

# TEST REPORT

Applicant Name : Shenzhen Retevis Technology Co., Ltd.  
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Report Number : 2504S52470E-EM-02  
FCC ID: 2ASNS-AH

## Test Standard (s)

FCC Rules and Regulations Part 15 Subpart B Class B

## Sample Description

Product Type: Two Way Radio  
Model No.: Ailunce H1, Ailunce H2  
Trade Mark: **RETEVIS**  
Date Received: 2025-04-09  
Date of Test: 2025-06-16  
Report Date: 2025-06-18

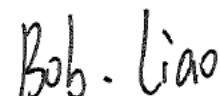
Test Result:	The EUT complied with the standards above.
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## Prepared and Checked By:

Ronour Huang

\_\_\_\_\_  
Ronour Huang  
EMC Engineer

## Approved By:



\_\_\_\_\_  
Bob Liao  
EMC Engineer

Note: This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA, or any agency of the Federal Government. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked. This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. 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.

## Shenzhen Accurate Technology Co., Ltd.

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## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2504S52470E-EM-02	Original Report	2025-06-18

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Product	Two Way Radio
Tested Model	Ailunce H1
Multiple Model	Ailunce H2
Model Difference <sup>#</sup>	Above models, the difference among them is model name and sales channels. Please refer to DOS letter for more detail. The applicant provided model "Ailunce H1" for testing.
Frequency Range	RX: 136-174MHz, 400-520MHz(Scanning receiver)
Highest Operating Frequency	The EUT's highest operating frequency is 520MHz <sup>#</sup> , the radiated emission measurement shall be made up to 5GHz.
Voltage Range <sup>#</sup>	DC 5V from USB port DC 8.4V from desktop charger DC 7.4V from the rechargeable battery
Sample Serial Number	315A-1 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition
Desktop Charger Information <sup>#</sup>	Model: Ailunce CB02 Input: 5V === 2A Output: 8.4V === 600-700mA

### Objective

This report is in accordance with Part 2-Subpart J, and Part 15-Subparts B of the Federal Communication Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15, Class B device.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

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
AC Power Lines Conducted Emissions	2.7 dB( $k=2$ , 95% level of confidence)
Radiated emission	30MHz-1GHz 4.3 dB( $k=2$ , 95% level of confidence)
	1GHz-18GHz 4.9 dB( $k=2$ , 95% level of confidence)
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 a typical fashion (as normally used by a typical user).

Test Mode 1: Scanning receiver (Analog)  
Test Mode 2: Receiver at 136MHz  
Test Mode 3: Receiver at 155MHz  
Test Mode 4: Receiver at 174MHz  
Test Mode 5: Receiver at 400MHz  
Test Mode 6: Receiver at 460MHz  
Test Mode 7: Receiver at 520MHz  
Test Mode 8: Scanning receiver (Digital)

Note: The applicant declares: Do not use the radio during charging. This will affect the normal charging of the battery pack, causing damage to the radio and accidents.

### Special Accessories

No special accessory was used.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Unknown	Earphone	Unknown	Unknown
AGILENT	Vector Signal Generator	N5182A	MY50143401

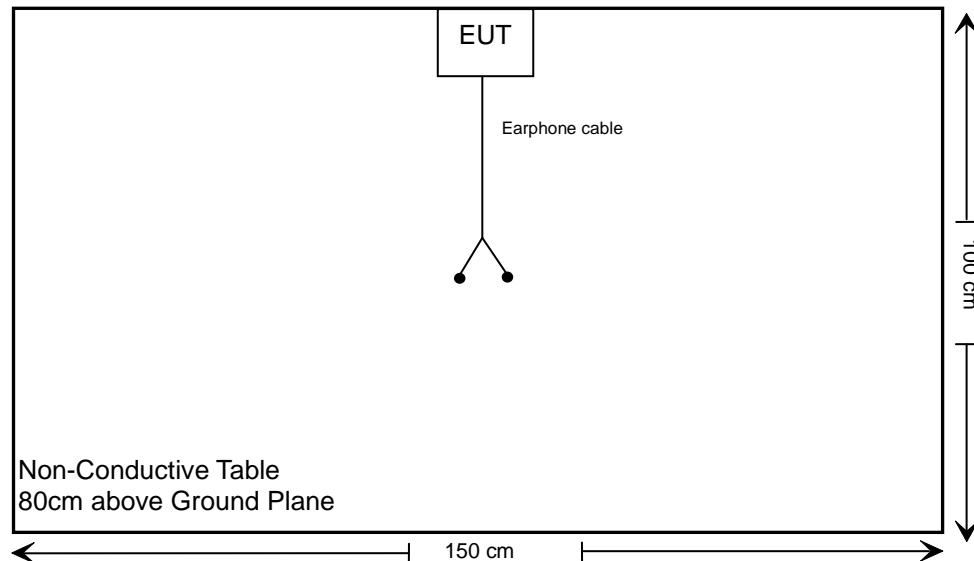
### External I/O Cable

Cable Description	Shielding Type	Length (m)	From Port	To
Earphone Cable	No	1.2	EUT	Earphone

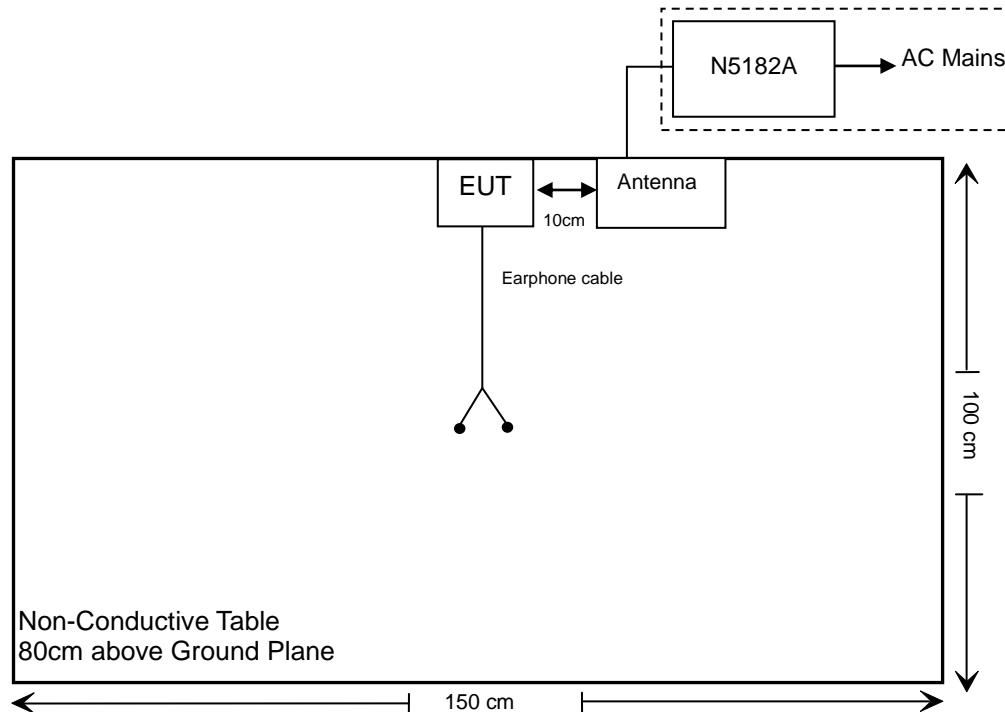
## Block Diagram of Test Setup

**For Radiated Emission:**

**Test Mode 1&8**



**Test Mode 2~7**



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§ 15.107	Conducted Emissions	Not Applicable
§15.109	Radiated Emissions	Compliance
§15.111	Antenna Conducted Power for receivers	Compliance
§15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliance

Not Applicable: The product must be switched off during charging, which was declared by applicant.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Radiated Emission Test (Below 1GHz)</b>					
Rohde & Schwarz	Test Receiver	ESR	102725	2024/11/08	2025/11/07
SONOMA INSTRUMENT	Amplifier	310N	186131	2025/03/26	2026/03/25
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2024/08/08	2027/08/07
AGILENT	Vector Signal Generator	N5182A	MY50143401	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.12	N040	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.13	N300	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.14	N800	2024/10/08	2025/10/07
Test Software: e3 191218 (V9)					
<b>Radiated Emission Test (Above 1GHz)</b>					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2024/10/08	2025/10/07
Decentest	Filter Switch Unit	DT7220FSU	DQ77927	2024/10/08	2025/10/07
Decentest	Multiplex Switch Test Control Set	DT7220CSU	DQ77924	2024/10/08	2025/10/07
A.H. Systems, inc.	Preamplifier	PAM-0118	226	2025/03/20	2026/03/19
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
AGILENT	Vector Signal Generator	N5182A	MY50143401	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.10	N050	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.11	N1000	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.19	N500	2024/10/08	2025/10/07
Test Software: e3 191218 (V9)					
<b>RF Conducted Test</b>					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2024/10/08	2025/10/07
AGILENT	Vector Signal Generator	N5182A	MY50143401	2024/10/08	2025/10/07
HP Agilent	RF Communication test set	8920A	3325U00859	2025/05/24	2026/05/23
Aeroflex/Weinschel	30dB Attenuator (Input 250W/Output 50W)	58-30-33	PS467	2025/03/26	2026/03/25
Unknown	RF Coaxial Cable	No.31	RF-01	2024/10/08	2025/10/07
Unknown	RF Coaxial Cable	No.32	RF-02	2024/10/08	2025/10/07

**\* 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).

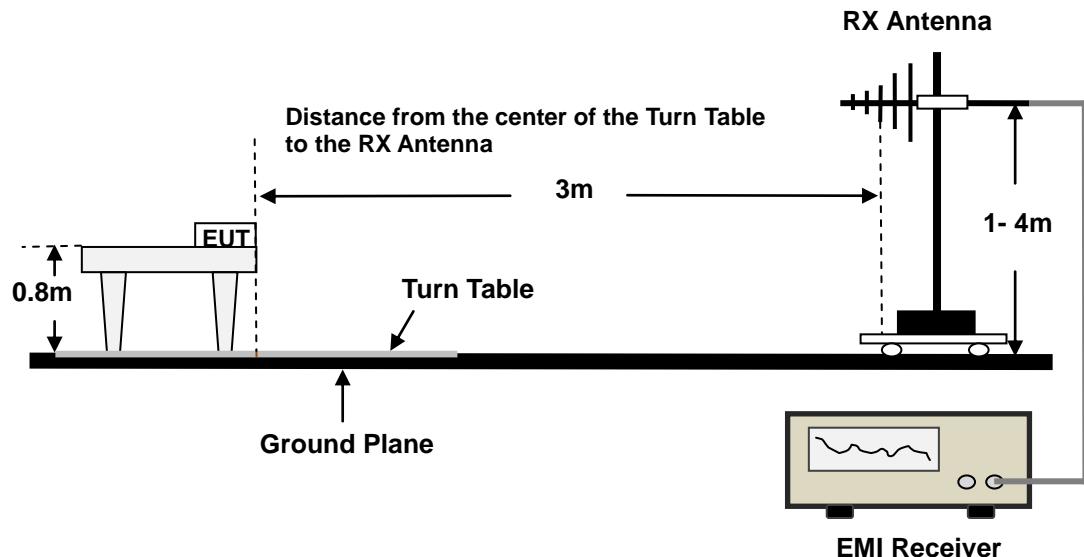
## FCC §15.109-RADIATED EMISSIONS

### Applicable Standard

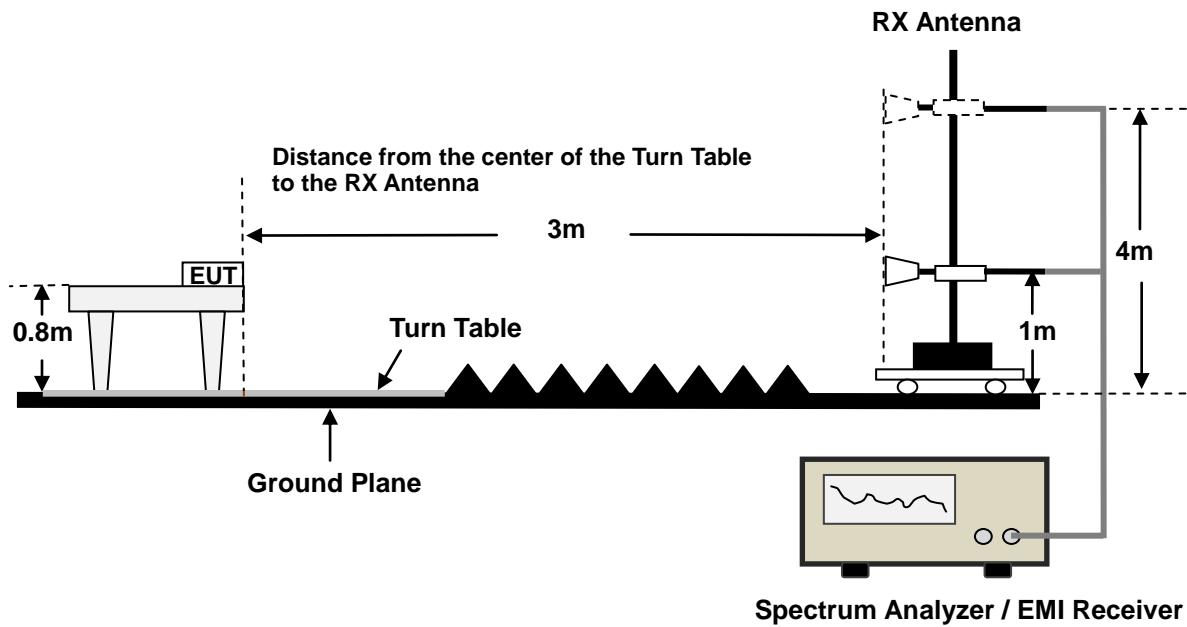
FCC §15.109

### EUT Setup

30MHz - 1GHz:



Above 1GHz:



Boundary of the EUT, local AE and associated cabling and measurement distance for radiated emissions measurements:

The central point of the arrangement shall be positioned at the centre of the turntable. The measurement distance is the shortest horizontal distance between an imaginary circular periphery just encompassing this arrangement and the calibration point of the antenna. See as below Figure C.1 and C.2.

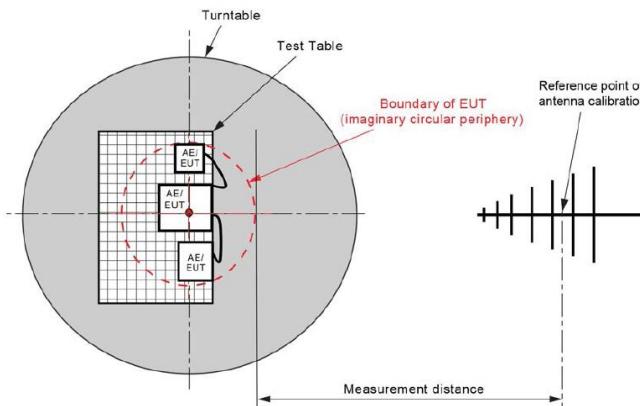


Figure C.1 – Measurement distance

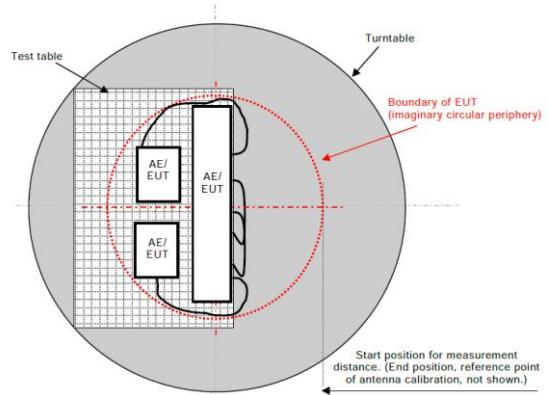


Figure C.2 – Boundary of EUT, Local AE and associated cabling

The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle. The spacing between the peripherals was 10 cm.

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30MHz to 5GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30MHz - 1000MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
30MHz - 1000MHz	PK	100kHz	300kHz	/	PK
	QP	/	/	120kHz	QP

1GHz - 5GHz:

Measurement	Detector	RBW	Video B/W
PK	Peak	1MHz	3MHz
AV	Peak	1MHz	5kHz

Note 1: For below 1GHz testing, if the maximized peak measured value complies with the limit, then it is unnecessary to perform QP measurement.

Note 2: For above 1GHz testing, the peak value is low than AV limit, then the result is unnecessary to perform Peak/AV measurement.

Note 3: Other emissions which were more than 20dB below to the limit or on noise floor level was not recorded.

Required highest measurement frequency for radiated emissions:

Highest frequency generated or used in the device or on which the device operates or tunes(MHz) (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower

## Test Procedure

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

## Calculation

The Factor 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:

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

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

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Reading} + \text{Factor} \end{aligned}$$

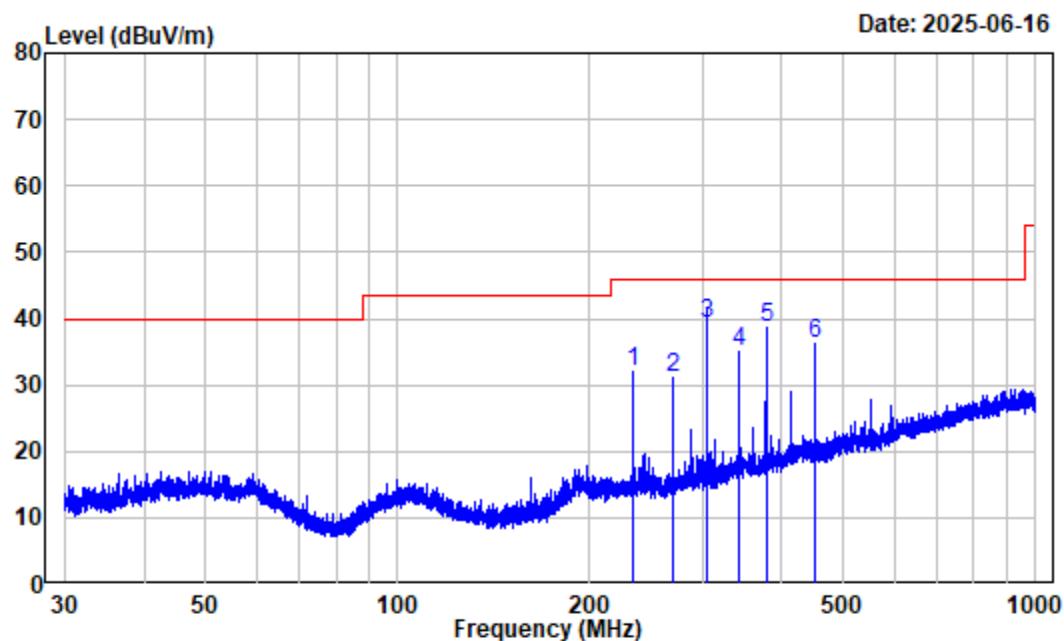
## Test Data

### Below 1GHz

#### Environmental Conditions

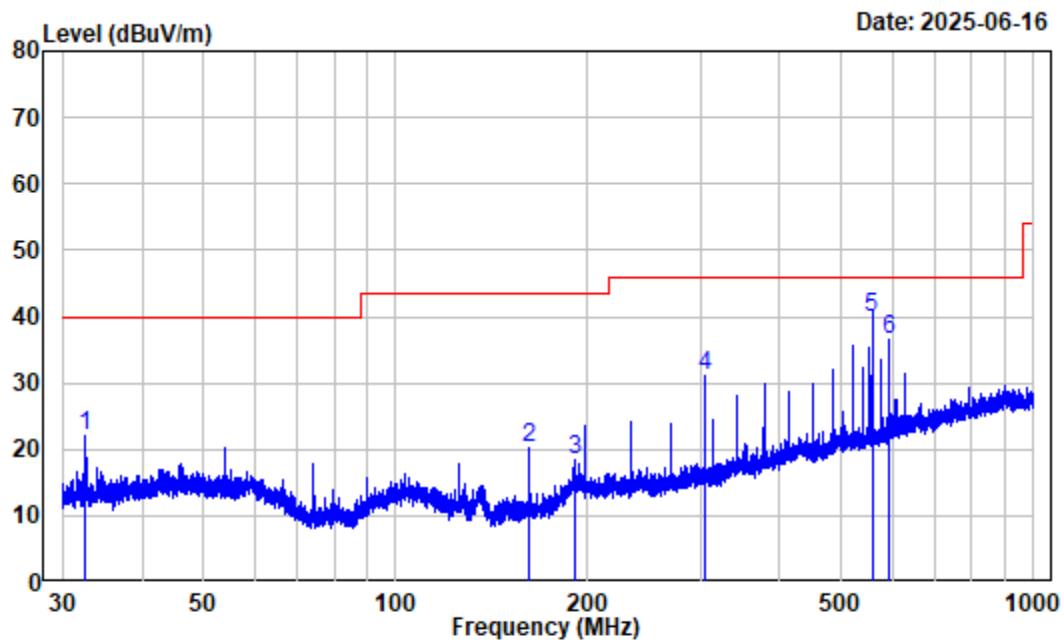
<b>Temperature:</b>	25.6 °C
<b>Relative Humidity:</b>	58 %
<b>ATM Pressure:</b>	99.7 kPa
<b>Test Engineer:</b>	Colin Lin
<b>Test Date:</b>	2025-06-16
<b>EUT Operation Mode:</b>	Test Mode 1~8

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

**Test Mode 1: Scanning receiver (Analog)**

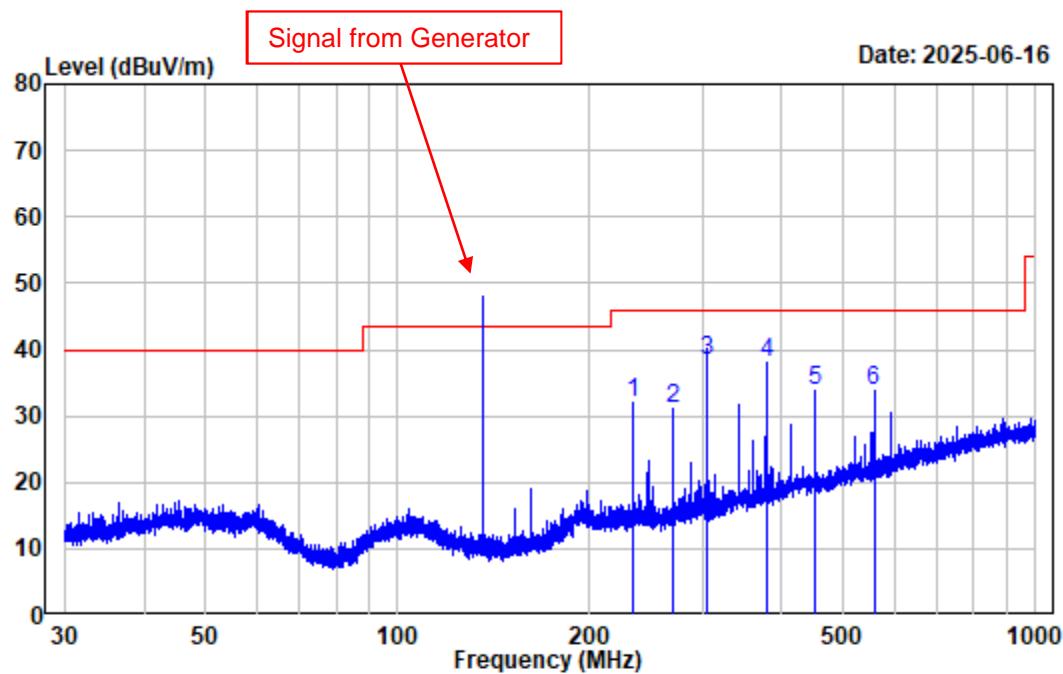
Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 1  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	233.963	-11.00	42.87	31.87	46.00	-14.13 Peak
2	270.020	-10.41	41.64	31.23	46.00	-14.77 Peak
3	306.007	-9.58	48.80	39.22	46.00	-6.78 QP
4	341.979	-7.73	42.86	35.13	46.00	-10.87 Peak
5	378.087	-7.38	46.07	38.69	46.00	-7.31 Peak
6	450.147	-5.61	41.74	36.13	46.00	-9.87 Peak



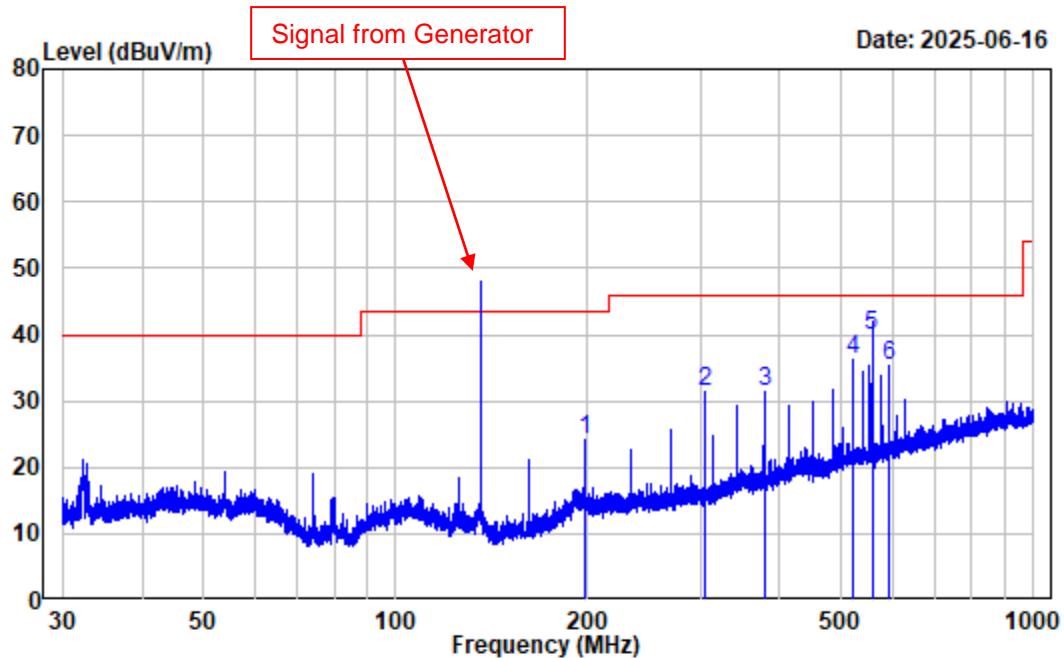
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 1  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.577	-12.60	34.70	22.10	40.00	-17.90	Peak
2	162.041	-14.47	34.55	20.08	43.50	-23.42	Peak
3	190.990	-10.80	29.09	18.29	43.50	-25.21	Peak
4	306.082	-9.58	40.53	30.95	46.00	-15.05	Peak
5	558.000	-4.03	43.80	39.77	46.00	-6.23	QP
6	594.090	-3.13	39.72	36.59	46.00	-9.41	Peak

**Test Mode 2: Receiver at 136MHz**

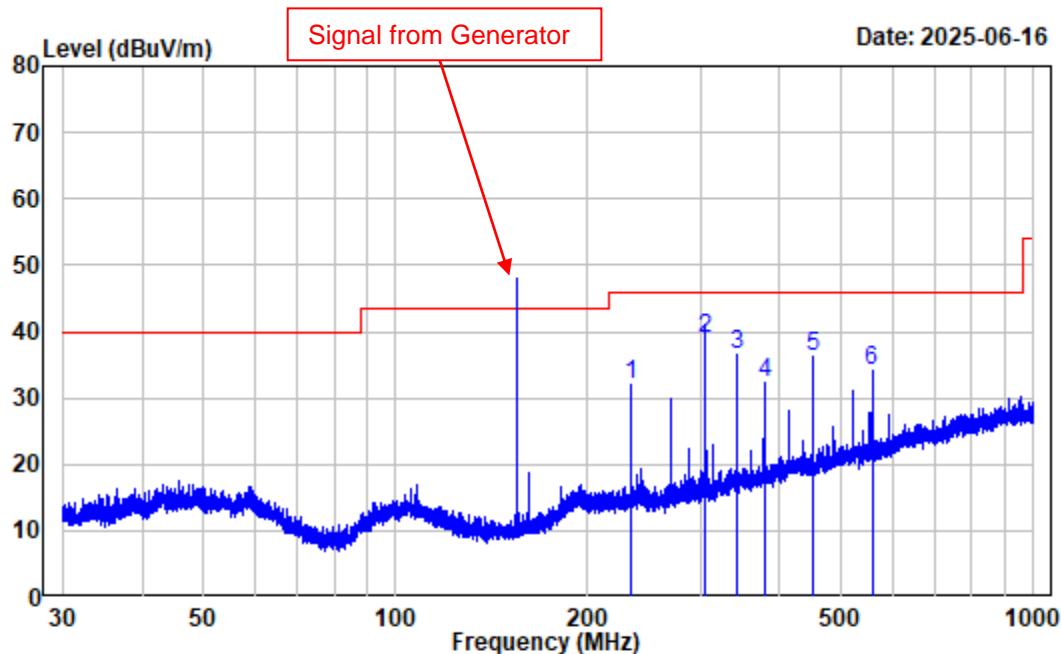
Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 2  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	233.963	-11.00	42.96	31.96	46.00	-14.04	Peak
2	270.020	-10.41	41.37	30.96	46.00	-15.04	Peak
3	306.082	-9.58	47.80	38.22	46.00	-7.78	QP
4	378.087	-7.38	45.42	38.04	46.00	-7.96	Peak
5	450.147	-5.61	39.54	33.93	46.00	-12.07	Peak
6	557.996	-4.03	37.99	33.96	46.00	-12.04	Peak



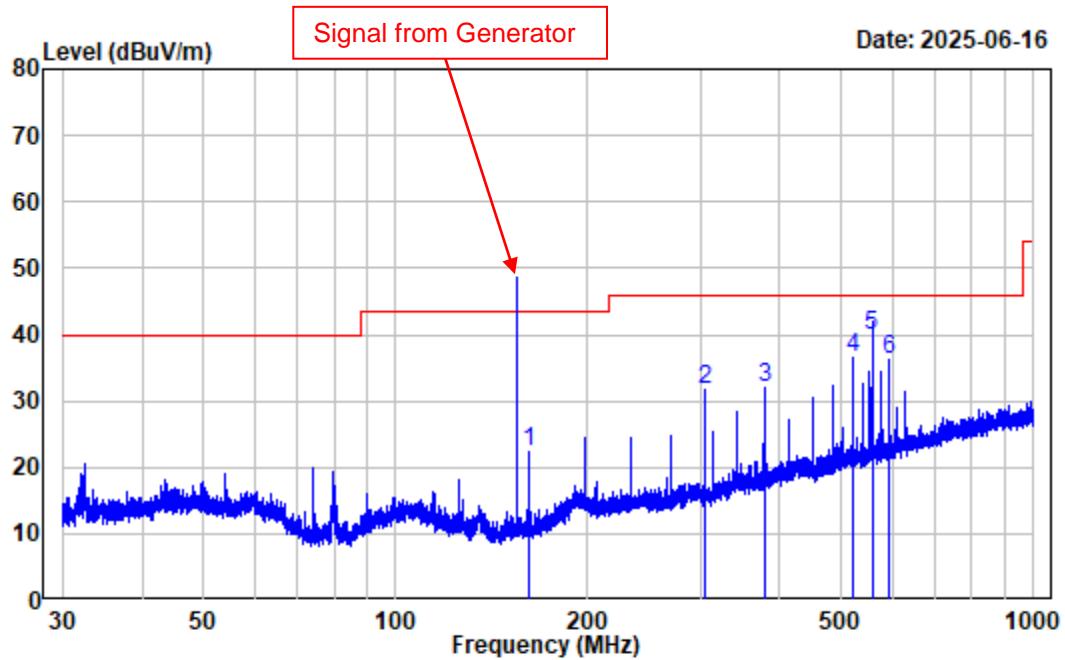
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 2  
Receiver Setting: RBW:100kHz VBW:300kHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	197.980	-10.77	35.01	24.24	43.50 -19.26 Peak
2	306.082	-9.58	41.04	31.46	46.00 -14.54 Peak
3	378.087	-7.38	38.82	31.44	46.00 -14.56 Peak
4	522.031	-4.16	40.31	36.15	46.00 -9.85 Peak
5	557.996	-4.03	44.00	39.97	46.00 -6.03 QP
6	594.090	-3.13	38.35	35.22	46.00 -10.78 Peak

**Test Mode 3: Receiver at 155MHz**

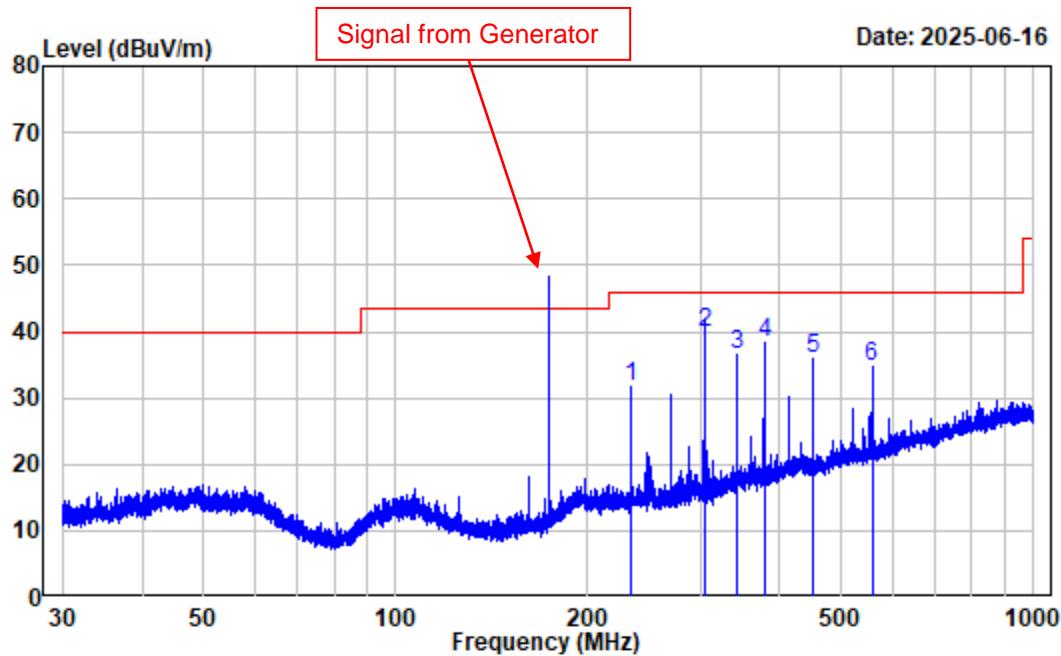
Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 3  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	233.963	-11.00	43.14	32.14	46.00	-13.86 Peak
2	306.082	-9.58	48.40	38.82	46.00	-7.18 QP
3	341.979	-7.73	44.22	36.49	46.00	-9.51 Peak
4	378.087	-7.38	39.68	32.30	46.00	-13.70 Peak
5	450.147	-5.61	41.78	36.17	46.00	-9.83 Peak
6	557.996	-4.03	38.14	34.11	46.00	-11.89 Peak



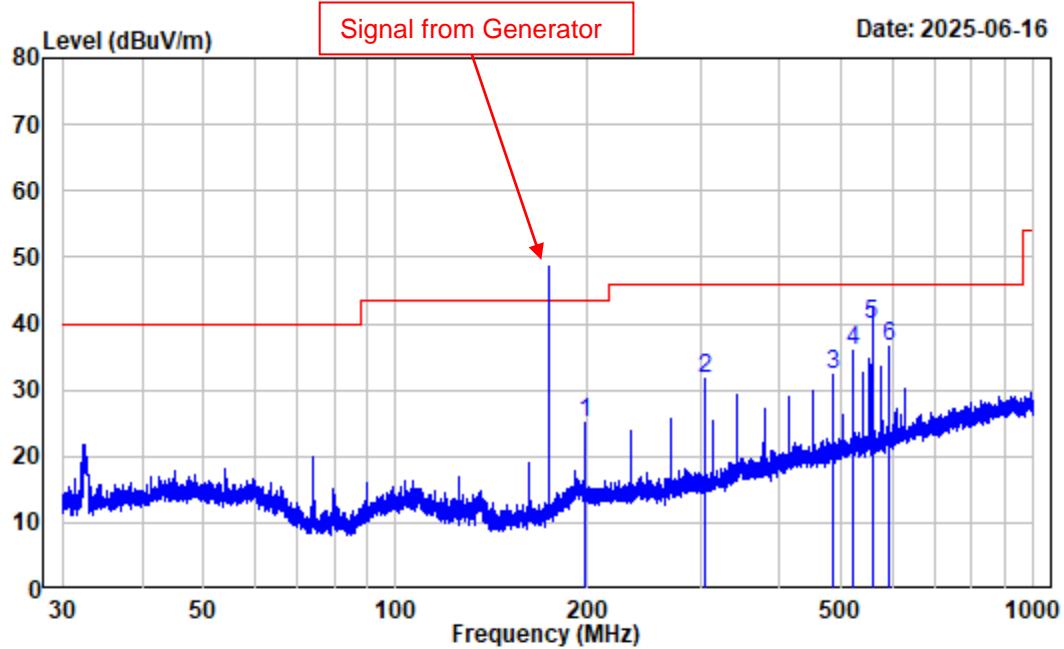
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 3  
Receiver Setting: RBW:100kHz VBW:300kHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	162.041	-14.47	36.90	22.43	43.50 -21.07 Peak
2	306.082	-9.58	41.33	31.75	46.00 -14.25 Peak
3	378.087	-7.38	39.50	32.12	46.00 -13.88 Peak
4	522.031	-4.16	40.60	36.44	46.00 -9.56 Peak
5	557.996	-4.03	43.80	39.77	46.00 -6.23 QP
6	594.090	-3.13	39.40	36.27	46.00 -9.73 Peak

**Test Mode 4: Receiver at 174MHz**

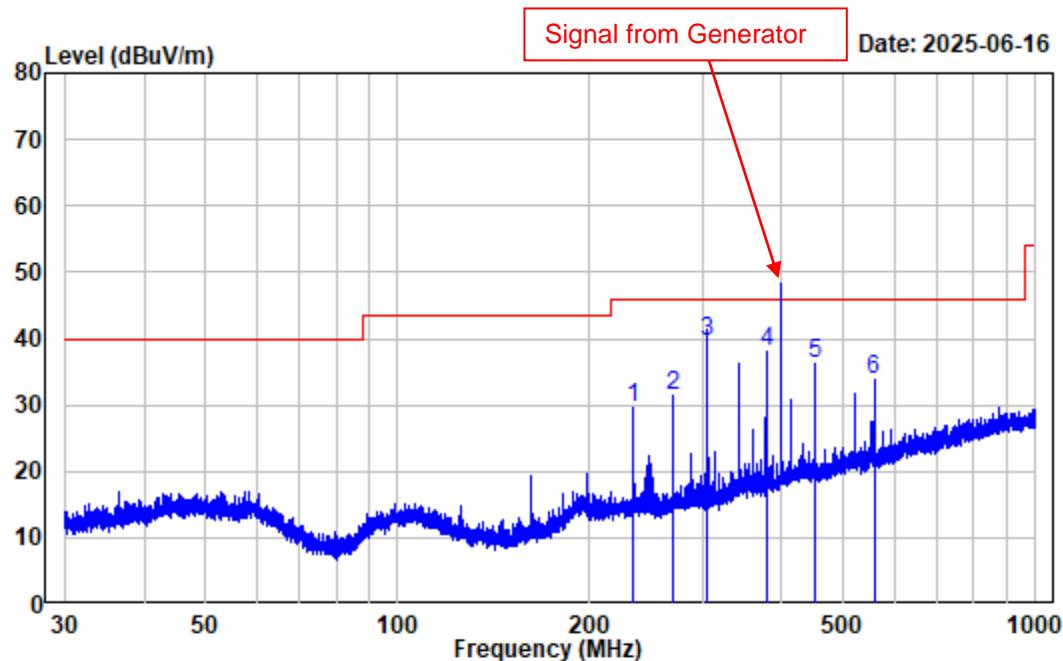
Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 4  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Read Factor	Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	234.066	-11.00	42.83	31.83	46.00	-14.17	Peak
2	306.082	-9.58	49.30	39.72	46.00	-6.28	QP
3	341.979	-7.73	44.20	36.47	46.00	-9.53	Peak
4	378.087	-7.38	45.79	38.41	46.00	-7.59	Peak
5	450.147	-5.61	41.57	35.96	46.00	-10.04	Peak
6	557.996	-4.03	38.88	34.85	46.00	-11.15	Peak



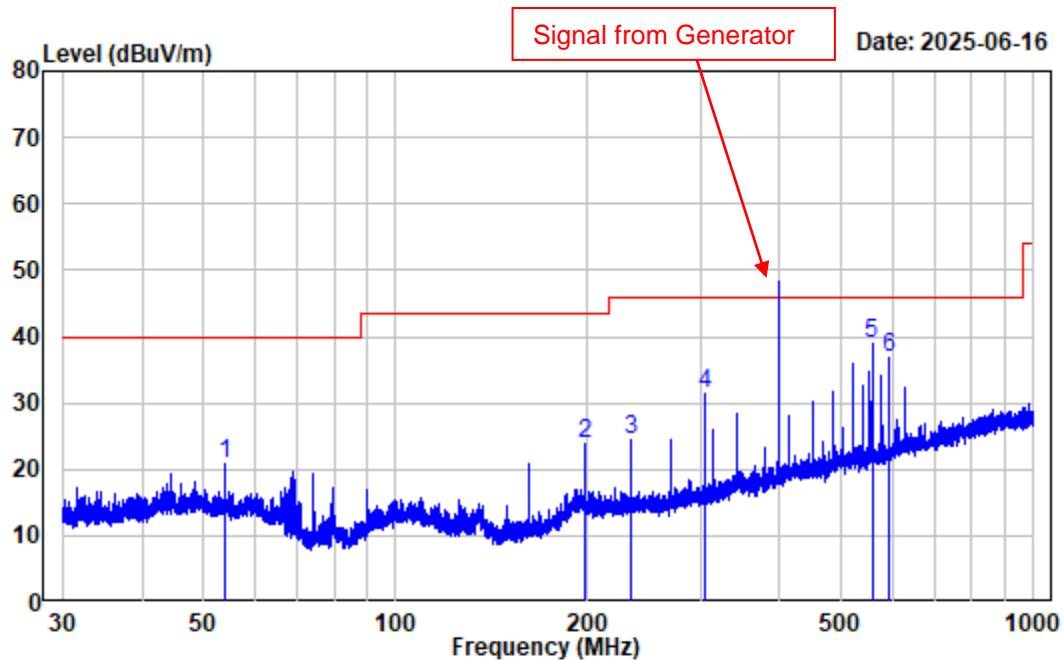
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 4  
Receiver Setting: RBW:100kHz VBW:300kHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	197.980	-10.77	35.70	24.93	43.50 -18.57 Peak
2	306.082	-9.58	41.43	31.85	46.00 -14.15 Peak
3	486.035	-4.87	37.15	32.28	46.00 -13.72 Peak
4	522.031	-4.16	40.21	36.05	46.00 -9.95 Peak
5	557.996	-4.03	43.80	39.77	46.00 -6.23 QP
6	594.090	-3.13	39.67	36.54	46.00 -9.46 Peak

**Test Mode 5: Receiver at 400MHz**

Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 5  
Receiver Setting: RBW:100kHz VBW:300kHz

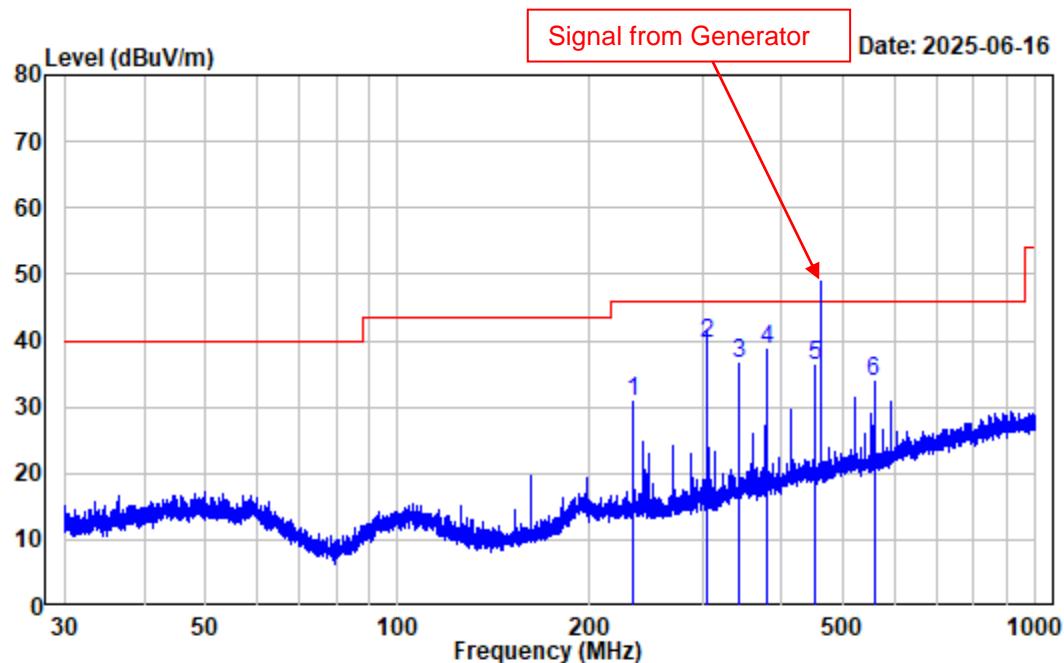
	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	233.963	-11.00	40.62	29.62	46.00	-16.38	Peak
2	270.020	-10.41	41.75	31.34	46.00	-14.66	Peak
3	306.082	-9.58	49.20	39.62	46.00	-6.38	QP
4	378.087	-7.38	45.49	38.11	46.00	-7.89	Peak
5	450.147	-5.61	41.89	36.28	46.00	-9.72	Peak
6	557.996	-4.03	37.85	33.82	46.00	-12.18	Peak



Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 5  
Receiver Setting: RBW:100kHz VBW:300kHz

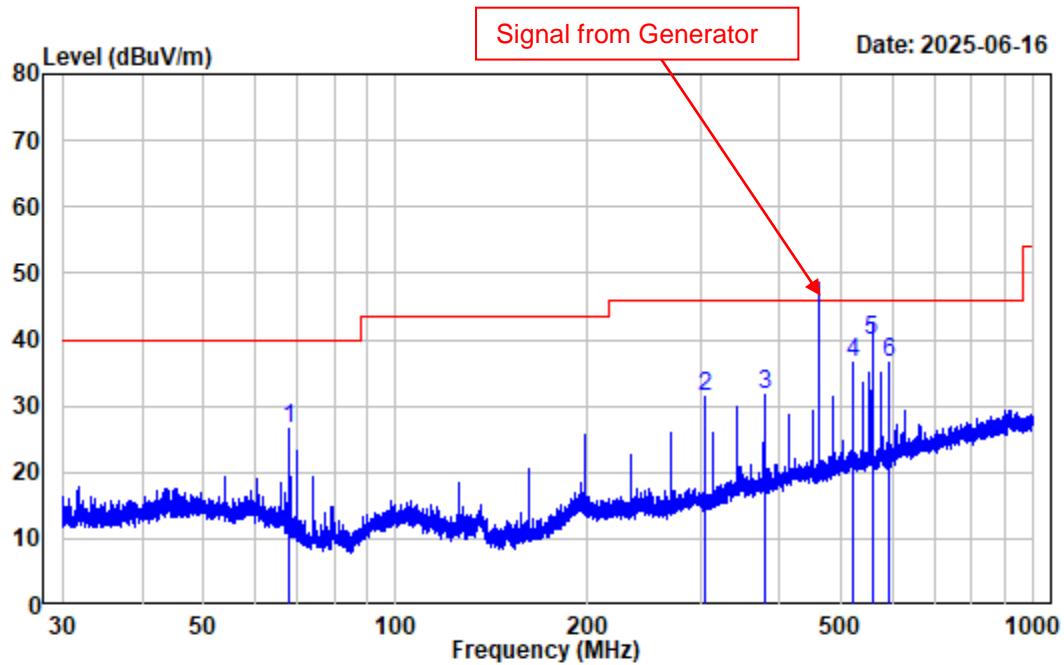
Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	53.976	-10.98	31.75	20.77	40.00 -19.23 Peak
2	197.980	-10.77	34.59	23.82	43.50 -19.68 Peak
3	233.963	-11.00	35.37	24.37	46.00 -21.63 Peak
4	306.082	-9.58	40.97	31.39	46.00 -14.61 Peak
5	557.996	-4.03	42.89	38.86	46.00 -7.14 Peak
6	594.090	-3.13	39.99	36.86	46.00 -9.14 Peak

## Test Mode 6: Receiver at 460MHz



Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 6  
Receiver Setting: RBW:100kHz VBW:300kHz

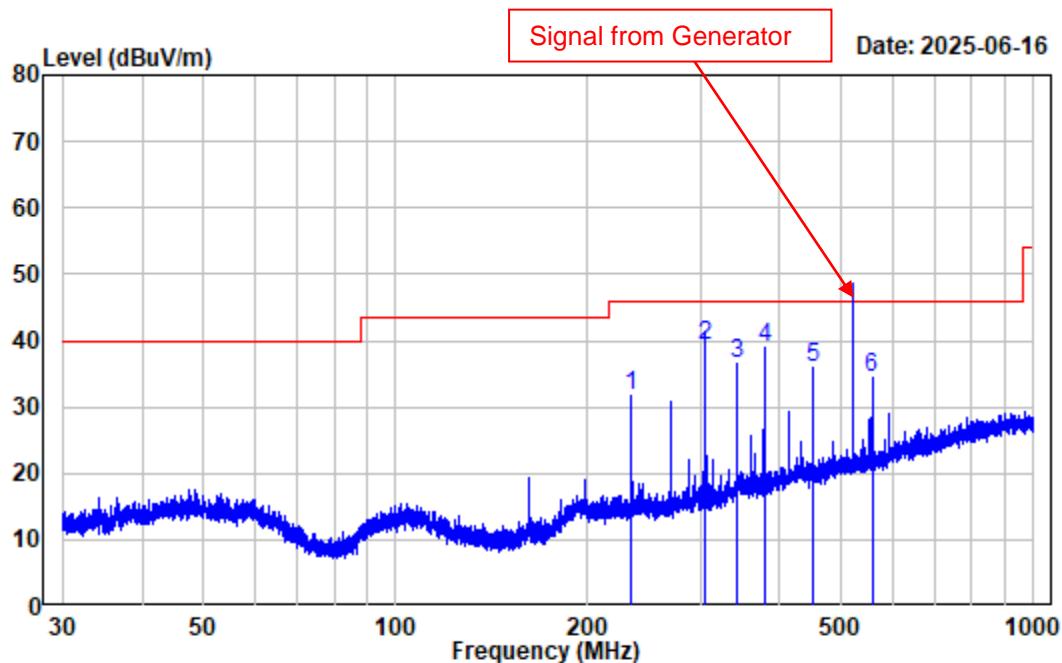
	Freq	Read Factor	Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	234.066	-11.00	41.94	30.94	46.00	-15.06	Peak
2	306.082	-9.58	49.00	39.42	46.00	-6.58	QP
3	341.979	-7.73	44.39	36.66	46.00	-9.34	Peak
4	378.087	-7.38	46.16	38.78	46.00	-7.22	Peak
5	450.147	-5.61	41.95	36.34	46.00	-9.66	Peak
6	557.996	-4.03	37.72	33.69	46.00	-12.31	Peak



Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM      Tester: Colin Lin  
Test Mode : Test Mode 6  
Receiver Setting: RBW:100kHz VBW:300kHz

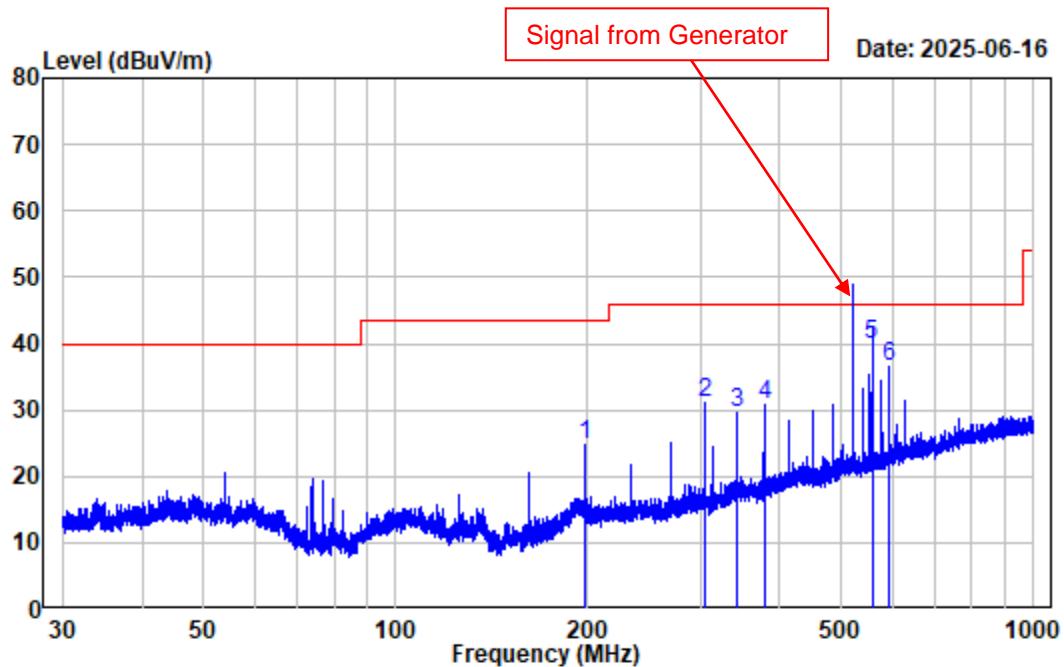
Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	68.002	-14.05	40.67	26.62	40.00 -13.38 Peak
2	306.082	-9.58	41.10	31.52	46.00 -14.48 Peak
3	378.087	-7.38	39.17	31.79	46.00 -14.21 Peak
4	522.031	-4.16	40.55	36.39	46.00 -9.61 Peak
5	557.996	-4.03	43.90	39.87	46.00 -6.13 QP
6	594.090	-3.13	39.52	36.39	46.00 -9.61 Peak

## Test Mode 7: Receiver at 520MHz



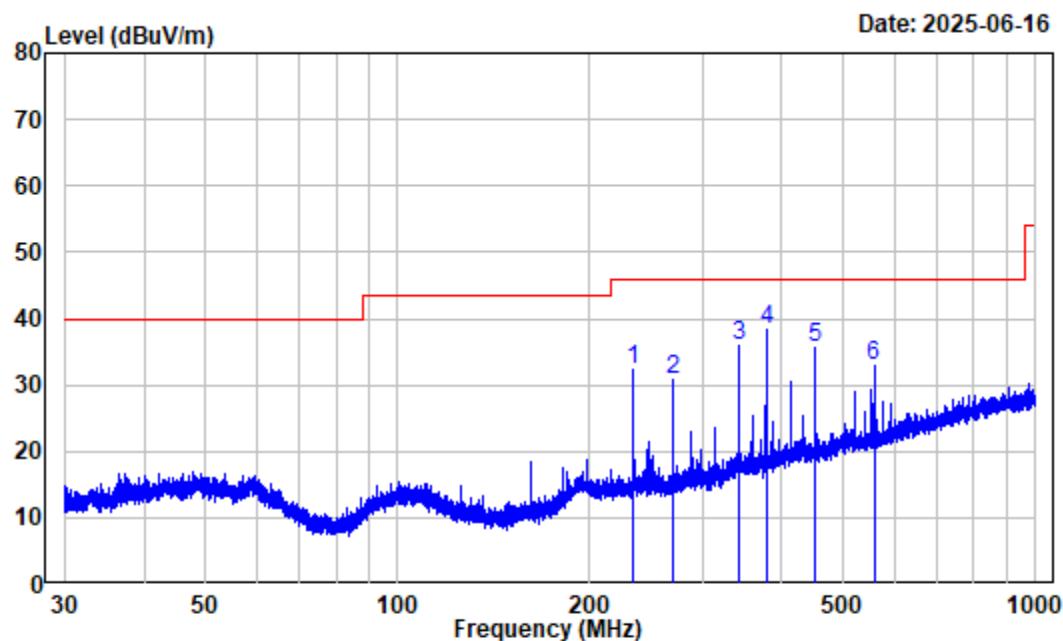
Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM      Tester: Colin Lin  
Test Mode : Test Mode 7  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	234.066	-11.00	42.69	31.69	46.00	-14.31	Peak
2	306.082	-9.58	48.90	39.32	46.00	-6.68	QP
3	341.979	-7.73	44.33	36.60	46.00	-9.40	Peak
4	378.087	-7.38	46.19	38.81	46.00	-7.19	Peak
5	450.147	-5.61	41.48	35.87	46.00	-10.13	Peak
6	557.996	-4.03	38.44	34.41	46.00	-11.59	Peak



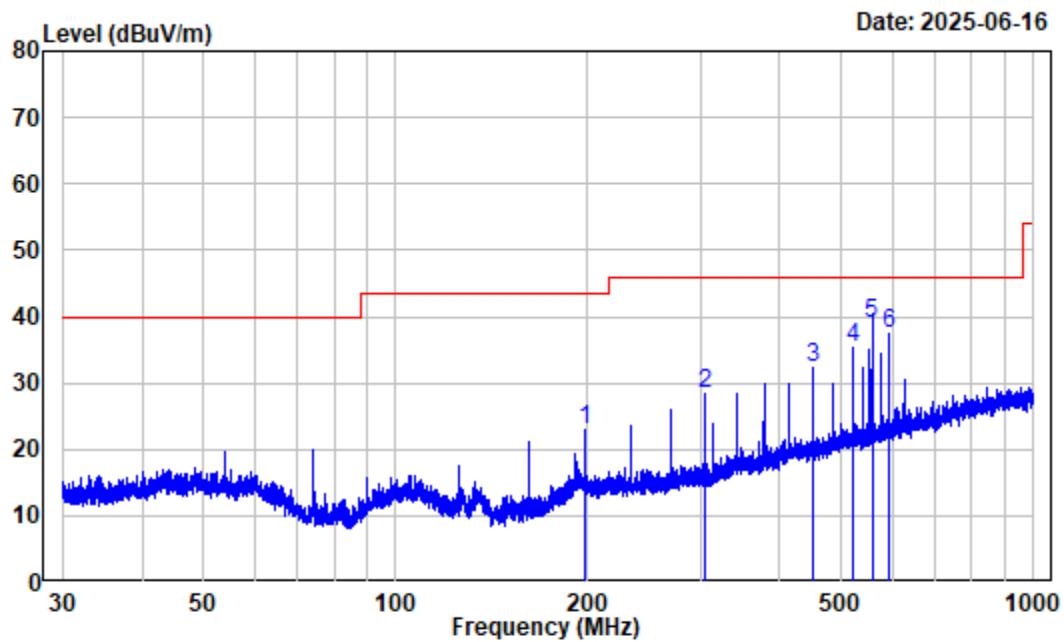
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM      Tester: Colin Lin  
Test Mode : Test Mode 7  
Receiver Setting: RBW:100kHz VBW:300kHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	197.980	-10.77	35.59	24.82	43.50 -18.68 Peak
2	306.082	-9.58	40.67	31.09	46.00 -14.91 Peak
3	341.979	-7.73	37.28	29.55	46.00 -16.45 Peak
4	378.087	-7.38	38.13	30.75	46.00 -15.25 Peak
5	557.996	-4.03	43.90	39.87	46.00 -6.13 QP
6	594.090	-3.13	39.64	36.51	46.00 -9.49 Peak

**Test Mode 8: Scanning receiver (Digital)**

Site : Chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 8  
Receiver Setting: RBW:100kHz VBW:300kHz

	Freq	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	233.963	-11.00	43.33	32.33	46.00	-13.67 Peak
2	270.020	-10.41	41.11	30.70	46.00	-15.30 Peak
3	341.979	-7.73	43.64	35.91	46.00	-10.09 Peak
4	378.087	-7.38	45.81	38.43	46.00	-7.57 Peak
5	450.147	-5.61	41.14	35.53	46.00	-10.47 Peak
6	557.996	-4.03	37.07	33.04	46.00	-12.96 Peak



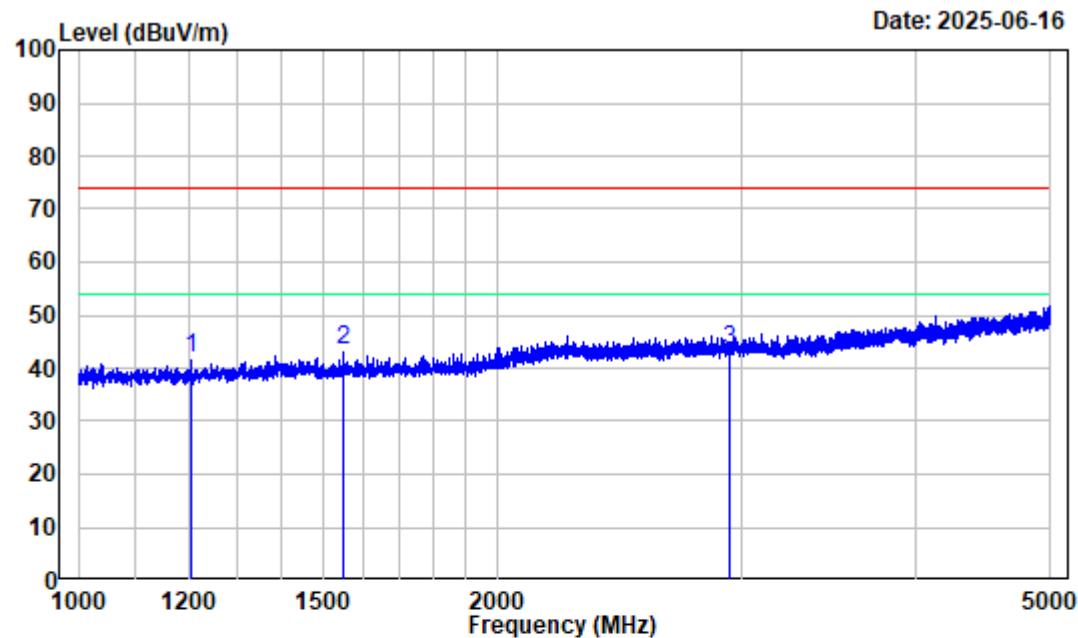
Site : Chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM Tester: Colin Lin  
Test Mode : Test Mode 8  
Receiver Setting: RBW:100kHz VBW:300kHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	197.980	-10.77	33.86	23.09	43.50 -20.41 Peak
2	306.082	-9.58	37.94	28.36	46.00 -17.64 Peak
3	450.147	-5.61	37.90	32.29	46.00 -13.71 Peak
4	522.031	-4.16	39.42	35.26	46.00 -10.74 Peak
5	557.996	-4.03	43.10	39.07	46.00 -6.93 QP
6	594.090	-3.13	40.46	37.33	46.00 -8.67 Peak

**Above 1GHz****Environmental Conditions**

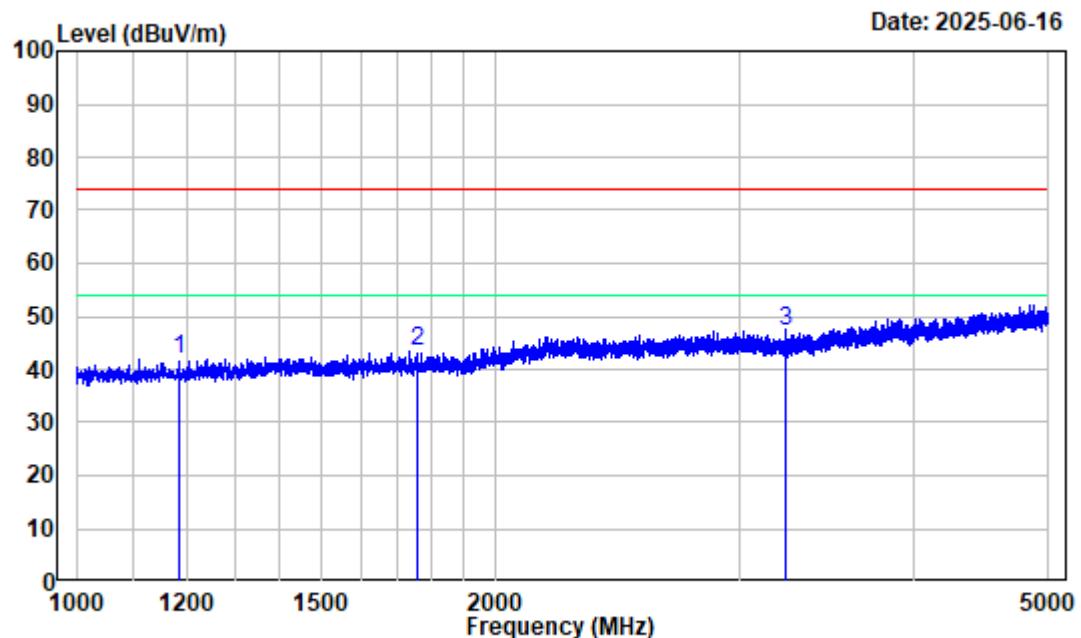
<b>Temperature:</b>	26.3 °C
<b>Relative Humidity:</b>	56 %
<b>ATM Pressure:</b>	99.7 kPa
<b>Test Engineer:</b>	Kevin Lv
<b>Test Date:</b>	2025-06-16
<b>EUT Operation Mode:</b>	Test Mode 1~8

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

**Test Mode 1: Scanning receiver (Analog)**

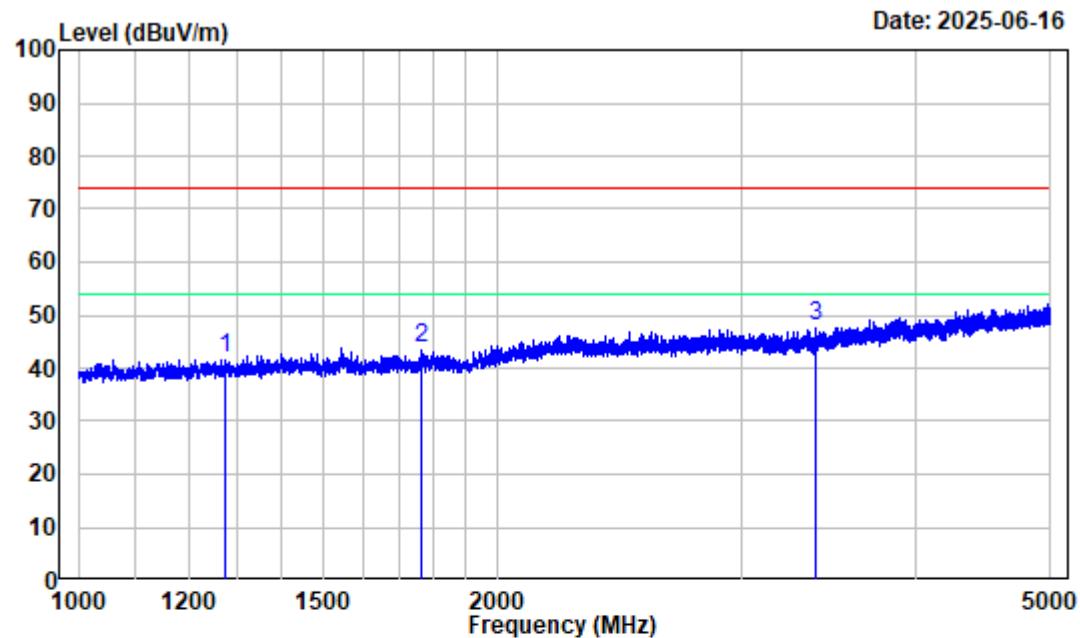
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 1  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	1203.500	-14.40	56.21	41.81	74.00	-32.19	Peak
2	1550.000	-13.42	56.65	43.23	74.00	-30.77	Peak
3	2939.500	-9.78	53.11	43.33	74.00	-30.67	Peak



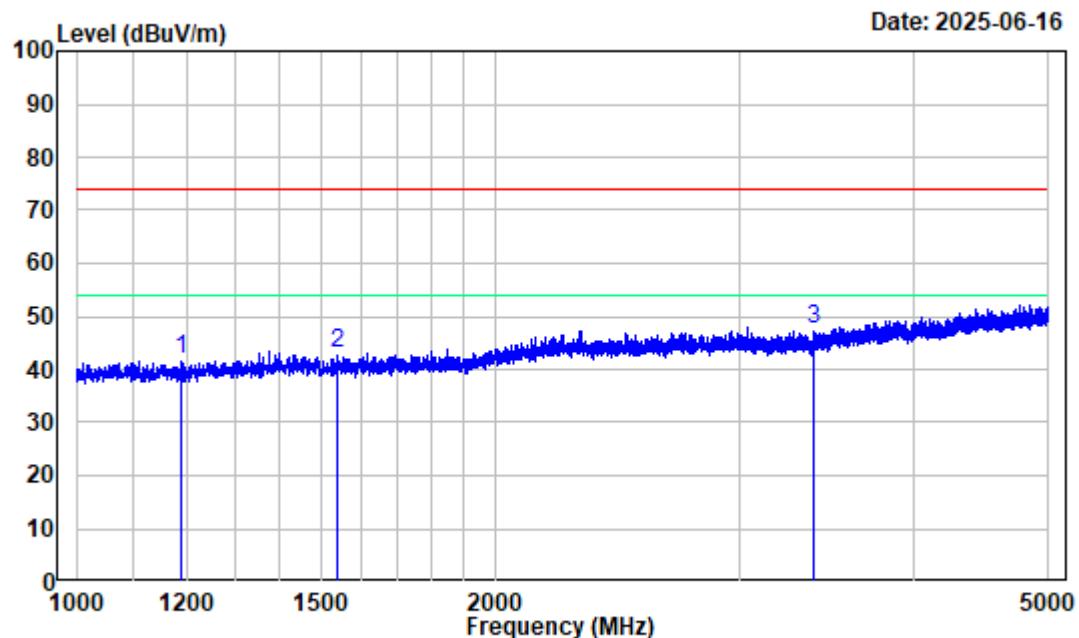
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 1  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1185.000	-14.39	56.31	41.92	74.00	-32.08	Peak
2	1758.000	-12.97	56.38	43.41	74.00	-30.59	Peak
3	3232.000	-10.02	57.33	47.31	74.00	-26.69	Peak

**Test Mode 2: Receiver at 136MHz**

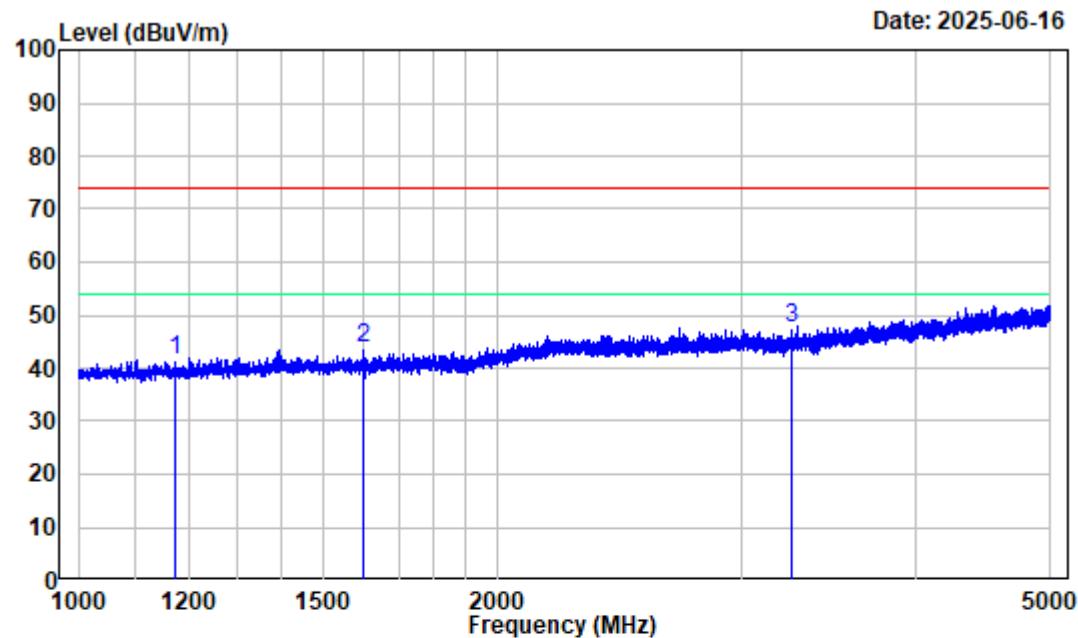
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 2  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1273.500	-13.82	55.70	41.88	74.00	-32.12	Peak
2	1766.000	-12.96	56.72	43.76	74.00	-30.24	Peak
3	3394.500	-9.86	57.83	47.97	74.00	-26.03	Peak



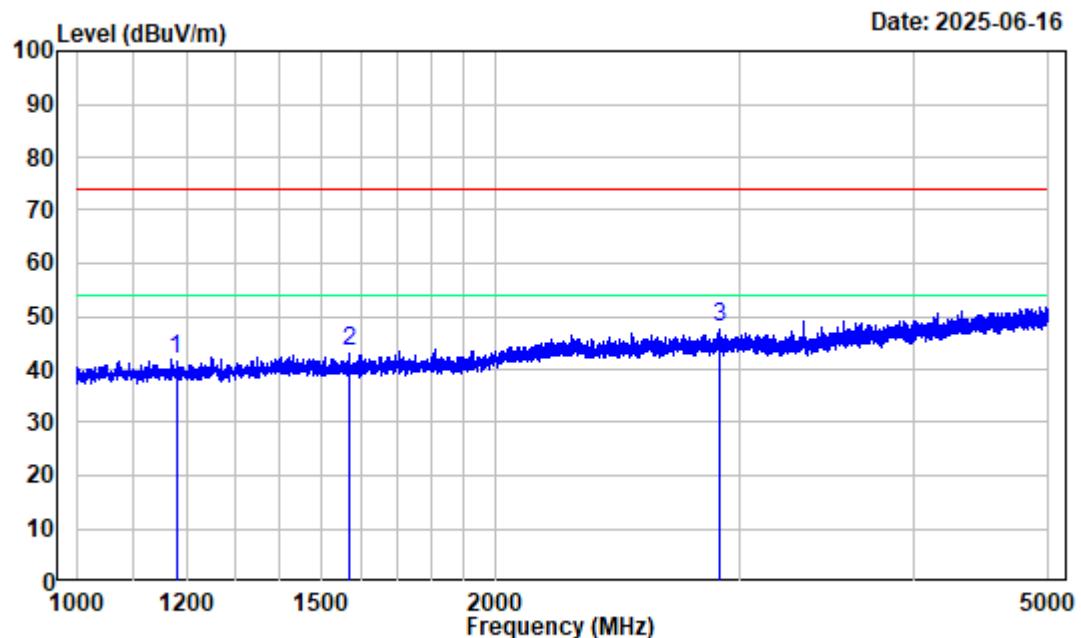
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 2  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1187.500	-14.40	56.34	41.94	74.00	-32.06	Peak
2	1538.500	-13.40	56.58	43.18	74.00	-30.82	Peak
3	3394.000	-9.86	57.39	47.53	74.00	-26.47	Peak

**Test Mode 3: Receiver at 155MHz**

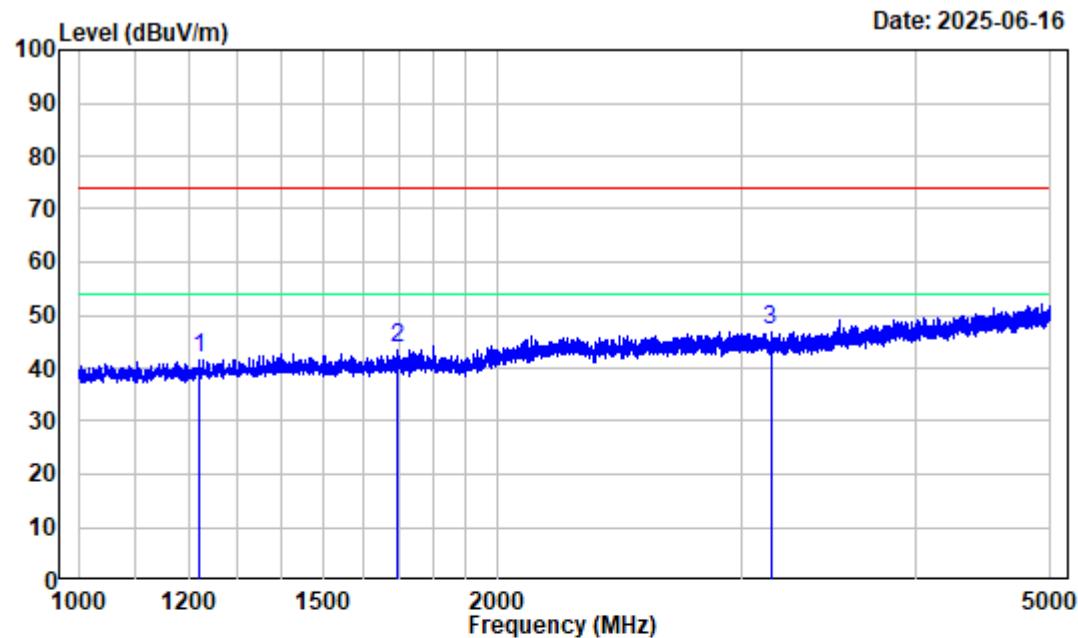
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 3  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1175.000	-14.35	55.87	41.52	74.00	-32.48	Peak
2	1601.000	-13.71	57.51	43.80	74.00	-30.20	Peak
3	3260.000	-9.90	57.27	47.37	74.00	-26.63	Peak



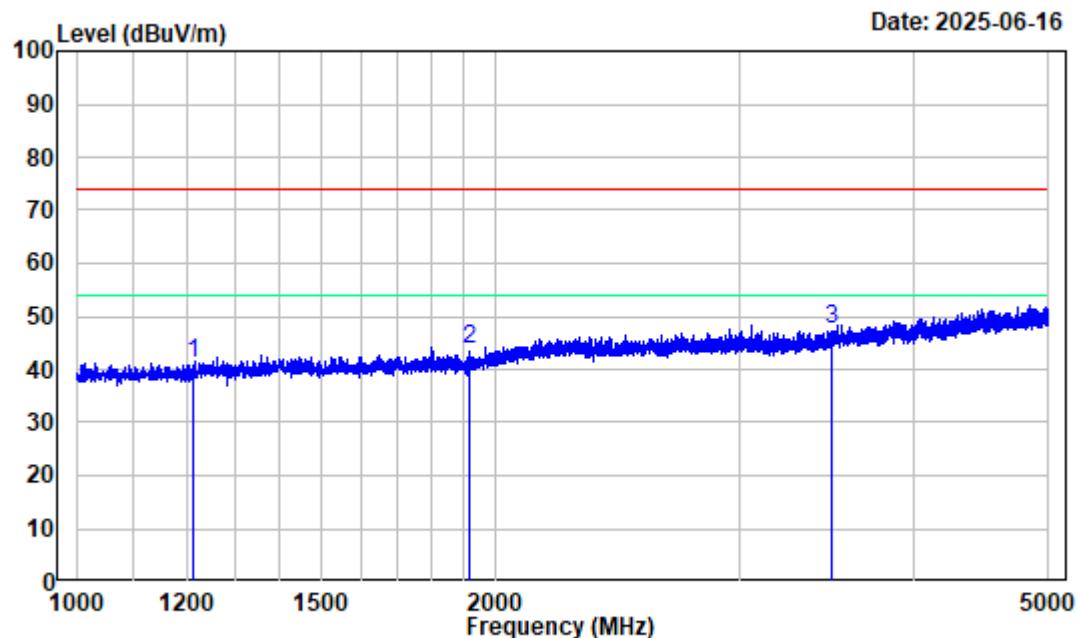
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 3  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1179.500	-14.37	56.16	41.79	74.00	-32.21	Peak
2	1570.000	-13.54	56.76	43.22	74.00	-30.78	Peak
3	2905.000	-9.98	57.72	47.74	74.00	-26.26	Peak

**Test Mode 4: Receiver at 174MHz**

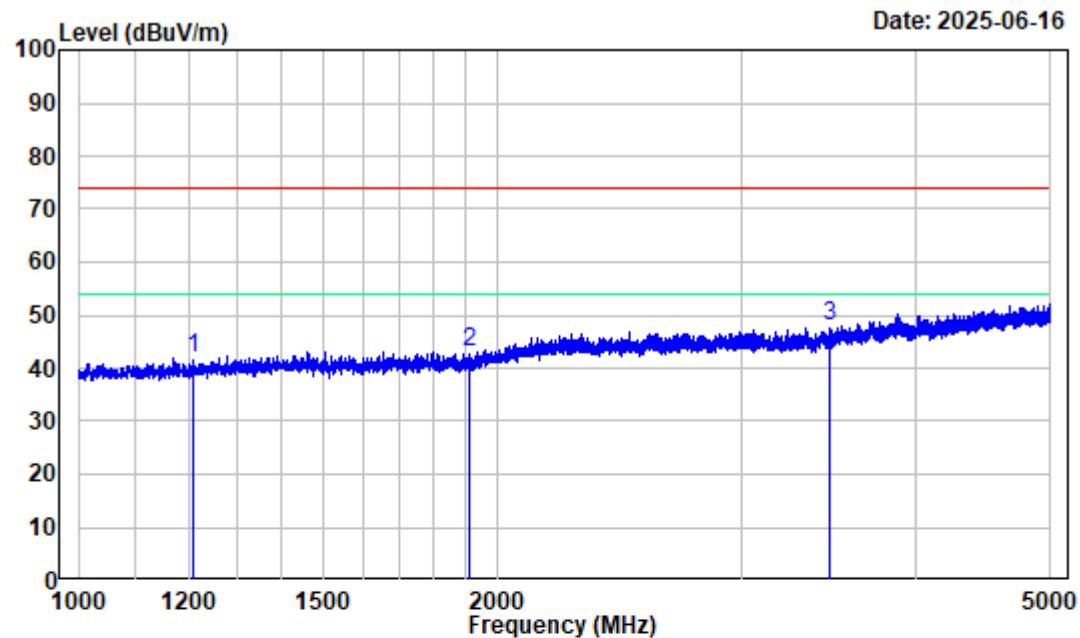
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 4  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1219.500	-14.21	56.15	41.94	74.00	-32.06	Peak
2	1694.000	-13.10	56.95	43.85	74.00	-30.15	Peak
3	3146.000	-9.83	57.02	47.19	74.00	-26.81	Peak



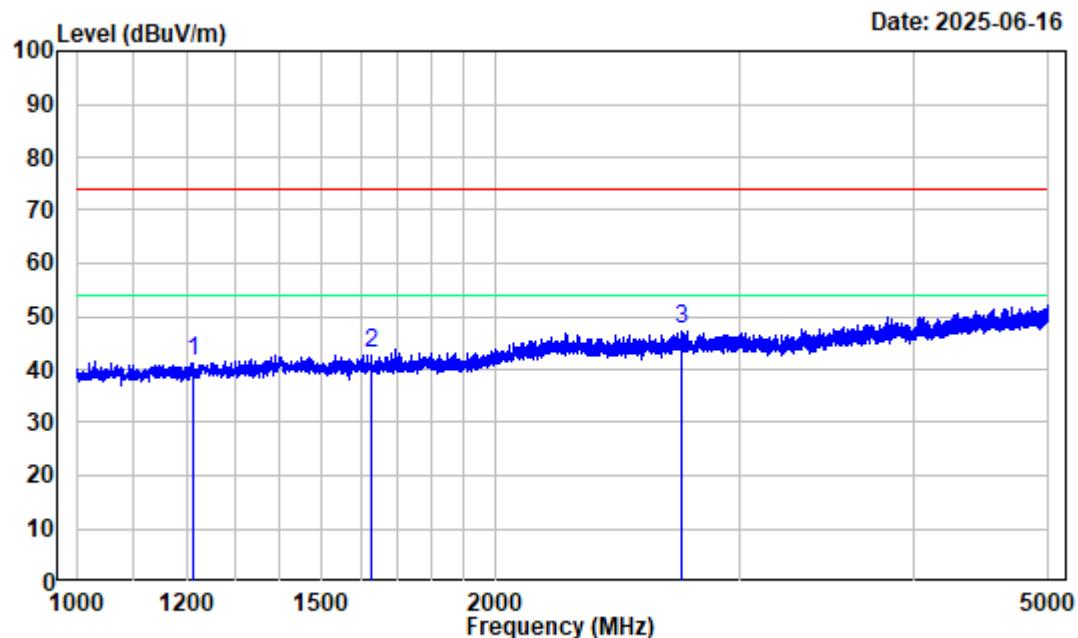
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 4  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1214.000	-14.28	55.58	41.30	74.00	-32.70	Peak
2	1918.000	-12.73	56.39	43.66	74.00	-30.34	Peak
3	3493.500	-9.55	57.09	47.54	74.00	-26.46	Peak

**Test Mode 5: Receiver at 400MHz**

Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 5  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

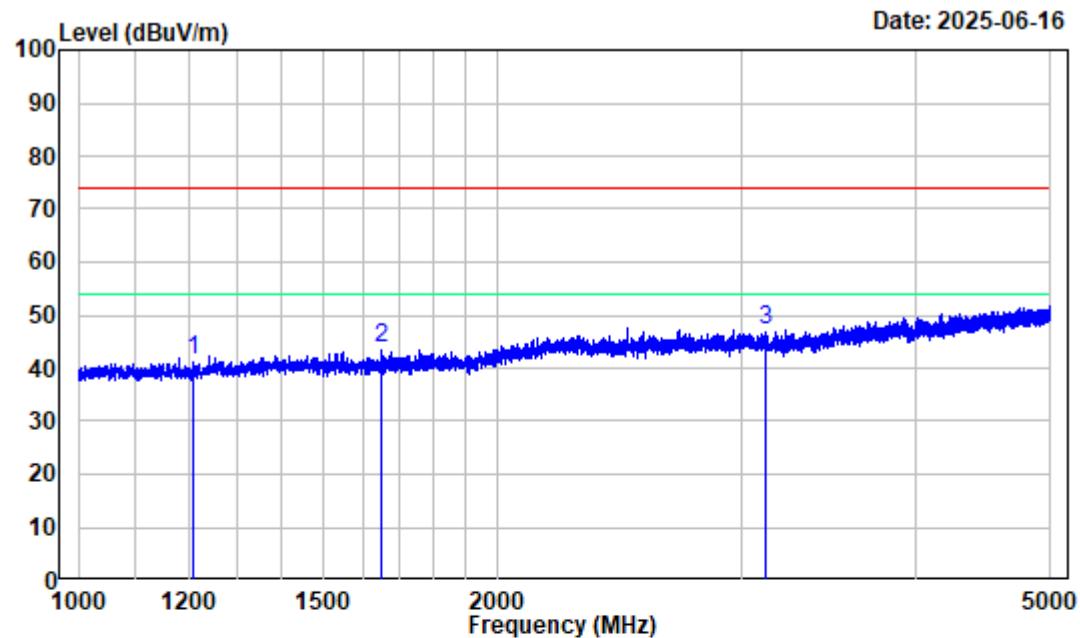
Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1209.000	-14.34	56.10	41.76	74.00	-32.24	Peak
2	1909.000	-12.78	55.80	43.02	74.00	-30.98	Peak
3	3468.500	-9.79	57.67	47.88	74.00	-26.12	Peak



Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 5  
Tester : Kevin Lv

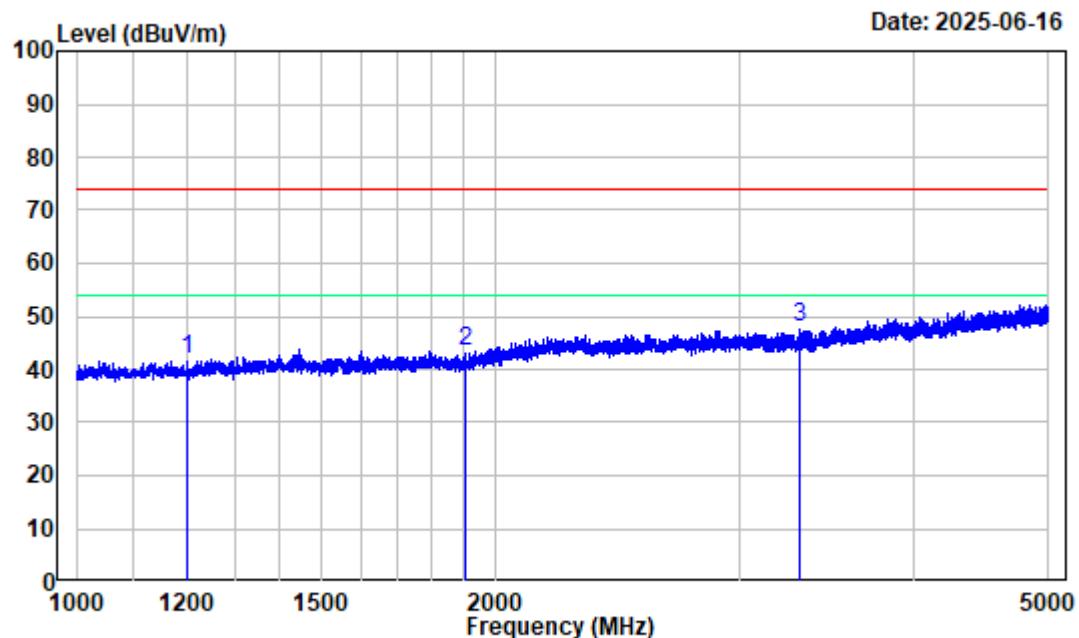
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1214.500	-14.27	55.92	41.65	74.00	-32.35	Peak
2	1630.000	-13.43	56.49	43.06	74.00	-30.94	Peak
3	2724.000	-9.83	57.43	47.60	74.00	-26.40	Peak

**Test Mode 6: Receiver at 460MHz**

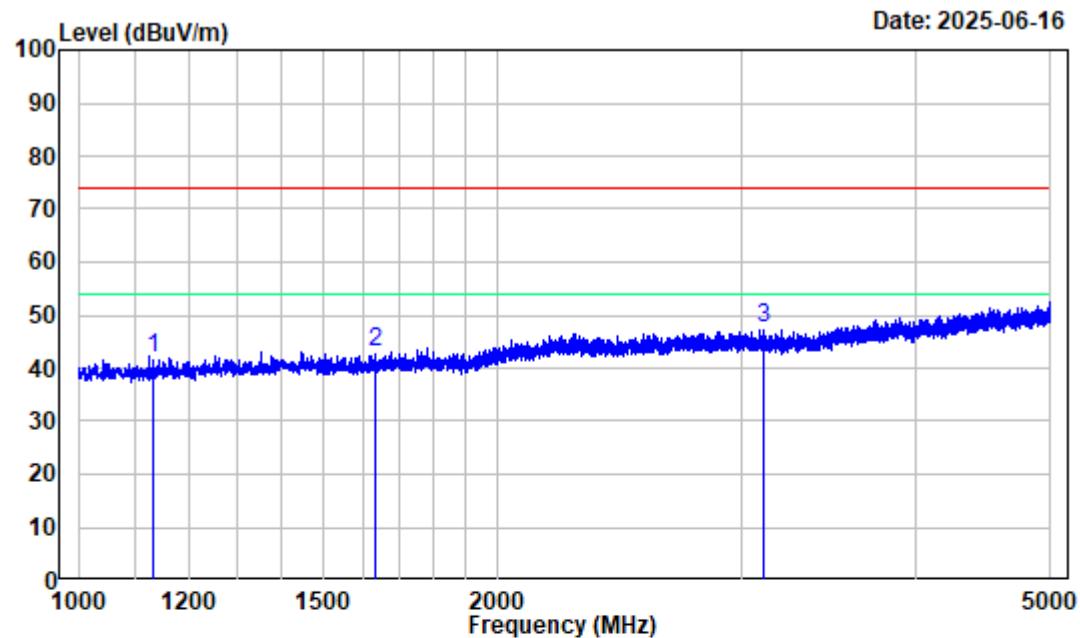
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 6  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1211.000	-14.31	55.93	41.62	74.00	-32.38	Peak
2	1652.000	-13.24	57.00	43.76	74.00	-30.24	Peak
3	3118.000	-9.89	57.05	47.16	74.00	-26.84	Peak



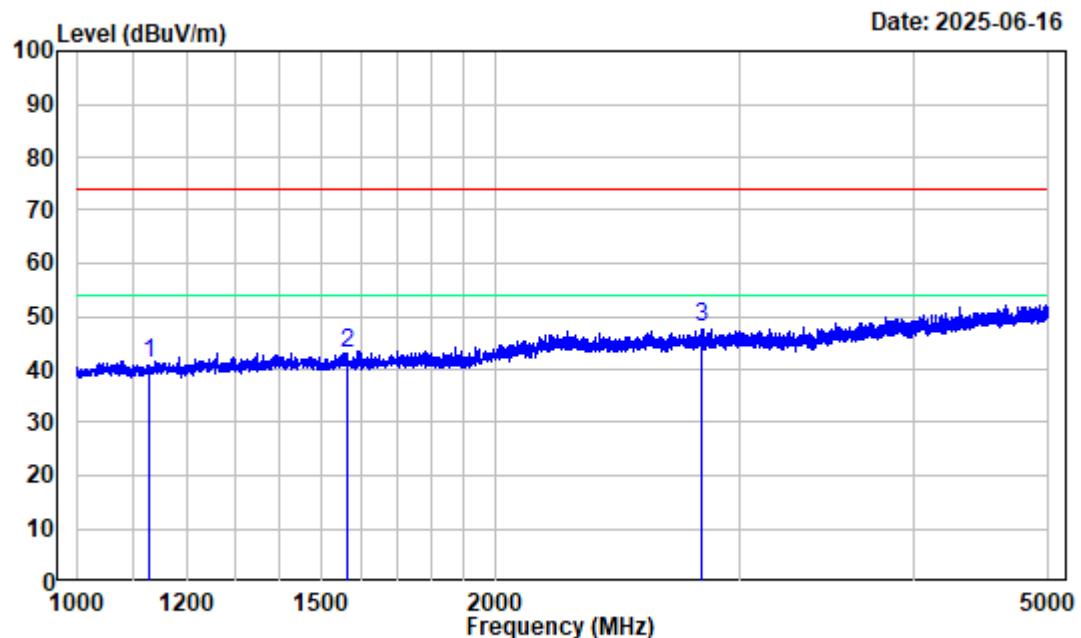
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 6  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1201.000	-14.43	56.34	41.91	74.00	-32.09	Peak
2	1907.000	-12.78	56.02	43.24	74.00	-30.76	Peak
3	3309.000	-10.04	57.92	47.88	74.00	-26.12	Peak

**Test Mode 7: Receiver at 520MHz**

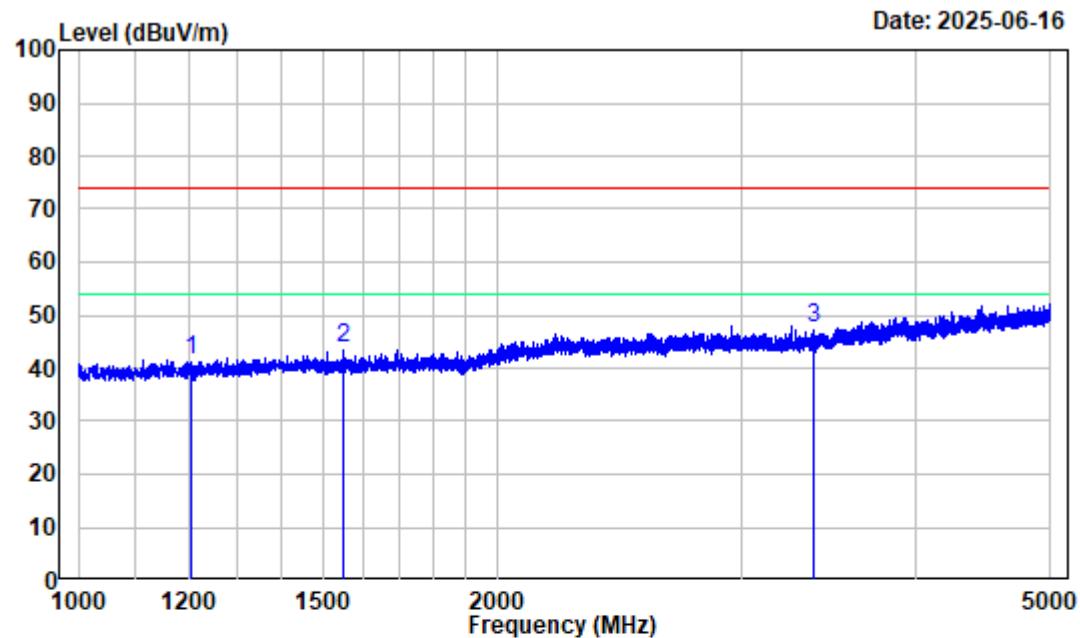
Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 7  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>B</sub> U	dB <sub>B</sub> U/m	Line	
1	1130.500	-14.31	56.17	41.86	74.00	-32.14	Peak
2	1637.000	-13.37	56.39	43.02	74.00	-30.98	Peak
3	3108.000	-9.91	57.27	47.36	74.00	-26.64	Peak



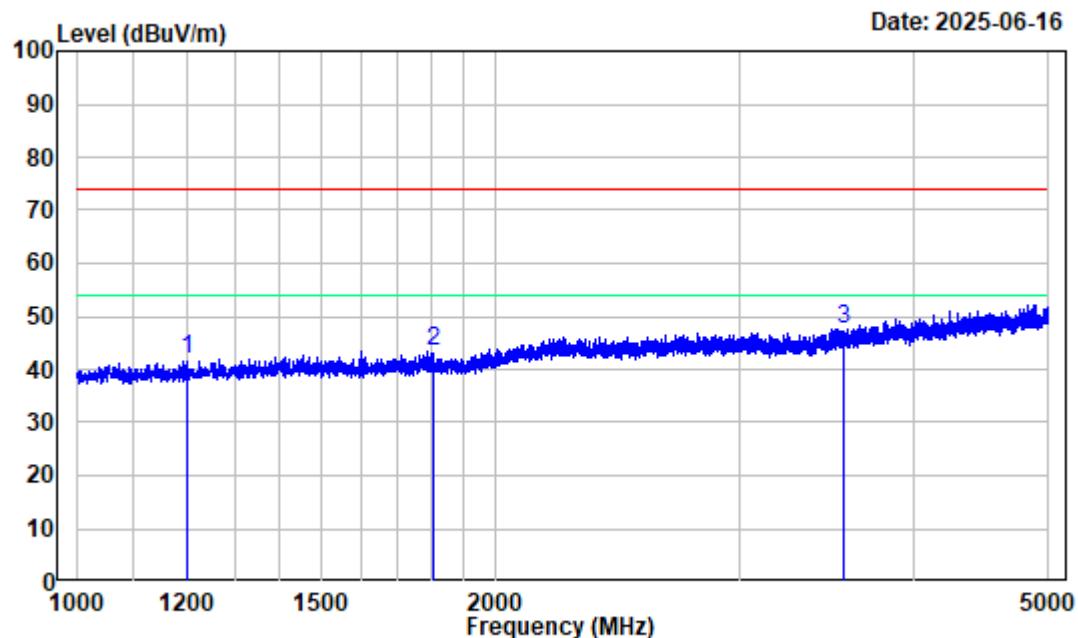
Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 7  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	1127.000	-14.31	55.34	41.03	74.00 -32.97 Peak
2	1566.500	-13.52	56.63	43.11	74.00 -30.89 Peak
3	2816.000	-9.99	57.75	47.76	74.00 -26.24 Peak

**Test Mode 8: Scanning receiver (Digital)**

Site : chamber  
Condition : 3m HORIZONTAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 8  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1207.000	-14.35	55.96	41.61	74.00	-32.39	Peak
2	1552.000	-13.43	57.17	43.74	74.00	-30.26	Peak
3	3382.000	-9.83	57.22	47.39	74.00	-26.61	Peak



Site : chamber  
Condition : 3m VERTICAL  
Job No. : 2504S52470E-EM  
Test Mode : Test Mode 8  
Tester : Kevin Lv  
Receiver Setting: Peak:RBW:1MHz VBW:3MHz

Freq	Factor	Read		Limit		Over	Remark
		Level	Level	Line	Line		
1	1200.000	-14.44	56.22	41.78	74.00	-32.22	Peak
2	1808.500	-12.89	56.33	43.44	74.00	-30.56	Peak
3	3559.000	-9.12	56.68	47.56	74.00	-26.44	Peak

## FCC §15.111-ANTENNA CONDUCTED POWER FOR RECEIVES

### Applicable Standard

According to FCC §15.111

### Limit

The antenna conducted power of the receiver as defined in §15.111 shall not exceed the values given in the following tables

Frequency Range	Limit
9 kHz to 5 GHz	2.0 nW (-57 dBm)

### EUT Setup



### Test Procedure

1. The receiver antenna terminal connected to a spectrum analyzer.
2. The test data of the worst case condition was reported on the following Data page.

### Test Data

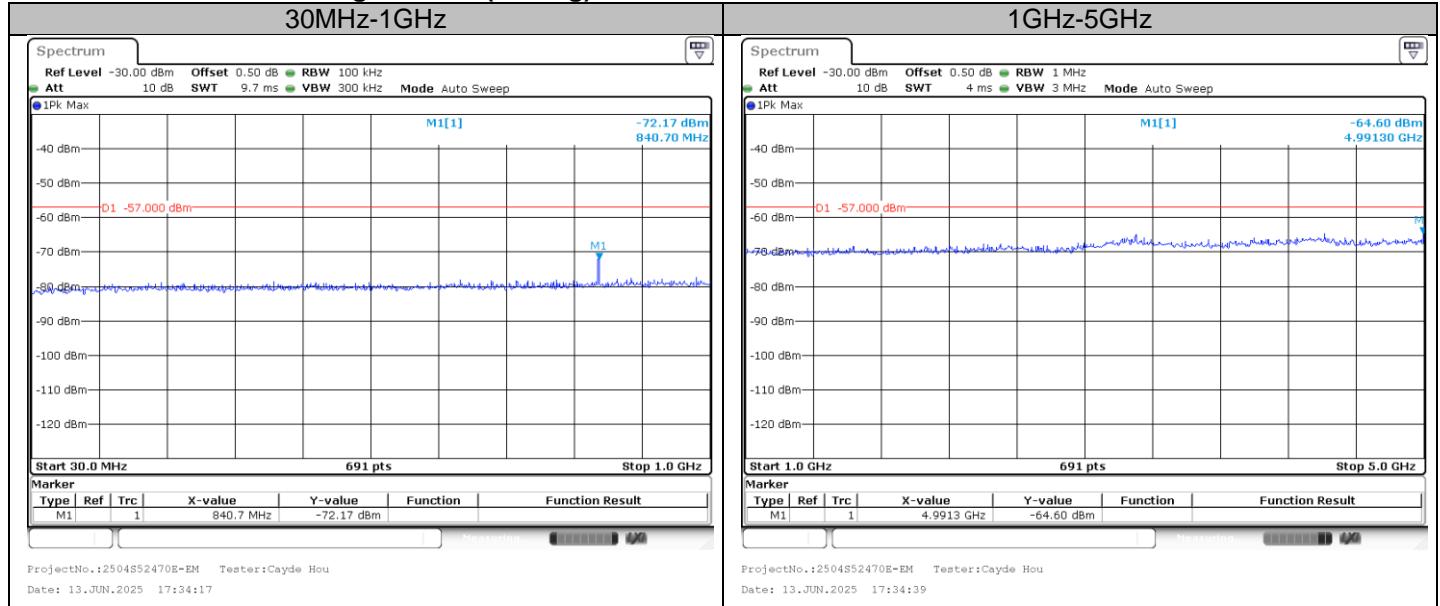
#### Environmental Conditions

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	99.7 kPa

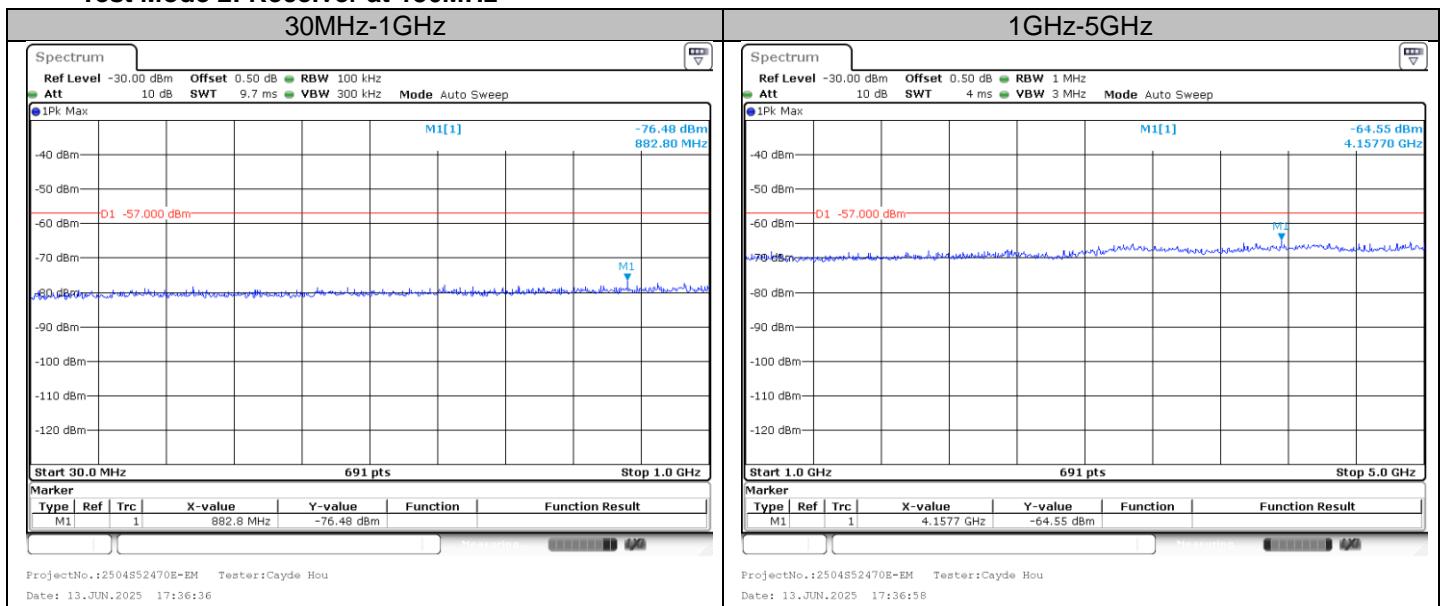
*The testing was performed by Cayde Hou on 2025-06-13.*

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

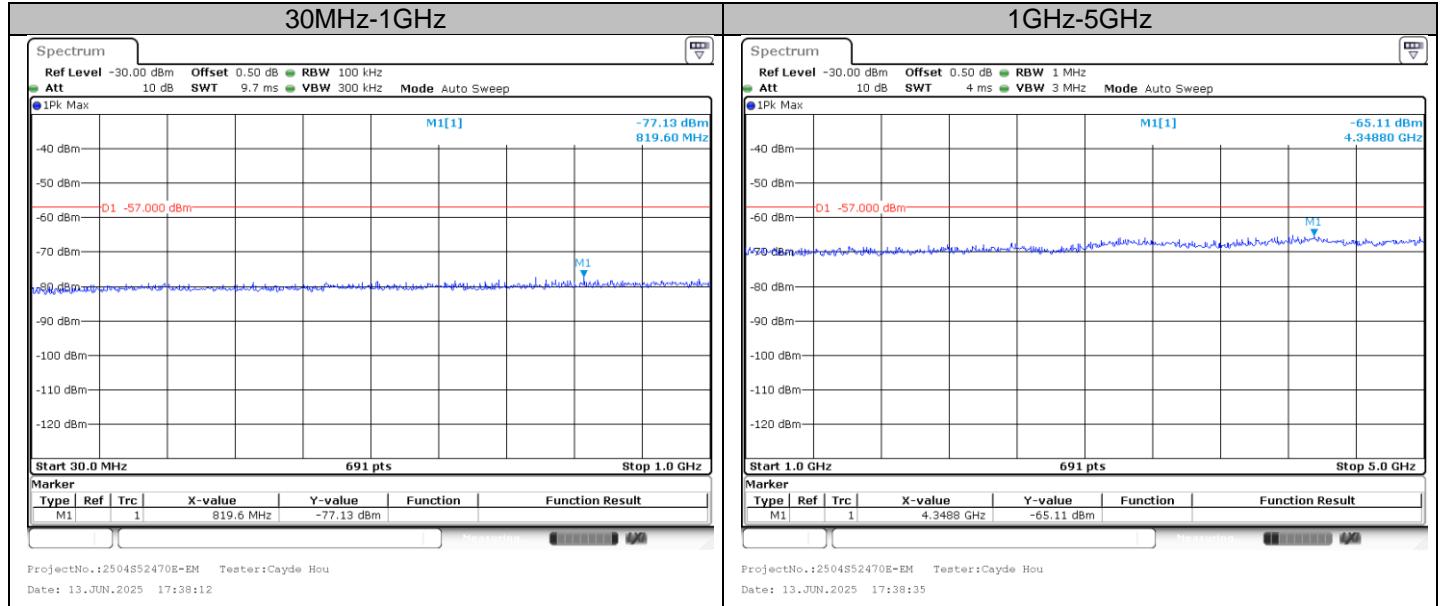
## Test Mode 1: Scanning receiver (Analog)



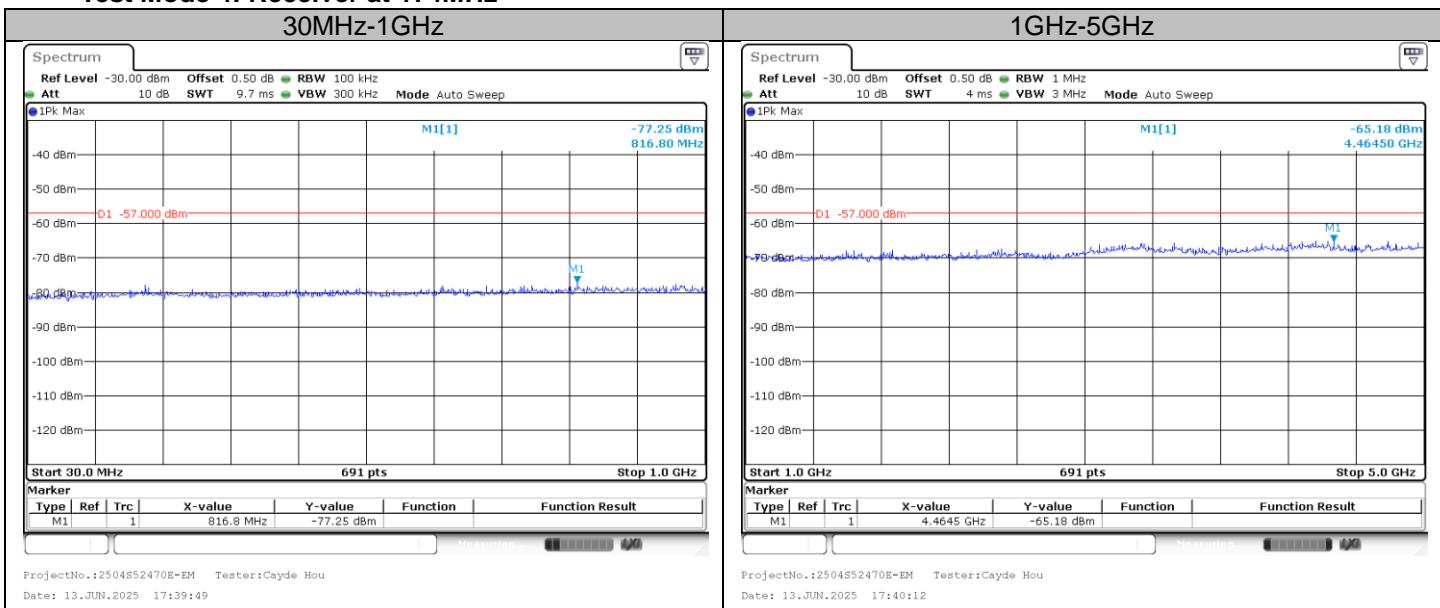
## Test Mode 2: Receiver at 136MHz



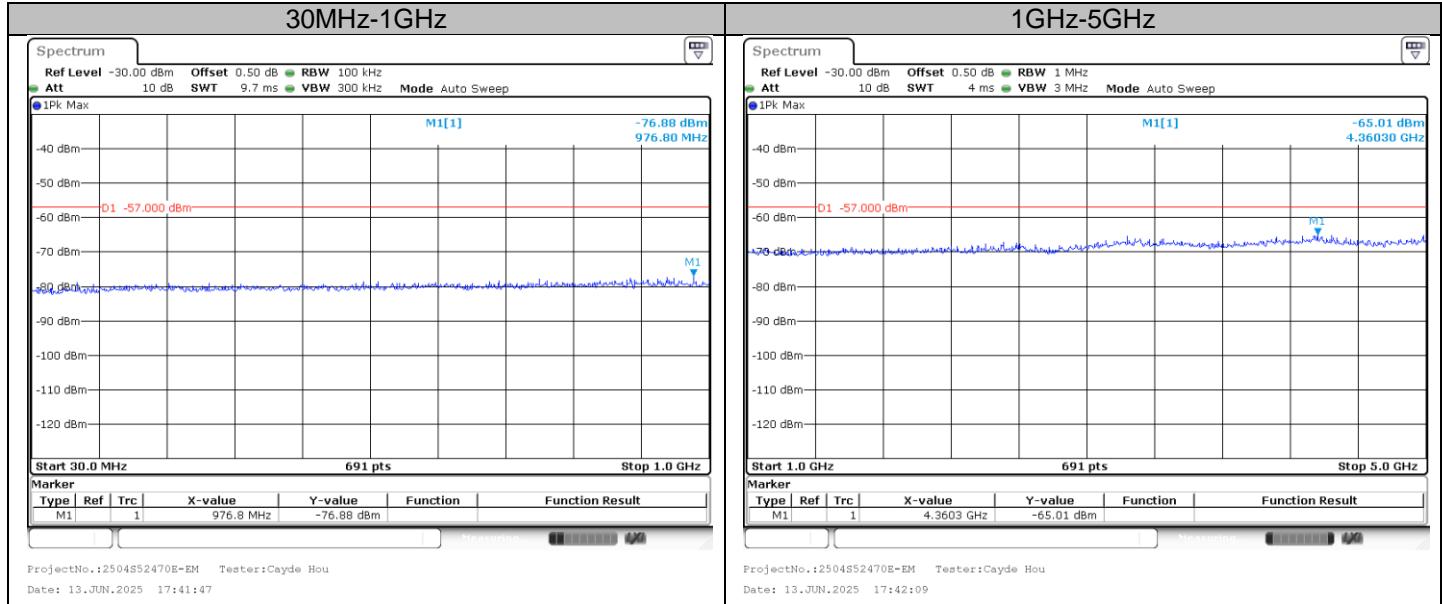
## Test Mode 3: Receiver at 155MHz



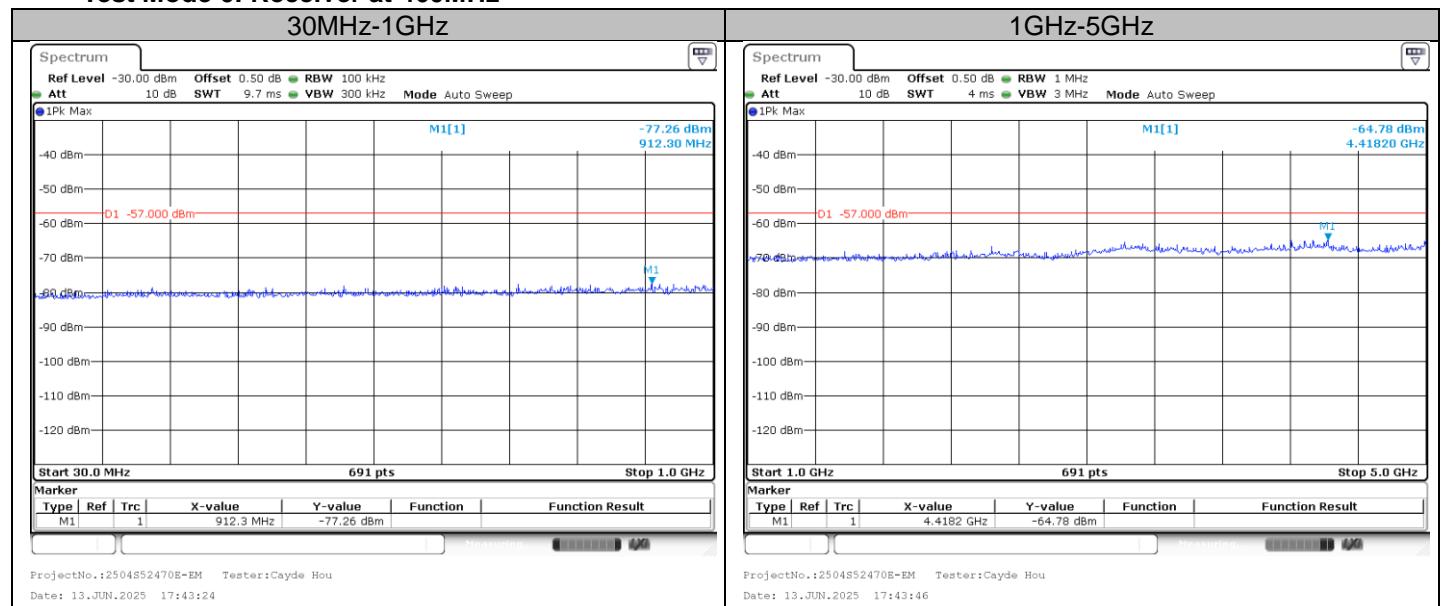
## Test Mode 4: Receiver at 174MHz



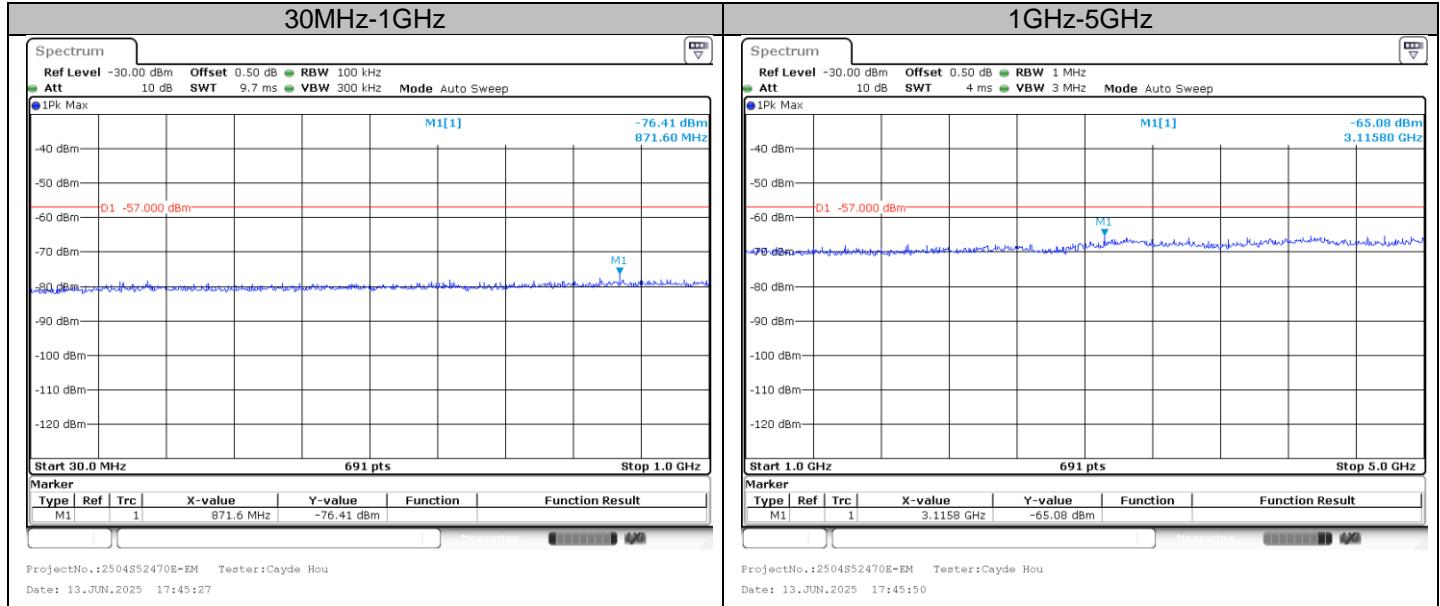
## Test Mode 5: Receiver at 400MHz



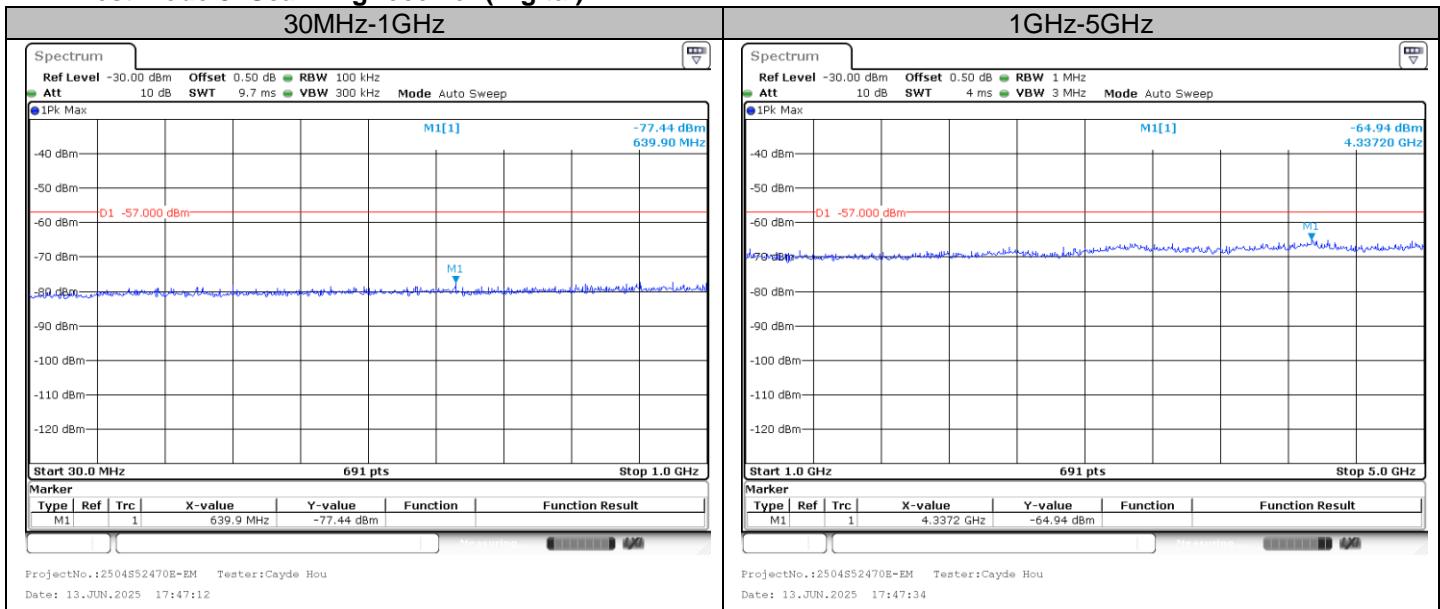
## Test Mode 6: Receiver at 460MHz



## Test Mode 7: Receiver at 520MHz



## Test Mode 8: Scanning receiver (Digital)



## FCC §15.121(B)-SCANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH SCANNING RECEIVERS

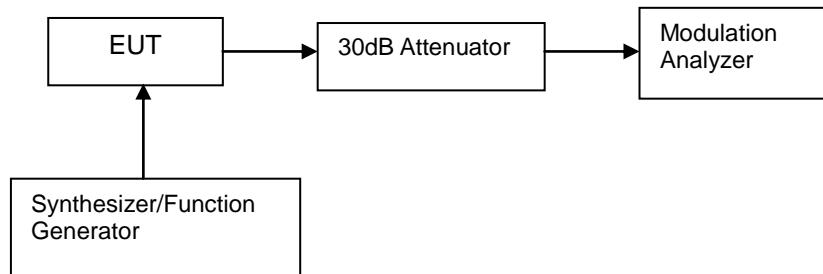
### Applicable Standard

According to FCC §15.121(b)

### Limit

Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

### EUT Setup



### Test Procedure

- 1) Connected the EUT as shown in the above block diagram.
- 2) Apply a RF signal to the receiver input port at lowest, middle and highest channel frequencies of receiver operation band.
- 3) Adjust the audio output level of the receiver to it's rated value with the distortion less than 10%.
- 4) Adjust the RF Signal Generator Output Power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB. This output level of the RF SG at each channel frequency is the sensitivity of the receiver.
- 5) Select the lowest or worse-case sensitivity level for all of the bands as the reference sensitivity.
- 6) Adjust the RF Signal Generator output to a level of +60 dB above the reference sensitivity obtained in step 5) and its frequency to the frequency points in the cellular band.
- 7) Set the Receiver squelch to threshold, the signal required to open the squelch must be lower than the reference sensitivity level.
- 8) Set the receiver in a scanning mode and allow it to scan through it's complete receiving range.
- 9) If the receiver unsquelched or stopped on any frequency, receiving at this frequency, then adjust the signal generator output level until 12 dB SINAD is produced, this level is the spurious value and the difference between the reference sensitivity and the spurious value is the rejection ratio and must be at least 38dB.
- 10) Repeat above procedure at the frequencies 824, 836.0, and 849 MHz for the mobile band, and 869, 881.5, and 894 MHz for the cellular base band.

## Test Data

### Environmental Conditions

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	99.7 kPa

The testing was performed by Cayde Hou on 2025-06-13.

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

EUT's Scanning Frequency Range (MHz)	Test Frequencies of Cellular Band (MHz)	Measurement Result (dB)	Limit (dB)
136-174	824, 836.0, 849, 869, 881.5, 894	47	>38
400-520	824, 836.0, 849, 869, 881.5, 894	45	>38

## **EXHIBIT A-EUT PHOTOGRAPHS**

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Please refer to the Annex: 2504S52470E-EM EUT EXTERNAL PHOTOGRAPHS and 2504S52470E-EM EUT INTERNAL PHOTOGRAPHS.

## **EXHIBIT B-TEST SETUP PHOTOGRAPHS**

Please refer to the Attachment: 2504S52470E-EM-02 TEST SETUP PHOTOGRAPHS.

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