



FCC Radio Test Report

FCC ID: 2AXJ4WA3001

This report concerns: Class II Permissive Change

Project No. : 2402G090
Equipment : AX3000 Gigabit Wi-Fi 6 Access Point
Brand Name : tp-link
Test Model : TL-WA3001
Series Model : N/A
Applicant : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong
Manufacturer : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong
Date of Receipt : Mar. 01, 2024
Date of Test : Mar. 04, 2024 ~ Mar. 30, 2024
Issued Date : Apr. 16, 2024
Report Version : R00
Test Sample : Engineering Sample No.: SSL20240301211
Standard(s) : FCC CFR Title 47, Part 15, Subpart C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2402G090	R00	This is a supplementary report to the original test report (BTL-FCCP-1-2112C158). Change the adapter and 5G FEM, so the radiated emissions below 1000MHz, radiated emissions above 1000MHz of the original worst case and ac power line conducted emissions are verified and recorded. In this report only recorded the new test results. The other test items results please refer to original report.	Apr. 16, 2024	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of A2LA:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	-----
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----

2.1 TEST FACILITY

The test facilities used to collect the test data in this report :

For AC power line conducted emissions and Radiated Emissions-9kHz to 30 MHz items: No.3, Jinshagang 1st Road, Dalang, Dongguan City, Guangdong People's Republic of China.

For Radiated Emissions-Above 30MHz items: Room 108, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong, People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95.45% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.88

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB01	CISPR	9kHz ~ 30MHz	2.36

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
SSL-CB01 (3m)	CISPR	30MHz ~ 200MHz	V	4.70
		30MHz ~ 200MHz	H	3.56
		200MHz ~ 1,000MHz	V	4.92
		200MHz ~ 1,000MHz	H	4.54

Test Site	Method	Measurement Frequency Range	U,(dB)
SSL-CB01 (3m)	CISPR	1GHz ~ 6GHz	4.56
		6GHz ~ 18GHz	5.14

Test Site	Method	Measurement Frequency Range	U,(dB)
SSL-CB01 (1m)	CISPR	18 ~ 26.5 GHz	3.30

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
AC Power Line Conducted Emissions	21°C	72%	AC 120V/60Hz	Hayden Chen	Mar. 05, 2024
Radiated Emissions-9kHz to 30 MHz	22°C	50%	AC 120V/60Hz	Hayden Chen	Mar. 21, 2024
Radiated Emissions-30MHz to 1000MHz	23°C	55%	AC 120V/60Hz	Max Wang	Mar. 21, 2024
Radiated Emissions-Above 1000MHz	22°C	55%	AC 120V/60Hz	Max Wang	Mar. 16, 2024
	25°C	41%	AC 120V/60Hz	Max Wang	Mar. 14, 2024

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	AX3000 Gigabit Wi-Fi 6 Access Point
Brand Name	tp-link
Test Model	TL-WA3001
Series Model	N/A
Model Difference(s)	N/A
Power Source	1# DC voltage supplied from AC adapter. Model: T480038-2B1 2# Supplied from PoE.
Power Rating	1# I/P: 100-240V~ 50/60Hz 0.6A O/P: 48.0V \approx 0.375A 2# PoE 48V
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM IEEE 802.11ax: OFDMA
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps IEEE 802.11ax: up to 573.6 Mbps

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20), IEEE 802.11ax(HE20) CH03 - CH09 for IEEE 802.11n(HT40), IEEE 802.11ax(HE40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	tp-link	3101504476	Dipole	Weld	1.58
2	tp-link	3101504477	Dipole	Weld	1.58

Note:

- This EUT supports CDD, and all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$. For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=1.58 dBi.
- Beamforming Gain: 3 dB. So the Directional gain=3+1.58=4.58 dBi.

4. Table for Antenna Configuration:
For Non Beamforming:

Operating Mode	TX Mode	2TX
IEEE 802.11b		V(Ant. 1 + Ant. 2)
IEEE 802.11g		V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT20)		V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT40)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)		V(Ant. 1 + Ant. 2)

For Beamforming:

Operating Mode	TX Mode	2TX
IEEE 802.11ax(HE20)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)		V(Ant. 1 + Ant. 2)

3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX B Mode Channel 11
Mode 2	TX N(HT40) Mode Channel 03

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 1	TX B Mode Channel 11

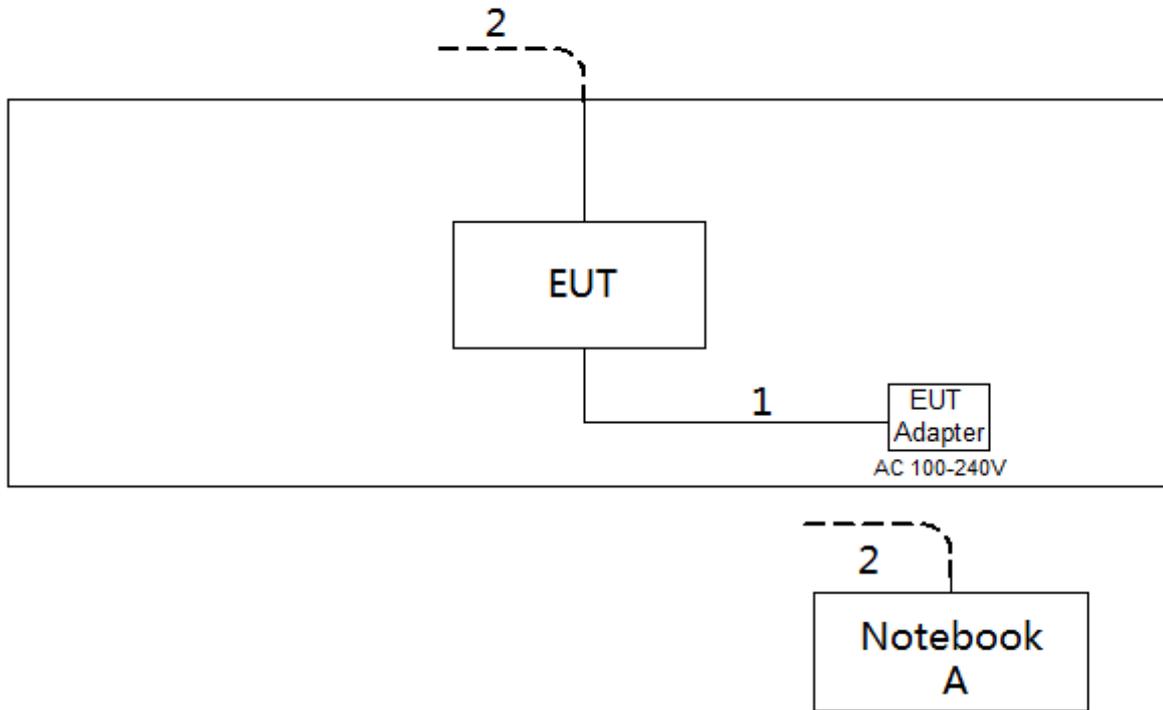
Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 1	TX B Mode Channel 11

Radiated emissions test- Above 1GHz_Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 11
Mode 2	TX N(HT40) Mode Channel 03

NOTE:

(1) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Honor	14SER5 3500	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.5m
2	RJ45 Cable	NO	NO	10m

3.5 CUSTOMER INFORMATION DESCRIPTION

- 1) The antenna gain and beamforming gain are provided by the manufacturer.
- 2) All cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency of Emission (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of "*" marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

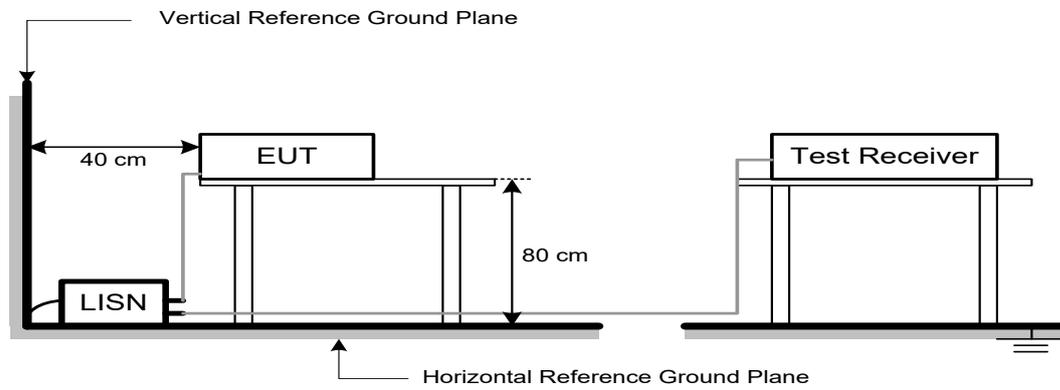
The following table is the setting of the receiver:

Receiver Parameters	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

5. RADIATED EMISSIONS

5.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Band edge/ Harmonic at 3m (dB μ V/m)		Harmonic at 1m (dB μ V/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	83.5 (Note 4)	63.5 (Note 4)

NOTE:

- (1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dB μ V/m)=20log Emission level (uV/m).
- (4)

$$FS_{\text{limit}} = FS_{\text{max}} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

$$20\log(d_{\text{limit}}/d_{\text{measure}})=20\log(3/1)=9.5\text{ dB.}$$

5.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance of 3 m or 1m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
(below 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i. For the actual test configuration, please refer to the related Item -EUT Test Photos.

The following table is the setting of the receiver:

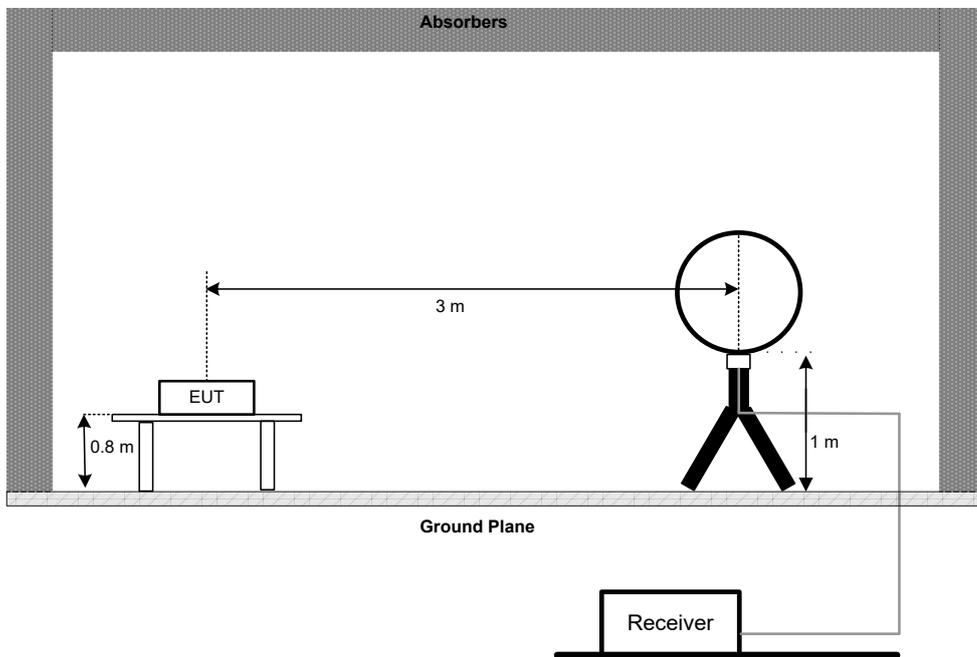
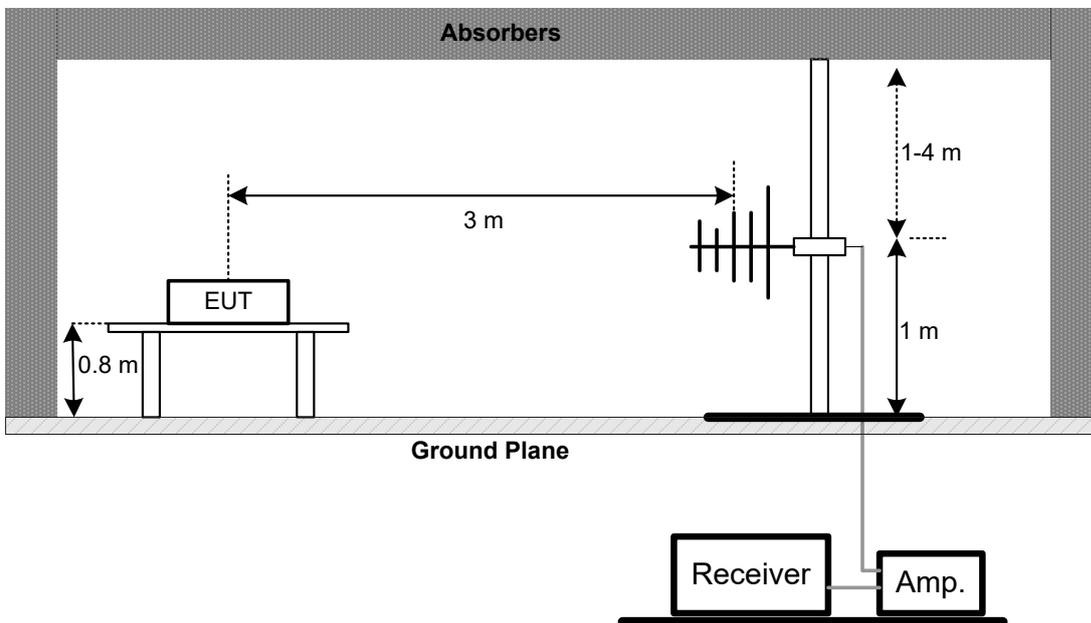
Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

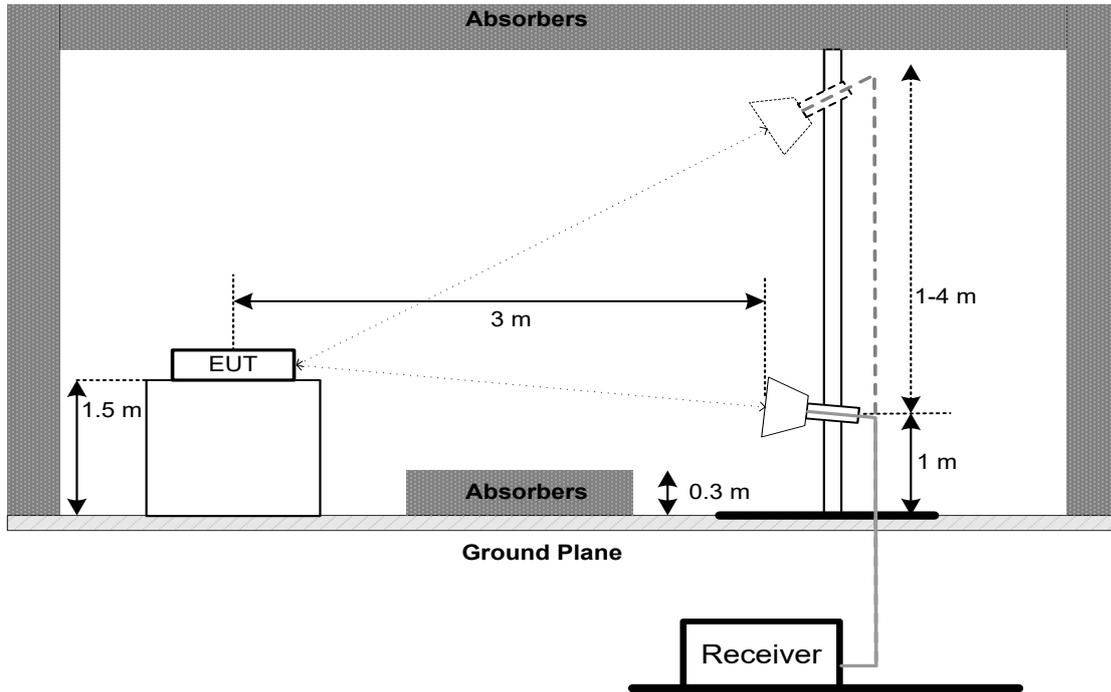
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~26.5 GHz for PK/AVG detector

5.3 DEVIATION FROM TEST STANDARD

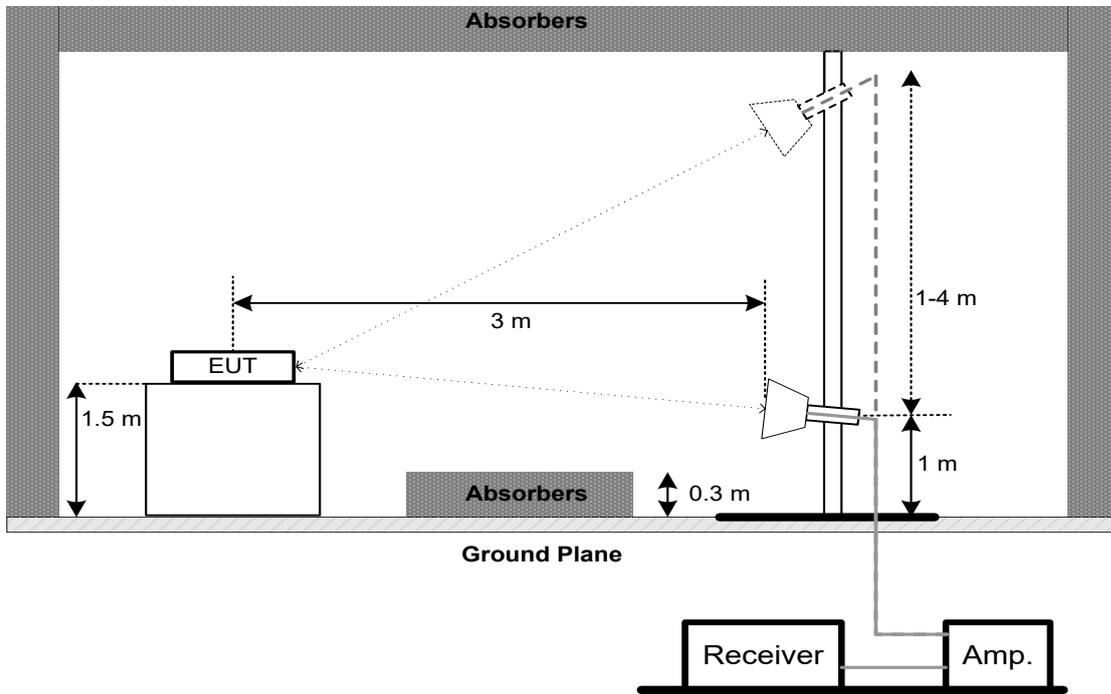
No deviation.

5.4 TEST SETUP**9 kHz to 30 MHz****30 MHz to 1 GHz**

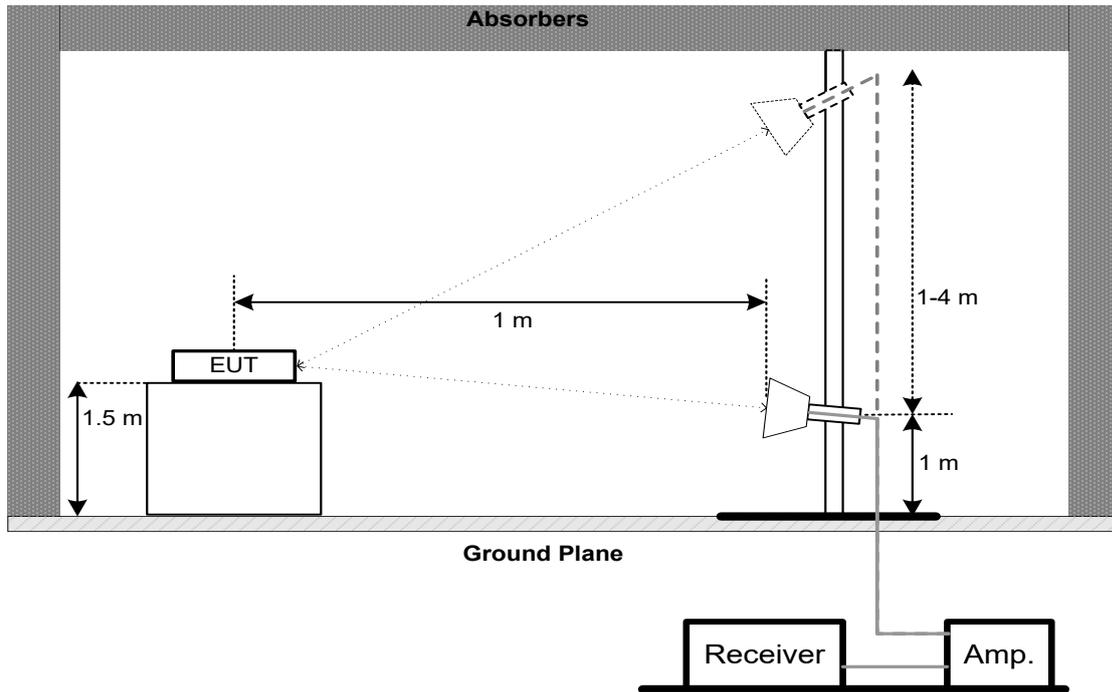
**Above 1 GHz
Band edge**



Harmonic(1 GHz to 18 GHz)



Harmonic(18 GHz to 26.5 GHz)



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B.

Remark:

- (1) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

5.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

6. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESR3	103027	Jun. 16, 2024
2	TWO-LINE V-NETWORK	R&S	ENV216	101447	Dec. 22, 2024
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
4	Cable	N/A	SFT205-NMNM-9M-001	9M	Nov. 27, 2024
5	643 Shield Room	ETS	6*4*3	N/A	N/A

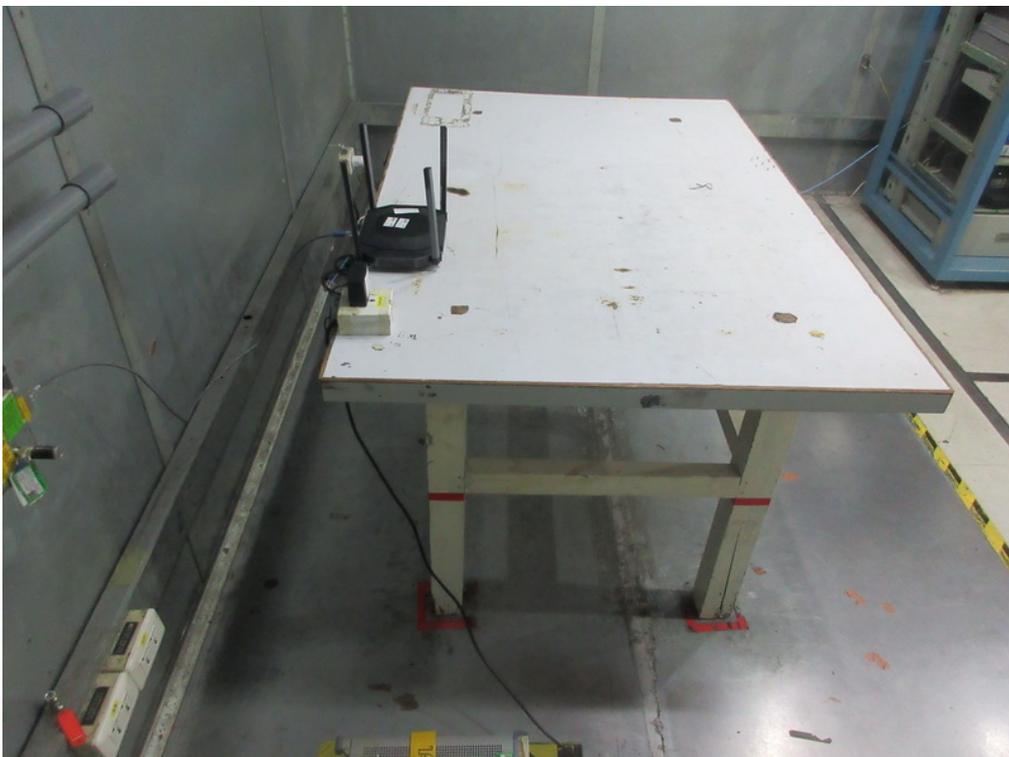
Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60 B-034	Apr. 01, 2024
2	MXE EMI Receiver	Keysight	N9038A	MY56400091	Dec. 22, 2024
3	Cable	N/A	RW2350-3.8A-NMB M-1.5M	N/A	Jun. 10, 2024
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
5	966 Chamber room	ETS	9*6*6	N/A	Jul. 11, 2024

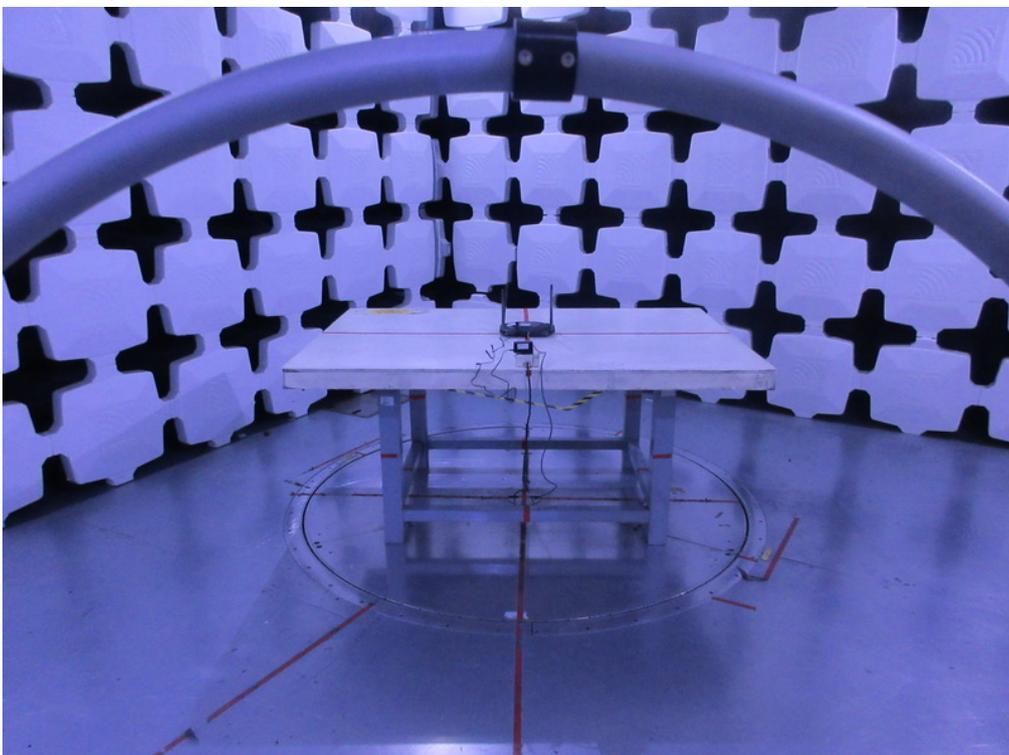
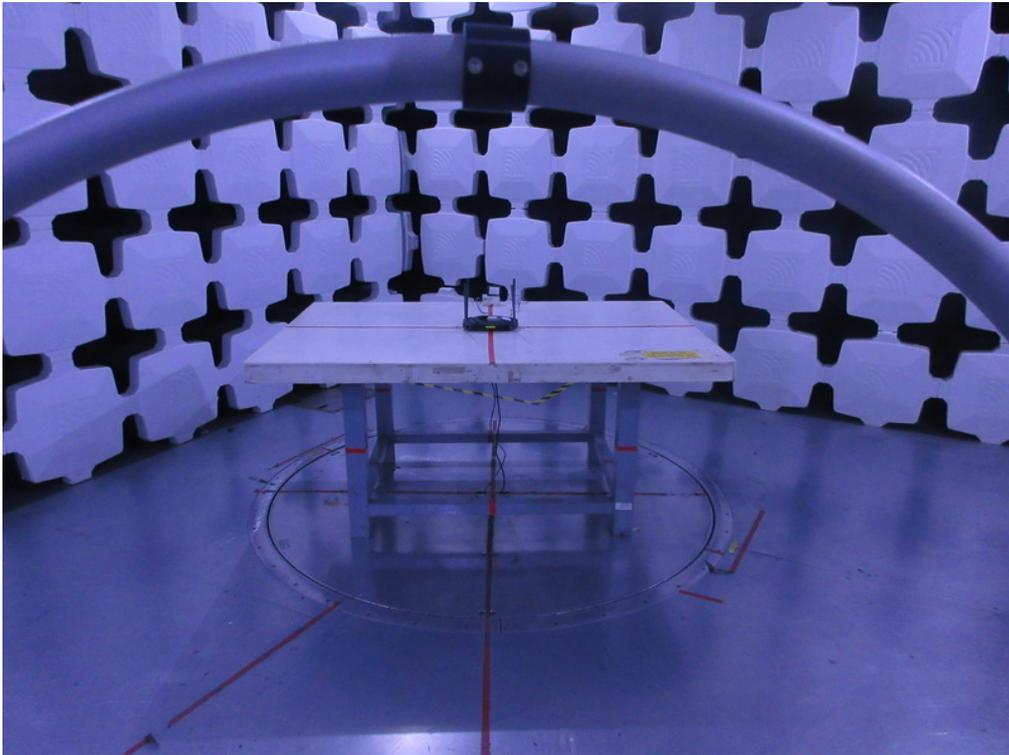
Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB9168	01269	May 15, 2024
2	Attenuator	EMCI	EMCI-N-6-06	AN-N0697	May 15, 2024
3	Preamplifier	EMC INSTRUMENT	EMC001330	980825	Jan. 19, 2025
4	Cable	EMC INSTRUMENT	EMCCFD400-NM-N M-2500	N/A	Jun. 08, 2024
5	Cable	EMC INSTRUMENT	EMCCFD400-NM-N M-7000	N/A	Jun. 08, 2024
6	Cable	EMC INSTRUMENT	EMCCFD400-NM-N M-3000	N/A	Jun. 08, 2024
7	MXE EMI Receiver	Keysight	N9038A	MY59050118	Sep. 26, 2024
8	Positioning Controller	MF	MF-7802BS	N/A	N/A
9	Max-Full Antenna Corp	MF	MFA-560BSN	N/A	N/A
10	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
11	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
12	966 Chamber room	Tai He	9*6*6 (NSA&VSWR)	N/A	Jun. 07, 2024

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
2	MXE EMI Receiver	Keysight	N9038A	MY59050118	Sep. 26, 2024
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
4	Preamplifier	EMC INSTRUMENT	EMC118A45SE	980739	Jan. 19, 2025
5	Cable	EMC INSTRUMENT	EMC104-SM-SM-10000	N/A	Jun. 08, 2024
6	Cable	EMC INSTRUMENT	EMC104-SM-SM-3000	N/A	Jun. 08, 2024
7	Cable	EMC INSTRUMENT	EMC104-SM-SM-800	N/A	Jun. 08, 2024
8	Double Ridged Broadband Horn Antenna	RF SPIN	DRH18-E	210106A18E	Jul. 04, 2024
9	Preamplifier	EMC INSTRUMENT	EMC184045SE	980793	Jan. 19, 2025
10	Cable	EMC INSTRUMENT	EMC101G-KM-KM-800	N/A	Aug. 13, 2024
11	Cable	EMC INSTRUMENT	EMC101G-KM-KM-6000	N/A	Aug. 13, 2024
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	1046	Jul. 05, 2024
13	Band Reject Filter	COM-MW	ZHPF6-M6500-18000-547	07213124	Jul. 07, 2024
14	966 Chamber room	Tai He	9*6*6 (NSA&VSWR)	N/A	Jun. 07, 2024

Remark: "N/A" denotes no model name, serial no. or calibration specified.

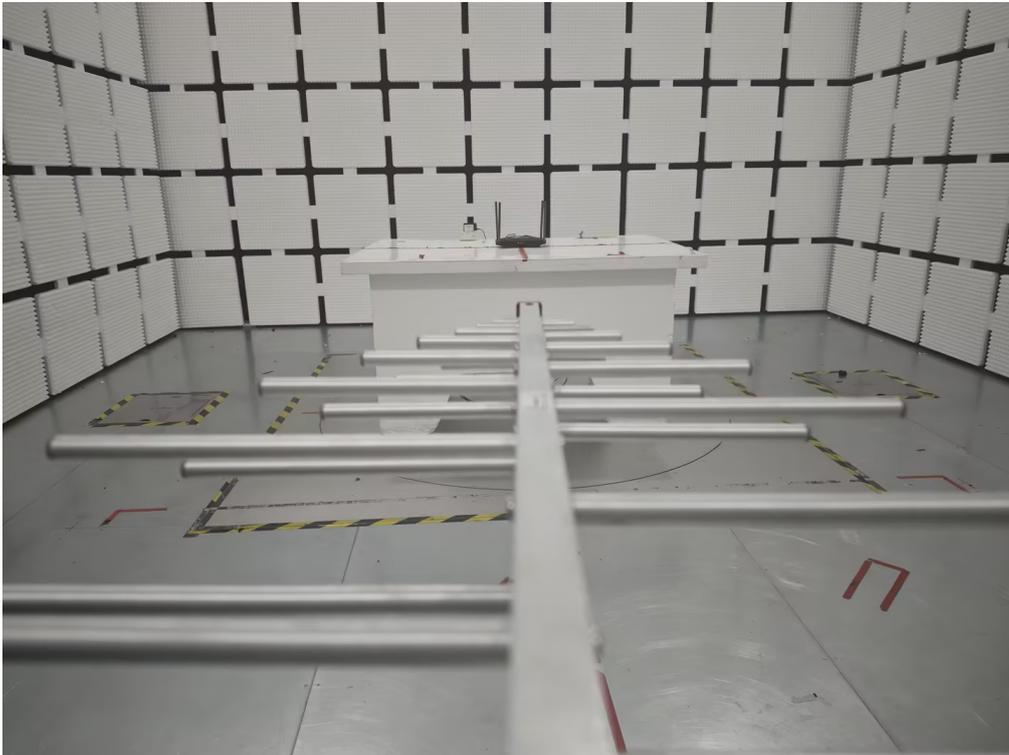
All calibration period of equipment list is one year.

7. EUT TEST PHOTO**AC Power Line Conducted Emissions Test Photos**

Radiated Emissions Test Photos**9 kHz to 30 MHz**

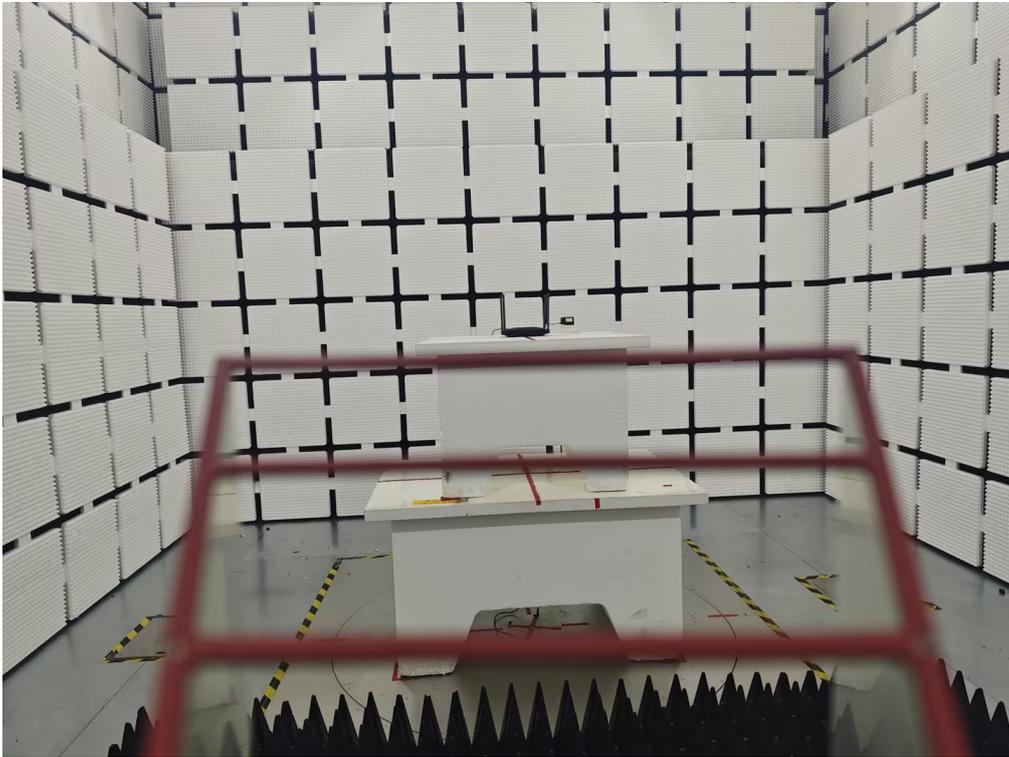
Radiated Emissions Test Photos

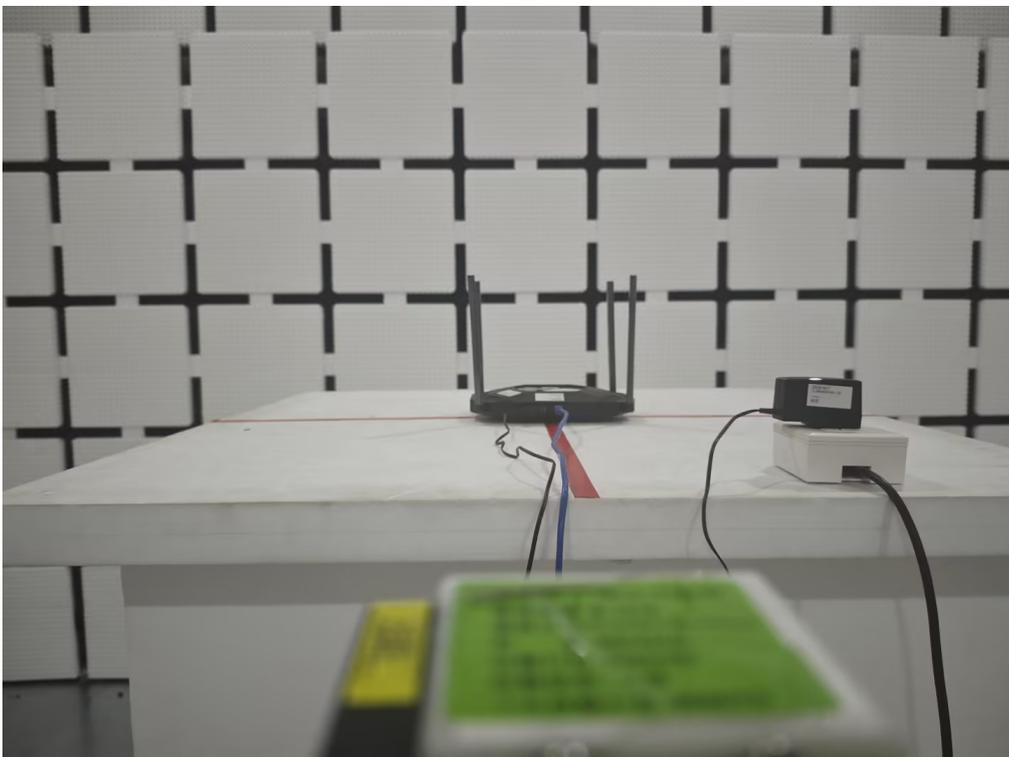
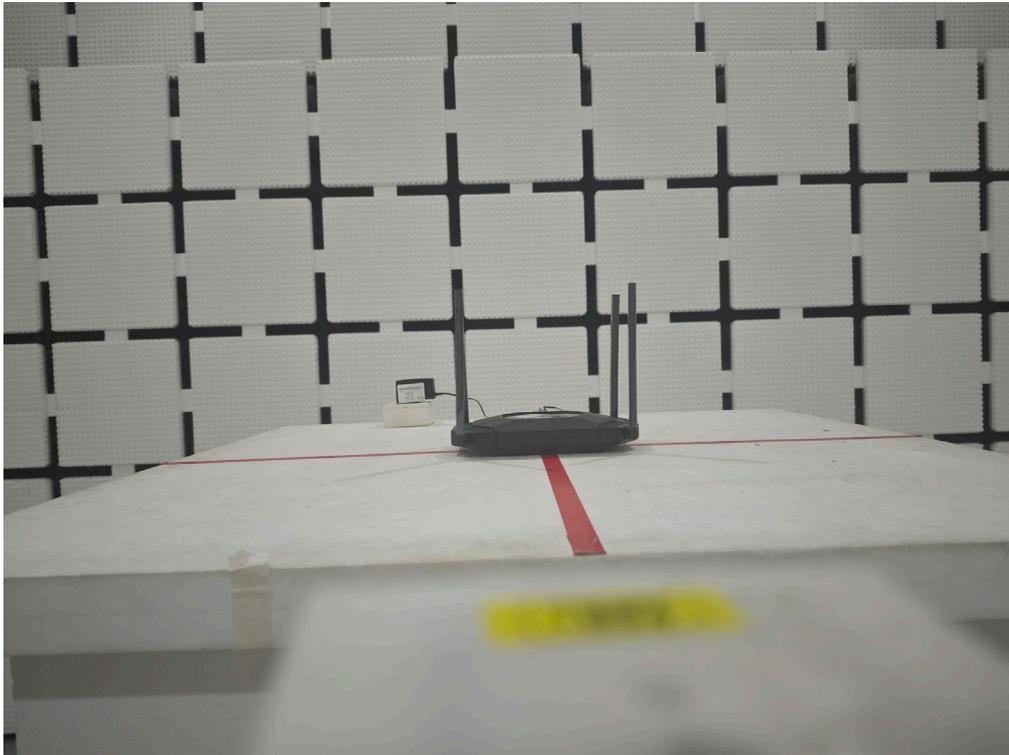
30 MHz to 1 GHz



Radiated Emissions Test Photos

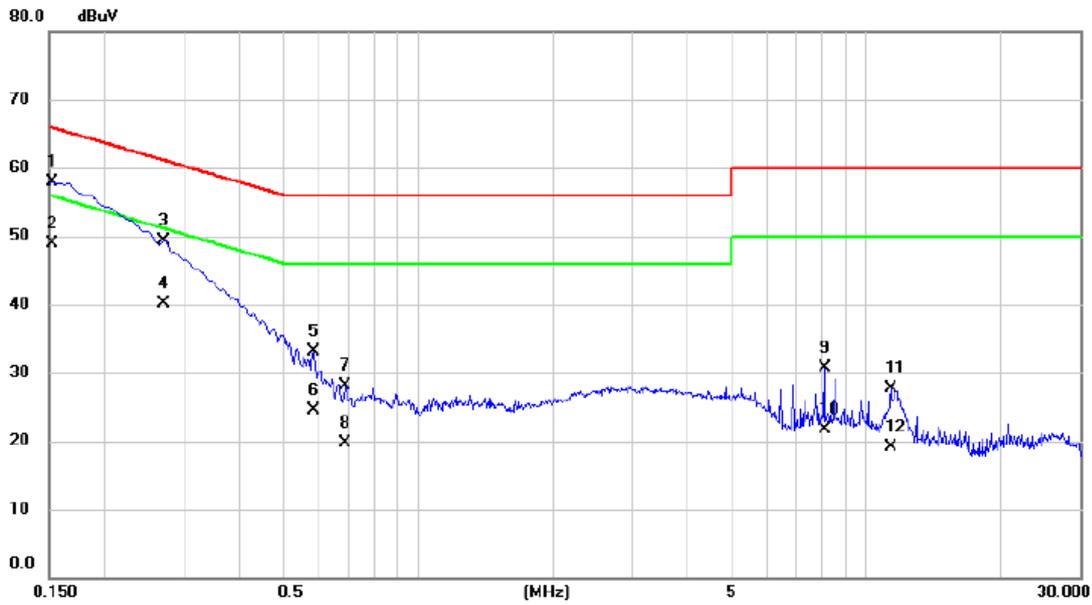
1 GHz to 18 GHz



Radiated Emissions Test Photos**18 GHz to 26.5 GHz**

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode	TX B Mode Channel 11	Phase	Line
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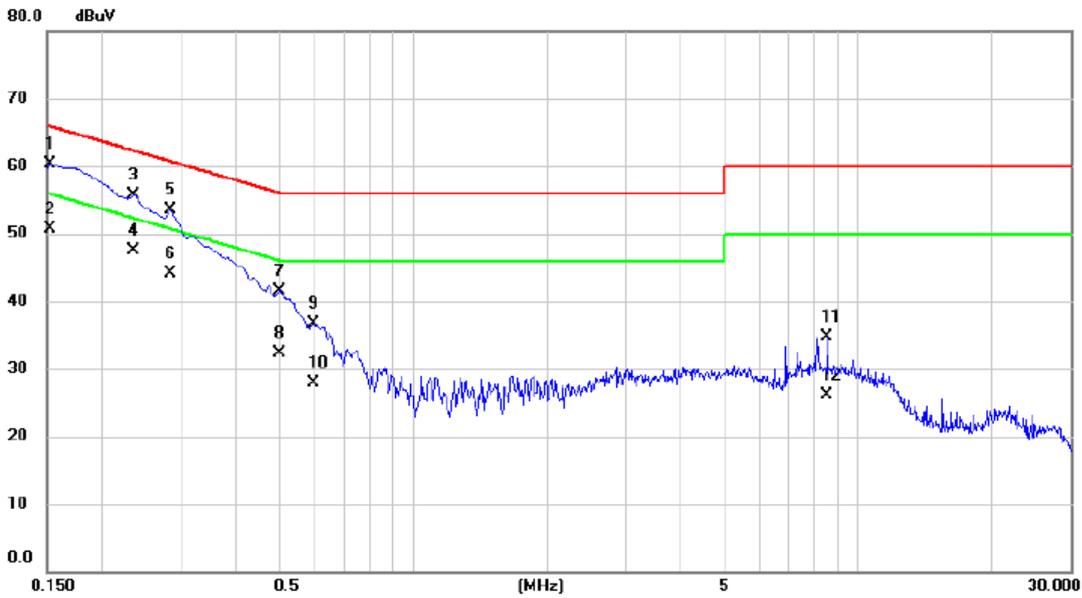


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1522	48.22	9.74	57.96	65.88	-7.92	QP	
2	*	0.1522	39.10	9.74	48.84	55.88	-7.04	AVG	
3		0.2714	39.58	9.76	49.34	61.07	-11.73	QP	
4		0.2714	30.30	9.76	40.06	51.07	-11.01	AVG	
5		0.5842	23.39	9.79	33.18	56.00	-22.82	QP	
6		0.5842	14.80	9.79	24.59	46.00	-21.41	AVG	
7		0.6877	18.29	9.80	28.09	56.00	-27.91	QP	
8		0.6877	9.90	9.80	19.70	46.00	-26.30	AVG	
9		8.0948	20.45	10.30	30.75	60.00	-29.25	QP	
10		8.0948	11.50	10.30	21.80	50.00	-28.20	AVG	
11		11.3303	17.18	10.52	27.70	60.00	-32.30	QP	
12		11.3303	8.60	10.52	19.12	50.00	-30.88	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode Channel 11	Phase	Neutral
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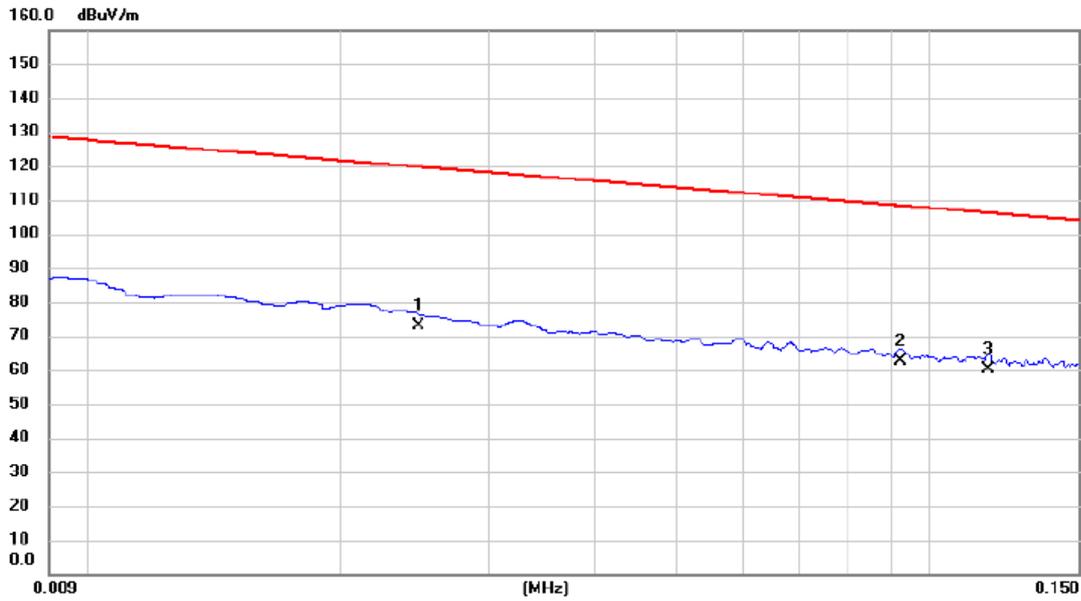
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1522	50.81	9.59	60.40	65.88	-5.48	QP	
2		0.1522	41.10	9.59	50.69	55.88	-5.19	AVG	
3		0.2355	46.02	9.61	55.63	62.25	-6.62	QP	
4	*	0.2355	37.80	9.61	47.41	52.25	-4.84	AVG	
5		0.2850	43.85	9.63	53.48	60.67	-7.19	QP	
6		0.2850	34.50	9.63	44.13	50.67	-6.54	AVG	
7		0.5010	31.95	9.65	41.60	56.00	-14.40	QP	
8		0.5010	22.60	9.65	32.25	46.00	-13.75	AVG	
9		0.5955	27.08	9.65	36.73	56.00	-19.27	QP	
10		0.5955	18.20	9.65	27.85	46.00	-18.15	AVG	
11		8.5133	24.43	10.23	34.66	60.00	-25.34	QP	
12		8.5133	15.90	10.23	26.13	50.00	-23.87	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode	TX B Mode Channel 11	Polarization	Ant 0°
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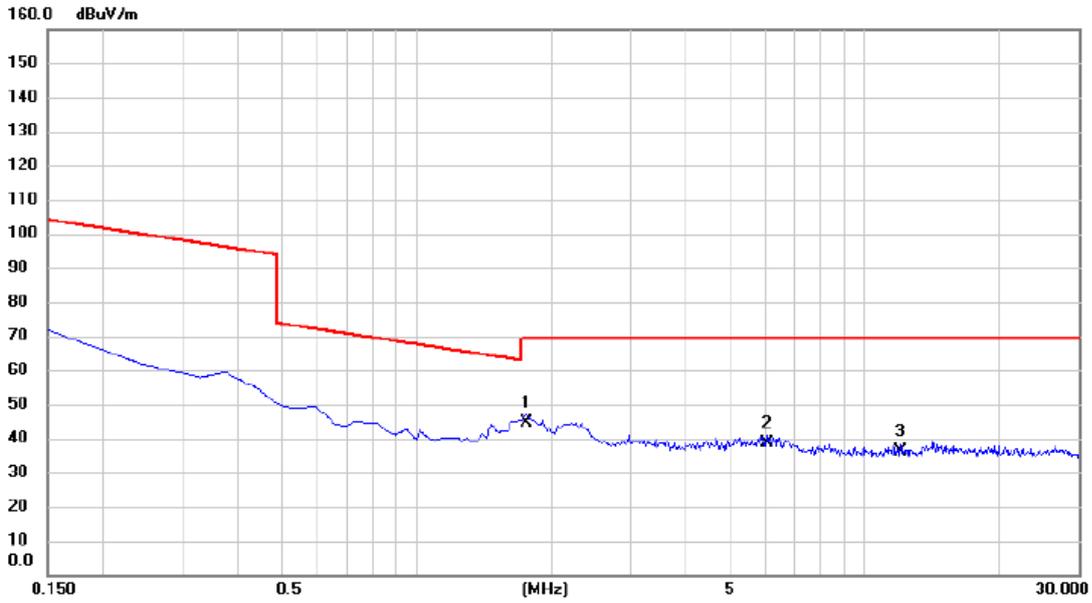
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0247	52.94	20.09	73.03	119.75	-46.72	AVG	
2	*	0.0923	42.85	19.87	62.72	108.30	-45.58	QP	
3		0.1175	40.35	19.83	60.18	106.21	-46.03	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode Channel 11	Polarization	Ant 0°
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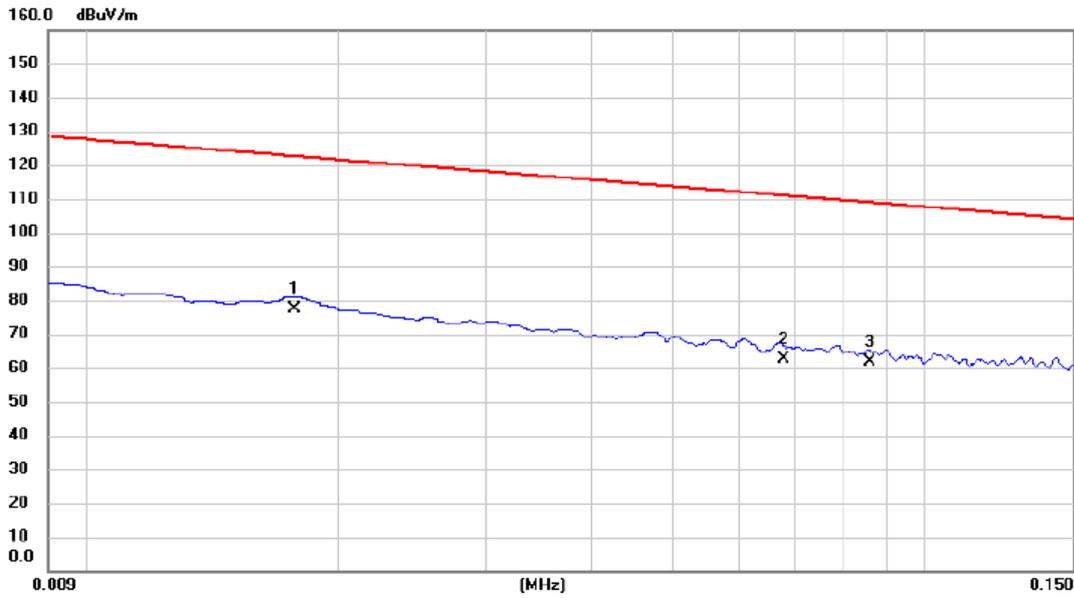


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	1.7620	24.99	19.81	44.80	69.54	-24.74	QP	
2		6.0603	18.45	19.96	38.41	69.54	-31.13	QP	
3		12.0452	15.84	20.23	36.07	69.54	-33.47	QP	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode Channel 11	Polarization	Ant 90°
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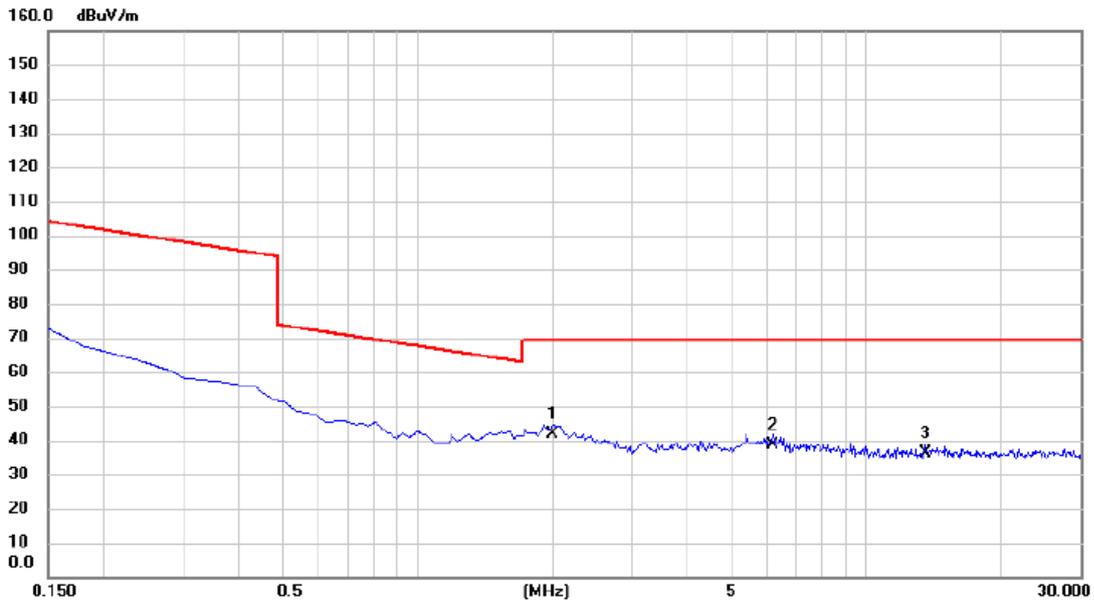


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0177	56.92	20.48	77.40	122.65	-45.25	AVG	
2		0.0678	42.61	19.86	62.47	110.98	-48.51	AVG	
3		0.0858	41.85	19.87	61.72	108.94	-47.22	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode Channel 11	Polarization	Ant 90°
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2.0007	21.85	19.79	41.64	69.54	-27.90	QP	
2		6.1648	18.63	19.97	38.60	69.54	-30.94	QP	
3		13.5080	16.03	20.25	36.28	69.54	-33.26	QP	

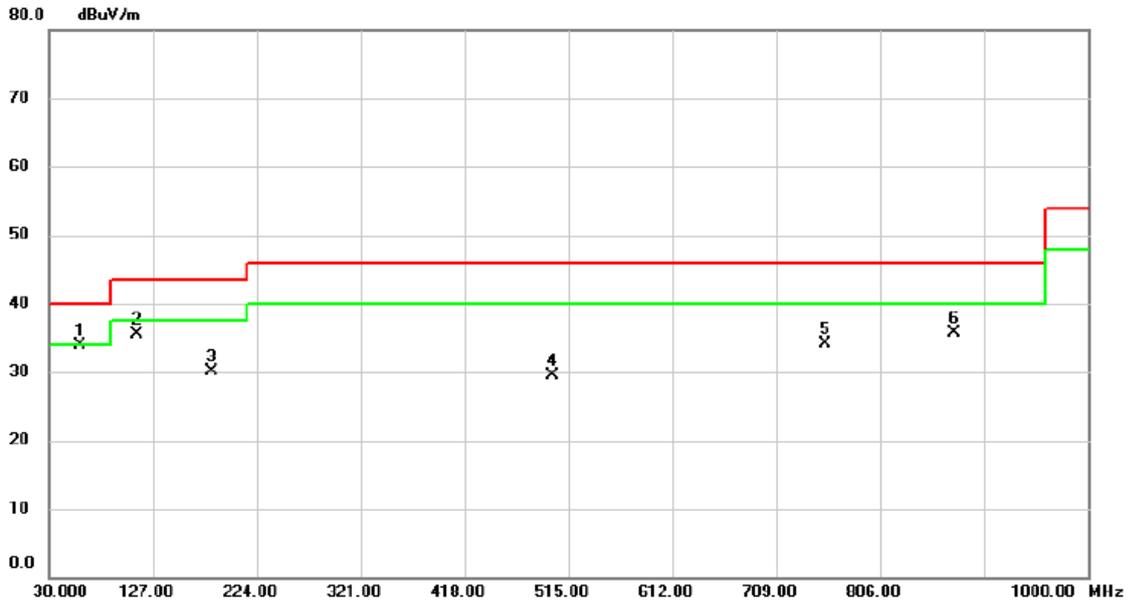
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode	TX B Mode Channel 11	Polarization	Vertical
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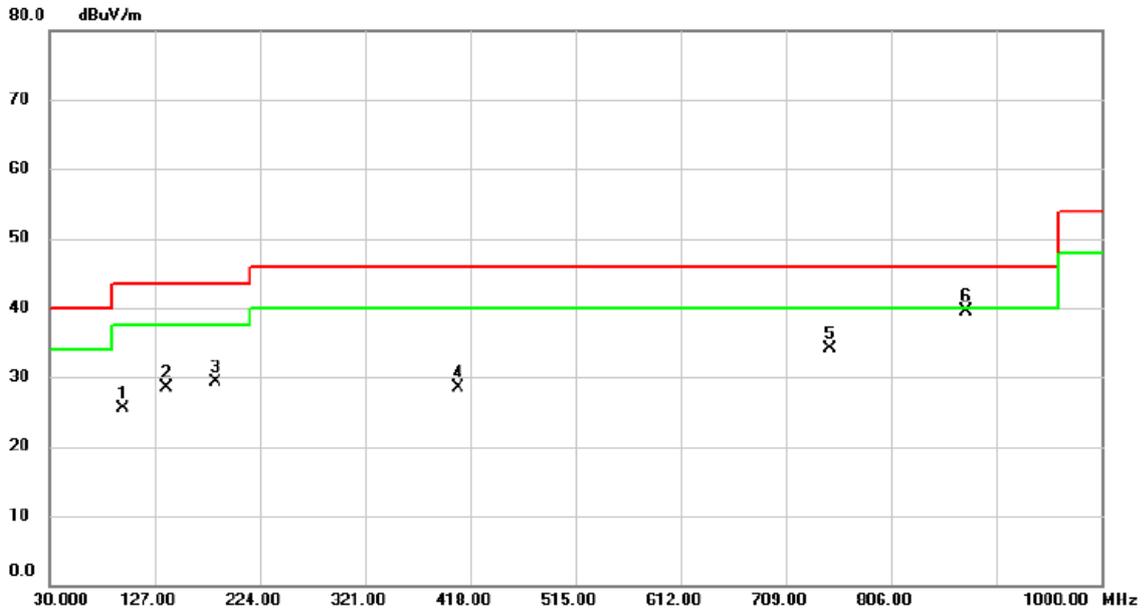


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	59.1000	46.32	-12.47	33.85	40.00	-6.15	peak	
2	112.4500	50.32	-14.81	35.51	43.50	-7.99	peak	
3	181.3200	43.32	-13.23	30.09	43.50	-13.41	peak	
4	499.9650	36.05	-6.56	29.49	46.00	-16.51	peak	
5	754.5900	35.17	-1.14	34.03	46.00	-11.97	peak	
6	874.8700	36.35	-0.55	35.80	46.00	-10.20	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode Channel 11	Polarization	Horizontal
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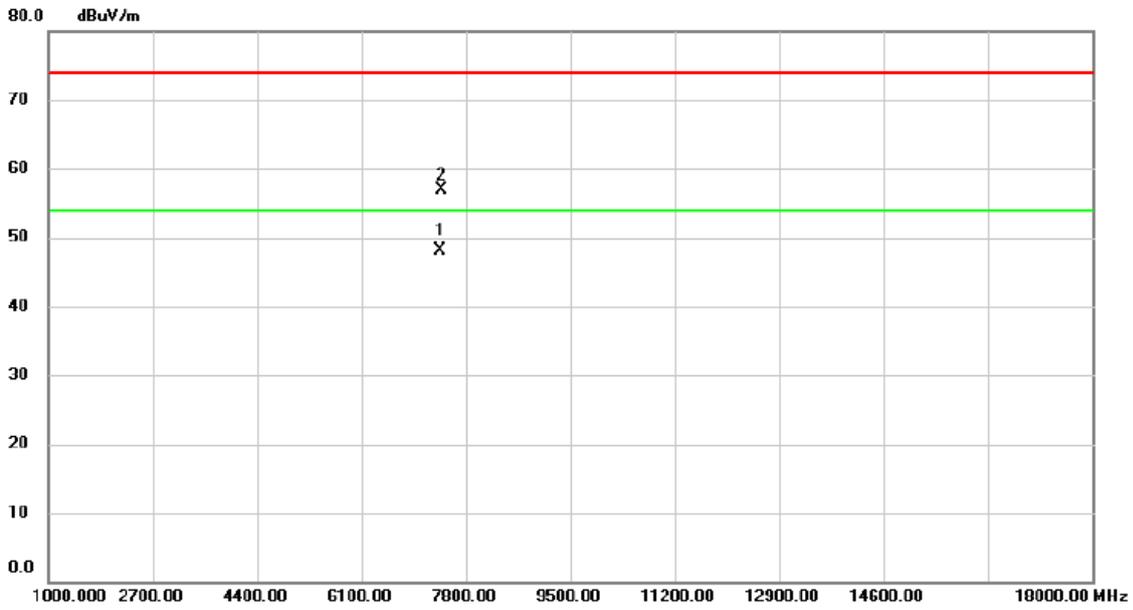
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		98.3850	42.12	-16.70	25.42	43.50	-18.08	peak	
2		137.6700	41.09	-12.57	28.52	43.50	-14.98	peak	
3		183.7450	42.76	-13.51	29.25	43.50	-14.25	peak	
4		407.3300	37.17	-8.64	28.53	46.00	-17.47	peak	
5		749.7400	35.22	-1.16	34.06	46.00	-11.94	peak	
6	*	874.8700	39.99	-0.55	39.44	46.00	-6.56	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Test Mode	TX B Mode 2462 MHz	Polarization	Vertical
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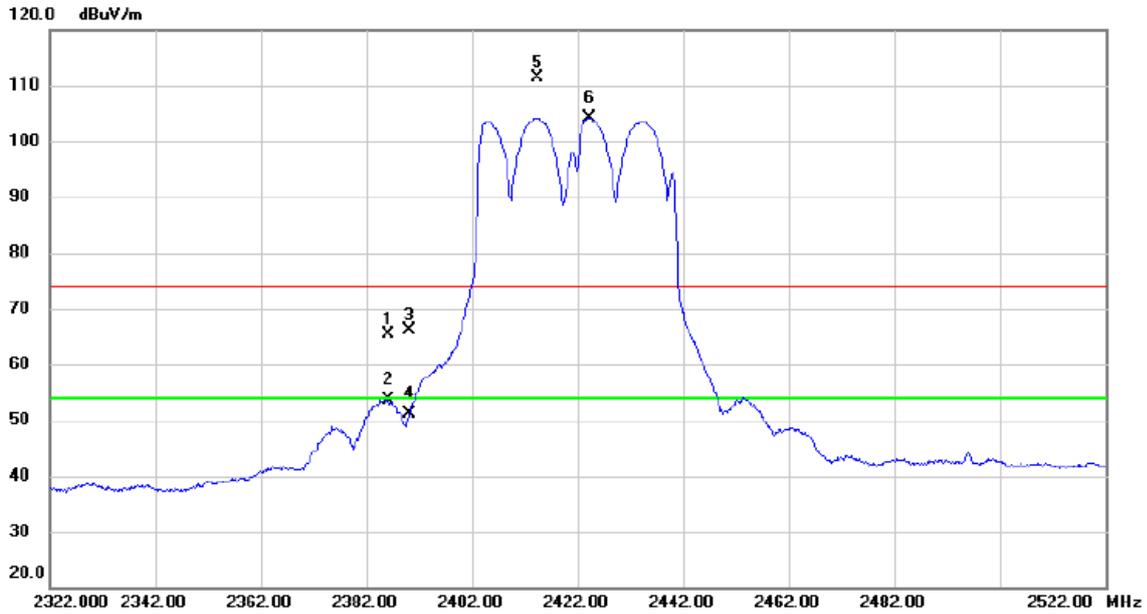


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	7390.100	30.40	17.73	48.13	54.00	-5.87	AVG	
2		7397.650	39.22	17.74	56.96	74.00	-17.04	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Vertical
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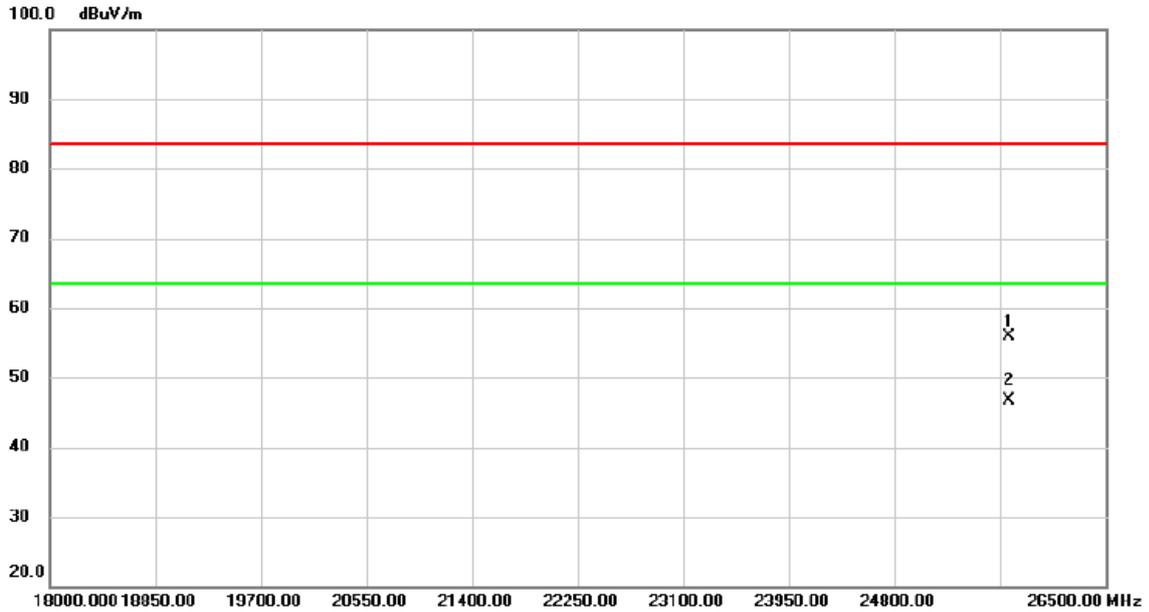


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2386.200	59.79	5.60	65.39	74.00	-8.61	peak	
2		2386.200	48.11	5.60	53.71	54.00	-0.29	AVG	
3		2390.000	60.49	5.61	66.10	74.00	-7.90	peak	
4		2390.000	45.57	5.61	51.18	54.00	-2.82	AVG	
5	X	2414.300	105.8	5.65	111.48	74.00	37.48	peak	No Limit
6	*	2424.300	98.57	5.67	104.24	54.00	50.24	AVG	No Limit

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode 2462 MHz	Polarization	Vertical
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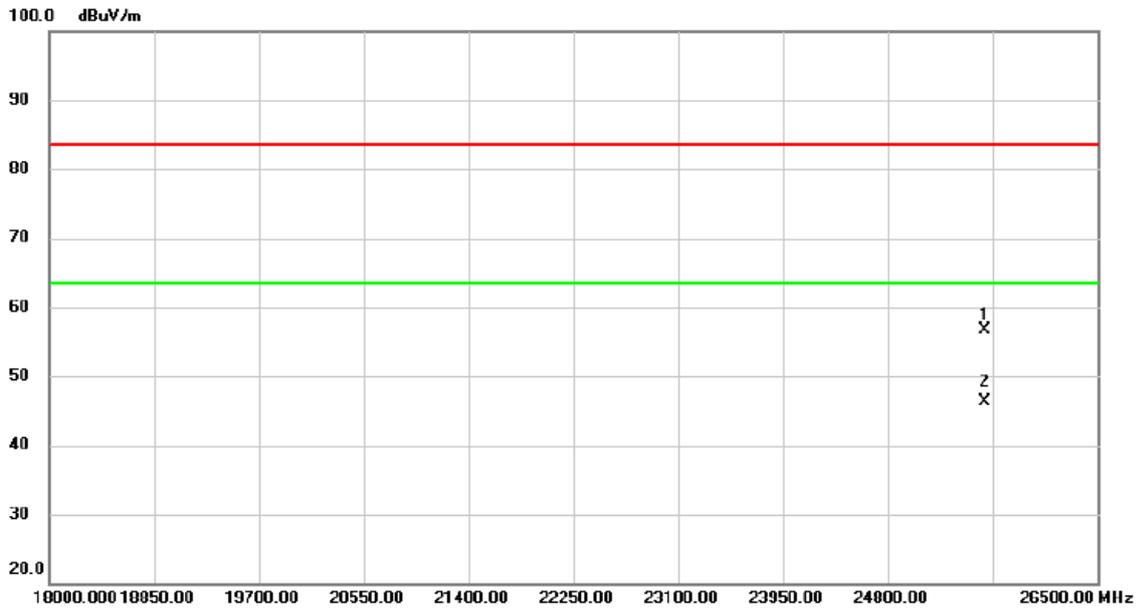


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		25726.50	45.82	10.03	55.85	83.50	-27.65	peak	
2	*	25726.50	36.59	10.03	46.62	63.50	-16.88	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		25586.25	46.87	9.78	56.65	83.50	-26.85	peak	
2	*	25586.25	36.58	9.78	46.36	63.50	-17.14	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

End of Test Report