U6-Enterprise-IW WiFi Annex

Summary

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

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

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
2412.000000	18.2	30.0	18.2	85.700	PASS

OSP PowerMeter settings

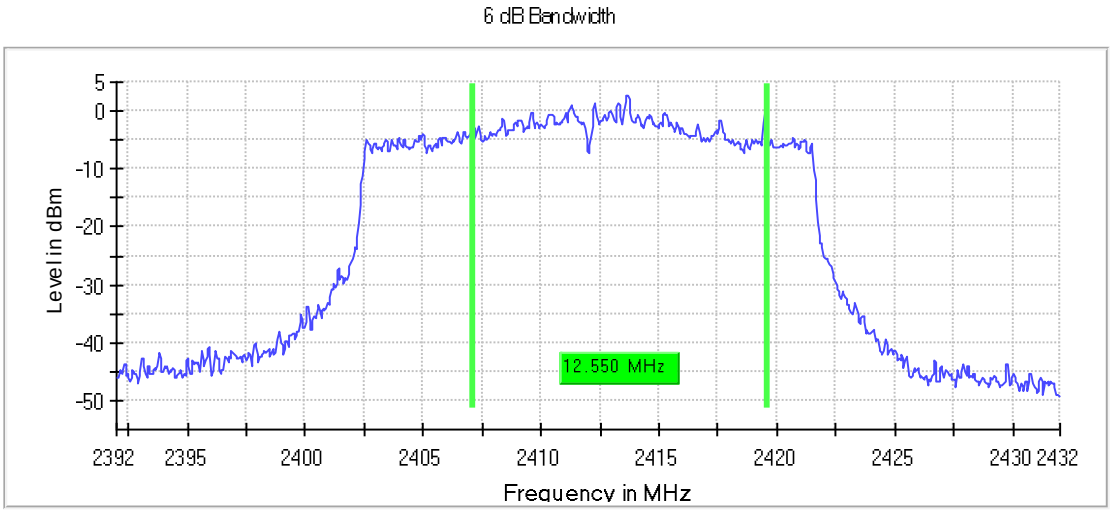
Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 µs	1.000 µs

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

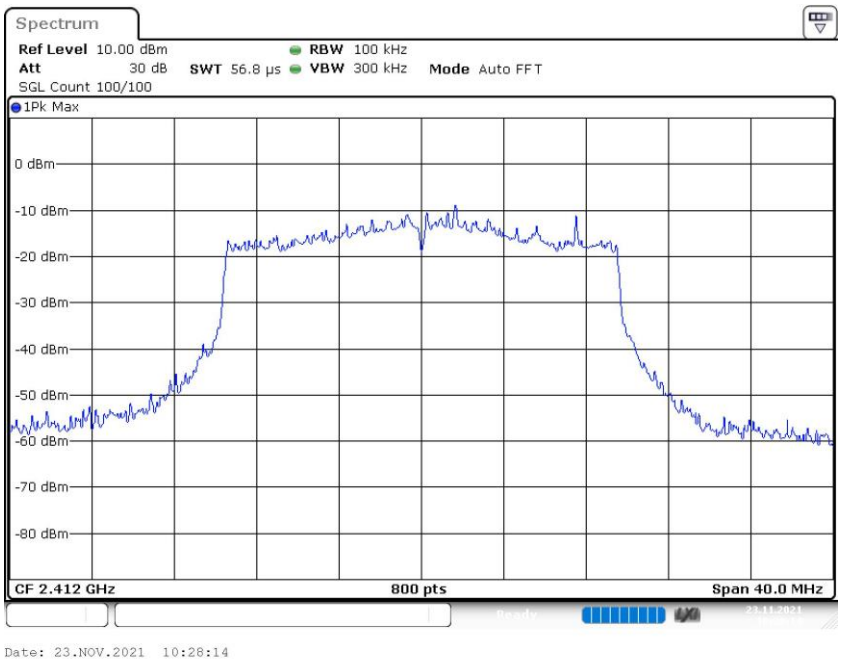
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	12.550000	0.500000	---	2407.075000	2419.625000

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	2.8	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	56.836 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

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

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2412.000000	2411.697750	-18.363	8.0	PASS

Ports

Port	State
1	used
2	used

Measurement

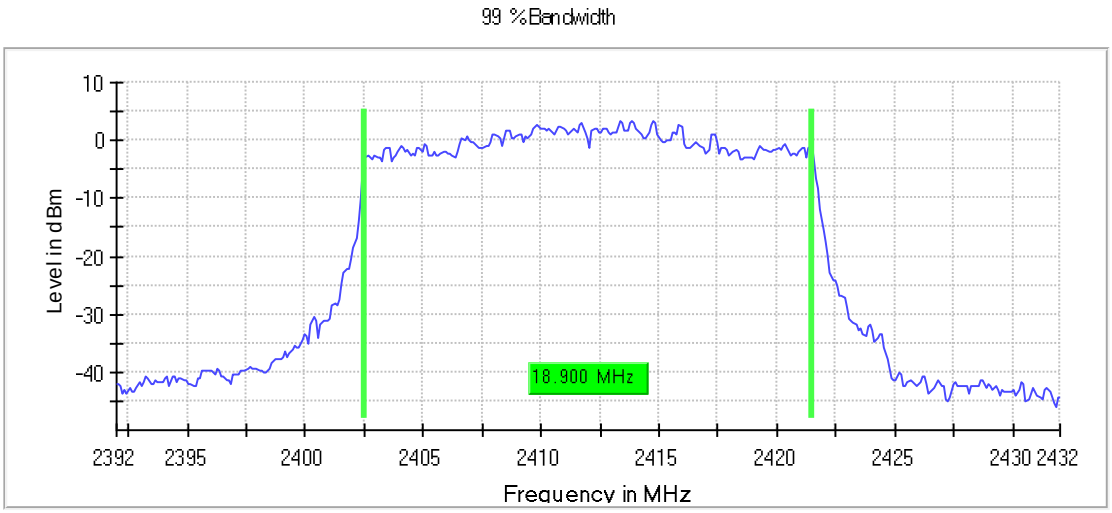
Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.42700 GHz	2.42700 GHz
Span	30.000 MHz	30.000 MHz
RBW	3.000 kHz	<= 3.000 kHz
VBW	10.000 kHz	>= 9.000 kHz
SweepPoints	20000	~ 20000
Sweeptime	4.424 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000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

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

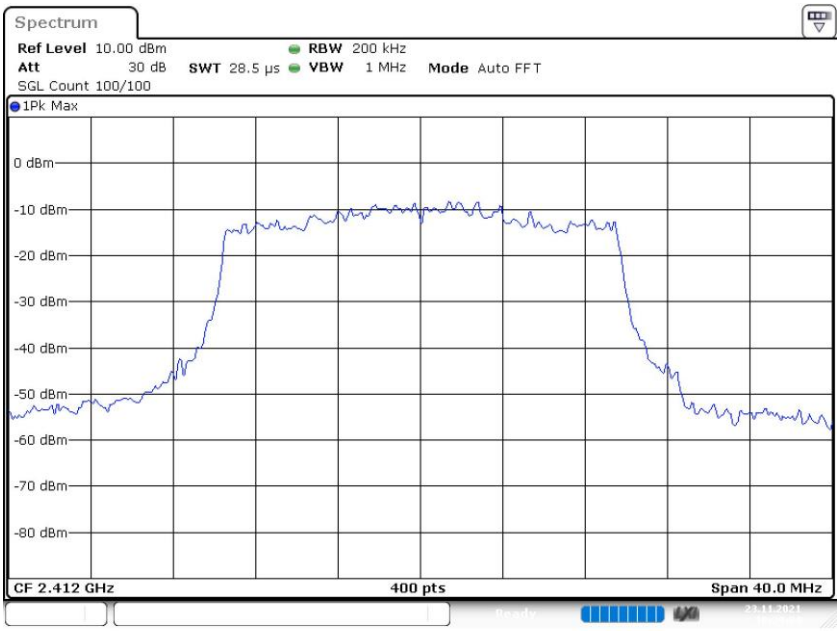
99 % Bandwidth

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

DUT Frequency (MHz)	Result
2412.000000	PASS



Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	28.477 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

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

Result

DUT Frequency (MHz)	Result
2412.000000	PASS

Final measurements

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

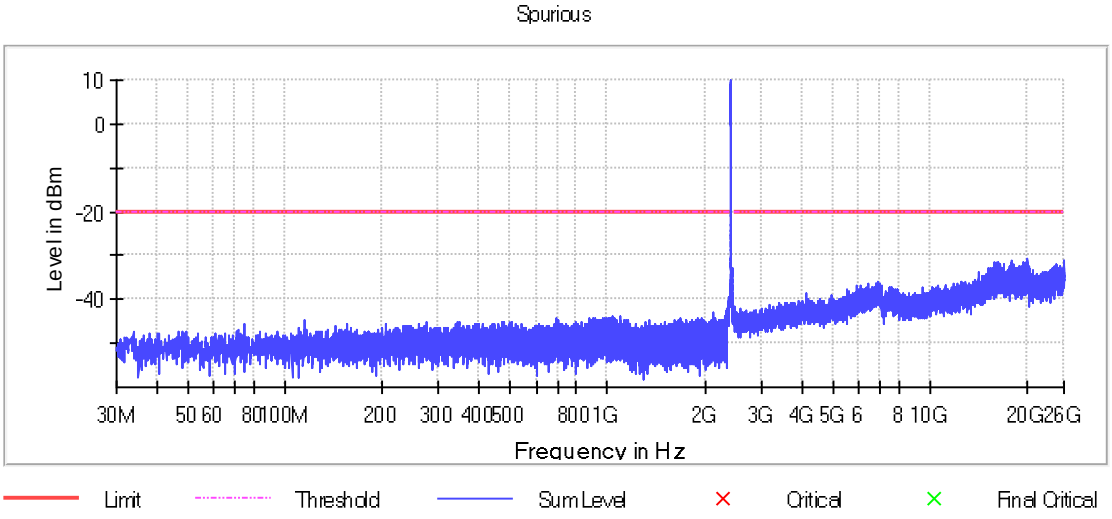
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19895.086911	-30.9	10.7	-20.2
19859.813264	-31.0	10.9	-20.2
25951.866168	-31.0	10.9	-20.2
25929.820138	-31.1	11.0	-20.2
17907.269890	-31.2	11.1	-20.2
19560.722126	-31.4	11.2	-20.2

19523.243875	-31.4	11.2	-20.2
16160.489461	-31.4	11.2	-20.2
19895.821779	-31.4	11.3	-20.2
16214.869668	-31.4	11.3	-20.2
19939.178971	-31.4	11.3	-20.2
17868.321904	-31.5	11.3	-20.2
19565.866199	-31.5	11.4	-20.2
17905.800155	-31.5	11.4	-20.2
19899.496117	-31.5	11.4	-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



Pre Measurement 1

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

Pre Measurement 2

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

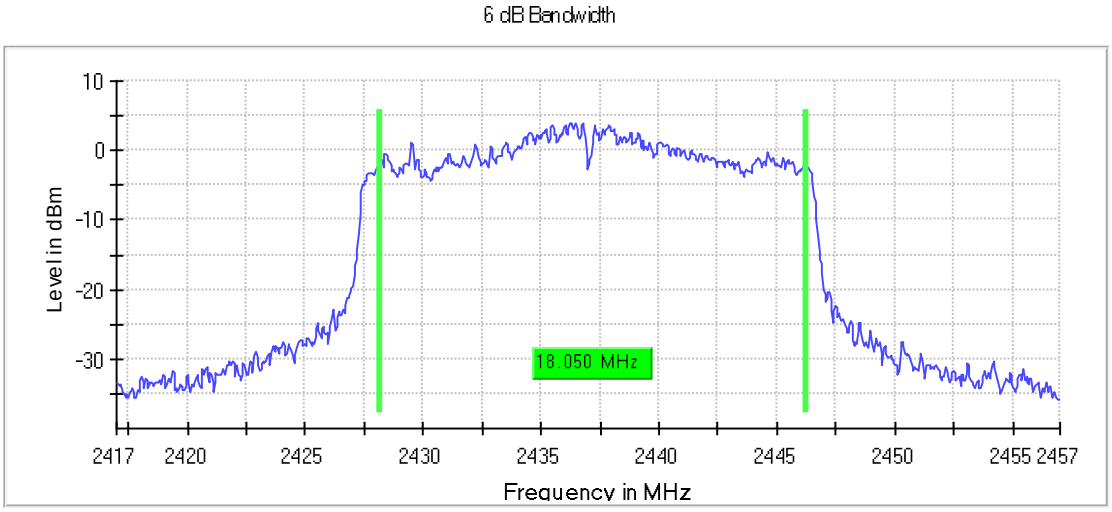
Sweeptype	**FFT**	**AUTO**
Preamp	**off**	**off**

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

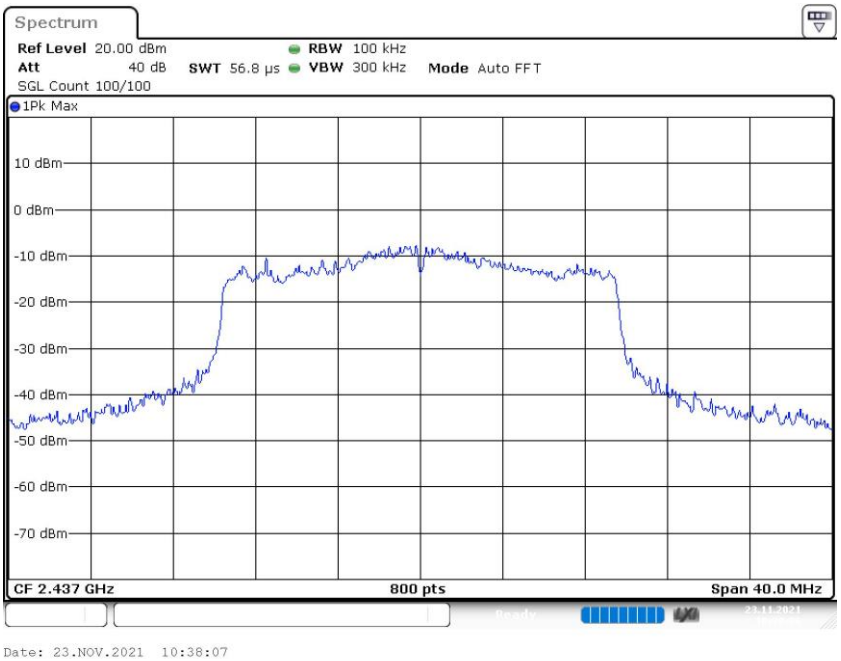
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	18.050000	0.500000	---	2428.175000	2446.225000

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	3.9	PASS



Bandwidth

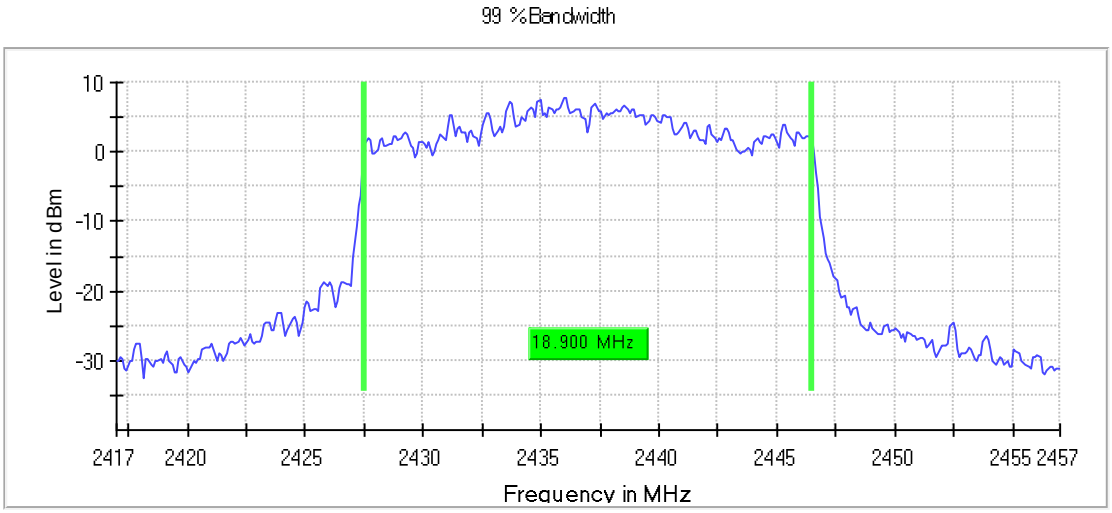


Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 20 MHz)

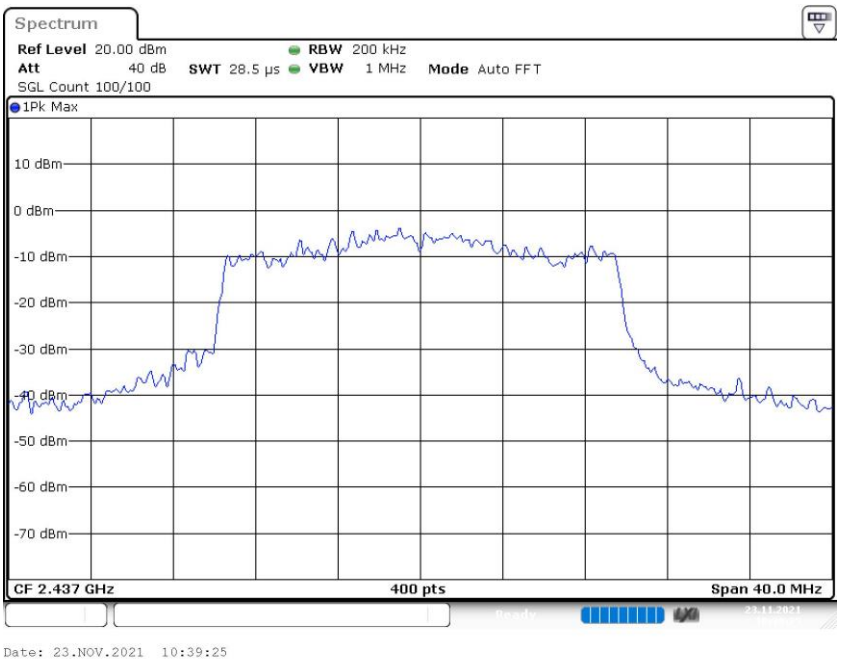
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	18.900000	---	---	2427.550000	2446.450000

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

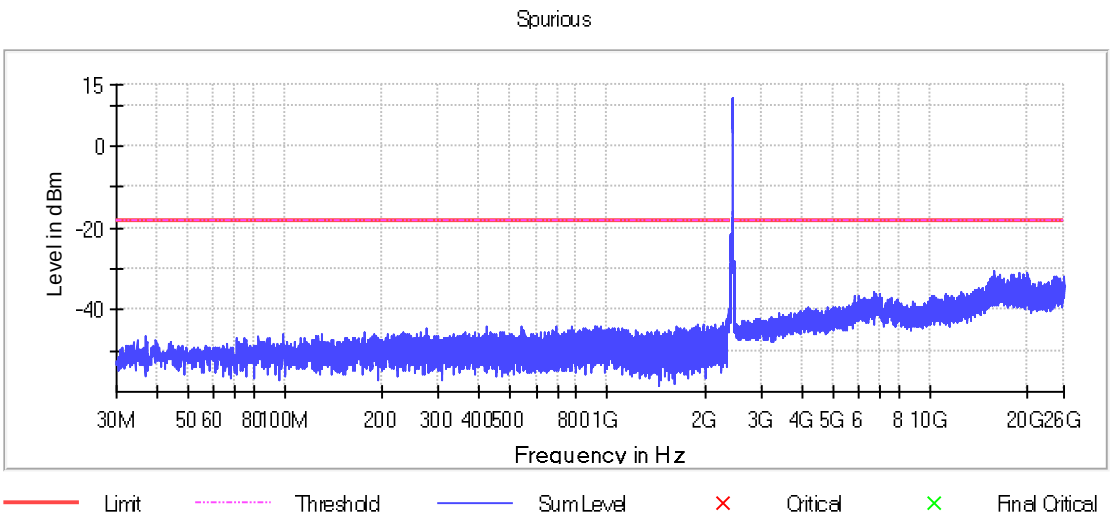
Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
15807.018117	-30.4	12.1	-18.3
19863.487602	-30.9	12.6	-18.3
18937.554350	-31.0	12.7	-18.3
19546.024773	-31.2	12.9	-18.3
15809.222720	-31.2	12.9	-18.3
19554.108317	-31.3	12.9	-18.3
19551.903714	-31.3	12.9	-18.3
19913.458603	-31.3	13.0	-18.3
19897.291514	-31.3	13.0	-18.3
17855.829154	-31.3	13.0	-18.3
19892.147441	-31.3	13.0	-18.3
17862.442963	-31.5	13.1	-18.3
19909.049397	-31.5	13.1	-18.3
19905.375059	-31.5	13.2	-18.3
19883.329029	-31.5	13.2	-18.3

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

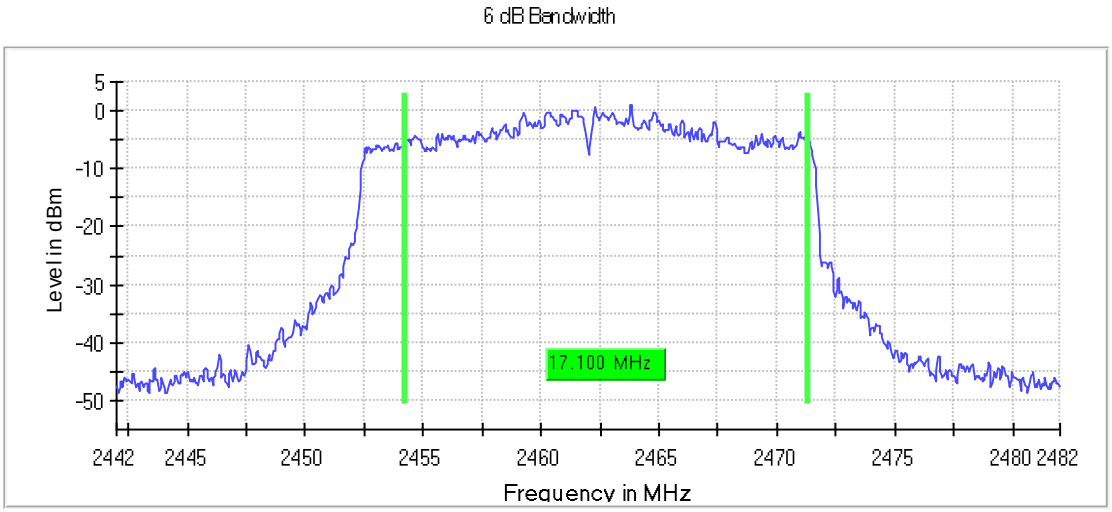


Minimum Emission Bandwidth 6 dB (2462 MHz; 24.000 dBm; 20 MHz)

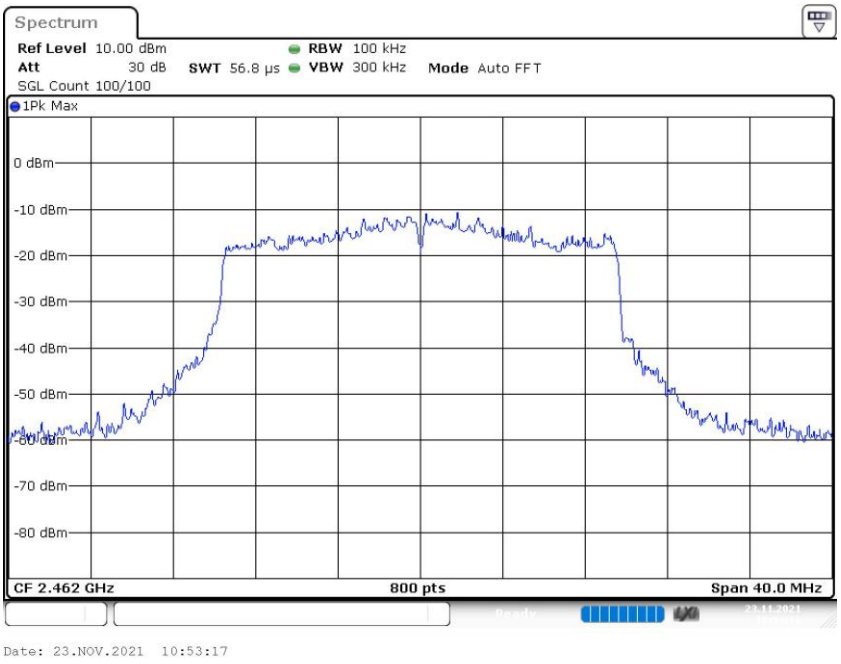
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.100000	0.500000	---	2454.225000	2471.325000

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	1.0	PASS



Bandwidth

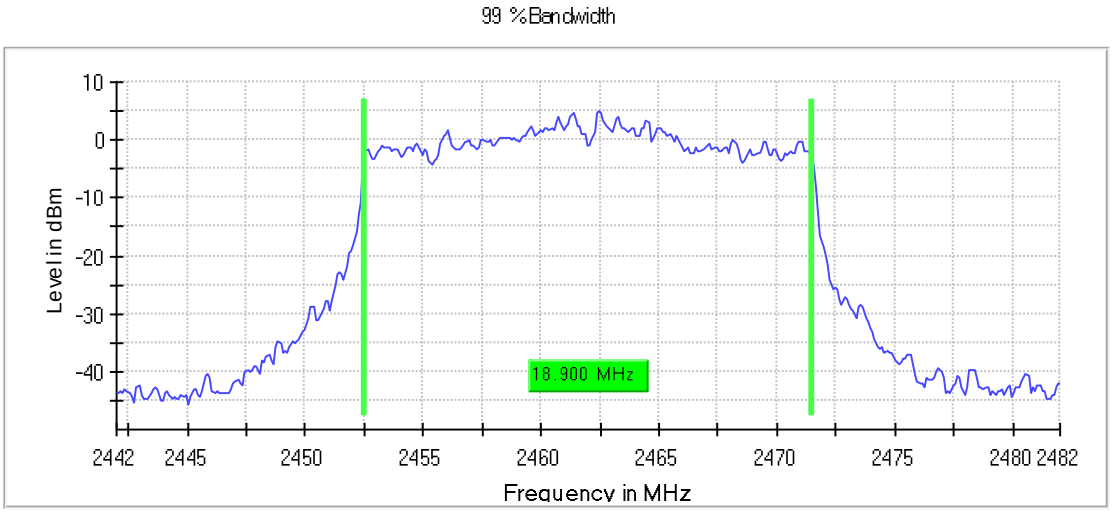


Occupied Channel Bandwidth 99% (2462 MHz; 24.000 dBm; 20 MHz)

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	18.900000	---	---	2452.550000	2471.450000

DUT Frequency (MHz)	Result
2462.000000	PASS



Bandwidth

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

Result

DUT Frequency (MHz)	Result
2462.000000	PASS

Final measurements

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

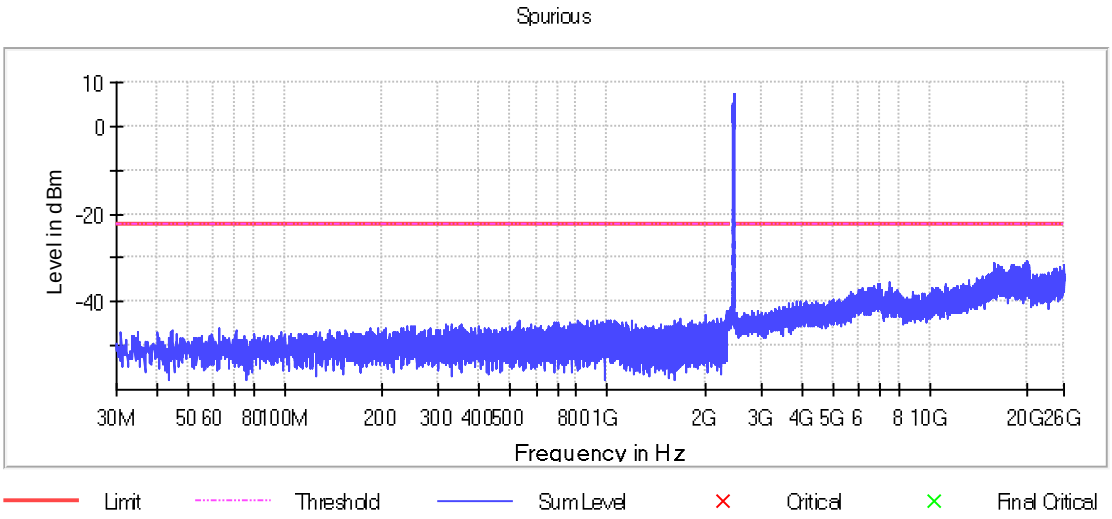
Pre Measurements

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

19898.761250	-30.5	8.0	-22.5
19883.329029	-30.7	8.2	-22.5
15878.300280	-31.1	8.6	-22.5
19586.442494	-31.1	8.6	-22.5
15883.444353	-31.2	8.7	-22.5
19900.965853	-31.3	8.8	-22.5
19922.277015	-31.3	8.8	-22.5
18237.225470	-31.4	8.9	-22.5
16176.656550	-31.4	8.9	-22.5
25905.569506	-31.4	8.9	-22.5
19923.011882	-31.4	8.9	-22.5
19891.412573	-31.4	8.9	-22.5
19901.700720	-31.4	8.9	-22.5
15881.974618	-31.5	9.0	-22.5
16184.005226	-31.5	9.0	-22.5

Measurement Settings

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

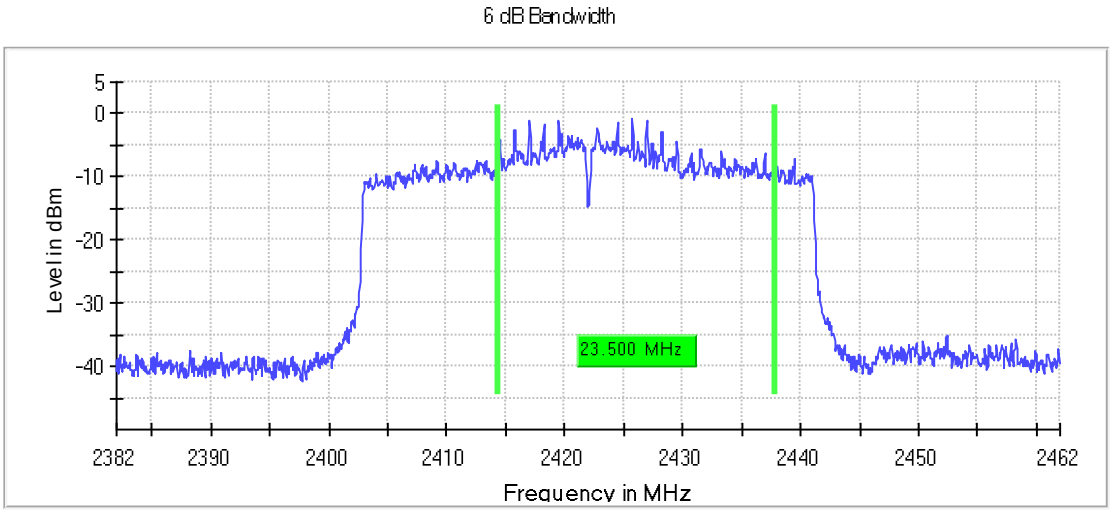


Minimum Emission Bandwidth 6 dB (2422 MHz; 24.000 dBm; 40 MHz)

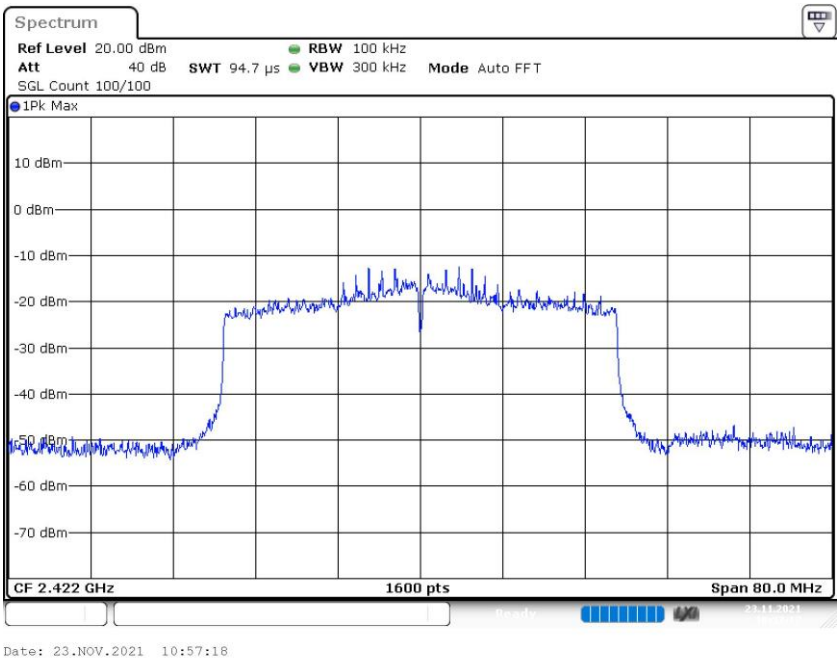
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	23.500000	0.500000	---	2414.425000	2437.925000

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



Bandwidth

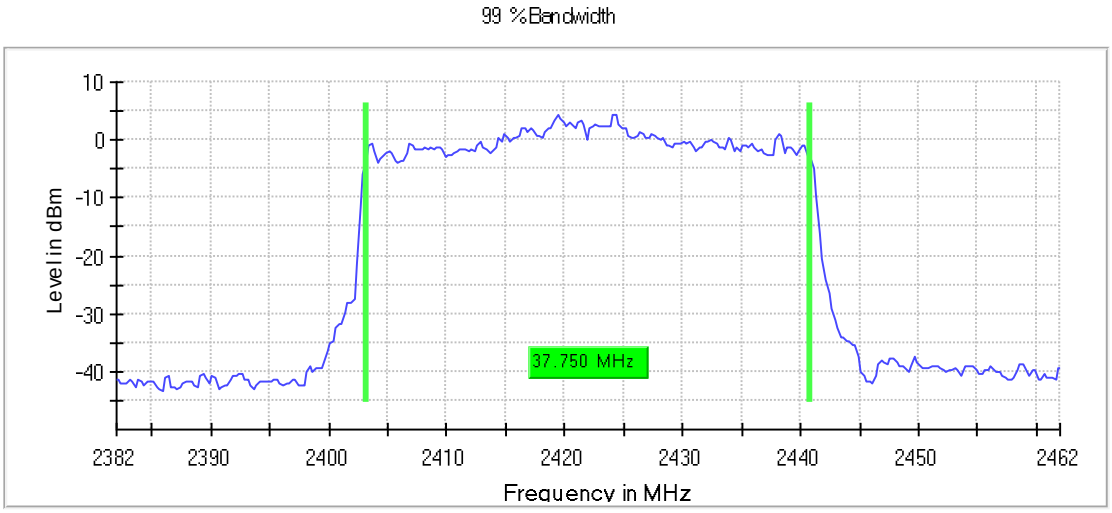


Occupied Channel Bandwidth 99% (2422 MHz; 24.000 dBm; 40 MHz)

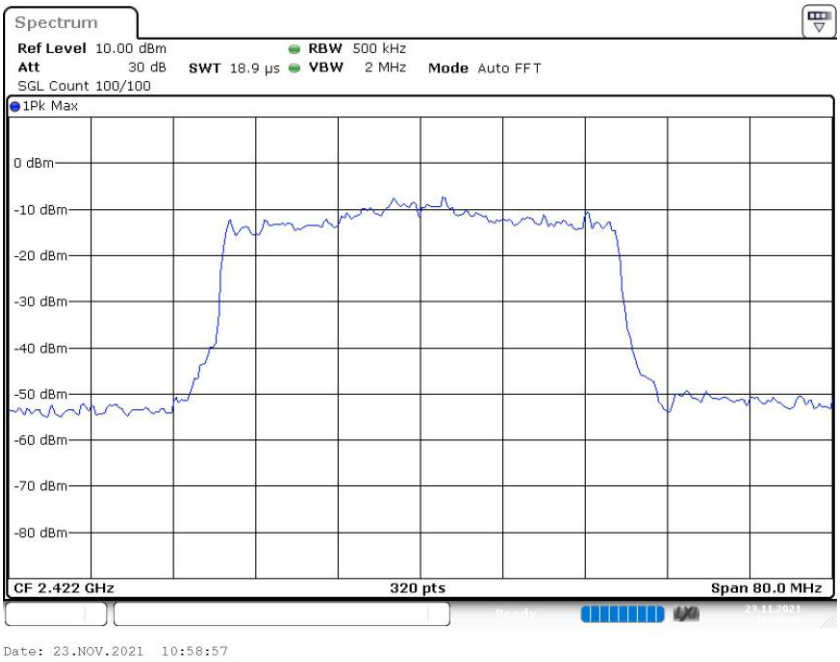
99 % Bandwidth

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

DUT Frequency (MHz)	Result
2422.000000	PASS



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2422.000000	PASS

Final measurements

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

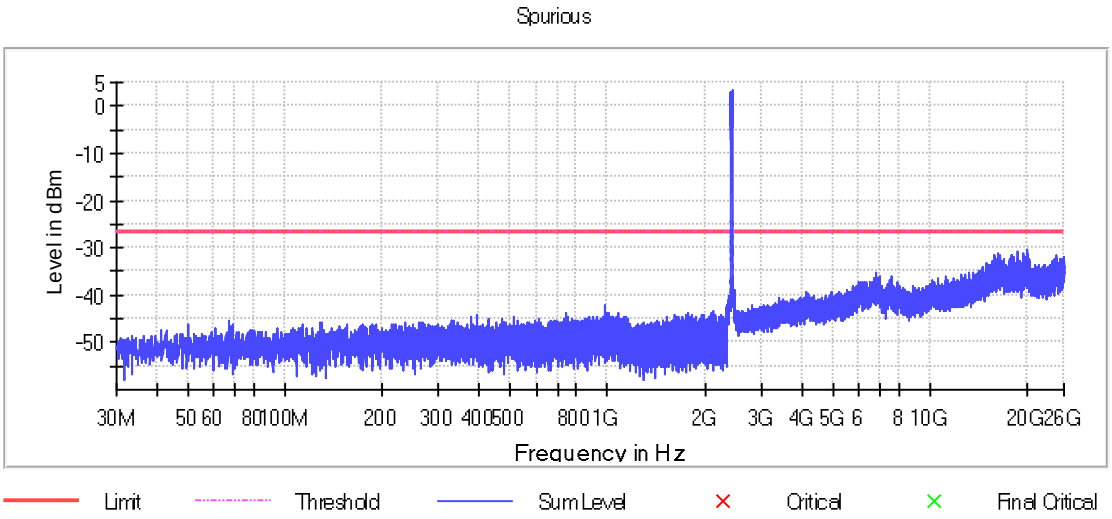
Pre Measurements

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

19901.700720	-30.2	3.4	-26.8
18556.158034	-30.8	4.0	-26.8
19896.556647	-31.0	4.2	-26.8
19903.905323	-31.1	4.3	-26.8
19508.546522	-31.2	4.4	-26.8
16200.172315	-31.3	4.5	-26.8
17905.065287	-31.4	4.6	-26.8
17873.465978	-31.4	4.6	-26.8
15882.709486	-31.4	4.7	-26.8
19897.291514	-31.5	4.7	-26.8
19525.448478	-31.5	4.7	-26.8
24665.112895	-31.5	4.8	-26.8
15856.254250	-31.6	4.8	-26.8
19887.003367	-31.6	4.8	-26.8
19890.677705	-31.6	4.8	-26.8

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

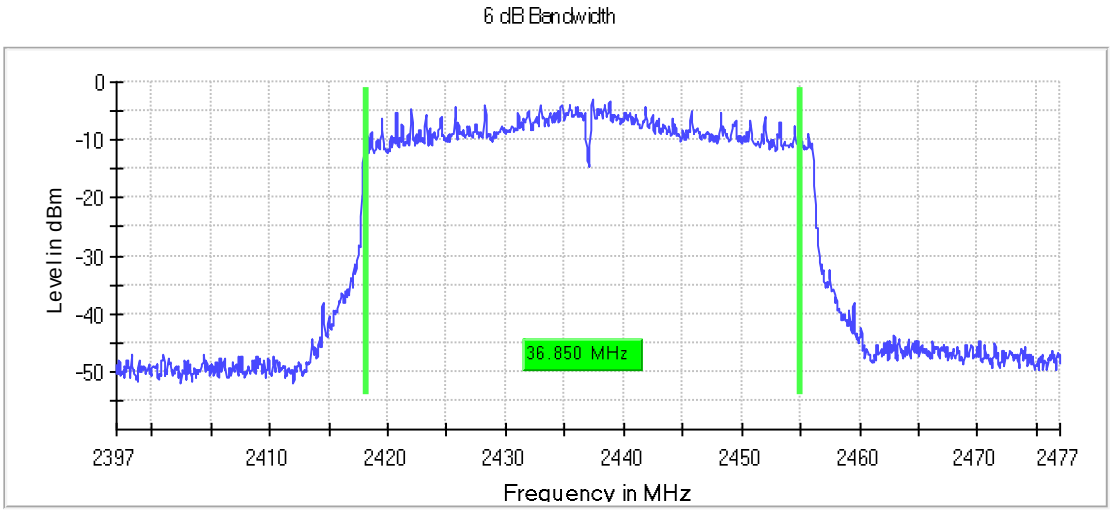


Minimum Emission Bandwidth 6 dB (2437 MHz; 24.000 dBm; 40 MHz)

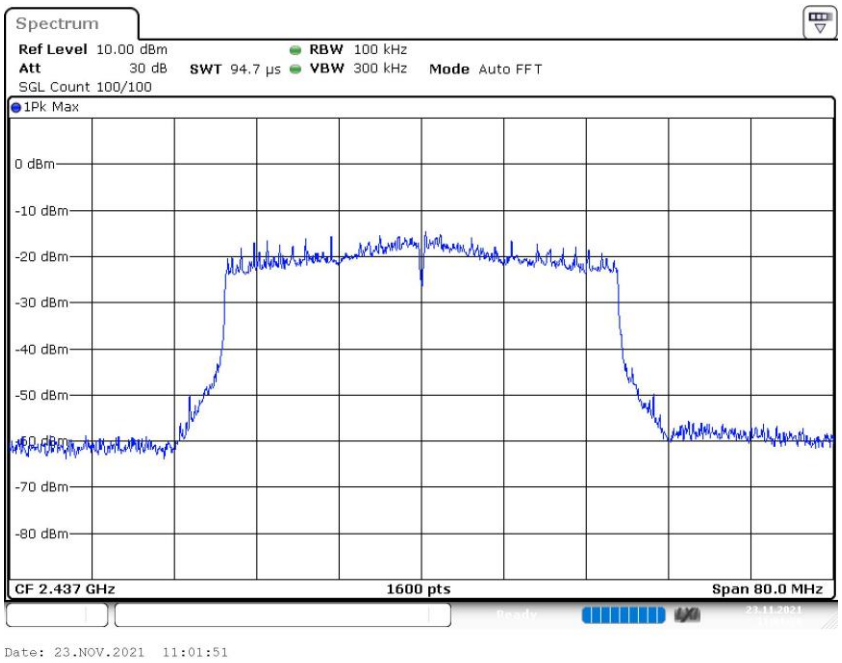
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	36.850000	0.500000	---	2418.175000	2455.025000

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	-2.9	PASS



Bandwidth

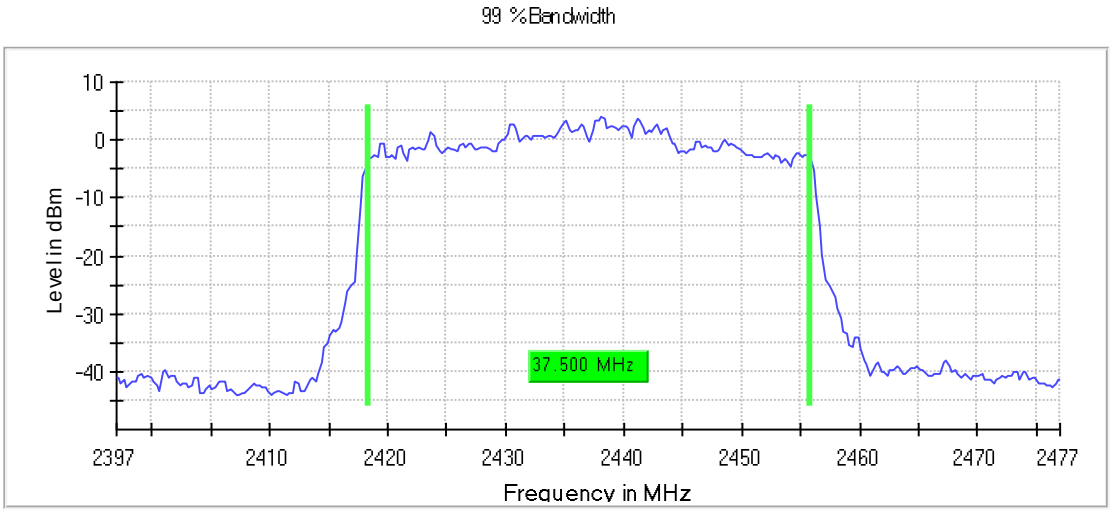


Occupied Channel Bandwidth 99% (2437 MHz; 24.000 dBm; 40 MHz)

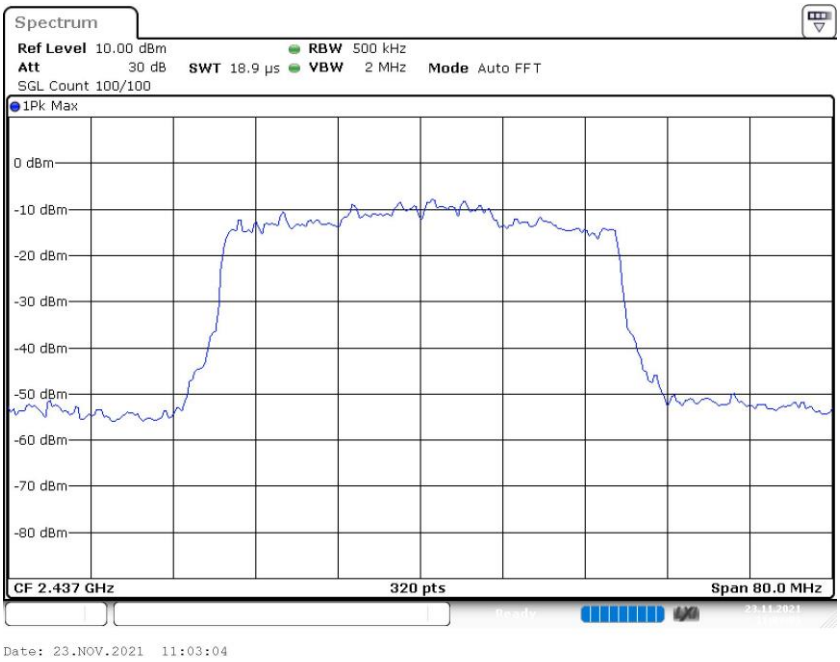
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	37.500000	---	---	2418.375000	2455.875000

DUT Frequency (MHz)	Result
2437.000000	PASS



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2437.000000	PASS

Final measurements

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

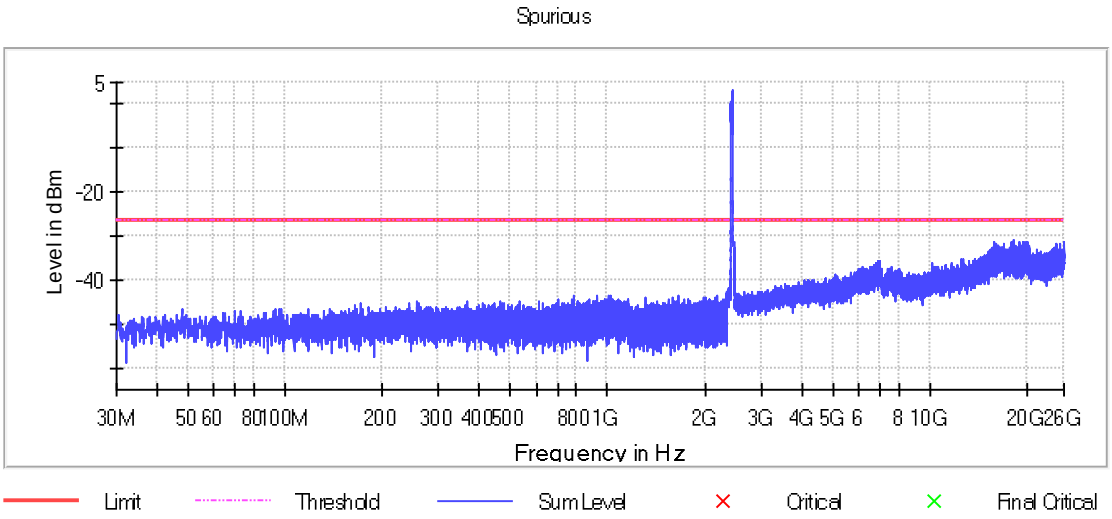
Pre Measurements

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

18235.755734	-30.8	4.2	-26.6
19871.571146	-31.1	4.5	-26.6
17866.852169	-31.1	4.5	-26.6
19526.918213	-31.2	4.6	-26.6
18894.932026	-31.3	4.6	-26.6
19886.268499	-31.3	4.6	-26.6
17876.405448	-31.3	4.7	-26.6
19889.942838	-31.3	4.7	-26.6
19870.101411	-31.3	4.7	-26.6
19508.546522	-31.4	4.7	-26.6
19852.464587	-31.4	4.7	-26.6
25951.866168	-31.4	4.8	-26.6
18260.006367	-31.4	4.8	-26.6
15881.974618	-31.4	4.8	-26.6
19895.086911	-31.5	4.9	-26.6

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

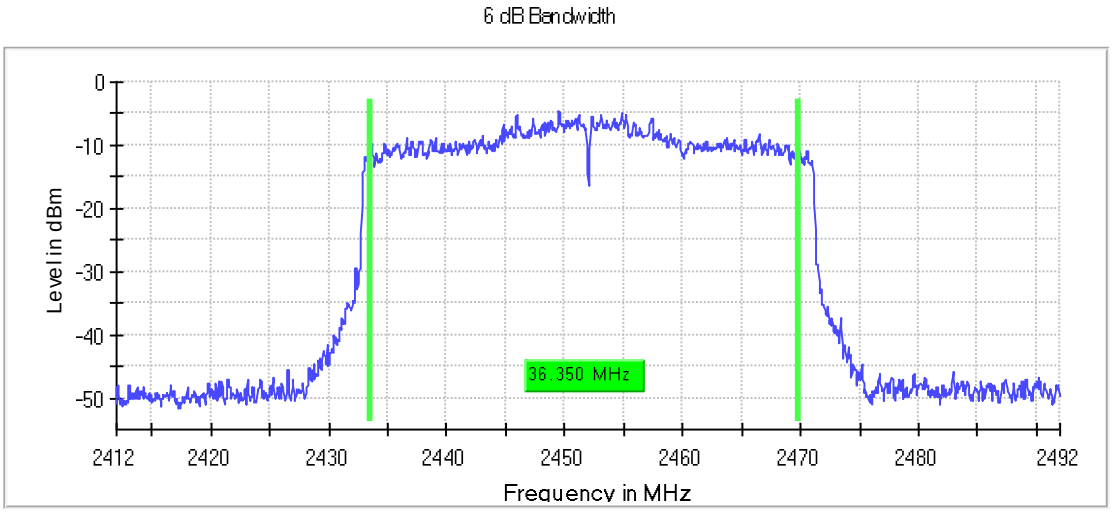


Minimum Emission Bandwidth 6 dB (2452 MHz; 24.000 dBm; 40 MHz)

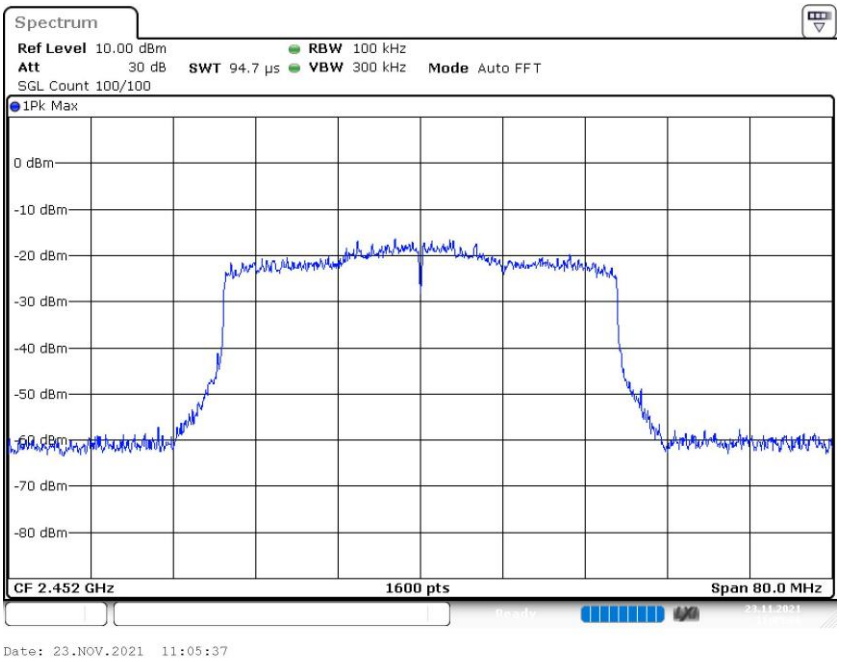
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	36.350000	0.500000	---	2433.525000	2469.875000

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	-4.7	PASS



Bandwidth

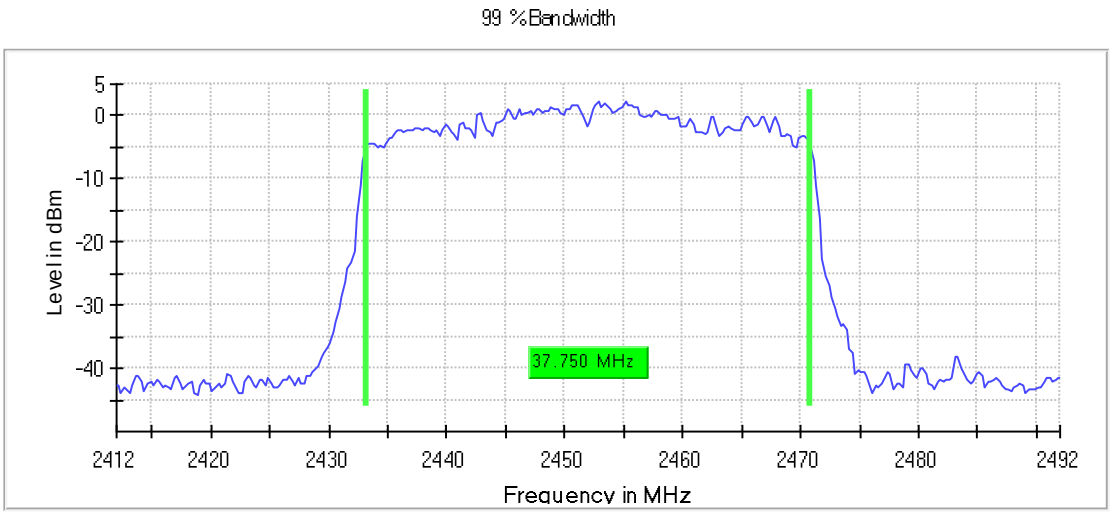


Occupied Channel Bandwidth 99% (2452 MHz; 24.000 dBm; 40 MHz)

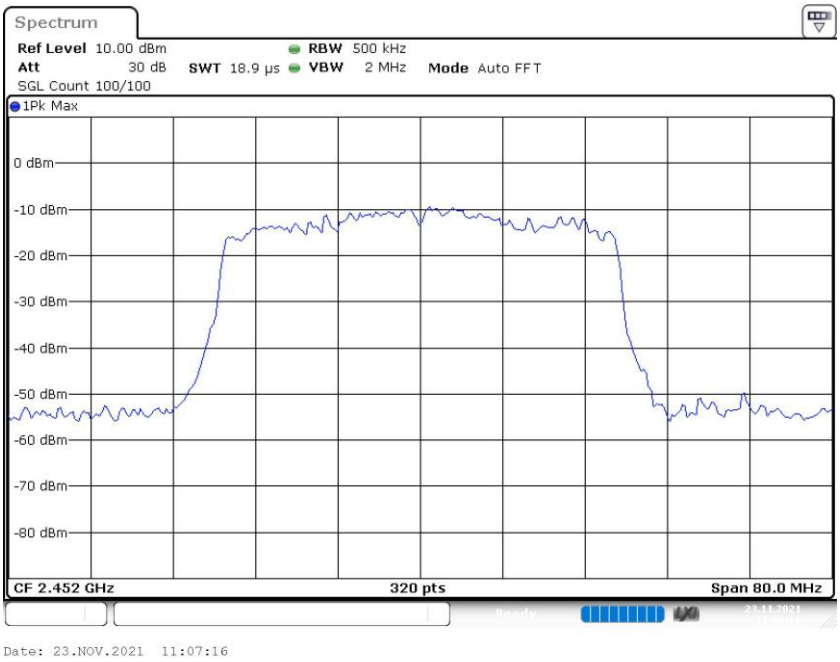
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	37.750000	---	---	2433.125000	2470.875000

DUT Frequency (MHz)	Result
2452.000000	PASS



Bandwidth



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

Result

DUT Frequency (MHz)	Result
2452.000000	PASS

Final measurements

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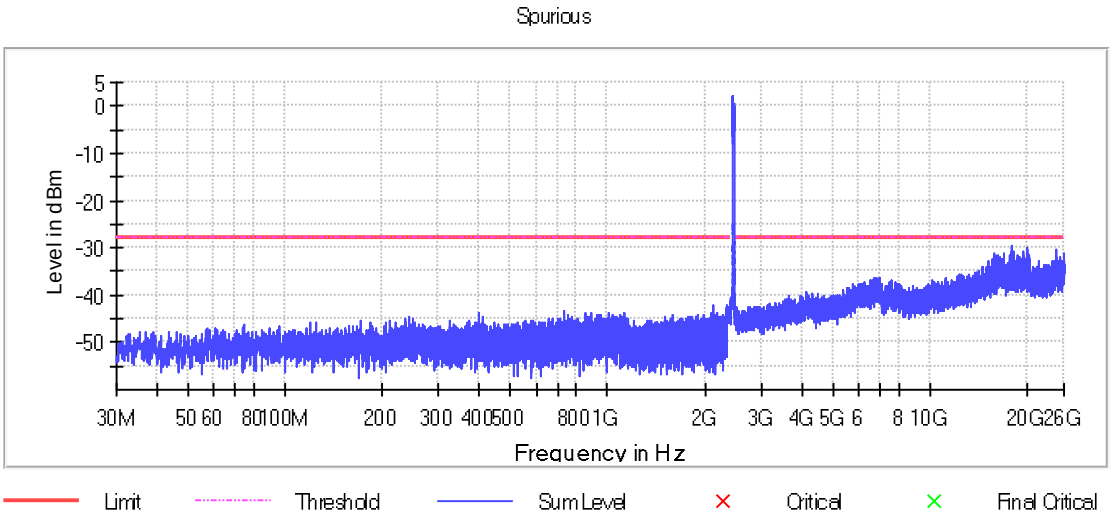
Pre Measurements

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

17902.125816	-29.7	1.7	-27.9
19871.571146	-30.1	2.2	-27.9
19895.086911	-30.4	2.5	-27.9
24575.459040	-30.5	2.6	-27.9
18207.095895	-30.7	2.8	-27.9
17887.428463	-30.7	2.8	-27.9
19507.811654	-30.8	2.9	-27.9
19890.677705	-31.1	3.1	-27.9
25870.295858	-31.1	3.2	-27.9
16885.803842	-31.3	3.3	-27.9
15843.761500	-31.3	3.3	-27.9
19531.327419	-31.4	3.4	-27.9
15901.081177	-31.5	3.5	-27.9
18212.239969	-31.5	3.5	-27.9
15844.496367	-31.5	3.6	-27.9

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



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