**DEKRA Testing and Certification, S.A.U.**
Parque Tecnológico de Andalucía,
c/ Severo Ochoa nº 2 · 29590 Campanillas · Málaga · España
C.I.F. A29507456

Test report No:

NIE: 57721RRF.001A1

# 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.

| | |
|---|---|
| (*) Identification of item tested | Wireless battery powered parking sensor |
| (*) Trademark | Urbiótica |
| (*) Model and /or type reference | U-SPOT-DUO |
| Other identification of the product | HW Version: SPD.HW.20.10<br>SW Version: SPD.FW.1.11<br>FCC ID: 2AYS6-U-SPOT-DUO |
| (*) Features | LoRa communications. |
| Applicant | Barcelona Smart Technologies S.L.<br>C/ Joaquim Molins 5, 4o 4a<br>Barcelona 08028. Spain. |
| Test method requested, standard | USA FCC Part 15.247 (10-1-19 Edition): Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz.<br>USA FCC Part 15.209 (10-1-19 Edition): Radiated emission limits; general requirements.<br>CANADA RSS-247 Issue 2 (February 2017).<br>CANADA RSS-Gen Issue 5 (March 2019). Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019. ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices. |
| Summary | IN COMPLIANCE |
| Approved by (name / position & signature) | Rafael López<br>EMC Consumer & RF Lab. Manager<br>2021.03.25 13:24:02 +01'00' |
| Date of issue | 2021-03-25 |
| Report template No | FDT08_23<br>(*) "Data provided by the client" |

# Index

Competences and guarantees ..... 3
General conditions ..... 3
Uncertainty ..... 3
Data provided by the client ..... 3
Usage of samples ..... 4
Test sample description ..... 4
Identification of the client ..... 5
Testing period and place ..... 5
Document history ..... 6
Environmental conditions ..... 6
Remarks and comments ..... 7
Testing verdicts ..... 8
Summary ..... 8
Appendix A: Test results. LoRa ..... 9

# 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 is a FCC-recognized accredited testing laboratory with appropriate scope of accreditation that include testing performed in this test report.

DEKRA Testing and Certification 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.

# 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 is a parking sensor. Use magnetic and infrared sensors for detecting occupation of parking space. It sends the information using a LoRa radio.responsibility with respect to the information provided by the client and that may affect the validity of results.

# Usage of samples

Samples undergoing test have been selected by: The client.

- Sample S/01 is composed of the following elements:

| Control Nº | Description | Model | Serial Nº | Date of reception |
|---|---|---|---|---|
| 66612/013 | U-SPOT-DUO | -- | -- | 2020/11/09 |

Sample S/01 has undergone the test(s): All Radiated and No Hopping mode Conducted tests indicated in Appendix A.

- Sample S/02 is composed of the following elements:

| Control Nº | Description | Model | Serial Nº | Date of reception |
|---|---|---|---|---|
| 66612/020 | Module (FCC HOP) | -- | 103591 | 2020/11/30 |

Sample S/02 has undergone the following test(s): All Hopping mode Conducted tests indicated in Appendix A.

# Test sample description

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ports…… : | Port name and description | | Cable | | | | |
| | | | Specified max length [m] | Attached during test | Shielded | Coupled to patient(3) | |
| | | | | ☐ | ☐ | ☐ | |
| Supplementary information to the ports……: | No ports | | | | | | |
| Rated power supply .....: | Voltage and Frequency | | Reference poles | | | | |
| | | | L1 | L2 | L3 | N | PE |
| | ☐ | | ☐ | ☐ | ☐ | ☐ | ☐ |
| | ☒ | DC: 3.6 Volts primary lithium Battery. Saft LS33600 model | | | | | |
| Rated Power .....: | 250mA at 3.6V recommended continuous current by manufacturer | | | | | | |
| Clock frequencies .....: | 48Mhz for microcontroller and 32MHz for radio transceiver | | | | | | |
| Other parameters.....: | - | | | | | | |
| Software version .....: | SPD.FW.1.11 | | | | | | |
| Hardware version.....: | SPD.HW.20.10 | | | | | | |
| Dimensions in cm (W x H x D)....: | - | | | | | | |
| Mounting position.....: | ☒ | Other: Outdoor sensor. Embeded on the pavement | | | | | |

| | | | |
|---|---|---|---|
| Modules/parts .....: | Module/parts of test item | Type | Manufacturer |
| | 2 x D type batteries | Battery | Saft |
| | Internal patch mount ISM PCB antenna | Antenna | 2J |
| Accessories (not part of the test item) .....: | Description | Type | Manufacturer |
| | - | | |
| Documents as provided by the applicant.....: | Description | File name | Issue date |
| | - | | |

(3) Only for Medical Equipment

## Identification of the client

Worldsensing S.L.

C/Viriat, 47, Edificio Numancia 1, planta 10. Barcelona 08014. Spain

## Testing period and place

| | |
|---|---|
| **Test Location** | DEKRA Testing and Certification S.A.U. |
| **Date (start)** | 2020-11-12 |
| **Date (finish)** | 2020-12-18 |

# Document history

| Report number | Date | Description |
|---|---|---|
| 57721RRF.001 | 2021-03-12 | First release |
| 57721RRF.001 | 2021-03-25 | Second release:<br>- Inclusion of the Clause 5.3. (b) Power spectral density for hybrid systems |

# Environmental conditions

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

| | |
|---|---|
| **Temperature** | Min. = 15 ºC<br>Max. = 35 ºC |
| **Relative humidity** | Min. = 20 %<br>Max. = 75 % |

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

| | |
|---|---|
| **Temperature** | Min. = 15 ºC<br>Max. = 35 ºC |
| **Relative humidity** | Min. = 20 %<br>Max. = 75 % |

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

| | |
|---|---|
| **Temperature** | Min. = 15 ºC<br>Max. = 35 ºC |
| **Relative humidity** | Min. = 20 %<br>Max. = 75 % |

# Remarks and comments

The tests have been performed by the technical personnel: Cristina Calle, Javier M. Nadales, José Manuel Jiménez and Miguel Ángel Torres.

Used instrumentation:

Conducted Measurements:

| | | Last Calibration | Due Calibration |
|---|---|---|---|
| 1. | SHIELDED ROOM ETS LINDGREN S101 | N.A. | N.A. |
| 2. | SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz ROHDE AND SCHWARZ FSV40 | 2020/03 | 2022/03 |
| 3. | DC POWER SUPPLY ROHDE AND SCHWARZ NGPE 40/40 | N.A. | N.A. |
| 4. | DIGITAL MULTIMETER FLUKE 175 | 2020/11 | 2021/11 |

Radiated Measurements:

| | | Last Calibration | Due Calibration |
|---|---|---|---|
| 1. | SEMIANECHOIC ABSORBER LINED CHAMBER ETS LINDGREN FACT 3 200 STP | N.A. | N.A. |
| 2. | HYBRID BILOG ANTENNA 30MHz-6GHz SUNOL SCIENCES CORPORATION JB6 | 2018/10 | 2021/10 |
| 3. | PRE-AMPLIFIER G>40dB 10MHz-6GHz BONN ELEKTRONIK BLNA 0160-01N | 2020/02 | 2021/02 |
| 4. | EMI TEST RECEIVER 9kHz-7GHz ROHDE AND SCHWARZ ESR7 | 2020/01 | 2021/01 |
| 5. | HORN ANTENNA 1-18GHz SCHWARZBECK BBHA 9120 D | 2020/08 | 2023/08 |
| 6. | PRE-AMPLIFIER G>30dB 1GHz-18GHz BONN ELEKTRONIK BLMA 0118-3A | 2020/10 | 2021/10 |
| 7. | SIGNAL AND SPECTRUM ANALYZER 10Hz-40GHz ROHDE AND SCHWARZ FSV40 | 2019/10 | 2021/10 |
| 8. | DC POWER SUPPLY 30V/5A KEYSIGHT TECHNOLOGIES U8002A | N.A. | N.A. |
| 9. | DIGITAL MULTIMETER FLUKE 175 | 2020/11 | 2021/11 |

# Testing verdicts

| | |
|---|---|
| Not applicable: | N/A |
| Pass: | P |
| Fail: | F |
| Not measured: | N/M |

# Summary

### 1. LoRa 125 kHz

| FCC PART 15 PARAGRAPH / RSS-247 | | | |
|---|---|---|---|
| **Requirement – Test case** | | **Verdict** | **Remark** |
| FCC 15.247 (a)(1) / RSS-247 5.1. (b) | 20 dB Bandwidth and Carrier frequency separation | P | |
| FCC 15.247 (f) / RSS-247 5.3. (a) | Time of occupancy (Dwell Time) | P | |
| FCC 15.247 (b)(2) / RSS-247 5.4. (a) | Maximum peak output power and antenna gain | P | |
| FCC 15.247 (d) / RSS-247 5.5. | Band-edge compliance of conducted emissions (Transmitter) | P | |
| FCC 15.247 Subclause (f) / RSS-247 5.3. (b) | Power spectral density for hybrid systems | P | |
| FCC 15.247 (d) / RSS-247 5.5. | Emission limitations radiated (Transmitter) | P | |
| Supplementary information and remarks:<br>None. | | | |

# **Appendix A:** Test results. LoRa

# INDEX

TEST CONDITIONS ..... 11
Occupied Bandwidth ..... 13
FCC 15.247 (a)(1) / RSS-247 5.1. (b) 20 dB Bandwidth and Carrier frequency separation. ..... 15
FCC 15.247 (f) / RSS-247 5.3. (a) Time of occupancy (Dwell Time) ..... 18
FCC 15.247 (b)(2) / RSS-247 5.4 (a) Maximum output power and antenna gain ..... 20
FCC 15.247 (d) / RSS-247 5.5. Band-edge compliance of conducted emissions (Transmitter) ..... 23
FCC 15.247 (f) / RSS-247 Clause 5.3. (b) Power spectral density for hybrid systems ..... 27
FCC 15.247 (d) / RSS-247 5.5. Emission limitations radiated (Transmitter) ..... 30

# TEST CONDITIONS

POWER SUPPLY (V):

V nonimal: 3.6 Vdc.

Type of power supply: Lithium battery.

ANTENNA:

Type of Antenna: Internal patch mount ISM PCB antenna.

Maximum Declared Assembly Gain: +1 dBi

TEST FREQUENCIES:

Low Channel: 902.30 MHz

Middle Channel: 915.20 MHz

High Channel: 927.36 MHz

The equipment can operate as a hybrid system using 8 hopping channels. The equipment was tested with a Spreading Factor 10.

CONDUCTED MEASUREMENTS

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

The DC supply voltage is applied using an external calibrated power supply.

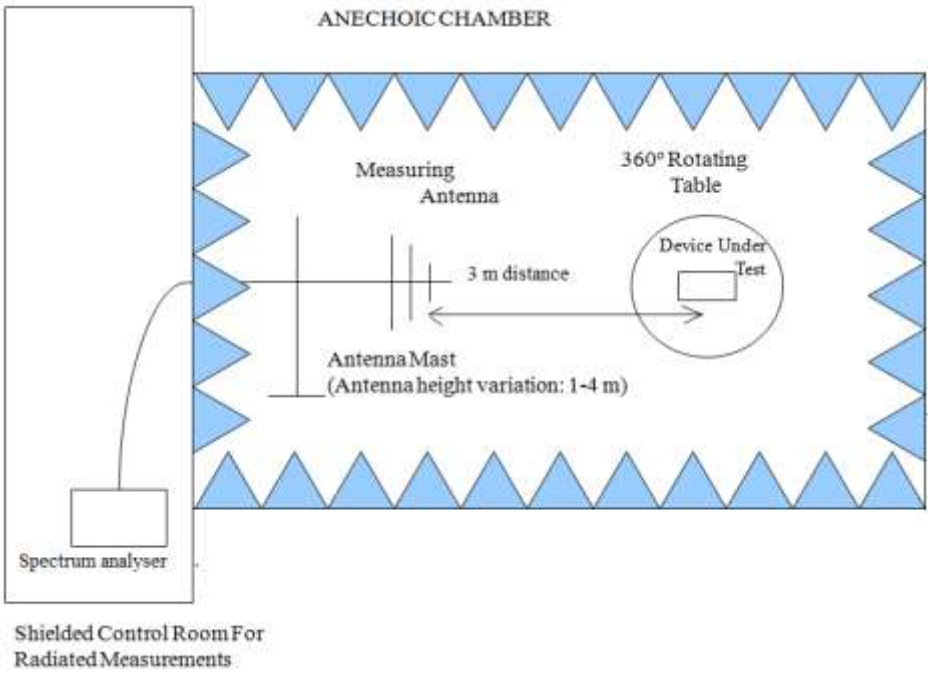
RADIATED MEASUREMENTS

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

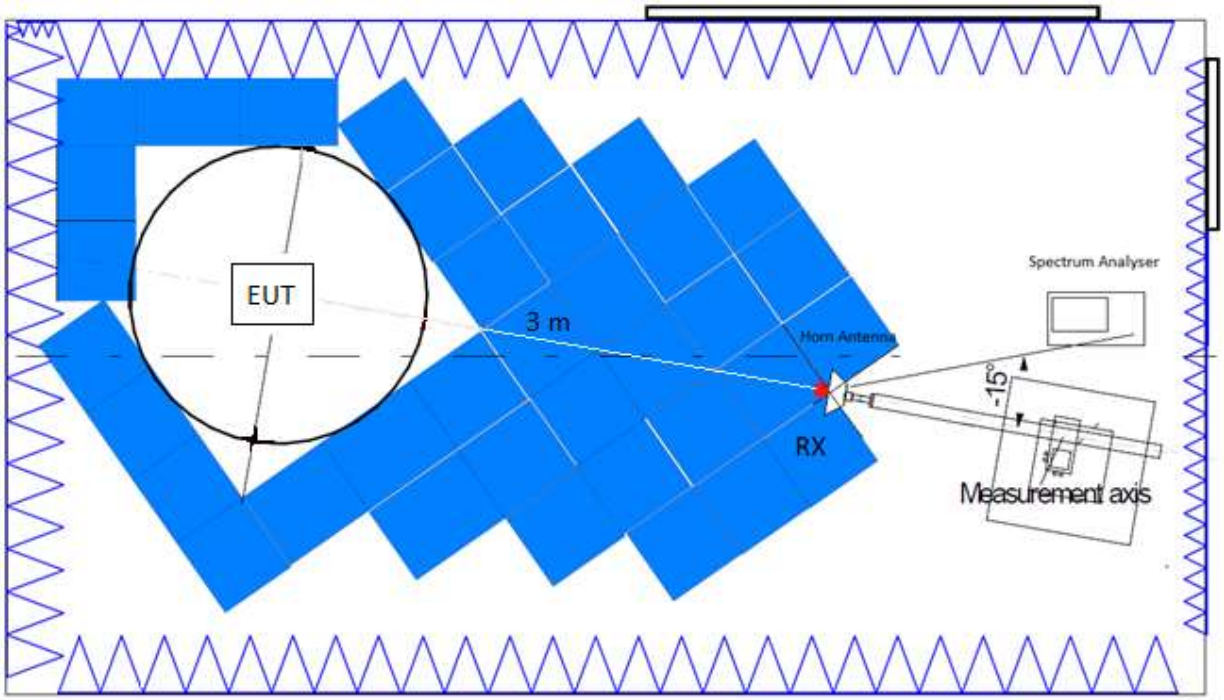
The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360º and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find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

Measurements were made in both horizontal and vertical planes of polarization.
A resolution bandwidth/video bandwidth of 100 kHz / 300 kHz was used for frequencies below 1 GHz and 1 MHz / 3 MHz for frequencies above 1 GHz.

Radiated measurements setup from 30 MHz to 1 GHz:




Radiated measurements setup from 1 GHz to 10 GHz:



# Occupied Bandwidth

SPECIFICATION:

FCC §2.1049. Measurements required: Occupied bandwidth.

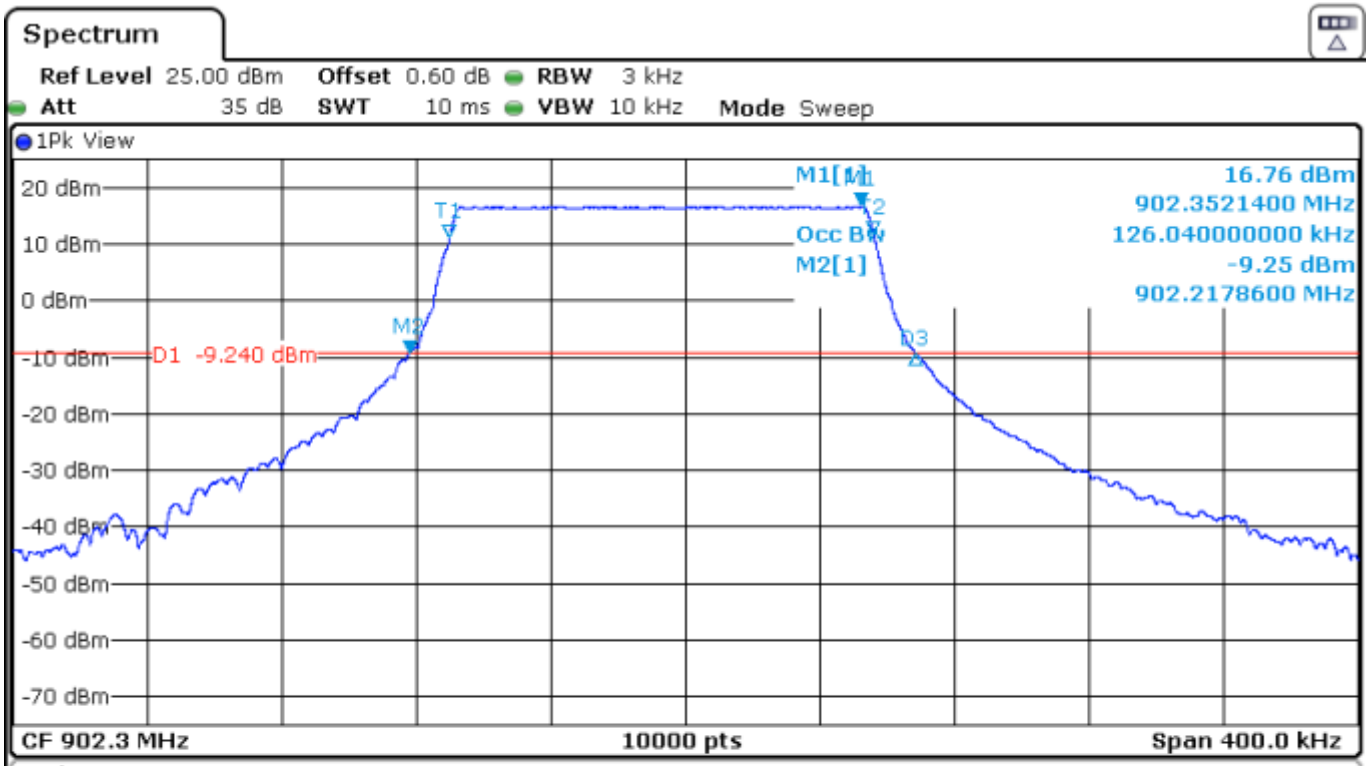
RSS-Gen Clause 6.7.

RESULTS:

| | Lowest Channel 902.30 MHz | Middle Channel 915.20 MHz | Highest Channel 927.36 MHz |
|---|---|---|---|
| 99% bandwidth (kHz) | 126.04 | 126.12 | 126.20 |
| -26 dBc bandwidth (kHz) | 150.320 | 150.298 | 150.689 |
| Measurement uncertainty (kHz) | <± 0.87 | | |

Verdict: PASS

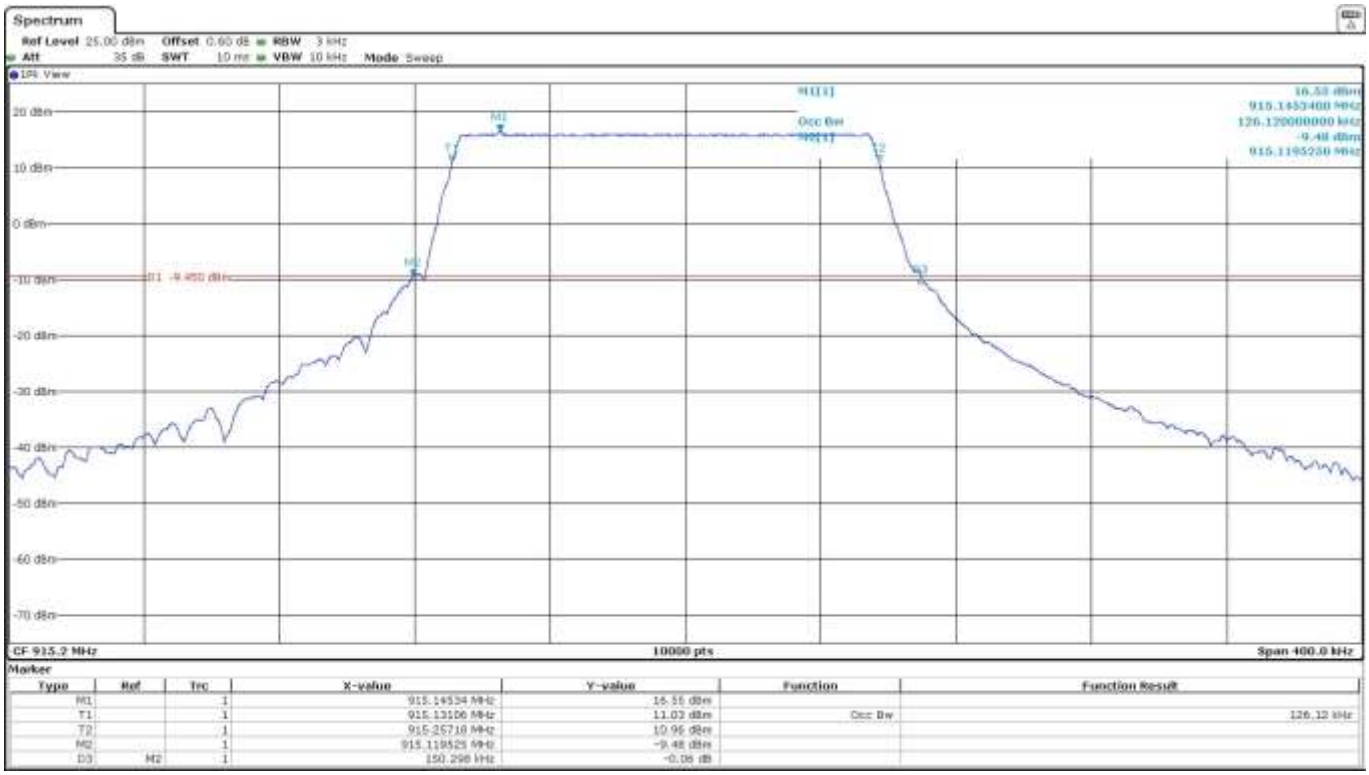
- Lowest Channel:



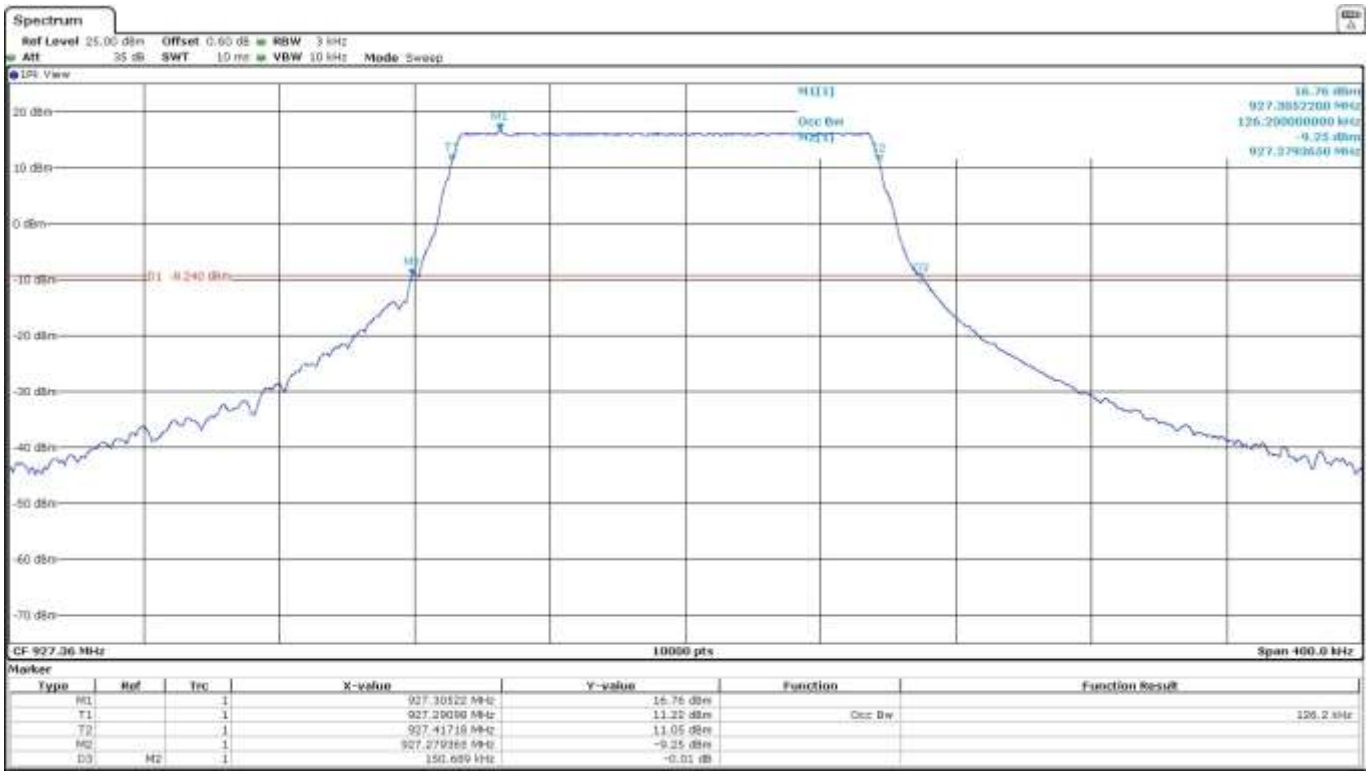

Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 902.35214 MHz | 16.76 dBm | | |
| T1 | | 1 | 902.22982 MHz | 11.16 dBm | Occ Bw | 126.04 kHz |
| T2 | | 1 | 902.35586 MHz | 11.79 dBm | | |
| M2 | | 1 | 902.21786 MHz | -9.25 dBm | | |
| D3 | M2 | 1 | 150.32 kHz | -0.00 dB | | |

- Middle Channel:




- High Channel:



# FCC 15.247 (a)(1) / RSS-247 5.1. (b) 20 dB Bandwidth and Carrier frequency separation.

SPECIFICATION:

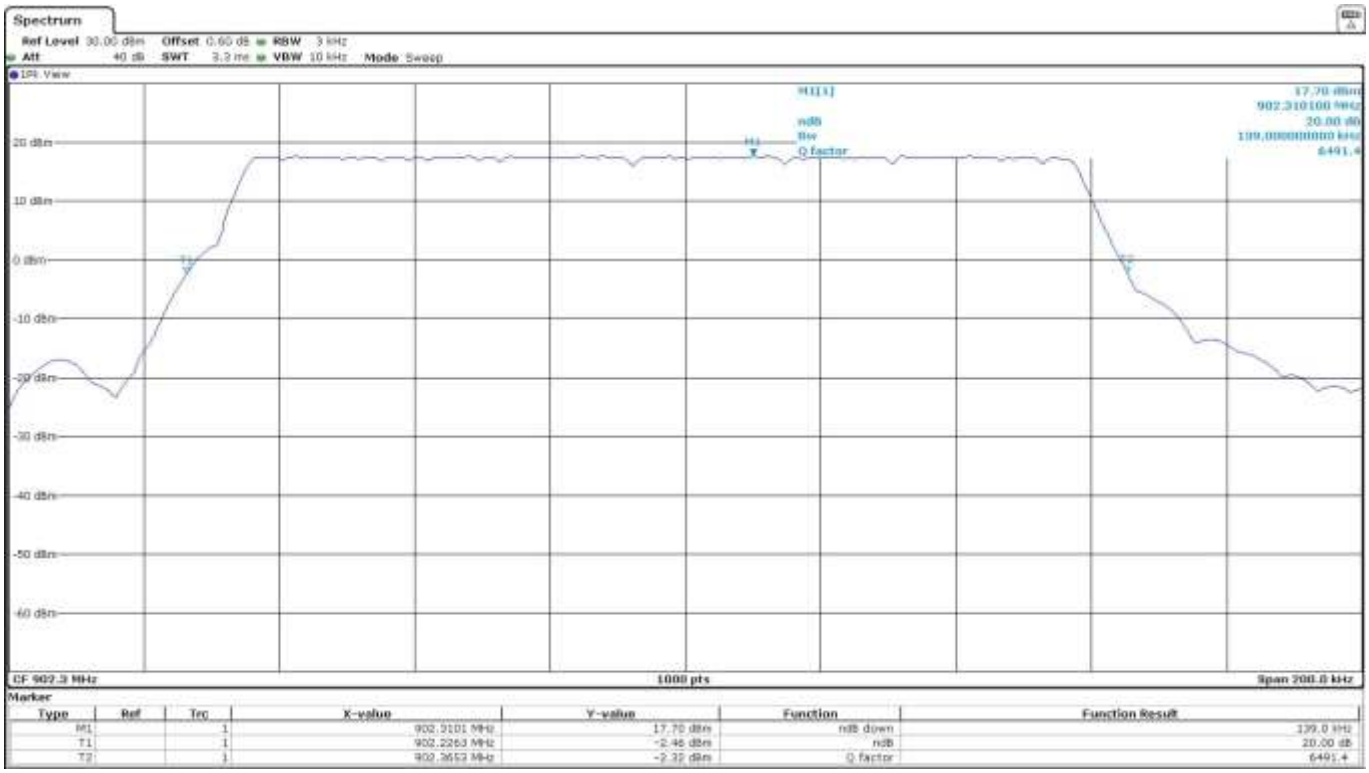
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

RESULTS:

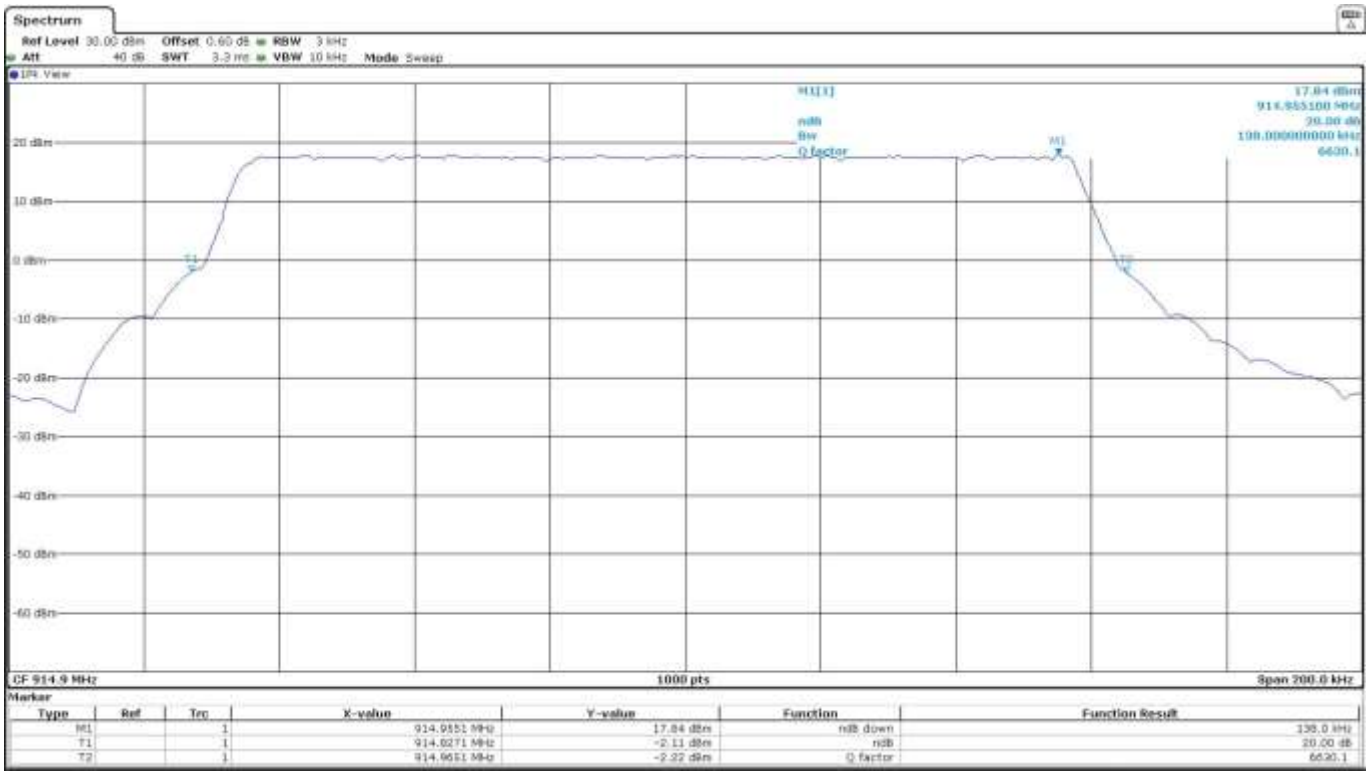
| | Lowest Channel 902.30 MHz | Middle Channel 915.20 MHz | Highest Channel 927.36 MHz |
|---|---|---|---|
| 20 dB Spectrum bandwidth (kHz) | 139.00 | 138.00 | 138.40 |
| Measurement uncertainty (kHz) | <± 0.87 | | |

Verdict: PASS

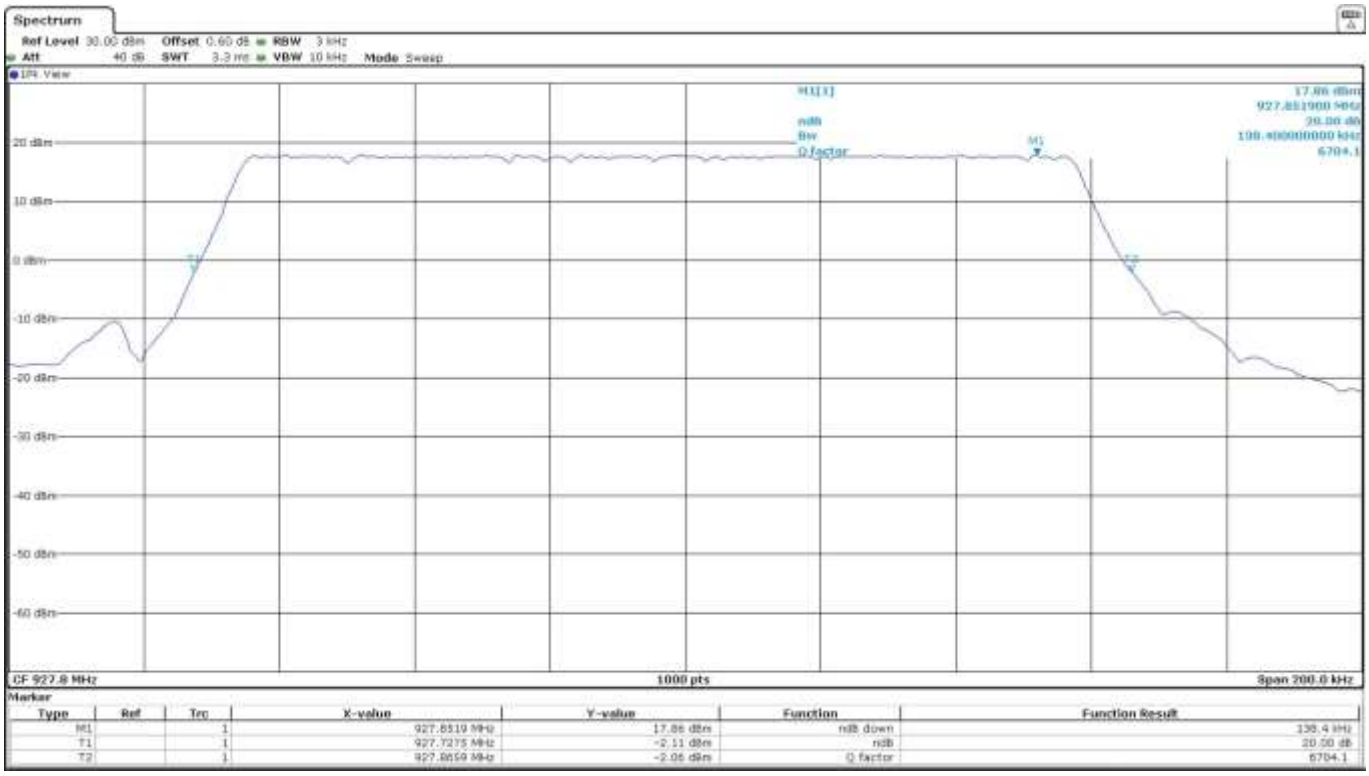
- Lowest Channel:



- Middle Channel:

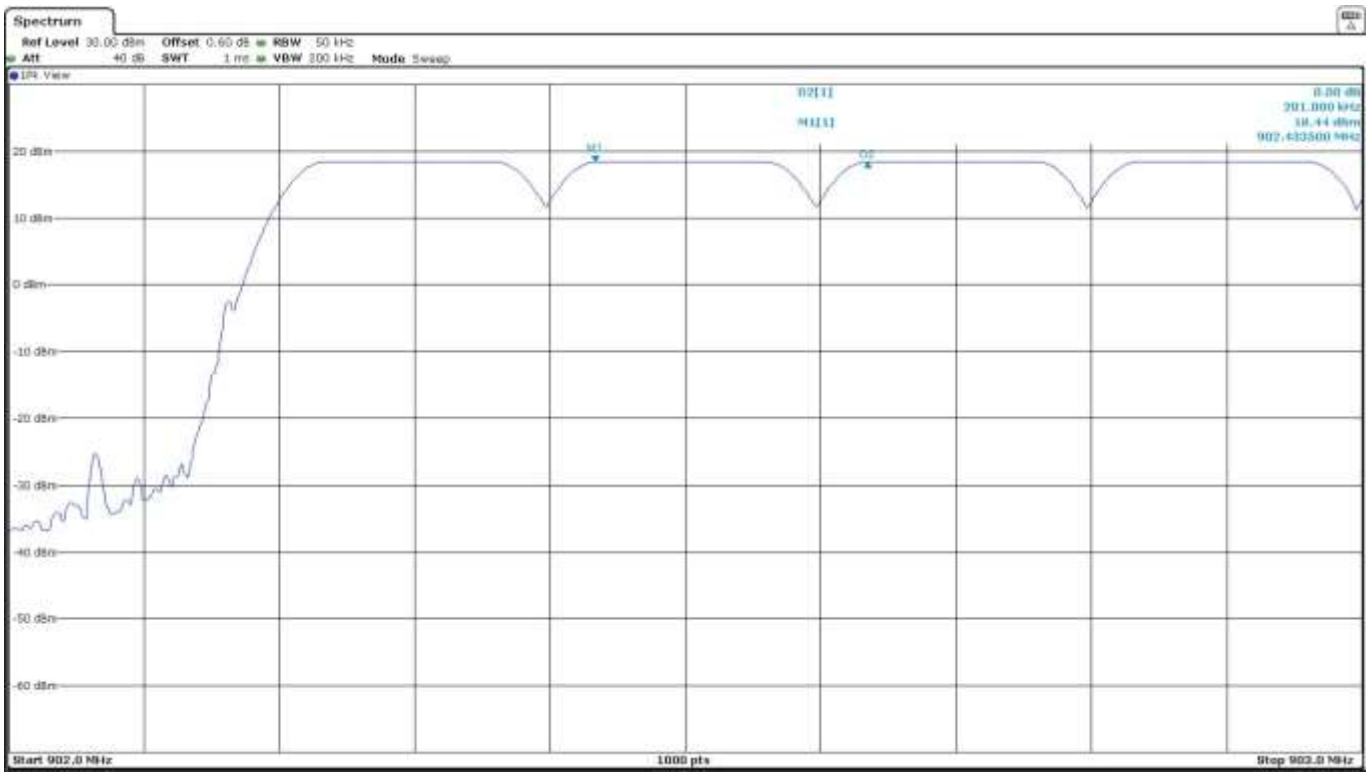



- Highest Channel:



## Carrier frequency separation

201 kHz




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

Verdict: PASS

# FCC 15.247 (f) / RSS-247 5.3. (a) Time of occupancy (Dwell Time)

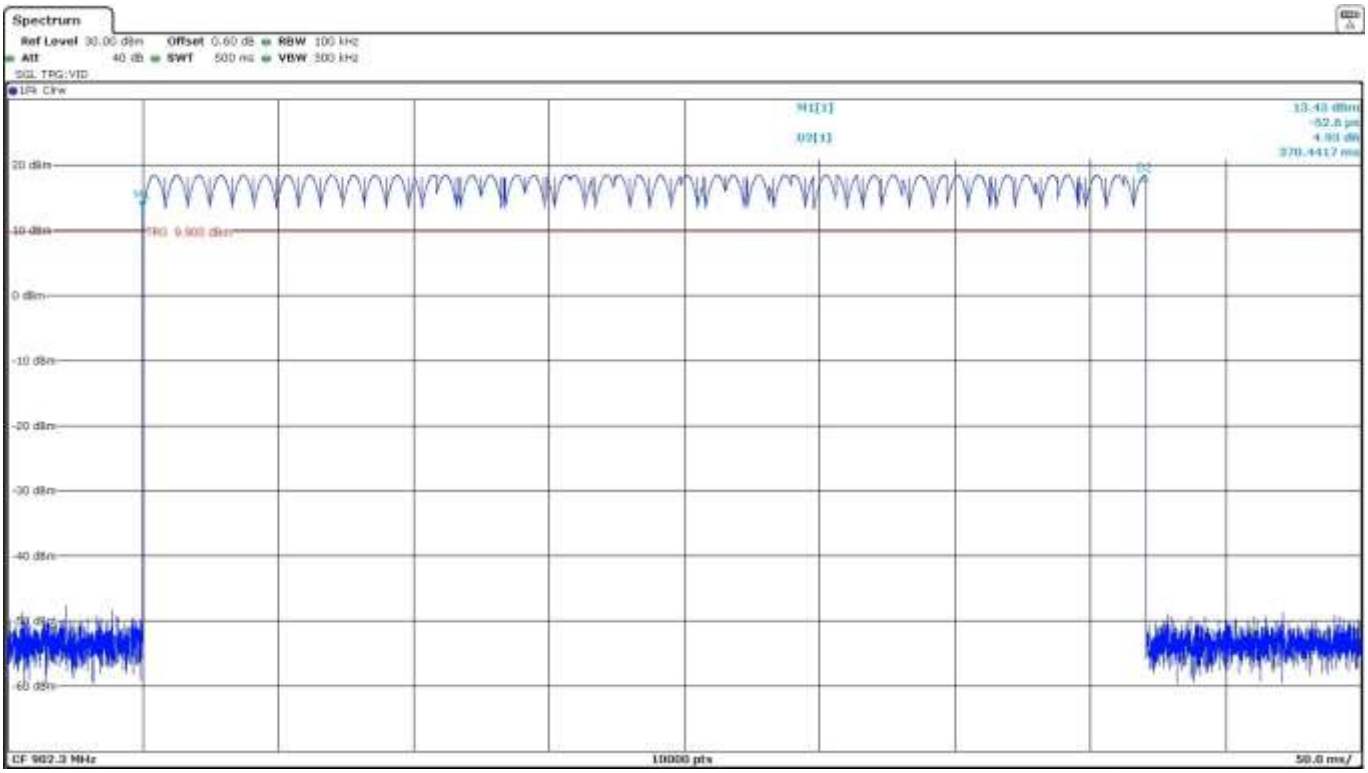
SPECIFICATION:

For the purposes of this section, hybrid systems are those that employ a combination of both frequency hopping and digital modulation techniques. The frequency hopping operation of the hybrid system, with the direct sequence or digital modulation operation turned-off, shall have an average time of occupancy on any frequency not to exceed 0.4 seconds within a time period in seconds equal to the number of hopping frequencies employed multiplied by 0.4 (0.4 x 8 = 3.2 seconds).

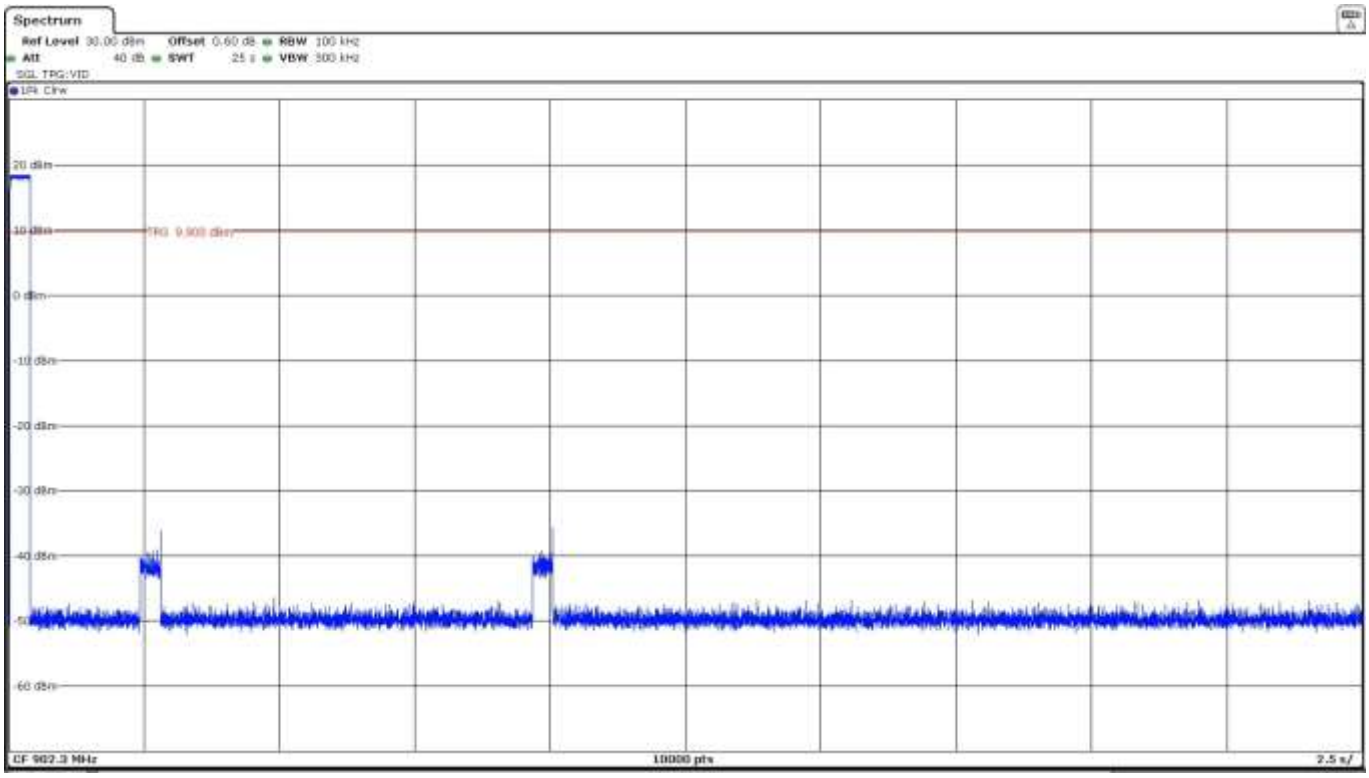
RESULTS:

1. TIME OF OCCUPANCY (DWELL TIME) FOR OPERATION AS FREQUENCY HOPPING SYSTEM USING 8 HOPPING CHANNELS.

- TX time per hop: 370.4417 ms (see next plots)



- Number of hops over a period of 3.2 s: 1 (see next plots)




- **Average Time of Occupancy** = 370.4417 ms x 1 hops = 370.4417 ms per 3.2 s.

| | |
|---|---|
| Measurement uncertainty (ms) | <± 11.578 |

Verdict: PASS

# FCC 15.247 (b)(2) / RSS-247 5.4 (a) Maximum 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.

Hybrid systems shall comply with the 1 W limit.
Additionally for RSS-247:

For FHSs operating in the band 902-928 MHz, the e.i.r.p. shall not exceed 4 W if the hopset uses 50 or more hopping channels; the e.i.r.p. shall not exceed 1 W if the hopset uses less than 50 hopping channels.

RESULTS:

The maximum conducted output power was measured using the method AVGSA-2 according to point 11.9.2.2.4 of ANSI C.63.10-2013.

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

Maximum Declared Antenna Gain: +1 dBi

Duty cycle correction: +2.31 dB

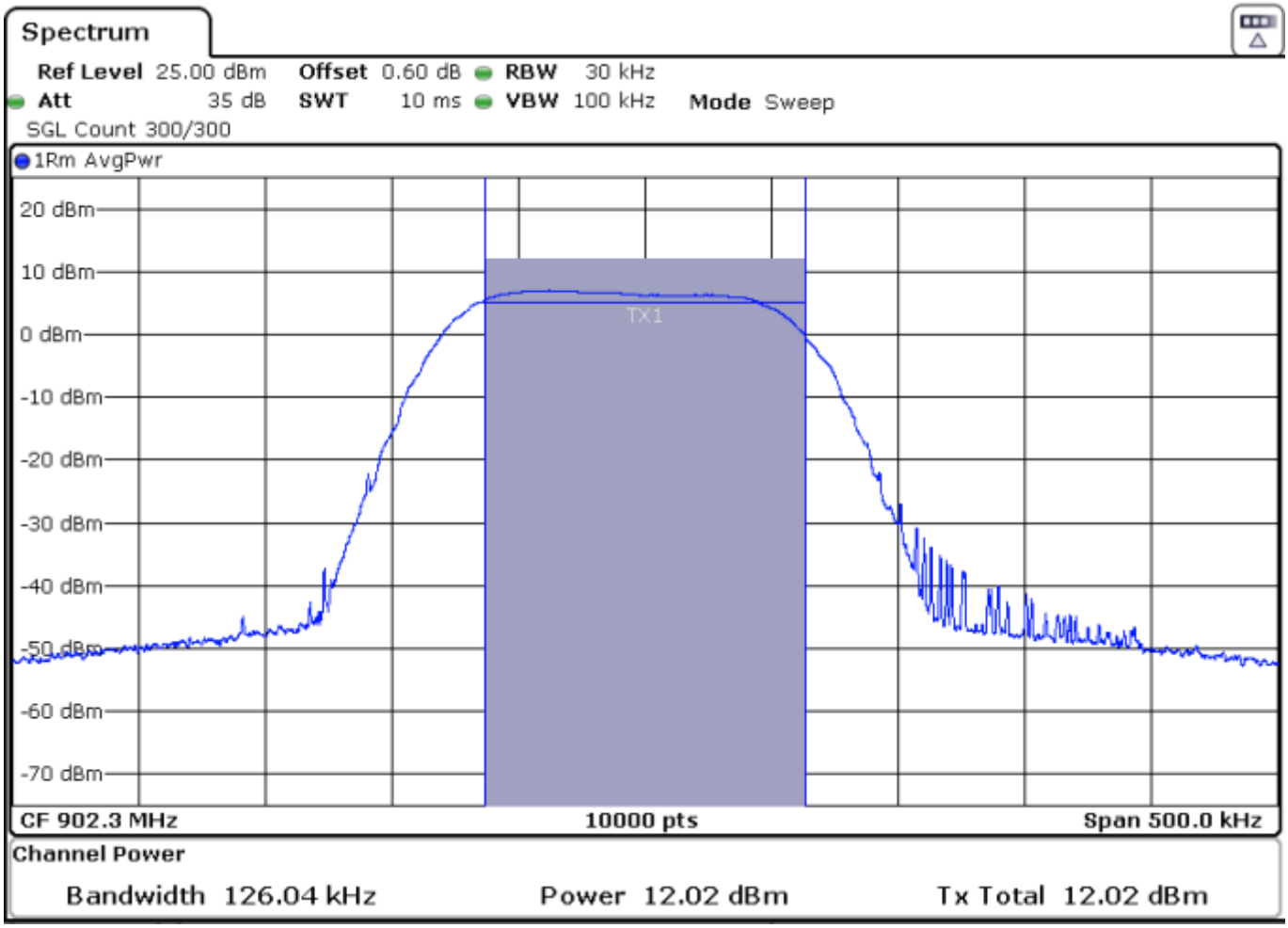
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

| | Lowest Channel 902.30 MHz | Middle Channel 915.20 MHz | Highest Channel 927.36 MHz |
|---|---|---|---|
| Maximum conducted power (dBm) | 12.02 | 13.77 | 13.91 |
| Maximum conducted power with Duty Cycle correction (dBm) | 14.33 | 16.08 | 16.22 |
| Maximum E.I.R.P. power (dBm) | 15.33 | 17.08 | 17.22 |
| Measurement uncertainty (dB) | <±2.008 | | |

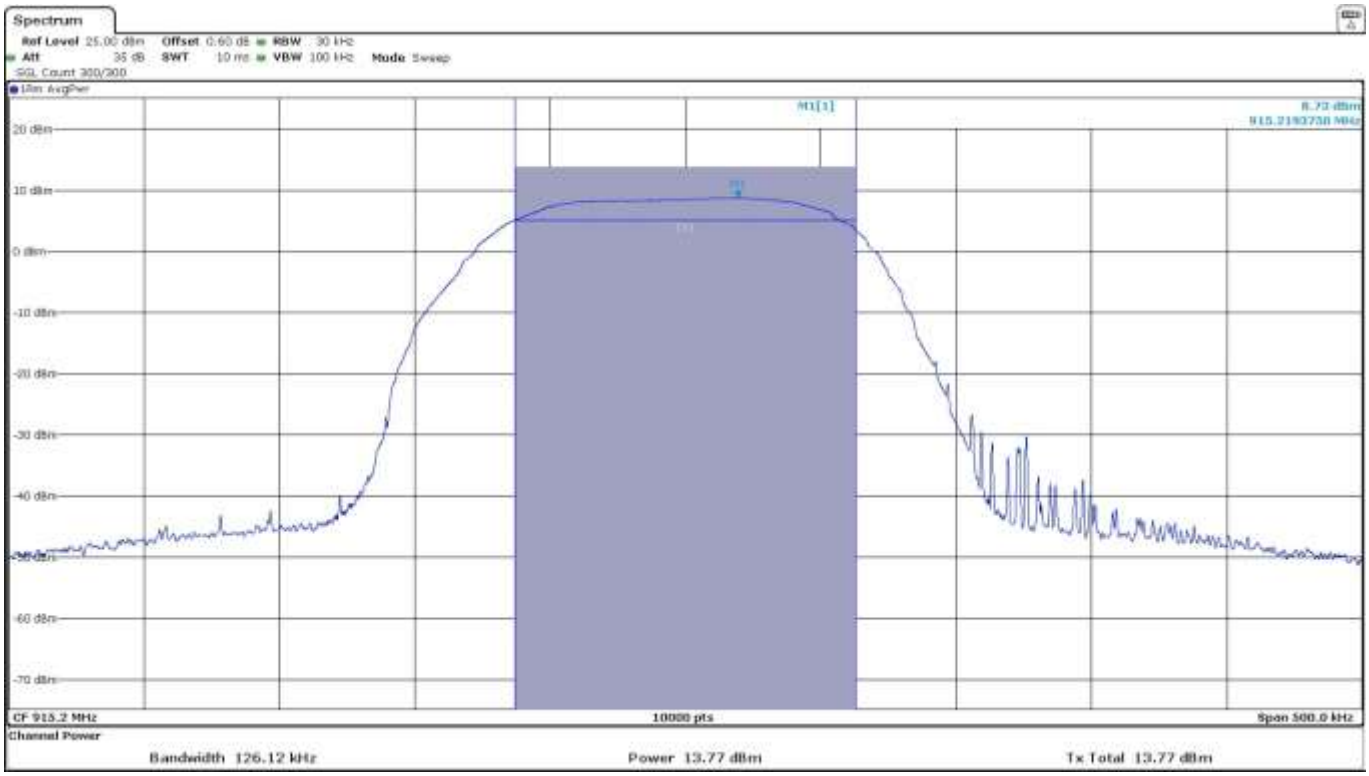
Verdict: PASS

**Maximum Output Power:**

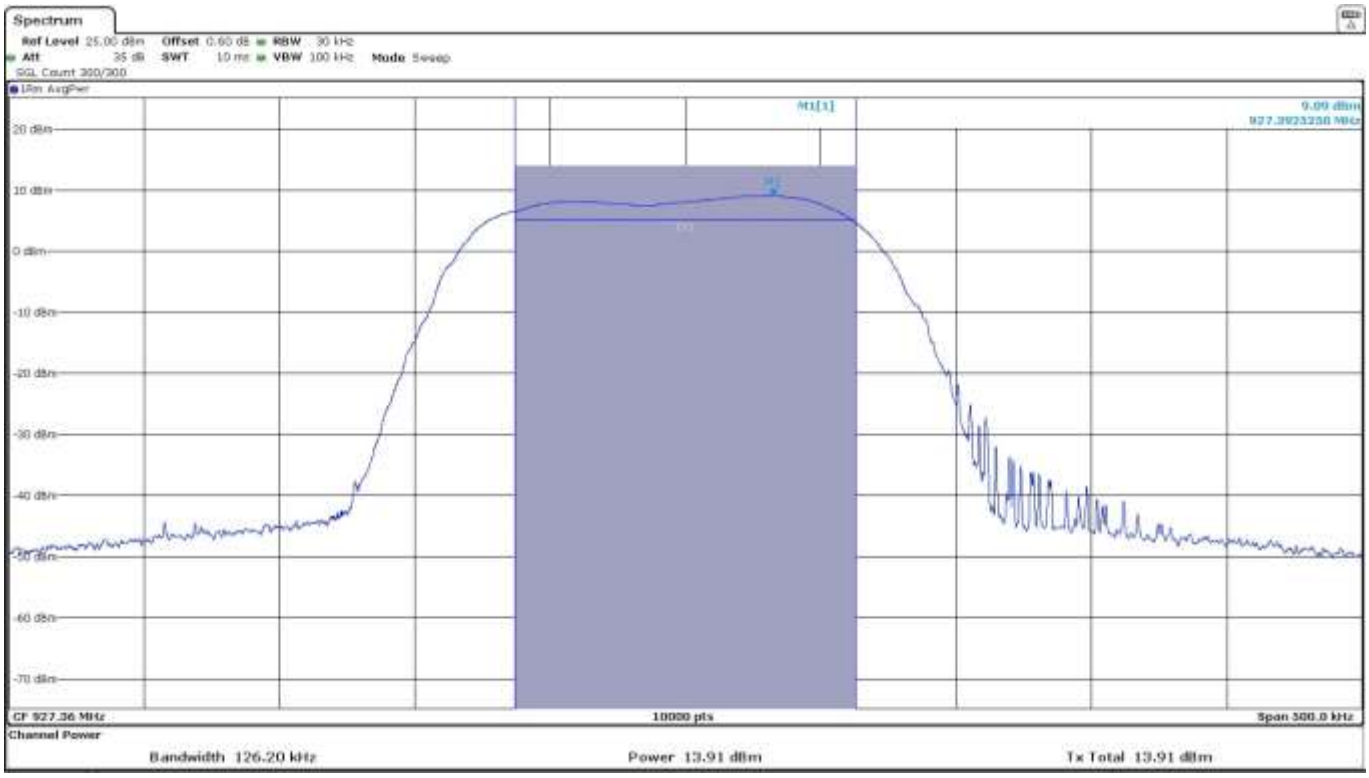
- Lowest Channel:



- Middle Channel:




- Highest Channel:



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

SPECIFICATION:

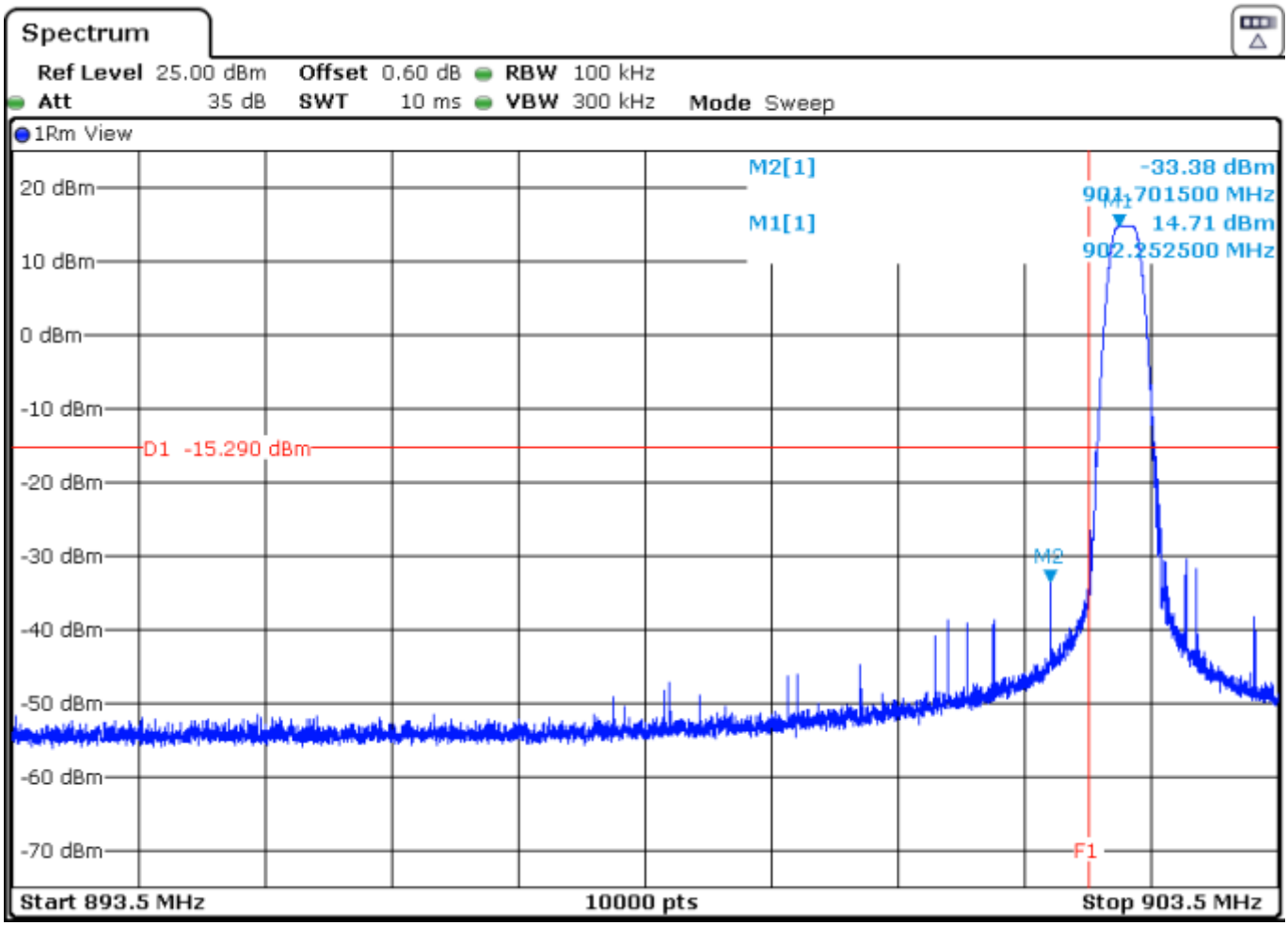
In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, 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 RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

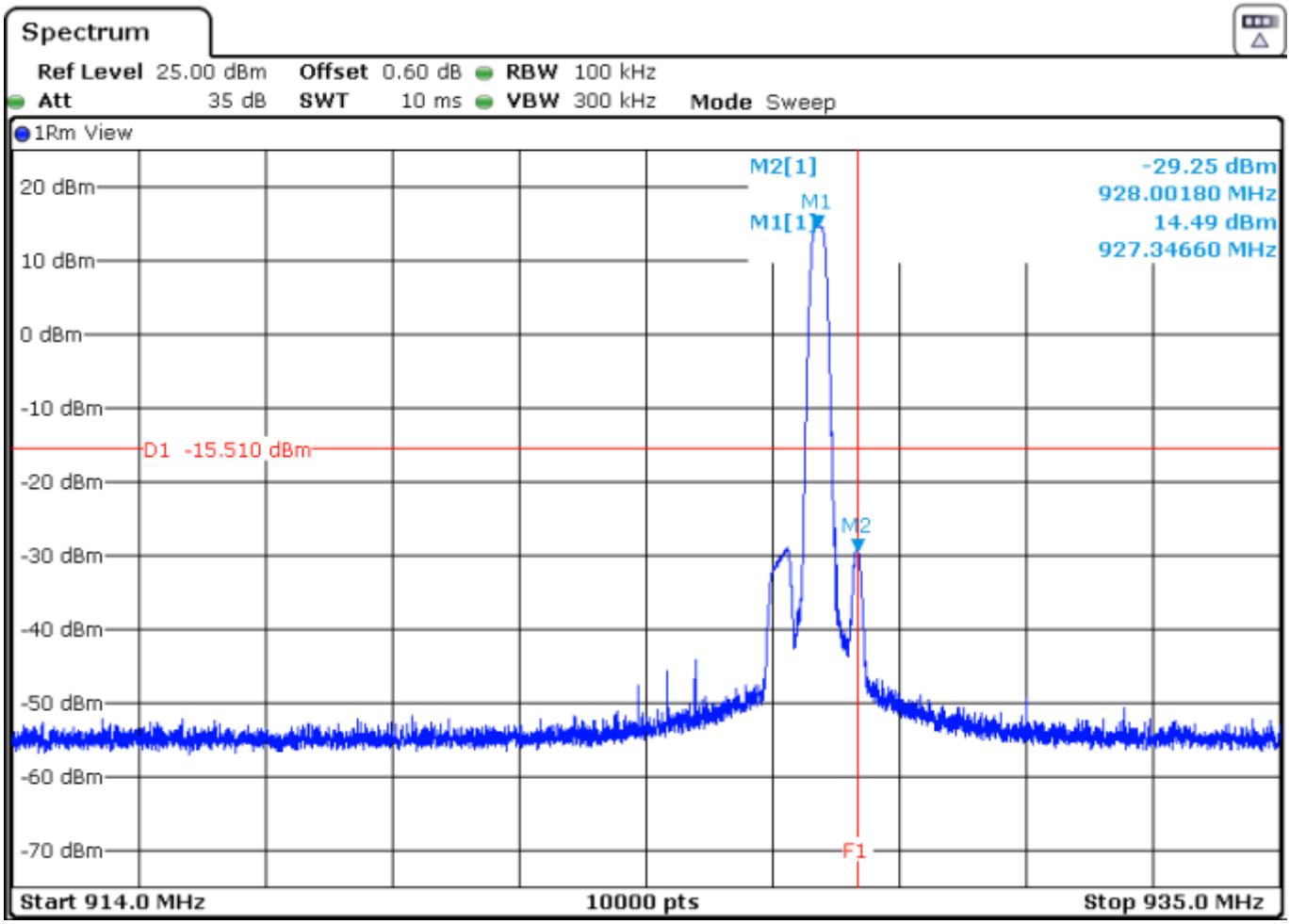
RESULTS:

The attenuation of highest emissions at the band-edge is more than 30 dB respect to the highest level of the desired power.

- HOPPING OFF:
    - LOW FREQUENCY SECTION:

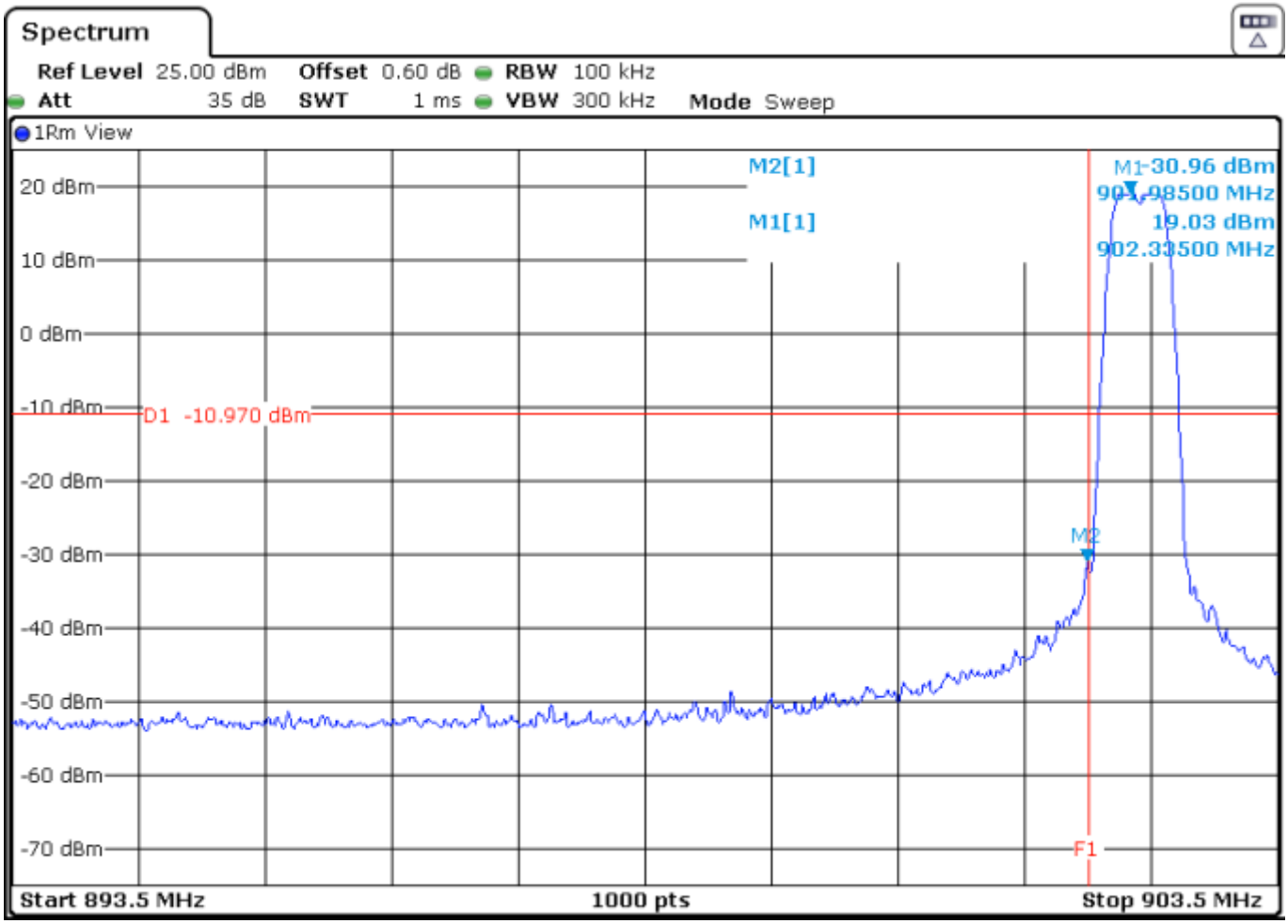


- HIGH FREQUENCY SECTION:

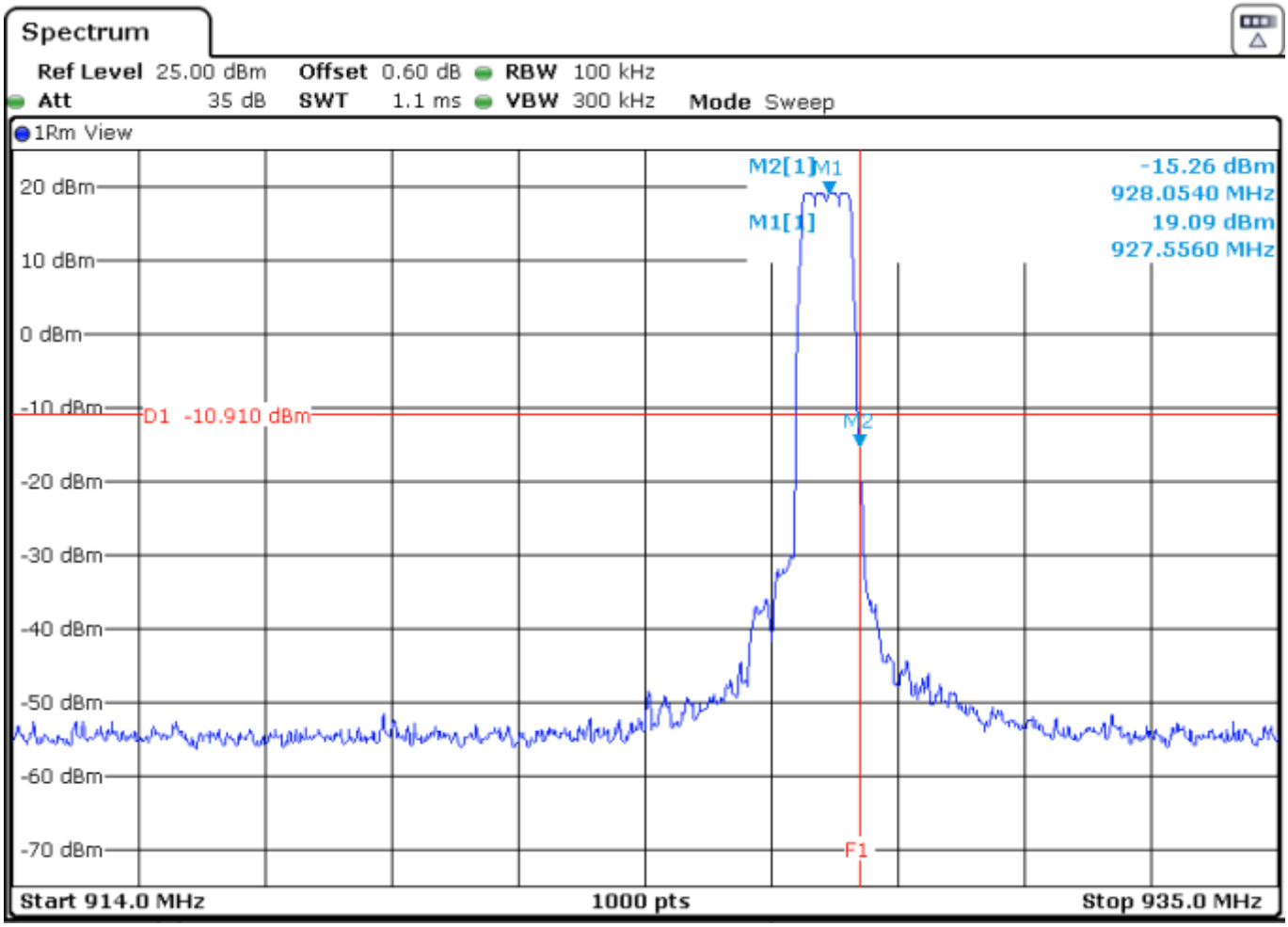


- HOPPING ON:

  - LOW FREQUENCY SECTION:



- HIGH FREQUENCY SECTION:




Verdict: PASS

Measurement uncertainty (dB) <±2.574

# FCC 15.247 (f) / RSS-247 Clause 5.3. (b) Power spectral density for hybrid systems

SPECIFICATION

For the purposes of this section, hybrid systems are those that employ a combination of both frequency hopping and digital modulation techniques.

The power spectral density conducted from the intentional radiator to the antenna due to the digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

The maximum power spectral density level in the fundamental emission was measured using the method AVGPSD-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction) according to point 10.5. of Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 558074 D01 DTS Meas Guidance v04 dated 05/04/2017.

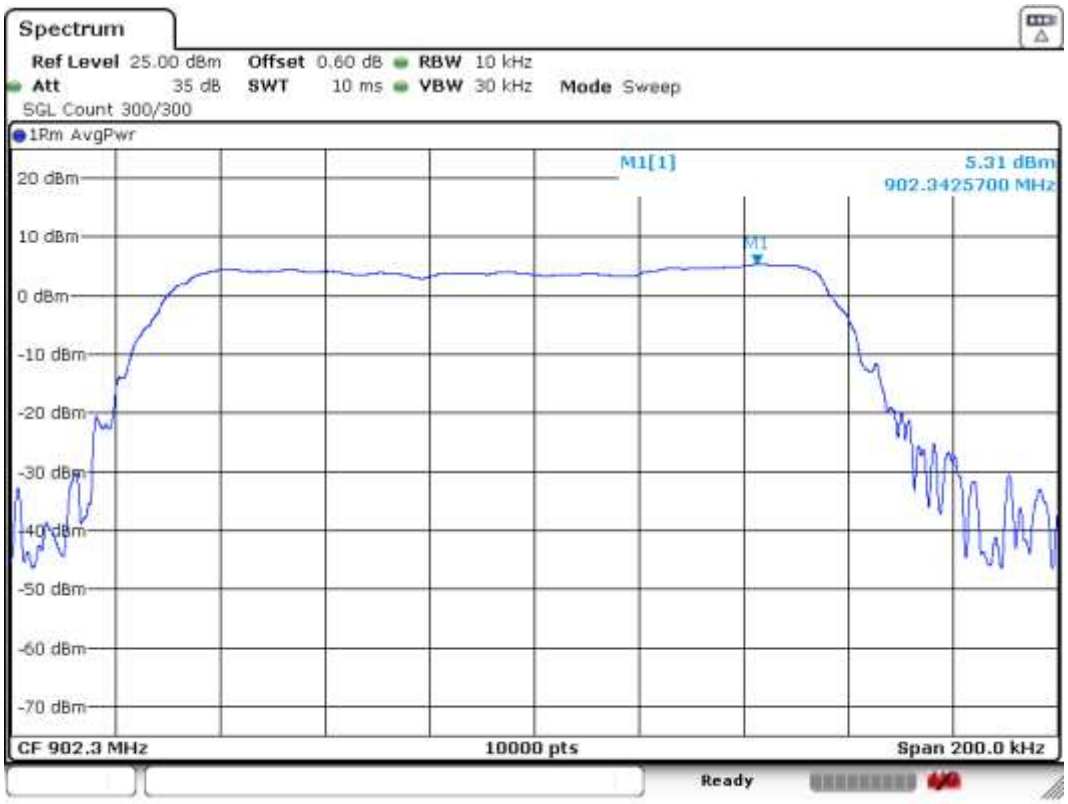
Power spectral density (see next plots).

Measured Duty cycle: x = 0.58 Correction = 10*log (1/x) = 2.31 dB.

| | Lowest Channel 902.30 MHz | Middle Channel 915.20 MHz | Highest Channel 927.36 MHz |
|---|---|---|---|
| Power spectral density (dBm) | 5.31 | 3.94 | 3.67 |
| Average PSD (dBm) | 7.624 | 6.254 | 5.984 |
| Measurement uncertainty (dB) | <±0.78 | | |

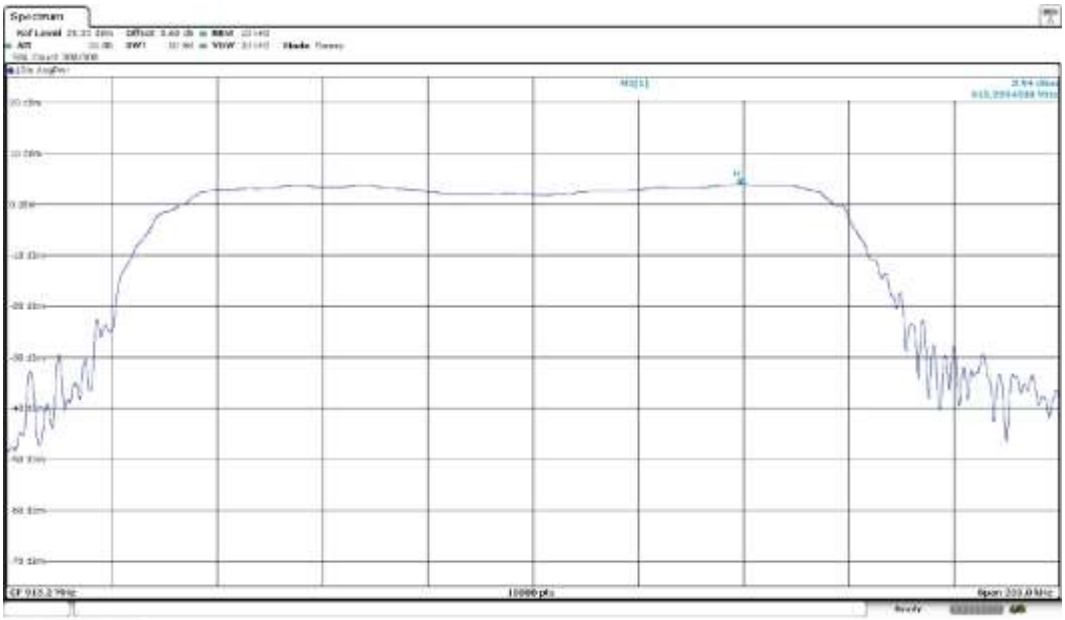
POWER SPECTRAL DENSITY

Lowest Channel

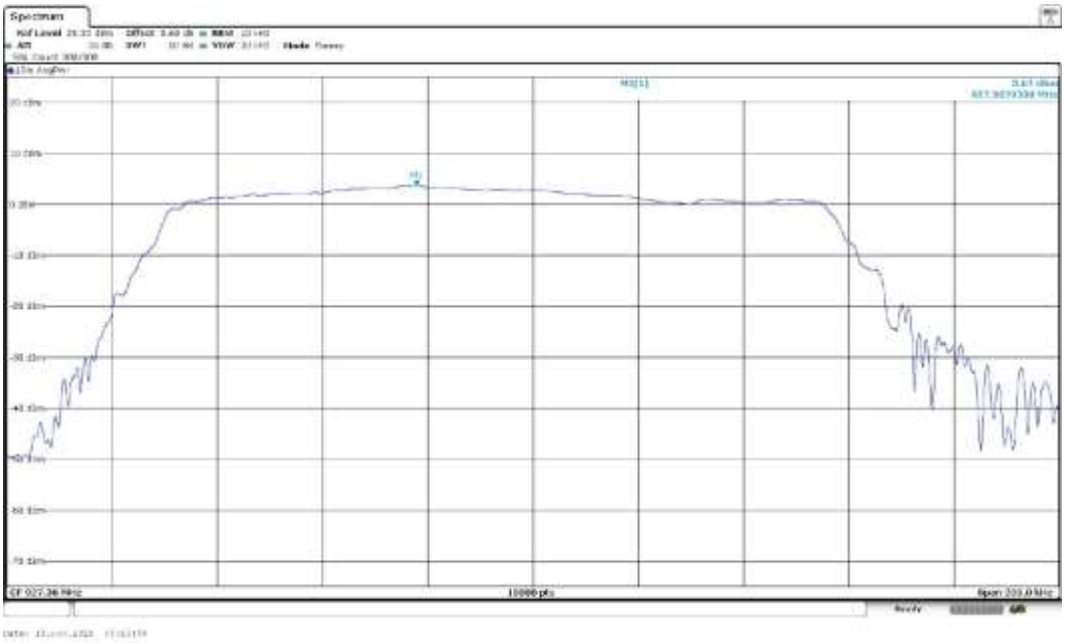



Date: 17.DEC.2020 11:38:36

Middle Channel



Highest channel



# FCC 15.247 (d) / RSS-247 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):

| Frequency Range (MHz) | Field strength (µV/m) | Field strength (dBµV/m) | Measurement distance (m) |
|---|---|---|---|
| 0.009-0.490 | 2400/F(kHz) | - | 300 |
| 0.490-1.705 | 24000/F(kHz) | - | 30 |
| 1.705 - 30.0 | 30 | - | 30 |
| 30 - 88 | 100 | 40 | 3 |
| 88 - 216 | 150 | 43.5 | 3 |
| 216 - 960 | 200 | 46 | 3 |
| 960 - 10000 | 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.

RSS-247. Attenuation below the general field strength limits specified in RSS-Gen is not required.

RESULTS:

The situation and orientation was varied to find the maximum radiated emission. It was also rotated 360º 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-10 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 - 1 GHz:**

The spurious frequencies do not depend on the operating channel.

No spurious frequencies detected at less than 20 dB below the limit.

Measurement Uncertainty (dB) <±5.08

**Frequency range 1 - 10 GHz:**

The results in the next tables show the maximum measured levels in the 1-10 GHz range (see next plots).

Spurious signals with peak levels above the average limit (54 dBµV/m at 3 m) are measured with average detector for checking compliance with the average limit.

Duty cycle correction: +2.31 dB

- LOW CHANNEL. Spurious frequencies closest to the limit:

| Spurious Frequency (GHz) | Emission Level (dBµV/m) | Corrected Emission Level (dBµV/m) | Polarization | Detector | Measurement Uncertainty (dB) |
|---|---|---|---|---|---|
| 1.804333 | 44.18 | 44.18 | H | Peak | <± 5.13 |
| | 40.07 | 42.38 | | Average | |

- MIDDLE CHANNEL. Spurious frequencies closest to the limit:

| Spurious Frequency (GHz) | Emission Level (dBµV/m) | Corrected Emission Level (dBµV/m) | Polarization | Detector | Measurement Uncertainty (dB) |
|---|---|---|---|---|---|
| 1.830333 | 43.06 | 43.06 | H | Peak | <± 5.13 |
| | 38.99 | 41.30 | | Average | |

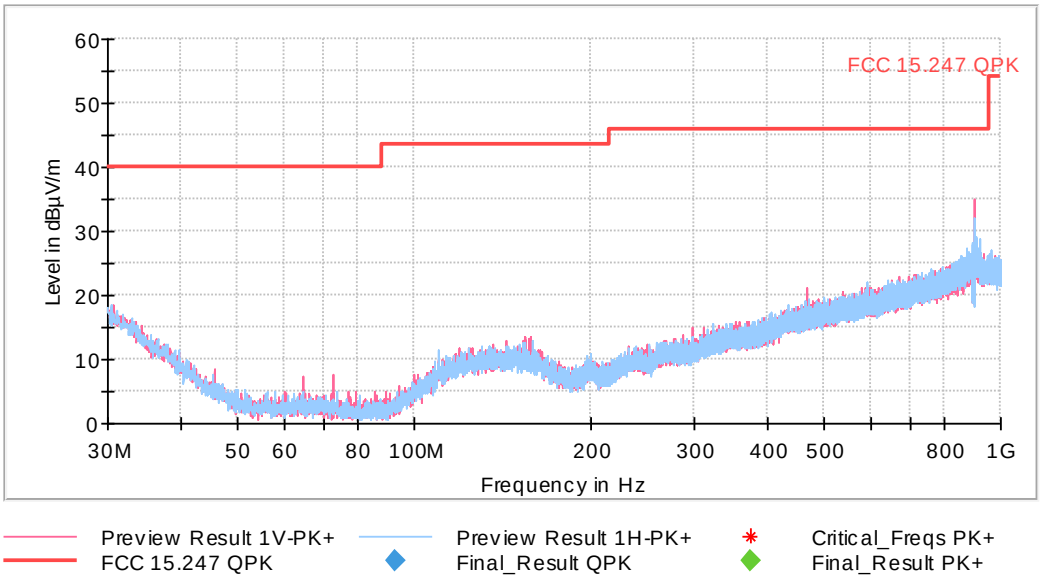
- HIGH CHANNEL. Spurious frequencies closest to the limit:

| Spurious Frequency (GHz) | Emission Level (dBµV/m) | Corrected Emission Level (dBµV/m) | Polarization | Detector | Measurement Uncertainty (dB) |
|---|---|---|---|---|---|
| 1.854600 | 46.27 | 46.27 | H | Peak | <± 5.13 |
| | 43.89 | 46.20 | | Average | |
| 7.418500 | 46.88 | 46.88 | V | Peak | <± 5.13 |
| | 35.87 | 38.18 | | Average | |
| 8.346750 | 47.71 | 47.71 | V | Peak | <± 5.13 |
| | 37.19 | 39.50 | | Average | |

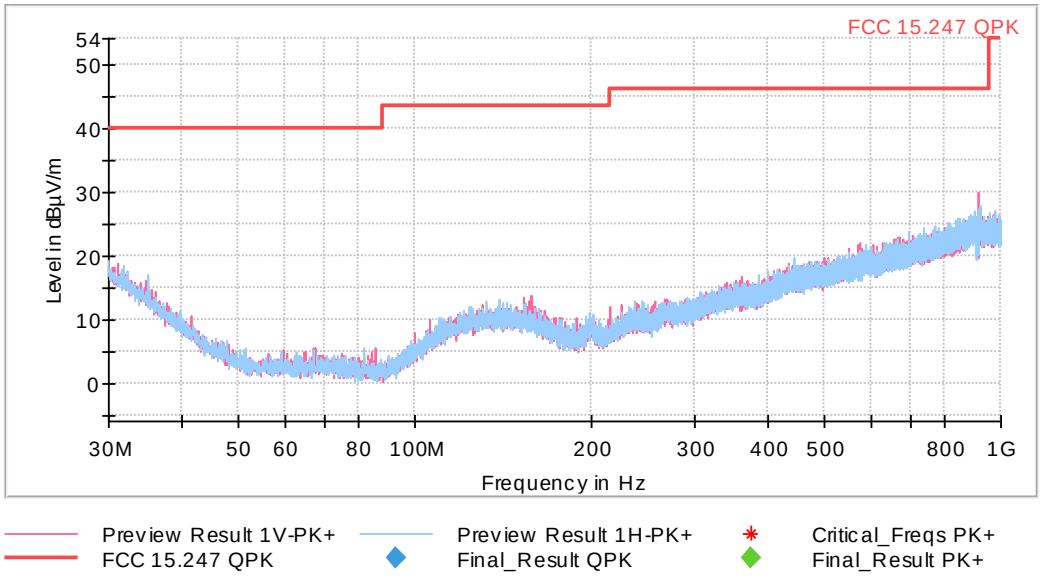
Verdict: PASS

## FREQUENCY RANGE 30 MHz - 1 GHz:

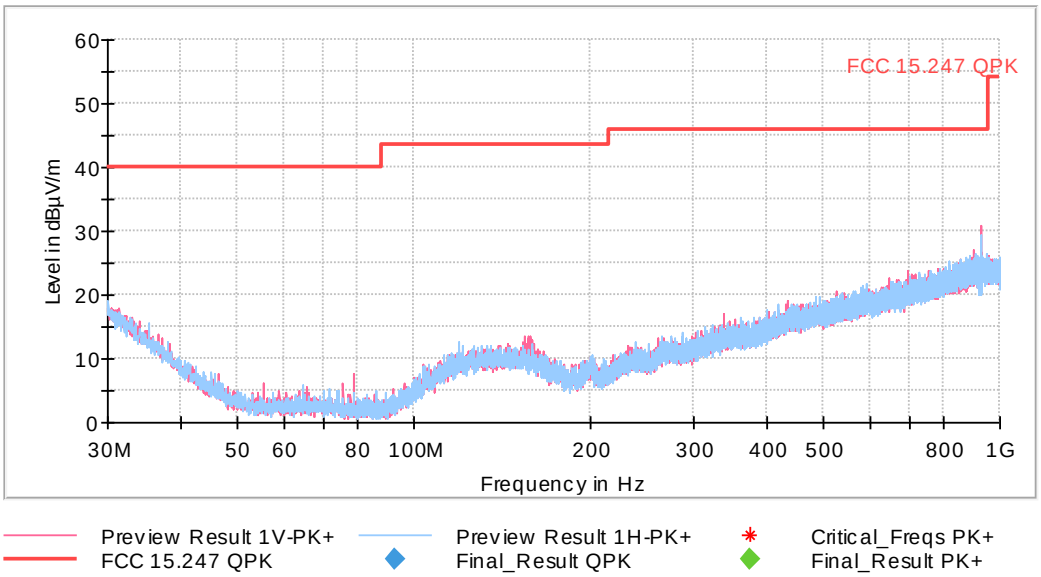
- Low Channel:




- Middle Channel:

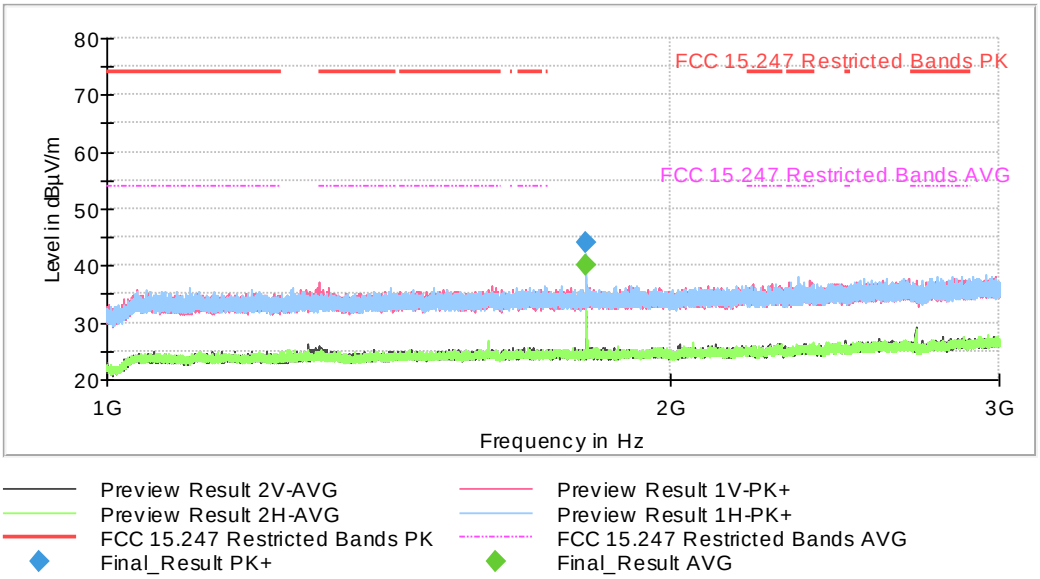


- High Channel

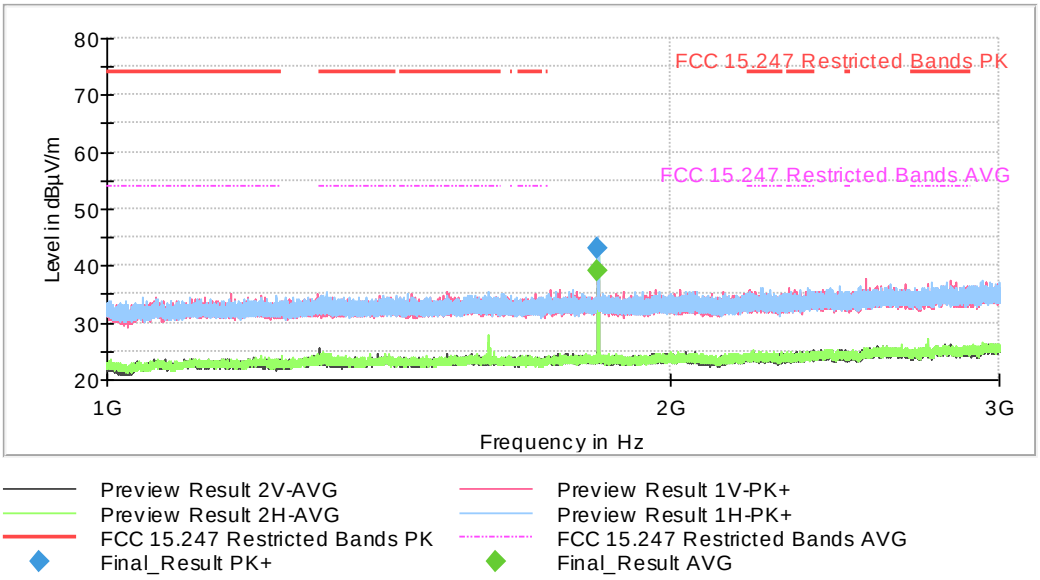


## FREQUENCY RANGE 1 - 3 GHz:

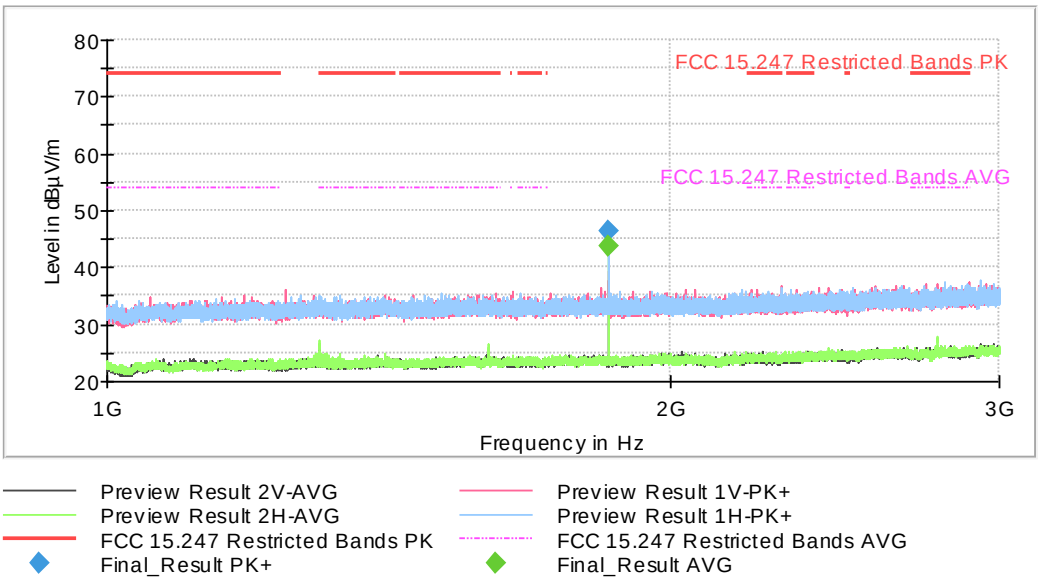
- Low Channel:




- Middle Channel:

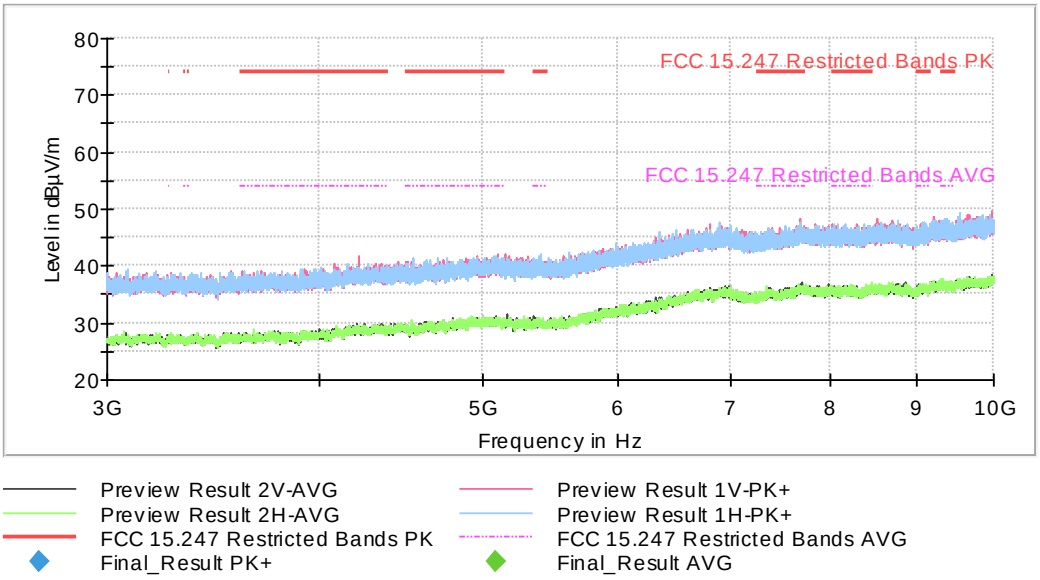


- High Channel:

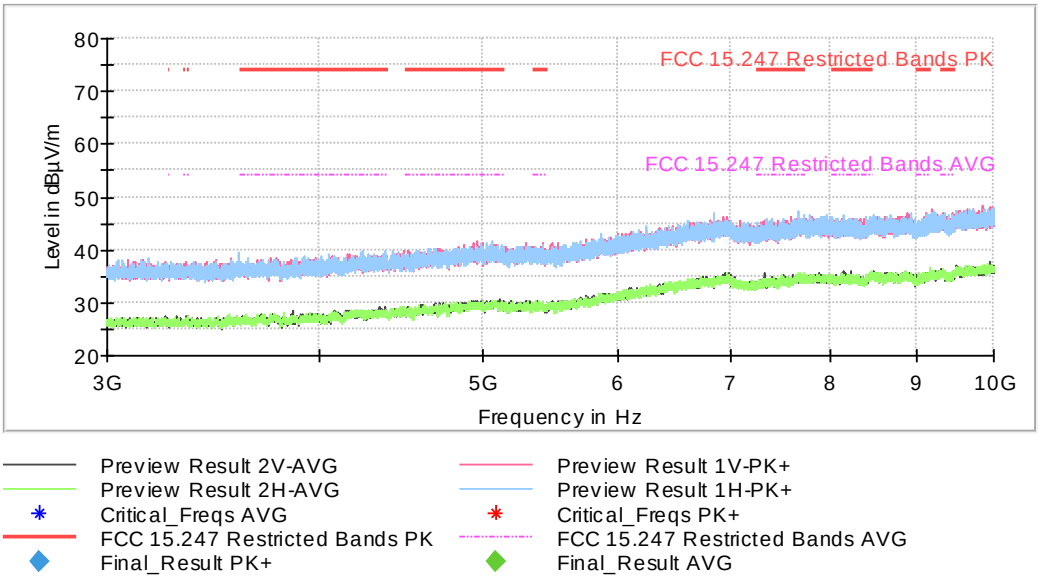
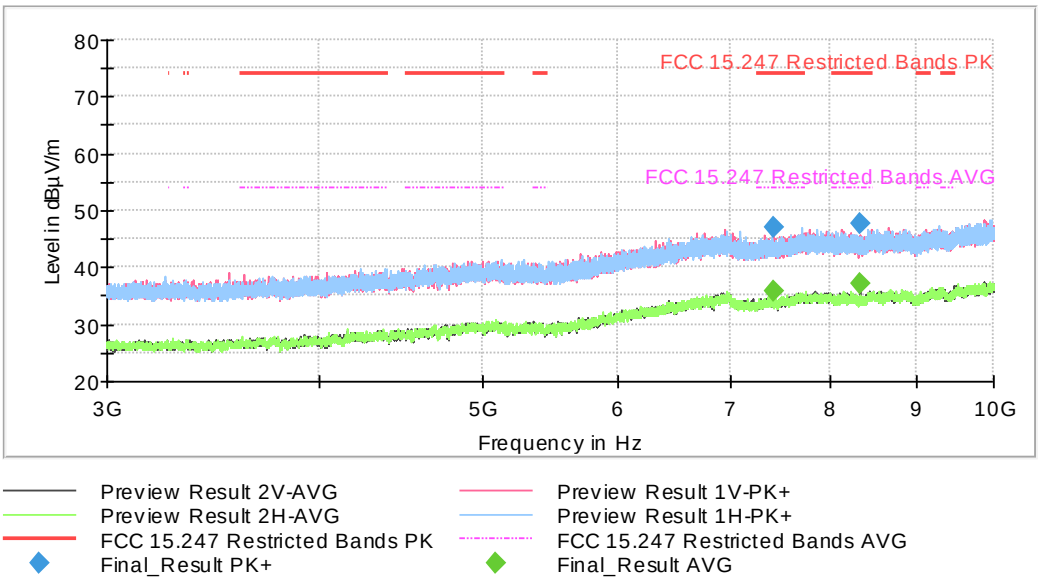


## FREQUENCY RANGE 3 - 10 GHz:

- Low Channel:




- Middle Channel:



- High Channel: