427 West 12800 South
Draper, UT 84020

Test Report Attachment

FCC ID	SWX-UKU
ISED ID	6545A-UKU
Equipment Under Test	UK-Ultra
Test Report Serial Number	TR8447_02
Date of Test(s)	9-10, 11, 14 August 2023
Report Issue Date	19 December 2023

Test Personnel

Testing performed by	Tyler Parry

Test Location

Testing was performed at the Unified Compliance Laboratory located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2023. This site has also been registered with Innovations, Science and Economic Development (ISED) department as was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2023. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED and MRA US5037.

NVLAP LAB CODE 600241-0

1 Table of Contents

2 UK-Ultra 2.4GHz WiFi Integral Antenna

2.1 n mode Integral Antenna

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2412.000	24.0	20.000000	PASS
Power Spectral Density	2412.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	24.0	20.000000	PASS
Tx Spurious Emission	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	20.000000	PASS
Tx Spurious Emission	2437.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	24.0	20.000000	PASS
Tx Spurious Emission	2462.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2422.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2422.000	24.0	40.000000	PASS
Tx Spurious Emission	2422.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	40.000000	PASS
Tx Spurious Emission	2437.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2452.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2452.000	24.0	40.000000	PASS
Tx Spurious Emission	2452.000	24.0	40.000000	PASS

RF output power (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	20.9	30.0	20.9	94.673	PASS

OSP PowerMeter settings

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs

Minimum Emission Bandwidth 6 dB (2412 MHz; 24.000 dBm; 20 MHz)

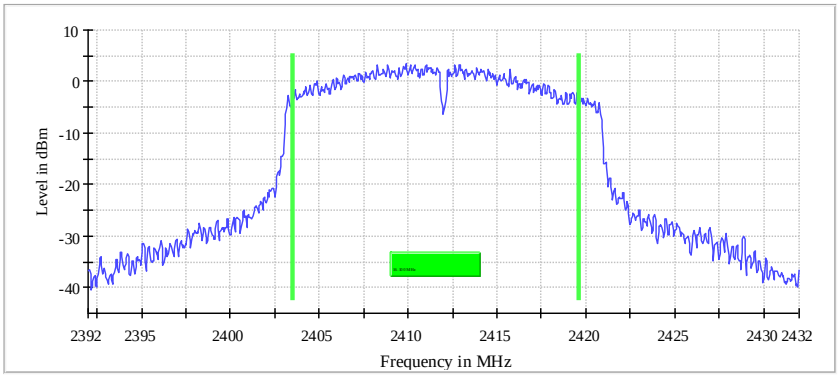
Customized settings.

6 dB Bandwidth

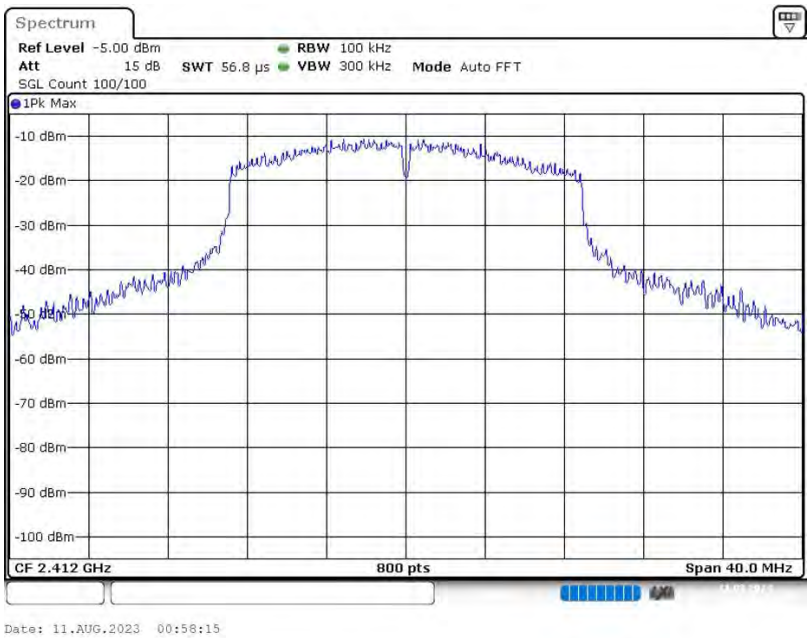
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.100000	0.500000	---	2403.475000	2419.575000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	3.4	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	56.836 µs	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Power Spectral Density (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

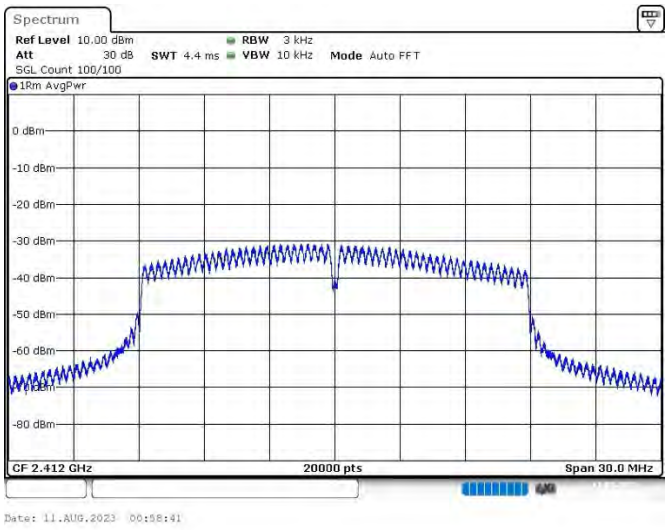
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2410.457250	-13.695	8.0	PASS

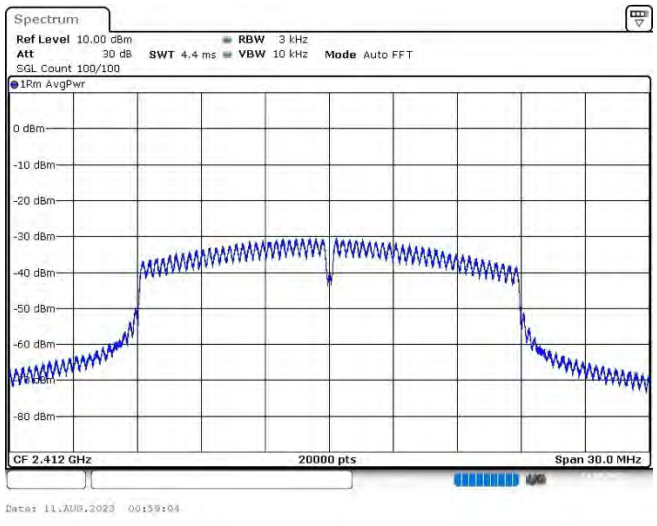
Ports

Port	State
1	used
2	used

PSD Connector 1



PSD Connector 2



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.42700 GHz	2.42700 GHz
Span	30.000 MHz	30.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	20000	~ 20000
Sweeptime	4.424 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Average Power	Average Power
Sweeptype	FFT	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (2412 MHz; 24.000 dBm; 20 MHz)

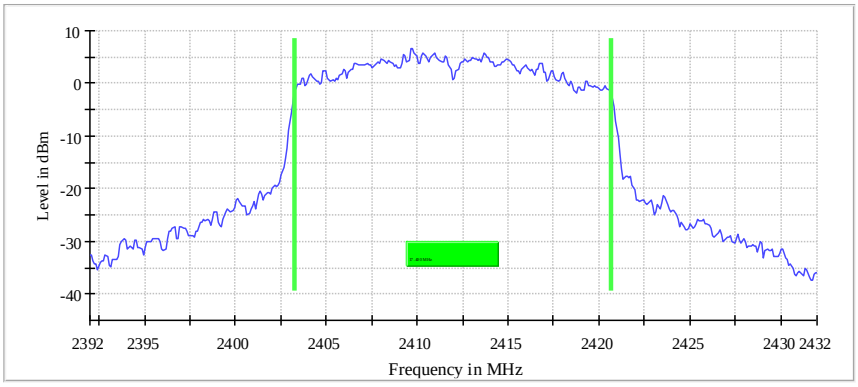
Customized settings.

99 % Bandwidth

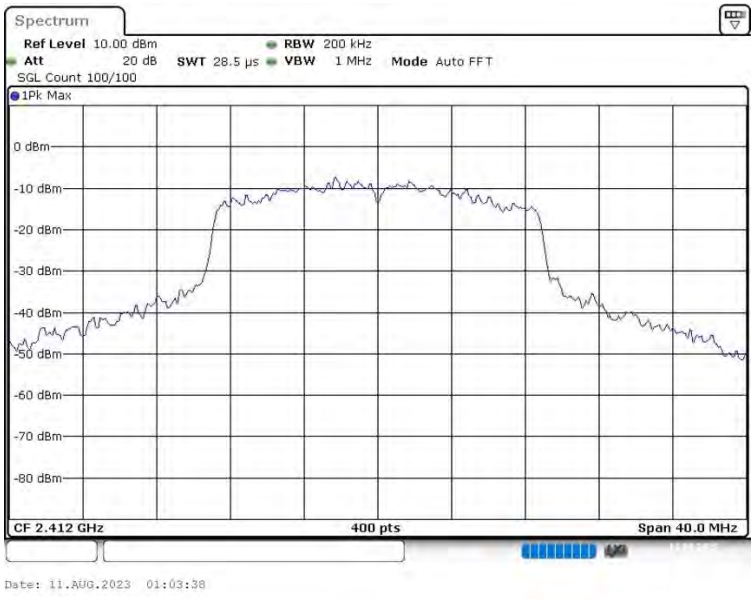
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.400000	---	---	2403.250000	2420.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	28.477 µs	AUTO
Reference Level	10.000 dBm	AUTO
Attenuation	20.000 dB	20.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Tx Spurious Emission (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

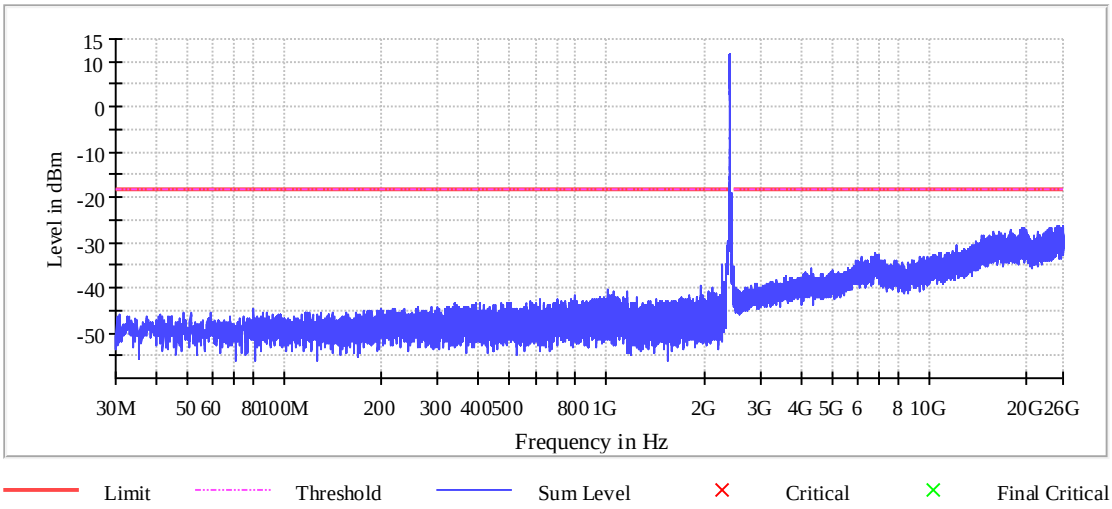
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2398.875000	-19.5	1.3	-18.2
2399.825000	-19.6	1.5	-18.2
2399.475000	-19.8	1.6	-18.2
2399.525000	-19.8	1.6	-18.2
2398.925000	-19.9	1.7	-18.2
2399.875000	-20.0	1.8	-18.2
2399.775000	-20.2	2.1	-18.2
2398.525000	-20.3	2.1	-18.2
2398.275000	-20.3	2.1	-18.2
2398.475000	-20.4	2.2	-18.2
2398.825000	-20.5	2.3	-18.2
2399.225000	-20.6	2.4	-18.2
2399.925000	-20.6	2.4	-18.2
2398.225000	-20.6	2.5	-18.2
2397.975000	-20.8	2.6	-18.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	32001	~ 46400
Sweeptime	32.100 ms	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2670	~ 2670
Sweeptime	151.563 µs	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak

SweepCount	**300**	**300**
Filter	**3 dB**	**3 dB**
Trace Mode	**Max Hold**	**Max Hold**
Sweeptype	**FFT**	**AUTO**
Preamp	**off**	**off**

Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 20 MHz)

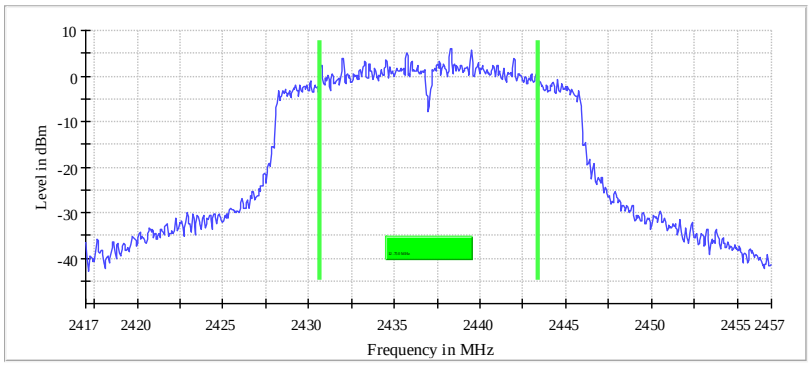
Customized settings.

6 dB Bandwidth

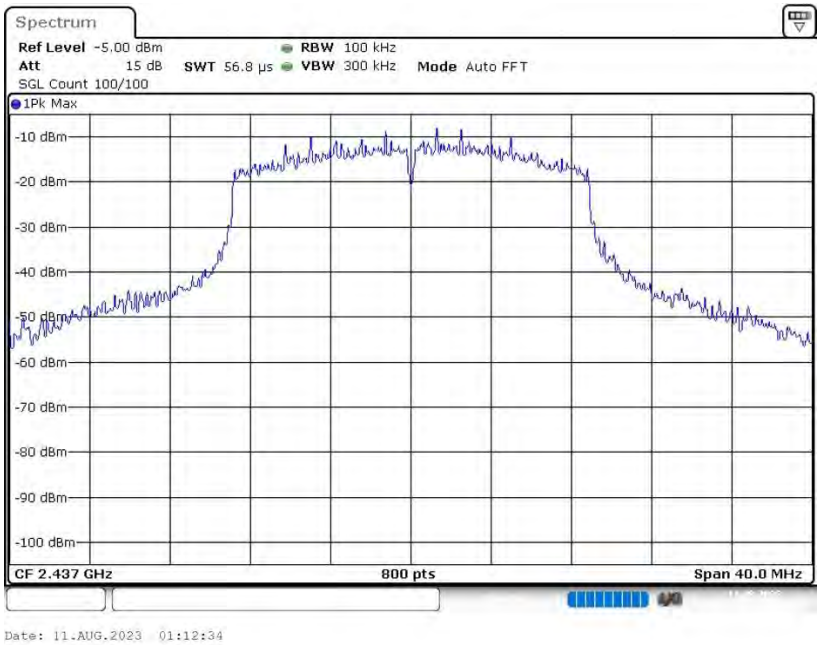
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	12.750000	0.500000	---	2430.625000	2443.375000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	6.0	PASS



Bandwidth



Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

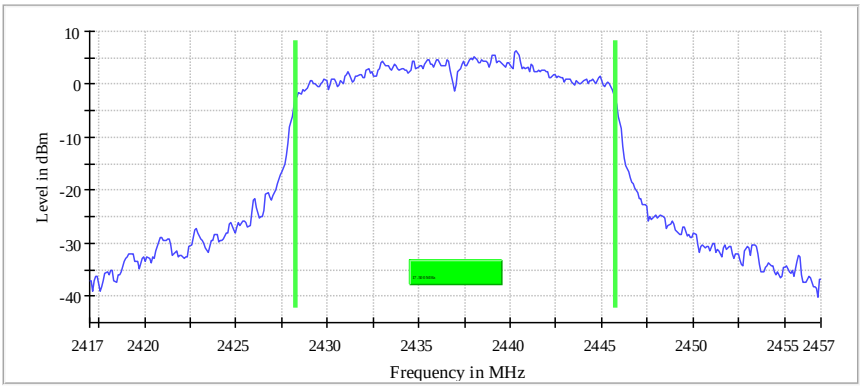
Customized settings.

99 % Bandwidth

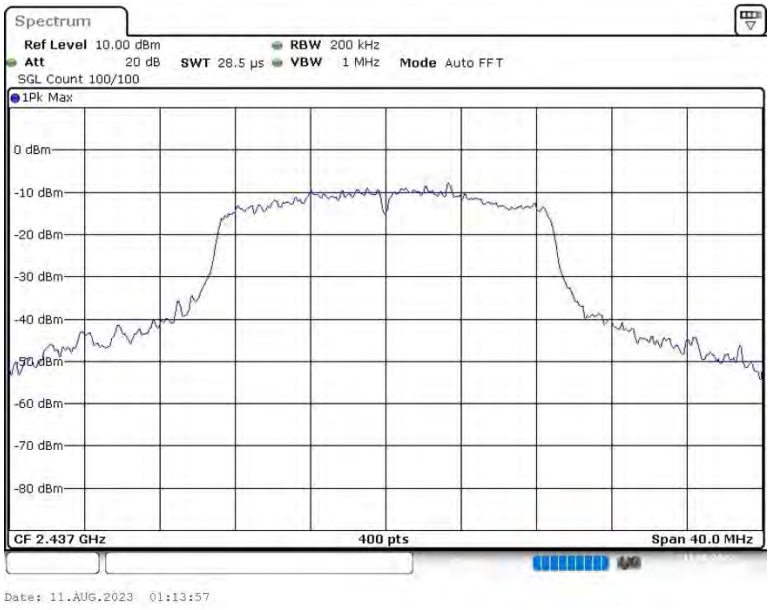
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.500000	---	---	2428.250000	2445.750000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth



Tx Spurious Emission (2437 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

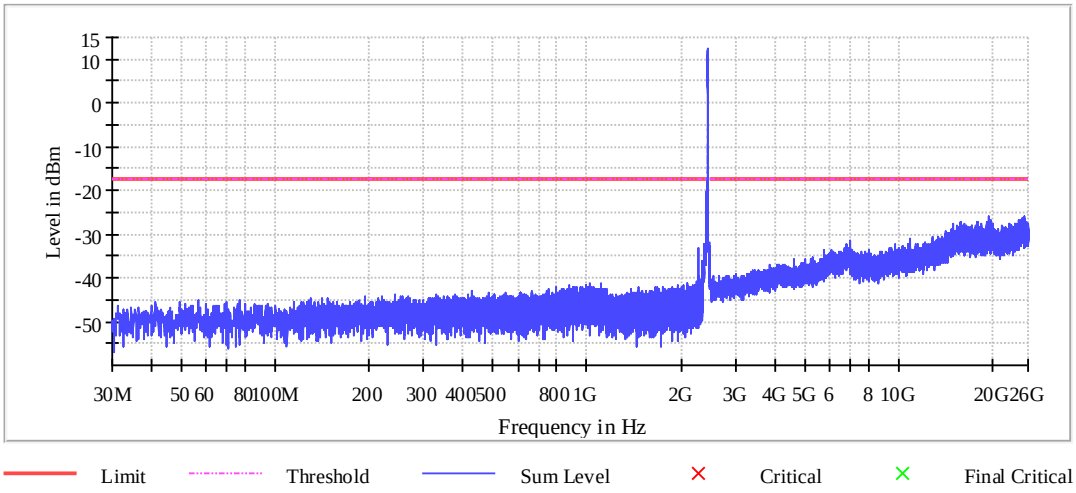
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19401.990711	-25.9	8.4	-17.5
25131.753859	-26.0	8.5	-17.5
25093.540741	-26.3	8.7	-17.5
25092.071006	-26.5	9.0	-17.5
25125.140050	-26.5	9.0	-17.5
25416.882511	-26.6	9.0	-17.5
25206.710361	-26.6	9.0	-17.5
24439.508523	-26.6	9.1	-17.5
25047.244078	-26.7	9.1	-17.5
24785.631191	-26.7	9.2	-17.5
24429.220376	-26.7	9.2	-17.5
25124.405183	-26.8	9.2	-17.5
24780.487118	-26.8	9.3	-17.5
19792.940307	-26.9	9.4	-17.5
25420.556850	-27.0	9.4	-17.5

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

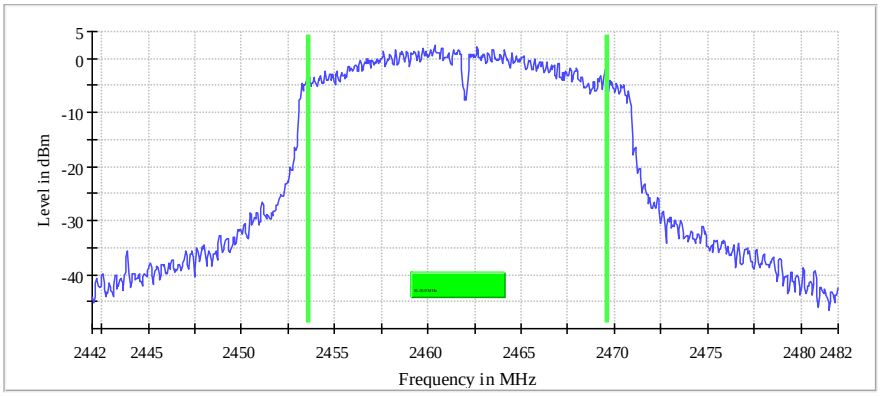
Customized settings.

6 dB Bandwidth

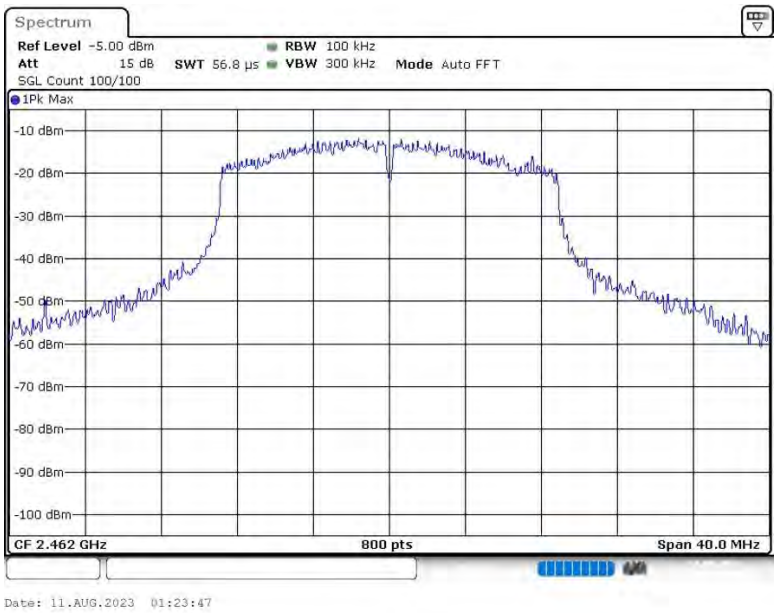
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.050000	0.500000	---	2453.575000	2469.625000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	2.4	PASS



Bandwidth



Occupied Channel Bandwidth 99% (2462 MHz; 24.000 dBm; 20 MHz)

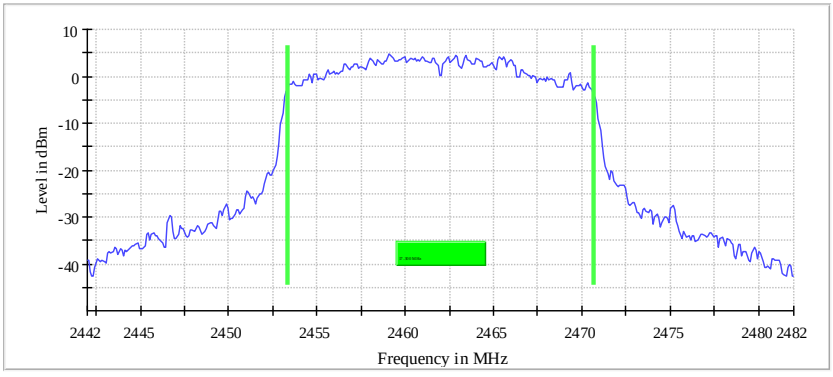
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.300000	---	---	2453.350000	2470.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Bandwidth

Tx Spurious Emission (2462 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

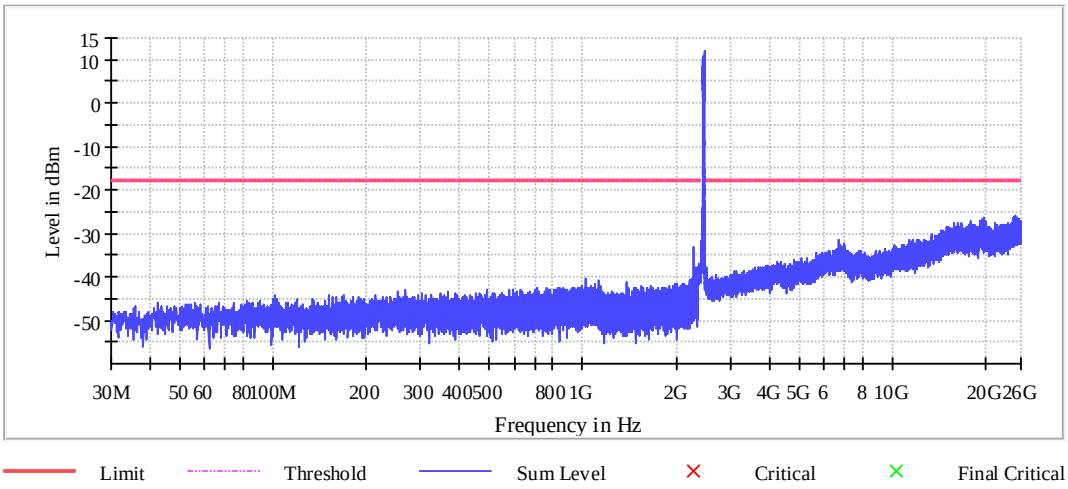
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25092.071006	-26.0	8.0	-18.0
19839.236969	-26.2	8.3	-18.0
24918.642238	-26.4	8.4	-18.0
25225.082052	-26.5	8.5	-18.0
24690.833263	-26.5	8.5	-18.0
24731.985852	-26.5	8.6	-18.0
25059.001961	-26.6	8.6	-18.0
25640.282280	-26.8	8.8	-18.0
24678.340513	-26.8	8.9	-18.0
25503.596895	-26.8	8.9	-18.0
19795.144910	-26.8	8.9	-18.0
25506.536366	-26.9	8.9	-18.0
19512.220860	-26.9	8.9	-18.0

24824.579177	-26.9	8.9	-18.0
25222.142581	-26.9	9.0	-18.0

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Minimum Emission Bandwidth 6 dB (2422 MHz; 24.000 dBm; 40 MHz)

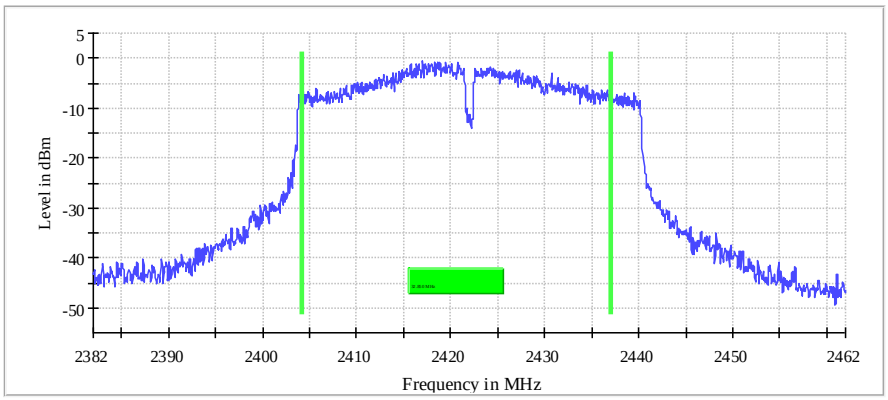
Customized settings.

6 dB Bandwidth

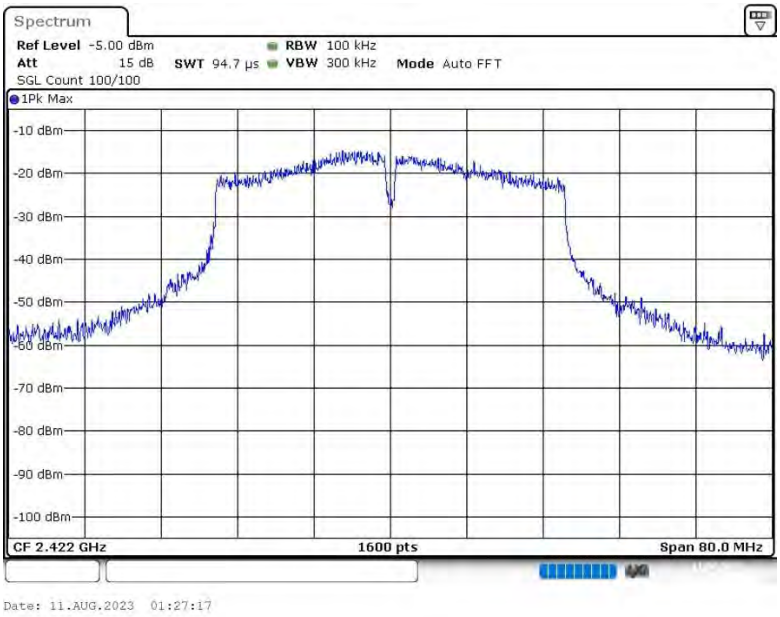
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	32.850000	0.500000	---	2404.225000	2437.075000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-0.6	PASS



Bandwidth



Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

Customized settings.

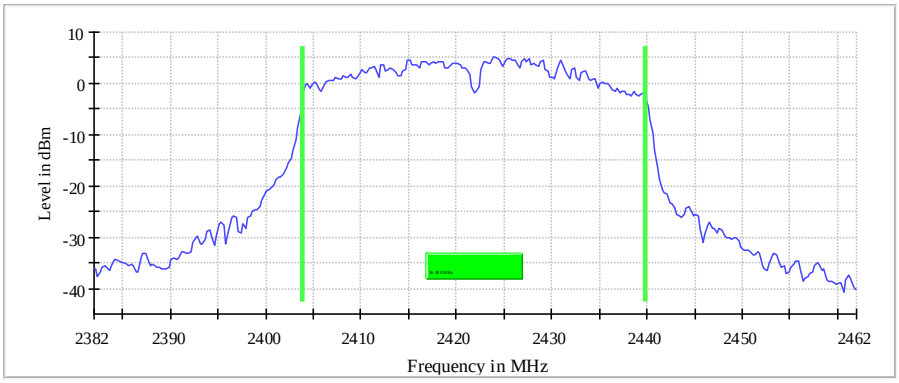
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.000000	---	---	2403.875000	2439.875000

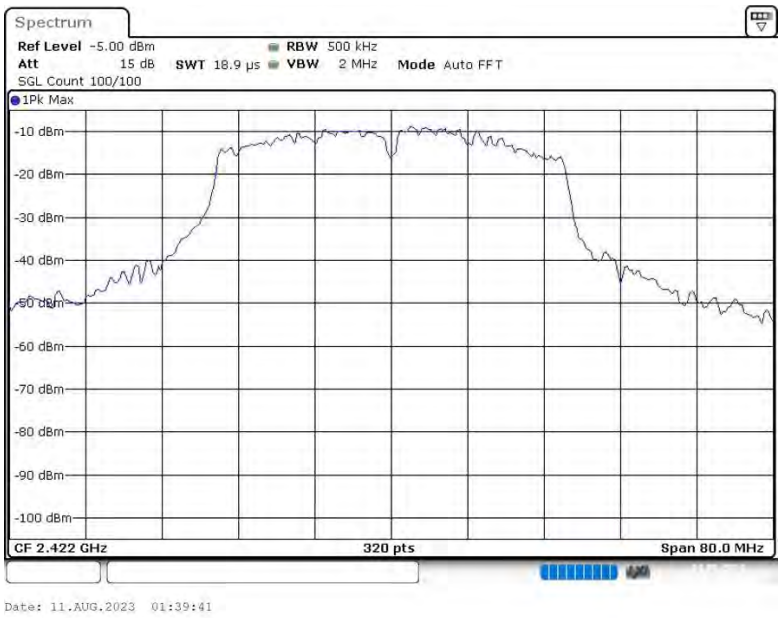
(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS

99 % Bandwidth



Bandwidth



Tx Spurious Emission (2422 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

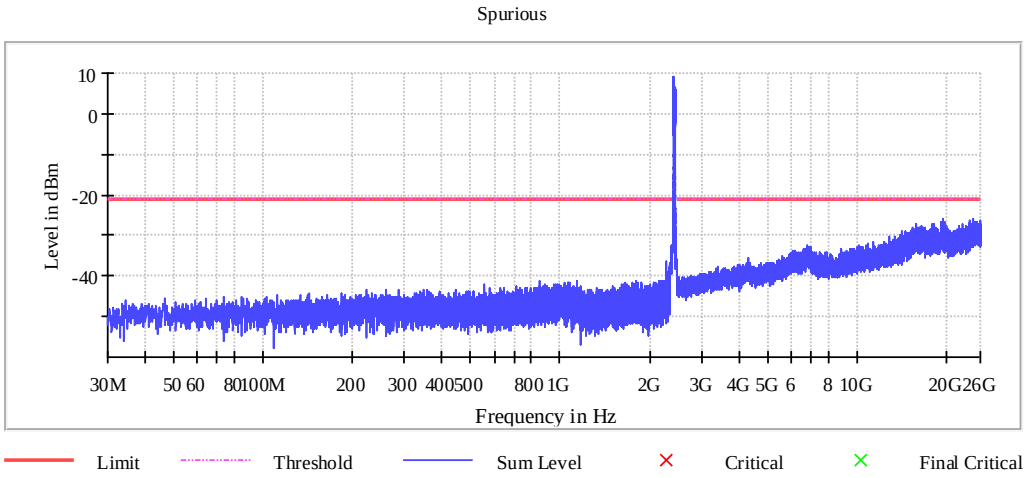
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2398.875000	-23.6	2.6	-21.0
2399.775000	-23.7	2.7	-21.0
2398.925000	-23.8	2.8	-21.0
2399.825000	-23.8	2.9	-21.0
2398.825000	-24.0	3.0	-21.0
2399.075000	-24.0	3.0	-21.0
2399.125000	-24.2	3.2	-21.0
2399.025000	-24.2	3.2	-21.0
2399.475000	-24.4	3.4	-21.0
2399.525000	-24.5	3.6	-21.0
2399.175000	-24.6	3.6	-21.0
2398.975000	-24.7	3.7	-21.0
2399.725000	-24.7	3.7	-21.0
2399.225000	-24.7	3.8	-21.0
2399.575000	-24.8	3.8	-21.0

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 40 MHz)

Customized settings.

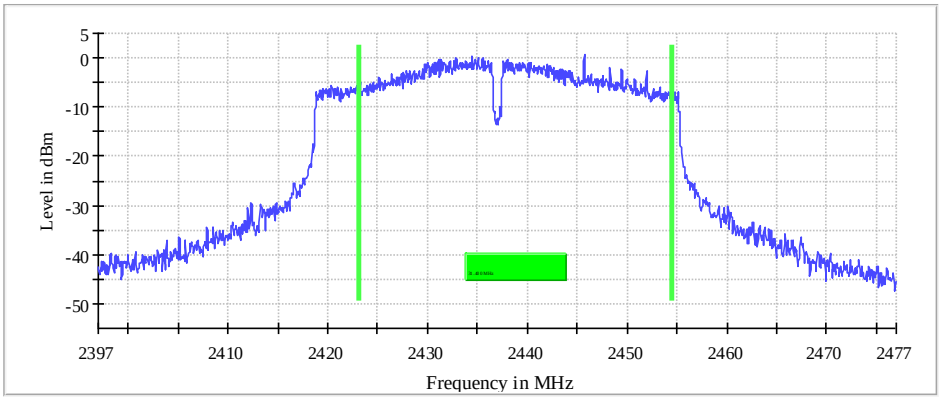
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	31.400000	0.500000	---	2423.175000	2454.575000

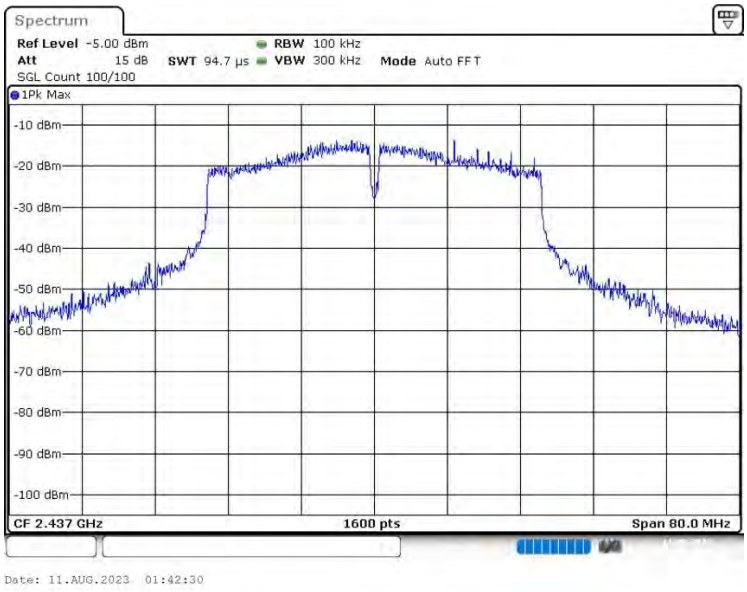
(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	0.5	PASS

6 dB Bandwidth



Bandwidth



Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

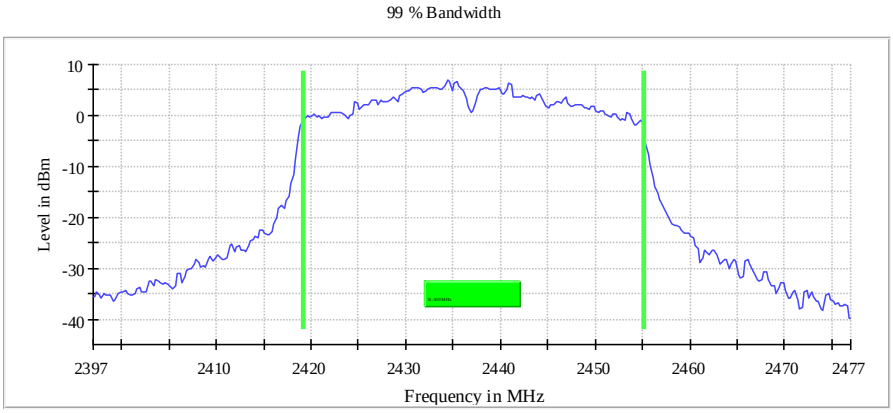
Customized settings.

99 % Bandwidth

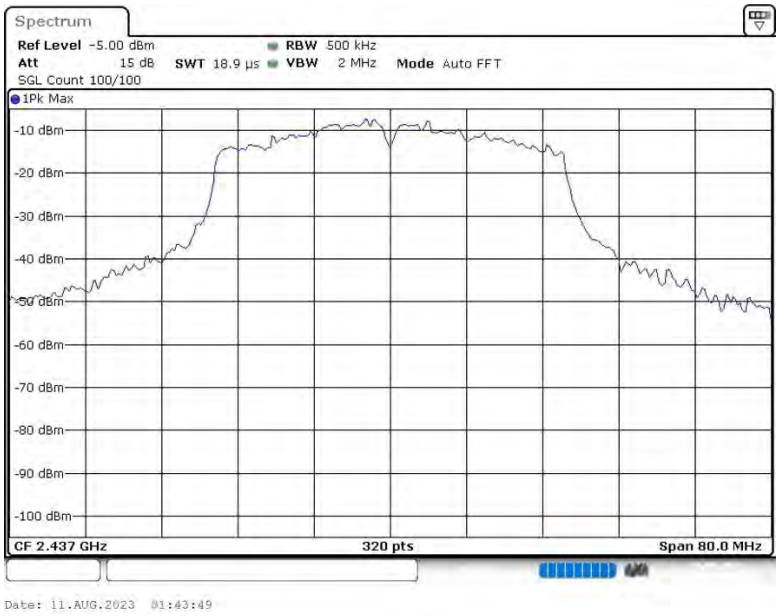
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.000000	---	---	2419.125000	2455.125000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth



Tx Spurious Emission (2437 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

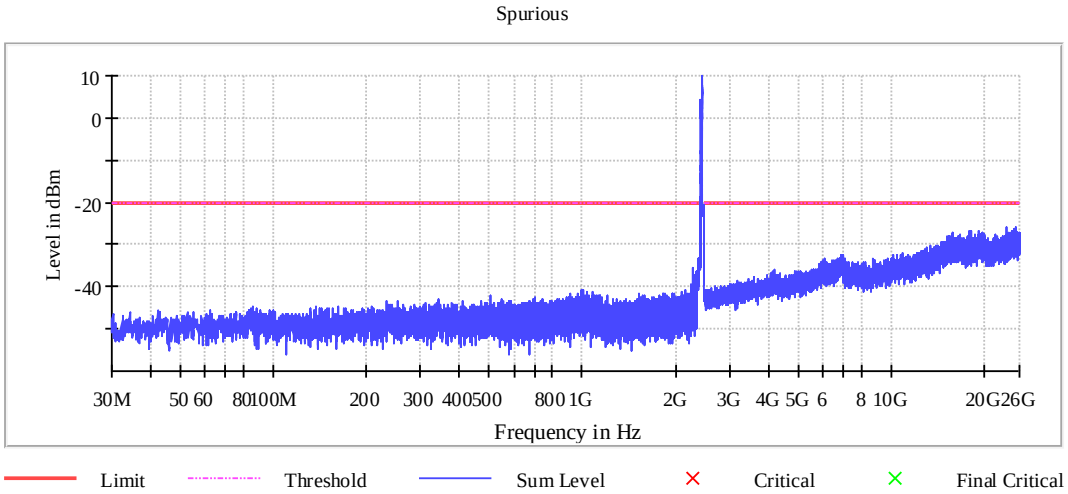
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
23750.937525	-26.0	5.8	-20.2
25203.036022	-26.1	5.9	-20.2
24783.426588	-26.4	6.2	-20.2
25086.926932	-26.5	6.3	-20.2
25100.154550	-26.7	6.5	-20.2
17816.881168	-26.7	6.5	-20.2
25106.033491	-26.8	6.6	-20.2
19141.847559	-26.8	6.6	-20.2
25199.361684	-26.8	6.6	-20.2
24580.603114	-26.9	6.7	-20.2
24776.077912	-26.9	6.7	-20.2
24739.334529	-26.9	6.7	-20.2
24943.627738	-26.9	6.7	-20.2
24831.927854	-26.9	6.8	-20.2
18072.615114	-27.0	6.8	-20.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Minimum Emission Bandwidth 6 dB (2452 MHz; 24.000 dBm; 40 MHz)

Customized settings.

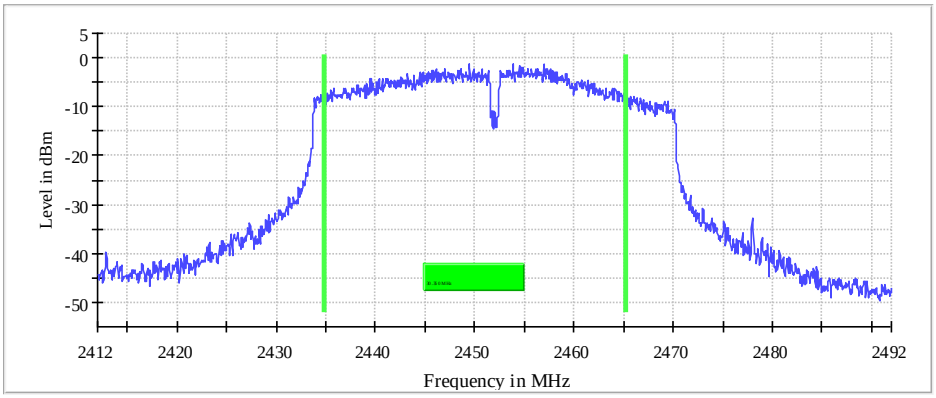
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	30.350000	0.500000	---	2434.825000	2465.175000

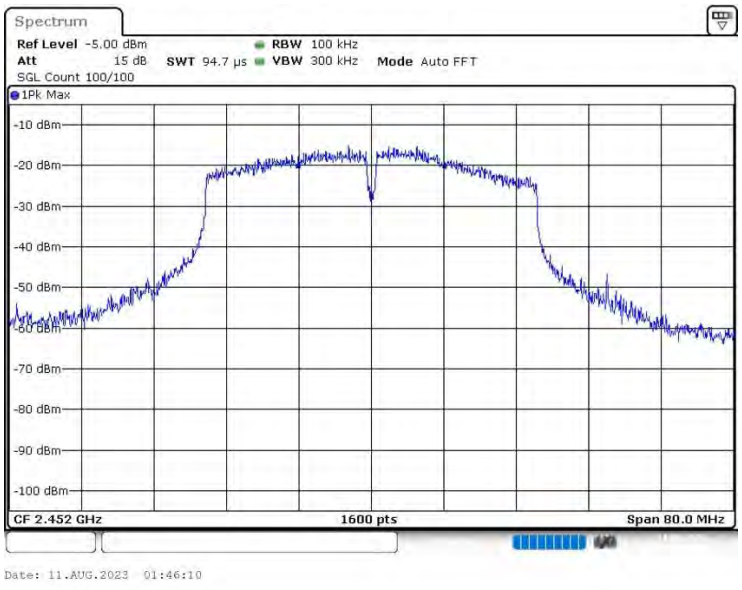
(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-1.2	PASS

6 dB Bandwidth



Bandwidth



Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

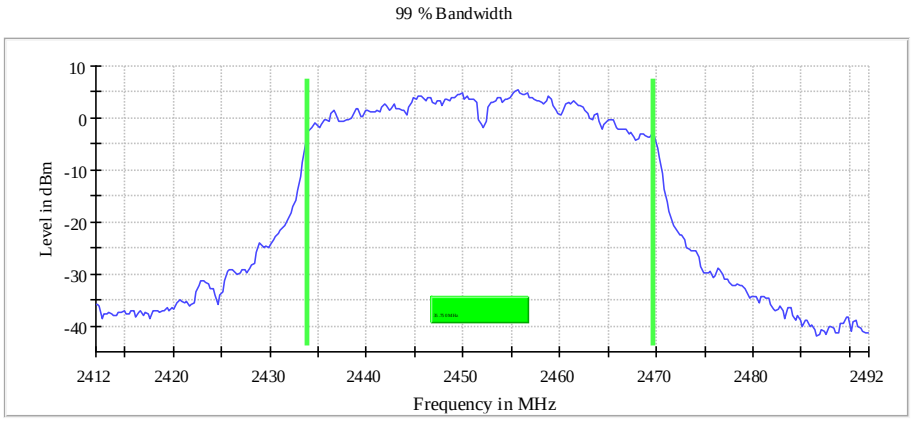
Customized settings.

99 % Bandwidth

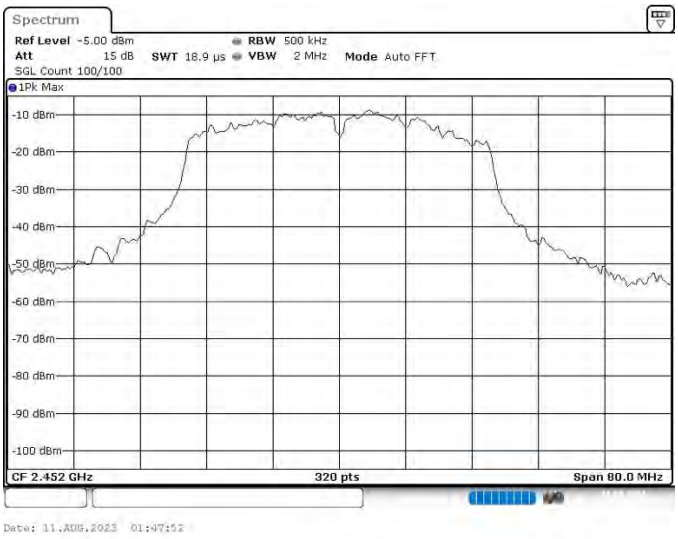
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	35.750000	---	---	2433.875000	2469.625000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



Bandwidth



Tx Spurious Emission (2452 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

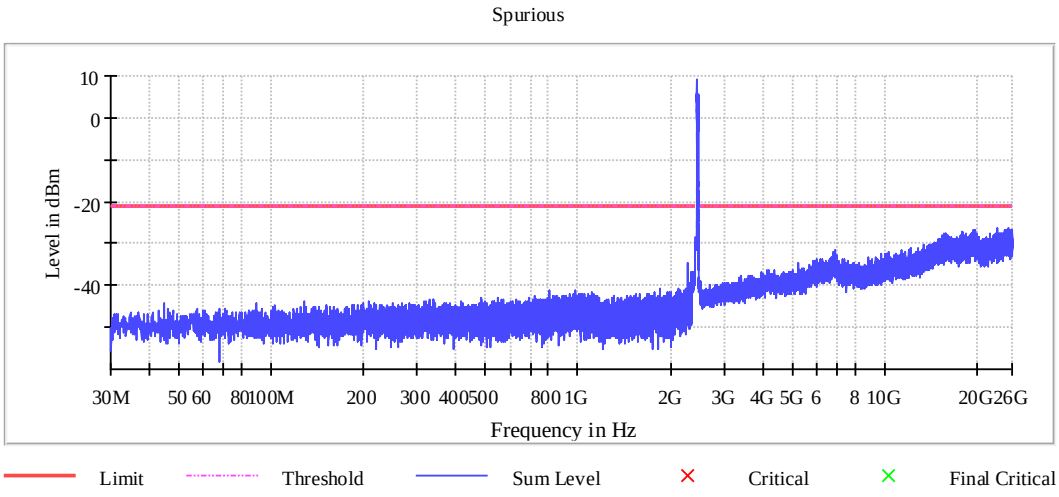
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
23398.935916	-26.4	5.4	-21.1
25121.465712	-26.5	5.4	-21.1
25086.192064	-26.6	5.5	-21.1
25158.943963	-26.6	5.5	-21.1
25072.964446	-26.7	5.6	-21.1
25297.833951	-26.7	5.6	-21.1
24976.696783	-26.7	5.6	-21.1
25378.669393	-26.7	5.7	-21.1
25061.206564	-26.8	5.7	-21.1
25718.913120	-26.8	5.7	-21.1
24728.311514	-26.8	5.8	-21.1
25413.208173	-26.8	5.8	-21.1
25128.079521	-26.9	5.8	-21.1
25982.730610	-26.9	5.8	-21.1
19501.932713	-26.9	5.8	-21.1

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



2.2 n mode Omni Antenna

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2412.000	24.0	20.000000	PASS
Power Spectral Density	2412.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	24.0	20.000000	PASS
Tx Spurious Emission	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	20.000000	PASS
Tx Spurious Emission	2437.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	24.0	20.000000	PASS
Tx Spurious Emission	2462.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2422.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2422.000	24.0	40.000000	PASS
Tx Spurious Emission	2422.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	40.000000	PASS
Tx Spurious Emission	2437.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2452.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2452.000	24.0	40.000000	PASS
Tx Spurious Emission	2452.000	24.0	40.000000	PASS

RF output power (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	13.3	30.0	13.3	95.018	PASS

OSP PowerMeter settings

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs

Minimum Emission Bandwidth 6 dB (2412 MHz; 24.000 dBm; 20 MHz)

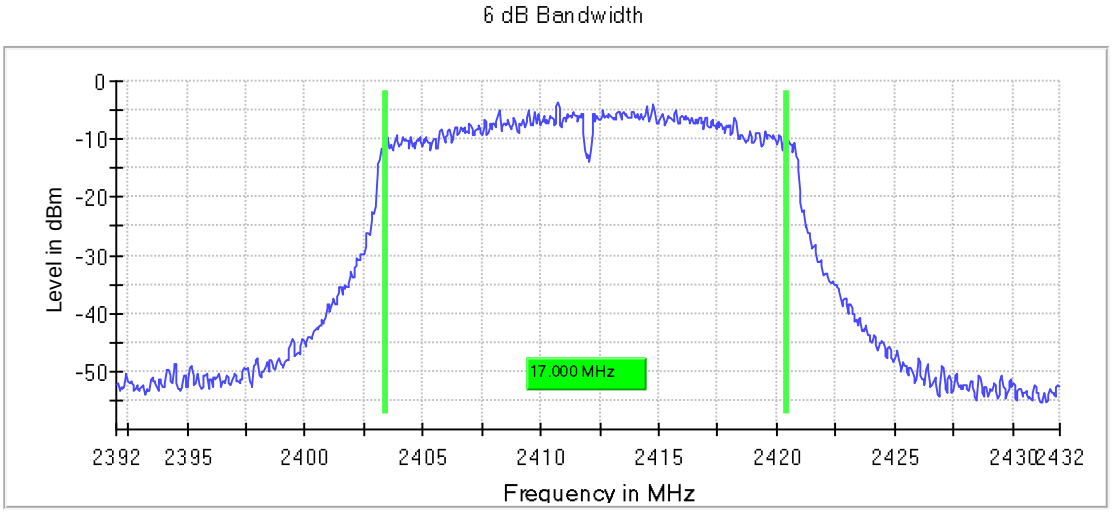
Customized settings.

6 dB Bandwidth

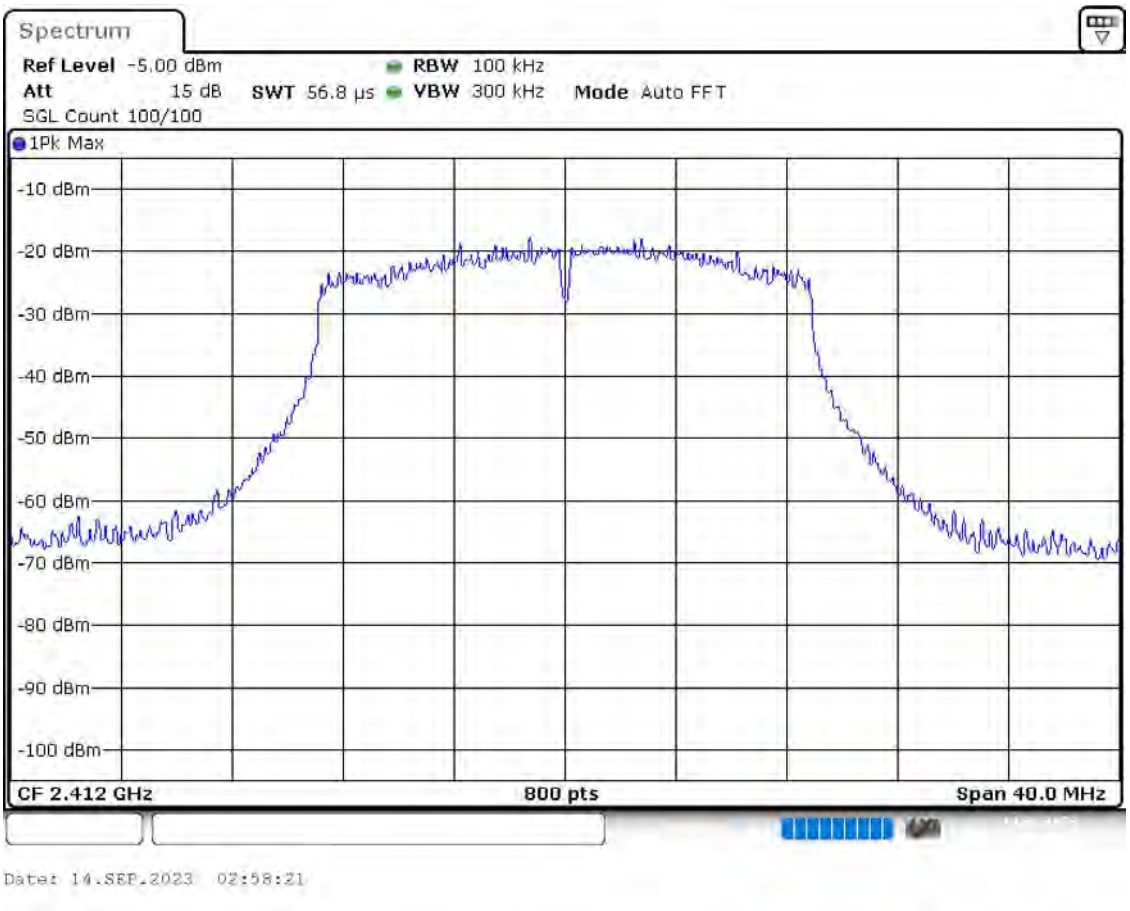
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.000000	0.500000	---	2403.425000	2420.425000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	-3.8	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	56.836 µs	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Power Spectral Density (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

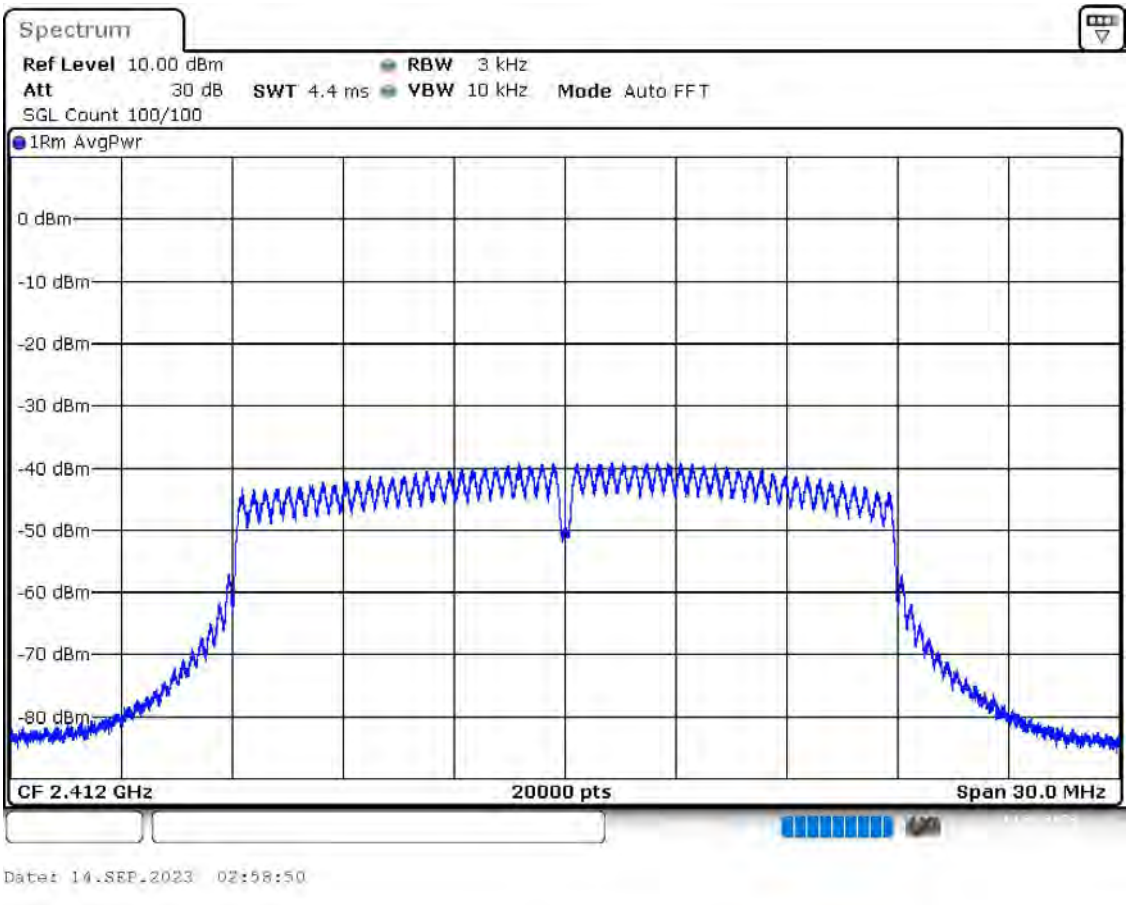
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2413.571250	-22.213	8.0	PASS

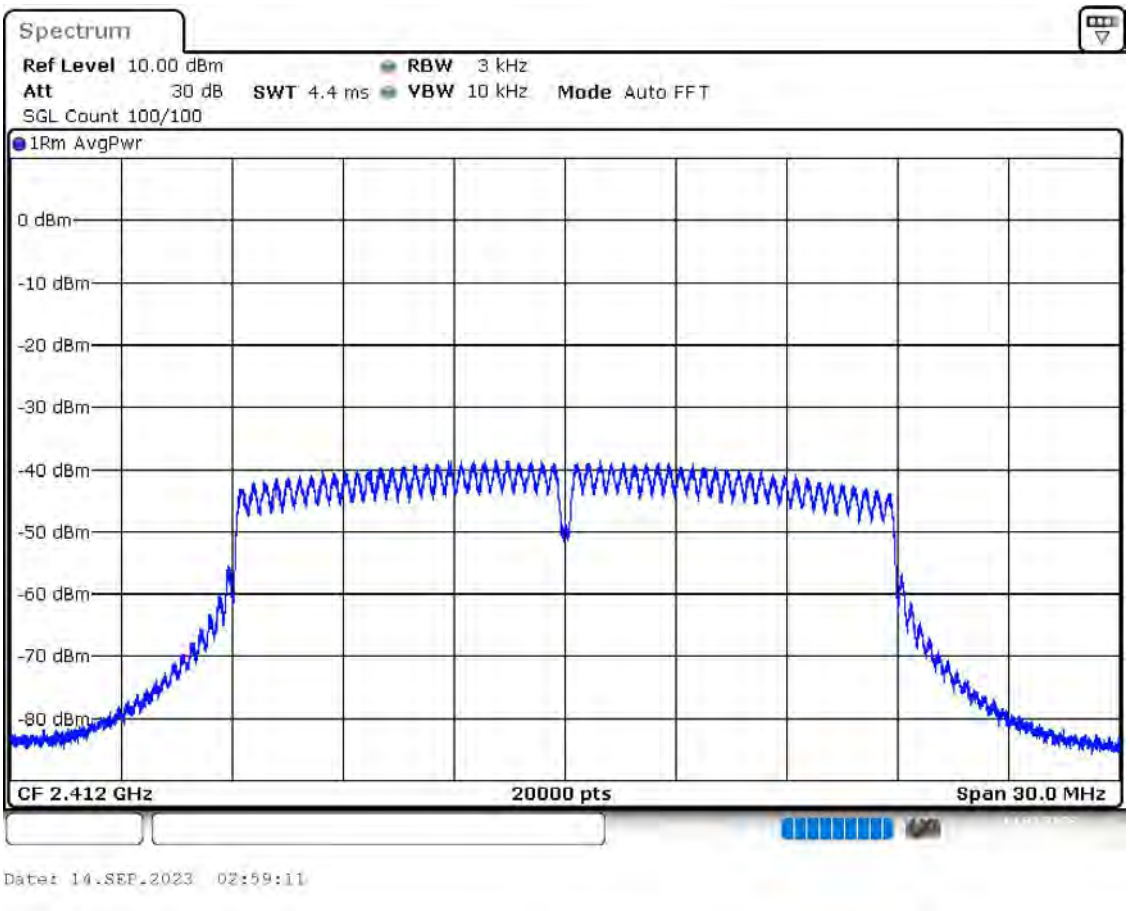
Ports

Port	State
1	used
2	used

PSD Connector 1



PSD Connector 2



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.42700 GHz	2.42700 GHz
Span	30.000 MHz	30.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	20000	~ 20000
Sweeptime	4.424 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Average Power	Average Power
Sweeptype	FFT	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (2412 MHz; 24.000 dBm; 20 MHz)

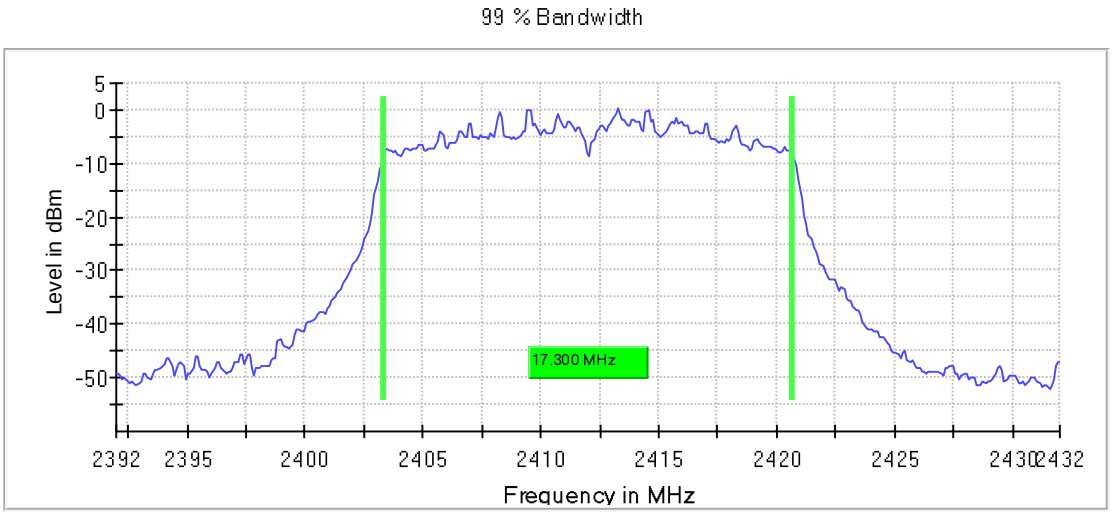
Customized settings.

99 % Bandwidth

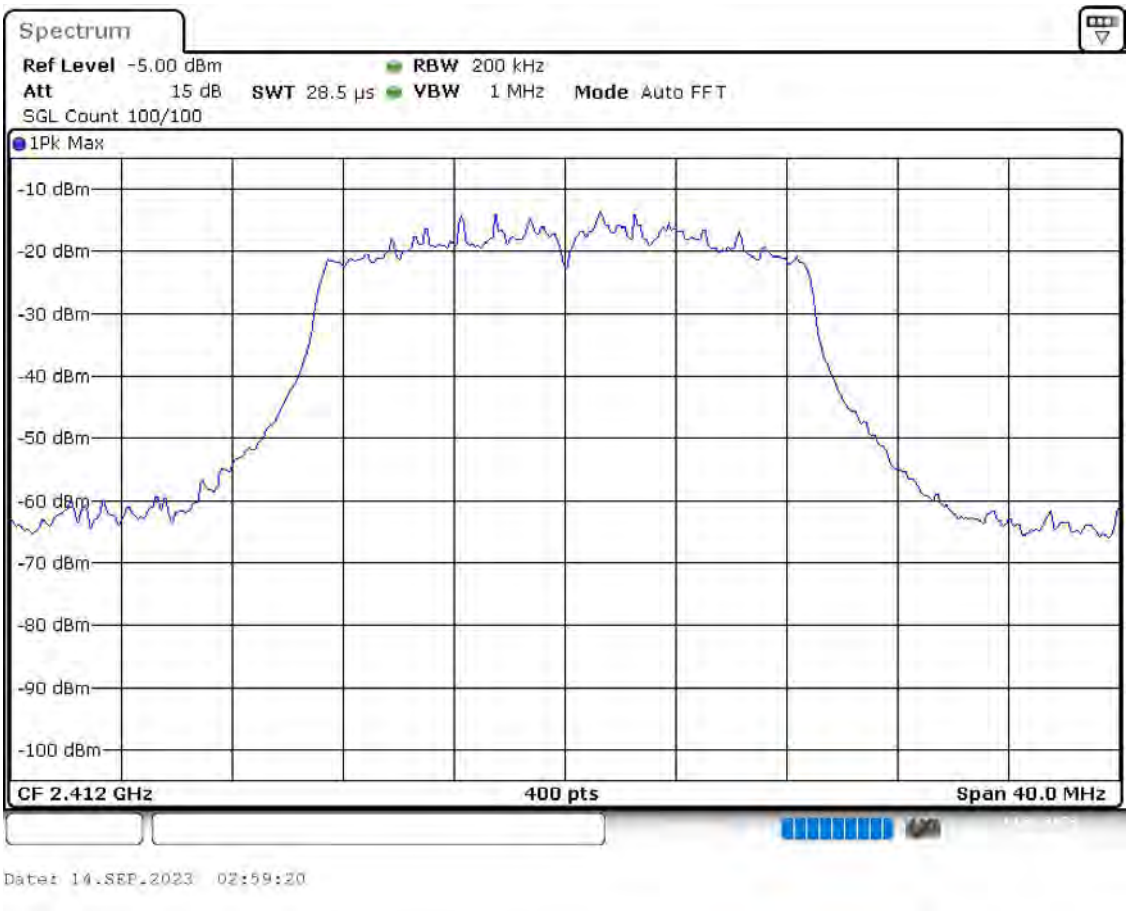
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.300000	---	---	2403.350000	2420.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	28.477 µs	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Tx Spurious Emission (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

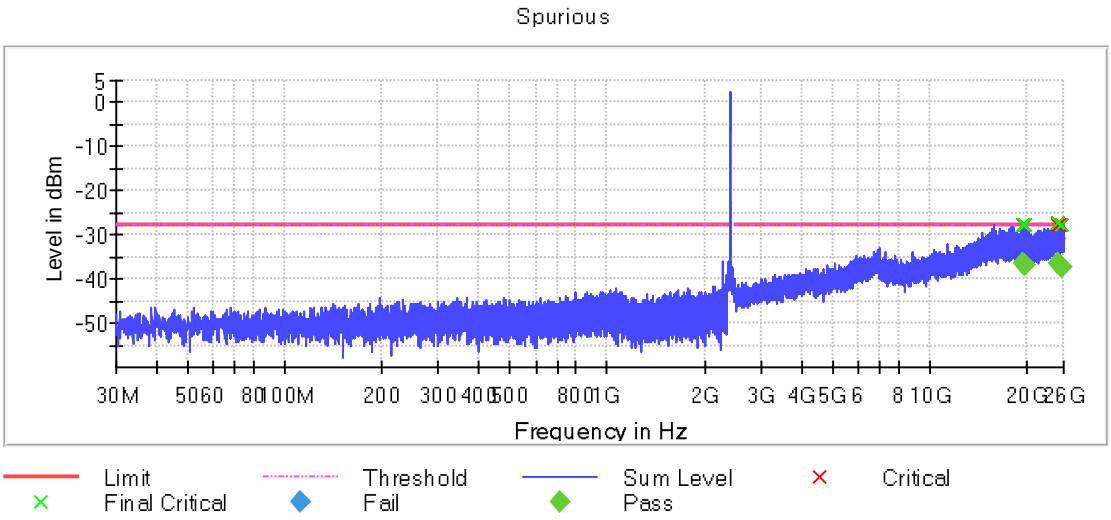
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
19435.574944	-30.1	-36.3	-27.7	8.5	PASS
19839.240713	-30.6	-37.0	-27.7	9.3	PASS
25084.196480	-30.5	-36.4	-27.7	8.7	PASS
25481.095071	-30.1	-37.3	-27.7	9.6	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25075.169049	-27.2	-0.6	-27.7
25069.290108	-27.3	-0.5	-27.7
25228.756390	-27.5	-0.2	-27.7
25078.108520	-27.5	-0.2	-27.7
25476.406792	-27.6	-0.2	-27.7
19431.385418	-27.6	-0.2	-27.7
25244.188611	-27.7	-0.1	-27.7
19847.320513	-27.7	-0.1	-27.7
25154.534757	-27.7	0.0	-27.7
25165.557772	-27.8	0.0	-27.7
25919.531991	-27.9	0.1	-27.7
15812.162190	-27.9	0.2	-27.7
25378.669393	-28.0	0.2	-27.7
19416.688064	-28.0	0.2	-27.7
25131.018992	-28.0	0.3	-27.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
Level in dBm
5
0
-10
-20
-30
-40
-50
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical
Fail
Pass

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	32001	~ 46400
Sweeptime	32.100 ms	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2670	~ 2670
Sweeptime	151.563 µs	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	300	300
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Final Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	401	~ 401
Sweeptime	113.721 µs	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	Sample	Sample
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Average Linear	Average Linear
Sweeptype	FFT	AUTO
Preamp	off	off

Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 20 MHz)

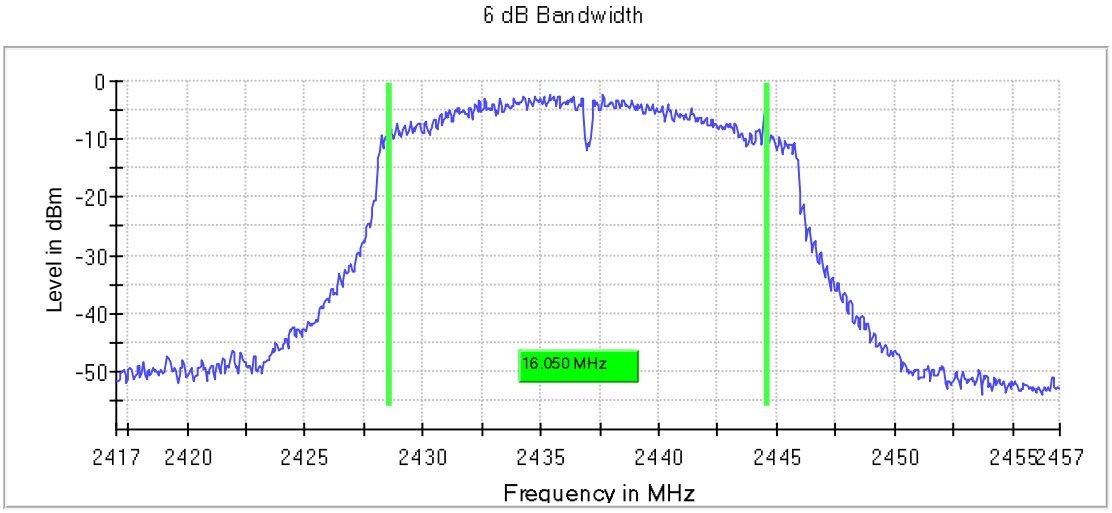
Customized settings.

6 dB Bandwidth

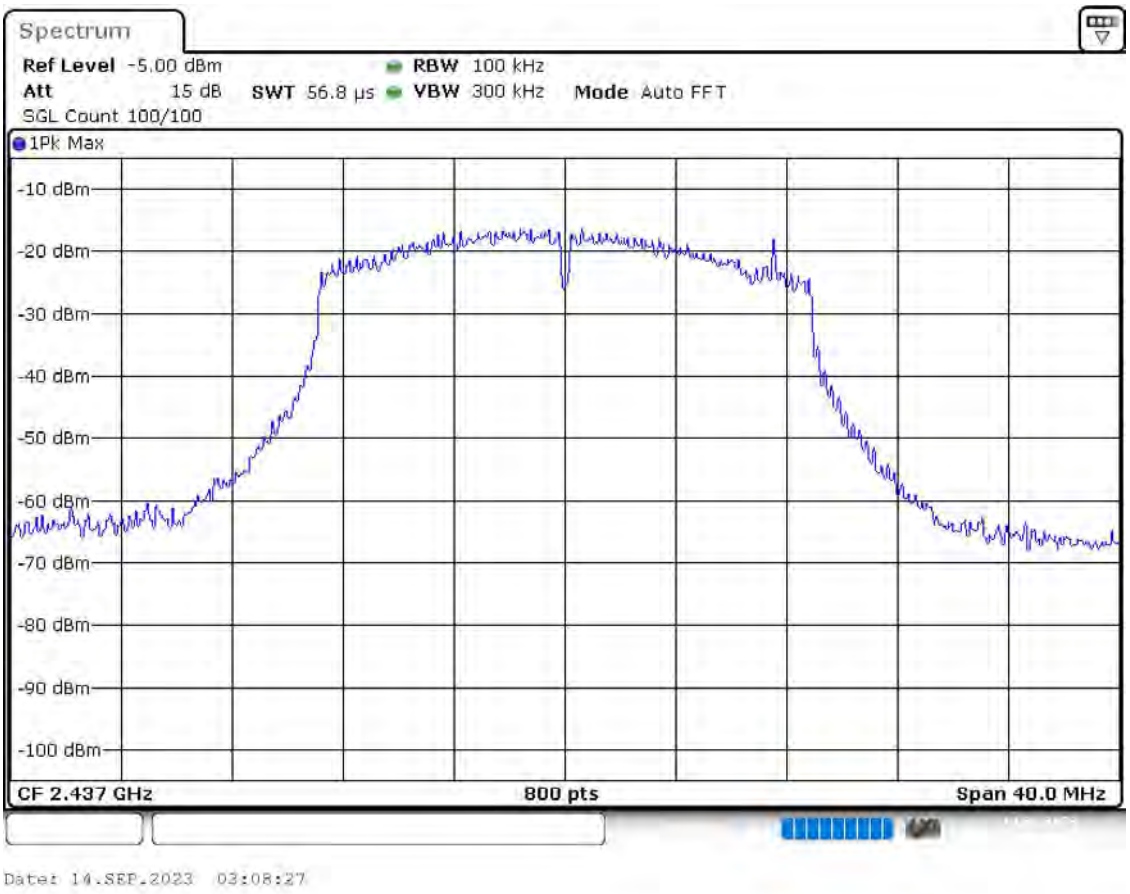
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	16.050000	0.500000	---	2428.575000	2444.625000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-2.3	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 100 kHz
Att 15 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.437 GHz
800 pts
Span 40.0 MHz
Date: 14.SEP.2023 03:08:27

Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

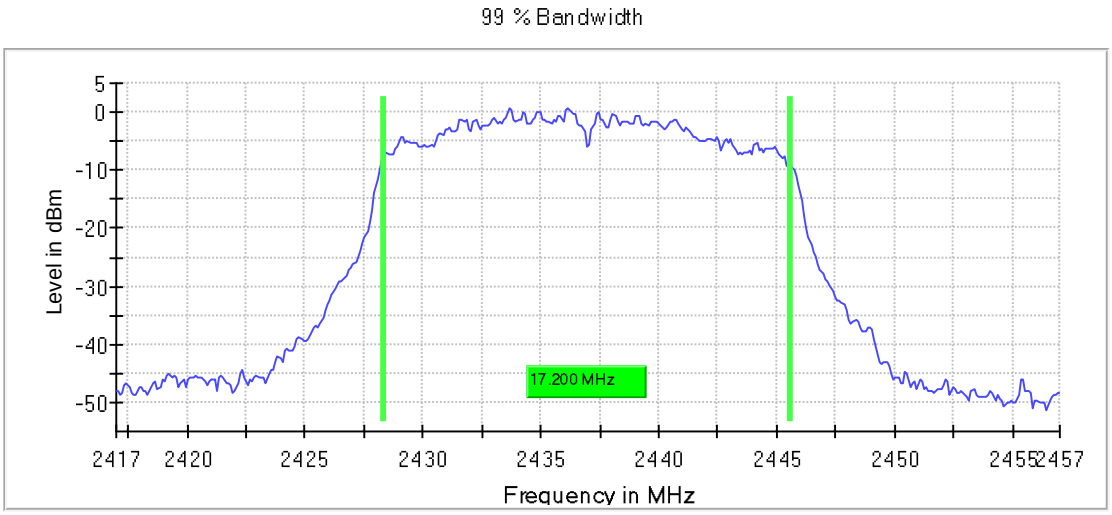
Customized settings.

99 % Bandwidth

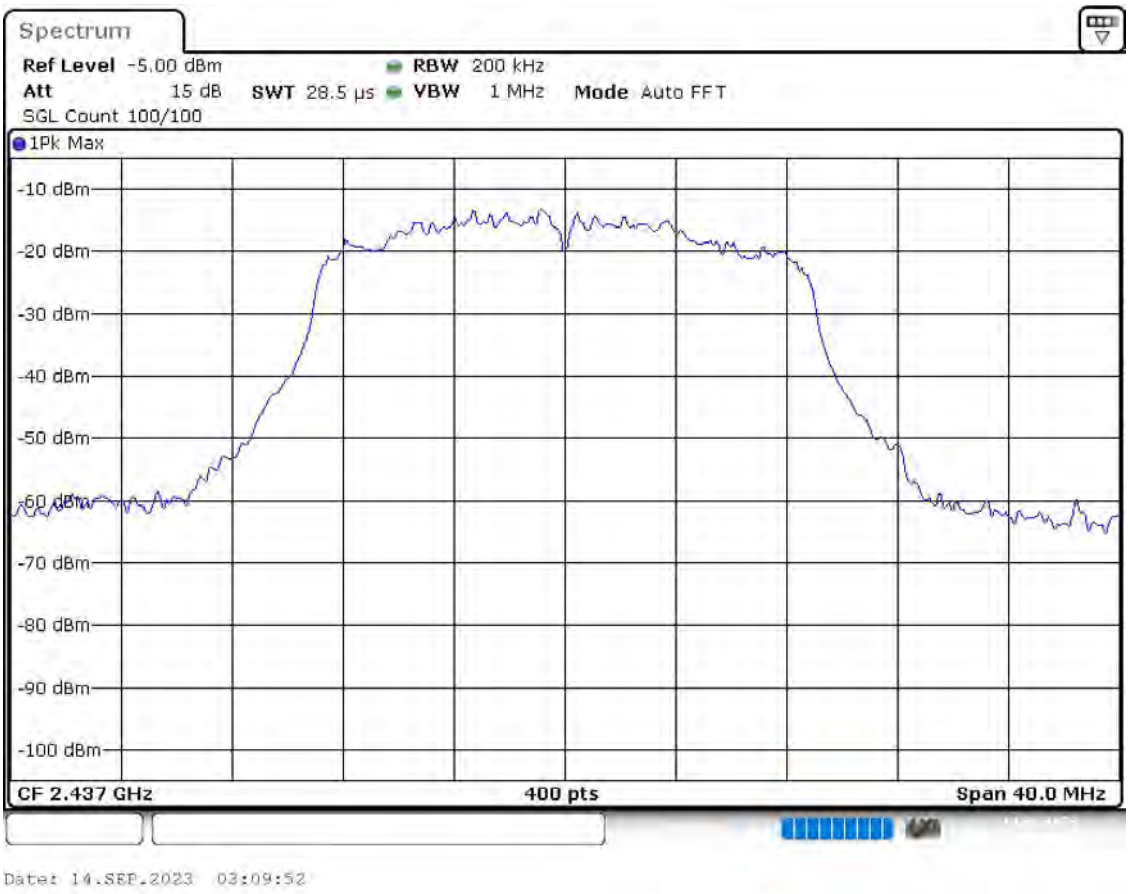
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.200000	---	---	2428.350000	2445.550000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 200 kHz
Att 15 dB
SWT 28.5 µs
VBW 1 MHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.437 GHz
400 pts
Span 40.0 MHz
Date: 14.SEP.2023 03:09:52

Tx Spurious Emission (2437 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

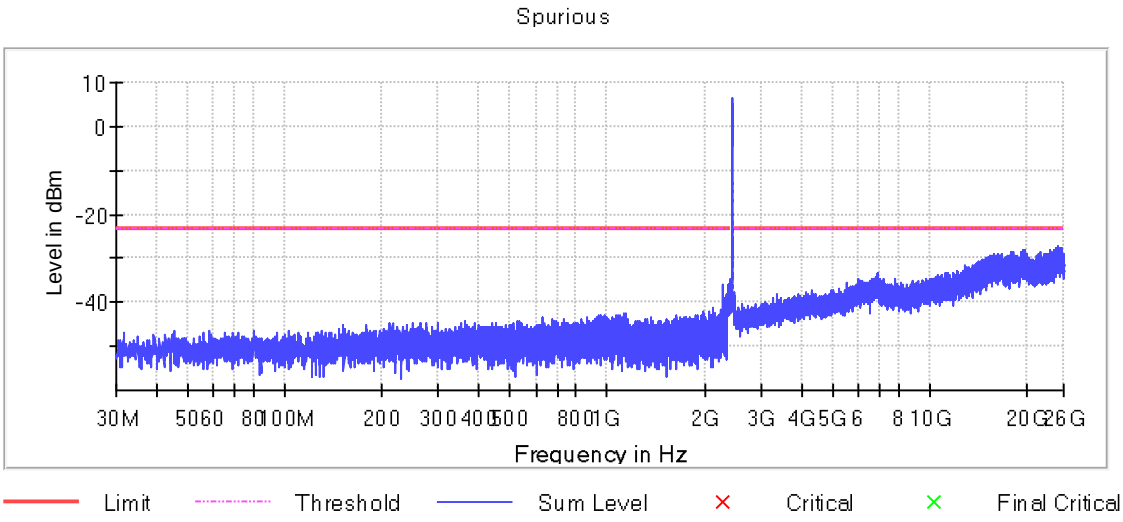
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25099.419682	-27.2	3.8	-23.4
25402.185158	-27.5	4.2	-23.4
25072.964446	-27.6	4.2	-23.4
24760.645691	-27.6	4.2	-23.4
24909.088958	-27.7	4.4	-23.4
25319.879980	-27.7	4.4	-23.4
25170.701845	-27.7	4.4	-23.4
25499.187689	-27.8	4.4	-23.4
25126.609786	-27.8	4.4	-23.4
25092.805873	-27.9	4.5	-23.4
24420.401964	-27.9	4.5	-23.4
25097.949947	-28.0	4.6	-23.4
25485.960072	-28.0	4.6	-23.4
25158.943963	-28.1	4.7	-23.4
25047.978946	-28.1	4.7	-23.4

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

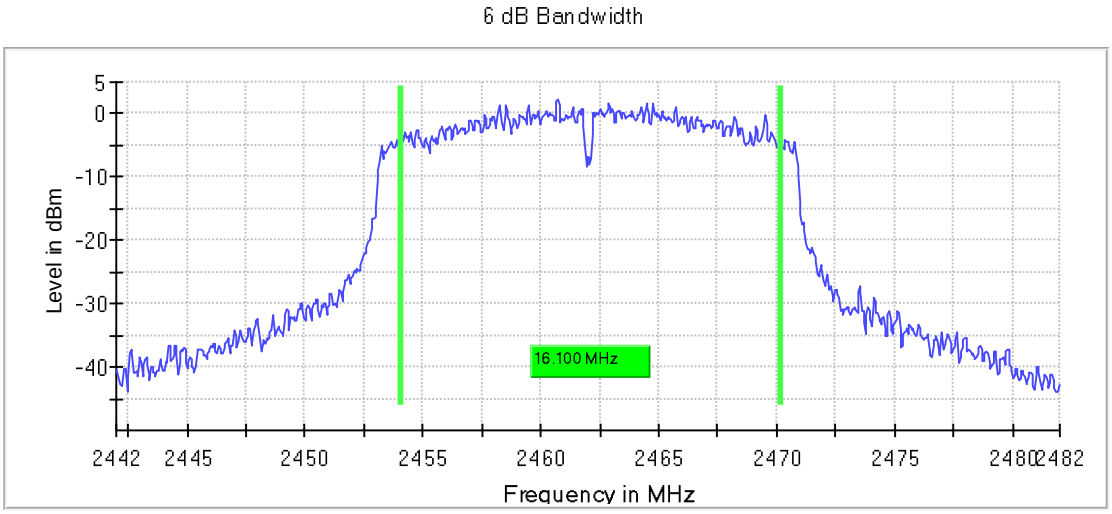
Customized settings.

6 dB Bandwidth

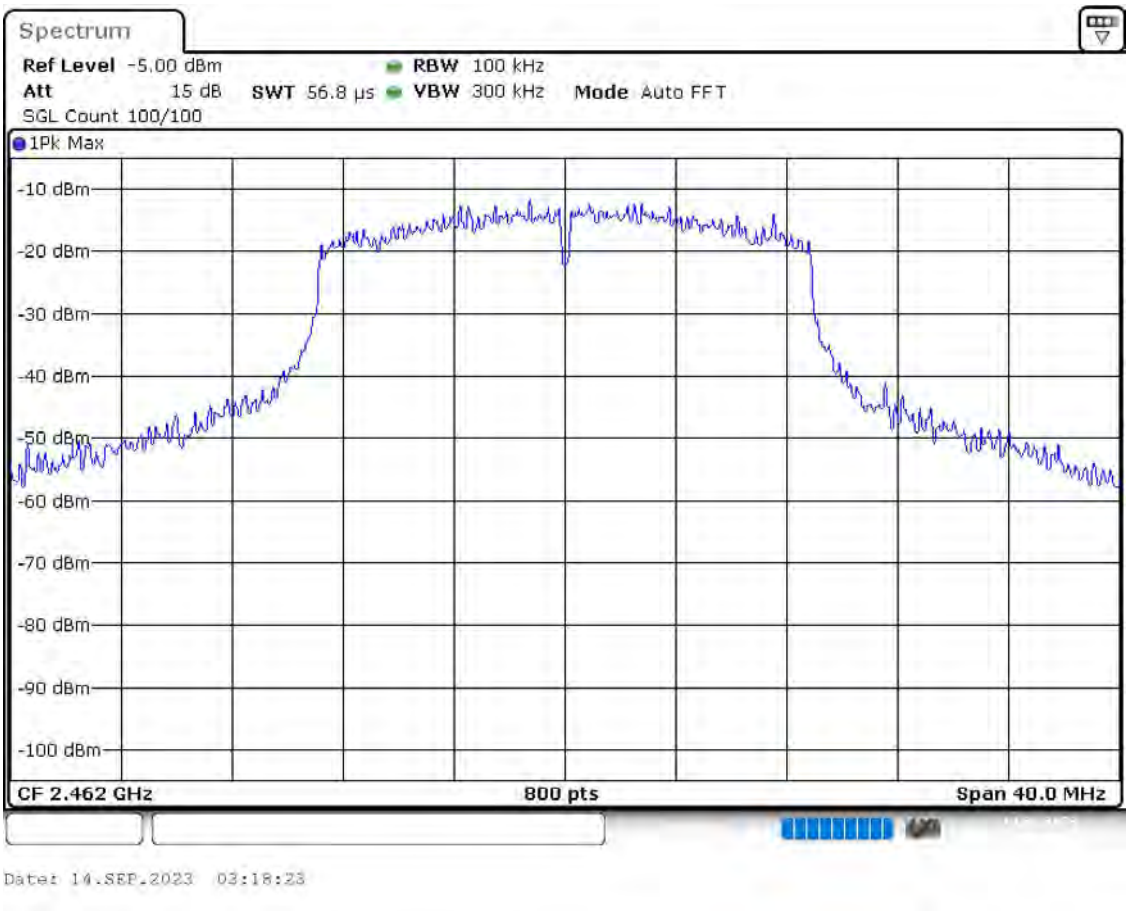
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.100000	0.500000	---	2454.075000	2470.175000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	2.3	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 100 kHz
Att 15 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.462 GHz
800 pts
Span 40.0 MHz
Date: 14.SEP.2023 03:18:23

Occupied Channel Bandwidth 99% (2462 MHz; 24.000 dBm; 20 MHz)

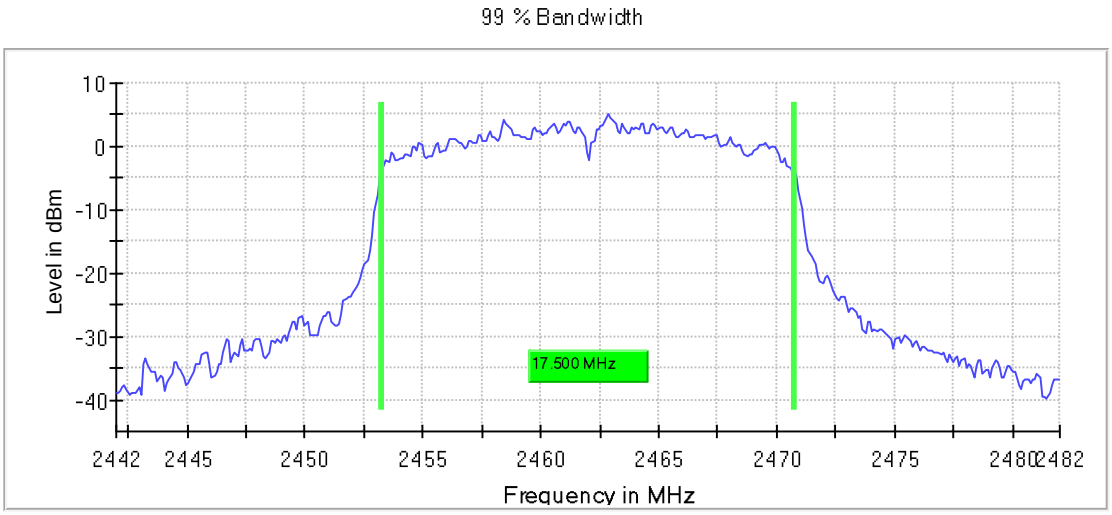
Customized settings.

99 % Bandwidth

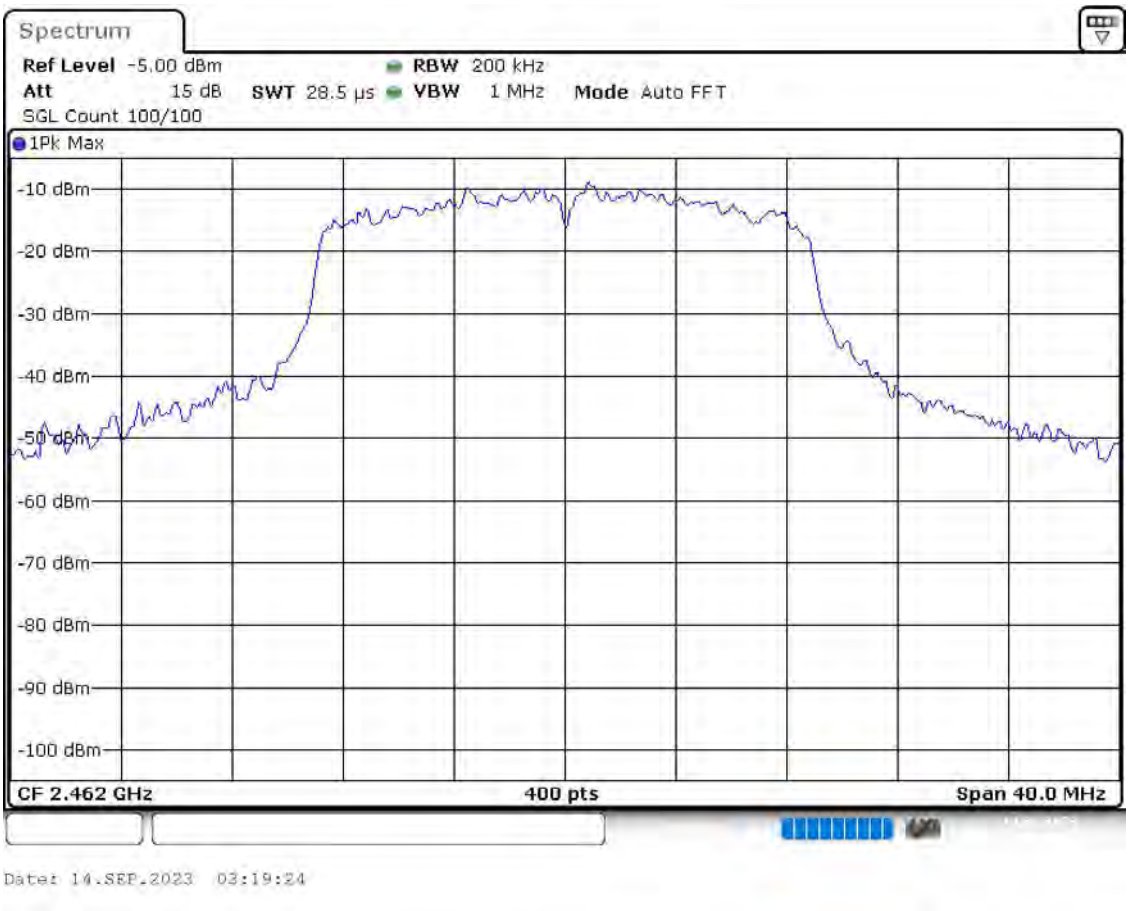
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.500000	---	---	2453.250000	2470.750000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 200 kHz
Att 15 dB
SWT 28.5 µs
VBW 1 MHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.462 GHz
400 pts
Span 40.0 MHz
Date: 14.SEP.2023 03:19:24

Tx Spurious Emission (2462 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

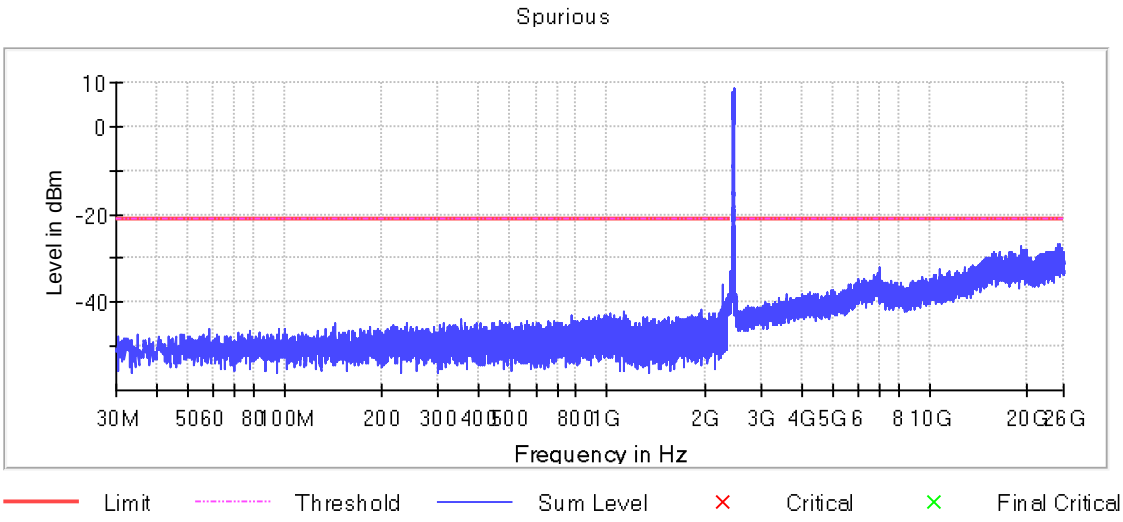
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
24828.988383	-26.7	5.5	-21.2
25148.655815	-26.9	5.7	-21.2
24829.723251	-26.9	5.7	-21.2
19107.308779	-27.0	5.8	-21.2
24754.031882	-27.4	6.2	-21.2
25702.746031	-27.5	6.3	-21.2
25015.644769	-27.5	6.3	-21.2
25118.526241	-27.6	6.4	-21.2
25347.070084	-27.6	6.4	-21.2
25144.981477	-27.7	6.5	-21.2
24720.962837	-27.8	6.6	-21.2
24970.817842	-27.8	6.6	-21.2
25564.590911	-27.8	6.6	-21.2
25110.442697	-27.9	6.7	-21.2
25142.776874	-27.9	6.7	-21.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2422 MHz; 24.000 dBm; 40 MHz)

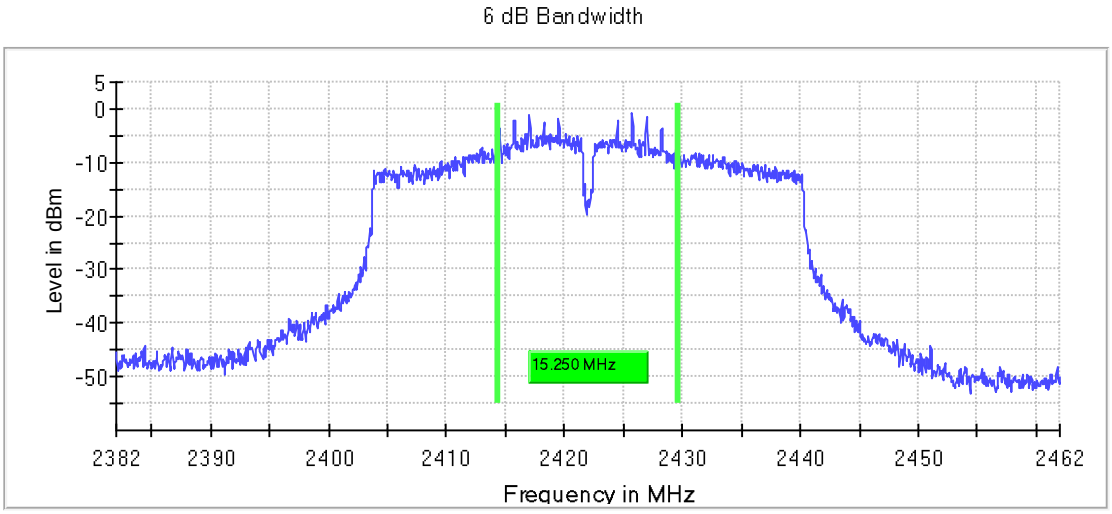
Customized settings.

6 dB Bandwidth

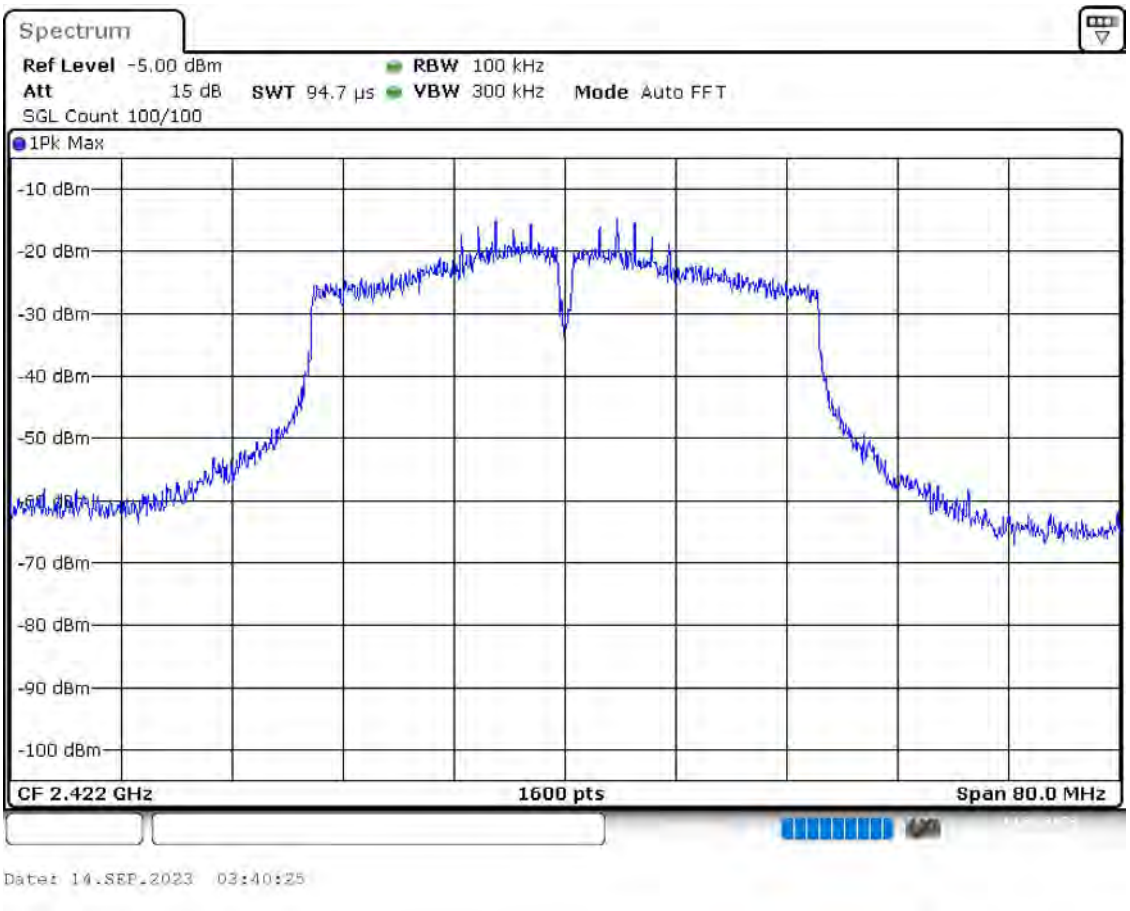
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	15.250000	0.500000	---	2414.375000	2429.625000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-0.8	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 100 kHz
Att 15 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.422 GHz
1600 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:40:25

Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

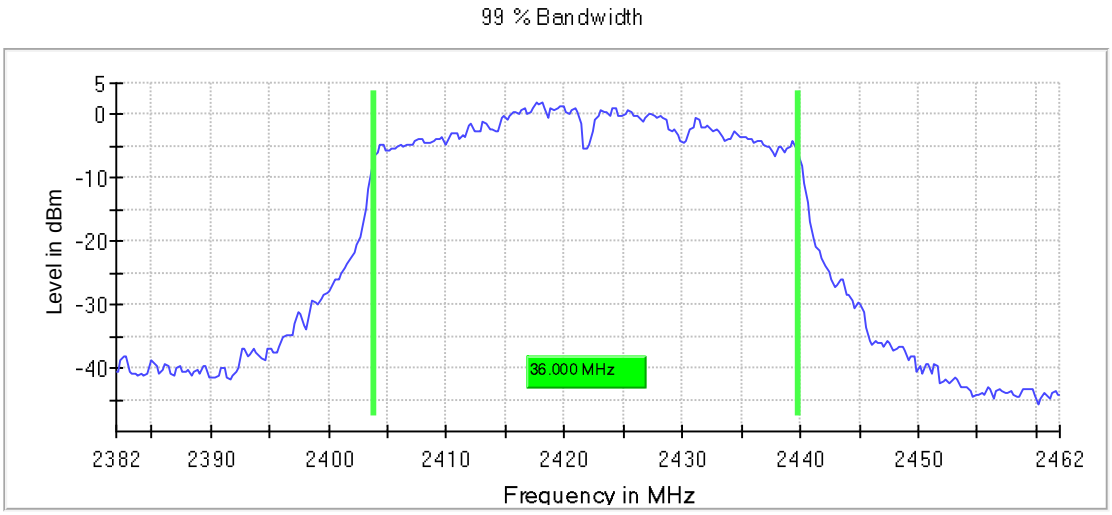
Customized settings.

99 % Bandwidth

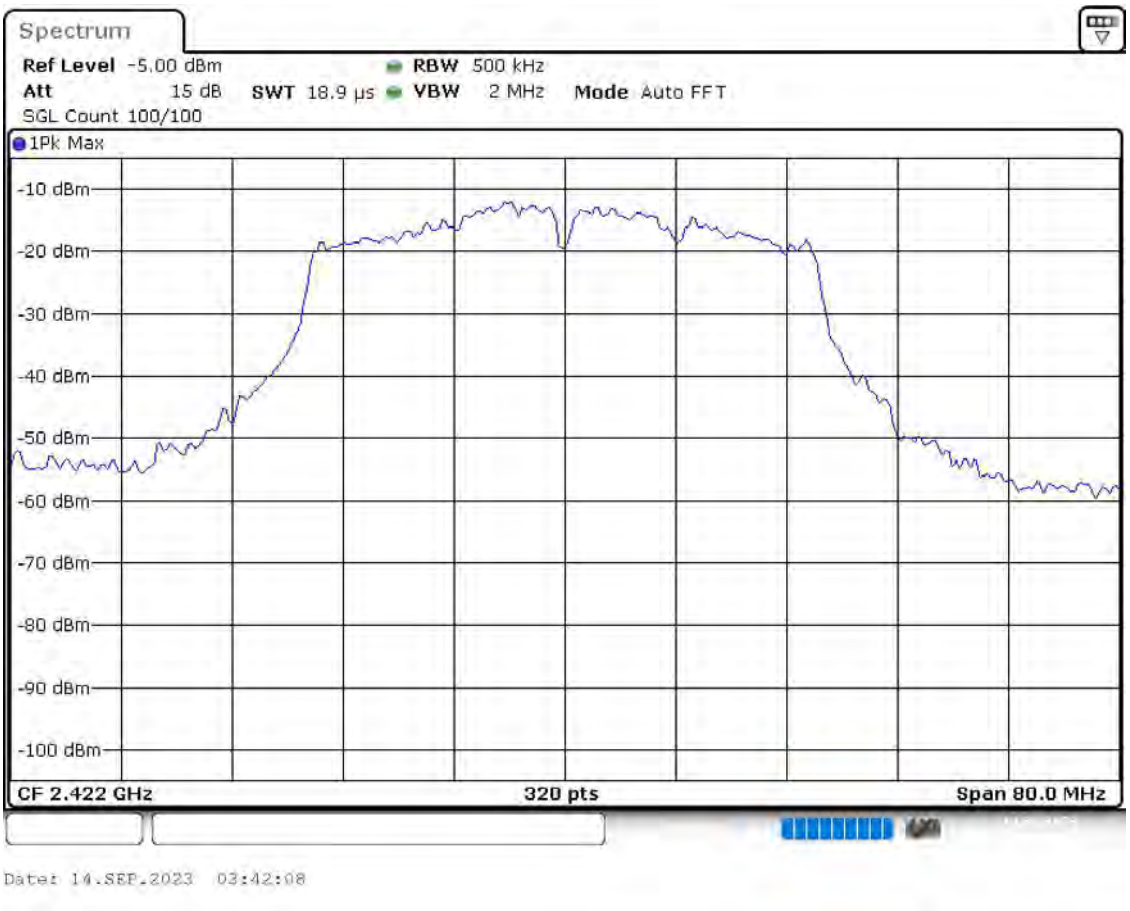
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.000000	---	---	2403.875000	2439.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 500 kHz
Att 15 dB
SWT 18.9 µs
VBW 2 MHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.422 GHz
320 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:42:08

Tx Spurious Emission (2422 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

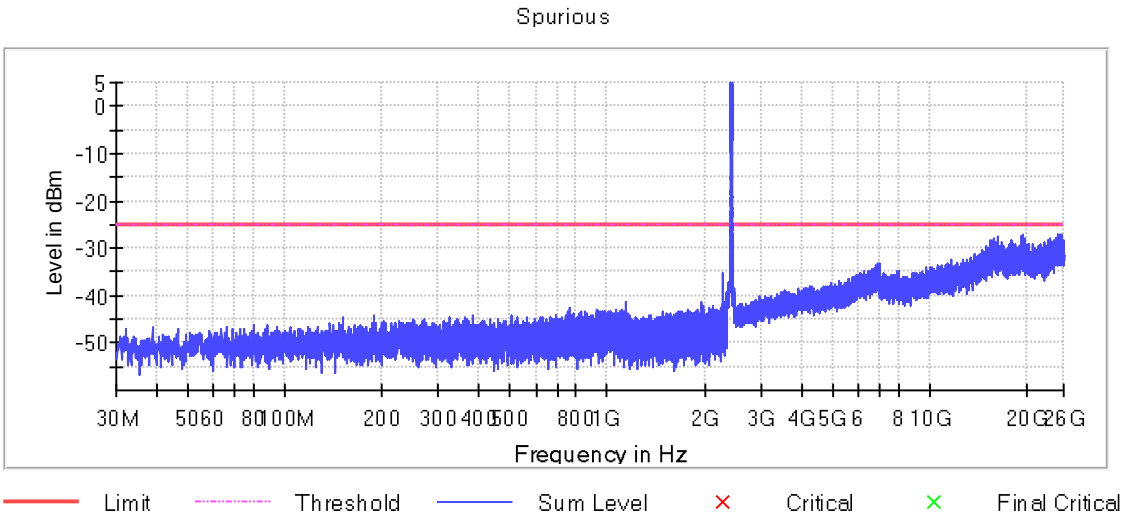
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25094.275609	-27.1	2.0	-25.0
24824.579177	-27.1	2.1	-25.0
25771.088724	-27.2	2.2	-25.0
25264.764906	-27.2	2.2	-25.0
19445.347903	-27.3	2.3	-25.0
25726.996664	-27.4	2.3	-25.0
25139.102536	-27.4	2.4	-25.0
16346.410979	-27.5	2.5	-25.0
25020.053975	-27.5	2.5	-25.0
25175.111051	-27.5	2.5	-25.0
25235.370199	-27.6	2.6	-25.0
25069.290108	-27.6	2.6	-25.0
19083.058147	-27.6	2.6	-25.0
25142.776874	-27.6	2.6	-25.0
19086.732485	-27.6	2.6	-25.0

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
Level in dBm
5
0
-10
-20
-30
-40
-50
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 40 MHz)

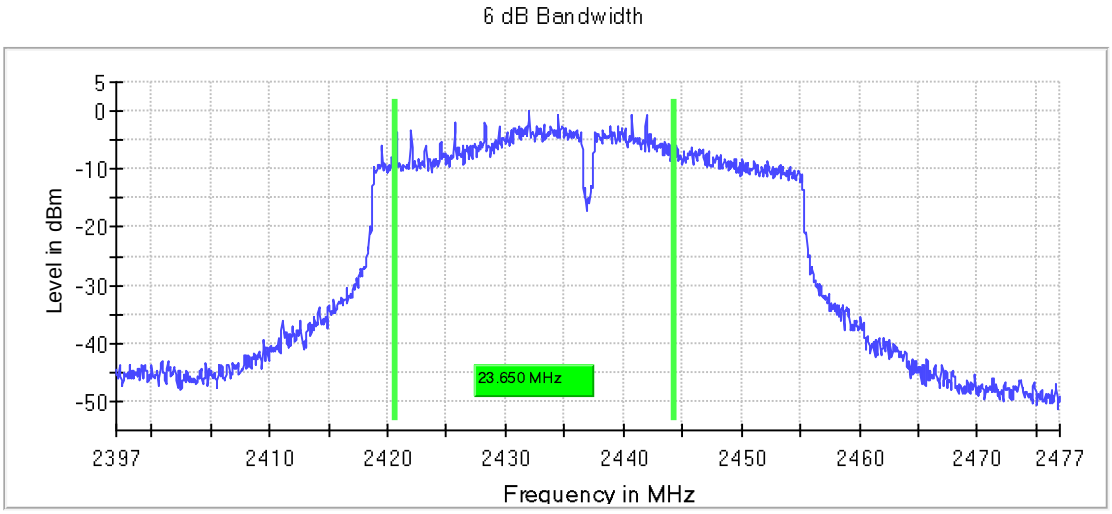
Customized settings.

6 dB Bandwidth

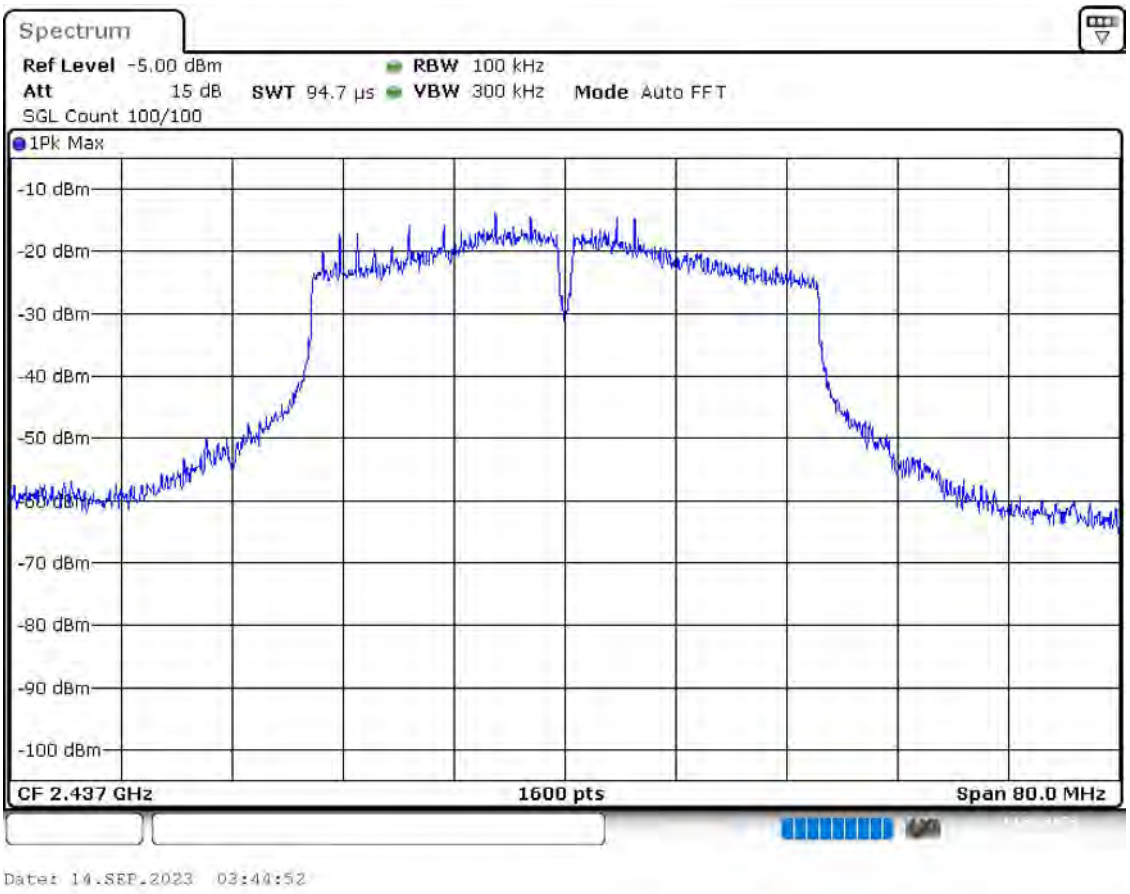
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	23.650000	0.500000	---	2420.675000	2444.325000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	0.1	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 100 kHz
Att 15 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.437 GHz
1600 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:44:52

Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

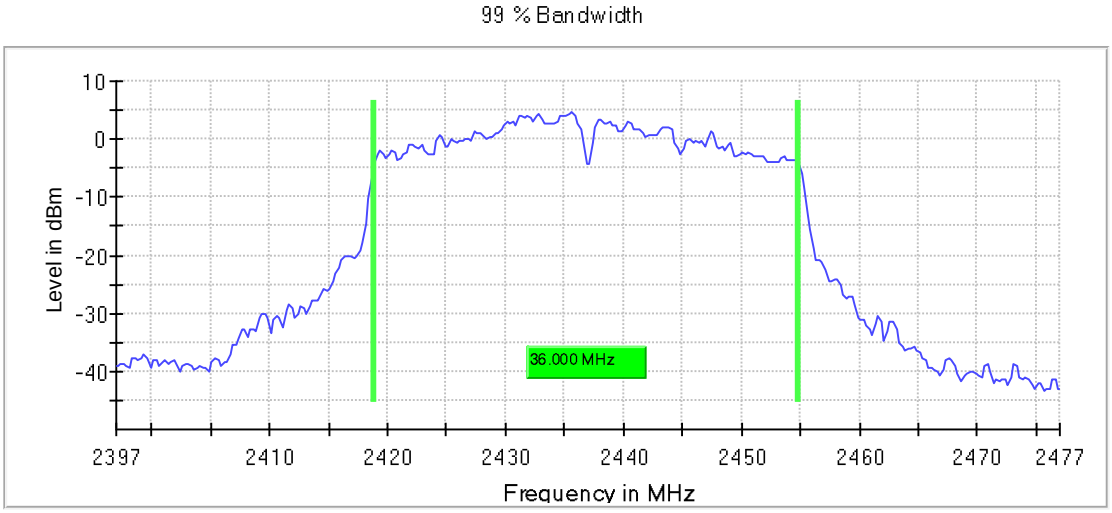
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.000000	---	---	2418.875000	2454.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 500 kHz
Att 15 dB
SWT 18.9 µs
VBW 2 MHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.437 GHz
320 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:46:10

Tx Spurious Emission (2437 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

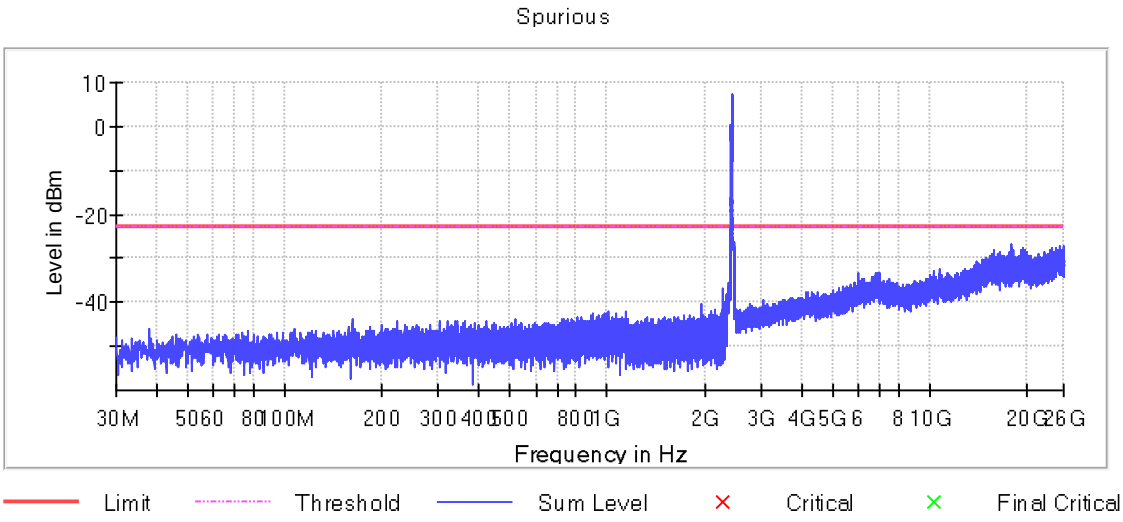
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
17822.760109	-26.7	4.0	-22.7
25167.027507	-27.2	4.5	-22.7
25959.214845	-27.3	4.6	-22.7
24063.256281	-27.7	5.0	-22.7
17825.699580	-27.7	5.0	-22.7
17833.048256	-27.8	5.0	-22.7
19457.840653	-27.8	5.0	-22.7
24732.720720	-27.8	5.0	-22.7
19820.130410	-27.8	5.1	-22.7
25234.635332	-27.9	5.1	-22.7
25195.687346	-27.9	5.1	-22.7
25101.624285	-27.9	5.2	-22.7
19105.839044	-27.9	5.2	-22.7
15731.326748	-27.9	5.2	-22.7
25395.571349	-28.0	5.2	-22.7

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2452 MHz; 24.000 dBm; 40 MHz)

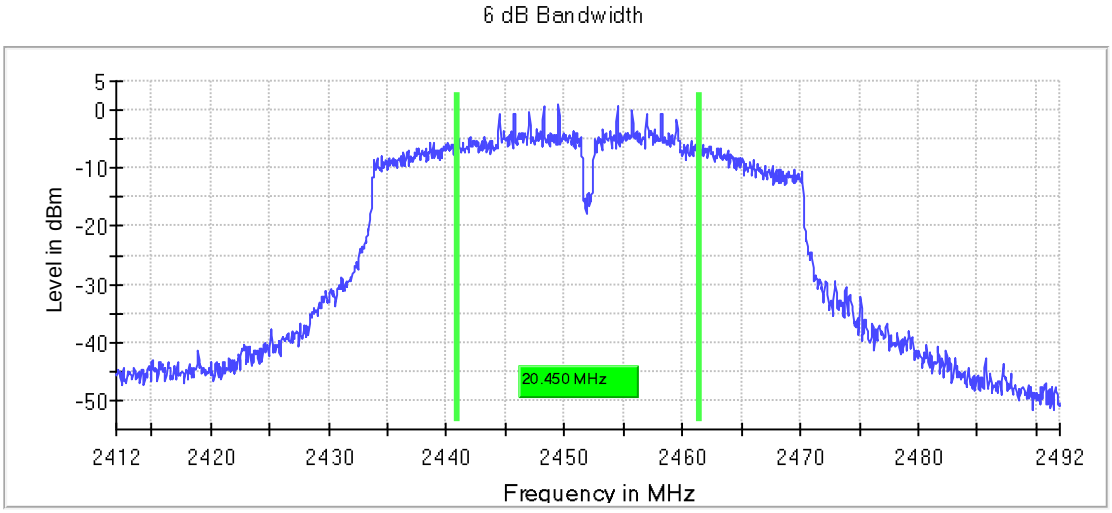
Customized settings.

6 dB Bandwidth

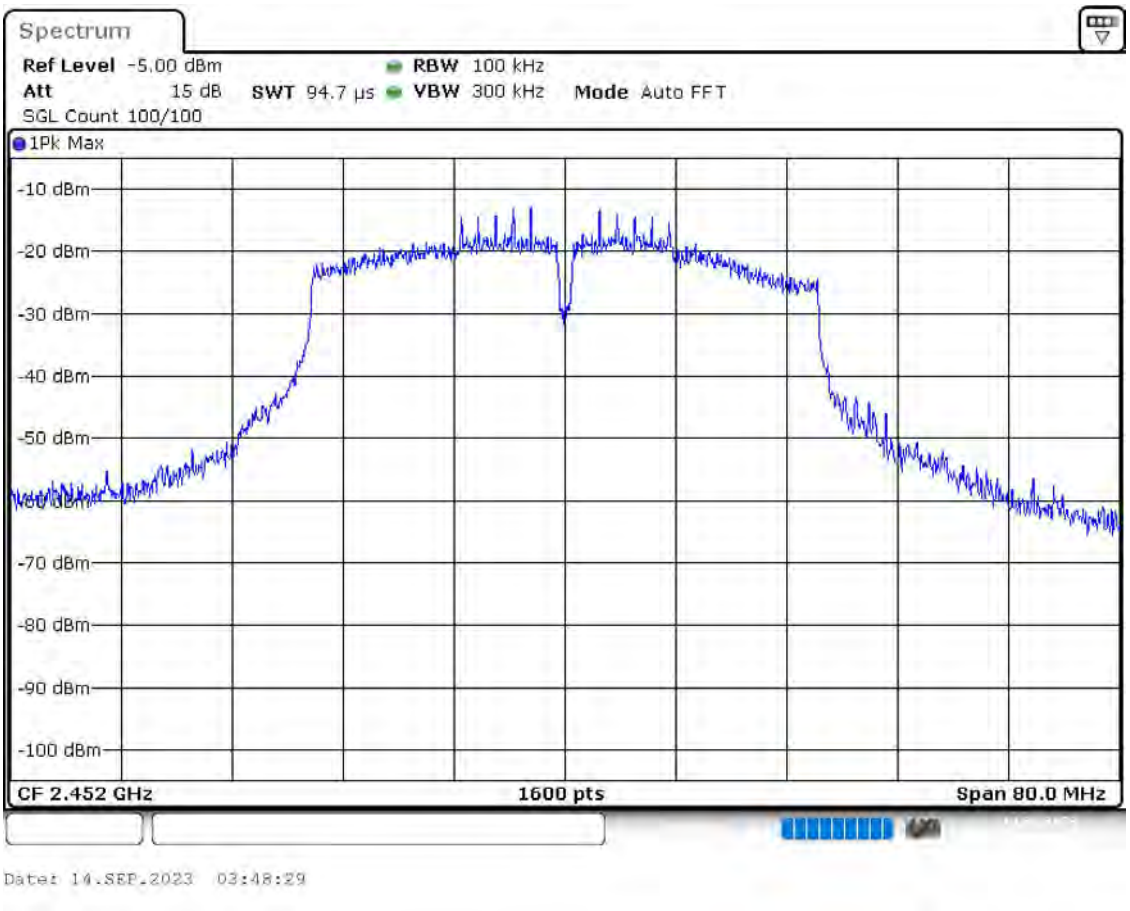
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	20.450000	0.500000	---	2440.975000	2461.425000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	0.9	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 100 kHz
Att 15 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.452 GHz
1600 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:48:29

Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

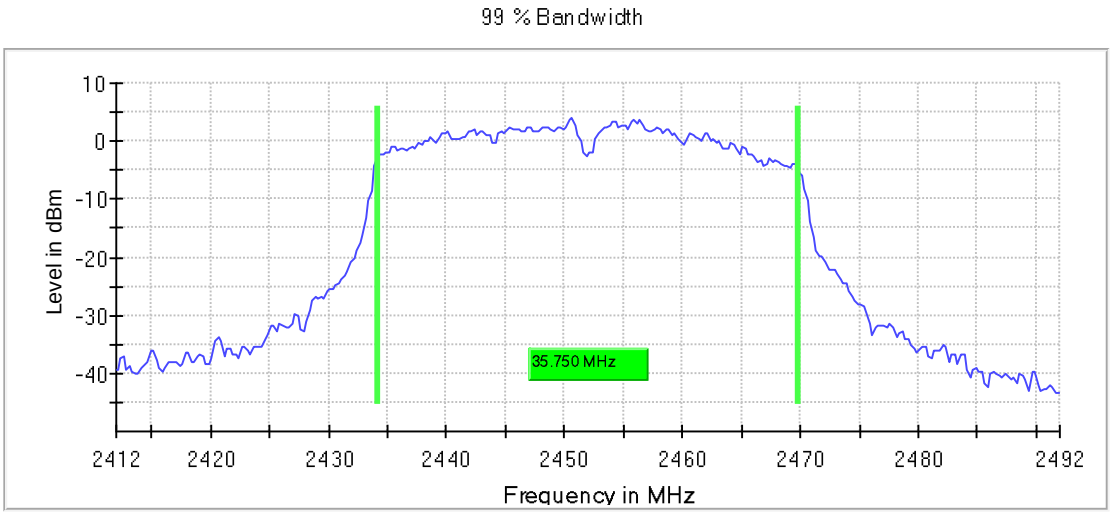
Customized settings.

99 % Bandwidth

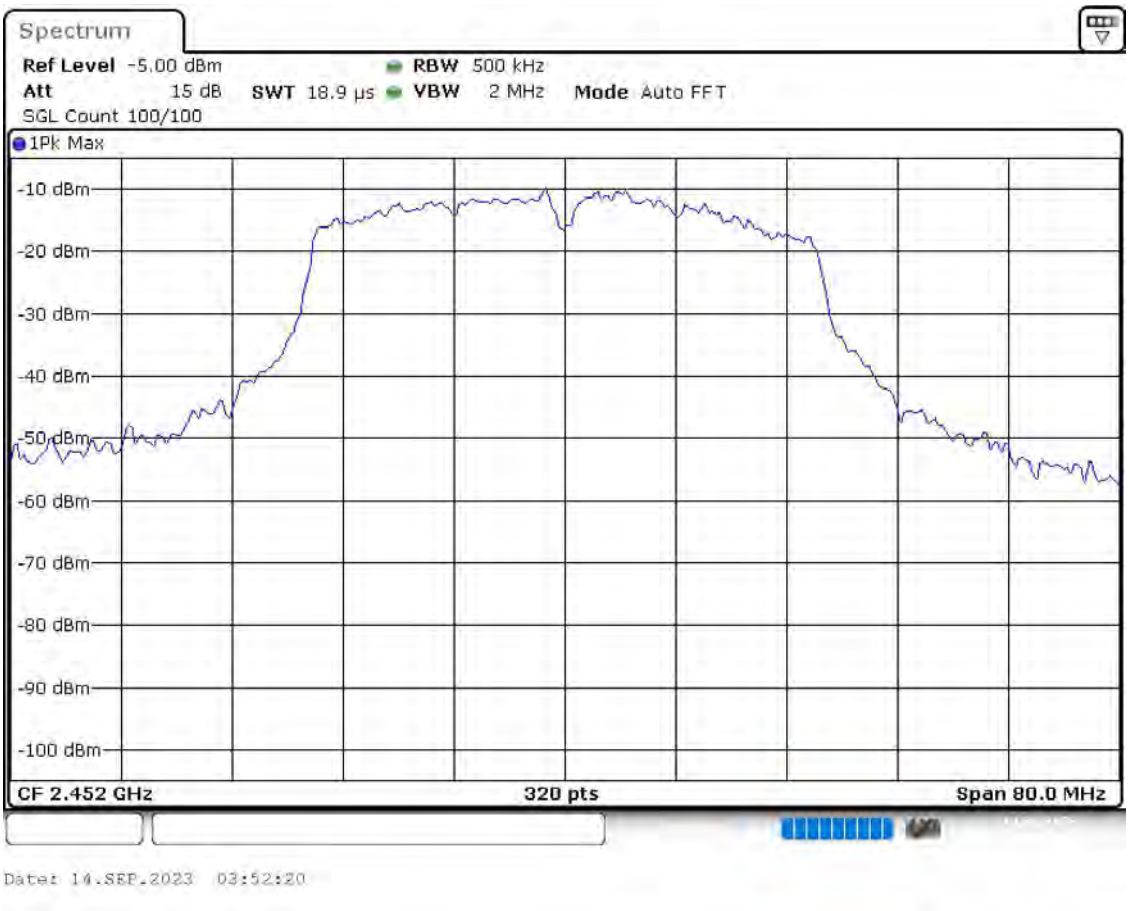
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	35.750000	---	---	2434.125000	2469.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



Bandwidth


Spectrum
Ref Level -5.00 dBm
RBW 500 kHz
Att 15 dB
SWT 18.9 µs
VBW 2 MHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
-100 dBm
CF 2.452 GHz
320 pts
Span 80.0 MHz
Date: 14.SEP.2023 03:52:20

Tx Spurious Emission (2452 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

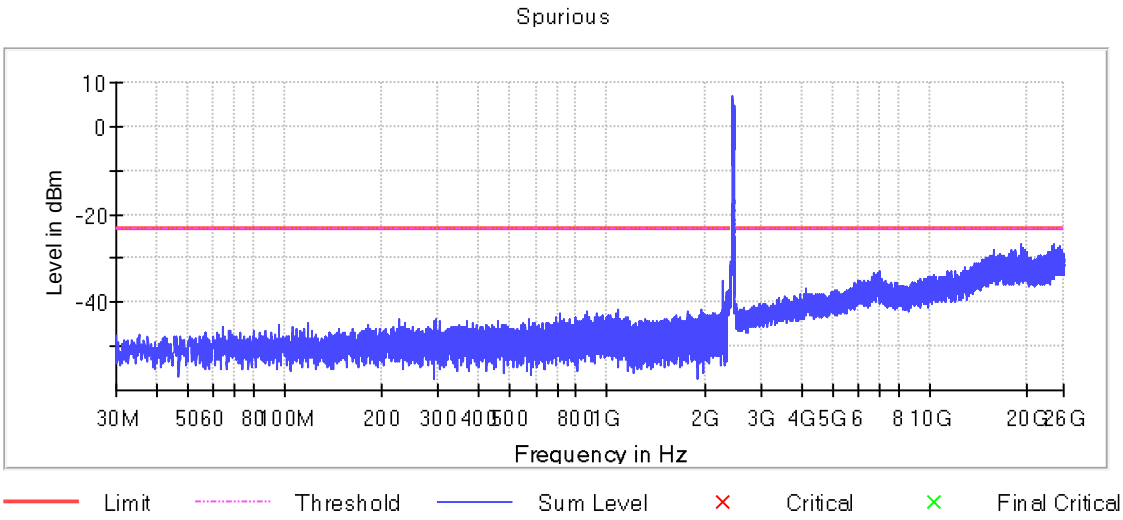
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
24399.090802	-26.9	3.7	-23.1
19096.285765	-26.9	3.8	-23.1
25350.009554	-27.1	4.0	-23.1
23789.885511	-27.4	4.3	-23.1
19437.264359	-27.5	4.4	-23.1
23789.150644	-27.7	4.6	-23.1
25041.365137	-27.7	4.6	-23.1
19844.381043	-27.9	4.8	-23.1
15716.629394	-27.9	4.8	-23.1
15759.251719	-28.0	4.9	-23.1
19073.504867	-28.0	4.9	-23.1
25141.307139	-28.0	4.9	-23.1
15756.312248	-28.1	5.0	-23.1
24762.115426	-28.1	5.0	-23.1
25097.215079	-28.1	5.0	-23.1

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



2.3 n mode Panel Antenna

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2412.000	24.0	20.000000	PASS
Power Spectral Density	2412.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	24.0	20.000000	PASS
Tx Spurious Emission	2412.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	20.000000	PASS
Tx Spurious Emission	2437.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	24.0	20.000000	PASS
Tx Spurious Emission	2462.000	24.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2422.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2422.000	24.0	40.000000	PASS
Tx Spurious Emission	2422.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	24.0	40.000000	PASS
Tx Spurious Emission	2437.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2452.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2452.000	24.0	40.000000	PASS
Tx Spurious Emission	2452.000	24.0	40.000000	PASS

RF output power (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	11.0	30.0	11.0	92.356	PASS

OSP PowerMeter settings

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs

Minimum Emission Bandwidth 6 dB (2412 MHz; 24.000 dBm; 20 MHz)

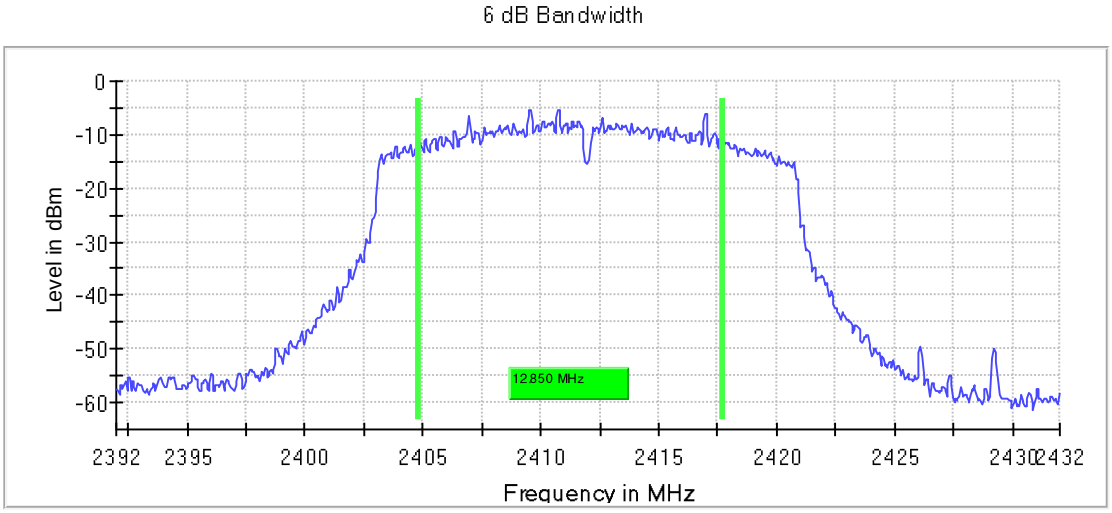
Customized settings.

6 dB Bandwidth

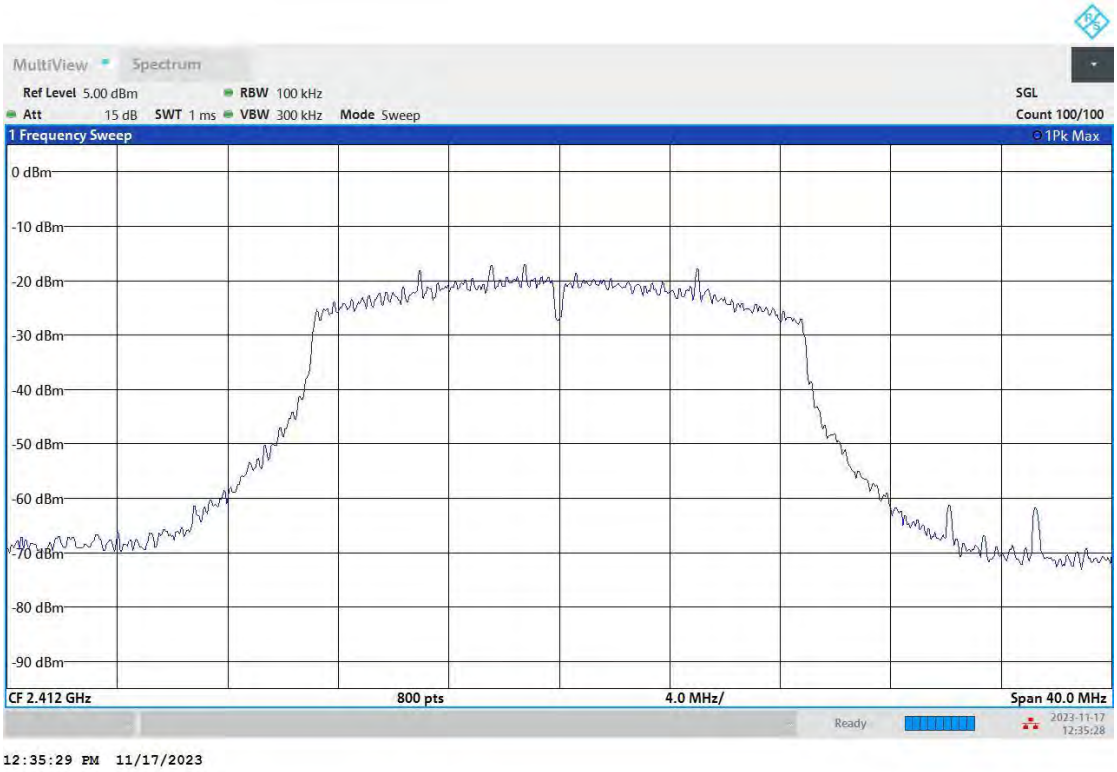
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	12.850000	0.500000	---	2404.825000	2417.675000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	-5.3	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	1.000 ms	AUTO
Reference Level	5.000 dBm	-5.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Power Spectral Density (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

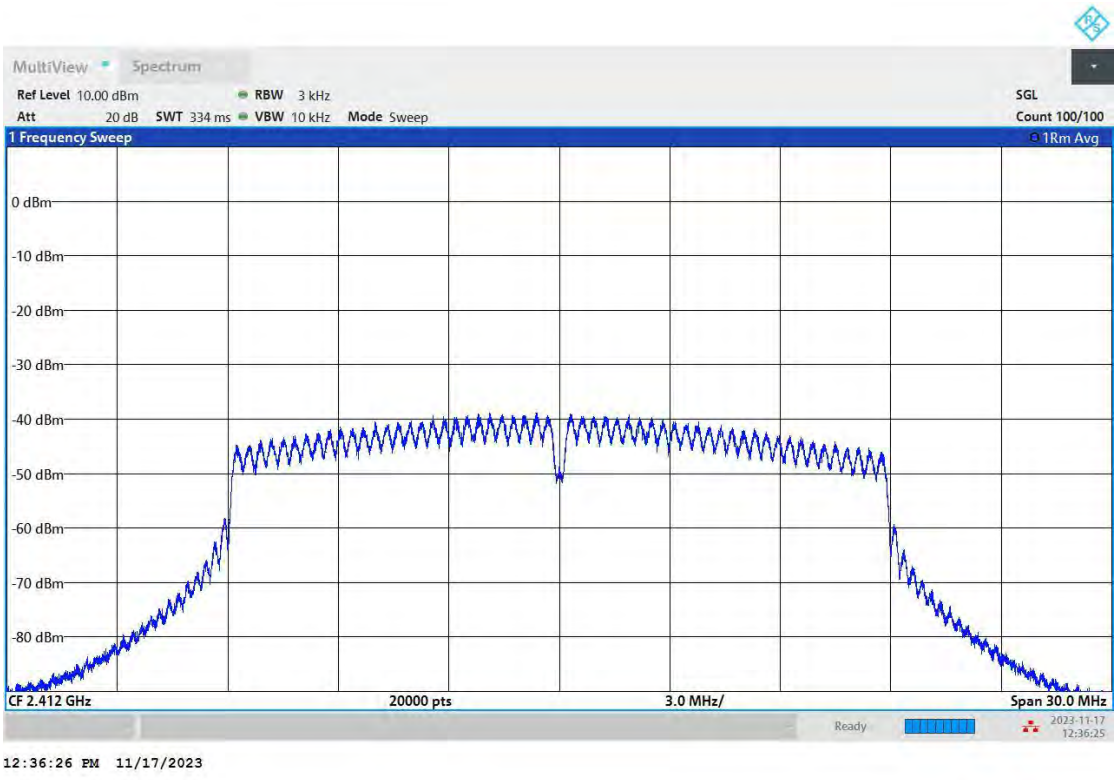
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2412.309750	-24.704	8.0	PASS

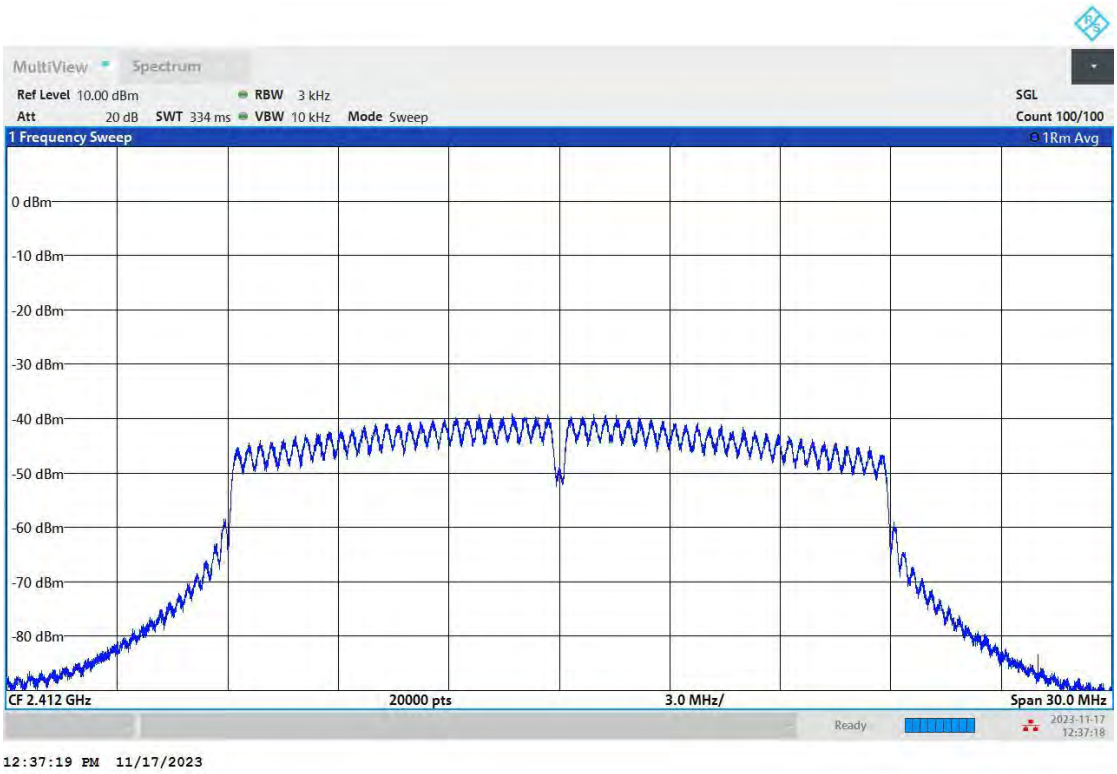
Ports

Port	State
1	used
2	used

PSD Connector 1



PSD Connector 2



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.42700 GHz	2.42700 GHz
Span	30.000 MHz	30.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	20000	~ 20000
Sweeptime	334.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Average Power	Average Power
Sweeptype	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (2412 MHz; 24.000 dBm; 20 MHz)

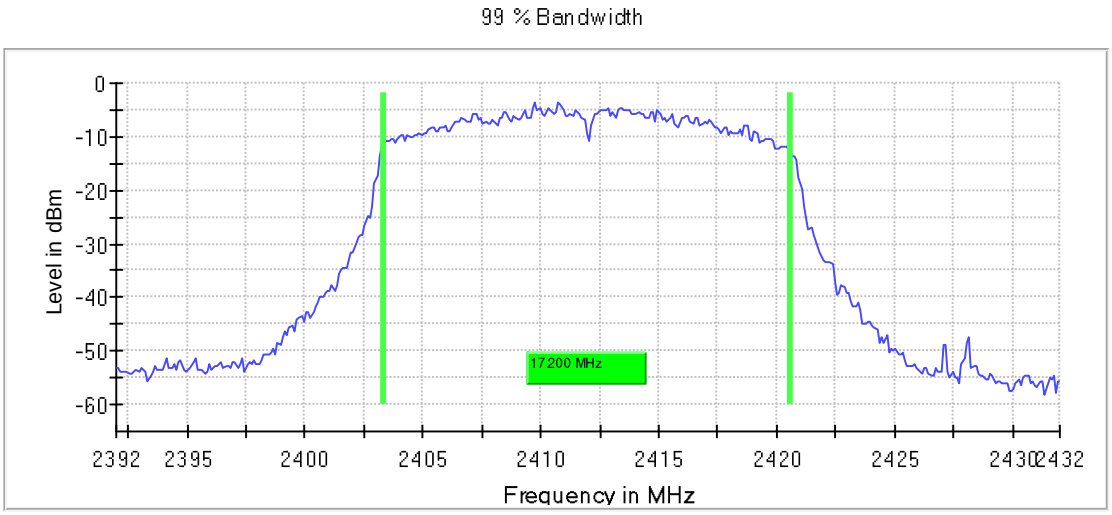
Customized settings.

99 % Bandwidth

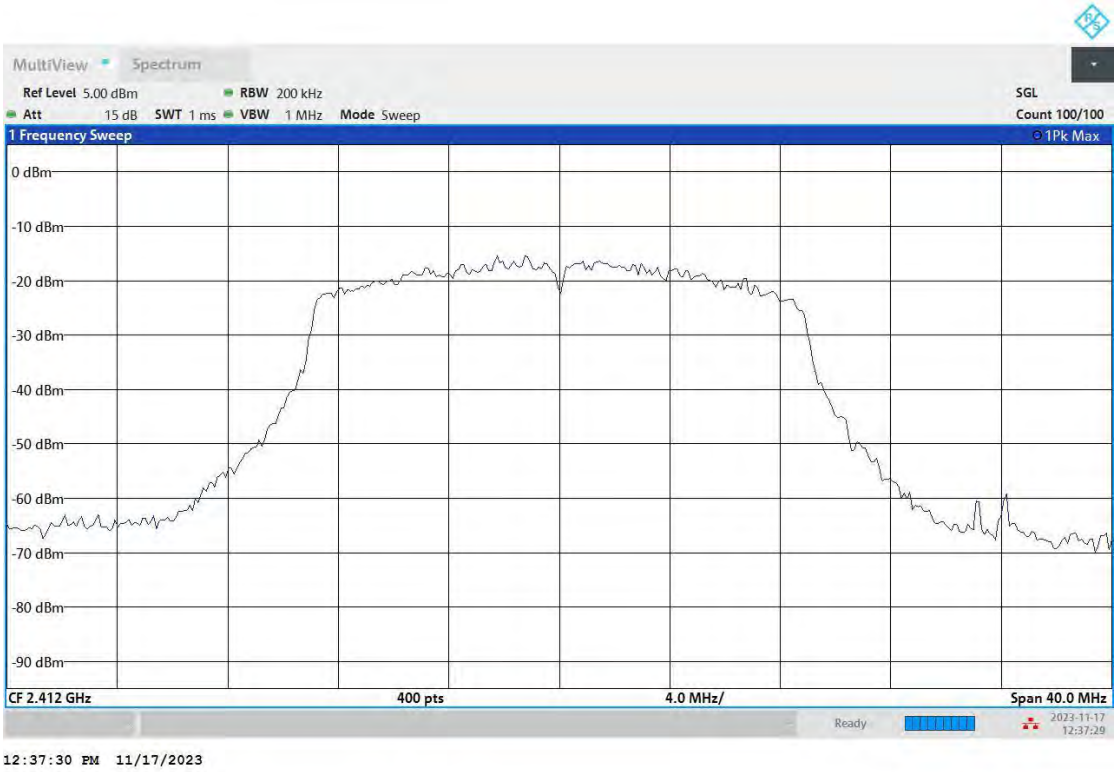
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.200000	---	---	2403.350000	2420.550000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	1.000 ms	AUTO
Reference Level	5.000 dBm	-5.000 dBm
Attenuation	15.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Tx Spurious Emission (2412 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

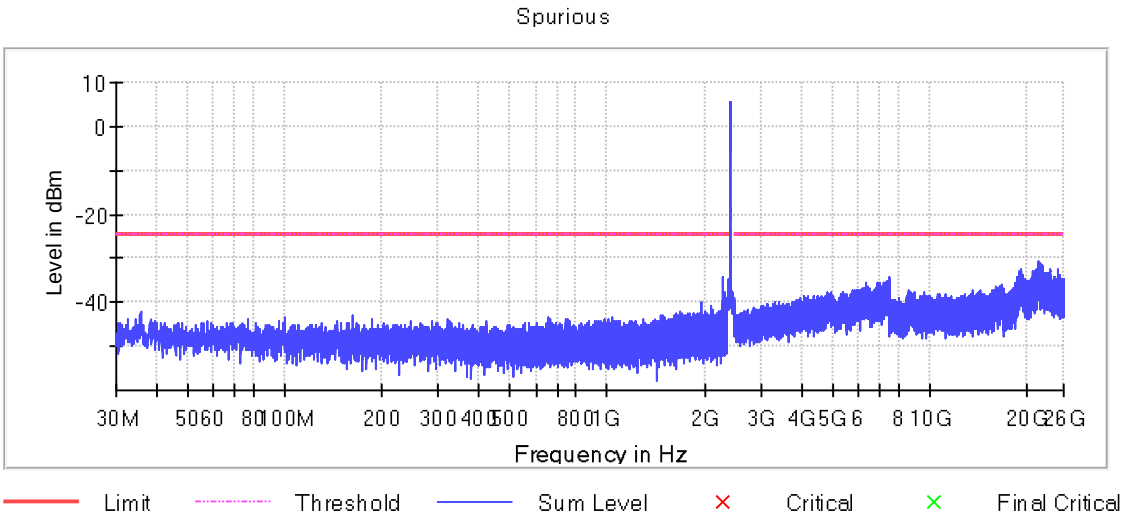
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
21812.341139	-30.6	6.2	-24.4
21590.112436	-30.7	6.3	-24.4
22024.222685	-31.1	6.7	-24.4
21746.025272	-31.4	7.0	-24.4
22070.784890	-31.4	7.0	-24.4
21768.836049	-31.5	7.1	-24.4
22027.279800	-31.6	7.2	-24.4
21769.071212	-31.7	7.3	-24.4
21650.784400	-31.7	7.3	-24.4
21758.018567	-31.7	7.3	-24.4
22233.987768	-31.8	7.4	-24.4
21668.891924	-31.8	7.4	-24.4
21651.960213	-31.9	7.5	-24.4
21874.188916	-31.9	7.5	-24.4
21575.062027	-31.9	7.5	-24.4

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	46400	~ 46400
Sweeptime	46.400 ms	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2670	~ 2670
Sweeptime	2.670 ms	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	300	300
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off

Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 20 MHz)

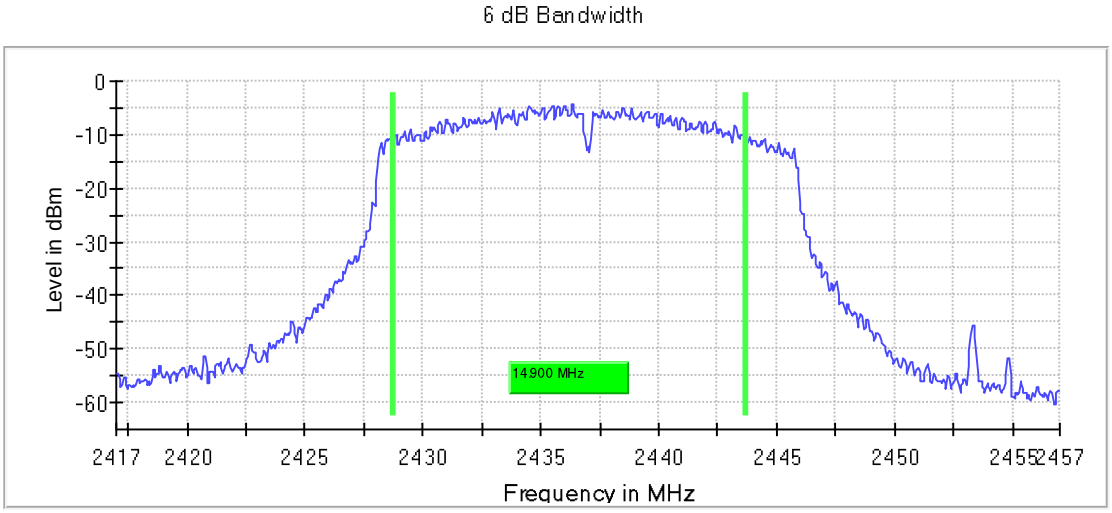
Customized settings.

6 dB Bandwidth

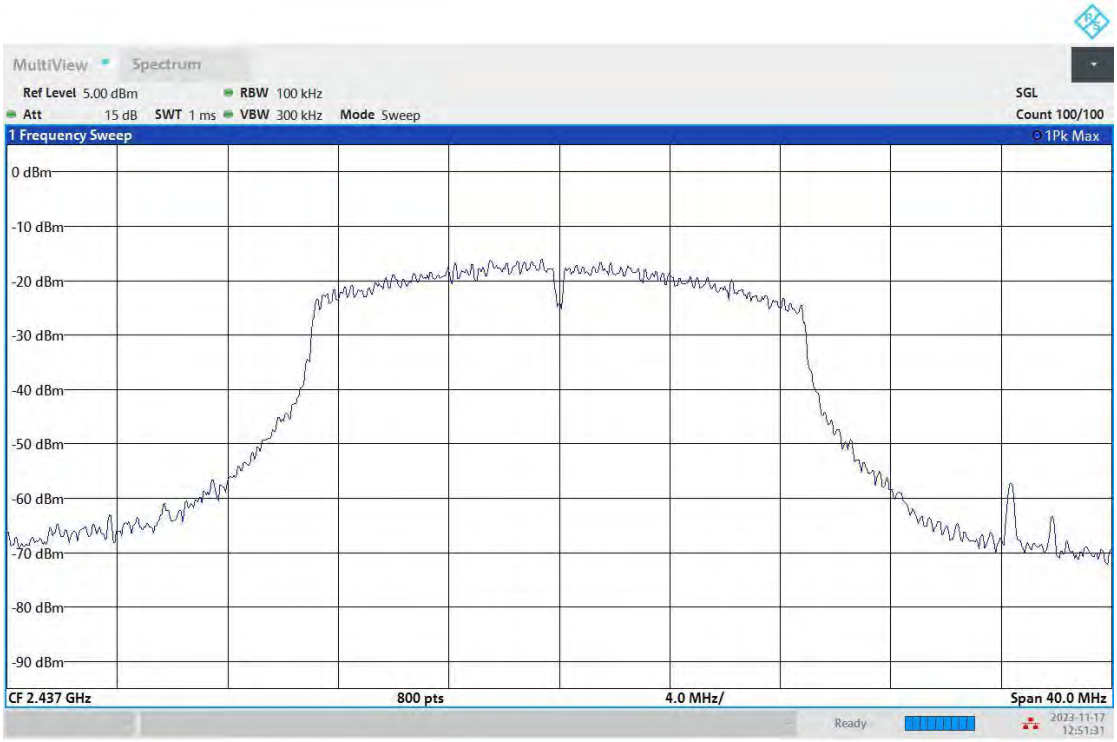
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	14.900000	0.500000	---	2428.775000	2443.675000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-4.2	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 100 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 300 kHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.437 GHz
800 pts
4.0 MHz/
Span 40.0 MHz
Ready
2023-11-17
12:51:31
12:51:32 PM 11/17/2023

Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

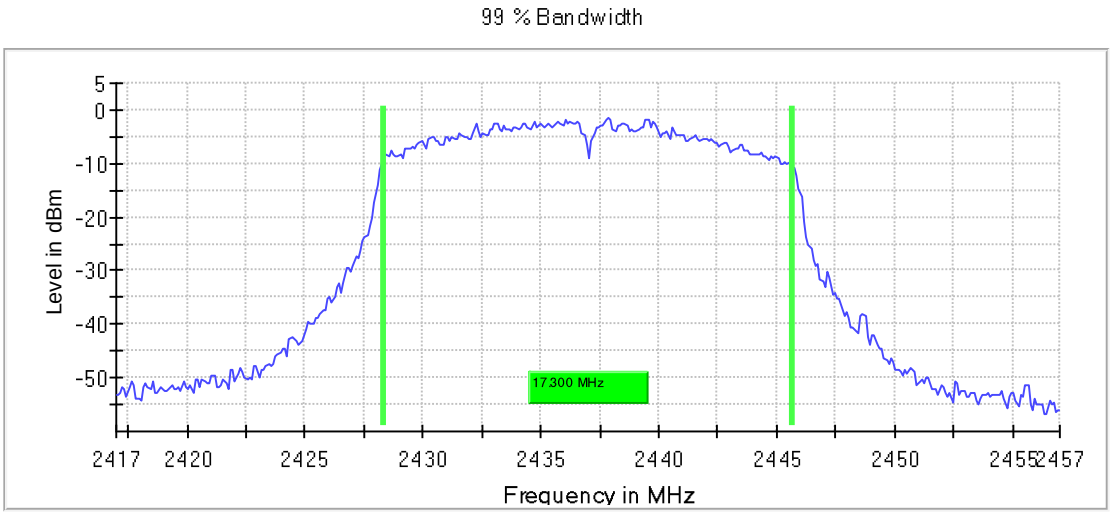
Customized settings.

99 % Bandwidth

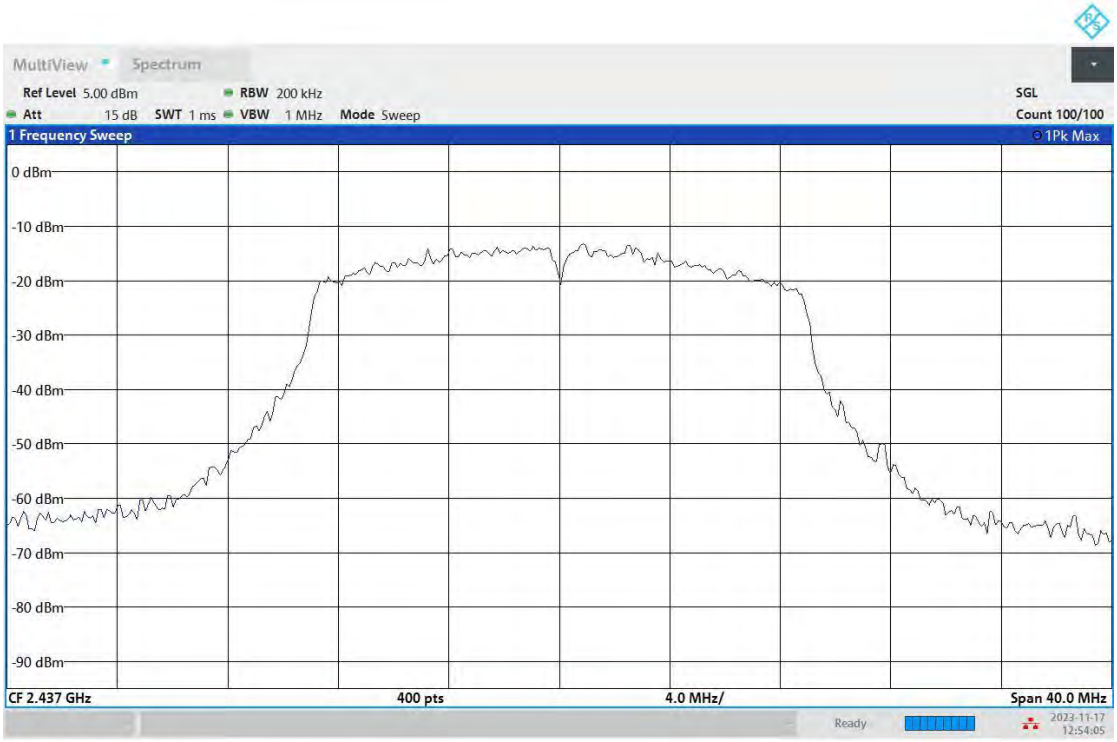
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.300000	---	---	2428.350000	2445.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 200 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 1 MHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.437 GHz
400 pts
4.0 MHz/
Span 40.0 MHz
Ready
2023-11-17
12:54:05
12:54:06 PM 11/17/2023

Tx Spurious Emission (2437 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

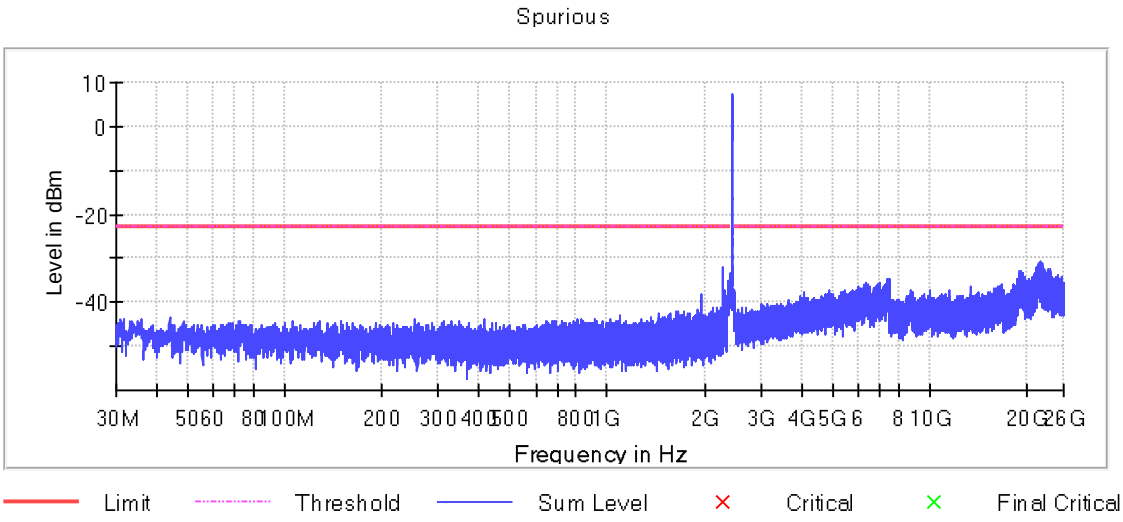
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
22023.517197	-30.7	8.1	-22.6
22242.923948	-31.1	8.4	-22.6
21602.811219	-31.1	8.5	-22.6
22012.934878	-31.2	8.6	-22.6
21751.669176	-31.4	8.8	-22.6
21722.038682	-31.4	8.8	-22.6
21654.311839	-31.5	8.9	-22.6
21705.106971	-31.5	8.9	-22.6
22154.737955	-31.5	8.9	-22.6
22113.819654	-31.6	9.0	-22.6
21687.469773	-31.7	9.0	-22.6
22009.172276	-31.7	9.1	-22.6
21676.887454	-31.8	9.1	-22.6
22154.973118	-31.8	9.2	-22.6
22206.003412	-31.9	9.3	-22.6

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

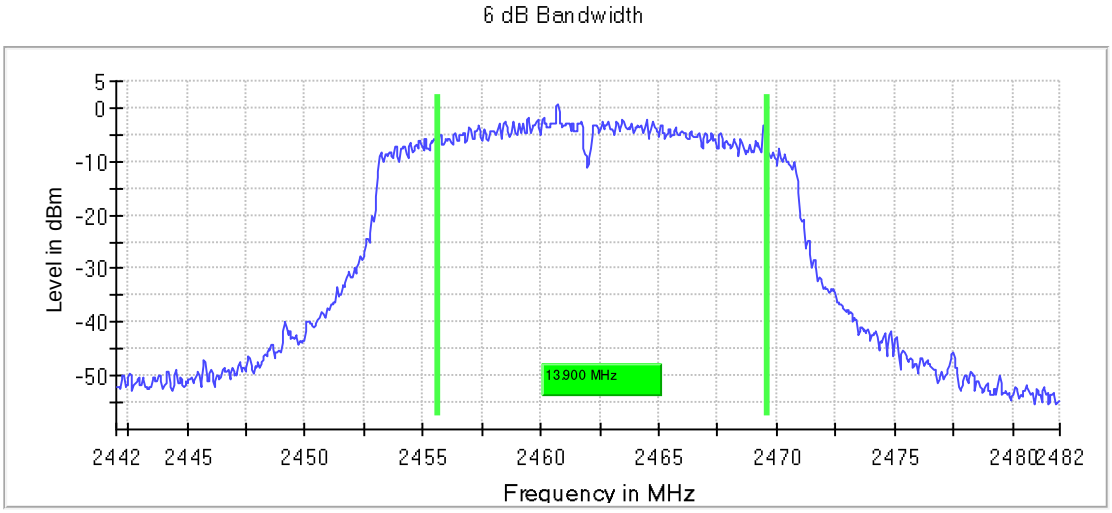
Customized settings.

6 dB Bandwidth

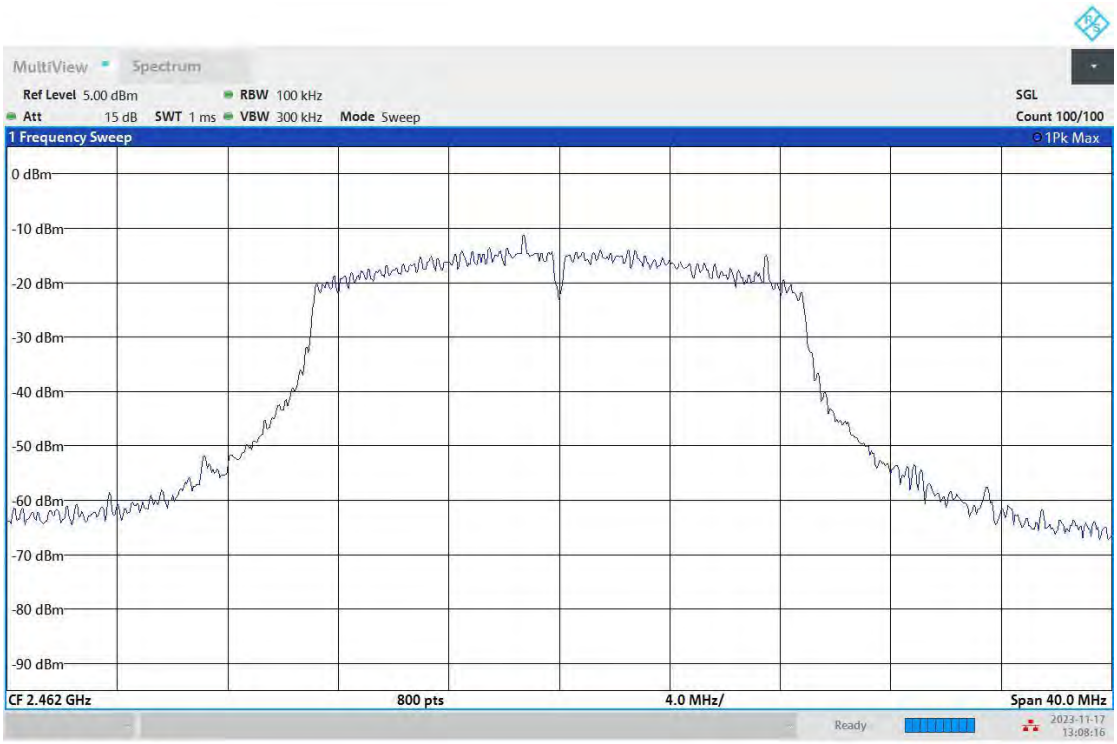
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	13.900000	0.500000	---	2455.675000	2469.575000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	0.6	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 100 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 300 kHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.462 GHz
800 pts
4.0 MHz/
Span 40.0 MHz
Ready
2023-11-17
13:08:16
01:08:17 PM 11/17/2023

Occupied Channel Bandwidth 99% (2462 MHz; 24.000 dBm; 20 MHz)

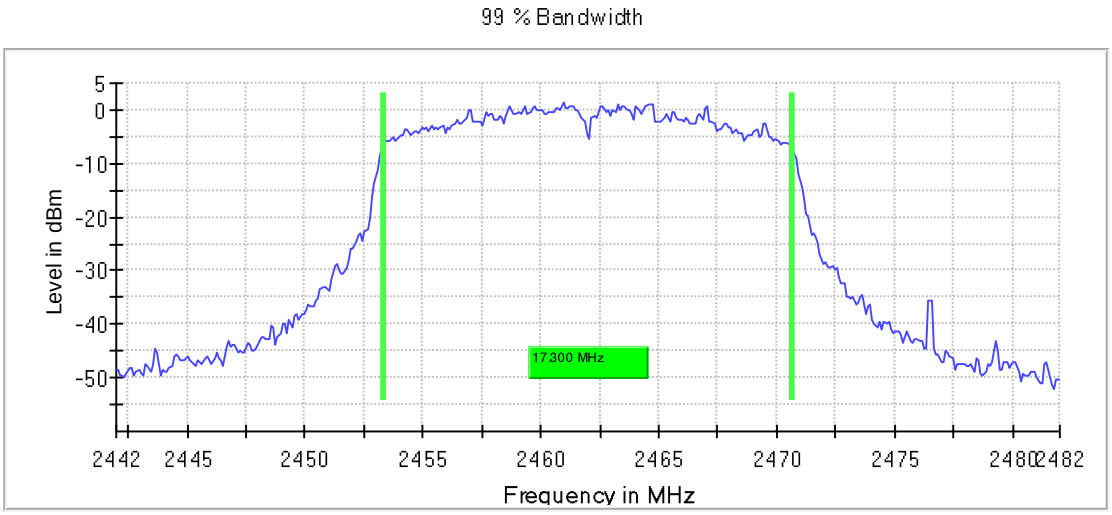
Customized settings.

99 % Bandwidth

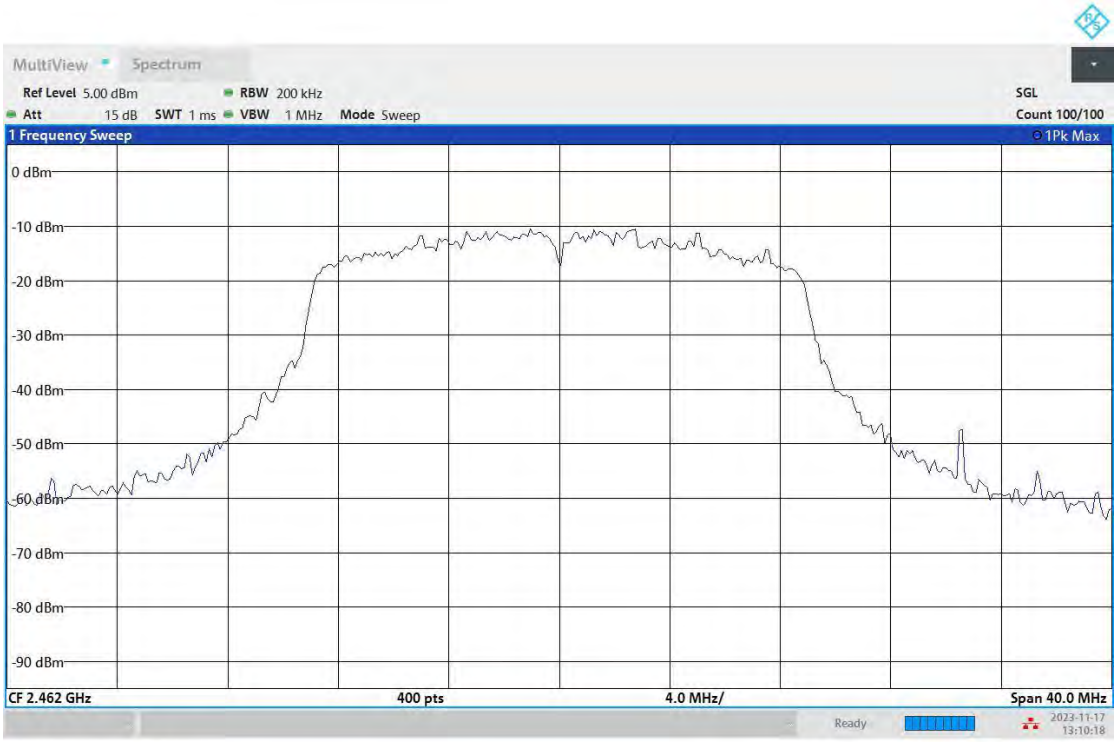
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.300000	---	---	2453.350000	2470.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 200 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 1 MHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.462 GHz
400 pts
4.0 MHz/
Span 40.0 MHz
Ready
2023-11-17
13:10:18
01:10:19 PM 11/17/2023

Tx Spurious Emission (2462 MHz; 24.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

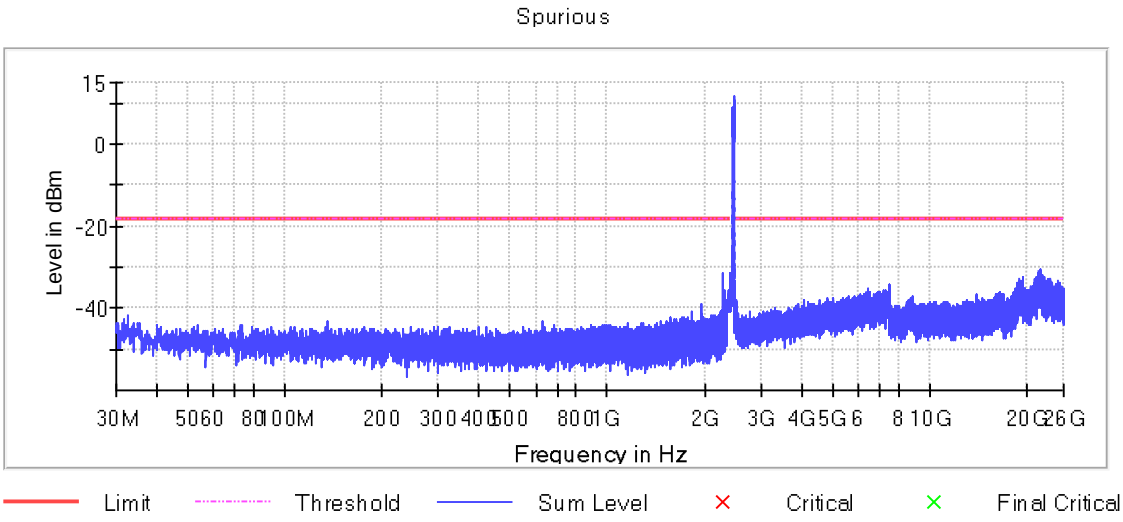
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
21916.518192	-30.7	12.3	-18.4
21611.041912	-31.0	12.7	-18.4
21948.500312	-31.2	12.8	-18.4
21586.820159	-31.3	12.9	-18.4
21710.750875	-31.4	13.0	-18.4
21683.001682	-31.4	13.0	-18.4
21701.344369	-31.4	13.0	-18.4
2275.025000	-31.4	13.1	-18.4
21660.190906	-31.5	13.1	-18.4
22058.556432	-31.5	13.2	-18.4
21740.851694	-31.6	13.3	-18.4
21686.999448	-31.7	13.3	-18.4
22091.479203	-31.7	13.3	-18.4
22159.206045	-31.7	13.4	-18.4
21897.705180	-31.8	13.4	-18.4

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
15
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2422 MHz; 24.000 dBm; 40 MHz)

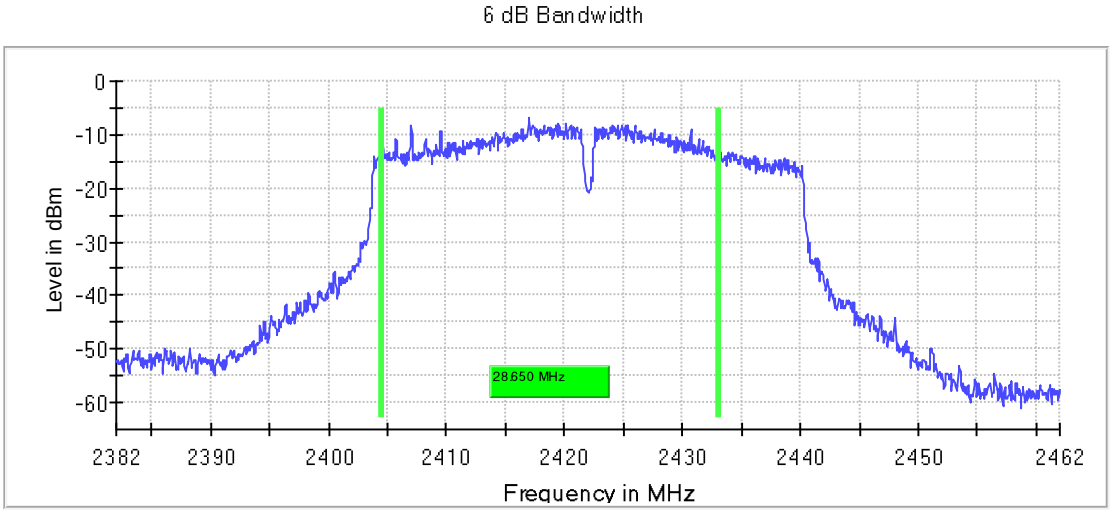
Customized settings.

6 dB Bandwidth

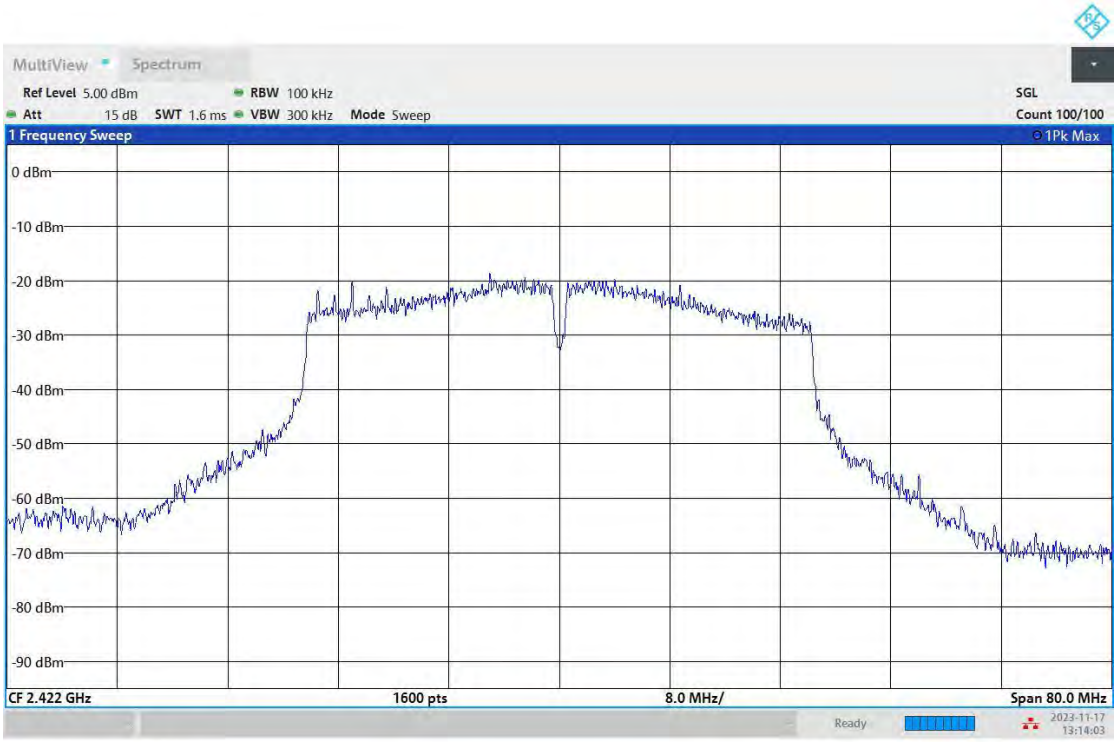
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	28.650000	0.500000	---	2404.425000	2433.075000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-6.9	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 100 kHz
SGL
Att 15 dB
SWT 1.6 ms
VBW 300 kHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.422 GHz
1600 pts
8.0 MHz/
Span 80.0 MHz
Ready
2023-11-17
13:14:03
01:14:03 PM 11/17/2023

Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

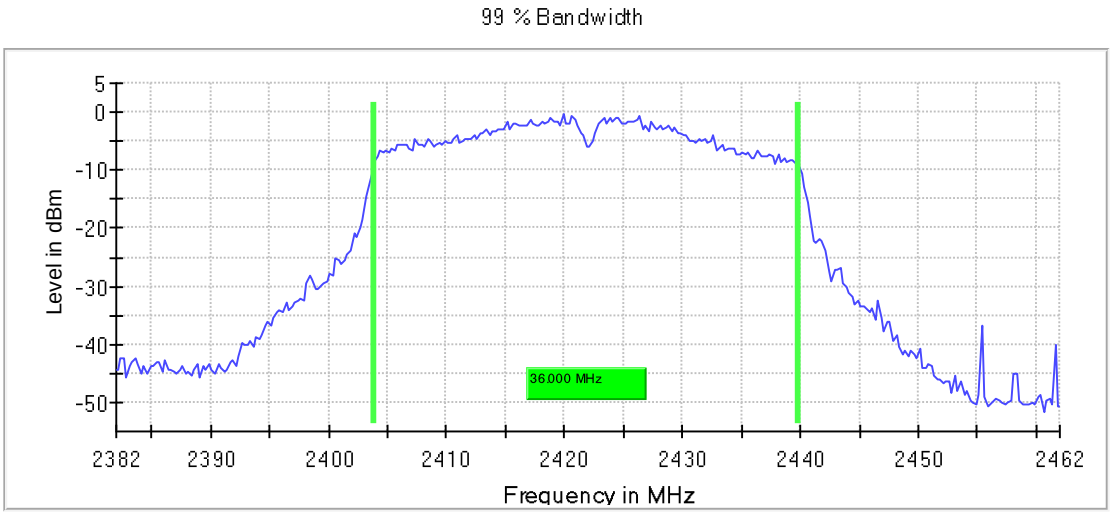
Customized settings.

99 % Bandwidth

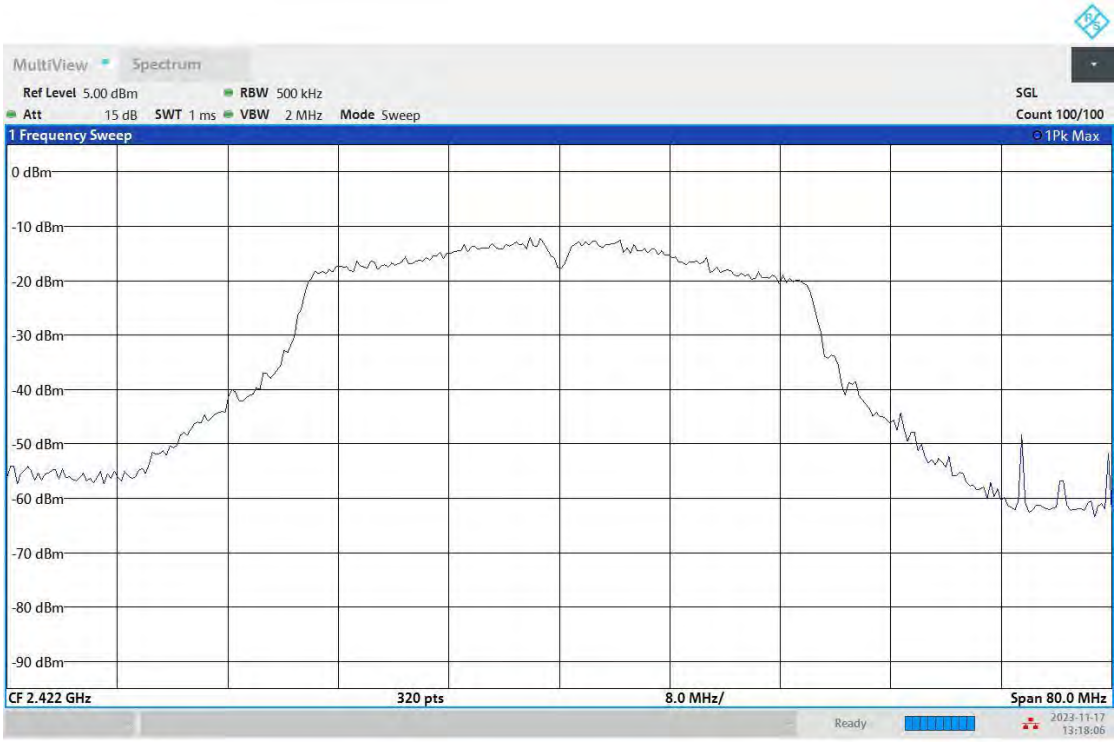
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.000000	---	---	2403.875000	2439.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 500 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 2 MHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.422 GHz
320 pts
8.0 MHz/
Span 80.0 MHz
Ready
2023-11-17
13:18:06
01:18:07 PM 11/17/2023

Tx Spurious Emission (2422 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

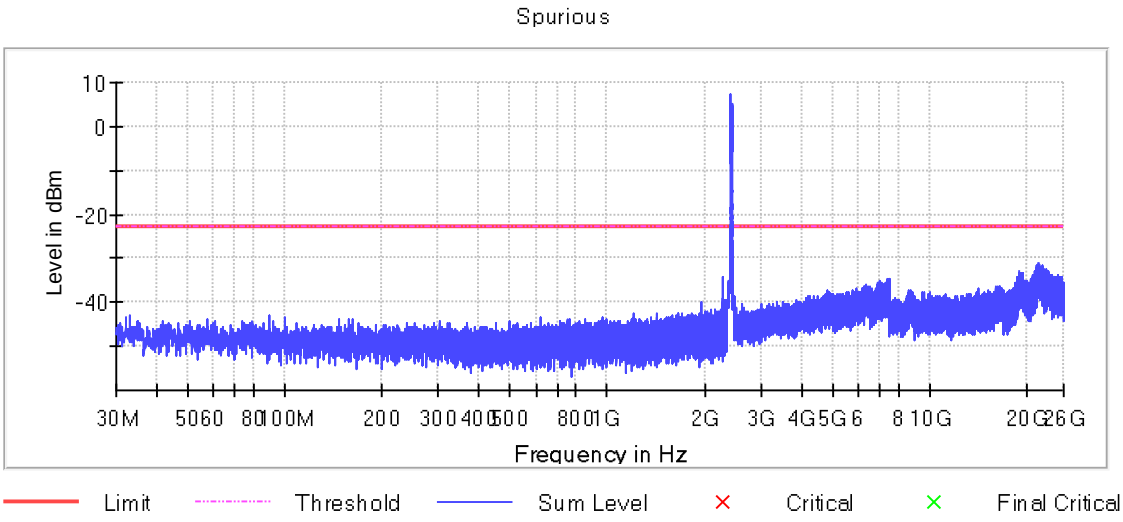
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.775000	-25.8	3.0	-22.8
2399.725000	-26.0	3.2	-22.8
2399.675000	-26.4	3.5	-22.8
2399.625000	-26.5	3.7	-22.8
2399.825000	-26.7	3.9	-22.8
2399.875000	-27.3	4.5	-22.8
2399.575000	-27.5	4.6	-22.8
2399.525000	-27.6	4.8	-22.8
2399.225000	-27.7	4.9	-22.8
2399.275000	-27.8	4.9	-22.8
2399.075000	-27.8	4.9	-22.8
2399.475000	-27.9	5.1	-22.8
2399.925000	-28.0	5.2	-22.8
2399.125000	-28.0	5.2	-22.8
2399.025000	-28.1	5.2	-22.8

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 40 MHz)

Customized settings.

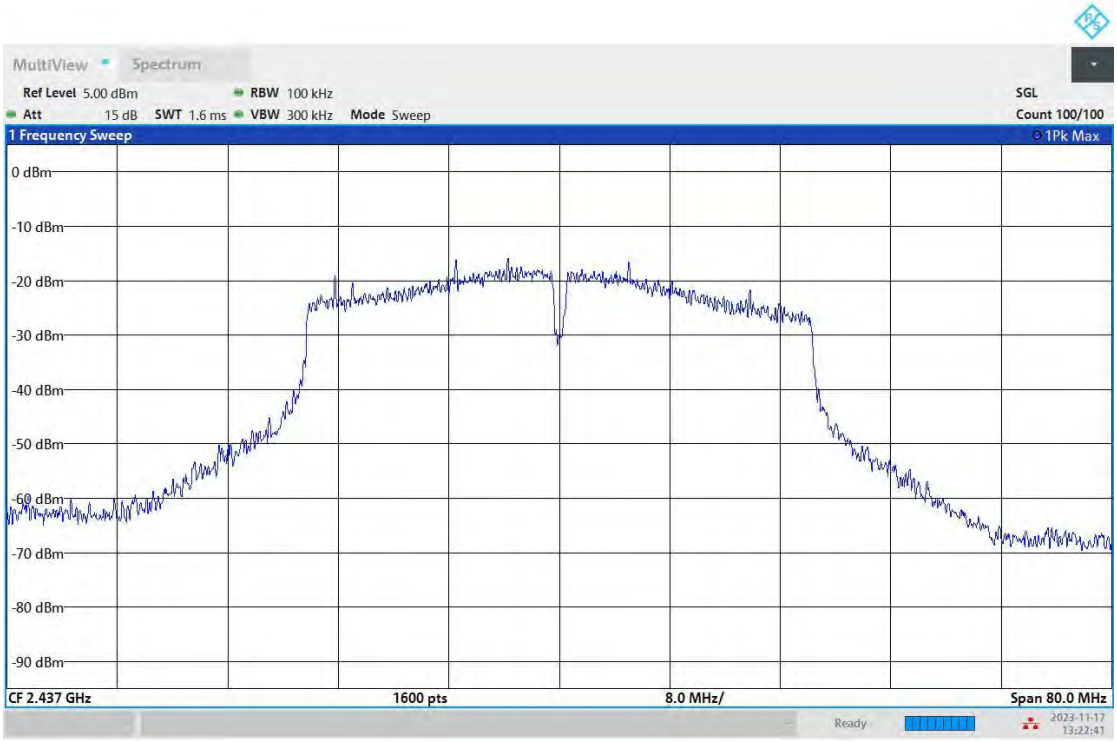
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	30.200000	0.500000	---	2420.675000	2450.875000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-4.1	PASS

Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 100 kHz
SGL
Att 15 dB
SWT 1.6 ms
VBW 300 kHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.437 GHz
1600 pts
8.0 MHz/
Span 80.0 MHz
Ready
2023-11-17
13:22:41
01:22:42 PM 11/17/2023

Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

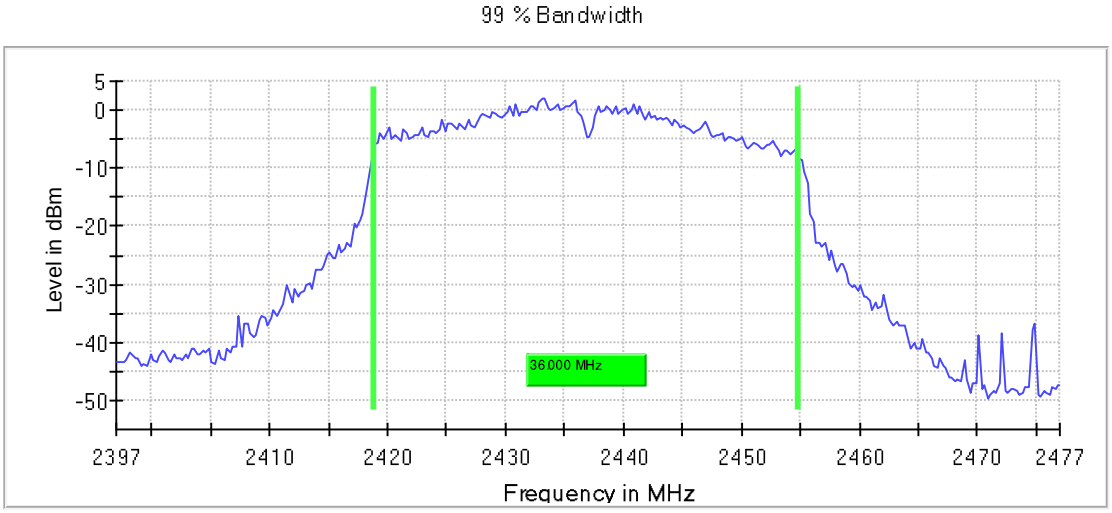
Customized settings.

99 % Bandwidth

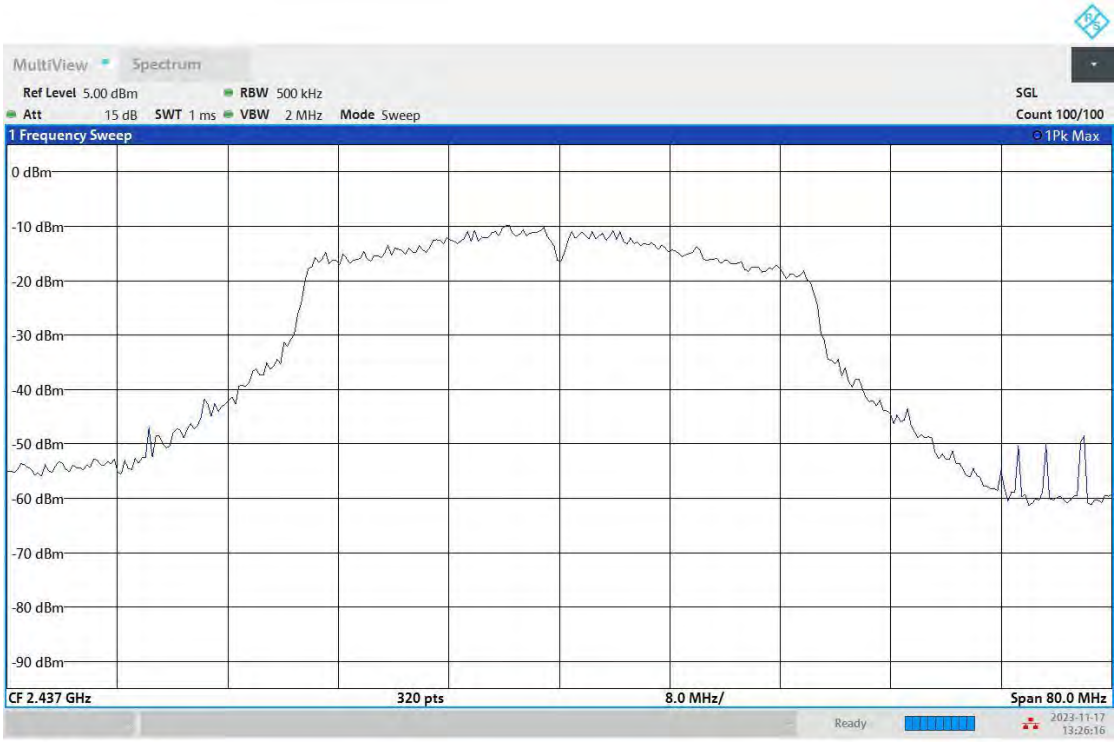
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.000000	---	---	2418.875000	2454.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth



01:26:17 PM 11/17/2023

Tx Spurious Emission (2437 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

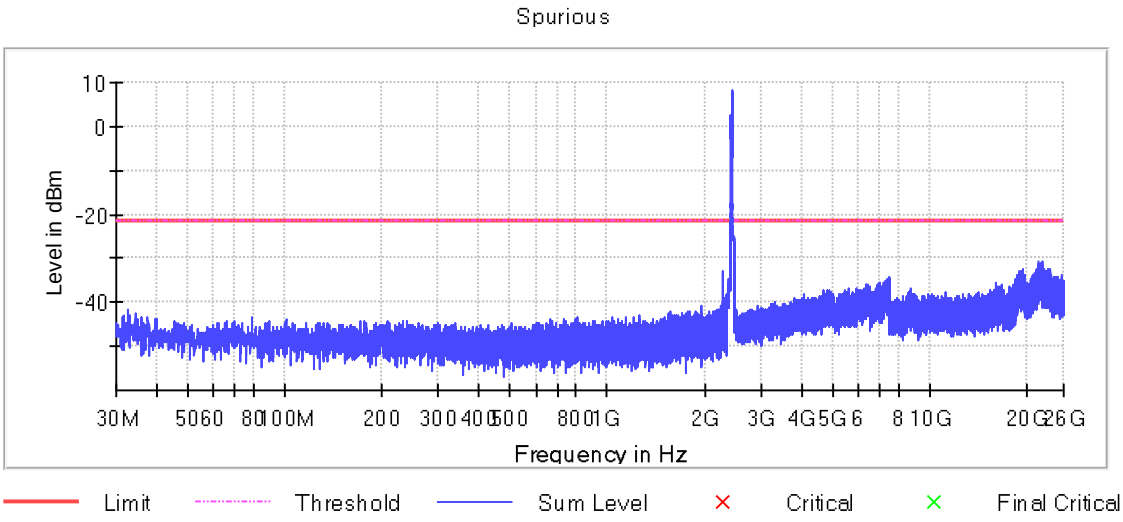
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
21675.476478	-30.5	8.9	-21.6
22247.156876	-30.9	9.3	-21.6
22079.721070	-31.0	9.4	-21.6
21764.838284	-31.3	9.7	-21.6
21641.142731	-31.4	9.8	-21.6
21684.647821	-31.5	9.9	-21.6
21675.711640	-31.5	9.9	-21.6
21724.625471	-31.7	10.1	-21.6
21636.909803	-31.7	10.1	-21.6
21637.380129	-31.7	10.1	-21.6
22274.200580	-31.7	10.2	-21.6
21656.193141	-31.8	10.2	-21.6
21681.355544	-31.8	10.2	-21.6
21733.796815	-31.8	10.2	-21.6
21704.166321	-31.9	10.3	-21.6

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

Minimum Emission Bandwidth 6 dB (2452 MHz; 24.000 dBm; 40 MHz)

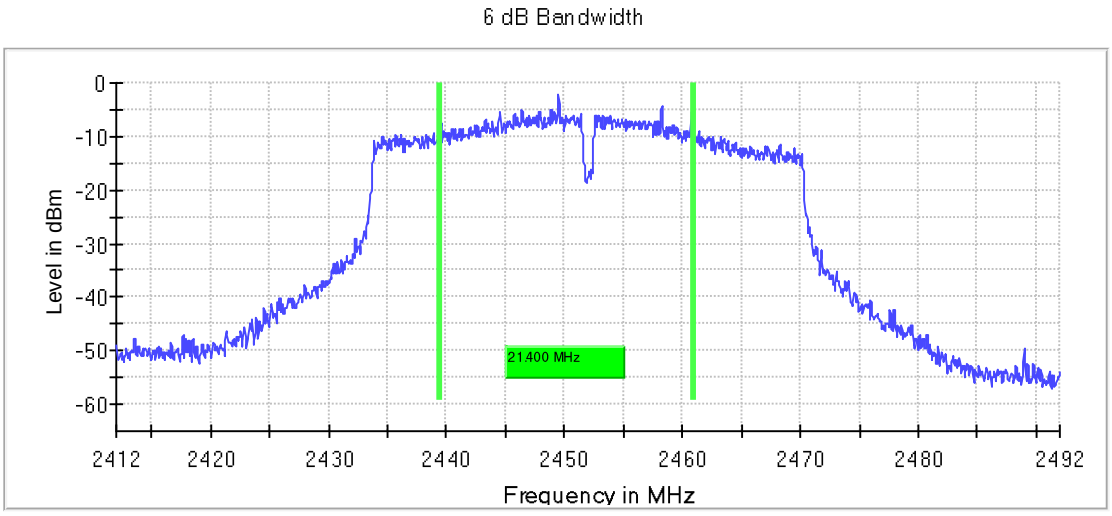
Customized settings.

6 dB Bandwidth

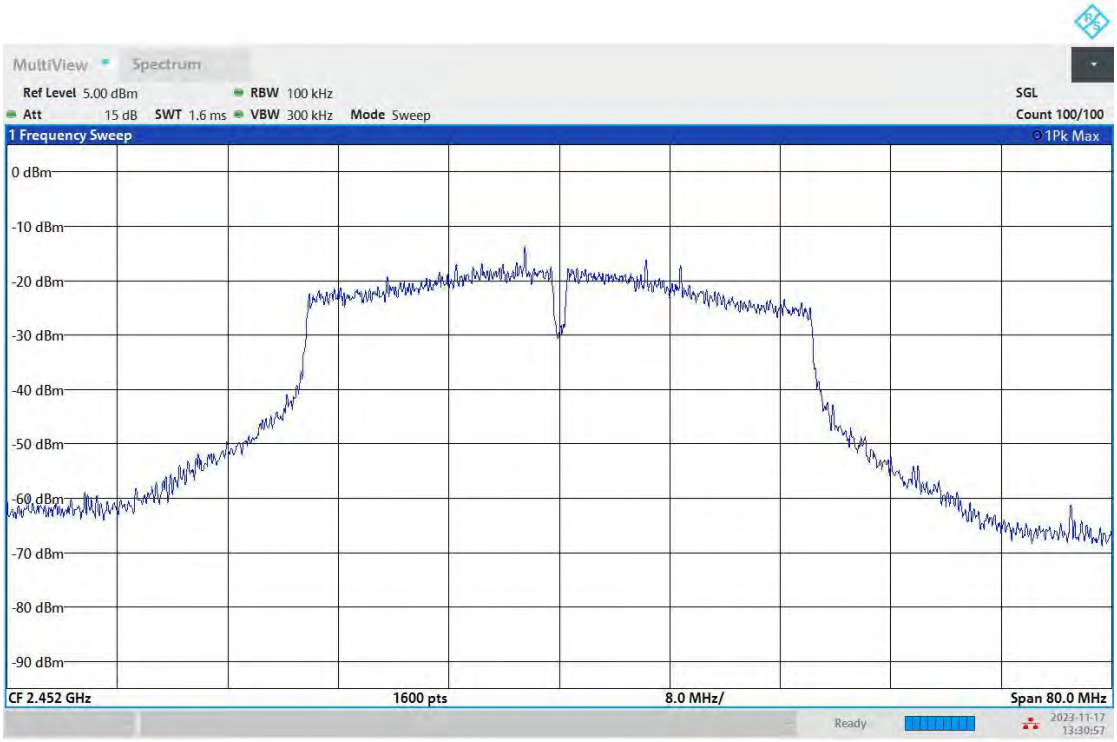
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	21.400000	0.500000	---	2439.475000	2460.875000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-2.1	PASS



Bandwidth



01:30:57 PM 11/17/2023

Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

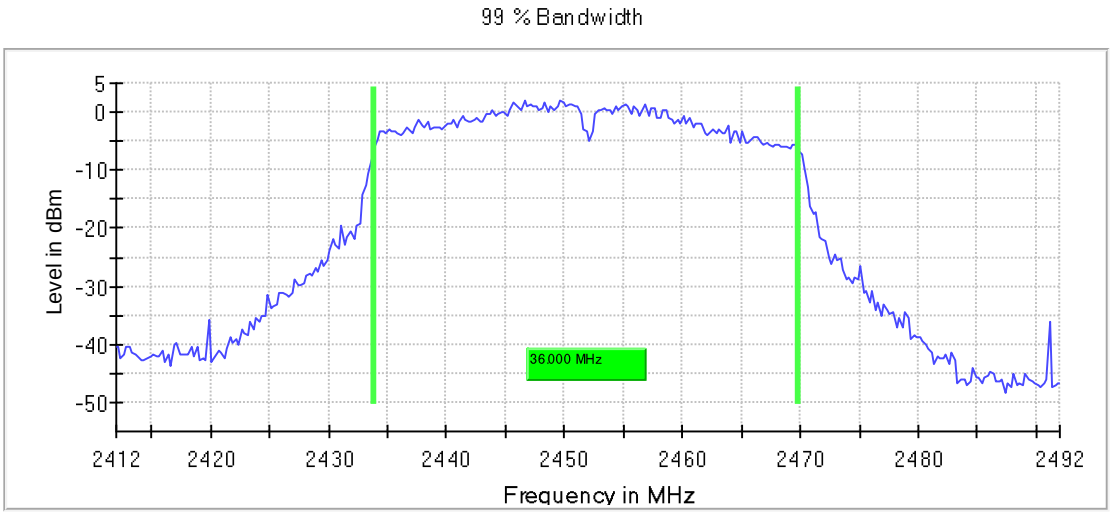
Customized settings.

99 % Bandwidth

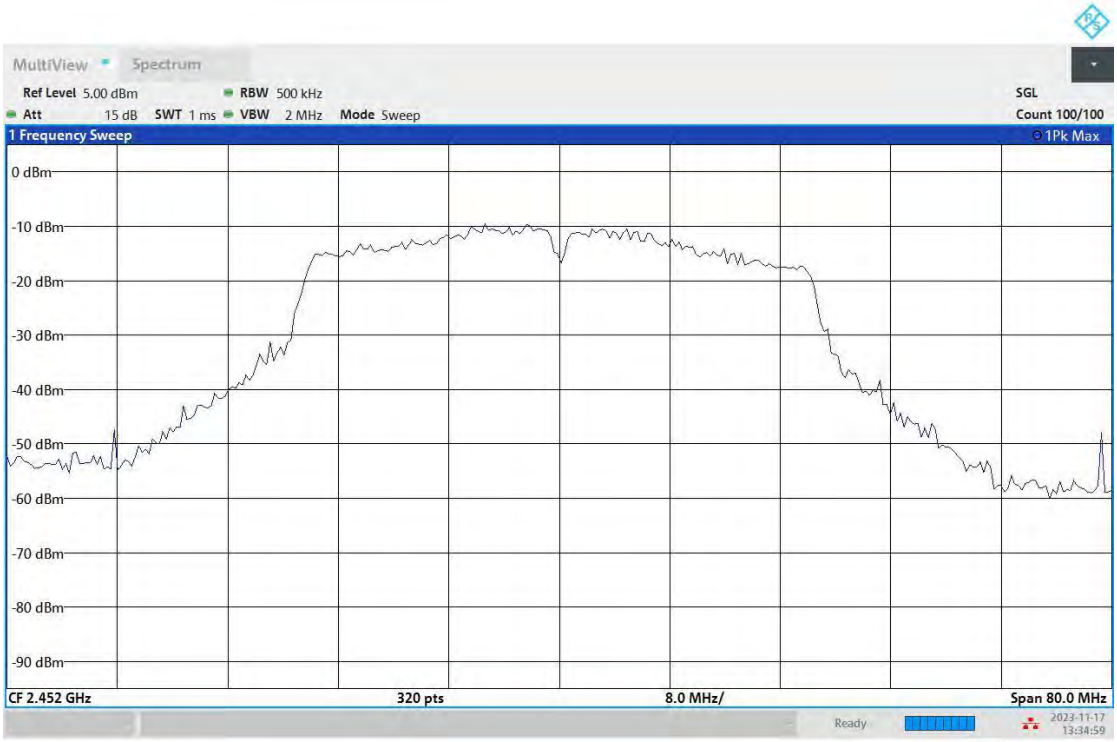
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	36.000000	---	---	2433.875000	2469.875000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



Bandwidth


MultiView
Spectrum
Ref Level 5.00 dBm
RBW 500 kHz
SGL
Att 15 dB
SWT 1 ms
VBW 2 MHz
Mode Sweep
Count 100/100
1 Frequency Sweep
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
-90 dBm
CF 2.452 GHz
320 pts
8.0 MHz/
Span 80.0 MHz
Ready
2023-11-17
13:34:59
01:35:00 PM 11/17/2023

Tx Spurious Emission (2452 MHz; 24.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

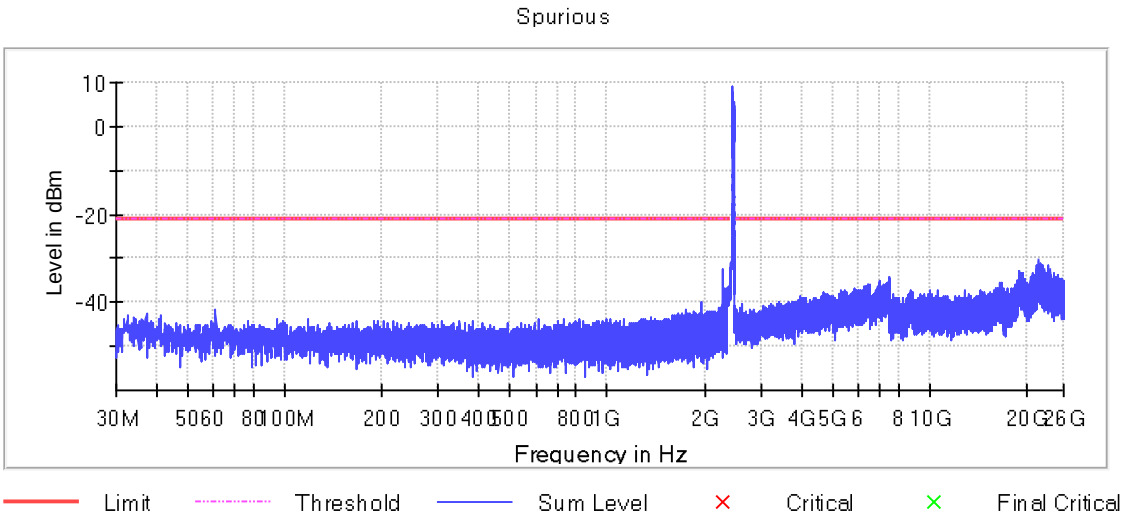
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
21678.768755	-30.4	9.3	-21.1
22115.465793	-31.1	10.0	-21.1
22251.389804	-31.5	10.4	-21.1
21799.877519	-31.5	10.4	-21.1
22263.383099	-31.5	10.4	-21.1
23343.249980	-31.5	10.5	-21.1
21519.328479	-31.6	10.5	-21.1
21705.812459	-31.6	10.6	-21.1
22230.930653	-31.6	10.6	-21.1
21631.030737	-31.6	10.6	-21.1
21892.766765	-31.7	10.6	-21.1
21932.744415	-31.7	10.6	-21.1
22284.312574	-31.7	10.7	-21.1
21744.143971	-31.8	10.7	-21.1
22223.640611	-31.8	10.8	-21.1

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1


Spurious
10
0
-20
-40
Level in dBm
30M
50
60
80
100M
200
300
400
500
800
1G
2G
3G
4G
5G
6
8
10G
20G
26G
Frequency in Hz
Limit
Threshold
Sum Level
Critical
Final Critical

- End of Report –