Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2412.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2412.000	20.0	20.000000	PASS
Power Spectral Density	2412.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	20.0	20.000000	PASS
Tx Spurious Emission	2412.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	20.0	20.000000	PASS
Tx Spurious Emission	2437.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	20.0	20.000000	PASS
Tx Spurious Emission	2462.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2422.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2422.000	20.0	40.000000	PASS
Tx Spurious Emission	2422.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	20.0	40.000000	PASS
Tx Spurious Emission	2437.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	2452.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	2452.000	20.0	40.000000	PASS
Tx Spurious Emission	2452.000	20.0	40.000000	PASS

RF output power (2412 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	18.0	30.0	22.0	96.393	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; 20.000 dBm; 20 MHz)

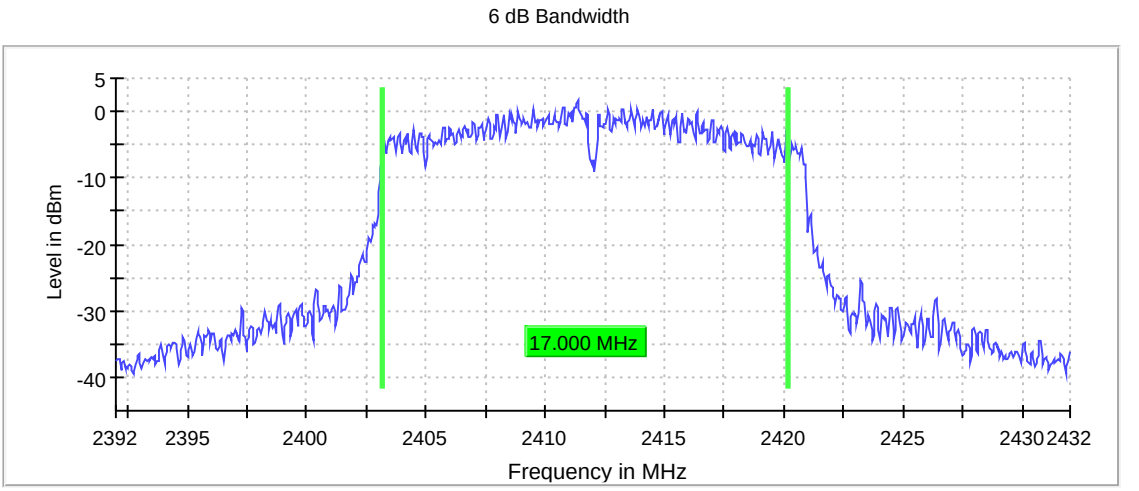
Customized settings.

6 dB Bandwidth

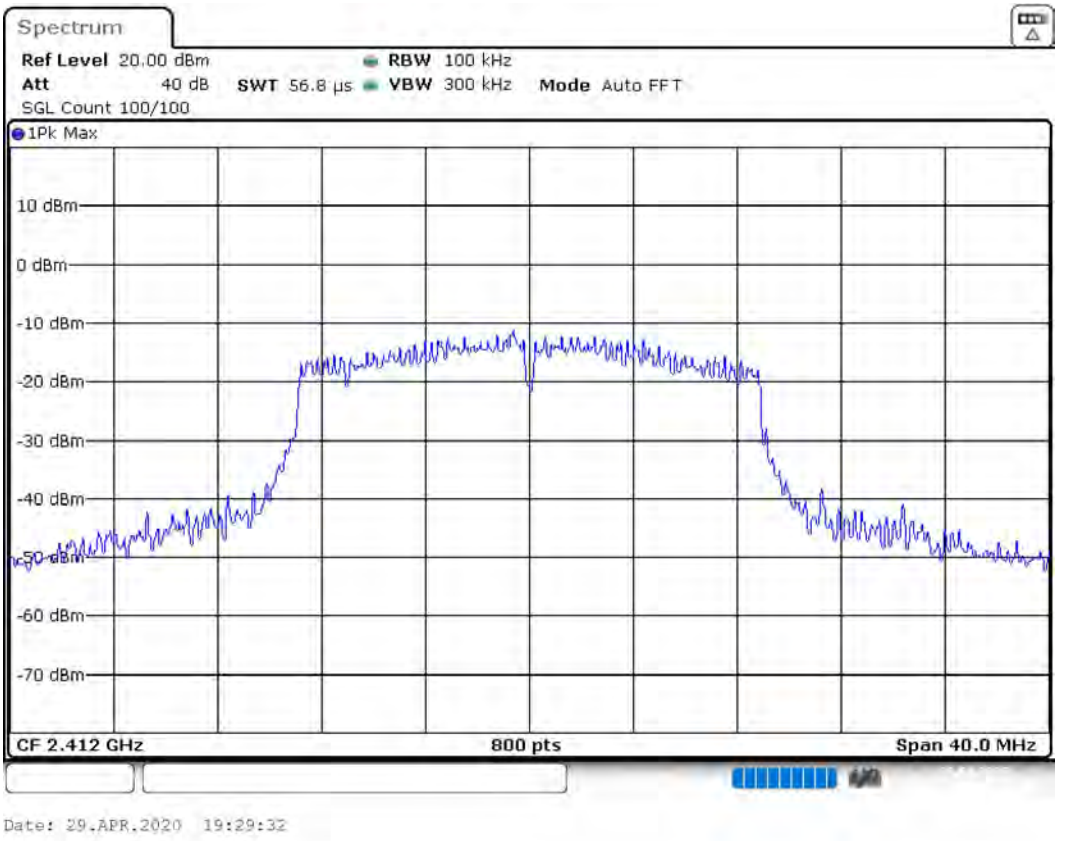
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.000000	0.500000	---	2403.175000	2420.175000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	1.6	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	20.000 dBm	20.000 dBm
Attenuation	40.000 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; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2411.375000	-2.176	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	20.000 dBm	20.000 dBm
Attenuation	40.000 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; 20.000 dBm; 20 MHz)

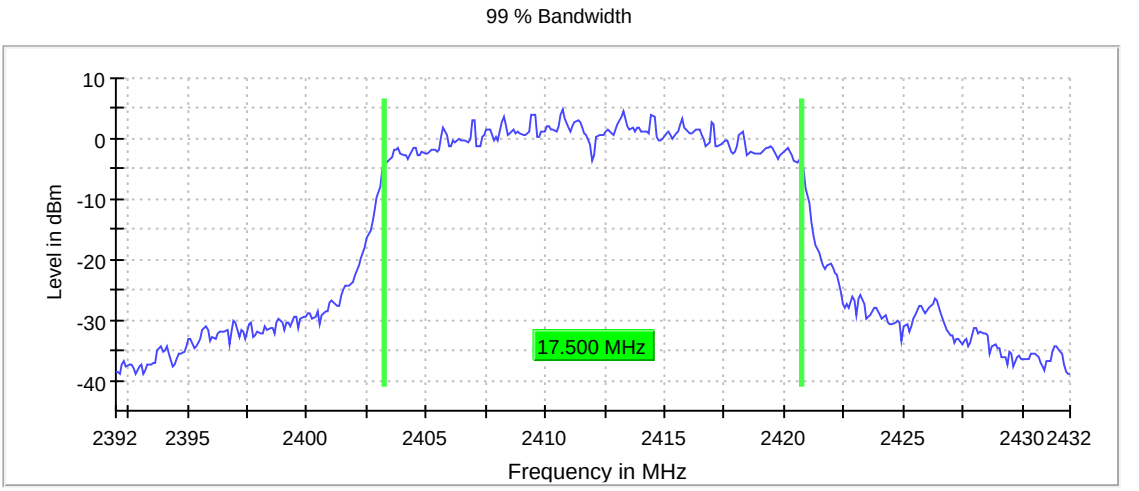
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.500000	---	---	2403.250000	2420.750000

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

DUT Frequency (MHz)	Result
2412.000000	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 2.412 GHz
400 pts
Span 40.0 MHz
Date: 29.APR.2020 19:29:51

Tx Spurious Emission (2412 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

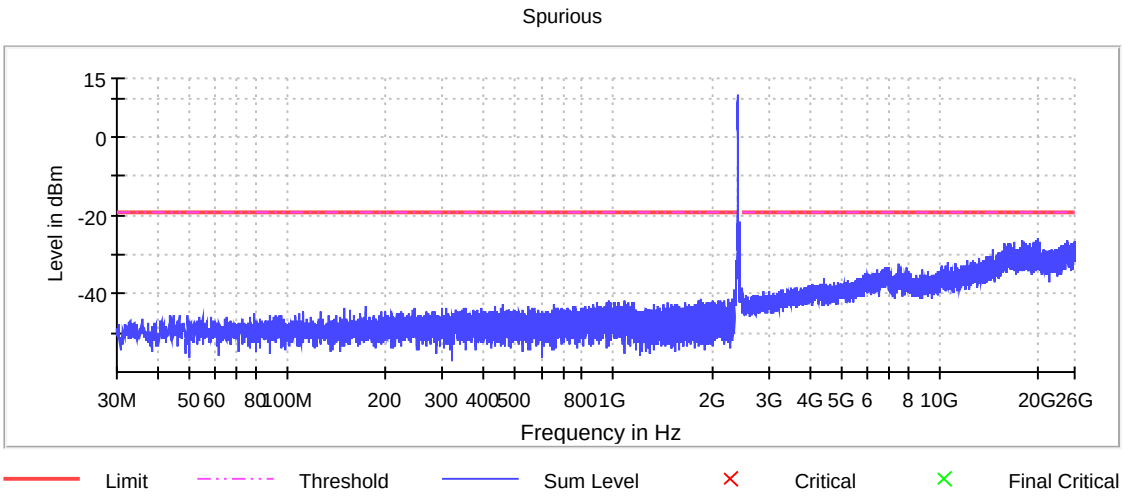
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

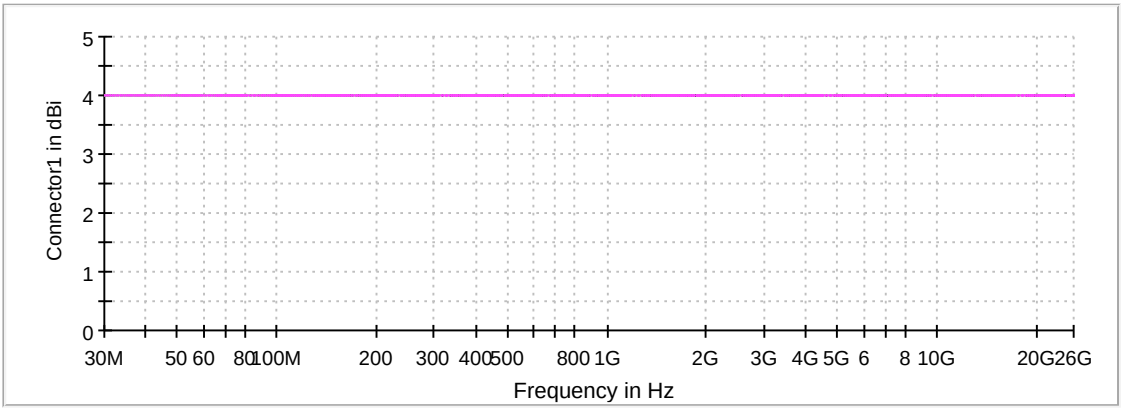
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2396.975000	-23.7	4.4	-19.3
2397.025000	-23.9	4.6	-19.3
2398.625000	-24.0	4.7	-19.3
2399.125000	-24.3	5.0	-19.3
2398.525000	-24.4	5.1	-19.3
2399.825000	-24.4	5.1	-19.3
2399.475000	-24.4	5.1	-19.3
2399.175000	-24.4	5.1	-19.3
2398.675000	-24.4	5.1	-19.3
2398.575000	-24.4	5.1	-19.3
2398.875000	-24.4	5.1	-19.3
2399.775000	-24.5	5.2	-19.3
2399.525000	-24.5	5.2	-19.3
2399.875000	-24.6	5.3	-19.3
2398.225000	-24.6	5.3	-19.3

Measurement Settings

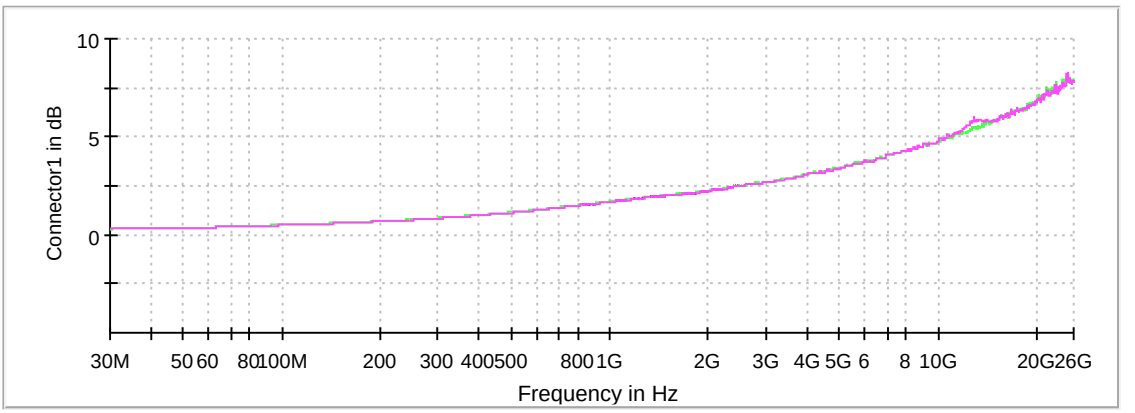
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2350.000000	1	1
2350.000000	2483.500000	2	1
2483.500000	26000.000000	1	1



Gain



Attenuation



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

Setting	Instrument Value	Target Value
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; 20.000 dBm; 20 MHz)

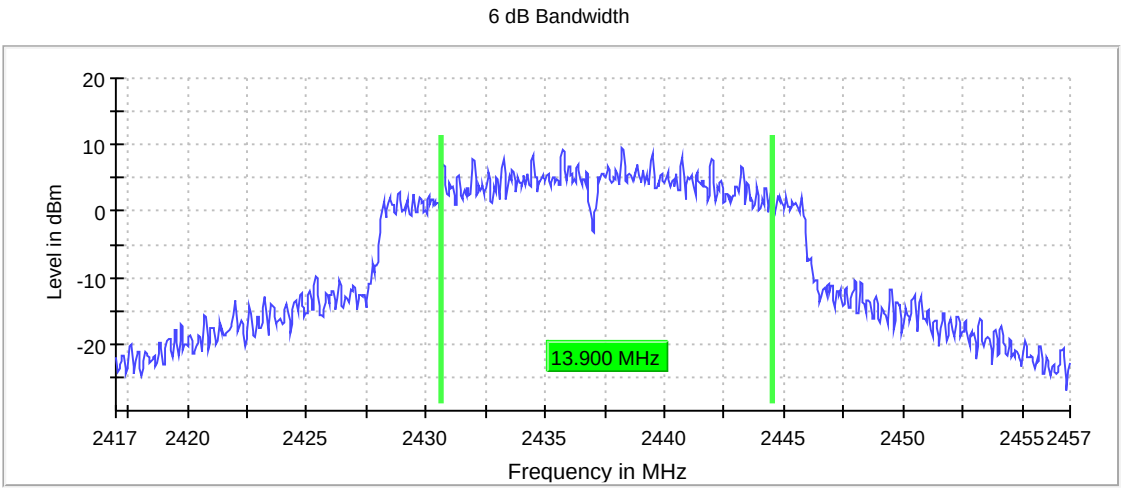
Customized settings.

6 dB Bandwidth

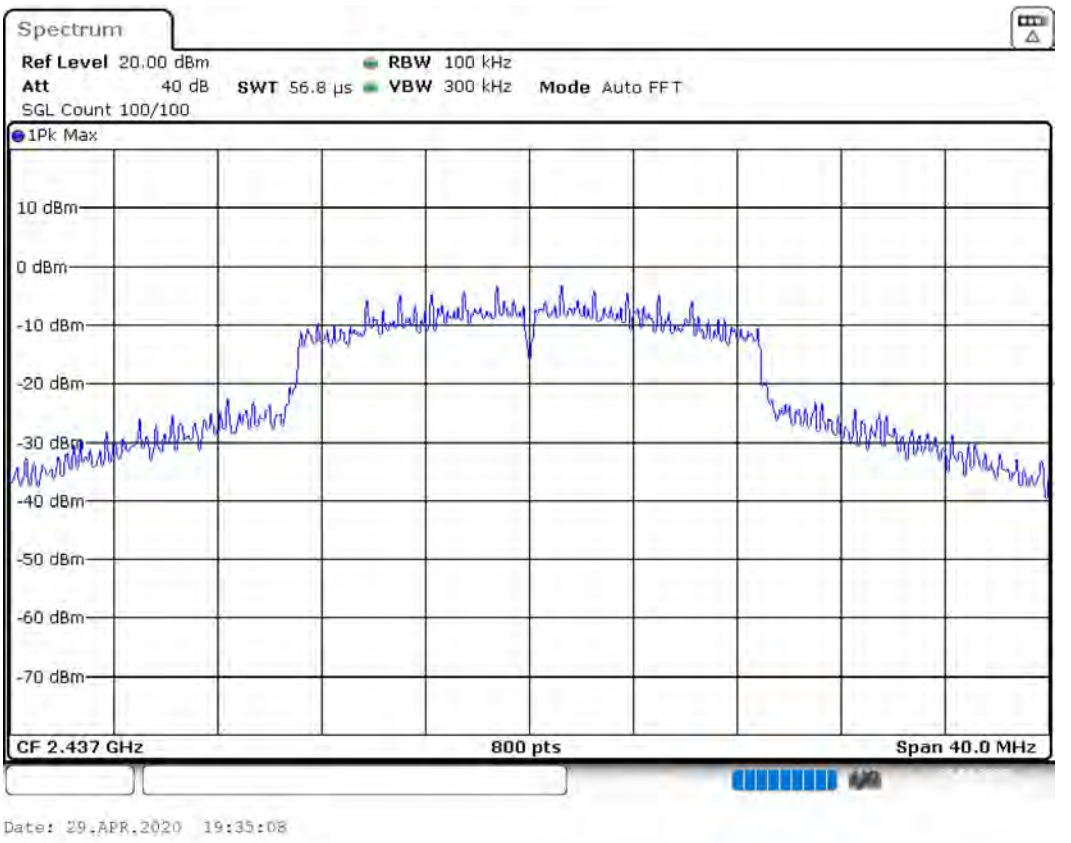
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	13.900000	0.500000	---	2430.625000	2444.525000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	9.4	PASS



Bandwidth


Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.437 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:35:08

Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 20 MHz)

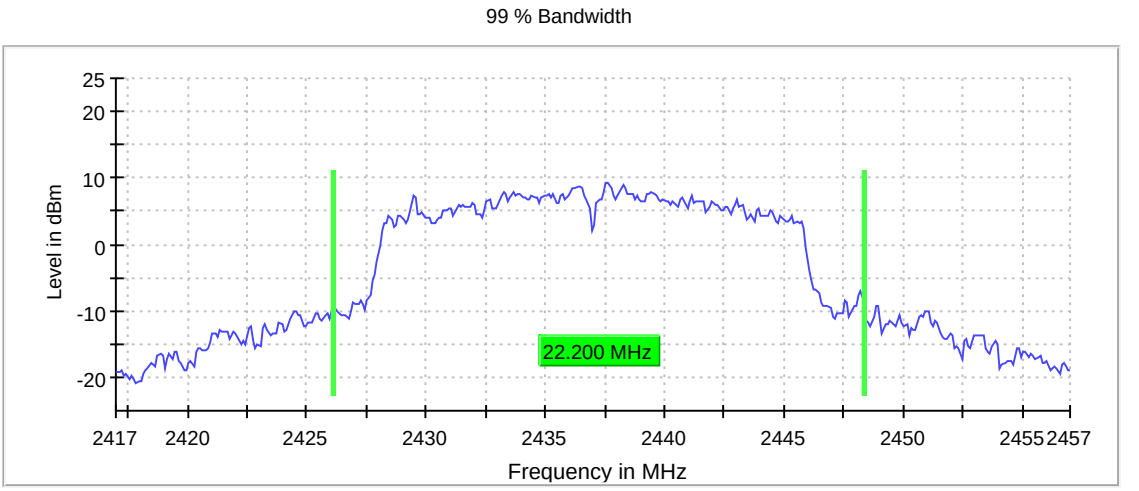
Customized settings.

99 % Bandwidth

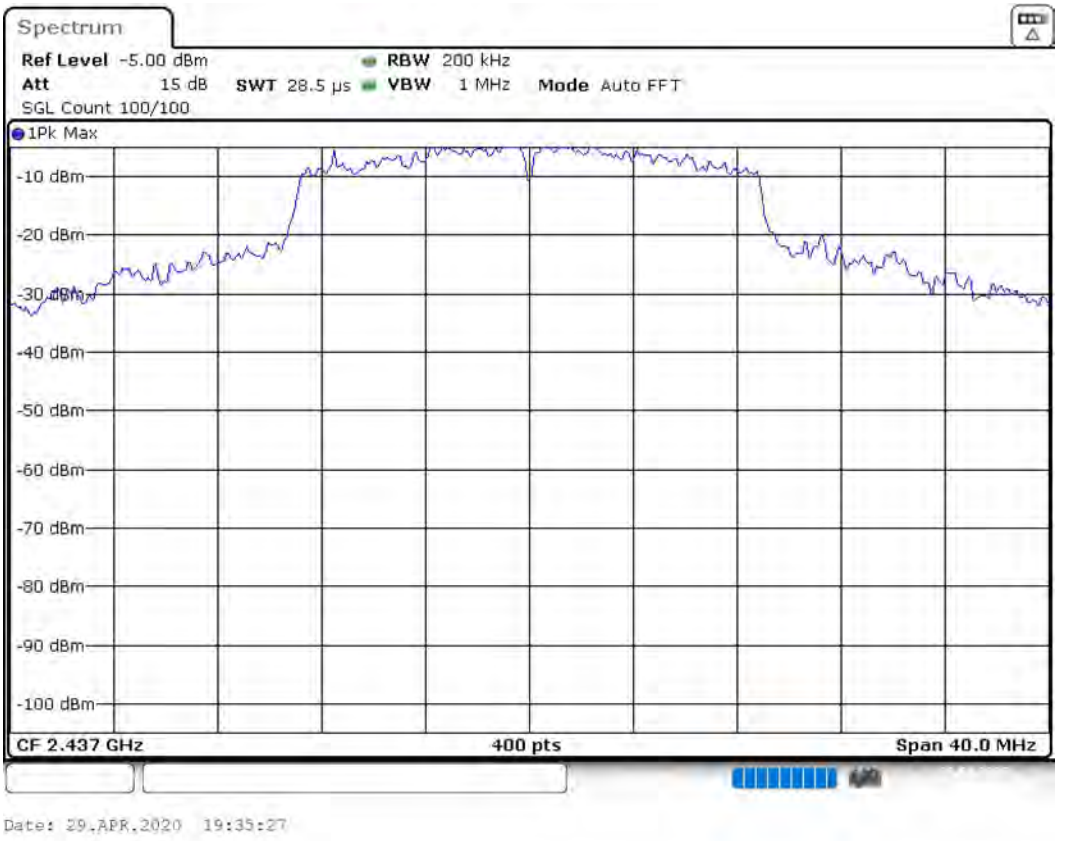
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	22.200000	---	---	2426.150000	2448.350000

(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: 29.APR.2020 19:35:27

Tx Spurious Emission (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

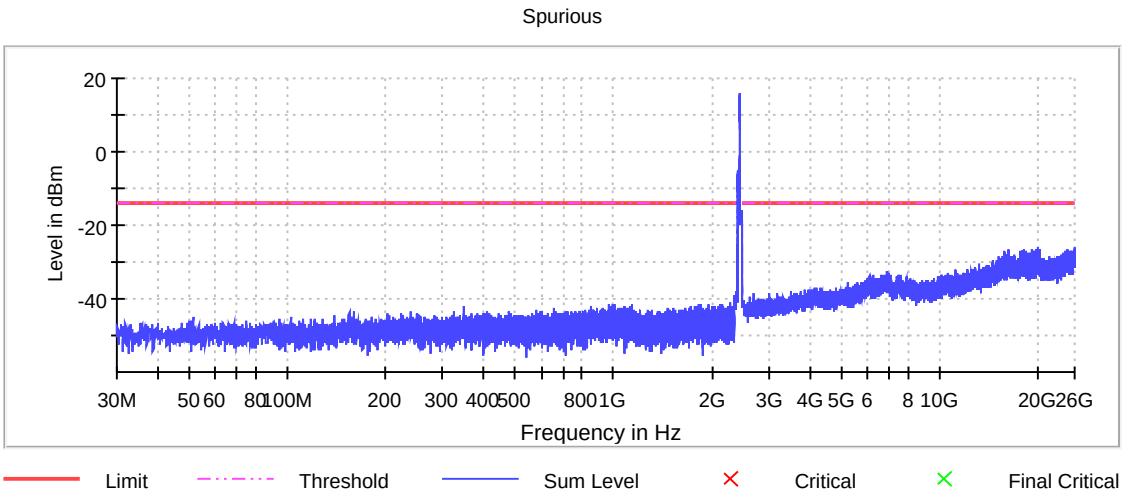
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

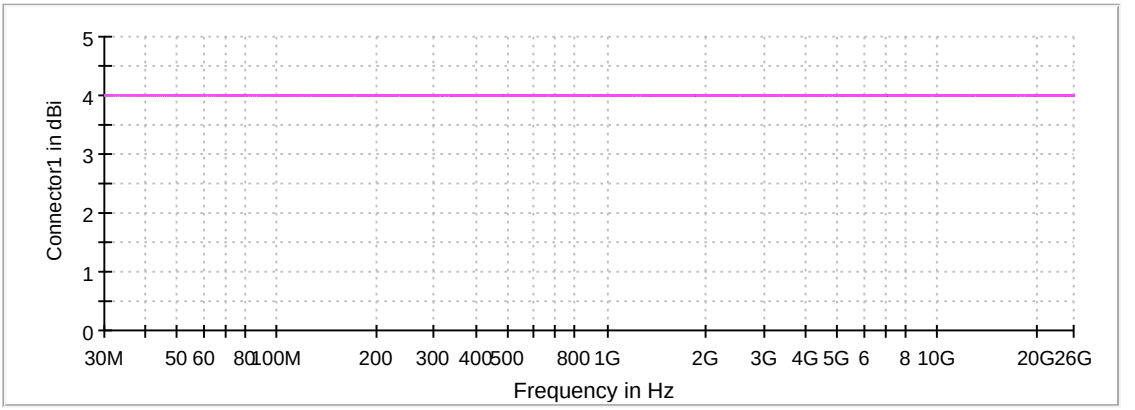
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19853.934322	-25.8	12.0	-13.8
25937.903683	-26.2	12.4	-13.8
19897.291514	-26.4	12.5	-13.8
19820.130410	-26.4	12.6	-13.8
24558.557084	-26.5	12.7	-13.8
18221.793249	-26.5	12.7	-13.8
19180.060678	-26.5	12.7	-13.8
24604.118879	-26.6	12.8	-13.8
16205.316389	-26.6	12.8	-13.8
20274.278624	-26.6	12.8	-13.8
19881.124426	-26.7	12.9	-13.8
18237.960337	-26.7	12.9	-13.8
19884.063896	-26.7	12.9	-13.8
25968.033257	-26.7	12.9	-13.8
25930.555006	-26.8	12.9	-13.8

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

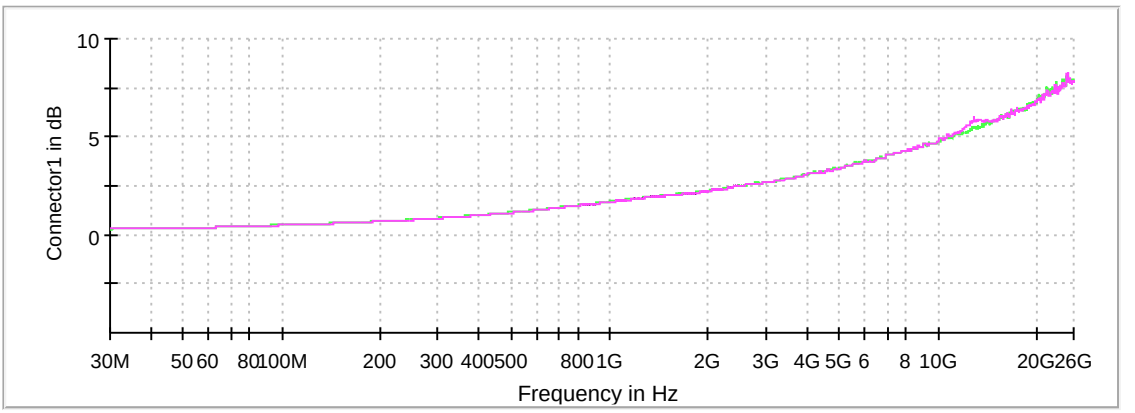


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

Minimum Emission Bandwidth 6 dB (2462 MHz; 20.000 dBm; 20 MHz)

Customized settings.

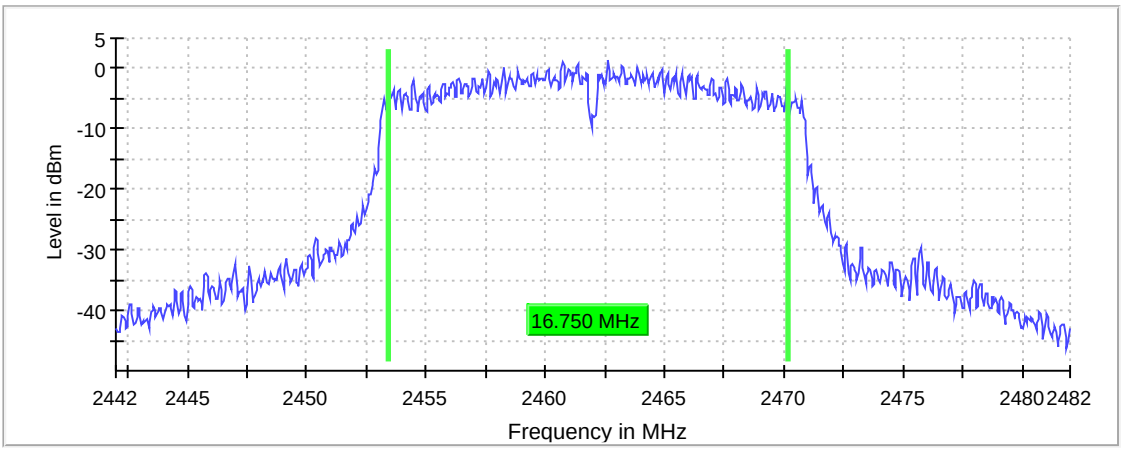
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.750000	0.500000	---	2453.425000	2470.175000

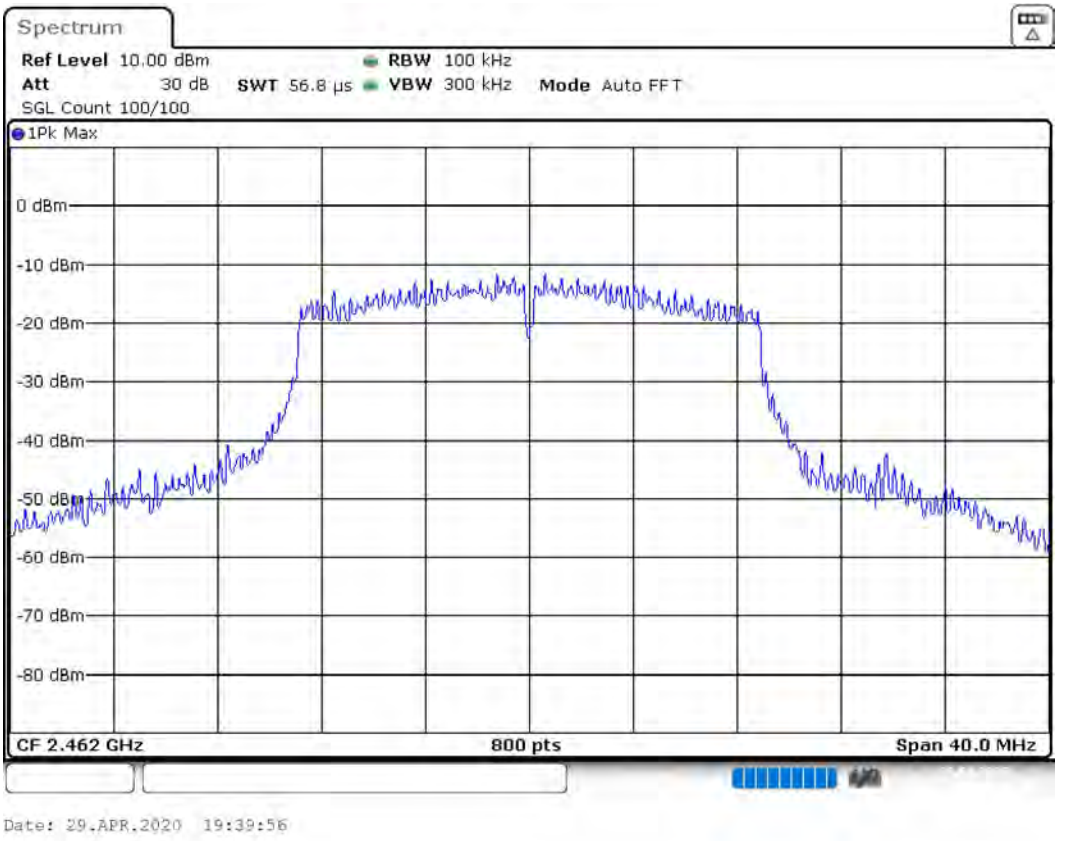
(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	1.2	PASS

6 dB Bandwidth



Bandwidth


Spectrum
Ref Level 10.00 dBm
RBW 100 kHz
Att 30 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.462 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:39:56

Occupied Channel Bandwidth 99% (2462 MHz; 20.000 dBm; 20 MHz)

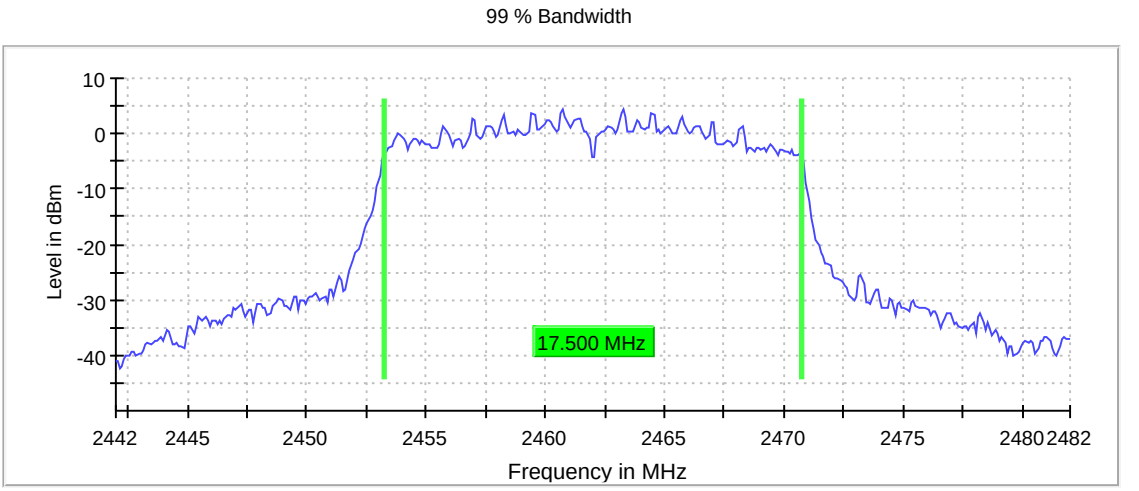
Customized settings.

99 % Bandwidth

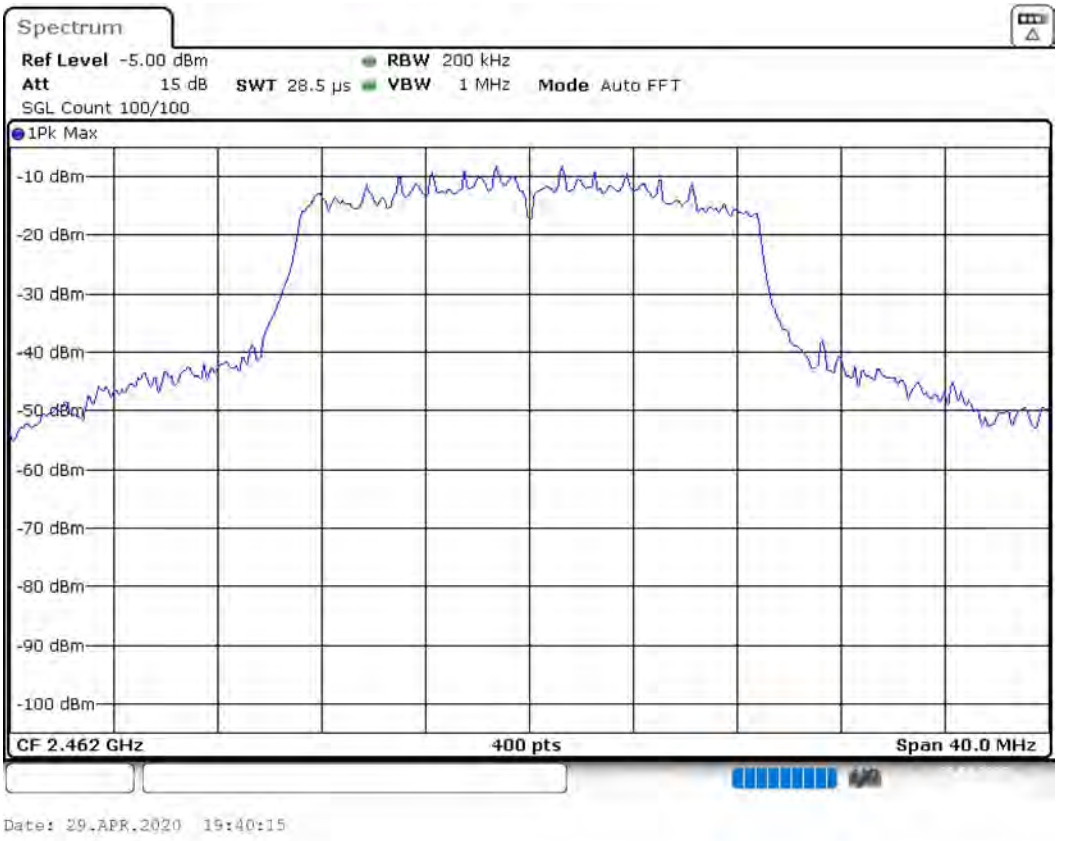
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.500000	---	---	2453.250000	2470.750000

(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: 29.APR.2020 19:40:15

Tx Spurious Emission (2462 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

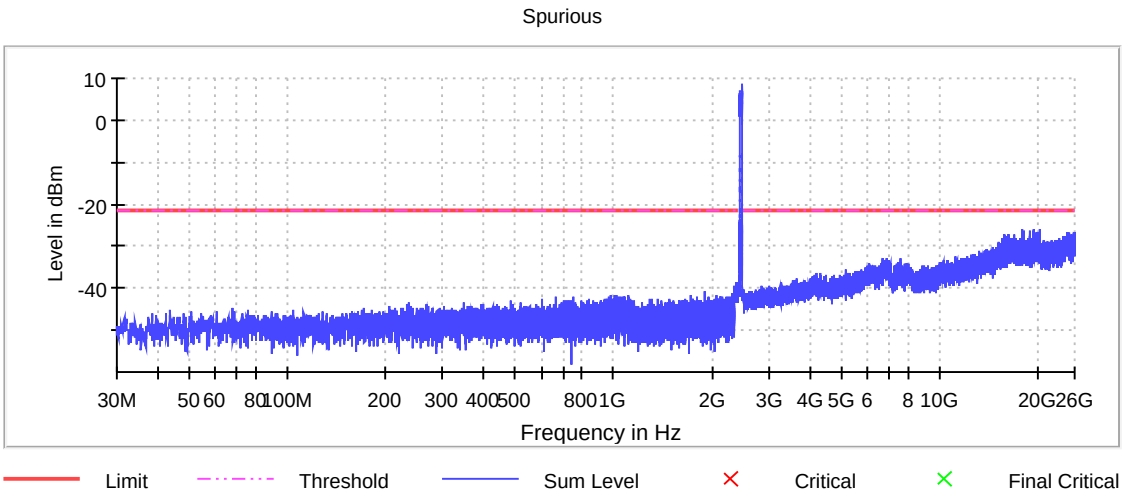
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

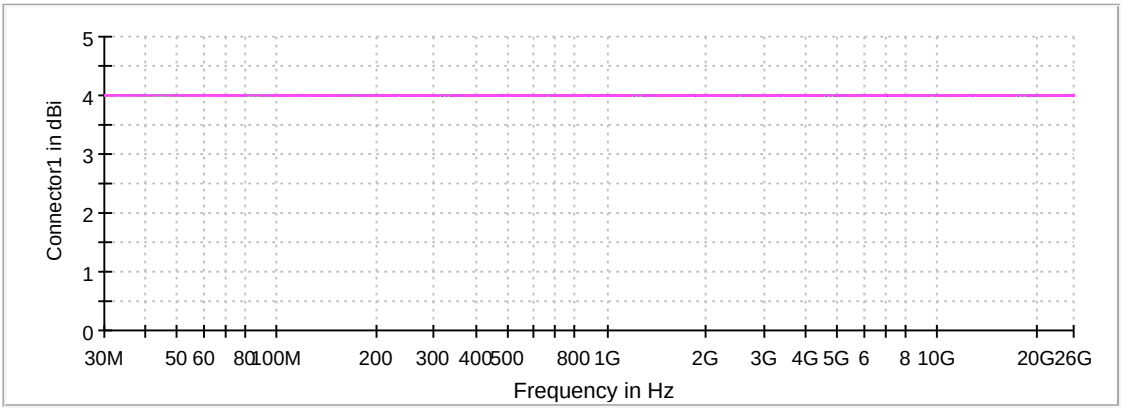
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
20239.739844	-25.7	4.3	-21.4
19540.880699	-26.0	4.7	-21.4
17902.125816	-26.1	4.7	-21.4
18891.257687	-26.2	4.8	-21.4
19557.047788	-26.4	5.0	-21.4
19505.607051	-26.4	5.0	-21.4
18204.891292	-26.5	5.1	-21.4
25929.820138	-26.6	5.2	-21.4
19873.040882	-26.6	5.2	-21.4
18210.035366	-26.6	5.3	-21.4
20188.299108	-26.6	5.3	-21.4
19906.109926	-26.6	5.3	-21.4
25959.949713	-26.7	5.3	-21.4
25861.477446	-26.7	5.3	-21.4
25922.471462	-26.7	5.3	-21.4

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

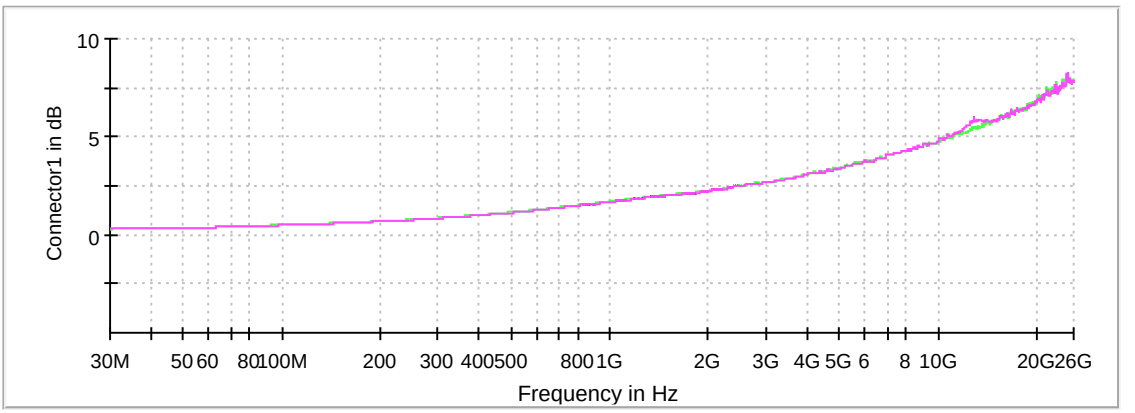


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

Minimum Emission Bandwidth 6 dB (2422 MHz; 20.000 dBm; 40 MHz)

Customized settings.

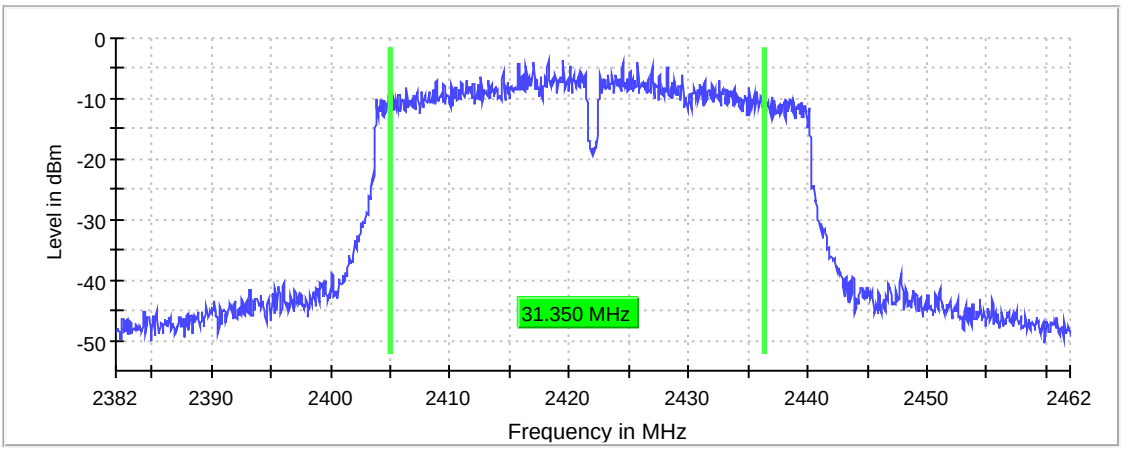
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	31.350000	0.500000	---	2405.075000	2436.425000

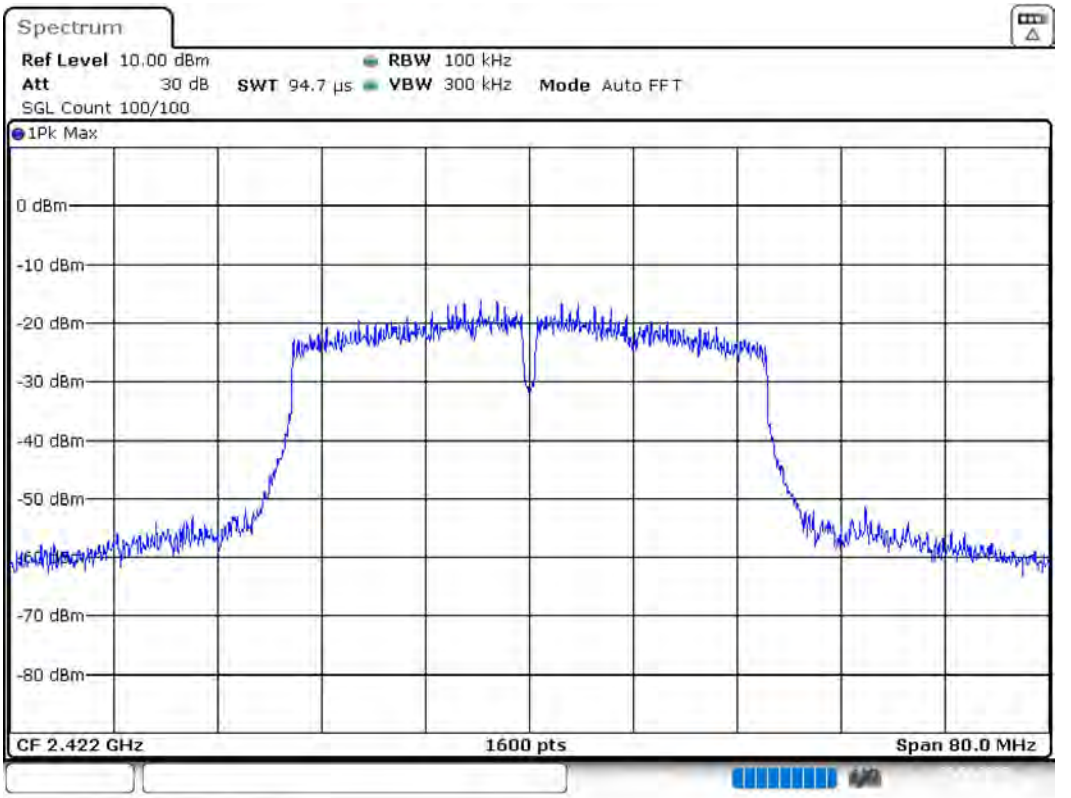
(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-3.5	PASS

6 dB Bandwidth



Bandwidth


Spectrum
Ref Level 10.00 dBm
RBW 100 kHz
Att 30 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-70 dBm
-80 dBm
CF 2.422 GHz
1600 pts
Span 80.0 MHz
Date: 29.APR.2020 19:47:49

Occupied Channel Bandwidth 99% (2422 MHz; 20.000 dBm; 40 MHz)

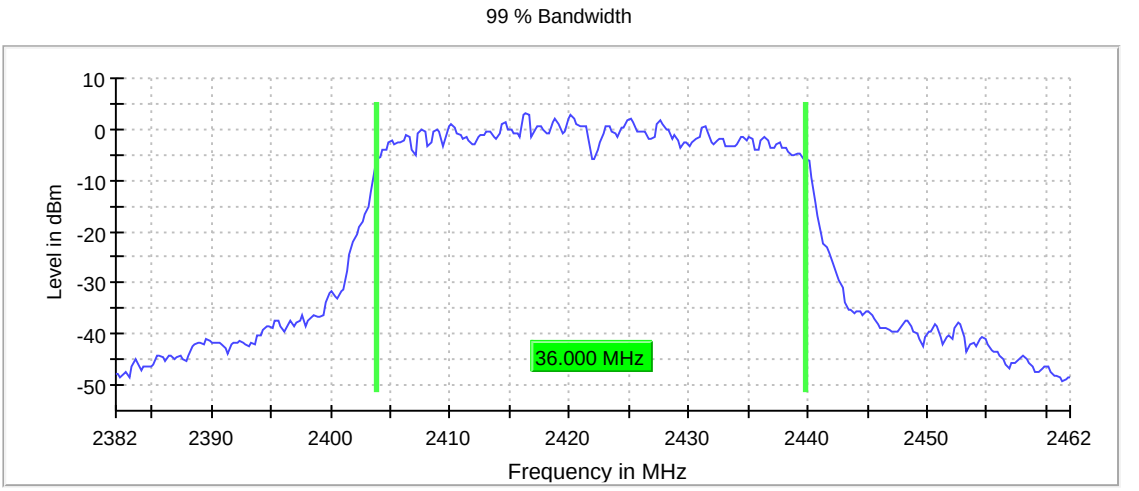
Customized settings.

99 % Bandwidth

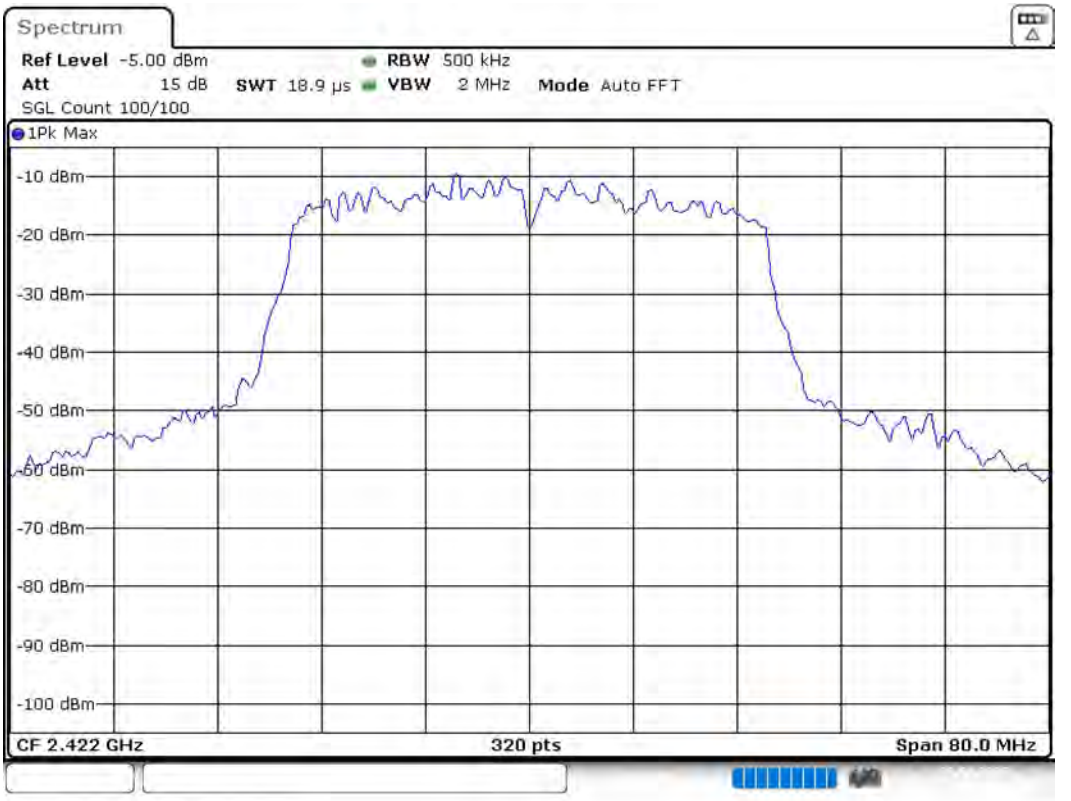
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.000000	---	---	2403.875000	2439.875000

(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: 29.APR.2020 19:48:08

Tx Spurious Emission (2422 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

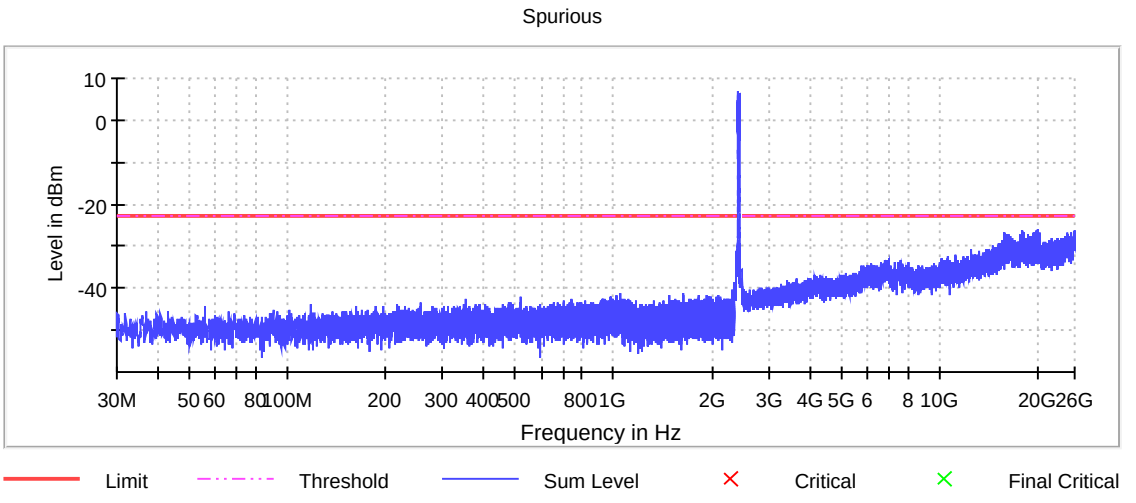
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

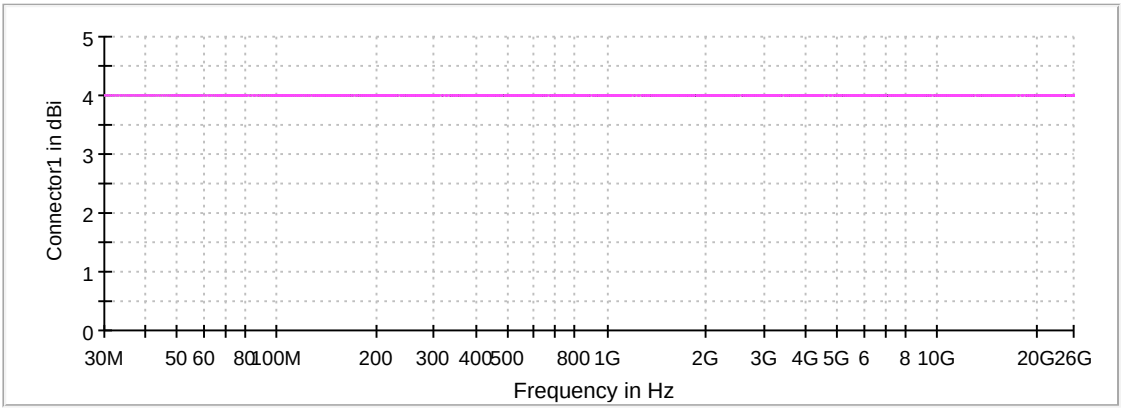
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19864.222470	-25.8	2.9	-22.9
19859.078396	-26.0	3.0	-22.9
19887.003367	-26.2	3.3	-22.9
19838.502101	-26.3	3.3	-22.9
17905.065287	-26.3	3.3	-22.9
17902.860684	-26.3	3.3	-22.9
19920.807279	-26.4	3.5	-22.9
19913.458603	-26.4	3.5	-22.9
25914.387918	-26.5	3.5	-22.9
25860.007711	-26.5	3.6	-22.9
18198.277484	-26.6	3.7	-22.9
19577.624082	-26.6	3.7	-22.9
19860.548131	-26.7	3.7	-22.9
18218.853778	-26.7	3.8	-22.9
25981.260875	-26.7	3.8	-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

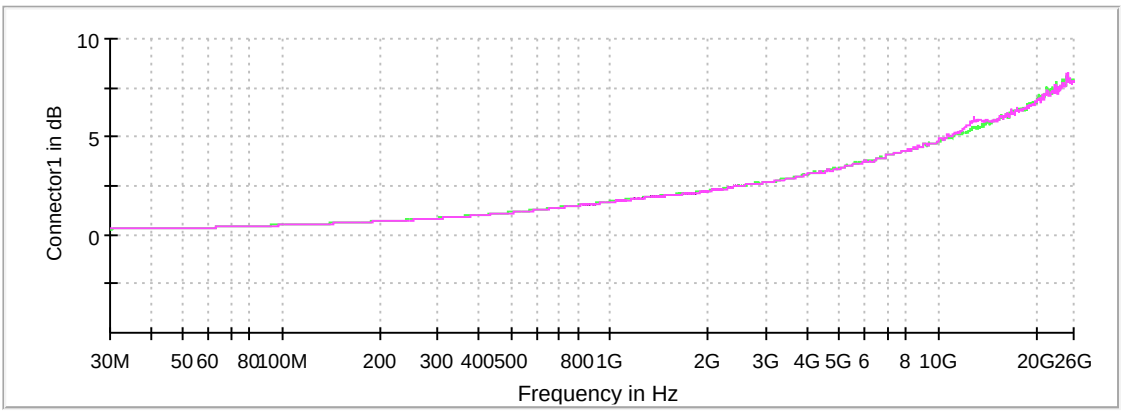


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 40 MHz)

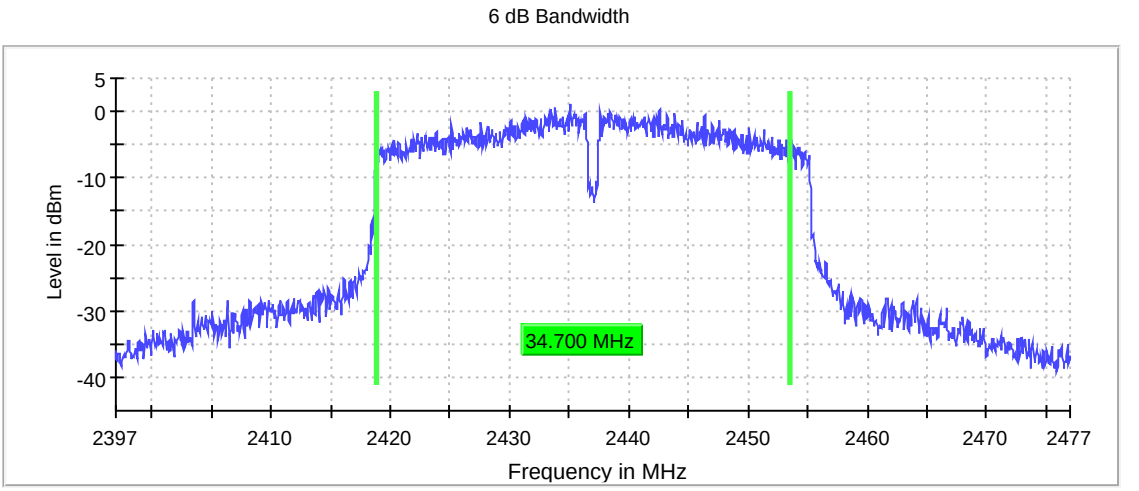
Customized settings.

6 dB Bandwidth

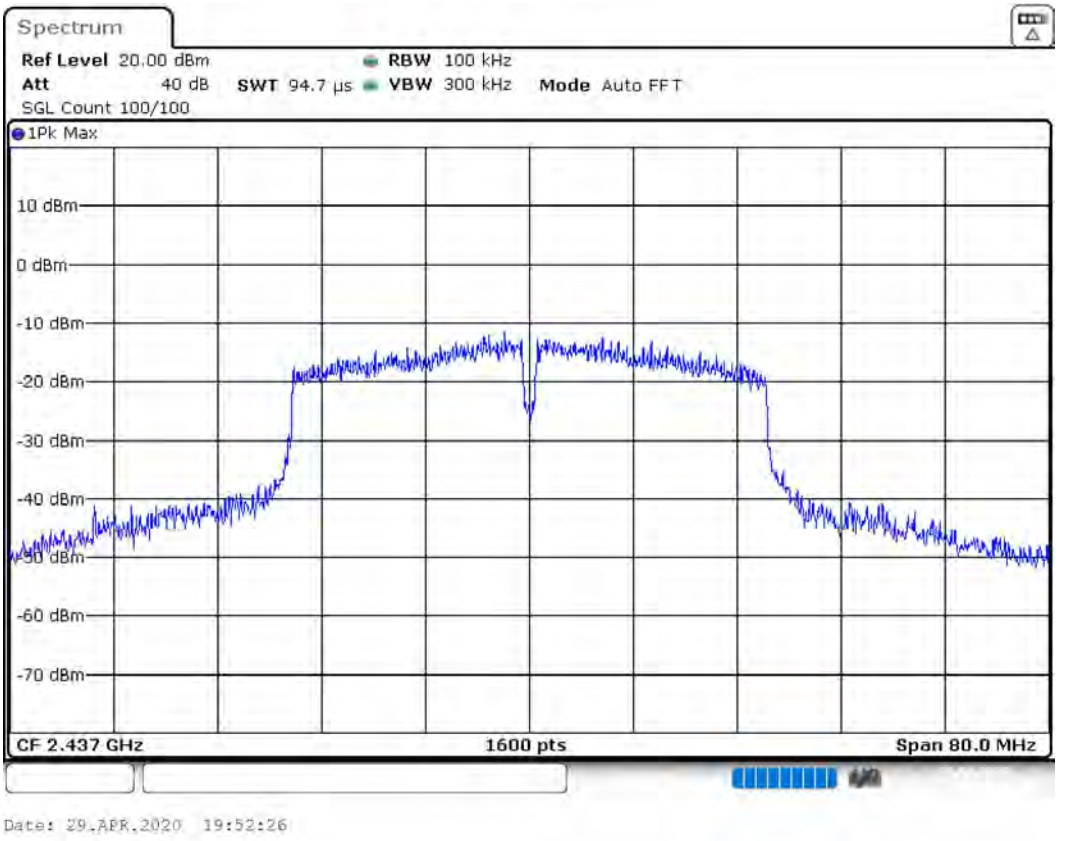
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	34.700000	0.500000	---	2418.825000	2453.525000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	1.1	PASS



Bandwidth


Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.437 GHz
1600 pts
Span 80.0 MHz
Date: 29.APR.2020 19:52:26

Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 40 MHz)

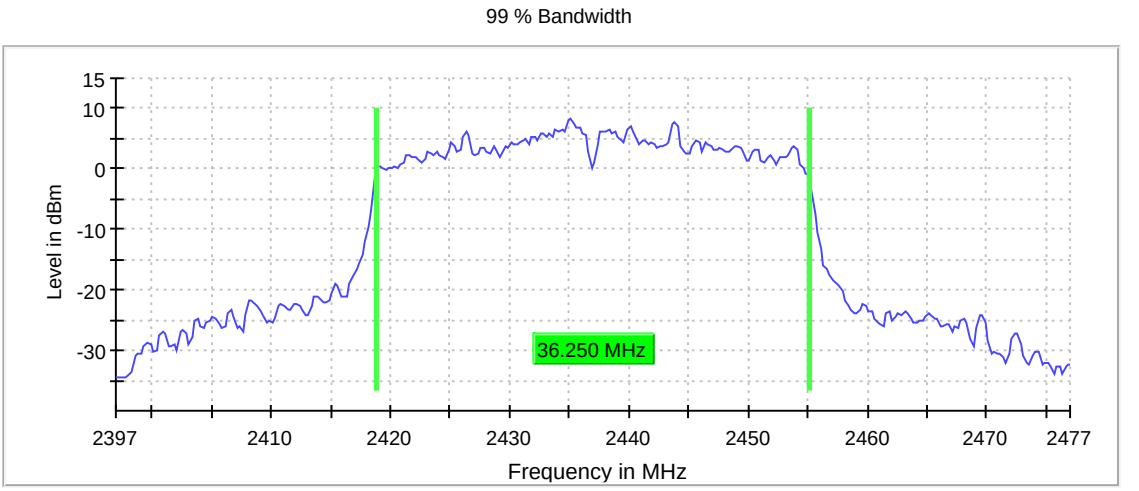
Customized settings.

99 % Bandwidth

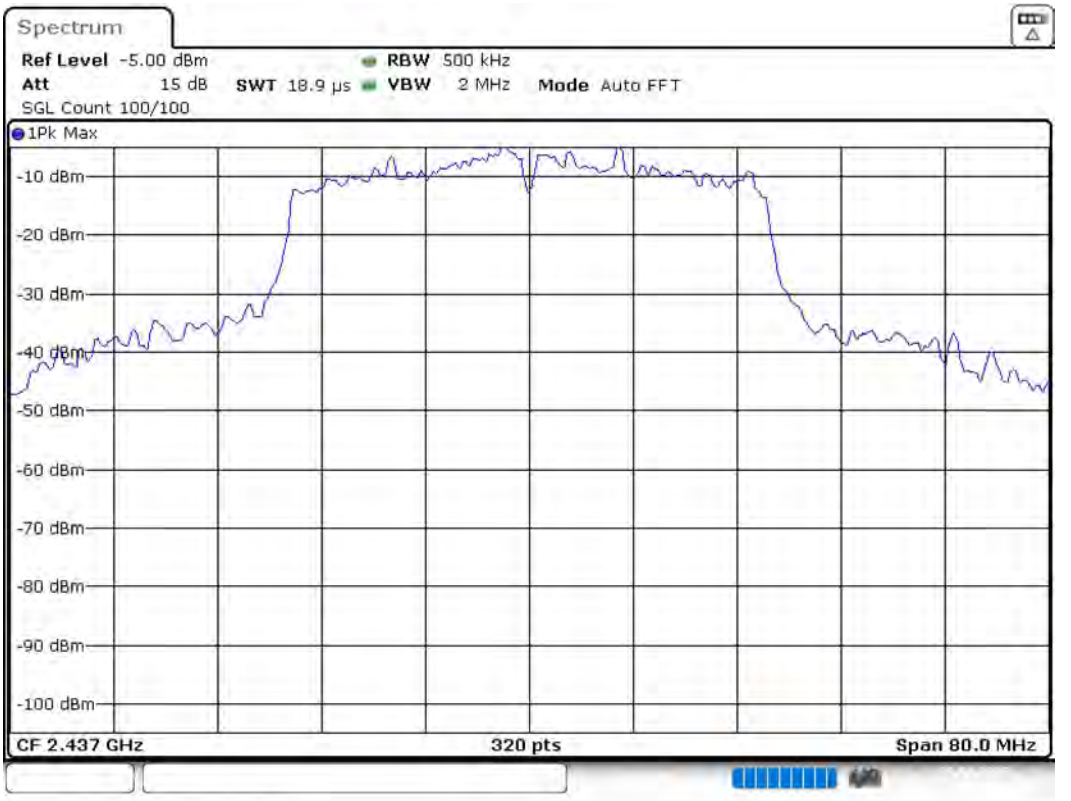
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.250000	---	---	2418.875000	2455.125000

(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: 29.APR.2020 19:52:44

Tx Spurious Emission (2437 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

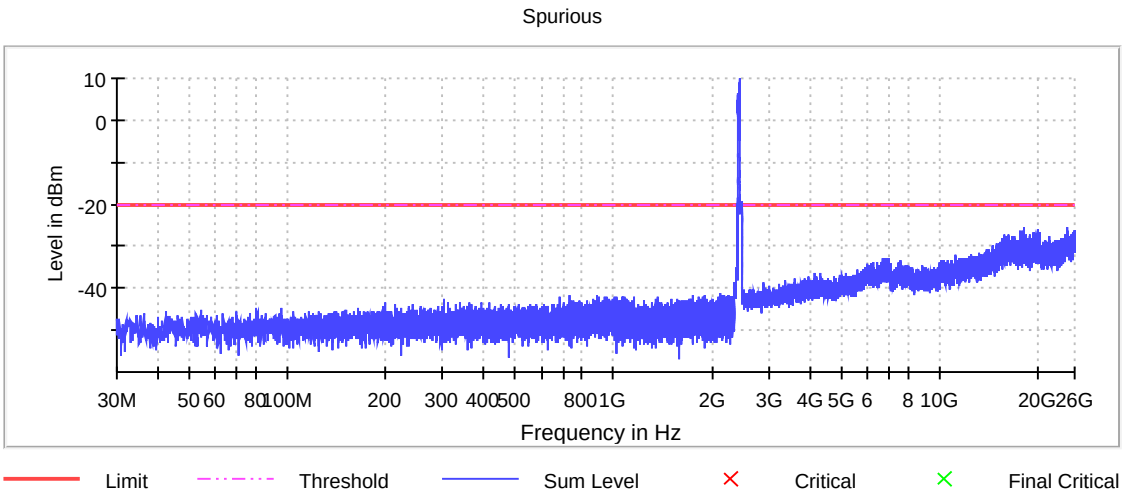
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

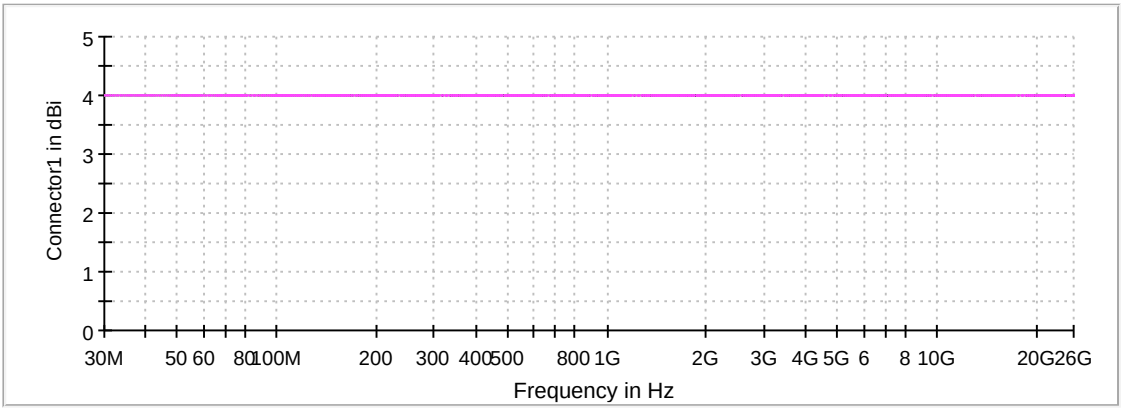
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
18215.179440	-25.3	5.2	-20.1
24668.052366	-25.5	5.5	-20.1
19898.026382	-25.9	5.9	-20.1
25949.661565	-26.1	6.1	-20.1
17855.094286	-26.1	6.1	-20.1
19870.836279	-26.2	6.1	-20.1
17603.769546	-26.2	6.2	-20.1
24637.187924	-26.4	6.3	-20.1
25951.131301	-26.4	6.3	-20.1
25896.751094	-26.4	6.3	-20.1
19886.268499	-26.4	6.3	-20.1
2399.525000	-26.4	6.4	-20.1
18234.285999	-26.4	6.4	-20.1
2399.475000	-26.4	6.4	-20.1
25913.653050	-26.5	6.4	-20.1

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

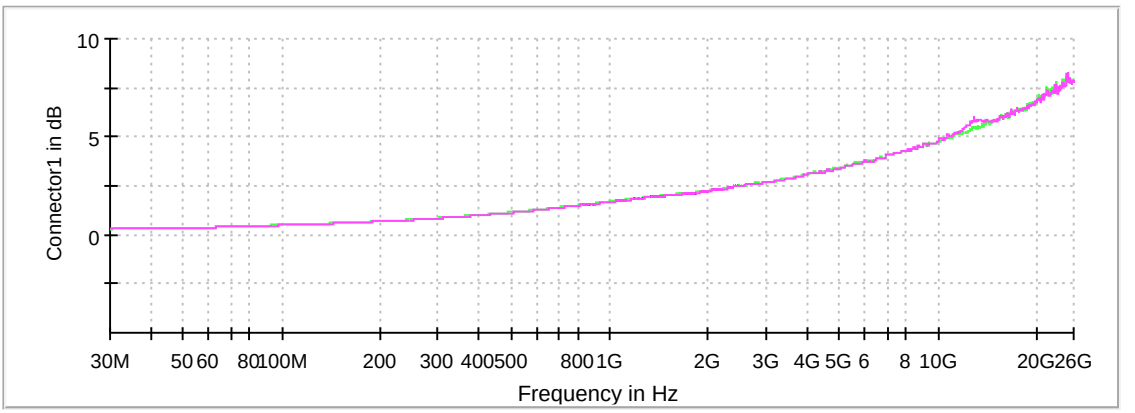


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

Minimum Emission Bandwidth 6 dB (2452 MHz; 20.000 dBm; 40 MHz)

Customized settings.

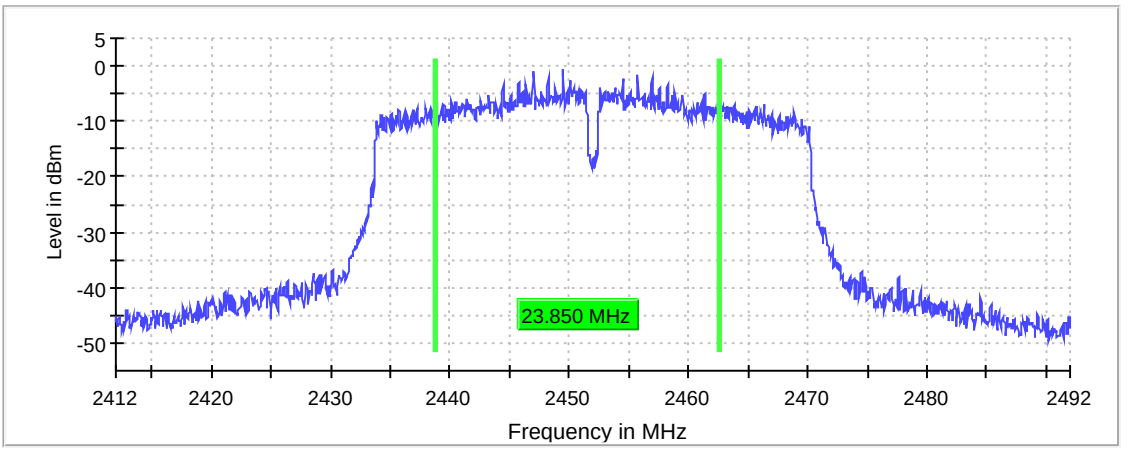
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	23.850000	0.500000	---	2438.825000	2462.675000

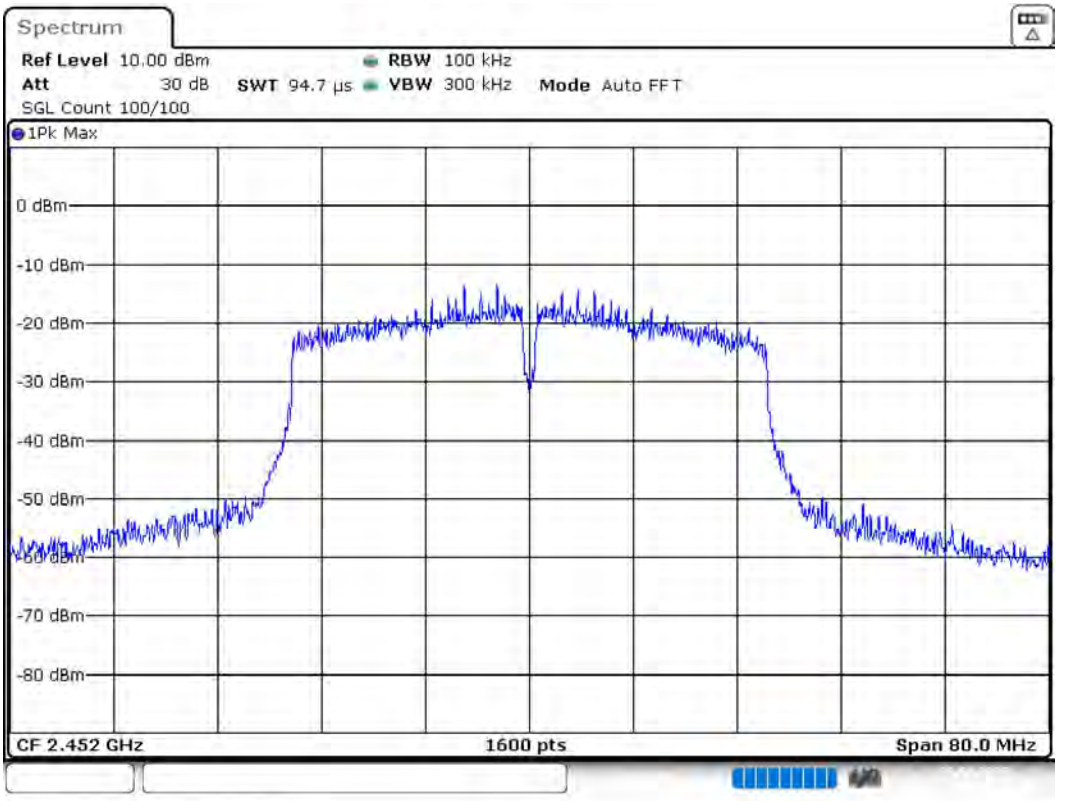
(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-0.8	PASS

6 dB Bandwidth



Bandwidth


Spectrum
Ref Level 10.00 dBm
RBW 100 kHz
Att 30 dB
SWT 94.7 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-70 dBm
-80 dBm
CF 2.452 GHz
1600 pts
Span 80.0 MHz
Date: 29.APR.2020 20:00:06

Occupied Channel Bandwidth 99% (2452 MHz; 20.000 dBm; 40 MHz)

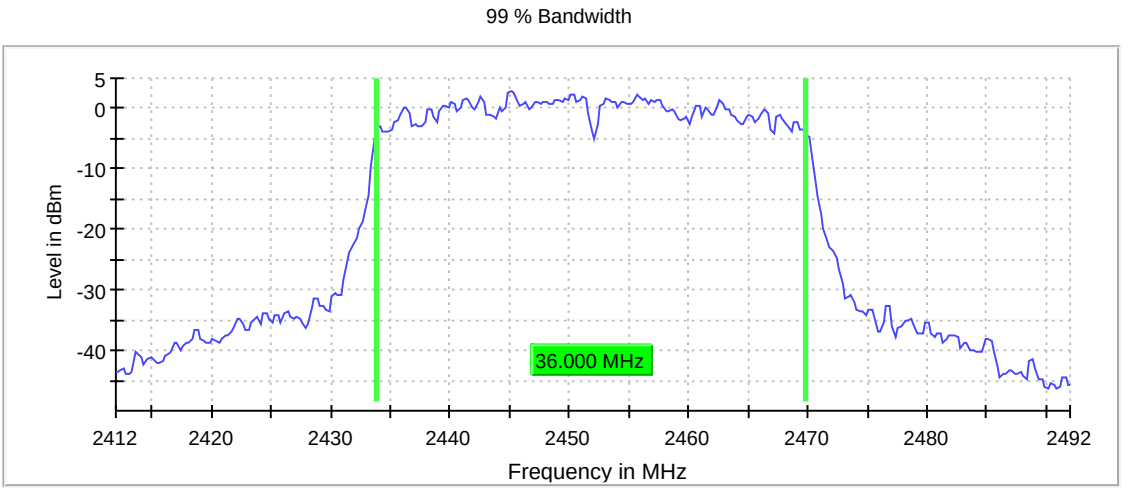
Customized settings.

99 % Bandwidth

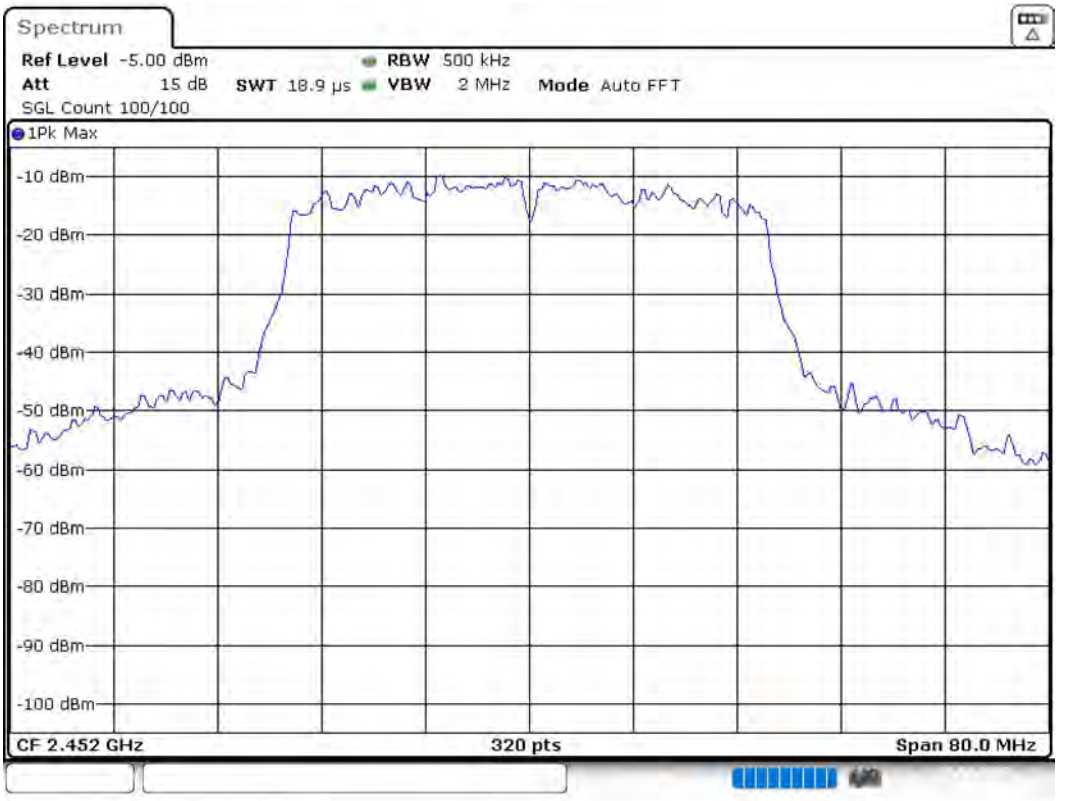
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	36.000000	---	---	2433.875000	2469.875000

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

DUT Frequency (MHz)	Result
2452.000000	PASS



Bandwidth


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: 29.APR.2020 20:00:24

Tx Spurious Emission (2452 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

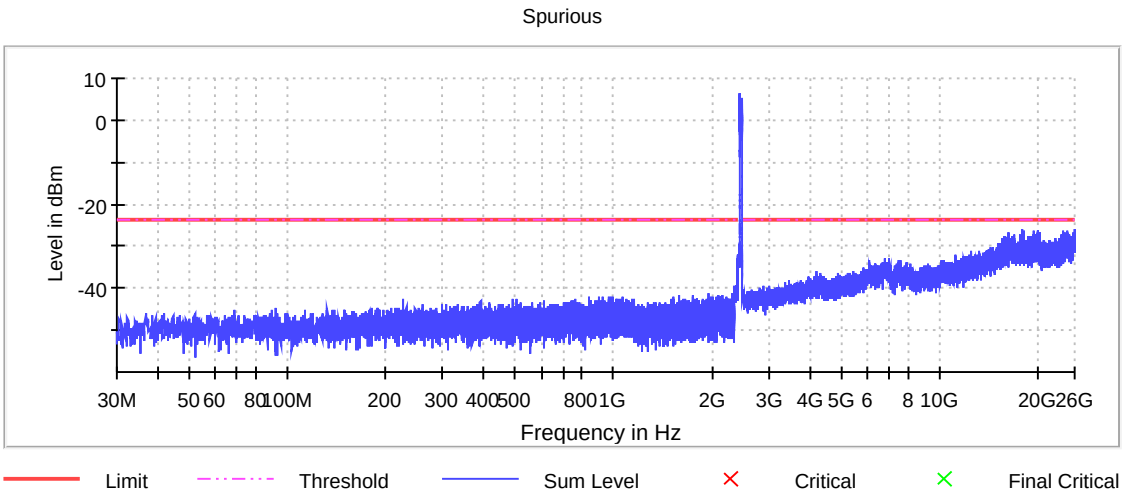
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

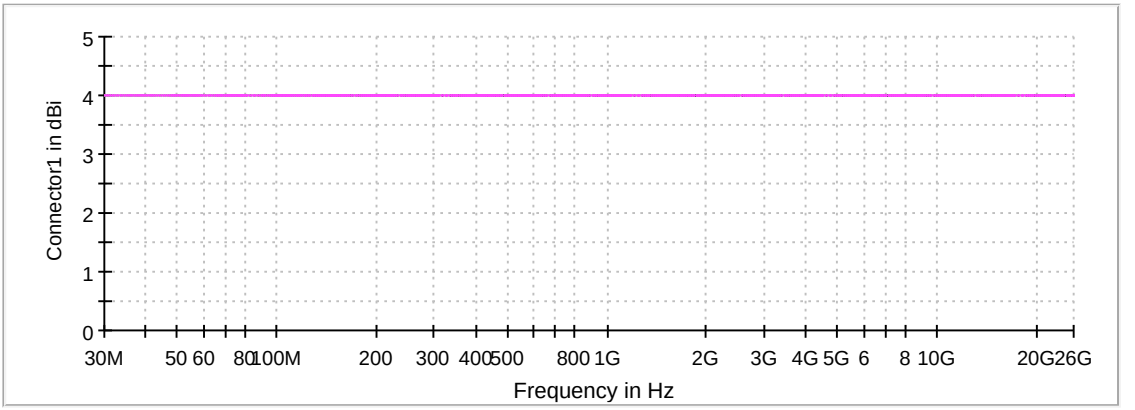
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
17868.321904	-26.0	2.5	-23.5
25991.549022	-26.0	2.5	-23.5
17864.647566	-26.2	2.7	-23.5
19506.341919	-26.3	2.7	-23.5
23972.867559	-26.3	2.8	-23.5
24715.083896	-26.4	2.9	-23.5
19918.602676	-26.4	2.9	-23.5
17865.382433	-26.4	2.9	-23.5
18233.551131	-26.5	3.0	-23.5
19886.268499	-26.5	3.0	-23.5
20239.739844	-26.6	3.1	-23.5
25946.722095	-26.6	3.1	-23.5
25886.462946	-26.6	3.1	-23.5
25924.676065	-26.6	3.1	-23.5
25921.001727	-26.6	3.1	-23.5

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

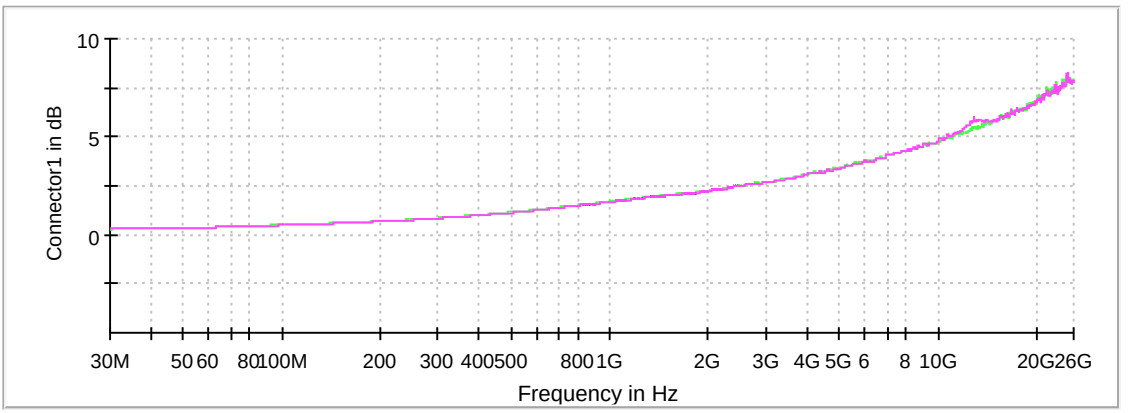


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Minimum Emission Bandwidth 6 dB	2412.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	20.0	20.000000	PASS
Tx Spurious Emission	2437.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	20.0	20.000000	PASS

Minimum Emission Bandwidth 6 dB (2412 MHz; 20.000 dBm; 20 MHz)

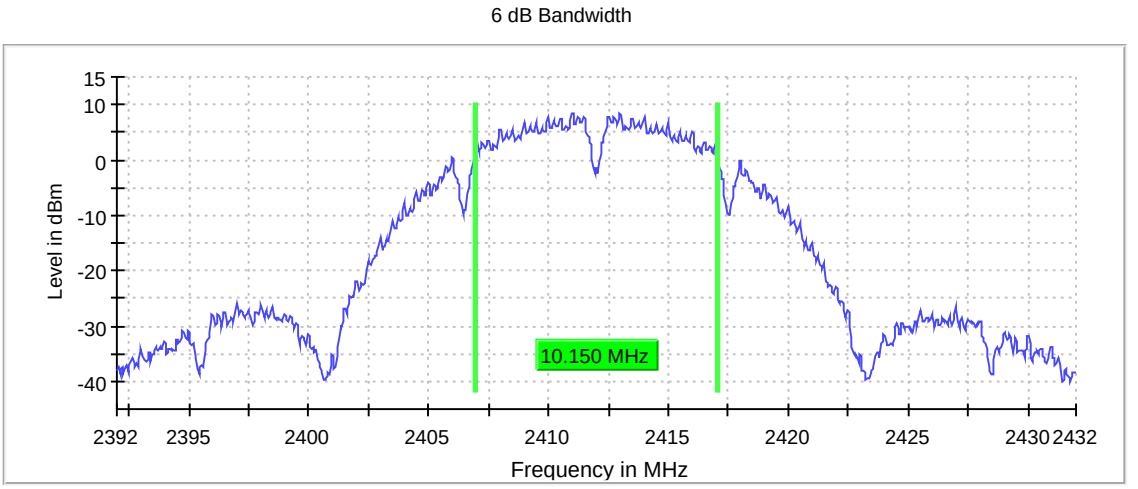
Customized settings.

6 dB Bandwidth

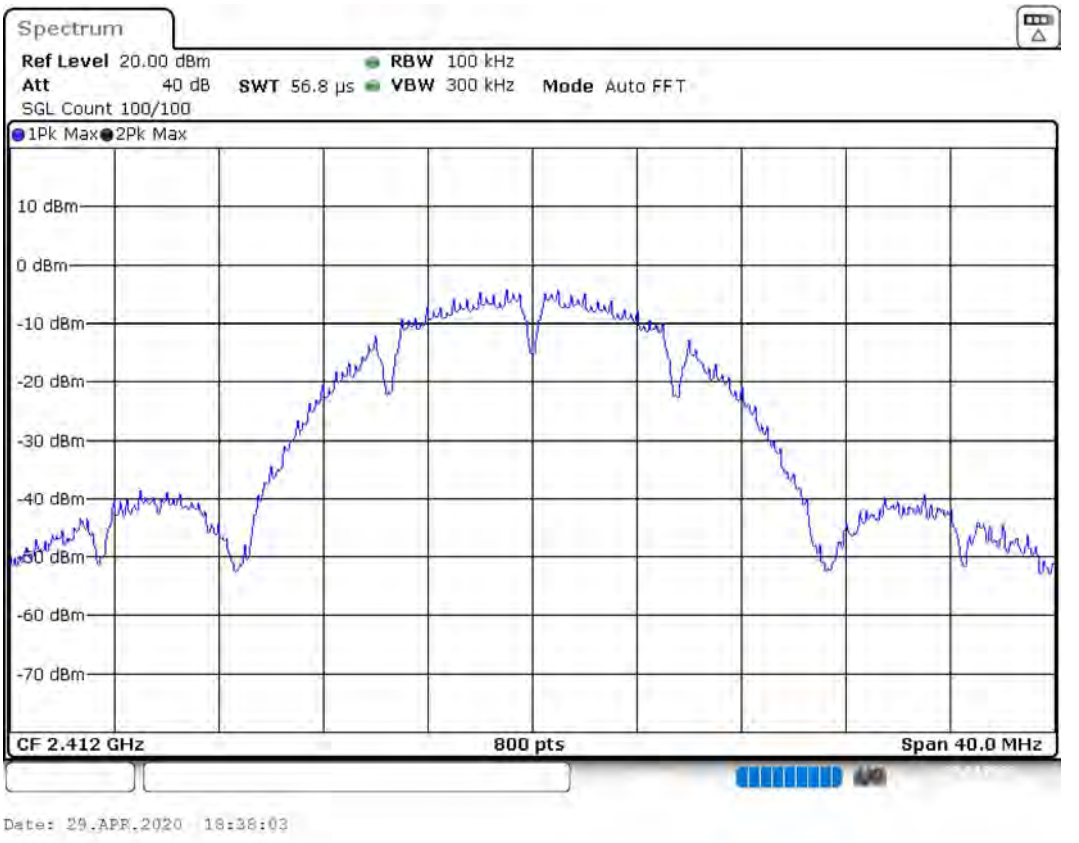
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	10.150000	0.500000	---	2406.925000	2417.075000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	8.4	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	20.000 dBm	20.000 dBm
Attenuation	40.000 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

Occupied Channel Bandwidth 99% (2412 MHz; 20.000 dBm; 20 MHz)

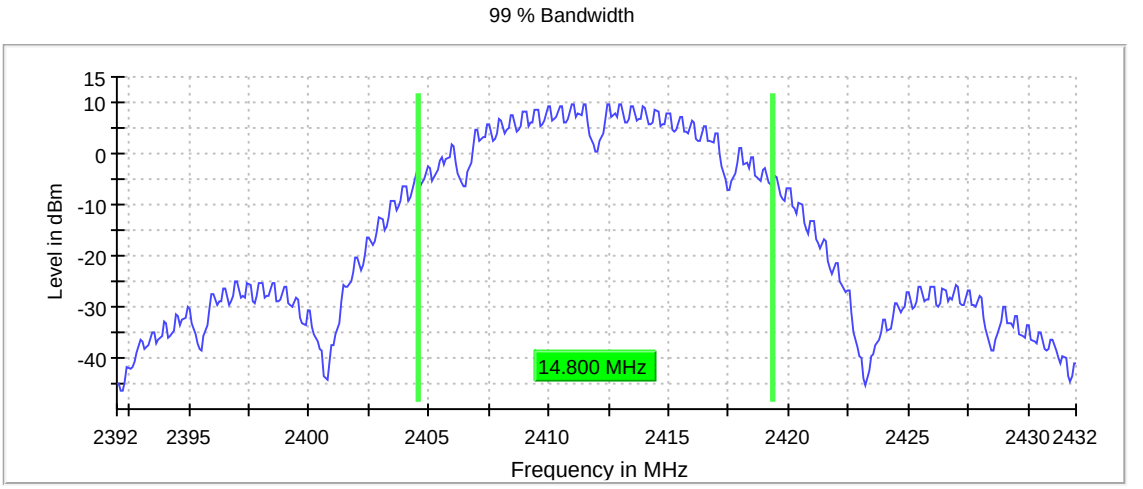
Customized settings.

99 % Bandwidth

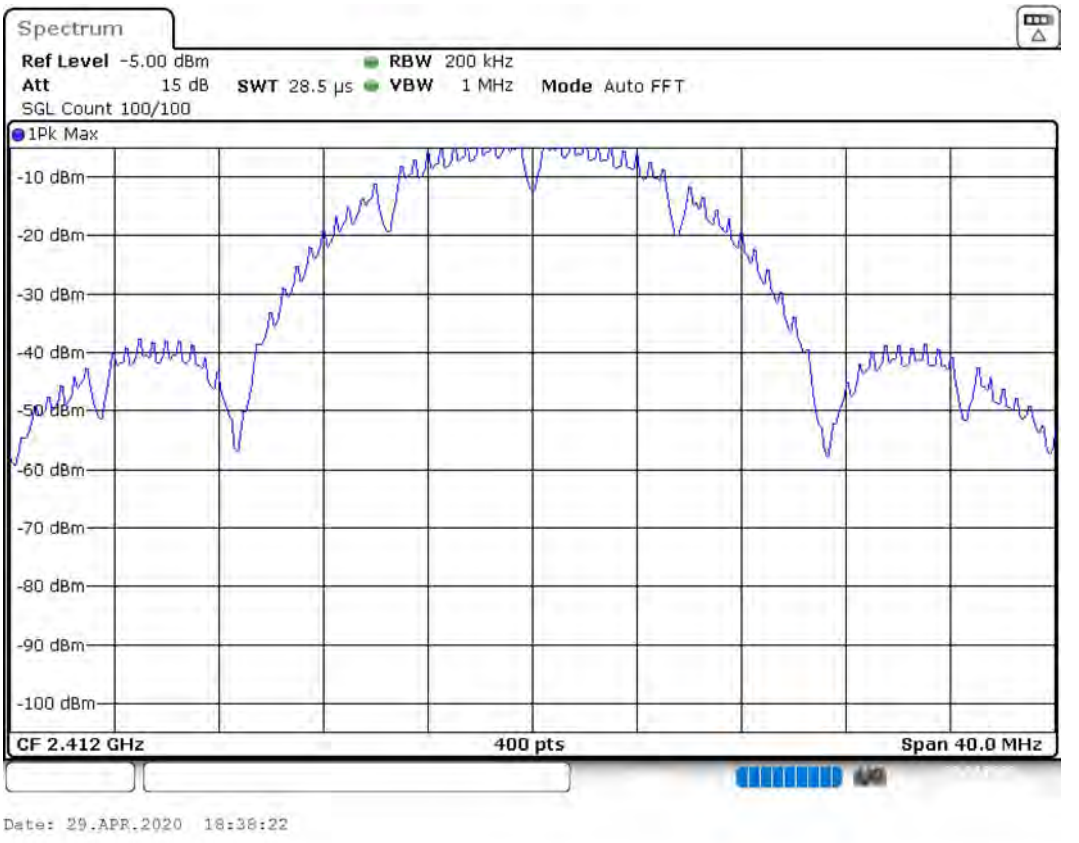
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	14.800000	---	---	2404.550000	2419.350000

(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

Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 20 MHz)

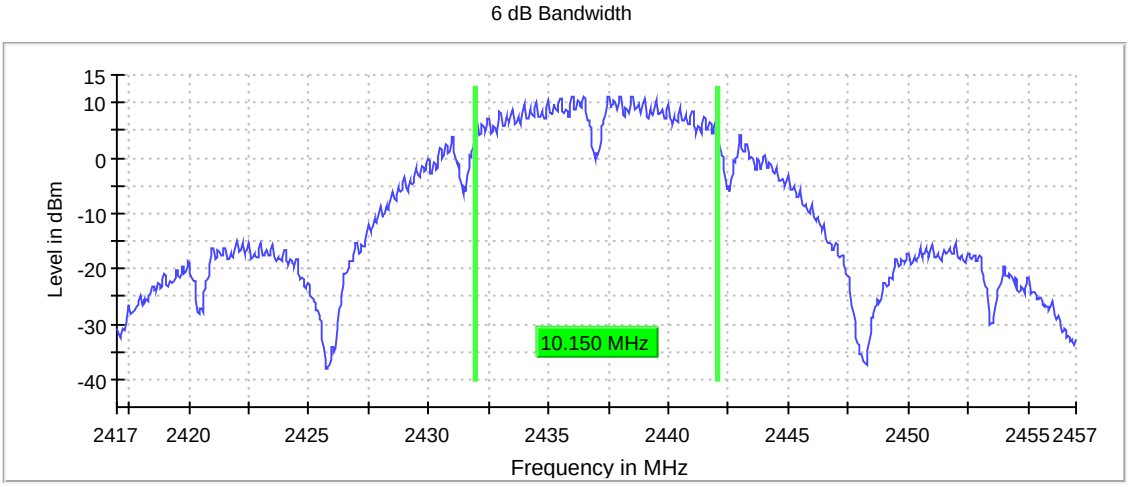
Customized settings.

6 dB Bandwidth

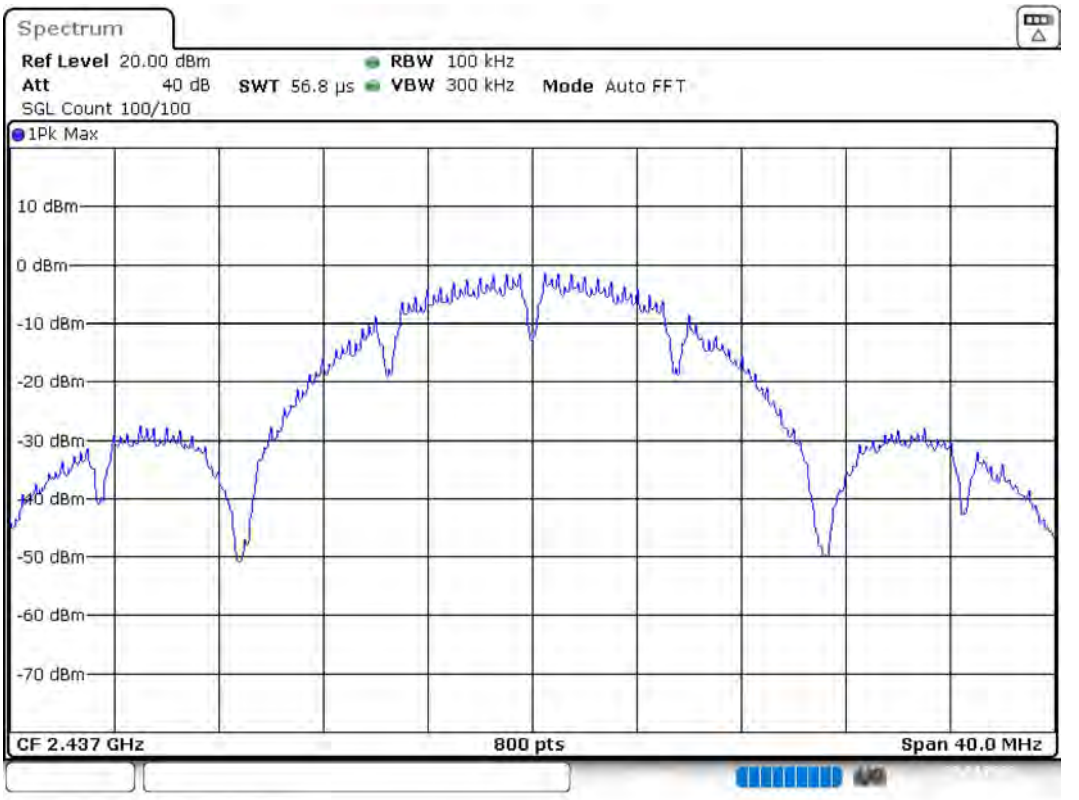
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	10.150000	0.500000	---	2431.925000	2442.075000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	11.2	PASS



Bandwidth


Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.437 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:02:29

Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 20 MHz)

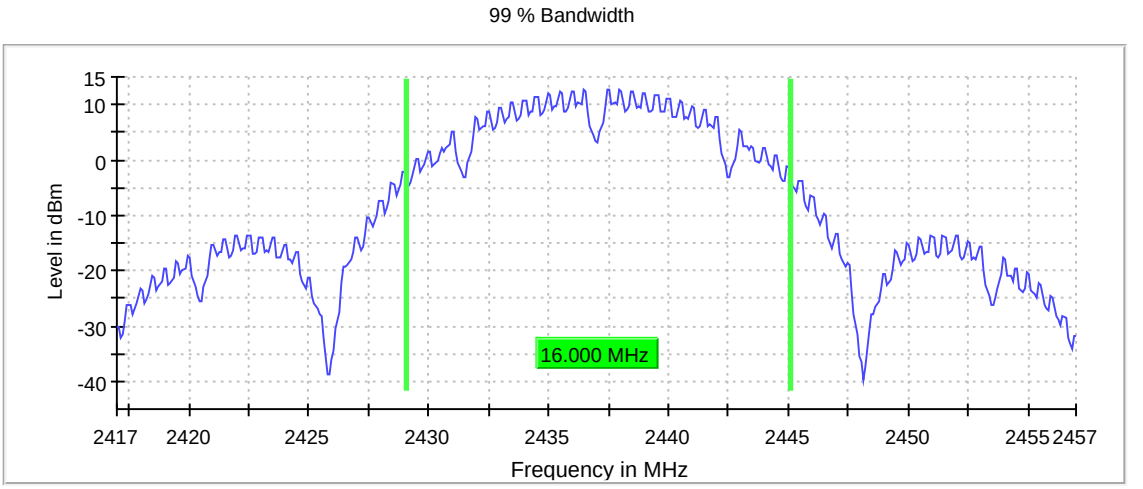
Customized settings.

99 % Bandwidth

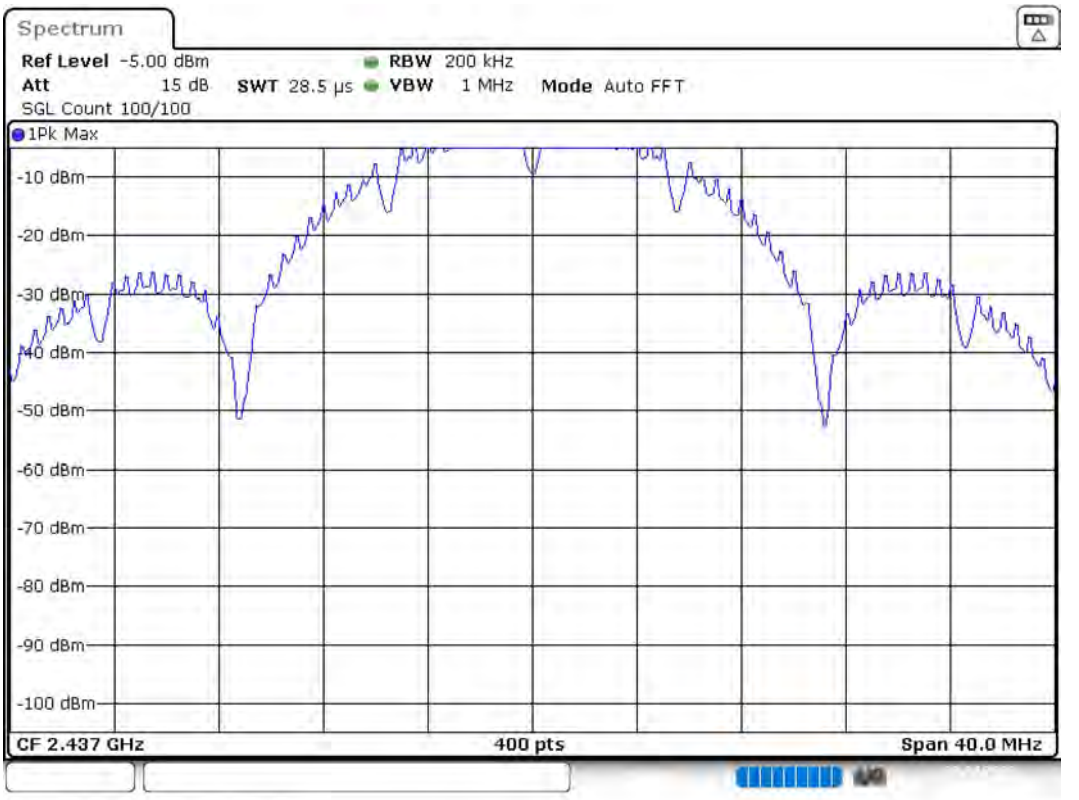
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	16.000000	---	---	2429.050000	2445.050000

(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: 29.APR.2020 19:02:49

Tx Spurious Emission (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

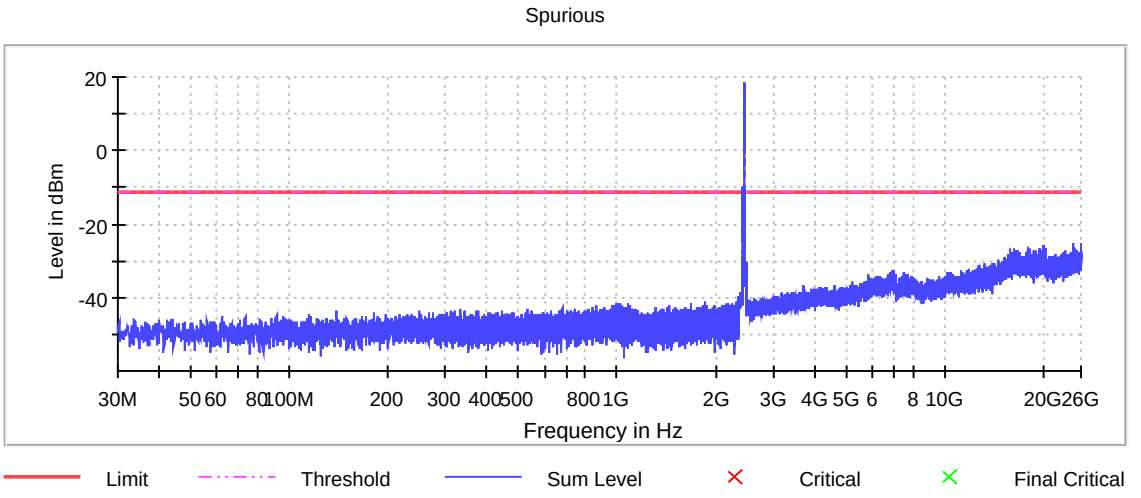
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

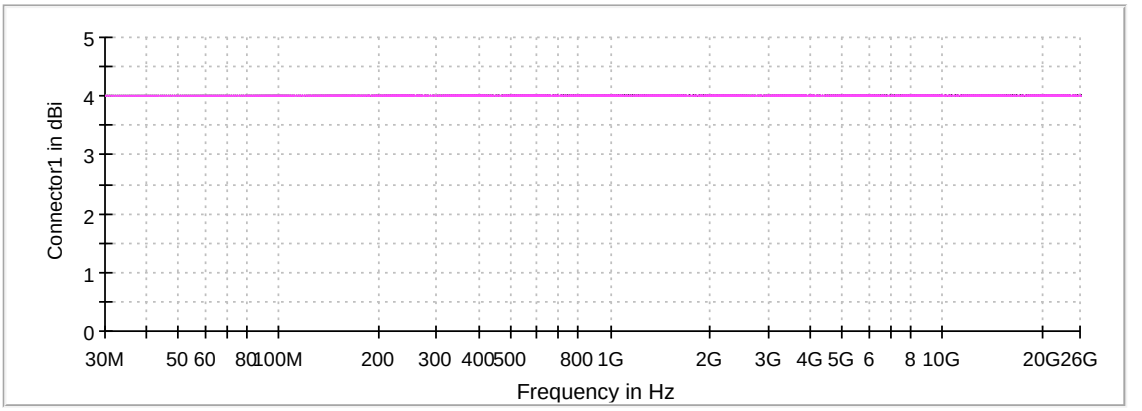
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
24648.210939	-25.0	13.6	-11.4
25931.289874	-25.3	13.8	-11.4
19925.951353	-25.5	14.1	-11.4
19892.147441	-25.8	14.3	-11.4
24583.542585	-26.2	14.8	-11.4
24670.256969	-26.3	14.9	-11.4
17876.405448	-26.4	14.9	-11.4
24630.574115	-26.4	14.9	-11.4
24560.761687	-26.4	15.0	-11.4
19895.086911	-26.5	15.1	-11.4
25900.425432	-26.5	15.1	-11.4
17860.238360	-26.5	15.1	-11.4
20254.437197	-26.5	15.1	-11.4
24649.680674	-26.6	15.1	-11.4
25917.327388	-26.6	15.2	-11.4

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

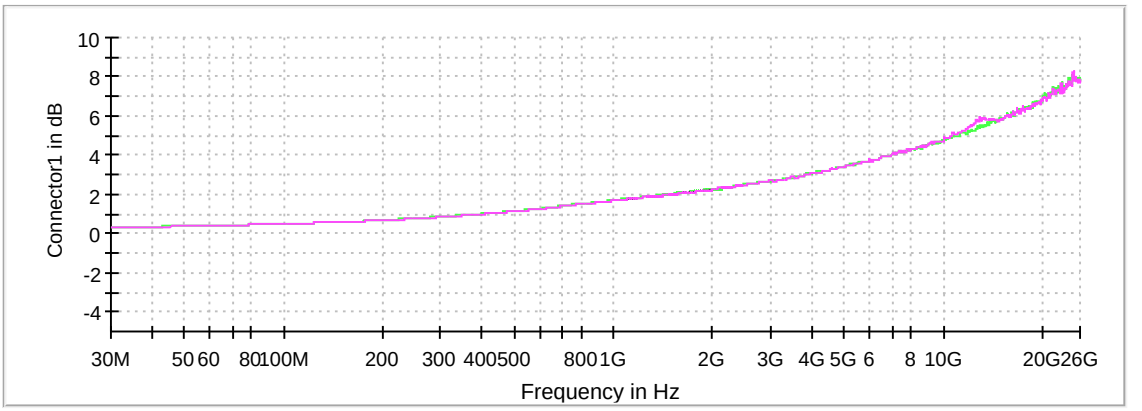


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

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

Setting	Instrument Value	Target Value
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 (2462 MHz; 20.000 dBm; 20 MHz)

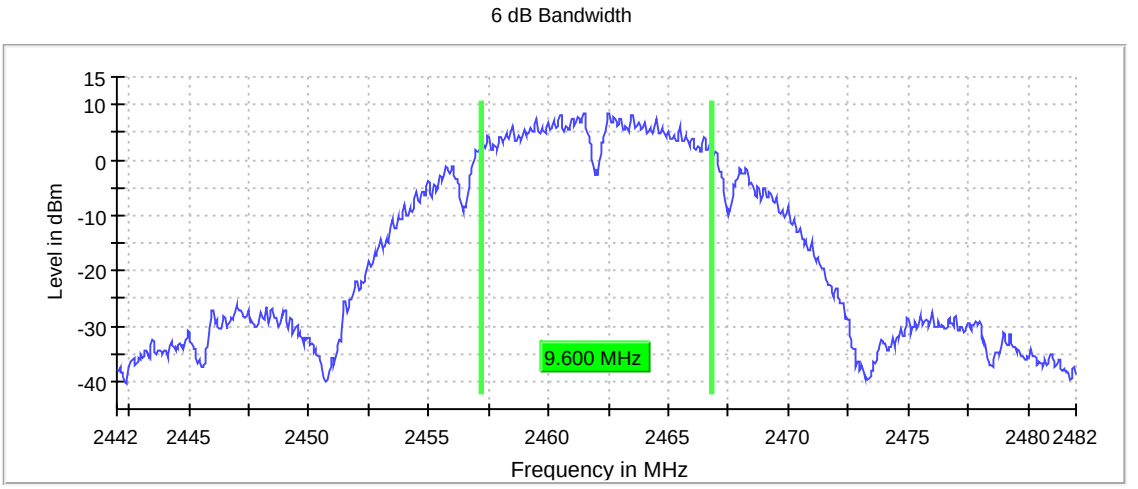
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	9.600000	0.500000	---	2457.175000	2466.775000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	8.6	PASS



Bandwidth

Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.462 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:07:53

Occupied Channel Bandwidth 99% (2462 MHz; 20.000 dBm; 20 MHz)

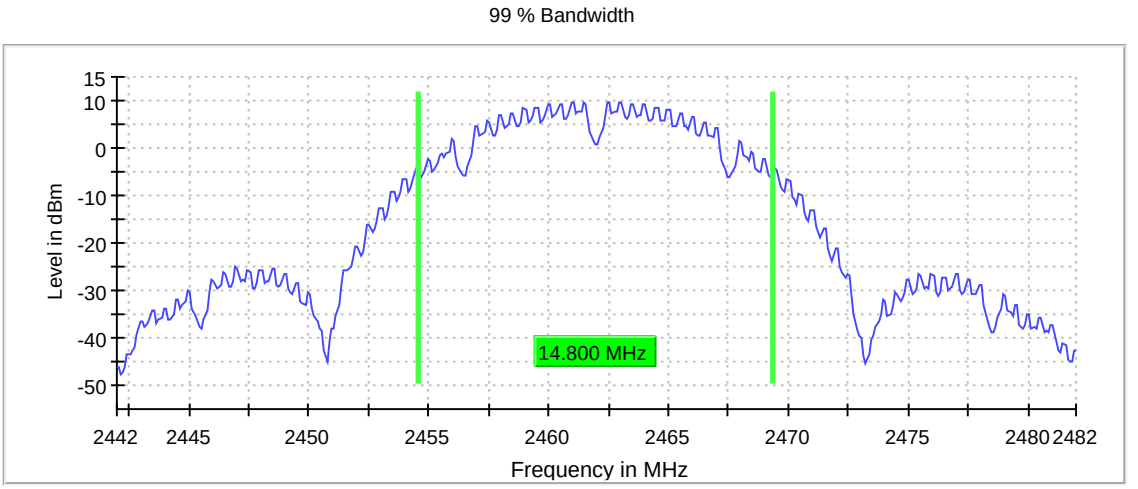
Customized settings.

99 % Bandwidth

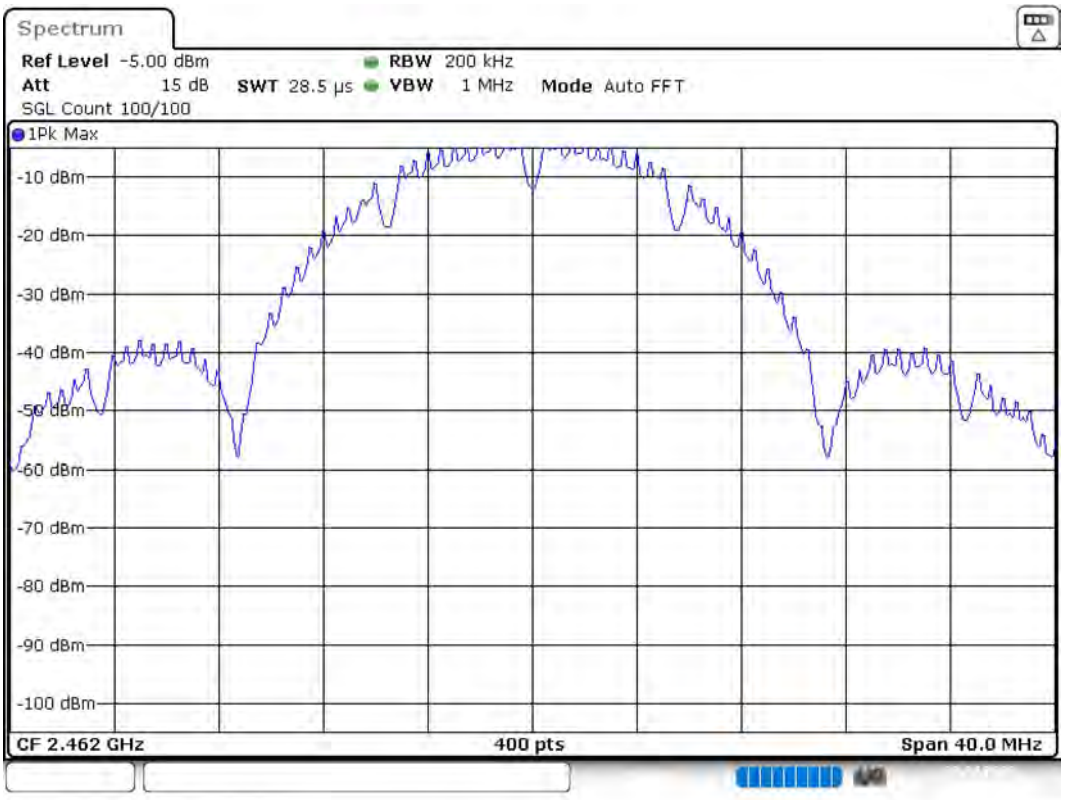
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	14.800000	---	---	2454.550000	2469.350000

(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: 29.APR.2020 19:08:13

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Minimum Emission Bandwidth 6 dB	2412.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2412.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2437.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2437.000	20.0	20.000000	PASS
Tx Spurious Emission	2437.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	2462.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	2462.000	20.0	20.000000	PASS

Minimum Emission Bandwidth 6 dB (2412 MHz; 20.000 dBm; 20 MHz)

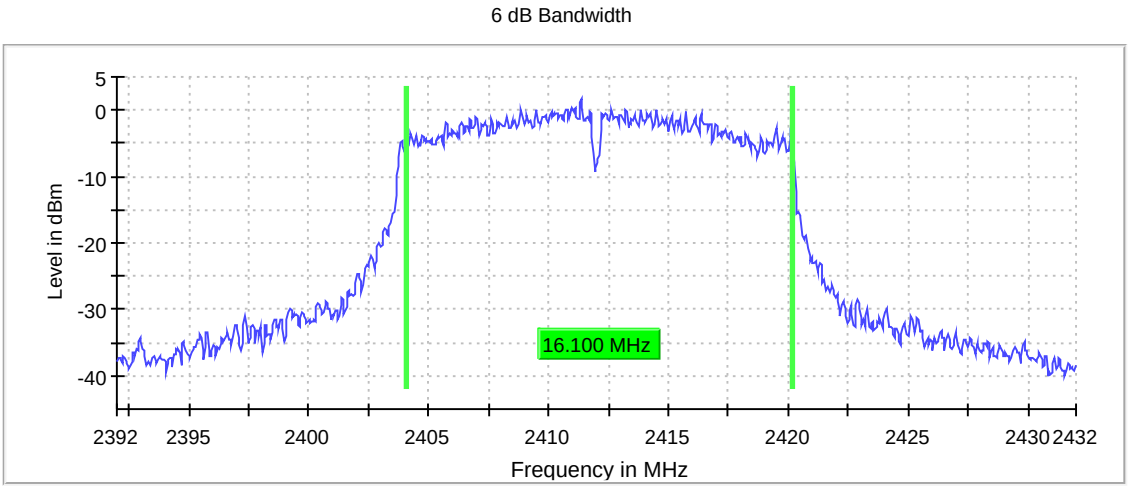
Customized settings.

6 dB Bandwidth

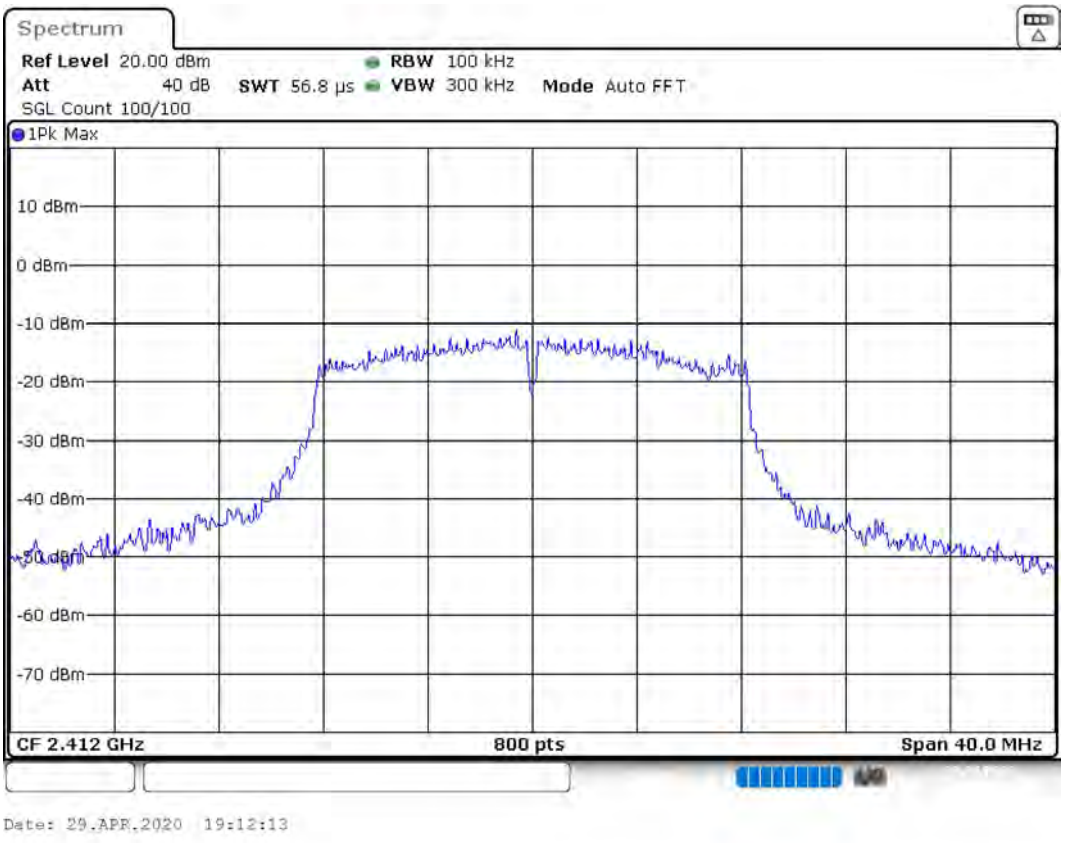
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.100000	0.500000	---	2404.075000	2420.175000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	1.6	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	20.000 dBm	20.000 dBm
Attenuation	40.000 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

Occupied Channel Bandwidth 99% (2412 MHz; 20.000 dBm; 20 MHz)

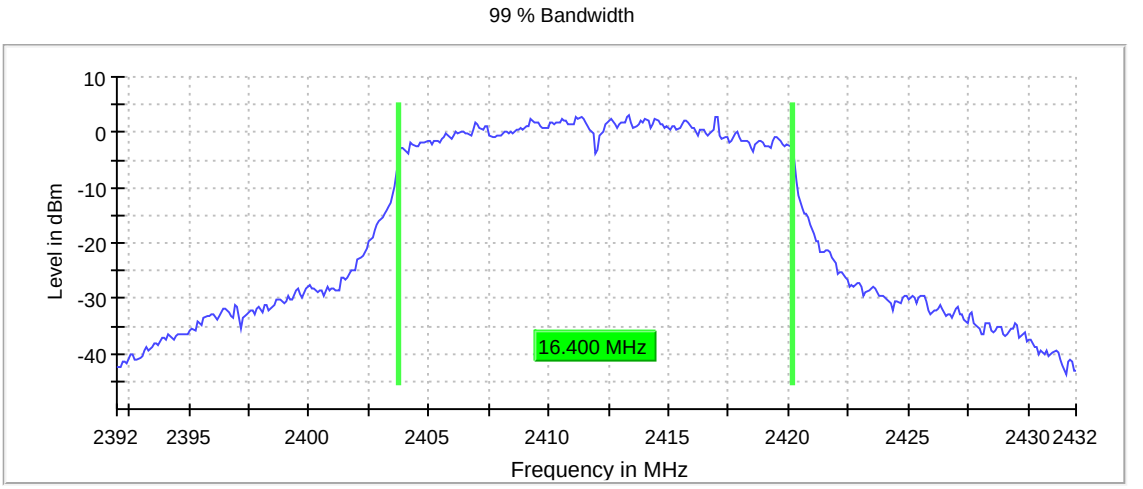
Customized settings.

99 % Bandwidth

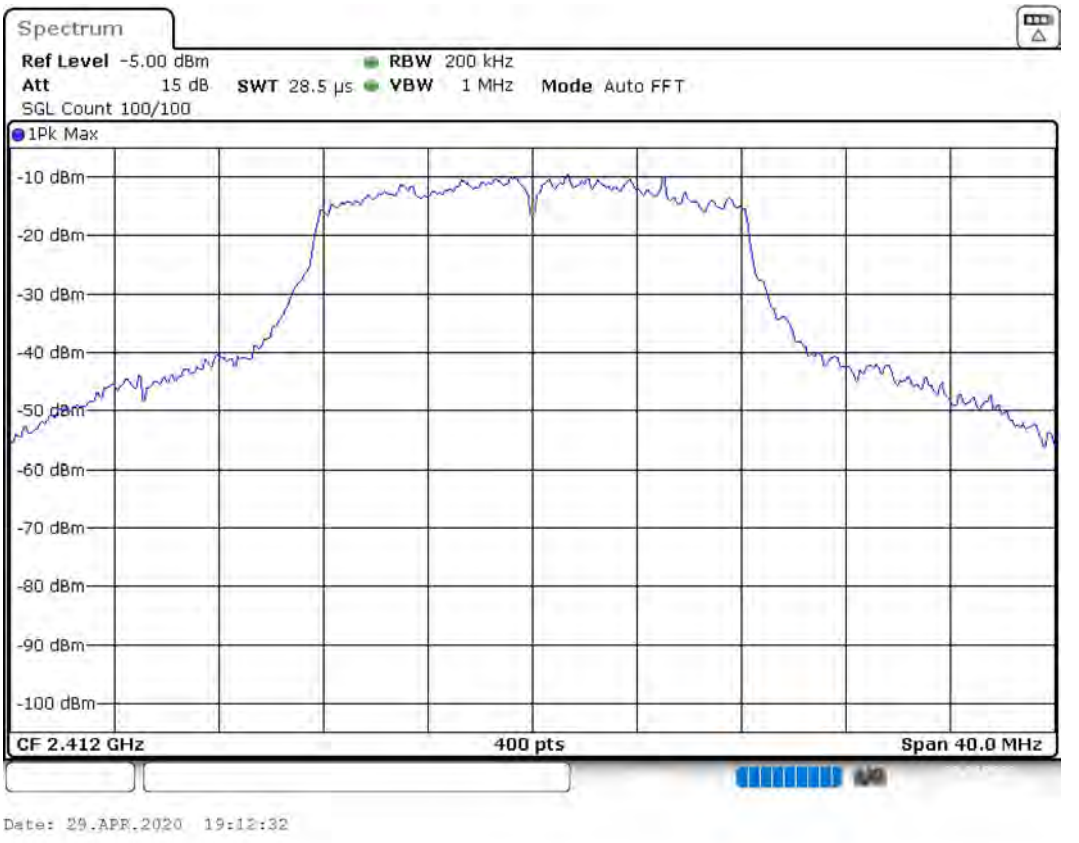
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.400000	---	---	2403.750000	2420.150000

(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

Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 20 MHz)

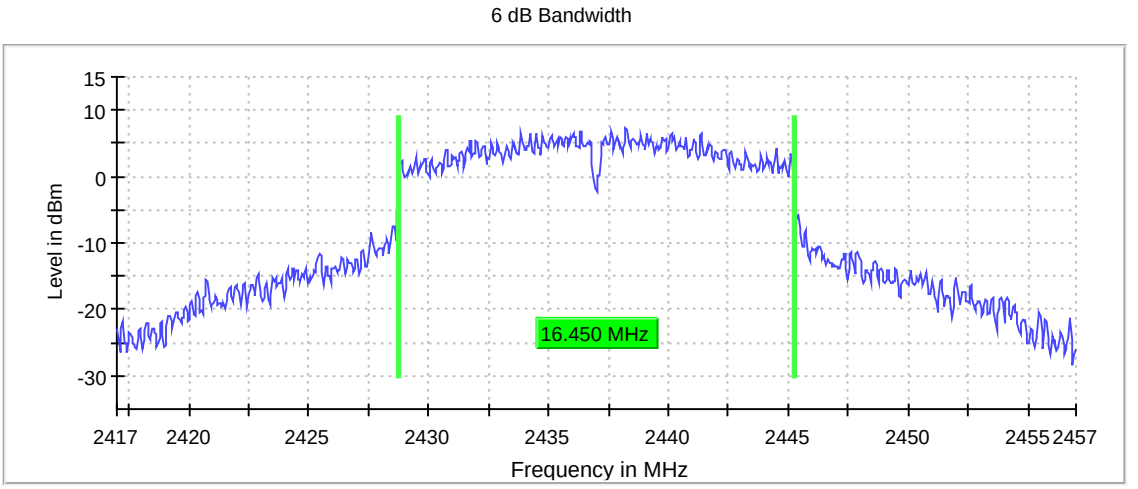
Customized settings.

6 dB Bandwidth

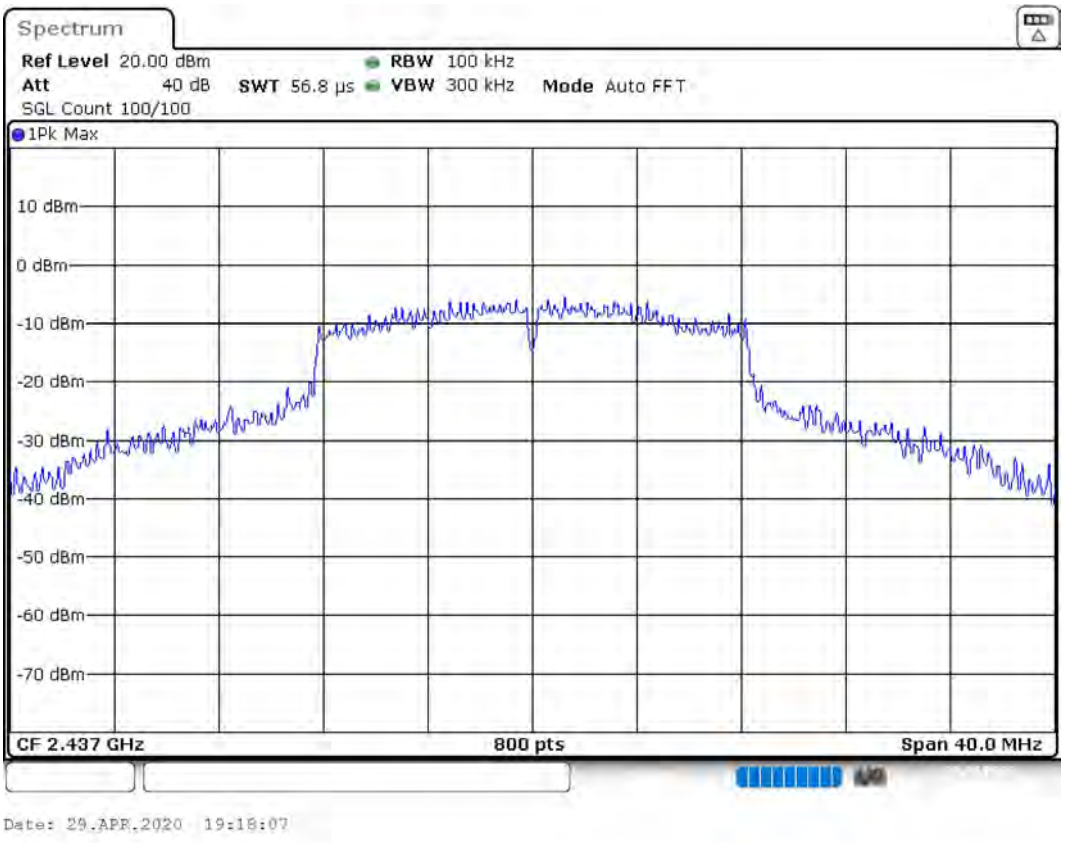
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	16.450000	0.500000	---	2428.775000	2445.225000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	7.3	PASS



Bandwidth


Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.437 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:18:07

Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 20 MHz)

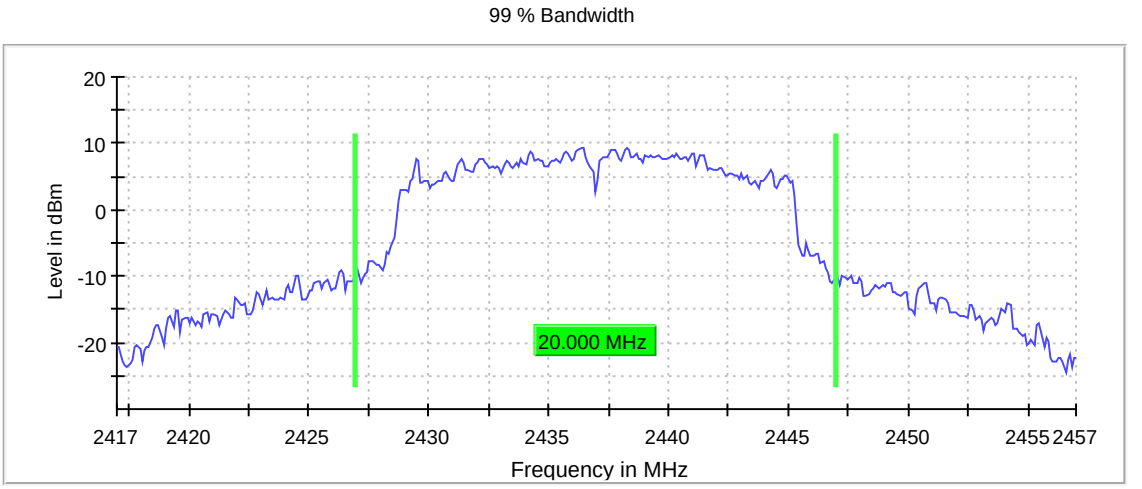
Customized settings.

99 % Bandwidth

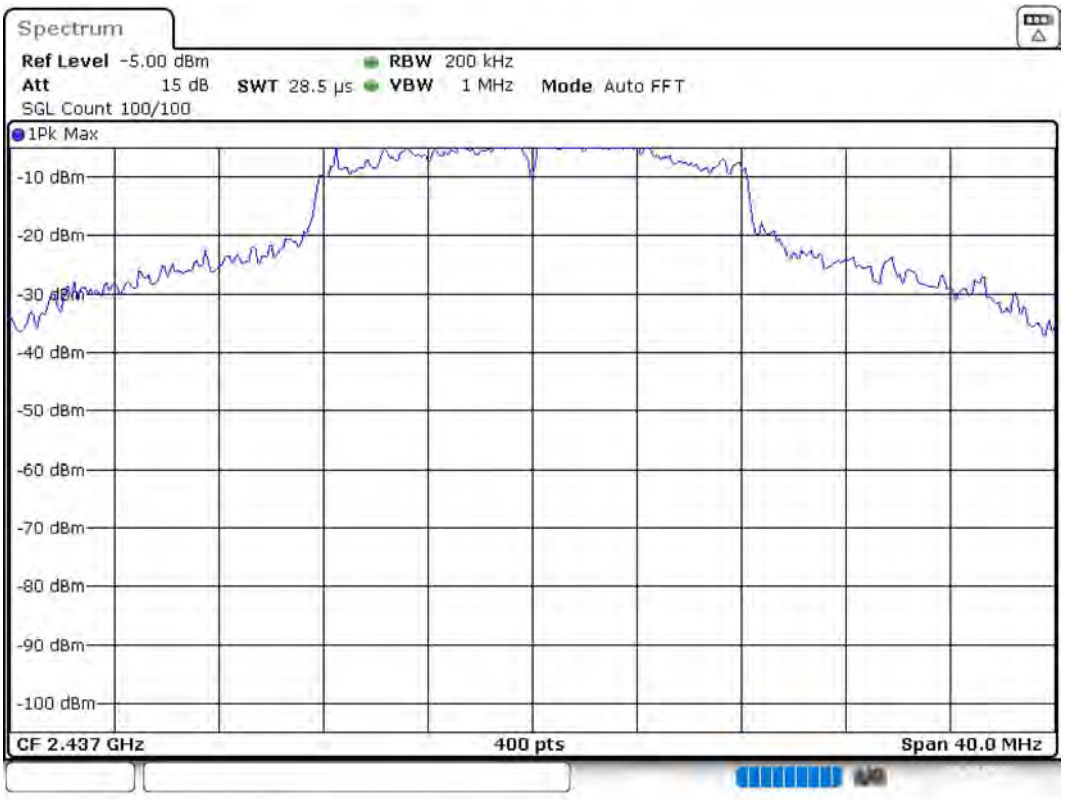
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	20.000000	---	---	2426.950000	2446.950000

(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: 29.APR.2020 19:18:27

Tx Spurious Emission (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

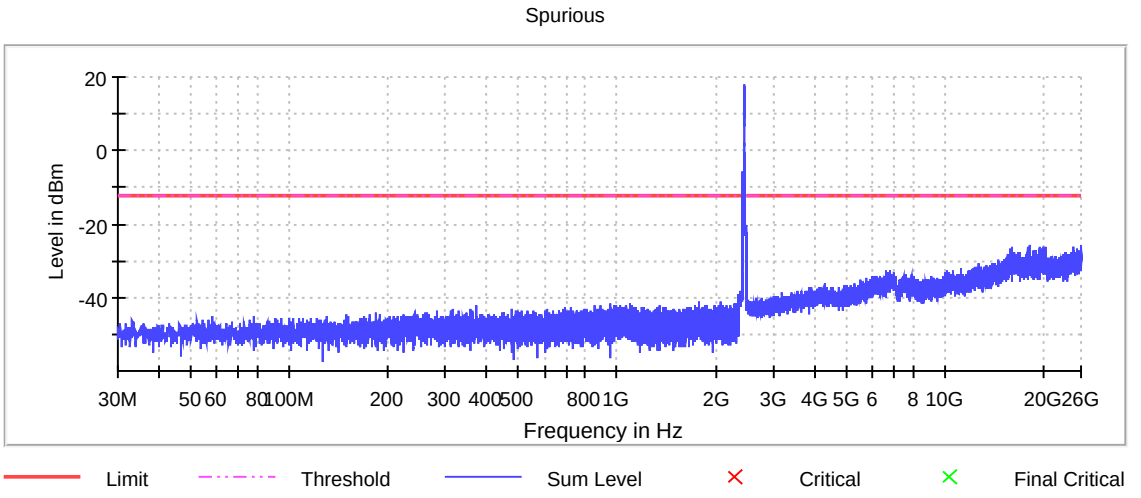
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

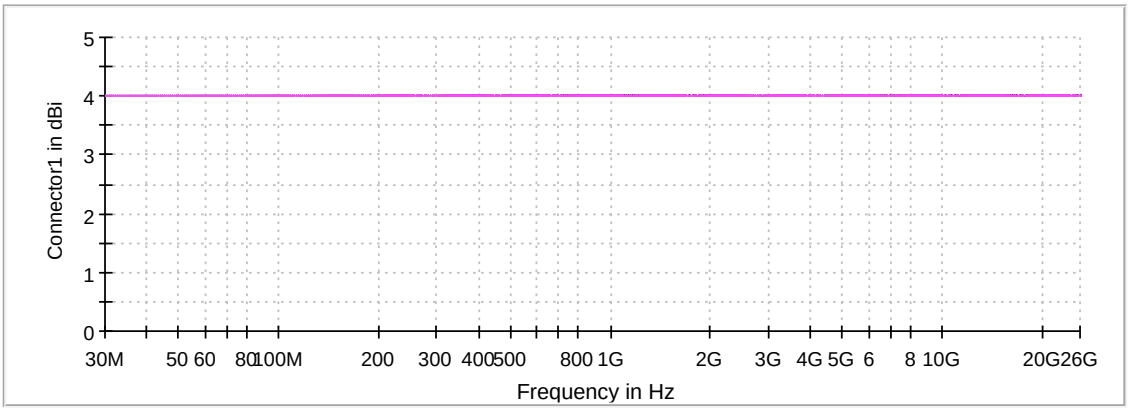
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
18250.453087	-25.7	13.5	-12.2
25931.289874	-25.9	13.7	-12.2
18229.876793	-25.9	13.7	-12.2
20228.716829	-26.0	13.7	-12.2
25893.076755	-26.0	13.8	-12.2
19906.109926	-26.2	13.9	-12.2
18222.528116	-26.2	14.0	-12.2
19518.834669	-26.2	14.0	-12.2
19882.594161	-26.3	14.1	-12.2
15916.513398	-26.3	14.1	-12.2
24631.308983	-26.3	14.1	-12.2
24623.225438	-26.4	14.1	-12.2
17848.480477	-26.4	14.2	-12.2
25892.341888	-26.4	14.2	-12.2
17873.465978	-26.5	14.3	-12.2

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

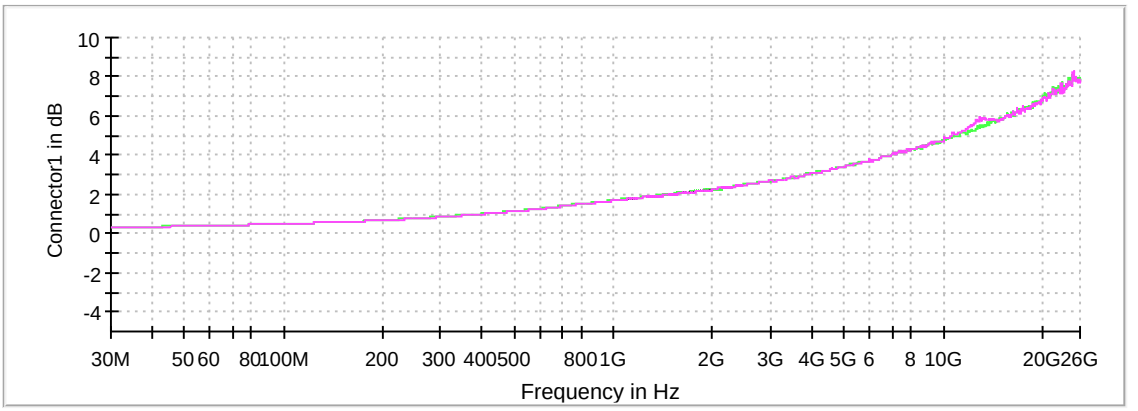


Gain



Connector1 Connector2

Attenuation



Connector1 Connector2

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

Setting	Instrument Value	Target Value
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 (2462 MHz; 20.000 dBm; 20 MHz)

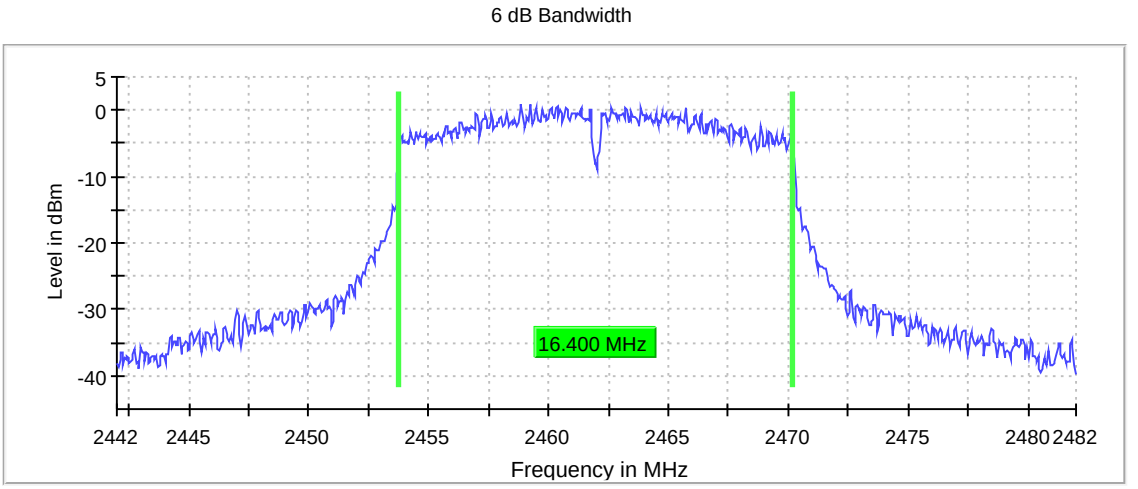
Customized settings.

6 dB Bandwidth

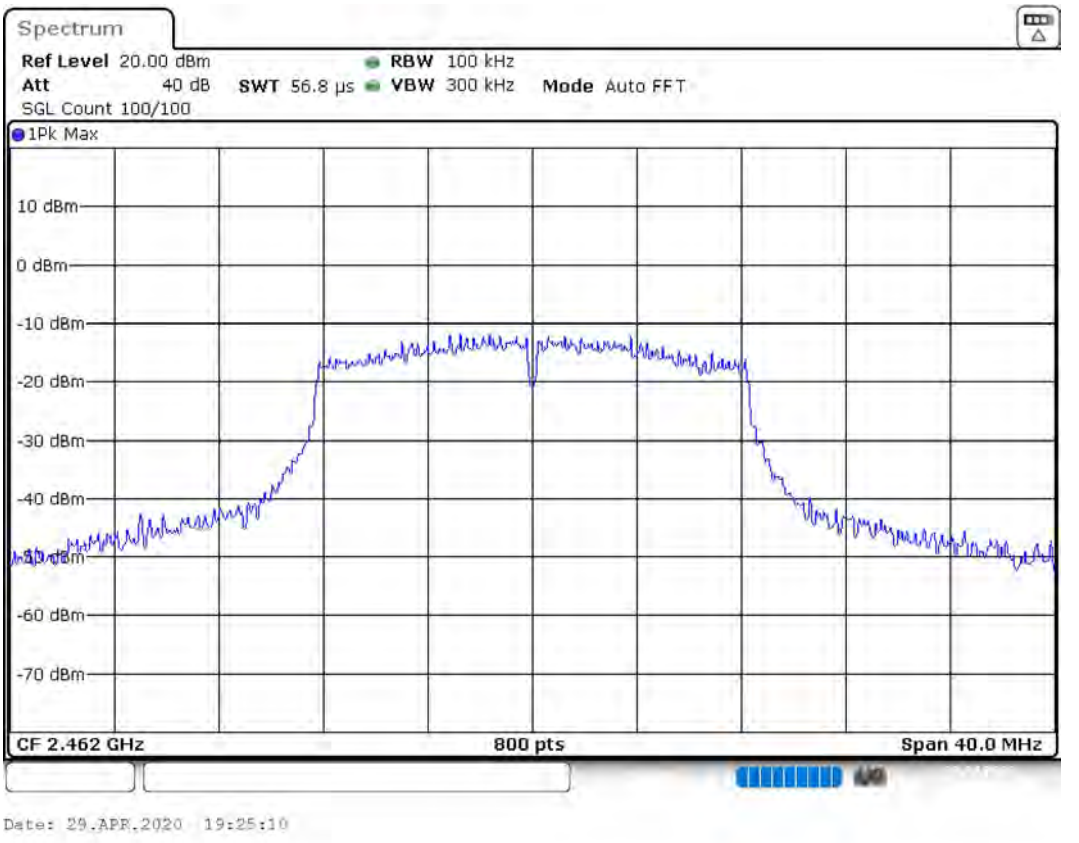
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.400000	0.500000	---	2453.775000	2470.175000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	0.9	PASS



Bandwidth


Spectrum
Ref Level 20.00 dBm
RBW 100 kHz
Att 40 dB
SWT 56.8 µs
VBW 300 kHz
Mode Auto FFT
SGL Count 100/100
1Pk Max
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-60 dBm
-70 dBm
CF 2.462 GHz
800 pts
Span 40.0 MHz
Date: 29.APR.2020 19:25:10

Occupied Channel Bandwidth 99% (2462 MHz; 20.000 dBm; 20 MHz)

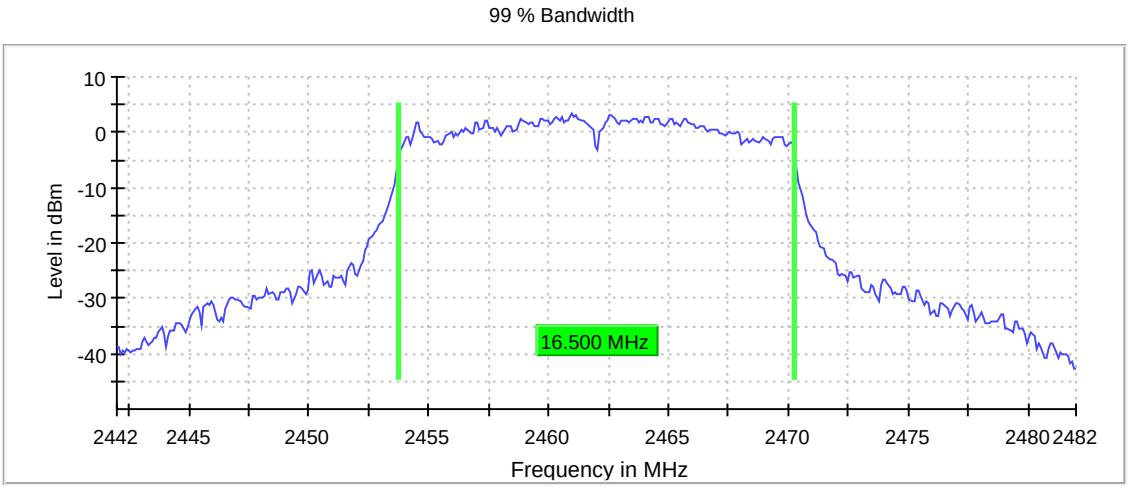
Customized settings.

99 % Bandwidth

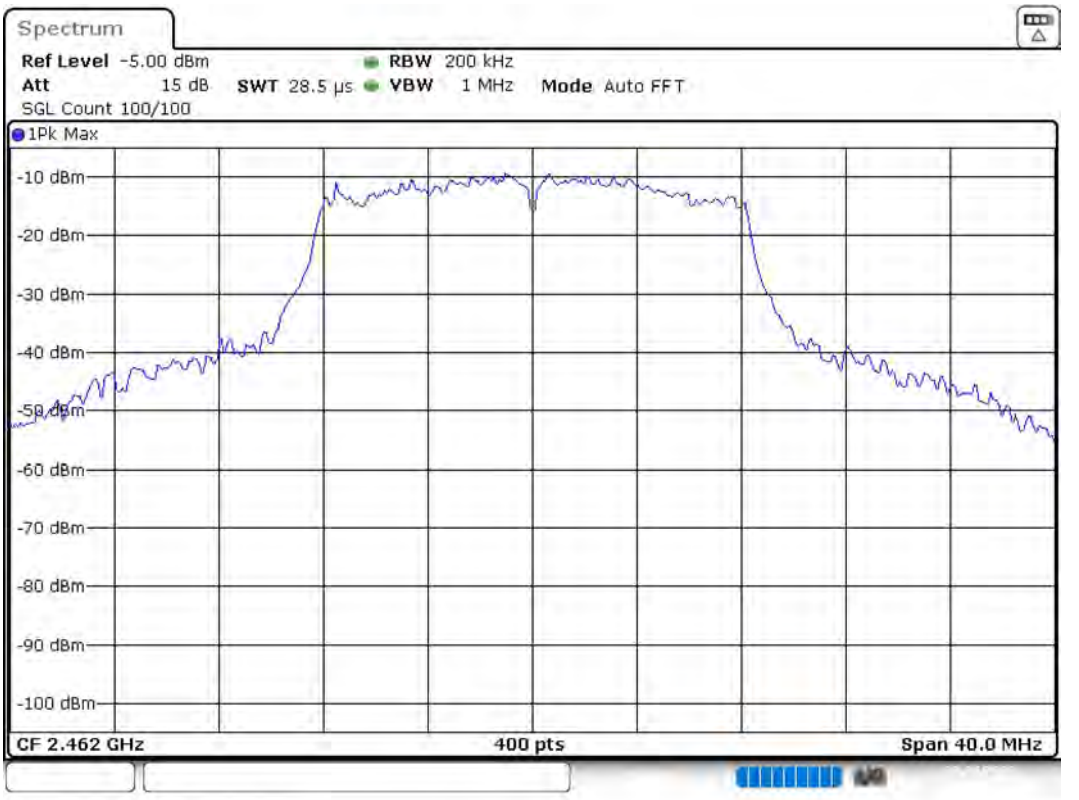
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.500000	---	---	2453.750000	2470.250000

(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: 29.APR.2020 19:25:30