



Test report No:
5425ERM.002

Test report

2.4GHz Wideband Low Power Data Communication System (BT/BLE/Wi-Fi)

(*) Identification of item tested	Multimedia device with Bluetooth and WLAN
(*) Trademark	BOSCH
(*) Model and /or type reference	RSUI31
(*) Derived model not tested	-
Other identification of the product	Hw version: D3.2 Sw version: E219.0
(*) Features	WLAN 5GHz, WLAN 2.4GHz, Bluetooth v5.2, Bluetooth LE
Manufacturer	Robert Bosch GmbH
Test method requested, Certification Ordinance	Public notice of MIC No.88 test method of specified radio equipment Annex43. Article 2 paragraph 1 item 19
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager  Digitally signed by Domingo Galvez DN: cn=Domingo Galvez, o=DeKra Certification Inc., ou=Regulatory Lab Manager, email=domingo.galvez@dekra.com, c=US
Date of issue	2025-10-30
Report template No	FDT08_25 (*) "Data provided by the client"

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DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

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Testing Site

Test Site	DEKRA Certification Inc.
Test Site Location	405 Glenn Dr. Suite 12, Sterling, VA 20164 United States of America

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Certification internal document PODT000.

Test case	Frequency (MHz)	U (k=2)	Units
Antenna power and tolerances for antenna power	2402-2483	0.78	dB
Frequency tolerance		10.03	kHz
Spurious emission intensity	0.01 - 1000	0.48	dB
Receiving equipment. Limit on secondary radiated emissions	1000 - 25000	0.94	dB
Permissible value for occupied bandwidth, Spread Bandwidth	2402-2483	5.0	kHz
Antenna gain		2.6	dB

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample consists of a Multimedia device with Bluetooth and WLAN.

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: The client.

Control N°	Description	Model	Serial N°	Date of reception
5425/01	Multimedia device	BOSCH/ RSUI31	0008218	2025/09/18
5425/02	Main Harness	-	-	2025/09/18
5425/03	Quad Mate AX Z to duo MATE AX cable (BT/Wi-Fi)	-	-	2025/09/18
5425/04	USB to Fakra cable	-	-	2025/09/18

Test sample description

Test Sample description (compulsory information for EMC and RF testing services)

Ports	Port name and description		Cable				
			Specified max length [m]	Attached during test	Shielded	Coupled to patient (3)	
	Main Connector A		3	☒	☐	☐	
	HD-BaseT		3	☒	☐	☐	
	BT/WLAN antenna		3	☒	☐	☐	
	Video		3	☒	☐	☐	
	USB3.0		3	☐	☐	☐	
	USB2.0		3	☐	☐	☐	
				☐	☐	☐	
				☐	☐	☐	
			☐	☐	☐		
			☐	☐	☐		
			☐	☐	☐		
			☐	☐	☐		
Supplementary information to the ports..... :		USB 3.0 and USB2.0: Only used in BOSCH production, not used by customer or end user					
Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	☐	AC:	☐	☐	☐	☐	☐
	☐	AC:	☐	☐	☐	☐	☐
	☐	DC:					
☒	DC: Nominal supply voltage: 9.0 - 16.0 VDC						
Rated Power	Max. Current consumption: <8A						
Clock frequencies	No Data Provided						
Other parameters.....	No Data Provided						
219.0	219.0						
Hardware version.....	D3.2						
Dimensions in cm (W x H x D)	length: 224,57mm (+/- 0,6), width: 139,45mm (+/-1,5), height: 51,9mm (+/-1,2)						
Mounting position.....	☐	Tabletop equipment					
	☐	Wall/Ceiling mounted equipment					
	☐	Floor standing equipment					
	☐	Hand-held equipment					
	☒	Other: in vehicle					

Modules/parts	Description	Type	Manufacturer
Accessories (not part of the test item)	Description	Type	Manufacturer
	Laptop	Latitude 5500	Dell
	Display		
	USB-Ethernet Adapter		
	Harness and cable		
	infotainment systems and extension of USB	VA6000	Valens
	other necessary equipment and cables		
Documentation provided by the applicant	Description	Document Name	Date of issue
Marking Label			

⁽³⁾ Only for Medical Equipment

Identification of the client

Robert Bosch GmbH
Robert-Bosch-Strasse 200,
31139 Hildesheim
Germany

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	2025-10-06
Date (finish)	2025-10-14

Document history

Report number	Date	Description
5425ERM.002	2025-10-30	First release

Environmental conditions

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C
	Max. = 35 °C
Relative humidity	Min. = 45 %
	Max. = 85 %
Air pressure	Min. = 860 mbar
	Max. = 1060 mbar

Remarks and comments

The tests have been performed by the technical personnel: Juliana Cherry, Yuqi Wang and Koji Nishimoto.

The tests are performed only at rated voltage. Because the input voltage to the RF circuit varies within $\pm 1\%$ when the input voltage from the external power supply to the DUT varies $\pm 10\%$ (excluding power supply).

List of equipment used during the test

Conducted Measurements

Control number	Description	Manufacturer	Model	Calibrated By	Serial No.	Last Calibration	Calibration Method
1039	Fsv40 Signal Analyzer 40ghz	Rhode & Schwarz	FSV40	HCT	101627	2025-04-11	c)
1378	NRP6A Average Power Sensor	Rhode & Schwarz	NRP6A	HCT	102484	2025-04-12	c)

Note: Calibration Method

- Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1) of the Radio Law.
- Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
- Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- Calibration conducted by using other equipment that is listed above from a) to c).

Testing verdicts

Not applicable :	N/A
Pass :	P
Fail :	F
Not measured :	N/M

Summary

1. Bluetooth Low Energy

Requirement – Test case	Verdict	Remark
Modulation system	P	N/A
Antenna power and tolerances for antenna power	P	N/A
Frequency tolerance	P	N/A
Unwanted Emission Strength	P	N/A
Permissible value for occupied bandwidth	P	N/A
Secondary Radiated Emission Strength	P	N/A
Interference prevention function	P	N/A
Antenna gain	P	N/A

2. Bluetooth BR/EDR

Requirement – Test case	Verdict	Remark
Antenna power and tolerances for antenna power	P	N/A
Frequency tolerance	P	N/A
Unwanted Emission Strength	P	N/A
Permissible value for occupied bandwidth	P	N/A
Spread bandwidth	P	N/A
Process gain	P	N/A
Dwell time	P	N/A
Secondary Radiated Emission Strength	P	N/A
Interference prevention function	P	N/A
Antenna gain	P	N/A

3. Wi-Fi 2.4 GHz

Requirement – Test case	Verdict	Remark
Antenna power and tolerances for antenna power	P	N/A
Frequency tolerance	P	N/A
Spurious emission intensity	P	N/A
Permissible value for occupied bandwidth	P	N/A
Spread bandwidth	P	N/A
Process gain	P	N/A
Secondary Radiated Emission Strength	P	N/A
Interference prevention function	P	N/A
Antenna gain	P	N/A

Power Supply Voltage Fluctuation

After checking the fluctuation of input voltage to the circuit of the radio part (excluding the power supply) of the equipment to be tested, the fluctuation was less than $\pm 1\%$ when input voltage from an external supply into the equipment fluctuates $\pm 10\%$, therefore, the test is carried out only at the normal voltage.

Test Procedure and Setup

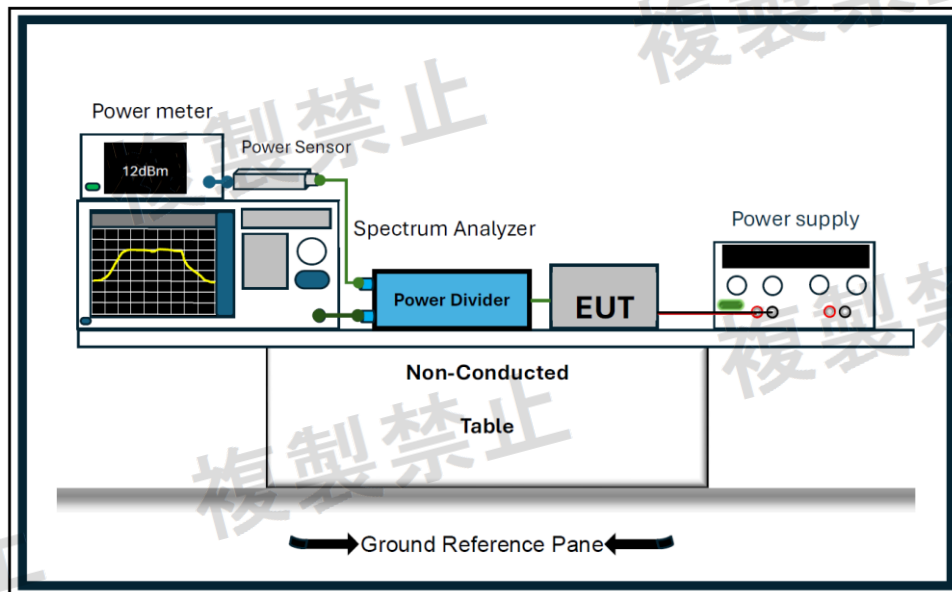
Article 49-20 Antenna Power/Antenna Power Tolerance/E.I.R.P. (BT)

Test Procedure

The DUT is connected to the power meter and spectrum by power divider; it is configured at maximum power in the different test modes

1. Connect a power meter to the output of the dummy load (attenuator) and measure the output power.
2. The spectrum analyzer to the output of the dummy load (attenuator) and measure the duty cycle and spread bandwidth (90% Occupied Bandwidth).
3. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
4. The test result was calculated by the formula below.
$$\text{Antenna Power (mW/MHz)} = 10^{((\text{Total Output power (dBm)} + \text{Duty Cycle correction(dB)})/10)} / \text{Spread Bandwidth (MHz)}$$
5. The antenna power tolerance was compared between the declared antenna power and antenna power test result.
6. Antenna gain is added to these results in order to calculate the E.I.R.P.

Test Setup



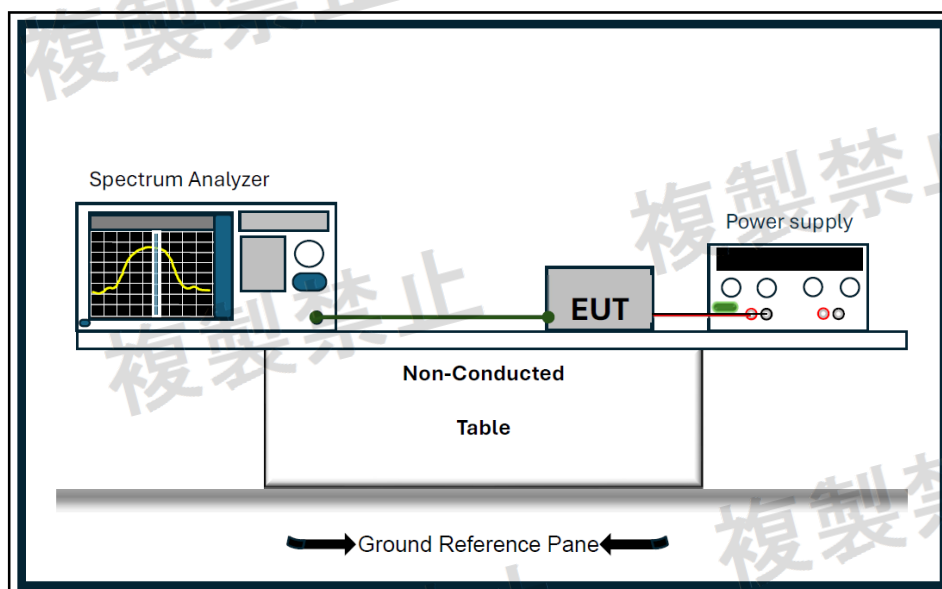
Article 49-20 Antenna Power/Antenna Power Tolerance/E.I.R.P. (Wi-Fi b-DSSS)

Test Procedure

The DUT is connected to the spectrum analyzer, and it is configured at maximum output power in the different test channels.

1. A measurement instrument with a 1 MHz integrated power function may be used to automate the test process.
2. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
3. The antenna power tolerance was compared between the declared antenna power and antenna power test result.
4. Antenna gain is added to these results in order to calculate the E.I.R.P.

Test Setup



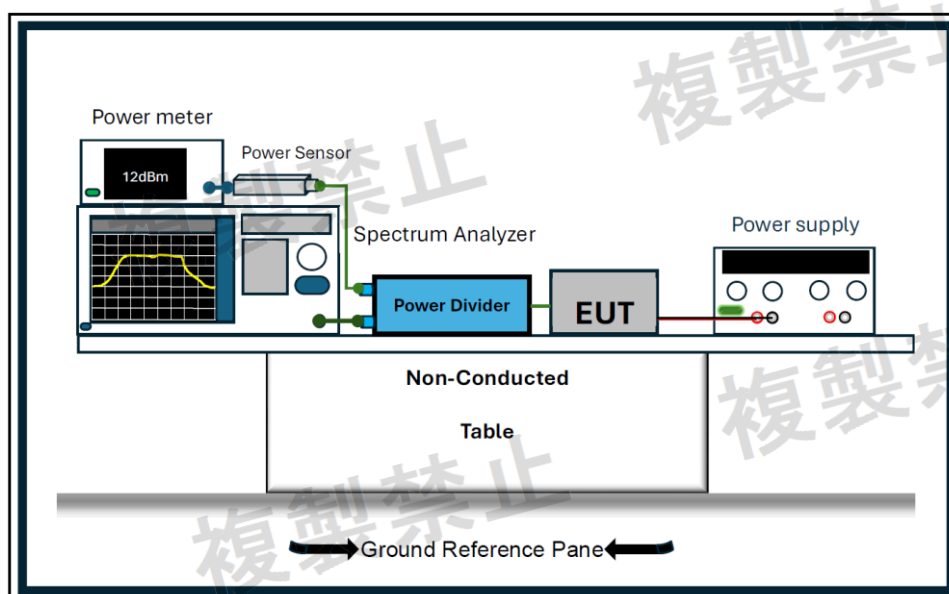
Article 49-20 Antenna Power/Antenna Power Tolerance. (Wi-Fi-OFDM)

Test Procedure

The DUT is connected to the power meter and spectrum by power divider, it is configured at maximum output power in the different test channels.

1. Connect a power meter to the output of the dummy load (attenuator) and measure the output power.
2. The spectrum analyzer to the output of the dummy load (attenuator) and measure the duty cycle and spread bandwidth (90% Occupied Bandwidth).
3. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
4. The test result was calculated by the formula below.
Antenna Power (mW/MHz) = $10^{((\text{Total Output power (dBm)} + \text{Duty Cycle correction (dB)})/10)} / \text{Spread Bandwidth (MHz)}$
5. The antenna power tolerance was compared between the declared antenna power and antenna power test result.
6. Antenna gain is added to these results in order to calculate the E.I.R.P.

Test Setup

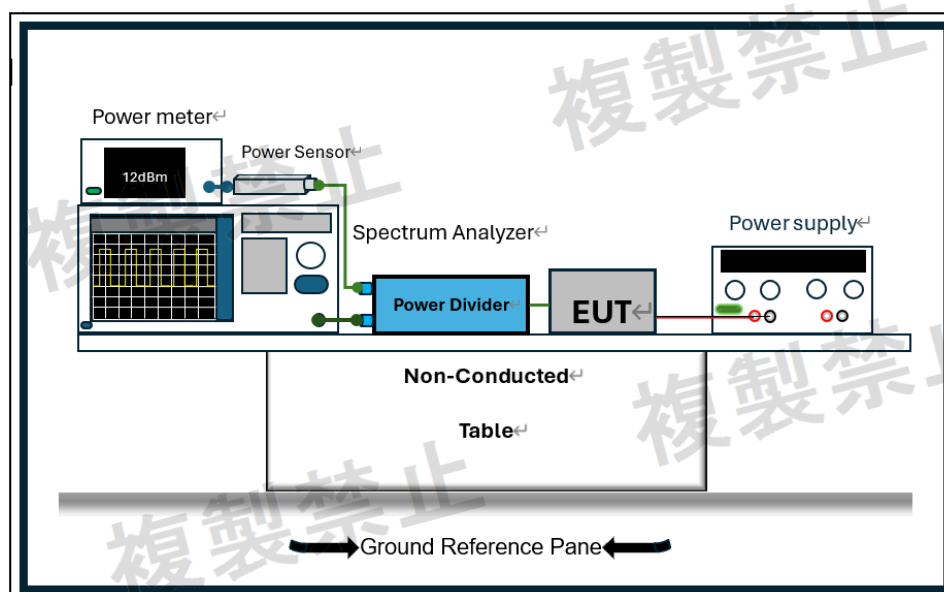


Article 49-20 Antenna Power/Antenna Power Tolerance (BLE)

Test Procedure

The RF conducted output power measurements were made at the RF output terminals of the DUT, using an average power meter, selecting maximum transmission power of the DUT in the different test channels. The measurement is corrected with the duty cycle. Antenna gain is added to these results in order to calculate the E.I.R.P.

Test Setup



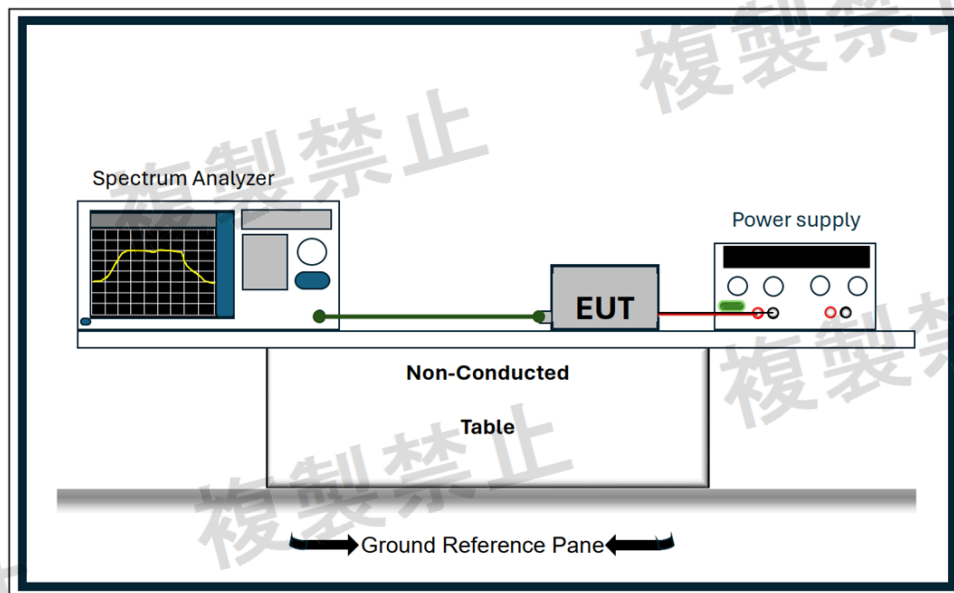
Article 5 and Annex 1 table 7-8 Frequency Tolerance (with modulation)

Test Procedure

The DUT is connected to the spectrum analyzer and it is configured at maximum output power with modulation in the different test channels.

1. A positive peak detector function must be used.
2. The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
3. 'Maximum Hold' then 'View' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.
4. The peak value of the power envelope shall be measured and noted. The span shall be reduced and the marker moved in a positive frequency increment until the upper, (relative to the center frequency), -10 dBc point is reached. This value shall be noted as f1.
5. The marker shall then be moved in a negative frequency increment until the lower, (relative to the center frequency), -10 dBc point is reached. This value shall be noted as f2.
6. The center frequency is calculated as $(f1 + f2) / 2$.

Test Setup



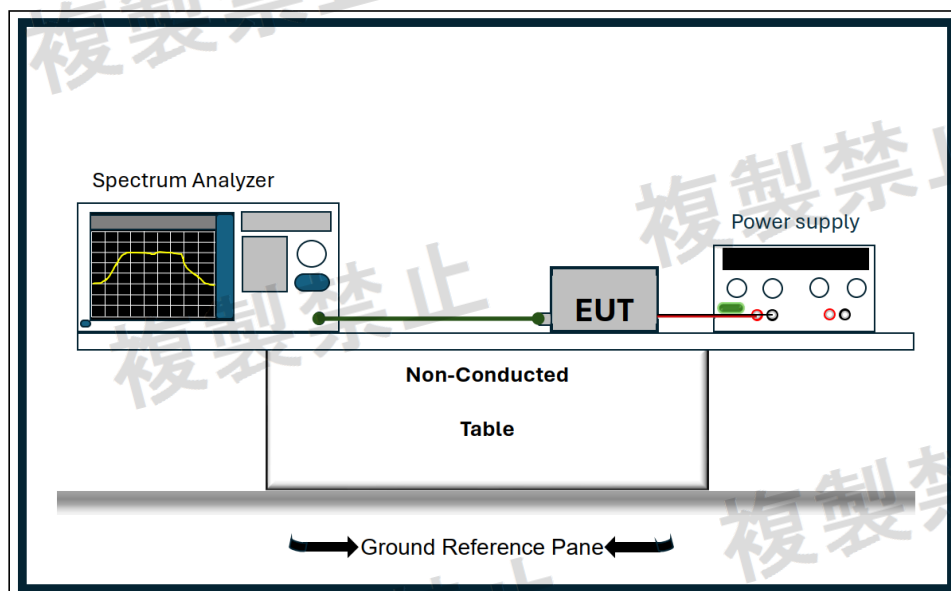
Article 6 and Annex 2. 30 Occupied Bandwidth

Test Procedure

The DUT is connected to the spectrum analyzer and it is configured at maximum output power in the different test channels.

- 1 A positive peak detector function must be used.
- 2 A measurement instrument with an integrated 99% power bandwidth function may be used to automate the test process.
- 3 The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
- 4 'Maximum Hold' then 'View' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Test Setup



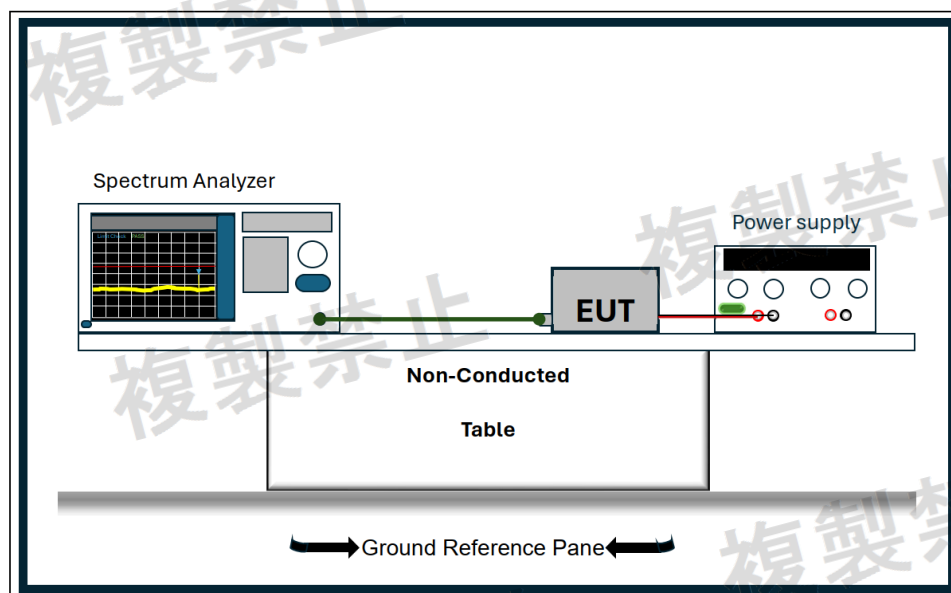
Article 7 and Annex 3. 26 Unwanted Emission Strength

Test Procedure

The DUT is connected to the spectrum analyzer, and it is configured at maximum output power in the different test channels.

- 1 A positive peak detector function must be used.
- 2 The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
- 3 'Maximum Hold' then 'View' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Test Setup



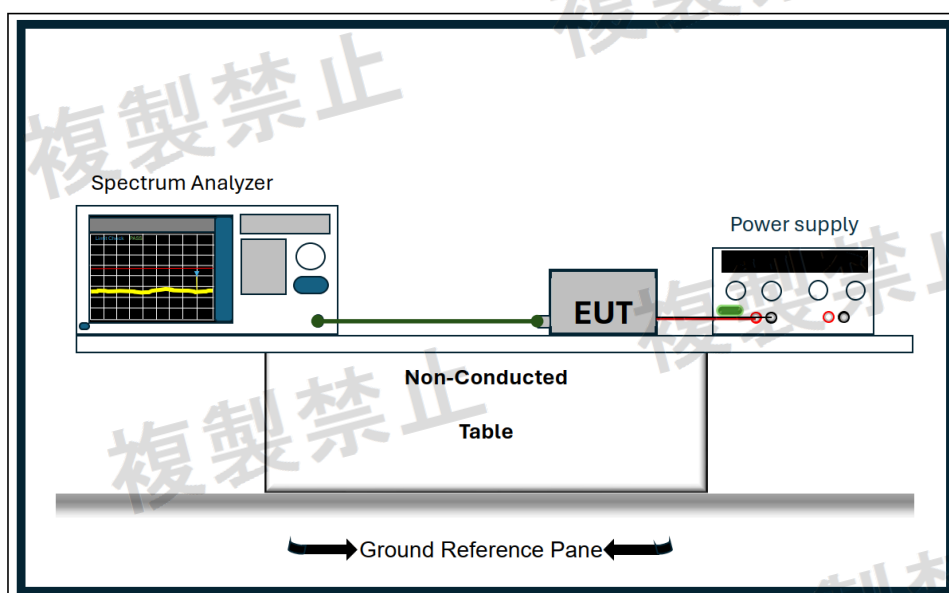
Article 24. 2 Secondary Radiated Emission Strength

Test Procedure

The DUT is connected to the spectrum analyzer, and it is configured in reception mode on the different test channels.

- 1 A positive peak detector function must be used.
- 2 The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
- 3 'Maximum Hold' then 'View' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

Test Setup



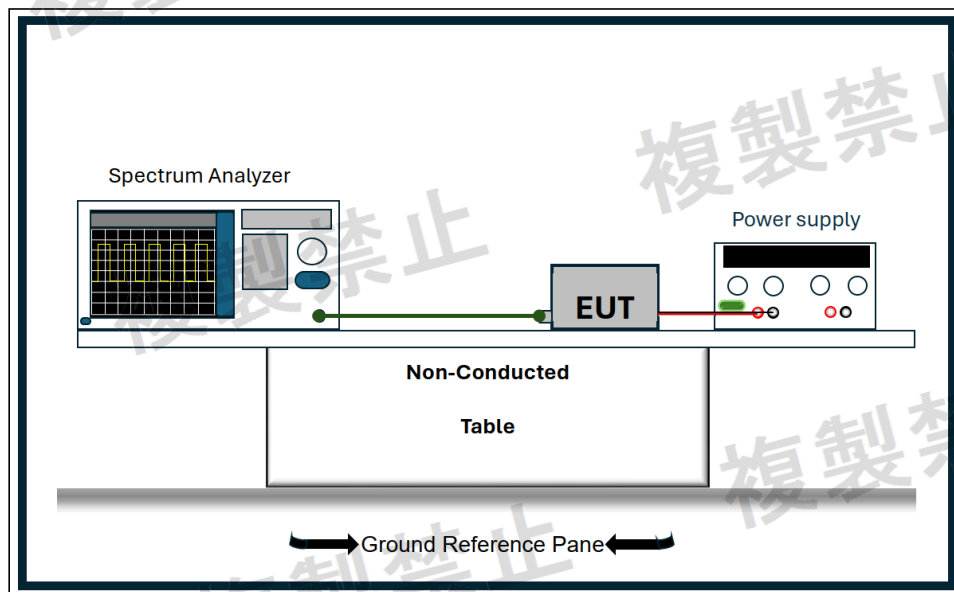
Article 49-20 Dwell Time (BT)

Test Procedure

The DUT is connected to the spectrum analyzer, and it is configured at maximum output power in the different test channels.

- 1 A positive peak detector function must be used.
- 2 The center frequency is set to the test frequency, and the span is switched to zero.
- 3 The measurement instrument bandwidth must be set sufficiently with, and, the scan time set sufficiently slowly, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.
- 4 "Single sweep" mode may be used to capture a packet over a single scan.
- 5 The Dwell time has been calculated by the formula.
$$\text{Dwell time} = (\text{Spreading rate} * 0.4) * (\text{Duty cycle} / \text{Hopping or AFH channels})$$
$$\text{Spreading rate} = \text{Spread Bandwidth} / \text{Symbol rate (1 M symbols/sec)}$$

Test Setup

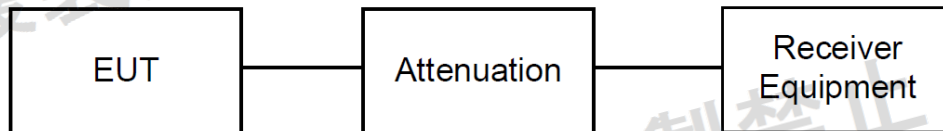


Article 9.4-5 Interference Prevention Function

Test Procedure

The DUT is placed on a shielded room to isolate it. With the DUT turned off and using a spectrum analyzer and an antenna, it is checked that no signal from other devices is present inside the shielded room in the frequency range of interest. Then, the DUT is turned ON. Using an ancillary device, the MAC address is checked and registered

Test Setup



Appendix A: Test results. Bluetooth Low Energy

PRODUCT INFORMATION

Modulation:	GFSK
Spread spectrum system:	No (Other digital modulation methods).
Nominal necessary Bandwidth:	1 MHz
Maximum declared antenna gain:	0.1 dBi.
Rated Antenna Power:	5.5 mW
Type of antenna:	Ext. Antenna
Operating nominal frequency range:	2402 MHz to 2480 MHz
Type of power supply:	DC voltage

DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC#01	Power supply (V): Vnominal = 12 Vdc GFSK Data Rate: 1 Mbps ⁽¹⁾ <u>Test Frequencies for Conducted tests:</u> Lowest Channel: 2402 MHz Middle Channel: 2440 MHz Highest Channel: 2480 MHz

Note (1): A preliminary evaluation identified 1 Mbps as the worst-case data rate. The following tables and plots show results measured in this mode.

CONDUCTED MEASUREMENTS

The equipment under test (EUT) was set up in a shielded room and its antenna port (SMA type) is directly connected to the spectrum analyzer.

The EUT is set in continuous transmission with and without modulation using an implemented test mode.

TEST RESULTS

Test Cases Details

Subclause 3.2 (1). Modulation system

SPECIFICATION

For spread spectrum systems, a Direct Sequence system (DS system), a Frequency Hopping system (FH system), a hybrid system combining these systems, or a hybrid system combining FH and orthogonal frequency division multiplexing systems (OFDM system) shall be used.

DS: A pseudo-random spreading code is combined with the information sequence to implement spreading function. The resulting signal modulates a carrier signal and consequently, the information signal is spread to a wide band signal.

FH: The transmitting signal is a sequence of pulses at different frequencies over a large bandwidth. This sequence is called as frequency hopping pattern.

RESULTS

Data Rate: 1 Mbps

The equipment incorporates a Bluetooth Low Energy radio which uses digital modulation (GFSK) and 40 channels over the frequency range 2402 MHz to 2480 MHz

Verdict: PASS

Article 2 Paragraph 1 of Item 19

Article 49-20 [AntPLE] Antenna Power (BLE)

Limits

Mode	Limit	Tolerance
a) FH, FH+DS, FH+OFDM	3 mW/MHz	-80% to +20%
b) OFDM (Narrow bandwidth), DS	10 mW/MHz	
c) Other than a & b	10 mW	
d) OFDM (Wide band)	5 mW/MHz	

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Antenna Power (dBm)	Antenna Power [Conducted] (mW)	Limit (mW)
15.00	12	2402	2.76	2.08	4.84	3.05	10
15.00	12	2440	2.55	2.42	4.97	3.14	10
15.00	12	2480	3.16	2.42	5.58	3.61	10

Verdict

Pass

Article 14 Table 8 [AntPTLE] Antenna Power Tolerance (BLE)

Limits

Mode	Limit	Tolerance
a) FH, FH+DS, FH+OFDM	3 mW/MHz	-80% to +20%
b) OFDM (Narrow bandwidth), DS	10 mW/MHz	
c) Other than a & b	10 mW	
d) OFDM (Wide band)	5 mW/MHz	

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Declared Antenna Power (mW)	Antenna Power [Conducted] (mW)	Antenna Power Error (%)	Limit (%)
15.00	12	2402	5.00	3.05	-39.00	20
15.00	12	2440	5.00	3.14	-37.20	20
15.00	12	2480	5.00	3.61	-27.80	20

Verdict

Pass

Article 5 and Annex 1 table 7-8 [FreqTLEwm] Frequency Tolerance

Limits

Frequency tolerance shall be $\pm 50 \times 10^{-6}$ (50 ppm).

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	2402	2401.9730	11.26	50.00
15.00	12	2440	2439.9717	11.61	50.00
15.00	12	2480	2479.9715	11.51	50.00

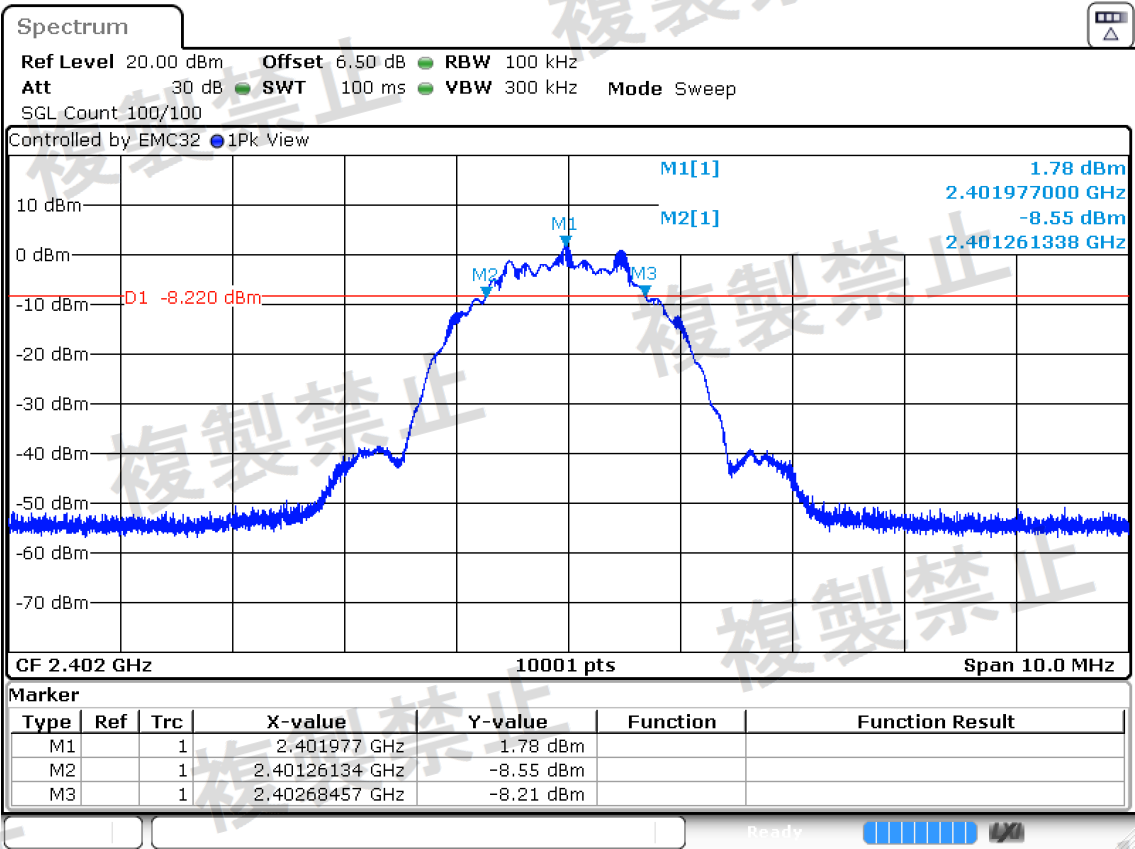
Verdict

Pass

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s)
Frequency MHz = 2402

Verdict: Pass

Images:

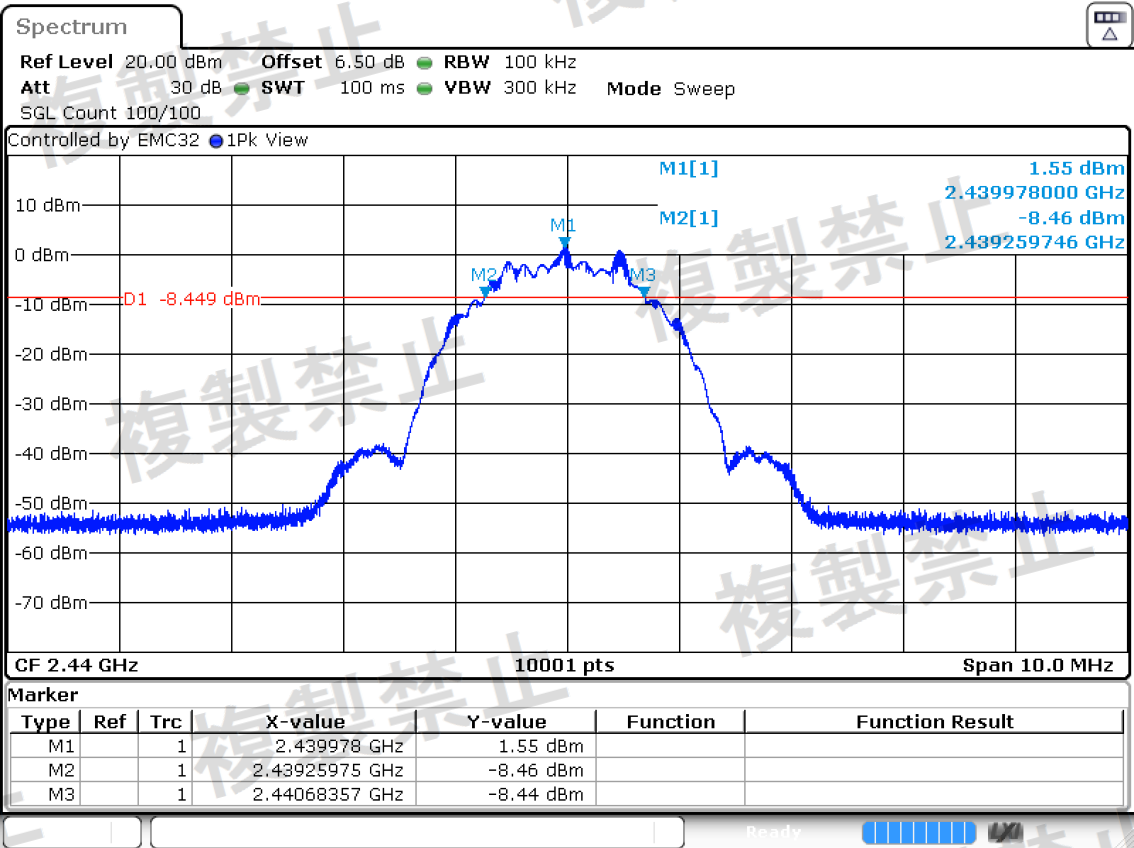


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s)
Frequency MHz = 2440

Verdict: Pass

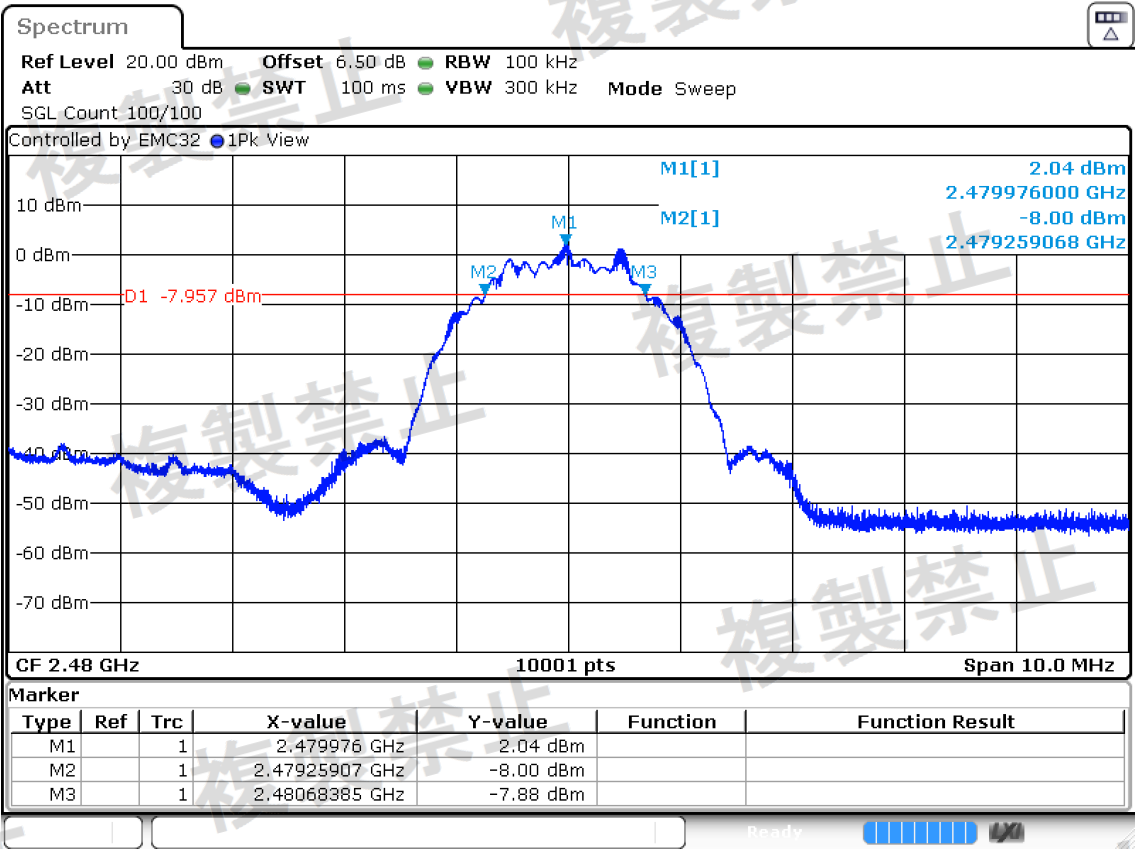
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s)
Frequency MHz = 2480

Verdict: Pass

Images:



Article 6 and Annex 2. 30 [OBWLE] Occupied Bandwidth (BLE)

Limits

Mode	Limit
FH	83.5 MHz
FH+DS	83.5 MHz
FH+OFDM	83.5 MHz
OFDM (Narrow bandwidth), DS	26 MHz
OFDM (Wide band)	38 MHz
Others	26 MHz

Modulation: BTLE 5.1 (GFSK 1 Mbit/s)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	99OBW (MHz)	Limit (≤MHz)
15.00	12	2402	1.216	26.00
15.00	12	2440	1.220	26.00
15.00	12	2480	1.221	26.00

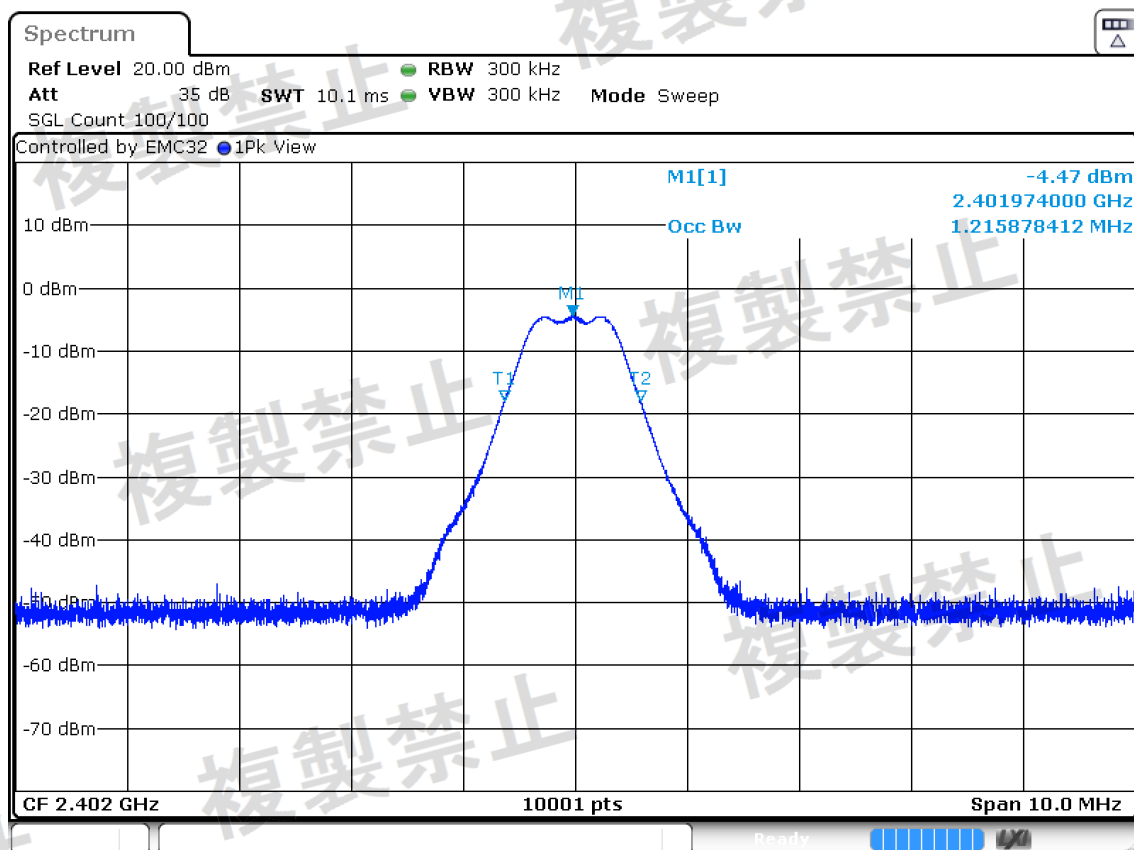
Verdict

Pass

Test Voltage = 12

Frequency MHz = 2402

Images:



Attachments

Ambient Temperature °C = 15.00

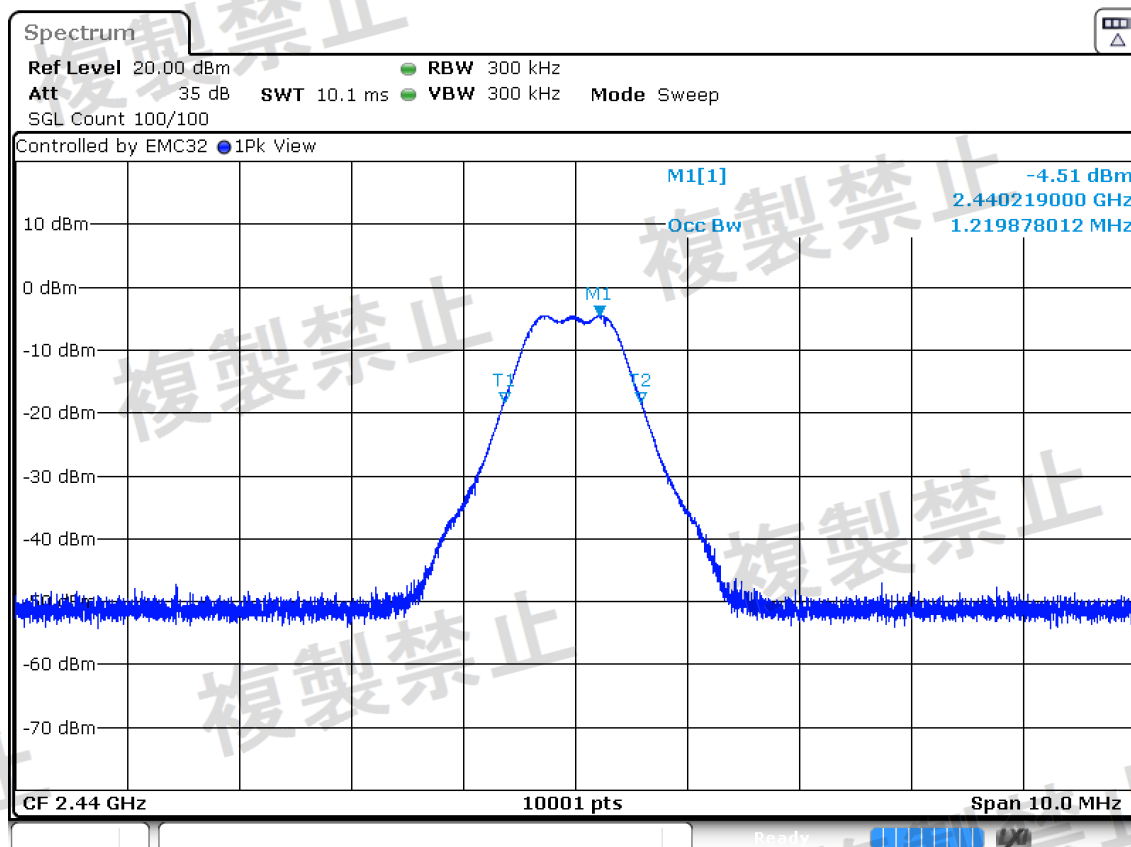
Test Voltage = 12

Modulation = BTLE 5.1 (GFSK 1 Mbit/s)

Frequency MHz = 2440

Verdict: Pass

Images:



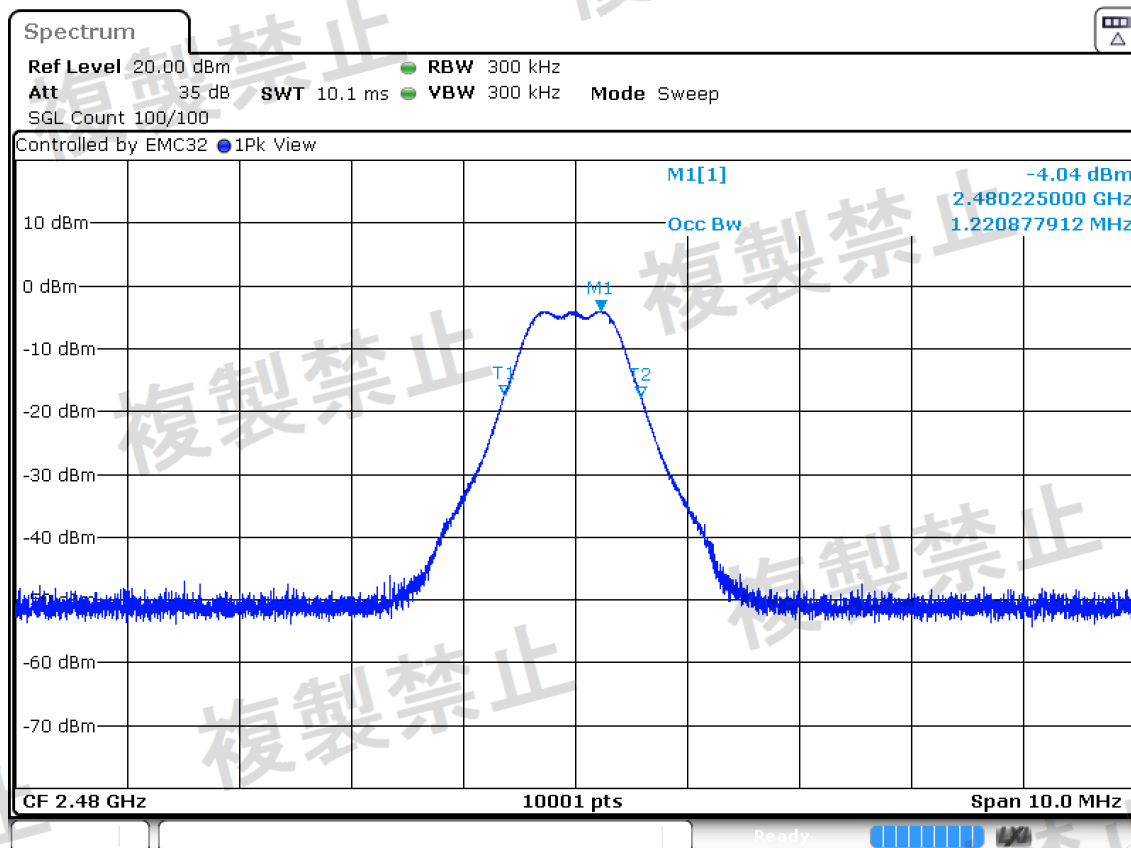
Ambient Temperature °C = 15.00 Test Voltage = 12

Modulation = BTLE 5.1 (GFSK 1 Mbit/s)

Frequency MHz = 2480

Verdict: Pass

Images:



Article 7 and Annex 3. 26 [CSETxLE] Unwanted Emission Strength (BLE)

Limits

Permissible mean power of spurious emission of each frequency supplied to a feeder, that is, mean power of spurious emission in the 1 MHz bandwidth at frequency f other than frequency band used shall be as follows:

- $2,387 \text{ MHz} \leq f \leq 2,400 \text{ MHz}$ and $2,483.5 \text{ MHz} < f \leq 2,496.5 \text{ MHz}$ $25 \text{ } \mu\text{W/MHz}$ (-16 dBm/MHz) or less.
- $2,387 \text{ MHz} > f$ and $2,496.5 \text{ MHz} < f$ $2.5 \text{ } \mu\text{W/MHz}$ (-26 dBm/MHz) or less.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Results

Frequency: 2402 MHz

Ambient Temp (°C)	Test Voltage	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	[0.03, 2.387]	1123.577	-57.22	0.0019	2.5
15.00	12	[2.387, 2.4]	2392.041	-56.31	0.0023	25
15.00	12	[2.4835, 2.4965]	2487.827	-55.51	0.0028	25
15.00	12	[2.4965, 12.5]	12437.640	-49.95	0.0101	2.5

Frequency: 2440 MHz

Ambient Temp (°C)	Test Voltage	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	[0.03, 2.387]	2134.036	-56.38	0.0023	2.5
15.00	12	[2.387, 2.4]	2399.998	-37.37	0.1832	25
15.00	12	[2.4835, 2.4965]	2483.752	-56.55	0.0022	25
15.00	12	[2.4965, 12.5]	6940.880	-51.34	0.0073	2.5

Frequency: 2480 MHz

Ambient Temp (°C)	Test Voltage	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	[0.03, 2.387]	841.335	-56.65	0.0022	2.5
15.00	12	[2.387, 2.4]	2391.349	-56.77	0.0021	25
15.00	12	[2.4835, 2.4965]	2483.527	-53.73	0.0042	25
15.00	12	[2.4965, 12.5]	6992.780	-50.97	0.0080	2.5

Verdict

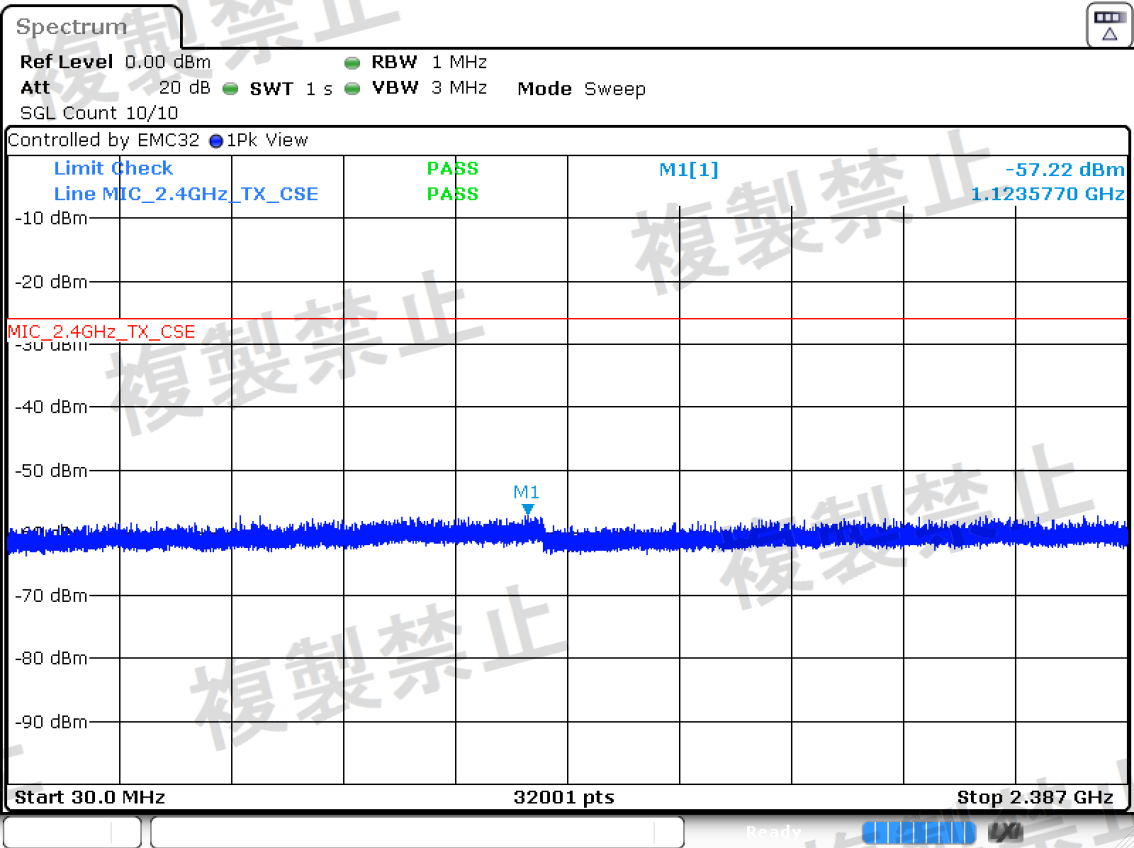
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 17
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

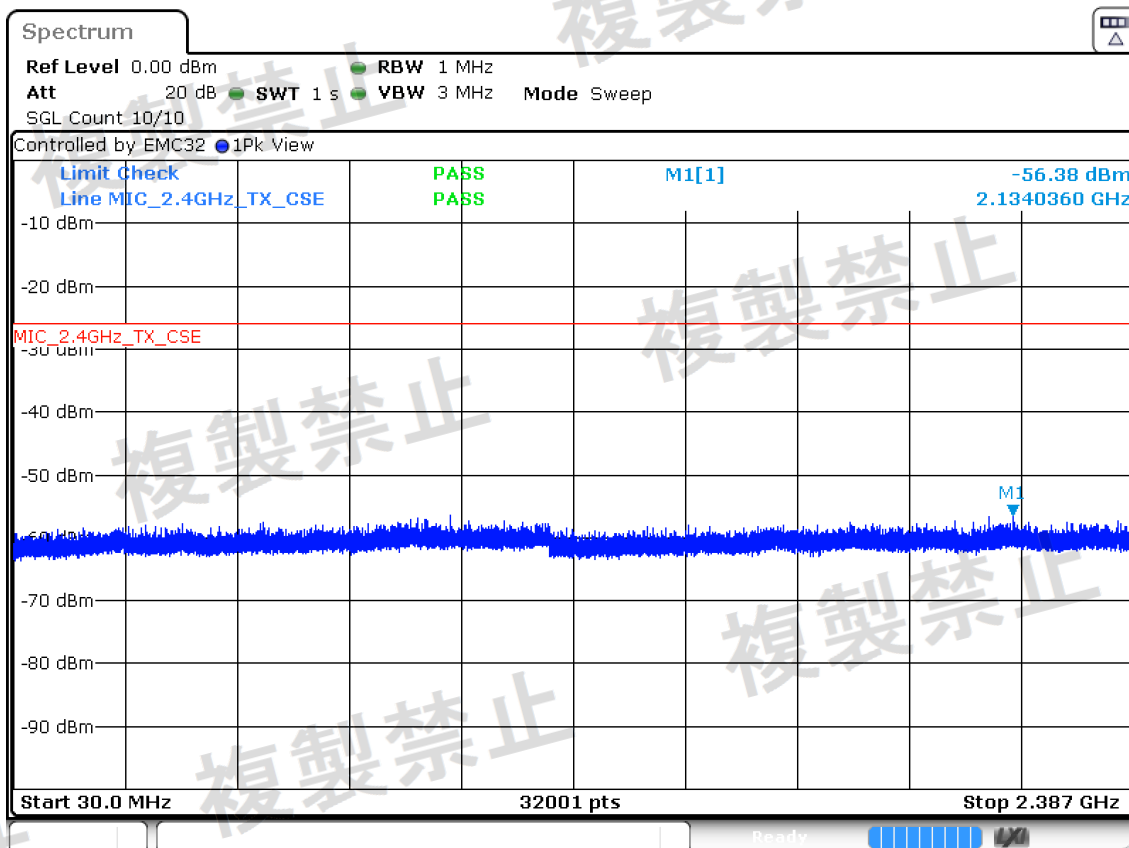
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 37
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

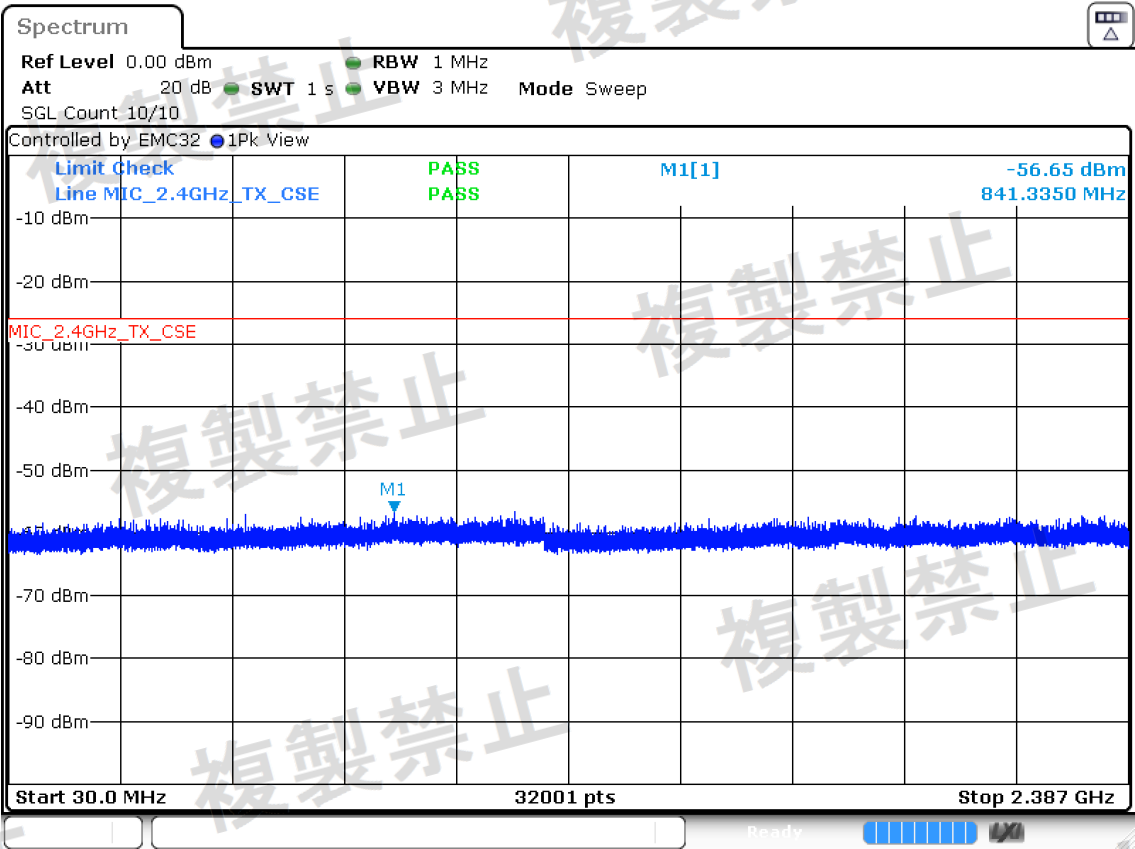
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 39
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

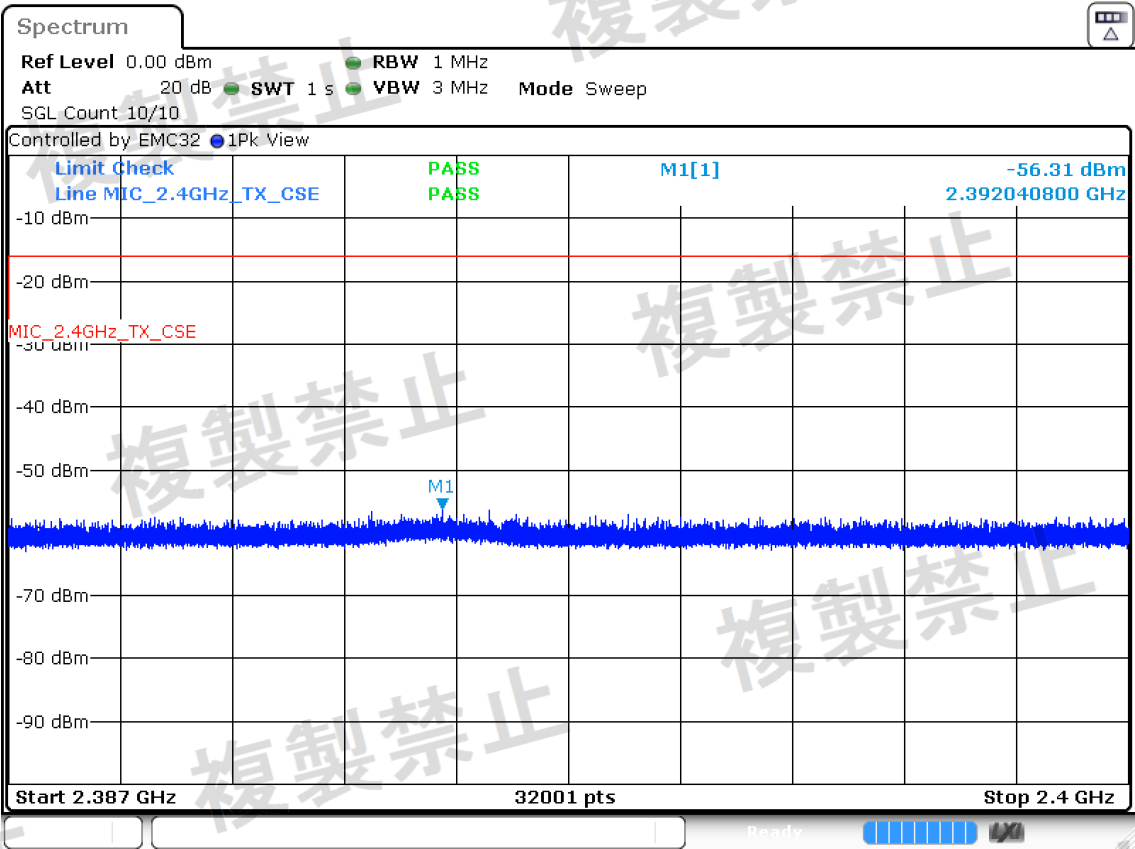
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 17
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

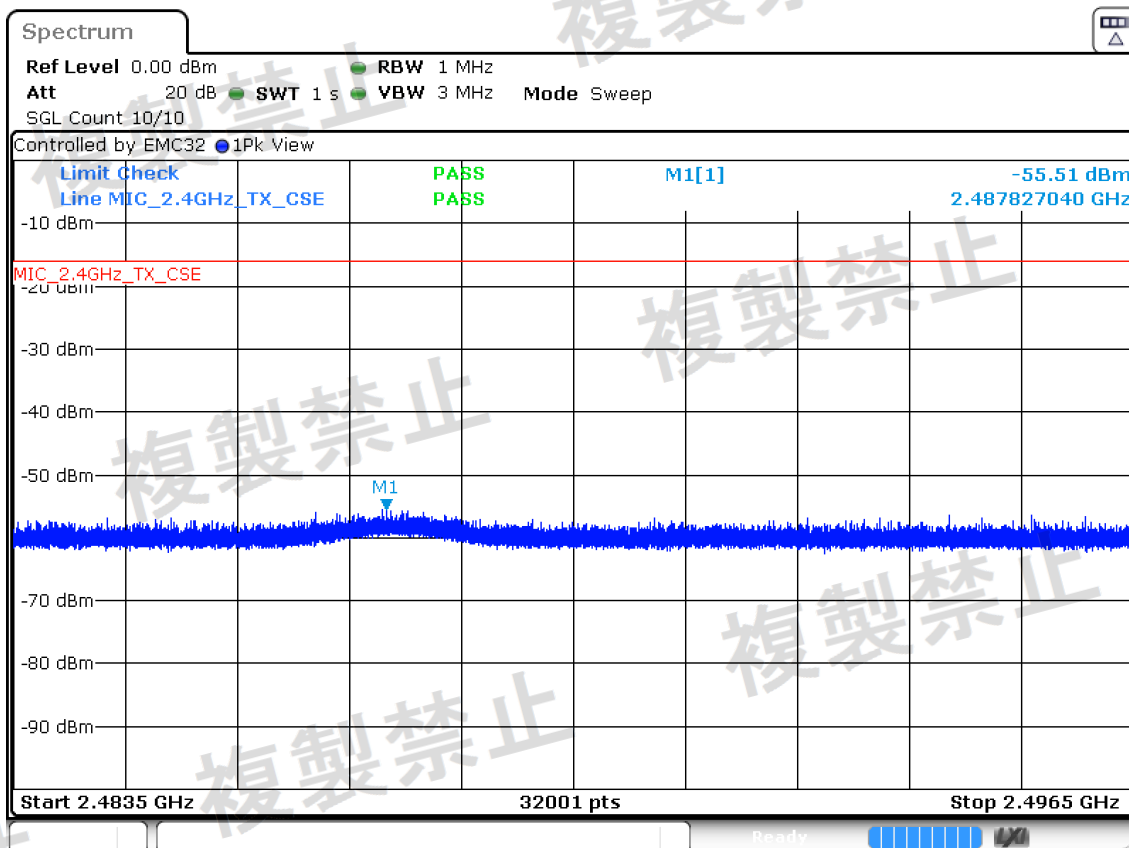
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 17
Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

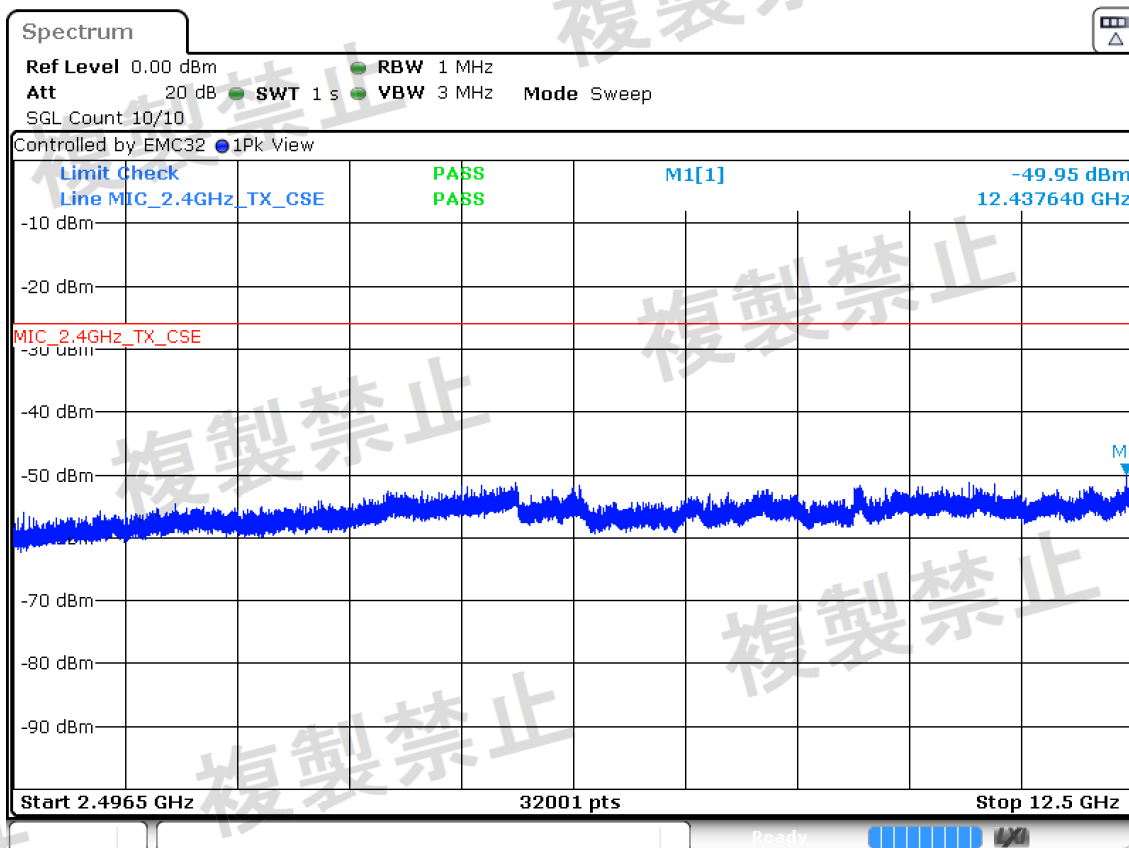
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 17
Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

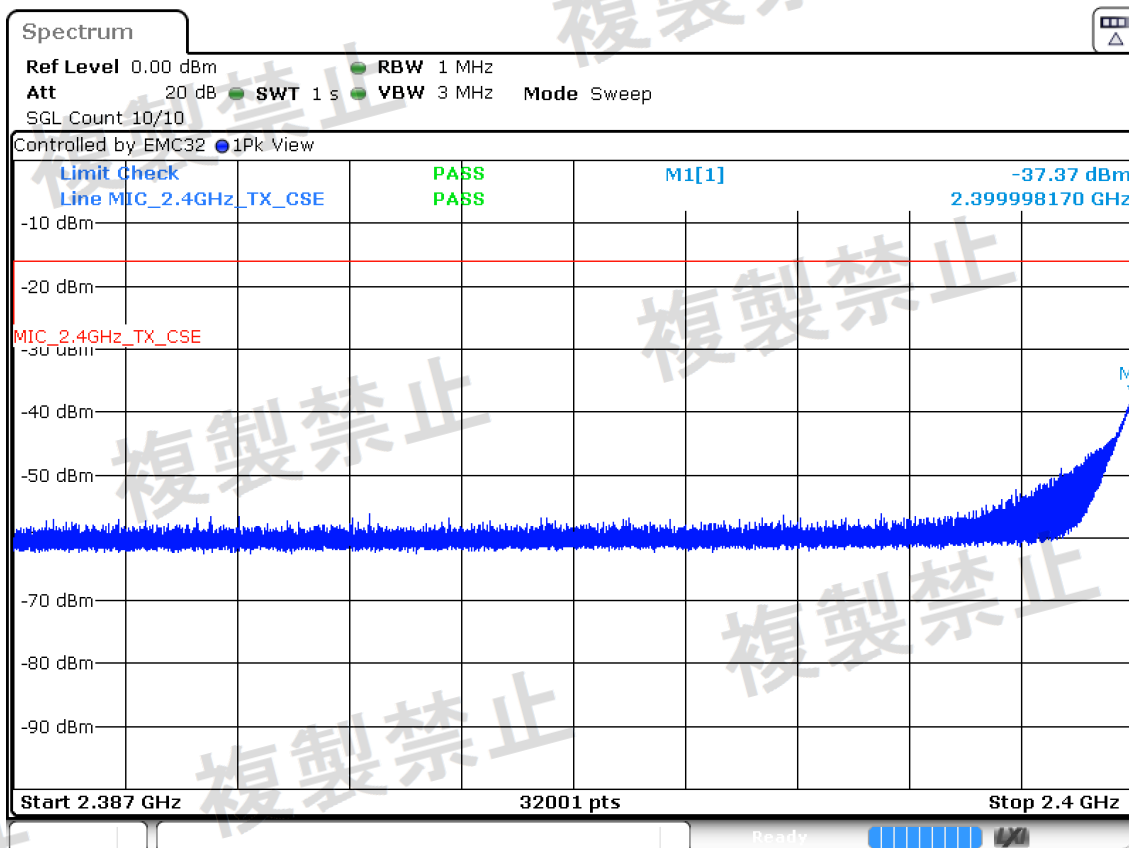
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 37
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

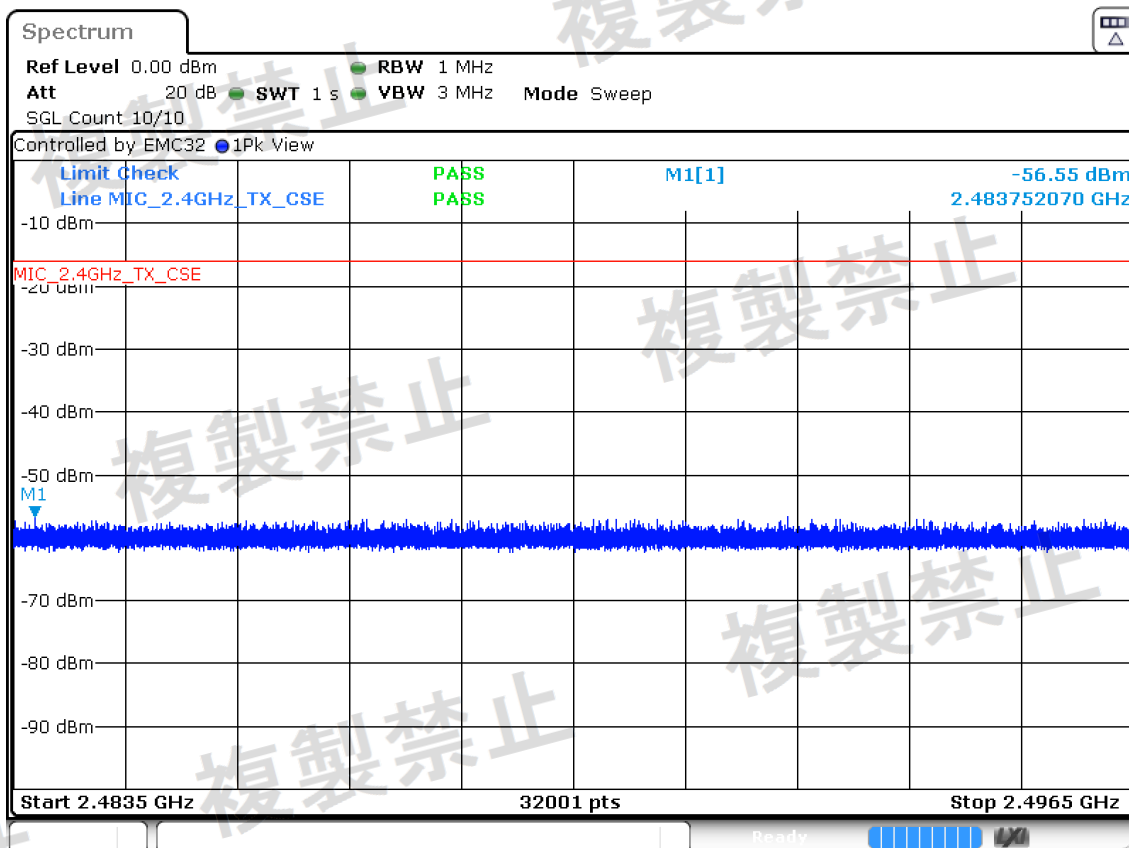
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 37
Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

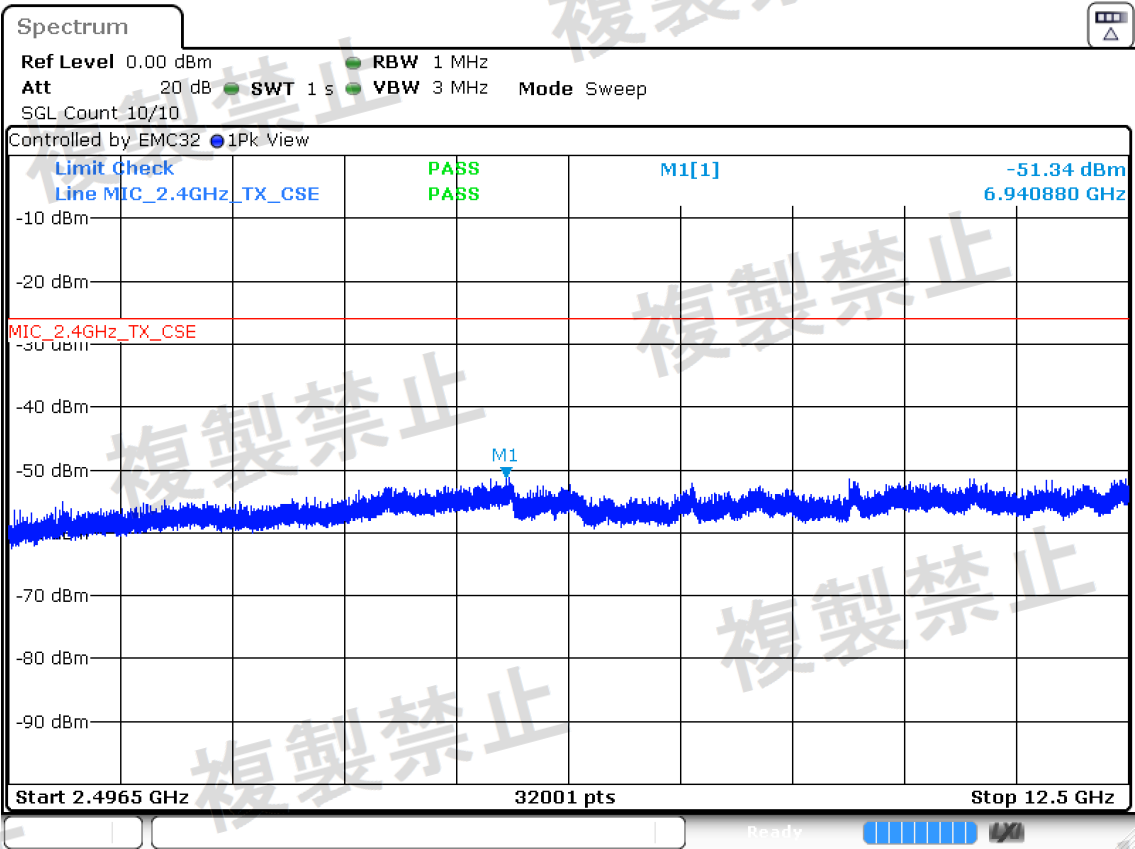
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 37
Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

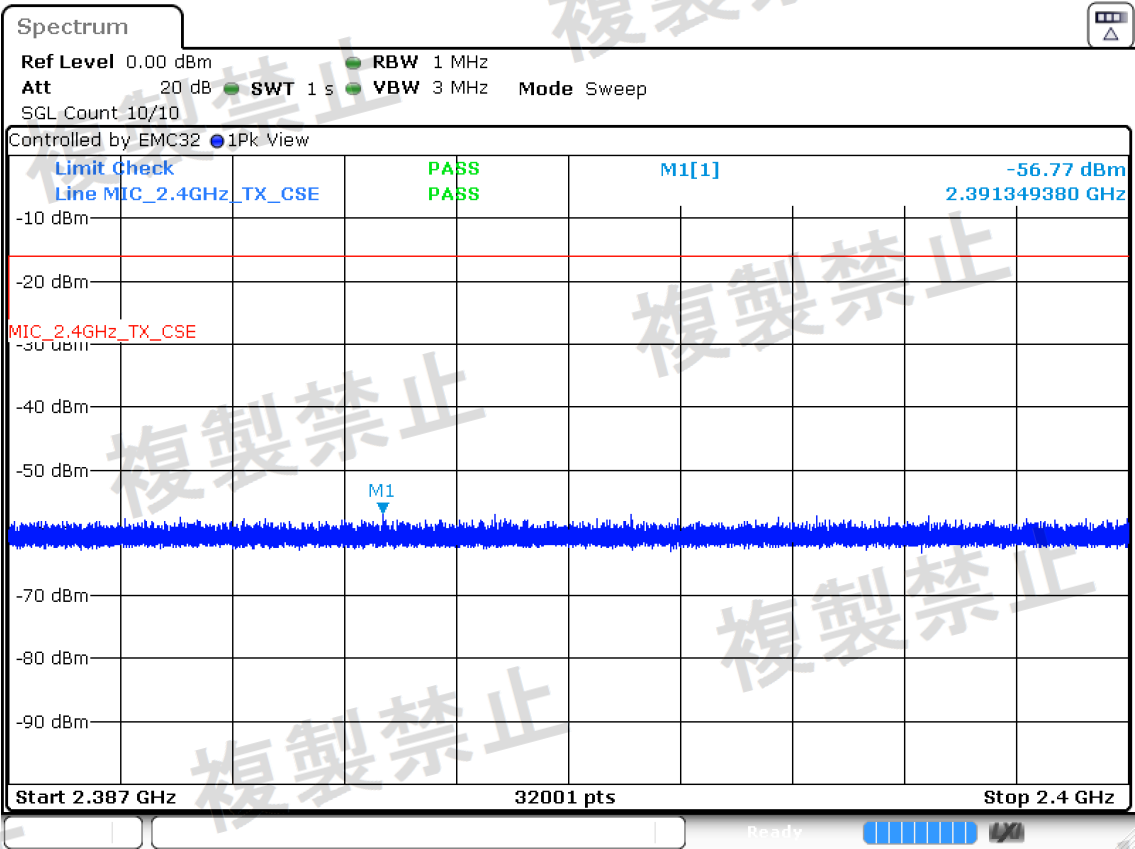
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 39
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

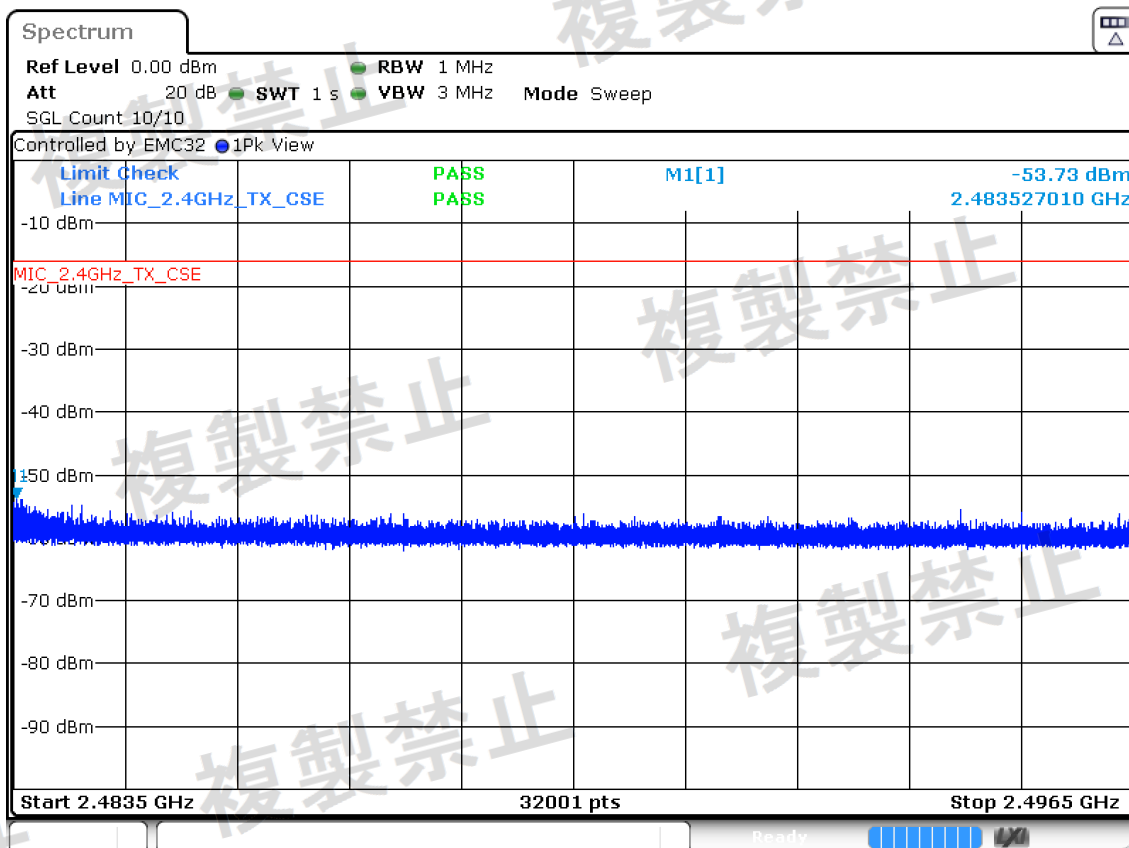
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 39
Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

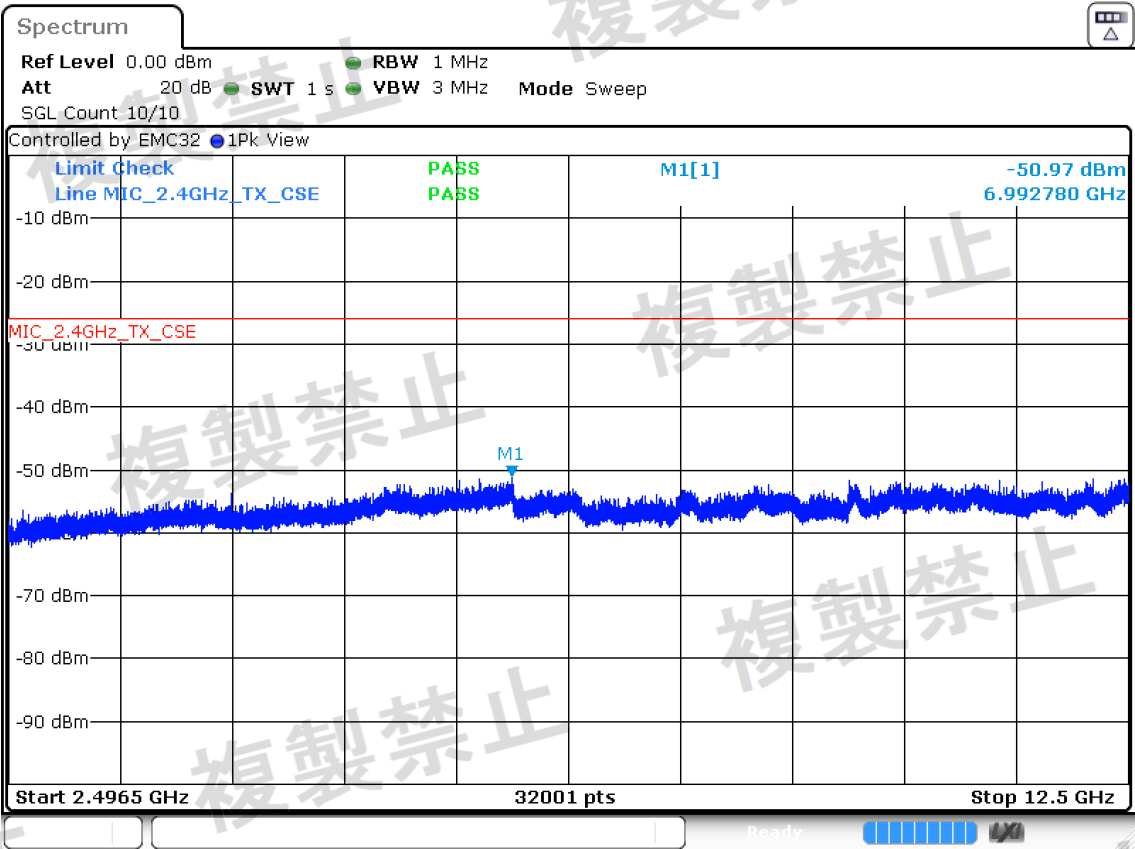
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 39
Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

Images:



Article 24. 2 [CSERxLE] Secondary Radiated Emission Strength (BLE)

Limits

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW (-54 dBm) or less at a frequency below 1 GHz and 20 nW (-47 dBm) or less at a frequency of 1 GHz or higher as measured using the circuit.

Modulation: BTLE 5.2 (GFSK 1 Mbit/s)

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (nW)	Limit (nW)
15.00	12	2402	[0.03, 1]	932.239	-77.43	0.0181	4
			[1, 12.5]	12411.060	-60.28	0.9376	20
		2440	[0.03, 1]	717.906	-76.95	0.0202	4
			[1, 12.5]	12407.820	-60.82	0.8279	20
		2480	[0.03, 1]	643.369	-77.62	0.0173	4
			[1, 12.5]	12436.210	-61.37	0.7295	20

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

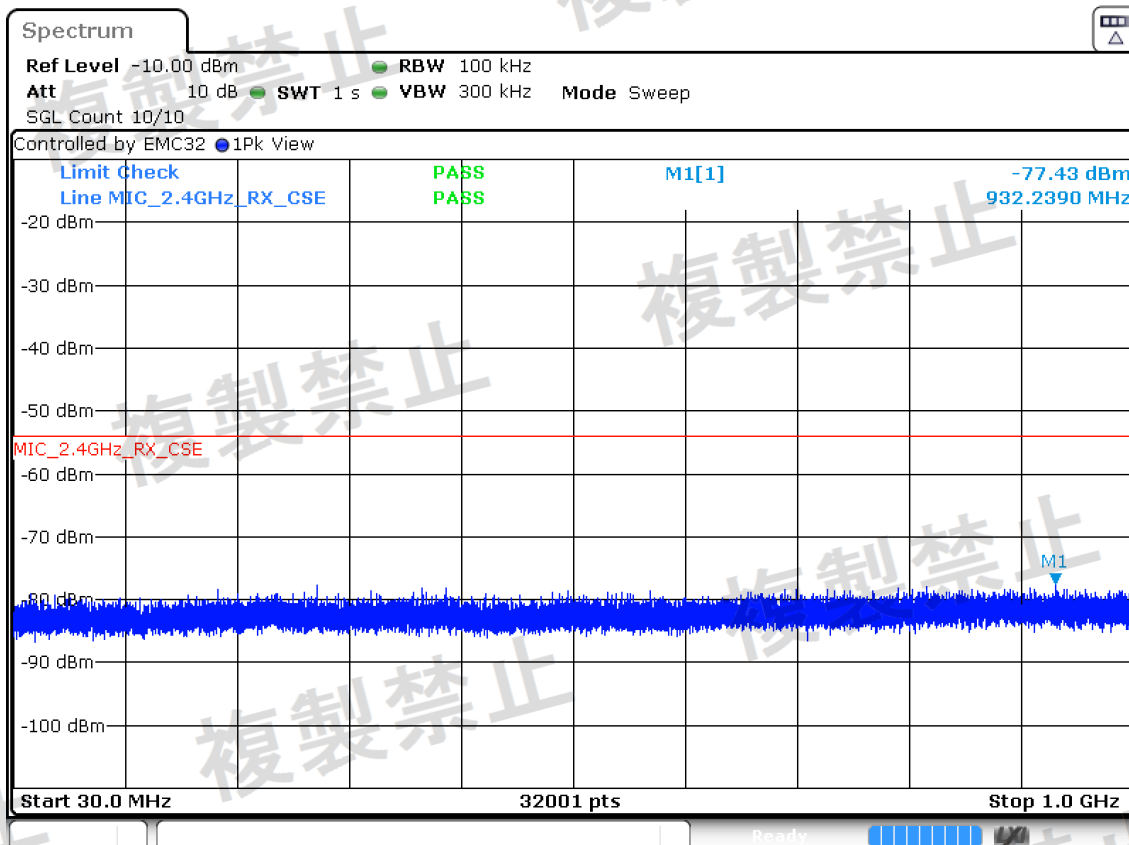
Modulation = BTLE 5.2 (GFSK 1 Mbit/s)

Channel = 2402 MHz

Frequency Range GHz = [0.03, 1]

Verdict: Pass

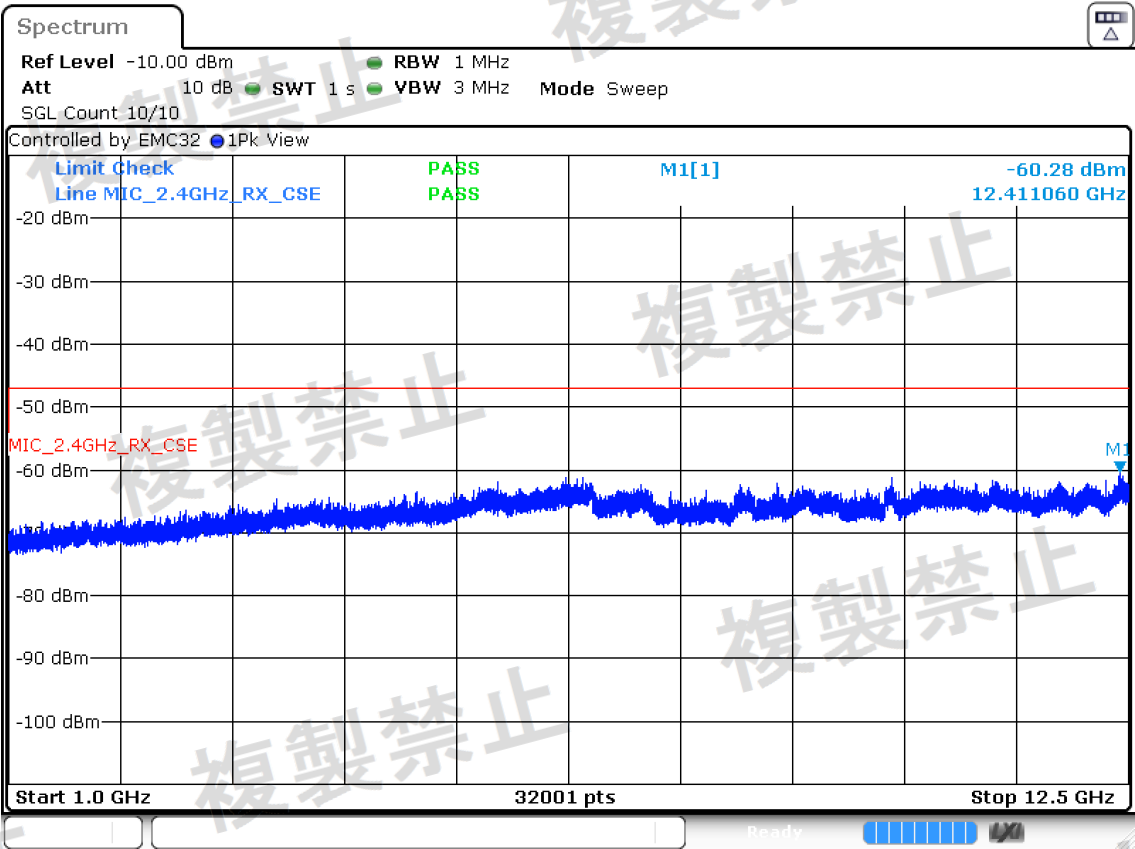
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 2402 MHz
Frequency Range GHz = [1, 12.5]

Verdict: Pass

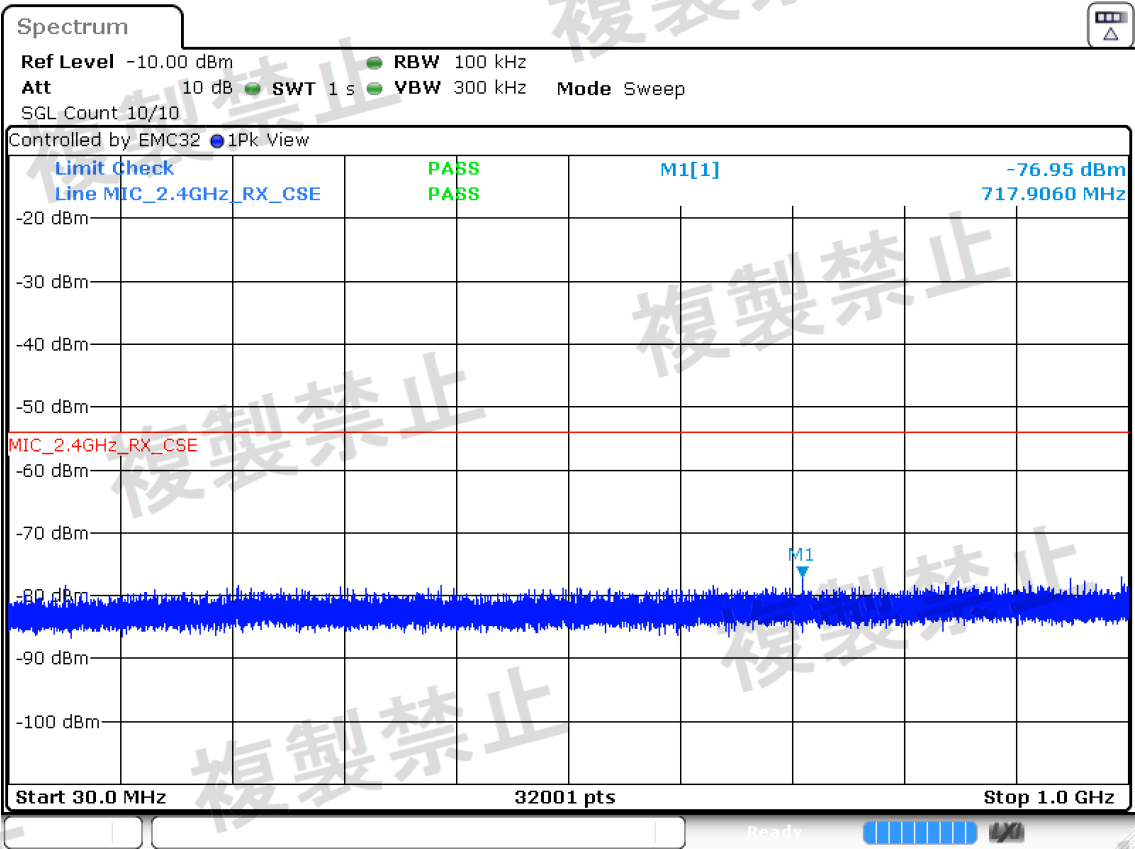
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 2440 MHz
Frequency Range GHz = [0.03, 1]

Verdict: Pass

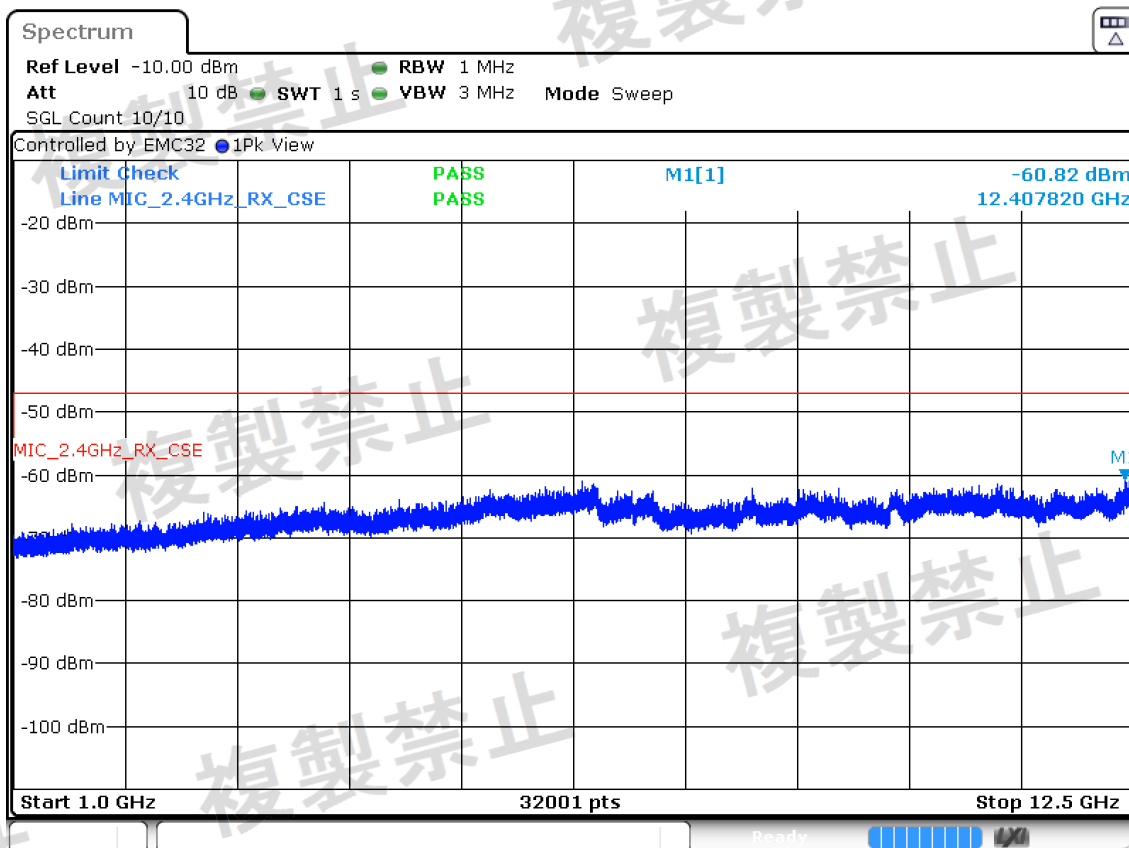
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 2440 MHz
Frequency Range GHz = [1, 12.5]

Verdict: Pass

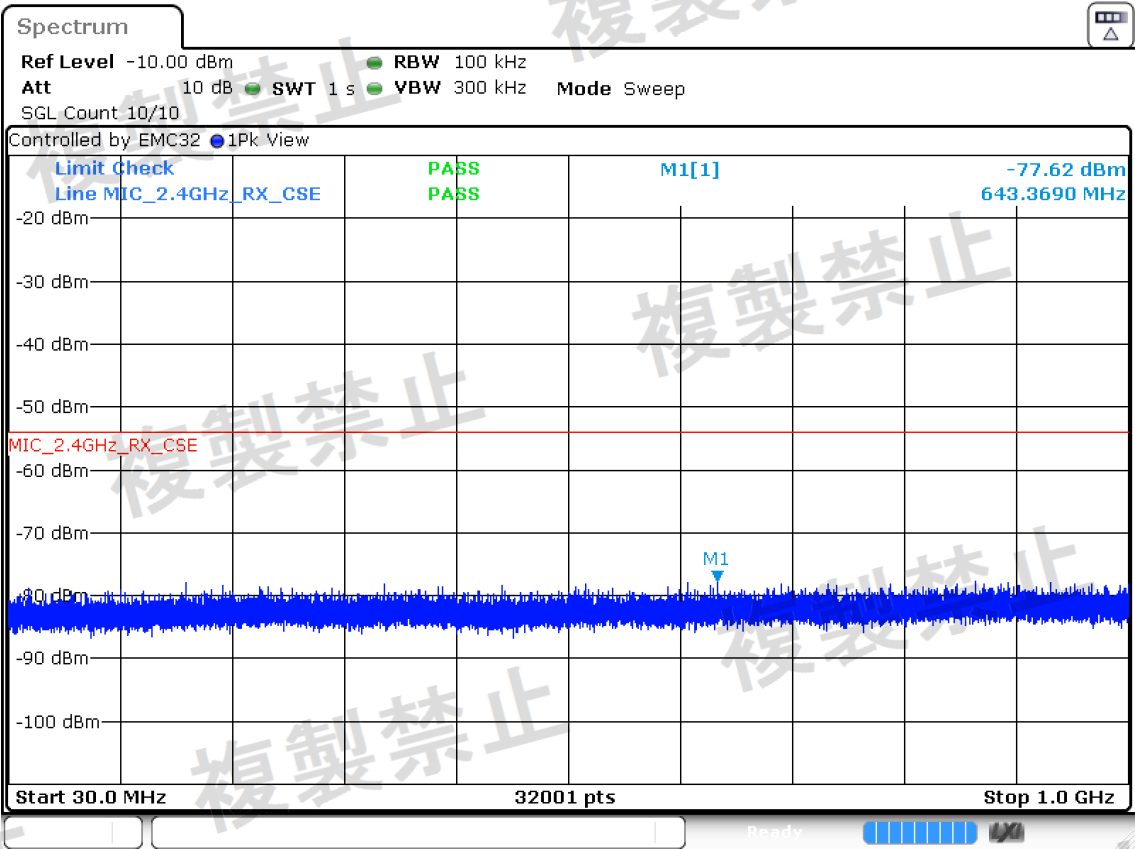
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 2480 MHz
Frequency Range GHz = [0.03, 1]

Verdict: Pass

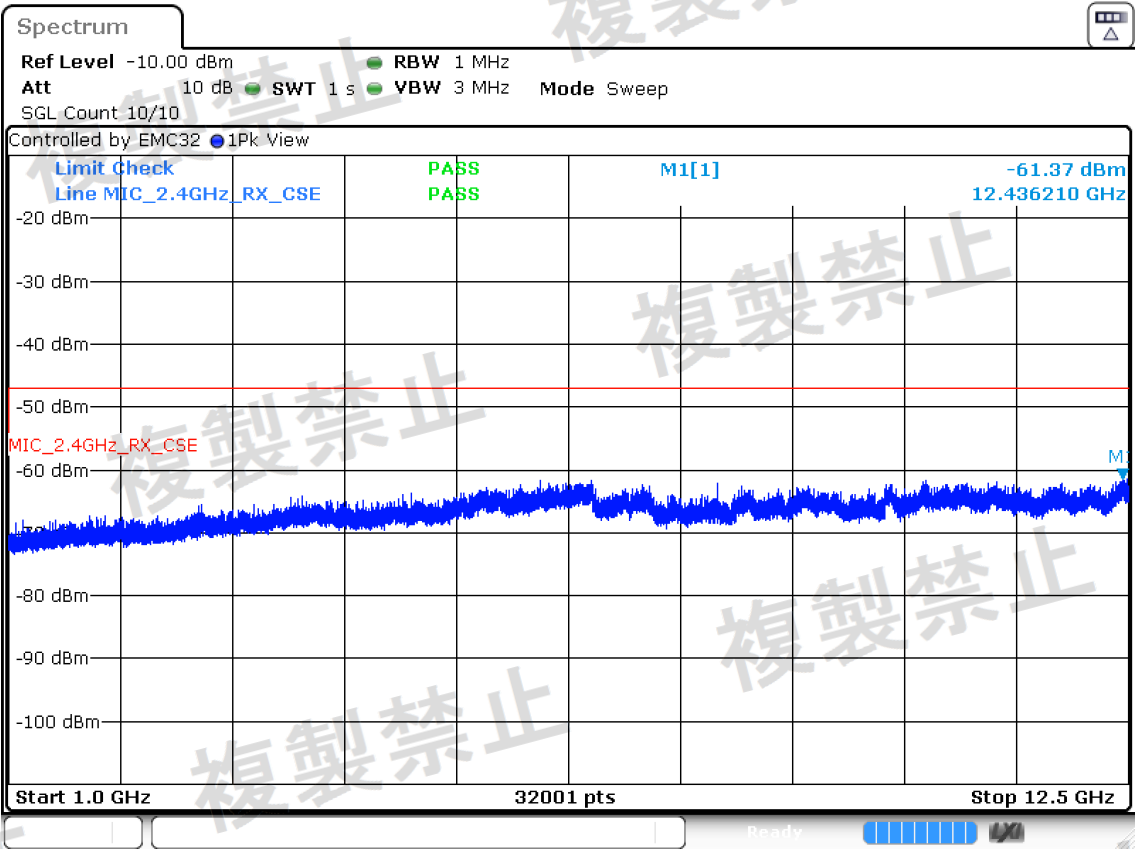
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BTLE 5.2 (GFSK 1 Mbit/s) Channel = 2480 MHz
Frequency Range GHz = [1, 12.5]

Verdict: Pass

Images:



Subclause 3.4 (1). Interference prevention function

SPECIFICATION

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

Limits:

Item	Limit
Identification	≥ 48 bits

RESULTS

Identification code received.

Verdict: PASS

Subclause 3.6 (2). Antenna gain

SPECIFICATION

a: The absolute gain of the transmitting antenna shall be 12.14 dB or less. However, when the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) is equal to or less than the value obtained by applying an antenna power with the mean power of 10 mW with its absolute gain being 12.14 dB, the shortage shall be compensated for by the gain of the transmitting antenna (Note that mean power is 10 mW in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

b: The Half-Power Beam Width Angle HPBA (angle between two points at which radiated power becomes 1/2) of the transmitting antenna's horizontal and vertical planes shall not exceed the value as determined by the following formula:

$$HPBA \leq 360 / A \text{ [degrees]}$$

where constant A is equal to the value obtained by dividing the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) by the value obtained by applying an antenna power with the mean power of 10 mW with its absolute gain being 2.14 dB, and shall be assumed to be 1 if it is less than 1 (Note that mean power is 10 mW in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining the FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

Therefore

$$\text{Antenna gain (A)} = \text{EIRP (mW/MHz)} / 16.37$$

RESULTS

Data Rate: 1 Mbps

Maximum declared antenna gain: 0.1 dBi.

Channel	Radiated power EIRP (mW)	Antenna gain (mW)	Result
Low (2402 MHz)	2.86	0.12	< 1
Middle (2440 MHz)	2.65	0.11	< 1
High (2480 MHz)	3.26	0.13	< 1

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

Verdict: PASS

Appendix B: Test results. Bluetooth BR/EDR

PRODUCT INFORMATION

Modulation:	FHSS GFSK (1Mbps), $\pi/4$ DQPSK (2 Mbps), 8DPSK (3Mbps)
Spread spectrum system:	Yes
Nominal necessary Bandwidth:	1 MHz
Maximum declared antenna gain:	0.1 dBi
Rated Antenna Power:	GFSK/ $\pi/4$ DQPSK/8-DPSK FH: 0.02 mW/MHz, AFH: 0.09 mW/MHz
Type of antenna:	Ext. Antenna
Operating nominal frequency range:	2402 MHz to 2480 MHz
Type of power supply:	DC voltage

DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC#01	Power supply (V): Vnominal = 12 Vdc <u>Test Frequencies for Conducted tests</u> Lowest Channel: 2402 MHz Middle Channel: 2441 MHz Highest Channel: 2480 MHz

CONDUCTED MEASUREMENTS

The equipment under test (EUT) was set up in a shielded room and its antenna port (SMA type) is directly connected to the spectrum analyzer.

The EUT is set in continuous transmission with and without modulation using an implemented test mode.

Subclause 3.2 (1). Modulation system

SPECIFICATION

For spread spectrum systems, a Direct Sequence system (DS system), a Frequency Hopping system (FH system), a hybrid system combining these systems, or a hybrid system combining FH and orthogonal frequency division multiplexing systems (OFDM system) shall be used.

DS: A pseudo-random spreading code is combined with the information sequence to implement spreading function. The resulting signal modulates a carrier signal and consequently, the information signal is spread to a wide band signal.

FH: The transmitting signal is a sequence of pulses at different frequencies over a large bandwidth. This sequence is called as frequency hopping pattern.

RESULTS

The equipment incorporates a Bluetooth BR/EDR which uses digital modulation GFSK (1Mbps), $\pi/4$ DQPSK (2 Mbps), 8DPSK (3Mbps) and 79 channels over the frequency range 2402 MHz to 2480 MHz

Verdict: PASS

Article 49-20 [AntPTBT] Antenna Power (BT)

Limits

Mode	Limit	Tolerance
a) FH, FH+DS, FH+OFDM	3 mW/MHz	-80% to +20%
b) OFDM (Narrow bandwidth), DS	10 mW/MHz	
c) Other than a & b	10 mW	
d) OFDM (Wide band)	5 mW/MHz	

Frequency Hopping

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-3.00	1.14	71.48	0.01	3

Verdict

Pass

Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-3.78	1.14	71.73	0.01	3

Verdict

Pass

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-3.77	1.14	71.64	0.01	3

Verdict

Pass

Adaptive Frequency Hopping

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-2.77	3.19	18.58	0.06	3

Verdict

Pass

Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-3.00	3.37	18.11	0.06	3

Verdict

Pass

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	Hopping	A	-3.15	3.37	18.11	0.05	3

Verdict

Pass

Article 14 Table 8 [AntPTW] Antenna Power Tolerance (BT)

Limits

Mode	Tolerance
a) FH, FH+DS, FH+OFDM	+20%
b) OFDM (Narrow bandwidth), DS	
c) Other than a & b	
d) OFDM (Wide band)	

Frequency Hopping

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.02	0.01	-50.00	20

Verdict

Pass

Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.02	0.01	-50.00	20

Verdict

Pass

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.02	0.01	-50.00	20

Verdict

Pass

Adaptive Frequency Hopping

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.09	0.06	-33.33	20

Verdict

Pass

Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.09	0.06	-33.33	20

Verdict

Pass

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	Hopping	A	0.09	0.05	-44.44	20

Verdict

Pass

Article 5 and Annex 1 table 7-8 [FreqTBwm] Frequency Tolerance

Limits

Frequency tolerance shall be $\pm 50 \times 10^{-6}$ (50 ppm).

Results

Ambient Temp (°C)	Test Voltage	Ch (MHz)	Operation Band (MHz)	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	2402	[2400, 2483.5]	2402.0049	2.08	50.00
15.00	12	2441	[2400, 2483.5]	2440.985	-6.15	50.00
15.00	12	2480	[2400, 2483.5]	2479.990	-4.01	50.00

Verdict

Pass

Article 6 and Annex 2. 30 [OBWB] Occupied Bandwidth (BT)

Limits

Mode	Limit
FH	83.5 MHz
FH+DS	83.5 MHz
FH+OFDM	83.5 MHz
OFDM (Narrow bandwidth), DS	26 MHz
OFDM (Wide band)	38 MHz
Others	26 MHz

Frequency Hopping mode

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	78.16

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	78.41

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	78.24

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

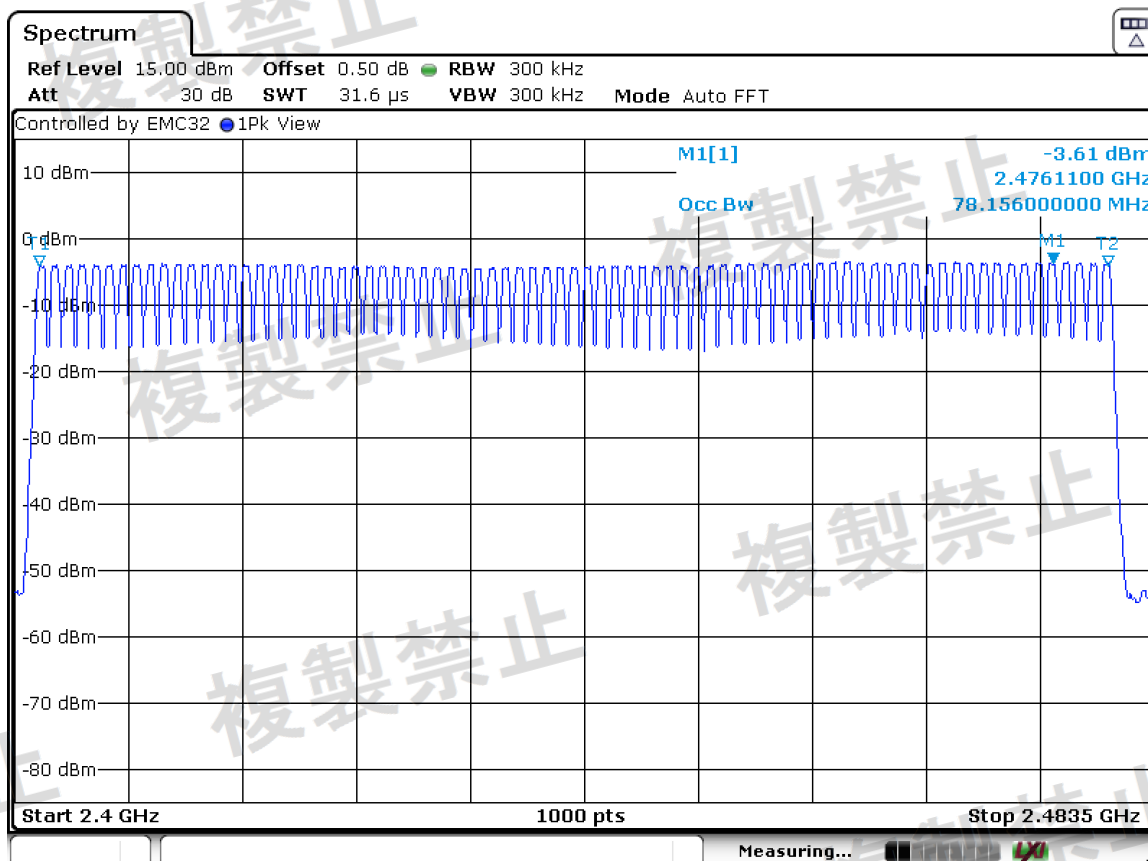
Modulation = BT (GFSK 1-DH5)

Channel = Hopping

Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

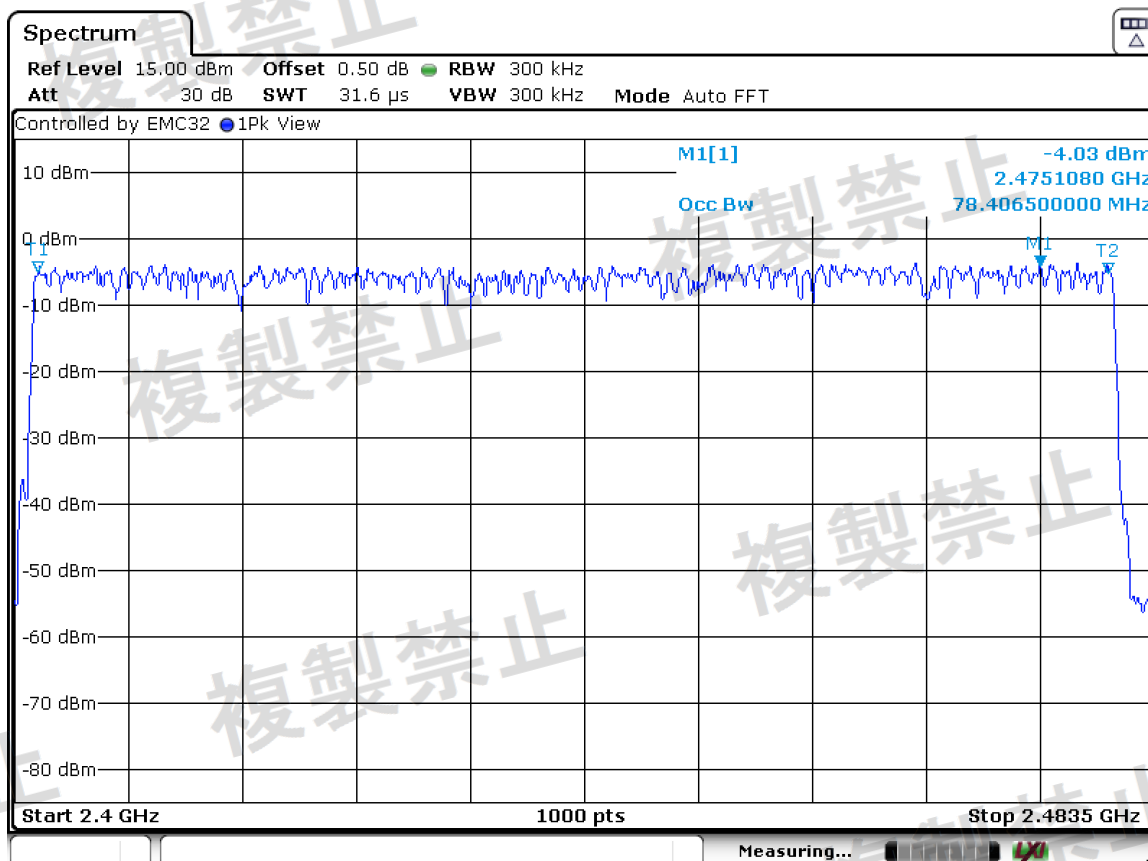


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT ($\pi/4$ DQPSK 2-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

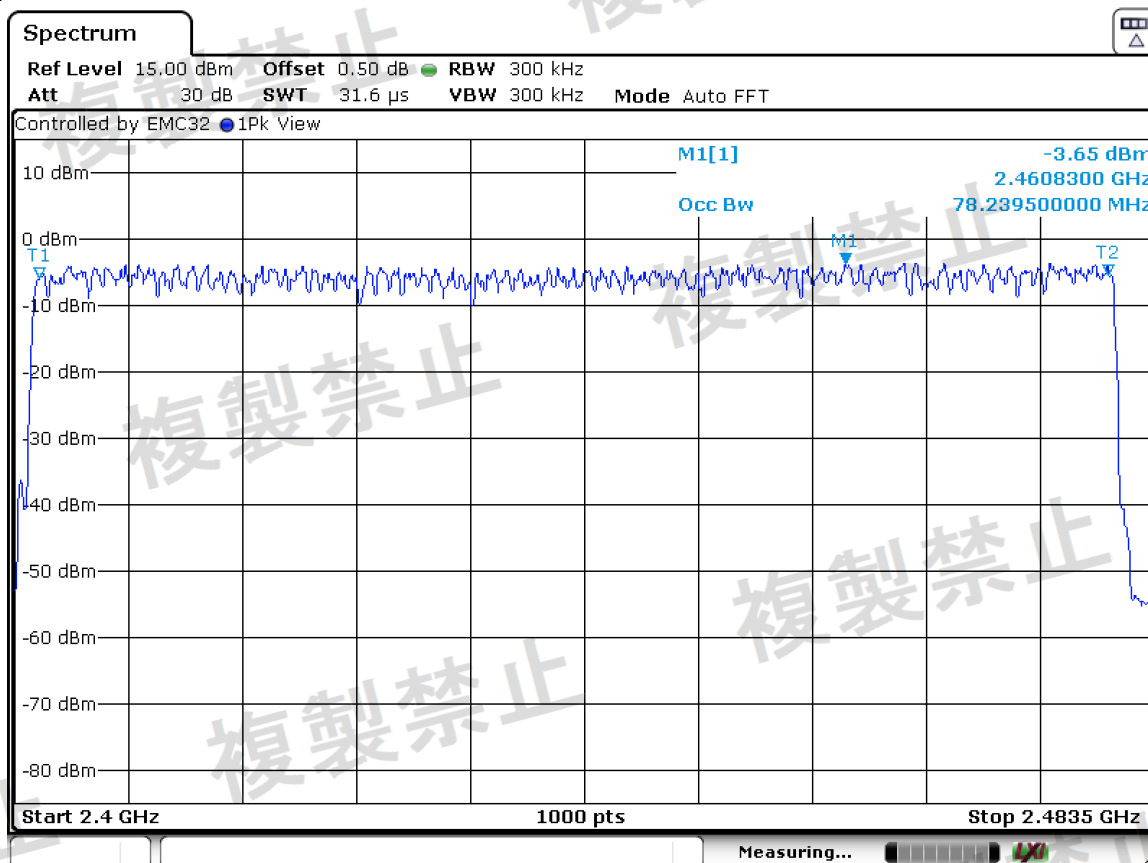
Modulation = BT (8DPSK 3-DH5)

Channel = Hopping

Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Adaptive Frequency Hopping mode

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	19.38

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	19.87

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	99OBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	19.84

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (GFSK 1- DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

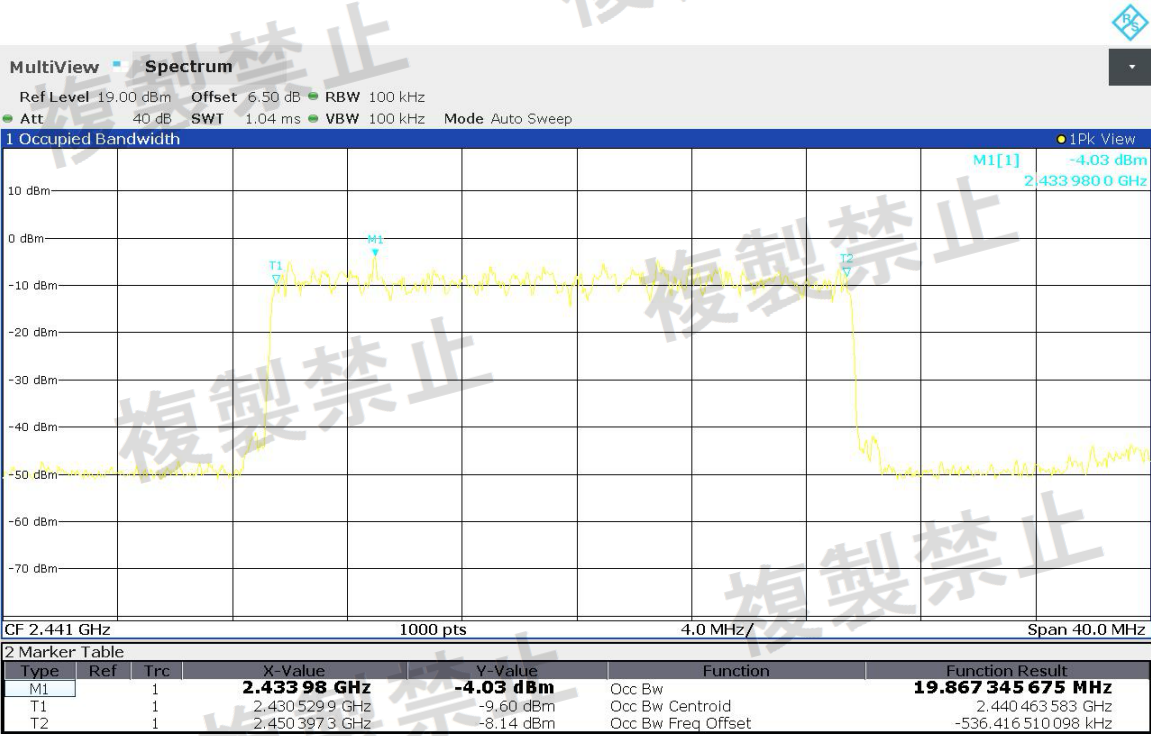


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT ($\pi/4$ DQPSK 2-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

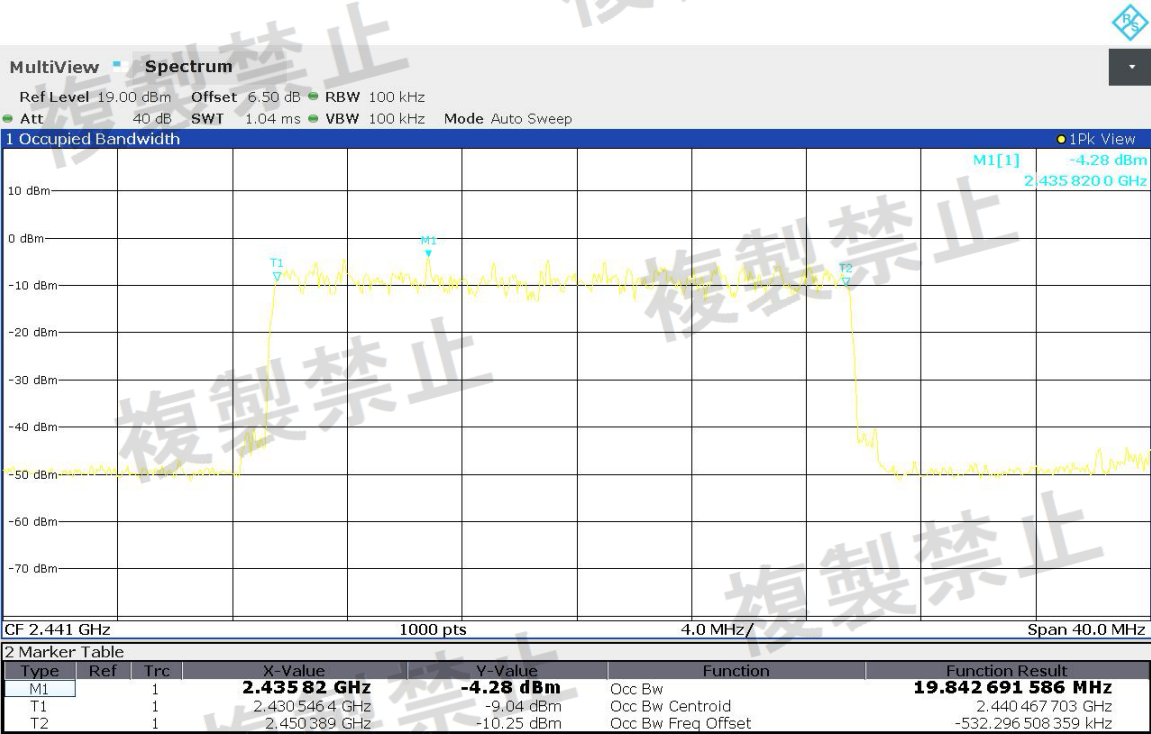


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Article 6 and Annex 2. 30 [SBWBT] Spread Bandwidth (BT)

Limits

In spread spectrum systems, spread bandwidth (which refers to a frequency bandwidth with an upper limit and lower limit such that each of the mean powers radiated above the upper frequency limit and below the lower frequency limit is equal to 5 % of the total mean power radiated; this also applies hereafter) shall be 500 kHz or more.

Frequency Hopping mode

Modulation: BT (GFSK 1-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	71.48

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	71.73

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	71.64

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

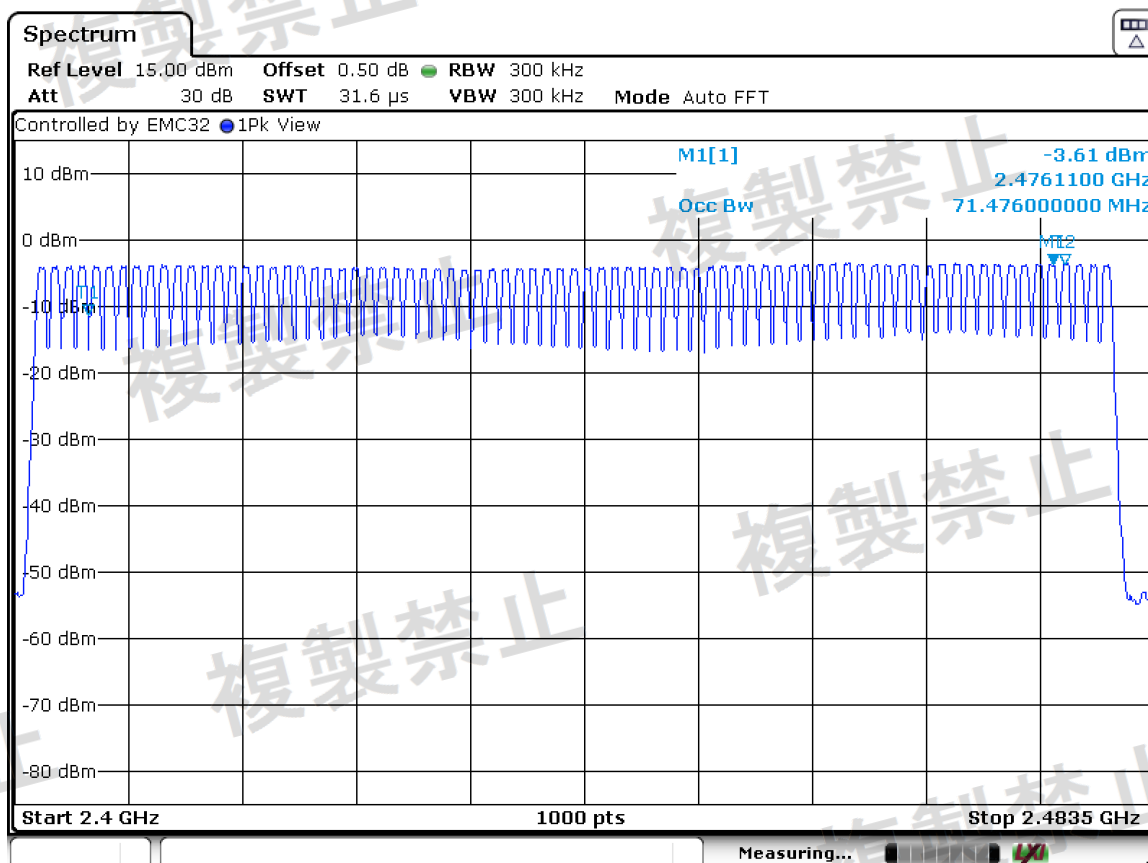
Modulation = BT (GFSK 1-DH5)

Channel = Hopping

Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

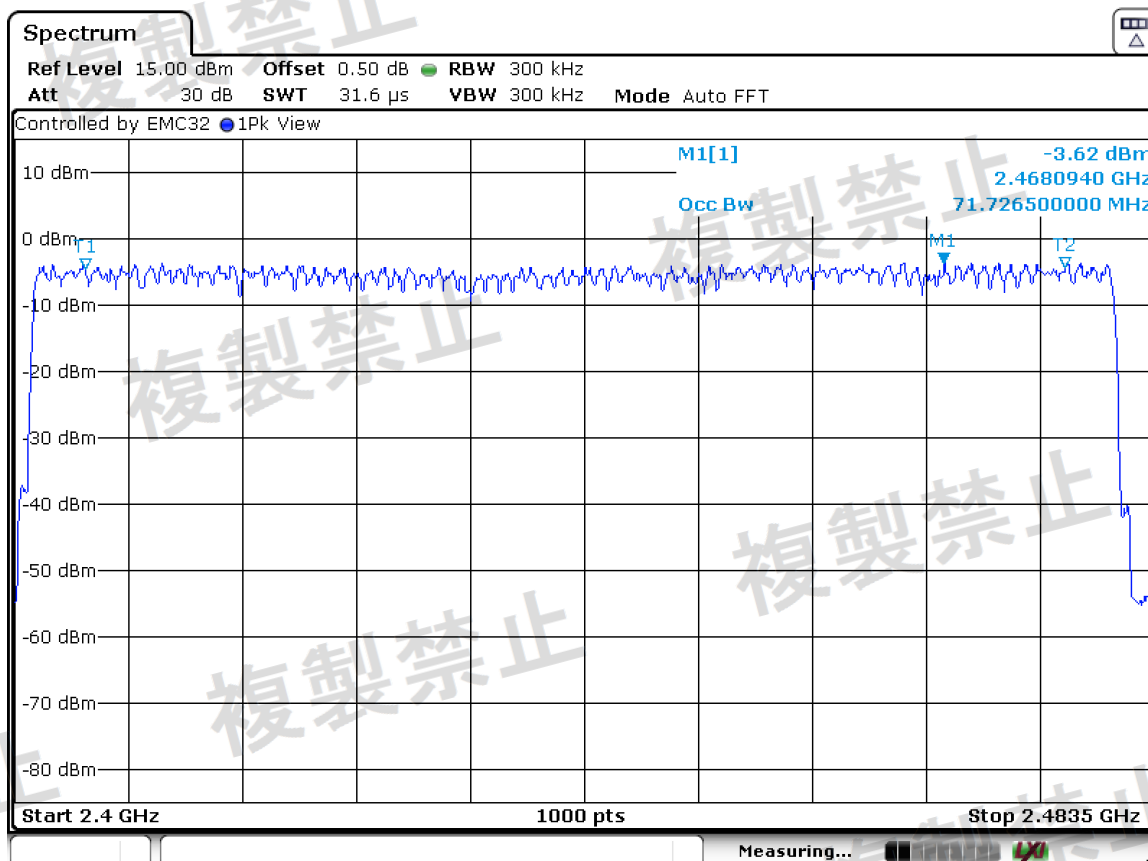


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT ($\pi/4$ DQPSK 2-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

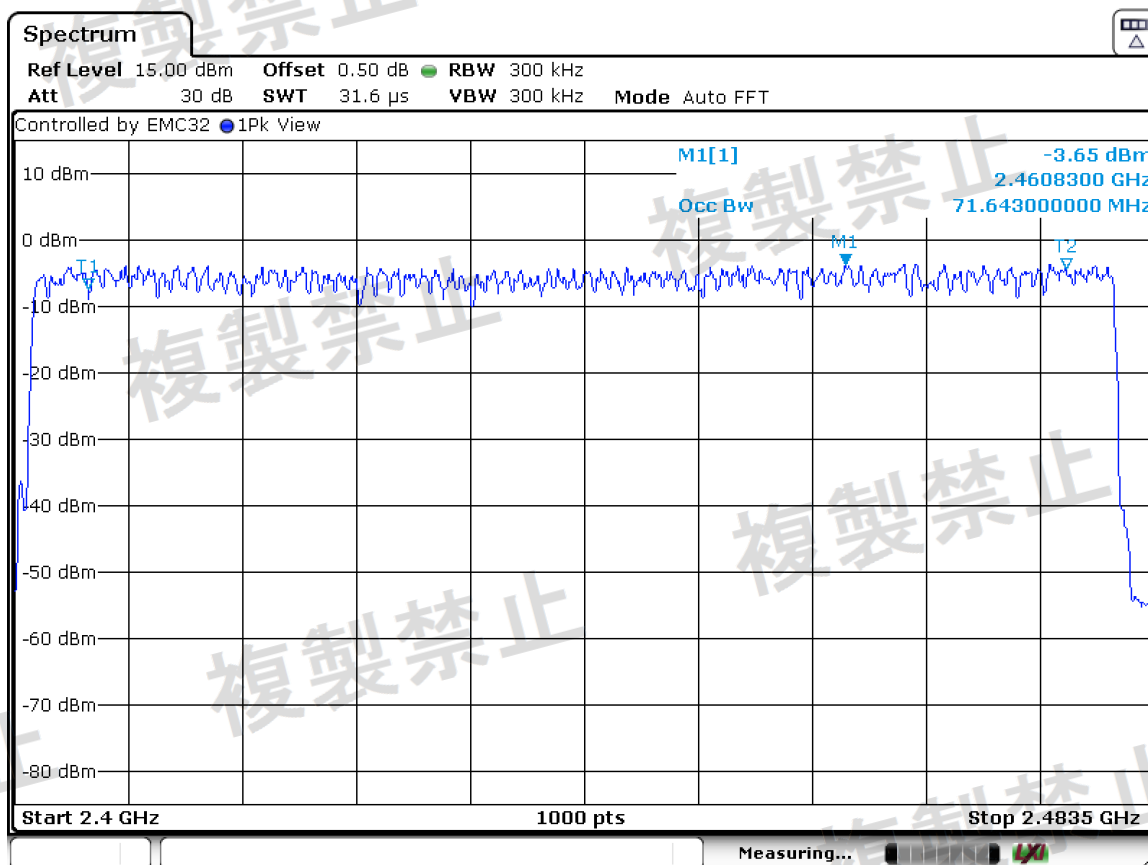
Modulation = BT (8DPSK 3-DH5)

Channel = Hopping

Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Adaptive Frequency Hopping mode

Modulation: BT (GFSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	18.58

Modulation: BT ($\pi/4$ DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	18.11

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Operation Band (MHz)	90SBW (MHz)
15.00	12	Hopping	[2400, 2483.5]	18.28

Verdict

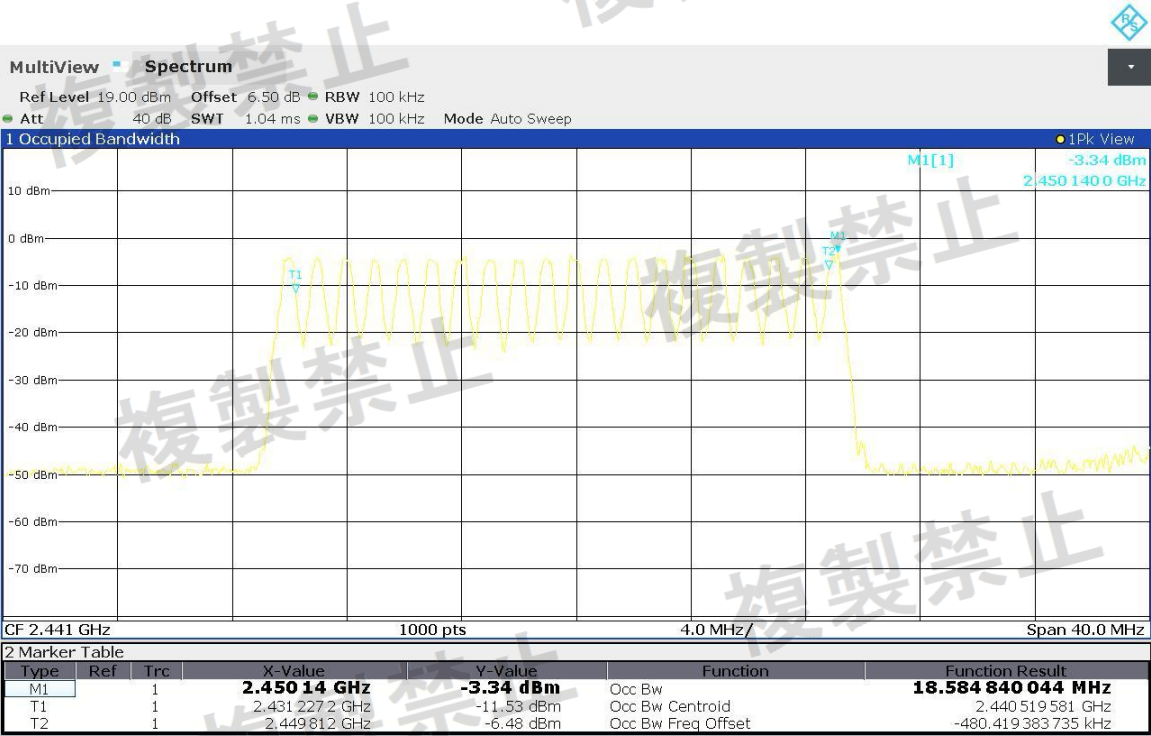
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (GFSK 1-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

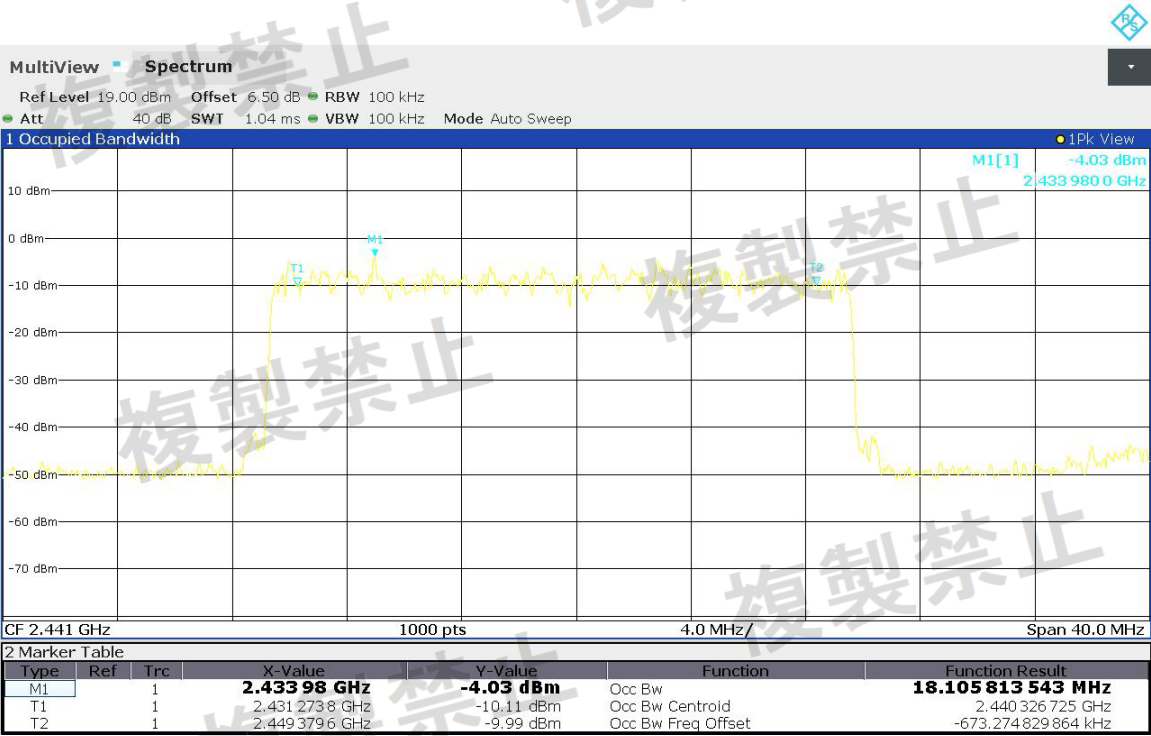


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT ($\pi/4$ DQPSK 2-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:

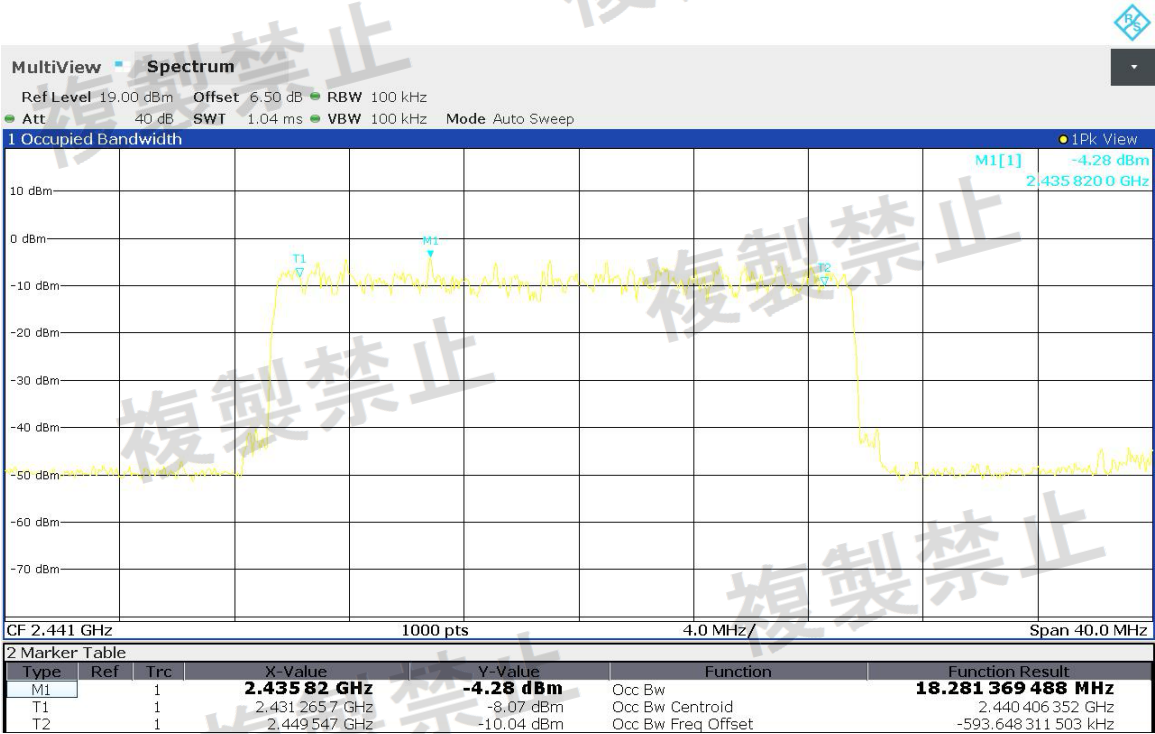


Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Operation Band MHz = [2400, 2483.5]

Verdict: Pass

Images:



Subclause 3.2 (9). Process gain

SPECIFICATION

Process gain (value obtained by dividing the spread bandwidth by a frequency equal to the transmission rate of the modulation signal; this also applies hereafter) in the spread spectrum system shall be 5 or more.

RESULTS

Modulation: GSKF (1-DH5).

Test Frequency	MHz	2402-2480MHz (Hopping)
Spread-Spectrum Bandwidth	MHz	78.16
Modulated Rate	Mbps	1
Process Gain	---	70.51

Modulation: $\pi/4$ DQPSK (2-DH5).

Test Frequency	MHz	2402-2480MHz (Hopping)
Spread-Spectrum Bandwidth	MHz	78.41
Modulated Rate	Mbps	2
Process Gain	---	39.21

Modulation: 8DPSK (3-DH5).

Test Frequency	MHz	2402-2480MHz (Hopping)
Spread-Spectrum Bandwidth	MHz	78.24
Modulated Rate	Mbps	3
Process Gain	---	26.08

Verdict: PASS

Subclause 3.2 (11). Dwell Time

SPECIFICATION

Frequency dwell time (time during which radio waves continue to be emitted at a specified frequency) of a transmitting equipment using the FH system shall be 0.4 seconds or less (0.05 seconds or less in case of transmitting unit used for radio control of airplane models used outdoors). When a simple FH system (except hybrid system) is used, total frequency dwell time at any frequency within the time period obtained by multiplying 0.4 seconds by the process gain shall be 0.4 seconds or less.

RESULTS

Mode: Full Hopping Mode

Numbers of channels = 79

	FH	AFH
Time period=	28592.00	7432.00
Numbers of channels	79.00	20.00
TX ON=	26.10	2.88
TX ON + TX OFF=	100.00	3.10
TX OFF=	73.90	0.22
TX/Idle Cycle=	100.00	3.10
Number of TX/Idle cycles per channel=	3.62	119.87
Total TX on time within time period (s)	0.09	0.35

Verdict

Pass

Frequency Hopping

Attachments

Ambient Temperature °C = 15.00

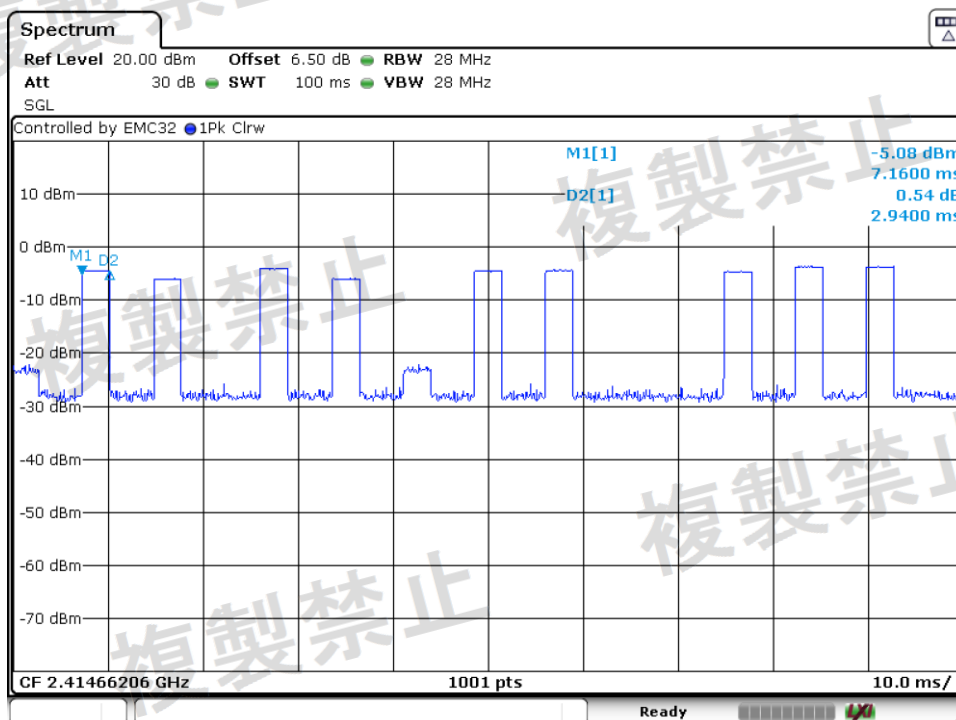
Channel = Hopping

Operation Band MHz = [2400, 2483.5]

Test Voltage = 12

Verdict: Pass

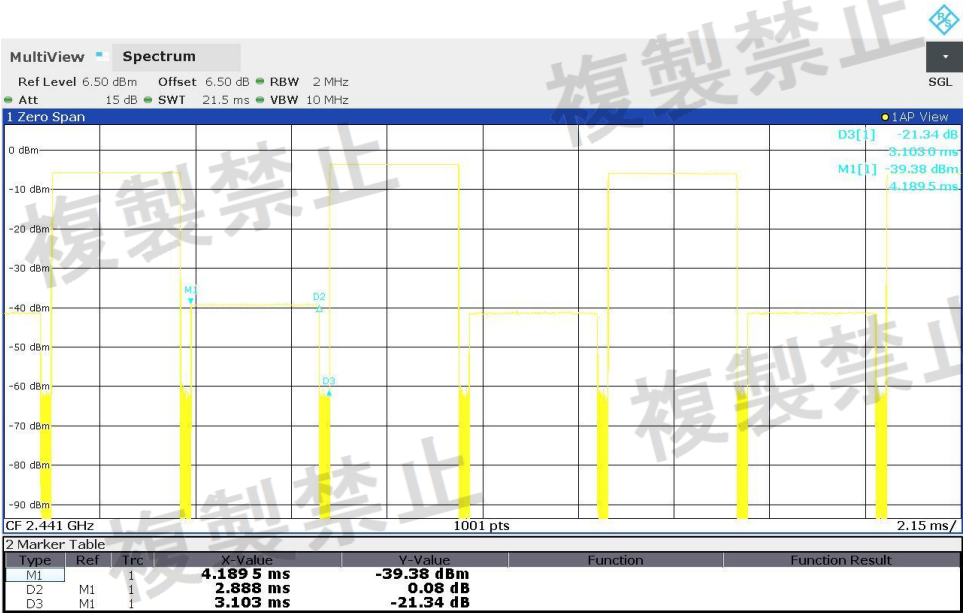
Images:



Adaptive Frequency Hopping

Attachments

Ambient Temperature °C = 15.00
Channel = Hopping
Operation Band MHz = [2400, 2483.5]
Test Voltage = 12
Verdict: Pass
Images:



Article 7 and Annex 3. 26 [CSETxBT] Unwanted Emission Strength (BT)

Limits

Permissible mean power of spurious emission of each frequency supplied to a feeder, that is, mean power of spurious emission in the 1 MHz bandwidth at frequency f other than frequency band used shall be as follows:

- $2,387 \text{ MHz} \leq f \leq 2,400 \text{ MHz}$ and $2,483.5 \text{ MHz} < f \leq 2,496.5 \text{ MHz}$ $25 \text{ } \mu\text{W/MHz}$ (-16 dBm/MHz) or less.
- $2,387 \text{ MHz} > f$ and $2,496.5 \text{ MHz} < f$ $2.5 \text{ } \mu\text{W/MHz}$ (-26 dBm/MHz) or less.

Modulation: BT (GFSK)

Results

Ambient Temp (°C)	Test Voltage	Ch	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl ($\mu\text{W/MHz}$)	Limit ($\mu\text{W/MHz}$)
15.00	12	Hopping	[0.03, 2.387]	2326.125	-58.50	0.0014	0.00
15.00	12	Hopping	[2.387, 2.4]	2399.993	-40.62	0.0867	0.32
15.00	12	Hopping	[2.4835, 2.4965]	2484.065	-57.39	0.0018	0.32
15.00	12	Hopping	[2.4965, 12.5]	6931.190	-53.65	0.0043	0.00

Verdict

Pass

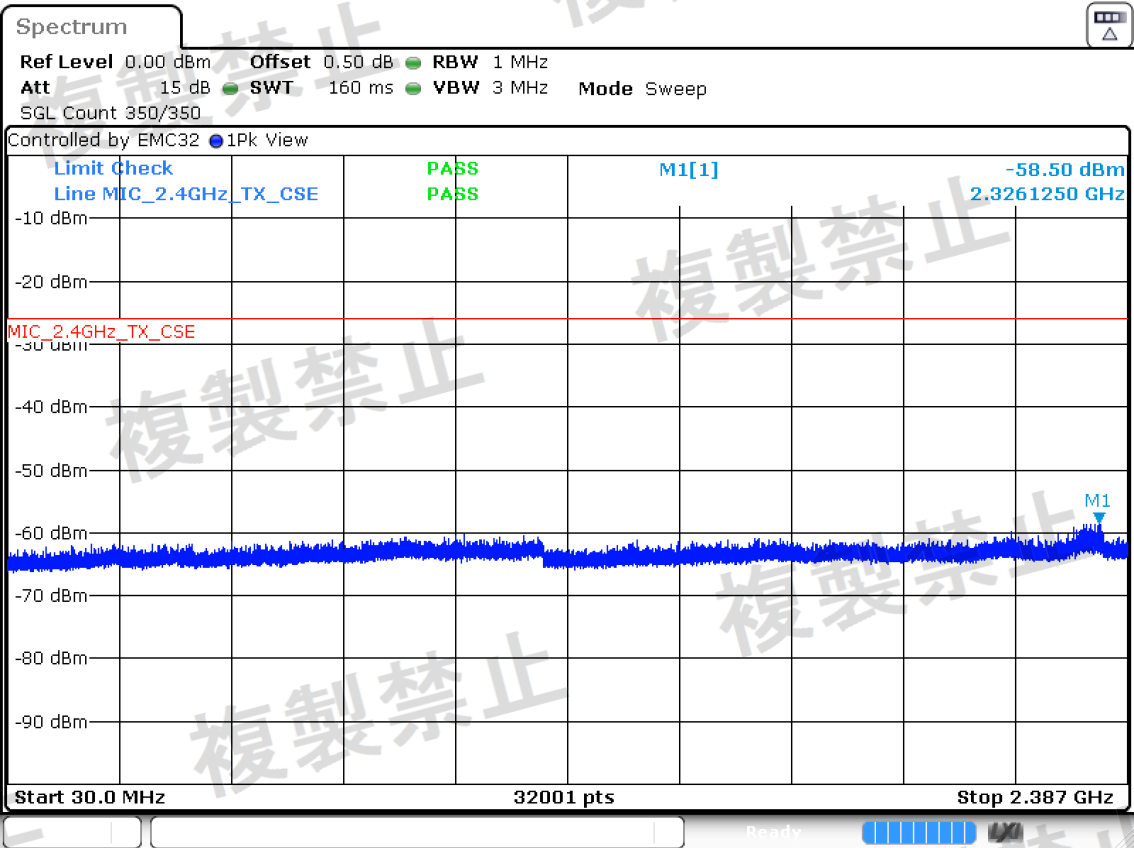
Uncertainty

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (GFSK) Channel = Hopping
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

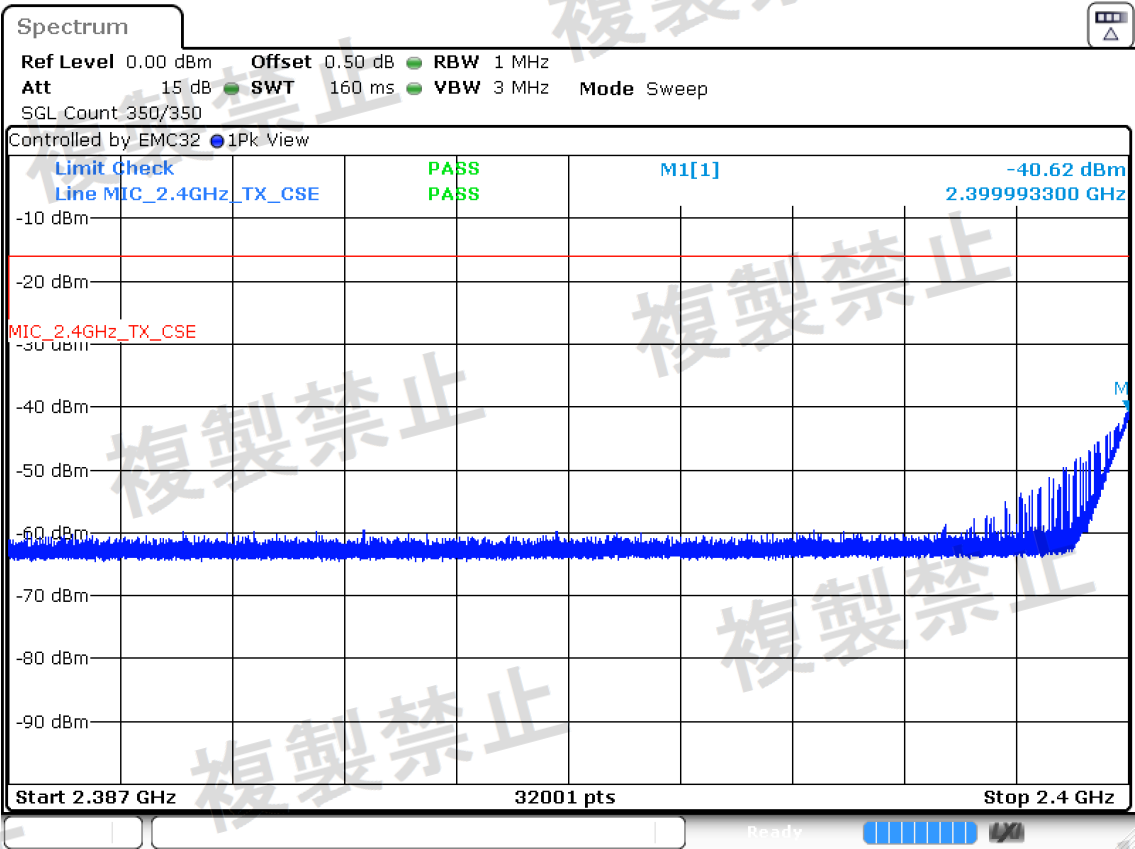
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (GFSK) Channel = Hopping
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

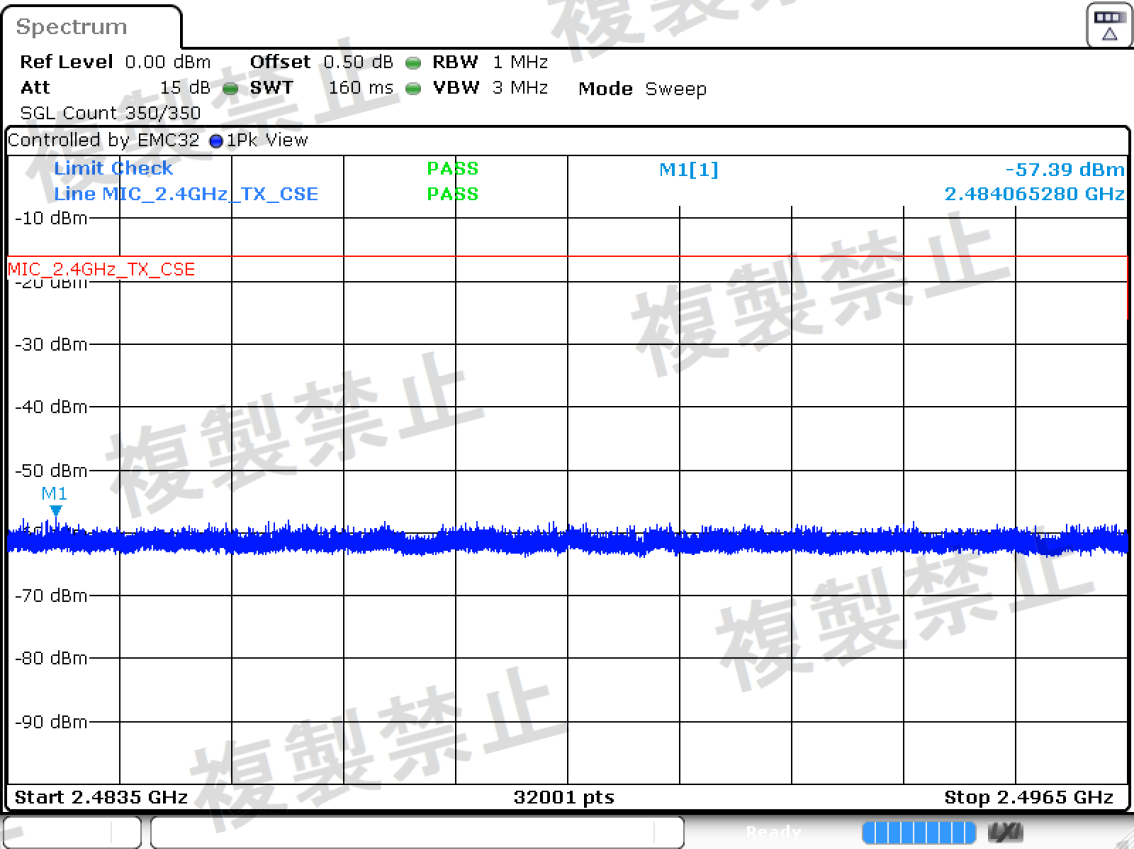
Modulation = BT (GFSK)

Channel = Hopping

Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

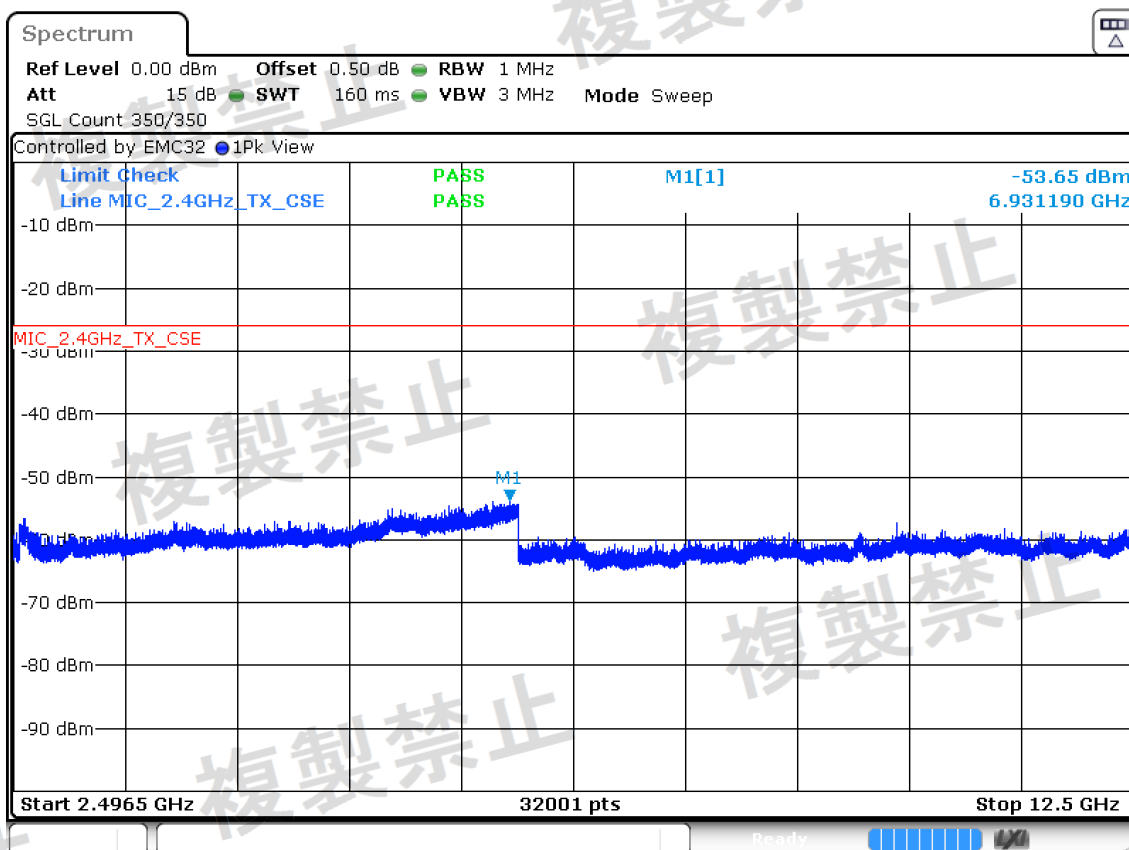
Modulation = BT (GFSK)

Channel = Hopping

Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

Images:



Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (µW/MHz)	Limit (µW/MHz)
15.00	12	Hopping	[0.03, 2.387]	2295.706	-58.81	0.0013	0.00
15.00	12	Hopping	[2.387, 2.4]	2399.994	-29.50	1.1220	0.32
15.00	12	Hopping	[2.4835, 2.4965]	2483.780	-53.64	0.0043	0.32
15.00	12	Hopping	[2.4965, 12.5]	6859.920	-53.47	0.0045	0.00

Verdict

Pass

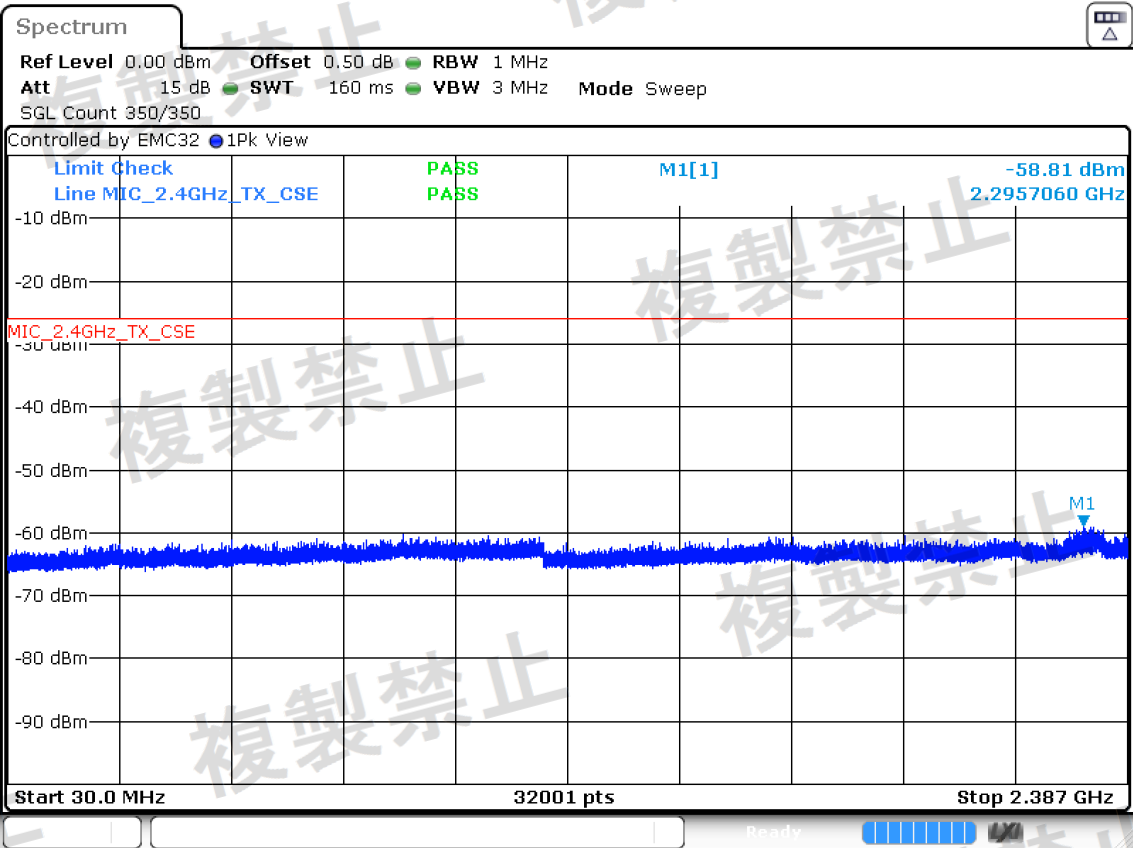
Uncertainty

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (Pi/4 DQPSK 2-DH5) Channel = Hopping
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

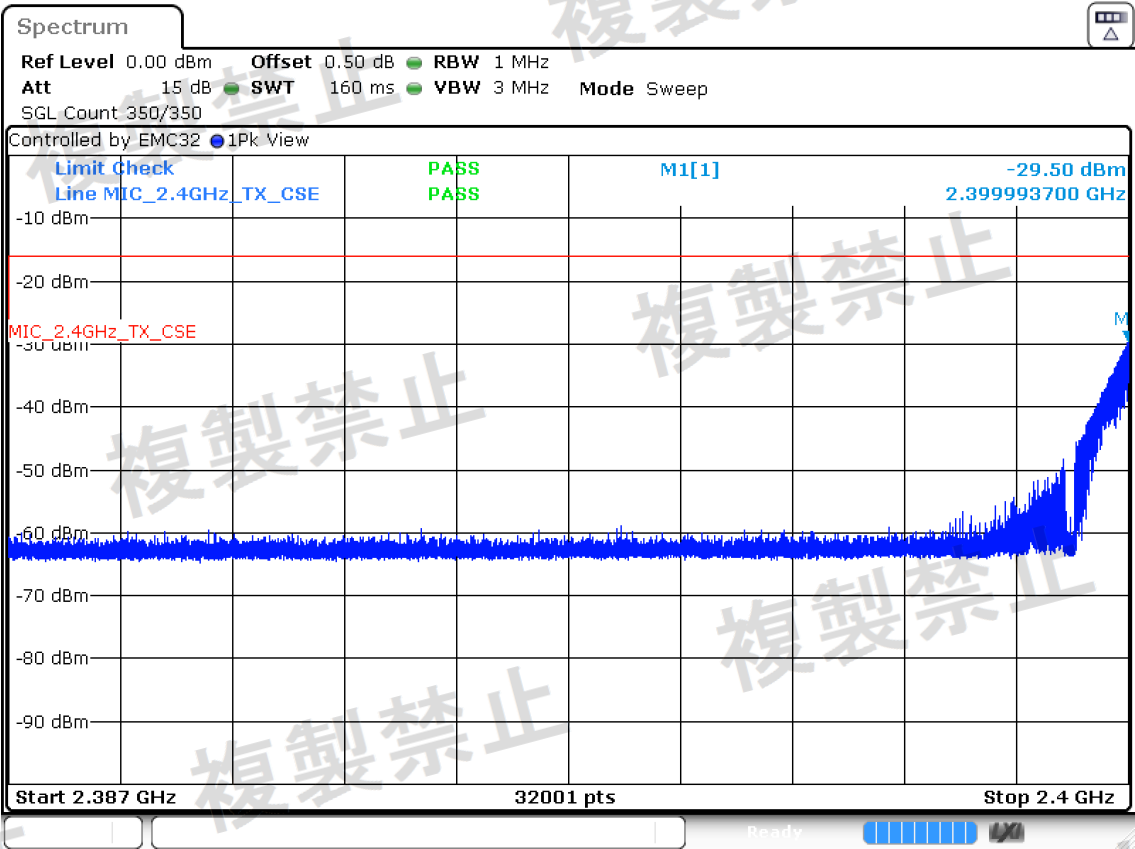
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (Pi/4 DQPSK 2-DH5) Channel = Hopping
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

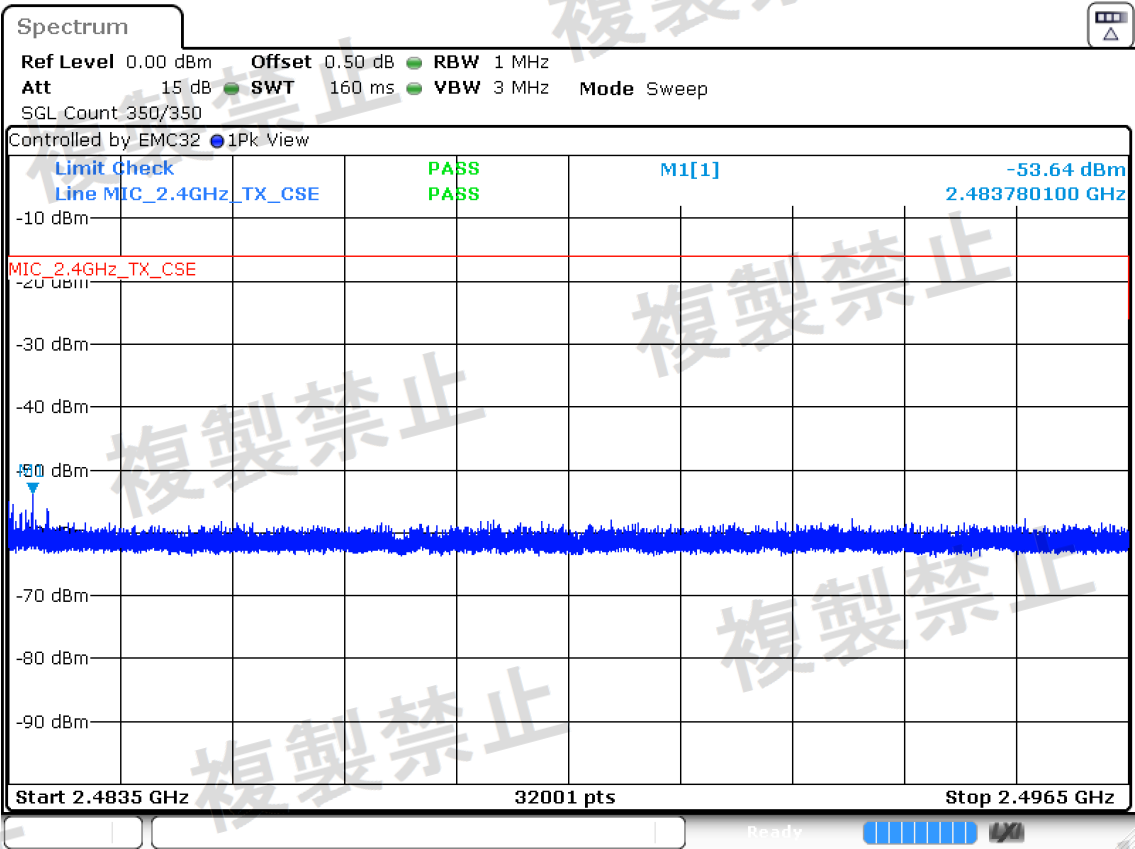
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (Pi/4 DQPSK 2-DH5) Channel = Hopping
Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

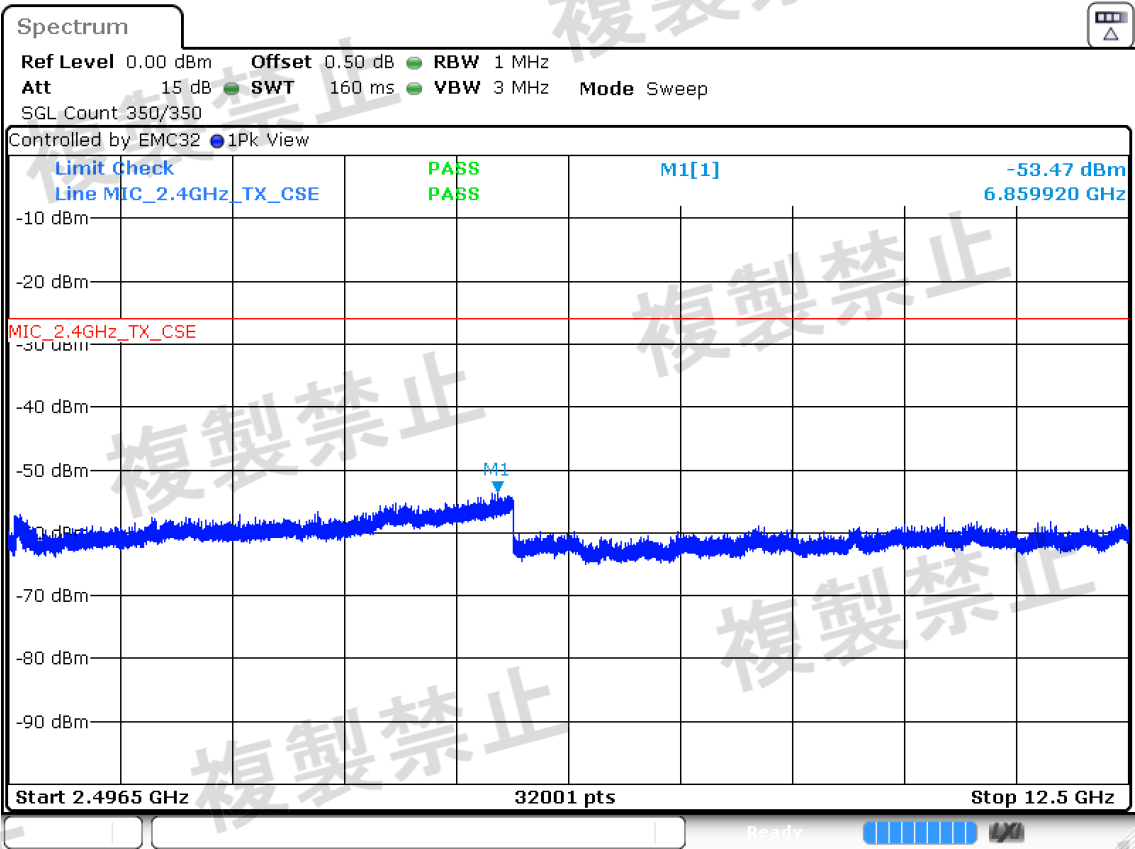
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (Pi/4 DQPSK 2-DH5) Channel = Hopping
Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

Images:



Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (µW/MHz)	Limit (µW/MHz)
15.00	12	Hopping	[0.03, 2.387]	2312.057	-58.22	0.0015	0.00
15.00	12	Hopping	[0.03, 2.387]	2312.057	-58.22	0.0015	0.00
15.00	12	Hopping	[2.387, 2.4]	2399.999	-29.24	1.1912	0.32
15.00	12	Hopping	[2.387, 2.4]	2399.999	-29.24	1.1912	0.32
15.00	12	Hopping	[2.4835, 2.4965]	2483.824	-57.27	0.0019	0.32
15.00	12	Hopping	[2.4835, 2.4965]	2483.824	-57.27	0.0019	0.32
15.00	12	Hopping	[2.4965, 12.5]	6964.330	-53.68	0.0043	0.00
15.00	12	Hopping	[2.4965, 12.5]	6964.330	-53.68	0.0043	0.00

Verdict

Pass

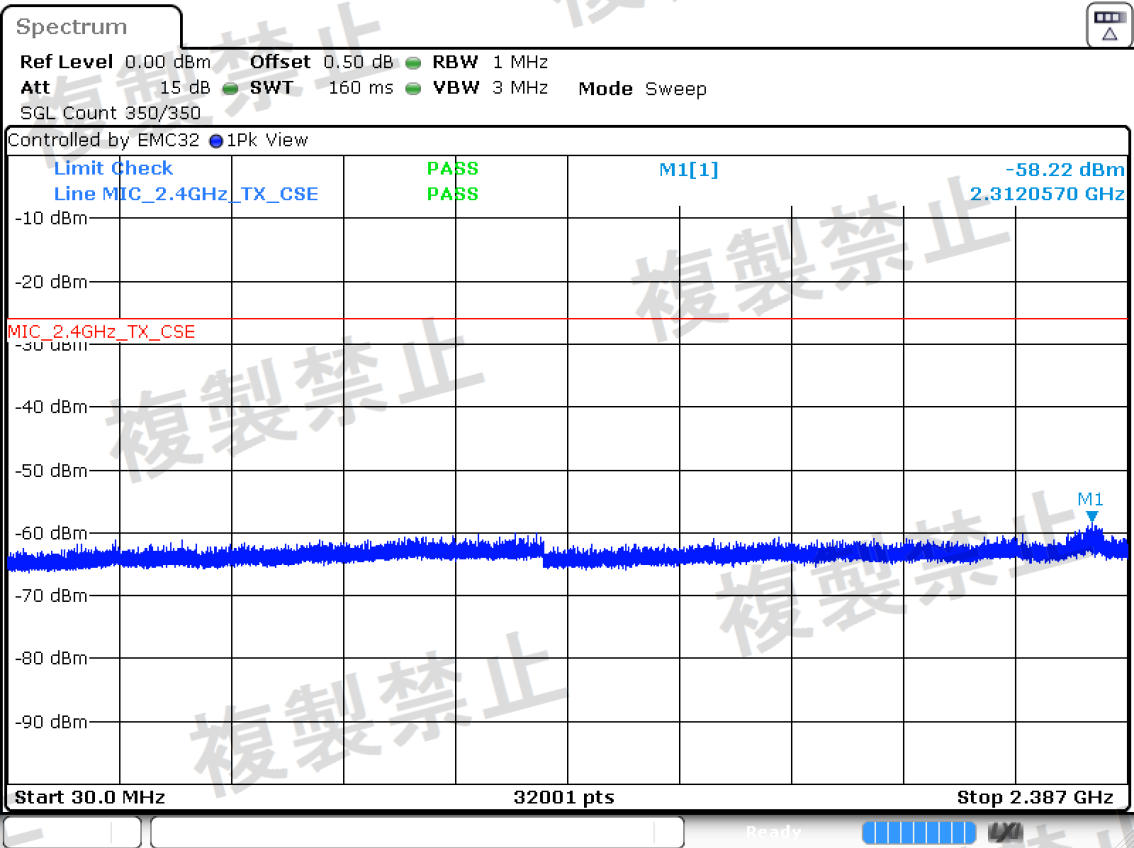
Uncertainty

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

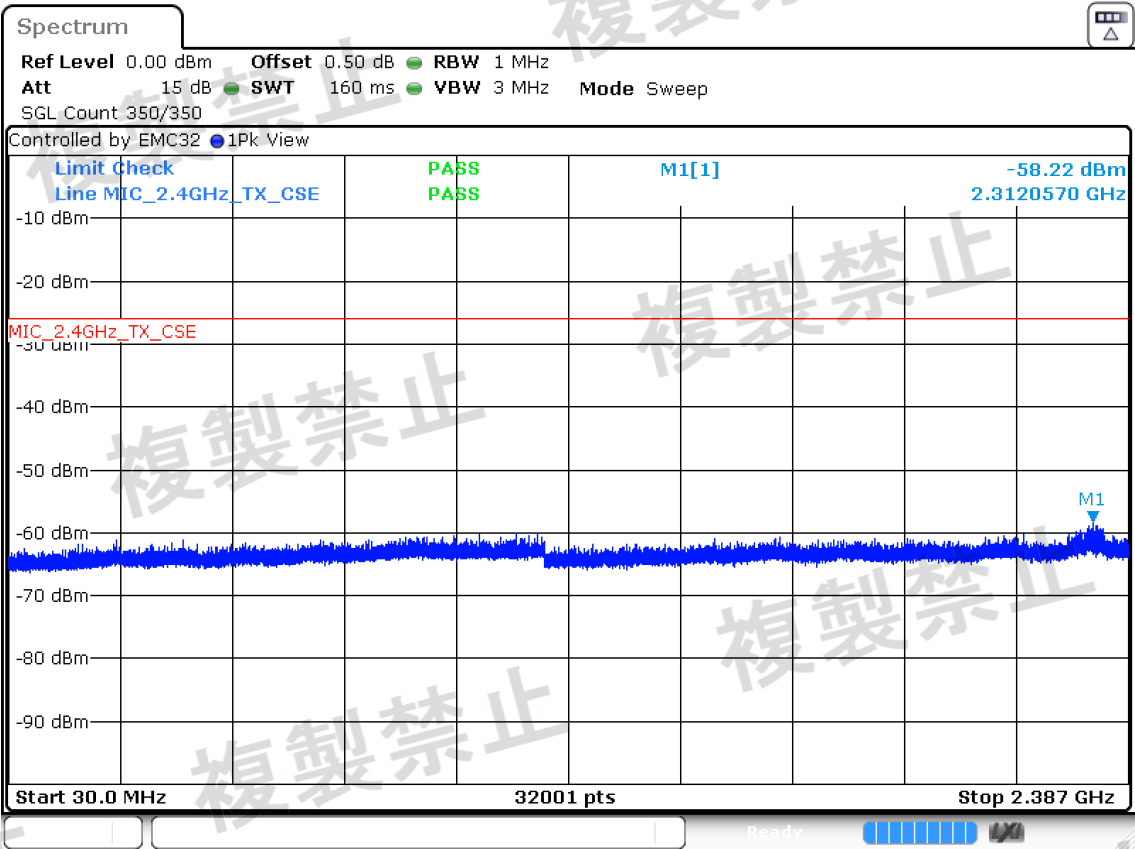
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Frequency Range GHz = [0.03, 2.387]

Verdict: Pass

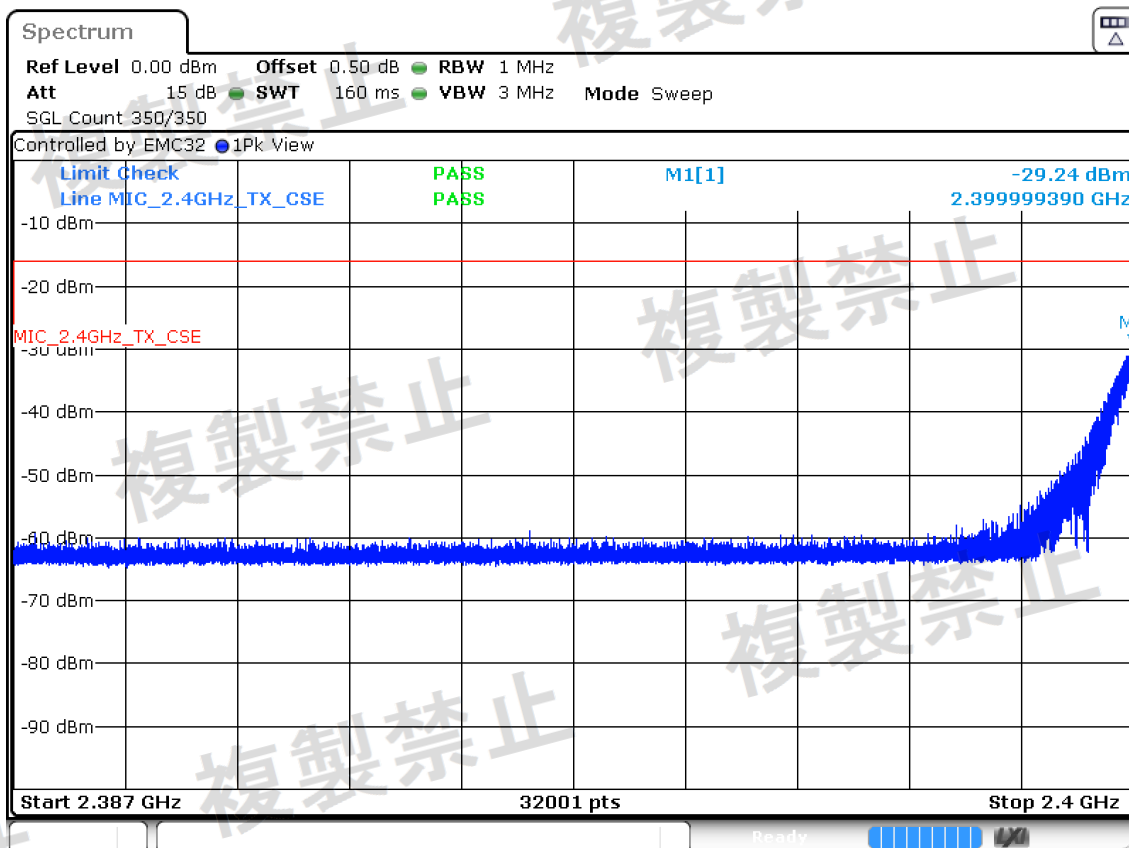
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

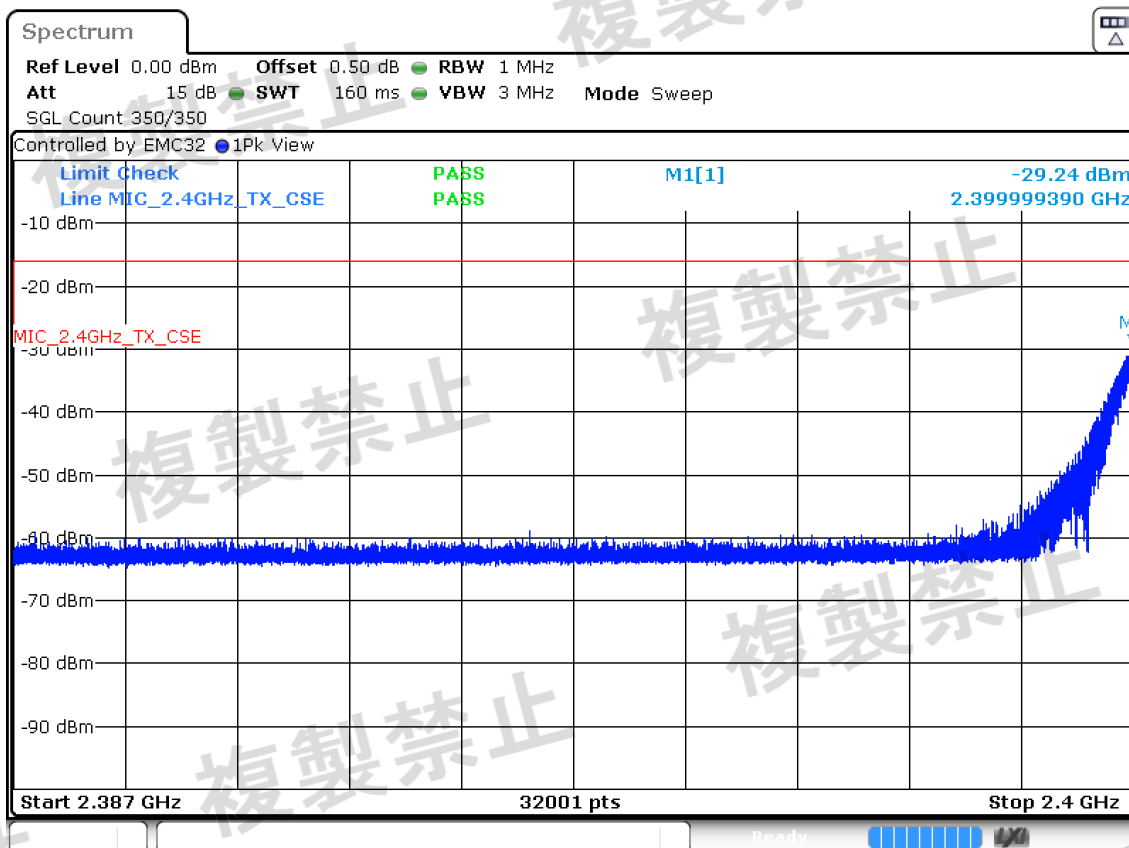
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Frequency Range GHz = [2.387, 2.4]

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

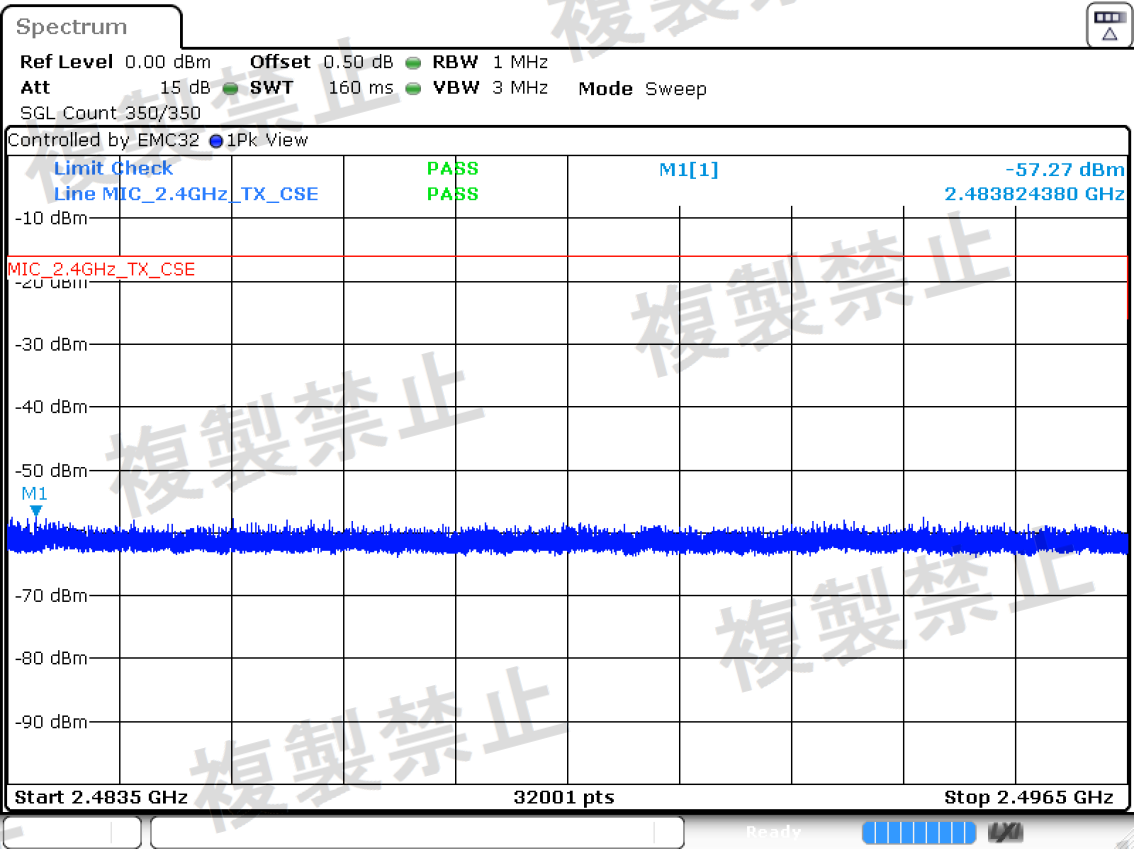
Modulation = BT (8DPSK 3-DH5)

Channel = Hopping

Frequency Range GHz = [2.4835, 2.4965]

Verdict: Pass

Images:

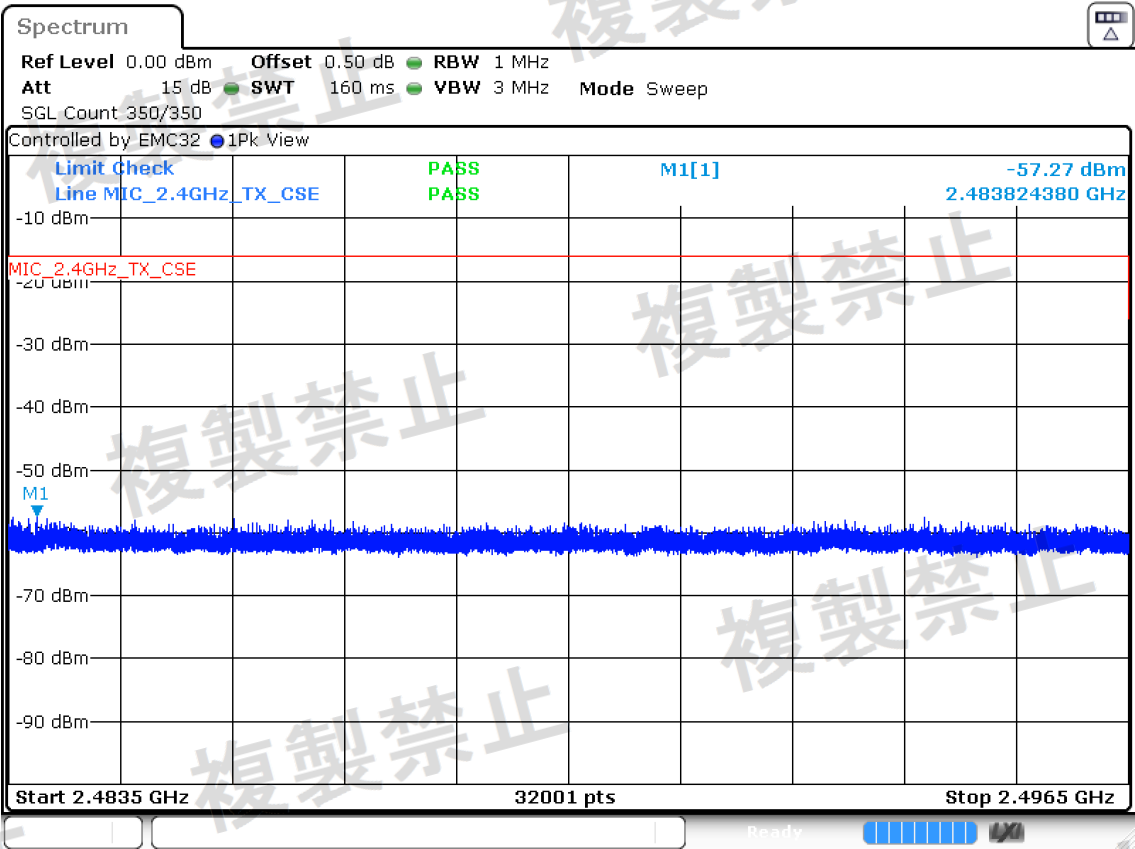


Ambient Temperature °C = 15.00
Modulation = BT (8DPSK 3-DH5)
Frequency Range GHz = [2.4835, 2.4965]

Test Voltage = 12
Channel = Hopping

Verdict: Pass

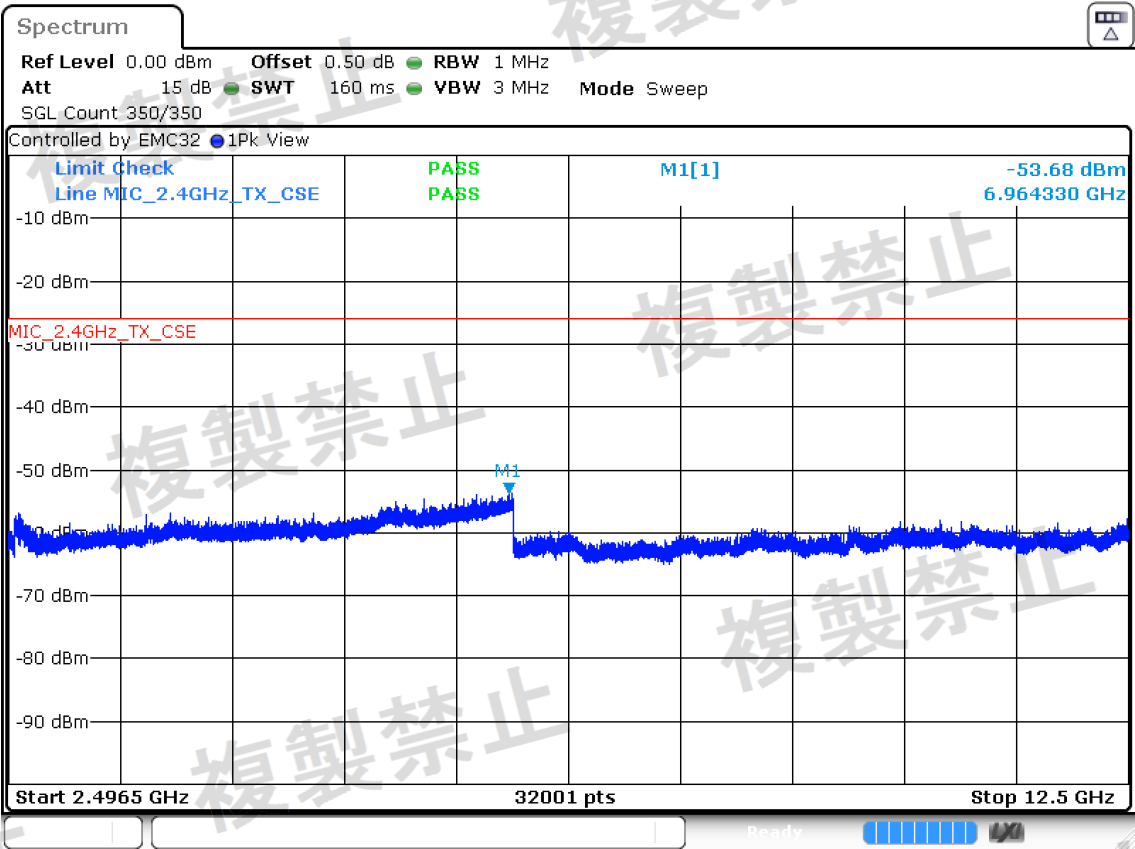
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5) Channel = Hopping
Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

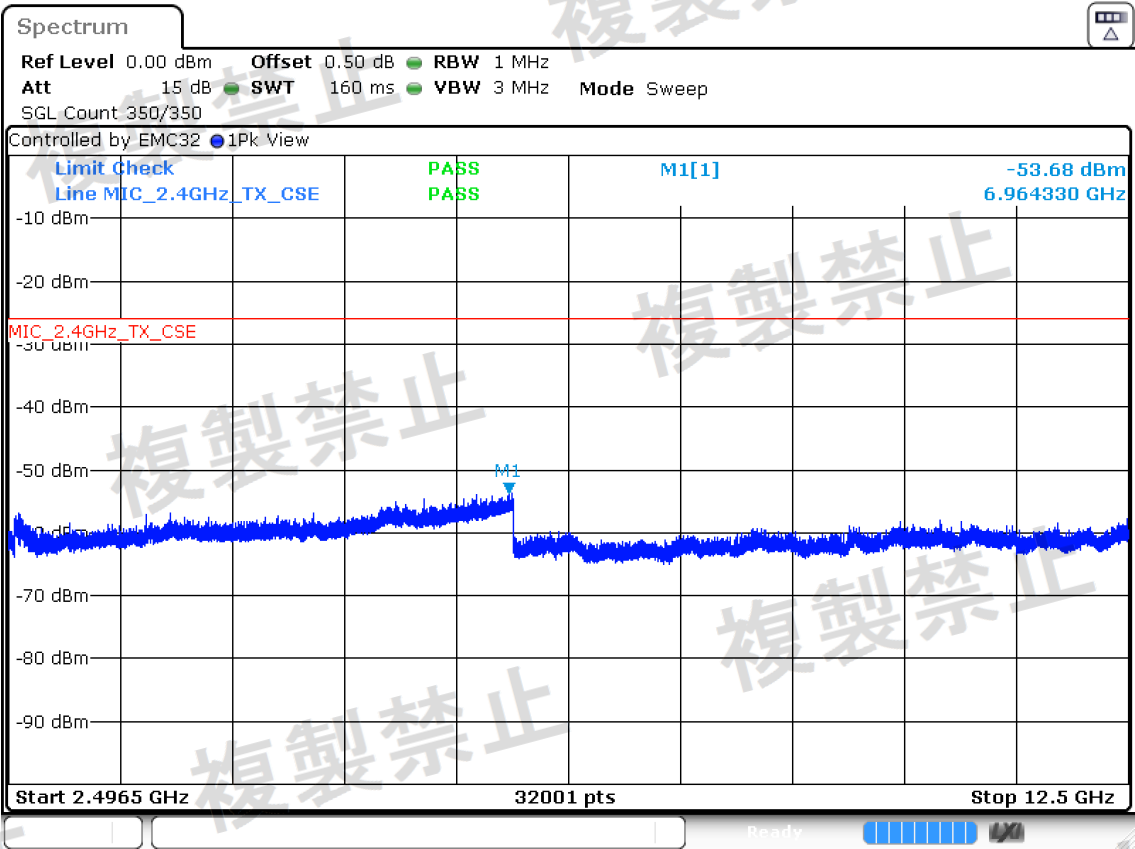
Modulation = BT (8DPSK 3-DH5)

Channel = Hopping

Frequency Range GHz = [2.4965, 12.5]

Verdict: Pass

Images:



Article 24. 2 [CSERxBT] Secondary Radiated Emission Strength (BT)

Limits

The limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW (-54 dBm) or less at a frequency below 1 GHz and 20 nW (-47 dBm) or less at a frequency of 1 GHz or higher as measured using the circuit.

Modulation: BT (8DPSK 3-DH5)

Results

Ambient Temp (°C)	Test Voltage	Ch	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (nW)	Limit (nW)
15.00	12	Hopping	[0.03, 1]	999.985	-79.30	0.0117	4
15.00	12	Hopping	[1, 12.5]	6971.370	-64.59	0.3475	20

Verdict

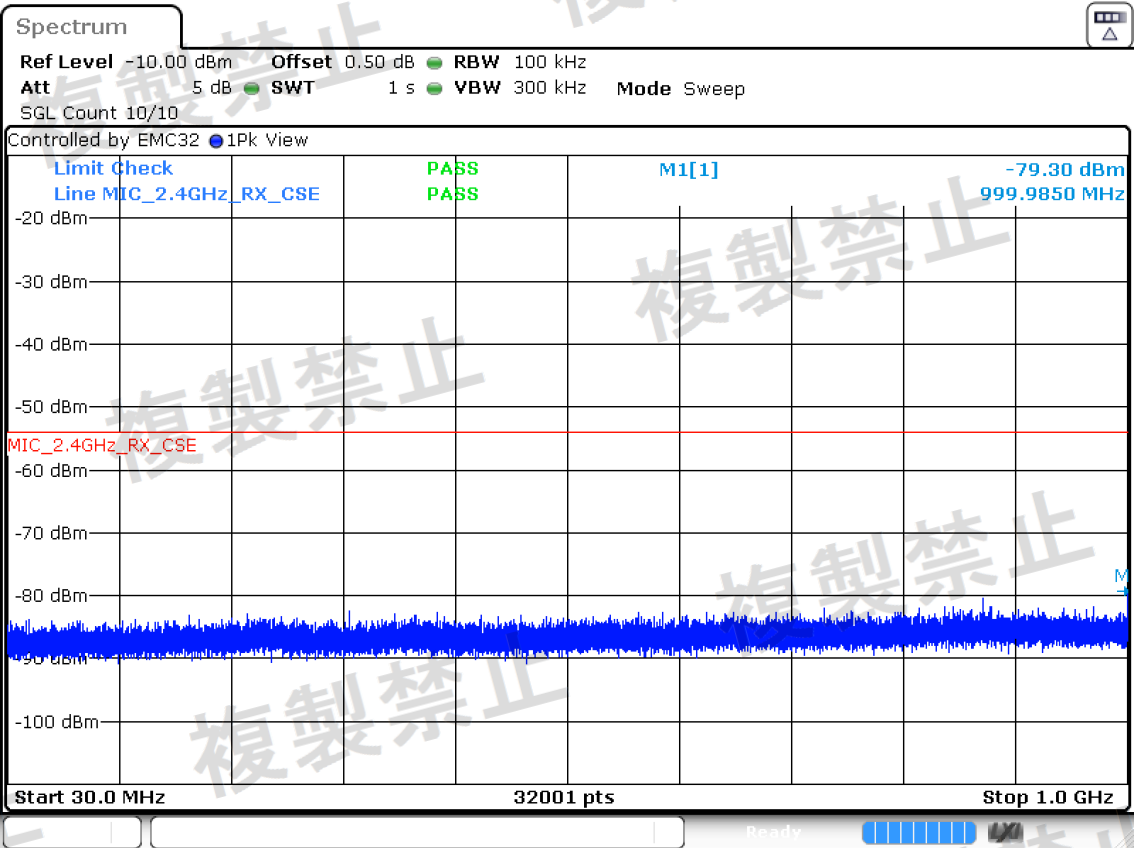
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5)
Frequency Range GHz = [0.03, 1]

Verdict: Pass

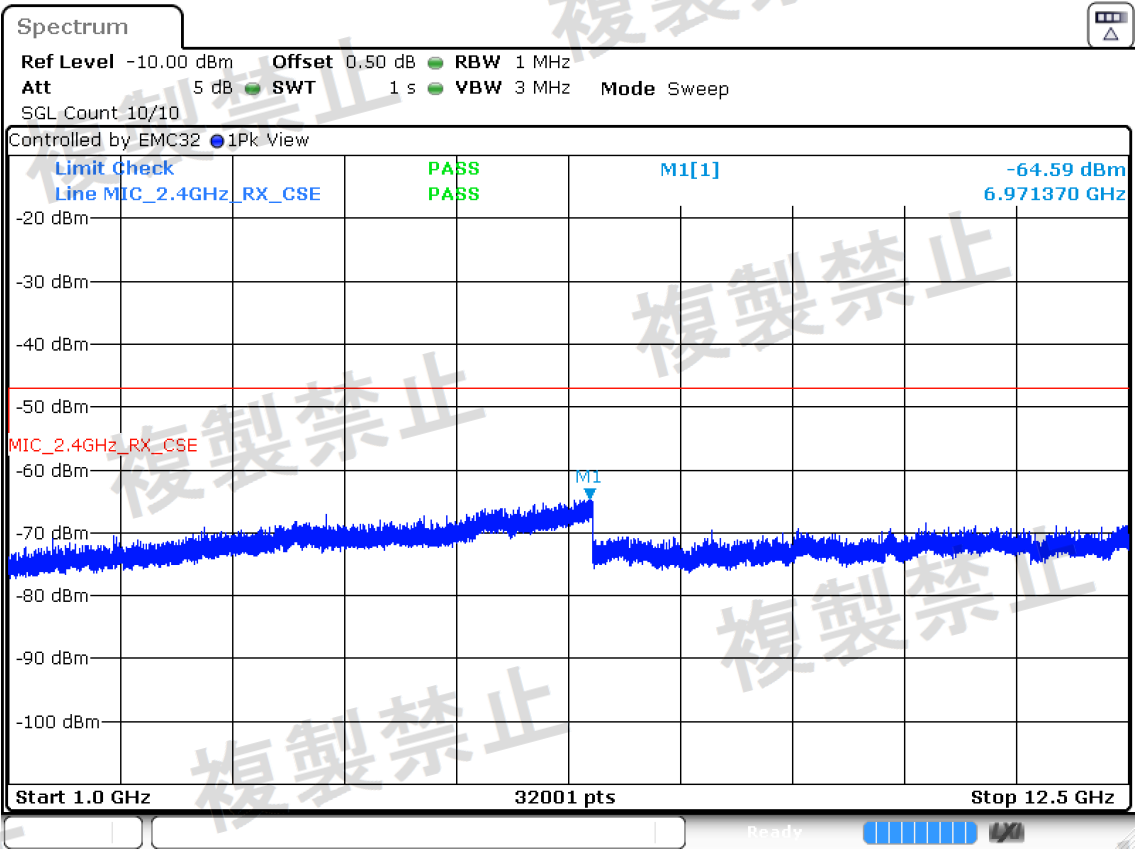
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = BT (8DPSK 3-DH5)
Frequency Range GHz = [1, 12.5]

Verdict: Pass

Images:



Subclause 3.4 (1). Interference prevention function

SPECIFICATION

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

Limits:

Item	Limit
Identification	≥ 48 bits

RESULTS

Identification code received.

Verdict: PASS

Subclause 3.6 (2). Antenna gain

SPECIFICATION

a: The absolute gain of the transmitting antenna shall be 12.14 dB or less. However, when the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) is equal to or less than the value obtained by applying an antenna power with the mean power of 10 mW with its absolute gain being 12.14 dB, the shortage shall be compensated for by the gain of the transmitting antenna (Note that mean power is 10 mW in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

b: The Half-Power Beam Width Angle HPBA (angle between two points at which radiated power becomes 1/2) of the transmitting antenna's horizontal and vertical planes shall not exceed the value as determined by the following formula:

$$HPBA \leq 360 / A \text{ [degrees]}$$

where constant A is equal to the value obtained by dividing the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) by the value obtained by applying an antenna power with the mean power of 10 mW with its absolute gain being 12.14 dB, and shall be assumed to be 1 if it is less than 1 (Note that mean power is 10 mW in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining the FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

Therefore

$$\text{Antenna gain (A)} = \text{EIRP (mW/MHz)} / 16.37$$

RESULTS

Maximum declared antenna gain: 3 dBi.

Modulation	Radiated power EIRP (mW/MHz)	A = EIRP (mW/MHz) /16.37	Result
GFSK	19.95	1.22	< 1
$\pi/4$ DQPSK	17.14	1.05	< 1
8DPSK	20.04	1.22	< 1

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

Verdict: PASS

Appendix C: Test results. Wi-Fi 2.4 GHz

PRODUCT INFORMATION

The following information is provided by the client

Modulation:	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Spread spectrum system:	No (Other digital modulation methods)
Nominal necessary Bandwidth:	20 MHz
Rated Antenna Power:	b mode: 0.9 mW/MHz g, n modes: 1.2 mW/MHz ax mode: 2.0 mW/MHz
Antenna gain	0.1 dBi
Type of antenna:	External antenna
Operating nominal frequency range:	2402 MHz to 2472 MHz
Type of power supply:	DC voltage
Equipment type	Wi-Fi 2.4GHz b/g/n/ax

DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC#01 (b mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ Channel Bandwidth: 20 MHz Data rate: 1Mbit/s <u>Test Frequencies for conducted/Radiated tests (SISO Radio A, SISO Radio B):</u> Lowest range: 2412 MHz Middle channel: 2442 MHz Highest range: 2472 MHz
TC#02 (g mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ Channel Bandwidth: 20 MHz Data rate: 6 Mbit/s <u>Test Frequencies for Conducted/Radiated tests (SISO Radio A, SISO Radio B):</u> Lowest range: 2412 MHz Middle channel: 2442 MHz Highest range: 2472 MHz
TC#03	<u>Power supply (V):</u>

(n mode)	$V_{\text{nominal}} = 12 \text{ Vdc}$ Channel Bandwidth: 20 MHz Data rate: MCS0 <u>Test Frequencies for Conducted/Radiated tests (SISO Radio A, SISO Radio B):</u> Lowest range: 2412 MHz Middle channel: 2442 MHz Highest range: 2472 MHz
TC#04 (ax mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 12 \text{ Vdc}$ Channel Bandwidth: 20 MHz Data rate: HE SS1 MCS0 <u>Test Frequencies for Conducted/Radiated tests (SISO Radio A, SISO Radio B, MIMO A+B):</u> Lowest range: 2412 MHz Middle channel: 2442 MHz Highest range: 2472 MHz

CONDUCTED MEASUREMENTS

The equipment under test (EUT) was set up in a shielded room and its antenna port (SMA type) is directly connected to the spectrum analyzer.

The EUT is set in continuous transmission with and without modulation using an implemented test mode.

Subclause 3.2 (1). Modulation system

SPECIFICATION

For spread spectrum systems, a Direct Sequence system (DS system), a Frequency Hopping system (FH system), a hybrid system combining these systems, or a hybrid system combining FH and orthogonal frequency division multiplexing systems (OFDM system) shall be used.

DS: A pseudo-random spreading code is combined with the information sequence to implement spreading function. The resulting signal modulates a carrier signal and consequently, the information signal is spread to a wide band signal.

FH: The transmitting signal is a sequence of pulses at different frequencies over a large bandwidth. This sequence is called as frequency hopping pattern.

RESULTS

The equipment uses a digital modulation (DS and OFDM) and 13 channels over the frequency range 2412 MHz to 2472 MHz

Verdict: PASS

Article 49-20 [AntPW] Antenna Power (Wi-Fi)

Limits

Mode	Limit	Tolerance
a) FH, FH+DS, FH+OFDM	3 mW/MHz	20%
b) OFDM (Narrow bandwidth), DS	10 mW/MHz	
c) Other than a & b	10 mW	
d) OFDM (Wide band)	5 mW/MHz	

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm/MHz)	Antenna Power [Conducted] (mW/MHz)
15.00	12	2412	A	-5.15	0.31
15.00	12	2412	B	-5.12	0.31
15.00	12	2442	A	-4.96	0.32
15.00	12	2442	B	-5.07	0.31
15.00	12	2472	A	-5.13	0.31
15.00	12	2472	B	-5.18	0.30
15.00	12	2412	A+B	-2.08	0.61
15.00	12	2442	A+B	-2.01	0.63
15.00	12	2472	A+B	-2.15	0.61

Verdict

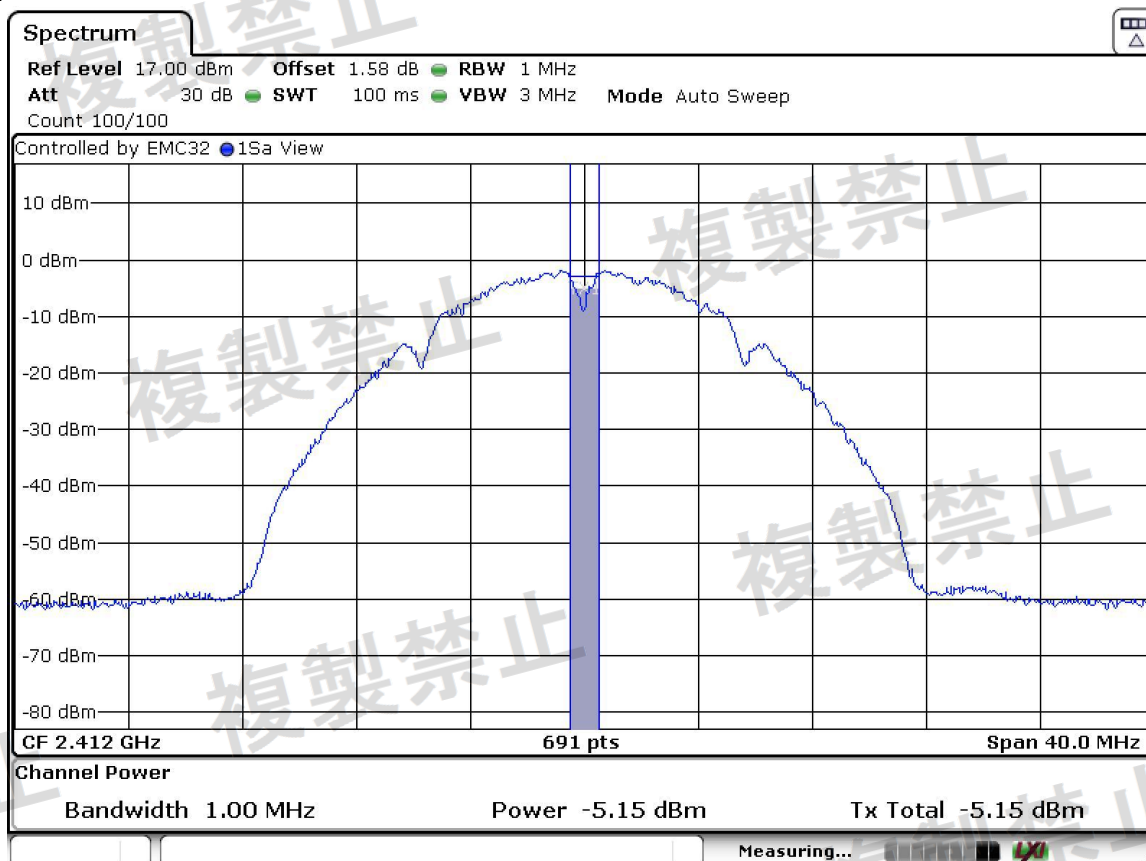
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

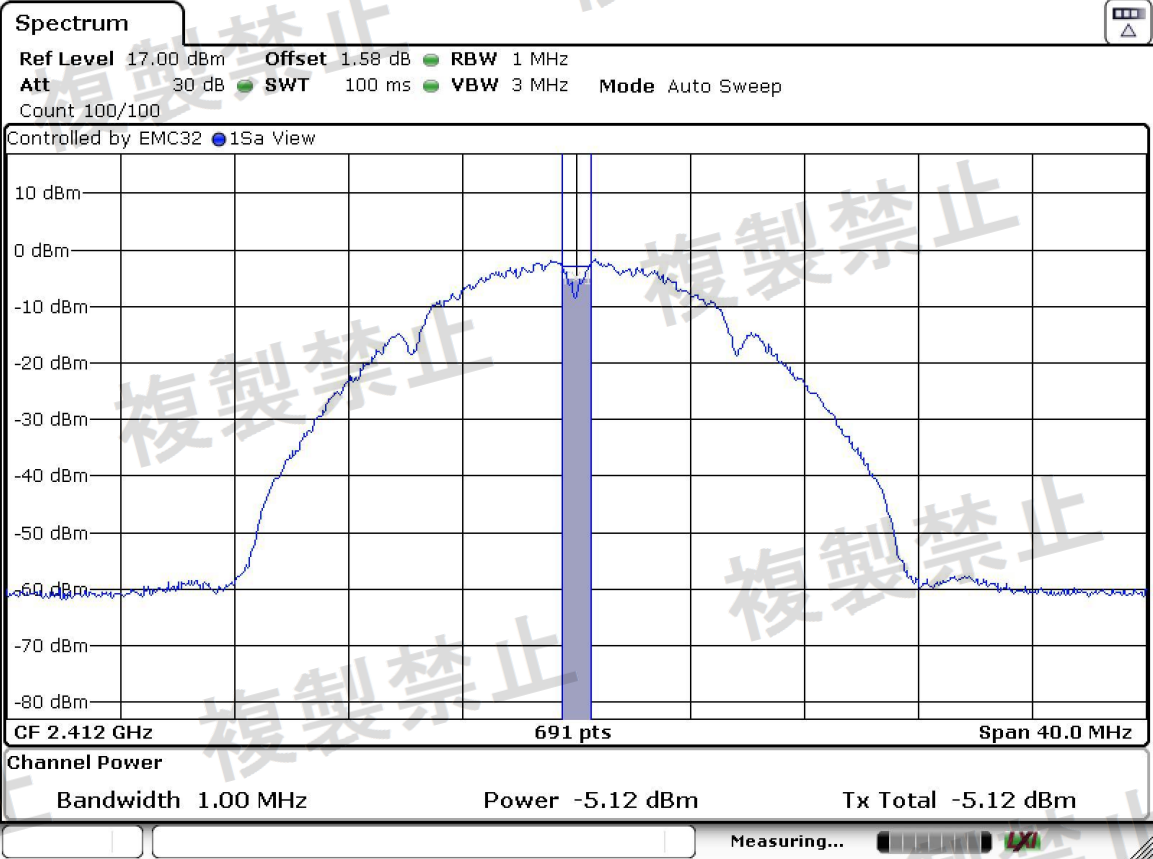
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

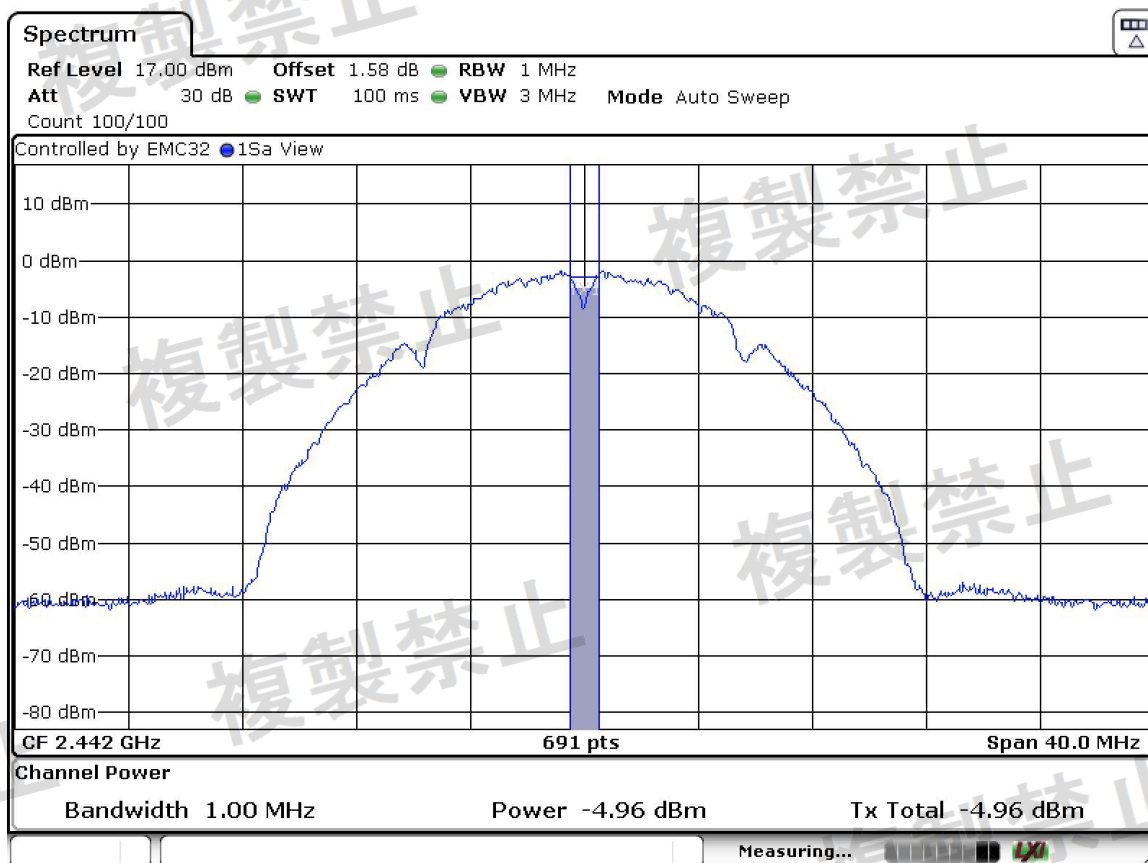
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

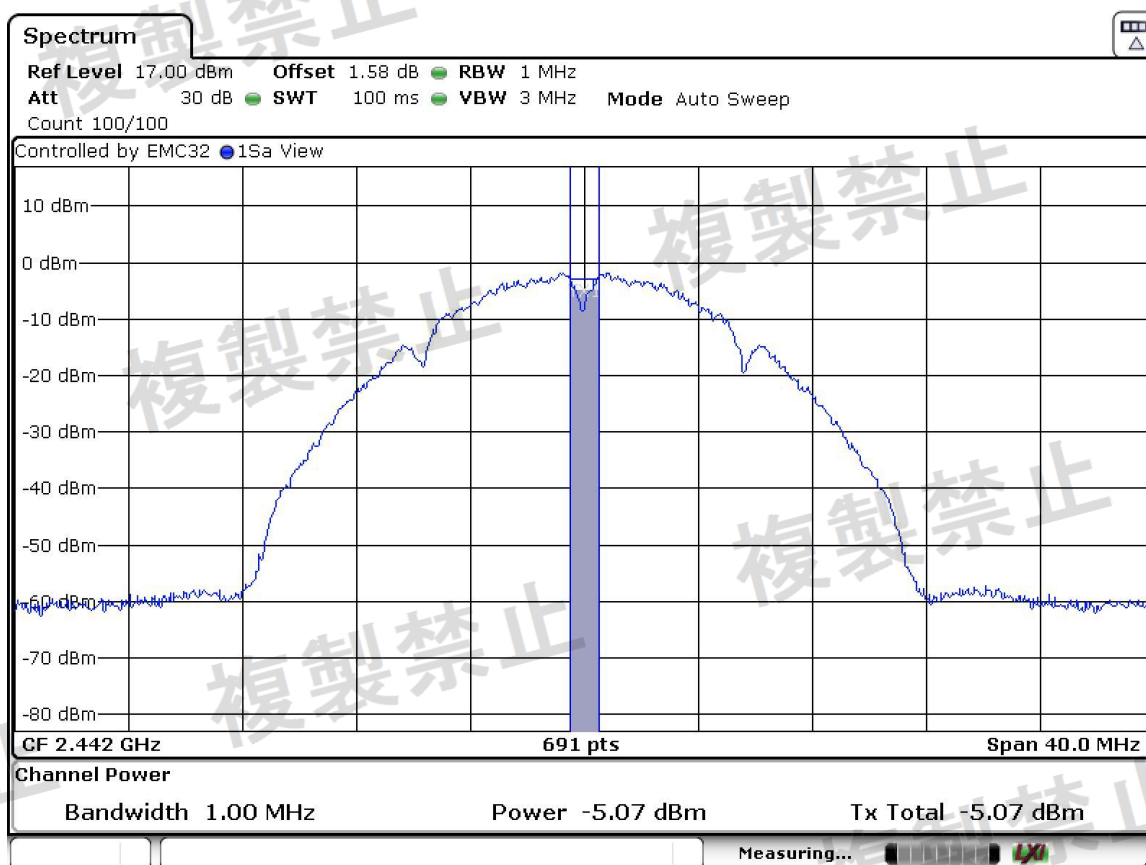
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

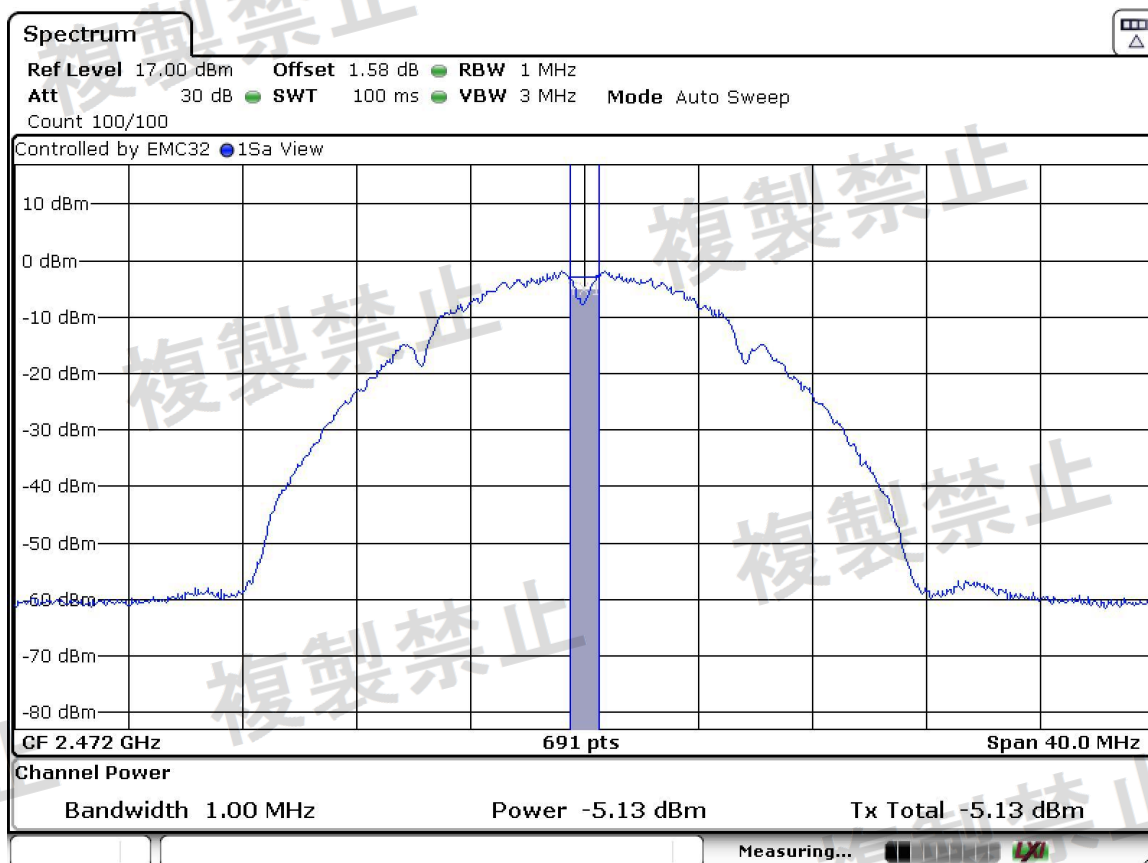
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

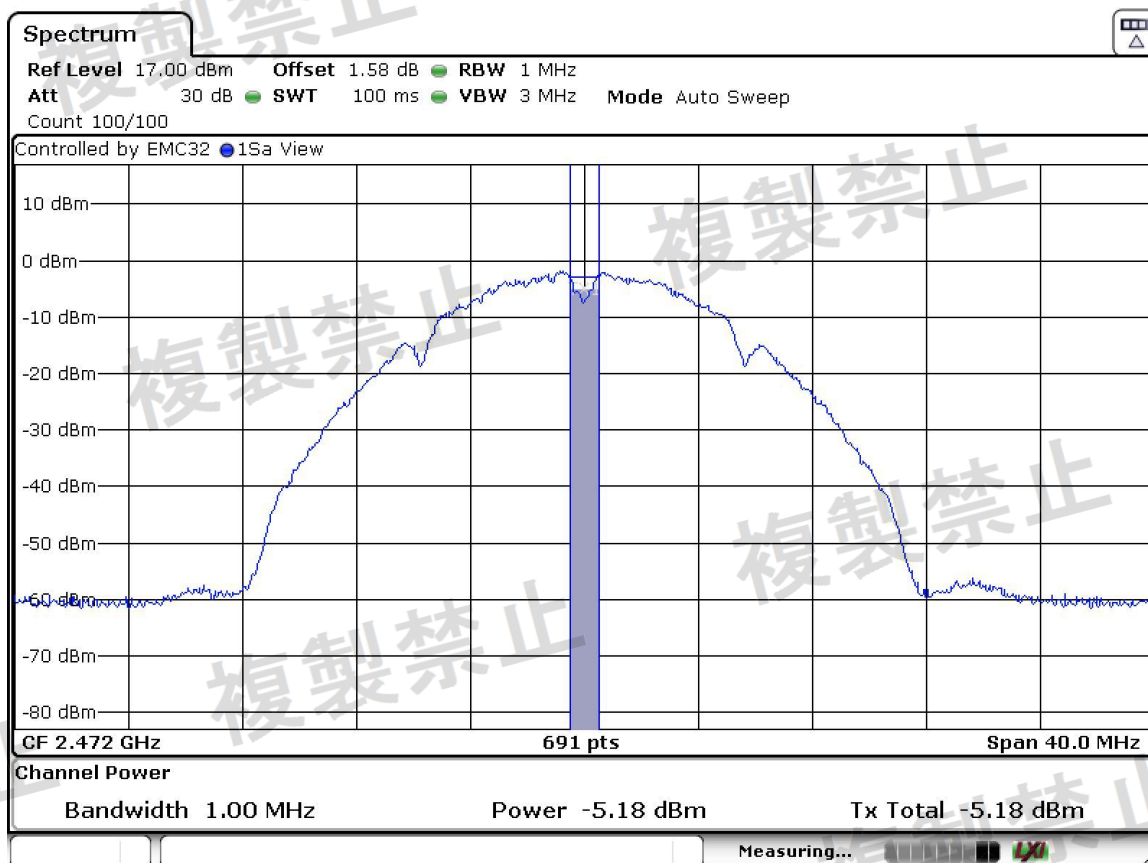
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Modulation: 802.11g (OFDM 6 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	1	2412	A	7.9	0.04	14.39	0.43	10
				B	7.9	0.04	14.39	0.43	10
		7	2442	A	7.0	0.04	14.39	0.35	10
				B	7.8	0.04	14.39	0.42	10
		13	2472	A	7.6	0.04	14.02	0.41	10
				B	8.1	0.04	14.02	0.47	10
		1	2412	A+B	10.9	0.04	14.39	0.87	10
		7	2442		10.4	0.04	14.39	0.77	10
		13	2472		10.9	0.04	14.02	0.88	10

Verdict

Pass

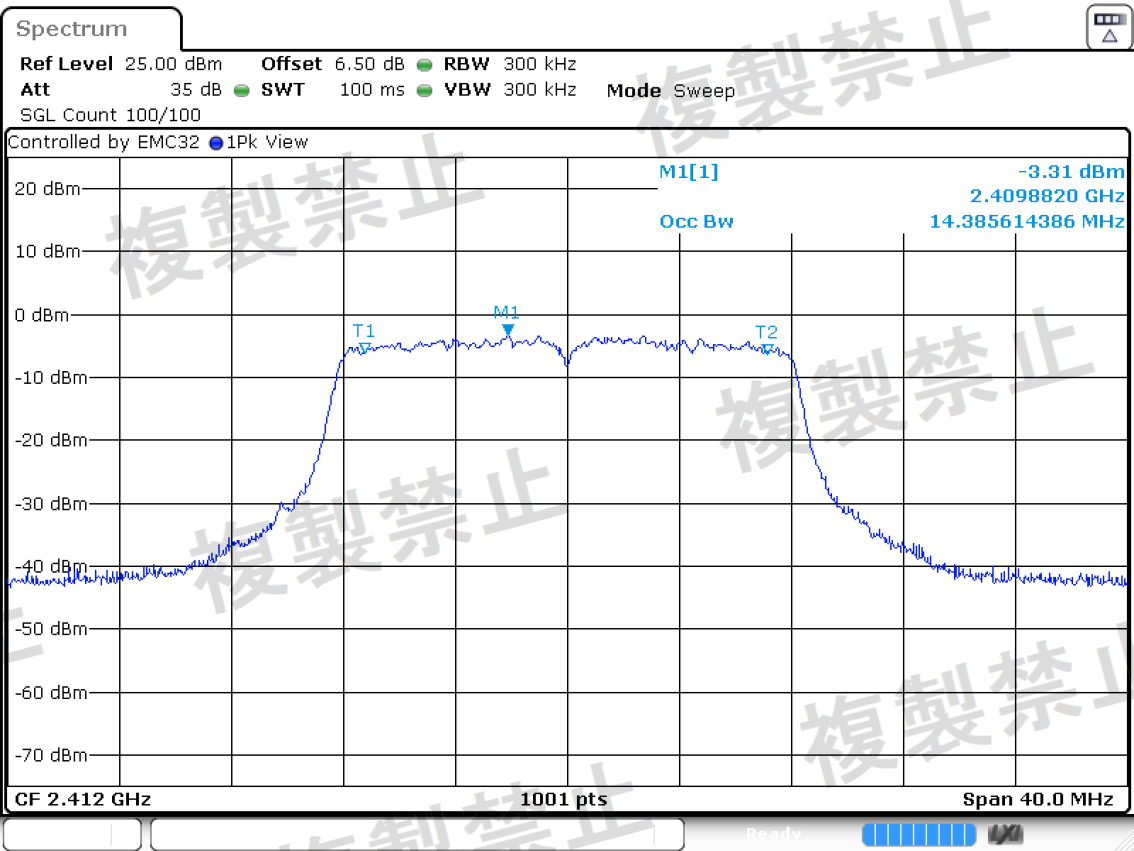
Spreading Bandwidth

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

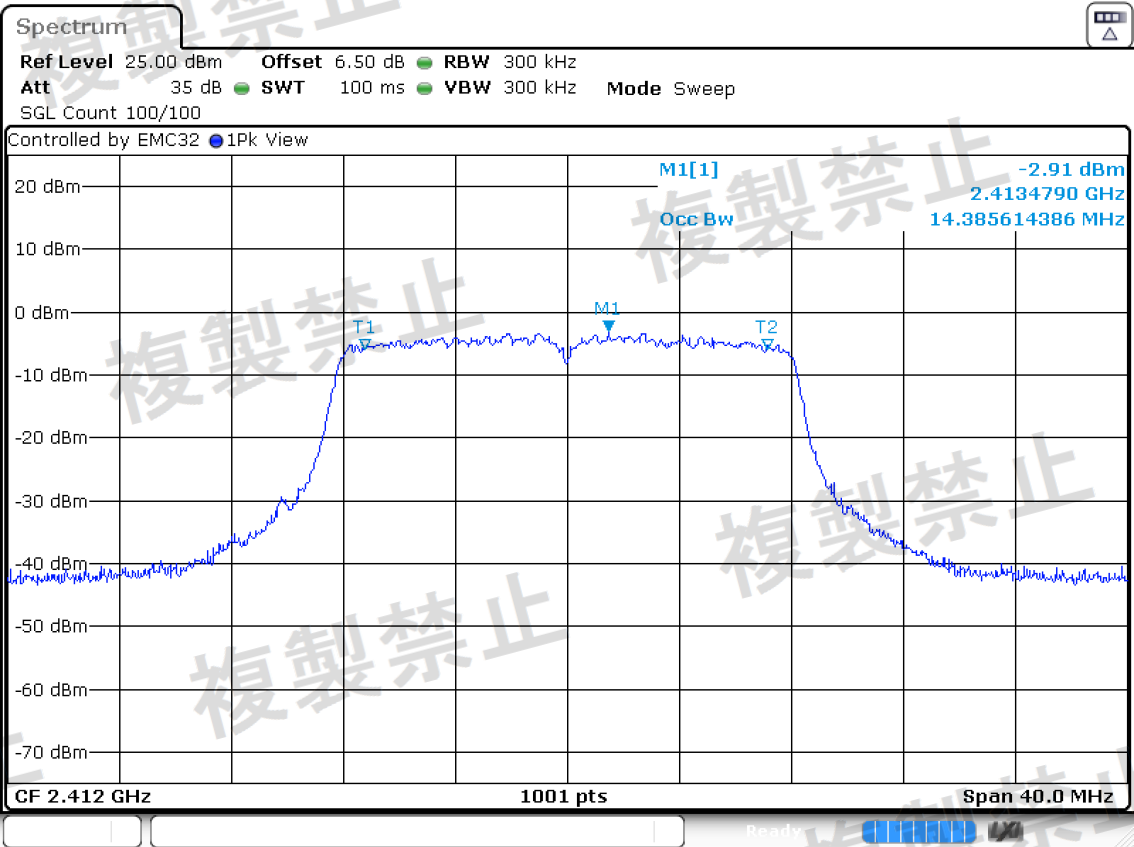
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

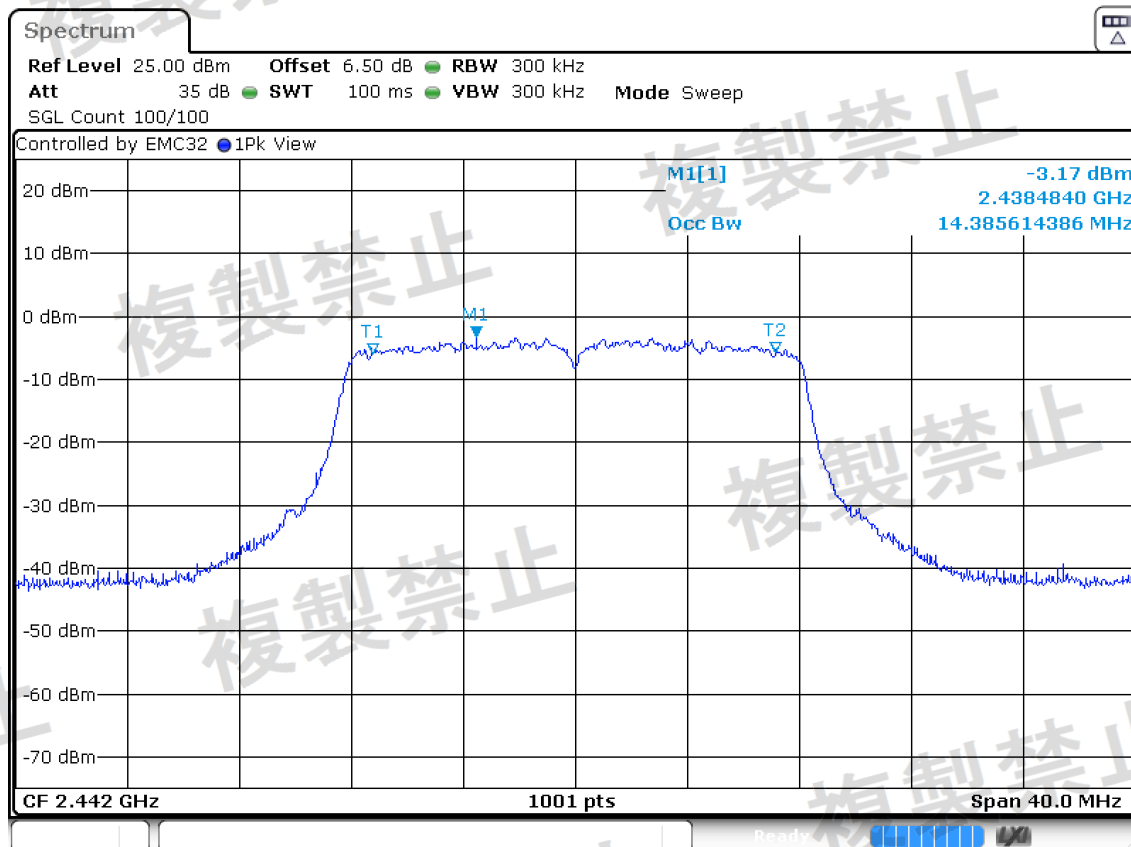
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

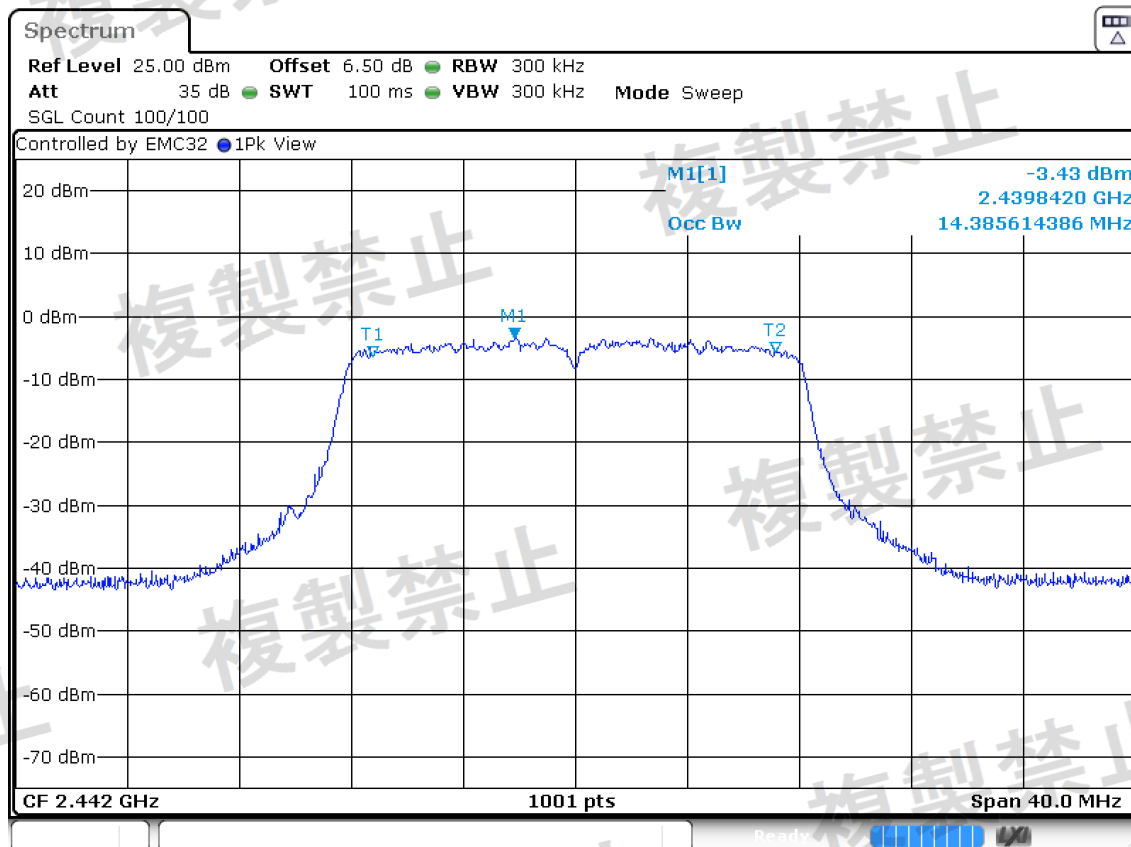
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

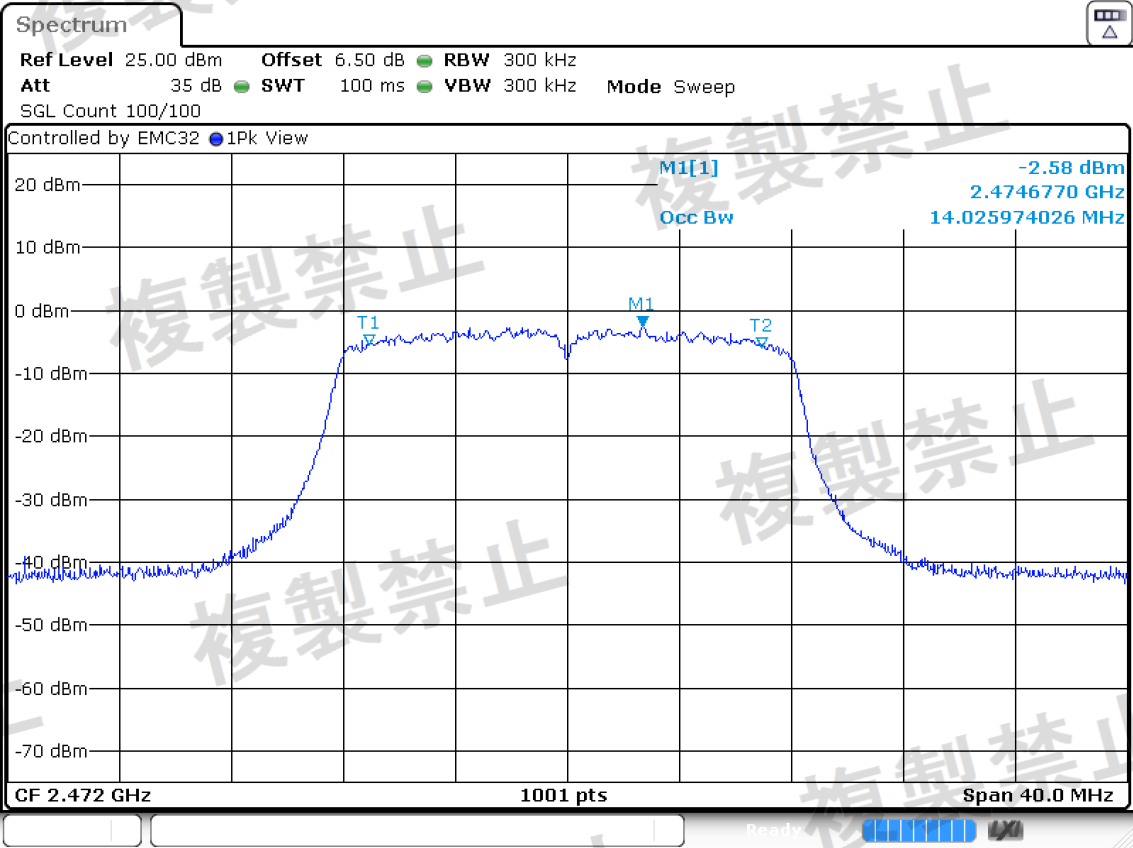
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

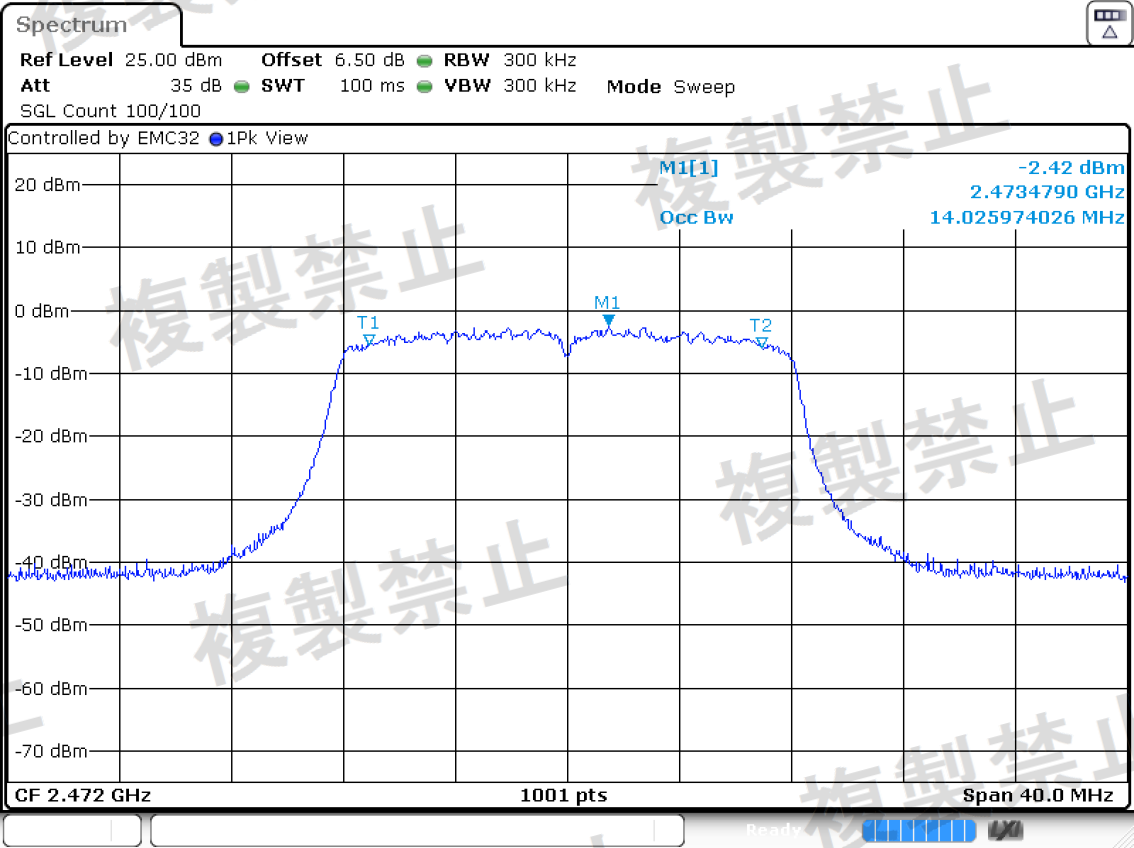
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11n HT20 (OFDM MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	1	2412	A	7.6	0.04	15.30	0.40	10
				B	7.6	0.04	15.26	0.40	10
		7	2442	A	7.6	0.04	15.26	0.40	10
				B	7.6	0.04	15.26	0.40	10
		13	2472	A	8.0	0.04	14.70	0.45	10
				B	7.9	0.04	14.70	0.44	10
		1	2412	A+B	10.6	0.04	15.30	0.80	10
		7	2442		10.6	0.04	15.26	0.80	10
		13	2472		11.0	0.04	14.70	0.89	10

Verdict

Pass

Uncertainty

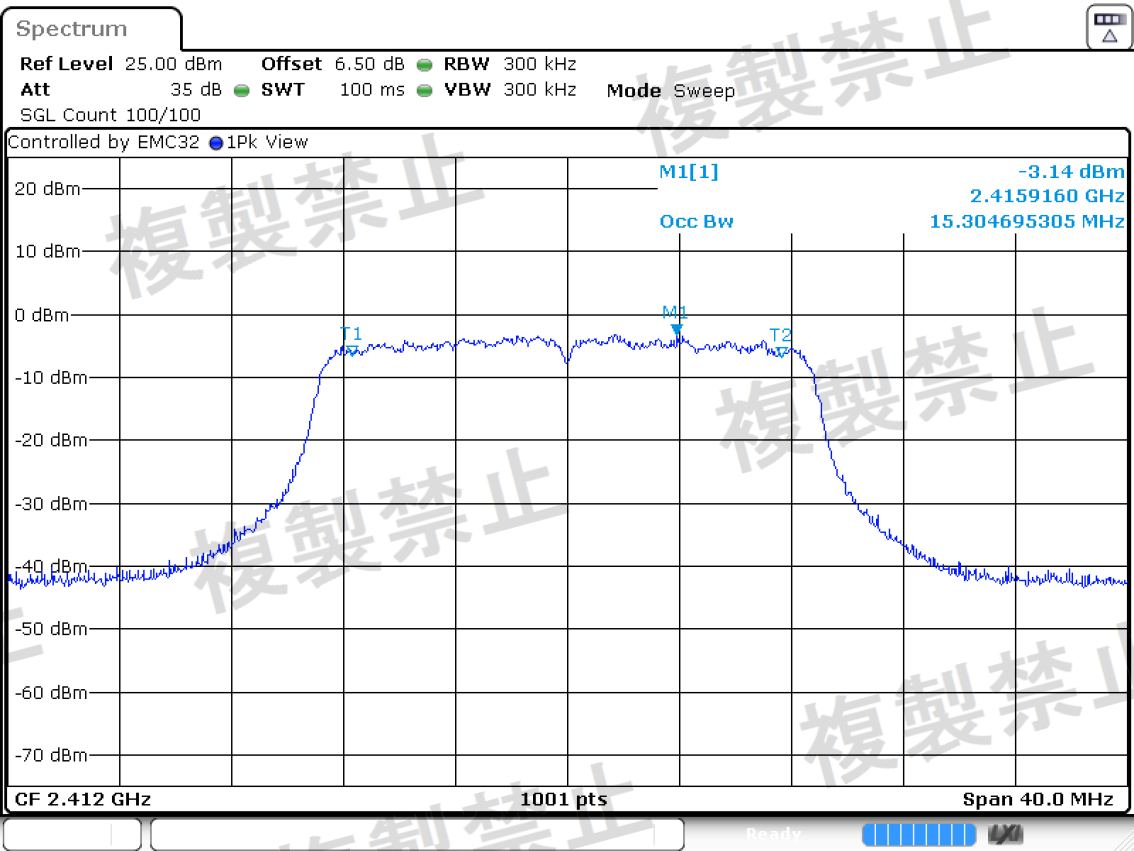
Spreading Bandwidth

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

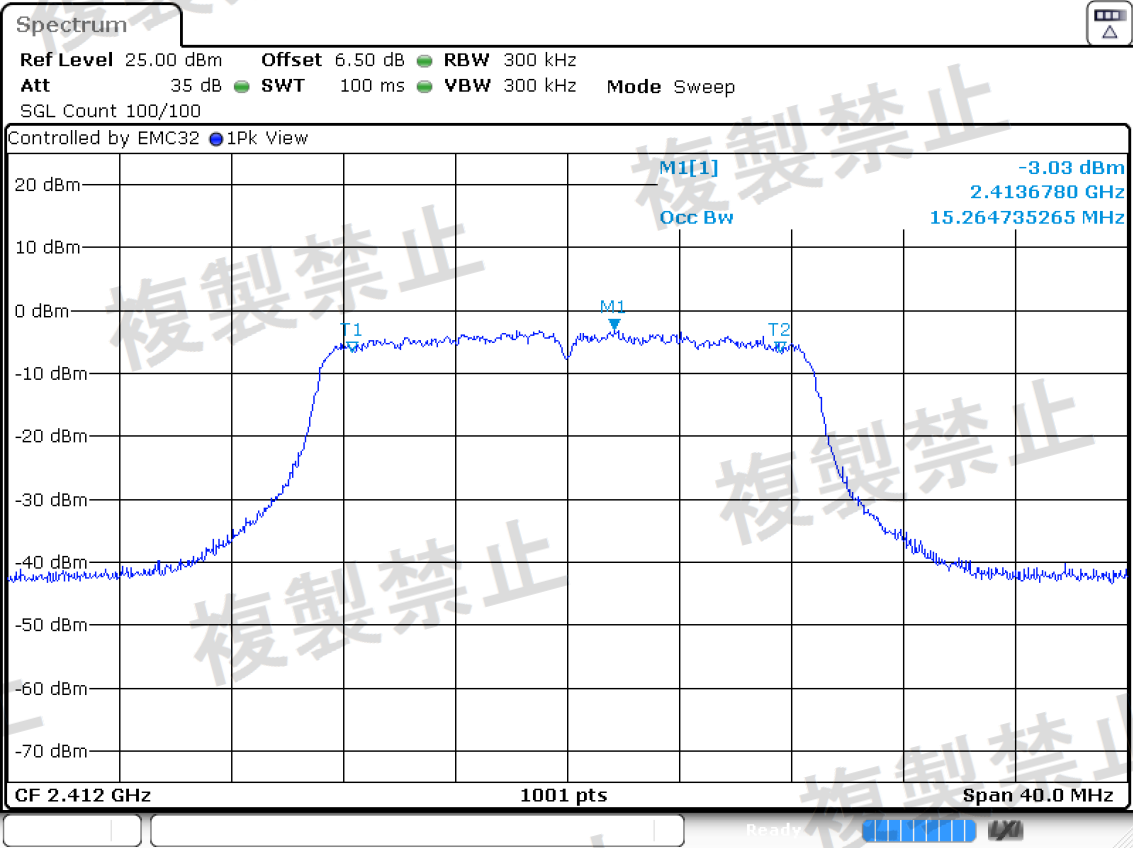
Frequency MHz = 2412

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 7

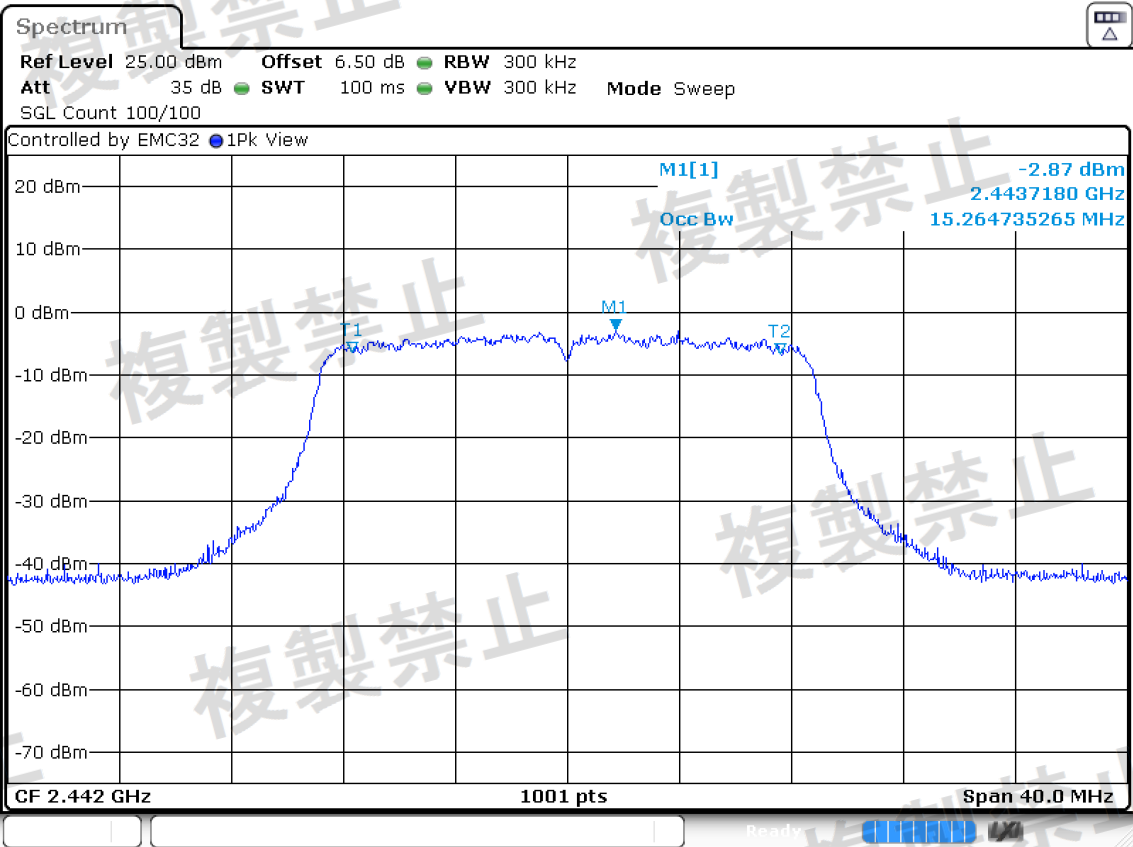
Frequency MHz = 2442

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

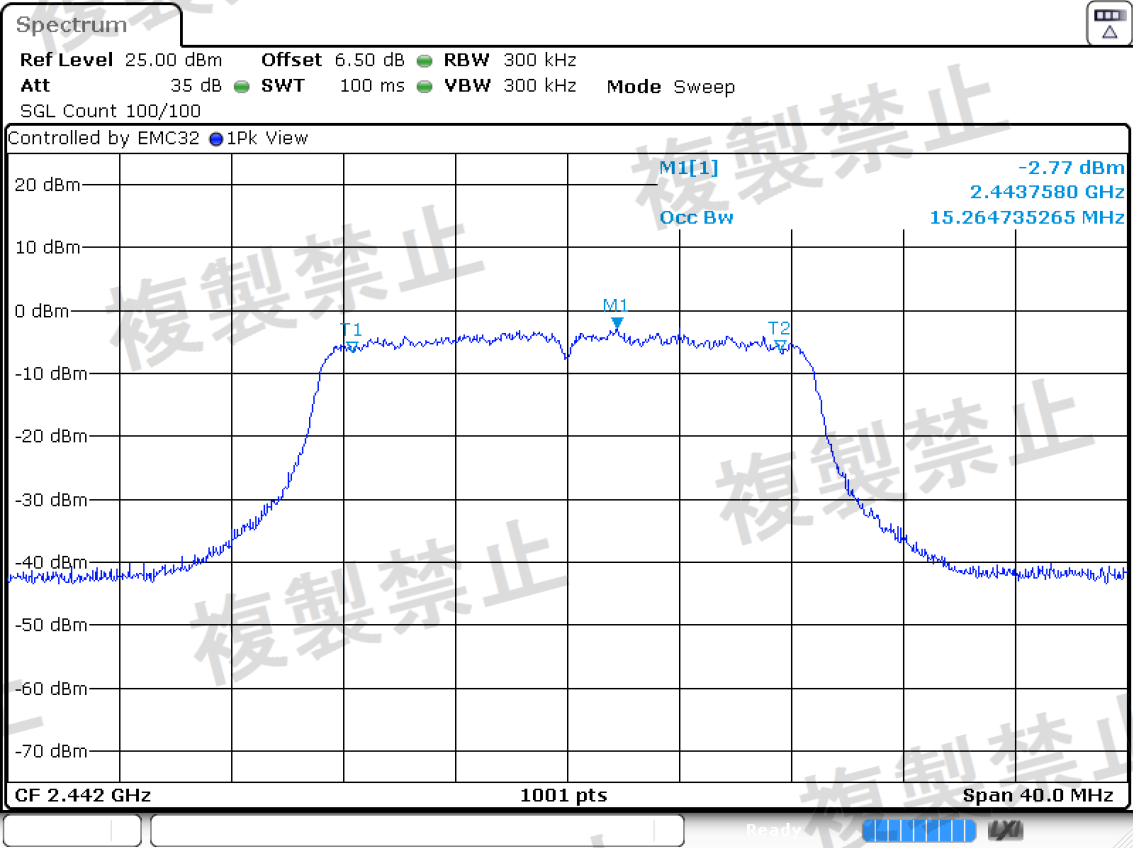
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 13

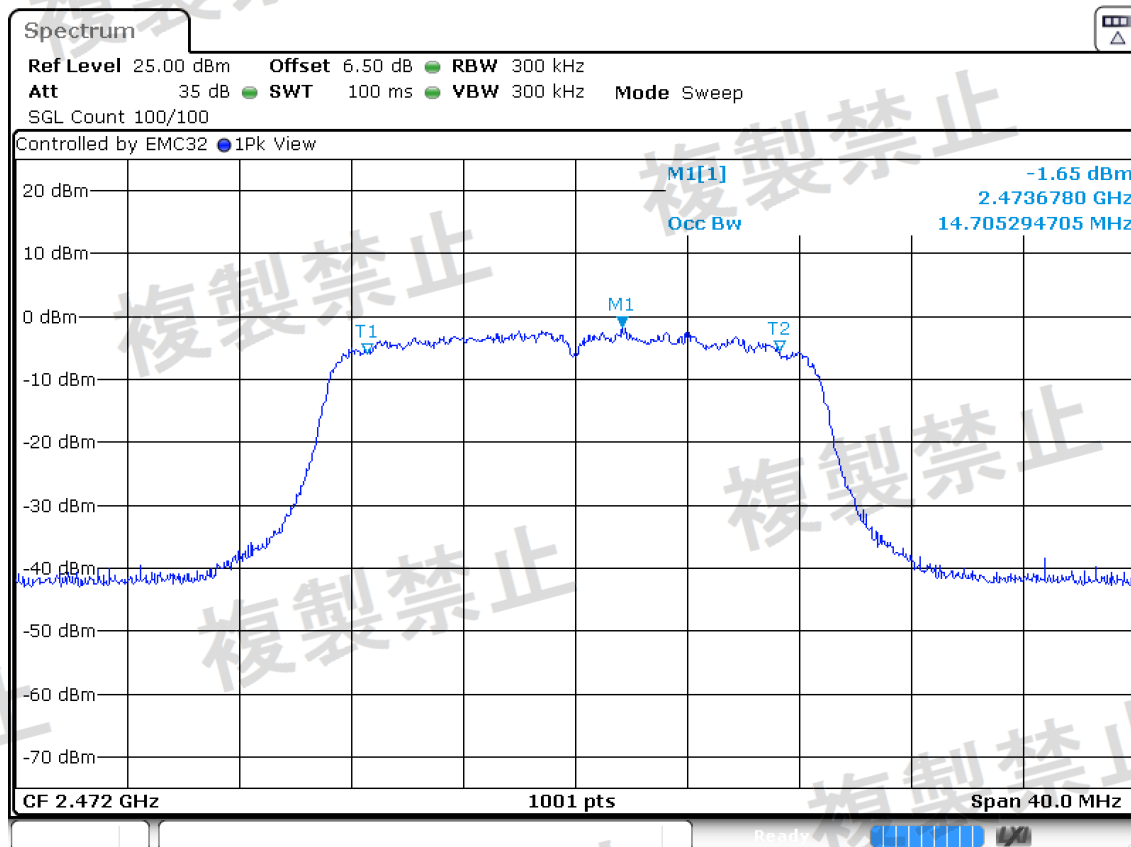
Frequency MHz = 2472

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 13

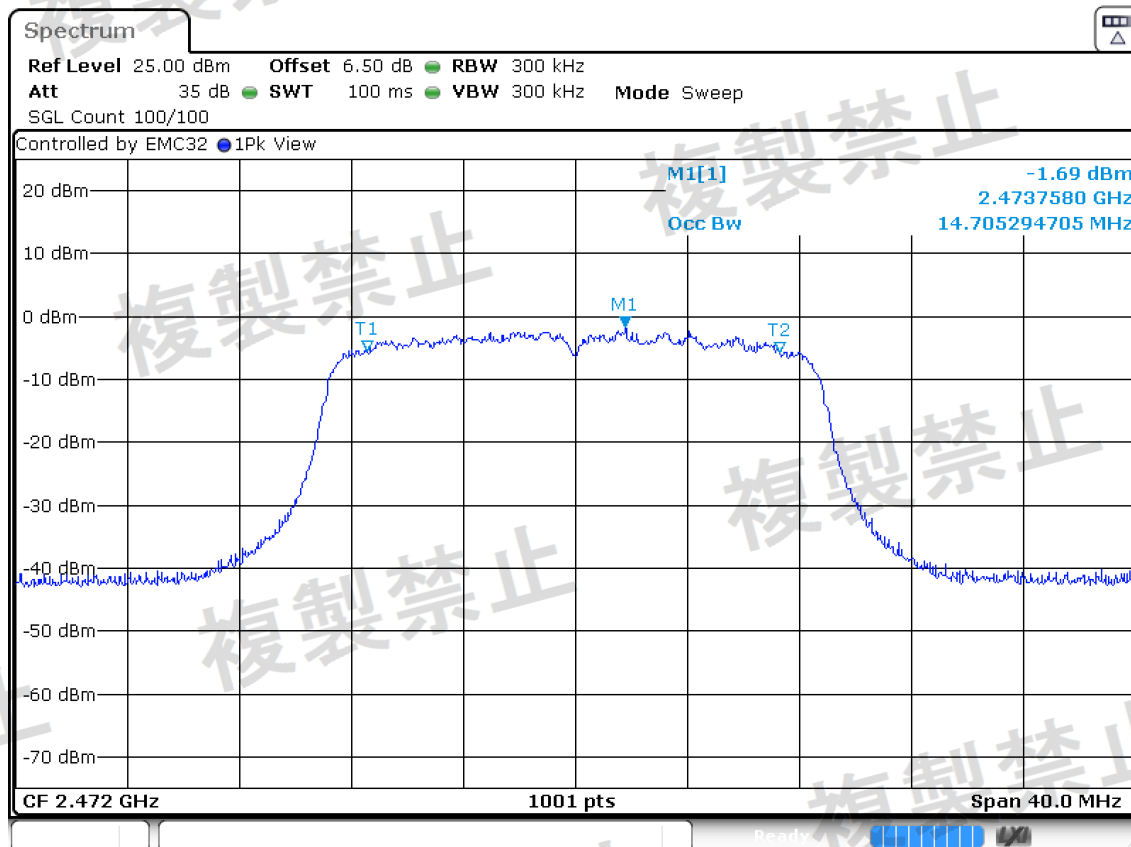
Frequency MHz = 2472

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11ax HE20 (OFDMA MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Antenna Power [Conducted] (dBm)	DC Corr (dB)	Spreading Bandwidth (MHz)	Antenna Power [Conducted] (mW/MHz)	Limit (mW/MHz)
15.00	12	1	2412	A	10.7	0.04	16.54	0.82	10
				B	10.6	0.04	16.54	0.81	10
		7	2442	A	10.3	0.04	16.54	0.75	10
				B	10.3	0.04	16.54	0.75	10
		13	2472	A	10.6	0.04	15.74	0.83	10
				B	10.6	0.04	15.70	0.83	10
		1	2412	A+B	13.7	0.04	16.54	1.63	10
		7	2442		13.3	0.04	16.54	1.50	10
		13	2472		13.6	0.04	15.74	1.66	10

Verdict

Pass

Spreading Bandwidth

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

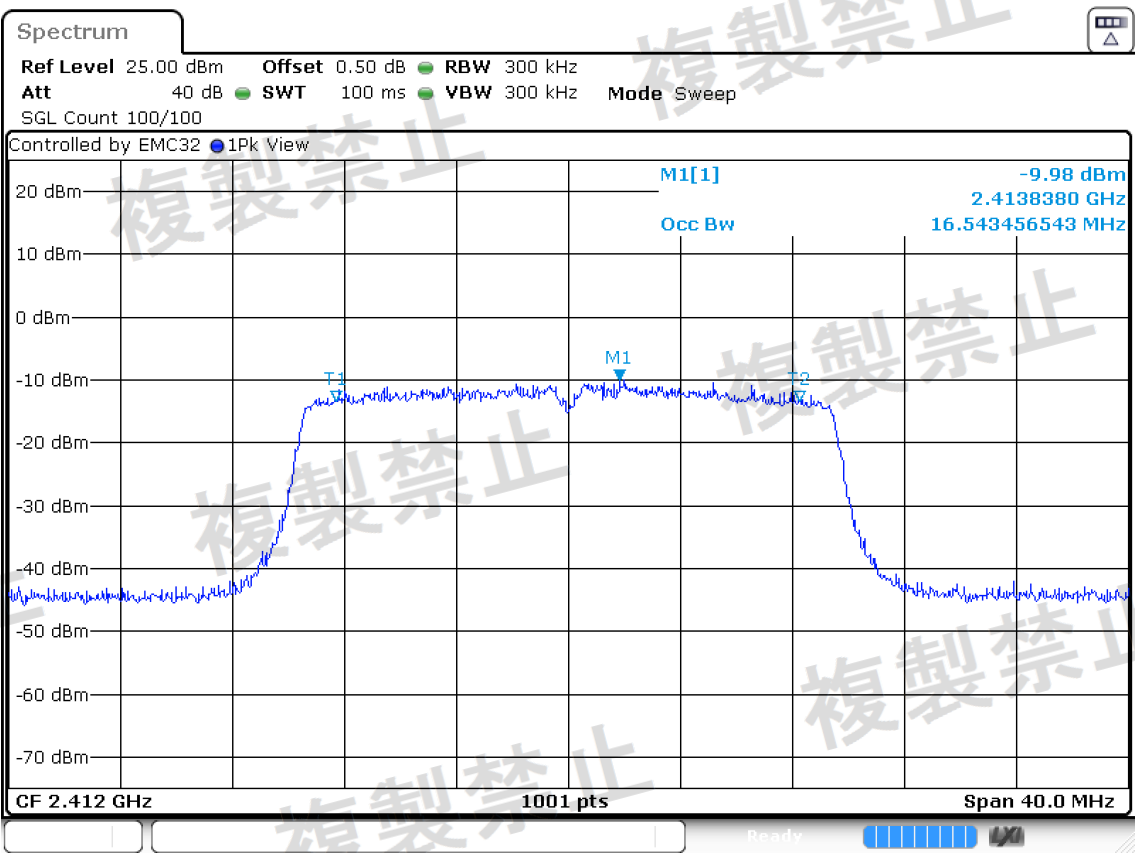
Frequency MHz = 2412

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

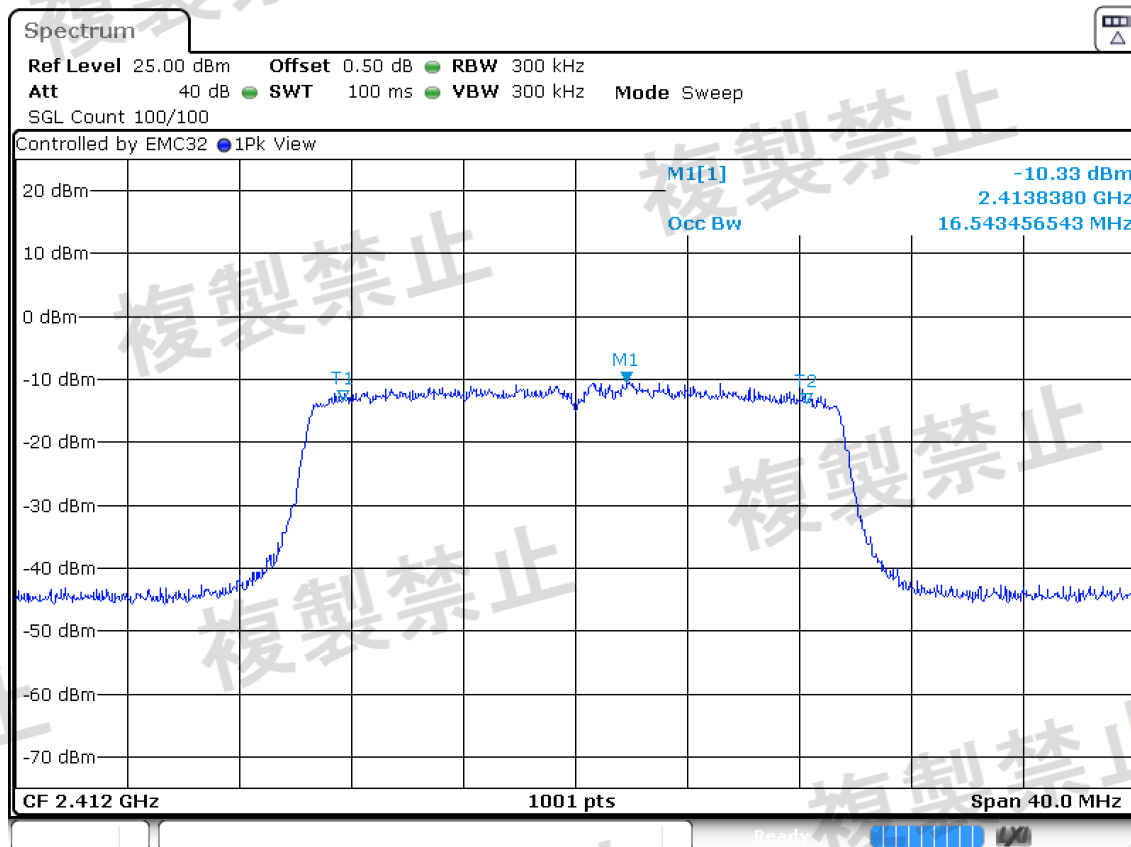
Frequency MHz = 2412

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

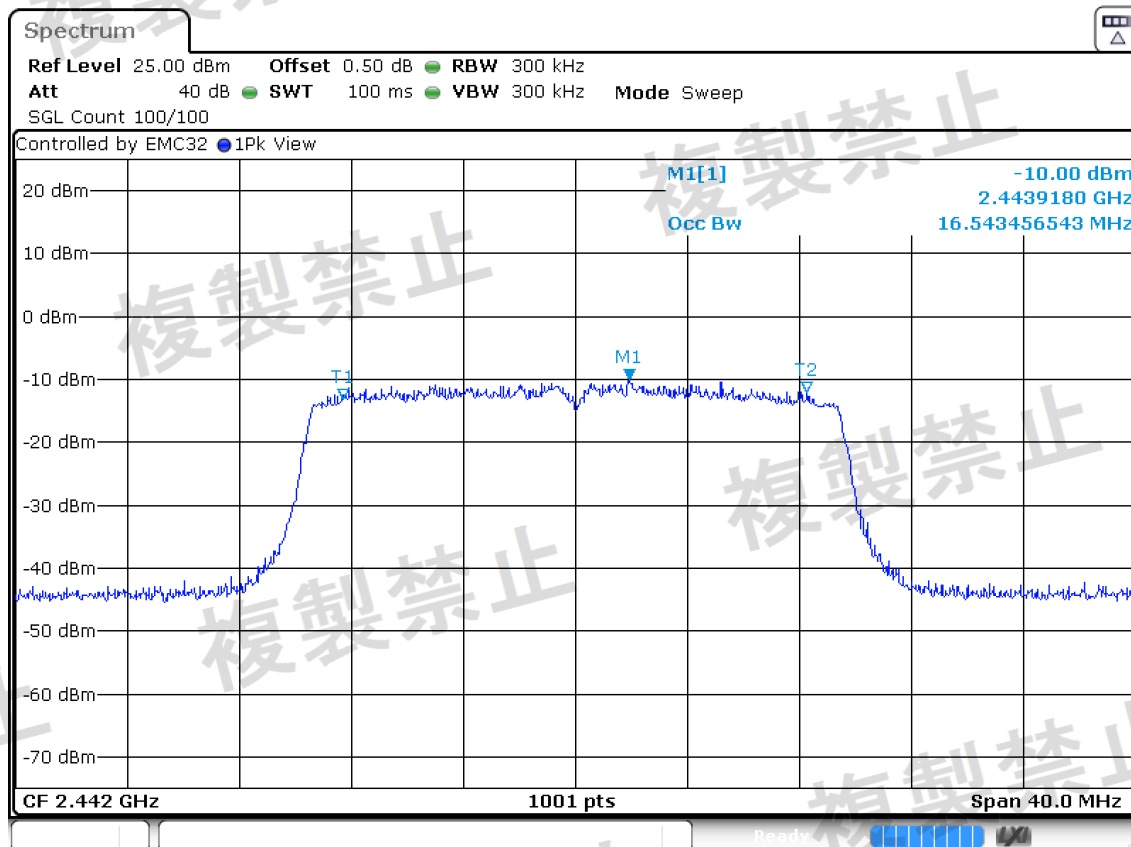
Frequency MHz = 2442

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

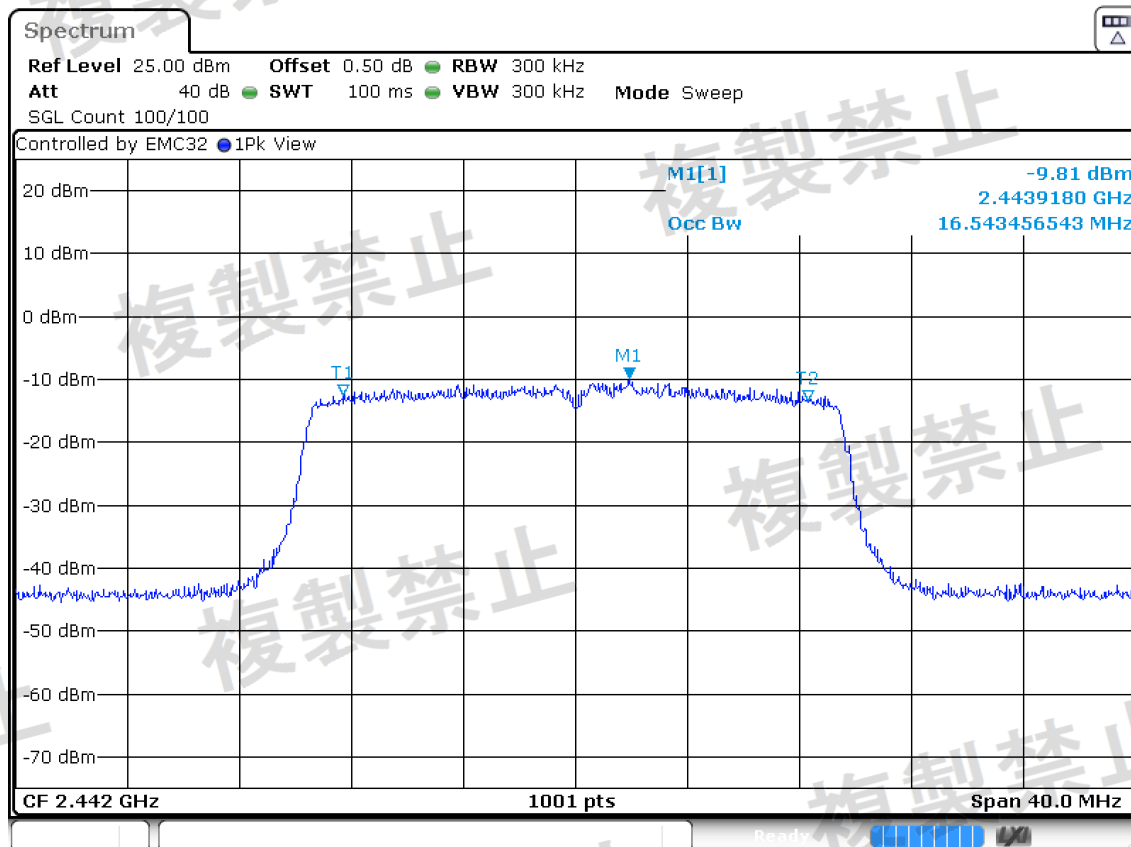
Frequency MHz = 2442

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

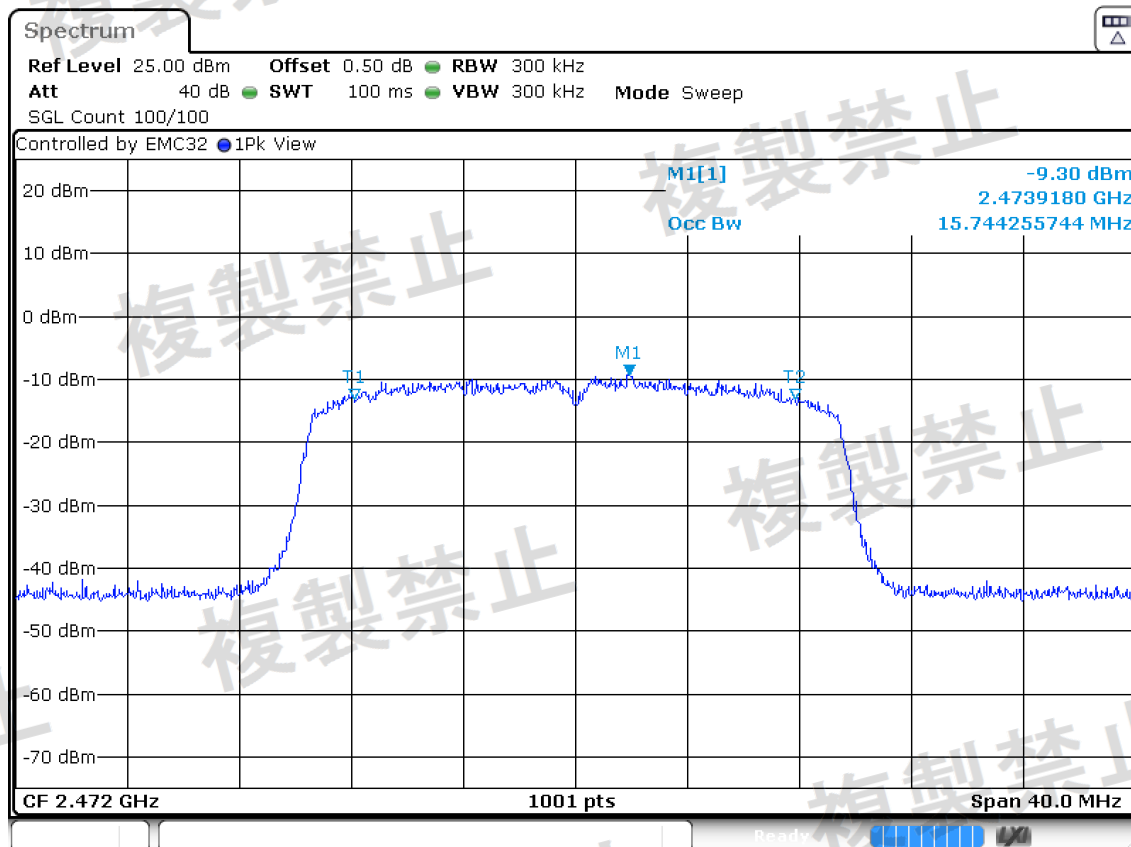
Frequency MHz = 2472

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

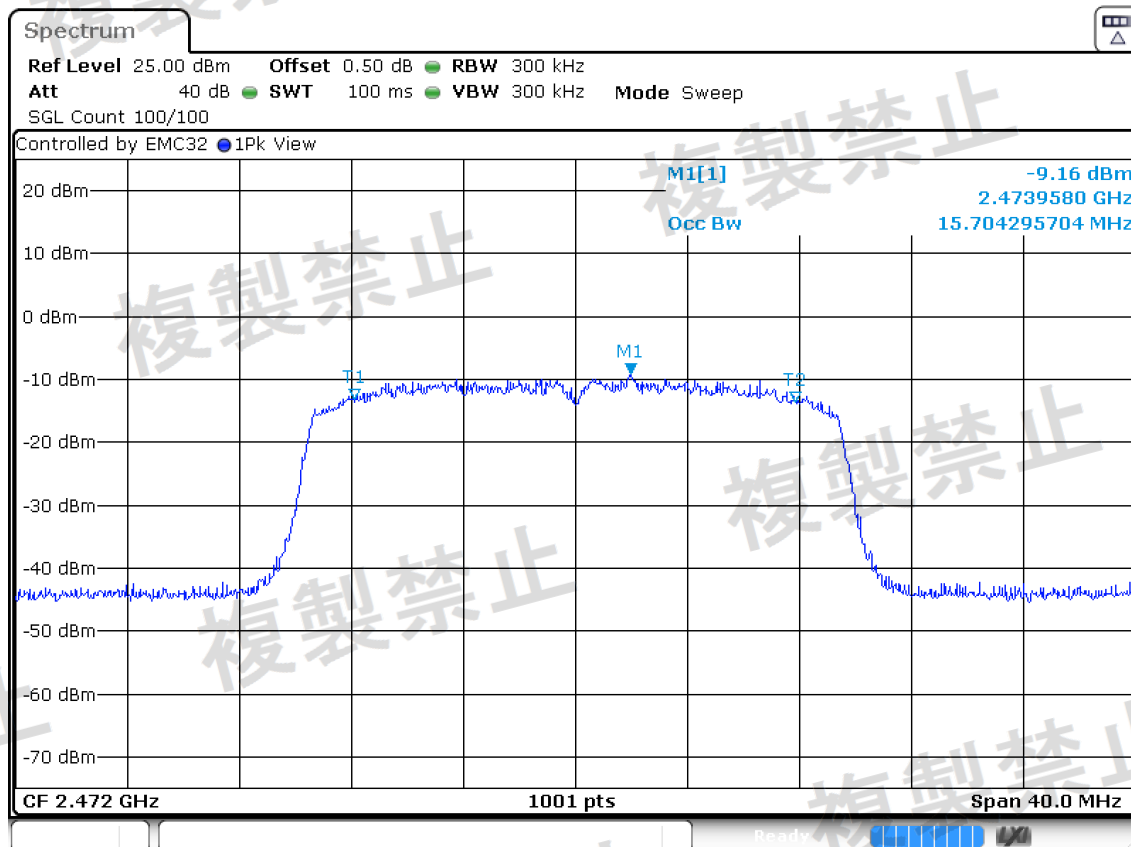
Frequency MHz = 2472

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Article 14 Table 8 [AntPTW] Antenna Power Tolerance (Wi-Fi)

Limits

No Limit has been set to this test case

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	1	2412	A+B	0.9	0.61	-31.11	20
		7	2442			0.63	-30.00	20
		13	2472			0.61	-32.22	20

Verdict

Pass

Modulation: 802.11g (OFDM 6 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	1	2412	A+B	1.2	0.87	-28.33	20
		7	2442			0.77	-35.83	20
		13	2472			0.88	-26.67	20

Verdict

Pass

Results

Modulation: 802.11n HT20 (OFDM MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	1	2412	A+B	1.2	0.80	-33.33	20
		7	2442			0.80	-33.33	20
		13	2472			0.89	-25.83	20

Verdict

Pass

Results

Modulation: 802.11ax HE20 (OFDMA MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Declared Antenna Power (mW/MHz)	Antenna Power [Conducted] (mW/MHz)	Antenna Power Error (%)	Limit (%)
15.00	12	1	2412	A+B	2.0	1.63	-18.50	20
		7	2442			1.50	-25.00	20
		13	2472			1.66	-17.00	20

Verdict

Pass

Article 5 and Annex 1 table 7-8 [FreqTWwm] Frequency Tolerance (Wi-Fi with modulation)

Limits

No Limit has been set to this test case

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Freq (MHz)	Port	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	2412	A	2412.0033	-1.35	50.00
15.00	12	2412	B	2412.0013	-0.54	50.00
15.00	12	2442	A	2442.0171	-7.01	50.00
15.00	12	2442	B	2442.0184	-7.53	50.00
15.00	12	2472	A	2472.0103	-4.18	50.00
15.00	12	2472	B	2472.0105	-4.25	50.00

Verdict

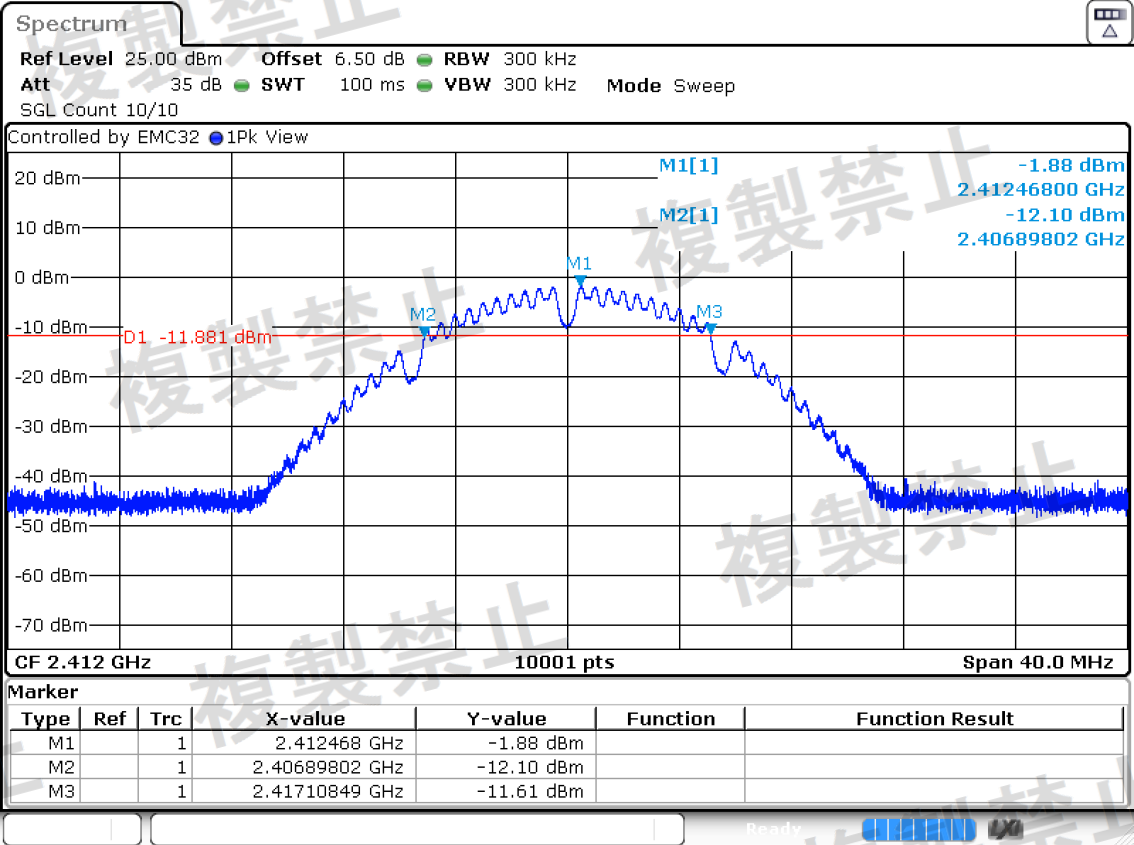
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

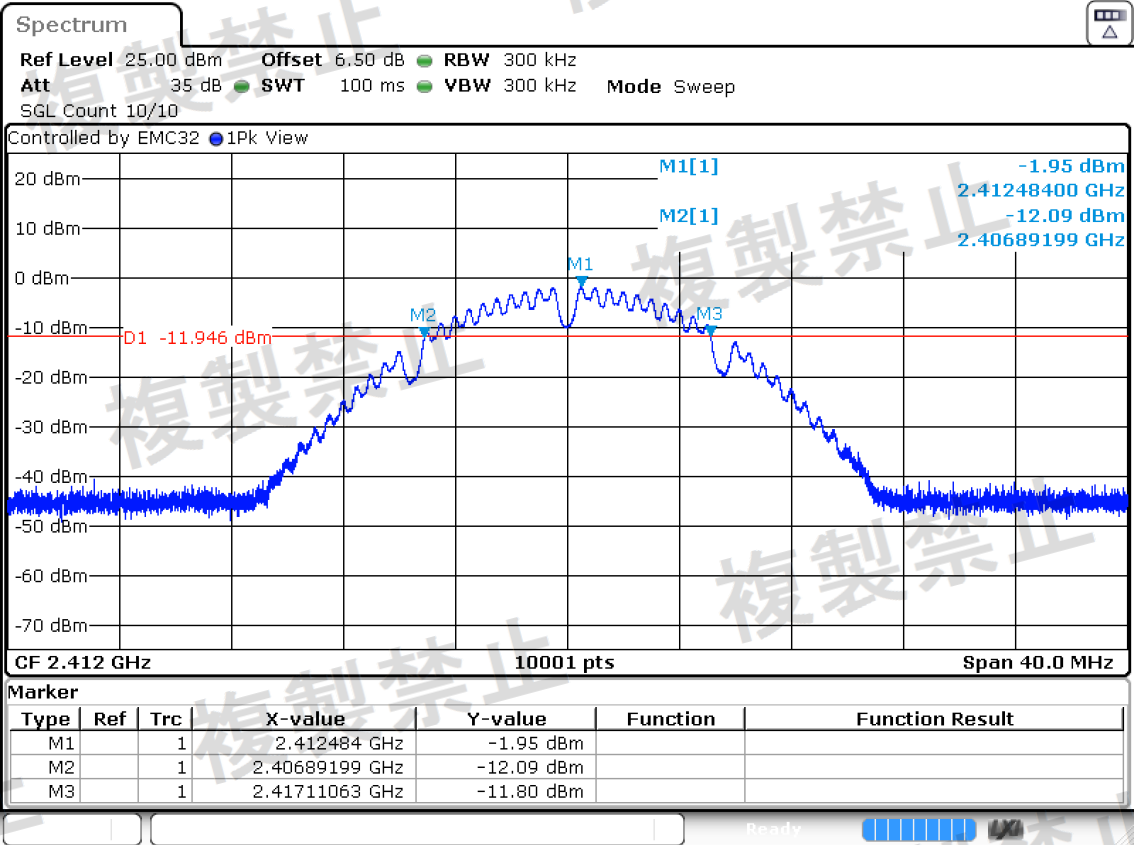
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

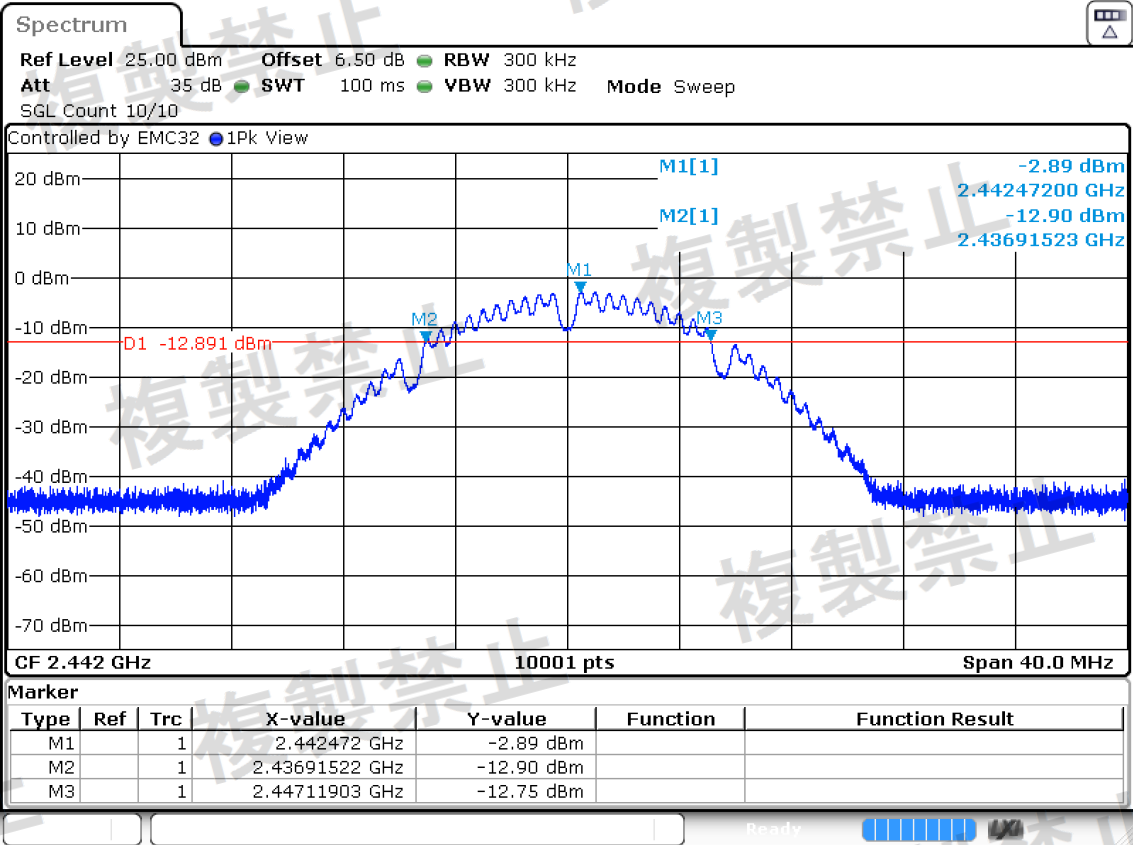
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

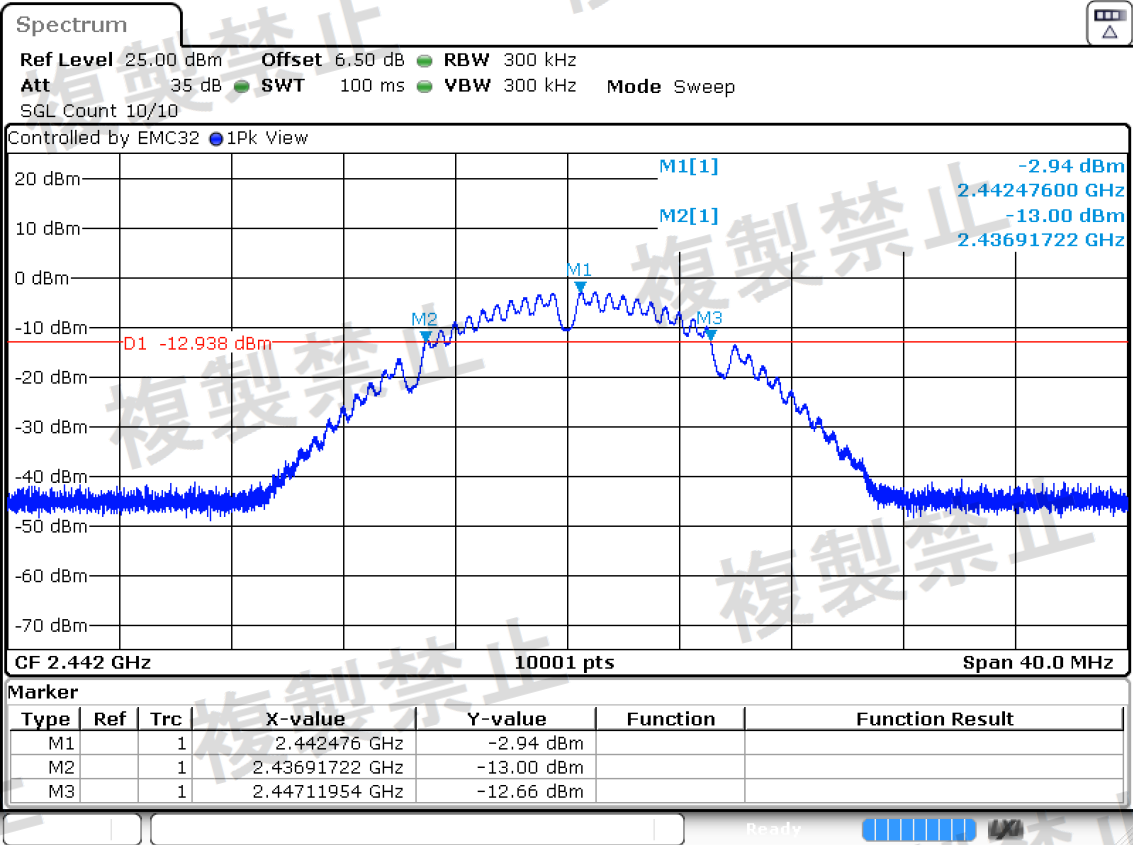
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

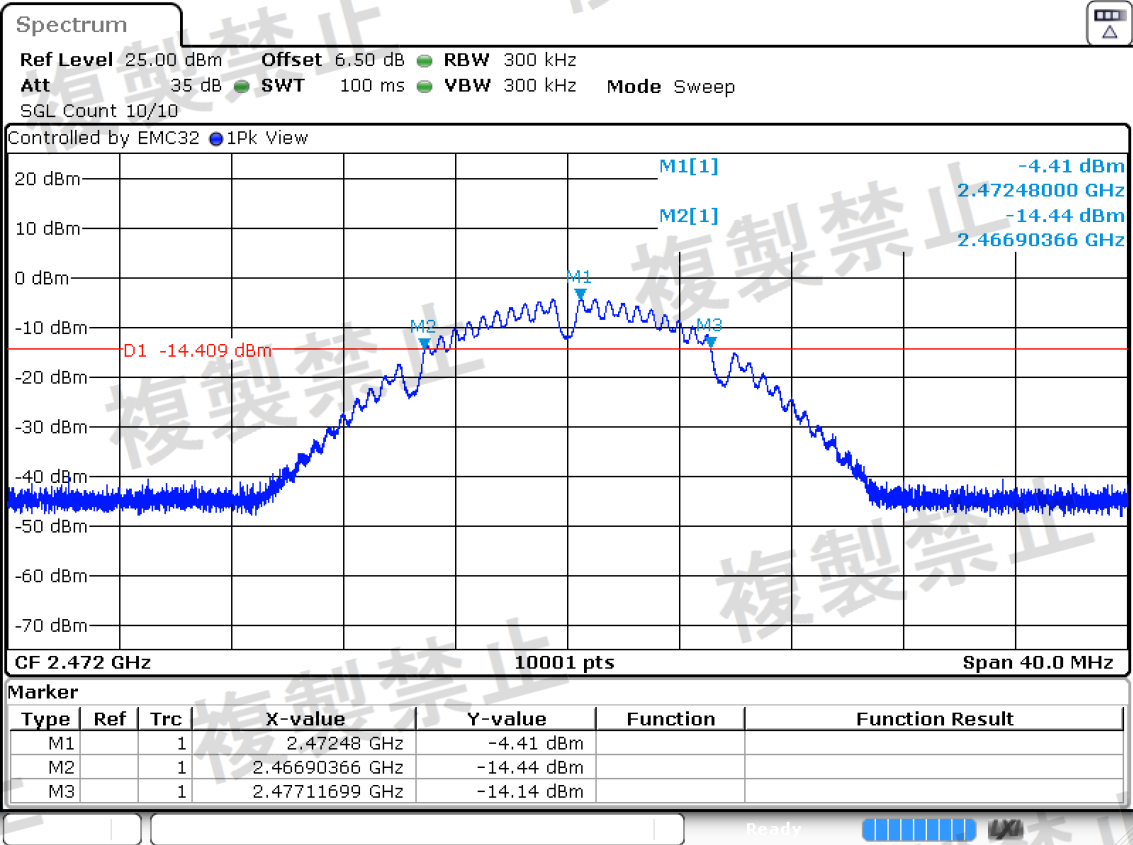
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

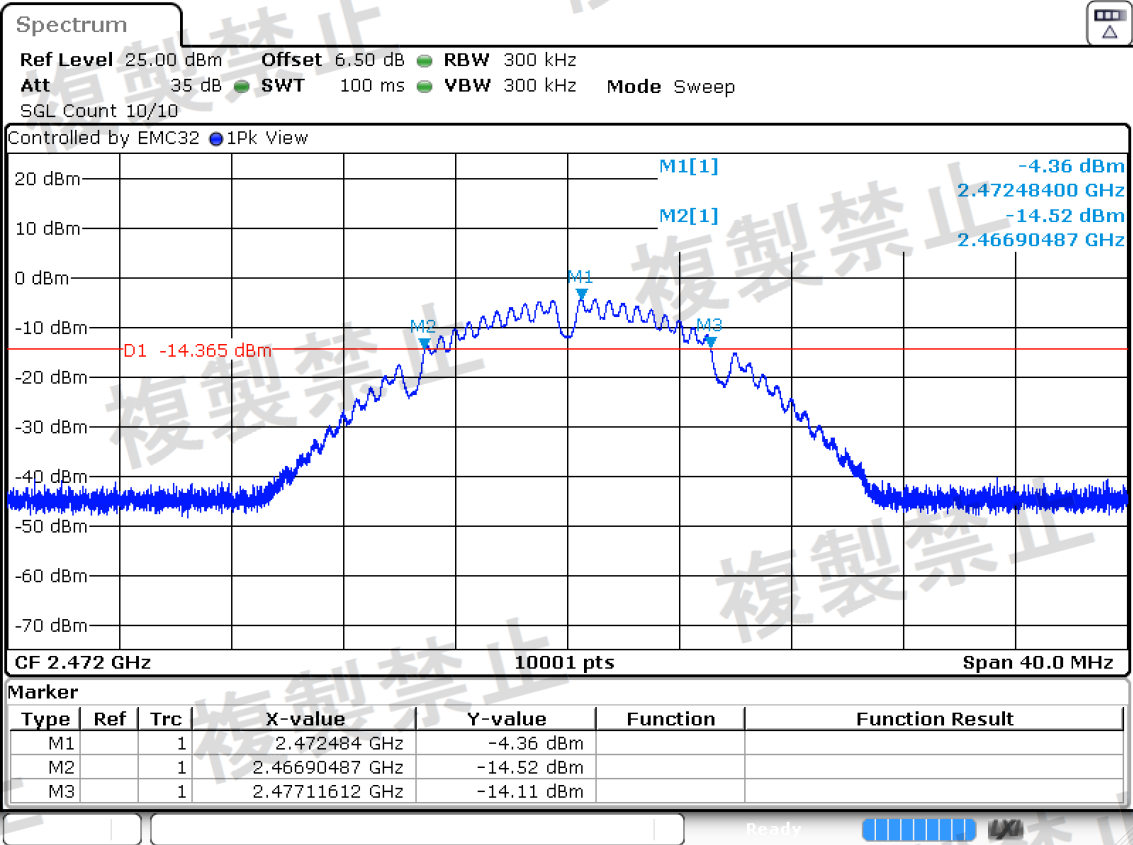
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Modulation: 802.11g (OFDM 6 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	1	2412	A	2411.9024	40.46	50.00
				B	2411.8988	41.95	50.00
		7	2442	A	2441.9088	37.34	50.00
				B	2441.9209	32.39	50.00
		13	2472	A	2471.9180	33.18	50.00
				B	2471.9220	31.55	50.00

Verdict

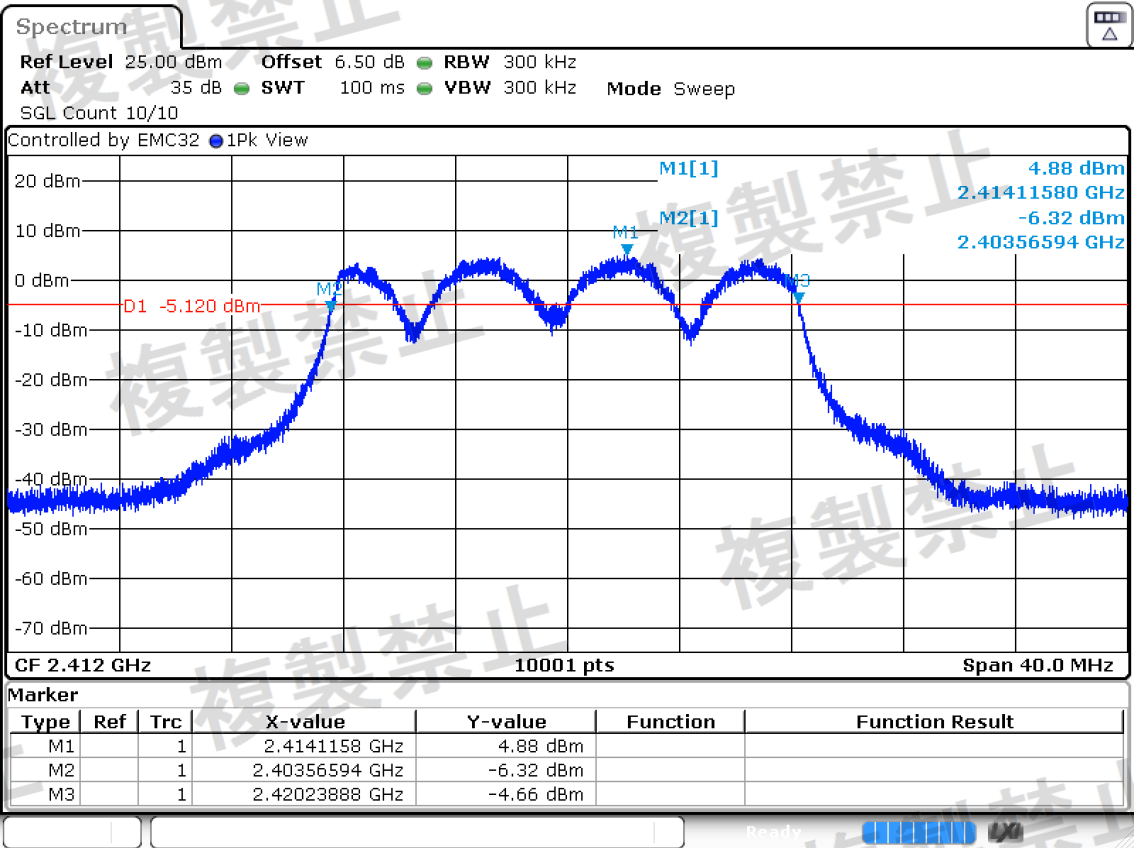
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

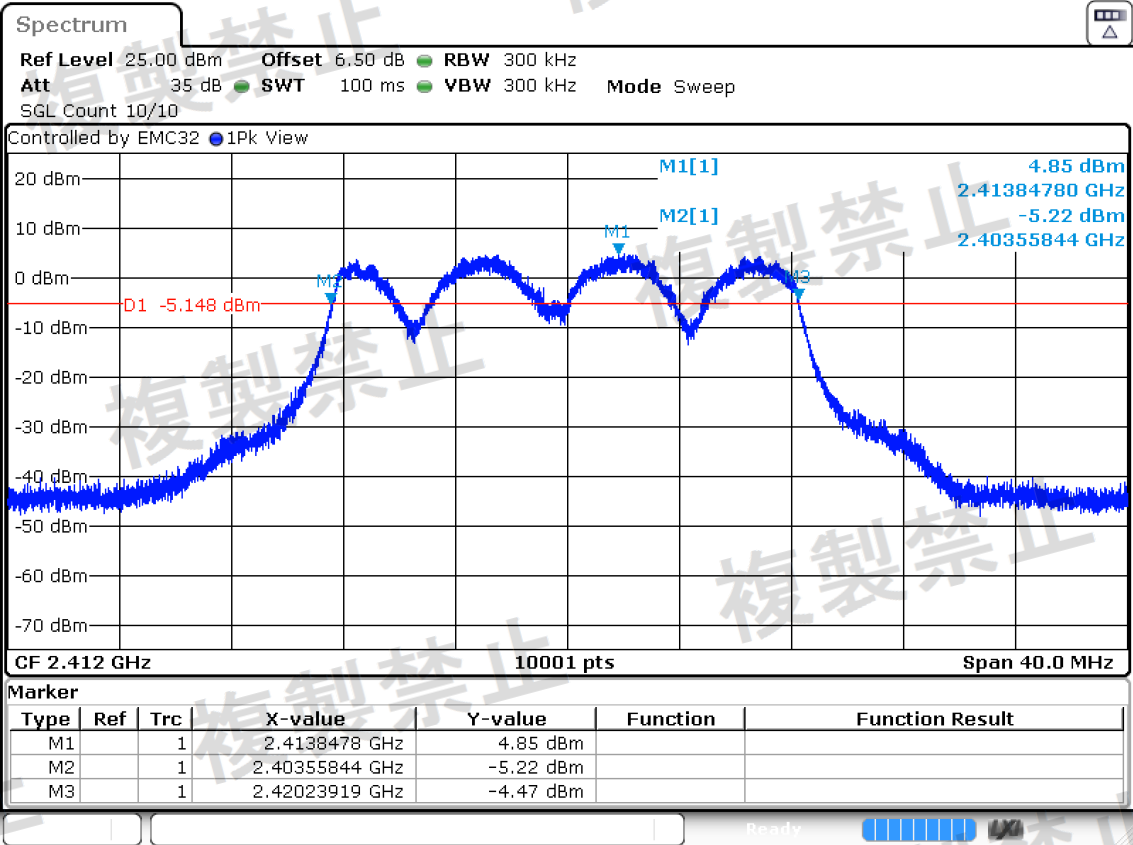
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

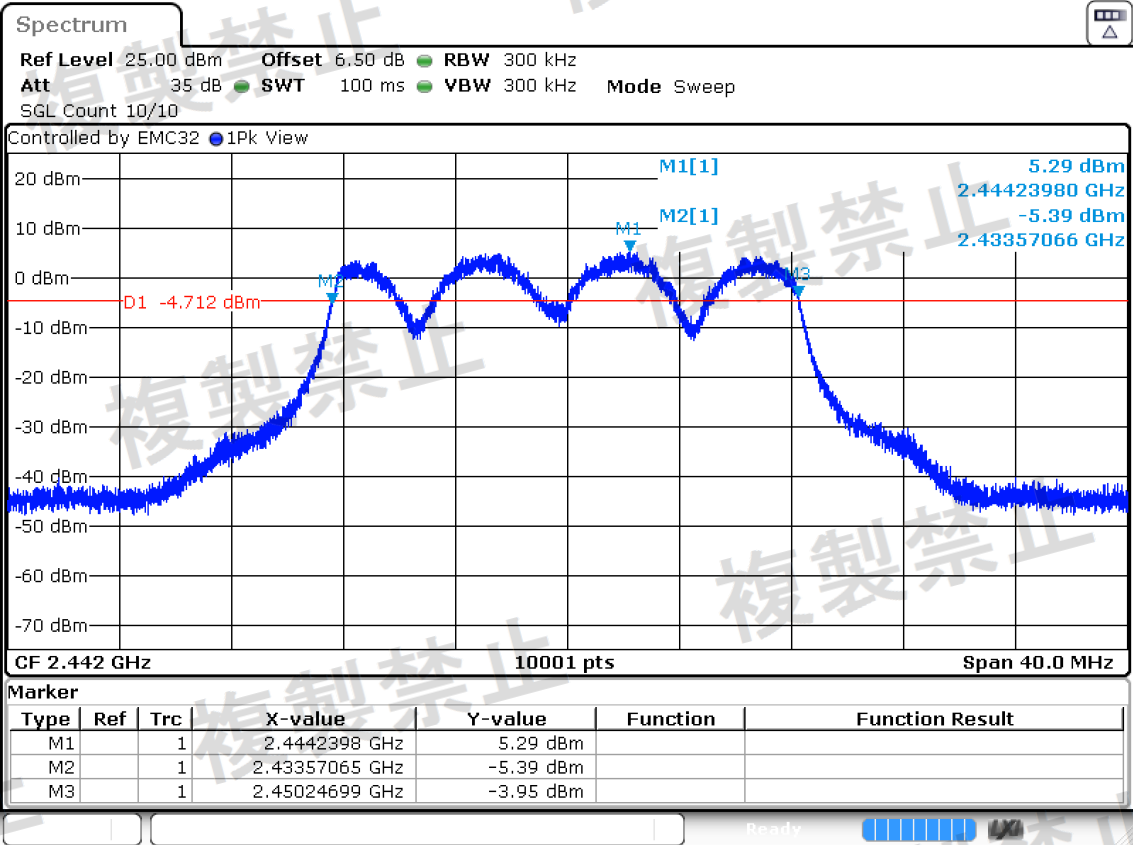
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

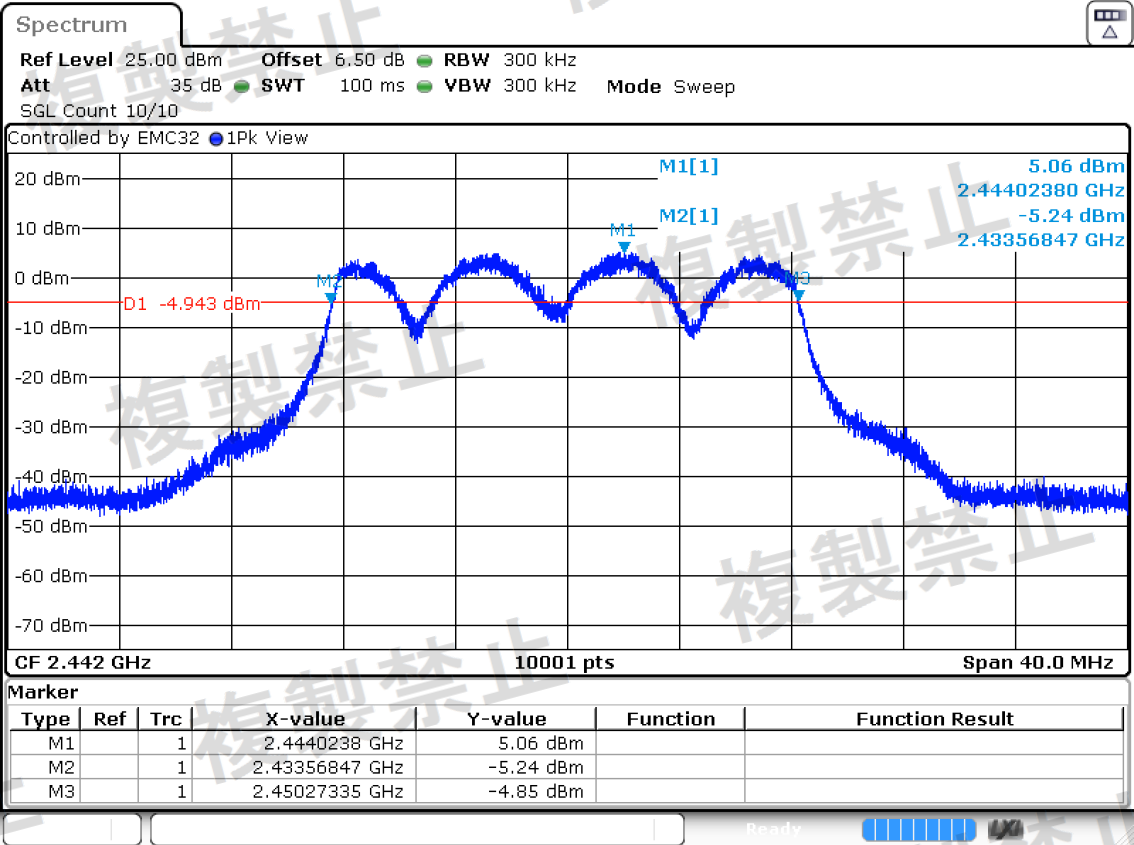
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

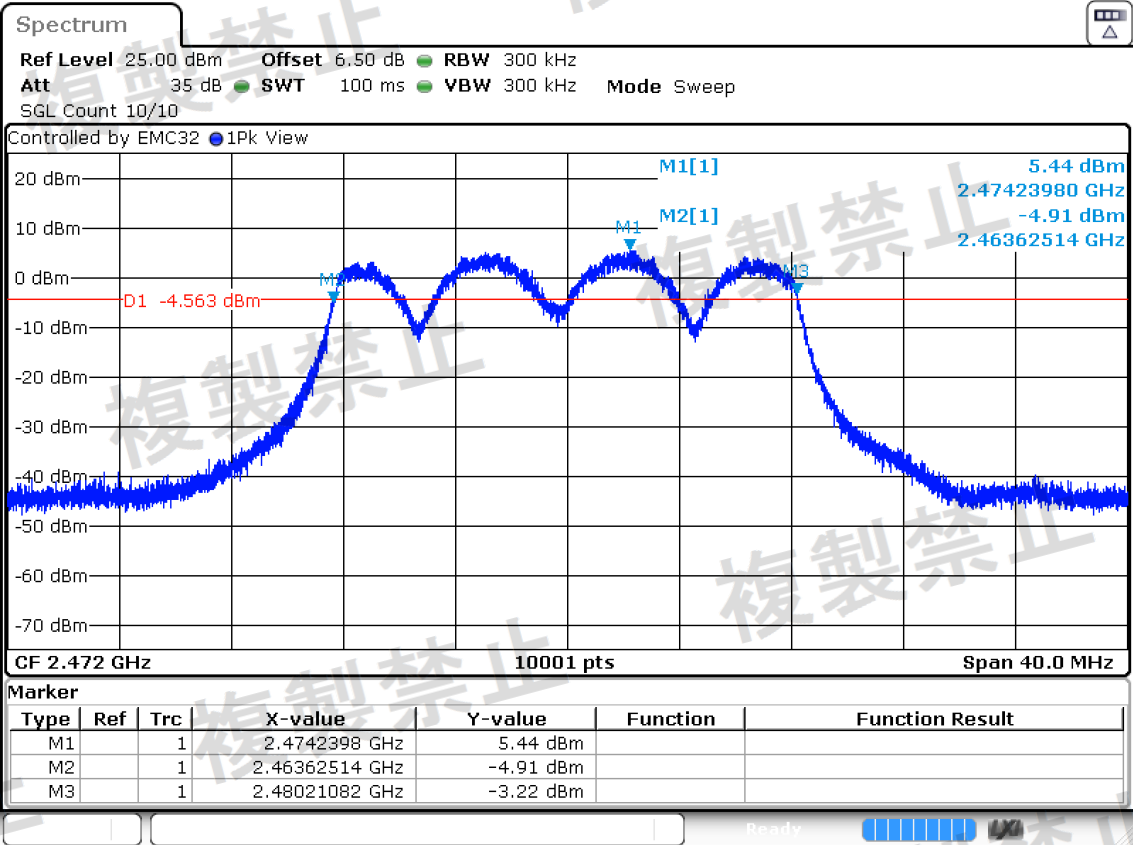
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

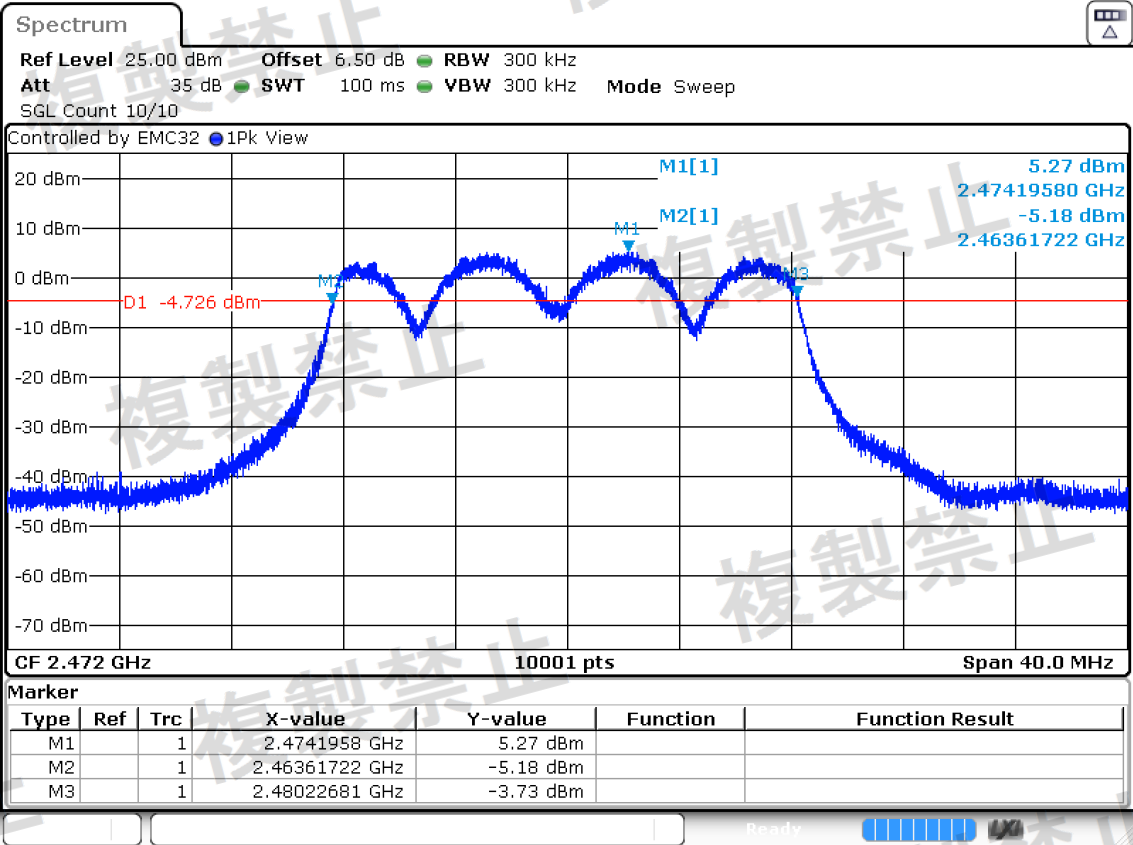
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11n HT20 (OFDM MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	1	2412	A	2411.9805	8.08	50.00
				B	2411.9756	10.13	50.00
		7	2442	A	2441.9800	8.19	50.00
				B	2441.9977	0.94	50.00
		13	2472	A	2471.9773	9.17	50.00
				B	2471.9719	11.39	50.00

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

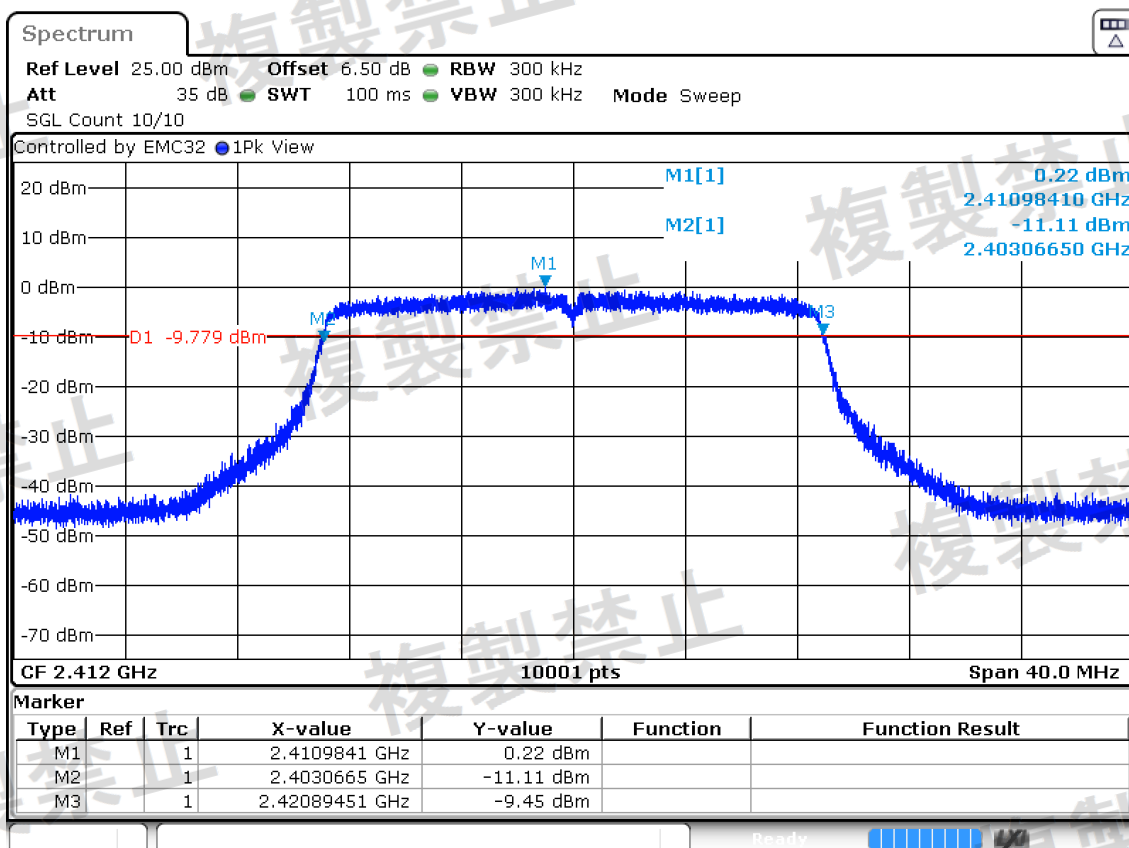
Frequency MHz = 2412

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

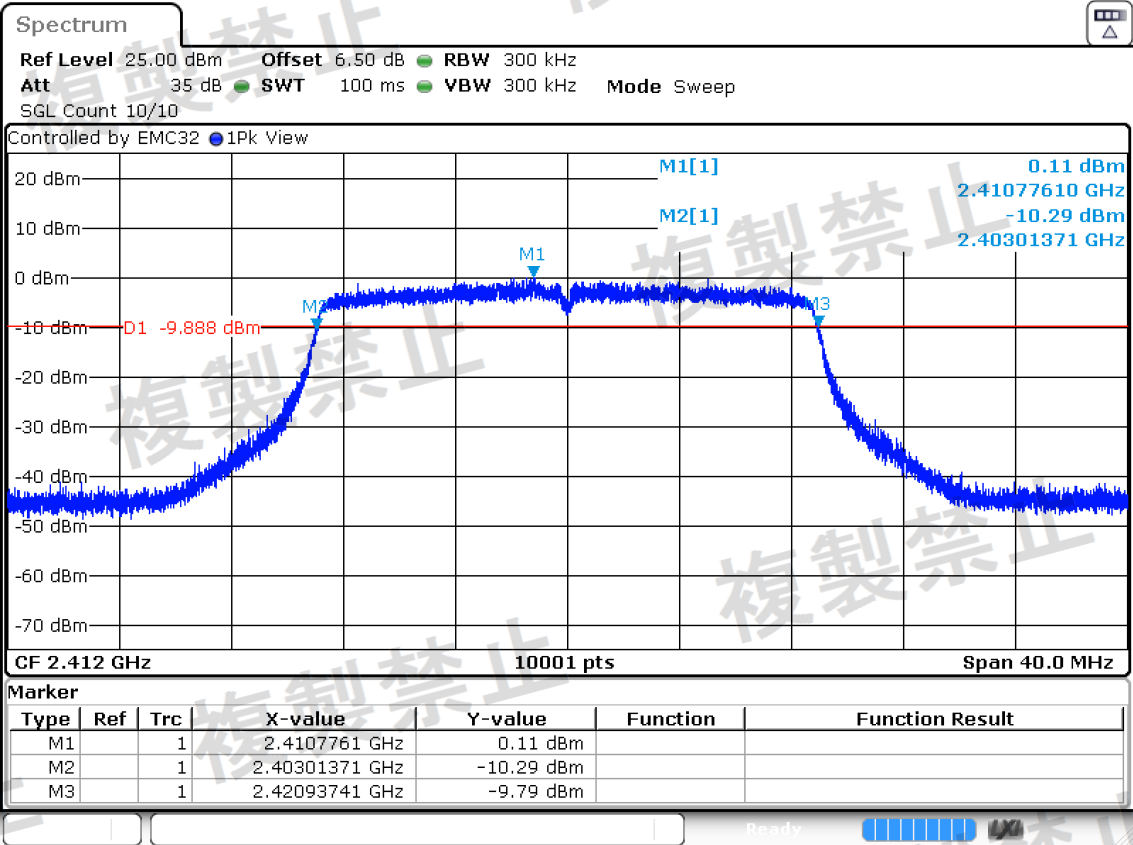
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

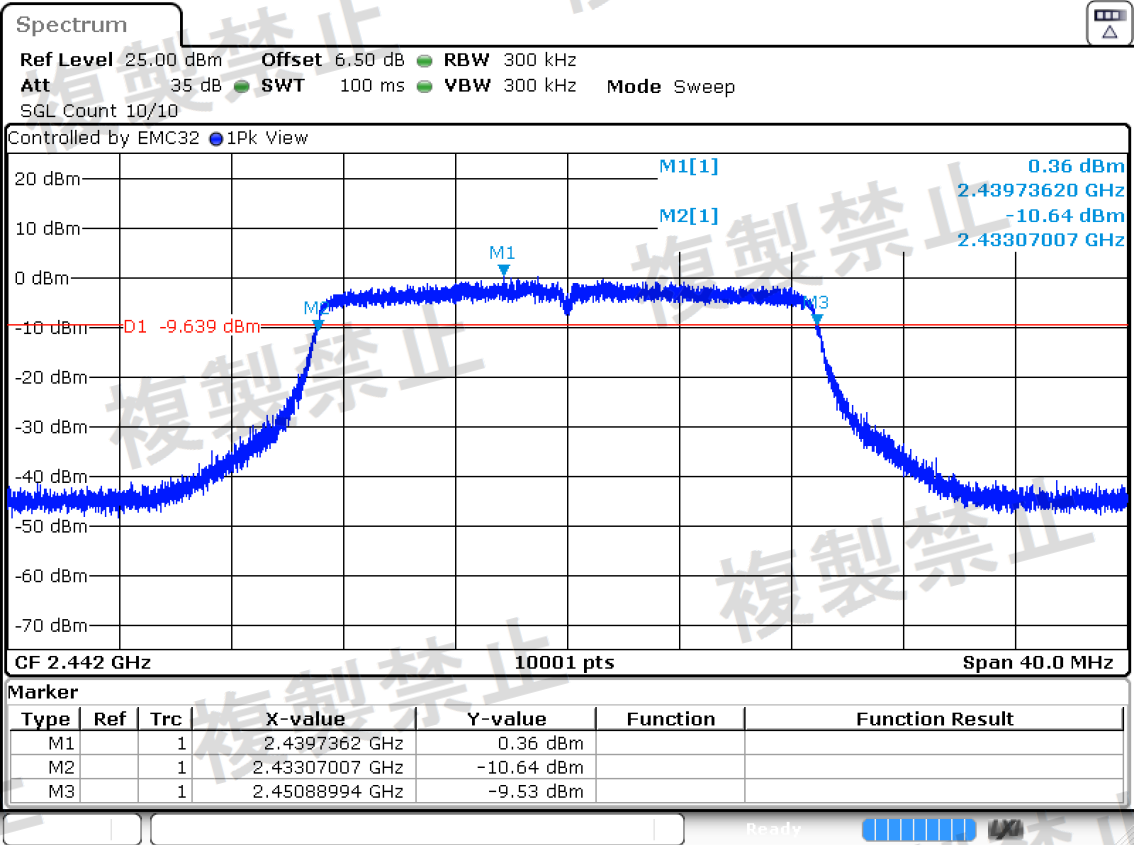
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

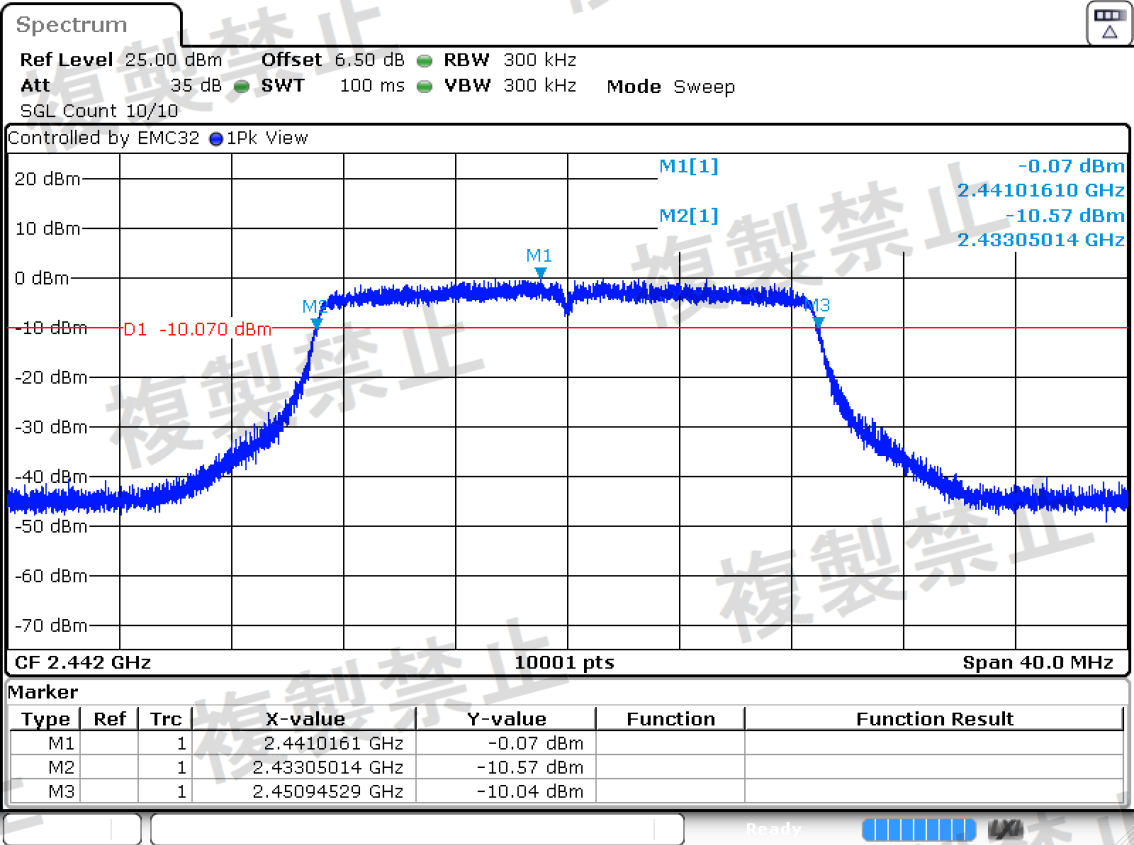
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

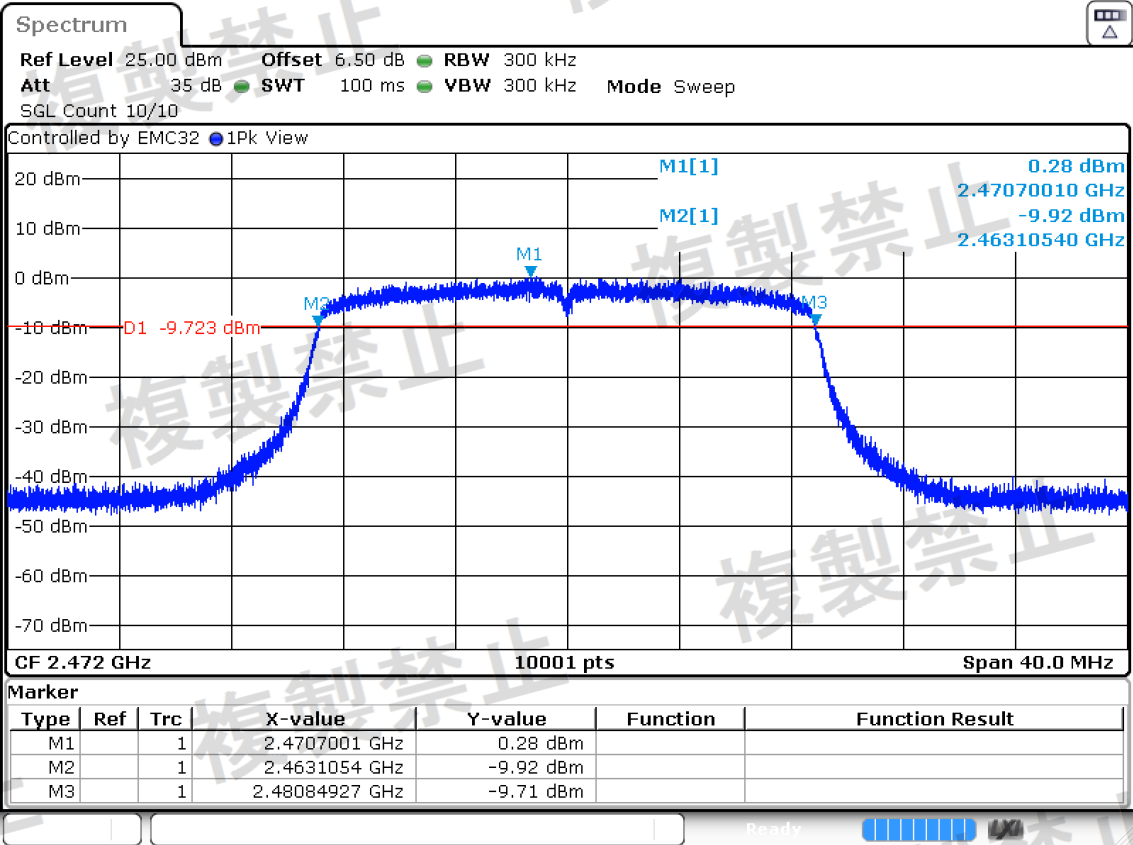
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

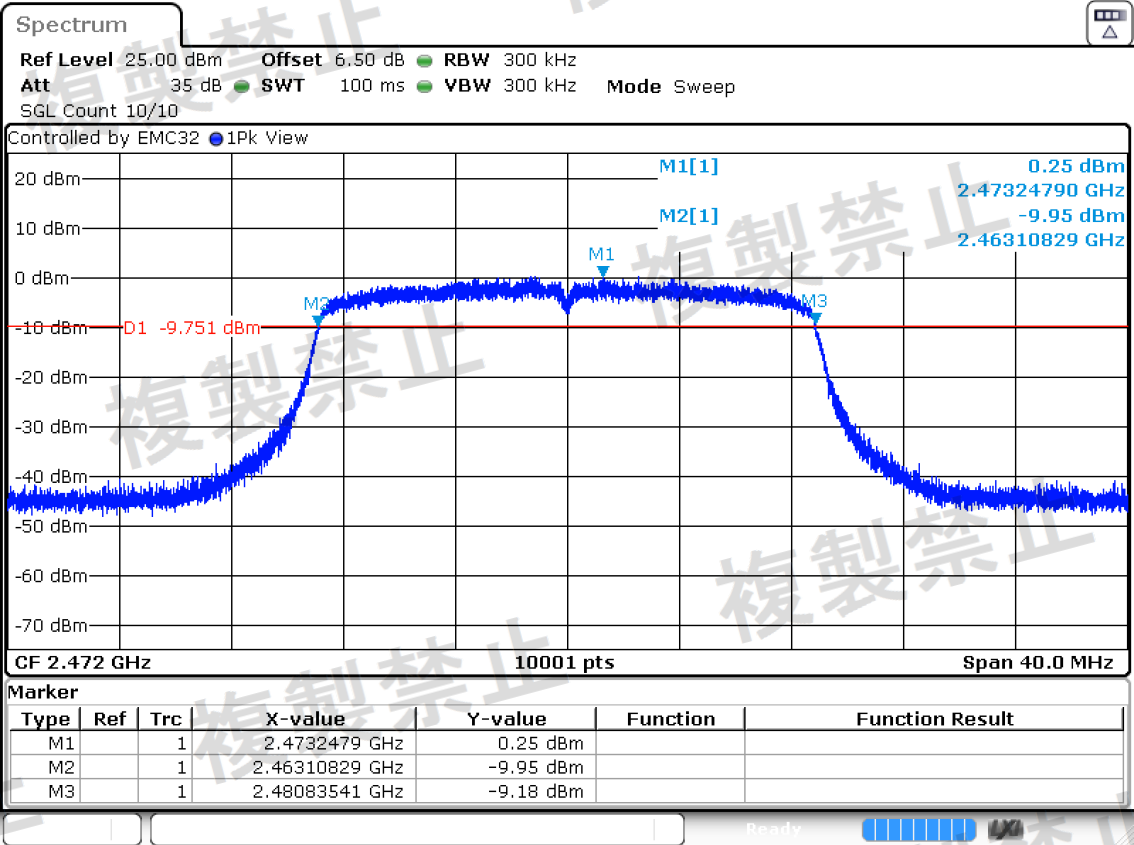
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11ax HE20 (OFDMA MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	Measured Value (MHz)	Freq Tol (ppm)	Limit (±ppm)
15.00	12	1	2412	A	2411.9561	18.19	50.00
				B	2411.9680	13.26	50.00
		7	2442	A	2441.9907	3.81	50.00
				B	2441.9674	13.36	50.00
		13	2472	A	2471.9637	14.69	50.00
				B	2471.9870	5.24	50.00

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

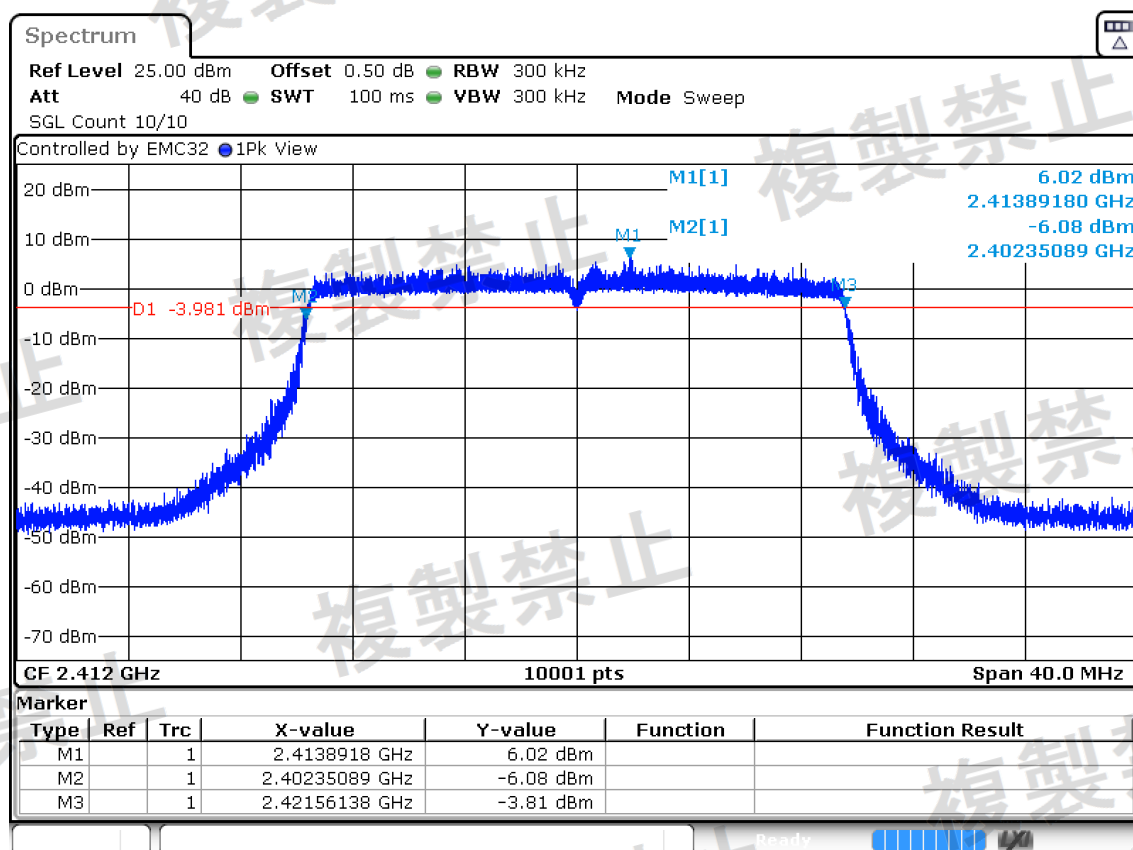
Frequency MHz = 2412

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

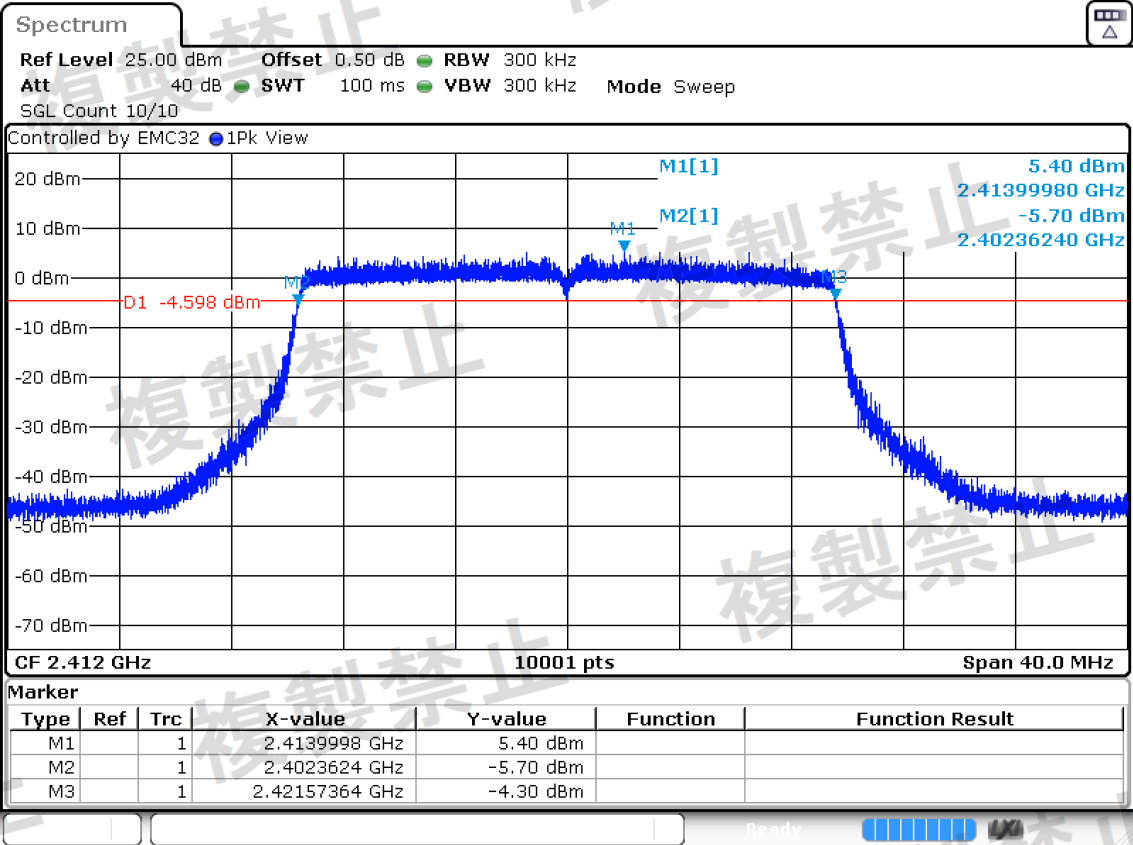
Frequency MHz = 2412

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

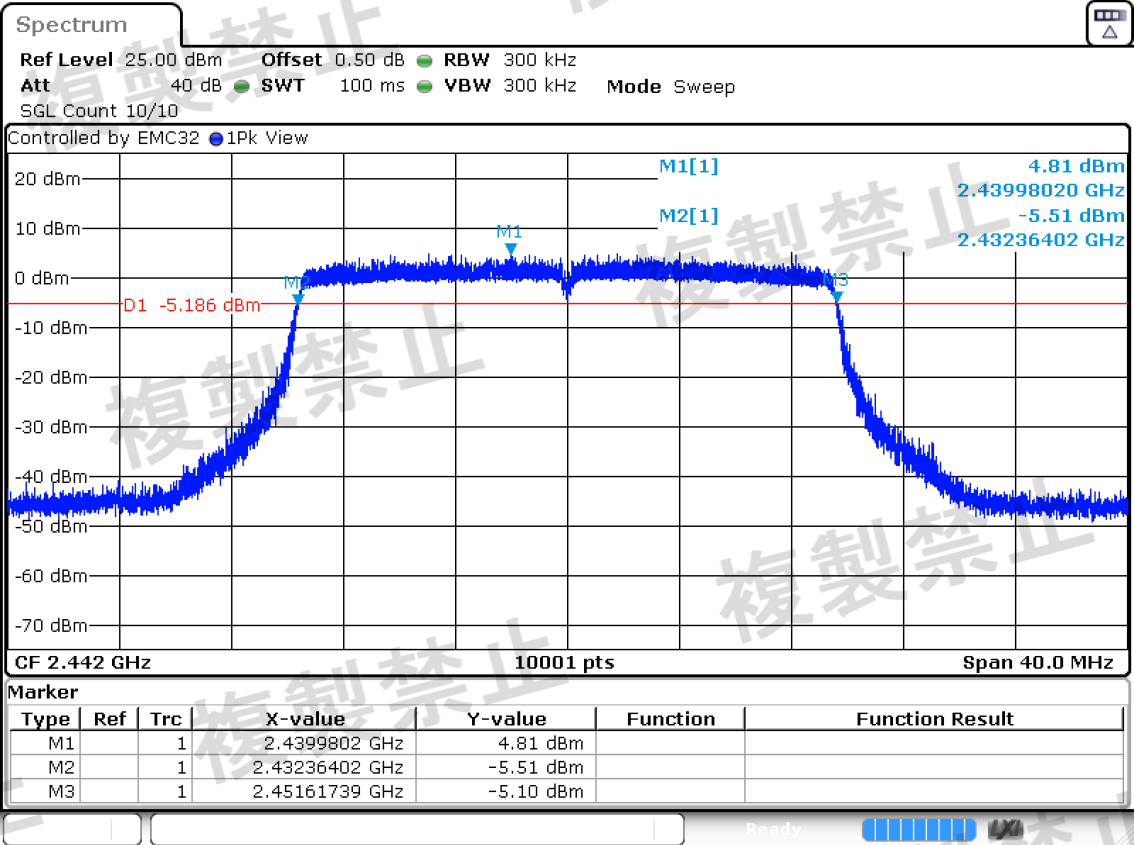
Frequency MHz = 2442

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

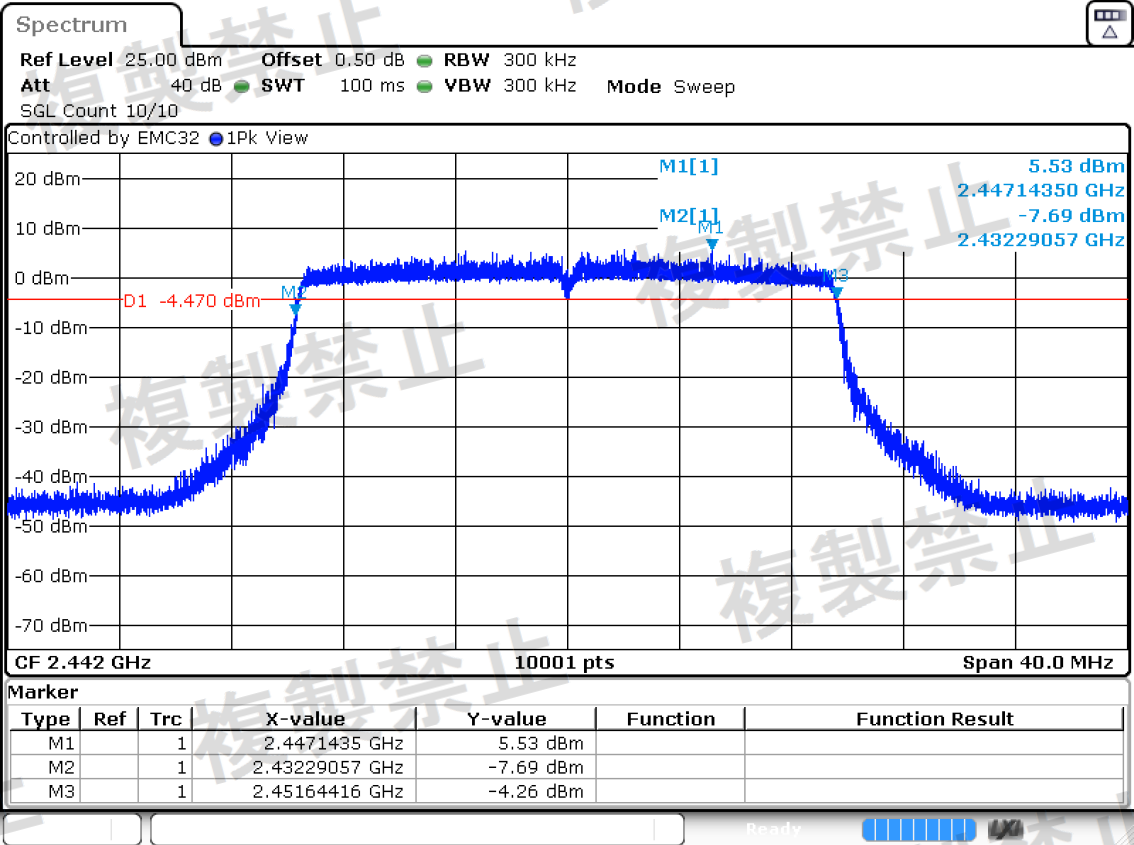
Frequency MHz = 2442

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

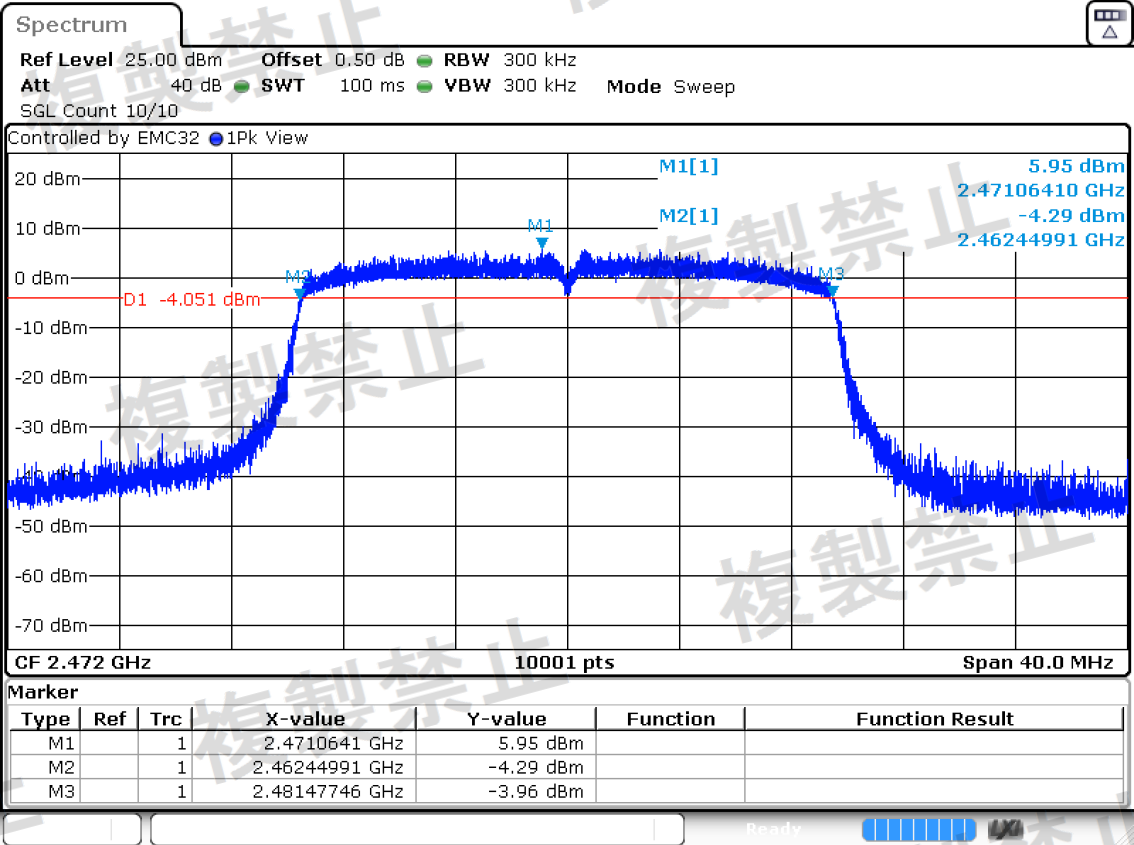
Frequency MHz = 2472

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

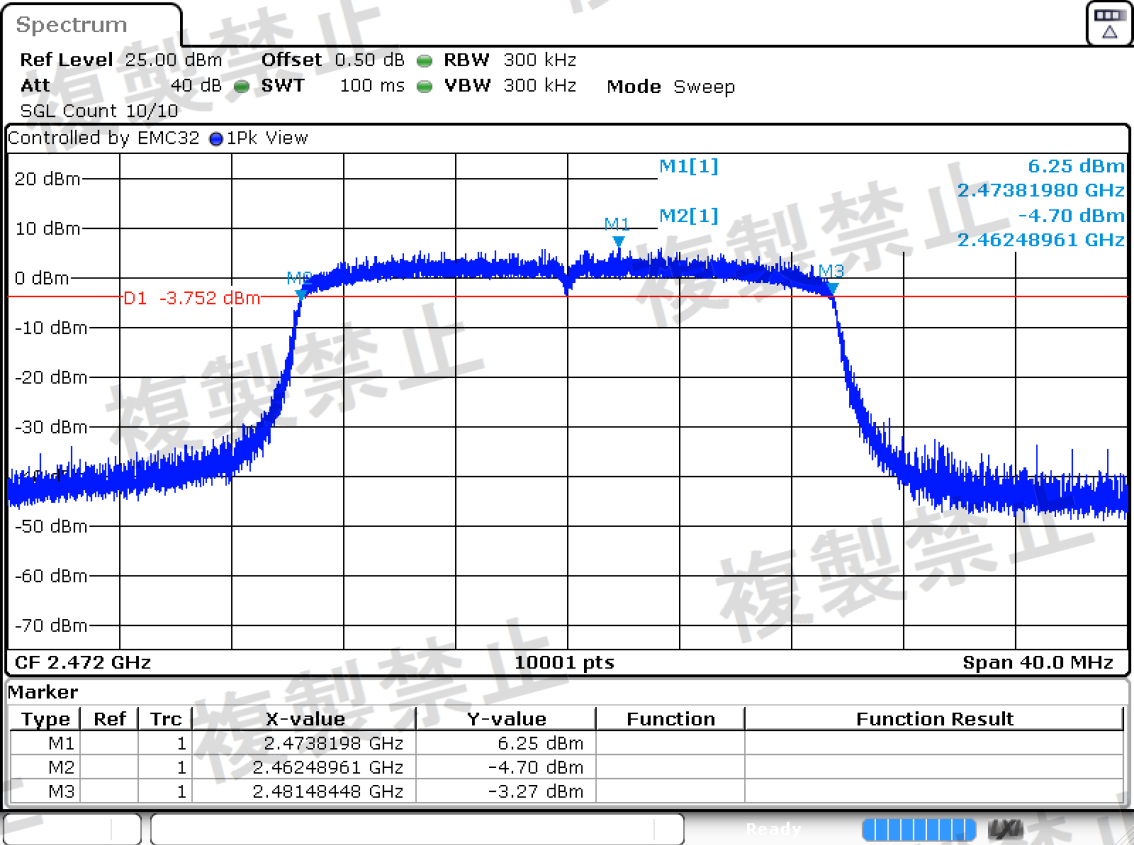
Frequency MHz = 2472

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Article 6 and Annex 2. 30 [OBW] Occupied Bandwidth (Wi-Fi)

Limits

No Limit has been set to this test case

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	99OBW (MHz)	Limit (MHz)
15.00	12	1	2412	A	13.323	26
				B	13.323	26
		7	2442	A	13.323	26
				B	13.327	26
		13	2472	A	13.415	26
				B	13.419	26

Verdict

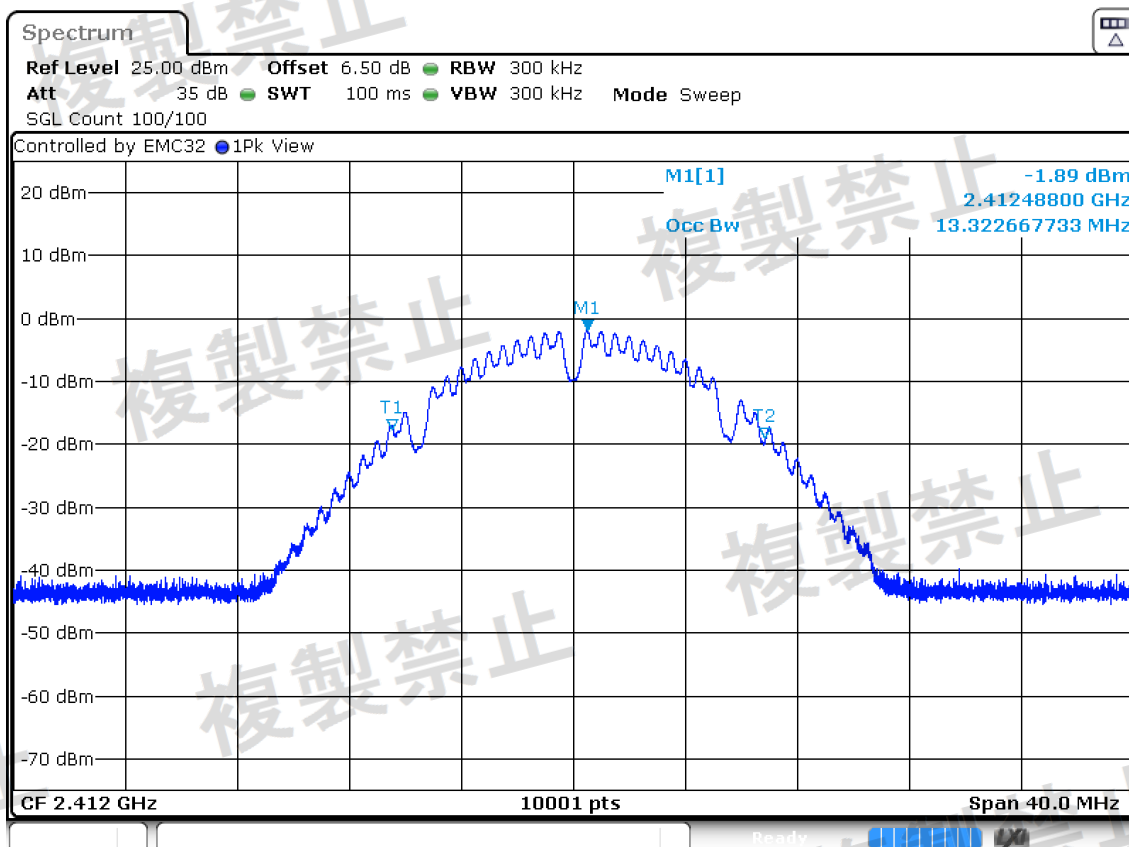
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

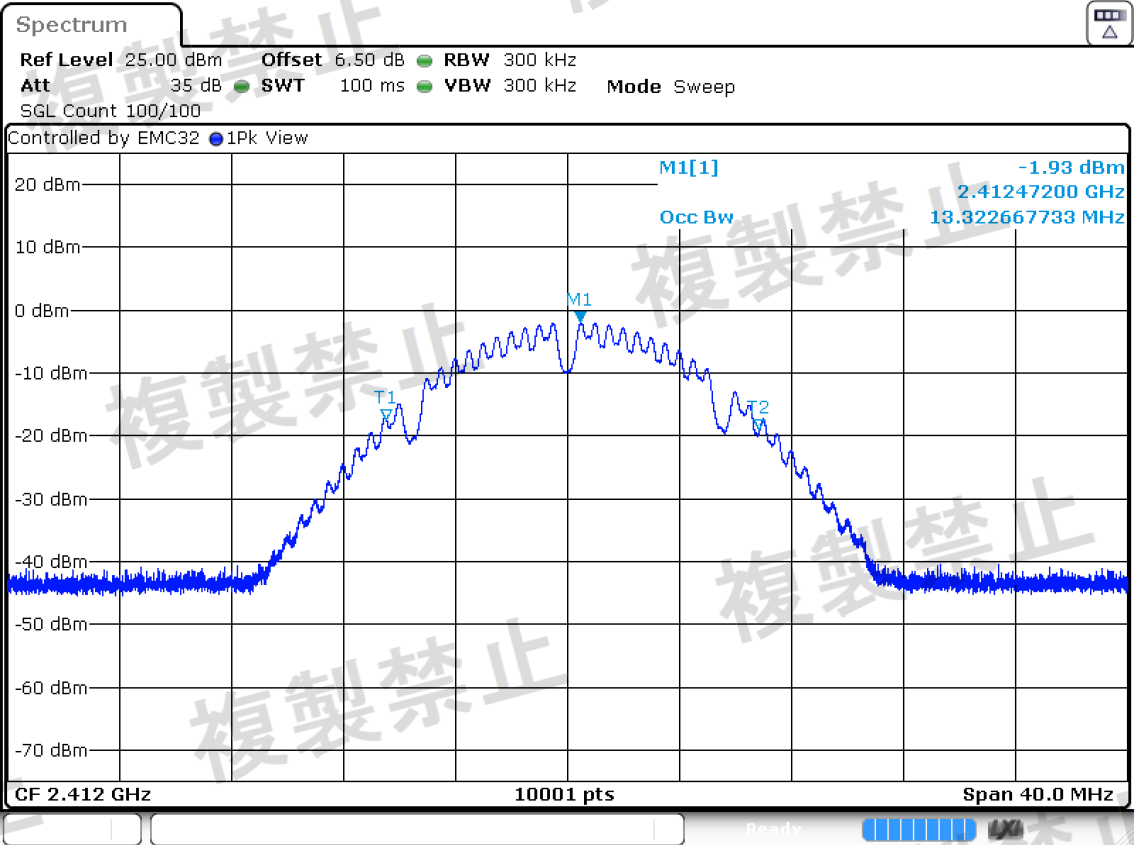
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Frequency MHz = 2412 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

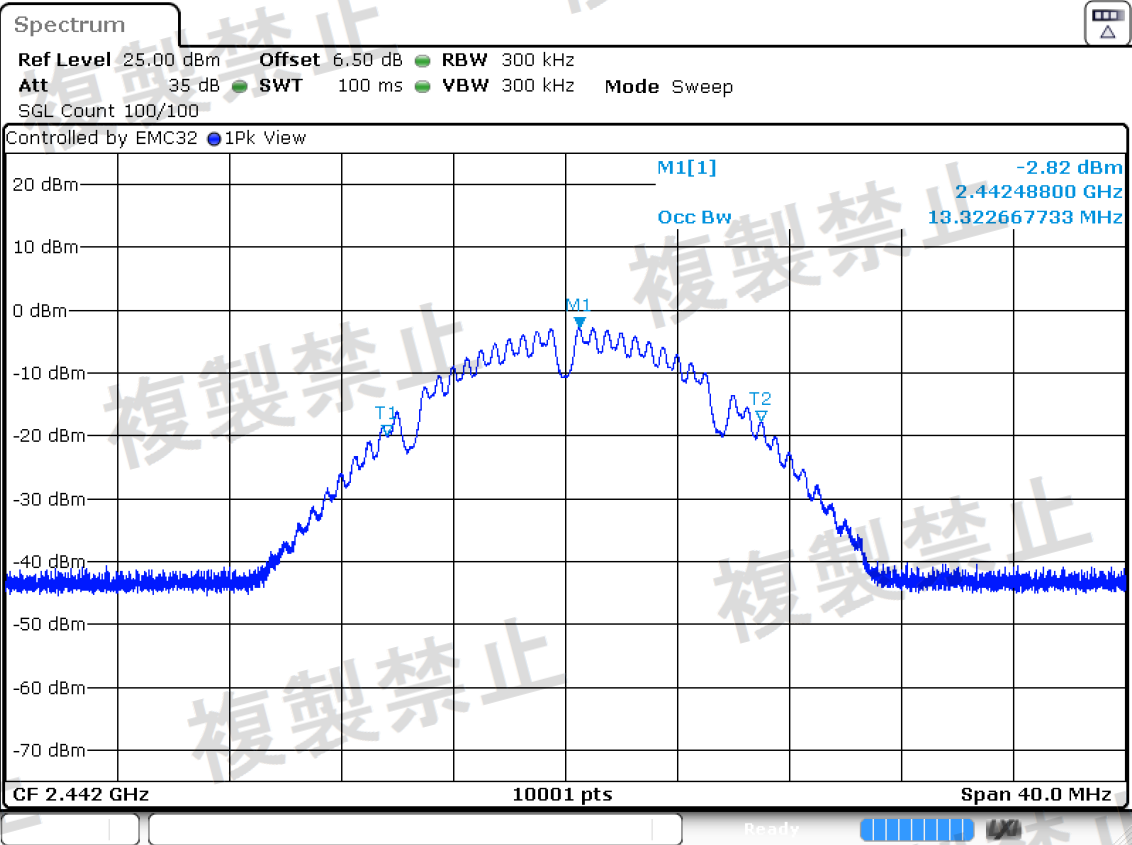
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

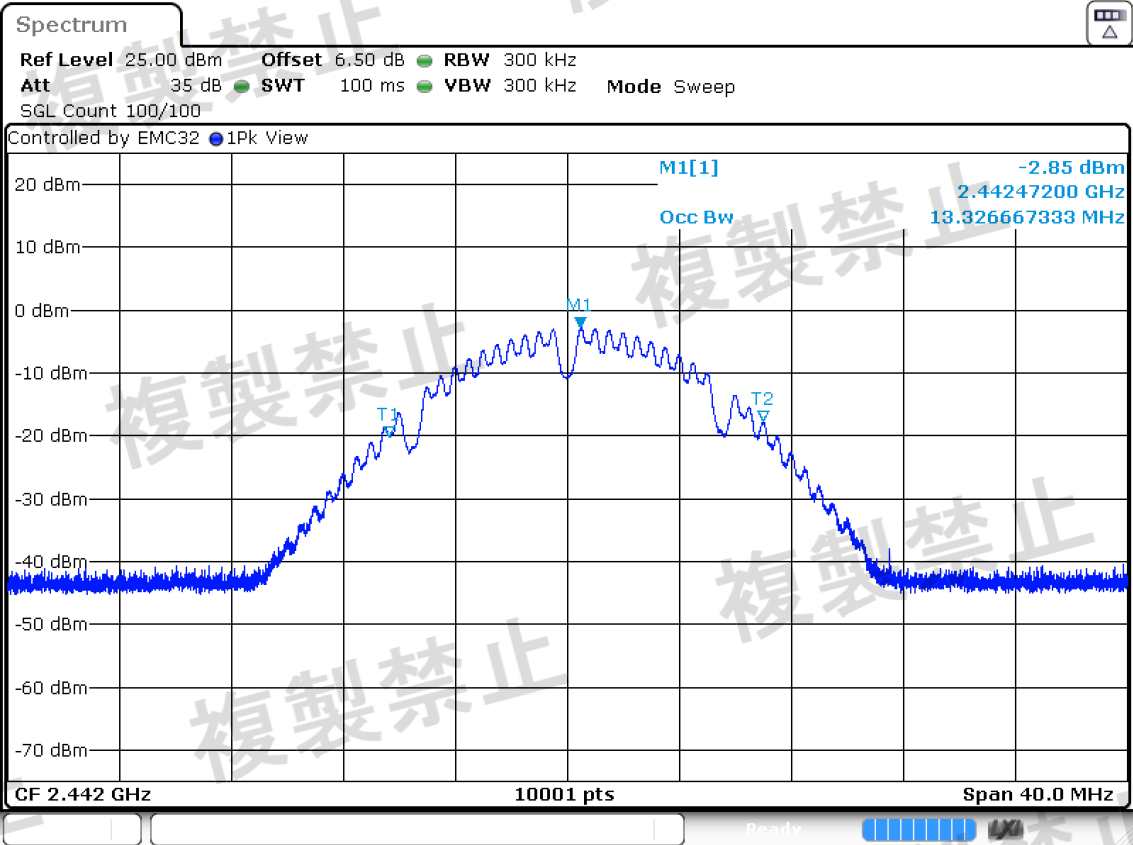
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

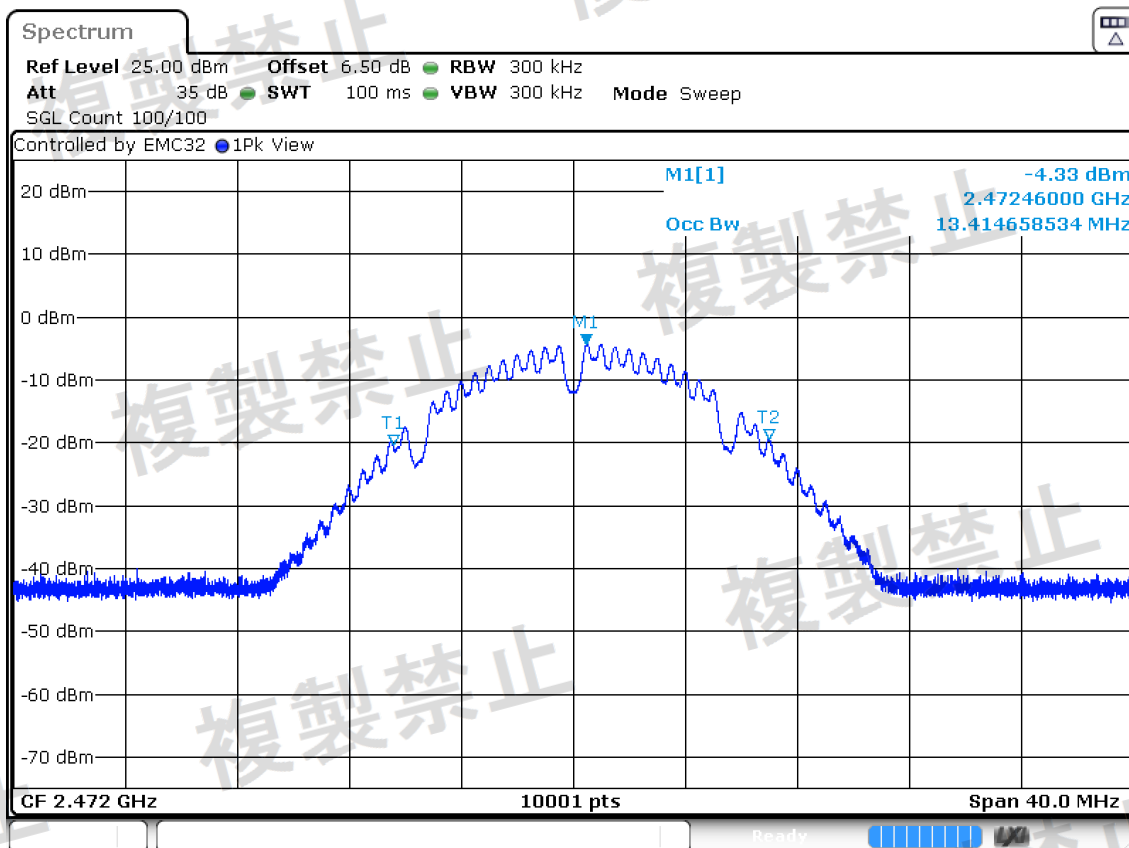
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

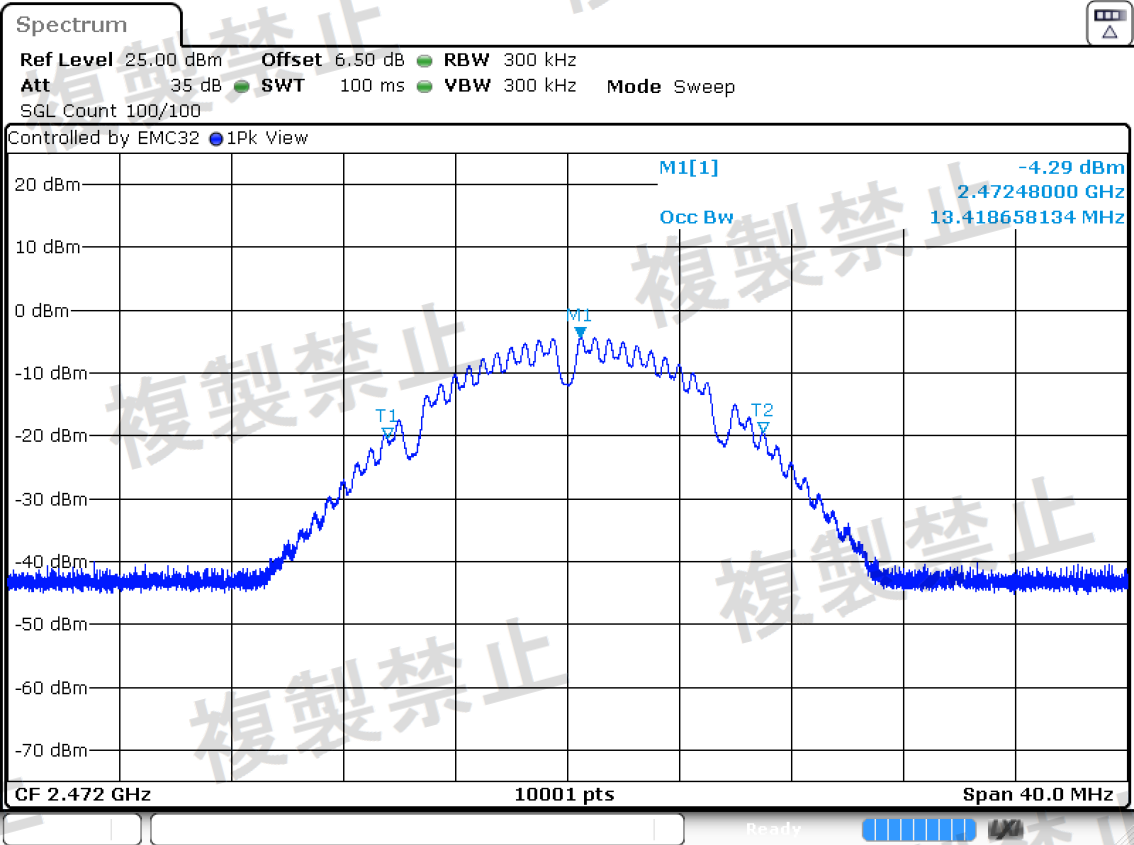
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Modulation: 802.11g (OFDM 6 Mbit/s)

MIMO Mode: SISO A

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	99OBW (MHz)	Limit (MHz)
15.00	12	1	2412	A	16.382	26
		7	2442		16.382	26
		13	2472		16.278	26

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11g (OFDM 6 Mbit/s)

Channel = 1

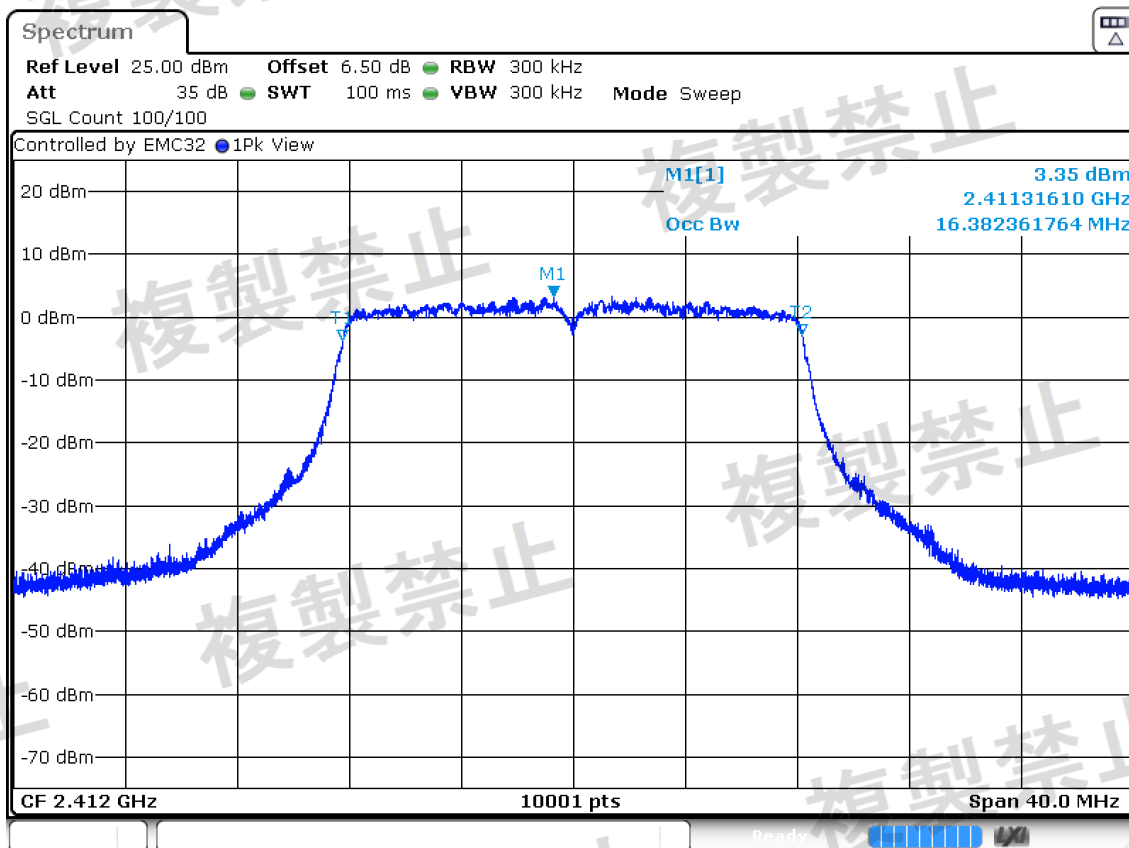
Frequency MHz = 2412

Active Port = A

MIMO Mode = SISO A

Verdict: Pass

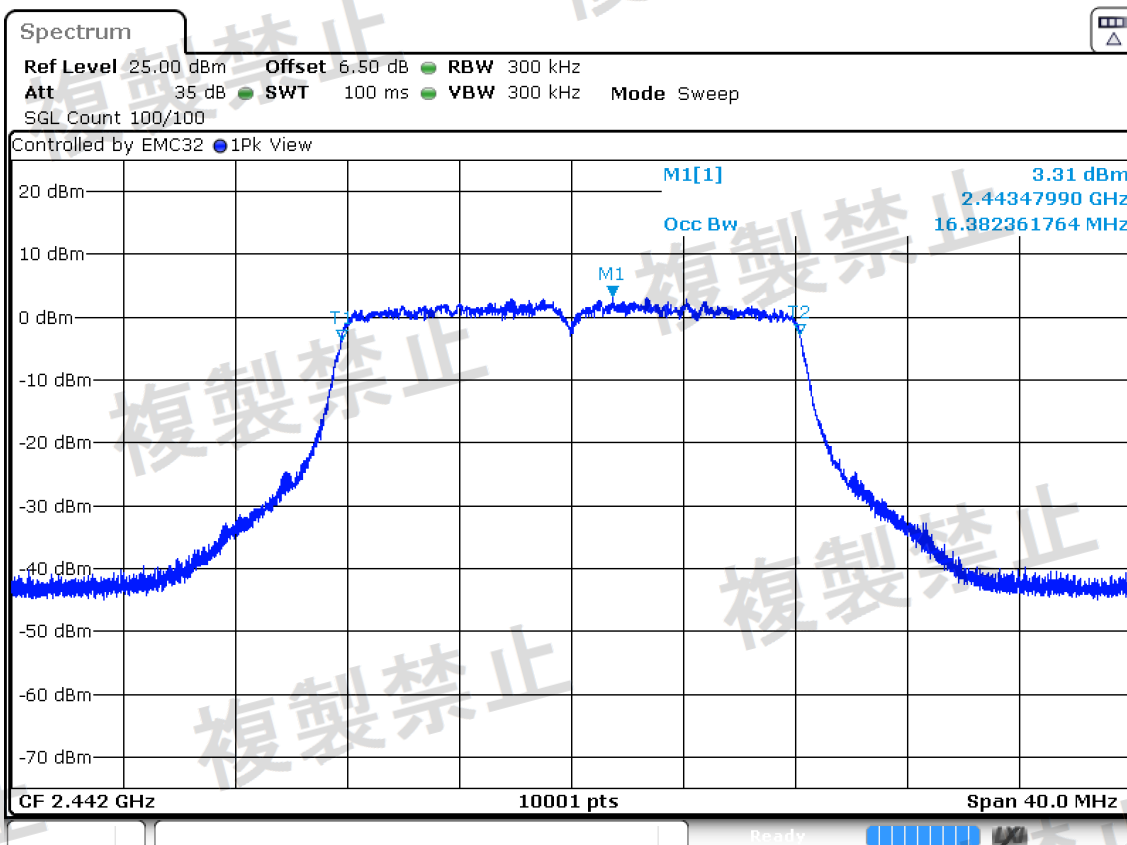
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = SISO A

Verdict: Pass

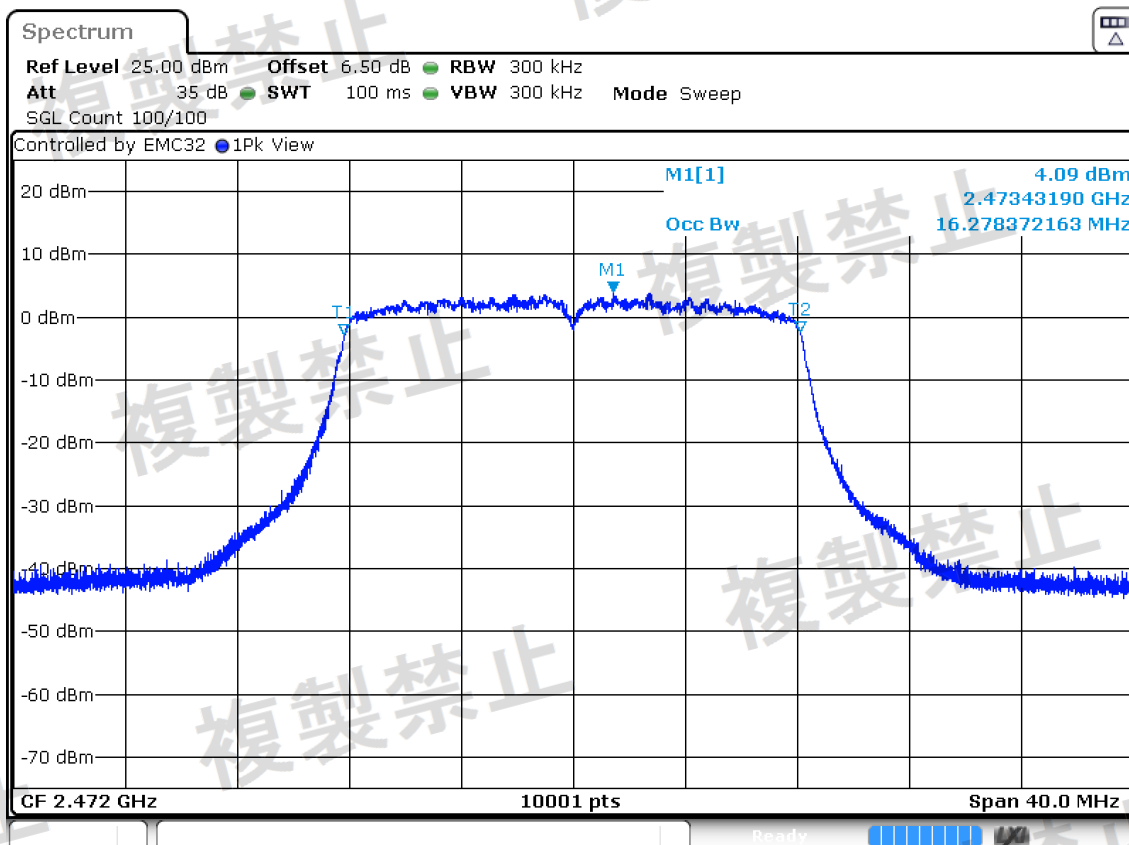
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11g (OFDM 6 Mbit/s) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = SISO A

Verdict: Pass

Images:



Results

Modulation: 802.11n HT20 (OFDM MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	99OBW (MHz)	Limit (MHz)
15.00	12	1	2412	A	17.586	26
				B	17.586	26
		7	2442	A	17.582	26
				B	17.586	26
		13	2472	A	17.422	26
				B	17.422	26

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

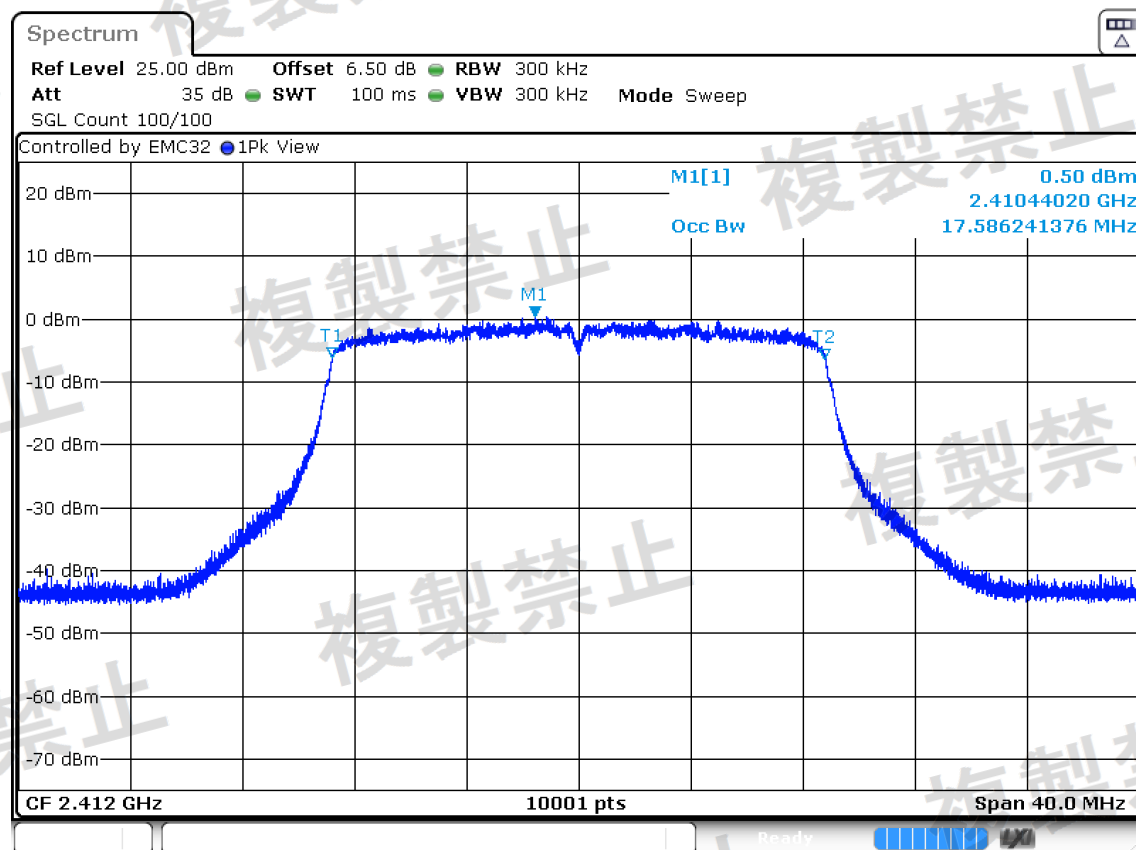
Frequency MHz = 2412

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

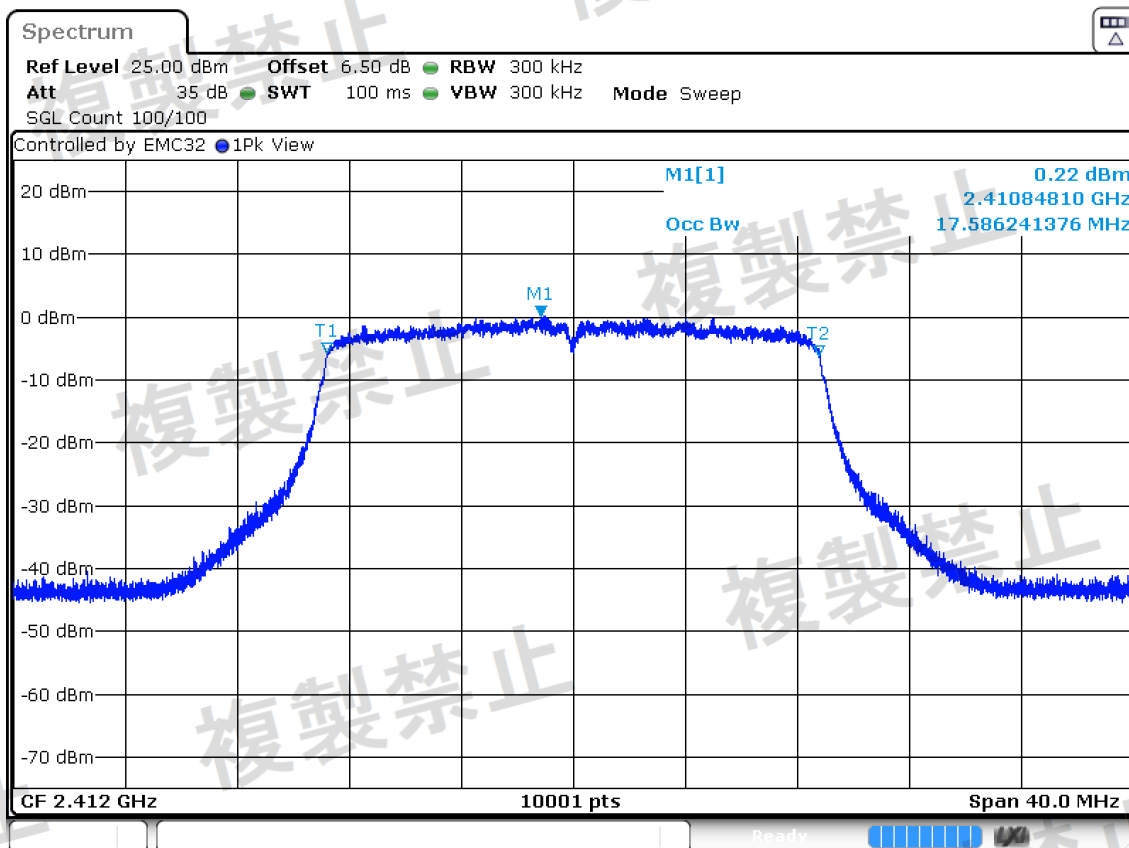
Frequency MHz = 2412

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

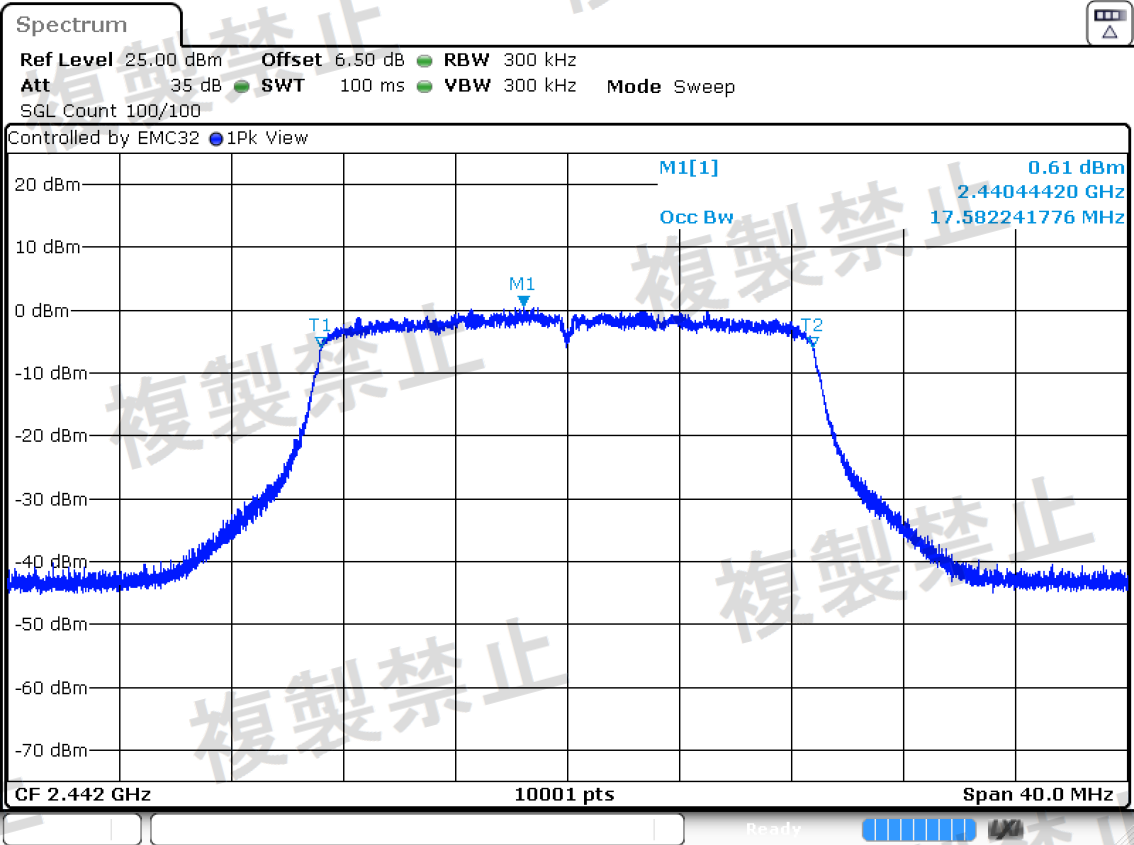
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Frequency MHz = 2442 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 7

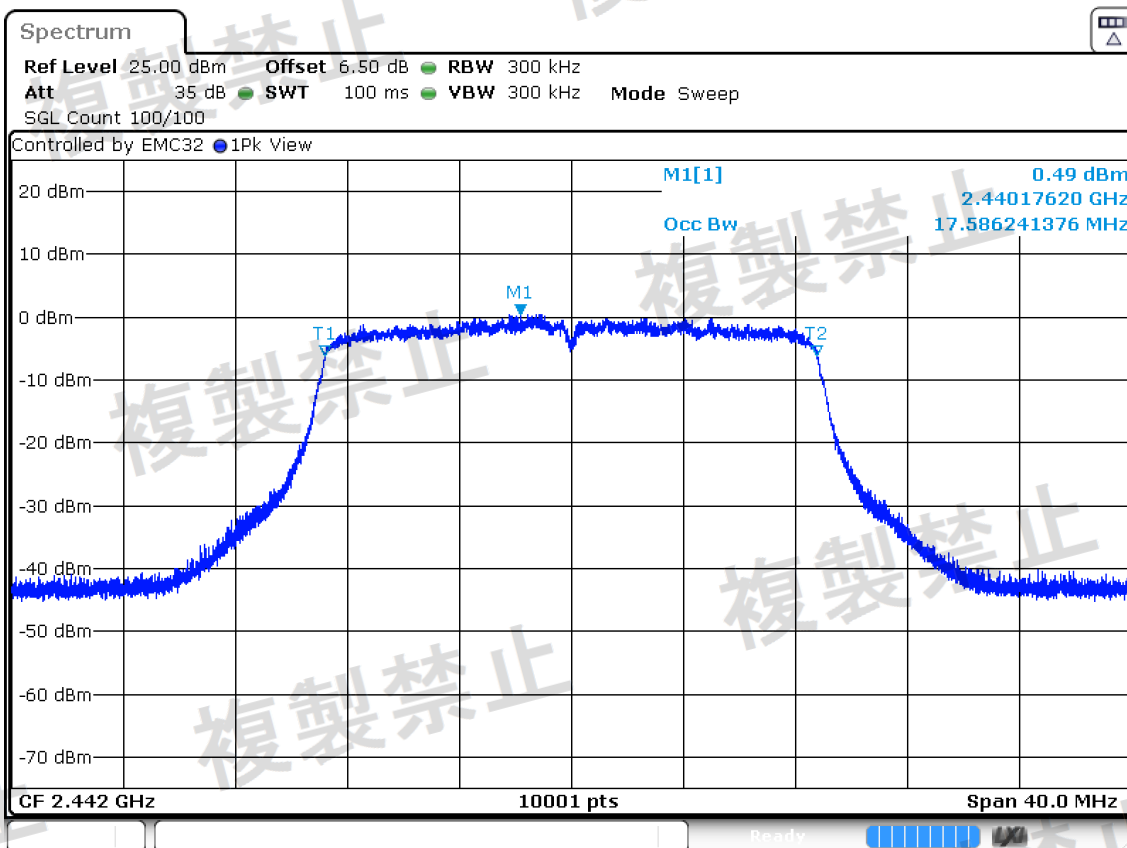
Frequency MHz = 2442

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

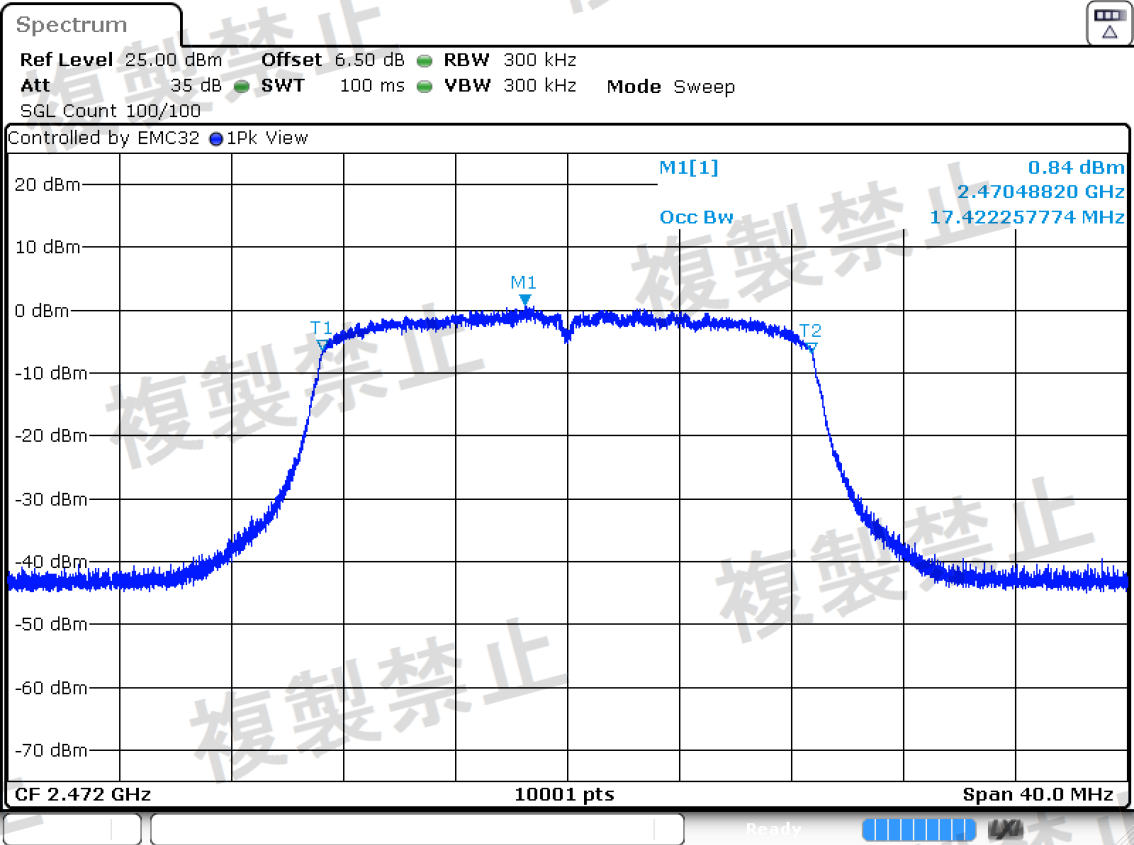
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Frequency MHz = 2472 Active Port = A
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

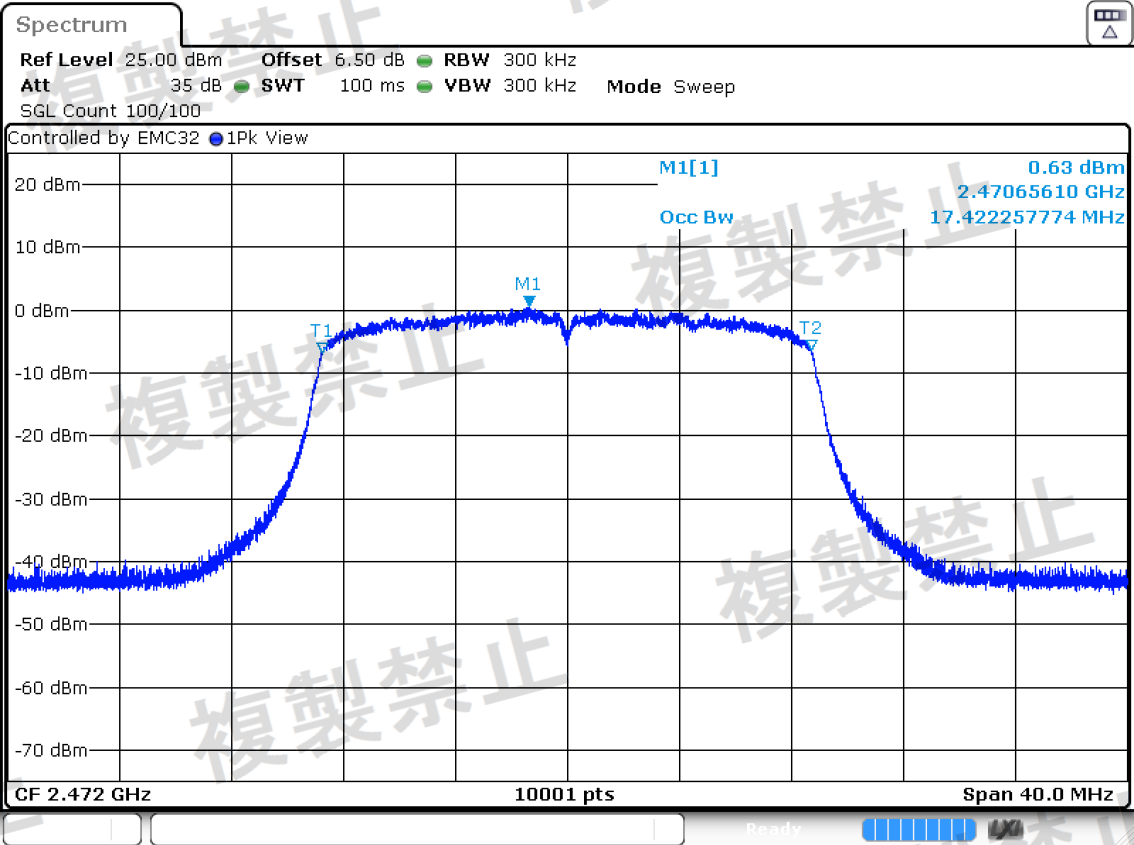
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Frequency MHz = 2472 Active Port = B
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11ax HE20 (OFDMA MCS0)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Freq (MHz)	Port	99OBW (MHz)	Limit (MHz)
15.00	12	1	2412	A	18.926	26
				B	18.922	26
		7	2442	A	18.926	26
				B	18.922	26
		13	2472	A	18.706	26
				B	18.706	26

Verdict

Pass

Attachments

Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

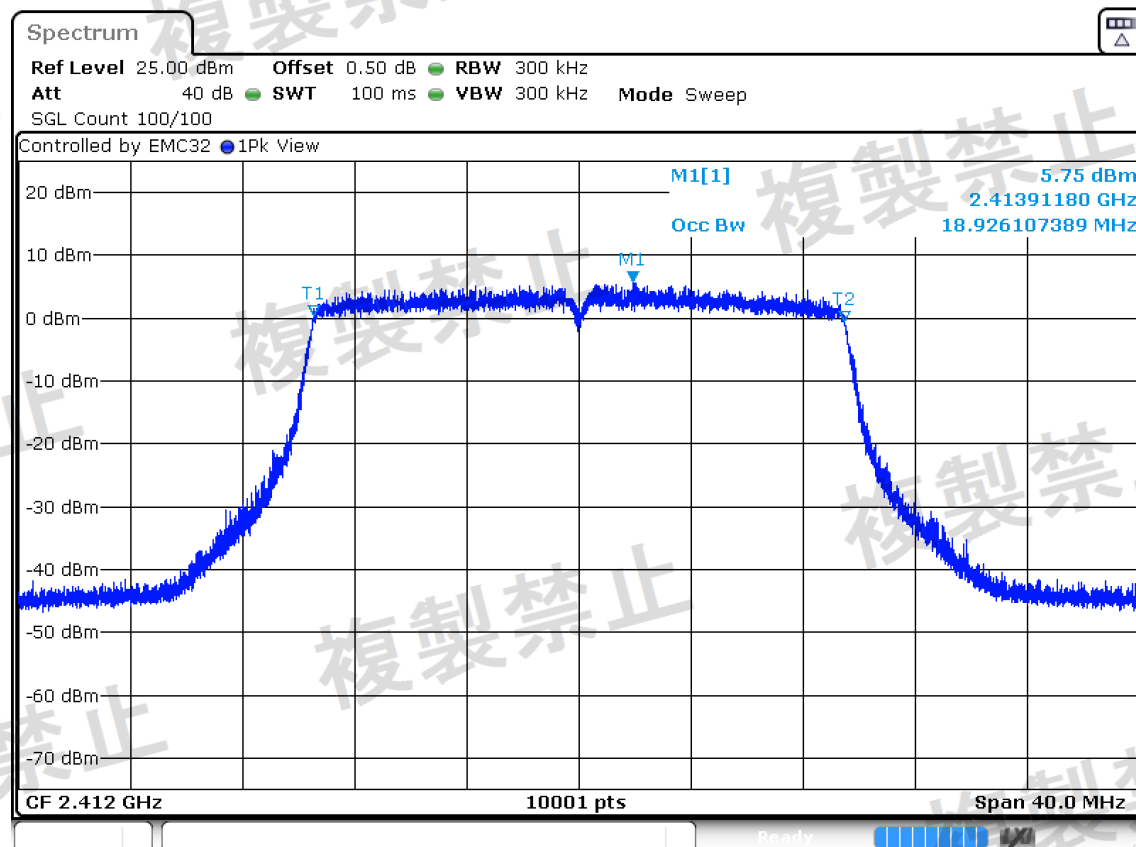
Frequency MHz = 2412

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 1

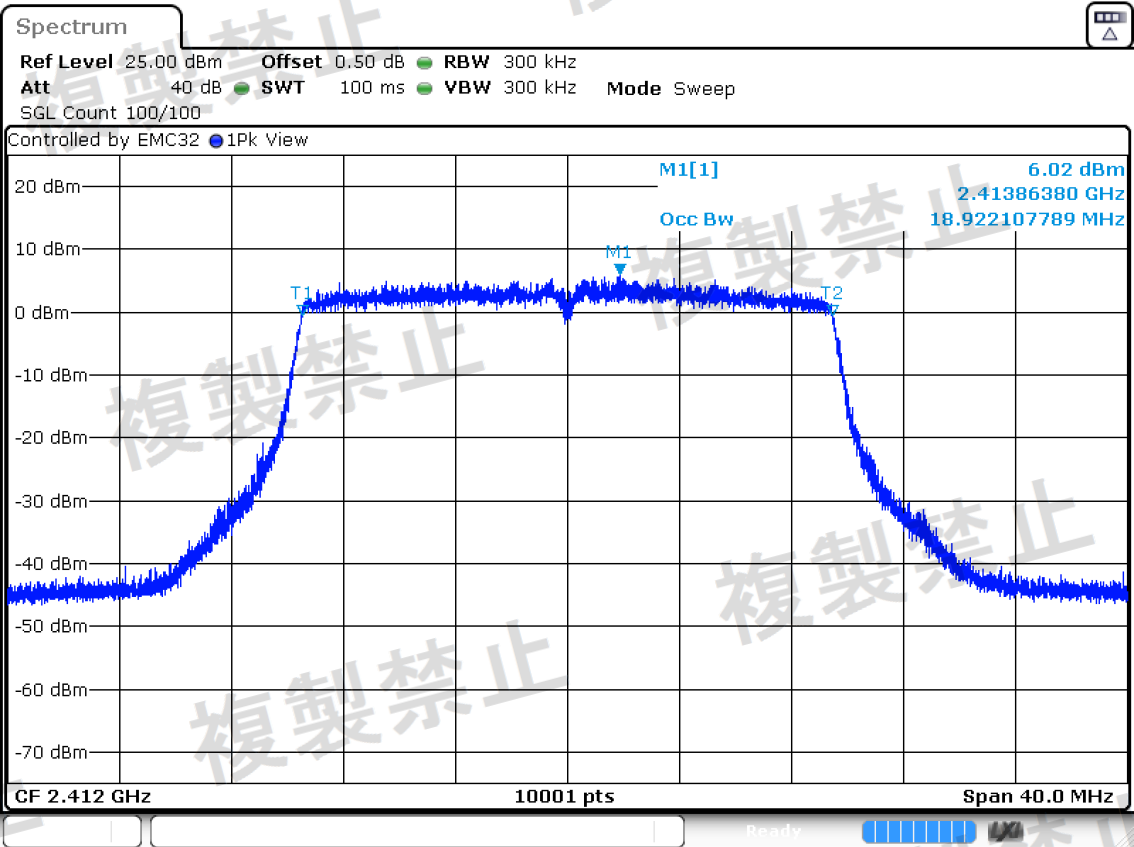
Frequency MHz = 2412

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

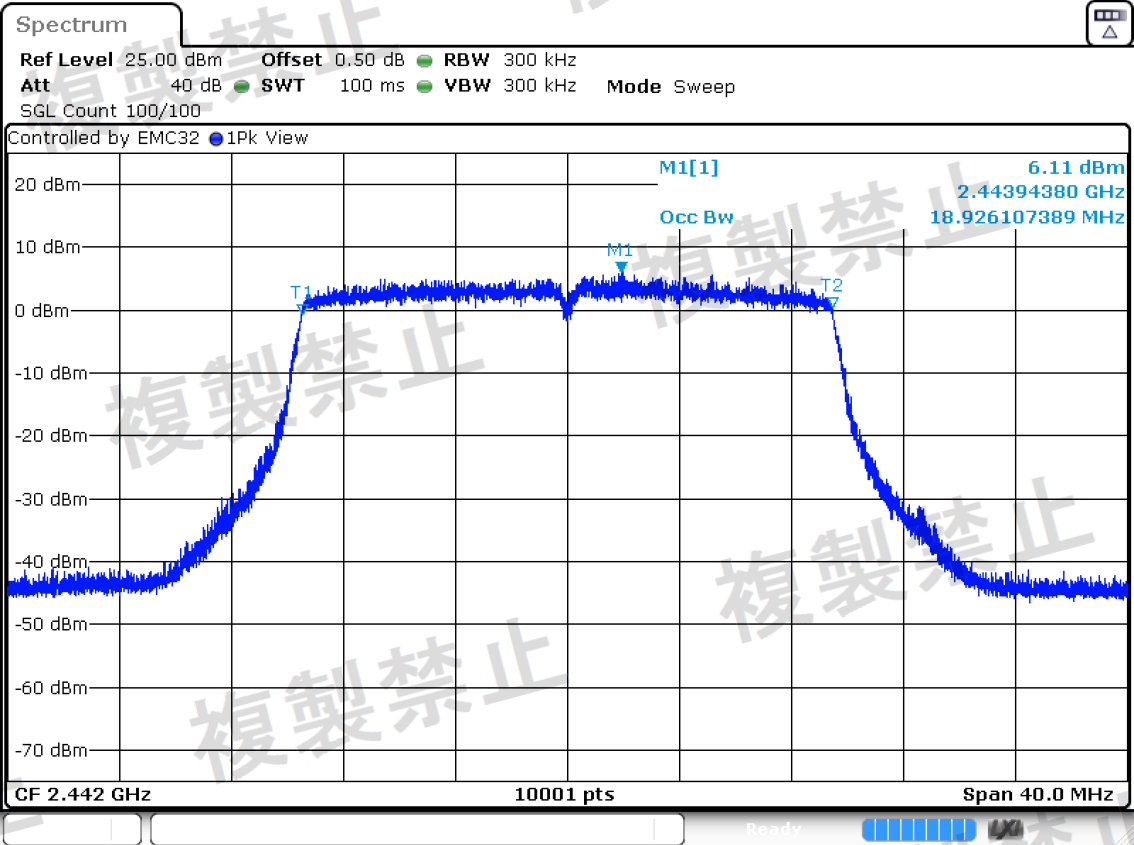
Frequency MHz = 2442

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

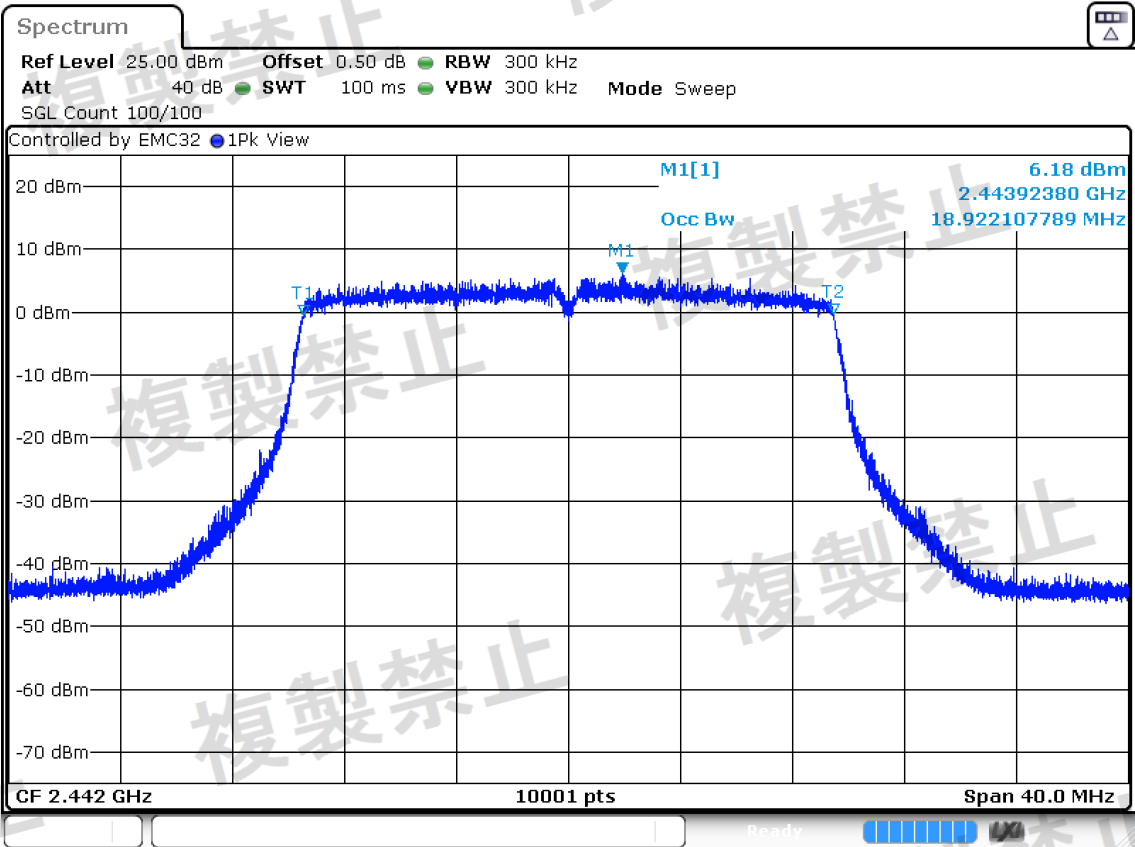
Frequency MHz = 2442

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

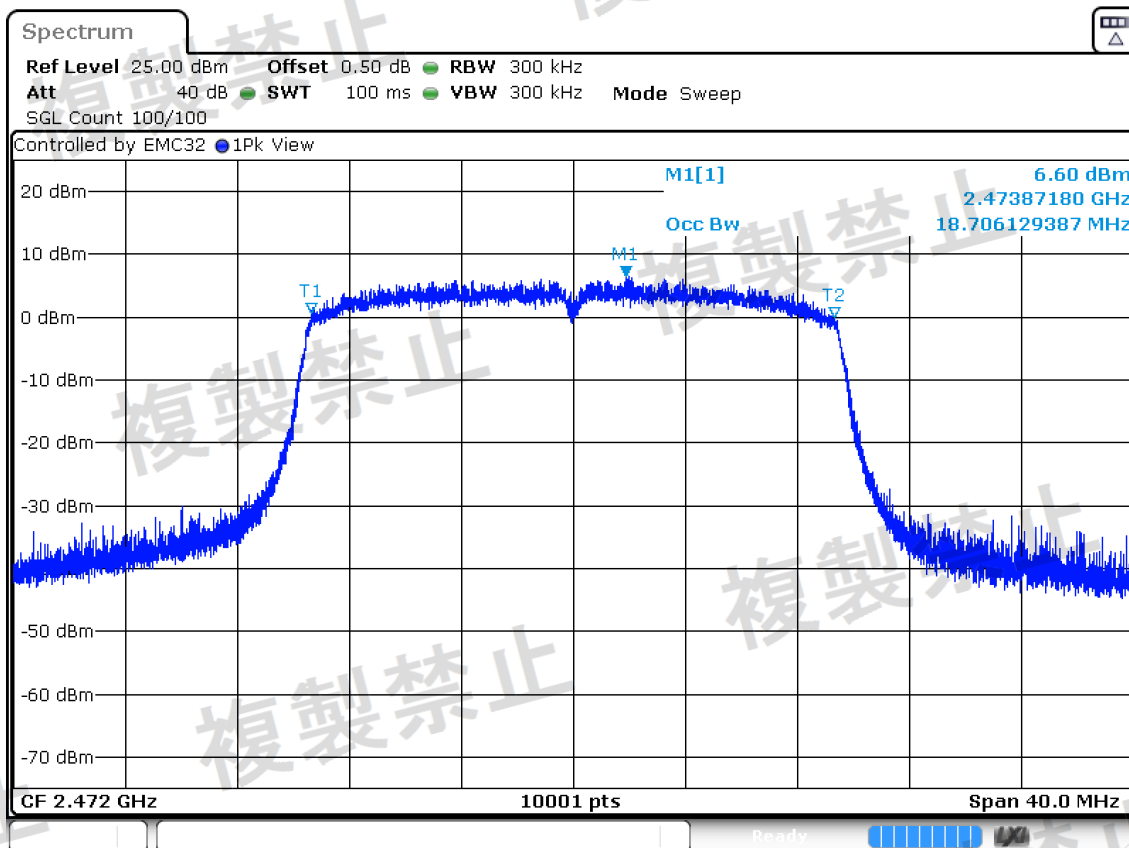
Frequency MHz = 2472

Active Port = A

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

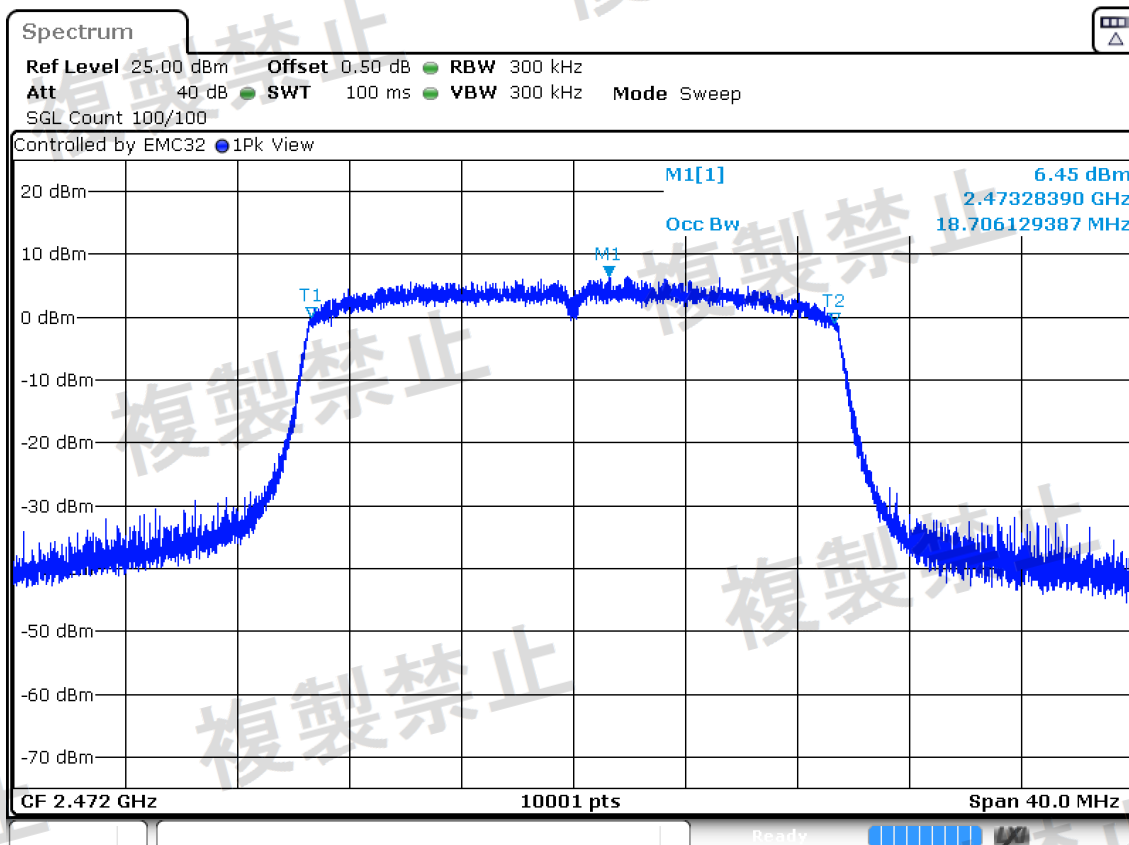
Frequency MHz = 2472

Active Port = B

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Article 7 and Annex 3. 26 [CSETxW] Unwanted Emission Strength (Wi-Fi)

Limits

Permissible mean power of spurious emission of each frequency supplied to a feeder, that is, mean power of spurious emission in the 1 MHz bandwidth at frequency f other than frequency band used shall be as follows:

- a. $2,387 \text{ MHz} \leq f \leq 2,400 \text{ MHz}$ and $2,483.5 \text{ MHz} < f \leq 2,496.5 \text{ MHz}$ $25 \text{ } \mu\text{W/MHz}$ (-16 dBm/MHz) or less.
- b. $2,387 \text{ MHz} > f$ and $2,496.5 \text{ MHz} < f$ $2.5 \text{ } \mu\text{W/MHz}$ (-26 dBm/MHz) or less.

Results

Modulation: 802.11b (DSSS 1 Mbit/s) MIMO Mode: MIMO CDD Mode 2x2

Ambient Temp (°C)	Test Voltage	Channel	Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	1	A	[0.03, 2.387]	2351.904	-45.97	0.0253	2.50
15.00	12	1	B	[0.03, 2.387]	2351.904	-45.54	0.0279	2.50
15.00	12	7	A	[0.03, 2.387]	2380.703	-46.98	0.0200	2.50
15.00	12	7	B	[0.03, 2.387]	2381.586	-46.85	0.0207	2.50
15.00	12	13	A	[0.03, 2.387]	2280.975	-49.75	0.0106	2.50
15.00	12	13	B	[0.03, 2.387]	2278.545	-49.92	0.0102	2.50
15.00	12	1	A+B	[0.03, 2.387]	2351.904	-42.74	0.0532	2.50
15.00	12	1	A	[2.387, 2.4]	2399.964	-37.73	0.1687	25.00
15.00	12	1	A	[2.4835, 2.4965]	2485.013	-49.79	0.0105	25.00
15.00	12	1	A	[2.4965, 12.5]	2507.280	-53.80	0.0042	2.50
15.00	12	1	B	[2.387, 2.4]	2399.919	-37.85	0.1641	25.00
15.00	12	1	B	[2.4835, 2.4965]	2485.082	-50.11	0.0097	25.00
15.00	12	1	B	[2.4965, 12.5]	2506.660	-52.67	0.0054	2.50
15.00	12	7	A+B	[0.03, 2.387]	2380.703	-43.90	0.0407	2.50
15.00	12	7	A	[2.387, 2.4]	2387.060	-50.12	0.0097	25.00
15.00	12	7	A	[2.4835, 2.4965]	2486.950	-49.83	0.0104	25.00
15.00	12	7	A	[2.4965, 12.5]	2503.850	-50.90	0.0081	2.50
15.00	12	7	B	[2.387, 2.4]	2387.060	-52.74	0.0053	25.00
15.00	12	7	B	[2.4835, 2.4965]	2496.268	-50.64	0.0086	25.00
15.00	12	7	B	[2.4965, 12.5]	2499.780	-50.68	0.0086	2.50
15.00	12	13	A+B	[0.03, 2.387]	2280.975	-46.82	0.0208	2.50
15.00	12	13	A	[2.387, 2.4]	2399.882	-51.40	0.0072	25.00
15.00	12	13	A	[2.4835, 2.4965]	2483.636	-34.59	0.3475	25.00
15.00	12	13	A	[2.4965, 12.5]	2532.920	-51.55	0.0070	2.50
15.00	12	13	B	[2.387, 2.4]	2399.702	-51.25	0.0075	25.00
15.00	12	13	B	[2.4835, 2.4965]	2483.592	-34.32	0.3698	25.00
15.00	12	13	B	[2.4965, 12.5]	2532.920	-52.08	0.0062	2.50
15.00	12	1	A+B	[2.387, 2.4]	2399.964	-34.78	0.3327	25.00
15.00	12	1	A+B	[2.4835, 2.4965]	2485.013	-46.94	0.0202	25.00
15.00	12	1	A+B	[2.4965, 12.5]	2507.280	-50.19	0.0096	2.50
15.00	12	7	A+B	[2.387, 2.4]	2387.060	-48.23	0.0150	25.00
15.00	12	7	A+B	[2.4835, 2.4965]	2486.950	-47.21	0.0190	25.00
15.00	12	7	A+B	[2.4965, 12.5]	2503.850	-47.78	0.0167	2.50
15.00	12	13	A+B	[2.387, 2.4]	2399.882	-48.31	0.0147	25.00
15.00	12	13	A+B	[2.4835, 2.4965]	2483.636	-31.44	0.7174	25.00
15.00	12	13	A+B	[2.4965, 12.5]	2532.920	-48.80	0.0132	2.50

Verdict

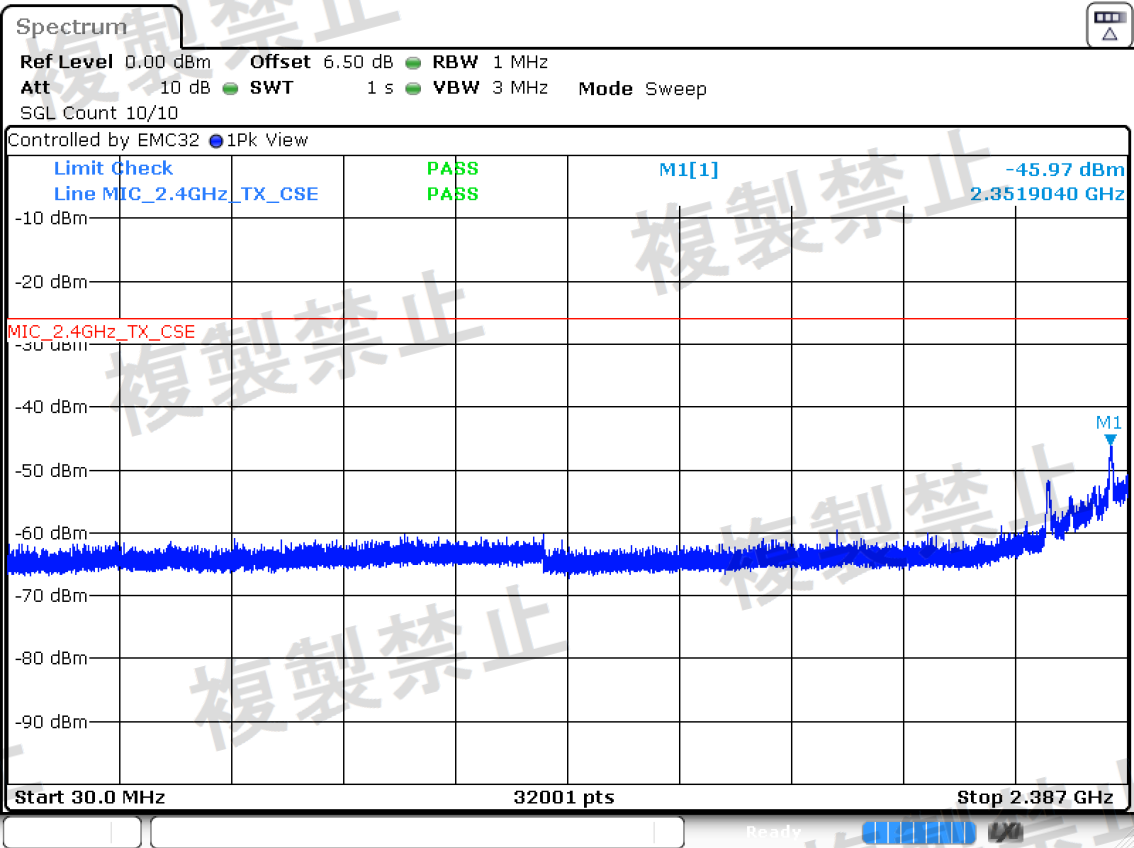
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

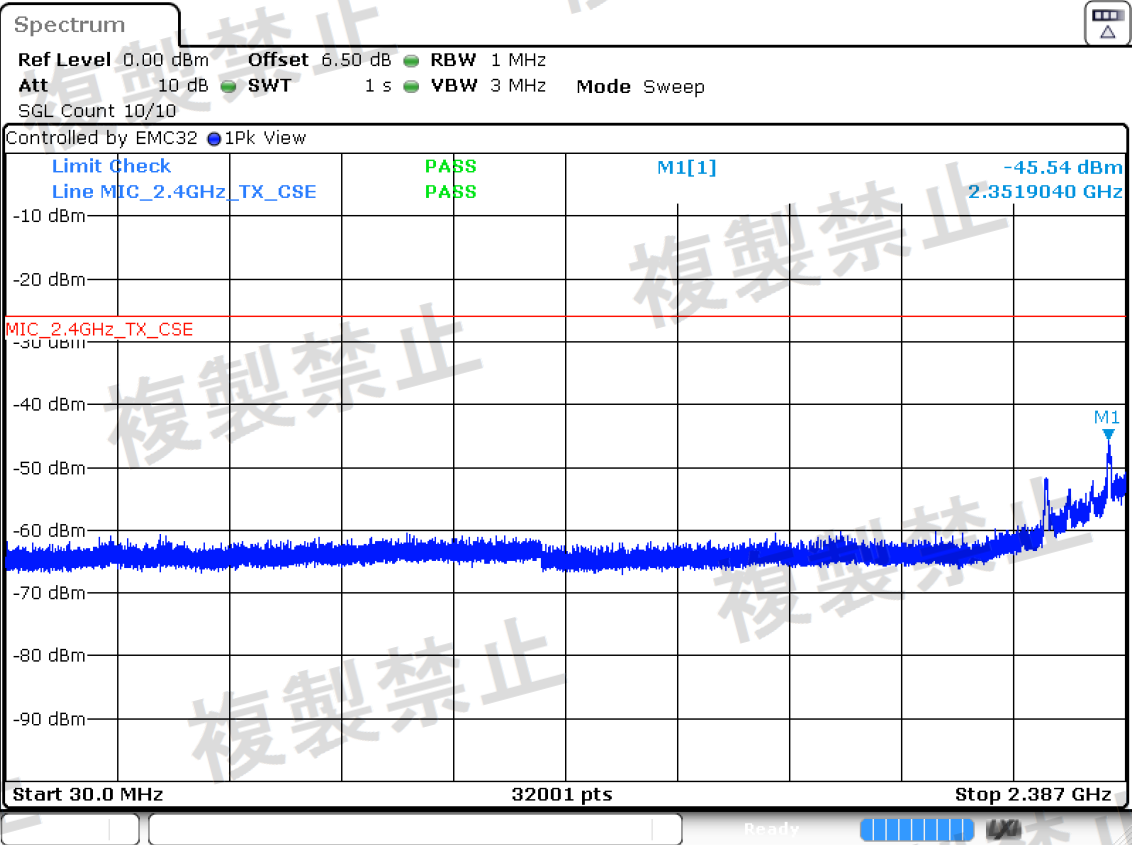
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 7

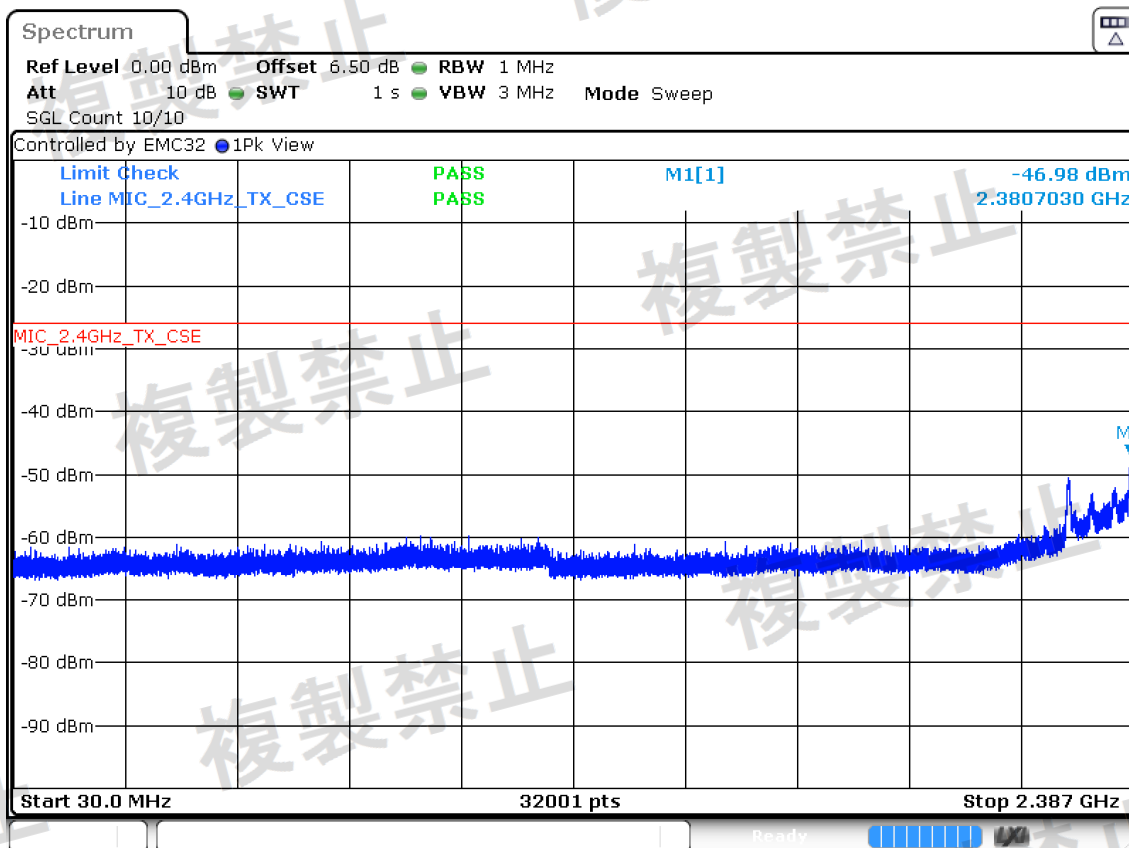
Active Port = A

Frequency Range GHz = [0.03, 2.387]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 7

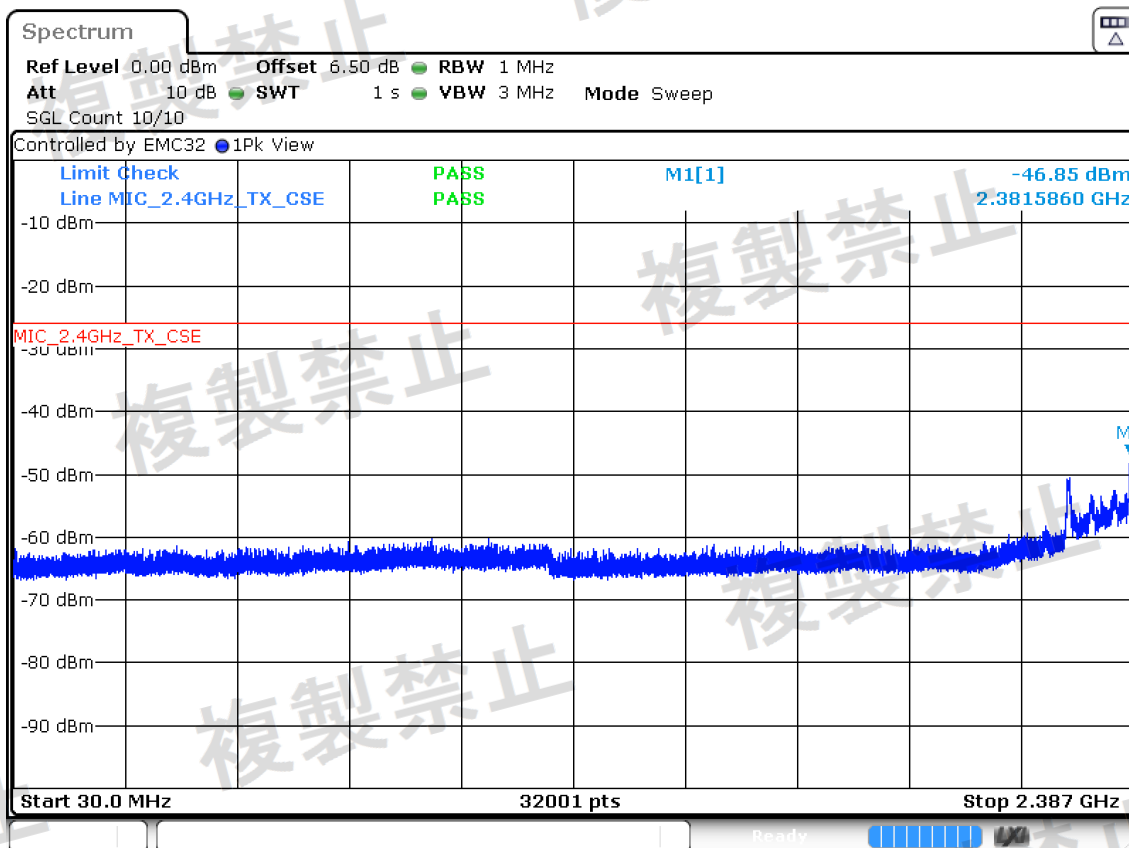
Active Port = B

Frequency Range GHz = [0.03, 2.387]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 13

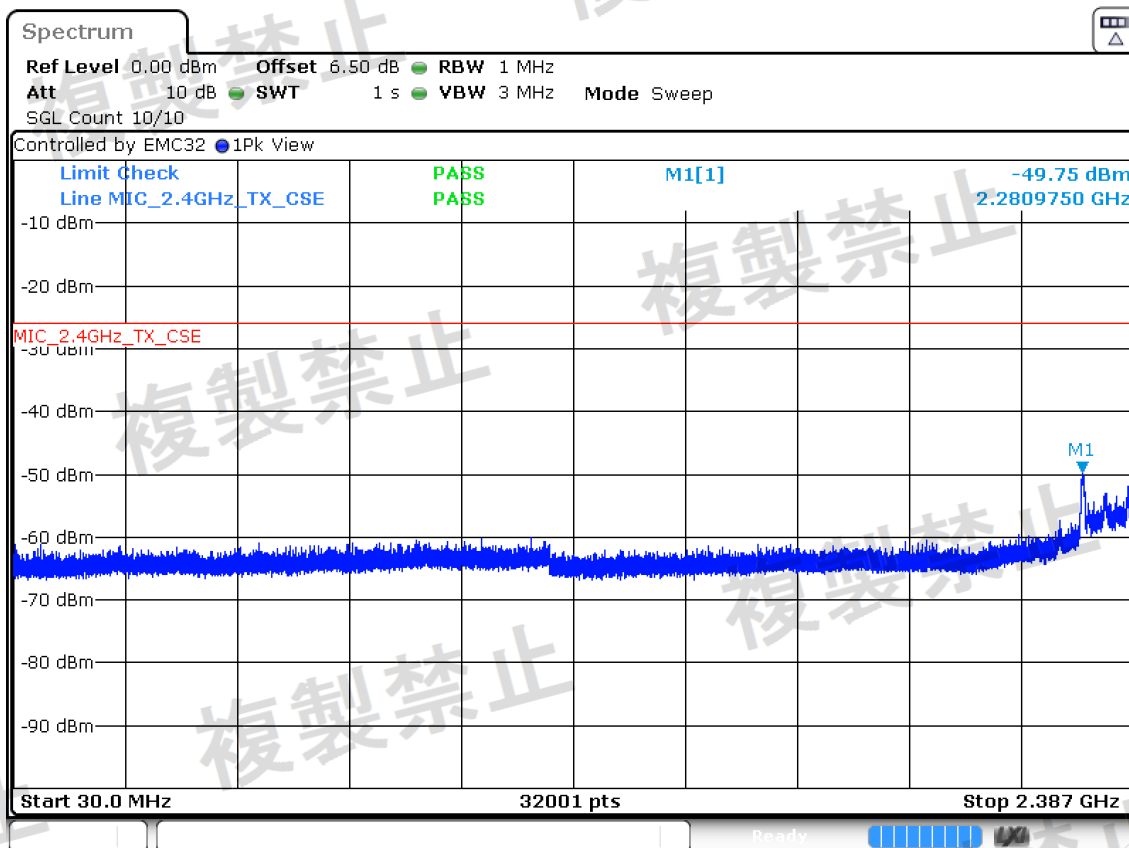
Active Port = A

Frequency Range GHz = [0.03, 2.387]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

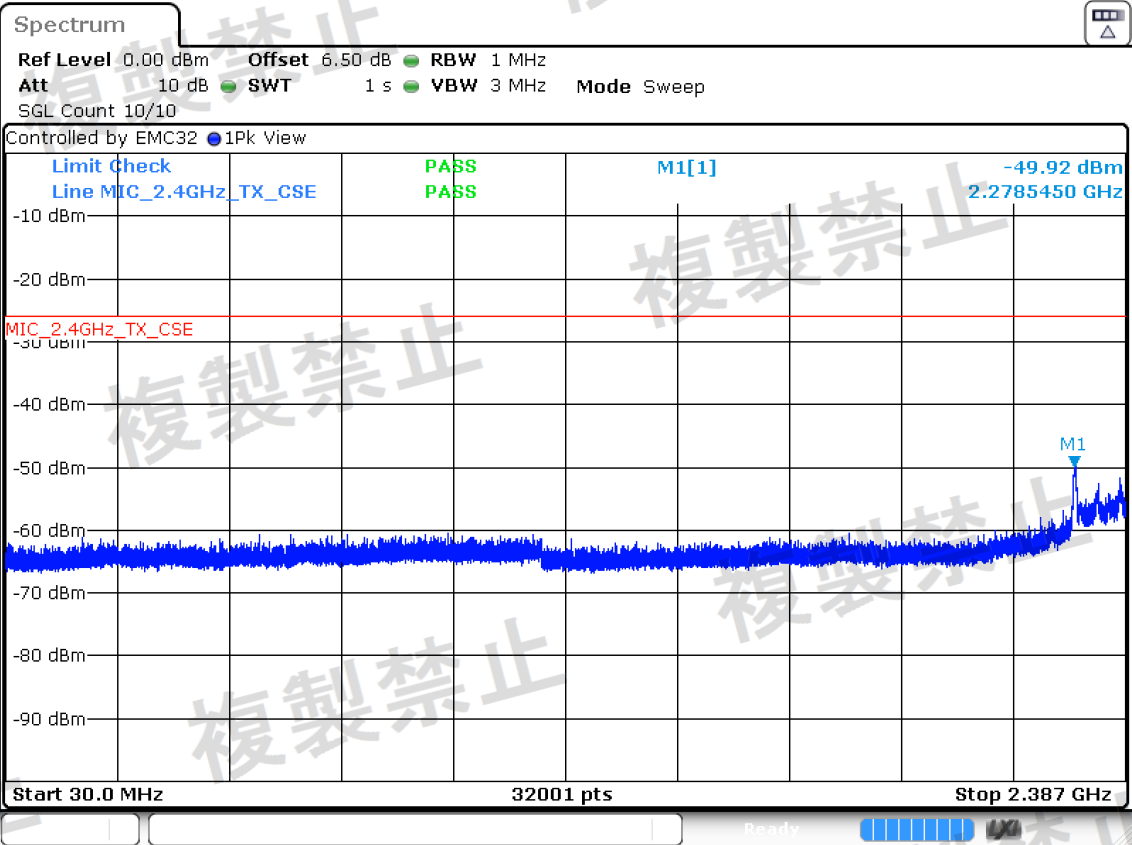
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

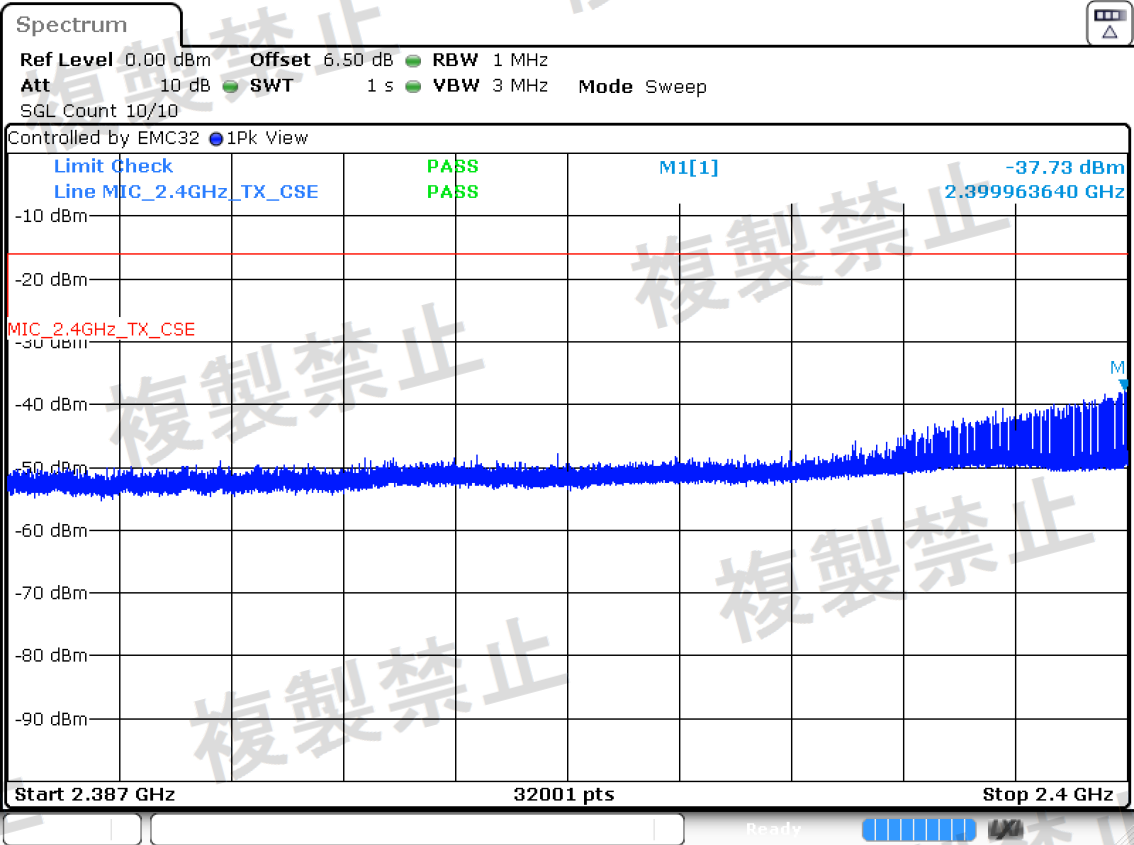
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

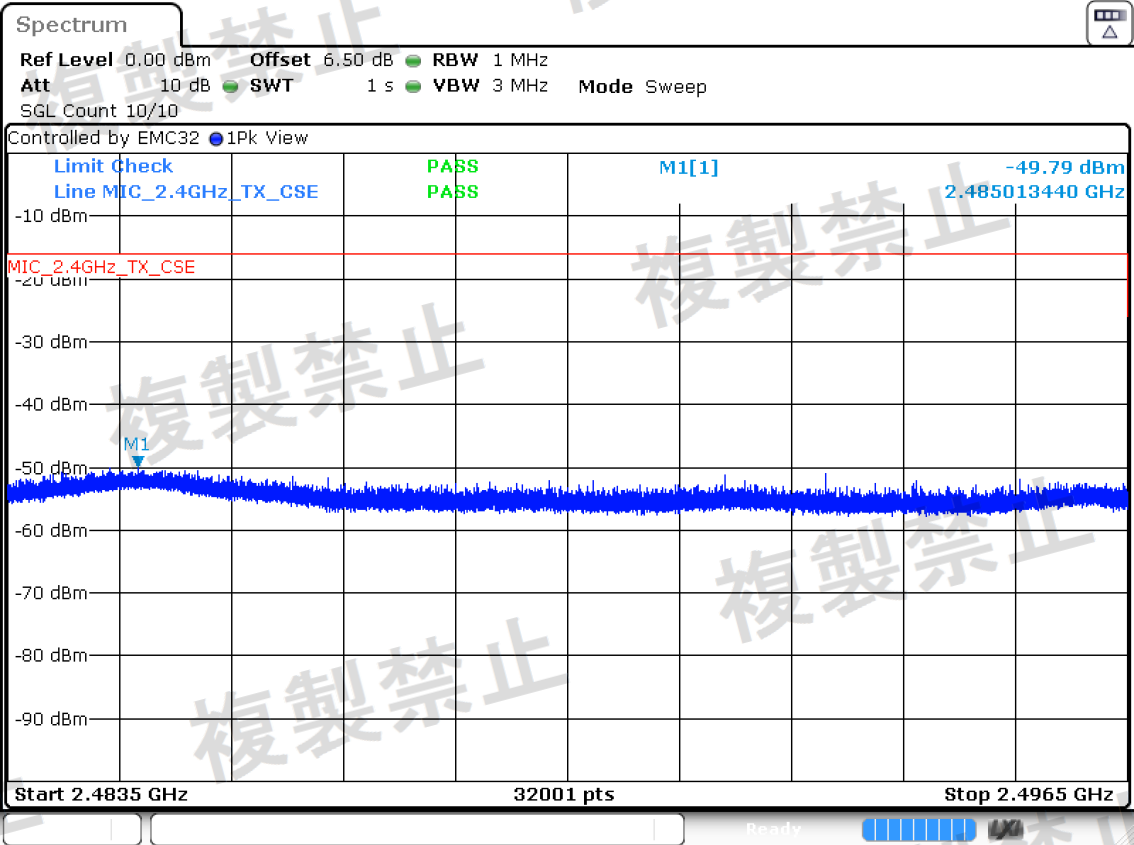
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 1

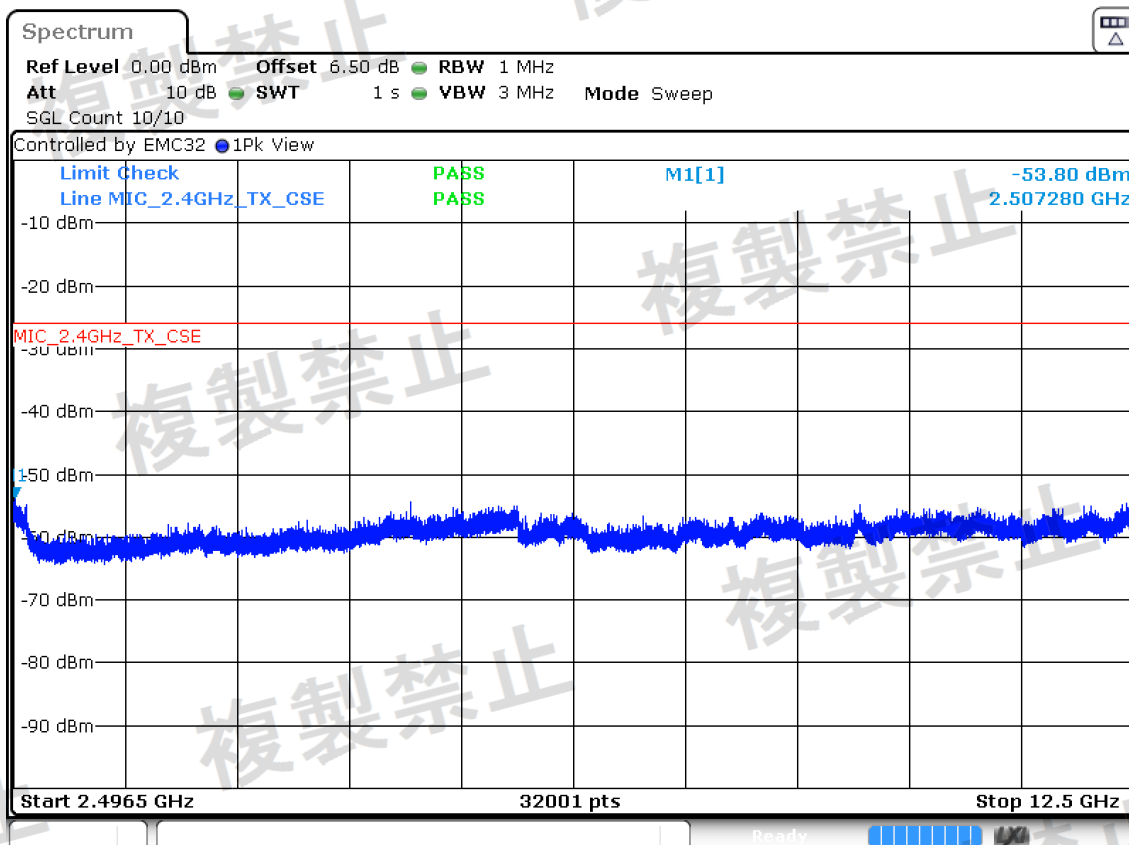
Active Port = A

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 1

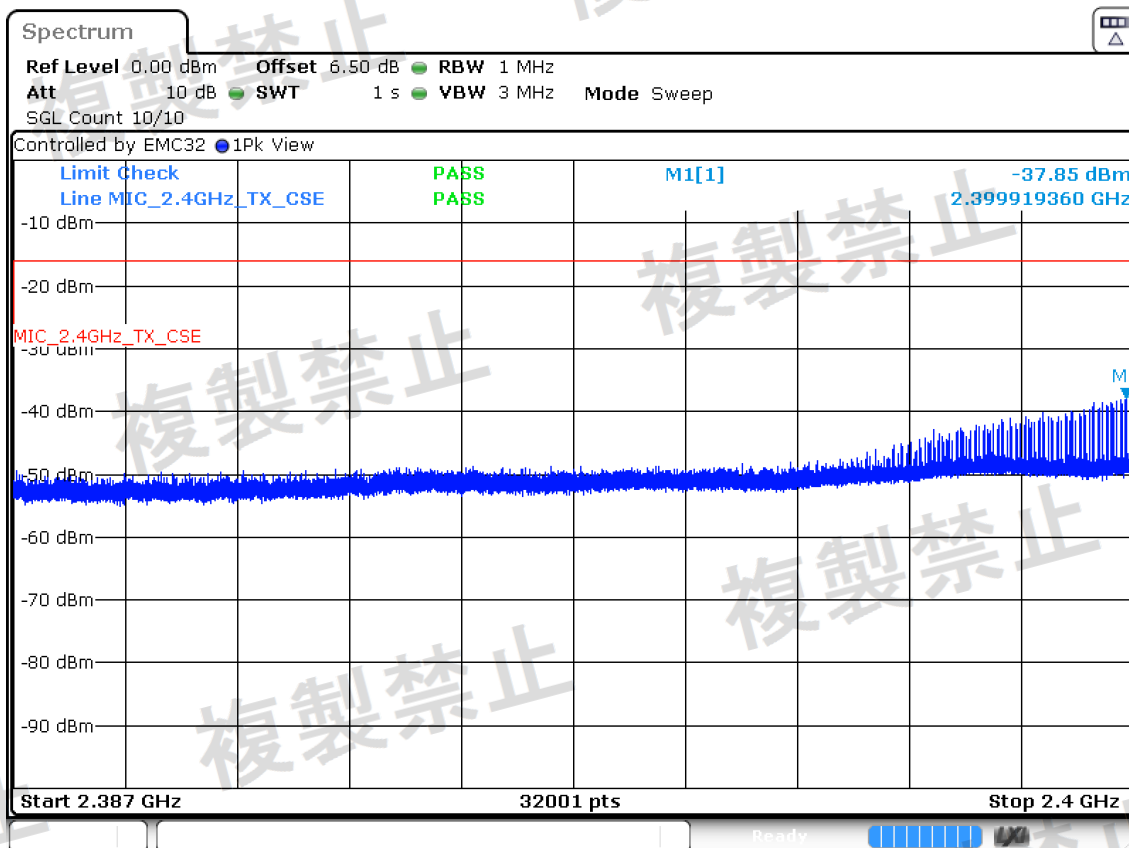
Active Port = B

Frequency Range GHz = [2.387, 2.4]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

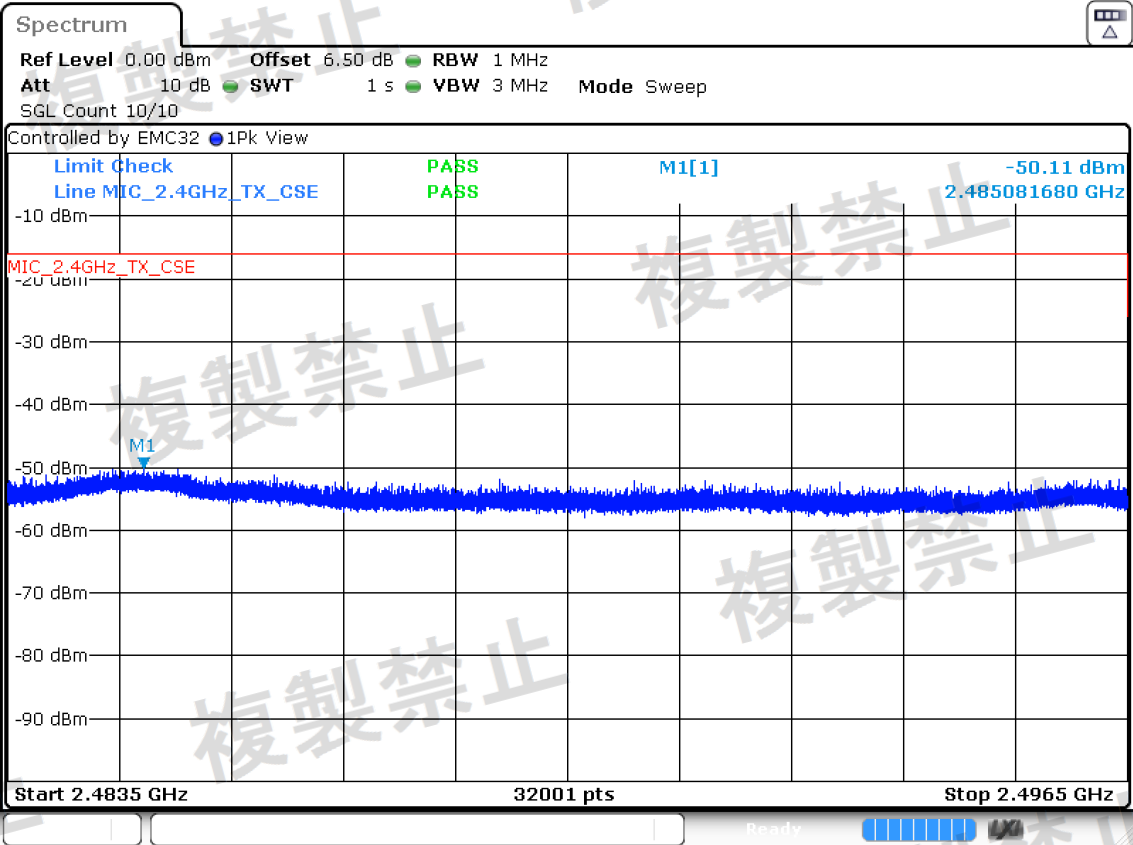
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

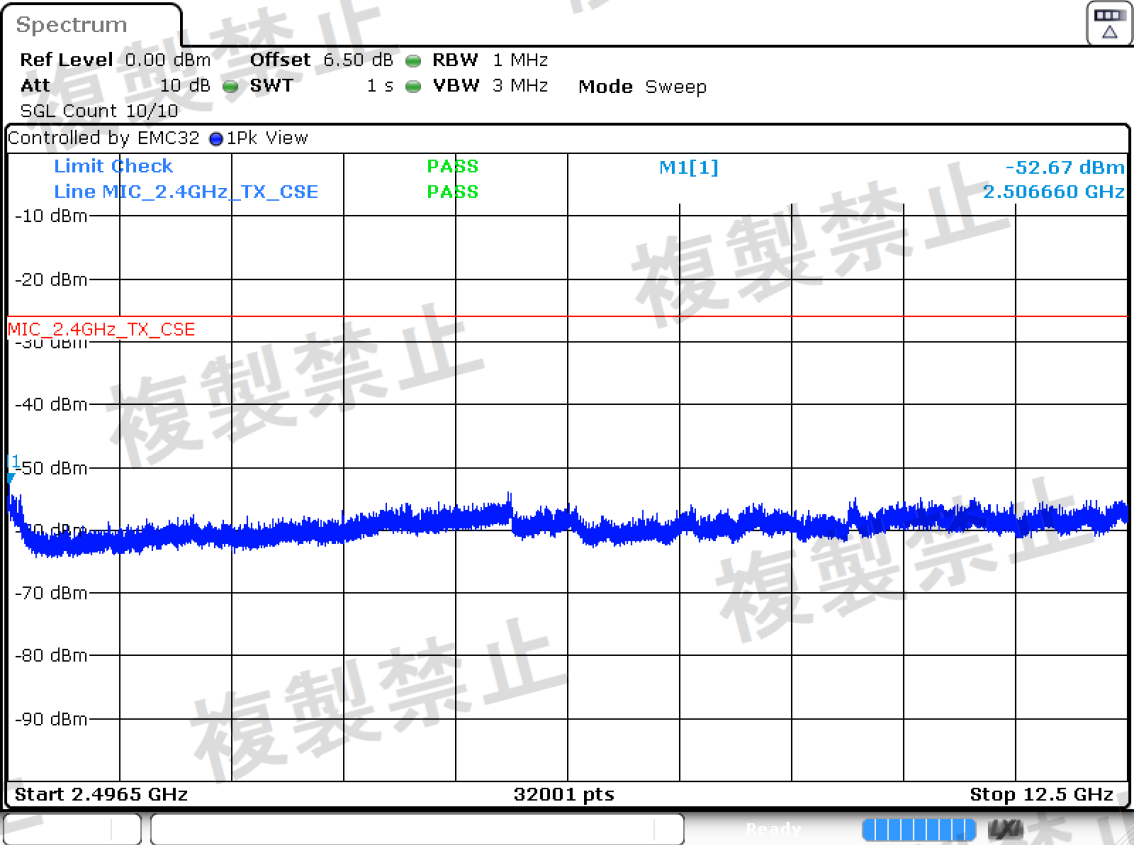
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 7

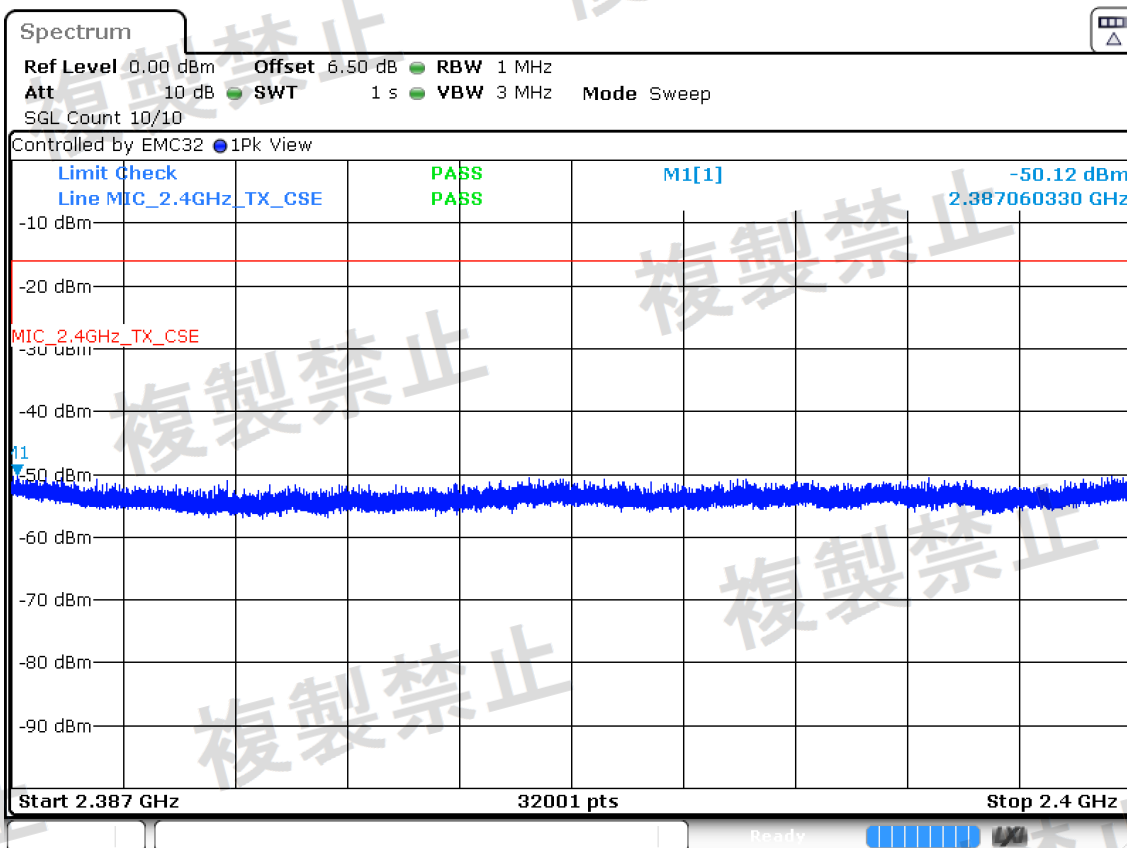
Active Port = A

Frequency Range GHz = [2.387, 2.4]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

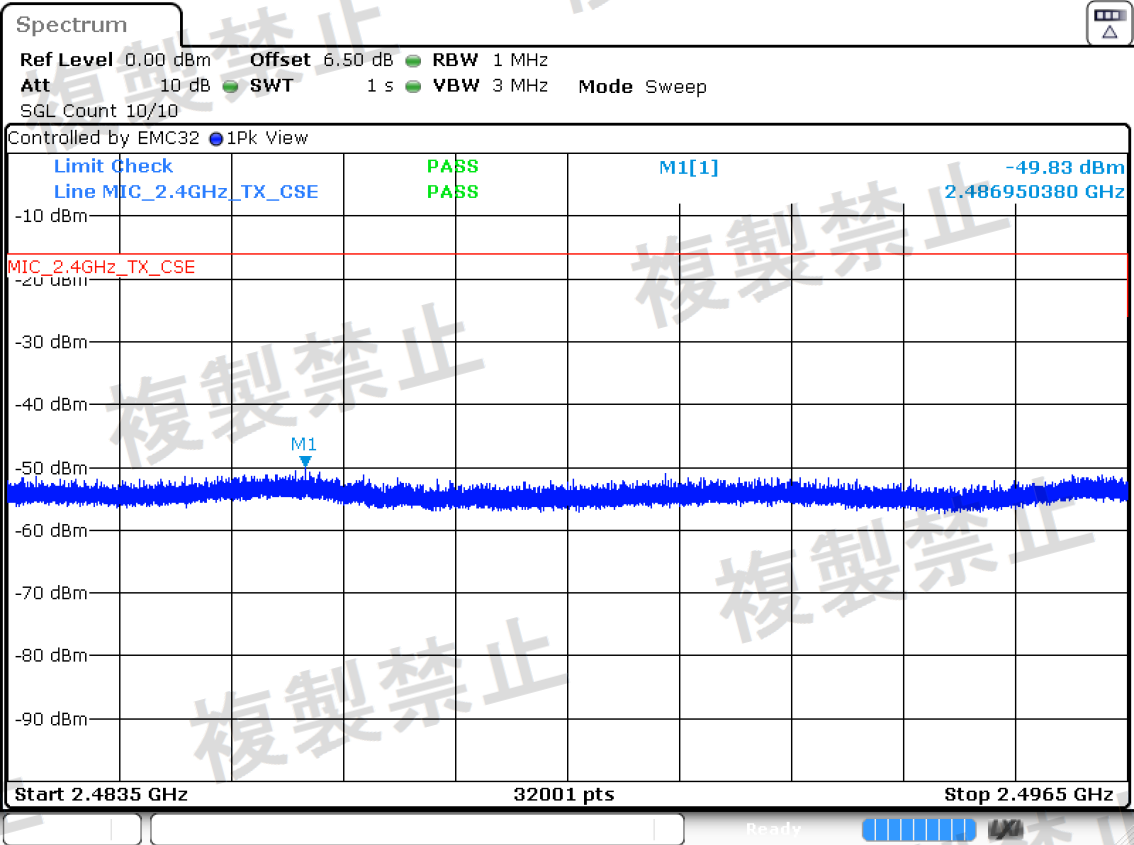
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 7

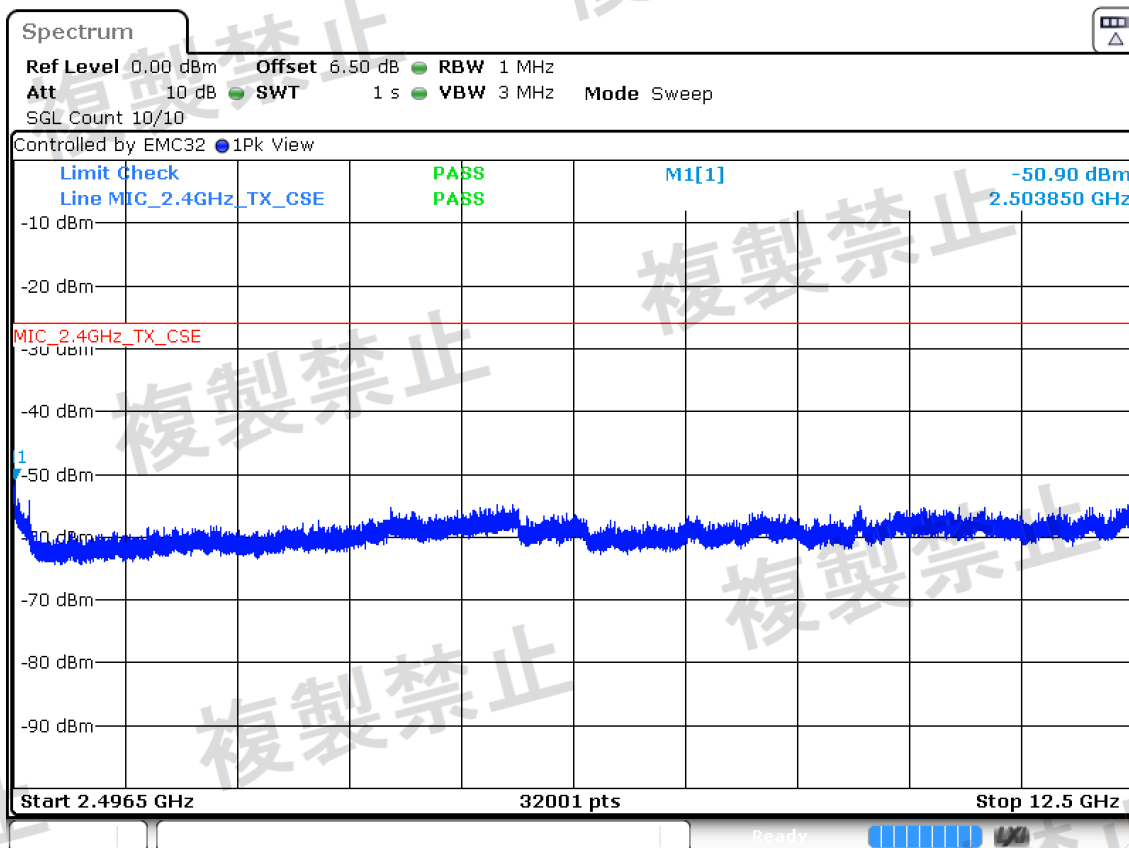
Active Port = A

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

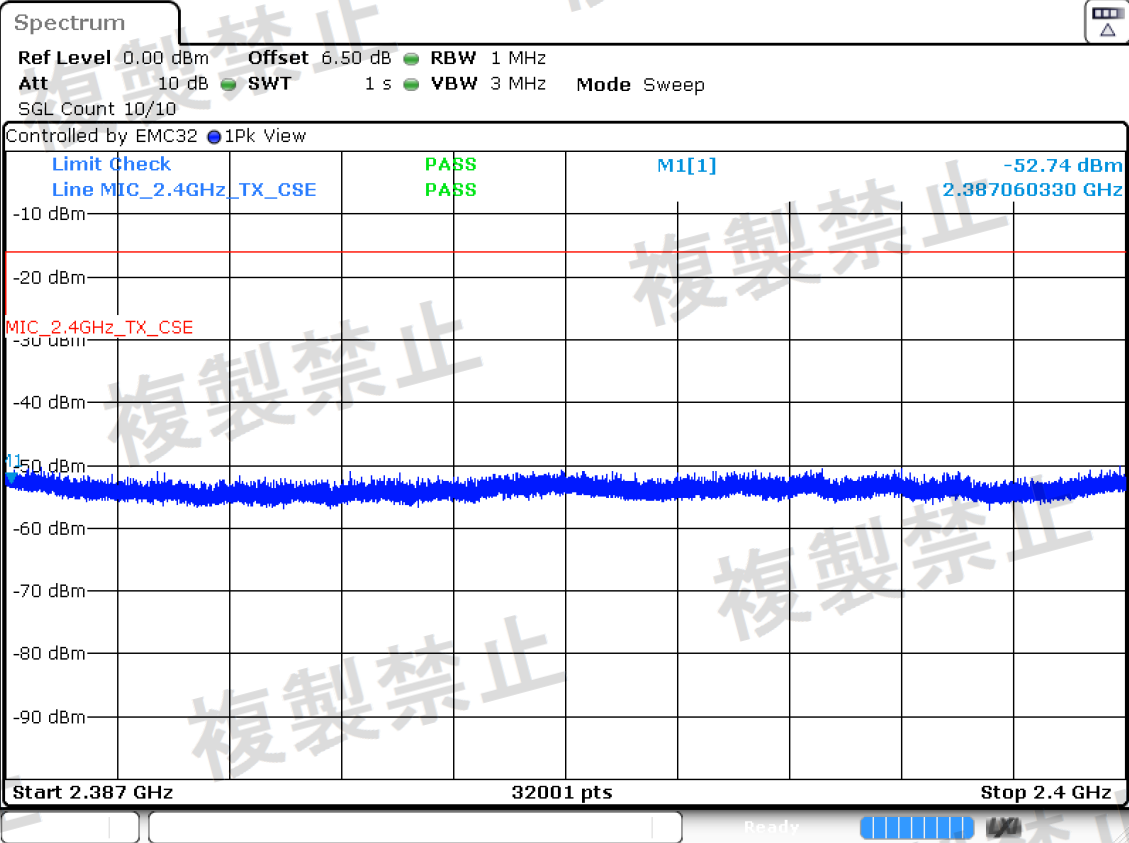
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

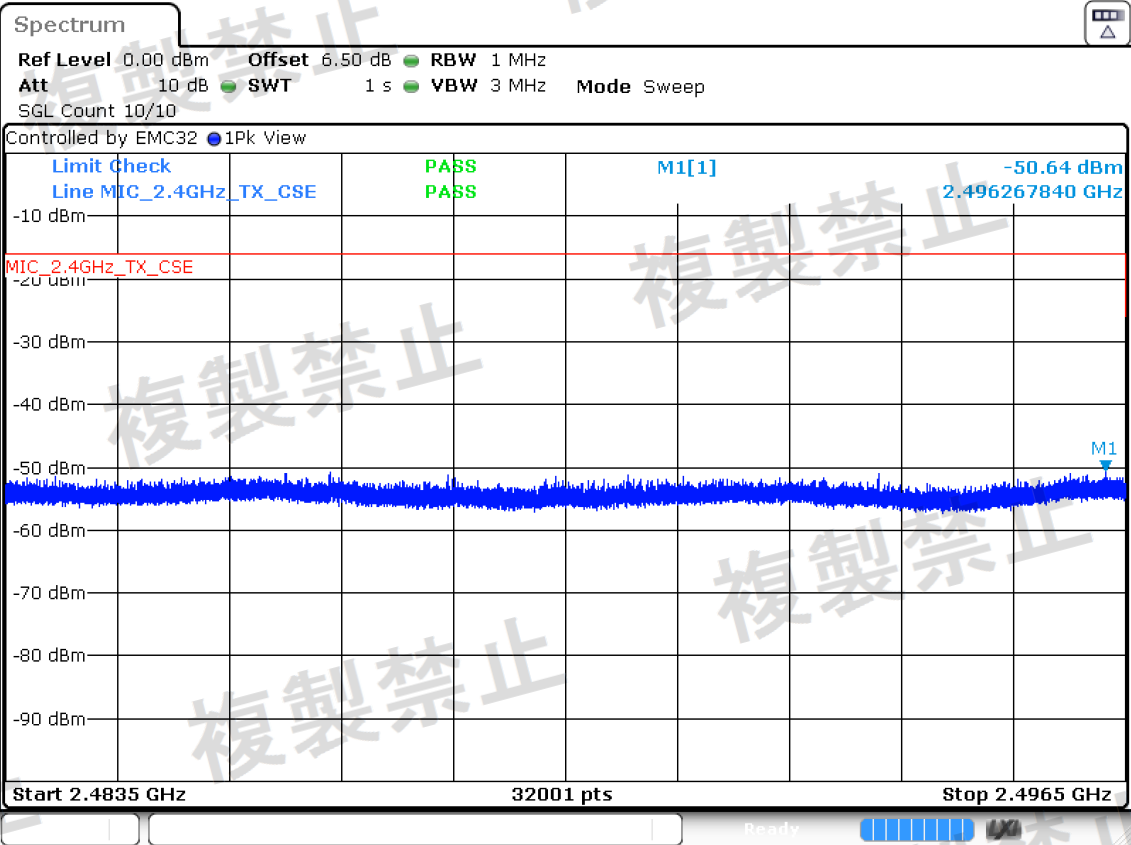
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 7

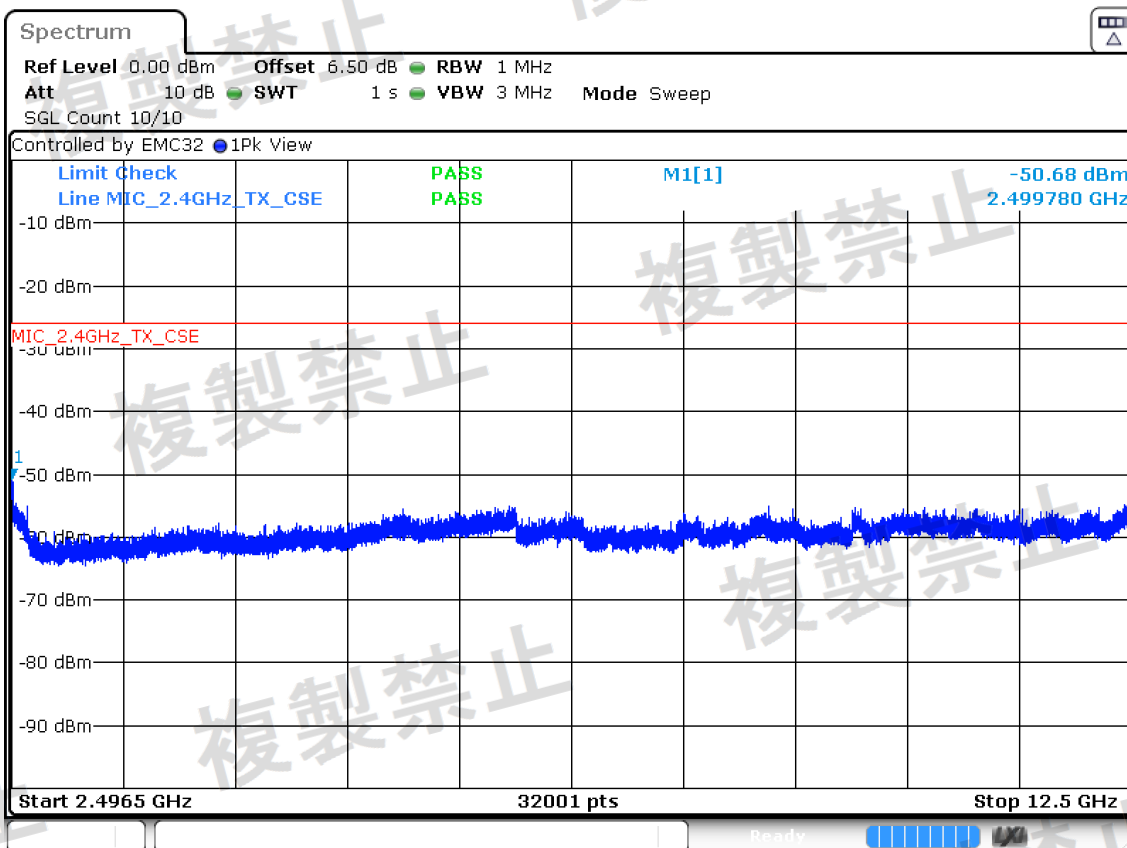
Active Port = B

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

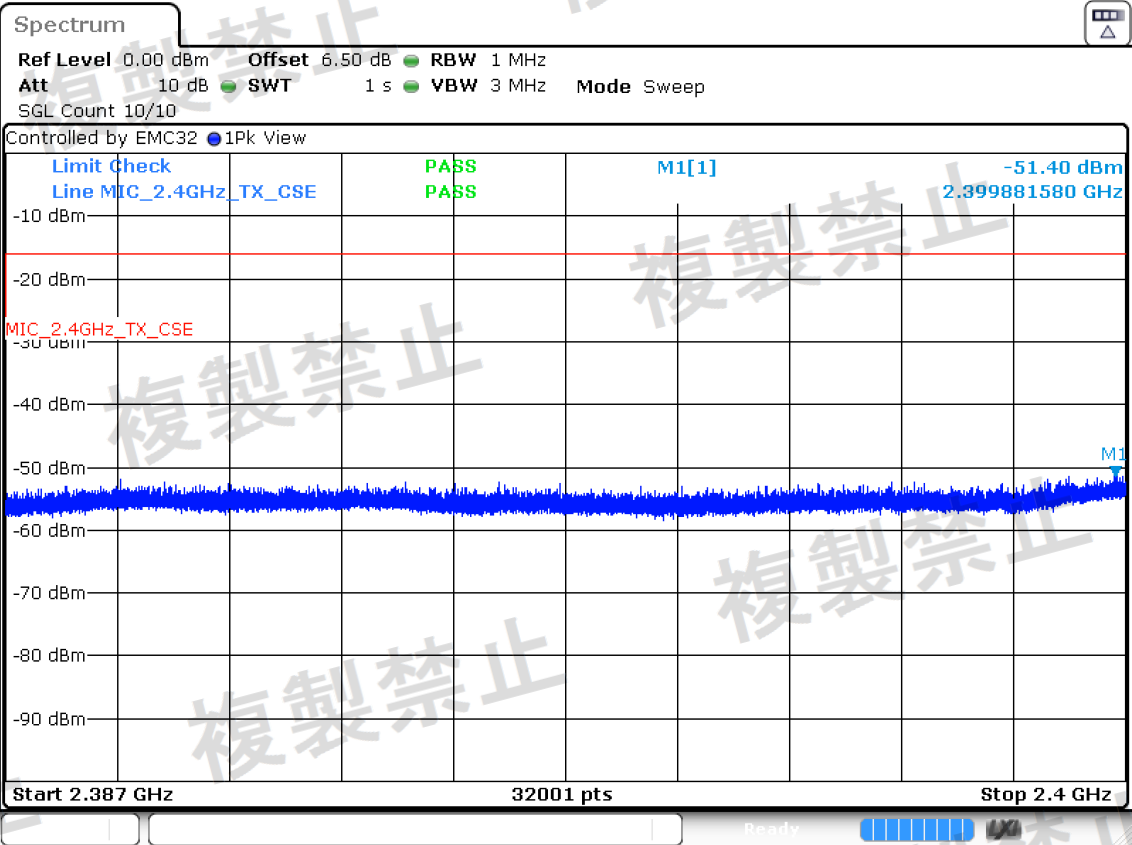
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

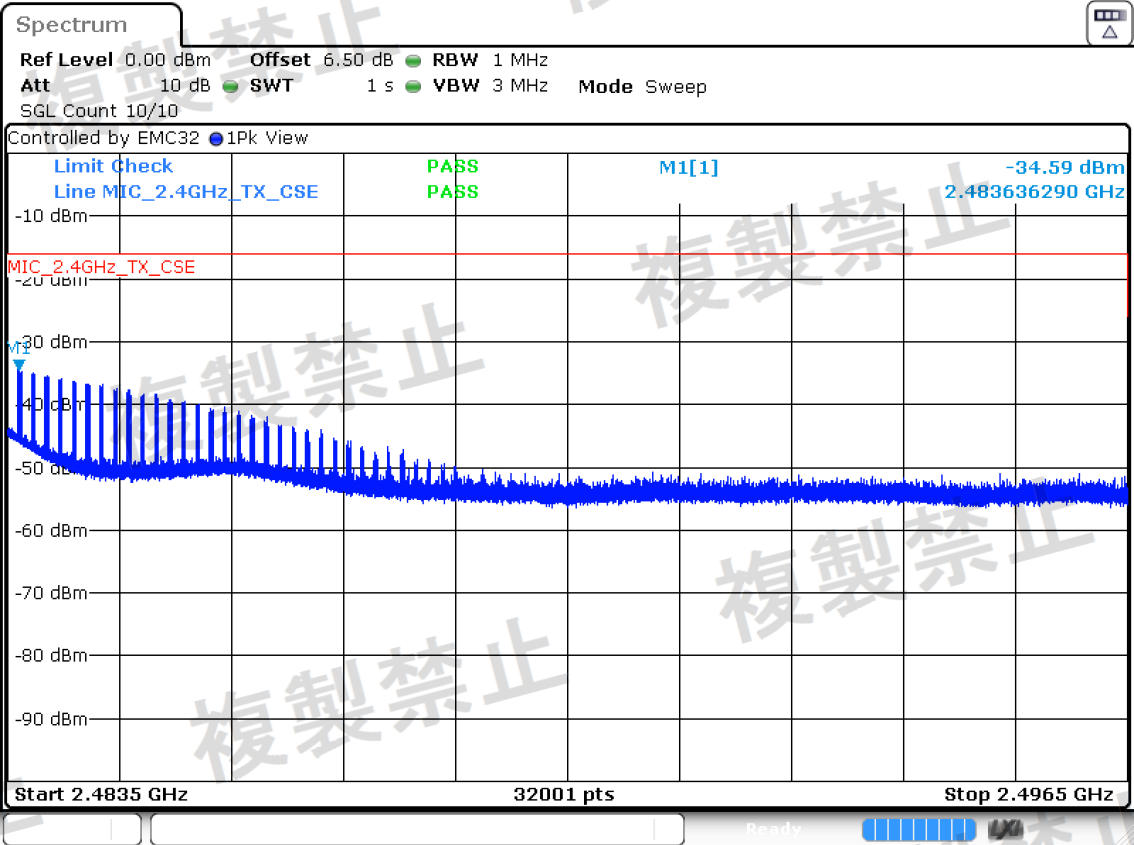
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

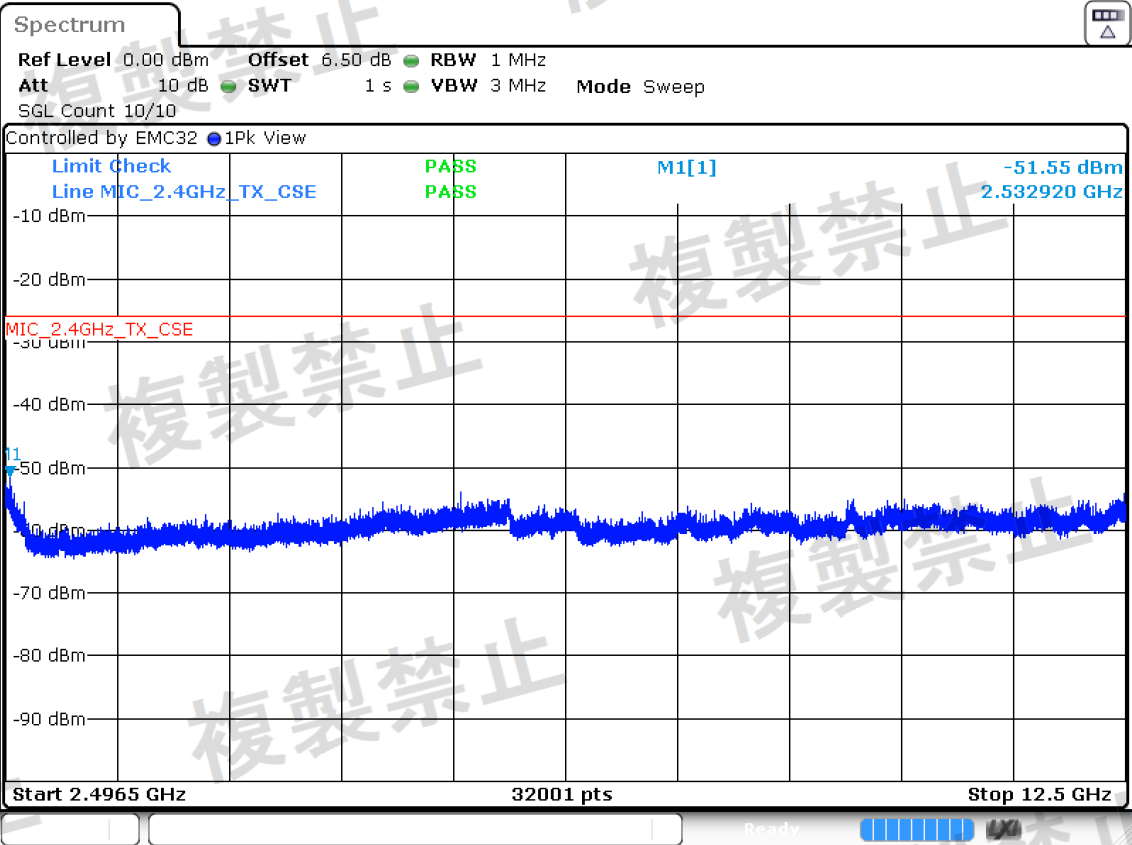
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

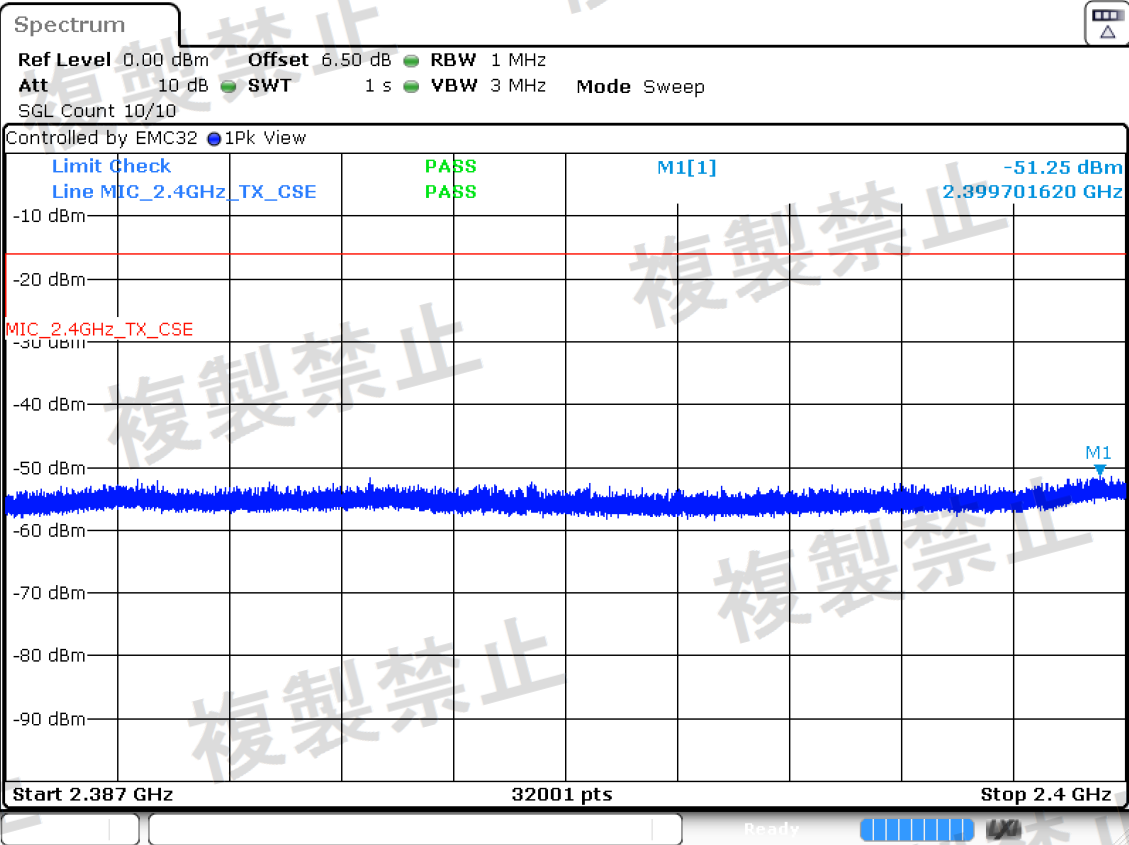
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

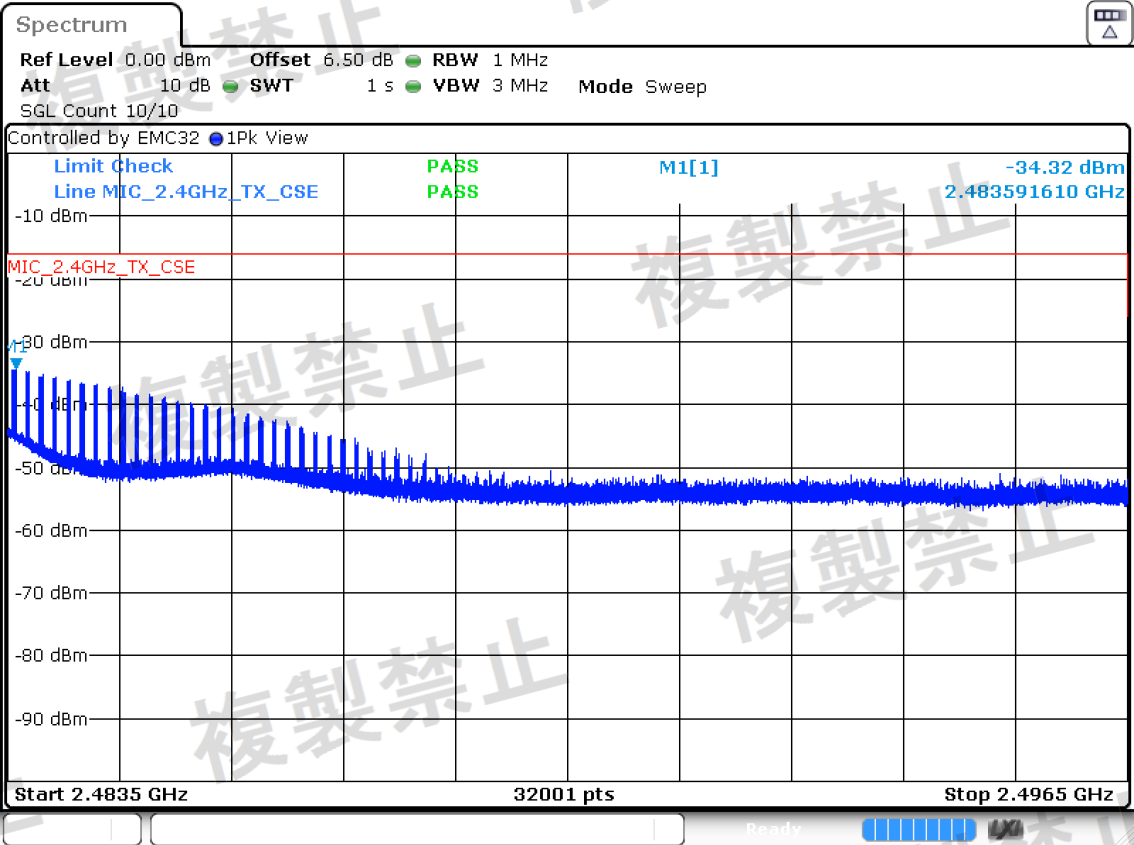
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11b (DSSS 1 Mbit/s)

Channel = 13

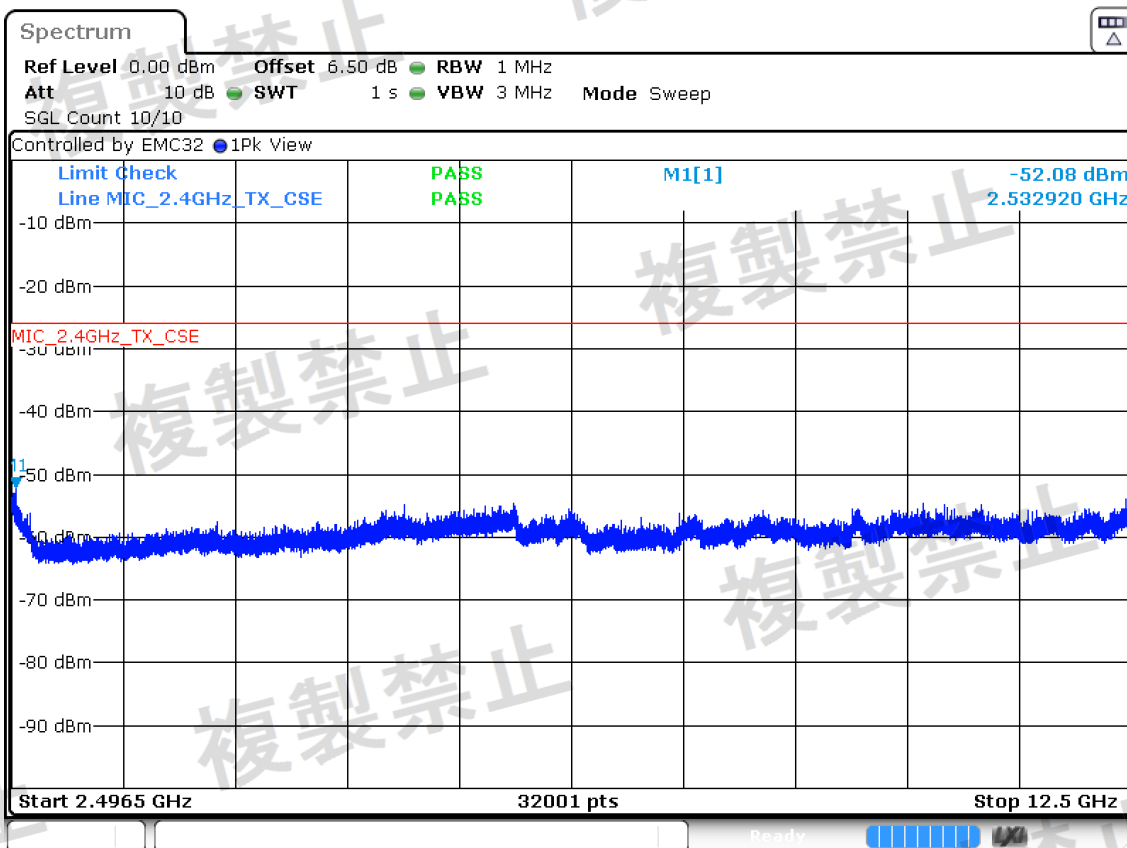
Active Port = B

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11n HT20 (OFDM MCS0) / MIMO Mode: MIMO CDD Mode 2x2

Ambient Temp (°C)	Test Voltage	Channel	Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	1	A	[0.03, 2.387]	2350.873	-45.18	0.0303	2.50
15.00	12	1	B	[0.03, 2.387]	2356.176	-44.88	0.0325	2.50
15.00	12	7	A	[0.03, 2.387]	2380.555	-44.47	0.0357	2.50
15.00	12	7	B	[0.03, 2.387]	2385.711	-45.18	0.0303	2.50
15.00	12	13	A	[0.03, 2.387]	2355.808	-48.53	0.0140	2.50
15.00	12	13	B	[0.03, 2.387]	2355.587	-49.84	0.0104	2.50
15.00	12	1	A+B	[0.03, 2.387]	2350.873	-42.02	0.0628	2.50
15.00	12	1	A	[2.387, 2.4]	2399.893	-23.38	4.5920	25.00
15.00	12	1	A	[2.4835, 2.4965]	2488.668	-52.60	0.0055	25.00
15.00	12	1	A	[2.4965, 12.5]	2601.690	-51.27	0.0075	2.50
15.00	12	1	B	[2.387, 2.4]	2399.990	-23.25	4.7315	25.00
15.00	12	1	B	[2.4835, 2.4965]	2485.243	-52.67	0.0054	25.00
15.00	12	1	B	[2.4965, 12.5]	2602.630	-50.20	0.0095	2.50
15.00	12	7	A+B	[0.03, 2.387]	2380.555	-41.80	0.0661	2.50
15.00	12	7	A	[2.387, 2.4]	2388.186	-44.88	0.0325	25.00
15.00	12	7	A	[2.4835, 2.4965]	2495.761	-45.34	0.0292	25.00
15.00	12	7	A	[2.4965, 12.5]	2505.410	-46.29	0.0235	2.50
15.00	12	7	B	[2.387, 2.4]	2389.486	-44.91	0.0323	25.00
15.00	12	7	B	[2.4835, 2.4965]	2495.710	-45.78	0.0264	25.00
15.00	12	7	B	[2.4965, 12.5]	2500.720	-43.58	0.0439	2.50
15.00	12	13	A+B	[0.03, 2.387]	2355.808	-46.13	0.0244	2.50
15.00	12	13	A	[2.387, 2.4]	2395.224	-52.46	0.0057	25.00
15.00	12	13	A	[2.4835, 2.4965]	2483.521	-24.37	3.6559	25.00
15.00	12	13	A	[2.4965, 12.5]	2527.290	-41.68	0.0679	2.50
15.00	12	13	B	[2.387, 2.4]	2399.360	-52.94	0.0051	25.00
15.00	12	13	B	[2.4835, 2.4965]	2483.542	-24.48	3.5645	25.00
15.00	12	13	B	[2.4965, 12.5]	2528.230	-40.02	0.0995	2.50
15.00	12	1	A+B	[2.387, 2.4]	2399.893	-20.30	9.3235	25.00
15.00	12	1	A+B	[2.4835, 2.4965]	2488.668	-49.62	0.0109	25.00
15.00	12	1	A+B	[2.4965, 12.5]	2601.690	-47.69	0.0170	2.50
15.00	12	7	A+B	[2.387, 2.4]	2388.186	-41.88	0.0648	25.00
15.00	12	7	A+B	[2.4835, 2.4965]	2495.761	-42.54	0.0557	25.00
15.00	12	7	A+B	[2.4965, 12.5]	2505.410	-41.72	0.0673	2.50
15.00	12	13	A+B	[2.387, 2.4]	2395.224	-49.68	0.0108	25.00
15.00	12	13	A+B	[2.4835, 2.4965]	2483.521	-21.41	7.2205	25.00
15.00	12	13	A+B	[2.4965, 12.5]	2527.290	-37.76	0.1675	2.50

Verdict

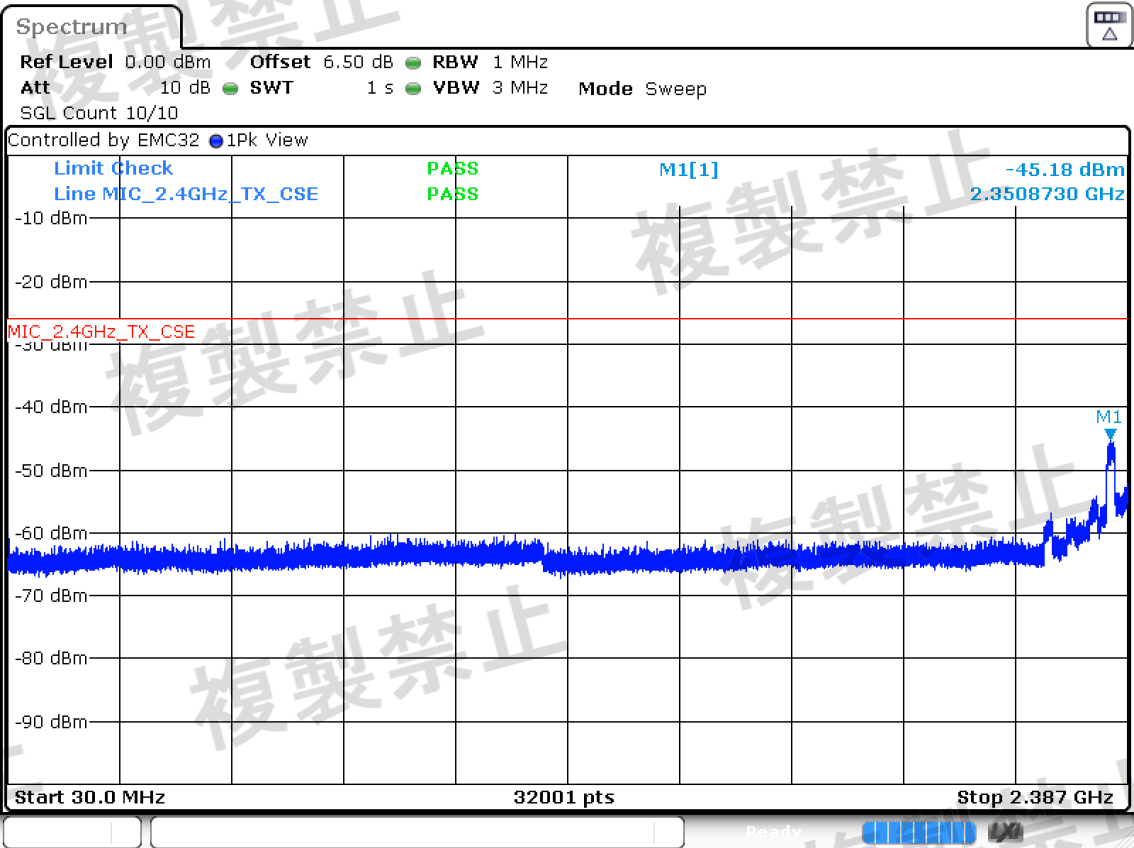
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

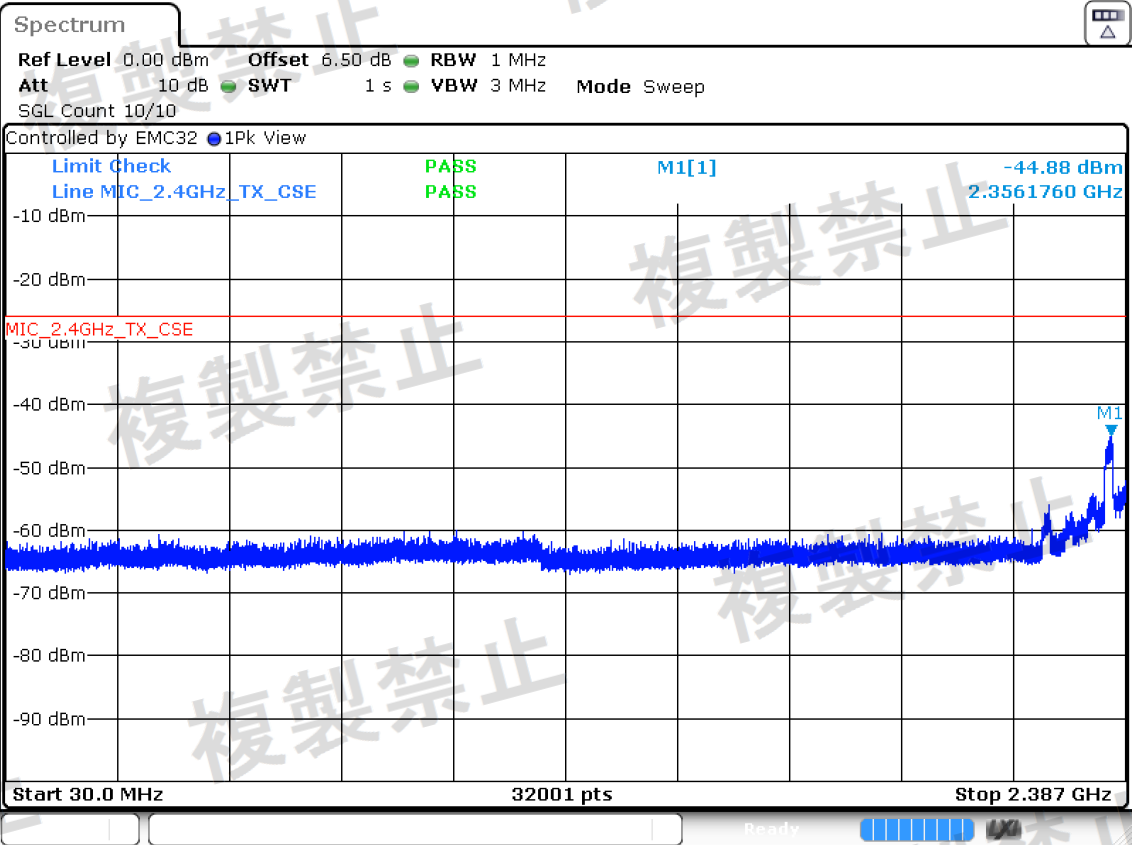
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

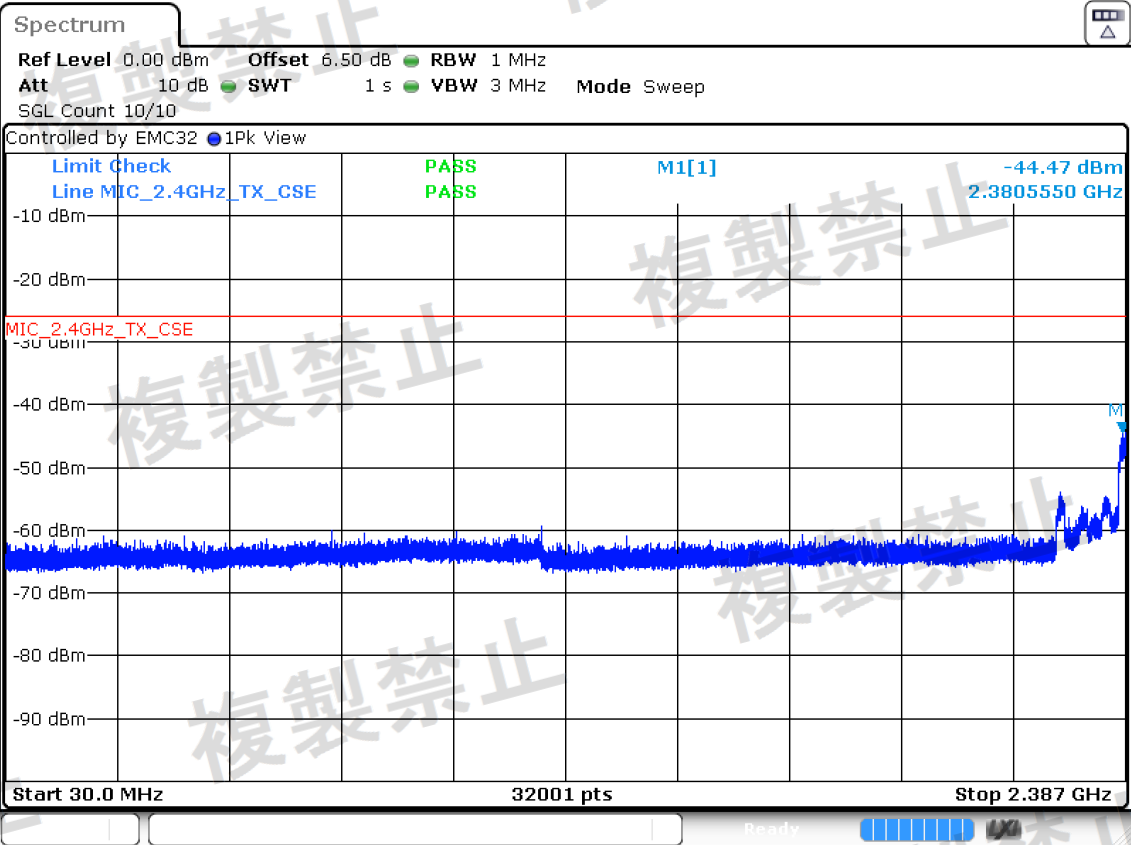
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

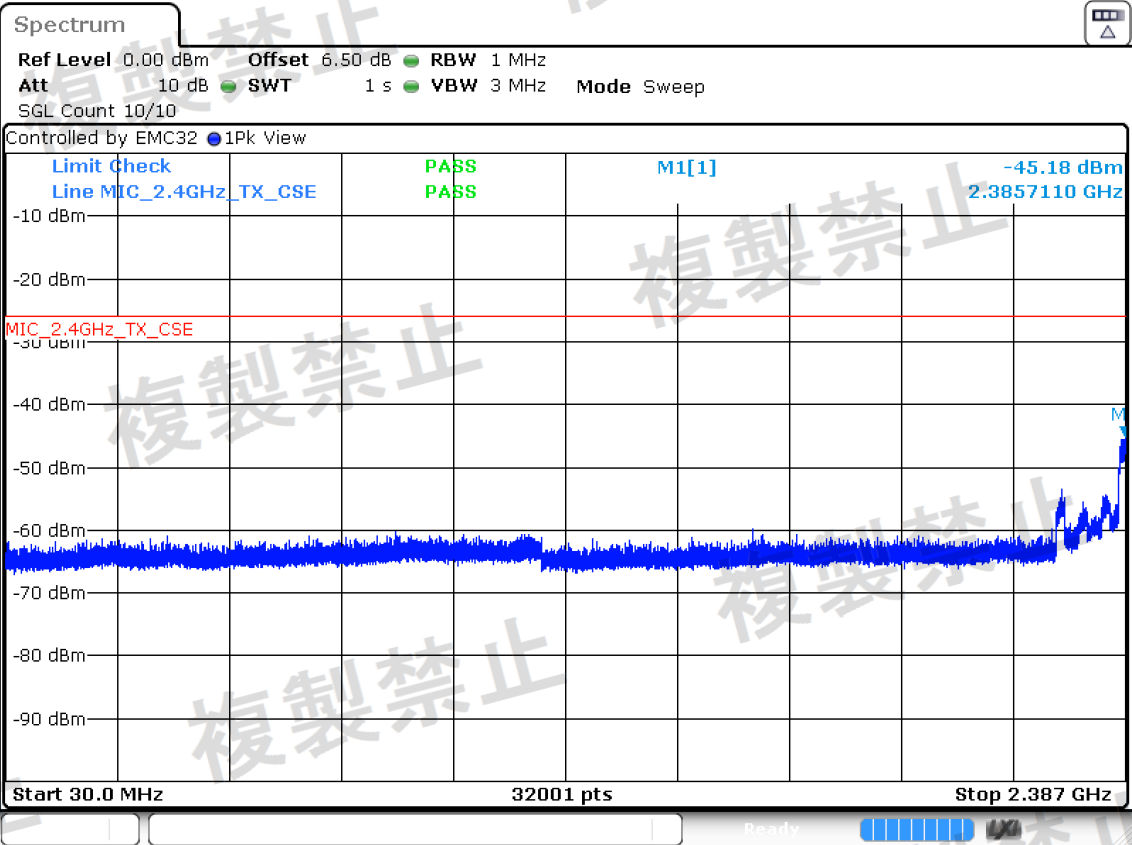
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

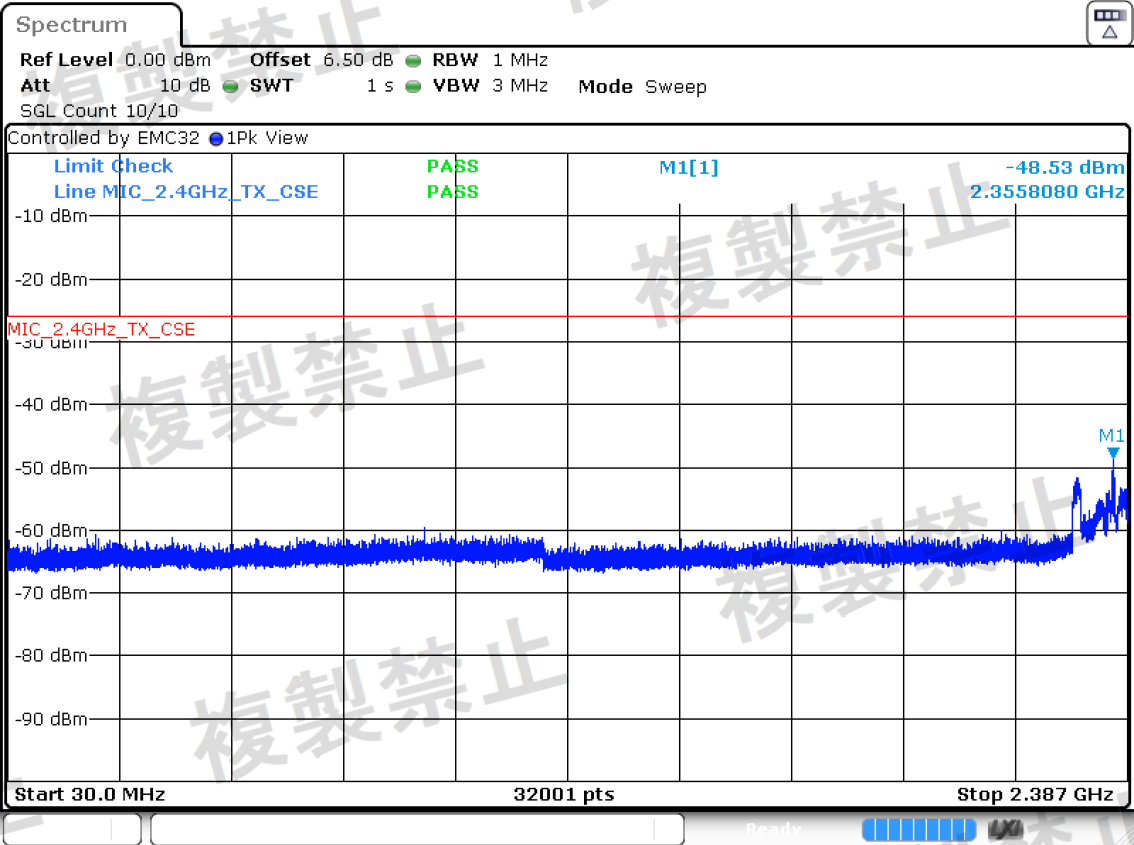
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

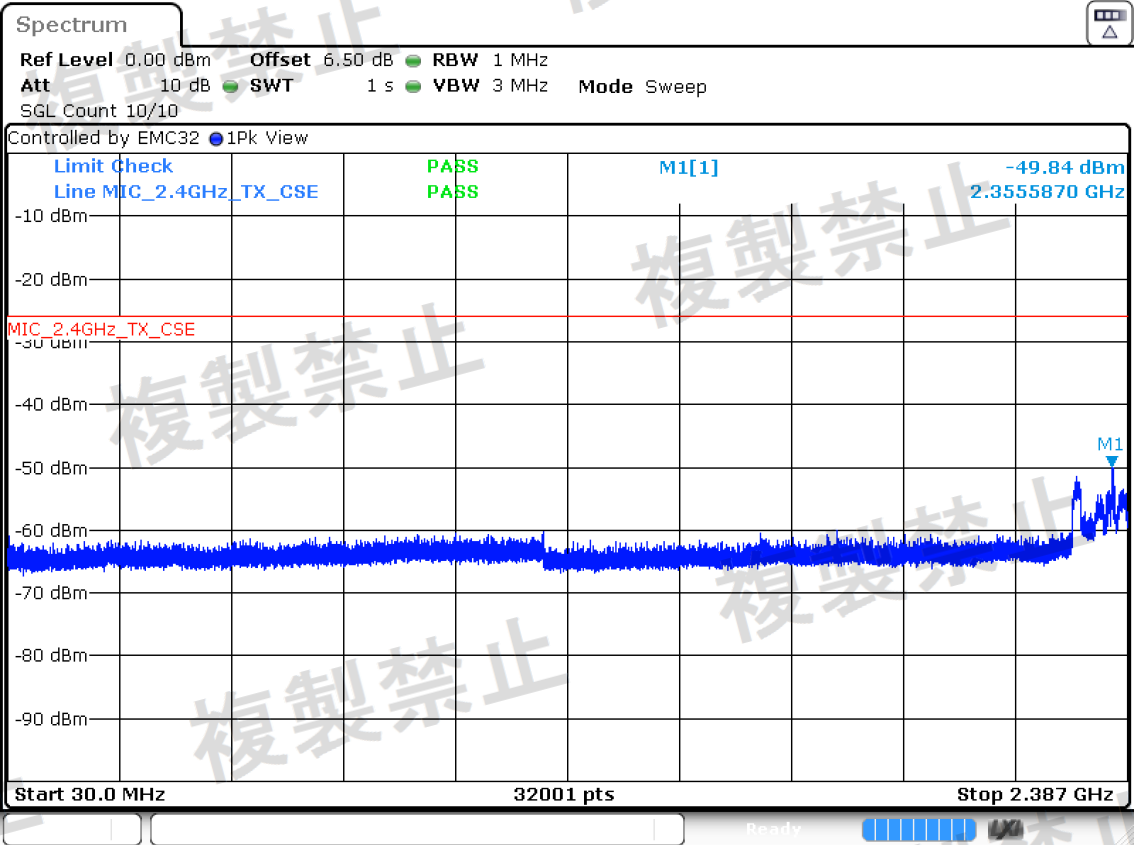
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

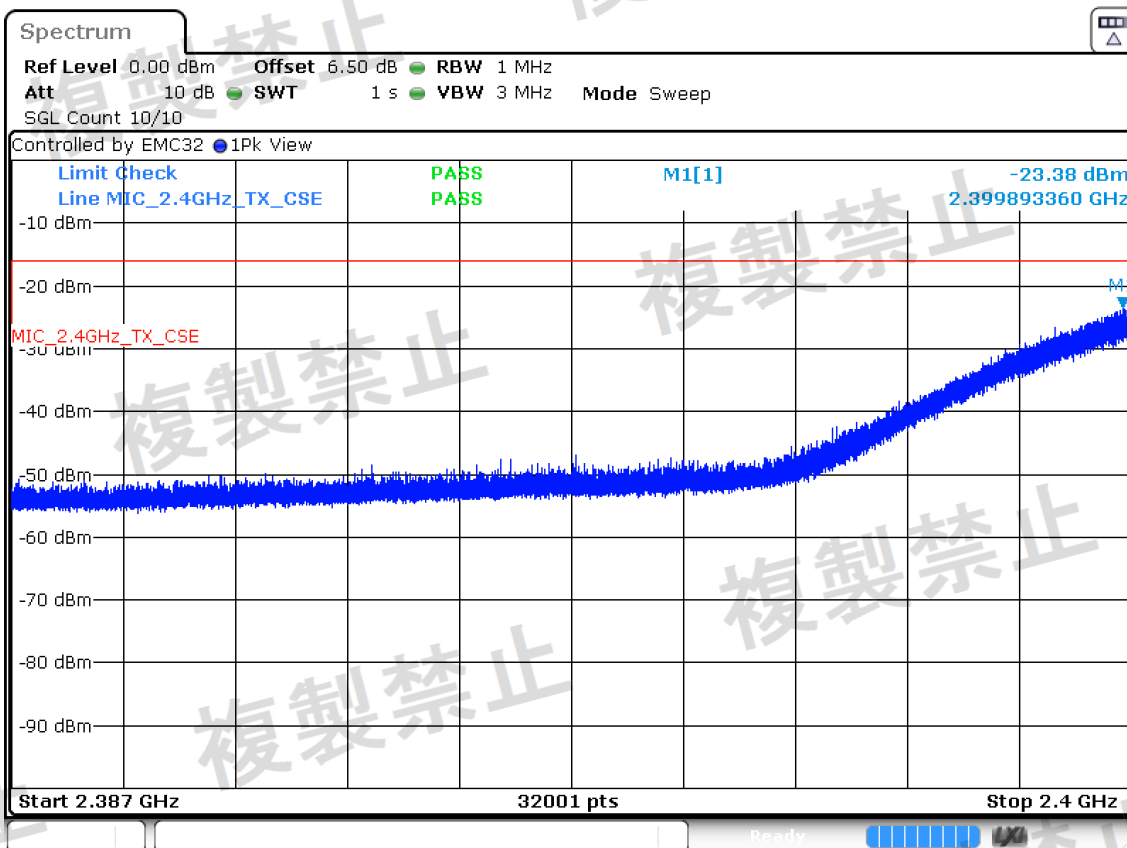
Active Port = A

Frequency Range GHz = [2.387, 2.4]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

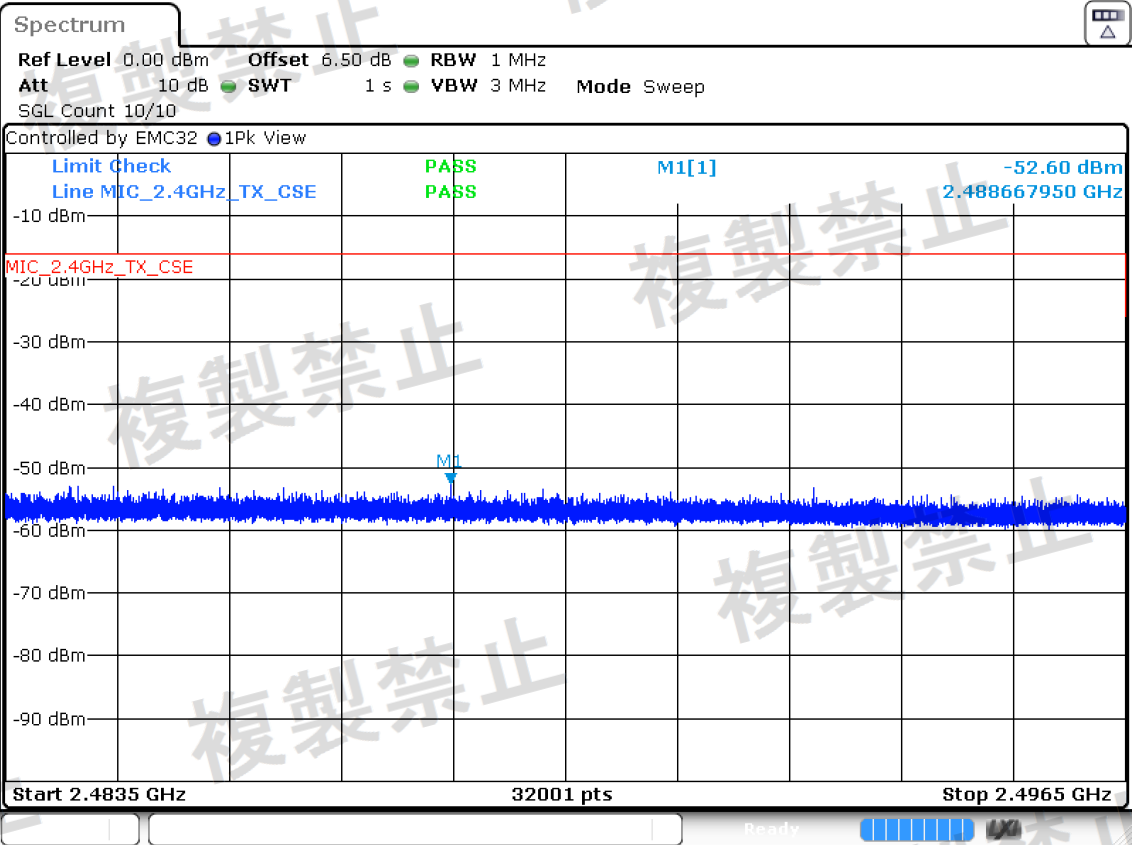
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

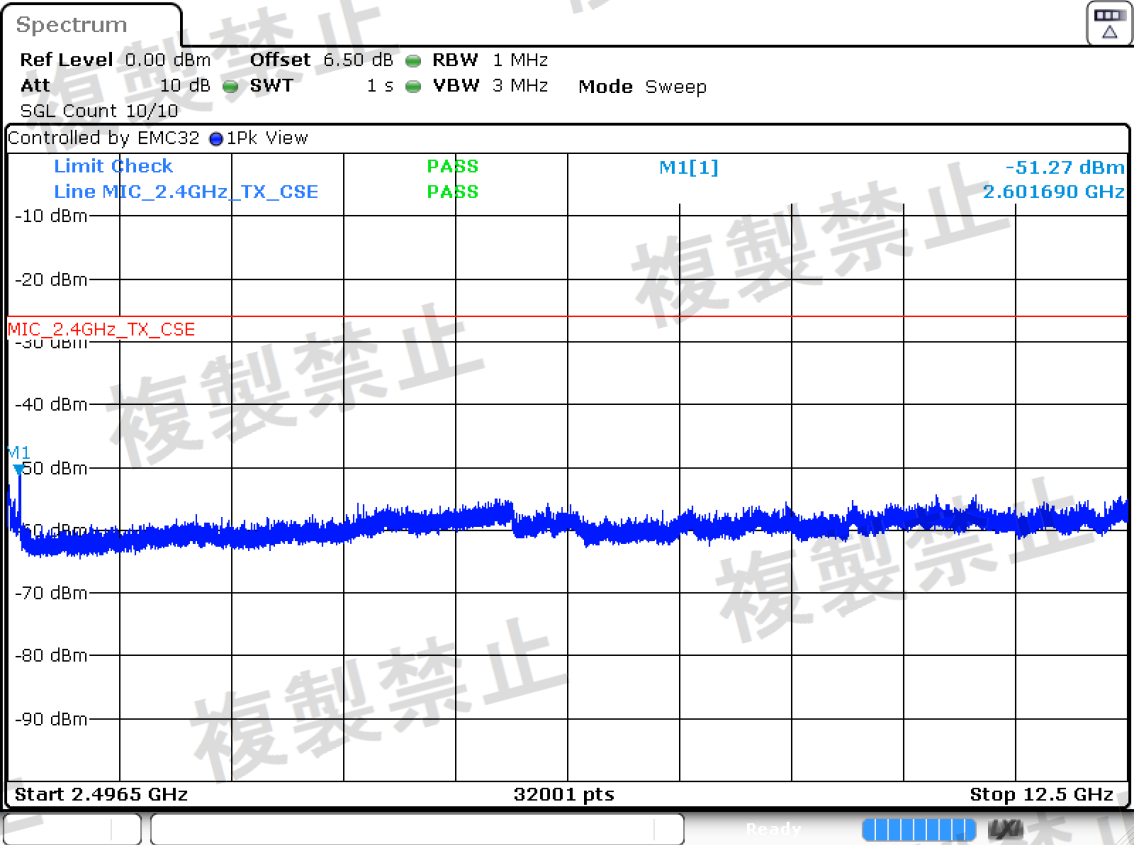
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Active Port = A Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

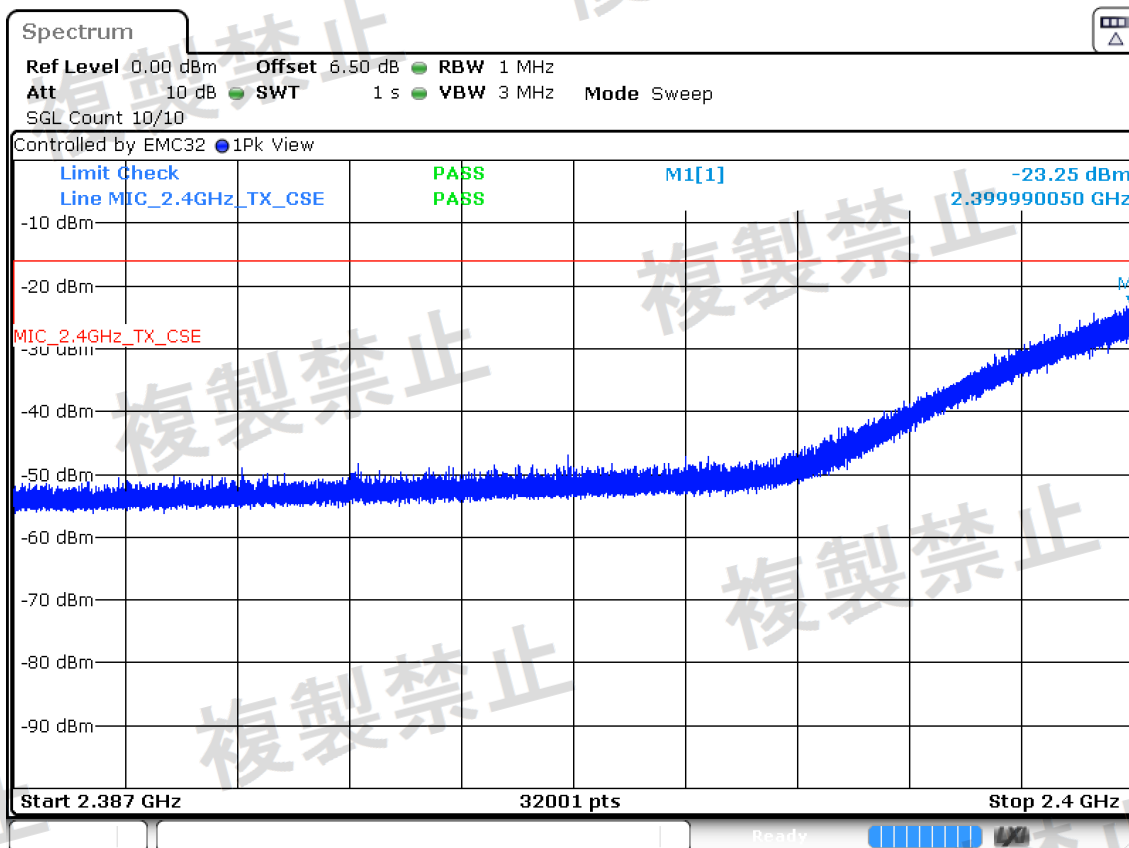
Active Port = B

Frequency Range GHz = [2.387, 2.4]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

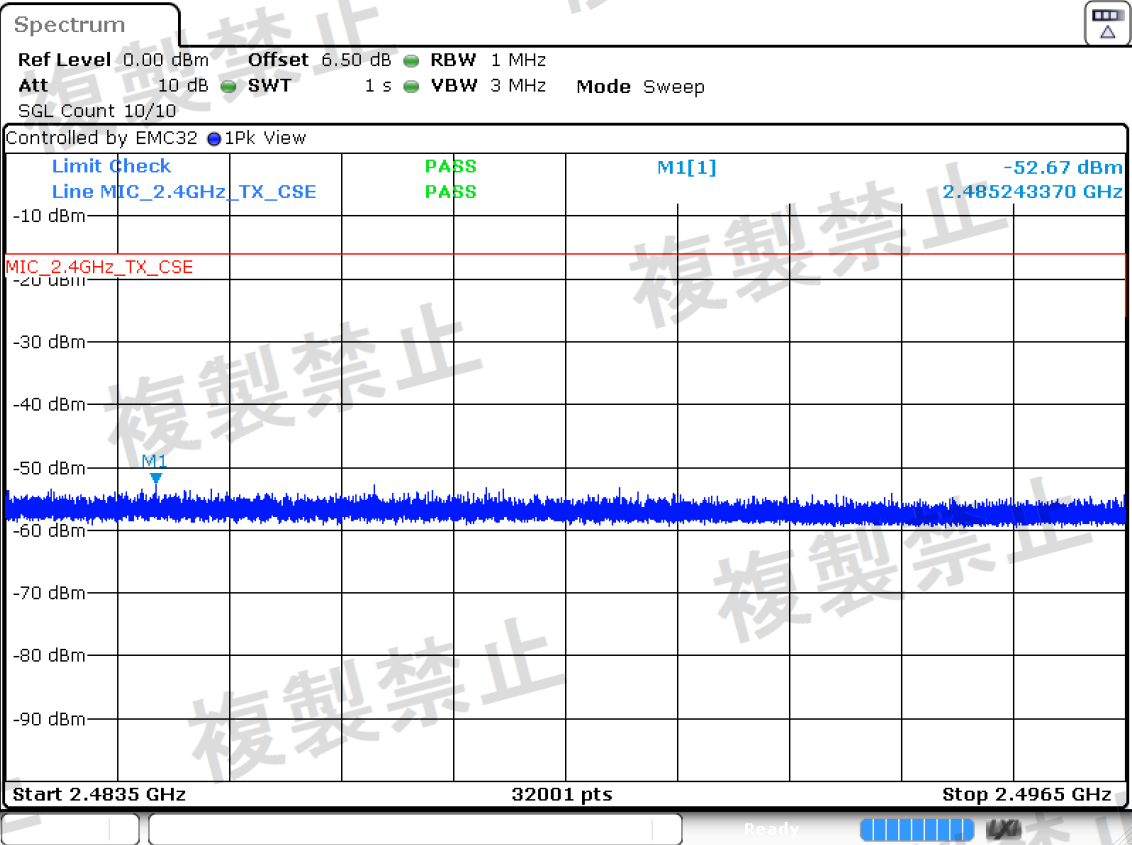
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 1
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 1

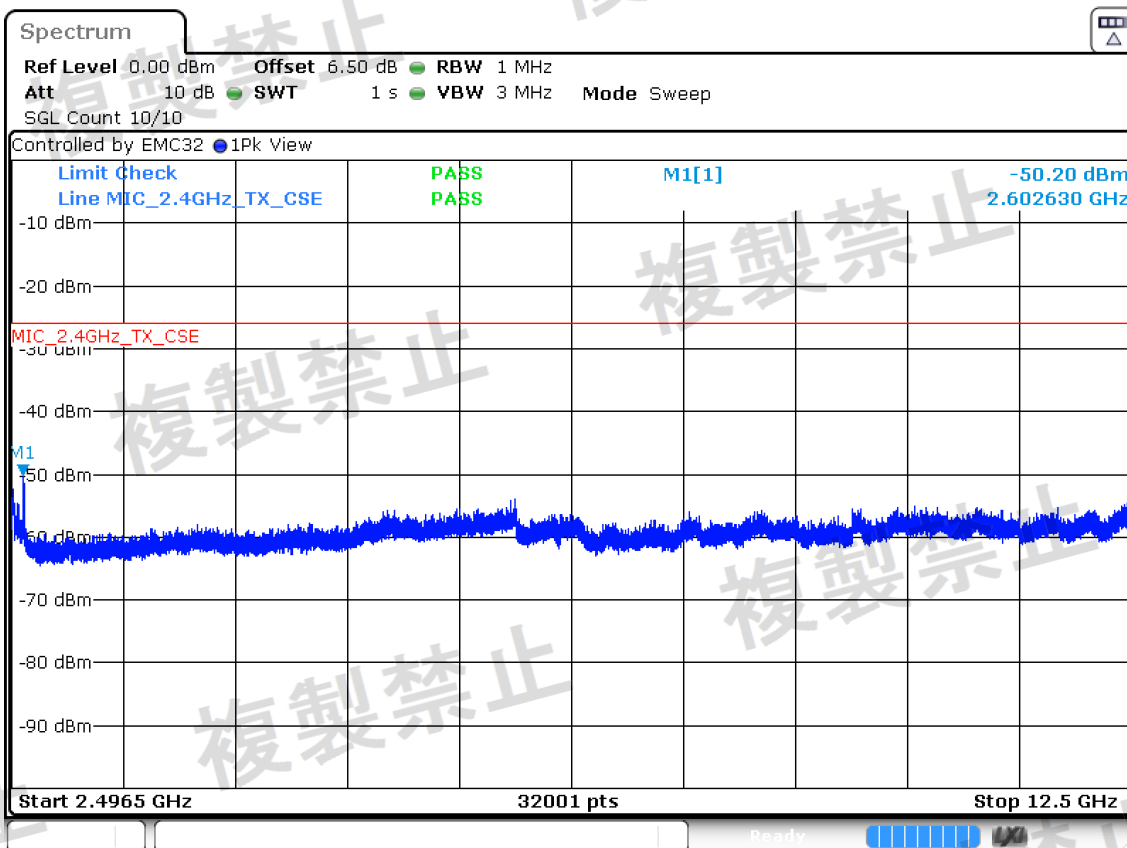
Active Port = B

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

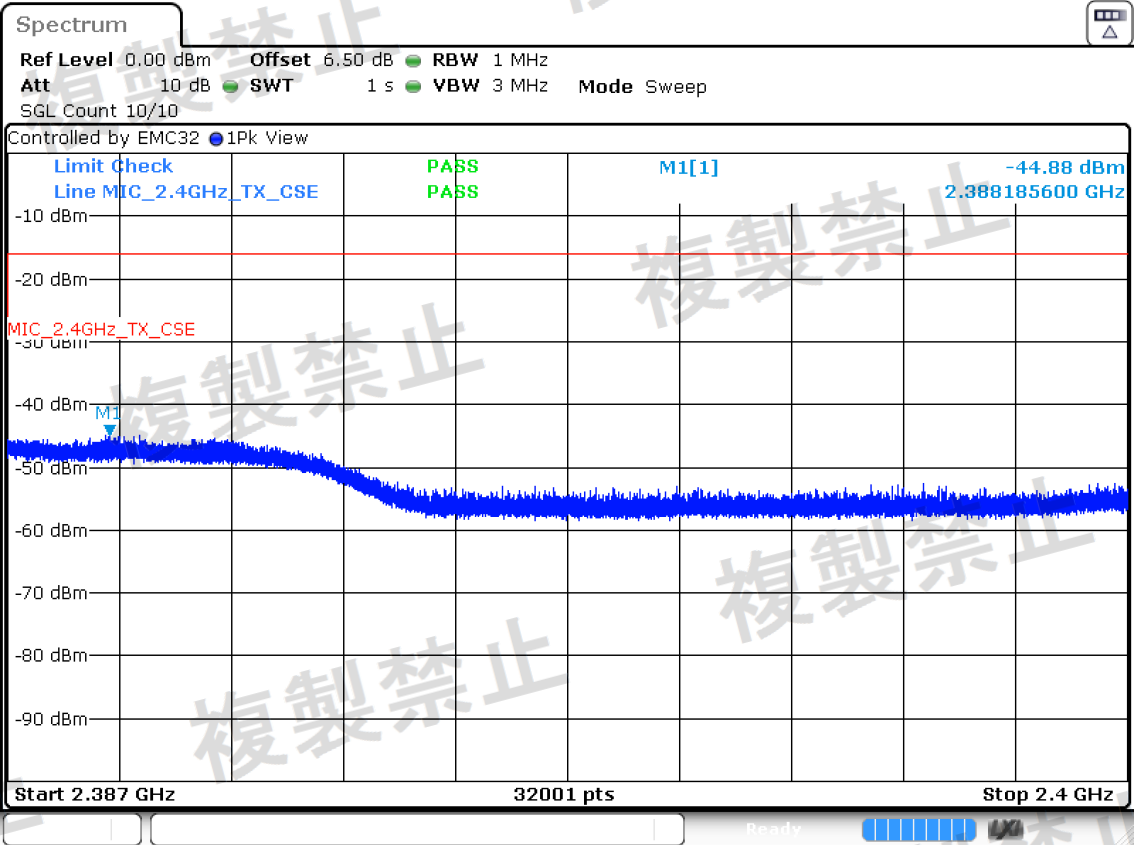
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

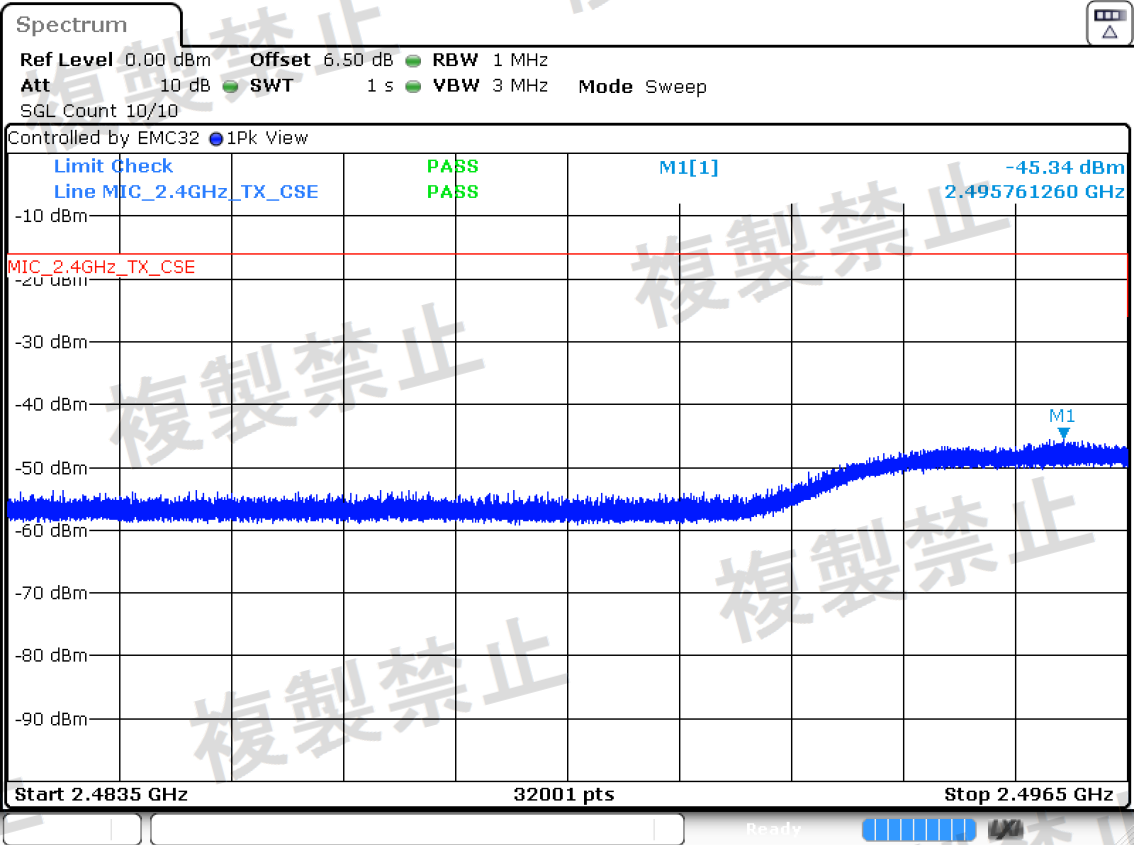
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

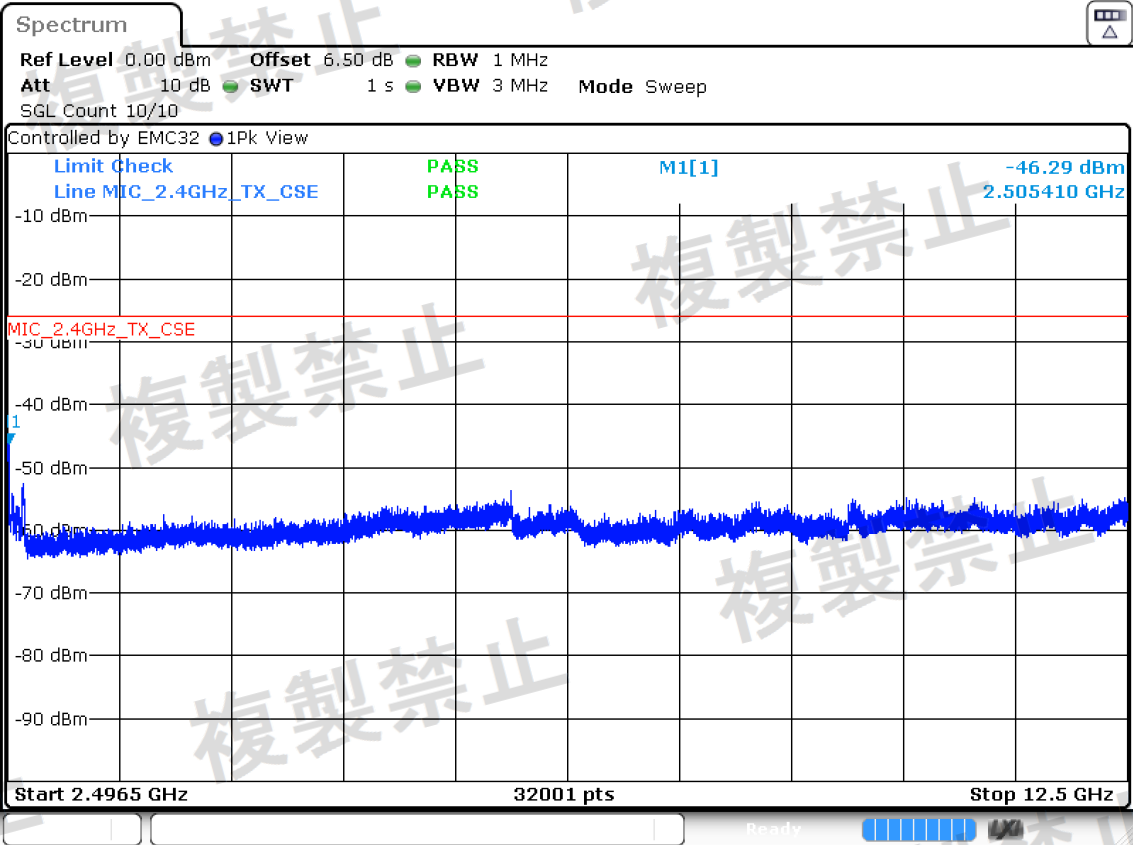
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = A Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 7

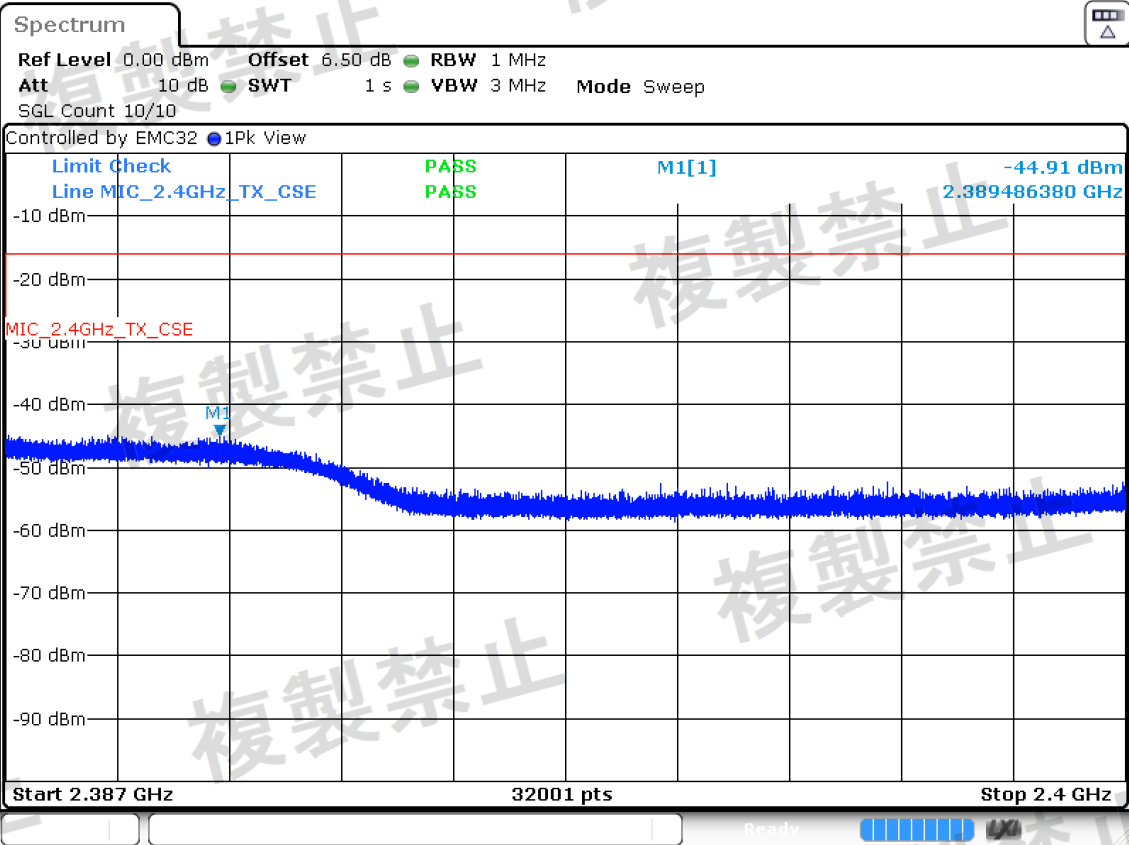
Active Port = B

Frequency Range GHz = [2.387, 2.4]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

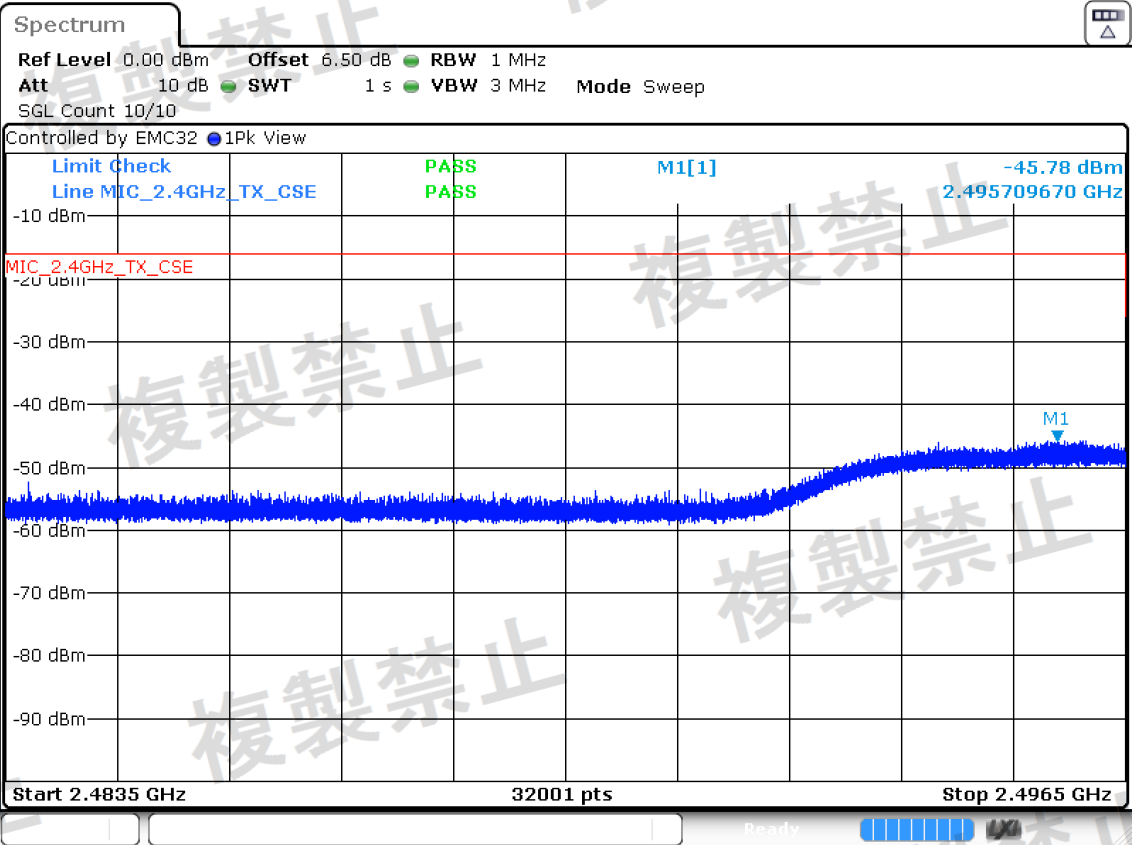
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

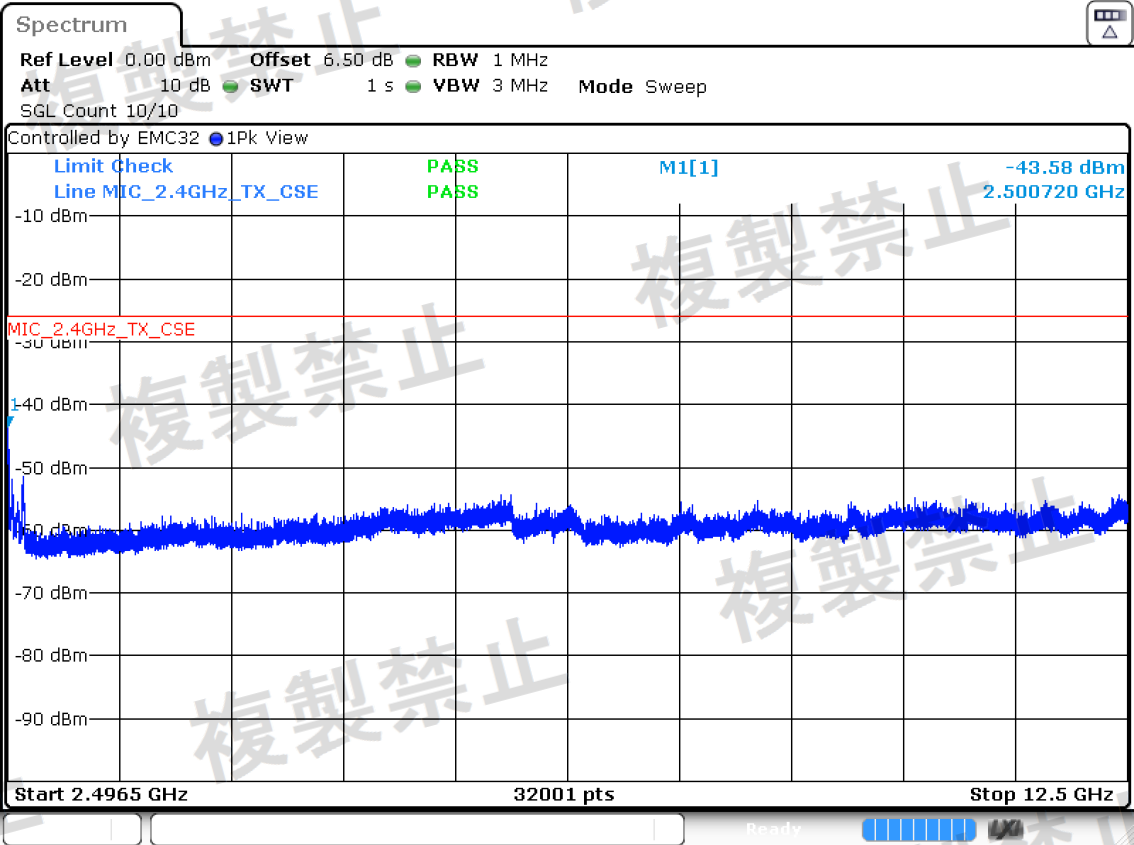
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 7
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

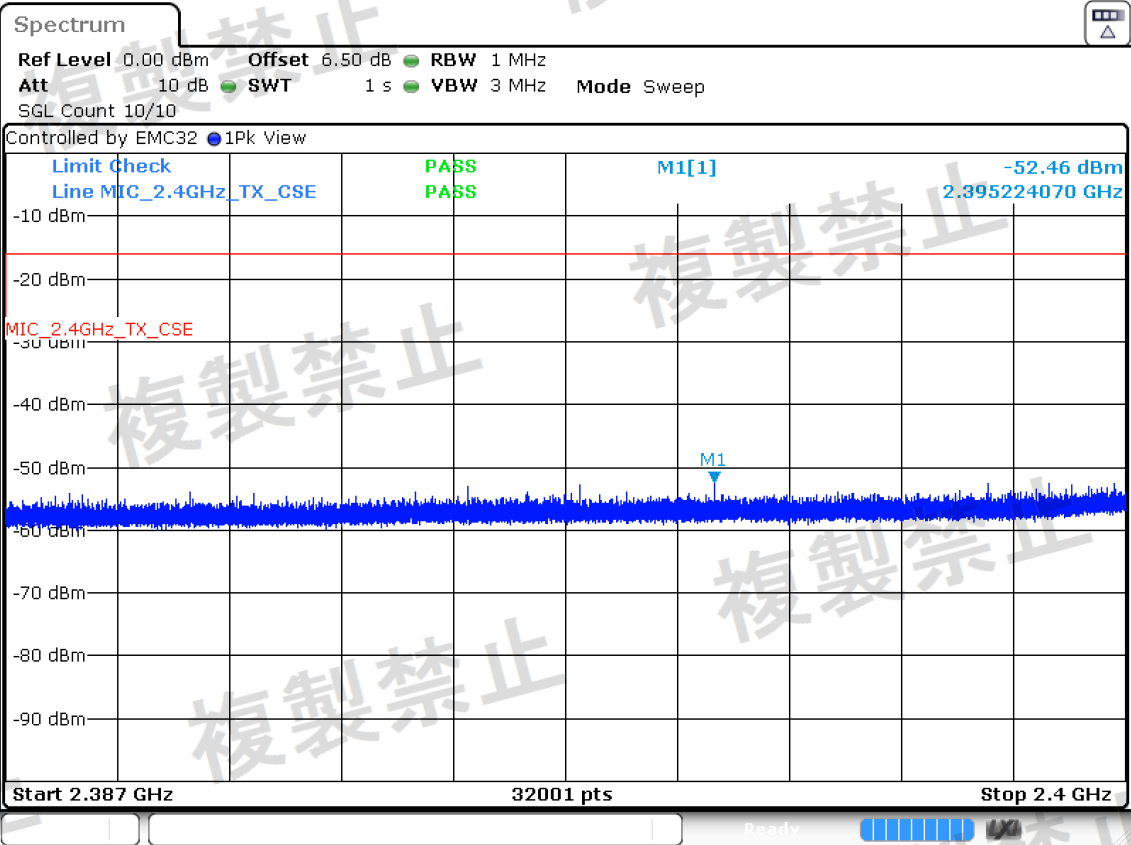
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

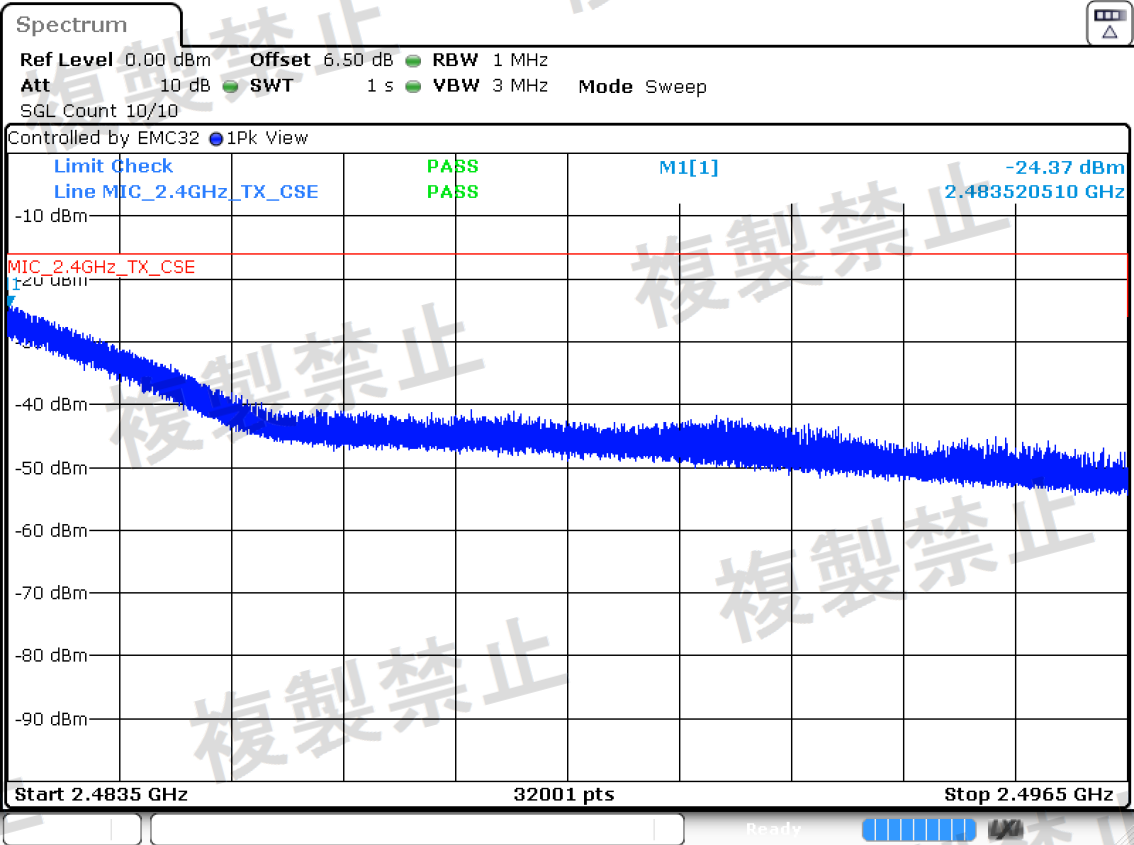
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11n HT20 (OFDM MCS0)

Channel = 13

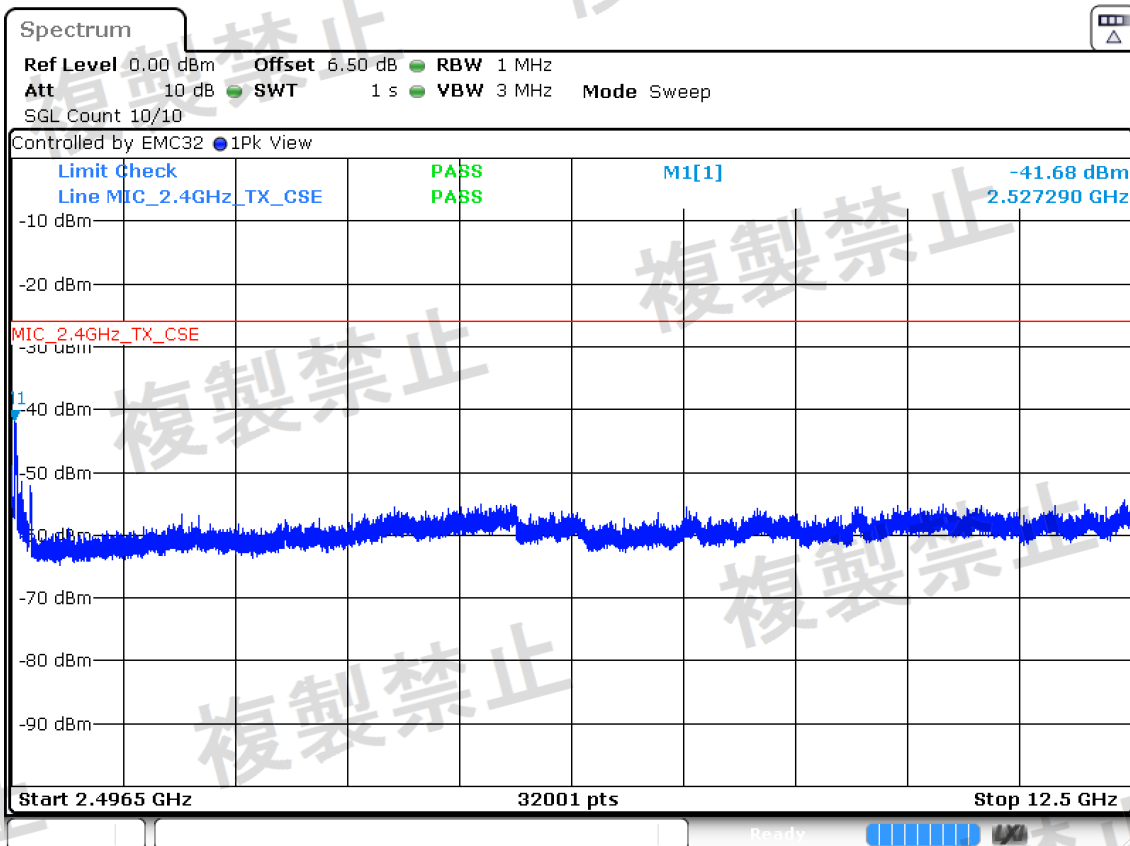
Active Port = A

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

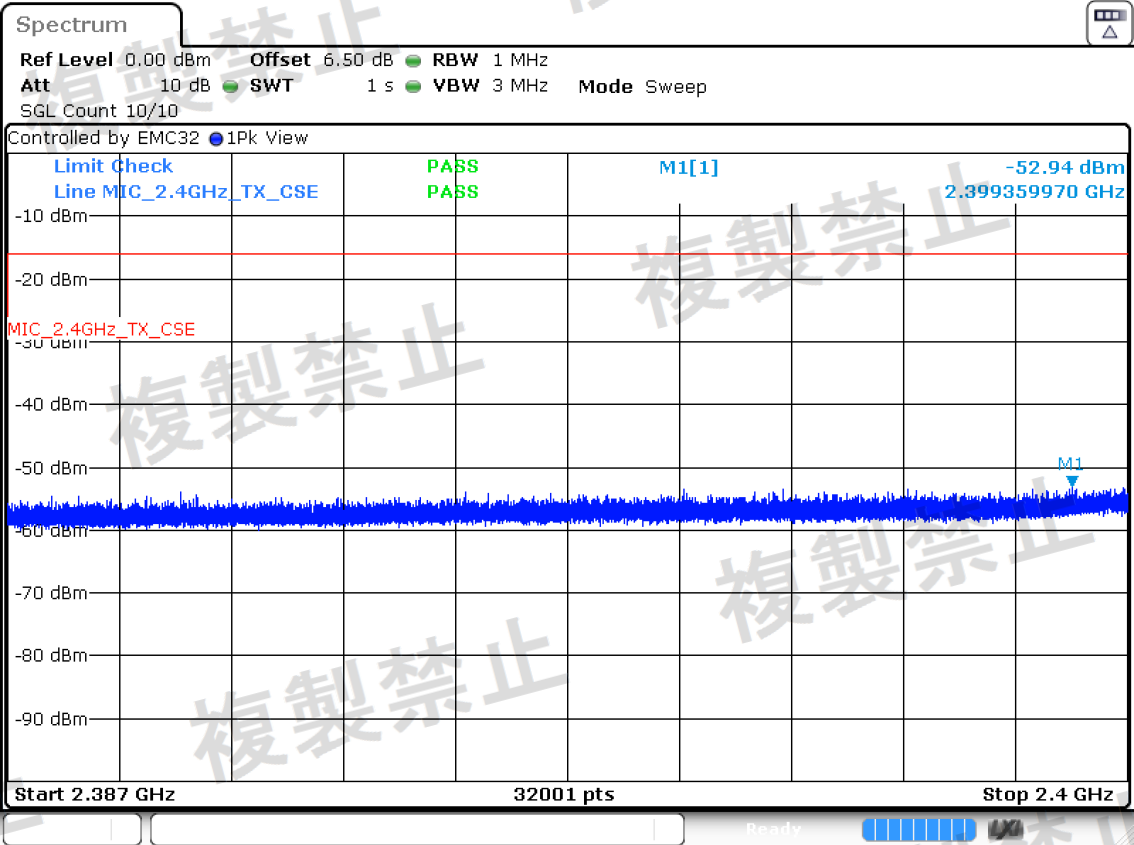
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

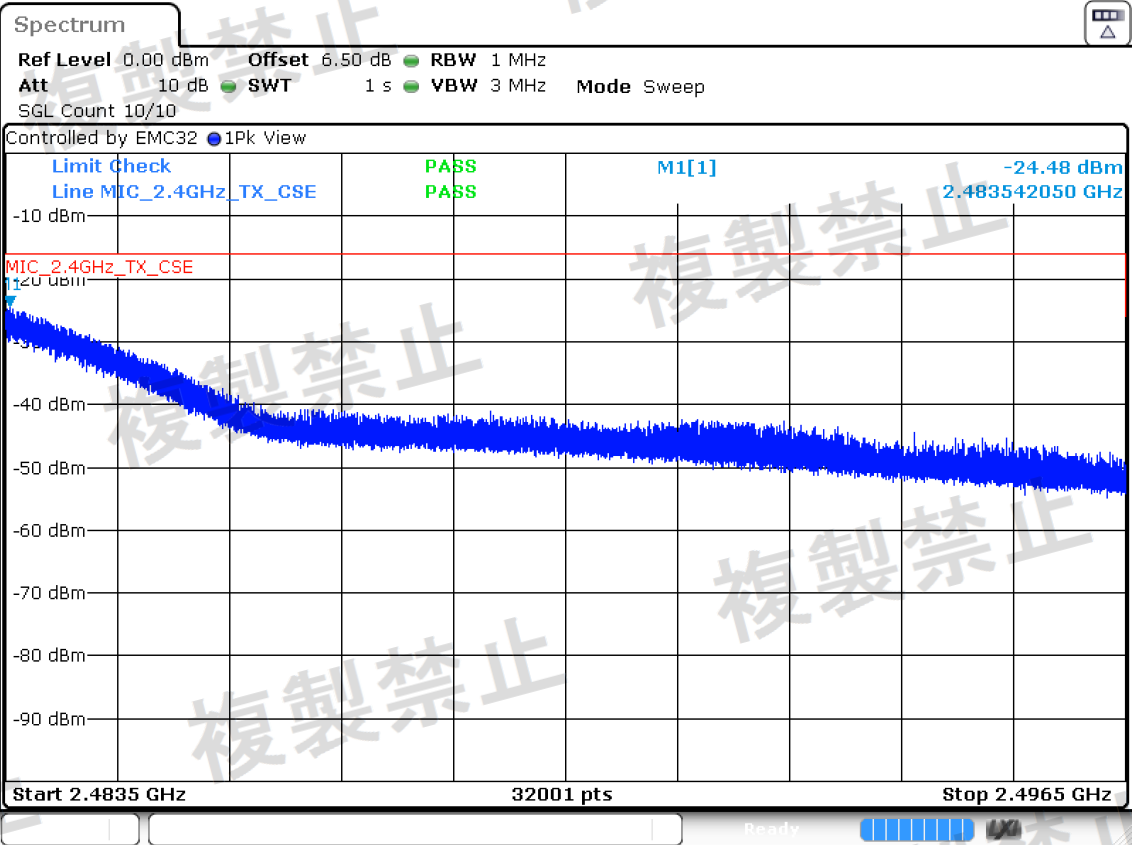
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

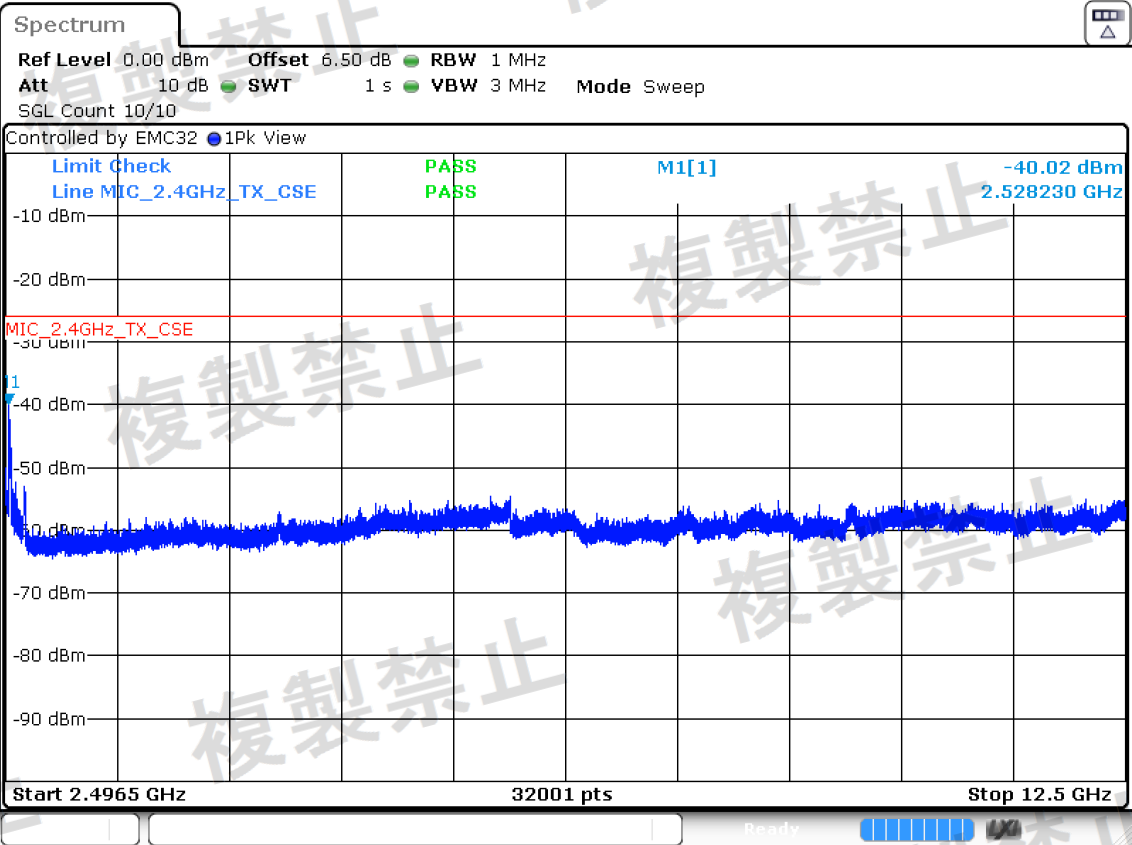
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11n HT20 (OFDM MCS0) Channel = 13
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Results

Modulation: 802.11ax HE20 (OFDMA MCS0) / MIMO Mode: MIMO CDD Mode 2x2

Ambient Temp (°C)	Test Voltage	Channel	Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (μW/MHz)	Limit (μW/MHz)
15.00	12	1	A	[0.03, 2.387]	2218.885	-45.04	0.0313	2.50
15.00	12	1	B	[0.03, 2.387]	2217.854	-45.42	0.0287	2.50
15.00	12	7	A	[0.03, 2.387]	2245.695	-43.43	0.0454	2.50
15.00	12	7	B	[0.03, 2.387]	2255.638	-44.60	0.0347	2.50
15.00	12	13	A	[0.03, 2.387]	2281.049	-42.42	0.0573	2.50
15.00	12	13	B	[0.03, 2.387]	2276.409	-42.29	0.0590	2.50
15.00	12	1	A+B	[0.03, 2.387]	2218.885	-42.22	0.0600	2.50
15.00	12	1	A	[2.387, 2.4]	2399.959	-42.69	0.0538	25.00
15.00	12	1	A	[2.4835, 2.4965]	2488.505	-50.68	0.0086	25.00
15.00	12	1	A	[2.4965, 12.5]	2605.440	-47.97	0.0160	2.50
15.00	12	1	B	[2.387, 2.4]	2399.996	-28.47	1.4223	25.00
15.00	12	1	B	[2.4835, 2.4965]	2488.394	-39.66	0.1081	25.00
15.00	12	1	B	[2.4965, 12.5]	2605.440	-43.60	0.0437	2.50
15.00	12	7	A+B	[0.03, 2.387]	2245.695	-40.97	0.0801	2.50
15.00	12	7	A	[2.387, 2.4]	2399.713	-47.75	0.0168	25.00
15.00	12	7	A	[2.4835, 2.4965]	2486.306	-48.53	0.0140	25.00
15.00	12	7	A	[2.4965, 12.5]	2628.890	-48.84	0.0131	2.50
15.00	12	7	B	[2.387, 2.4]	2399.997	-47.30	0.0186	25.00
15.00	12	7	B	[2.4835, 2.4965]	2484.066	-48.36	0.0146	25.00
15.00	12	7	B	[2.4965, 12.5]	2631.390	-49.51	0.0112	2.50
15.00	12	13	A+B	[0.03, 2.387]	2281.049	-39.34	0.1163	2.50
15.00	12	13	A	[2.387, 2.4]	2397.323	-49.43	0.0114	25.00
15.00	12	13	A	[2.4835, 2.4965]	2483.565	-36.48	0.2249	25.00
15.00	12	13	A	[2.4965, 12.5]	2496.660	-35.58	0.2767	2.50
15.00	12	13	B	[2.387, 2.4]	2394.695	-49.25	0.0119	25.00
15.00	12	13	B	[2.4835, 2.4965]	2483.512	-35.48	0.2831	25.00
15.00	12	13	B	[2.4965, 12.5]	2498.840	-32.23	0.5984	2.50
15.00	12	1	A+B	[2.387, 2.4]	2399.959	-28.31	1.4762	25.00
15.00	12	1	A+B	[2.4835, 2.4965]	2488.505	-39.33	0.1167	25.00
15.00	12	1	A+B	[2.4965, 12.5]	2605.440	-42.25	0.0596	2.50
15.00	12	7	A+B	[2.387, 2.4]	2399.713	-44.51	0.0354	25.00
15.00	12	7	A+B	[2.4835, 2.4965]	2486.306	-45.43	0.0286	25.00
15.00	12	7	A+B	[2.4965, 12.5]	2628.890	-46.15	0.0243	2.50
15.00	12	13	A+B	[2.387, 2.4]	2397.323	-46.33	0.0233	25.00
15.00	12	13	A+B	[2.4835, 2.4965]	2483.565	-32.94	0.5080	25.00
15.00	12	13	A+B	[2.4965, 12.5]	2496.660	-30.58	0.8751	2.50

Verdict

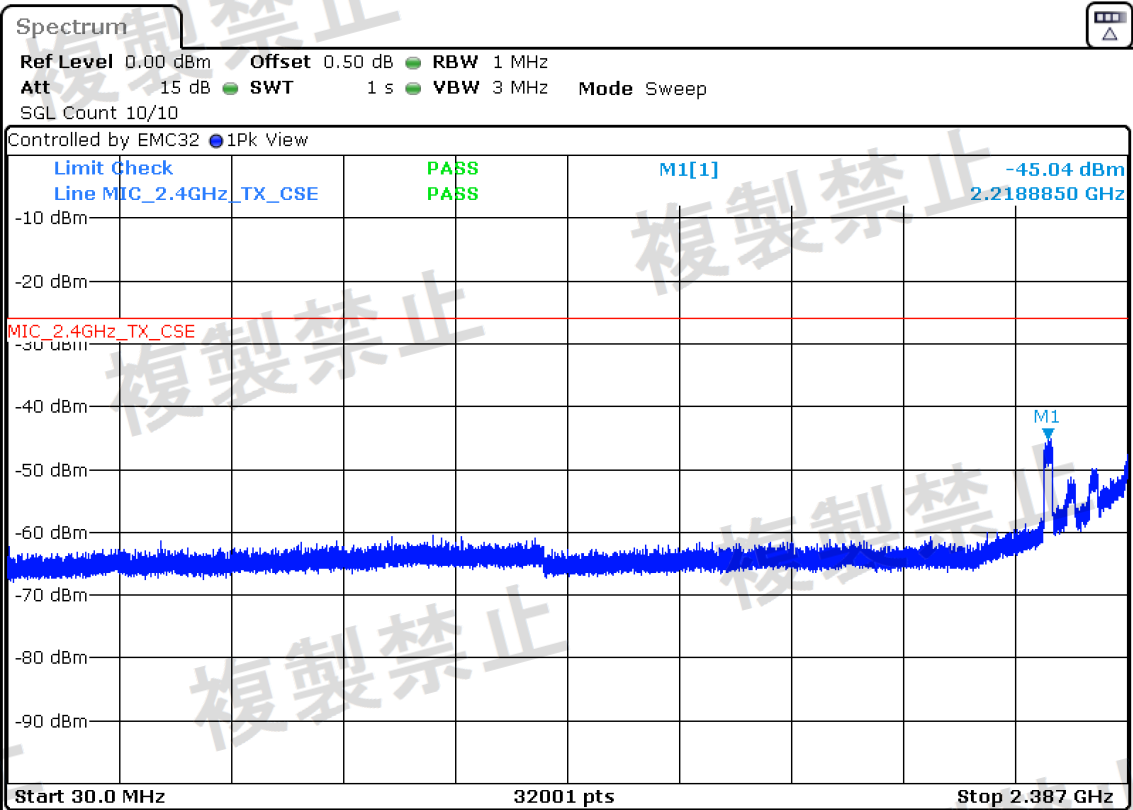
Pass

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

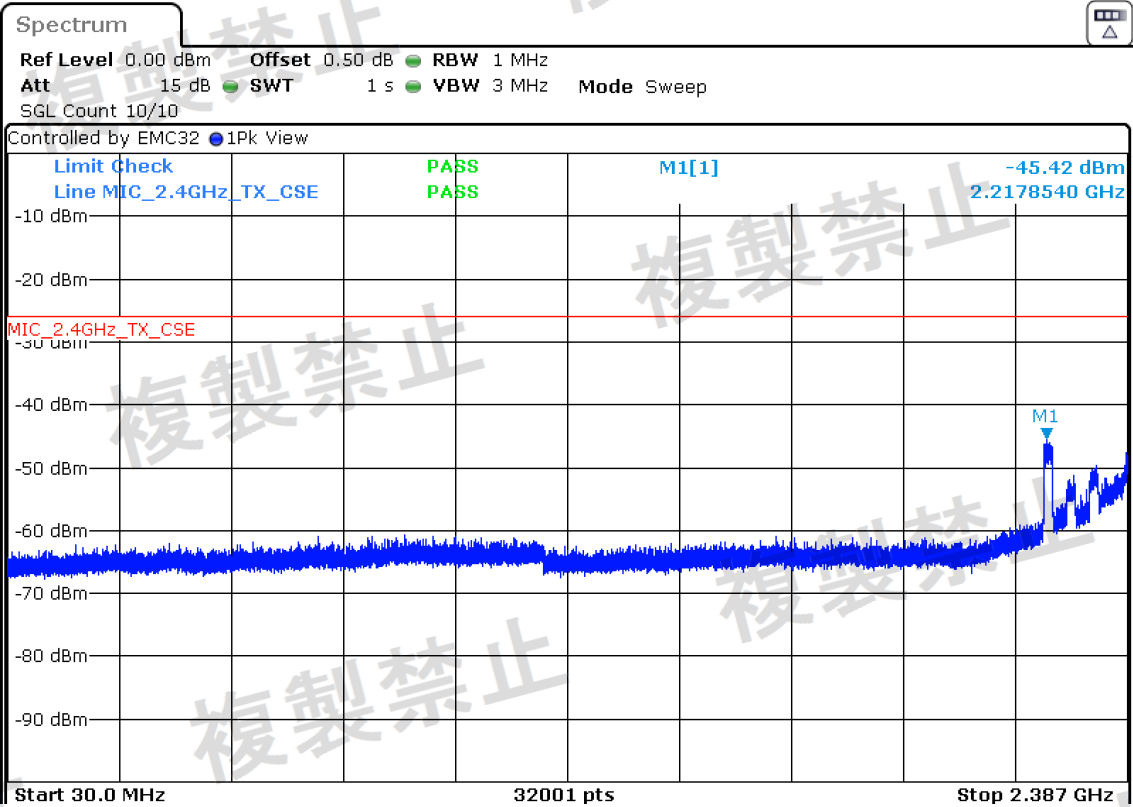
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

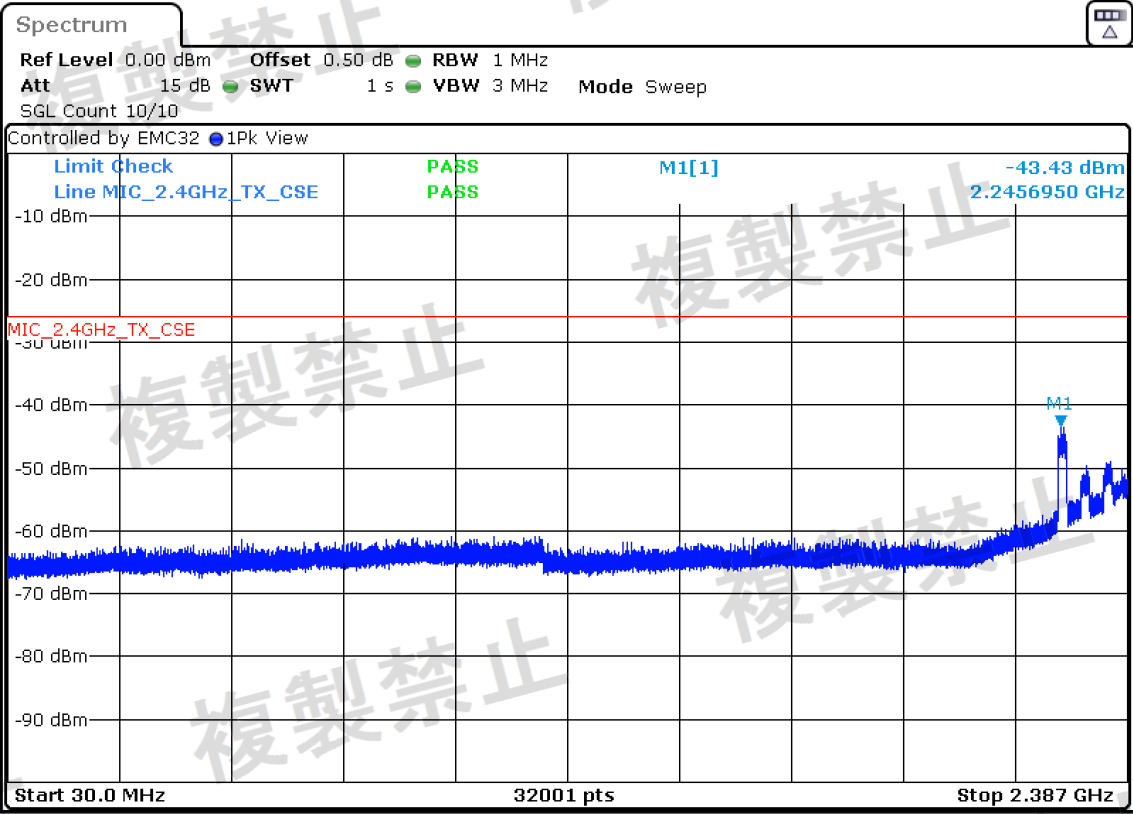
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = A Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

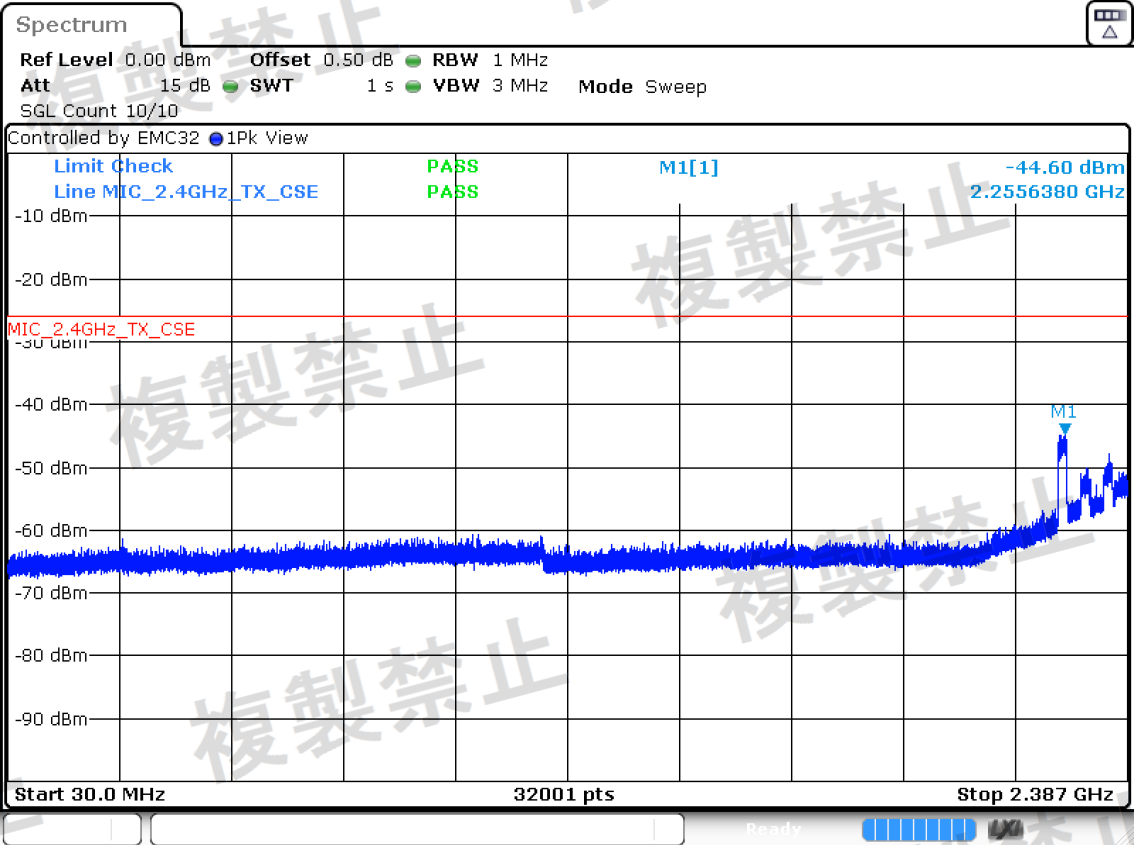
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

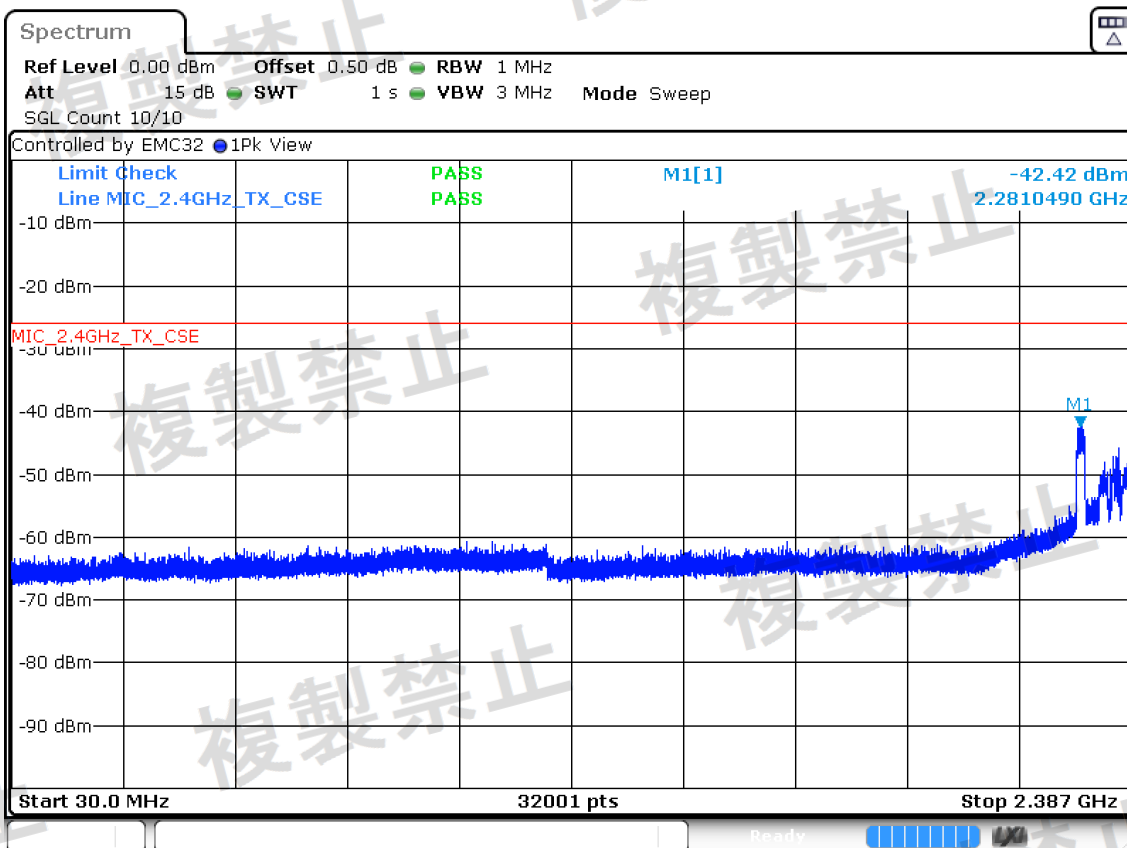
Active Port = A

Frequency Range GHz = [0.03, 2.387]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

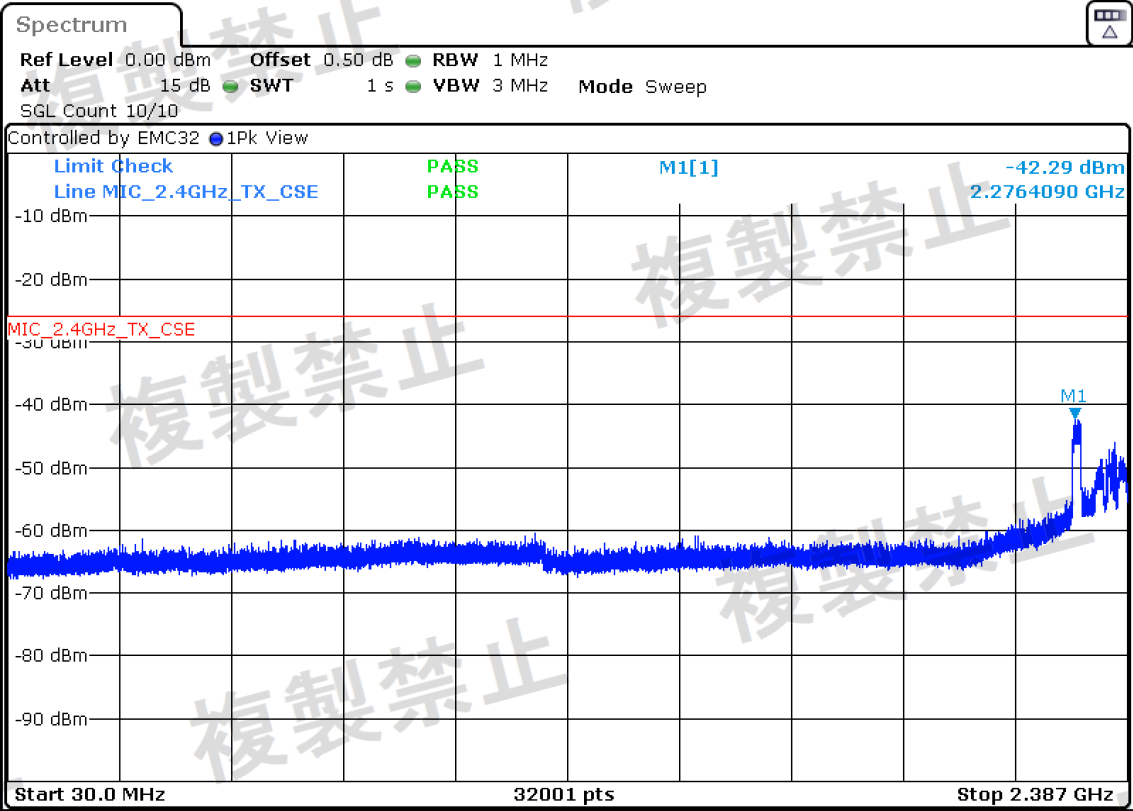
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 13
Active Port = B Frequency Range GHz = [0.03, 2.387]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

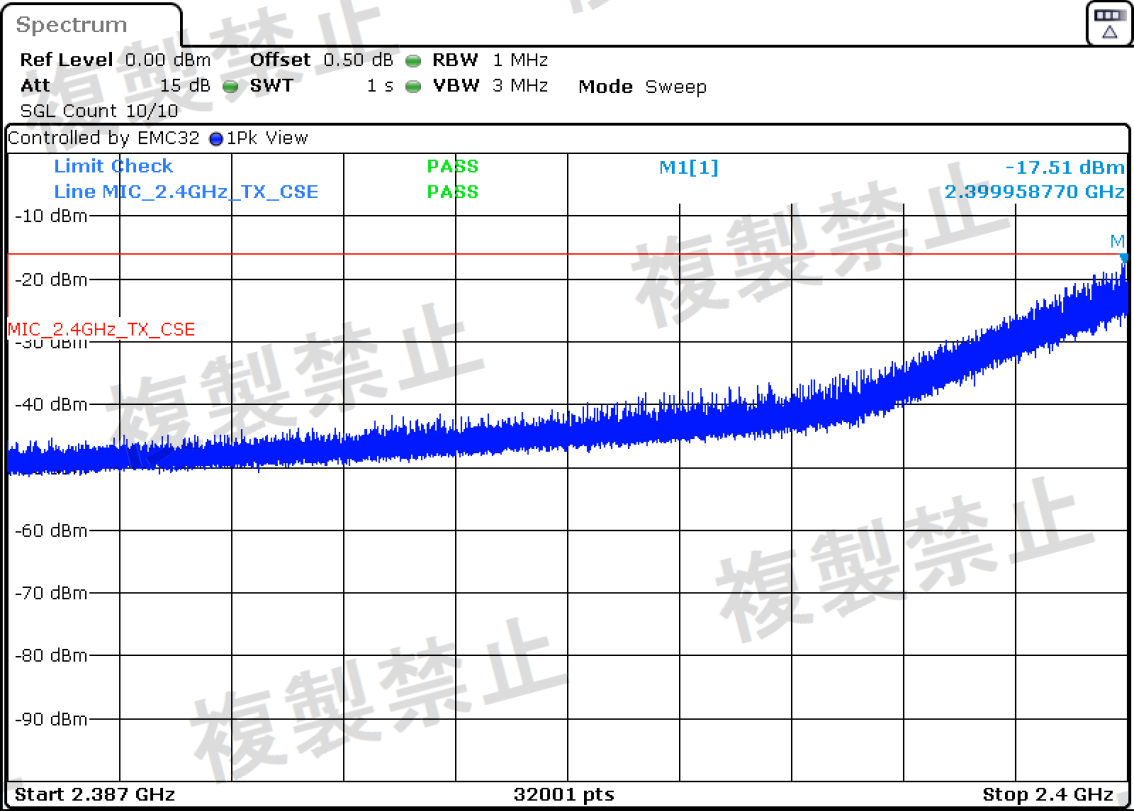
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

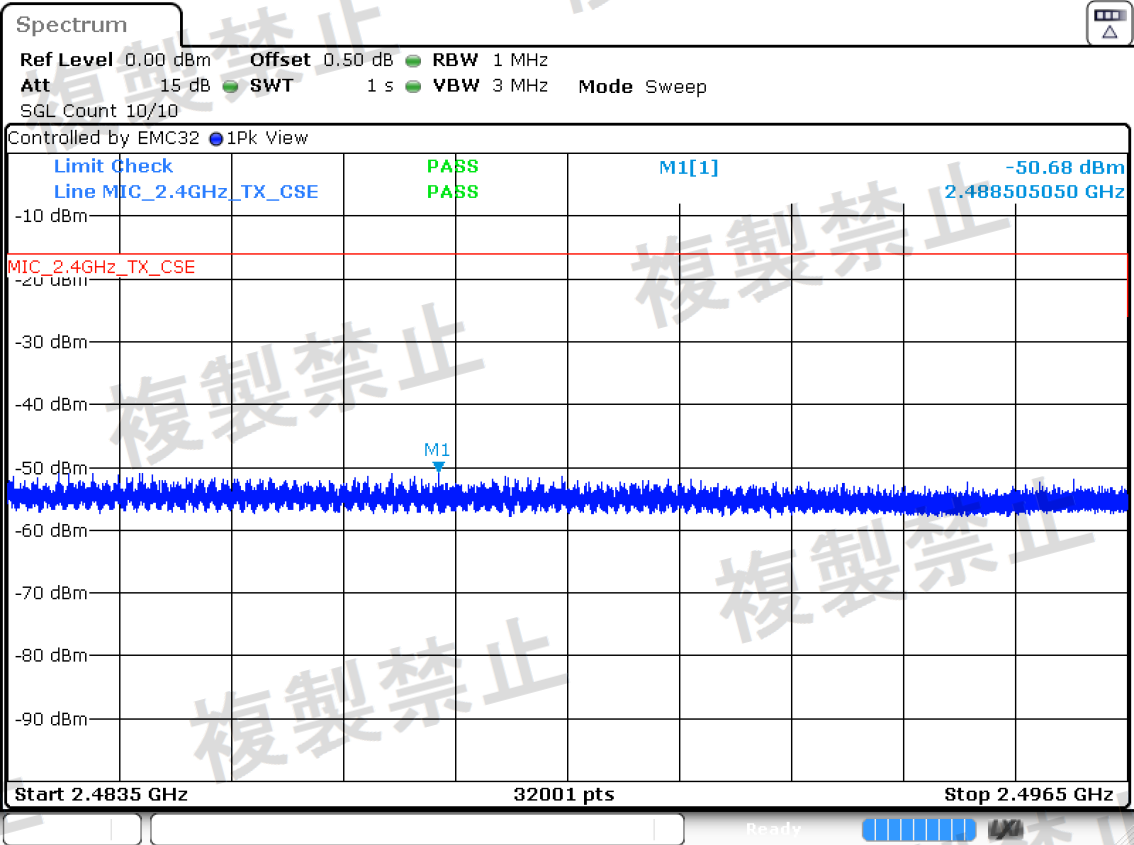
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

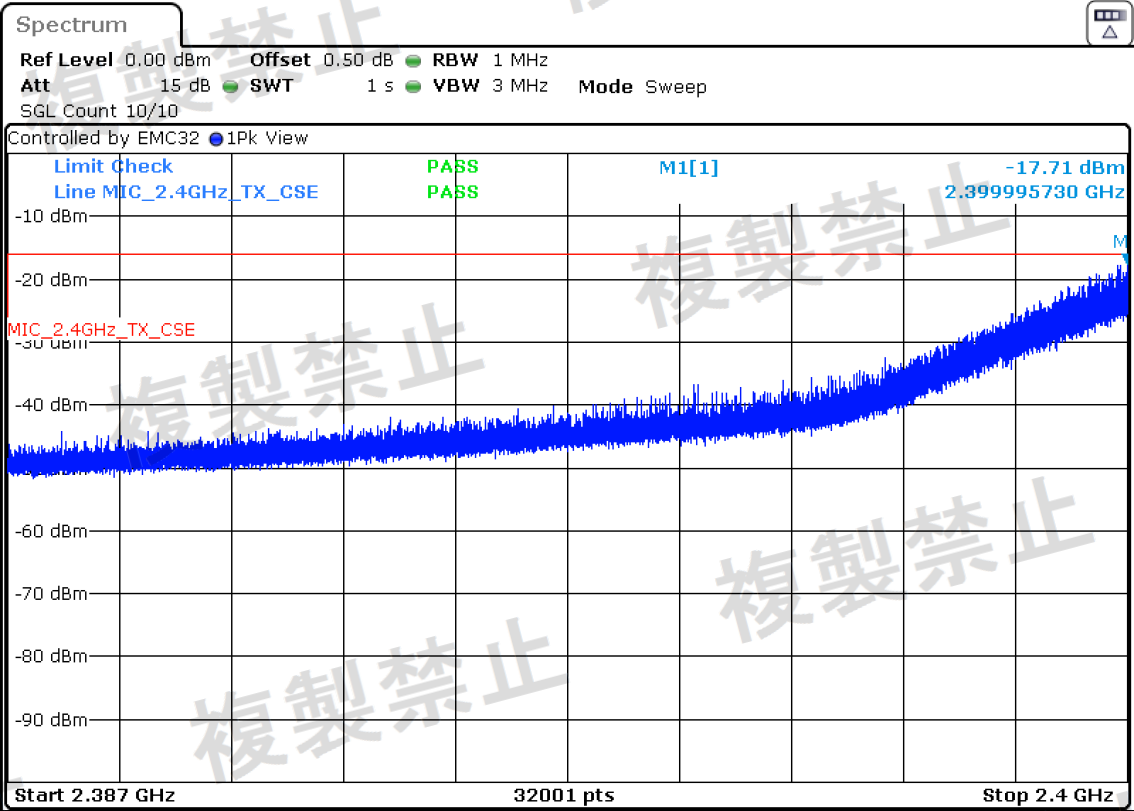
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

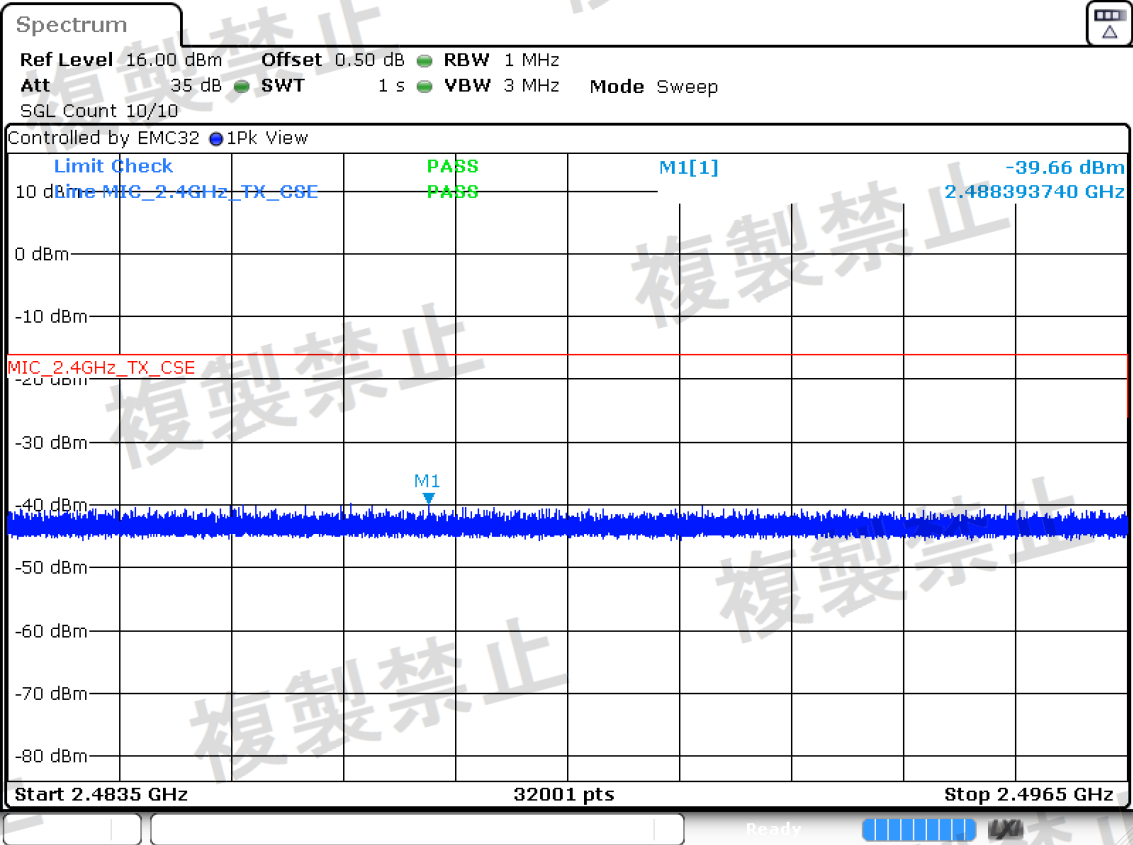
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

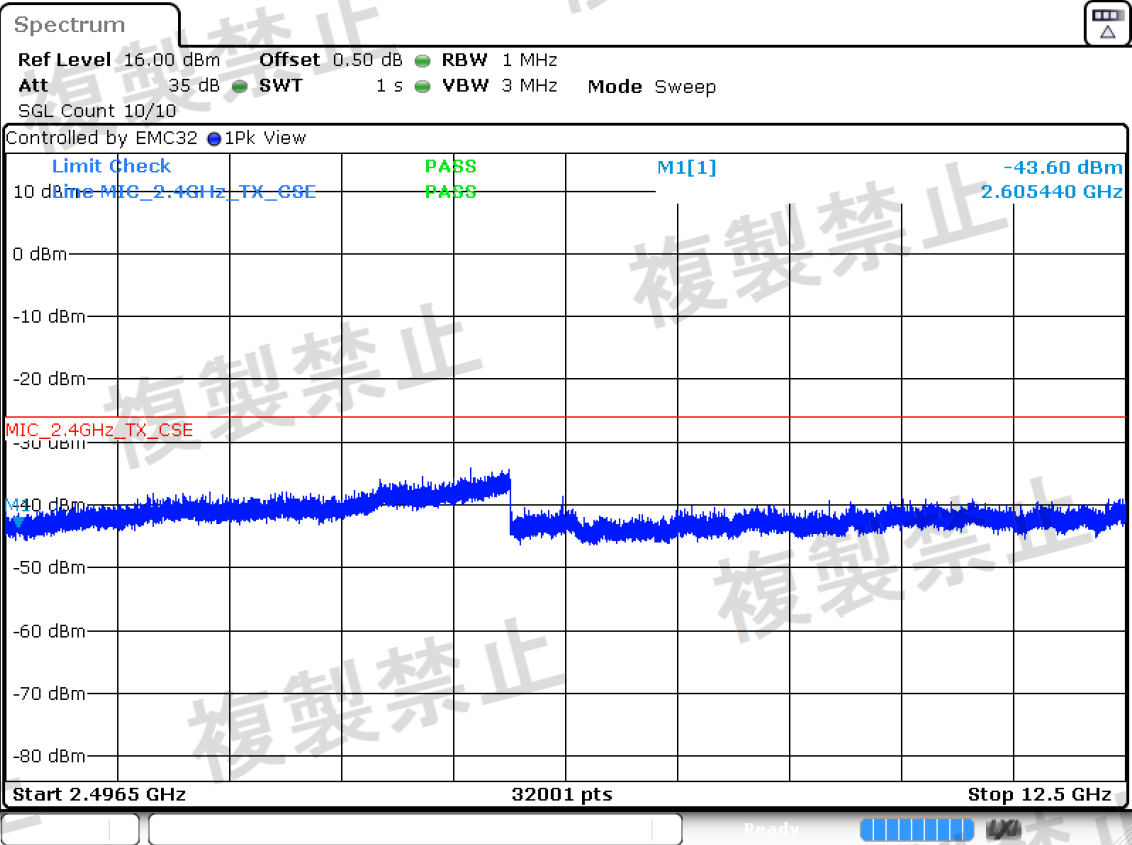
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 1
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

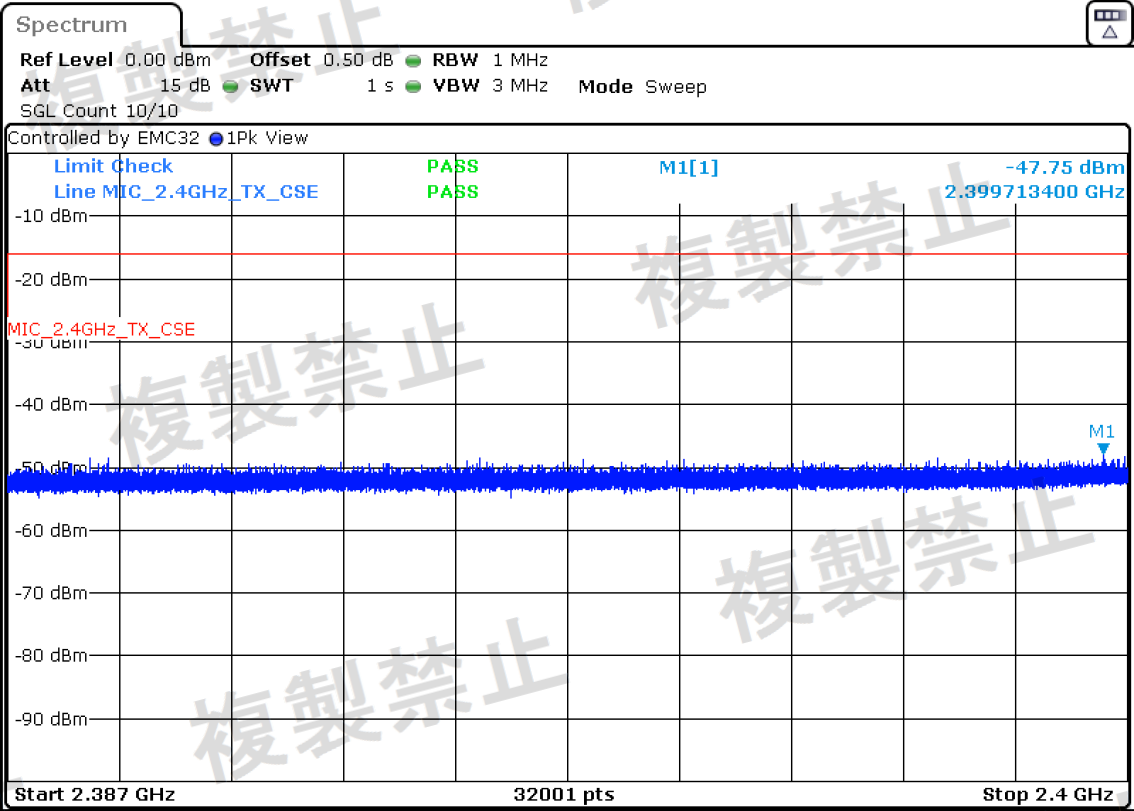
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

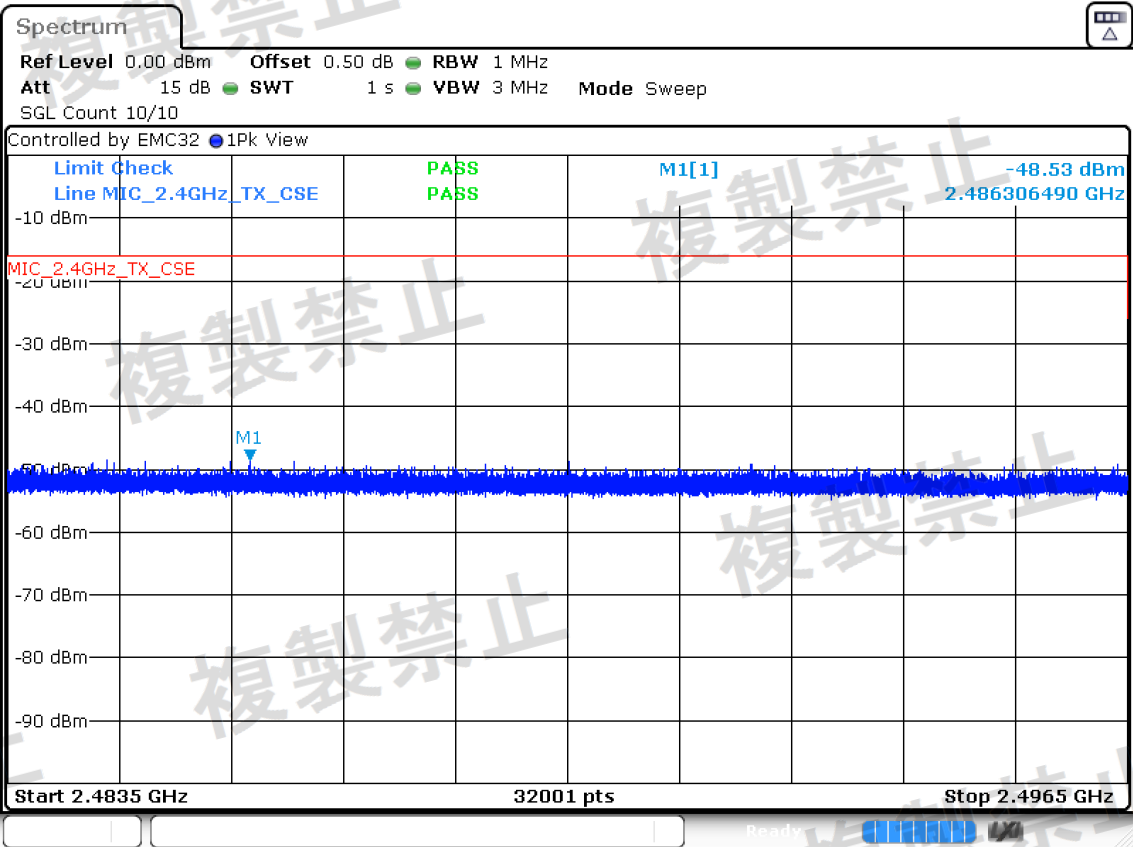
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = A Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 7

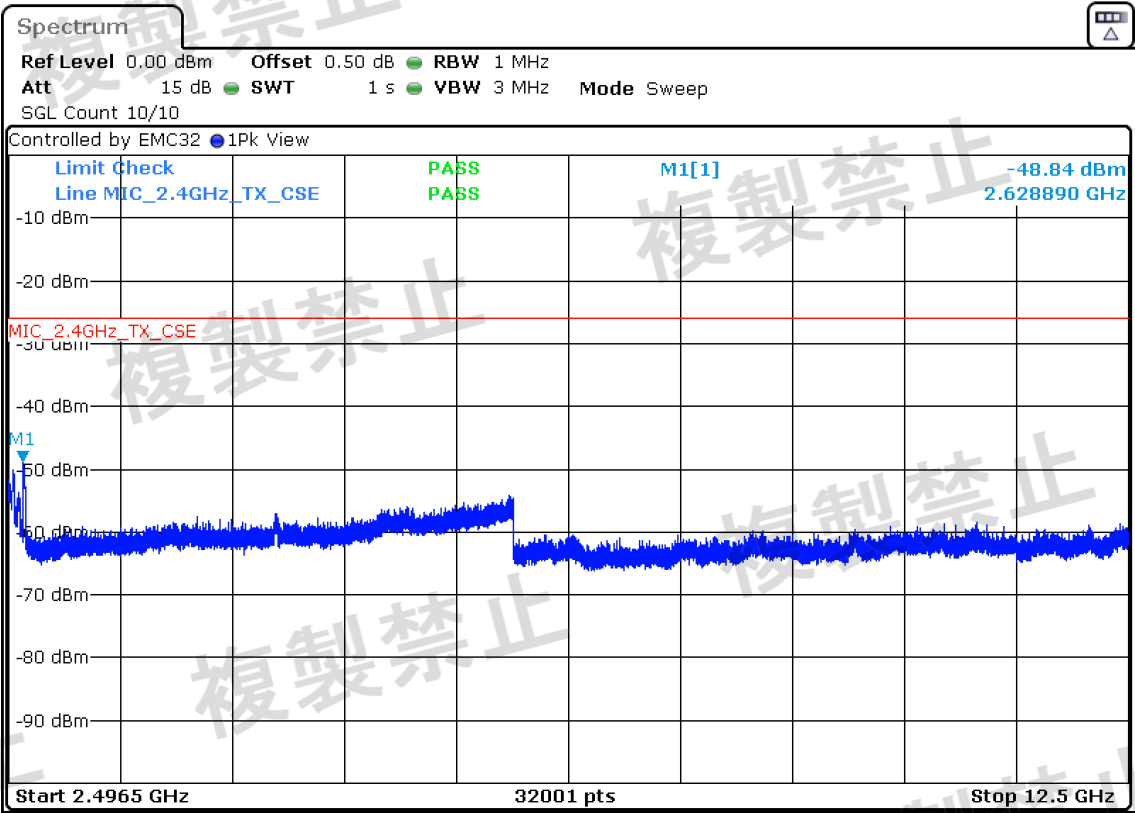
Active Port = A

Frequency Range GHz = [2.4965, 12.5]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

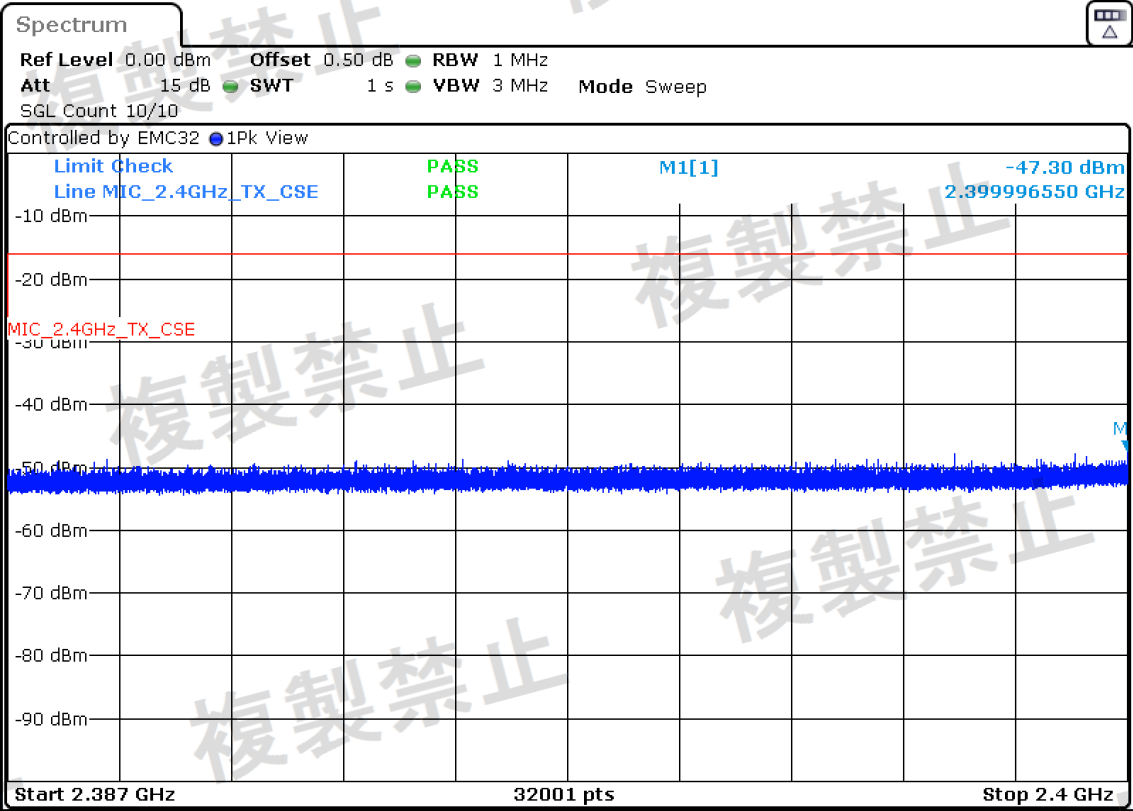
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

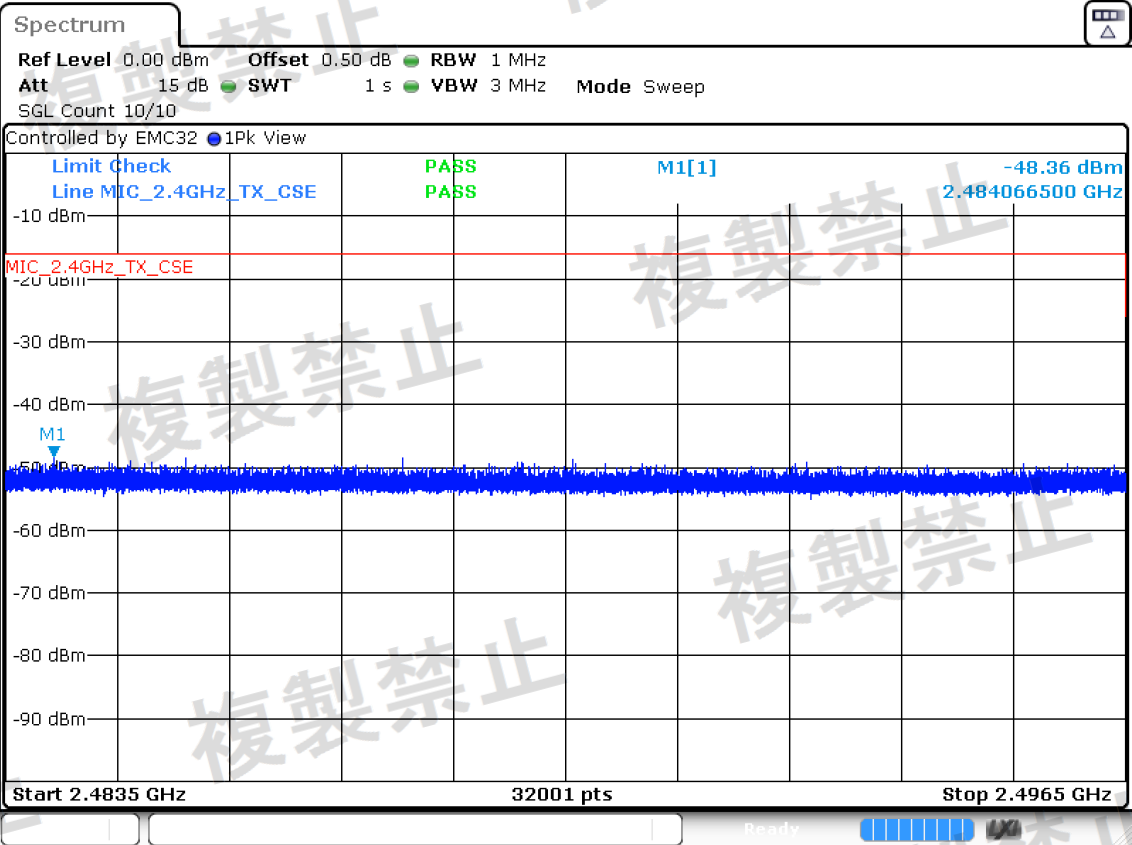
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = B Frequency Range GHz = [2.4835, 2.4965]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

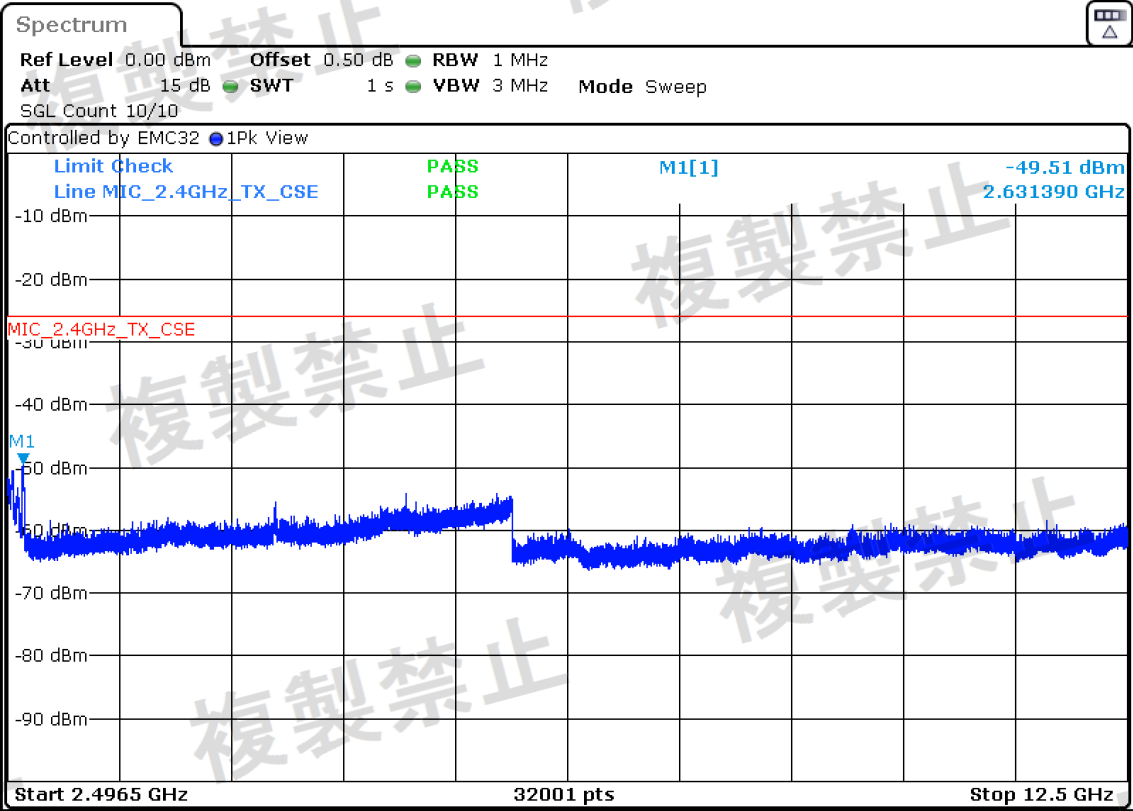
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 7
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

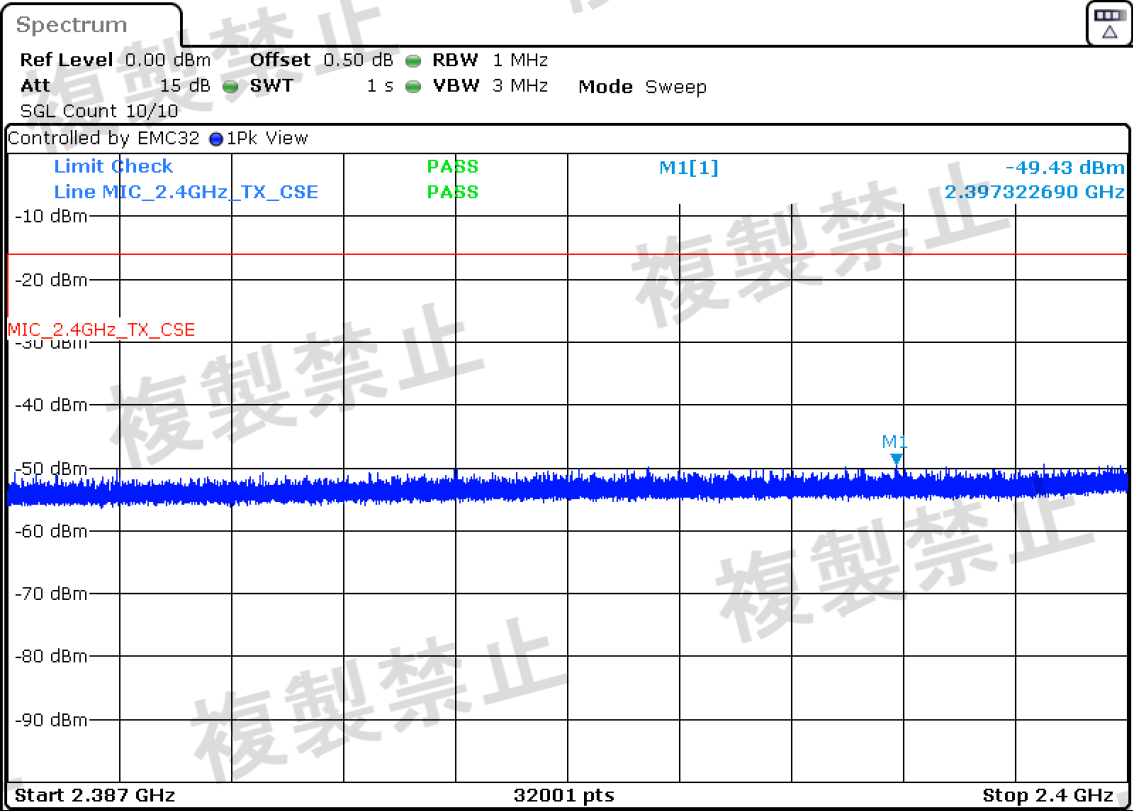
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 13
Active Port = A Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

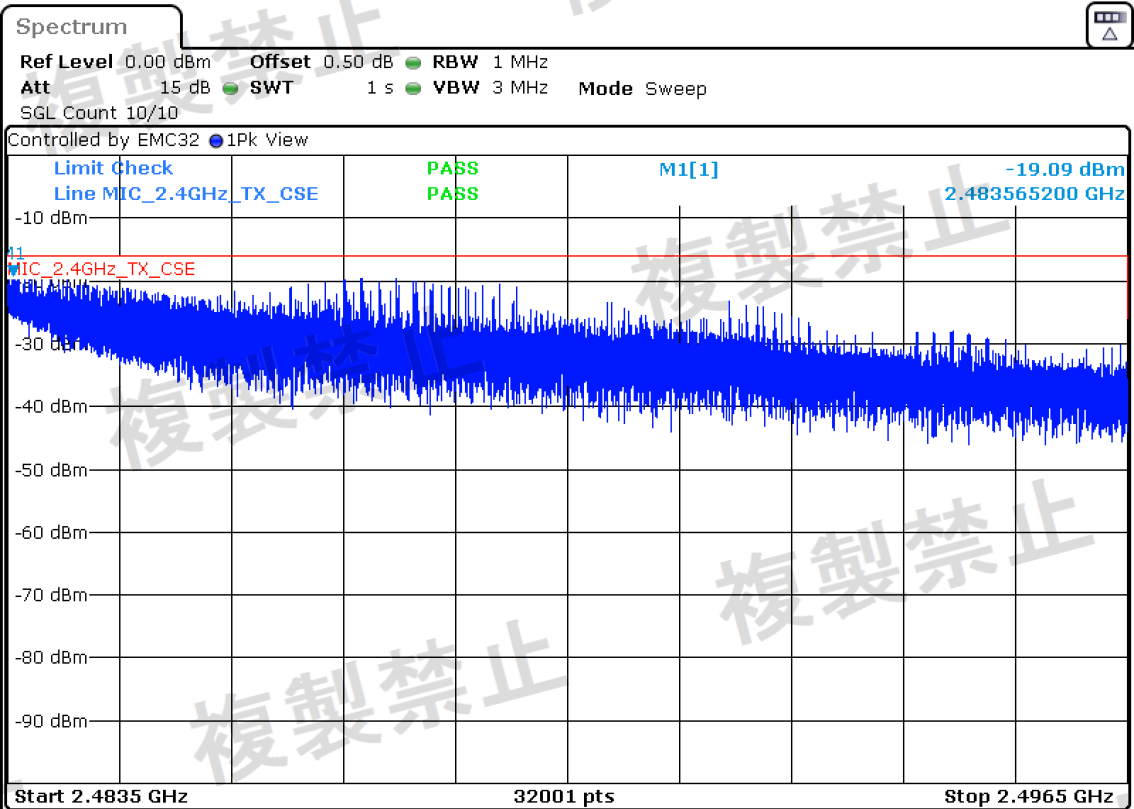
Active Port = A

Frequency Range GHz = [2.4835, 2.4965]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

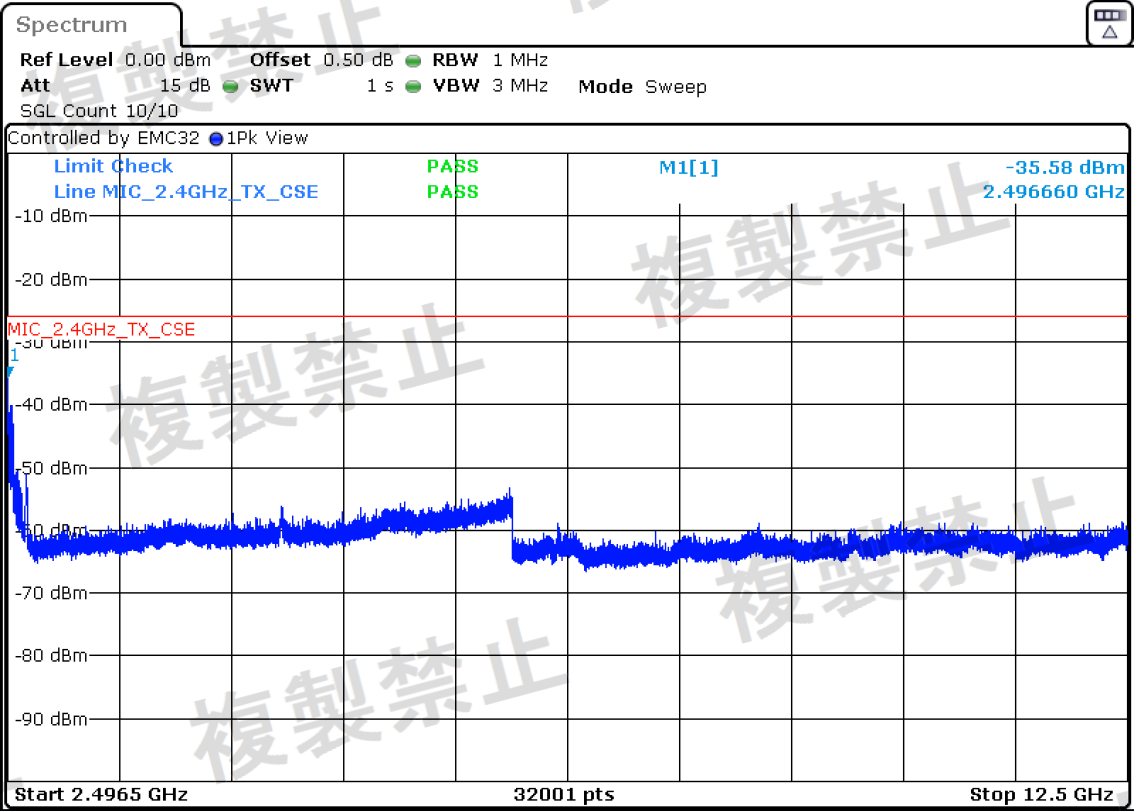
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 13
Active Port = A Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

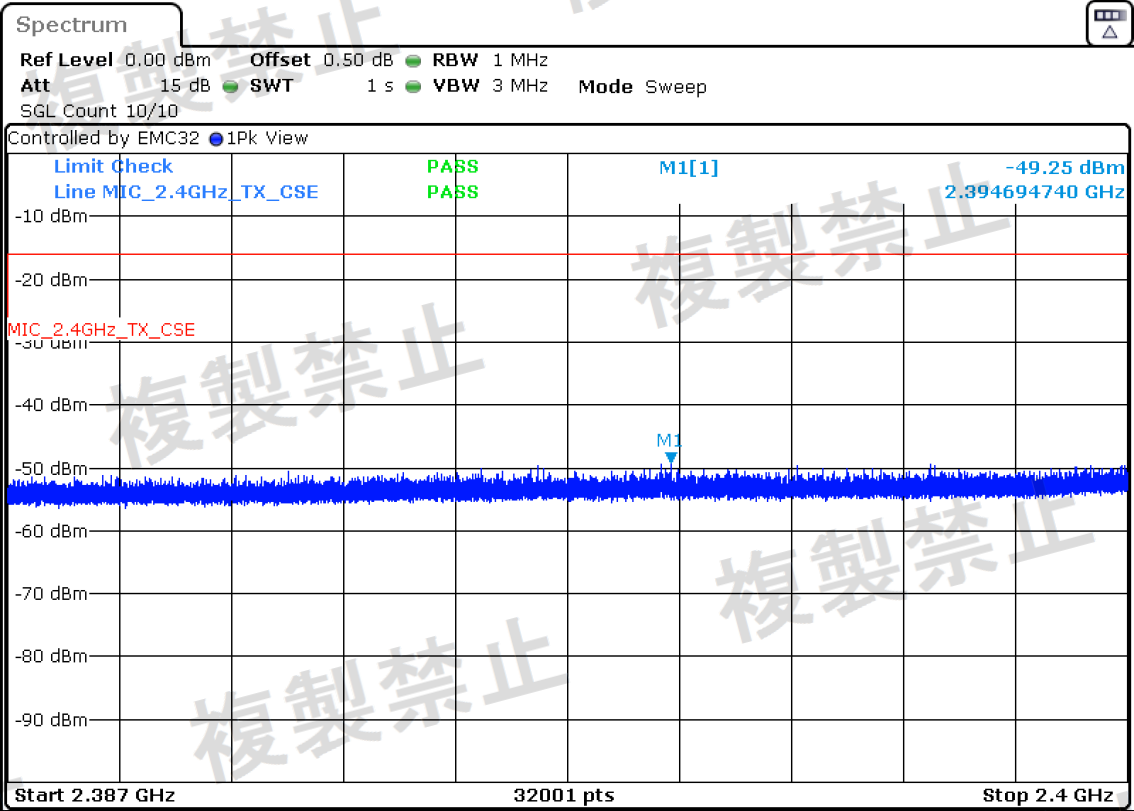
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 13
Active Port = B Frequency Range GHz = [2.387, 2.4]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00

Test Voltage = 12

Modulation = 802.11ax HE20 (OFDMA MCS0)

Channel = 13

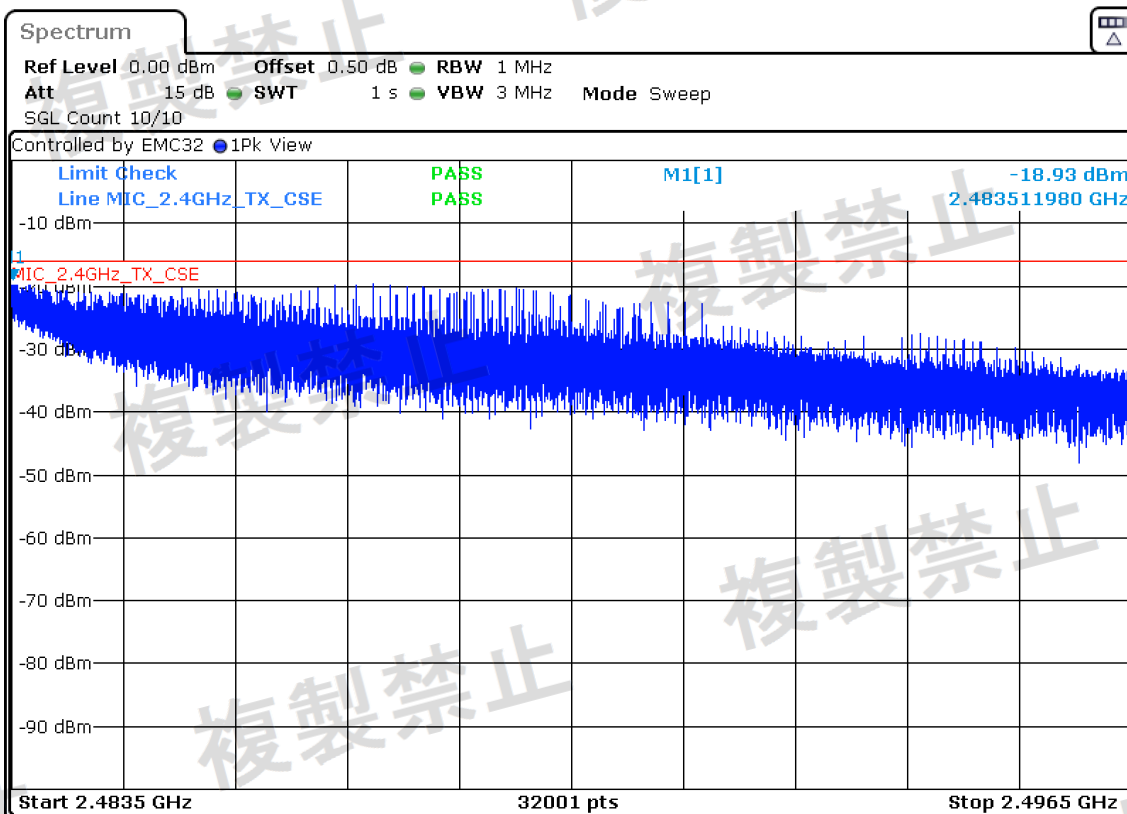
Active Port = B

Frequency Range GHz = [2.4835, 2.4965]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

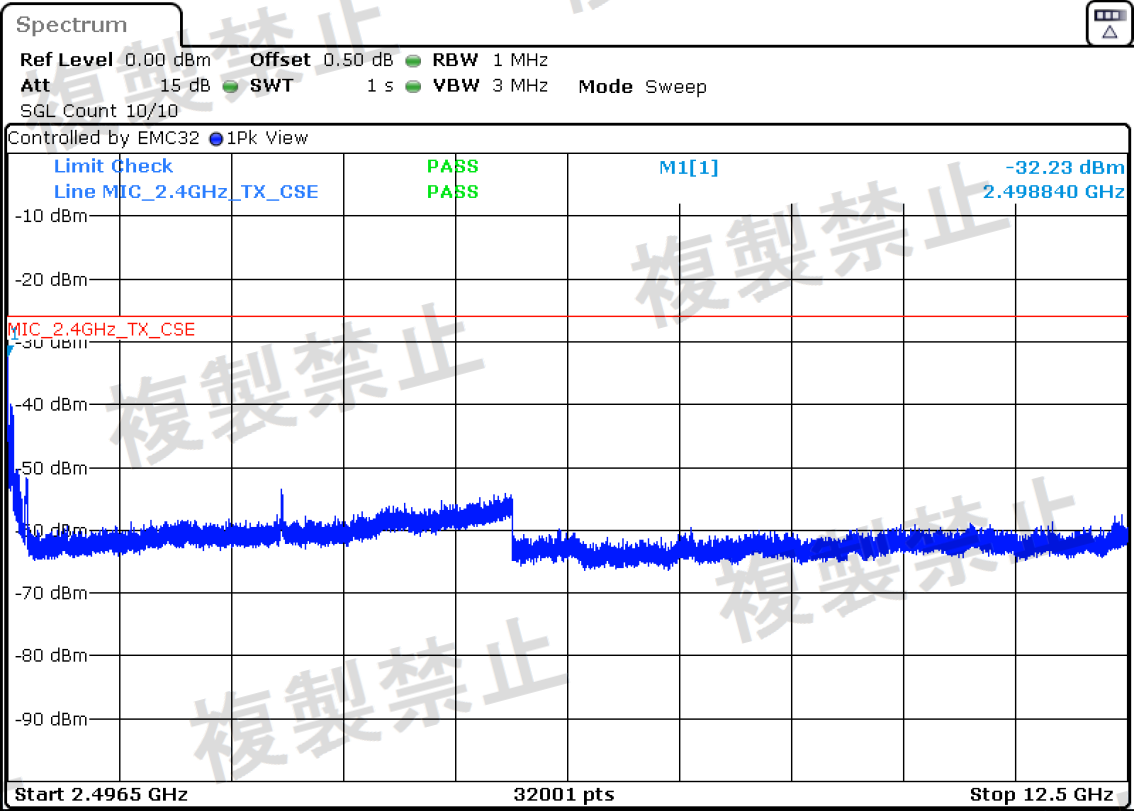
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11ax HE20 (OFDMA MCS0) Channel = 13
Active Port = B Frequency Range GHz = [2.4965, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Subclause 3.2 (10). Number of carriers

SPECIFICATION

The OFDM system shall have one or more carriers per 1MHz bandwidth.

RESULTS

g/n/ax modes have one or more carriers per 1 MHz based on center frequencies with 5 MHz interval and at least 20 MHz bandwidth from 2412 to 2472 MHz.

Subclause 3.4 (1). Interference prevention function

SPECIFICATION

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

Limits:

Item	Limit
Identification	≥ 48 bits

RESULTS

Identification code received.

Verdict: PASS

Subclause 3.6 (2). Antenna gain

SPECIFICATION

a: The absolute gain of the transmitting antenna shall be 12.14 dB or less. However, when the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) is equal to or less than the value obtained by applying an antenna power with the mean power of 10 mW/MHz with its absolute gain being 12.14 dB, the shortage shall be compensated for by the gain of the transmitting antenna (Note that mean power is 10 mW/MHz in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW/MHz in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

b: The Half-Power Beam Width Angle HPBA (angle between two points at which radiated power becomes 1/2) of the transmitting antenna's horizontal and vertical planes shall not exceed the value as determined by the following formula:

$$HPBA \leq 360 / A \text{ [degrees]}$$

where constant A is equal to the value obtained by dividing the equivalent isotropic radiated power EIRP (equivalent isotropic radiated power in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems) by the value obtained by applying an antenna power with the mean power of 10 mW/MHz with its absolute gain being 2.14 dB, and shall be assumed to be 1 if it is less than 1 (Note that mean power is 10 mW/MHz in the 1 MHz bandwidth in the case of spread spectrum and OFDM systems; however, mean power of 3 mW/MHz in the 1 MHz bandwidth is applied if the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining the FH and OFDM systems is employed and the frequency band of 2,427 - 2,470.75 MHz is used).

Therefore

$$A = \text{EIRP (mW/MHz)} / (10 \text{ mW/MHz} \times \text{absolute gain}) = \text{EIRP (mW/MHz)} / 16.37$$

Where absolute gain is the linear value corresponding to 2.14 dB = 1.637

RESULTS

Maximum declared antenna gain: 0.1 dBi.

802.11b mode

Freq (MHz)	Port	Gain (dBi)	Antenna Power (dBm/MHz)	E.I.R.P. (dBm/MHz)	A (dBm/MHz)
2412	A	0.1	-9.18	-9.08	-0.55
	B	0.1	-9.17	-9.07	-0.55
2442	A	0.1	-9.89	-9.79	-0.60
	B	0.1	-9.87	-9.77	-0.60
2472	A	0.1	-11.3	-11.2	-0.68
	B	0.1	-11.34	-11.24	-0.69

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

802.11g mode

Freq (MHz)	Port	Gain (dBi)	Antenna Power (dBm/MHz)	E.I.R.P. (dBm/MHz)	A (dBm/MHz)
2412	A	0.1	3.94	4.04	0.25
	B	0.1	3.72	3.82	0.23
2442	A	0.1	3.79	3.89	0.24
	B	0.1	4.28	4.38	0.27
2472	A	0.1	4.12	4.22	0.26
	B	0.1	3.66	3.76	0.23

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

802.11n20 mode

Freq (MHz)	Port	Gain (dBi)	Antenna Power (dBm/MHz)	E.I.R.P. (dBm/MHz)	A (dBm/MHz)
2412	A	0.1	-0.87	-0.77	-0.05
	B	0.1	-1.4	-1.3	-0.08
2442	A	0.1	-2.3	-2.2	-0.13
	B	0.1	0.35	0.45	0.03
2472	A	0.1	-0.98	-0.88	-0.05
	B	0.1	-0.19	-0.09	-0.01

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

802.11ax20 mode

Freq (MHz)	Port	Gain (dBi)	Antenna Power (dBm/MHz)	E.I.R.P. (dBm/MHz)	A (dBm/MHz)
2412	A	0.1	3.01	3.11	0.19
	B	0.1	2.94	3.04	0.19
2442	A	0.1	2.72	2.82	0.17
	B	0.1	3.06	3.16	0.19
2472	A	0.1	2.72	2.82	0.17
	B	0.1	3.14	3.24	0.20

Since A is < 1, it is assumed to be 1, and therefore the half-power beam width must be 360° or less.

Verdict: PASS

Article 24. 2 [CSERxW] Secondary Radiated Emission Strength (Wi-Fi)

Limits

No Limit has been set to this test case

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (nW)	Limit (nW)
15.00	12	1	A	[0.03, 1]	33.895	-70.98	0.0798	4.00
				[1, 12.5]	12440.170	-64.23	0.3776	20.00
			B	[0.03, 1]	33.804	-71.63	0.0687	4.00
				[1, 12.5]	12434.780	-64.11	0.3882	20.00
		7	A	[0.03, 1]	33.804	-71.10	0.0776	4.00
				[1, 12.5]	6971.010	-64.08	0.3908	20.00
			B	[0.03, 1]	33.834	-71.39	0.0726	4.00
				[1, 12.5]	12471.790	-64.48	0.3565	20.00
		13	A	[0.03, 1]	33.713	-71.42	0.0721	4.00
				[1, 12.5]	10771.280	-64.57	0.3491	20.00
			B	[0.03, 1]	33.774	-71.34	0.0735	4.00
				[1, 12.5]	12439.810	-63.85	0.4121	20.00

Verdict

Pass

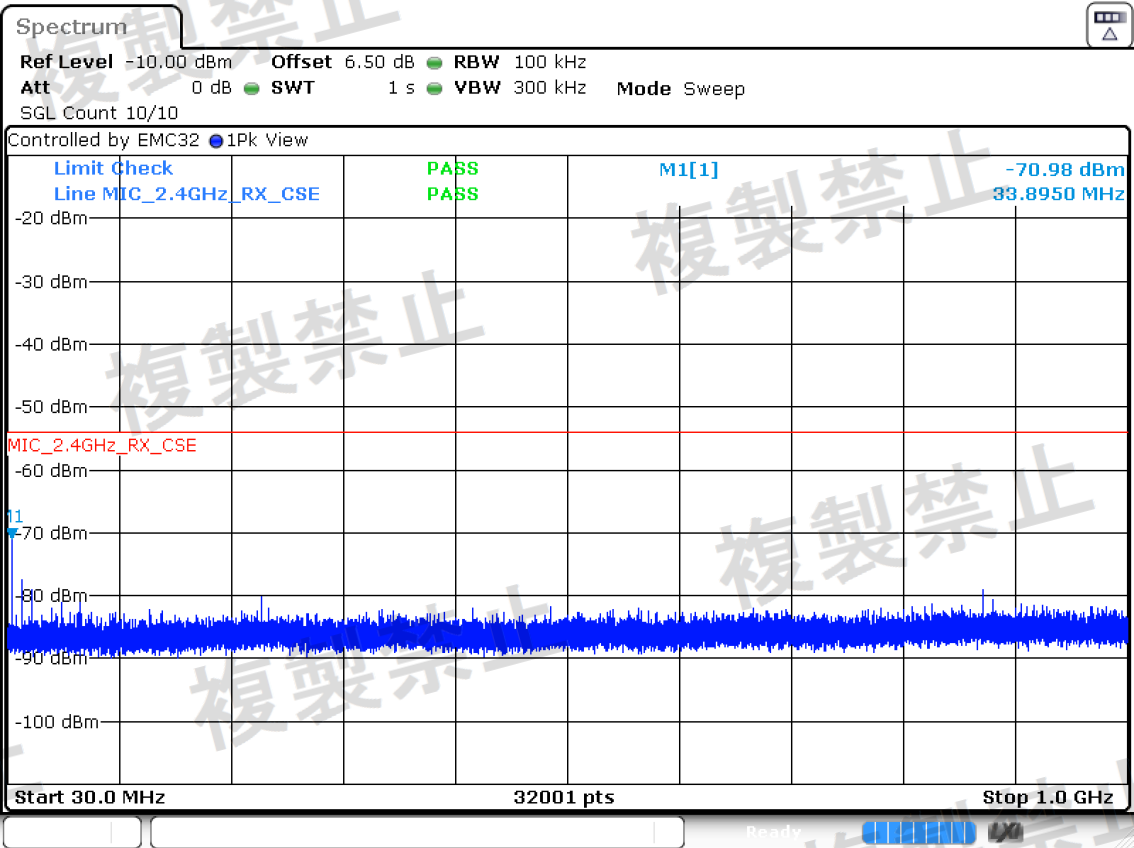
Uncertainty

Attachments

Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

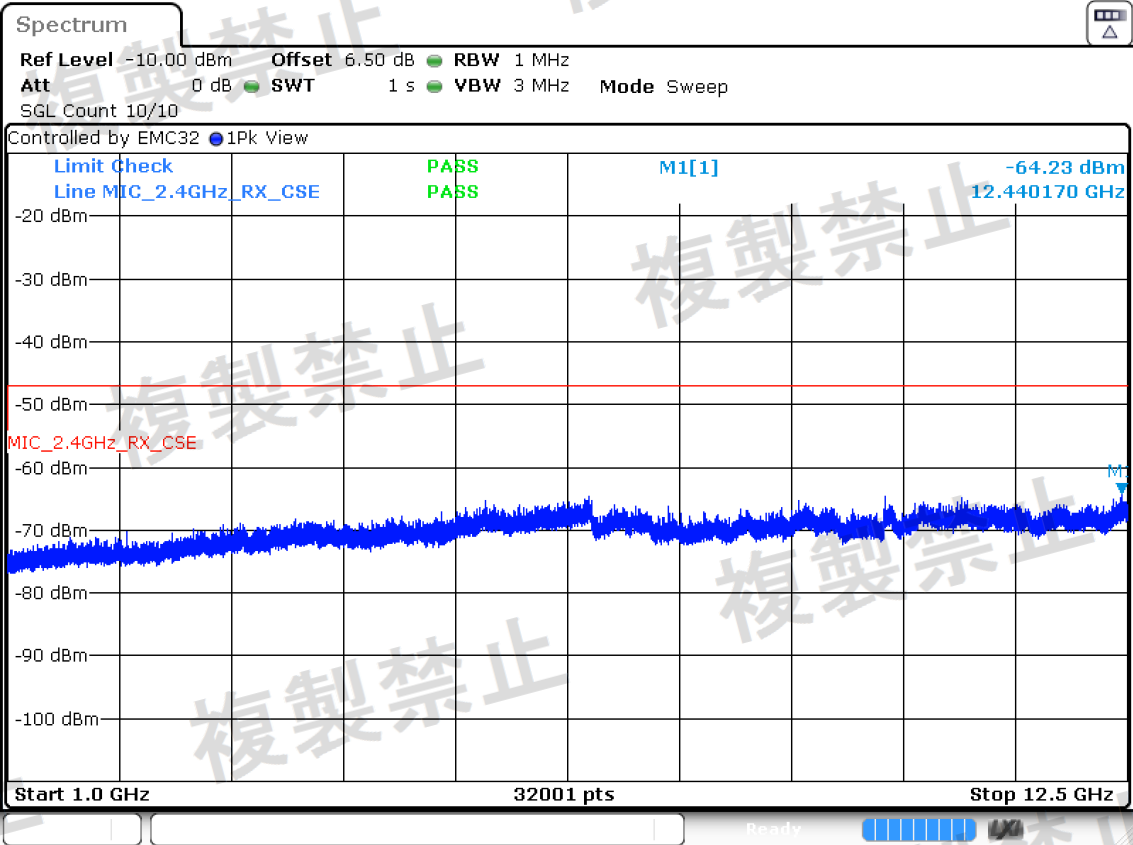
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

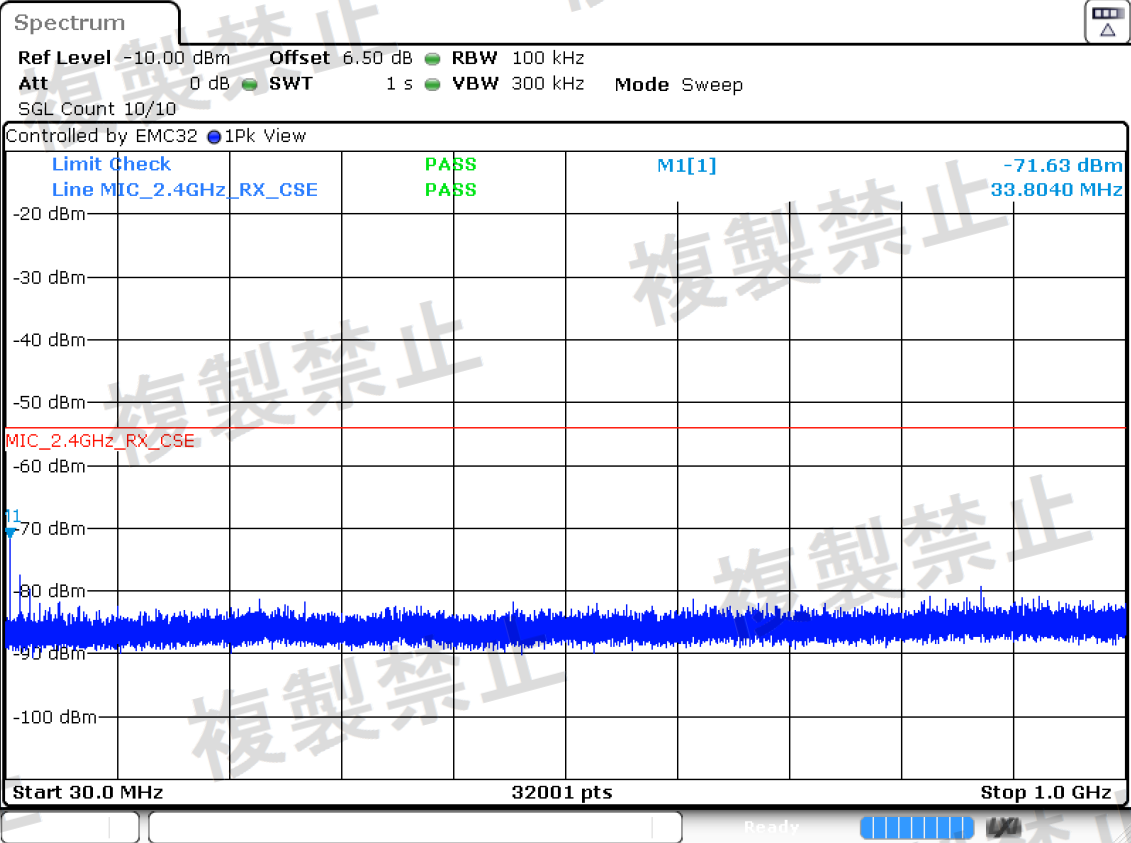
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

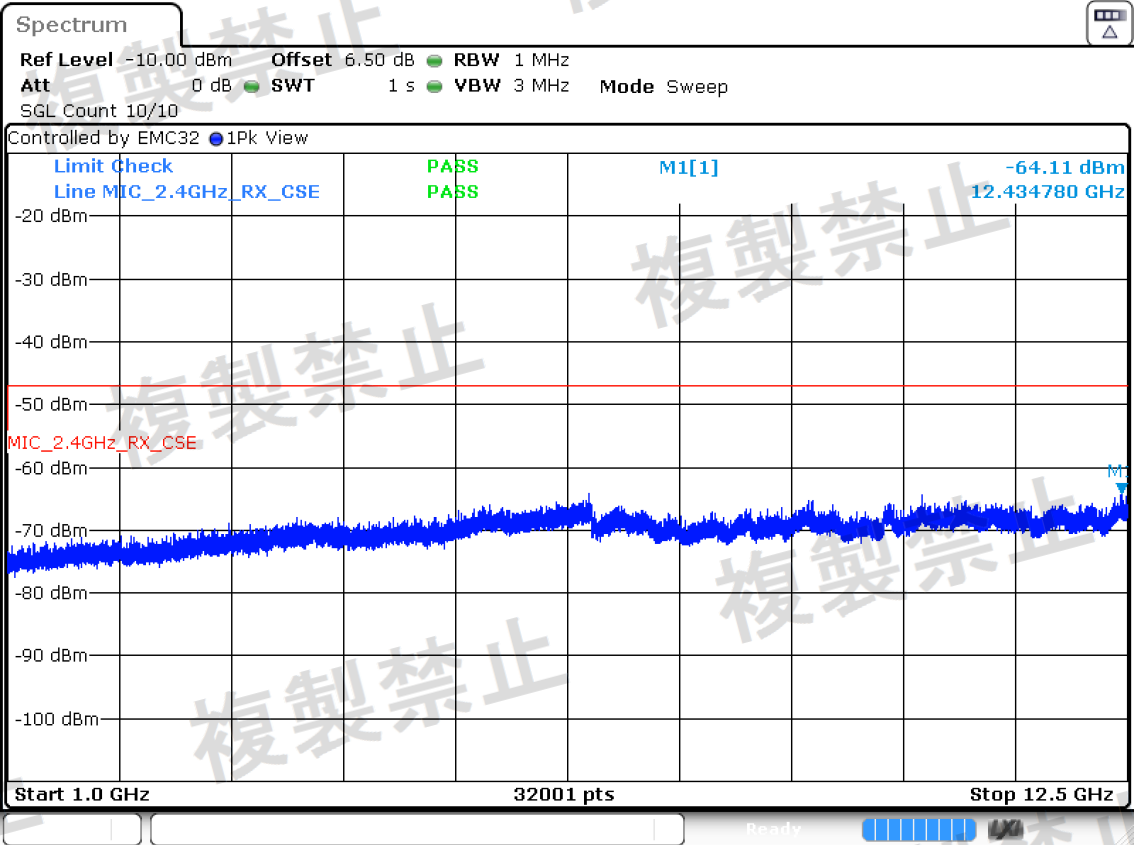
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

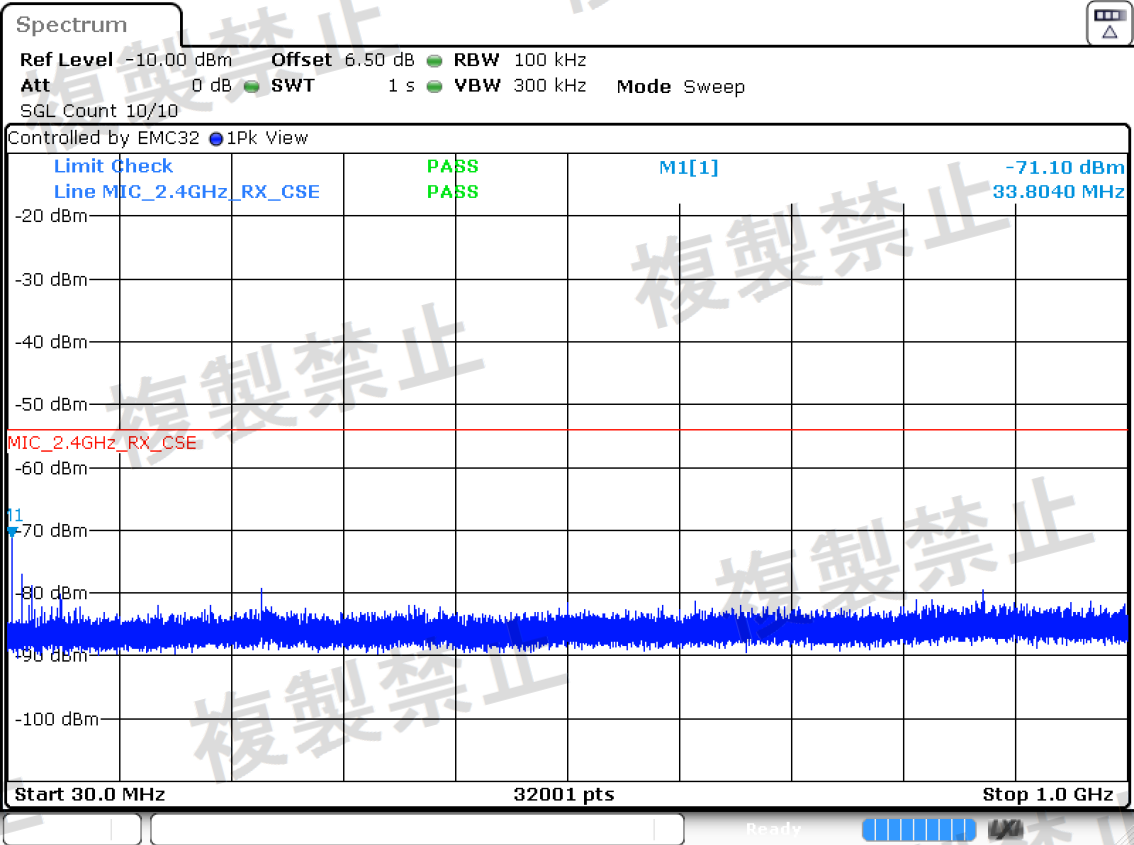
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = A Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

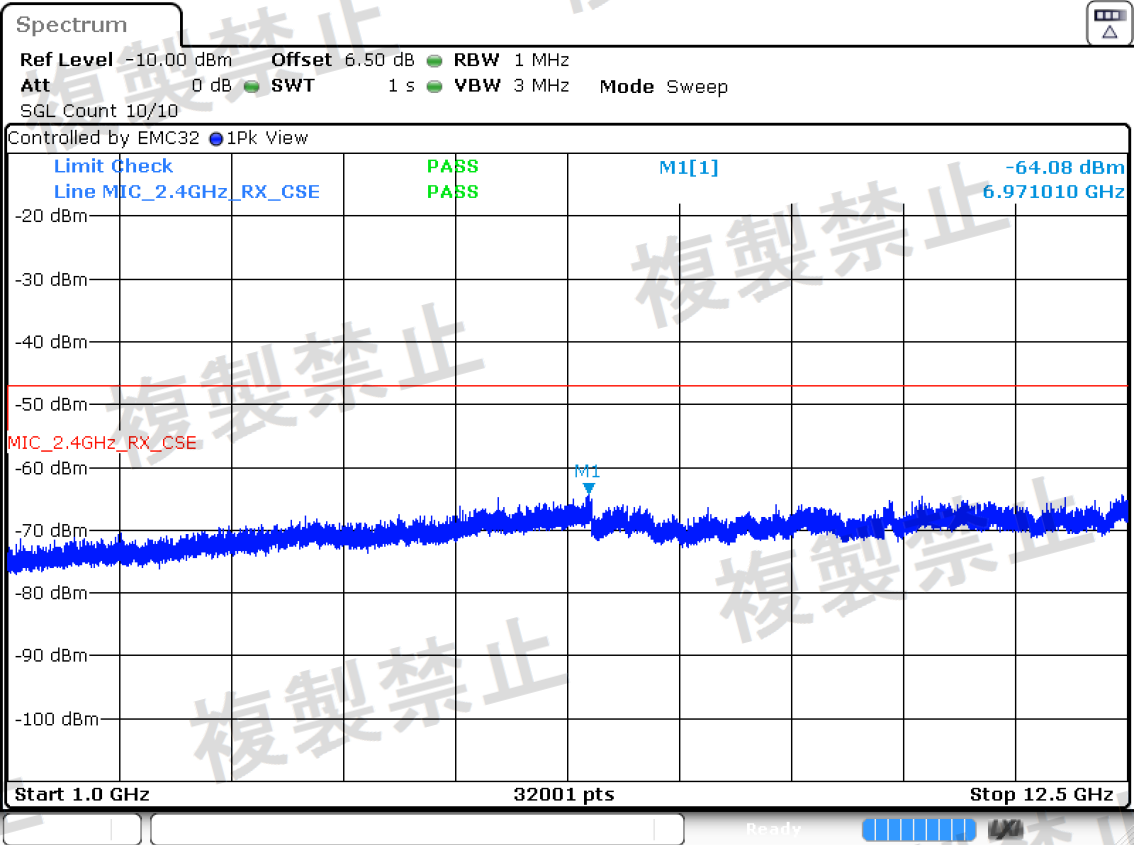
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

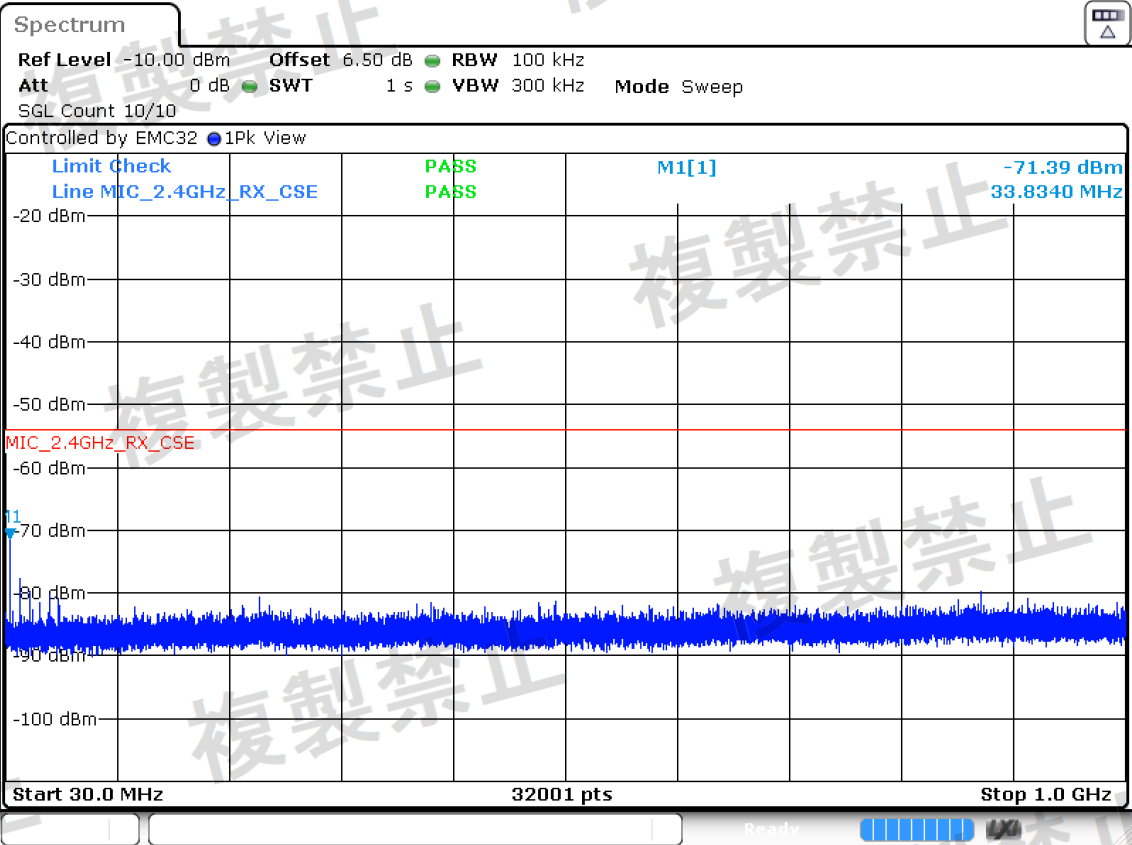
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

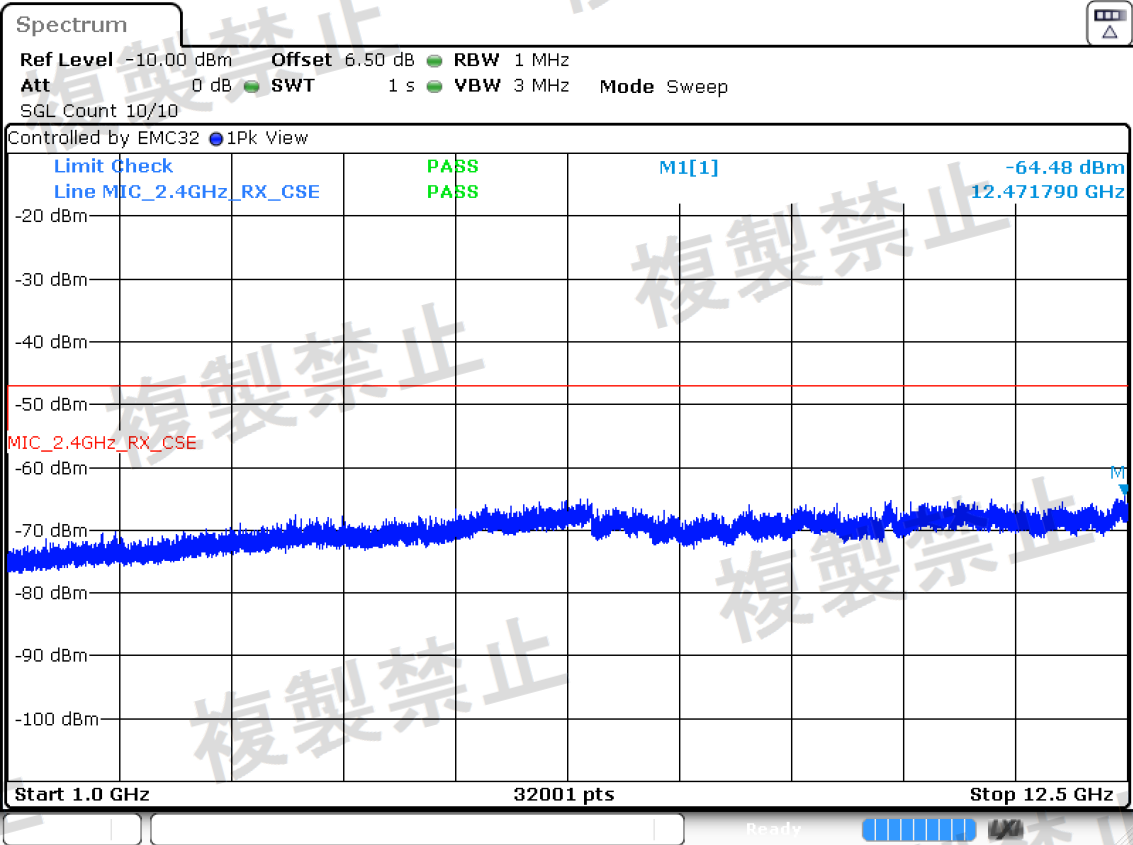
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

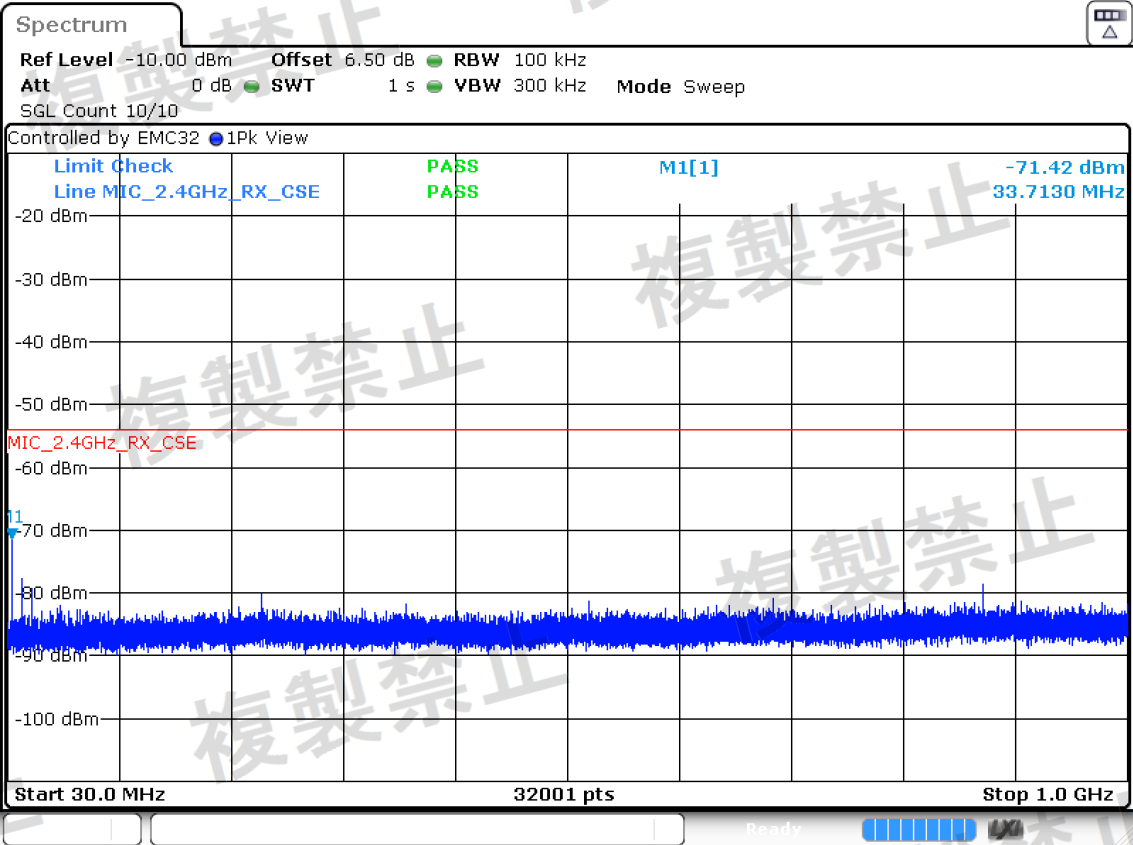
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

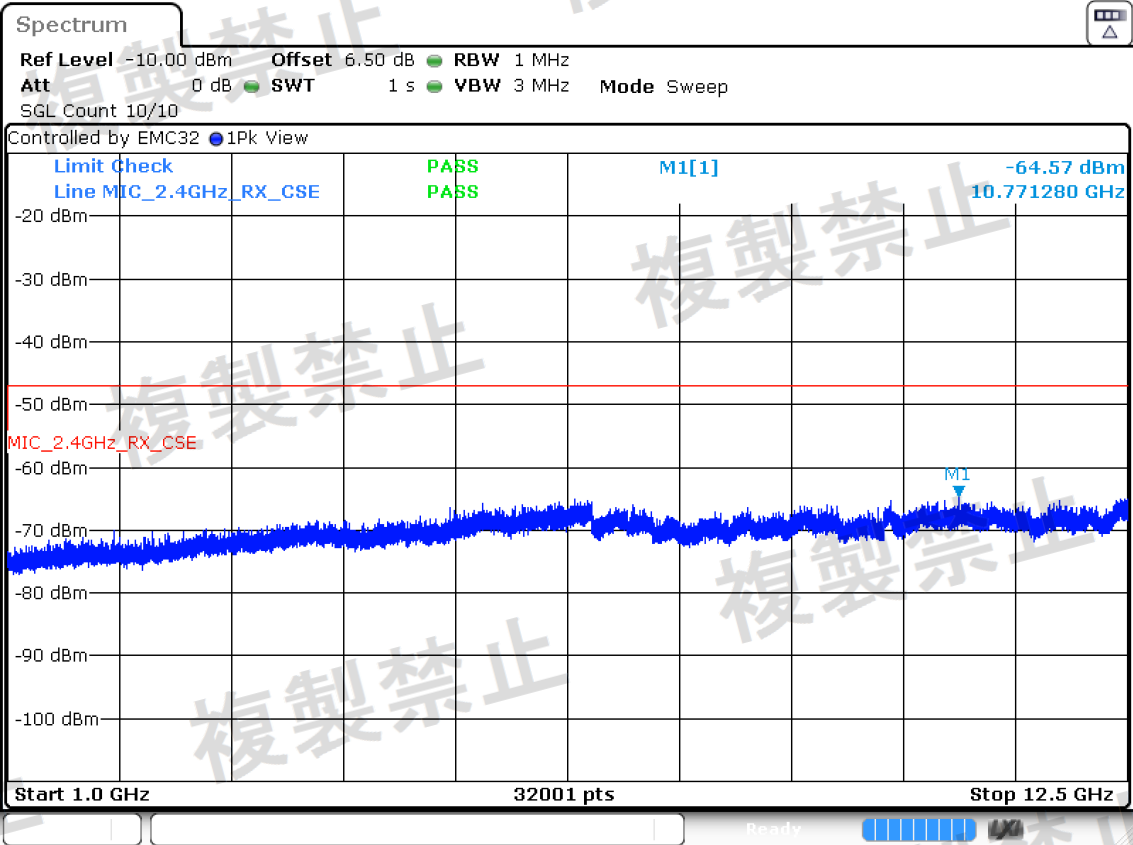
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

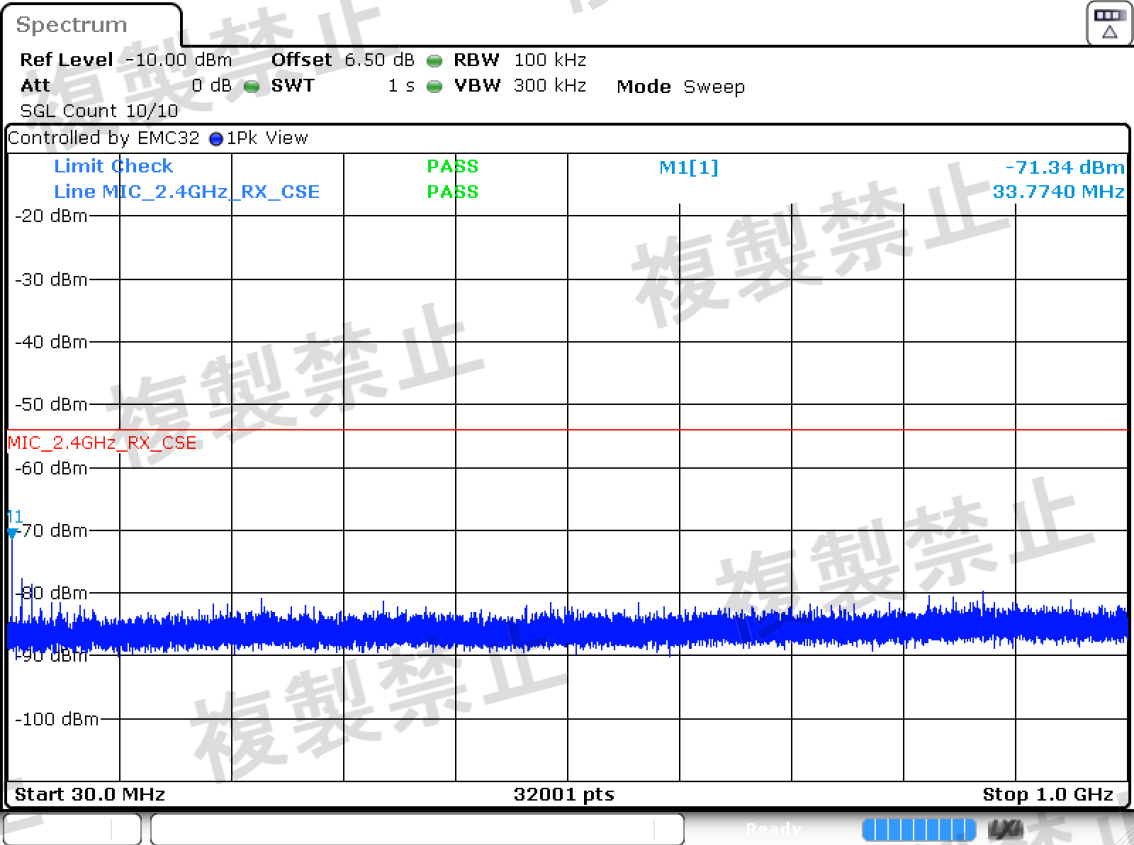
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

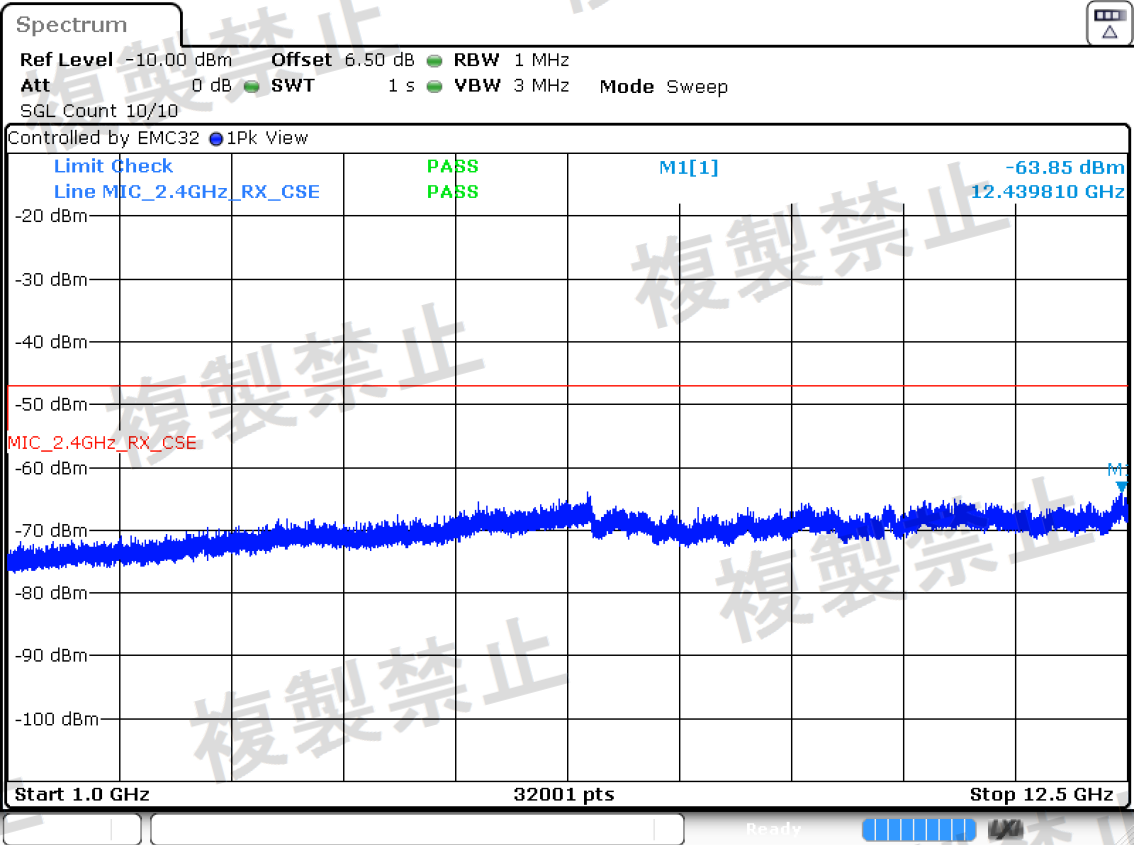
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Article 24. 2 [CSERxW] Secondary Radiated Emission Strength (Wi-Fi)

Limits

No Limit has been set to this test case

Results

Modulation: 802.11b (DSSS 1 Mbit/s)

MIMO Mode: MIMO CDD Mode 2x2

Results

Ambient Temp (°C)	Test Voltage	Channel	Port	Freq Rng (GHz)	Unwanted Freq (MHz)	Reading Value (dBm)	Unwanted Lvl (nW)	Limit (nW)
15.00	12	1	A	[0.03, 1]	33.895	-70.98	0.0798	4.00
				[1, 12.5]	12440.170	-64.23	0.3776	20.00
			B	[0.03, 1]	33.804	-71.63	0.0687	4.00
				[1, 12.5]	12434.780	-64.11	0.3882	20.00
		7	A	[0.03, 1]	33.804	-71.10	0.0776	4.00
				[1, 12.5]	6971.010	-64.08	0.3908	20.00
			B	[0.03, 1]	33.834	-71.39	0.0726	4.00
				[1, 12.5]	12471.790	-64.48	0.3565	20.00
		13	A	[0.03, 1]	33.713	-71.42	0.0721	4.00
				[1, 12.5]	10771.280	-64.57	0.3491	20.00
			B	[0.03, 1]	33.774	-71.34	0.0735	4.00
				[1, 12.5]	12439.810	-63.85	0.4121	20.00

Verdict

Pass

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Test Voltage = 12

Channel = 1

Frequency Range GHz = [0.03, 1]

MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

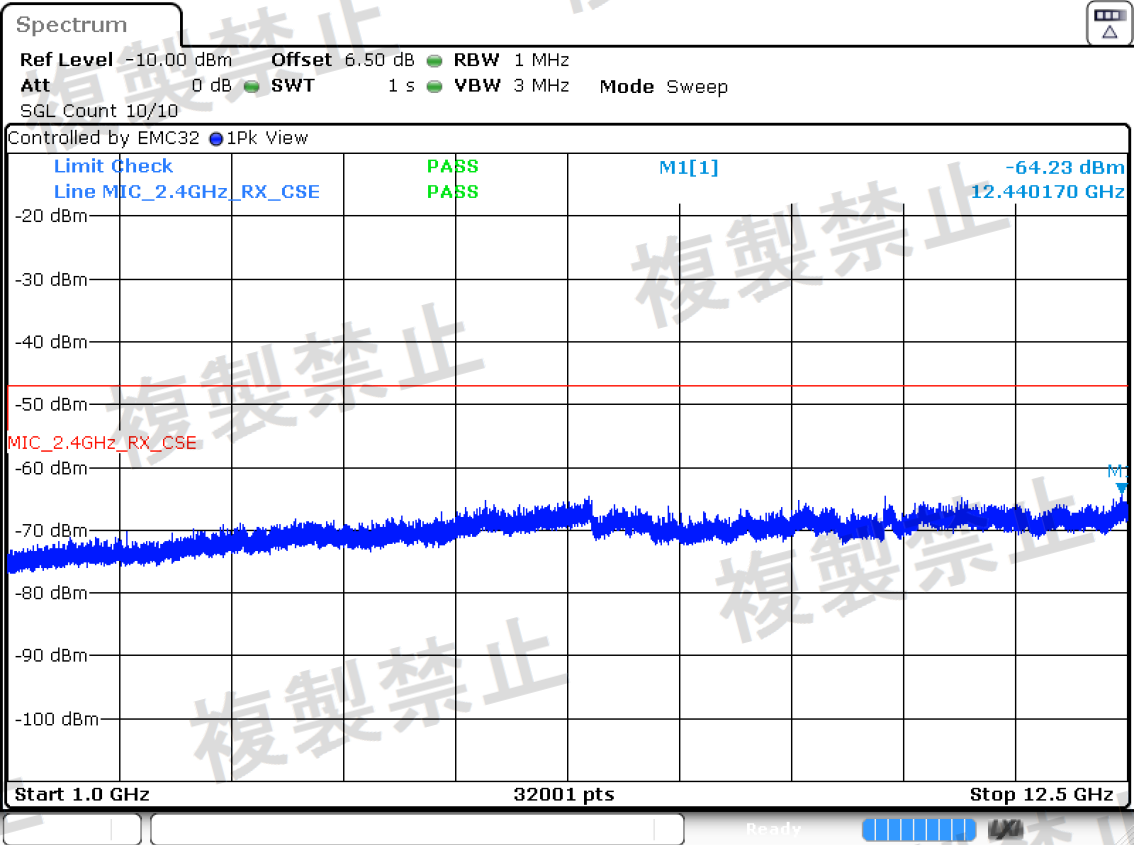
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

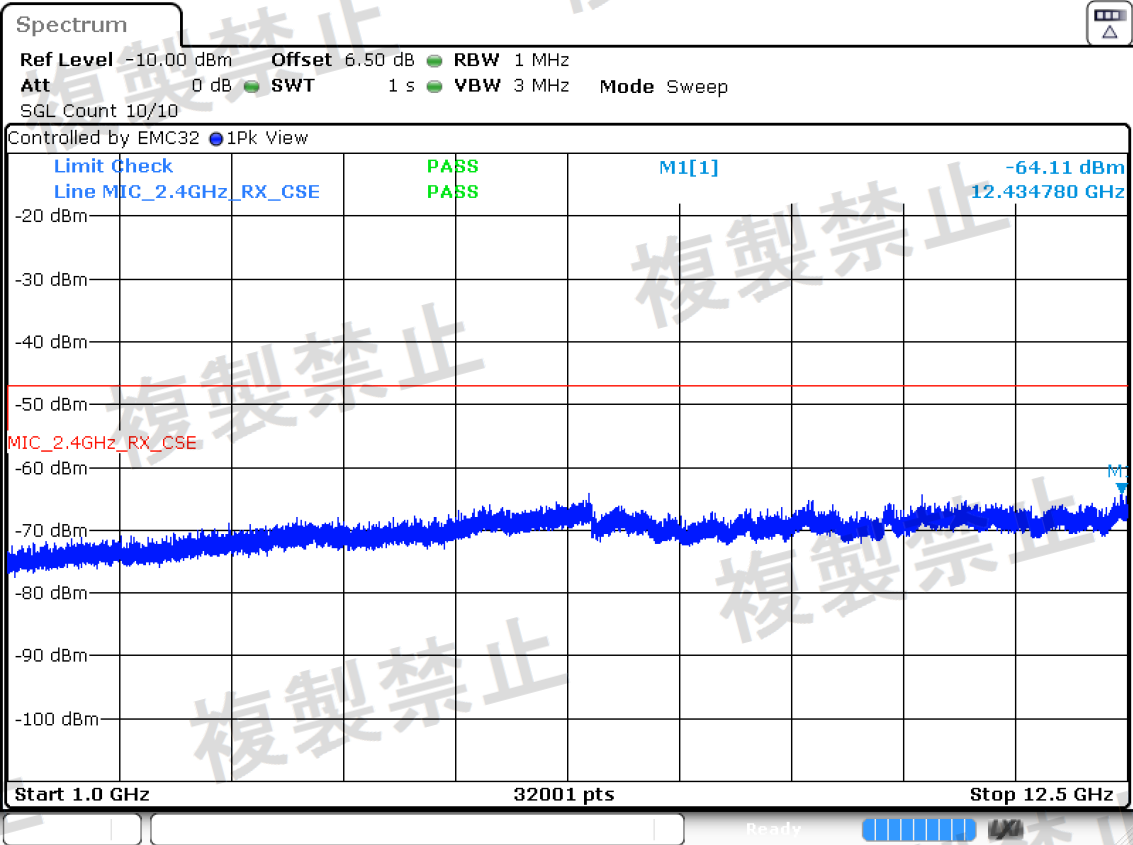
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 1
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

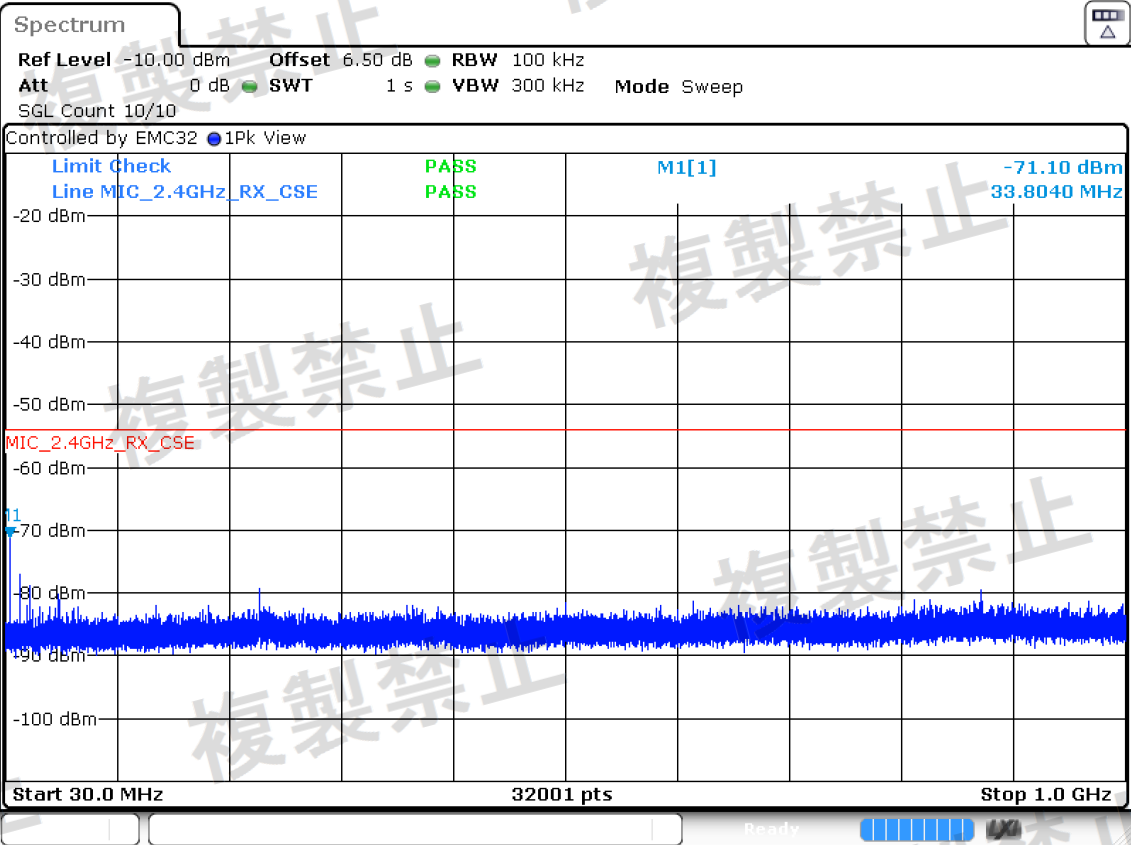
Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = A Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

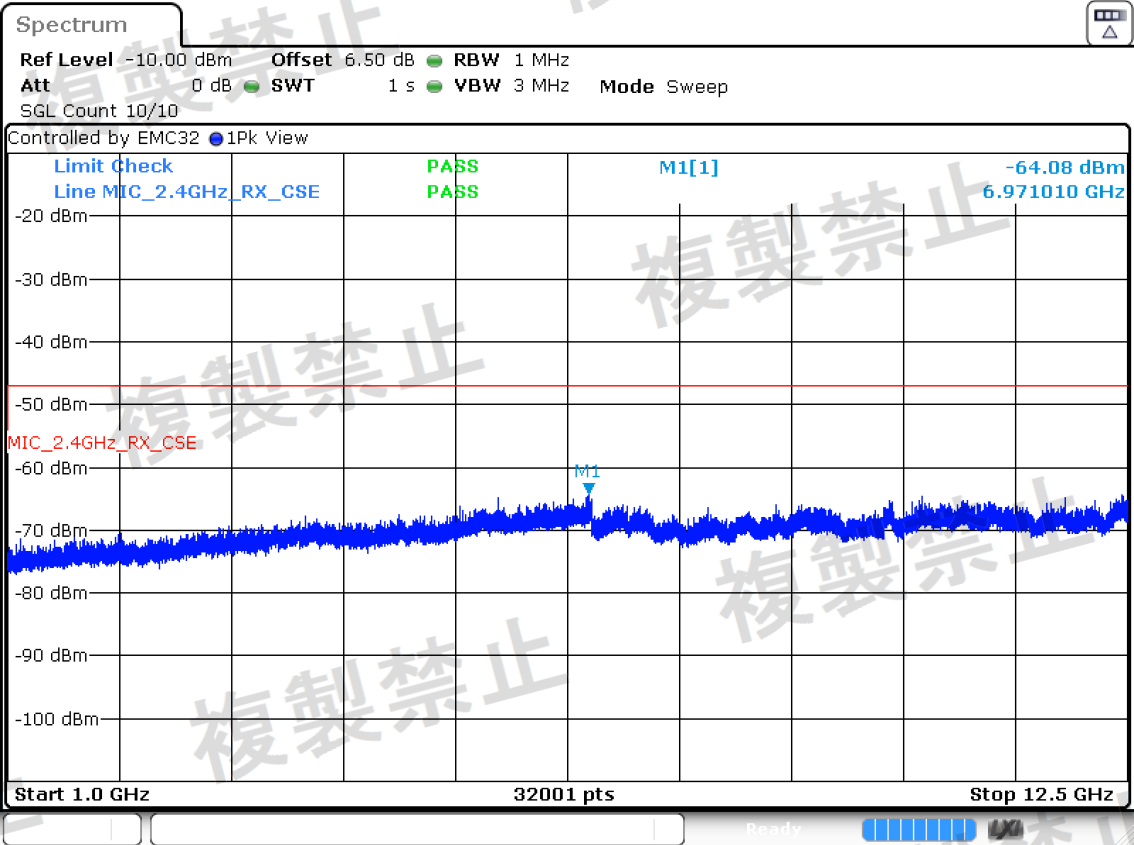
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

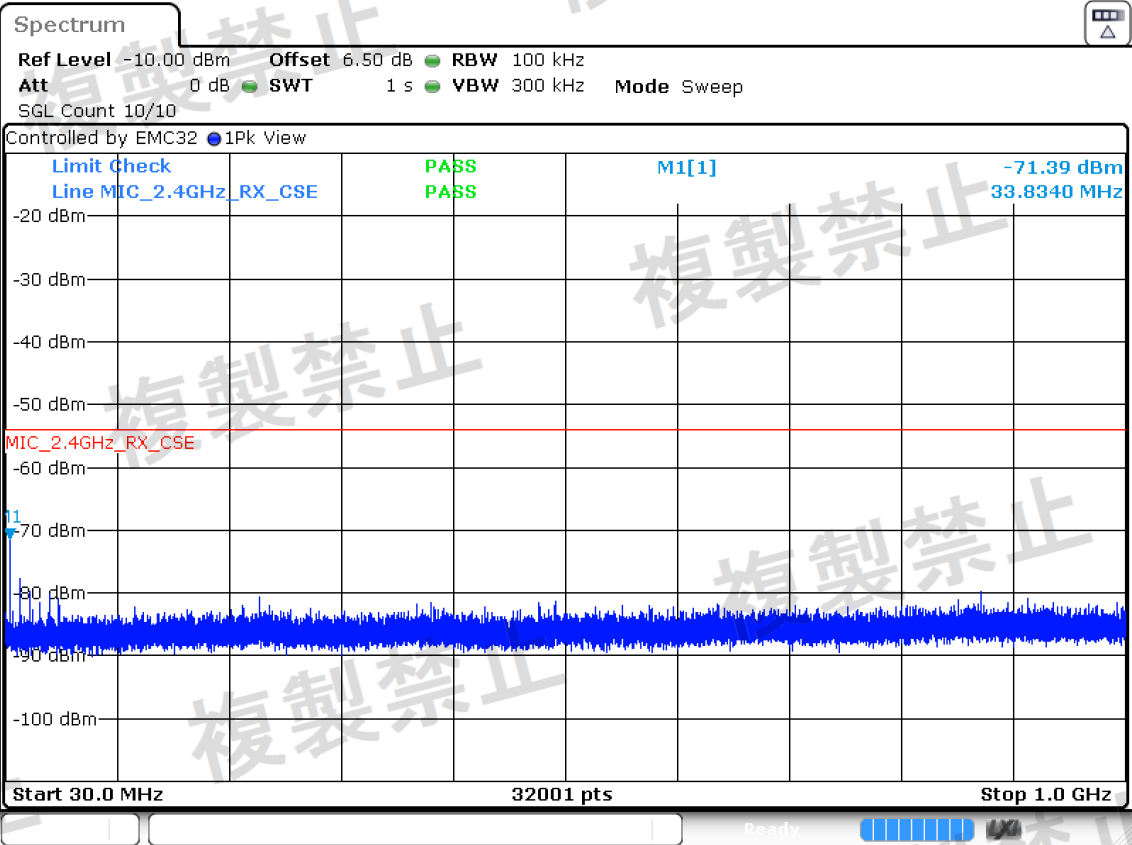
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

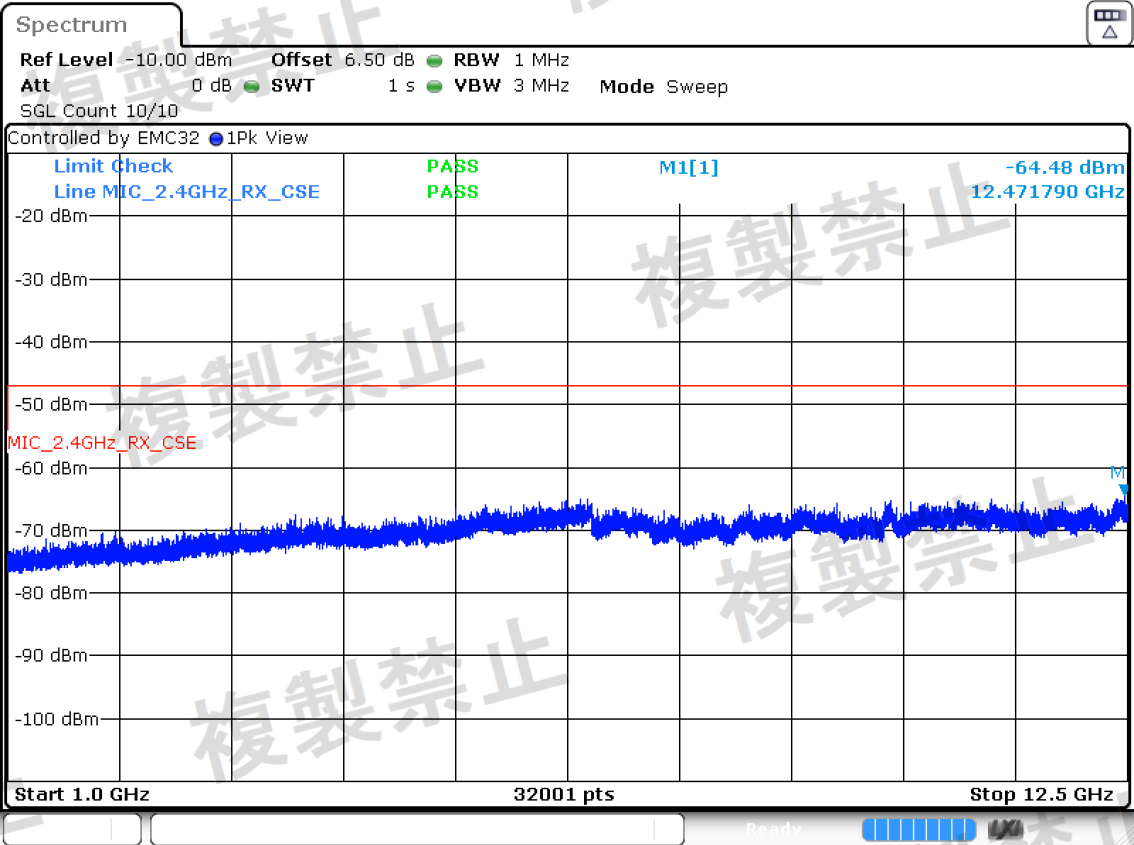
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 7
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

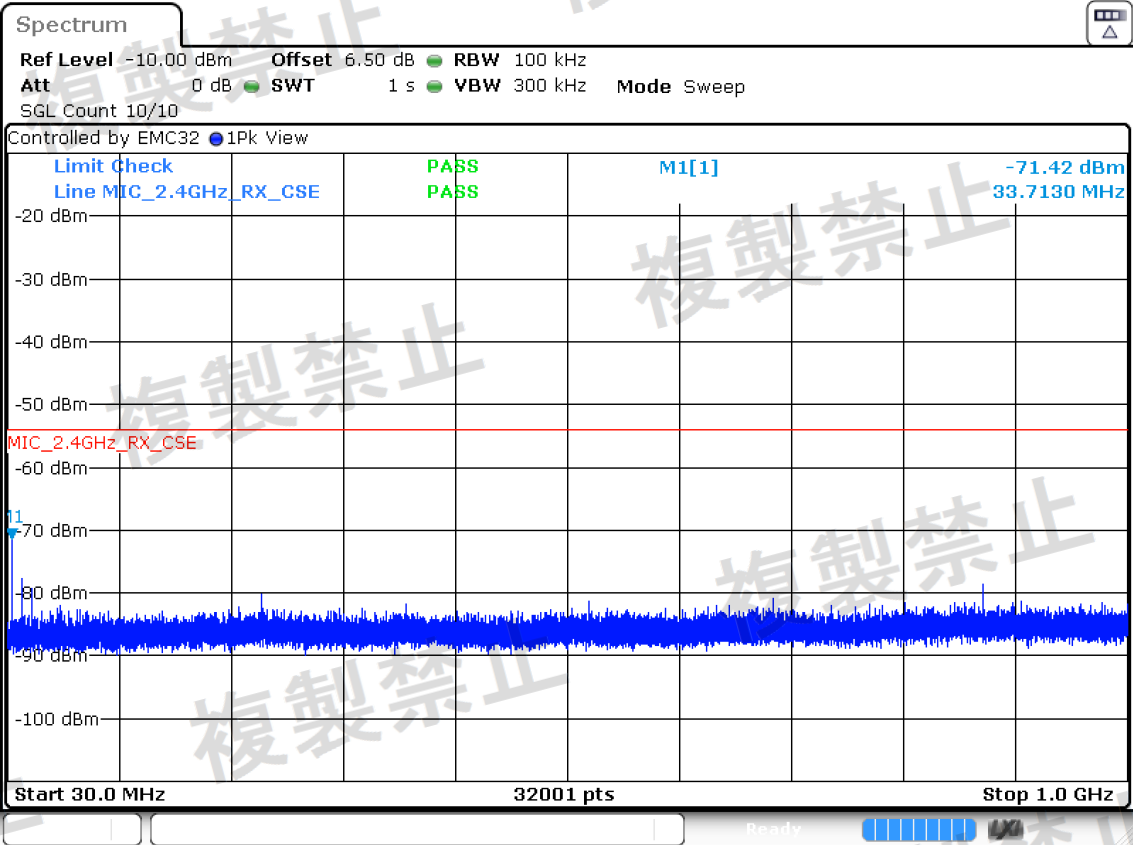
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

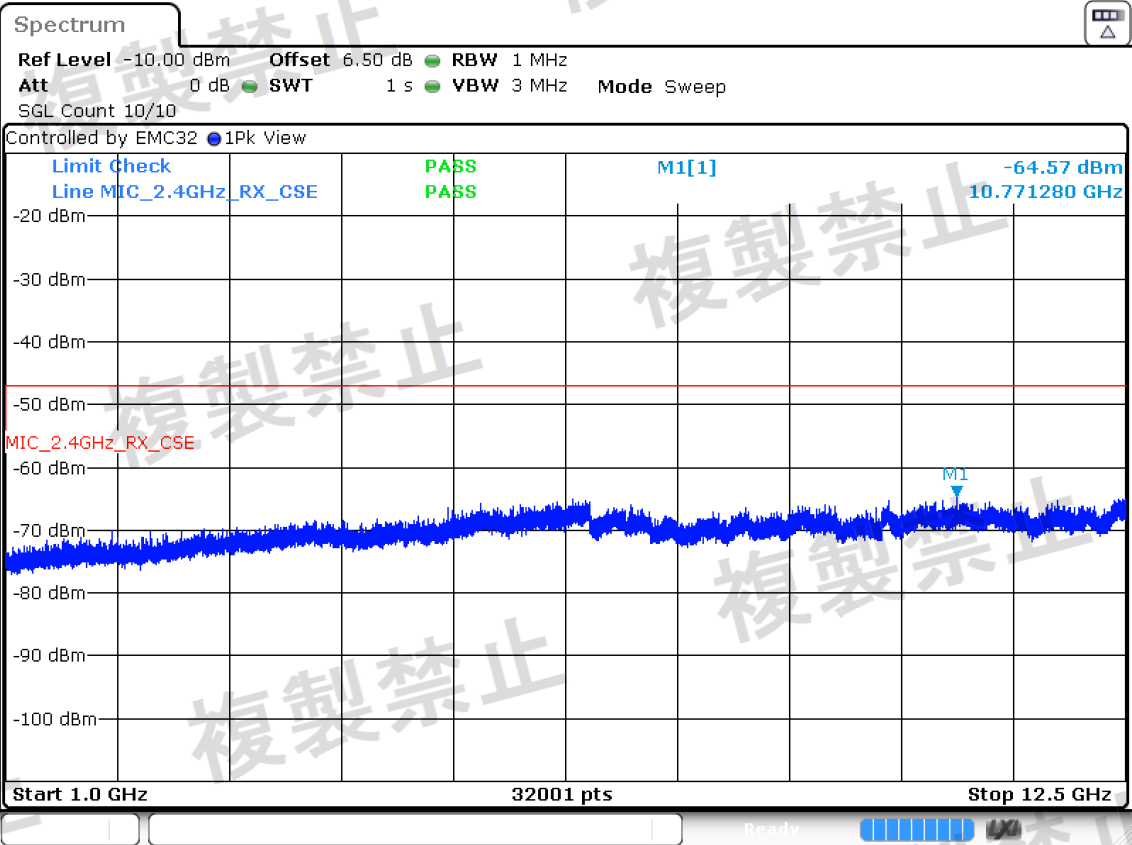
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = A Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

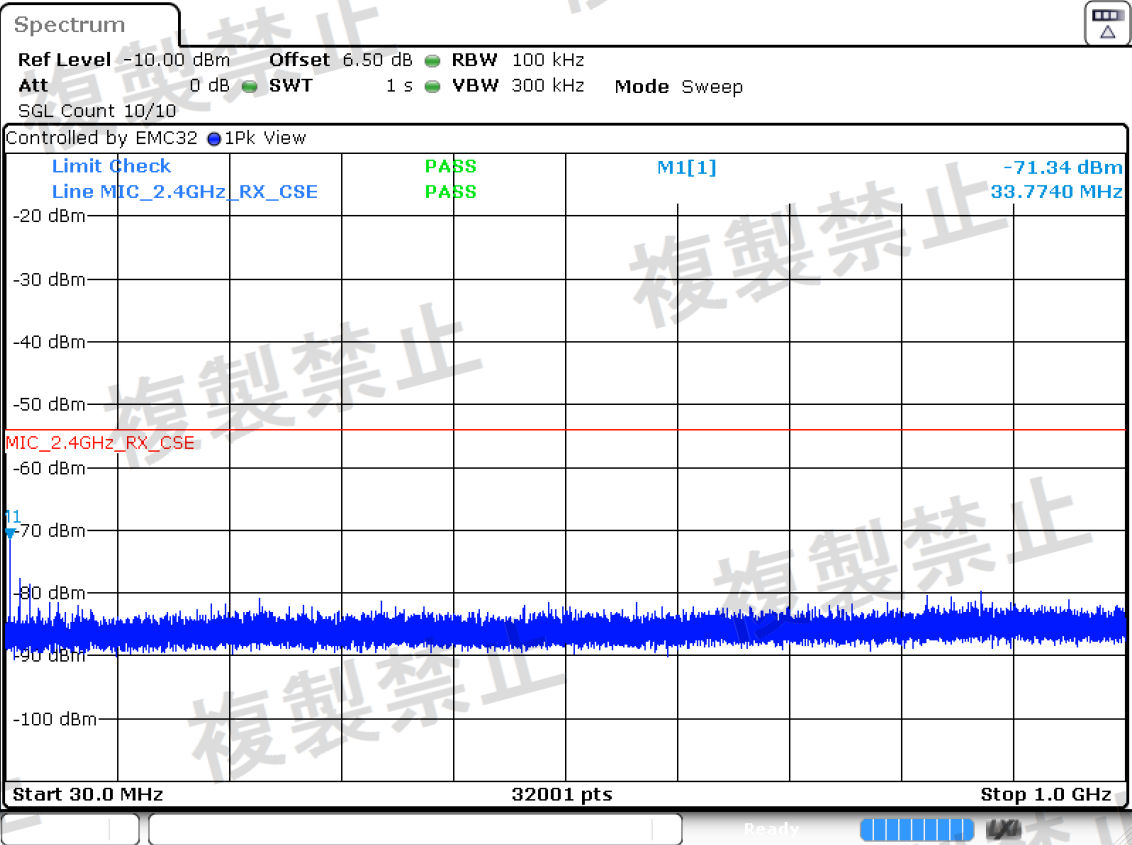
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Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [0.03, 1]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:



Ambient Temperature °C = 15.00 Test Voltage = 12
Modulation = 802.11b (DSSS 1 Mbit/s) Channel = 13
Active Port = B Frequency Range GHz = [1, 12.5]
MIMO Mode = MIMO CDD Mode 2x2

Verdict: Pass

Images:

