

Test report No:
 NIE: 66640REM.001

Test report

**FCC Rules and Regulations CFR 47, Part 15, Subpart B
 (10-1-19 Edition), ICES-003 Issue 7 (October 2020) & RSS-Gen Issue
 5 (March 2019)**

(*) Identification of item tested	RF Transceiver / Mobile Radio
(*) Trademark	PowerTrunk
(*) Model and /or type reference	Model: MDT-400 806-870 MHz Code: D262N28PT S/N: 000003032913060
Other identification of the product	FCC ID: WT7PTMDT800B IC: 8624A-PTMDT800B HW version: CCP: 1.14.26.05.13 SW version: CCP: 1.14.26.05.13
(*) Features	The MDT-400 mobile radio is a TETRA digital RF transceiver (see description in subpart Data provided by the client)
Manufacturer	TELTRONIC S.A.U. Polígono Malpica, C/F Oeste, 50016 Zaragoza, Spain.
Test method requested, standard	FCC Rules and Regulations CFR 47, Part 15, Subpart B (10-1-19 Edition) & ICES-003 Issue 7 (October 2020) & RSS-Gen Issue 5 (March 2019)
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Rafael López Martín EMC Consumer & RF Lab. Manager
Date of issue	2021-06-07
Report template No	FDT08_23 (*) "Data provided by the client"

Index

ACRONYMS	3
COMPETENCES AND GUARANTEES	3
GENERAL CONDITIONS	4
UNCERTAINTY	4
DATA PROVIDED BY THE CLIENT	5
USAGE OF SAMPLES	7
TEST SAMPLE DESCRIPTION	8
IDENTIFICATION OF THE CLIENT	11
TESTING PERIOD AND PLACE	11
DOCUMENT HISTORY	11
ENVIRONMENTAL CONDITIONS	12
REMARKS AND COMMENTS	13
TESTING VERDICTS	13
LIST OF EQUIPMENT USED DURING THE TEST	13
SUMMARY	14
APPENDIX A: TEST RESULTS	15

Acronyms

Acronym ID	Acronym Description
Code	EMC Test Code
Freq Rng	Frequency Range
OM	Operation Mode
S/	Sample
V	Verdict
CE	Conducted Emission
RE	Radiated Emission

Competences and guarantees

DEKRA Testing and Certification S.A.U. is a testing laboratory accredited by the National Accreditation Body (ENAC -Entidad Nacional de Acreditación), to perform the tests indicated in the Certificate No. 51/LE 147.

DEKRA Testing and Certification S.A.U. is a FCC recognized accredited testing laboratory with appropriate scope of accreditation that include testing performed in this test report, FCC designation number ES0004.

DEKRA Testing and Certification S.A.U. is an ISED-recognized accredited testing laboratory with appropriate scope of accreditation that include testing performed in this test report.

In order to assure the traceability to other national and international laboratories, DEKRA Testing and Certification S.A.U. has a calibration and maintenance program for its measurement equipment.

DEKRA Testing and Certification S.A.U. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Testing and Certification S.A.U. at the time of performance of the test.

DEKRA Testing and Certification S.A.U. is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA Testing and Certification S.A.U.

General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Testing and Certification S.A.U.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Testing and Certification S.A.U. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Testing and Certification S.A.U. internal document PODT000.

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 30 MHz to 1000 MHz is $I = \pm 4,9$ dB for quasi-peak measurements, $I = \pm 4,6$ dB for peak measurements ($k= 2$).

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 1000 MHz to 12.75 GHz is $I = \pm 2,6$ dB for peaks and average measurements ($k = 2$).

The total uncertainty of the measurement system for conducted disturbance characteristics at the antenna port of the EUT from 30 MHz to 10 GHz is $I = \pm 2.33$ dB for quasi-peak measurements and $I = \pm 0,75$ dB for peaks and average measurements ($k = 2$).

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested")
2. The sample consists of an RF Transceiver / Mobile Radio, model name MDT-400 806-870 MHz.
3. The MDT-400 mobile radio is a TETRA digital RF transceiver that can operate in the following modes:
 - TMO mode (Trunked Mode Operation), on the network infrastructure supported by a service provider.
 - DMO mode (Direct Mode Operation), by communicating directly with another radio (antenna to antenna)
 - A GPS receiver can optionally be integrated in the radio.
4. The test sample operates in the 806-825 MHz and 851-870 MHz frequency subbands in TMO mode and only in the latter in DMO mode. It provides an RF output power of 3 W in both subbands. However, only the following frequency segments are subject to testing and certification, in accordance with the American and Canadian licensed bands currently in force:
 - FCC: 809-824 MHz / 854-869 MHz
 - ISED: 806-824 MHz / 851-869 MHz
5. Features supported:
 - Power Supply:
 - Nominal voltage: 13.2 VDC
 - Operational voltage range: [10.8 - 15.6 VDC]
 - Access scheme:
 - TDMA with 4 physical channels (time slots) per RF channel.
 - Modulation scheme:
Based on TETRA:
 - $\pi/4$ -DQPSK digital modulation with a rate of 18 Ksym/s, equivalent to 36 Kbits/s.
 - Modulation low-pass filter: Square-root raised cosine filter with a roll-off factor of 0.35.
 - RF channel bandwidth (channel spacing):
25 KHz
 - Spectral efficiency:
One voice & data physical channel with a rate of 9 Kbits/s is allocated a 6.25 KHz equivalent channel bandwidth.
 - Frequency band in TMO mode:
TX: 806-825 MHz
RX: 851-870 MHz
 - Frequency band in DMO mode:
TX & RX: 851-870 MHz
 - RF output power (nominal):
TETRA: 35 dBm \pm 1 dB (3 W)

- RF authorized bandwidth:
TETRA: 22 KHz
- Emission designators:
TETRA: 22K0D7D, 22K0D7E, 22K0D7W
- Options:
 - O261000PT: GPS receiver
 - O261003PT: Programmable I/O

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Sample S/01 has undergone the test, has been selected by the client, and is composed of the following elements:

Id	Control Number	Description	Model	Serial N°	Date of Reception	Application
S/01	66640C/001	RF Transceiver / Mobile Radio	MDT-400 806-870 MHz	TEI: 000003032913070	2021-03-03	Element under test
S/01	66640C/004	MP-400 fist microphone with PTT and AUX switches	D026608PT	--	2021-03-03	Auxiliary element
S/01	66640C/008	TETRA antenna	D02631NPT	--	2021-03-03	Auxiliary element
S/01	64233B/001	5m remote connection cable for F-400 console	208748	--	2020-09-17	Auxiliary element
S/01	64233B/003	External speaker, 2 1/2", 5W	D026622PT	--	2020-09-17	Auxiliary element
S/01	64233B/004	Button PTT	D026000PT	--	2020-09-17	Auxiliary element
S/01	64233B/008	In-vehicle + PEI connection kit	D026521PT	--	2020-09-17	Auxiliary element
S/01	64233B/009	GPS Antenna	11779	--	2020-09-17	Auxiliary element
S/01	64233B/010	F-400 front console	ME261020APT	6020202	2020-09-17	Auxiliary element
S/01	66640C/003	Power supply cable MDT-400 / M-4000 3m	D026502PT	--	2021-03-03	Auxiliary element
S/01	66640C/007	Directional microphone	D026614PT	--	2021-03-03	Auxiliary element

Notes referenced to samples during the project.

Test sample description

Test Sample description (compulsory information for EMC and RF testing services)

Ports..... :	Port name and description	Cable					
		Specified max length [m]	Attached during test	Shielded	Coupled to patient ⁽³⁾		
	DB15HD: Female socket to connect an F-400 front console.	25 m	[X]	[X]	[]		
	DB26HD: Female socket to connect any approved accessory kit.	3 m	[X]	[]	[]		
	GPS: SMB male socket to connect an approved GPS antenna.	5 m	[X]	[X]	[]		
	ANT: BNC female socket to connect an approved TETRA antenna.	5 m	[X]	[X]	[]		
	POWER IN: Connector for power supply input.	3 m	[X]	[]	[]		
Supplementary information to the ports..... :							
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
		AC:					
	[X]	DC: <i>Nominal voltage: 13.2 VDC</i> <i>Operational voltage range: [10.8 – 15.6 VDC]</i>					
Rated Power	35 dBm ± 1dB (3 W)						

Clock frequencies.....:	This information has been provided in the following certification pdf documents: D262N28PT_TAD000004-03_ened0100_BlockDiagrams_FCCISED2021 D262x28PT_TAD000001-03_ened0103_OperationalDescription_0		
Other parameters			
Software version	CCP: 1.14.26.05.13		
Hardware version	CCP: 1.14.26.05.13		
Dimensions in mm (W x H x D)....:	167.6 x 48.5 x 181 (MDT-400 radio unit) 167.6 x 61.2 x 209 (MDT-400 radio unit + F-400 front console)		
Mounting position	Table top equipment		
	Wall/Ceiling mounted equipment		
	Floor standing equipment		
	Hand-held equipment		
	<input checked="" type="checkbox"/> Other: Vehicular installation; Tested as a table-top equipment		
Modules/parts.....:	Module/parts of test item	Type	Manufacturer
	Not provided data		
Accessories (not part of the test item)	Description	Type	Manufacturer
	F-400 front console	Console	ME261020APT
	MP-400 fist microphone with PTT and AUX switches	Microphone	D026608PT
	External speaker, 2 1/2", 5W	Speaker	D026622PT
	Microphone	Microphone	D026614PT
	Button PTT	PTT	D026000PT
	In-vehicle + PEI connection kit	Cable	D026521PT

	DC power cable	Cable	D026502PT
	5m remote connection cable for F-400 console	Cable	208748
	TETRA antenna (representative model)	Antenna	D02631NPT
	GPS antenna	Antenna	11779
Documents as provided by the applicant.....:	Description	File name	Issue date
	D262x28PT_TAD000009-03_ened0103_TestOperationManual_0	Ed.1.3	05/02/2021
	D262N28PT_TAD000009-03_ened0100_AdditionalInfo_FCCISED2021.	Ed.1.0	16/02/2021

⁽³⁾ Only for Medical Equipment

Identification of the client

TELTRONIC S.A.U.
Polígono Malpica, C/F Oeste, 50016
Zaragoza, Spain.

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2021-05-27
Date (finish)	2021-05-28

Document history

Report number	Date	Description
66640REM.001	2021-06-07	First release

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860mbar Max. = 1060mbar

In the semianechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860mbar Max. = 1060mbar

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 60 %
Air pressure	Min. = 860mbar Max. = 1060mbar

Remarks and comments

The tests have been performed by the technical personnel: Antonio Manuel Sánchez Carrizo.

Testing verdicts

Fail	F
Inconclusive	I
Not applicable	N/A
Not measured	N/M
Pass	P

List of equipment used during the test

Control Number	Description	Model	Manufacturer	Next Calibration
3258	USB TEMPERATURE AND HUMIDITY SENSOR	HUMIDIPROBE	PICO TECHNOLOGY	2022-04-07
3545	USB TEMPERATURE AND HUMIDITY SENSOR	HUMIDIPROBE	PICO TECHNOLOGY	2022-04-07
4575	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	TR-702W	T&D	2022-04-07
7763	HORN ANTENNA 1-18GHz	BBHA 9120D	SCHWARZBECK MESS-ELEKTRONIK	2022-11-15
7769	PREAMPLIFIER 30dB 500MHz-18GHz	BBV 9718 C	SCHWARZBECK	2022-02-10
7817	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2021-10-29
7826	ULTRALOG ANTENNA 30MHz-6GHz	HL562E_UPG	ROHDE AND SCHWARZ	2022-10-15
8130	SEMIANECHOIC ABSORBER LINED CHAMBER VI	P29419	ALBATROSS	---
8134	SHIELDED ROOM	P29419	ALBATROSS PROJECTS GMBH	---

Summary

Test Specification.	Requirement – Test case	Verdict	Remark
FCC CFR 47, Part 15, Subpart B (10-1-19 Edition) & ICES-003 Issue 7 (October 2020) & RSS-Gen Issue 5 (March 2019)	Radiated Emission (RE). Electromagnetic Field Measure	Pass	--
FCC CFR 47, Part 15, Subpart B (10-1-19 Edition) & RSS-Gen Issue 5 (March 2019)	Conducted Emission (CE). Antenna Port	Pass	--
<u>Supplementary information and remarks:</u> None			

Appendix A: Test results

Appendix A contents

DESCRIPTION OF THE OPERATION MODES	17
TEST STANDARDS VERSION APPLIED	18
TEST CASES DETAILS	19
RADIATED EMISSION (RE). ELECTROMAGNETIC FIELD MEASURE	19
CONDUCTED EMISSION (CE). ANTENNA PORT	25

Description of the operation modes

The operation modes described in this paragraph constitute a functionality of the sample under test for itself.
The operation modes used by the samples to which the present report refers, are shown in the following table:

Id	Description
OM/01	EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc

Test standards version applied

The product standards and test standards applied for each test cases are shown in the following table:

Product Standard	Test standard	Requirement – Test case
FCC CFR 47, Part 15, Subpart B (10-1-19 Edition) & ICES-003 Issue 7 (October 2020) & RSS-Gen Issue 5 (March 2019)	ANSI C63.4-2014 + ANSI C63.4a-2017	Radiated Emission (RE). Electromagnetic Field Measure
FCC CFR 47, Part 15, Subpart B (10-1-19 Edition) & RSS-Gen Issue 5 (March 2019)	ANSI C63.4-2014 + ANSI C63.4a-2017	Conducted Emission (CE). Antenna Port

Test Cases Details

Radiated Emission (RE). Electromagnetic field measure.

Limits

Limits of interference Class B

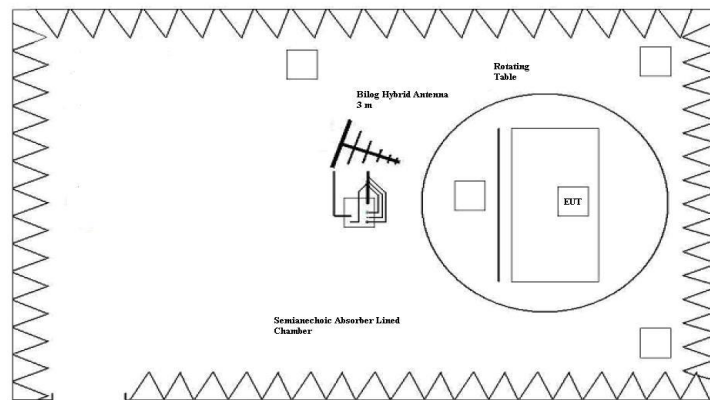
The applied limit for radiated emissions, 3 m distance, according to the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart B (10-1-19 Edition), Secs. 15.109 & ICES-003 Issue 7 (October 2020)

Frequency range (MHz)	FCC Part 15B		ICES-003 Issue 7		FCC Part 15B & ICES-003 Issue 7	
	QP Limit for 3 m ($\mu\text{V/m}$)	(dB $\mu\text{V/m}$)	QP Limit for 3 m ($\mu\text{V/m}$)	(dB $\mu\text{V/m}$)	PK Limit for 3 m (dB $\mu\text{V/m}$)	AVG Limit for 3 m (dB $\mu\text{V/m}$)
30 to 88	100	40	100	40	---	---
88 to 216	150	43.5	150	43.5	---	---
216 to 230	200	46	200	46	---	---
230 to 960	200	46	224	47	---	---
960 to 1000	500	54	500	54	---	---
Above 1000	---	---	---	---	74	54

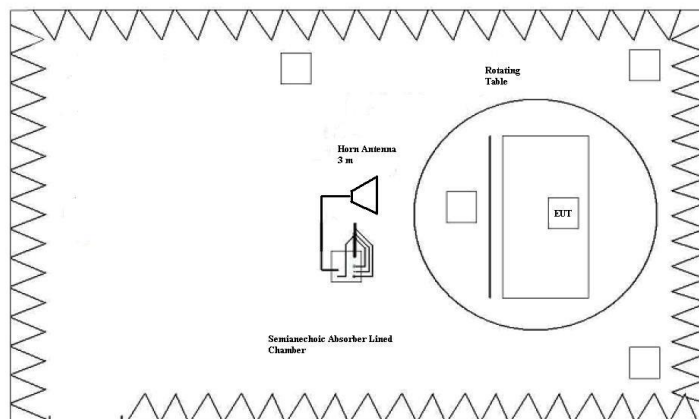
NOTE: FCC QP and AVG limits are in concordance with RSS-Gen Issue 5 (March 2019), Secs. 7.1 and 7.3.

Limits according to FCC Part 15B, equal to o more stringent than those of ICES-003 Issue 7.

Setup for measurements



Setup for measurements < 1GHz.



Setup for measurements > 1GHz.

Results

According to the requirements of FCC Part 15:

S/	OM	Code	Freq Rng (MHz)	V
01	01	RE0101LR	[30, 1000]	P
01	01	RE0101HR	[1000, 12750]	P

According to the requirements of RSS-Gen Issue 5:

S/	OM	Code	Freq Rng (MHz)	V
01	01	RE0101LR	[30, 1000]	P
01	01	RE0101HR	[1000, 12750]	P

According to the requirements of ICES-003 Issue 7:

S/	OM	Code	Freq Rng (MHz)	V
01	01	RE0101LR	[30, 1000]	P
01	01	RE0101HR	[1000, 12750]	P

Verdict

Pass

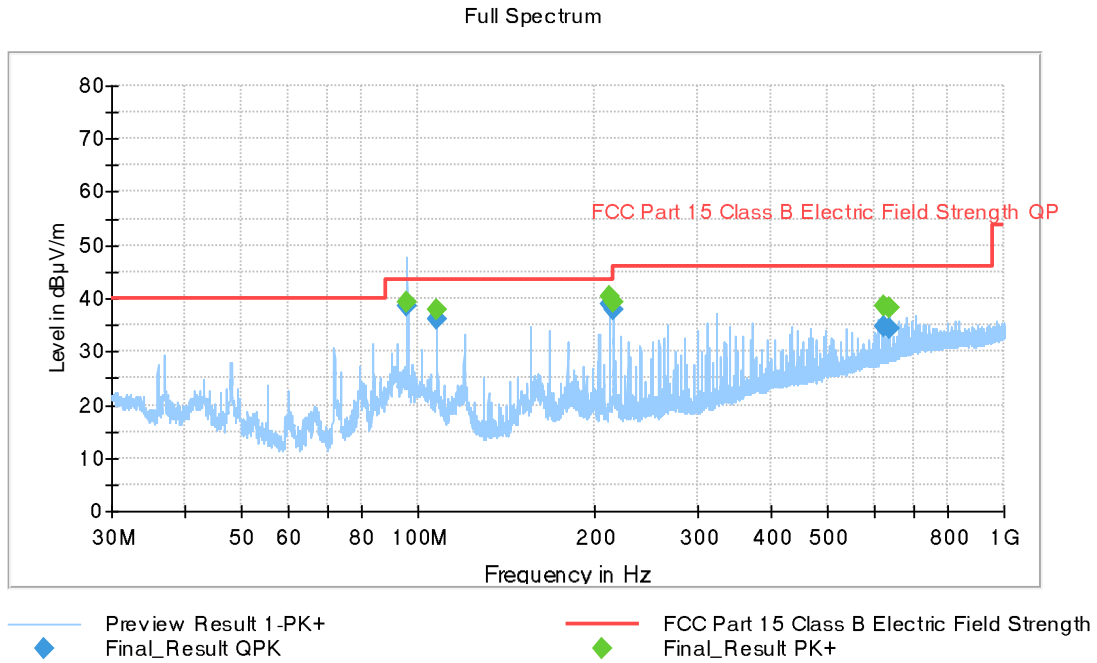
Attachments

EMC Test Code = RE0101LR, Frequency Range MHz = [30, 1000] - Limit according to FCC Part 15 & RSS-Gen Issue 5

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc

Images:



Documents:

Frequency (MHz)	QuasiPeak (dBµV/m)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
95.875000	38.63	---	43.52	4.89	400.0	V	112.0
95.875000	---	39.46	---	---	400.0	V	112.0
107.862000	---	38.05	---	---	138.0	H	22.0
107.862000	36.18	---	43.52	7.34	138.0	H	22.0
211.979000	---	40.23	---	---	127.0	V	131.0
211.979000	38.96	---	43.52	4.56	127.0	V	131.0
215.717000	---	39.35	---	---	195.0	V	112.0
215.717000	38.00	---	43.52	5.52	195.0	V	112.0
623.190000	---	38.49	---	---	100.0	H	307.0
623.190000	34.85	---	46.00	11.15	100.0	H	307.0
635.160000	---	38.27	---	---	127.0	H	83.0
635.160000	34.36	---	46.00	11.64	127.0	H	83.0

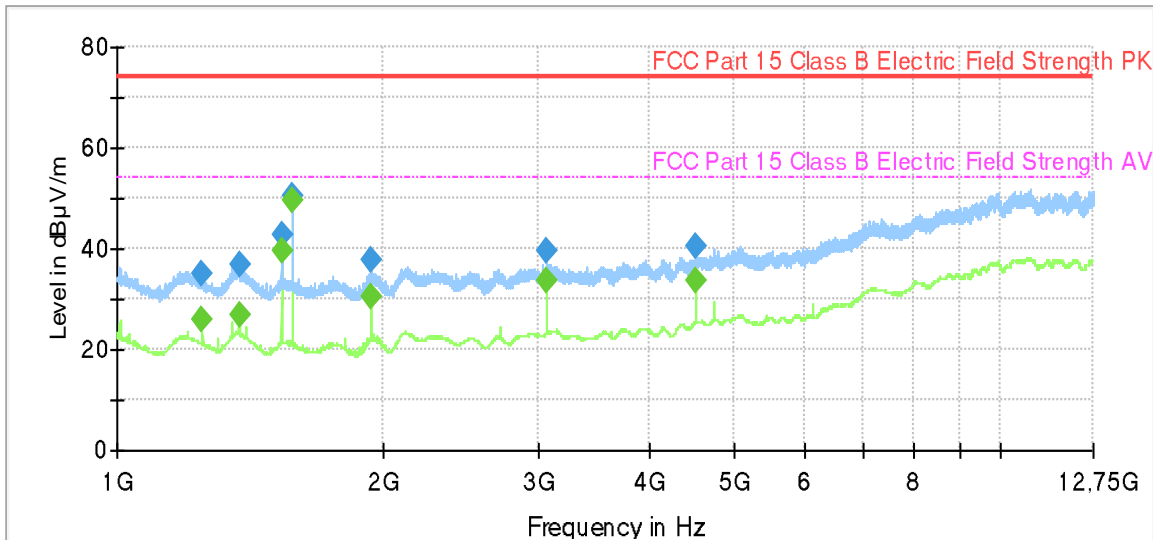
EMC Test Code = RE0101HR, Frequency Range MHz = [1000, 12750] - Limit according to FCC Part 15 & RSS-Gen Issue 5

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc

Images:

Full Spectrum



- Preview Result 2-AVG
- Preview Result 1-PK+
- FCC Part 15 Class B Electric Field Strength PK
- - - FCC Part 15 Class B Electric Field Strength AV
- ◆ Final_Result PK+
- ◆ Final_Result AVG

Documents:

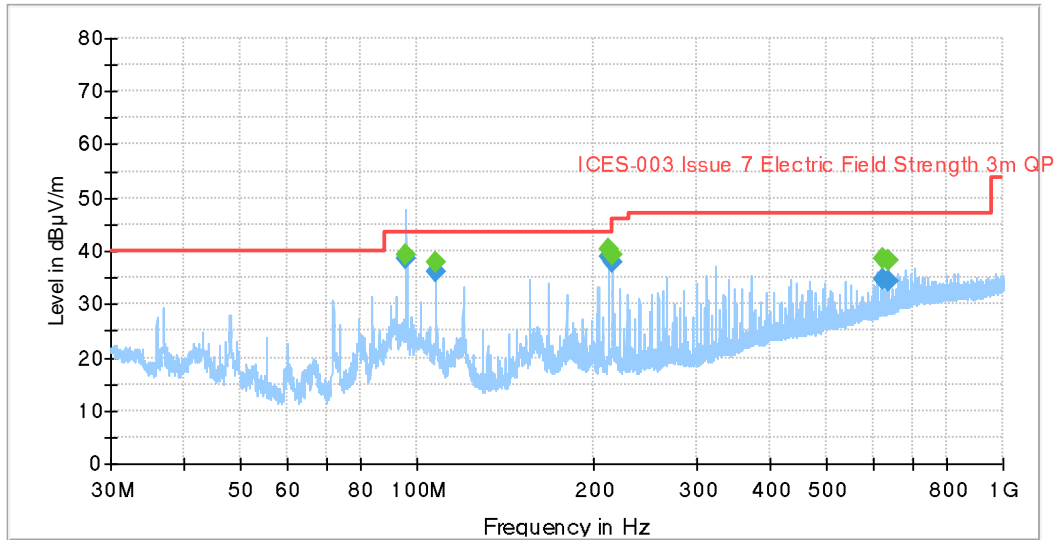
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1250.000000	---	25.99	53.97	27.98
1250.000000	35.06	---	73.97	38.91
1374.800000	---	26.80	53.97	27.17
1374.800000	36.62	---	73.97	37.35
1536.000000	---	39.73	53.97	14.24
1536.000000	42.78	---	73.97	31.19
1578.000000	---	49.45	53.97	4.52
1578.000000	50.42	---	73.97	23.55
1937.600000	---	30.51	53.97	23.46
1937.600000	37.54	---	73.97	36.43
3071.600000	---	33.48	53.97	20.49
3071.600000	39.74	---	73.97	34.23
4525.200000	40.68	---	73.97	33.29
4525.200000	---	33.82	53.97	20.15

EMC Test Code = RE0101LR, Frequency Range MHz = [30, 1000] - Limit according to ICES-003 Issue 7

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc

Full Spectrum



◆ Preview Result 1-PK+ Final_Result QPK
 ◆ FCC Part 15 Class B (ICES-003 Issue 7) 3m Final_Result PK+

Documents:

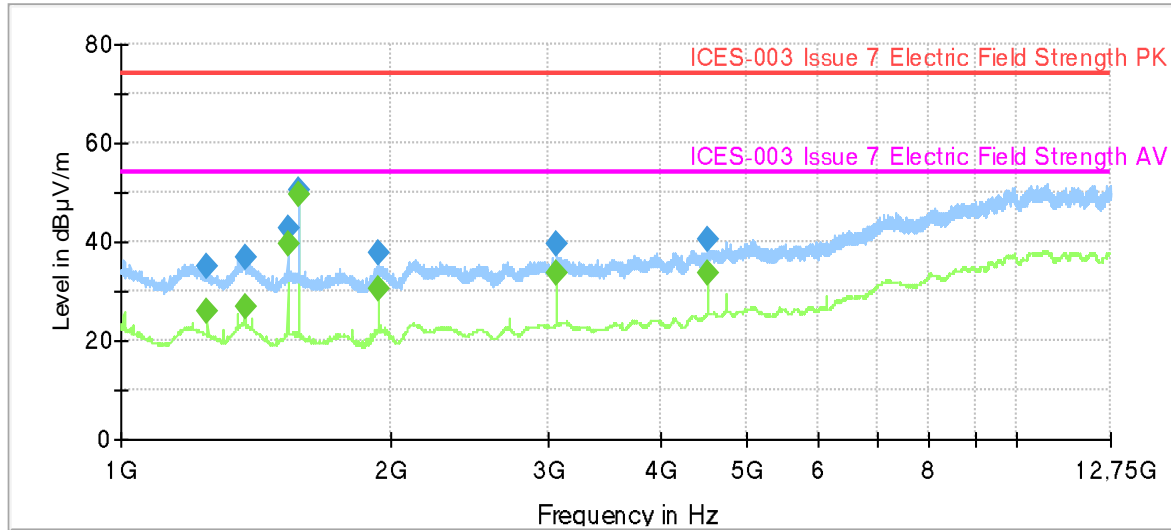
Frequency (MHz)	QuasiPeak (dBµV/m)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
95.875000	38.63	---	43.52	4.89	400.0	V	112.0
95.875000	---	39.46	---	---	400.0	V	112.0
107.862000	---	38.05	---	---	138.0	H	22.0
107.862000	36.18	---	43.52	7.34	138.0	H	22.0
211.979000	---	40.23	---	---	127.0	V	131.0
211.979000	38.96	---	43.52	4.56	127.0	V	131.0
215.717000	---	39.35	---	---	195.0	V	112.0
215.717000	38.00	---	43.52	5.52	195.0	V	112.0
623.190000	---	38.49	---	---	100.0	H	307.0
623.190000	34.85	---	47.00	12.15	100.0	H	307.0
635.160000	---	38.27	---	---	127.0	H	83.0
635.160000	34.36	---	47.00	12.64	127.0	H	83.0

EMC Test Code = RE0101HR, Frequency Range MHz = [1000, 12750] - Limit according to ICES-003 Issue 7

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc

Full Spectrum



- Preview Result 2-AVG
- Preview Result 1-PK+
- ICES-003 Issue 7 Electric Field Strength PK
- ICES-003 Issue 7 Electric Field Strength AV
- ◆ Fina_Result PK+
- ◆ Fina_Result AVG

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1250.000000	35.06	---	73.97	38.91
1250.000000	---	25.99	53.97	27.98
1374.800000	36.62	---	73.97	37.35
1374.800000	---	26.80	53.97	27.17
1536.000000	42.78	---	73.97	31.19
1536.000000	---	39.73	53.97	14.24
1578.000000	50.42	---	73.97	23.55
1578.000000	---	49.45	53.97	4.52
1937.600000	37.54	---	73.97	36.43
1937.600000	---	30.51	53.97	23.46
3071.600000	39.74	---	73.97	34.23
3071.600000	---	33.48	53.97	20.49
4525.200000	---	33.82	53.97	20.15
4525.200000	40.68	---	73.97	33.29

Conducted Emission (CE). Antenna port

Limit

According to FCC CFR 47, Part 15, Subpart B (10-1-19 Edition) §15.111: Antenna power conduction limits for receivers.

Receivers that operate (tune) in the frequency range 30 to 960 MHz and CB receivers that provide terminals for the connection of an external receiving antenna may be tested to demonstrate compliance with the provisions of §15.109 with the antenna terminals shielded and terminated with a resistive termination equal to the impedance specified for the antenna, provided these receivers also comply with the following: With the receiver antenna terminal connected to a resistive termination equal to the impedance specified or employed for the antenna, the power at the antenna terminal at any frequency within the range of measurements specified in §15.33 shall not exceed 2.0 nW (-57dBm / 50 dBµV).

Frequency range	Limit for QuasiPeak measurement (dBµV)
30MHz – 1GHz	50

Frequency range	Limit for Average measurement (dBµV)	Limit for Peak measurement (dBµV)
Above 1000MHz	30	50

According to RSS-Gen Issue 5 §7.4. Receiver conducted emissions limits.

If the receiver has a detachable antenna of known impedance, an antenna-conducted supurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method of section 7.3 is preferred.

The antenna-conducted test shall be performed with the antenna disconnected and with the receiver antenna port connected to a measuring instrument having equal input impedance to that specified for the antenna. The RF cable connecting the receiver under test to the measuring instrument shall also have the same impedance to that specified for the receiver's antenna.

The supurious emissions from the receiver at any discrete frequency, measured at the antenna port by the antenna-conducted method, shall not exceed 2 nW (-57 dBm / 50 dBµV) in the frequency range 30-1000 MHz and 5 nW (-53 dBm / 54 dBµV) above 1 GHz.

Frequency range	Limit for QuasiPeak measurement (dBµV)
30MHz – 1000MHz	50

Frequency range	Limit for Average measurement (dBµV)	Limit for Peak measurement (dBµV)
Above 1000MHz	34	54

RESULTS

CCmnnhh	Description	Result
CE0101LR	Range: 30MHz – 1000MHz. Spurious conducted - Limit according to FCC Part 15	P
CE0101HR	Range: 1000MHz – 10000MHz. Spurious conducted - Limit according to FCC Part 15	P
CE0101LR	Range: 30MHz – 1000MHz. Spurious conducted – Limit according to RSS-Gen Issue 5	P
CE0101HR	Range: 1000MHz – 10000MHz. Spurious conducted - Limit according to RSS-Gen Issue 5	P

VERDICT

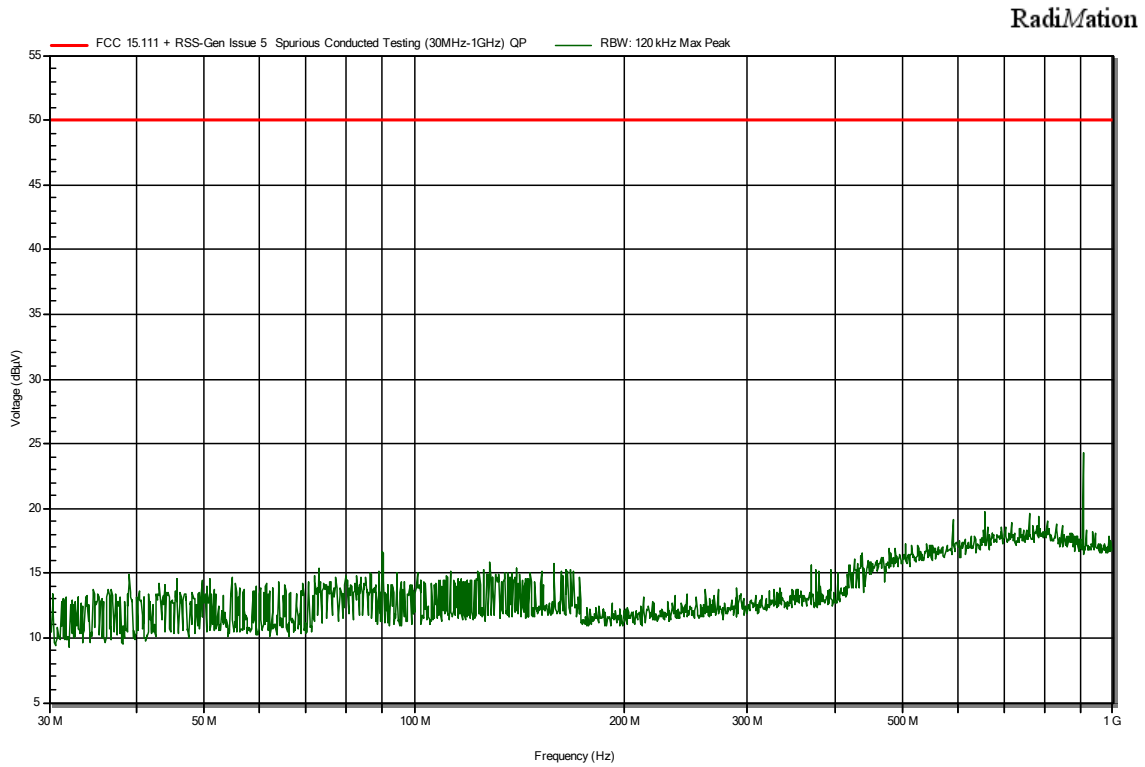
Pass

EMC Test Code = CE0101LR, Frequency Range MHz = [30, 1000] - Limit according to FCC Part 15.

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc. Conducted spurious emission. Antenna port noise.

Images:



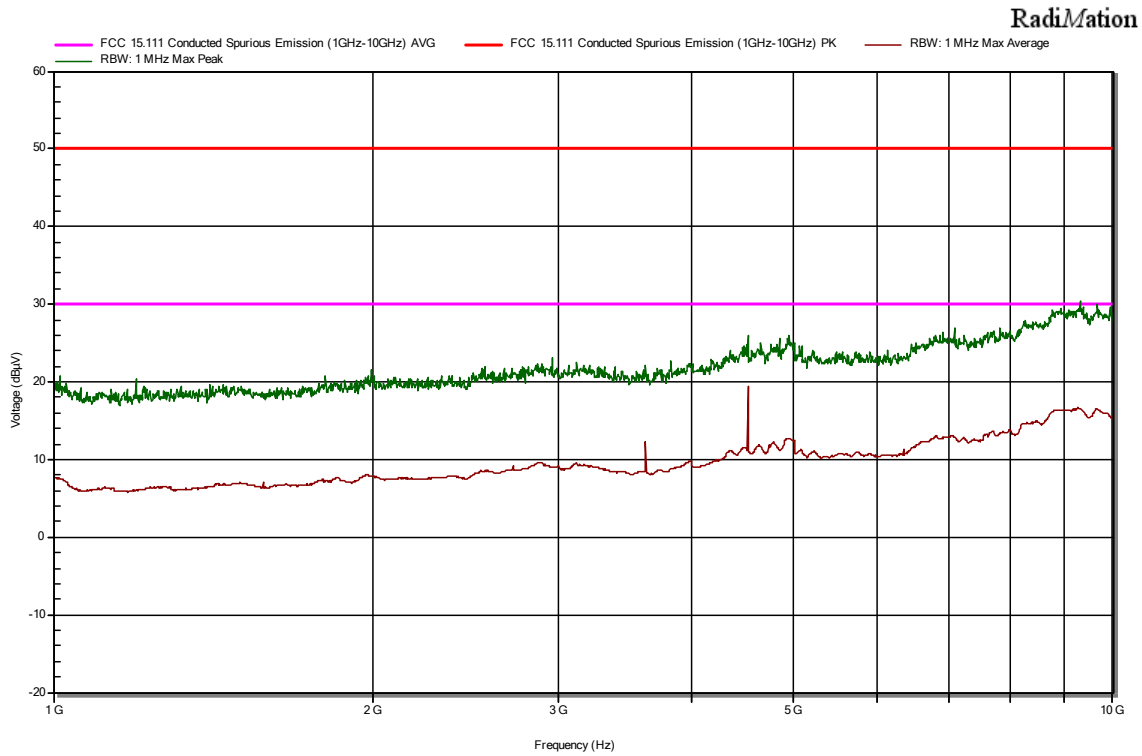
Frequency (MHz)	Quasi-peak (dBµV)
589,581 MHz	19,2 dBµV
655,534 MHz	19,8 dBµV
660,559 MHz	18,6 dBµV
715,651 MHz	18,9 dBµV
782,18 MHz	19,4 dBµV
905,004 MHz	24,3 dBµV

EMC Test Code = CE0101HR, Frequency Range MHz = [1000, 10000] - Limit according to FCC Part 15.

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc. Conducted spurious emission. Antenna port noise.

Images:



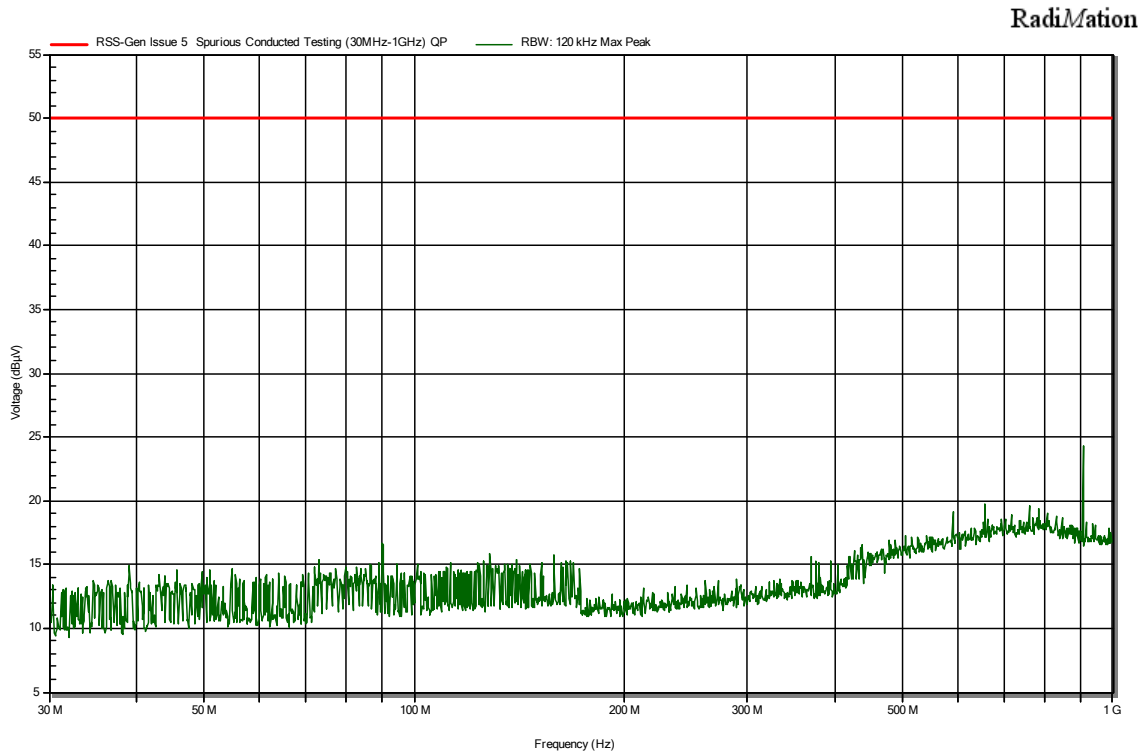
Frequency (MHz)	Average (dBµV)	Peak (dBµV)
1196,5 MHz	6,1 dBµV	20,4 dBµV
1995 MHz	7,9 dBµV	21,5 dBµV
3620 MHz	12,3 dBµV	22,1 dBµV
4525 MHz	19,3 dBµV	25,9 dBµV
7085 MHz	12,7 dBµV	27 dBµV
9676 MHz	16,3 dBµV	29,9 dBµV

EMC Test Code = CE0101LR, Frequency Range MHz = [30, 1000] - Limit according to RSS-Gen Issue 5

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc. Conducted spurious emission. Antenna port noise.

Images:



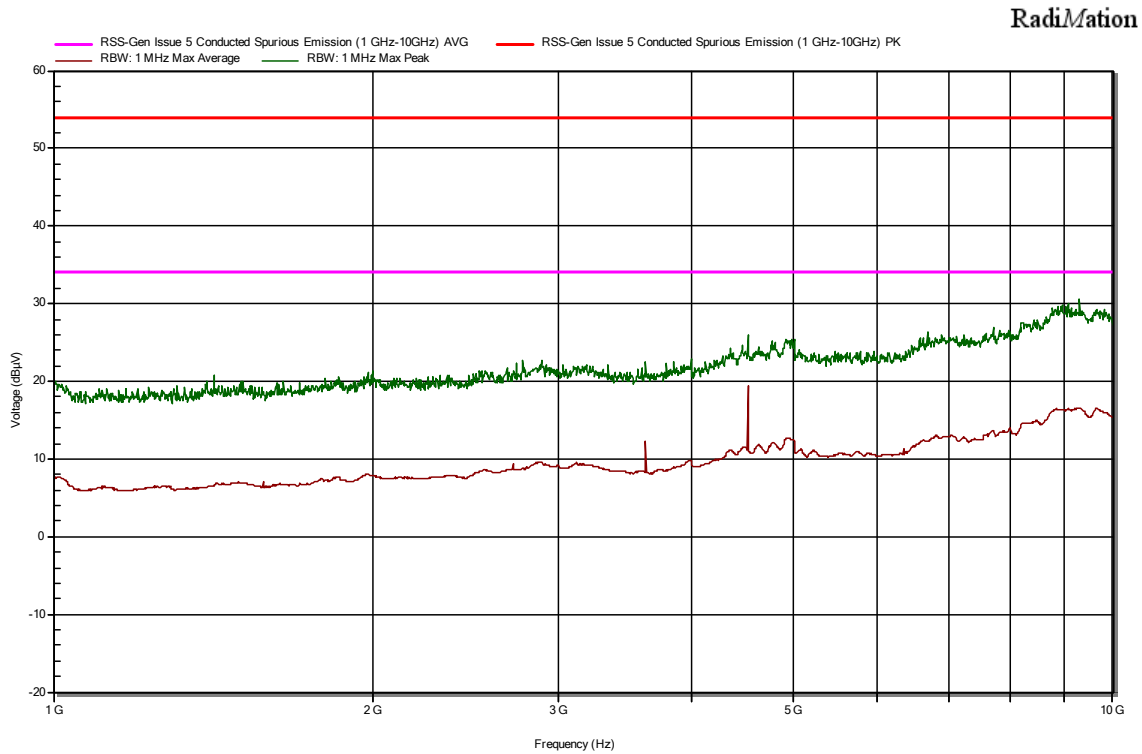
Frequency (MHz)	Quasi-peak (dBµV)
589,581 MHz	19,2 dBµV
655,534 MHz	19,8 dBµV
660,559 MHz	18,6 dBµV
715,651 MHz	18,9 dBµV
782,18 MHz	19,4 dBµV
905,004 MHz	24,3 dBµV

EMC Test Code = CE0101HR, Frequency Range MHz = [1000, 10000] - Limit according to RSS-Gen Issue 5

Sample ID: S/01

Operation Mode: 01. EUT ON. TETRA RX mode 860.0125 MHz (worst case). Power supply: 13.2 Vdc. Conducted spurious emission. Antenna port noise.

Images:



Frequency (MHz)	Average (dBµV)	Peak (dBµV)
1196,5 MHz	6,1 dBµV	20,4 dBµV
1995 MHz	7,9 dBµV	21,5 dBµV
3620 MHz	12,3 dBµV	22,1 dBµV
4525 MHz	19,3 dBµV	25,9 dBµV
7085 MHz	12,7 dBµV	27 dBµV
9676 MHz	16,3 dBµV	29,9 dBµV