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TEST REPORT

Simoco Pulse Air Data Modem AC

tested to the

Code of Federal Regulations (CFR) 47

Part 90 –Private Land Mobile Services

for

Simoco Australasia Pty Ltd

This Test Report is issued with the authority of:

Andrew Cutler- General Manager

IANZ ACCREDITED LABORATORY

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

Table of Contents

1. COMPLIANCE STATEMENT

The **Simoco Pulse Air Data Modem AC** complies with 47 CFR Part 90 and 47 CFR Part 2 when tested in-accordance with the test methods described in 47 CFR Part 2 and ANSI / TIA-603-D-2010.

2. RESULT SUMMARY

The results of testing carried out in January and February 2017 are summarised below.

Clause	Description	Result
90.203	Certification required	Noted
2.1046 90.205	RF power output Power and antenna height limits	Noted Complies
2.1049 2.202 90.207 90.209 90.210	Occupied bandwidth Bandwidths Types of emissions Bandwidth limitations Emission masks	Noted Noted Complies Complies Complies
2.1051	Spurious emissions at antenna terminals	Complies
2.1053	Field strength of spurious radiation	Not tested
2.1055 90.213	Frequency stability Frequency stability	Noted Complies
90.214	Transient frequency behaviour	Complies
1.1310	Radio frequency exposure limits	Complies

3. ATTESTATION

This report describes the tests and measurements performed for the purpose of determining compliance with the specification with the following conditions:

The client selected the test sample.

The report relates only to the sample tested.

This report does not contain 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.

In addition this equipment has been tested in accordance with the requirements contained in the appropriate Commission regulations.

All compliance statements have been made with respect of the specification limit with no reference to the measurement uncertainty.

To the best of my knowledge, these tests were performed using measurement procedures that are consistent with industry or Commission standards and demonstrate that the equipment complies with the appropriate standards.

I further certify that the necessary measurements were made by EMC Technologies NZ Ltd, 47 MacKelvie Street, Grey Lynn, Auckland, New Zealand.

Andrew Cutler
General Manager
EMC Technologies NZ Ltd

4. CLIENT INFORMATION

Company Name	Simoco Australasia Pty Ltd
Address	1270 Ferntree Gully Rd, Scoresby, Victoria, 3179
Country	Australia
Contact	Mr Robert Stowell

5. TEST SAMPLE DESCRIPTION

Brand Name	Simoco
Model Number	Pulse Air Data Modem AC
Manufacturer	Simoco Australia Pty Ltd
Designed in	Australia
Manufactured in	Taiwan
Serial Number	5PDAC1646 04NR
FCC ID	STZAIR600AC

The sample tested has the following specifications:

Rated Transmitter Output Power

5.0 Watts (+37 dBm) burst which is a DMR 50% TDMA

Transmitter Certification Range

150 – 174 MHz

Test frequencies

Channel	Frequency (MHz)	Power (Watts)
1	151.0750	5.0
2	161.5000	5.0
3	173.3750	5.0

Transmitter Type

This equipment has been classed as fixed

Emission designators

7K60FXE – Speech
7K60FXD – DMR data

Channel Spacing

Equipment designed to operate using 12.5 kHz channel spacing.

Receiver Intermediate Frequency

45 MHz

Transmitter Duty Cycle

Intermittent 1:4 (25%)

Power Supply

DC voltage supply using an external AC mains power supply.

Standard Temperature and Humidity

Temperature:	+15°C to + 30° maintained.
Relative Humidity:	20% to 75% observed.

Standard Test Power Source

Standard Test Voltage:	13.0 Vdc.
High Voltage:	15.0 Vdc
Low Voltage:	11.0 Vdc

Extreme Temperature

High Temperature:	+ 50°C maintained.
Low Temperature:	- 30 °C maintained.

6. TEST RESULTS

Certification required

Part 90.203(j)

4) Applications for part 90 certification of transmitters designed to operate on frequencies in the 150.8–162.0125 MHz, 173.2–173.4 MHz, and/or 421–512 MHz bands, received on or after January 1, 2011,

(ii) 12.5 kHz for multi-bandwidth mode equipment with a maximum channel bandwidth of 12.5 kHz if it is capable of operating on channels of 6.25 kHz or less;

(5), Applications for part 90 certification of transmitters designed to operate on frequencies in the 150.8–162.0125 MHz, 173.2–173.4 MHz, and/or 421–512 MHz bands, after January 1, 2011, must include a certification that the equipment meets a spectrum efficiency standard of one voice channel per 6.25 kHz of channel bandwidth.

Additionally, if the equipment is capable of transmitting data, has transmitter output power greater than 500 mW, and has a channel bandwidth of more than 6.25 kHz, the equipment must be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.

Result: Complies.

RF power output

Measurements were carried out at the RF output terminals of the transmitter using a 30 dB power attenuator and a 50 Ω dummy load.

Measurements were carried out when the transmitter was not being modulated.

Testing was carried out at maximum power output.

Frequency (MHz)	Voltage (Vdc)	Rated (dBm)	Measured (dBm)
151.075	11.0	37.0	36.1
	13.0	37.0	36.3
	15.0	37.0	36.2
161.500	11.0	37.0	36.3
	13.0	37.0	36.5
	15.0	37.0	36.3
173.375	11.0	37.0	36.5
	13.0	37.0	36.6
	15.0	37.0	36.5

Limits:

Part 90 does not specify the transmitter output power

Result: Complies.
Measurement Uncertainty: ± 0.5 dB

Emission types and bandwidth limitations:

The authorised bandwidth for the 150 – 174 MHz band is 11.25 kHz when a 12.5 kHz channel bandwidth is used.

The following emission types are used:

- FXE: 4FSK digital modulation is used for digital telephony using a channel bandwidth of 12.5 kHz. The client has declared a necessary bandwidth of 7.6 kHz

- FXD: 4FSK digital modulation is used for data transmissions using a channel bandwidth of 12.5 kHz. The client has declared a necessary bandwidth of 7.6 kHz

The occupied bandwidth is calculated using a maximum deviation of 2600 Hz and a symbol rate of 1200 Hz.

$B_n = 2 \times D + 2 \times M$
Where D = maximum deviation: 2600 Hz
Where M = symbol rate: 1200 Hz
$B_n =$ 7600 Hz or 7.6 kHz

Measurements have been made to verify this declared bandwidth using the various modulation types and data rates that this radio can support at each test frequency.

Measurements were initially made when a digitally modulated emission was applied to the input of a spectrum analyser that was operating in peak hold mode with a 100 kHz resolution bandwidth.

This level was used as the reference level for this measurement.

The spectrum analyser resolution bandwidth was then changed to 100 Hz with the bandwidth of the emission being determined at the -23 dB points with reference to the spectrum analyser reference level.

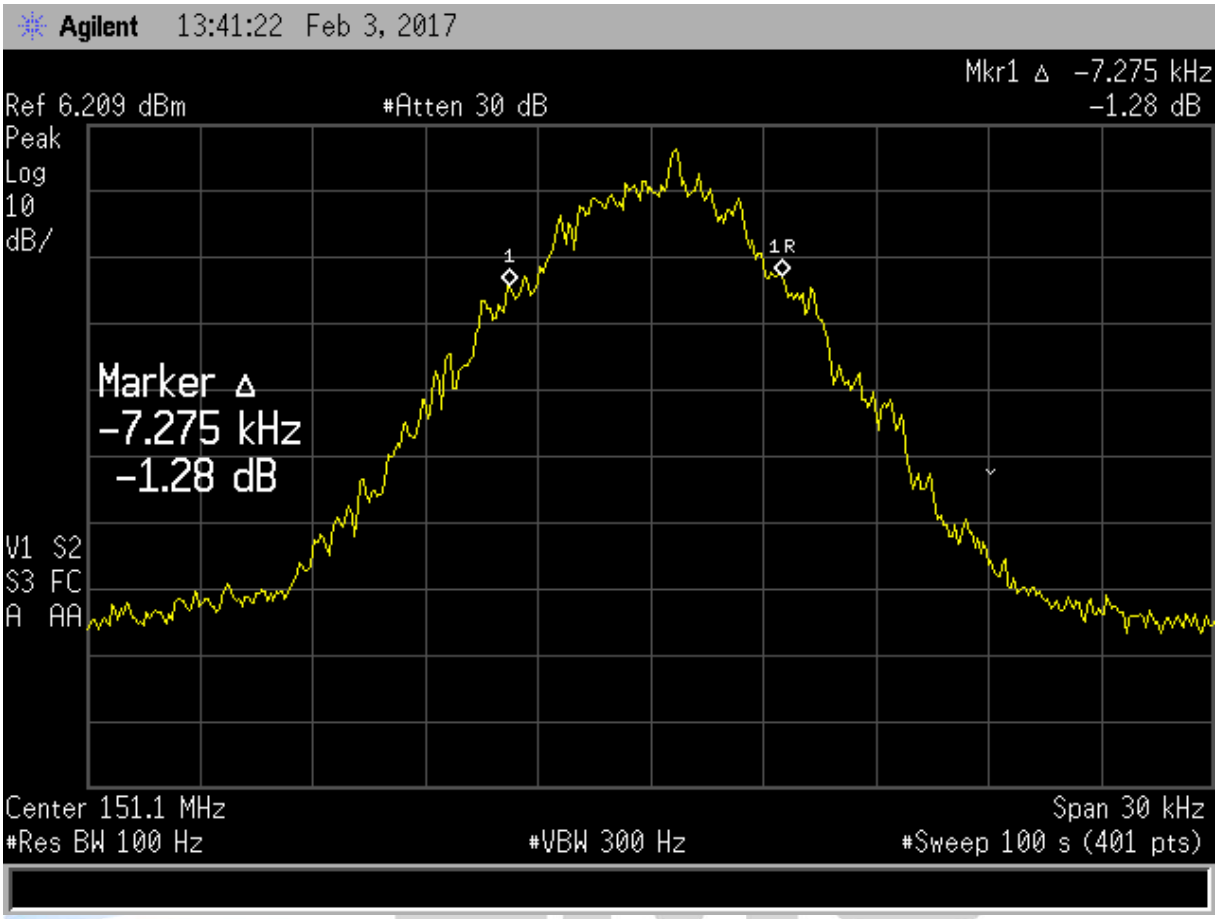
Attached to the input of the spectrum analyser was an external 30 dB attenuator.

The transmitter was internally modulated with the F1D and F1E output being identical.

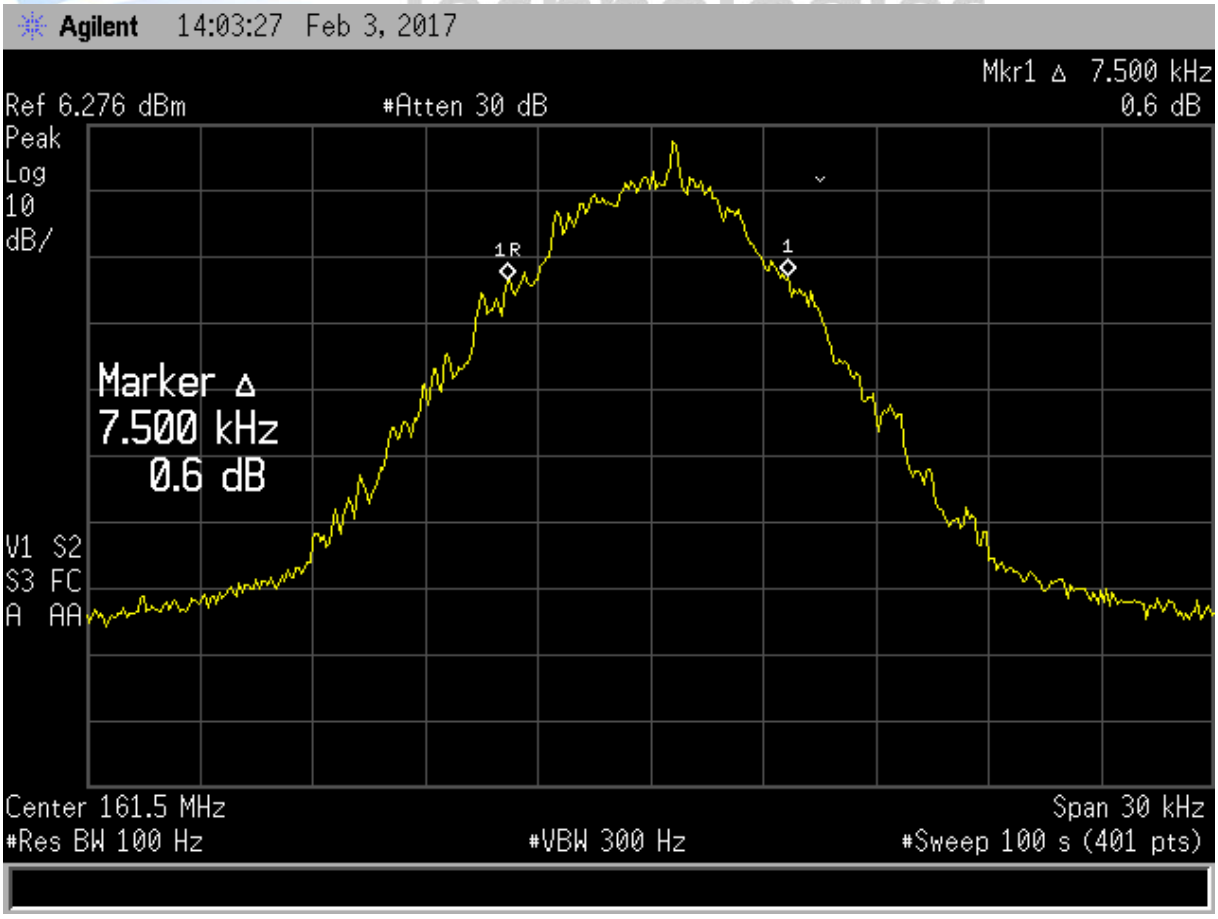
Frequency (MHz)	Emission	Measured (kHz)
151.0750	FXD / FXE	7.275
161.5000	FXD / FXE	7.500
173.3750	FXD / FXE	7.425

Result: Complies

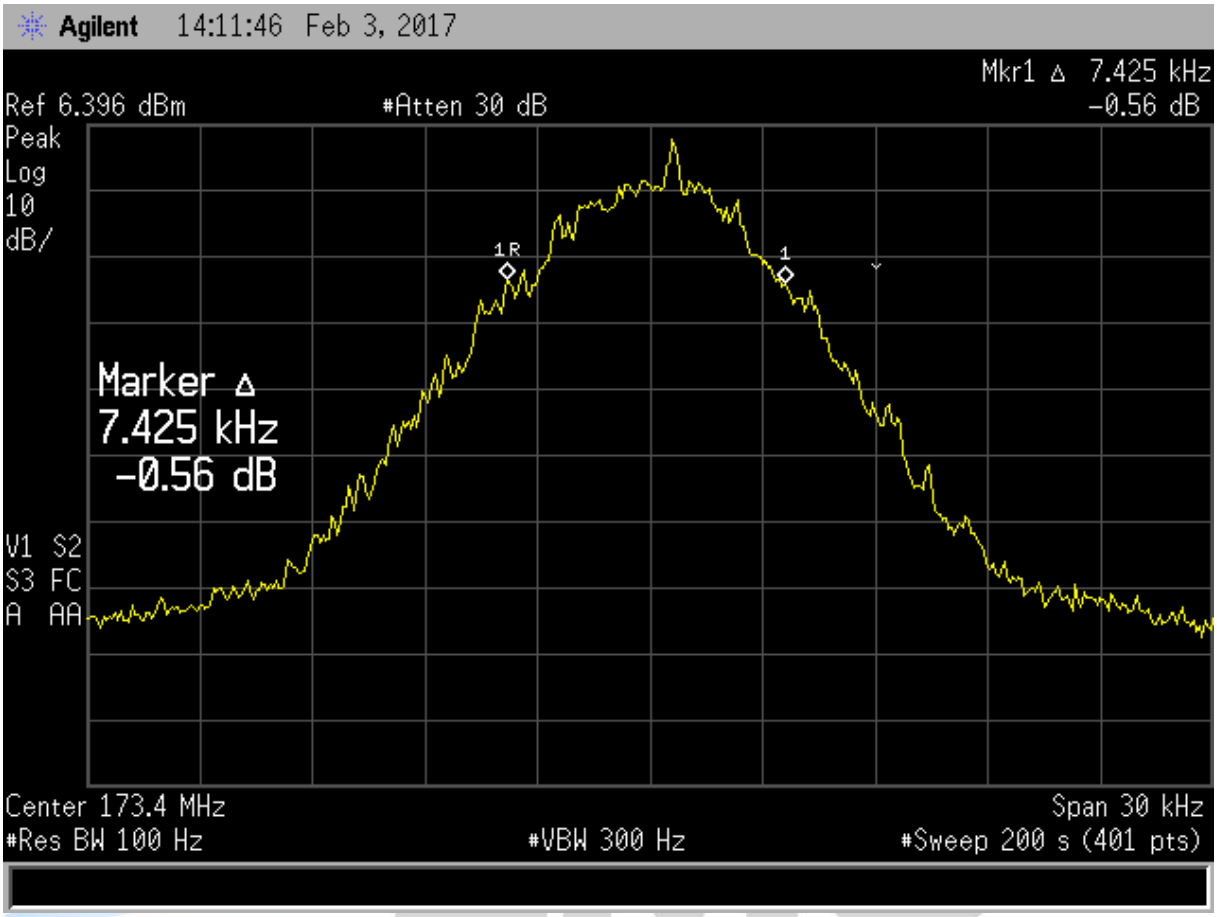
151.175 MHz



161.500 MHz



173.375 MHz



Spectrum Masks

The spectrum masks are defined in:

Section 90.210(d) – Mask D has been applied as the transmitter can operate in the band 150.050 - 174.00 MHz using an authorised bandwidth of 12.5 kHz as per Section 90.209(b)(5).

The reference level for the following emission mask measurements has been determined using an un-modulated carrier which is shown in the FXD / FXE mask measurements.

The yellow trace is the un-modulated carrier and the blue trace is the emission spectrum that was observed.

All measurements have been made when a 30 dB attenuator is placed between the transmitter and the spectrum analyser.

All plots can be observed to have reference levels of approximately +6.5 dBm.

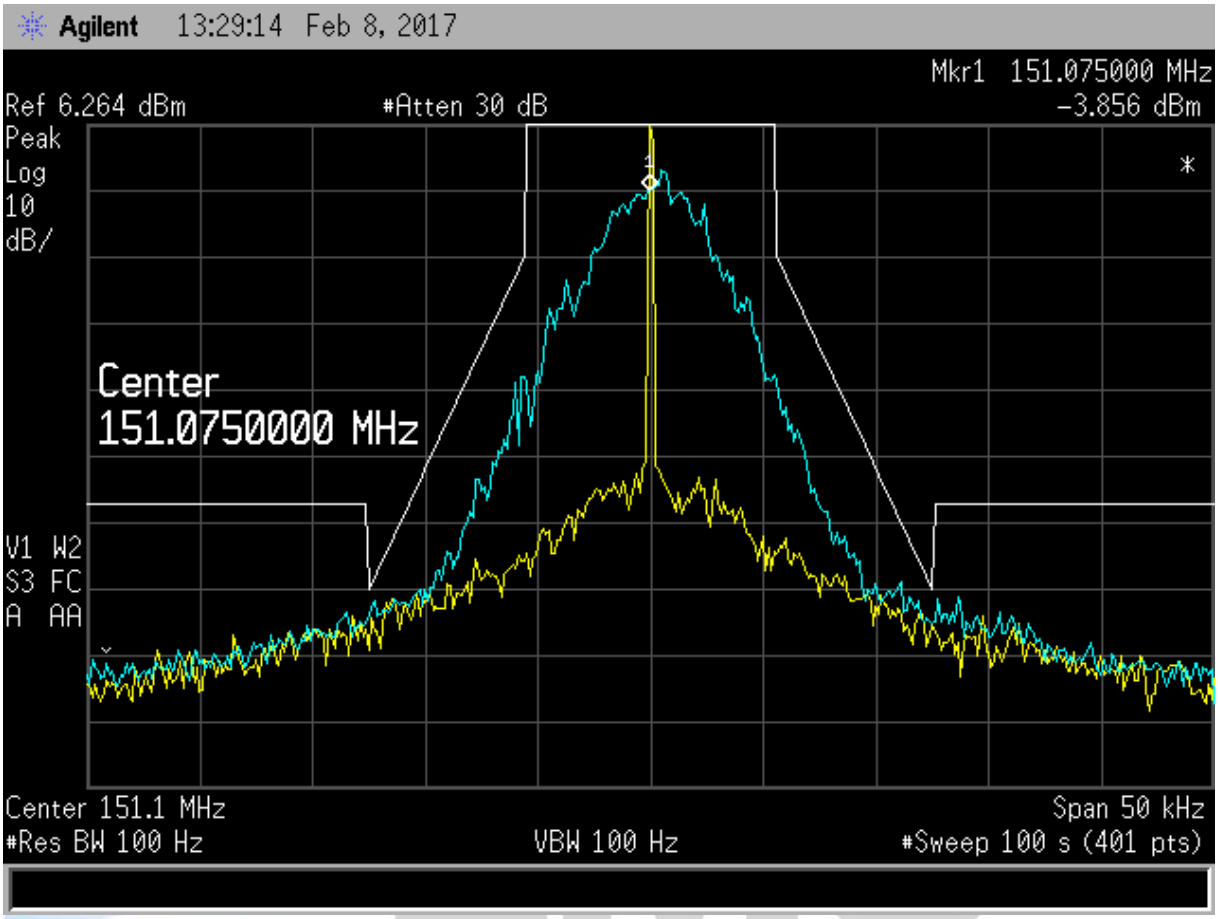
When the 30 dB attenuator is account for this gives a power level of +36.5 dBm which approximates the rated power level of the transmitter of +37.0 dBm (5 watts).

Measurements were made in peak hold with the transmitter operating on 151.075 MHz, 161.500 MHz and 173.375 MHz.

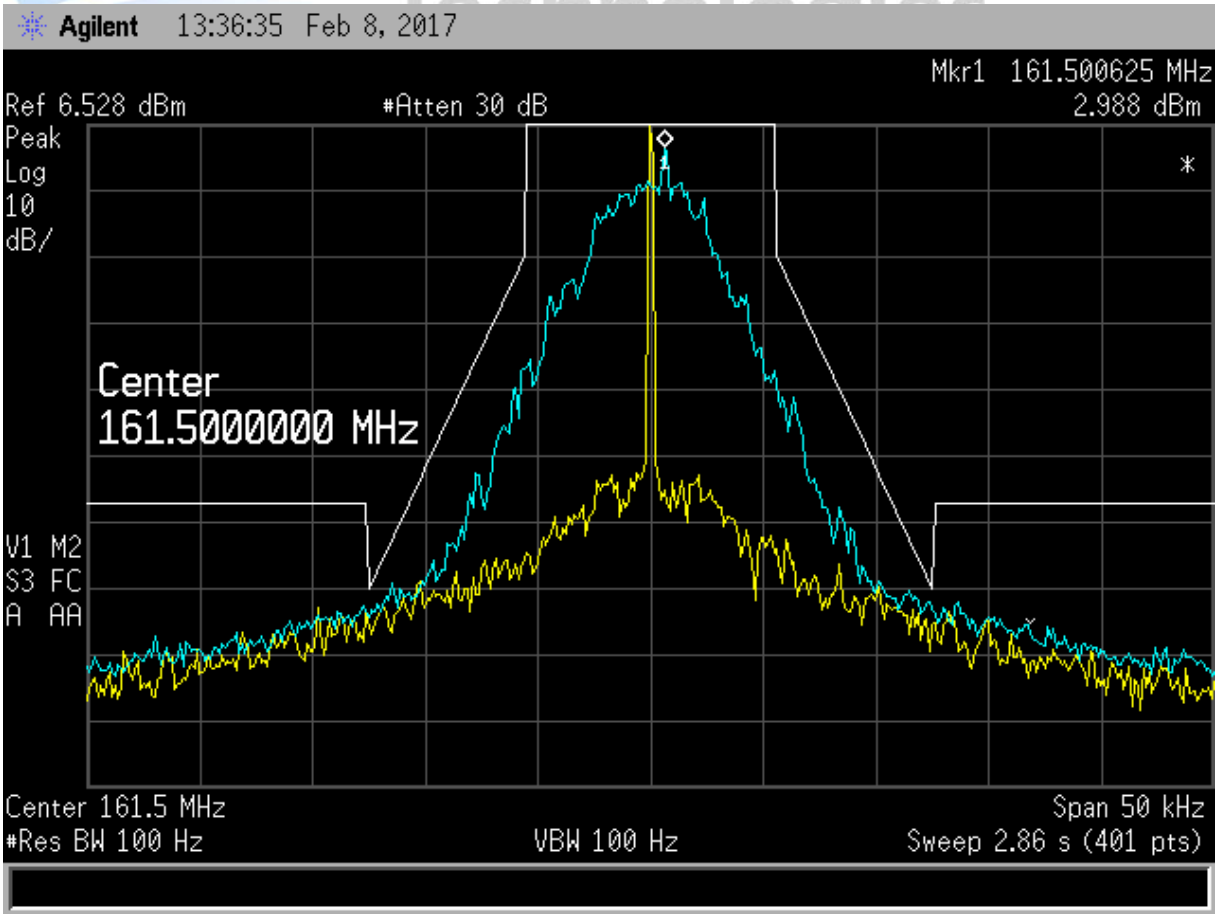
The transmitter was modulated using modulation sources internal to the transmitter as supplied by the client.

Result: Complies.

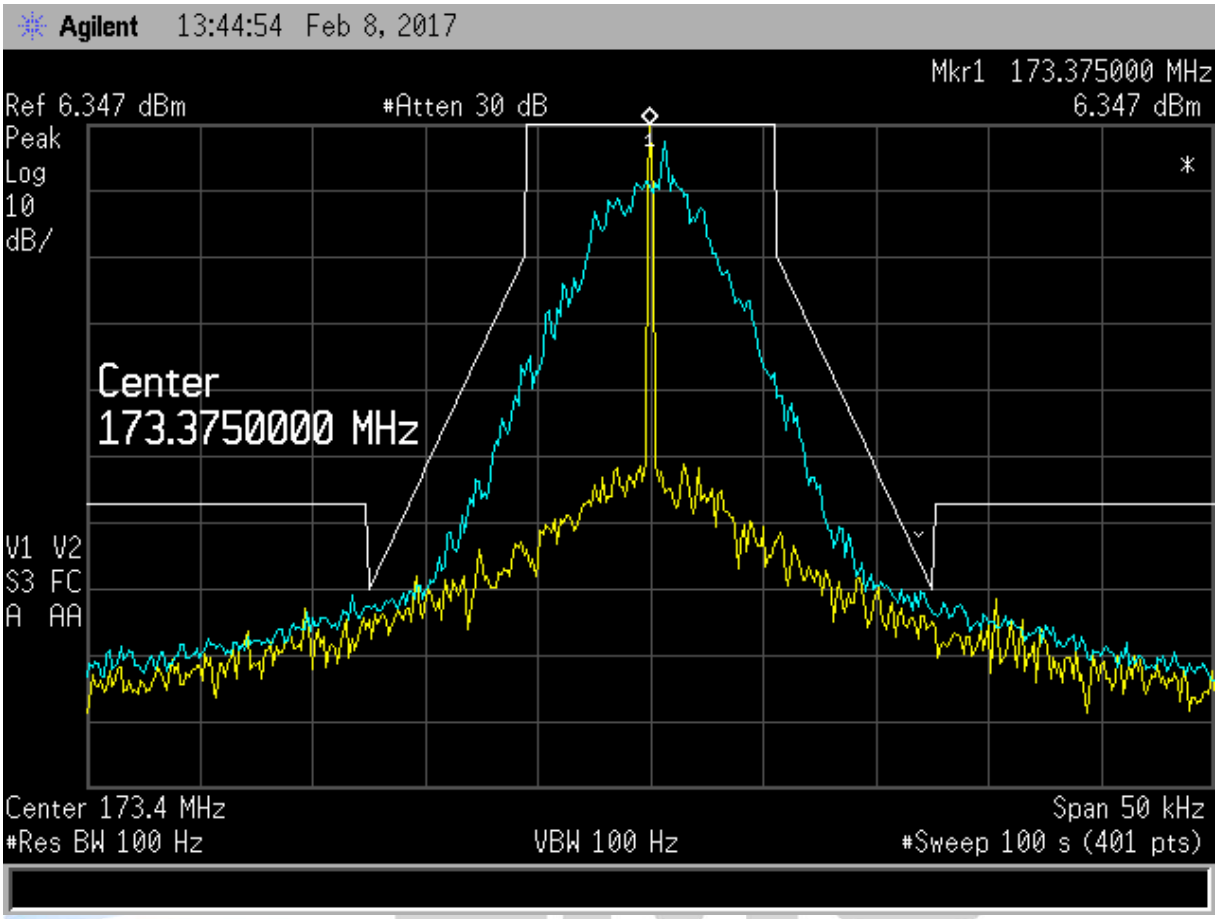
FXD / FXE - 151.075 MHz



FXD / FXE - 160.500 MHz



FXD / FXE - 173.375 MHz



Transmitter spurious emissions at the antenna terminals

The spectrum analyser bandwidth was set to 100 kHz for measurements below 1 GHz and 1 MHz for measurements above 1 GHz.

An external 30 dB attenuator was applied to the input of the spectrum analyser with the levels observed at the input of the 30 dB attenuator (transmitter output) detailed below.

Nominal Frequency: 151.0750 MHz

Frequency (MHz)	Level (dBm)	Limit (dBm)
302.150	-53.2	-20.0
453.225	-45.2	-20.0
604.300	-60.0*	-20.0
755.375	-60.0*	-20.0
906.450	-60.0*	-20.0
1057.525	-60.0*	-20.0
1208.600	-60.0*	-20.0
1359.675	-60.0*	-20.0
1510.750	-60.0*	-20.0

Nominal Frequency: 161.5000 MHz

Frequency (MHz)	Level (dBm)	Limit (dBm)
323.000	-45.3	-20.0
484.500	-49.4	-20.0
646.000	-60.0*	-20.0
807.500	-60.0*	-20.0
969.000	-60.0*	-20.0
1130.500	-60.0*	-20.0
1292.000	-60.0*	-20.0
1453.500	-60.0*	-20.0
1615.000	-60.0*	-20.0
1776.500	-60.0*	-20.0

Nominal Frequency: 173.3750 MHz

Frequency (MHz)	Level (dBm)	Limit (dBm)
346.750	-42.5	-20.0
520.125	-45.1	-20.0
693.500	-60.0*	-20.0
866.875	-60.0*	-20.0
1040.250	-60.0*	-20.0
1213.625	-60.0*	-20.0
1387.000	-60.0*	-20.0
1560.375	-60.0*	-20.0
1733.750	-60.0*	-20.0
1907.125	-60.0*	-20.0

* Noise floor measurement

Limit:

Mask D, on any frequency removed from the centre of the authorised bandwidth by a displacement frequency of more than 12.5 kHz shall be attenuated by at least 50 + 10 log (P) or 70.0 dB whichever is the lesser attenuation.

The spectrum has been investigated up to the 10th harmonic of the transmitter frequency.

A rated power of 5.0 watts gives a limit of –20.0 dBm.

Result:
Measurement Uncertainty: ± 3.3 dB

Transmitter Radiated Emissions Test Set Up:

The device was powered using a 12 Vdc lead acid battery.

Attached to the transceiver were the following cables / devices:

- a 1.2 metre long serial cable that was terminated with a laptop computer that was running a client supplied control programme

- a resistive dummy load that was attached to the antenna port

Transmitter testing was carried out when the device was transmitting continuously on 151.075 MHz, 161.500 MHz and 173.375 MHz.

The transmitter was tested while transmitting continuously while attached to a dummy load.

When operating in transmit mode no significant emissions were detected between the harmonic emissions that were detected.

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

Testing was carried out at EMC Technologies NZ Ltd Open Area Test Site, which is located at Driving Creek, Orere Point, Auckland.

The level recorded is the signal generator output level in dBm less any gains / losses due to the coax cable and the dipole antenna.

Testing was carried out with an un-modulated carrier and with digital modulation applied.

Testing with an un-modulated carrier gave worst case results which have been recorded below.

Limit:

All spurious emissions are to be attenuated by at least 50 + 10 log (P).

The rated power of 5 watts gives a limit of –20 dBm.

No measurements were made above the 10^{th} harmonic.

Result: Complies.
Measurement Uncertainty: ± 4.1 dB

Field strength of the transmitter spurious emissions

Nominal Frequency: 151.075 MHz

Frequency (MHz)	Level (dBuV/m)	Level (dBm)	Limit (dBm)	Polarity	Margin (dB)	Result
302.1500	30.3	-67.1	-20.0	Vertical	47.1	Pass
	39.6	-57.8	-20.0	Horizontal	37.8	Pass
453.2250	22.3	-75.1	-20.0	Vertical	55.1	Pass
	21.0	-76.4	-20.0	Horizontal	56.4	Pass
604.3000	30.3	-67.1	-20.0	Vertical	47.1	Pass
	29.8	-67.6	-20.0	Horizontal	47.6	Pass
755.3750	27.3	-70.1	-20.0	Vertical	50.1	Pass
	24.2	-73.2	-20.0	Horizontal	53.2	Pass
906.4500	24.0*	-	-20.0	Vertical	-	Pass
	24.0*	-	-20.0	Horizontal	-	Pass
1057.5250	29.0*	-	-20.0	Vertical	-	Pass
	29.0*	-	-20.0	Horizontal	-	Pass
1208.6000	30.0*	-	-20.0	Vertical	-	Pass
	30.0*	-	-20.0	Horizontal	-	Pass
1359.6750	31.0*	-	-20.0	Vertical	-	Pass
	31.0*	-	-20.0	Horizontal	-	Pass
1510.7500	32.0*	-	-20.0	Vertical	-	Pass
	32.0*	-	-20.0	Horizontal	-	Pass

* Noise floor measurements

Nominal Frequency: 161.500 MHz

Frequency (MHz)	Level (dBuV/m)	Level (dBm)	Limit (dBm)	Polarity	Margin (dB)	Result
323.0000	37.1	-60.3	-20.0	Vertical	40.3	Pass
	48.6	-48.8	-20.0	Horizontal	28.8	Pass
484.5000	26.4	-71.0	-20.0	Vertical	51.0	Pass
	28.1	-69.3	-20.0	Horizontal	49.3	Pass
646.0000	31.6	-65.8	-20.0	Vertical	45.8	Pass
	34.1	-63.3	-20.0	Horizontal	43.3	Pass
807.5000	28.1	-69.3	-20.0	Vertical	49.3	Pass
	29.1	-68.3	-20.0	Horizontal	48.3	Pass
969.0000	27.0*	-	-20.0	Vertical	-	Pass
	27.0*	-	-20.0	Horizontal	-	Pass
1130.5000	30.0*	-	-20.0	Vertical	-	Pass
	30.0*	-	-20.0	Horizontal	-	Pass
1292.0000	32.0*	-	-20.0	Vertical	-	Pass
	32.0*	-	-20.0	Horizontal	-	Pass
1453.5000	32.0*	-	-20.0	Vertical	-	Pass
	32.0*	-	-20.0	Horizontal	-	Pass
1615.0000	34.0*	-	-20.0	Vertical	-	Pass
	34.0*	-	-20.0	Horizontal	-	Pass

* Noise floor measurements

Nominal Frequency: 173.375 MHz

Frequency (MHz)	Level (dBuV/m)	Level (dBm)	Limit (dBm)	Polarity	Margin (dB)	Result
346.7500	41.0	-56.4	-20.0	Vertical	36.4	Pass
	48.0	-49.4	-20.0	Horizontal	29.4	Pass
520.1250	29.5	-67.9	-20.0	Vertical	47.9	Pass
	30.1	-67.3	-20.0	Horizontal	47.3	Pass
693.5000	25.1	-72.3	-20.0	Vertical	52.3	Pass
	26.7	-70.7	-20.0	Horizontal	50.7	Pass
866.8750	27.6	-69.8	-20.0	Vertical	49.8	Pass
	27.1	-70.3	-20.0	Horizontal	50.3	Pass
1040.2500	30.0*	-	-20.0	Vertical	-	Pass
	30.0*	-	-20.0	Horizontal	-	Pass
1213.6250	32.0*	-	-20.0	Vertical	-	Pass
	32.0*	-	-20.0	Horizontal	-	Pass
1387.0000	33.0*	-	-20.0	Vertical	-	Pass
	33.0*	-	-20.0	Horizontal	-	Pass
1560.3750	34.0*	-	-20.0	Vertical	-	Pass
	34.0*	-	-20.0	Horizontal	-	Pass
1733.7500	35.0*	-	-20.0	Vertical	-	Pass
	35.0*	-	-20.0	Horizontal	-	Pass

* Noise floor measurements

Frequency Stability

Frequency stability measurements were between - 30 °C and + 50°C in 10°C increments.

At each temperature the transmitter was given a period of 30 minutes to stabilise with the transmitter then being turned on and the frequency error measured after a period of 1 minute.

Frequency: 151.075 MHz

Temperature (°C)	11.0 Vdc (Hz)	13.0 Vdc (Hz)	15.0 Vdc (Hz)
+50	-100.0	-100.0	-101.0
+40	-64.0	-64.0	-66.0
+30	-71.0	-71.0	-71.0
+20	-54.0	-58.0	-58.0
+10	-38.0	-34.0	-32.0
0	-85.0	-74.0	-68.0
-10	-89.0	-84.0	-81.0
-20	-85.0	-80.0	-75.0
-30	-80.0	-85.0	-87.0

Frequency: 161.500 MHz

Temperature (°C)	11.0 Vdc (Hz)	13.0 Vdc (Hz)	15.0 Vdc (Hz)
+50	-110.0	-111.0	-110.0
+40	-70.0	-70.0	-71.0
+30	-70.0	-70.0	-71.0
+20	-58.0	-67.0	-61.0
+10	-44.0	-41.0	-38.0
0	-77.0	-74.0	-62.0
-10	-90.0	-103.0	-107.0
-20	-88.0	-94.0	-98.0
-30	-92.0	-91.0	-88.0

Frequency: 173.375 MHz

Temperature (°C)	11.0 Vdc (Hz)	13.0 Vdc (Hz)	15.0 Vdc (Hz)
+50	-120.0	-119.0	-118.0
+40	-80.0	-80.0	-80.0
+30	-76.0	-75.0	-75.0
+20	-64.0	-77.0	-64.0
+10	-47.0	-45.0	-43.0
0	-66.0	-59.0	-54.0
-10	-100.0	-107.0	-109.0
-20	-103.0	-109.0	-108.0
-30	-91.0	-88.0	-88.0

Limit:

Part 90.213 states that fixed station transmitters operating between 150 – 175 MHz with 12.5 kHz channelling are required to have a frequency tolerance of 1.5 ppm.

A worst case error of 0.692 ppm (120 Hz / 173.375 MHz) was observed.

Result: Complies.
Measurement Uncertainty: ± 30 Hz

Transient frequency behaviour

Measurements were carried out using the method described in TIA-603 and EN 300-086.

The modulation analyser produces an amplitude difference signal and a frequency difference signal, which are applied to the input of a storage oscilloscope.

The unmodulated transmitter is then keyed which produces a trigger pulse that is AC coupled to the oscilloscope that produces a display on the screen.

The result of the change in the ratio of power between the test signal from the signal generator and the transmitter output will produce 2 separate sides on the oscilloscope picture. One will show the 1000 Hz test modulation and the other will be the frequency difference of the transmitter versus time.

Channel Spacing (kHz)	Transient Period t_1	Frequency Period t_2	Deviation (kHz) Period t_3
12.5	Nil	Nil	Nil

Limits:

Time Interval	Period (ms)	12.5 kHz Deviation (kHz)	25 kHz Deviation (kHz)
t_1	5	± 12.5	± 25.0
t_2	20	± 6.25	± 12.5
t_3	5	± 12.5	± 25.0

Result: Complies.
Measurement Uncertainty: Frequency difference ± 1.6 kHz, Time period ±1 ms.

12.5 kHz transmitter turn on

Green Trace = 1 kHz tone with FM deviation of 12.5 kHz and any transient.

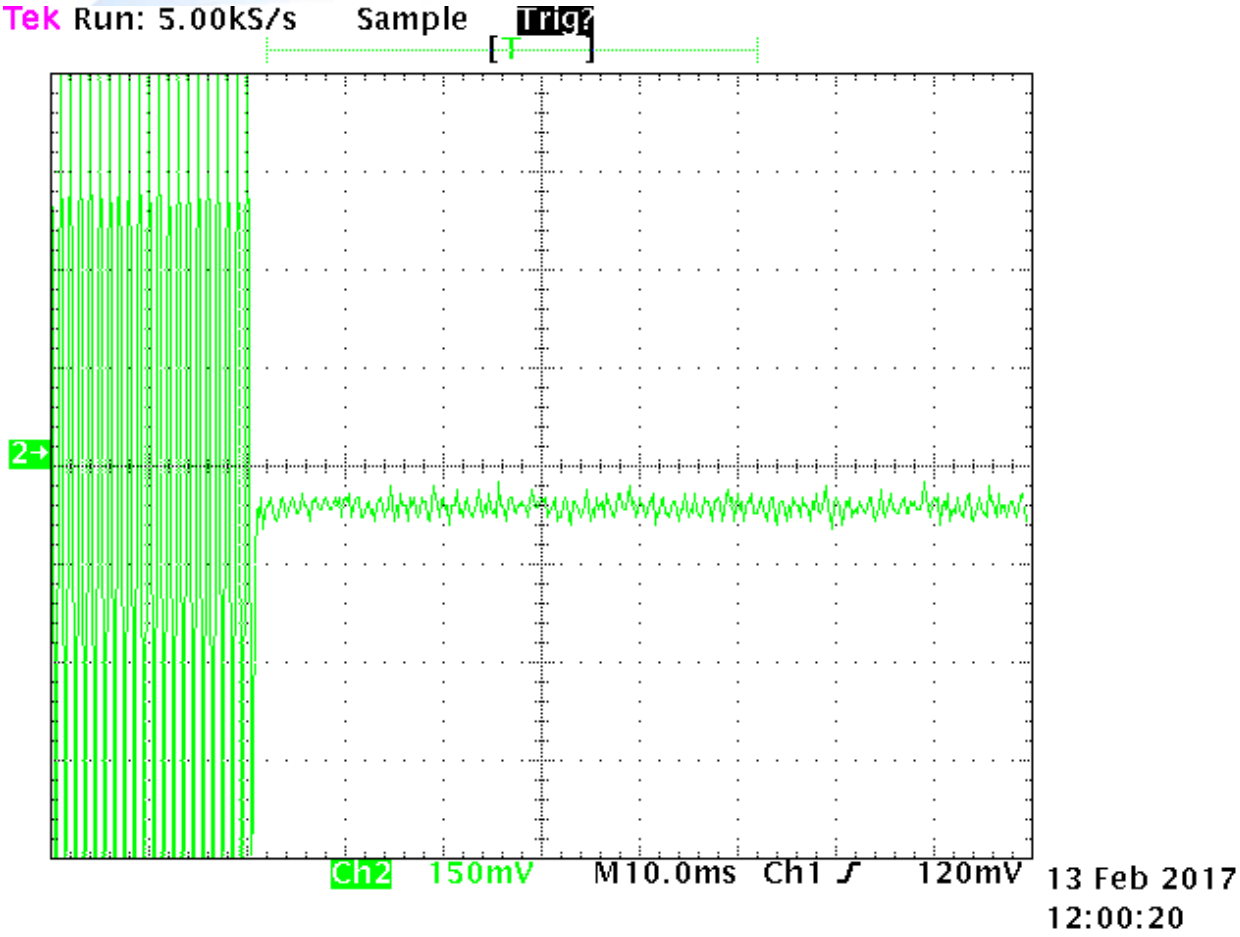
Green trace has been maximised to give full screen indication of a ±12.5 kHz.
Therefore each Y axis division = 3.125 kHz per division.
The X axis has been set to a sweep rate of 10 ms/division.

Triggering has been set to occur 2 divisions from the left hand edge (20 ms). This is position *t*on.

*t*1 occurs between 2.0 and 2.5 divisions from the left-hand edge.
t2 occurs between 2.5 and 4.5 divisions from the left-hand edge.

No transient can be observed.

Frequency: 173.375 MHz



12.5 kHz transmitter turn off

Green Trace = 1 kHz tone with FM deviation of 12.5 kHz and any transient.

Green trace has been maximised to give full screen indication of a ± 12.5 kHz.
Therefore each Y axis division = 3.125 kHz per division.
The X axis has been set to a sweep rate of 10 ms/division.

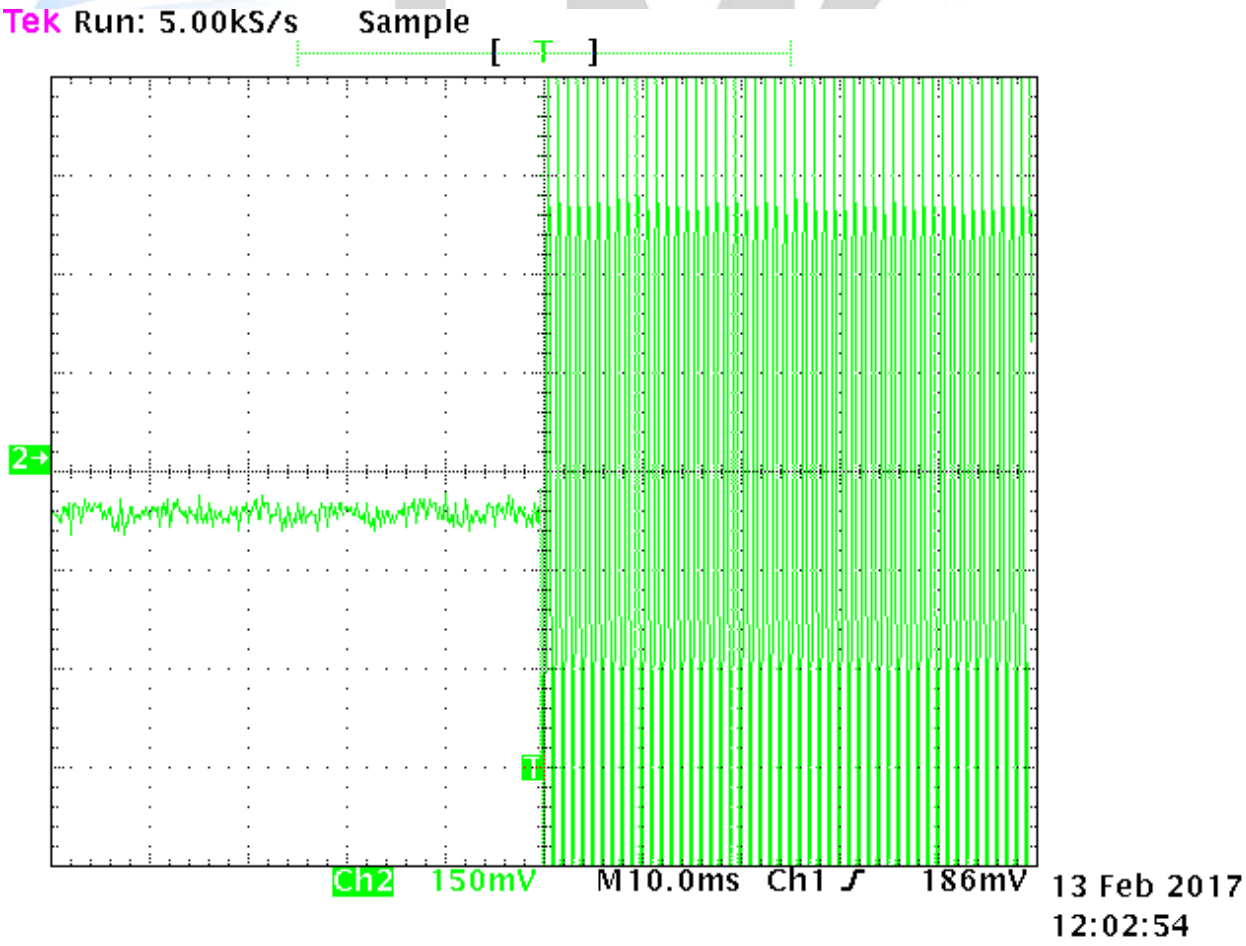
The display of the 1 kHz signal rising has been positioned 5 divisions from the left hand edge (50 ms).

This is position *t*off.

*t*3 occurs between 4.5 and 5.0 divisions from the left hand edge.

No transient response can be observed.

Frequency: 173.375 MHz



Exposure of humans to RF fields

As per FCC KDB 447498 D01 and Section 2.1091 radio frequency transmitters are required to be operated in a manner that ensures the public is not exposed to RF energy levels.

Calculations have been made using the General Public/Uncontrolled Exposure limits that are defined in Section 1.1310.

Minimum safe distances have been calculated below.

Power density, $mW/cm^2 = E^2/3770$

- General Population / Uncontrolled exposure is 0.2 mW/cm^2

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

Power Density = 0.2 $mW/cm^2 = E^2/3770$

$E = \sqrt{0.2*3770}$

E = 27.4 V/m

The rated maximum transmitter power (PC) = 5 watts (+37 dBm).

A duty cycle (DC) of 50% (0.5) has been applied as the device uses source based 50% TDMA which relates to the carrier duty cycle.

The client has declared that this transmitter can be operated using a non-directional antenna with a gain of 0 dBd or a directional antenna with a gain of up to 6 dBd.

Calculations of the safe distance for these types of antenna are detailed in the table below.

Antenna Gain (dBd)	Max Gain (dBi)	Tx Power (dBm)	EIRP (dBm)	EIRP (Watts)	E Limit (V/m)	Safe Distance (Metres)
0.0	2.15	37.0	39.15	8.22	27.4	0.40
6.0	8.15	37.0	45.15	32.73	27.4	0.80

A sample calculation for the safe distance would be:

$d = \sqrt{(30 * P * G*DC) / E}$

$d = \sqrt{(30 * 32.73 * 0.5) / 27.4}$

d = 0.80 metres or 80 cm

Result: Complies if the safe distances defined above are applied.

7. TEST EQUIPMENT USED

Instrument	Manufacturer	Model	Serial #	Asset	Cal Due	Interval
Aerial Controller	EMCO	1090	9112-1062	3710	N/a	N/a
Aerial Mast	EMCO	1070-1	9203-1661	3708	N/a	N/a
Biconical Antenna	Schwarzbeck	BBA 9106	-	3612	03/02/2018	3 years
Horn Antenna	EMCO	3115	9511-4629	E1526	04/06/2017	3 years
Level generator	Anritsu	MG443B	M61689	E1143	01/06/2017	2 years
Log Periodic Antenna	Schwarzbeck	VUSLP 91111	9111-228	3785	17/12/2017	3 years
Modulation Analyzer	Rohde & Schwarz	FMA	837807/020	E1552	19/06/2017	2 years
Modulation Analyzer	Hewlett Packard	8901B	2608A00782	E1090	13/10/2018	2 years
Oscilloscope	Tektronics	745A	B010643	E1569	19/06/2017	2 years
Power Attenuator	JFW	50FH-030-100	-	-	N/a	N/a
Power Supply	Hewlett Packard	6032A	2743A-02859	E1069	N/a	N/a
Receiver	Rohde & Schwarz	ESIB-40	100171	4003	16/04/2017	1 year
Selective Level Meter	Anritsu	ML422C	M35386	E1140	19/05/2017	2 years
Signal Generator	Rohde & Schwarz	SMHU	838923/028	E1493	19/06/2017	2 years
Spectrum Analyzer	Hewlett Packard	E7405A	US39150142	3776	08/09/2017	1 year
Thermal chamber	Contherm	M180F	86025	E1129	N/a	N/a
Thermometer	DSIR	RT200	035	E1049	N/a	N/a
Turntable	EMCO	1080-1-2.1	9109-1578	3709	N/a	N/a
VHF Balun	Schwarzbeck	VHA9103	-	3603	03/02/2018	3 years

At the time of testing all test equipment was within calibration.

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 in June 2014.

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.

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.

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

Label

External Views – Top Front

Bottom Face

Front face

Rear Face

Left hand Side

Right Hand Side

Radiated Emissions Test Set Up