

n Mode

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
Power Spectral Density	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)

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	18.5	30.0	24.0	96.141	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

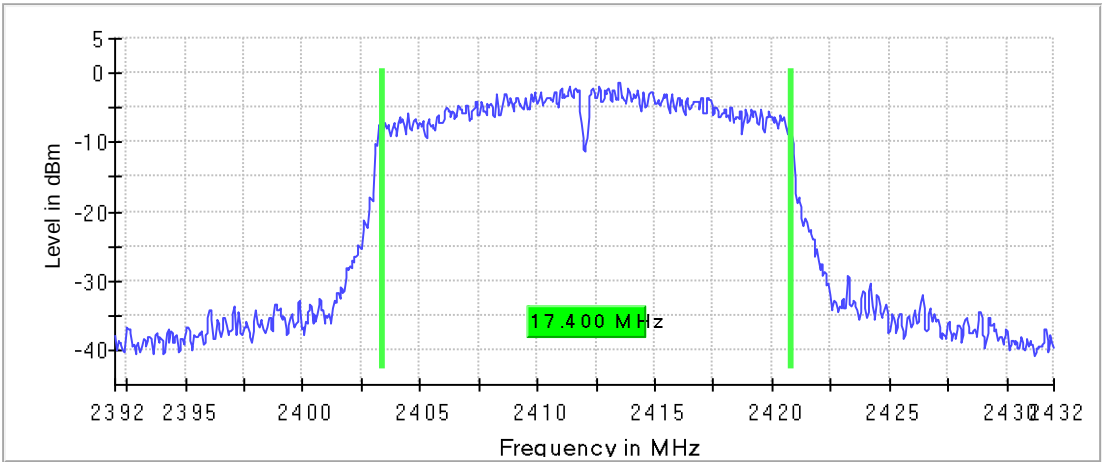
Minimum Emission Bandwidth 6 dB (2412 MHz; 20.000 dBm; 20 MHz)

6 dB Bandwidth

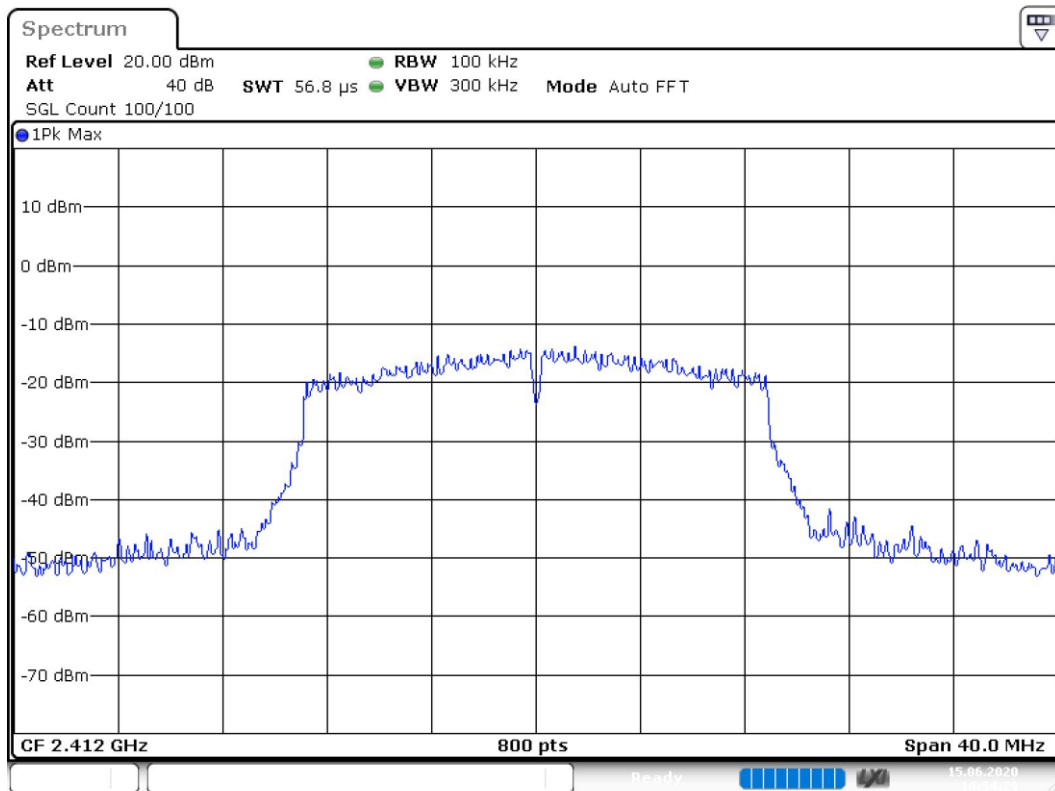
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.400000	0.500000	---	2403.425000	2420.825000

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	-1.3	PASS

6 dB Bandwidth



Bandwidth



Date: 15.JUN.2020 14:54:29

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	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

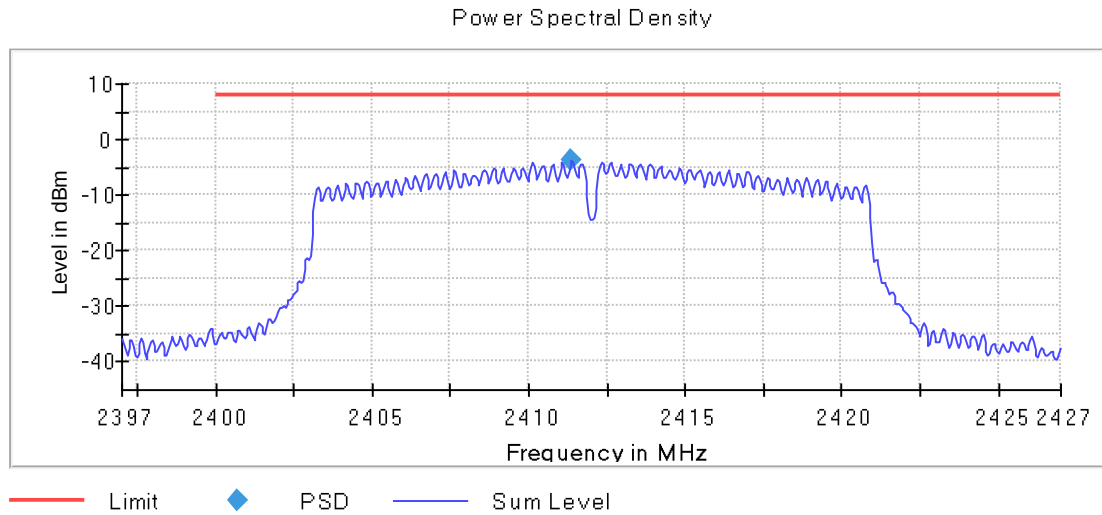
Power Spectral Density (2412 MHz; 20.000 dBm; 20 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2411.375000	-3.868	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

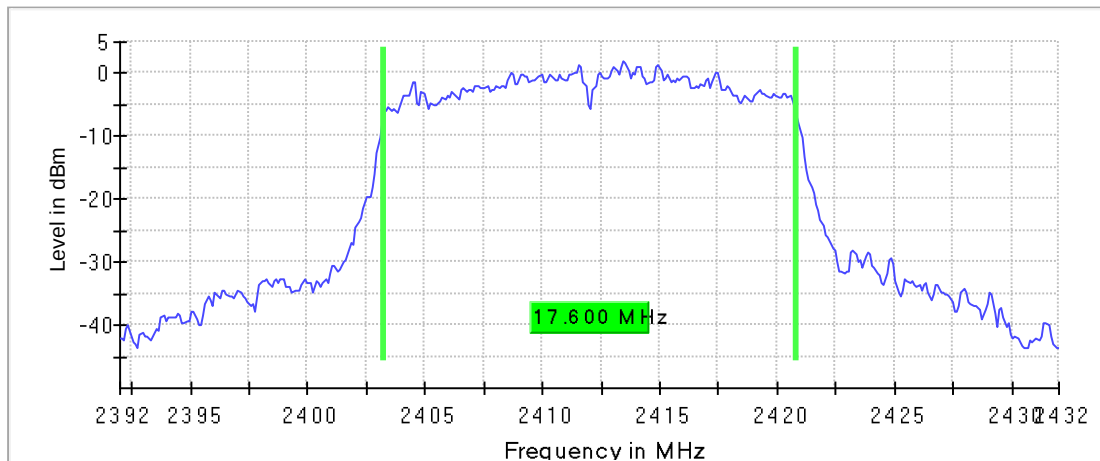
Occupied Channel Bandwidth 99% (2412 MHz; 20.000 dBm; 20 MHz)

99 % Bandwidth

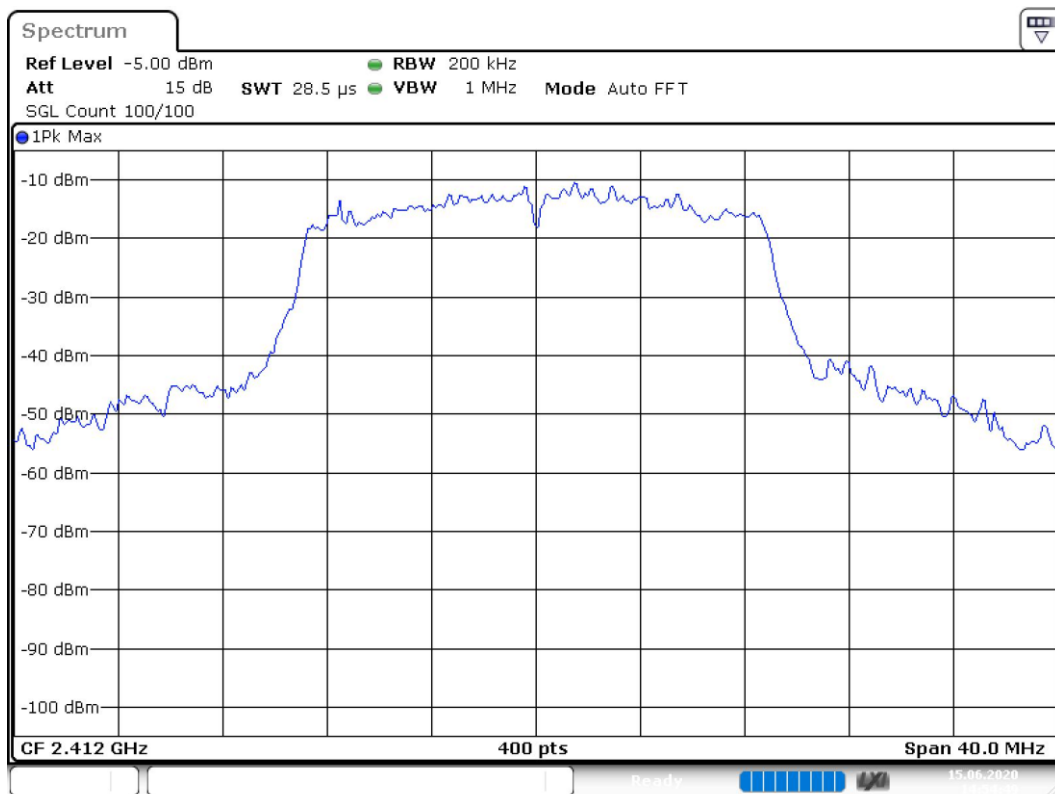
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.600000	---	---	2403.250000	2420.850000

DUT Frequency (MHz)	Result
2412.000000	PASS

99 % Bandwidth



Bandwidth



Date: 15.JUN.2020 14:54:49

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
Sweptime	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
Sweep type	FFT	AUTO
Preamp	off	off

Tx Spurious Emission (2412 MHz; 20.000 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
2398.526746	-21.5	-30.3	-20.2	10.1	PASS

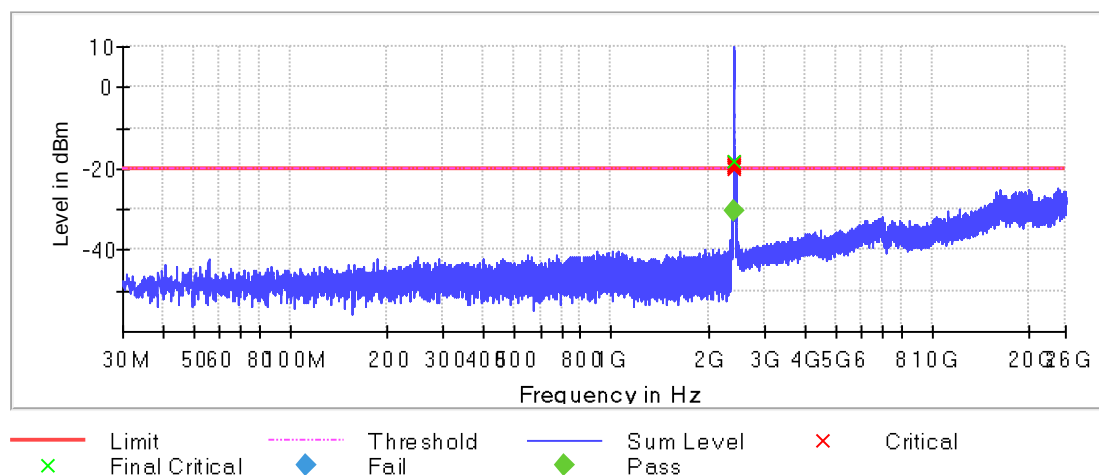
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.225000	-18.3	-1.9	-20.2
2399.275000	-18.6	-1.6	-20.2
2399.525000	-19.1	-1.1	-20.2
2399.475000	-19.1	-1.1	-20.2
2399.175000	-19.6	-0.6	-20.2
2399.775000	-19.7	-0.5	-20.2
2399.725000	-19.9	-0.3	-20.2
2398.625000	-20.2	0.0	-20.2
2398.275000	-20.4	0.2	-20.2
2398.225000	-20.4	0.2	-20.2
2398.875000	-20.5	0.3	-20.2
2399.575000	-20.5	0.3	-20.2
2399.125000	-20.6	0.3	-20.2
2399.825000	-20.6	0.4	-20.2
2398.575000	-20.7	0.5	-20.2

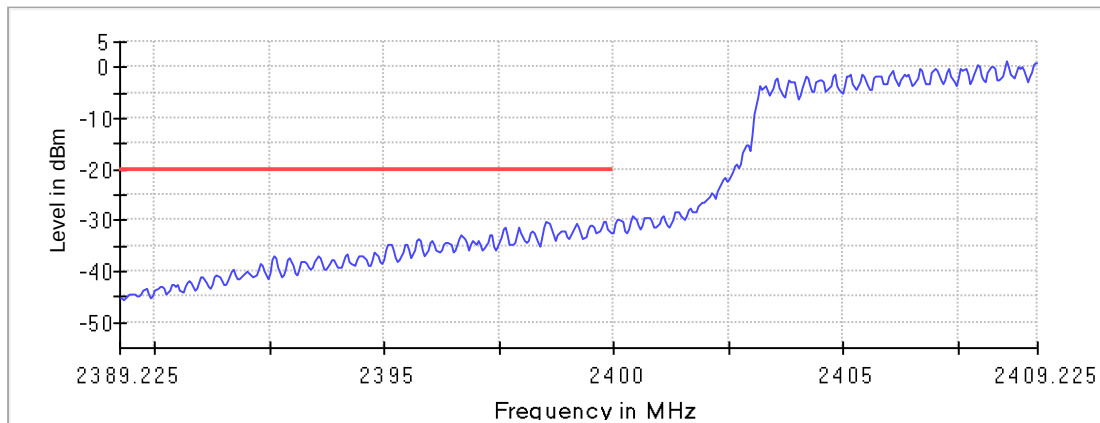
Measurement Settings

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

Spurious



FinalMeas_2399225000Hz



— 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	37.907 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

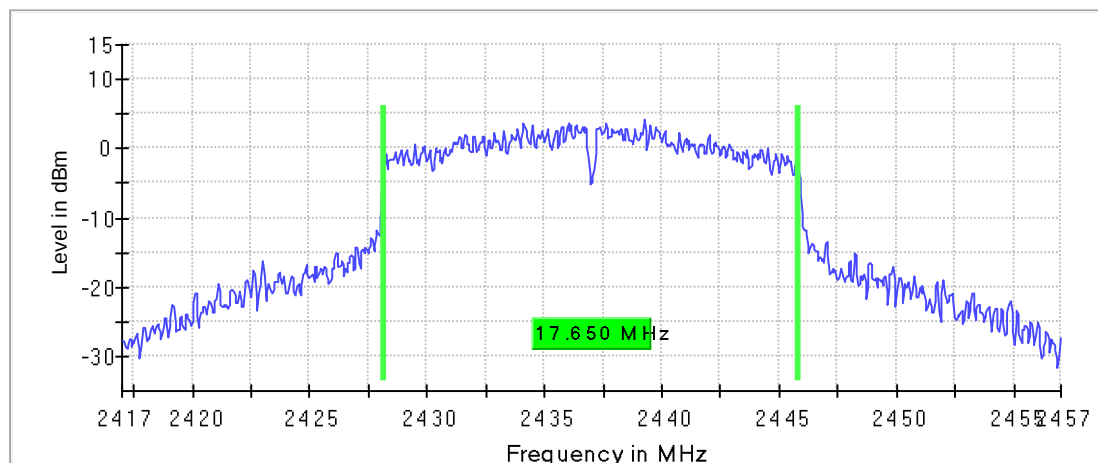
Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 20 MHz)

6 dB Bandwidth

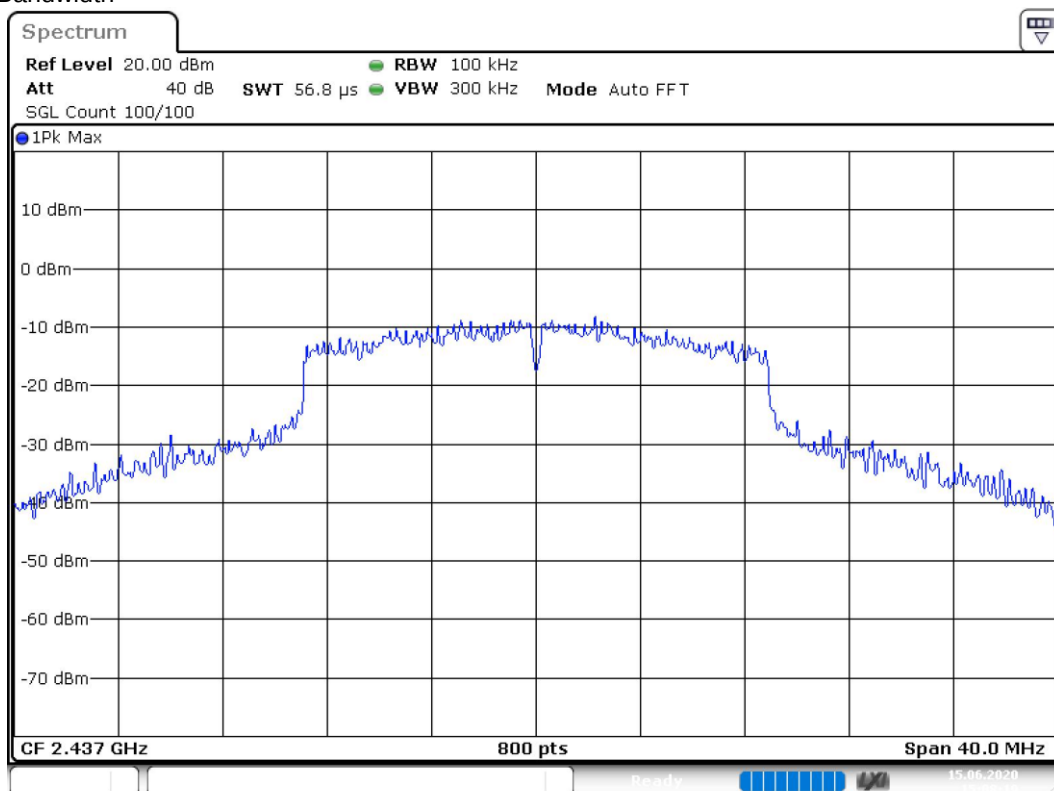
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.650000	0.500000	---	2428.175000	2445.825000

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

6 dB Bandwidth



Bandwidth



Date: 15.JUN.2020 15:08:19

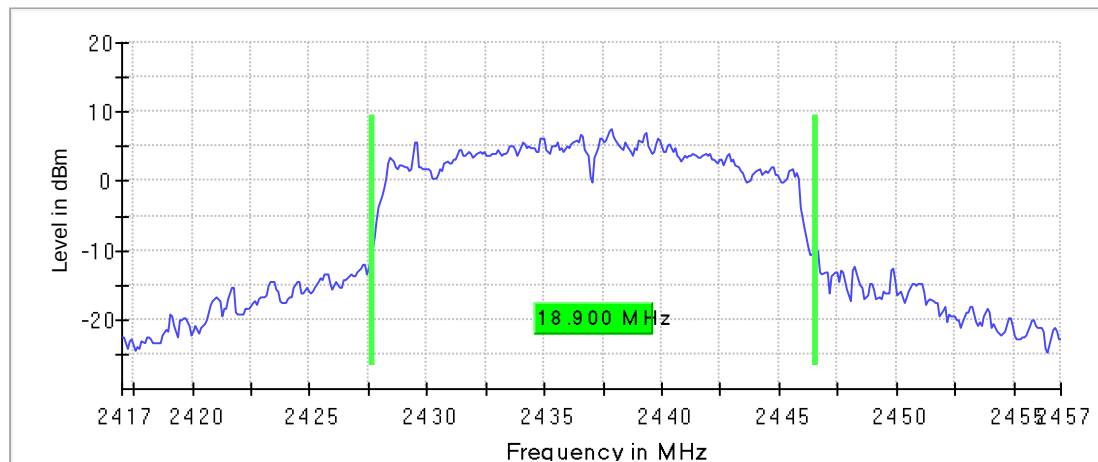
Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 20 MHz)

99 % Bandwidth

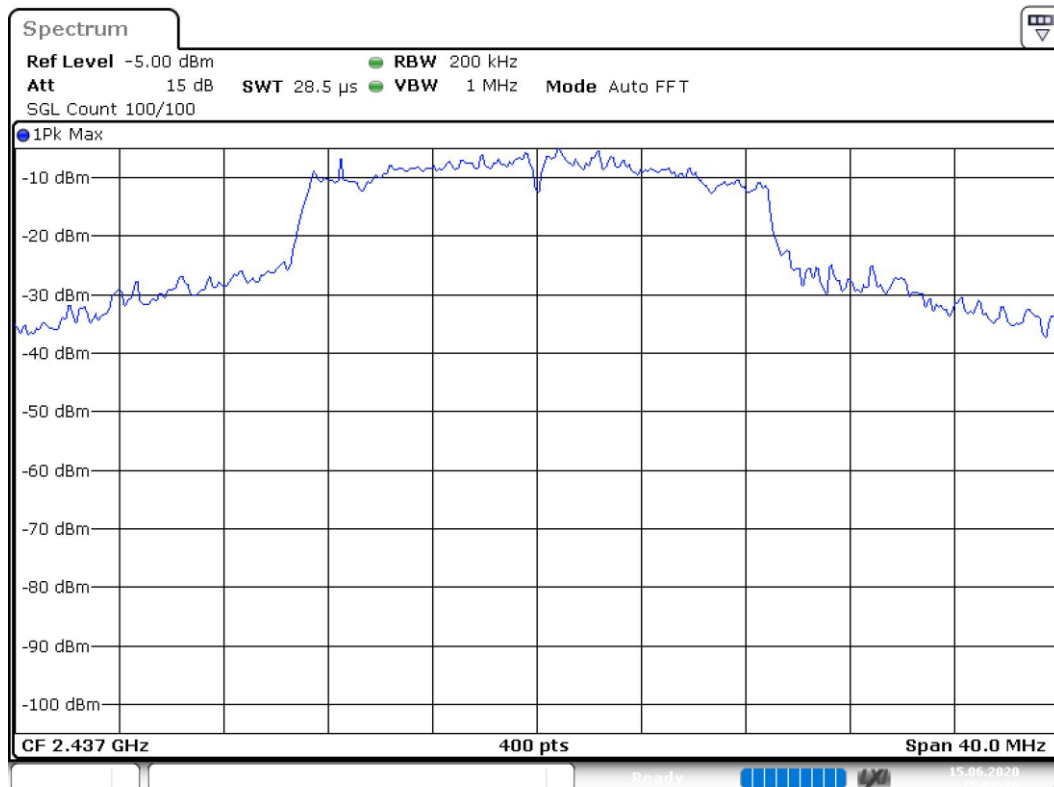
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	18.900000	---	---	2427.650000	2446.550000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 % Bandwidth



Bandwidth



Date: 15.JUN.2020 15:08:39

Tx Spurious Emission (2437 MHz; 20.000 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
---	---	---	---	---	---

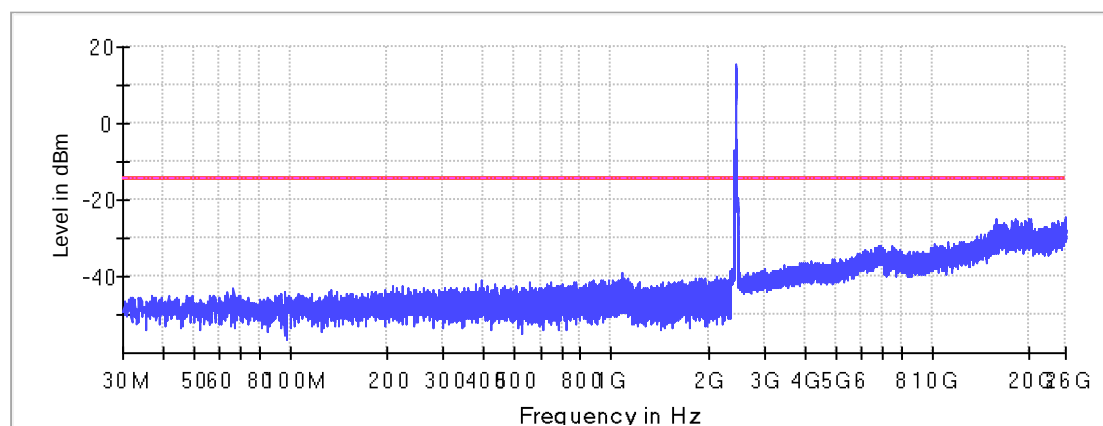
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
25973.177330	-24.7	10.0	-14.7
19911.254000	-24.9	10.2	-14.7
20186.829373	-24.9	10.2	-14.7
25899.690564	-24.9	10.2	-14.7
25927.615535	-25.0	10.3	-14.7
25937.903683	-25.0	10.3	-14.7
18206.361028	-25.0	10.3	-14.7
19903.170456	-25.1	10.4	-14.7
25960.684580	-25.1	10.4	-14.7
15826.859543	-25.1	10.4	-14.7
25884.993211	-25.2	10.5	-14.7
19883.329029	-25.2	10.5	-14.7
15895.937104	-25.2	10.5	-14.7
25954.805639	-25.4	10.7	-14.7
19864.222470	-25.4	10.7	-14.7

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



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

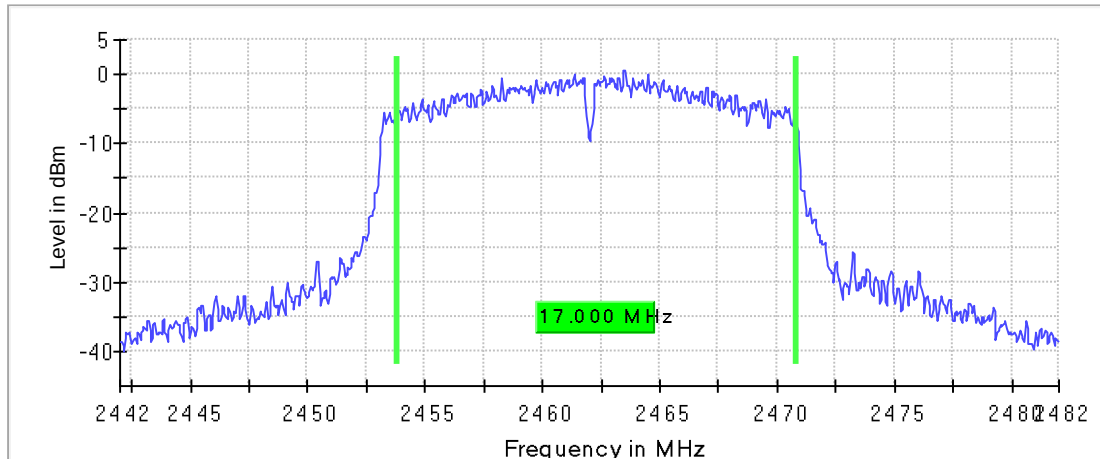
Minimum Emission Bandwidth 6 dB (2462 MHz; 20.000 dBm; 20 MHz)

6 dB Bandwidth

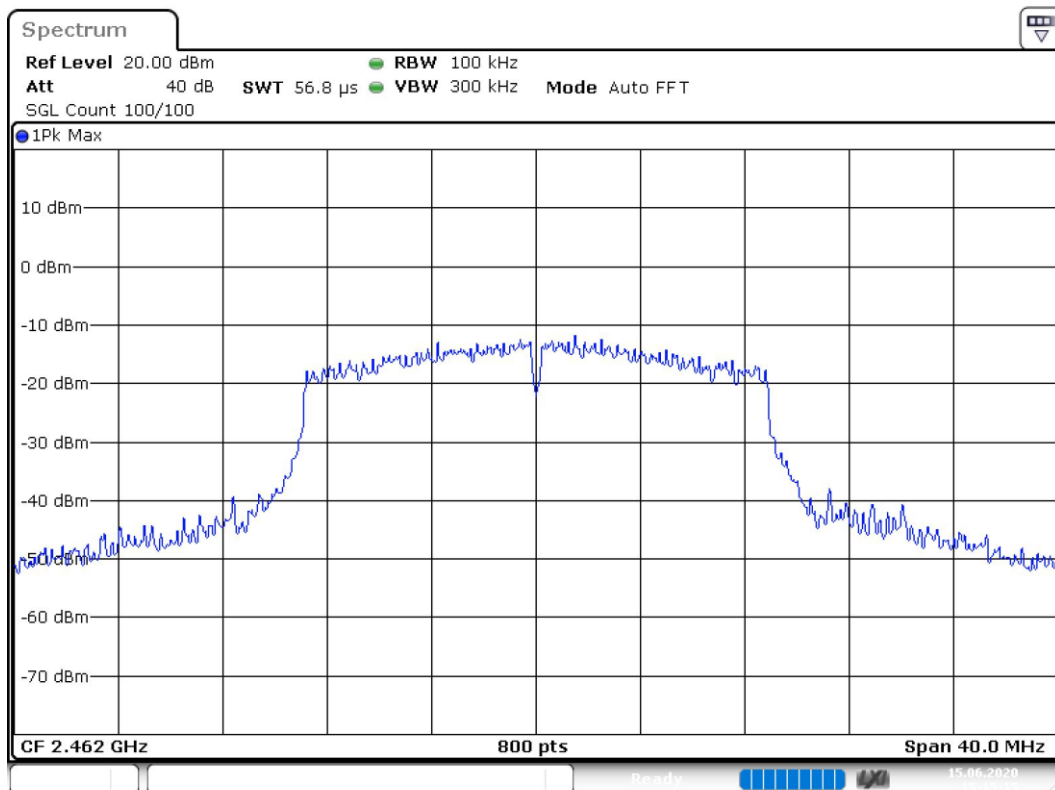
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.000000	0.500000	---	2453.825000	2470.825000

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

6 dB Bandwidth



Bandwidth



Date: 15.JUN.2020 15:15:15

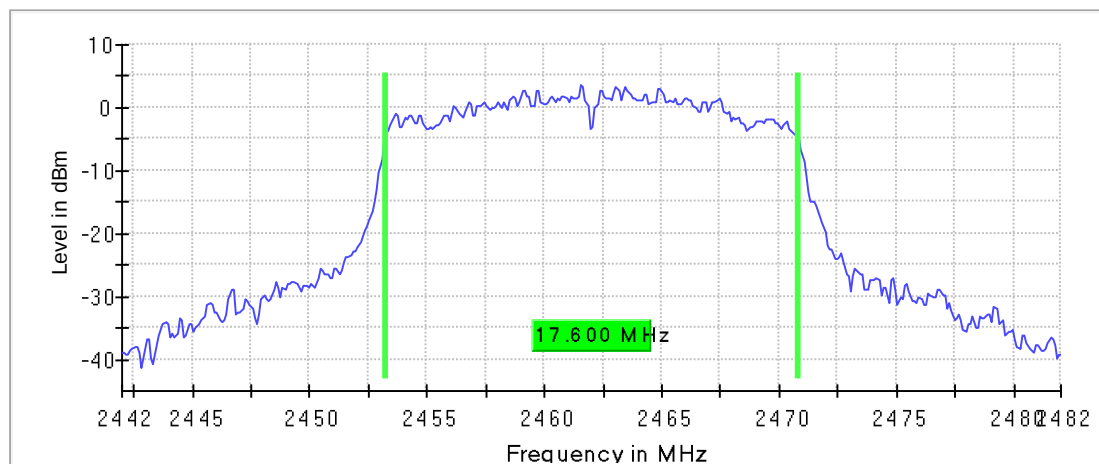
Occupied Channel Bandwidth 99% (2462 MHz; 20.000 dBm; 20 MHz)

99 % Bandwidth

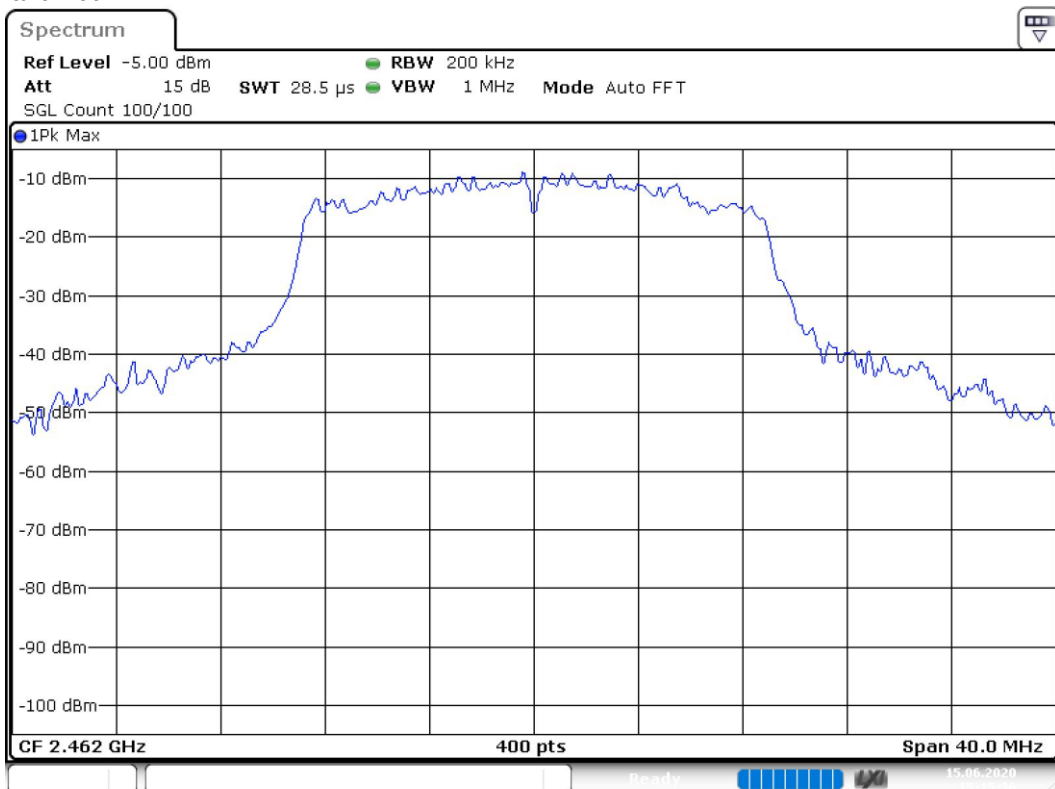
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.600000	---	---	2453.250000	2470.850000

DUT Frequency (MHz)	Result
2462.000000	PASS

99 % Bandwidth



Bandwidth



Date: 15.JUN.2020 15:15:36

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

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

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

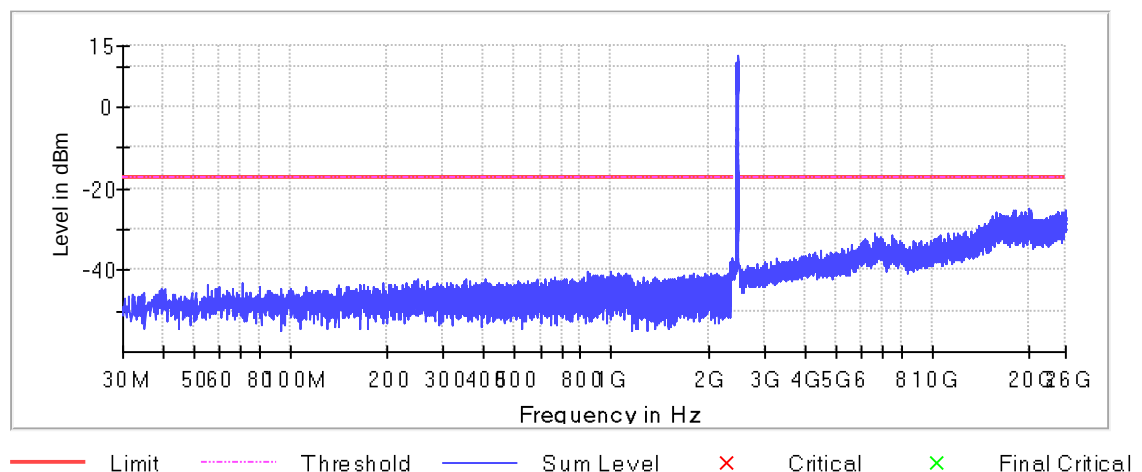
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19898.761250	-24.9	7.3	-17.5
25996.693096	-25.1	7.6	-17.5
18209.300498	-25.2	7.6	-17.5
25872.500461	-25.3	7.7	-17.5
17885.958728	-25.3	7.8	-17.5
19950.936854	-25.4	7.9	-17.5
20231.656300	-25.5	8.0	-17.5
17883.754125	-25.6	8.0	-17.5
24590.156394	-25.6	8.1	-17.5
20172.866887	-25.7	8.1	-17.5
19909.784265	-25.7	8.1	-17.5
25943.047756	-25.7	8.1	-17.5
19512.220860	-25.7	8.1	-17.5
18855.249172	-25.7	8.2	-17.5
24552.678143	-25.7	8.2	-17.5

Measurement Settings

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

Spurious



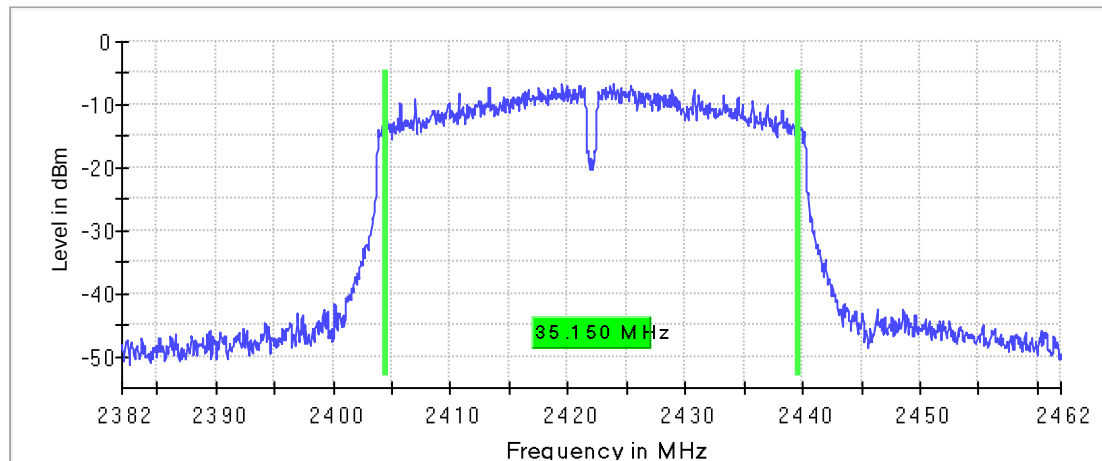
Minimum Emission Bandwidth 6 dB (2422 MHz; 20.000 dBm; 40 MHz)

6 dB Bandwidth

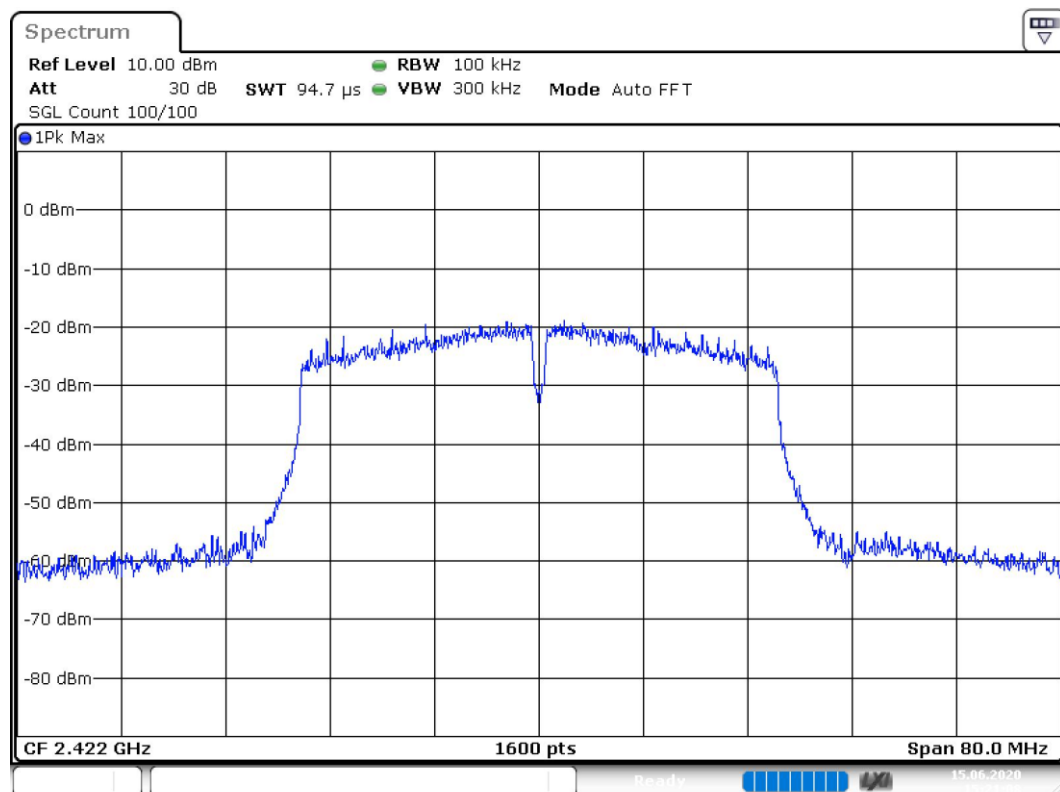
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	35.150000	0.500000	---	2404.475000	2439.625000

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	-6.6	PASS

6 dB Bandwidth



Bandwidth



Date: 15.JUN.2020 15:21:08

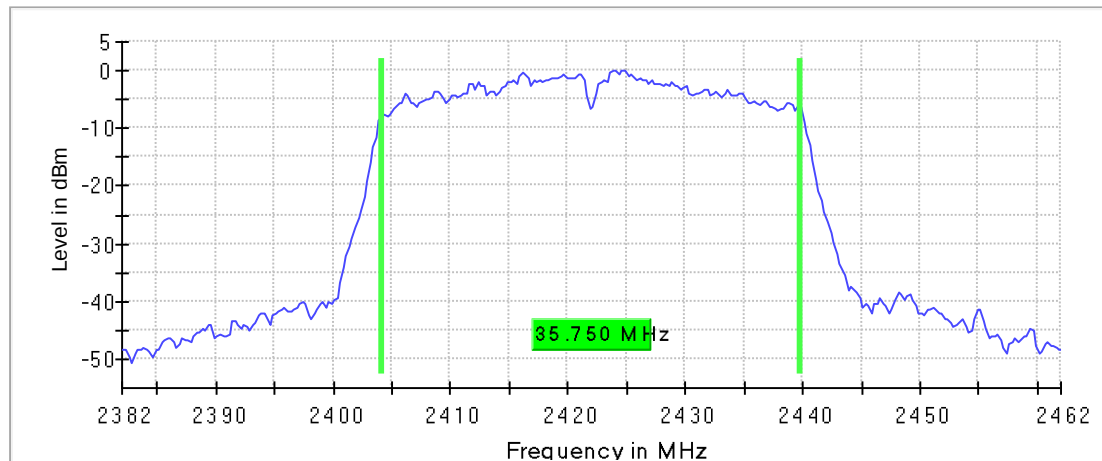
Occupied Channel Bandwidth 99% (2422 MHz; 20.000 dBm; 40 MHz)

99 % Bandwidth

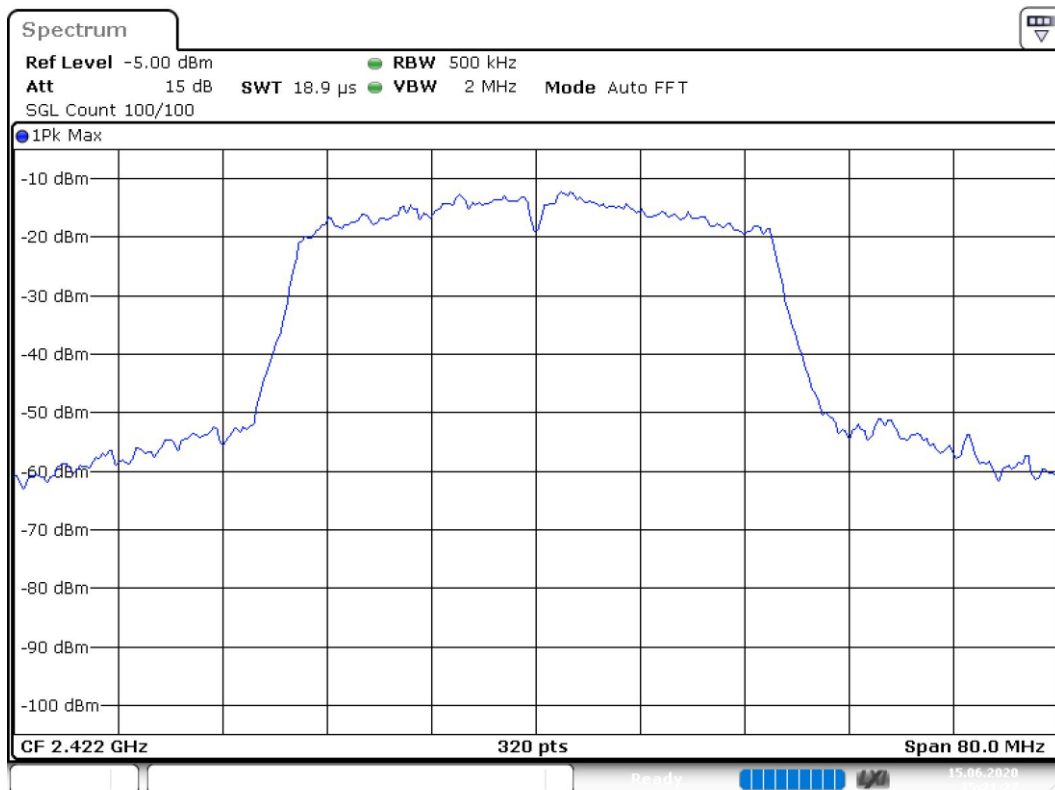
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	35.750000	---	---	2404.125000	2439.875000

DUT Frequency (MHz)	Result
2422.000000	PASS

99 % Bandwidth



Bandwidth



Date: 15.JUN.2020 15:21:27

Tx Spurious Emission (2422 MHz; 20.000 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
16171.332582	-28.6	-34.9	-24.5	10.4	PASS
23948.147870	-28.5	-34.6	-24.5	10.1	PASS
25928.527124	-28.6	-34.1	-24.5	9.6	PASS

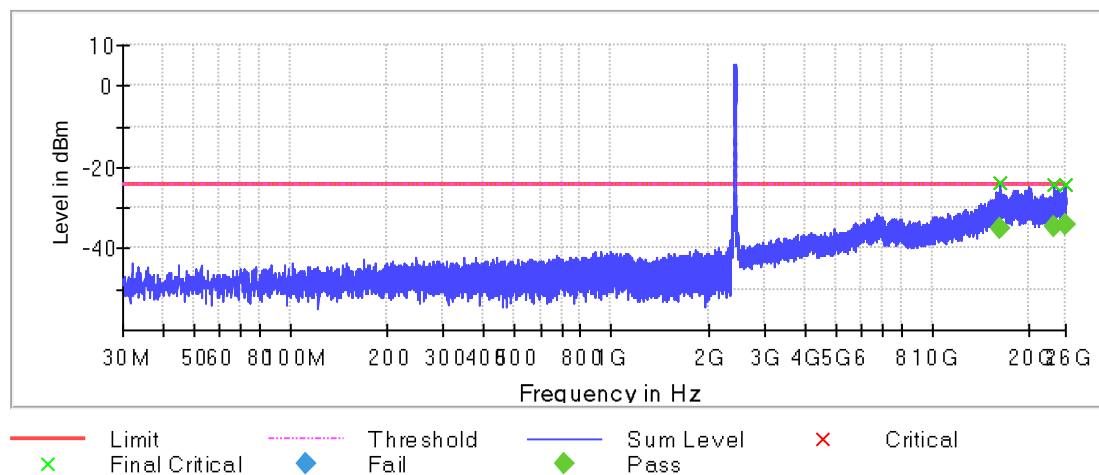
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
16164.898667	-23.8	-0.8	-24.5
23944.207720	-24.4	-0.2	-24.5
25937.903683	-24.5	-0.1	-24.5
19898.026382	-24.6	0.0	-24.5
20194.912917	-25.1	0.6	-24.5
19905.375059	-25.2	0.7	-24.5
24582.072849	-25.3	0.7	-24.5
25530.052131	-25.3	0.7	-24.5
25987.874684	-25.3	0.8	-24.5
19896.556647	-25.4	0.9	-24.5
24695.242469	-25.4	0.9	-24.5
16184.740094	-25.5	1.0	-24.5
18523.088989	-25.5	1.0	-24.5
19871.571146	-25.5	1.0	-24.5
25864.416917	-25.6	1.1	-24.5

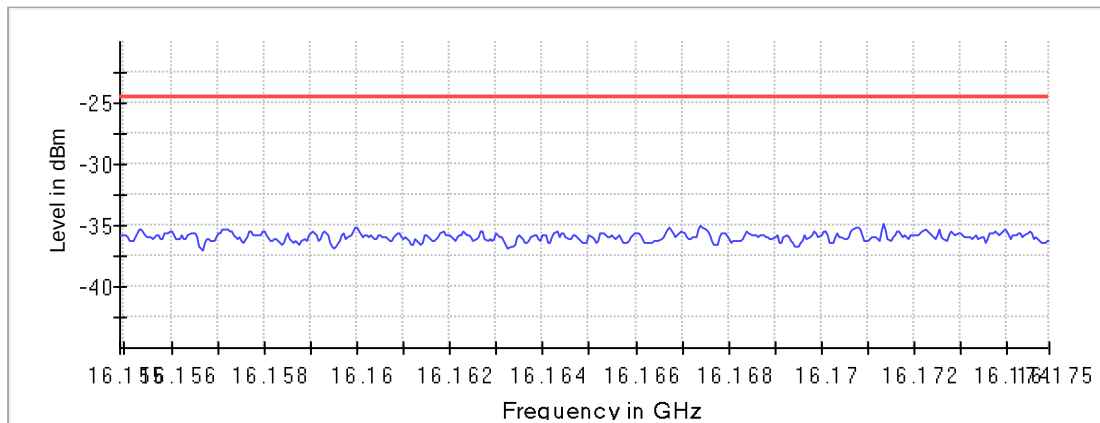
Measurement Settings

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

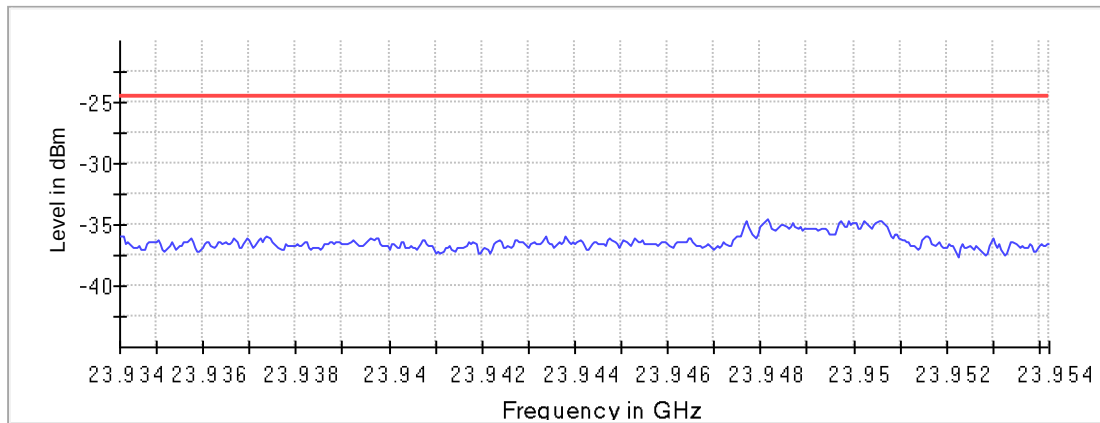
Spurious



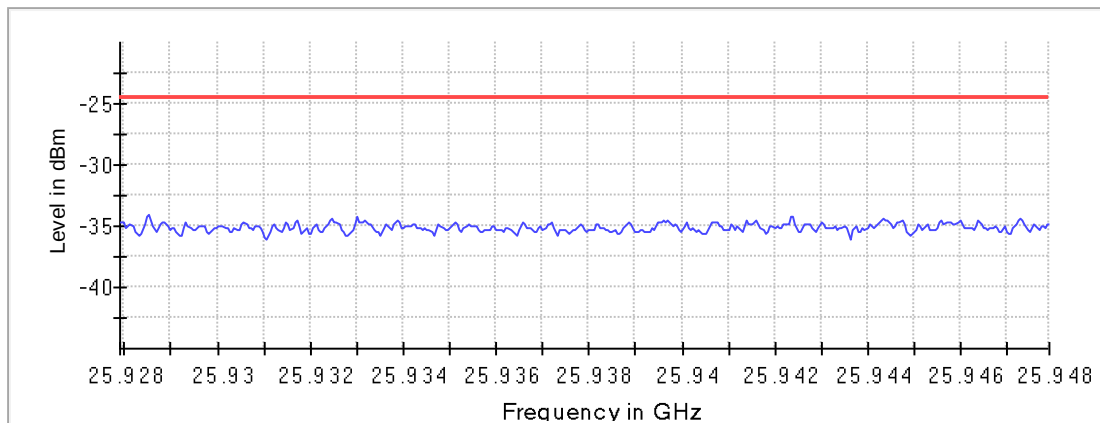
FinalMeas_16164898667Hz



FinalMeas_23944207720Hz



FinalMeas_25937903683Hz



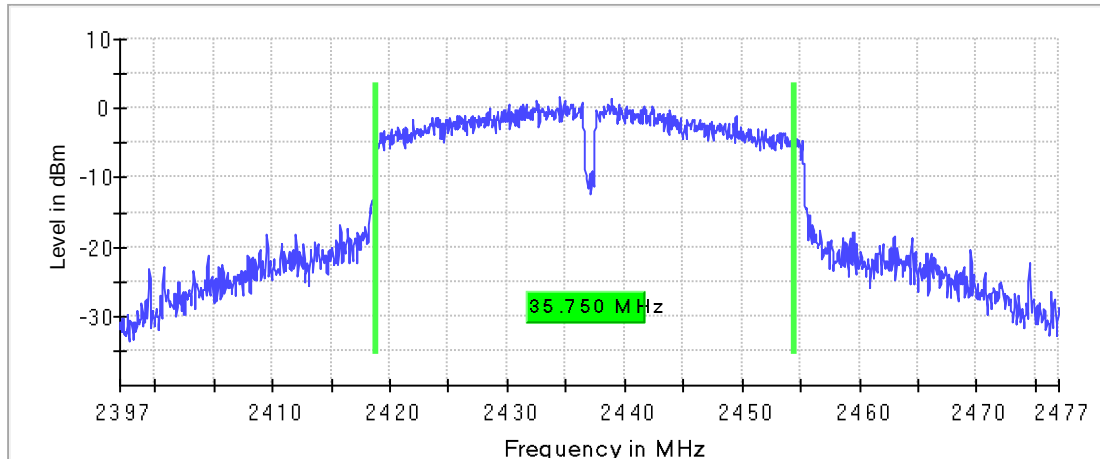
Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 40 MHz)

6 dB Bandwidth

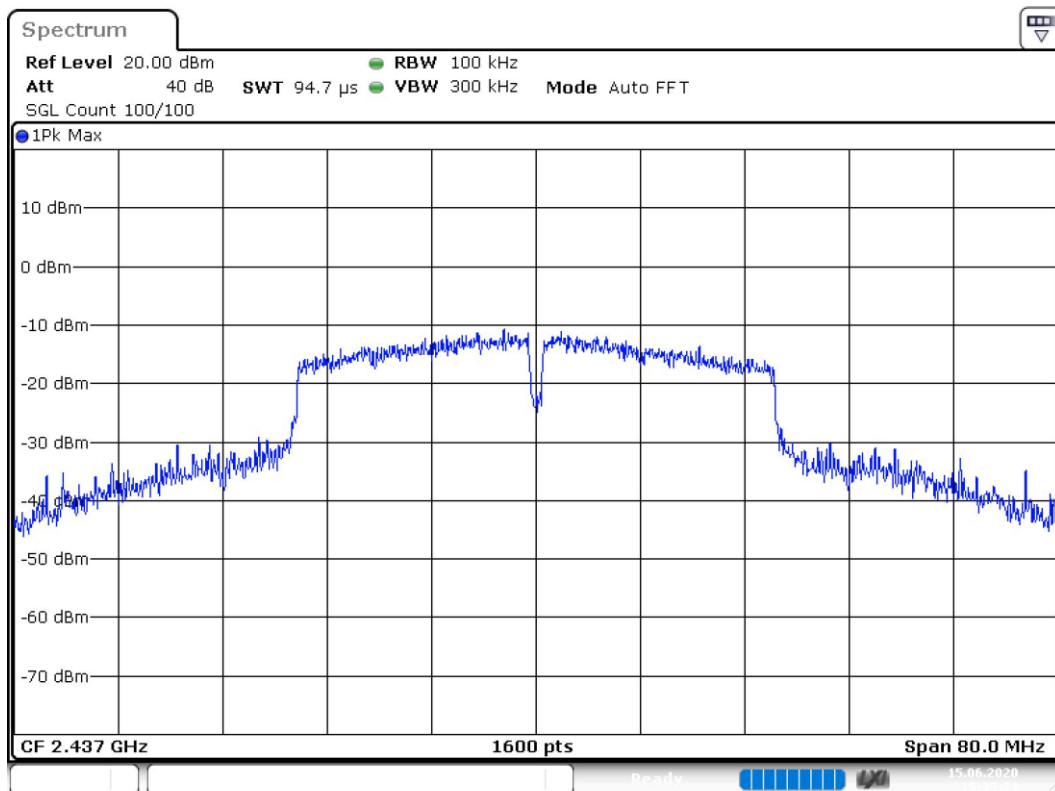
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	35.750000	0.500000	---	2418.825000	2454.575000

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

6 dB Bandwidth



Bandwidth



Date: 15.JUN.2020 15:35:20

Power Spectral Density (2437 MHz; 20.000 dBm; 40 MHz)

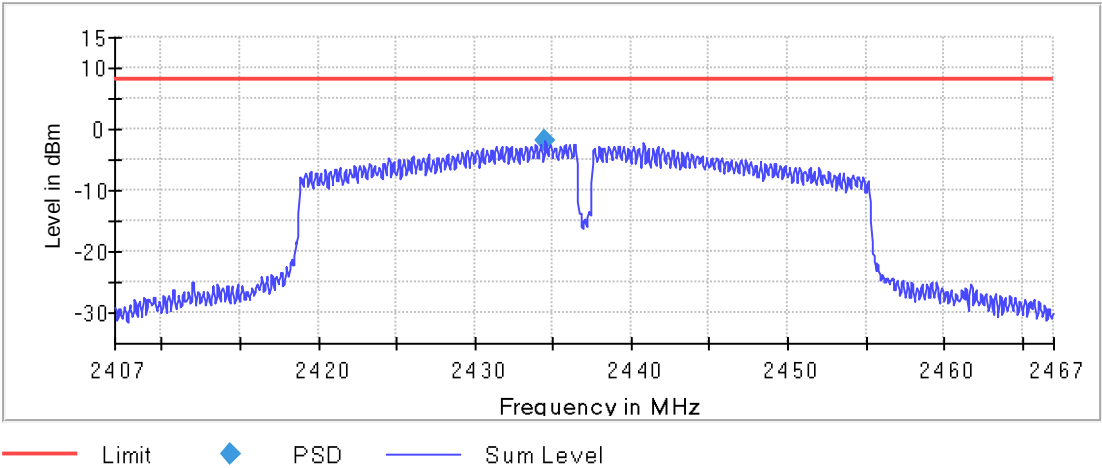
Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2437.000000	2434.525000	-2.014	8.0	PASS

Ports

Port	State
1	used
2	used

Power Spectral Density



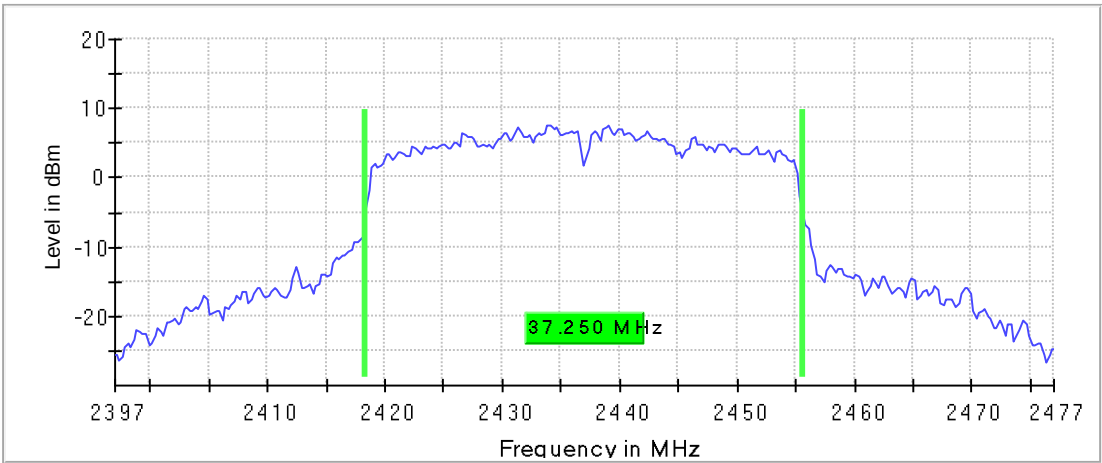
Occupied Channel Bandwidth 99% (2437 MHz; 20.000 dBm; 40 MHz)

99 % Bandwidth

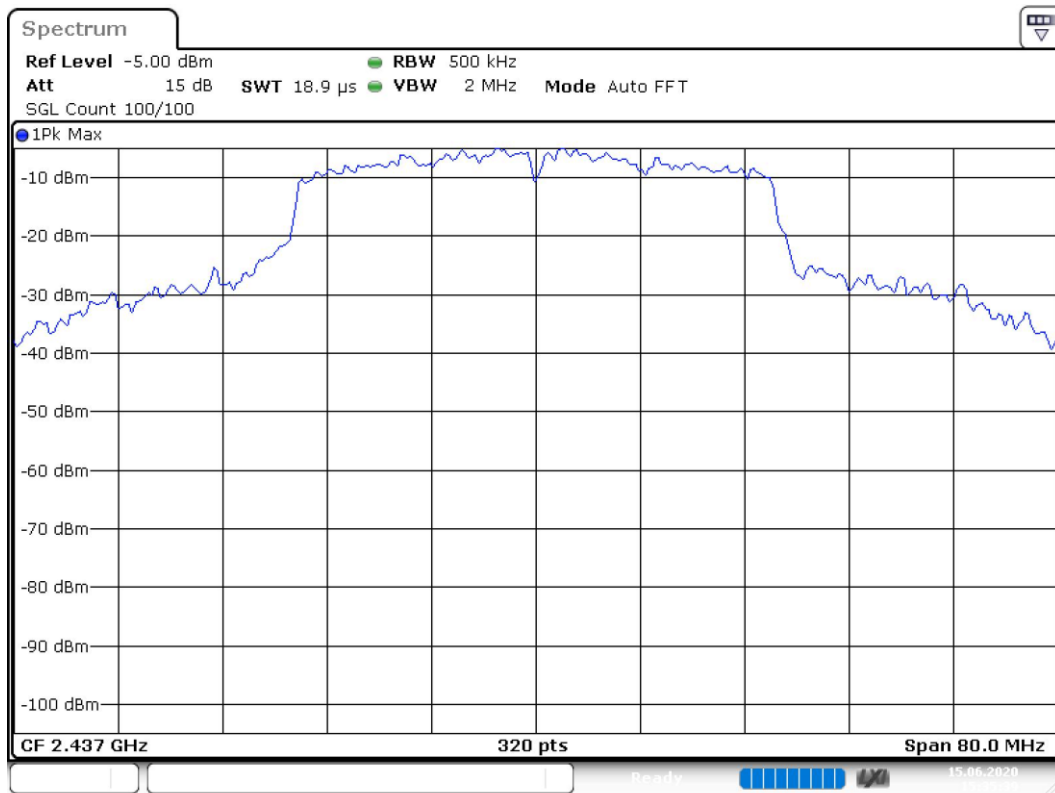
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	37.250000	---	---	2418.375000	2455.625000

DUT Frequency (MHz)	Result
2437.000000	PASS

99 % Bandwidth



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

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

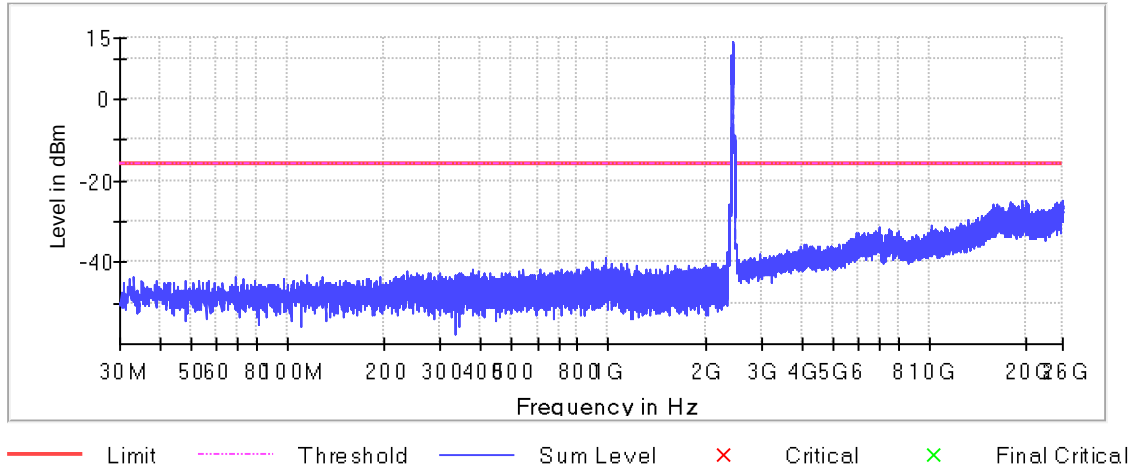
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2399.525000	-16.0	0.1	-15.9
2399.475000	-16.3	0.4	-15.9
2399.575000	-16.4	0.5	-15.9
2398.875000	-18.1	2.2	-15.9
2399.425000	-18.1	2.3	-15.9
2399.175000	-18.3	2.5	-15.9
2398.575000	-18.6	2.7	-15.9
2398.825000	-18.7	2.9	-15.9
2399.225000	-18.8	2.9	-15.9
2398.525000	-18.8	3.0	-15.9
2398.625000	-18.9	3.0	-15.9
2398.925000	-18.9	3.0	-15.9
2399.125000	-19.0	3.2	-15.9
2399.625000	-19.1	3.2	-15.9
2399.275000	-19.3	3.5	-15.9

Measurement Settings

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

Spurious



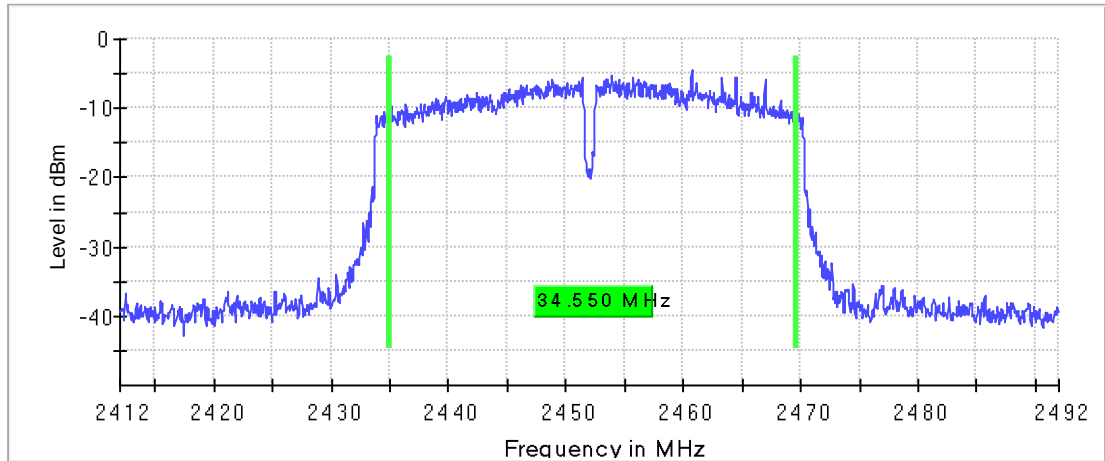
Minimum Emission Bandwidth 6 dB (2452 MHz; 20.000 dBm; 40 MHz)

6 dB Bandwidth

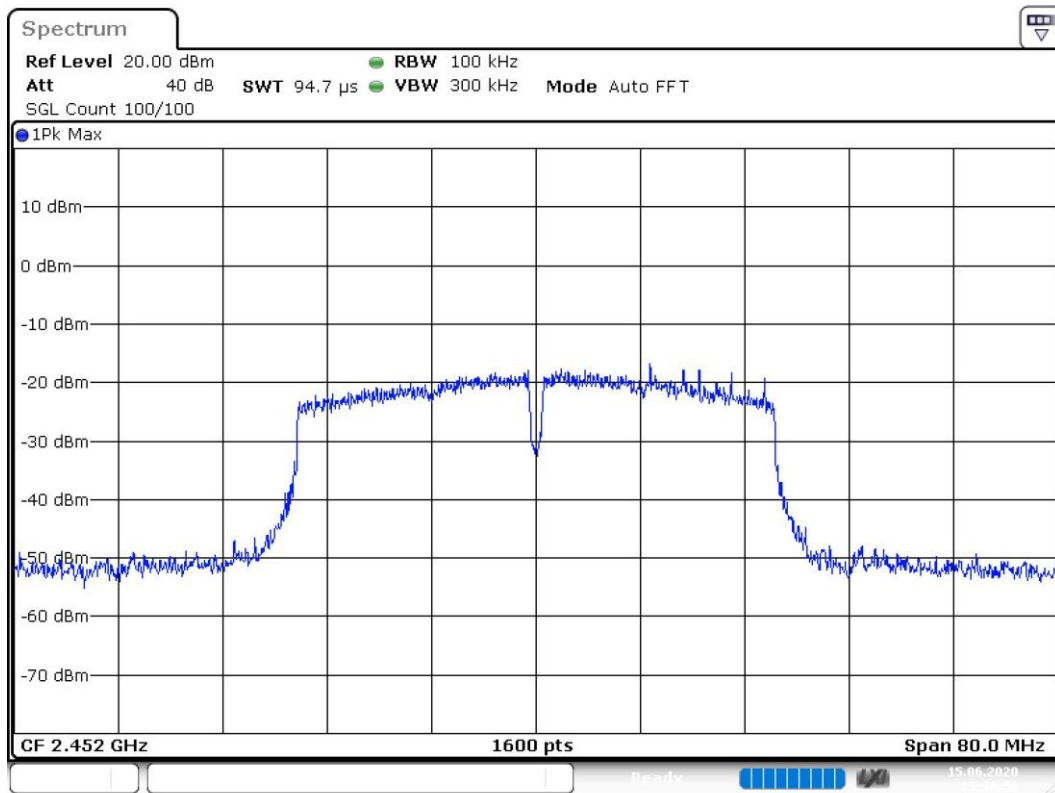
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	34.550000	0.500000	---	2435.075000	2469.625000

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-4.4	PASS

6 dB Bandwidth



Bandwidth



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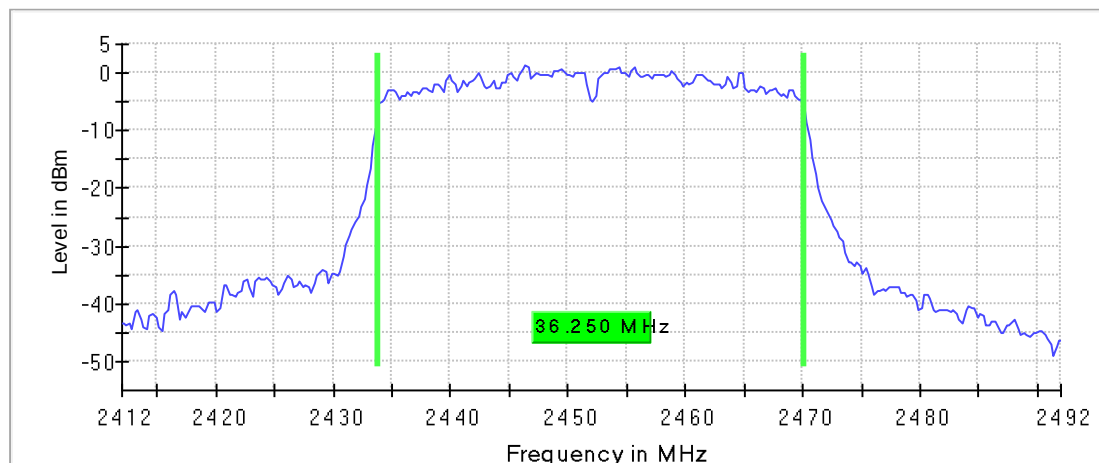
Occupied Channel Bandwidth 99% (2452 MHz; 20.000 dBm; 40 MHz)

99 % Bandwidth

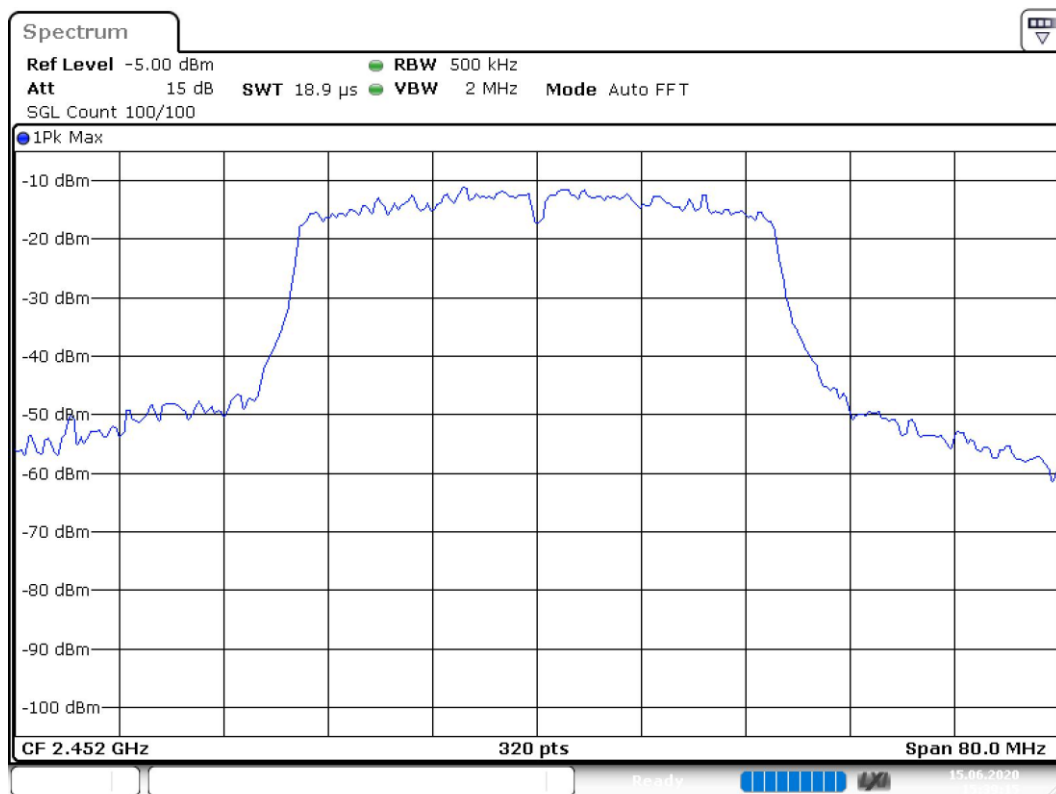
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	36.250000	---	---	2433.875000	2470.125000

DUT Frequency (MHz)	Result
2452.000000	PASS

99 % Bandwidth



Bandwidth



Date: 15.JUN.2020 15:39:15

Tx Spurious Emission (2452 MHz; 20.000 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
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
24704.060881	-24.3	1.2	-23.1
19890.677705	-24.6	1.5	-23.1
19878.919823	-24.6	1.5	-23.1
18254.127426	-24.8	1.7	-23.1
19915.663206	-24.9	1.8	-23.1
24643.066865	-25.2	2.1	-23.1
19936.974368	-25.3	2.2	-23.1
19549.699111	-25.3	2.2	-23.1
19912.723735	-25.3	2.2	-23.1
17905.800155	-25.3	2.2	-23.1
19856.138925	-25.4	2.3	-23.1
18872.885996	-25.4	2.3	-23.1
25917.327388	-25.5	2.4	-23.1
24655.559615	-25.5	2.4	-23.1
19582.768156	-25.6	2.5	-23.1

Measurement Settings

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

Spurious

