A RADIO TEST REPORT

FOR

BW BROADCAST Ltd

ON

UNIFIED TX FM BROADCAST TRANSMITTER

DOCUMENT NO. TRA-035142-47-00B

Element Test Report	: TRA-035142-47-00B
Applicant	: BW BROADCAST Ltd
Apparatus	: UNIFIED TX FM Broadcast Transmitter
Specification(s)	: CFR47 Part 73
Purpose of Test	: Certification
FCCID	: 2ABPH-UNIFIEDTX
Authorised by	:  Digitally signed by John Charters DN: cn=John Charters, o, ou=Element Materials Technology Ltd., email=john.charters@element.com, c=GB Reason: I am approving this document Date: 2018.09.05 08:55:44 +01'00'
	: Radio Product Manager
Issue Date	:5th **September 2018**
Authorised Copy Number	: *PDF*

Total number of pages: 36

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Section 1: Introduction

1.1 General

This report contains an assessment of an apparatus against Electromagnetic Compatibility Standards based upon tests carried out on samples submitted to the Laboratory.

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Report author: D Winstanley

1.2 Tests Requested By

This testing in this report was requested by :

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1.3 Manufacturer

BW Broadcast Ltd
Unit 27
IO Centre
Croydon Road
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CR0 4WG

1.4 Apparatus Assessed

The following apparatus was assessed between: 3rd to 6th July 2018.

UNIFIED TX FM Broadcast Transmitter 87.5 MHz – 108.0 MHz

1.5 Test Result Summary

Full details of test results are contained within Appendix A. The following table summarises the results of the assessment.

The statements relating to compliance with the standards below apply ONLY as qualified in the notes and deviations stated in sections 1.6 to 1.7 of this test report.

Full details of test results are contained within Appendix A. The following table summarises the results of the assessment.

Test Type	Regulation	Measurement standard	Result
RF Output Power	Part 2.1046 Part 73.267	ANSI C63.26	Complies
Modulation Characteristics	Part 2.1047	ANSI C63.26	Complies
Emission Mask	Part 2.1049 Part 73.317	ANSI C63.26	Complies
Conducted Spurious Emissions (Antenna Terminal)	Part 2.1051	ANSI C63.26	Complies
Frequency Stability	Part 2.1055 Part 73.1545	ANSI C63.26	Complies
Radiated spurious emissions (Cabinet radiation)	Part 2.1053	ANSI C63.26	Complies

Abbreviations used in the above table:

CFR : Code of Federal Regulations
REFE : Radiated Electric Field Emissions
ANSI : American National Standards Institution
PLCE : Power Line Conducted Emissions

1.6 Notes Relating To The Assessment

With regard to this assessment, the following points should be noted:

The results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

The apparatus was set up and exercised using the configurations, modes of operation and arrangements defined in this report only.

Particular operating modes, apparatus monitoring methods and performance criteria required by the standards tested to have been performed except where identified in Section 1.7 of this test report (Deviations from Test Standards).

For emissions testing, throughout this test report, “Pass” indicates that the results for the sample as tested were below the specified limit (refer also to Section 2, Measurement Uncertainty).

Where relevant, the apparatus was only assessed using the monitoring methods and susceptibility criteria defined in this report.

All testing with the exception of testing at the Open Area Test Site was performed under the following environmental conditions:

Temperature	: 17 to 23 °C
Humidity	: 45 to 75 %

All dates used in this report are in the format dd/mm/yy.

This assessment has been performed in accordance with the requirements of ISO/IEC 17025.

1.7 Deviations from Test Standards

There were no deviations from the standards tested to.

Section 2: Measurement Uncertainty

2.1 Radio Testing – General Uncertainty Schedule

All statements of uncertainty are expanded standard uncertainty using a coverage factor of 1.96 to give a 95% confidence where no required test level exists.

[1] Adjacent Channel Power

Uncertainty in test result = **1.86dB**

[2] Carrier Power

Uncertainty in test result (Power Meter) = **1.08dB**
Uncertainty in test result (Spectrum Analyser) = **2.48dB**

[3] Effective Radiated Power

Uncertainty in test result = **4.71dB**

[4] Spurious Emissions

Uncertainty in test result = **4.75dB**

[5] Maximum frequency error

Uncertainty in test result (Power Meter) = **0.113ppm**
Uncertainty in test result (Spectrum Analyser) = **0.265ppm**

[6] Radiated Emissions, field strength OATS 14kHz-18GHz Electric Field

Uncertainty in test result (14kHz – 30MHz) = **4.8dB**,
Uncertainty in test result (30MHz – 1GHz) = **4.6dB**,
Uncertainty in test result (1GHz – 18GHz) = **4.7dB**

[7] Frequency deviation

Uncertainty in test result = **3.2%**

[8] Magnetic Field Emissions

Uncertainty in test result = **2.3dB**

[9] Conducted Spurious

Uncertainty in test result – Up to 8.1GHz = **3.31dB**
Uncertainty in test result – 8.1GHz – 15.3GHz = **4.43dB**
Uncertainty in test result – 15.3GHz – 21GHz = **5.34dB**
Uncertainty in test result – Up to 26GHz = **3.14dB**

[10] Channel Bandwidth

Uncertainty in test result = **15.5%**

[11] Amplitude and Time Measurement – Oscilloscope

Uncertainty in overall test level = **2.1dB**,
Uncertainty in time measurement = **0.59%,**
Uncertainty in Amplitude measurement = **0.82%**

[12] Power Line Conduction

Uncertainty in test result = **3.4dB**

[13] Spectrum Mask Measurements

Uncertainty in test result = **2.59% (frequency)**
Uncertainty in test result = **1.32dB (amplitude)**

[14] Adjacent Sub Band Selectivity

Uncertainty in test result = **1.24dB**

[15] Receiver Blocking – Listen Mode, Radiated

Uncertainty in test result = **3.42dB**

[16] Receiver Blocking – Talk Mode, Radiated

Uncertainty in test result = **3.36dB**

[17] Receiver Blocking – Talk Mode, Conducted

Uncertainty in test result = **1.24dB**

[18] Receiver Threshold

Uncertainty in test result = **3.23dB**

[19] Transmission Time Measurement

Uncertainty in test result = **7.98%**

Section 3: Modifications

3.1 Modifications Performed During Assessment

No modifications were performed during the assessment

Appendix A: Formal Emission Test Results

Abbreviations used in the tables in this appendix:

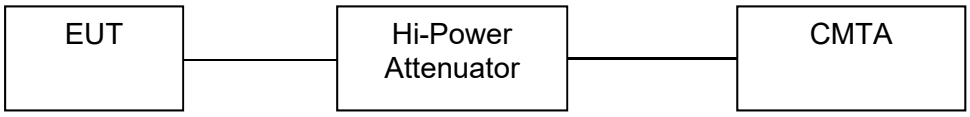
Spec	: Specification
Mod	: Modification
EUT	: Equipment Under Test
SE	: Support Equipment
L	: Live Power Line
N	: Neutral Power Line
E	: Earth Power Line
Pk	: Peak Detector
QP	: Quasi-Peak Detector
Av	: Average Detector
CDN	: Coupling & decoupling network
ALSR	: Absorber Lined Screened Room
OATS	: Open Area Test Site
ATS	: Alternative Test Site
Ref	: Reference
Freq	: Frequency
MD	: Measurement Distance
SD	: Spec Distance
Pol	: Polarisation
H	: Horizontal Polarisation
V	: Vertical Polarisation

A1 Transmitter Intentional Emission Conducted

Regulation	Title 47 of the CFR: Part73 Subpart (b)
Measurement standard	ANSI C63.26
EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C
Temperature	22°C

Notes: Applicable Standard

(b) FM stations. Except as provided in paragraph (d), the transmitter output power of an FM station, with power output as determined by the procedures specified in § 73.267,which is authorized for output power more than 10 watts must be maintained as near as practicable to the authorized transmitter output power and may not be less than 90% nor more than 105% of the authorized power. FM stations operating with authorized transmitter output power of 10 watts or less, may operate at less than the authorized power, but not more than 105% of the authorized power.



FREQ. (MHz)	Level at CMTA (dBm)	Output Cable and Attenuator Loss (dB)	Conducted Output Power (dBm)	Conducted Output Power (Watts)	% of Declared Output Power
88.1	26.8	33.2	60.00	1000.00	100.00
98.0	26.8	33.2	60.00	1000.00	100.00
107.9	26.8	33.2	60.00	1000.00	100.00
Output Power Limit			**90% ≤ Declared Output power ≤ 105%**		

The EUT was set to the maximum transmitter output power.
The manufacturers declared rated output power is 1000W.

Part 2.1033 (c)(8) input to the final amplifier.
DC Voltage = 46.5 Vdc
DC Current = 29.43 A

A2 Modulation Characteristics / Audio Response

EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C
Temperature	22°C

Test Method – Audio Response

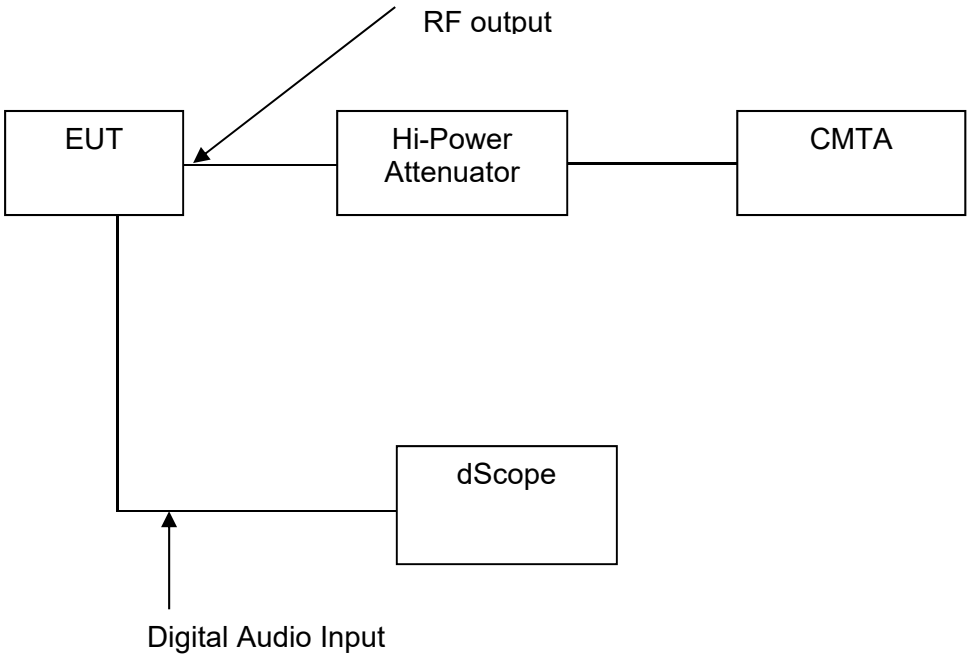
The measurement was taken as per ANSI TIA-603. With a 1 kHz audio tone the audio level was set to produce 20% peak of the rated deviation, a RMS Deviation reference (DEV_Ref) was taken. The audio tone was varied and the RMS deviation was recorded for each audio frequency (DEV_Freq). The audio response was then calculate by 20* Log (DEV_Freq/DEV_Ref).

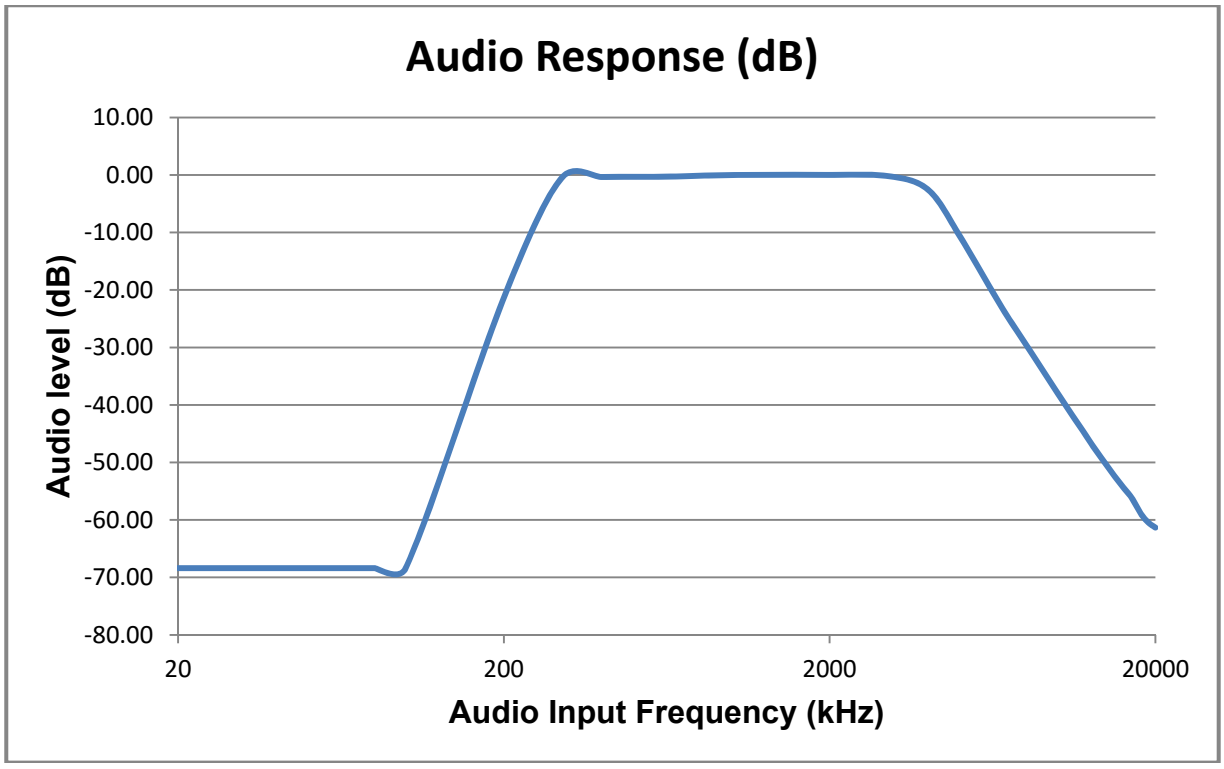
Test Method – Modulation limiting

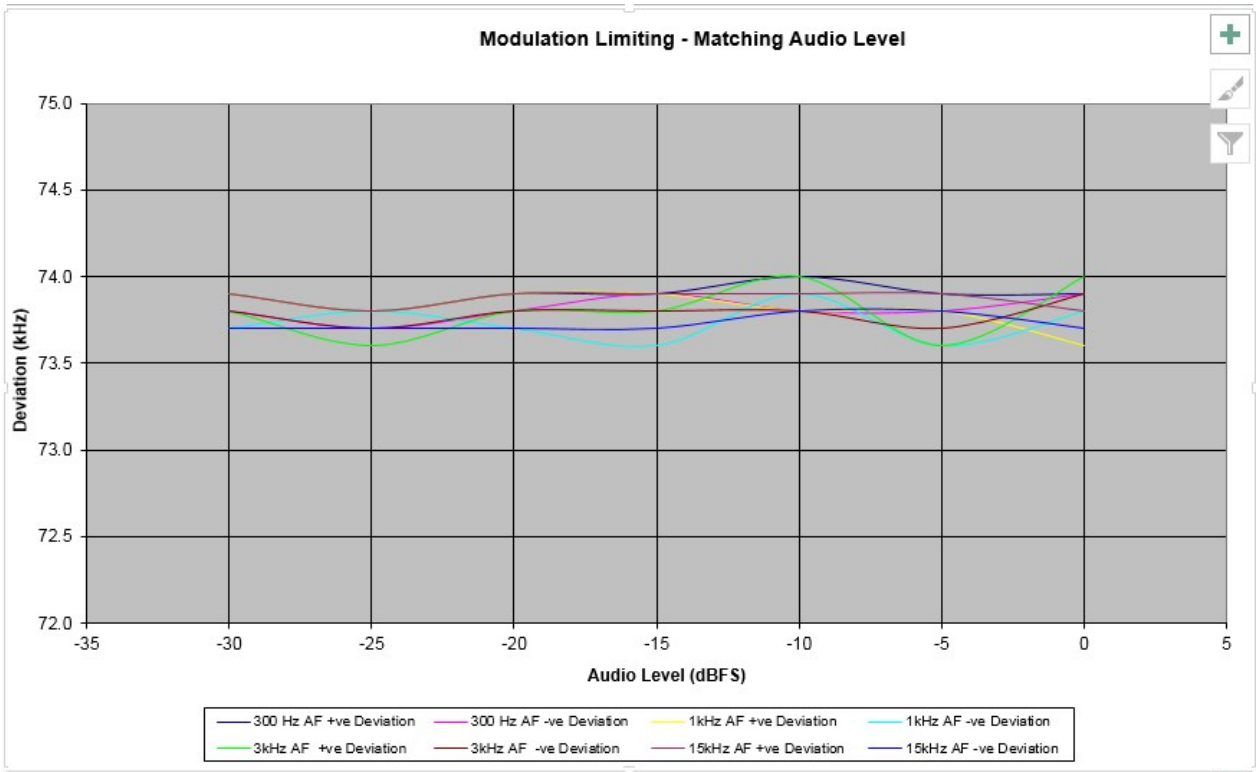
The modulation limiting was measured with two methods

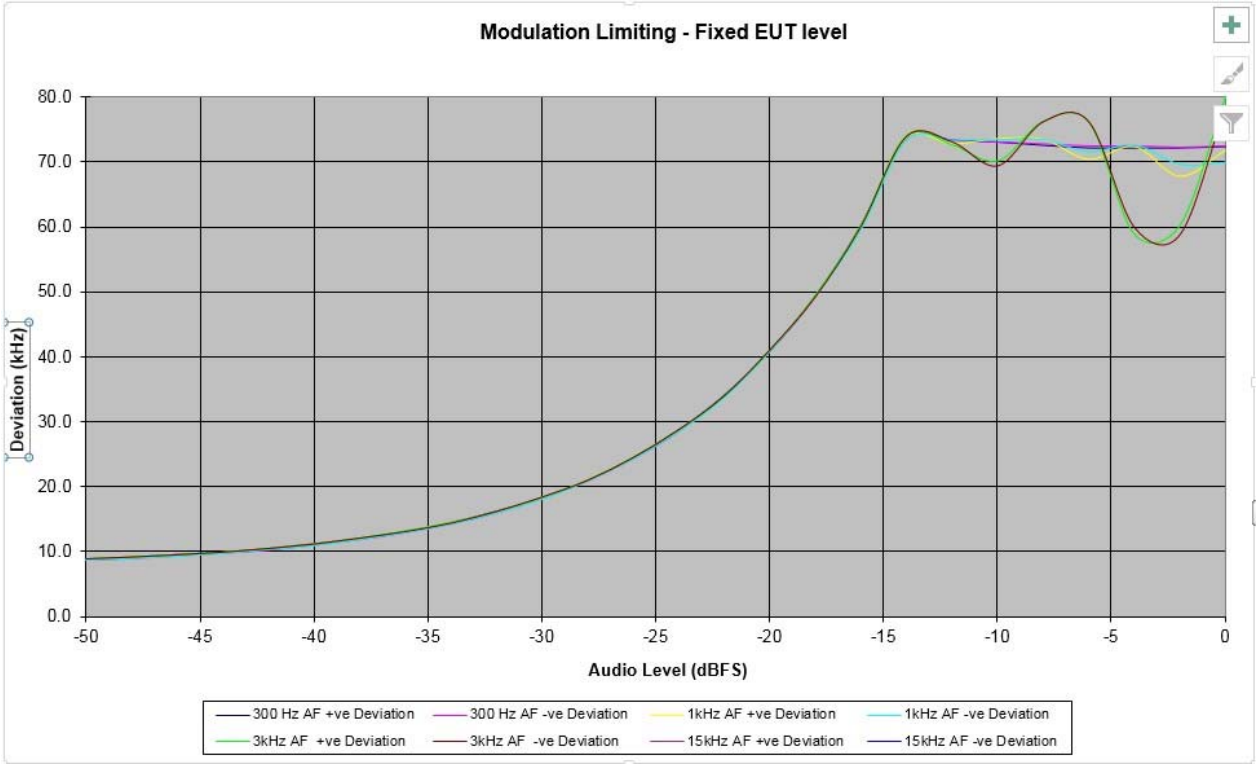
1. The EUT audio input level was set to a fixed value. The audio source level was varied and the resultant deviation recorded

2. The EUT audio input level and the audio source level were set to the same value and the resultant deviation recorded.




Audio Response (dB)
10.00
0.00
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
Audio level (dB)
20
200
2000
20000
Audio Input Frequency (kHz)

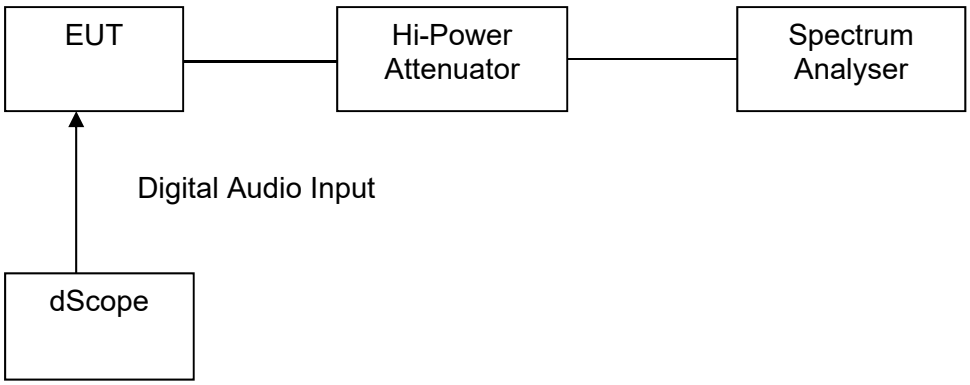

Modulation Limiting - Matching Audio Level
Deviation (kHz)
75.0
74.5
74.0
73.5
73.0
72.5
72.0
-35
-30
-25
-20
-15
-10
-5
0
5
Audio Level (dBFS)
300 Hz AF +ve Deviation
300 Hz AF -ve Deviation
1kHz AF +ve Deviation
1kHz AF -ve Deviation
3kHz AF +ve Deviation
3kHz AF -ve Deviation
15kHz AF +ve Deviation
15kHz AF -ve Deviation


Modulation Limiting - Fixed EUT level
Deviation (kHz)
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
Audio Level (dBFS)
300 Hz AF +ve Deviation
300 Hz AF -ve Deviation
1kHz AF +ve Deviation
1kHz AF -ve Deviation
3kHz AF +ve Deviation
3kHz AF -ve Deviation
15kHz AF +ve Deviation
15kHz AF -ve Deviation

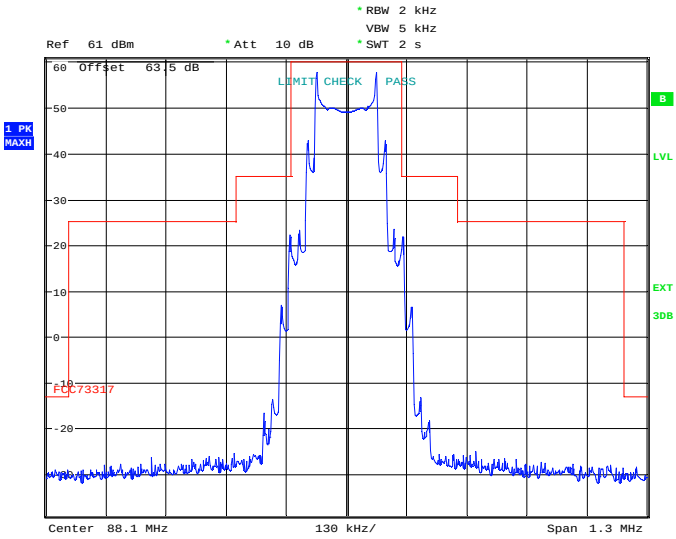
A3 Emission Mask Plots

Regulation	Title 47 of the CFR: Part73 Subpart (b)
Measurement standard	ANSI C63.26
EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C
Temperature	24°C

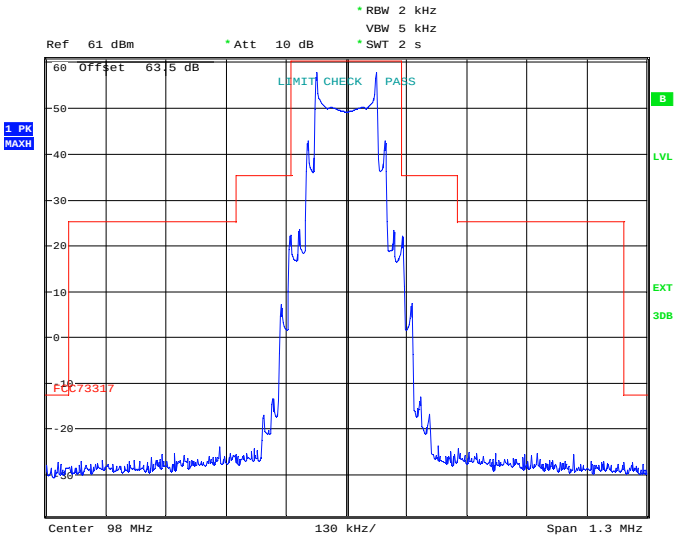
Any emission appearing on a frequency removed from the carrier by between 120 kHz and 240 kHz inclusive must be attenuated at least 25 dB below the level of the unmodulated carrier. Compliance with this requirement will be deemed to show the occupied bandwidth to be 240 kHz or less.
(c) Any emission appearing on a frequency removed from the carrier by more than 240 kHz and up to and including 600 kHz must be attenuated at least 35 dB below the level of the unmodulated carrier.
(d) Any emission appearing on a frequency removed from the carrier by more than 600 kHz must be attenuated at least 43 + 10 Log10 (Power, in watts) dB below the level of the unmodulated carrier, or 80 dB, whichever is the lesser attenuation.



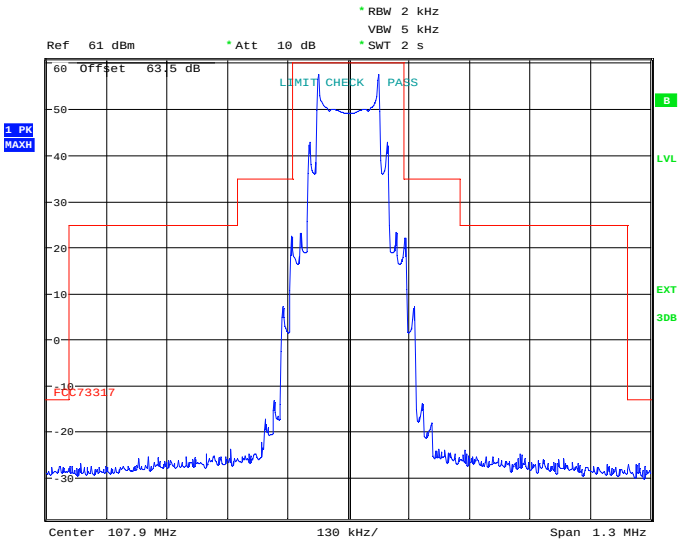
Operating Frequency (MHz)	Audio Frequency Input		
	400 Hz	1 kHz	15 kHz
88.10	Complies with Mask	Complies with Mask	Complies with Mask
98.00	Complies with Mask	Complies with Mask	Complies with Mask
107.90	Complies with Mask	Complies with Mask	Complies with Mask



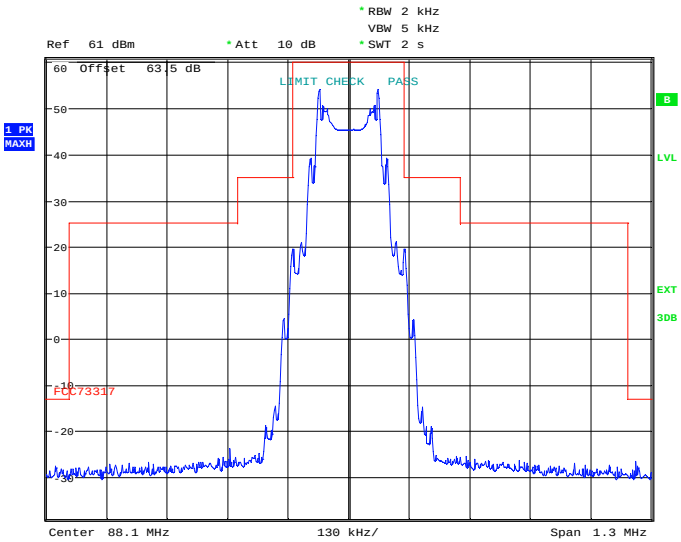
88.1 MHz; 400 Hz Audio Input



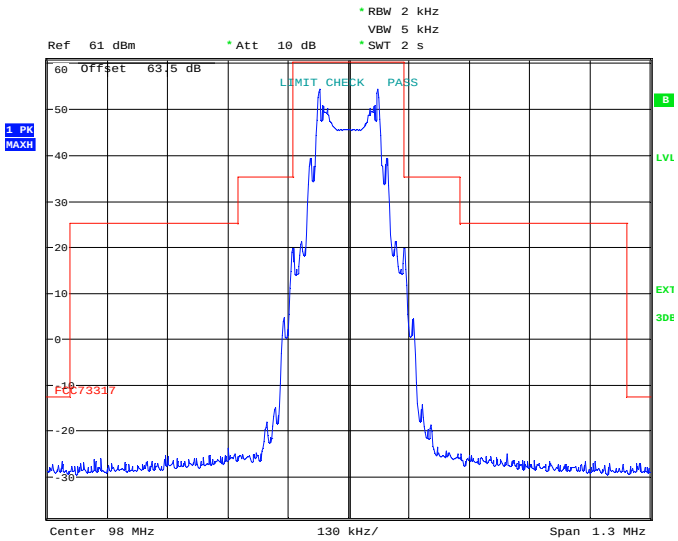
98.0 MHz; 400 Hz Audio Input



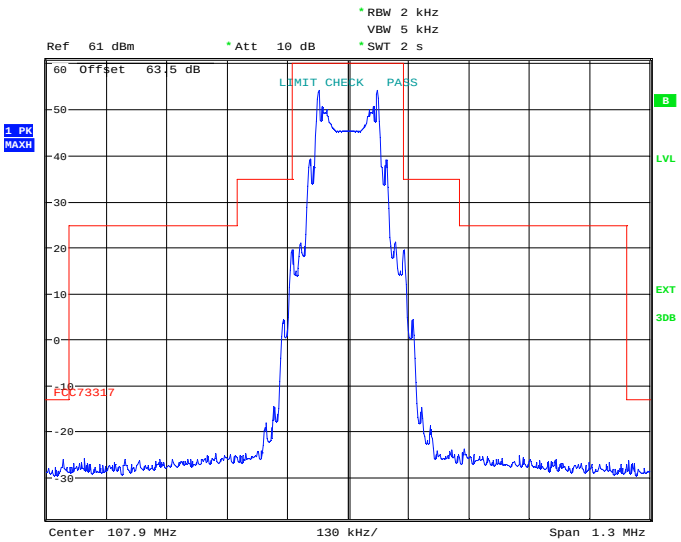
107.9 MHz; 400 Hz Audio Input



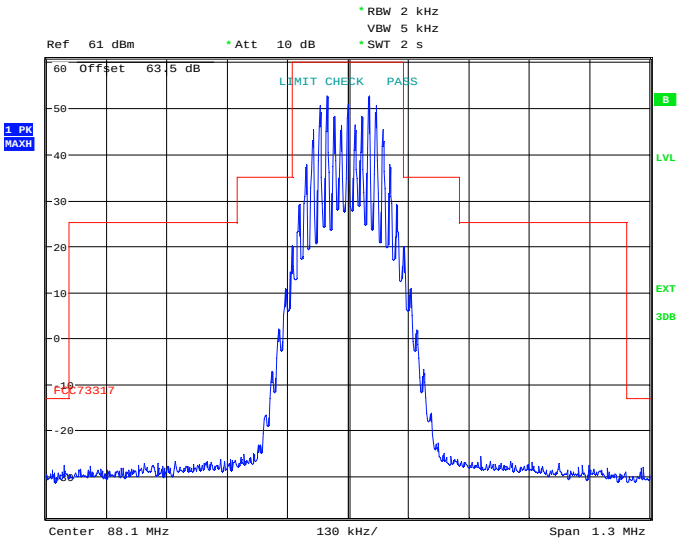
88.1 MHz; 1.0 kHz Audio Input



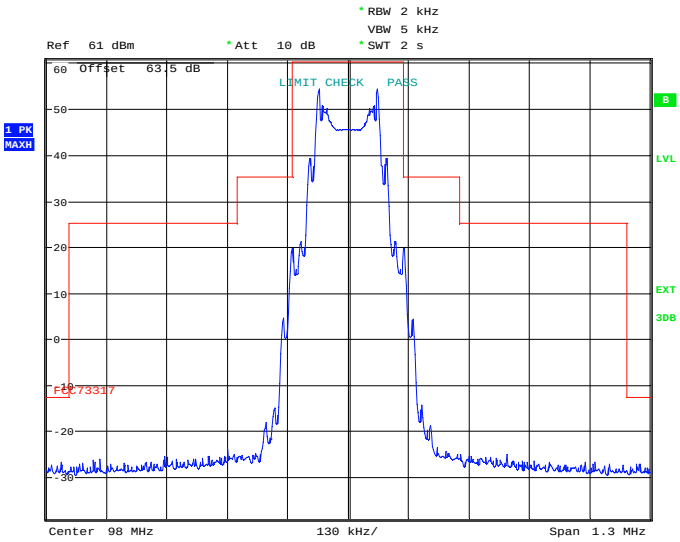
98.0 MHz; 1.0 kHz Audio Input



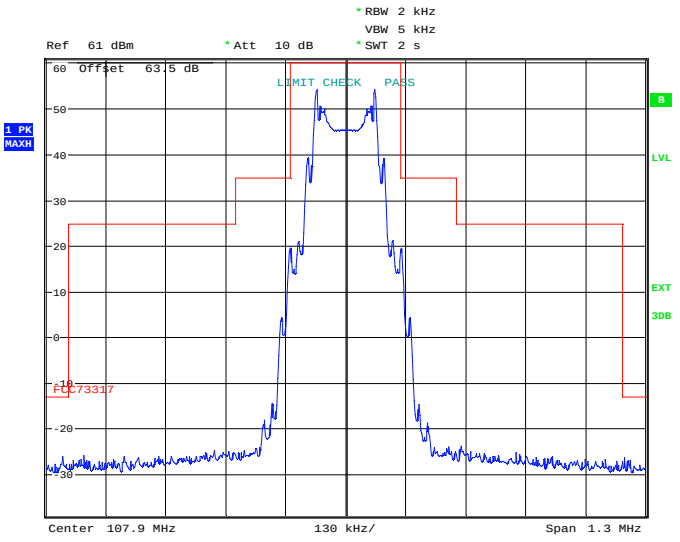
107.9 MHz; 1.0 kHz Audio Input



88.1 MHz; 15.0 kHz Audio Input



98.0 MHz; 15.0 kHz Audio Input



107.9 MHz; 15.0 kHz Audio Input

Note: other modulation characteristics

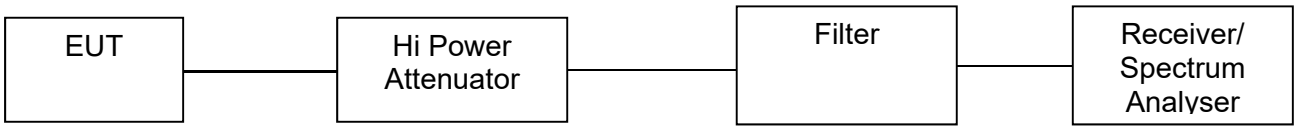
Part 2.202 Sound broadcasting

Bn = 2M +2DK
M = 15000
D = 75 kHz (peak deviation)
K = 1
Bn = 2(15k) + 2(75k)(1) = 180 kHz

ALLOWED AUTHORIZED BANDWIDTH = 200 kHz

A4 Conducted Spurious emissions- (Antenna Terminal)

Regulation	Title 47 of the CFR: Part73 Subpart (b); Part 2.1051
Measurement standard	ANSI C63.26
EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C
Temperature	24°C



The test was set up as per the above diagram, the unit was tested operating at maximum power and on three test frequencies.

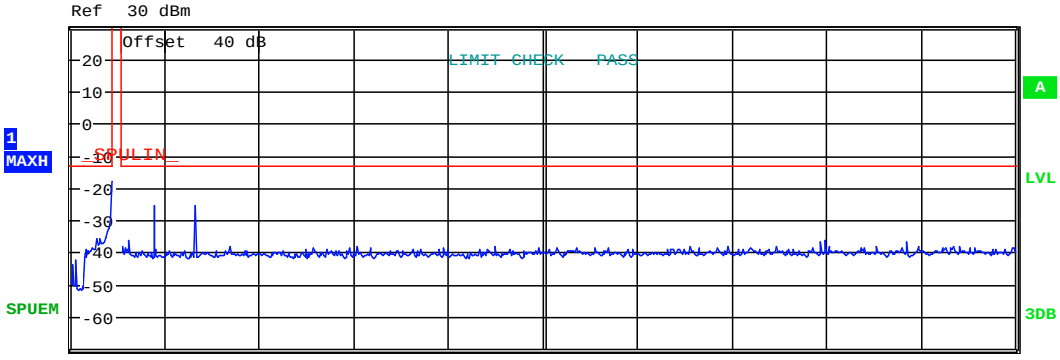
The spurious limit was calculated as follows:

On any frequency removed from the assigned frequency by more than 250% of the authorised bandwidth:

At least 43 + 10 log PdB
(10logPwatts) –(43+10log(Pwatts*1000) = Limit = -13dBm

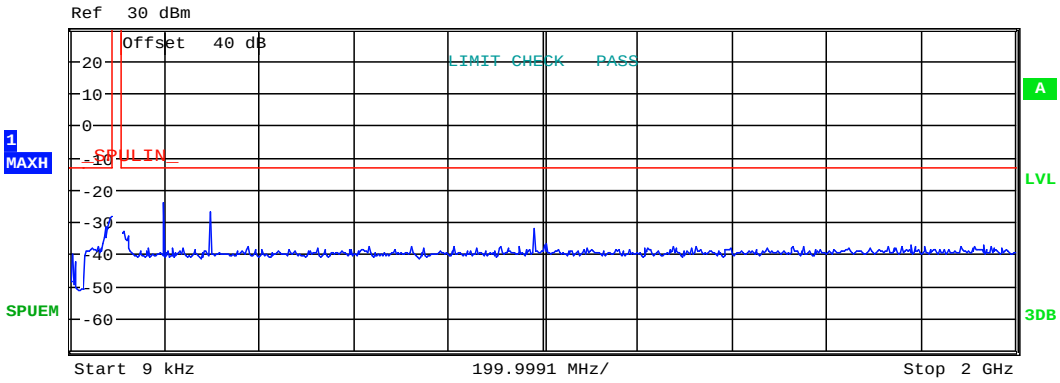
Further emissions that are more than 20dB under the limit are not reported.

Operating Frequency (MHz)	Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
88.1	176.180	-25.1	12.1	-13
	264.312	-24.5	11.5	-13



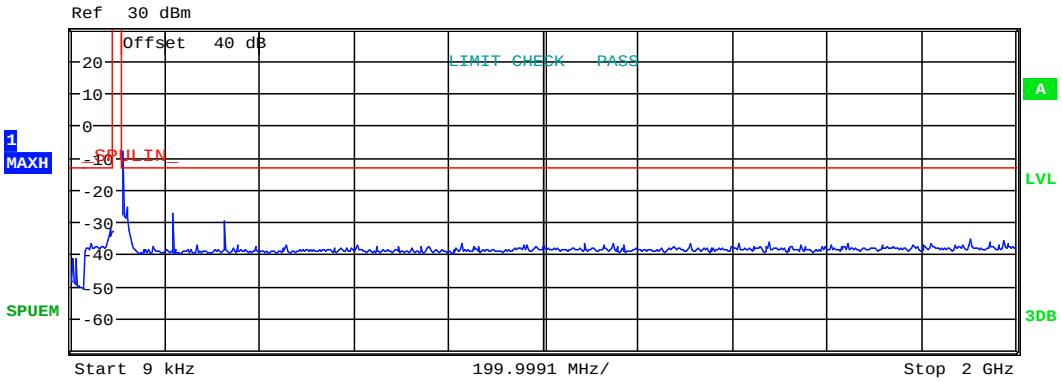
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
9.000 k	150.000 k	1.00 k	34.985577 k	-48.48	-35.48
150.000 k	30.000 M	10.00 k	9.997515 M	-42.64	-29.64
30.000 M	87.500 M	100.00 k	87.310250 M	-18.06	-5.06
108.000 M	1.000 G	100.00 k	176.148800 M	-25.58	-12.58
1.000 G	2.000 G	100.00 k	1.596700 G	-36.62	-23.62

Operating Frequency (MHz)	Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
98.0	195.986	-24.6	11.6	-13
	294.009	-22.3	9.3	-13
	980.074	-28.3	15.3	-13



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
9.000 k	150.000 k	1.00 k	10.129808 k	-48.83	-35.83
150.000 k	30.000 M	10.00 k	161.940000 k	-40.38	-27.38
30.000 M	87.500 M	100.00 k	86.568500 M	-28.56	-15.56
108.000 M	1.000 G	100.00 k	195.951200 M	-24.43	-11.43
1.000 G	2.000 G	100.00 k	1.006800 G	-37.10	-24.10

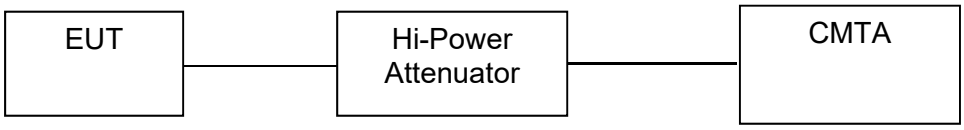
Operating Frequency (MHz)	Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
107.9	215.785	-26.9	13.9	-13
	323.717	-26.6	13.6	-13
	1789.650	-31.6	18.6	-13



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
9.000 k	150.000 k	1.00 k	34.985577 k	-48.74	-35.74
150.000 k	30.000 M	10.00 k	194.775000 k	-41.51	-28.51
30.000 M	87.500 M	100.00 k	83.975250 M	-32.20	-19.20
108.000 M	1.000 G	100.00 k	108.044600 M	-18.60	-5.60
1.000 G	2.000 G	100.00 k	1.904767 G	-35.61	-22.61

A5 Frequency Stability

Test Details:	
Regulation	Title 47 of the CFR, Part 73.1545; Part 2.1055 (a)(3)
Measurement standard	ANSI C63.10
EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C



Applicable Standard: Part 2.1055 (3)(b)

From 0°C - 50°C Centigrade for equipment to be licensed for use in the Radio Broadcast Services under part 73.

Frequency measurements shall be made at the extremes of the specified temperature range and at the intervals of not more than 10°C centigrade through the range. A period of time sufficient to stabilise all of the components of the oscillator circuit at each temperature level prior to the frequency measurement.

Part 2.1055 (3)(d)

The frequency stability shall be measured with variation of the primary supply voltage 85%- 115%.

88.1 MHz				
Voltage Vac	Temp (C)	Fc (MHz)	Drift (kHz)	Drift (PPM)
100%	0	88.10001	0.01	0.11
	10	88.10000	0.00	0.00
	20	88.09998	-0.02	-0.23
	30	88.09997	-0.03	-0.34
	40	88.09997	-0.03	-0.34
	50	88.09996	-0.04	-0.45
85%	20	88.09998	-0.02	-0.23
115%	20	88.09998	-0.02	-0.23

98.0 MHz				
Voltage Vac	Temp (C)	Fc (MHz)	Drift (kHz)	Drift (PPM)
100%	0	98.00001	0.010	0.10
	10	98.00000	0.000	0.00
	20	97.99998	-0.020	-0.20
	30	97.99997	-0.030	-0.31
	40	97.99996	-0.040	-0.41
	50	97.99996	-0.040	-0.41
85%	20	97.99998	-0.02	-0.20
115%	20	97.99998	-0.02	-0.20

107.9 MHz				
Voltage Vac	Temp (C)	Fc (MHz)	Drift (kHz)	Drift (PPM)
100%	0	107.90001	0.01	0.09
	10	107.90000	0.00	0.00
	20	107.89998	-0.02	-0.19
	30	107.89997	-0.03	-0.28
	40	107.89996	-0.04	-0.37
	50	107.89996	-0.04	-0.37
85%	20	107.89998	-0.02	-0.19
115%	20	107.89998	-0.02	-0.19

A6 Radiated Spurious Emissions

The following test site was used for final measurements as specified by the standard tested to:

3m open area test site : [ ] 3m alternative test site : [X]

The effect of the EUT set-up on the measurements is summarised in note (c) below.

Test Details:	
Regulation	Title 47 of the CFR, Part 2.1049; Part 73.317
Measurement standard	ANSI C63.4
EUT sample number	S01
Modification state	0
SE in test environment	N/A
SE isolated from EUT	No
EUT set up	Refer to Appendix C
Temperature	20°C

The worst case radiated emission measurements for spurious emissions are listed below:

Plot are preview plots only to indicate emission frequencies, levels shown on plots are not fully maximised formal measurements.

Any testing performed below 30 MHz was performed using a magnetic loop antenna. For emissions below 30MHz the cable losses are assumed to be negligible.

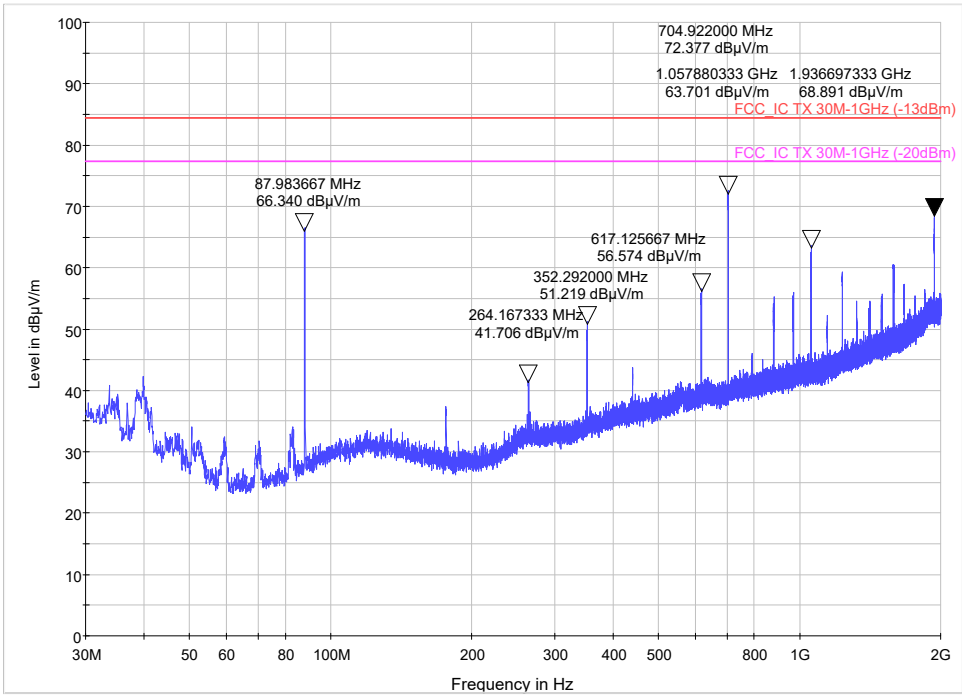
For Frequencies below 1 GHz, RBW = 120 kHz, testing was performed with test receiver with peak detector.

For Frequencies above 1 GHz, RBW = 1 MHz, testing was performed with test receiver with peak detector.

The upper and lower frequency of the measurement range was decided according to CFR47 part 2.1057 : BETS-6

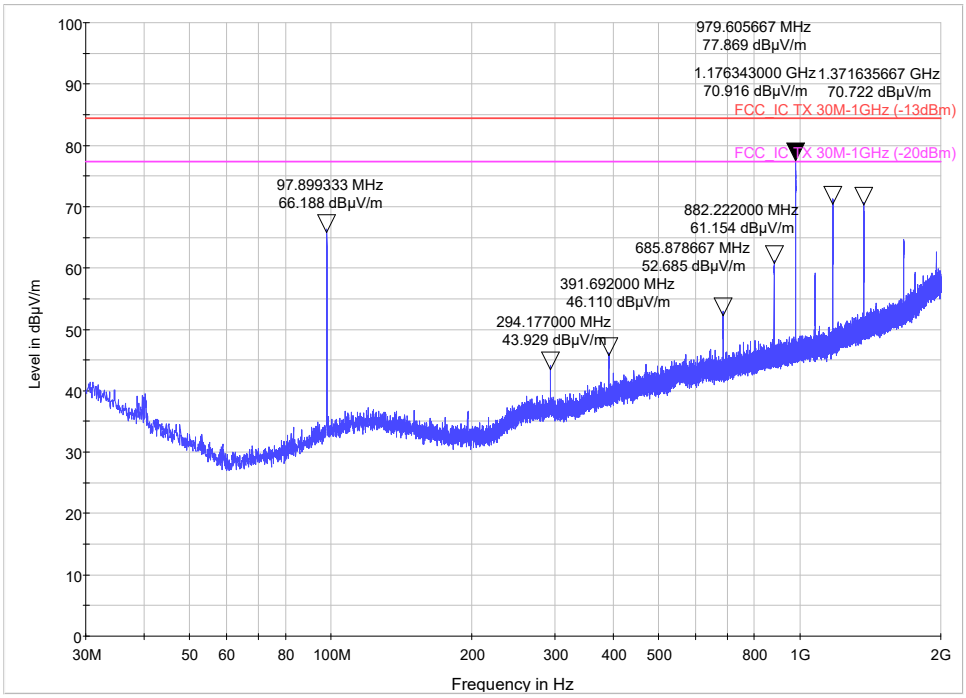
88.1 MHz			
Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
700.8	-19.8	6.8	-13
1051.2	-30.5	17.5	-13
1226.4	-26.8	13.8	-13

Emissions that are 20dB lower than the limit are not shown.



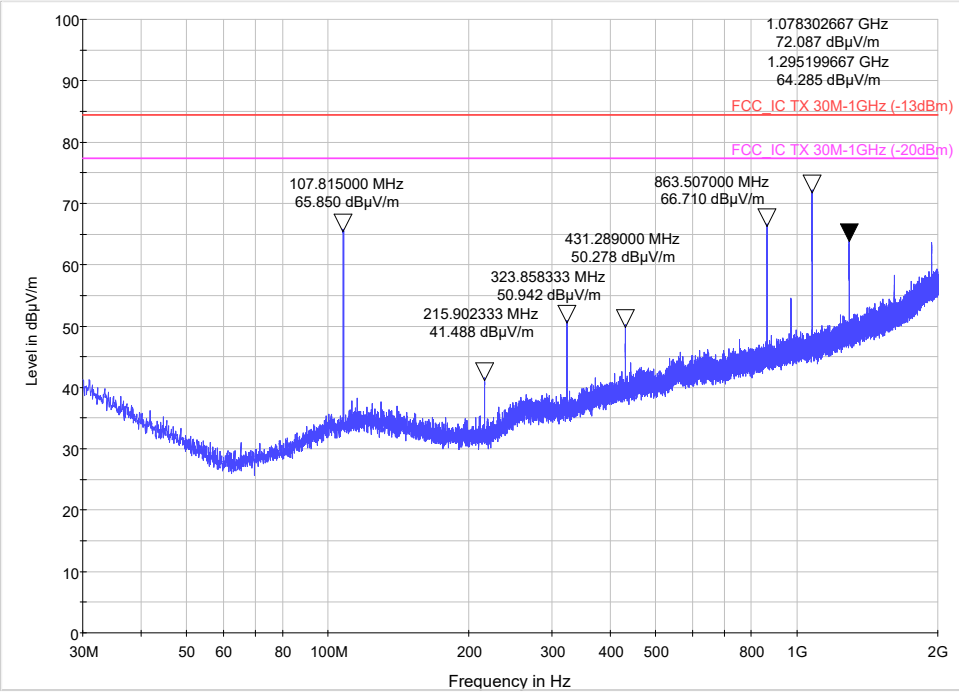
98.0 MHz			
Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
882.0	-29.1	16.1	-13
980.0	-18.8	5.8	-13
1176.0	-19.9	6.9	-13
1372.0	-21.5	8.5	-13
1666.0	-21.2	8.2	-13

Emissions that are 20dB lower than the limit are not shown.



107.9 MHz			
Emission Frequency (MHz)	Emission Level (dBm)	Delta from limit (dB)	Limit (dBm)
863.2	-22.6	9.6	-13
1079.0	-14.0	1.0	-13
1294.8	-24.7	13.5	-13

Emissions that are 20dB lower than the limit are not shown.



Appendix B: Additional Test and Sample Details

This appendix contains details of:

1. The samples submitted for testing.
2. Details of EUT operating mode(s)
3. Details of EUT configuration(s) (see below).
4. EUT arrangement (see below).

Throughout testing, the following numbering system is used to identify the sample and it's modification state:

Sample No: Sxx Mod w

where:

xx = sample number eg. S01
w = modification number eg. Mod 2

The following terminology is used throughout the test report:

Support Equipment (SE) is any additional equipment required to exercise the EUT in the applicable operating mode. Where relevant SE is divided into two categories:

SE in test environment: The SE is positioned in the test environment and is not isolated from the EUT (e.g. on the table top during REFE testing).

SE isolated from the EUT: The SE is isolated via filtering from the EUT. (e.g. equipment placed externally to the ALSR during REFE testing).

EUT configuration refers to the internal set-up of the EUT. It may include for example:

Positioning of cards in a chassis.
Setting of any internal switches.
Circuit board jumper settings.
Alternative internal power supplies.

Where no change in EUT configuration is **possible**, the configuration is described as “single possible configuration”.

EUT arrangement refers to the termination of EUT ports / connection of support equipment, and where relevant, the relative positioning of samples (EUT and SE) in the test environment.

For further details of the test procedures and general test set ups used during testing please refer to the related document "EMC Test Methods - An Overview", which can be supplied by TRaC Global upon request.

B1) Test samples

The following samples of the apparatus were submitted by the client for testing:

Sample No.	Description	Identification
S01	UNIFIED TX FM Broadcast transmitter	30085

B2) EUT Operating Mode During Testing.

During testing, the EUT was exercised as described in the following tables:

Test	Description of Operating Mode
tests detailed in this report	Transmitting at full and low power settings With LF audio fed via the two XLR connectors on the rear panel

B3) EUT Configuration Information.

The EUT was submitted for testing in one single possible configuration.

B4) List of EUT Ports

The tables below describe the termination of EUT ports:

	Type	*Description*	*Length*	*Equipment Connected*
1	3 core unscreened	ac mains input	<1.0 m	220Vac Supply
2	7/16 ” Type co-axial	RF Output	1.0 m	Measurement System
3	CAT5e STP	RJ45 port	3.0 m	dScope Analyser
4	CAT5e UTP	AES/EBU port	-	Un-terminated
5	BNC co-axial	GPS 1PPS port	-	Un-terminated
6	BNC co-axial	GPS 10 MHz port	-	Un-terminated
7	9 way D-Type	I/O Alarms port	-	Un-terminated
8	9 way D-Type	RS232 port	-	Un-terminated
9	BNC co-axial	MPX port	-	Un-terminated
10	BNC co-axial	MPX port	-	Un-terminated
11	BNC co-axial	MPX port	-	Un-terminated
12	BNC co-axial	MPX port	-	Un-terminated
13	Audio cable	Analog I/P L port	-	Un-terminated
14	Audio cable	Analog I/P R port	-	Un-terminated
15	SMA co-axial	RF Mon port	-	50 Ohm Termination

B5 Details of Equipment Used

Equipment Description	*Manufacturer*	*Equipment Type*	*Element No*	*Last Cal Calibration*	*Calibration Period*	*Due For Calibration*
Bilog	Chase	CBL6112	U420	2016-04-18	24	2018-04-18
Spectrum Analyser	R&S	FSU46	REF910	2017-07-13	12	2018-07-13
Communications Analyser	R&S	CMTA52	L005	2017-07-06	24	2019-07-06
Temperature Indicator	Fluke	52 Series II	L426	2018-06-18	12	2019-06-18
Temperature Chamber	ETS-S1000CHS	ETS	U522	Use L426		
Multimeter	Agilent	34405a	REF976	2018-01-17	12	2019-01-17
Variable Transformer	RS	8A	U034	Use REF976		
Tunable Notch Filter	Telonic Berkeley	TTR95-3EE	U265	In Use		
30 dB Attenuator	Radiall	R417030110	A0340*	In Use		
30 dB, 2 kW attenuator	Bird	8329-300	131000335*	In use		

*Denotes Serial Number

Appendix C: Additional Information

The Manufacturers declared rated output power is 1000W and ±75kHz deviation FM Modulation

Appendix E: Photographs and Figures

The following Radiated Test setup photographs were taken of the test samples: