

TEST REPORT

Applicant Name: Shenzhen Saiku Electronic Co., Ltd.
Address: 3F, Building C14, Fuyuan Industrial City, Jiuwei Community,
Hangcheng Street, Shenzhen, China
Report Number: 2504Y29066E-RF
FCC ID: 2A8DG-B2

Test Standard (s)

FCC PART15C

Sample Description

Product Name: Pet Barrier Transmitter
Model No.: B2
Trade Mark: N/A
Date Received: 2025-10-31
Report Date: 2025-12-01

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

Amanda Wei

Amanda Wei
EMC Engineer

Approved By:

Bob. Liao

Bob.Liao
EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2504Y29066E-RF	Original Report	2025-12-01

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Pet Barrier Transmitter
Tested Model	B2
Operating Frequency	125kHz
Modulation Technique [#]	ASK
Antenna Type	Internal Antenna
Maximum E-field Strength	98.61 dBuV/m@3m
Voltage Range [#]	DC 3.7V from battery or DC 5V from USB
Sample Serial Number	3C2L-1 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

This test report is in accordance with Part 2, Subpart J, and Part 15, Subparts A and C of the Federal Communications Commission’s rules.

The objective is to determine the compliance of EUT with FCC rules, section 15.203, 15.205, 15.207and 15.209.

Test Methodology

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

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5 %
Unwanted Emission, conducted		1.2 dB
AC Power Lines Conducted Emissions		2.7 dB
Emissions, Radiated	9kHz - 30MHz	2.1 dB
	30MHz - 1GHz	4.3 dB
Temperature		1 °C
Humidity		7 %
Supply voltages		0.4 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in engineering mode and the power is default, which was provided and declared by manufacturer.

Operating frequency: 125kHz

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

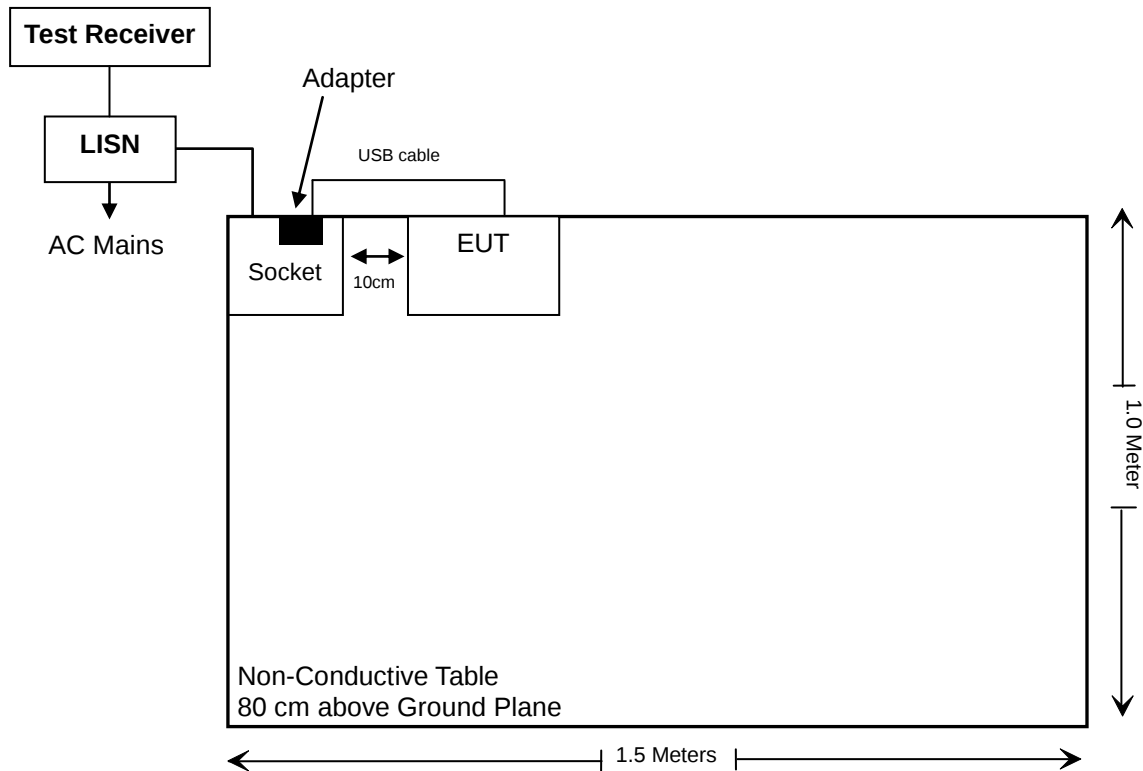
Manufacturer	Description	Model	Serial Number
Unknown	Adapter	Unknown	Unknown

External I/O Cable

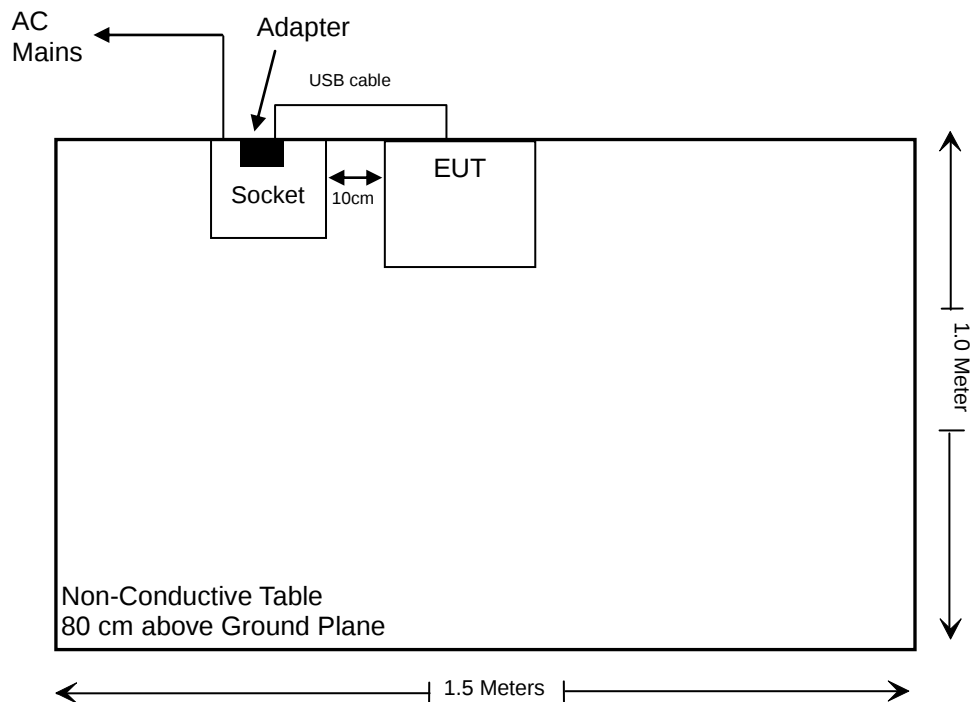
Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	NO	0.8	EUT	Adapter

Block Diagram of Test Setup

For Conducted Emission:



For Radiated Emission Below 1GHz:



SUMMARY OF TEST RESULTS

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

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100784	2025/09/17	2026/09/16
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2025/09/17	2026/09/16
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2025/09/18	2026/09/17
Rohde & Schwarz	Pulse Limiter	ESH3-Z2	100312	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.17	N0350	2025/05/30	2026/05/29
Test Software: e3 191218 (V9)					
Radiated Spurious Emission Test(Below 1GHz) /20dB Emission Bandwidth					
Rohde & Schwarz	Test Receiver	ESR	102725	2025/09/18	2026/09/17
SONOMA INSTRUMENT	Amplifier	310N	186131	2025/03/26	2026/03/25
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2024/08/08	2027/08/07
Unknown	RF Coaxial Cable	No.12	N040	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.13	N300	2025/05/30	2026/05/29
Unknown	RF Coaxial Cable	No.14	N800	2025/05/30	2026/05/29
BACL	LOOP ANTENNA	1313-1A	3110711	2024/01/16	2027/01/15
Test Software: e3 191218 (V9)					

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 15.203, 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 Connector Construction

The EUT has one internal antenna arrangement which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

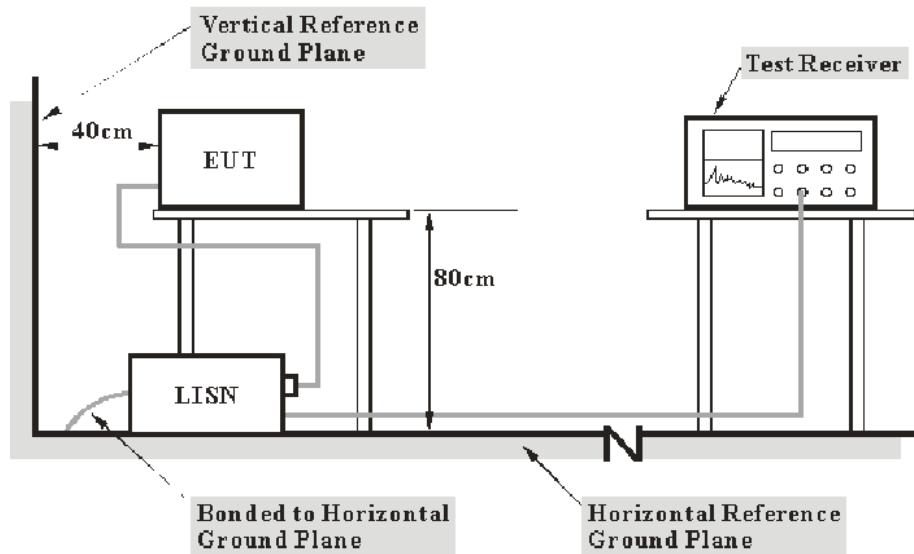
Result: Compliance.

AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.10-2020. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

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.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss + 10dB Attenuation(Limiter)

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

Over Limit = Level - Limit

Level = Read Level + Factor

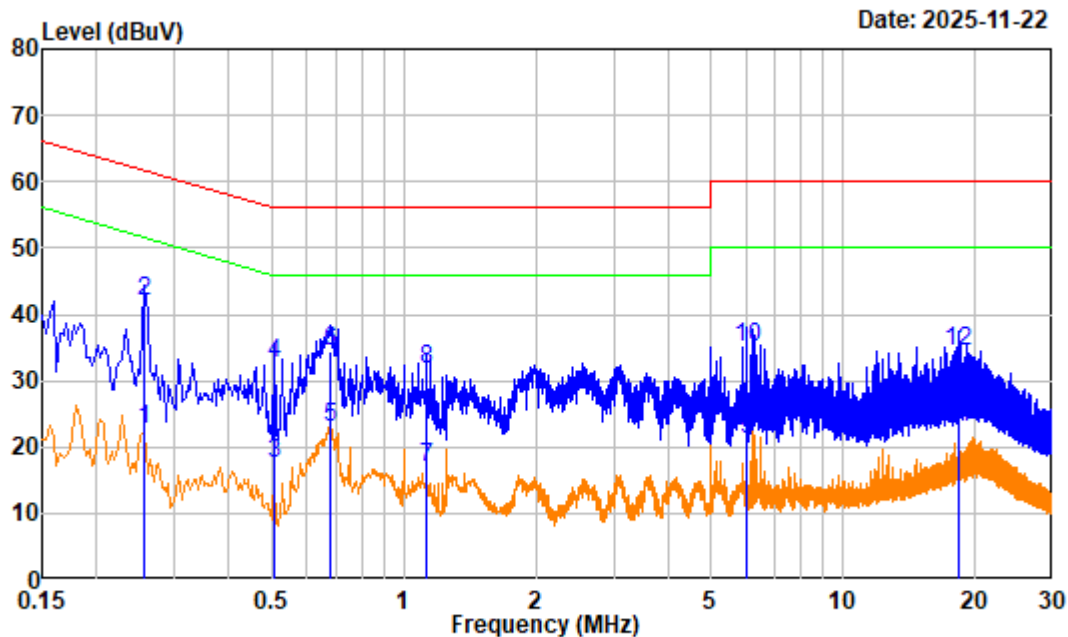
Test Data

Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	49 %
ATM Pressure:	101.1 kPa
Test Engineer:	Jason Fan
Test Date:	2025-11-22
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

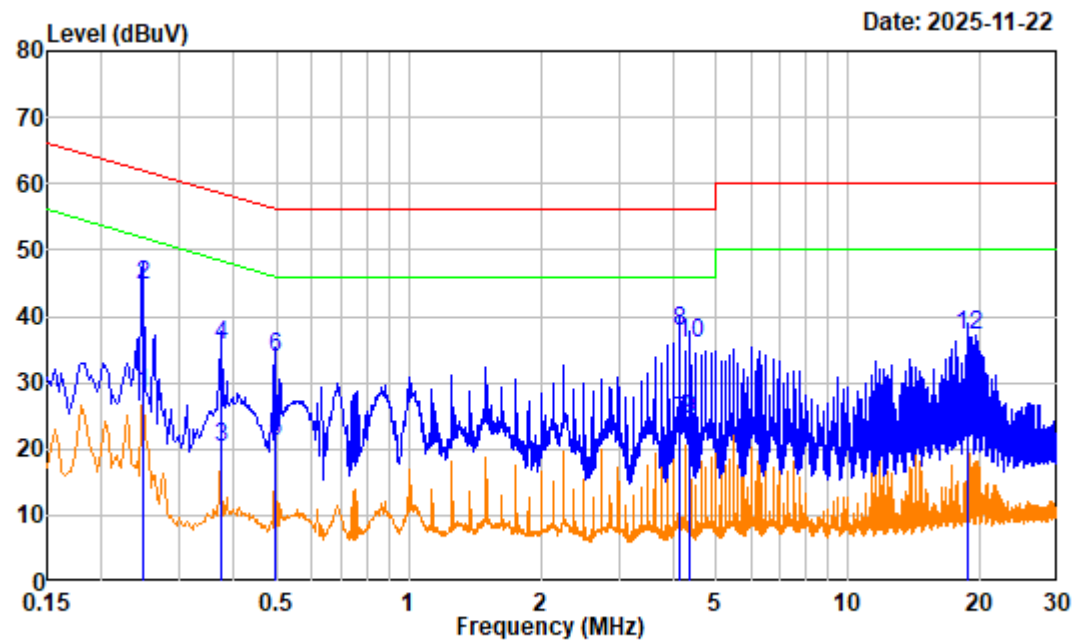
AC 120V/60Hz, Line:



Site : Shielding Room
Condition: Line
Job No. : 2504Y29066E-RF
Test Mode: Transmitting
Tester : Jason Fan
Setting : IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.255	19.95	2.75	22.70	51.59	-28.89	Average
2	0.255	19.95	21.91	41.86	61.59	-19.73	QP
3	0.506	19.99	-2.49	17.50	46.00	-28.50	Average
4	0.506	19.99	12.47	32.46	56.00	-23.54	QP
5	0.677	20.15	2.78	22.93	46.00	-23.07	Average
6	0.677	20.15	14.38	34.53	56.00	-21.47	QP
7	1.130	20.38	-3.34	17.04	46.00	-28.96	Average
8	1.130	20.38	11.44	31.82	56.00	-24.18	QP
9	6.000	21.89	-0.88	21.01	50.00	-28.99	Average
10	6.000	21.89	13.08	34.97	60.00	-25.03	QP
11	18.239	23.80	-0.95	22.85	50.00	-27.15	Average
12	18.239	23.80	10.68	34.48	60.00	-25.52	QP

AC 120V/60Hz, Neutral:



Site : Shielding Room
Condition: neutral
Job No. : 2504Y29066E-RF
Test Mode: Transmitting
Tester : Jason Fan
Setting : IF B/W 9kHz PK/AV

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.249	19.93	8.42	28.35	51.78	-23.43	Average
2	0.249	19.93	24.88	44.81	61.78	-16.97	QP
3	0.375	19.94	0.26	20.20	48.39	-28.19	Average
4	0.375	19.94	15.82	35.76	58.39	-22.63	QP
5	0.495	20.03	1.22	21.25	46.09	-24.84	Average
6	0.495	20.03	13.74	33.77	56.09	-22.32	QP
7	4.123	21.39	2.70	24.09	46.00	-21.91	Average
8	4.123	21.39	16.23	37.62	56.00	-18.38	QP
9	4.370	21.48	3.01	24.49	46.00	-21.51	Average
10	4.370	21.48	14.53	36.01	56.00	-19.99	QP
11	18.755	23.92	-0.15	23.77	50.00	-26.23	Average
12	18.755	23.92	13.19	37.11	60.00	-22.89	QP

RADIATED EMISSIONS

Applicable Standard

FCC§15.205, §15.209

According to FCC Part 15.209

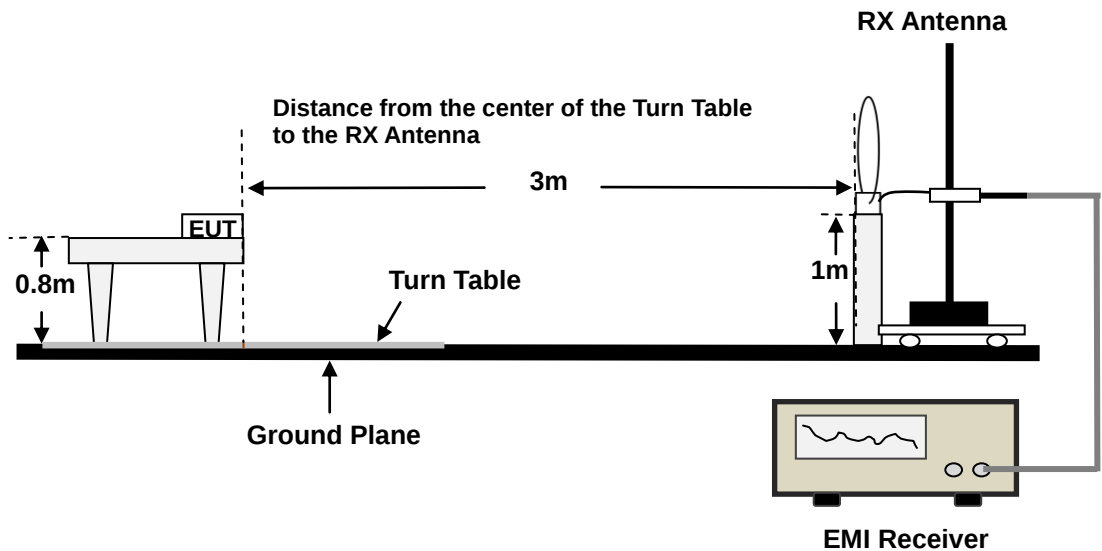
(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

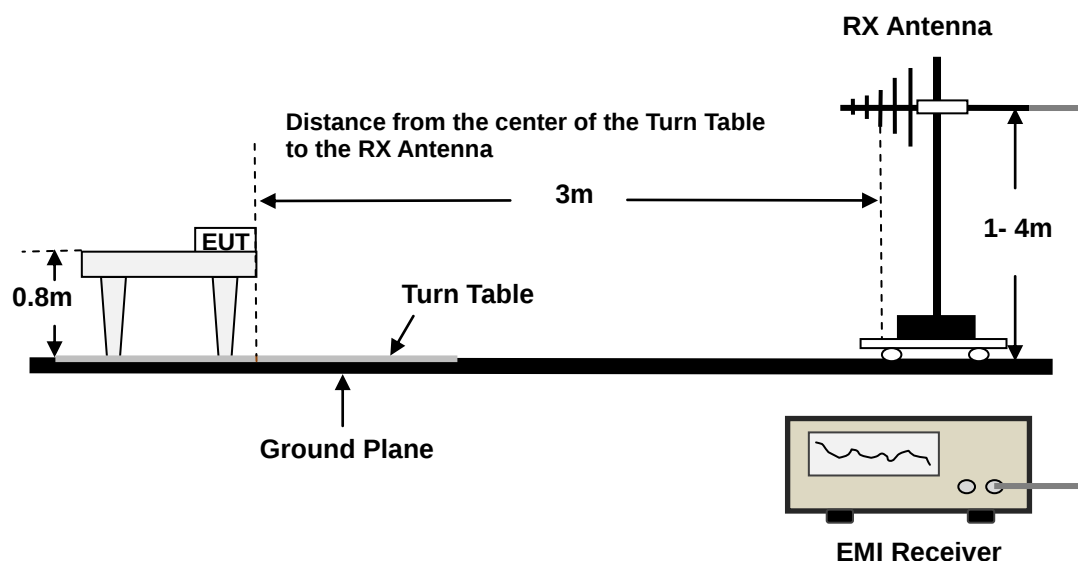
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

**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.

EUT Setup

9kHz - 30MHz:



30MHz - 1GHz:

The radiated emission performed in the 3 meters, 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

The system was investigated from 9 kHz to 1 GHz.

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

9kHz – 1GHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9kHz - 150kHz	PK	0.3kHz	1kHz	/	PK
	QP/AV	/	/	200Hz	QP/AV
150kHz - 30MHz	PK	10kHz	30kHz	/	PK
	QP/AV	/	/	9kHz	QP/AV
30MHz - 1000MHz	PK	100kHz	300kHz	/	PK
	QP	/	/	120kHz	QP

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform QP/Average measurement.

Test Procedure

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

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Calculation

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

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level / Corrected Amplitude} - \text{Limit} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Test Data

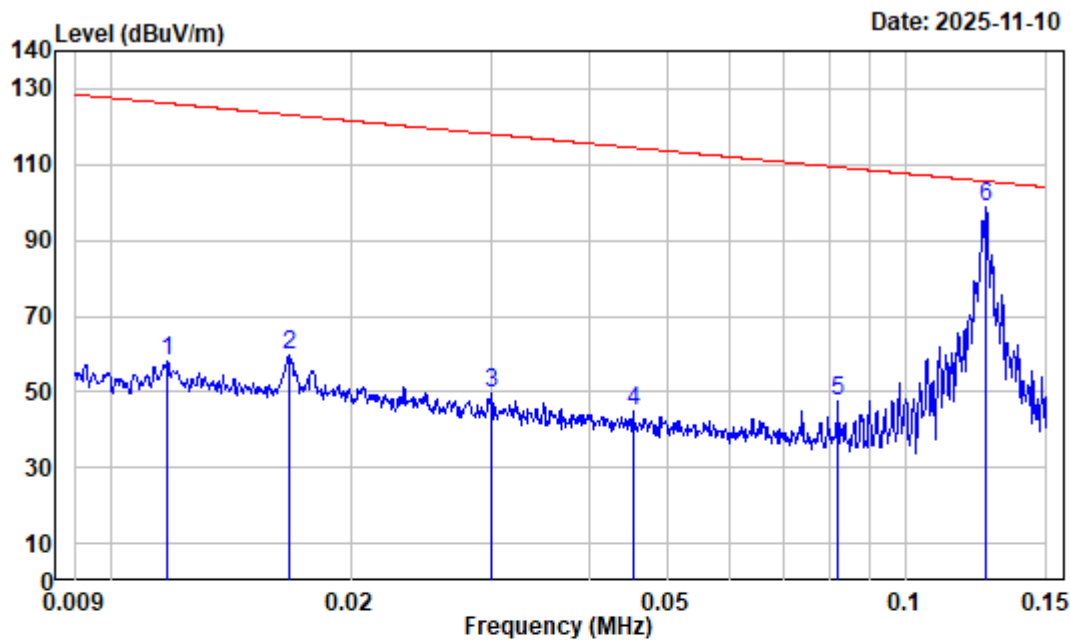
For Radiated Spurious Emissions, after pre-scan in the X, Y and Z axes of orientation, the worst case as setup photos was recorded.

Environmental Conditions

Temperature:	24.8 °C
Relative Humidity:	56 %
ATM Pressure:	101.1 kPa
Test Engineer:	Colin Lin
Test Date:	2025-11-10
EUT Operation Mode:	Transmitting

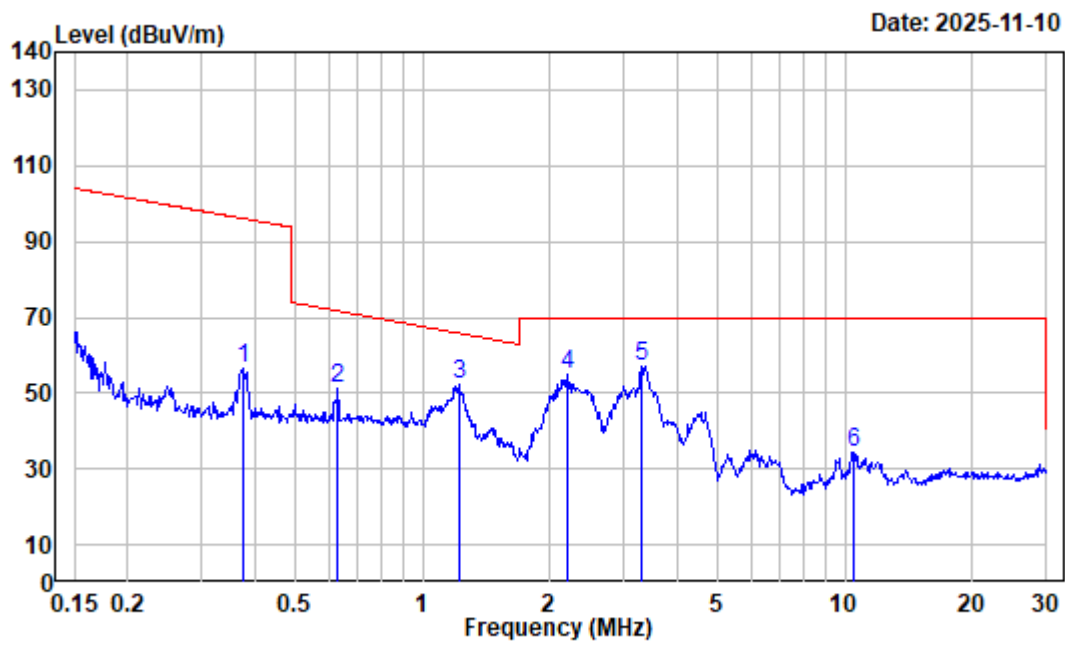
Test Result: Compliance, please refer to the below data.

9kHz~30MHz:



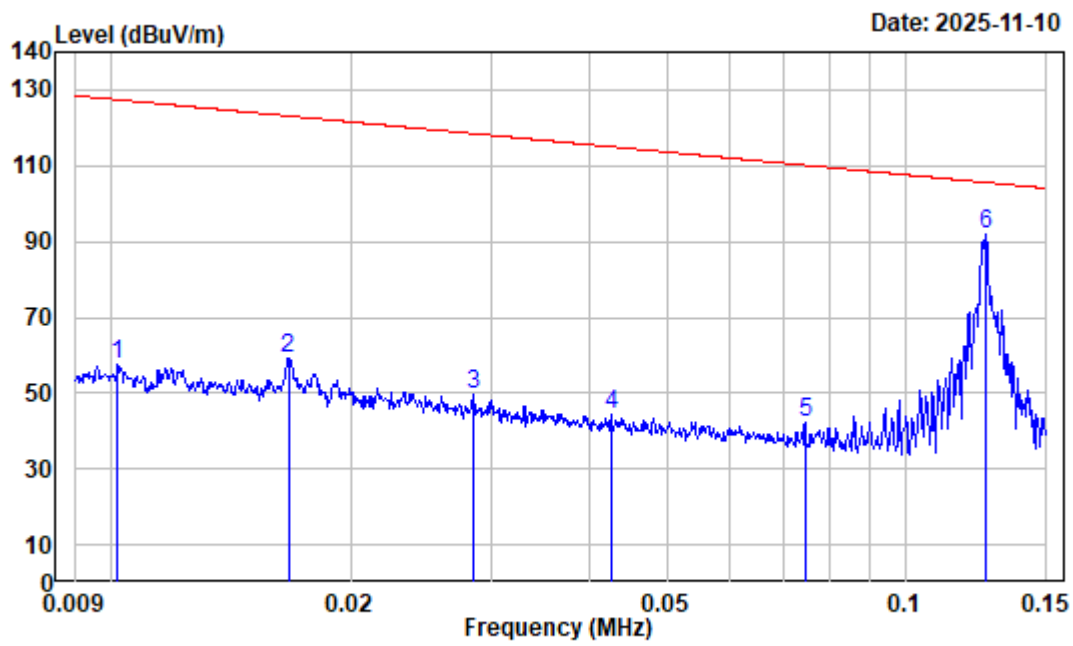
Site : Chamber
Condition : 3m
Job No. : 2504Y29066E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:300Hz VBW:1kHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	35.03	23.13	58.16	126.17	-68.01	Peak
2	0.017	32.83	26.78	59.61	123.12	-63.51	Peak
3	0.030	26.93	22.48	49.41	118.04	-68.63	Peak
4	0.045	23.77	20.98	44.75	114.47	-69.72	Peak
5	0.082	18.30	29.40	47.70	109.31	-61.61	Peak
6	0.126	15.26	83.35	98.61	105.60	-6.99	Peak



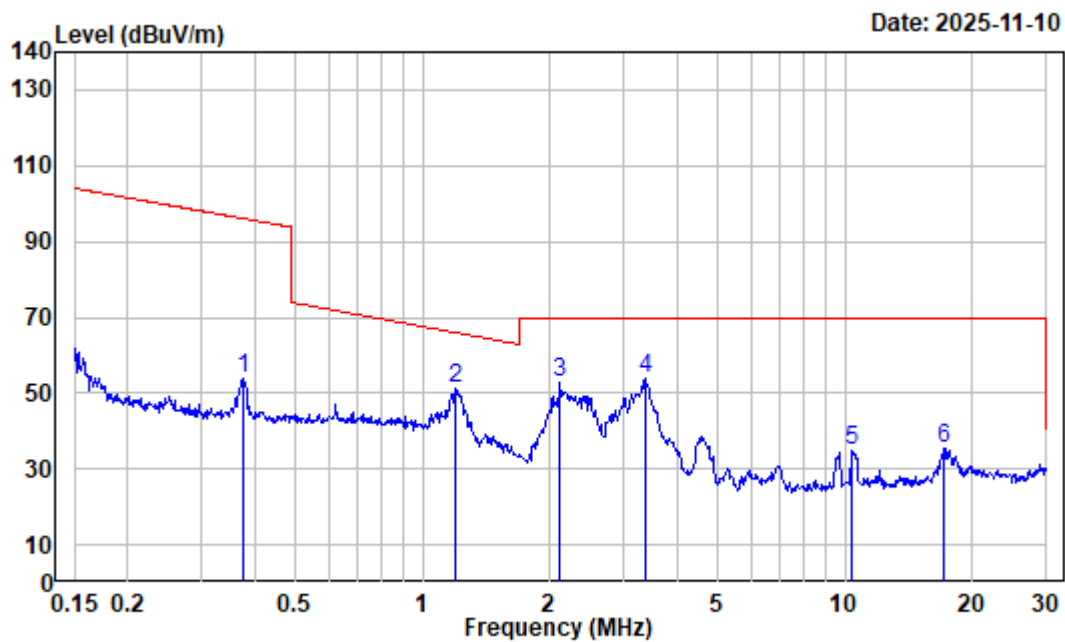
Site : Chamber
Condition : 3m
Job No. : 2504Y29066E-RF
Polarization : Parallel Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:10kHz VBW:30kHz

	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.375	5.78	50.89	56.67	96.12	-39.45	Peak
2	0.630	1.74	49.65	51.39	71.56	-20.17	Peak
3	1.223	-2.62	54.79	52.17	65.69	-13.52	Peak
4	2.213	-5.48	60.32	54.84	69.54	-14.70	Peak
5	3.293	-5.97	62.92	56.95	69.54	-12.59	Peak
6	10.452	-5.24	39.80	34.56	69.54	-34.98	Peak



Site : Chamber
Condition : 3m
Job No. : 2504Y29066E-RF
Polarization : Perpendicular Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:300Hz VBW:1kHz

	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	35.75	21.63	57.38	127.44	-70.06	Peak
2	0.017	32.85	26.53	59.38	123.14	-63.76	Peak
3	0.029	27.61	21.92	49.53	118.50	-68.97	Peak
4	0.043	24.35	20.04	44.39	115.03	-70.64	Peak
5	0.075	19.29	23.13	42.42	110.14	-67.72	Peak
6	0.126	15.26	76.64	91.90	105.60	-13.70	Peak



Site : Chamber

Condition : 3m

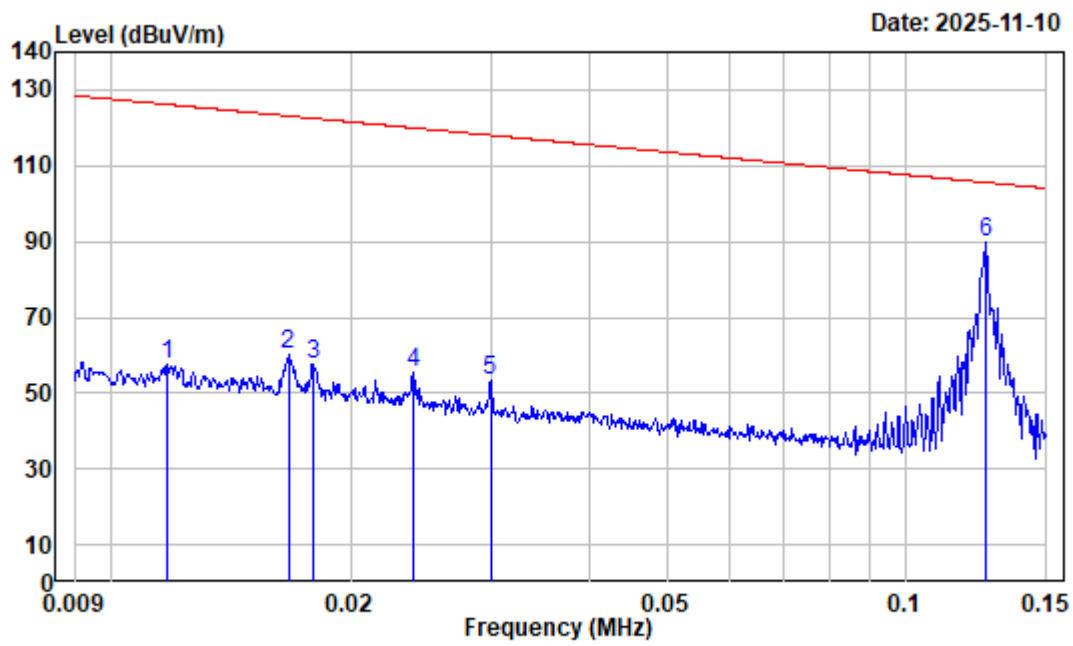
Job No. : 2504Y29066E-RF

Polarization : Perpendicular Tester: Colin Lin

Test Mode : Transmitting

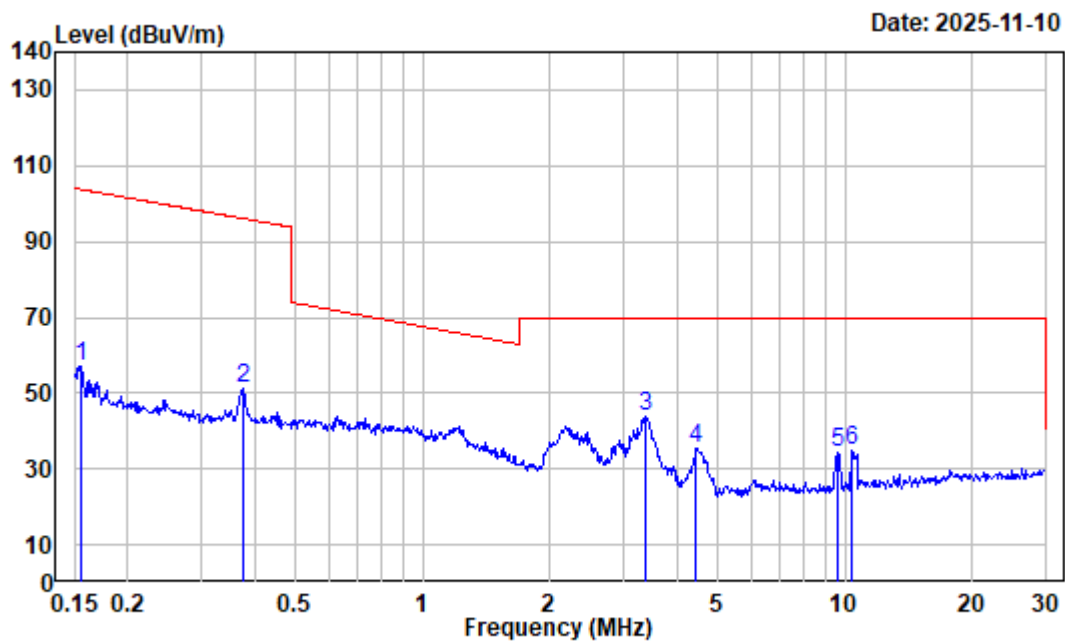
Receiver Setting: RBW:10kHz VBW:30kHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.375	5.78	48.29	54.07	96.12	-42.05	Peak
2	1.197	-2.53	53.85	51.32	65.88	-14.56	Peak
3	2.110	-5.43	58.01	52.58	69.54	-16.96	Peak
4	3.364	-6.00	59.88	53.88	69.54	-15.66	Peak
5	10.397	-5.25	40.29	35.04	69.54	-34.50	Peak
6	17.109	-3.84	39.32	35.48	69.54	-34.06	Peak



Site : Chamber
Condition : 3m
Job No. : 2504Y29066E-RF
Polarization : Ground-parallel Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:300Hz VBW:1kHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.012	35.05	22.38	57.43	126.20	-68.77	Peak
2	0.017	32.85	27.60	60.45	123.14	-62.69	Peak
3	0.018	32.31	25.26	57.57	122.53	-64.96	Peak
4	0.024	29.63	25.59	55.22	120.02	-64.80	Peak
5	0.030	26.95	26.22	53.17	118.06	-64.89	Peak
6	0.126	15.28	74.30	89.58	105.62	-16.04	Peak



Site : Chamber

Condition : 3m

Job No. : 2504Y29066E-RF

Polarization : Ground-parallel

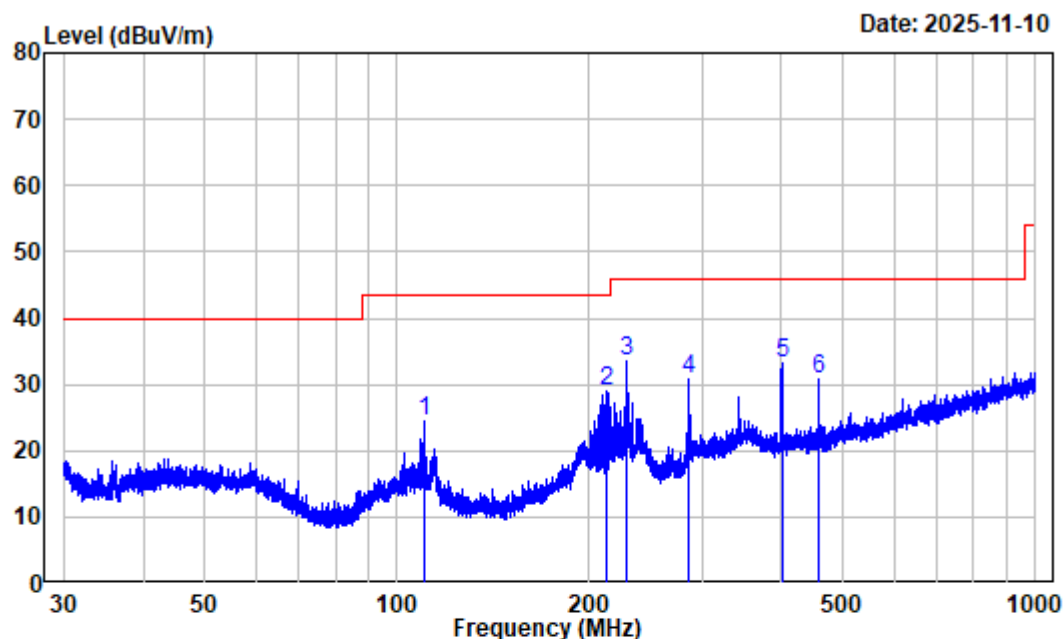
Test Mode : Transmitting

Receiver Setting: RBW:10kHz VBW:30kHz

Tester: Colin Lin

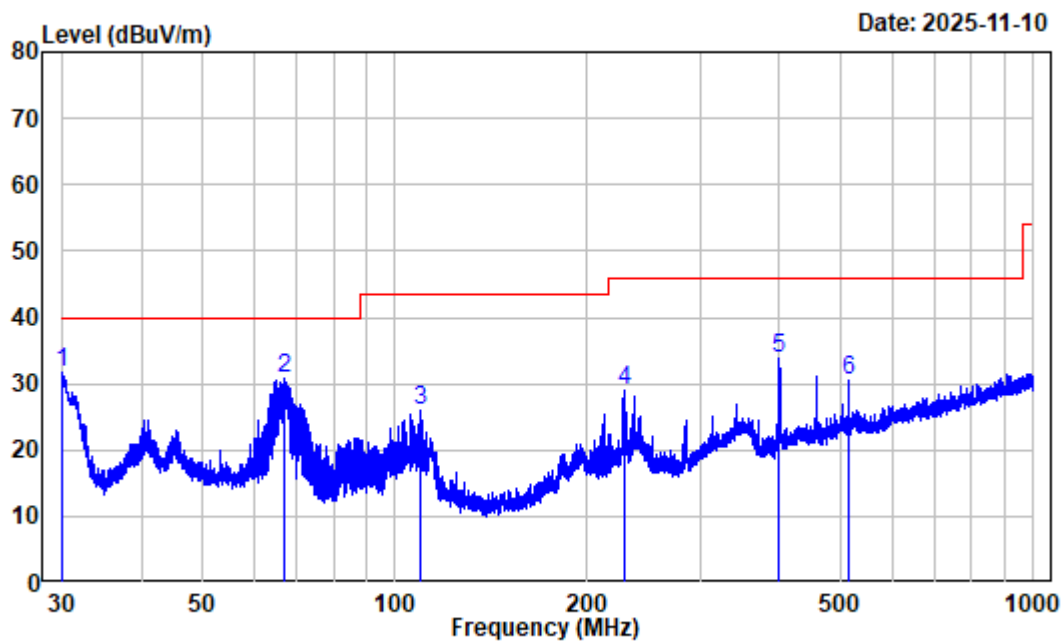
	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.155	13.95	43.28	57.23	103.81	-46.58	Peak
2	0.375	5.78	45.45	51.23	96.12	-44.89	Peak
3	3.364	-6.00	49.59	43.59	69.54	-25.95	Peak
4	4.454	-6.30	41.83	35.53	69.54	-34.01	Peak
5	9.654	-5.40	39.49	34.09	69.54	-35.45	Peak
6	10.397	-5.25	40.13	34.88	69.54	-34.66	Peak

30MHz~1GHz:



Site : Chamber
Condition : 3m HORIZONTAL
Job No. : 2504Y29066E-RF Tester: Colin Lin
Test Mode : Transmitting
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	110.617	-11.73	36.18	24.45	43.50	-19.05	Peak
2	212.456	-10.58	39.55	28.97	43.50	-14.53	Peak
3	229.092	-10.51	43.93	33.42	46.00	-12.58	Peak
4	286.103	-9.11	39.76	30.65	46.00	-15.35	Peak
5	400.607	-6.03	39.26	33.23	46.00	-12.77	Peak
6	457.909	-4.77	35.46	30.69	46.00	-15.31	Peak



Site : Chamber

Condition : 3m VERTICAL

Job No. : 2504Y29066E-RF Tester: Colin Lin

Test Mode : Transmitting

Receiver Setting: RBW:100kHz VBW:300kHz

	Freq		Read		Limit	Over	Remark
	Factor		Level	Level	Line	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.053	-11.78	43.53	31.75	40.00	-8.25	Peak
2	67.173	-13.38	44.03	30.65	40.00	-9.35	Peak
3	109.844	-11.59	37.64	26.05	43.50	-17.45	Peak
4	228.791	-10.51	39.44	28.93	46.00	-17.07	Peak
5	399.380	-6.06	39.73	33.67	46.00	-12.33	Peak
6	514.309	-3.60	34.20	30.60	46.00	-15.40	Peak

20dB EMISSION BANDWIDTH

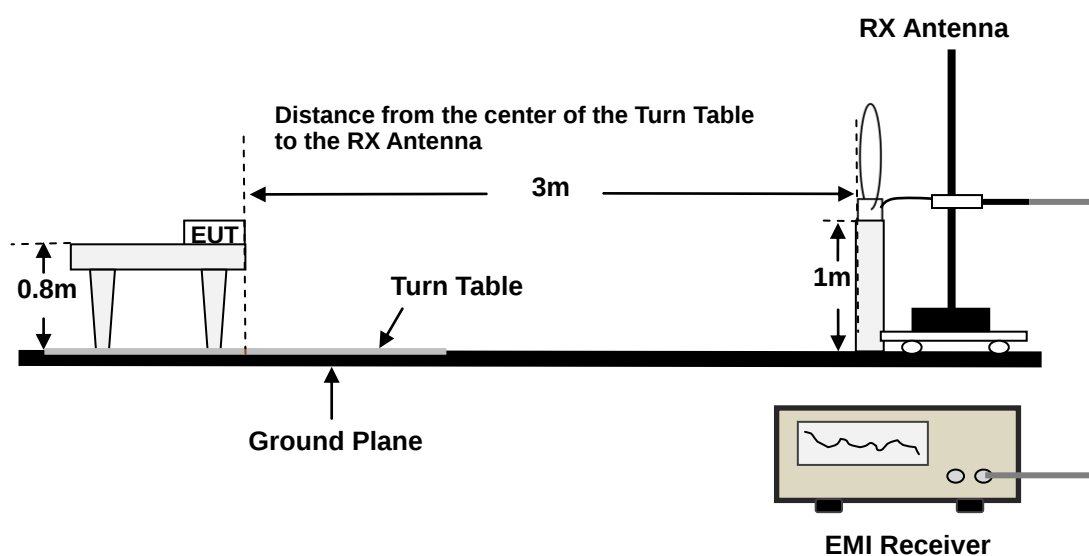
Applicable Standard

According to FCC§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.

Test Procedure

According to ANSI C63.10-2020, section 6.9.2

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 Data

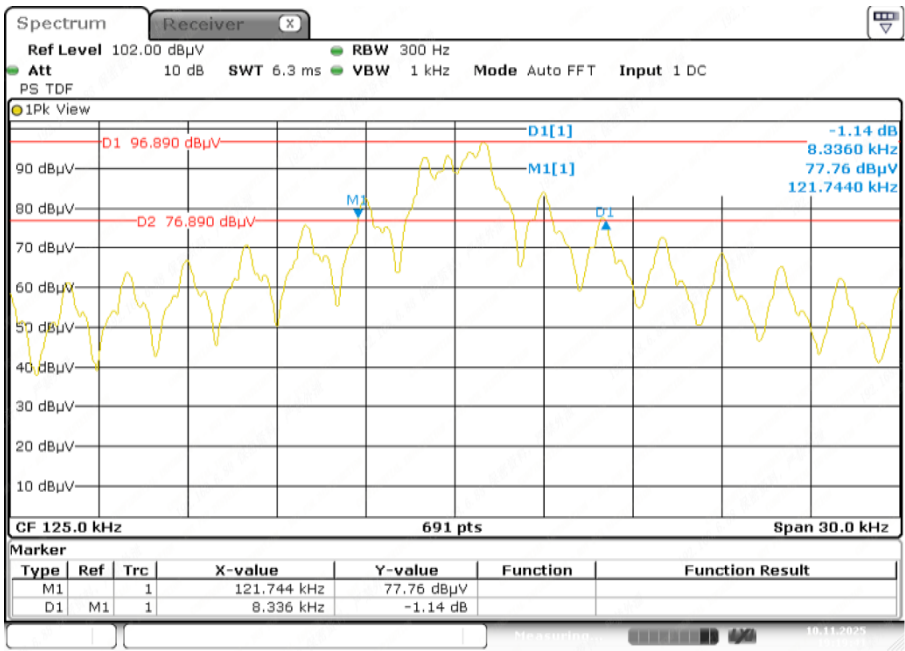
Environmental Conditions

Temperature:	24.8 °C
Relative Humidity:	56 %
ATM Pressure:	101.1 kPa
Test Engineer:	Colin Lin
Test Date:	2025-11-10
EUT Operation Mode:	Transmitting

Test Result: Compliance, please refer to the below data.

Frequency (kHz)	20dB BW (kHz)
125	8.336

20dB Emission Bandwidth



ProjectNo.:2504Y29066E-RF Tester:Colin Lin
Date: 10.NOV.2025 19:19:41

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2504Y29066E-RF EUT External Photos and Attachment No.2 2504Y29066E-RF EUT Internal Photos.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the Attachment No.3 2504Y29066E-RF Test Photos.

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