



FCC Test Report

APPLICANT : Lenovo(Shanghai) Electronics Technology Co., Ltd.
EQUIPMENT : Portable Tablet Computer
BRAND NAME : Lenovo
MODEL NAME : TB336ZJ
FCC ID : O57TB336ZJ
STANDARD : 47 CFR Part 15 Subpart B
CLASSIFICATION : Certification
TEST DATE(S) : Jun. 25, 2025 ~ Jun. 26, 2025

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia



Approved by: Jason Jia

Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 8.09 dB at 0.169 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.43 dB at 44.55 MHz for Quasi-Peak

Conformity Assessment Condition:
The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. Please refer to each test results in the section "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are dedared by the manufacturer who shall take full responsibility for the authenticity.



1. General Description

1.1. Applicant

Lenovo(Shanghai) Electronics Technology Co., Ltd.
Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone

1.2. Manufacturer

Lenovo PC HK Limited
23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Portable Tablet Computer
Brand Name	Lenovo
Model Name	TB336ZJ
FCC ID	O57TB336ZJ
EUT supports Radios application	WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE GNSS
IMEI Code	Conduction: 860228080001452/860228080001460 for Sample 1 860228080004050/860228080004068 for Sample 2 860228080004399/860228080004407 for Sample 3 860228080002997/860228080003003 for Sample 4 Radiation: 860228080001650/860228080001668 for Sample 1 860228080004852/860228080004860 for Sample 2 860228080004399/860228080004407 for Sample 3 860228080004431/860228080004449 for Sample 4
HW Version	TB336ZJ
SW Version	Lenovo ZUI 17.0
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are four types of EUT, for the differences please refer to the TB336ZJ_Operational Description of Product Equality Declaration exhibit separately. According to the difference, we choose Sample 1 to full test and the Sample 2/3/4 to verify for the differences.



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz LTE Band 42 : 3450 MHz ~ 3550 MHz 5G NR n78 : 3450 MHz ~ 3550 MHz; 3550 MHz ~ 3700 MHz; 802.11b/g/n: 2400 MHz ~ 2483.5 MHz 802.11a/n/ac: 5150 MHz ~ 5250 MHz; 5250 MHz ~ 5350 MHz; 5470 MHz ~ 5725 MHz 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Rx Frequency	WCDMA Band V: 869 MHz ~ 894 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz LTE Band 42 : 3450 MHz ~ 3550 MHz 5G NR n78 : 3450 MHz ~ 3550 MHz; 3550 MHz ~ 3700 MHz; 802.11b/g/n: 2400 MHz ~ 2483.5 MHz 802.11a/n/ac: 5150 MHz ~ 5250 MHz; 5250 MHz ~ 5350 MHz; 5470 MHz ~ 5725 MHz 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz GNSS : 1559 MHz ~ 1610 MHz
Antenna Type	WWAN : PIFA Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GNSS: PIFA Antenna
Type of Modulation	WCDMA : BPSK HSPA : QPSK HSPA+ : 16QAM(16QAM not support uplink) DC-HSDPA : 64QAM LTE: QPSK / 16QAM / 64QAM 5G NR: DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM) CP-OFDM (QPSK / 16QAM / 64QAM) 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK



1.5. Modification of EUT

No modifications are made to the EUT during all test items.

1.6. Test Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH04-KS	CN1257	314309

1.7. Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	210616
2.	CO01-KS	AUDIX	E3	6.2009-8-24

1.8. Applicable Standards

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

- 47 CFR Part 15 Subpart B
- ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

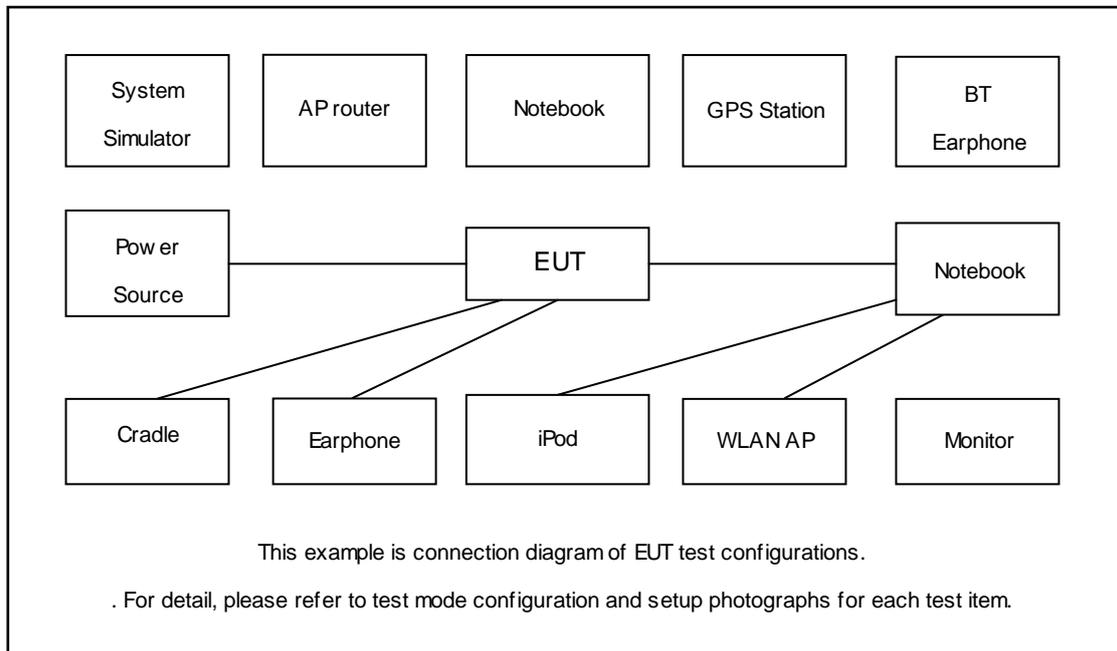
Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 1 + Charging from Adapter + SIM 1 for Sample 1
	Mode 2 : LTE Band 5 Rx(Middle) + Bluetooth Idle + WLAN (5G) Idle + Camera(Front) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + EUT (eMMC) USB Data Link to PC/NB + SIM 2 for Sample 1
	Mode 3 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 1 for Sample 1
	Mode 4 : LTE Band 42 Rx(Low) + Bluetooth Idle + WLAN (5G) Idle + GNSS Rx + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + EUT (SD) USB Data Link to PC/NB + SIM 1 for Sample 1
	Mode 5 : 5G NR n78 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (SD) + SIM 1 for Sample 1
	Mode 6 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 2 + Charging from Adapter + SIM 1 for Sample 2
	Mode 7 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + EUT (eMMC) USB Data Link to PC/NB + SIM 1 for Sample 2
	Mode 8 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + EUT (eMMC) USB Data Link to PC/NB + SIM 1 for Sample 3
	Mode 9 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + EUT (eMMC) USB Data Link to PC/NB + SIM 1 for Sample 4



Radiated Emissions	<p>Mode 1 : WCDMA 850 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Rear) + Earphone 1 + Battery 1 + Charging from Adapter + SIM 1 for Sample 1</p> <p>Mode 2 : LTE Band 5 Rx(Middle) + Bluetooth Idle + WLAN (5G) Idle + Camera(Front) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + EUT (eMMC) USB Data Link to PC/NB + SIM 2 for Sample 1</p> <p>Mode 3 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 2 for Sample 1</p> <p>Mode 4 : LTE Band 42 Rx(Low) + Bluetooth Idle + WLAN (5G) Idle + GNSS Rx + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + EUT (SD) USB Data Link to PC/NB</p> <p>Mode 5 : 5GNR n78 Rx(Middle) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 1 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (SD) + SIM 2 for Sample 1</p> <p>Mode 6 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (5G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 1 + OTG Cable With U Disk (R/W) Type-C Port + SIM 2 for Sample 1</p> <p>Mode 7 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 2 + Battery 1 + SIM 2 for Sample 1</p> <p>Mode 8 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + Camera(Front) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 2 for Sample 2</p> <p>Mode 9 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 2 for Sample 2</p> <p>Mode 10 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 2 for Sample 3</p> <p>Mode 11 : LTE Band 41 Rx(High) + Bluetooth Idle + WLAN (2.4G) Idle + MPEG4(Run Color Bar) + Earphone 1 + Battery 2 + USB Cable (Data Link with Notebook) + PC/NB USB Data Link to EUT (eMMC) + SIM 2 for Sample 4</p>
<p>Remark:</p> <ol style="list-style-type: none"> 1. The worst case of AC is mode 2; only the test data of this mode is reported. 2. The worst case of RE is mode 10; only the test data of this mode is reported. 3. Data Link with Notebook means data application transferred mode between EUT and Notebook. 4. Pre-scanned Low/Middle/High channels, the worst channel was recorded in this report. 	

2.2. Connection Diagram of Test System



The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritus	MT8821C	N/A	N/A	Unshielded,1.8m
2.	Base Station	Anritus	MT8000A	N/A	N/A	Unshielded,1.8m
3.	Base Station	Anritus	MT8820C	N/A	N/A	Unshielded,1.8m
4.	Signal Generator	R&S	SMBV100A	N/A	N/A	N/A
5.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	Shielded cable DC O/P 1.8m, Unshielded AC I/P cable 1.8m
6.	Notebook	Acer	N20C5	N/A	N/A	N/A
7.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m
8.	Earphone 1/2	N/A	N/A	N/A	N/A	N/A
9.	Bluetooth Earphone	Lenovo	thinkplus-BH3	N/A	N/A	N/A
10.	Hard Disk	Lenovo	F310	DoC	N/A	Shielded, 1.2m
11.	Hard disk	KINGSHARE	KSP6120G	Fcc DoC	N/A	Shielded, 1.2m
12.	SD Card	Kingston	8GB	N/A	N/A	N/A
13.	Adapter	N/A	N/A	N/A	N/A	N/A
14.	USB Cable	N/A	N/A	N/A	N/A	N/A
15.	Earphone	N/A	N/A	N/A	N/A	N/A



2.4. EUT Operation Test Setup

The EUT was in WCDMA or LTE or 5G NR idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between notebook and EUT via USB cable.
2. Turn on camera to capture images.
3. Turn on MPEG4 function.
4. Turn on GNSS function to make the EUT receive continuous signals from GNSS station.



3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

<Class B Limit>

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

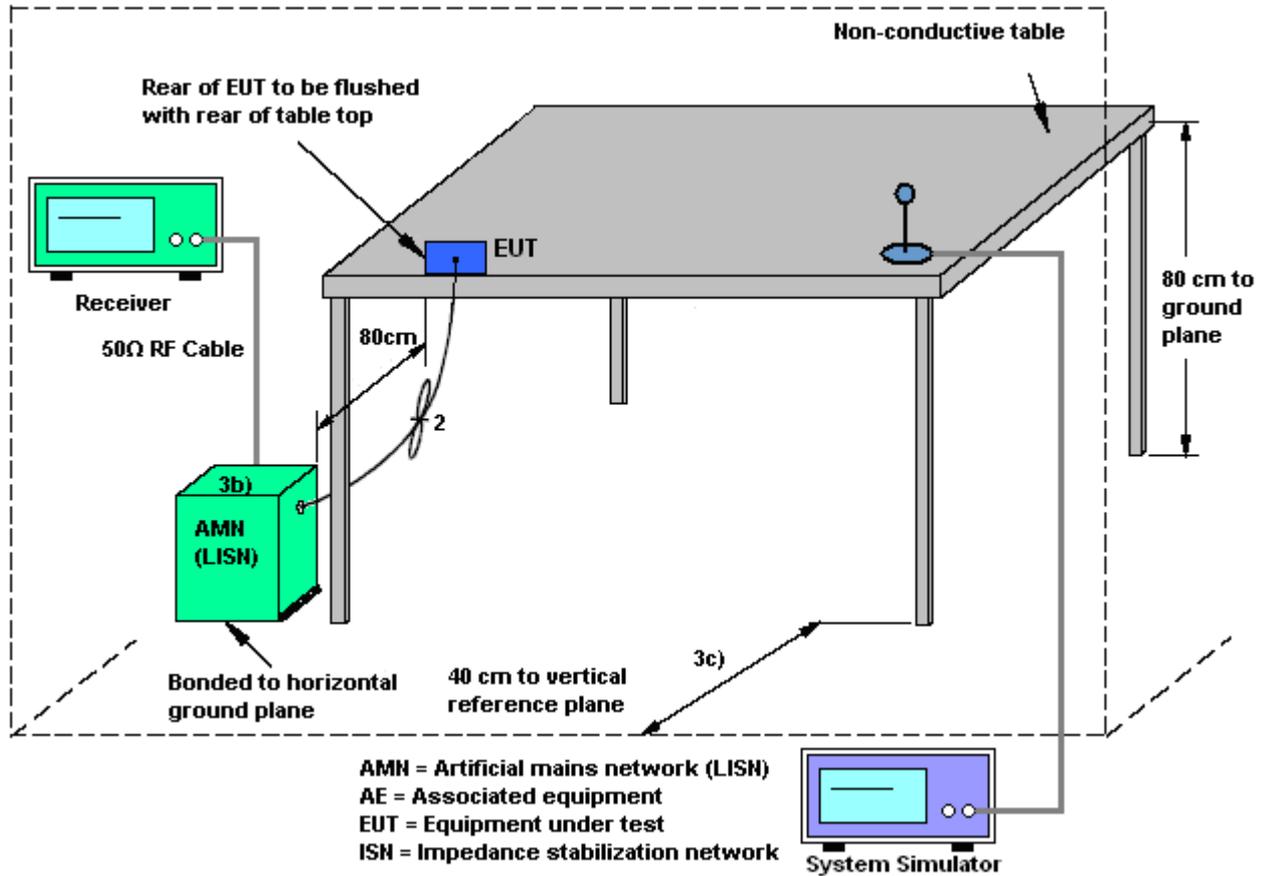
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

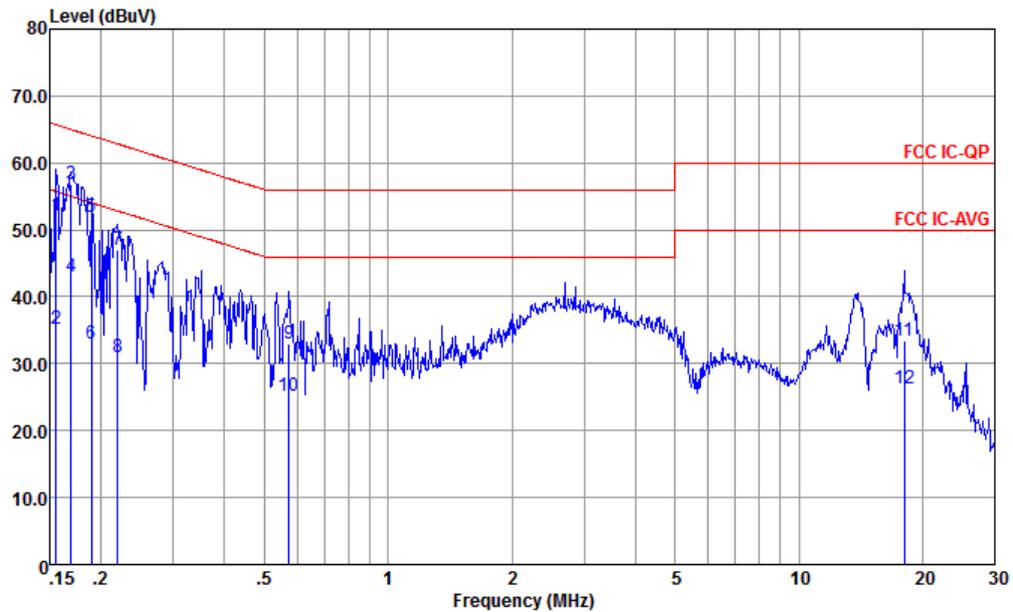
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Engineer :	Eko	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

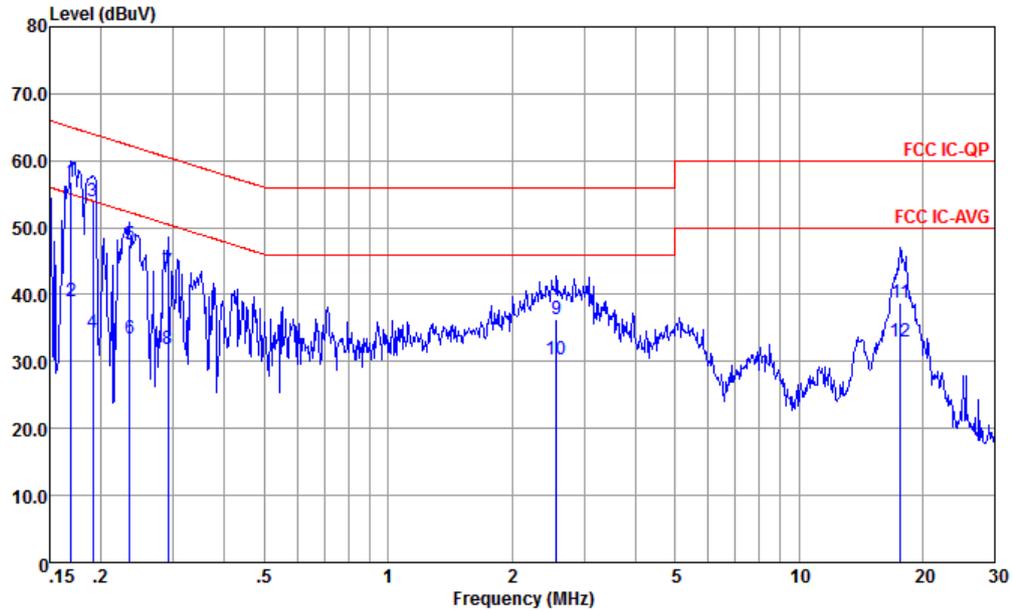


Site : CO01-KS
 Condition : FCC IC-QP LISN-060105-L 24+80 LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.156	52.19	-13.50	65.69	41.50	0.24	10.45	QP
2	0.156	35.19	-20.50	55.69	24.50	0.24	10.45	Average
3 *	0.169	56.90	-8.09	64.99	46.20	0.25	10.45	QP
4	0.169	42.90	-12.09	54.99	32.20	0.25	10.45	Average
5	0.189	51.91	-12.15	64.06	41.20	0.25	10.46	QP
6	0.189	33.01	-21.05	54.06	22.30	0.25	10.46	Average
7	0.220	46.93	-15.90	62.83	36.21	0.26	10.46	QP
8	0.220	30.93	-21.90	52.83	20.21	0.26	10.46	Average
9	0.573	32.95	-23.05	56.00	22.20	0.37	10.38	QP
10	0.573	25.25	-20.75	46.00	14.50	0.37	10.38	Average
11	18.039	33.52	-26.48	60.00	22.20	1.03	10.29	QP
12	18.039	26.22	-23.78	50.00	14.90	1.03	10.29	Average



Test Engineer :	Eko	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
 Condition : FCC IC-QP LISN-060105-N 24+80 NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1 *	0.169	56.90	-8.09	64.99	46.20	0.25	10.45	QP
2	0.169	38.90	-16.09	54.99	28.20	0.25	10.45	Average
3	0.191	54.00	-9.98	63.98	43.30	0.24	10.46	QP
4	0.191	34.30	-19.68	53.98	23.60	0.24	10.46	Average
5	0.235	47.53	-14.73	62.26	36.80	0.26	10.47	QP
6	0.235	33.33	-18.93	52.26	22.60	0.26	10.47	Average
7	0.291	43.56	-16.94	60.50	32.79	0.29	10.48	QP
8	0.291	31.96	-18.54	50.50	21.19	0.29	10.48	Average
9	2.567	36.22	-19.78	56.00	25.60	0.39	10.23	QP
10	2.567	30.22	-15.78	46.00	19.60	0.39	10.23	Average
11	17.661	38.81	-21.19	60.00	27.50	1.02	10.29	QP
12	17.661	32.91	-17.09	50.00	21.60	1.02	10.29	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B Limit>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

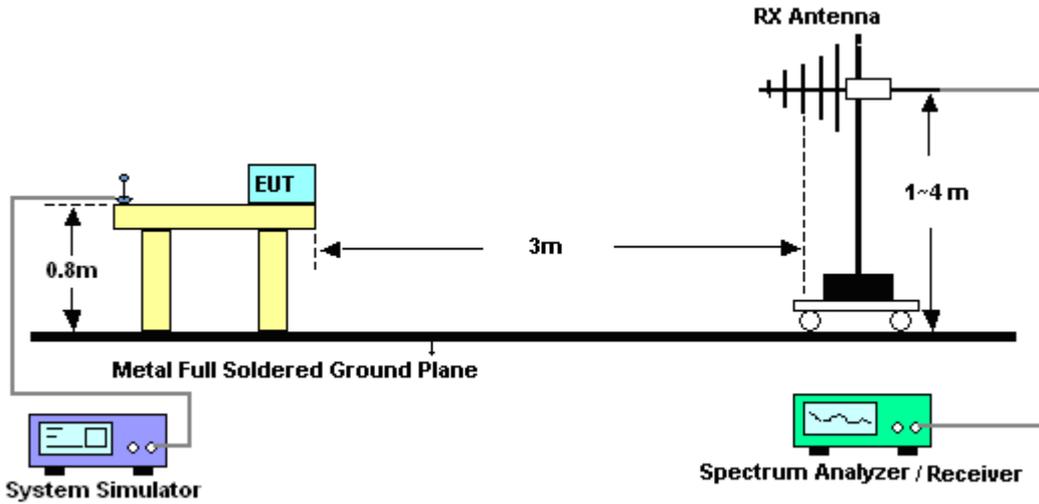


3.2.3. Test Procedures

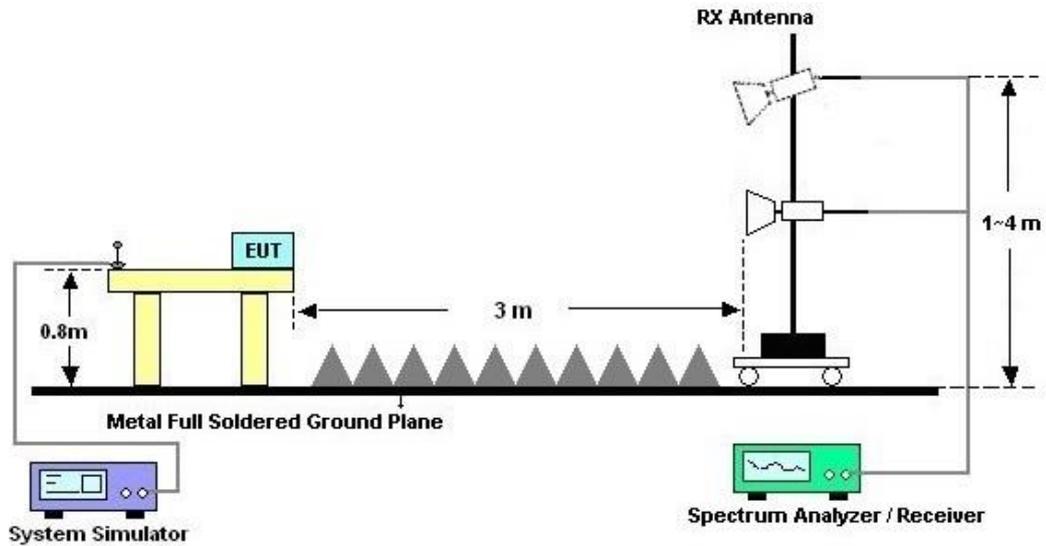
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
10. Exploratory radiated emissions testing of handheld and/or body-worn devices shall include rotation of the EUT through three orthogonal axes (X/Y/Z Plane) to determine the orientation (attitude) that maximizes the emissions.

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



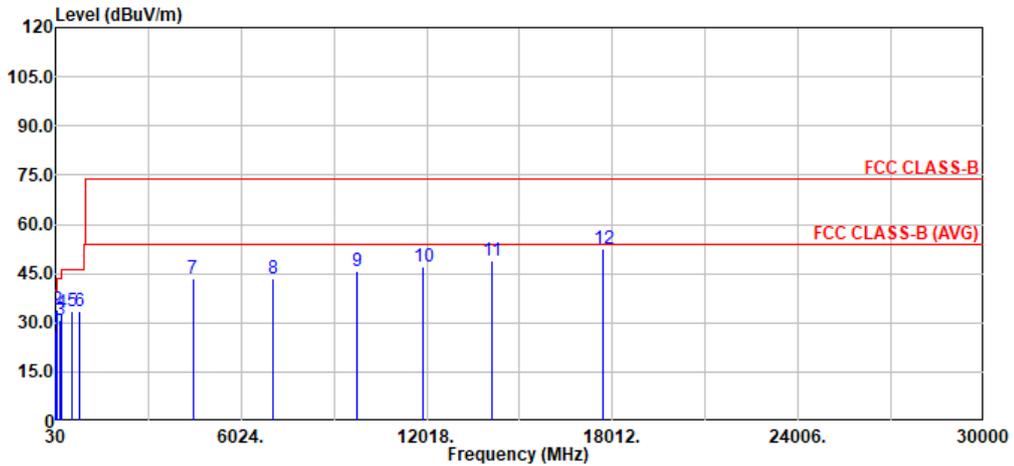
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Henry LI	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal

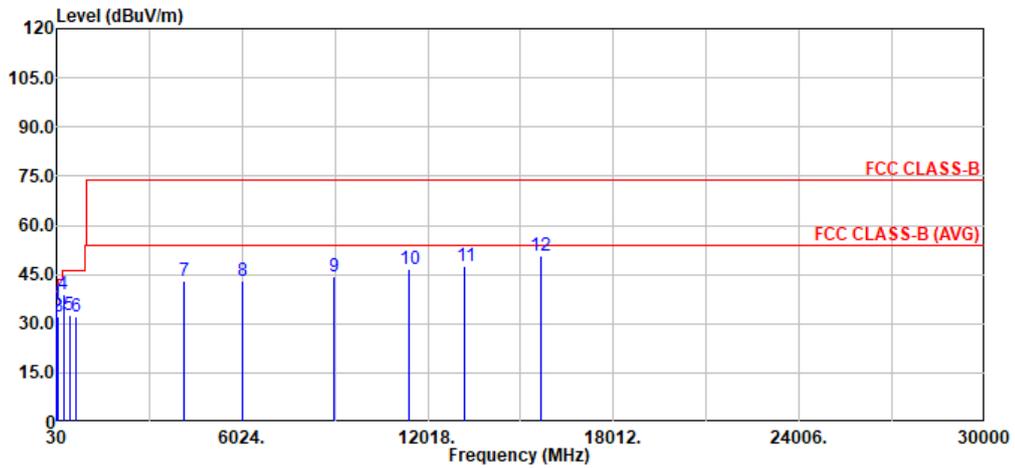


Site : 03CH04-KS
 Condition : FCC CLASS-B 3m 3117-00227860-2024 Horizontal

	Freq	Level	Limit	Over	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	45.52	27.71	40.00	-12.29	42.51	16.76	0.80	32.36	0.00	--	--	Peak
2	76.32	34.08	40.00	-5.92	51.97	13.07	1.27	32.23	0.00	200	232	QP
3	186.90	30.96	43.50	-12.54	46.23	14.76	2.23	32.26	0.00	--	--	Peak
4	245.58	32.97	46.00	-13.03	44.75	18.09	2.57	32.44	0.00	--	--	Peak
5	561.32	33.63	46.00	-12.37	35.85	26.59	3.90	32.71	0.00	--	--	Peak
6	786.84	33.44	46.00	-12.56	32.82	28.67	4.60	32.65	0.00	--	--	Peak
7	4461.63	43.36	74.00	-30.64	61.93	34.12	11.12	63.81	0.00	--	--	Peak
8	7045.63	43.54	74.00	-30.46	58.09	35.69	14.18	64.42	0.00	--	--	Peak
9	9752.88	45.74	74.00	-28.26	54.85	36.91	16.86	62.88	0.00	--	--	Peak
10	11884.25	47.00	74.00	-27.00	50.51	38.58	18.93	61.02	0.00	--	--	Peak
11	14098.50	48.98	74.00	-25.02	51.88	39.10	20.65	62.65	0.00	--	--	Peak
12	17721.63	52.39	74.00	-21.61	51.98	41.48	23.26	64.33	0.00	--	--	Peak



Test Engineer :	Henry LI	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical



Site : 03CH04-KS
 Condition : FCC CLASS-B 3m 3117-00227860-2024 Vertical

	Freq	Level	Limit	Over	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	44.55	35.57	40.00	-4.43	49.86	17.29	0.79	32.37	0.00	100	89	QP
2	50.37	32.21	40.00	-7.79	49.36	14.29	0.87	32.31	0.00	--	--	Peak
3	76.56	32.26	40.00	-7.74	50.11	13.10	1.28	32.23	0.00	--	--	Peak
4	249.71	38.76	46.00	-7.24	49.96	18.67	2.59	32.46	0.00	--	--	Peak
5	443.22	32.67	46.00	-13.33	38.76	22.78	3.46	32.33	0.00	--	--	Peak
6	663.41	31.95	46.00	-14.05	33.66	26.88	4.23	32.82	0.00	--	--	Peak
7	4157.75	42.82	74.00	-31.18	61.36	33.38	10.75	62.67	0.00	--	--	Peak
8	6034.13	43.22	74.00	-30.78	59.07	35.57	13.12	64.54	0.00	--	--	Peak
9	8987.88	44.46	74.00	-29.54	55.37	36.33	16.12	63.36	0.00	--	--	Peak
10	11395.50	46.84	74.00	-27.16	51.56	38.09	18.50	61.31	0.00	--	--	Peak
11	13220.88	47.52	74.00	-26.48	50.50	39.08	19.84	61.90	0.00	--	--	Peak
12	15647.63	50.53	74.00	-23.47	52.66	40.14	21.73	64.00	0.00	--	--	Peak

Note:

- Level(dBμV/m) = Read Level(dBμV) + Antenna Factor(dB/m) + Cable Loss(dB) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 11, 2024	Jun. 25, 2025	Oct. 10, 2025	Radiation (03CH04-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Dec. 03, 2024	Jun. 25, 2025	Dec. 02, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Jun. 25, 2025	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Nov. 23, 2024	Jun. 25, 2025	Nov. 22, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Jun. 25, 2025	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Jun. 25, 2025	Oct. 21, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9kHz-1GHz	Jul. 03, 2024	Jun. 25, 2025	Jul. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060852	18~40GHz	Jan. 03, 2025	Jun. 25, 2025	Jan. 02, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1GHz-18GHz	Oct. 09, 2024	Jun. 25, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1GHz-18GHz	Oct. 09, 2024	Jun. 25, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 25, 2025	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 25, 2025	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m-4 m	NCR	Jun. 25, 2025	NCR	Radiation (03CH04-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 16, 2025	Jun. 26, 2025	Apr. 15, 2026	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 20, 2024	Jun. 26, 2025	Aug. 19, 2025	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Dec. 24, 2024	Jun. 26, 2025	Dec. 23, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Jun. 26, 2025	Oct. 08, 2025	Conduction (CO01-KS)

NCR: No Calibration Required



5. Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.04 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.20 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.34 dB
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