

TEST REPORT

Applicant Name: JEM ACCESSORIES INC.
Address: 32 Brunswick Avenue, Edison, New Jersey, United States,
08817
Report Number: 2601R21608E-RF-00B
FCC ID: 2AHAS-BTFM360M

Test Standard (s)

FCC PART 15.239

Sample Description

Product Type: Wireless FM Transmitter and Car Charger
Model No.: BTFMT36025509
Multiple Model(s) No.: N/A
Trade Mark: N/A
Date Received: 2026-04-09
Issue Date: 2026-07-08

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Wills Yu

Wills Yu
RF Engineer

Approved By:

Nancy Wang

Nancy Wang
RF Supervisor

Note: 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.

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Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China
Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2601R21608E-RF-00B	Original Report	2026-07-08

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	88.1-107.9 MHz
Maximum E-field strength	47.98dBuV/m@3m
Modulation Technique	FM
Voltage Range	DC 12-24V
Sample serial number	3JGP-4 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

Objective

This test report is in accordance with Part 2-Subpart J, and Part 15-Subparts A and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.209 and 15.239 rules.

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.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		52.29kHz(k=1.96, 95% level of confidence)
RF Frequency		81.235Hz(k=1.96, 95% level of confidence)
AC Power Lines Conducted Emissions	9kHz~150 kHz	3.46dB(k=2, 95% level of confidence)
	150 kHz ~30MHz	3.72dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~30MHz	3.66dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Horizontal)	5.10dB(k=2, 95% level of confidence)
	30MHz~1000MHz (Vertical)	6.28dB(k=2, 95% level of confidence)
	1GHz - 6GHz	6.18dB(k=2, 95% level of confidence)
	6GHz - 18GHz	6.62dB(k=2, 95% level of confidence)
	18GHz - 40GHz	6.66dB(k=2, 95% level of confidence)
Temperature		$\pm 0.4^{\circ}\text{C}$
Humidity		$\pm 2\%$
Supply voltages		DC $\pm 0.4\%$; AC $\pm 1\%$

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.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, test firm registration No.: 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured in a testing mode which provided by manufacturer. The operating frequency is 88.1-107.9MHz and the channel spacing is 200kHz. The 88.1MHz, 98.1MHz and 107.9MHz were chosen for test.

Note: The device supports DC12-24V power supply, after pre testing, it was found that the worst-case was when the power supply voltage was DC 12V, so it was selected to complete all tests.

Input 2.5 kHz tone through Bluetooth function of mobile phone and EUT connection.

EUT Exercise Software

No exercise software was used.

Equipment Modifications

No modifications were made to the unit tested.

Support Equipment List and Details

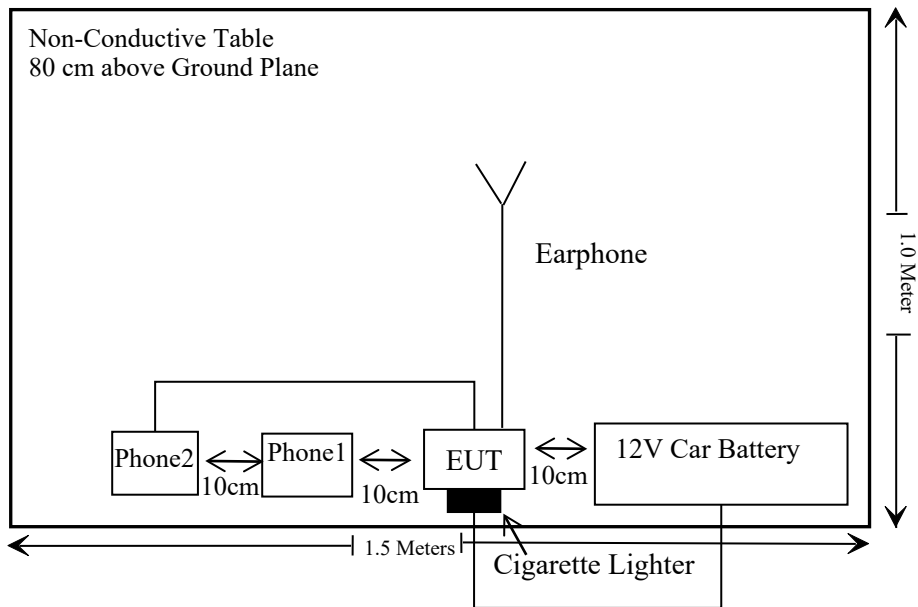
Manufacturer	Description	Model	Serial Number
instek	DC Power Supply	GPS-3030DD	EM832096
Unknown	12V Car Battery	Unknown	Unknown
MIUI	Phone1	Redmi Note 12T Pro	48257/S3T100576
iPone	Phone2	MQ3G3CH/A	YQ4T7X2D71
Apple	Earphone	unknown	Unknown

Support Cable Descriptions

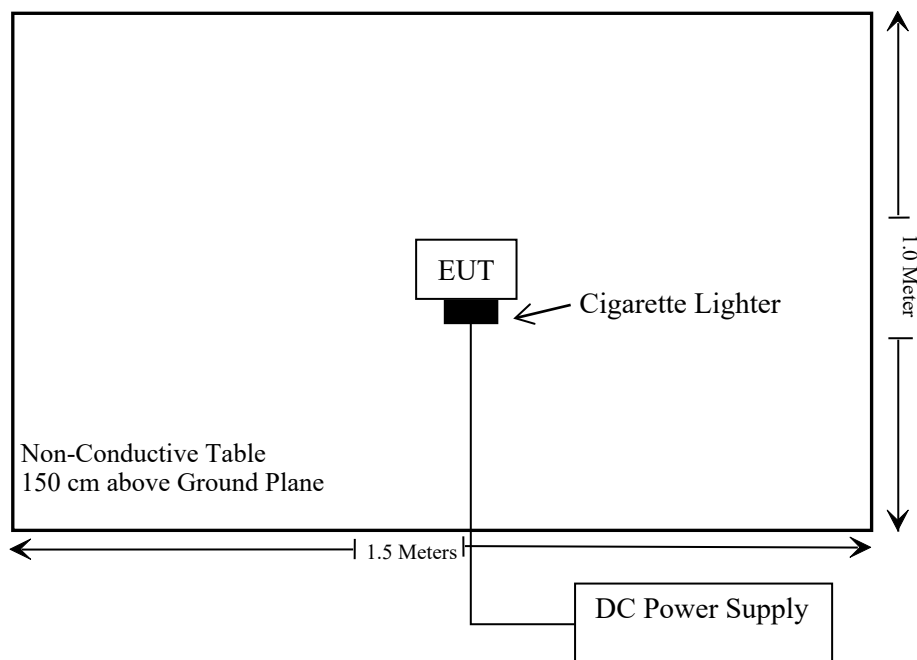
Cable Description	Length (m)	From/Port	To
Unshielded detachable DC cable	10.0	EUT	DC Power Supply
Unshielded detachable twisted pair DC cable	1	EUT	12V Car Battery
Unshielded detachable USB cable	1.0	Phone1	EUT
Unshielded detachable Type-C cable	1.0	Phone2	EUT
Unshielded detachable AUX cable	1.5	Earphone	EUT

Block Diagram of Test Setup

Radiated Emission for below 1GHz



Radiated Emission for above 1GHz



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §1.1307 (b) & §2.1091	RF Exposure Evaluation	Compliant
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207(a)	Conducted Emissions	Not Applicable
FCC §15.205, §15.209, §15.239(b)(c)	Radiated Spurious Emissions	Compliant
FCC §15.239 (a)	20dB Bandwidth Emission	Compliant

Not Applicable: the device not connected to the public utility (AC) power line.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emissions Test & 20dB Bandwidth test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
Sonoma instrument	Pre-amplifier	310 N	186238	2025/09/08	2026/09/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Chamber A Cable	Cable A1	Cable A1	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A2	Cable A2	2025/09/08	2026/09/07
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Chamber A Cable	Cable A3	Cable A3	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A4	Cable A4	2025/09/08	2026/09/07
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
TDK	Chamber	Chamber A	2#	2023/07/12	2026/07/11
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/09/01	2026/08/31
A.H.System	Preamplifier	PAM-0118P	489	2025/09/08	2026/09/07
Schwarzbeck	Horn Antenna	BBHA9120D (1201)	1143	2023/07/26	2026/07/25
Unknown	Chamber B Cable	Cable B1	Cable B1	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B2	Cable B2	2025/09/08	2026/09/07
Unknown	Chamber B Cable	Cable B3	Cable B3	2025/09/08	2026/09/07
JD	Filter Switch Unit	DT7220FSU	DS79906	2025/08/12	2026/08/11
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2025/08/12	2026/08/11
Audix	EMI Test software	E3	191218 V9(c)	NCR	NCR
TDK	Chamber	Chamber B	1#	2023/07/14	2026/07/13

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

RF EXPOSURE EVALUATION

Applicable Standard

According to FCC §2.1091 and §1.1307(b) (3), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D04 Interim General RF Exposure Guidance

1-mW Test Exemption:

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

When the aggregate maximum available power of all transmitting antennas is ≤ 1 mW in the same time-averaging period.

Result

For worst case:

Mode	Frequency (MHz)	Antenna Gain [#]	Maximum Tune up conducted power [#]		Exemption Limit (mW)	Test Exemption
			dBm	mW		
BT	2402-2480	-0.58	-10	0.1	1	Yes

Mode	Frequency (MHz)	Maximum E-Field (dBuV/m@3m)	Maximum EIRP		1-mW Test Exemption
			(dBm)	(mW)	
FM	88.1-107.9	47.98	-47.22	0.00002	Yes

Note: EIRP = E-Field – 95.2 @3m

Simultaneous transmitting consideration (Worst case):

The FM and BT can transmit simultaneously,

The ratio= Power_{BT}/limit+ Power_{FM}/limit= 0.1+0.00002=0.1<1.0

Result: Compliant

FCC§15.203 - 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Antenna Connector Construction

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

Result: Compliant.

FCC§15.209 & §15.239(b)(c) - RADIATED EMISSIONS

Applicable Standard

FCC§15.209&FCC§15.239 (b)(c)

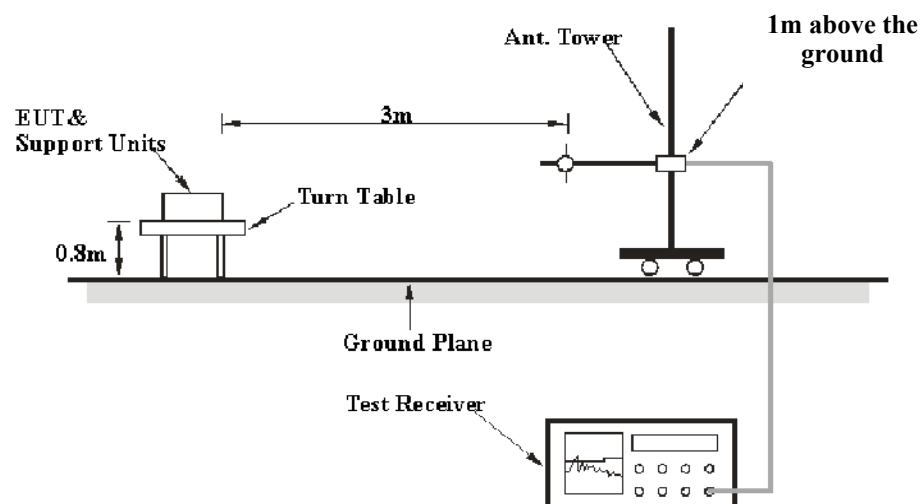
Limit

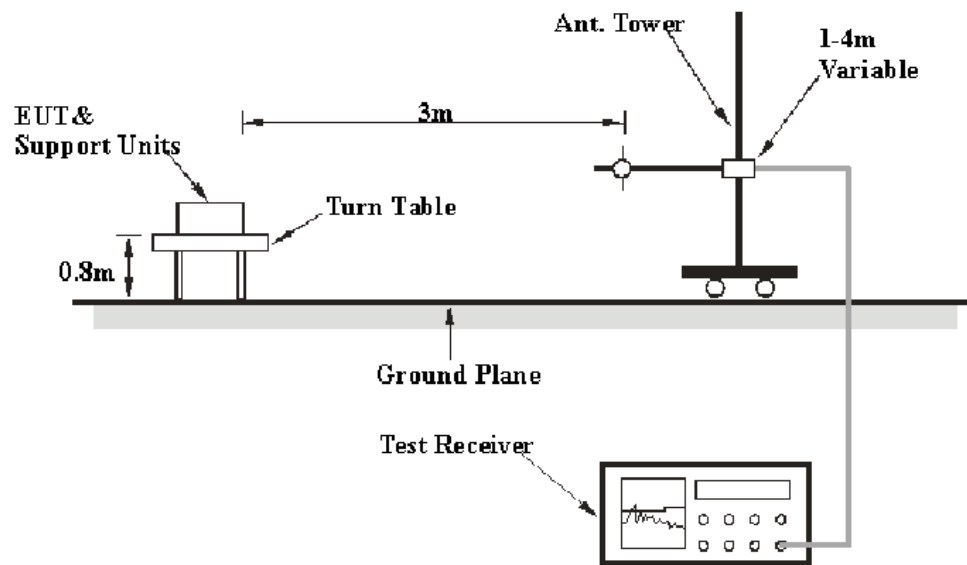
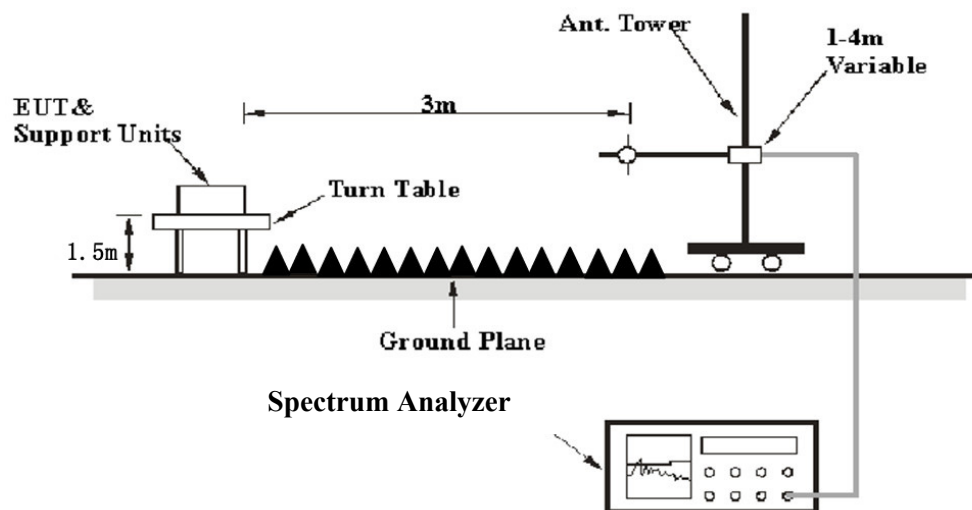
The field strength of any emissions within the authorized bandwidth shall not exceed $250\mu\text{V/m}$ measured at 3m with an average meter.

The field strength of any emissions outside the 200 kHz authorized bandwidth or outside the band 88-108MHz shall not exceed the general field strength limits specified in §15.239 (b).

EUT Setup

9 kHz-30MHz:



30MHz-1GHz:**Above 1GHz:**

The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209/15.205 and FCC 15.239 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	PK
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	120 kHz	500 kHz	/	PK	PK
Above 1 GHz	1MHz	3 MHz	/	PK	PK
	1MHz	10 Hz	/	Average	PK

Test Procedure

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

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter above ground plane for below 1GHz or 1.5 meter for above 1GHz, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

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

Factor & Over Limit/Margin 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:

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

Test Data

Environmental Conditions

Temperature:	23.1~23.8 °C
Relative Humidity:	54~55 %
ATM Pressure:	99.9~101.5 kPa

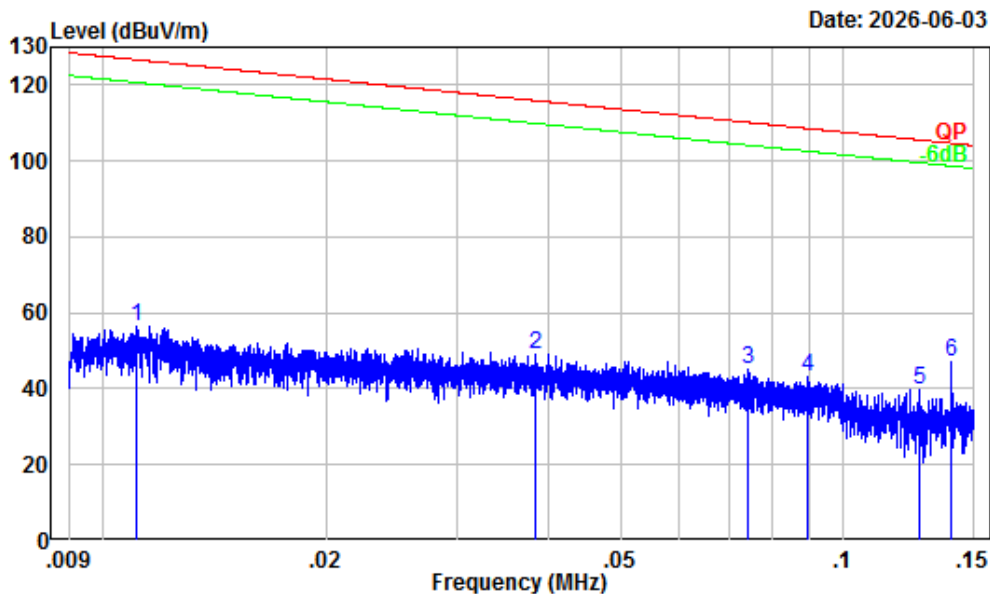
The testing was performed by Alex Yan from 2026-06-03 to 2026-06-29 for below 1GHz and Leon Guo on 2026-06-10 for above 1GHz.

EUT operation mode: Transmitting

- 1. For the radiated spurious emission below 30MHz, only the worst case (parallel) was recorded.*
- 2. For the radiated spurious emission below 1GHz, When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.*
- 3. After pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation were recorded.*

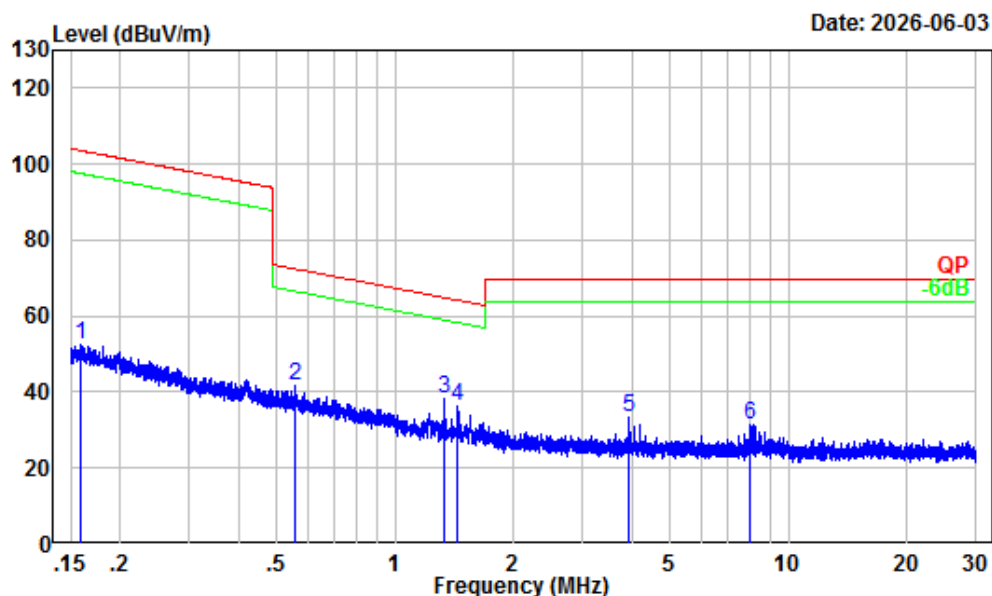
9 kHz-30MHz: worst case at low channel

Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2601R21608E-RF
Test Mode : FM Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	0.011	32.09	24.42	56.51	126.70	-70.19 Peak
2	0.038	27.62	21.33	48.95	115.92	-66.97 Peak
3	0.074	23.96	21.03	44.99	110.17	-65.18 Peak
4	0.090	22.73	20.51	43.24	108.57	-65.33 Peak
5	0.127	20.42	19.48	39.90	105.55	-65.65 Peak
6	0.140	19.65	27.32	46.97	104.69	-57.72 Peak

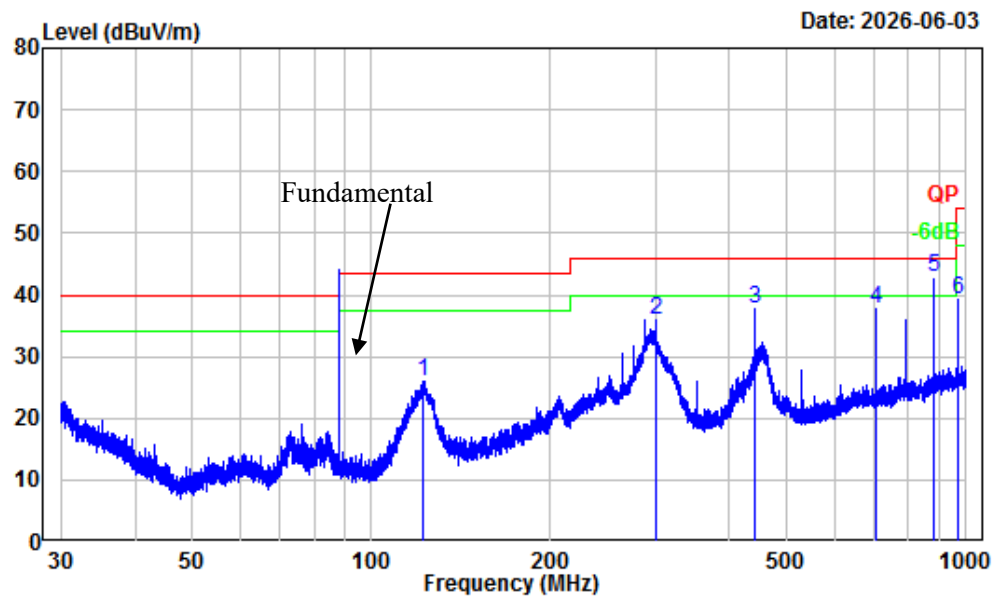


Site : Chamber A
Condition : 3m
Project Number : 2601R21608E-RF
Test Mode : FM Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.159	18.54	33.94	52.48	103.60	-51.12	Peak
2	0.556	5.71	36.16	41.87	72.68	-30.81	Peak
3	1.334	0.26	38.20	38.46	64.91	-26.45	Peak
4	1.445	-0.05	36.58	36.53	64.21	-27.68	Peak
5	3.920	-2.66	36.06	33.40	69.54	-36.14	Peak
6	7.983	-3.00	34.31	31.31	69.54	-38.23	Peak

30MHz-1GHz: worst case at low channel

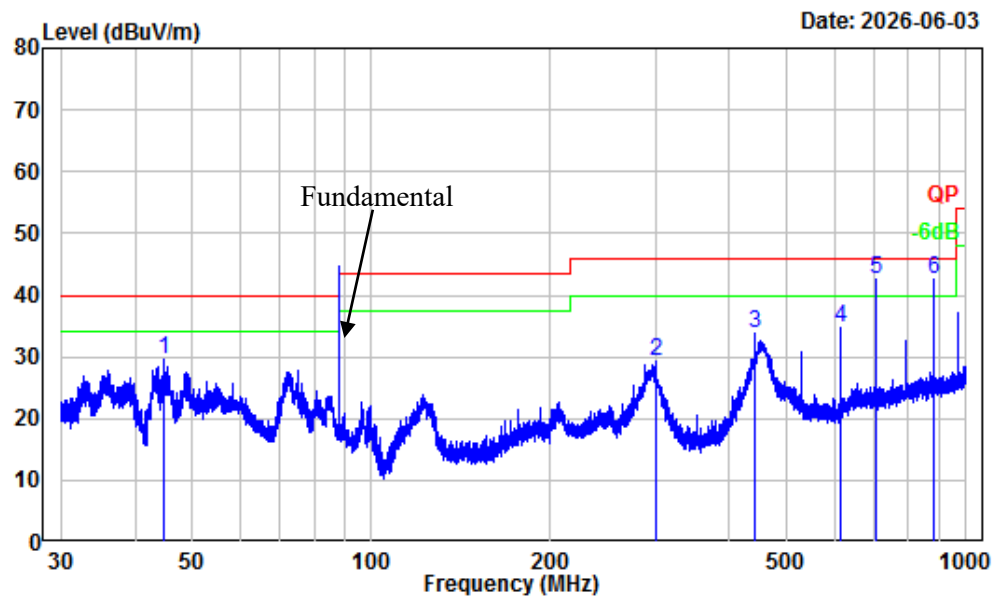
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2601R21608E-RF
Test Mode : FM Transmitting
Detector: Peak RBW/VBW: 120/500kHz
Detector: QP RBW/VBW : 120kHz
Tester : Alex Yan

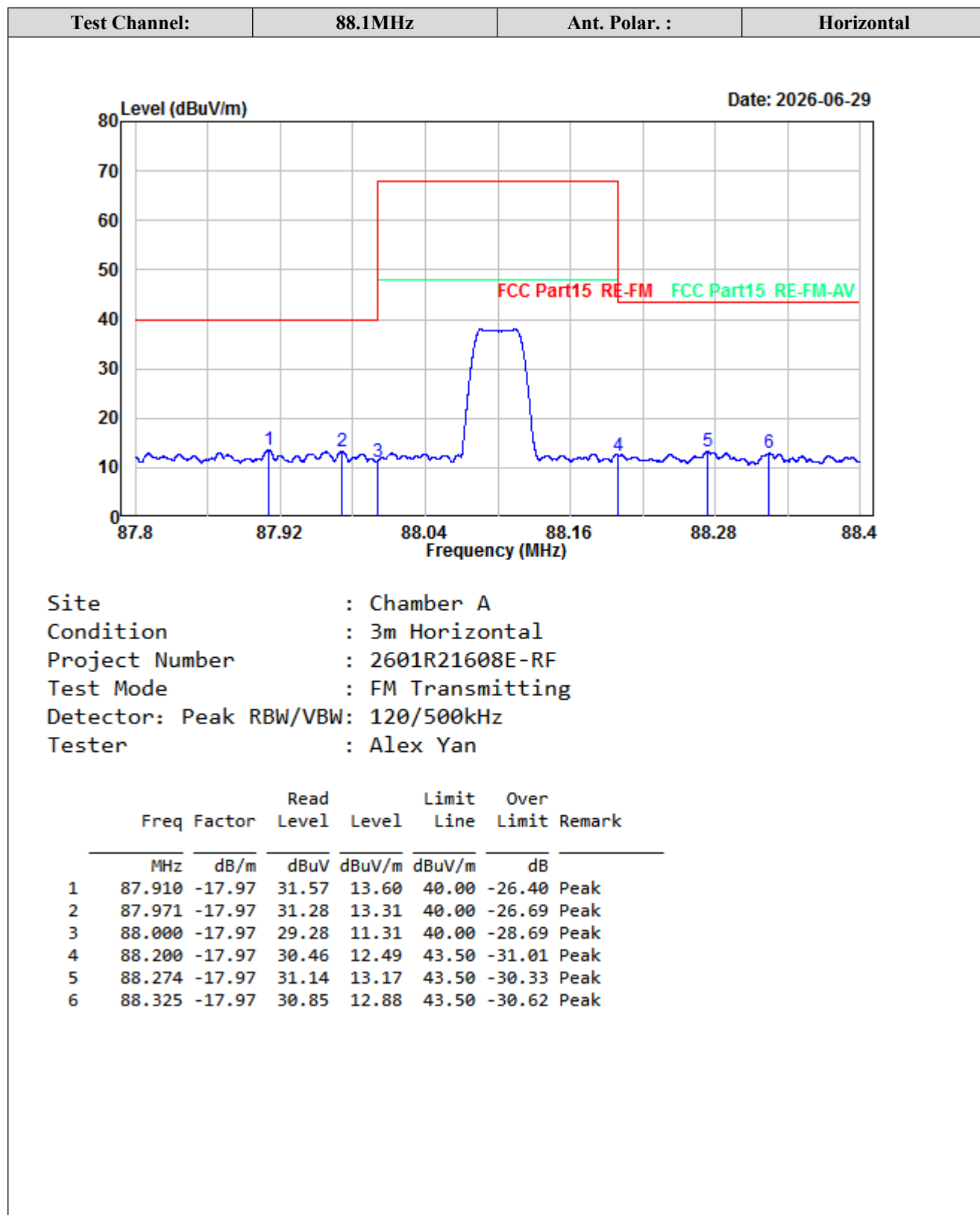
	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	122.24	-11.22	37.09	25.87	43.50	-17.63	Peak
2	299.97	-11.08	47.12	36.04	46.00	-9.96	Peak
3	440.58	-7.35	45.08	37.73	46.00	-8.27	Peak
4	704.84	-3.45	41.33	37.88	46.00	-8.12	Peak
5	881.02	-1.18	44.10	42.92	46.00	-3.08	QP
6	969.36	-0.08	39.36	39.28	54.00	-14.72	Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2601R21608E-RF
Test Mode : FM Transmitting
Detector: Peak RBW/VBW: 120/500kHz
Detector: QP RBW/VBW : 120kHz
Tester : Alex Yan

	Freq Factor		Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	44.65	-15.43	44.96	29.53	40.00	-10.47	Peak
2	299.97	-11.08	40.23	29.15	46.00	-16.85	Peak
3	440.58	-7.35	41.25	33.90	46.00	-12.10	Peak
4	616.91	-4.47	39.13	34.66	46.00	-11.34	Peak
5	704.84	-3.45	46.00	42.55	46.00	-3.45	QP
6	881.02	-1.18	43.89	42.71	46.00	-3.29	QP

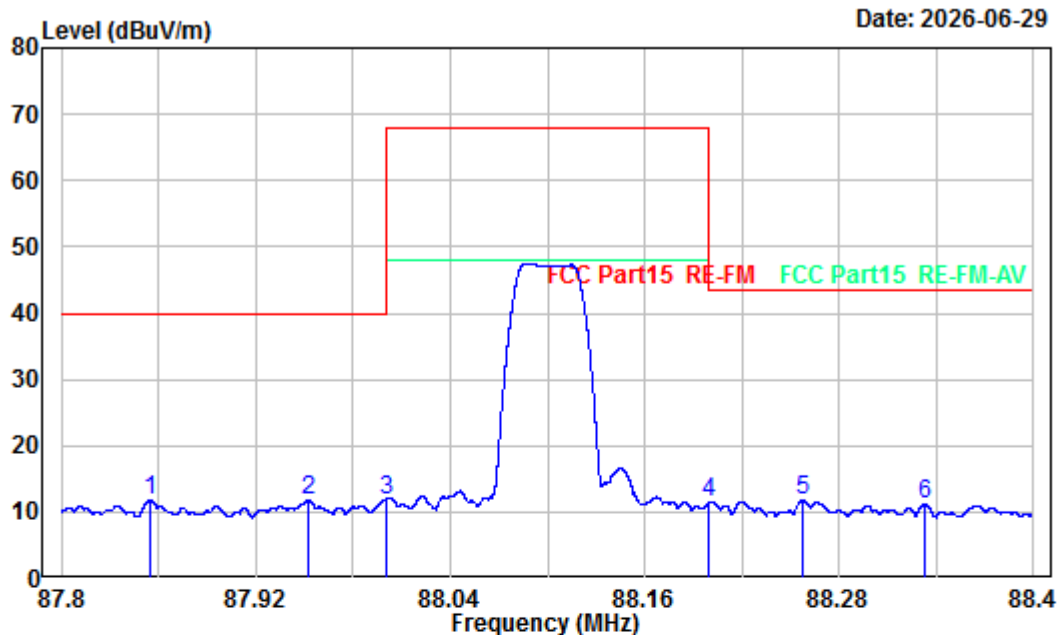
Out-of-band spurious and Fundamental E-Field strength:

Test Channel:

88.1MHz

Ant. Polar. :

Vertical



Site : Chamber A
 Condition : 3m Vertical
 Project Number : 2601R21608E-RF
 Test Mode : FM Transmitting
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

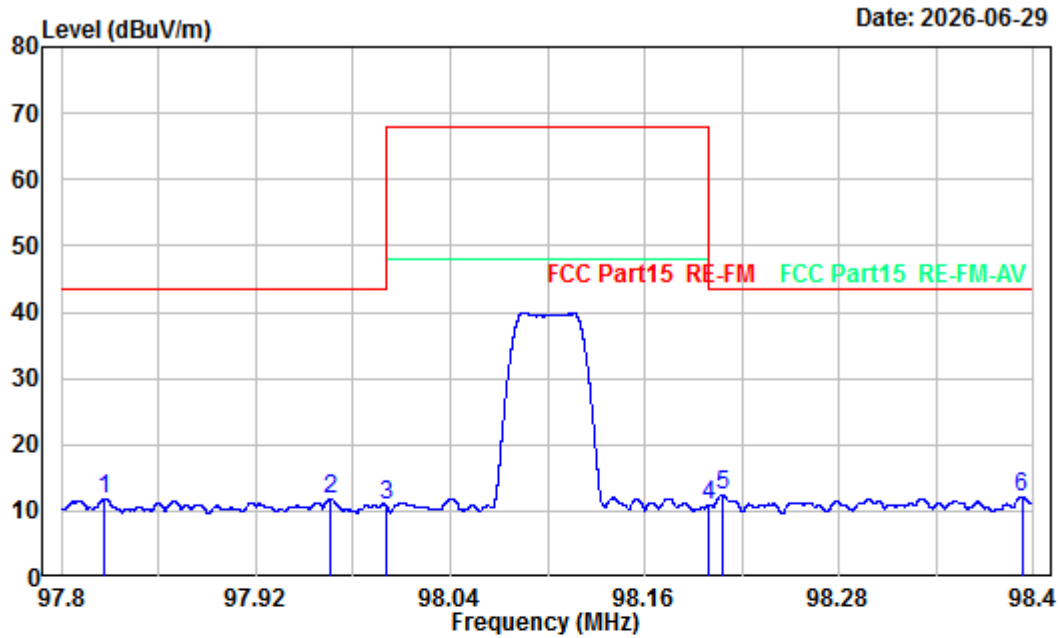
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	87.855	-17.97	29.65	11.68	40.00	-28.32	Peak
2	87.952	-17.97	29.78	11.81	40.00	-28.19	Peak
3	88.000	-17.97	29.82	11.85	40.00	-28.15	Peak
4	88.200	-17.97	29.39	11.42	43.50	-32.08	Peak
5	88.258	-17.97	29.69	11.72	43.50	-31.78	Peak
6	88.333	-17.97	29.10	11.13	43.50	-32.37	Peak

Test Channel:

98.1MHz

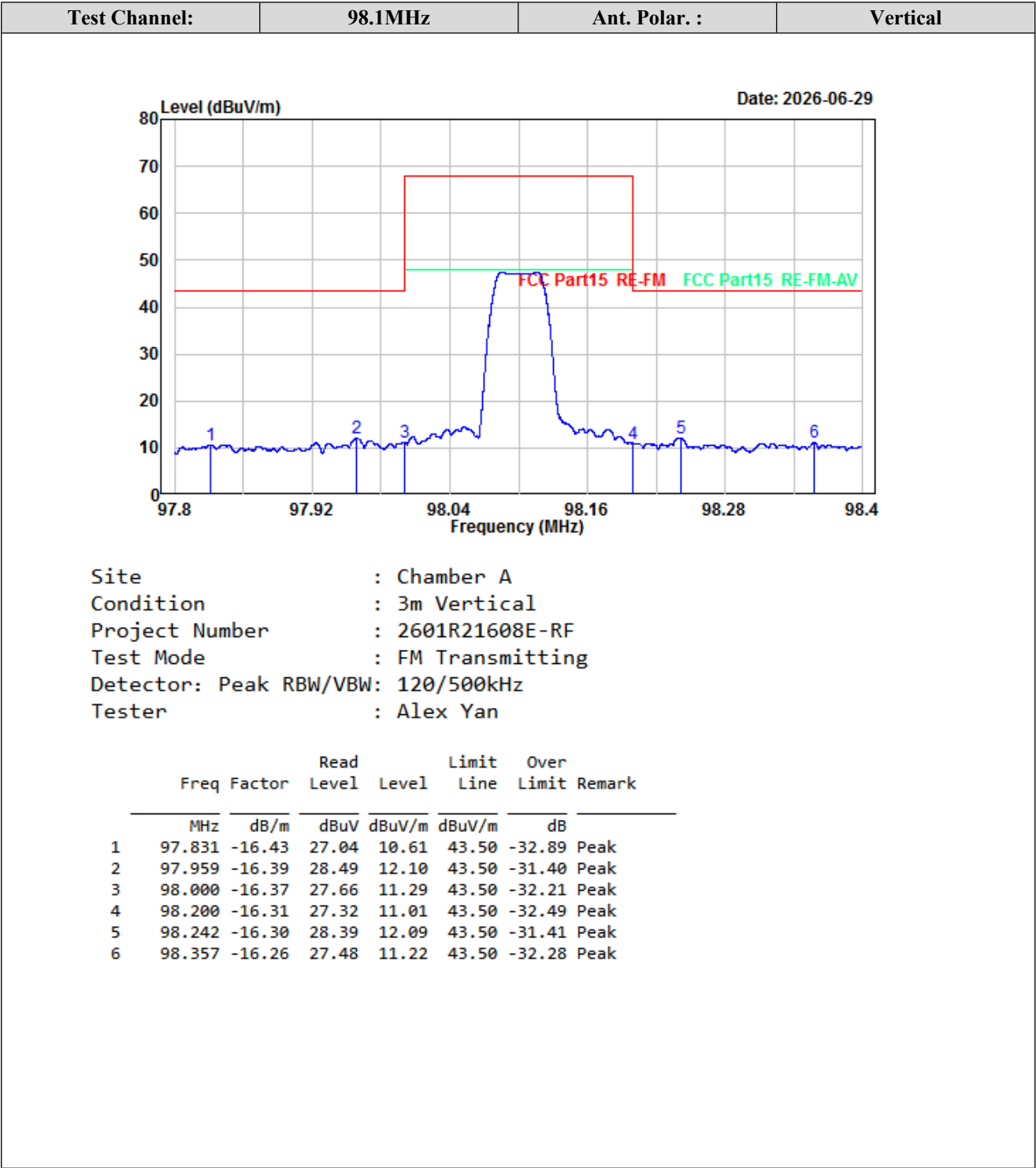
Ant. Polar. :

Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2601R21608E-RF
Test Mode : FM Transmitting
Detector: Peak RBW/VBW: 120/500kHz
Tester : Alex Yan

	Freq		Read		Limit	Over	Remark
	Factor	Level	Level	Line	Limit	Limit	
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	97.827	-16.43	28.26	11.83	43.50	-31.67	Peak
2	97.966	-16.39	28.19	11.80	43.50	-31.70	Peak
3	98.000	-16.38	27.26	10.88	43.50	-32.62	Peak
4	98.200	-16.31	27.17	10.86	43.50	-32.64	Peak
5	98.208	-16.31	28.74	12.43	43.50	-31.07	Peak
6	98.393	-16.25	28.42	12.17	43.50	-31.33	Peak

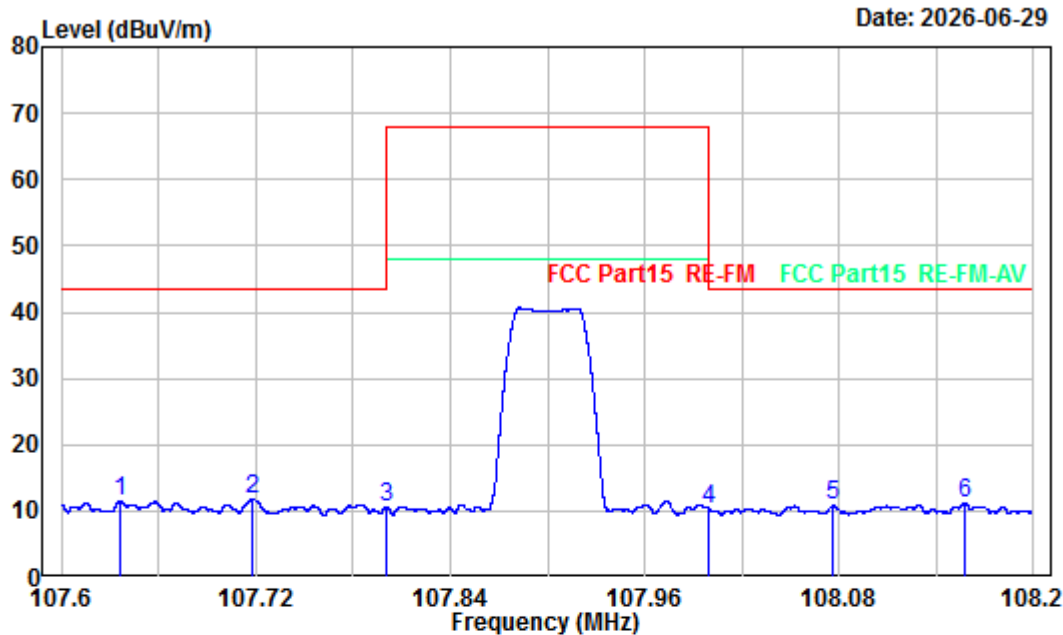


Test Channel:

107.9 MHz

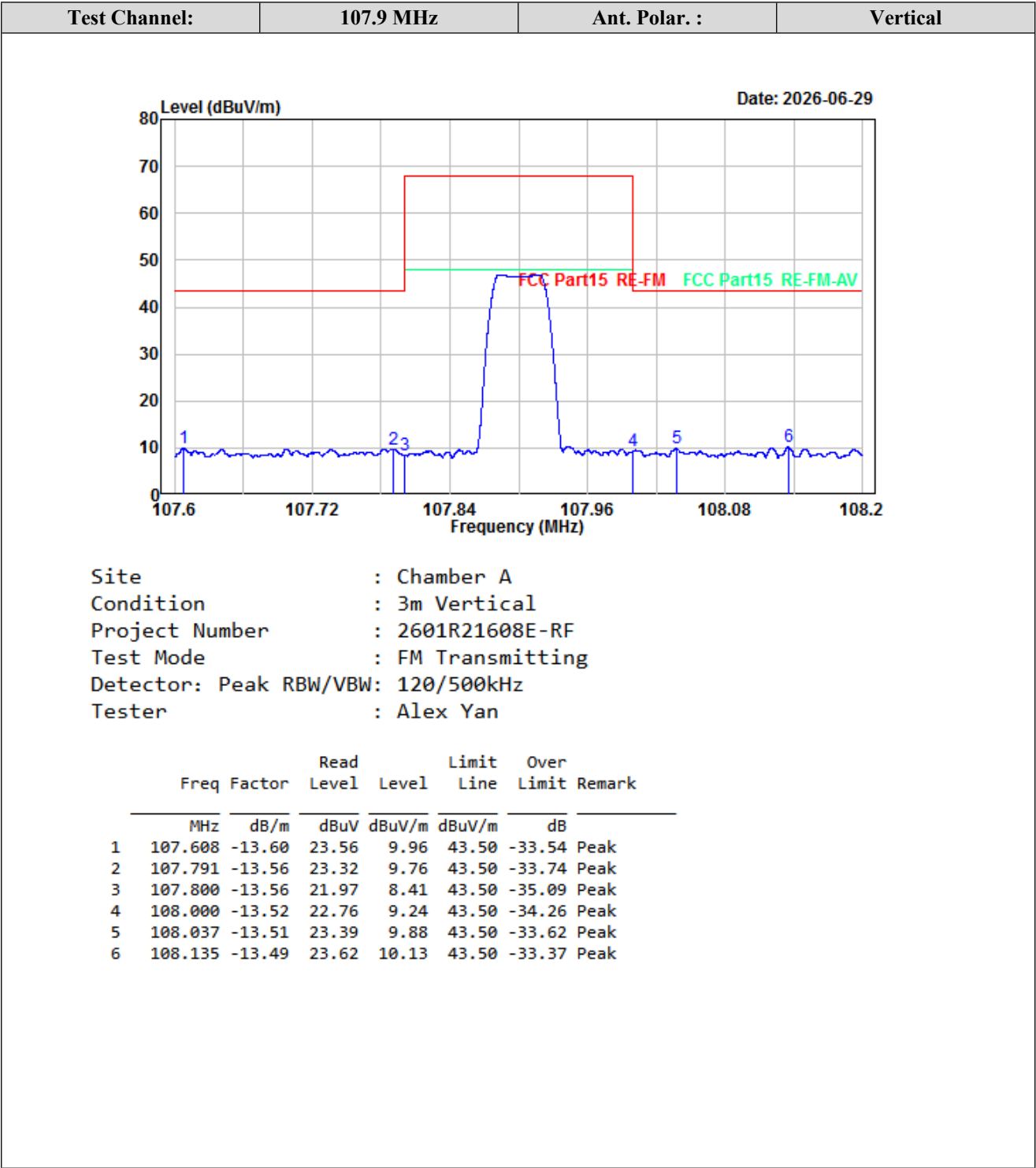
Ant. Polar. :

Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number : 2601R21608E-RF
 Test Mode : FM Transmitting
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	107.636	-13.59	24.97	11.38	43.50	-32.12	Peak
2	107.718	-13.58	25.30	11.72	43.50	-31.78	Peak
3	107.800	-13.56	24.01	10.45	43.50	-33.05	Peak
4	108.000	-13.52	23.87	10.35	43.50	-33.15	Peak
5	108.076	-13.50	24.26	10.76	43.50	-32.74	Peak
6	108.158	-13.49	24.77	11.28	43.50	-32.22	Peak



Fundamental E-Field strength:

Frequency (MHz)	Reading (dB μ V)	PK/AV	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
Low Channel							
88.1	58.89	PK	H	-18.07	40.82	68	27.18
88.1	66.05	PK	V	-18.07	47.98	68	20.02
Middle Channel							
98.1	56.68	PK	H	-16.5	40.18	68	27.82
98.1	64.26	PK	V	-16.5	47.76	68	20.24
High Channel							
107.9	53.48	PK	H	-13.63	39.85	68	28.15
107.9	60.54	PK	V	-13.63	46.91	68	21.09

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Absolute Level (Corrected Amplitude) = Reading + Factor

Margin = Limit- Absolute Level

Above 1GHz:

Frequency (MHz)	Reading (dB μ V)	PK/AV	Polar (H/V)	Factor (dB/m)	Absolute Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
High Channel							
1079.00	49.03	PK	H	-15.28	33.75	74	-40.25
1079.00	49.33	PK	V	-15.28	34.05	74	-39.95

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

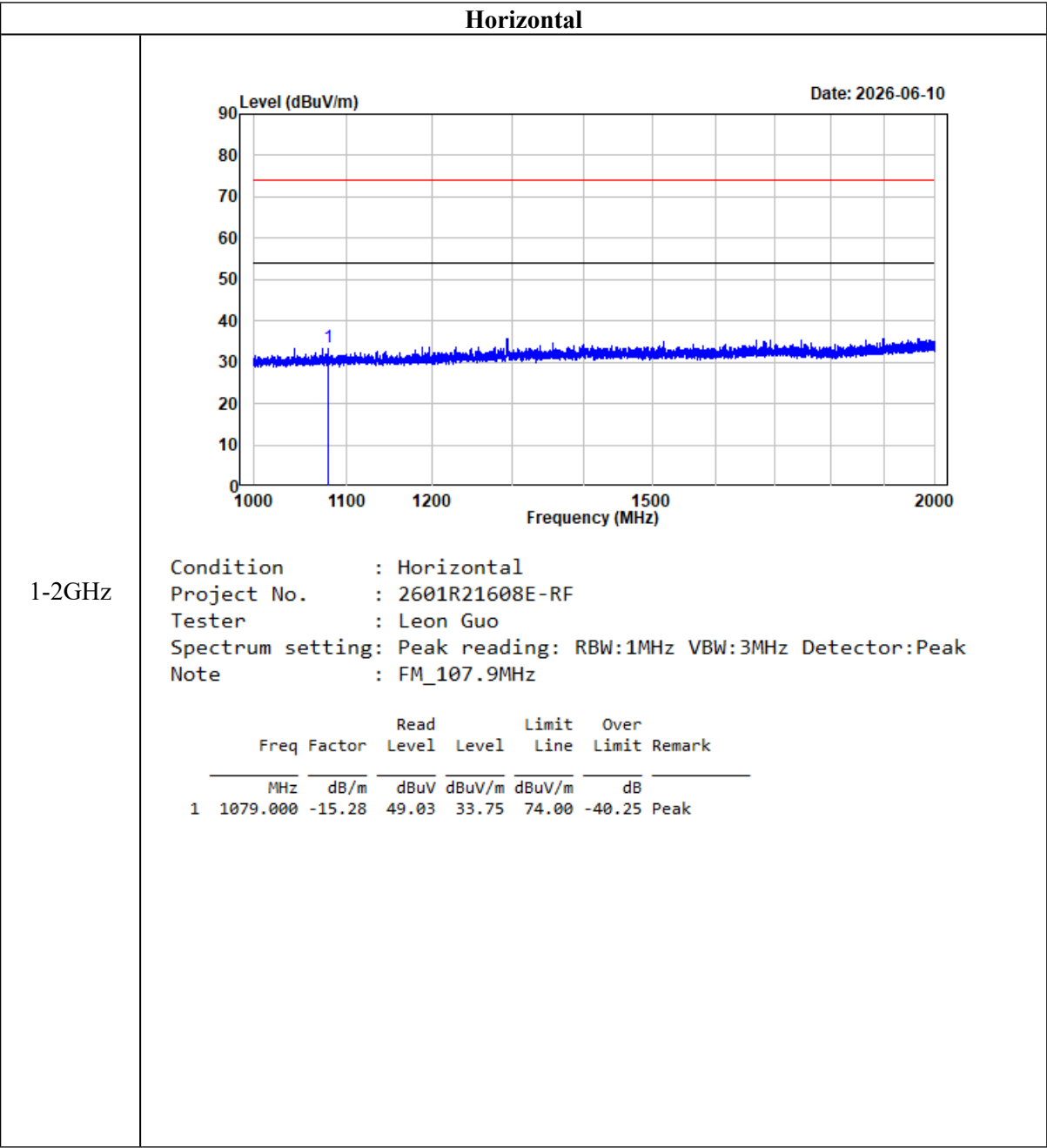
Absolute Level (Corrected Amplitude) = Factor + Reading

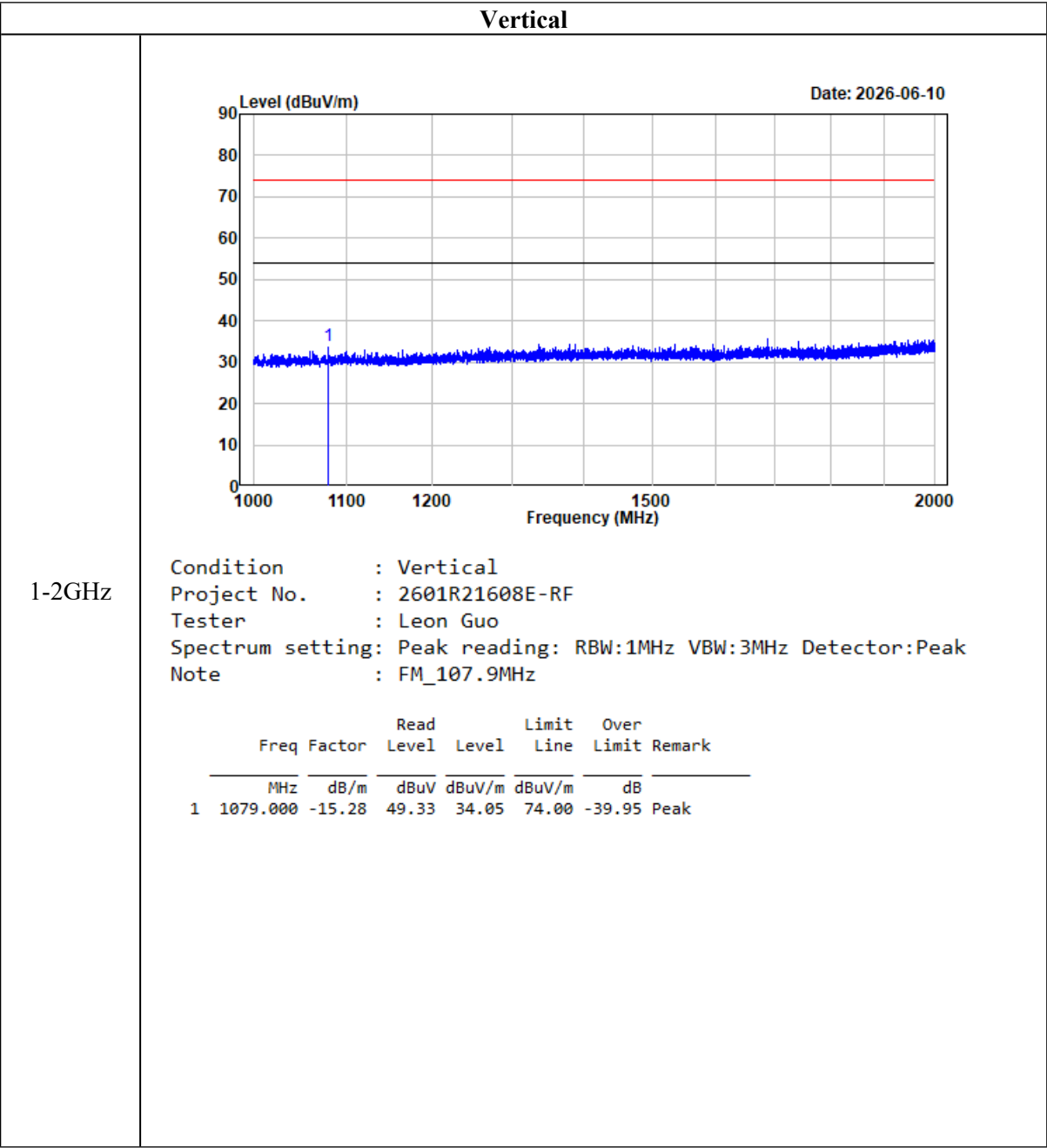
Margin = Absolute Level - Limit

The other spurious emission which is 20dB to the limit or in noise floor level was not recorded.

The peak value was less than the average limit, so just peak value was recorded

Listed with the worst harmonic margin test plot:





FCC§15.239(a) - 20dB BANDWIDTH

Applicable Standard

FCC §15.239(a)

Limit

According to §15.239(a) Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108MHz.

Test Procedure

Test Method: ANSI C63.10-2020 Clause 6.9.2

A dBc bandwidth is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). Typical ratios, expressed in dB, are -6 dB, -20 dB, and -26 dB, corresponding to 6 dB BW, 20 dB BW, and 26 dB BW, respectively. In this subclause, the ratio is designated by “-xx dB.” The reference value is either the level of the unmodulated carrier or the highest level of the spectral envelope of the modulated signal, as stated by the applicable requirement. Some requirements might specify a specific maximum or minimum value for the “-xx dB” bandwidth; other requirements might specify that the “-xx dB” bandwidth be entirely contained within the authorized or designated frequency band⁵¹

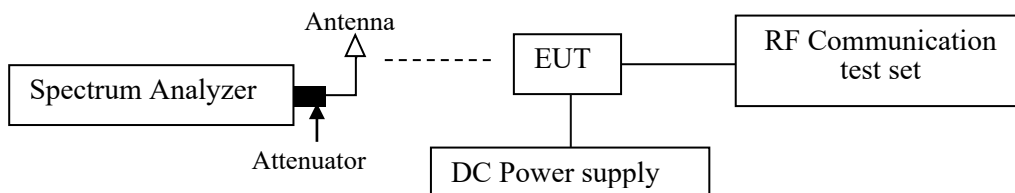
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be at least three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.6.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max-hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).

h) Determine the “-xx dB down amplitude” using [(reference value) - xx]. Alternatively, this calculation may be made by using the marker-delta function of the instrument.

i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).

j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The dBc bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

k) The dBc bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).



Test Data

Environmental Conditions

Temperature:	24.5 °C
Relative Humidity:	51 %
ATM Pressure:	101.2 kPa

The testing was performed by Alex Yan on 2026-06-08.

EUT operation mode: Transmitting

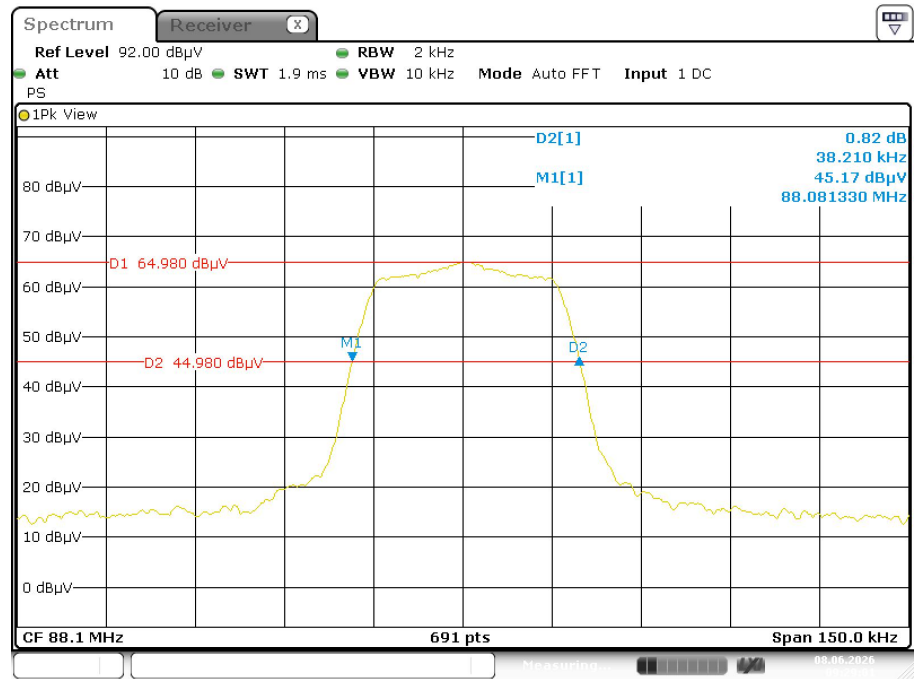
Please refer to the following table and plots.

Channel	Frequency (MHz)	20dB Bandwidth (kHz)	Limit(kHz)
Low	88.1	38.21	200
Middle	98.1	41.46	
High	107.9	50.14	

Note: 200 kHz BW is within 88-108MHz

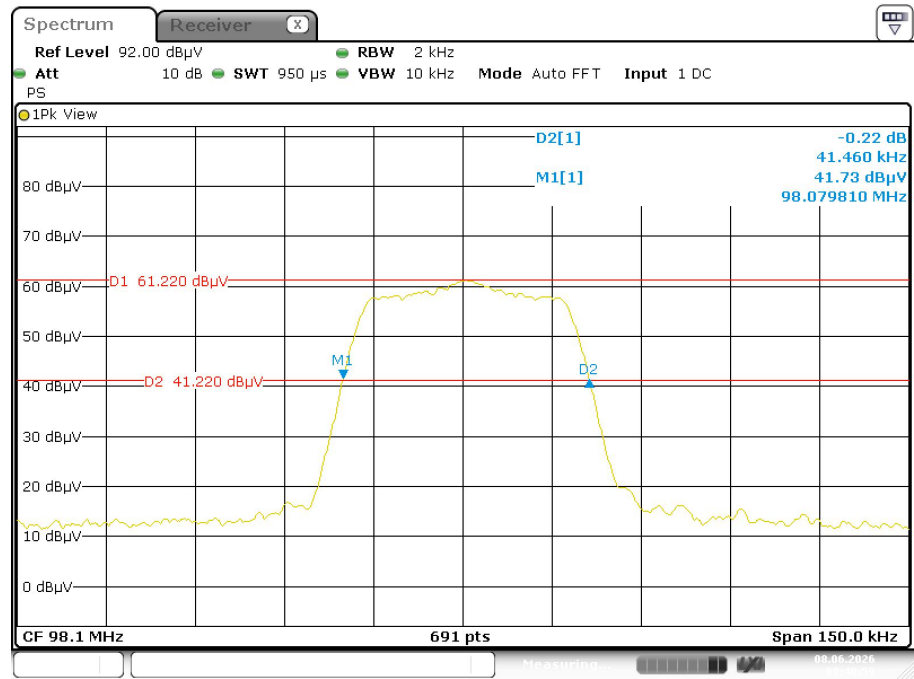
20dB Bandwidth

Low channel



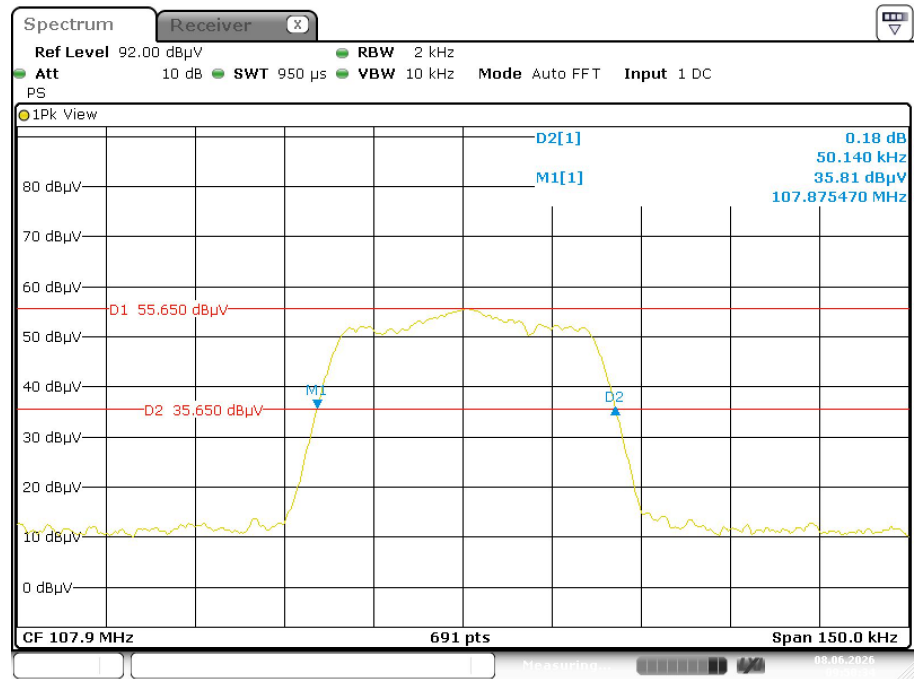
ProjectNo.:2601R21608E-RF Tester:Alex Yan
Date: 8.JUN.2026 09:29:01

Middle Channel



ProjectNo.:2601R21608E-RF Tester:Alex Yan
Date: 8.JUN.2026 09:40:59

High Channel



ProjectNo.:2601R21608E-RF Tester:Alex Yan
Date: 8.JUN.2026 09:50:34

EUT PHOTOGRAPHS

Please refer to the attachment 2601R21608E-RF-EXP External photo and 2601R21608E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2601R21608E-RF-00B-TSP Test Setup photo.

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