

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
Power Spectral Density	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
Power Spectral Density	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
Power Spectral Density	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
Power Spectral Density	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
RF output power	2442.000	24.0	40.000000	PASS
RF output power	2447.000	24.0	40.000000	PASS
RF output power	2452.000	24.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2452.000	24.0	40.000000	PASS
Power Spectral Density	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	8.4	30.0	8.4	88.397	PASS

OSP PowerMeter settings

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

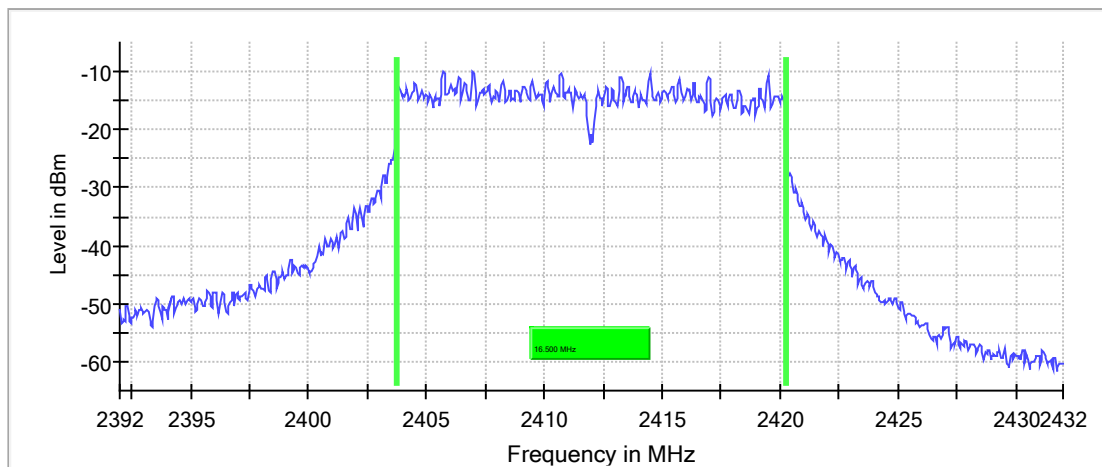
Minimum Emission Bandwidth 6 dB (2412 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

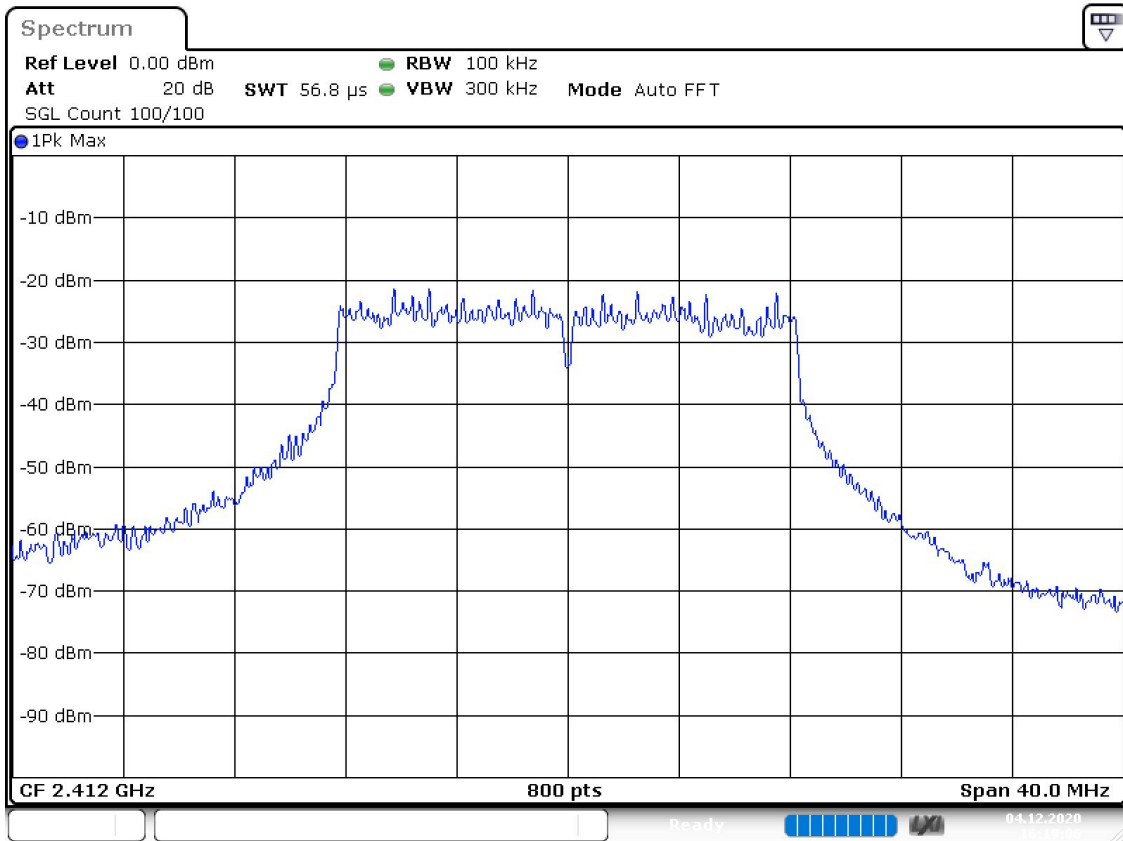
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.500000	0.500000	---	2403.725000	2420.225000

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	-9.8	PASS

6 dB Bandwidth



Bandwidth



Date: 4.DEC.2020 16:19:06

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	0.000 dBm	0.000 dBm
Attenuation	20.000 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	2404.525000	-13.810	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	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	600	~ 600
SweepTime	1.040 ms	AUTO
Reference Level	0.000 dBm	0.000 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	Sweep
Preamp	off	off

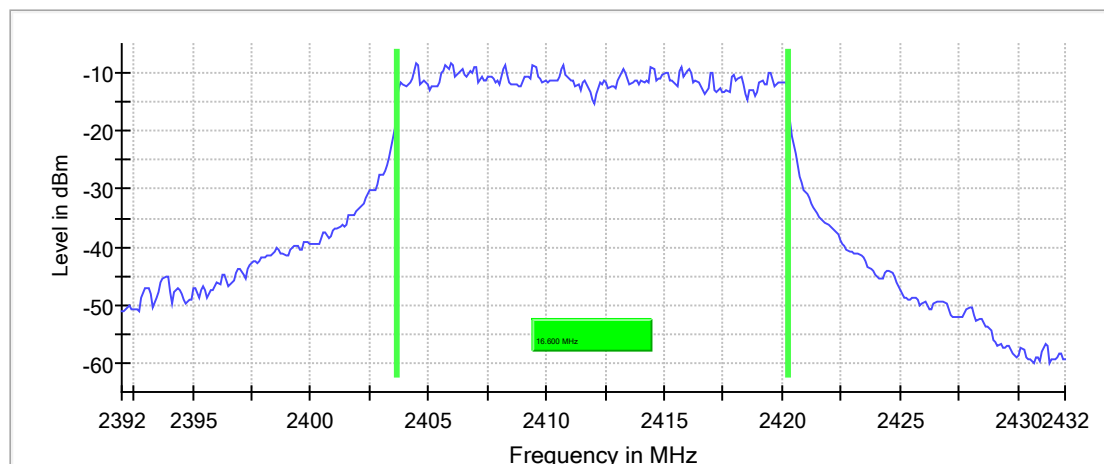
Occupied Channel Bandwidth 99% (2412 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

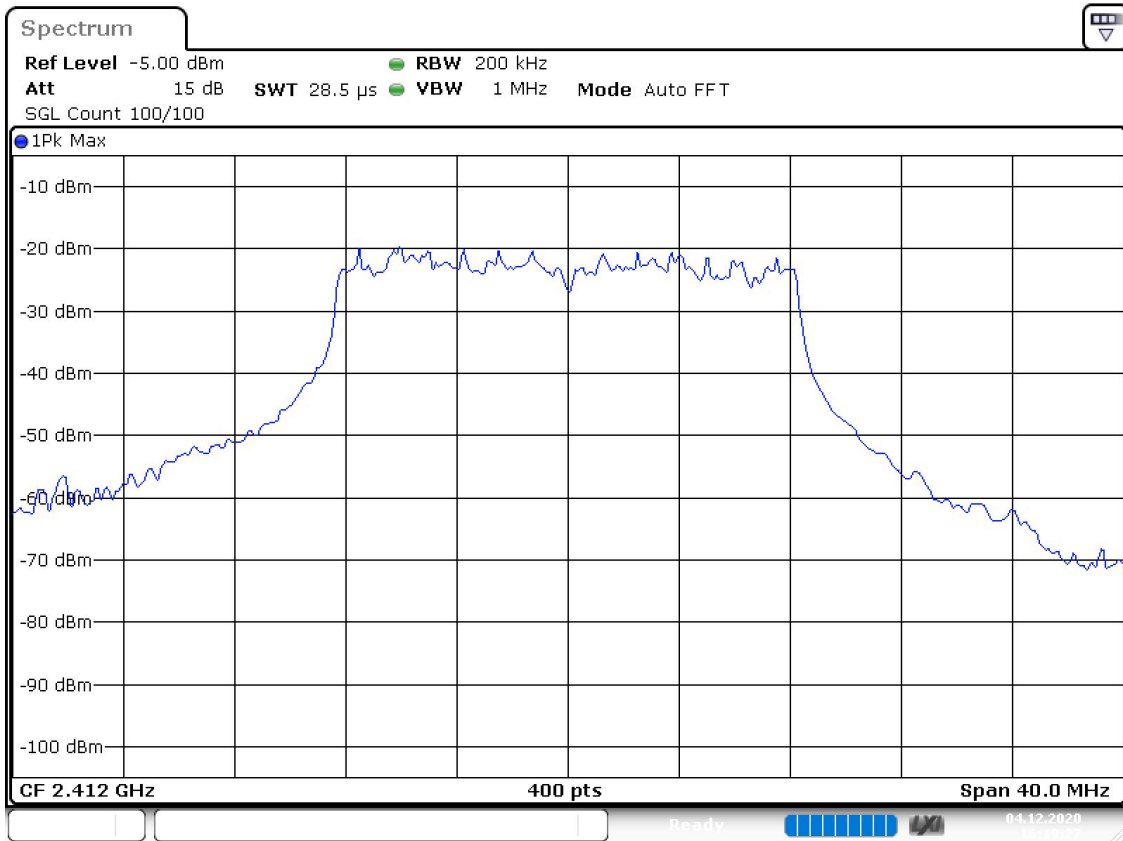
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.600000	---	---	2403.650000	2420.250000

DUT Frequency (MHz)	Result
2412.000000	PASS

99 % Bandwidth



Bandwidth



Date: 4.DEC.2020 16:19:27

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	\geq 200.000 kHz
VBW	1.000 MHz	\geq 600.000 kHz
SweepPoints	400	\sim 400
Sweeptime	28.477 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

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
15842.644636	-34.7	-41.4	-32.8	8.6	PASS
16846.962524	-36.1	-42.3	-32.8	9.5	PASS

17867.683043	-35.6	-41.1	-32.8	8.2	PASS
18246.718784	-35.5	-41.0	-32.8	8.2	PASS
18549.361159	-35.4	-41.8	-32.8	9.0	PASS
18895.394165	-34.6	-41.7	-32.8	8.9	PASS
19514.258832	-35.0	-41.1	-32.8	8.3	PASS
19872.478991	-34.7	-40.5	-32.8	7.7	PASS
20247.334724	-36.0	-41.0	-32.8	8.2	PASS
25908.515893	-34.7	-41.5	-32.8	8.7	PASS

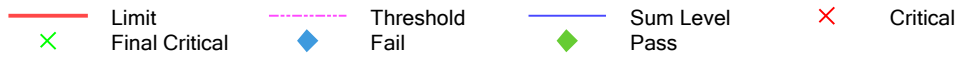
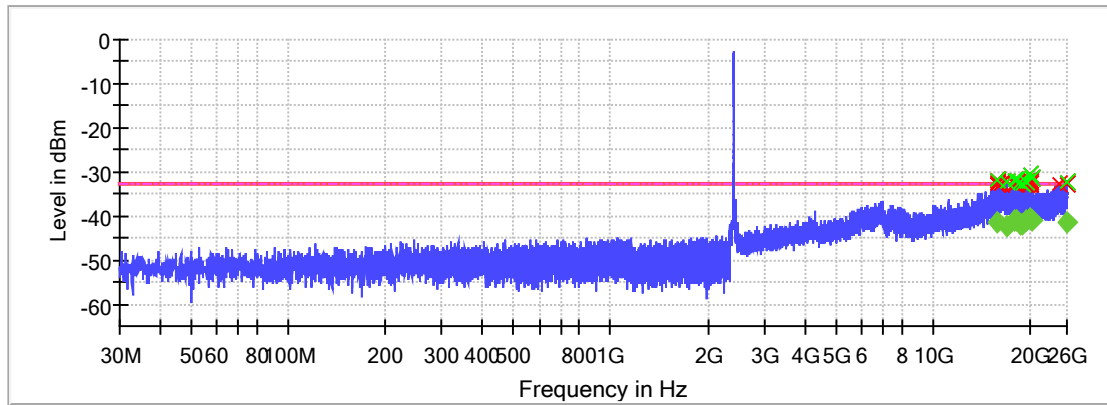
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19873.775749	-30.6	-2.2	-32.8
20250.027991	-31.5	-1.3	-32.8
15850.375309	-31.8	-1.1	-32.8
18244.574146	-31.8	-1.1	-32.8
19904.640191	-31.9	-1.0	-32.8
19899.496117	-31.9	-0.9	-32.8
15820.245735	-31.9	-0.9	-32.8
19906.844794	-32.0	-0.9	-32.8
17859.503492	-32.0	-0.8	-32.8
15865.807529	-32.0	-0.8	-32.8
19507.076787	-32.1	-0.8	-32.8
16851.999930	-32.1	-0.7	-32.8
19909.049397	-32.2	-0.6	-32.8
19917.867809	-32.3	-0.6	-32.8
19529.122816	-32.3	-0.5	-32.8

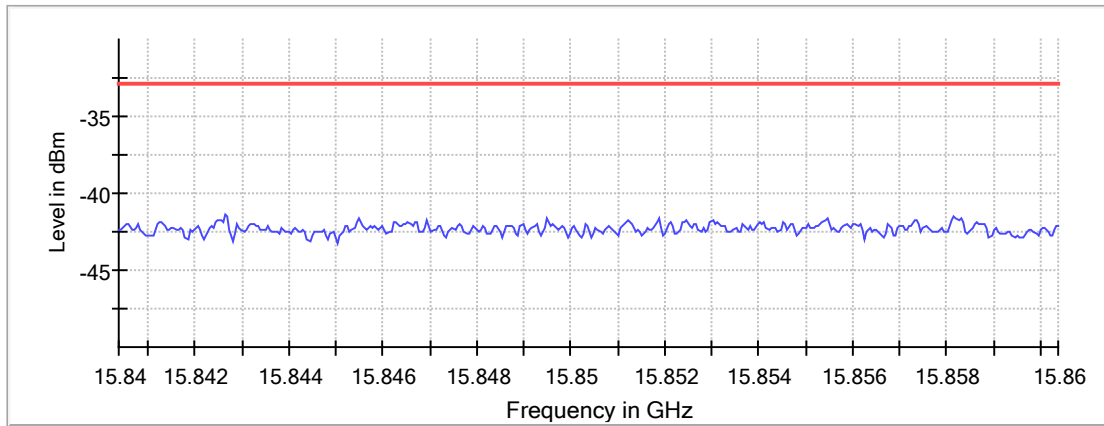
Measurement Settings

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

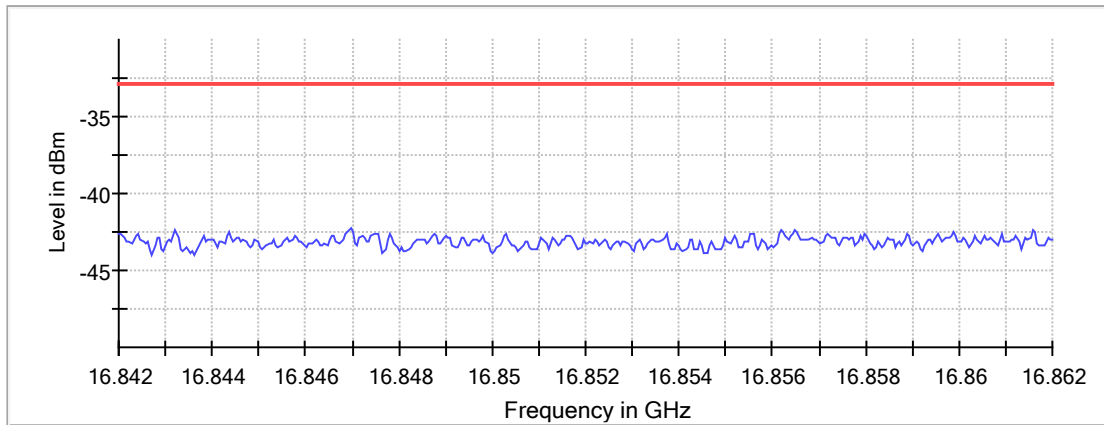


FinalMeas_15850375309Hz



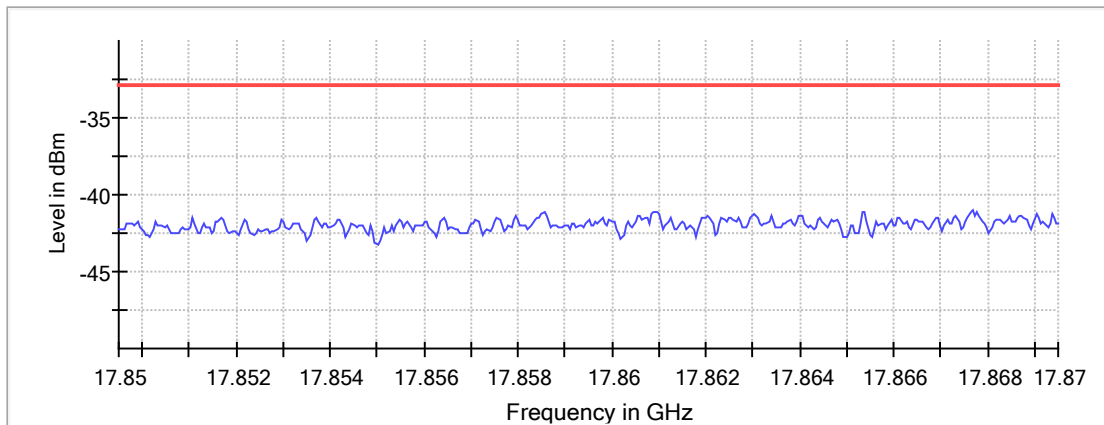
— Sum Level — Limit

FinalMeas_16851999930Hz



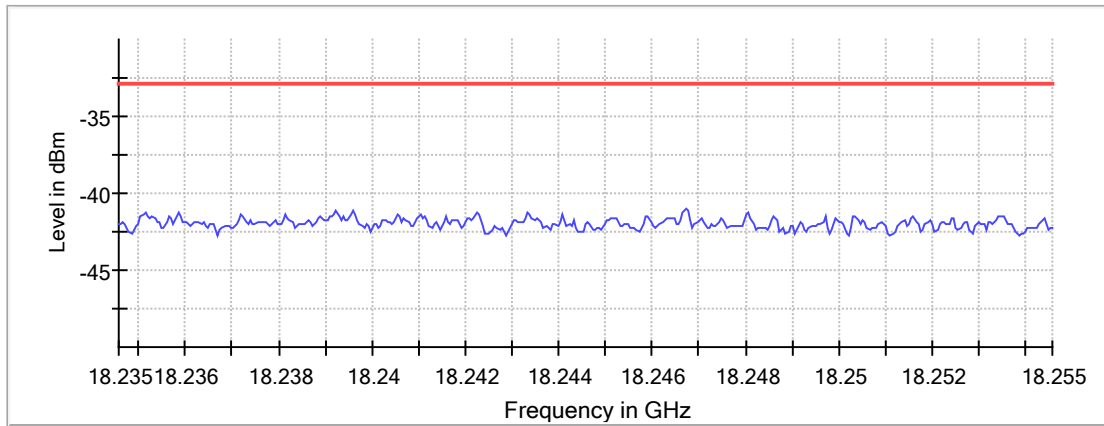
— Sum Level — Limit

FinalMeas_17859503492Hz



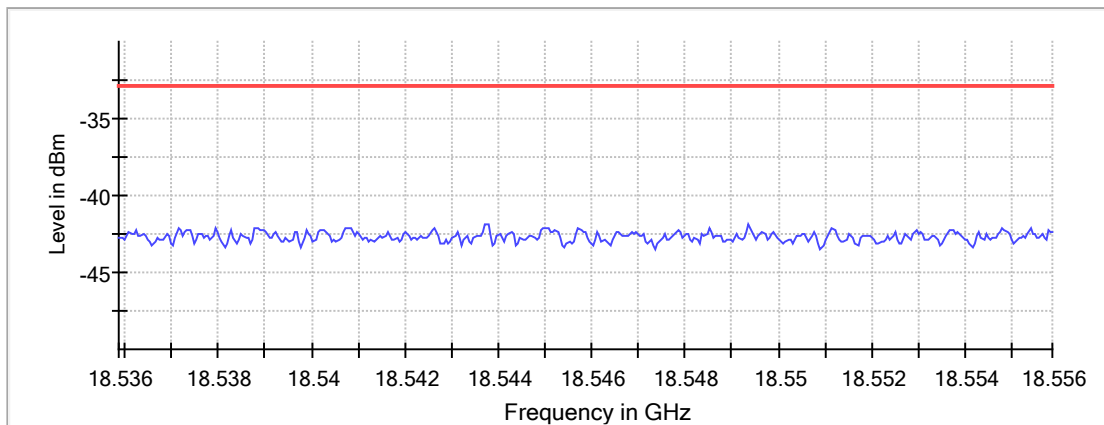
— Sum Level — Limit

FinalMeas_18244574146Hz



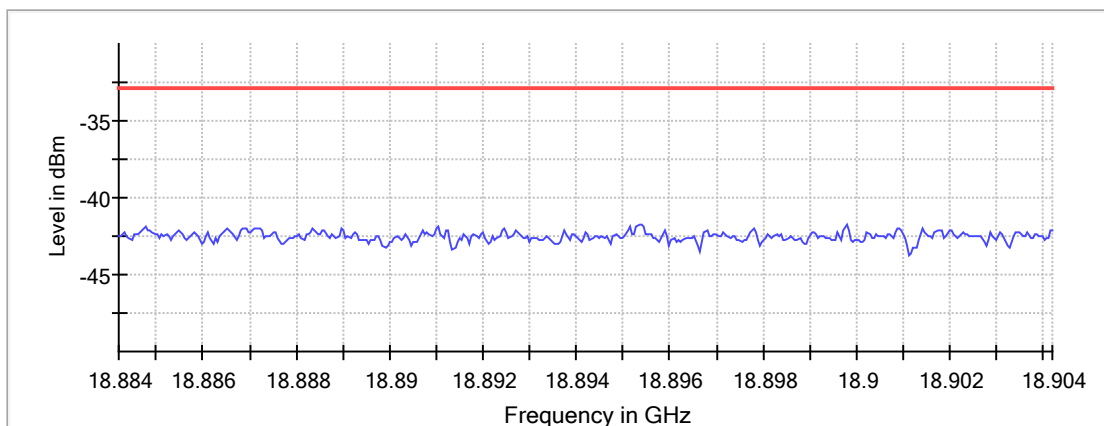
Sum Level Limit

FinalMeas_18545869887Hz



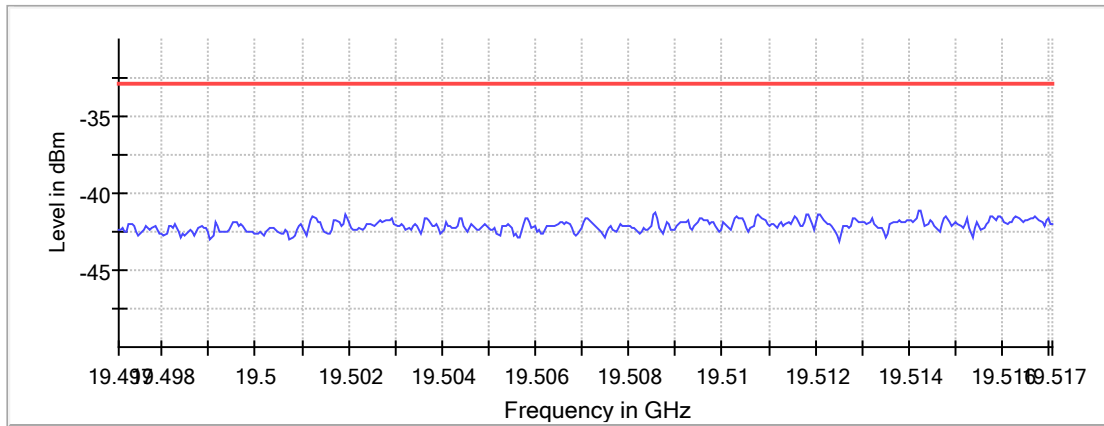
Sum Level Limit

FinalMeas_18894197158Hz



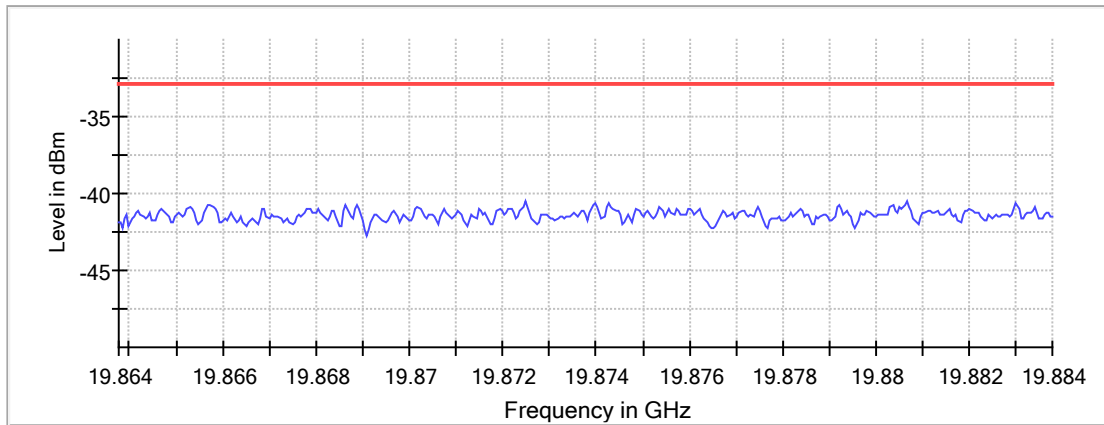
Sum Level Limit

FinalMeas_19507076787Hz



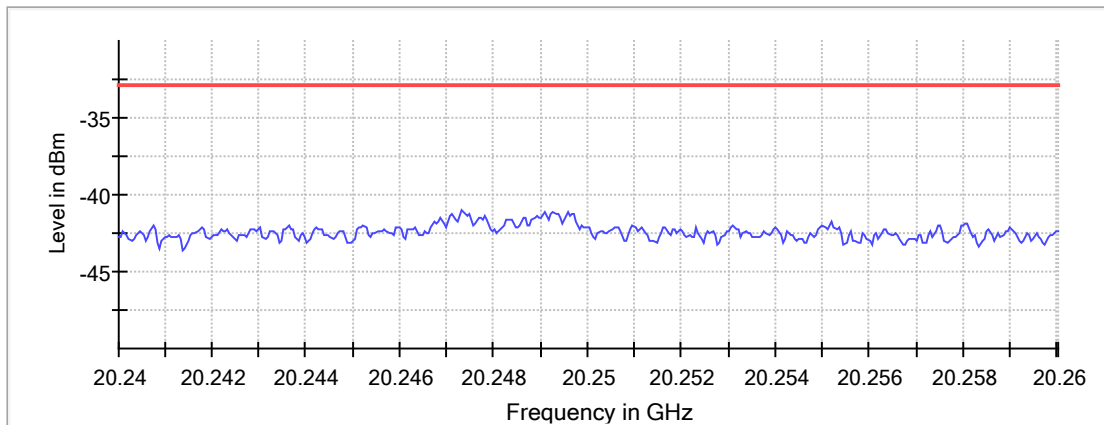
— Sum Level — Limit

FinalMeas_19873775749Hz

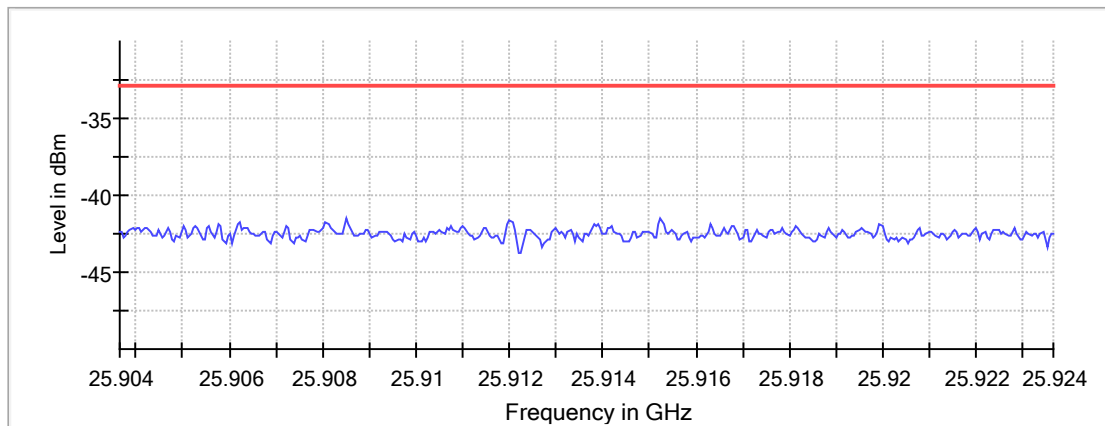


— Sum Level — Limit

FinalMeas_20250027991Hz



— Sum Level — Limit



— Sum Level — Limit

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 μ s	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 μ s	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

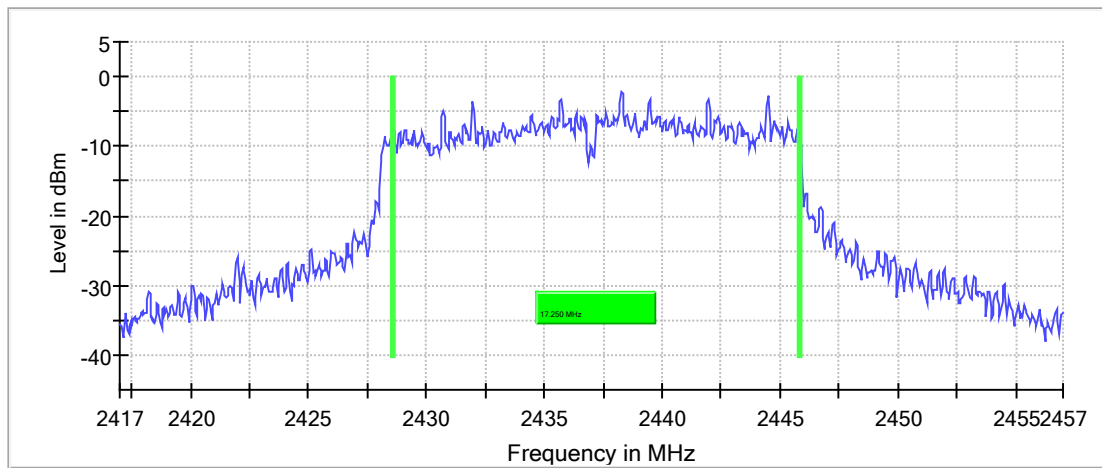
Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

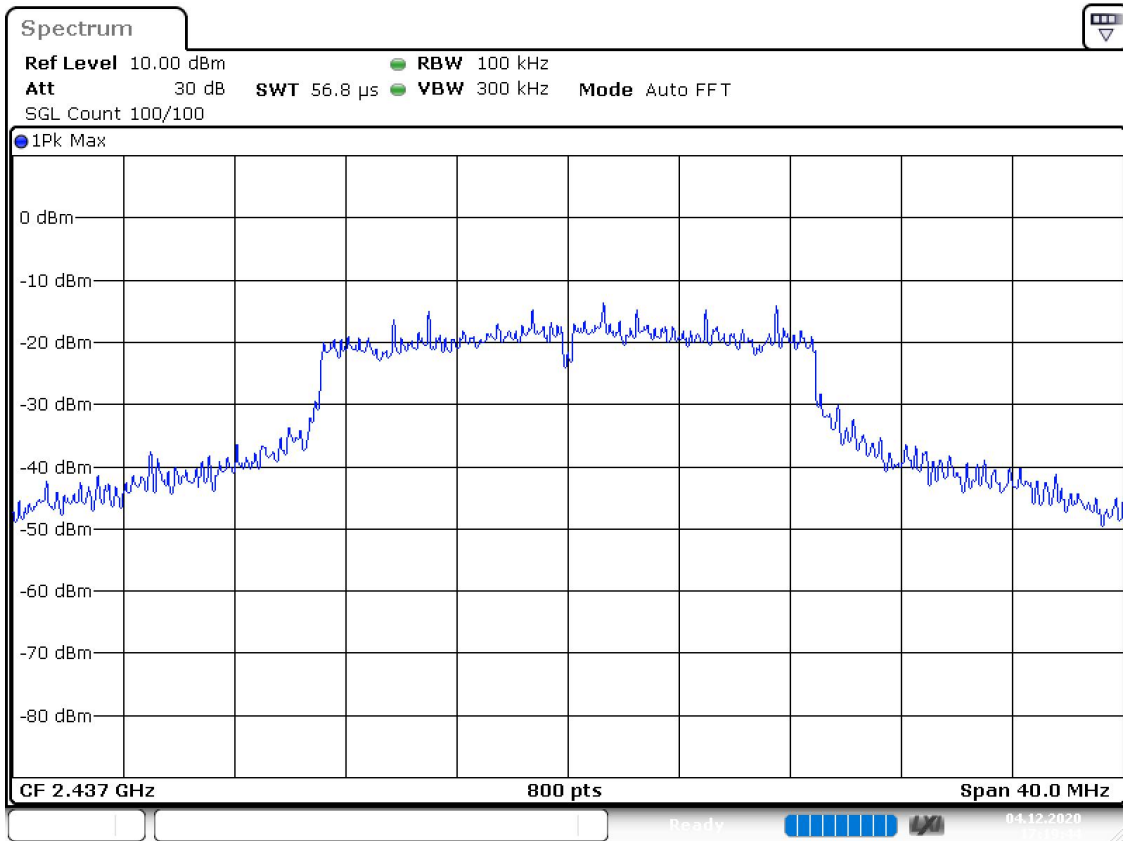
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.250000	0.500000	---	2428.575000	2445.825000

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-2.2	PASS

6 dB Bandwidth



Bandwidth



Date: 4.DEC.2020 17:19:44

Power Spectral Density (2437 MHz; 24.000 dBm; 20 MHz)

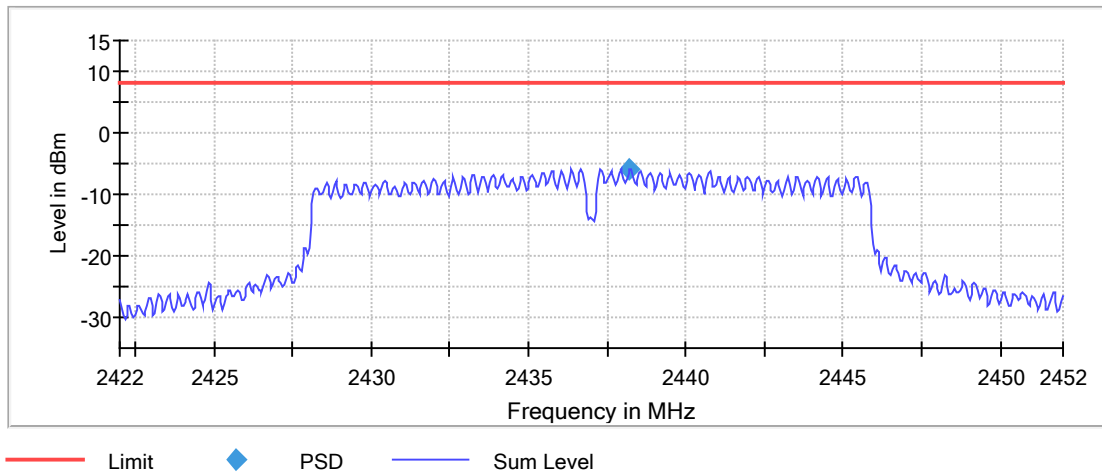
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2438.225000	-5.961	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



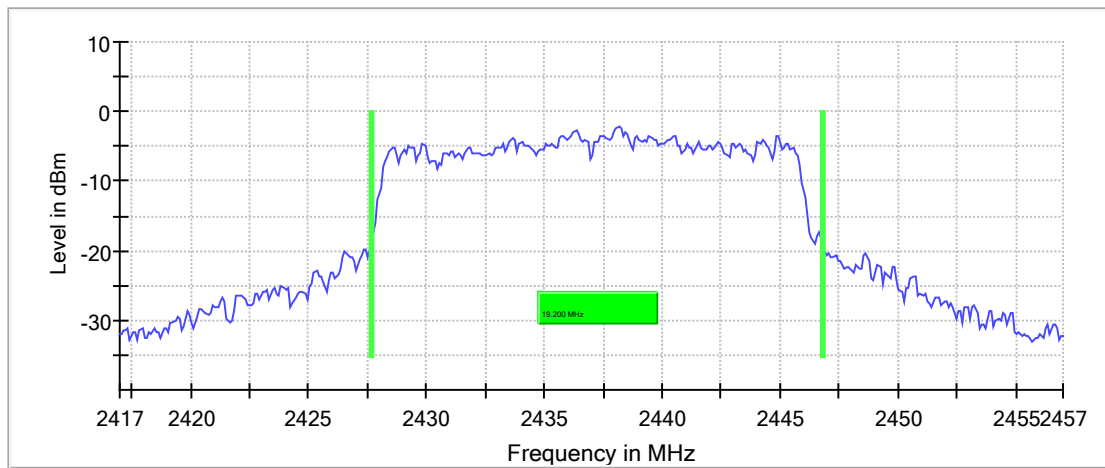
Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

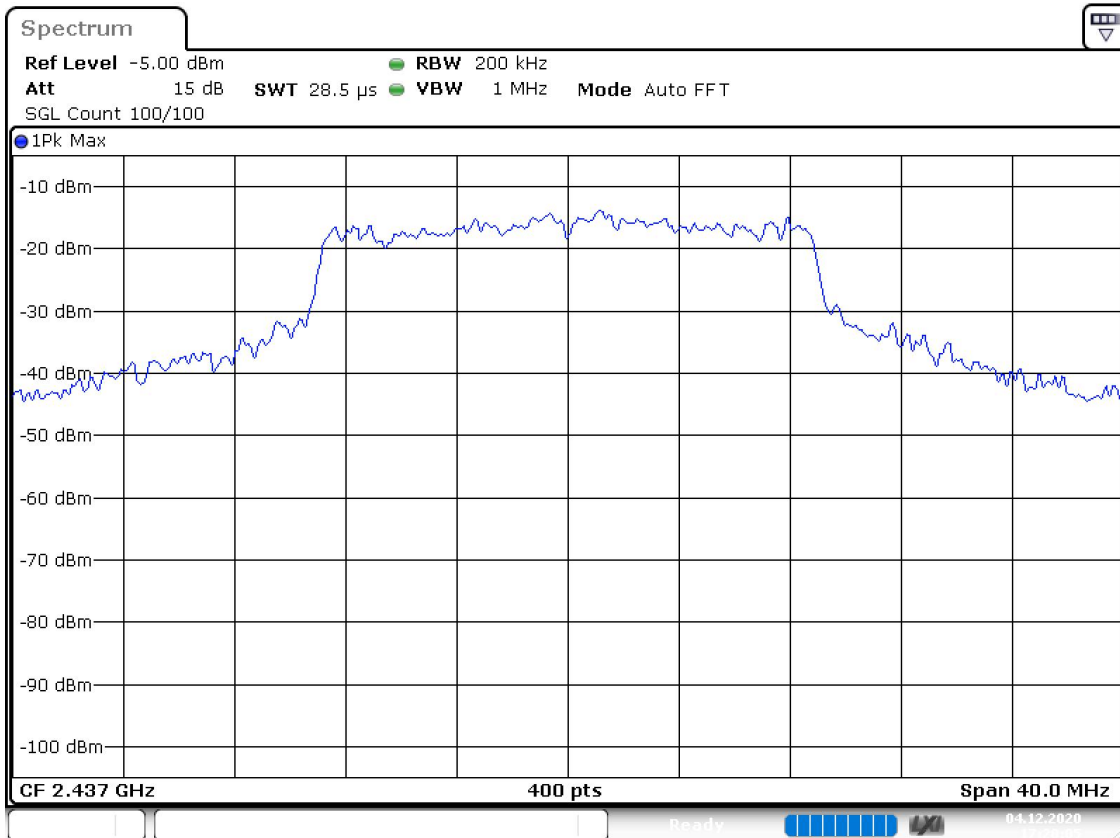
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	19.200000	---	---	2427.650000	2446.850000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 % Bandwidth



Bandwidth



Date: 4.DEC.2020 17:20:05

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
---	---	---	---	---	---

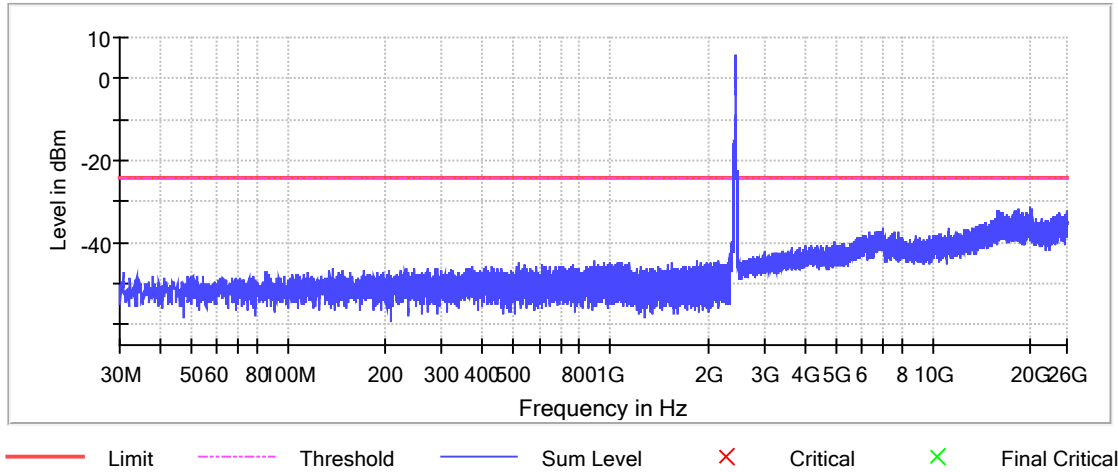
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19864.222470	-31.2	6.8	-24.3
19903.170456	-31.5	7.2	-24.3
20237.535241	-31.7	7.3	-24.3
18293.075412	-31.9	7.6	-24.3
19919.337544	-31.9	7.6	-24.3
18292.340544	-32.0	7.7	-24.3
19905.375059	-32.1	7.7	-24.3
25970.237860	-32.1	7.7	-24.3
15815.101661	-32.1	7.8	-24.3
19859.813264	-32.1	7.8	-24.3
19872.306014	-32.1	7.8	-24.3
19895.821779	-32.2	7.8	-24.3
15914.308795	-32.2	7.9	-24.3
19888.473102	-32.2	7.9	-24.3
18220.323513	-32.3	7.9	-24.3

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



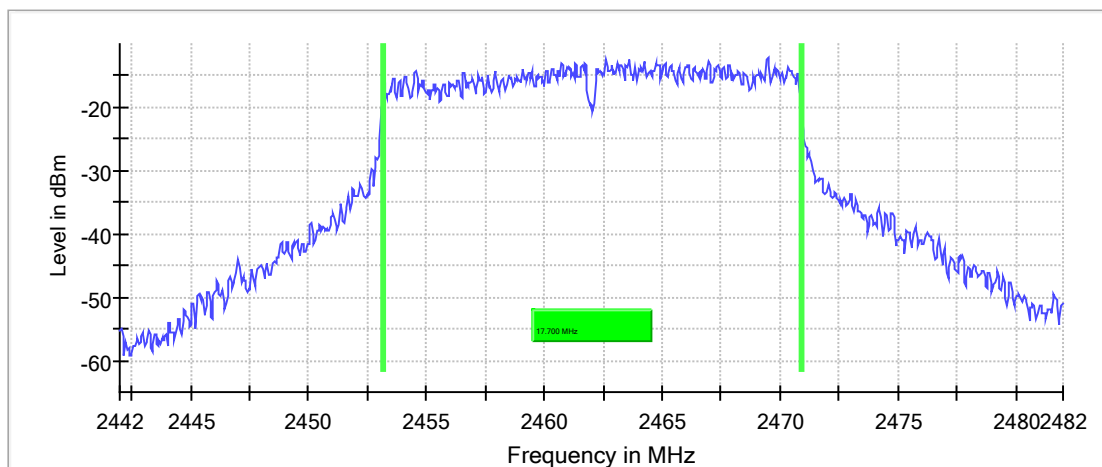
Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

6 dB Bandwidth

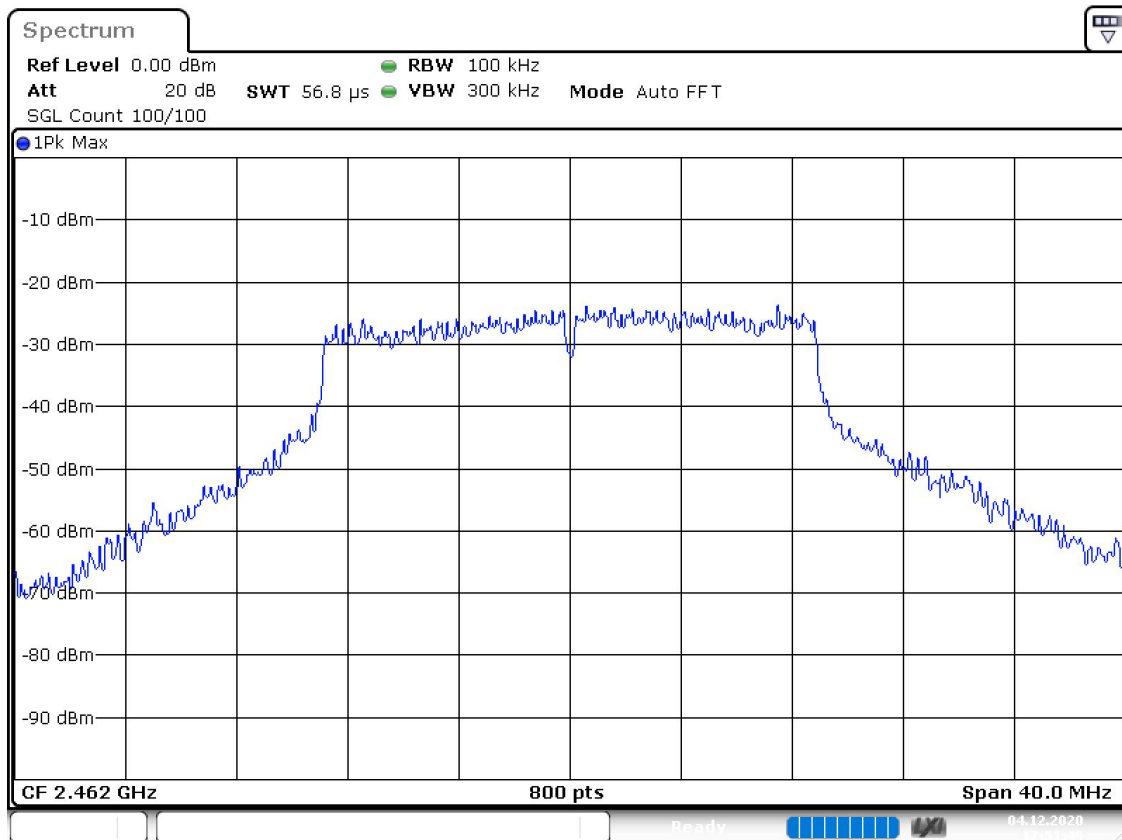
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.700000	0.500000	---	2453.175000	2470.875000

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	-12.2	PASS

6 dB Bandwidth



Bandwidth



Date: 4.DEC.2020 17:51:49

Power Spectral Density (2462 MHz; 24.000 dBm; 20 MHz)

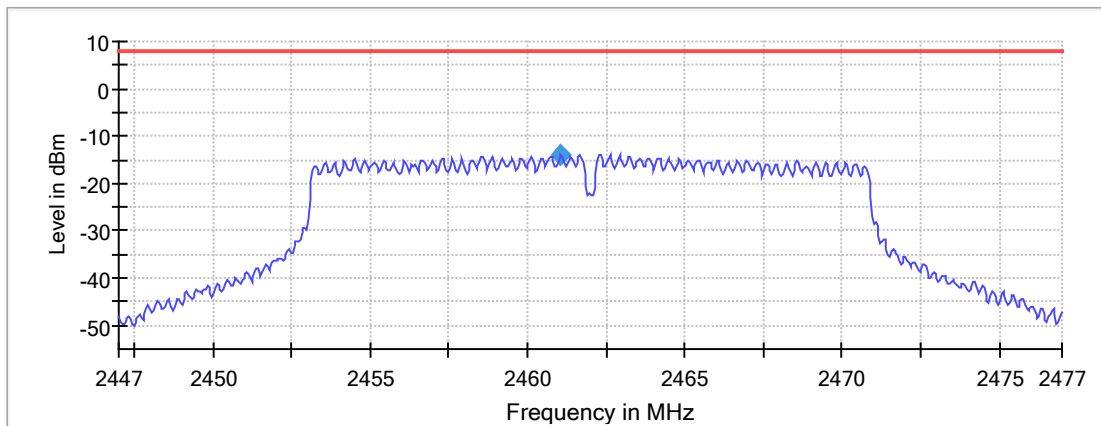
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2462.000000	2461.075000	-13.906	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



— Limit ◆ PSD — Sum Level

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

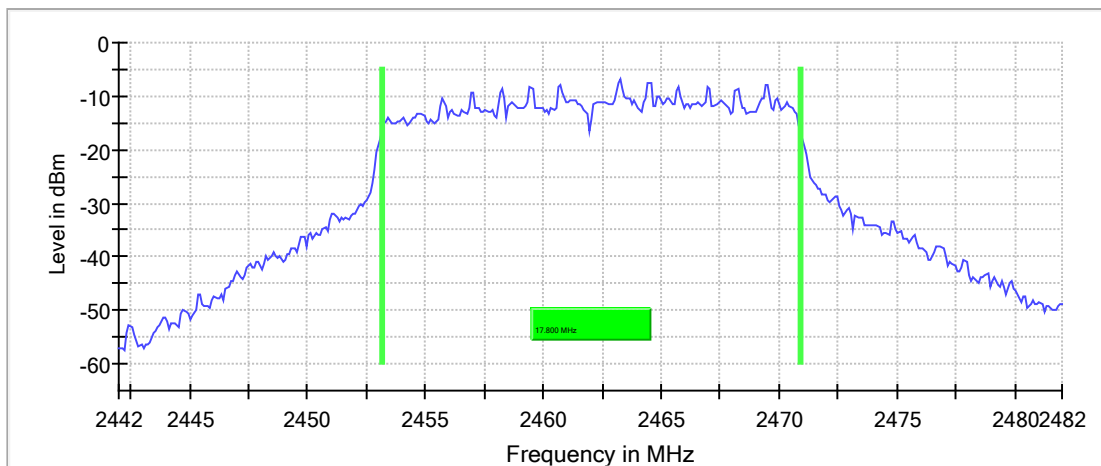
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.800000	---	---	2453.150000	2470.950000

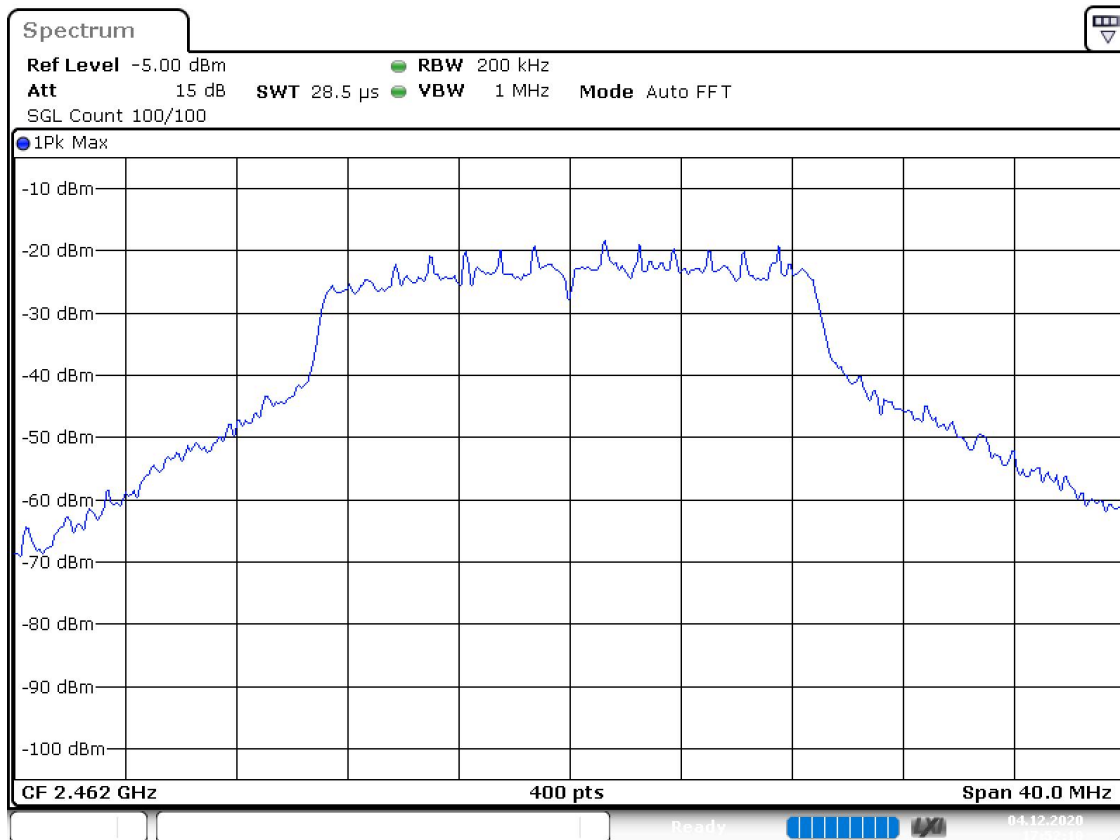
(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS

99 % Bandwidth



Bandwidth



Date: 4.DEC.2020 17:52:11

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
15784.831979	-34.6	-42.0	-33.0	9.0	PASS
16149.196891	-34.7	-41.3	-33.0	8.3	PASS
16849.735934	-36.8	-42.3	-33.0	9.4	PASS
17606.057466	-34.0	-41.7	-33.0	8.7	PASS
17895.987980	-34.5	-40.9	-33.0	7.9	PASS
18186.585911	-33.7	-41.4	-33.0	8.4	PASS
18529.882121	-33.9	-42.0	-33.0	9.1	PASS
19514.647745	-34.2	-41.4	-33.0	8.4	PASS
19889.574103	-33.9	-40.3	-33.0	7.3	PASS
25895.241001	-34.0	-41.7	-33.0	8.8	PASS

Pre Measurements

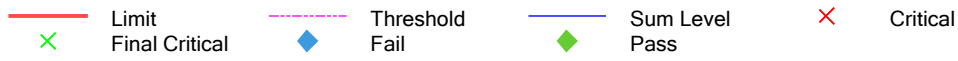
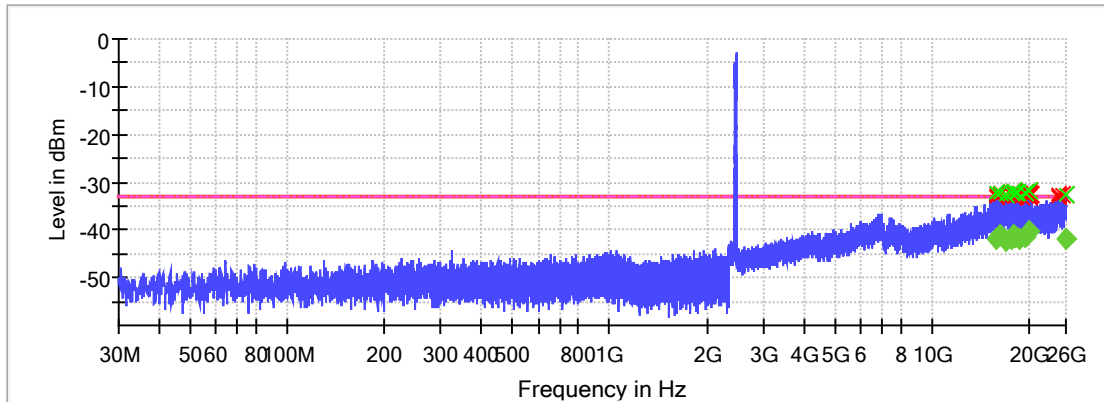
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
17905.065287	-31.6	-1.4	-33.0
17901.390949	-31.8	-1.2	-33.0
19896.556647	-31.9	-1.0	-33.0
19895.821779	-32.0	-1.0	-33.0
17609.648488	-32.0	-0.9	-33.0
16145.057240	-32.1	-0.9	-33.0
16164.898667	-32.1	-0.9	-33.0

18182.845263	-32.2	-0.8	-33.0
19504.872184	-32.3	-0.7	-33.0
15776.153675	-32.3	-0.6	-33.0
19906.109926	-32.4	-0.6	-33.0
17906.535022	-32.4	-0.6	-33.0
17889.633066	-32.4	-0.6	-33.0
17855.829154	-32.4	-0.6	-33.0
18525.293592	-32.4	-0.6	-33.0

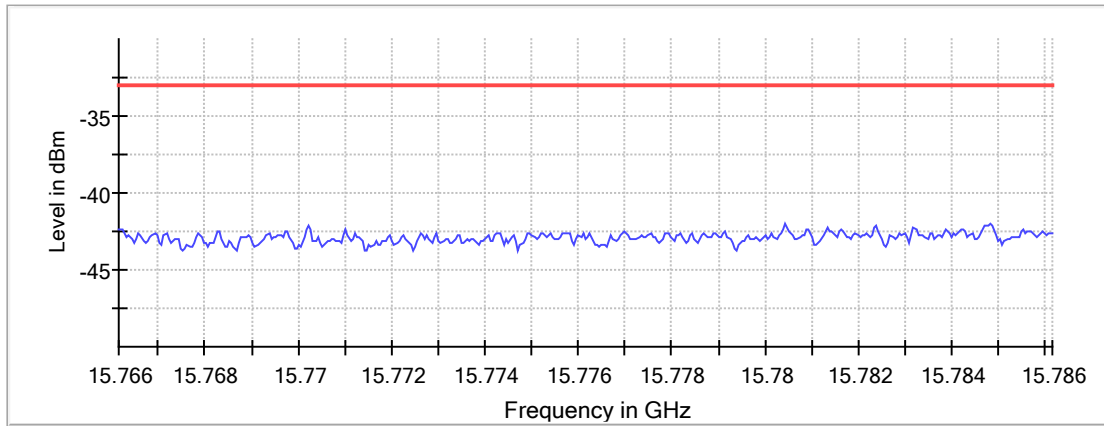
Measurement Settings

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

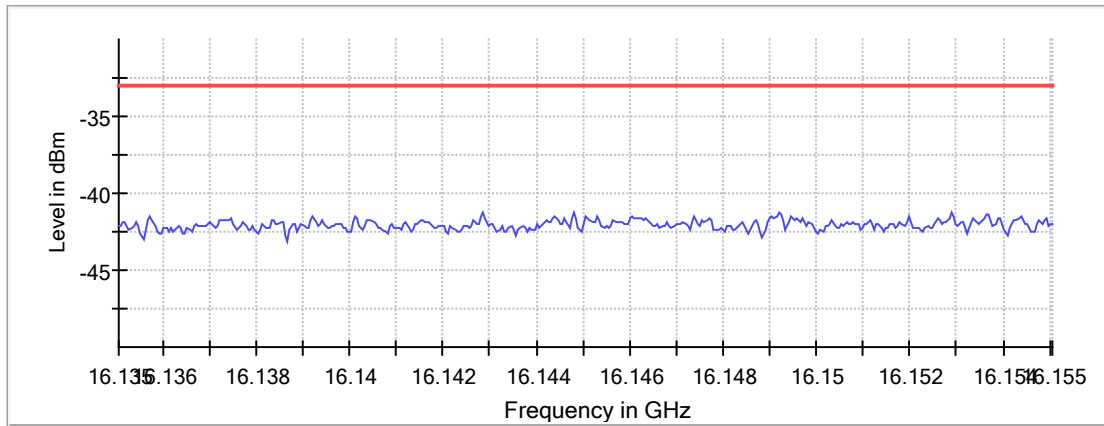
Spurious



FinalMeas_15776153675Hz

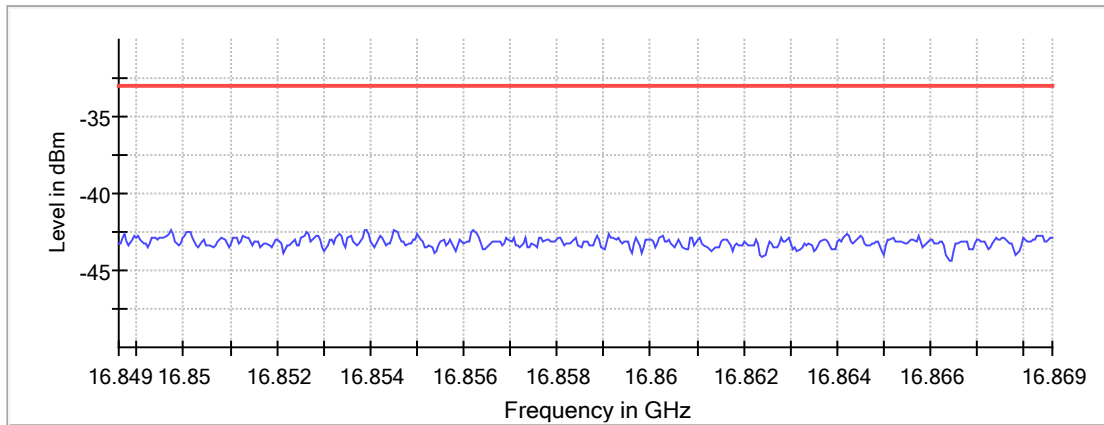


FinalMeas_16145057240Hz



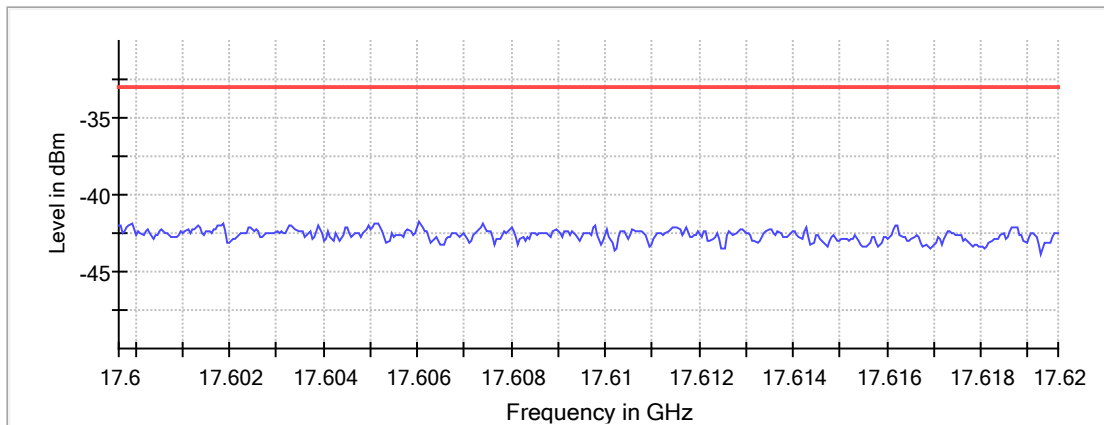
— Sum Level — Limit

FinalMeas_16858613739Hz



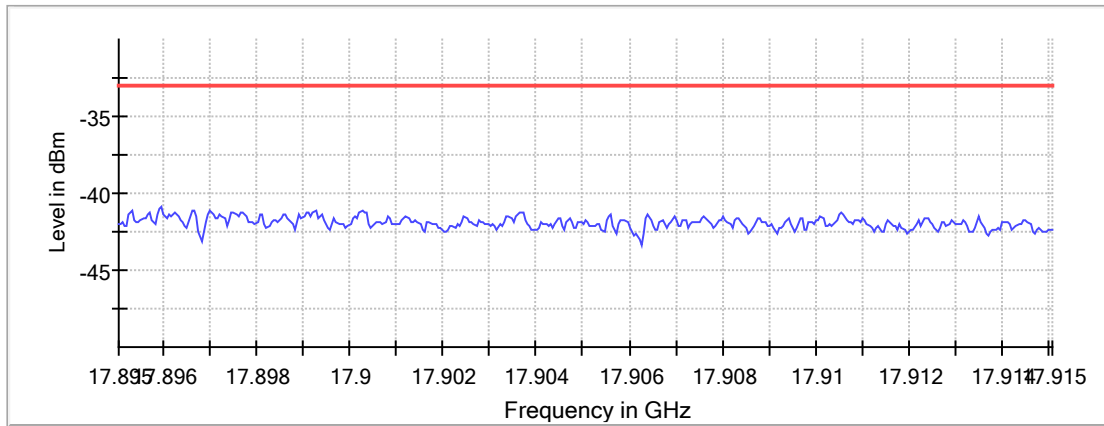
— Sum Level — Limit

FinalMeas_17609648488Hz



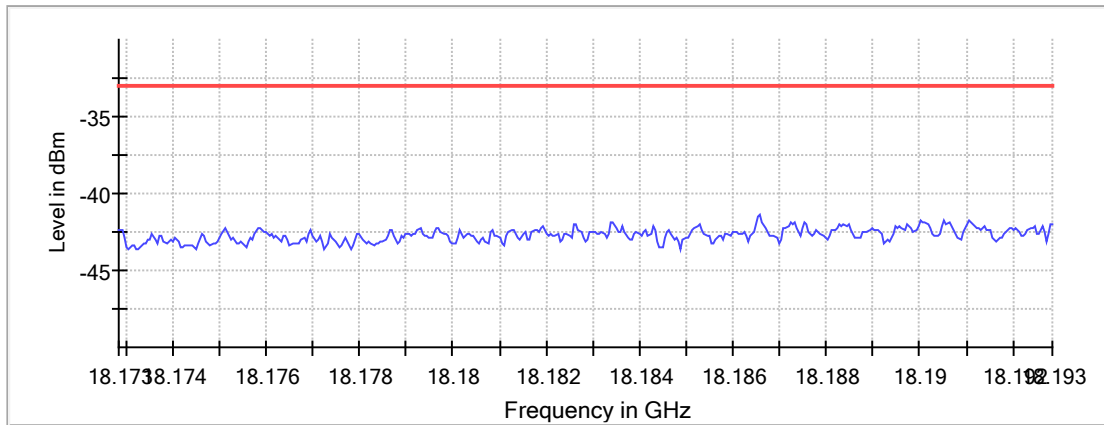
— Sum Level — Limit

FinalMeas_17905065287Hz



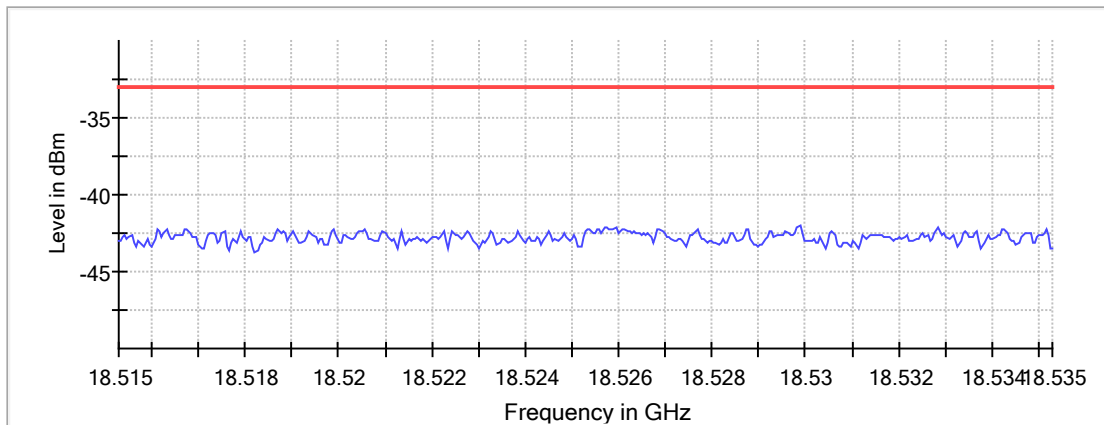
— Sum Level — Limit

FinalMeas_18182845263Hz



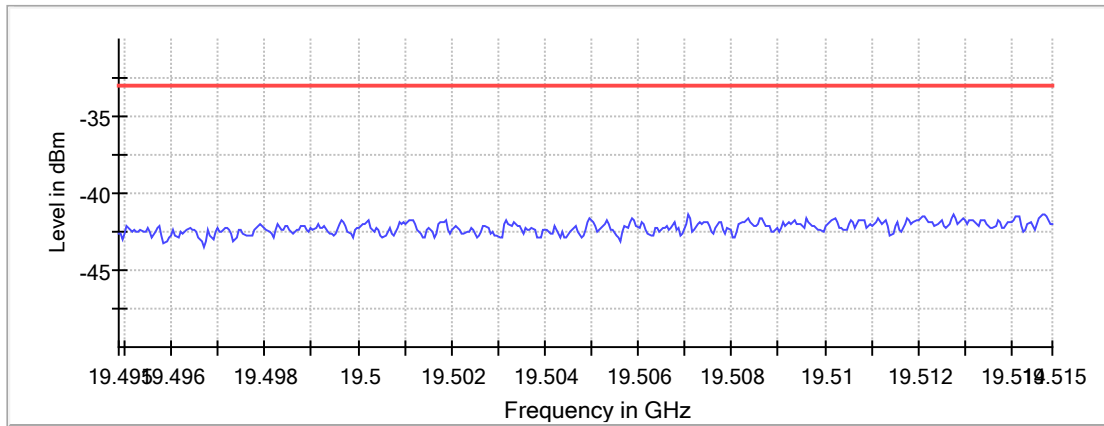
— Sum Level — Limit

FinalMeas_18525293592Hz



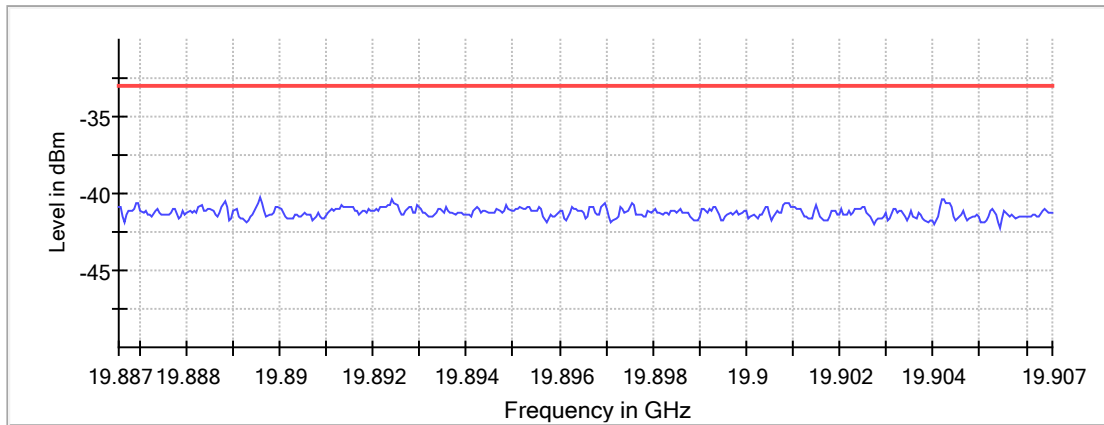
— Sum Level — Limit

FinalMeas_19504872184Hz



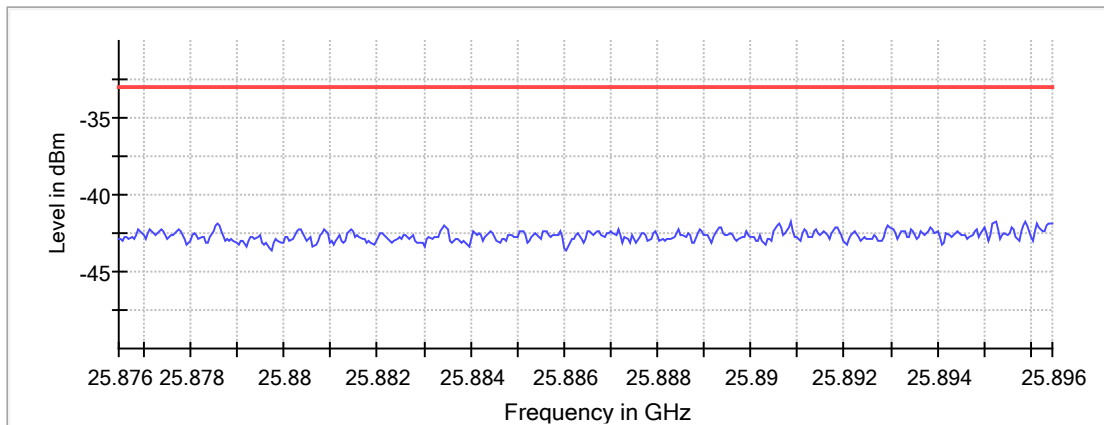
— Sum Level — Limit

FinalMeas_19896556647Hz



— Sum Level — Limit

FinalMeas_25886462946Hz



— Sum Level — Limit

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

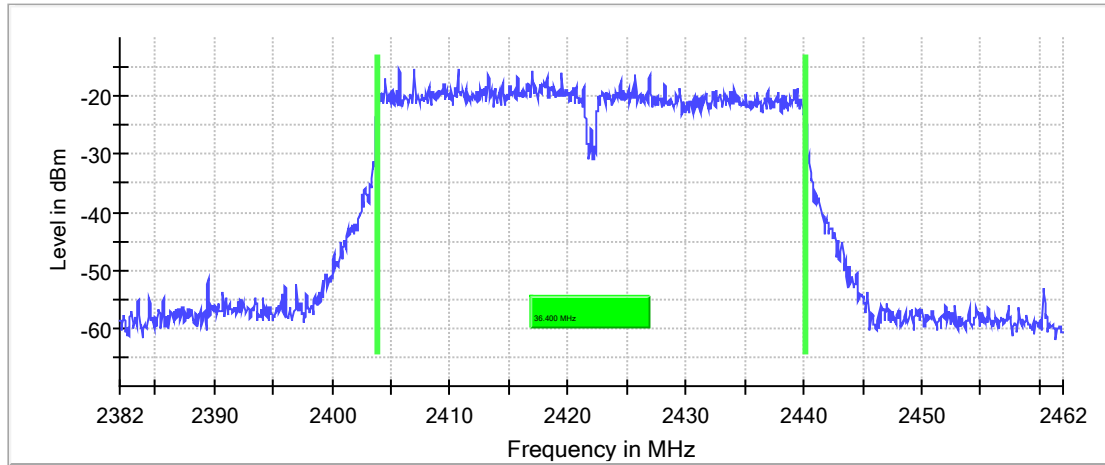
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)

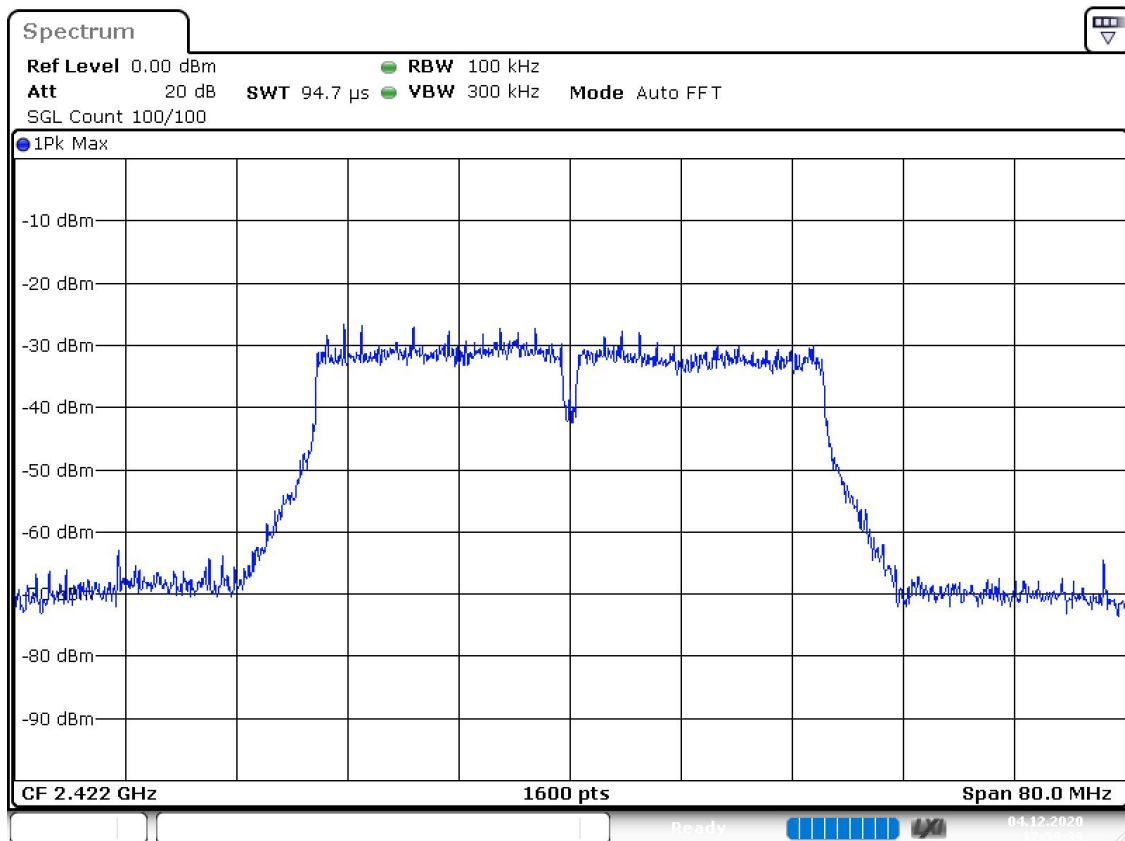
2422.000000	36.400000	0.500000	---	2403.775000	2440.175000
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DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-15.2	PASS

6 dB Bandwidth



Bandwidth



Date: 4.DEC.2020 17:59:40

Power Spectral Density (2422 MHz; 24.000 dBm; 40 MHz)

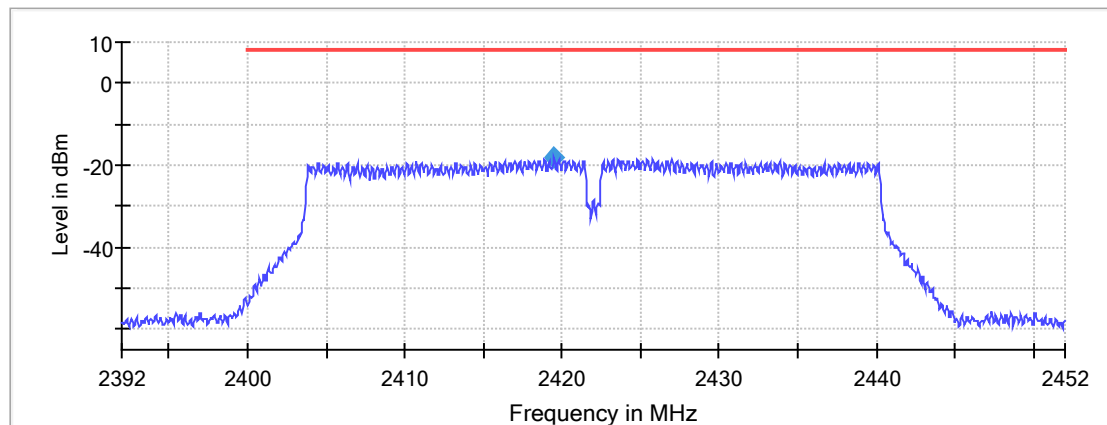
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2422.000000	2419.475000	-18.182	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



— Limit ◆ PSD — Sum Level

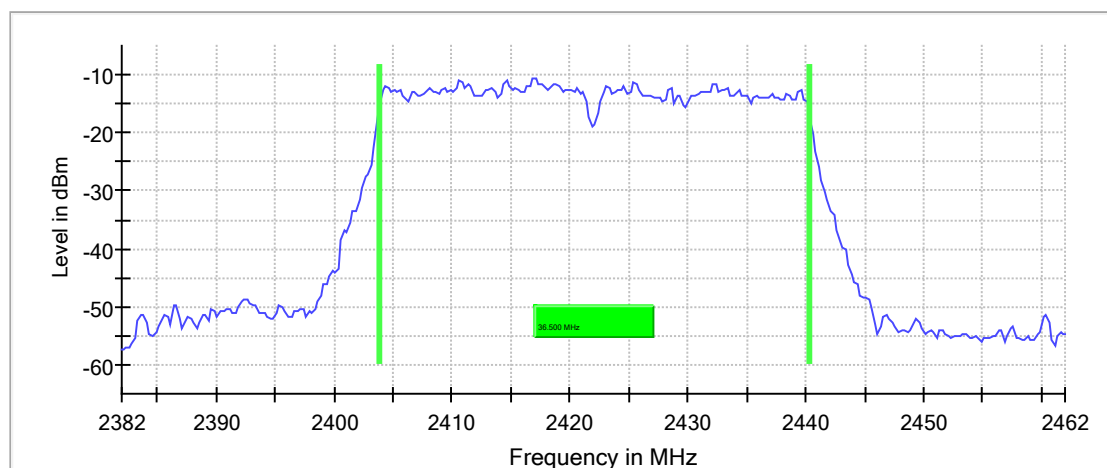
Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

99 % Bandwidth

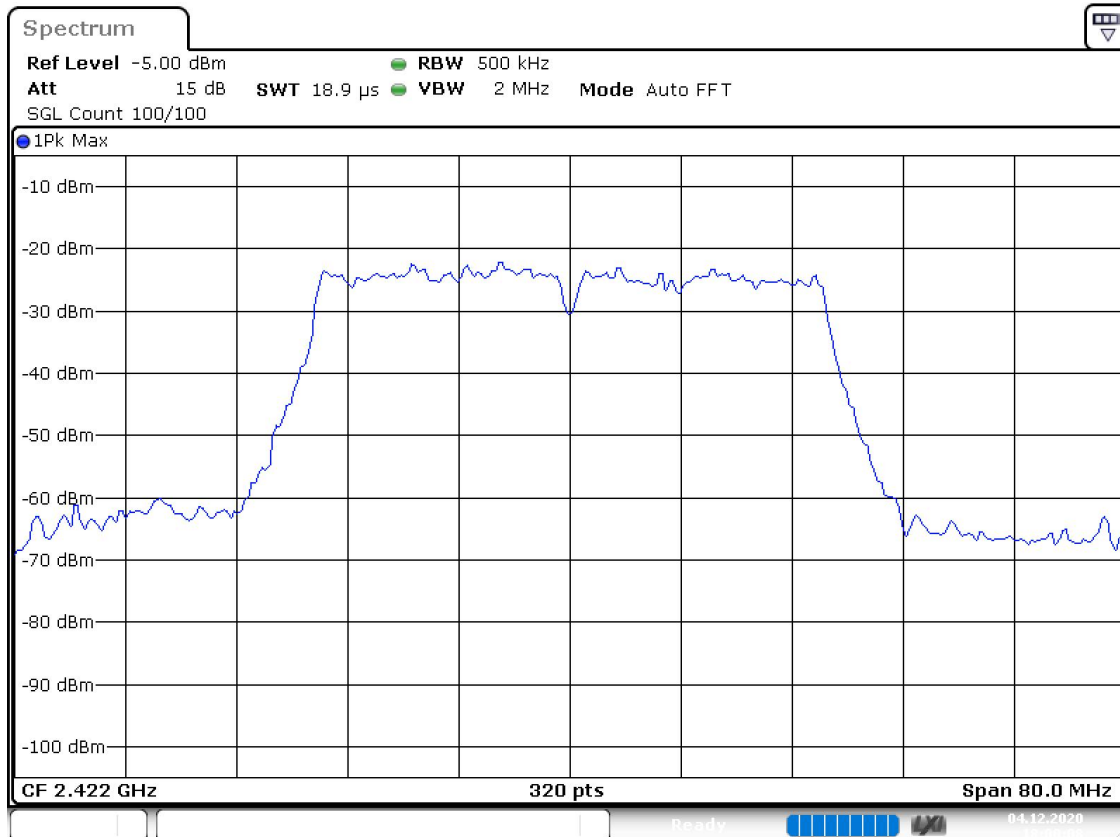
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.500000	---	---	2403.875000	2440.375000

DUT Frequency (MHz)	Result
2422.000000	PASS

99 % Bandwidth



Bandwidth



Date: 4.DEC.2020 18:00:09

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
16171.186700	-33.7	-41.2	-37.8	3.4	PASS
16791.667555	-35.3	-42.1	-37.8	4.3	PASS
17897.384489	-33.2	-40.6	-37.8	2.8	PASS
18543.439258	-35.6	-41.9	-37.8	4.1	PASS
19544.139600	-34.4	-40.0	-37.8	2.2	PASS
19904.607322	-34.9	-40.5	-37.8	2.7	PASS
20144.150828	-37.0	-41.8	-37.8	4.0	PASS
24563.531925	-35.1	-40.7	-37.8	2.9	PASS
24701.776135	-35.6	-42.5	-37.8	4.7	PASS
25880.308105	-35.6	-41.7	-37.8	3.9	PASS

Pre Measurements

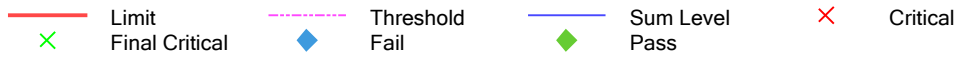
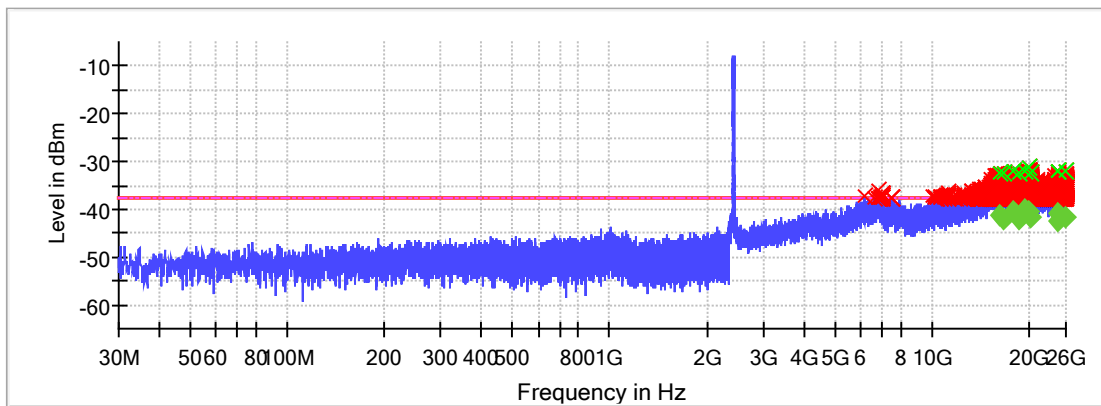
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19911.988868	-31.3	-6.5	-37.8
19849.525116	-31.8	-6.0	-37.8
19878.919823	-31.8	-6.0	-37.8
19878.184955	-31.8	-6.0	-37.8
25882.053741	-32.0	-5.8	-37.8

19891.412573	-32.0	-5.8	-37.8
24570.314967	-32.0	-5.8	-37.8
24695.242469	-32.0	-5.8	-37.8
17905.065287	-32.0	-5.8	-37.8
19925.951353	-32.1	-5.7	-37.8
24557.087349	-32.1	-5.7	-37.8
19548.229376	-32.1	-5.7	-37.8
19866.427073	-32.2	-5.6	-37.8
17907.269890	-32.2	-5.6	-37.8
18545.135019	-32.3	-5.5	-37.8

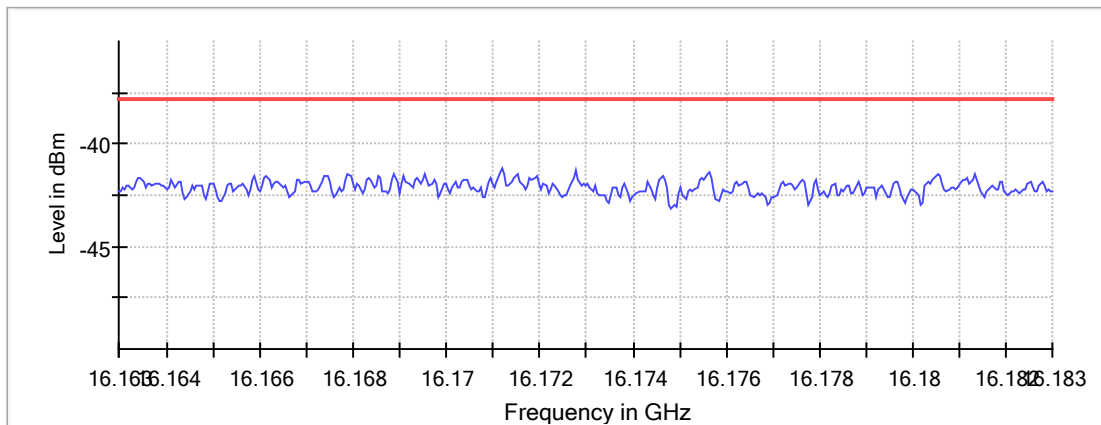
Measurement Settings

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

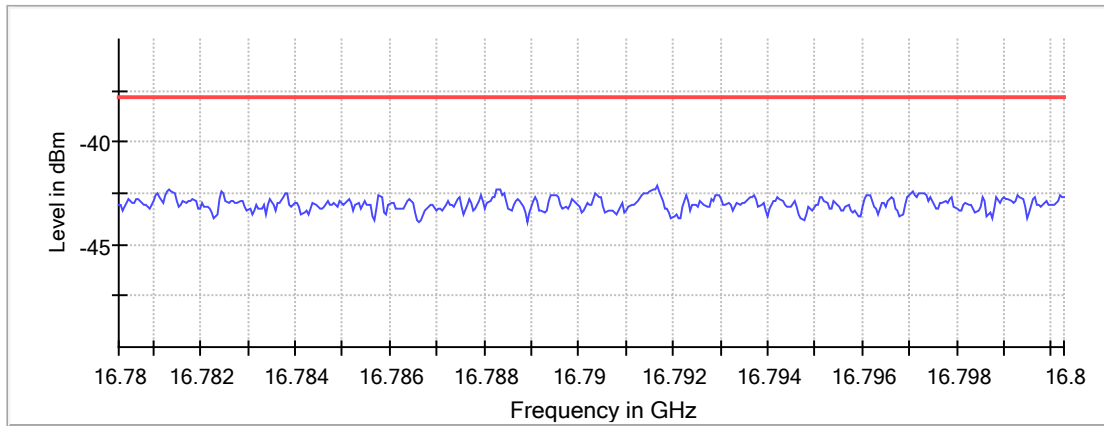
Spurious



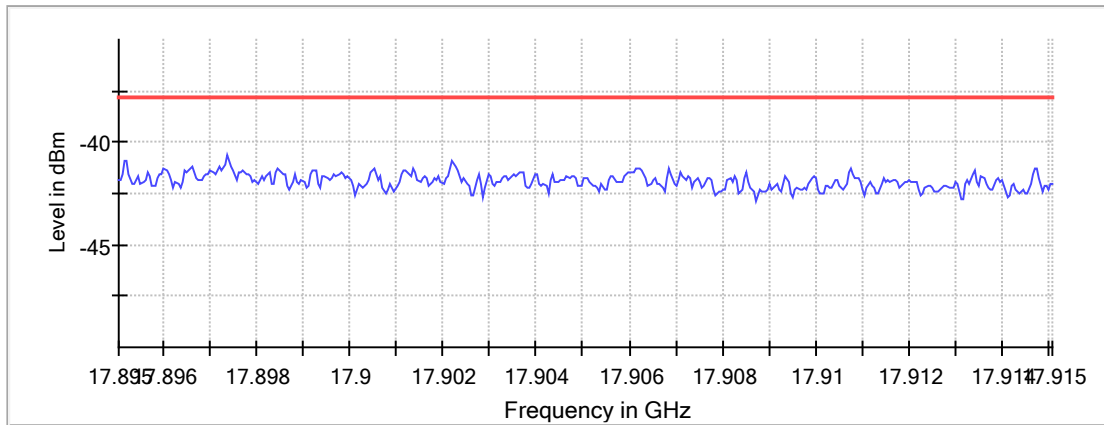
FinalMeas_16172982211Hz



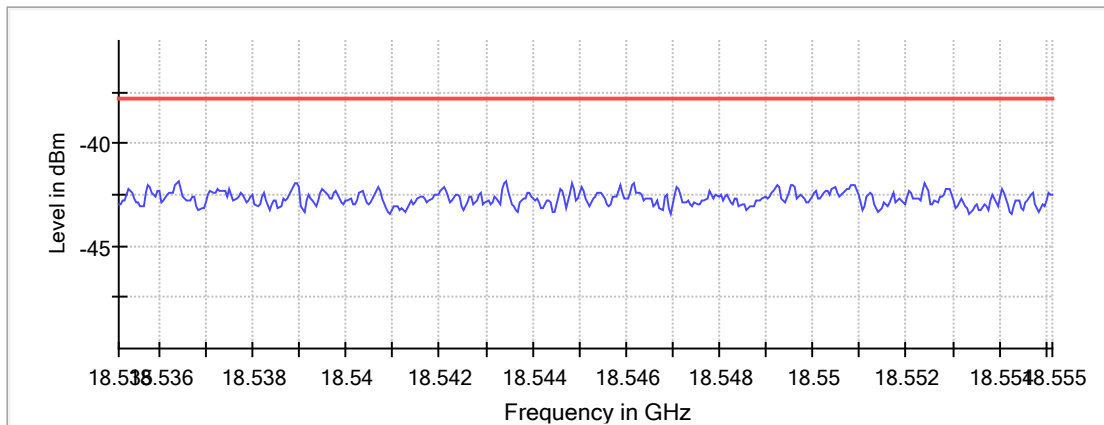
FinalMeas_16790271046Hz



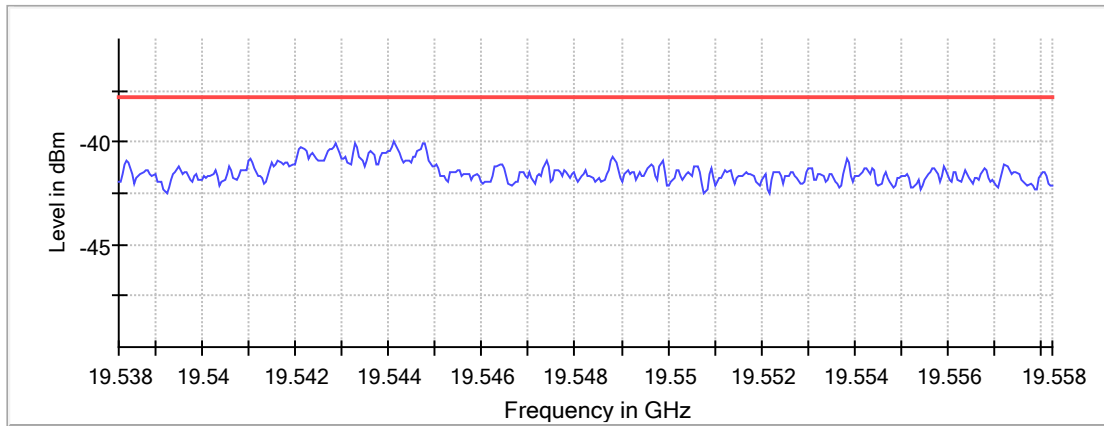
FinalMeas_17905065287Hz



FinalMeas_18545135019Hz

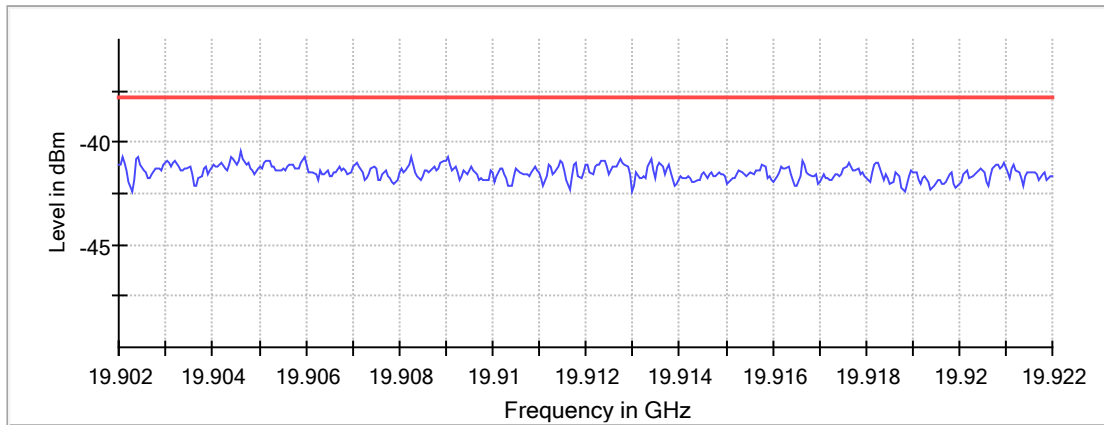


FinalMeas_19548229376Hz



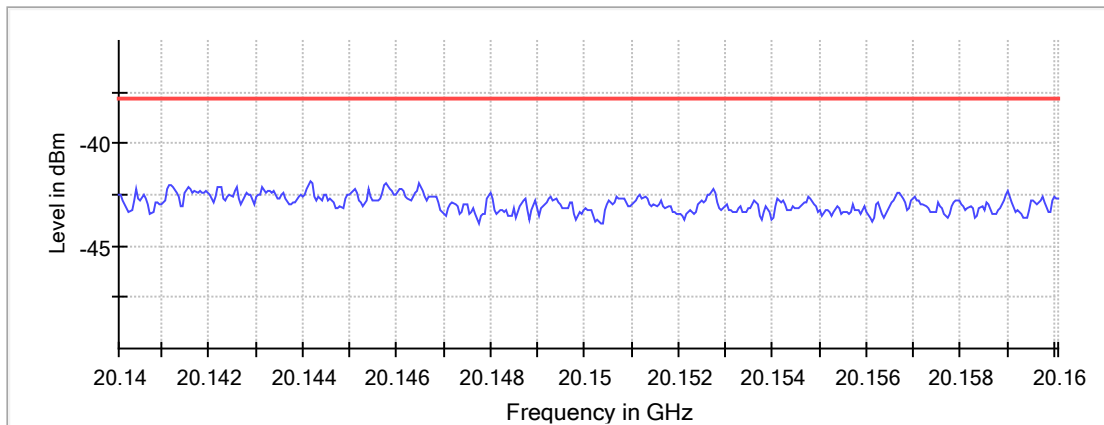
— Sum Level — Limit

FinalMeas_19911988868Hz



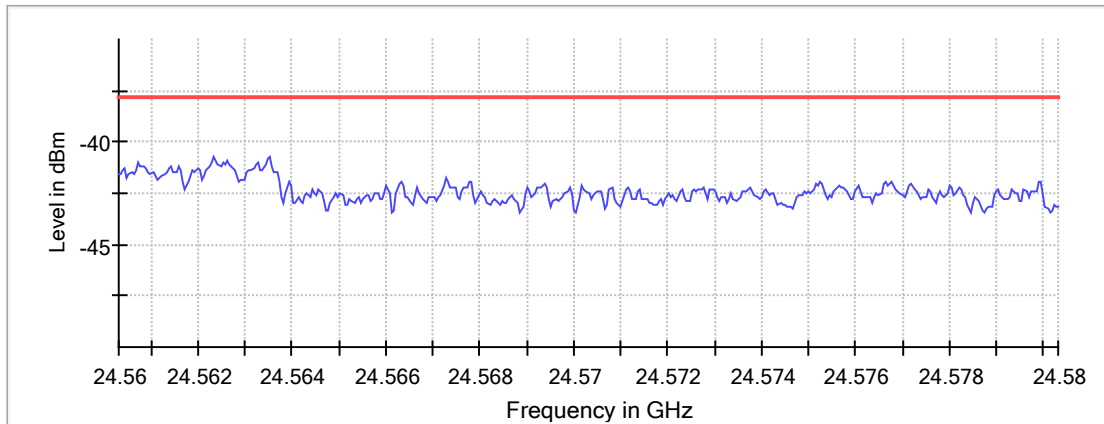
— Sum Level — Limit

FinalMeas_20150085990Hz



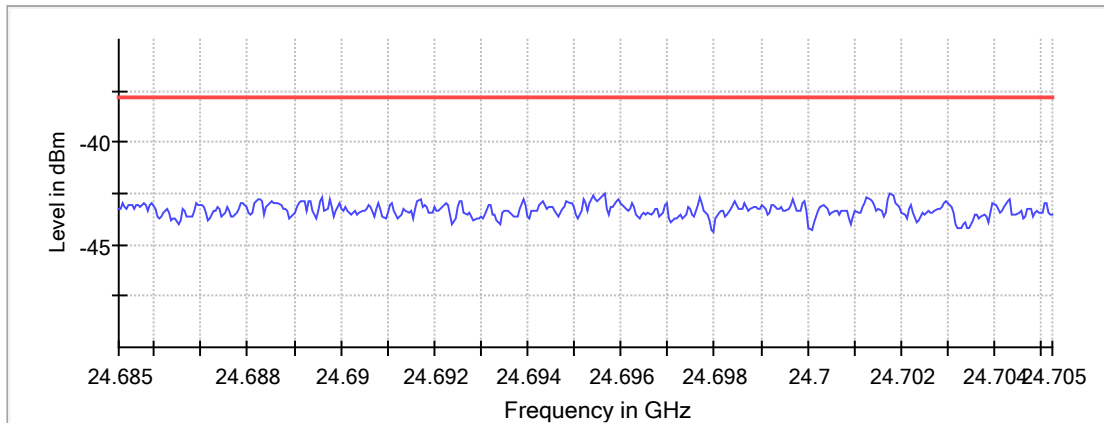
— Sum Level — Limit

FinalMeas_24570314967Hz



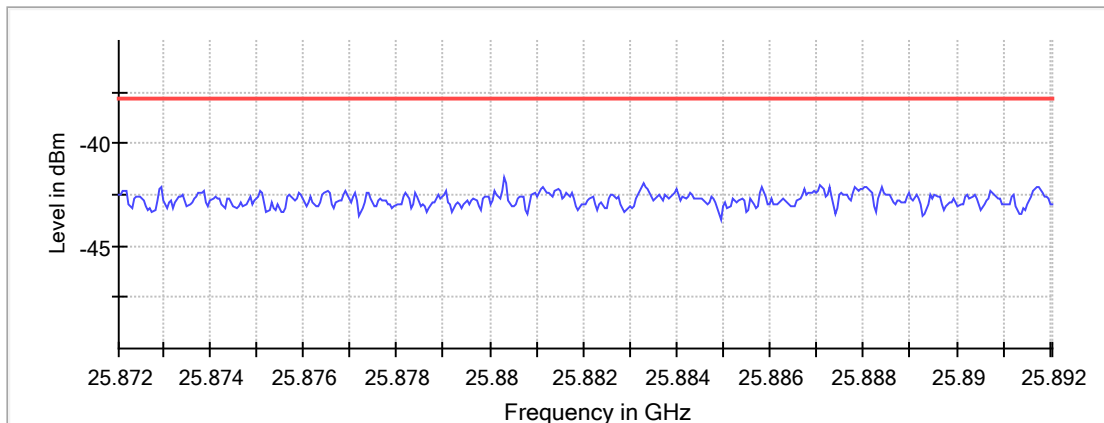
— Sum Level — Limit

FinalMeas_24695242469Hz



— Sum Level — Limit

FinalMeas_25882053741Hz



— Sum Level — Limit

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

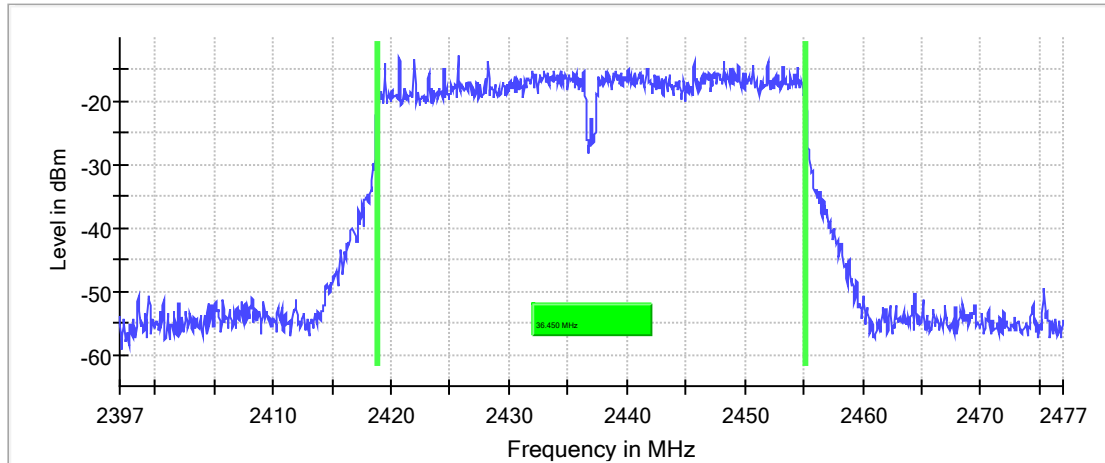
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)

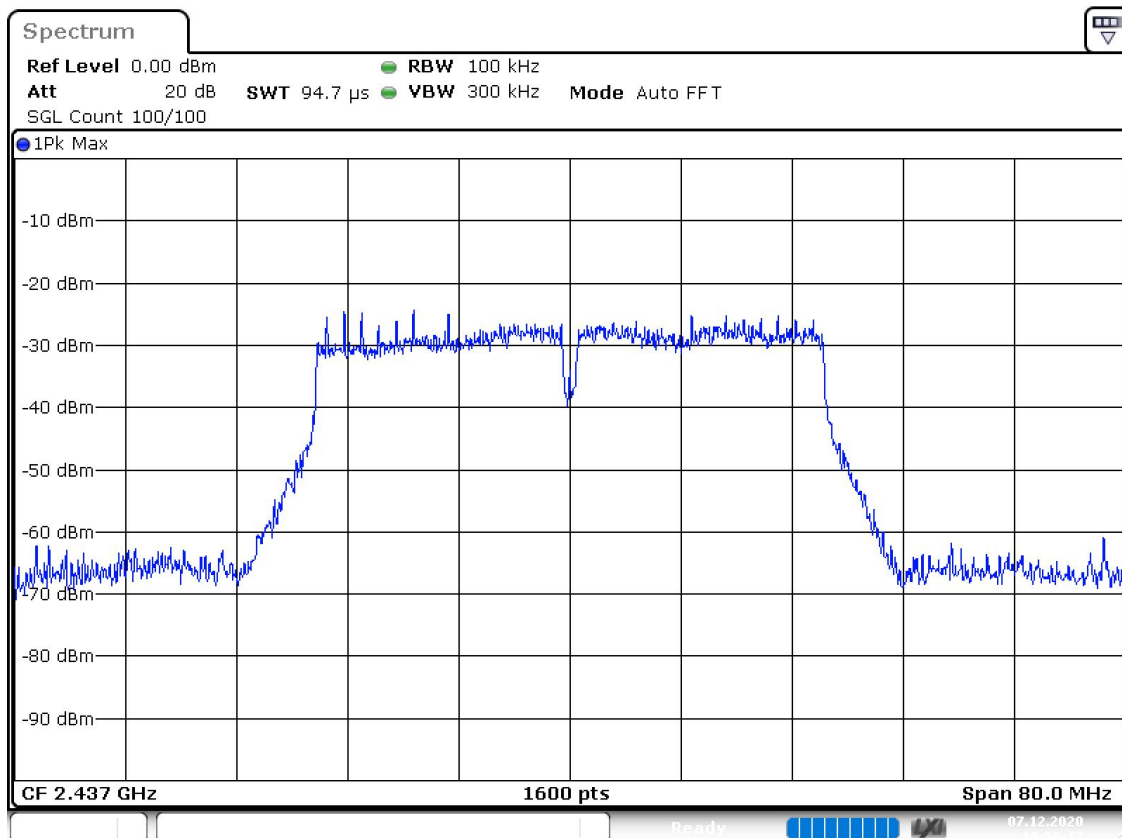
2437.000000	36.450000	0.500000	---	2418.775000	2455.225000
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DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-12.8	PASS

6 dB Bandwidth



Bandwidth



Date: 7.DEC.2020 10:58:17

Power Spectral Density (2437 MHz; 24.000 dBm; 40 MHz)

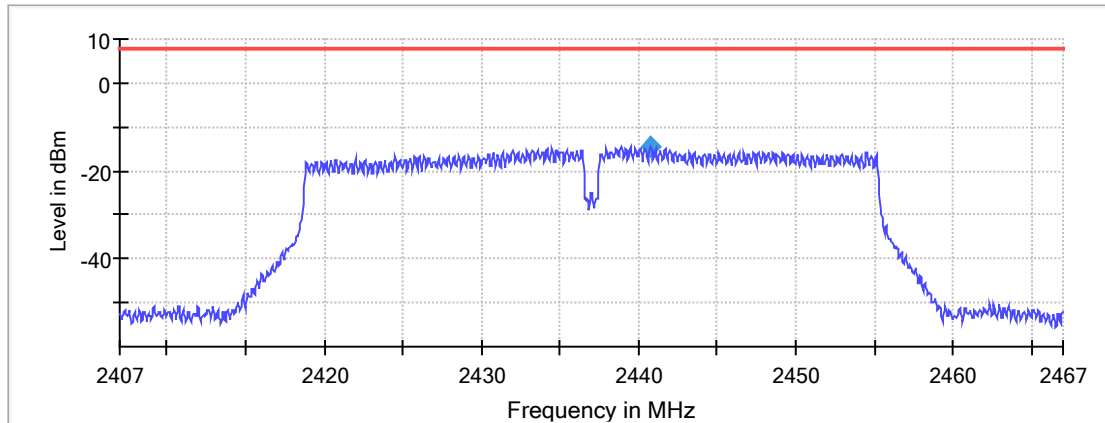
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2440.775000	-14.401	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



— Limit ◆ PSD — Sum Level

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40700 GHz	2.40700 GHz
Stop Frequency	2.46700 GHz	2.46700 GHz
Span	60.000 MHz	60.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1200	~ 1200
SweepTime	1.200 ms	AUTO
Reference Level	0.000 dBm	0.000 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	Sweep
Preamp	off	off

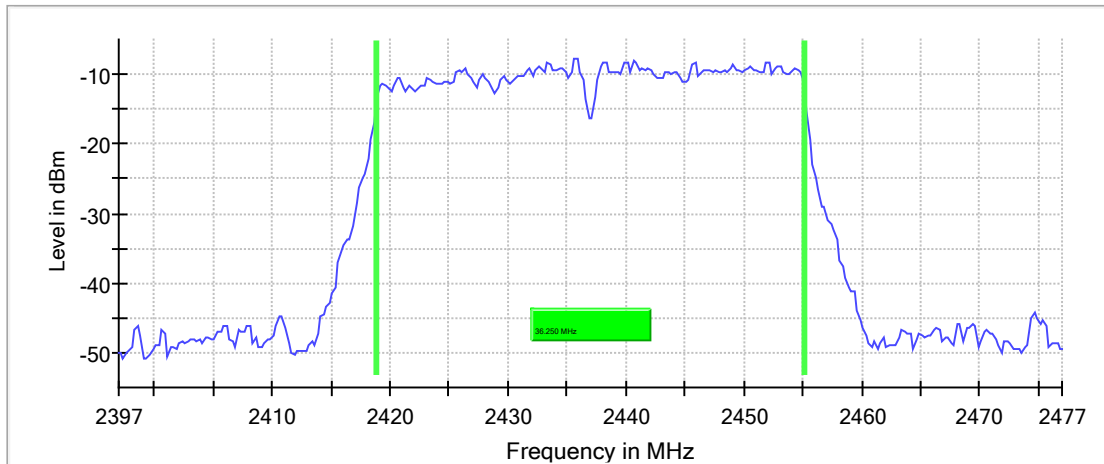
Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

99 % Bandwidth

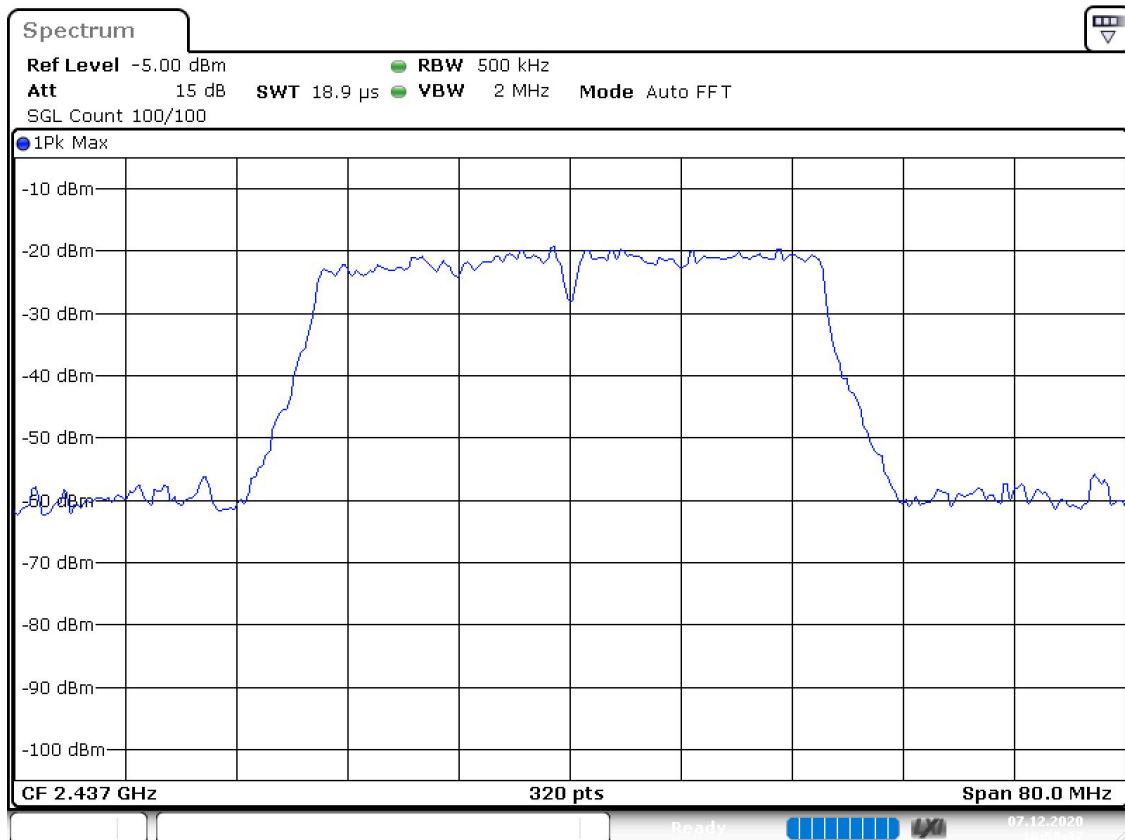
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.250000	---	---	2418.875000	2455.125000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 % Bandwidth



Bandwidth



Date: 7.DEC.2020 10:58:37

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
15845.862608	-35.3	-41.5	-34.7	6.8	PASS
16157.527210	-34.9	-40.5	-34.7	5.8	PASS
16848.098995	-33.7	-42.2	-34.7	7.5	PASS
17898.750730	-30.0	-40.6	-34.7	5.9	PASS
18250.632981	-35.3	-41.2	-34.7	6.5	PASS
19524.696605	-35.6	-40.9	-34.7	6.2	PASS
19904.809996	-33.7	-40.6	-34.7	5.9	PASS
20200.130217	-36.3	-41.8	-34.7	7.1	PASS
24698.940159	-33.3	-42.6	-34.7	7.9	PASS
25925.251788	-34.9	-41.6	-34.7	6.9	PASS

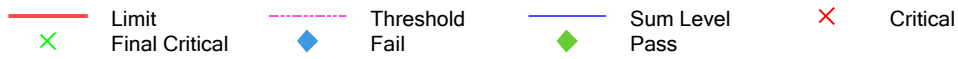
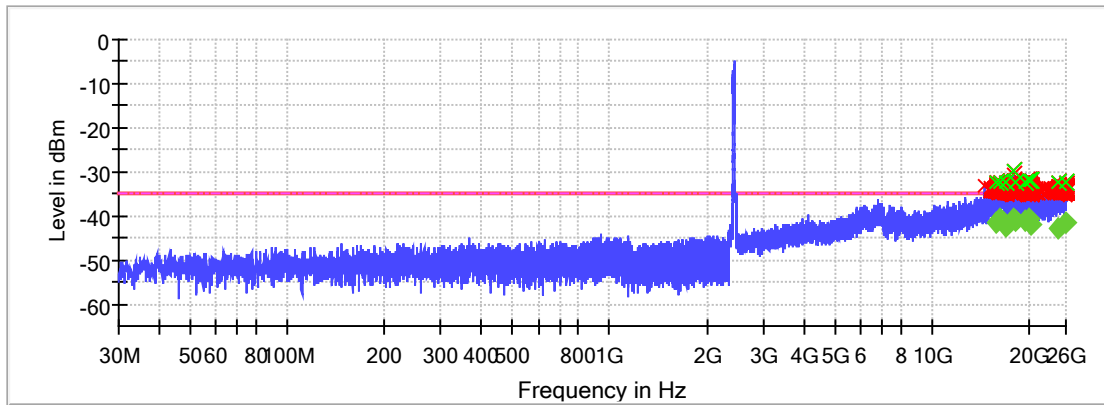
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
17898.451478	-29.8	-4.9	-34.7
17899.186346	-30.3	-4.4	-34.7
19909.049397	-31.9	-2.8	-34.7
20201.526726	-31.9	-2.7	-34.7
19915.663206	-32.0	-2.7	-34.7
20166.987946	-32.0	-2.7	-34.7
19852.464587	-32.0	-2.7	-34.7
17896.981743	-32.0	-2.7	-34.7
16167.103270	-32.1	-2.6	-34.7
16838.772312	-32.1	-2.6	-34.7
17902.125816	-32.1	-2.6	-34.7
19517.364934	-32.2	-2.5	-34.7
19837.032366	-32.3	-2.4	-34.7
19950.936854	-32.3	-2.4	-34.7
15837.882558	-32.4	-2.3	-34.7

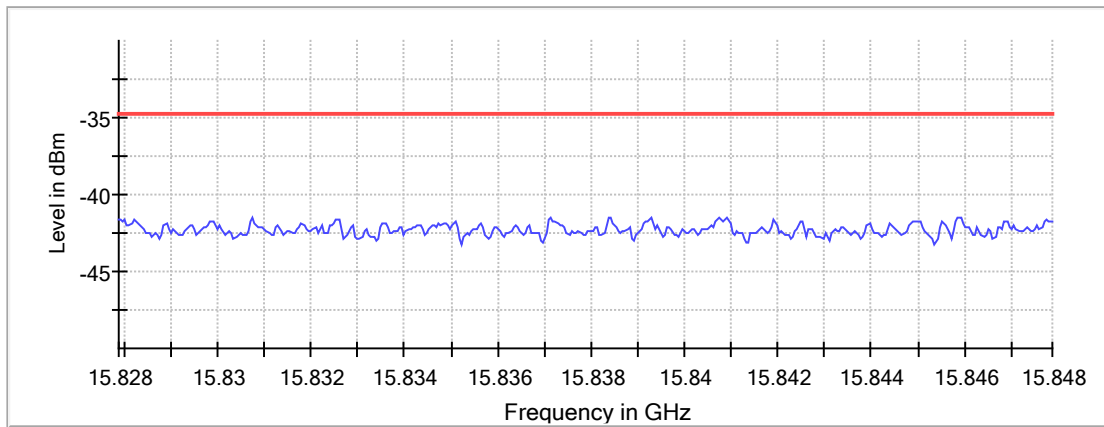
Measurement Settings

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

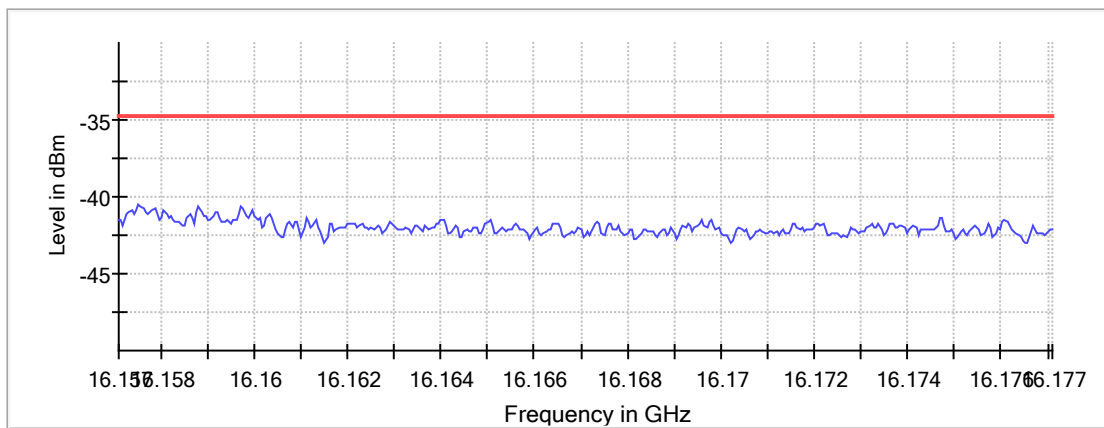
Spurious



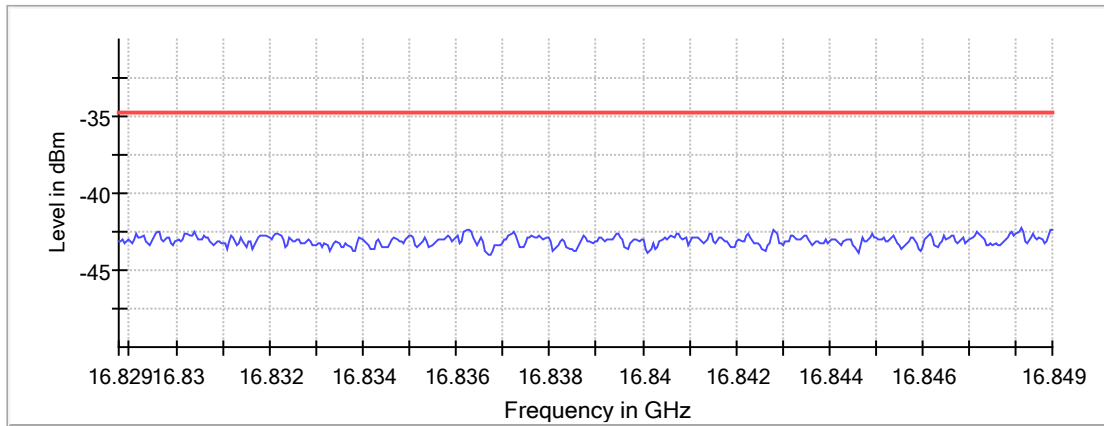
FinalMeas_15837882558Hz



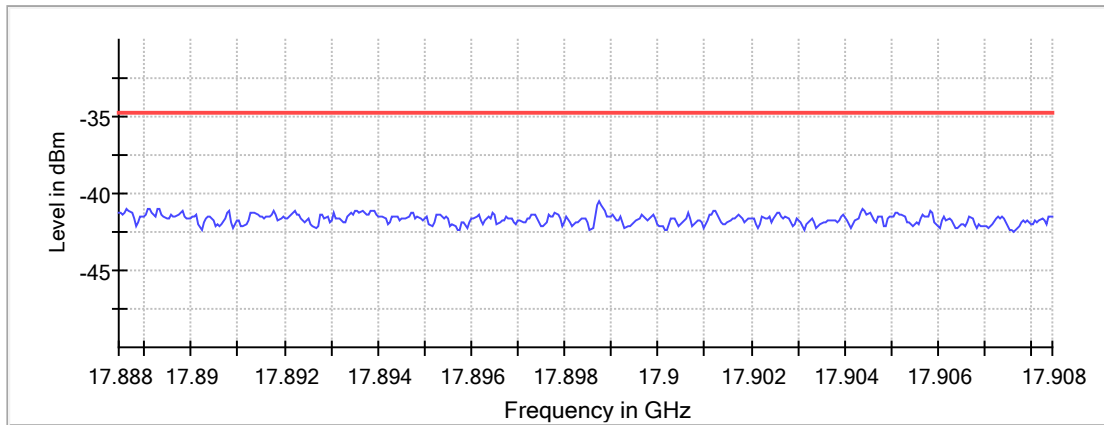
FinalMeas_16167103270Hz



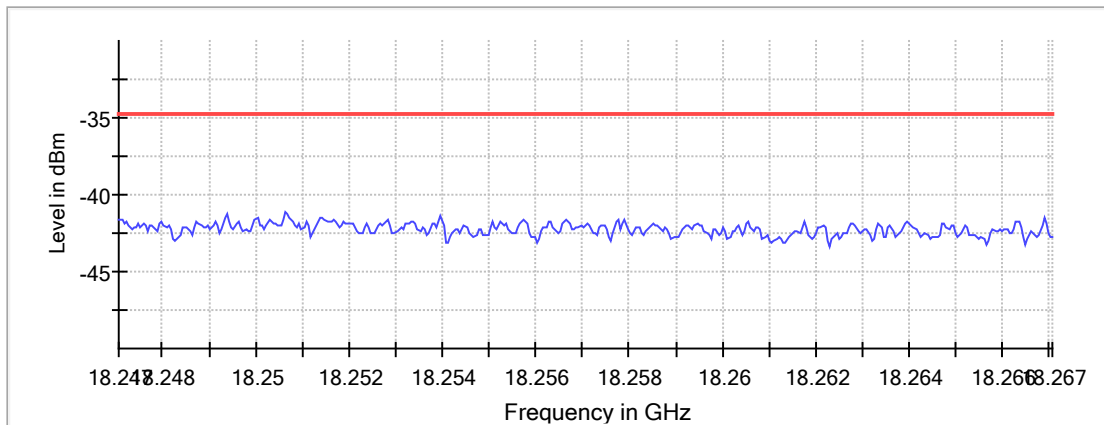
FinalMeas_16838772312Hz



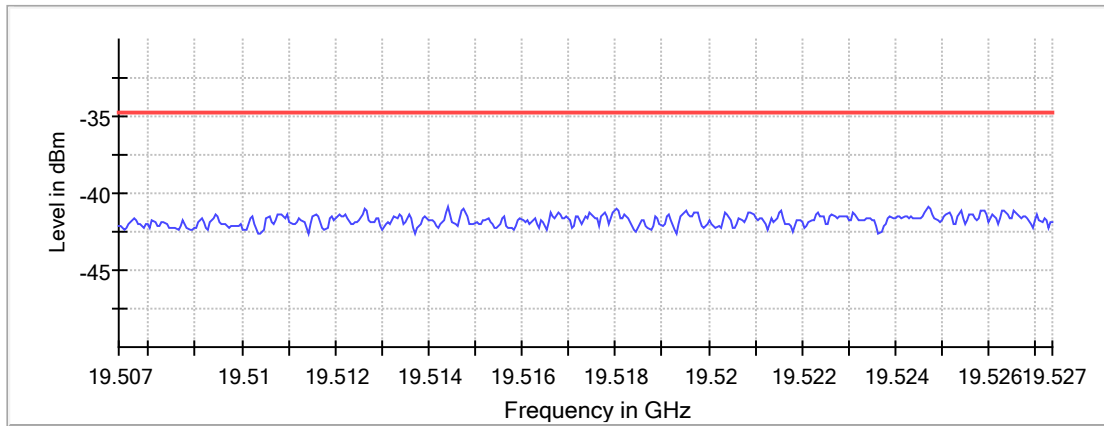
FinalMeas_17898451478Hz



FinalMeas_18257066896Hz

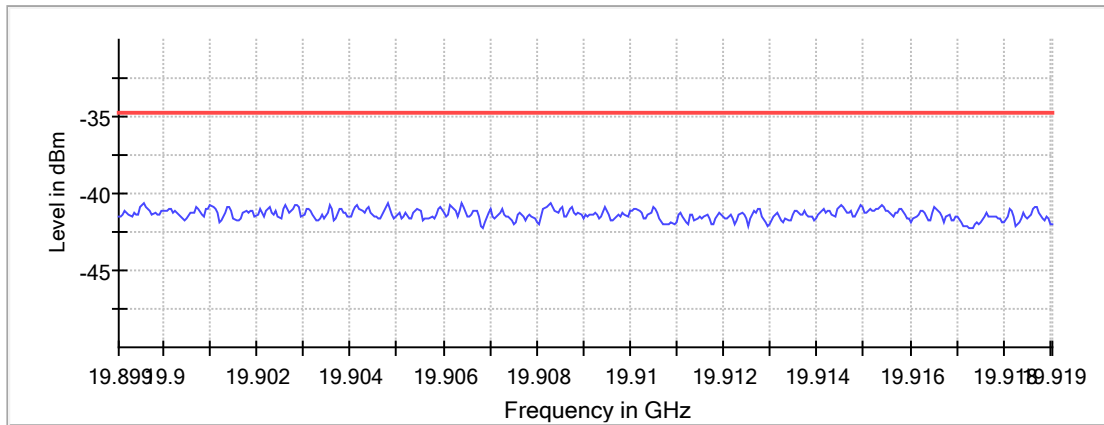


FinalMeas_19517364934Hz



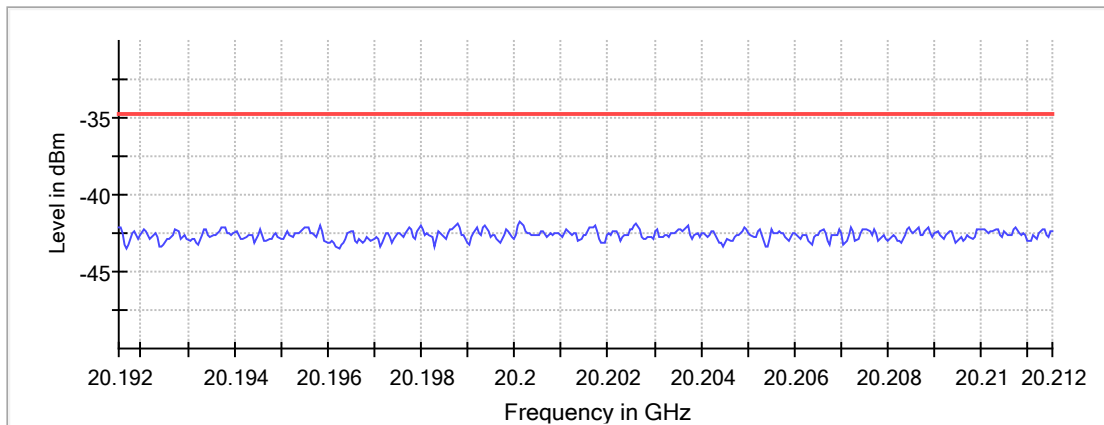
— Sum Level — Limit

FinalMeas_19909049397Hz



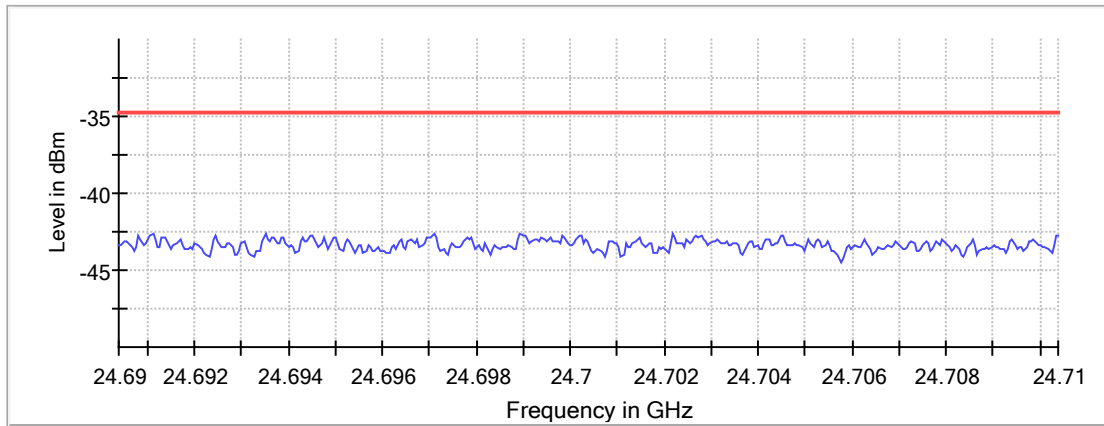
— Sum Level — Limit

FinalMeas_20201526726Hz



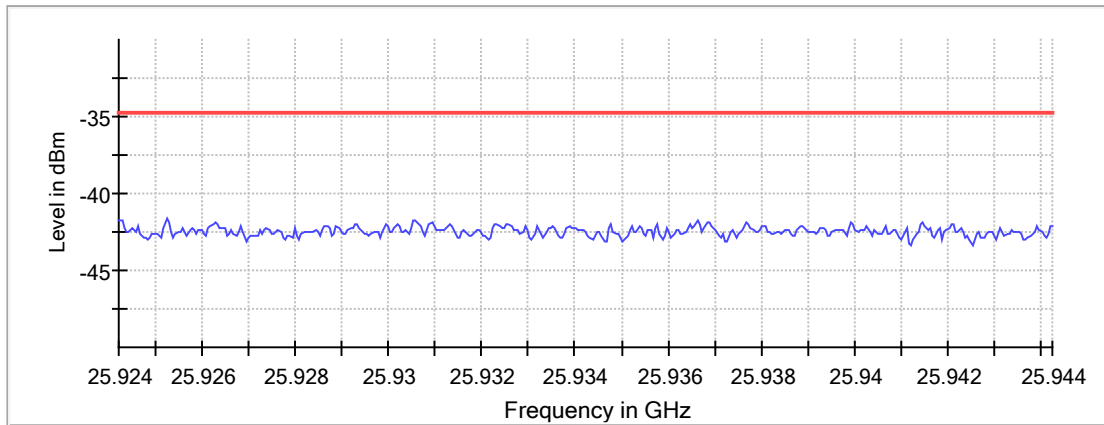
— Sum Level — Limit

FinalMeas_24700386543Hz



— Sum Level — Limit

FinalMeas_25934229344Hz



— Sum Level — Limit

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

RF output power (2442 MHz; 24.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2442.000000	8.3	30.0	8.3	95.191	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

RF output power (2447 MHz; 24.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2447.000000	8.4	30.0	8.4	95.191	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

RF output power (2452 MHz; 24.000 dBm; 40 MHz)

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2452.000000	8.4	30.0	8.4	95.193	PASS

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

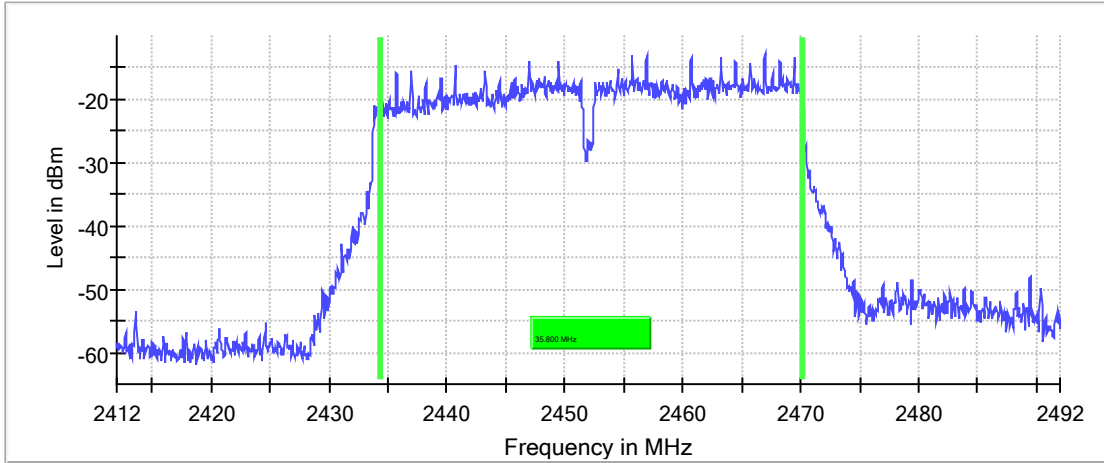
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
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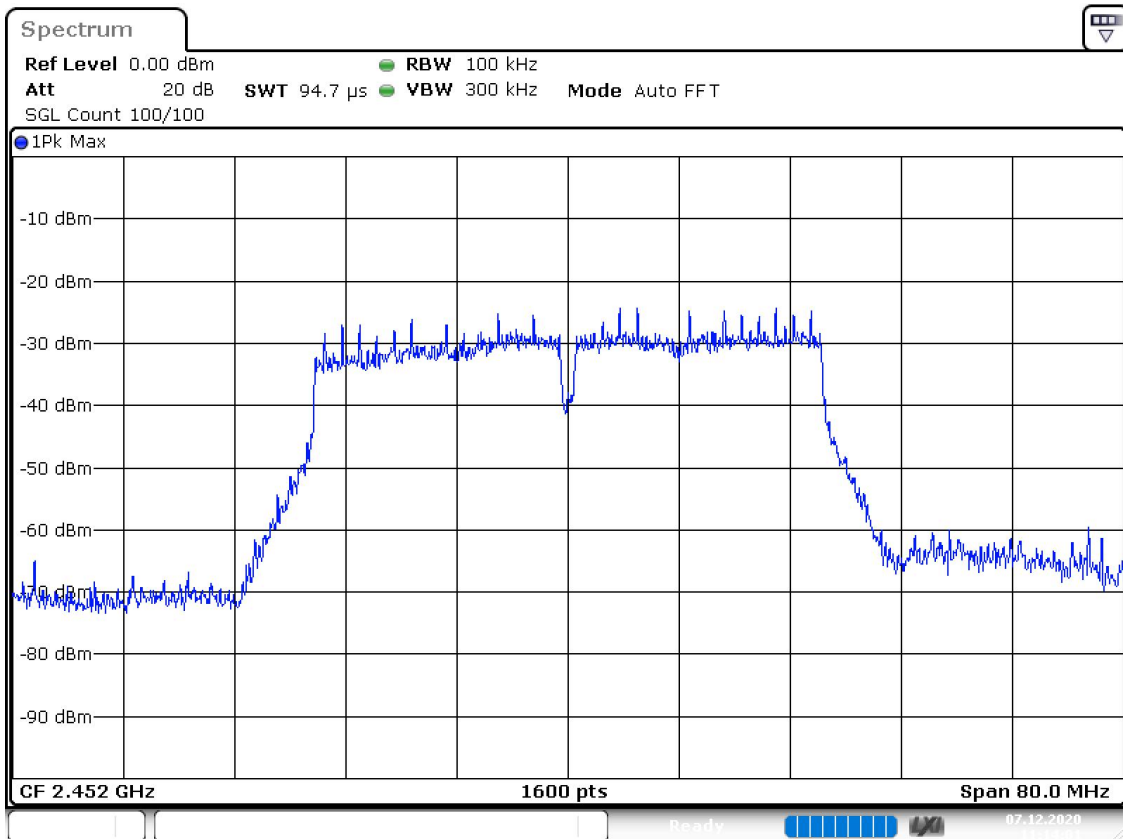
2452.000000	35.800000	0.500000	---	2434.375000	2470.175000
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DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-12.8	PASS

6 dB Bandwidth



Bandwidth



Date: 7.DEC.2020 11:14:01

Power Spectral Density (2452 MHz; 24.000 dBm; 40 MHz)

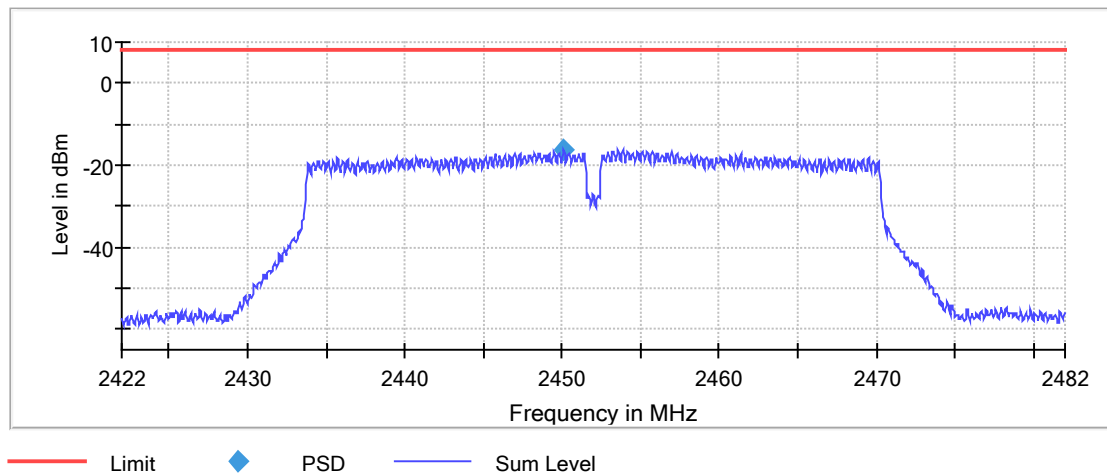
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2452.000000	2450.125000	-16.244	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.42200 GHz	2.42200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	60.000 MHz	60.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1200	~ 1200
Sweeptime	1.200 ms	AUTO
Reference Level	0.000 dBm	0.000 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	Sweep
Preamp	off	off

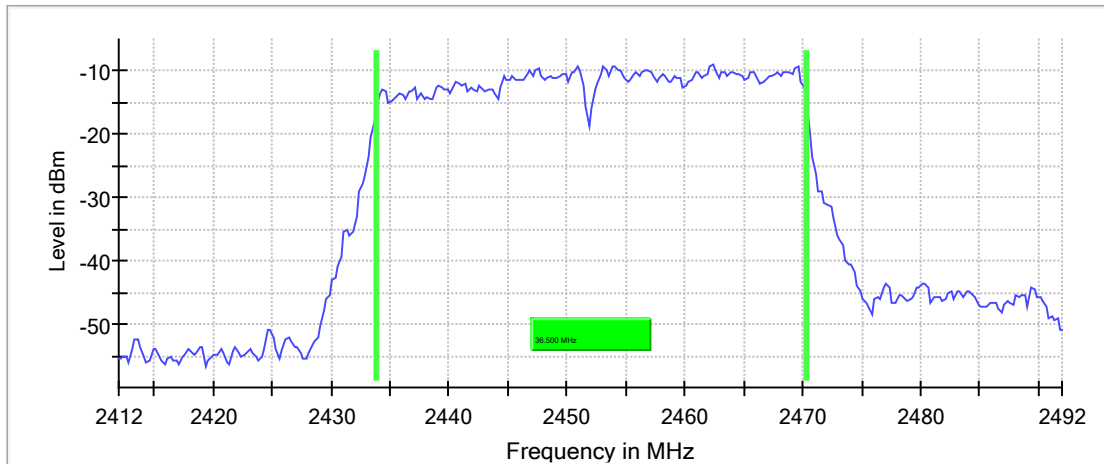
Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

99 % Bandwidth

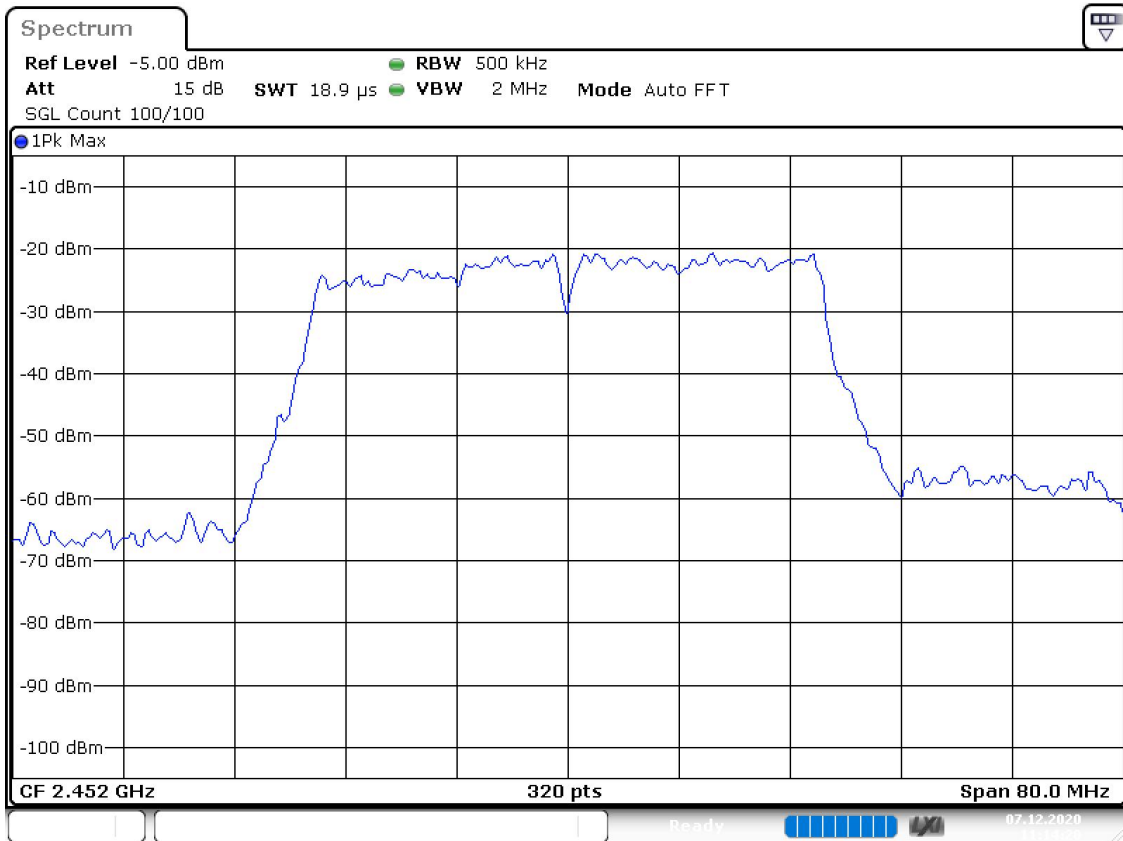
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	36.500000	---	---	2433.875000	2470.375000

DUT Frequency (MHz)	Result
2452.000000	PASS

99 % Bandwidth



Bandwidth



Date: 7.DEC.2020 11:14:20

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
15887.231704	-33.4	-41.4	-35.6	5.8	PASS
16129.122522	-35.5	-41.7	-35.6	6.1	PASS
16189.153044	-34.1	-41.4	-35.6	5.8	PASS
16840.092421	-33.2	-42.3	-35.6	6.8	PASS
17890.491036	-34.9	-40.6	-35.6	5.1	PASS
18233.321933	-34.0	-41.0	-35.6	5.4	PASS
18903.360954	-35.4	-41.6	-35.6	6.0	PASS
19548.175756	-36.3	-39.6	-35.6	4.1	PASS
19905.318267	-34.3	-40.3	-35.6	4.7	PASS
25916.465675	-34.3	-41.5	-35.6	5.9	PASS

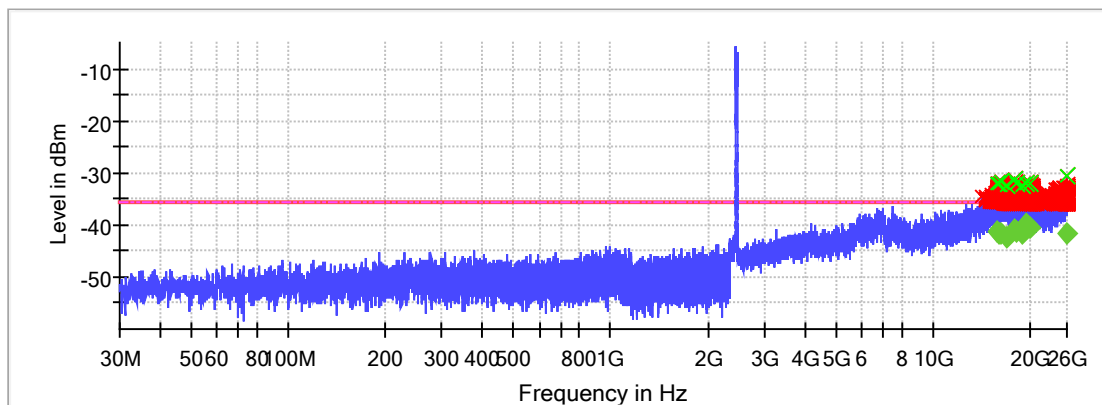
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25907.039241	-30.6	-5.0	-35.6
17891.837669	-31.3	-4.2	-35.6
16197.232844	-31.7	-3.9	-35.6
16196.497977	-31.8	-3.8	-35.6
19900.230985	-31.8	-3.8	-35.6
16134.769093	-31.8	-3.8	-35.6
18237.960337	-31.8	-3.8	-35.6
19903.905323	-31.8	-3.8	-35.6
15886.383824	-31.8	-3.8	-35.6
17874.200845	-31.8	-3.8	-35.6
19540.145831	-31.8	-3.7	-35.6
17880.814654	-31.9	-3.7	-35.6
17899.921213	-32.0	-3.6	-35.6
16121.541475	-32.1	-3.5	-35.6
18894.932026	-32.1	-3.4	-35.6

Measurement Settings

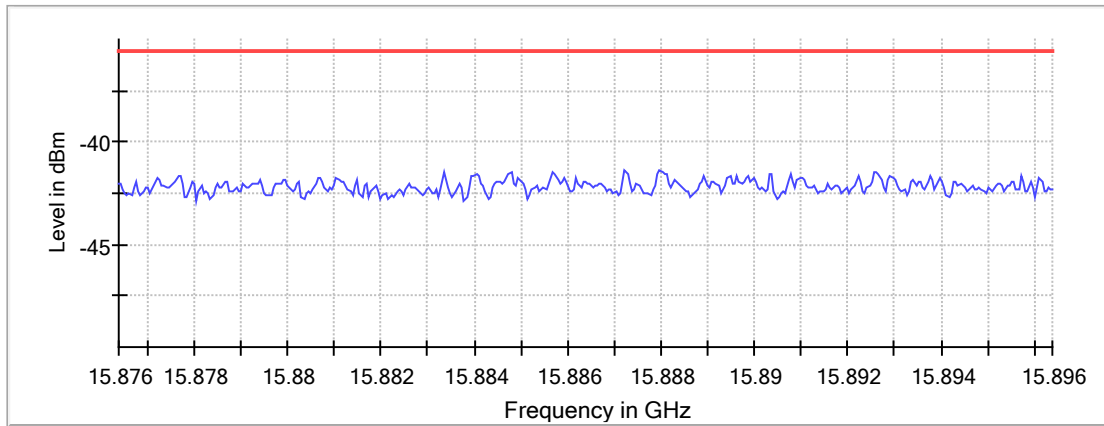
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1

Spurious



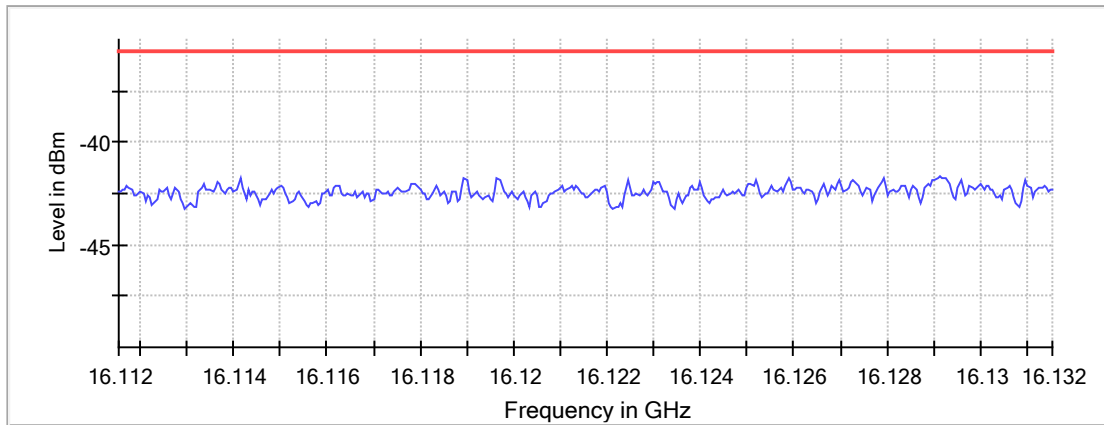
— Limit - - - Threshold — Sum Level × Critical
× Final Critical ◆ Fail ◆ Pass

FinalMeas_15886383824Hz



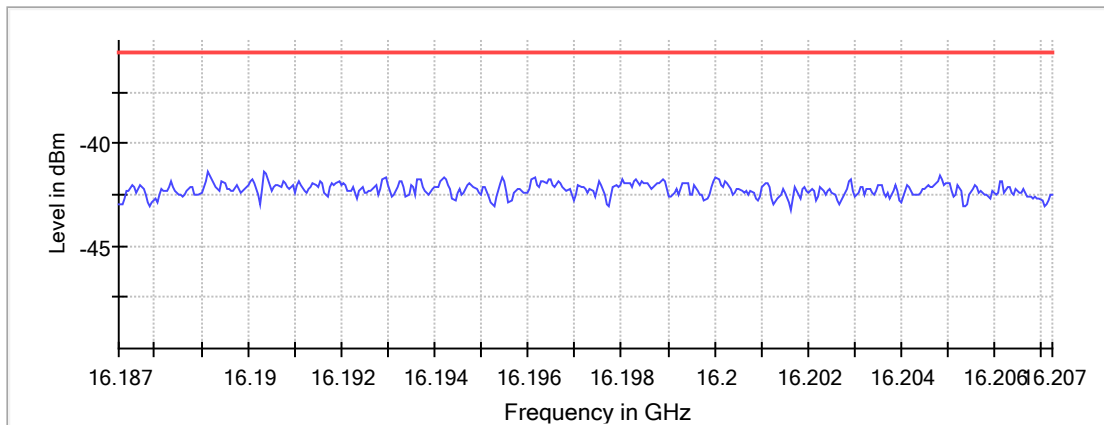
— Sum Level — Limit

FinalMeas_16121541475Hz



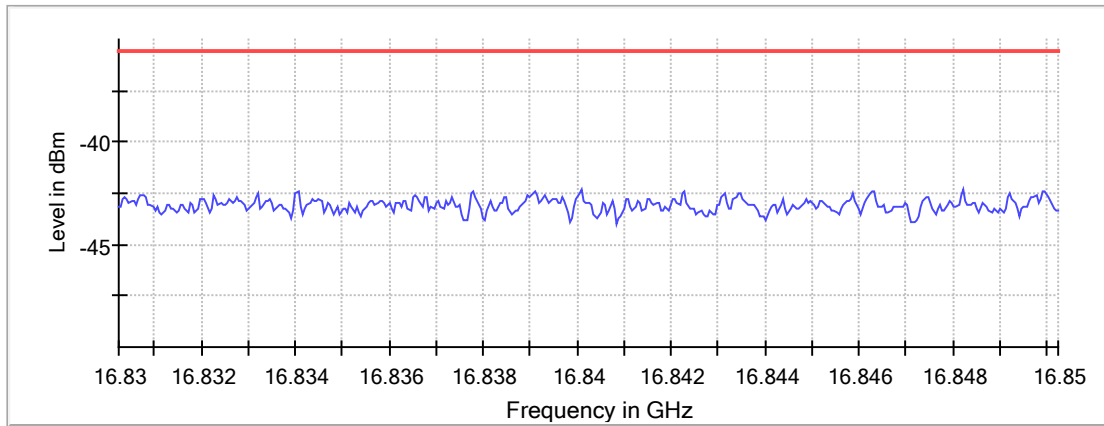
— Sum Level — Limit

FinalMeas_16197232844Hz

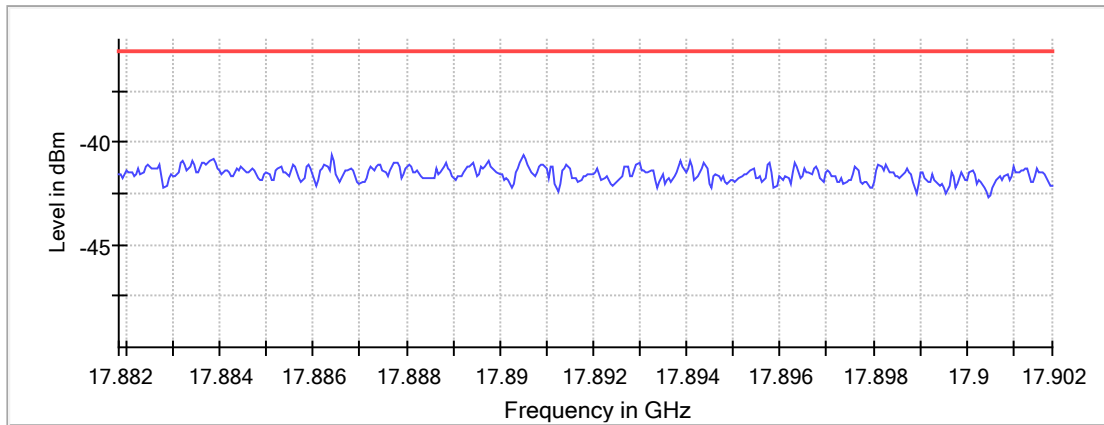


— Sum Level — Limit

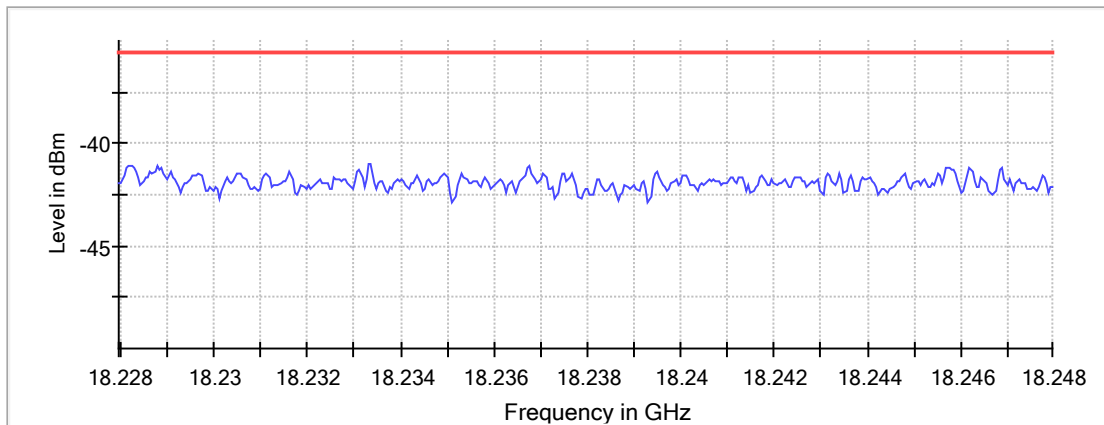
FinalMeas_16840242047Hz



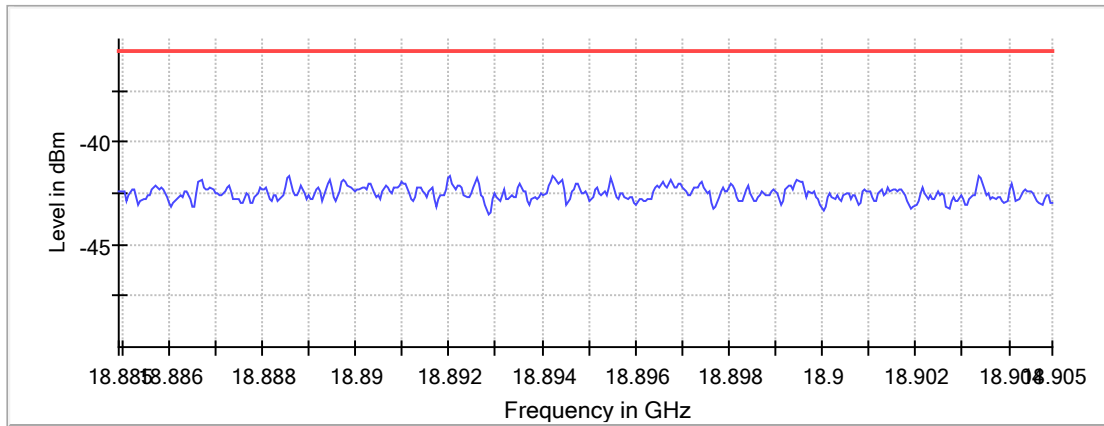
FinalMeas_17891837669Hz



FinalMeas_18237960337Hz

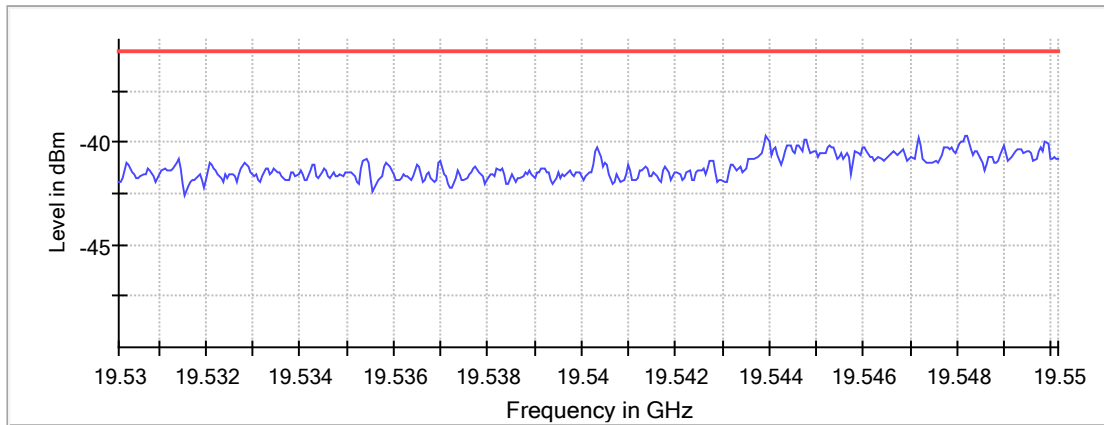


FinalMeas_18894932026Hz



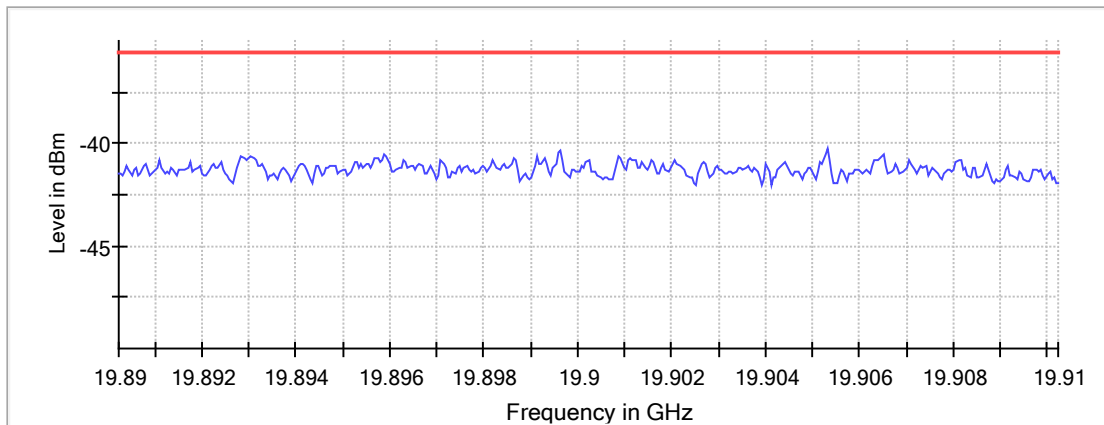
— Sum Level — Limit

FinalMeas_19540145831Hz

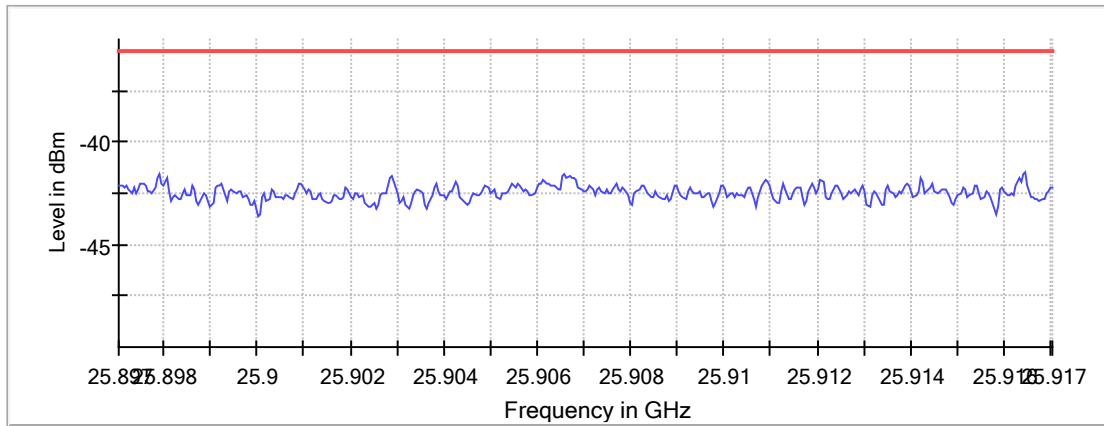


— Sum Level — Limit

FinalMeas_19900230985Hz



— Sum Level — Limit



— Sum Level — Limit

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