The following test report with report number FR5N0815-01J is an addendum to the RF spot check test report for FCC ID: A4RGM45K variant model GM45K.
It contains test data from FCC ID: A4RG7SWN reference model G7SWN that is referenced in the variant model GM45K RF spot check report.

FCC RADIO TEST REPORT

BLUETOOTH EDR

FCC ID	:	**A4RG7SWN**
Equipment	:	**Phone**
Model Name	:	**G7SWN**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC Part 15 Subpart C §15.247**

The product was received on Nov. 25, 2025 and testing was performed from Dec. 09, 2025 to Mar. 07, 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
FR5N0815-01J	01	Initial issue of report	Mar. 26, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.247(b)(3) 15.247(b)(4)	Output Power	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges and Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Spurious Emission	Pass	-
3.6	15.207	AC Conducted Emission	Pass	-
3.7	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. 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/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. 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: William Chen

Report Producer:Lili Lu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs GSM/WCDMA/LTE/5G NR/NTN, Bluetooth, BLE, BLE channel sounding, Thread, Wi-Fi 802.11be, NFC, WPC Rx, UWB and GNSS Rx. **Antenna Type** Bluetooth: **<Ant. 3>:** IFA Antenna **<Ant. 4>:** IFA Antenna

EUT Information List	
S/N	**Performed Test Item**
61061FDKX00033	RF Conducted Measurement
61061FDKX0002L	Radiated Spurious Emission
61061FDKX0003L	Conducted Emission

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	Ant.3: -3.6 Ant.4: -1.8

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

1.1.1 Antenna Directional Gain

Follows FCC KDB 662911 D01 Multiple Transmitter Output **v02r01** F)2)f)ii)

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

As minimum N_{SS}=1 is supported by EUT, the formula can be simplified as:

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi

Where G1, G2….GN denote single antenna gain.

The directional gain "DG" is calculated as following table.

	Ant 3 (dBi)	Ant 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Bluetooth	-3.60	-1.80	0.36	0.36	0.00	0.00

Calculation example:

If a device has two antenna, G_{ANT3} = -3.6 dBi; G_{ANT4} = -1.8 dBi

Directional gain derived from formula which is

10 x log { { [10^ (-3.6 dBi / 20) + 10^ (-1.8 dBi / 20)] ^ 2 } / 2 }

= 0.36 dBi

Power and PSD limit reduction = Composite gain – 6dBi, (min = 0)

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

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.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, CO07-HY 03CH11-HY

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

FCC designation No.: TW3786

1.4 Applicable Standards

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

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- FCC KDB 414788 D01 Radiated Test Site v01r01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2020 + Cor.1-2023

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	0	2402	27	2429	54	2456
	1	2403	28	2430	55	2457
	2	2404	29	2431	56	2458
	3	2405	30	2432	57	2459
	4	2406	31	2433	58	2460
	5	2407	32	2434	59	2461
	6	2408	33	2435	60	2462
	7	2409	34	2436	61	2463
	8	2410	35	2437	62	2464
	9	2411	36	2438	63	2465
	10	2412	37	2439	64	2466
	11	2413	38	2440	65	2467
	12	2414	39	2441	66	2468
	13	2415	40	2442	67	2469
	14	2416	41	2443	68	2470
	15	2417	42	2444	69	2471
	16	2418	43	2445	70	2472
	17	2419	44	2446	71	2473
	18	2420	45	2447	72	2474
	19	2421	46	2448	73	2475
	20	2422	47	2449	74	2476
	21	2423	48	2450	75	2477
	22	2424	49	2451	76	2478
	23	2425	50	2452	77	2479
	24	2426	51	2453	78	2480
	25	2427	52	2454	-	-
	26	2428	53	2455	-	-

2.2 Test Mode

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, 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 accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane with Adapter for as worst plane.

b. The SISO mode conducted power is covered by MIMO mode per chain, so only the MIMO mode is tested.

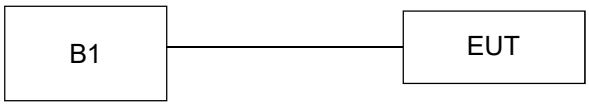
c. AC power line Conducted Emission was tested under maximum output power.

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases		
Test Item	**Data Rate / Modulation**	
Conducted Test Cases	**Bluetooth EDR 2Mbps π/4-DQPSK**	**Bluetooth EDR 3Mbps 8-DPSK**
	Mode 1: CH00_2402 MHz Mode 2: CH39_2441 MHz Mode 3: CH78_2480 MHz	Mode 4: CH00_2402 MHz Mode 5: CH39_2441 MHz Mode 6: CH78_2480 MHz
AC Conducted Emission	Mode 3 : Bluetooth EDR 3Mbps Channel 39 Tx + USB Cable 2 (Charging from AC Adapter)	

Remark:
1. For Radiated Test Cases, the tests were performed with USB Cable 2.
2. During the preliminary test, both charging modes (Adapter mode and WPC Rx mode) were verified. It is determined that the adaptor mode is the worst case for official test.
3. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.
4. The detailed Radiated test modes are shown in Appendix C.

2.3 Connection Diagram of Test System



Conduction Test Setup									
No.	Power Source	Connection Type	Test Mode						
			3	-	-	-	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	X	-	-	-	-	-	-

Radiation Tx Test Setup									
No.	Power Source	Connection Type	Test Mode						
			4~8	-	-	-	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	X	-	-	-	-	-	-

2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Adapter	N/A	GW8L7	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “BT DUT Control GUI.exe (Ver 09-04-25)” for DTS was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

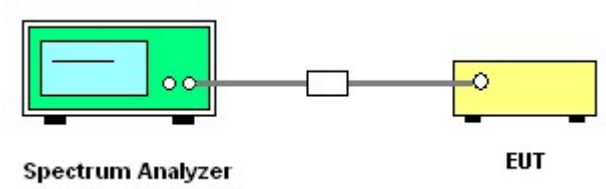
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
6. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.

3.1.6 Test Result of 99% Occupied Bandwidth

Please refer to Appendix A.

3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna of directional gain greater than 6 dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

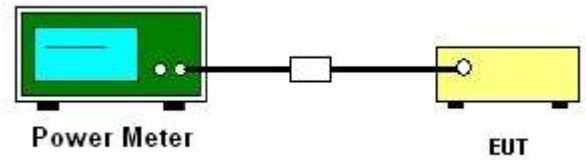
3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

1. For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.3 PKPM1.
2. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
3. The RF output of EUT is connected to the power meter by RF cable and attenuator.
4. The path loss is compensated to the results for each measurement.
5. Set the maximum power setting and enable the EUT to transmit continuously.
6. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Please refer to Appendix A.

3.2.6 Test Result of Average Output Power (Reporting Only)

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band at any time interval of continuous transmission.

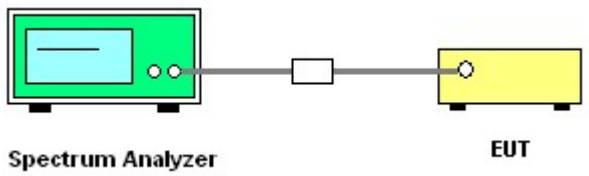
3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth (VBW) = 10 kHz. In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6 dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. The Measured power density (dBm)/ 100 kHz is a reference level and is used as 20 dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission

All harmonics/spurious must be at least 20 dB down from the highest emission level within the authorized band.

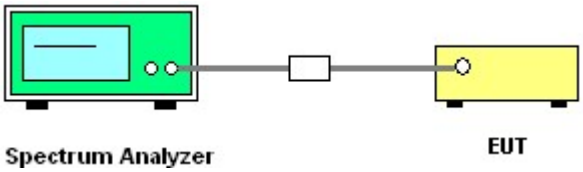
3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedure

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Set RBW = 100 kHz, VBW = 300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



3.4.5 Test Result of Conducted Band Edges Plots

Please refer to Appendix A.

3.4.6 Test Result of Conducted Spurious Emission Plots

Please refer to Appendix A.

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

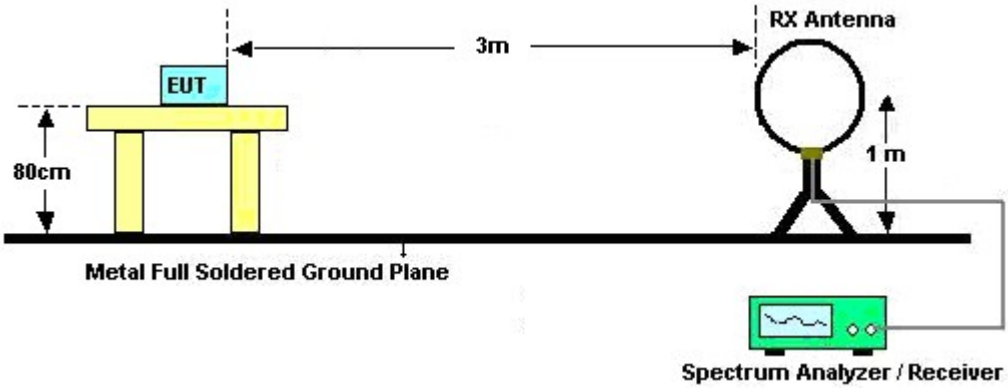
Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

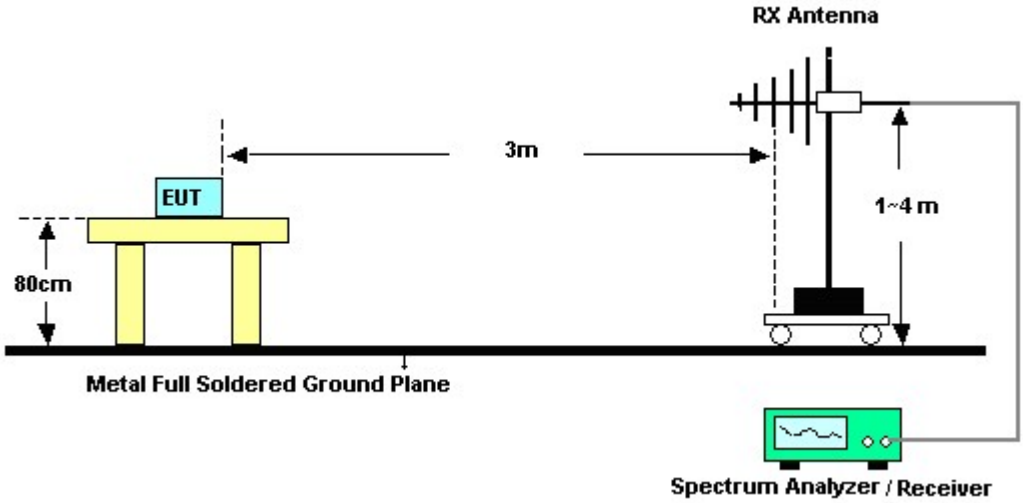
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".
8. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW = 100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW = 3 MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

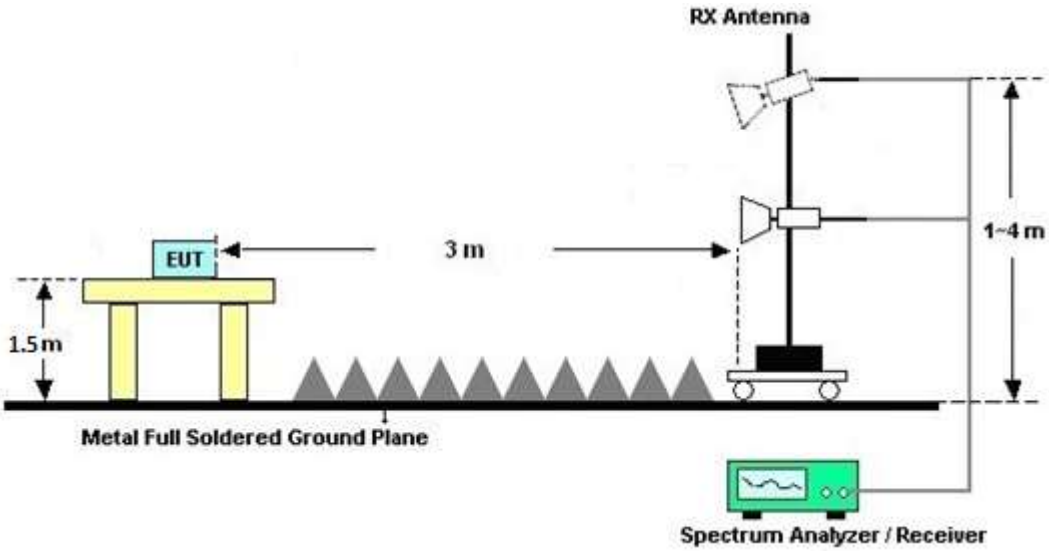
For radiated test below 30MHz



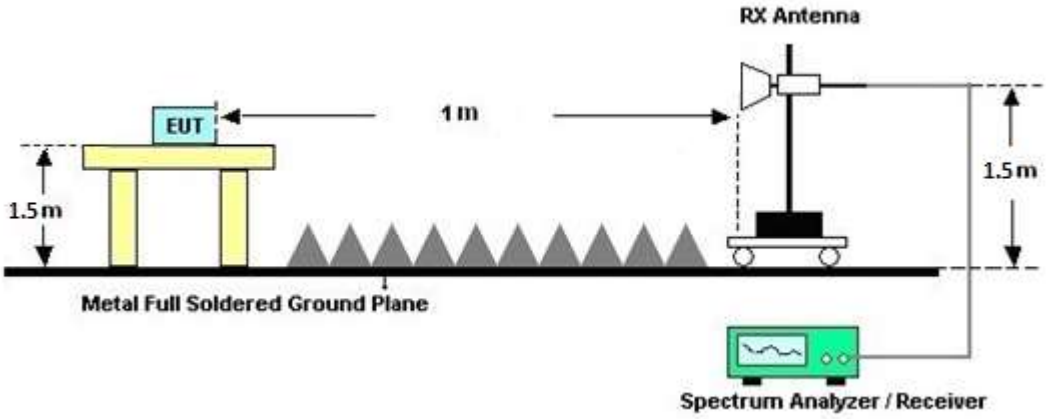
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.5.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not 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 comes out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.5.7 Duty Cycle

Please refer to Appendix D.

3.5.8 Test Result of Radiated Spurious Emission (30 MHz ~ 10th Harmonic)

Please refer to Appendix C.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

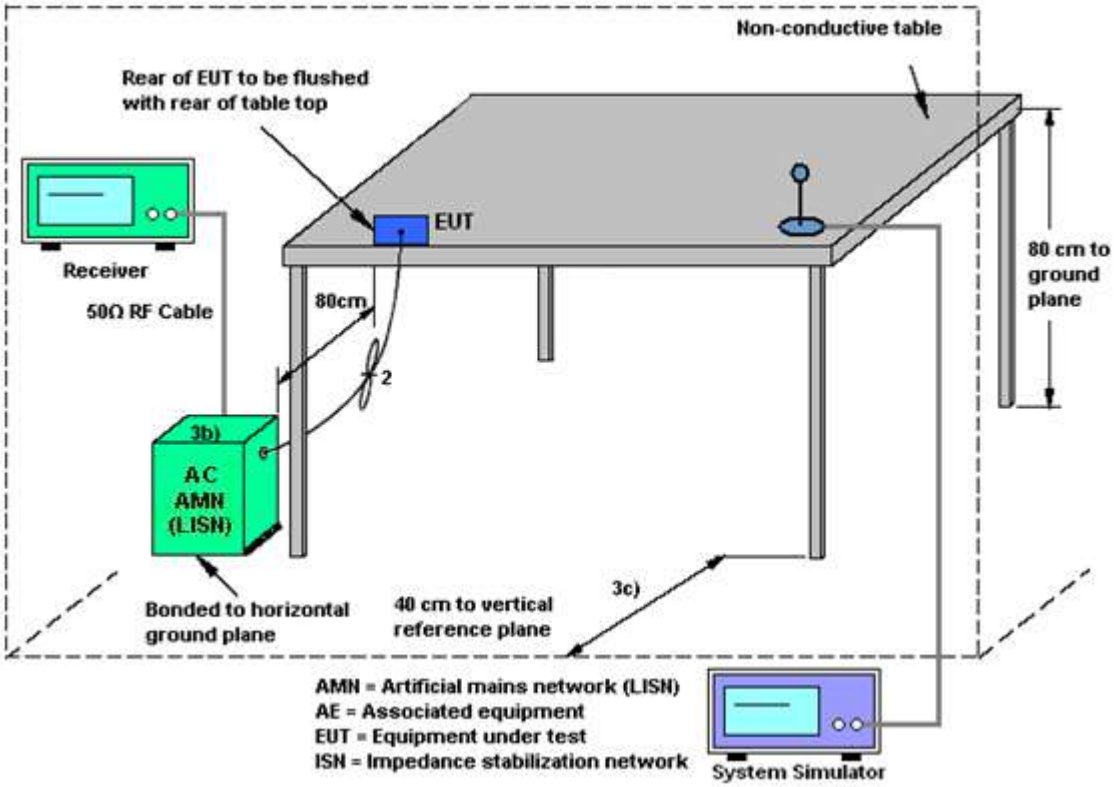
3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.7.2 Antenna Anti-Replacement Construction

b) Unique (non-standard) antenna connector.

(3) Use of a standard connector is also allowed if the connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter, where such disassembly is not normally required. The user manual must not show that user has access to the connector.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9kHz~30MHz	Mar. 06, 2025	Dec. 09, 2025~ Feb. 11, 2026	Mar. 05, 2026	Radiation (03CH11-HY)
Bilog Antenna with 6dB pad	TESEQ & VGT	CBL 6111D & VFA_Z-04002-N-06	66925 & 24006	30MHz~1GHz	Feb. 19, 2025	Dec. 09, 2025~ Feb. 11, 2026	Feb. 18, 2026	Radiation (03CH11-HY)
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Sep. 15, 2025	Dec. 09, 2025~ Feb. 11, 2026	Sep. 14, 2026	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1225	18GHz~40GHz	Jul. 02, 2025	Dec. 09, 2025~ Feb. 11, 2026	Jul. 01, 2026	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 06, 2025	Dec. 09, 2025~ Feb. 11, 2026	Dec. 05, 2026	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Mar. 24, 2025	Dec. 09, 2025~ Feb. 11, 2026	Mar. 23, 2026	Radiation (03CH11-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-56-01-A70	EC1900249	1GHz~18GHz	Jan. 21, 2025	Dec. 09, 2025~ Jan. 19, 2026	Jan. 20, 2026	Radiation (03CH11-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-56-01-A70	EC1900249	1GHz~18GHz	Jan. 20, 2026	Jan. 20, 2026~ Feb. 11, 2026	Jan. 19, 2027	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May 26, 2025	Dec. 09, 2025~ Feb. 11, 2026	May 25, 2026	Radiation (03CH11-HY)
Signal Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 23, 2025	Dec. 09, 2025~ Feb. 11, 2026	Oct. 22, 2026	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	20MHz~8.4GHz	Jul. 22, 2025	Dec. 09, 2025~ Feb. 11, 2026	Jul. 21, 2026	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP200880	N/A	Aug. 26, 2025	Dec. 09, 2025~ Feb. 11, 2026	Aug. 25, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804013/2	30MHz~40GHz	Mar. 05, 2025	Dec. 09, 2025~ Feb. 11, 2026	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 05, 2025	Dec. 09, 2025~ Feb. 11, 2026	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30MHz~40GHz	Mar. 05, 2025	Dec. 09, 2025~ Feb. 11, 2026	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	805139/2	30MHz~40GHz	May 10, 2025	Dec. 09, 2025~ Feb. 11, 2026	May 09, 2026	Radiation (03CH11-HY)
Notch Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 09, 2025	Dec. 09, 2025~ Feb. 11, 2026	Sep. 08, 2026	Radiation (03CH11-HY)
Notch Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1.53GHz Low Pass Filter	Sep. 09, 2025	Dec. 09, 2025~ Feb. 11, 2026	Sep. 08, 2026	Radiation (03CH11-HY)
Attenuator	HONOVA	5910 SMA-50-005	0028	N/A	Sep. 09, 2025	Dec. 09, 2025~ Feb. 11, 2026	Sep. 08, 2026	Radiation (03CH11-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Dec. 09, 2025~ Feb. 11, 2026	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Dec. 09, 2025~ Feb. 11, 2026	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Dec. 09, 2025~ Feb. 11, 2026	N/A	Radiation (03CH11-HY)
Software	Audix	E3	RK-002391	N/A	N/A	Dec. 09, 2025~ Feb. 11, 2026	N/A	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 04, 2025	Feb. 12, 2026~ Feb. 27, 2026	Nov. 03, 2026	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO37 (NO:167)	10MHz~6GHz	Nov. 14, 2025	Feb. 12, 2026~ Feb. 27, 2026	Nov. 13, 2026	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 29, 2025	Feb. 12, 2026~ Feb. 27, 2026	Aug. 28, 2026	Conducted (TH05-HY)
Switch Control Mainframe	E-Instument	ETF-1405-0	EC1900067 (BOX7)	N/A	Jul. 02, 2025	Feb. 12, 2026~ Feb. 27, 2026	Jul. 01, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_version_240513	N/A	Conducted Other Test Item	N/A	Feb. 12, 2026~ Feb. 27, 2026	N/A	Conducted (TH05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2025	Feb. 08, 2026~ Mar. 07, 2026	Oct. 19, 2026	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 03, 2025	Feb. 08, 2026~ Mar. 01, 2026	Mar. 02, 2026	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 02, 2026	Mar. 02, 2026~ Mar. 07, 2026	Mar. 01, 2027	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 24, 2025	Feb. 08, 2026~ Mar. 07, 2026	Mar. 23, 2026	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 21, 2025	Feb. 08, 2026~ Mar. 07, 2026	Oct. 20, 2026	Conduction (CO07-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Feb. 08, 2026~ Mar. 07, 2026	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Feb. 08, 2026~ Mar. 07, 2026	N/A	Conduction (CO07-HY)

5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.7 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.50 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.90 dB

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.70 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.90 dB

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Joseph Hu	Temperature:	21~25	°C
Test Date:	2026/2/12~2026/02/27	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass /Fail
					Ant3	Ant4	Ant3	Ant4		
2DH	2Mbps	2	0	2402	1.194	1.195	1.074	1.072	0.50	Pass
2DH	2Mbps	2	39	2441	1.193	1.194	1.073	1.073	0.50	Pass
2DH	2Mbps	2	78	2480	1.193	1.193	1.074	1.071	0.50	Pass
3DH	3Mbps	2	0	2402	1.170	1.171	1.062	1.066	0.50	Pass
3DH	3Mbps	2	39	2441	1.170	1.171	1.066	1.065	0.50	Pass
3DH	3Mbps	2	78	2480	1.171	1.170	1.062	1.060	0.50	Pass

TEST RESULTS DATA
Peak Power Table

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)	DG (dBi)	Total EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
					Ant3	Ant4	SUM					
2DH	2Mbps	2	0	2402	21.77	21.25	24.53	30.00	0.36	24.89	36.00	Pass
2DH	2Mbps	2	39	2441	21.89	21.43	24.68	30.00	0.36	25.04	36.00	Pass
2DH	2Mbps	2	78	2480	21.38	20.86	24.14	30.00	0.36	24.50	36.00	Pass
3DH	3Mbps	2	0	2402	22.04	21.44	24.76	30.00	0.36	25.12	36.00	Pass
3DH	3Mbps	2	39	2441	22.30	21.79	25.06	30.00	0.36	25.42	36.00	Pass
3DH	3Mbps	2	78	2480	21.61	21.33	24.48	30.00	0.36	24.84	36.00	Pass

TEST RESULTS DATA
Average Power Table
(Reporting Only)

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Duty Factor (dB)
					Ant3	Ant4	SUM	
2DH	2Mbps	2	0	2402	18.69	18.05	21.39	5.06
2DH	2Mbps	2	39	2441	18.98	18.37	21.70	5.06
2DH	2Mbps	2	78	2480	18.43	17.79	21.13	5.06
3DH	3Mbps	2	0	2402	18.67	18.01	21.36	5.06
3DH	3Mbps	2	39	2441	18.95	18.35	21.67	5.06
3DH	3Mbps	2	78	2480	18.42	17.78	21.12	5.06

TEST RESULTS DATA
Peak Power Density

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	Peak PSD Worst +3.01 (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass /Fail
2DH	2Mbps	2	0	2402	18.48	4.81	7.82	0.36	8.00	Pass
2DH	2Mbps	2	39	2441	18.34	4.65	7.66	0.36	8.00	Pass
2DH	2Mbps	2	78	2480	17.69	3.95	6.96	0.36	8.00	Pass
3DH	3Mbps	2	0	2402	17.97	4.97	7.98	0.36	8.00	Pass
3DH	3Mbps	2	39	2441	18.24	4.74	7.75	0.36	8.00	Pass
3DH	3Mbps	2	78	2480	17.94	4.39	7.40	0.36	8.00	Pass

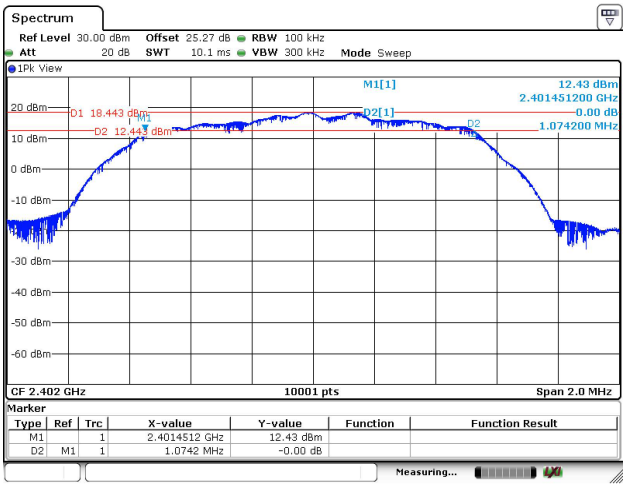
Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

Number of TX = 2, Ant. 3 (Measured)

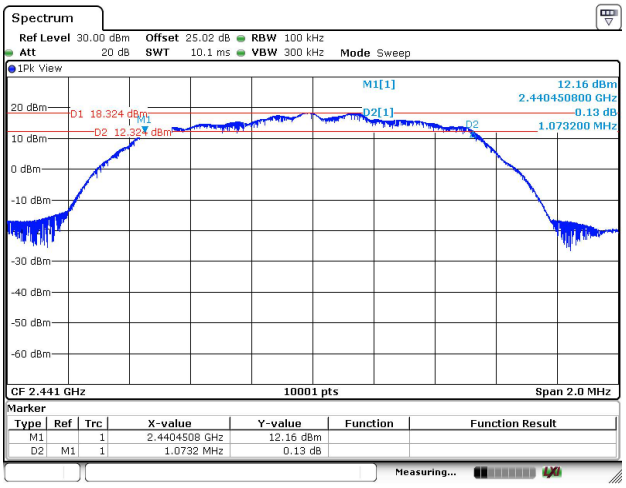
6dB Bandwidth

<2Mbps>

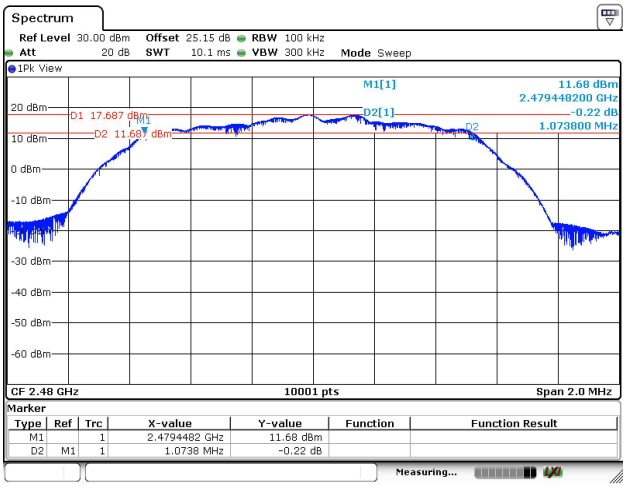
6 dB Bandwidth Plot on Channel 00



6 dB Bandwidth Plot on Channel 39

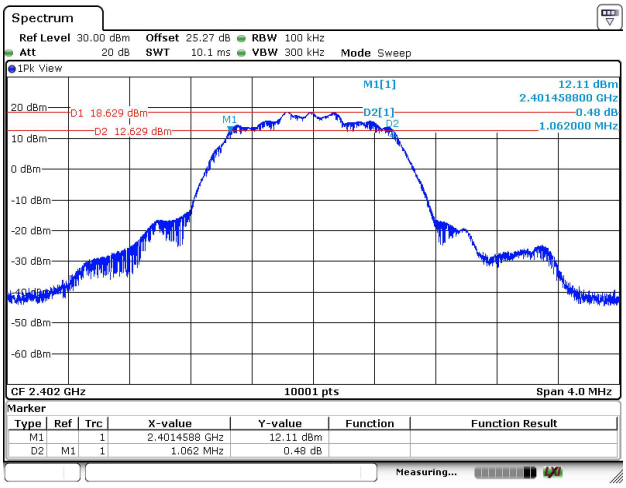


6 dB Bandwidth Plot on Channel 78

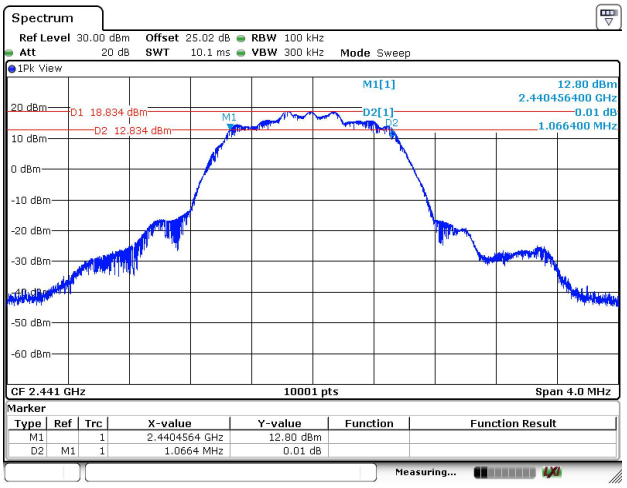


<3Mbps>

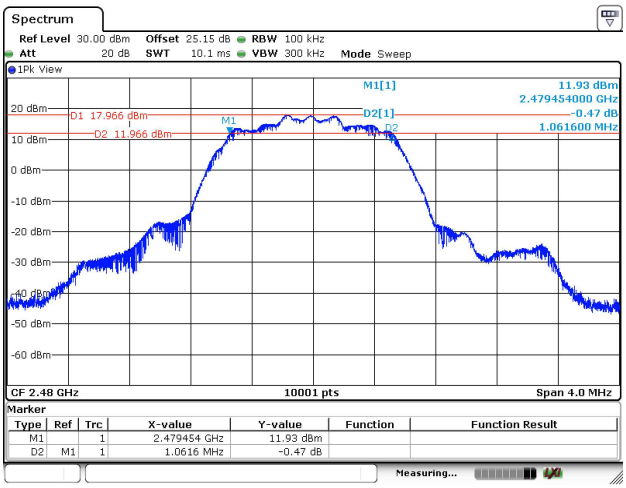
6 dB Bandwidth Plot on Channel 00



6 dB Bandwidth Plot on Channel 39



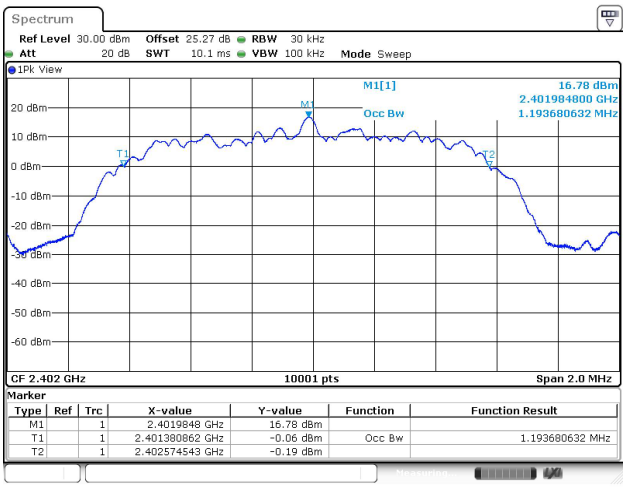
6 dB Bandwidth Plot on Channel 78



99% Occupied Bandwidth

<2Mbps>

99% Occupied Bandwidth Plot on Channel 00



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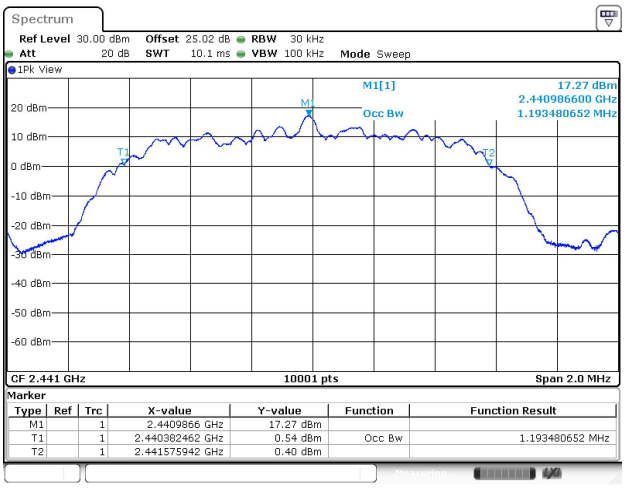
99% Occupied Bandwidth Plot on Channel 39



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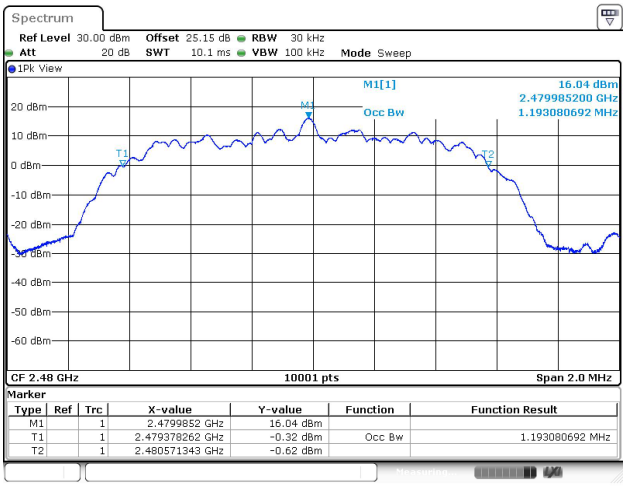
99% Occupied Bandwidth Plot on Channel 78



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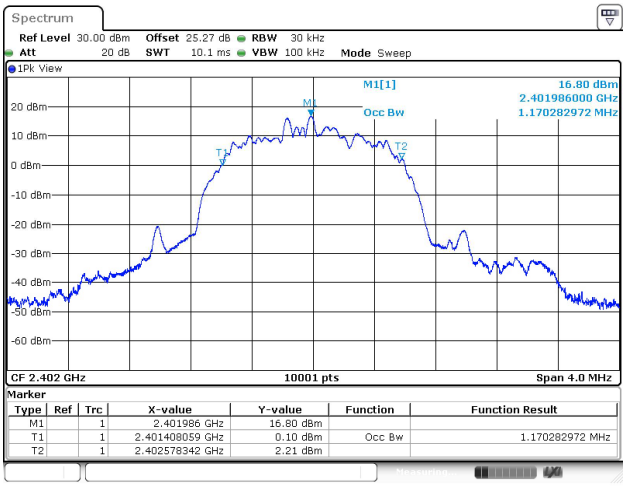
<3Mbps>

99% Occupied Bandwidth Plot on Channel 00



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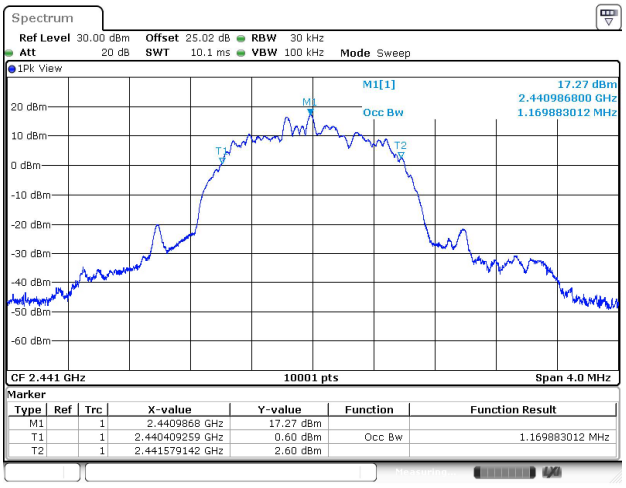
99% Occupied Bandwidth Plot on Channel 39



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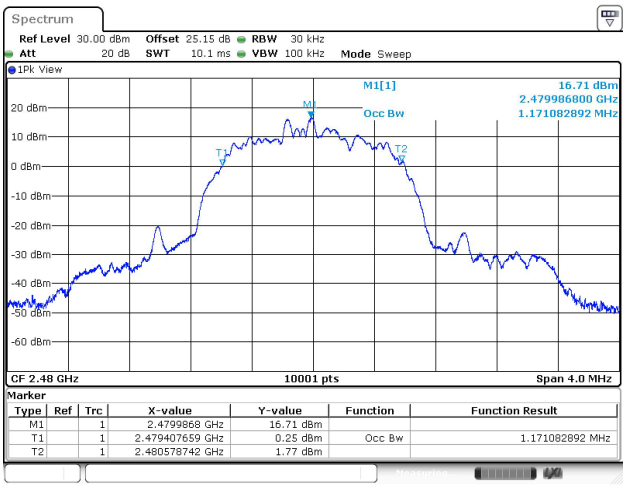
99% Occupied Bandwidth Plot on Channel 78



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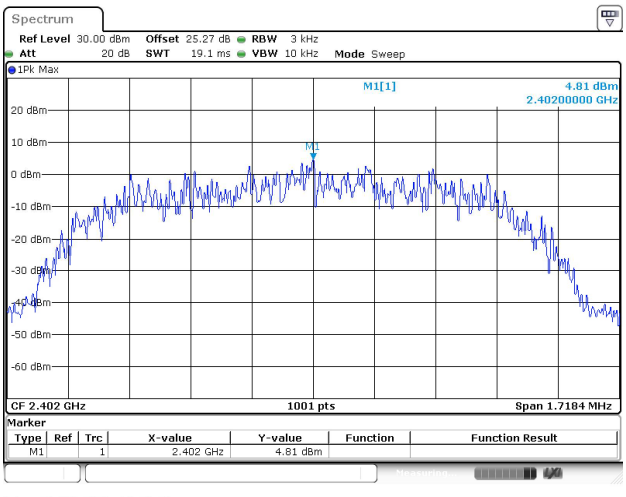
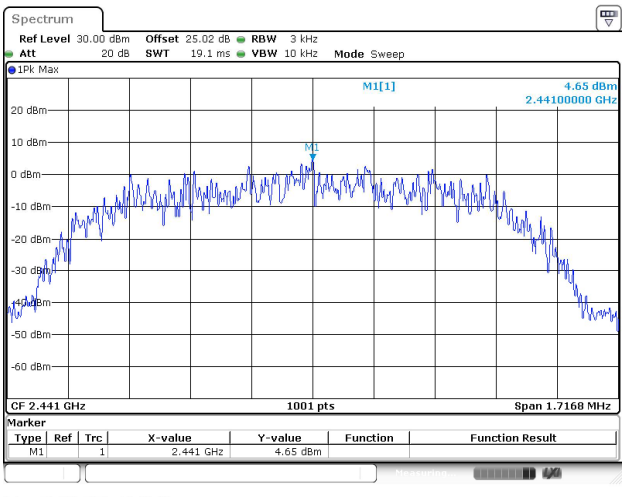
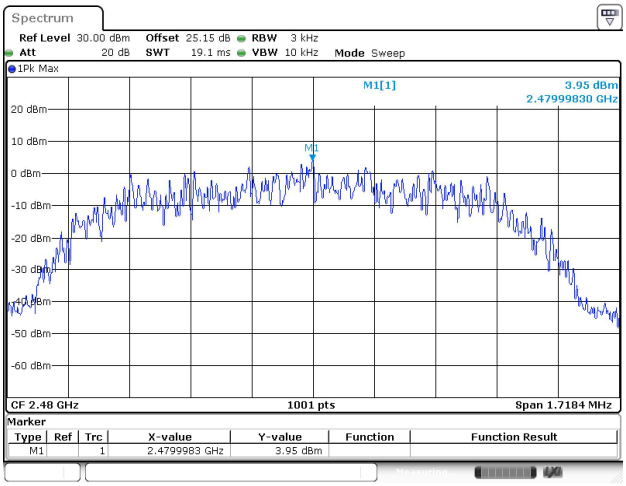
Power Spectral Density (dBm/3kHz)

<2Mbps>

Power Density (dBm/3kHz) Plot Channel 00	Power Density (dBm/3kHz) Plot Channel 39
	
Power Density (dBm/3kHz) Plot Channel 78	
	

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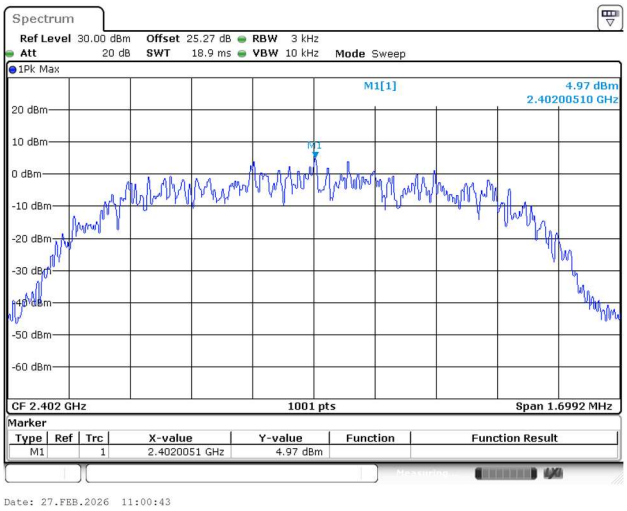
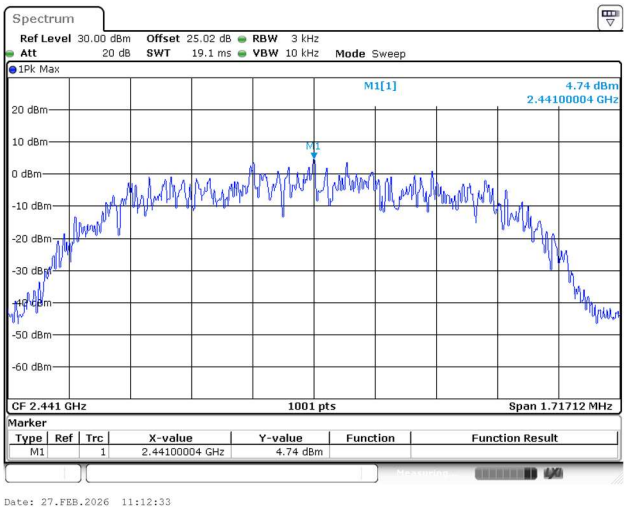
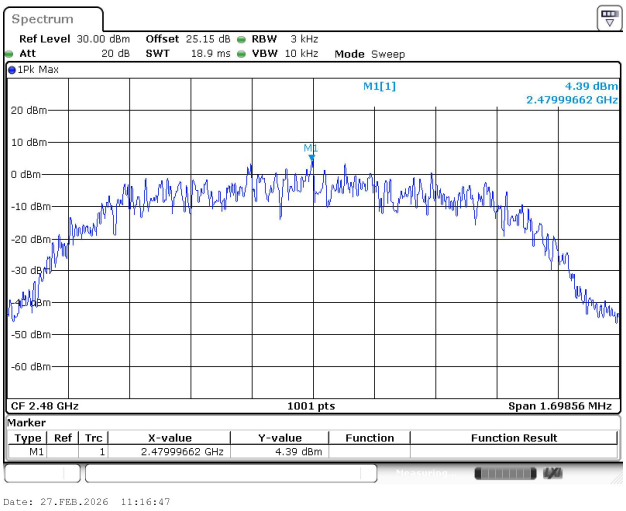
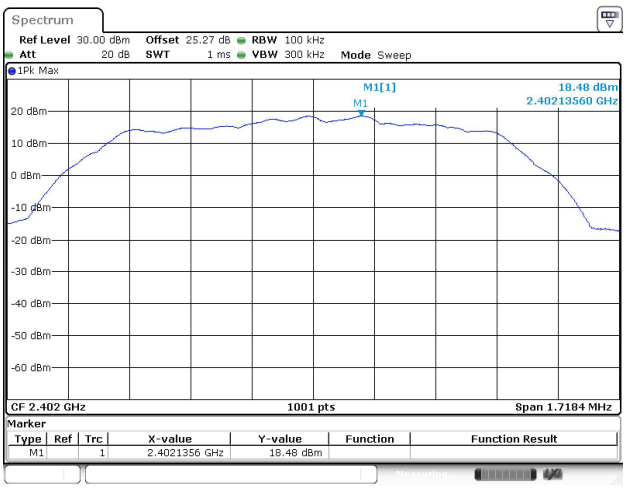
Power Density (dBm/3kHz) Plot Channel 00	Power Density (dBm/3kHz) Plot Channel 39
	
Power Density (dBm/3kHz) Plot Channel 78	
	

Band Edge and Conducted Spurious Emission

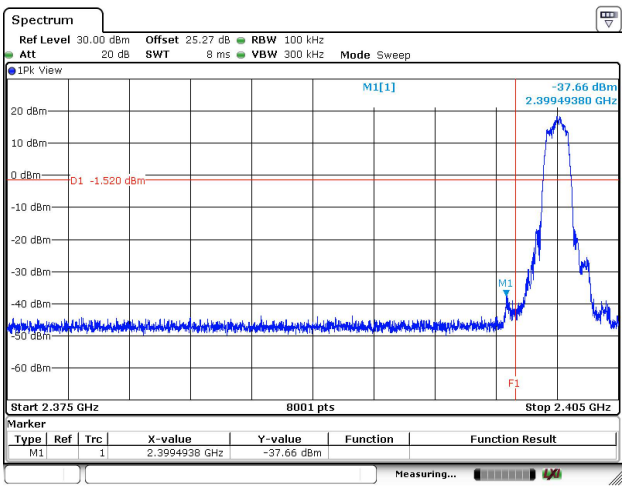
<2Mbps>

Channel 00

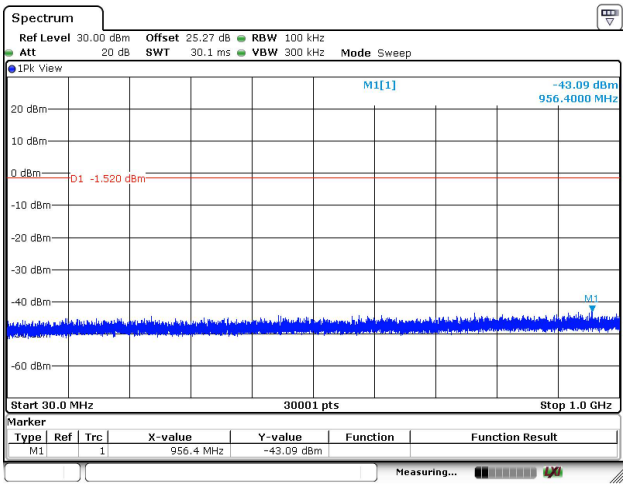
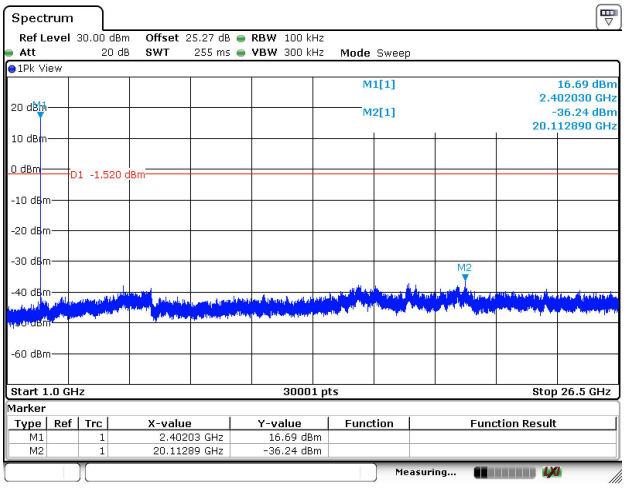
100kHz PSD reference Level Plot



Plot on Channel 00



Spurious Emission 30MHz~1GHz Plot



Spurious Emission 1GHz~26.5GHz Plot