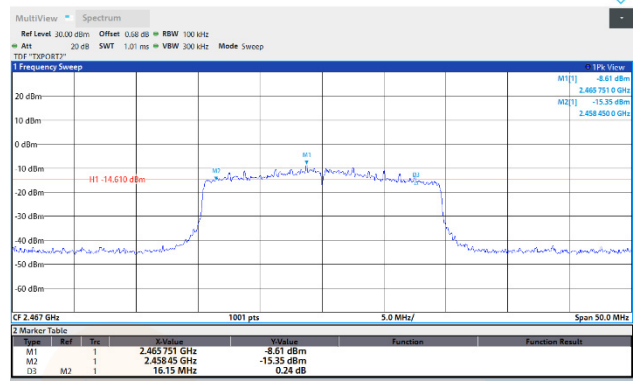
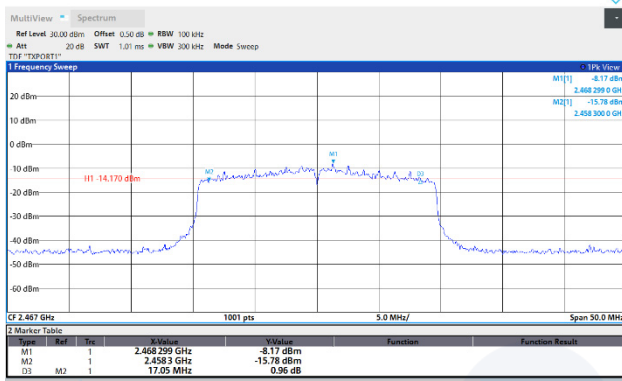


ANT 1

ANT 2

SU / 2 467 MHz



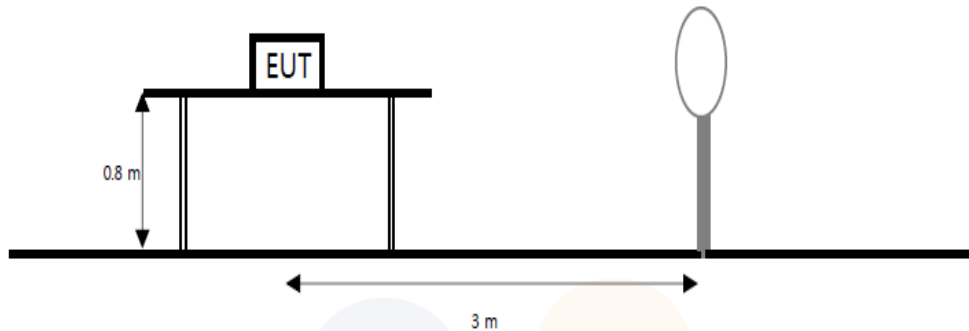
SU / 2 472 MHz



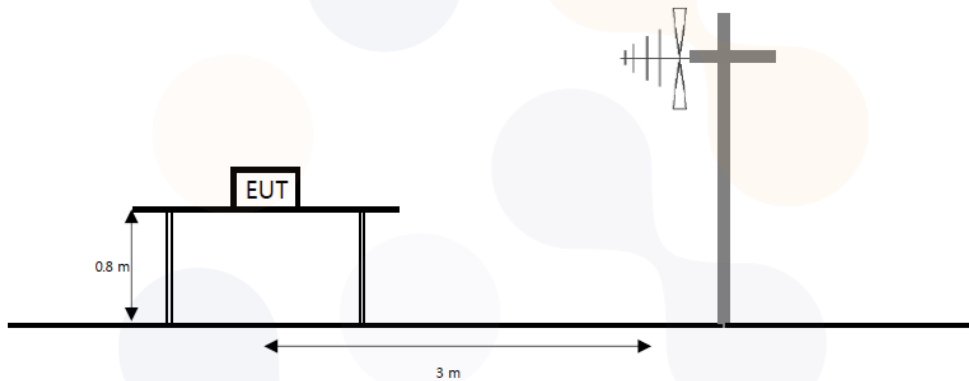
7.4. Spurious Emission, Band Edge and Restricted bands

Test setup

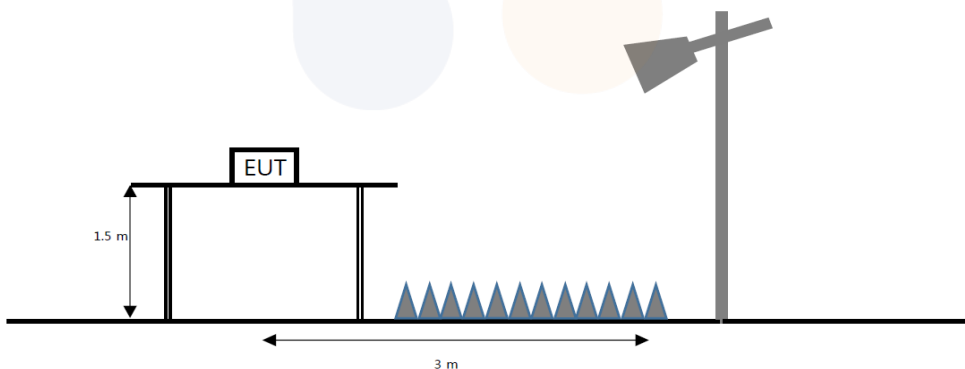
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz Emissions



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz emissions, whichever is lower.



Limit

According to section 15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength ($\mu V/m$)	Measurement distance (m)
0.009 - 0.490	2 400/F(kHz)	300
0.490 - 1.705	24 000/F(kHz)	30
1.705 - 30	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., Section 15.231 and 15.241.

According to section 15.205(a) and (b), only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.009 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.694 75 - 16.695 25	608 - 614	5.35 - 5.46
2.173 5 - 2.190 5	16.804 25 - 16.804 75	960 - 1 240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1 300 - 1 427	8.025 - 8.5
4.177 25 - 4.177 75	37.5 - 38.25	1 435 - 1 626.5	9.0 - 9.2
4.207 25 - 4.207 75	73 - 74.6	1 645.5 - 1 646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1 660 - 1 710	10.6 - 12.7
6.267 75 - 6.268 25	108 - 121.94	1 718.8 - 1 722.2	13.25 - 13.4
6.311 75 - 6.312 25	123 - 138	2 200 - 2 300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2 310 - 2 390	15.35 - 16.2
8.362 - 8.366	156.524 75 - 156.525	2 483.5 - 2 500	17.7 - 21.4
8.376 25 - 8.386 75	25	2 690 - 2 900	22.01 - 23.12
8.414 25 - 8.414 75	156.7 - 156.9	3 260 - 3 267	23.6 - 24.0
12.29 - 12.293	162.012 5 - 167.17	3 332 - 3 339	31.2 - 31.8
12.519 75 - 12.520 25	167.72 - 173.2	3 345.8 - 3 358	36.43 - 36.5
12.576 75 - 12.577 25	240 - 285	3 600 - 4 400	Above 38.6
13.36 - 13.41	322 - 335.4		

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in section 15.209. At frequencies equal to or less than 1 000 MHz, compliance with the limits in section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1 000 MHz, compliance with the emission limits in section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in section 15.35 apply to these measurements.

Test procedure

ANSI C63.10-2013

Test settings

Peak field strength measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in table
3. VBW $\geq$ (3 $\times$ RBW)
4. Detector = peak
5. Sweep time = auto
6. Trace mode = max hold
7. Allow sweeps to continue until the trace stabilizes

Table. RBW as a function of frequency

Frequency	RBW
9 kHz to 150 kHz	200 Hz to 300 Hz
0.15 MHz to 30 MHz	9 kHz to 10 kHz
30 MHz to 1 000 MHz	100 kHz to 120 kHz
> 1 000 MHz	1 MHz

Average field strength measurements

Trace averaging with continuous EUT transmission at full power

If the EUT can be configured or modified to transmit continuously ($D \geq 98\%$), then the average emission levels shall be measured using the following method (with EUT transmitting continuously):

1. RBW = 1 MHz (unless otherwise specified).
2. VBW $\geq$ (3 $\times$ RBW).
3. Detector = RMS (power averaging), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
4. Averaging type = power (i.e., rms):
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
5. Sweep time = auto.
6. Perform a trace average of at least 100 traces.

Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT ($D \geq 98\%$) cannot be achieved and the duty cycle is constant (duty cycle variations are less than $\pm 2\%$), then the following procedure shall be used:

1. The EUT shall be configured to operate at the maximum achievable duty cycle.
2. Measure the duty cycle D of the transmitter output signal as described in 11.6.
3. RBW = 1 MHz (unless otherwise specified).
4. VBW $\geq [3 \times \text{RBW}]$.
5. Detector = RMS (power averaging), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
6. Averaging type = power (i.e., rms):

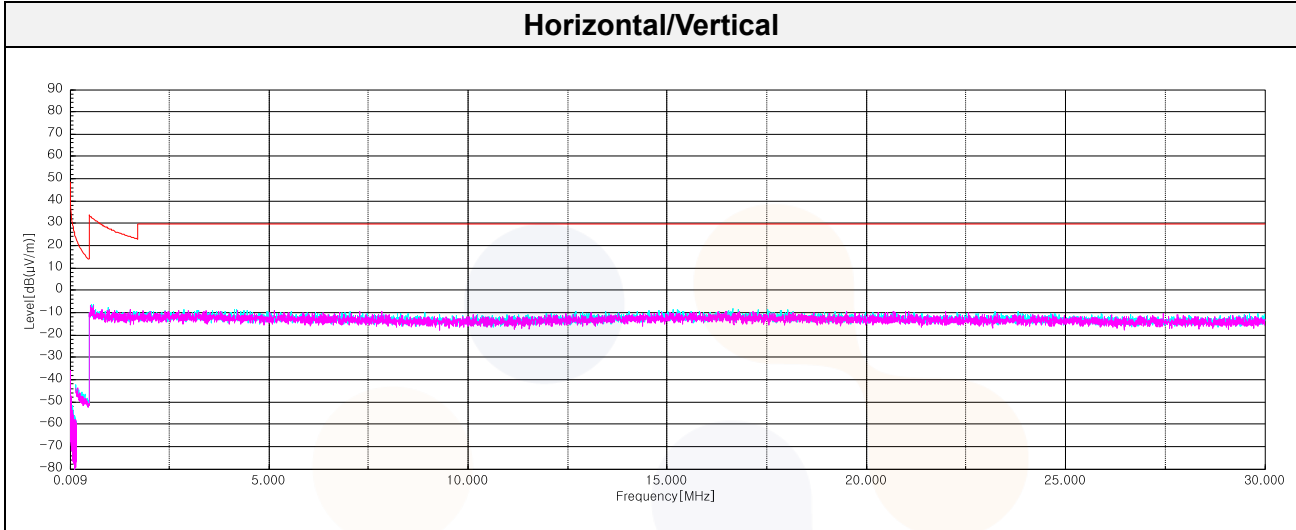
- 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
- 2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
7. Sweep time = auto.
8. Perform a trace average of at least 100 traces.
9. A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (rms) mode was used in step f), then the applicable correction factor is $[10 \log (1 / D)]$, where D is the duty cycle.
 - 2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $[20 \log (1 / D)]$, where D is the duty cycle.
 - 3) If a specific emission is demonstrated to be continuous ($D \geq 98\%$) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Notes:

1. $f < 30$ MHz, extrapolation factor of 40 dB/decade of distance. $F_d = 40 \log(D_m/D_s)$
 $f \geq 30$ MHz, extrapolation factor of 20 dB/decade of distance. $F_d = 20 \log(D_m/D_s)$
 Where:
 F_d = Distance factor in dB
 D_m = Measurement distance in meters
 D_s = Specification distance in meters
2. Factors(dB) = Antenna factor(dB/m) + Cable loss(dB) + or Amp. gain(dB) + or F_d (dB)
3. The worst-case emissions are reported however emissions whose levels were not within 20 dB of respective limits were not reported.
4. Average test would be performed if the peak result were greater than the average limit.
5. ¹⁾ means restricted band.
6. Above 1 GHz the worst results between two antenna polarizations (H and V) were documented in the test report.
7. Below 30 MHz frequency range, In order to search for the worst result, all orientations about parallel, perpendicular, and ground-parallel were investigated then reported. when the emission level was higher than 20 dB of the limit, then the following statement shall be made: "No spurious emissions were detected within 20 dB of the limit."
8. Measurement configuration for 11ax RU allocations
 - 1) For the radiated band-edge test, it was tested at 11ax RU allocations near the band edge.
 - 2) For the spurious emissions, it was tested at the RU allocations with actual highest power considering each bandwidth/channel.

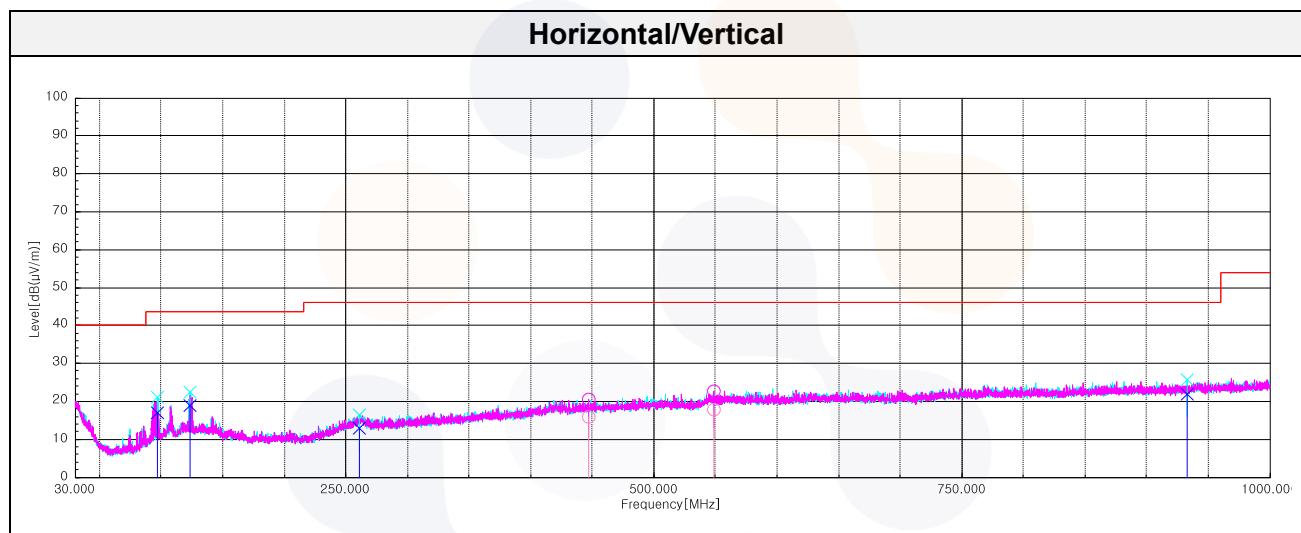
Test results (Below 30 MHz) – Worst case: 802.11ax HE20 RU 52T offset 37 MIMO / 2 437 MHz

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Quasi peak data								
No spurious emissions were detected within 20 dB of the limit.								



Test results (Below 1 000 MHz) – Worst case: 802.11ax HE20 RU 52T offset 37 MIMO / 2 437 MHz

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Quasi peak data								
96.69	V	32.90	15.87	-31.65	-	17.12	43.50	26.38
123.85 ¹⁾	V	32.10	18.00	-31.32	-	18.78	43.50	24.72
261.10 ¹⁾	V	24.20	19.66	-31.01	-	12.85	46.00	33.15
447.10	H	23.90	22.70	-30.85	-	15.75	46.00	30.25
548.34	H	23.80	24.72	-30.64	-	17.88	46.00	28.12
932.95	V	23.90	26.60	-28.60	-	21.90	46.00	24.10



Test results (Above 1 000 MHz)

SISO ANT2 Restricted Band edge (Lowest Channel)

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								
2 389.26 ¹⁾	V	49.20	27.10	-30.39	-	45.91	74.00	28.09
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 0)_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								
2 389.66 ¹⁾	V	52.40	27.10	-30.39	-	49.11	74.00	24.89
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (52T / RU offset 37)_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								
2 389.88 ¹⁾	V	60.70	27.10	-30.39	-	57.41	74.00	16.59
Average Data								
2 389.88 ¹⁾	V	41.05	27.10	-30.39	0.09	37.85	54.00	16.15

802.11ax_HE20 RU mode (106T / RU offset 53)_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								
2 389.04 ¹⁾	V	72.50	27.10	-30.39	-	69.21	74.00	4.79
Average Data								
2 389.04 ¹⁾	V	45.81	27.10	-30.39	0.14	42.66	54.00	11.34

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								
2 389.43 ¹⁾	V	64.70	27.10	-30.39	-	61.41	74.00	12.59
Average Data								
2 389.43 ¹⁾	V	48.13	27.10	-30.39	0.14	44.98	54.00	9.02

MIMO Restricted Band edge (Lowest Channel)

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								
2 388.97 ¹⁾	H	50.50	27.10	-30.39	-	47.21	74.00	26.79
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 0)_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								
2 388.68 ¹⁾	V	56.50	27.10	-30.39	-	53.21	74.00	20.79
Average Data								
2 388.68 ¹⁾	V	41.06	27.10	-30.39	-	37.77	54.00	16.23

802.11ax_HE20 RU mode (52T / RU offset 37)_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								
2 388.89 ¹⁾	V	69.50	27.10	-30.39	-	66.21	74.00	7.79
Average Data								
2 388.89 ¹⁾	V	44.62	27.10	-30.39	-	41.33	54.00	12.67

802.11ax_HE20 RU mode (106T / RU offset 53)_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								
2 389.83 ¹⁾	V	73.90	27.10	-30.39	-	70.61	74.00	3.39
Average Data								
2 389.83 ¹⁾	V	48.96	27.10	-30.39	-	45.67	54.00	8.33

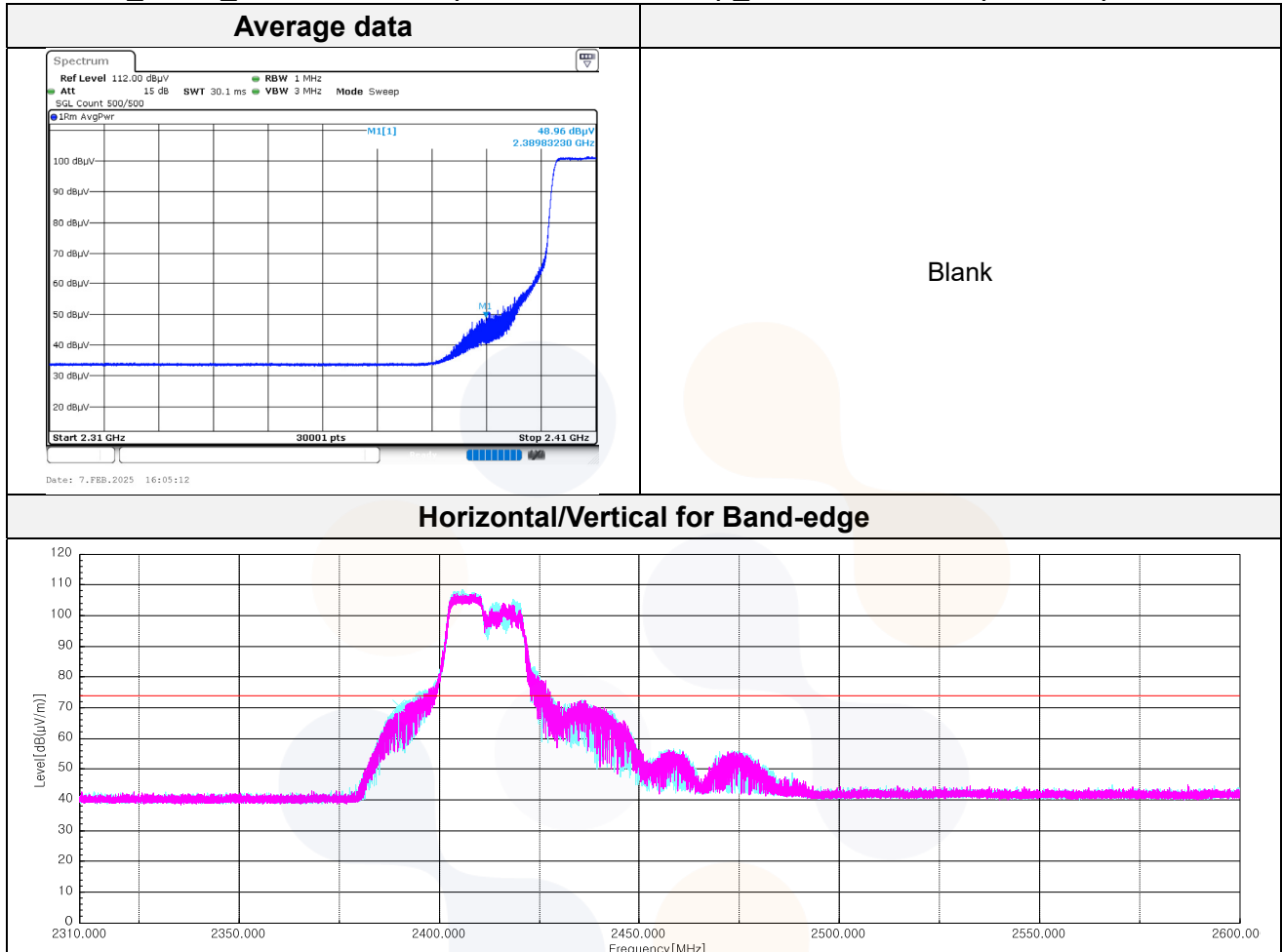
802.11ax_HE20 RU mode (242T / RU offset 61)_Lowest Channel (2 412 MHz)

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								
2 389.02 ¹⁾	V	71.20	27.10	-30.39	-	67.91	74.00	6.09
Average Data								
2 389.02 ¹⁾	V	51.42	27.10	-30.39	0.14	48.27	54.00	5.73

Plot of Bandedge

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

802.11ax_MIMO_HE20 RU mode (106T / RU offset 53) _Lowest Channel (2 412 MHz)



SISO ANT2 Restricted Band edge (11 Channel)

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								
2 488.38 ¹⁾	V	47.00	27.88	-30.23	-	44.65	74.00	29.35
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 486.27 ¹⁾	V	59.30	27.86	-30.23	-	56.93	74.00	17.07
Average Data								
2 486.27 ¹⁾	V	42.72	27.86	-30.23	-	40.35	54.00	13.65

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 483.51 ¹⁾	V	59.60	27.84	-30.24	-	57.20	74.00	16.80
Average Data								
2 483.51 ¹⁾	V	41.80	27.84	-30.24	0.09	39.49	54.00	14.51

802.11ax_HE20 RU mode (106T / RU offset 54)_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								
2 483.54 ¹⁾	V	59.80	27.84	-30.24	-	57.40	74.00	16.60
Average Data								
2 483.54 ¹⁾	V	42.25	27.84	-30.24	0.14	39.99	54.00	14.01

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								
2 483.74 ¹⁾	V	57.70	27.84	-30.24	-	55.30	74.00	18.70
Average Data								
2 483.74 ¹⁾	V	43.61	27.84	-30.24	0.14	41.35	54.00	12.65

MIMO Restricted Band edge (11 Channel)

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								
2 485.81 ¹⁾	H	50.10	27.86	-30.23	-	47.73	74.00	26.27
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 485.23 ¹⁾	V	65.00	27.85	-30.23	-	62.62	74.00	11.38
Average Data								
2 485.23 ¹⁾	V	42.36	27.85	-30.23	-	39.98	54.00	14.02

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 484.45 ¹⁾	V	67.40	27.84	-30.23	-	65.01	74.00	8.99
Average Data								
2 484.45 ¹⁾	V	45.23	27.84	-30.23	-	42.84	54.00	11.16

802.11ax_HE20 RU mode (106T / RU offset 54)_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								
2 485.48 ¹⁾	V	70.00	27.85	-30.23	-	67.62	74.00	6.38
Average Data								
2 485.48 ¹⁾	V	45.45	27.85	-30.23	-	43.07	54.00	10.93

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								
2 483.83 ¹⁾	V	65.80	27.84	-30.24	-	63.40	74.00	10.60
Average Data								
2 483.83 ¹⁾	V	50.64	27.84	-30.24	0.14	48.38	54.00	5.62

SISO ANT2 Restricted Band edge (12 Channel)

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								
2 498.86 ¹⁾	V	46.90	27.80	-30.21	-	44.49	74.00	29.51
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 483.53 ¹⁾	V	50.30	27.84	-30.24	-	47.90	74.00	26.10
-Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 483.82 ¹⁾	V	46.80	27.84	-30.24	-	44.40	74.00	29.60
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (106T / RU offset 54)_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								
2 483.55 ¹⁾	V	47.10	27.84	-30.24	-	44.70	74.00	29.30
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								
2 484.28 ¹⁾	H	46.20	27.84	-30.24	-	43.80	74.00	30.20
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

MIMO Restricted Band edge (12 Channel)

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								
2 486.16 ¹⁾	V	46.50	27.86	-30.23	-	44.13	74.00	29.87
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 483.54 ¹⁾	V	52.80	27.84	-30.24	-	50.40	74.00	23.60
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 483.56 ¹⁾	V	51.80	27.84	-30.24	-	49.40	74.00	24.60
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (106T / RU offset 54)_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								
2 483.84 ¹⁾	V	54.00	27.84	-30.24	-	51.60	74.00	22.40
Average Data								
2 483.84 ¹⁾	V	37.32	27.84	-30.24	-	34.92	54.00	19.08

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								
2 483.66 ¹⁾	V	54.90	27.84	-30.24	-	52.50	74.00	21.50
Average Data								
2 483.66 ¹⁾	V	37.75	27.84	-30.24	0.14	35.49	54.00	18.51

SISO ANT2 Restricted Band edge (Highest Channel)

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								
2 483.57 ¹⁾	V	61.10	27.84	-30.24	-	58.70	74.00	15.30
Average Data								
2 483.57 ¹⁾	V	46.03	27.84	-30.24	-	43.63	54.00	10.37

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 483.52 ¹⁾	V	70.70	27.84	-30.24	-	68.30	74.00	5.70
Average Data								
2 483.52 ¹⁾	V	49.26	27.84	-30.24	-	46.86	54.00	7.14

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 483.51 ¹⁾	V	68.90	27.84	-30.24	-	66.50	74.00	7.50
Average Data								
2 483.51 ¹⁾	V	48.91	27.84	-30.24	0.09	46.60	54.00	7.40

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								
2 483.55 ¹⁾	V	68.00	27.84	-30.24	-	65.60	74.00	8.40
Average Data								
2 483.55 ¹⁾	V	48.28	27.84	-30.24	0.14	46.02	54.00	7.98

802.11ax_HE20 RU mode (242T / RU offset 61)_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								
2 483.54 ¹⁾	V	66.90	27.84	-30.24	-	64.50	74.00	9.50
Average Data								
2 483.54 ¹⁾	V	46.29	27.84	-30.24	0.14	44.03	54.00	9.97

MIMO Restricted Band edge (Highest Channel)

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								
2 483.62 ¹⁾	H	66.00	27.84	-30.24	-	63.60	74.00	10.40
Average Data								
2 483.62 ¹⁾	H	52.25	27.84	-30.24	-	49.85	54.00	4.15

802.11ax_HE20 RU mode (26T / RU offset 8)_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								
2 483.55 ¹⁾	V	72.70	27.84	-30.24	-	70.30	74.00	3.70
Average Data								
2 483.55 ¹⁾	V	52.32	27.84	-30.24	-	49.92	54.00	4.08

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
2 483.52 ¹⁾	H	72.50	27.84	-30.24	-	70.10	74.00	3.90
Average Data								
2 483.52 ¹⁾	H	54.06	27.84	-30.24	-	51.66	54.00	2.34

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								
2 483.50 ¹⁾	H	72.80	27.84	-30.24	-	70.40	74.00	3.60
Average Data								
2 483.50 ¹⁾	H	52.48	27.84	-30.24	-	50.08	54.00	3.92

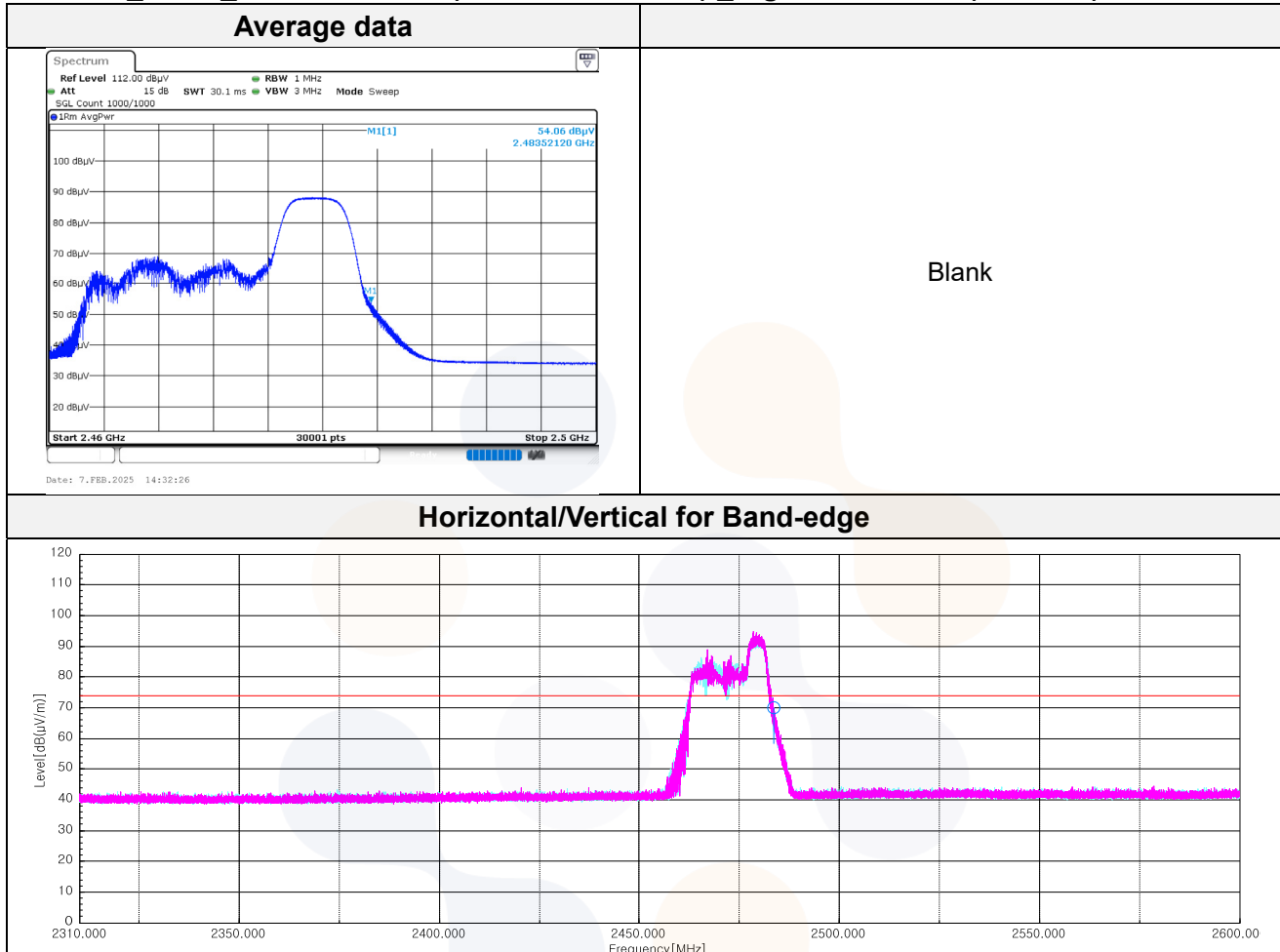
802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (2 472 MHz)

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								
2 483.58 ¹⁾	H	69.40	27.84	-30.24	-	67.00	74.00	7.00
Average Data								
2 483.58 ¹⁾	H	51.15	27.84	-30.24	0.14	48.89	54.00	5.11

Plot of Band edge

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

802.11ax_MIMO_HE20 RU mode (52T / RU offset 40) _Highest Channel (2 472 MHz)



SISO ANT2 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								
4 838.35 ¹⁾	V	55.30	32.43	-45.97	-	41.76	74.00	32.24
7 217.80	H	54.10	37.07	-44.34	-	46.83	74.00	27.17
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (52T / RU offset 40)_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								
4 846.08 ¹⁾	H	56.00	32.48	-45.94	-	42.54	74.00	31.46
7 197.50	H	54.10	37.18	-44.29	-	46.99	74.00	27.01
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								
4 855.27 ¹⁾	V	55.10	32.53	-45.90	-	41.73	74.00	32.27
7 322.68 ¹⁾	V	53.70	36.81	-44.29	-	46.22	74.00	27.78
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

802.11ax_HE20 RU mode (106T / RU offset 53)_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								
4 909.40 ¹⁾	V	54.40	32.74	-45.66	-	41.48	74.00	32.52
7 336.70 ¹⁾	V	53.70	36.75	-44.27	-	46.18	74.00	27.82
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								
4 880.40 ¹⁾	V	55.10	32.68	-45.79	-	41.99	74.00	32.01
7 358.45 ¹⁾	V	53.90	36.78	-44.23	-	46.45	74.00	27.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 38)_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								
4 955.80 ¹⁾	H	53.80	32.92	-45.45	-	41.27	74.00	32.73
7 400.98 ¹⁾	H	53.70	36.70	-44.16	-	46.24	74.00	27.76
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								
4 963.53 ¹⁾	H	54.70	32.95	-45.41	-	42.24	74.00	31.76
7 359.90 ¹⁾	V	53.70	36.78	-44.23	-	46.25	74.00	27.75
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_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								
4 937.43 ¹⁾	V	55.90	32.85	-45.53	-	43.22	74.00	30.78
7 365.22 ¹⁾	H	53.80	36.77	-44.22	-	46.35	74.00	27.65
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								
4 911.82 ¹⁾	V	55.30	32.75	-45.65	-	42.40	74.00	31.60
7 417.90 ¹⁾	V	53.30	36.66	-44.13	-	45.83	74.00	28.17
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_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								
4 960.63 ¹⁾	H	53.50	32.94	-45.43	-	41.01	74.00	32.99
7 459.47 ¹⁾	V	54.20	36.46	-44.06	-	46.60	74.00	27.40
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								
4 893.93 ¹⁾	H	55.00	32.76	-45.73	-	42.03	74.00	31.97
7 216.83	H	53.80	37.07	-44.34	-	46.53	74.00	27.47
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_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								
4 908.43 ¹⁾	V	55.50	32.73	-45.66	-	42.57	74.00	31.43
7 230.85	H	54.90	37.12	-44.37	-	47.65	74.00	26.35
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								
5 111.43 ¹⁾	V	55.30	33.20	-45.19	-	43.31	74.00	30.69
7 306.25 ¹⁾	V	53.70	36.88	-44.32	-	46.26	74.00	27.74
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_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								
4 858.65 ¹⁾	V	59.20	32.55	-45.88	-	45.87	74.00	28.13
7 259.85 ¹⁾	H	53.90	37.12	-44.40	-	46.62	74.00	27.38
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								
4 935.98 ¹⁾	V	55.50	32.84	-45.54	-	42.80	74.00	31.20
7 352.65 ¹⁾	H	53.90	36.79	-44.24	-	46.45	74.00	27.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_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								
4 909.88 ¹⁾	V	55.60	32.74	-45.65	-	42.69	74.00	31.31
7 378.75 ¹⁾	H	53.90	36.74	-44.20	-	46.44	74.00	27.56
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								
4 960.63 ¹⁾	H	54.90	32.94	-45.43	-	42.41	74.00	31.59
7 453.18 ¹⁾	V	54.60	36.49	-44.07	-	47.02	74.00	26.98
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 54)_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								
4 959.18 ¹⁾	V	55.10	32.94	-45.43	-	42.61	74.00	31.39
7 353.62 ¹⁾	V	54.30	36.79	-44.24	-	46.85	74.00	27.15
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								
4 966.43 ¹⁾	V	55.10	32.97	-45.40	-	42.67	74.00	31.33
7 370.53 ¹⁾	H	54.10	36.76	-44.21	-	46.65	74.00	27.35
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (2 472 MHz)

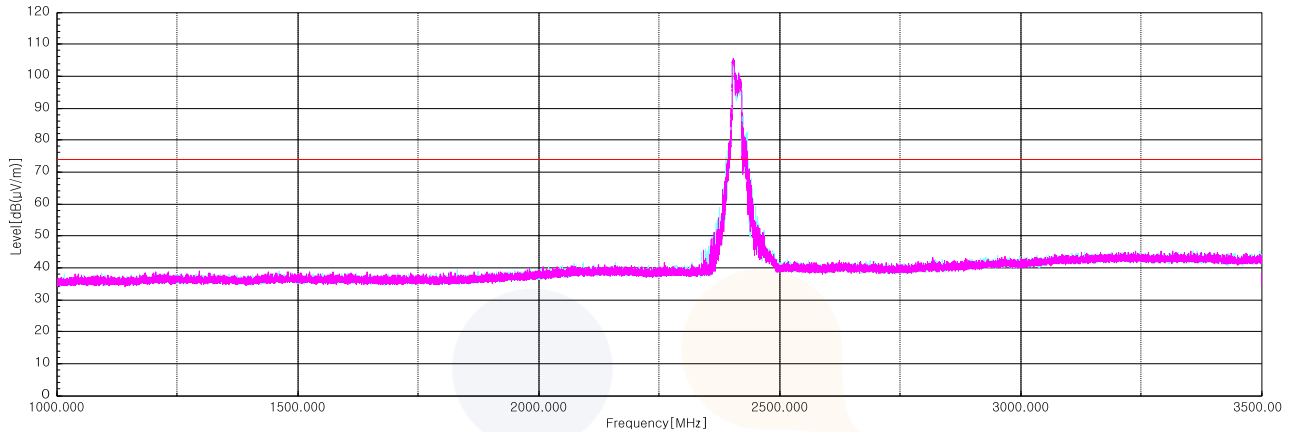
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
4 890.07 ¹⁾	H	56.40	32.74	-45.74	-	43.40	74.00	30.60
7 392.77 ¹⁾	V	54.30	36.71	-44.17	-	46.84	74.00	27.16
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

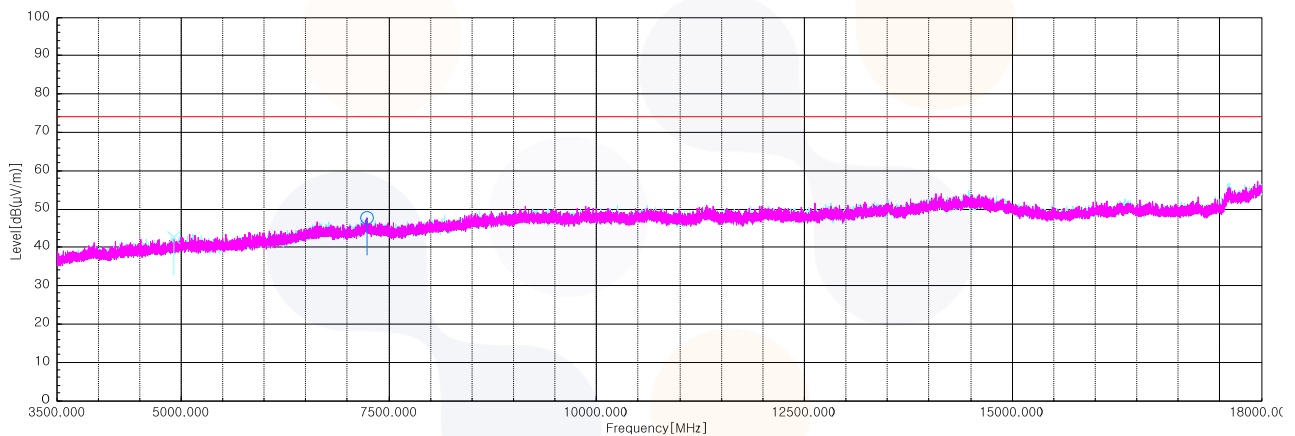
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_MIMO_HE20 RU mode (52T / RU offset 37) _Lowest Channel (2 412 MHz)

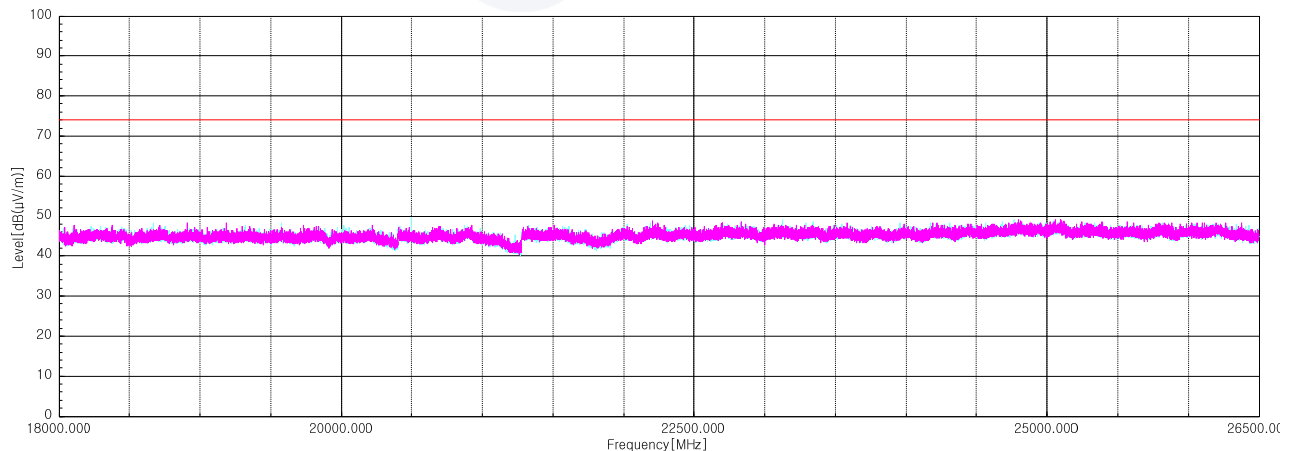
Horizontal/Vertical for 1 GHz ~ 3.5 GHz



Horizontal/Vertical for 3.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 26.5 GHz



Spurious Emission for Simultaneous Tx Condition

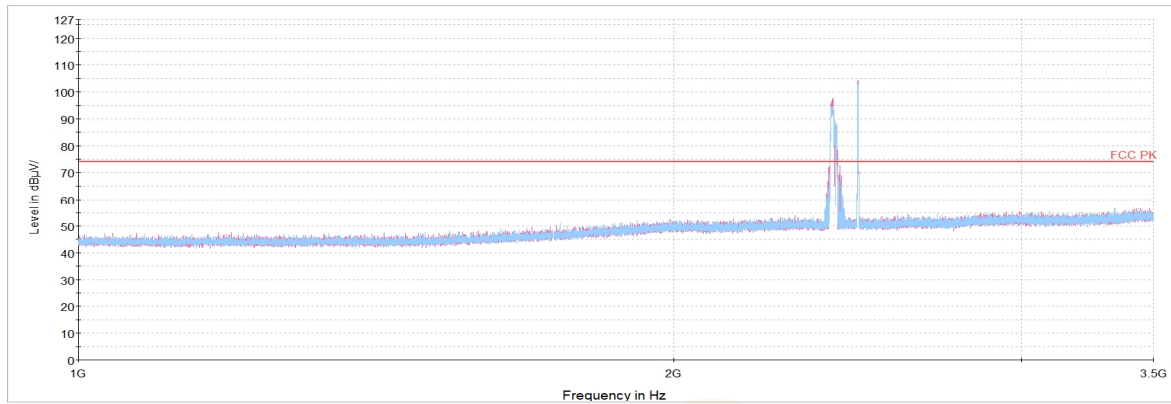
Case	WLAN 2.4 GHz	Bluetooth
Mode	802.11ax HE20_106T 53	BLE
Channel	1	39
Frequency	2 412 MHz	2 480 MHz
Data Rate	HE20, MCS0	1M Bits/s,37Packet

Notes.

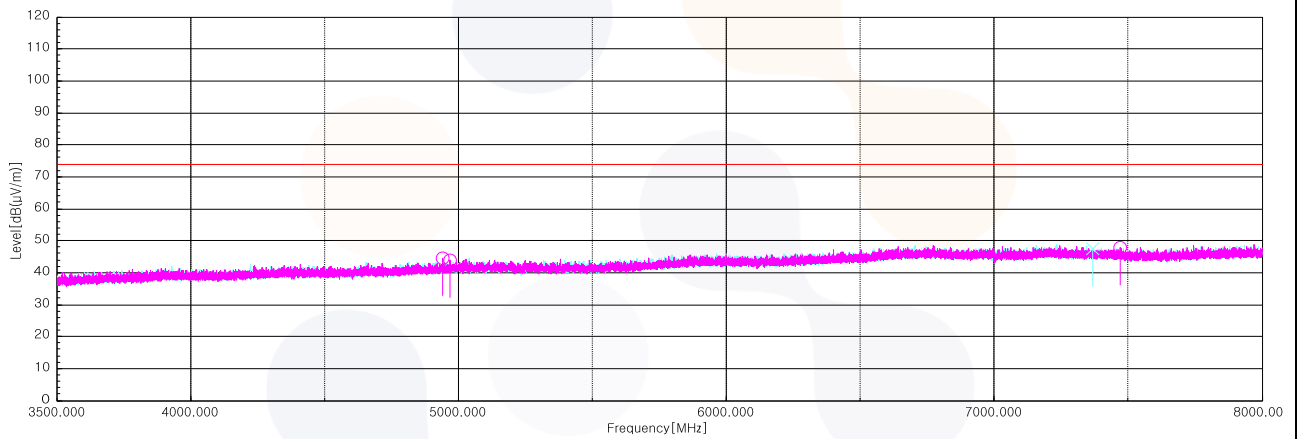
The lowest margin condition among the channels and modes were selected for test.

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								
4 939.70 ¹⁾	H	57.10	32.86	-45.52	-	44.44	74.00	29.56
4 969.40 ¹⁾	H	56.10	32.98	-45.39	-	43.69	74.00	30.31
7 368.05 ¹⁾	V	54.90	36.76	-44.22	-	47.44	74.00	26.56
7 470.20 ¹⁾	H	55.20	36.42	-44.04	-	47.58	74.00	26.42
Average data								
No spurious emissions were detected within 20 dB of the limit								

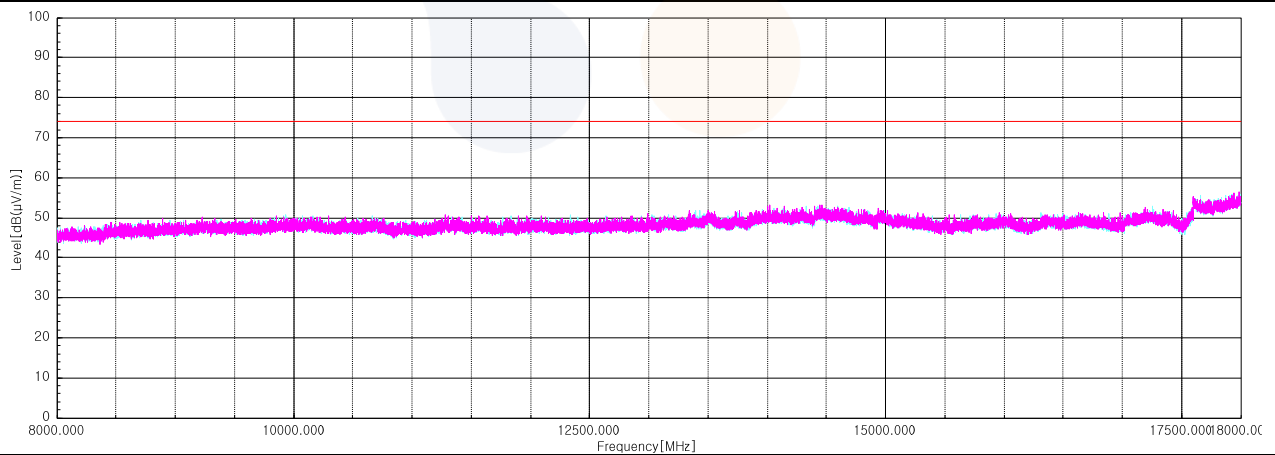
Horizontal/Vertical for 1 GHz ~ 3.5 GHz



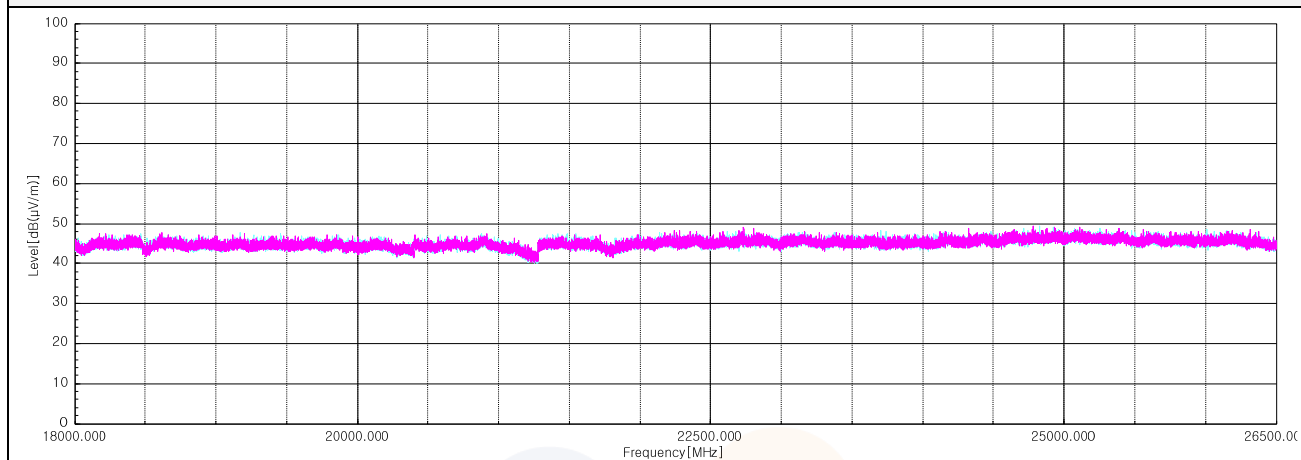
Horizontal/Vertical for 3.5 GHz ~ 8 GHz



Horizontal/Vertical for 8 GHz ~ 18 GHz

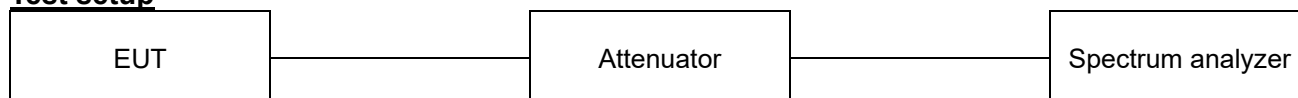


Horizontal/Vertical for 18 GHz ~ 26.5 GHz



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 device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

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.

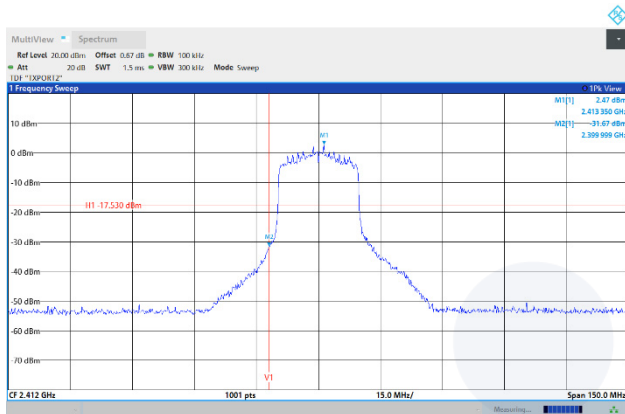
- Band Edge: 11ax SU, 11ax RU all tones/offsets with the nearest to the band edge.
- Spurious Emission: 11ax SU, 11ax RU allocation with the actual highest PSD for the channel.

Test results

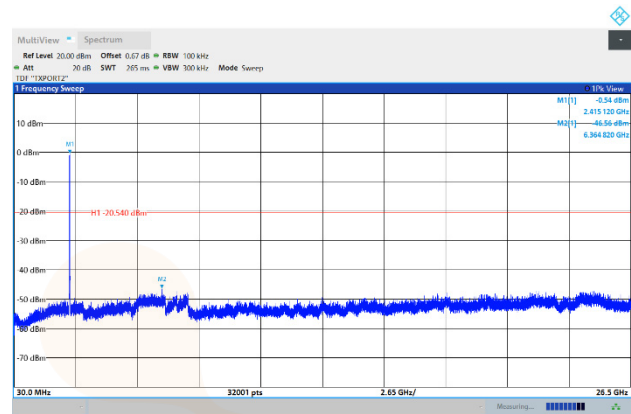
SISO_ANT2

SU

Conducted band-edge / 2 412 MHz



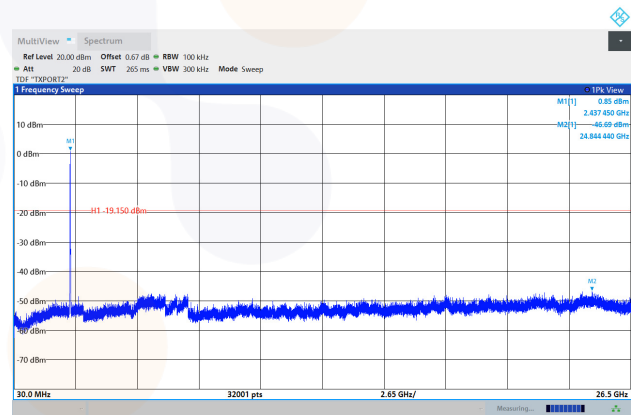
Conducted spurious / 2 412 MHz



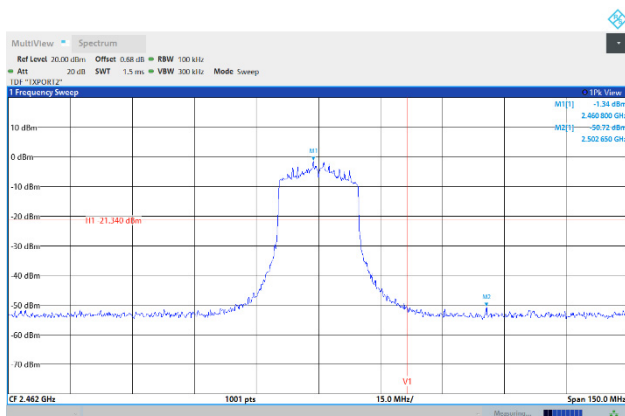
Conducted band-edge / 2 437 MHz

Blank

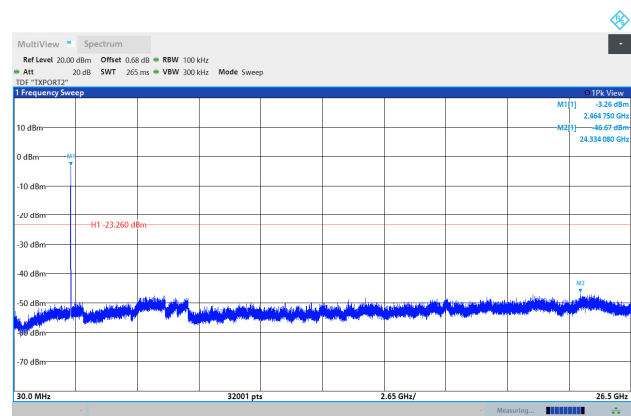
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

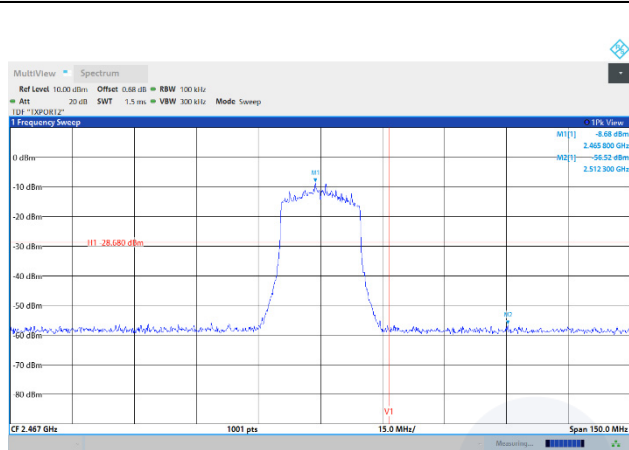


Conducted spurious / 2 462 MHz

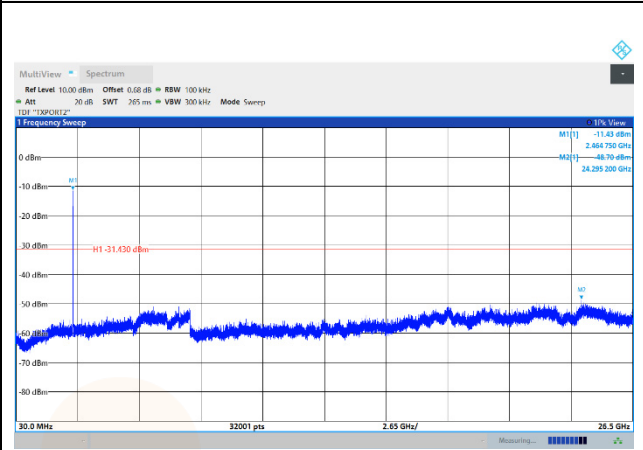


SU

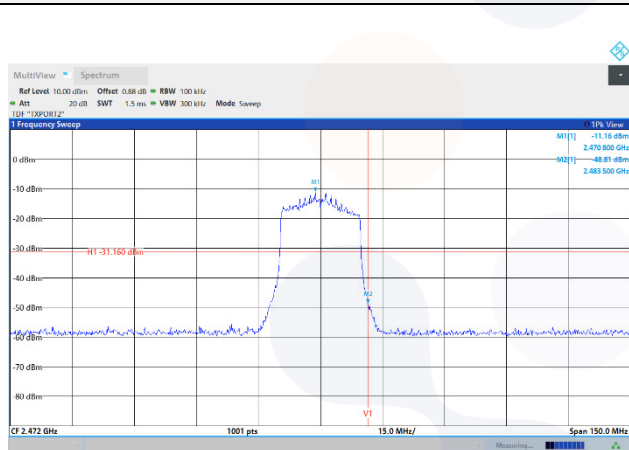
Conducted band-edge / 2 467 MHz



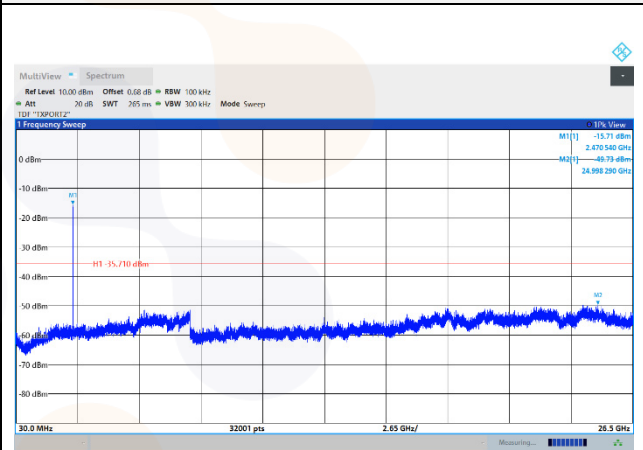
Conducted spurious / 2 467 MHz



Conducted band-edge / 2 472 MHz

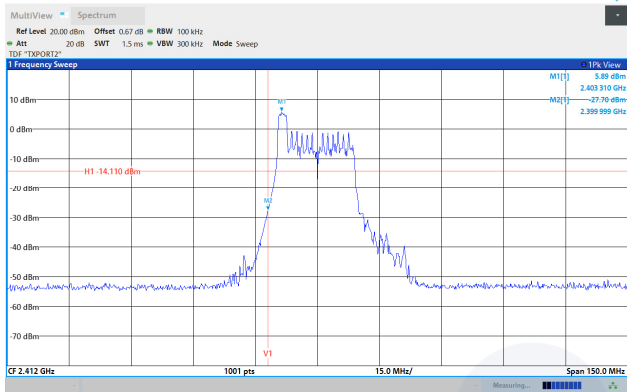


Conducted spurious / 2 472 MHz



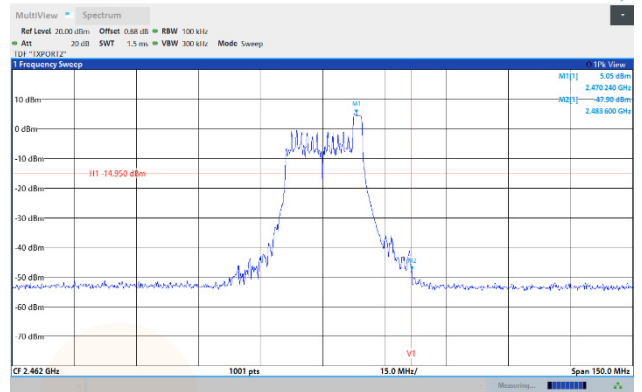
26T / RU offset 0

Conducted band-edge / 2 412 MHz



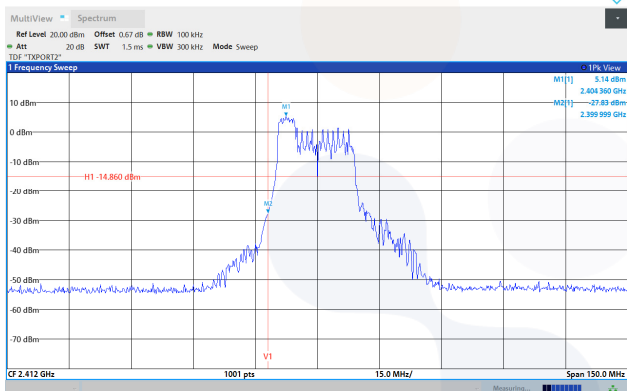
26T / RU offset 8

Conducted band-edge / 2 462 MHz



52T / RU offset 37

Conducted band-edge / 2 412 MHz



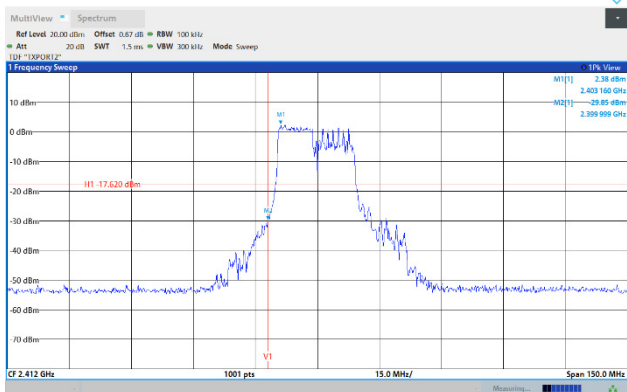
52T / RU offset 40

Conducted band-edge / 2 462 MHz



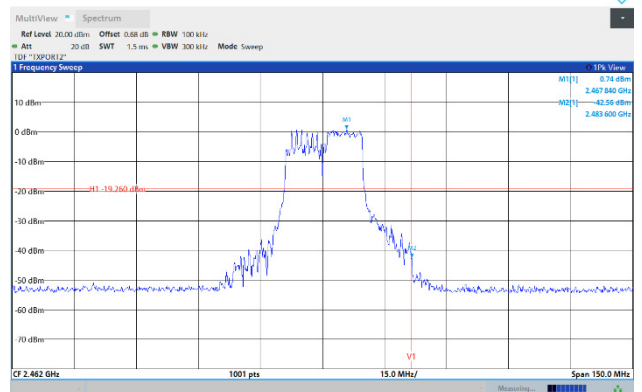
106T / RU offset 53

Conducted band-edge / 2 412 MHz



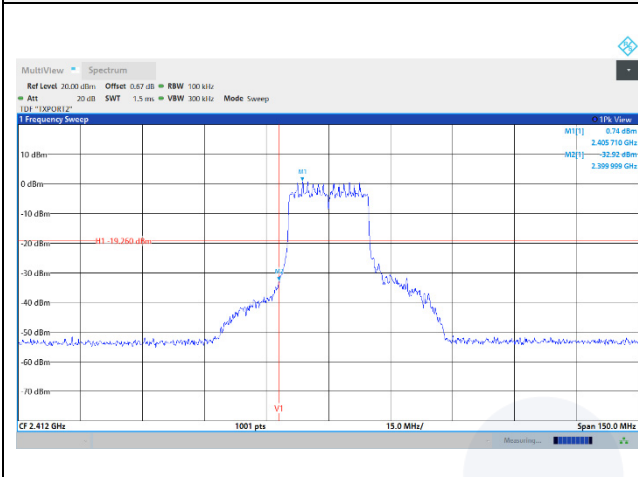
106T / RU offset 54

Conducted band-edge / 2 462 MHz

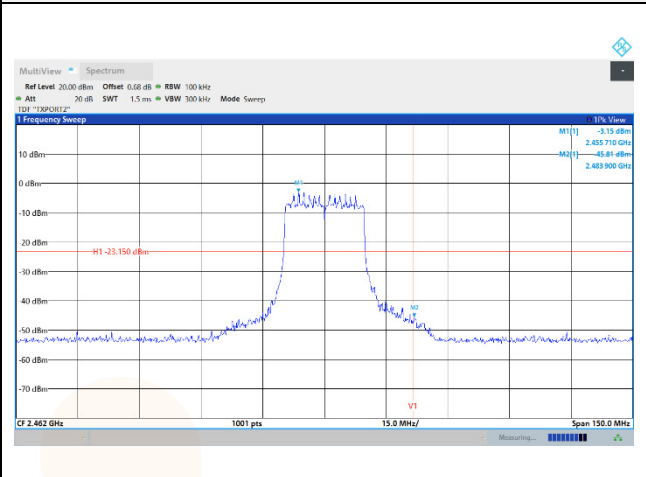


242T / RU offset 61

Conducted band-edge / 2 412 MHz

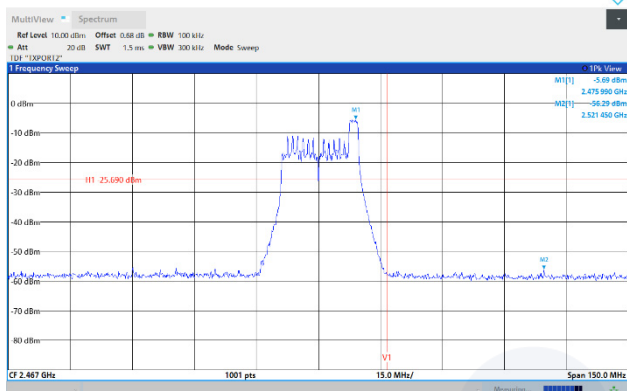


Conducted band-edge / 2 462 MHz

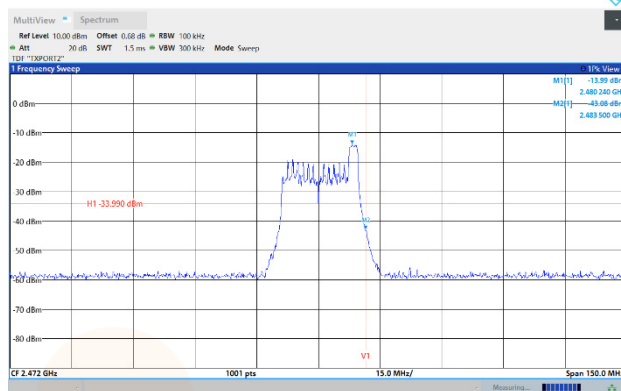


26T / RU offset 8

Conducted band-edge / 2 467 MHz

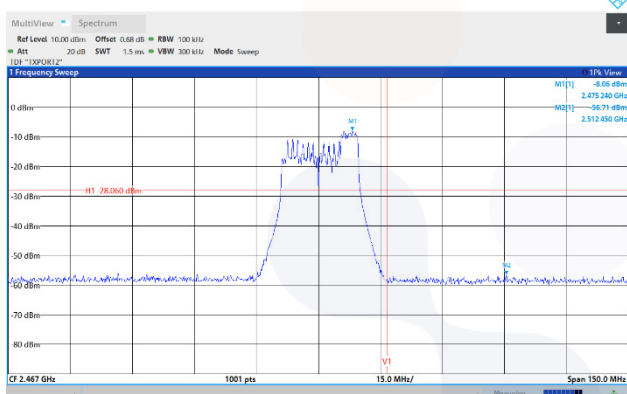


Conducted band-edge / 2 472 MHz

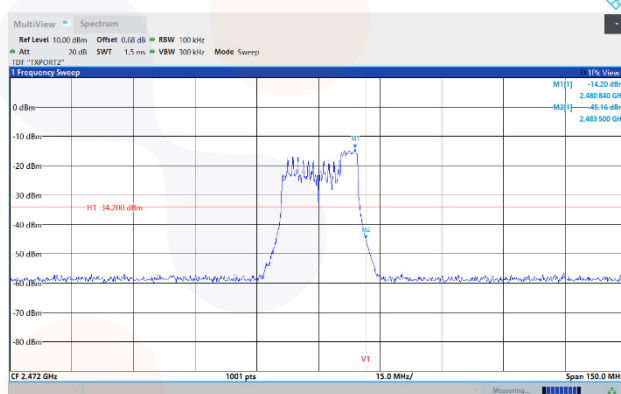


52T / RU offset 40

Conducted band-edge / 2 467 MHz

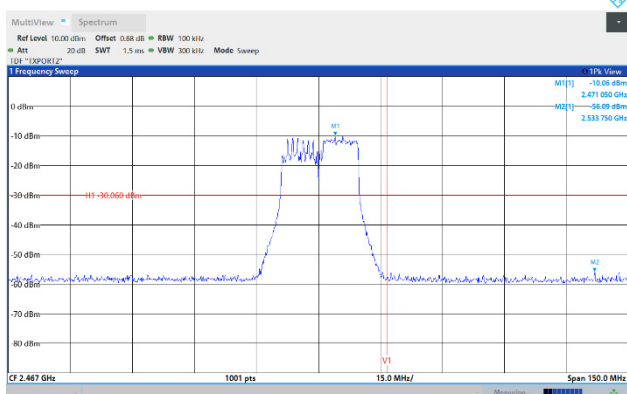


Conducted band-edge / 2 472 MHz

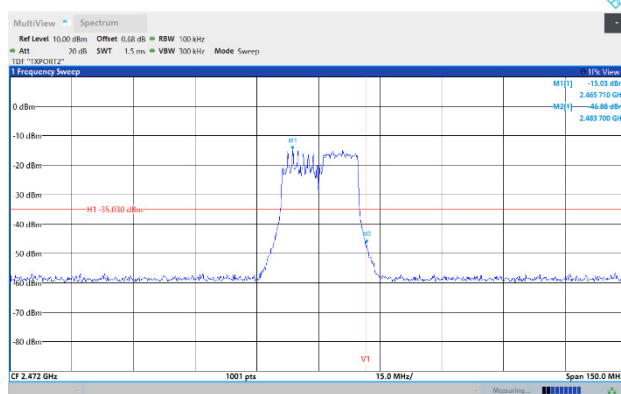


106T / RU offset 54

Conducted band-edge / 2 467 MHz

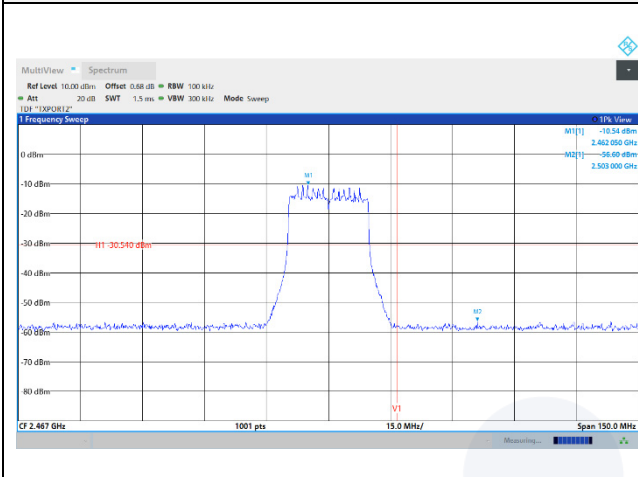


Conducted band-edge / 2 472 MHz



242T / RU offset 61

Conducted band-edge / 2 467 MHz



Conducted band-edge / 2 472 MHz

