

FCC LISTED, REGISTRATION
NUMBER: 720267

Informe de ensayo nº:
Test report No:

IC LISTED REGISTRATION
NUMBER IC 4621A-1

NIE: 42959RRF.002

Test report

USA FCC Part 15.247, 15.209

CANADA RSS-247, RSS-Gen

Radio Frequency Devices. Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz,
and 5725 - 5850 MHz.

Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-
Exempt Local Area Network(LE-LAN) Devices

General Requirements and Information for the Certification of Radio Apparatus.

Identificación del objeto ensayado.....: Identification of item tested	S-ONE 915MHZ WITH FREQUENCY HOPPING CONFIGURATION
Marca Trade	TELIT LE70-915
Modelo y/o referencia tipo Model and /or type reference	LE70-915
Other identification of the product	FCC ID: RI7LE70FH IC: 5131A-LE70FH
Final HW version	3990401152
Final SW version	GO.S01.01.03-B001 GO.B00.01.0C
Características Features	---
Fabricante Manufacturer	Telit communication s.p.a Via stazione di prosecco 5/B, 34010 Sgonico (ITALY)
Método de ensayo solicitado, norma.....: Test method requested, standard	USA FCC Part 15.247 10-1-13 Edition: Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.209 10-1-14 Edition: Radiated emission limits; general requirements. CANADA RSS-247 Issue 1 (May 2015). CANADA RSS-Gen Issue 4 (November 2014). FCC part 15.247 and Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum System DA 00-705 Released March 30, 2000. ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Resultado.....: Summary	IN COMPLIANCE
Aprobado por (nombre / cargo y firma) Approved by (name / position & signature)	A. Llamas RF Lab. Manager

Fecha de realización	2015-06-30
Date of issue	
Formato de informe No.	FDT08_16
Report template No	

Index

Competences and guarantees.....	4
General conditions.....	4
Uncertainty	4
Usage of samples.....	4
Test sample description	5
Identification of the client	5
Testing period.....	5
Environmental conditions.....	5
Remarks and comments.....	6
Testing verdicts	7
Appendix A – Test result.....	8

Competences and guarantees

AT4 wireless is a laboratory with a measurement facility in compliance with the requirements of Section 2.948 of the FCC rules and has been added to the list of facilities whose measurements data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Registration Number: 720267.

AT4 wireless is a laboratory with a measurement site in compliance with the requirements of RSS 212, Issue 1 (Provisional) and has been added to the list of filed sites of the Canadian Certification and Engineering Bureau. Reference File Number: IC 4621A-1.

In order to assure the traceability to other national and international laboratories, AT4 wireless has a calibration and maintenance program for its measurement equipment.

AT4 wireless 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 AT4 wireless at the time of performance of the test.

AT4 wireless 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 AT4 wireless.

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 AT4 wireless.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of AT4 wireless and the Accreditation Bodies.

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the AT4 wireless internal document PODT000.

Usage of samples

Samples undergoing test have been selected by: **the client**

Sample M/01 is composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
42959B/011	Module	LE70-915	GOE2950003H	2015-02-12
42959B/003	Half wave dipole antenna	-	-	2014-07-03

1. Sample M/01 has undergone following test(s).
All radiated tests indicated in appendix A.

Sample M/02 is composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
42959B/011	Module	LE70-915	GOE2950003H	2015-02-12
42959B/001	Test Board	---	GMDM0000069	2014-07-03

1. Sample M/02 has undergone the test(s) specified in subclause "Test method requested".

All conducted tests indicated in appendix A.

Test sample description

The test sample consists of a S-ONE 915MHz with frequency hopping configuration.

Identification of the client

Telit communication s.p.a

Via stazione di prosecco 5/B, 34010 Sgonico (ITALY)

Testing period

The performed test started on 2015-02-17 and finished on 2015-02-25.

The tests have been performed at AT4 wireless.

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. = 20 % Max. = 75 %
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 1 Ω

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

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 20 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 1 Ω
Normal site attenuation (NSA)	< ±4 dB at 10 m distance between item under test and receiver antenna, (30 MHz to 1000 MHz)
Field homogeneity	More than 75% of illuminated surface is between 0 and 6 dB (26 MHz to 1000 MHz).

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. = 20 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 1 Ω

Remarks and comments

1: Used instrumentation:

Conducted Measurements

		Last Cal. date	Cal. due date
1.	Spectrum Analyzer Agilent E4440A	2014/05	2016/05
2.	DC power supply R&S NGPE 40/40	2014/11	2017/11

Radiated Measurements

		Last Cal. date	Cal. due date
1.	Semianechoic Absorber Lined Chamber ETS FACT3 200STP	N.A.	N.A.
2.	BiconicalLog antenna ETS LINDGREN 3142E	2014/03	2017/03
3.	Multi Device Controller EMCO 2090	N.A.	N.A.
4.	Double-ridge Guide Horn antenna 1-18 GHz SCHWARZBECK BBHA 9120 D	2013/11	2016/11
5.	EMI Test Receiver R&S ESU 26	2013/08	2015/08
6.	Spectrum analyser Rohde & Schwarz FSW50	2013/10	2015/10
7.	RF pre-amplifier 10 MHz-6 GHz SCHWARZBECK BBV9743	2014/02	2015/02
8.	RF pre-amplifier Miteq JS4-12002600- 30-5A.	2014/05	2016/05
9.	DC power supply R&S NGPE 40/40	2014/11	2017/11

Testing verdicts

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

FCC PART 15 PARAGRAPH / RSS-247		VERDICT			
		NA	P	F	NM
FCC 15.247 Subclause (a) (1) / RSS-247 Clause 5.1 (2)	20 dB Bandwidth and Carrier frequency separation	P			
FCC 15.247 Subclause (a)(1)(i) / RSS-247 Clause 5.1 (3)	Number of hopping channels	P			
FCC 15.247 Subclause (a)(1)(i) / RSS-247 Clause 5.1 (3)	Time of occupancy (Dwell Time)	P			
FCC 15.247 Subclause (b) (2) / RSS-247, Clause 5.4 (1)	Maximum peak output power and antenna gain	P			
FCC 15.247 Subclause (d) / RSS-247 Clause 5.5	Emission limitations conducted (Transmitter)	P			
FCC 15.247 Subclause (d) / RSS-247 Clause 5.5	Emission limitations radiated (Transmitter)	P			

Appendix A – Test result

INDEX

TEST CONDITIONS	10
FCC Section 15.247 Subclause (a) (1) / RSS-247 Clause 5.1 (2). 20 dB Bandwidth and Carrier frequency separation.....	11
FCC Section 15.247 Subclause (a) (1) (i) / RSS-247 Clause 5.1 (3). Number of hopping channels.....	14
FCC Section 15.247 Subclause (a) (1) (i) / RSS-247 Clause 5.1 (3). Time of occupancy (Dwell Time).....	17
FCC Section 15.247 Subclause (b) (2) / RSS-247 Clause 5.4 (1). Maximum peak output power and antenna gain.....	18
FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Band-edge compliance of conducted emissions (Transmitter)	21
FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter).....	24
FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations radiated (Transmitter)	26

TEST CONDITIONS

Power supply (V):

$$V_{\text{nominal}} = 3.3 \text{ Vdc}$$

Type of power supply = DC voltage from battery.

Type of antenna = Half wave dipole antenna.

Declared Gain for antenna (maximum) = 1.9 dBi

TEST FREQUENCIES:

Lowest channel: 915.3 MHz

Middle channel: 921.1 MHz

Highest channel: 927.6 MHz

CONDUCTED MEASUREMENTS

The equipment under test was set up in a shielded room and it is connected to the spectrum analyzer using a low loss RF cable. The reading in the spectrum analyser is corrected taking into account the cable loss.

RADIATED MEASUREMENTS

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at a distance of 3 m for the frequency range 30 MHz-1000 MHz (30 MHz-1000 MHz Bilog antenna) and at a distance of 1m for the frequency range 1 GHz-10 GHz (1 GHz-10 GHz Double ridge horn antenna).

For radiated emissions in the range 1 GHz-10 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive (wooden) platform one meter above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

FCC Section 15.247 Subclause (a) (1) / RSS-247 Clause 5.1 (2). 20 dB Bandwidth and Carrier frequency separation

SPECIFICATION

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

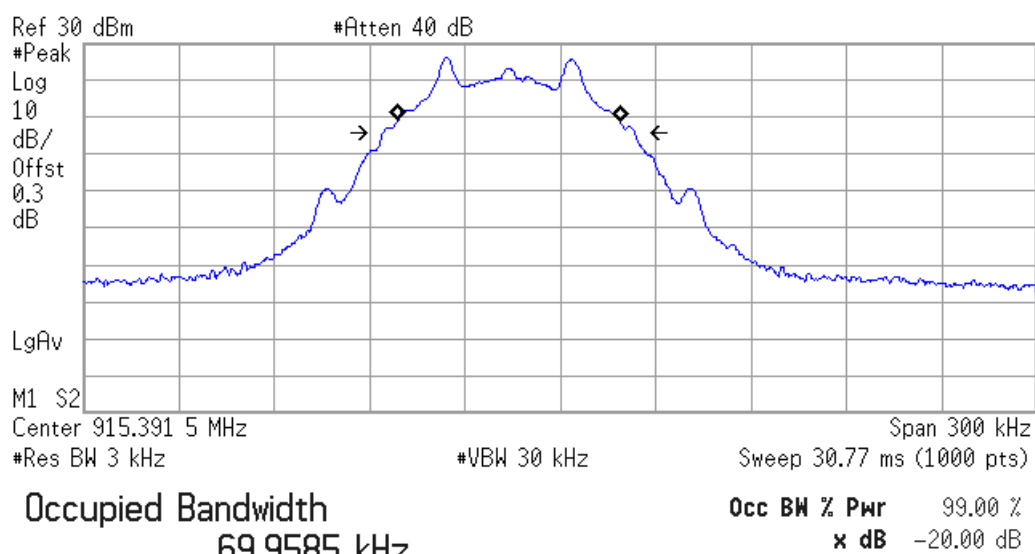
For frequency hopping systems operating in the 902–928 MHz band the maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

RESULTS

(See next plots)

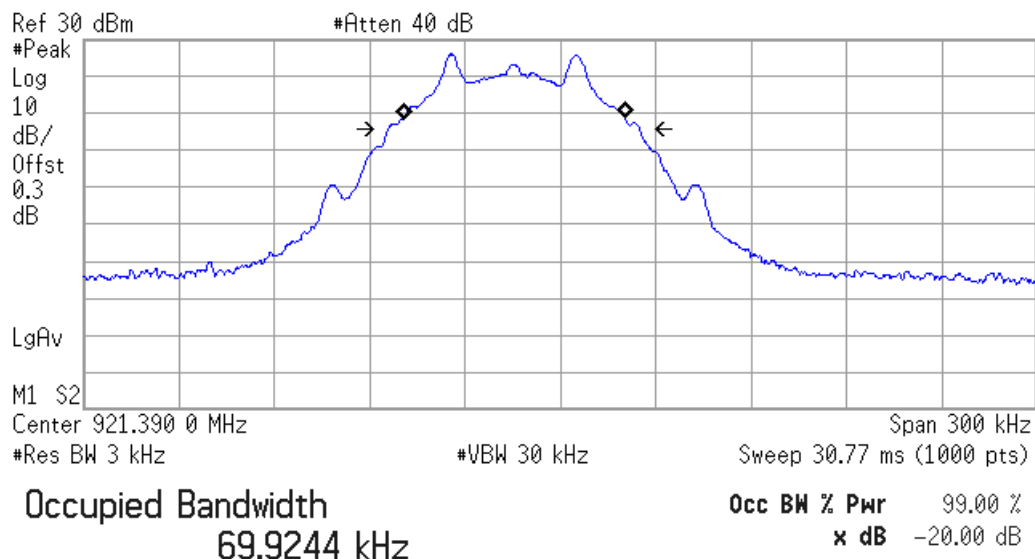
	Lowest frequency 915.3 MHz	Middle frequency 921.1 MHz	Highest frequency 927.6 MHz
20 dB Spectrum bandwidth (kHz)	79.196	79.145	79.096
Measurement uncertainty (kHz)	±1.15		

20 dB BANDWIDTH. Lowest Channel



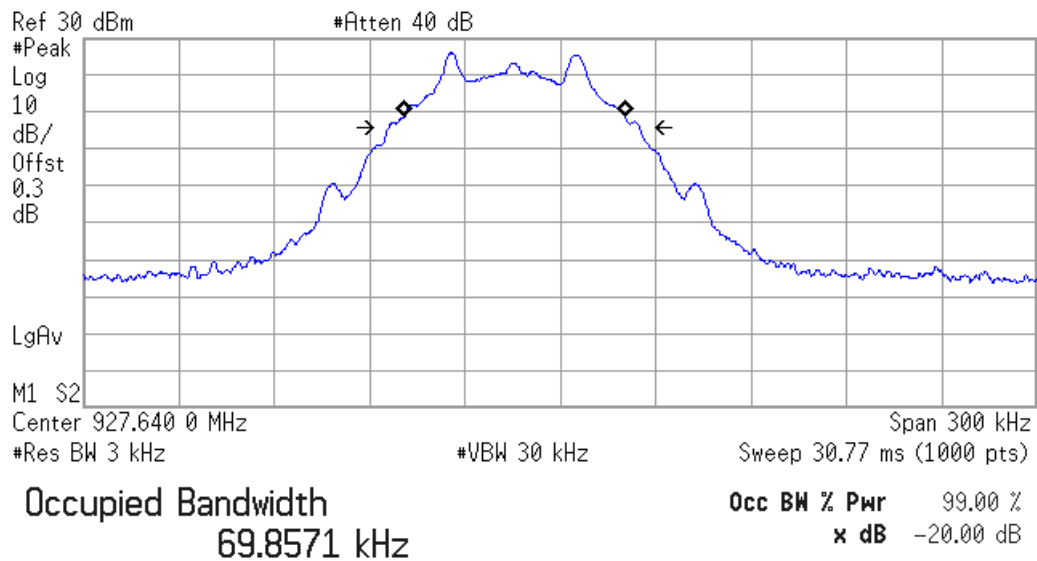
Transmit Freq Error -16.246 kHz
 x dB Bandwidth 79.196 kHz

Middle Channel



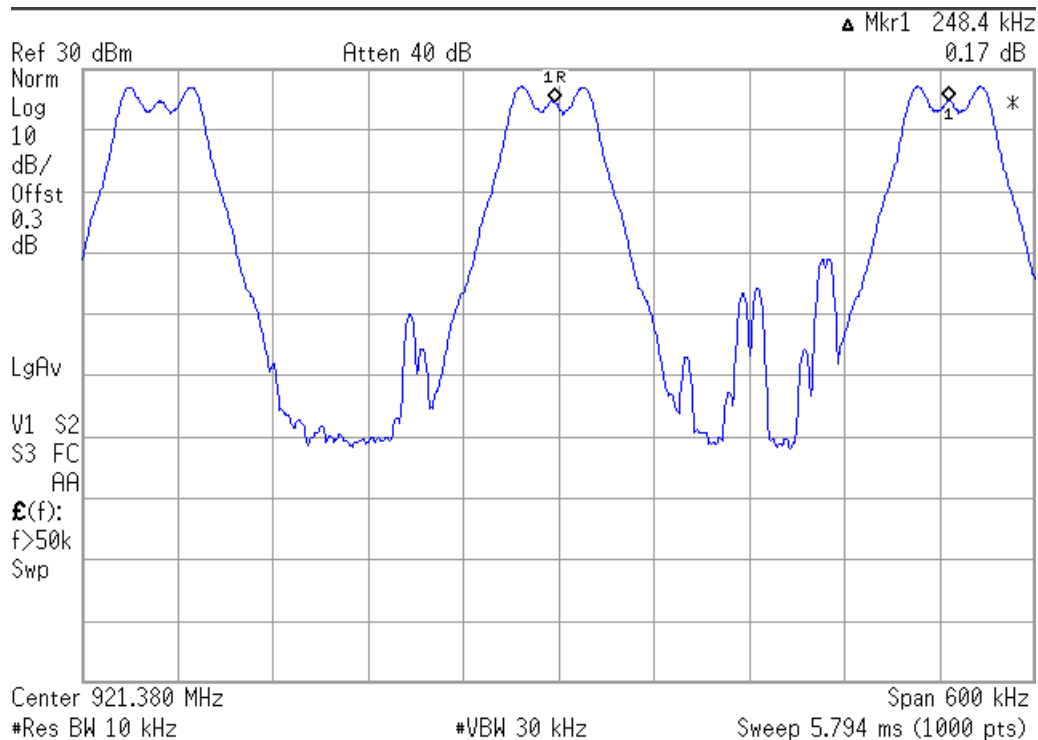
Transmit Freq Error -14.658 kHz
 x dB Bandwidth 79.145 kHz

Highest Channel



Transmit Freq Error -14.655 kHz
 x dB Bandwidth 79.096 kHz

Carrier frequency separation



The hopping channel carrier frequencies are separated by a minimum of the 20 dB bandwidth of the hopping channel.

Verdict: PASS

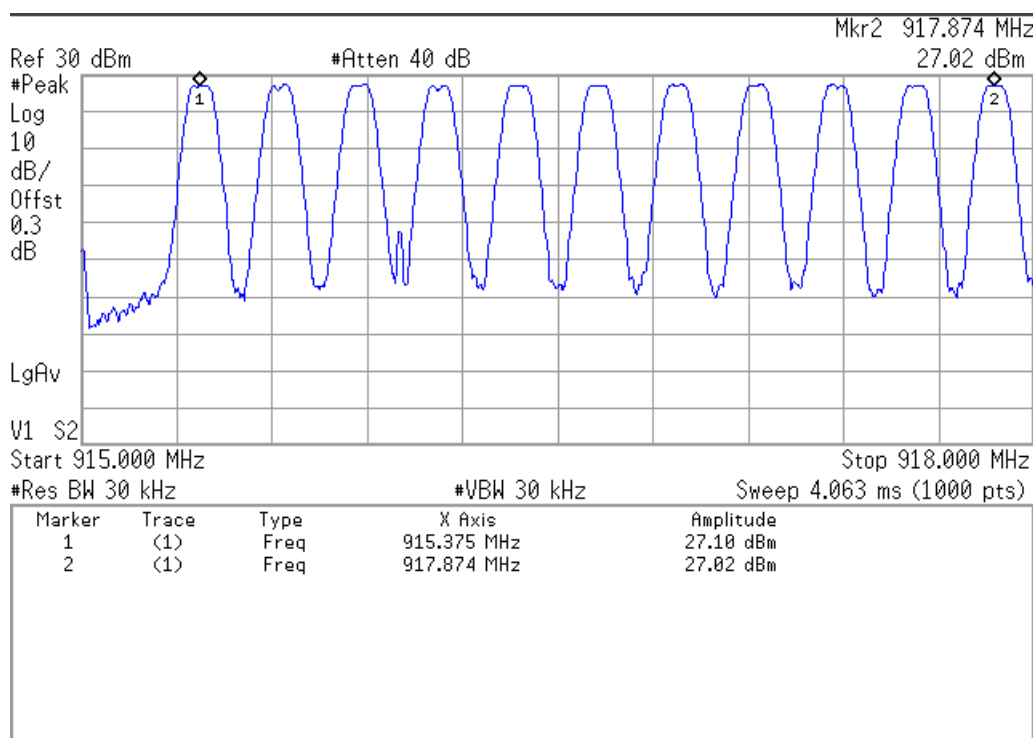
FCC Section 15.247 Subclause (a) (1) (i) / RSS-247 Clause 5.1 (3). Number of hopping channels

SPECIFICATION

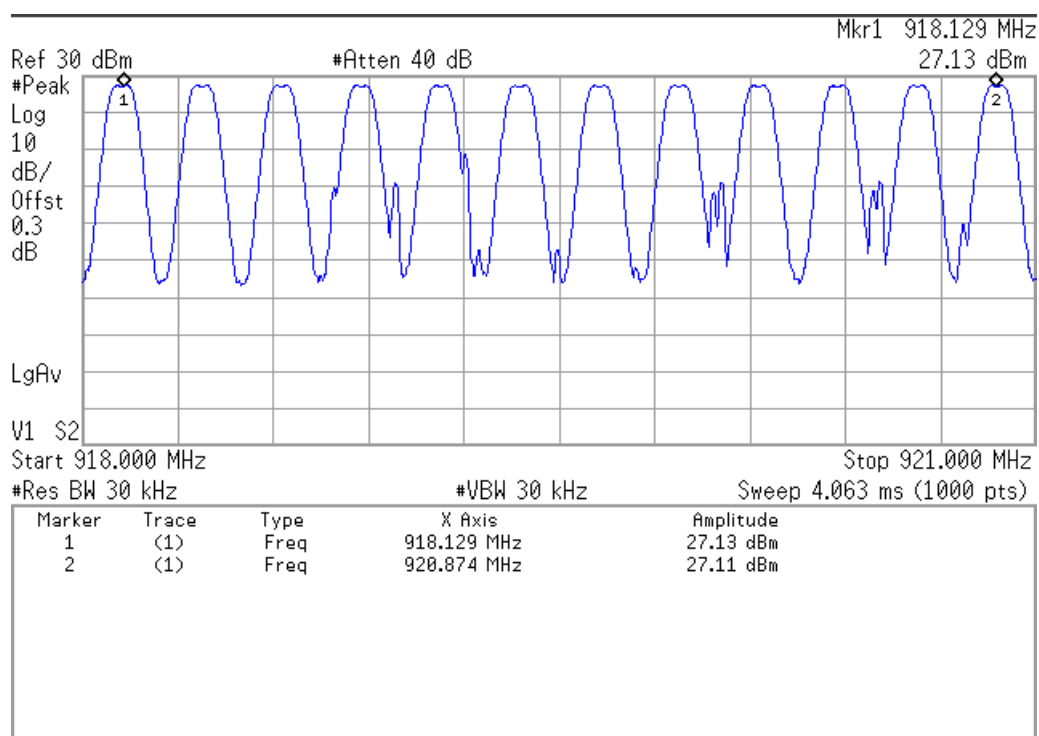
For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

RESULTS

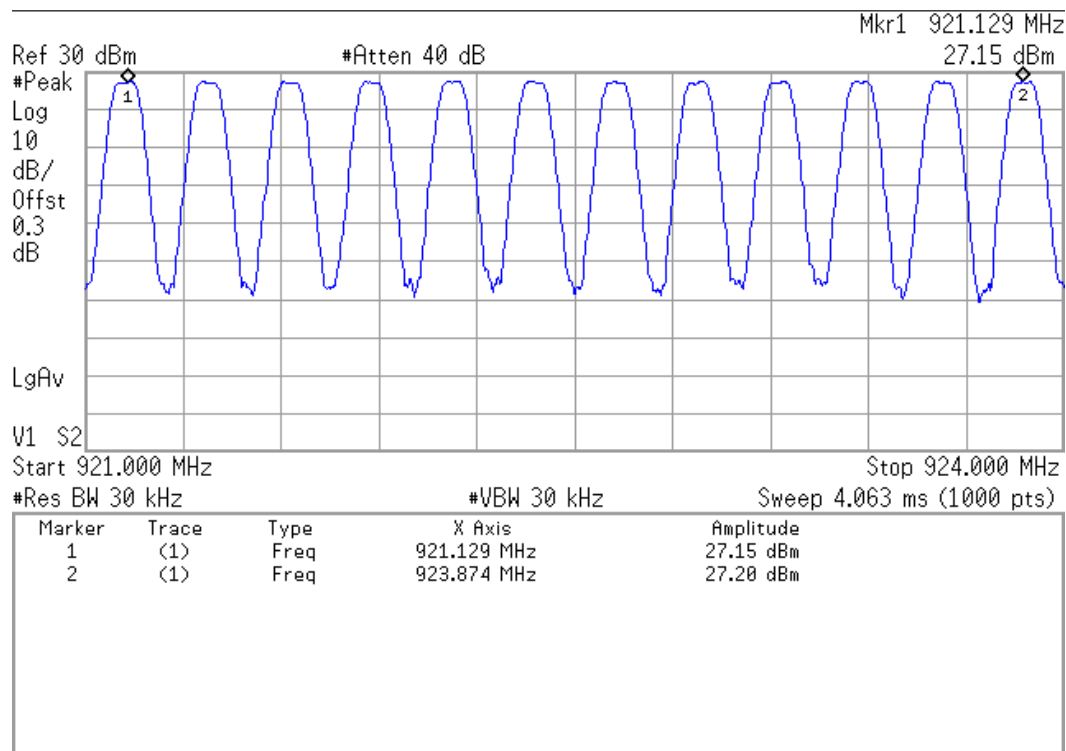
The number of hopping channels is 50 (see next plots).



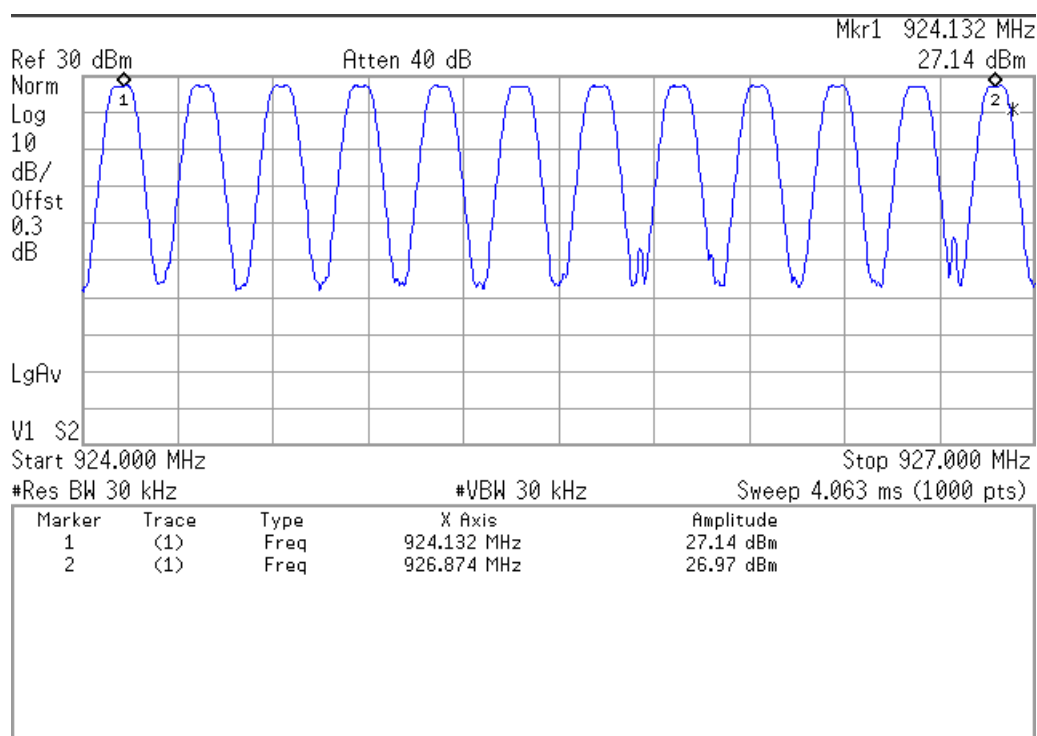
Number of hopping frequencies: 11



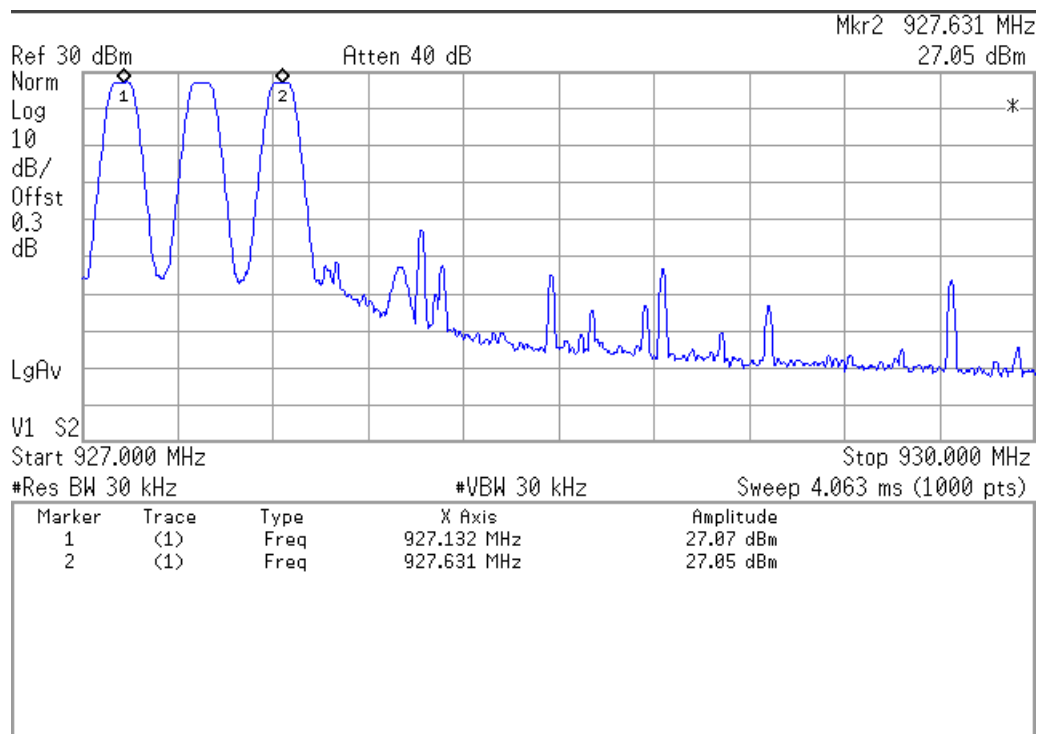
Number of hopping frequencies: 12



Number of hopping frequencies: 12



Number of hopping frequencies: 12



Number of hopping frequencies: 3

Total number of hopping frequencies: 50

Verdict: PASS

FCC Section 15.247 Subclause (a) (1) (i) / RSS-247 Clause 5.1 (3). Time of occupancy (Dwell Time)

SPECIFICATION

For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

RESULTS

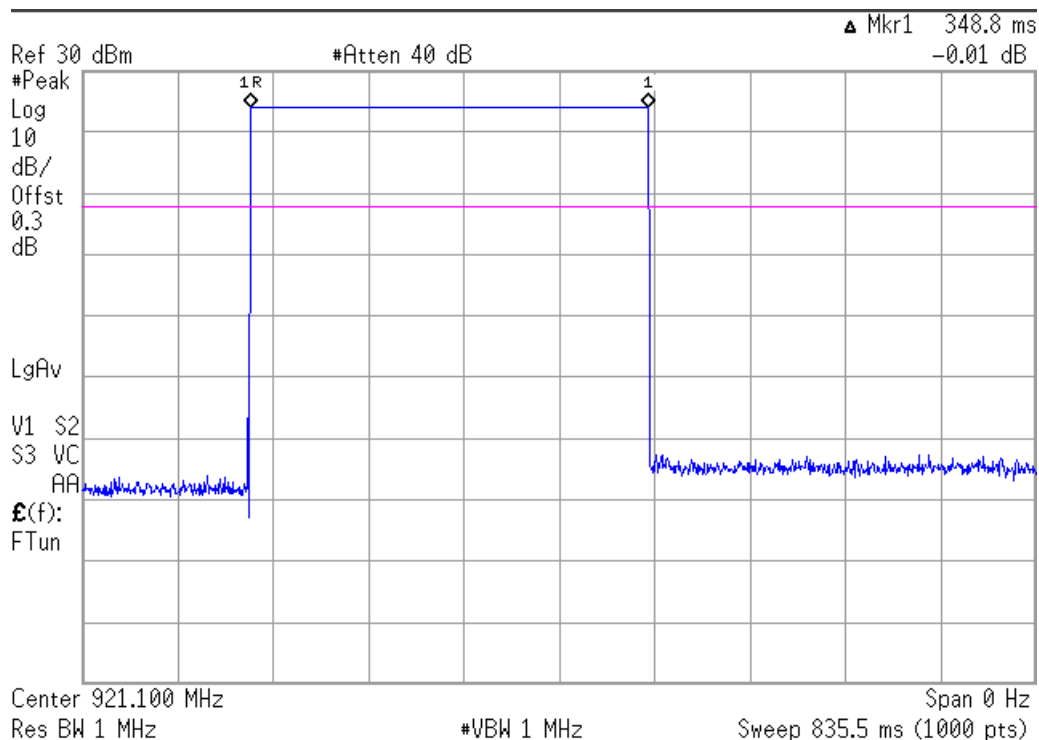
The equipment has one operation mode.

1. TIME OF OCCUPANCY (DWEELL TIME).

The system makes worst case 2.85714 hops per second with 50 channels. So you have each channel $2.85714/50 = 0.0571428$ times per second and so for a period of 20 seconds you have $0.0571428 \times 20 = 1.142856$ times of appearance.

Each Tx-time per appearance is 348.8 ms (see next plot).

So we have $1.142856 \times 348.8 \text{ ms} = 398.6281728 \text{ ms}$ per 20 seconds.



Verdict: PASS

FCC Section 15.247 Subclause (b) (2) / RSS-247 Clause 5.4 (1). Maximum peak output power and antenna gain

SPECIFICATION

For frequency hopping systems operating in the 902–928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels.

The e.i.r.p. shall not exceed 4 W (36 dBm) if the hopset uses 50 or more hopping channels (Canada).

RESULTS

MAXIMUM OUTPUT POWER. See next plots.

Declared maximum antenna gain: 1.9 dBi.

The EIRP power (dBm) is calculated by subtracting the antenna cable loss and adding the declared maximum antenna gain to the measured conducted power.

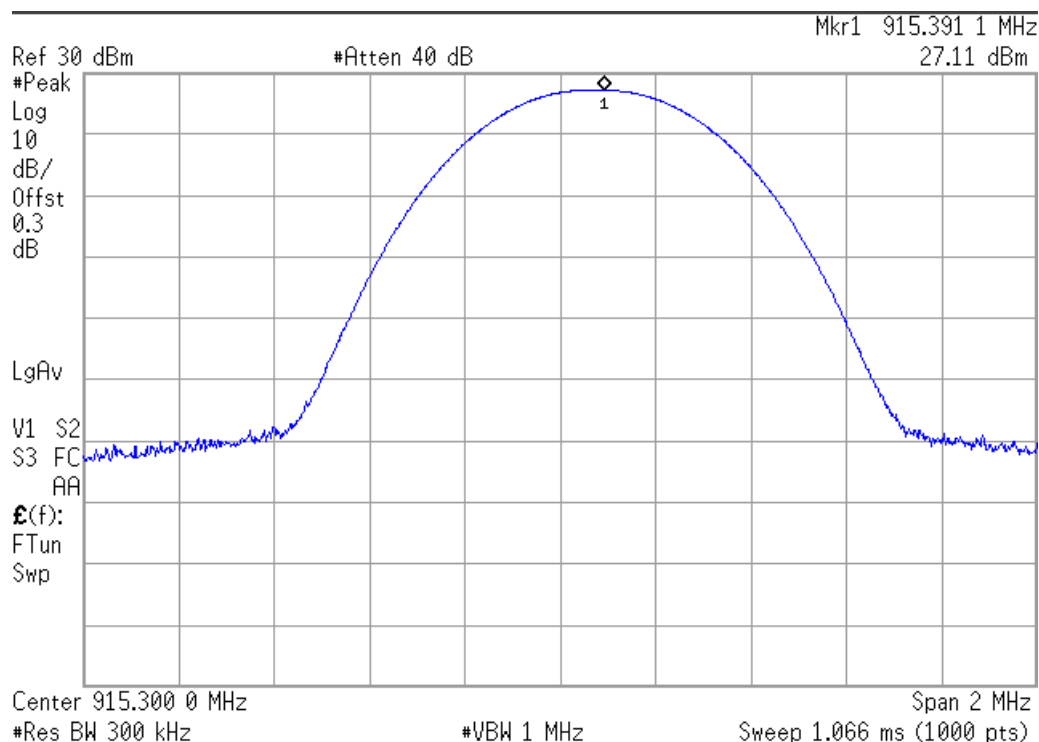
	Lowest frequency 915.3 MHz	Middle frequency 921.1 MHz	Highest frequency 927.6 MHz
Maximum peak power (dBm)	27.11	27.07	27.02
Maximum EIRP power (dBm)	29.01	28.97	28.92
Measurement uncertainty (dB)	±1.5		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

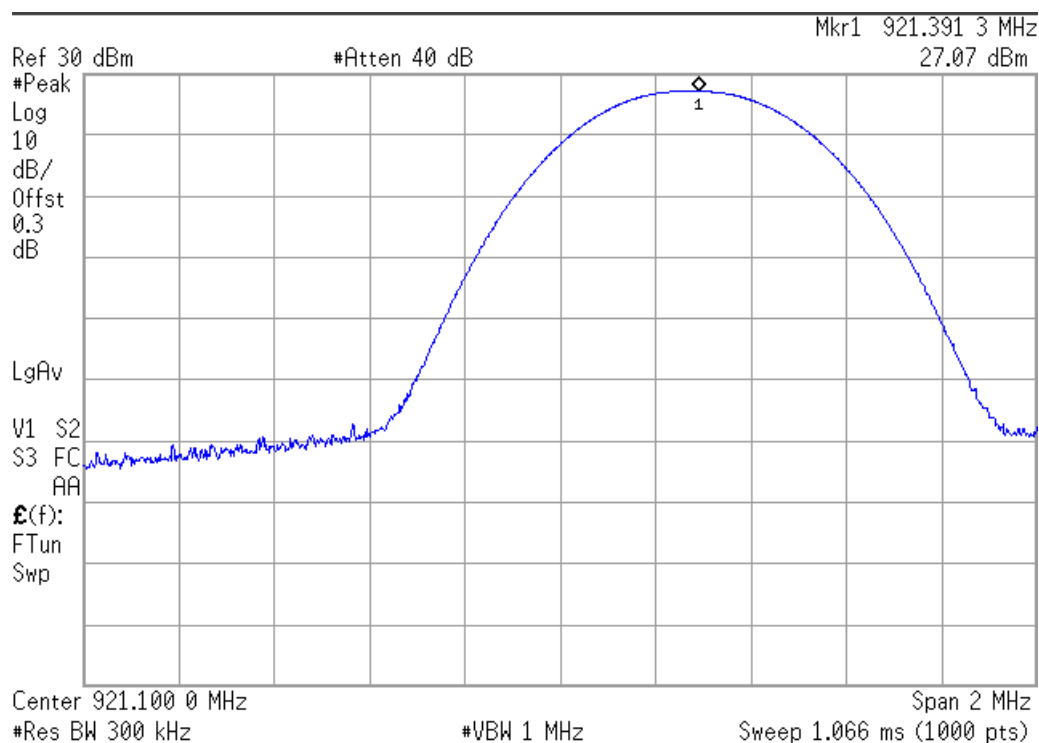
Verdict: PASS

PEAK OUTPUT POWER (CONDUCTED).

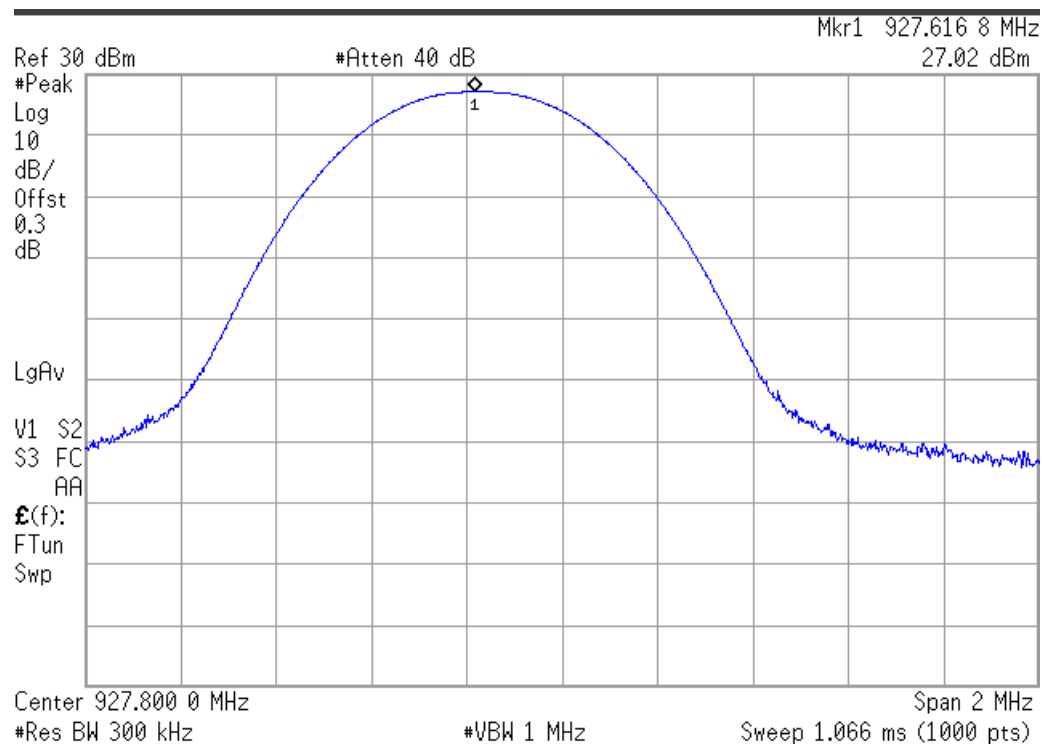
Lowest Channel



Middle Channel



Highest Channel



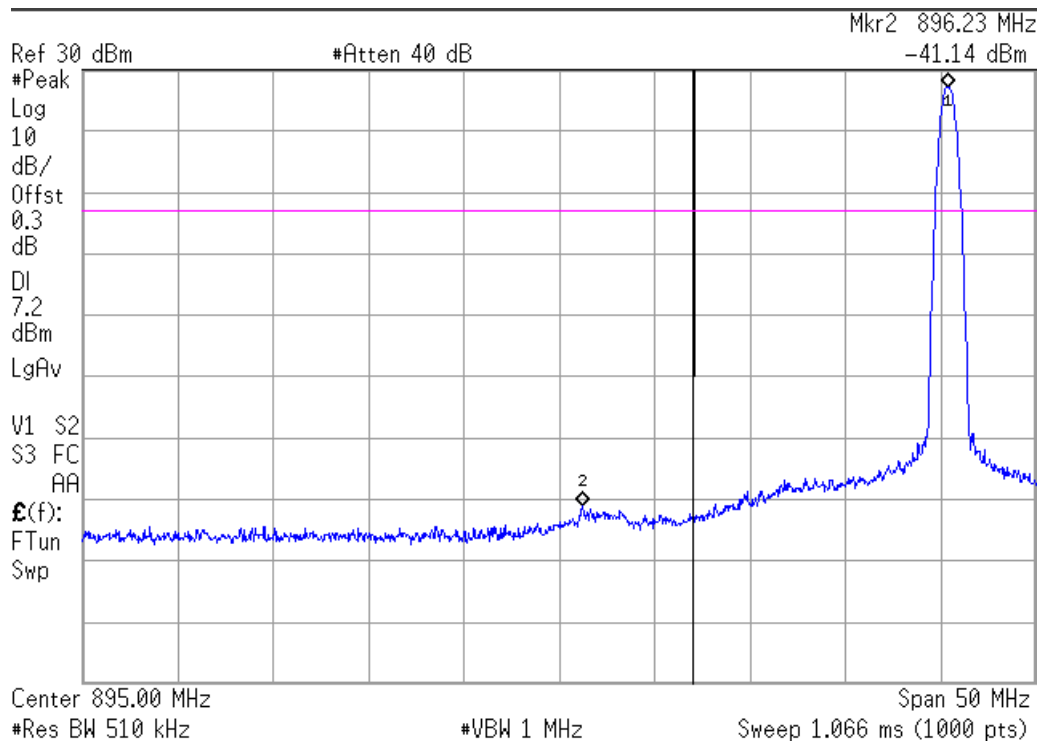
FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Band-edge compliance of conducted emissions (Transmitter)

SPECIFICATION

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB.

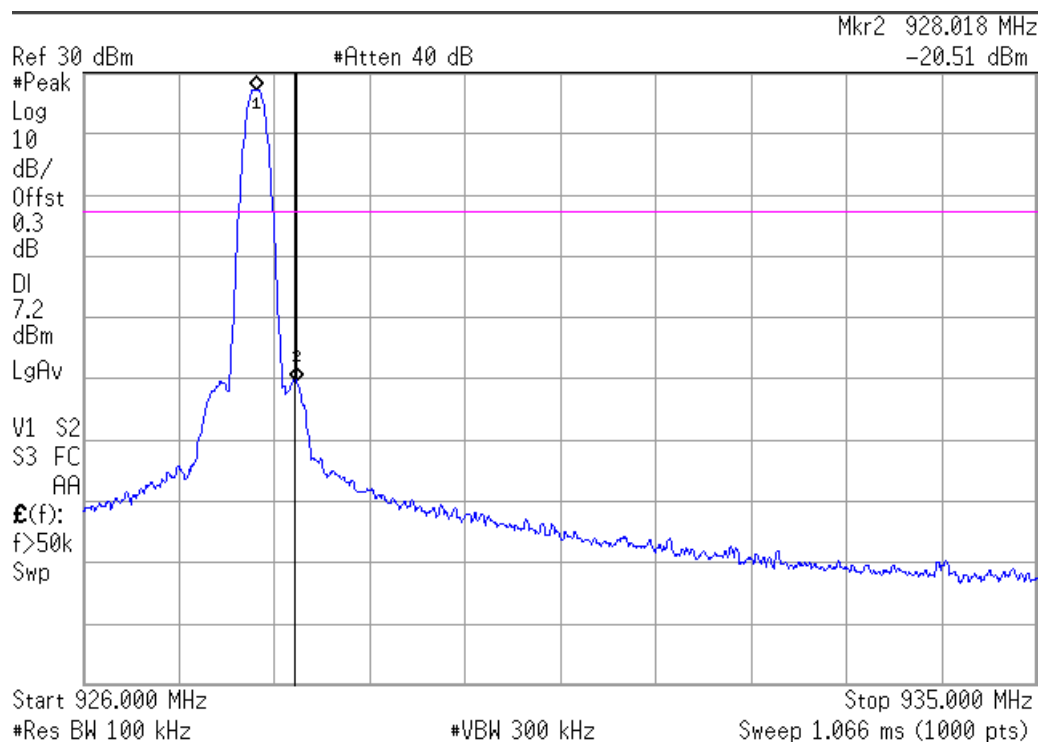
RESULTS:

1. LOW FREQUENCY SECTION (HOPPING OFF). See next plot.



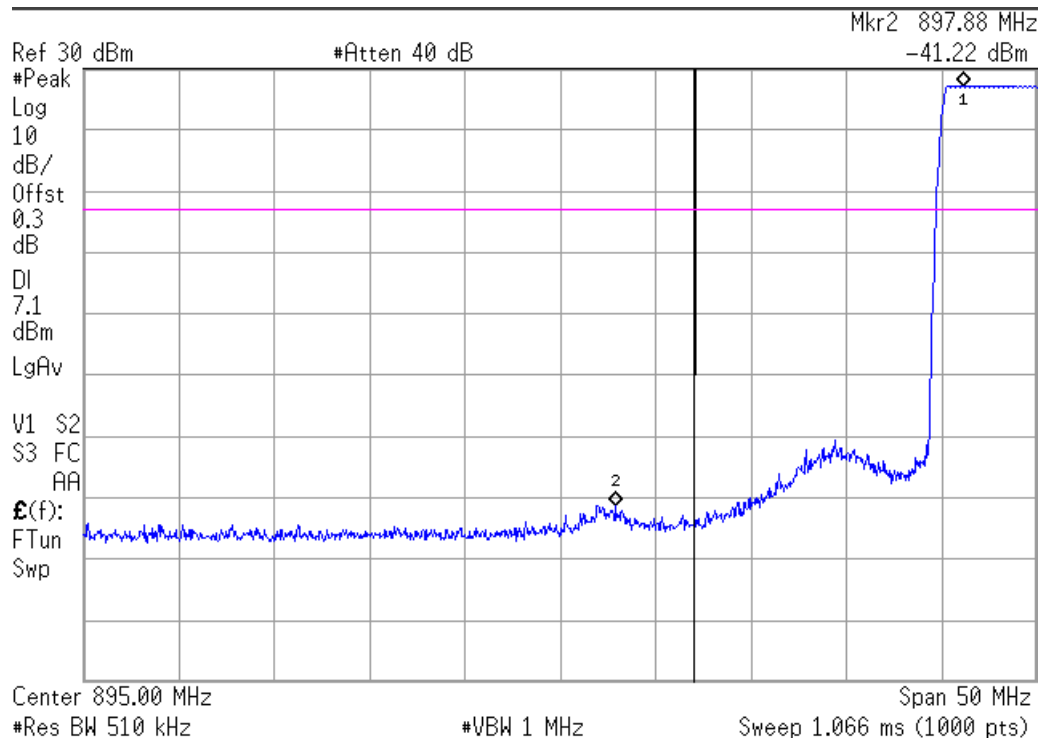
Verdict: PASS

2. HIGH FREQUENCY SECTION (HOPPING OFF). See next plot.



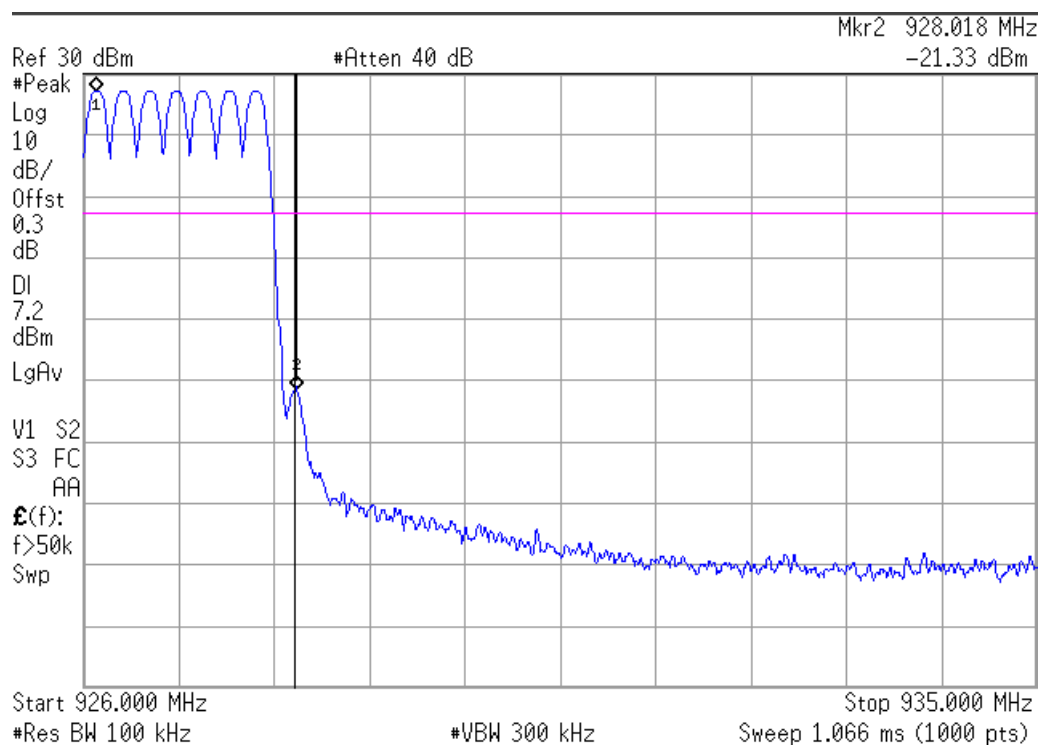
Verdict: PASS

3. LOW FREQUENCY SECTION (HOPPING ON). See next plot.



Verdict: PASS

4. HIGH FREQUENCY SECTION (HOPPING ON). See next plot.



Verdict: PASS

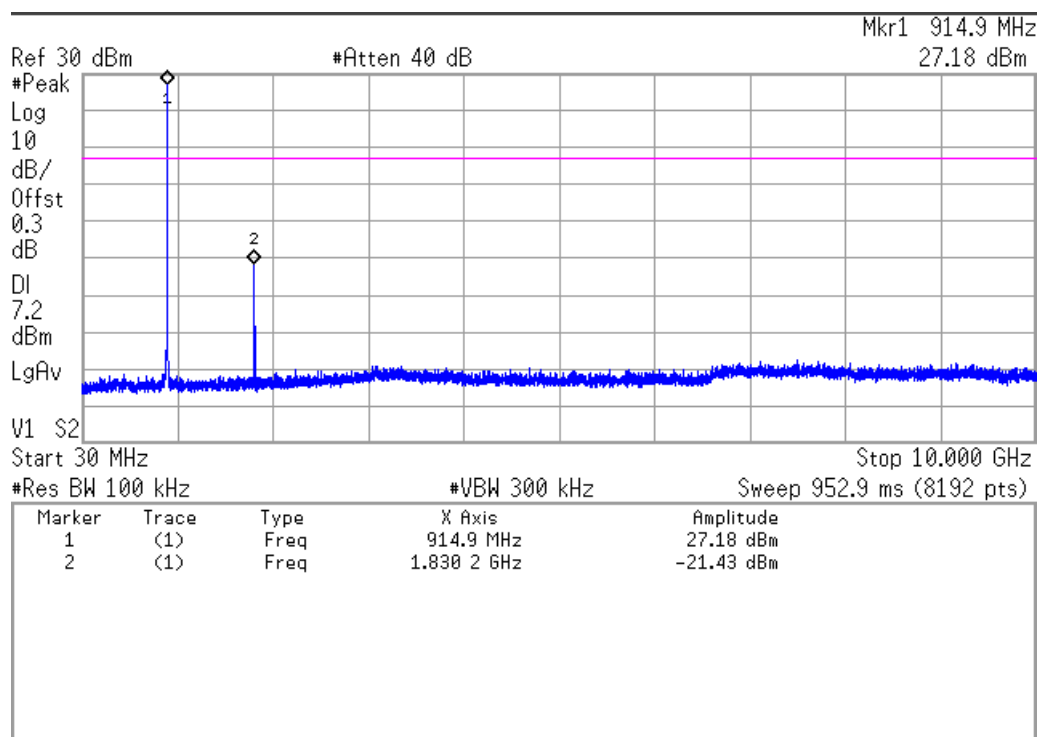
FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter)

SPECIFICATION

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB.

RESULTS:

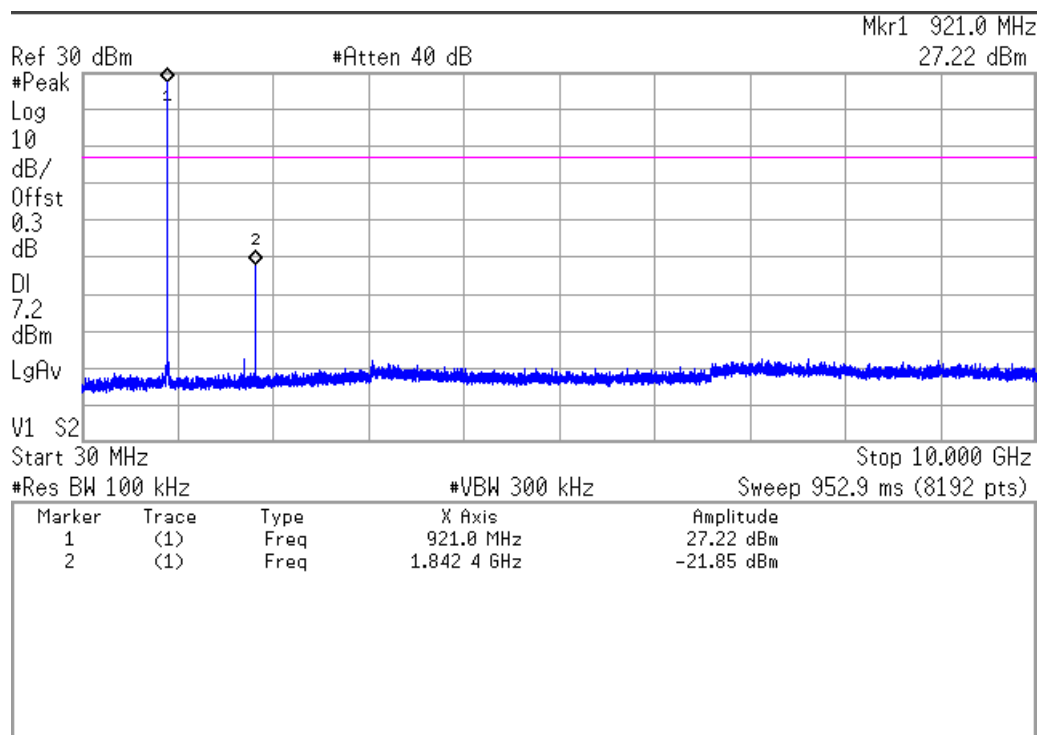
1. LOWEST CHANNEL 30 MHz-10 GHz (see next plot).



Note: The peak above the limit is the carrier frequency.

Verdict: PASS

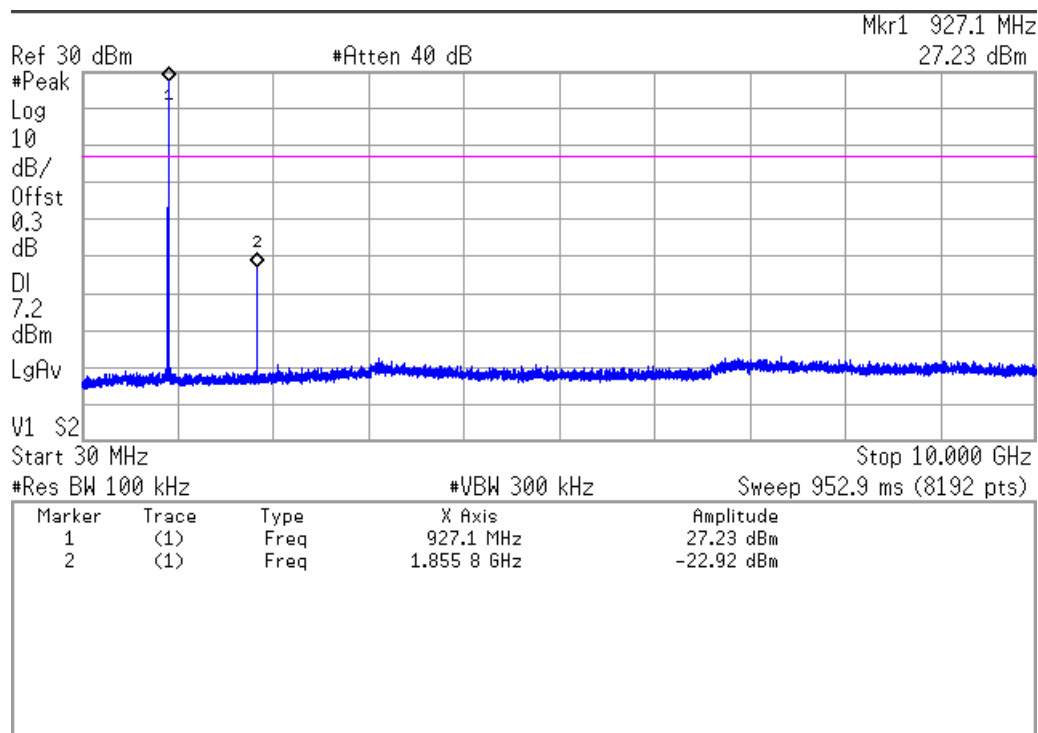
2. MIDDLE CHANNEL 30 MHz-10 GHz (see next plot).



Note: The peak above the limit is the carrier frequency.

Verdict: PASS

3. HIGH CHANNEL 30 MHz-10 GHz (see next plot).



Note: The peak above the limit is the carrier frequency.

Verdict: PASS

FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations radiated (Transmitter)

SPECIFICATION

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)) / RSS-Gen 8.9:

Frequency Range (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	300
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
960 - 25000	500	54	3

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

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

RESULTS:

The situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

All tests were performed in a semi-anechoic chamber at a distance of 3 m for the frequency range 30 MHz-1000 MHz and at distance of 1m for the frequency range 1 GHz-25 GHz.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

Frequency range 30 MHz-1000 MHz.

All peaks are more than 20 dB below the limit.

Frequency range 1 GHz-10 GHz

1. CHANNEL: LOWEST

Spurious frequency (GHz)	Polarization	Detector	Emission Level (dBμV/m)	Measurement Uncertainty (dB)
1.83085 (*)	V	Peak	58.56	± 4.00
	V	Average	58.33	± 4.00
2.74585	V	Peak	49.18	± 4.00
	V	Average	48.64	± 4.00
3.66145	V	Peak	46.30	± 4.00
	V	Average	45.36	± 4.00
4.57705	V	Peak	44.13	± 4.00
	V	Average	42.43	± 4.00
5.49235	V	Peak	50.53	± 4.00
	V	Average	49.78	± 4.00
6.40765	V	Peak	49.5	± 4.00
	V	Average	48.07	± 4.00
7.32295	V	Peak	46.75	± 4.00
	V	Average	43.85	± 4.00
8.23825	V	Peak	49.97	± 4.00
	V	Average	47.64	± 4.00
9.15385	V	Peak	45.36	± 4.00
	V	Average	40.48	± 4.00

(*): This spurious frequency is outside the restricted bands as defined in §15.205(a) / RSS-Gen 8.10. See point “FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter)” for compliance with the -20 dB limit respect to the carrier level.

2. CHANNEL: MIDDLE

Spurious frequency (GHz)	Polarization	Detector	Emission Level (dBμV/m)	Measurement Uncertainty (dB)
1.84285 (*)	V	Peak	61.37	± 4.00
	V	Average	61.00	± 4.00
2.76415	V	Peak	46.68	± 4.00
	V	Average	45.60	± 4.00
3.68545	V	Peak	45.78	± 4.00
	V	Average	44.63	± 4.00
4.60675	V	Peak	42.45	± 4.00
	V	Average	40.34	± 4.00
5.52835	V	Peak	49.58	± 4.00
	V	Average	48.87	± 4.00
6.44965	V	Peak	47.24	± 4.00
	V	Average	45.56	± 4.00
7.37065	V	Peak	42.74	± 4.00
	V	Average	36.82	± 4.00
8.29225	V	Peak	49.13	± 4.00
	V	Average	47.18	± 4.00
9.21355	V	Peak	47.04	± 4.00
	V	Average	41.25	± 4.00

(*): This spurious frequency is outside the restricted bands as defined in §15.205(a) / RSS-Gen 8.10. See point “FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter)” for compliance with the -20 dB limit respect to the carrier level.

3. CHANNEL: HIGHEST

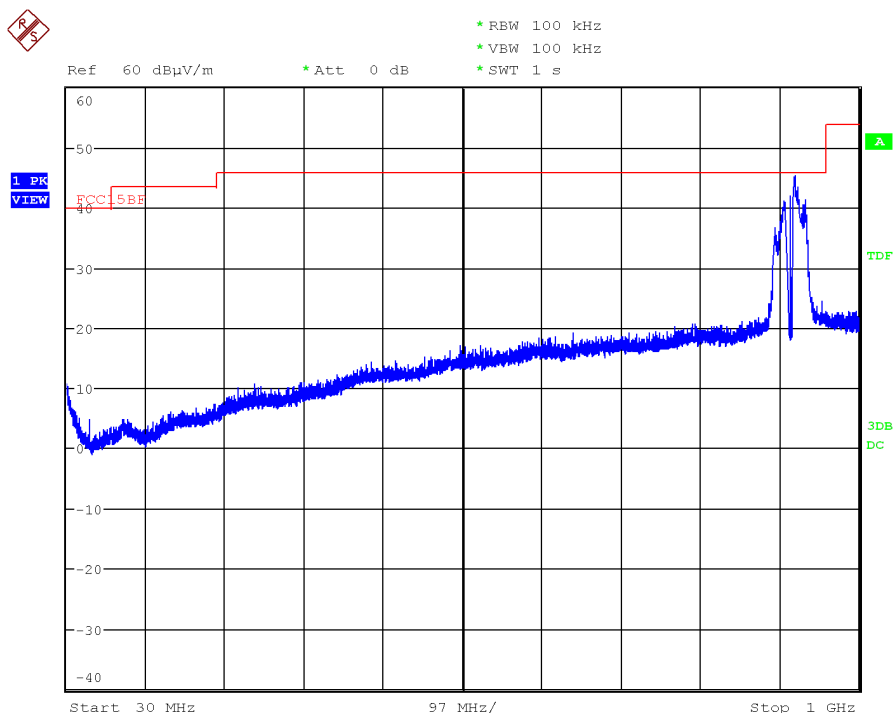
Spurious frequency (GHz)	Polarization	Detector	Emission Level (dBμ V/m)	Measurement Uncertainty (dB)
1.85515 (*)	V	Peak	61.79	± 4.00
	V	Average	61.56	± 4.00
2.78275	V	Peak	46.80	± 4.00
	V	Average	46.11	± 4.00
3.71065	V	Peak	47.69	± 4.00
	V	Average	46.97	± 4.00
4.63825	V	Peak	41.77	± 4.00
	V	Average	39.42	± 4.00
5.56585	V	Peak	48.99	± 4.00
	V	Average	48.10	± 4.00
6.49315	V	Peak	45.69	± 4.00
	V	Average	43.55	± 4.00
7.42045	V	Peak	44.92	± 4.00
	V	Average	41.05	± 4.00
8.34865	V	Peak	49.02	± 4.00
	V	Average	46.28	± 4.00
9.27595	V	Peak	48.92	± 4.00
	V	Average	45.26	± 4.00

(*): This spurious frequency is outside the restricted bands as defined in §15.205(a) / RSS-Gen 8.10. See point “FCC Section 15.247 Subclause (d) / RSS-247 Clause 5.5. Emission limitations conducted (Transmitter)” for compliance with the -20 dB limit respect to the carrier level.

Verdict: PASS

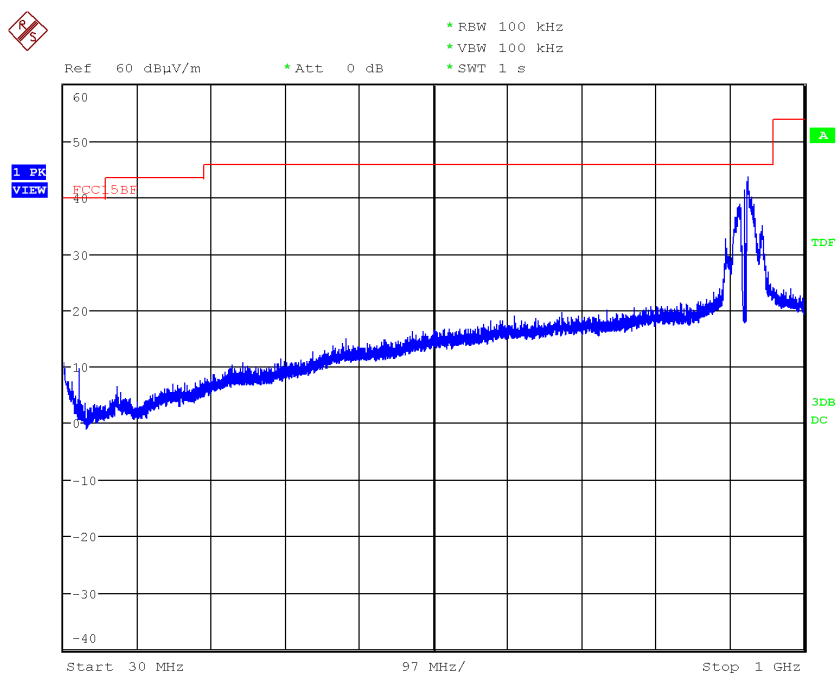
FREQUENCY RANGE 30 MHz-1000 MHz.

CHANNEL: Lowest



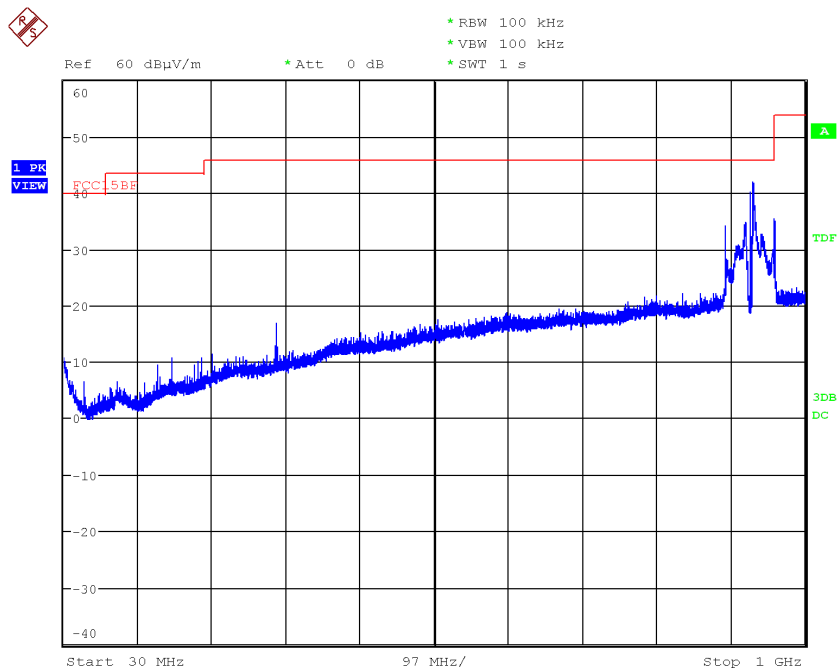
Note: The signal shown in the plot is the carrier frequency. The carrier has been suppressed using a band-stop filter tuned at the carrier frequency.

CHANNEL: Middle



Note: The signal shown in the plot is the carrier frequency. The carrier has been suppressed using a band-stop filter tuned at the carrier frequency.

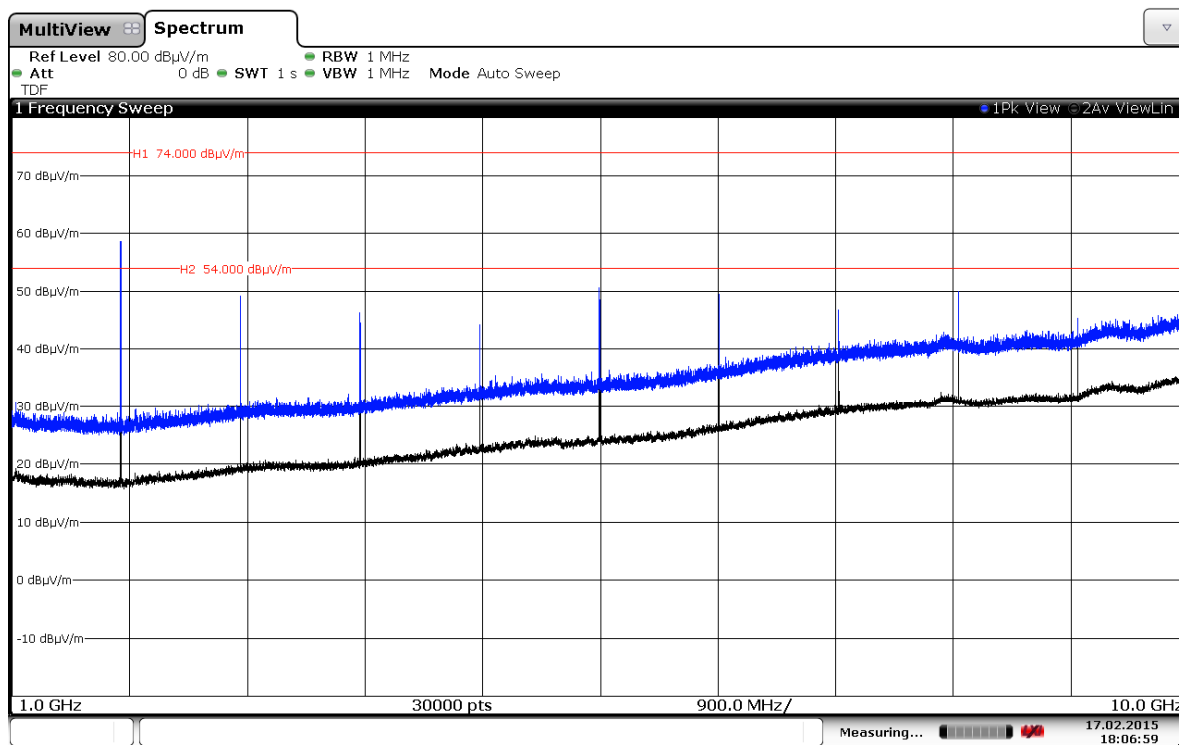
CHANNEL: Highest



Note: The signal shown in the plot is the carrier frequency. The carrier has been suppressed using a band-stop filter tuned at the carrier frequency.

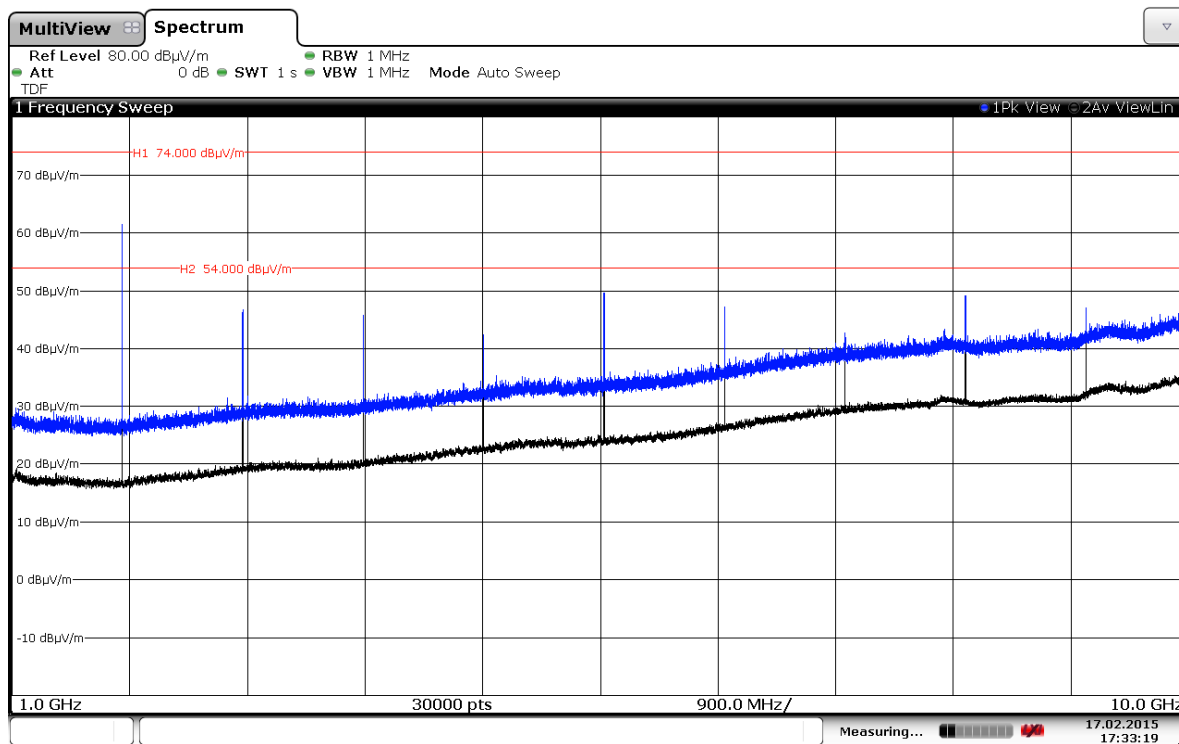
FREQUENCY RANGE 1 GHz to 10 GHz.

CHANNEL: Lowest



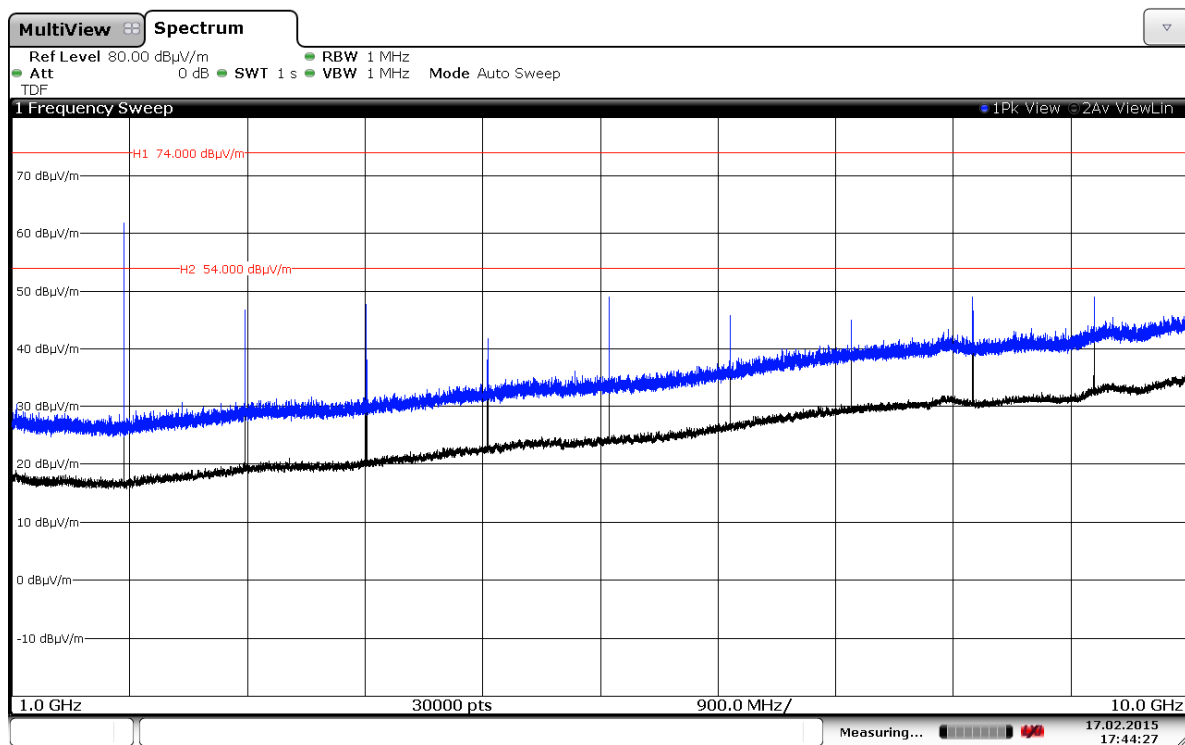
Date: 17.FEB.2015 18:06:59

CHANNEL: Middle



Date: 17.FEB.2015 17:33:18

CHANNEL: Highest



Date: 17.FEB.2015 17:44:27