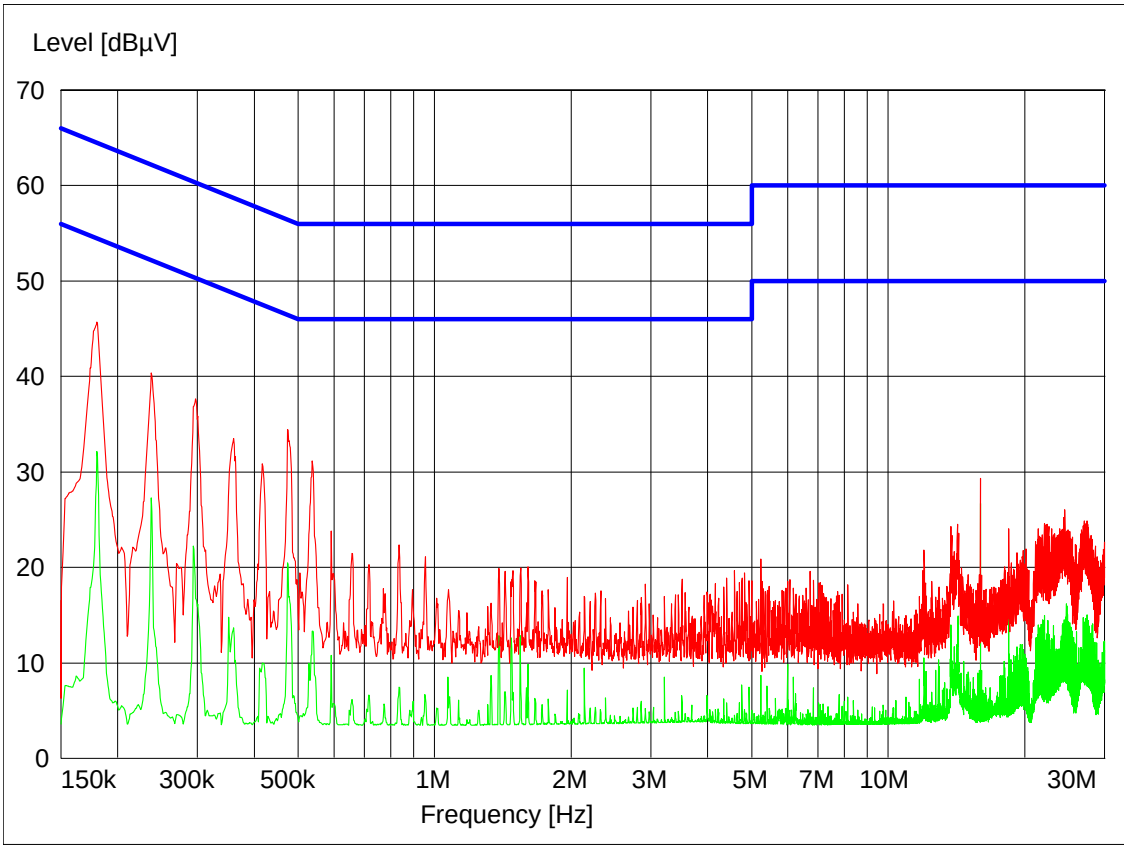
Final Average Measurements

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Phase	Rechecks dBµV
	No emissions within 15 dB of the limit.				

Conducted Emissions – AC Input Power Port

Setup:	Transmitter tested when transmitting continuously in hop mode between 902-928 MHz when powered by a 110 Vac DC adapter.

Peak ---	Average --	Quasi Peak X	Average +



Final Quasi-Peak Measurements

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Phase	Rechecks dBµV
	No emissions within 15 dB of the limit.				

Final Average Measurements

Frequency MHz	Level dBµV	Limit dBµV	Margin dB	Phase	Rechecks dBµV
	No emissions within 15 dB of the limit.				

Section 15.247(a)(1)(i) - Channel occupancy / bandwidth

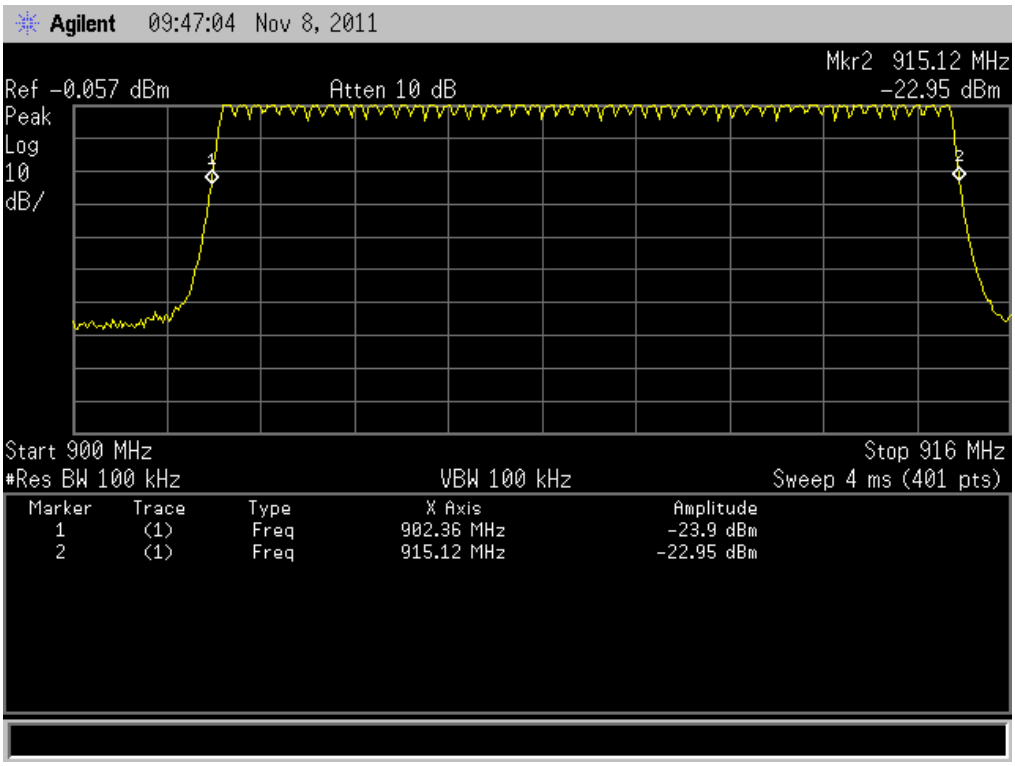
The results are summarised as follows:

Parameter	Limit	Observation	Result
Number of channels	50 channels or more	50 channels	Pass
20 dB bandwidth	Less than 250kHz	247.5 kHz worst case observed	Pass
Dwell time	Not to exceed 400 ms in any 20 second period	81.0 ms	Pass

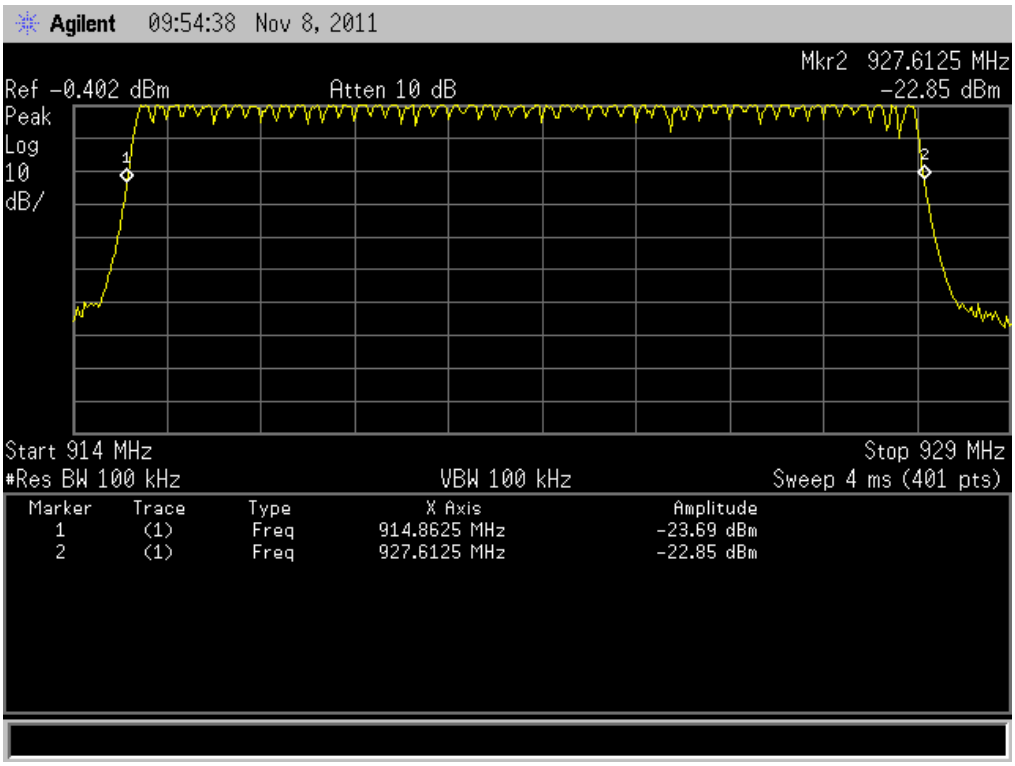
This device operates using Frequency Hopping Spread Spectrum techniques.

50 Channels were observed.

902 - 915 MHz

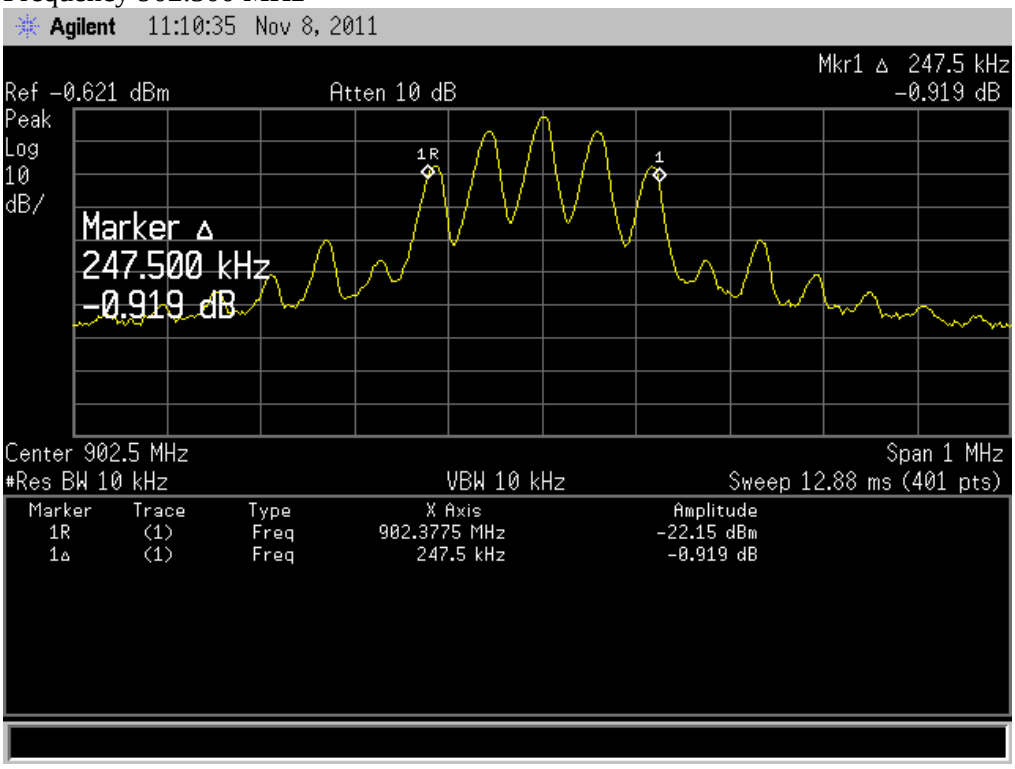


915 - 928 MHz

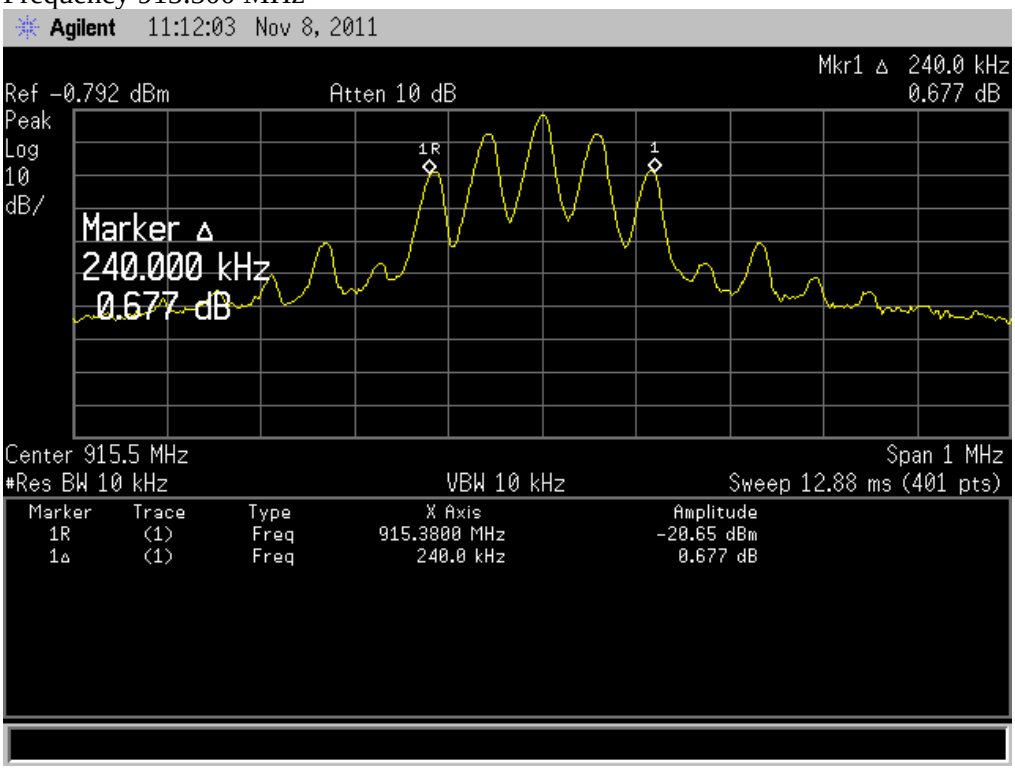


The -20 dB bandwidth has been determined below

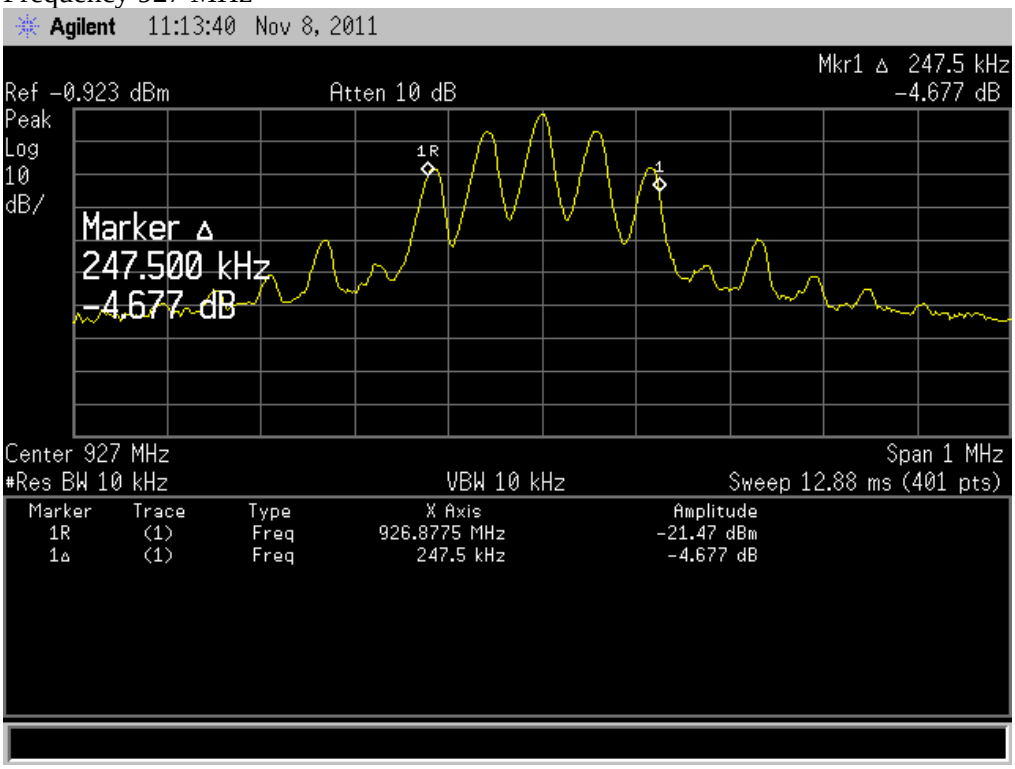
Frequency 902.500 MHz



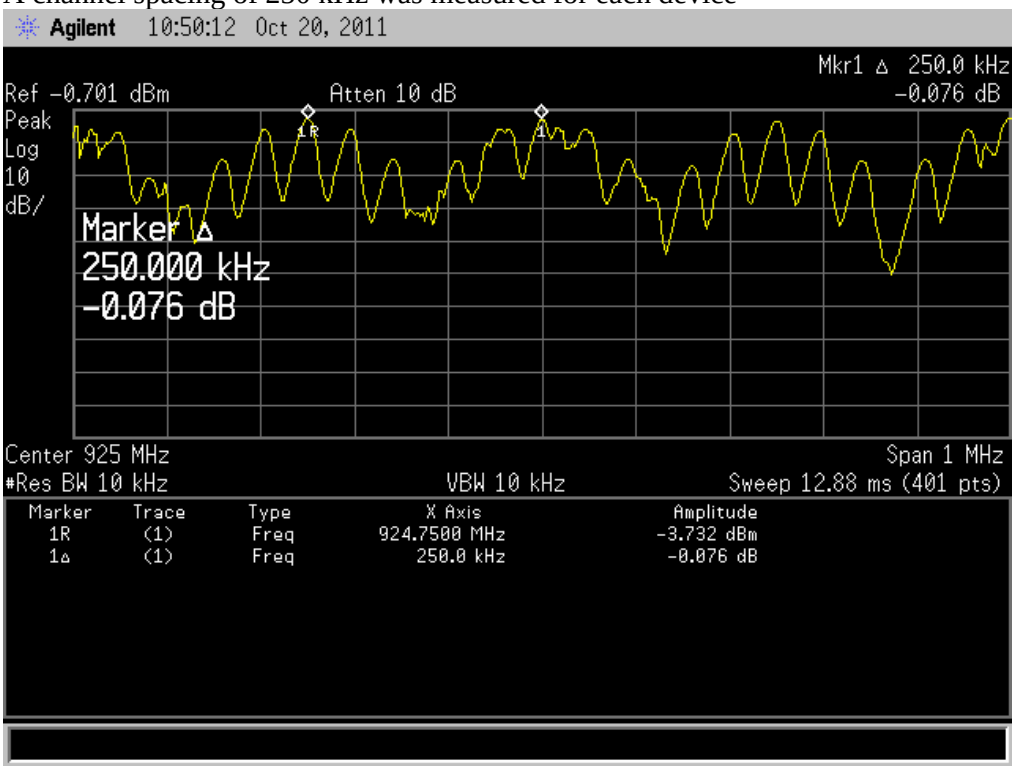
Frequency 915.500 MHz



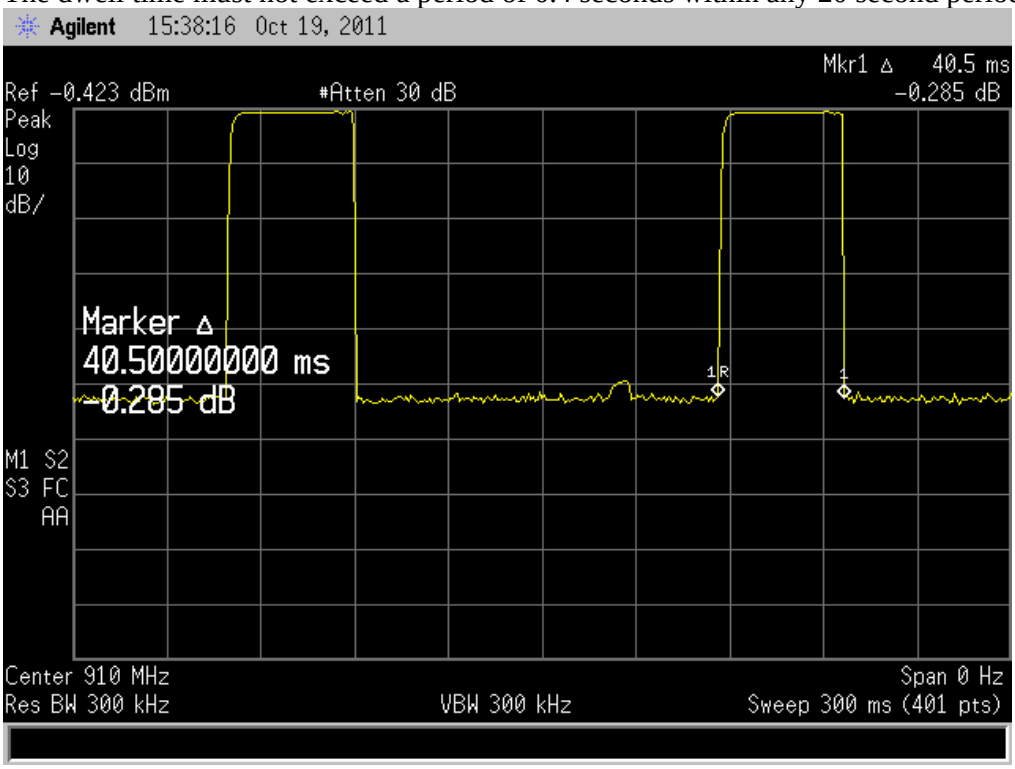
Frequency 927 MHz



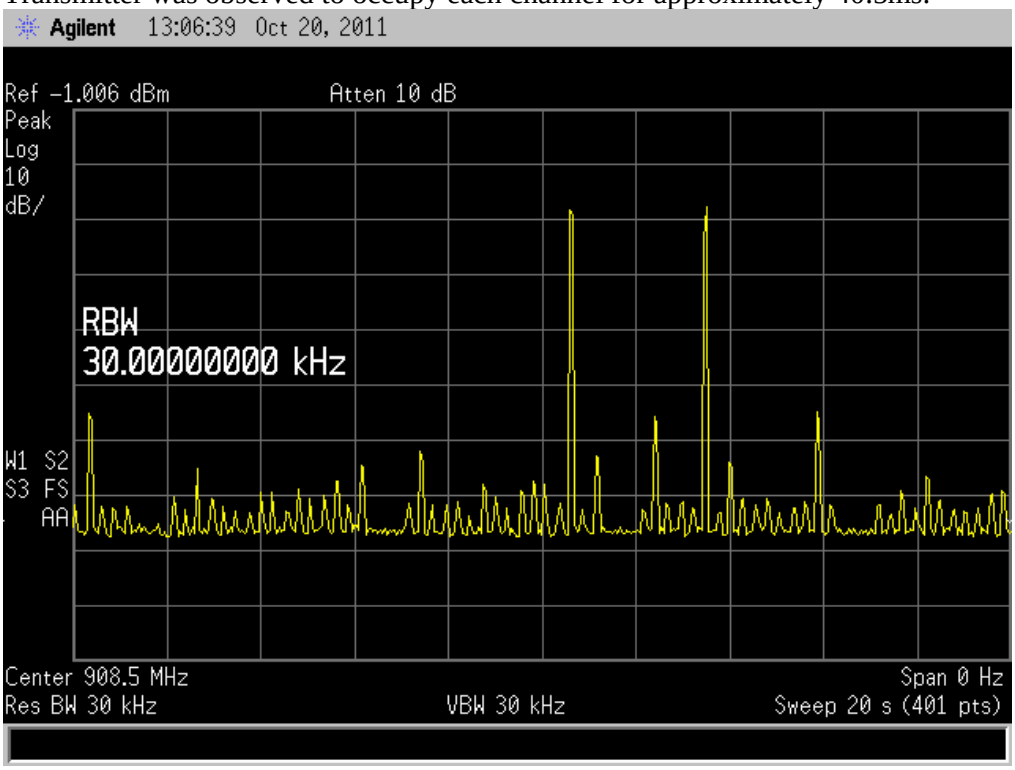
A channel spacing of 250 kHz was measured for each device



The dwell time must not exceed a period of 0.4 seconds within any 20 second period.



Transmitter was observed to occupy each channel for approximately 40.5ms.



Therefore in any 20 second period the occupancy time will be:
40.5 ms x 2 = 81.0 ms.

Result: Complies

Section 15.247(b)(1)+(2)– Peak output power
Measurements were made at the antenna terminal using a spectrum analyser with a resolution bandwidth of 1 MHz.

Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)
902.500	28.8	30.0
915.500	28.3	30.0
927.000	28.4	30.0

A conducted limit of 1 watt (+30 dBm) has been applied as more than 25 channels are in use.

Radiated power measurements were made on the low, middle and high frequency channels using both supplied antennas in vertical and horizontal polarisations.

Measurements were made using a spectrum analyser with a resolution bandwidth of 1 MHz.

4.4 dBi Yagi Antenna with 20 metre coax cable

Frequency (MHz)	Conducted dBm	Radiated dBµV/m	Radiated dBm	Gain dBi	Polarisation
902.500	28.8	124.6	29.4	0.6	Horizontal
915.500	28.3	126.0	30.8	2.5	Horizontal
927.000	28.4	124.6	29.4	1.0	Horizontal

5.0 dBi Collinear Antenna with 10 metre coax cable

Frequency (MHz)	Conducted dBm	Radiated dBµV/m	Radiated dBm	Gain dBi	Polarisation
902.500	28.8	122.5	27.3	-1.5	Vertical
915.500	28.3	122.3	27.1	-1.2	Vertical
927.000	28.4	125.0	29.8	1.4	Vertical

The radiated power level in dBm was determined by formula from the field strength using the formula Field strength (V/m) = (square root of (30 x transmitter power (watts))) / distance (metres)

The device was placed in the centre of the test table at a height of 80 cm above the ground plane.

Testing was carried out at EMC Technologies NZ Ltd Open Area Test Site, which is located at 670 Kawakawa – Orere Road, RD5, Papakura.

Result: Complies
Measurement Uncertainty: ±4.1 dB

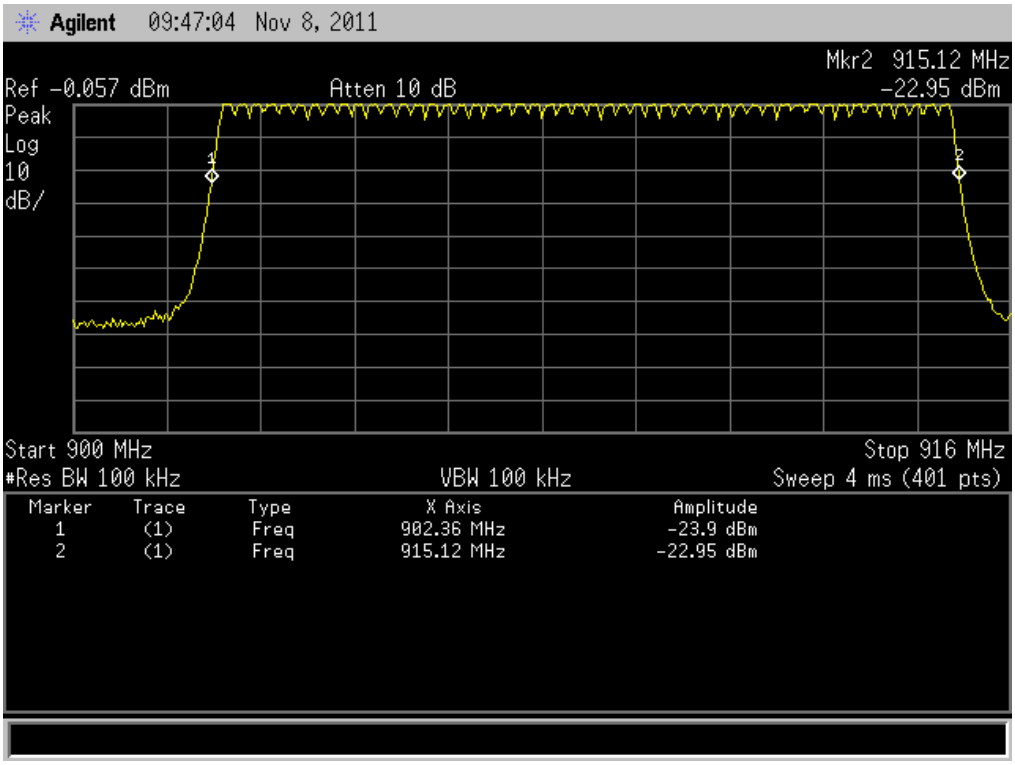
Section 15.247 (d) – Out of band emissions

Band edge measurements:

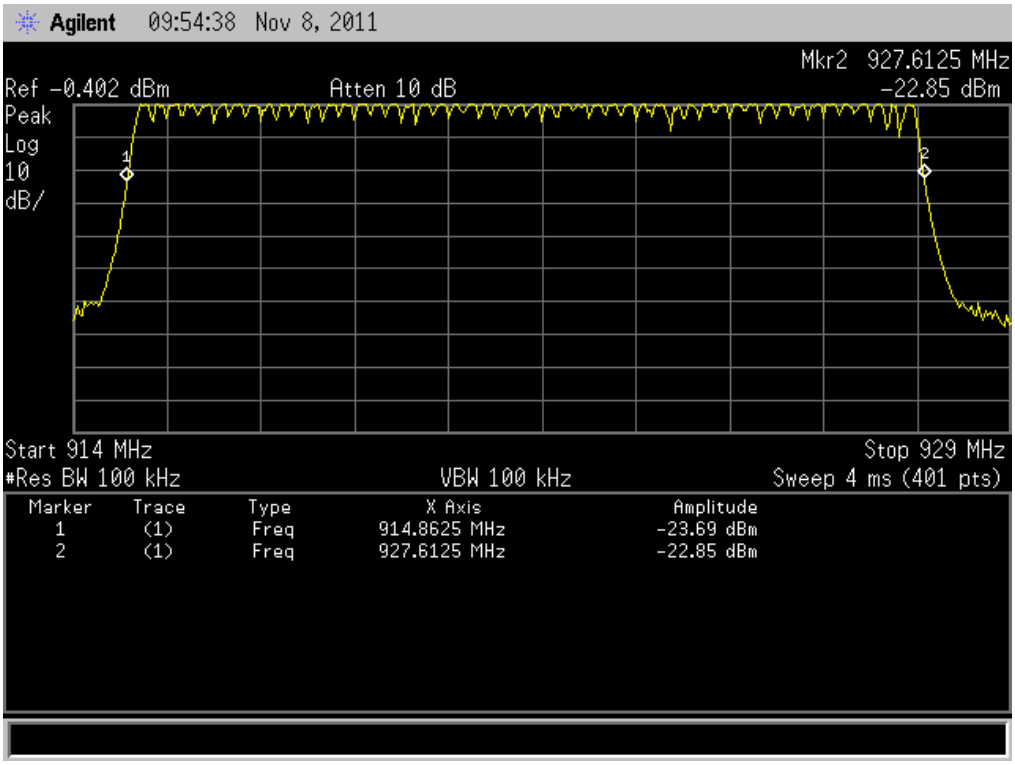
At the band edges of 902 MHz and 928 MHz all emissions are required to be attenuated by more than 20 dB relative to the highest 100 kHz resolution bandwidth emission level observed in the band of operation.

A conducted measurement has been made which shows that while the transmitter is operating the -20 dB points remains within the 902 MHz to 928 MHz band.

Low band 902-915 MHz



High Band 915-928 MHz



Result: Complies
Measurement Uncertainty: ±4.1 dB

Section 15.109 – Radiated emissions

Radiated emission testing was carried out over the frequency range of 30 to 10,000 MHz.

Testing was carried out at the laboratory's open area test site - located at 670 Kawakawa - Orere Rd, RD5, Papakura, New Zealand.

This site conforms to the requirements of CISPR 16 and ANSI C63.4 - 2003.

Before testing was carried out, a receiver Self Test and Internal Calibration was undertaken along with a check of all connecting cables and programmed antenna factors.

The device was placed on the fibreglass test table that has a dielectric constant near 1 which is a total of 0.8 m above the test site ground plane.

Measurements of the radiated field were made with the antenna located at a 3 metre horizontal distance from the boundary of the digital devices under test.

Testing is carried out by manually scanning between 30 and 1000 MHz in 100 kHz steps while aurally and visually monitoring for emissions.

When an emission is located, it is positively identified and its maximum level is found by rotating the automated turntable, and by varying the antenna height with an automated antenna tower.

Below 1 GHz the emission is measured in both vertical and horizontal antenna polarisations using a Peak and average detector with a bandwidth of 1 MHz.

Above 1 GHz the emission the emission is measured in both vertical and horizontal antenna polarisations using a Quasi Peak detector with a bandwidth of 120 kHz.

During the test, a number of ambient emissions are identified (list of which can be provided upon request).

The emission level is determined in field strength by taking the following into consideration:

Level (dBμV/m) = Receiver Reading (dBμV) + Antenna Factor (dB/m) + Coax Loss (dB)

Measurements were made while the device was being powered using a representative 110 Vac to 24 Vdc power supply.

Result: Complies.

Measurement uncertainty with a confidence interval of 95% is:
- Free radiation tests (30 – 2000 MHz) ± 4.1 dB

Yagi Antenna with 20 metre coax cable

Below 1000MHz – Other emissions observed

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
304.000	27.0	33.5	46.0	QP
320.000	27.2	31.5	46.0	QP
336.000	22.0	19.0	46.0	QP

Low frequency: 902.5 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1805.000	54.0	53.0	104.6	Peak
2707.500	55.0	46.2	74.0	Peak
2707.500	48.0	45.1	54.0	Average
3610.000	52.5	51.0	74.0	Peak
3610.000	47.2	46.2	54.0	Average
4512.500	45.1	38.0	74.0	Peak
4512.500	36.4	38.0	54.0	Average
5415.000	48.0	46.8	74.0	Peak
5415.000	36.0	35.5	54.0	Average
6317.500	50.1	48.0	104.6	Peak
7220.000	-	-	104.6	Peak
8122.500	-	-	74.0	Peak
8122.500	-	-	54.0	Average
9025.000	-	-	54.0	Average
9025.000	-	-	74.0	Peak

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

Mid frequency: 915.5 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1831.000	55.0	52.0	106.0	Peak
2746.500	55.0	46.0	74.0	Peak
2746.500	47.0	45.2	54.0	Average
3662.000	49.6	50.0	74.0	Peak
3662.000	40.5	39.2	54.0	Average
4577.500	45.6	38.0	74.0	Peak
4577.500	37.0	36.2	54.0	Average
5493.000	50.0	47.0	106.0	Peak
6408.000	52.0	49.0	106.0	Peak
7324.000	-	-	74.0	Peak
7324.000	-	-	54.0	Average
8239.500	-	-	74.0	Peak
8239.500	-	-	54.0	Average
9155.000	-	-	74.0	Peak
9155.000	-	-	54.0	Average

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

High frequency: 927.0 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1854.000	54.0	50.5	104.6	Peak
2781.000	54.4	54.0	74.0	Peak
2781.000	47.0	44.0	54.0	Average
3708.000	50.8	49.0	74.0	Peak
3708.000	42.0	39.1	54.0	Average
4635.000	48.5	48.0	74.0	Peak
4635.000	38.5	38.0	54.0	Average
5562.000	49.0	48.0	104.6	Peak
6489.000	51.5	48.0	104.6	Peak
7416.000	-	-	74.0	Peak
7416.000	-	-	54.0	Average
8343.000	-	-	74.0	Peak
8343.000	-	-	54.0	Average
9270.000	-	-	104.6	Peak

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

Collinear Antenna with 10 metre coax cable

Below 1000MHz – Other emissions observed

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
304.000	25.6	29.4	46.0	QP
320.000	25.6	29.5	46.0	QP
336.000	21.8	19.0	46.0	QP

Low frequency: 902.5 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1805.000	56.5	49.1	102.5	Peak
2707.500	52.6	54.8	74.0	Peak
2707.500	48.6	47.5	54.0	Average
3610.000	51.5	50.5	74.0	Peak
3610.000	41.6	42.1	54.0	Average
4512.500	44.0	43.8	74.0	Peak
4512.500	34.0	34.5	54.0	Average
5415.000	49.0	48.0	74.0	Peak
5415.000	36.0	35.8	54.0	Average
6317.500	51.8	50.4	102.5	Peak
7220.000	-	-	102.5	Peak
8122.500	-	-	74.0	Peak
8122.500	-	-	54.0	Average
9025.000	-	-	54.0	Average
9025.000	-	-	74.0	Peak

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

Mid frequency: 915.5 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1831.000	52.0	47.0	102.3	Peak
2746.500	53.6	54.0	74.0	Peak
2746.500	43.1	47.0	54.0	Average
3662.000	51.3	51.2	74.0	Peak
3662.000	45.6	43.2	54.0	Average
4577.500	51.0	49.5	74.0	Peak
4577.500	42.8	41.7	54.0	Average
5493.000	51.8	49.0	102.3	Peak
6408.000	51.0	50.4	102.3	Peak
7324.000	-	-	74.0	Peak
7324.000	-	-	54.0	Average
8239.500	-	-	74.0	Peak
8239.500	-	-	54.0	Average
9155.000	-	-	74.0	Peak
9155.000	-	-	54.0	Average

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

High frequency: 927.0 MHz

Frequency (MHz)	Vertical (dBµV/m)	Horizontal (dBµV/m)	Limit (dBµV/m)	Detector
1854.000	56.0	48.7	105.0	Peak
2781.000	53.6	54.6	74.0	Peak
2781.000	44.6	47.3	54.0	Average
3708.000	53.0	51.0	74.0	Peak
3708.000	47.5	46.0	54.0	Average
4635.000	52.0	51.8	74.0	Peak
4635.000	45.0	43.2	54.0	Average
5562.000	51.8	49.0	105.0	Peak
6489.000	51.0	50.4	105.0	Peak
7416.000	-	-	74.0	Peak
7416.000	-	-	54.0	Average
8343.000	-	-	74.0	Peak
8343.000	-	-	54.0	Average
9270.000	-	-	105.0	Peak

- indicates that an emissions was not observed from the transmitter above the noise floor when measurements were attempted. The noise floor at these frequencies was at least 15 dB below the limit prescribed.

Result: Complies

Measurement uncertainty with a confidence interval of 95% is:
- Free radiation tests (30 – 10,000 MHz) ± 4.1 dB

Section 15.109 - Field strength of the receiver spurious emissions

Device was tested on an open area test site at a distance of 3 metres.

Below 1000 MHz a quasi peak detector was used with a bandwidth of 120 kHz.

Above 1000 MHz a peak detector was used with a bandwidth of 1 MHz.

Measurements were attempted using both vertical and horizontal polarisations.

Receive Frequency 915.000 MHz

Yagi with 20 metre coax cable

Frequency MHz	Vertical dBµV/m	Horizontal dBµV/m	Limit dBµV/m	Margin dB	Result	Antenna
844.753	37.0	38.0	46.0	8.0	Pass	Horizontal
1689.488	43.6	44.0	54.0	10.0	Pass	Horizontal

Collinear antenna with 10 metre coax cable

Frequency MHz	Vertical dBµV/m	Horizontal dBµV/m	Limit dBµV/m	Margin dB	Result	Antenna
844.753	42.0	34.5	46.0	4.0	Pass	Vertical
1689.488	43.6	44.5	54.0	9.5	Pass	Horizontal

No further emissions were detected when measurements were attempted on the above frequency up to 4 GHz.

Section 15.111 - Conducted limits for receivers

Measurements were also made when this device was operated in receive mode with a spectrum analyser attached to the antenna port.

Receiver frequency (MHz)	Emission frequency (MHz)	Level (dBm)
927.000	856.765	-82.0
915.500	845.243	-82.4
902.500	832.235	-81.5

No further emissions were detected that exceeded a level of -90 dBm when measurements were attempted on the above frequency between 30 MHz and 9 GHz. A limit of 2 nW (-57 dBm) was applied.

Result: Complies
Measurement Uncertainty: ±4.1 dB

Section 15.247(i) – Radio Frequency Hazard Information

As per Section 15.247 (b) (4) spread spectrum transmitters operating in the 902 – 928 MHz band are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with CFR 47, Section 1.1307(b)(1).

The device when in operation is fixed and a safe distance could be maintained when events are undertaken.

In accordance with Section 1.1310 the Maximum Permissible Exposure (MPE) limits for the General Population / Uncontrolled Exposure of f/1500 have been applied.

The maximum distance from the antenna at which the MPE is met or exceeded is calculated from the equation relating field strength in V/m, transmit power in watts, transmit antenna gain and separation distance in metres:

E, V/m = (√ (30 * P * G)) / d
Power density, mW/m2 = E2/3770
E for MPE: (920/1500) = E2/3770
E = √(920/1500)*3770
E = 48.1 V/m

The highest radiated power has been measured to be 30.8 dBm or 1.2 watts EiRP when operating on 915.500 MHz using the Yagi Antenna

Therefore:
E = √ (30 * P * G) / d
d = √ (30 * P * G) / E
d = √ (30 * 1.2) / 48.1
d = 0.125 m or 12.5 cm

Result: Complies if a minimum safe distance of 20 cm is specified in the set up instructions for this system.

7. TEST EQUIPMENT USED

Instrument	Manufacturer	Model	Serial No	Asset Ref	Cal Due
Aerial Controller	EMCO	1090	9112-1062	RFS 3710	Not applic
Aerial Mast	EMCO	1070-1	9203-1661	RFS 3708	Not applic
Turntable	EMCO	1080-1-2.1	9109-1578	RFS 3709	Not applic
Measuring Receiver	Rhode & Schwarz	ESCS30	847124/020	E1595	09 Feb 2012
Spectrum Analyser	Hewlett Packard	E7405A	US39150142	RFS 3776	14 Dec 2012
Bicon Antenna	Schwarzbeck	VHA9103	9594	RFS 3696	03 Mar 2012
Log Antenna	Schwarzbeck	UHALP9107	91071203	RFS 3702	17 Jan 2014
Horn Antenna	EMCO	3115	9511-4629	E1526	21 Feb 2014

8. ACCREDITATIONS

Testing was carried out in accordance with EMC Technologies Ltd registration with the Federal Communications Commission as a listed facility, registration number: 90838, which was updated on 15 February, 2011.

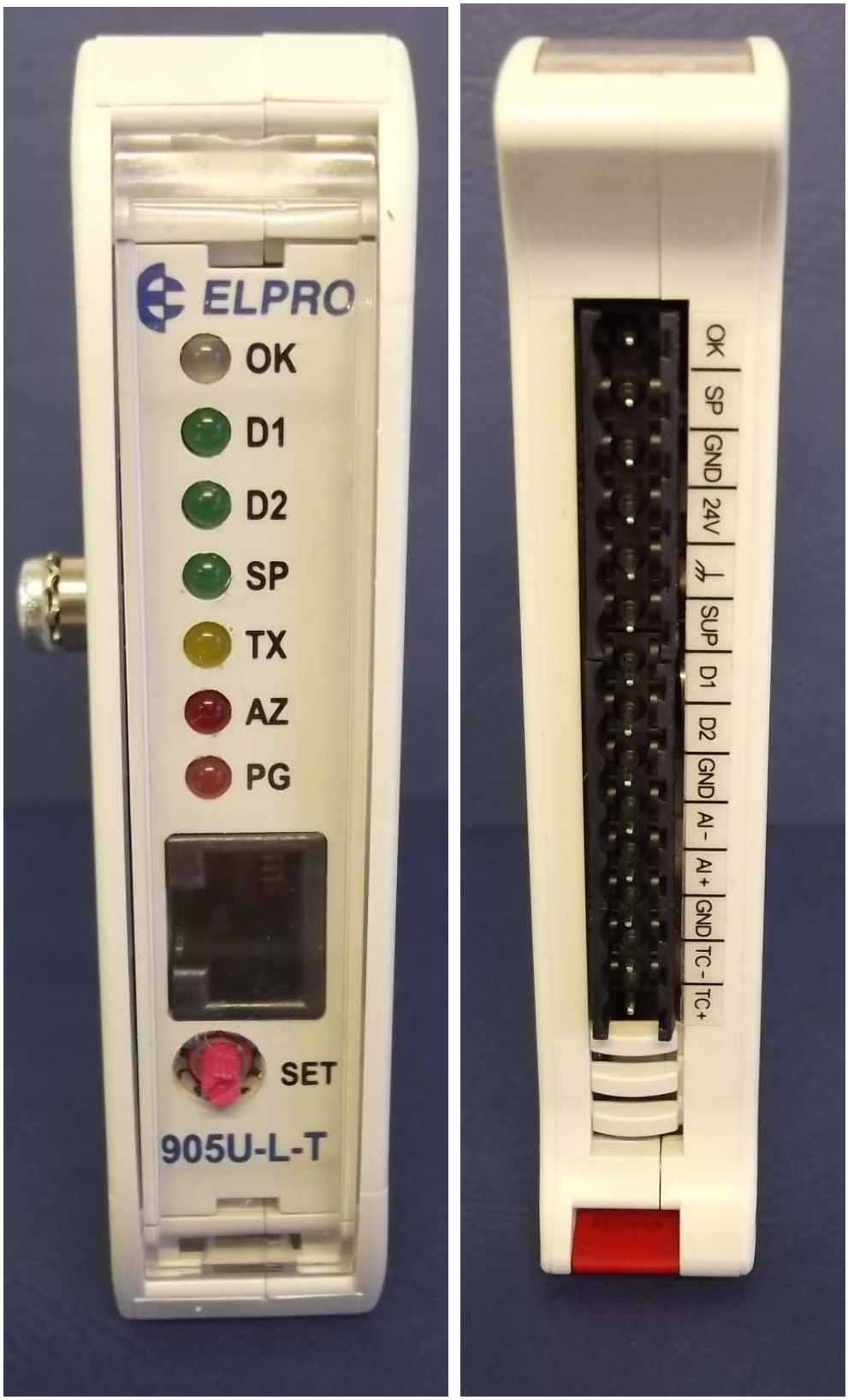
All testing was carried out in accordance with the terms of EMC Technologies (NZ) Ltd International Accreditation New Zealand (IANZ) Accreditation to NZS/ISO/IEC 17025, 2005.

All measurement equipment has been calibrated in accordance with the terms of the EMC Technologies (NZ) Ltd International Accreditation New Zealand (IANZ) Accreditation to NZS/ISO/IEC 17025, 2005.

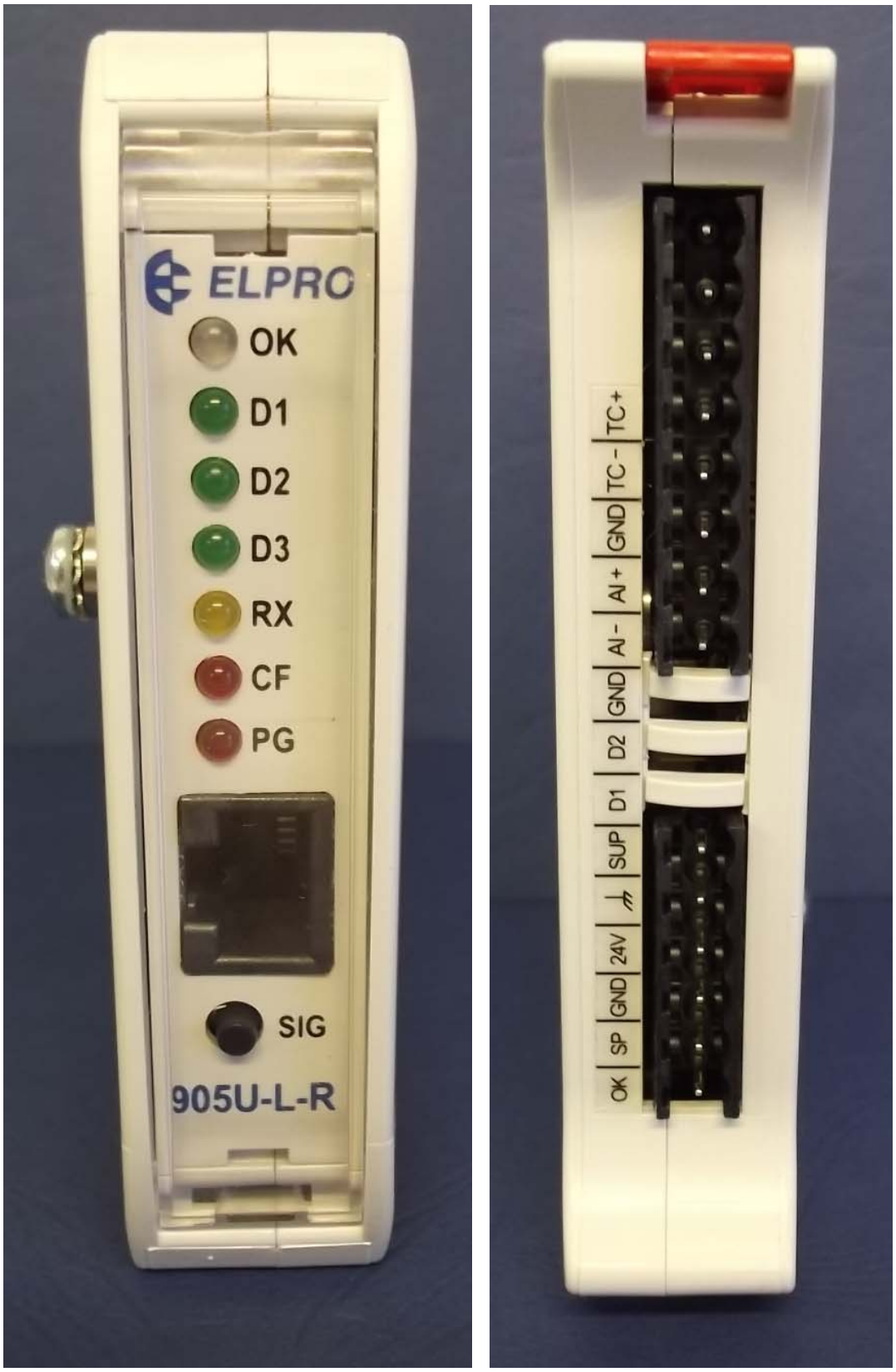
International Accreditation New Zealand has Mutual Recognition Arrangements for testing and calibration with various accreditation bodies in a number of economies. This includes NATA (Australia), UKAS (UK), SANAS (South Africa), NVLAP (USA), A2LA (USA), SWEDAC (Sweden). Further details can be supplied on request.

9. PHOTOGRAPHS

905U-LT External views



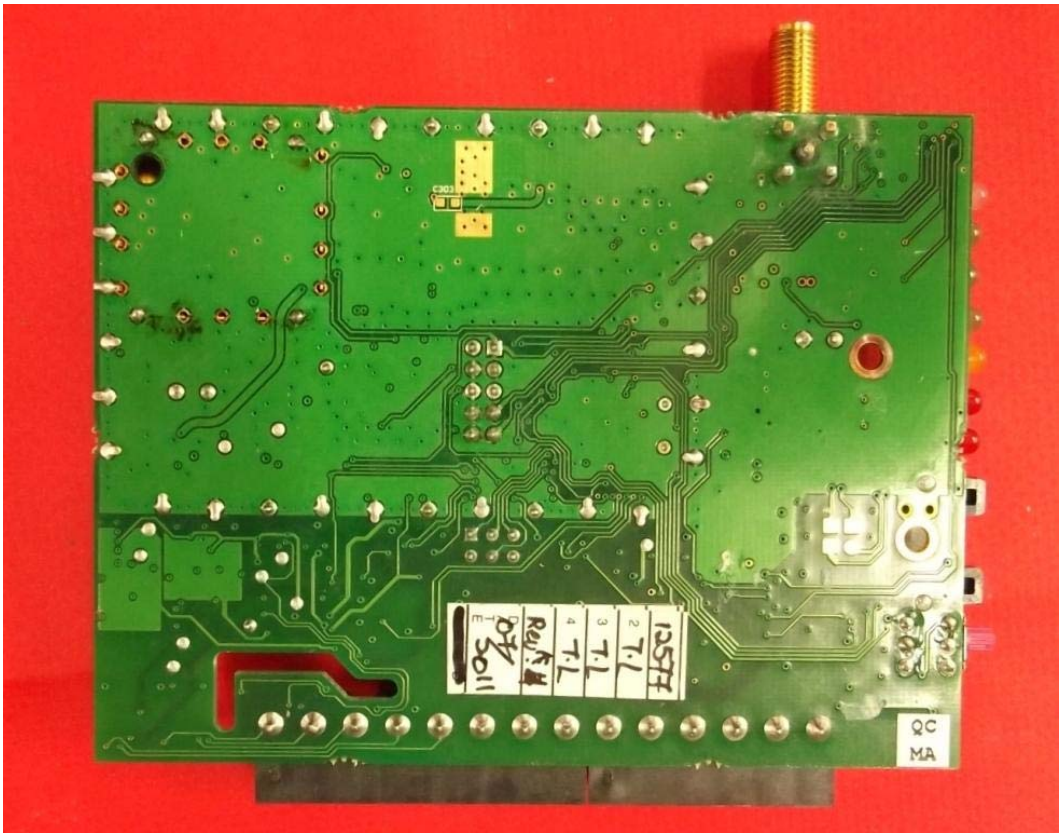
905U-LR External views



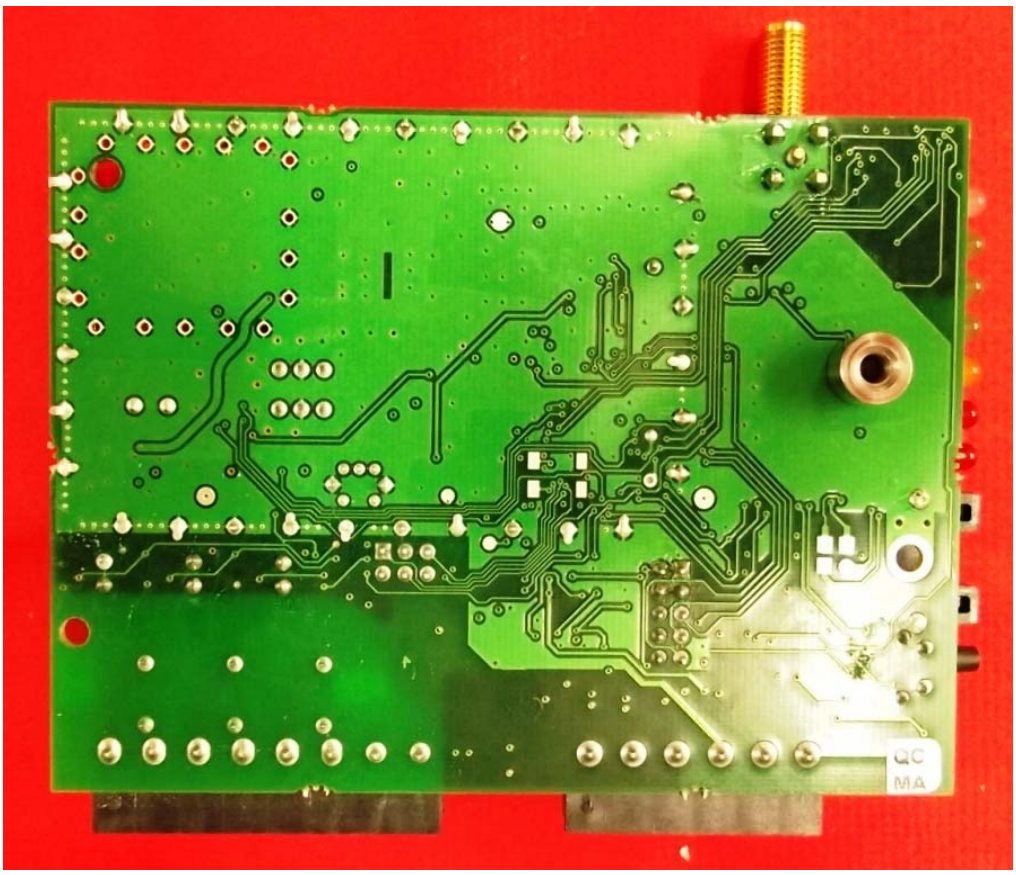
Antenna: CC20 Yagi with 20 metre coax cable

Antenna: CC10 Collinear with 10 metre coax cable

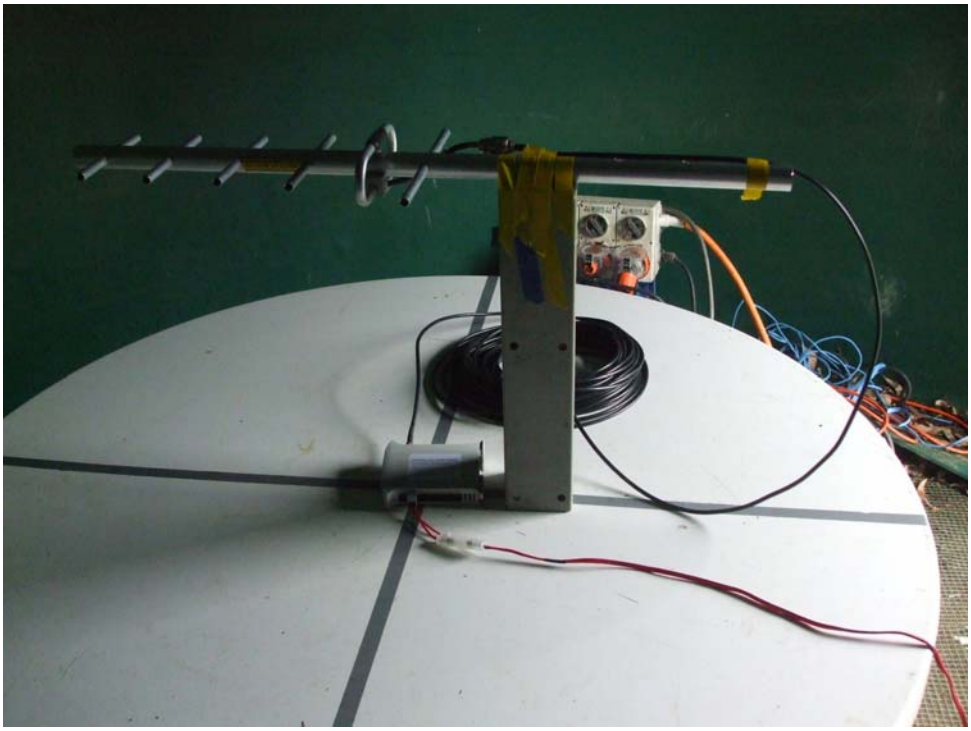
905 U-L-T Internal View

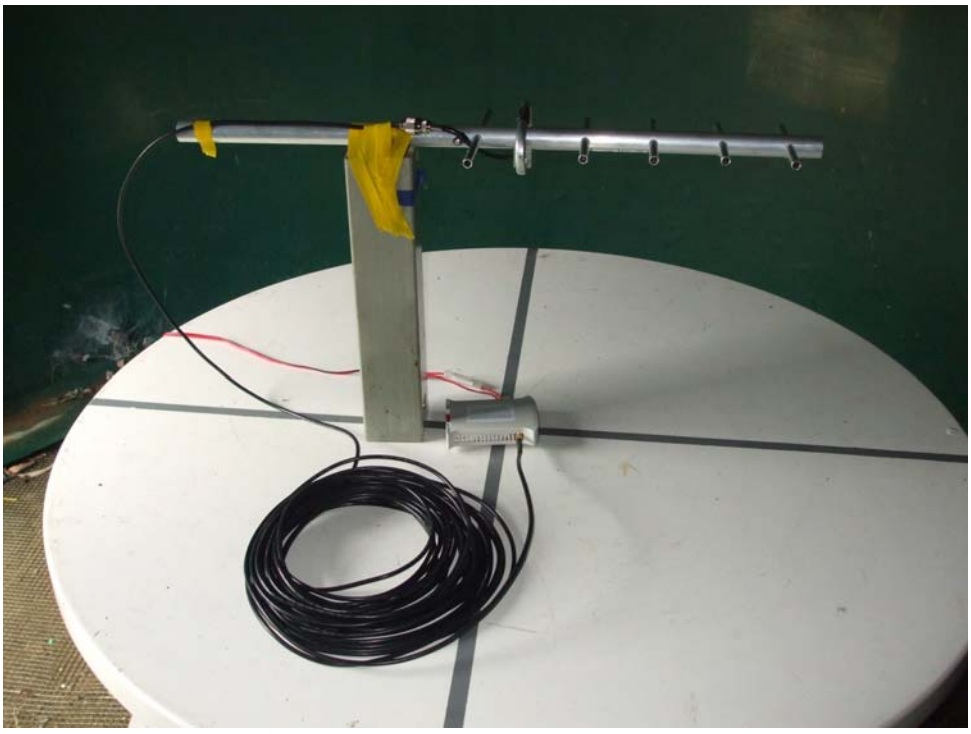


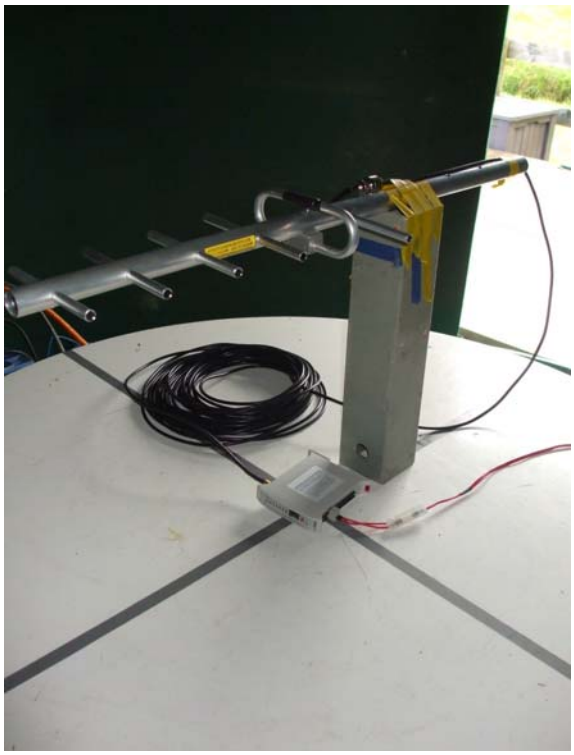
905U-L-R Internal Views

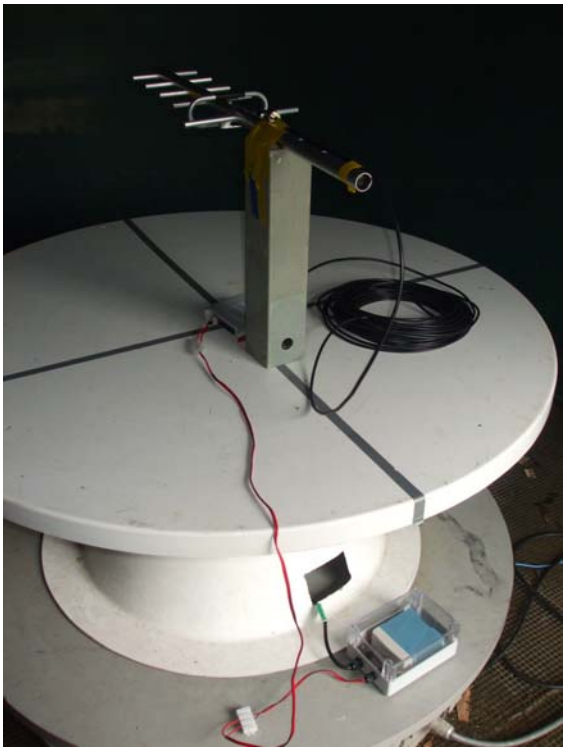


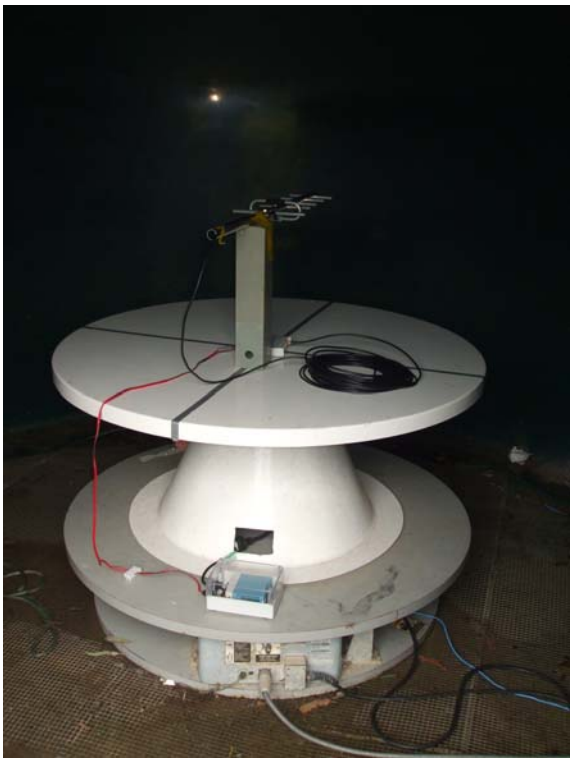
Radiated emissions test set up CC20 Yagi with 20 metre coax cable



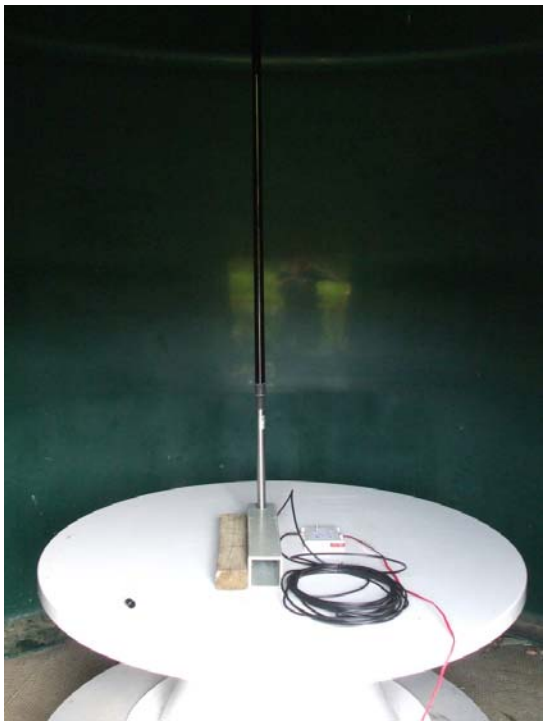


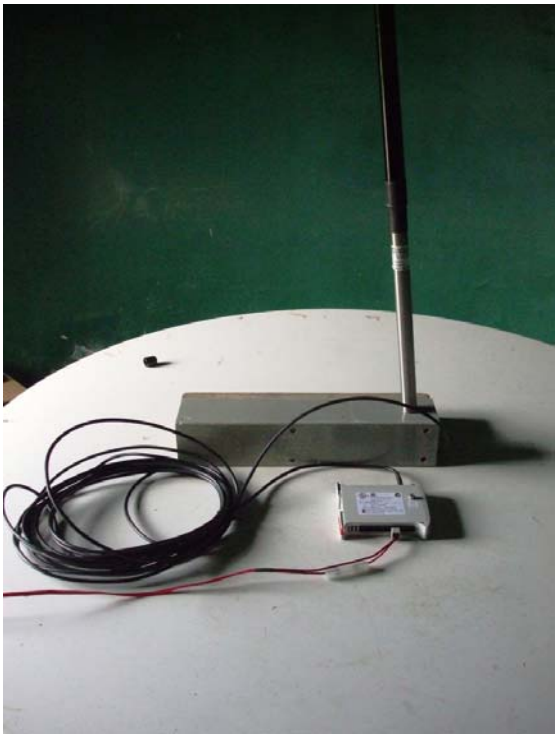






Radiated emissions test set up CC10 Collinear with 10 metre coax cable





Conducted emissions set up