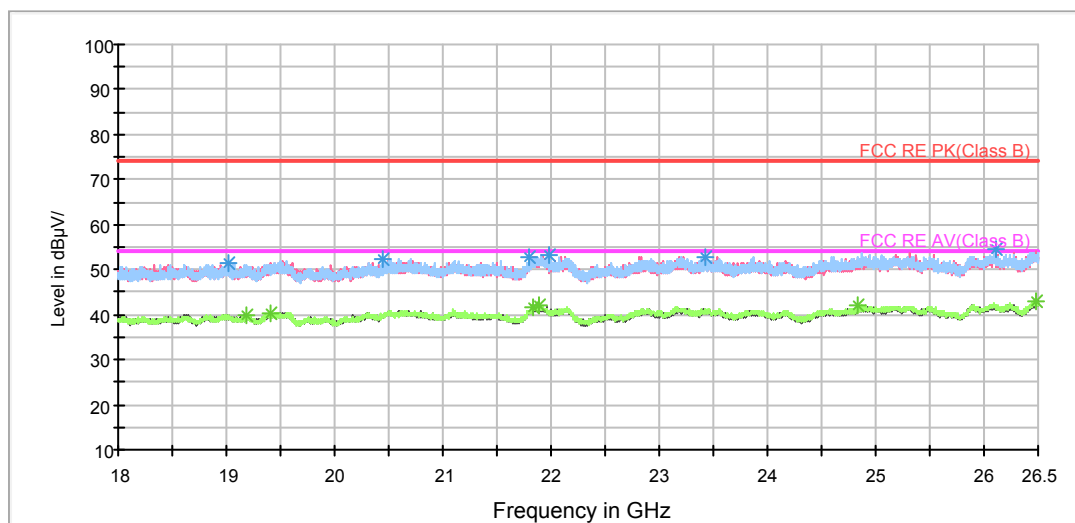


BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1140.000000	47.7	100.0	H	271.0	45.4	2.3	26.3	74
1429.500000	48.1	100.0	V	0.0	45.0	3.1	25.9	74
1664.250000	50.0	100.0	H	346.0	46.0	4.0	24.0	74
1824.250000	50.2	100.0	H	358.0	45.6	4.6	23.8	74
2649.500000	52.3	100.0	H	177.0	45.0	7.3	21.7	74
2975.250000	51.7	100.0	H	252.0	44.2	7.5	22.3	74

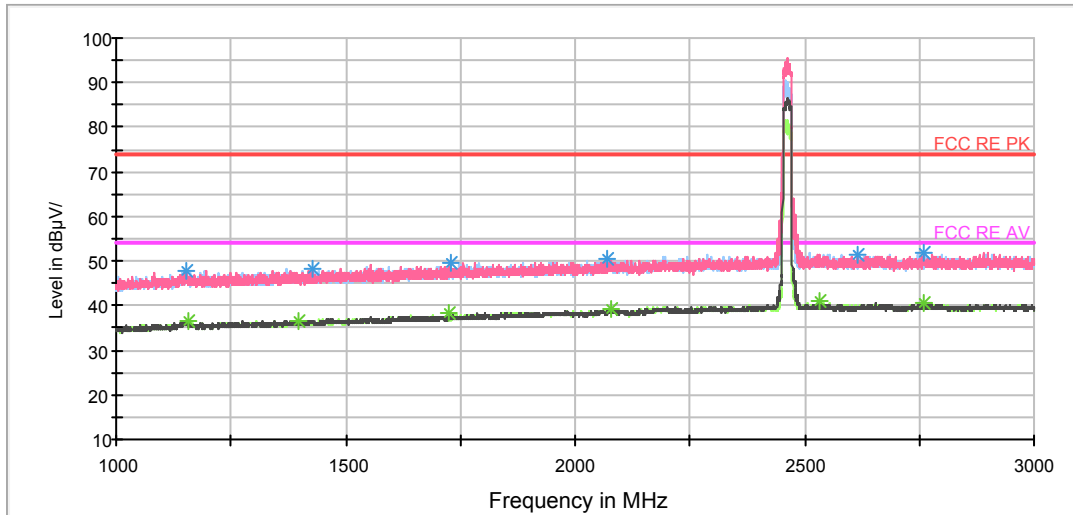
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1145.000000	36.6	100.0	H	280.0	34.3	2.3	17.4	54
1441.750000	36.9	100.0	H	341.0	33.7	3.2	17.1	54
1725.000000	38.1	100.0	V	0.0	33.9	4.2	15.9	54
2074.500000	39.2	100.0	V	124.0	33.7	5.5	14.8	54
2498.500000	40.5	100.0	H	186.0	33.4	7.1	13.5	54
2882.250000	40.4	100.0	V	162.0	32.9	7.5	13.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

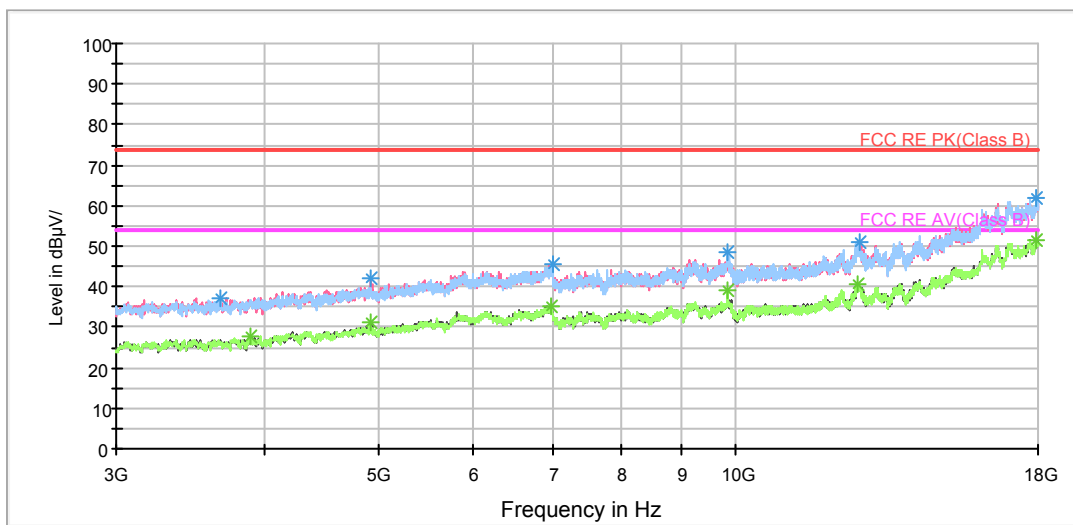
802.11n (HT20) CH11

RE 1G-6GHz PK+AV Class B



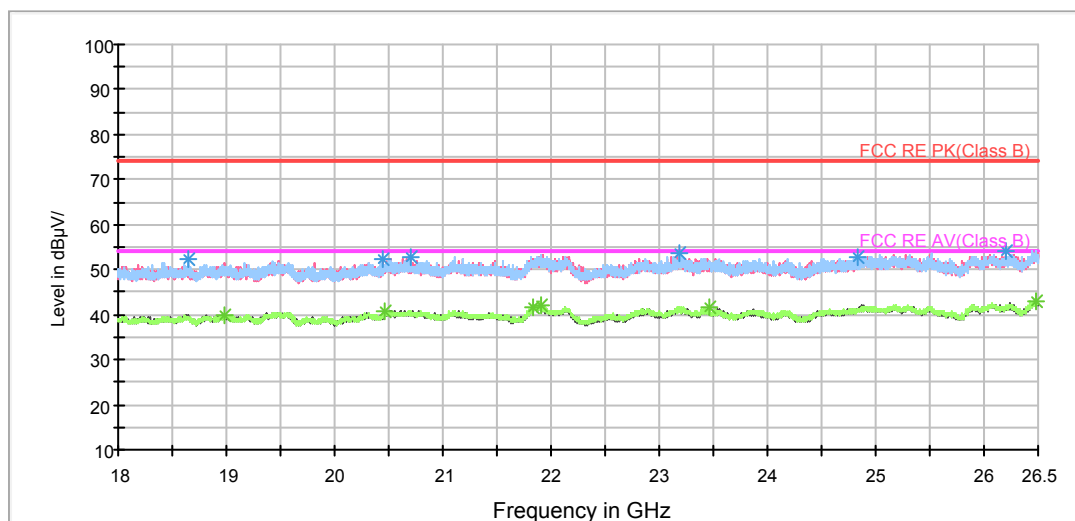
Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1150.750000	47.8	100.0	H	328.0	45.5	2.3	26.2	74
1429.750000	48.4	100.0	V	79.0	45.3	3.1	25.6	74
1727.250000	49.4	100.0	V	0.0	45.2	4.2	24.6	74
2067.750000	50.6	100.0	H	0.0	45.1	5.5	23.4	74
2616.000000	51.5	100.0	H	342.0	44.2	7.3	22.5	74
2758.000000	52.0	100.0	V	164.0	44.6	7.4	22.0	74

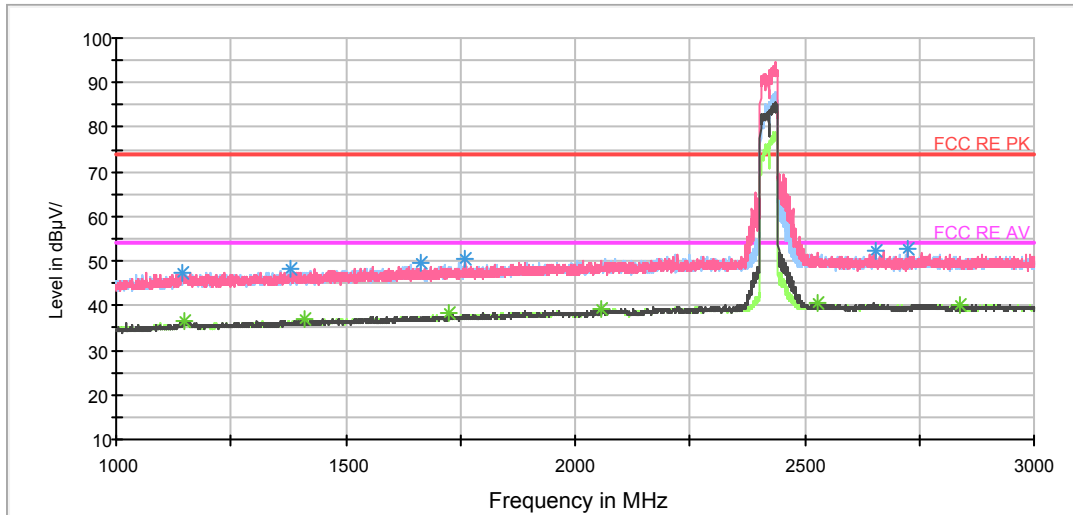
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1155.250000	36.5	100.0	H	356.0	34.2	2.3	17.5	54
1398.500000	36.7	100.0	V	4.0	33.6	3.1	17.3	54
1725.000000	38.3	100.0	V	154.0	34.1	4.2	15.7	54
2080.000000	39.3	100.0	V	19.0	33.8	5.5	14.7	54
2531.000000	40.8	100.0	H	348.0	33.6	7.2	13.2	54
2760.750000	40.7	100.0	H	354.0	33.3	7.4	13.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

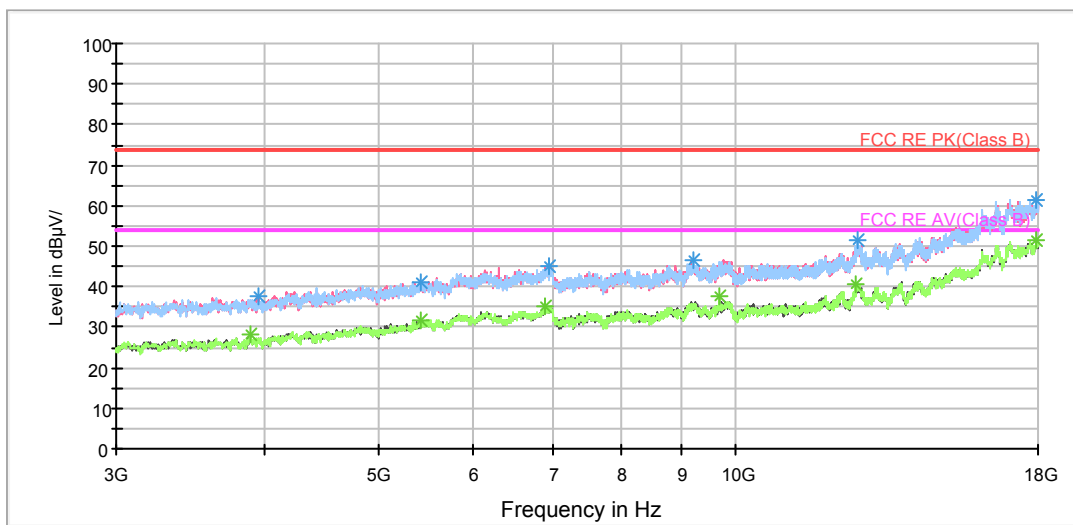
802.11n (HT40) CH3

RE 1G-6GHz PK+AV Class B



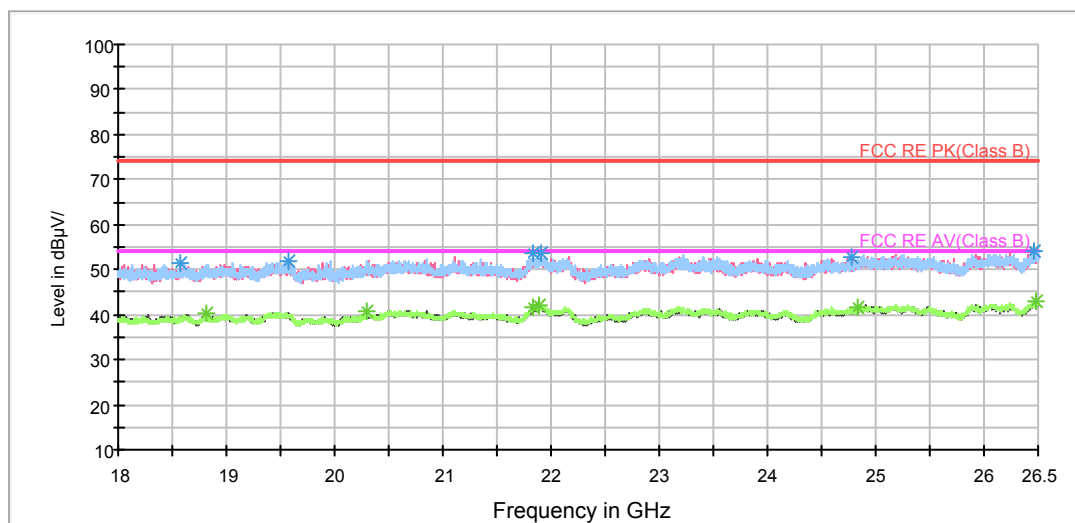
Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1142.500000	47.4	100.0	V	162.0	45.1	2.3	26.6	74
1379.500000	48.3	100.0	H	338.0	45.3	3.0	25.7	74
1664.750000	49.6	100.0	H	355.0	45.6	4.0	24.4	74
1762.000000	50.7	100.0	V	18.0	46.4	4.3	23.3	74
2655.000000	52.4	100.0	V	310.0	45.1	7.3	21.6	74
2724.750000	52.6	100.0	V	321.0	45.3	7.3	21.4	74

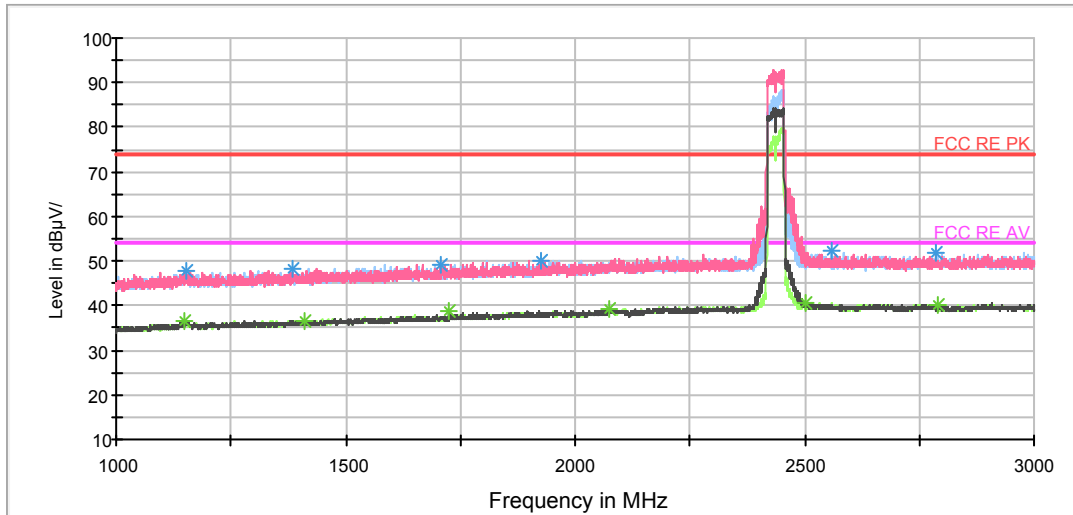
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1150.000000	36.5	100.0	H	0.0	34.2	2.3	17.5	54
1408.750000	36.8	100.0	H	352.0	33.7	3.1	17.2	54
1725.000000	38.4	100.0	V	106.0	34.2	4.2	15.6	54
2058.250000	39.2	100.0	V	3.0	33.8	5.4	14.8	54
2530.000000	40.5	100.0	H	244.0	33.3	7.2	13.5	54
2839.750000	40.3	100.0	V	9.0	32.9	7.4	13.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

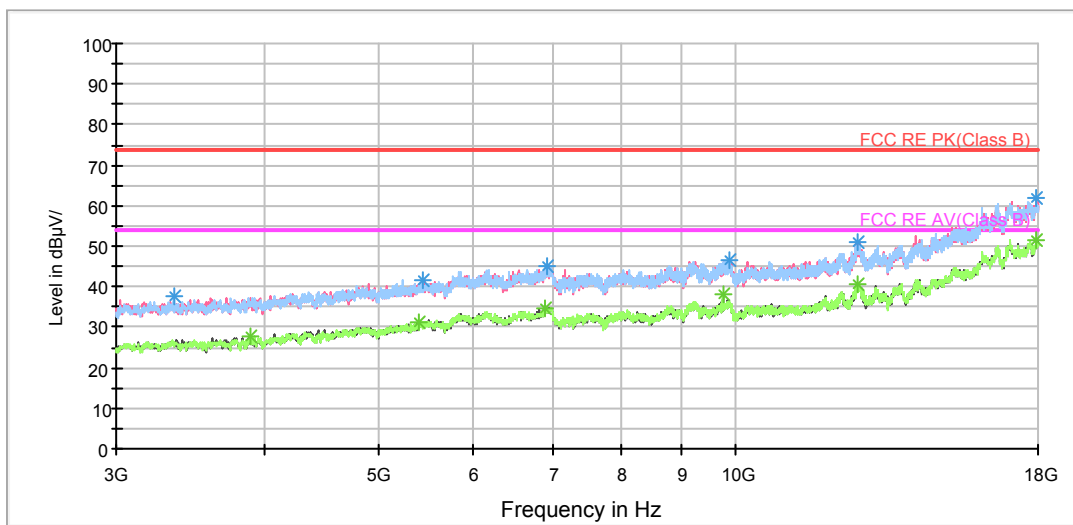
802.11n (HT40) CH6

RE 1G-6GHz PK+AV Class B



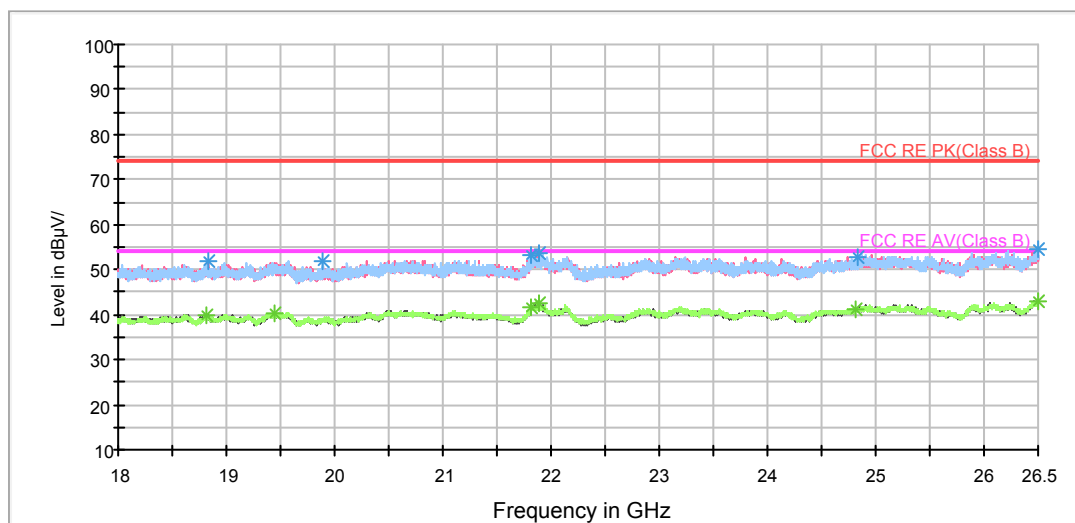
Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1153.500000	47.7	100.0	H	197.0	45.4	2.3	26.3	74
1382.500000	48.3	100.0	H	81.0	45.3	3.0	25.7	74
1706.500000	49.3	100.0	V	0.0	45.2	4.1	24.7	74
1924.250000	50.2	100.0	H	207.0	45.3	4.9	23.8	74
2557.000000	52.1	100.0	H	356.0	44.9	7.2	21.9	74
2786.500000	51.6	100.0	V	163.0	44.2	7.4	22.4	74

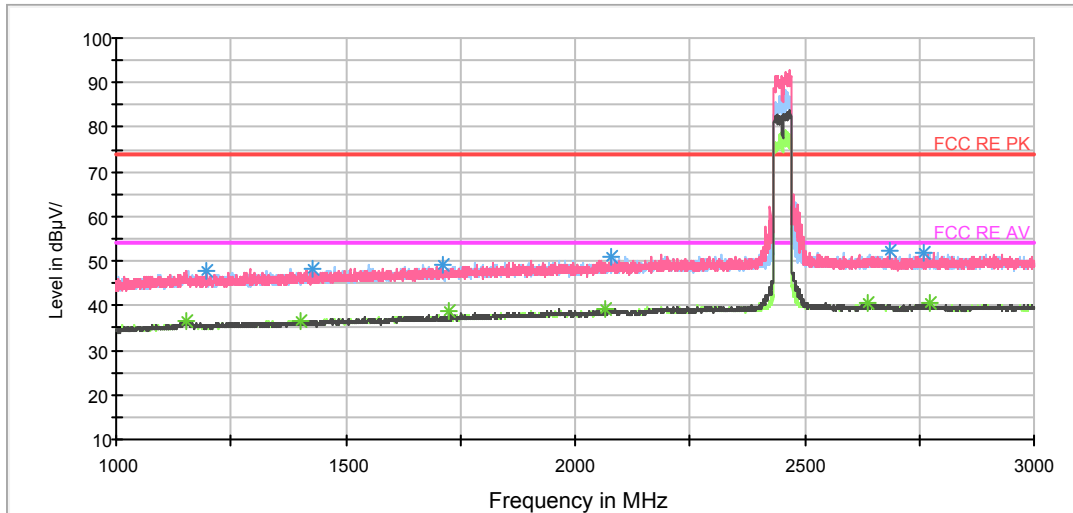
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1148.500000	36.5	100.0	H	356.0	34.2	2.3	17.5	54
1410.250000	36.7	100.0	V	125.0	33.6	3.1	17.3	54
1724.750000	38.7	100.0	V	116.0	34.5	4.2	15.3	54
2073.750000	39.4	100.0	V	191.0	33.9	5.5	14.6	54
2501.500000	40.6	100.0	V	163.0	33.4	7.2	13.4	54
2789.750000	40.3	100.0	H	342.0	32.9	7.4	13.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

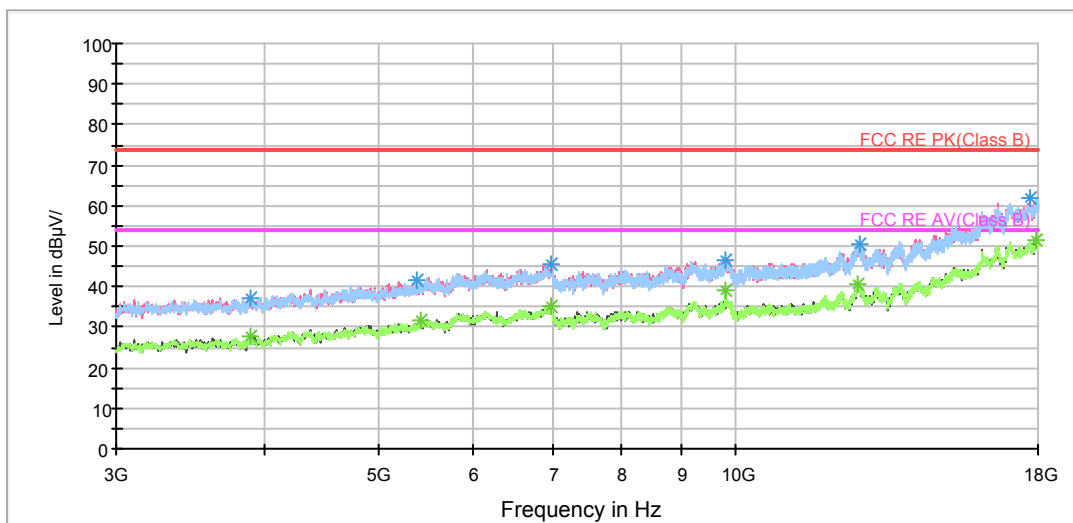
802.11n (HT40) CH9

RE 1G-6GHz PK+AV Class B



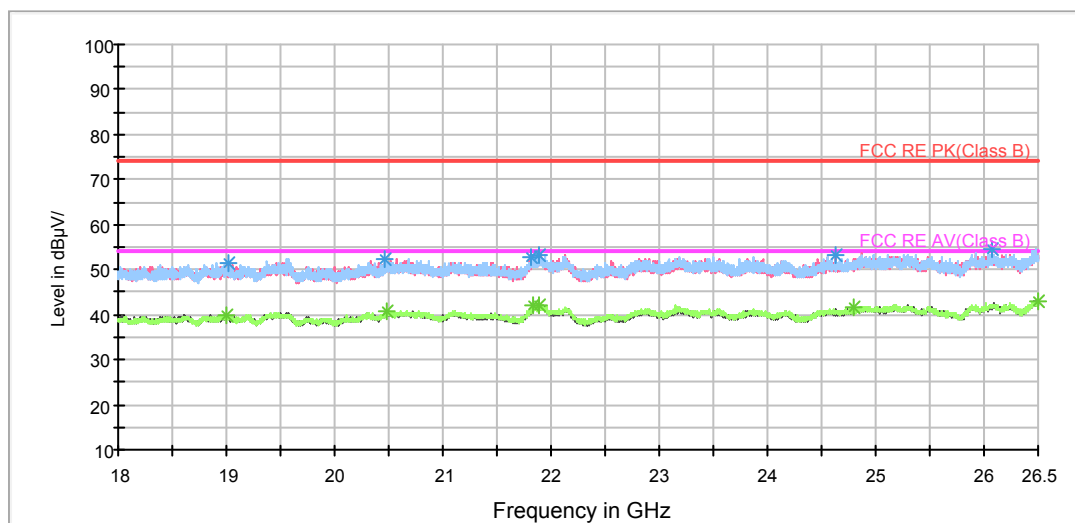
Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	47.8	100.0	V	174.0	45.4	2.4	26.2	74
1429.500000	48.2	100.0	H	352.0	45.1	3.1	25.8	74
1710.500000	49.2	100.0	V	19.0	45.0	4.2	24.8	74
2077.000000	50.9	100.0	V	0.0	45.4	5.5	23.1	74
2687.000000	52.1	100.0	V	322.0	44.8	7.3	21.9	74
2760.000000	52.1	100.0	V	106.0	44.7	7.4	21.9	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1152.250000	36.6	100.0	V	1.0	34.3	2.3	17.4	54
1403.250000	36.7	100.0	H	256.0	33.6	3.1	17.3	54
1725.000000	38.7	100.0	V	106.0	34.5	4.2	15.3	54
2064.000000	39.2	100.0	V	333.0	33.7	5.5	14.8	54
2636.500000	40.5	100.0	V	0.0	33.2	7.3	13.5	54
2774.500000	40.5	100.0	V	145.0	33.1	7.4	13.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

5.8. Conducted Emission

Ambient condition

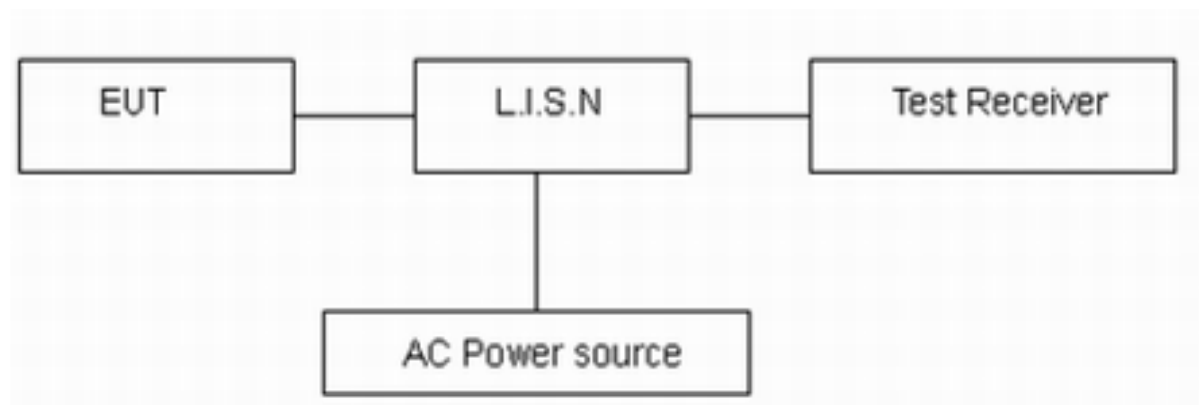
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.

The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46 *
0.5 - 5	56	46
5 - 30	60	50

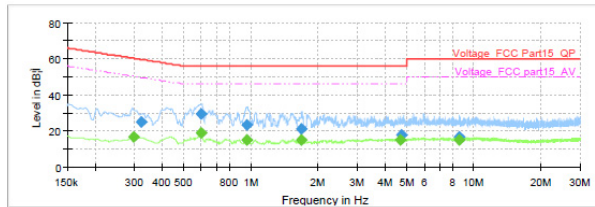
*: Decreases with the logarithm of the frequency.

Measurement Uncertainty

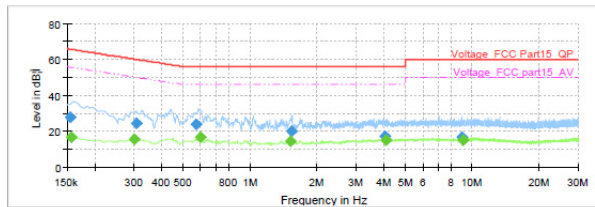
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

**Test Results:**

Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes (WIFI 2.4) with all channels, 802.11b, Channel 6 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

802.11b, Channel No.: 6**L Line**

Frequency (MHz)	QuasiPeak (dB; V)	Average (dB; V)	Limit (dB; V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	16.44	50.28	33.84	1000.0	9.000	L1	ON	19.6
0.323250	25.10	---	59.62	34.52	1000.0	9.000	L1	ON	19.6
0.597750	---	18.61	46.00	27.39	1000.0	9.000	L1	ON	19.6
0.597750	29.71	---	56.00	26.29	1000.0	9.000	L1	ON	19.6
0.955500	---	15.25	46.00	30.75	1000.0	9.000	L1	ON	19.6
0.957750	23.47	---	56.00	32.53	1000.0	9.000	L1	ON	19.6
1.675500	20.91	---	56.00	35.09	1000.0	9.000	L1	ON	19.6
1.677750	---	14.72	46.00	31.28	1000.0	9.000	L1	ON	19.6
4.708500	---	15.25	46.00	30.75	1000.0	9.000	L1	ON	19.7
4.749000	17.61	---	56.00	38.49	1000.0	9.000	L1	ON	19.7
8.583000	---	15.11	50.00	34.89	1000.0	9.000	L1	ON	19.8
8.623500	16.39	---	60.00	43.61	1000.0	9.000	L1	ON	19.8

N Line

Frequency (MHz)	QuasiPeak (dB; V)	Average (dB; V)	Limit (dB; V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154500	27.63	---	65.75	38.13	1000.0	9.000	N	ON	19.7
0.156750	---	16.63	55.63	39.11	1000.0	9.000	N	ON	19.7
0.300750	---	15.48	50.22	34.74	1000.0	9.000	N	ON	19.6
0.307500	24.25	---	60.04	35.79	1000.0	9.000	N	ON	19.6
0.570750	23.95	---	56.00	32.05	1000.0	9.000	N	ON	19.6
0.600900	---	16.78	46.00	29.22	1000.0	9.000	N	ON	19.6
1.522500	---	14.34	46.00	31.66	1000.0	9.000	N	ON	19.6
1.542750	19.86	---	56.00	36.14	1000.0	9.000	N	ON	19.6
4.065000	16.97	---	56.00	39.03	1000.0	9.000	N	ON	19.6
4.092000	---	14.97	46.00	31.03	1000.0	9.000	N	ON	19.6
8.988000	16.48	---	60.00	43.52	1000.0	9.000	N	ON	19.9
9.134250	---	15.17	50.00	34.83	1000.0	9.000	N	ON	19.9

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV30	100815	2017-12-17	2018-12-16
EMI Test Receiver	R&S	ESCI	100948	2017-05-20	2018-05-19
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-201	2017-11-18	2020-11-17
Double Ridged Waveguide Horn Antenna	R&S	HF907	100126	2014-12-06	2019-12-05
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2017-11-18	2020-11-17
Standard Gain Horn	ETS-Lindgren	3160-09	00102644	2015-01-30	2020-01-29
EMI Test Receiver	R&S	ESR	101667	2017-09-06	2018-09-05
LISN	R&S	ENV216	101171	2016-12-16	2019-12-15
Spectrum Analyzer	Agilent	N9010A	MY47191109	2017-05-20	2018-05-19
Power Meter	R&S	NRP2	1144.1374K02 -104306-EX	2017-05-24	2018-05-23
Power Sensor	R&S	NRP-Z21	104799	2017-05-24	2018-05-23
RF Cable	Agilent	SMA 15cm	0001	/	/
Software (CE)	ROHDE&SCHW ARZ	EMC32	9.26.0	/	/
Software (RE/RSE)	ROHDE&SCHW ARZ	EMC32	8.52.0	/	/

*****END OF REPORT *****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance

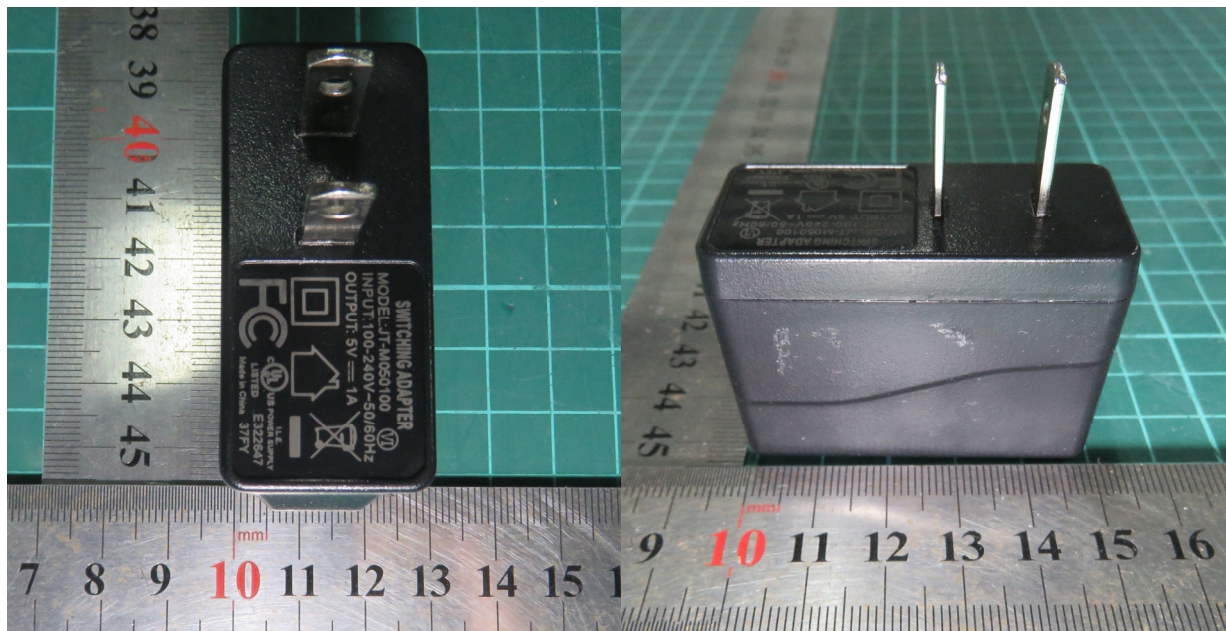


Front Side



Back Side

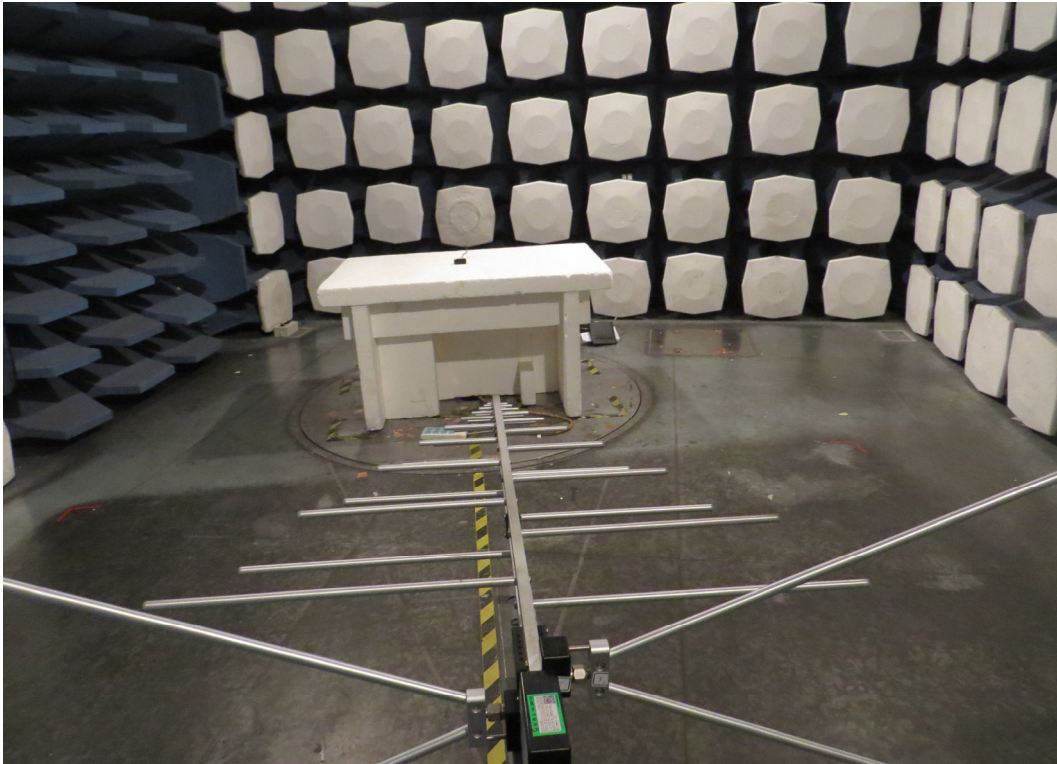
a: EUT



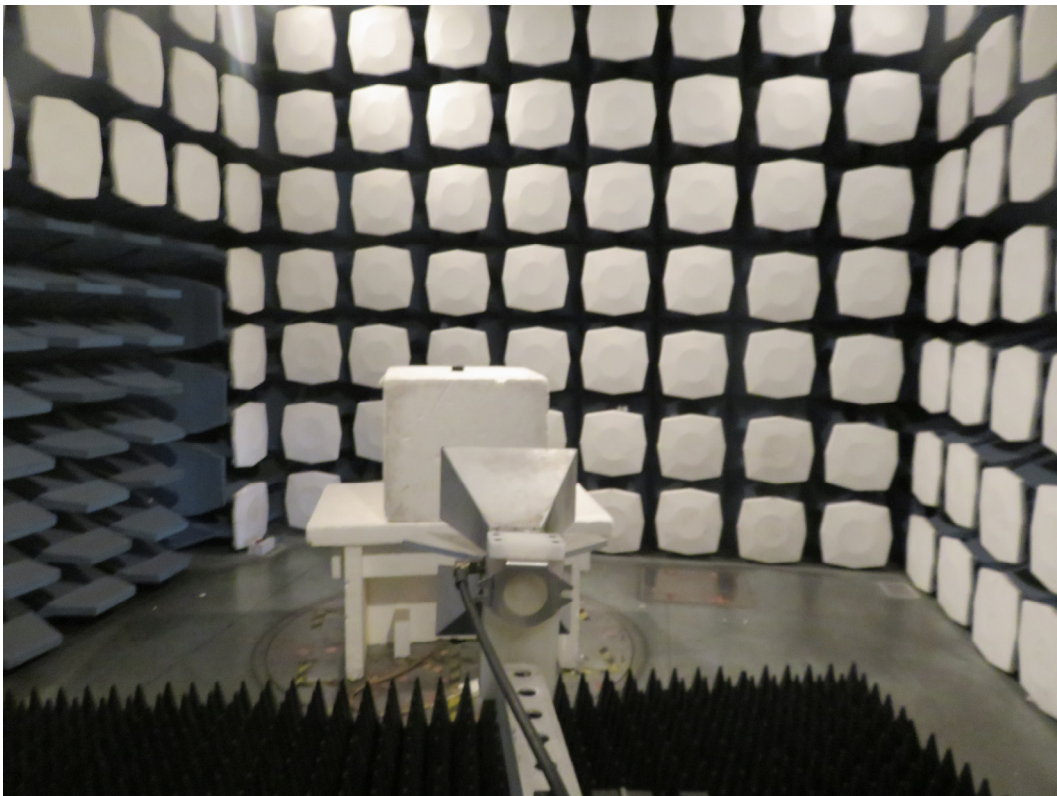
b: Adapter

Picture 1 EUT and Accessory

A.2 Test Setup

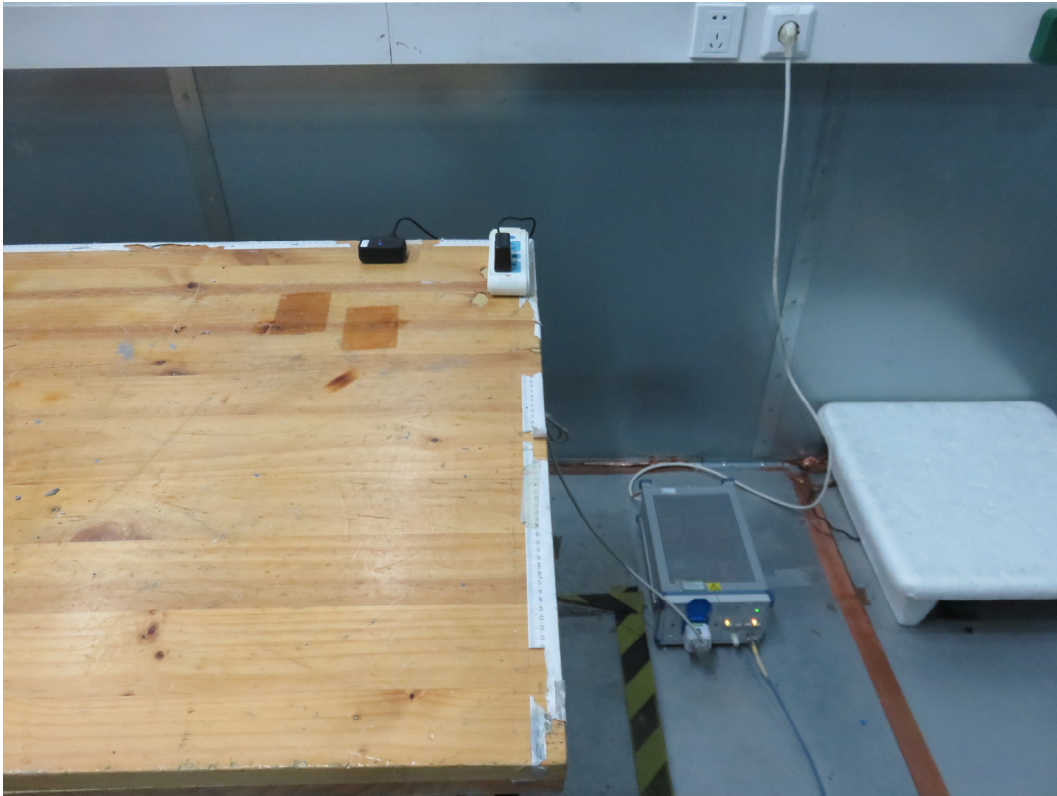


30M Hz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup