

ISED CABid: ES1909

Test report No:
NIE: 67944RRF.002

Test report

USA FCC Part 15.247, 15.209
CANADA RSS-247, RSS-Gen

(*) Identification of item tested	Bluetooth enabled blood glucose meter
(*) Trademark	OneTouch
(*) Model and /or type reference	Select Plus Flex
Other identification of the product	HW version: CIP DV2 SW version: Main Firmware: 1.5.1, Bluetooth Firmware: 1.4.1 FCC ID: 2ACT5-G01 IC: 12202A-G01
(*) Features	Bluetooth LE
Manufacturer	Lifescan Europe GmbH Gubelstrasse 34, 6300 Zug Switzerland
Test method requested, standard	USA FCC Part 15.247 (10-1-20 Edition): Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.209 (10-1-20 Edition): Radiated emission limits; general requirements. CANADA RSS-247 Issue 2 (February 2017). CANADA RSS-Gen Issue 5 Amendment 1 (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 EMC Consumer & RF Lab. Manager
Date of issue	2021-11-24
Report template No	FDT08_23 (*) "Data provided by the client"

Index

Competences and guarantees3

General conditions3

Uncertainty3

Data provided by the client.....3

Usage of samples4

Test sample description4

Identification of the client.....5

Testing period and place5

Document history5

Environmental conditions6

Remarks and comments7

Testing verdicts.....8

Summary8

Appendix A: Test results. Bluetooth Low Energy 5.0 (2M, 1M).....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, CABid: ES1909, with the appropriate scope of accreditation that covers the performed tests in this 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 of the model Select Plus Flex is a Blood glucose meter for measuring the levels of Glucose in a patient's blood. Bluetooth is used to transfer the patients result(s) to their smart device.

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 result.

Usage of samples

Samples undergoing test have been selected by: the client.

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

Control N°	Description	Model	Serial N°	Date of reception
67944/010	Glucose meter (conducted)	Select Plus Flex	--	2021/06/25

Sample S/01 has undergone the test(s): All Conducted tests indicated in Appendix A.

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

Control N°	Description	Model	Serial N°	Date of reception
67944/012	Glucose meter	Select Plus Flex	--	2021/07/26

Sample S/02 has undergone the test(s): All Radiated 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⁾	
	FDTI cable			☒	☐	☐	
Supplementary information to the ports..... :	--						
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	☒	DC: 3V					
Rated Power	--						
Clock frequencies..... :	Main processor: 8 MHz Bluetooth processor: 16 MHz						
Other parameters	--						
Software version	Main Firmware: 1.5.1, Bluetooth Firmware: 1.4.1						
Hardware version	CIP DV2						
Dimensions in cm (W x H x D) :	--						
Mounting position	☐	Table top equipment					
	☐	Wall/Ceiling mounted equipment					
	☐	Floor standing equipment					
	☒	Hand-held equipment					
	☐	Other:					

Modules/parts.....:	Module/parts of test item	Type	Manufacturer
	nRF52805	BLE transceiver	Nordic Semiconductors
	MSP430F6636IPZ	Microcontroller	Texas Instruments
Accessories (not part of the test item)	Description	Type	Manufacturer
	N/A		
Documents as provided by the applicant	Description	File name	Issue date
	N/A		

⁽³⁾ Only for Medical Equipment

Identification of the client

Beechwood Park North
Inverness IV2 3ED
UK

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2021-08-24
Date (finish)	2021-09-13

Document history

Report number	Date	Description
67944RRF.002	2021-11-24	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. = 20 % Max. = 75 %

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 %

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. = 35 %

Remarks and comments

The tests have been performed by the technical personnel: Javier Miguel Nadales and Nicolás Salguero.

Used instrumentation:

Conducted Measurements:

	Last Calibration	Due Calibration
1. Shielded Room ETS LINDGREN S101	N.A.	N.A.
2. Signal and Spectrum Analyzer 10 Hz - 40 GHz ROHDE AND SCHWARZ FSV40	2021/02	2023/02
3. DC POWER SUPPLY 40V/40A ROHDE AND SCHWARZ NGPE 40/40	N.A.	N.A.
4. Digital multimeter FLUKE 179	2020/10	2021/10

Radiated Measurements:

	Last Calibration	Due Calibration
1. Semianechoic Absorber Lined Chamber ETS LINDGREN FACT 3 200 STP	N.A.	N.A.
2. Shielded Room ETS LINDGREN S101	N.A.	N.A.
3. EMI Test Receiver 9kHz-7GHz ROHDE AND SCHWARZ ESR7	2020/12	2022/12
4. Signal and Spectrum Analyzer 2Hz-50GHz ROHDE AND SCHWARZ FSW50	2020/07	2022/07
5. HYBRID BILOG ANTENNA 30MHz-6GHz ETS LINDGREN 3142E	2020/04	2023/04
6. HORN ANTENNA 1-18GHz SCHWARZBECK MESS-ELEKTRONIK BBHA 9120 D	2019/11	2022/11
7. Horn antenna 18 - 40 GHz SCHWARZBECK BBHA 9170	2020/05	2023/05
8. PRE-AMPLIFIER G>40dB 10MHz-6GHz BONN ELEKTRONIK BLNA 0160-01N	2021/03	2022/03
9. PRE-AMPLIFIER G>40dB 1-18 GHz BONN ELEKTRONIK BLMA 0118-1M	2021/06	2022/06
10. PRE-AMPLIFIER G>30dB 18-40GHz BONN ELEKTRONIK BLMA 1840-3G	2019/11	2021/11

Testing verdicts

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

Summary

1. Bluetooth Low Energy 5.0 (1M, 2M).

FCC PART 15 PARAGRAPH / RSS-247			
Requirement – Test case		Verdict	Remark
FCC 15.247 (a)(2) / RSS-247 5.2 (a)	6 dB Bandwidth	P	
FCC 15.247 (b) / RSS-247 5.4 (d)	Maximum output power and antenna gain	P	
FCC 15.247 (d) / RSS-247 5.5	Band-edge emissions compliance (Transmitter)	P	
FCC 15.247 (e) / RSS-247 5.2 (b)	Power spectral density	P	
FCC 15.247 (d) / RSS-247 5.5	Emission limitations radiated (Transmitter)	P	
<u>Supplementary information and remarks:</u>			
None.			

Appendix A: Test results. Bluetooth Low Energy 5.0 (1M, 2M)

TEST CONDITIONS.....	11
Occupied Bandwidth	14
FCC 15.247 (a)(2) / RSS-247 5.2 (a) 6 dB Bandwidth.....	18
FCC 15.247 (b) / RSS-247 5.4 (d) Maximum output power and antenna gain	22
FCC 15.247 (d) / RSS-247 5.5 Band-edge emissions compliance (Transmitter).....	27
FCC 15.247 (e) / RSS-247 5.2 (b) Power spectral density	30
FCC 15.247 (d) / RSS-247 5.5 Emission limitations radiated (Transmitter)	34

TEST CONDITIONS

POWER SUPPLY (*):

Vnominal:	3 Vdc
Type of Power Supply:	Battery

ANTENNAS (*):

Type of Antenna:	Integral (PCB track)
Maximum Declared Antenna Gain:	-0.09 dBi

(*) Declared by applicant.

TEST FREQUENCIES:

Low Channel:	2402 MHz
Middle Channel:	2440 MHz
High Channel:	2480 MHz

CONDUCTED MEASUREMENTS

The equipment under test was set up in a shielded room and it 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 power supply which output is monitored with a multimeter.

RADIATED MEASUREMENTS

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna (Bilog antenna for the range 30 MHz to 1000 MHz and Double ridged horn antenna for the range 1 to 17 GHz) is situated at a distance of 3 m for measurements up to 17 GHz and at a distance of 1 m for the frequency range 17 GHz-26 GHz (17 GHz-40 GHz horn antenna).

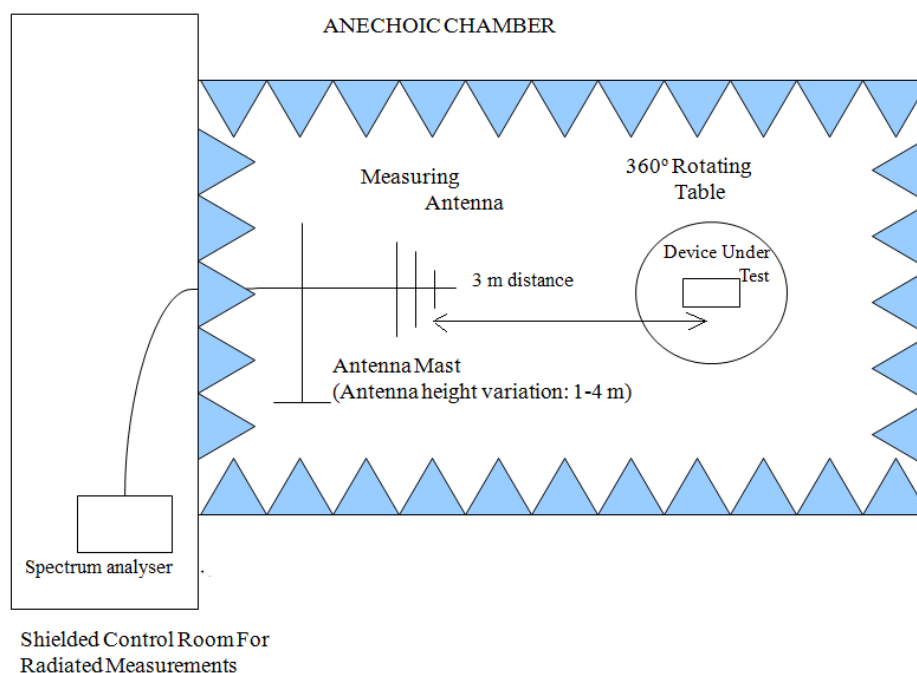
For radiated emissions in the range 17 GHz-26 GHz measured at a distance closer than the specified distance in standard, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

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

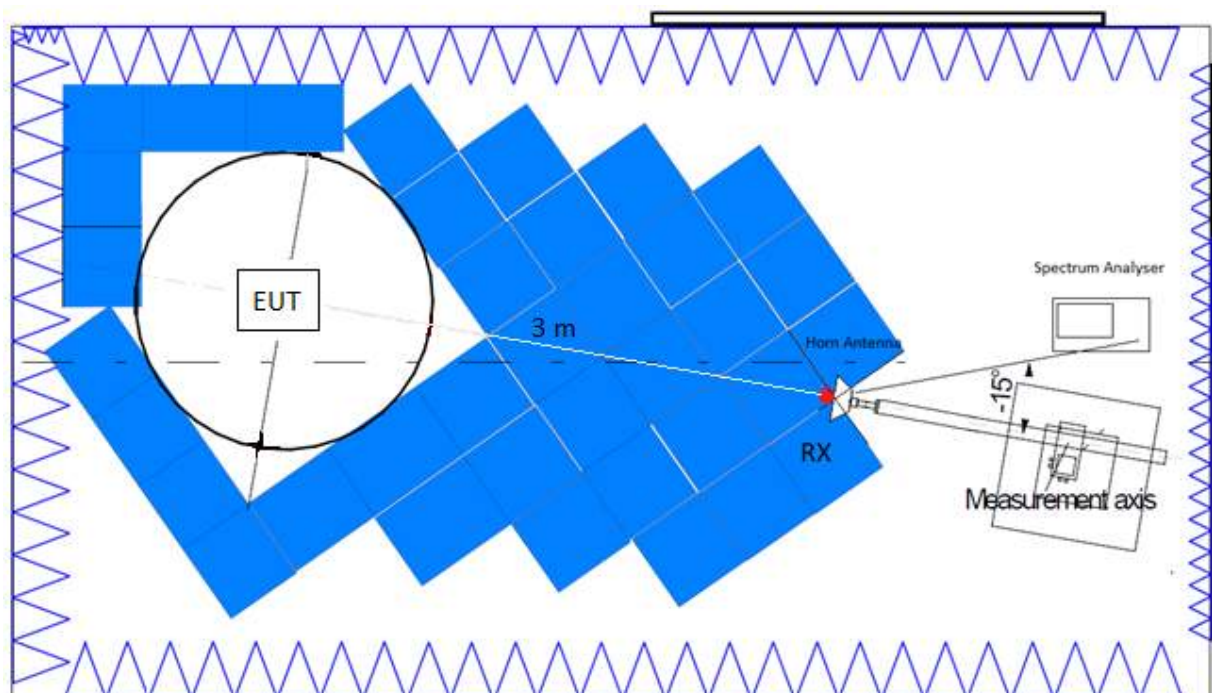
Measurements were made in both horizontal and vertical planes of polarization.

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.

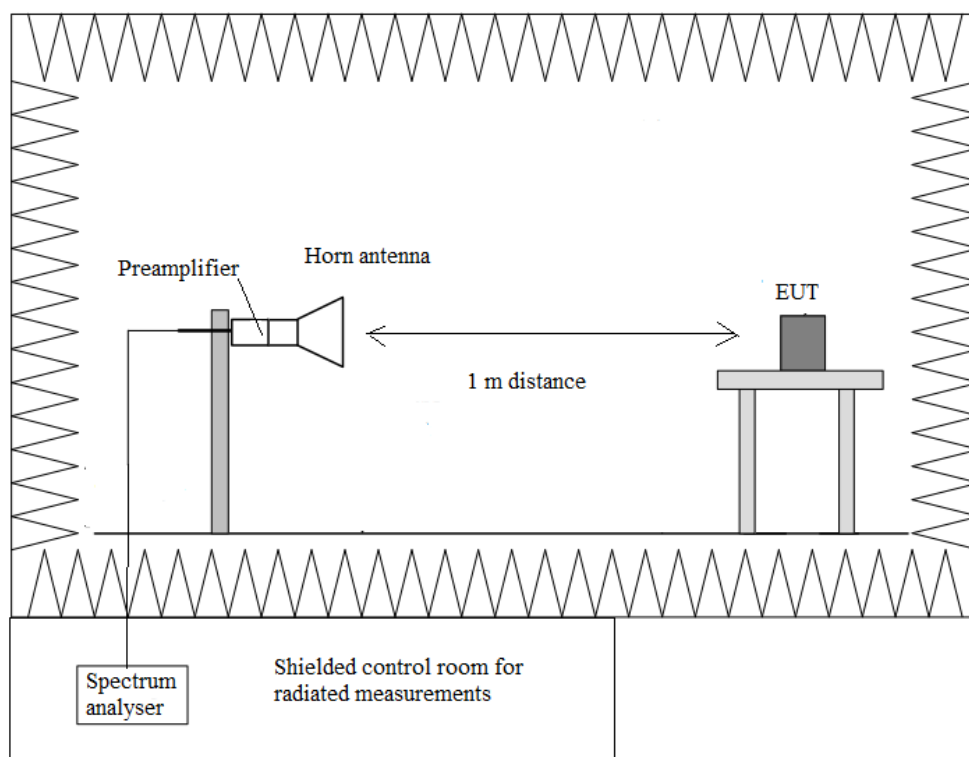
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1GHz to 17 GHz:



Radiated measurements setup for $f > 17$ GHz:



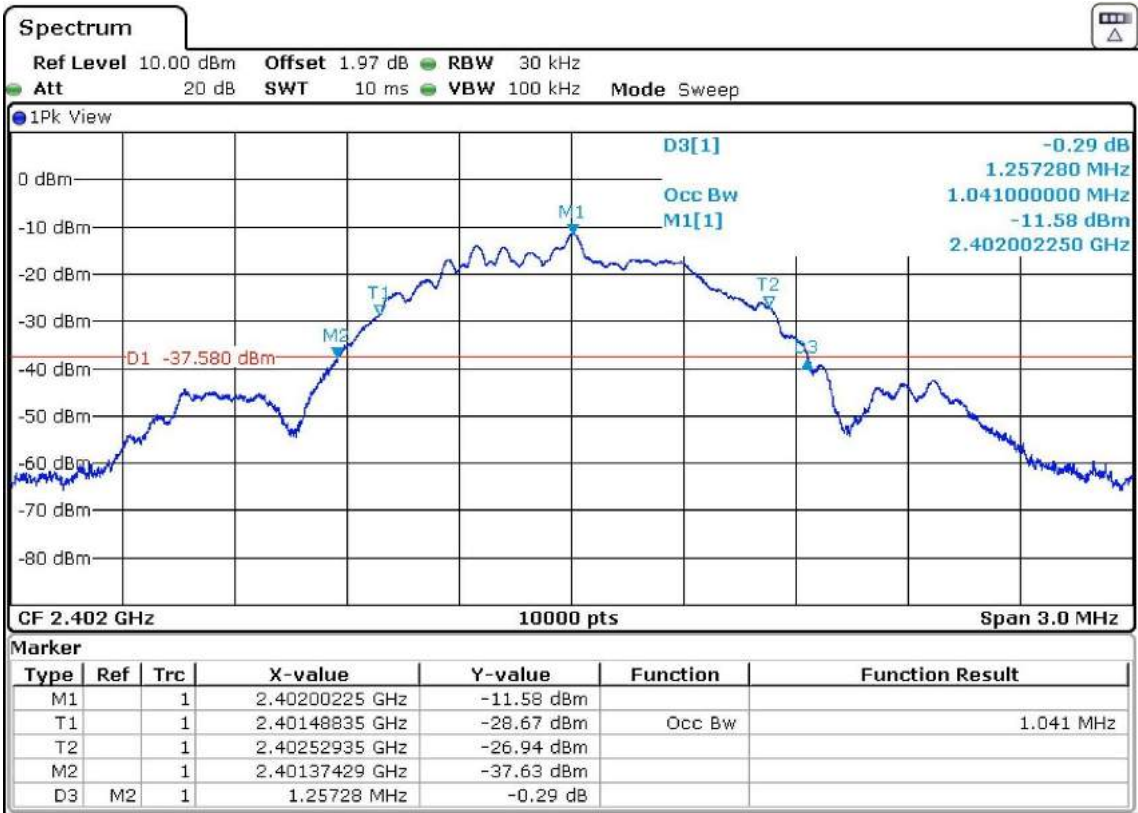
Occupied Bandwidth

RESULTS:

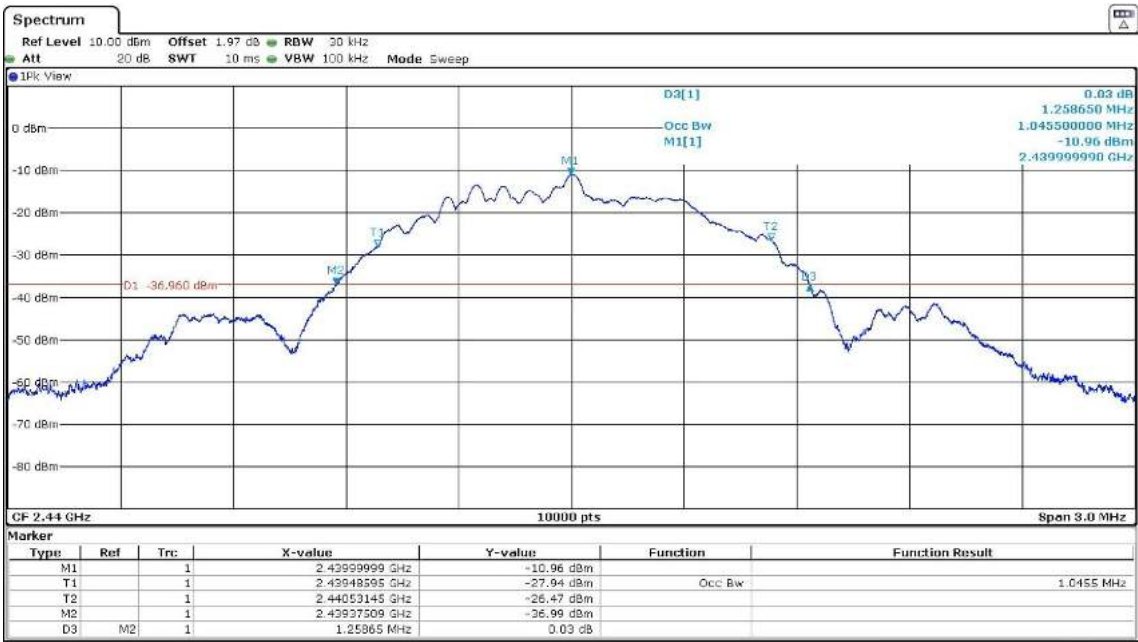
1M modulation:

	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
99% bandwidth (MHz)	1.041000	1.045500	1.044900
26dB bandwidth (MHz)	1.257280	1.258650	1.258200
Measurement Uncertainty (kHz)	< ±3.64		

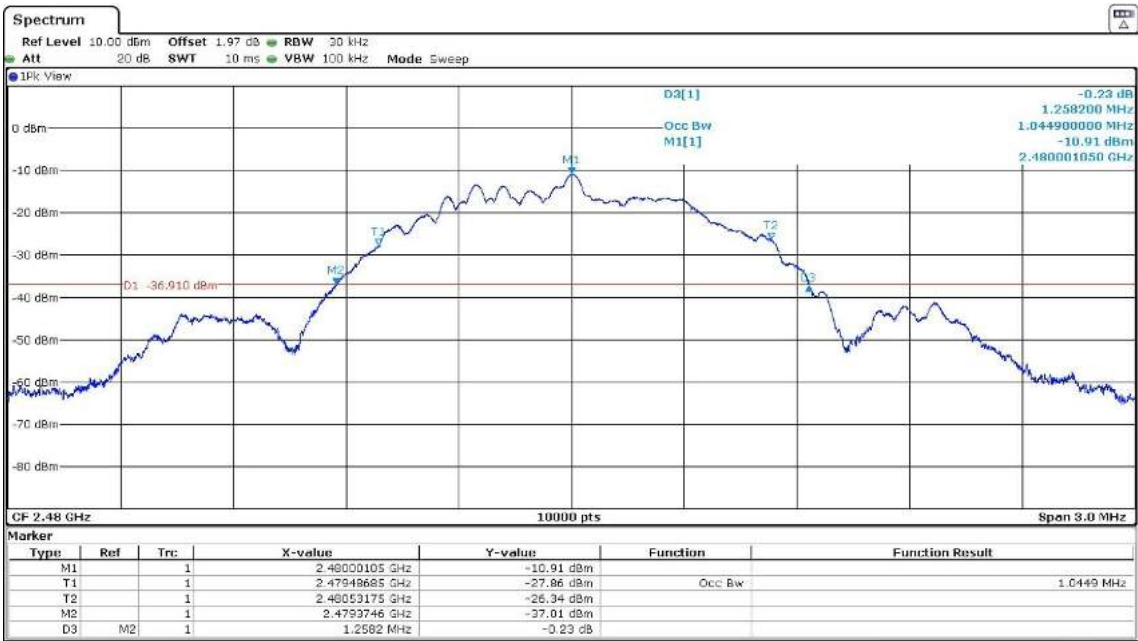
Low Channel:



- Middle Channel:



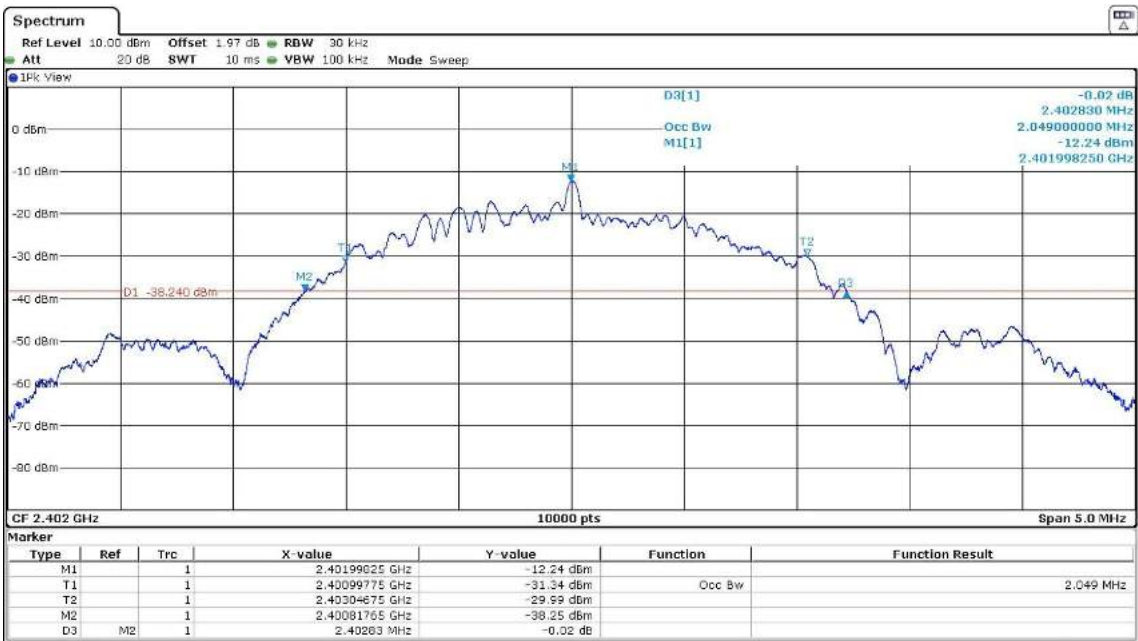
- High Channel:



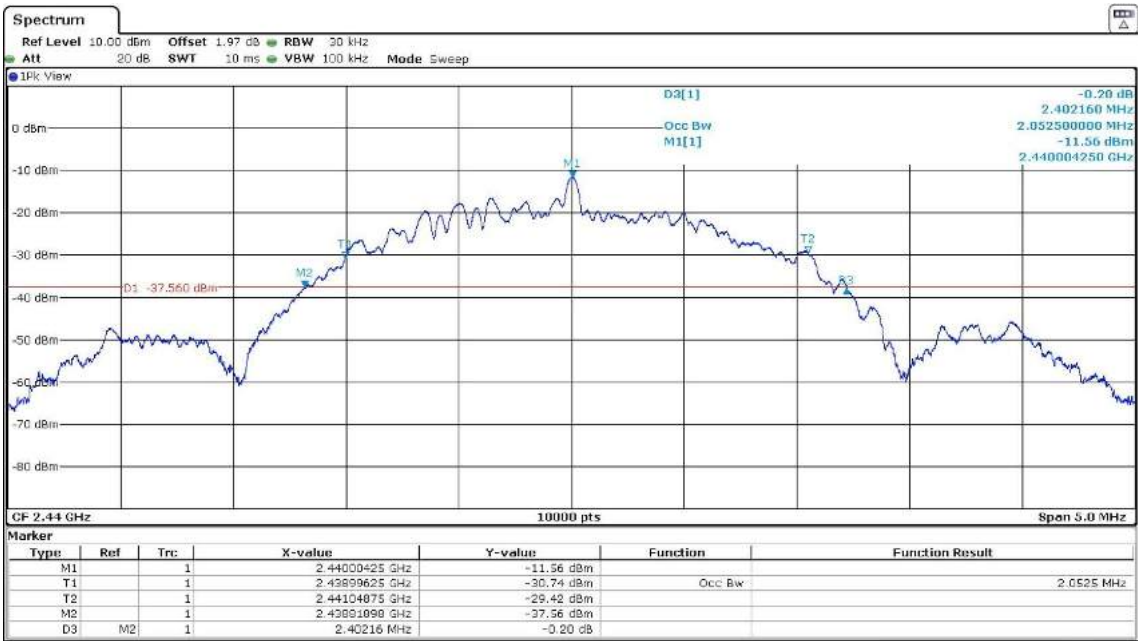
2M modulation:

	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
99% bandwidth (MHz)	2.049000	2.052500	2.060000
26dB bandwidth (MHz)	2.402830	2.402160	2.414500
Measurement Uncertainty (kHz)	< ±3.75		

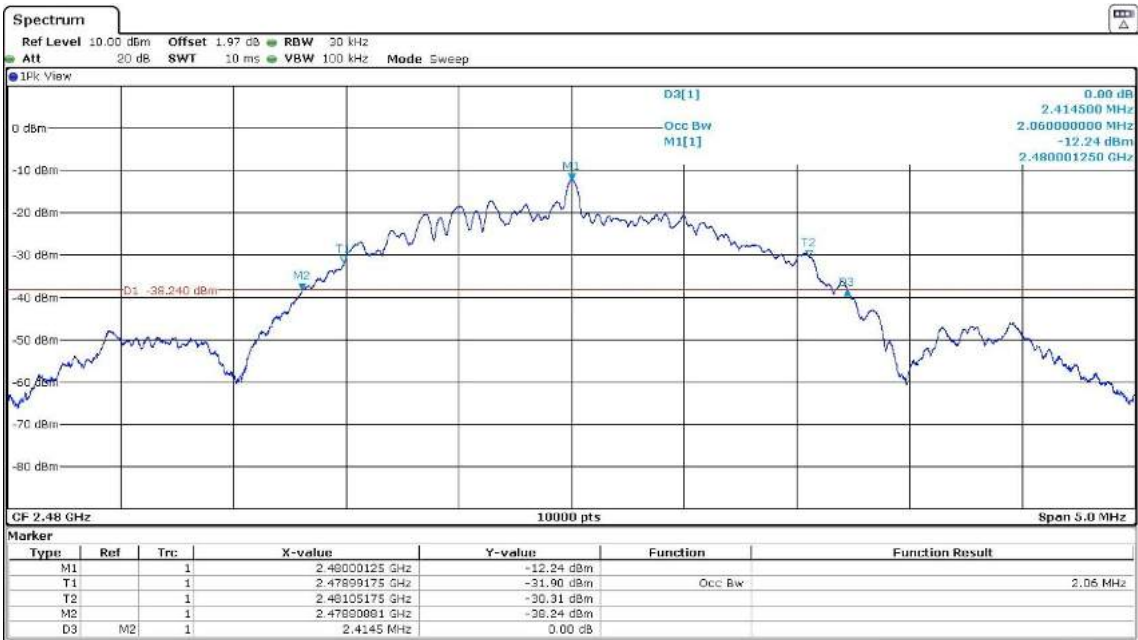
Low Channel:



- Middle Channel:



- High Channel:



FCC 15.247 (a)(2) / RSS-247 5.2 (a) 6 dB Bandwidth

SPECIFICATION:

The minimum 6 dB bandwidth shall be at least 500 kHz.

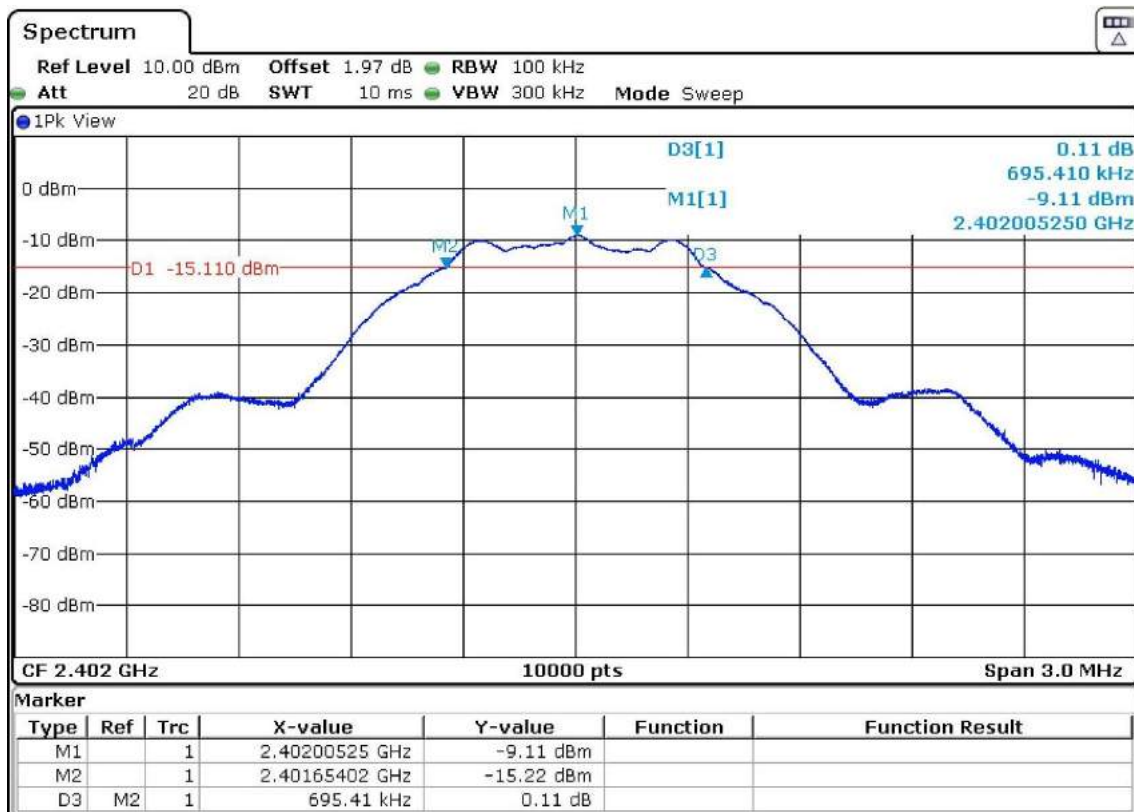
RESULTS:

• 1M modulation:

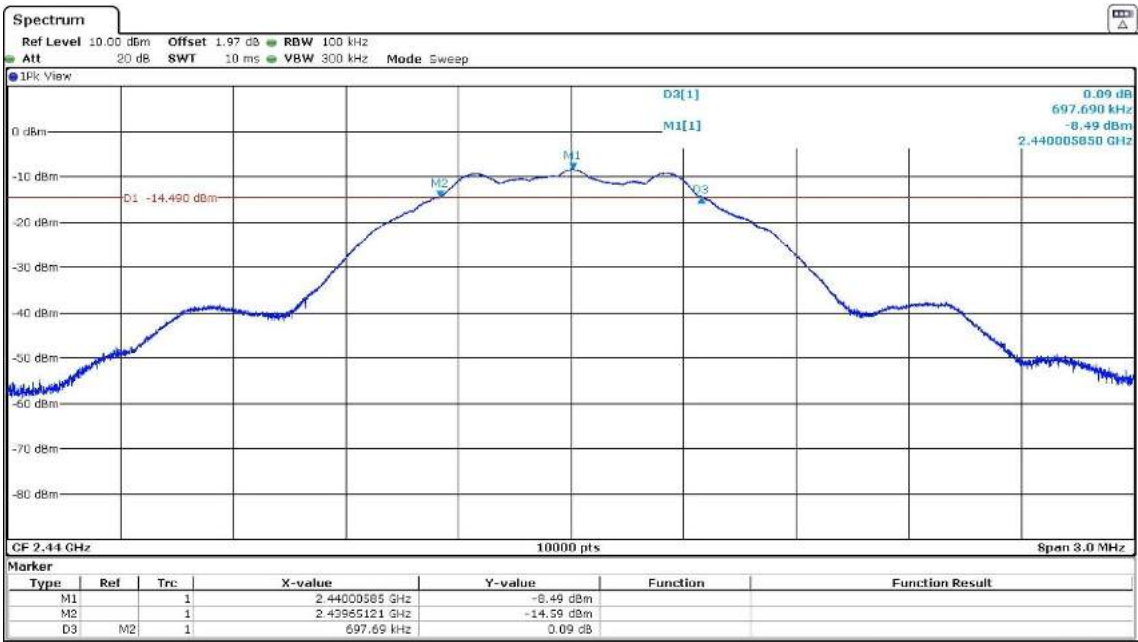
	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
6 dB Spectrum bandwidth (MHz)	0.695410	0.697690	0.701190
Measurement Uncertainty (kHz)	< ±11.72		

Verdict: PASS

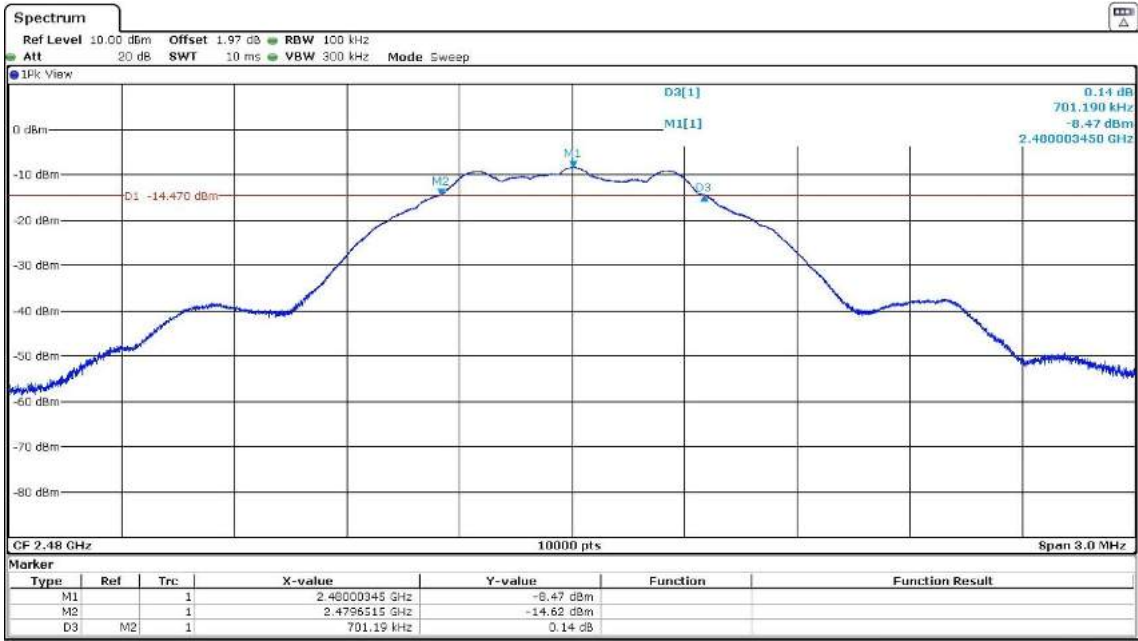
- Low Channel:



- Middle Channel:



- High Channel:

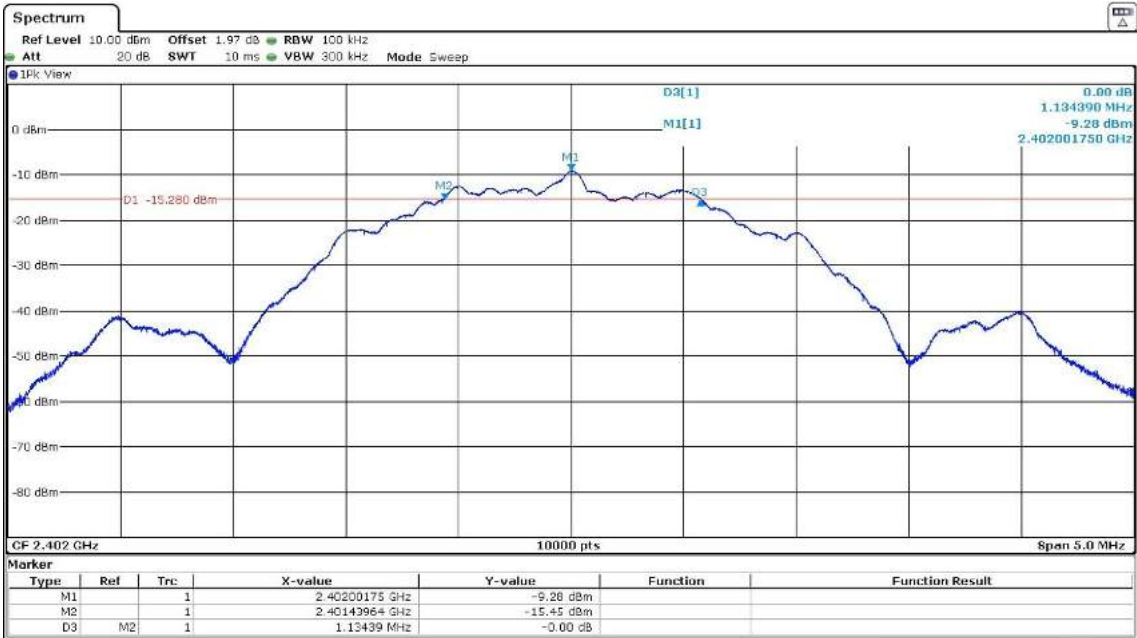


2M modulation:

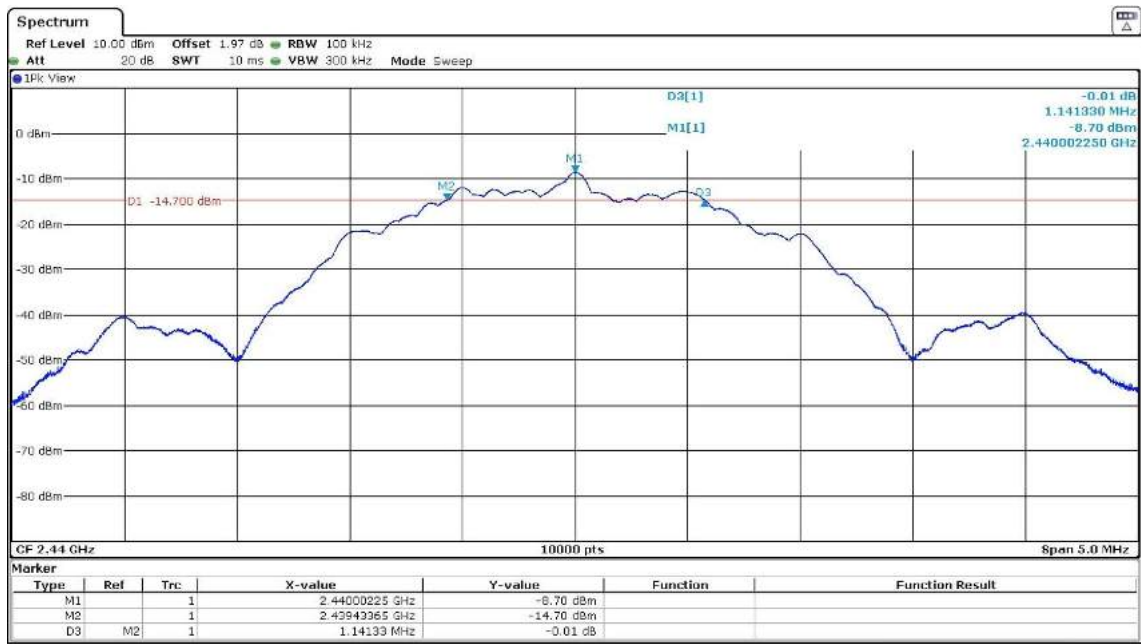
	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
6 dB Spectrum bandwidth (MHz)	1.134390	1.141330	1.139730
Measurement Uncertainty (kHz)	< ±11.84		

Verdict: PASS

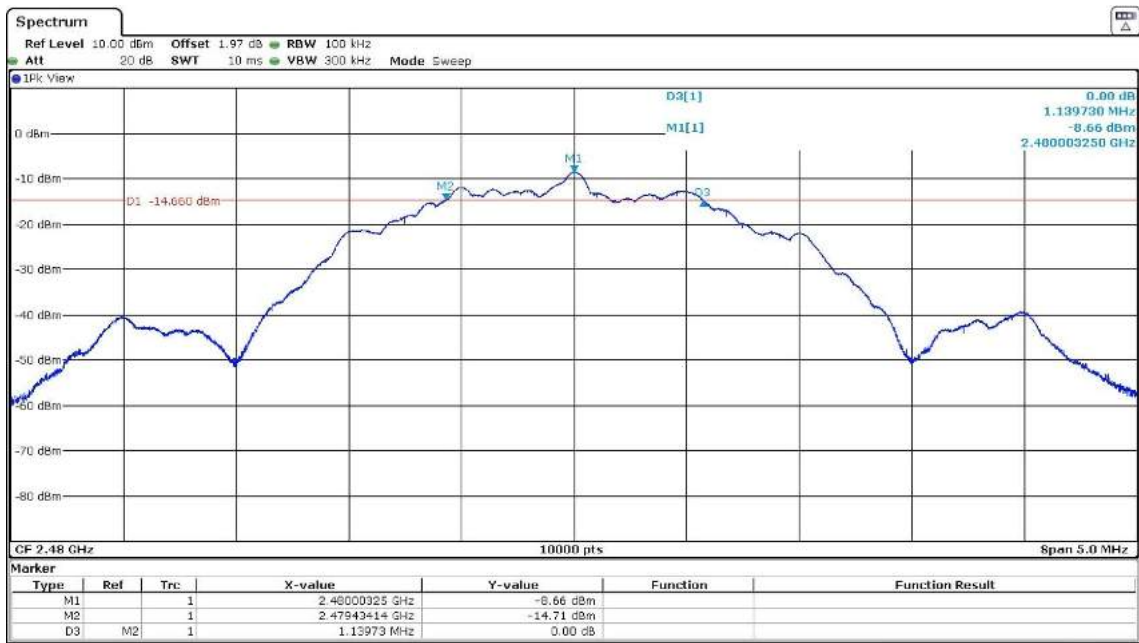
Low Channel:



- Middle Channel:



- High Channel:



FCC 15.247 (b) / RSS-247 5.4 (d) Maximum output power and antenna gain

SPECIFICATION:

For systems using digital modulation in the 2400-2483.5 MHz band: 1 Watt (30 dBm).
The e.i.r.p. shall not exceed 4 W (36 dBm) (RSS-247).

RESULTS:

The maximum peak conducted output power level of the fundamental emission was measured according to clause 11.9.1.1 "RBW $\geq$ DTS bandwidth" of ANSI C63.10-2013.

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

Maximum Declared Antenna Gain: -0.09 dBi

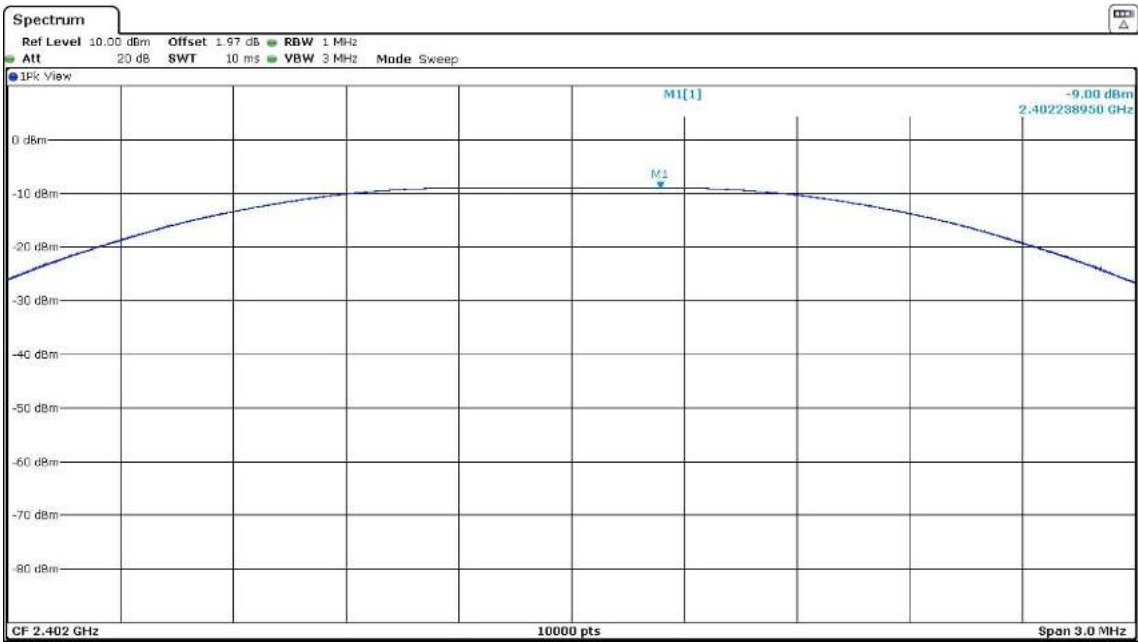
• **1M modulation:**

	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
Maximum Conducted Power (dBm)	-9.00	-8.40	-8.37
Maximum EIRP Power (dBm)	-9.09	-8.49	-8.46
Measurement Uncertainty (dB)	< ± 1.95		

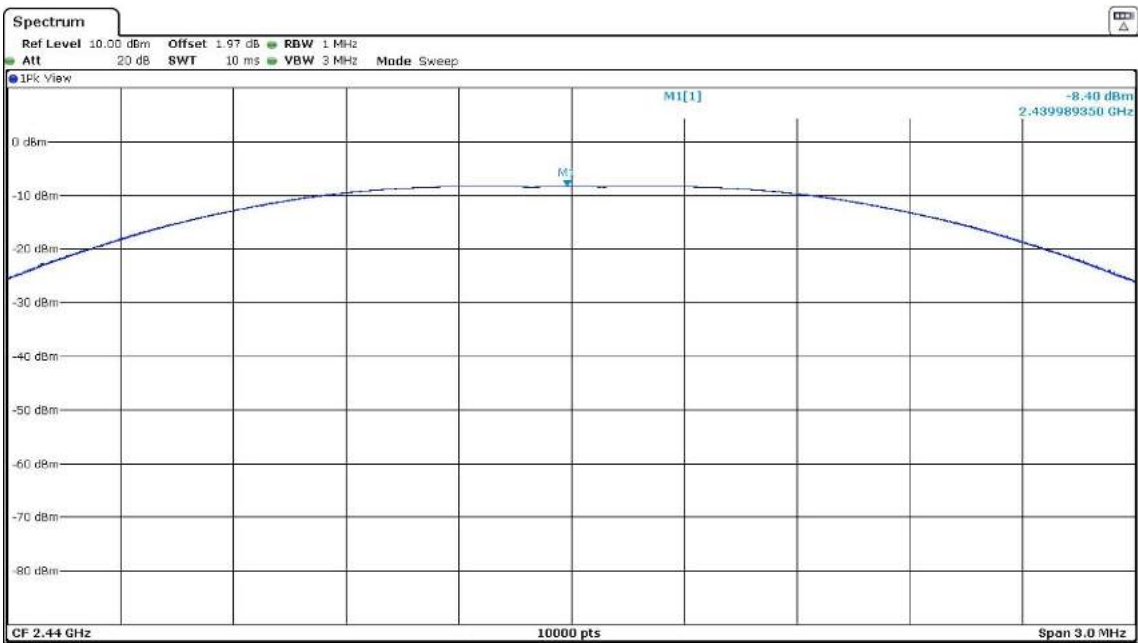
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Verdict: PASS

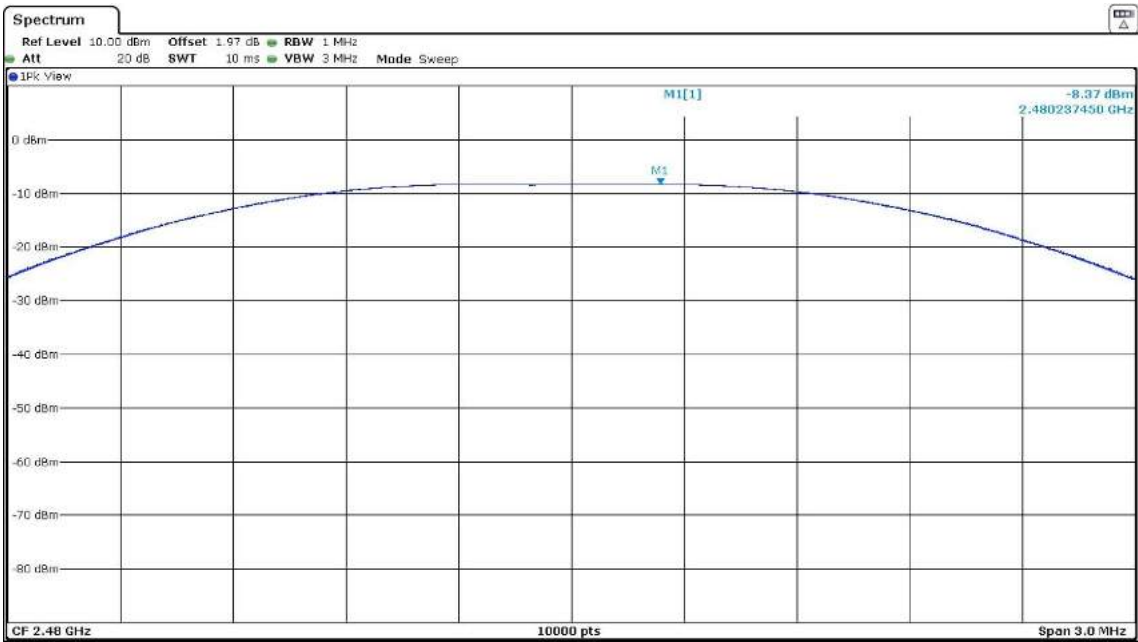
- Low Channel:



- Middle Channel:



- High Channel:



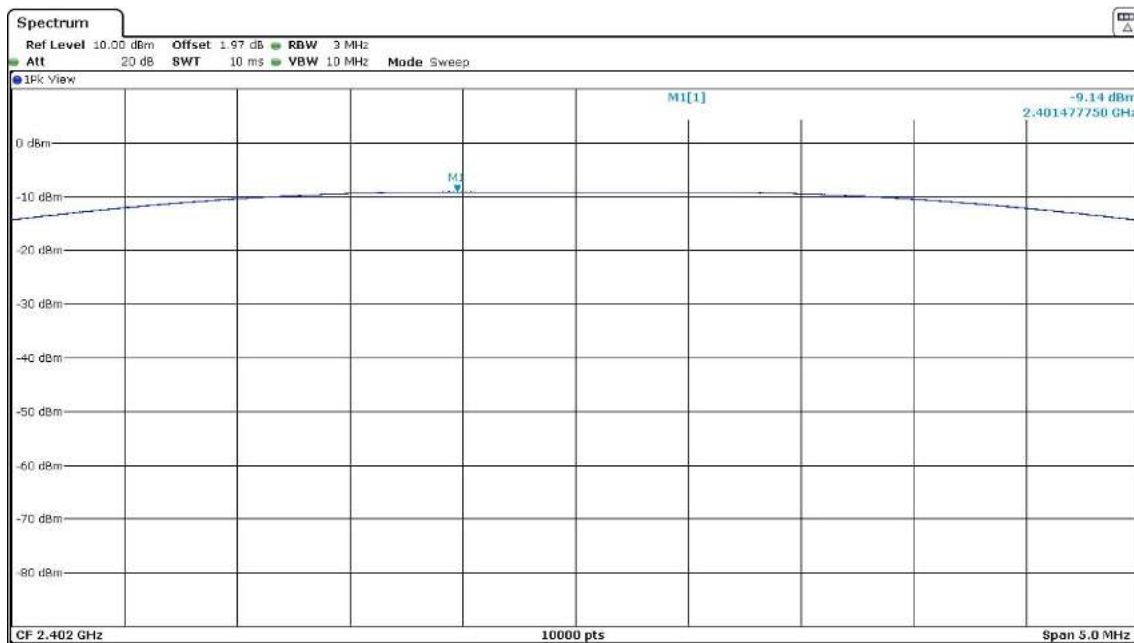
• **2M modulation:**

	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
Maximum Conducted Power (dBm)	-9.14	-8.49	-8.49
Maximum EIRP Power (dBm)	-9.23	-8.58	-8.58
Measurement Uncertainty (dB)	< ±1.95		

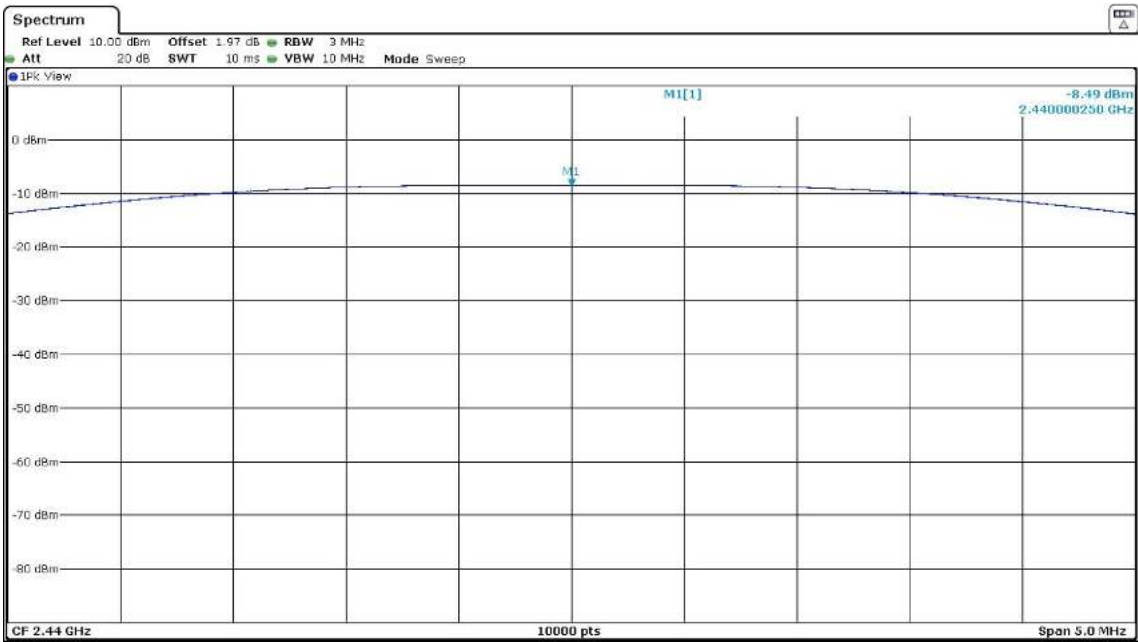
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Verdict: PASS

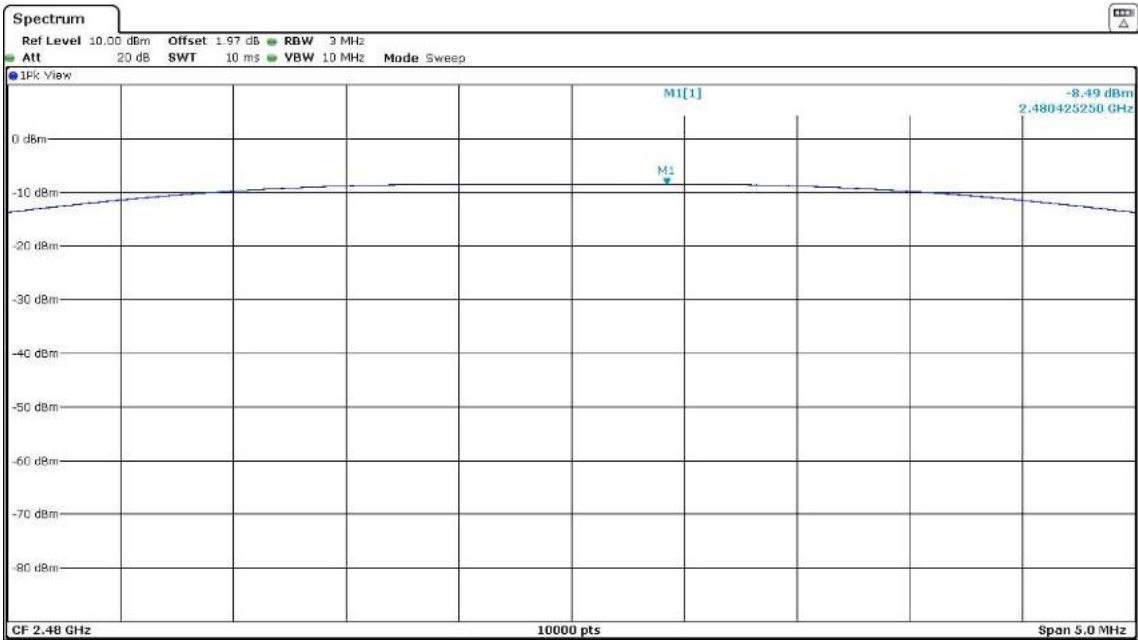
- Low Channel:



- Middle Channel:



- High Channel:



FCC 15.247 (d) / RSS-247 5.5 Band-edge emissions compliance (Transmitter)

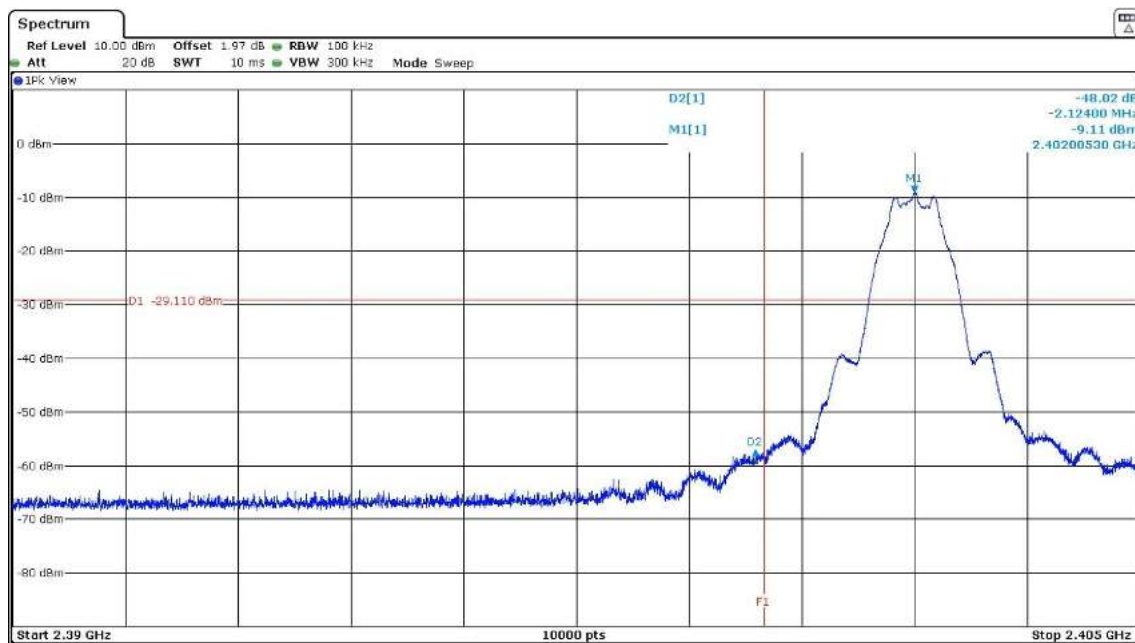
SPECIFICATION:

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.

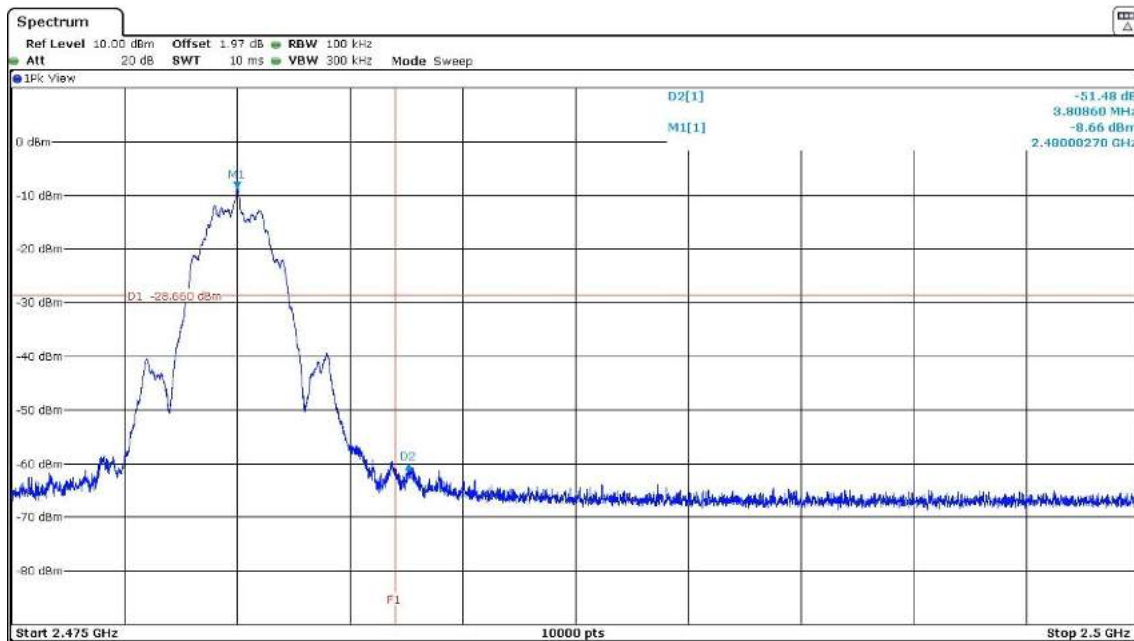
RESULTS:

- **1M modulation:**

- Low Channel:



- High Channel:

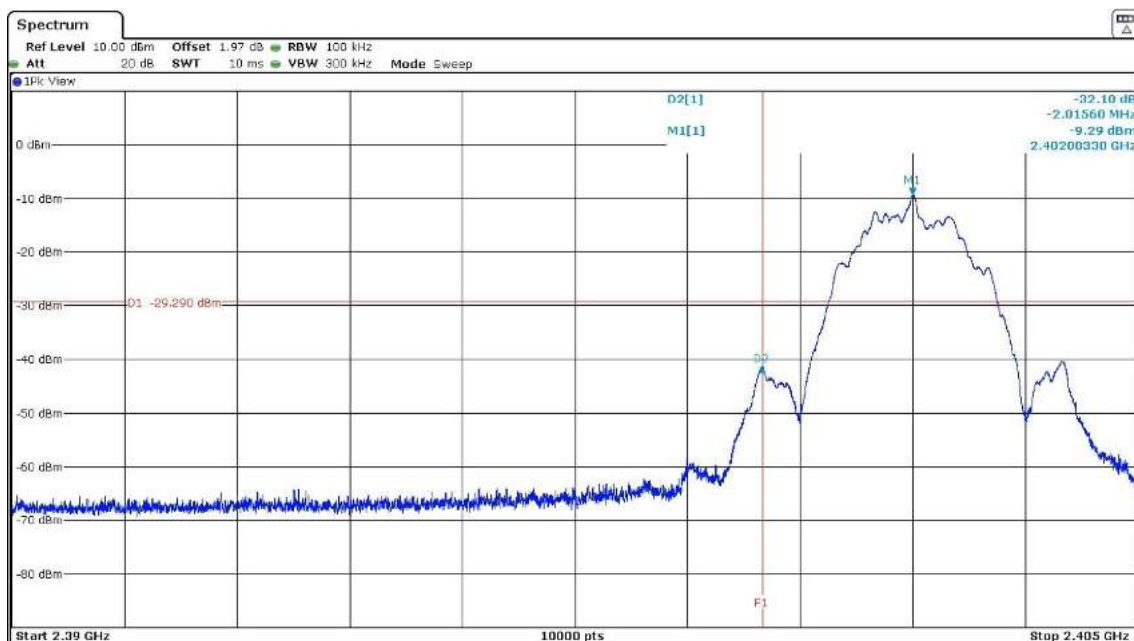


The attenuation of highest emissions at the band edges is more than 20 dB respect to the highest level of the desired power.

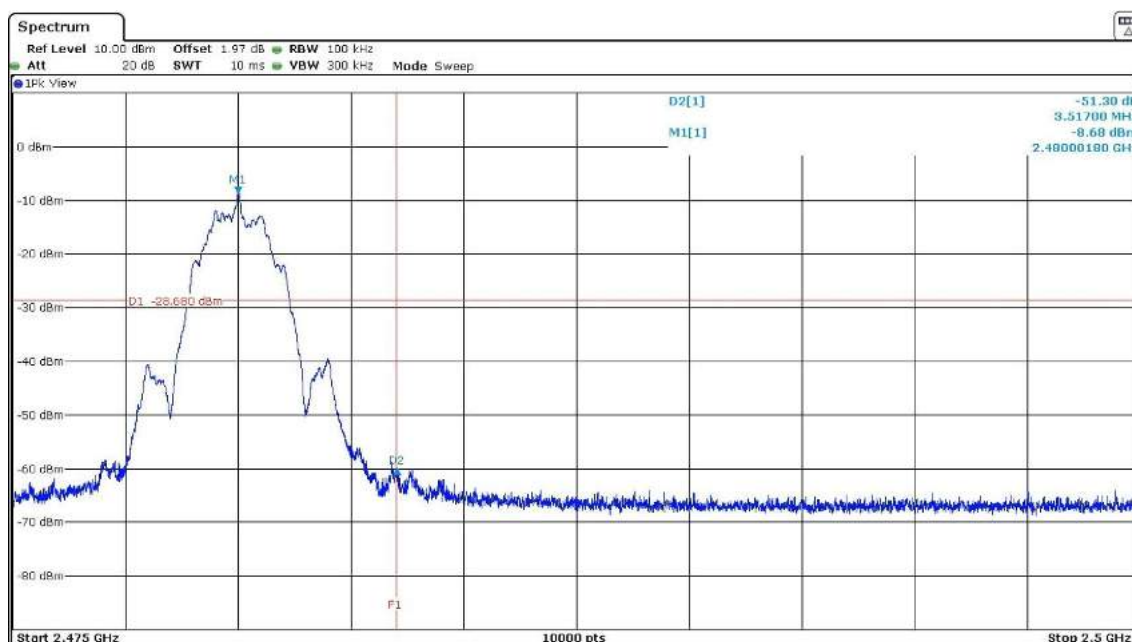
Verdict: PASS

- 2M modulation:

- Low Channel:



- High Channel:



The attenuation of the highest emissions at the band edges is more than 20 dB respect to the highest level of the desired power.

Verdict: PASS

Measurement Uncertainty (dB) < ±2.57

FCC 15.247 (e) / RSS-247 5.2 (b) Power spectral density

SPECIFICATION:

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS:

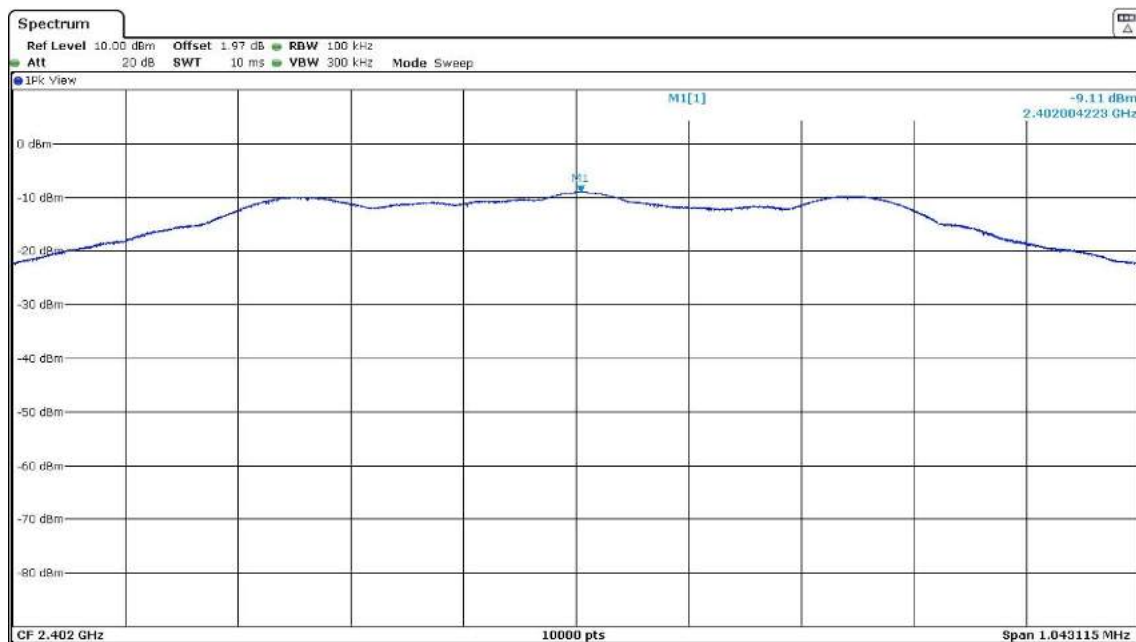
The maximum power spectral density level of the fundamental emission was measured according to clause 11.10.2 "Method PKPSD (peak PSD)" of ANSI C63.10-2013.

• 1M modulation:

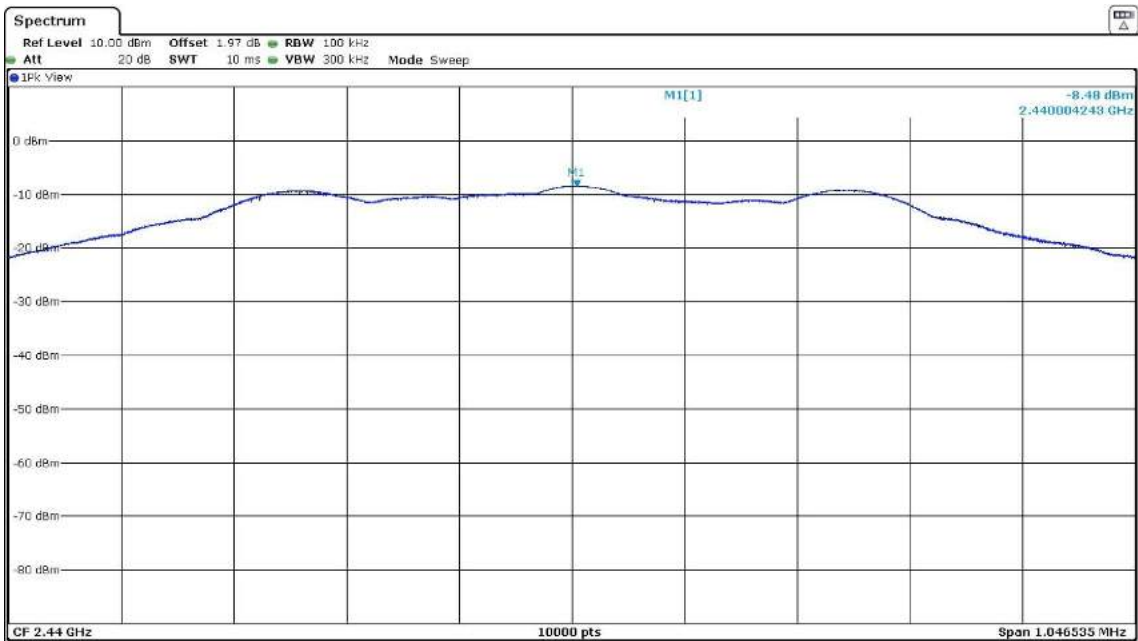
	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
Power Spectral Density (dBm)	-9.11	-8.48	-8.66
Measurement Uncertainty (dB)	< ±2.01		

Verdict: PASS

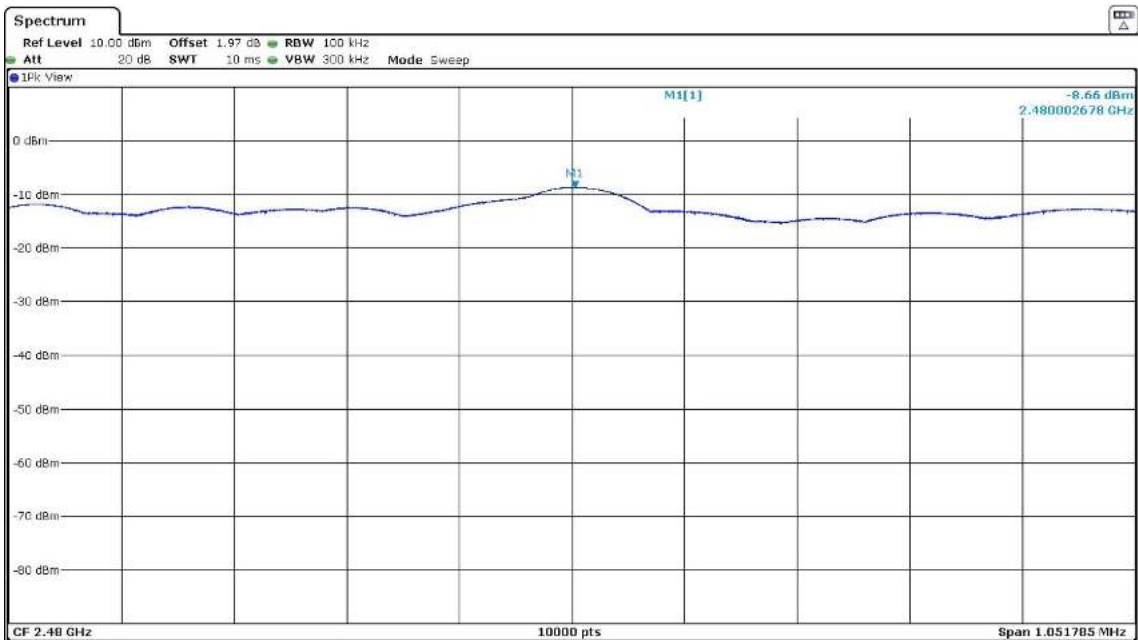
- Low Channel:



- Middle Channel:



- High Channel:

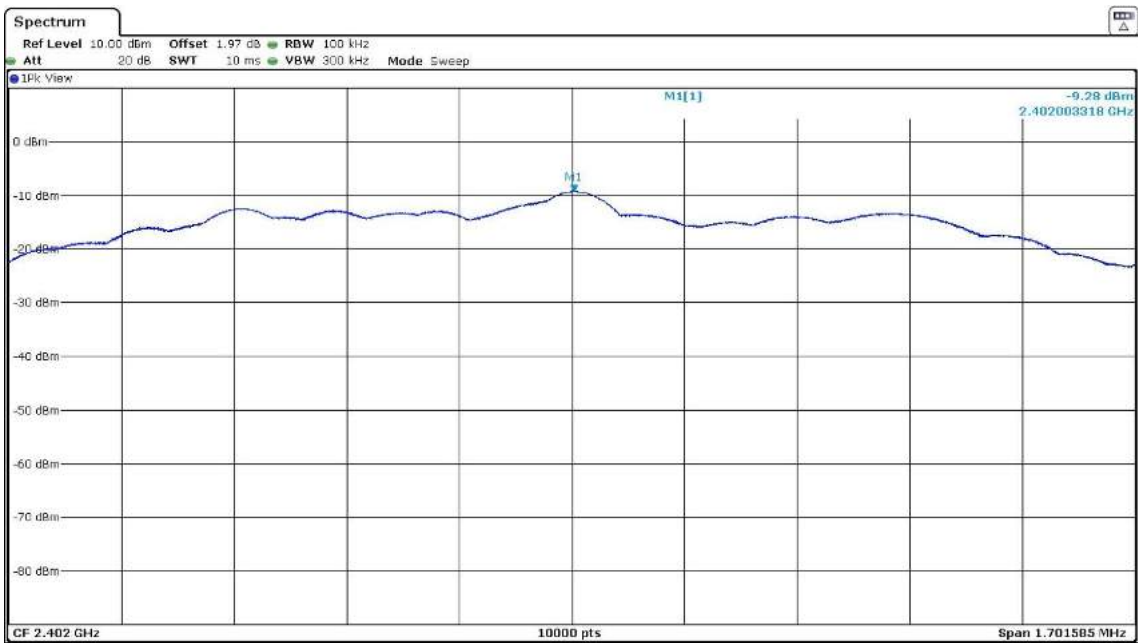


• 2M modulation:

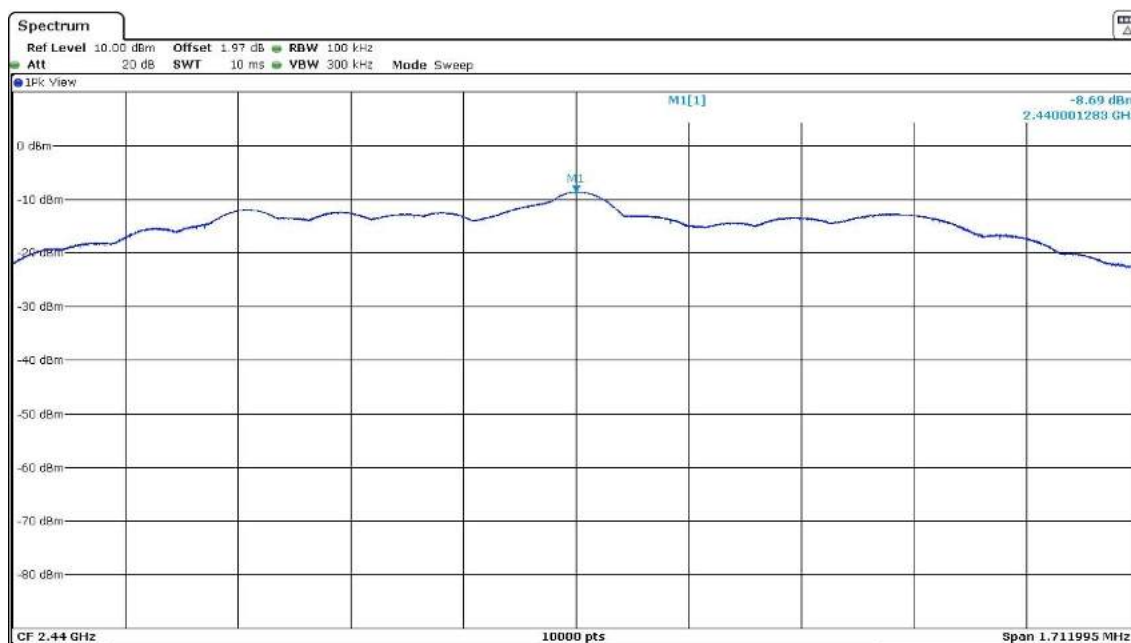
	Low Channel 2402 MHz	Middle Channel 2440 MHz	High Channel 2480 MHz
Power Spectral Density (dBm)	-9.28	-8.69	-8.68
Measurement Uncertainty (dB)	< ±2.01		

Verdict: PASS

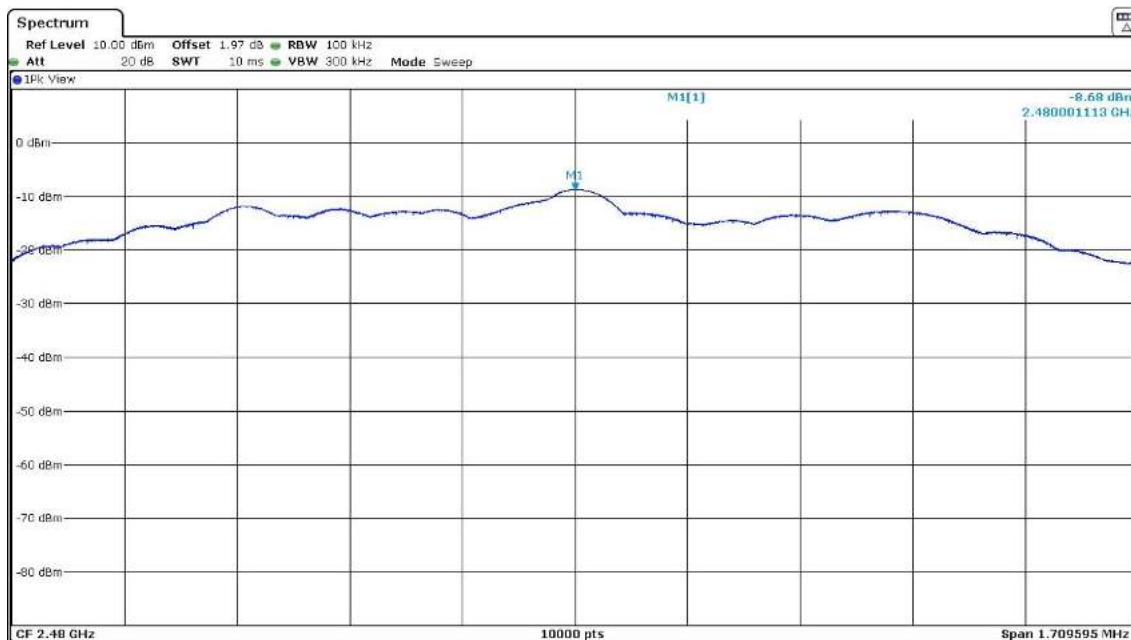
- Low Channel:



- Middle Channel:



- High 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 Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)/RSS-Gen):

Frequency Range (MHz)	Field strength ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	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
Above 960	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 specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.

RSS-247:

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

RESULTS:

The situation and orientation of the equipment under test 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 – 17 GHz and at distance of 1m for the frequency range 17 GHz – 26 GHz.

The field strength is calculated by adding a 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 detected do not depend neither on the operating channel nor the modulation mode.

Spurious frequencies detected at less than 20 dB below the limit:

Spurious Frequency (MHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
44.7440	28.14	V	Quasi-Peak	< ±5.01
89.8005	29.87	H		
104.5930	27.85	V		

Frequency range 1 GHz – 26 GHz:

The results in the next tables show the maximum measured levels in the range 1 – 26 GHz including the restricted bands 2.31 – 2.39 GHz and 2.4835 – 2.5 GHz.

- **1M modulation:**

- Low Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.8040	42.87	H	Peak	≤ ±4.22
7.2060 (*)	49.43	V	Peak	

(*) This spurious frequency is outside the restricted bands as defined in §15.205(a). The spurious level is more than 20 dB below the carrier level.

- Middle Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.8805	43.35	H	Peak	≤ ±4.22
7.3215	49.92	H	Peak	

- High Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.9590	43.91	H	Peak	≤ ±4.22
7.4385	50.91	H	Peak	

- **2M modulation:**

- Low Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.8035	41.10	H	Peak	≤ ±4.22
7.2045 (*)	48.88	H	Peak	

(*) This spurious frequency is outside the restricted bands as defined in §15.205(a). The spurious level is more than 20 dB below the carrier level.

- Middle Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.8800	43.67	H	Peak	≤ ±4.22
7.3190	48.80	H	Peak	

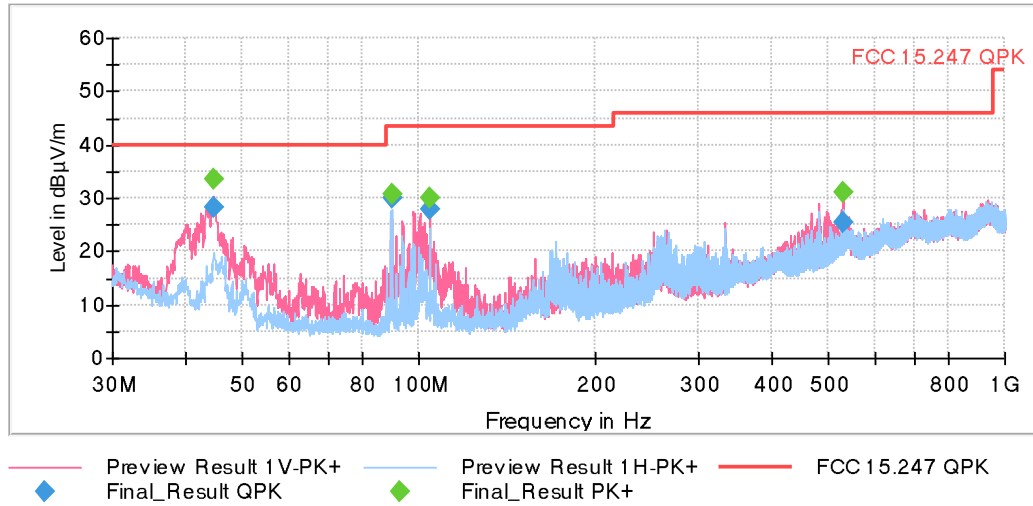
- High Channel. Spurious frequencies detected closest to the limit:

Spurious frequency (GHz)	Emission Level (dBμV/m)	Polarization	Detector	Measurement Uncertainty (dB)
4.9600	42.25	H	Peak	≤ ±4.22
7.4415	50.91	H	Peak	

Verdict: PASS

FREQUENCY RANGE 30 MHz – 1 GHz:

The spurious frequencies detected do not depend neither on the operating channel nor the modulation mode.

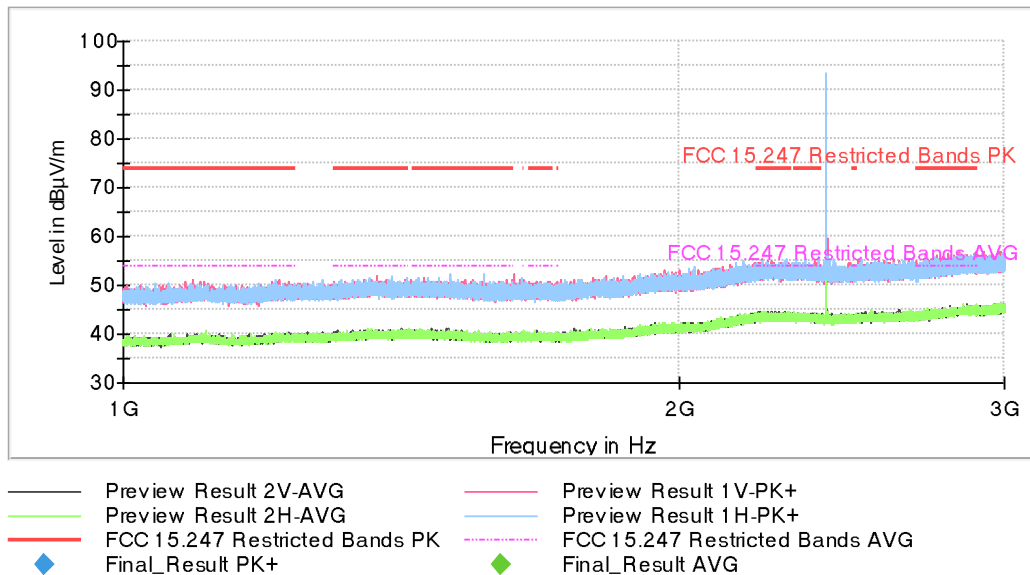


This plot is valid for the Low, Middle and High Channels.

• 1M modulation:

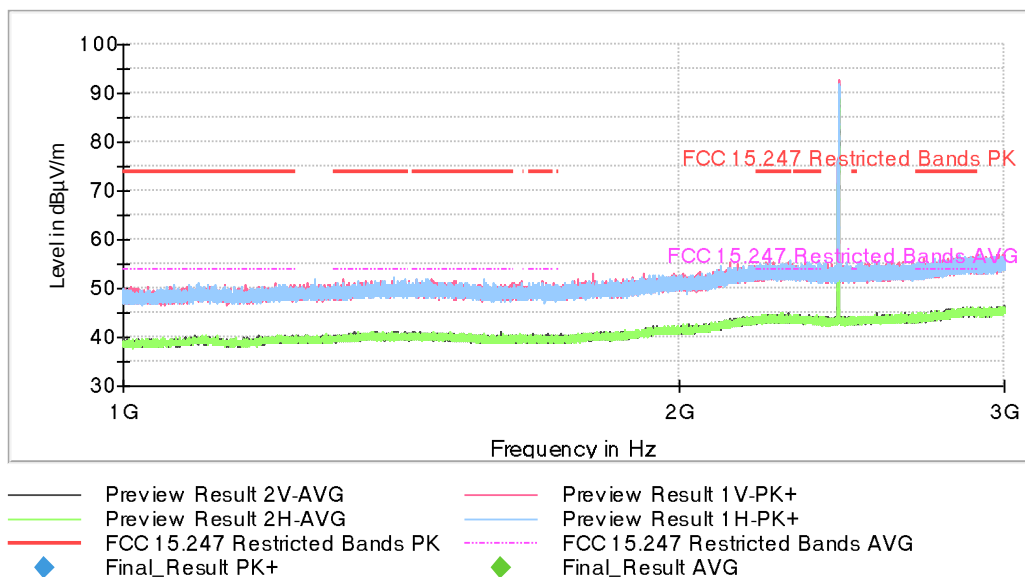
FREQUENCY RANGE 1 GHz – 3 GHz:

- Low Channel:



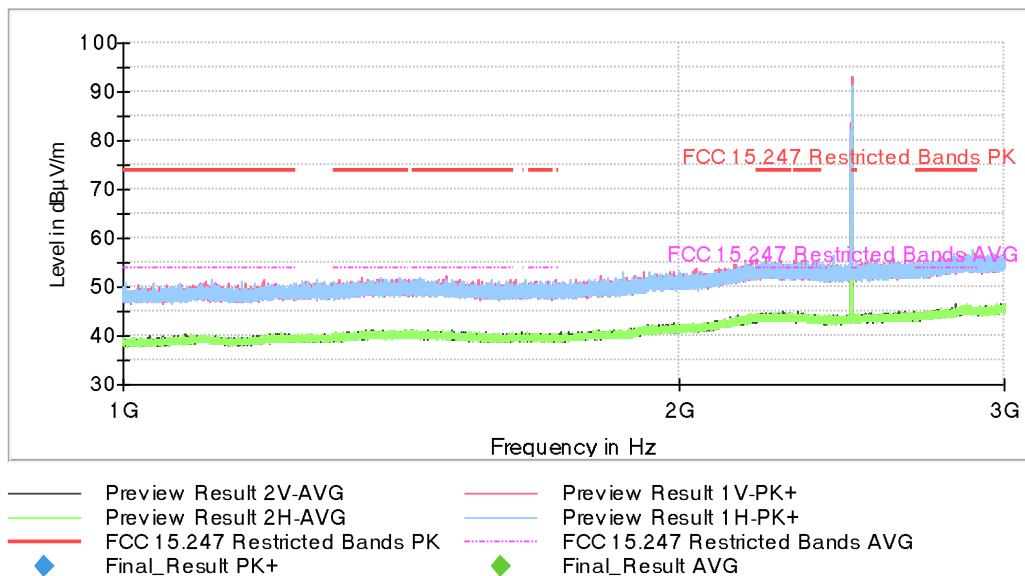
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

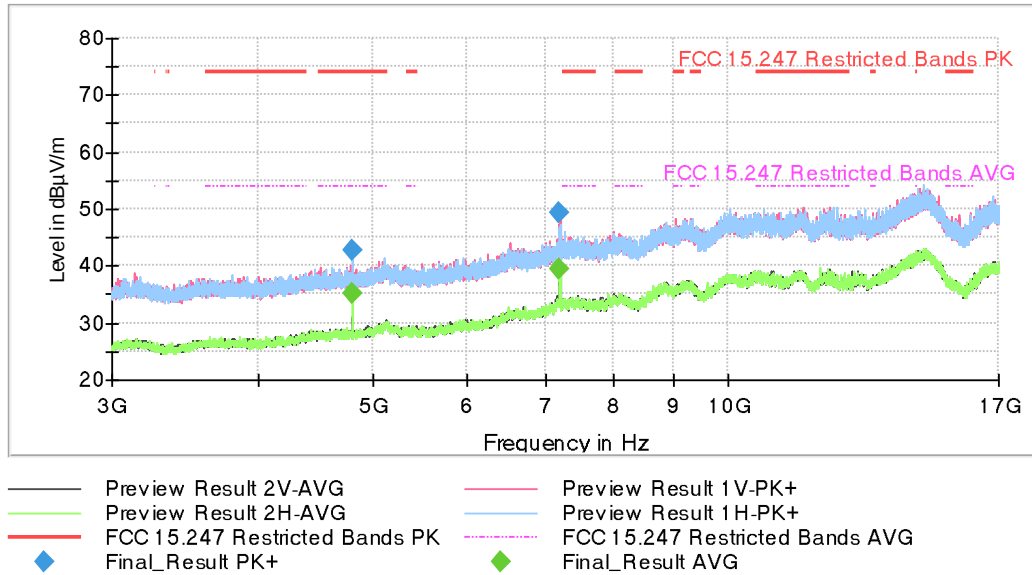
- High Channel:



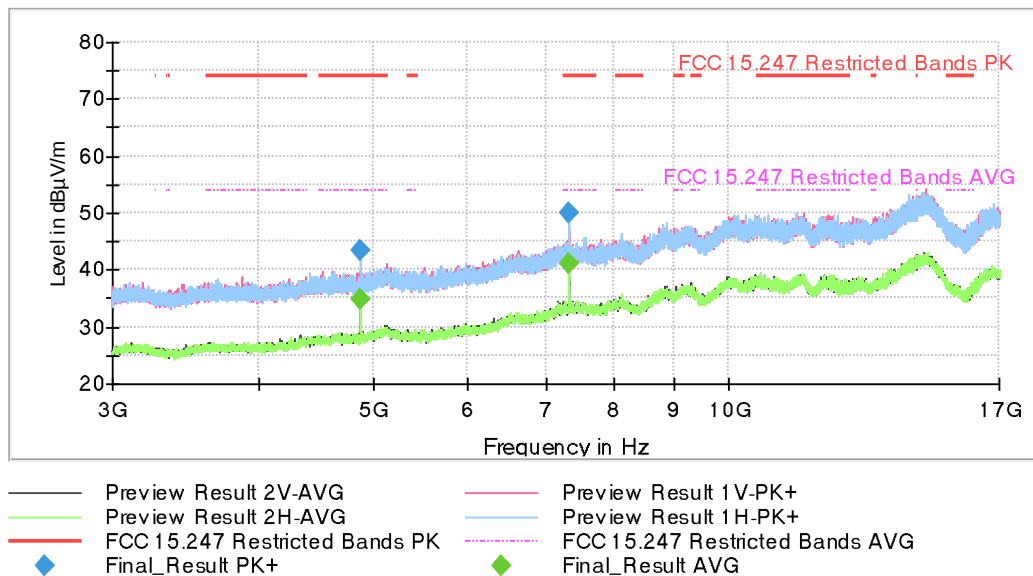
The peak above the limit is the carrier frequency.

FREQUENCY RANGE 3 GHz – 17 GHz:

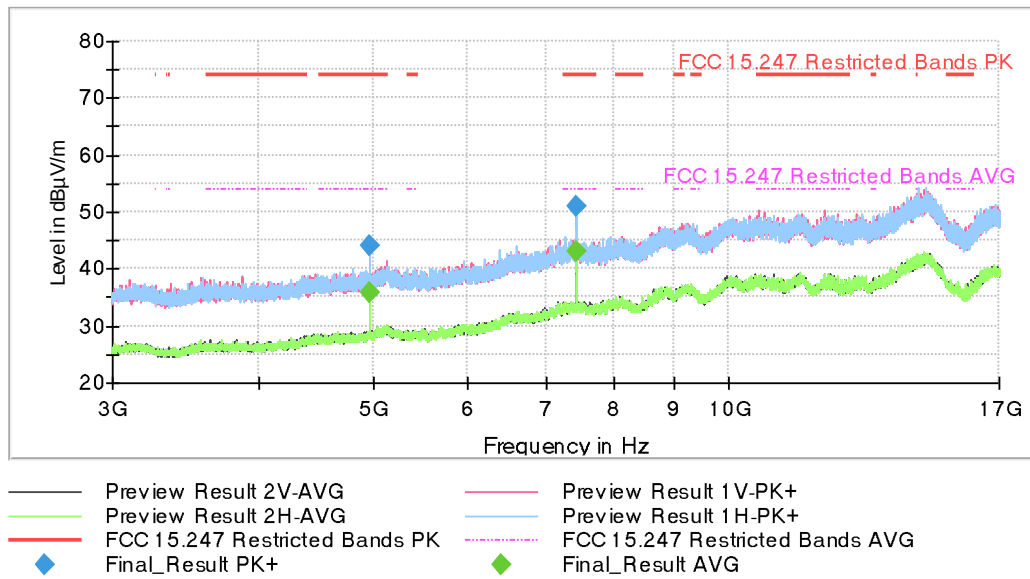
- Low Channel:



- Middle Channel:

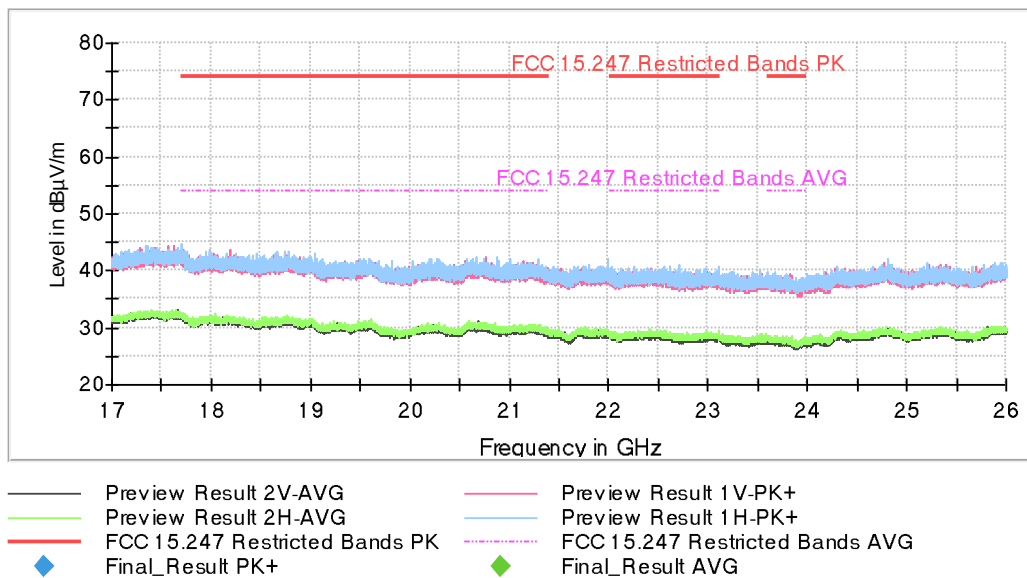


- High Channel:



FREQUENCY RANGE 17 GHz – 26 GHz:

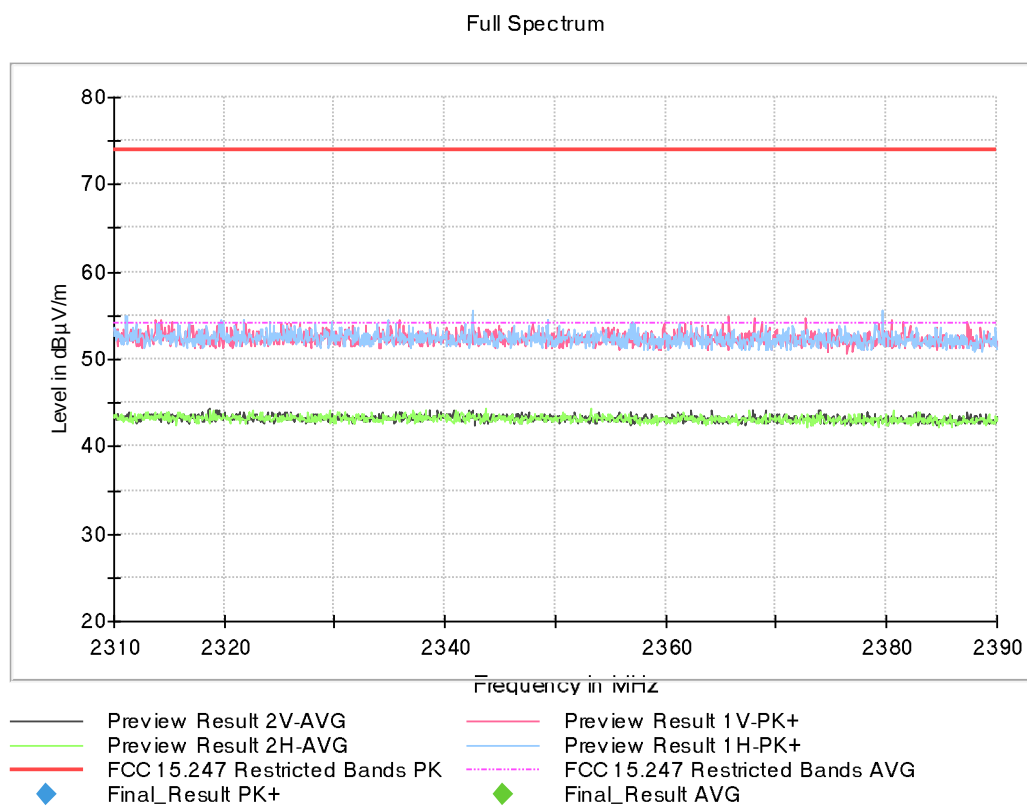
The spurious frequencies do not depend on the operating channel.



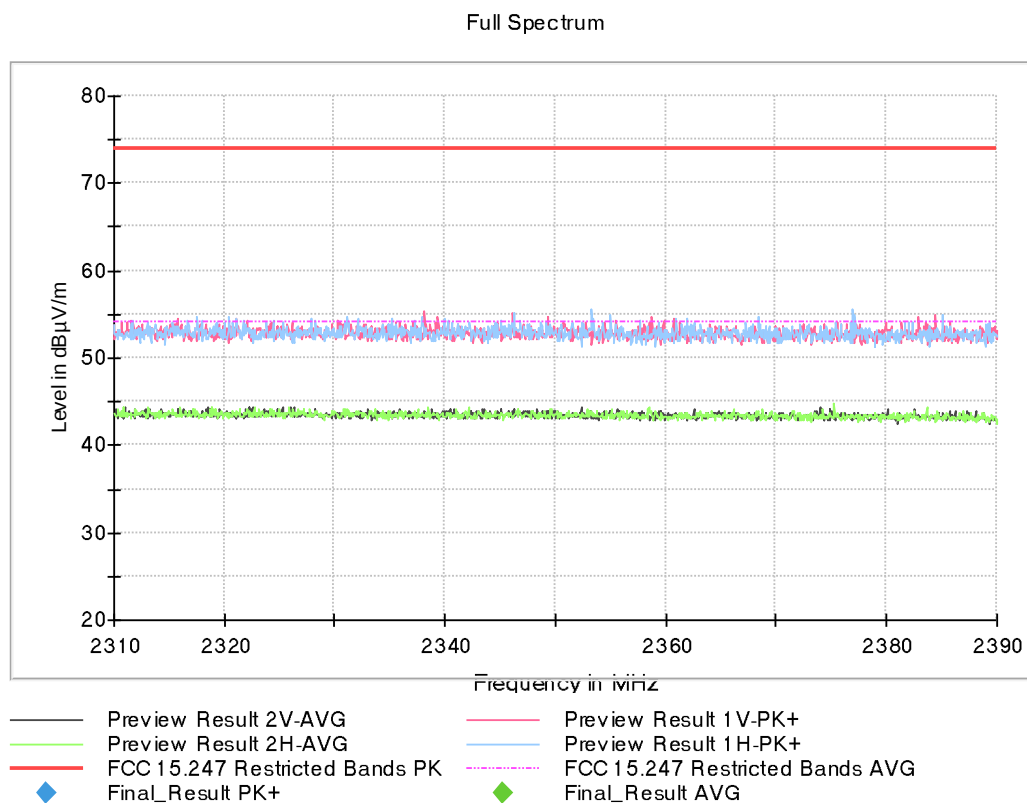
This plot is valid for the Low, Middle and High Channels.

FREQUENCY RANGE 2.31 GHz – 2.39 GHz:

- Low Channel:

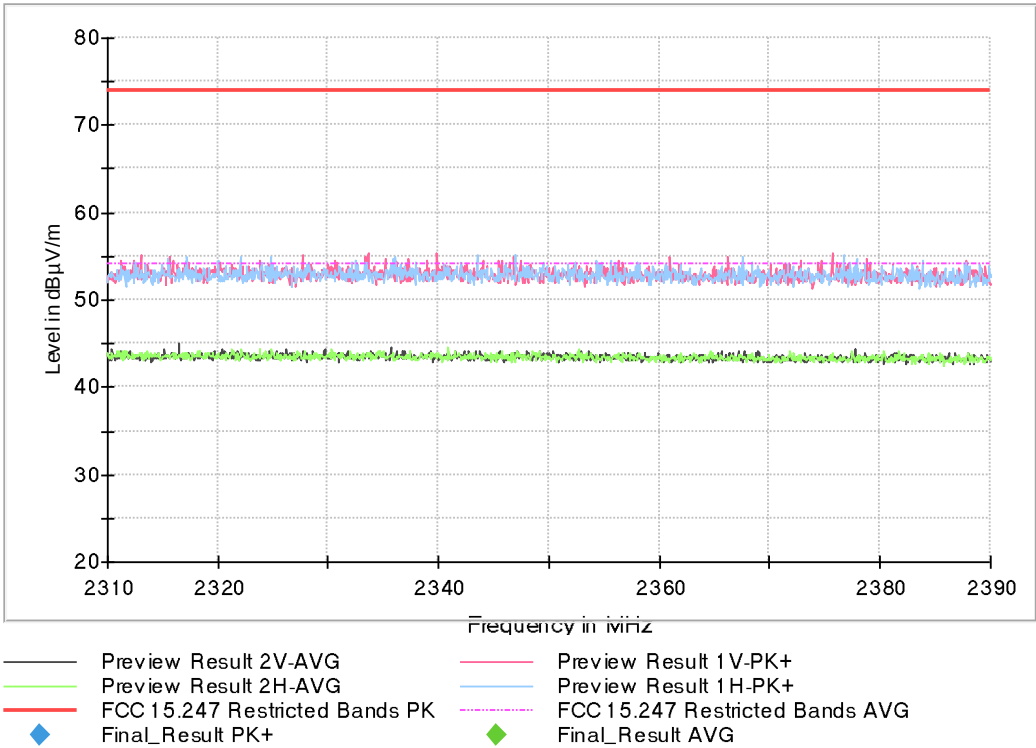


- Middle Channel:



- High Channel:

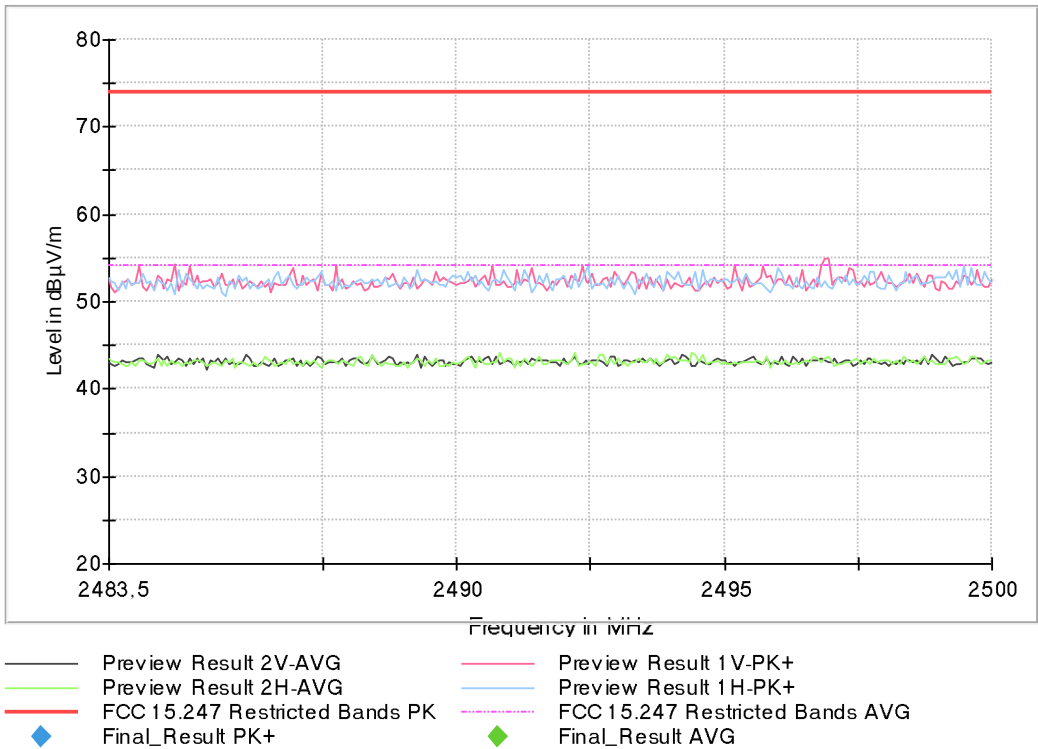
Full Spectrum



FREQUENCY RANGE 2.4835 GHz – 2.5 GHz:

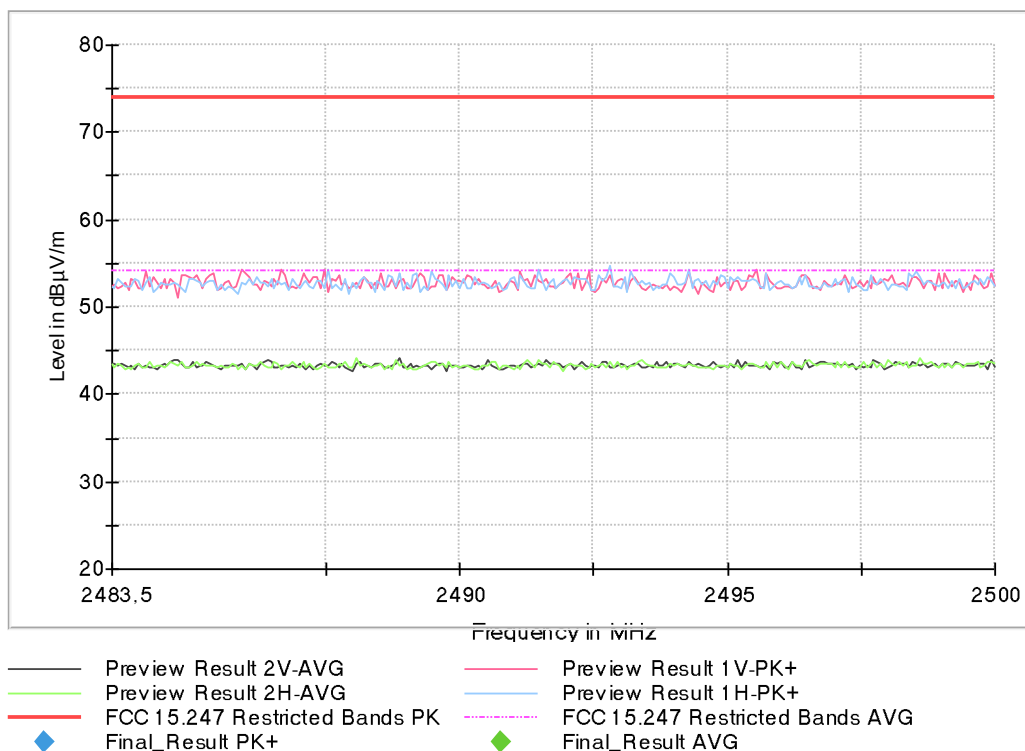
- Low Channel:

Full Spectrum



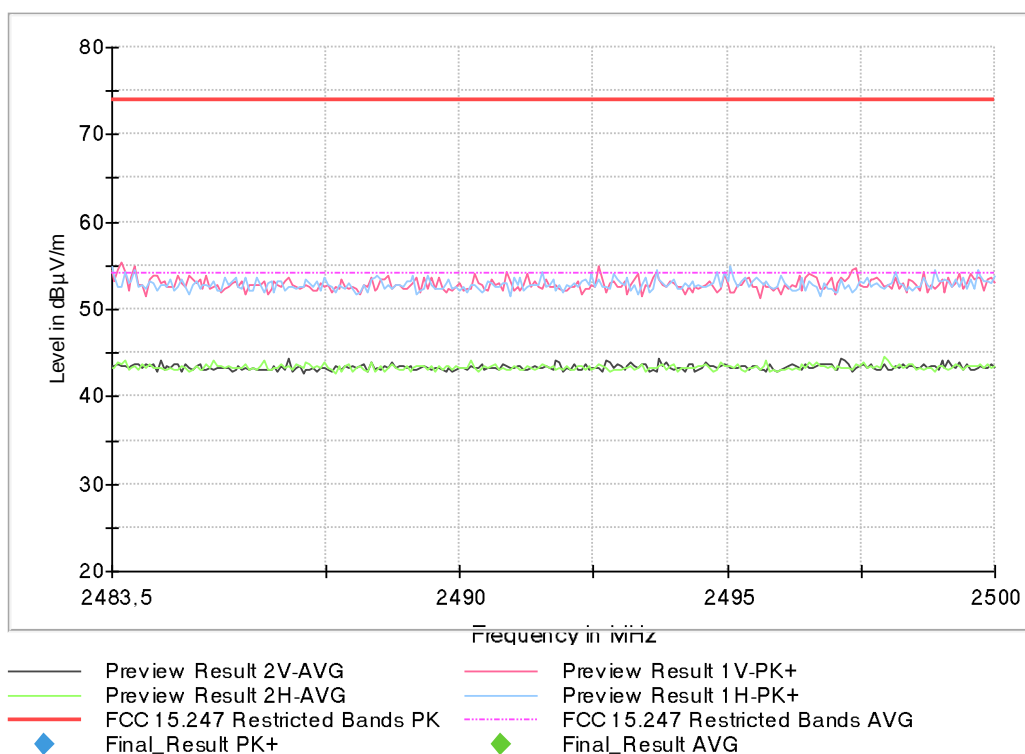
- Middle Channel:

Full Spectrum



- High Channel:

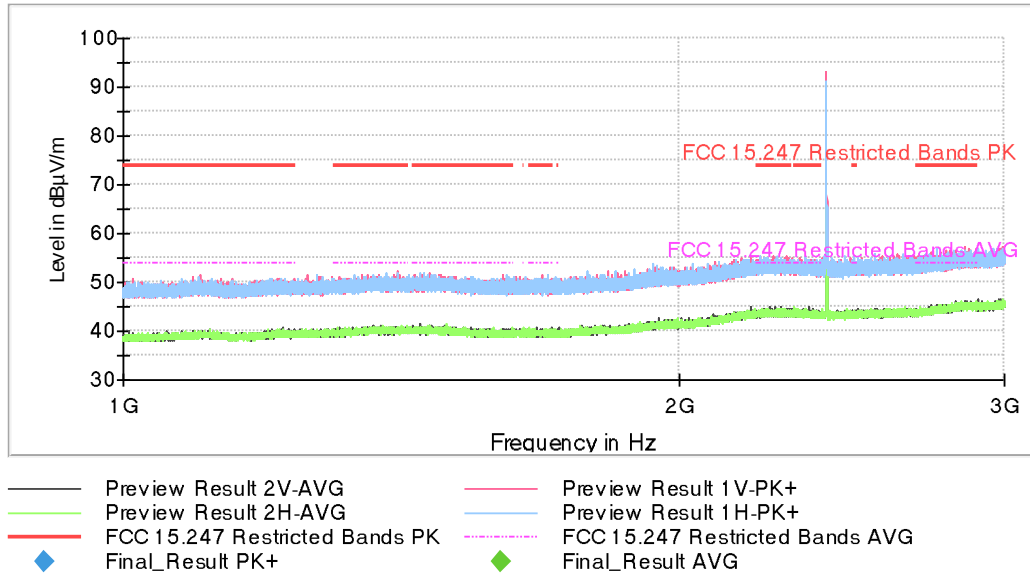
Full Spectrum



- **2M modulation:**

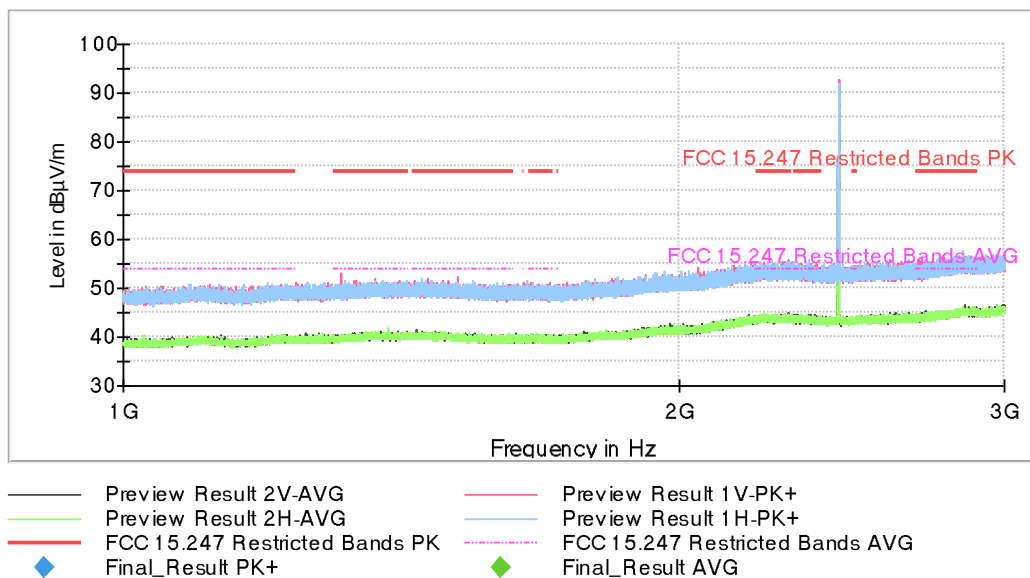
FREQUENCY RANGE 1 GHz – 3 GHz:

- Low Channel:



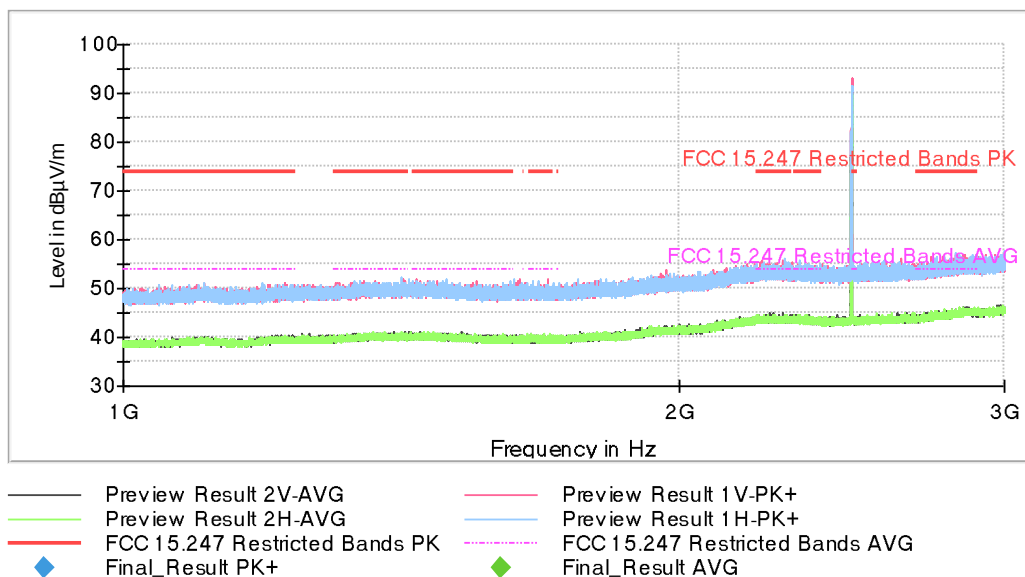
The peak above the limit is the carrier frequency.

- Middle Channel:



The peak above the limit is the carrier frequency.

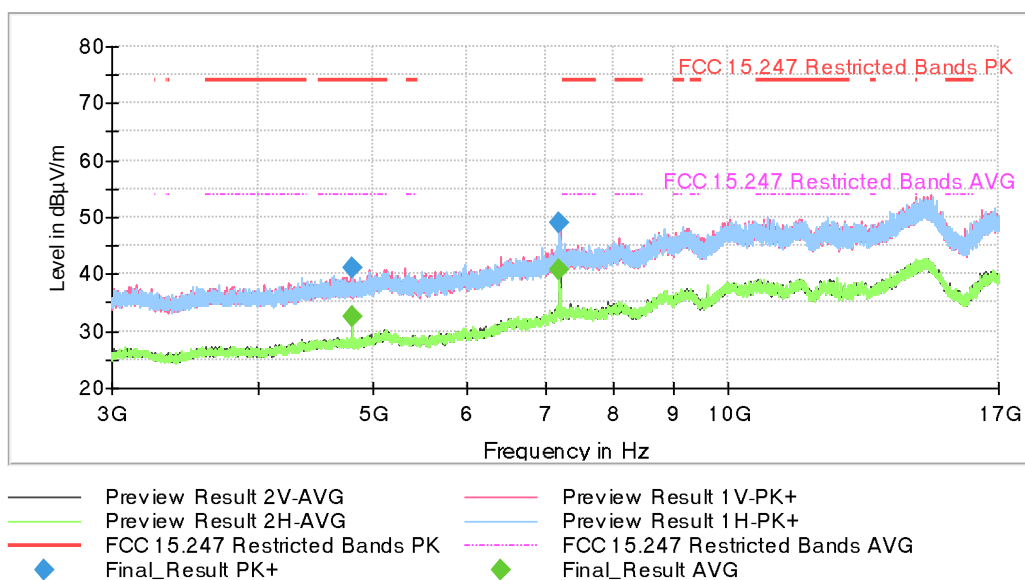
- High Channel:



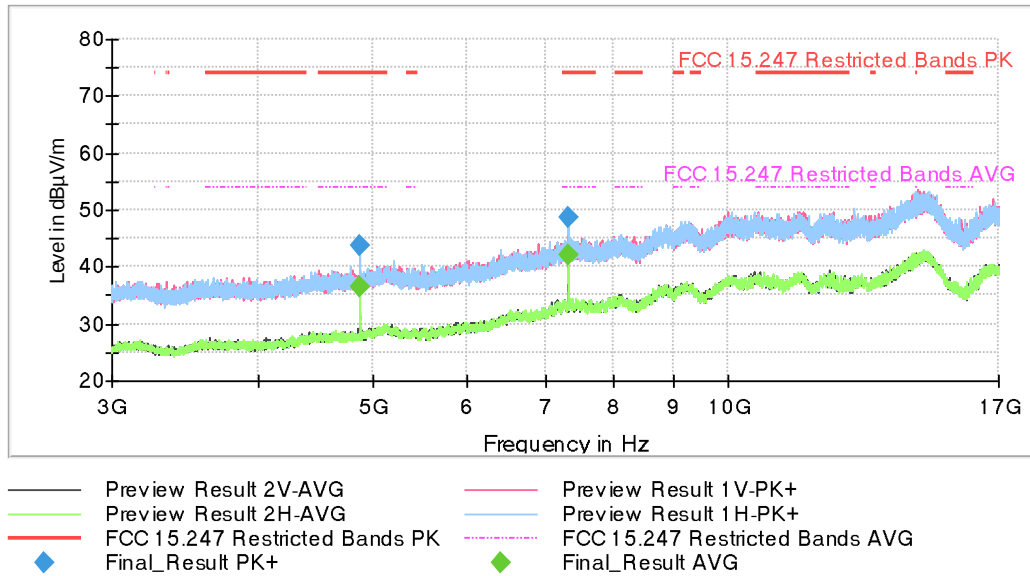
The peak above the limit is the carrier frequency.

FREQUENCY RANGE 3 GHz – 17 GHz:

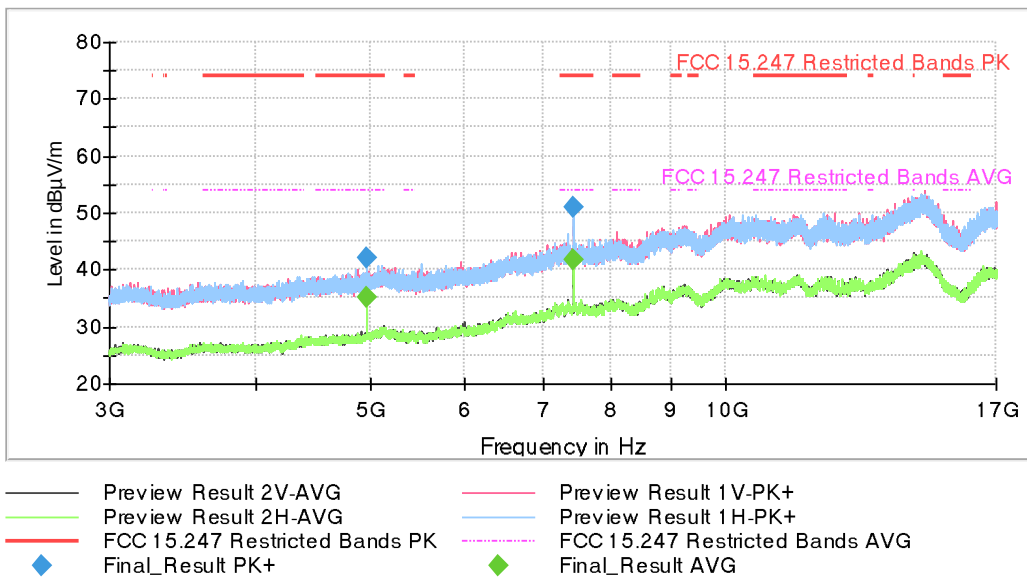
- Low Channel:



- Middle Channel:

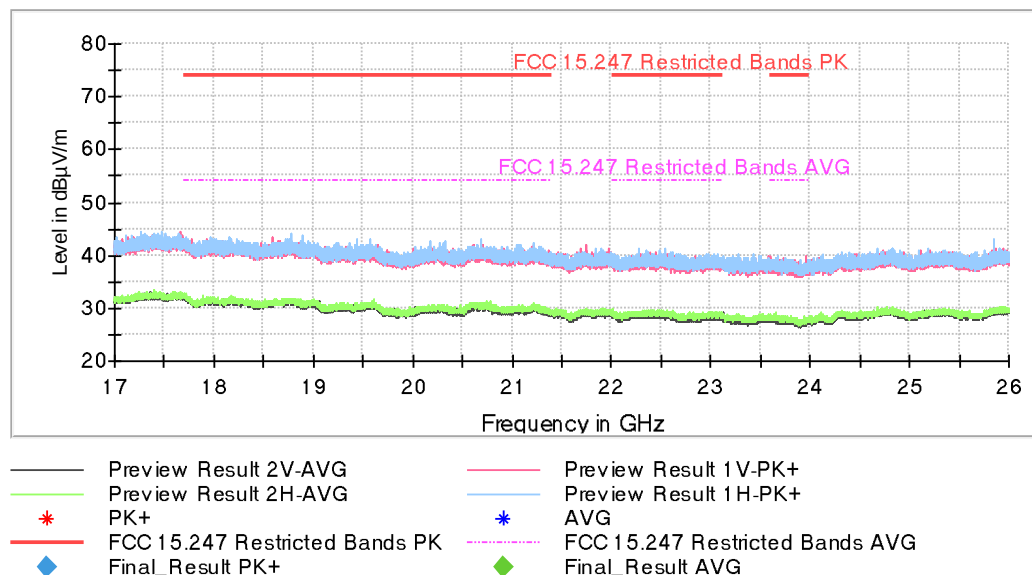


- High Channel:



FREQUENCY RANGE 17 GHz – 26 GHz:

The spurious frequencies do not depend on the operating channel.

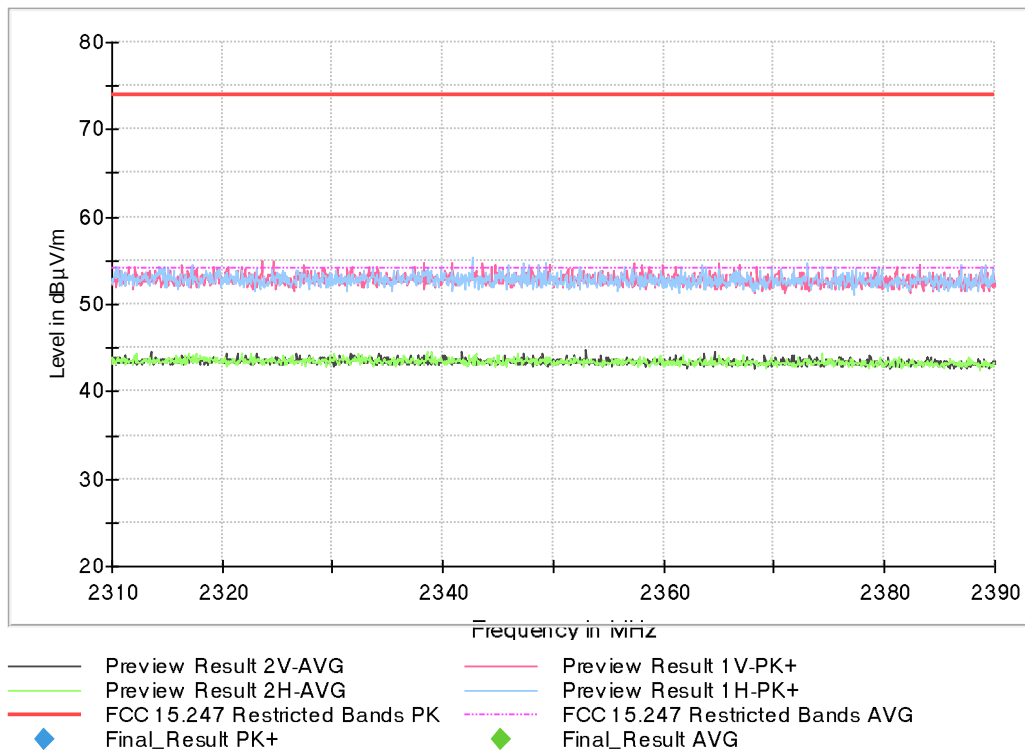


This plot is valid for the Low, Middle and High Channels.

FREQUENCY RANGE 2.31 GHz – 2.39 GHz:

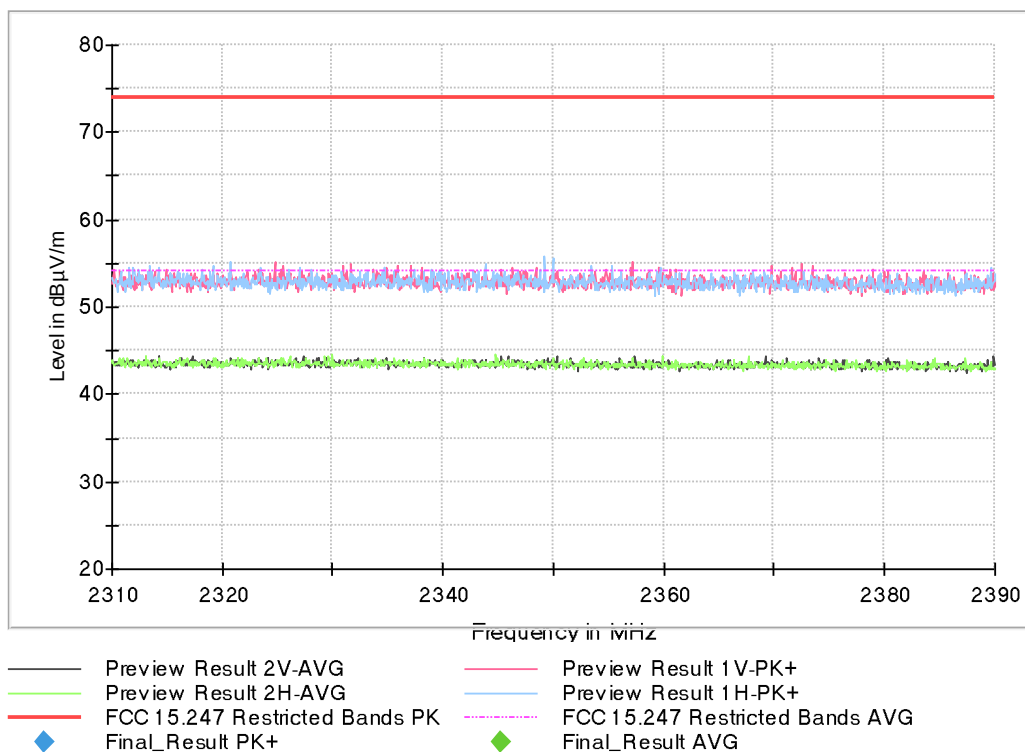
- Low Channel:

Full Spectrum



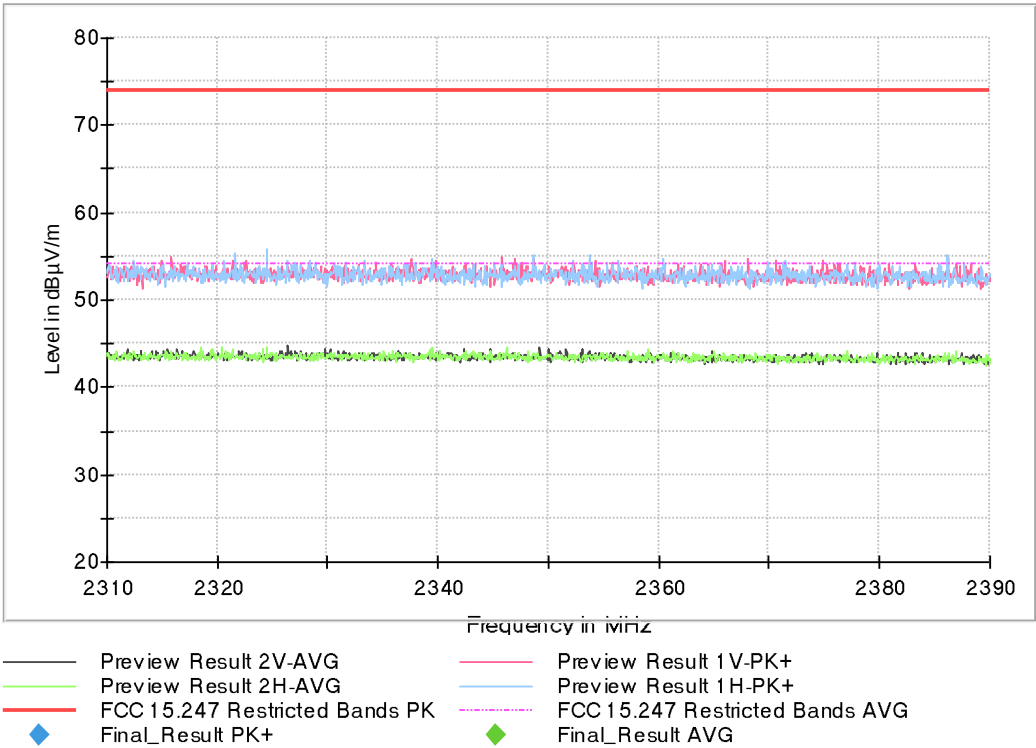
- Middle Channel:

Full Spectrum



- High Channel:

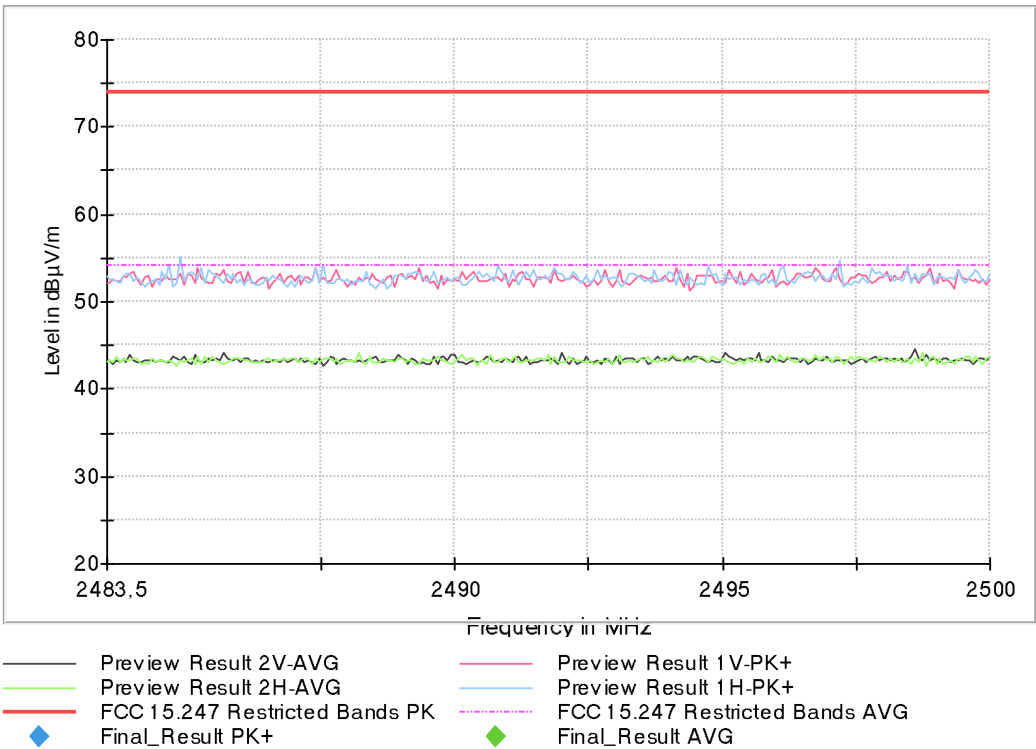
Full Spectrum



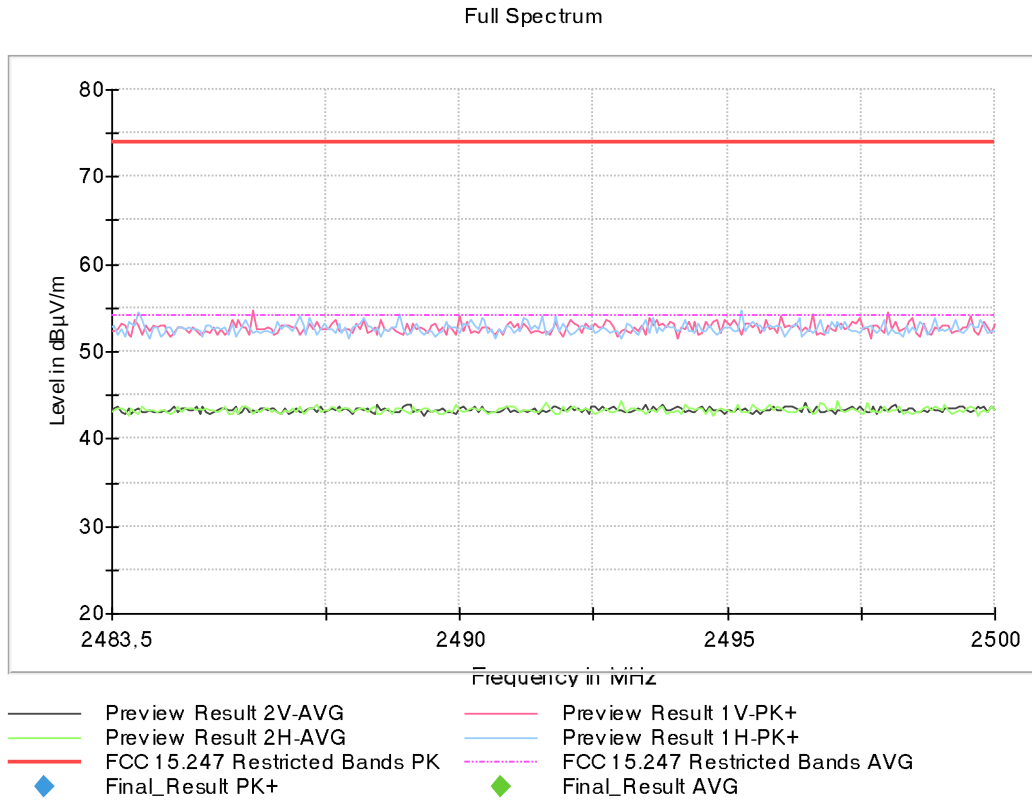
FREQUENCY RANGE 2.4835 GHz – 2.5 GHz:

- Low Channel:

Full Spectrum



- Middle Channel:



- High Channel:

