



FCC PART 15C

TEST REPORT

For

AKUVOX (XIAMEN) NETWORKS CO., LTD.

10/F, No.56 Guanri Road, Software Park II, Xiamen 361009, China

FCC ID: 2AHCR-A08K

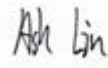
Report Type: Original Report	Product Name: Access Control Terminal
Report Number:	2507X04884E-RF-02
Report Date:	2025-12-04
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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2507X04884E-RF-02	R1V1	2025-12-04	Initial Release

GENERAL INFORMATION**Product Description for Equipment under Test (EUT)**

Applicant:	AKUVOX (XIAMEN) NETWORKS CO., LTD.
Tested Model:	A08K
Product Name:	Access Control Terminal
Power Supply:	DC 12V from Adapter or DC 48V from PoE
RF Function:	RFID
Operating Band/Frequency:	125 kHz
Antenna Type:	Coil Antenna
EUT Received Status:	Good
<i>Note:</i> 1. All measurement and test data in this report was gathered from production sample serial number: 39PH-1. (Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2025-09-05)	

Objective

This Type approval report is prepared for *AKUVOX (XIAMEN) NETWORKS CO., LTD.* in accordance with Part 2- Subpart J, and Part 15-Subparts A and C of the Federal Communication Commission's rules.

The objective is to determine the Compliance of the EUT with FCC rules, sec 15.205, 15.207, 15.209 and 15.215.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone Xiamen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

Measurement Uncertainty

Item		U_{lab}
Conducted Emission	150kHz-30MHz	2.45 dB
Radiated Spurious Emission	9kHz~150kHz	2.82 dB
	150kHz~30MHz	2.74 dB
	30MHz~1GHz	4.68dB
Occupied Bandwidth		1.69%
Frequency Error(RF Frequency)		0.085×10^{-6} MHz
Temperature		1°C
Humidity		5%

SYSTEM TEST CONFIGURATION

Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Test Mode 1: Transmitting(no card swiped) Test Mode 2: Transmitting(swiping card)
Test voltage:	DC 12V from adapter(AC 120V/60Hz) or DC 48V from PoE(AC 120V/60Hz)
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.

Justification

The system was configured in testing mode which was provided by manufacturer.

EUT Exercise Software

The EUT is tested in the engineering mode.

Equipment Modifications

No modification on the EUT.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Lenovo	Adapter1	HKA04812040-0A7	Unknown
Lenovo	Laptop	Lenovo 14w Gen 2	PW01PJ6E
Unknown	Exit button*2	Unknown	Unknown
Unknown	Relay Load	Unknown	Unknown
Unknown	RS 485 Load	Unknown	Unknown
Unknown	TF card	Unknown	Unknown
NETGEAR,INC.	POE	GS108PE	Unknown

External I/O Cable

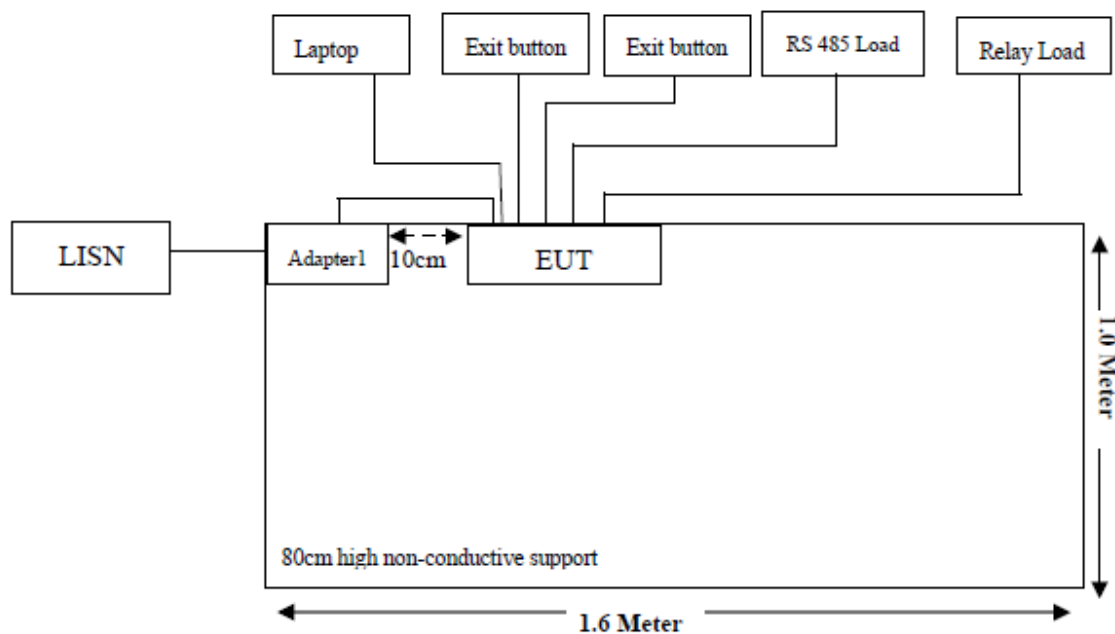
Cable Description	Length (m)	From Port	To
Network cable*2	10	EUT	Exit button
Network cable	10	EUT	Laptop
Network cable	10	POE	Laptop
Network cable	10	EUT	Relay Load
Network cable	10	EUT	RS 485 Load
Network cable	0.5	POE	EUT

Block Diagram of Test Setup

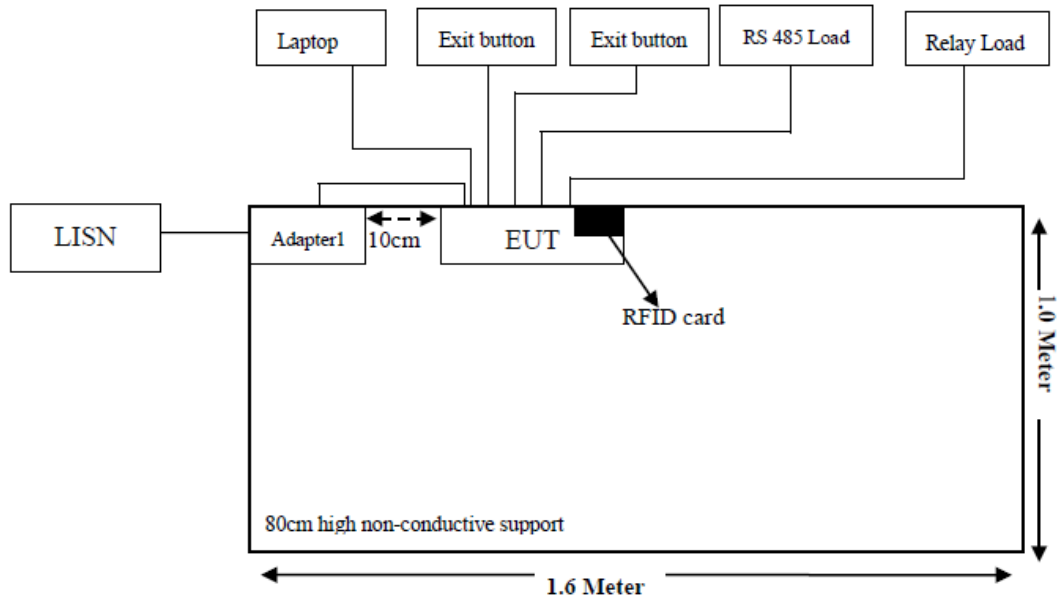
Conducted Emission:

DC 12V from Adapter

Test Mode 1:

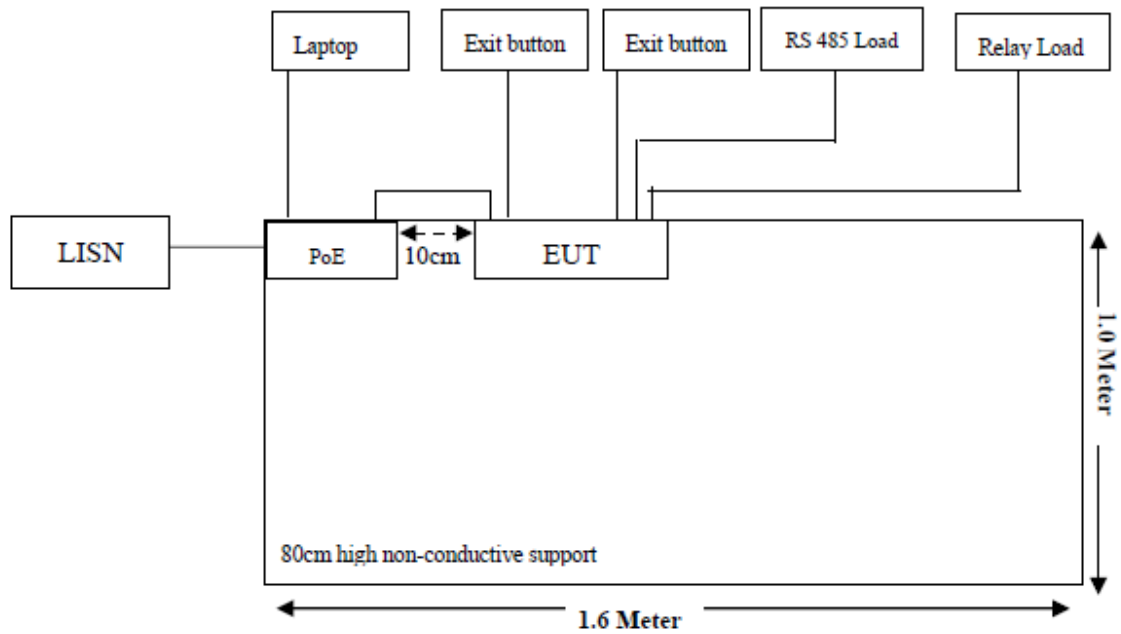


Test Mode 2:

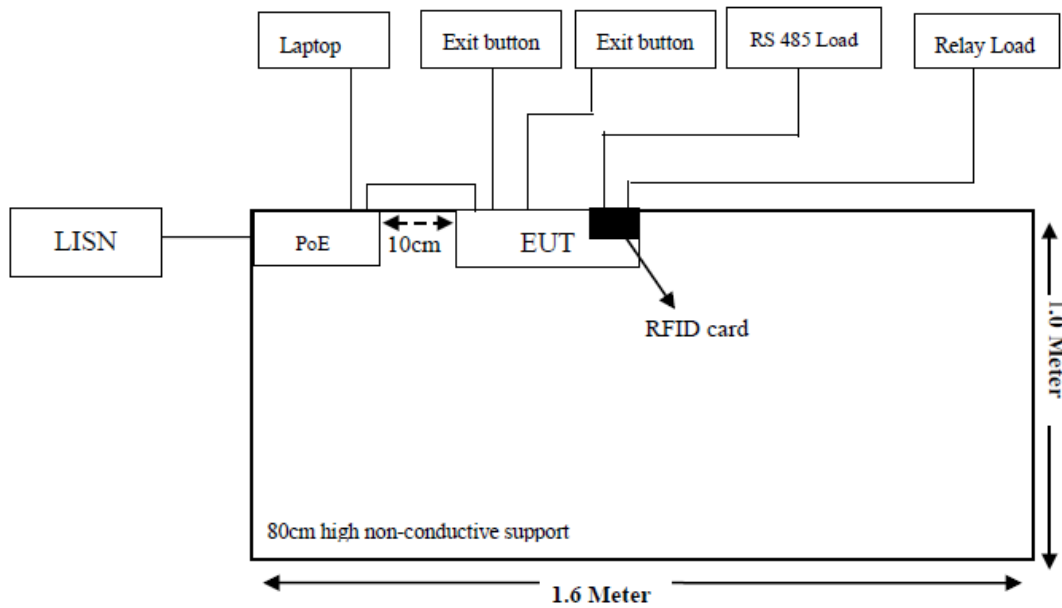


DC 48V from PoE

Test Mode 1:



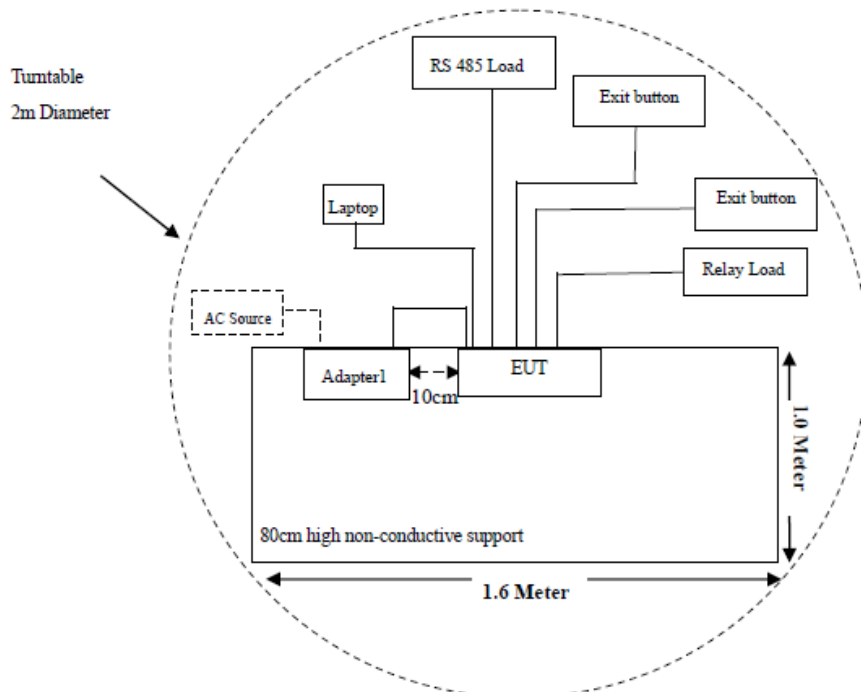
Test Mode 2:



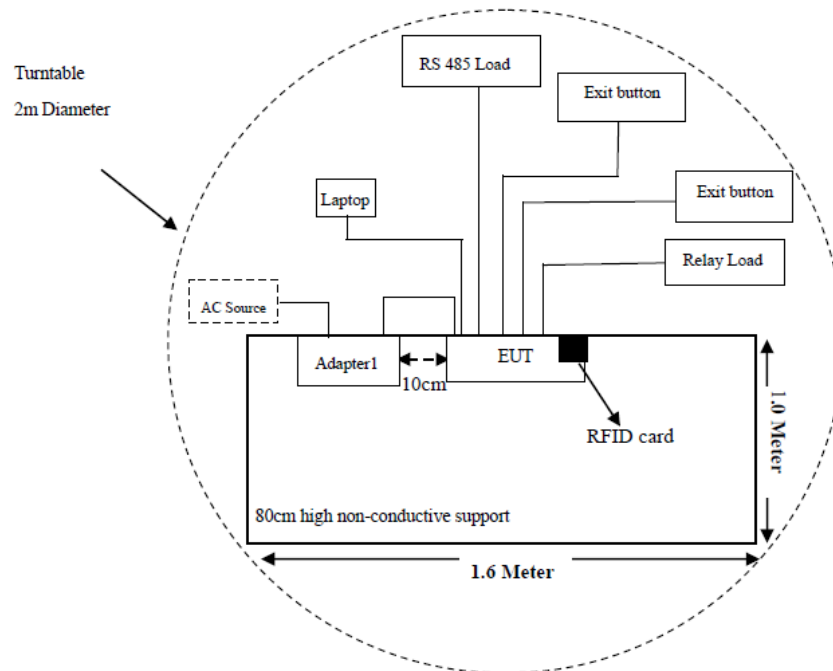
Radiated Emission (Below 1GHz):

DC 12V from Adapter

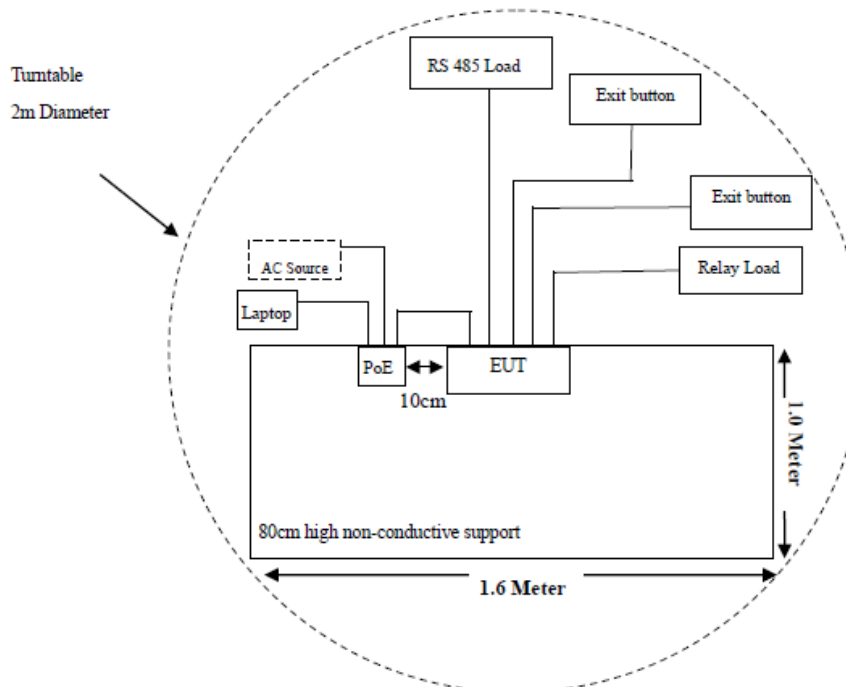
Test Mode 1:



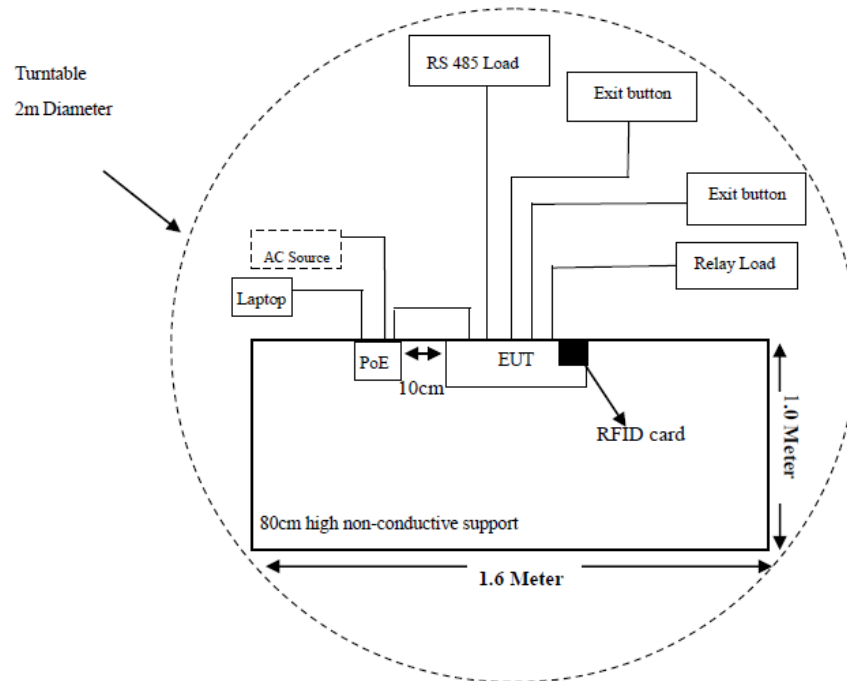
Test Mode 2:



DC 48V from PoE
Test Mode 1:



Test Mode 2:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.209 §15.205	Radiated Emission Test	Compliant
§15.215(c)	20dB Bandwidth Testing	Compliant

TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission Test					
EMI Test Receiver	Rohde & Schwarz	ESR3	103105	2025/02/20	2026/02/19
LISN	Rohde & Schwarz	ENV216	100129	2025/02/20	2026/02/19
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC001	2025/02/20	2026/02/19
Test Software	Audix	E3	18621a	N/A	N/A
Radiated Emission Test					
EMI Test Receiver	Rohde & Schwarz	ESR3	103103	2025/02/20	2026/02/19
Loop Antenna	Rohde & Schwarz	HFH2-Z2	830749/001	2023/07/27	2026/07/26
Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26
Amplifier	Sonoma	310B	120903	2025/02/20	2026/02/19
AC power source	WACP	ES-CPF-SD45-600	EO20230629001	2025/02/20	2026/02/19
Temperature Chamber	BACL	BTH-150	30211	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	HFH2-CC	335.3609	2025/02/20	2026/02/19
Test Software	Audix	E3	18621a	N/A	N/A

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC§15.203 - ANTENNA REQUIREMENT

Applicable Standard

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

Antenna Connected Construction

The EUT has one Coil antenna for RFID, the antenna was permanently attached, fulfill the requirement of this section, please refer to the EUT photos.

Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS**Applicable Standard**

FCC§15.207(a)

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	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.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

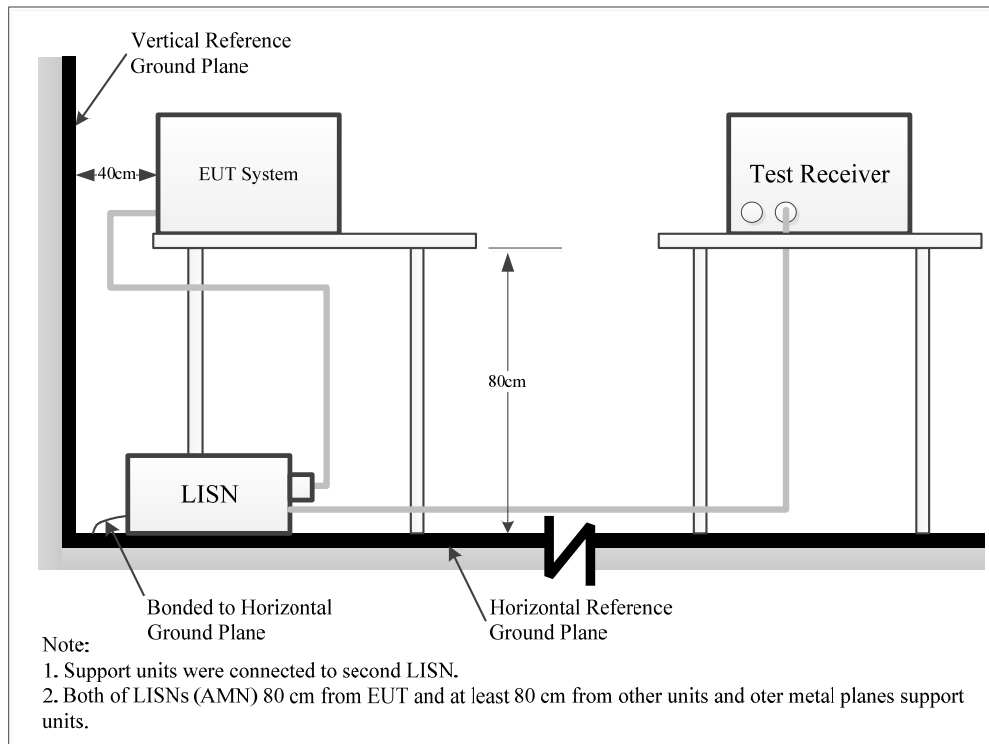
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

Test System Setup



The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz - 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

According FCC publication number 174176, for a device with a permanent antenna operating at or below 30 MHz, the measurements done with a suitable dummy load, in lieu of the permanent antenna under the following conditions: (1) perform the AC line conducted tests with the permanent antenna to determine compliance with the Section 15.207 limits outside the transmitter's fundamental emission band; (2) retest with a dummy load in lieu of the permanent antenna to determine compliance with the Section 15.207 limits within the transmitter's fundamental emission band.

Result & Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\begin{aligned}\text{Factor (dB)} &= \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)} \\ \text{Result (dB}\mu\text{V)} &= \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}\end{aligned}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

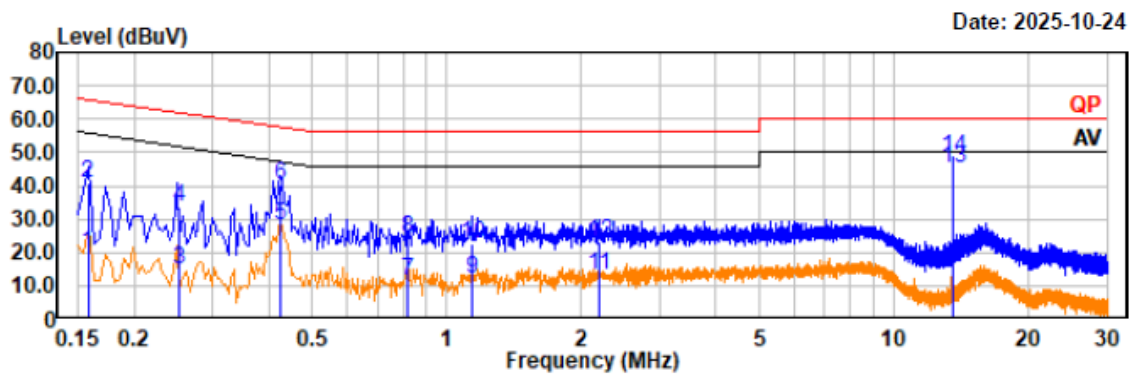
Test Data

Test Frequency:	150kHz~30MHz
Temperature:	24.6°C
Relative Humidity:	53%
ATM Pressure:	100.1kPa
Test Date:	2025-10-24
Test Engineer:	Wlif Wu

DC 12V from Adapter

Project No.: 2507X04884E-RF
Test Mode: MODE1
EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.158	-1.42	21.08	19.66	55.58	35.92	Line	Average
0.158	19.54	21.08	40.62	65.58	24.96	Line	QP
0.251	-6.34	21.02	14.68	51.71	37.03	Line	Average
0.251	12.57	21.02	33.59	61.71	28.12	Line	QP
0.425	7.87	20.46	28.33	47.36	19.03	Line	Average
0.425	19.62	20.46	40.08	57.36	17.28	Line	QP
0.814	-8.80	20.61	11.81	46.00	34.19	Line	Average
0.814	3.74	20.61	24.35	56.00	31.65	Line	QP
1.142	-8.41	20.70	12.29	46.00	33.71	Line	Average
1.142	2.17	20.70	22.87	56.00	33.13	Line	QP
2.194	-7.93	21.02	13.09	46.00	32.91	Line	Average
2.194	2.23	21.02	23.25	56.00	32.75	Line	QP
13.559	23.93	21.05	44.98	50.00	5.02	Line	Average
13.559	27.68	21.05	48.73	60.00	11.27	Line	Peak

Project No.: 2507X04884E-RF

Test Mode: MODE1

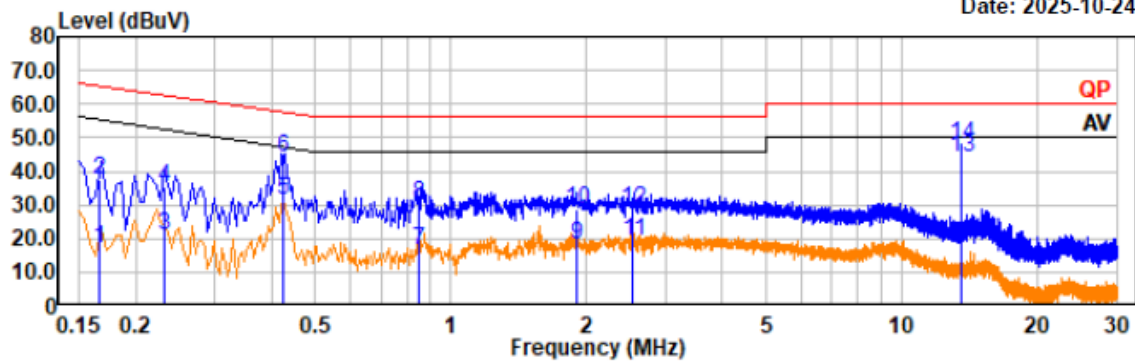
EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Trace: 1

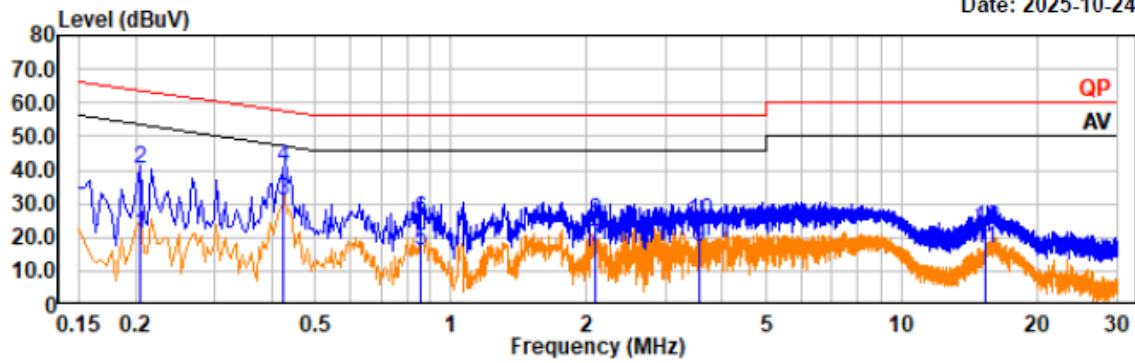
Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.167	-3.61	20.91	17.30	55.11	37.81	Neutral	Average
0.167	16.81	20.91	37.72	65.11	27.39	Neutral	QP
0.232	-0.20	20.94	20.74	52.37	31.63	Neutral	Average
0.232	14.56	20.94	35.50	62.37	26.87	Neutral	QP
0.425	11.15	20.43	31.58	47.35	15.77	Neutral	Average
0.425	23.47	20.43	43.90	57.35	13.45	Neutral	QP
0.853	-3.91	20.58	16.67	46.00	29.33	Neutral	Average
0.853	9.56	20.58	30.14	56.00	25.86	Neutral	QP
1.911	-3.01	21.10	18.09	46.00	27.91	Neutral	Average
1.911	7.54	21.10	28.64	56.00	27.36	Neutral	QP
2.533	-1.79	21.07	19.28	46.00	26.72	Neutral	Average
2.533	7.42	21.07	28.49	56.00	27.51	Neutral	QP
13.559	23.35	21.02	44.37	50.00	5.63	Neutral	Average
13.559	27.00	21.02	48.02	60.00	11.98	Neutral	Peak

Project No.: 2507X04884E-RF
 Test Mode: MODE2
 EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

Date: 2025-10-24



Trace: 1

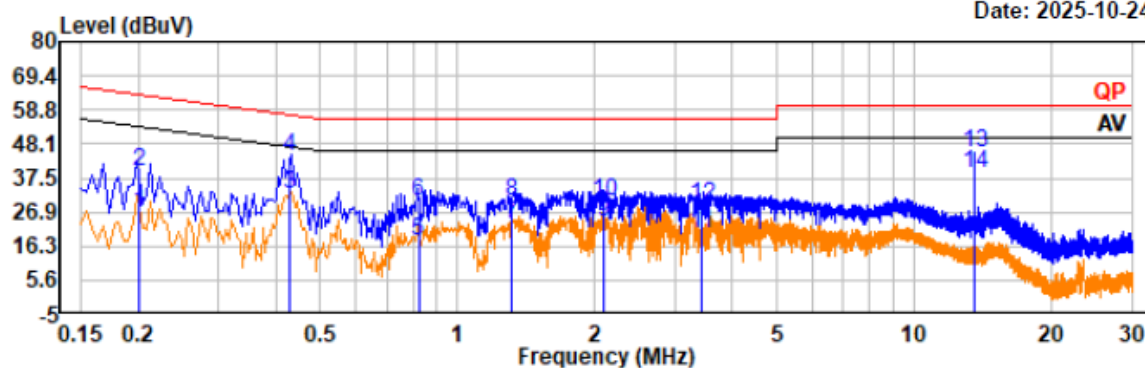
Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.204	-0.46	21.25	20.79	53.43	32.64	Line	Average
0.204	19.20	21.25	40.45	63.43	22.98	Line	QP
0.426	10.18	20.46	30.64	47.33	16.69	Line	Average
0.426	20.46	20.46	40.92	57.33	16.41	Line	QP
0.856	-4.56	20.61	16.05	46.00	29.95	Line	Average
0.856	5.00	20.61	25.61	56.00	30.39	Line	QP
2.084	-4.15	21.02	16.87	46.00	29.13	Line	Average
2.084	3.61	21.02	24.63	56.00	31.37	Line	QP
3.566	-3.89	20.98	17.09	46.00	28.91	Line	Average
3.566	3.95	20.98	24.93	56.00	31.07	Line	QP
15.326	-4.71	21.08	16.37	50.00	33.63	Line	Average
15.326	1.44	21.08	22.52	60.00	37.48	Line	QP

Project No.: 2507X04884E-RF
Test Mode: MODE2
EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.201	5.56	21.06	26.62	53.55	26.93	Neutral	Average
0.201	18.71	21.06	39.77	63.55	23.78	Neutral	QP
0.430	12.31	20.42	32.73	47.26	14.53	Neutral	Average
0.430	24.09	20.42	44.51	57.26	12.75	Neutral	QP
0.822	-2.44	20.54	18.10	46.00	27.90	Neutral	Average
0.822	9.45	20.54	29.99	56.00	26.01	Neutral	QP
1.312	2.24	20.88	23.12	46.00	22.88	Neutral	Average
1.312	9.53	20.88	30.41	56.00	25.59	Neutral	QP
2.086	2.52	21.12	23.64	46.00	22.36	Neutral	Average
2.086	8.92	21.12	30.04	56.00	25.96	Neutral	QP
3.419	-0.66	21.00	20.34	46.00	25.66	Neutral	Average
3.419	7.79	21.00	28.79	56.00	27.21	Neutral	QP
13.559	24.24	21.02	45.26	60.00	14.74	Neutral	Peak
13.563	17.95	21.02	38.97	50.00	11.03	Neutral	Average

DC 48V from PoE

Project No.: 2507X04884E-RF

Test Mode: MODE1

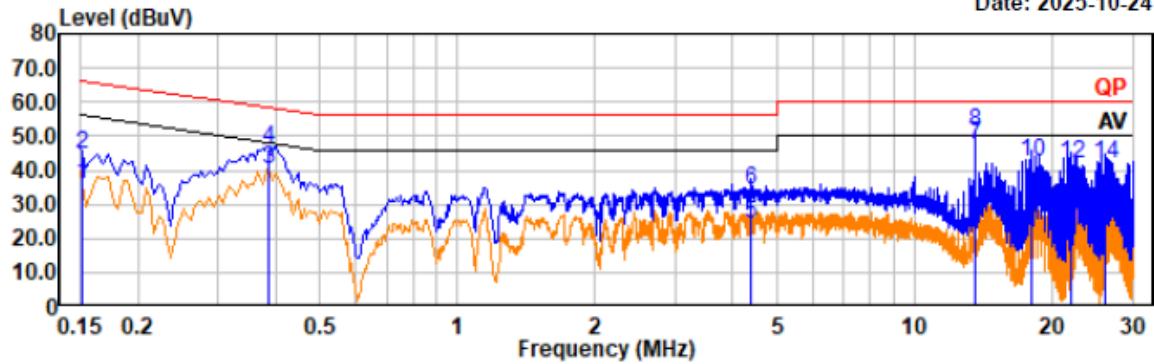
EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



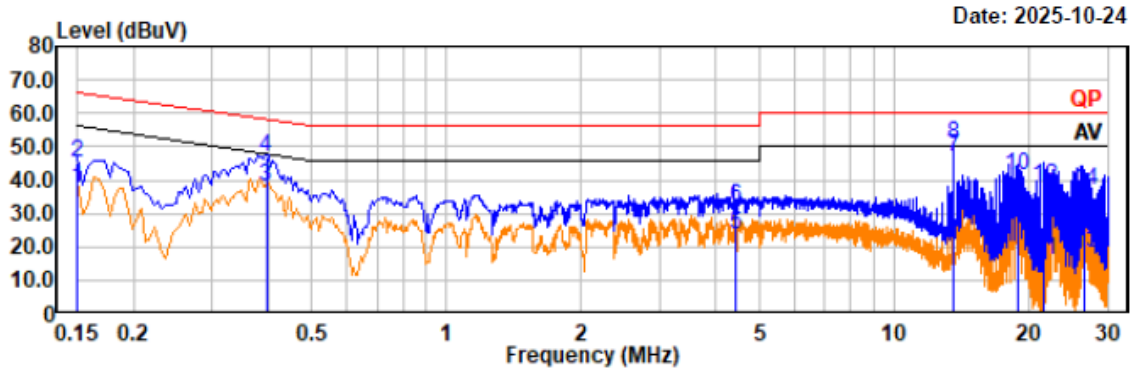
Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.151	15.02	21.04	36.06	55.94	19.88	Line	Average
0.151	23.47	21.04	44.51	65.94	21.43	Line	QP
0.388	19.59	20.56	40.15	48.11	7.96	Line	Average
0.388	25.91	20.56	46.47	58.11	11.64	Line	QP
4.400	3.58	20.92	24.50	46.00	21.50	Line	Average
4.400	13.43	20.92	34.35	56.00	21.65	Line	QP
13.559	26.33	21.05	47.38	50.00	2.62	Line	Average
13.559	29.99	21.05	51.04	60.00	8.96	Line	Peak
18.000	4.33	21.12	25.45	50.00	24.55	Line	Average
18.000	21.32	21.12	42.44	60.00	17.56	Line	QP
22.005	2.16	21.17	23.33	50.00	26.67	Line	Average
22.005	20.63	21.17	41.80	60.00	18.20	Line	QP
26.003	4.09	21.14	25.23	50.00	24.77	Line	Average
26.003	20.90	21.14	42.04	60.00	17.96	Line	QP

Project No.: 2507X04884E-RF
 Test Mode: MODE1
 EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz



Trace: 1

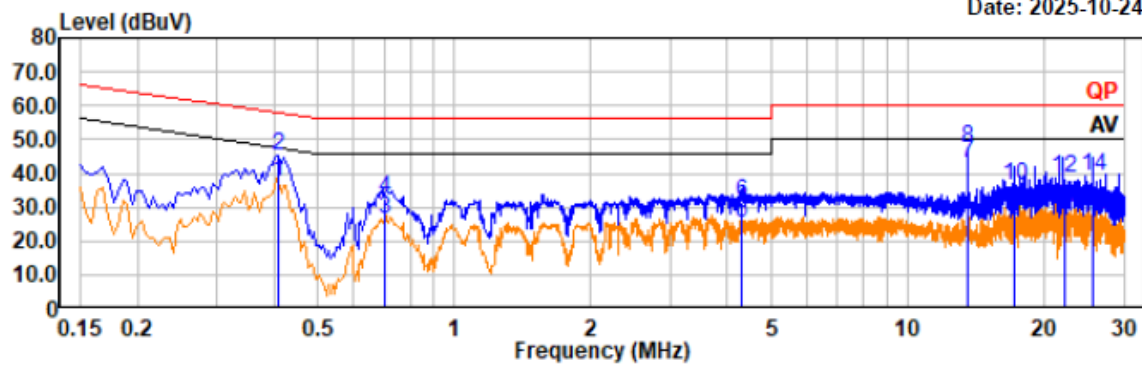
Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.150	16.69	20.83	37.52	55.99	18.47	Neutral	Average
0.150	24.54	20.83	45.37	65.99	20.62	Neutral	QP
0.396	17.50	20.48	37.98	47.94	9.96	Neutral	Average
0.396	26.46	20.48	46.94	57.94	11.00	Neutral	QP
4.408	2.73	20.88	23.61	46.00	22.39	Neutral	Average
4.408	11.25	20.88	32.13	56.00	23.87	Neutral	QP
13.559	26.00	21.02	47.02	50.00	2.98	Neutral	Average
13.559	29.47	21.02	50.49	60.00	9.51	Neutral	Peak
18.798	5.98	20.97	26.95	50.00	23.05	Neutral	Average
18.798	20.31	20.97	41.28	60.00	18.72	Neutral	QP
21.631	-5.16	21.02	15.86	50.00	34.14	Neutral	Average
21.631	17.20	21.02	38.22	60.00	21.78	Neutral	QP
26.494	-3.12	21.12	18.00	50.00	32.00	Neutral	Average
26.494	15.72	21.12	36.84	60.00	23.16	Neutral	QP

Project No.: 2507X04884E-RF
Test Mode: MODE2
EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



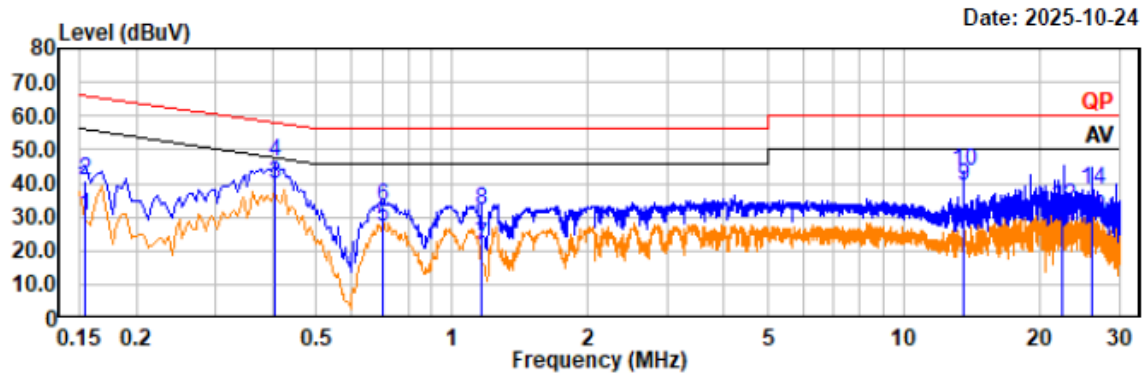
Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.409	16.96	20.50	37.46	47.68	10.22	Line	Average
0.409	24.49	20.50	44.99	57.68	12.69	Line	QP
0.703	6.06	20.60	26.66	46.00	19.34	Line	Average
0.703	11.98	20.60	32.58	56.00	23.42	Line	QP
4.301	4.46	20.93	25.39	46.00	20.61	Line	Average
4.301	10.79	20.93	31.72	56.00	24.28	Line	QP
13.559	21.96	21.05	43.01	50.00	6.99	Line	Average
13.559	26.42	21.05	47.47	60.00	12.53	Line	Peak
17.221	4.71	21.11	25.82	50.00	24.18	Line	Average
17.221	15.54	21.11	36.65	60.00	23.35	Line	QP
22.079	8.67	21.16	29.83	50.00	20.17	Line	Average
22.079	17.22	21.16	38.38	60.00	21.62	Line	QP
25.607	5.76	21.18	26.94	50.00	23.06	Line	Average
25.607	18.21	21.18	39.39	60.00	20.61	Line	QP

Project No.: 2507X04884E-RF
 Test Mode: MODE2
 EUT Model: A08K

Temp/Humi/ATM: 24.6°C/53%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz



Trace: 1

Condition: IF B/W 9kHz PK/AV

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.154	9.52	20.85	30.37	55.80	25.43	Neutral	Average
0.154	19.81	20.85	40.66	65.80	25.14	Neutral	QP
0.404	19.17	20.47	39.64	47.77	8.13	Neutral	Average
0.404	25.93	20.47	46.40	57.77	11.37	Neutral	QP
0.701	6.60	20.40	27.00	46.00	19.00	Neutral	Average
0.701	12.68	20.40	33.08	56.00	22.92	Neutral	QP
1.166	0.45	20.81	21.26	46.00	24.74	Neutral	Average
1.166	10.99	20.81	31.80	56.00	24.20	Neutral	QP
13.559	17.99	21.02	39.01	50.00	10.99	Neutral	Average
13.559	22.53	21.02	43.55	60.00	16.45	Neutral	Peak
22.480	5.86	21.06	26.92	50.00	23.08	Neutral	Average
22.480	11.88	21.06	32.94	60.00	27.06	Neutral	QP
26.048	8.49	21.13	29.62	50.00	20.38	Neutral	Average
26.048	16.97	21.13	38.10	60.00	21.90	Neutral	QP

FCC§15.205 & §15.209 - RADIATED EMISSIONS TEST

Applicable Standard

As per FCC Part §15.209

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

*** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.*

If both the single point and the limit distance are equal to or closer to the EUT than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

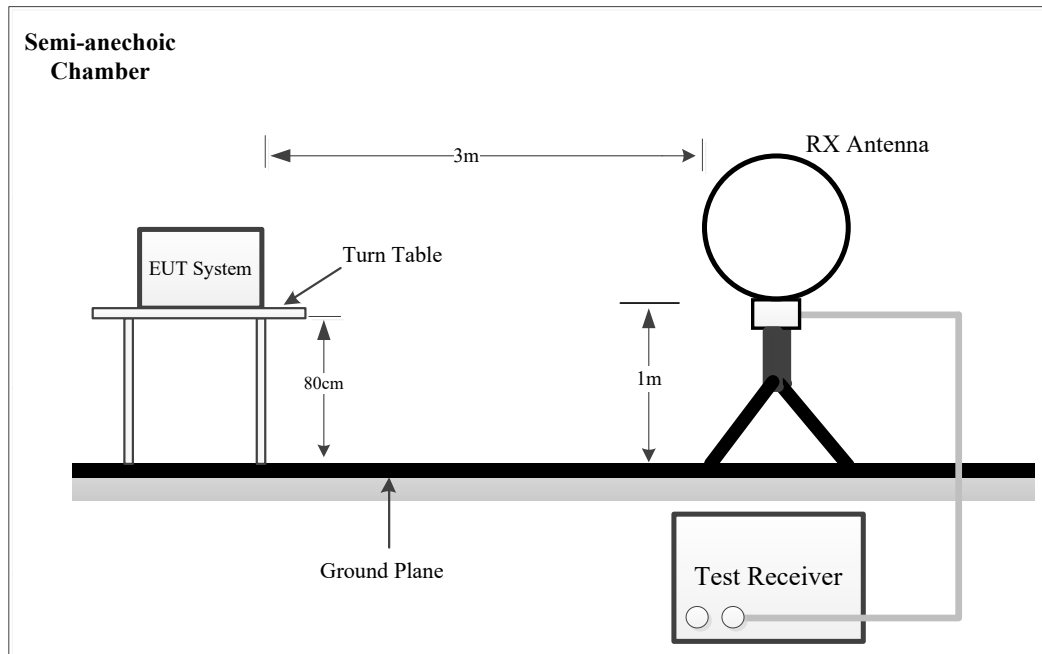
where

FS_{limit}	is the calculation of field strength at the limit distance, expressed in dBμV/m
FS_{max}	is the measured field strength, expressed in dBμV/m
$d_{\text{near field}}$	is the $\lambda/2\pi$ distance
d_{measure}	is the distance of the measurement point from the EUT
d_{limit}	is the reference distance or the distance of the $\lambda/2\pi$ point

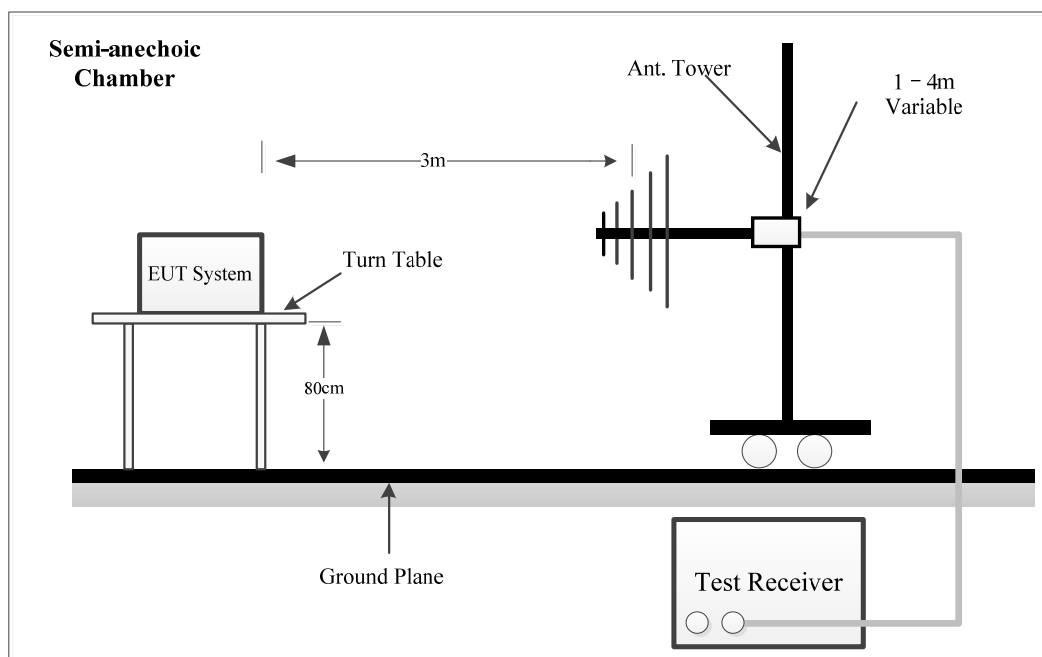
Note: dBμV/m=20 log(μV/m)

Test System Setup

9 kHz-30MHz:



30MHz-1GHz:



The radiated emission tests were performed in the 3 meter chamber a test site, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC Part Subpart C limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

According to FCC Rules, 47 CFR 15.33, the EUT emissions were investigated up to 1000 MHz.

During the radiated emission test, the EMI test Receiver was set with the following configurations:

Frequency Range	RBW	VBW	Measurement
9 kHz – 150 kHz	300Hz	1 kHz	PK
	200Hz	/	QP
150 kHz – 30 MHz	10 kHz	30 kHz	PK
	9kHz	/	QP
30 MHz – 1000 MHz	100 kHz	300 kHz	PK
	120kHz	/	QP

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 9 kHz-1 GHz except 9-90 kHz, 110-490 kHz, employing an average detector, peak and Average detection modes for frequencies above 1 GHz.

All emissions under the average limit and under the noise floor have not recorded in the report.

Result & Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Result (dBμV/m) = Meter Reading (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) – Result (dBμV/m)

Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15.209, 15.205.

Test Data

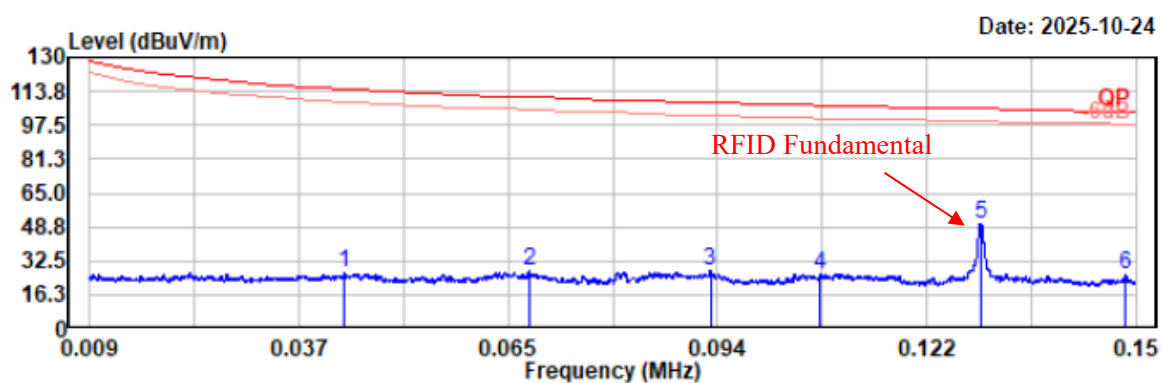
Frequency Range:	Below 1 GHz
Temperature:	23.5°C
Relative Humidity:	55%
ATM Pressure:	100.1 kPa
Test Date:	2025-10-24
Test Engineer:	Wlif Wu

Note: Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded.

DC 12V from Adapter**1) 9 kHz~150 kHz:**

Project No.: 2507X04884E-RF
Test Mode: Model (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



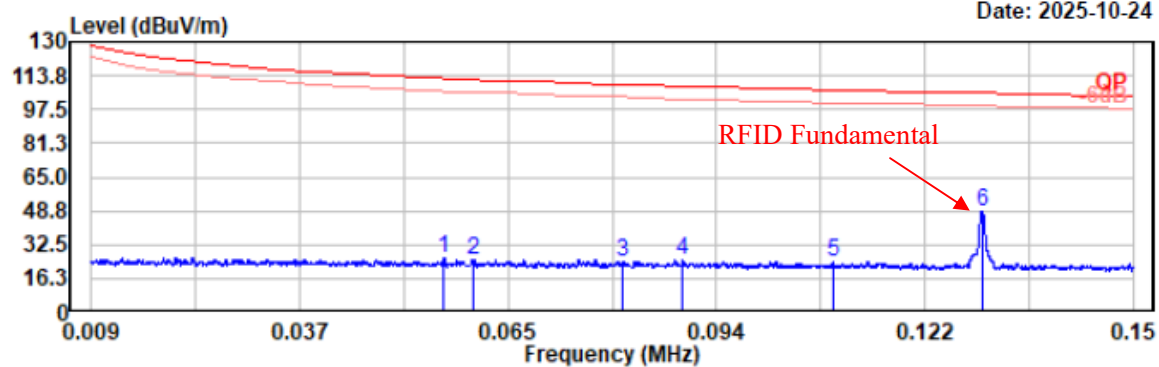
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.043	6.69	19.91	26.60	114.87	88.27	Peak
0.068	7.77	19.83	27.60	110.93	83.33	Peak
0.093	8.22	19.79	28.01	108.27	80.26	Peak
0.108	6.62	19.73	26.35	106.98	80.63	Peak
0.129	30.45	19.73	50.18	105.38	55.20	Peak
0.149	5.99	19.73	25.72	104.17	78.45	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



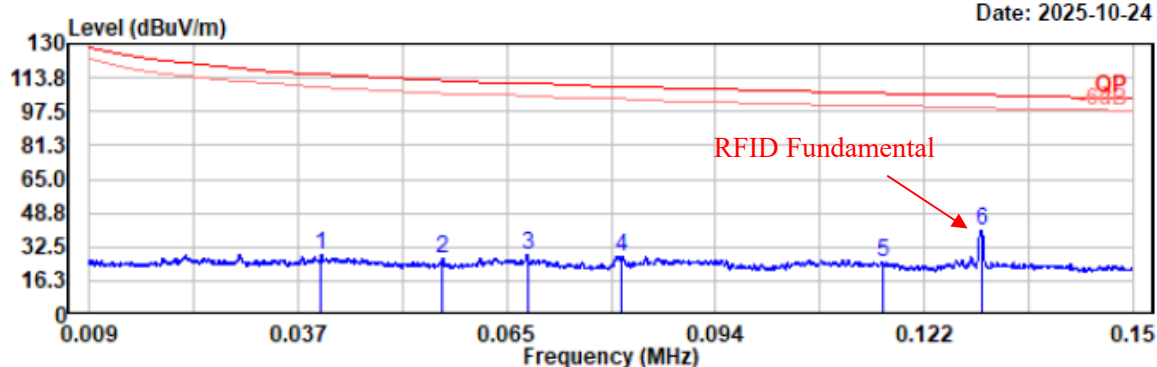
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.057	6.48	19.91	26.39	112.54	86.15	Peak
0.061	5.00	19.90	24.90	111.93	87.03	Peak
0.081	4.85	19.72	24.57	109.44	84.87	Peak
0.089	5.14	19.80	24.94	108.62	83.68	Peak
0.109	4.23	19.73	23.96	106.83	82.87	Peak
0.130	28.48	19.73	48.21	105.35	57.14	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



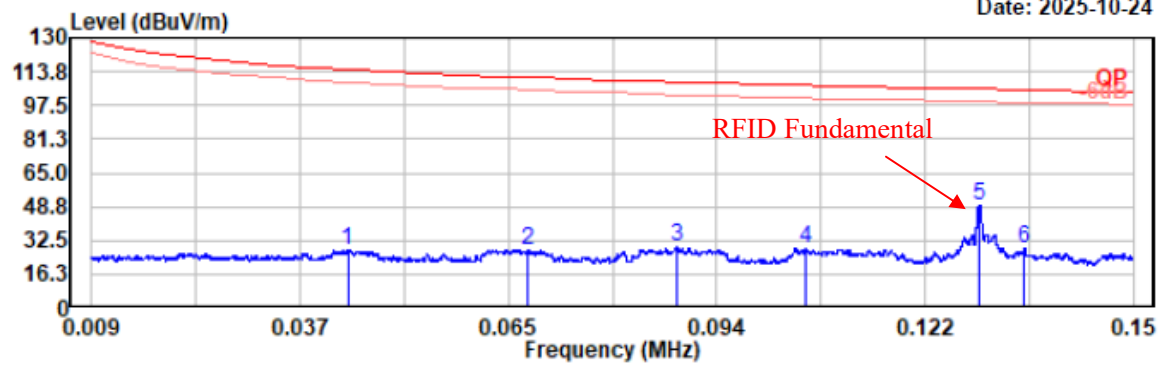
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Remark
0.040	8.60	19.91	28.51	115.50	86.99	Peak
0.057	7.11	19.91	27.02	112.53	85.51	Peak
0.068	8.77	19.83	28.60	110.93	82.33	Peak
0.081	8.29	19.72	28.01	109.46	81.45	Peak
0.116	5.68	19.73	25.41	106.30	80.89	Peak
0.130	20.65	19.73	40.38	105.36	64.98	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24

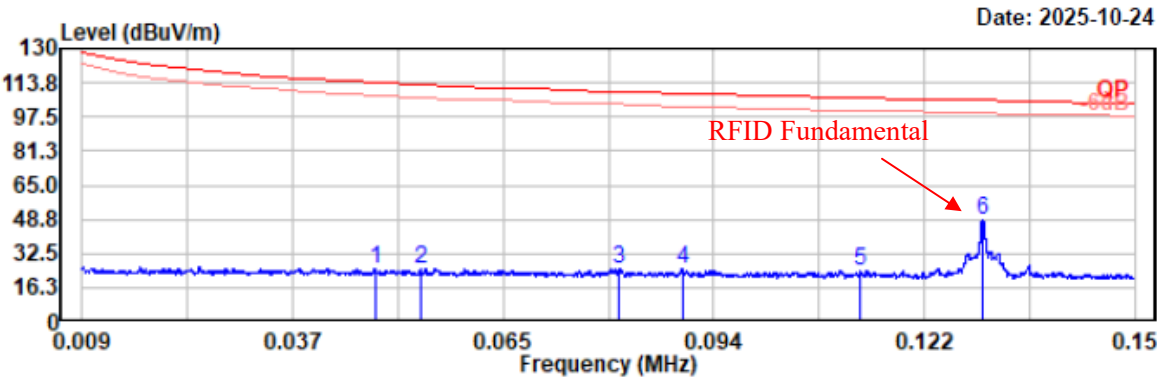


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.044	8.04	19.91	27.95	114.80	86.85	Peak
0.068	8.07	19.83	27.90	110.95	83.05	Peak
0.088	9.39	19.79	29.18	108.70	79.52	Peak
0.106	8.97	19.73	28.70	107.13	78.43	Peak
0.129	29.60	19.73	49.33	105.38	56.05	Peak
0.135	9.08	19.73	28.81	104.99	76.18	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



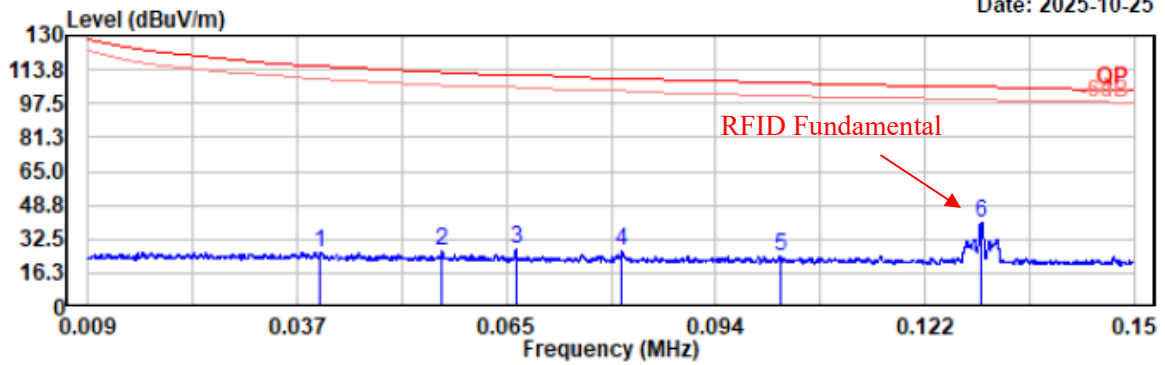
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.048	5.46	19.91	25.37	113.94	88.57	Peak
0.054	4.89	19.91	24.80	112.91	88.11	Peak
0.081	5.72	19.72	25.44	109.44	84.00	Peak
0.089	4.93	19.80	24.73	108.58	83.85	Peak
0.113	4.82	19.73	24.55	106.53	81.98	Peak
0.130	28.26	19.73	47.99	105.35	57.36	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-25



Condition: PK RBW:300Hz VBW:1kHz SWT:auto

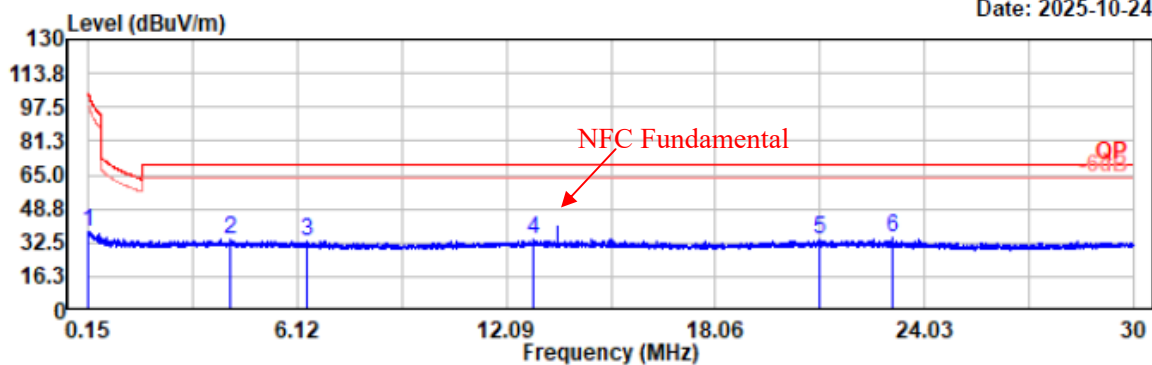
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.040	6.23	19.91	26.14	115.50	89.36	Peak
0.057	6.61	19.91	26.52	112.54	86.02	Peak
0.067	7.86	19.84	27.70	111.13	83.43	Peak
0.081	6.73	19.72	26.45	109.45	83.00	Peak
0.102	4.47	19.73	24.20	107.42	83.22	Peak
0.129	20.96	19.73	40.69	105.37	64.68	Peak

2) 150 kHz ~30MHz

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24

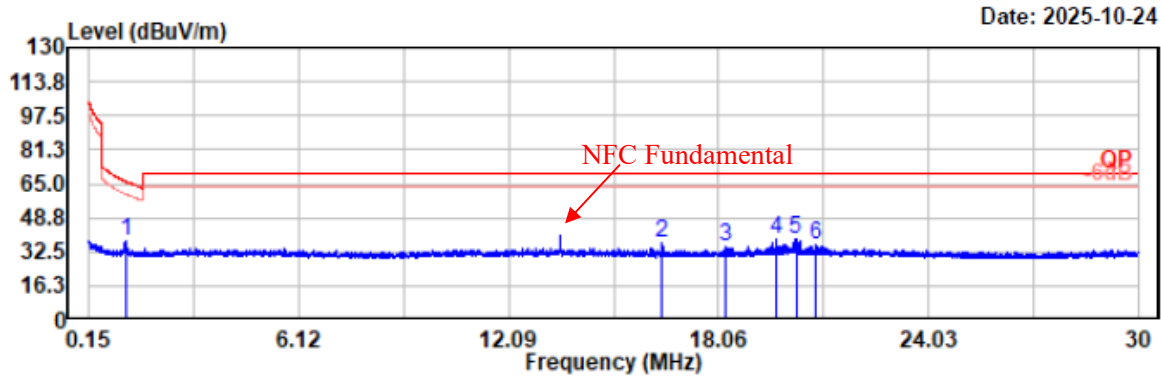


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.150	18.13	19.72	37.85	104.08	66.23	Peak
4.228	14.03	19.74	33.77	69.54	35.77	Peak
6.386	13.60	19.76	33.36	69.54	36.18	Peak
12.842	14.17	19.73	33.90	69.54	35.64	Peak
21.057	13.51	20.12	33.63	69.54	35.91	Peak
23.132	14.85	20.17	35.02	69.54	34.52	Peak

Project No.: 2507X04884E-RF
 Test Mode: Mode1 (Perpendicular)
 EUT Model: A08K
 Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
 Tested by: Wlif Wu
 Power Source: AC 120V/60Hz

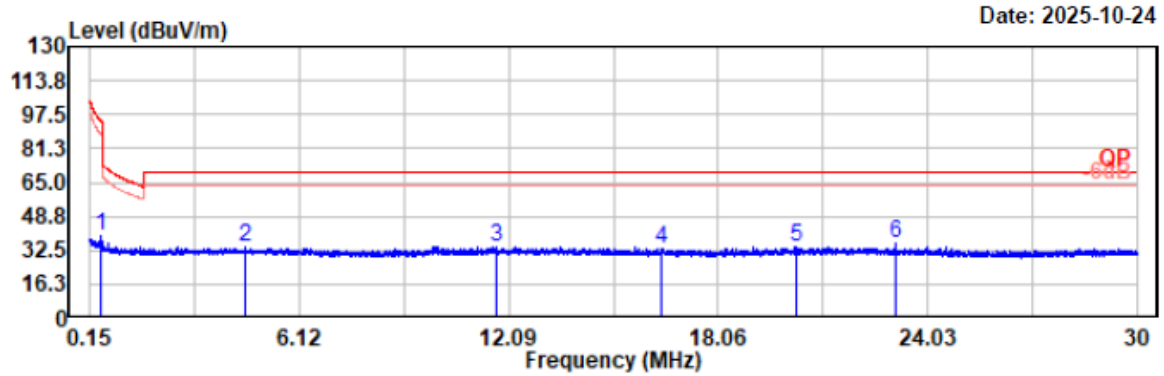


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
1.186	17.95	19.71	37.66	66.12	28.46	Peak
16.457	16.60	19.86	36.46	69.54	33.08	Peak
18.245	15.31	19.97	35.28	69.54	34.26	Peak
19.711	18.49	20.07	38.56	69.54	30.98	Peak
20.260	18.37	20.10	38.47	69.54	31.07	Peak
20.809	15.96	20.11	36.07	69.54	33.47	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

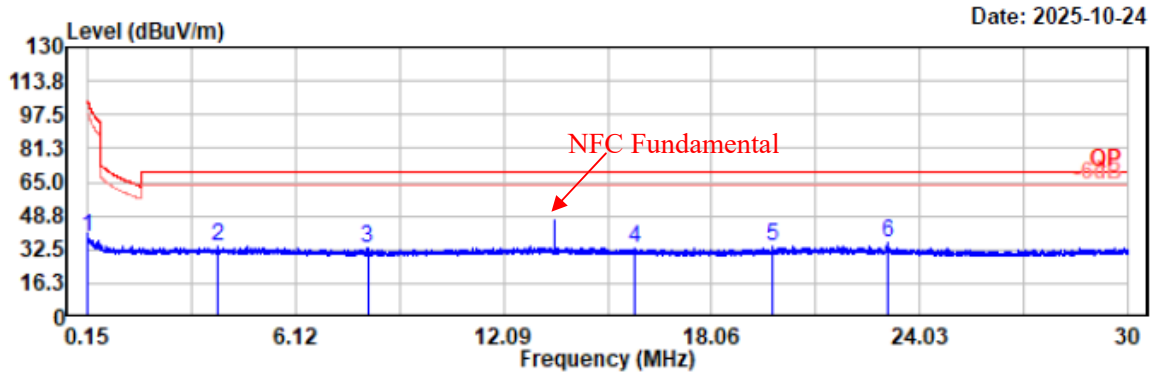


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.451	19.50	19.79	39.29	94.51	55.22	Peak
4.595	14.20	19.71	33.91	69.54	35.63	Peak
11.714	14.52	19.72	34.24	69.54	35.30	Peak
16.454	13.63	19.86	33.49	69.54	36.05	Peak
20.263	14.37	20.10	34.47	69.54	35.07	Peak
23.129	15.74	20.17	35.91	69.54	33.63	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

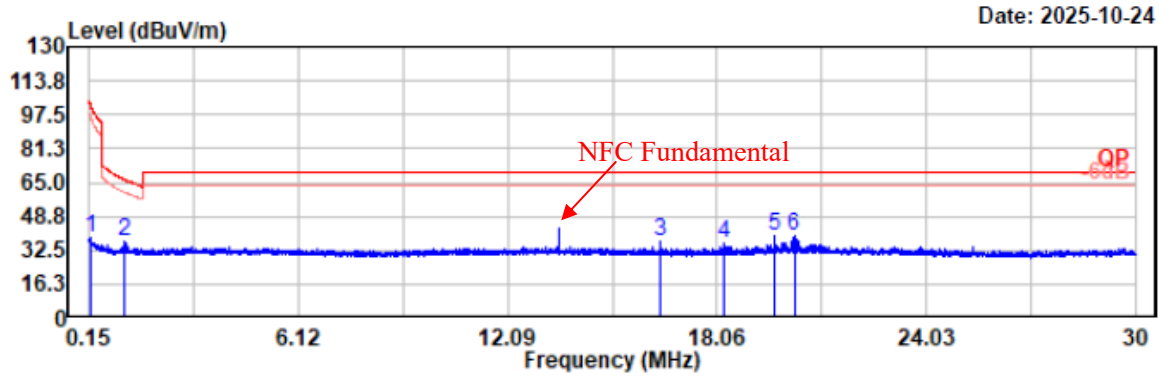


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.153	18.45	19.72	38.17	103.91	65.74	Peak
3.872	14.69	19.77	34.46	69.54	35.08	Peak
8.183	13.34	19.68	33.02	69.54	36.52	Peak
15.833	13.36	19.81	33.17	69.54	36.37	Peak
19.788	13.73	20.08	33.81	69.54	35.73	Peak
23.132	15.44	20.17	35.61	69.54	33.93	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



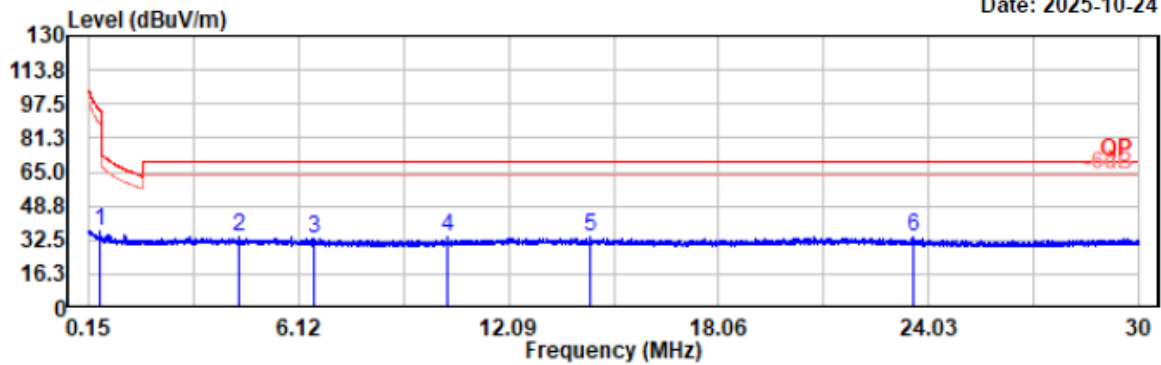
Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.174	18.47	19.72	38.19	102.80	64.61	Peak
1.174	17.02	19.71	36.73	66.21	29.48	Peak
16.457	17.14	19.86	37.00	69.54	32.54	Peak
18.245	15.77	19.97	35.74	69.54	33.80	Peak
19.711	18.99	20.07	39.06	69.54	30.48	Peak
20.260	19.04	20.10	39.14	69.54	30.40	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.454	17.22	19.79	37.01	94.45	57.44	Peak
4.413	14.57	19.72	34.29	69.54	35.25	Peak
6.550	13.58	19.74	33.32	69.54	36.22	Peak
10.347	13.98	19.70	33.68	69.54	35.86	Peak
14.421	14.56	19.75	34.31	69.54	35.23	Peak
23.573	13.80	20.18	33.98	69.54	35.56	Peak

3) 30MHz-1GHz

Project No.: 2507X04884E-RF

Test Mode: Model

EUT Model: A08K

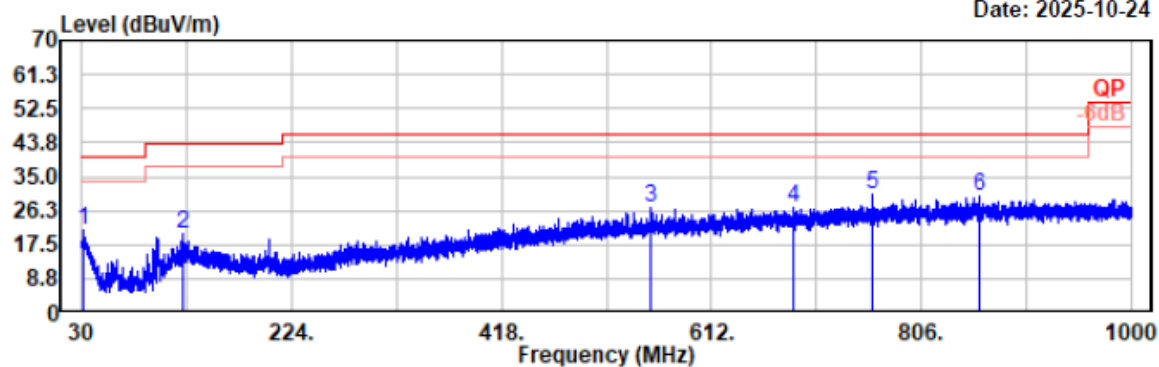
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.87	26.95	-5.82	21.13	40.00	18.87	Horizontal	Peak
123.80	30.01	-9.95	20.06	43.50	23.44	Horizontal	Peak
555.93	29.71	-2.62	27.09	46.00	18.91	Horizontal	Peak
688.63	27.30	-0.46	26.84	46.00	19.16	Horizontal	Peak
760.41	29.90	0.61	30.51	46.00	15.49	Horizontal	Peak
859.74	27.80	2.07	29.87	46.00	16.13	Horizontal	Peak

Project No.: 2507X04884E-RF

Test Mode: Model

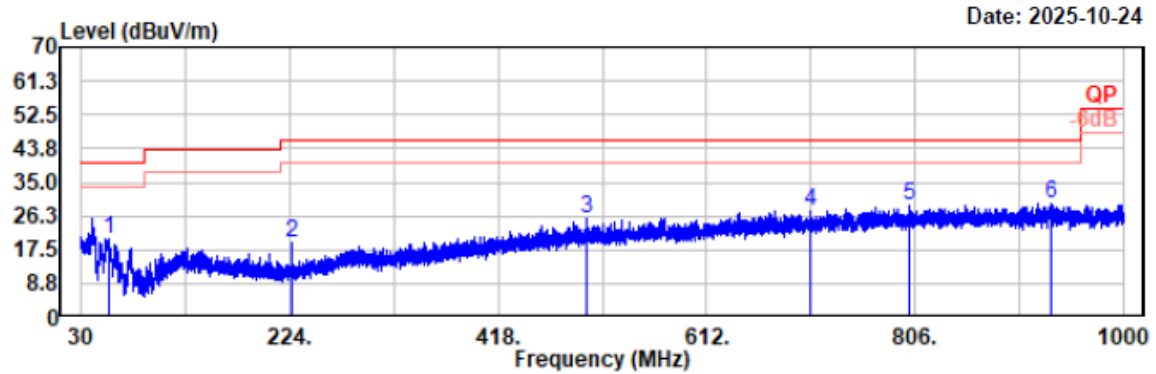
EUT Model: A08K

Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz



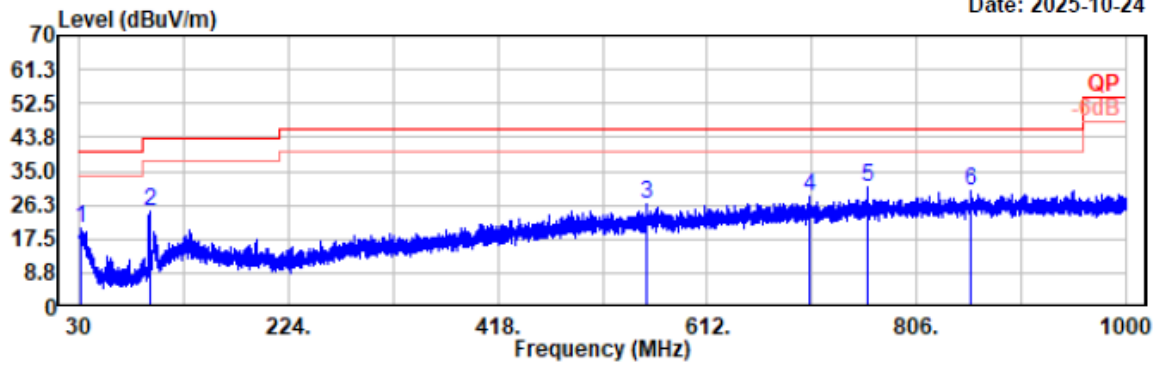
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
55.12	38.21	-17.81	20.40	40.00	19.60	Vertical	Peak
226.04	31.85	-12.44	19.41	46.00	26.59	Vertical	Peak
500.35	29.05	-3.40	25.65	46.00	20.35	Vertical	Peak
708.22	27.81	-0.13	27.68	46.00	18.32	Vertical	Peak
799.89	27.67	1.25	28.92	46.00	17.08	Vertical	Peak
933.36	26.60	3.00	29.60	46.00	16.40	Vertical	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBUV	Factor dB/m	Result dBUV/m	Limit dBUV/m	Margin dB	Polarity	Remark
30.68	26.02	-5.77	20.25	40.00	19.75	Horizontal	Peak
94.89	41.08	-16.36	24.72	43.50	18.78	Horizontal	Peak
555.93	29.24	-2.62	26.62	46.00	19.38	Horizontal	Peak
707.35	28.45	-0.15	28.30	46.00	17.70	Horizontal	Peak
760.51	30.35	0.61	30.96	46.00	15.04	Horizontal	Peak
855.86	27.95	1.98	29.93	46.00	16.07	Horizontal	Peak

Project No.: 2507X04884E-RF

Test Mode: Mode2

EUT Model: A08K

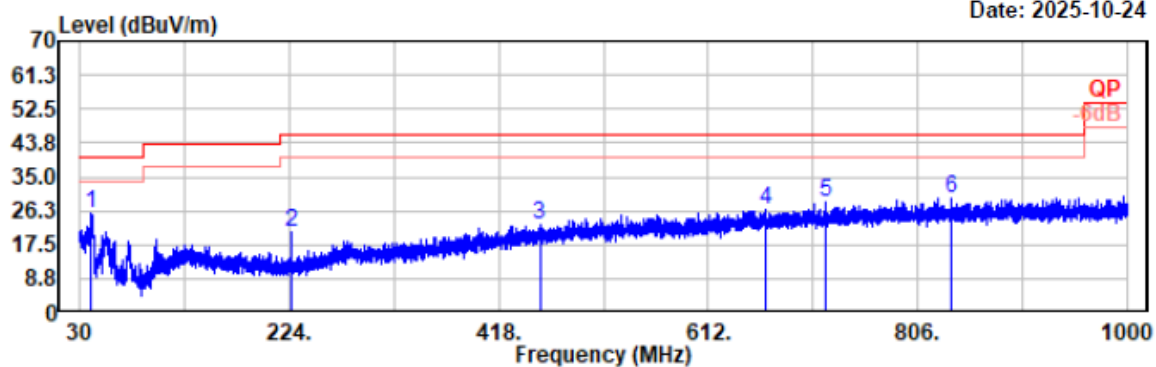
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

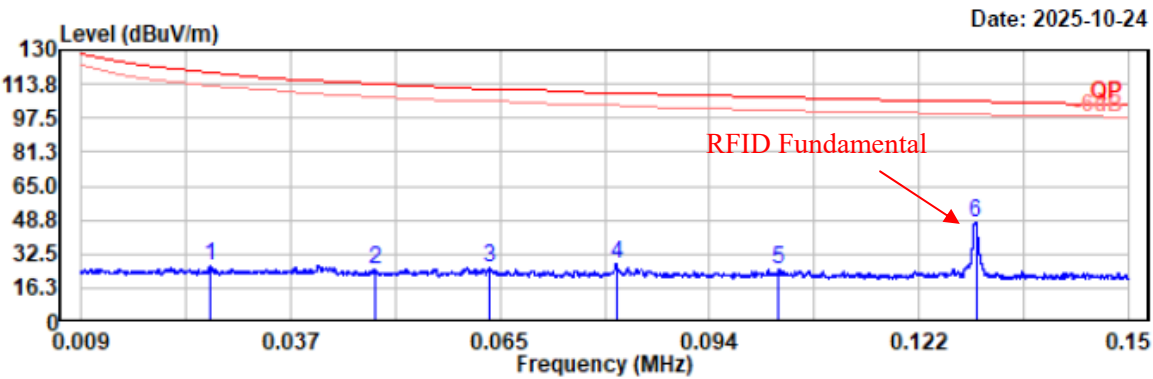
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
40.57	37.70	-12.06	25.64	40.00	14.36	Vertical	Peak
226.04	33.43	-12.44	20.99	46.00	25.01	Vertical	Peak
456.02	27.19	-4.69	22.50	46.00	23.50	Vertical	Peak
665.16	27.43	-0.74	26.69	46.00	19.31	Vertical	Peak
721.13	28.49	0.05	28.54	46.00	17.46	Vertical	Peak
837.33	27.60	1.79	29.39	46.00	16.61	Vertical	Peak

DC 48V from PoE

1) 9 kHz~150 kHz:

Project No.: 2507X04884E-RF
Test Mode: Model (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5℃/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



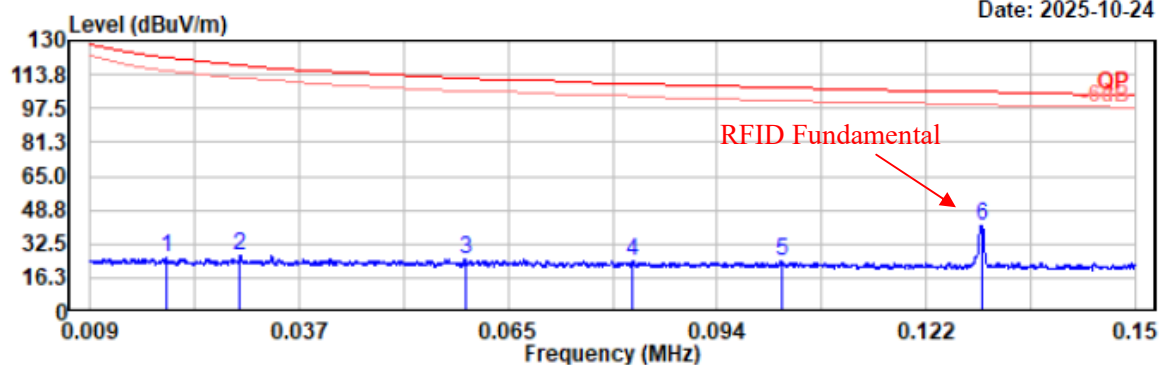
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.026	6.92	19.87	26.79	119.23	92.44	Peak
0.049	5.36	19.91	25.27	113.88	88.61	Peak
0.064	6.05	19.87	25.92	111.49	85.57	Peak
0.081	8.28	19.72	28.00	109.43	81.43	Peak
0.103	5.55	19.73	25.28	107.35	82.07	Peak
0.129	27.90	19.73	47.63	105.36	57.73	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24

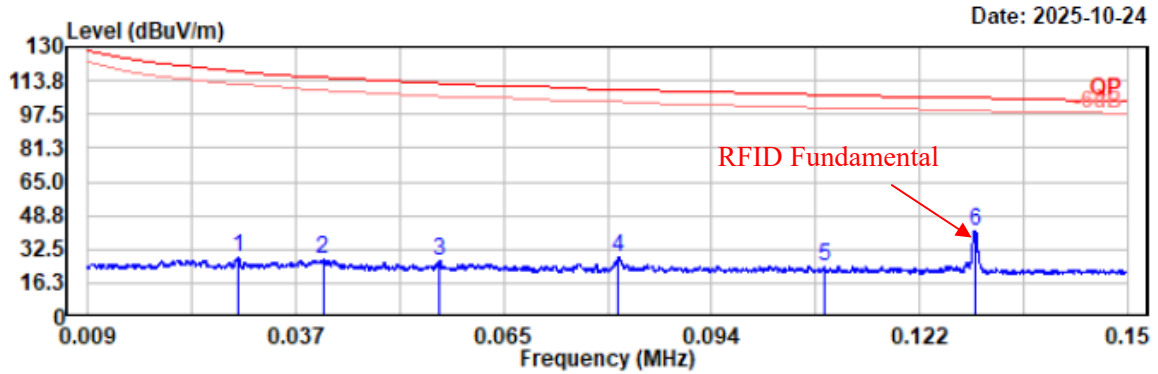


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.019	6.07	19.79	25.86	121.91	96.05	Peak
0.029	7.00	19.90	26.90	118.29	91.39	Peak
0.060	5.36	19.91	25.27	112.10	86.83	Peak
0.082	4.51	19.73	24.24	109.31	85.07	Peak
0.102	4.13	19.73	23.86	107.41	83.55	Peak
0.129	21.67	19.73	41.40	105.37	63.97	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



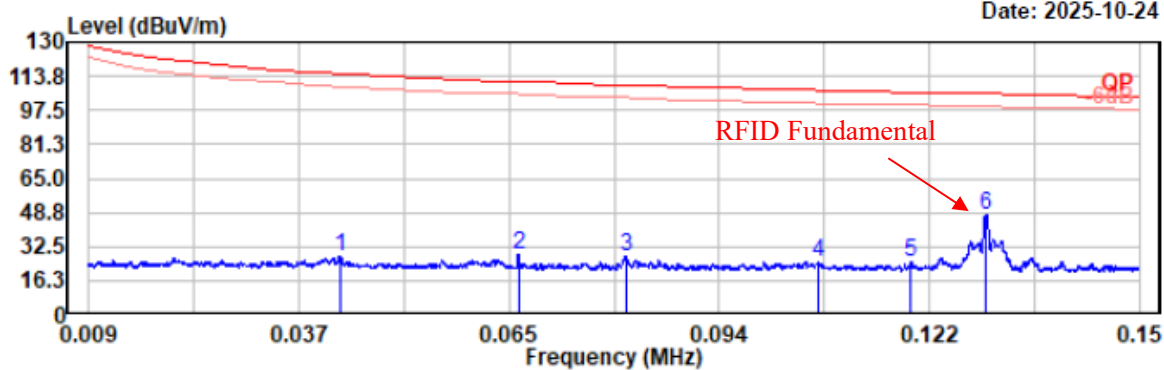
Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.029	8.80	19.90	28.70	118.25	89.55	Peak
0.041	7.44	19.91	27.35	115.39	88.04	Peak
0.057	6.94	19.91	26.85	112.53	85.68	Peak
0.081	9.23	19.72	28.95	109.44	80.49	Peak
0.109	4.64	19.73	24.37	106.87	82.50	Peak
0.129	21.84	19.73	41.57	105.37	63.80	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24

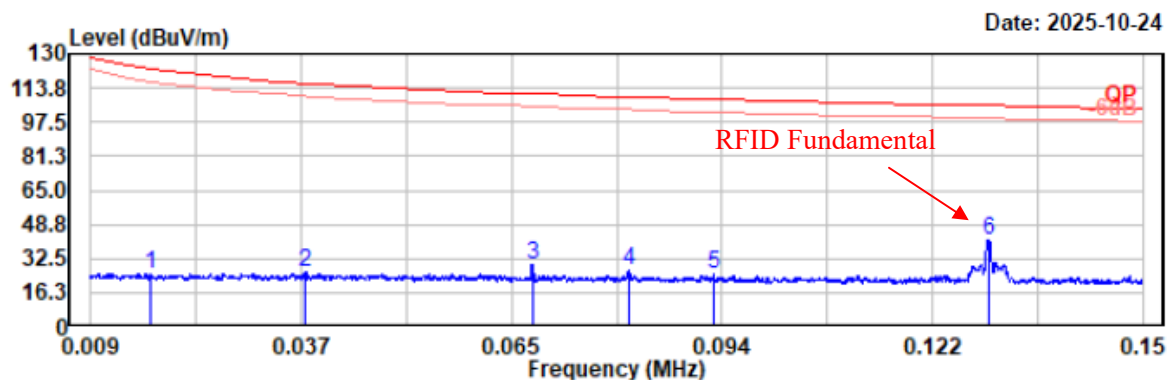


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.043	7.92	19.91	27.83	115.00	87.17	Peak
0.067	9.27	19.84	29.11	111.14	82.03	Peak
0.081	8.33	19.72	28.05	109.43	81.38	Peak
0.107	5.36	19.73	25.09	107.03	81.94	Peak
0.119	5.27	19.73	25.00	106.07	81.07	Peak
0.129	27.84	19.73	47.57	105.36	57.79	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

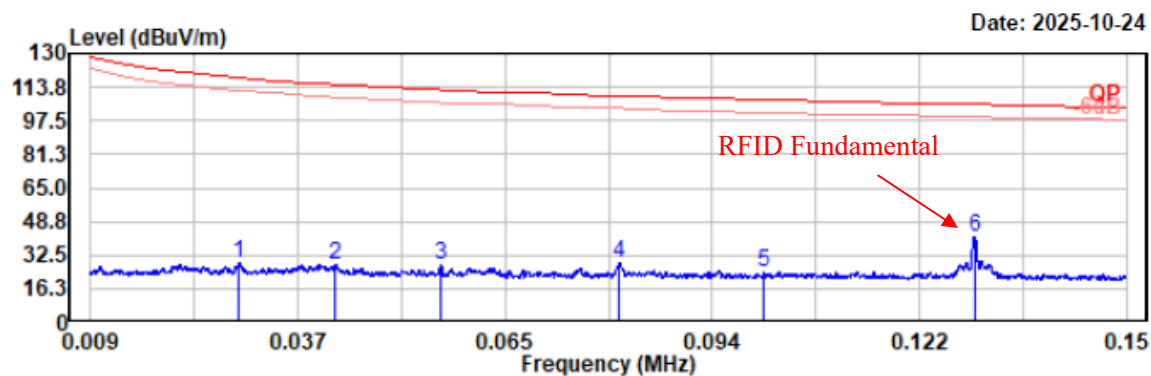


Condition: PK RBW:300Hz VBW:1kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.017	5.52	19.73	25.25	122.97	97.72	Peak
0.038	5.81	19.91	25.72	116.06	90.34	Peak
0.068	10.05	19.83	29.88	110.93	81.05	Peak
0.081	7.08	19.72	26.80	109.43	82.63	Peak
0.092	4.97	19.79	24.76	108.29	83.53	Peak
0.129	21.88	19.73	41.61	105.37	63.76	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Condition: PK RBW:300Hz VBW:1kHz SWT:auto

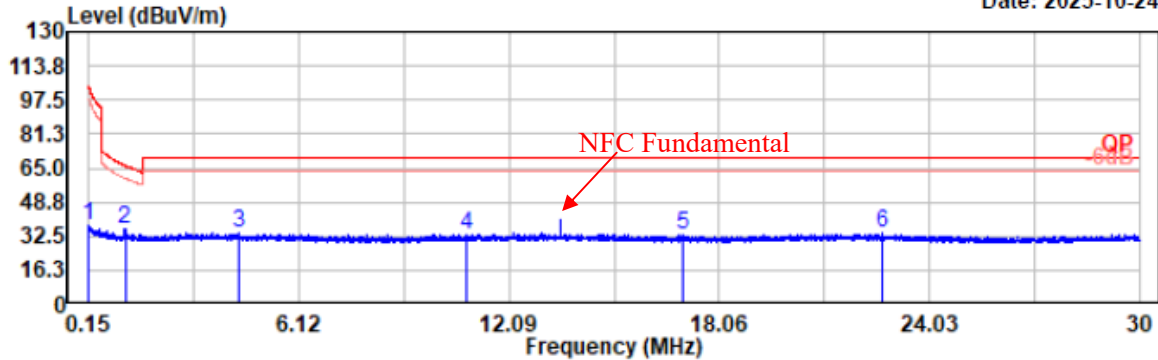
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.029	8.74	19.90	28.64	118.31	89.67	Peak
0.042	8.22	19.91	28.13	115.08	86.95	Peak
0.057	7.48	19.91	27.39	112.54	85.15	Peak
0.081	9.15	19.72	28.87	109.44	80.57	Peak
0.101	4.55	19.73	24.28	107.56	83.28	Peak
0.129	21.31	19.73	41.04	105.37	64.33	Peak

2) 150 kHz ~30MHz

Project No.: 2507X04884E-RF
Test Mode: Model (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24



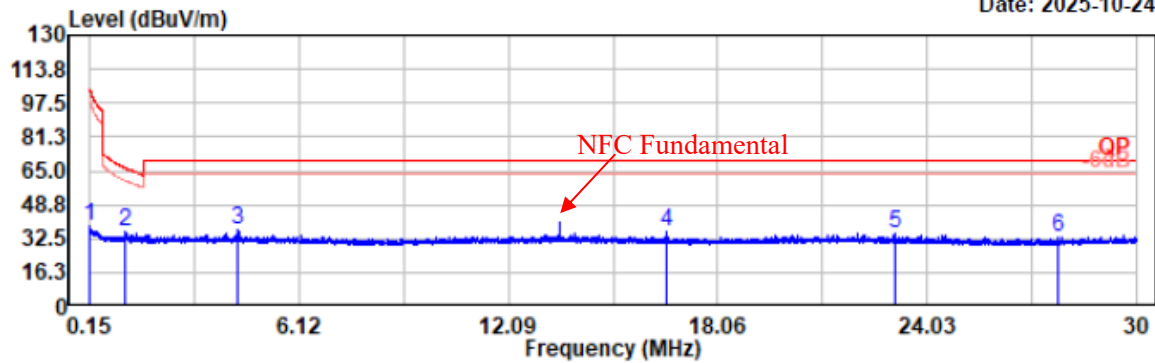
Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.150	17.60	19.72	37.32	104.08	66.76	Peak
1.183	16.18	19.71	35.89	66.15	30.26	Peak
4.398	14.10	19.72	33.82	69.54	35.72	Peak
10.878	13.75	19.71	33.46	69.54	36.08	Peak
17.027	13.70	19.89	33.59	69.54	35.95	Peak
22.690	13.88	20.16	34.04	69.54	35.50	Peak

Project No.: 2507X04884E-RF
Test Mode: Model (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

Date: 2025-10-24

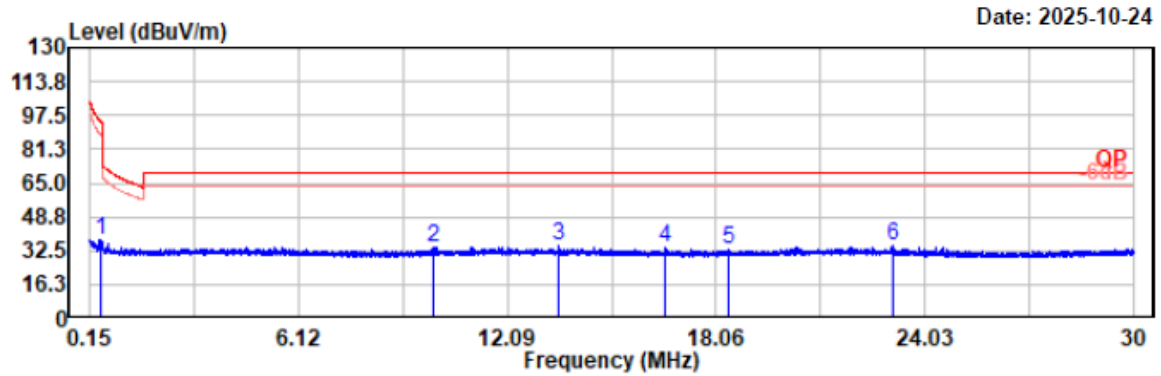


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.156	18.43	19.72	38.15	103.74	65.59	Peak
1.162	16.59	19.71	36.30	66.30	30.00	Peak
4.380	16.81	19.72	36.53	69.54	33.01	Peak
16.609	15.87	19.87	35.74	69.54	33.80	Peak
23.132	14.64	20.17	34.81	69.54	34.73	Peak
27.782	13.36	20.08	33.44	69.54	36.10	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode1 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

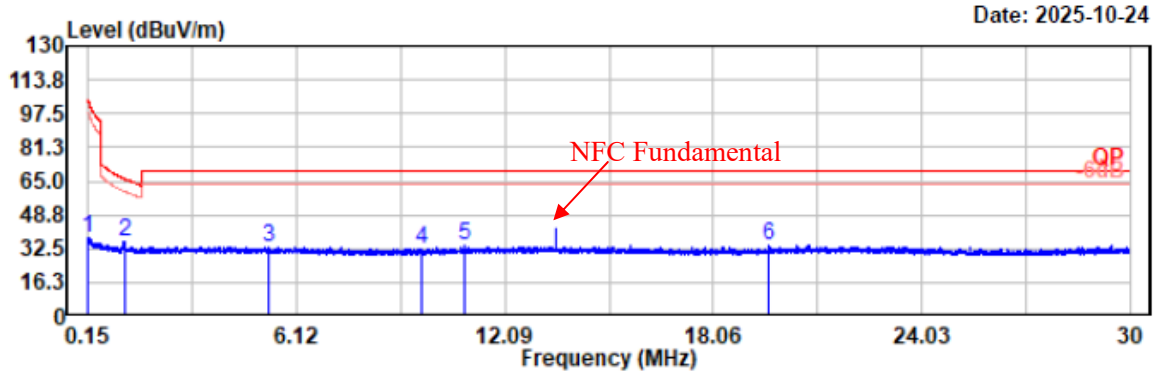


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.457	18.07	19.79	37.86	94.40	56.54	Peak
9.998	14.10	19.70	33.80	69.54	35.74	Peak
13.562	14.85	19.74	34.59	69.54	34.95	Peak
16.606	14.07	19.87	33.94	69.54	35.60	Peak
18.391	13.41	19.98	33.39	69.54	36.15	Peak
23.132	14.64	20.17	34.81	69.54	34.73	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

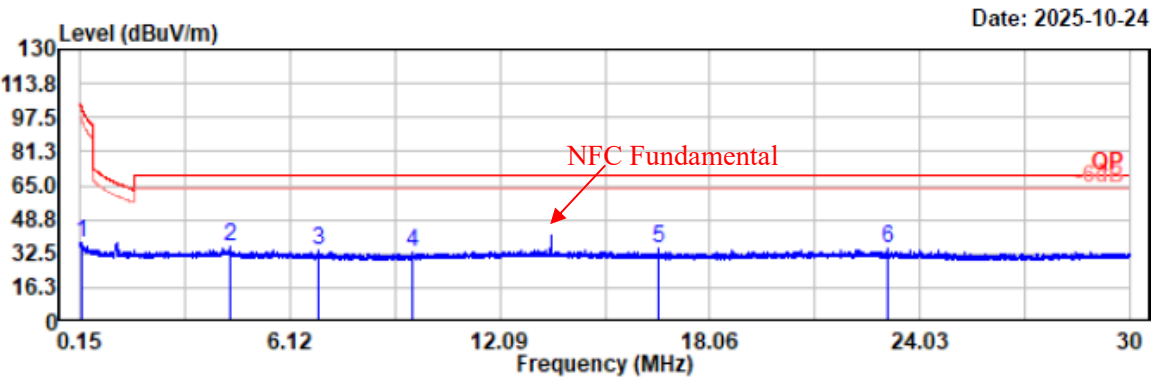


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.150	17.66	19.72	37.38	104.08	66.70	Peak
1.192	16.17	19.71	35.88	66.08	30.20	Peak
5.344	13.46	19.71	33.17	69.54	36.37	Peak
9.708	12.91	19.70	32.61	69.54	36.93	Peak
10.929	14.17	19.71	33.88	69.54	35.66	Peak
19.666	13.70	20.07	33.77	69.54	35.77	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Perpendicular)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz

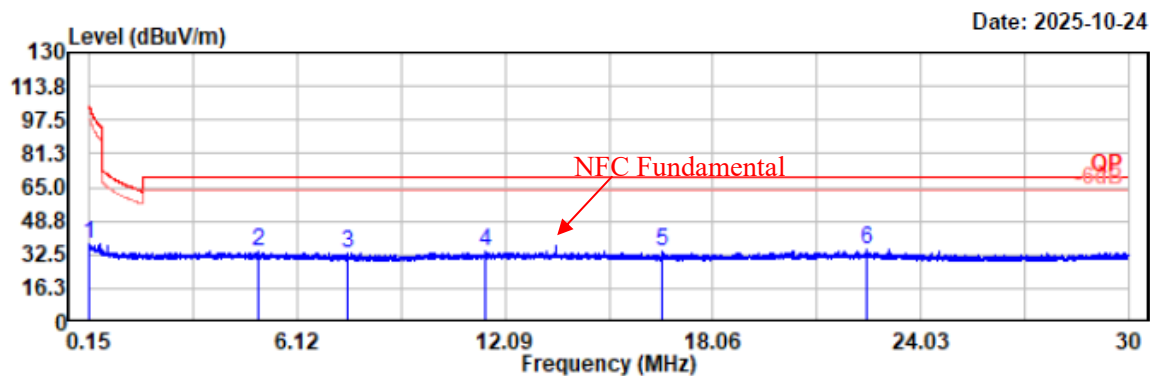


Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.174	17.95	19.72	37.67	102.80	65.13	Peak
4.413	15.89	19.72	35.61	69.54	33.93	Peak
6.950	14.19	19.69	33.88	69.54	35.66	Peak
9.601	13.04	19.70	32.74	69.54	36.80	Peak
16.609	15.52	19.87	35.39	69.54	34.15	Peak
23.132	14.56	20.17	34.73	69.54	34.81	Peak

Project No.: 2507X04884E-RF
Test Mode: Mode2 (Ground-parallel)
EUT Model: A08K
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa
Tested by: Wlif Wu
Power Source: AC 120V/60Hz



Condition: PK RBW:10kHz VBW:30kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.159	17.81	19.72	37.53	103.58	66.05	Peak
4.995	14.72	19.67	34.39	69.54	35.15	Peak
7.556	13.55	19.68	33.23	69.54	36.31	Peak
11.508	14.16	19.72	33.88	69.54	35.66	Peak
16.594	13.85	19.87	33.72	69.54	35.82	Peak
22.466	14.53	20.15	34.68	69.54	34.86	Peak

3) 30MHz-1GHz

Project No.: 2507X04884E-RF

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

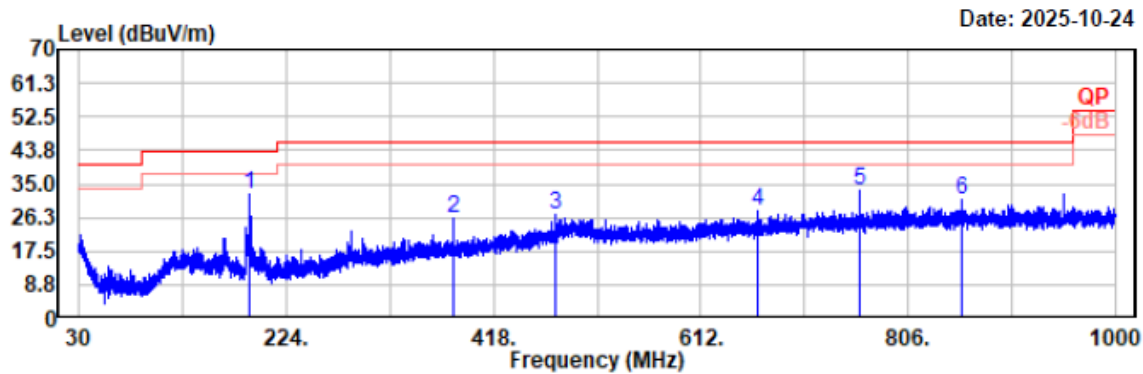
Test Mode: Mode1

Tested by: Wlif Wu

EUT Model: A08K

Power Source: AC 120V/60Hz

Test distance: 3m



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
190.15	44.49	-12.27	32.22	43.50	11.28	Horizontal	Peak
380.27	33.00	-7.11	25.89	46.00	20.11	Horizontal	Peak
475.52	31.27	-4.04	27.23	46.00	18.77	Horizontal	Peak
665.64	28.87	-0.73	28.14	46.00	17.86	Horizontal	Peak
760.90	32.49	0.62	33.11	46.00	12.89	Horizontal	Peak
855.96	28.75	1.98	30.73	46.00	15.27	Horizontal	Peak

Project No.: 2507X04884E-RF

Test Mode: Model

EUT Model: A08K

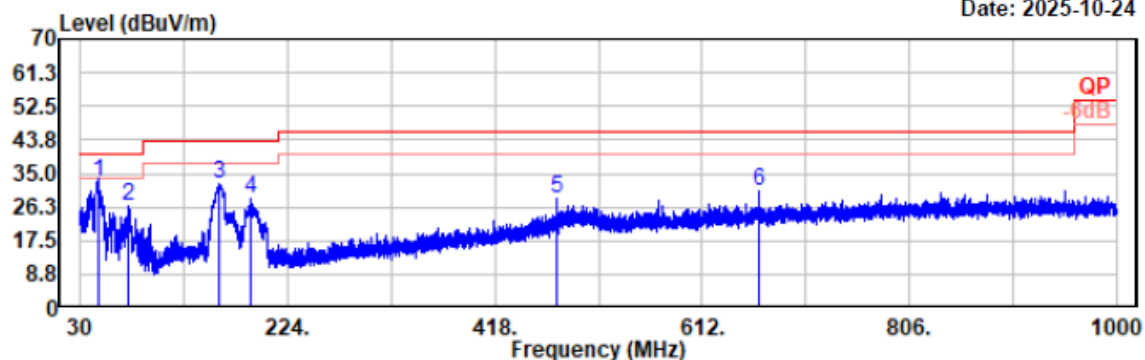
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
46.98	49.19	-16.34	32.85	40.00	7.15	Vertical	QP
74.62	43.81	-17.14	26.67	40.00	13.33	Vertical	Peak
159.88	43.85	-11.45	32.40	43.50	11.10	Vertical	Peak
190.15	40.94	-12.27	28.67	43.50	14.83	Vertical	Peak
475.42	32.30	-4.04	28.26	46.00	17.74	Vertical	Peak
665.64	31.10	-0.73	30.37	46.00	15.63	Vertical	Peak

Project No.: 2507X04884E-RF

Test Mode: Mode2

EUT Model: A08K

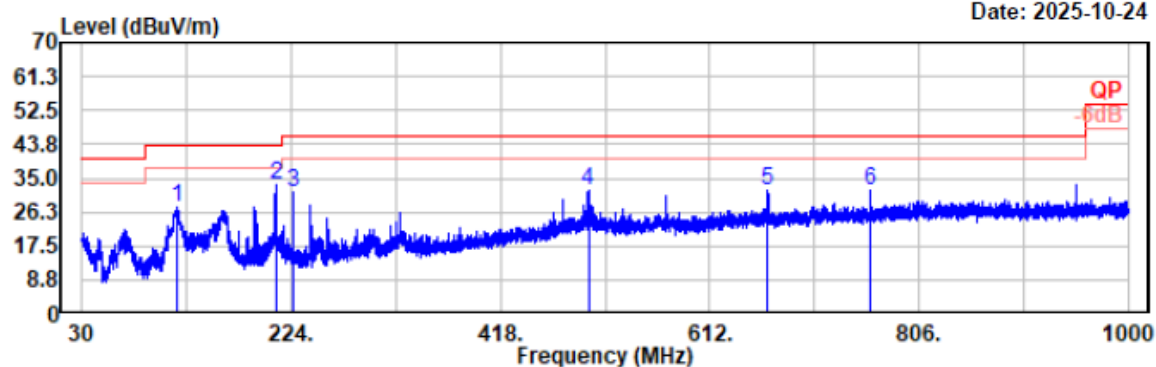
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
117.69	38.10	-10.55	27.55	43.50	15.95	Horizontal	Peak
209.64	46.09	-12.59	33.50	43.50	10.00	Horizontal	Peak
225.65	44.09	-12.47	31.62	46.00	14.38	Horizontal	Peak
499.38	35.12	-3.41	31.71	46.00	14.29	Horizontal	Peak
665.93	32.58	-0.72	31.86	46.00	14.14	Horizontal	Peak
761.19	31.08	0.62	31.70	46.00	14.30	Horizontal	Peak

Project No.: 2507X04884E-RF

Test Mode: Mode2

EUT Model: A08K

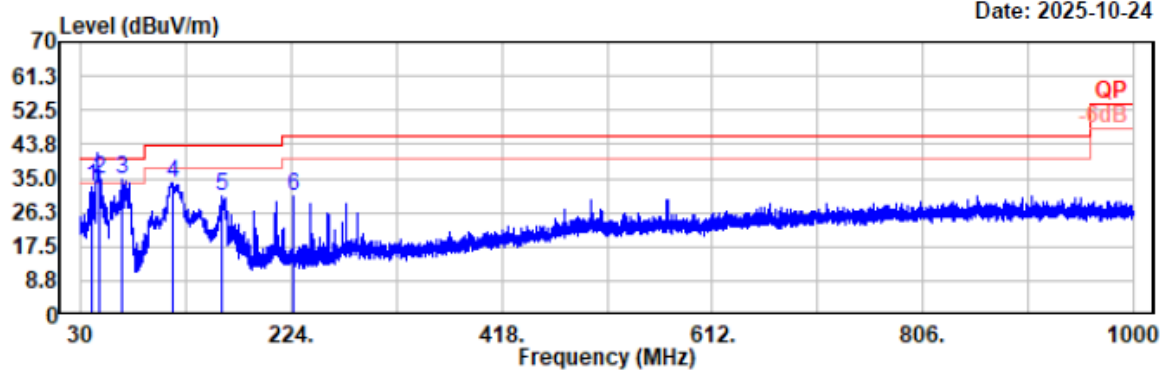
Test distance: 3m

Temp/Humi/ATM: 23.5°C/55%/100.1kPa

Tested by: Wlif Wu

Power Source: AC 120V/60Hz

Date: 2025-10-24



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
40.67	44.85	-12.12	32.73	40.00	7.27	Vertical	Peak
46.34	50.93	-15.97	34.96	40.00	5.04	Vertical	QP
67.54	51.97	-17.11	34.86	40.00	5.14	Vertical	QP
114.49	44.97	-11.06	33.91	43.50	9.59	Vertical	Peak
159.59	41.64	-11.45	30.19	43.50	13.31	Vertical	Peak
225.75	42.91	-12.46	30.45	46.00	15.55	Vertical	Peak

§15.215(c) - 20dB EMISSION BANDWIDTH TESTING

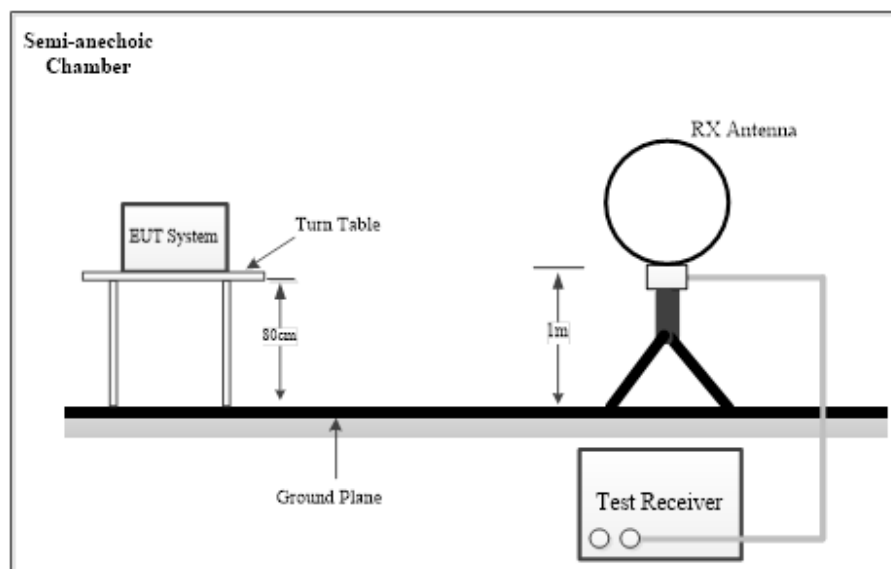
Requirement

Per 15.215 (c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

Test Procedure

1. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
2. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.

Test Setup Block diagram



Test Data

Test Mode:	Transmitting	Test Engineer:	Wlif Wu
Test Date:	2025-10-24	Environment:	Temp.: 23.5°C Humi.: 55% Atm:100.5kPa

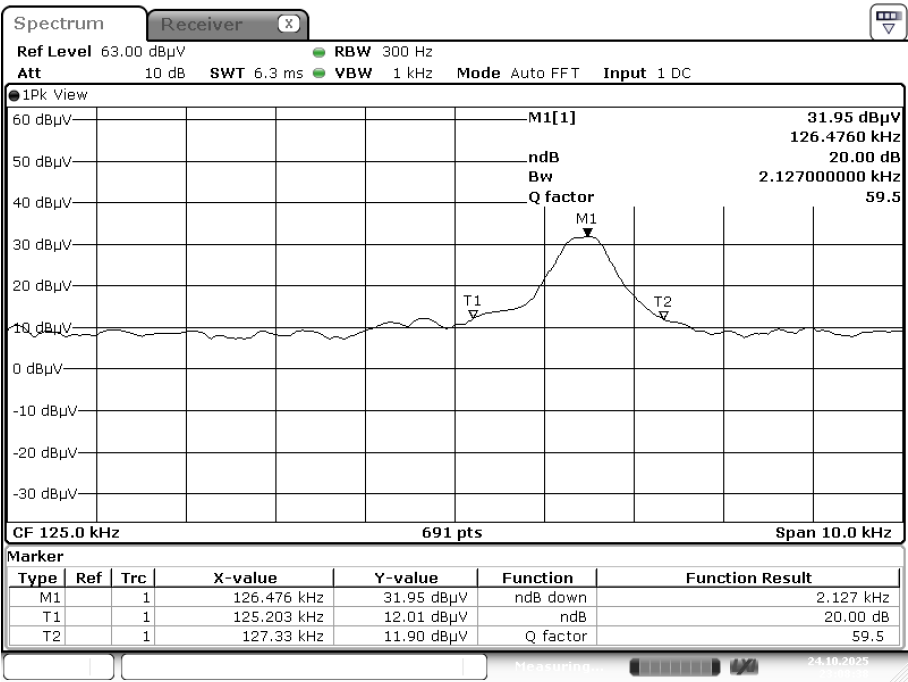
Test Result: Compliant

DC 12V from Adapter

EUT Mode	Frequency (MHz)	20 dB Bandwidth (kHz)
no card swiping	0.125	2.127
swiping card	0.125	5.192

no card swiping

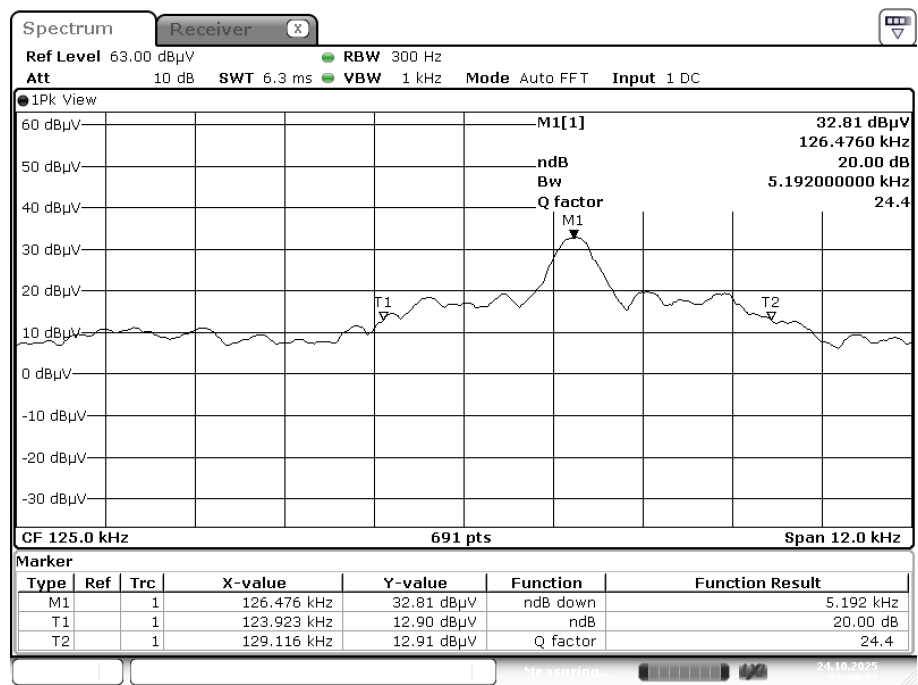
20 dB Emission Bandwidth-125kHz



ProjectNo.:2507X04884E-RF Tester:Wlif Wu
Date: 24.OCT.2025 23:08:38

swiping card

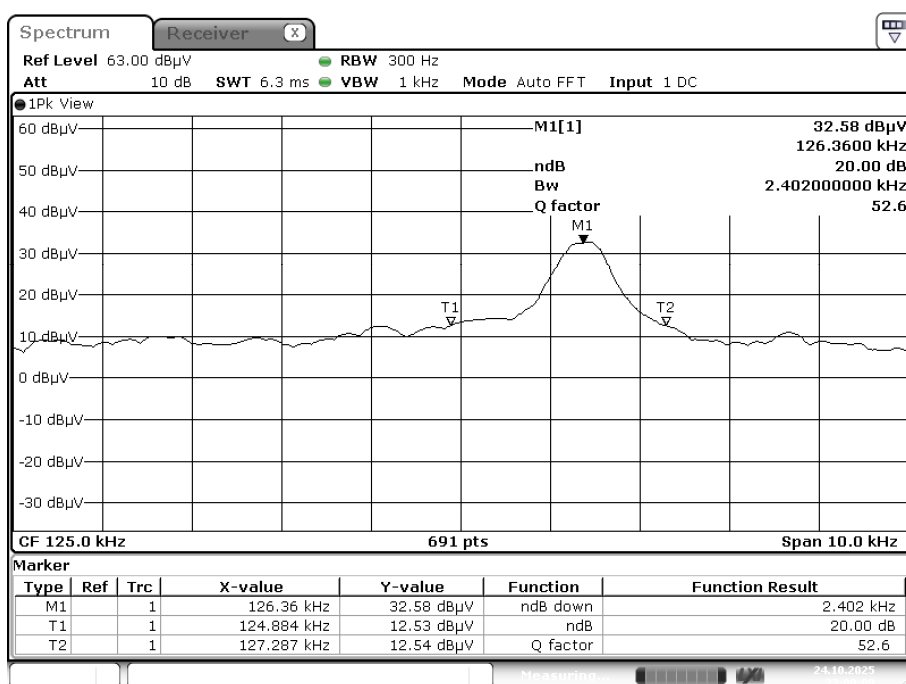
20 dB Emission Bandwidth-125kHz



ProjectNo.:2507X04884E-RF Tester:Wlif Wu
Date: 24.OCT.2025 23:09:51

DC 48V from PoE

EUT Mode	Frequency (MHz)	20 dB Bandwidth (kHz)
no card swiping	0.125	2.402
swiping card	0.125	3.459

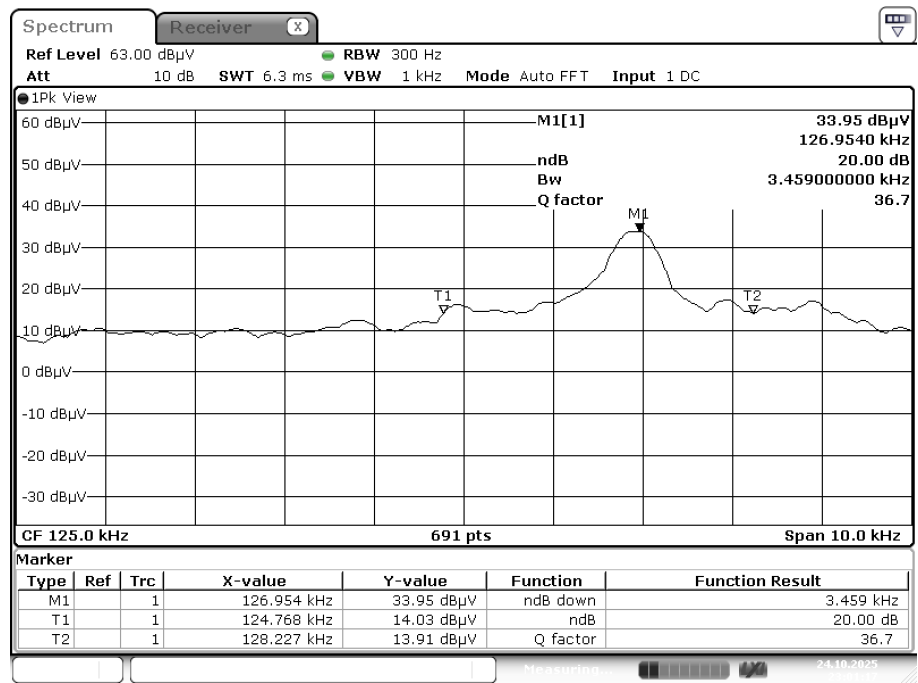
no card swiping**20 dB Emission Bandwidth-125kHz**

ProjectNo.:2507X04884E-RF Tester:Wlif Wu

Date: 24.OCT.2025 23:00:09

swiping card

20 dB Emission Bandwidth-125kHz



ProjectNo.:2507X04884E-RF Tester:Wlif Wu
Date: 24.OCT.2025 23:01:17

EUT PHOTOGRAPHS

Please refer to the attachment 2507X04884E-RF-EXP_EUT EXTERNAL PHOTOGRAPHS and 2507X04884E-RF-INP_EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2507X04884E-RF-TSP TEST SETUP PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk “★”.
 2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.
 3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.
 4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95% confidence interval.
 5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).
 6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.
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******* END OF REPORT *******