

Contention Based Protocol

Mode	Communication 11ax-20 / 11ax-160			
Date	Test site	Temperature	Humidity	Engineer
March 31, 2026	SR5	26 deg. C	51 % RH	Shiro Kobayashi

Incumbent signal plots

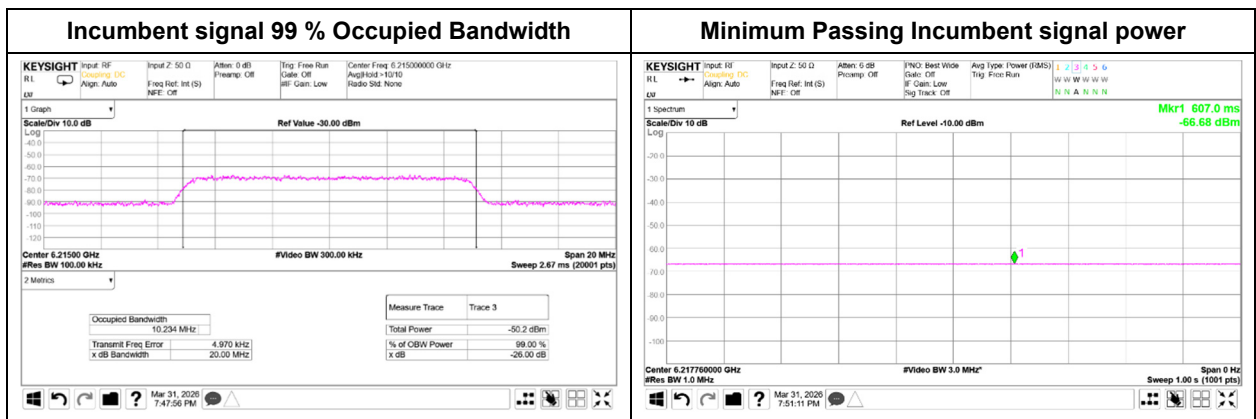
[20 MHz BW mode]

All tests were conducted with the Incumbent Signal frequency set to the middle of EUT channel and a nominal 99% Occupied Power Bandwidth of 10 MHz.

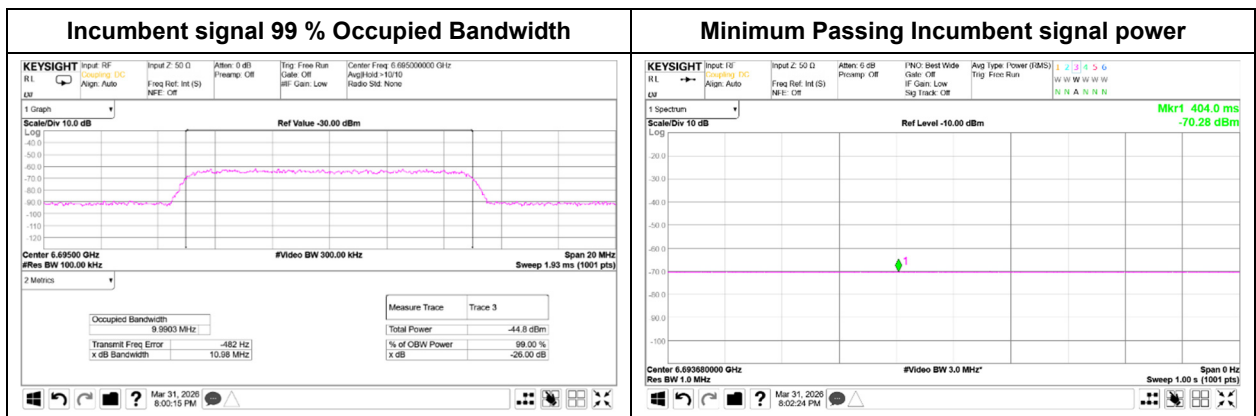
[160 MHz BW mode]

All tests were conducted with the Incumbent Signal frequency set to as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel and a nominal 99 % Occupied Power Bandwidth of 10 MHz.

Reference Plot
U-NII-5



Reference Plot
U-NII-7



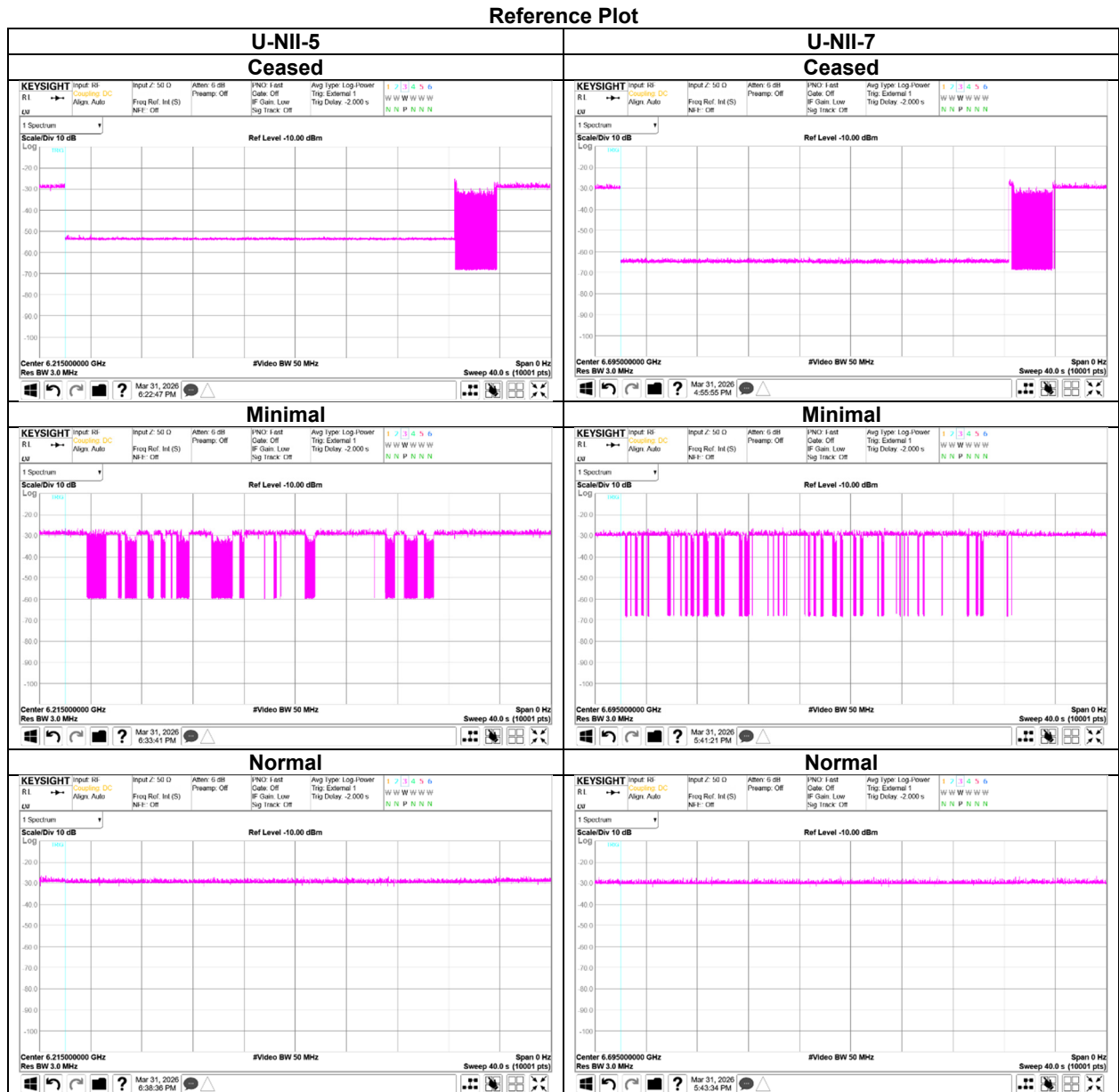
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EUT response to the applied incumbent signal

A link between the EUT and the Companion Device was established on the test channel. Traffic flowing from the EUT to the Companion Device was then initiated. A sweep was started, and the incumbent signal was continuously applied at approximately 2 seconds after the start of the sweep for a duration of 30 seconds and removed after the end of the observation period.

Transmissions cease while the Incumbent AWGN Signal is present and resume after it is removed.

Span was set to zero to ensure detection of transmissions from the EUT.



Ceased: The level at which no transmission is detected, consistently for a minimum period of 10 seconds.

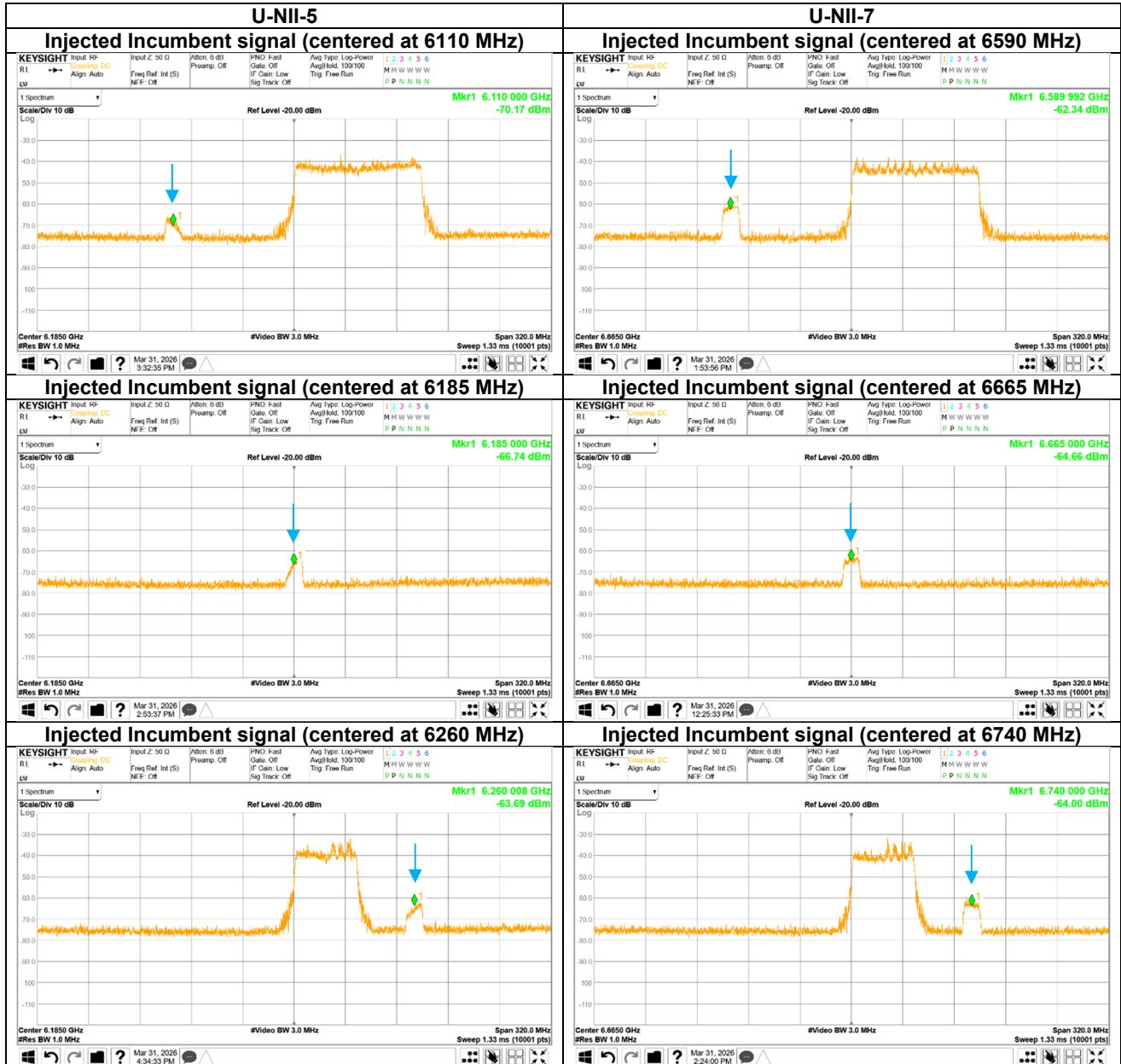
Minimal: The AWGN level at which the system begins to trigger the transmission switch off, albeit not being kept off consistently.

Normal: The level at which there is no apparent detection and the operation of the EUT is still considered optimal.

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CBP Bandwidth Reduction Description

It was confirmed how the channel is reduced when AWGN is injected at the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel.



→ : Incumbent Signal

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Incumbent signal detection results

UNII Band	Center Frequency [MHz]	BW [MHz]	Incumbent Frequency [MHz]	Incumbent Power [dBm]	Antenna gain* [dBi]	Adjusted Incumbent Power [dBm]	Detection Limit [dBm]	EUT Tx Status
5	6215	20	6215	-66.68	4.42	-71.10	-62.00	Ceased
				-72.88	4.42	-77.30	-62.00	Minimal
				-76.98	4.42	-81.40	-62.00	Normal
	6185	160	6110	-65.61	4.42	-70.03	-62.00	Ceased
				-70.51	4.42	-74.93	-62.00	Minimal
				-73.71	4.42	-78.13	-62.00	Normal
			6185	-61.60	4.42	-66.02	-62.00	Ceased
				-65.00	4.42	-69.42	-62.00	Minimal
				-71.25	4.42	-75.67	-62.00	Normal
			6260	-61.58	4.42	-66.00	-62.00	Ceased
				-70.18	4.42	-74.60	-62.00	Minimal
				-73.18	4.42	-77.60	-62.00	Normal

Adjusted Incumbent Power = Incumbent Power - Antenna gain

*The antenna gain value was applied as conservative condition.

The testing was performed with the AWGN signal set to Normal level (more than 20 dB below the -62 dBm threshold) and increased until the EUT detected and stopped transmitting (Ceased level).

EUT Tx Status means below

Ceased: The level at which no transmission is detected, consistently for a minimum period of 10 seconds.

Minimal: The AWGN level at which the system begins to trigger the transmission switch off, albeit not being kept off consistently.

Normal: The level at which there is no apparent detection and the operation of the EUT is still considered optimal.

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Incumbent signal detection results

UNII Band	Center Frequency [MHz]	BW [MHz]	Incumbent Frequency [MHz]	Incumbent Power [dBm]	Antenna gain* [dBi]	Adjusted Incumbent Power [dBm]	Detection Limit [dBm]	EUT Tx Status
7	6695	20	6695	-70.28	4.42	-74.70	-62.00	Ceased
				-80.48	4.42	-84.90	-62.00	Minimal
				-84.18	4.42	-88.60	-62.00	Normal
	6665	160	6590	-61.09	4.42	-65.51	-62.00	Ceased
				-70.39	4.42	-74.81	-62.00	Minimal
				-73.39	4.42	-77.81	-62.00	Normal
			6665	-62.55	4.42	-66.97	-62.00	Ceased
				-65.25	4.42	-69.67	-62.00	Minimal
				-69.25	4.42	-73.67	-62.00	Normal
			6740	-62.71	4.42	-67.13	-62.00	Ceased
				-70.61	4.42	-75.03	-62.00	Minimal
				-88.06	4.42	-92.48	-62.00	Normal

Adjusted Incumbent Power = Incumbent Power - Antenna gain

*The antenna gain value was applied as conservative condition.

The testing was performed with the AWGN signal set to Normal level (more than 20 dB below the -62 dBm threshold) and increased until the EUT detected and stopped transmitting (Ceased level).

EUT Tx Status means below

Ceased: The level at which no transmission is detected, consistently for a minimum period of 10 seconds.

Minimal: The AWGN level at which the system begins to trigger the transmission switch off, albeit not being kept off consistent

Normal: The level at which there is no apparent detection and the operation of the EUT is still considered optimal.

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Incumbent signal detection certainty results

UNII Band	Center Frequency [MHz]	BW [MHz]	Incumbent* Frequency [MHz]	Trial No.										Detection Rate [%]	Detection Rate Limit [%]
				1	2	3	4	5	6	7	8	9	10		
5	6215	20	6215	○	○	○	○	○	○	○	○	○	○	100	90
				○	○	○	○	○	○	○	○	○	○	100	90
	6185	160	6110	○	○	○	○	○	○	○	○	○	○	100	90
			6185	○	○	○	○	○	○	○	○	○	○	100	90
7	6695	20	6695	○	○	○	○	○	○	○	○	○	○	100	90
				○	○	○	○	○	○	○	○	○	○	100	90
	6665	160	6590	○	○	○	○	○	○	○	○	○	○	100	90
			6665	○	○	○	○	○	○	○	○	○	○	100	90
			6740	○	○	○	○	○	○	○	○	○	○	100	90

"○" means EUT ceased.

Blank means EUT did not ceased.

* Test was performed at the level which the EUT Tx Status was Ceased.

APPENDIX 2: Test Instruments

Test Equipment [1/2]

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	204927	Attenuator	Weinschel Corp.	54A-10	109972	2026/02/02	12
AT	204928	Attenuator	Weinschel Corp.	54A-10	109973	2026/02/05	12
AT	245174	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-2.0m	49334-01-01	2026/02/02	12
AT	245175	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-2.0m	49334-01-02	2026/02/02	12
AT	145111	Digital Tester	SANWA	PC500	7019232	2025/09/11	12
AT	150461	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46186392	2025/08/07	12
AT	273121	Terminator	Amphenol RF	132360	-	-	-
AT	236796	Power Meter	Raditeq (Formerly DARE!! Instruments)	RPR3008W	RPR8W-2301014	2025/05/21	12
AT	236797	Power Meter	Raditeq (Formerly DARE!! Instruments)	RPR3008W	RPR8W-2301015	2025/05/21	12
AT	220801	measurement software	Raditeq (Formerly DARE!! Instruments)	RadiMation	Ver 2020.0.12	-	-
AT	146362	Thermo-Hygrometer	CUSTOM. Inc	CTH-190	K-07	2025/08/15	12
AT	259713	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2026/04/01	12
AT, CBP	146212	Digital Hitester	HIOKI E. E. CORPORATION	3805-50	80997828	2025/09/10	12
AT, CBP	272616	Microwave cable	RS Pro	R-132G7210 100CO	-	2025/11/18	12
AT, CBP	272617	Microwave cable	RS Pro	R-132G7210 100CO	-	2025/11/18	12
CBP	242070	Attenuator	Weinschel Corp.	54A-20	120415	2025/11/02	12
CBP	145181	Coaxial Cable	Suhner	141PE	-	2025/07/17	12
CBP	145182	Coaxial Cable	Suhner	141PE	-	2025/07/17	12
CBP	179106	Coaxial Cable	Junkosha	MWX241-01000KMSKMS/B	1901Q061-R	2025/04/15	12
CBP	179107	Coaxial Cable	Junkosha	MWX241-01000KMSKMS/B	1901Q062-R	2025/04/15	12
CBP	246244	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-SMS13-1.0m	49883-01-01	2026/03/01	12
CBP	246245	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-SMS13-1.0m	49883-01-02	2026/03/01	12
CBP	146252	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	2025/11/02	12
CBP	146276	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	2025/11/02	12
CBP	146277	Power Splitters/Combiners	Mini-Circuits	ZFSC-2-10G+	-	2025/11/02	12
CBP	146020	RF switch circuit	UL-ISE	-	1	-	-
CBP	226868	Signal Generator	Rohde & Schwarz	SMW200A	108835	2026/04/21	12
CBP	236410	Spectrum Analyzer	Keysight Technologies Inc	N9030B	MY63050151	2025/04/29	12
CBP	259714	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2026/04/02	12
RE	199783	Attenuator	JFW	50HF-006N	-	2025/06/04	12
RE	239787	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	VHBB 9124+BBA9106	01908	2025/08/14	12
RE	236711	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-7.0m	47256-03-02	2025/05/27	12
RE	236724	Coaxial Cable	Hayashi-Repic co., Ltd.	SF106(HUBER+SUHNER)/LMR400UF/GL310C x2	2000430/47753-2/47256-01-04/47256-01-02	2025/05/12	12
RE	239644	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	2306S022	2025/08/27	12
RE	239650	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	2001218/2	2025/08/27	12
RE	243690	Coaxial Cable	Huber+Suhner	GL310C(Hayashi-Repic)/SF106/SF106	49373-01-02/2001168/2001161	2025/12/02	12
RE	264042	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-SFS13-0.5m	53292-01-02	2025/06/20	12
RE	235640	DIGITAL MULTIMETER	HIOKI E. E. CORPORATION	DT4261	230313157	2025/05/22	12
RE	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	Ver 3.1.0612	-	-

Test Equipment [2/2]

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	242062	Highpass Filter	Micro-Tronics	HPM50107	G119	2025/11/11	12
RE	236584	Horn Antenna	AINFO Inc.	LB-8180-NF	2030013000112	2025/04/25	12
RE	236586	Horn Antenna	AINFO Inc.	LB-42-25-C2-KF	2020087000114	2025/04/25	12
RE	236687	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	00788	2025/04/25	12
RE	145528	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	195	2026/03/18	12
RE	236967	Pre Amplifier	TSJ (Techno Science Japan)	MLA-9K01-L01	23050010	2025/06/04	12
RE	237719	Pre Amplifier	TSJ (Techno Science Japan)	MLA-18265-J03	23060017	2025/06/19	12
RE	237786	RF RELAY MATRIX with preamplifier	TSJ (Techno Science Japan)	RFM-E221261R	07796	2025/11/23	12
RE	236615	Semi-Anechoic Chamber	TDK	SWAC-02(NSA)	2	2026/04/06	12
RE	236617	Semi-Anechoic Chamber	TDK	SWAC-02(SVSWR)	2	2025/06/13	12
RE	207281	Tape Measure	ASKUL	-	-	-	-
RE	235268	Test Receiver	Rohde & Schwarz	ESW44	103212	2025/12/19	12
RE	235738	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2026/04/02	12

*Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.

The expiration date of the calibration is the end of the expired month.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test item:

AT: Antenna Terminal Conducted test

RE: Radiated Emission

CBP: Contention Based Protocol