



FCC 47 CFR PART 15 SUBPART C 15.247 TEST REPORT

FOR

UFO Lamp

Model : WH1, WH2, WH3

Issued to

Wantai Lighting Co., Ltd.

NO. 37, SHANXI 5TH ST., NORTH DIST., TAICHUNG CITY 404038,

TAIWAN(R.O.C.)

Issued by

WH Technology Corp.



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Test Result Certification

Applicant's Name Wantai Lighting Co., Ltd.
Address NO. 37, SHANXI 5TH ST., NORTH DIST., TAICHUNG CITY 404038,
TAIWAN(R.O.C.)
Manufacturer's Name Wantai Lighting Co., Ltd.
Address NO. 37, SHANXI 5TH ST., NORTH DIST., TAICHUNG CITY 404038,
TAIWAN(R.O.C.)

Product Description

Trade Mark WAN TAI
Product Name UFO Lamp
Model and/or Type Reference ...: WH1, WH2, WH3

Standards 47 CFR FCC Part 15 Subpart C 15.247
KDB 558074 D01 15.247 Meas Guidance v05r02
ANSI C63.10: 2020

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Date of Test

Date (s) of Performance of Tests May. 05, 2026 ~ Aug. 14, 2026

Date of Issue Aug. 14, 2026

Test Result Pass

Testing Engineer

Bing Zhang / Project Engineer

Technical Manager

Bell Wei / Manager

Authorized Signatory

Bell Wei



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**** Issued History ****

Revision	Description	Issued Date	Remark
Revision 1.0	Initial Test Report Release	Aug. 14, 2026	



1 Summary

1.1 Test Procedures and Results

Test Item	Test Requirement	Result
Antenna Requirement	§15.203/§15.247(b)(4)	PASS
AC Conducted Emission	FCC Part 15.207	PASS
Radiated Emissions	FCC Part 15.205/15.209	PASS
Maximum Peak Output Power	FCC Part 15.247(b)	PASS
Power Spectral Density	FCC Part 15.247(e)	PASS
6dB Bandwidth & 99% Bandwidth	FCC Part 15.247(a)(2)	PASS
Spurious RF Conducted Emission	FCC Part 15.247(d)	PASS
Band Edge	FCC Part 15.247(d)	PASS

Note:

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.



1.2 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Measurement Item	Uncertainty
Radiated emission	$\pm 4.11\text{dB}$
Peak Output Power (Conducted)	$\pm 1.38\text{dB}$
Peak Output Power (Radiated)	$\pm 1.70\text{dB}$
Power Spectral Density	$\pm 1.39\text{dB}$
Radiated emission (3m)	$\pm 4.11\text{dB}$
Radiated emission (10m)	$\pm 3.89\text{dB}$



2 General Information

2.1 General Description of EUT

EUT Name:	UFO Lamp
FCC ID:	2BV8DWANTAIWHN
Model No:	WH1
Series Model(s):	WH2, WH3
Model Difference:	The only difference between the models is their appearance; all other internal components, including the circuit board structure and circuitry, are identical. The test model is WH1
Operation Frequency:	2402 MHz to 2480 MHz
Channel Separation:	2MHz
Number of Channel:	40
Modulation Technology:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	-0.58 dBi
Power Supply:	DC 5V/DC 3.7V
Hardware Version:	V1.0
Software Version:	V1.0
Note: 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. Antenna gain Refer to the antenna specifications. 3. The cable loss data is obtained from the supplier. 4. The test results in the report only apply to the tested sample.	



Description of Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454		
13	2428	27	2456		

The EUT has been operated in modulations: GFSK independently.

No.	Test Mode Description
1	Low channel TX
2	Middle channel TX
3	High channel TX

Note:

1. All the test modes can be supply by serial port, only the result of the worst case was recorded in the report if no any records.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

Software name:FCC_assist_1.0.2.2

Power setting:default



2.2 Description of Test Conditions

(1) E.U.T. test conditions:

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

(2) Frequency range of radiated measurements:

The test range will be up to the tenth harmonic of the highest fundamental frequency.

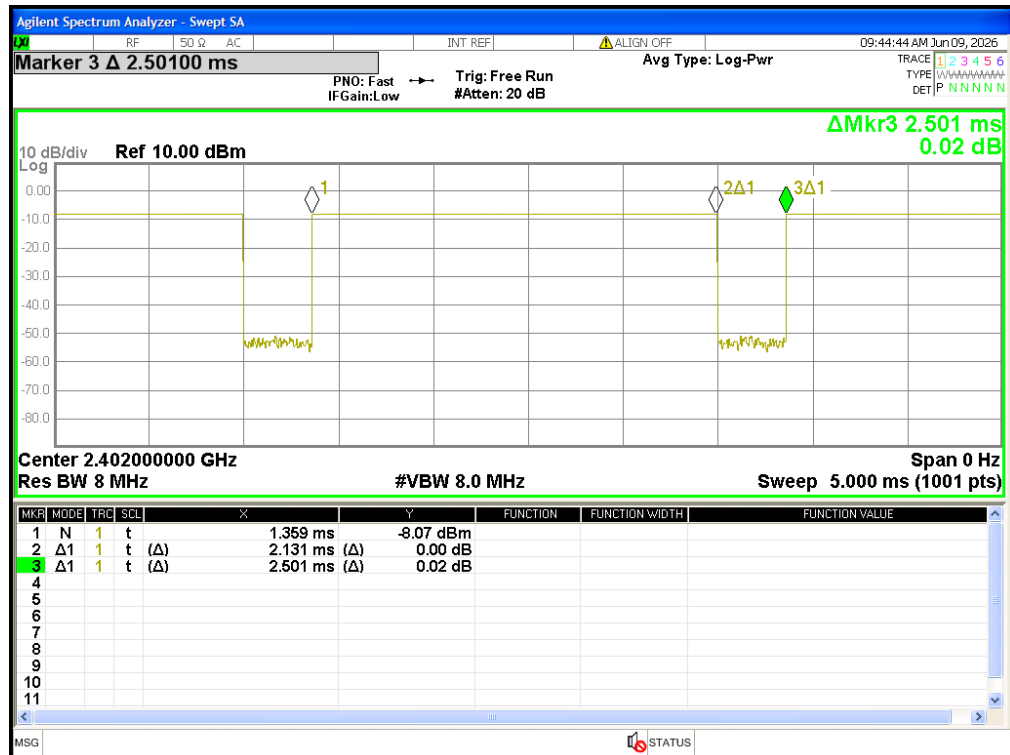
(3) Pre-test the EUT in all transmitting mode at the lowest (2402 MHz), middle (2440 MHz) and highest (2480 MHz) channel with different data packet and conducted to determine the worst-case mode, only the worst-case results are recorded in this report.

(4) Mode Test Duty Cycle

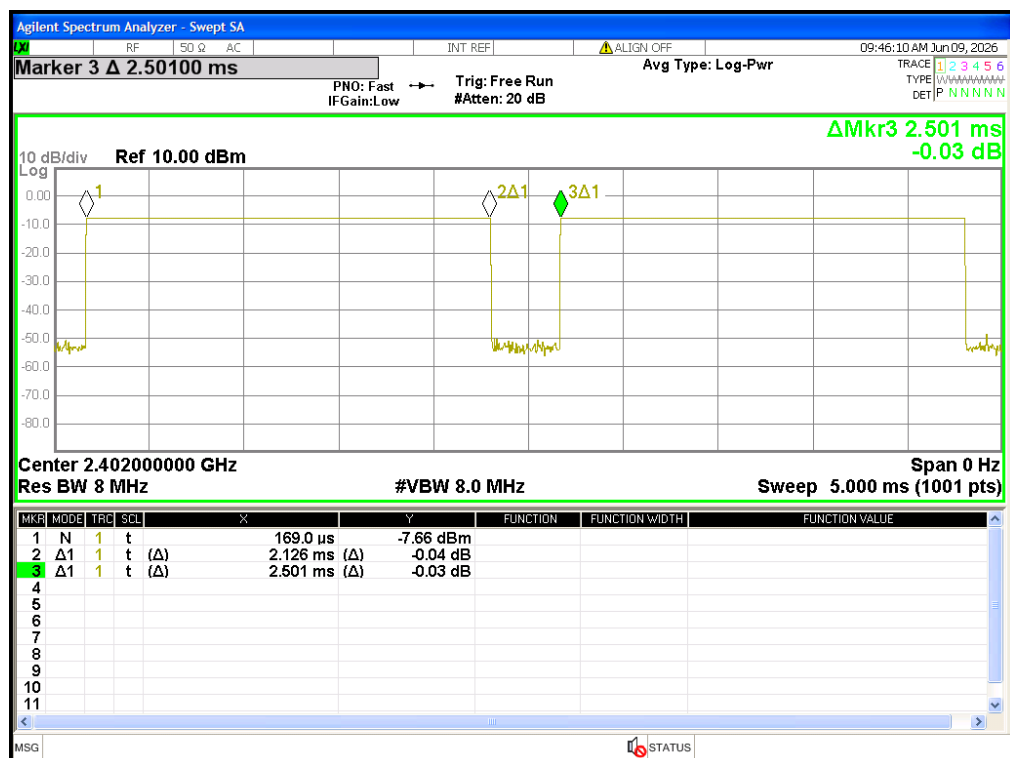
Mode	Duty Cycle
BT-LE(1Mbps)	0.852
BT-LE(2Mbps)	0.85



1M



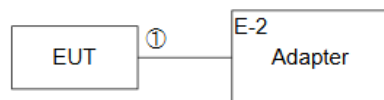
2M





2.3 Description of Test Setup

CON



RE



The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The report only reflects the worst emission test results. The worst case is X position.



2.4 Description of Support Units

The WH1 has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

OUTSIDE SUPPORT EQUIPMENT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord/ LAN Cable
②	RF cable	N/A	N/A	N/A	N/A	Unshielded 0.2m	N/A
E-1	Notebook	20SL	LR0DA6TH	R33B65	Lenovo	N/A	Unshielded 1.8m
E-2	Adapter	P1214C	NA	R35188	UKKO	N/A	N/A
INSIDE SUPPORT EQUIPMENT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord
①	Type-C Cable	XYX-C-CC 60-1M	N/A	N/A	XYX	Shielded 1m	N/A

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.



3 Equipments List for All Test Items

Conducted emission					
Instrument	Manufacturer	Model No.	Serial No.	Cali Due Date	Remark
EMI Test Receiver	PMM	9010F	190ZW40510	2027/01/11	1 Year
Two-Line V-Network	R&S	NNB-2/16z	98062	2027/04/13	1 Year
Test Cable	N/A	N/A	WH-CON03	2027/04/06	1 Year
Measurement Software	AUDIX	e3	230427 wh,V9	N/A	N/A
Radiated emission Below 1 GHz					
Instrument	Manufacturer	Model No.	Serial No.	Cali Due Date	Remark
Bilog antenna	Schwarzbeck	VULB 9168	01712	2026/09/10	1 Year
LOOP Antenna	COM-POWER	AL-130	17117	2027/04/27	1 Year
Pre-amplifier	EMCI	EMC9135	980334	2027/03/27	1 Year
Cable	EMCI	N male on end of both sides (EMI4)	30m	2027/04/06	1 Year
Receiver	R&S	ESVS30	826006/002	2027/03/11	1 Year
Spectrum Analyzer	R&S	FSP7	830180/009	2027/03/16	1 Year
Measurement Software	AUDIX	e3	V6.101222a	N/A	N/A
Radiated emission Above 1 GHz					
Instrument	Manufacturer	Model No.	Serial No.	Cali Due Date	Remark
Horn antenna	ETS LINDGREN	3117	00114397	2026/10/02	1 Year
Horn antenna	com-power	AH-826	81000	2026/10/06	1 Year
Horn antenna	Schwarzbeck	BBHA9170	#687	2026/07/01	1 Year
Pre-amplifier	EMCI	EMC051845	980108	2026/06/19	1 Year
Pre-amplifier	MITEQ	JS4-18002600-30-5A	808329	2026/09/18	1 Year
Pre-amplifier	EMC INSTRUMENT	EMC264035SE	980288	2026/06/19	1 Year
RF CABLE	SUCOFLEX	104PEA	33957/4PEA	2026/09/18	1 Year
RF CABLE	AGILENT	EMC102-KM-KM-3000	160101	2026/09/18	1 Year
RF CABLE	AGILENT	EMC102-KM-KM-600	160102	2026/09/18	1 Year
Spectrum Analyzer	R&S	FSP7	830180/009	2027/03/16	1 Year
Spectrum Analyzer	AGILENT	N9010A	MY51280195	2027/03/16	1 Year
Spectrum Analyzer	ADVANTEST	R3182	150900201	2027/03/16	1 Year
Measurement Software	AUDIX	e3	V6.101222a	N/A	N/A



4 Test Result

4.1 Antenna Requirement

4.1.1 Standard Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, 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.

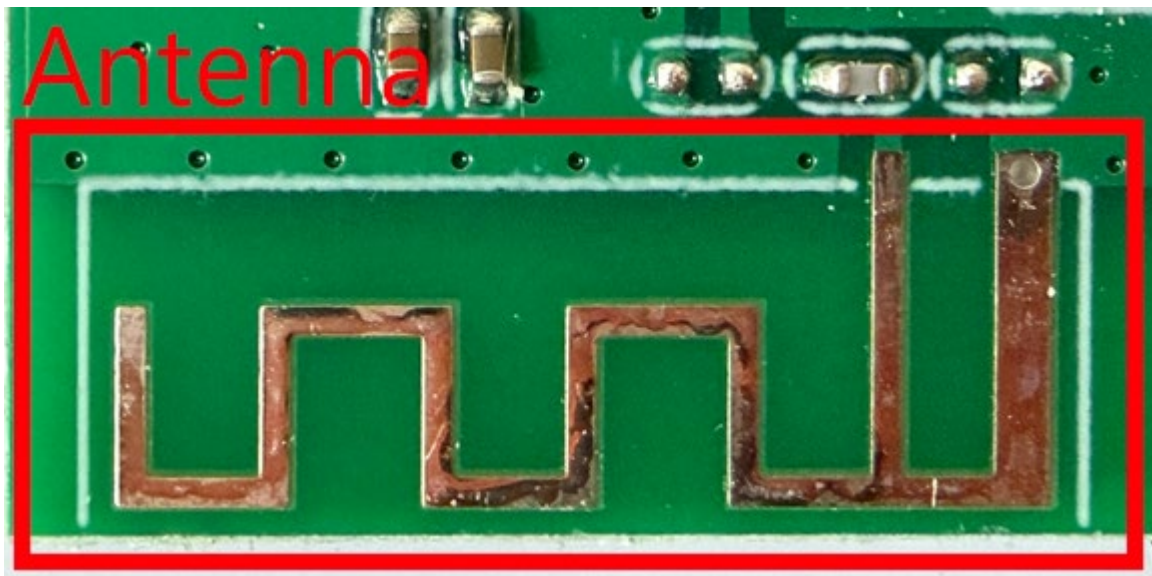
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Antenna Connected Construction

Antenna Type: PCB Antenna

Antenna Gain: -0.58 dBi

4.1.2 EUT Antenna





4.2 AC Conduction Emissions Measurement

4.2.1 Applied Procedures / Limit

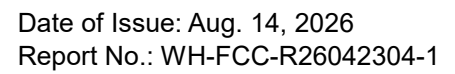
Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.10-2013 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66 – 56*	56 – 46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

4.2.2 Test Procedure

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system and using CISPR Quasi-Peak / Average detectors and Specified Bandwidth with Maximum Hold Mode.
- RBW=9kHz. VBW=30kHz.



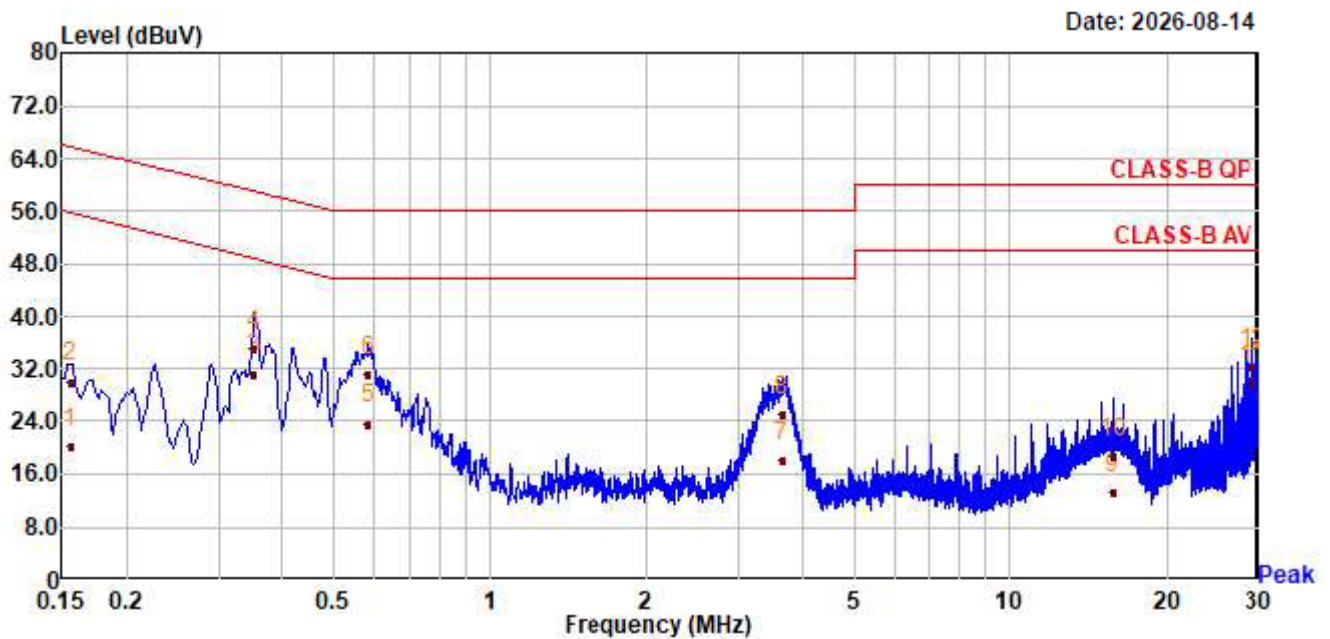
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4.2.4 Test Results

All the test modes completed for test. Only the worst result was reported as below:

Test Specification: Line



Remarks : Factor=Insertion loss+Cable loss

Result	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.16	20.00	0.14	20.14	55.67	-35.53	Average
2	0.16	29.83	0.14	29.97	65.67	-35.70	QP
3 @	0.35	30.98	0.16	31.14	48.95	-17.81	Average
4	0.35	34.77	0.16	34.93	58.95	-24.02	QP
5	0.58	23.47	0.17	23.64	46.00	-22.36	Average
6	0.58	30.83	0.17	31.00	56.00	-25.00	QP
7	3.64	17.81	0.26	18.07	46.00	-27.93	Average
8	3.64	24.76	0.26	25.02	56.00	-30.98	QP
9	15.73	12.75	0.45	13.20	50.00	-36.80	Average
10	15.73	18.16	0.45	18.61	60.00	-41.39	QP
11	29.11	29.25	0.60	29.85	50.00	-20.15	Average
12	29.11	31.62	0.60	32.22	60.00	-27.78	QP

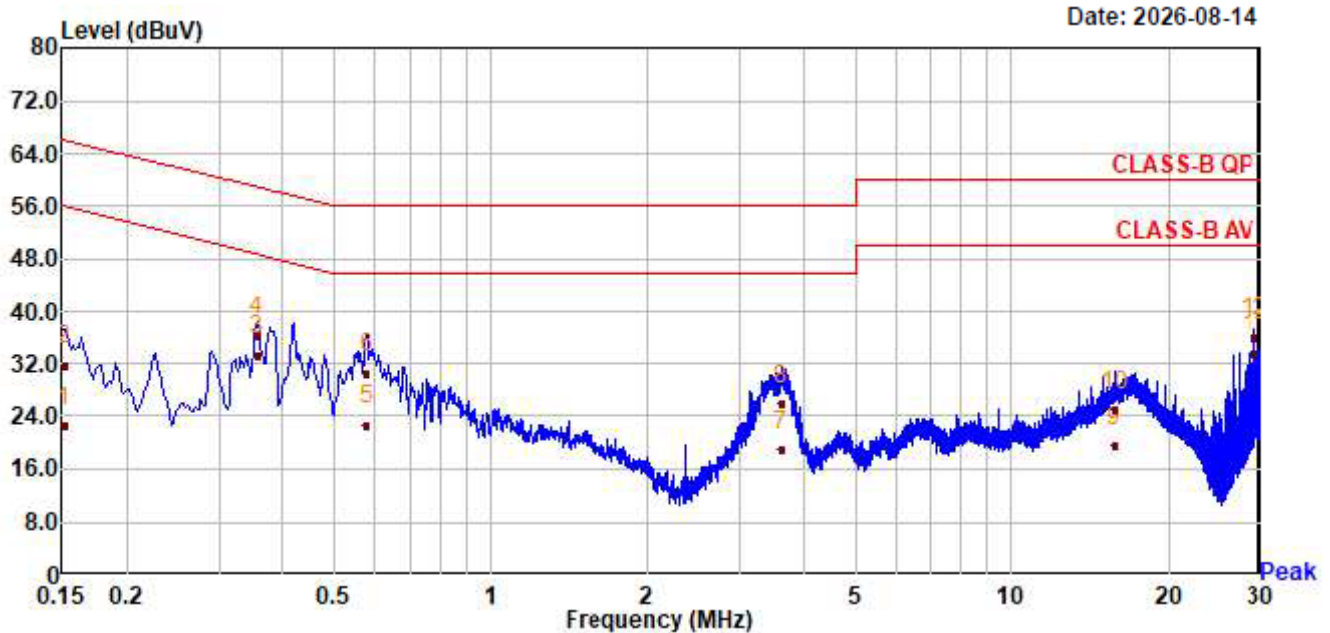
Remark: Over Limit = Level – Limit

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor



Test Specification: Neutral



Remarks : Factor=Insertion loss+Cable loss

Result	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.15	22.40	0.13	22.53	55.89	-33.36	Average
2	0.15	31.69	0.13	31.82	65.89	-34.07	QP
3 @	0.35	33.17	0.15	33.32	48.86	-15.54	Average
4	0.35	36.14	0.15	36.29	58.86	-22.57	QP
5	0.58	22.55	0.15	22.70	46.00	-23.30	Average
6	0.58	30.44	0.15	30.59	56.00	-25.41	QP
7	3.61	18.69	0.24	18.93	46.00	-27.07	Average
8	3.61	25.64	0.24	25.88	56.00	-30.12	QP
9	15.74	19.07	0.44	19.51	50.00	-30.49	Average
10	15.74	24.49	0.44	24.93	60.00	-35.07	QP
11	29.23	33.04	0.56	33.60	50.00	-16.40	Average
12	29.23	35.43	0.56	35.99	60.00	-24.01	QP

Remark: Over Limit = Level – Limit

Correction factor = Cable lose + LISN insertion loss

Level=Test receiver reading + correction factor



4.3 Radiated Emissions Measurement

4.3.1 Applied Procedures / Limit

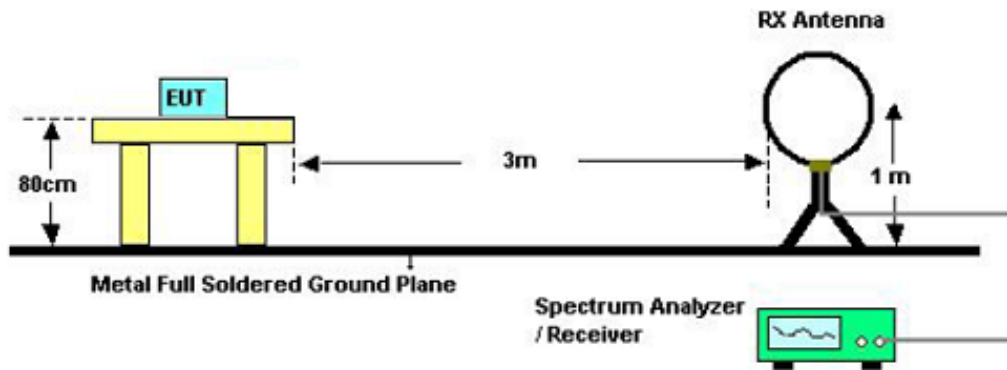
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter measurement is based on the maximum conducted output power, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in section 15.205(a) the restricted bands must also comply with the radiated emission limit specified in section 15.209(a).

Frequency (MHz)	Field Strength (microvolt/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

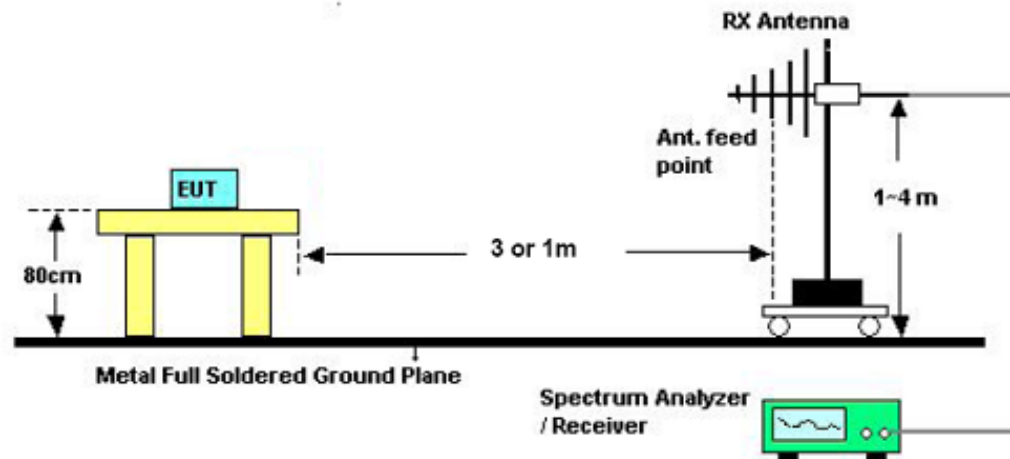


4.3.2 Test Setup

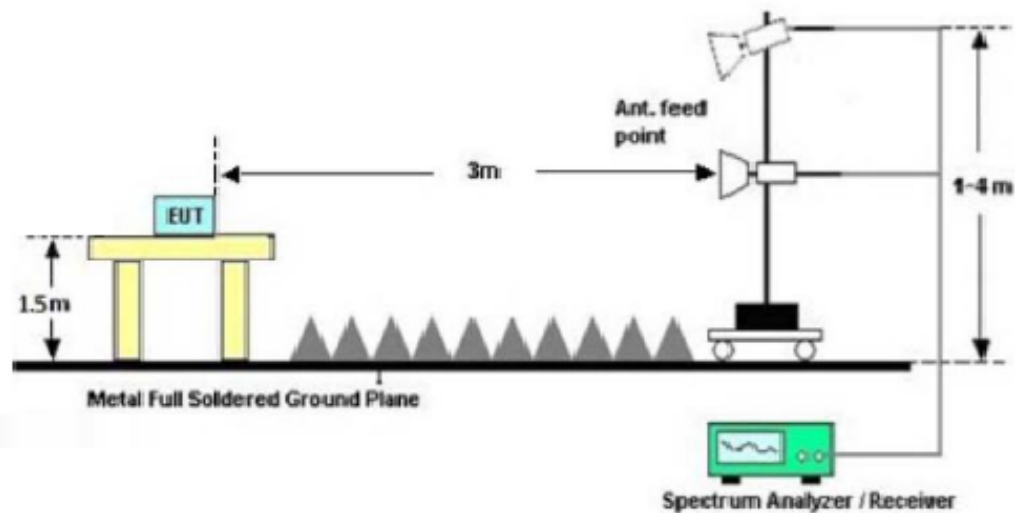
For radiated emissions below 30MHz



For radiated emissions above 30MHz



For radiated emissions above 1GHz





Test Procedure

1. The EUT was placed on turn table which is 0.8m above ground plane for below 1GHz test, and on a low permittivity and low loss tangent turn table which is 1.5m above ground plane for above 1GHz test.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0 degrees to 360 degrees to acquire the highest emissions from EUT.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.



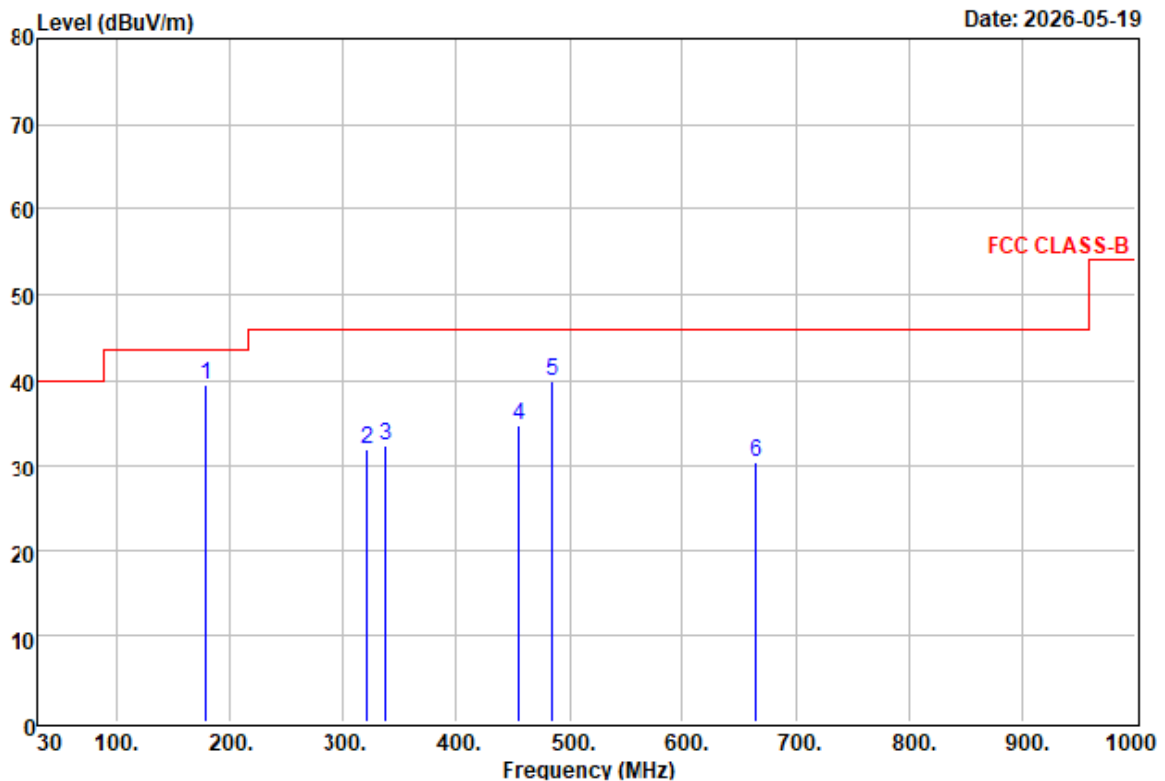
4.3.3 Test Result

Below 1GHz Test Results

All modes have been tested, only the worst mode of GFSK Low channel TX is reflected.

BLE 1M 2402MHz

Antenna polarity: Horizontal

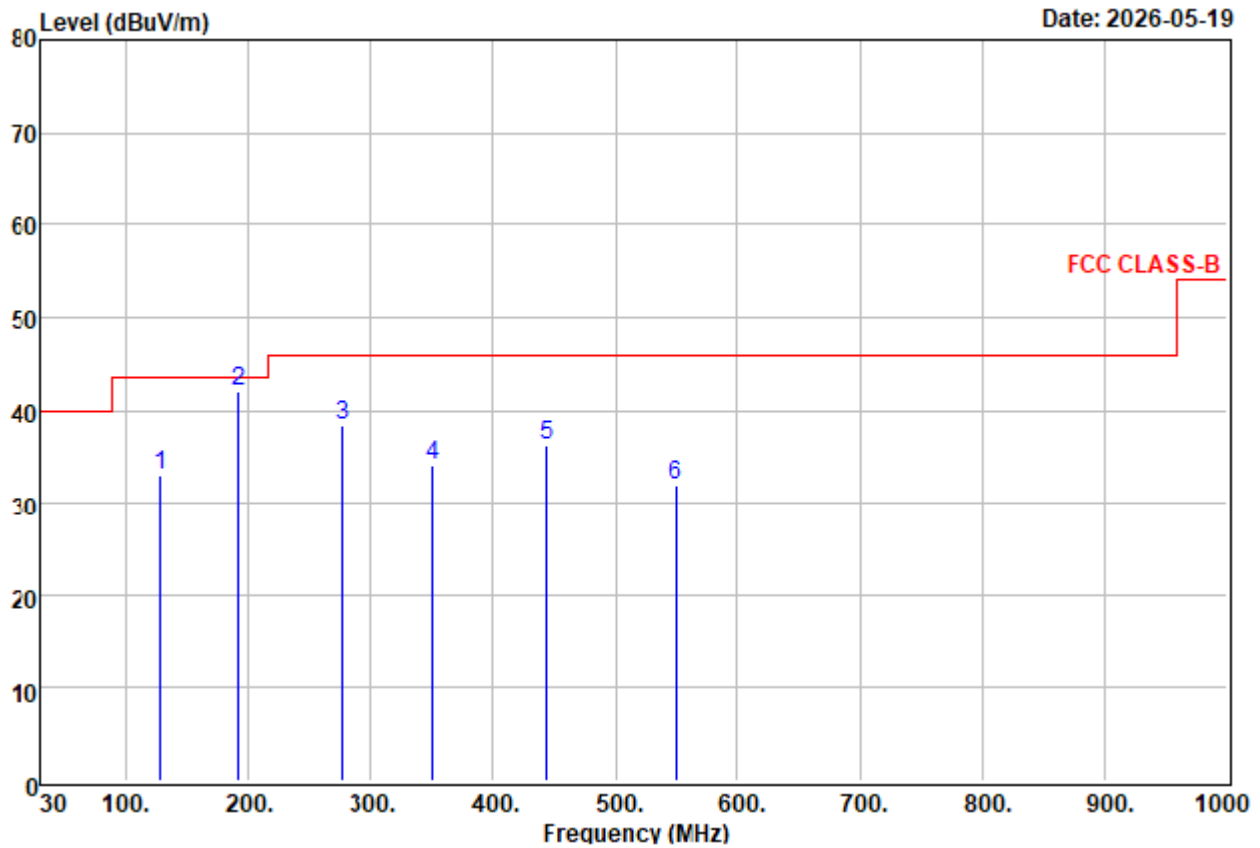


Remarks : 1.Result=Read Value+Factor
: 2.Factor=Antenna Factor-Cable loss-
: Amplifier Factor

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1 @	178.430	54.98	-15.56	39.42	43.50	-4.08 QP
2	321.810	44.50	-12.53	31.97	46.00	-14.03 QP
3	337.800	44.46	-11.97	32.49	46.00	-13.51 QP
4	455.020	43.95	-9.12	34.83	46.00	-11.17 QP
5	484.670	48.33	-8.40	39.93	46.00	-6.07 QP
6	665.020	35.08	-4.73	30.35	46.00	-15.65 QP



Antenna polarity: Vertical



Remarks : 1.Result=Read Value+Factor
: 2.Factor=Antenna Factor-Cable loss-
: Amplifier Factor

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	127.770	49.92	-16.95	32.97	43.50	-10.53 QP
2 @	191.500	58.57	-16.54	42.03	43.50	-1.47 QP
3	276.050	52.31	-13.93	38.38	46.00	-7.62 QP
4	350.710	46.09	-11.98	34.11	46.00	-11.89 QP
5	443.840	45.45	-9.23	36.22	46.00	-9.78 QP
6	548.650	39.05	-7.10	31.95	46.00	-14.05 QP



Harmonics and Spurious Emissions

Frequency Range (9kHz-30MHz)

Frequency (MHz)	Level@3m (dBμV/m)	Limit@3m (dBμV/m)
--	--	--
--	--	--
--	--	--
--	--	--

Note: 1. Emission Level=Reading+ Cable loss+ Antenna factor-Amp factor.

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement.



Above 1GHz Test Results

All the test modes completed for test. Only the worst result was reported as below:

For 1GHz to 26GHz

Test date: 2026-05-19							
Test mode: BT-LE(1Mbps) Tx CH0 2402MHz							
Antenna polarity: Vertical							
No	Freq (MHz)	Read Level (dBuV/m)	Corrected Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4808	56.24	-9.24	47.00	74	-27.00	PK
2	7206	48.35	-6.06	42.29	74	-31.71	PK
3	9608	49.64	-3.23	46.41	74	-27.59	PK
4	12010	43.19	0.77	43.96	74	-30.04	PK
5	14412	41.57	3.43	45.00	74	-29.00	PK
6	16814	35.30	9.99	45.29	74	-28.71	PK
7	/	/					PK
Antenna Polarity: Horizontal							
1	4808	55.57	-9.24	46.33	74	-27.67	PK
2	7206	49.39	-6.06	43.33	74	-30.67	PK
3	9608	49.35	-3.23	46.12	74	-27.88	PK
4	12010	43.32	0.77	44.09	74	-29.91	PK
5	14412	41.46	3.43	44.89	74	-29.11	PK
6	16814	36.04	9.99	46.03	74	-27.97	PK
7	/	/					PK
Note:							
1, Measuring frequency from 1GHz to 25GHz							
2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK							
2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK							
3, Result = Read level + Antenna factor + cable loss-Amp factor							
4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.							



4.4 Maximum Peak Output Power Measurement

4.4.1 Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

4.4.2 Test Procedure

The maximum peak conducted output power may be measured using a broadband peak RF automatic control unit. The RF automatic control unit shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

The maximum Average conducted output power may be measured using a wideband RF automatic control unit with a thermocouple detector or equivalent. The RF automatic control unit shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

4.4.3 Deviation from Standard

No deviation.

4.4.4 Test Setup



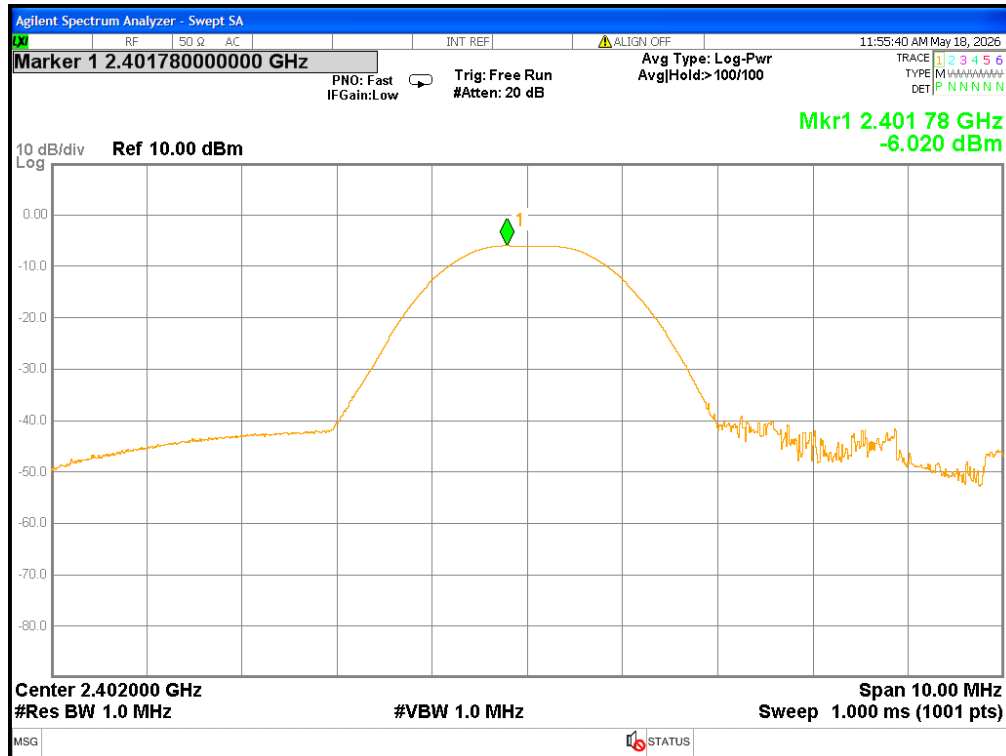
4.4.5 Test Results

Test Rate	Channel	Channel Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)	Limit (dBm)	Result
1M	CH00	2402	-6.020	30.00	Pass
	CH19	2440	-6.553		Pass
	CH39	2480	-7.278		Pass
2M	CH00	2402	-4.360	30.00	Pass
	CH19	2440	-4.799		Pass
	CH39	2480	-4.983		Pass

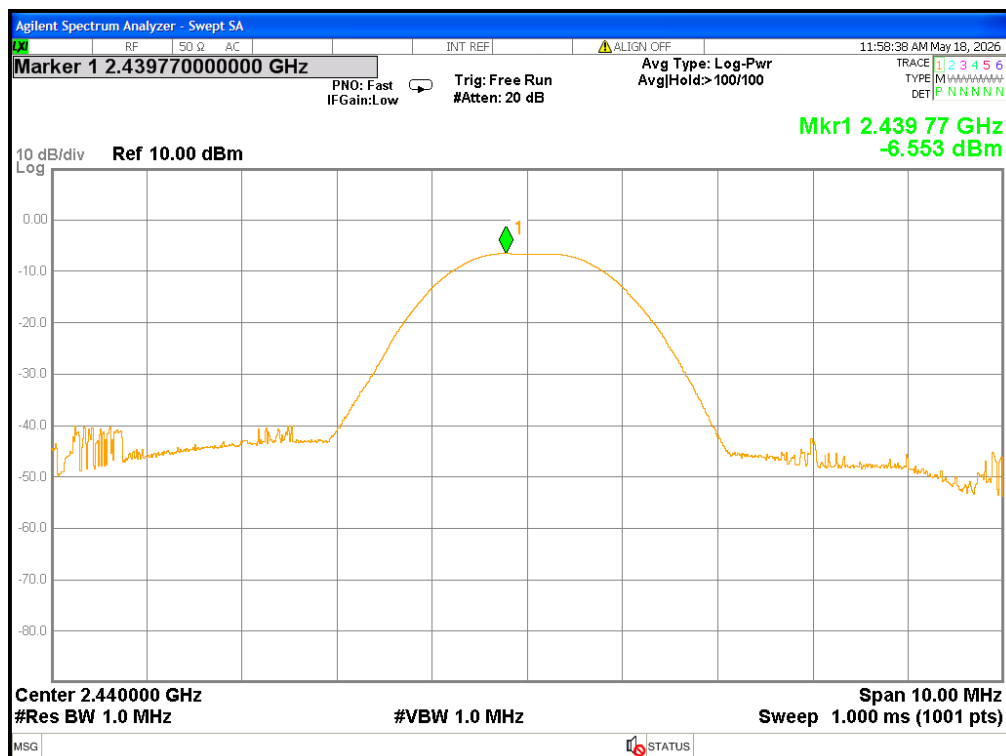
Note: The test results including the cable loss.



1M: CH00

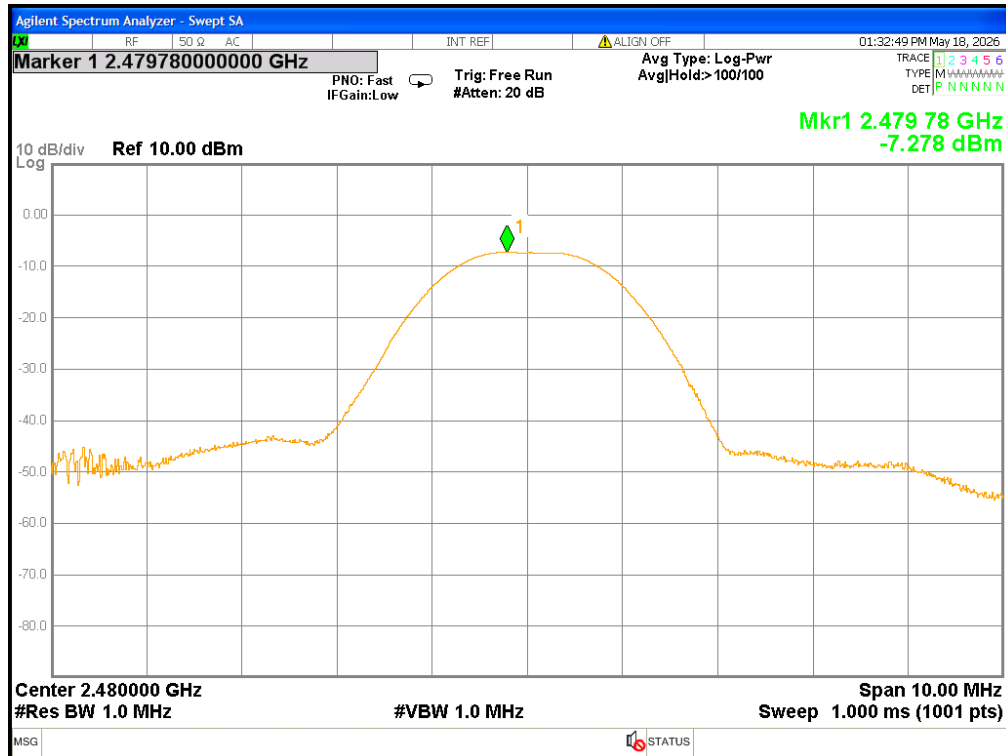


1M: CH19

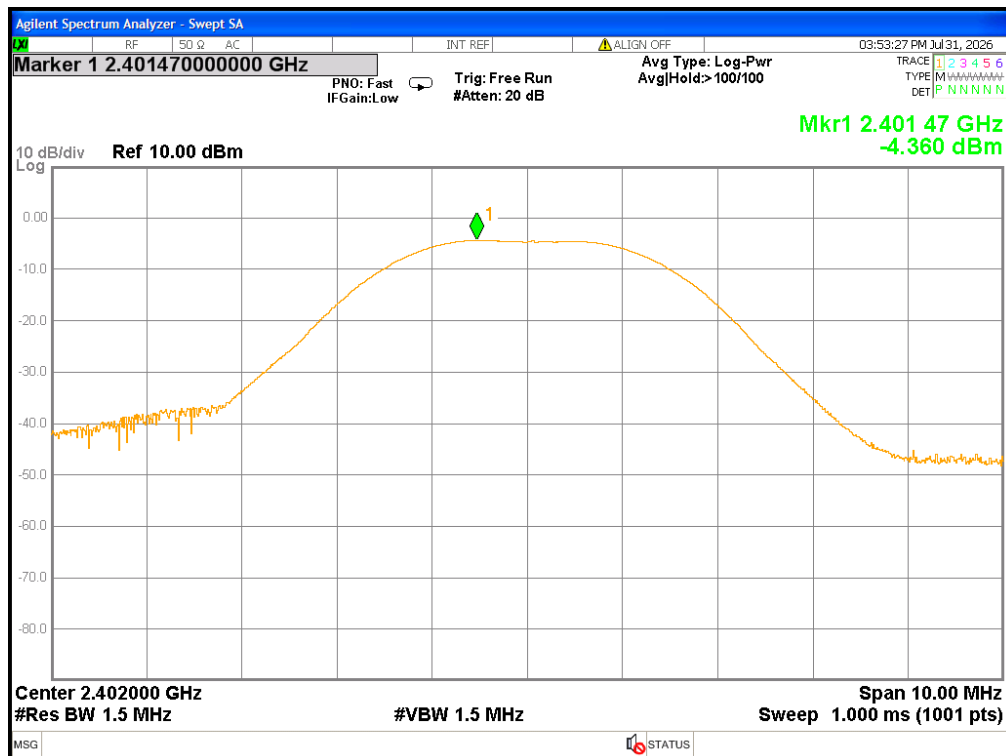




1M: CH39

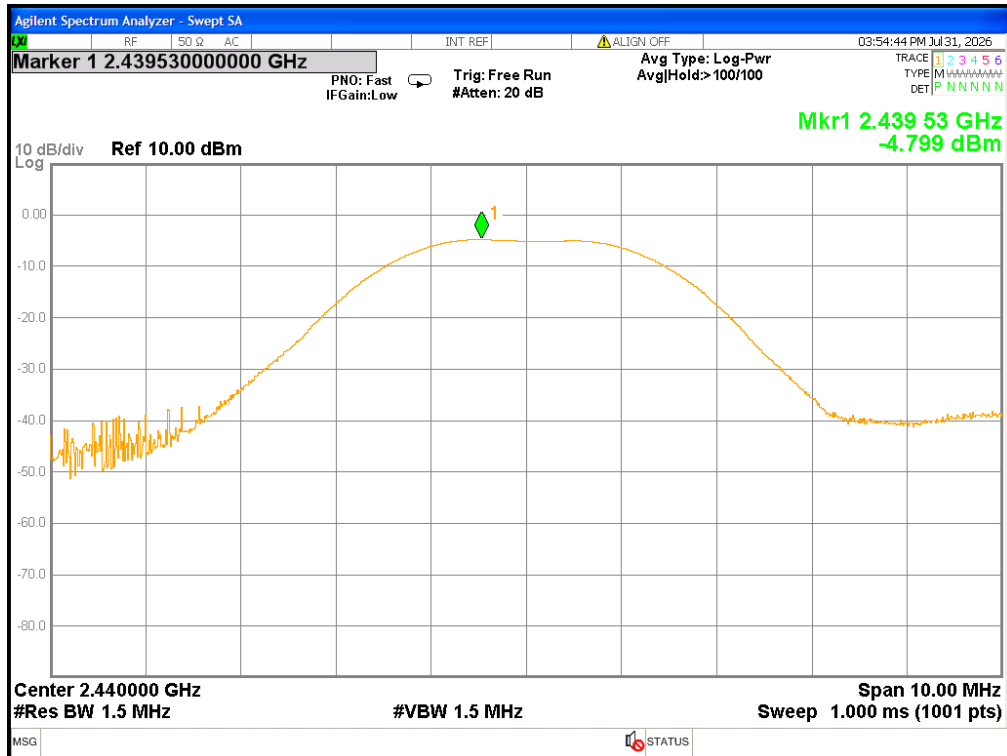


2M: CH00

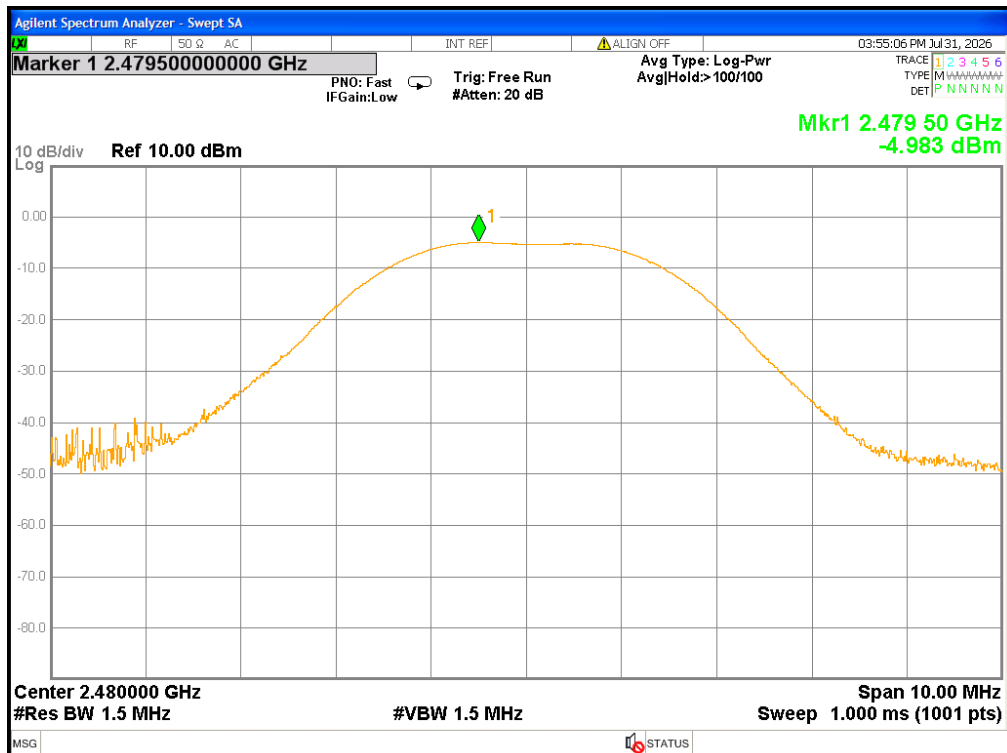




2M: CH19



2M: CH39





4.5 Power Spectral Density

4.5.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

4.5.2 Test Procedure

Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.

Set the RBW =3 kHz.

Set the VBW =10 KHz.

Set the span to 1.5 times the DTS channel bandwidth.

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.

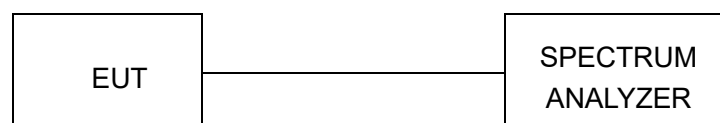
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

The resulting peak PSD level must be 8dBm.

4.5.3 Deviation from Standard

No deviation.

4.5.4 Test Setup

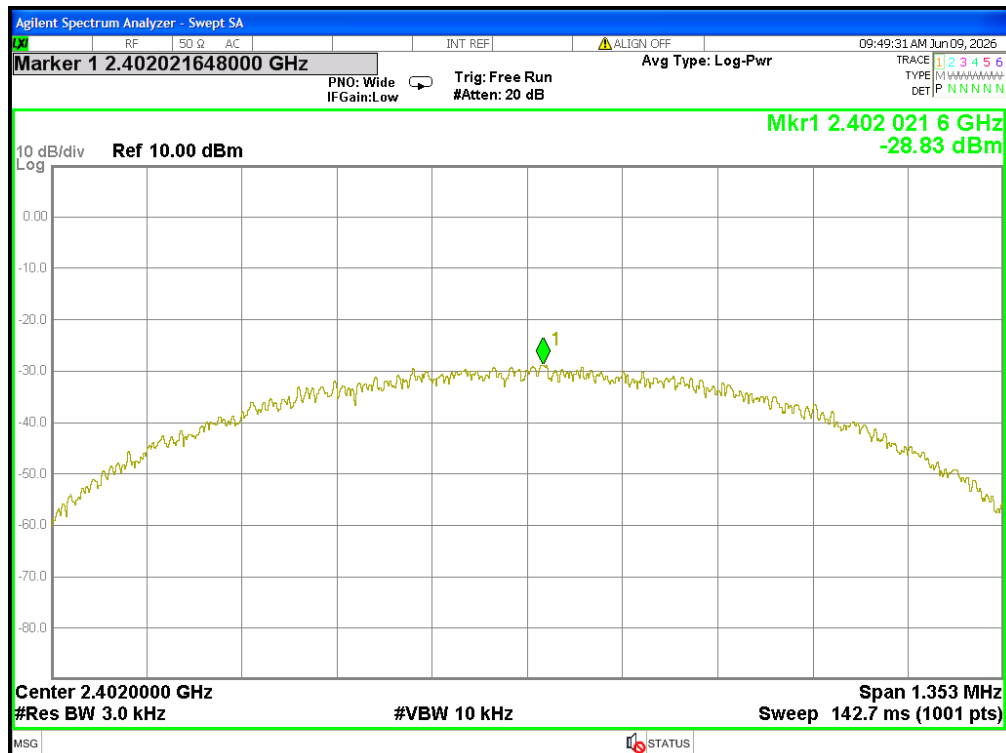




4.5.5 Test Results

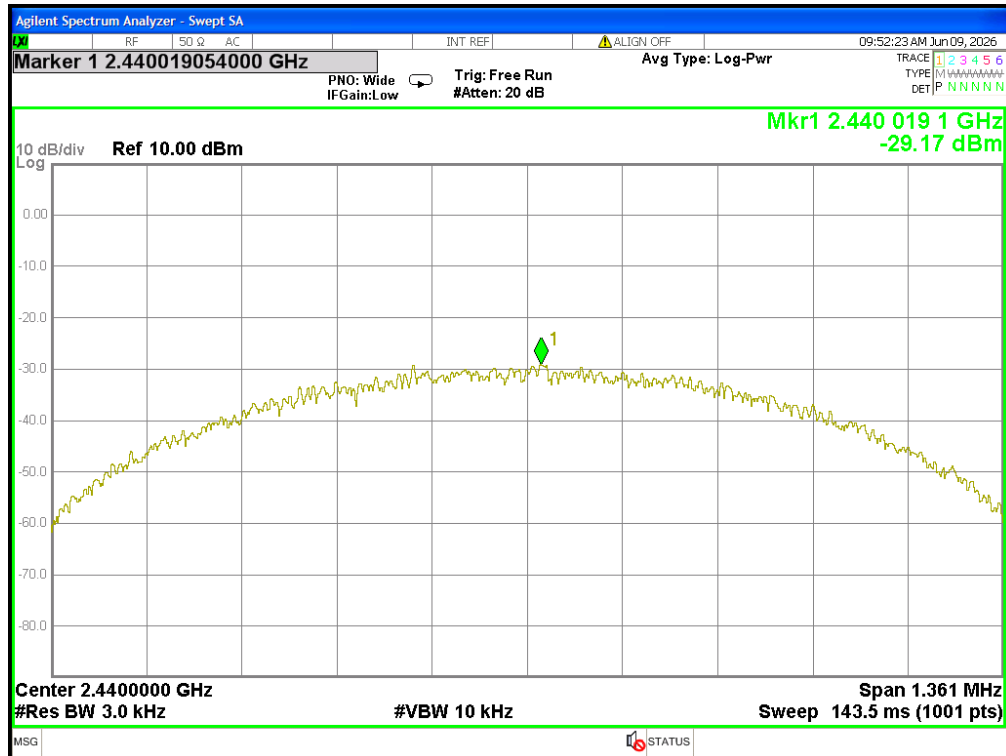
Test Rate	Channel	Channel Frequency (MHz)	Result (dBm/3KHz)
1M	CH00	2402	-28.83
	CH19	2440	-29.17
	CH39	2480	-28.70
2M	CH00	2402	-33.07
	CH19	2440	-34.25
	CH39	2480	-33.77
Limit : 8dBm/3KHz			
Test Result		PASS	

1M: CH00

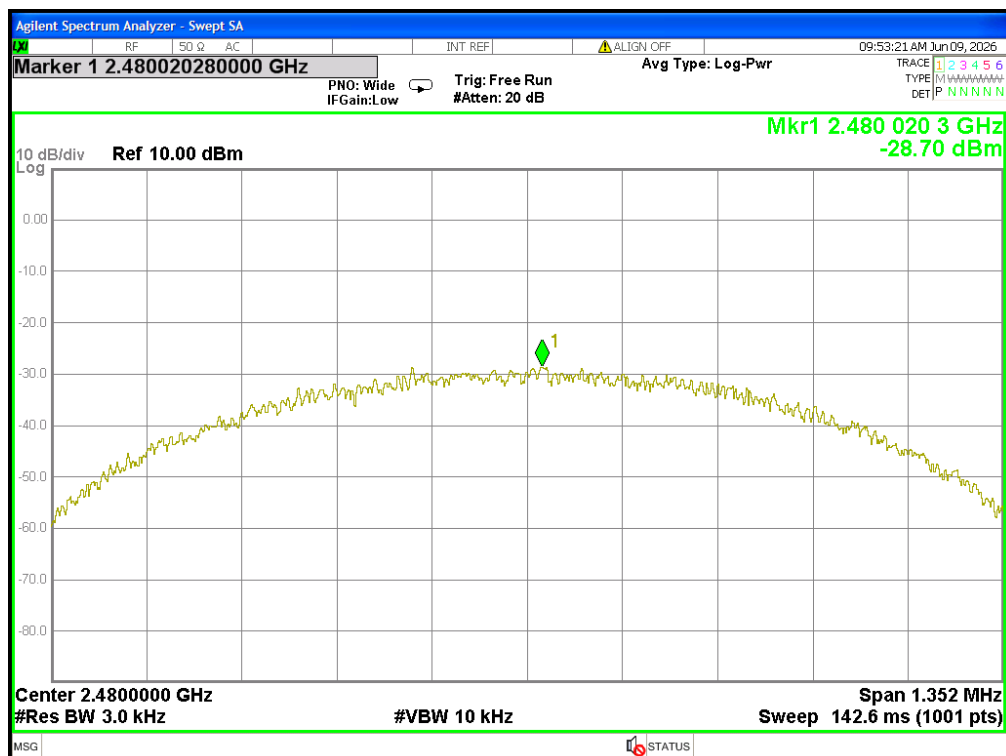




1M: CH19

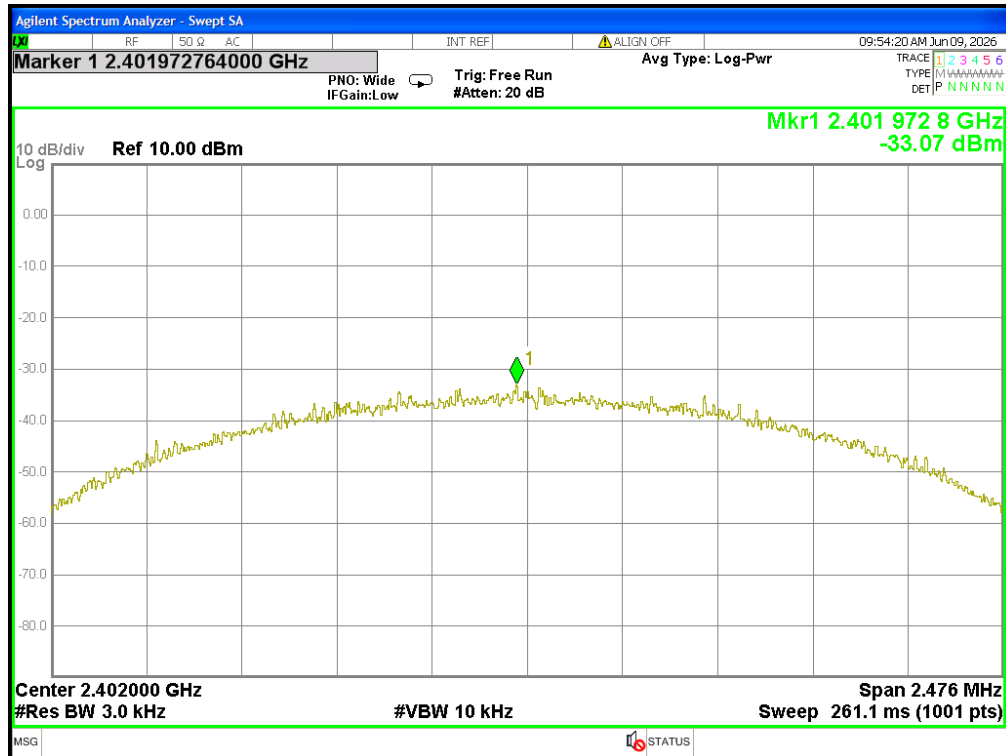


1M: CH39

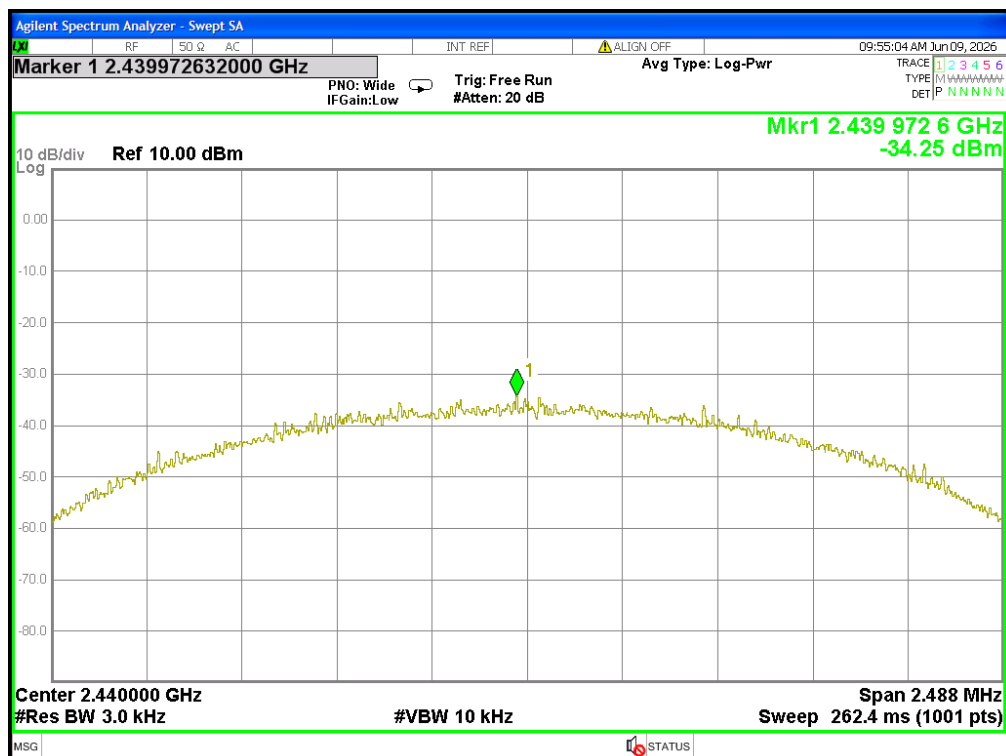




2M: CH00

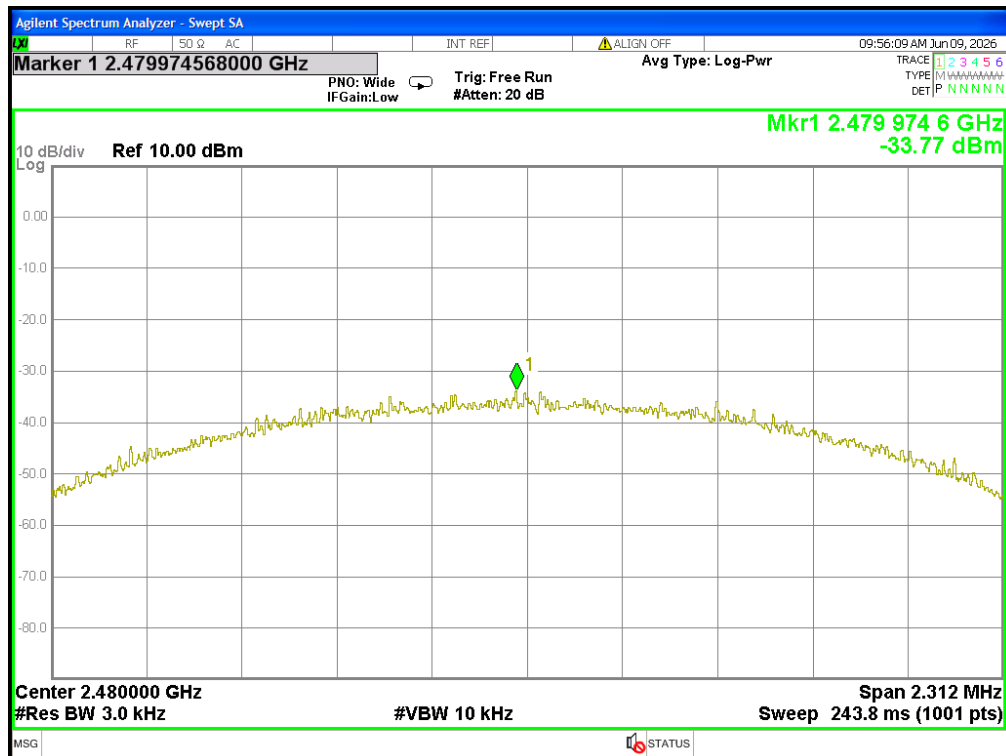


2M: CH19





2M: CH39





4.6 6dB Bandwidth

4.6.1 Limit

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

4.6.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW=100 KHz and VBW=300 KHz.

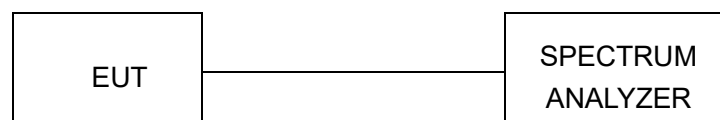
The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.6.3 Deviation from Standard

No deviation.

4.6.4 Test Setup

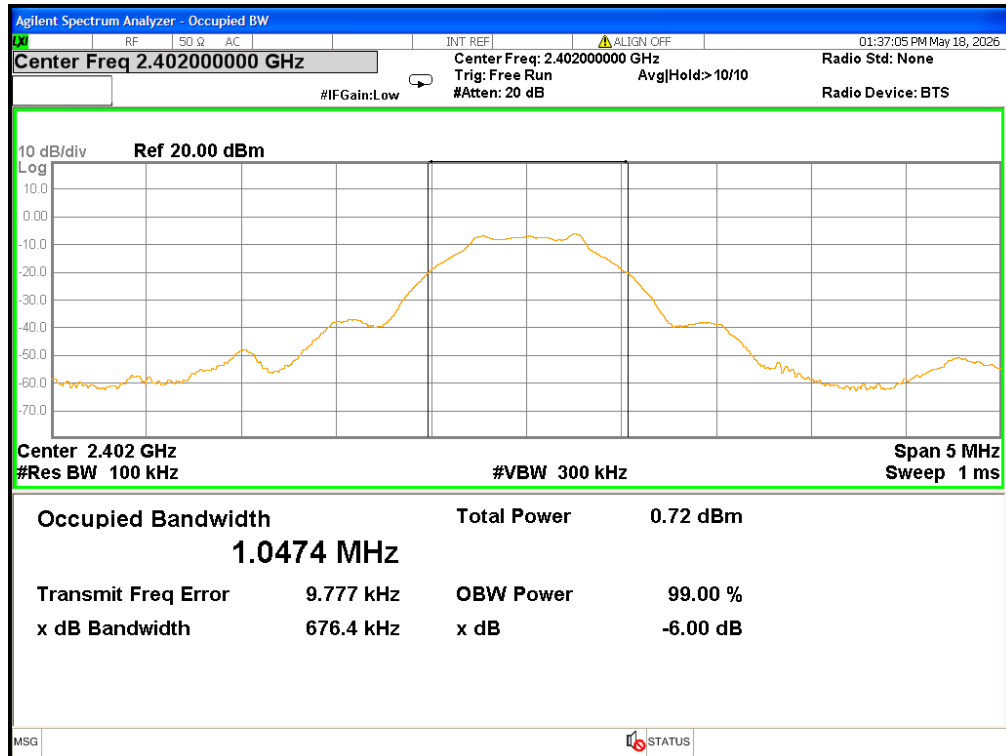


4.6.5 Test Result

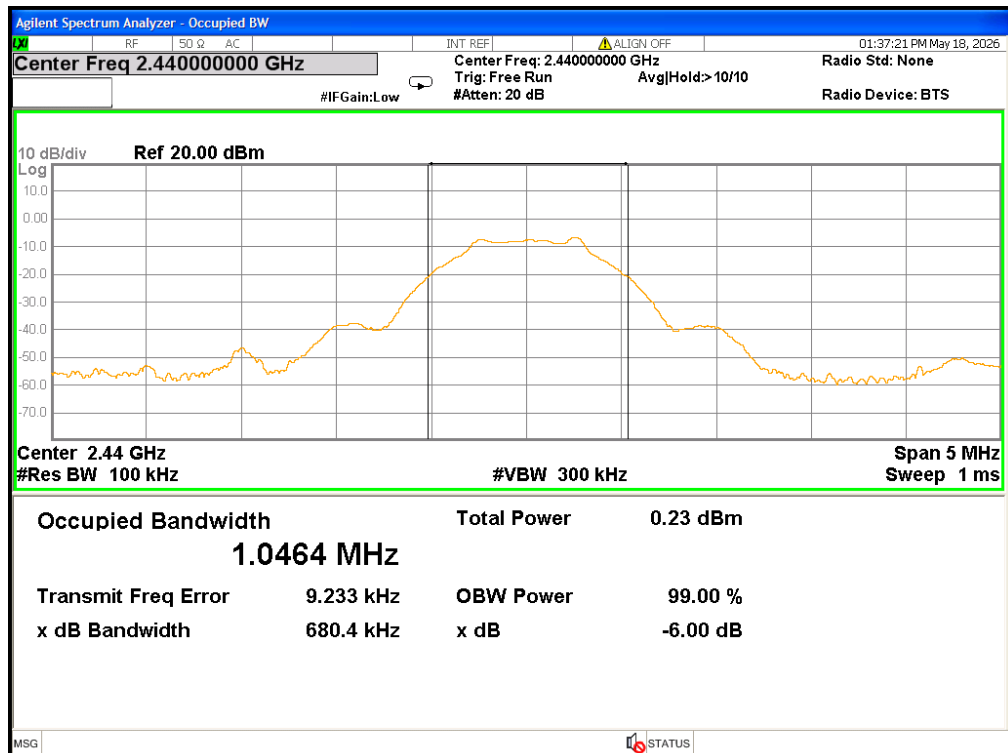
Test Rate	Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (KHz)	Result
1M	CH00	2402	0.6764	≥ 500	Pass
	CH19	2440	0.6804		Pass
	CH39	2480	0.6761		Pass
2M	CH00	2402	1.238	≥ 500	Pass
	CH19	2440	1.244		Pass
	CH39	2480	1.156		Pass



1M: CH00

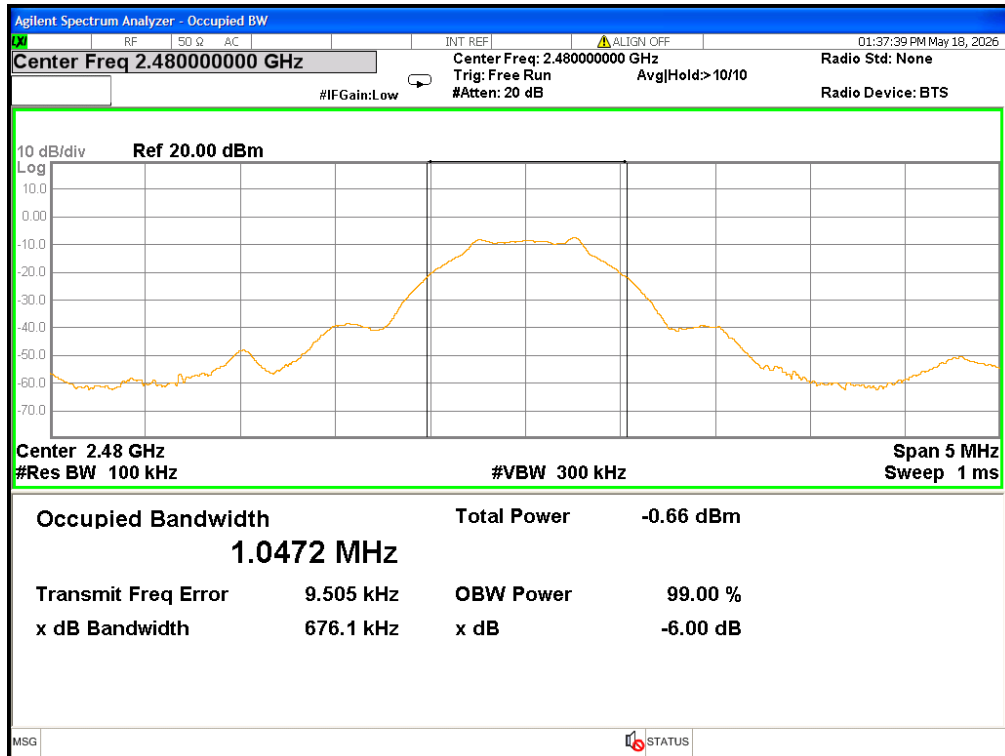


1M: CH19

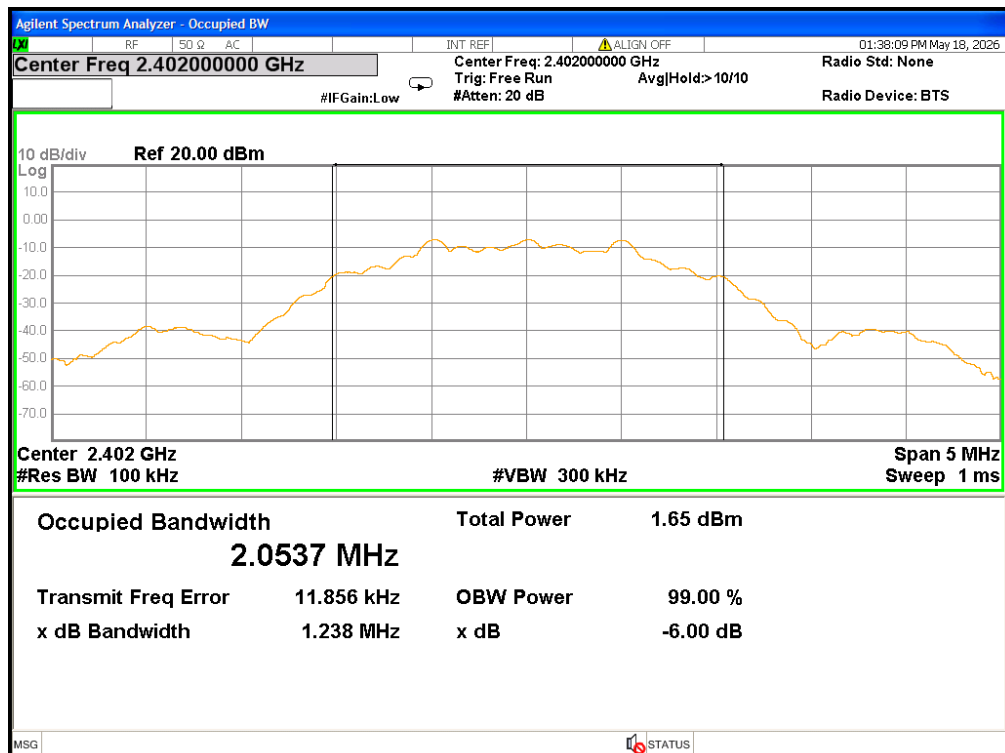




1M: CH39

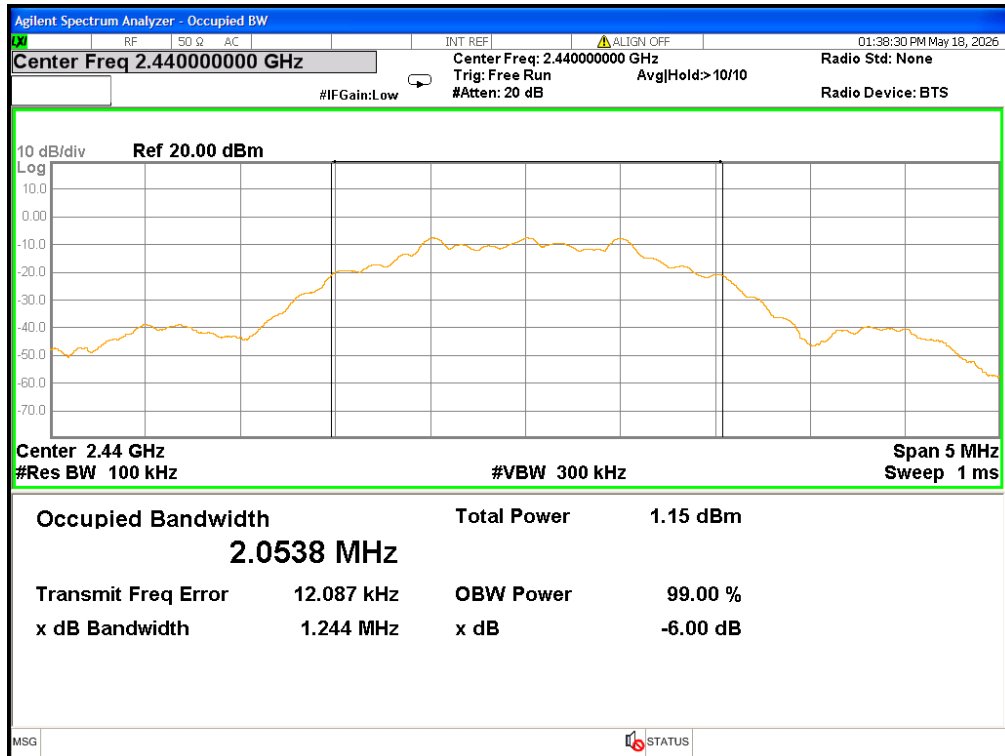


2M: CH00

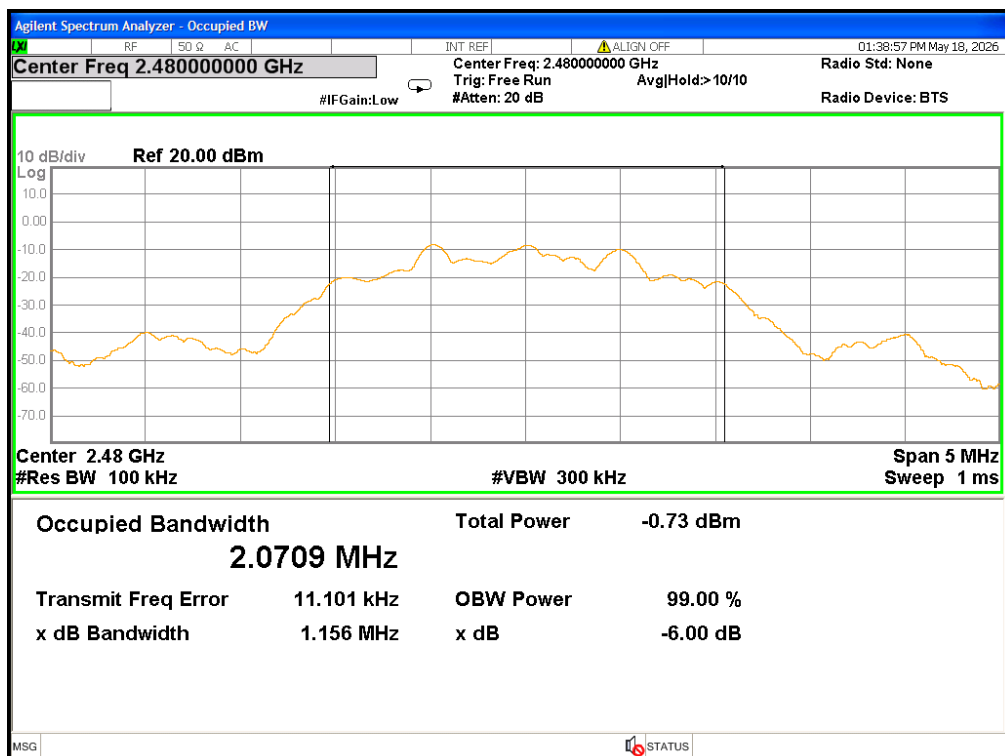




2M: CH19



2M: CH39





4.7 Band Edge

4.7.1 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under FCC rules in section 5.8.1, the attenuation required shall be 30 dB instead of 20 dB.

4.7.2 Test Procedure

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation, RBW $\geq$ 1% of the span, VBW $\geq$ RBW, Sweep = auto, Detector function = peak, Trace = max hold.

4.7.3 Deviation from Standard

No deviation.

4.7.4 Test Setup

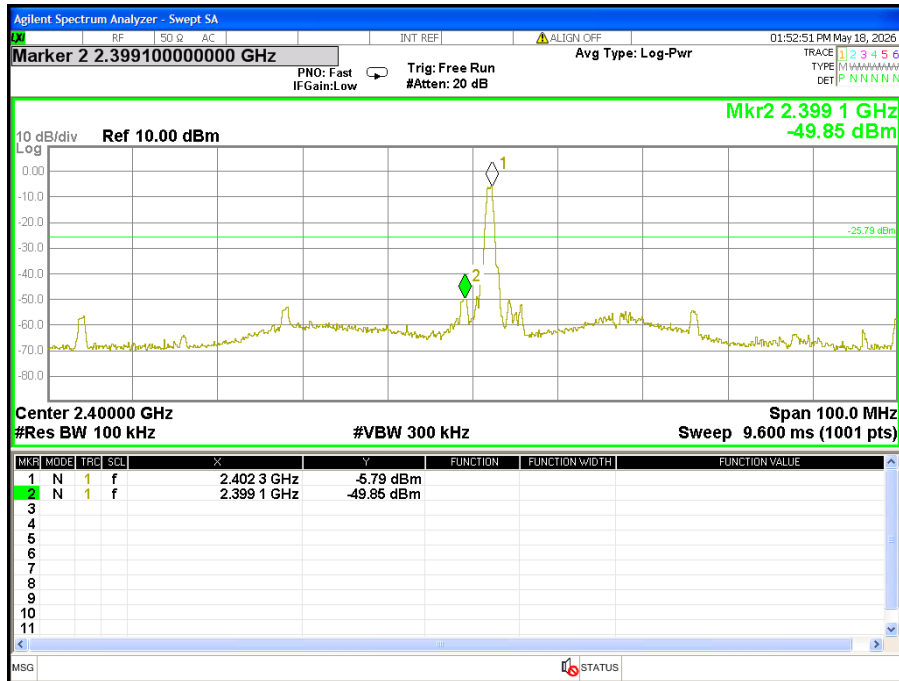




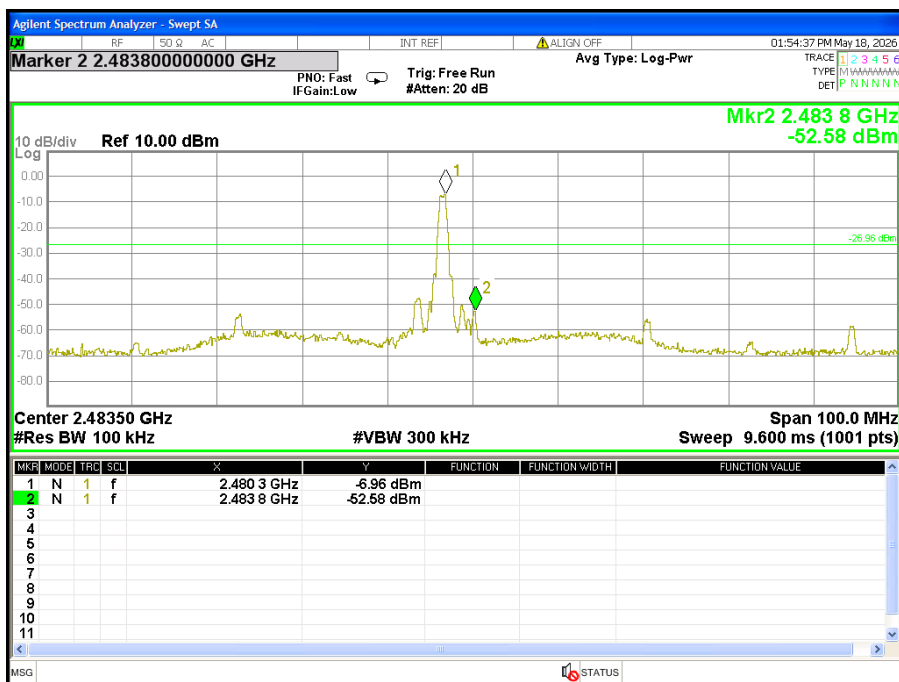
4.7.5 Test Results

PASS

1M:



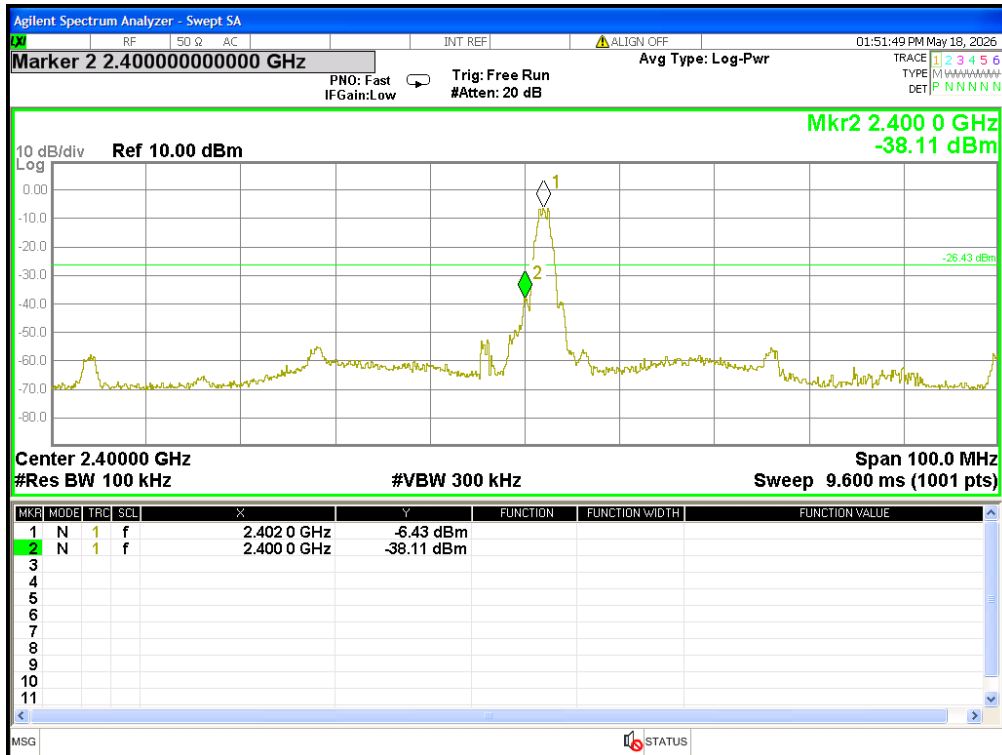
CH00



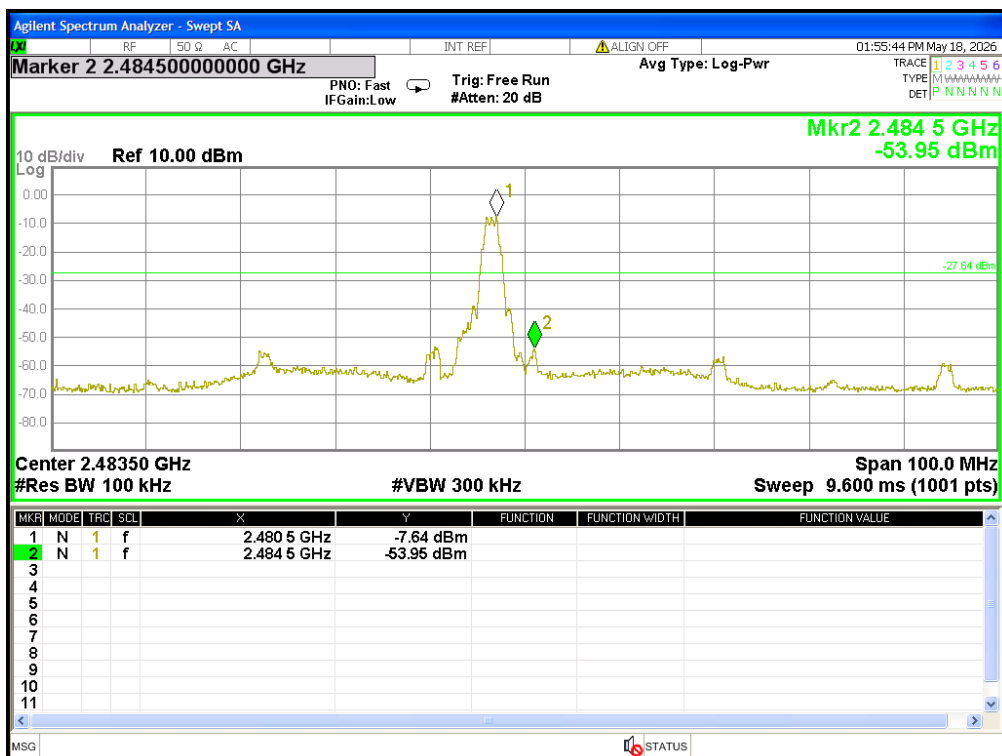
CH39



2M:



CH00



CH39



4.8 Conducted Spurious Emissions

4.8.1 Applied Procedures / Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

For below 30MHz, For 9KHz-150kHz, 150K-10MHz, We use the RBW 1KHz, 10KHz, So the limit need to calculated by " $10\lg(BW1/BW2)$ ". For example For 9KHz-150kHz, RBW 1KHz, The Limit = the highest emission level-20-10log(100/1) = the highest emission level-40.

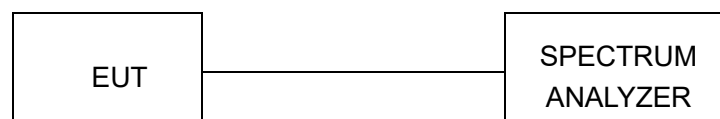
4.8.2 Test Procedure

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation, RBW $\geq$ 1% of the span, VBW $\geq$ RBW, Sweep = auto, Detector function = peak, Trace = max hold.

4.8.3 Deviation from Standard

No deviation.

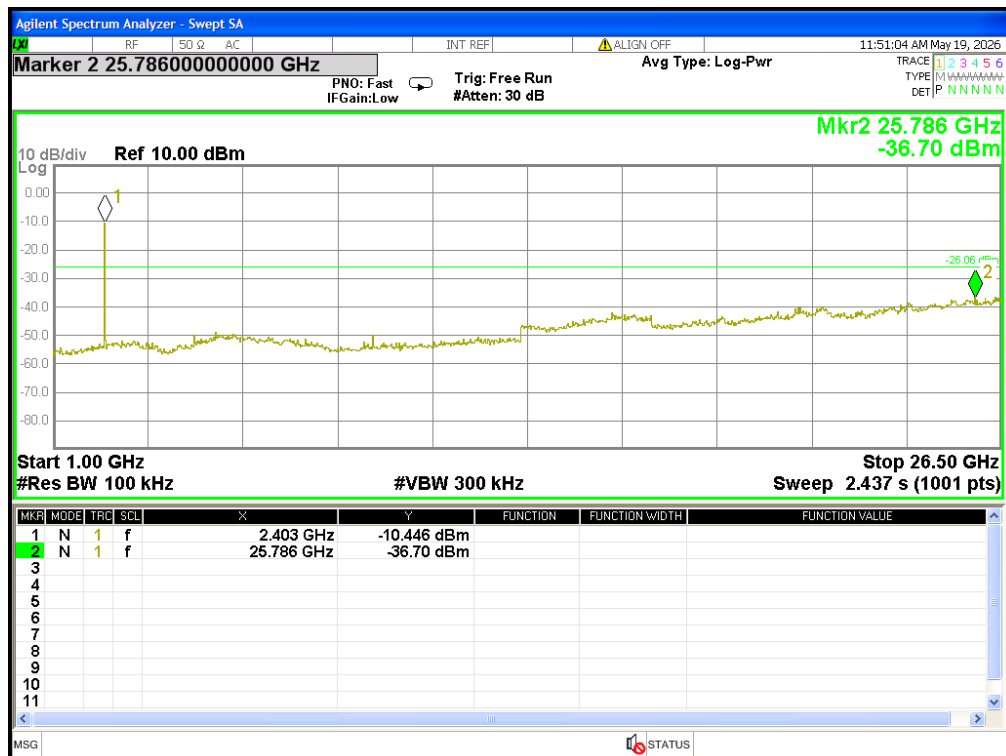
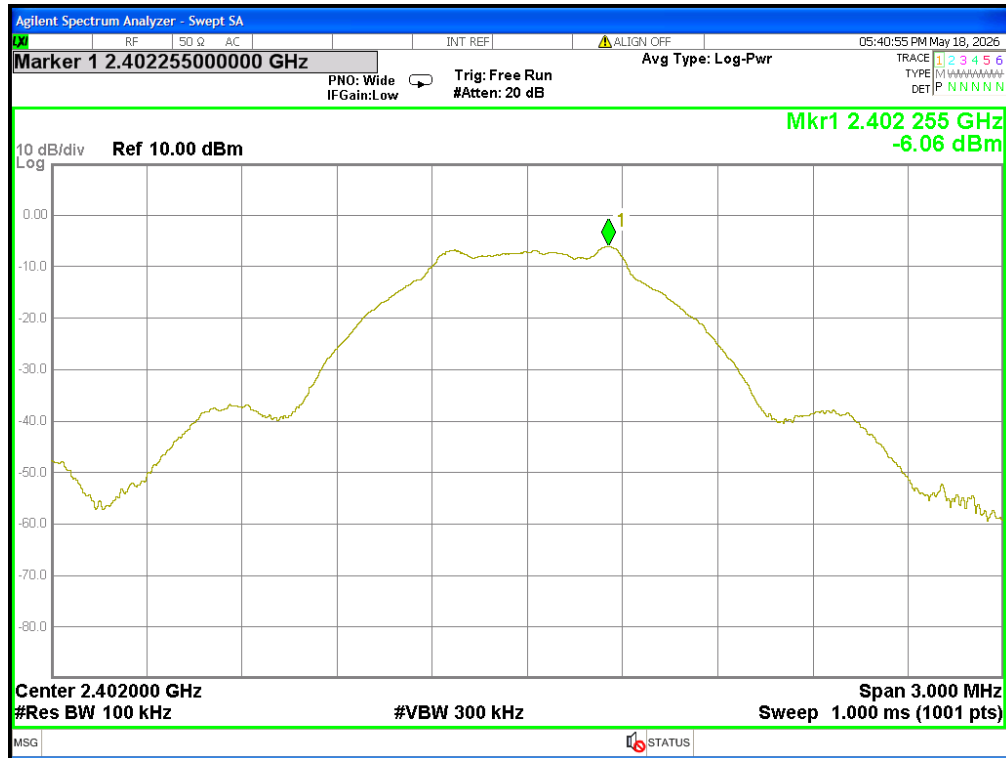
4.8.4 Test Setup

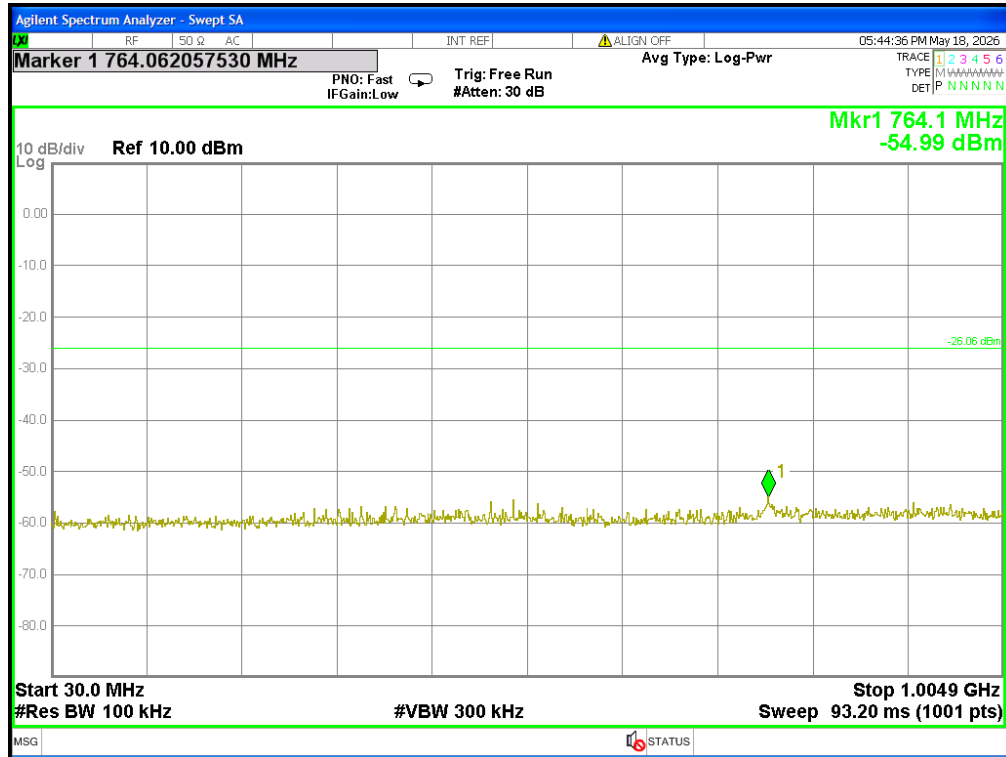




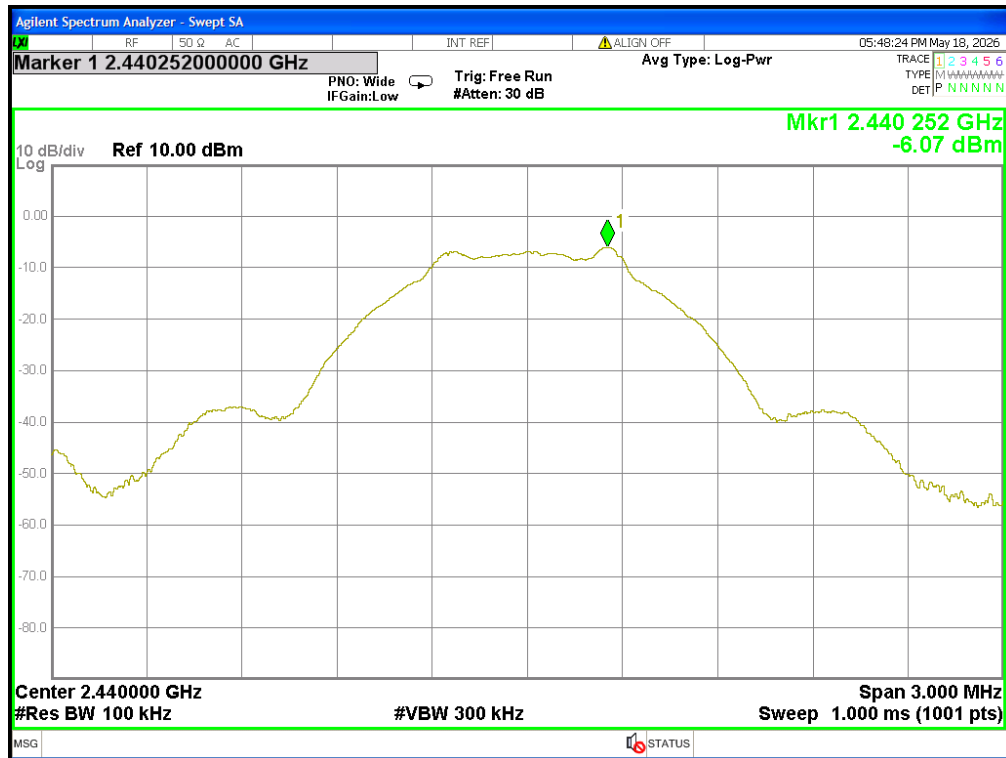
4.8.5 Test Results

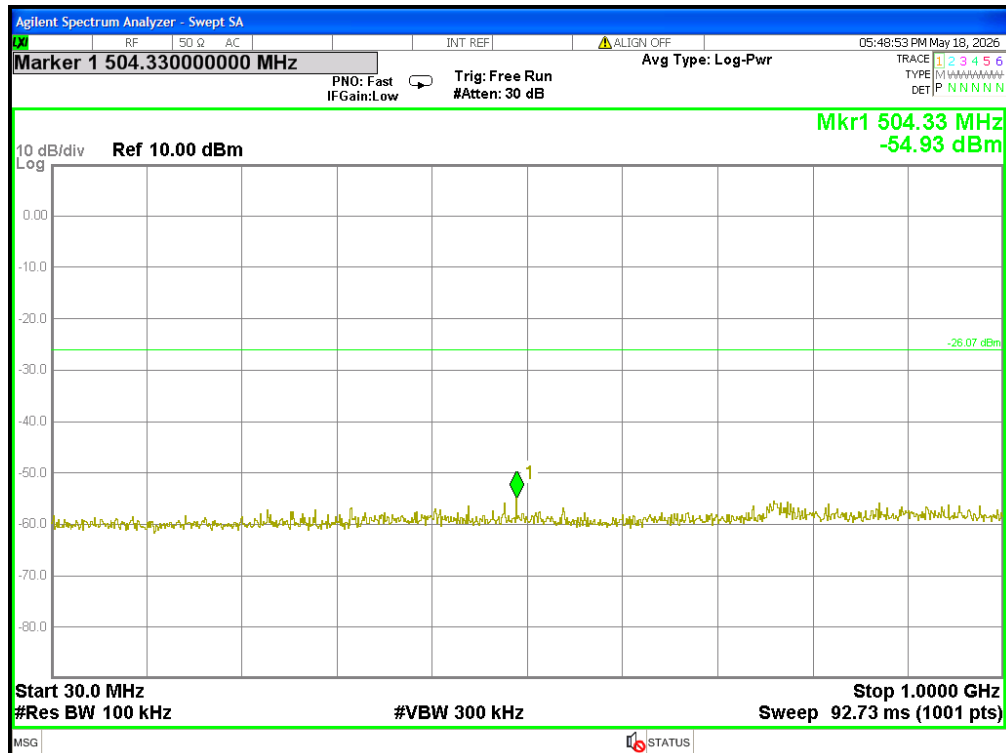
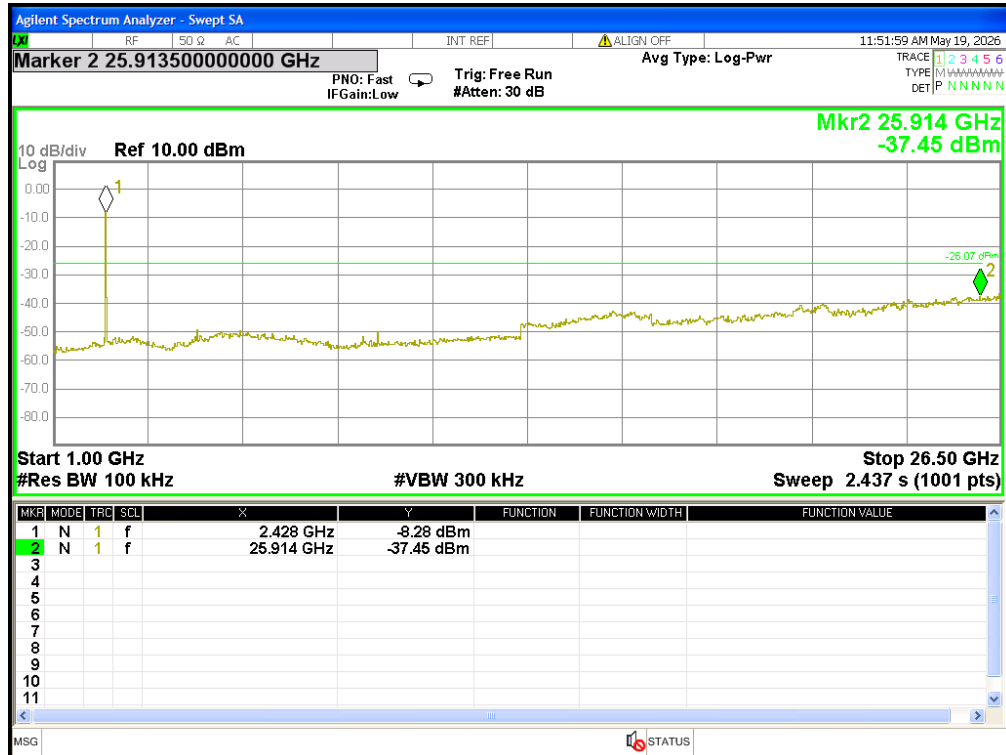
1M: CH00





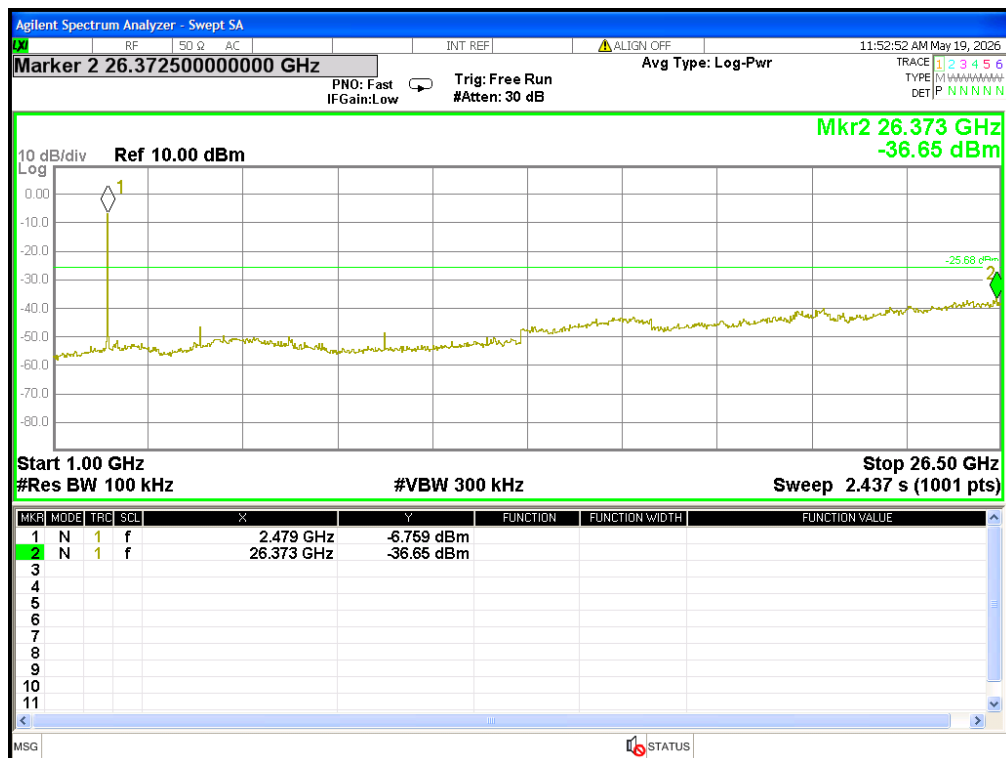
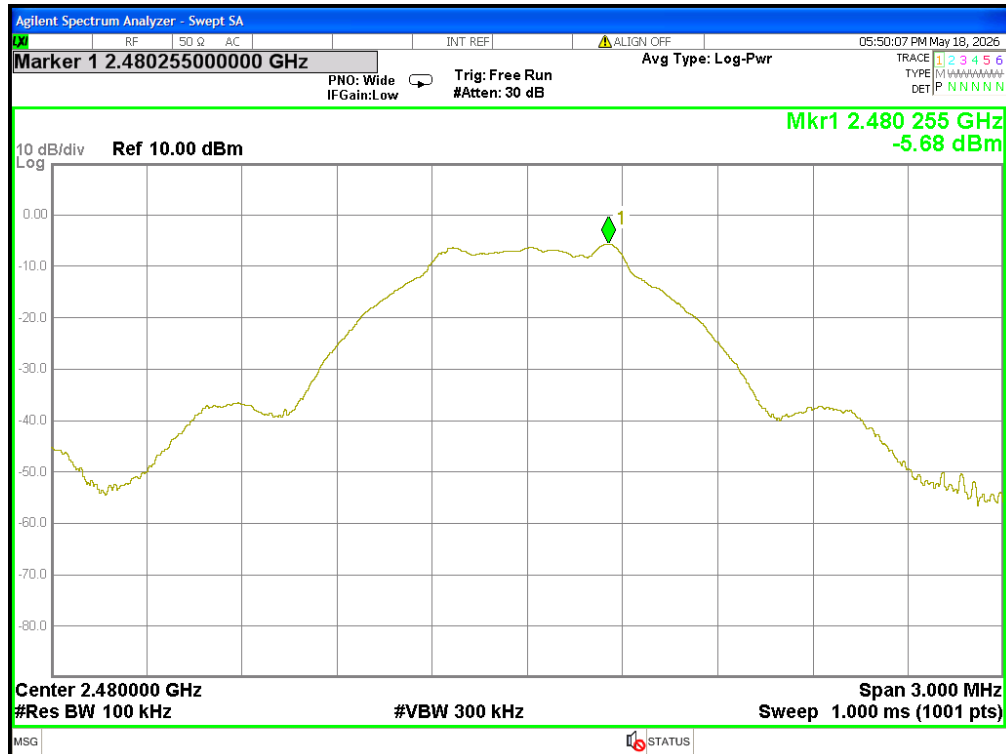
1M: CH19

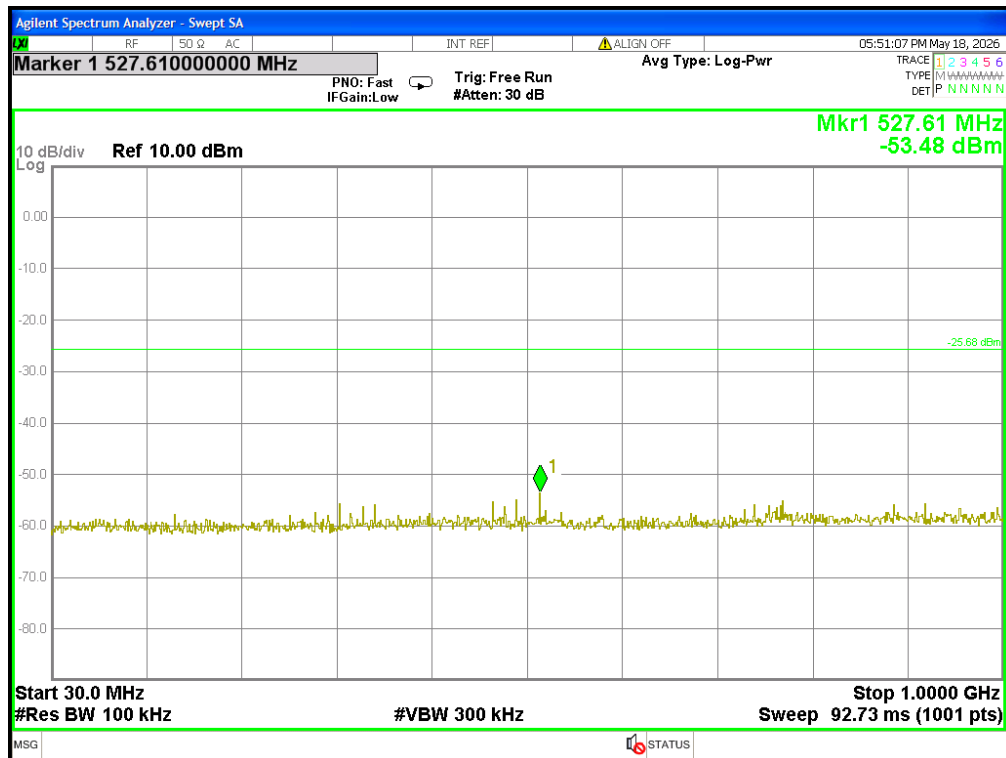




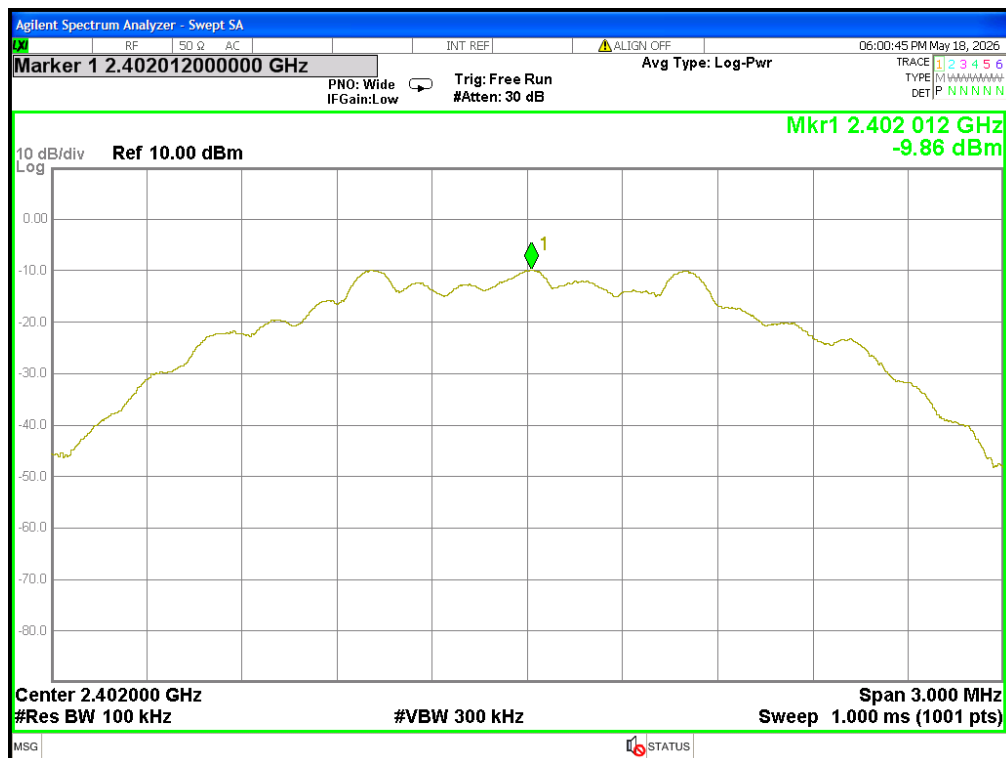


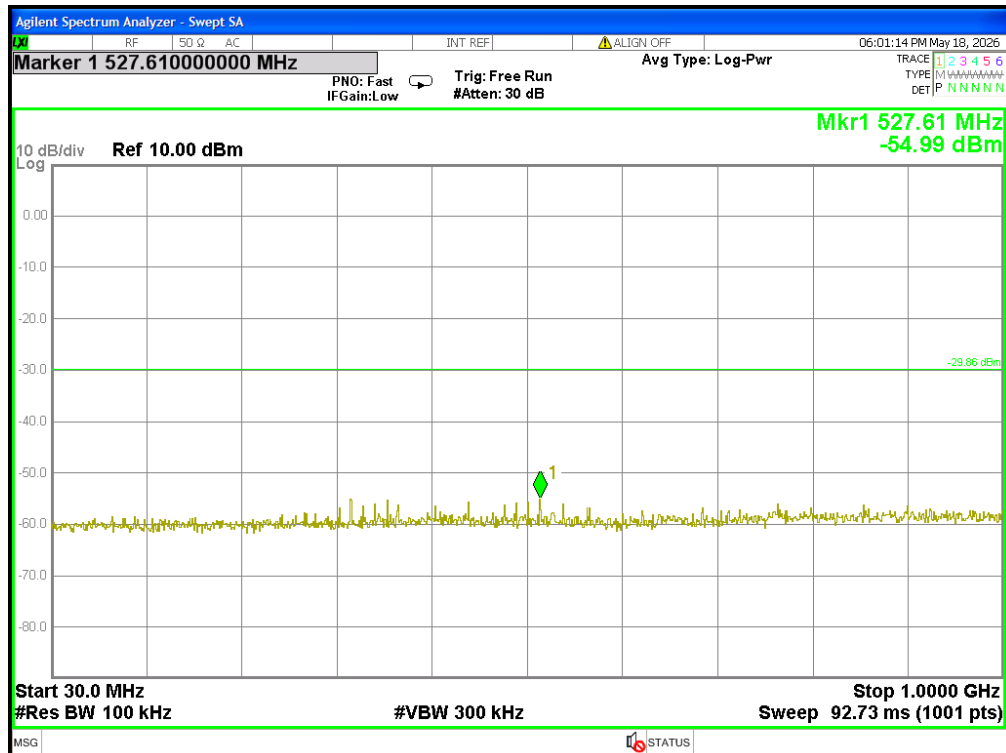
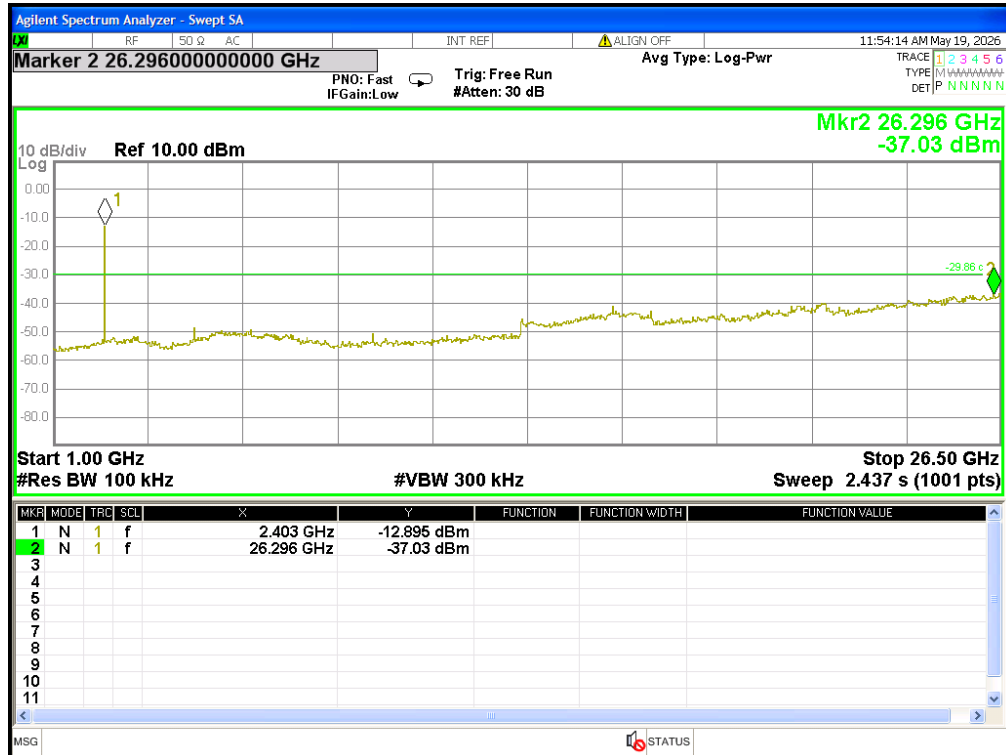
1M: CH39





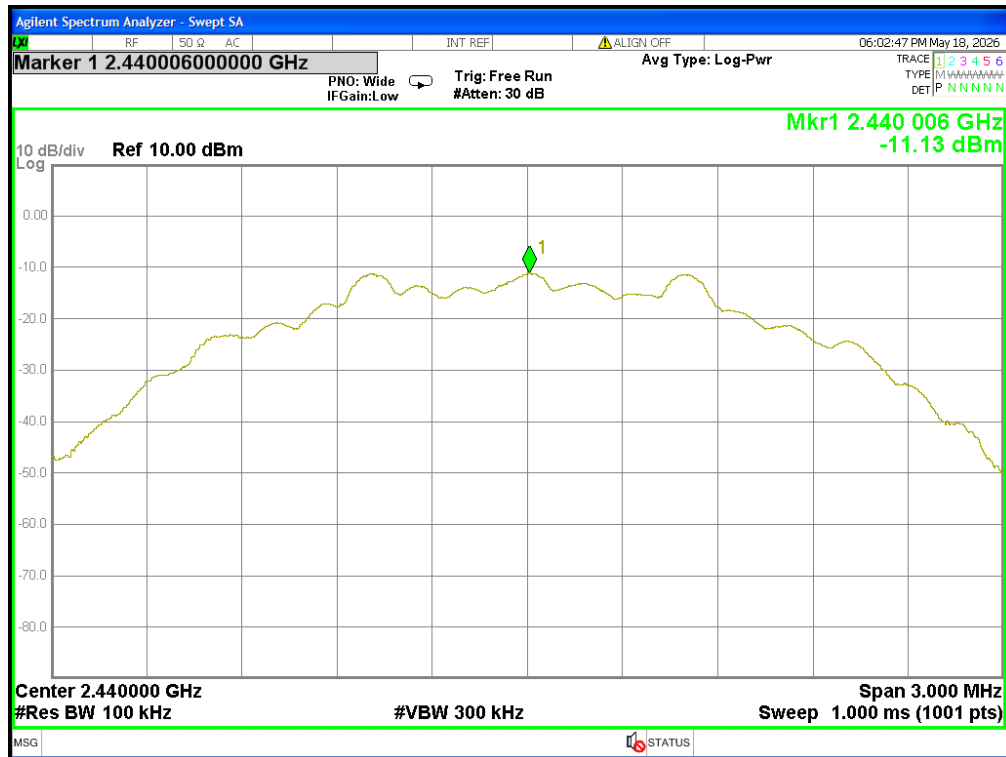
2M: CH00

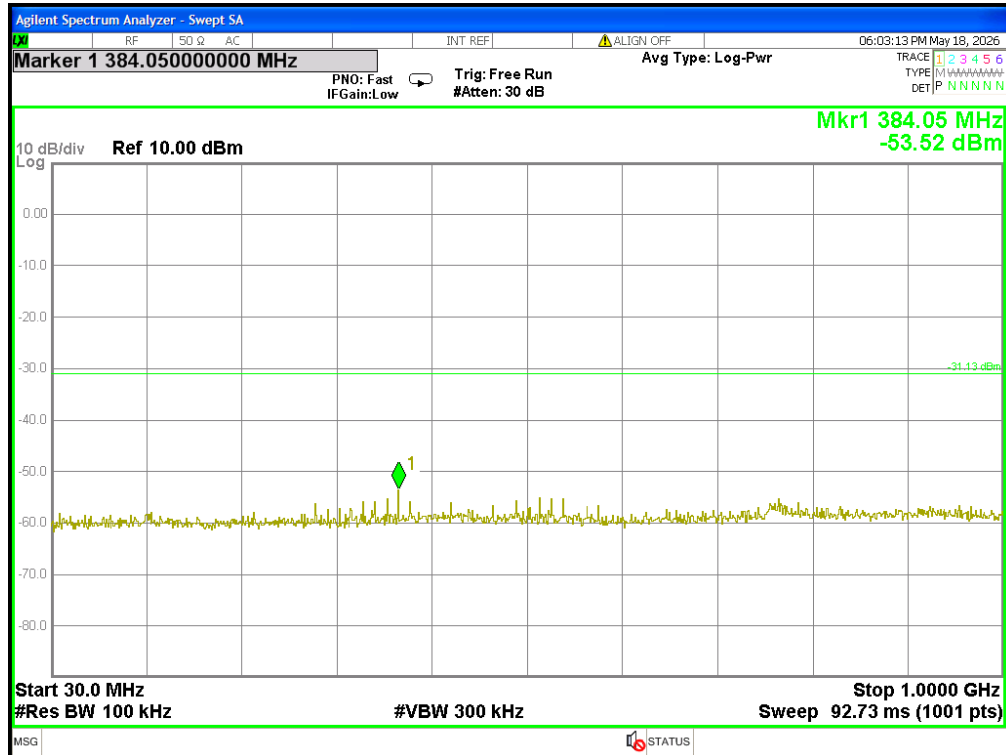




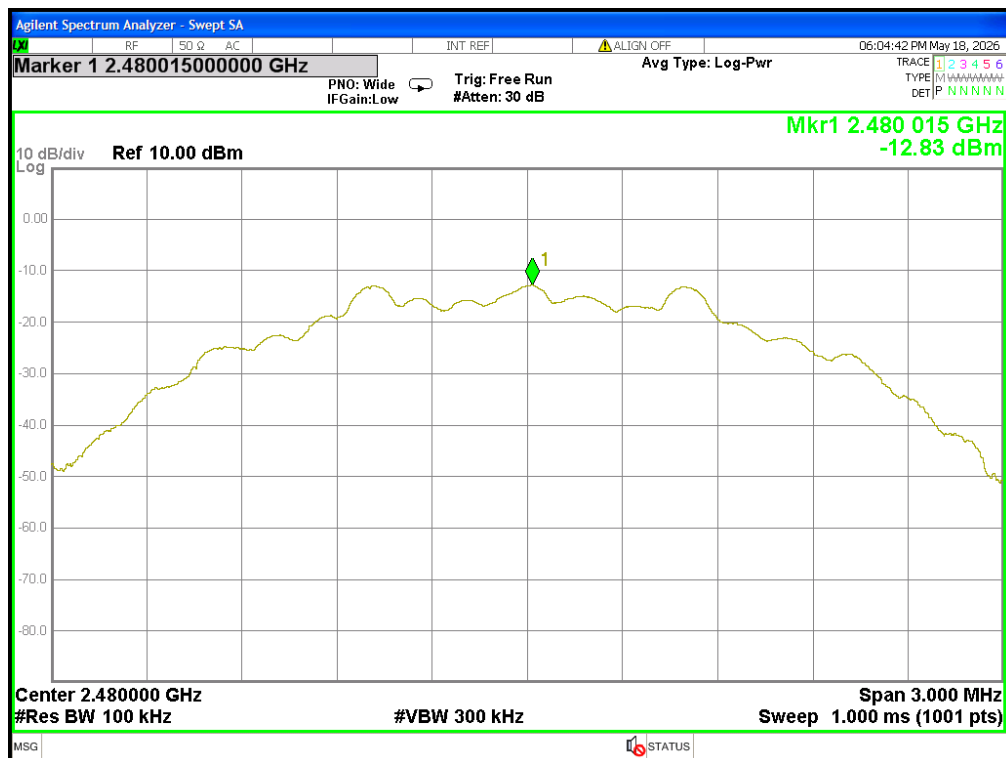


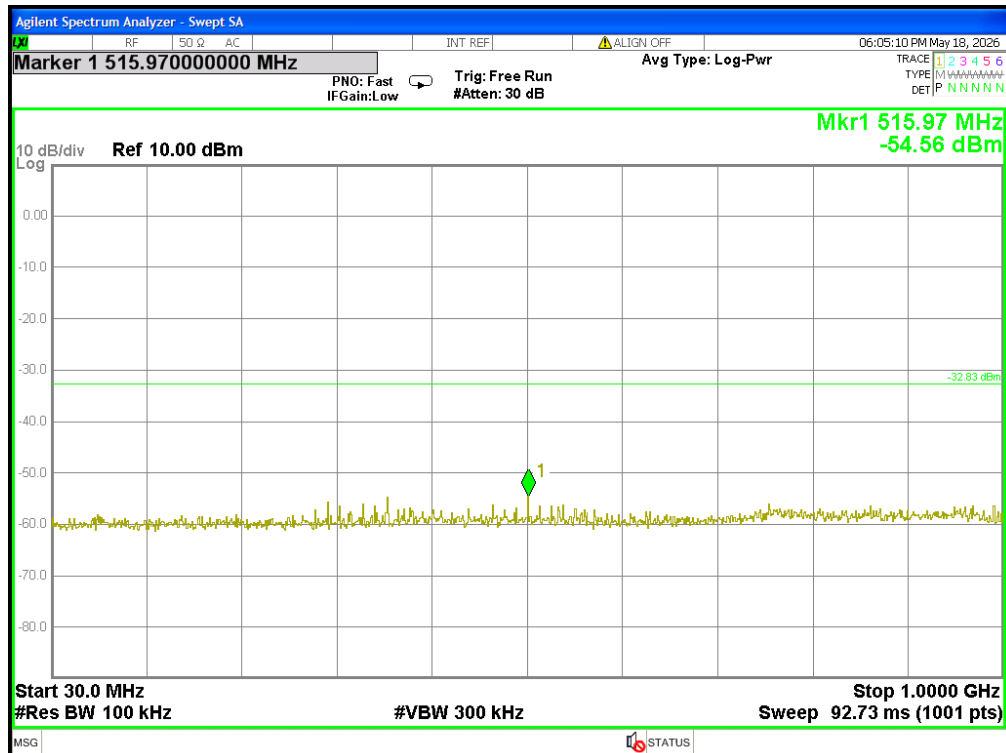
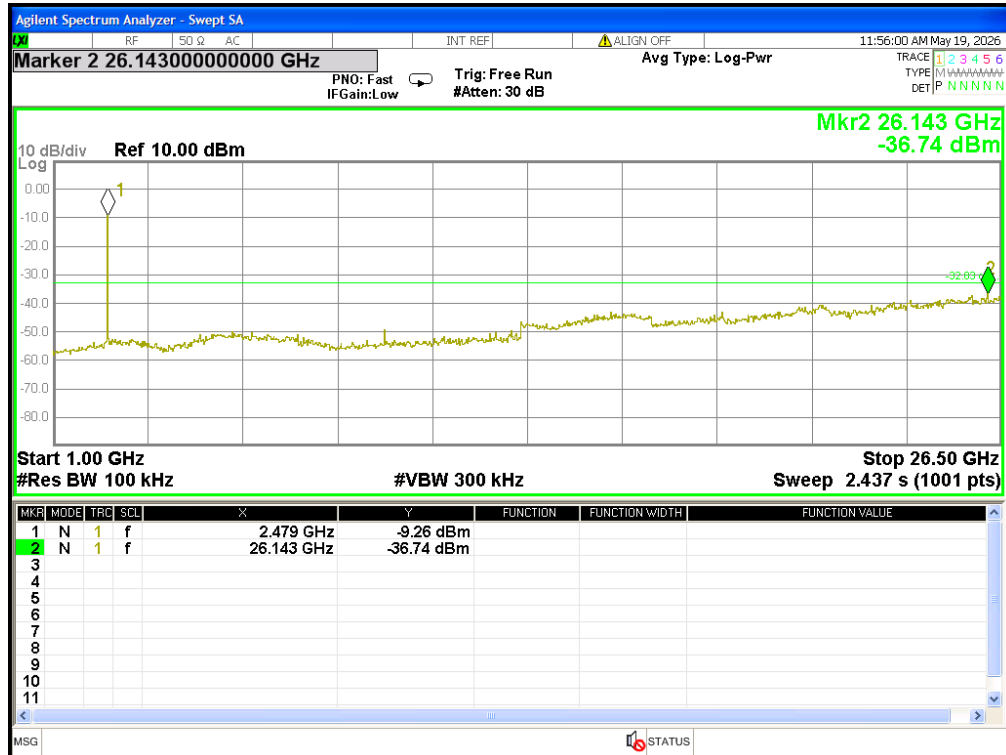
2M: CH19





2M: CH39







5 Test Setup Photos of the EUT

Please see the additional attachment (WH1_Test Setup Photos).

6 Photos of the EUT

Please see the additional attachment (WH1_External Photos)&(WH1_Internal Photos).