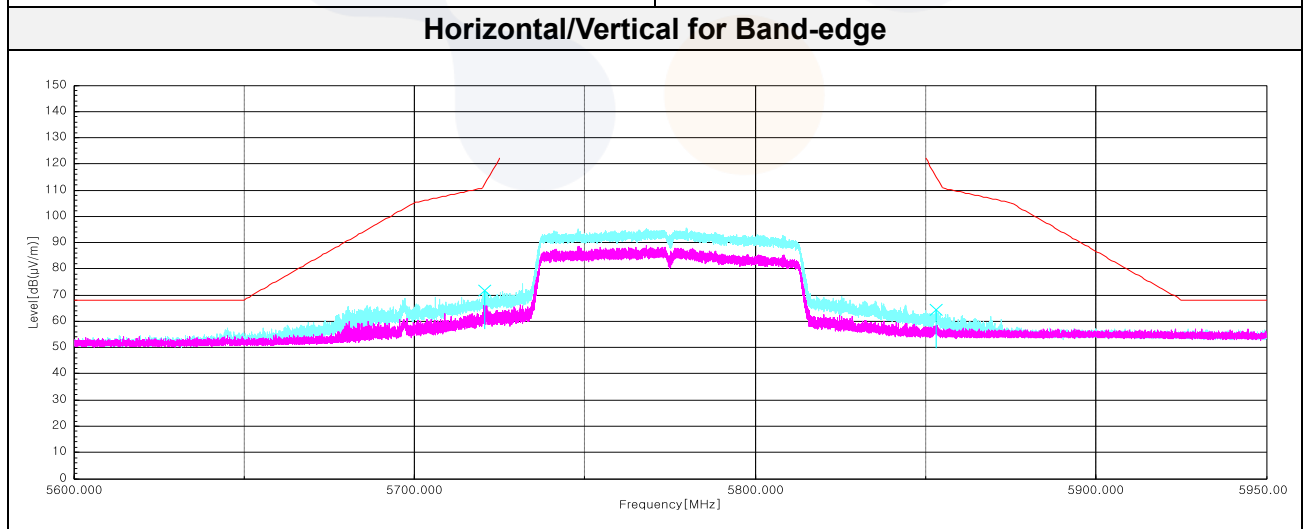
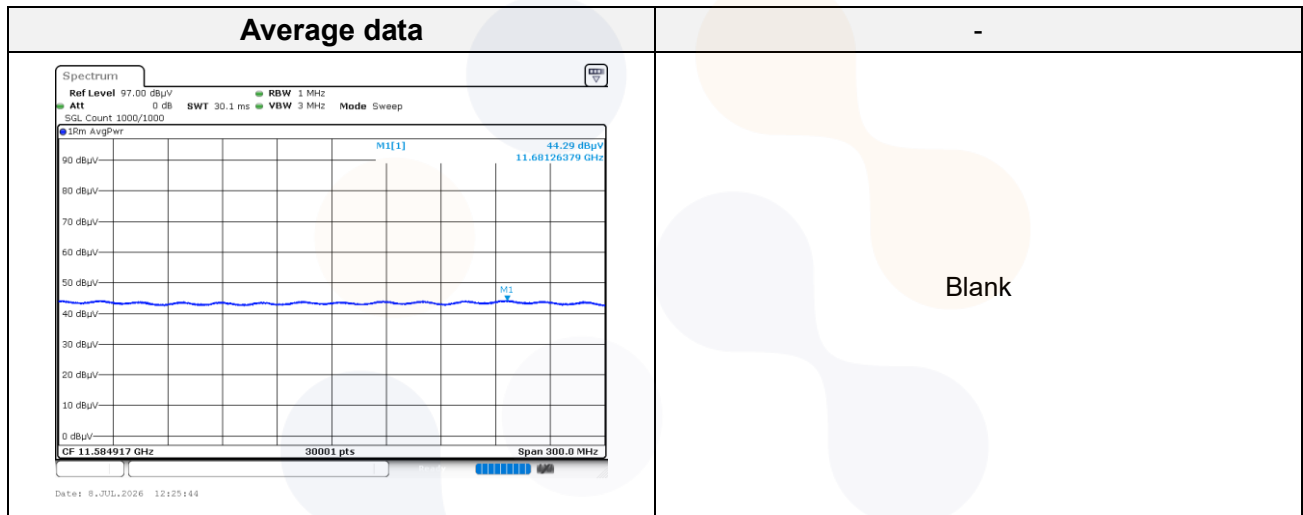
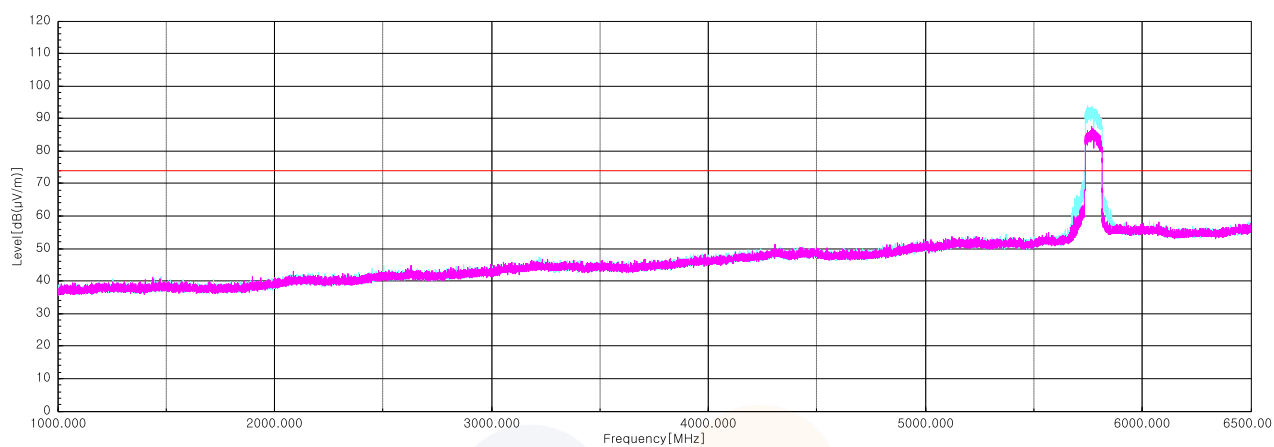


802.11ac VHT80_Lowest Channel (5 775 MHz)

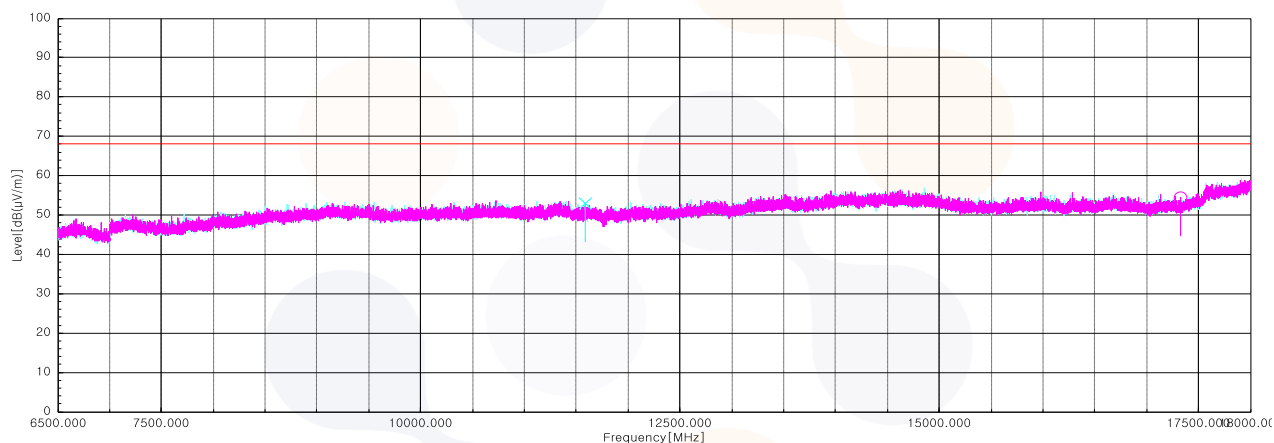
Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 720.53	V	62.00	33.62	-24.05	-	71.57	112.00	40.43
5 853.23	V	54.00	34.31	-23.86	-	64.45	114.80	50.35
11 681.26 ¹⁾	V	55.50	38.70	-41.30	-	52.90	74.00	21.10
17 326.48	H	56.00	38.61	-40.34	-	54.27	68.20	13.93
Average Data								
11 681.26 ¹⁾	V	44.29	38.70	-41.30	1.26	42.95	54.00	11.05



Horizontal/Vertical for 1 GHz ~ 6.5 GHz

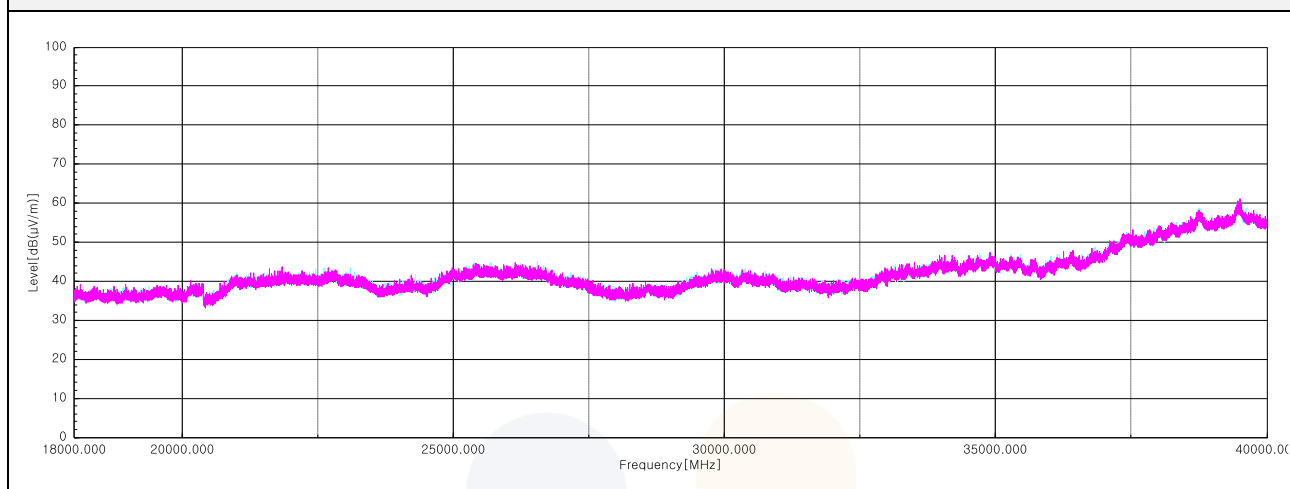


Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Test results (Above 18 GHz) – Worst case: 802. 11a_UNII 3_5 785 MHz

Horizontal/Vertical for 18 GHz ~ 40 GHz

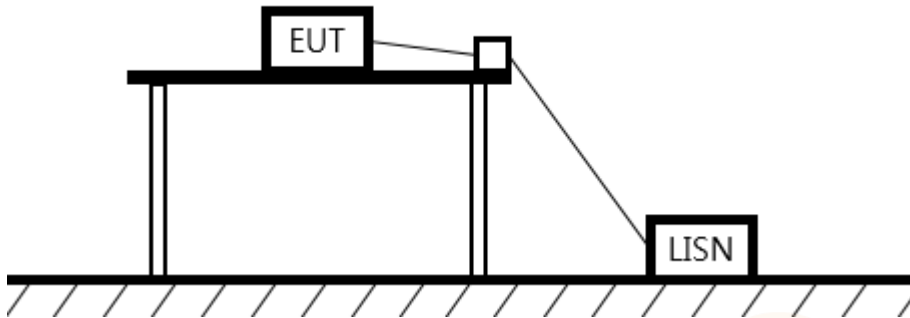


Note:

The Worst case was based on the lowest margin condition considering Harmonic and Spurious Emission.

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 ohm line impedance stabilization network (LISN). Compliance with the provision 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 applies at the boundary between the frequency ranges.

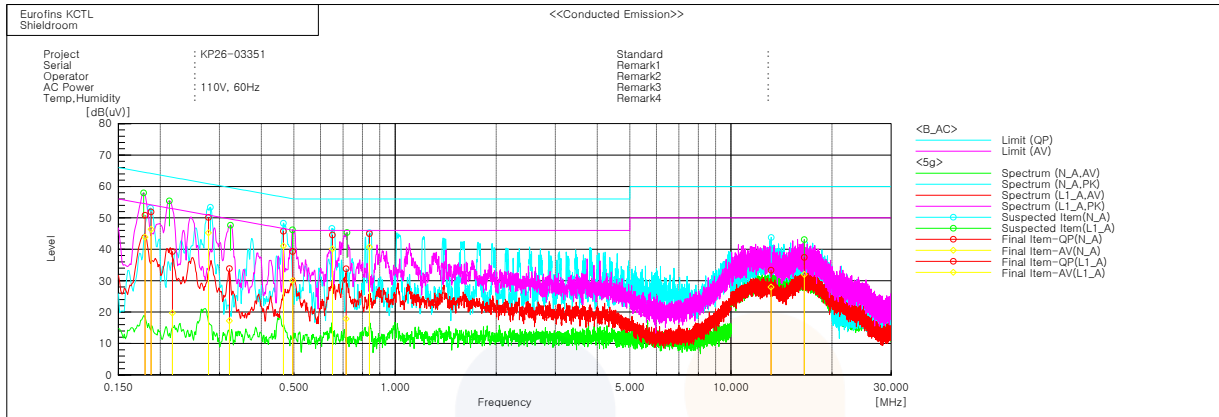
Frequency of Emission (MHz)	Conducted limit (dB μ V/m)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

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 HT40_UNII 3_5 755 MHz



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	0.18777	41.3	35.7	10.6	51.9	46.3	64.1	54.1	12.2
2	0.27813	39.8	34.9	10.3	50.1	45.2	60.9	50.9	10.8
3	0.46522	35.1	30.4	10.6	45.7	41.0	56.6	46.6	10.9
4	0.65117	34.0	29.6	10.5	44.5	40.1	56.0	46.0	11.5
5	0.83899	34.5	30.3	10.4	44.9	40.7	56.0	46.0	11.1
6	13.17442	22.3	16.9	11.0	33.3	27.9	60.0	50.0	26.7

--- 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	0.18005	40.2	33.2	10.6	50.8	43.8	64.5	54.5	13.7
2	0.21714	29.0	9.4	10.3	39.3	19.7	62.9	52.9	23.6
3	0.32096	23.4	6.8	10.4	33.8	17.2	59.7	49.7	25.9
4	0.49571	26.8	19.5	10.5	39.3	30.0	56.1	46.1	16.8
5	0.71464	23.4	7.4	10.4	33.8	17.8	56.0	46.0	22.2
6	16.54166	26.2	20.8	11.2	37.4	32.0	60.0	50.0	22.6

8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100914	27.04.23
Signal Generator	R&S	SMB100A	176206	27.01.15
DC Power Supply	AGILENT	E3632A	KR94907664	27.04.23
Attenuator	API Inmet	40AH2W-10	16	27.04.27
Attenuator	R&S	DNF	0007	27.01.15
Power Sensor	R&S	NRP-Z81	1137.9009.02-106223-bB	27.04.24
Spectrum Analyzer	R&S	FSVA40	101575	27.04.23
Broadband Pre-Amplifier	SCHWARZBECK	BBV9718D	57	27.01.15
Low Noise Amplifier	TESTEK	TK-PA18H	220124-L	26.09.29
Low Noise Amplifier	TESTEK	TK-PA1840H	220133-L	26.10.13
Horn Antenna	SCHWARZBECK	BBHA9120D	2763	26.10.02
Horn Antenna	SCHWARZBECK	BBHA9170	1267	26.10.02
High Pass Filter	QOTANA TECHNOLOGIES	DBHF0508004000A	23041800061	27.04.28
High Pass Filter	Wainwright Instruments GmbH	WHKX8-5655-6500-18000-40SS	SN8	26.09.30
Spectrum Analyzer	R&S	FSV40	100988	27.04.06
Amplifier	SONOMA INSTRUMENT	310N	421910	27.07.06*
Bi-log Antenna	Teseq GmbH	CBL 6112D	61521	26.12.11
Loop Antenna	R&S	HFH2-Z2	100355	28.06.29
Vector Signal Generator	R&S	SMBV100A	257566	27.07.06*
TWO-LINE V - NETWORK	R&S	ENV216	101584	27.03.24
EMI TEST RECEIVER	R&S	ESCI3	101428	27.08.11

*This equipment was calibrated during the test period, and was used after calibration.

End of test report