Testing and Certification

TEST REPORT

FCC 24 GHz Radar Test for UTR 3.0 Rear Certification

APPLICANT
Mobile Appliance, Inc.

REPORT NO.
HCT-RF-2605-FC009

DATE OF ISSUE
May 12, 2026

Tested by
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TEST REPORT

REPORT NO.
HCT-RF-2605-FC009

DATE OF ISSUE
May 12, 2026

Additional Model
Universal Traffic Recorder 3 Rear, Lamborghini Eye 3.0 Rear

Applicant	**Mobile Appliance, Inc.** 1701~1706, 401, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea
Product Name Model Name	Dashcam Rear UTR 3.0 Rear
FCC ID	WHBUTR3R
Date of Test	March 18, 2026 ~ May 08, 2026
Location of Test	■ Permanent Testing Lab ☐ On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
FCC Standard Used	Part 15.245
Test Results	PASS

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REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	May 12, 2026	Initial Release

Notice

Content
Engineering Statement: 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 FCC 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. EUT DESCRIPTION

Model	UTR 3.0 Rear
Additional Model	Universal Traffic Recorder 3 Rear, Lamborghini Eye 3.0 Rear
EUT Type	Dashcam Rear
EUT Serial Number	ATR260300001
Power Supply	DC 12.0 V
Frequency Range	24.075 GHz ~ 24.175 GHz
Modulation Type	FSK
Antenna type:	PCB Antenna
Max. antenna gain:	7.00 dBi

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2. TEST METHODOLOGY

The measurement procedure described in ANSI C63.10-2020 + Cor. 1-2023, operating under 47 CFR § 15.255, was used for the measurement.

Note : Here In after, ANSI C63.10-2020 + Cor. 1-2023 will be referred to as ANSI C63.10-2020

2.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx Frequency that was for the purpose of the measurements.

2.3 GENERAL TEST PROCEDURES

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above the ground plane below 1 GHz and 1.5 m above 1 GHz with absorbers between the EUT and receiving antenna. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set far-field distance away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 8 of ANSI C63.10-2020.

2.4 DESCRIPTION OF TEST MODES

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

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3. 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's, which is traceable to recognized national standards.
Especially, all antennas(Up to 40 GHz) for measurement are calibrated in accordance with the requirements of C63.5-2017.

4. FACILITIES AND ACCREDITATIONS

4.1 FACILITIES

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).

4.2 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 CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

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5. ANTENNA REQUIREMENTS

According to FCC 47 CFR § 15.203:

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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.

(1) The antennas of this E.U.T are permanently attached.

(2) The E.U.T Complies with the requirement of § 15.203

6. MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty
Occupied Bandwidth	95 kHz
RF Output Power	0.68 dB
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 dB
Radiated Disturbance (30 MHz ~ 1 GHz)	5.68 dB
Radiated Disturbance (1 GHz ~ 18 GHz)	5.75 dB
Radiated Disturbance (18 GHz ~ 40 GHz)	5.82 dB
Radiated Disturbance (Above 40 GHz)	5.58 dB
Transmitter Frequency Stability	27.94 kHz

Coverage factor $k = 2$, Confidence levels of 95 %

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7. SUMMARY TEST OF RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
Occupied Bandwidth	§ 2.1049	N/A	RADIATED	PASS
Fundamental Field Strength Level	§ 15.245(b)	< 2500 mV/m		PASS
Harmonic Field Strength Level	§ 15.245(b)(1)(i)	< 2500 mV/m		PASS
General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	§ 15.205, 15.209, 15.245(b)(3)	< 15.209 limits or 50dB below the level of the fundamental		PASS
Frequency Stability	§ 15.255(f)	24.075 ~ 24.175 GHz		PASS

Notes:

1. The decision rule applies 'simple acceptance'

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8. TEST RESULT

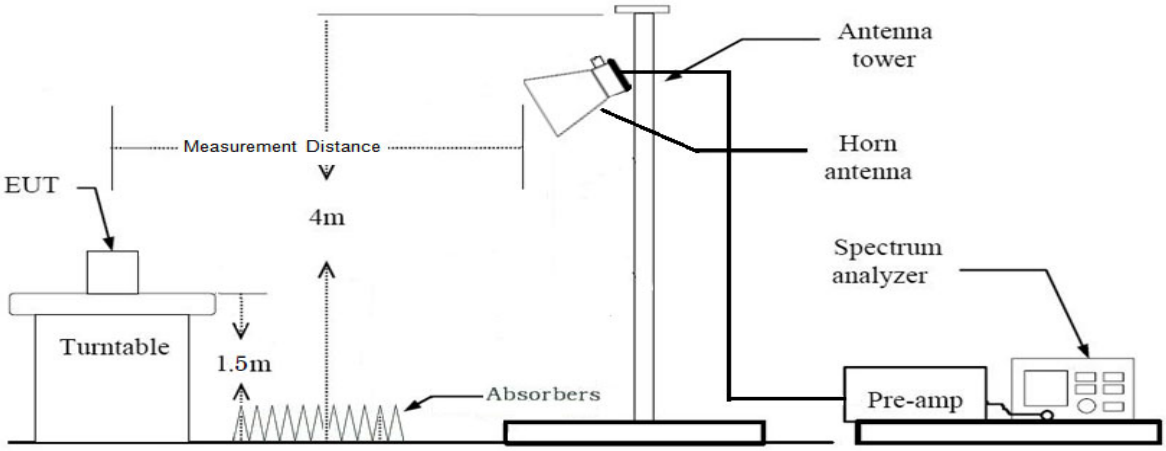
8.1 OCCUPIED BANDWIDTH MEASUREMENT

▣ TEST REQUIREMENT

§ 2.1049 Measurements required: Occupied bandwidth.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

▣ TEST CONFIGURATION



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▣ TEST PROCEDURE

According to ANSI C63.10-2020, 9.4.

The occupied bandwidth (OBW) is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

a) The following procedure shall be used for measuring 99% power bandwidth: Use the following spectrum analyzer settings:
   1) Span equal to approximately 1.5 times the OBW, centered on the carrier frequency
   2) RBW, prefer 1% to 5% of OBW, or a minimum of 1 MHz if this is not possible due to a large OBW
   3) VBW approximately 3 × RBW
   4) Set the reference level of the instrument as required to reduce the chance of the signal amplitude exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.1.6.
   5) Sweep = No faster than coupled (auto) time.
   6) Detector function = peak.
   7) Trace = max-hold.

Note : 1. We tested Occupied Bandwidth using the automatic bandwidth measurement capability of a spectrum analyzer.

2. Measured distance : 1 m

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▣ TEST RESULT

TEST CONDITIONS:		Occupied Channel Bandwidth (MHz)
T nom	V nom	1.3037

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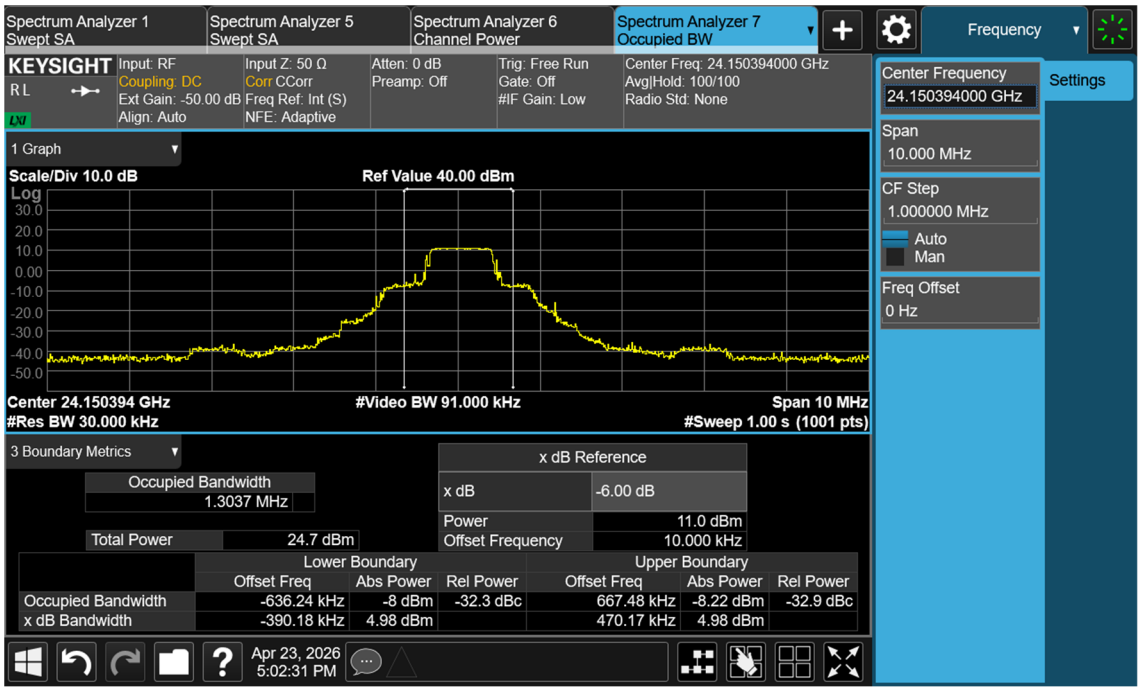
▣ RESULT PLOTS

Occupied Bandwidth plot



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8.2 RADIATED MEASUREMENT.

Test Requirements and limit, § 15.245 (b)
Operation within the bands 902–928 MHz, 2435–2465 MHz, 5785–5815 MHz, 10 500-10 550 MHz, And 24 075-24 175 MHz.
(a) Operation under the provisions of this section is limited to international radiators used as field disturbance sensors, excluding perimeter protection systems.
(b) The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency (MHz)	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (millivolts/meter)
902-928	500	1.6
2435-2465	500	1.6
5785-5815	500	1.6
10 500-10 550	2500	25
24 075-24 175	2500	25

(1) Regardless of the limits shown in the above table, harmonic emissions in the restricted bands below 17.7 GHz, as specified in § 15.205, shall not exceed the field strength limits shown in § 15.209. Harmonic emissions in the restricted bands at and above 17.7 GHz shall not exceed the following field strength limits:

(i) For the second and third harmonics of field disturbance sensors operating in the 24075-24175 MHz band and for other field disturbance sensors designed for use only within a building or to open building doors, 25.0 mV/m.

(ii) For all other field disturbance sensors, 7.5 mV/m.

(iii) Field disturbance sensors designed to be used in motor vehicles or aircraft must include features to prevent continuous operation unless their emissions in the restricted bands, other than the second and third harmonics from devices operating in the 24075-24175 MHz band, fully comply with the limits given in § 15.209. Continuous operation of field disturbance sensors designed to be used in farm equipment, vehicles such as fork lifts that are intended primarily for use indoors or for very specialized operations, or railroad locomotives, railroad cars and other equipment which travels on fixed tracks is permitted. A field disturbance sensor will be considered not to be operating in a continuous mode if its operation is limited to specific activities of limited duration (e.g., putting a vehicle into reverse gear, activating a turn signal, etc.).

(2) Field strength limits are specified at a distance of 3 meters.

(3) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

(4) The emission limits shown above are based on measurement instrumentation employing an average detector. The provisions in § 15.35 for limiting peak emissions apply.

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Test Procedure

According to ANSI C63.10-2020, 6.6

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. In case from 9 kHz to 18 GHz, EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
   In case from 18 GHz to 60 GHz, EUT is set 1 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
   In case above 60 GHz, EUT is set 1.5 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. Measured Distance

All tests is performed by radiated measurement and applied below conditions.

: Spurious emissions measurement distance is shown in table below. (Far field)

Frequency Rage (GHz)	Wavelength (cm)	Far Field Distance (m)	Measured Distance (m)
18 ~ 40	0.75	3.154	3.5
40 ~ 60	0.50	1.354	1.5
60 ~ 90	0.33	0.856	1.0
90 ~ 140	0.21	0.572	1.0
140 ~ 200	0.15	0.365	1.0

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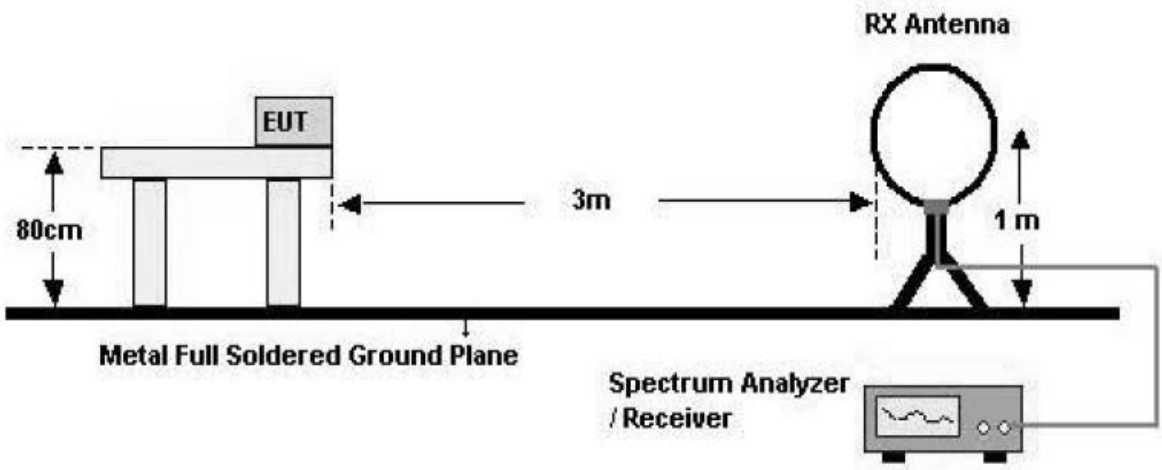
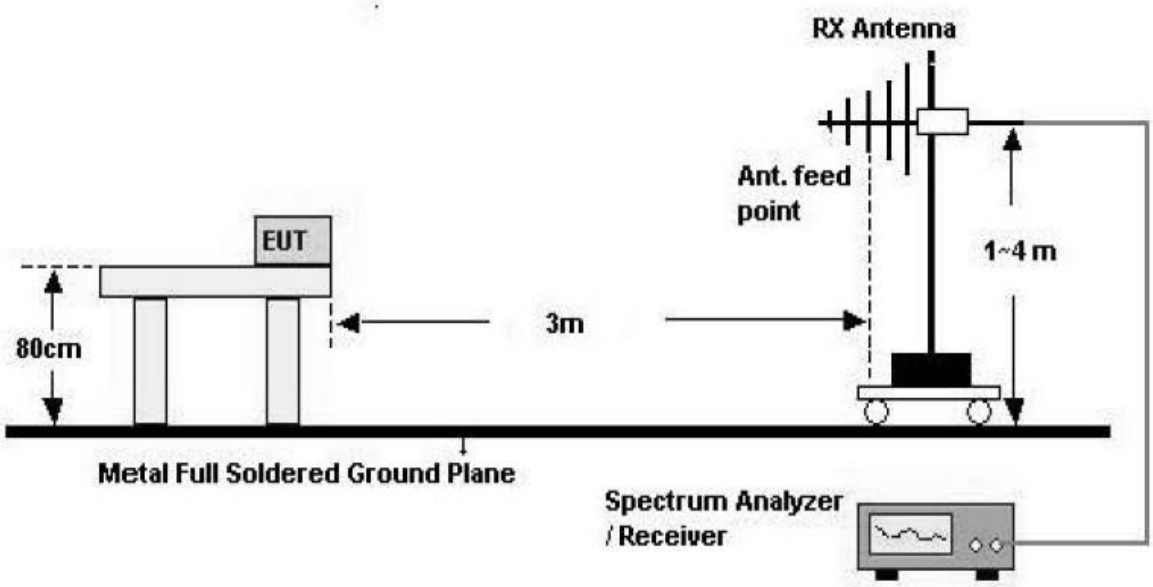
Test Configuration

Below 30 MHz



30 MHz - 1 GHz



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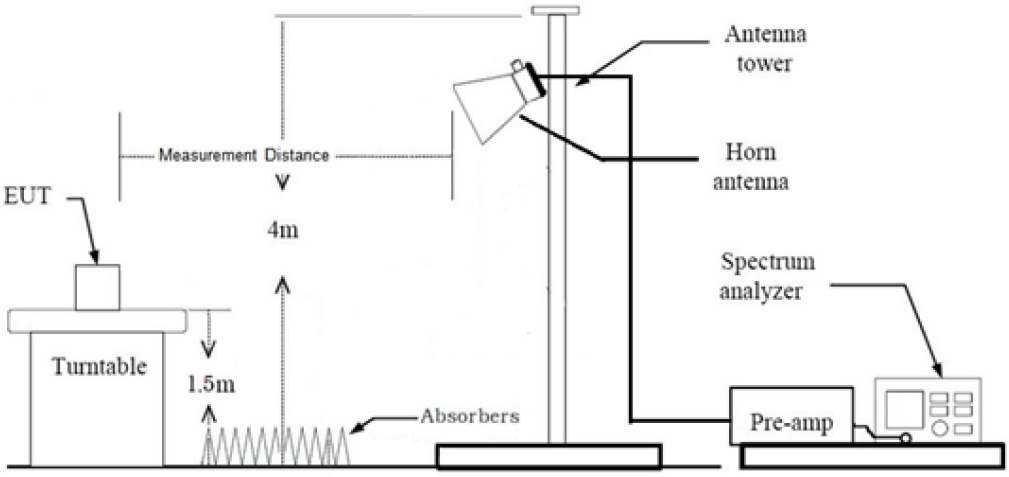
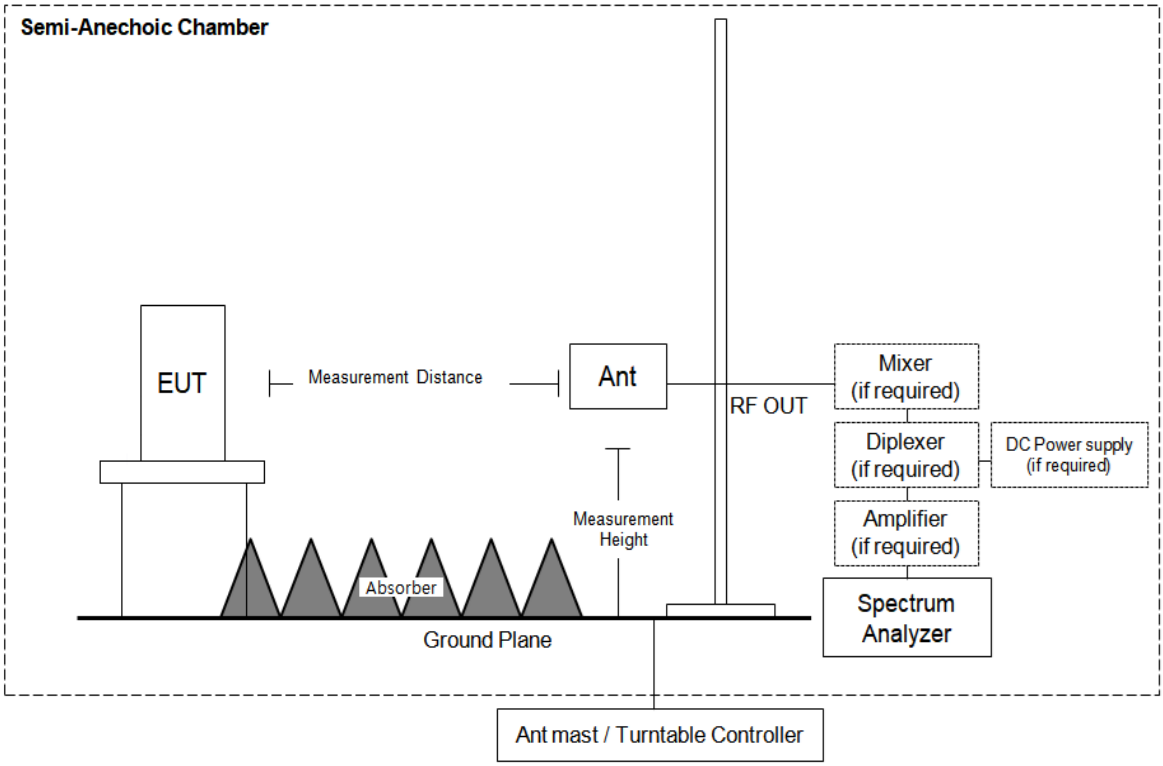
1 GHz – 40 GHz



40 GHz – 100 GHz



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▣ FIELD STRENGTH OF FUNDAMENTAL TEST RESULTS

Frequency	Reading	A.F.+C.L.	Ant. Pol.	D.F.	Total	Limit	Margin	Measurement
[㎓]	[dBμV/m]	[dB]	[H/V]	[dB]	[dBμV/m]	[dBμV/m]	[dB]	Type
24.1504	68.53	48.87	V	-9.54	107.86	147.96	40.10	Peak
24.1503	68.29	48.87	V	-9.54	107.62	127.96	20.34	Avg

※ A·F: ANTENNA FACTOR

C·L: CABLE LOSS

Note :

1. Total = Reading Value + Antenna Factor + Cable Loss + Distance Factor
2. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
3. Measured Distance : 1 m
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

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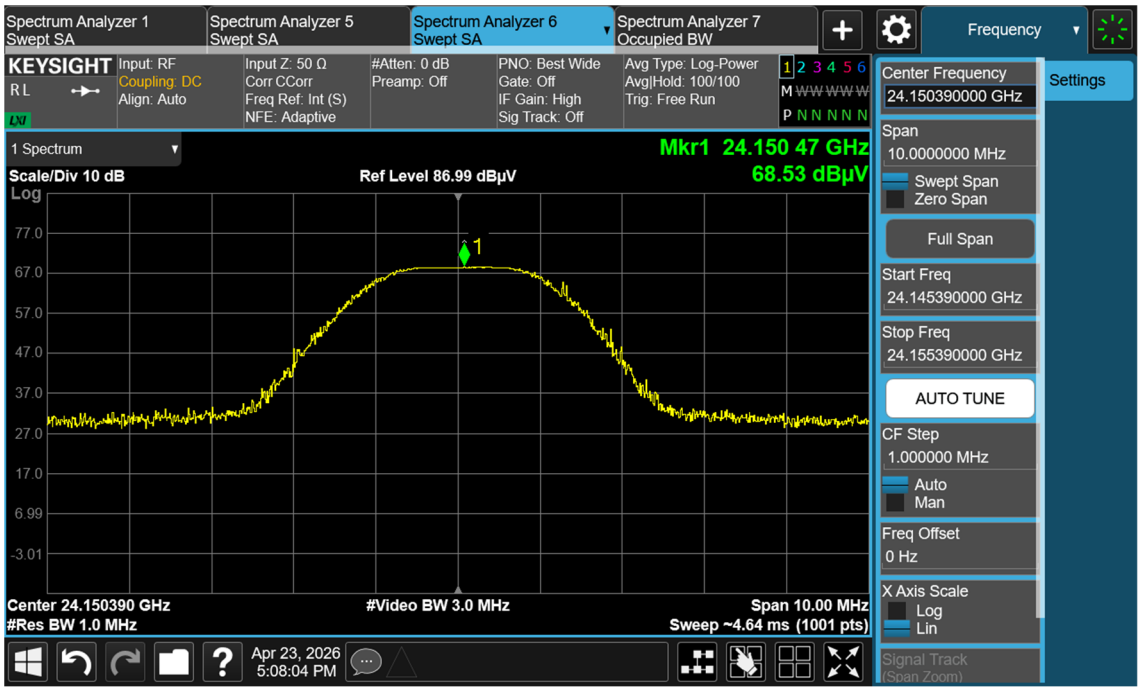
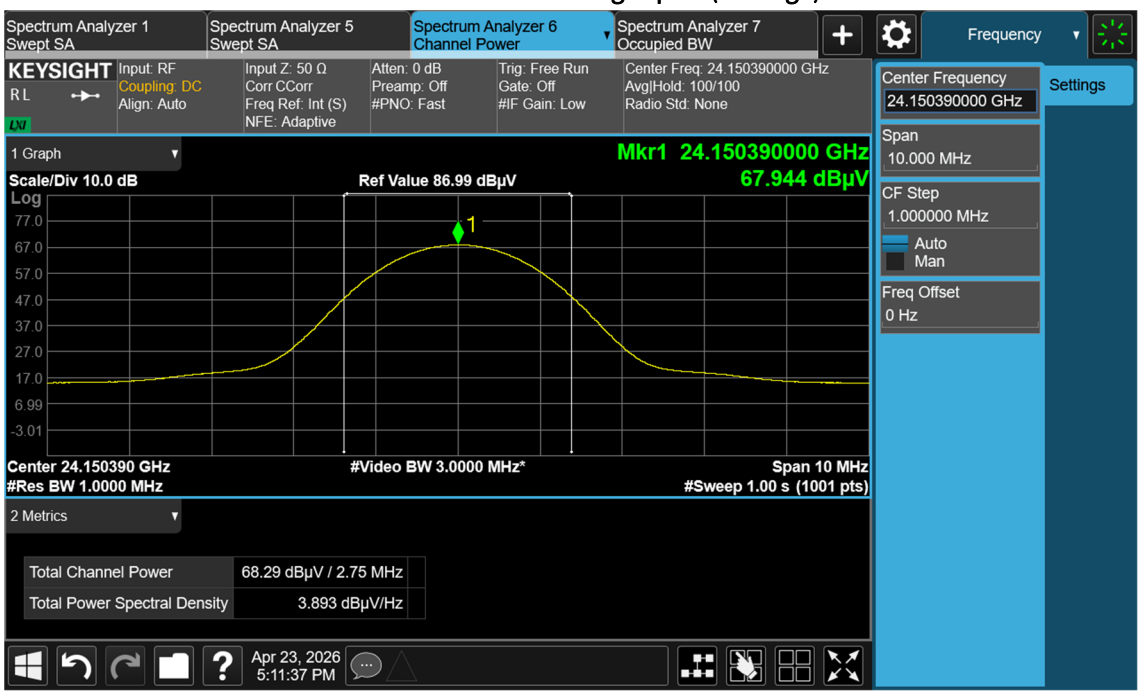
▣ RESULT PLOTS

Fundamental Field Strength plot (Peak)



Fundamental Field Strength plot (Average)



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▣ FIELD STRENGTH OF HARMONICS and RADIATED SPURIOUS EMISSIONS TEST RESULTS

9 kHz ~ 30 MHz

Operation Mode: Continuous TX Mode

Frequency	Reading	Ant. Factor	Cable Loss	Ant. Pol.	Total	Limit	Margin
MHz	dBμV	dB/m	dB	(H/V)	dBμV/m	dBμV/m	dB
No Critical peaks found							

Notes:

1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Limit line = specific Limits (dBμV) + Distance extrapolation factor
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. Measurements were performed for the EUT in the X, Y, and Z planes, with both horizontal and vertical polarizations of the detecting antenna.

30 MHz ~ 1 GHz

Operation Mode: Continuous TX Mode

Frequency	Polarization	Measured Level	Limit	Margin	Detector
(MHz)	(H/V)	(dBμV)	(dBμV/m)	(dBμV)	(RMS/PK)
No Critical peaks found					

Notes:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
2. Measurements were performed for the EUT in the X, Y, and Z planes, with both horizontal and vertical polarizations of the detecting antenna.

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1 GHz ~ 18 GHz

Operation Frequency: Continuous TX Mode

Frequency	Polarization	Measured Level	Limit	Margin	Detector
(MHz)	(H/V)	(dBμV)	(dBμV/m)	(dB)	(RMS/PK)
No Critical peaks found					

※ A.F.: Antenna Factor, C.L.: Cable Loss, Amp. G.: Amplifier Gain, D.F.: Distance Factor

18 GHz – 40 GHz

Operation Frequency: Continuous TX Mode

Frequency	Polarization	Measured Level	Limit	Margin	Detector
(GHz)	(H/V)	(dBμV)	(dBm)	(dB)	(RMS/PK)
No Critical peaks found					

※ A.F.: Antenna Factor, C.L.: Cable Loss, Amp. G.: Amplifier Gain, D.F.: Distance Factor

40 GHz ~ 100 GHz

Operation Frequency: Continuous TX Mode

Frequency	Polarization	Measured Level	Limit	Margin	Detector
(GHz)	(H/V)	(dBm)	(dBm)	(dB)	(RMS/PK)
No Critical peaks found					

※ A.F.: Antenna Factor, C.L.: Cable Loss, Amp. G.: Amplifier Gain, D.F.: Distance Factor

Notes:

1. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
2. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
3. Total = Reading Value + Antenna Factor + Cable Loss – Amplifier Gain + Distance Factor
4. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)
5. Measurements were performed for the EUT in the X, Y, and Z planes, with both horizontal and vertical polarizations of the detecting antenna.

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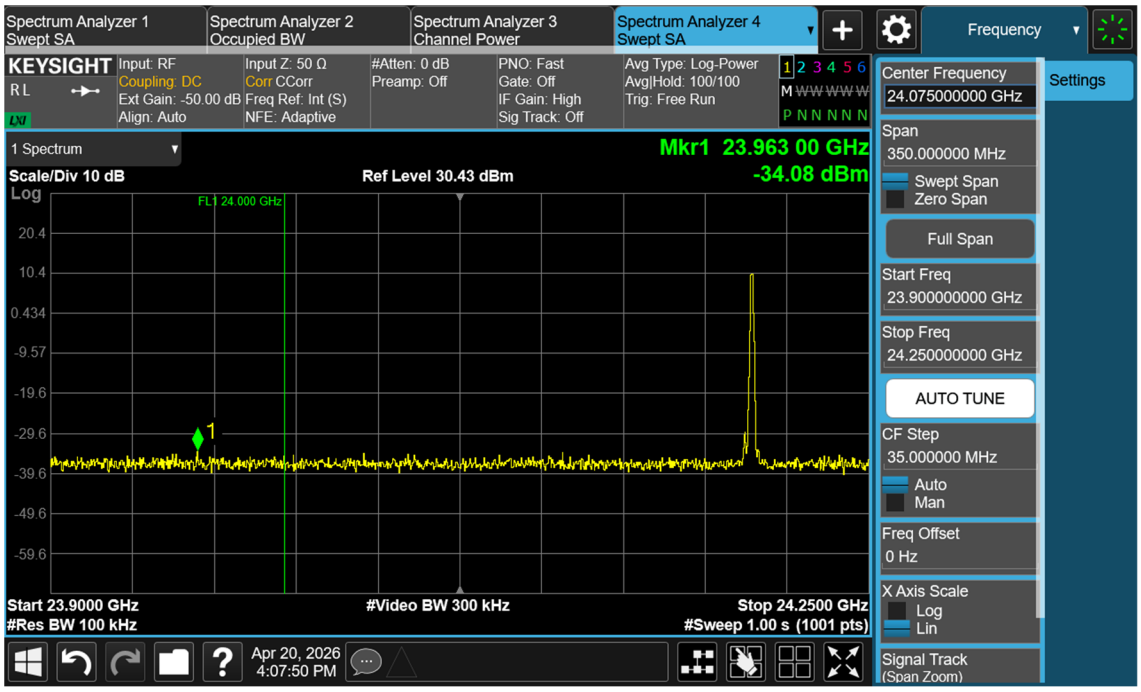
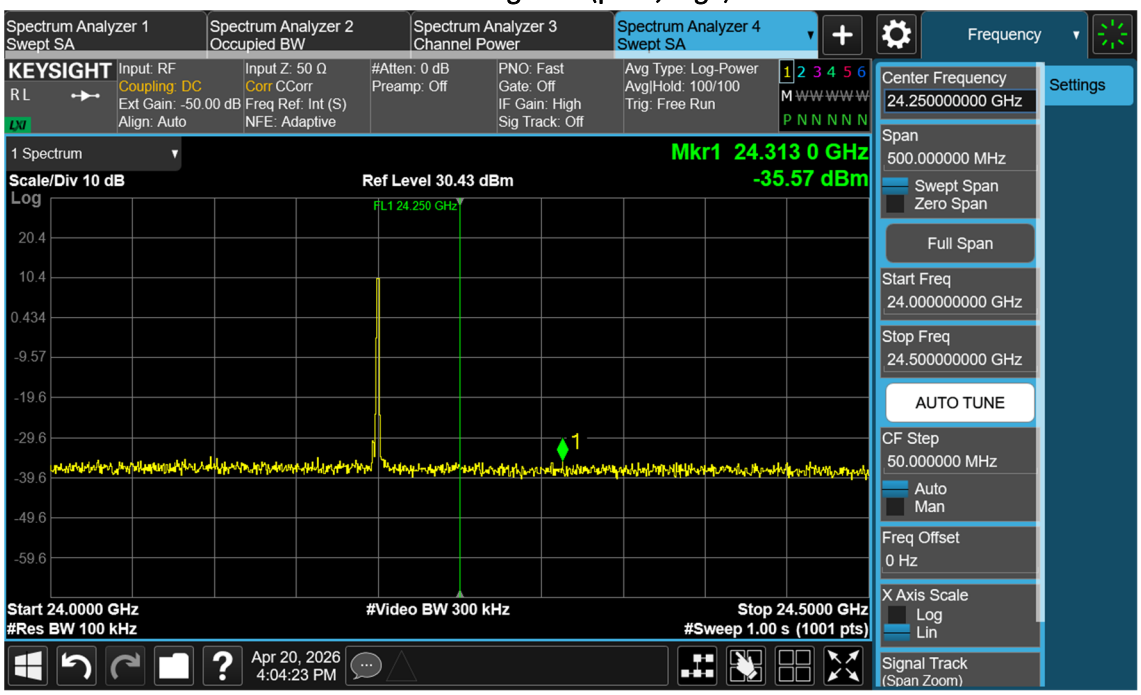
▣ RESULT PLOTS

Band Edge Plot(peak, Low)



Band Edge Plot(peak, High)



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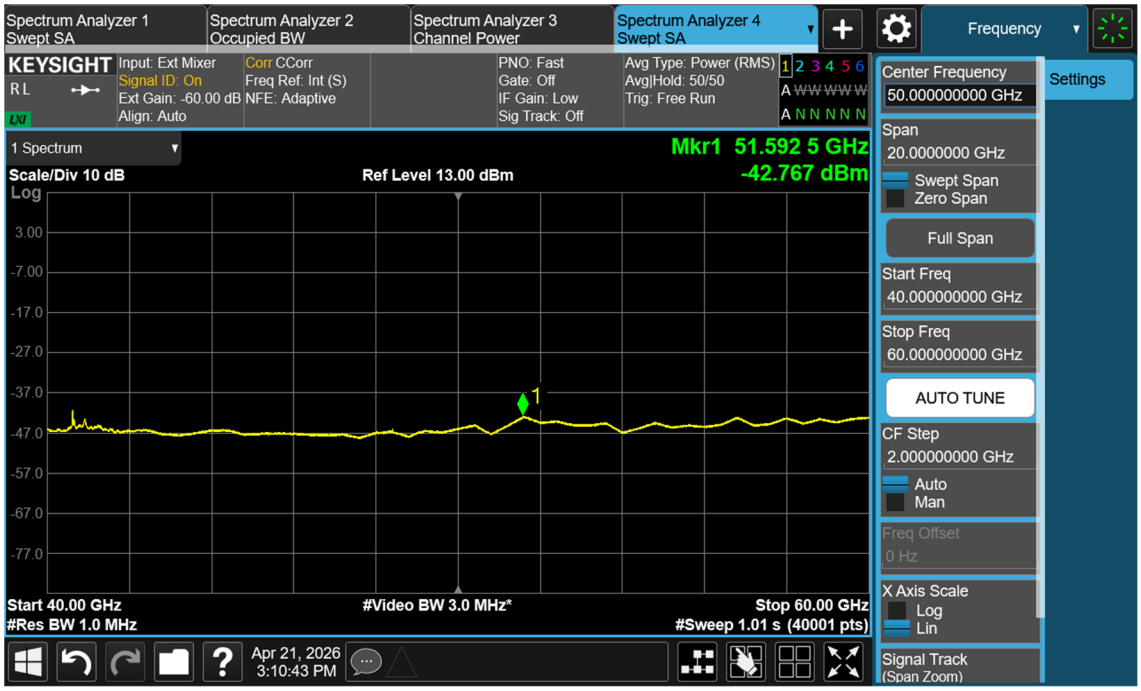
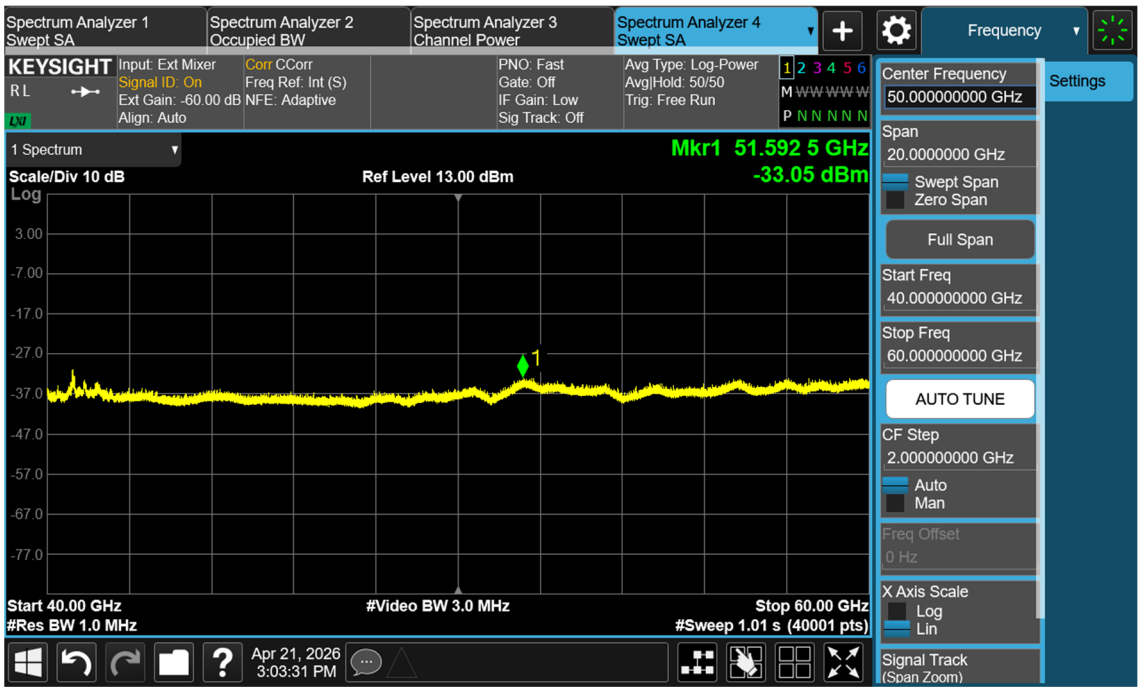
Spurious Emissions plot, 40 GHz – 60 GHz Average



Spurious Emissions plot, 40 GHz – 60 GHz Peak



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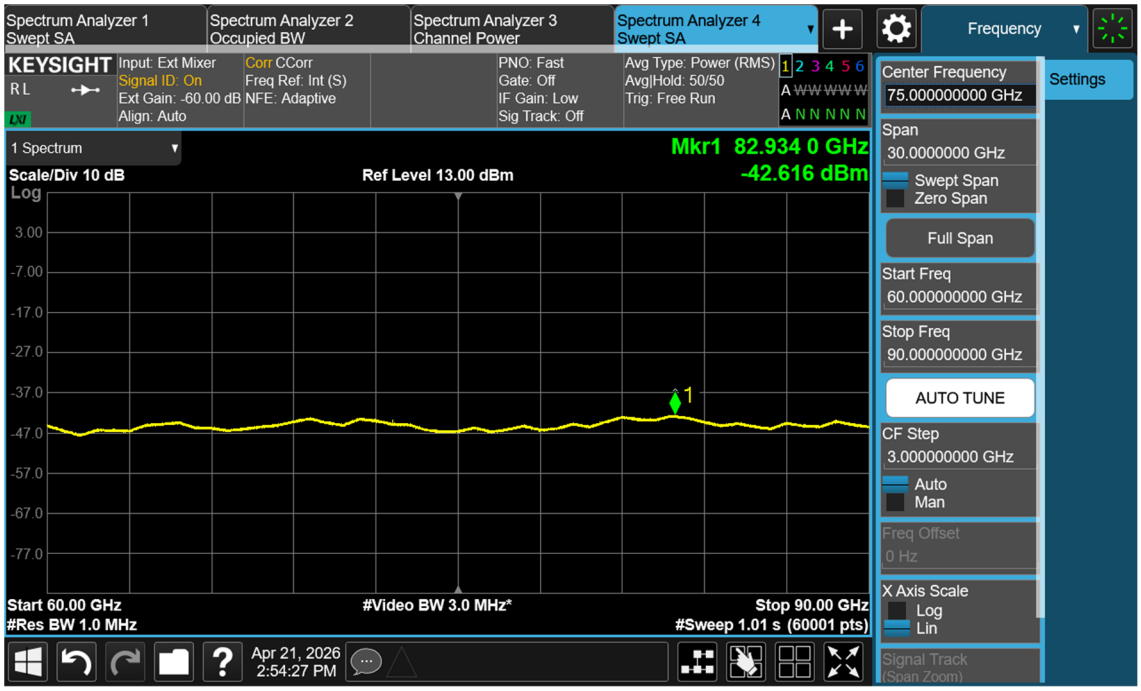
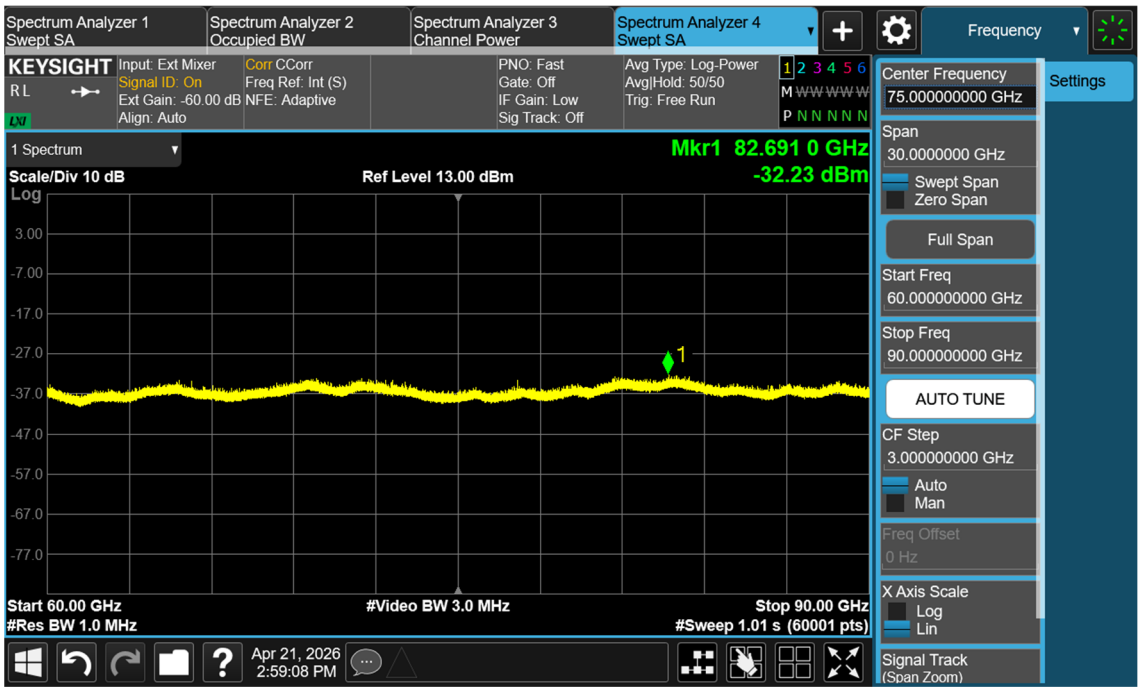
Spurious Emissions plot, 60 GHz – 90 GHz Average



Spurious Emissions plot, 60 GHz – 90 GHz Peak



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8.3 FREQUENCY STABILITY

▣ TEST REQUIREMENT

§ 15.255 Operation within the band 24.075-24.175 GHz.

(f) ***Frequency stability.*** Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation. Equipment is presumed to operate over the temperature range −20 to + 50 degrees Celsius with an input voltage variation of 85% to 115% of rated input voltage, unless justification is presented to demonstrate otherwise.

▣ TEST PROCEDURE

According to ANSI C63.10-2020, 6.8.

Some unlicensed wireless device requirements specify frequency stability tests with variation of supply voltage and temperature; the requirements can be found in the regulatory specifications for each type of unlicensed wireless device. The procedures listed in 6.8.1 and 6.8.2 shall be used for frequency stability tests.

6.8.1 Frequency stability with respect to ambient temperature

a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.

b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.

   NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.

e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature

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to stabilize.

f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 min, 5 min, and 10 min after the EUT is energized. Four measurements in total are made.

g) Measure the frequency at each of frequencies specified in 5.6.

h) Switch OFF the EUT but do not switch OFF the oscillator heater.

i) Lower the chamber temperature by not more than 10 °C, and allow the temperature inside the chamber to stabilize.

j) Repeat step f) through step i) down to the lowest specified temperature.

6.8.2 Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15 °C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency measuring instrument.
NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

c) Measure the frequency at each of the frequencies specified in 5.6.

d) Repeat the above procedure at 85% and 115% of the nominal supply voltage as described in 5.13.

Notes:

1. Frequency stability was investigated at 10 °C intervals from −30 °C to +75 °C after the unit had stabilized, and the readings were recorded in a tabular format. The voltage supplied to the EUT was 12.0 V, and the reference temperature was set at 20 °C.
1. The operating temperature and voltage ranges declared by the manufacturer (temperature: -30°C to 75°C, voltage: DC 9 V to 16 V) are wider than those specified in the standard.

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▣ TEST RESULTS

Voltage (V)	Temp. (°C)	Meas. Time	Frequency (GHz)		Frequency Error (GHz)	
			Lowest edge	Highest edge	Lowest edge	Highest edge
12	+20(Ref)	Startup	24.149848	24.150145	-	
	-30		24.149710	24.150369	-0.000138	0.000224
	-20		24.149873	24.150702	0.000025	0.000557
	-10		24.149972	24.150722	0.000124	0.000577
	0		24.149782	24.150485	-0.000066	0.000340
	10		24.149985	24.150658	0.000137	0.000513
	30		24.150147	24.150569	0.000299	0.000424
	40		24.150131	24.150436	0.000283	0.000291
	50		24.150064	24.150523	0.000216	0.000378
	75		24.150168	24.150559	0.000320	0.000414
12	+20(Ref)	2 min	24.149764	24.150069	-	-
	-30		24.149622	24.150482	-0.000142	0.000413
	-20		24.149849	24.150512	0.000085	0.000443
	-10		24.149886	24.150509	0.000122	0.000440
	0		24.150066	24.150868	0.000302	0.000799
	10		24.149970	24.150405	0.000206	0.000336
	30		24.150265	24.150642	0.000501	0.000573
	40		24.149832	24.150207	0.000068	0.000138
	50		24.150306	24.150394	0.000542	0.000325
	75		24.150112	24.150343	0.000348	0.000274
12	+20(Ref)	5 min	24.149728	24.150197	-	-
	-30		24.149614	24.150460	-0.000114	0.000263
	-20		24.149894	24.150863	0.000166	0.000666
	-10		24.150252	24.150664	0.000524	0.000467
	0		24.149874	24.150595	0.000146	0.000398
	10		24.149940	24.150334	0.000212	0.000137
	30		24.149864	24.150454	0.000136	0.000257
	40		24.150040	24.150428	0.000312	0.000231
	50		24.150119	24.150749	0.000391	0.000552
	75		24.150030	24.150614	0.000302	0.000417
12	+20(Ref)	10 min	24.149061	24.150020	-	-
	-30		24.150158	24.150554	0.001097	0.000534
	-20		24.149698	24.150704	0.000637	0.000684
	-10		24.149587	24.150648	0.000526	0.000628
	0		24.150094	24.150843	0.001033	0.000823
	10		24.150007	24.150733	0.000946	0.000713
	30		24.149888	24.150580	0.000827	0.000560
	40		24.150020	24.150623	0.000959	0.000603
	50		24.149955	24.150275	0.000894	0.000255
	75		24.150231	24.150588	0.001170	0.000568
9	20	-	24.149737	24.150674	-0.000111	0.000529
16	20		24.149705	24.150585	-0.000143	0.000440

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9. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Signal Analyzer	FSW85	Rohde&Schwarz	101256	10/16/2026	Annual
PXA Signal Analyzer	N9030B	Keysight	MY57143020	06/18/2026	Annual
Temperature & Humidity Chamber	PL-2KP	ESPEC	14005385	07/04/2026	Annual
Controller(Antenna mast & Turn Table)	CO3000	Innco systems	CO3000/1251/48920320/P	N/A	N/A
Antenna Mast	MA4640	Innco systems	S4AM	08/01/2026	Annual
Turn Table	1060	Innco systems	N/A	N/A	N/A
Turn Table	N/A	Ets	N/A	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM20090002	N/A	N/A
RF Switching System	FBSR-04C (LNA)	TNM system	S4L4	03/04/2027	Annual
RF Switching System	FBSR-04C (Thru)	TNM system	S4L6	03/04/2027	Annual
Loop Antenna	FMZB1513	SCHWARZBECK	1513-333	06/23/2027	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/28/2026	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-937	02/07/2027	Biennial
Horn Antenna	BBHA 9170	Schwarzbeck	BBHA9170541	10/24/2027	Biennial
Horn Antenna	WR-19 Horn Antenna	OML INC.	M19RH-180423-1	02/21/2028	Biennial
Horn Antenna	WR-12 Horn Antenna	OML INC.	M12RH-180423-1	02/21/2028	Biennial
Horn Antenna	WR-08 Horn Antenna	OML INC.	M08RH-180501-1	02/21/2028	Biennial
Harmonic Mixer	WR-19	VDI	SAX 771	02/20/2028	Annual
Harmonic Mixer	WR-12	VDI	SAX 773	02/20/2028	Annual
Harmonic Mixer	WR-08	VDI	SAX 779	02/20/2028	Annual
DC Power Supply	PWR800L	KIKUSUI	RK000880	07/03/2026	Annual
Source Module	WR-19	OML INC.	S19MS-A-160516-1	07/04/2026	Annual
Source Module	WR-12	OML INC.	S12MS-A-160419-1	07/04/2026	Annual
Source Module	WR-08	OML INC.	S08MS-A-160419-1	07/04/2026	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

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10. ANNEX A_ TEST SETUP PHOTO

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

No.	Description
1	HCT-RF-2605-FC009-P

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