

U6-IW WiFi Annex

Summary – ax Mode

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)

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	18.7	30.0	18.7	88.526	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

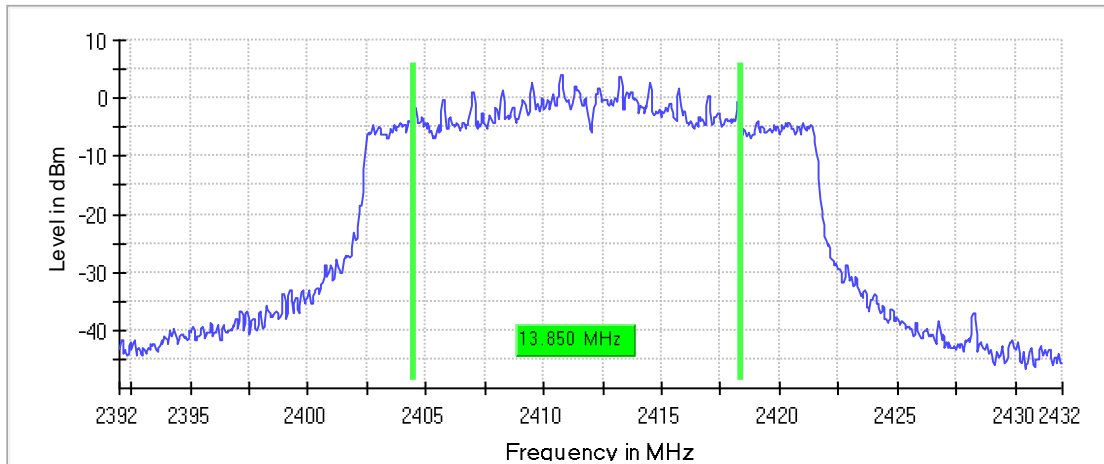
Minimum Emission Bandwidth 6 dB (2412 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

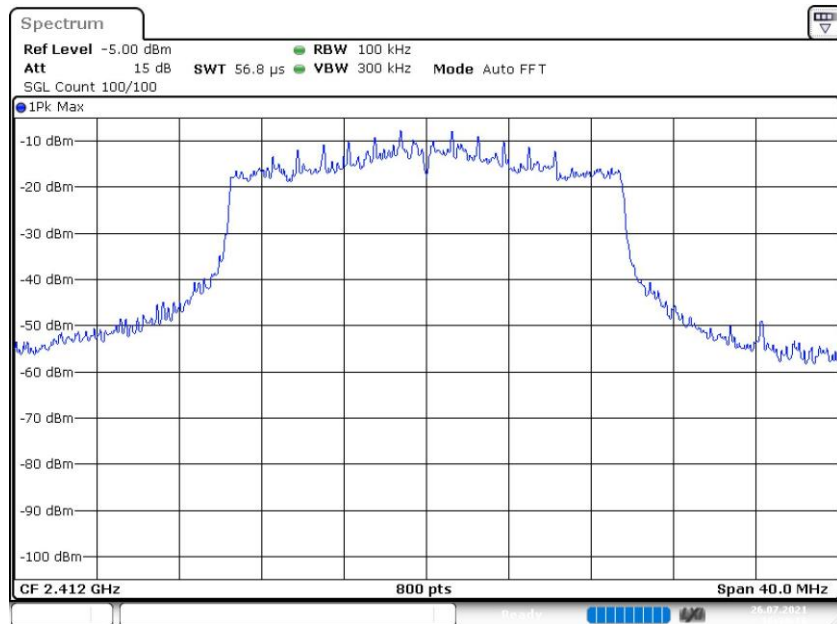
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	13.850000	0.500000	---	2404.475000	2418.325000

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	4.0	PASS

6 dB Bandwidth



Bandwidth



Date: 26.JUL.2021 16:39:17

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 μ s	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)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2411.693250	-17.876	8.0	PASS

Ports

Port	State
1	used
2	used

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

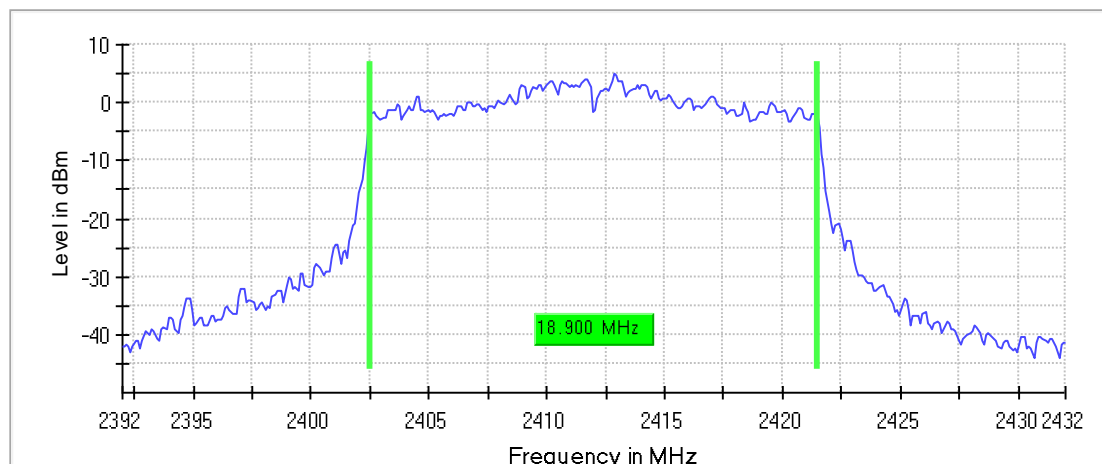
Occupied Channel Bandwidth 99% (2412 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

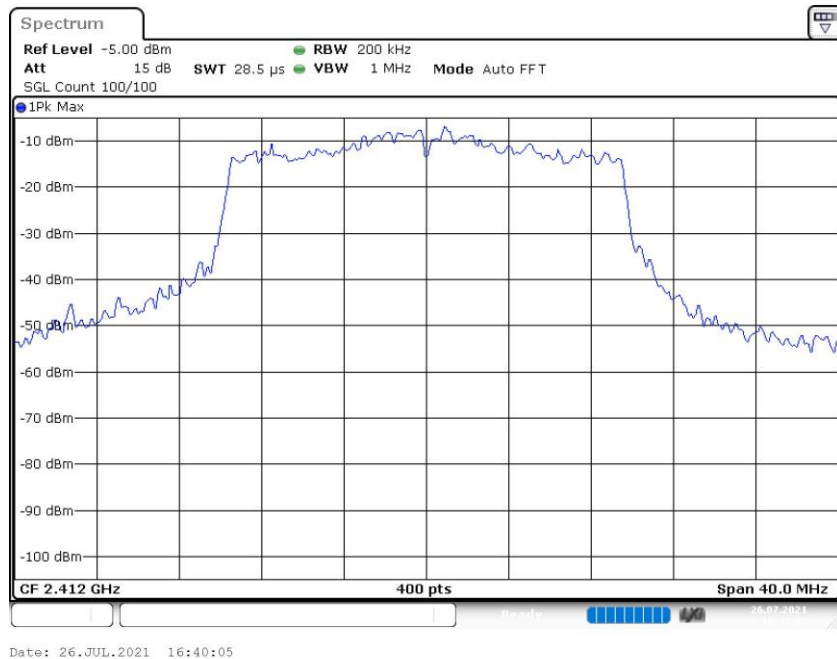
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	18.900000	---	---	2402.550000	2421.450000

DUT Frequency (MHz)	Result
2412.000000	PASS

99 %Bandwidth



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)

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

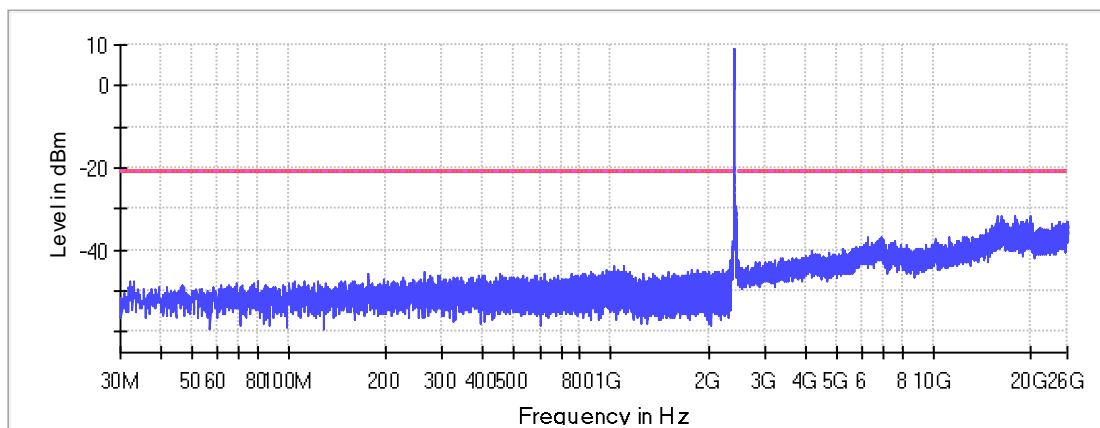
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.325000	-28.5	7.7	-20.8
2399.375000	-28.6	7.8	-20.8
2399.725000	-29.2	8.4	-20.8
2399.775000	-29.2	8.4	-20.8
2399.275000	-29.3	8.6	-20.8

2399.425000	-29.4	8.6	-20.8
2399.675000	-29.4	8.7	-20.8
2397.775000	-29.8	9.0	-20.8
2399.225000	-29.8	9.1	-20.8
2399.025000	-29.9	9.1	-20.8
2397.725000	-29.9	9.1	-20.8
2399.525000	-30.0	9.3	-20.8
2399.625000	-30.1	9.3	-20.8
2399.475000	-30.2	9.4	-20.8
2399.075000	-30.4	9.6	-20.8

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



— 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	32001	~ 46400
Sweptime	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
Sweptime	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
Sweep type	FFT	AUTO
Preamp	off	off

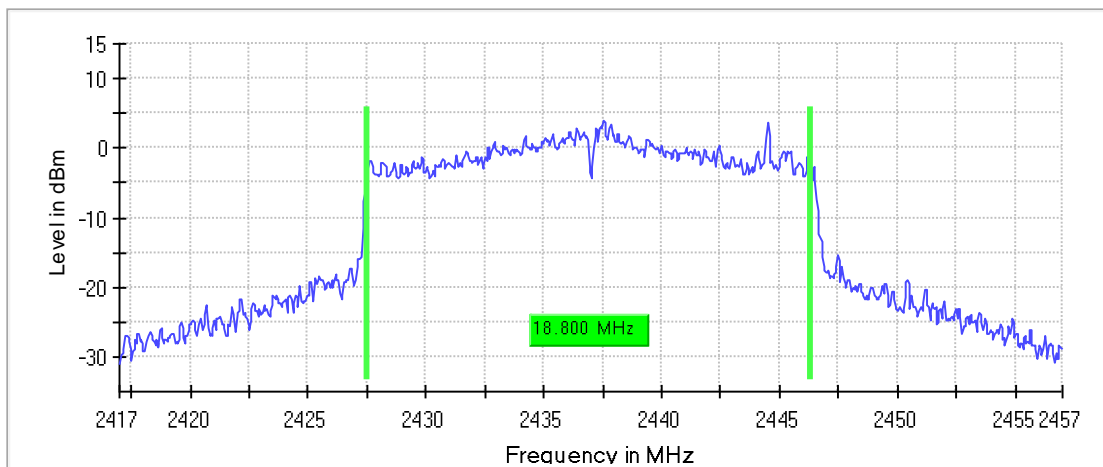
Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

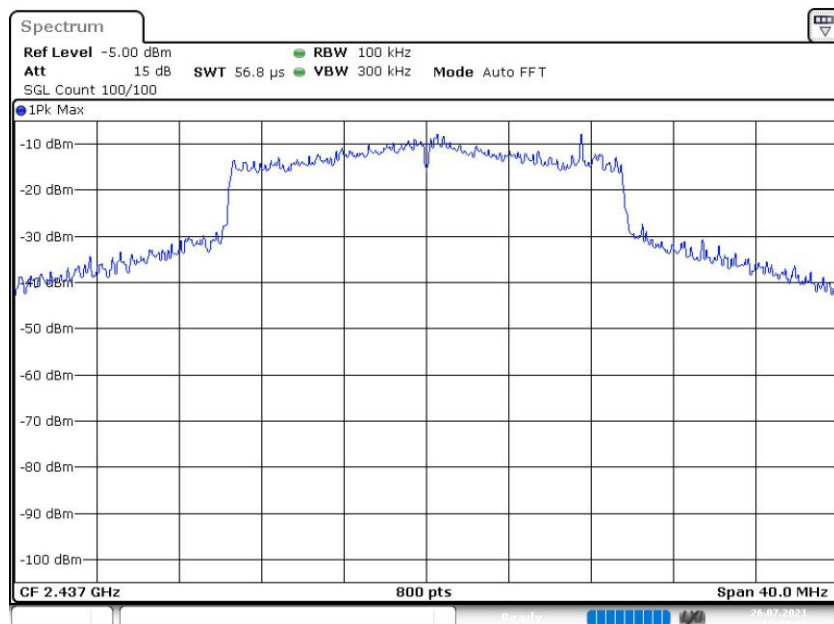
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	18.800000	0.500000	---	2427.525000	2446.325000

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	3.8	PASS

6 dB Bandwidth



Bandwidth



Date: 26.JUL.2021 16:48:46

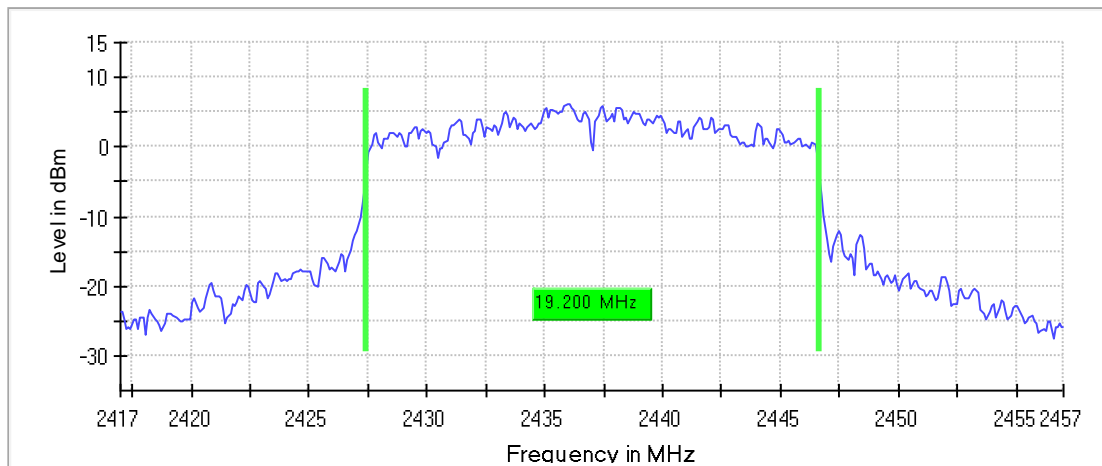
Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

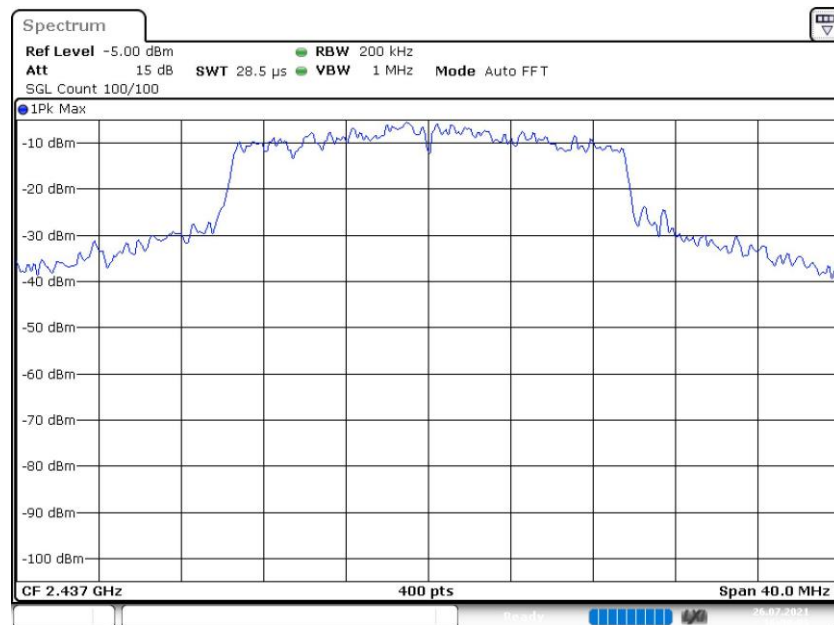
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	19.200000	---	---	2427.450000	2446.650000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 %Bandwidth



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

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

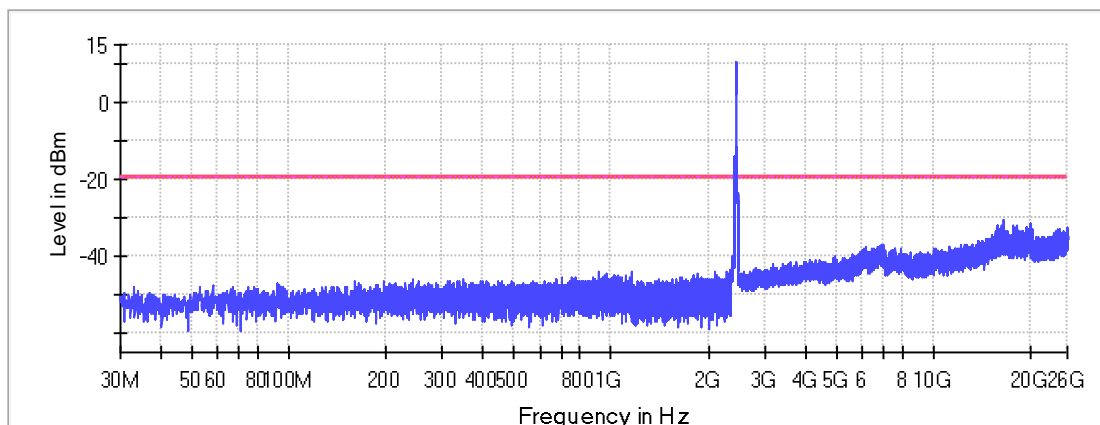
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
16520.574615	-30.7	11.4	-19.3
2398.525000	-31.4	12.2	-19.3
19898.761250	-31.5	12.2	-19.3
19887.738235	-31.6	12.4	-19.3
2398.475000	-31.7	12.5	-19.3
18208.565631	-31.8	12.6	-19.3
15867.277265	-32.0	12.7	-19.3
17615.527429	-32.1	12.9	-19.3
16220.748609	-32.2	12.9	-19.3
15815.101661	-32.2	12.9	-19.3
19892.882308	-32.2	13.0	-19.3
19940.648706	-32.3	13.0	-19.3
2398.575000	-32.3	13.1	-19.3
19509.281390	-32.3	13.1	-19.3
19529.857684	-32.3	13.1	-19.3

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



— Limit - - - - - Threshold — Sum Level × Critical × Final Critical

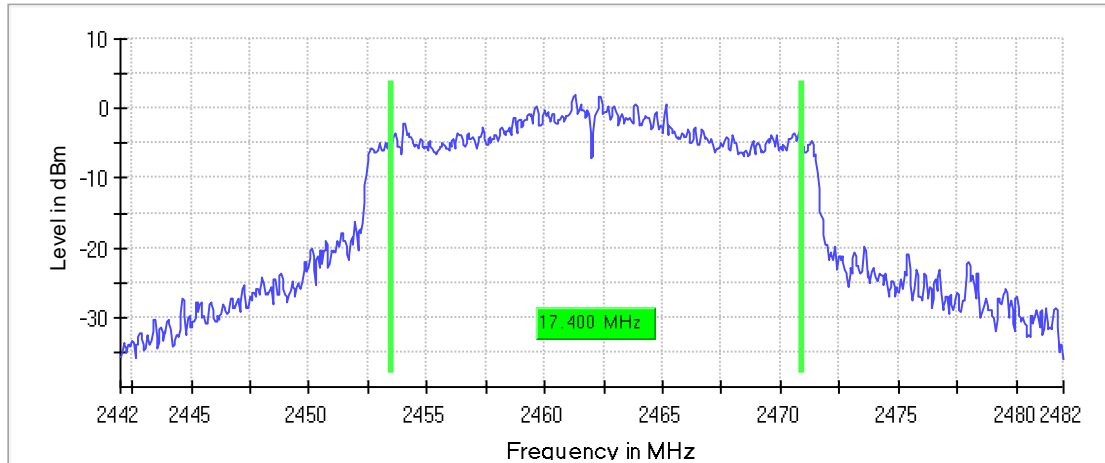
Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

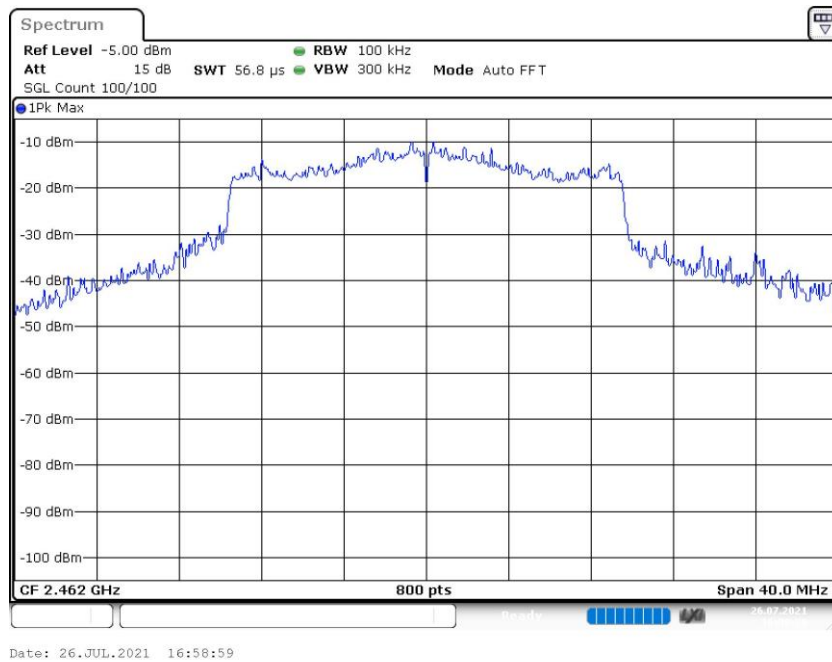
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.400000	0.500000	---	2453.525000	2470.925000

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	1.9	PASS

6 dB Bandwidth



Bandwidth



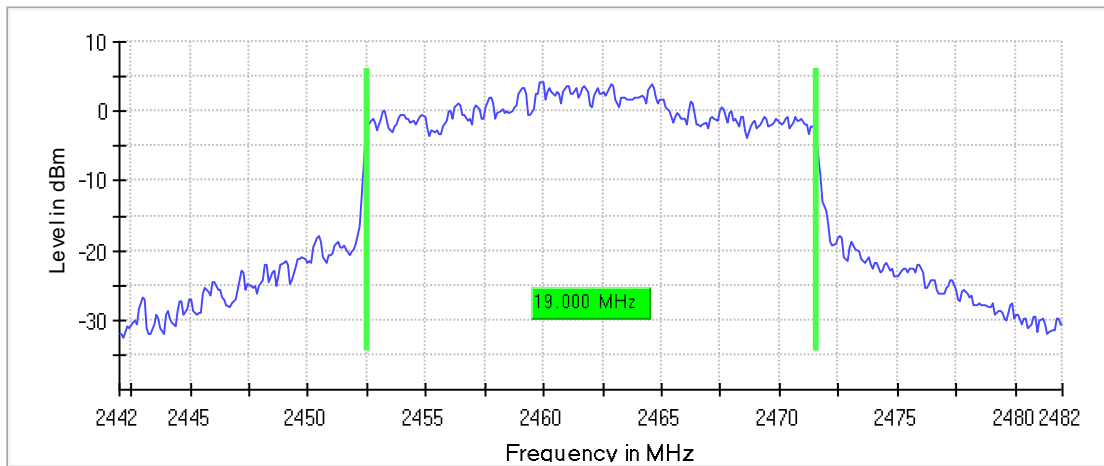
Occupied Channel Bandwidth 99% (2462 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

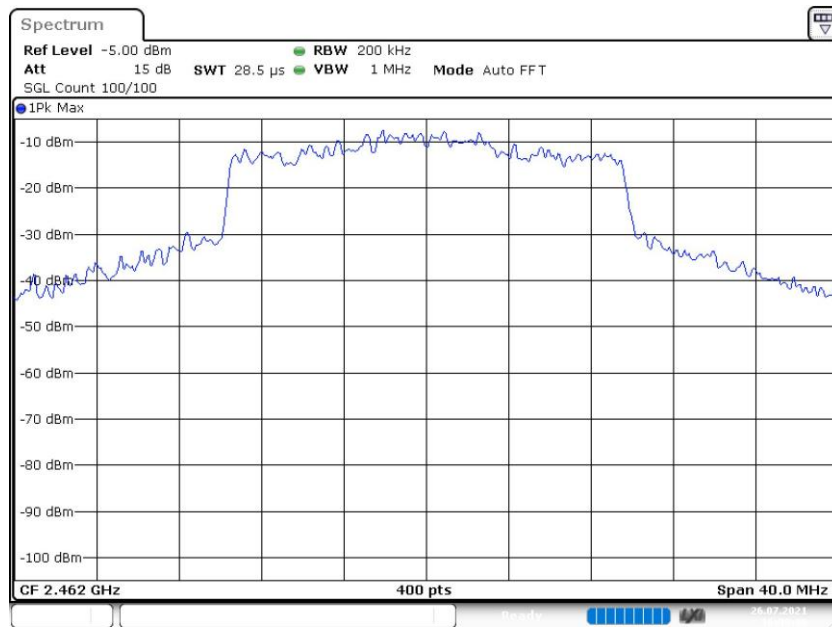
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	19.000000	---	---	2452.550000	2471.550000

DUT Frequency (MHz)	Result
2462.000000	PASS

99 %Bandwidth



Bandwidth



Date: 26.JUL.2021 16:59:49

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

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

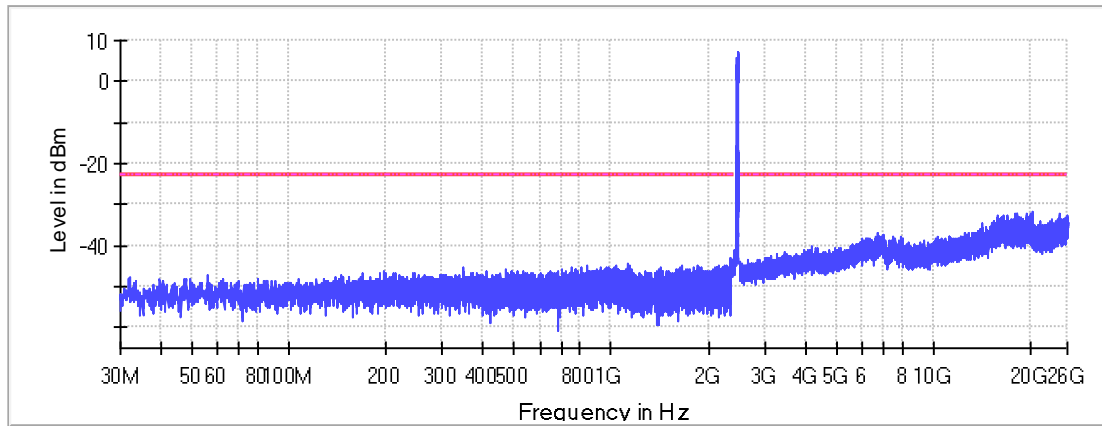
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
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20205.935932	-31.7	8.8	-22.9
19560.722126	-32.1	9.3	-22.9
19856.873793	-32.2	9.3	-22.9
18235.020867	-32.2	9.4	-22.9
17895.512007	-32.3	9.5	-22.9
18190.193939	-32.4	9.5	-22.9
18235.755734	-32.4	9.5	-22.9
24490.949259	-32.4	9.6	-22.9
18212.239969	-32.4	9.6	-22.9
15895.937104	-32.4	9.6	-22.9
19888.473102	-32.4	9.6	-22.9
19906.844794	-32.6	9.7	-22.9
18204.156425	-32.6	9.7	-22.9
25948.191830	-32.6	9.8	-22.9
19914.193471	-32.7	9.8	-22.9

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



— Limit - - - Threshold — Sum Level × Critical × Final Critical

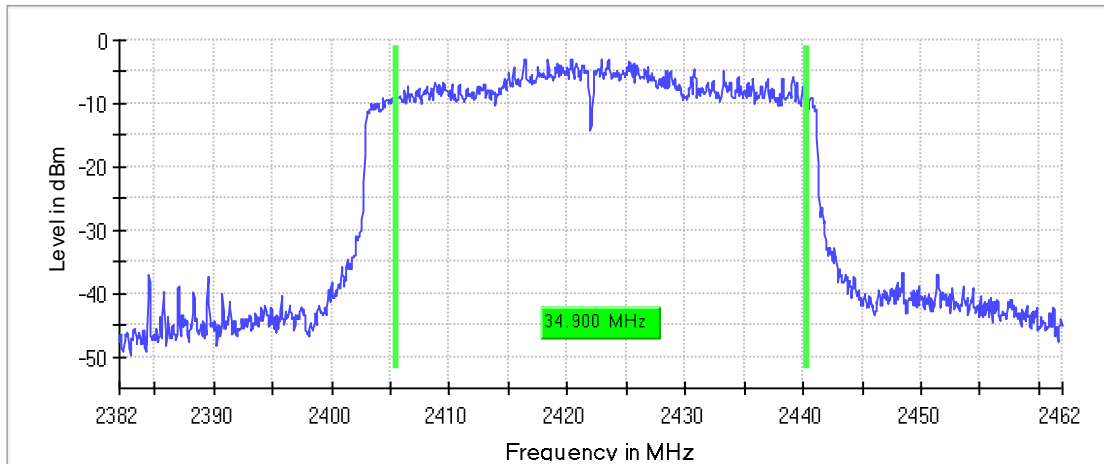
Minimum Emission Bandwidth 6 dB (2422 MHz; 24.000 dBm; 40 MHz)

6 dB Bandwidth

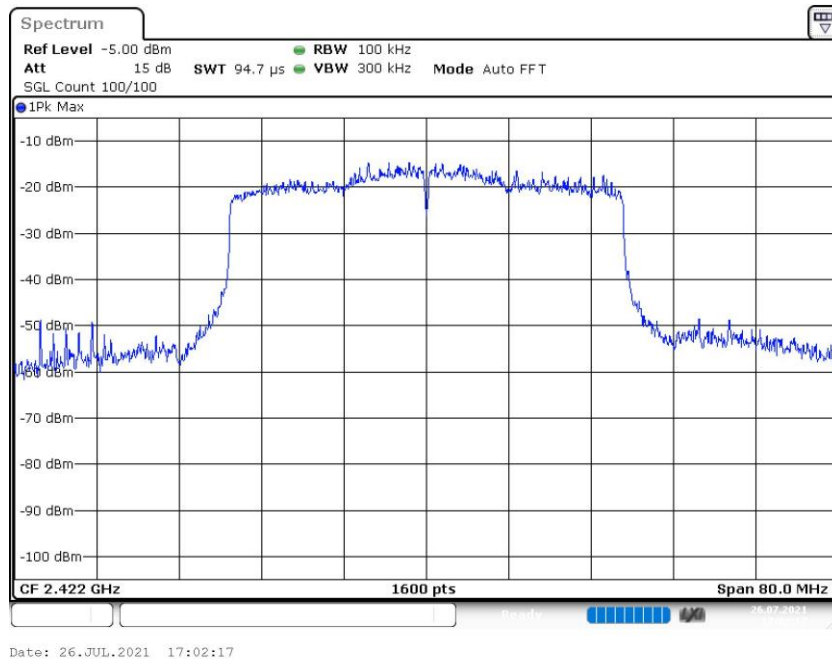
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	34.900000	0.500000	---	2405.425000	2440.325000

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-3.0	PASS

6 dB Bandwidth



Bandwidth

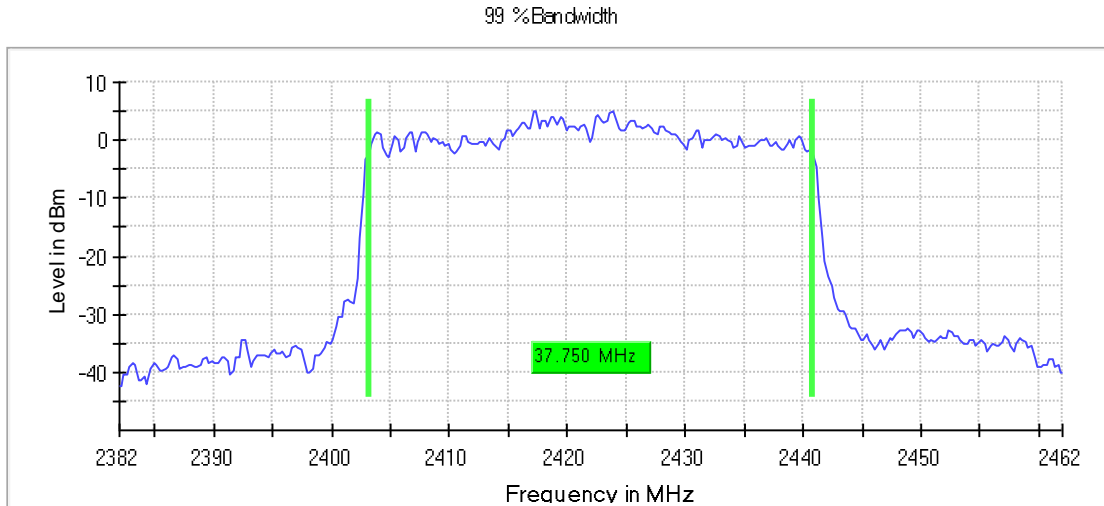


Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

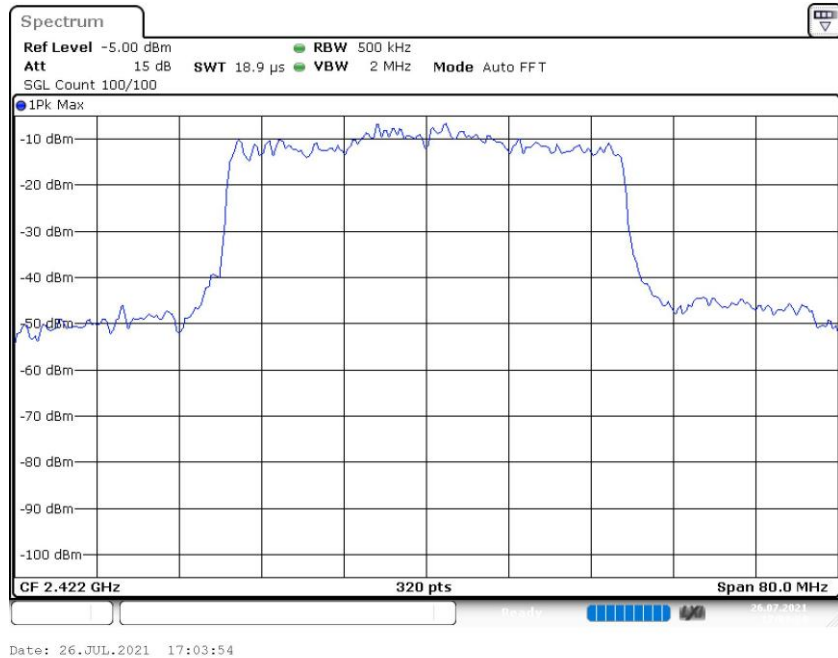
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	37.750000	---	---	2403.125000	2440.875000

DUT Frequency (MHz)	Result
2422.000000	PASS



Bandwidth



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

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

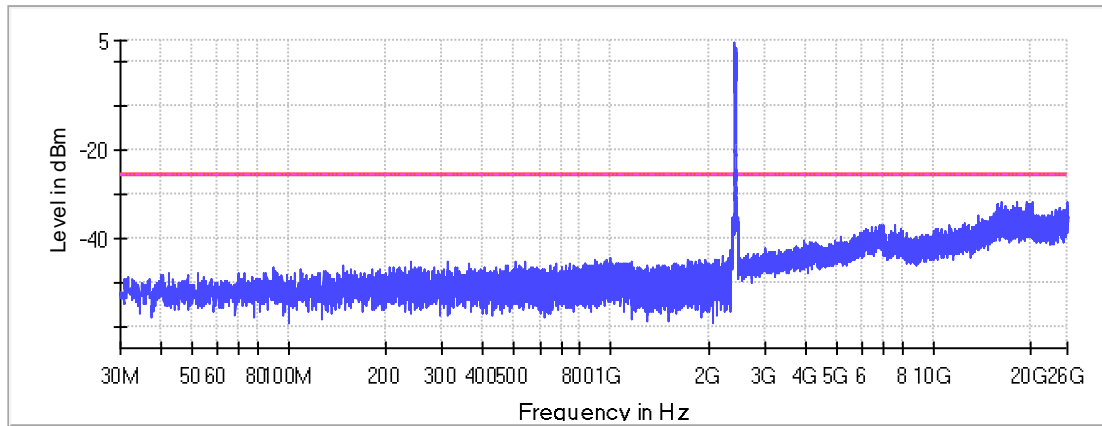
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
---	---	---	---

19558.517523	-31.5	5.9	-25.6
18237.225470	-31.9	6.3	-25.6
20212.549741	-31.9	6.3	-25.6
16220.748609	-31.9	6.3	-25.6
25946.722095	-31.9	6.3	-25.6
19847.320513	-32.1	6.5	-25.6
15875.360809	-32.2	6.6	-25.6
19519.569537	-32.2	6.6	-25.6
19881.124426	-32.2	6.6	-25.6
19910.519132	-32.3	6.6	-25.6
19900.965853	-32.3	6.7	-25.6
15906.960118	-32.4	6.7	-25.6
16145.057240	-32.4	6.8	-25.6
15807.752984	-32.4	6.8	-25.6
19893.617176	-32.6	6.9	-25.6

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



— Limit - - - - Threshold — Sum Level × Critical × Final Critical

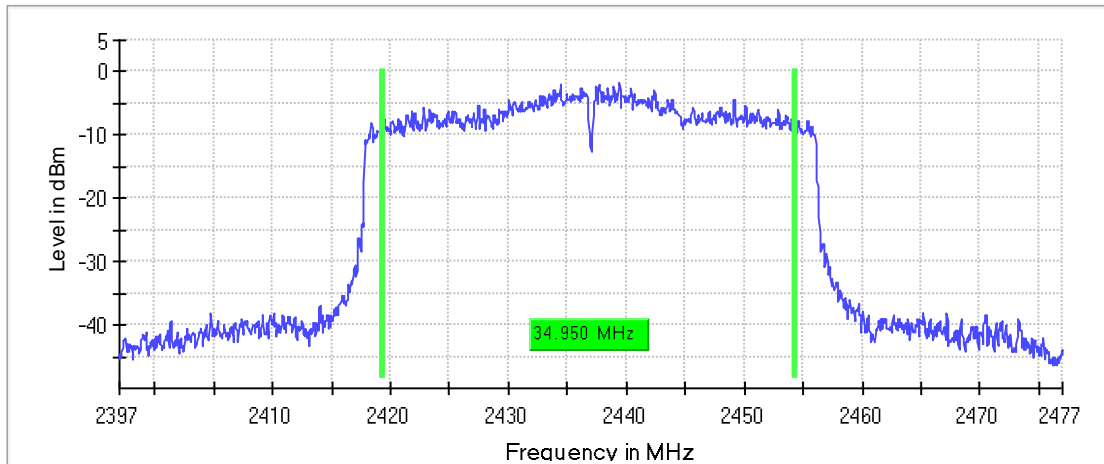
Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 40 MHz)

6 dB Bandwidth

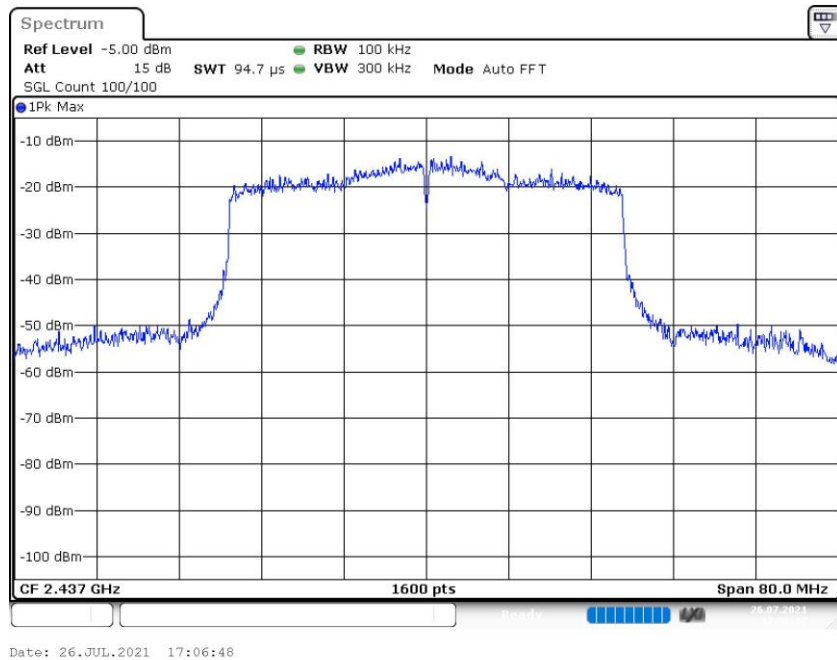
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	34.950000	0.500000	---	2419.375000	2454.325000

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-1.6	PASS

6 dB Bandwidth



Bandwidth



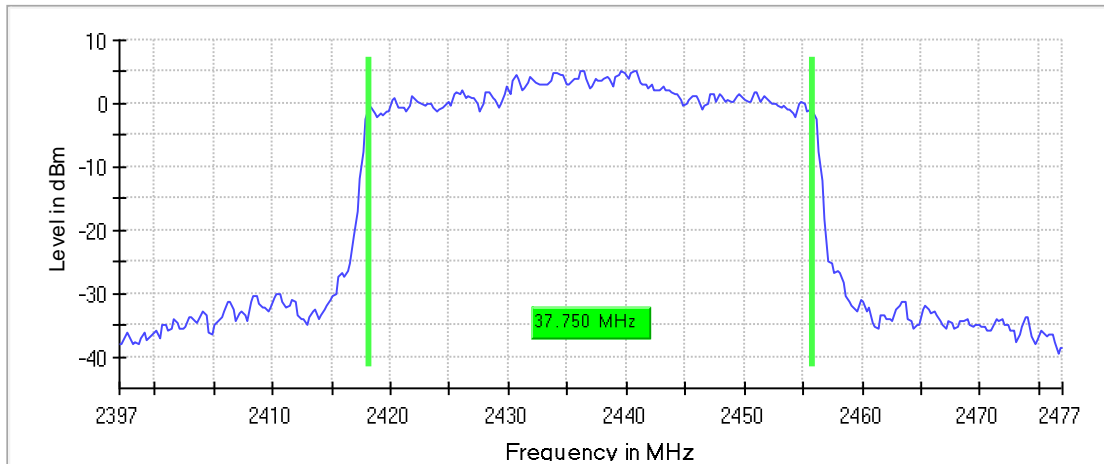
Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

99 % Bandwidth

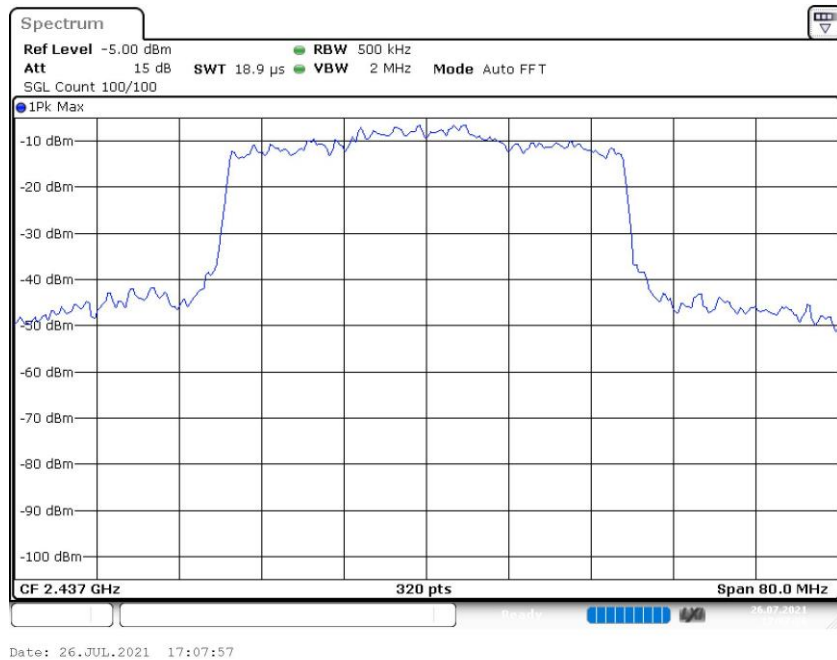
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	37.750000	---	---	2418.125000	2455.875000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 %Bandwidth



Bandwidth



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

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

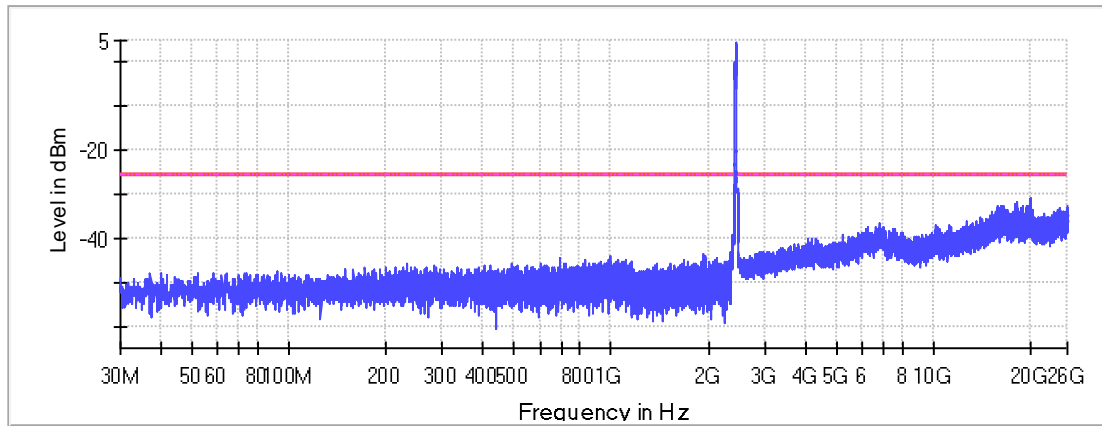
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
---	---	---	---

2399.525000	-30.7	5.2	-25.5
19889.207970	-30.9	5.4	-25.5
19914.193471	-31.0	5.5	-25.5
2399.475000	-31.1	5.6	-25.5
2399.575000	-31.9	6.3	-25.5
18246.778749	-31.9	6.4	-25.5
17901.390949	-32.1	6.6	-25.5
19856.138925	-32.5	7.0	-25.5
19859.813264	-32.6	7.0	-25.5
19825.274484	-32.6	7.0	-25.5
15829.064146	-32.6	7.1	-25.5
19902.435588	-32.6	7.1	-25.5
25995.958228	-32.6	7.1	-25.5
17898.451478	-32.6	7.1	-25.5
16203.846653	-32.6	7.1	-25.5

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

Spurious



— Limit - - - - Threshold — Sum Level × Critical × Final Critical

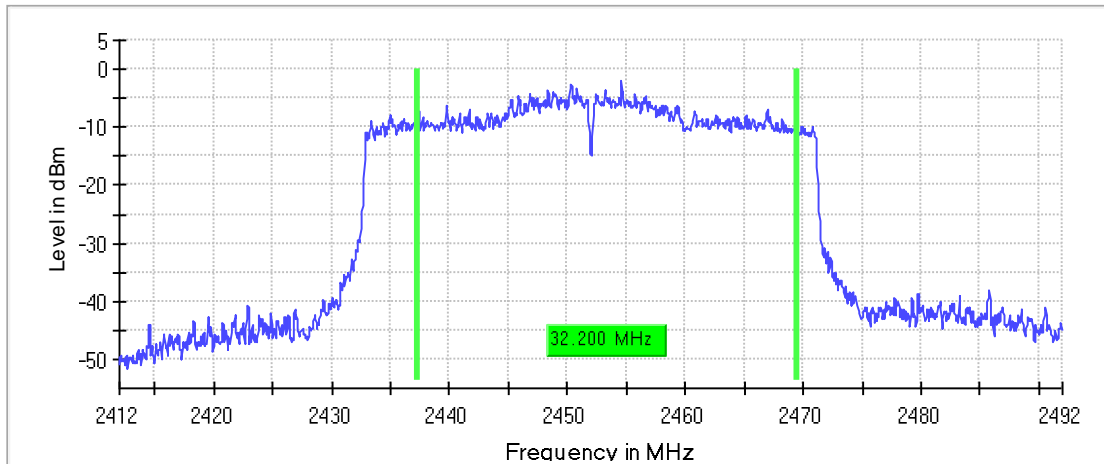
Minimum Emission Bandwidth 6 dB (2452 MHz; 24.000 dBm; 40 MHz)

6 dB Bandwidth

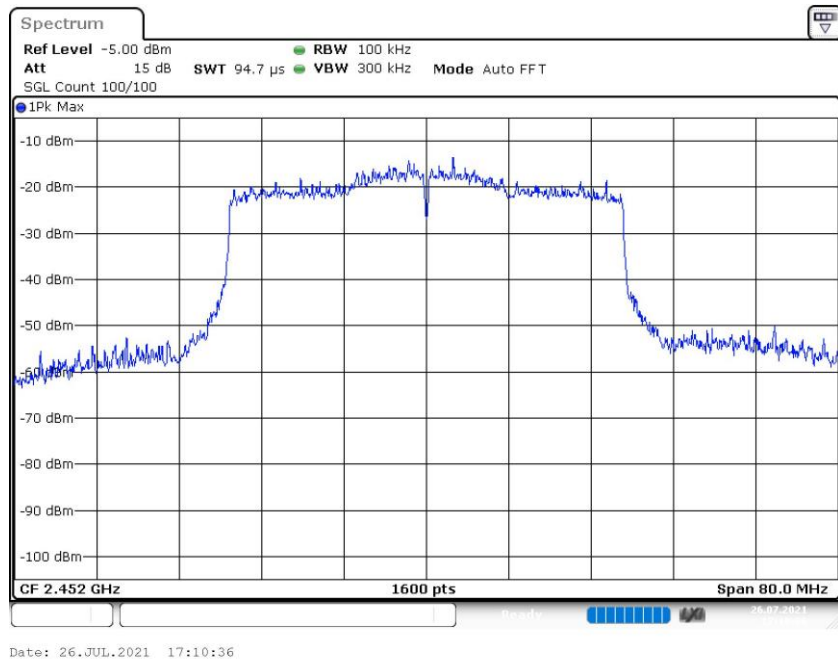
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	32.200000	0.500000	---	2437.325000	2469.525000

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-1.9	PASS

6 dB Bandwidth



Bandwidth



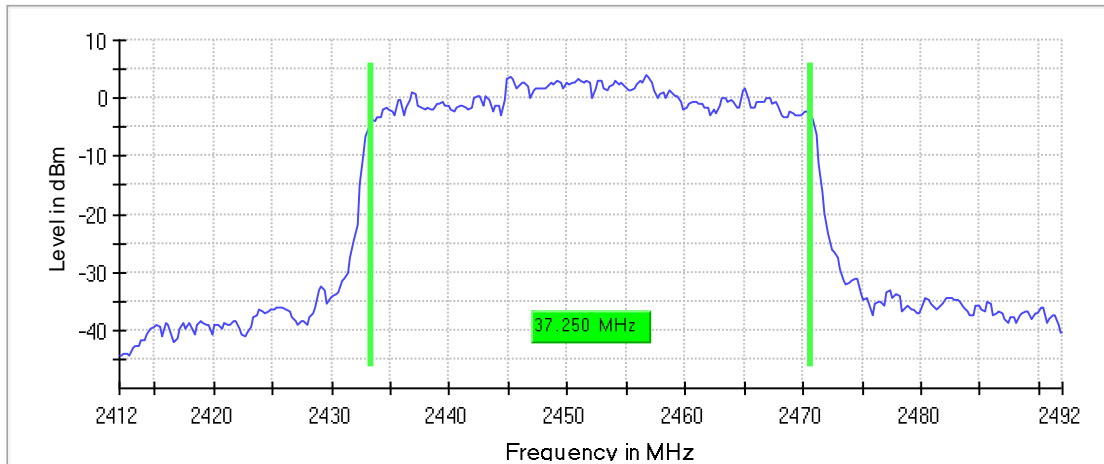
Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

99 % Bandwidth

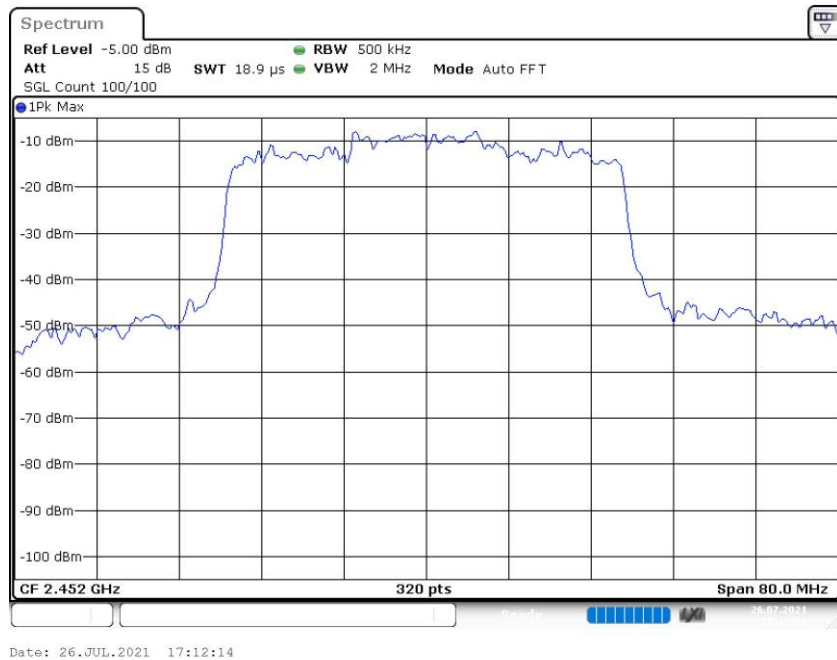
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	37.250000	---	---	2433.375000	2470.625000

DUT Frequency (MHz)	Result
2452.000000	PASS

99 %Bandwidth



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

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

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
24565.905761	-31.3	5.7	-25.6

18223.262984	-31.9	6.3	-25.6
15789.381293	-31.9	6.3	-25.6
19838.502101	-32.1	6.5	-25.6
16191.353903	-32.1	6.5	-25.6
25893.076755	-32.4	6.8	-25.6
18212.239969	-32.4	6.8	-25.6
18218.118910	-32.4	6.8	-25.6
18229.141925	-32.5	6.9	-25.6
25892.341888	-32.5	6.9	-25.6
18217.384043	-32.6	7.0	-25.6
16200.907183	-32.6	7.0	-25.6
20183.889902	-32.6	7.0	-25.6
19878.919823	-32.6	7.0	-25.6
16136.973696	-32.7	7.1	-25.6

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

