



FCC RADIO TEST REPORT

FCC ID : A4RG1XJ6
Equipment : Wireless Device
Model Name : G1XJ6
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, CA, 94043 USA
Standard : 47 CFR FCC Part 15.519

The product was received on Feb. 09, 2026, and testing was performed from Mar. 01, 2026 to Mar. 12, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR5O3008J	01	Initial issue of report	Apr. 09, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1	15.203	Antenna Requirement	PASS	15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	15.207
3.2	15.503	UWB Bandwidth	PASS	≥ 500MHz
3.3	15.519(a)(1)	Technical requirements for Hand Held UWB systems	PASS	15.519(a)(1)
3.4	15.519(e)	Peak Power Measurement	PASS	≤ 0 dBm/50MHz
3.5	15.519(c) /15.519(d)	Radiated Emissions	PASS	UWB Emissions: 15.519(c) GPS Emissions: 15.519(d) Digital Emissions: 15.209

Conformity Assessment Condition:

- ECR inquiry for data referencing from A4RG0F3Y has been approved by FCC. The ECR inquiry and the associated document are submitted in the confidential exhibit.
- A4RG1XJ6 is different from FCC ID: A4RG0F3Y (Reference model), in the following:
 - The only difference between A4RG0F3Y and A4RG1XJ6 are the LTE and NTN function, which is depopulated by hardware.
- All the test results are referenced from A4RG0F3Y (Sporton Test Report FR5O3007J), and spot check results to justify data referencing is presented in the Appendix B.
- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Shannon Huang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth, Bluetooth-LE, Bluetooth-LE ASK, Bluetooth-LE GFSK, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, NFC, UWB, 60GHz and GNSS.
Antenna Type UWB: PIFA Antenna

Antenna information
6489.6 MHz Peak Gain (dBi) -0.1
7987.2 MHz Peak Gain (dBi) -0.7

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

EUT Information List	
S/N	Performed Test Item
5C251WRDQL13K4	Equivalent Isotropic Radiated Power
	Radiated Spurious Emission
5C261WRDQL13RY	Conducted Emission

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Type of EUT

Operational Condition
EUT Power Type AC mains: AC voltage 120 V
Type of EUT
☒ Stand-alone
☐ Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: ...
☐ Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: ...
☐ Other:

1.4 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2020 + Cor.1-2023
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01

Remark: The TAF code is not including all the FCC KDB listed without accreditation.

1.5 Testing Location Information

The test location is accredited based on TAF code 3786 designated by NCC (National Communication Commission).

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)

Note: The test site complies with ANSI C63.4 2014 requirement.

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
AC Conduction (150kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1000MHz)	6.50 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 6GHz)	4.70 dB	Confidence levels of 95%
Radiated Emission (6GHz ~ 18GHz)	5.70 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.20 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Mode

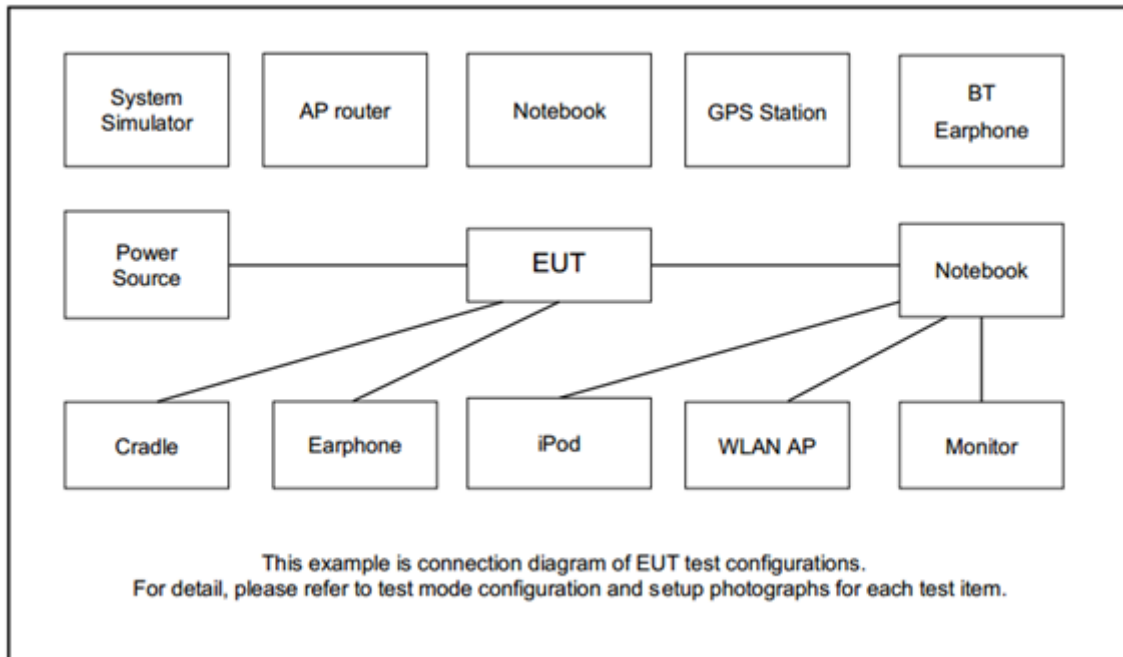
Test Configuration					
Config	Channel	Modulation	Config	STS Nums	Payload Length (bytes)
Mode 1	5	BPRF9	0	0	127
Mode 2	5	BPRF10	0	0	127
Mode 3	5	BPRF9	1	1	127
Mode 4	5	BPRF10	1	1	127
Mode 5	5	BPRF9	3	1	0
Mode 6	5	BPRF10	3	1	0
Mode 7	5	HPRF27	0	0	255
Mode 8	5	HPRF27	1	1	255
Mode 9	5	HPRF27	3	1	0
Mode 10	9	BPRF9	0	0	127
Mode 11	9	BPRF10	0	0	127
Mode 12	9	BPRF9	1	1	127
Mode 13	9	BPRF10	1	1	127
Mode 14	9	BPRF9	3	1	0
Mode 15	9	BPRF10	3	1	0
Mode 16	9	HPRF27	0	0	255
Mode 17	9	HPRF27	1	1	255
Mode 18	9	HPRF27	3	1	0

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter Mode
Remark: Please refer to 15.207 which states, "Measurements to demonstrate compliance with the conducted limits are not required for devices employ Battery for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines".	

The Worst Case Mode for Following Conformance Tests			
Tests Item	UWB Bandwidth, Peak Power Measurement, Radiated Emissions		
Test Condition	Radiated measurement		
Operating Mode	CTX		
1	Adapter Mode		
Mode 1 configuration was tested and found to be the worst case and measured during the test.			
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
CH05		V	
CH09			V
Remark: The measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find as worst plane, and recorded in this report.			

2.3 Test Setup Diagram



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

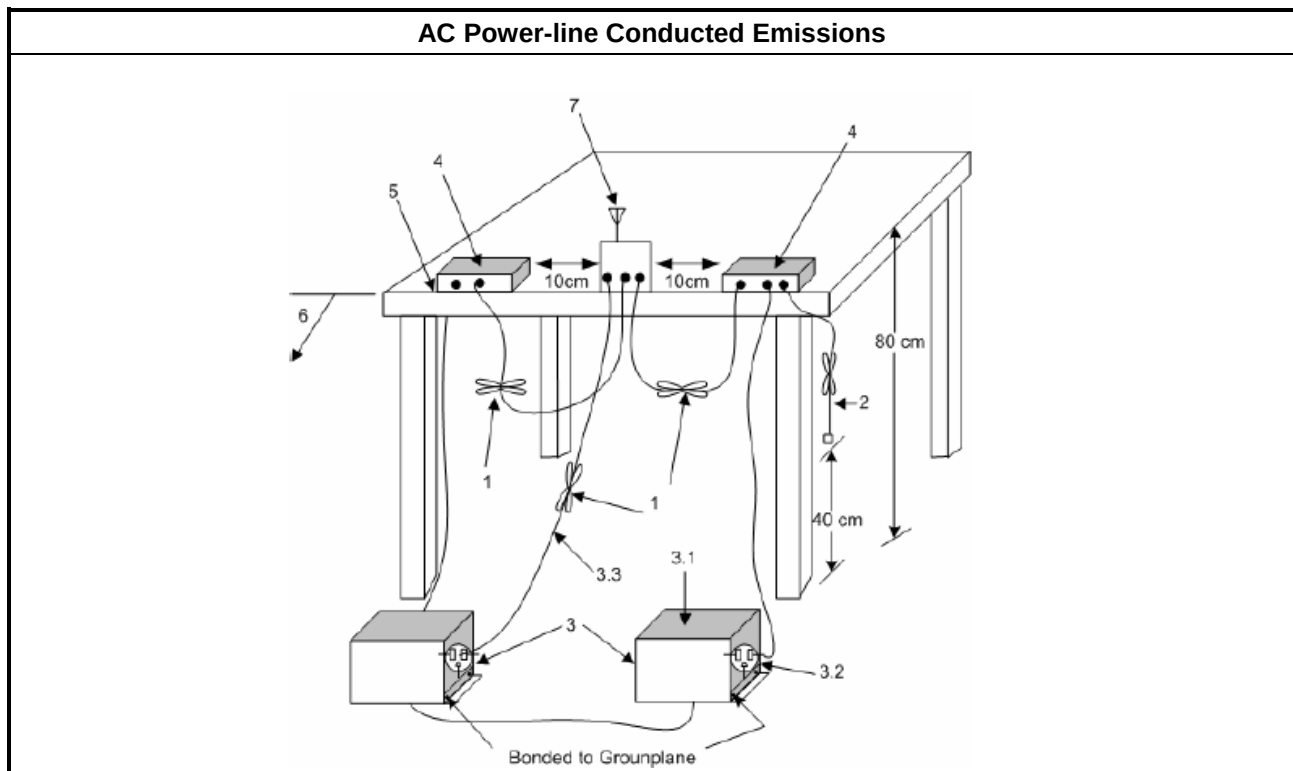
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
■ Refer as ANSI C63.10-2020 + Cor.1-2023, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result

Please refer to Appendix A.

3.2 UWB bandwidth

3.2.1 UWB bandwidth Limit

UWB bandwidth Limit
UWB bandwidth ≥ 500 MHz or Fractional bandwidth ≥ 0.2 ; Fractional bandwidth = $2(f_H - f_L) / (f_H + f_L)$

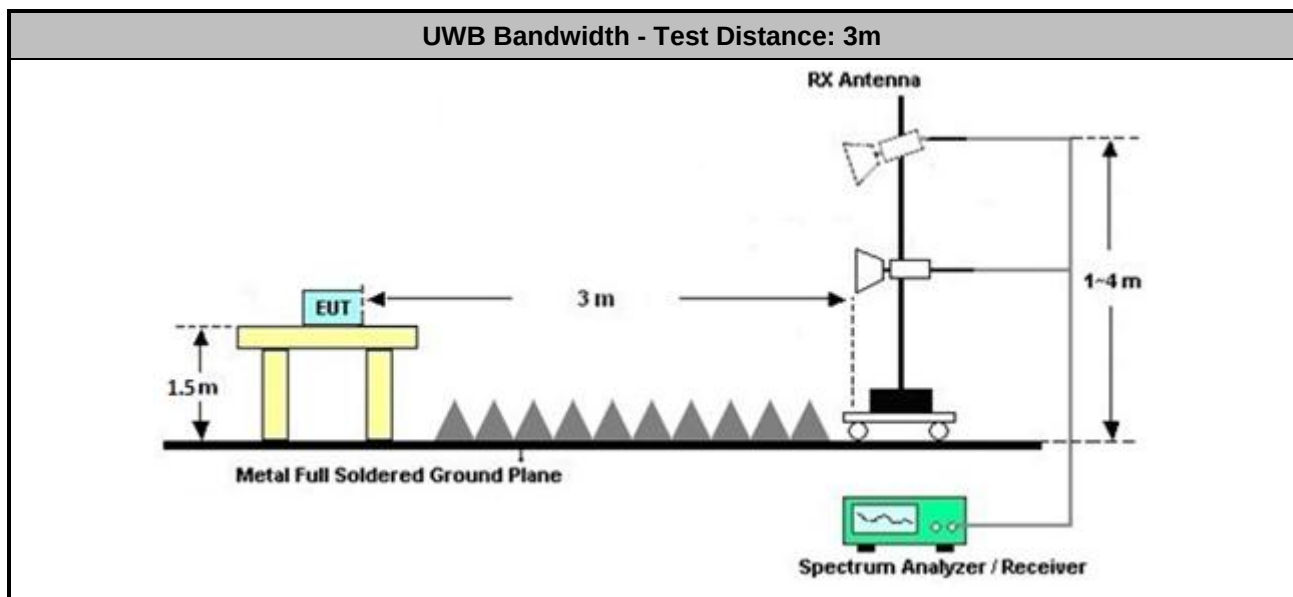
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method
■ For the UWB bandwidth shall be measured using one of the options below:
■ Refer as ANSI C63.10, clause 6.9.2 and clause 10.1 for UWB bandwidth testing.

3.2.4 Test Setup



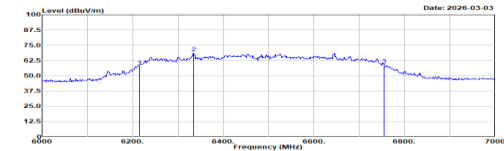
3.2.5 Test Result of UWB Bandwidth

Test mode	F _L (MHz)	F _H (MHz)	UWB Bandwidth (MHz)	Bandwidth limit (MHz)	Result	Pol [H/V]
1	6215	6755	540	≥ 500	Pass	H
2	6232	6734	502	≥ 500	Pass	H
3	6215	6762	547	≥ 500	Pass	H
4	6231	6735	504	≥ 500	Pass	H
5	6211	6762	551	≥ 500	Pass	H
6	6207	6771	564	≥ 500	Pass	H
7	6219	6756	537	≥ 500	Pass	H
8	6218	6760	542	≥ 500	Pass	H
9	6207	6761	554	≥ 500	Pass	H
10	7707	8254	547	≥ 500	Pass	V
11	7726	8233	507	≥ 500	Pass	V
12	7703	8262	559	≥ 500	Pass	V
13	7726	8244	518	≥ 500	Pass	V
14	7700	8261	561	≥ 500	Pass	V
15	7690	8270	580	≥ 500	Pass	V
16	7705	8258	553	≥ 500	Pass	V
17	7704	8258	554	≥ 500	Pass	V
18	7704	8270	566	≥ 500	Pass	V



UWB Bandwidth

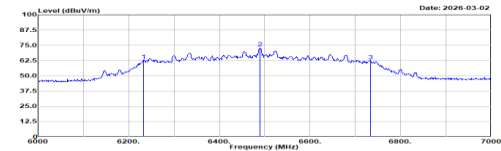
Mode 1



Site : 03CH20-HV
Condition : 3m HF-91280_92360_251185 Horizontal1
Project : RBU1000_000MHz_V001000_000Hz_S0713_000sec
Detector : 503007
Channel : 05
Modulation : BPSK
Config : 0
STS Num : 0
Payload Length : 127
RFS Power : 0uW
Adaptive : 0uW
Calibration : 0uW

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6215.00	57.80	-----	47.17	34.26	14.13	37.76	0.00	--	--	Peak
2	6334.00	68.79	-----	57.52	34.54	14.22	37.75	0.00	--	--	Peak
3	6755.00	58.76	-----	45.91	35.81	14.85	37.82	0.00	--	--	Peak

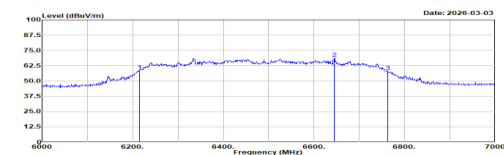
Mode 2



Site : 03CH20-HV
Condition : 3m HF-91280_92360_251185 Horizontal1
Project : RBU1000_000MHz_V001000_000Hz_S0713_000sec
Detector : 503007
Channel : 05
Modulation : BPSK
Config : 0
STS Num : 0
Payload Length : 127
RFS Power : 0uW
Adaptive : 0uW
Calibration : 0uW

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6232.00	62.46	-----	51.74	34.33	14.15	37.76	0.00	--	--	Peak
2	6499.00	72.68	-----	60.65	35.06	14.50	37.73	0.00	--	--	Peak
3	6734.00	62.35	-----	49.50	35.83	14.83	37.81	0.00	--	--	Peak

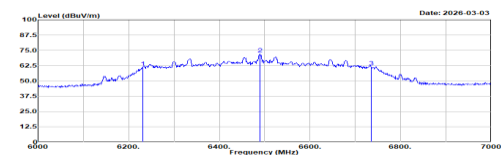
Mode 3



Site : 03CH20-HV
Condition : 3m HF-91280_92360_251185 Horizontal1
Project : RBU1000_000MHz_V001000_000Hz_S0713_000sec
Detector : 503007
Channel : 05
Modulation : BPSK
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0uW
Adaptive : 0uW
Calibration : 0uW

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6215.00	58.25	-----	47.18	34.26	14.13	37.76	0.00	--	--	Peak
2	6645.00	68.48	-----	55.73	35.80	14.73	37.78	0.00	--	--	Peak
3	6762.00	57.91	-----	45.84	35.82	14.87	37.82	0.00	--	--	Peak

Mode 4



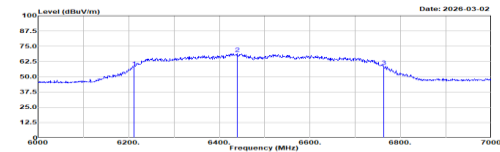
Site : 03CH20-HV
Condition : 3m HF-91280_92360_251185 Horizontal1
Project : RBU1000_000MHz_V001000_000Hz_S0713_000sec
Detector : 503007
Channel : 05
Modulation : BPSK
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0uW
Adaptive : 0uW
Calibration : 0uW

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6231.00	61.16	-----	50.45	34.32	14.15	37.76	0.00	--	--	Peak
2	6499.00	71.98	-----	60.15	35.00	14.50	37.73	0.00	--	--	Peak
3	6733.00	61.59	-----	48.73	35.83	14.84	37.81	0.00	--	--	Peak



UWB Bandwidth

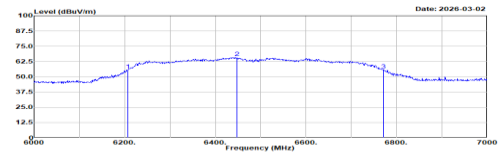
Mode 5



Site : 03CH20-NY
Condition : 3e HP 91280_02360_251185 Horizontal
Project : RBU1000.000kHz VHW1000.000kHz SWT13.000sec
Detector : 503007
Channel : 05
Modulation : BPSK10
Config : 3
STS Num : 1
Payload Length : 0
RFS Power : 0u14
Adaptive : 0u01
Calibration : 0u00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
Hz	dBuV/m	dBuV/m	dB	dBuV	dBuV	dB	dB	Factor	Factor	Factor	Factor	
1 6211.00	57.76	-----	-----	47.16	34.24	14.12	37.76	0.00	--	--	Peak	
2 6439.00	69.19	-----	-----	57.64	34.88	14.43	37.74	0.00	--	--	Peak	
3 6762.00	58.43	-----	-----	45.56	35.82	14.87	37.82	0.00	--	--	Peak	

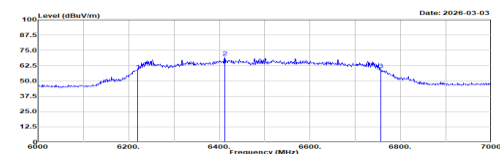
Mod 6



Site : 03CH20-NY
Condition : 3e HP 91280_02360_251185 Horizontal
Project : RBU1000.000kHz VHW1000.000kHz SWT13.000sec
Detector : 503007
Channel : 05
Modulation : BPSK10
Config : 3
STS Num : 1
Payload Length : 0
RFS Power : 0u14
Adaptive : 0u00
Calibration : 0u01

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
Hz	dBuV/m	dBuV/m	dB	dBuV	dBuV	dB	dB	Factor	Factor	Factor	Factor	
1 6287.00	55.42	-----	-----	44.83	34.23	14.12	37.76	0.00	--	--	Peak	
2 6468.00	65.79	-----	-----	54.11	34.90	14.43	37.74	0.00	--	--	Peak	
3 6771.00	55.56	-----	-----	42.67	35.84	14.88	37.83	0.00	--	--	Peak	

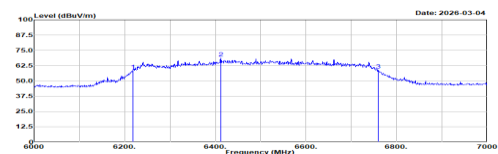
Mode 7



Site : 03CH20-NY
Condition : 3e HP 91280_02360_251185 Horizontal
Project : RBU1000.000kHz VHW1000.000kHz SWT13.000sec
Detector : 503007
Channel : 05
Modulation : BPSK27
Config : 1
STS Num : 1
Payload Length : 225
RFS Power : 0u14
Adaptive : 0u01
Calibration : 0u00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
Hz	dBuV/m	dBuV/m	dB	dBuV	dBuV	dB	dB	Factor	Factor	Factor	Factor	
1 6219.00	58.44	-----	-----	47.78	34.28	14.13	37.76	0.00	--	--	Peak	
2 6412.00	69.23	-----	-----	57.88	34.82	14.37	37.74	0.00	--	--	Peak	
3 6760.00	59.17	-----	-----	46.52	35.81	14.86	37.82	0.00	--	--	Peak	

Mode 8



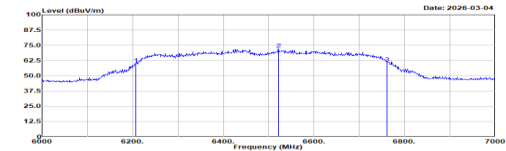
Site : 03CH20-NY
Condition : 3e HP 91280_02360_251185 Horizontal
Project : RBU1000.000kHz VHW1000.000kHz SWT13.000sec
Detector : 503007
Channel : 05
Modulation : BPSK27
Config : 1
STS Num : 1
Payload Length : 225
RFS Power : 0u14
Adaptive : 0u01
Calibration : 0u00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
Hz	dBuV/m	dBuV/m	dB	dBuV	dBuV	dB	dB	Factor	Factor	Factor	Factor	
1 6219.00	58.52	-----	-----	47.88	34.27	14.13	37.76	0.00	--	--	Peak	
2 6412.00	68.91	-----	-----	57.26	34.82	14.37	37.74	0.00	--	--	Peak	
3 6760.00	58.75	-----	-----	45.87	35.82	14.86	37.82	0.00	--	--	Peak	



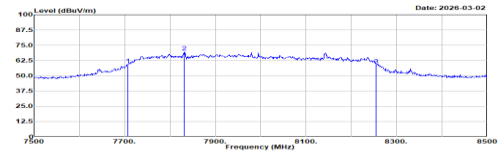
UWB Bandwidth

Mode 9



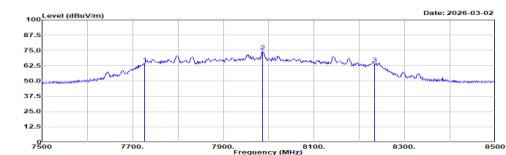
Site	: 03CH20-HY										
Condition	: 3m HF-91280_92360_251185 Horizontal										
Project	: RBU1000.000MHz VNU1000.000MHz SUT:3.000sec										
Detector	: 503007										
Channel	: 05										
Modulation	: HPRF27										
Config	: 3										
STS Num	: 1										
PayLoad Length	: 0.14										
RFS Power	: 0.00										
Adaptive	: 0.00										
Calibration	: 0.00										
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6287.00	59.45	-----	-----	48.86	34.23	14.12	37.76	0.00	--	--	Peak
2 6522.00	71.85	-----	-----	59.76	35.28	14.55	37.54	0.00	--	--	Peak
3 6761.00	60.26	-----	-----	47.39	35.82	14.87	37.82	0.00	--	--	Peak

Mode 10



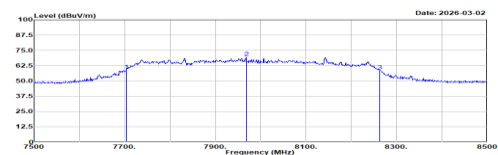
Site	: 03CH20-HY										
Condition	: 3m HF-91280_92360_251185 VERTICAL										
Project	: RBU1000.000MHz VNU1000.000MHz SUT:3.000sec										
Detector	: 503007										
Channel	: 05										
Modulation	: HPRF9										
Config	: 0										
STS Num	: 0										
PayLoad Length	: 127										
RFS Power	: 0.00										
Adaptive	: 0.00										
Calibration	: 0.00										
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7767.00	59.15	-----	-----	44.49	36.61	16.67	38.62	0.00	--	--	Peak
2 7831.00	69.31	-----	-----	54.52	37.02	16.49	38.72	0.00	--	--	Peak
3 8254.00	59.01	-----	-----	44.64	37.10	16.41	39.14	0.00	--	--	Peak

Mode 11



Site	: 03CH20-HY										
Condition	: 3m HF-91280_92360_251185 VERTICAL										
Project	: RBU1000.000MHz VNU1000.000MHz SUT:3.000sec										
Detector	: 503007										
Channel	: 05										
Modulation	: HPRF10										
Config	: 0										
STS Num	: 1										
PayLoad Length	: 127										
RFS Power	: 0.00										
Adaptive	: 0.00										
Calibration	: 0.00										
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7767.00	59.45	-----	-----	48.86	34.23	14.12	37.76	0.00	--	--	Peak
2 7767.00	74.40	-----	-----	59.64	37.20	16.42	38.80	0.00	--	--	Peak
3 8253.00	64.22	-----	-----	49.68	37.07	16.39	39.12	0.00	--	--	Peak

Mode 12

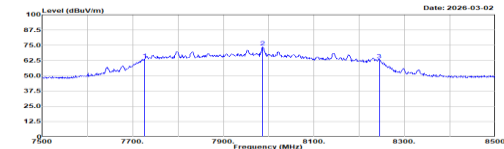


Site	: 03CH20-HY										
Condition	: 3m HF-91280_92360_251185 VERTICAL										
Project	: RBU1000.000MHz VNU1000.000MHz SUT:3.000sec										
Detector	: 503007										
Channel	: 05										
Modulation	: HPRF9										
Config	: 1										
STS Num	: 1										
PayLoad Length	: 127										
RFS Power	: 0.00										
Adaptive	: 0.00										
Calibration	: 0.00										
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7767.00	58.41	-----	-----	43.74	36.63	16.67	38.61	0.00	--	--	Peak
2 7767.00	69.04	-----	-----	54.23	37.20	16.43	38.84	0.00	--	--	Peak
3 8252.00	57.97	-----	-----	43.61	37.10	16.41	39.15	0.00	--	--	Peak



UWB Bandwidth

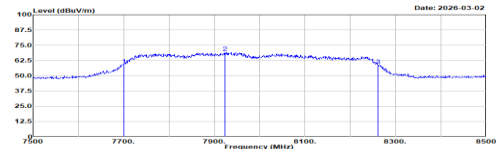
Mode 13



Site : 03CH20-HY
Condition : 3e HF-91280_92360_251185 VERTICAL
Project : 8BU1000_000MHz_VNU1000_000MHz_SUT:3.000sec
Detector : Peak
Channel : 00
Modulation : BPSK10
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7725.00	63.40	-----	-----	48.74	36.65	16.64	38.63	0.00	--	--	Peak
2	7987.00	73.40	-----	-----	58.64	37.09	16.42	38.66	0.00	--	--	Peak
3	8244.00	63.18	-----	-----	48.82	37.09	16.40	39.13	0.00	--	--	Peak

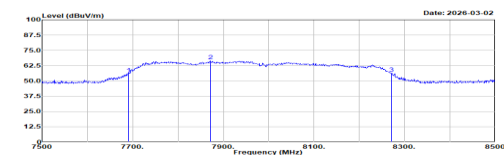
Mode 14



Site : 03CH20-HY
Condition : 3e HF-91280_92360_251185 VERTICAL
Project : 8BU1000_000MHz_VNU1000_000MHz_SUT:3.000sec
Detector : Peak
Channel : 00
Modulation : BPSK9
Config : 3
STS Num : 1
Payload Length : 0dB
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7700.00	58.93	-----	-----	44.26	36.68	16.68	38.61	0.00	--	--	Peak
2	7923.00	69.00	-----	-----	54.20	37.15	16.45	38.60	0.00	--	--	Peak
3	8261.00	58.58	-----	-----	44.22	37.10	16.41	39.15	0.00	--	--	Peak

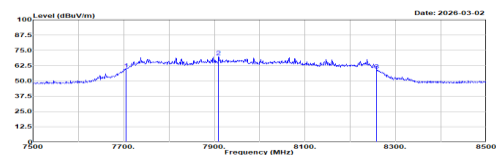
Mode 15



Site : 03CH20-HY
Condition : 3e HF-91280_92360_251185 VERTICAL
Project : 8BU1000_000MHz_VNU1000_000MHz_SUT:3.000sec
Detector : Peak
Channel : 00
Modulation : BPSK10
Config : 1
STS Num : 1
Payload Length : 0
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

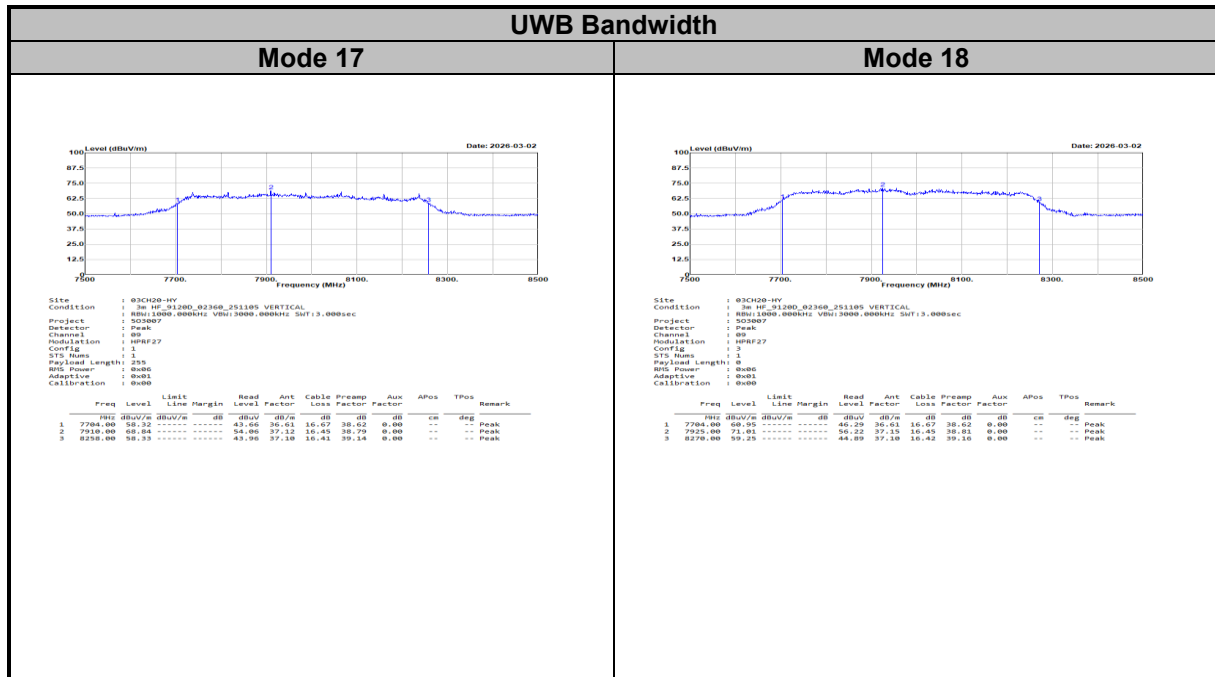
	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7700.00	56.03	-----	-----	41.37	36.56	16.70	38.60	0.00	--	--	Peak
2	7971.00	66.25	-----	-----	51.44	37.10	16.47	38.76	0.00	--	--	Peak
3	8279.00	56.18	-----	-----	41.62	37.10	16.42	39.16	0.00	--	--	Peak

Mode 16



Site : 03CH20-HY
Condition : 3e HF-91280_92360_251185 VERTICAL
Project : 8BU1000_000MHz_VNU1000_000MHz_SUT:3.000sec
Detector : Peak
Channel : 00
Modulation : BPSK27
Config : 0
STS Num : 0
Payload Length : 255
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7700.00	59.51	-----	-----	44.85	36.63	16.67	38.62	0.00	--	--	Peak
2	7989.00	69.63	-----	-----	54.64	37.12	16.46	38.79	0.00	--	--	Peak
3	8238.00	58.61	-----	-----	44.44	37.10	16.41	39.14	0.00	--	--	Peak



3.3 Technical requirements for hand held UWB systems

3.3.1 Technical Requirements for transmission Limit

FCC 15.519(a) (1) A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

3.3.2 Measuring Instruments

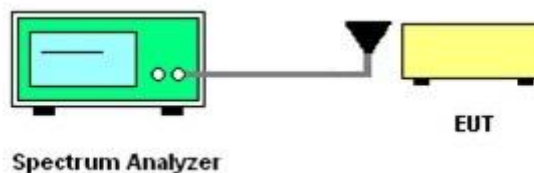
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedure

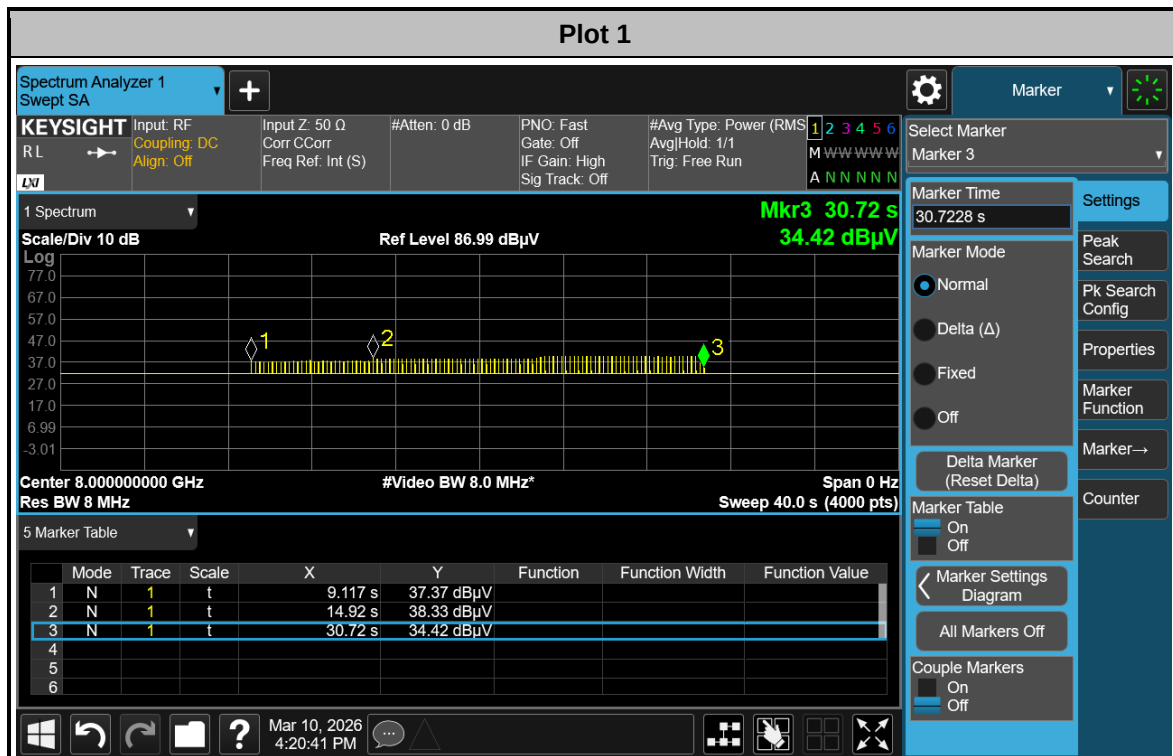
Follow the test step as below:

1. Turn on both EUT and companion receiver.
2. Set the EUT to TX mode, and EUT starts polling.
3. Set the companion receiver to associate EUT and EUT starts to transmit.
4. Disable the RX function of the companion receiver to disassociate the EUT.
5. Check if EUT stop transmitting once step 4 is made.

3.3.4 Test Setup



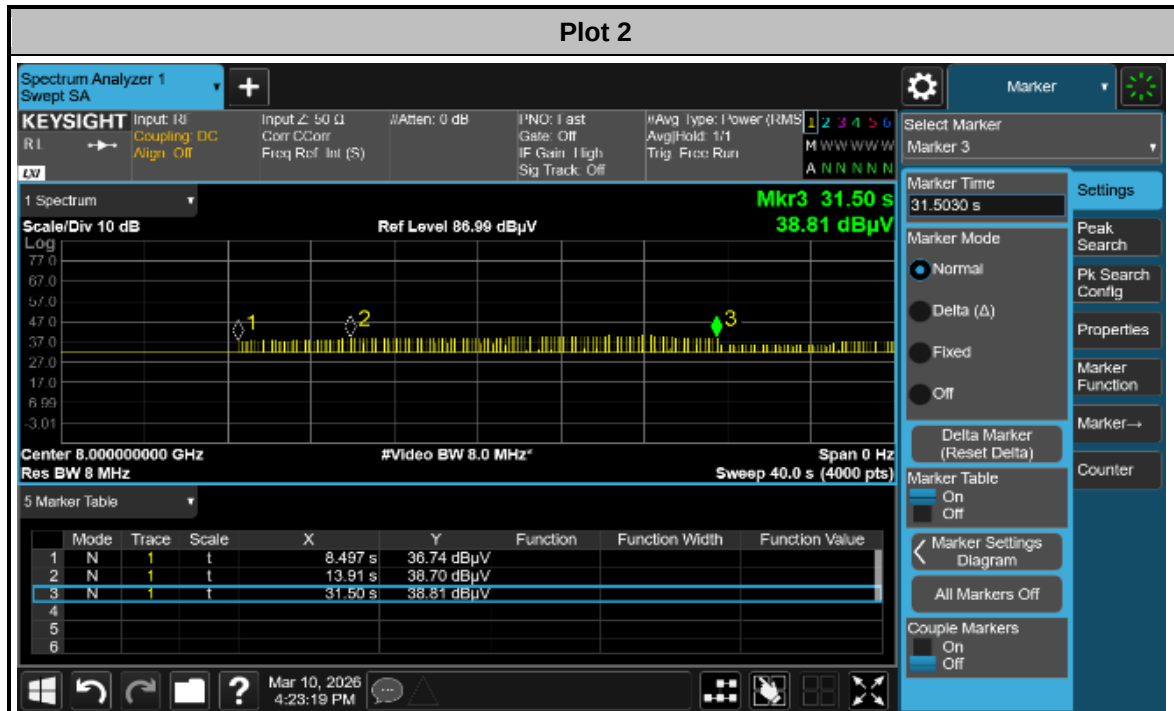
3.3.5 Test Result



M1 to M2: Set the EUT to TX mode, and EUT starts polling.

M2 to M3: Set the companion receiver to associate EUT and EUT starts to transmit.

M3: Disable the TX function of EUT. EUT stops transmitting and polling.



M1 to M2: Set the EUT to TX mode, and EUT starts polling.

M2 to M3: Set the companion receiver to associate EUT and EUT starts to transmit.

M3: RX function of the companion receiver is disabled. EUT disassociates the companion receiver and stops transmitting, but continues polling.



Plot 3 is zoom in plot of M2 to M3 (transmission)

Plot 4 is zoom in plot after M3 (polling only)

3.4 Peak Power Measurement

3.4.1 Peak Power Measurement Limit

Peak Power Measurement Limit
$P_{eirp} = 0 \text{ dBm/50MHz}$

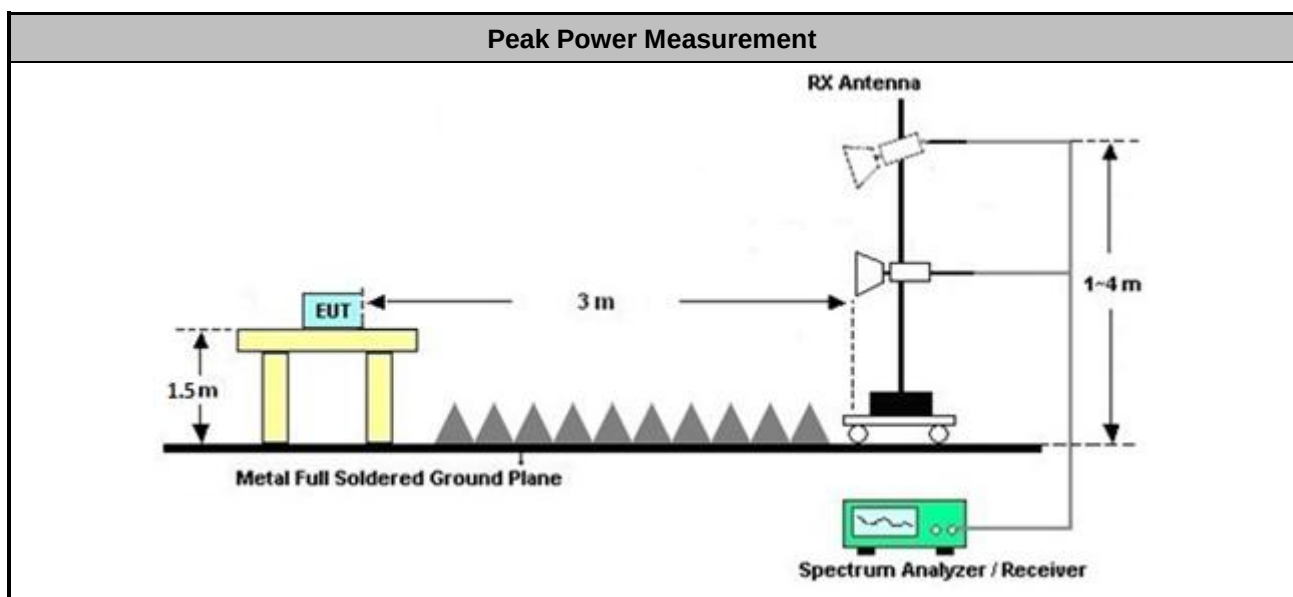
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method
■ Peak Power Measurement ■ Refer as ANSI C63.10, clause 10.3.1 for radiated measurement procedure testing. ■ Refer as ANSI C63.10, clause 10.3.2 for measurement distance is 3m. ■ Refer as ANSI C63.10, clause 10.3.5 for peak detector procedure testing. ■ Refer as ANSI C63.10, clause 10.3.6 for bandwidth conversion of peak power. ■ Frequency of max peak power is pre-located: The span bandwidth is continuously reduced to find the worst frequency. Once the worst frequency is found, the setting of spectrum analyzer is set as below: • Central frequency: Worst frequency point • Span: Zero span • RBW: 50MHz • VBW: 80MHz • Detector: Peak detector • Trace: Max hold

3.4.4 Test Setup



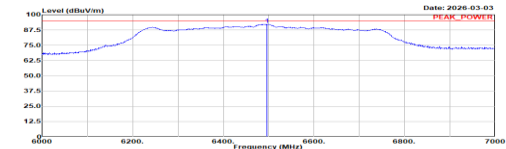
3.4.5 Test Result of Peak Power Measurement

Peak Measurement Result							
Test Mode	Freq. (MHz)	E-Field (dBuV/m)	ERIP _{50MHz} (dBm)	ERIP _{50MHz} Limit (dBm)	Margin (dB)	Result	Pol [H/V]
1	6496	92.09	-3.14	0	-3.14	Pass	H
2	6488	92.49	-2.74	0	-2.74	Pass	H
3	6487	92.00	-3.23	0	-3.23	Pass	H
4	6491	91.39	-3.84	0	-3.84	Pass	H
5	6427	85.25	-9.98	0	-9.98	Pass	H
6	6428	85.28	-9.95	0	-9.95	Pass	H
7	6617	84.45	-10.78	0	-10.78	Pass	H
8	6613	84.06	-11.17	0	-11.17	Pass	H
9	6552	85.06	-10.17	0	-10.17	Pass	H
10	7982	91.95	-3.28	0	-3.28	Pass	V
11	7982	92.83	-2.40	0	-2.40	Pass	V
12	7983	91.92	-3.31	0	-3.31	Pass	V
13	7985	92.22	-3.01	0	-3.01	Pass	V
14	7924	86.07	-9.16	0	-9.16	Pass	V
15	7923	85.78	-9.45	0	-9.45	Pass	V
16	7864	85.50	-9.73	0	-9.73	Pass	V
17	7866	84.83	-10.40	0	-10.40	Pass	V
18	7925	85.12	-10.11	0	-10.11	Pass	V
Note 1: EIRP [dBm] = E-Field [dBuV/m] - 95.23;							
Note 2: Measurement worst emissions of receive antenna polarization.							



Pre-located worst frequency Plots

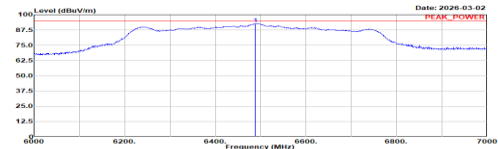
Mode 1



Site : 03CH20-HV
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK
Config : 0
STS Num : 0
Payload Length : 127
RFS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6496.00	92.09	95.23	-3.14	80.23	35.08	14.51	37.73	0.00	--	deg	Peak

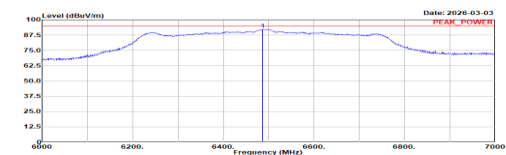
Mode 2



Site : 03CH20-HV
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK
Config : 0
STS Num : 0
Payload Length : 127
RFS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6488.00	92.49	95.23	-2.74	80.67	35.05	14.50	37.73	0.00	--	deg	Peak

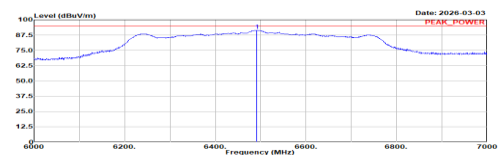
Mode 3



Site : 03CH20-HV
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6487.00	92.00	95.23	-3.23	80.19	35.05	14.49	37.73	0.00	--	deg	Peak

Mode 4



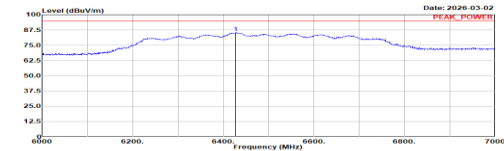
Site : 03CH20-HV
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	6491.00	91.59	95.23	-3.64	79.95	35.00	14.50	37.73	0.00	--	deg	Peak



Pre-located worst frequency Plots

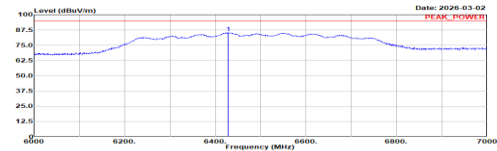
Mode 5



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK9
Config : 3
STS Num : 1
Payload Length : 0x14
RFS Power : 0x01
Adaptive : 0x00
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6427.00	85.25	95.23	-9.98	73.75	34.85	14.39	37.74	0.00	--	deg	Peak

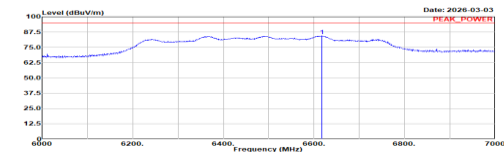
Mode 6



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK10
Config : 3
STS Num : 1
Payload Length : 0x14
RFS Power : 0x01
Adaptive : 0x00
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6428.00	85.28	95.23	-9.95	73.76	34.86	14.40	37.74	0.00	--	deg	Peak

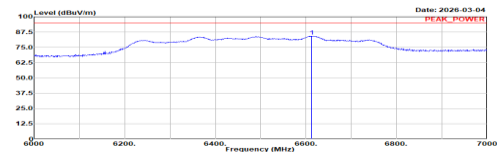
Mode 7



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK27
Config : 0
STS Num : 225
Payload Length : 0x14
RFS Power : 0x01
Adaptive : 0x00
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6637.00	84.45	95.23	-10.78	71.72	35.00	14.70	37.77	0.00	--	deg	Peak

Mode 8



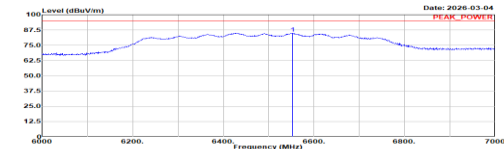
Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 05
Modulation : BPSK27
Config : 1
STS Num : 225
Payload Length : 0x14
RFS Power : 0x01
Adaptive : 0x00
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6613.00	84.00	95.23	-11.17	71.34	35.00	14.69	37.77	0.00	--	deg	Peak



Pre-located worst frequency Plots

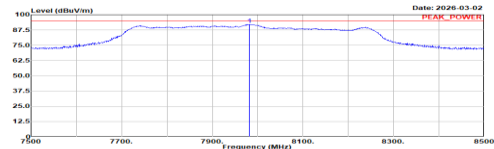
Mode 9



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 Horizontal
Project : 503008J
Detector : Peak
Channel : 00
Modulation : 00
Config : 00
STS Num : 1
Payload Length : 127
RFS Power : 0.00
Adaptive : 0.00
Calibration : 0.00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 6552.00	85.06	95.23	-10.17	72.70	35.51	14.68	37.75	0.00	0.00	deg	Peak

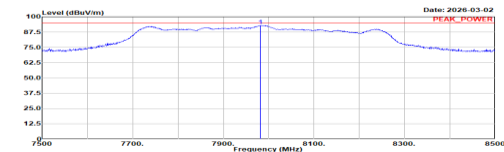
Mode 10



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503008J
Detector : Peak
Channel : 00
Modulation : 00
Config : 00
STS Num : 1
Payload Length : 127
RFS Power : 0.00
Adaptive : 0.00
Calibration : 0.00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7982.00	91.95	95.23	-3.28	77.18	37.28	16.42	38.85	0.00	0.00	deg	Peak

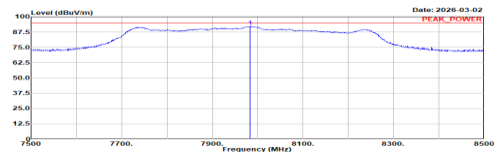
Mode 11



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503008J
Detector : Peak
Channel : 00
Modulation : 00
Config : 00
STS Num : 1
Payload Length : 127
RFS Power : 0.00
Adaptive : 0.00
Calibration : 0.00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7982.00	92.03	95.23	-3.20	78.86	37.28	16.42	38.85	0.00	0.00	deg	Peak

Mode 12



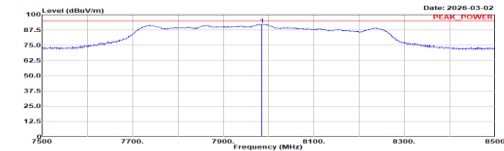
Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503008J
Detector : Peak
Channel : 00
Modulation : 00
Config : 00
STS Num : 1
Payload Length : 127
RFS Power : 0.00
Adaptive : 0.00
Calibration : 0.00

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1 7982.00	91.92	95.23	-3.31	77.15	37.28	16.42	38.86	0.00	0.00	deg	Peak



Pre-located worst frequency Plots

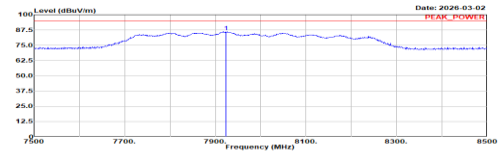
Mode 13



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503007
Detector : Peak
Channel : 00
Modulation : BPSK10
Config : 1
STS Num : 1
Payload Length : 127
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7985.00	92.22	95.23	-3.01	77.46	37.20	16.42	38.86	0.00	--	deg Peak

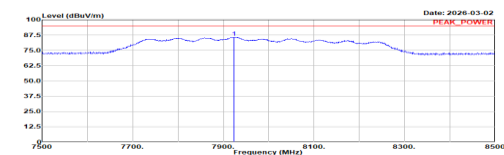
Mode 14



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503007
Detector : Peak
Channel : 00
Modulation : BPSK9
Config : 3
STS Num : 1
Payload Length : 0
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7924.00	86.07	95.23	-9.16	71.27	37.15	16.45	38.80	0.00	--	deg Peak

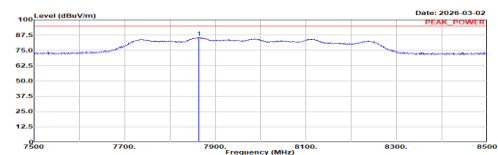
Mode 15



Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503007
Detector : Peak
Channel : 00
Modulation : BPSK10
Config : 1
STS Num : 1
Payload Length : 0
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7923.00	85.78	95.23	-9.45	70.38	37.15	16.45	38.80	0.00	--	deg Peak

Mode 16



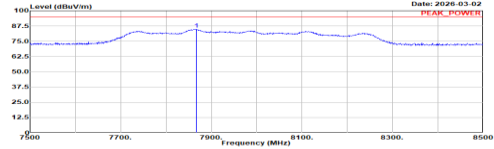
Site : 03CH20-HY
Condition : PEAK_POWER 3m HP_01200_02360_251105 VERTICAL
Project : 503007
Detector : Peak
Channel : 00
Modulation : BPSK27
Config : 0
STS Num : 0
Payload Length : 255
RFS Power : 0dB
Adaptive : 0dB
Calibration : 0dB

Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
1	7864.00	85.10	95.23	-9.73	70.67	37.10	16.40	38.75	0.00	--	deg Peak



Pre-located worst frequency Plots

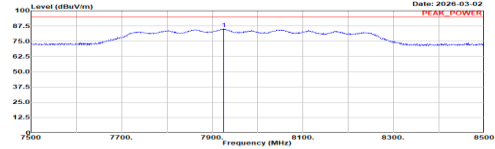
Mode 17



Site : 03CH20-HV
Condition : PEAK_POWER 3m HF_01200_02360_251105 VERTICAL
Project : R00120000_0000Hz_V001_00000_0000Hz_S0711_000sec
Detector : Peak
Channel : 00
Modulation : HPRF27
Config : 1
SIS Num : 1
Regional Length : 235
Ant. Pos : 0=00
Adaptive : 0=01
Calibration : 0=00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
1	7866.00	84.83	95.23	-10.40	70.00	37.10	16.48	38.75	0.00	--	deg	Peak

Mode 18



Site : 03CH20-HV
Condition : PEAK_POWER 3m HF_01200_02360_251105 VERTICAL
Project : R00120000_0000Hz_V001_00000_0000Hz_S0711_000sec
Detector : Peak
Channel : 00
Modulation : HPRF27
Config : 1
SIS Num : 1
Regional Length : 235
Ant. Pos : 0=00
Adaptive : 0=01
Calibration : 0=00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
1	7925.00	85.12	95.23	-10.11	70.33	37.15	16.45	38.81	0.00	--	deg	Peak

3.5 Radiated Emissions

3.5.1 Radiated Emissions Limit

Radiated Emissions below 960MHz and Emissions from Digital Circuitry Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Radiated Emissions above 960MHz Limit	
Frequency Range (MHz)	EIRP (dBm), RBW = 1MHz
960-1610	-75.3
1610-1990	-63.3
1990-3100	-61.3
3100-10600	-41.3
Above 10600	-61.3

Note: Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB)

Radiated Emissions in GPS Bands Limit	
Frequency Range (MHz)	EIRP (dBm), RBW ≥ 1kHz
1164-1240	-85.3
1559-1610	-85.3

Note E (dBuV/m) = EIRP (dBm) + 95.23, example, E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m

3.5.2 Measuring Instruments

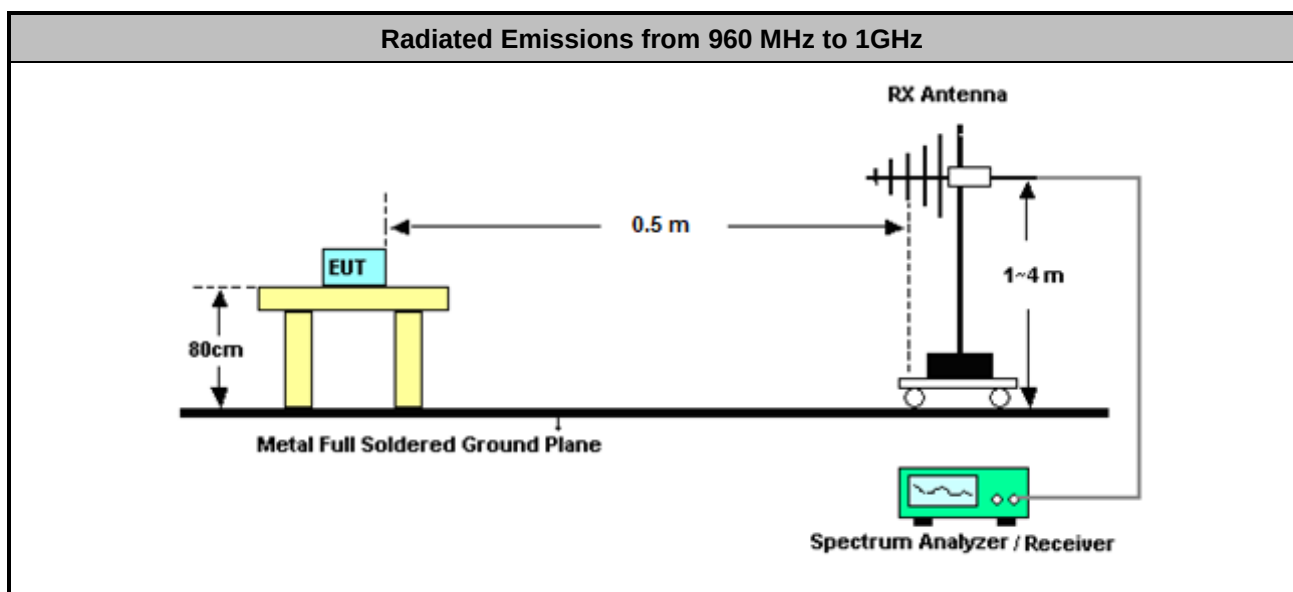
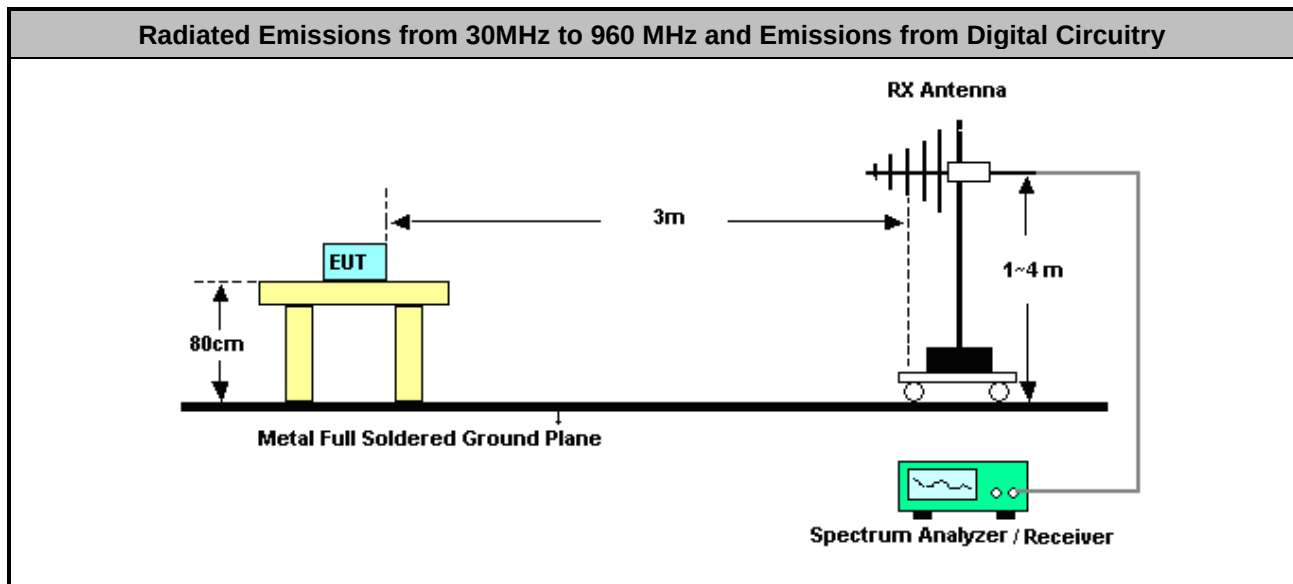
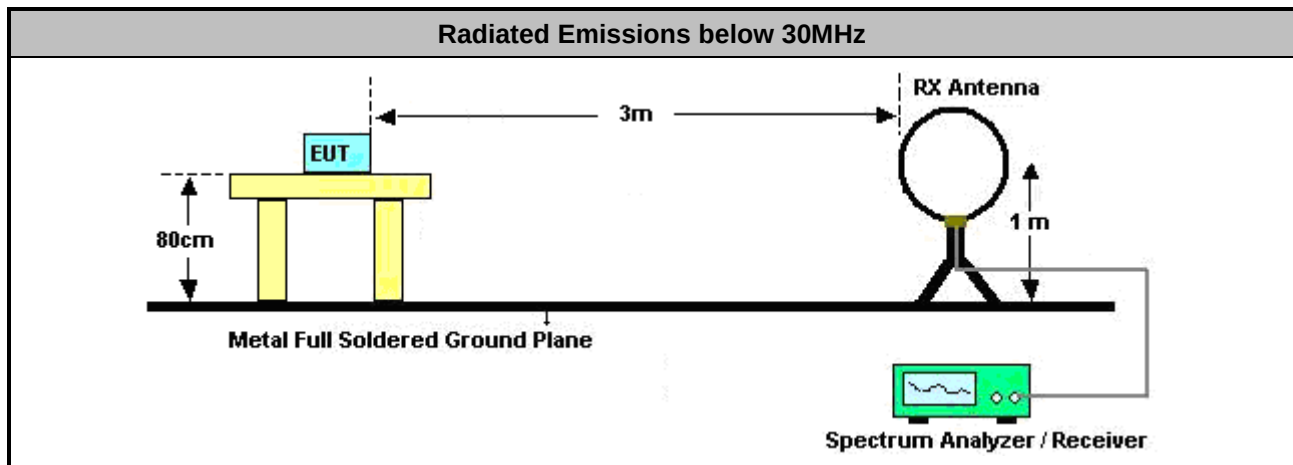
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

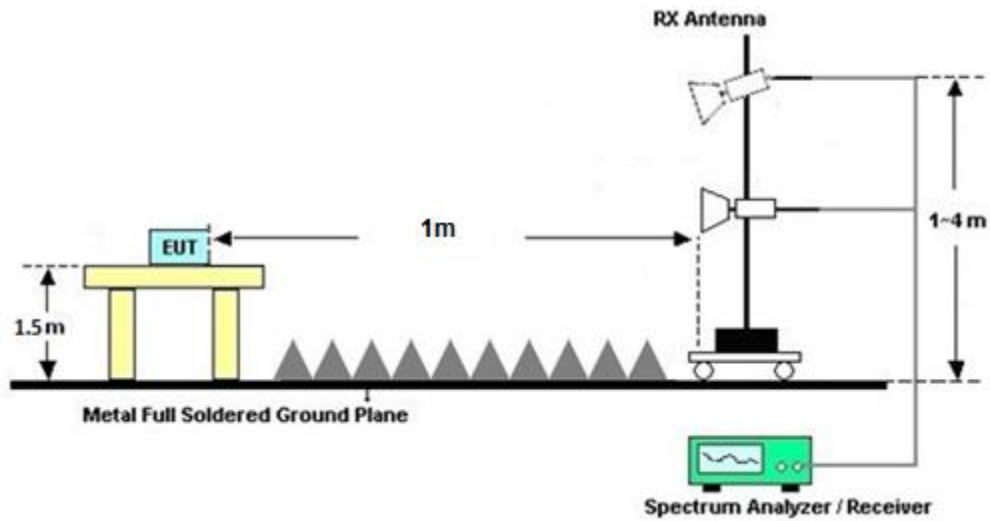
Test Method for Radiated Emissions above 960MHz	
■ Radiated Emissions above 960MHz	
■	Refer as ANSI C63.10, clause 10.3.1 for radiated measurement procedure testing.
■	Refer as ANSI C63.10, clause 10.3.2 for measurement distance is 3m. In some cases, it may be necessary to measure the radiated UWB emissions at a closer distance to obtain enough signal and margin to overcome the measurement system noise floor. Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB)
■	Refer as ANSI C63.10, clause 10.3.4 for rms detector procedure testing.
■	Refer as ANSI C63.10, clause 10.3.7 for evaluating AVG-PSD (RBW=1MHz).
■	Refer as ANSI C63.10, clause 10.3.10 for evaluating AVG-PSD in GPS Band (RBW≥1kHz).
■ For radiated measurement.	
■	Refer as ANSI C63.10, clause 10.3.8 following eirp can be used radiated test configuration.
■	Refer as ANSI C63.10, clause 10.3.9 following eirp can be directly determined using the field strength.

Test Method for Radiated Emissions below 960MHz and Emissions from Digital Circuitry	
■ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements) for above 30MHz-960MHz; 40dB/decade for frequency below 30MHz.	
■ For the transmitter unwanted emissions shall be measured using following options below:	
■	Refer as ANSI C63.10, clause 4.1.4 Detector functions and selection of bandwidth
□	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions. Adjusted by a “duty cycle correction factor”, derived from 20log (dwell time/100 ms). Average emission = peak emission + 20 log (duty cycle).
■	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
■ For radiated measurement.	
■	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
■	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
■	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1 GHz and test distance is 3m.
■	If the noise floor can't meet the limit, the test distance will be shorten and described in the report.
■ Any unwanted emissions level shall not exceed the fundamental emission level.	

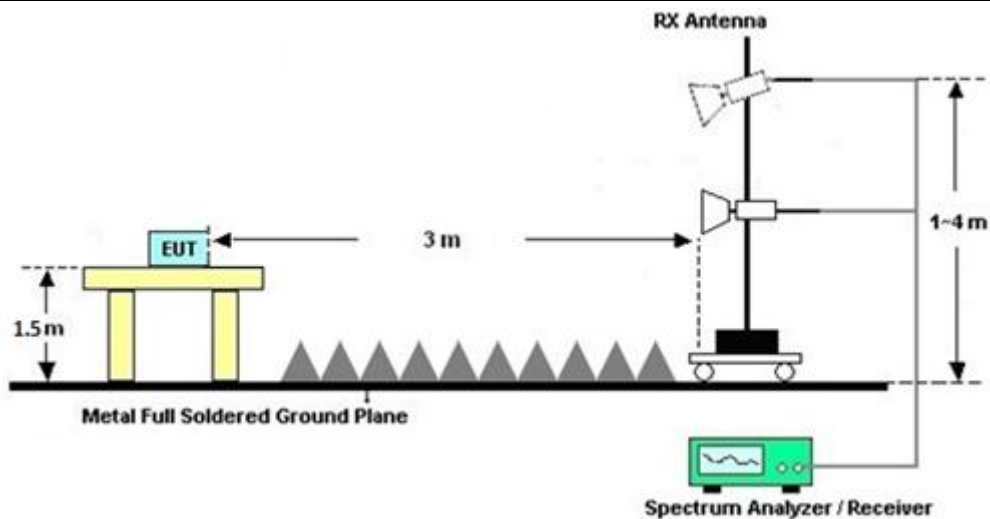
3.5.4 Test Setup

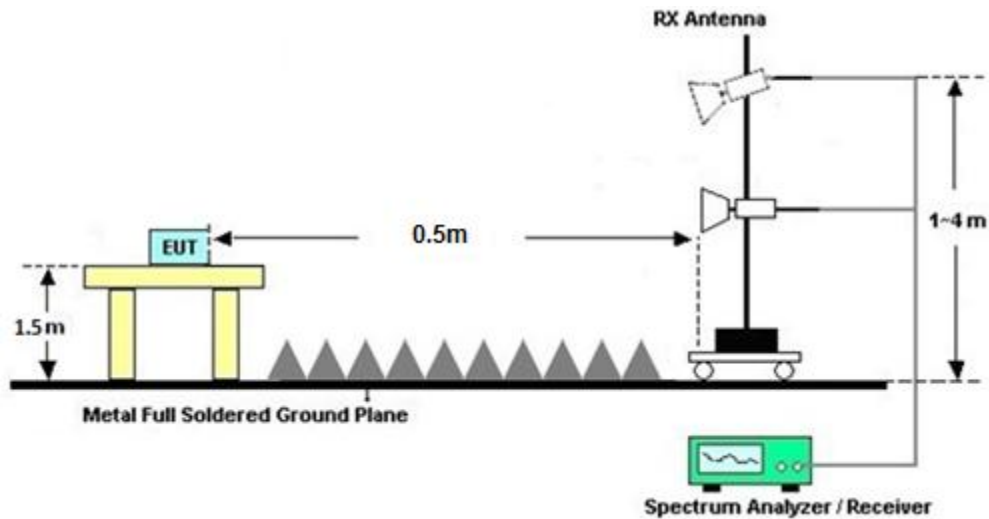
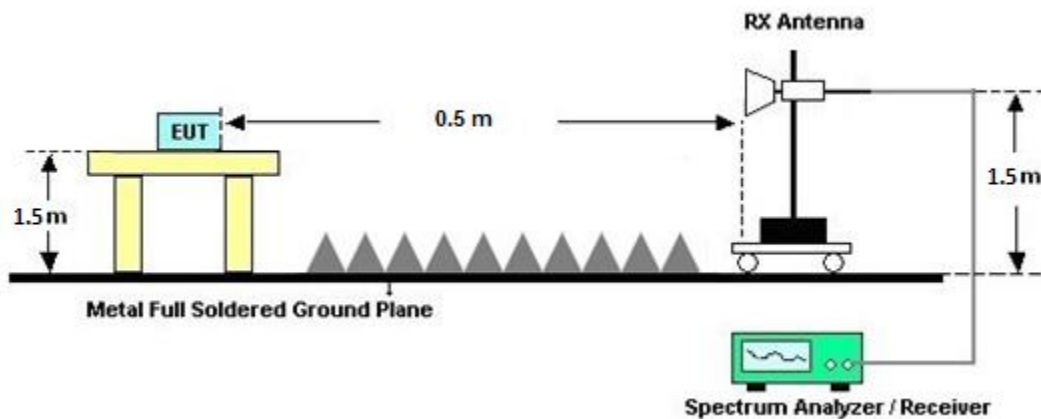


Radiated Emissions from 1GHz to 1.61 GHz



Radiated Emissions from 1.61 GHz to 10.60 GHz



Radiated Emissions from 10.60 GHz to 18GHz

Radiated Emissions above 18GHz


Note 1: Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.

Note 2: If test distance other than 3m is used, the used test distance will be recorded in test result.

3.5.5 Radiated Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.6 Average Power Spectral Density

Test mode	Frequency (MHz)	Emission Level (dBuV/m)	Emission Limit (dBm/MHz)	Emission Limit (dBuV/m)	Margin (dB)	Result	Pol [H/V]
1	6444	52.86	-41.3	53.93	-1.07	Pass	H
2	6449	52.62	-41.3	53.93	-1.31	Pass	H
3	6448	53.36	-41.3	53.93	-0.57	Pass	H
4	6528	53.01	-41.3	53.93	-0.92	Pass	H
5	6448	53.00	-41.3	53.93	-0.93	Pass	H
6	6453	53.80	-41.3	53.93	-0.13	Pass	H
7	6441	52.62	-41.3	53.93	-1.31	Pass	H
8	6441	52.94	-41.3	53.93	-0.99	Pass	H
9	6526	53.15	-41.3	53.93	-0.78	Pass	H
10	7873	52.67	-41.3	53.93	-1.26	Pass	V
11	7957	53.23	-41.3	53.93	-0.70	Pass	V
12	7958	53.16	-41.3	53.93	-0.77	Pass	V
13	7955	53.20	-41.3	53.93	-0.73	Pass	V
14	7955	52.99	-41.3	53.93	-0.94	Pass	V
15	7937	53.81	-41.3	53.93	-0.12	Pass	V
16	7958	52.90	-41.3	53.93	-1.03	Pass	V
17	7958	52.65	-41.3	53.93	-1.28	Pass	V
18	7953	52.26	-41.3	53.93	-1.67	Pass	V



Radiated Emissions (Fundamental)

Operating Function

Adapter Mode

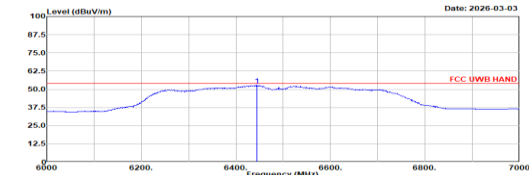
Polarization

H

Test Distance

3m

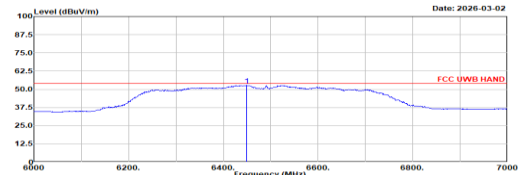
Mode 1



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF9
Config : 0
STS Rules : 0
Payload Length : 127
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dB	dB/m	dB	dB	dB	dB	cm	deg	
1	6444.00	52.65	53.93	-1.07	41.29	34.09	14.43	37.74	0.00	--	--	Average

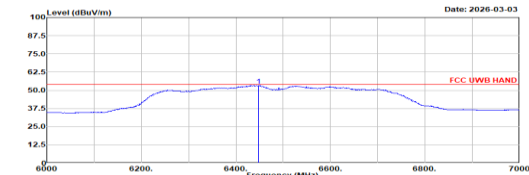
Mode 2



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 0
STS Rules : 0
Payload Length : 127
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dB	dB/m	dB	dB	dB	dB	cm	deg	
1	6449.00	52.65	53.93	-1.28	41.06	34.90	14.43	37.74	0.00	--	--	Average

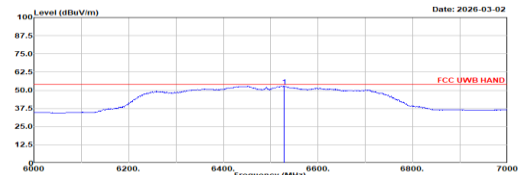
Mode 3



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF9
Config : 1
STS Rules : 1
Payload Length : 127
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dB	dB/m	dB	dB	dB	dB	cm	deg	
1	6444.00	53.36	53.93	-0.57	41.77	34.00	14.43	37.74	0.00	--	--	Average

Mode 4



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 1
STS Rules : 1
Payload Length : 127
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dB	dB/m	dB	dB	dB	dB	cm	deg	
1	6528.00	53.01	53.93	-0.92	40.87	35.32	14.56	37.74	0.00	--	--	Average



Radiated Emissions (Fundamental)

Operating Function

Adapter Mode

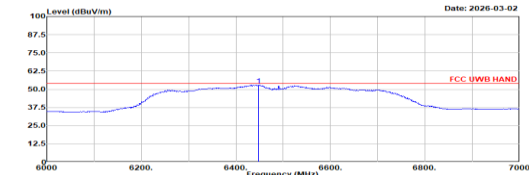
Polarization

H

Test Distance

3m

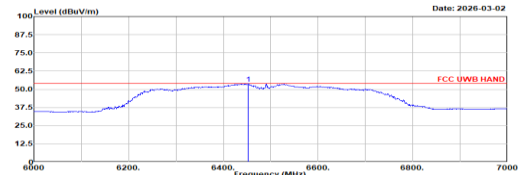
Mode 5



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 5030087
Detector : Average
Channel : 05
Modulation : HPRF9
Config : 3
ST5 Runs : 1
Payload Length : 0
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	6448.00	53.00	-0.93	41.41	34.90	14.43	37.74	0.00	--	--	Average

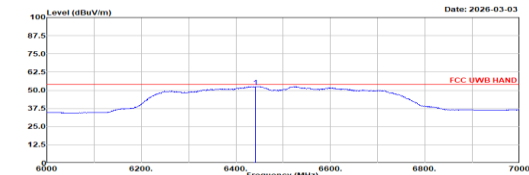
Mode 6



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 5030087
Detector : Average
Channel : 05
Modulation : HPRF10
Config : 3
ST5 Runs : 1
Payload Length : 0
RSS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	6453.00	53.00	-0.13	42.18	34.91	14.44	37.73	0.00	--	--	Average

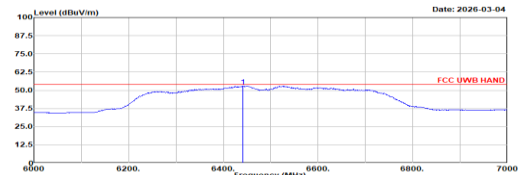
Mode 7



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 5030087
Detector : Average
Channel : 05
Modulation : HPRF27
Config : 0
ST5 Runs : 1
Payload Length : 225
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	6441.00	52.62	-1.33	41.06	34.08	14.42	37.74	0.00	--	--	Average

Mode 8



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360.251105 Horizontal
Project : 5030087
Detector : Average
Channel : 05
Modulation : HPRF27
Config : 1
ST5 Runs : 1
Payload Length : 225
RSS Power : 0x14
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	6441.00	52.94	-0.59	41.38	34.88	14.42	37.74	0.00	--	--	Average



Radiated Emissions (Fundamental)																																													
Operating Function		Adapter Mode		Polarization		H																																							
				Test Distance		3m																																							
Mode 9																																													
				Date: 2026-03-04																																									
Site : 03CH20-HY Condition : FCC UWB BAND 3m HP_01200_02369_251105 Horizontal Project : 503007 Detector : Average Channel : 05 Modulation : HPSK27 Config : 3 STS Maps : 1 Payload Length: 0 RFs Power : 0x14 Adaptive : 0x03 Calibration : 0x00																																													
<table border="1"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Limit</th> <th>Read</th> <th>Ant</th> <th>Cable</th> <th>Preamp</th> <th>Aux</th> <th>APos</th> <th>TPos</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dB/m</th> <th>dB</th> <th>dB</th> <th>dB</th> <th>cm</th> <th>deg</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>6526.00</td> <td>53.13</td> <td>53.93</td> <td>-0.80</td> <td>41.00</td> <td>35.31</td> <td>14.56</td> <td>37.74</td> <td>0.00</td> <td>--</td> <td>Average</td> </tr> </tbody> </table>					Freq	Level	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark		MHz	dBuV/m	dBuV/m	dB	dB/m	dB	dB	dB	cm	deg		1	6526.00	53.13	53.93	-0.80	41.00	35.31	14.56	37.74	0.00	--	Average						
	Freq	Level	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																		
	MHz	dBuV/m	dBuV/m	dB	dB/m	dB	dB	dB	cm	deg																																			
1	6526.00	53.13	53.93	-0.80	41.00	35.31	14.56	37.74	0.00	--	Average																																		



Radiated Emissions (Fundamental)

Operating Function

Adapter Mode

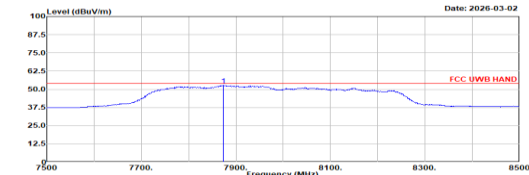
Polarization

V

Test Distance

3m

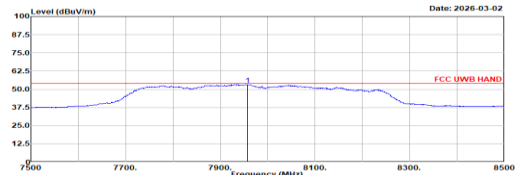
Mode 10



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360 251105 VERTICAL
Project : 5030087
Detector : Average
Channel : 09
Modulation : BPRF9
Config : 0
STS Runs : 0
Payload Length : 127
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7873.00	52.67	53.93	-1.26	37.06	37.10	16.47	36.76	0.00	--	Average

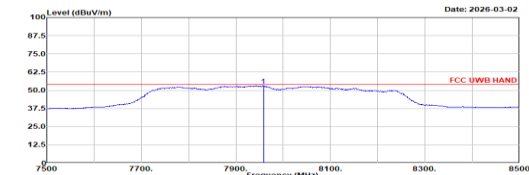
Mode 11



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360 251105 VERTICAL
Project : 5030087
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 0
STS Runs : 0
Payload Length : 127
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7957.00	53.23	53.93	-0.70	38.43	37.20	16.43	38.03	0.00	--	Average

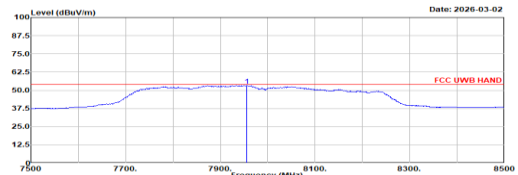
Mode 12



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360 251105 VERTICAL
Project : 5030087
Detector : Average
Channel : 09
Modulation : BPRF9
Config : 1
STS Runs : 1
Payload Length : 127
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7950.00	53.16	53.93	-0.77	38.36	37.20	16.43	38.03	0.00	--	Average

Mode 13



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF 91200.02360 251105 VERTICAL
Project : 5030087
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 1
STS Runs : 1
Payload Length : 127
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7950.00	53.20	53.93	-0.73	38.40	37.20	16.43	38.03	0.00	--	Average



Radiated Emissions (Fundamental)

Operating Function

Adapter Mode

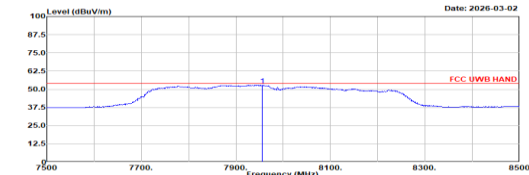
Polarization

V

Test Distance

3m

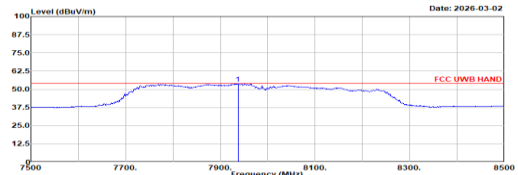
Mode 14



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF_91200_02368_251105 VERTICAL
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF9
Config : 1
STS Num : 1
Payload Length : 0
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7955.00	52.99	53.93	-0.94	38.19	37.20	16.43	38.63	0.00	--	Average

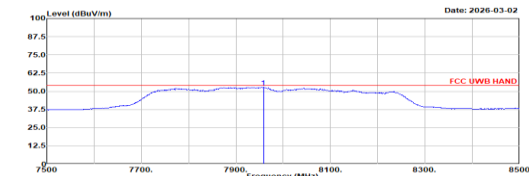
Mode 15



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF_91200_02368_251105 VERTICAL
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 1
STS Num : 1
Payload Length : 0
RSS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7937.00	53.81	53.93	-0.12	39.82	37.17	16.44	38.62	0.00	--	Average

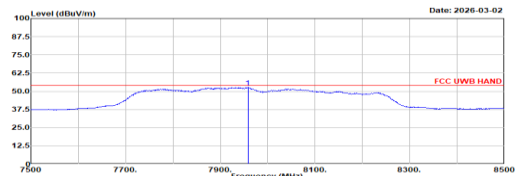
Mode 16



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF_91200_02368_251105 VERTICAL
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF27
Config : 1
STS Num : 1
Payload Length : 255
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7958.00	52.90	53.93	-1.03	38.10	37.20	16.43	38.63	0.00	--	Average

Mode 17



Site : 03CH20-HV
Condition : FCC UWB HAND 3m HF_91200_02368_251105 VERTICAL
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF27
Config : 1
STS Num : 1
Payload Length : 255
RSS Power : 0x06
Adaptive : 0x01
Calibration : 0x00

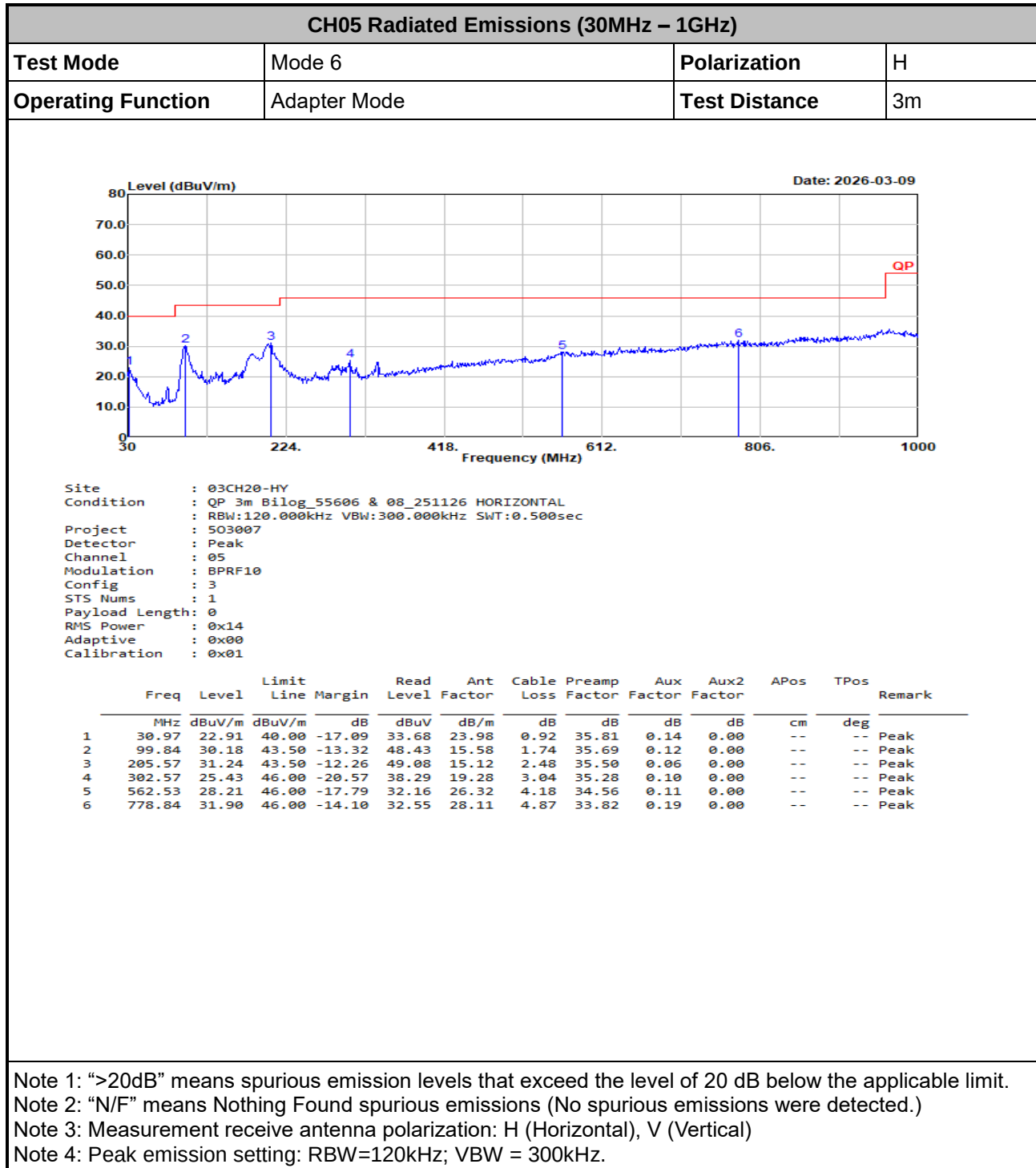
Freq	Level	Limit	Line Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	7958.00	52.65	53.93	-1.28	37.85	37.20	16.43	38.63	0.00	--	Average



Radiated Emissions (Fundamental)											
Operating Function	Adapter Mode	Polarization	V								
		Test Distance	3m								
Mode 18											
100 Level (dBuV/m)											



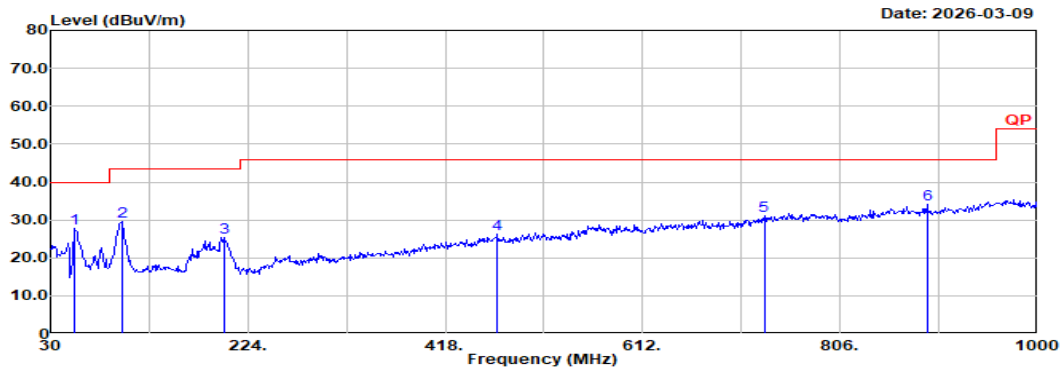
3.5.7 Radiated Emissions (30MHz – 1GHz)





CH05 Radiated Emissions (30MHz – 1GHz)

Test Mode	Mode 6	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : QP 3m Bilog_55606 & 08_251126 VERTICAL
Project : 503007
Detector : Peak
Channel : 05
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1	54.25	27.76	40.00	-12.24		49.03	13.08	1.26	35.76	0.15	0.00	--	--	Peak
2	99.84	29.58	43.50	-13.92		47.83	15.58	1.74	35.69	0.12	0.00	--	--	Peak
3	200.72	25.35	43.50	-18.15		43.30	15.05	2.45	35.51	0.06	0.00	--	--	Peak
4	469.41	26.27	46.00	-19.73		33.82	23.41	3.78	34.85	0.11	0.00	--	--	Peak
5	731.31	30.98	46.00	-15.02		32.33	27.68	4.74	33.98	0.21	0.00	--	--	Peak
6	891.36	34.04	46.00	-11.96		33.02	28.91	5.30	33.38	0.19	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

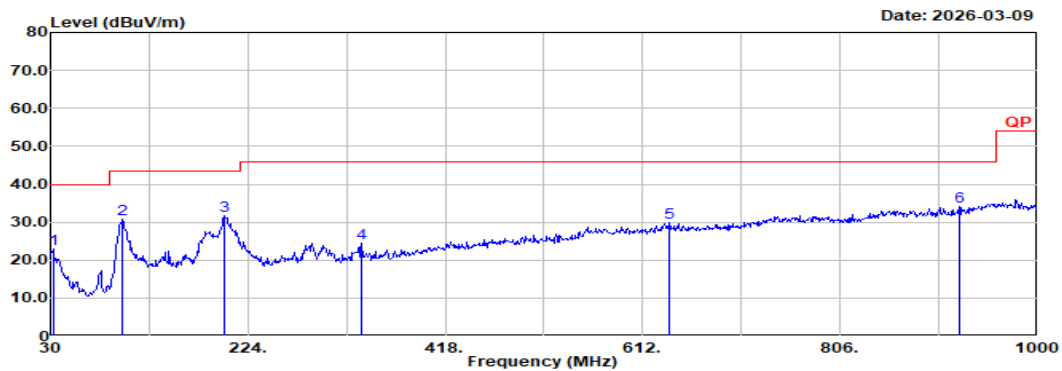
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Peak emission setting: RBW=120kHz; VBW = 300kHz.



CH09 Radiated Emissions (30MHz – 1GHz)

Test Mode	Mode 15	Polarization	H
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : QP 3m Bilog_55606 & 08_251126 HORIZONTAL
: RBW:120.000kHz VBW:300.000kHz SWT:0.500sec
Project : 503007
Detector : Peak
Channel : 09
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1	32.91	22.89	40.00	-17.11		34.23	23.38	0.95	35.80	0.13	0.00	--	--	Peak
2	100.81	30.64	43.50	-12.86		48.69	15.77	1.75	35.69	0.12	0.00	--	--	Peak
3	200.72	31.56	43.50	-11.94		49.51	15.05	2.45	35.51	0.06	0.00	--	--	Peak
4	335.55	24.44	46.00	-21.56		36.32	19.96	3.21	35.18	0.13	0.00	--	--	Peak
5	638.19	29.95	46.00	-16.05		33.21	26.46	4.42	34.31	0.17	0.00	--	--	Peak
6	923.37	34.07	46.00	-11.93		32.42	29.32	5.36	33.28	0.25	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

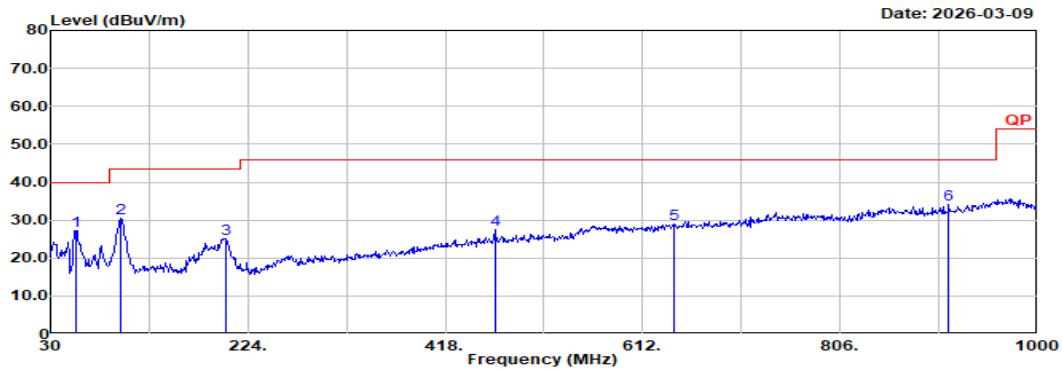
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Peak emission setting: RBW=120kHz; VBW = 300kHz.



CH09 Radiated Emissions (30MHz – 1GHz)

Test Mode	Mode 15	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : QP 3m Bilog_55606 & 08_251126 VERTICAL
: RBW:120.000kHz VBW:300.000kHz SWT:0.500sec
Project : 503007
Detector : Peak
Channel : 09
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	Loss	Factor	Factor	Factor		deg	
1	55.22	27.28	40.00		-12.72	48.75	12.87	1.27	35.76	0.15	0.00	--	--	Peak
2	98.87	30.63	43.50		-12.87	49.05	15.42	1.73	35.69	0.12	0.00	--	--	Peak
3	202.66	25.12	43.50		-18.38	43.00	15.09	2.47	35.50	0.06	0.00	--	--	Peak
4	466.50	27.58	46.00		-18.42	35.19	23.37	3.77	34.86	0.11	0.00	--	--	Peak
5	642.07	29.05	46.00		-16.95	32.24	26.50	4.44	34.30	0.17	0.00	--	--	Peak
6	912.70	34.24	46.00		-11.76	32.82	29.15	5.35	33.31	0.23	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

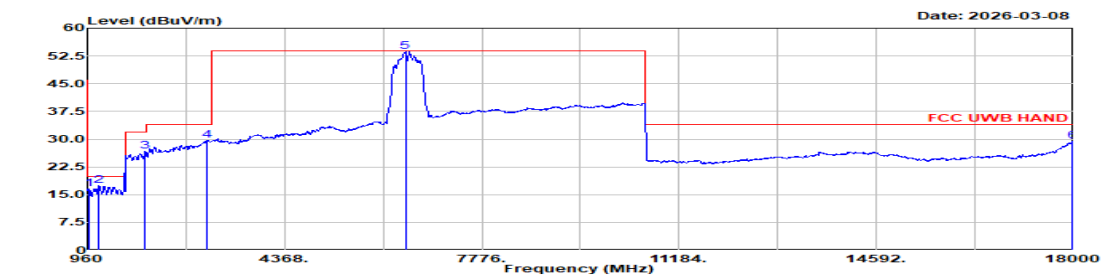
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Peak emission setting: RBW=120kHz; VBW = 300kHz.

3.5.8 Radiated Emissions (960MHz – 18GHz)

CH05 Radiated Emissions (960MHz – 18GHz)			
Test Mode	Mode 6	Polarization	H
Operating Function	Adapter Mode		
Test Distance	The test distance between the receiving antenna and the EUT is as following: 3m for 1.61 GHz ~ 10.60 GHz frequency range, 1 m for 1GHz ~ 1.61 GHz, and 0.5 m for other frequency ranges.		



Site : 03CH20-HY
 Condition : FCC UWB HAND 3m HF_9120D_02360_251105 Horizontal
 Project : 503007
 Detector : Average
 Channel : 05
 Modulation : BPRF10
 Config : 3
 STS Nums : 1
 Payload Length: 0
 RMS Power : 0x14
 Adaptive : 0x00
 Calibration : 0x01

	Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1	977.96	16.51	19.93	-3.42	28.55	30.81	5.47	33.08	-15.56	0.32	--	--	Average
2	1162.26	17.36	19.93	-2.57	31.20	25.50	5.91	35.71	-9.54	0.00	--	--	Average
3	1954.28	26.70	31.93	-5.23	28.98	26.16	7.73	36.17	0.00	0.00	--	--	Average
4	3032.29	29.67	33.93	-4.26	26.18	29.70	9.86	36.07	0.00	0.00	--	--	Average
5	6452.50	53.61	53.93	-0.32	41.99	34.91	14.44	37.73	0.00	0.00	--	--	Average
6	17977.80	29.53	33.93	-4.40	24.07	41.81	24.79	45.58	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting outside GPS Bands: RBW=1MHz; VBW=3MHz.

Note 5: Average emission setting in GPS bands: RBW=1kHz; VBW=3kHz.

Note 6: #5 is fundamental signal.

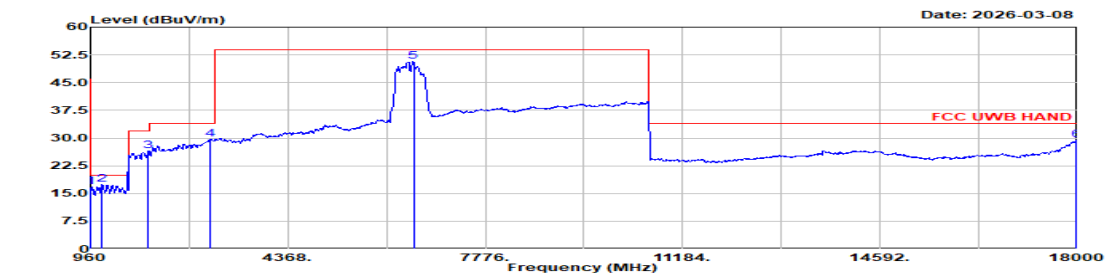
Note 7:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
Example: Distance extrapolation factor = $20 \log (0.5\text{m}/3\text{m}) = -15.56$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) + Aux2 Factor (dB) = Level (dBuV/m)
 (Note1: Aux Factor = Distance extrapolation factor)
 (Note2: Aux2 Factor = Filter loss(dB))
Example: Corrected Reading: 30.81 (dB/m) + 5.47 (dB) + 28.55 (dBuV) – 33.08 (dB) + (-15.56) (dB) + 0.32 (dB) = 16.51 (dBuV/m)



CH05 Radiated Emissions (960MHz – 18GHz)

Test Mode	Mode 6	Polarization	V
Operating Function	Adapter Mode		
Test Distance	The test distance between the receiving antenna and the EUT is as following: 3m for 1.61 GHz ~ 10.60 GHz frequency range, 1 m for 1GHz ~ 1.61 GHz, and 0.5 m for other frequency ranges.		



Site : 03CH20-HY
Condition : FCC UWB HAND 3m HF_9120D_02360_251105 Vertical
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	Level	Factor	Loss	Factor	Factor	Factor	cm	deg	
1	971.64	16.67	19.93	-3.26	28.50	31.05	5.46	33.10	-15.56	0.32	--	--	Average
2	1162.87	17.36	19.93	-2.57	31.20	25.50	5.91	35.71	-9.54	0.00	--	--	Average
3	1952.00	26.59	31.93	-5.34	26.85	26.18	7.73	36.17	0.00	0.00	--	--	Average
4	3027.85	29.62	33.93	-4.31	26.13	29.70	9.85	36.06	0.00	0.00	--	--	Average
5	6535.00	50.70	53.93	-3.23	38.49	35.38	14.57	37.74	0.00	0.00	--	--	Average
6	17985.20	29.49	33.93	-4.44	24.00	41.84	24.80	45.59	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting outside GPS Bands: RBW=1MHz; VBW=3MHz.

Note 5: Average emission setting in GPS bands: RBW=1kHz; VBW=3kHz.

Note 6: #5 is fundamental signal.

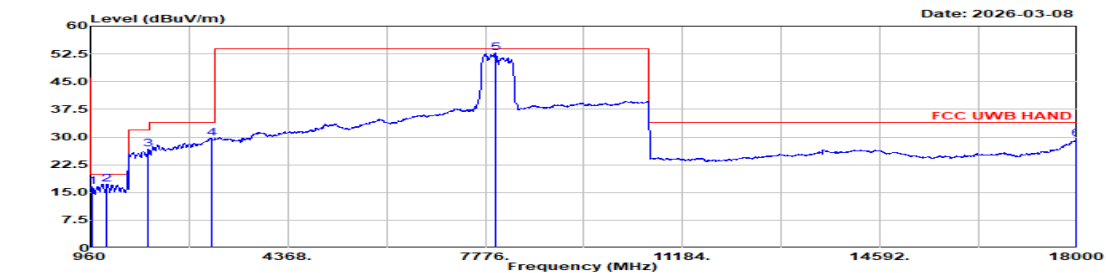
Note 7:

- Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) + Aux2 Factor (dB) = Level (dBuV/m)
(Note1: Aux Factor = Distance extrapolation factor)
(Note2: Aux2 Factor = Filter loss(dB))



CH09 Radiated Emissions (960MHz – 18GHz)

Test Mode	Mode 15	Polarization	H
Operating Function	Adapter Mode		
Test Distance	The test distance between the receiving antenna and the EUT is as following: 3m for 1.61 GHz ~ 10.60 GHz frequency range, 1 m for 1GHz ~ 1.61 GHz, and 0.5 m for other frequency ranges.		



Site : 03CH20-HY
Condition : FCC UWB HAND 3m HF_9120D_02360_251105 Horizontal
Project : RBW:1000.000kHz VBW:3000.000kHz SWT:7.500sec
Detector : 503007
Channel : Average
Modulation : 09
Config : BPRF10
STS Nums : 3
Payload Length: 1
RMS Power : 0
Adaptive : 0x06
Calibration : 0x01

	Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1	979.12	16.56	19.93	-3.37	28.65	30.75	5.48	33.08	-15.56	0.32	--	--	Average
2	1245.22	17.32	19.93	-2.61	30.72	25.75	6.14	35.75	-9.54	0.00	--	--	Average
3	1955.04	26.62	31.93	-5.31	28.91	26.15	7.73	36.17	0.00	0.00	--	--	Average
4	3048.94	29.65	33.93	-4.28	26.16	29.70	9.89	36.10	0.00	0.00	--	--	Average
5	7945.00	52.77	53.93	-1.16	37.96	37.19	16.44	38.82	0.00	0.00	--	--	Average
6	17985.20	29.39	33.93	-4.54	23.90	41.84	24.80	45.59	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting outside GPS Bands: RBW=1MHz; VBW=3MHz.

Note 5: Average emission setting in GPS bands: RBW=1kHz; VBW=3kHz.

Note 6: #5 is fundamental signal.

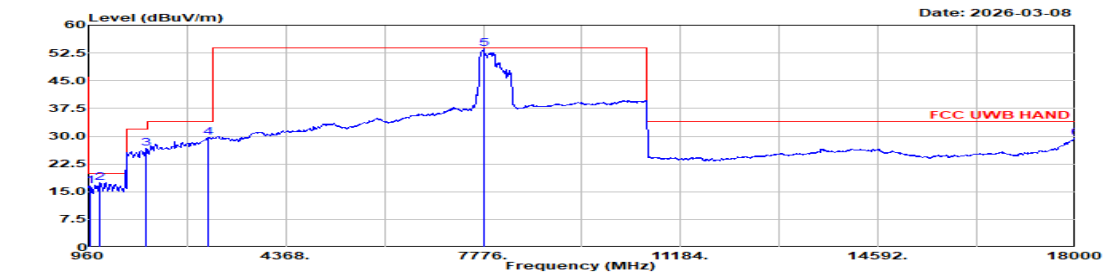
Note 7:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) + Aux2 Factor (dB) = Level (dBuV/m)
(Note1: Aux Factor = Distance extrapolation factor)
(Note2: Aux2 Factor = Filter loss(dB))



CH09 Radiated Emissions (960MHz – 18GHz)

Test Mode	Mode 15	Polarization	V
Operating Function	Adapter Mode		
Test Distance	The test distance between the receiving antenna and the EUT is as following: 3m for 1.61 GHz ~ 10.60 GHz frequency range, 1 m for 1GHz ~ 1.61 GHz, and 0.5 m for other frequency ranges.		



Site : 03CH20-HY
Condition : FCC UWB HAND 3m HF_9120D_02360_251105 Vertical
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RIS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1	979.52	16.60	19.93	-3.33	28.70	30.73	5.48	33.07	-15.56	0.32	--	--	Average
2	1158.60	17.34	19.93	-2.59	31.18	25.51	5.90	35.71	-9.54	0.00	--	--	Average
3	1955.04	26.66	31.93	-5.27	28.95	26.15	7.73	36.17	0.00	0.00	--	--	Average
4	3035.62	29.64	33.93	-4.29	26.15	29.70	9.86	36.07	0.00	0.00	--	--	Average
5	7780.00	53.60	53.93	-0.33	38.92	36.82	16.54	38.68	0.00	0.00	--	--	Average
6	17992.60	29.45	33.93	-4.48	23.94	41.87	24.80	45.60	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting outside GPS Bands: RBW=1MHz; VBW=3MHz.

Note 5: Average emission setting in GPS bands: RBW=1kHz; VBW=3kHz.

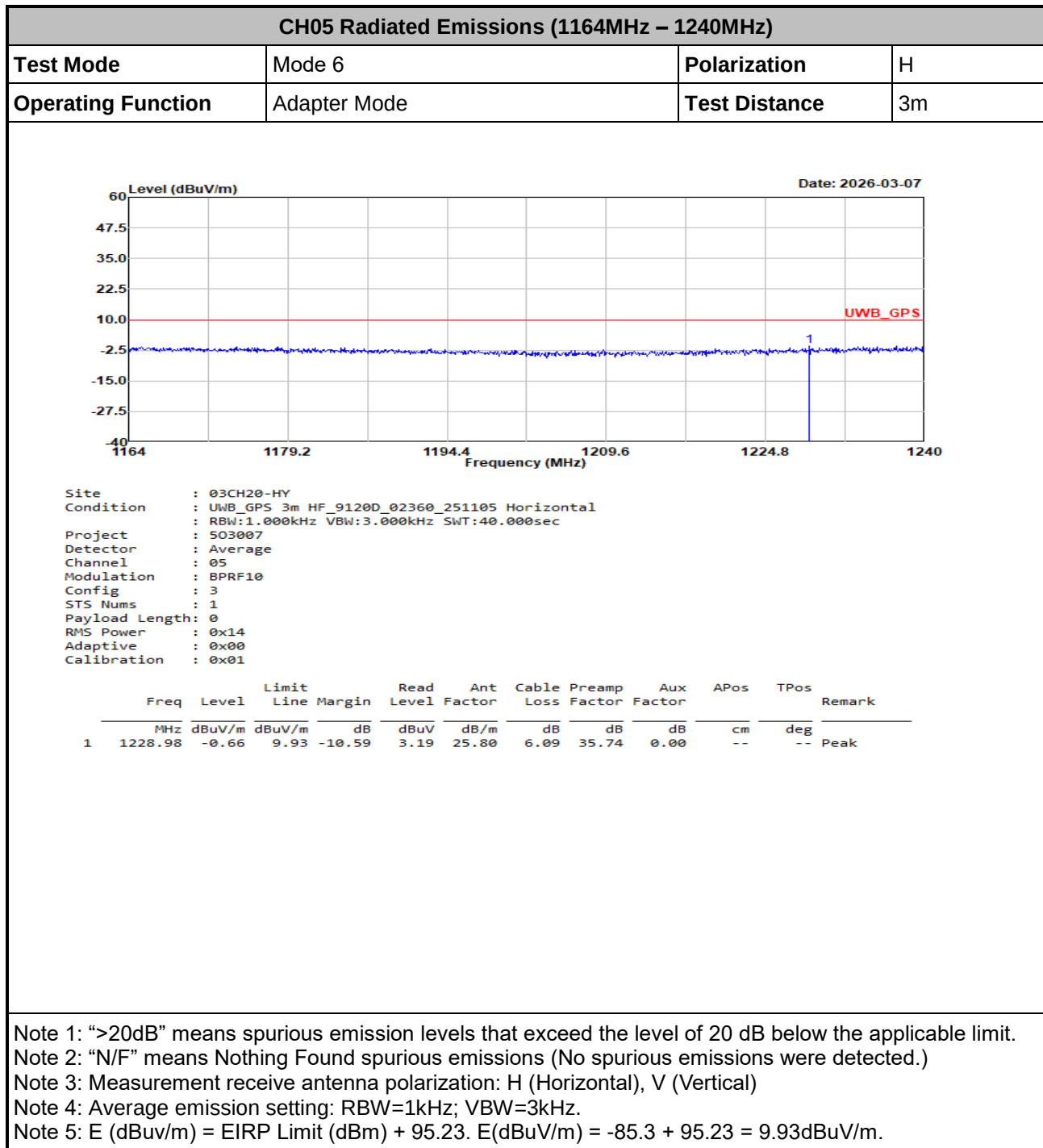
Note 6: #5 is fundamental signal.

Note 7:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) + Aux2 Factor (dB) = Level (dBuV/m)
(Note1: Aux Factor = Distance extrapolation factor)
(Note2: Aux2 Factor = Filter loss(dB))



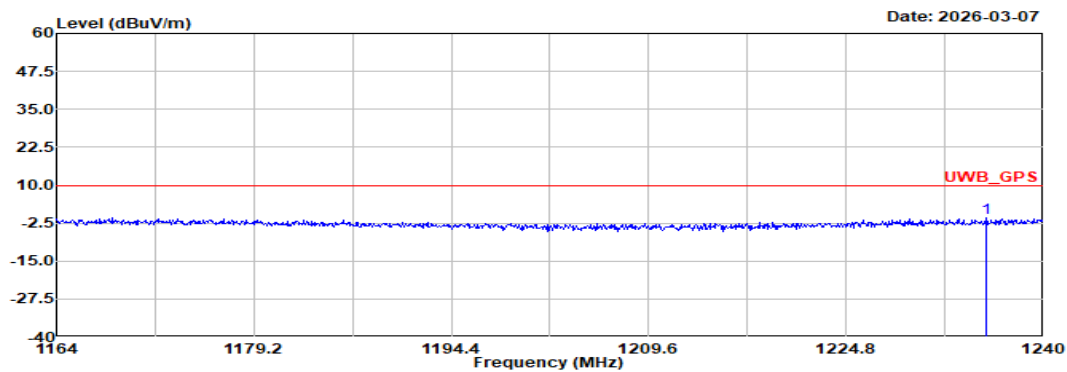
3.5.9 Radiated Emissions (1164MHz – 1240MHz)





CH05 Radiated Emissions (1164MHz – 1240MHz)

Test Mode	Mode 6	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Vertical
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	1235.59	-0.79	9.93		-10.72	3.04	25.80	6.11	35.74	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

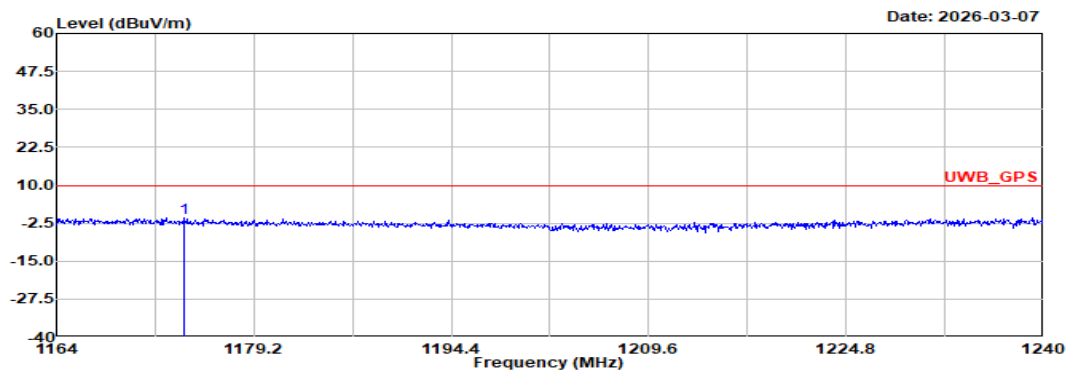
Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: E (dBuV/m) = EIRP Limit (dBm) + 95.23. E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m.



CH09 Radiated Emissions (1164MHz – 1240MHz)

Test Mode	Mode 15	Polarization	H
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Horizontal
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1 1173.88	-0.67	9.93		-10.60	3.57	25.54	5.94	35.72	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

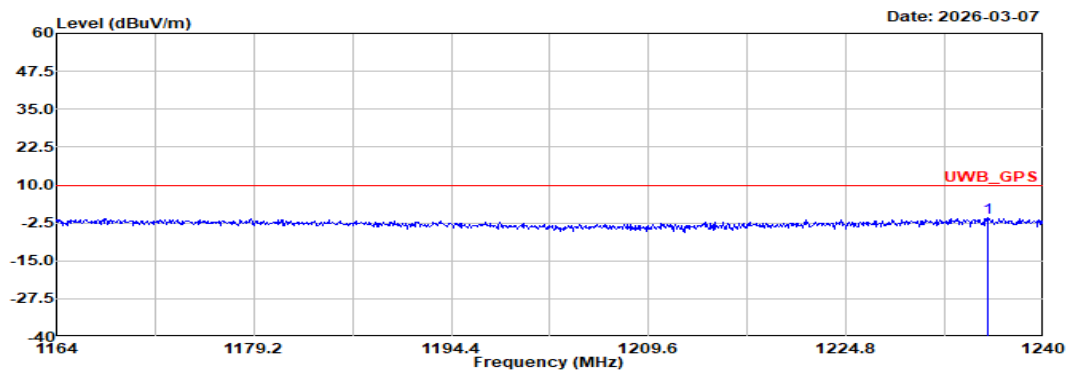
Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: E (dBuV/m) = EIRP Limit (dBm) + 95.23. E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m.



CH09 Radiated Emissions (1164MHz – 1240MHz)

Test Mode	Mode 15	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Vertical
RBW:1.000kHz VBW:3.000kHz SWT:40.000sec
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	1235.67	-0.88	9.93		-10.81	2.95	25.80	6.11	35.74	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

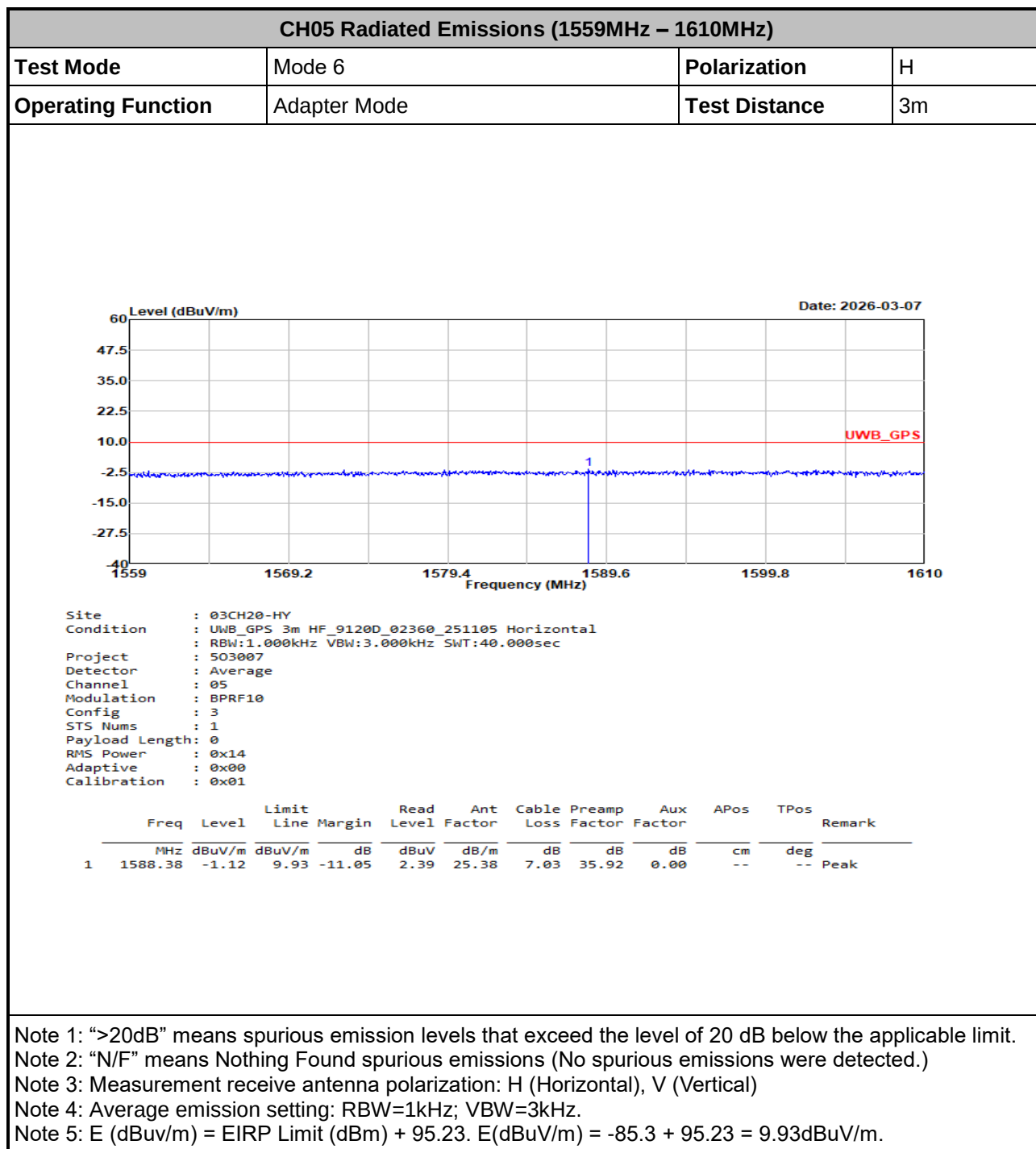
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: E (dBuV/m) = EIRP Limit (dBm) + 95.23. E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m.



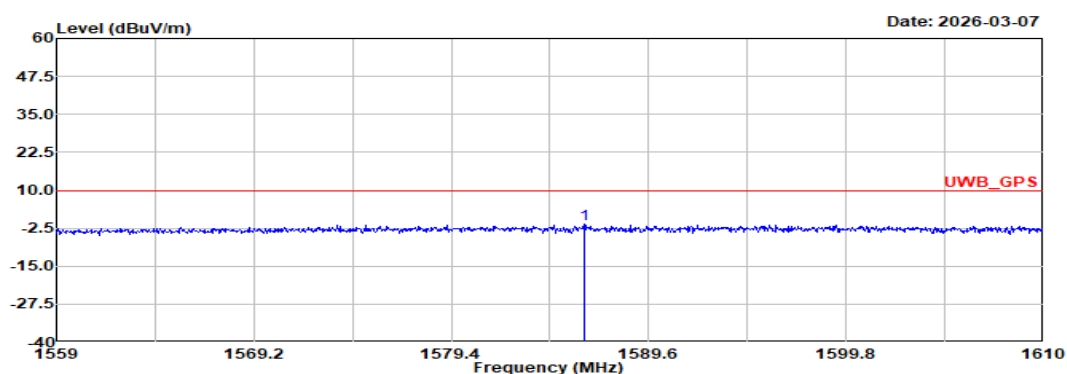
3.5.10 Radiated Emissions (1559MHz – 1610MHz)





CH05 Radiated Emissions (1559MHz – 1610MHz)

Test Mode	Mode 6	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Vertical
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	1586.23	-1.03	9.93		-10.96	2.50	25.36	7.03	35.92	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

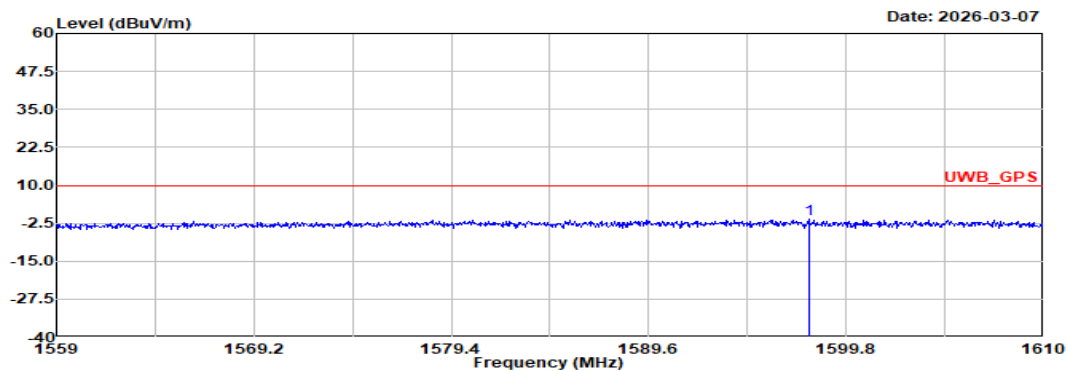
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: E (dBuV/m) = EIRP Limit (dBm) + 95.23. E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m.

**CH09 Radiated Emissions (1559MHz – 1610MHz)**

Test Mode	Mode 15	Polarization	H
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Horizontal
RBW:1.000kHz VBW:3.000kHz SWT:40.000sec
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	1597.86	-1.27	9.93		-11.20	2.28	25.32	7.06	35.93	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

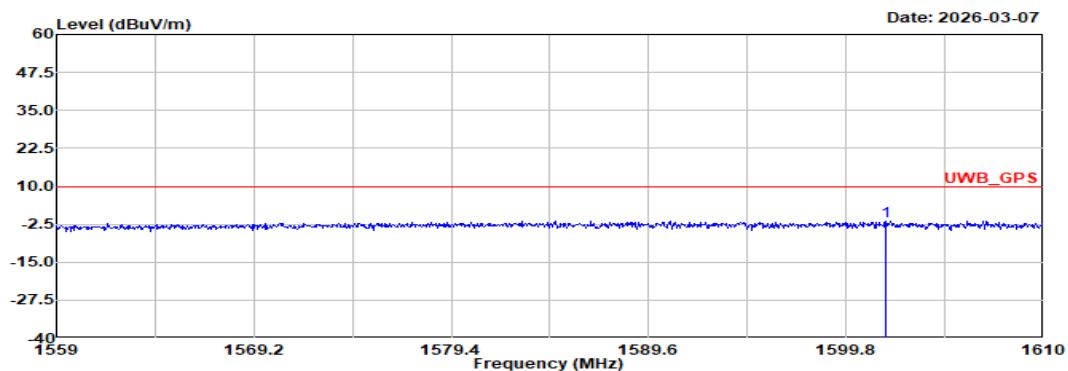
Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: $E \text{ (dBuV/m)} = \text{EIRP Limit (dBm)} + 95.23$. $E \text{ (dBuV/m)} = -85.3 + 95.23 = 9.93 \text{ dBuV/m}$.



CH09 Radiated Emissions (1559MHz – 1610MHz)

Test Mode	Mode 15	Polarization	V
Operating Function	Adapter Mode	Test Distance	3m



Site : 03CH20-HY
Condition : UWB_GPS 3m HF_9120D_02360_251105 Vertical
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Num : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

	Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	1601.84	-1.36	9.93		-11.29	2.23	25.28	7.06	35.93	0.00	--	--	Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

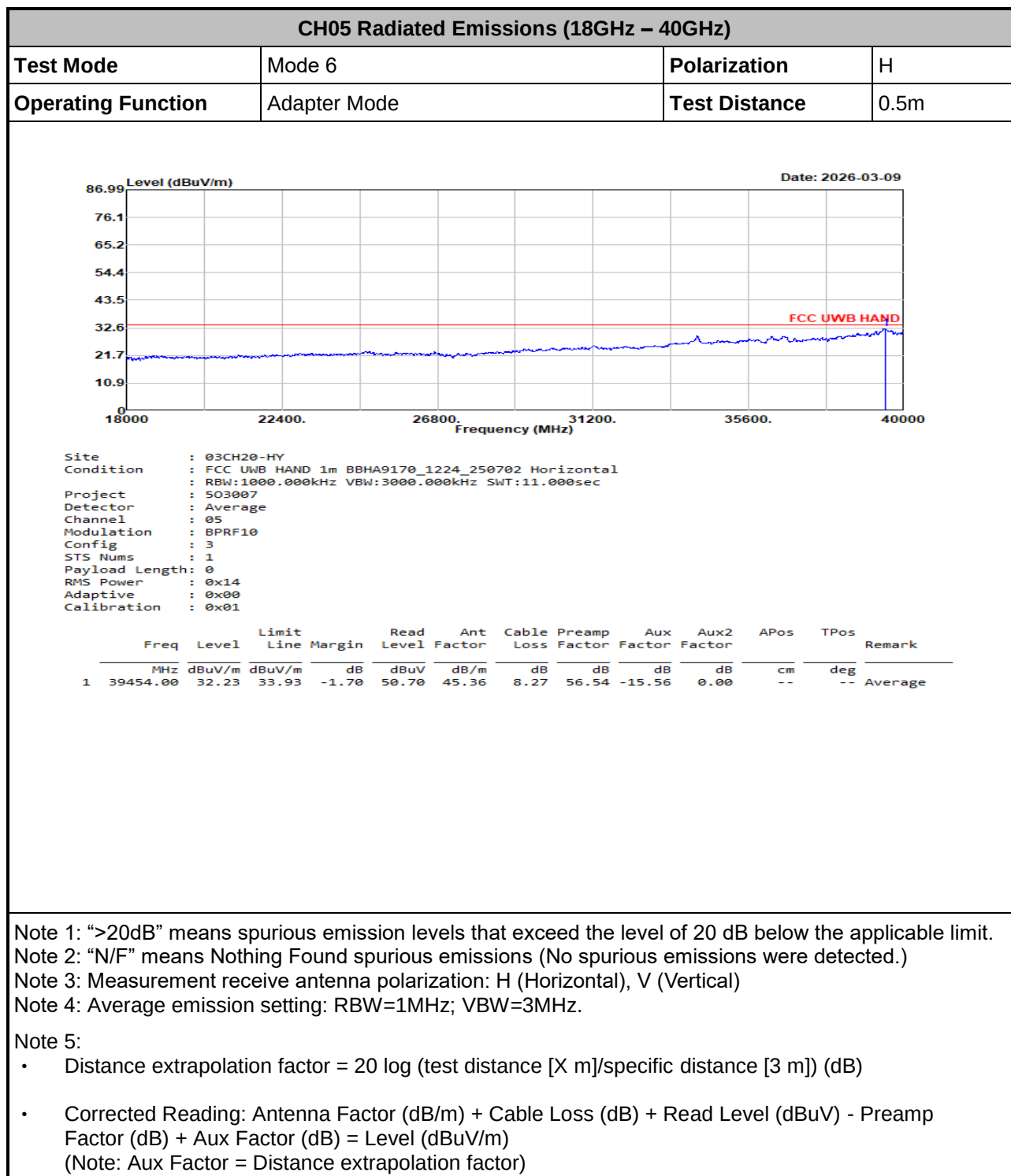
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1kHz; VBW=3kHz.

Note 5: E (dBuV/m) = EIRP Limit (dBm) + 95.23. E(dBuV/m) = -85.3 + 95.23 = 9.93dBuV/m.



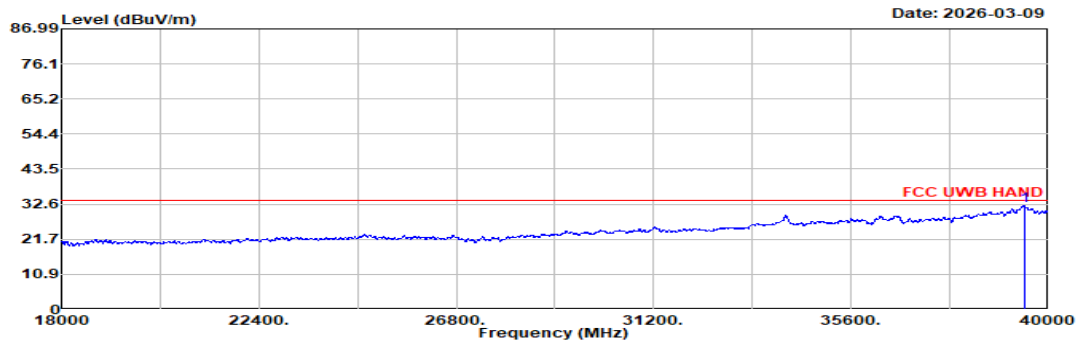
3.5.11 Radiated Emissions (18GHz – 40GHz)





CH05 Radiated Emissions (18GHz – 40GHz)

Test Mode	Mode 6	Polarization	V
Operating Function	Adapter Mode	Test Distance	0.5m



Site : 03CH20-HY
Condition : FCC UWB HAND 1m BBHA9170_1224_250702 Vertical
Project : 503007
Detector : Average
Channel : 05
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x14
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1 39454.00	32.09	33.93	-1.84	50.56	45.36	8.27	56.54	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1MHz; VBW=3MHz.

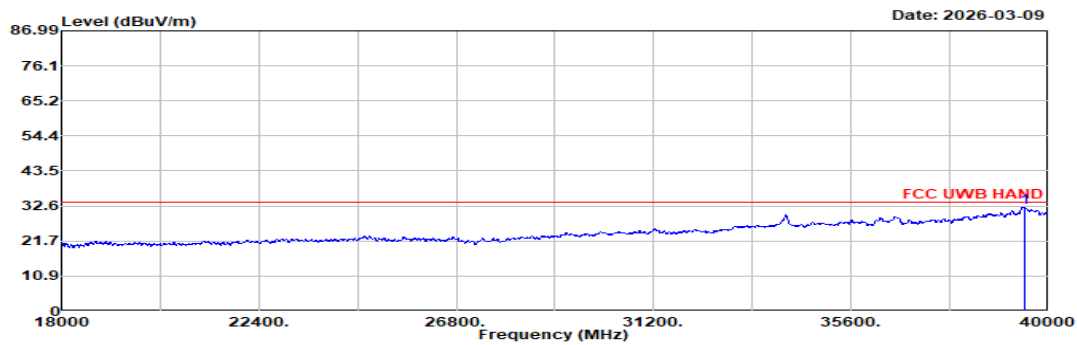
Note 5:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) = Level (dBuV/m)
(Note: Aux Factor = Distance extrapolation factor)



CH09 Radiated Emissions (18GHz – 40GHz)

Test Mode	Mode 15	Polarization	H
Operating Function	Adapter Mode	Test Distance	0.5m



Site : 03CH20-HY
Condition : FCC UWB HAND 1m BBHA9170_1224_250702 Horizontal
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Line	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
MHz	dBuV/m	dBuV/m		dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1 39454.00	32.24	33.93		-1.69	50.71	45.36	8.27	56.54	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1MHz; VBW=3MHz.

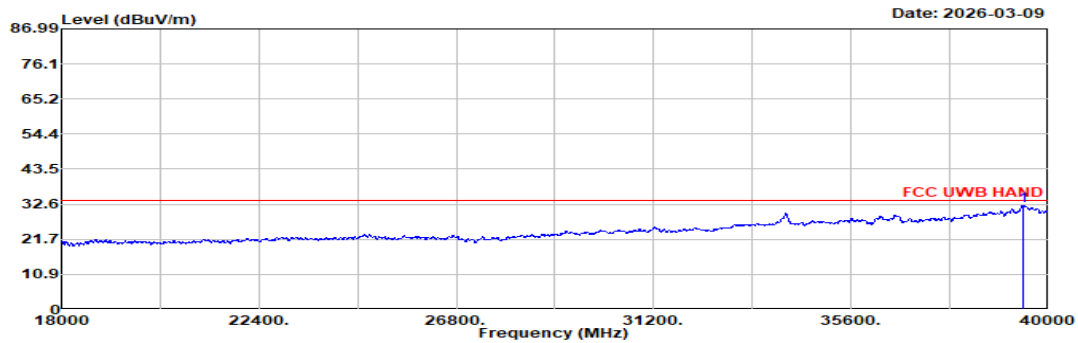
Note 5:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) = Level (dBuV/m)
(Note: Aux Factor = Distance extrapolation factor)



CH09 Radiated Emissions (18GHz – 40GHz)

Test Mode	Mode 15	Polarization	V
Operating Function	Adapter Mode	Test Distance	0.5m



Site : 03CH20-HY
Condition : FCC UWB HAND 1m BBHA9170_1224_250702 Vertical
Project : 503007
Detector : Average
Channel : 09
Modulation : BPRF10
Config : 3
STS Nums : 1
Payload Length: 0
RMS Power : 0x06
Adaptive : 0x00
Calibration : 0x01

Freq	Level	Limit	Margin	Read	Ant	Cable	Preamp	Aux	Aux2	APos	TPos	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	dB	cm	deg	
1 39440.00	32.26	33.93	-1.67	50.84	45.26	8.27	56.55	-15.56	0.00	--	--	Average

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: Average emission setting: RBW=1MHz; VBW=3MHz.

Note 5:

- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
- Corrected Reading: Antenna Factor (dB/m) + Cable Loss (dB) + Read Level (dBuV) - Preamp Factor (dB) + Aux Factor (dB) = Level (dBuV/m)
(Note: Aux Factor = Distance extrapolation factor)



4 Test Equipment and Calibration Data

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	N/A	Oct. 16, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Oct. 15, 2026	Radiation (03CH20-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Dec. 10, 2026	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May. 26, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	May. 25, 2026	Radiation (03CH20-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Mar. 01, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Mar. 01, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Mar. 01, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Signal Analyzer	Keysight	N9010B	MY60240520	10Hz~44GHz	Dec. 10, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Dec. 09, 2026	Radiation (03CH20-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz~1GHz	Oct. 04, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Oct. 03, 2026	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	02360	1GHz-18GHz	Nov. 05, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Nov. 04, 2026	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1224	18GHz-40GHz	Jul. 02, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Jul. 01, 2026	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Dec. 30, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Dec. 29, 2026	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 11, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Nov. 10, 2026	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,8040 15/2,804027/2	N/A	Jan. 15, 2026	Mar. 01, 2026 ~ Mar. 09, 2026	Jan. 14, 2027	Radiation (03CH20-HY)
Hygrometer	TECPEL	DTM-303A	TP211382	N/A	Mar. 31, 2025	Mar. 01, 2026 ~ Mar. 09, 2026	Mar. 30, 2026	Radiation (03CH20-HY)
Software	Audix	N/A	RK-002156	N/A	N/A	Mar. 01, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Mar. 12, 2026	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 12, 2026	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2025	Mar. 12, 2026	Oct. 19, 2026	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 02, 2026	Mar. 12, 2026	Mar. 01, 2027	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 24, 2025	Mar. 12, 2026	Mar. 23, 2026	Conduction (CO07-HY)
Four-Line V-Network	TESEQ	NNB 52	36122	N/A	Mar. 26, 2025	Mar. 12, 2026	Mar. 25, 2026	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 21, 2025	Mar. 12, 2026	Oct. 20, 2026	Conduction (CO07-HY)

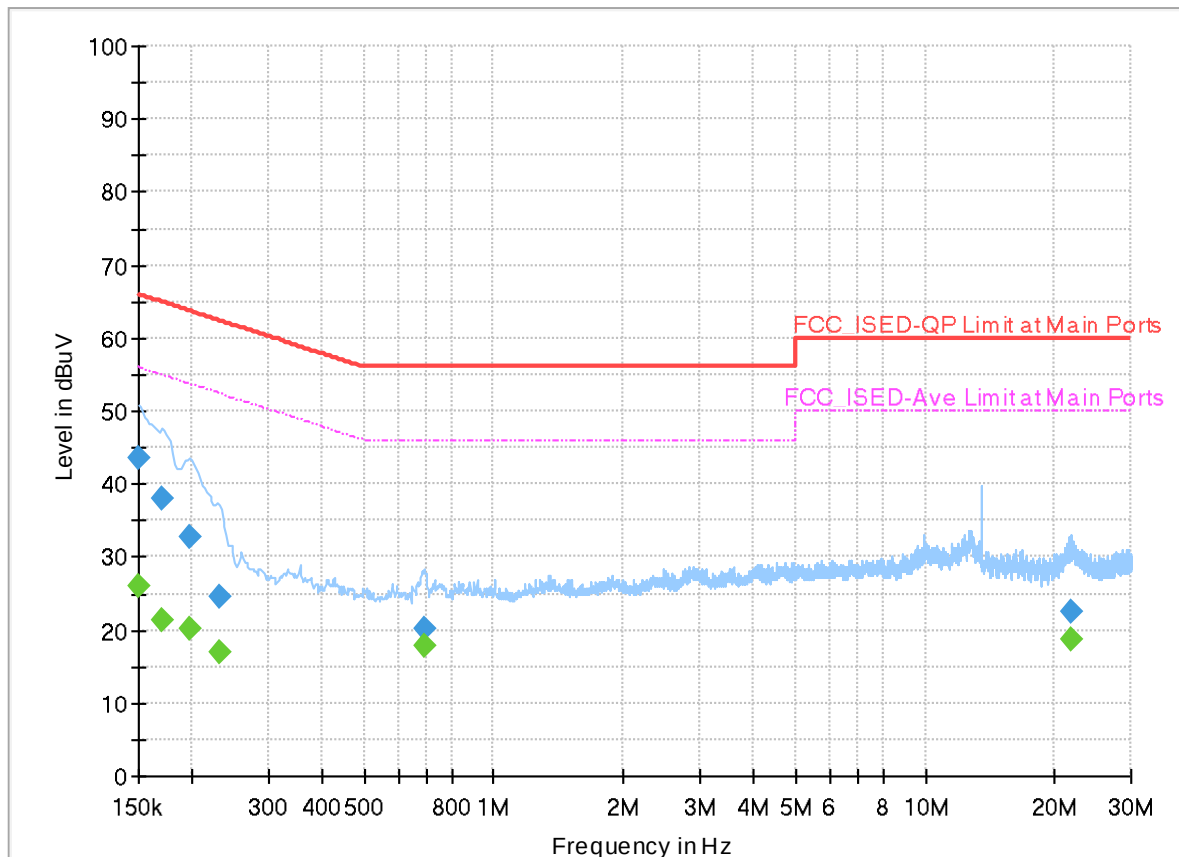


Appendix A. AC Conducted Emission Test Results

EUT Information

Report NO : 503008
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



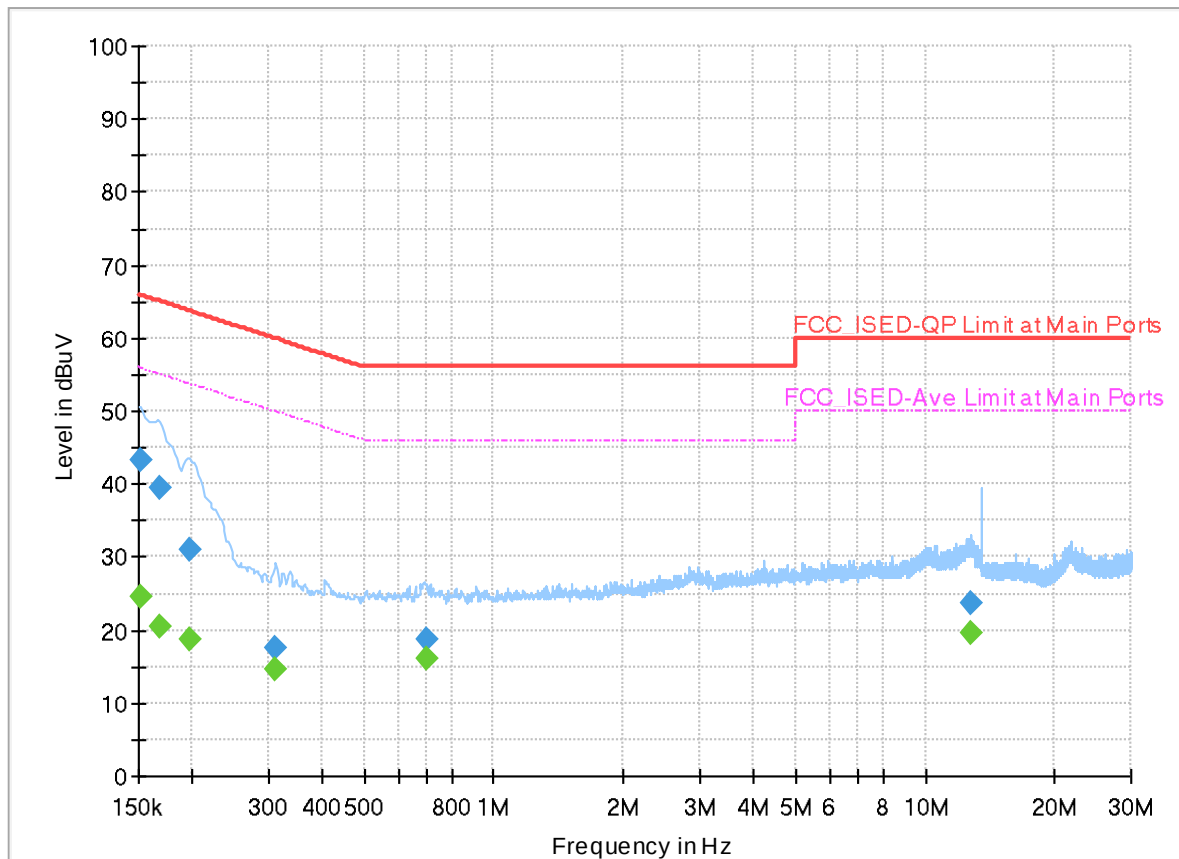
Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	25.92	56.00	30.08	L1	ON	20.0
0.150000	43.66	---	66.00	22.34	L1	ON	20.0
0.170250	---	21.33	54.95	33.62	L1	ON	20.0
0.170250	37.92	---	64.95	27.03	L1	ON	20.0
0.197250	---	20.04	53.73	33.69	L1	ON	20.0
0.197250	32.62	---	63.73	31.11	L1	ON	20.0
0.231000	---	16.88	52.41	35.53	L1	ON	20.0
0.231000	24.67	---	62.41	37.74	L1	ON	20.0
0.687750	---	17.77	46.00	28.23	L1	ON	20.0
0.687750	20.28	---	56.00	35.72	L1	ON	20.0
21.745500	---	18.75	50.00	31.25	L1	ON	20.9
21.745500	22.64	---	60.00	37.36	L1	ON	20.9

EUT Information

Report NO : 5O3008
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	24.66	55.88	31.22	N	ON	20.0
0.152250	43.30	---	65.88	22.58	N	ON	20.0
0.168000	---	20.59	55.06	34.47	N	ON	20.0
0.168000	39.37	---	65.06	25.69	N	ON	20.0
0.197250	---	18.64	53.73	35.09	N	ON	20.0
0.197250	31.12	---	63.73	32.61	N	ON	20.0
0.312000	---	14.68	49.92	35.24	N	ON	20.0
0.312000	17.59	---	59.92	42.33	N	ON	20.0
0.694500	---	16.12	46.00	29.88	N	ON	20.0
0.694500	18.82	---	56.00	37.18	N	ON	20.0
12.747750	---	19.66	50.00	30.34	N	ON	20.6
12.747750	23.71	---	60.00	36.29	N	ON	20.6



Appendix B. Spot Check Evaluation on G1XJ6

Conducted power test and radiated spurious emission test configurations were selected from the worst cases identified in the reference model and tested to demonstrate the test data from reference model remains representative for the variant model.

The deviation between the spot check and the referenced values is within 3dB, therefore data referencing is justified according to the guidance in the ECR inquiry

Summary for power and RSE spot check for each FCC rule part is listed as below:

Test Item	Mode	A4RG0F3Y Reference Worst Result	A4RG1XJ6 Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT	20.62	20.60	0.10
	BLE	19.50	19.40	0.06
	BLE ASK	20.61	20.55	0.10
	BLE GFSK	19.40	19.30	0.30
	WiFi 2.4GHz	20.70	20.40	0.10
	WiFi 5GHz	17.80	17.70	0.02
	UWB	-2.84	-2.86	0.04
	60GHz	-0.83	-0.87	0.48
Radiated Band Edges and Spurious Emission (dBuV/m)	BT	-24.09	-24.57	1.03
	BLE	-11.32	-10.29	1.11
	BLE ASK	-21.81	-22.92	1.23
	BLE GFSK	-7.33	-8.56	1.31
	WiFi 2.4GHz	-2.78	-4.09	0.74
	WiFi 5GHz	-1.57	-2.31	0.01
	UWB	-0.12	-0.11	0.30
	60GHz	-6.71	-6.41	0.10



Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Rule Part	Reference FCC ID (Parent)	Type Grant/ Permissive Change	Reference Exhibit	Full report referenced	FCC ID Filling (Variant)
15C	DSS	BT BR	§15.247	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C BT	Y	A4RG1XJ6
	DTS	BLE	§15.247	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C BLE	Y	A4RG1XJ6
	DSS	BLE ASK	§15.247	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C BLE ASK	Y	A4RG1XJ6
	DTS	BLE GFSK	§15.247	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C BLE GFSK	Y	A4RG1XJ6
	DTS	WiFi	§15.247	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C WLAN2.4G	Y	A4RG1XJ6
	DXX	60GHz	§15.255	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15C 60HJz	Y	A4RG1XJ6
15E	NII	WiFi	§15.407	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15E WLAN UNII-1-4	Y	A4RG1XJ6
15F	UWB	UWB	§15.519	A4RG0F3Y	Original Grant	G0F3Y_FCC Part 15F UWB	Y	A4RG1XJ6



List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Mar. 04, 2026~ Mar. 10, 2026	Dec. 10, 2026	Radiation (03CH21-HY)
Bilog Antenna	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	63303 & 001	30MHz~1GHz	Nov. 26, 2025	Mar. 04, 2026~ Mar. 10, 2026	Nov. 25, 2026	Radiation (03CH21-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C03A18EN	1GHz~18GHz	Aug. 07, 2025	Mar. 04, 2026~ Mar. 10, 2026	Aug. 06, 2026	Radiation (03CH21-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jul. 02, 2025	Mar. 04, 2026~ Mar. 10, 2026	Jul. 01, 2026	Radiation (03CH21-HY)
Amplifier	SONOMA	310N	421580	30MHz~1GHz	Jul. 13, 2025	Mar. 04, 2026~ Mar. 10, 2026	Jul. 12, 2026	Radiation (03CH21-HY)
Amplifier	EMEC	EM01G18GA	060876	1GHz~18GHz	Sep. 26, 2025	Mar. 04, 2026~ Mar. 10, 2026	Sep. 25, 2026	Radiation (03CH21-HY)
Preamplifier	EMEC	EM18G40G	060873	18GHz~40GHz	Aug. 26, 2025	Mar. 04, 2026~ Mar. 10, 2026	Aug. 25, 2026	Radiation (03CH21-HY)
EXA Signal Analyzer	Keysight	N9010B	MY62170358	10Hz~44GHz	Sep. 09, 2025	Mar. 04, 2026~ Mar. 10, 2026	Sep. 08, 2026	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 05, 2025	Mar. 04, 2026~ Mar. 03, 2026	Mar. 04, 2026	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 04, 2026	Mar. 04, 2026~ Mar. 10, 2026	Mar. 03, 2027	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804397/2,804612/2,803954/2	30MHz~40GHz	Aug. 11, 2025	Mar. 04, 2026~ Mar. 10, 2026	Aug. 10, 2026	Radiation (03CH21-HY)
RF Cable	EMCI	EMC101Y-KM-K M-1000	240906	30MHz~40GHz	Oct. 21, 2025	Mar. 04, 2026~ Mar. 10, 2026	Oct. 20, 2026	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP211568	N/A	Oct. 21, 2025	Mar. 04, 2026~ Mar. 10, 2026	Oct. 20, 2026	Radiation (03CH21-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Mar. 04, 2026~ Mar. 10, 2026	N/A	Radiation (03CH21-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 04, 2026~ Mar. 10, 2026	N/A	Radiation (03CH21-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Mar. 04, 2026~ Mar. 10, 2026	N/A	Radiation (03CH21-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Mar. 04, 2026~ Mar. 10, 2026	N/A	Radiation (03CH21-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	N/A	Oct. 16, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Oct. 15, 2026	Radiation (03CH20-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Dec. 10, 2026	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May. 26, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	May. 25, 2026	Radiation (03CH20-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Mar. 04, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Mar. 04, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Mar. 04, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)
Signal Analyzer	Keysight	N9010B	MY60240520	10Hz~44GHz	Dec. 10, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Dec. 09, 2026	Radiation (03CH20-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-0 6	47020 & 06	30MHz~1GHz	Oct. 04, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Oct. 03, 2026	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	02360	1GHz-18GHz	Nov. 05, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Nov. 04, 2026	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	1224	18GHz-40GHz	Jul. 02, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Jul. 01, 2026	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Dec. 30, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Dec. 29, 2026	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 11, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Nov. 10, 2026	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,8040 15/2,804027/2	N/A	Jan. 15, 2026	Mar. 04, 2026 ~ Mar. 09, 2026	Jan. 14, 2027	Radiation (03CH20-HY)
Hygrometer	TECPEL	DTM-303A	TP211382	N/A	Mar. 31, 2025	Mar. 04, 2026 ~ Mar. 09, 2026	Mar. 30, 2026	Radiation (03CH20-HY)
Software	Audix	N/A	RK-002156	N/A	N/A	Mar. 04, 2026 ~ Mar. 09, 2026	N/A	Radiation (03CH20-HY)

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Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Nov. 26, 2025	Mar. 11, 2026~ Mar. 13, 2026	Nov. 25, 2026	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Mar. 11, 2026~ Mar. 13, 2026	Dec. 10, 2026	Radiation (03CH11-HY)
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Sep. 15, 2025	Mar. 11, 2026~ Mar. 13, 2026	Sep. 14, 2026	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1224	18GHz~40GHz	Jul. 02, 2025	Mar. 11, 2026~ Mar. 13, 2026	Jul. 01, 2026	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 06, 2025	Mar. 11, 2026~ Mar. 13, 2026	Dec. 05, 2026	Radiation (03CH11-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-56-01-A70	EC1900249	1GHz~18GHz	Jan. 20, 2026	Mar. 11, 2026~ Mar. 13, 2026	Jan. 19, 2027	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May 26, 2025	Mar. 11, 2026~ Mar. 13, 2026	May 25, 2026	Radiation (03CH11-HY)
Signal Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 23, 2025	Mar. 11, 2026~ Mar. 13, 2026	Oct. 22, 2026	Radiation (03CH11-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290045	20Hz~8.4GHz	Apr. 21, 2025	Mar. 11, 2026~ Mar. 13, 2026	Apr. 20, 2026	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Mar. 11, 2026~ Mar. 13, 2026	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 11, 2026~ Mar. 13, 2026	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Mar. 11, 2026~ Mar. 13, 2026	N/A	Radiation (03CH11-HY)
Software	Audix	E3	RK-002391	N/A	N/A	Mar. 11, 2026~ Mar. 13, 2026	N/A	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP210117	N/A	Oct. 02, 2025	Mar. 11, 2026~ Mar. 13, 2026	Oct. 01, 2026	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP200880	N/A	Aug. 26, 2025	Mar. 11, 2026~ Mar. 13, 2026	Aug. 25, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804013/2	30M~40G	Mar. 04, 2026	Mar. 11, 2026~ Mar. 13, 2026	Mar. 03, 2027	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 04, 2026	Mar. 11, 2026~ Mar. 13, 2026	Mar. 03, 2027	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30M~40G	Mar. 04, 2026	Mar. 11, 2026~ Mar. 13, 2026	Mar. 03, 2027	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	805139 2	9K~30M	Mar. 04, 2026	Mar. 11, 2026~ Mar. 13, 2026	Mar. 03, 2027	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	805139 2	30M~40G	Mar. 04, 2026	Mar. 11, 2026~ Mar. 13, 2026	Mar. 03, 2027	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1.53GHz Low Pass Filter	Sep. 09, 2025	Mar. 11, 2026~ Mar. 13, 2026	Sep. 08, 2026	Radiation (03CH11-HY)

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Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSW43	101456	2Hz to 43.5GHz	Feb 04, 2026	Mar 06, 2026 ~ Mar 13, 2026	Feb 03, 2027	Radiation (03CH18-HY)
Harmonic Mixer	Rohde & Schwarz	RPG FS-Z75	102042	50 GHz to 75 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Harmonic Mixer*	Rohde & Schwarz	RPG FS-Z60	101033	40GHz to 60GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Harmonic Mixer*	Rohde & Schwarz	FSZ-90	101867	60GHz to 90GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Harmonic Mixer*	Rohde & Schwarz	RPG FS-Z140	101130	90GHz to 140GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Harmonic Mixer	Rohde & Schwarz	RPG FS-Z220	101042	140GHz to 220GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-VPRR00	1371800008	50-75 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-UPRR00	1410300003	40-60 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-EPRR00	1372000000	60-90 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-FPRR00	1011500008	90-140 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-GPRR00	QWH-GPRR00-01	140-220 GHz	Jun 27, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jun 26, 2027	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801607/2	N/A	Dec 24, 2025	Mar 06, 2026 ~ Mar 13, 2026	Dec 23, 2026	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519231/2	N/A	Dec 24, 2025	Mar 06, 2026 ~ Mar 13, 2026	Dec 23, 2026	Radiation (03CH18-HY)
Detector	Quinstars	QEA-FBFBVP	2672009	50 ~ 75 GHz	Jul 09, 2024	Mar 06, 2026 ~ Mar 13, 2026	Jul 08, 2027	Radiation (03CH18-HY)
Oscilloscope	Rohde & Schwarz	RTO 1002	400025	600MHz, 10GSa/sec	Aug 29, 2025	Mar 06, 2026 ~ Mar 13, 2026	Aug 28, 2026	Radiation (03CH18-HY)
Temperature Chamber	ESPEC	SU-641	92013720	-40°C ~90°C	Sep. 10, 2025	Mar 06, 2026 ~ Mar 13, 2026	Sep. 09, 2026	Radiation (03CH18-HY)
AC Power Source	AC POWER	AFC-500W	F104070011	50Hz~60Hz	May 12, 2025	Mar 06, 2026 ~ Mar 13, 2026	N/A	Radiation (03CH18-HY)

Note: (*) Equipment manufacturer's Calibration Certificate.



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Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 04, 2025	Mar. 06, 2026	Nov. 03, 2026	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 37 (NO:167)	10MHz~6GHz	Nov. 14, 2025	Mar. 06, 2026	Nov. 13, 2026	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101468	10HZ~44GHZ	Mar. 13, 2025	Mar. 06, 2026	Mar. 12, 2026	Conducted (TH05-HY)
Switch Control Mainframe	E-Instument	ETF-1405-0	EC1900067 (BOX7)	N/A	Jul. 02, 2025	Mar. 06, 2026	Jul. 01, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_version_240513	N/A	Conducted Other Test Item	N/A	Mar. 06, 2026	N/A	Conducted (TH05-HY)

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