General Procedure for conducted measurements in restricted bands

a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)

c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).

e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$E = EIRP – 20\log D + 104.8$

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

f) Compare the resultant electric field strength level to the applicable limit.

g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

a) RBW = as specified in Table 1.

b) VBW ≥ 3 x RBW.

c) Detector = Peak.

d) Sweep time = auto.

e) Trace mode = max hold.

f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be

longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

a) The EUT shall be configured to operate at the maximum achievable duty cycle.

b) Measure the duty cycle, x, of the transmitter output signal as described in section 6.0.

c) RBW = 1 MHz (unless otherwise specified).

d) VBW ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (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.

f) 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 in order to use linear voltage averaging. Log or dB averaging shall not be used.

g) Sweep time = auto.

h) Perform a trace average of at least 100 traces.

i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent 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/x), where x is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is 20 log(1/x), where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

5.7.4 Test Result

Note 1: The symbol of "--" in the table which means not application.

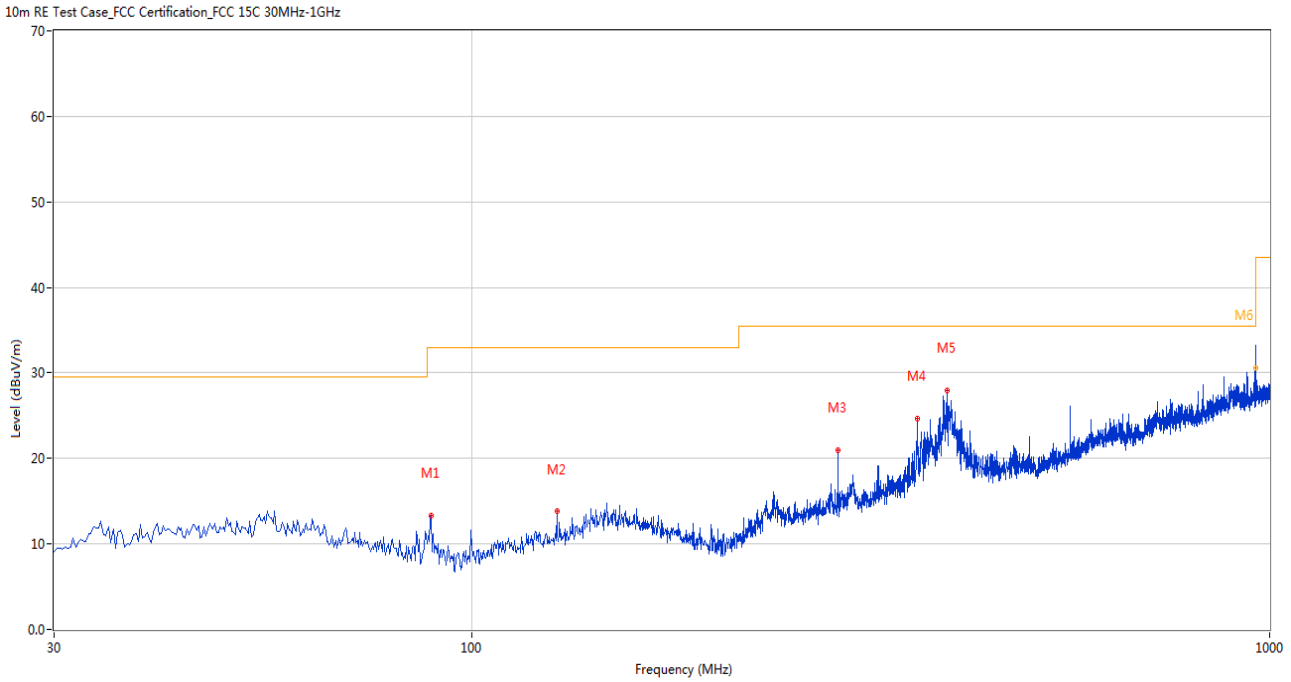
Note 2: For the test data above 1 GHz，According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note 4: The EUT was tested in Link mode and the charging.

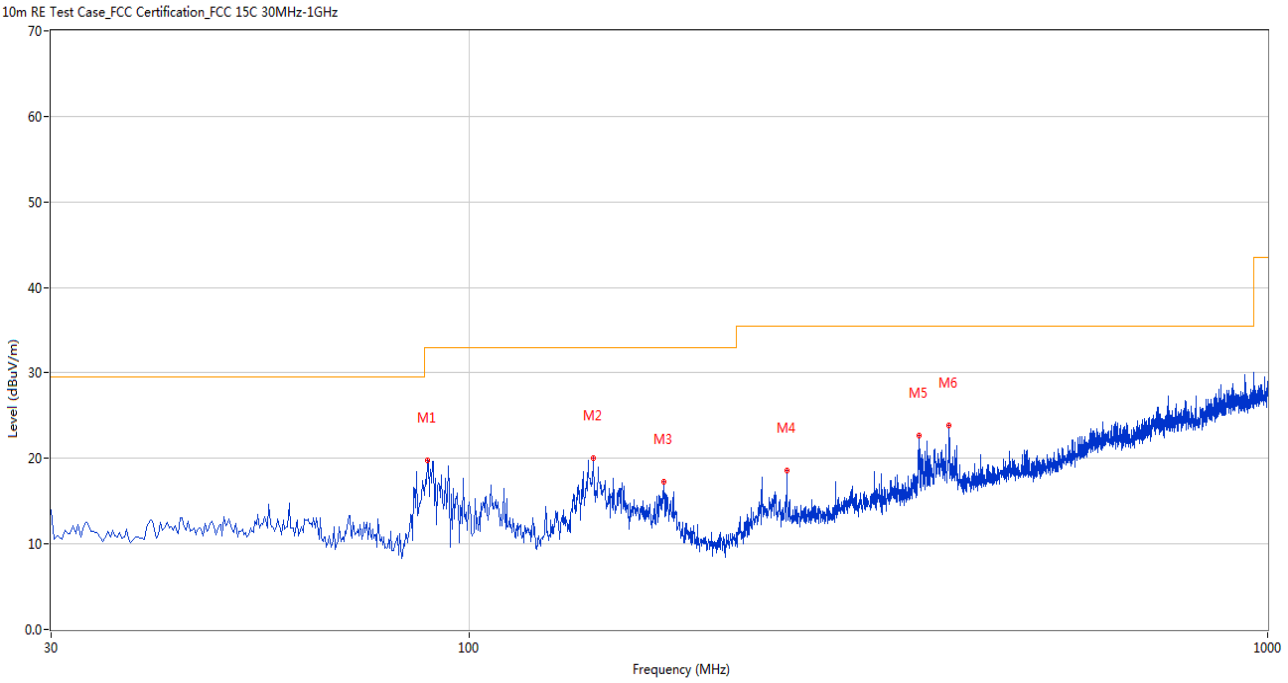
Test Data and Plots

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	88.913	13.28	-31.59	33.0	19.72	Peak	63.00	200	Horizontal	Pass
2	127.946	13.78	-27.27	33.0	19.22	Peak	350.00	100	Horizontal	Pass
3	287.956	20.99	-25.18	35.5	14.51	Peak	302.00	200	Horizontal	Pass
4	361.900	24.69	-23.31	35.5	10.81	Peak	97.00	200	Horizontal	Pass
5	394.386	27.93	-22.40	35.5	7.57	Peak	97.00	200	Horizontal	Pass
6	959.987	32.65	-10.77	35.5	2.85	Peak	142.00	110	Horizontal	N/A
6*	959.987	30.63	-10.77	35.5	4.87	QP	142.00	110	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	88.670	19.84	-31.62	33.0	13.16	Peak	110.00	100	Vertical	Pass
2	143.219	20.01	-25.95	33.0	12.99	Peak	13.00	100	Vertical	Pass
3	175.464	17.23	-26.78	33.0	15.77	Peak	360.00	100	Vertical	Pass
4	249.893	18.61	-26.71	35.5	16.89	Peak	0.00	200	Vertical	Pass
5	365.779	22.72	-23.20	35.5	12.78	Peak	56.00	100	Vertical	Pass
6	398.993	23.81	-22.37	35.5	11.69	Peak	24.00	100	Vertical	Pass

Note 1: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note 2: The spurious above 18G is noise only, do not show on the report.

1 GHz to 18 GHz, ANT H 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.000	42.10	-16.99	74.0	31.90	Peak	222.00	300	Horizontal	Pass
1**	1332.000	33.17	-16.99	54.0	20.83	AV	222.00	300	Horizontal	Pass
2	2410.800	103.28	-10.35	74.0	-29.28	Peak	88.00	200	Horizontal	N/A
2**	2410.800	100.38	-10.35	54.0	-46.38	AV	88.00	200	Horizontal	N/A
3	4732.250	50.29	-2.77	74.0	23.71	Peak	293.00	200	Horizontal	Pass
3**	4732.250	40.97	-2.77	54.0	13.03	AV	293.00	200	Horizontal	Pass
4	4824.500	48.43	-3.55	74.0	25.57	Peak	341.00	200	Horizontal	Pass
4**	4824.500	43.41	-3.55	54.0	10.59	AV	341.00	200	Horizontal	Pass
5	12366.200	53.99	0.93	74.0	20.01	Peak	40.00	300	Horizontal	Pass
5**	12366.200	44.72	0.93	54.0	9.28	AV	40.00	300	Horizontal	Pass
6	13479.750	56.68	3.29	74.0	17.32	Peak	234.00	100	Horizontal	Pass
6**	13479.750	46.79	3.29	54.0	7.21	AV	234.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1327.900	46.73	-16.95	74.0	27.27	Peak	300.00	300	Vertical	Pass
1**	1327.900	34.59	-16.95	54.0	19.41	AV	300.00	300	Vertical	Pass
2	2410.800	97.91	-10.35	74.0	-23.91	Peak	244.00	100	Vertical	N/A
2**	2410.800	94.98	-10.35	54.0	-40.98	AV	244.00	100	Vertical	N/A
3	4824.000	50.48	-3.61	74.0	23.52	Peak	176.00	200	Vertical	Pass
3**	4824.000	45.38	-3.61	54.0	8.62	AV	176.00	200	Vertical	Pass
4	4824.250	49.66	-3.48	74.0	24.34	Peak	176.00	200	Vertical	Pass
4**	4824.250	45.48	-3.48	54.0	8.52	AV	176.00	200	Vertical	Pass
5	12260.750	54.39	0.99	74.0	19.61	Peak	171.00	300	Vertical	Pass
5**	12260.750	44.50	0.99	54.0	9.50	AV	171.00	300	Vertical	Pass
6	17200.163	56.10	4.06	74.0	17.90	Peak	122.00	400	Vertical	Pass
6**	17200.163	48.20	4.06	54.0	5.80	AV	122.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1592.500	42.61	-16.66	74.0	31.39	Peak	0.00	200	Horizontal	Pass
1**	1592.500	33.32	-16.66	54.0	20.68	AV	0.00	200	Horizontal	Pass
2	2438.400	103.81	-9.92	74.0	-29.81	Peak	91.00	200	Horizontal	N/A
2**	2438.400	100.93	-9.92	54.0	-46.93	AV	91.00	200	Horizontal	N/A
3	4874.000	51.62	-3.49	74.0	22.38	Peak	4.00	150	Horizontal	Pass
3**	4874.000	47.17	-3.49	54.0	6.83	AV	4.00	150	Horizontal	Pass
4	4874.250	51.27	-3.45	74.0	22.73	Peak	343.00	200	Horizontal	Pass
4**	4874.250	47.75	-3.45	54.0	6.25	AV	343.00	200	Horizontal	Pass
5	12469.037	53.87	1.19	74.0	20.13	Peak	0.00	200	Horizontal	Pass
5**	12469.037	44.23	1.19	54.0	9.77	AV	0.00	200	Horizontal	Pass
6	13403.099	55.97	2.51	74.0	18.03	Peak	295.00	100	Horizontal	Pass
6**	13403.099	46.41	2.51	54.0	7.59	AV	295.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.600	43.85	-17.13	74.0	30.15	Peak	61.00	200	Vertical	Pass
1**	1332.600	35.19	-17.13	54.0	18.81	AV	61.00	200	Vertical	Pass
2	2438.400	97.51	-9.92	74.0	-23.51	Peak	195.00	200	Vertical	N/A
2**	2438.400	94.66	-9.92	54.0	-40.66	AV	195.00	200	Vertical	N/A
3	4874.250	52.93	-3.45	74.0	21.07	Peak	182.00	100	Vertical	Pass
3**	4874.250	49.70	-3.45	54.0	4.30	AV	182.00	100	Vertical	Pass
4	7853.500	54.39	0.90	74.0	19.61	Peak	297.00	200	Vertical	Pass
4**	7853.500	43.97	0.90	54.0	10.03	AV	297.00	200	Vertical	Pass
5	12337.937	54.05	0.78	74.0	19.95	Peak	138.00	300	Vertical	Pass
5**	12337.937	44.64	0.78	54.0	9.36	AV	138.00	300	Vertical	Pass
6	13291.013	56.38	3.07	74.0	17.62	Peak	300.00	100	Vertical	Pass
6**	13291.013	46.35	3.07	54.0	7.65	AV	300.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1328.200	42.25	-17.03	74.0	31.75	Peak	219.00	100	Horizontal	Pass
1**	1328.200	35.71	-17.03	54.0	18.29	AV	219.00	100	Horizontal	Pass
2	2460.800	101.86	-11.30	74.0	-27.86	Peak	81.00	100	Horizontal	N/A
2**	2460.800	98.96	-11.30	54.0	-44.96	AV	81.00	100	Horizontal	N/A
3	4924.000	52.95	-3.57	74.0	21.05	Peak	317.00	200	Horizontal	Pass
3**	4924.000	48.26	-3.57	54.0	5.74	AV	317.00	200	Horizontal	Pass
4	4924.250	52.10	-3.53	74.0	21.90	Peak	34.00	200	Horizontal	Pass
4**	4924.250	48.91	-3.53	54.0	5.09	AV	34.00	200	Horizontal	Pass
5	11598.363	54.29	-0.63	74.0	19.71	Peak	295.00	400	Horizontal	Pass
5**	11598.363	44.59	-0.63	54.0	9.41	AV	295.00	400	Horizontal	Pass
6	17188.874	56.16	3.97	74.0	17.84	Peak	283.00	200	Horizontal	Pass
6**	17188.874	47.26	3.97	54.0	6.74	AV	283.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1331.900	45.53	-16.94	74.0	28.47	Peak	58.00	300	Vertical	Pass
1**	1331.900	33.73	-16.94	54.0	20.27	AV	58.00	300	Vertical	Pass
2	2460.800	95.82	-11.30	74.0	-21.82	Peak	238.00	150	Vertical	N/A
2**	2460.800	92.92	-11.30	54.0	-38.92	AV	238.00	150	Vertical	N/A
3	4923.750	53.66	-3.66	74.0	20.34	Peak	166.00	200	Vertical	Pass
3**	4923.750	47.47	-3.66	54.0	6.53	AV	166.00	200	Vertical	Pass
4	4924.000	52.13	-3.57	74.0	21.87	Peak	166.00	200	Vertical	Pass
4**	4924.000	50.09	-3.57	54.0	3.91	AV	166.00	200	Vertical	Pass
5	12985.201	54.61	1.91	74.0	19.39	Peak	324.00	300	Vertical	Pass
5**	12985.201	44.22	1.91	54.0	9.78	AV	324.00	300	Vertical	Pass
6	16438.387	55.81	2.65	74.0	18.19	Peak	332.00	400	Vertical	Pass
6**	16438.387	45.84	2.65	54.0	8.16	AV	332.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1404.700	42.15	-16.91	74.0	31.85	Peak	86.00	400	Horizontal	Pass
1**	1404.700	32.76	-16.91	54.0	21.24	AV	86.00	400	Horizontal	Pass
2	2409.600	105.60	-10.56	74.0	-31.60	Peak	74.00	100	Horizontal	N/A
2**	2409.600	97.56	-10.56	54.0	-43.56	AV	74.00	100	Horizontal	N/A
3	4823.500	49.95	-3.66	74.0	24.05	Peak	146.00	150	Horizontal	Pass
3**	4823.500	40.44	-3.66	54.0	13.56	AV	146.00	150	Horizontal	Pass
4	7889.000	54.86	1.57	74.0	19.14	Peak	23.00	100	Horizontal	Pass
4**	7889.000	45.61	1.57	54.0	8.39	AV	23.00	100	Horizontal	Pass
5	12248.401	53.99	1.08	74.0	20.01	Peak	127.00	400	Horizontal	Pass
5**	12248.401	45.27	1.08	54.0	8.73	AV	127.00	400	Horizontal	Pass
6	13470.037	56.42	3.27	74.0	17.58	Peak	300.00	200	Horizontal	Pass
6**	13470.037	47.39	3.27	54.0	6.61	AV	300.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.500	44.89	-16.83	74.0	29.11	Peak	71.00	200	Vertical	Pass
1**	1329.500	33.44	-16.83	54.0	20.56	AV	71.00	200	Vertical	Pass
2	2409.500	99.21	-10.61	74.0	-25.21	Peak	221.00	100	Vertical	N/A
2**	2409.500	91.68	-10.61	54.0	-37.68	AV	221.00	100	Vertical	N/A
3	4812.250	49.61	-3.00	74.0	24.39	Peak	259.00	150	Vertical	Pass
3**	4812.250	39.97	-3.00	54.0	14.03	AV	259.00	150	Vertical	Pass
4	7889.750	55.37	1.58	74.0	18.63	Peak	310.00	400	Vertical	Pass
4**	7889.750	45.38	1.58	54.0	8.62	AV	310.00	400	Vertical	Pass
5	12462.625	53.99	1.14	74.0	20.01	Peak	12.00	300	Vertical	Pass
5**	12462.625	45.92	1.14	54.0	8.08	AV	12.00	300	Vertical	Pass
6	13442.475	56.17	3.11	74.0	17.83	Peak	3.00	100	Vertical	Pass
6**	13442.475	46.90	3.11	54.0	7.10	AV	3.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1316.000	42.35	-16.80	74.0	31.65	Peak	261.00	400	Horizontal	Pass
1**	1316.000	33.44	-16.80	54.0	20.56	AV	261.00	400	Horizontal	Pass
2	2435.300	106.06	-10.19	74.0	-32.06	Peak	96.00	100	Horizontal	N/A
2**	2435.300	98.91	-10.19	54.0	-44.91	AV	96.00	100	Horizontal	N/A
3	4680.750	49.97	-3.66	74.0	24.03	Peak	341.00	150	Horizontal	Pass
3**	4680.750	39.28	-3.66	54.0	14.72	AV	341.00	150	Horizontal	Pass
4	7926.000	54.33	1.60	74.0	19.67	Peak	290.00	300	Horizontal	Pass
4**	7926.000	44.61	1.60	54.0	9.39	AV	290.00	300	Horizontal	Pass
5	12243.412	54.32	1.01	74.0	19.68	Peak	301.00	300	Horizontal	Pass
5**	12243.412	44.46	1.01	54.0	9.54	AV	301.00	300	Horizontal	Pass
6	13321.725	56.91	2.93	74.0	17.09	Peak	121.00	200	Horizontal	Pass
6**	13321.725	46.56	2.93	54.0	7.44	AV	121.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.600	45.71	-17.12	74.0	28.29	Peak	82.00	300	Vertical	Pass
1**	1330.600	37.12	-17.12	54.0	16.88	AV	82.00	300	Vertical	Pass
2	2435.800	100.56	-10.14	74.0	-26.56	Peak	242.00	100	Vertical	N/A
2**	2435.800	93.18	-10.14	54.0	-39.18	AV	242.00	100	Vertical	N/A
3	4873.250	52.20	-3.57	74.0	21.80	Peak	168.00	100	Vertical	Pass
3**	4873.250	42.60	-3.57	54.0	11.40	AV	168.00	100	Vertical	Pass
4	4874.750	48.63	-3.47	74.0	25.37	Peak	190.00	200	Vertical	Pass
4**	4874.750	44.93	-3.47	54.0	9.07	AV	190.00	200	Vertical	Pass
5	12325.588	53.90	0.70	74.0	20.10	Peak	128.00	100	Vertical	Pass
5**	12325.588	45.04	0.70	54.0	8.96	AV	128.00	100	Vertical	Pass
6	17206.989	56.67	3.84	74.0	17.33	Peak	305.00	200	Vertical	Pass
6**	17206.989	47.58	3.84	54.0	6.42	AV	305.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.300	42.52	-17.08	74.0	31.48	Peak	3.00	100	Horizontal	Pass
1**	1330.300	32.77	-17.08	54.0	21.23	AV	3.00	100	Horizontal	Pass
2	2460.700	104.89	-11.30	74.0	-30.89	Peak	91.00	100	Horizontal	N/A
2**	2460.700	97.47	-11.30	54.0	-43.47	AV	91.00	100	Horizontal	N/A
3	4921.750	52.73	-3.28	74.0	21.27	Peak	360.00	200	Horizontal	Pass
3**	4921.750	42.59	-3.28	54.0	11.41	AV	360.00	200	Horizontal	Pass
4	4922.000	50.62	-3.23	74.0	23.38	Peak	360.00	200	Horizontal	Pass
4**	4922.000	45.58	-3.23	54.0	8.42	AV	360.00	200	Horizontal	Pass
5	12349.338	54.41	0.84	74.0	19.59	Peak	157.00	300	Horizontal	Pass
5**	12349.338	44.14	0.84	54.0	9.86	AV	157.00	300	Horizontal	Pass
6	13430.400	56.37	2.93	74.0	17.63	Peak	104.00	300	Horizontal	Pass
6**	13430.400	46.95	2.93	54.0	7.05	AV	104.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.700	44.35	-17.06	74.0	29.65	Peak	71.00	400	Vertical	Pass
1**	1330.700	33.52	-17.06	54.0	20.48	AV	71.00	400	Vertical	Pass
2	2459.700	99.60	-11.46	74.0	-25.60	Peak	238.00	150	Vertical	N/A
2**	2459.700	91.95	-11.46	54.0	-37.95	AV	238.00	150	Vertical	N/A
3	4925.500	50.60	-3.57	74.0	23.40	Peak	150.00	200	Vertical	Pass
3**	4925.500	45.05	-3.57	54.0	8.95	AV	150.00	200	Vertical	Pass
4	4930.750	52.66	-3.44	74.0	21.34	Peak	150.00	200	Vertical	Pass
4**	4930.750	42.56	-3.44	54.0	11.44	AV	150.00	200	Vertical	Pass
5	12471.412	53.72	1.21	74.0	20.28	Peak	154.00	200	Vertical	Pass
5**	12471.412	44.49	1.21	54.0	9.51	AV	154.00	200	Vertical	Pass
6	17213.551	55.95	3.62	74.0	18.05	Peak	206.00	400	Vertical	Pass
6**	17213.551	47.05	3.62	54.0	6.95	AV	206.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1557.700	42.48	-17.31	74.0	31.52	Peak	347.00	200	Horizontal	Pass
1**	1557.700	33.33	-17.31	54.0	20.67	AV	347.00	200	Horizontal	Pass
2	2410.200	104.76	-10.41	74.0	-30.76	Peak	76.00	150	Horizontal	N/A
2**	2410.200	96.92	-10.41	54.0	-42.92	AV	76.00	150	Horizontal	N/A
3	4854.250	49.40	-3.58	74.0	24.60	Peak	161.00	100	Horizontal	Pass
3**	4854.250	40.21	-3.58	54.0	13.79	AV	161.00	100	Horizontal	Pass
4	7888.000	54.22	1.55	74.0	19.78	Peak	0.00	300	Horizontal	Pass
4**	7888.000	45.02	1.55	54.0	8.98	AV	0.00	300	Horizontal	Pass
5	12501.576	53.81	1.43	74.0	20.19	Peak	33.00	300	Horizontal	Pass
5**	12501.576	43.79	1.43	54.0	10.21	AV	33.00	300	Horizontal	Pass
6	17198.850	56.62	4.05	74.0	17.38	Peak	191.00	200	Horizontal	Pass
6**	17198.850	47.11	4.05	54.0	6.89	AV	191.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.400	44.93	-17.11	74.0	29.07	Peak	59.00	400	Vertical	Pass
1**	1332.400	33.35	-17.11	54.0	20.65	AV	59.00	400	Vertical	Pass
2	2410.100	100.31	-10.39	74.0	-26.31	Peak	234.00	100	Vertical	N/A
2**	2410.100	92.95	-10.39	54.0	-38.95	AV	234.00	100	Vertical	N/A
3	4825.750	49.89	-3.83	74.0	24.11	Peak	180.00	150	Vertical	Pass
3**	4825.750	41.13	-3.83	54.0	12.87	AV	180.00	150	Vertical	Pass
4	7878.500	54.61	2.16	74.0	19.39	Peak	0.00	100	Vertical	Pass
4**	7878.500	45.53	2.16	54.0	8.47	AV	0.00	100	Vertical	Pass
5	12428.425	54.24	1.07	74.0	19.76	Peak	0.00	400	Vertical	Pass
5**	12428.425	44.74	1.07	54.0	9.26	AV	0.00	400	Vertical	Pass
6	17200.949	56.47	4.03	74.0	17.53	Peak	120.00	200	Vertical	Pass
6**	17200.949	47.34	4.03	54.0	6.66	AV	120.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1327.200	43.80	-17.07	74.0	30.20	Peak	220.00	200	Horizontal	Pass
1**	1327.200	33.03	-17.07	54.0	20.97	AV	220.00	200	Horizontal	Pass
2	2435.700	106.16	-10.15	74.0	-32.16	Peak	84.00	200	Horizontal	N/A
2**	2435.700	98.92	-10.15	54.0	-44.92	AV	84.00	200	Horizontal	N/A
3	4874.500	49.41	-3.42	74.0	24.59	Peak	360.00	200	Horizontal	Pass
3**	4874.500	43.77	-3.42	54.0	10.23	AV	360.00	200	Horizontal	Pass
4	4876.250	50.87	-3.50	74.0	23.13	Peak	61.00	100	Horizontal	Pass
4**	4876.250	42.42	-3.50	54.0	11.58	AV	61.00	100	Horizontal	Pass
5	12220.849	54.67	0.70	74.0	19.33	Peak	9.00	400	Horizontal	Pass
5**	12220.849	44.30	0.70	54.0	9.70	AV	9.00	400	Horizontal	Pass
6	13456.388	56.12	3.24	74.0	17.88	Peak	183.00	400	Horizontal	Pass
6**	13456.388	46.93	3.24	54.0	7.07	AV	183.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1328.600	45.66	-17.01	74.0	28.34	Peak	213.00	300	Vertical	Pass
1**	1328.600	34.30	-17.01	54.0	19.70	AV	213.00	300	Vertical	Pass
2	2434.500	99.88	-10.30	74.0	-25.88	Peak	195.00	100	Vertical	N/A
2**	2434.500	92.39	-10.30	54.0	-38.39	AV	195.00	100	Vertical	N/A
3	4872.000	54.03	-3.49	74.0	19.97	Peak	163.00	200	Vertical	Pass
3**	4872.000	42.30	-3.49	54.0	11.70	AV	163.00	200	Vertical	Pass
4	4872.250	49.48	-3.36	74.0	24.52	Peak	163.00	200	Vertical	Pass
4**	4872.250	46.39	-3.36	54.0	7.61	AV	163.00	200	Vertical	Pass
5	12445.050	54.13	1.04	74.0	19.87	Peak	46.00	200	Vertical	Pass
5**	12445.050	44.54	1.04	54.0	9.46	AV	46.00	200	Vertical	Pass
6	13408.349	56.14	2.59	74.0	17.86	Peak	32.00	100	Vertical	Pass
6**	13408.349	46.90	2.59	54.0	7.10	AV	32.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1327.200	43.12	-17.07	74.0	30.88	Peak	168.00	300	Horizontal	Pass
1**	1327.200	33.03	-17.07	54.0	20.97	AV	168.00	300	Horizontal	Pass
2	2460.500	105.20	-11.29	74.0	-31.20	Peak	86.00	200	Horizontal	N/A
2**	2460.500	98.17	-11.29	54.0	-44.17	AV	86.00	200	Horizontal	N/A
3	4923.000	52.42	-3.38	74.0	21.58	Peak	0.00	200	Horizontal	Pass
3**	4923.000	43.70	-3.38	54.0	10.30	AV	0.00	200	Horizontal	Pass
4	7878.250	54.33	2.13	74.0	19.67	Peak	261.00	400	Horizontal	Pass
4**	7878.250	45.00	2.13	54.0	9.00	AV	261.00	400	Horizontal	Pass
5	12476.401	54.16	1.25	74.0	19.84	Peak	360.00	200	Horizontal	Pass
5**	12476.401	44.67	1.25	54.0	9.33	AV	360.00	200	Horizontal	Pass
6	17184.676	56.32	3.94	74.0	17.68	Peak	43.00	200	Horizontal	Pass
6**	17184.676	46.65	3.94	54.0	7.35	AV	43.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1331.200	44.55	-16.95	74.0	29.45	Peak	298.00	200	Vertical	Pass
1**	1331.200	32.11	-16.95	54.0	21.89	AV	298.00	200	Vertical	Pass
2	2463.400	99.28	-11.30	74.0	-25.28	Peak	234.00	200	Vertical	N/A
2**	2463.400	92.32	-11.30	54.0	-38.32	AV	234.00	200	Vertical	N/A
3	4921.500	52.49	-3.25	74.0	21.51	Peak	196.00	100	Vertical	Pass
3**	4921.500	45.13	-3.25	54.0	8.87	AV	196.00	100	Vertical	Pass
4	4924.000	49.59	-3.57	74.0	24.41	Peak	154.00	0	Vertical	Pass
4**	4924.000	45.90	-3.57	54.0	8.10	AV	154.00	0	Vertical	Pass
5	12278.325	53.90	0.79	74.0	20.10	Peak	263.00	200	Vertical	Pass
5**	12278.325	44.19	0.79	54.0	9.81	AV	263.00	200	Vertical	Pass
6	13484.213	56.40	3.30	74.0	17.60	Peak	167.00	200	Vertical	Pass
6**	13484.213	46.90	3.30	54.0	7.10	AV	167.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1333.600	43.30	-17.09	74.0	30.70	Peak	166.00	400	Horizontal	Pass
1**	1333.600	32.28	-17.09	54.0	21.72	AV	166.00	400	Horizontal	Pass
2	2412.400	100.29	-10.30	74.0	-26.29	Peak	79.00	150	Horizontal	N/A
2**	2412.400	91.42	-10.30	54.0	-37.42	AV	79.00	150	Horizontal	N/A
3	4825.250	49.67	-3.66	74.0	24.33	Peak	183.00	200	Horizontal	Pass
3**	4825.250	40.54	-3.66	54.0	13.46	AV	183.00	200	Horizontal	Pass
4	7964.000	54.73	1.96	74.0	19.27	Peak	319.00	400	Horizontal	Pass
4**	7964.000	46.29	1.96	54.0	7.71	AV	319.00	400	Horizontal	Pass
5	12780.450	54.09	0.99	74.0	19.91	Peak	314.00	100	Horizontal	Pass
5**	12780.450	44.32	0.99	54.0	9.68	AV	314.00	100	Horizontal	Pass
6	17202.526	57.33	3.98	74.0	16.67	Peak	360.00	200	Horizontal	Pass
6**	17202.526	47.15	3.98	54.0	6.85	AV	360.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.600	44.90	-16.79	74.0	29.10	Peak	300.00	200	Vertical	Pass
1**	1329.600	36.42	-16.79	54.0	17.58	AV	300.00	200	Vertical	Pass
2	2419.300	95.33	-9.92	74.0	-21.33	Peak	197.00	100	Vertical	N/A
2**	2419.300	88.25	-9.92	54.0	-34.25	AV	197.00	100	Vertical	N/A
3	4840.000	49.79	-3.85	74.0	24.21	Peak	190.00	200	Vertical	Pass
3**	4840.000	40.34	-3.85	54.0	13.66	AV	190.00	200	Vertical	Pass
4	7914.000	54.87	0.96	74.0	19.13	Peak	310.00	100	Vertical	Pass
4**	7914.000	44.90	0.96	54.0	9.10	AV	310.00	100	Vertical	Pass
5	12096.162	53.48	-0.20	74.0	20.52	Peak	224.00	200	Vertical	Pass
5**	12096.162	44.30	-0.20	54.0	9.70	AV	224.00	200	Vertical	Pass
6	13429.875	56.43	2.92	74.0	17.57	Peak	139.00	200	Vertical	Pass
6**	13429.875	47.17	2.92	54.0	6.83	AV	139.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1340.600	42.55	-16.86	74.0	31.45	Peak	0.00	200	Horizontal	Pass
1**	1340.600	33.03	-16.86	54.0	20.97	AV	0.00	200	Horizontal	Pass
2	2435.400	99.93	-10.17	74.0	-25.93	Peak	83.00	200	Horizontal	N/A
2**	2435.400	92.23	-10.17	54.0	-38.23	AV	83.00	200	Horizontal	N/A
3	4896.500	49.58	-3.34	74.0	24.42	Peak	139.00	200	Horizontal	Pass
3**	4896.500	40.63	-3.34	54.0	13.37	AV	139.00	200	Horizontal	Pass
4	7352.000	54.39	0.35	74.0	19.61	Peak	0.00	300	Horizontal	Pass
4**	7352.000	44.25	0.35	54.0	9.75	AV	0.00	300	Horizontal	Pass
5	12978.900	54.22	1.85	74.0	19.78	Peak	26.00	300	Horizontal	Pass
5**	12978.900	44.29	1.85	54.0	9.71	AV	26.00	300	Horizontal	Pass
6	17197.011	56.36	4.04	74.0	17.64	Peak	281.00	300	Horizontal	Pass
6**	17197.011	48.09	4.04	54.0	5.91	AV	281.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1333.000	45.93	-17.18	74.0	28.07	Peak	66.00	400	Vertical	Pass
1**	1333.000	38.42	-17.18	54.0	15.58	AV	66.00	400	Vertical	Pass
2	2438.400	94.83	-9.92	74.0	-20.83	Peak	219.00	100	Vertical	N/A
2**	2438.400	87.44	-9.92	54.0	-33.44	AV	219.00	100	Vertical	N/A
3	4743.750	50.22	-3.02	74.0	23.78	Peak	38.00	150	Vertical	Pass
3**	4743.750	40.18	-3.02	54.0	13.82	AV	38.00	150	Vertical	Pass
4	7904.750	54.89	0.96	74.0	19.11	Peak	0.00	400	Vertical	Pass
4**	7904.750	44.85	0.96	54.0	9.15	AV	0.00	400	Vertical	Pass
5	12531.262	54.49	1.26	74.0	19.51	Peak	9.00	300	Vertical	Pass
5**	12531.262	44.25	1.26	54.0	9.75	AV	9.00	300	Vertical	Pass
6	17467.912	56.76	5.24	74.0	17.24	Peak	349.00	400	Vertical	Pass
6**	17467.912	46.07	5.24	54.0	7.93	AV	349.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.300	42.81	-16.84	74.0	31.19	Peak	178.00	300	Horizontal	Pass
1**	1500.300	33.63	-16.84	54.0	20.37	AV	178.00	300	Horizontal	Pass
2	2450.400	100.15	-10.27	74.0	-26.15	Peak	74.00	100	Horizontal	N/A
2**	2450.400	92.71	-10.27	54.0	-38.71	AV	74.00	100	Horizontal	N/A
3	4593.500	49.84	-4.17	74.0	24.16	Peak	0.00	150	Horizontal	Pass
3**	4593.500	39.90	-4.17	54.0	14.10	AV	0.00	150	Horizontal	Pass
4	7870.750	54.47	1.50	74.0	19.53	Peak	222.00	100	Horizontal	Pass
4**	7870.750	44.49	1.50	54.0	9.51	AV	222.00	100	Horizontal	Pass
5	12169.550	54.02	0.14	74.0	19.98	Peak	62.00	200	Horizontal	Pass
5**	12169.550	43.09	0.14	54.0	10.91	AV	62.00	200	Horizontal	Pass
6	17196.751	56.50	4.04	74.0	17.50	Peak	195.00	300	Horizontal	Pass
6**	17196.751	47.46	4.04	54.0	6.54	AV	195.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.000	46.50	-16.94	74.0	27.50	Peak	76.00	200	Vertical	Pass
1**	1329.000	32.77	-16.94	54.0	21.23	AV	76.00	200	Vertical	Pass
2	2449.600	95.80	-10.35	74.0	-21.80	Peak	192.00	200	Vertical	N/A
2**	2449.600	88.51	-10.35	54.0	-34.51	AV	192.00	200	Vertical	N/A
3	4902.750	47.53	-3.20	74.0	26.47	Peak	218.00	200	Vertical	Pass
3**	4902.750	43.58	-3.20	54.0	10.42	AV	218.00	200	Vertical	Pass
4	7930.000	55.35	2.12	74.0	18.65	Peak	322.00	300	Vertical	Pass
4**	7930.000	45.49	2.12	54.0	8.51	AV	322.00	300	Vertical	Pass
5	11613.799	53.66	-0.81	74.0	20.34	Peak	171.00	200	Vertical	Pass
5**	11613.799	44.11	-0.81	54.0	9.89	AV	171.00	200	Vertical	Pass
6	13474.237	55.97	3.28	74.0	18.03	Peak	230.00	300	Vertical	Pass
6**	13474.237	47.18	3.28	54.0	6.82	AV	230.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1559.100	42.26	-17.17	74.0	31.74	Peak	338.00	300	Horizontal	Pass
1**	1559.100	33.01	-17.17	54.0	20.99	AV	338.00	300	Horizontal	Pass
2	2410.700	106.16	-10.37	74.0	-32.16	Peak	91.00	100	Horizontal	N/A
2**	2410.700	98.69	-10.37	54.0	-44.69	AV	91.00	100	Horizontal	N/A
3	4751.500	49.98	-3.52	74.0	24.02	Peak	339.00	200	Horizontal	Pass
3**	4751.500	39.69	-3.52	54.0	14.31	AV	339.00	200	Horizontal	Pass
4	7937.750	54.67	2.14	74.0	19.33	Peak	100.00	400	Horizontal	Pass
4**	7937.750	45.47	2.14	54.0	8.53	AV	100.00	400	Horizontal	Pass
5	12342.925	53.94	0.80	74.0	20.06	Peak	360.00	400	Horizontal	Pass
5**	12342.925	43.91	0.80	54.0	10.09	AV	360.00	400	Horizontal	Pass
6	17193.863	56.89	4.01	74.0	17.11	Peak	91.00	200	Horizontal	Pass
6**	17193.863	47.06	4.01	54.0	6.94	AV	91.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V802.11ax20(SU) Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1331.600	44.74	-16.92	74.0	29.26	Peak	302.00	300	Vertical	Pass
1**	1331.600	37.83	-16.92	54.0	16.17	AV	302.00	300	Vertical	Pass
2	2413.000	100.61	-10.23	74.0	-26.61	Peak	243.00	100	Vertical	N/A
2**	2413.000	92.50	-10.23	54.0	-38.50	AV	243.00	100	Vertical	N/A
3	4732.500	50.22	-2.62	74.0	23.78	Peak	237.00	100	Vertical	Pass
3**	4732.500	40.70	-2.62	54.0	13.30	AV	237.00	100	Vertical	Pass
4	7898.250	54.73	1.03	74.0	19.27	Peak	151.00	400	Vertical	Pass
4**	7898.250	45.89	1.03	54.0	8.11	AV	151.00	400	Vertical	Pass
5	12424.625	54.25	1.07	74.0	19.75	Peak	267.00	400	Vertical	Pass
5**	12424.625	44.69	1.07	54.0	9.31	AV	267.00	400	Vertical	Pass
6	17213.813	56.81	3.62	74.0	17.19	Peak	332.00	100	Vertical	Pass
6**	17213.813	47.66	3.62	54.0	6.34	AV	332.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1541.500	42.24	-17.25	74.0	31.76	Peak	59.00	300	Horizontal	Pass
1**	1541.500	32.76	-17.25	54.0	21.24	AV	59.00	300	Horizontal	Pass
2	2434.000	105.73	-10.45	74.0	-31.73	Peak	78.00	200	Horizontal	N/A
2**	2434.000	97.33	-10.45	54.0	-43.33	AV	78.00	200	Horizontal	N/A
3	4870.500	50.92	-3.45	74.0	23.08	Peak	10.00	200	Horizontal	Pass
3**	4870.500	39.96	-3.45	54.0	14.04	AV	10.00	200	Horizontal	Pass
4	4876.250	47.83	-3.50	74.0	26.17	Peak	319.00	200	Horizontal	Pass
4**	4876.250	44.59	-3.50	54.0	9.41	AV	319.00	200	Horizontal	Pass
5	12274.763	54.04	0.83	74.0	19.96	Peak	303.00	300	Horizontal	Pass
5**	12274.763	44.74	0.83	54.0	9.26	AV	303.00	300	Horizontal	Pass
6	13450.613	56.01	3.23	74.0	17.99	Peak	0.00	100	Horizontal	Pass
6**	13450.613	48.06	3.23	54.0	5.94	AV	0.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax20(SU) Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1333.700	45.20	-17.12	74.0	28.80	Peak	66.00	100	Vertical	Pass
1**	1333.700	32.96	-17.12	54.0	21.04	AV	66.00	100	Vertical	Pass
2	2435.100	99.88	-10.26	74.0	-25.88	Peak	237.00	100	Vertical	N/A
2**	2435.100	91.91	-10.26	54.0	-37.91	AV	237.00	100	Vertical	N/A
3	4877.250	46.53	-3.42	74.0	27.47	Peak	216.00	200	Vertical	Pass
3**	4877.250	43.68	-3.42	54.0	10.32	AV	216.00	200	Vertical	Pass
4	4880.500	50.98	-3.92	74.0	23.02	Peak	168.00	150	Vertical	Pass
4**	4880.500	41.94	-3.92	54.0	12.06	AV	168.00	150	Vertical	Pass
5	12427.000	53.91	1.07	74.0	20.09	Peak	45.00	400	Vertical	Pass
5**	12427.000	45.04	1.07	54.0	8.96	AV	45.00	400	Vertical	Pass
6	13476.338	56.23	3.29	74.0	17.77	Peak	360.00	300	Vertical	Pass
6**	13476.338	46.66	3.29	54.0	7.34	AV	360.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H802.11ax20(SU) High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1574.700	42.10	-16.87	74.0	31.90	Peak	307.00	200	Horizontal	Pass
1**	1574.700	32.34	-16.87	54.0	21.66	AV	307.00	200	Horizontal	Pass
2	2460.000	105.14	-11.31	74.0	-31.14	Peak	82.00	100	Horizontal	N/A
2**	2460.000	97.94	-11.31	54.0	-43.94	AV	82.00	100	Horizontal	N/A
3	4922.500	53.64	-3.41	74.0	20.36	Peak	1.00	200	Horizontal	Pass
3**	4922.500	43.50	-3.41	54.0	10.50	AV	1.00	200	Horizontal	Pass
4	4926.250	50.19	-3.74	74.0	23.81	Peak	1.00	200	Horizontal	Pass
4**	4926.250	45.25	-3.74	54.0	8.75	AV	1.00	200	Horizontal	Pass
5	12408.001	53.80	1.10	74.0	20.20	Peak	33.00	400	Horizontal	Pass
5**	12408.001	45.26	1.10	54.0	8.74	AV	33.00	400	Horizontal	Pass
6	17202.786	56.85	3.97	74.0	17.15	Peak	86.00	300	Horizontal	Pass
6**	17202.786	47.10	3.97	54.0	6.90	AV	86.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax20(SU) High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.800	45.51	-16.84	74.0	28.49	Peak	49.00	100	Vertical	Pass
1**	1329.800	34.01	-16.84	54.0	19.99	AV	49.00	100	Vertical	Pass
2	2463.500	99.24	-11.26	74.0	-25.24	Peak	245.00	150	Vertical	N/A
2**	2463.500	92.58	-11.26	54.0	-38.58	AV	245.00	150	Vertical	N/A
3	4920.750	53.18	-3.53	74.0	20.82	Peak	188.00	100	Vertical	Pass
3**	4920.750	42.30	-3.53	54.0	11.70	AV	188.00	100	Vertical	Pass
4	4924.750	50.07	-3.57	74.0	23.93	Peak	162.00	200	Vertical	Pass
4**	4924.750	46.45	-3.57	54.0	7.55	AV	162.00	200	Vertical	Pass
5	12543.612	54.32	1.19	74.0	19.68	Peak	12.00	200	Vertical	Pass
5**	12543.612	44.36	1.19	54.0	9.64	AV	12.00	200	Vertical	Pass
6	17211.974	56.08	3.68	74.0	17.92	Peak	325.00	400	Vertical	Pass
6**	17211.974	46.92	3.68	54.0	7.08	AV	325.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1574.700	42.73	-16.87	74.0	31.27	Peak	224.00	100	Horizontal	Pass
1**	1574.700	32.57	-16.87	54.0	21.43	AV	224.00	100	Horizontal	Pass
2	2423.100	100.56	-10.30	74.0	-26.56	Peak	81.00	150	Horizontal	N/A
2**	2423.100	92.44	-10.30	54.0	-38.44	AV	81.00	150	Horizontal	N/A
3	4816.750	50.25	-2.92	74.0	23.75	Peak	51.00	100	Horizontal	Pass
3**	4816.750	39.75	-2.92	54.0	14.25	AV	51.00	100	Horizontal	Pass
4	7350.750	54.64	0.17	74.0	19.36	Peak	142.00	100	Horizontal	Pass
4**	7350.750	44.94	0.17	54.0	9.06	AV	142.00	100	Horizontal	Pass
5	11633.037	54.23	-1.10	74.0	19.77	Peak	273.00	200	Horizontal	Pass
5**	11633.037	44.21	-1.10	54.0	9.79	AV	273.00	200	Horizontal	Pass
6	17197.275	56.37	4.04	74.0	17.63	Peak	212.00	200	Horizontal	Pass
6**	17197.275	47.14	4.04	54.0	6.86	AV	212.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.400	45.48	-16.87	74.0	28.52	Peak	81.00	400	Vertical	Pass
1**	1329.400	36.24	-16.87	54.0	17.76	AV	81.00	400	Vertical	Pass
2	2419.800	95.03	-10.07	74.0	-21.03	Peak	244.00	150	Vertical	N/A
2**	2419.800	87.26	-10.07	54.0	-33.26	AV	244.00	150	Vertical	N/A
3	4817.500	49.38	-2.89	74.0	24.62	Peak	181.00	150	Vertical	Pass
3**	4817.500	40.75	-2.89	54.0	13.25	AV	181.00	150	Vertical	Pass
4	7886.750	54.14	1.78	74.0	19.86	Peak	298.00	300	Vertical	Pass
4**	7886.750	45.77	1.78	54.0	8.23	AV	298.00	300	Vertical	Pass
5	12894.113	54.20	1.01	74.0	19.80	Peak	57.00	100	Vertical	Pass
5**	12894.113	44.63	1.01	54.0	9.37	AV	57.00	100	Vertical	Pass
6	17182.312	56.93	3.92	74.0	17.07	Peak	57.00	400	Vertical	Pass
6**	17182.312	46.76	3.92	54.0	7.24	AV	57.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1295.700	42.27	-16.82	74.0	31.73	Peak	184.00	400	Horizontal	Pass
1**	1295.700	32.78	-16.82	54.0	21.22	AV	184.00	400	Horizontal	Pass
2	2435.500	99.85	-10.16	74.0	-25.85	Peak	84.00	150	Horizontal	N/A
2**	2435.500	92.48	-10.16	54.0	-38.48	AV	84.00	150	Horizontal	N/A
3	4817.500	49.66	-2.89	74.0	24.34	Peak	303.00	200	Horizontal	Pass
3**	4817.500	40.27	-2.89	54.0	13.73	AV	303.00	200	Horizontal	Pass
4	7980.000	54.42	1.54	74.0	19.58	Peak	83.00	300	Horizontal	Pass
4**	7980.000	44.83	1.54	54.0	9.17	AV	83.00	300	Horizontal	Pass
5	11527.113	53.18	-0.94	74.0	20.82	Peak	223.00	0	Horizontal	Pass
5**	11527.113	44.22	-0.94	54.0	9.78	AV	223.00	0	Horizontal	Pass
6	13438.537	56.47	3.05	74.0	17.53	Peak	298.00	100	Horizontal	Pass
6**	13438.537	46.84	3.05	54.0	7.16	AV	298.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1166.100	43.51	-17.66	74.0	30.49	Peak	122.00	400	Vertical	Pass
1**	1166.100	31.76	-17.66	54.0	22.24	AV	122.00	400	Vertical	Pass
2	2438.600	94.35	-10.02	74.0	-20.35	Peak	190.00	150	Vertical	N/A
2**	2438.600	86.64	-10.02	54.0	-32.64	AV	190.00	150	Vertical	N/A
3	4910.500	49.63	-3.37	74.0	24.37	Peak	172.00	100	Vertical	Pass
3**	4910.500	39.91	-3.37	54.0	14.09	AV	172.00	100	Vertical	Pass
4	7934.750	54.55	2.63	74.0	19.45	Peak	101.00	400	Vertical	Pass
4**	7934.750	45.82	2.63	54.0	8.18	AV	101.00	400	Vertical	Pass
5	12443.625	53.67	1.05	74.0	20.33	Peak	225.00	300	Vertical	Pass
5**	12443.625	44.36	1.05	54.0	9.64	AV	225.00	300	Vertical	Pass
6	17202.262	56.44	3.99	74.0	17.56	Peak	7.00	300	Vertical	Pass
6**	17202.262	47.80	3.99	54.0	6.20	AV	7.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.500	42.88	-16.83	74.0	31.12	Peak	214.00	100	Horizontal	Pass
1**	1329.500	34.33	-16.83	54.0	19.67	AV	214.00	100	Horizontal	Pass
2	2450.500	100.66	-10.20	74.0	-26.66	Peak	80.00	100	Horizontal	N/A
2**	2450.500	93.71	-10.20	54.0	-39.71	AV	80.00	100	Horizontal	N/A
3	4821.500	49.56	-3.63	74.0	24.44	Peak	132.00	150	Horizontal	Pass
3**	4821.500	39.70	-3.63	54.0	14.30	AV	132.00	150	Horizontal	Pass
4	7964.500	54.02	2.22	74.0	19.98	Peak	251.00	100	Horizontal	Pass
4**	7964.500	45.34	2.22	54.0	8.66	AV	251.00	100	Horizontal	Pass
5	12232.013	54.60	0.85	74.0	19.40	Peak	212.00	400	Horizontal	Pass
5**	12232.013	44.97	0.85	54.0	9.03	AV	212.00	400	Horizontal	Pass
6	13397.588	56.10	2.47	74.0	17.90	Peak	331.00	200	Horizontal	Pass
6**	13397.588	46.37	2.47	54.0	7.63	AV	331.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.500	44.97	-16.83	74.0	29.03	Peak	76.00	200	Vertical	Pass
1**	1329.500	33.51	-16.83	54.0	20.49	AV	76.00	200	Vertical	Pass
2	2449.900	95.97	-10.39	74.0	-21.97	Peak	191.00	200	Vertical	N/A
2**	2449.900	88.15	-10.39	54.0	-34.15	AV	191.00	200	Vertical	N/A
3	4901.750	50.06	-3.30	74.0	23.94	Peak	242.00	100	Vertical	Pass
3**	4901.750	41.94	-3.30	54.0	12.06	AV	242.00	100	Vertical	Pass
4	7961.500	54.93	1.58	74.0	19.07	Peak	19.00	100	Vertical	Pass
4**	7961.500	45.07	1.58	54.0	8.93	AV	19.00	100	Vertical	Pass
5	11627.338	53.70	-1.01	74.0	20.30	Peak	232.00	100	Vertical	Pass
5**	11627.338	44.39	-1.01	54.0	9.61	AV	232.00	100	Vertical	Pass
6	17206.989	56.07	3.84	74.0	17.93	Peak	123.00	100	Vertical	Pass
6**	17206.989	47.83	3.84	54.0	6.17	AV	123.00	100	Vertical	Pass

5.8 Band Edge (Restricted-band band-edge)

5.8.1 Limit

FCC §15.209&15.247(d)

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

5.8.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX A.

5.8.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

For transmitters operating above 1 GHz repeat the measurement with an average detector.

5.8.4 Test Result

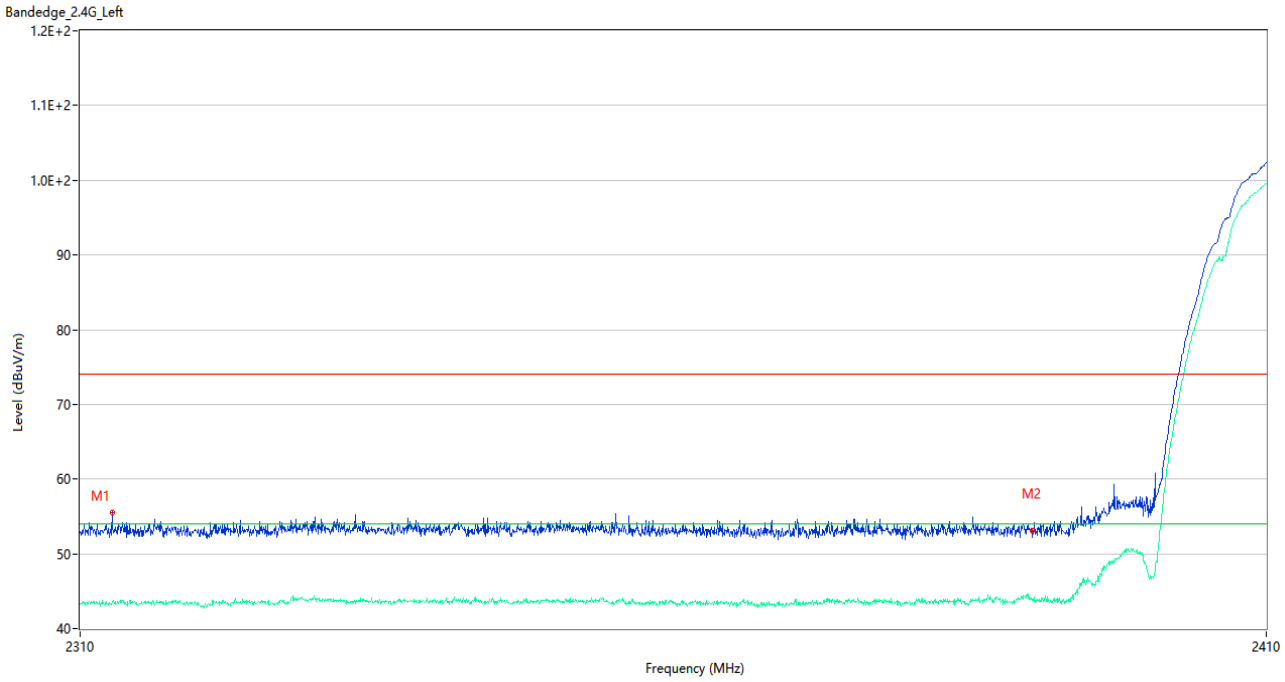
Note 1: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note 2: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note 3: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

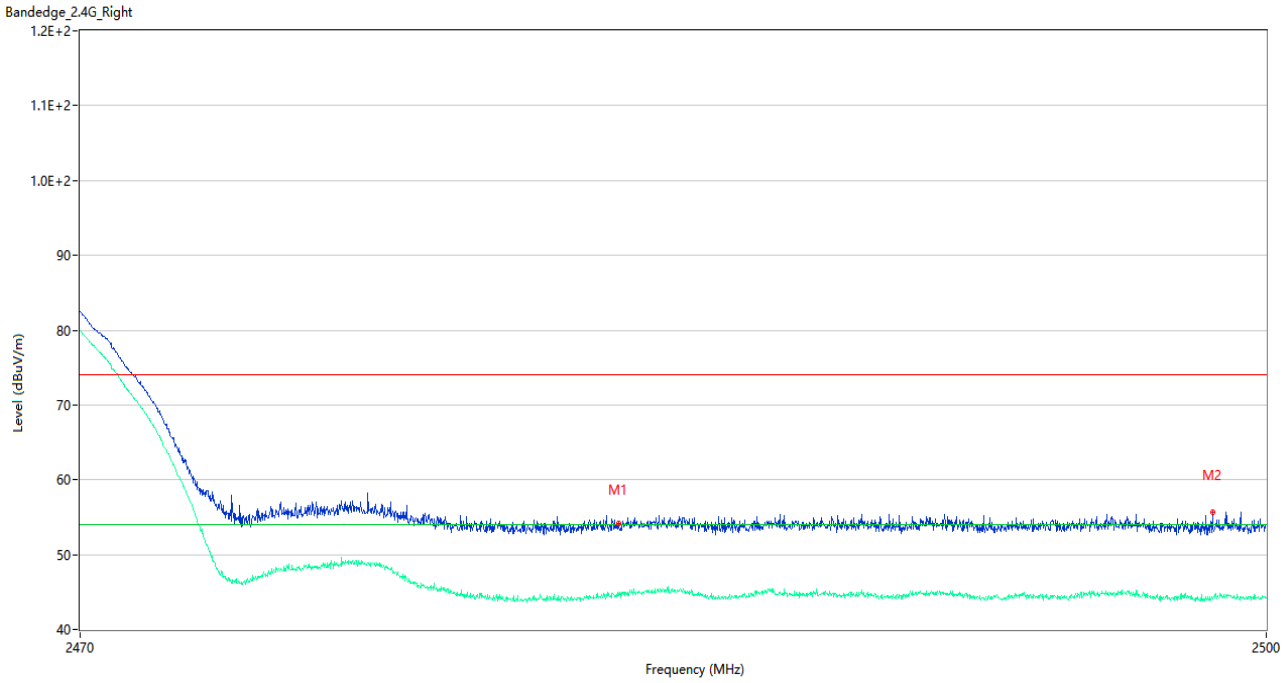
Test Data and Plots

802.11b LOW CHANNEL



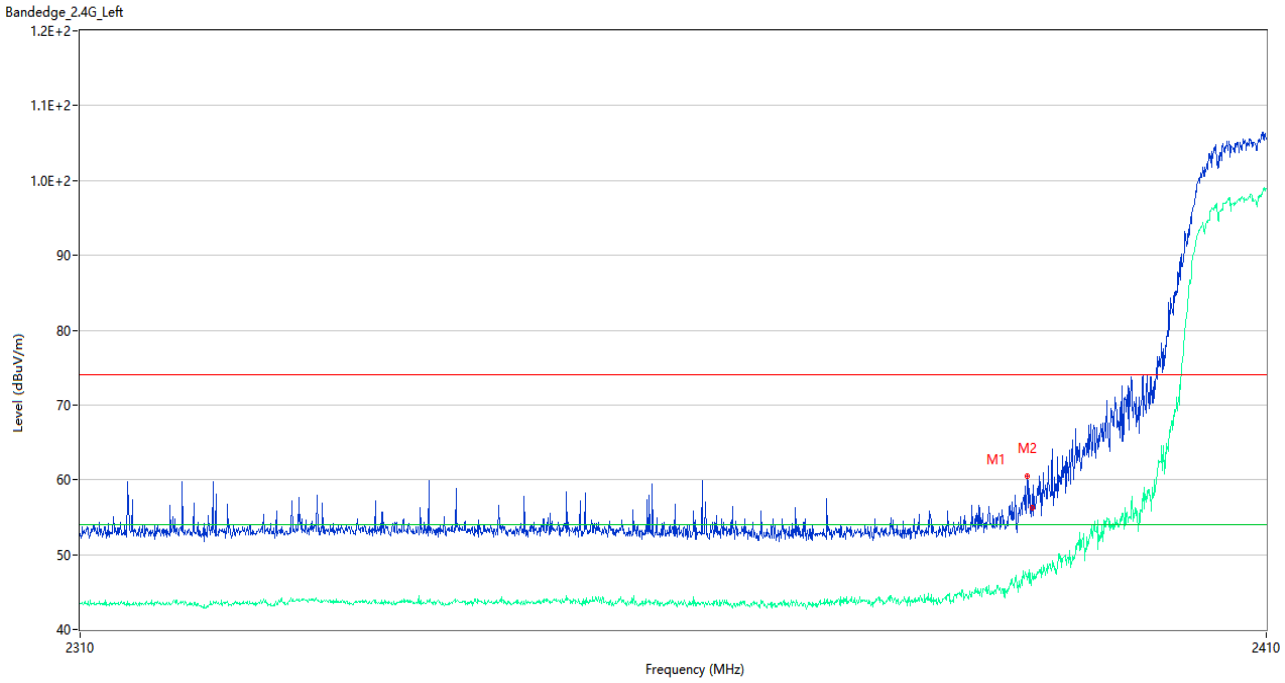
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2312.650	55.49	-1.44	74.0	18.51	Peak	230.00	200	Horizontal	Pass
1**	2312.650	43.50	-1.44	54.0	10.50	AV	230.00	200	Horizontal	Pass
2	2389.950	53.15	-1.82	74.0	20.85	Peak	83.00	200	Horizontal	Pass
2**	2389.950	43.90	-1.82	54.0	10.10	AV	83.00	200	Horizontal	Pass

802.11b HIGH CHANNEL



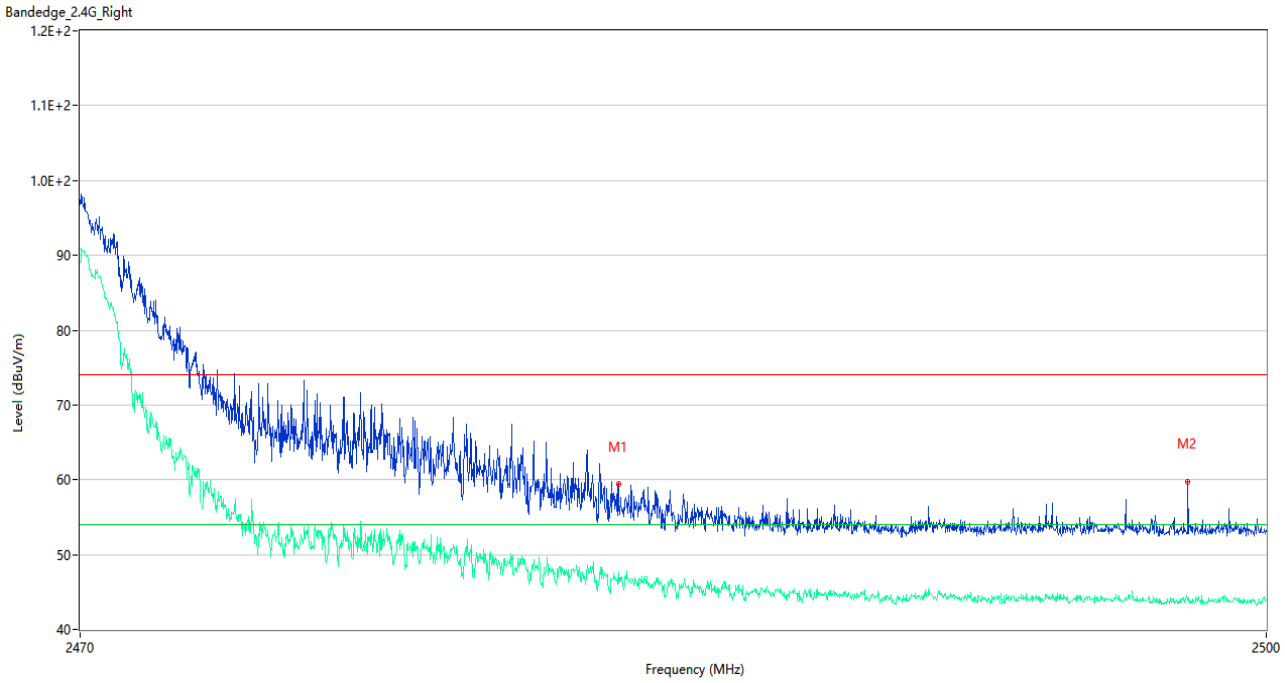
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.575	54.18	-1.09	74.0	19.82	Peak	87.00	100	Horizontal	Pass
1**	2483.575	44.47	-1.09	54.0	9.53	AV	87.00	100	Horizontal	Pass
2	2498.635	55.69	-0.99	74.0	18.31	Peak	229.00	200	Horizontal	Pass
2**	2498.635	44.13	-0.99	54.0	9.87	AV	229.00	200	Horizontal	Pass

802.11g LOW CHANNEL



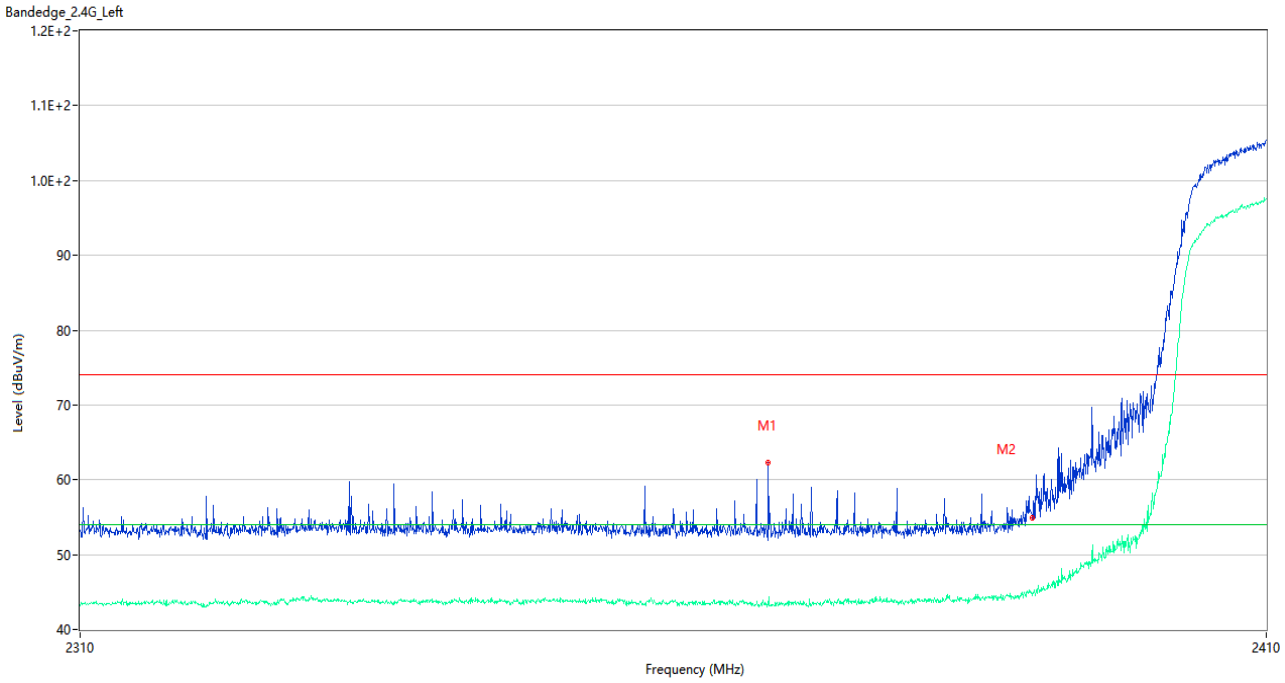
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2389.500	60.48	-1.75	74.0	13.52	Peak	74.00	100	Horizontal	Pass
1**	2389.500	46.61	-1.75	54.0	7.39	AV	74.00	100	Horizontal	Pass
2	2389.950	56.31	-1.82	74.0	17.69	Peak	54.00	200	Horizontal	Pass
2**	2389.950	46.95	-1.82	54.0	7.05	AV	54.00	200	Horizontal	Pass

802.11g HIGH CHANNEL



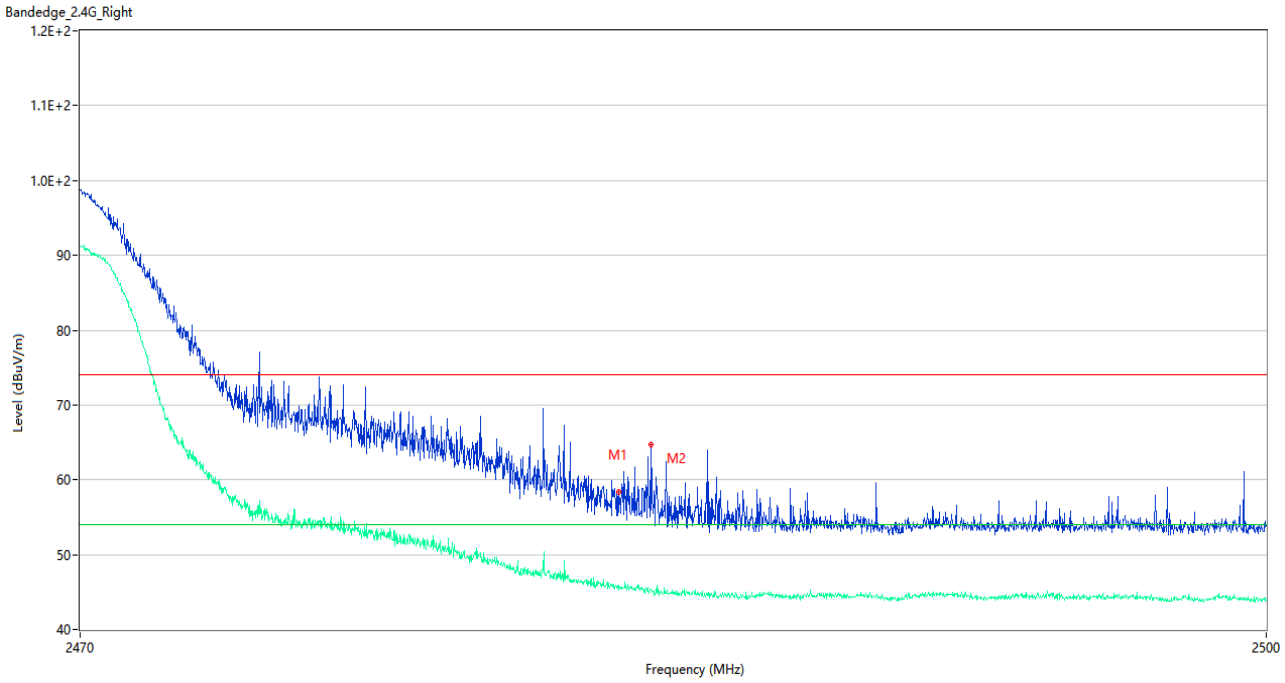
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.575	59.38	-1.09	74.0	14.62	Peak	81.00	100	Horizontal	Pass
1**	2483.575	46.12	-1.09	54.0	7.88	AV	81.00	100	Horizontal	Pass
2	2498.005	59.79	-0.97	74.0	14.21	Peak	76.00	200	Horizontal	Pass
2**	2498.005	43.89	-0.97	54.0	10.11	AV	76.00	200	Horizontal	Pass

802.11n20 LOW CHANNEL



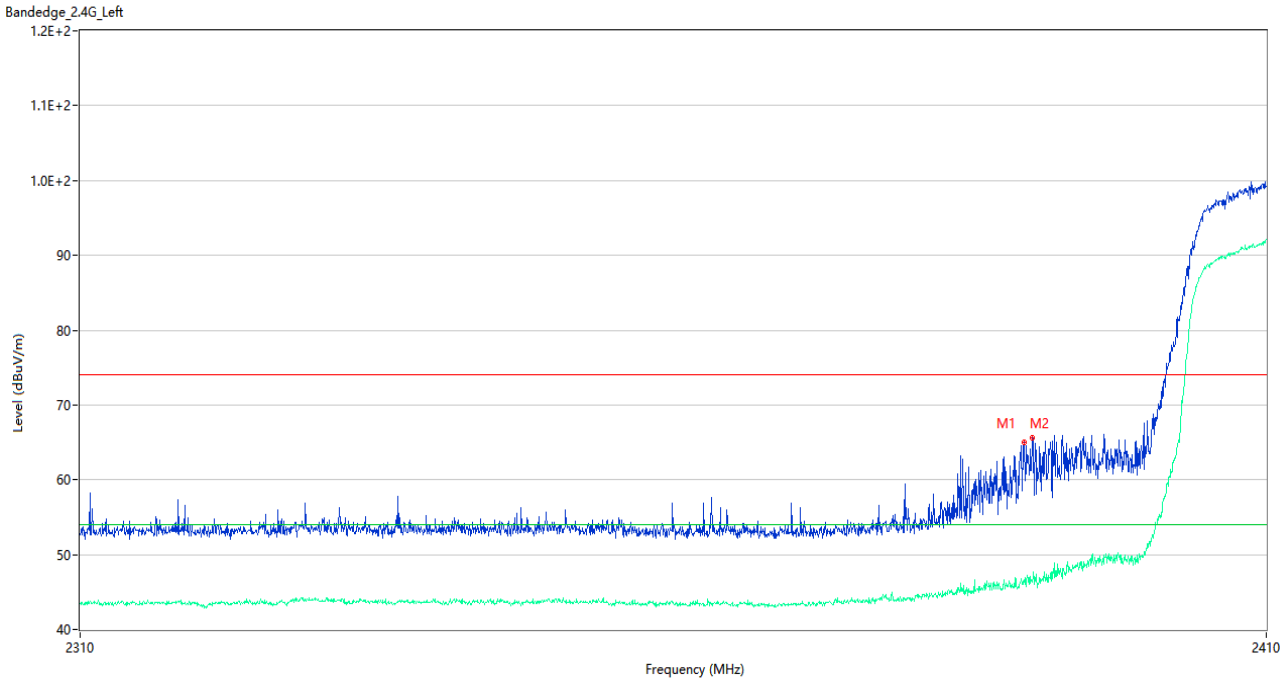
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2367.500	62.33	-1.80	74.0	11.67	Peak	72.00	150	Horizontal	Pass
1**	2367.500	43.33	-1.80	54.0	10.67	AV	72.00	150	Horizontal	Pass
2	2389.950	54.92	-1.82	74.0	19.08	Peak	88.00	150	Horizontal	Pass
2**	2389.950	44.83	-1.82	54.0	9.17	AV	88.00	150	Horizontal	Pass

802.11n20 HIGH CHANNEL



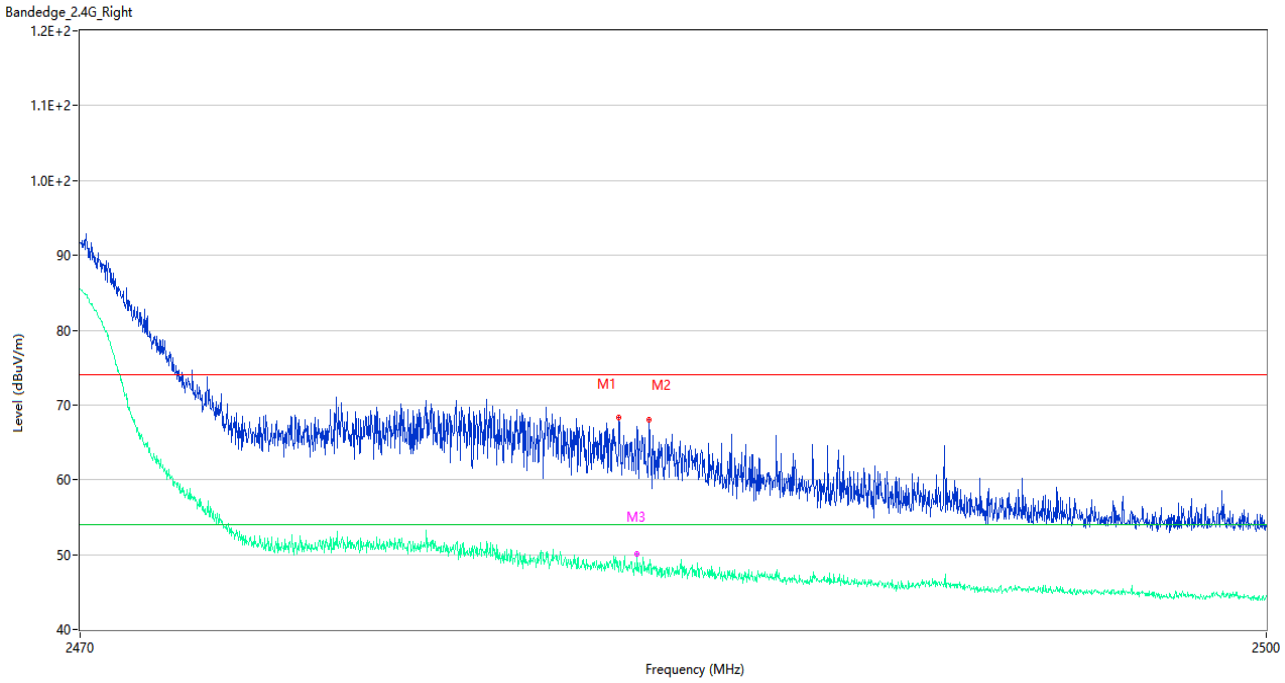
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.590	58.32	-1.09	74.0	15.68	Peak	238.00	200	Horizontal	Pass
1**	2483.590	45.83	-1.09	54.0	8.17	AV	238.00	200	Horizontal	Pass
2	2484.385	64.67	-1.19	74.0	9.33	Peak	94.00	150	Horizontal	Pass
2**	2484.385	45.45	-1.19	54.0	8.55	AV	94.00	150	Horizontal	Pass

802.11n40 LOW CHANNEL



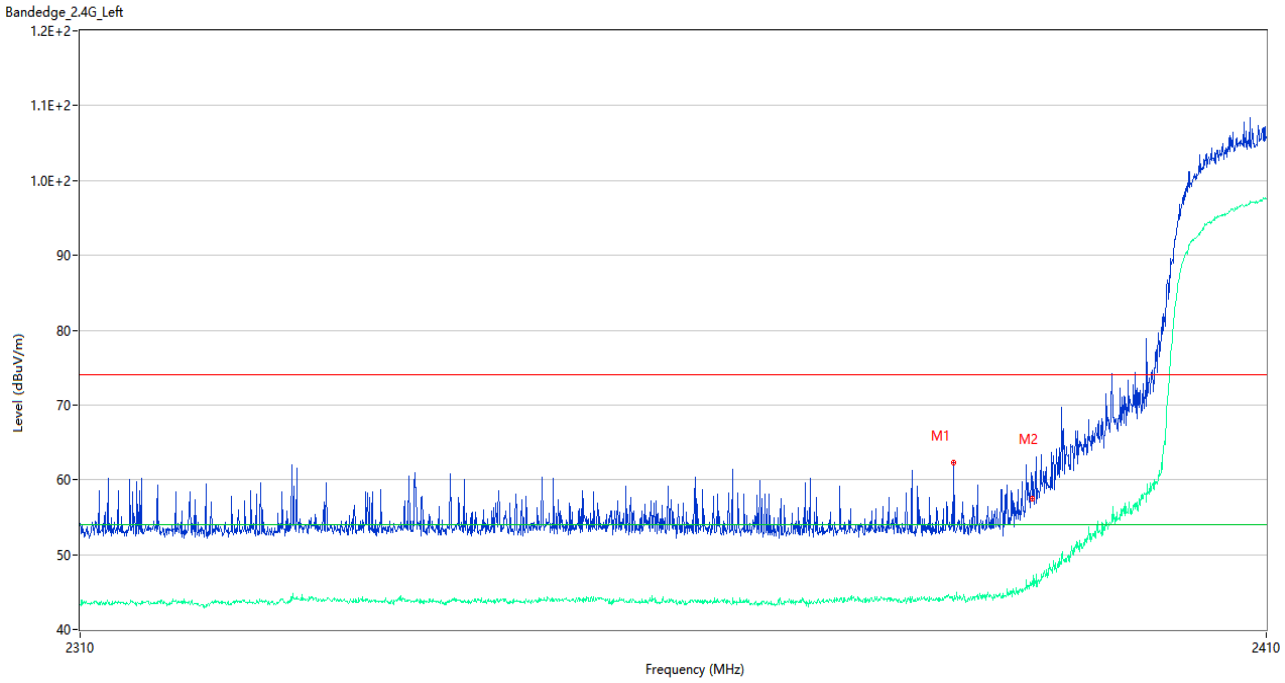
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2389.250	64.99	-1.85	74.0	9.01	Peak	77.00	200	Horizontal	Pass
1**	2389.250	46.31	-1.85	54.0	7.69	AV	77.00	200	Horizontal	Pass
2	2389.950	65.69	-1.82	74.0	8.31	Peak	75.00	200	Horizontal	Pass
2**	2389.950	46.70	-1.82	54.0	7.30	AV	75.00	200	Horizontal	Pass

802.11n40 HIGH CHANNEL



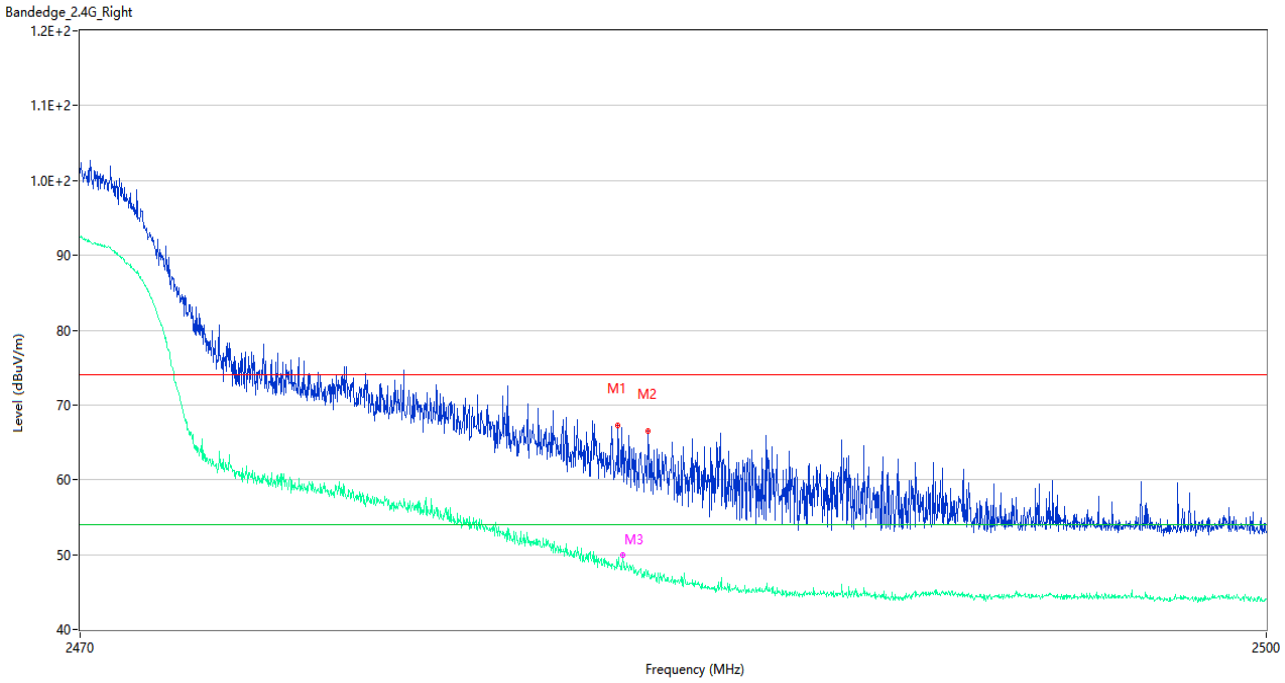
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.590	68.34	-1.09	74.0	5.66	Peak	76.00	200	Horizontal	Pass
1**	2483.590	47.64	-1.09	54.0	6.36	AV	76.00	200	Horizontal	Pass
2	2484.355	68.06	-1.19	74.0	5.94	Peak	76.00	200	Horizontal	Pass
2**	2484.355	47.57	-1.19	54.0	6.43	AV	76.00	200	Horizontal	Pass
3	2484.040	65.57	-1.07	74.0	8.43	Peak	73.00	150	Horizontal	Pass
3**	2484.040	50.17	-1.07	54.0	3.83	AV	73.00	150	Horizontal	Pass

802.11ax20(SU) LOW CHANNEL



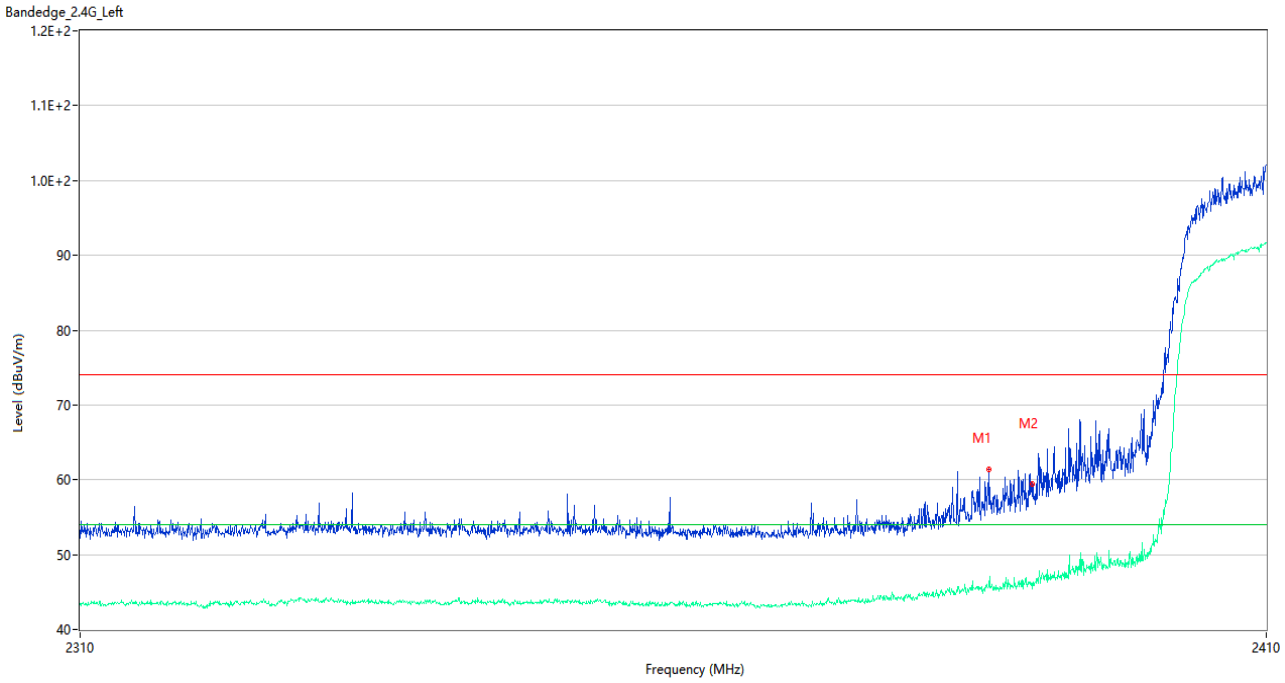
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2383.250	62.25	-1.61	74.0	11.75	Peak	69.00	150	Horizontal	Pass
1**	2383.250	43.80	-1.61	54.0	10.20	AV	69.00	150	Horizontal	Pass
2	2389.950	57.40	-1.82	74.0	16.60	Peak	64.00	150	Horizontal	Pass
2**	2389.950	46.25	-1.82	54.0	7.75	AV	64.00	150	Horizontal	Pass

802.11 ax20(SU) HIGH CHANNEL



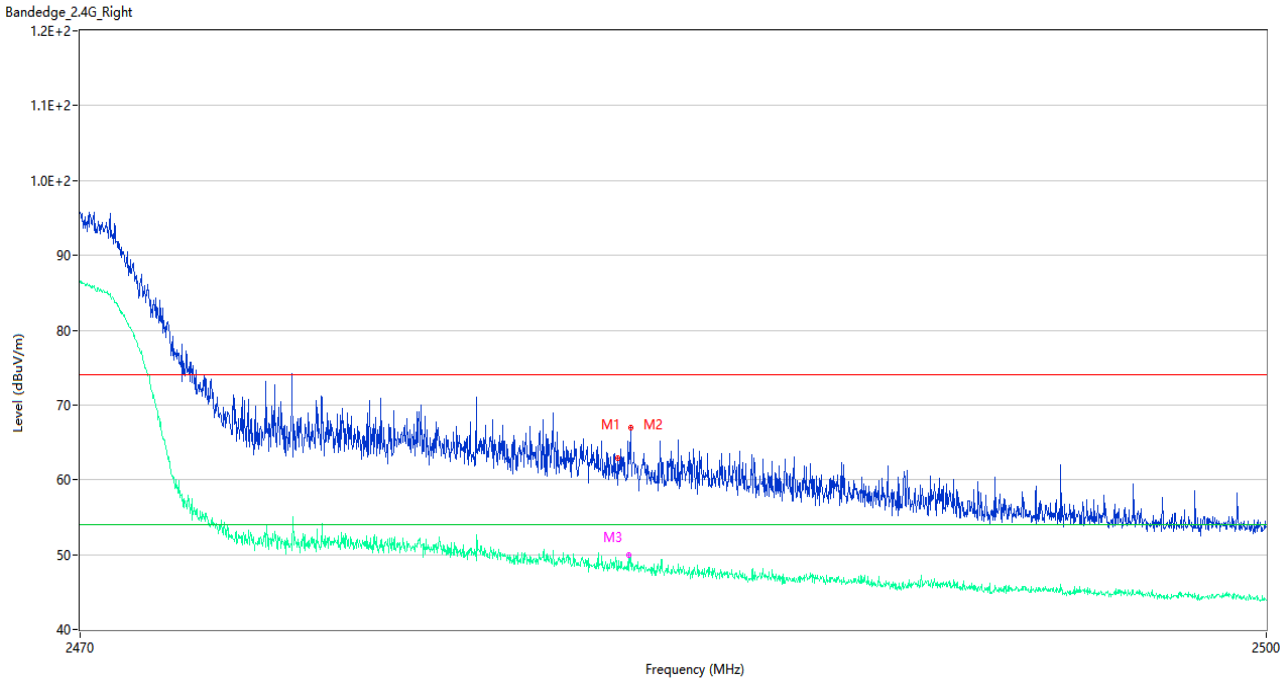
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.560	67.21	-1.09	74.0	6.79	Peak	95.00	150	Horizontal	Pass
1**	2483.560	48.43	-1.09	54.0	5.57	AV	95.00	150	Horizontal	Pass
2	2484.325	66.53	-1.18	74.0	7.47	Peak	86.00	200	Horizontal	Pass
2**	2484.325	47.81	-1.18	54.0	6.19	AV	86.00	200	Horizontal	Pass
3	2483.680	62.20	-1.07	74.0	11.80	Peak	61.00	150	Horizontal	Pass
3**	2483.680	50.01	-1.07	54.0	3.99	AV	61.00	150	Horizontal	Pass

802.11ax40(SU) LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2386.250	61.44	-1.42	74.0	12.56	Peak	76.00	150	Horizontal	Pass
1**	2386.250	45.81	-1.42	54.0	8.19	AV	76.00	150	Horizontal	Pass
2	2389.950	59.50	-1.82	74.0	14.50	Peak	269.00	100	Horizontal	Pass
2**	2389.950	46.18	-1.82	54.0	7.82	AV	269.00	100	Horizontal	Pass

802.11 ax40(SU) HIGH CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.560	62.83	-1.09	74.0	11.17	Peak	124.00	150	Horizontal	Pass
1**	2483.560	47.78	-1.09	54.0	6.22	AV	124.00	150	Horizontal	Pass
2	2483.875	66.89	-1.03	74.0	7.11	Peak	78.00	200	Horizontal	Pass
2**	2483.875	48.46	-1.03	54.0	5.54	AV	78.00	200	Horizontal	Pass
3	2483.830	62.29	-1.04	74.0	11.71	Peak	78.00	150	Horizontal	Pass
3**	2483.830	49.95	-1.04	54.0	4.05	AV	78.00	150	Horizontal	Pass

5.9 Power Spectral density (PSD)

5.9.1 Limit

FCC §15.247(e)

The same method of determining the conducted output power shall be used to determine the power spectral density. If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

5.9.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX A.

5.9.3 Test Procedure

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz $\leqslant$ RBW $\leqslant$ 100 kHz.

Set the VBW $\geqslant$ 3 RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.9.4 Test Result

Test Data

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.09	8
Middle	-7.00	8
High	-8.27	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.22	8
Middle	-8.77	8
High	-7.72	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-10.83	8
Middle	-9.50	8
High	-9.93	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.72	8
Middle	-13.63	8
High	-13.35	8

802.11ax-20 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.88	8
Middle	-9.84	8
High	-10.45	8

802.11ax-40 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.98	8
Middle	-14.31	8
High	-15.20	8

Test Plots

802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL

802.11n-20 MHz LOW CHANNEL

802.11n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL

802.11n-40 MHz HIGH CHANNEL

802.11ax-20 MHz(SU) LOW CHANNEL

802.11ax-20 MHz(SU) MIDDLE CHANNEL

802.11ax-20 MHz(SU) HIGH CHANNEL

802.11ax-40 MHz(SU) LOW CHANNEL

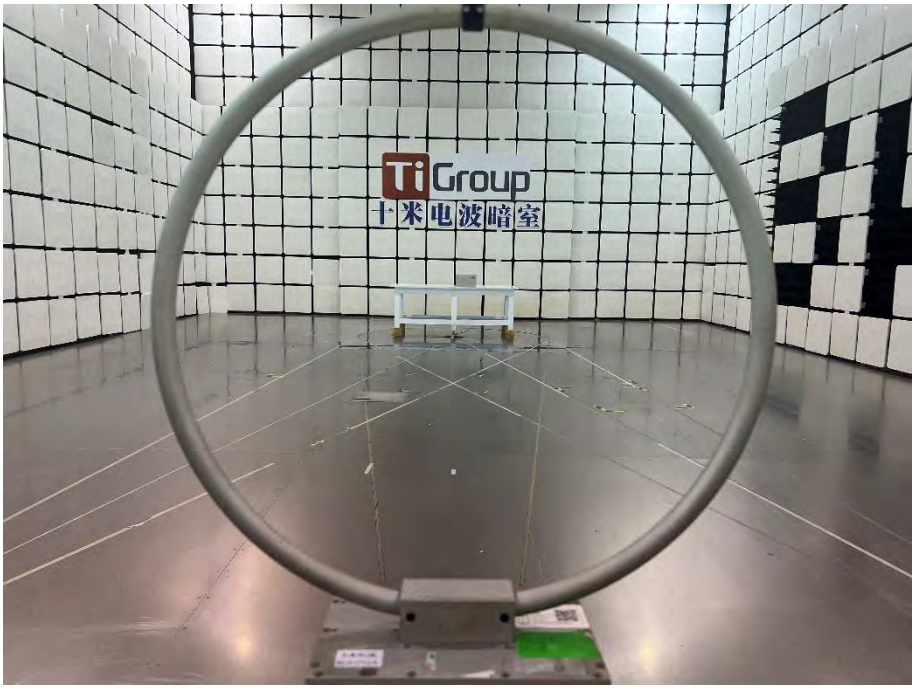
802.11ax-40 MHz(SU) MIDDLE CHANNEL

802.11ax-40 MHz(SU) HIGH CHANNEL

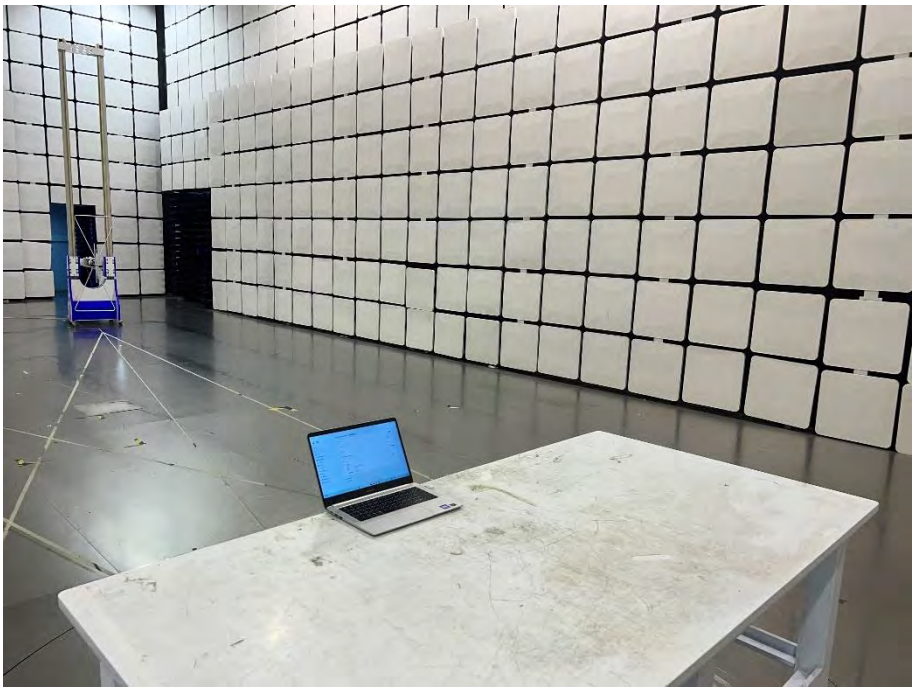
ANNEX A TEST SETUP PHOTOS

1 Radiated Test Photo

Below 30MHz

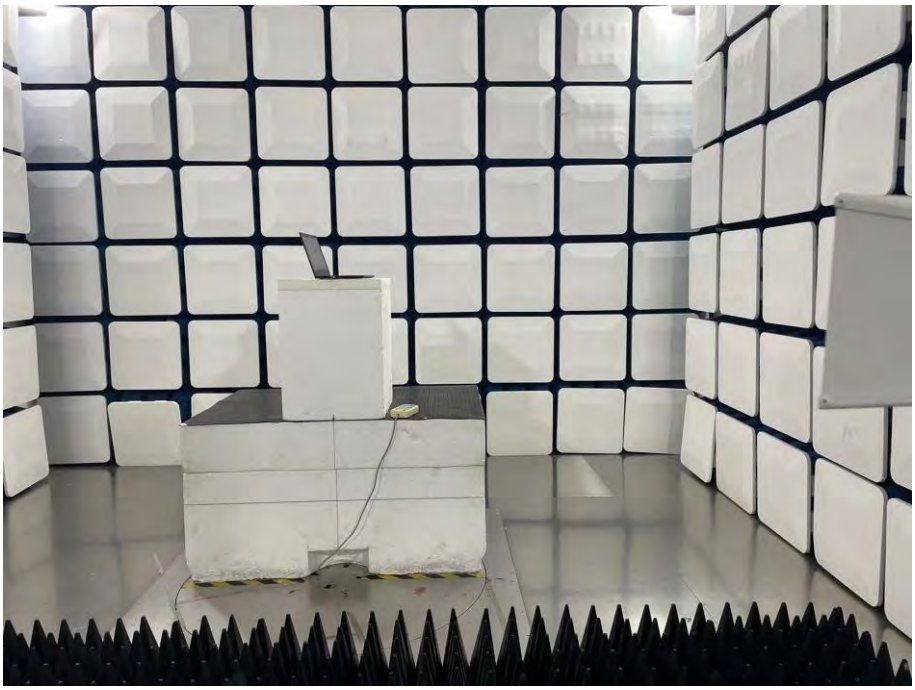


30MHz-1GHz



Close-up

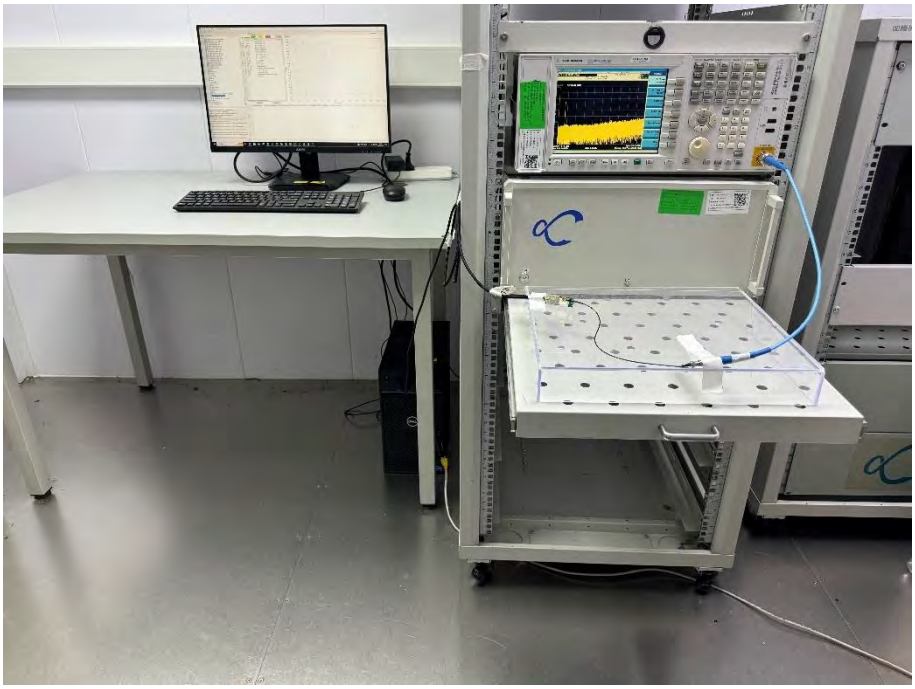
Above 1GHz



Close-up

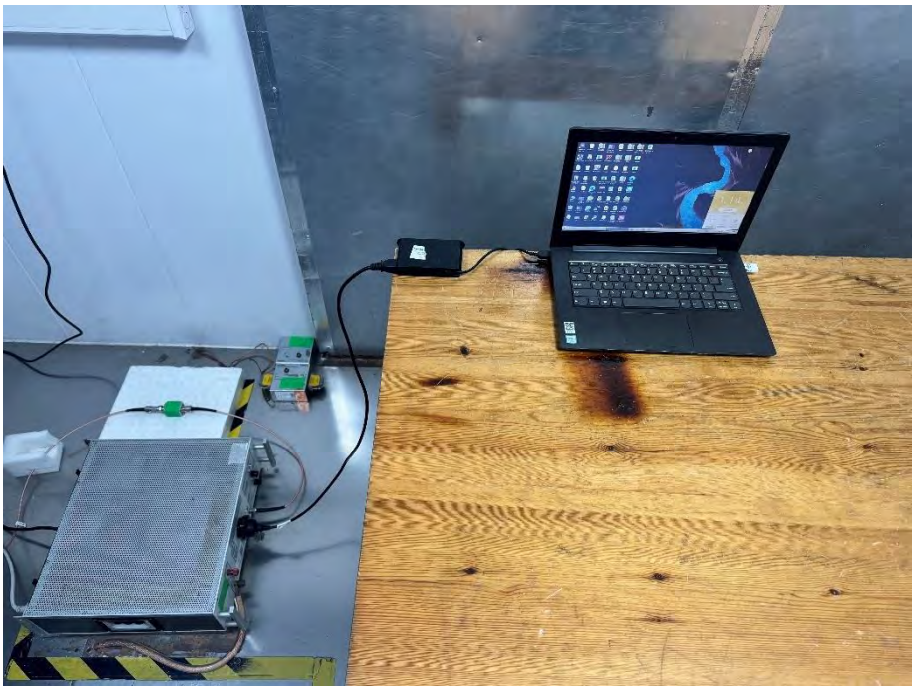
2 Conducted Test Photo

Conducted Test



3 Conducted Emissions

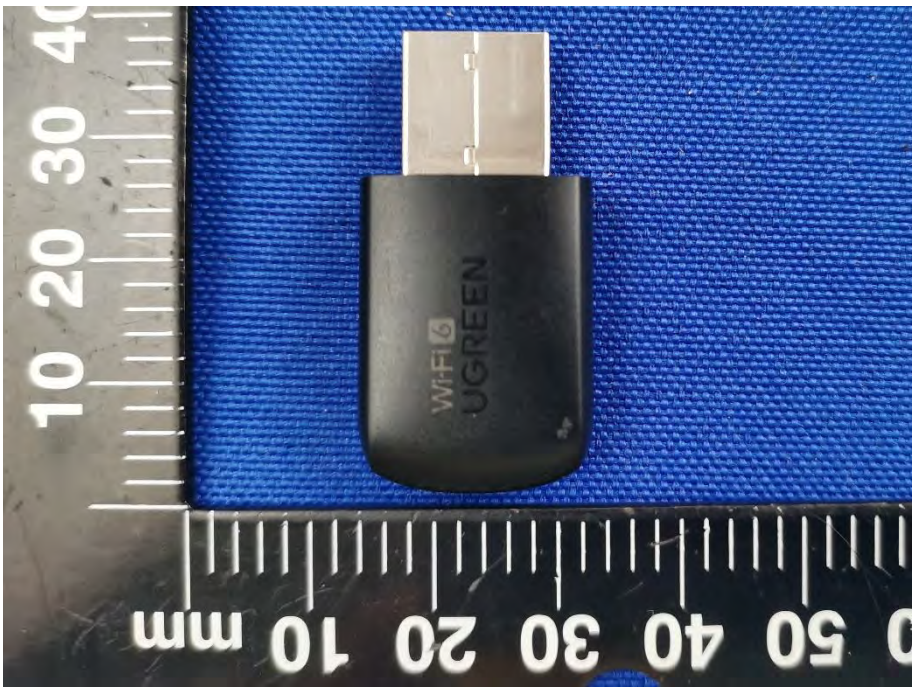
Test Photo 1



Test Photo 2

ANNEX B EUT EXTERNAL PHOTOS

FRONT VIEW OF EUT

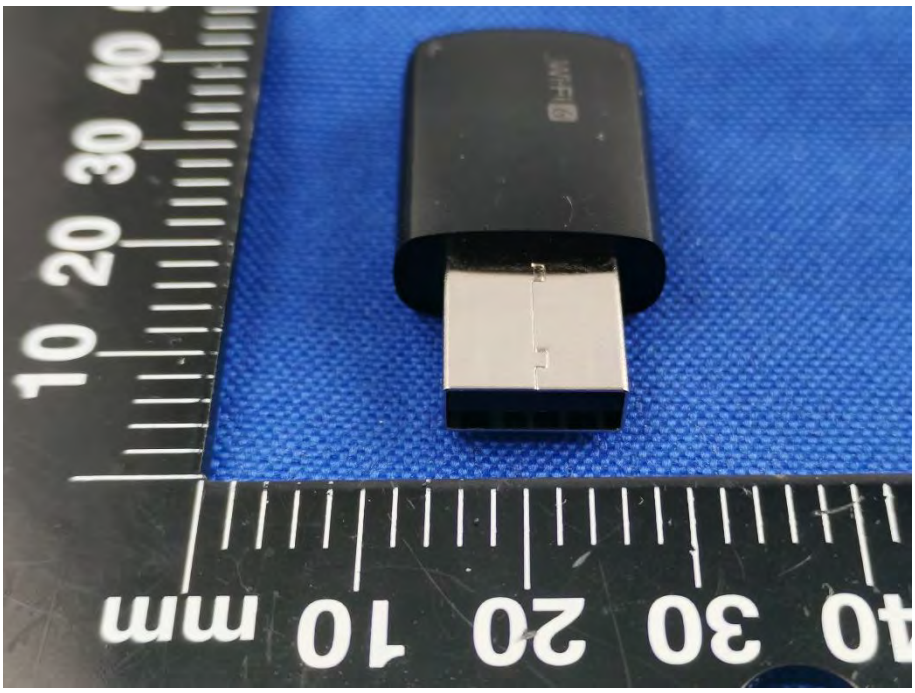


REAR VIEW OF EUT

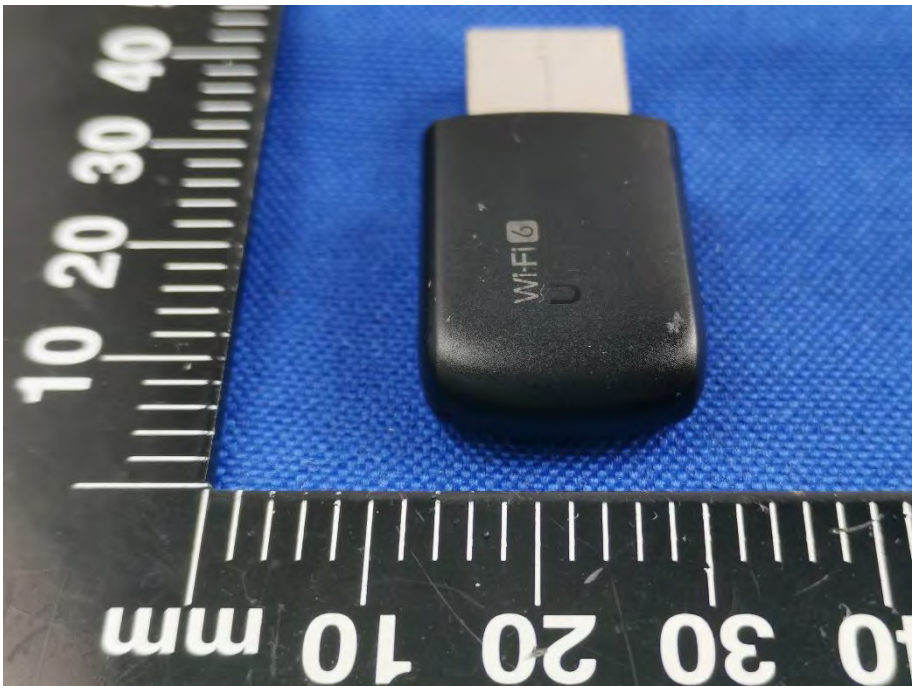
LEFT VIEW OF EUT

RIGHT VIEW OF EUT

TOP VIEW OF EUT

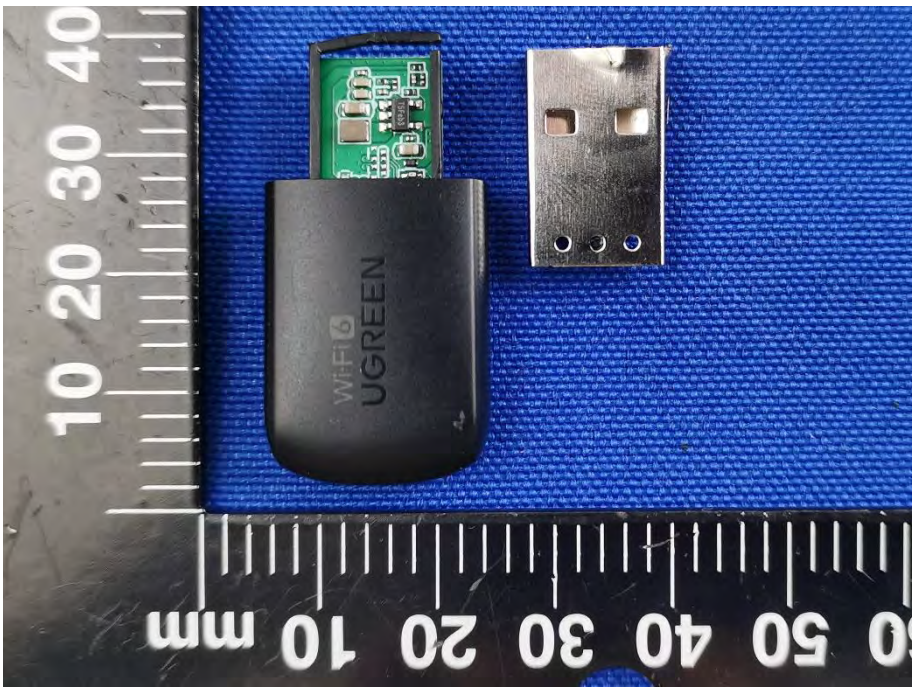


BOTTOM VIEW OF EUT

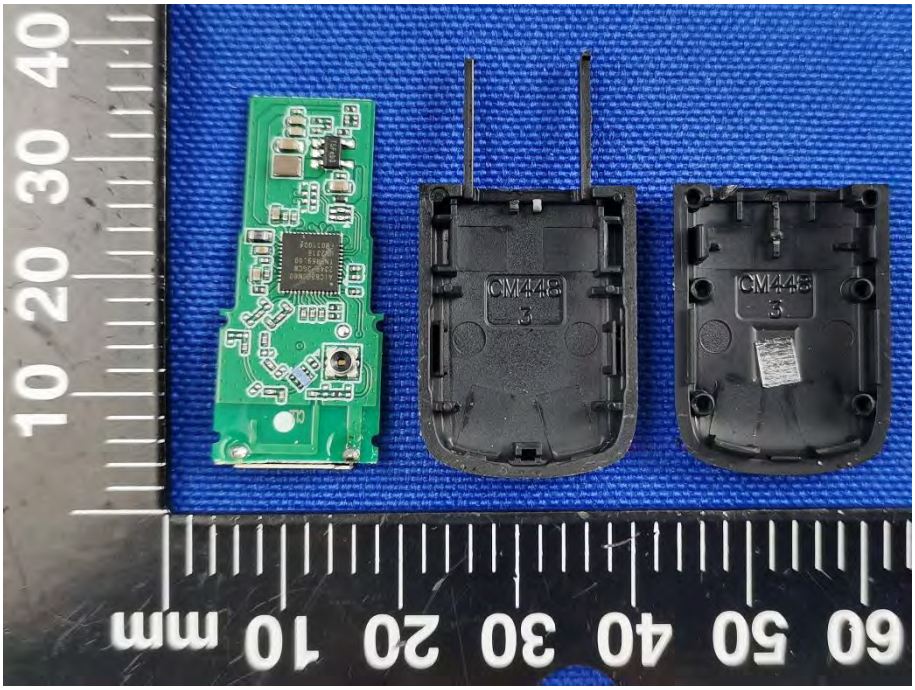


ANNEX C EUT INTERNAL PHOTOS

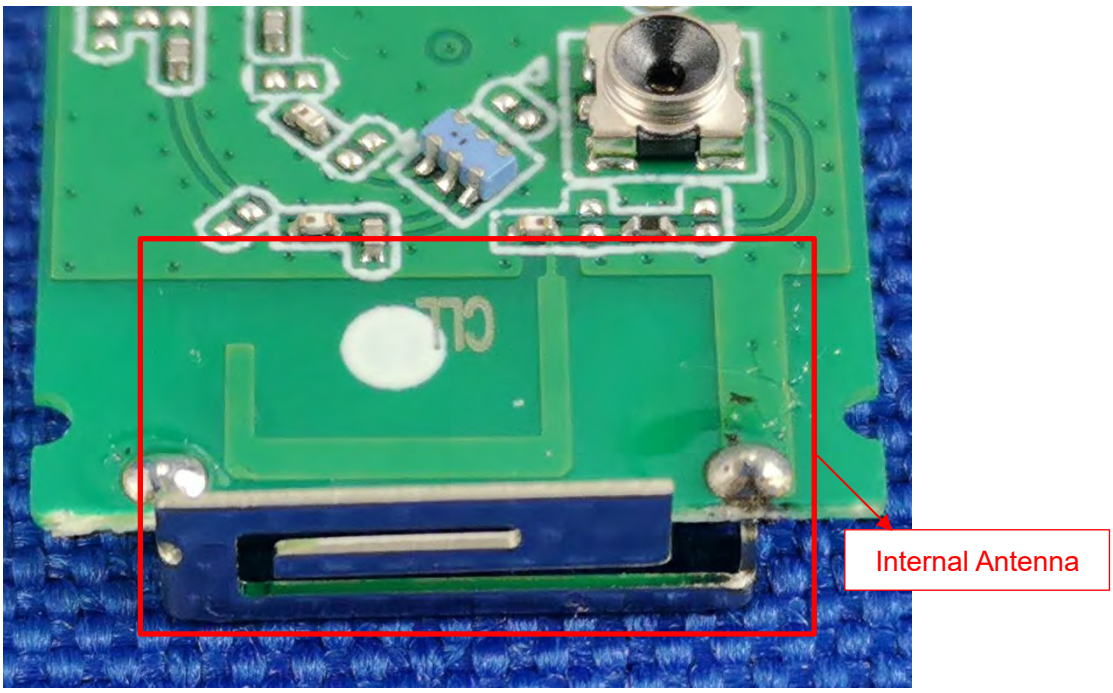
EUT UNCOVER VIEW 1



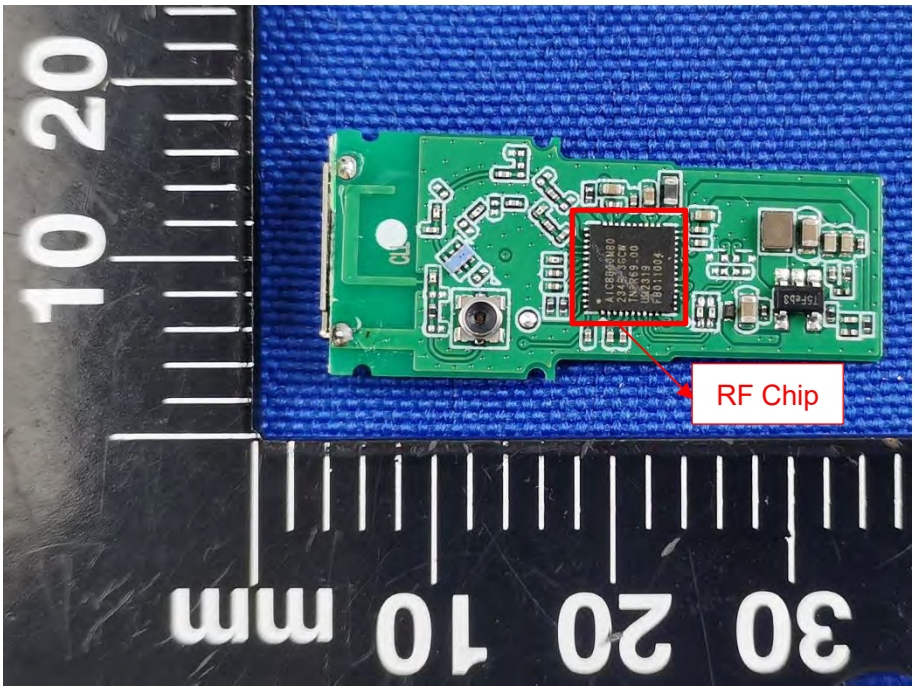
EUT UNCOVER VIEW 2



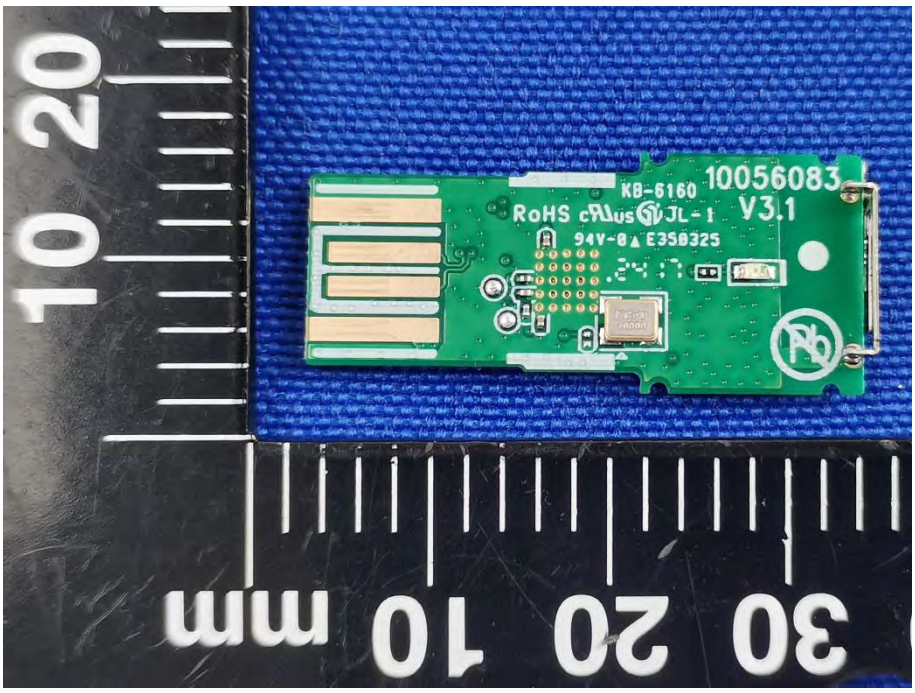
EUT UNCOVER VIEW 3



MAIN BOARD TOP VIEW



MAIN BOARD REAR VIEW



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