

SISO Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 881.37 ¹⁾	V	54.80	32.63	-47.66	-	39.77	74.00	34.23
7 291.75 ¹⁾	V	52.80	37.08	-46.41	-	43.47	74.00	30.53
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (242T / RU offset 61)_Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 907.47 ¹⁾	H	54.90	32.73	-47.55	-	40.08	74.00	33.92
7 252.60 ¹⁾	H	53.20	37.01	-46.36	-	43.85	74.00	30.15
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 SU mode_Middle Channel (2 437 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 926.32 ¹⁾	H	54.60	32.81	-47.53	-	39.88	74.00	34.12
7 252.12 ¹⁾	H	52.90	37.00	-46.36	-	43.54	74.00	30.46
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (106T / RU offset 54)_Middle Channel (2 437 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 794.85 ¹⁾	V	55.00	32.38	-48.10	-	39.28	74.00	34.72
7 307.70 ¹⁾	H	53.20	36.88	-46.43	-	43.65	74.00	30.35
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_11 Channel (2 462 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 819.02 ¹⁾	H	55.20	32.34	-48.00	-	39.54	74.00	34.46
7 360.87 ¹⁾	H	53.50	36.78	-46.51	-	43.77	74.00	30.23
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_11 Channel (2 462 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 883.78 ¹⁾	V	54.20	32.64	-47.65	-	39.19	74.00	34.81
7 409.20 ¹⁾	V	54.00	36.56	-46.57	-	43.99	74.00	30.01
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_12 Channel (2 467 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 955.32 ¹⁾	V	54.60	33.03	-47.50	-	40.13	74.00	33.87
7 410.17 ¹⁾	V	53.10	36.56	-46.58	-	43.08	74.00	30.92
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_12 Channel (2 467 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 866.87 ¹⁾	V	54.80	32.57	-47.74	-	39.63	74.00	34.37
7 313.98 ¹⁾	V	53.20	36.87	-46.44	-	43.63	74.00	30.37
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Highest Channel (2 472 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 866.38 ¹⁾	V	55.90	32.57	-47.74	-	40.73	74.00	33.27
7 445.93 ¹⁾	V	53.90	36.42	-46.63	-	43.69	74.00	30.31
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (2 472 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 906.98 ¹⁾	V	54.60	32.73	-47.55	-	39.78	74.00	34.22
7 420.80 ¹⁾	H	53.60	36.52	-46.59	-	43.53	74.00	30.47
Average Data								
No spurious emissions were detected within 20 dB of the limit								

MIMO Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 821.92 ¹⁾	V	55.00	32.34	-47.98	-	39.36	74.00	34.64
7 279.18 ¹⁾	H	52.80	37.06	-46.40	-	43.46	74.00	30.54
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 38)_Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 889.10 ¹⁾	H	55.30	32.66	-47.62	-	40.34	74.00	33.66
7 321.23 ¹⁾	V	53.00	36.86	-46.45	-	43.41	74.00	30.59
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Middle Channel (2 437 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 857.20 ¹⁾	V	54.90	32.53	-47.79	-	39.64	74.00	34.36
7 298.52 ¹⁾	V	53.00	37.10	-46.42	-	43.68	74.00	30.32
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (2 437 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 906.02 ¹⁾	V	54.80	32.72	-47.55	-	39.97	74.00	34.03
7 255.50 ¹⁾	V	54.30	37.01	-46.36	-	44.95	74.00	29.05
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_11 Channel (2 462 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 909.40 ¹⁾	V	55.00	32.74	-47.55	-	40.19	74.00	33.81
7 412.58 ¹⁾	H	53.20	36.55	-46.58	-	43.17	74.00	30.83
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_11 Channel (2 462 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 991.08 ¹⁾	H	54.00	33.25	-47.47	-	39.78	74.00	34.22
7 435.30 ¹⁾	V	52.80	36.46	-46.61	-	42.65	74.00	31.35
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_12 Channel (2 467 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 858.65 ¹⁾	V	54.60	32.53	-47.78	-	39.35	74.00	34.65
7 433.85 ¹⁾	H	53.60	36.46	-46.61	-	43.45	74.00	30.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_12 Channel (2 467 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 840.77 ¹⁾	V	54.60	32.38	-47.88	-	39.10	74.00	34.90
7 382.13 ¹⁾	H	53.10	36.74	-46.54	-	43.30	74.00	30.70
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Highest Channel (2 472 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
4 979.97 ¹⁾	H	53.90	33.18	-47.48	-	39.60	74.00	34.40
7 474.45 ¹⁾	H	53.20	36.45	-46.66	-	42.99	74.00	31.01
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_Highest Channel (2 472 MHz)

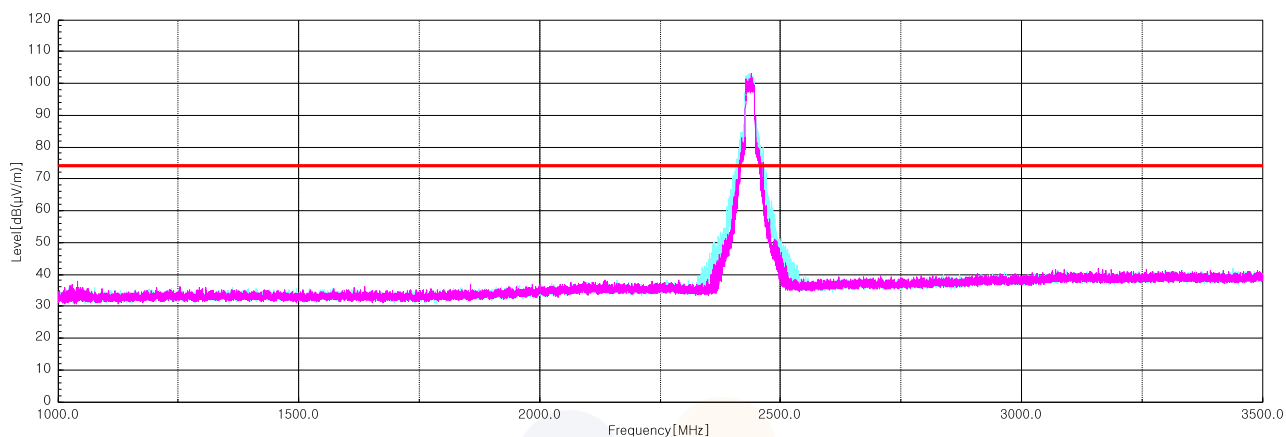
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
4 904.08 ¹⁾	H	54.20	32.72	-47.56	-	39.36	74.00	34.64
7 381.17 ¹⁾	V	53.00	36.74	-46.54	-	43.20	74.00	30.80
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

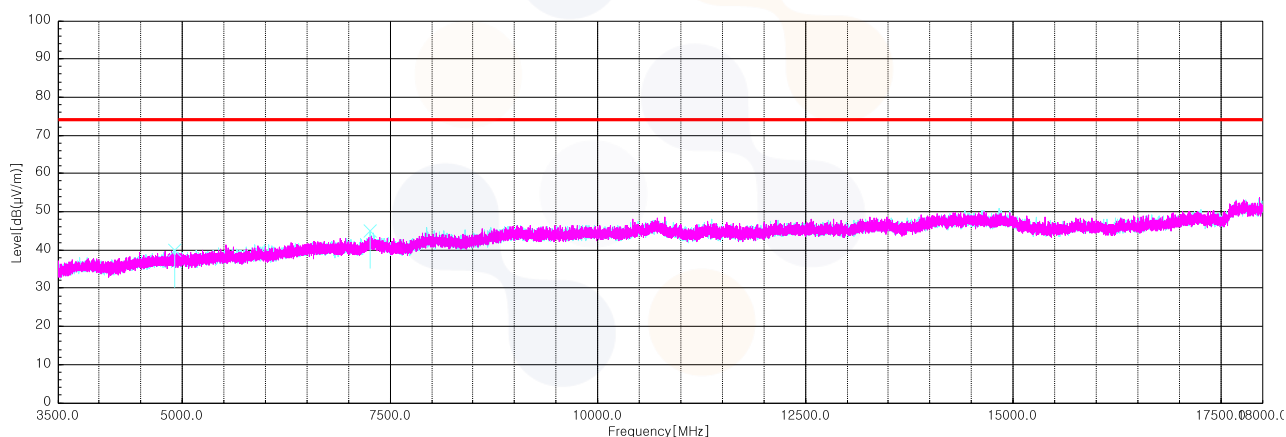
In order to simplify the report, attached plots were only the lowest margin condition

MIMO 802.11ax_HE20 RU mode (242T / RU offset 61) _ Middle Channel (2 437 MHz)

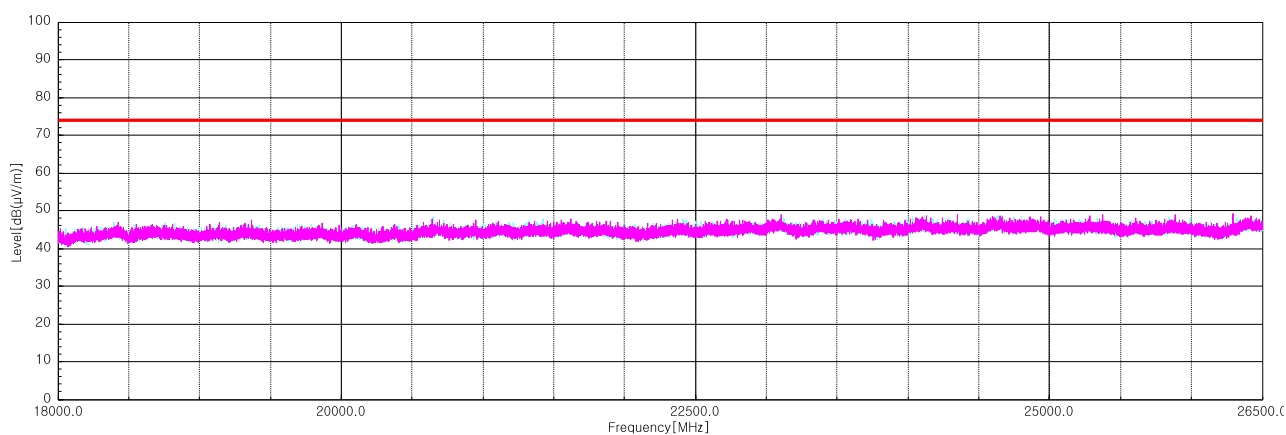
Horizontal/Vertical for 1 GHz ~ 3.5 GHz



Horizontal/Vertical for 3.5 GHz ~ 18 GHz

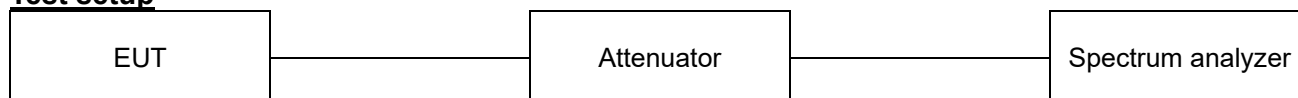


Horizontal/Vertical for 18 GHz ~ 26.5 GHz



7.5. Conducted Spurious Emission

Test setup



Limit

According to §15.247(d), 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:

For the worst case scenario of 11ax SU/RU allocation, the measurement was evaluated as below.

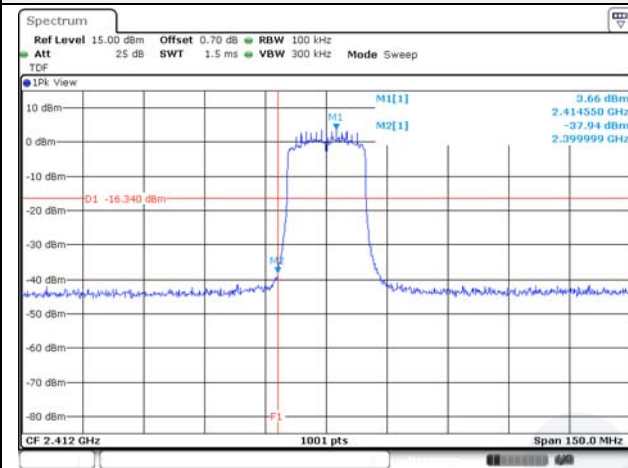
- Band Edge: 11ax SU, 11ax RU all tones/offsets with the nearest to the band edge.
- Spurious Emission: 11ax SU, 11ax RU allocation with the actual highest PSD for the channel.

Test results

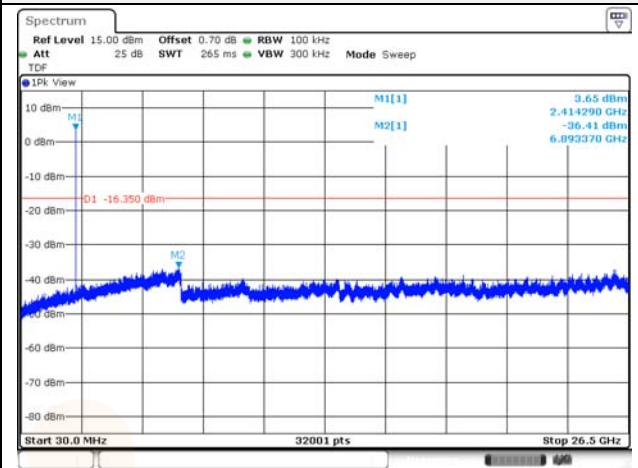
SISO

SU

Conducted band-edge / 2 412 MHz



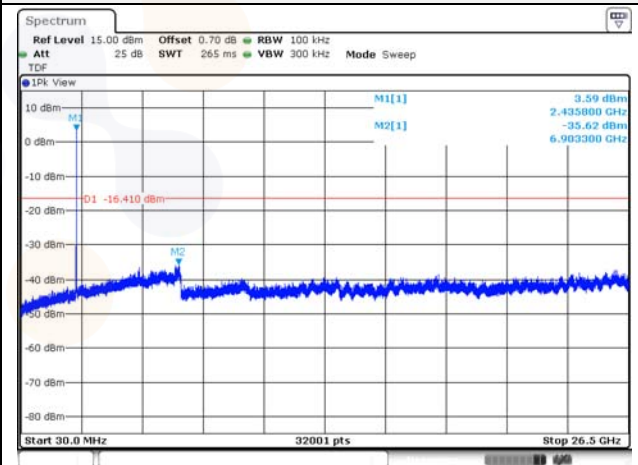
Conducted spurious / 2 412 MHz



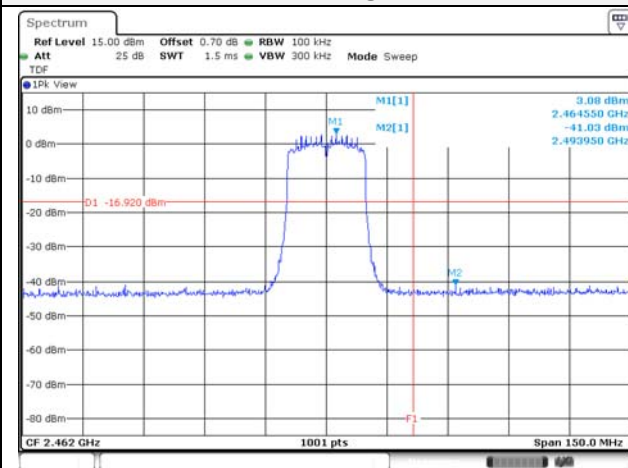
Conducted band-edge / 2 437 MHz

Blank

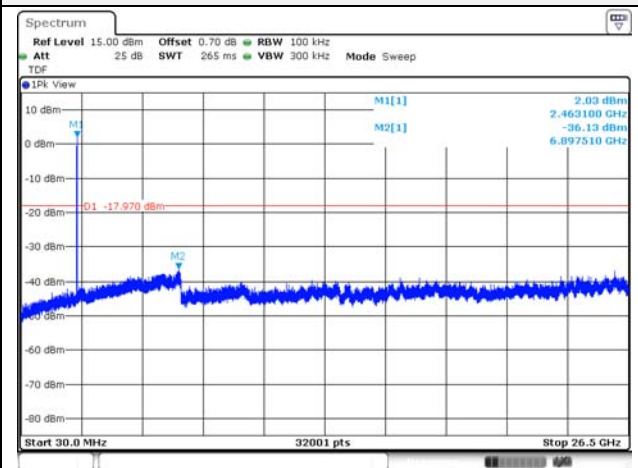
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

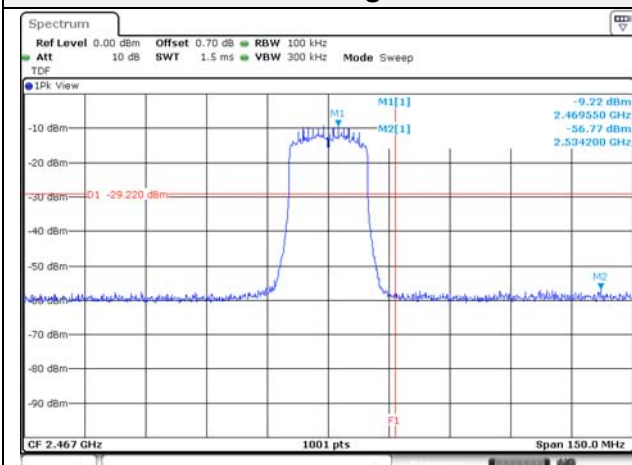


Conducted spurious / 2 462 MHz

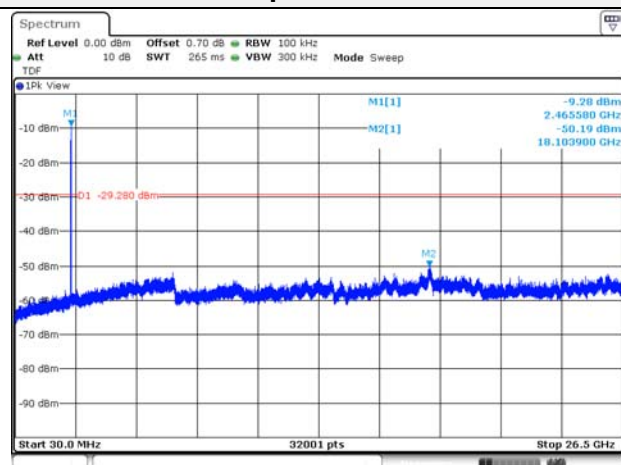


SU

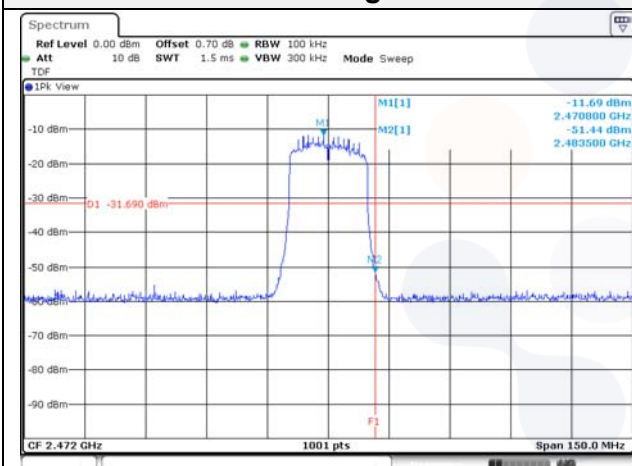
Conducted band-edge / 2 467 MHz



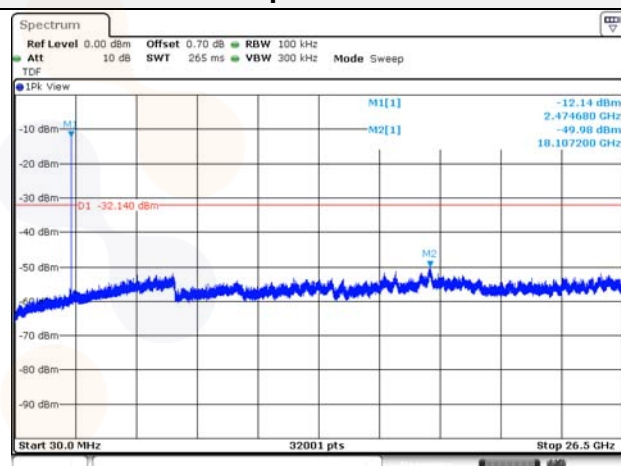
Conducted spurious / 2 467 MHz



Conducted band-edge / 2 472 MHz

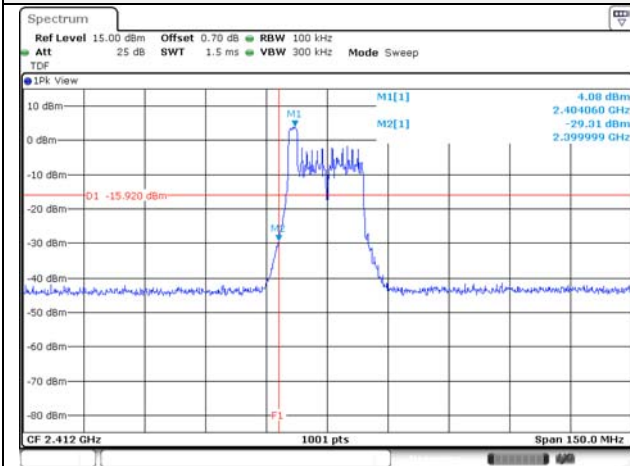


Conducted spurious / 2 472 MHz



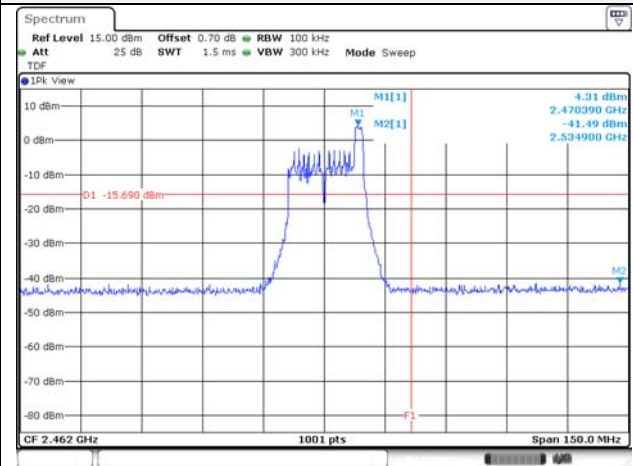
26T / RU offset 0

Conducted band-edge / 2 412 MHz



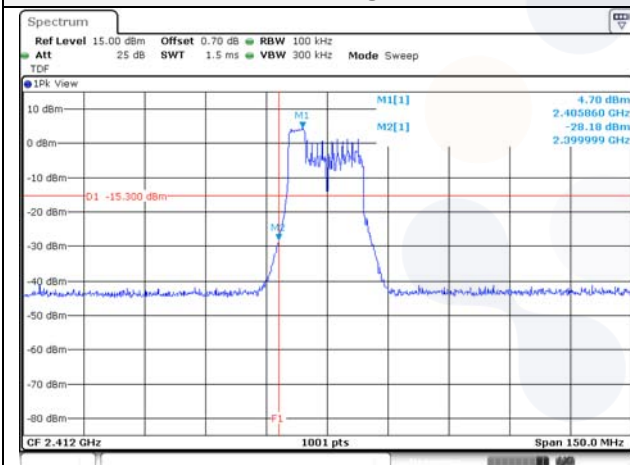
26T / RU offset 8

Conducted band-edge / 2 462 MHz



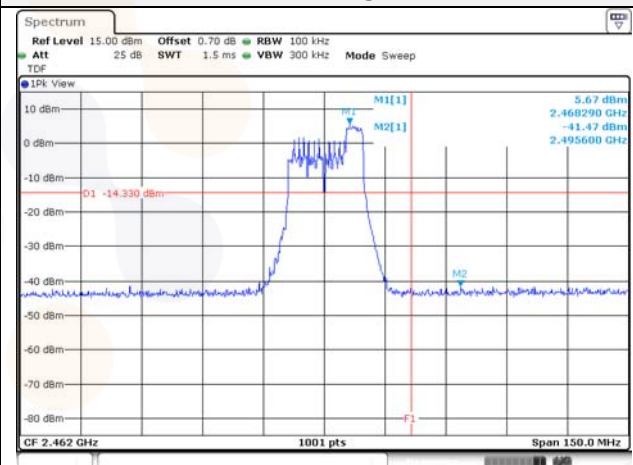
52T / RU offset 37

Conducted band-edge / 2 412 MHz



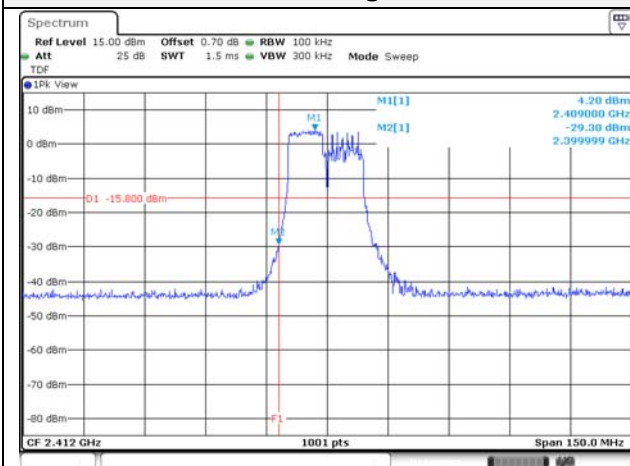
52T / RU offset 40

Conducted band-edge / 2 462 MHz



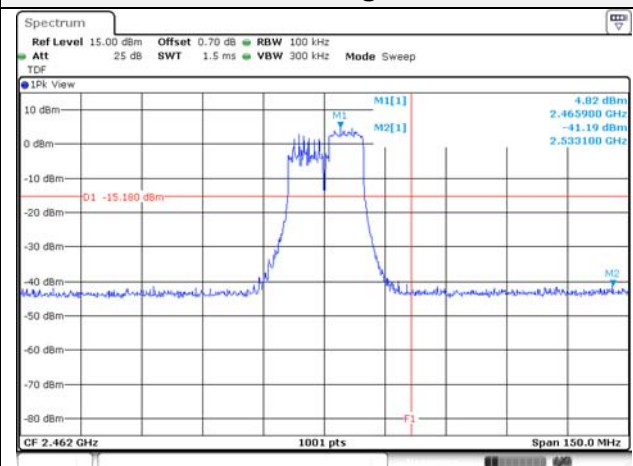
106T / RU offset 53

Conducted band-edge / 2 412 MHz



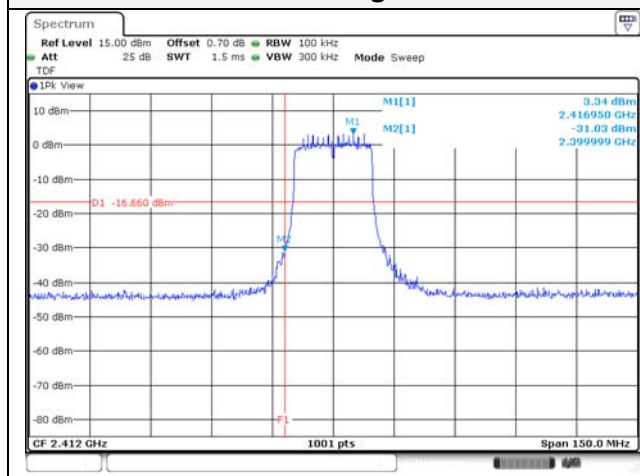
106T / RU offset 54

Conducted band-edge / 2 462 MHz

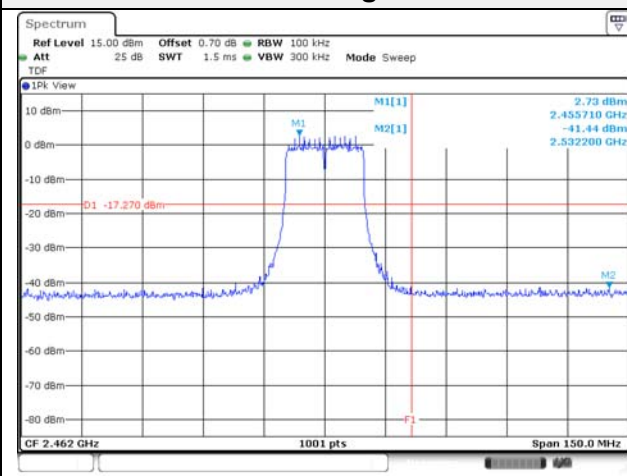


242T / RU offset 61

Conducted band-edge / 2 412 MHz

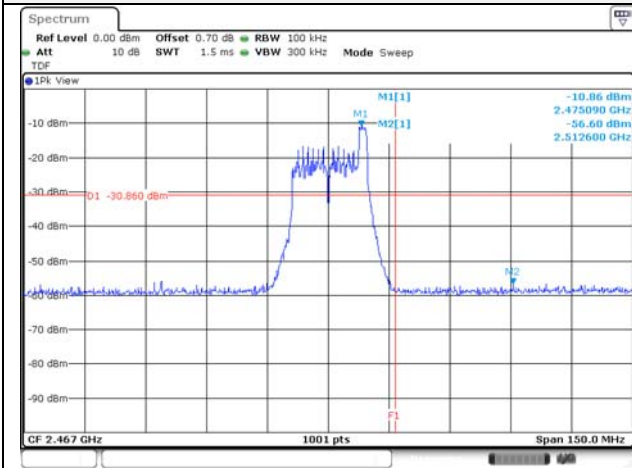


Conducted band-edge / 2 462 MHz

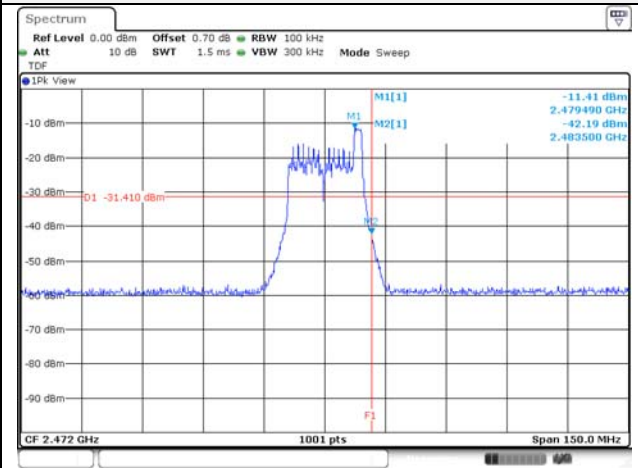


26T / RU offset 8

Conducted band-edge / 2 467 MHz

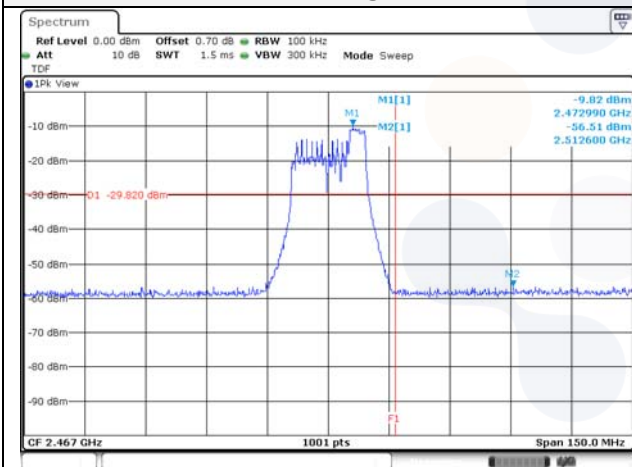


Conducted band-edge / 2 472 MHz

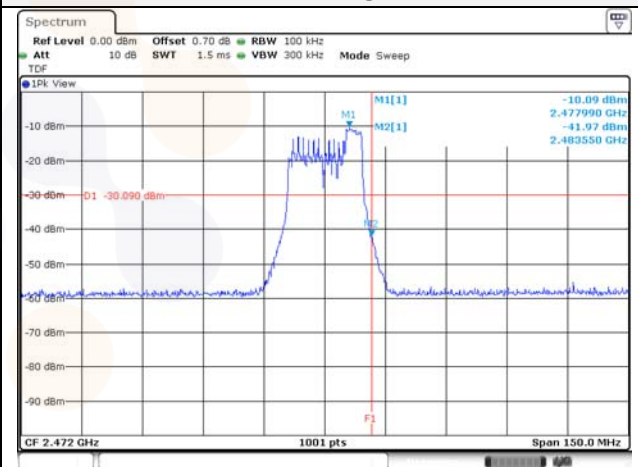


52T / RU offset 40

Conducted band-edge / 2 467 MHz

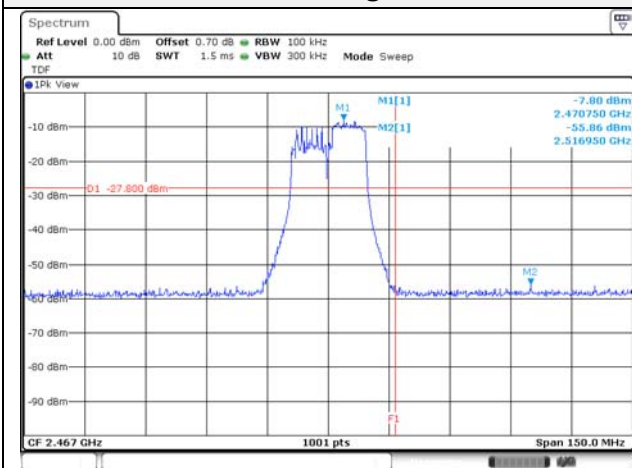


Conducted band-edge / 2 472 MHz

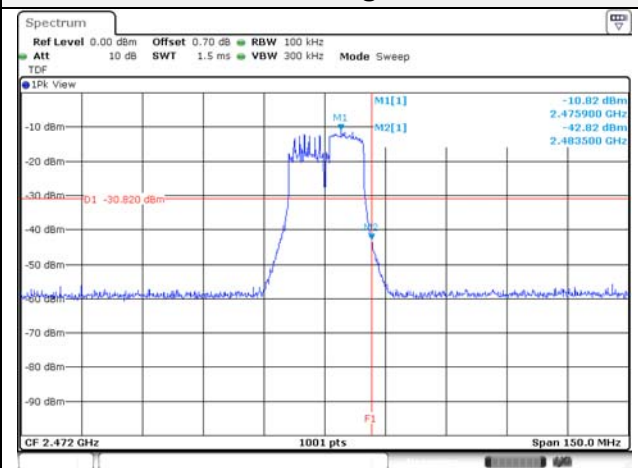


106T / RU offset 54

Conducted band-edge / 2 467 MHz

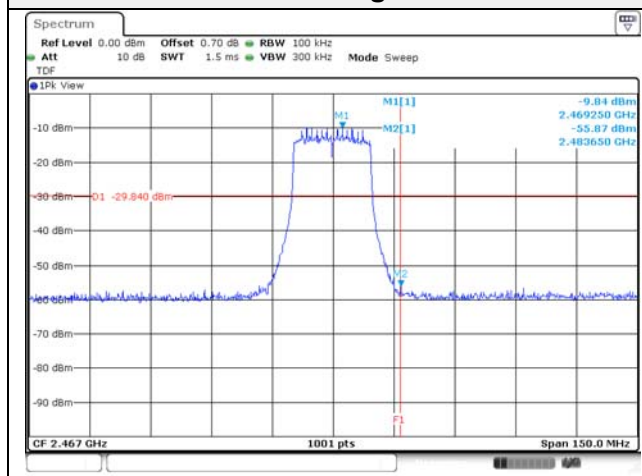


Conducted band-edge / 2 472 MHz

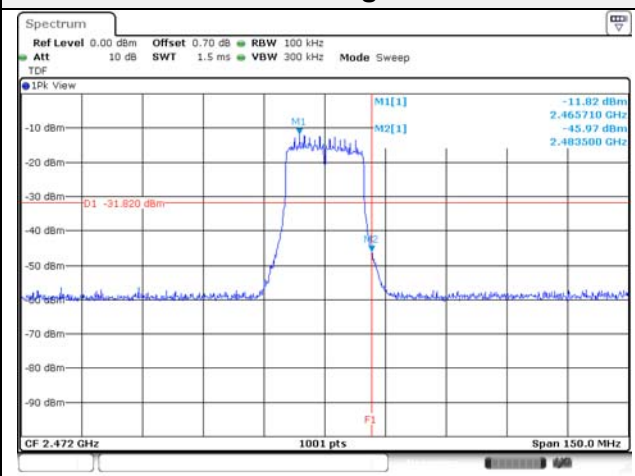


242T / RU offset 61

Conducted band-edge / 2 467 MHz

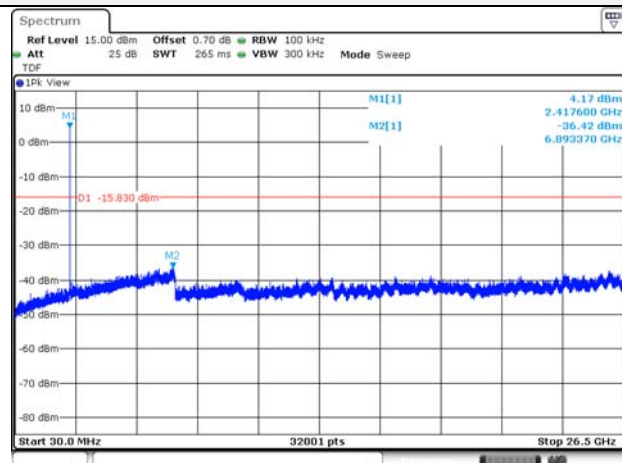


Conducted band-edge / 2 472 MHz



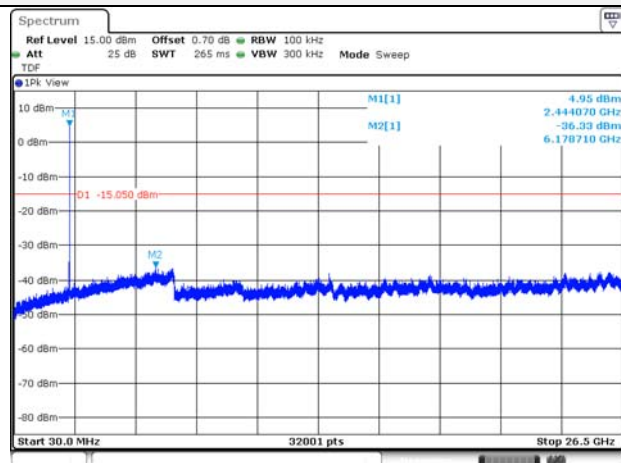
52T / RU offset 40

Conducted spurious / 2 412 MHz



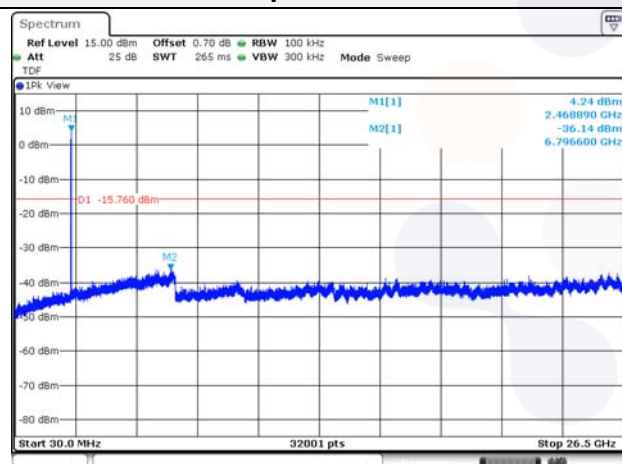
52T / RU offset 40

Conducted spurious / 2 437 MHz



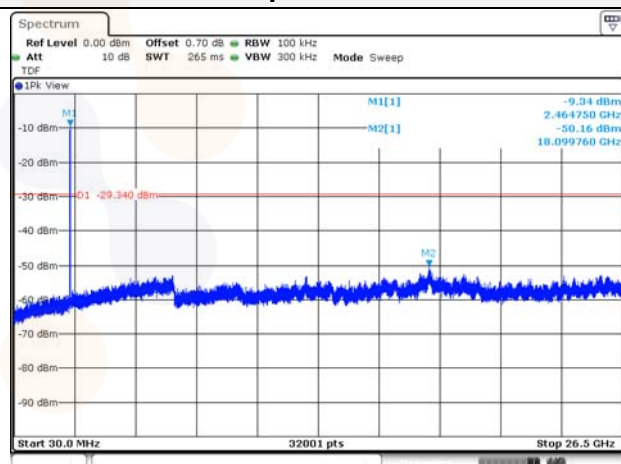
52T / RU offset 40

Conducted spurious / 2 462 MHz



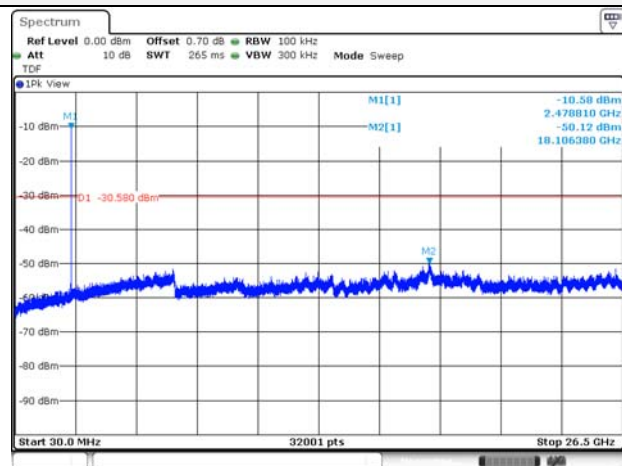
106T / RU offset 53

Conducted spurious / 2 467 MHz



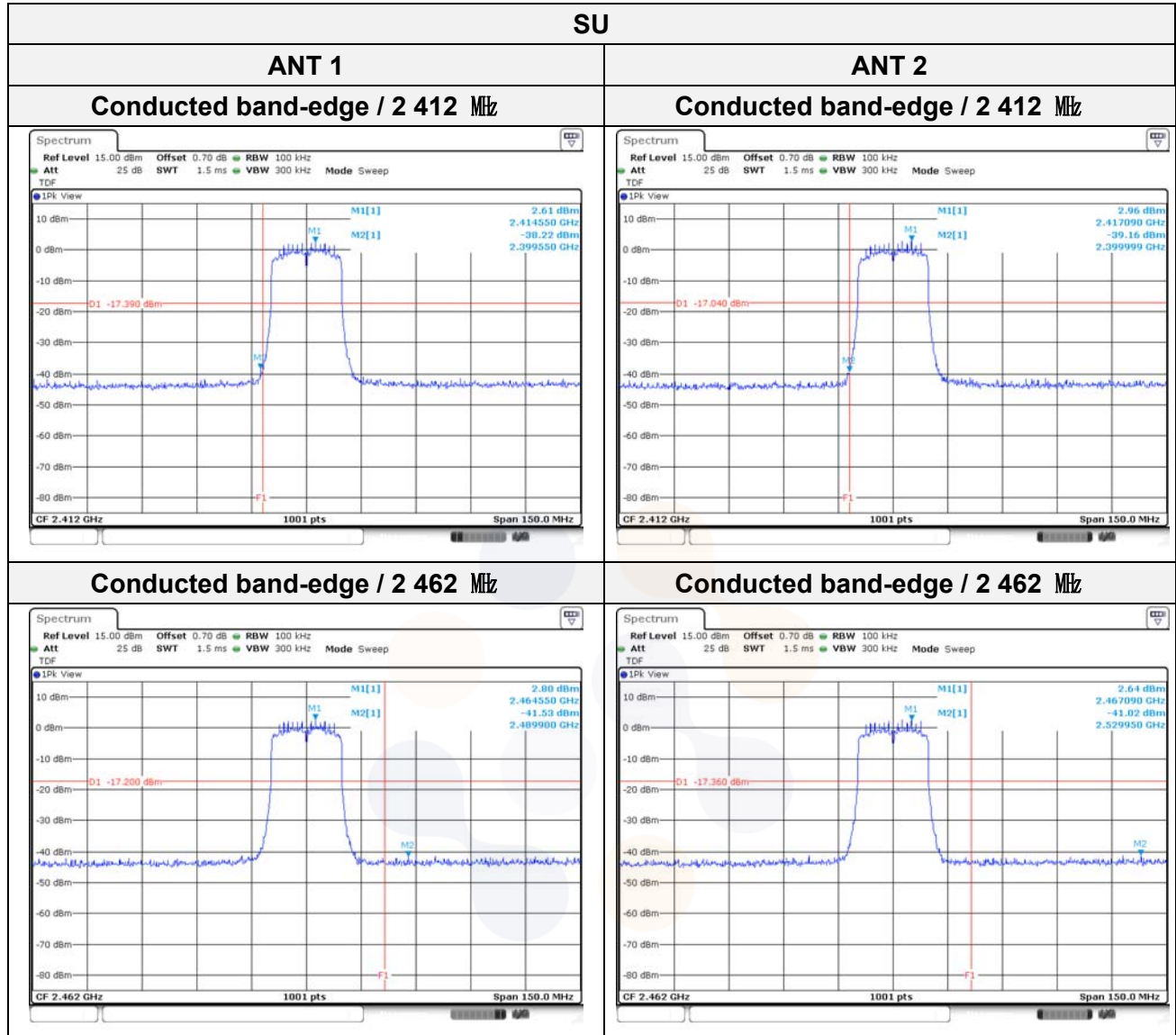
52T / RU offset 40

Conducted spurious / 2 472 MHz



Blank

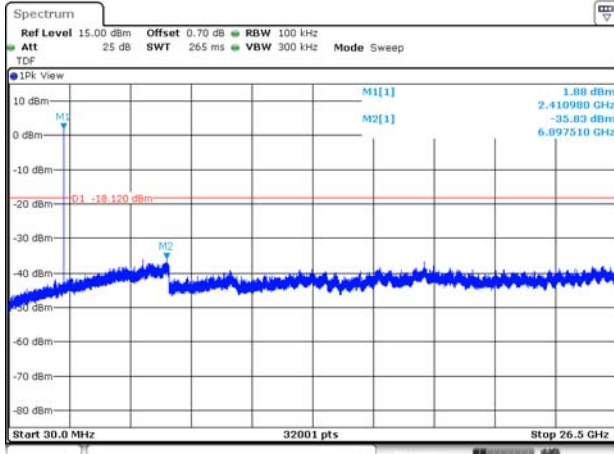
MIMO



SU

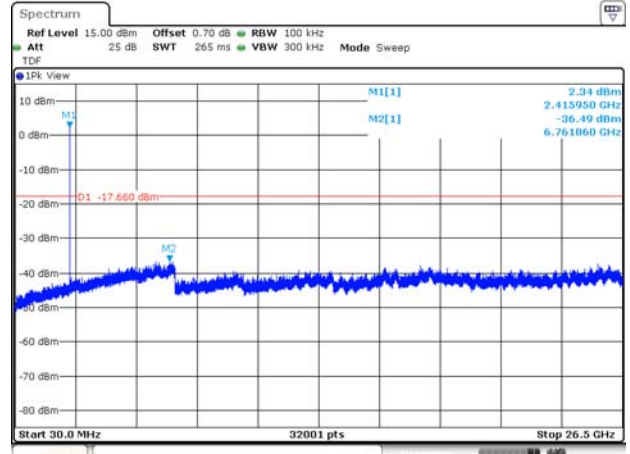
ANT 1

Conducted spurious / 2 412 MHz

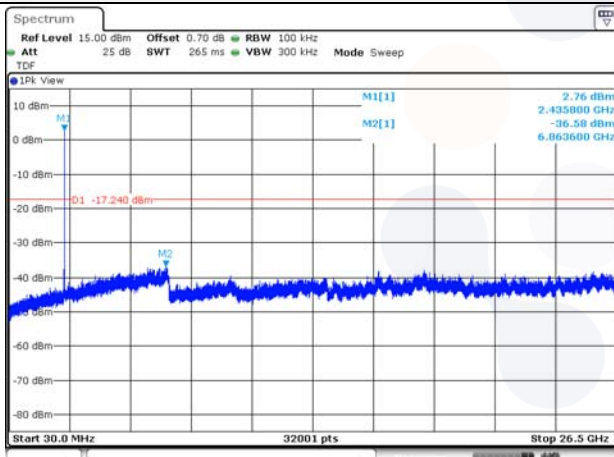


ANT 2

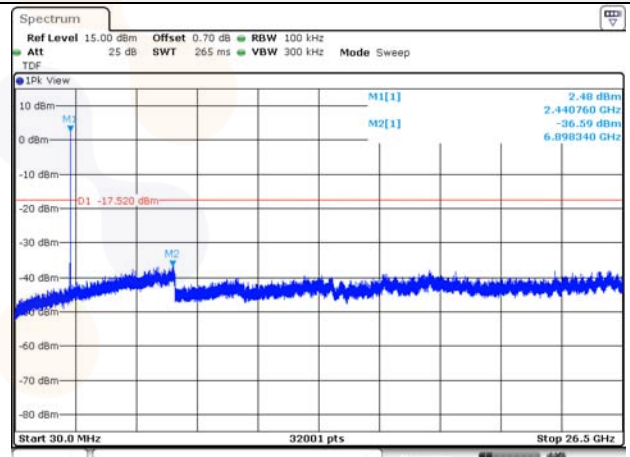
Conducted spurious / 2 412 MHz



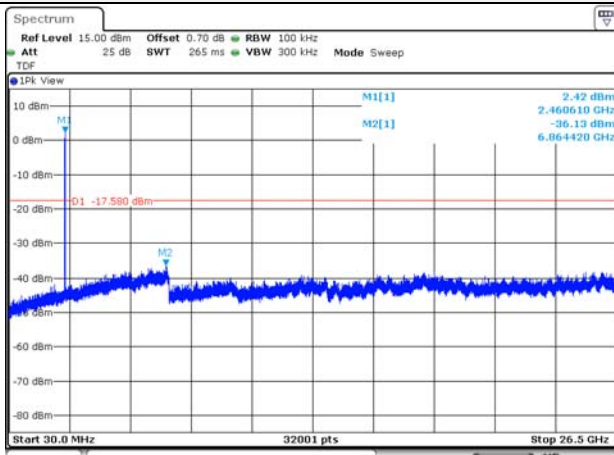
Conducted spurious / 2 437 MHz



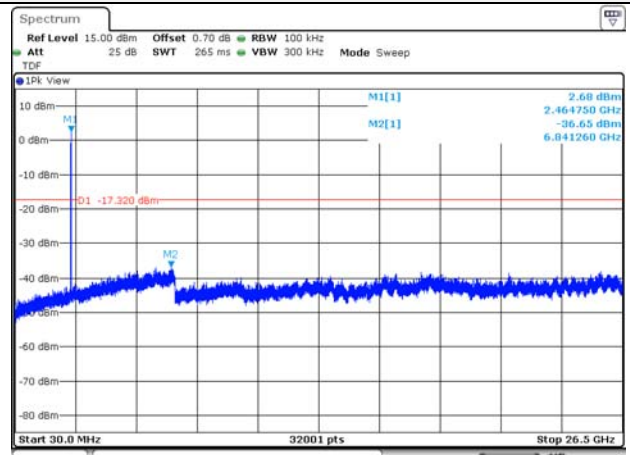
Conducted spurious / 2 437 MHz



Conducted spurious / 2 462 MHz



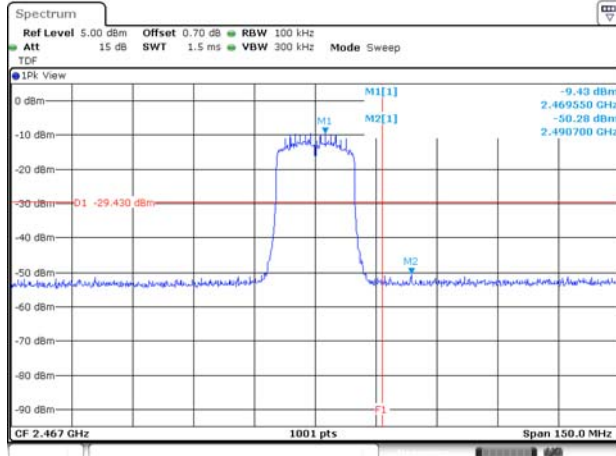
Conducted spurious / 2 462 MHz



SU

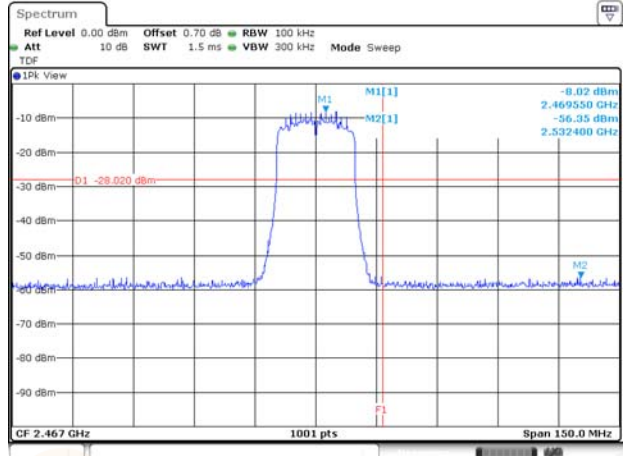
ANT 1

Conducted band-edge / 2 467 MHz

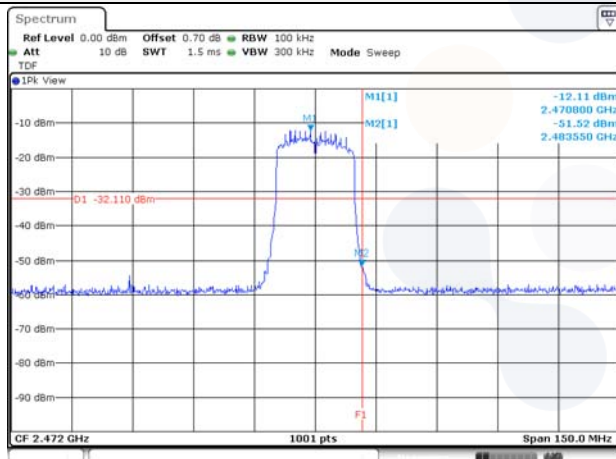


ANT 2

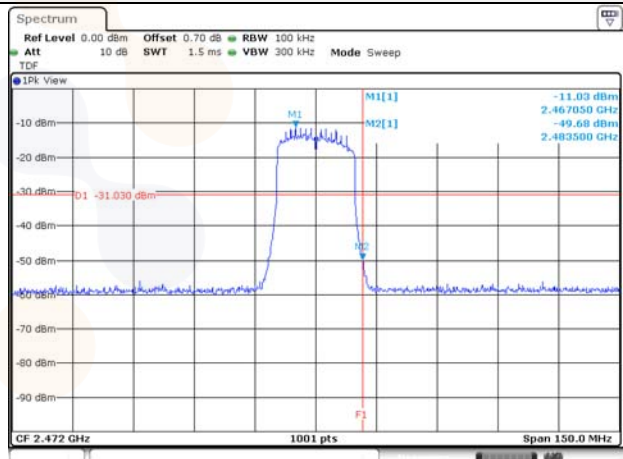
Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz



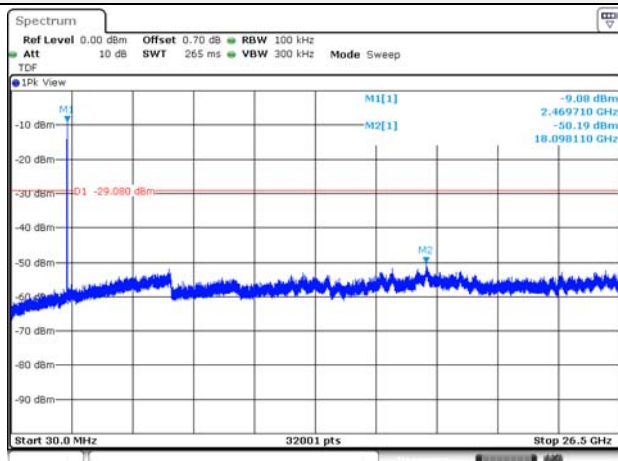
Conducted band-edge / 2 472 MHz



SU

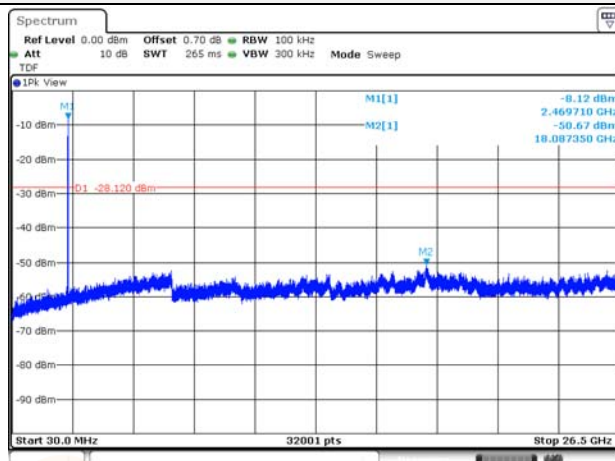
ANT 1

Conducted spurious / 2 467 MHz

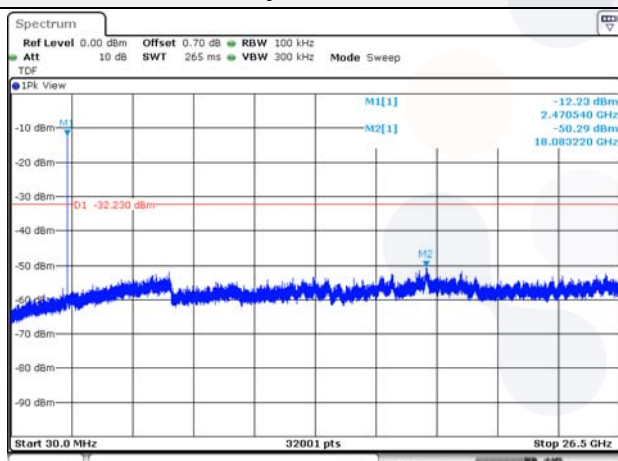


ANT 2

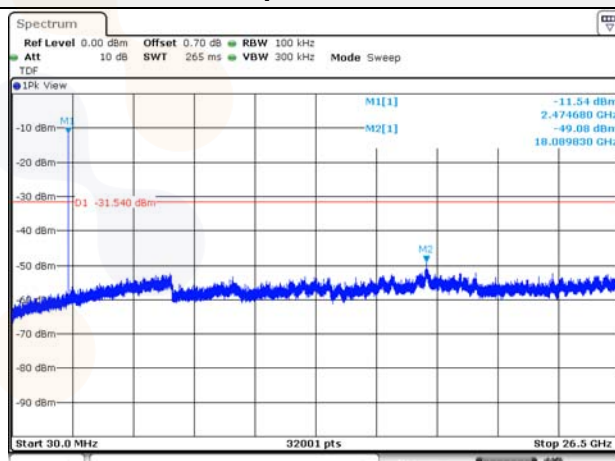
Conducted spurious / 2 467 MHz



Conducted spurious / 2 472 MHz



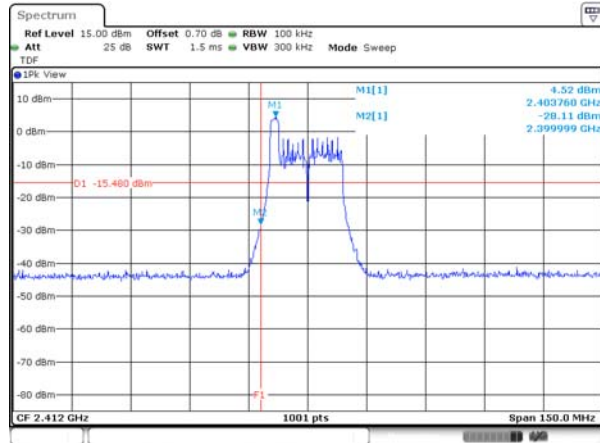
Conducted spurious / 2 472 MHz



26T / RU offset 0

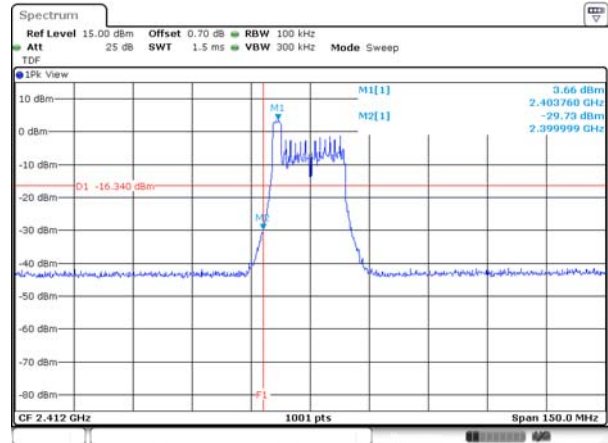
ANT 1

Conducted band-edge / 2 412 MHz



ANT 2

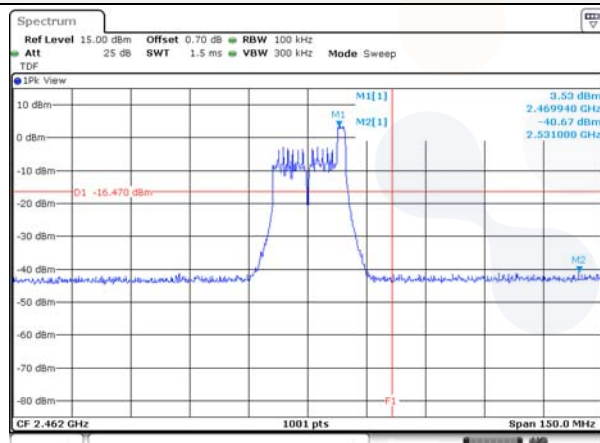
Conducted band-edge / 2 412 MHz



26T / RU offset 8

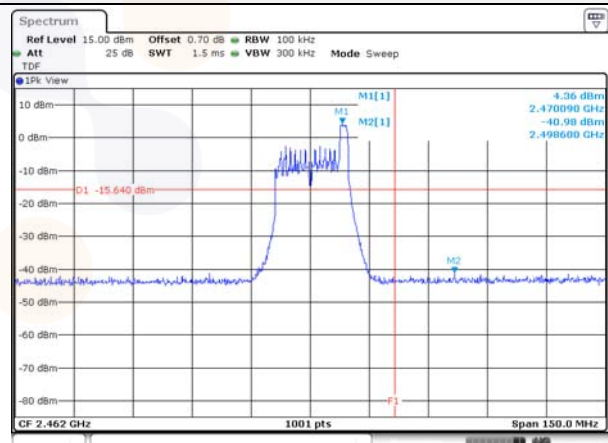
ANT 1

Conducted band-edge / 2 462 MHz



ANT 2

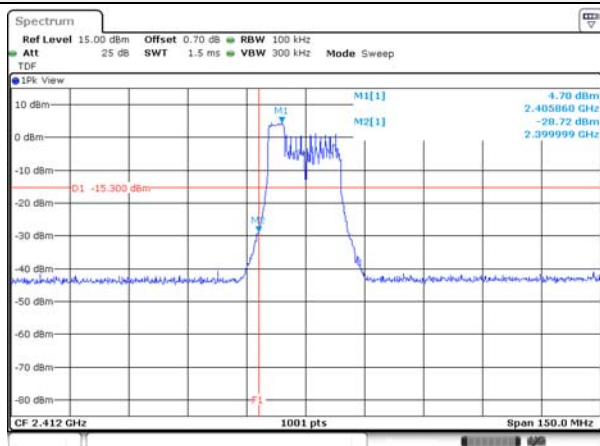
Conducted band-edge / 2 462 MHz



52T / RU offset 37

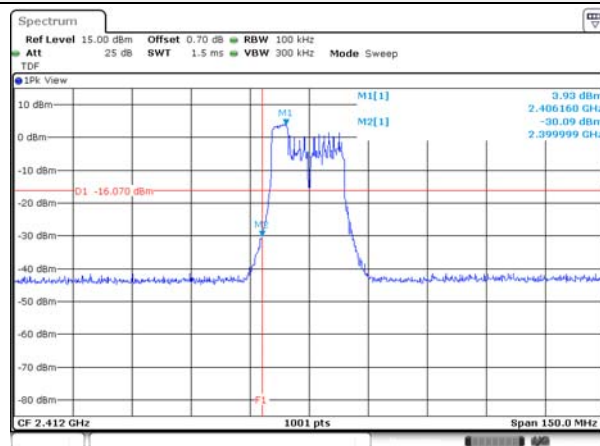
ANT 1

Conducted band-edge / 2 412 MHz



ANT 2

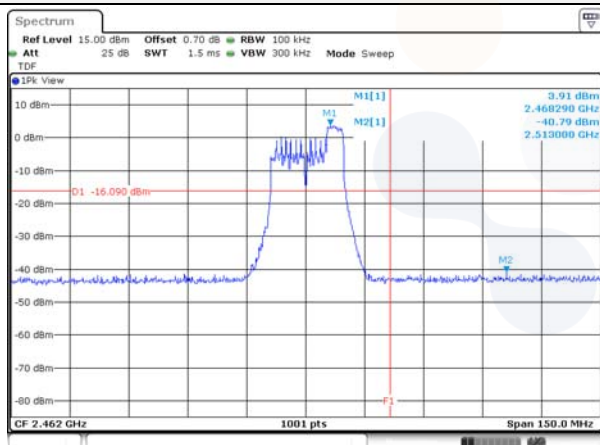
Conducted band-edge / 2 412 MHz



52T / RU offset 40

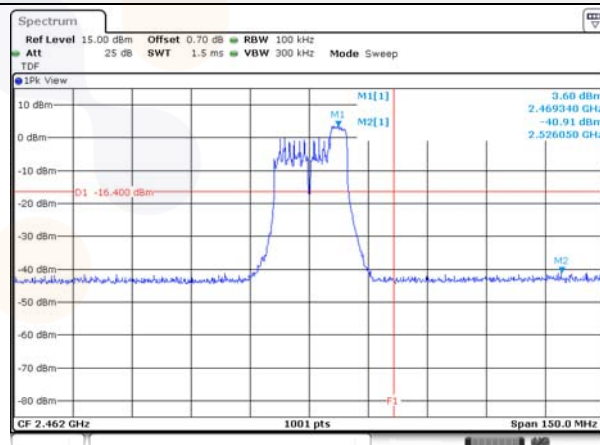
ANT 1

Conducted band-edge / 2 462 MHz



ANT 2

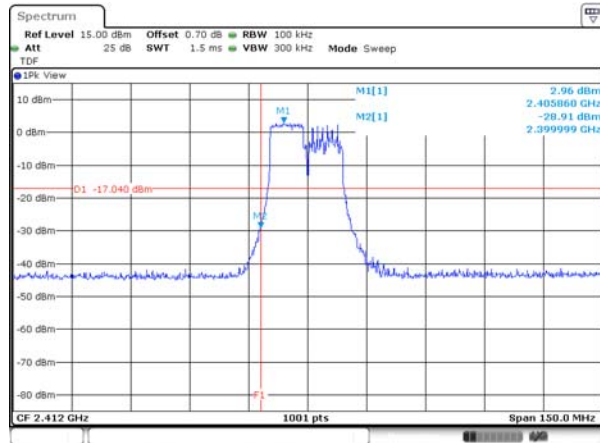
Conducted band-edge / 2 462 MHz



106T / RU offset 53

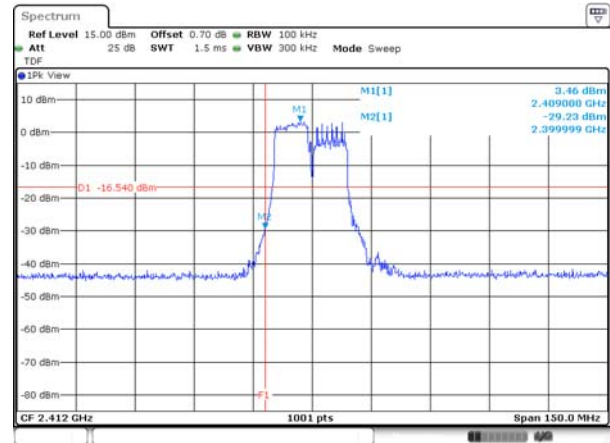
ANT 1

Conducted band-edge / 2 412 MHz



ANT 2

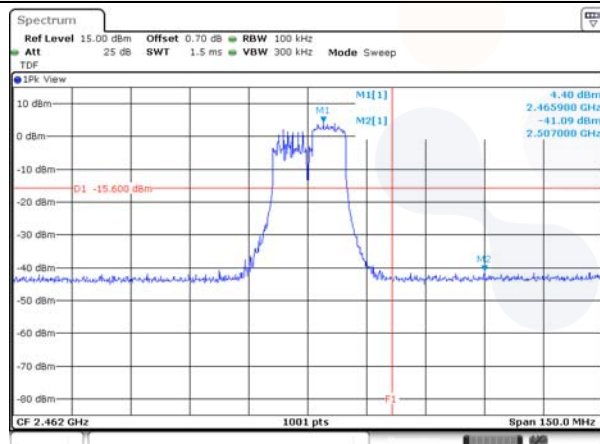
Conducted band-edge / 2 412 MHz



106T / RU offset 54

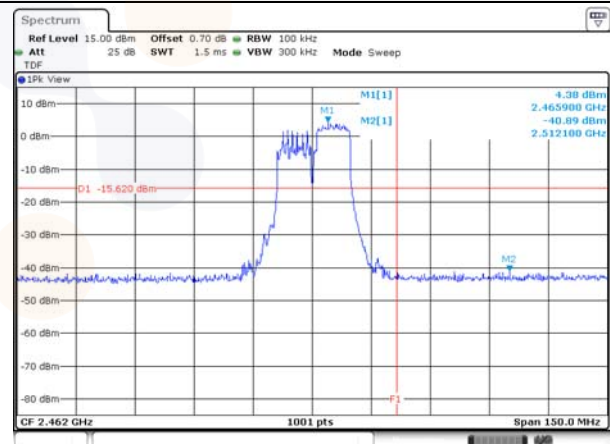
ANT 1

Conducted band-edge / 2 462 MHz



ANT 2

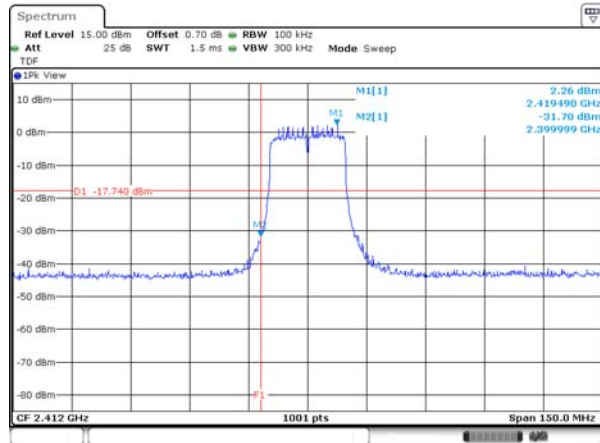
Conducted band-edge / 2 462 MHz



242T / RU offset 61

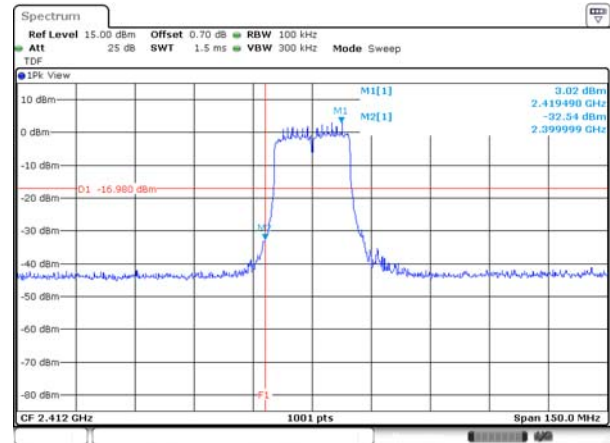
ANT 1

Conducted band-edge / 2 412 MHz

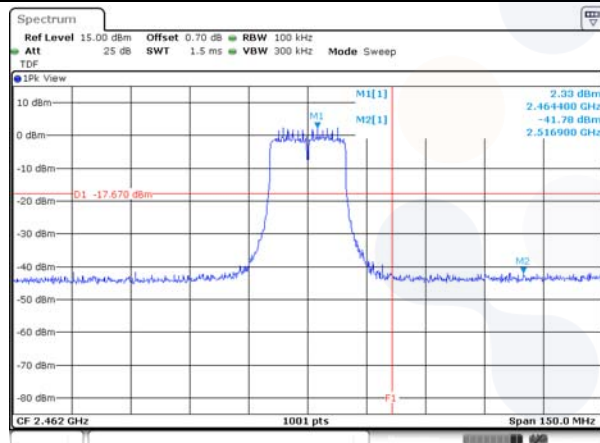


ANT 2

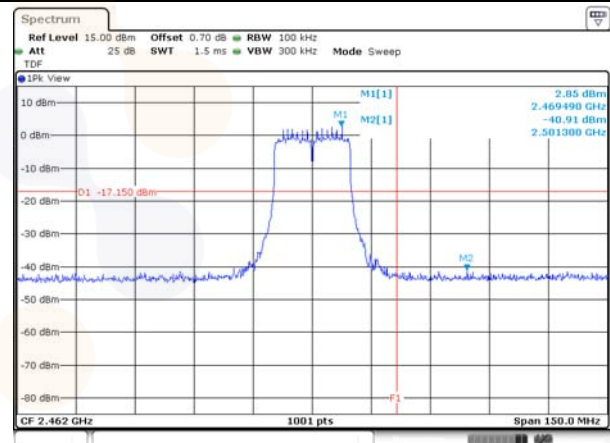
Conducted band-edge / 2 412 MHz



Conducted band-edge / 2 462 MHz



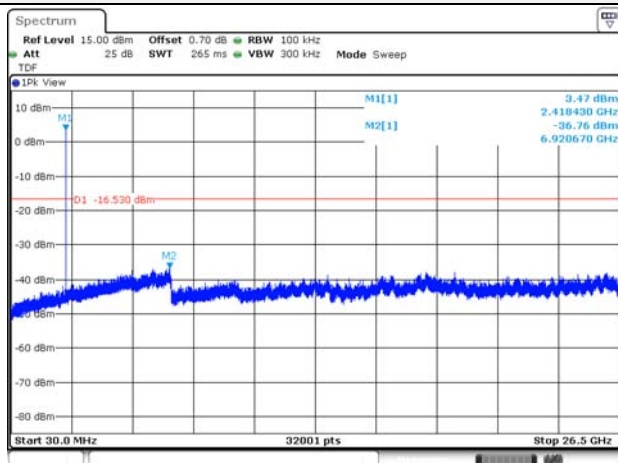
Conducted band-edge / 2 462 MHz



52T / RU offset 40

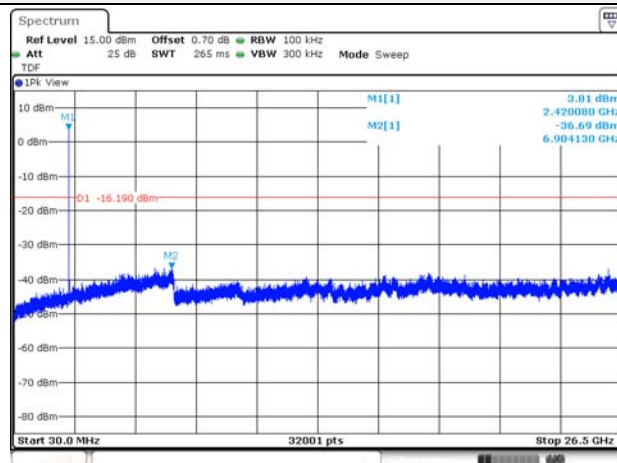
ANT 1

Conducted spurious / 2 412 MHz



ANT 2

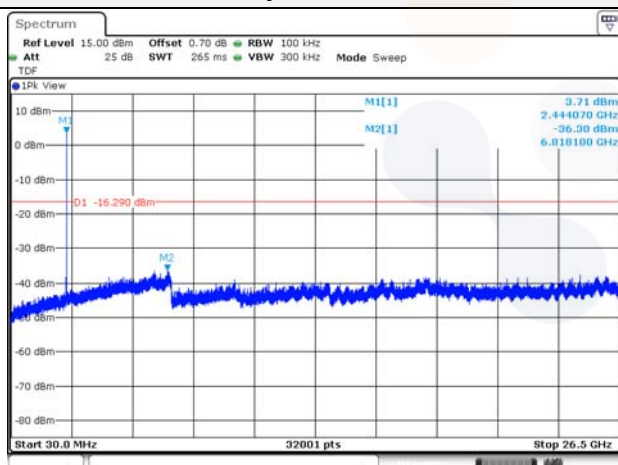
Conducted spurious / 2 412 MHz



52T / RU offset 40

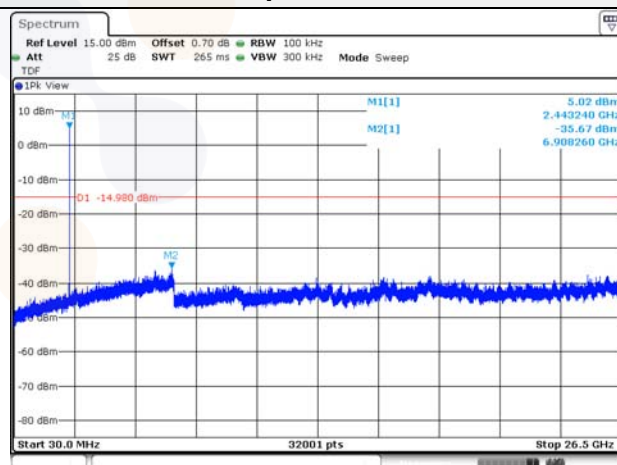
ANT 1

Conducted spurious / 2 437 MHz



ANT 2

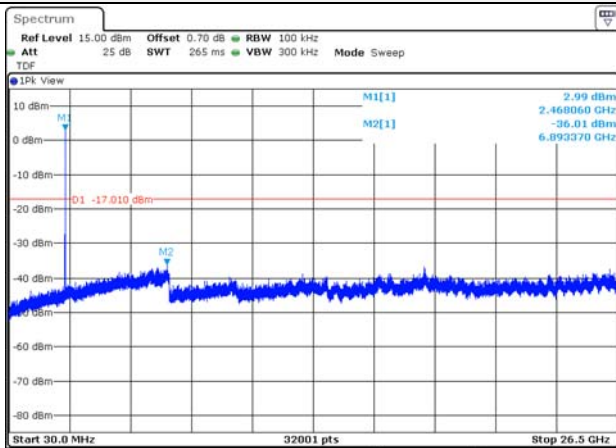
Conducted spurious / 2 437 MHz



52T / RU offset 40

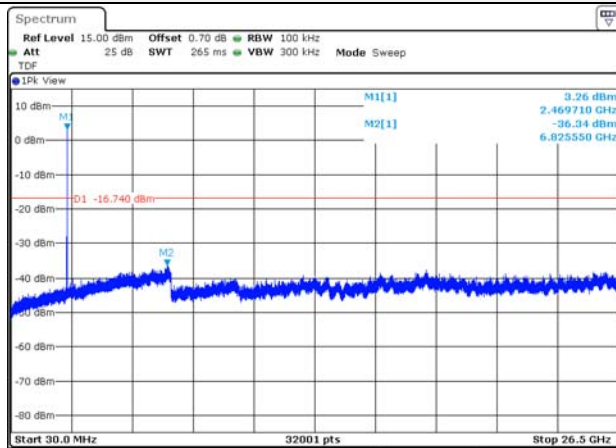
ANT 1

Conducted spurious / 2 462 MHz



ANT 2

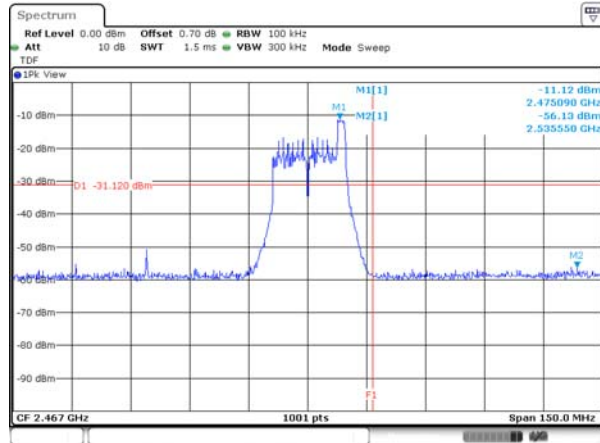
Conducted spurious / 2 462 MHz



26T / RU offset 8

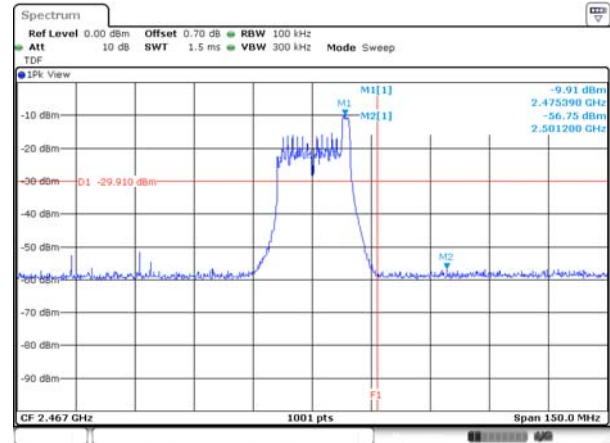
ANT 1

Conducted band-edge / 2 467 MHz

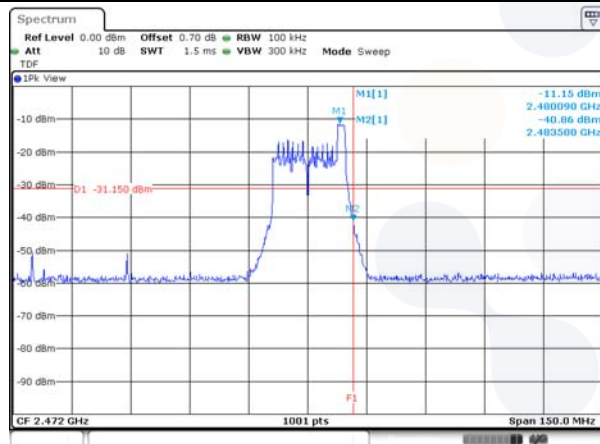


ANT 2

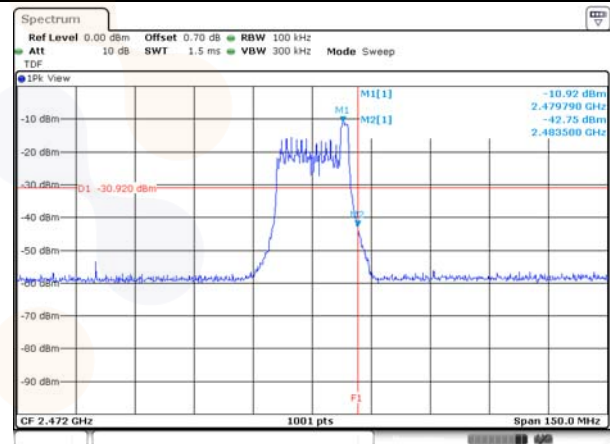
Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz



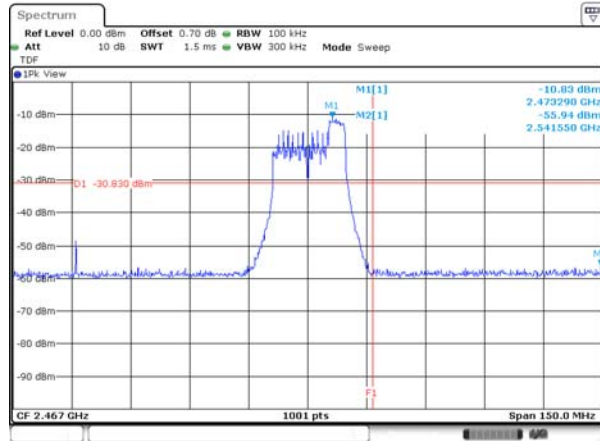
Conducted band-edge / 2 472 MHz



52T / RU offset 40

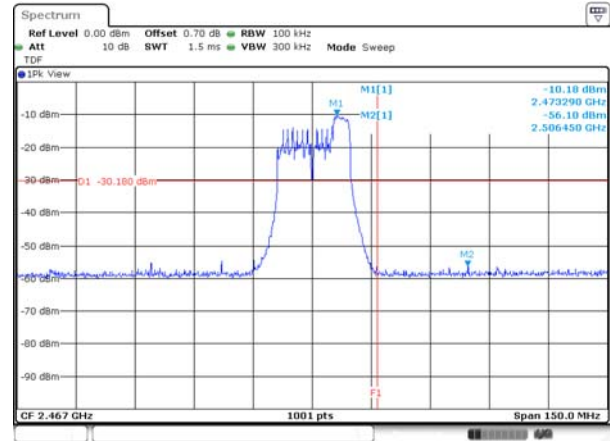
ANT 1

Conducted band-edge / 2 467 MHz

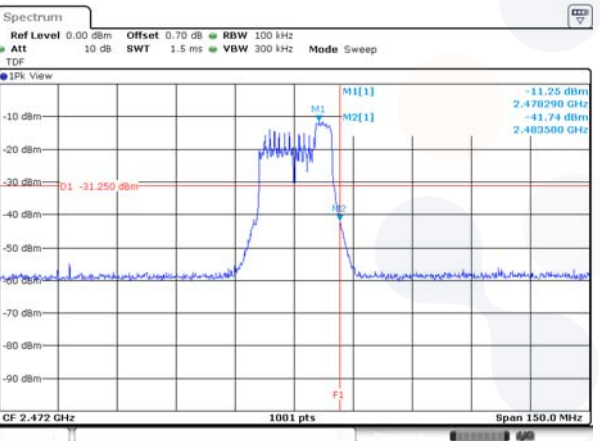


ANT 2

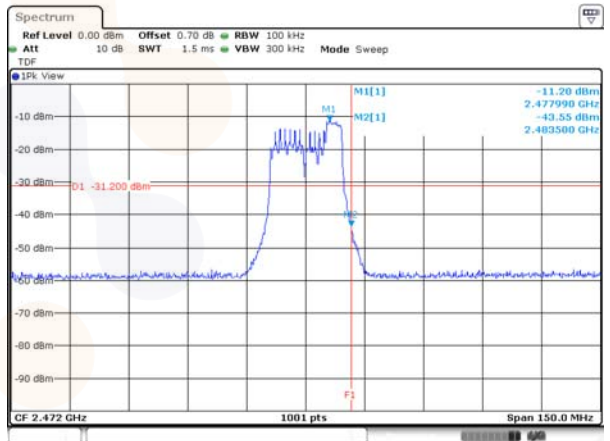
Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz



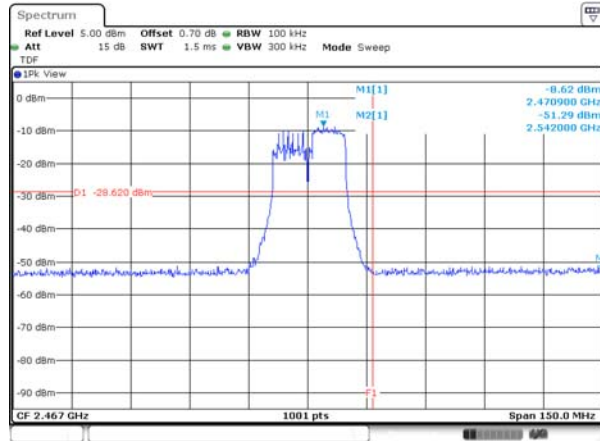
Conducted band-edge / 2 472 MHz



106T / RU offset 54

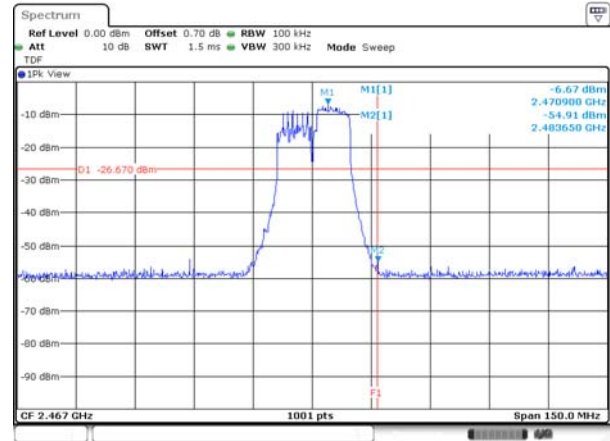
ANT 1

Conducted band-edge / 2 467 MHz

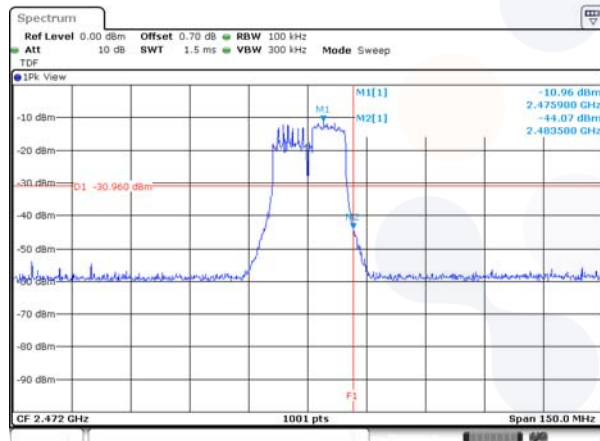


ANT 2

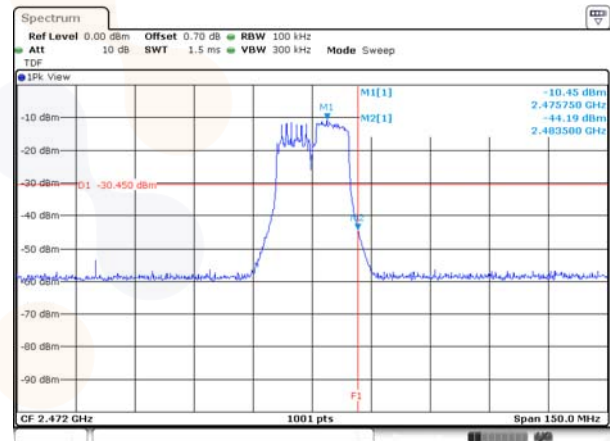
Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz



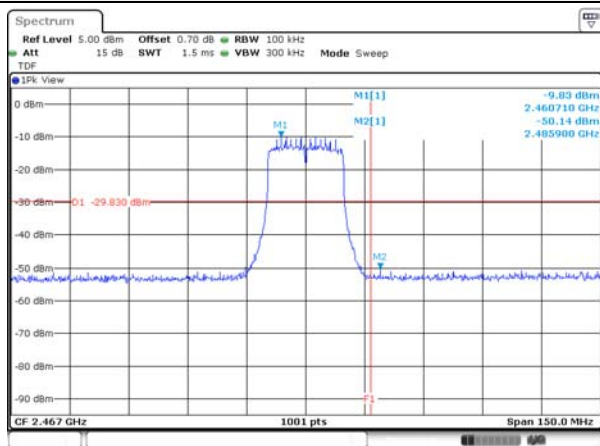
Conducted band-edge / 2 472 MHz



242T / RU offset 61

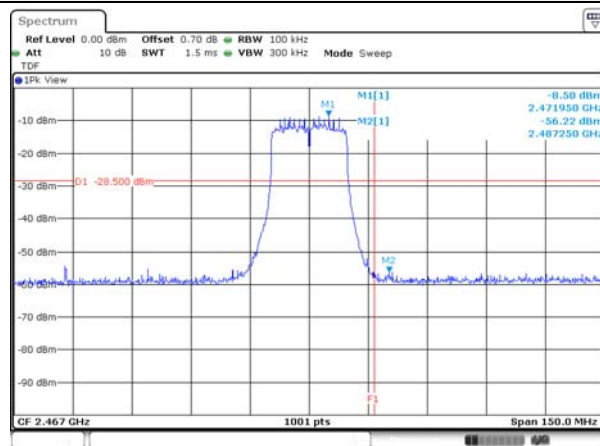
ANT 1

Conducted band-edge / 2 467 MHz

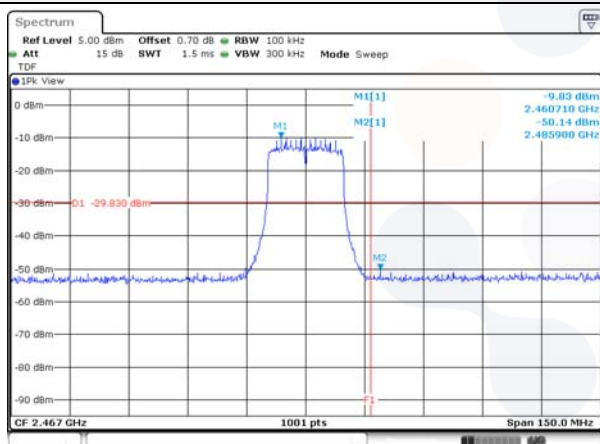


ANT 2

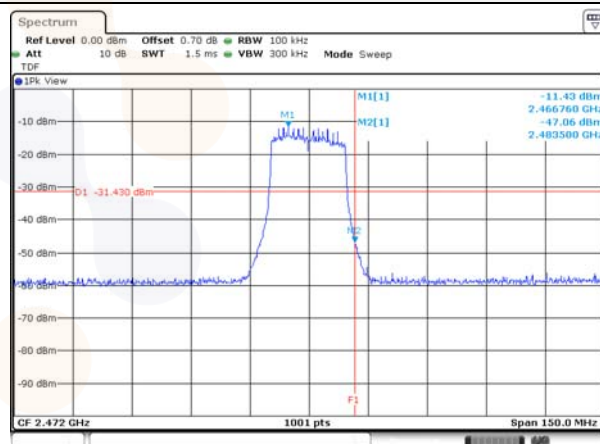
Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz



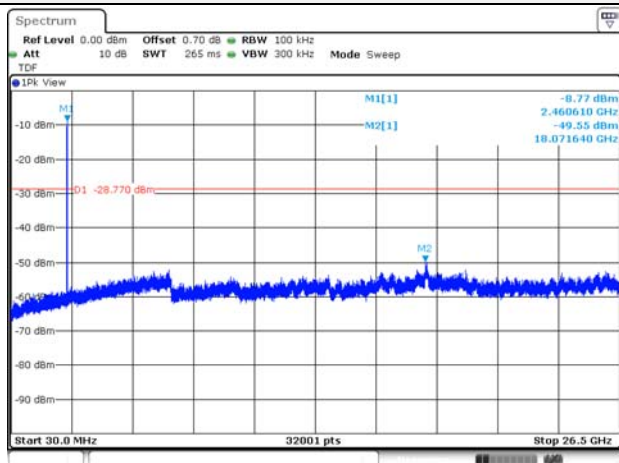
Conducted band-edge / 2 472 MHz



106T / RU offset 53

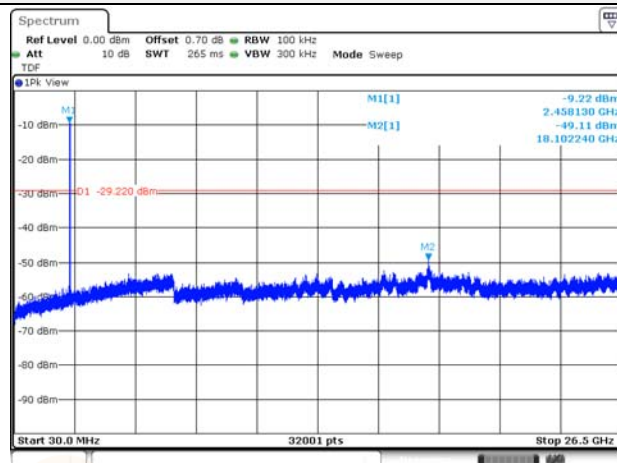
ANT 1

Conducted spurious / 2 467 MHz



ANT 2

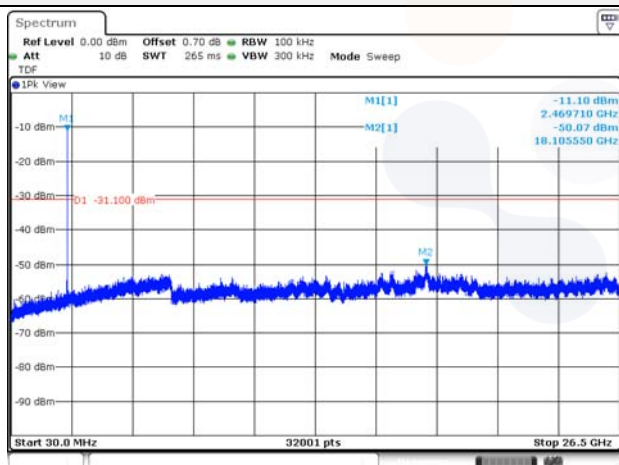
Conducted spurious / 2 467 MHz



52T / RU offset 38

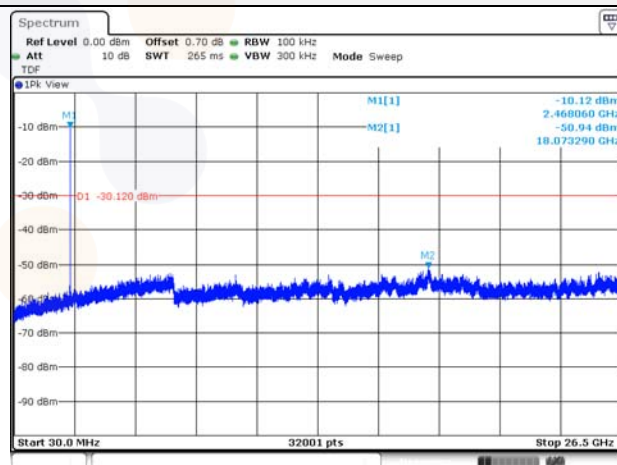
ANT 1

Conducted spurious / 2 472 MHz



ANT 2

Conducted spurious / 2 472 MHz



8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100807	23.07.12
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT09	24.04.10
DC Power Supply	AGILENT	E3632A	MY40008800	23.07.11
Vector Signal Generator	R&S	SMBV100A	257566	23.07.04
Signal Generator	R&S	SMB100A	176206	24.01.19
Power Sensor	R&S	NRP-Z81	1137.9009.02-106224-tg	24.04.25*
Attenuator	R&S	DNF Dämpfungsglied 10 dB in N-50 Ohm	0006	24.01.19
Controller	INNCO SYSTEMS	CO3000	1441/54370322/P	-
Antenna Mast	INNCO SYSTEMS	MA4640-XP-ET	-	-
Turn Device	INNCO SYSTEMS	DS1200-S-1t	-	-
Spectrum Analyzer	R&S	FSVA40	101575	23.07.22
PSA Spectrum Analyzer	Agilent	E4440A	MY46186407	24.03.22
Broadband Pre-Amplifier	SCHWARZBECK	BBV9718D	57	24.03.17
Low Noise Amplifier	TESTEK	TK-PA18H	220124-L	23.12.02
Low Noise Amplifier	TESTEK	TK-PA1840H	220133-L	23.12.02
Amplifier	SONOMA INSTRUMENT	310N	421821	23.12.14
Horn Antenna	SCHWARZBECK	BBHA9120D	2763	23.12.06
Horn Antenna	SCHWARZBECK	BBHA9170	1267	23.12.05
Bi-log Antenna	Teseq GmbH	CBL 6112D	63756	24.11.17
Loop Antenna	R&S	HFH2-Z2	100355	24.08.10
High Pass Filter	Wainwright Instruments GmbH	WHKX12-2805-3000-18000-40SS	SN58	23.12.14
TWO-LINE V - Network	R&S	ENV216	101358	23.09.29
EMI Test Receiver	R&S	ESCI3	100001	23.08.18

* Tests related to this equipment were progressed after the calibration was completed.

End of test report