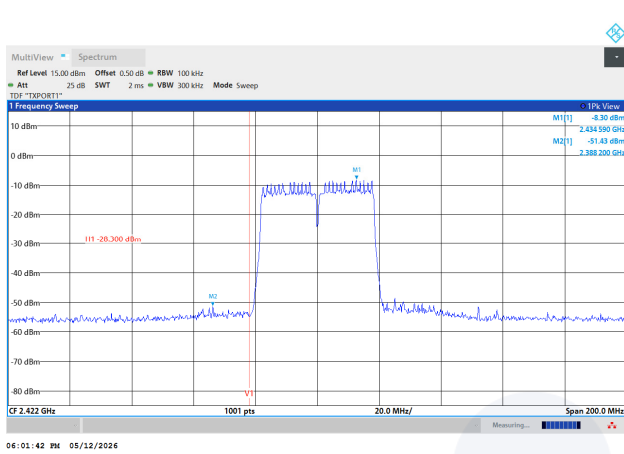
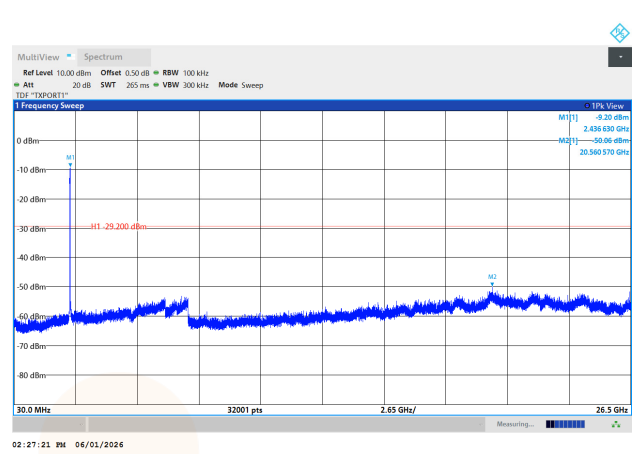


802.11n_HT40

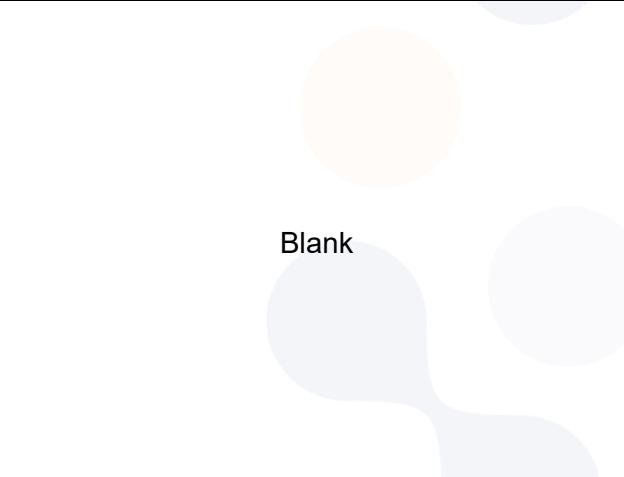
Conducted band-edge / 2 422 MHz



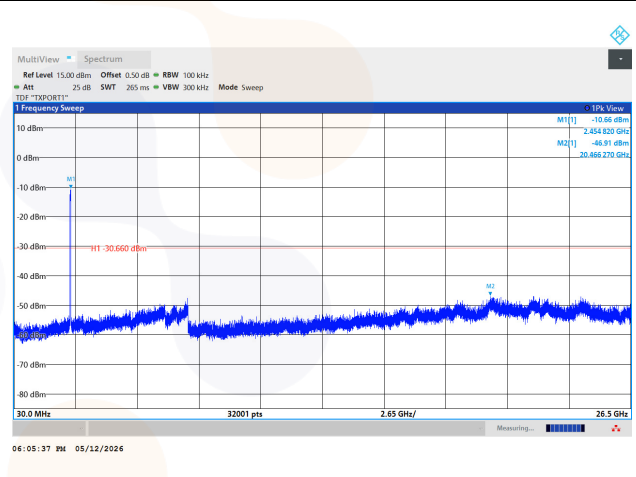
Conducted spurious / 2 422 MHz



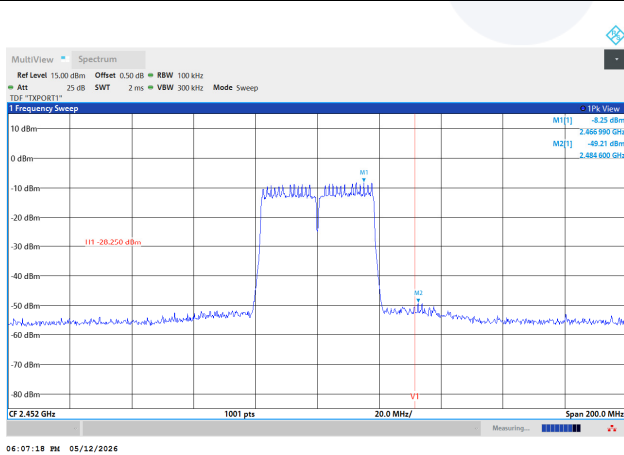
Conducted band-edge / 2 437 MHz



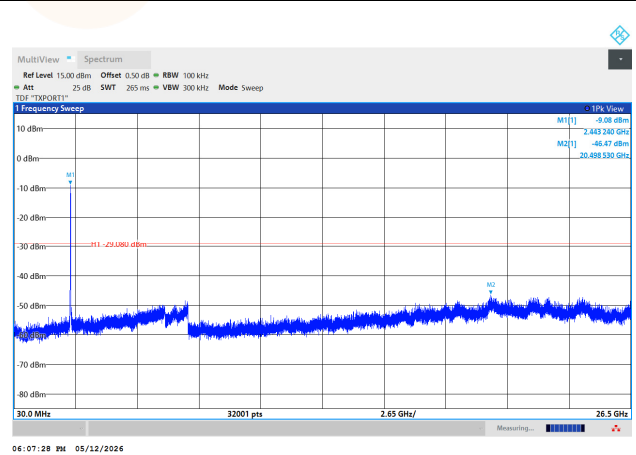
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 452 MHz



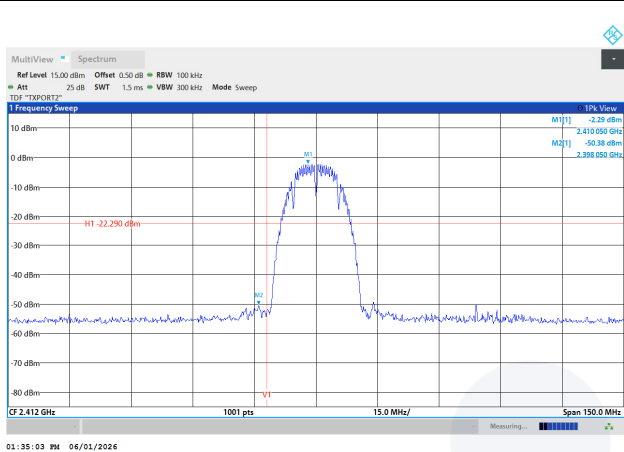
Conducted spurious / 2 452 MHz



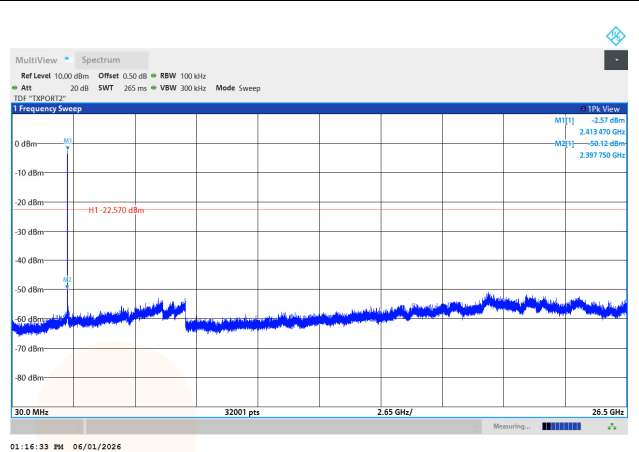
SISO ANT2

802.11b

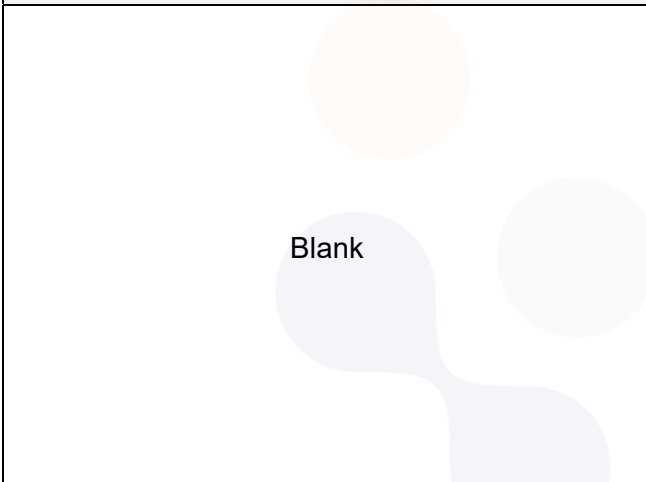
Conducted band-edge / 2 412 MHz



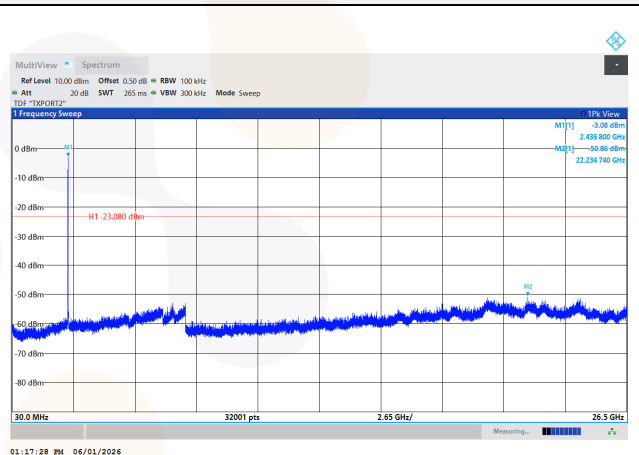
Conducted spurious / 2 412 MHz



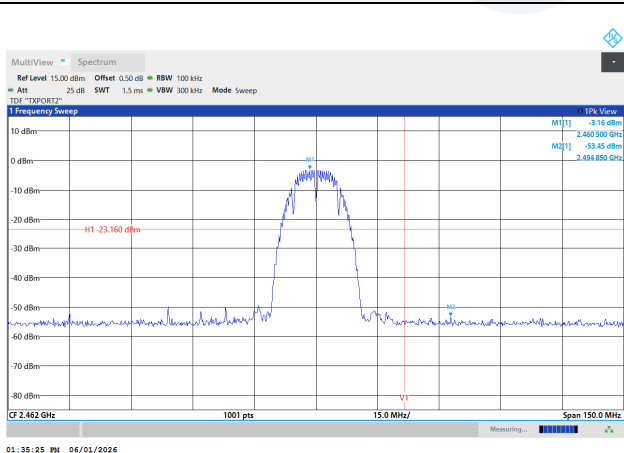
Conducted band-edge / 2 437 MHz



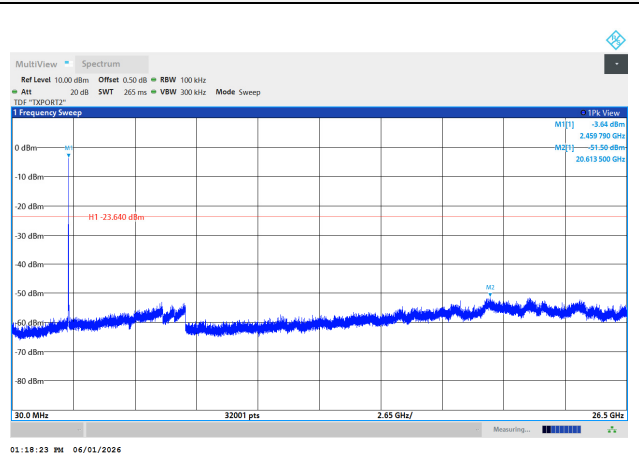
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

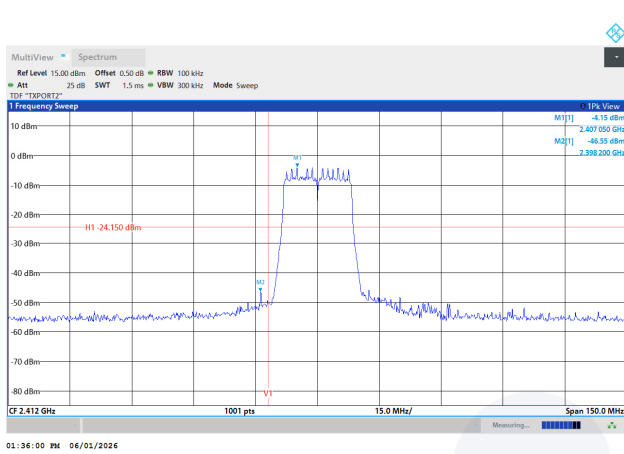


Conducted spurious / 2 462 MHz

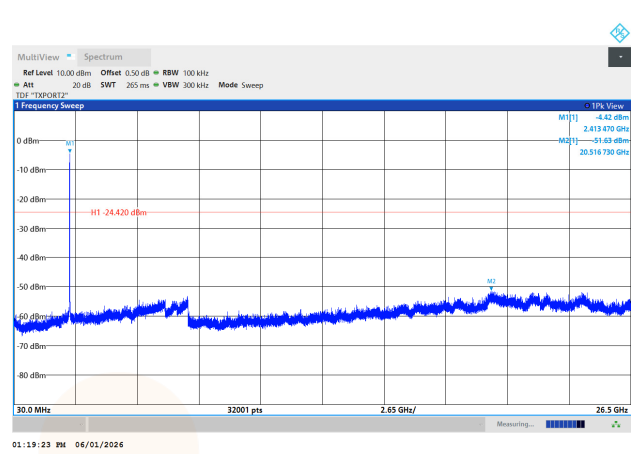


802.11g

Conducted band-edge / 2 412 MHz



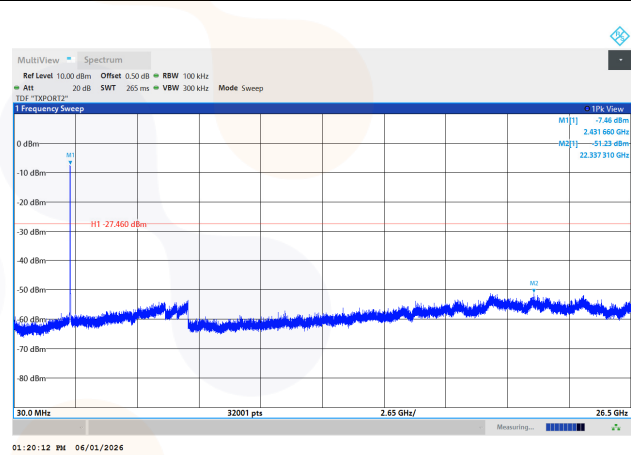
Conducted spurious / 2 412 MHz



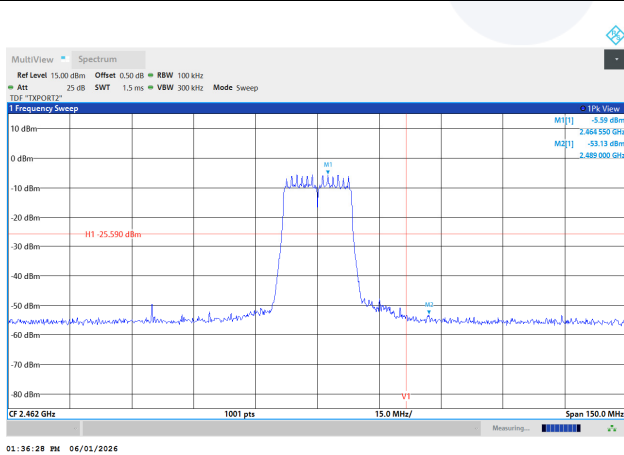
Conducted band-edge / 2 437 MHz

Blank

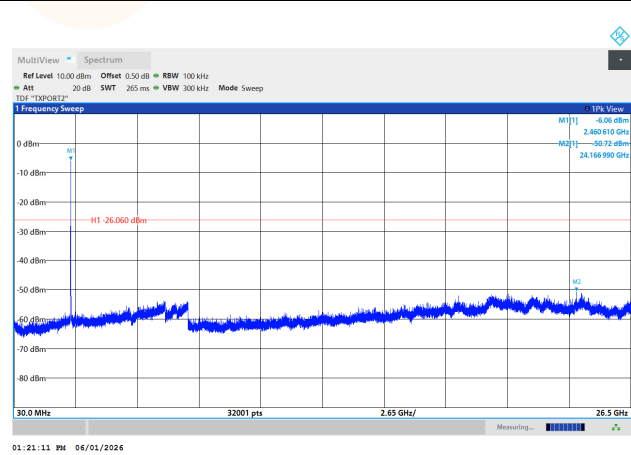
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

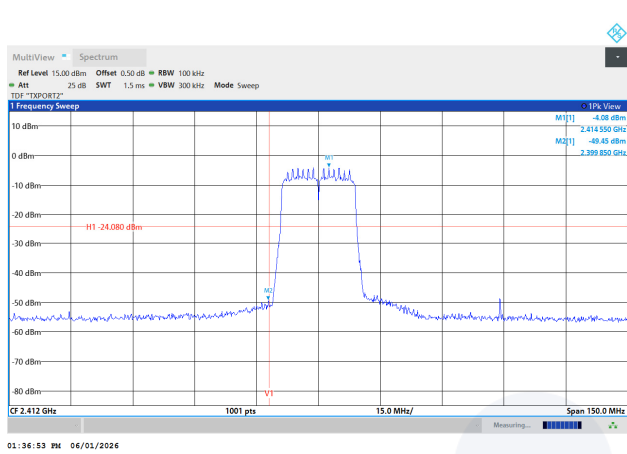


Conducted spurious / 2 462 MHz

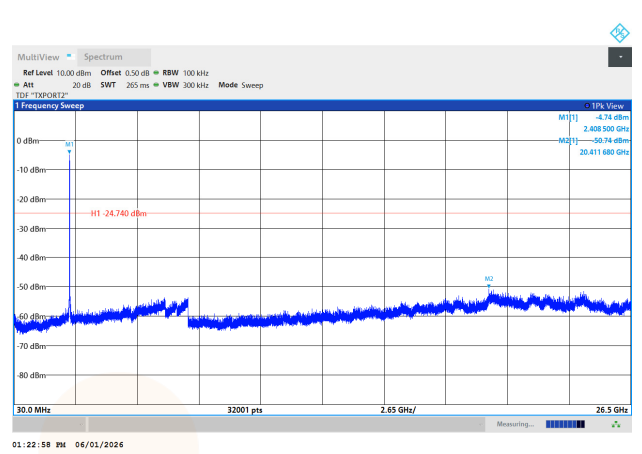


802.11n_HT20

Conducted band-edge / 2 412 MHz



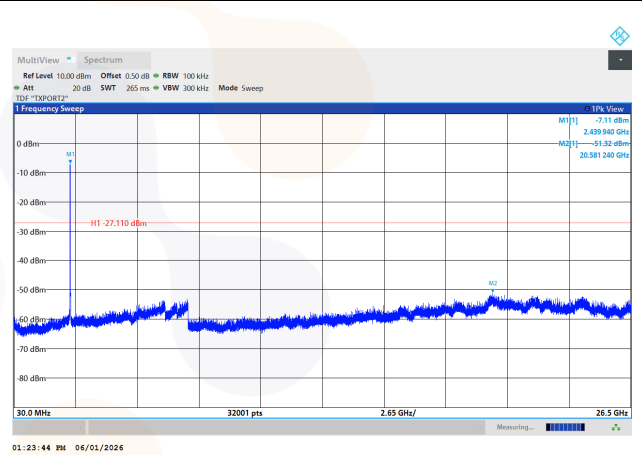
Conducted spurious / 2 412 MHz



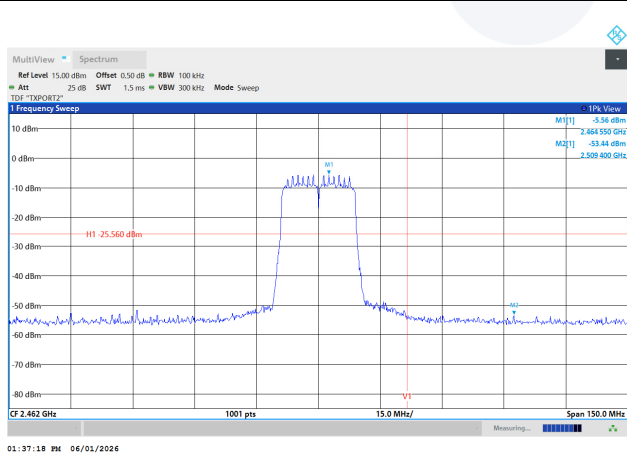
Conducted band-edge / 2 437 MHz

Blank

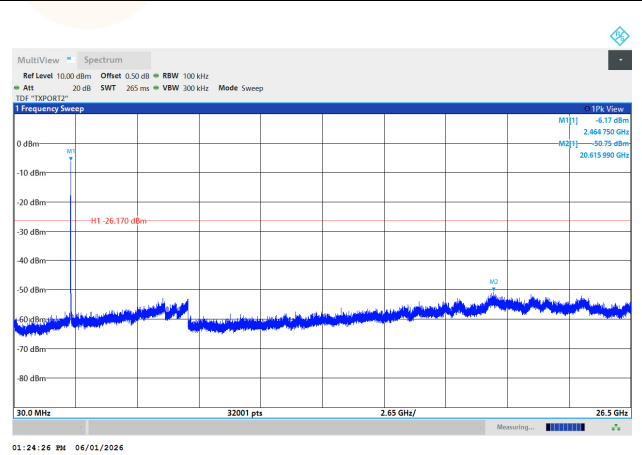
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 462 MHz

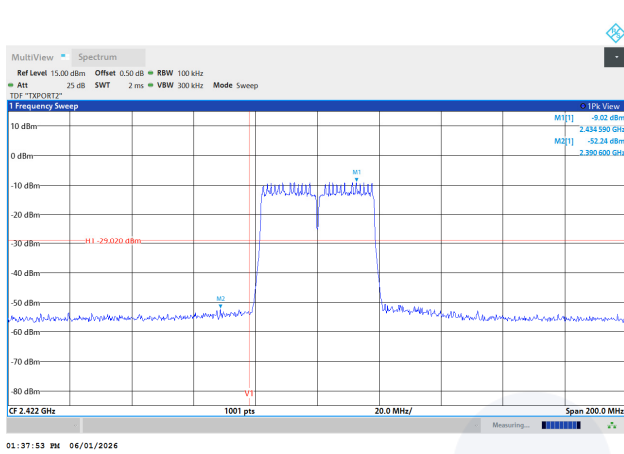


Conducted spurious / 2 462 MHz

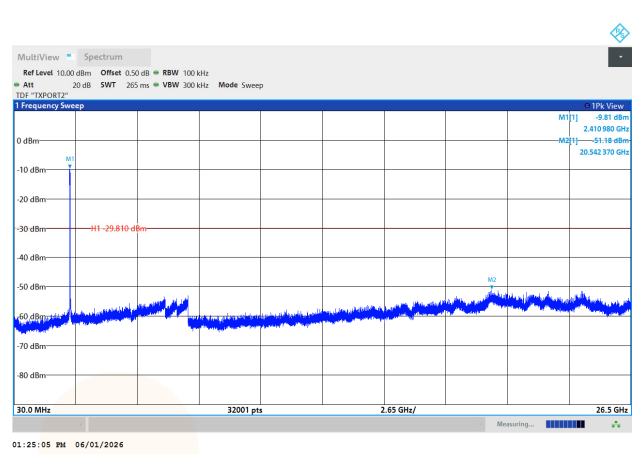


802.11n_HT40

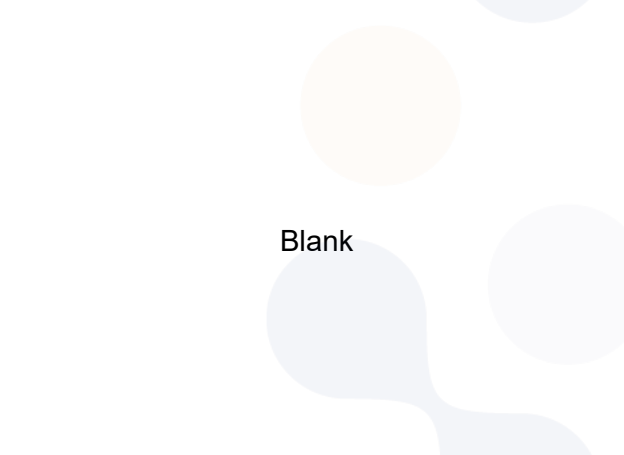
Conducted band-edge / 2 422 MHz



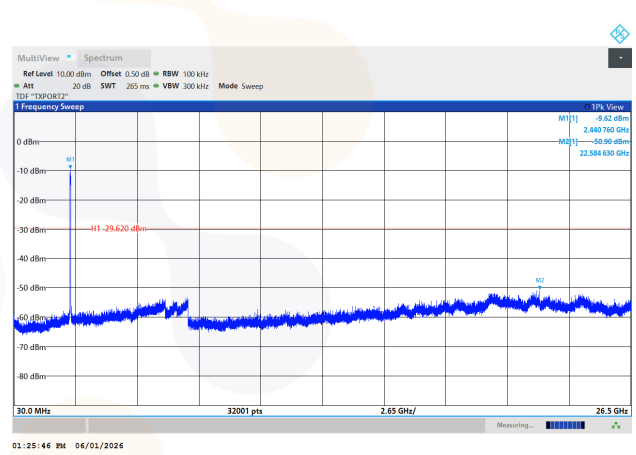
Conducted spurious / 2 422 MHz



Conducted band-edge / 2 437 MHz



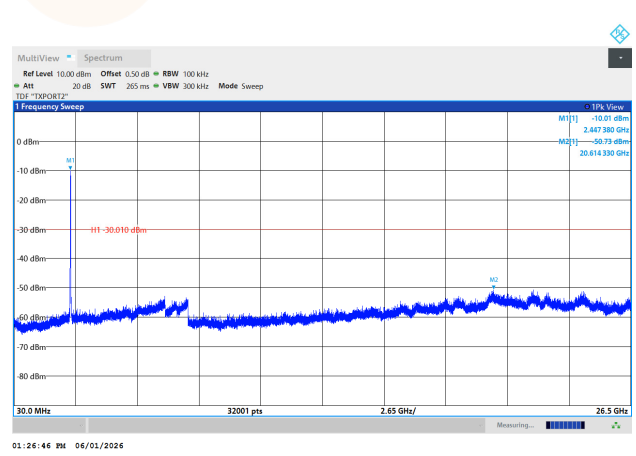
Conducted spurious / 2 437 MHz



Conducted band-edge / 2 452 MHz

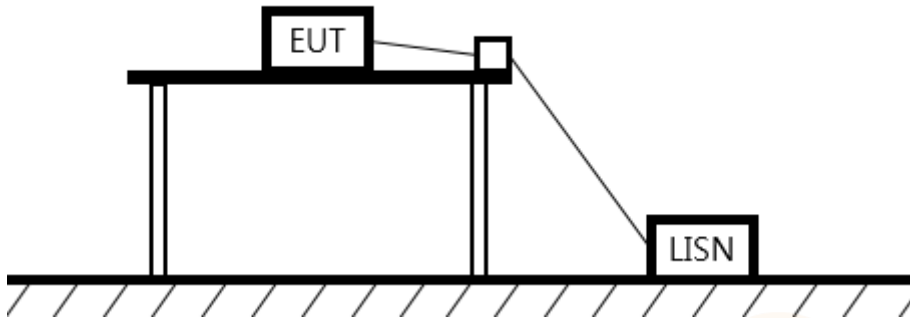


Conducted spurious / 2 452 MHz



7.6. AC Conducted emission

Test setup



Limit

According to 15.207(a),

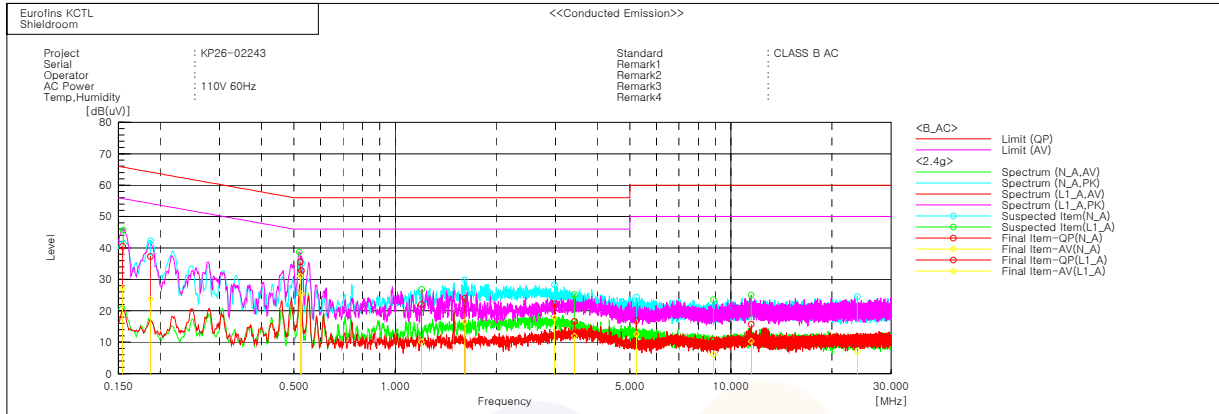
For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted limit (dB μ V/m)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

Measurement procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a spectrum analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 kHz or to quasi-peak and average within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

Test results - Worst case: 802.11n HT20 mode / 2 412 MHz / SISO_ANT2



Final Result

--- N_A Phase ---									
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]
1	0.18674	27.0	13.4	10.3	37.3	23.7	64.2	54.2	26.9
2	0.5263	22.6	15.2	10.2	32.8	25.4	56.0	46.0	23.2
3	1.61311	14.1	6.5	9.9	24.0	16.4	56.0	46.0	32.0
4	2.98181	12.4	7.8	9.9	22.3	17.7	56.0	46.0	33.7
5	5.23363	6.9	2.4	10.0	16.9	12.4	60.0	50.0	43.1
6	23.79024	0.5	-4.2	11.3	11.8	7.1	60.0	50.0	48.2

--- L1_A Phase ---									
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]
1	0.15442	30.4	17.0	10.1	40.5	27.1	65.8	55.8	25.3
2	0.52237	25.3	20.8	10.2	35.5	31.0	56.0	46.0	20.5
3	1.1968	12.0	0.2	10.0	22.0	10.2	56.0	46.0	34.0
4	3.42034	6.7	2.0	9.9	16.6	11.9	56.0	46.0	39.4
5	8.8761	0.1	-4.5	10.5	10.6	6.0	60.0	50.0	49.4
6	11.48232	5.0	-0.4	10.7	15.7	10.3	60.0	50.0	44.3

8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Horn antenna	ETS.lindgren	3117	00251528	27.01.23
Horn antenna	ETS.lindgren	3116	00086635	27.01.20
Amplifier	B&Z Technologies	BZR-0050400-551028-252525	27736	27.04.27
Amplifier	L-3 Narda-MITEQ	JS44-18004000-33-8P	2000996	27.01.26
Amplifier	Narda-MITEQ	LNAS-55-01001800-22-10p	2265313	27.01.15
Attenuator	Pasternack	PE7090-10	1928	27.01.12
High pass Filter	WT	WT-A1699-HS	WT160411001	27.04.23
Spectrum Analyzer	R&S	FSV40	100989	26.09.29
Signal Generator	R&S	SMB100A	176206	27.01.15
Antenna Mast	Innco Systems	MA4640-XP-ET	MA4000/396/30810213/L	-
Controller	Innco Systems	CO3000	1175/45850319/P	-
TWO-LINE V - NETWORK	R&S	ENV216	101358	27.04.21
EMI TEST RECEIVER	R&S	ESC13	100001	26.08.11
Spectrum Analyzer	R&S	FSV3030	102317	26.11.25
DC Power Supply	AGILENT	E3632A	MY40008800	27.04.23
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT11	26.07.07
Power Sensor	R&S	NRP-Z81	1137.9009.02-106223-bB	27.04.24
Spectrum Analyzer	R&S	FSV40	100988	27.04.06
Amplifier	SONOMA INSTRUMENT	310N	421910	26.07.01
Bi-log Antenna	Teseq GmbH	CBL 6112D	61521	26.12.11
Loop Antenna	R&S	HFH2-Z2	100355	26.06.25
DC Power Supply	POWERCOM	DCP-50100A	20220610-01	27.01.16
Vector Signal Generator	R&S	SMBV100A	257566	26.07.01
AC/DC Power Supply	KIKUSUI	PCR2000W	GB001619	27.04.23
Controller	INNCO SYSTEMS	CO3000	1442/54370322/P	-
Antenna Mast	INNCO SYSTEMS	MA4640-XP-ET	AM002	-
Turn Device	INNCO SYSTEMS	DS1200-S-1t	0001	-

End of test report