

TEST REPORT

FCC/ISED Test for NX-3921G-K
Class II Permissive Change

APPLICANT
JVCKENWOOD Corporation

REPORT NO.
HCT-RF-2605-FI001

DATE OF ISSUE
May 18, 2026

Tested by
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TEST REPORT

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May 18, 2026

Applicant

JVCKENWOOD Corporation
3-12, Moriyacho, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-0022,
Japan

Product Name
Model Name

900MHz DIGITAL TRANSCEIVER
NX-3921G-K

FCC ID
IC

K44502601
282F-502601

Date of Test

April 01, 2026 ~ May 13, 2026

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing Lab
(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si,
Gyeonggi-do, Republic of Korea)

Test Standard Used

FCC Rule Part(s): § 2, § 24D, § 90
ISED Rule Part(s):
RSS-Gen Issue 5 Amendment 2
RSS-119 Issue 12 Amendment 2
RSS-134 Issue 2

Test Results

PASS

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	May 18, 2026	Initial Release

Notice

Content

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 853(a)

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the ISED Rules under normal use and maintenance.

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked *.

Information provided by the applicant is marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

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1. GENERAL INFORMATION

Manufacturer:	JVCKENWOOD Corporation
Address:	3-12, Moriyacho, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-0022, Japan
FCC ID:	K44502601
IC:	282F-502601
EUT Type:	900MHz DIGITAL TRANSCEIVER
PMN: (Product Marketing Name)	NX-3921G-K
HMN: (Host Marketing Number)	N/A
HVIN: (Hardware Version Identification Number)	NX-3921G-K
FVIN: (Firmware Version Identification Number)	K4.26.00

2. EUT DESCRIPTION

Power Supply Voltage	DC 13.6V
Operating Temperature	-30 °C ~ +60 °C
Frequency Range	1. FCC 90, RSS-119 : 896 – 901MHz and 935 - 940 MHz 2. FCC 24D, RSS-134 : 901 – 902MHz and 940 - 941 MHz
Output Power	1. 896 – 901MHz and 935 - 940 MHz : 15 W (Power output continuously variable to 5 W) 2. 901 – 902MHz and 940 - 941 MHz : 5 W
Peak. Antenna gain	0 dBd
Channel Bandwidth	1. 896 – 901MHz and 935 - 940 MHz : 12.5 kHz / 6.25 kHz 2. 901 – 902MHz and 940 - 941 MHz : 50 kHz / 12.5 kHz
Type of Emission	1. 11K0F3E 2. 8K30F1E / 8K30F1D / 8K30F7W 3. 7K60FXE / 7K60FXD 4. 4K00F1E / 4K00F1D / 4K00F7W 5. 4K00F2D
Serial number:	C5710004

3. INTRODUCTION

3.1. TEST METHODOLOGY

FCC

: TIA-603-E and ANSI C63.26-2015 were used for the measurements.

ISED

: RSS-119 Issue 12 Amendment 2, RSS-Gen Issue 5 Amendment 2, RSS-134 Issue 2, and ANSI C63.26-2015 were used for the measurements.

3.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

3.3. TEST FACILITY

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea. The site is constructed in conformance with the requirements of ANSI C63.4-2014 and CISPR Publication 22.

Detailed description of test facility was submitted to the Commission and accepted dated February 26, 2026 (Registration Number: KR0032).

The site is constructed in conformance with the requirements of ANSI C63.4-2014 + C63.4a-2017 and ANSI C63.25.1-2018.

Detailed description of test facility was submitted to the Commission and accepted dated February 26, 2026 (CAB identifier: KR0032).

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea.

Detailed description of test facility was submitted to the Commission and accepted dated February 26, 2026 (Registration Number: KR0032).

3.4. EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to ANSI/USEMCSC C63.2-2023, "American National Standard for Specifications of Electromagnetic Interference and Field Strength Measuring Instrumentation in the Frequency Range 9 kHz to 40 GHz".

3.5 DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting is programmed.

4. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014.

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty ($\pm$ dB)
Conducted Output Power	0.54 (Confidence level about 95 %, $k=2$)
Band Edge, Emission Mask	0.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.54 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.74 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.80 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.86 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.44 (Confidence level about 95 %, $k=2$)

5. SUMMARY TEST OF RESULTS

5.1. 896-901 MHz and 935-940 MHz

Test Description	FCC Part Section(s)	ISED Part Section(s)	Test Condition	Test Result	Status
Carrier Output Power	§ 90.635	RSS-119 (5.4)	Conducted	PASS	C ^{Note3}
Unwanted Emissions	§ 90.210	RSS-119 (5.8)		PASS	NT ^{Note2}
99% Bandwidth	§ 90.210	RSS-119 (5.5)		PASS	NT ^{Note2}
Carrier Frequency Stability	N/A	RSS-119 (5.3)		PASS	NT ^{Note2}
Audio Frequency Response	§ 2.1047(a), TIA-603-E (2.2.6.2.2) (3.2.6.2)	-		PASS	NT ^{Note2}
Audio Low Pass Filter	§ 2.1047(a), TIA-603-E (2.2.6.2.2) (3.2.6.2)	-		PASS	NT ^{Note2}
Modulation Limiting	§ 2.1047(b) TIA-603-E (2.2.3.2) (1.3.4.4)	-		PASS	NT ^{Note2}
Emission Mask	§ 90.210	RSS-119 (5.8)	Radiated	PASS	C ^{Note3}
Field Strength of Spurious Radiation	§ 90.210	RSS-119 (5.8)		PASS	C ^{Note3, 4}
Receiver Spurious Emissions	-	RSS-Gen (7)		PASS	NT ^{Note2}

Note:

1. C = Comply, NT = Not Tested, NA = Not Applicable, NC = Not Comply
2. The C2PC models are electrically identical to the original models. therefore, only selected test requirement were spot checked.
3. The data from that application has been verified through worst-case(Section 5.3) spot checks to demonstrate the device compliance, as shown in the test results in Section 8.
4. The output power was confirmed to be within the tune-up range prior to the Spurious Radiation spot checks.
This confirms that the digital circuit changes have no adverse effect on the original compliance data.
5. The decision rule applies 'simple acceptance'

5.2. 901-902 MHz and 940-941 MHz

Test Description	FCC Part Section(s)	ISED Part Section(s)	Test Condition	Test Result	Status
Carrier Output Power	§ 24.132	RSS-134 Issue 2 (4.3)	Conducted	PASS	C ^{Note3}
Spurious Emissions at Antenna Terminals	§ 24.133(a)(1)(ii) & § 24.133(a)(2)(ii)	RSS-134 Issue 2 4.4.1(b) & 4.4.2(b)		PASS	NT ^{Note2}
99% Bandwidth	-	RSS-134 Issue 2 (4.1)		PASS	NT ^{Note2}
Carrier Frequency Stability	§ 24.135	RSS-134 Issue 2 (4.5)		PASS	NT ^{Note2}
Audio Frequency Response	§ 2.1047(a), TIA-603-E 2.2.6.2.2 & 3.2.6.2	-		PASS	NT ^{Note2}
Audio Low Pass Filter	§ 2.1047(a), TIA-603-E 2.2.6.2.2 & 3.2.6.2	-		PASS	NT ^{Note2}
Modulation Limiting	§ 2.1047(b)	-		PASS	NT ^{Note2}
Band edge	§ 24.133(a)(1)(i) & § 24.133(a)(2)(i)	RSS-134 Issue 2 4.4.1(a) & 4.4.2(a)	Radiated	PASS	C ^{Note3}
Field Strength of Spurious Radiation	§ 24.133(a)(1)(ii) & § 24.133(a)(2)(ii)	RSS-134 Issue 2 4.4.1(b) & 4.4.2(b)		PASS	C ^{Note3, 4}
Receiver Spurious Emissions	-	RSS-Gen Issue 5 (7)		PASS	NT ^{Note2}

Note:

1. C = Comply, NT = Not Tested, NA = Not Applicable, NC = Not Comply
2. The C2PC models are electrically identical to the original models. therefore, only selected test requirement were spot checked.
3. The data from that application has been verified through worst-case(Section 5.3) spot checks to demonstrate the device compliance, as shown in the test results in Section 8.
4. The output power was confirmed to be within the tune-up range prior to the Spurious Radiation spot checks.
This confirms that the digital circuit changes have no adverse effect on the original compliance data.
5. The decision rule applies 'simple acceptance'

5.3. Worst-case

1) Carrier RF Output Power

: It was measured under maximum output conditions.

2) Emission Mask

: All channels and emission types were investigated, and the results for the worst-case configuration are reported.

896 – 901MHz and 935 - 940 MHz

Type of emission	Channel Bandwidth (kHz)	Frequency (MHz)
11K0F3E	12.5	896.05
8K30F1E, 8K30F1D, 8K30F7W	12.5	896.05
4K00F1E, 4K00F1D, 4K00F7W	6.25	896.05

901 – 902MHz and 940 - 941 MHz

Type of emission	Channel Bandwidth (kHz)	Frequency (MHz)
11K0F3E	50	901.55
4K00F1E, 4K00F1D, 4K00F7W	12.5	901.55

3) Field Strength of Spurious Radiation

: All channels, emission types, and operating power settings were investigated, and the results for the worst-case configuration are reported.

896 – 901MHz and 935 - 940 MHz

Type of emission	Power setting	Channel Bandwidth (kHz)	Frequency (MHz)
7K60FXD, 7K60FXE	High	12.5	939.95
4K00F2D	High	6.25	896.05 900.95

901 – 902MHz and 940 - 941 MHz

Type of emission	Channel Bandwidth (kHz)	Frequency (MHz)
11K0F3E	50	901.55
8K30F1E, 8K30F1D, 8K30F7W	12.5	940.55

6. TEST LIMIT

6.1. 896-901 MHz and 935-940 MHz

Test Requirement	FCC	ISED
Carrier Output Power	< 100 W	< 60 W
Unwanted Emissions	Emission Mask I : 43 + 10 log (P)dB Emission Mask J : 50 + 10 log (P)dB	Emission Mask I : 43 + 10 log (P)dB Emission Mask J : 50 + 10 log (P)dB
99% Bandwidth	-	$\leq 13.6\text{kHz}$
Carrier Frequency Stability	1.5 ppm	1.5 ppm
Audio Frequency Response	Varies	-
Audio Low Pass Filter	Varies	-
Modulation Limiting	2.5 kHz	-
Emission Mask	Emission Mask I, J	Emission Mask I, J
Field Strength of Spurious Radiation (Note ^{1,2})	Emission Mask I : 43 + 10 log (P)dB Emission Mask J : 50 + 10 log (P)dB	Emission Mask I : 43 + 10 log (P)dB Emission Mask J : 50 + 10 log (P)dB
Receiver Spurious Emissions	-	Note ³

Note:

1. The lowest limit among the various limits was applied.
2. Emission Mask I: Transmitters Equipped With an Audio Low-Pass Filter
Emission Mask J: Transmitters not Equipped With an Audio Low-Pass Filter
3. Receiver Spurious Emissions Limit :

Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$ at 3meters)
30 – 88	100
88 - 216	150
216 – 960	200
Above 960	500

6.2. 901-902 MHz and 940-941 MHz

Test Requirement	FCC	ISED
Carrier Output Power	7 watts e.r.p.	7 watts e.r.p.
Spurious Emissions at Antenna Terminals	$43 + 10 \log (P) \text{dB}$	$43 + 10 \log (P) \text{dB}$
99% Bandwidth	-	Channel spacing 12.5kHz: $\leq 10 \text{kHz}$ Channel spacing 50kHz: $\leq 45 \text{kHz}$
Carrier Frequency Stability	1.0 ppm	1.0 ppm
Audio Frequency Response	Varies	-
Audio Low Pass Filter	Varies	-
Modulation Limiting	N/A	-
Band edge	Note ^{1,2}	Note ^{1,2}
Field Strength of Spurious Radiation	$43 + 10 \log (P) \text{dB}$	$43 + 10 \log (P) \text{dB}$
Receiver Spurious Emissions	-	Note ³

Note:

1. For transmitters authorized a bandwidth greater than 10 kHz

: On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 40 kHz: at least $116 \log_{10} ((f_d + 10)/6.1)$ decibels or 50 plus $10 \log_{10} (P)$ decibels or 70 decibels, whichever is the lesser attenuation;

2. For transmitters authorized a bandwidth of 10 kHz

: On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 20 kHz: at least $116 \times \log_{10} ((f_d + 5)/3.05)$ decibels or $50 + 10 \times \log_{10} (P)$ decibels or 70 decibels, whichever is the lesser attenuation;

3. Receiver Spurious Emissions Limit :

Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3meters)
30 – 88	100
88 - 216	150
216 – 960	200
Above 960	500

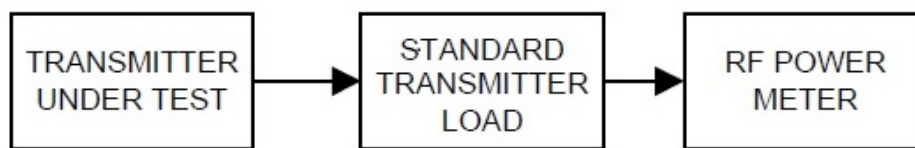
7. DESCRIPTION OF TESTS

7.1 Carrier Output Power

▣ DEFINITION

The conducted carrier power output rating for a transmitter is the power available at the output terminals of the transmitter when the output terminals are connected to the standard transmitter load.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

ANSI C63.26-2015 Section 5.2.4.2

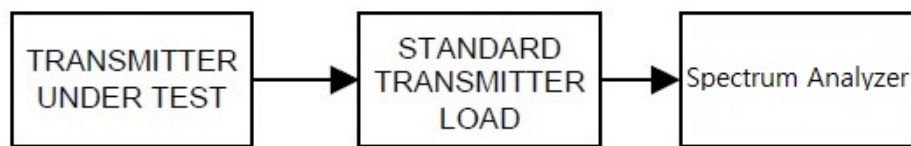
- a) Connect the equipment as illustrated.
- b) Detector: AVG RMS measurement
- c) Measure the transmitter output power during the defined duty cycle.
Correct for all losses in the RF path.
- d) The value recorded in step b) is the conducted carrier output power rating.

7.2 Carrier Frequency Stability

■ DEFINITION

The carrier frequency stability is the ability of the transmitter to maintain an assigned carrier frequency.

■ TEST CONFIGURATION



■ TEST PROCEDURE

ANSI C63.26-2015 Section 5.6

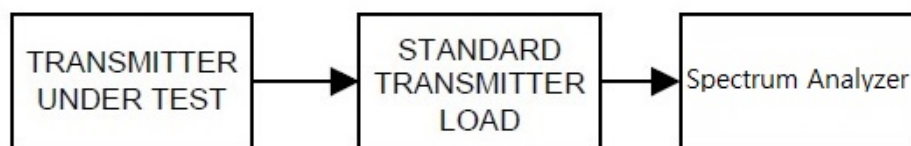
- a) The carrier frequency of the transmitter is measured at room temperature (20 °C to provide a reference).
- b) The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter.
Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
- c) Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

7.3 Occupied Bandwidth

▣ DEFINITION

The transmitter sideband spectrum denotes the sideband power produced at a discrete frequency separation from the carrier up to the test bandwidth due to all sources of unwanted noise within the transmitter in a modulated condition.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

ANSI C63.26-2015 Section 5.4.4

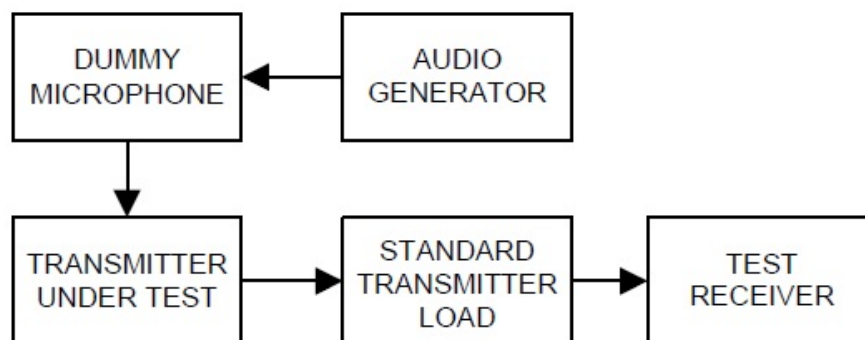
- a) The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- b) $RBW = 1 - 5 \% \text{ of the expected OBW}$
- c) $VBW \geq 3 \times RBW$
- d) Detector = Peak
- e) Trace mode = max hold
- f) Sweep = auto couple
- g) The trace was allowed to stabilize

7.4 Modulation Limiting

■ DEFINITION

Modulation limiting is the transmitter circuit's ability to limit the transmitter from producing deviations in excess of a rated system deviation.

■ TEST CONFIGURATION



■ TEST PROCEDURE

FCC: TIA-603-E Section 2.2.3

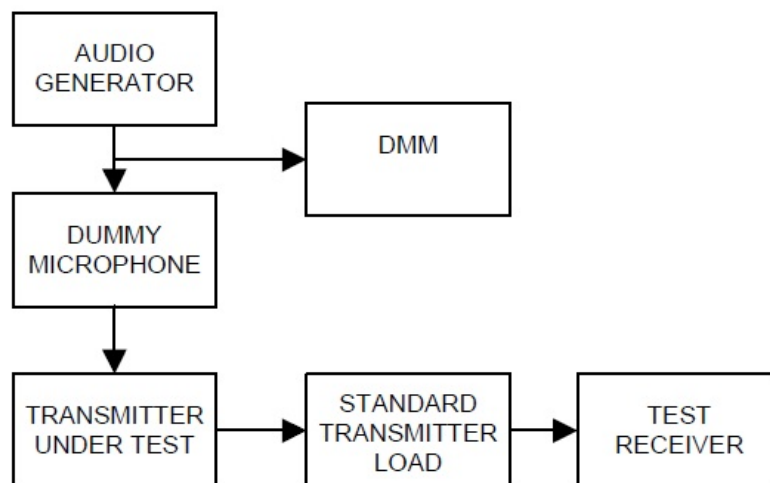
- Connect the equipment as illustrated.
- Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- Set the test receiver to measure Peak positive deviation.
Set the audio bandwidth for ≤ 0.25 Hz to $\geq 15,000$ Hz.
Turn the de-emphasis function off.
- Apply a 1000 Hz modulating signal to the transmitter from the audio frequency generator, and adjust the level obtain 60% of full rated system deviation.
- Increase the level form the audio frequency generator by 20 dB in one step(rise time between the 10% and 90% points shall be 0.1 second maximum).
- Measure both the instantaneous and steady-state deviation at and after the time of increasing the audio input level.
- With the level from the audio frequency generator held constant at the level obtained in step e), Slowly vary the audio frequency from 300 Hz to 3000 Hz and observe the steady-state deviation. Record the maximum deviation.
- Set the test receiver to measure Peak negative deviation and repeat steps d) through g).
- The values recorded in steps g) and h) are the modulation limiting.

7.5 Audio Frequency Response / Audio Low Pass Filter Response

■ DEFINITION

The audio frequency response is the degree of closeness to which the frequency deviation of the transmitter follows a prescribed characteristic.

■ TEST CONFIGURATION



▣ TEST PROCEDURE

FCC: TIA-603-E Section 2.2.6

- a) Connect the equipment as illustrated.
- b) Set the test receiver to measure Peak positive deviation. Set the audio bandwidth for ≤ 50 Hz to $\geq 15,000$ Hz. Turn the de-emphasis function off.
- c) Set the DMM to measure rms voltage.
- d) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- e) Apply a 1000 Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
- f) Set the test receiver to measure rms deviation and record the deviation reading.
- g) Record the DMM reading as V_{REF} .
- h) Set the audio frequency generator to the desired test frequency between 300 Hz and 3000 Hz.
- i) Vary the audio frequency generator output level until the deviation reading that was recorded in step f) is obtained.
- j) Record the DMM reading as V_{FREQ} .
- k) Calculate the audio frequency response at the present frequency as:
$$\text{audio frequency response} = 20 \times \log_{10}(V_{FREQ}/V_{REF})$$
- l) Repeat steps h) through k) for all the desired test frequencies.

Note

Audio Filter of the above result is substituted with the same structure as Audio Frequency Response.

On the transmission condition below 3kHz, Transceiver shows pre-emphasis condition of transmission function.

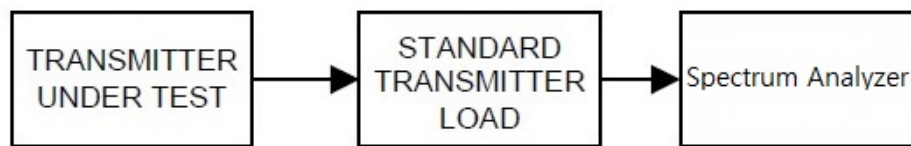
On the transmission condition above 3kHz, Transceiver shows Audio Low Pass Filter.

7.6 Emission Mask

■ DEFINITION

The transmitter sideband spectrum denotes the sideband power produced at a discrete frequency separation from the carrier up to the test bandwidth (see 1.3.4.4) due to all sources of unwanted noise within the transmitter in a modulated condition.

■ TEST CONFIGURATION



■ TEST PROCEDURE

FCC: § 90.210

ISED: RSS-119 Section 5.8

a) Use the table to determine the spectrum analyzer setting:

- RBW = 300Hz
- VBW $\geq 3 \times$ RBW
- Detector = Average
- Trace mode = Average

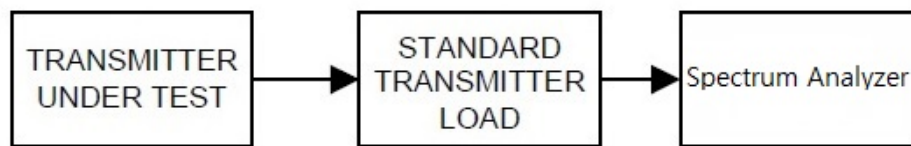
b) Modulate the transmitter with a 2500 Hz sine wave at an input level 16 dB greater than that necessary to produce 50% of rated system deviation. The input level shall be established at the frequency of maximum response of the audio modulating circuit. Transmitters employing digital modulation techniques that bypass the limiter and the audio low-pass filter shall be modulated as specified by the manufacturer.

7.7 Band edge

■ DEFINITION

The transmitter sideband spectrum denotes the sideband power produced at a discrete frequency separation from the carrier up to the test bandwidth (see 1.3.4.4) due to all sources of unwanted noise within the transmitter in a modulated condition.

■ TEST CONFIGURATION



■ TEST PROCEDURE

FCC: § 24.133(a)

ISED: RSS-134 Section 4.4

a) Use the table to determine the spectrum analyzer setting:

- RBW = 300Hz
- VBW $\geq 3 \times$ RBW
- Detector = Average
- Trace mode = Average

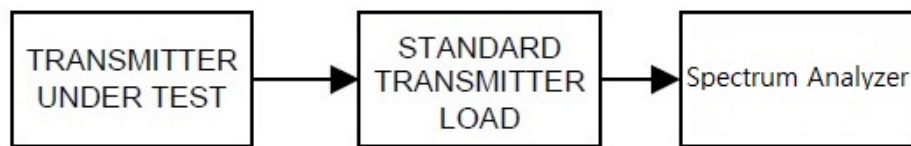
b) Modulate the transmitter with a 2500 Hz sine wave at an input level 16 dB greater than that necessary to produce 50% of rated system deviation. The input level shall be established at the frequency of maximum response of the audio modulating circuit. Transmitters employing digital modulation techniques that bypass the limiter and the audio low-pass filter shall be modulated as specified by the manufacturer.

7.8 Unwanted Emissions : Conducted Spurious Emission

■ DEFINITION

Conducted spurious emissions are emissions at the antenna terminals on a frequency or frequencies that are outside a band sufficient to ensure transmission of information of required quality for the class of communication desired.

■ TEST CONFIGURATION



■ TEST PROCEDURE

ANSI C63.26-2015 Section 5.7

- a) RBW = 100 kHz(Below 1GHz), 1 MHz(Above 1GHz)
- b) VBW $\geq$ 3 MHz
- c) Detector = Average
- d) Trace mode = Average
- e) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$
- f) Sweep time > number of points in sweep $\times$ symbol period

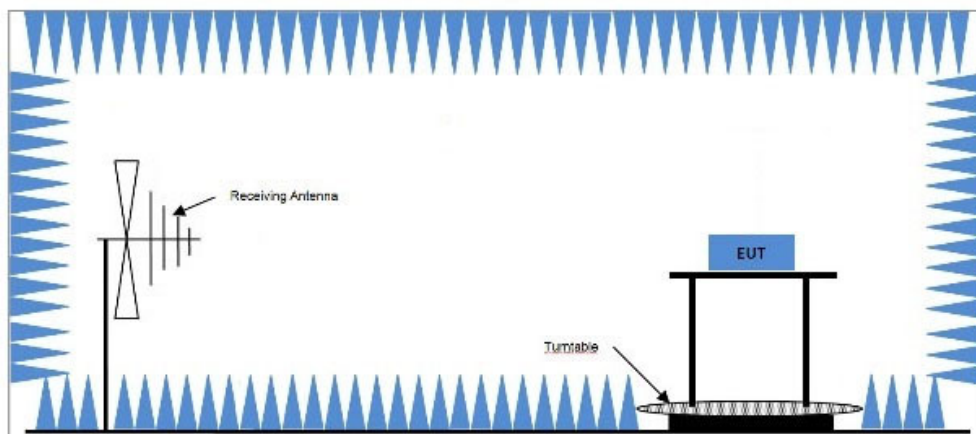
7.9 Unwanted Emissions : Radiated Spurious Emission

■ DEFINITION

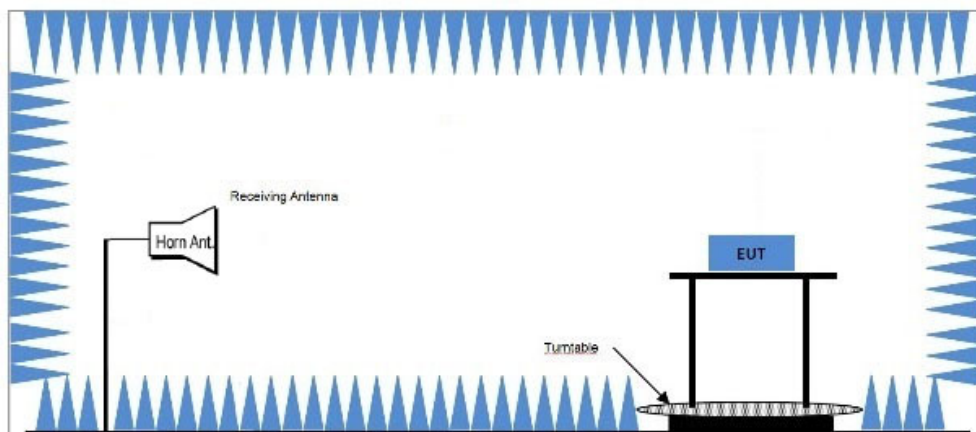
Radiated spurious emissions are emissions from the equipment when transmitting into a non-radiating load on a frequency or frequencies that are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communications desired.

■ TEST CONFIGURATION

Below 1 GHz



Above 1 GHz



■ TEST PROCEDURE

ANSI C63.26-2015 Section 5.5.3 & 5.7

- a) Radiated tests are performed in the Fully-anechoic chamber.
- b) RBW = 100 kHz(Below 1GHz), 1 MHz(Above 1GHz)
- c) VBW $\geq$ 3 MHz
- d) Detector = Average
- e) Trace mode = Average
- f) In the fully-anechoic chamber, setup as illustrated above the DUT placed on the 2.5m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization.
The “Read Value” is the spectrum reading the maximum power value.
- g) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization to find the maximum radiation power.
Record the power level of maximum radiation power from spectrum.
So, the measured Factor value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- h) Result(dBm) = “Reading” + Factor

7.10 Unwanted Emissions : Receiver Radiated Spurious Emission

■ TEST PROCEDURE

RSS-Gen Section 7

a) Radiated tests are performed in the Semi Anechoic Chamber.

b) Test Settings:

Operating conditions:	Under normal test conditions
Operation Mode:	Receiver
Method of testing:	Radiated
S/A. Settings:	F < 1 GHz: RBW: 120 kHz, VBW: 300 kHz (Quasi-Peak) F > 1 GHz: RBW: 1 MHz, VBW: 1 MHz (Average)
Mode of operation:	Receive

8. TEST RESULT

8.1 Carrier Output Power

Type of Emission	Channel Spacing (kHz)	Frequency (MHz)	Carrier Output Power	
			(dBm)	(W)
11K0F3E	12.5	896.05	41.520	14.191
		900.95	41.457	13.986
		935.05	41.439	13.928
		939.95	41.432	13.906
8K30F1E 8K30F1D 8K30F7W	12.5	896.05	41.553	14.299
		900.95	41.467	14.018
		935.05	41.431	13.903
		939.95	41.435	13.916
7K60FXD 7K60FXE	12.5	896.05	41.476	14.048
		900.95	41.478	14.054
		935.05	41.456	13.983
		939.95	41.455	13.980
4K00F1E 4K00F1D 4K00F7W	6.25	896.05	41.525	14.207
		900.95	41.440	13.932
		935.05	41.414	13.848
		939.95	41.400	13.804
4K00F2D	6.25	896.05	41.557	14.312
		900.95	41.482	14.067
		935.05	41.444	13.944
		939.95	41.438	13.925

Note:

1. Limit: FCC < 100 W, ISSED < 60 W

8.2 Effective Radiated Power

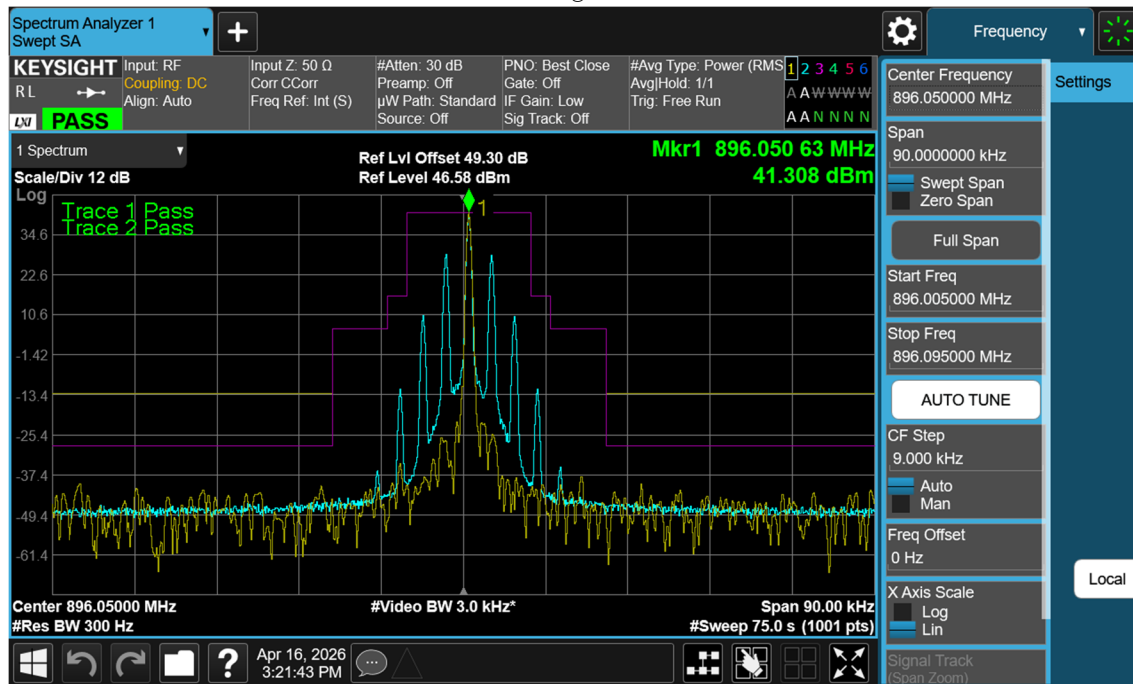
Type of Emission	Channel Spacing (kHz)	Frequency (MHz)	Effective Radiated Power	
			(dBm)	(W)
11K0F3E	50	901.55	36.733	4.713
		940.55	36.790	4.775
8K30F1E 8K30F1D 8K30F7W	50	901.55	36.727	4.707
		940.55	36.791	4.776
7K60FXD 7K60FXE	50	901.55	36.724	4.703
		940.55	36.781	4.765
4K00F1E 4K00F1D 4K00F7W	12.5	901.55	36.691	4.668
		940.55	36.749	4.730
4K00F2D	12.5	901.55	36.679	4.655
		940.55	36.754	4.736

Note:

1. Limit: 7 watts e.r.p.
2. Effective Radiated Power = Carrier Output Power(dBm) + Peak. Antenna Gain(dBd).
3. Peak. Antenna Gain = 0 dBd

8.3 Emission Mask

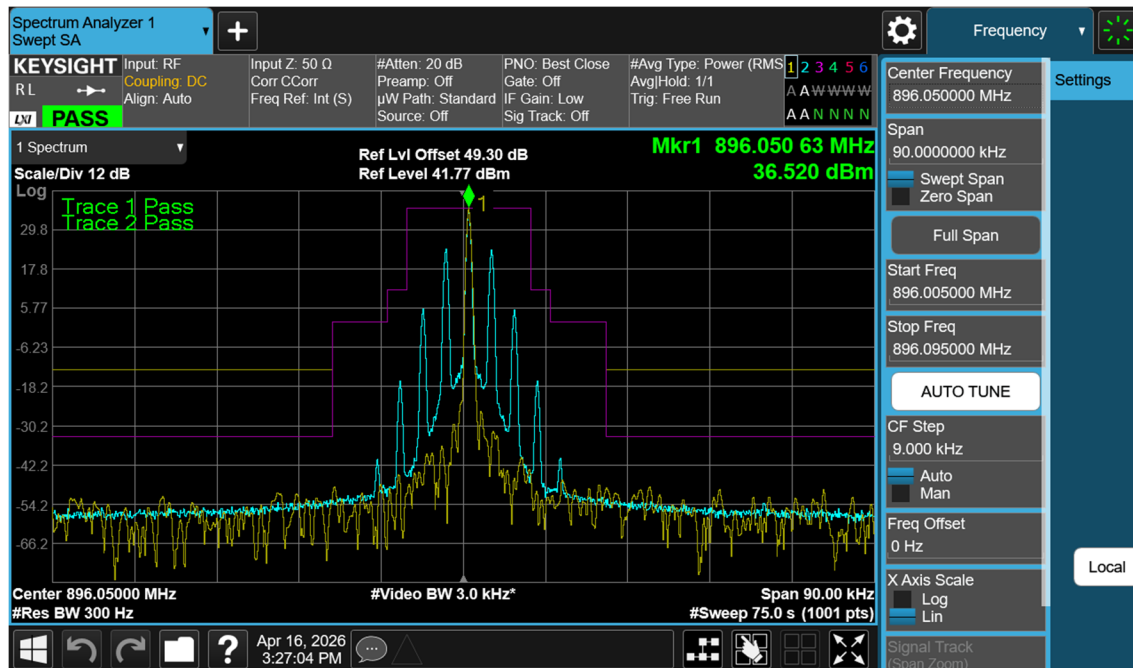
- TYPE OF EMISSION : 11K0F3E
- CHANNEL SPACING : 12.5 kHz
- FREQUENCY : 896.05 MHz
- POWER SETTING : High Power



Note:

- Emission Mask I
- Displacement Frequency, $f_d > 15\text{kHz}$: The yellow line was applied in the test because it has a lesser limit $((43+10\log(P))$.

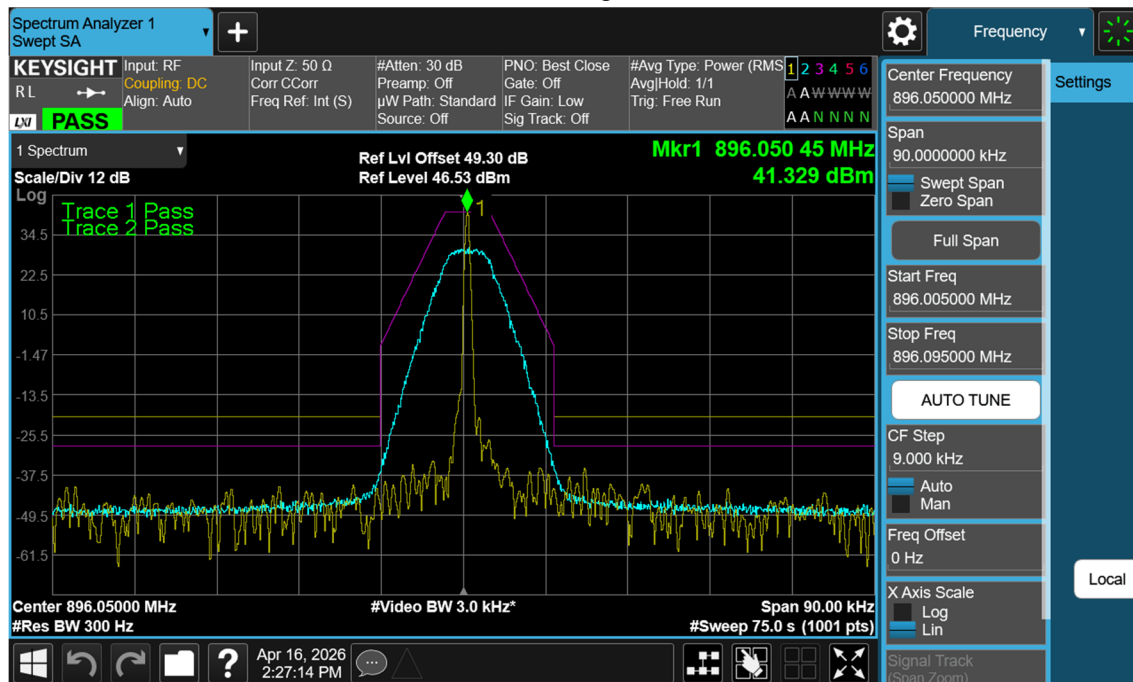
- ☐ TYPE OF EMISSION : 11K0F3E
- ☐ CHANNEL SPACING : 12.5 kHz
- ☐ FREQUENCY : 896.05 MHz
- ☐ POWER SETTING : Low Power



Note:

1. Emission Mask I
2. Displacement Frequency, $f_d > 15\text{kHz}$: The yellow line was applied in the test because it has a lesser limit $((43+10\log(P)))$.

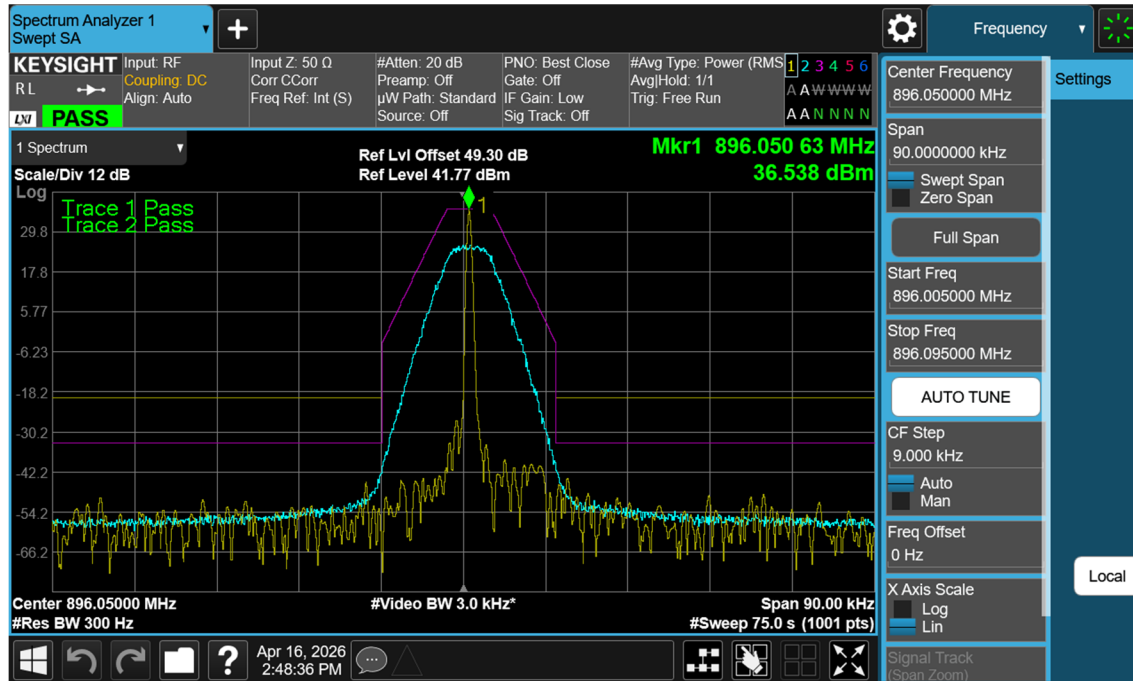
- TYPE OF EMISSION : 8K30F1E,8K30F1D,8K30F7W
- CHANNEL SPACING : 12.5 kHz
- FREQUENCY : 896.05 MHz
- POWER SETTING : High Power



Note:

1. Emission Mask J
2. Displacement Frequency, $f_d > 9.5\text{kHz}$: The yellow line was applied in the test because it has a lesser limit $((50+10\log(P)))$.

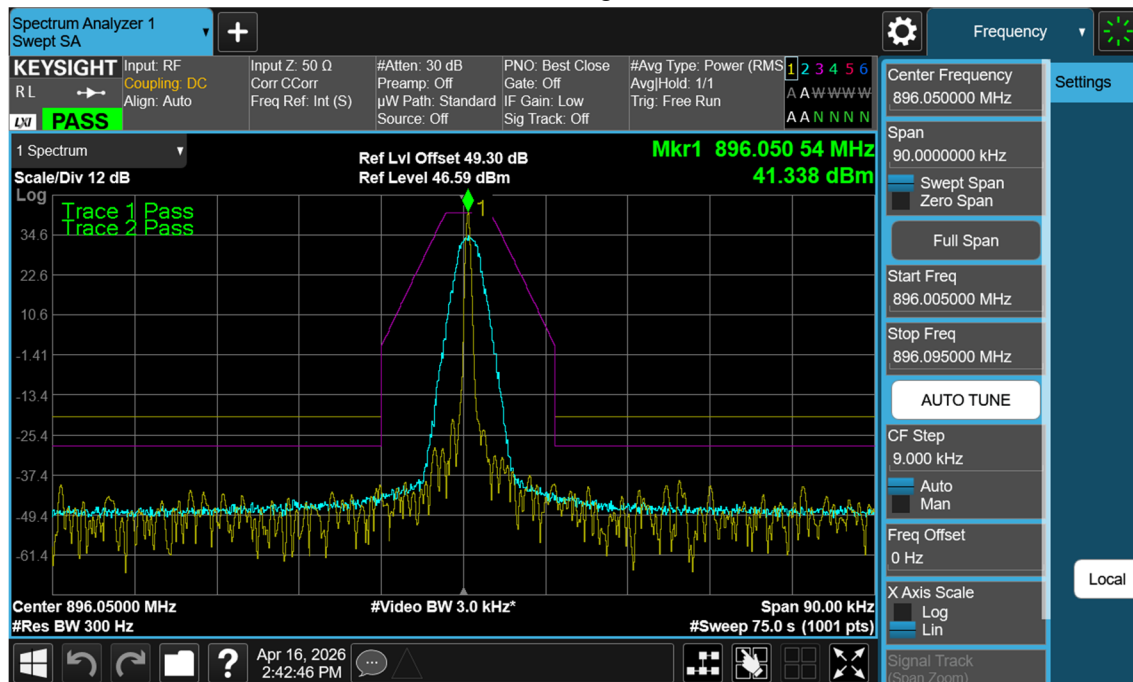
- TYPE OF EMISSION : 8K30F1E,8K30F1D,8K30F7W
- CHANNEL SPACING : 12.5 kHz
- FREQUENCY : 896.05 MHz
- POWER SETTING : Low Power



Note:

1. Emission Mask J
2. Displacement Frequency, $f_d > 9.5\text{kHz}$: The yellow line was applied in the test because it has a lesser limit $((50+10\log(P)))$.

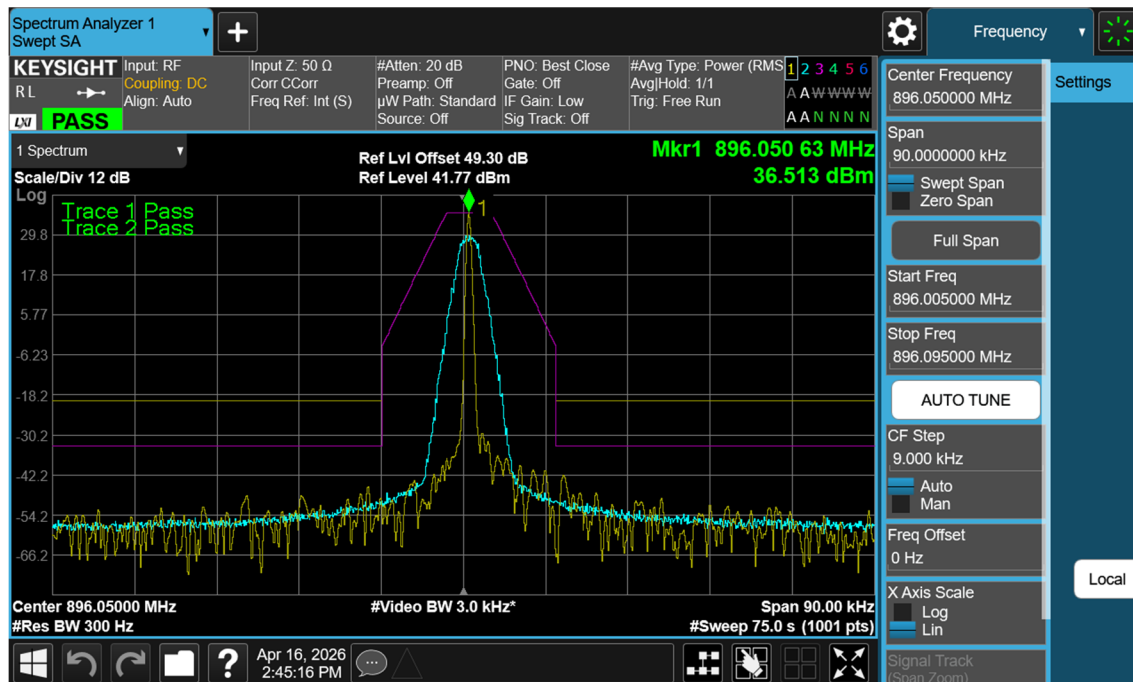
- TYPE OF EMISSION : 4K00F1E,4K00F1D,4K00F7W
- CHANNEL SPACING : 6.25 kHz
- FREQUENCY : 896.05 MHz
- POWER SETTING : High Power



Note:

1. Emission Mask J
2. Displacement Frequency, $f_d > 9.5\text{kHz}$: The yellow line was applied in the test because it has a lesser limit $((50+10\log(P)))$.

- TYPE OF EMISSION : 4K00F1E,4K00F1D,4K00F7W
- CHANNEL SPACING : 6.25 kHz
- FREQUENCY : 896.05 MHz
- POWER SETTING : Low Power

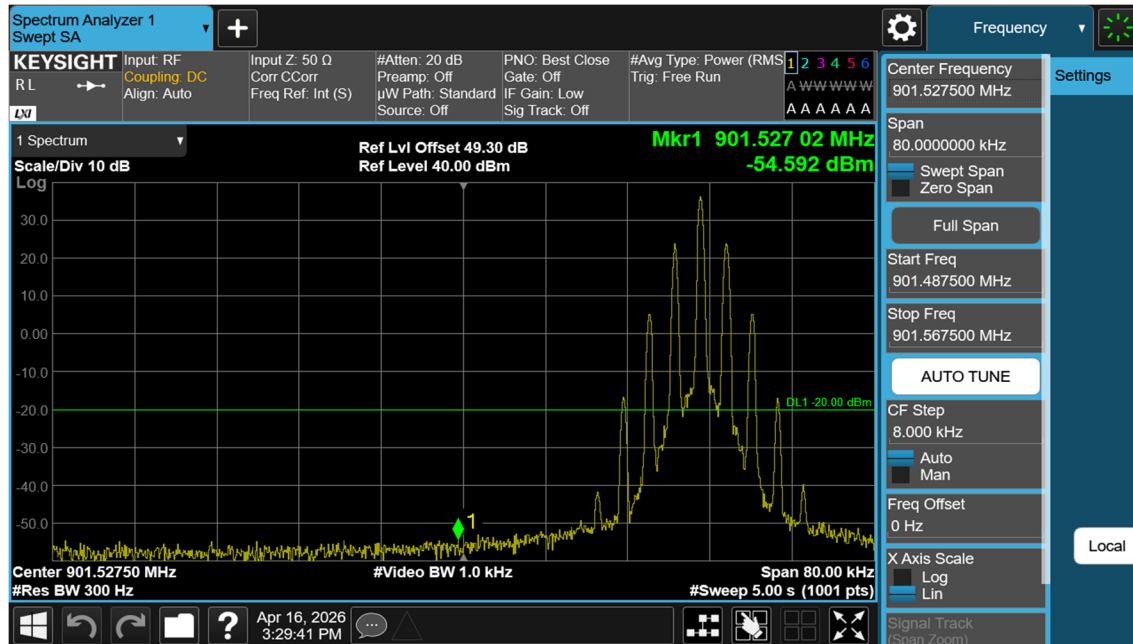


Note:

1. Emission Mask J
2. Displacement Frequency, $f_d > 9.5\text{kHz}$: The yellow line was applied in the test because it has a lesser limit($(50+10\log(P))$).

8.4 Band Edge

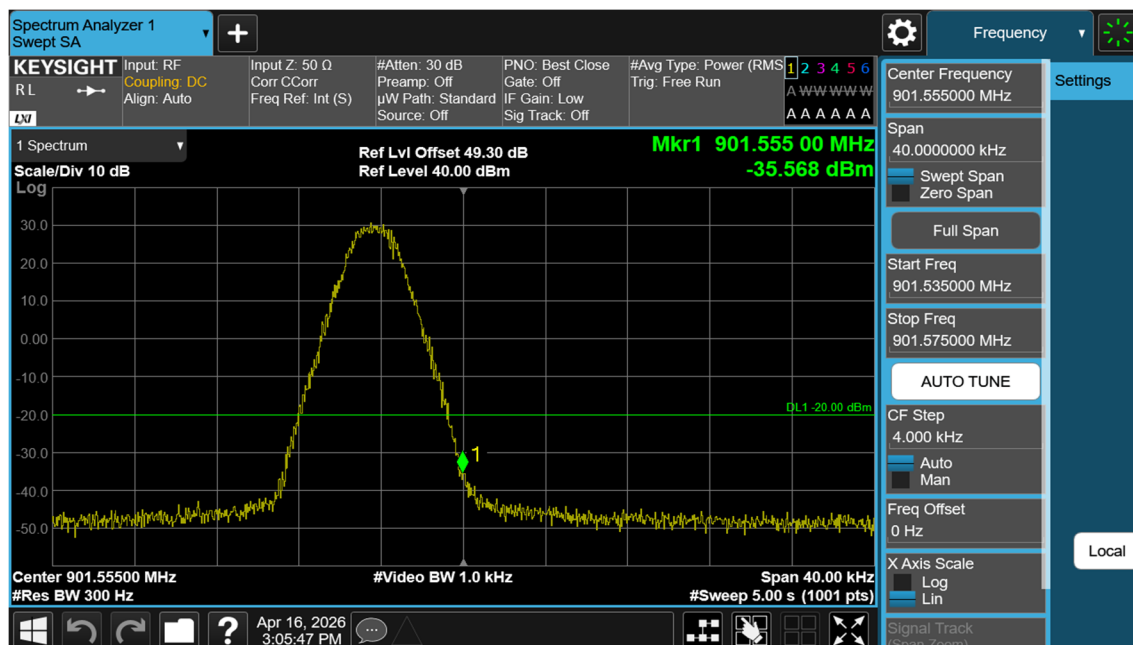
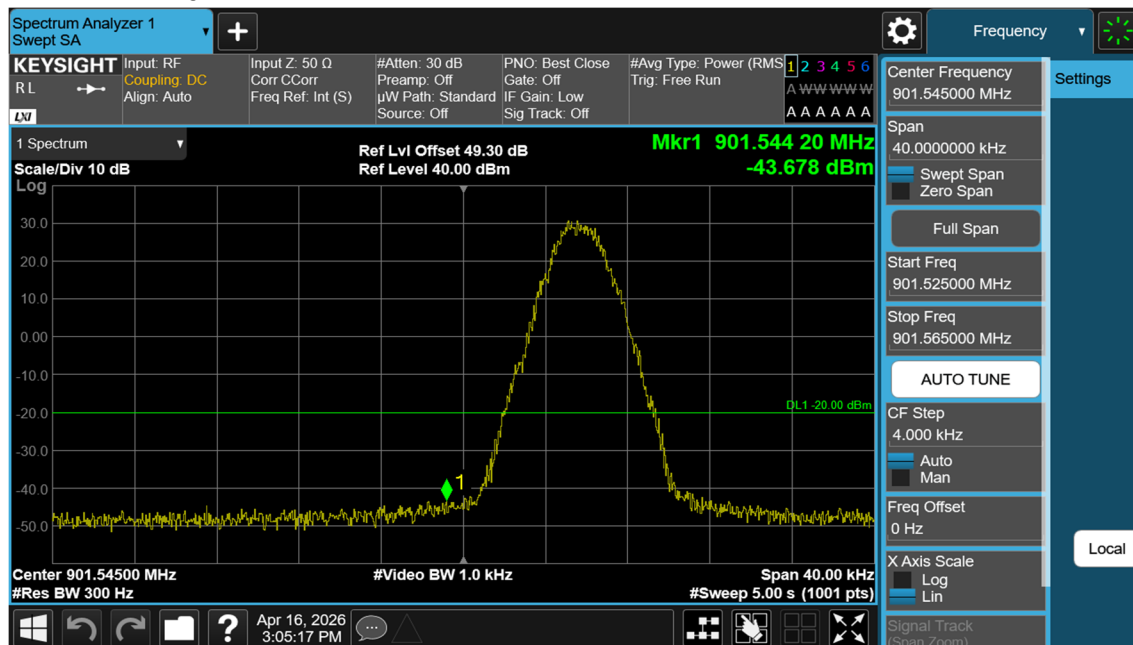
- ☐ TYPE OF EMISSION : 11K0F3E
- ☐ CHANNEL SPACING : 50 kHz
- ☐ FREQUENCY : 901.55 MHz



Limit:

- For f_d up to and including 40 kHz: The $50 + 10\log(P)$ dB was applied to the test, as it is the lesser of the three options among $116 \log((f_d+10)/6.1)$ dB, $50 + 10\log(P)$ dB, and 70 dB.

- TYPE OF EMISSION : 4K00F1E,4K00F1D,4K00F7W
- CHANNEL SPACING : 12.5 kHz
- FREQUENCY : 901.55 MHz



Limit:

1. For f_d up to and including 20 kHz: The $50 + 10\log(P)$ dB was applied to the test, as it is the lesser of the three options among $116 \log((f_d+10)/6.1)$ dB, $50 + 10\log(P)$ dB, and 70 dB.

8.5 Unwanted Emissions: Radiated Spurious Emission

- ▣ POWER SETTING: High Power
- ▣ TYPE OF EMISSION: 4K00F2D
- ▣ CHANNEL BANDWIDTH: 6.25 kHz
- ▣ FREQUENCY (MHz):: 896.05

Test Frequency (MHz)	Measured Frequency (MHz)	Pol	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
896.05	1792.10	Z-H	-25.94	-7.54	-33.48	-20.00	13.48
	2688.15	Z-H	-50.03	-3.06	-53.09	-20.00	33.09
	3584.20	X-H	-38.39	0.50	-37.89	-20.00	17.89
	4480.25	Z-H	-52.43	2.99	-49.44	-20.00	29.44
	5376.30	Z-H	-41.63	5.71	-35.93	-20.00	15.93
	6272.35	X-H	-54.81	8.96	-45.85	-20.00	25.85

- ▣ POWER SETTING: High Power
- ▣ TYPE OF EMISSION: 4K00F2D
- ▣ CHANNEL BANDWIDTH: 6.25 kHz
- ▣ FREQUENCY (MHz):: 900.95

Test Frequency (MHz)	Measured Frequency (MHz)	Pol	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
900.95	1801.90	Z-H	-26.00	-7.49	-33.49	-20.00	13.49
	2702.85	Z-H	-48.59	-2.95	-51.54	-20.00	31.54
	3603.80	Z-H	-40.30	0.24	-40.06	-20.00	20.06
	4504.75	Y-V	-51.90	2.97	-48.93	-20.00	28.93
	5405.70	Z-H	-43.72	5.83	-37.89	-20.00	17.89
	6306.65	Z-H	-56.06	8.95	-47.11	-20.00	27.11

- ▣ POWER SETTING: High Power
- ▣ TYPE OF EMISSION: 7K60FXD, 7K60FXE
- ▣ CHANNEL BANDWIDTH: 12.5 kHz
- ▣ FREQUENCY (MHz):: 939.95

Test Frequency (MHz)	Measured Frequency (MHz)	Pol	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
939.95	1879.90	Y-H	-25.42	-6.90	-32.32	-20.00	12.32
	2819.85	X-V	-40.56	-2.58	-43.14	-20.00	23.14
	3759.80	Z-V	-44.77	0.88	-43.89	-20.00	23.89
	4699.75	Z-H	-47.08	4.47	-42.61	-20.00	22.61
	5639.70	X-V	-51.80	5.98	-45.82	-20.00	25.82
	6579.65	Z-H	-54.98	10.12	-44.86	-20.00	24.86

☐ TYPE OF EMISSION: 11K0F3E
☐ CHANNEL BANDWIDTH: 50 kHz
☐ FREQUENCY (MHz):: 901.55

Test Frequency (MHz)	Measured Frequency (MHz)	Pol	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
901.55	1803.10	Y-H	-27.97	-7.51	-35.48	-13.00	22.48
	2704.65	Z-H	-50.43	-2.96	-53.39	-13.00	40.39
	3606.20	Z-H	-48.32	0.17	-48.15	-13.00	35.15
	4507.75	Y-V	-51.82	2.98	-48.85	-13.00	35.85
	5409.30	Z-H	-39.25	5.84	-33.41	-13.00	20.41
	6310.85	Z-H	-56.45	9.05	-47.40	-13.00	34.40

☐ TYPE OF EMISSION: 8K30F1E,8K30F1D,8K30F7W
☐ CHANNEL BANDWIDTH: 12.5 kHz
☐ FREQUENCY (MHz):: 940.55

Test Frequency (MHz)	Measured Frequency (MHz)	Pol	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
940.55	1881.10	X-H	-26.63	-6.90	-33.53	-13.00	20.53
	2821.65	Y-V	-44.39	-2.58	-46.97	-13.00	33.97
	3762.20	Y-V	-45.70	0.88	-44.82	-13.00	31.82
	4702.75	Y-V	-44.84	4.47	-40.37	-13.00	27.37
	5643.30	Z-H	-51.00	5.96	-45.04	-13.00	32.04
	6583.85	Z-V	-55.43	10.12	-45.31	-13.00	32.31

8.6 Simultaneous transmission

8.6.1 Scenario

Simultaneous transmission Scenario	WWAN	Bluetooth
WWAN + Bluetooth	on	on

8.6.2 Worst-case

Case1

Test Configuration	WWAN	Bluetooth
Frequency (MHz)	939.95	2441
Mode	7K60FXD, 7K60FXE	2DH5(π /4DQPSK)

Case2

Test Configuration	WWAN	Bluetooth
Frequency (MHz)	901.55	2441
Mode	11K0F3E	2DH5(π /4DQPSK)

Note

1. The worst-case configuration was selected based on the result with the minimum RSE margin for each test (WWAN, Bluetooth).
2. Simultaneous transmission testing was performed in a Semi-Anechoic Chamber (SAC).
3. No intermodulation signals were detected during the simultaneous transmission testing.
4. Spurious emissions from the WWAN and Bluetooth carriers were tested in accordance with their respective FCC/ISED regulations.

All results comply with the applicable limits, as summarized in the table below.

8.6.3 Test result

Case1

Mode: 2DH5(π /4DQPSK)

Frequency(MHz): 2441

Frequency [MHz]	Measured value [dB μ V]	C.L.+A.F.+D.F.-A.G. [dB/m]	Duty Cycle Correction [dB]	ANT. POL [H/V]	Result [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
12 205	38.22	17.51	0.00	H	55.73	73.98	18.25	PK
12 205	38.22	17.51	-18.71	H	37.02	53.98	16.96	AV

Power Setting: High

Type of Emission: 7K60FXD, 7K60FXE

Frequency(MHz): 939.95

Frequency [MHz]	Measured value [dB μ V]	C.L.+A.F.+D.F. [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Result [dBm]	Limit [dBm]	Margin [dB]
1879.90	33.02	33.11	H	66.13	-29.07	-20.00	9.07

Case2

☒ Mode: 2DH5(π /4DQPSK)

☒ Frequency(MHz): 2441

Frequency [MHz]	Measured value [dB μ V]	C.L.+A.F.+D.F.-A.G. [dB/m]	Duty Cycle Correction [dB]	ANT. POL [H/V]	Result [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
12 205	38.01	17.51	0.00	H	55.52	73.98	18.46	PK
12 205	38.01	17.51	-18.71	H	36.81	53.98	17.17	AV

☒ Type of Emission: 11K0F3E

☒ Frequency(MHz): 901.55

Frequency [MHz]	Measured value [dB μ V]	C.L.+A.F.+D.F [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Result [dBm]	Limit [dBm]	Margin [dB]
5409.30	58.97	6.57	V	65.54	-29.66	-13.00	16.66

9. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Audio Analyzer	8903B	Hewlett Packard	3413A13913	2026-08-18	Annual
Modulation Analyzer	8901B	Hewlett Packard	2406A00169	2026-07-04	Annual
COXIAL ATTENUATOR	FAS-23-20	MCLI	103756	2026-12-16	Annual
ATTENUATOR	WA93-30-33	WEINSCHTEL Associates	0149	2026-10-21	Annual
Horn Antenna	BBHA 9120D	Schwarzbeck	03197	2026-11-28	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	03201	2026-11-28	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	00895	2026-08-28	Biennial
RF Switching System	INPUT1 + 1GHz HPF + LNA	HCT CO., LTD.,	F2L2	2026-12-01	Annual
RF Switching System	INPUT1 + 3GHz HPF + LNA	HCT CO., LTD.,	F2L3	2026-12-01	Annual
RF Switching System	INPUT1 + 7GHz HPF + LNA	HCT CO., LTD.,	F2L5	2026-12-01	Annual
RF Switching System	INPUT3 + 6GHz HPF + LNA	HCT CO., LTD.,	F2L14	2026-12-01	Annual
SIGNAL GENERATOR	SMB100A	ROHDE & SCHWARZ	177633	2026-07-22	Annual
Signal Analyzer	FSV 40	ROHDE & SCHWARZ	101733	2026-09-17	Annual
Signal Analyzer	N9030B	KEYSIGHT	MY55480167	2027-04-28	Annual
MXA SIGNAL ANALYZER	N9020A	Agilent	MY52090906	2027-04-08	Annual
DC POWER SUPPLY	E3632A	Agilent	MY50360067	2027-01-27	Annual
Antenna Mast Controller	CO3000	Innco system GmbH	CO3000/842/ 35030115/L	N/A	N/A
Antenna Mast	MA4640/800-XP-EP	Innco system GmbH	S3AM	2026-07-25	Annual
Turn Table	DS1500-S-1t	Innco system GmbH	6290425	N/A	N/A
Trilog Broadband Antenna	VULB 9168	Schwarzbeck Mess-Elektronik OHG	01135	2026-08-19	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck Mess-Elektronik OHG	9120D-1191	2027-10-21	Biennial
RF Switching System	FBSR-03A (3G HPF+LNA)	T&M SYSTEM	S3L1	2026-10-20	Annual
RF Switching System	FBSR-03A (10dB ATT+LNA)	T&M SYSTEM	S3L2	2026-10-20	Annual
RF Switching System	FBSR-03A (7G HPF+LNA)	T&M SYSTEM	S3L3	2026-10-20	Annual
RF Switching System	FBSR-03A (3dB ATT+LNA)	T&M SYSTEM	S3L4	2026-10-20	Annual
RF Switching System	FBSR-03A (Thru)	T&M SYSTEM	S3L5	2026-10-20	Annual
Automation Software	FCC WLAN Radiated	HCT CO., LTD.	-	-	-
Broadband LNA	CBL18265035	CERNEX	22966	2026-10-21	Annual
Broadband LNA	CBL26405040	CERNEX	25956	2027-02-09	Annual
SIGNAL ANALYZER	FSV40	ROHDE&SCHWARZ	100900	2027-04-14	Annual
High Pass Filter	F5	Wainwright Instruments GmbH	F5	2027-04-20	Annual

Note:

- Equipment whose calibration due date was updated during the test period was not used between the previous due date and the update.
All reported measurements were performed using equipment within valid calibration.
- Especially, all antenna for measurement is calibrated in accordance with the requirements of ANSI C63.5-2017.

10. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2605-FI001-P