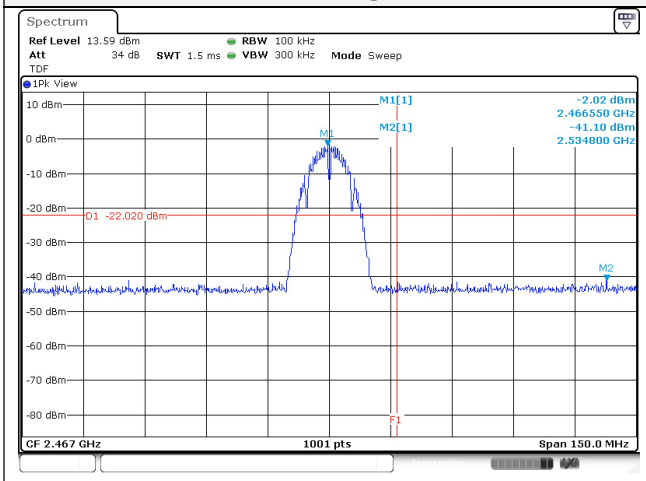
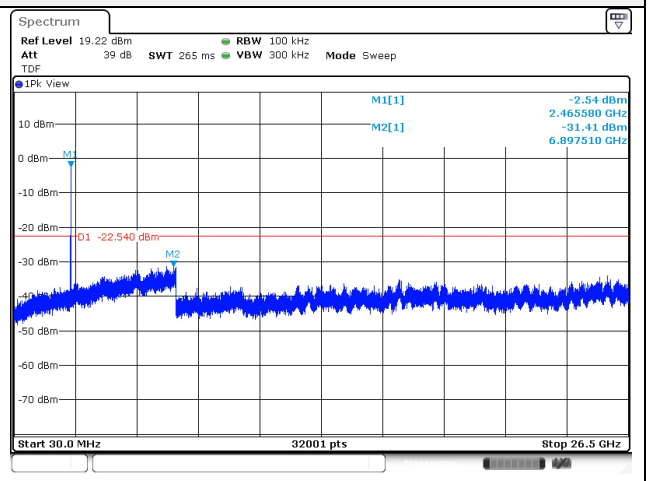
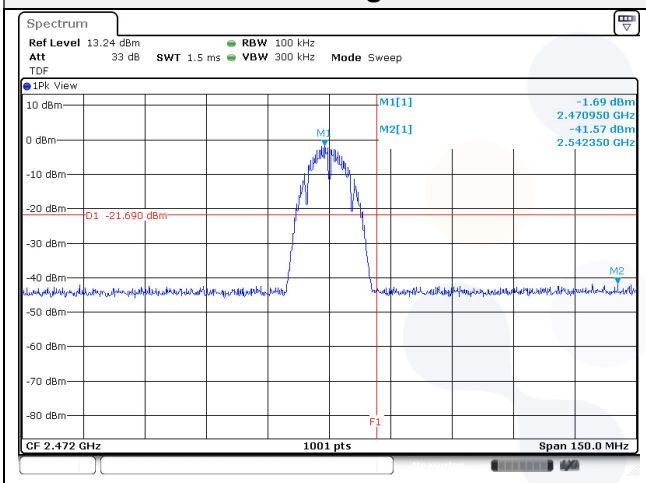
Conducted band-edge / 2 467 ㎒



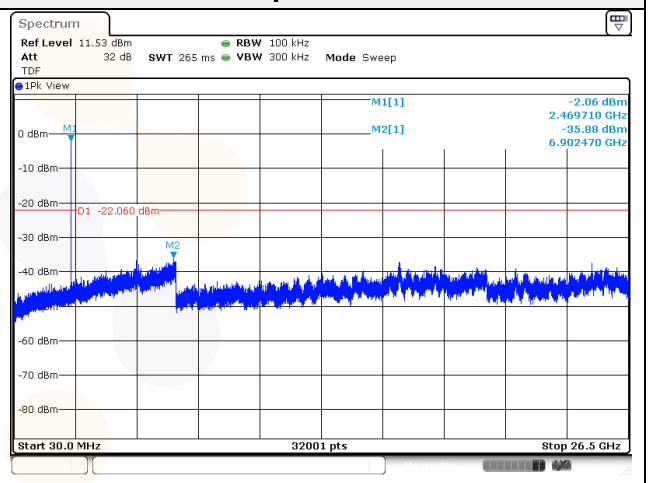
Conducted spurious / 2 467 ㎒



Conducted band-edge / 2 472 ㎒

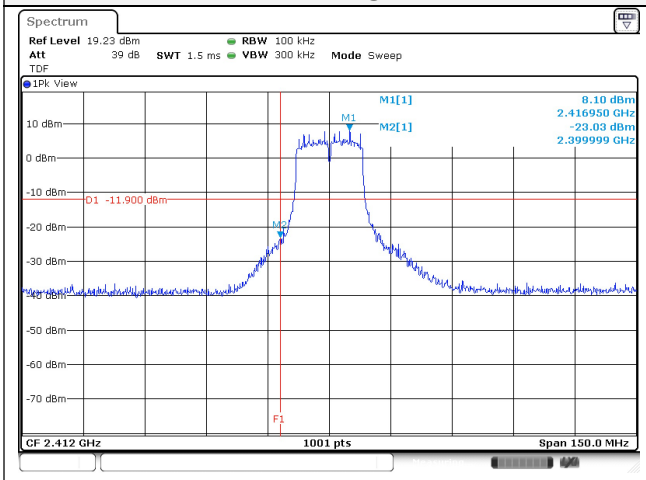


Conducted spurious / 2 472 ㎒

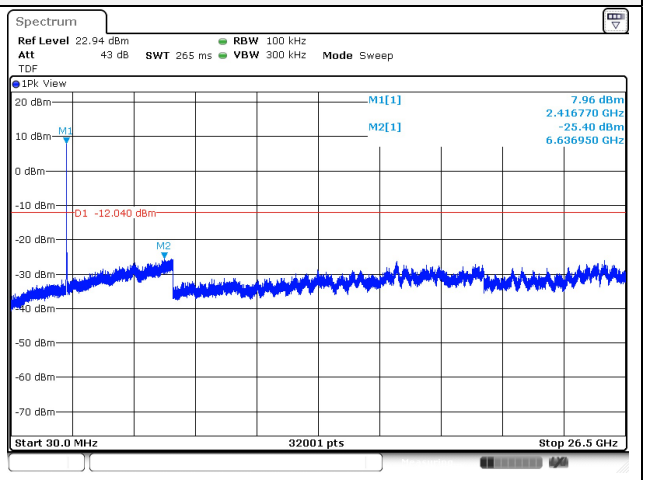


802.11g

Conducted band-edge / 2 412 ㎒



Conducted spurious / 2 412 ㎒



Conducted band-edge / 2 437 ㎒

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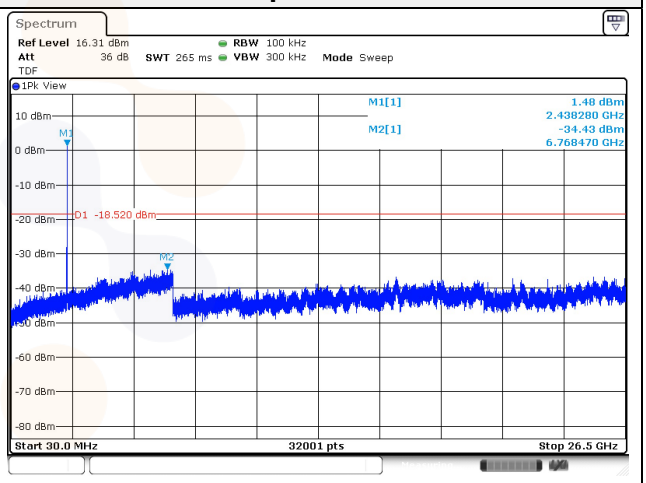
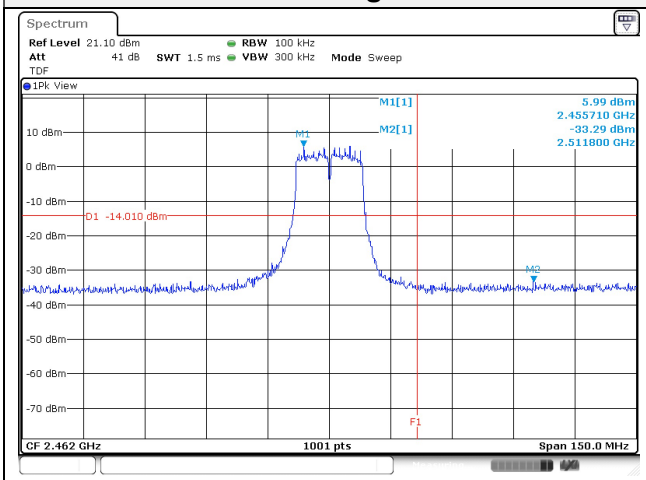
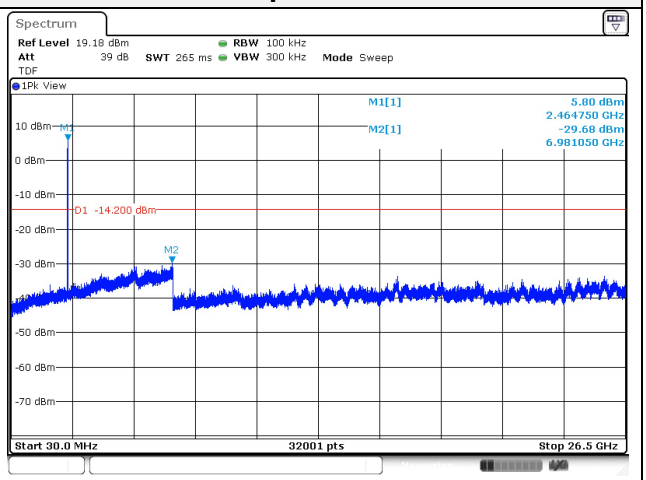
Conducted spurious / 2 437 ㎒



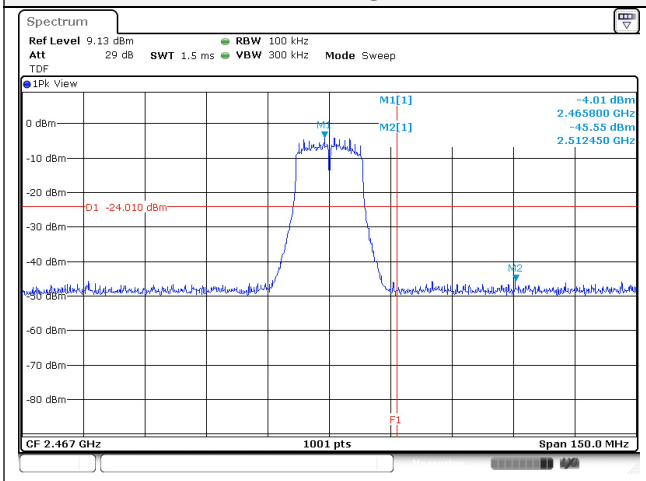
Conducted band-edge / 2 462 ㎒



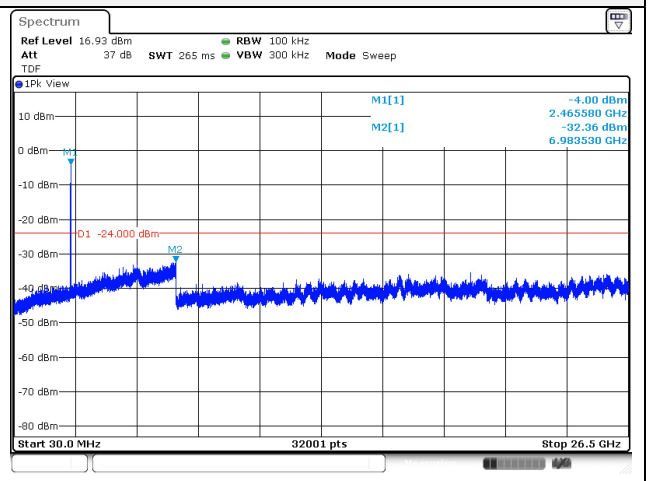
Conducted spurious / 2 462 ㎒



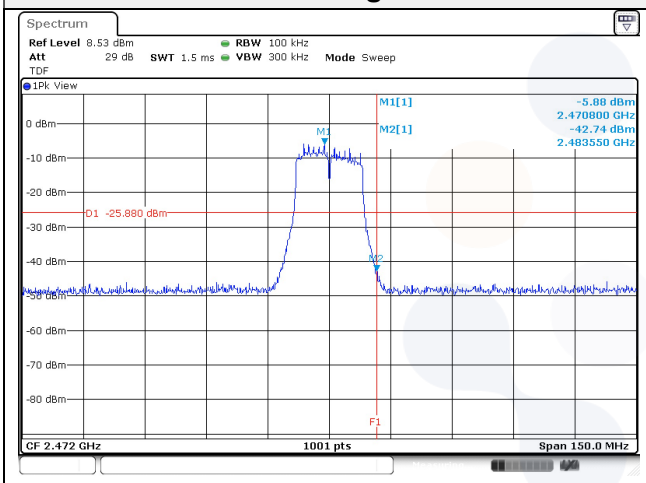
Conducted band-edge / 2 467 ㎒



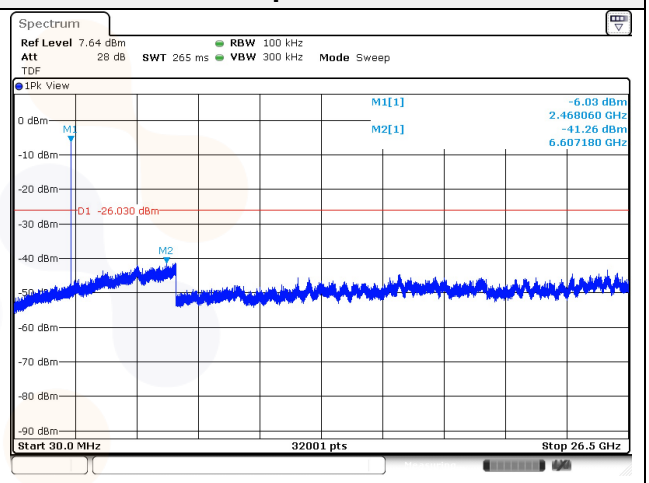
Conducted spurious / 2 467 ㎒



Conducted band-edge / 2 472 ㎒

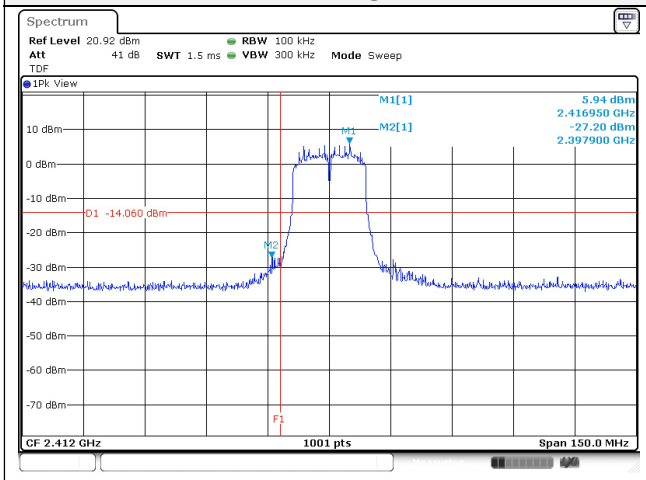


Conducted spurious / 2 472 ㎒

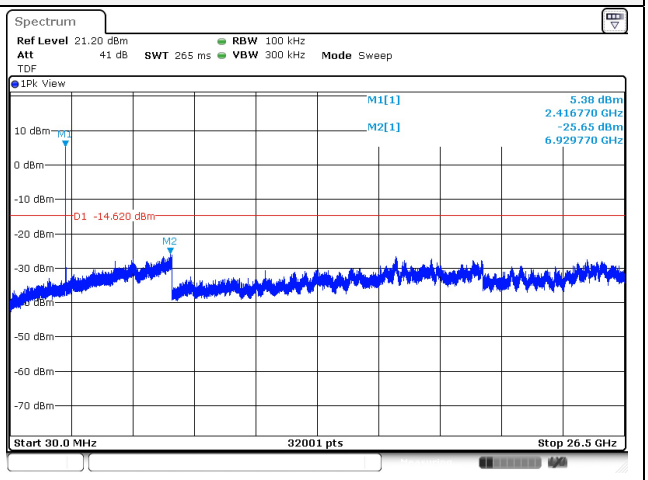


802.11n HT20

Conducted band-edge / 2 412 ㎒



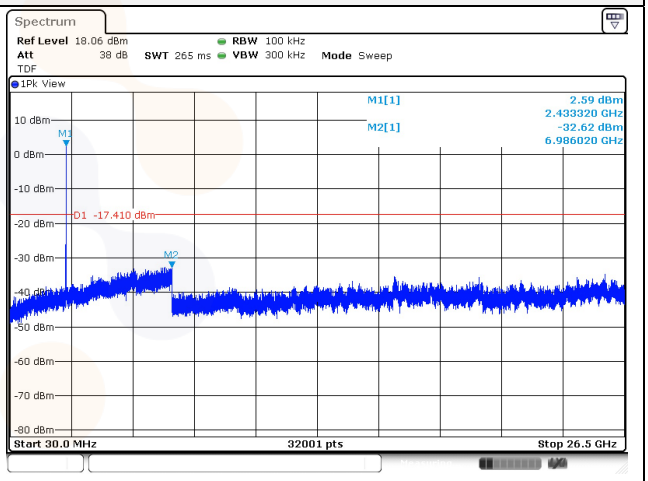
Conducted spurious / 2 412 ㎒



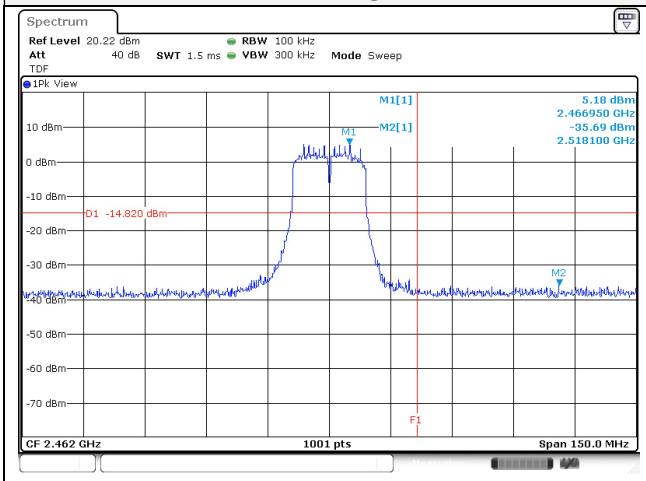
Conducted band-edge / 2 437 ㎒

Blank

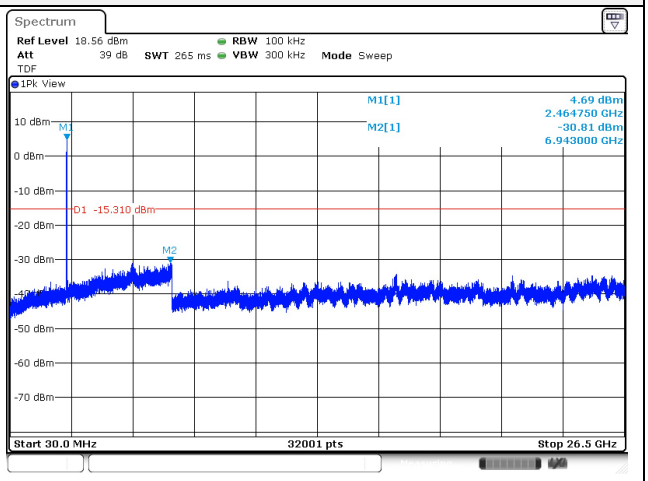
Conducted spurious / 2 437 ㎒



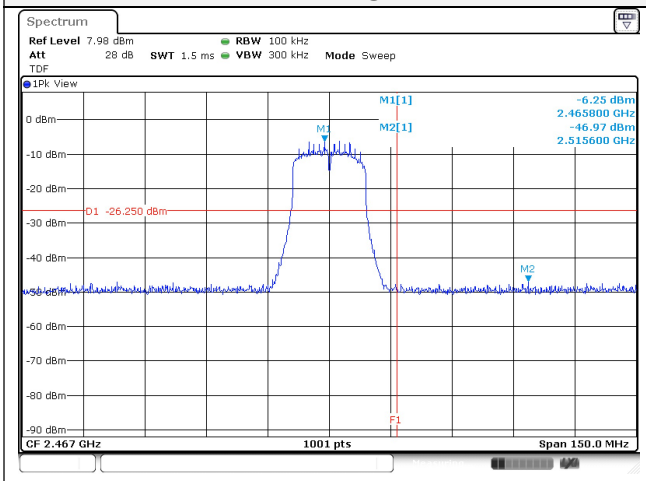
Conducted band-edge / 2 462 ㎒



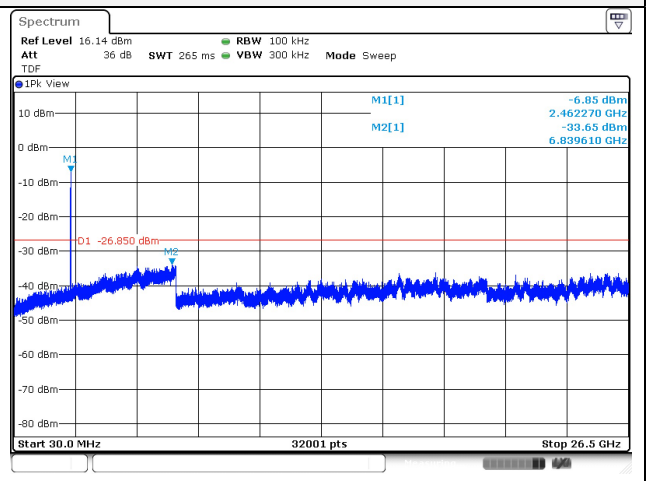
Conducted spurious / 2 462 ㎒



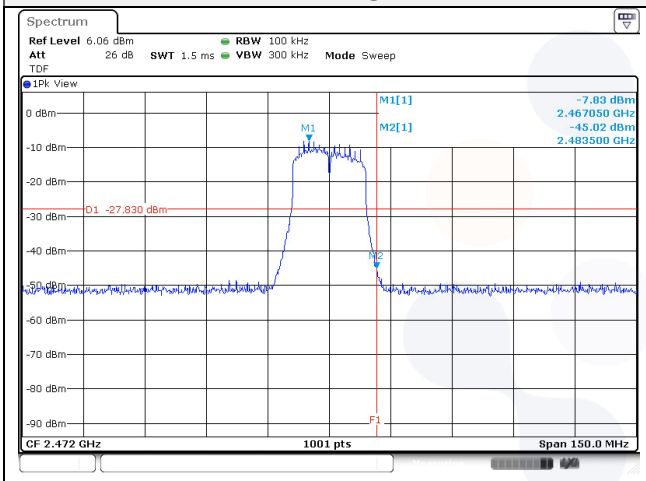
Conducted band-edge / 2 467 ㎒



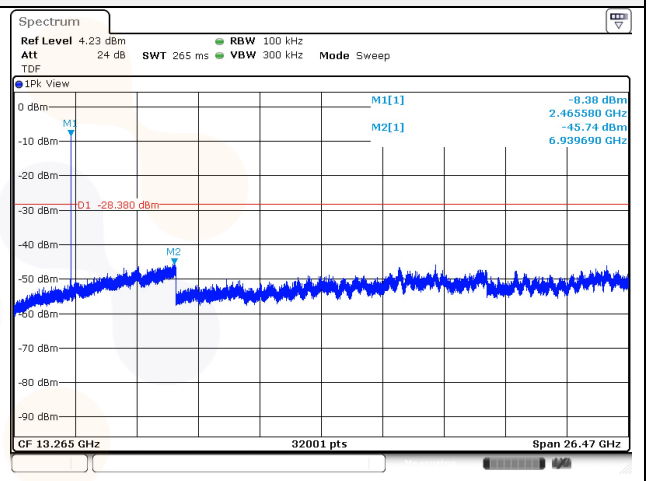
Conducted spurious / 2 467 ㎒



Conducted band-edge / 2 472 ㎒

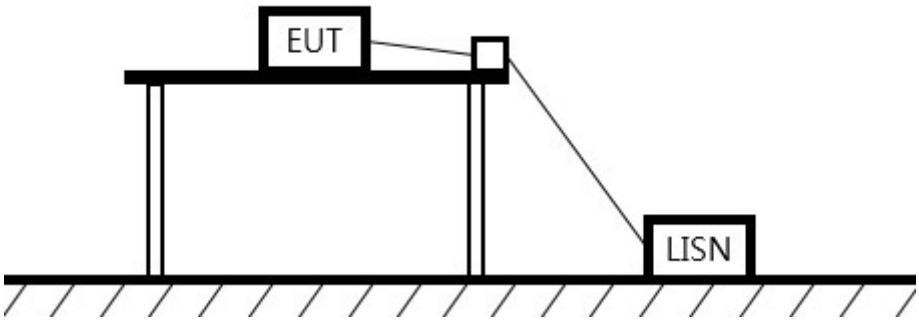


Conducted spurious / 2 472 ㎒



7.6. AC Conducted emission

Test setup



Limit

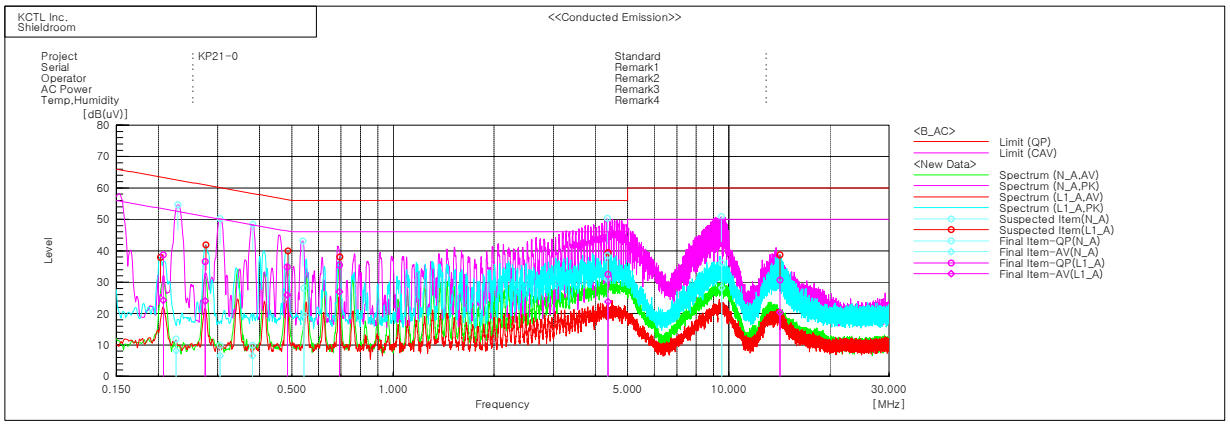
According to 15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 ㎑ to 30 ㎒, shall not exceed the limits in the following table, as measured using a 50uH/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminl. The lower applies at the boundary between the frequencies ranges.

Frequency of Emission (㎒)	Conducted limit (dBμV/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 ㎝ in which is located 40 ㎝ 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 50Ω/50μH 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 ㎒ to 30 ㎒.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 ㎑ or to quasi-peak and average within a bandwidth of 9 ㎑. The EUT was in transmitting mode during the measurements.

Test results – Worst case: 802.11n HT20 mode / 2 437 ㎒



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]	Margin CAV [dB]
1	0.2257	2.1	-1.6	9.8	11.9	8.2	62.6	52.6	50.7	44.4
2	0.30577	0.1	-3.1	9.7	9.8	6.6	60.1	50.1	50.3	43.5
3	0.38171	0.0	-3.3	9.8	9.8	6.5	58.2	48.2	48.4	41.7
4	0.54316	18.2	9.7	9.9	28.1	19.6	56.0	46.0	27.9	26.4
5	4.34388	28.6	21.3	9.8	38.4	31.1	56.0	46.0	17.6	14.9
6	9.51305	26.0	18.1	10.1	36.1	28.2	60.0	50.0	23.9	21.8

--- 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]	Margin CAV [dB]
1	0.20699	28.8	14.3	9.9	38.7	24.2	63.3	53.3	24.6	29.1
2	0.27596	26.9	14.3	9.7	36.6	24.0	60.9	50.9	24.3	26.9
3	0.4842	25.0	16.0	9.9	34.9	25.9	56.3	46.3	21.4	20.4
4	0.6924	25.5	17.0	9.9	35.4	26.9	56.0	46.0	20.6	19.1
5	4.36367	22.6	14.0	9.8	32.4	23.8	56.0	46.0	23.6	22.2
6	14.20233	20.1	9.9	10.5	30.6	20.4	60.0	50.0	29.4	29.6

8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100810	22.07.27
Spectrum Analyzer	R&S	FSV3030	1330.5000K30-101710-Wt	22.12.02
Attenuator	API Inmet	40AH2W-10	16	22.05.11
Signal Generator	R&S	SMB100A	176206	23.01.19
Vector Signal Generator	R&S	SMBV100A	257566	22.07.09
Power Sensor	R&S	NRP-Z81	1137.9009.02-106223-bB	22.05.11
Attenuator	R&S	DNF Dämpfungsglied 10 dB in N-50 Ohm	31210	22.05.11
DC Power Supply	AGILENT	E3632A	MY40017108	22.05.10
Spectrum Analyzer	R&S	FSV40	100989	22.12.21
EMI TEST RECEIVER	R&S	ESCI7	100732	23.01.19
Bi-Log Antenna	TESEQ	CBL 6112D	55545	23.01.14
Amplifier	SONOMA INSTRUMENT	310N	284608	22.08.19
ATTENUATOR	KEYSIGHT	8491B-6dB	MY39271060	23.01.14
Horn antenna	ETS.lindgren	3117	155787	22.10.05
Horn antenna	ETS.lindgren	3116	00086635	22.05.17
Attenuator	API Inmet	40AH2W-10	12	22.05.11
Broadband PreAmplifier	SCHWARZBECK	BBV9718	216	22.07.27
AMPLIFIER	L-3 Narda-MITEQ	AMF-7D-01001800-22-10P	2003683	22.08.19
AMPLIFIER	L-3 Narda-MITEQ	JS44-18004000-33-8P	2000996	23.01.21
LOOP Antenna	R&S	HFH2-Z2	100355	22.08.21
Antenna Mast	Innco Systems	MA4640-XP-ET	-	-
Turn Table	Innco Systems	CO3000	1175/45850319/P	-
Antenna Mast	Innco Systems	MA4000-EP	303	-
Turn Table	Innco Systems	CO3000	1175/45850319/P	-
Highpass Filter	WT	WT-A1698-HS	WT160411001	22.05.10
TWO-LINE V - NETWORK	R&S	ENV216	101358	22.09.29
EMI TEST RECEIVER	R&S	ESCI3	100001	22.08.19
Cable Assembly	RadiAll	2301761768000PJ	1724.659	-
Cable Assembly	HUER+SUHNER	SUCOFLEX 104	MY4342/4	-
Cable Assembly	HUER+SUHNER	SUCOFLEX 102	804320/2	-

End of test report