

Specified Radio Equipment TEST REPORT

Project Number : EA2603C-102

Test Report Number : TR-W2604-020-2

Type of Equipment : Remote Control Unit

Model Name : SR-INX

Additional Model Name : -

Applicant : HOMSSEN CO., Ltd.

Address : A-904, Digital Empire, 387, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do, KOREA

Manufacturer : HOMSSEN CO., Ltd.

Address : 53, Saneop-ro 155beon-gil, Gwonseon-gu, Suwon-si, Gyeonggi, 16648, Republic of Korea

Product Standard : Ordinance concerning Technical Regulations Conformity Certification, etc. of Specified Radio Equipment Regulations (Article 2-1-13) / MIC Notification No.88 of 2004, Annex 36

Total page of Report : 27 pages

Date of Receipt : April 1, 2026

Date(s) of Tests : April 29, 2026 ~ April 29, 2026

Date of Issue : April 30, 2026

Test Result : PASS

This test report only contains the result of a single test of the sample supplied for the examination.
It is not a generally valid assessment of the features of the respective products of the mass-production.

Prepared by Choi, Yoonseok / Research Engineer



Signature

April 30, 2026

Date

Reviewed by Ryu, Ui-Hyun / Technical Manager



Signature

April 30, 2026

Date

CONTENTS

Page

1. TEST SUMMARY	4
1.1 Test standards and results.....	4
1.2 Purpose of the test.....	4
1.3 Additions, deviations, exclusions from standards	4
1.4 Test Facility	5
2. EUT (Equipment Under Test) INFORMATION	6
2.1 General Description	6
2.2 Additional Model(s) Name.....	6
2.3 Factory Information	6
3.1 Mode of operation during the test	7
3.2 EUT RF operation software	7
3.3 Equipment Used During Test.....	7
3.4 Cable Description.....	7
3.5 Test Setup Drawing	8
3.6 EUT Modifications	8
4. MEASUREMENT UNCERTAINTY.....	8
5. TEST PARAMETER.....	9
5.1 Frequency tolerance	9
5.2 Max. RF Output Power	11
5.3 Occupied Bandwidth	13
5.4 Spurious Emission Strength.....	15
5.5 Restriction Function of Transmission Time.....	17
5.5.1 Method of Measurement	17
5.6 Adjacent Channel Leakage Power	19
5.7 Emission Wave Strength when Receiving	21
5.7.1 Method of Measurement	21
5.8 ID Code Length	23
5.8.1 Method of Measurement	23
Appendix I. Test Instrumentation.....	24
Appendix II. Test Setup Photo	25
Appendix III. Product Photo	26

Release Control Record

Issue Report No.	Issued Date	Details/Revisions
TR-W2604-020	April 30, 2026	Initial Release
TR-W2604-020-1	May 20, 2026	Retest all test items
TR-W2604-020-2	May 26, 2026	Page 6 (Declared RF output power, Channel information)

1. TEST SUMMARY

1.1 Test standards and results

The sample submitted for evaluation (Hereafter refer to as the EUT) has been tested in accordance with the following standards.

Test Items acc. to Radio Equipment Regulations (Article 2-1-13) and MIC Notification No.88 of 2004, Annex 36		
Test Items	Results	Note
Frequency tolerance	C	
Max. RF Output Power	C	
Occupied Bandwidth	C	
Spurious Emission Strength	C	
Restriction Function of Transmission Time	C	
Adjacent Channel Leakage Power	C	
Emission Wave Strength when Receiving	C	
ID Code Length	C	
Remark: C means Comply N/C means Not Comply N/A means Not Applicable		

1.2 Purpose of the test

To determine whether the EUT is operated in accordance with and fulfills the Ordinance concerning Technical Regulations Conformity Certification, etc. of Specified Radio Equipment Regulations (Article 2-1-13) and MIC Notification No.88 of 2004, Annex 36.

1.3 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

1.4 Test Facility

The measurement facilities are located at 135-60 Gyeongchung-daero, Gonjam-eup, Gwangju-si, Gyeonggi-do 12813, Korea. Our test facilities are accredited as a Conformity Assessment Body (CAB) by the FCC and ISED Canada, designated by the RRA (National Radio Research Agency), and accredited by KOLAS (Korea Laboratory Accreditation Scheme) in Korea and approved by TÜV Rheinland, TÜV SÜD, Korean Register of Shipping according to the requirement of ISO/IEC 17025 and registered VCCI member by VCCI Council.

Laboratory Qualification	Registration No.	Mark
FCC	KR0160	
ISED Canada	12721A	
RRA	KR0160	
TÜV Rheinland	UA 50314109-0002	
TÜV SÜD	CARAT 094465 0004 Rev.00	
Korean Agency for Technology and Standards	KT733	
Korea Register of Shipping	PCT40841-TL001	
VCCI	Member No: 4297 R-20184, T-20140	

Remark. This report is not related to KOLAS accreditation and relevant regulation.

2. EUT (Equipment Under Test) INFORMATION

2.1 General Description

HOMSSEN CO., Ltd. Model: SR-INX (referred to as the EUT in this report) is a 426.275 MHz wireless remote controller (remote control) for digital door locks under Low Power Security System (Article 2-1-13). It transmits registration and open signals to the registered digital door lock.

Trade Mark	-
Operating Frequency Range	426.275 MHz
Number of Channels	1 (426.275 MHz Only)
Channel interval	12.5 kHz
Modulation Types	FSK
Declared RF output power	0.25 mW (same as -5.23 dBm)
Type of Antenna	☒ Integrated Type ☐ Dedicated Type
	Helical Antenna
Antenna Gain	-11.83 dBi
Normal Test Voltage	DC 24.0 V
Test SW Version	-
Software Version	1.00
Hardware Version	1.00

2.2 Additional Model(s) Name

-

2.3 Factory Information

Company : HOMSSEN CO., Ltd.
Address : 53, Saneop-ro 155beon-gil, Gwonseon-gu, Suwon-si, Gyeonggi, 16648, Republic of Korea

3. TEST CONDITION AND OPERATION MODES

3.1 Mode of operation during the test

Test Mode	Description
# 1	The EUT operates in continuous unmodulated transmitting mode upon power-on.
# 2	The EUT operates in continuous modulated transmitting mode upon power-on.
Supply Voltage	The test was performed at DC 24.0 V $\pm$ 10 %.

3.2 EUT RF operation software

Test Software	-
Test Software Version	-
RF power setting in test software	Default (Unable to change output settings, using default values)

3.3 Equipment Used During Test

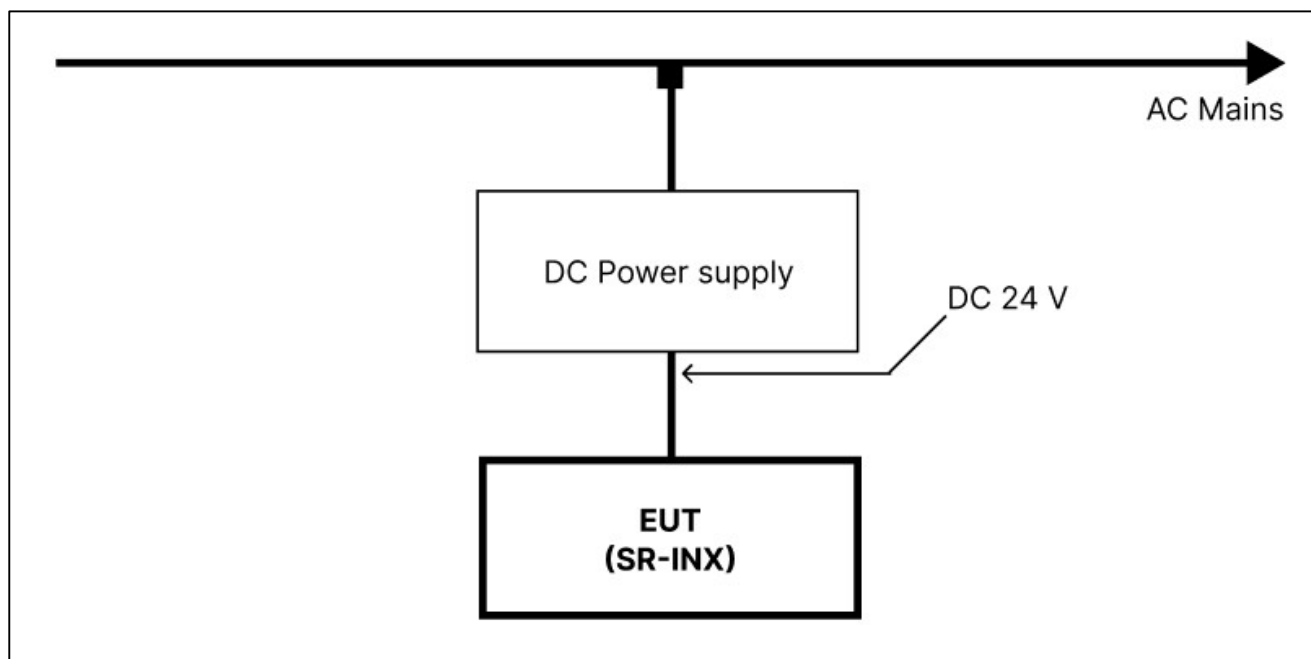
The following peripheral devices and/or interface cables were connected during the measurement:

Description	Model No.	Serial No.	Manufacturer.
Remote Control Unit	SR-INX	-	HOMSEN CO., Ltd.
DC Power Supply	U8001A	MY51080019	Agilent

3.4 Cable Description

Description	Ports Name	Shielded (Y/N)	Ferrite Core (Y/N)	Length (m)	Connected to
EUT	DC input	N	N	1.4	DC Power Supply

3.5 Test Setup Drawing



3.6 EUT Modifications

- None.

4. MEASUREMENT UNCERTAINTY

Measurement Item	Expanded Uncertainty $U = k \cdot U_c (k = 2)$
Frequency tolerance	131.60 Hz
RF Output Power	1.57 dBm
Occupied Bandwidth	34.69 kHz
Spurious Emission	3.13 dBm
Adjacent Channel Leakage	2.61 dBm
Receiving emission strength	3.46 dBm

5. TEST PARAMETER

5.1 Frequency tolerance

5.1.1 Method of Measurement

The frequency tolerance was measured in accordance with STD-T82.

The measurement was performed under unmodulated carrier condition.

The carrier frequency was directly measured to determine the frequency deviation.

The measured frequency was compared with the nominal frequency to verify compliance with the specified tolerance requirement.

5.1.2 Limits

Test Item	Limits
Frequency tolerance	± 4 ppm

5.1.3 Test Result

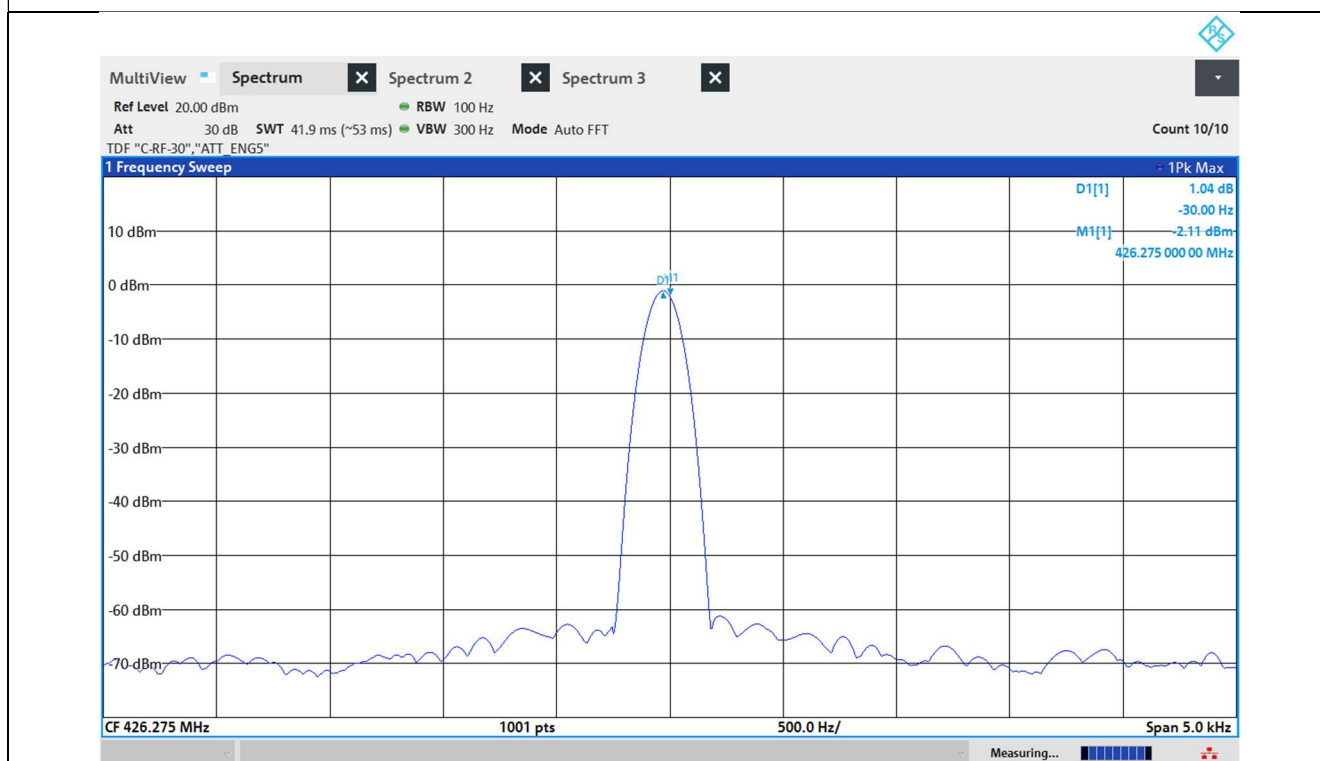
Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 1	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.1.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measured Frequency(MHz)	ppm
FSK	426.275 MHz	V _{high} : DC 26.2 V	426.275 030	0.07
		V _{nom} : DC 24.0 V	426.275 030	0.07
		V _{low} : DC 21.6 V	426.275 030	0.07

5.1.3.2 Graphical Test Data - Frequency tolerance

426.275 MHz (Normal Voltage)



5.2 Max. RF Output Power

5.2.1 Method of Measurement

The maximum RF output power was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The measurement was performed using appropriate conducted or radiated methods at the operating frequency of 426.275 MHz under normal transmission conditions.

5.2.2 Limits

Frequency Range	Limits
426.275 MHz	3 mW

5.2.3 Test Result

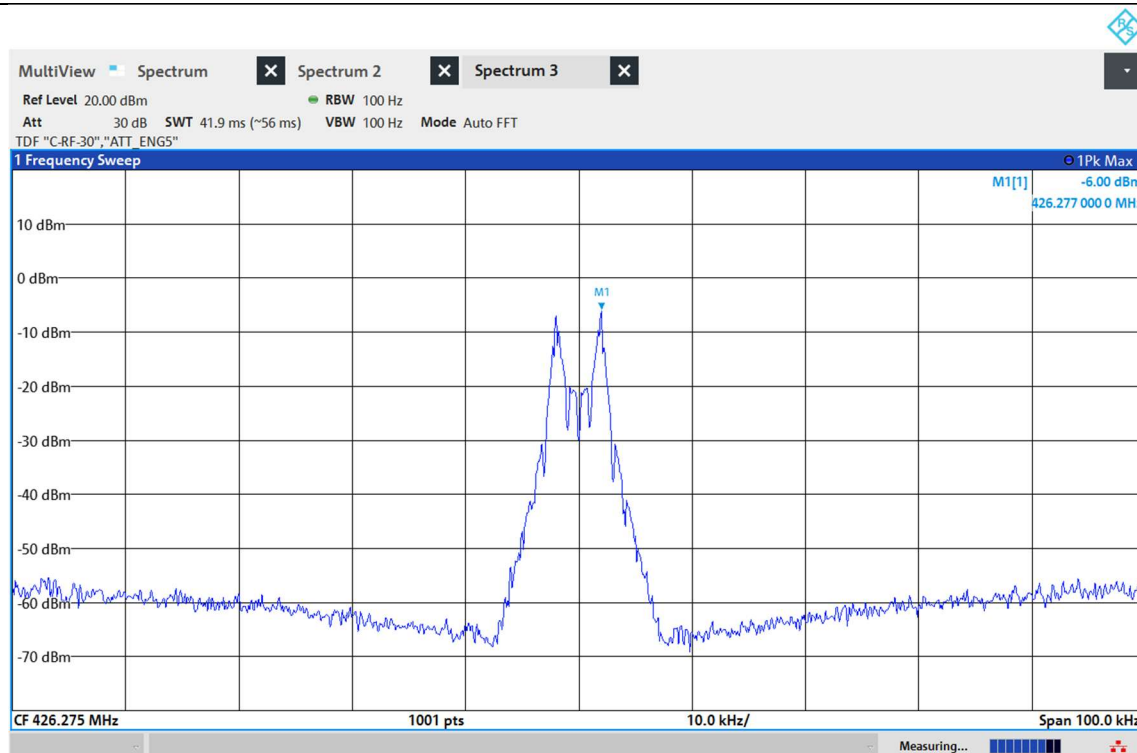
Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass 

5.2.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measurement power	
			dBm	mW
FSK	426.275 MHz	V _{high} :	-5.95	0.25
		V _{nom} :	-6.00	0.25
		V _{low} :	-5.91	0.26

5.2.3.2 Graphical Test Data - Max. RF Output Power

426.275 MHz (Normal Voltage)



5.3 Occupied Bandwidth

5.3.1 Method of Measurement

The occupied bandwidth was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The measurement was performed with the EUT operating under normal modulation conditions at the assigned operating frequency of 426.275 MHz.

The occupied bandwidth was determined by measuring the bandwidth of the transmitted emission containing the authorized modulation components.

5.3.2 Limits

The occupied bandwidth shall be within 8.5 kHz.

5.3.3 Test Result

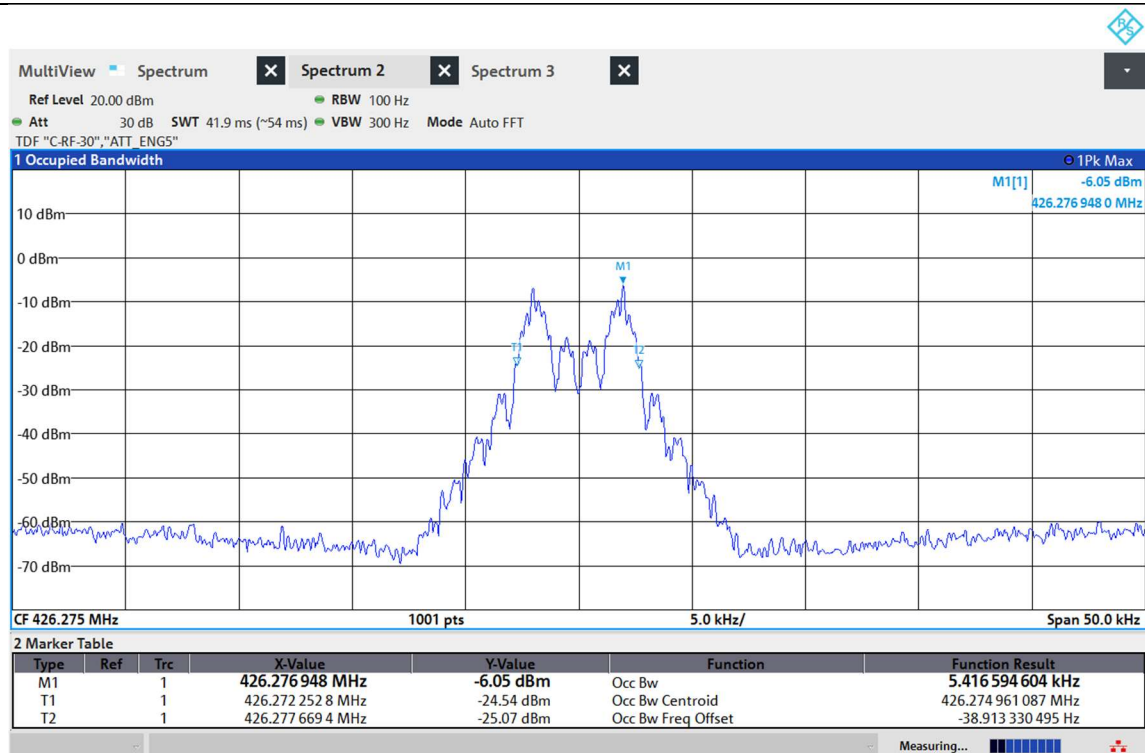
Test Date: 2026.05.19		Tested By: Choi, Yoonseok 	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.3.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measured Value(kHz)
FSK	426.275 MHz	V _{high} :	5.42
		V _{nom} :	5.42
		V _{low} :	5.42

5.3.3.2 Graphical Test Data – Occupied Bandwidth

426.275 MHz (Normal Voltage)



5.4 Spurious Emission Strength

5.4.1 Method of Measurement

The spurious emission strength was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

Measurements were performed over the frequency range including harmonic and spurious frequencies generated from the fundamental emission of 426.275 MHz during normal transmission operation.

The maximum spurious emission level was evaluated using conducted measurement methods where applicable.

5.4.2 Limits

The spurious emission strength shall be less than 2.5 μ W.

5.4.3 Test Result

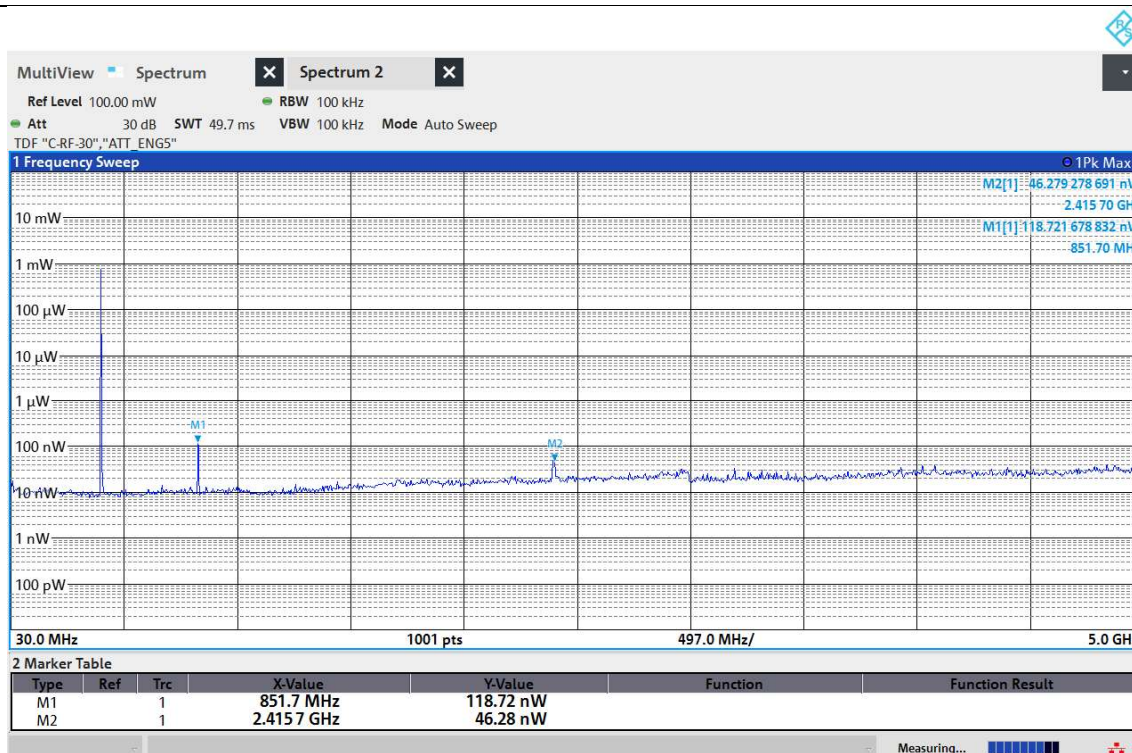
Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 $\pm$ 3) °C	Relative humidity	(57.3 $\pm$ 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.4.3.1 Tabulated Test Data

Operating Mode	Test condition	Frequency	Measured Value(μ W)
FSK	V _{high} :	851.7 MHz	0.10
	V _{nom} :	851.7 MHz	0.12
	V _{low} :	851.7 MHz	0.12

5.4.3.2 Graphical Test Data – Spurious Emission Strength

426.275 MHz (Normal Voltage) – 30 MHz ~ 5 GHz



5.5 Restriction Function of Transmission Time

5.5.1 Method of Measurement

The restriction function of transmission time was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The EUT was continuously activated under normal operating conditions, and the transmission ON duration and OFF duration were measured using zero span analysis at the operating frequency of 426.275 MHz.

The transmission pattern was evaluated to verify compliance with the specified transmission time limitation requirements.

5.5.2 Limits

Emission of harmonics or subharmonics radio wave shall be 50 μ W or less.

Item	Requirement
Transmission ON Time	Within 3 sec
Transmission OFF Time	Over 2 sec

5.5.3 Test Result

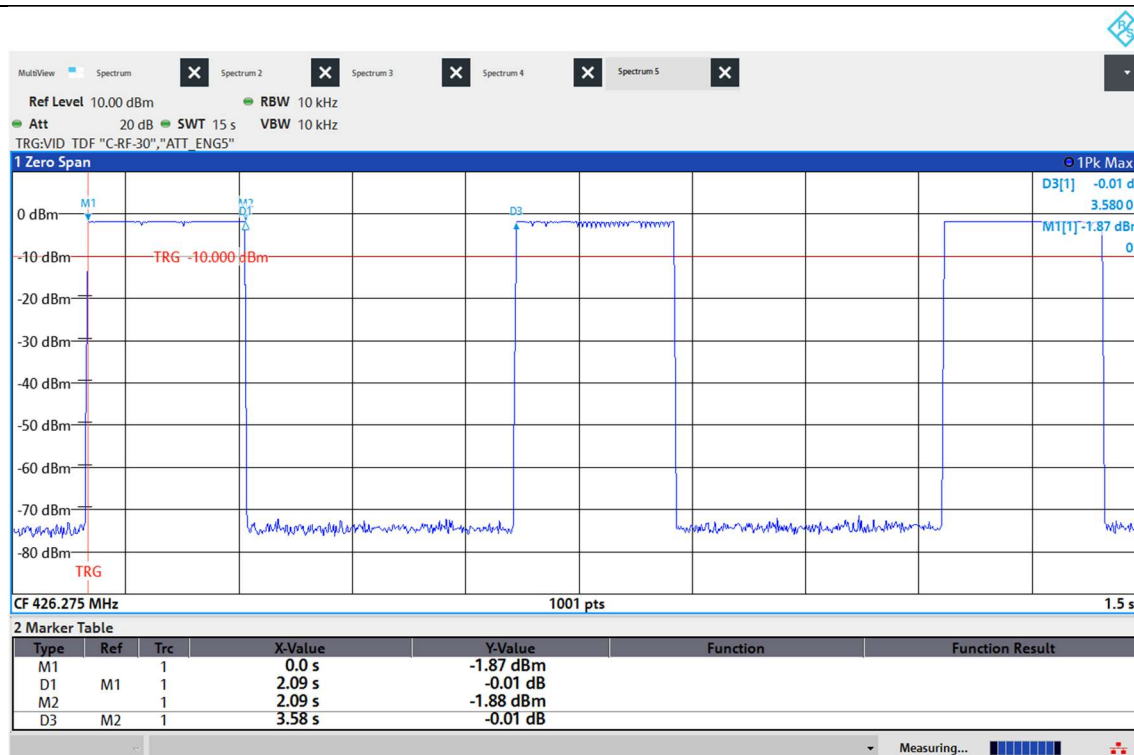
Test Date: 2026.05.19		Tested By: Choi, Yoonseok 	
Temperature	(26.4 $\pm$ 3) °C	Relative humidity	(57.3 $\pm$ 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.5.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measured Value(s)	
			ON time	OFF time
FSK	426.275 MHz	V _{high} :	2.09	3.58
		V _{nom} :	2.09	3.58
		V _{low} :	2.09	3.58

5.5.3.2 Graphical Test Data – Restriction Function of Transmission Time

426.275 MHz (Normal Voltage)



5.6 Adjacent Channel Leakage Power

5.6.1 Method of Measurement

The adjacent channel leakage power was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The EUT was operated under normal modulation conditions at the assigned operating frequency of 426.275 MHz. The leakage power emitted into adjacent channels was measured and compared to the power of the fundamental emission to determine compliance with adjacent channel suppression requirements.

5.6.2 Limits

The adjacent channel leakage power shall be more than 40 dB below the fundamental emission power.

5.6.3 Test Result

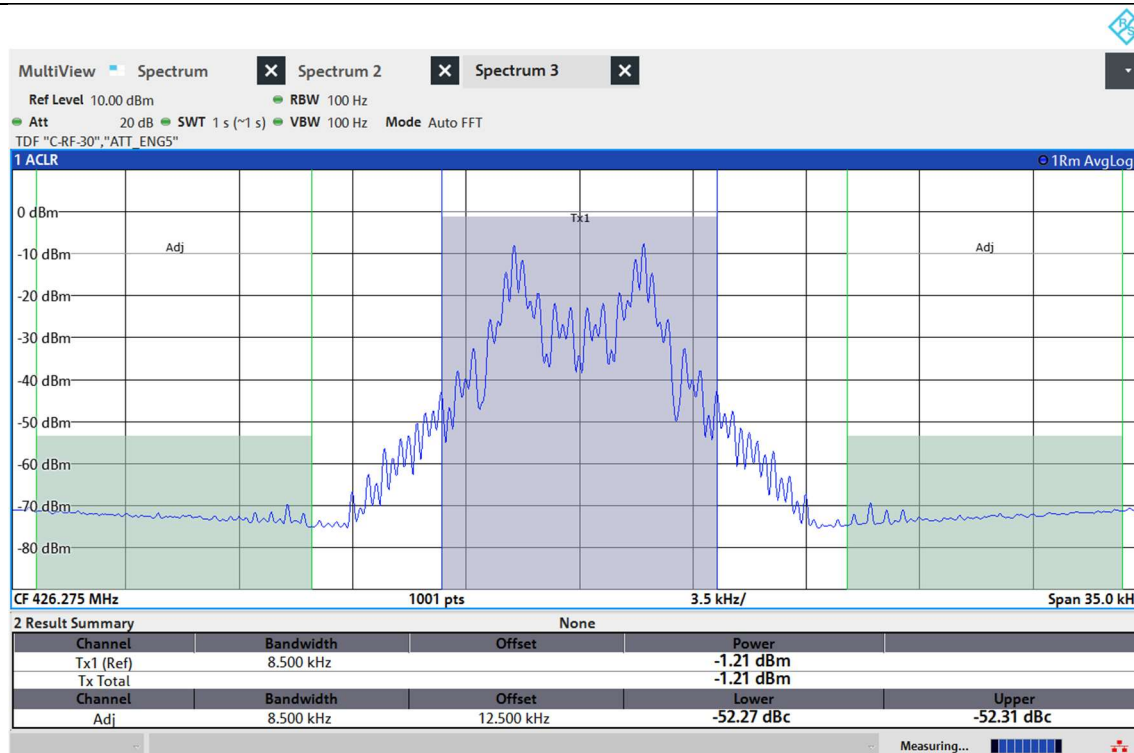
Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.6.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measured Value(dBc)	
			Lower	Upper
FSK	426.275 MHz	V _{high} :	-52.25	-52.32
		V _{nom} :	-52.27	-52.31
		V _{low} :	-52.27	-52.34

5.6.3.2 Graphical Test Data – Adjacent Channel Leakage Power

426.275 MHz (Normal Voltage)



5.7 Emission Wave Strength when Receiving

5.7.1 Method of Measurement

The emission wave strength when receiving was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The EUT was placed in receiving mode or standby mode under normal operating conditions.

Emission levels generated during receiving operation were measured to verify that unintended emissions complied with the specified regulatory limits.

5.7.2 Limits

The emission wave strength when receiving shall be less than 4 nW.

5.7.3 Test Result

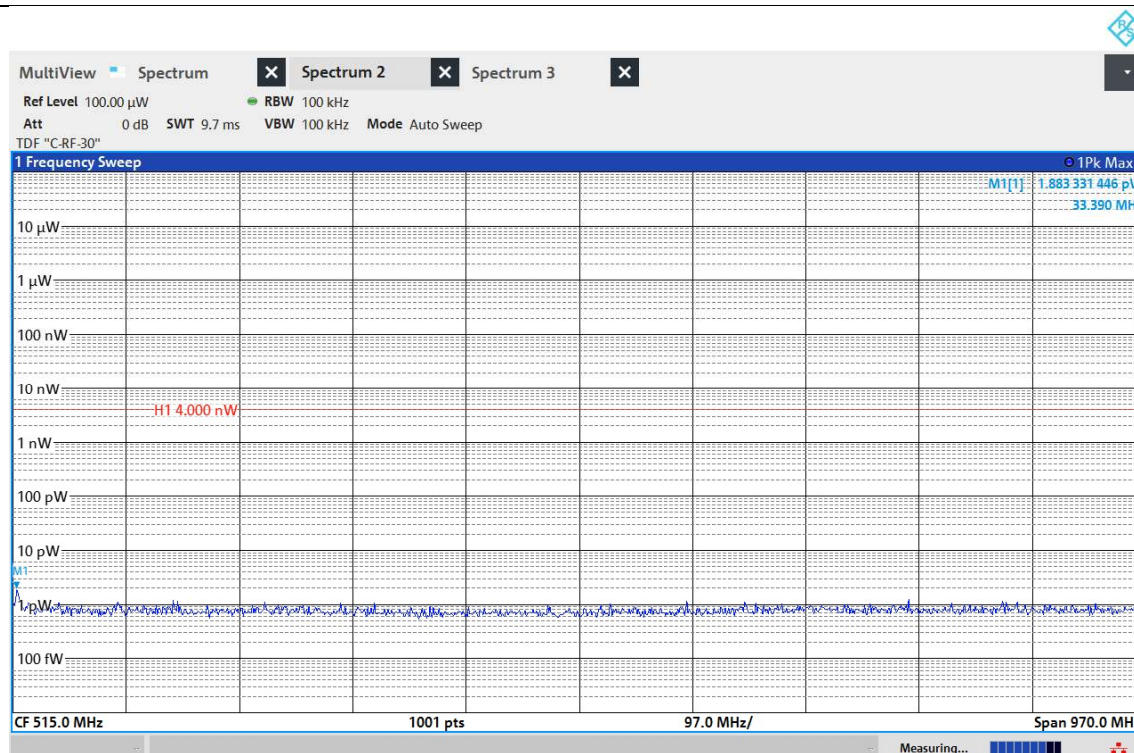
Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.7.3.1 Tabulated Test Data

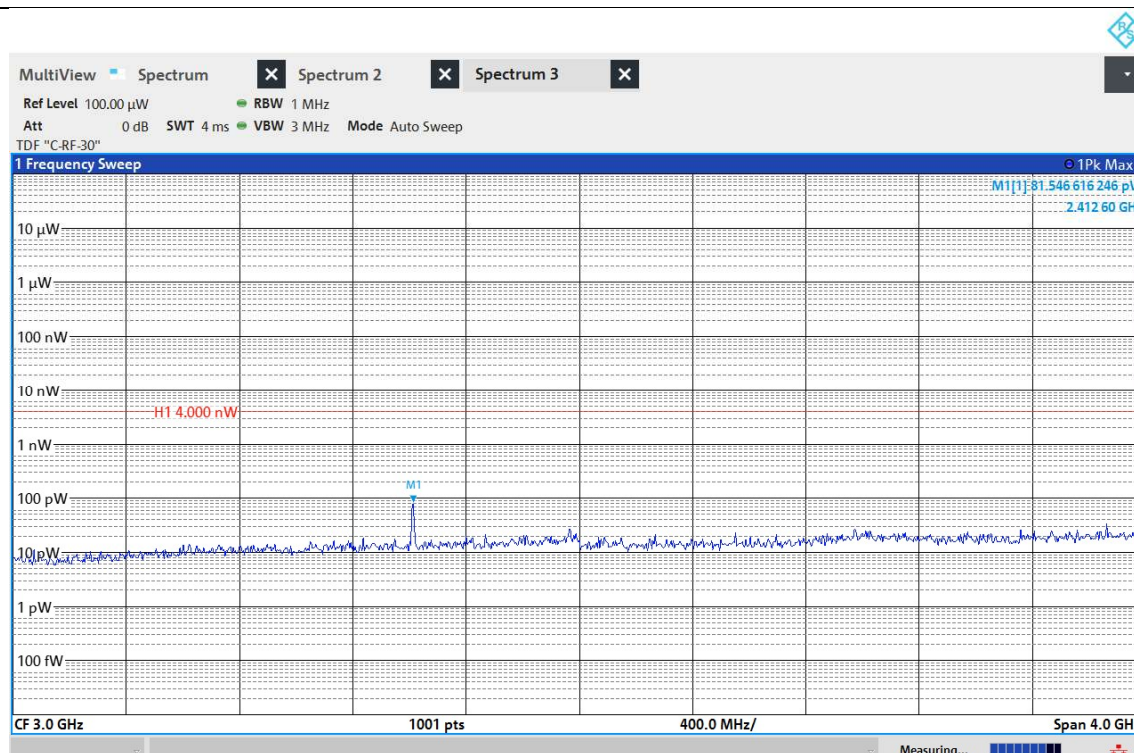
Operating Mode	Frequency	Test condition	Measured Value(nW)
FSK	426.275 MHz	V _{high} :	0.06
		V _{nom} :	0.08
		V _{low} :	0.04

5.7.3.2 Graphical Test Data – Emission Wave Strength when Receiving

426.275 MHz (Normal Voltage) – 30 MHz to 1 GHz



426.275 MHz (Normal Voltage) – 1 GHz to 5 GHz



5.8 ID Code Length

5.8.1 Method of Measurement

The ID code length was measured in accordance with Low Power Security Radio Equipment regulations specified in MIC Notification No.88 of 2004, Annex 36.

The EUT was operated under normal transmission conditions, and the transmitted identification code was analyzed to determine the total code length.

5.8.2 Limits

The ID code length shall be 48 bits or more.

5.7.3 Test Result

Test Date: 2026.05.19		Tested By: Choi, Yoonseok	
Temperature	(26.4 ± 3) °C	Relative humidity	(57.3 ± 4) % R.H.
Operating Mode	# 2	Duty cycle	-
Measurement Method	☐ Radiated ☒ Conducted		
Antenna Gain	-11.83 dBi	Test Result	Pass

5.7.3.1 Tabulated Test Data

Operating Mode	Frequency	Test condition	Measured Value(bit)
FSK	426.275 MHz	V nom:	48

Appendix I. Test Instrumentation

Description / Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date	Calibration Authority	Calibration Method
Spectrum Analyzer / Rohde & Schwarz	FSV3044	100946	2025-12-19	2026-12-19	KTICC	(c)
Signal Generator / Rohde & Schwarz	SMF100A	101441	2025-12-17	2026-12-17	KCLAB CO., Ltd.	(c)
DC Power Supply / AGILENT	E3610A	MY40005644	2025-12-08	2026-12-08	HCT	(c)
Attenuator / NONE	NONE	ENG-5	2026-01-26	2027-01-26	HCT	(c)

1. Calibration Method:

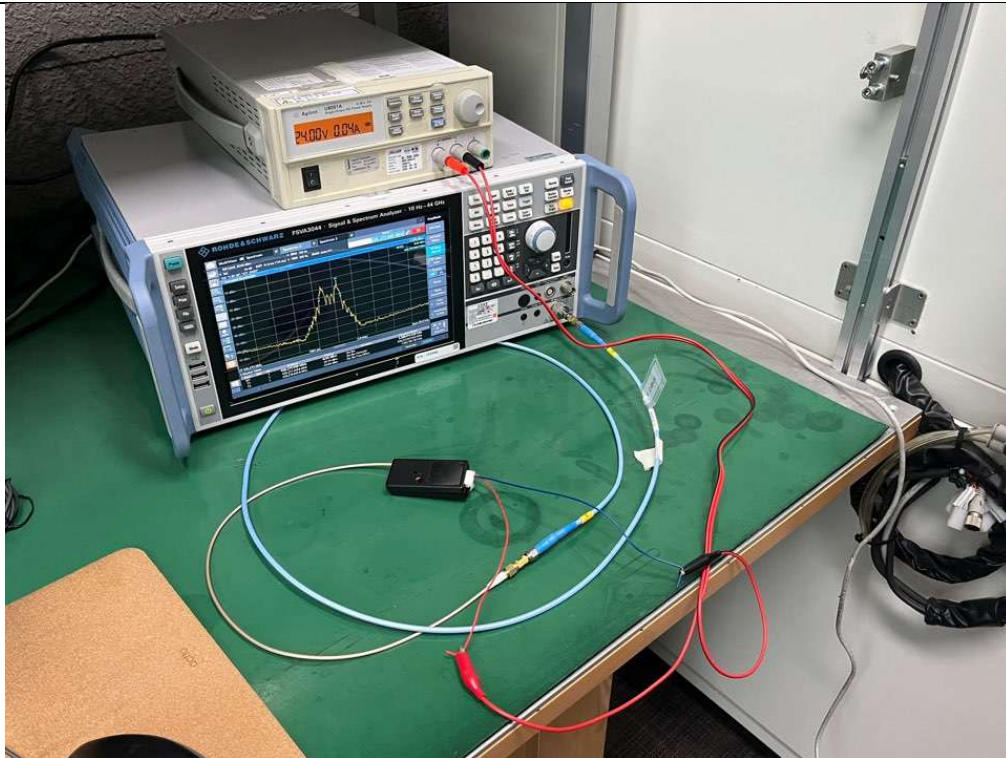
- (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1).
- (b) Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
- (c) Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- (d) Calibration conducted by using other equipment that listed above from a) to c).

2. The power supply was calibrated, which used the digital multimeter to verify before each testing.

3. The test was performed in Shield room.

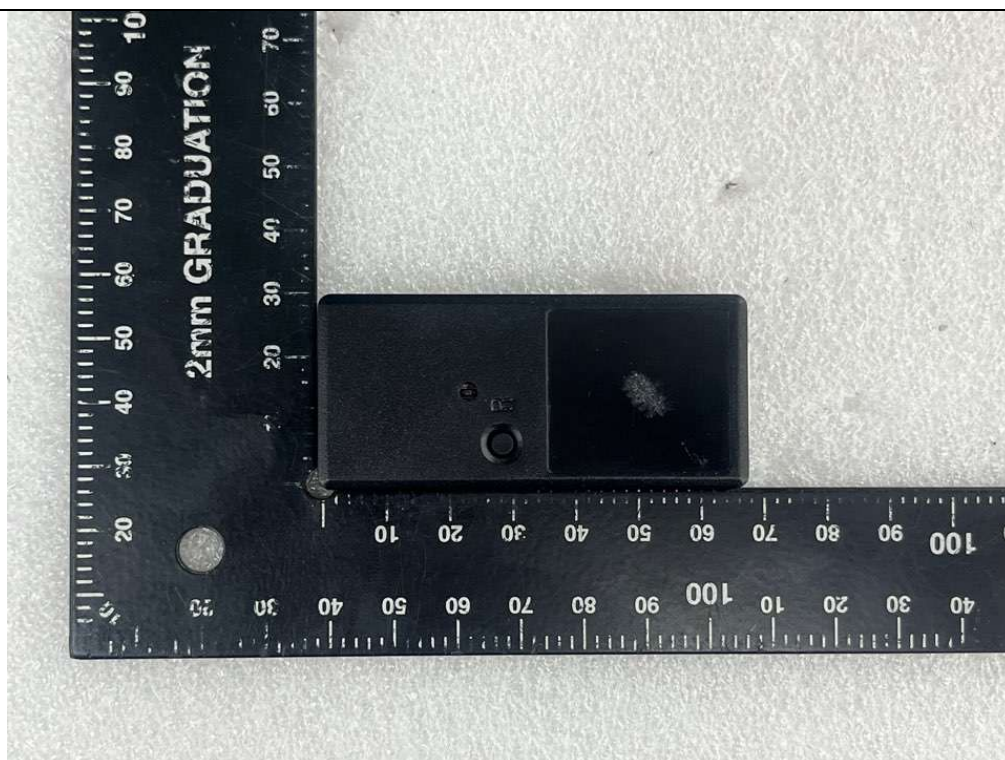
Appendix II. Test Setup Photo

Setup Photo

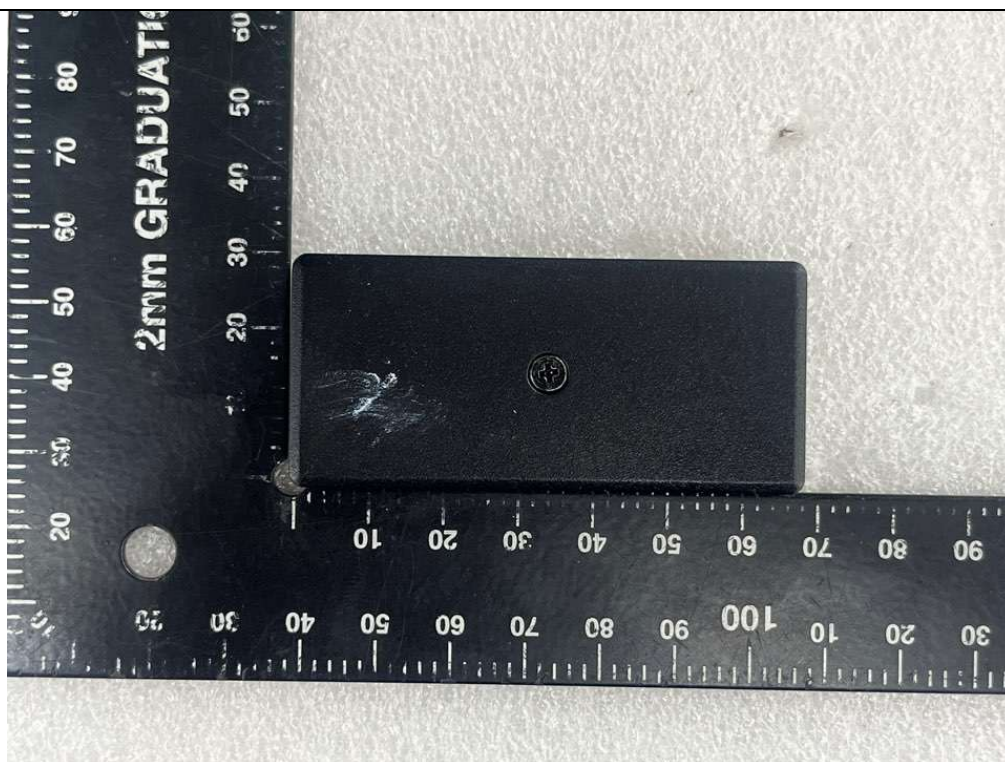


Appendix III. Product Photo

EUT - Front



EUT - Rear



(End of Test report)