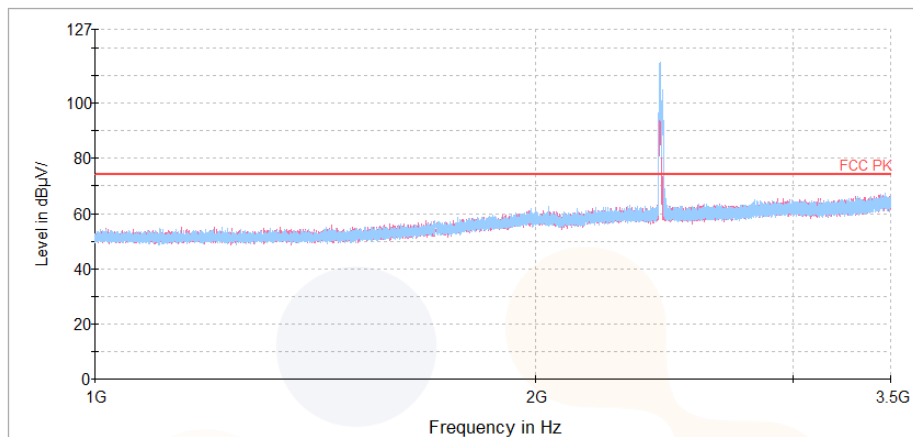
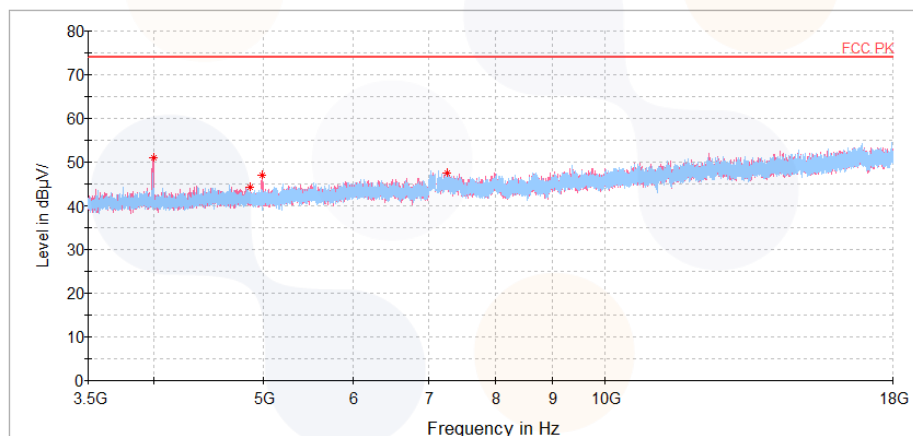
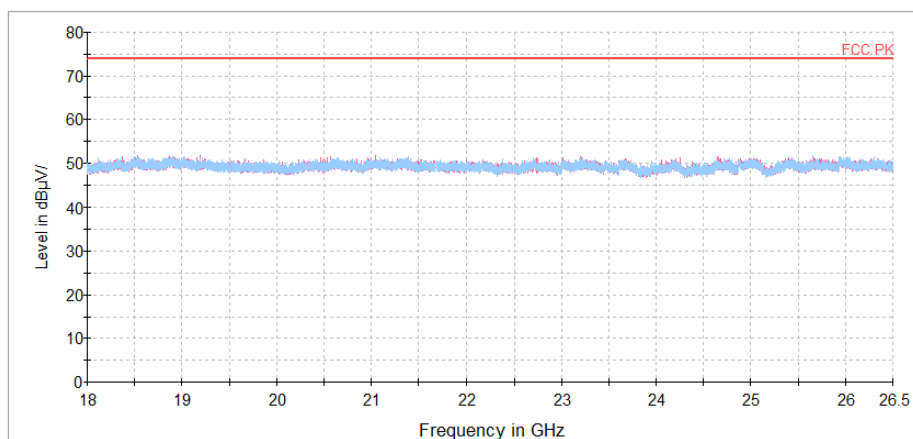


Plot of Harmonics and Spurious Emissions

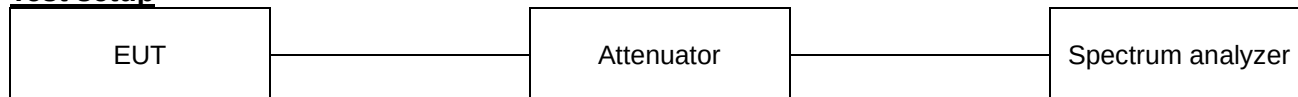
In order to simplify the report, attached plots were only the lowest margin condition

[DC 5 V] 802.11ax_HE20 RU mode (52T / RU offset 38)_Middle Channel (2 437 MHz)

Horizontal/Vertical for 1 GHz ~ 3.5 GHz**Horizontal/Vertical for 3.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 26.5 GHz**

7.5. Conducted Spurious Emission

Test setup



Limit

According to §15.247(d) and RSS-247(5.5), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operation, 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 averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation specified in §15.209(a) is not required. In addition, radiated emission limits specified in §15.209(a) (see §15.205(c)).

Limit : 20 dBc

Test procedure

ANSI C63.10 - Section 11.11.3, 14.3.3

KDB 558074 D01 v05 - Section 8.5

KDB 662911 D01 v02r01 – section (E)(3)(b)

Test settings

Establish an emission level by using the following procedure:

- 1) Set the center frequency and span to encompass frequency range to be measured.
- 2) Set the RBW = 100 kHz
- 3) Set the VBW $\geq [3 \times \text{RBW}]$
- 4) Detector = peak
- 5) Sweep time = auto couple
- 6) Trace mode = max hold
- 7) Allow trace to fully stabilize.
- 8) Use the peak marker function to determine the maximum amplitude level.

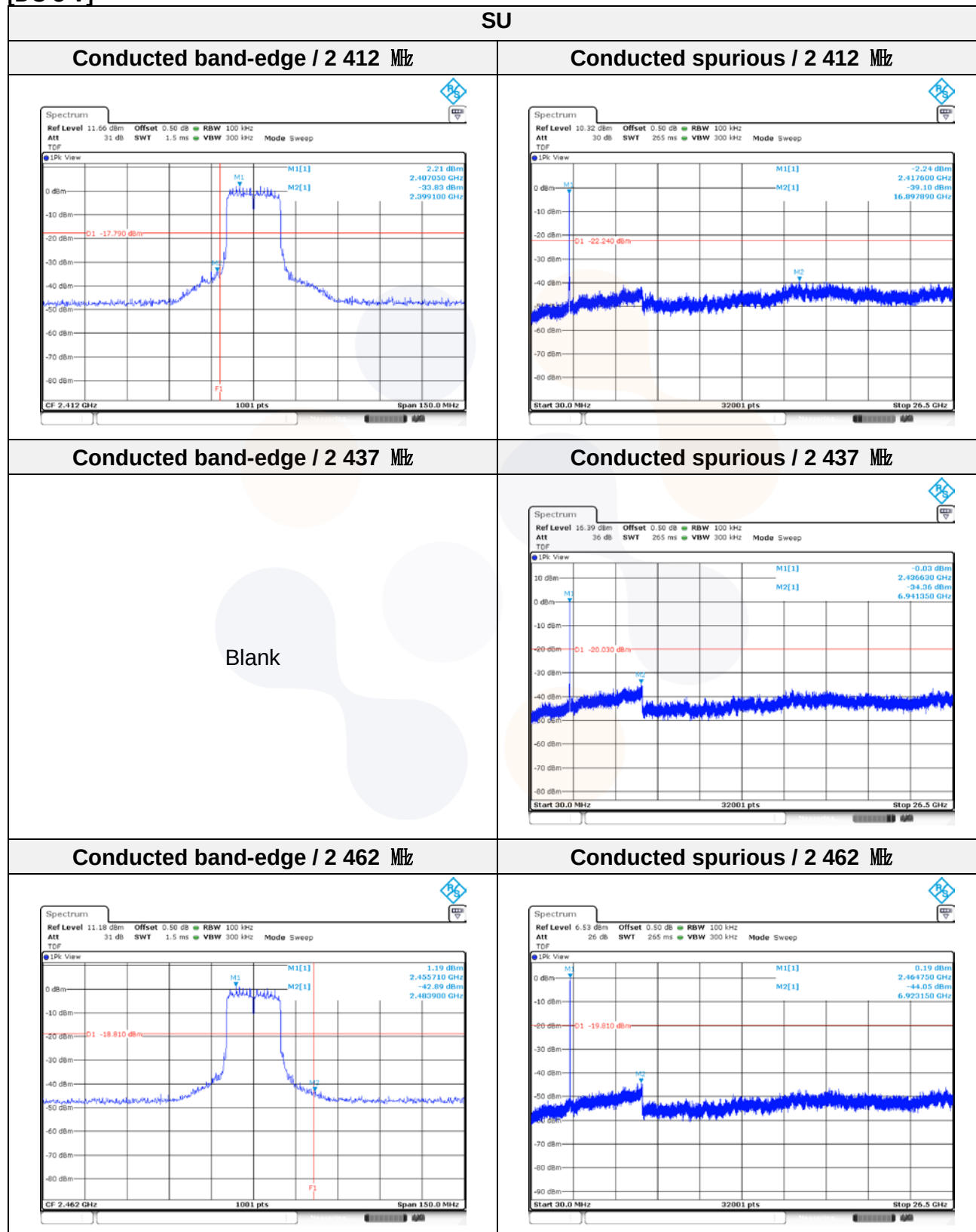
Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

Notes:

1. For the conducted spurious, it was tested at the RU allocation with actual highest power and RU allocation with actual highest PSD for channel

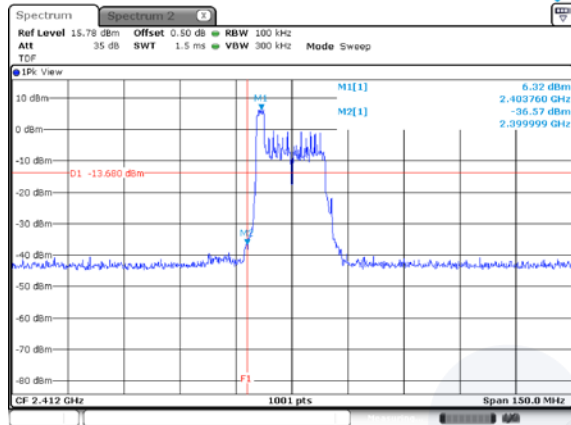
Test results

[DC 5 V]



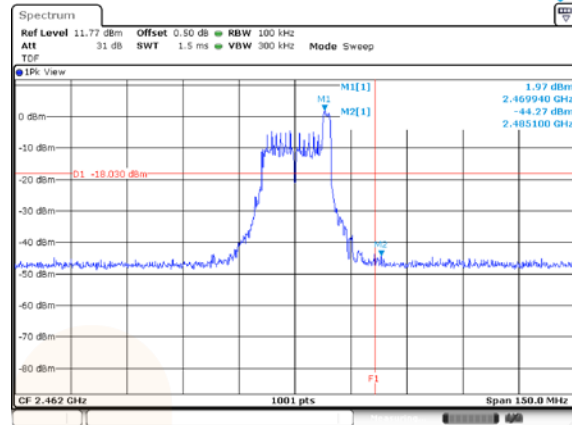
26T / RU offset 0

Conducted band-edge / 2 412 MHz



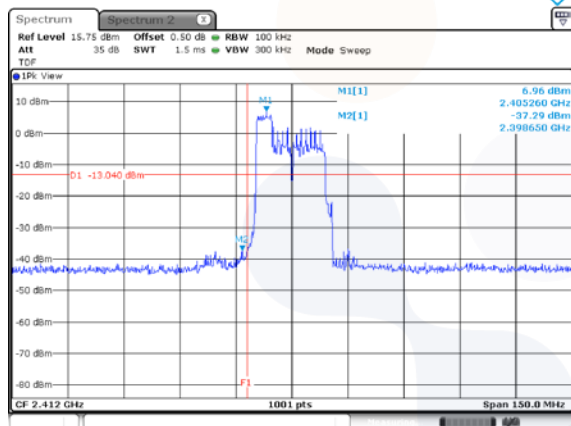
26T / RU offset 8

Conducted band-edge / 2 462 MHz



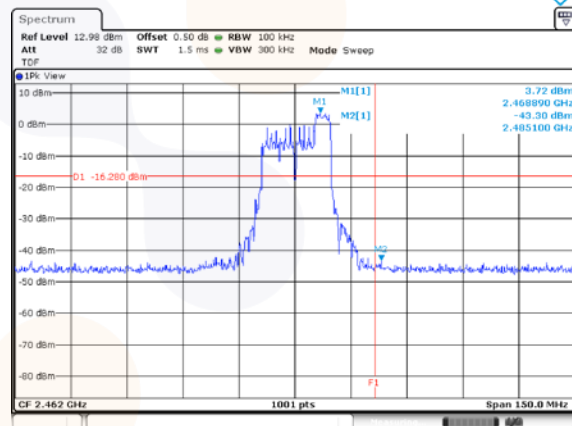
52T / RU offset 37

Conducted band-edge / 2 412 MHz



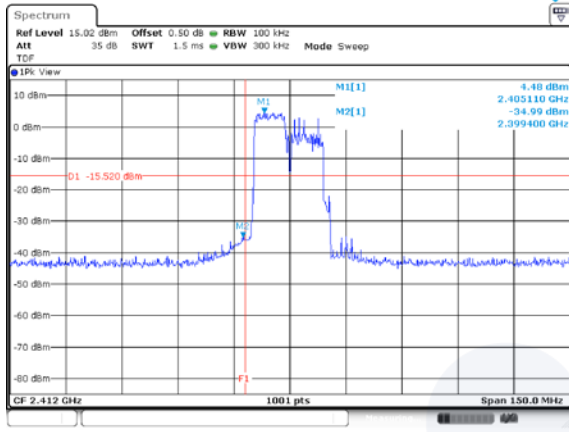
52T / RU offset 40

Conducted band-edge / 2 462 MHz



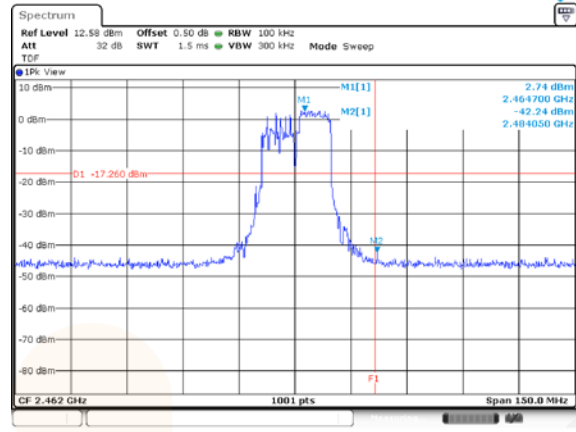
106T / RU offset 53

Conducted band-edge / 2 412 MHz



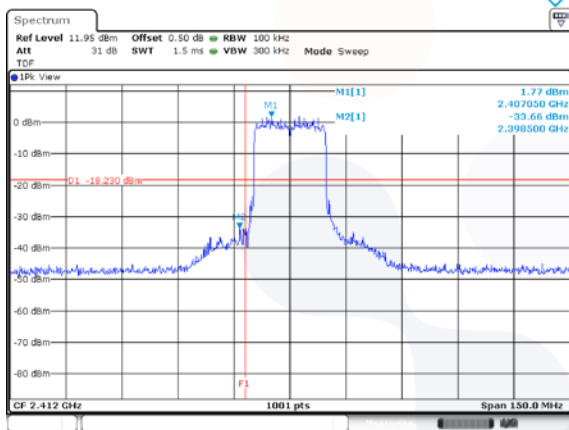
106T / RU offset 54

Conducted band-edge / 2 462 MHz

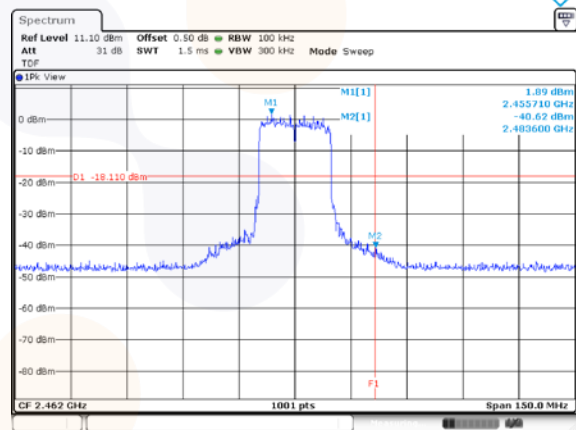


242T / RU offset 61

Conducted band-edge / 2 412 MHz

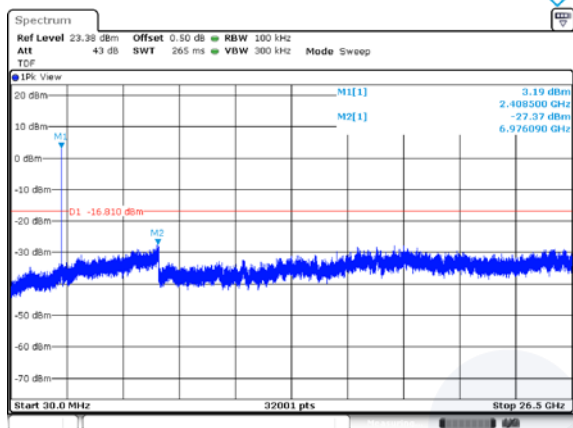


Conducted band-edge / 2 462 MHz



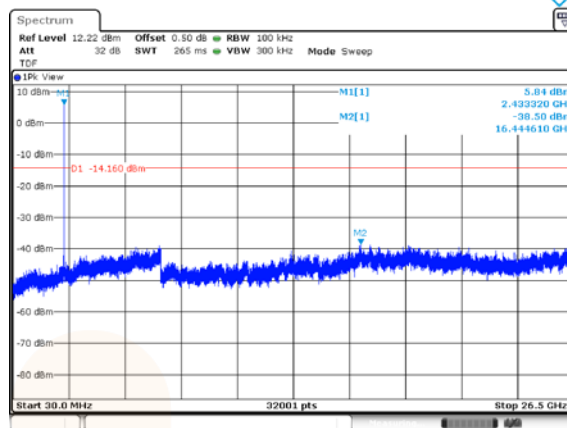
26T / RU offset 4

Conducted spurious / 2 412 MHz



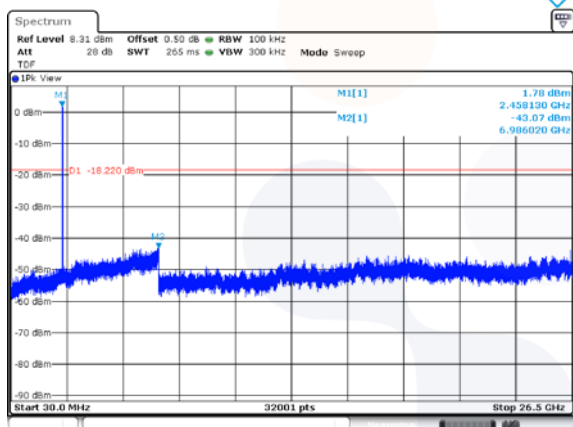
26T / RU offset 4

Conducted spurious / 2 437 MHz



26T / RU offset 4

Conducted spurious / 2 462 MHz

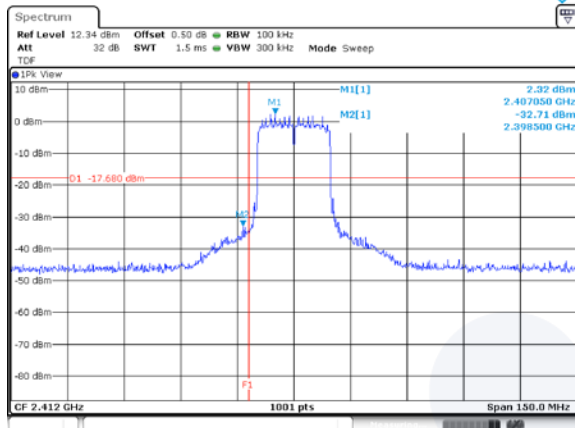


Blank

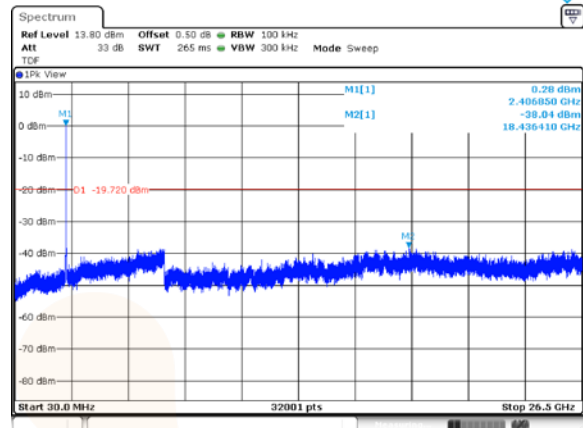
[DC 12 V]

SU

Conducted band-edge / 2 412 MHz



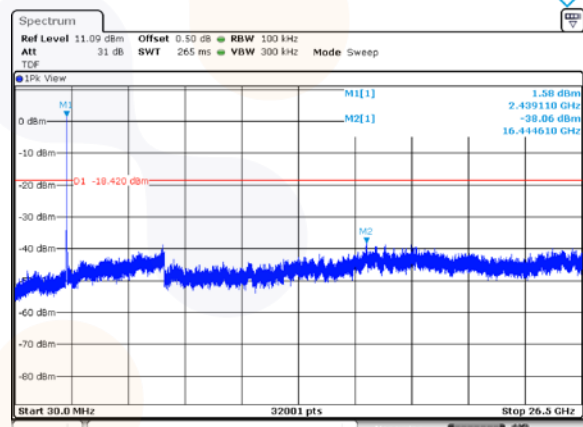
Conducted spurious / 2 412 MHz



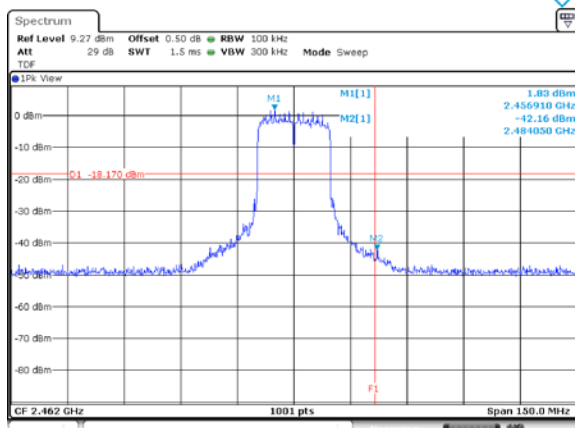
Conducted band-edge / 2 437 MHz

Blank

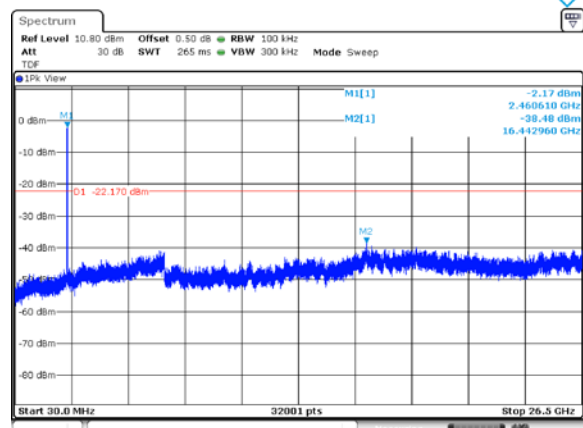
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

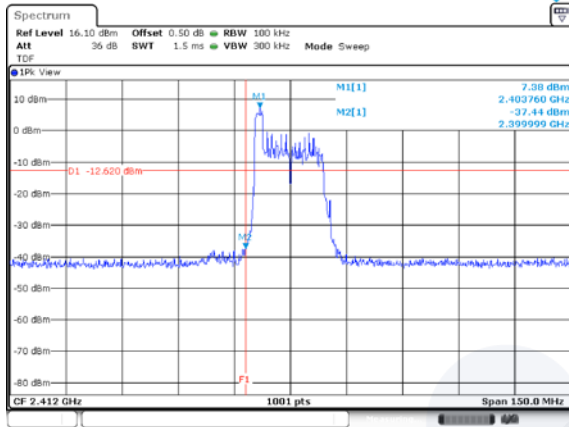


Conducted spurious / 2 462 MHz



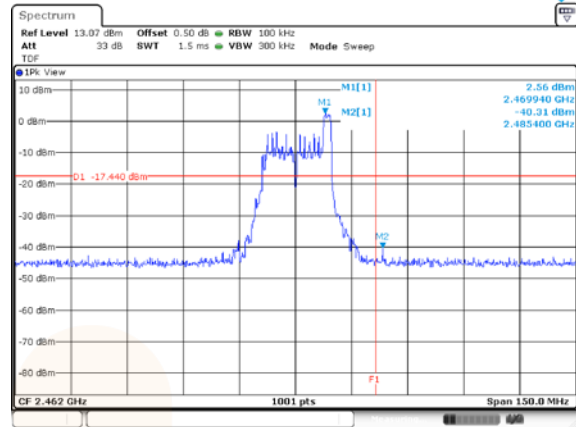
26T / RU offset 0

Conducted band-edge / 2 412 MHz



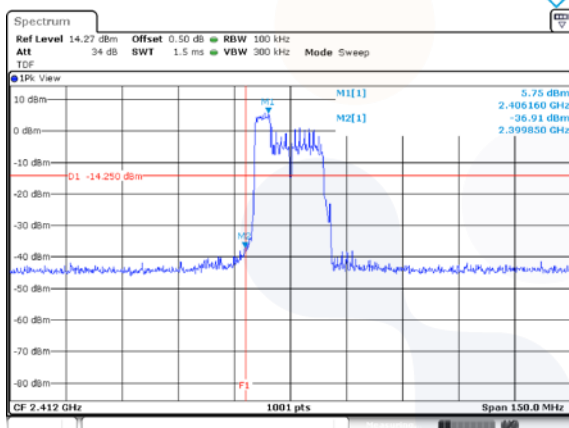
26T / RU offset 8

Conducted band-edge / 2 462 MHz



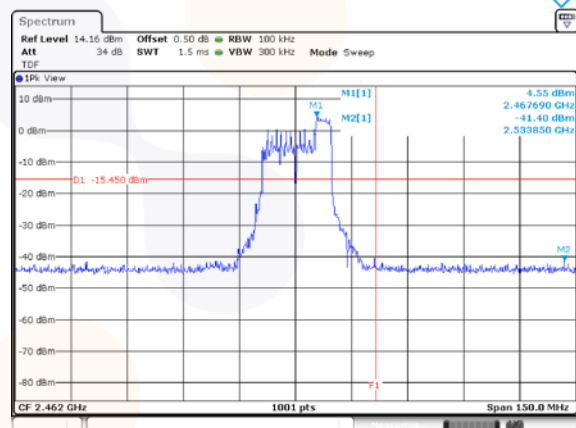
52T / RU offset 37

Conducted band-edge / 2 412 MHz



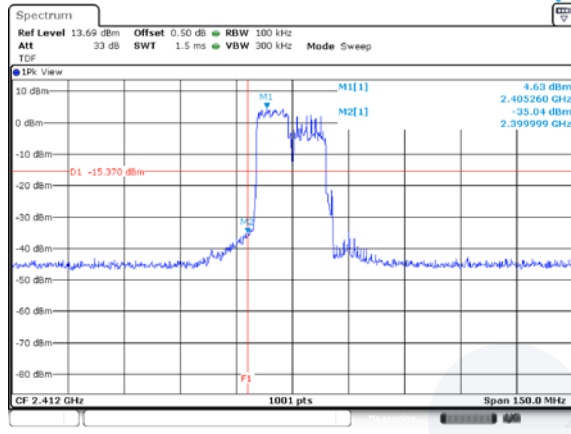
52T / RU offset 40

Conducted band-edge / 2 462 MHz



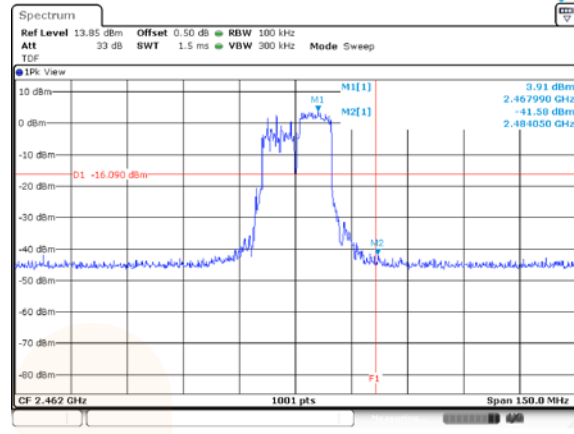
106T / RU offset 53

Conducted band-edge / 2 412 MHz



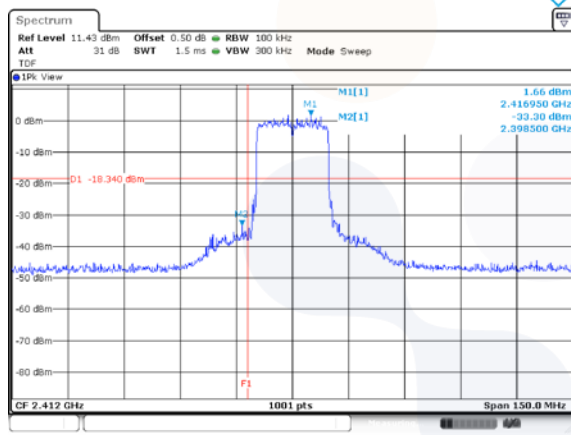
106T / RU offset 54

Conducted band-edge / 2 462 MHz

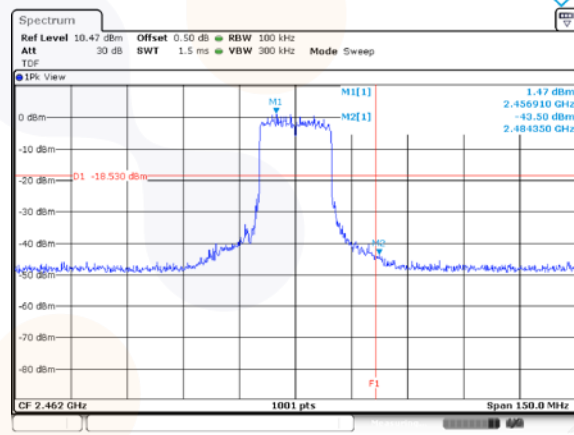


242T / RU offset 61

Conducted band-edge / 2 412 MHz

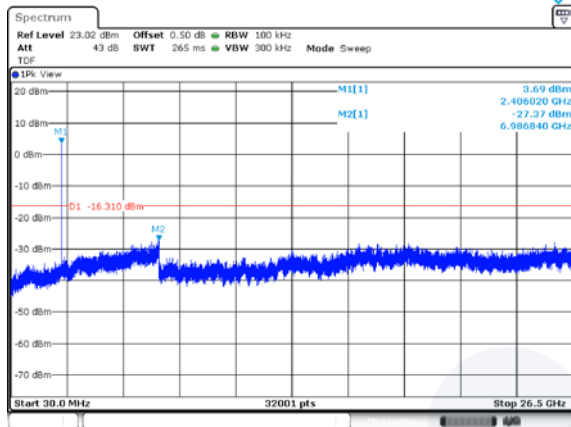


Conducted band-edge / 2 462 MHz



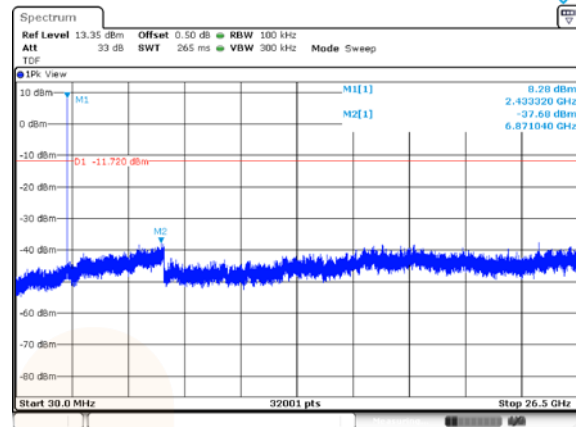
26T / RU offset 4

Conducted spurious / 2 412 MHz



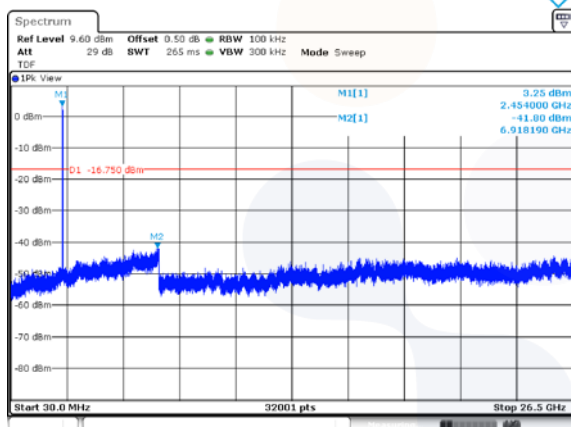
26T / RU offset 4

Conducted spurious / 2 437 MHz



26T / RU offset 4

Conducted spurious / 2 462 MHz



Blank

8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100732	25.07.02
DC Power Supply	AGILENT	E3632A	MY40016393	25.07.01
Signal Generator	R&S	SMB100A	176206	25.01.18
Vector Signal Generator	R&S	SMBV100A	257566	25.07.01
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT01	24.10.16
Power Sensor	R&S	NRP-Z81	1137.9009.02-106224-tg	25.07.01
Attenuator	R&S	DNF	0008	25.01.18
Antenna Mast	Innco Systems	MA4640-XP-ET	MA4000/396/30810213/L	-
Controller	Innco Systems	CO3000	1175/45850319/P	-
Spectrum Analyzer	R&S	FSV40	100989	24.10.12
Horn antenna	ETS.lindgren	3117	00251528	25.01.26
Horn antenna	ETS.lindgren	3116	00086635	25.01.25
AMPLIFIER	B&Z Technologies	BZRT-00504000-481055-382525	26299-27735	25.06.24
AMPLIFIER	B&Z Technologies	BZR-0050400-551028-252525	27736	25.06.24
Attenuator	API Inmet	40AH2W-10	12	25.04.30
High pass Filter	WT	WT-A1698-HS	WT160411001	25.04.25
High pass Filter	WT	WT-A1699-HS	WT160411002	25.04.25
High pass Filter	Qotana	DBHF058004000A	20070100016	25.06.24
Signal Generator	R&S	SMB100A	176206	25.01.18
EMI TEST RECEIVER	R&S	ESCI7	100732	25.02.28
Bi-Log Antenna	TESEQ	CBL 6112D	62438	25.05.25
Amplifier	SONOMA INSTRUMENT	310N	284608	25.08.13
ATTENUATOR	KEYSIGHT	8491B-6dB	MY39271082	25.05.25
LOOP Antenna	R&S	HFH2-Z2	100355	26.06.25
ISOLATION TRANSFORMER	ONETECH CO.,LTD	OT-IT500VA	OTR1-16026	25.03.21
Antenna Mast	Innco Systems	MA4640/800-XP-ET	-	-
Turn Table	Innco Systems	DT2000	79	-
TWO-LINE V - NETWORK	R&S	ENV216	101358	25.03.27
EMI TEST RECEIVER	R&S	ESCI3	100001	25.08.12

End of test report