

# Measurement Results

1-5191/17-01-11\_log1\_conducted

[Test logging](#)

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## IUT Summary

IUT DEFINITION	
Manufacturer	Sennheiser electronic
Type	XS Wireless Digital
Serial No.	1288000127
Setup No.	NI
SW Version	0.0.29
HW Version	KG001015024430579094T15G800010008
Comment 1	TEs-02
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-10
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3
Vmid [V]	3.7
Vhigh [V]	4.2
Imax [A]	1
Antenna Gain [dBi]	0.8
Additional Path Loss [dB]	1.1

IUT Common Settings 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2403
Frequency mid [MHz]	2443
Frequency high [MHz]	2481
Burst length [ms]	1
Nominal Bandwidth [MHz]	1.4
User Interaction	Yes

## 1. FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4

Test References	
TC Start	30.07.2018 16:43:23
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V04 - Chapter 9.1.1 RBW >= DTS Bandwidth
Class / TC Version / TC ID	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1   TCID_FCC15247_3
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS4 - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

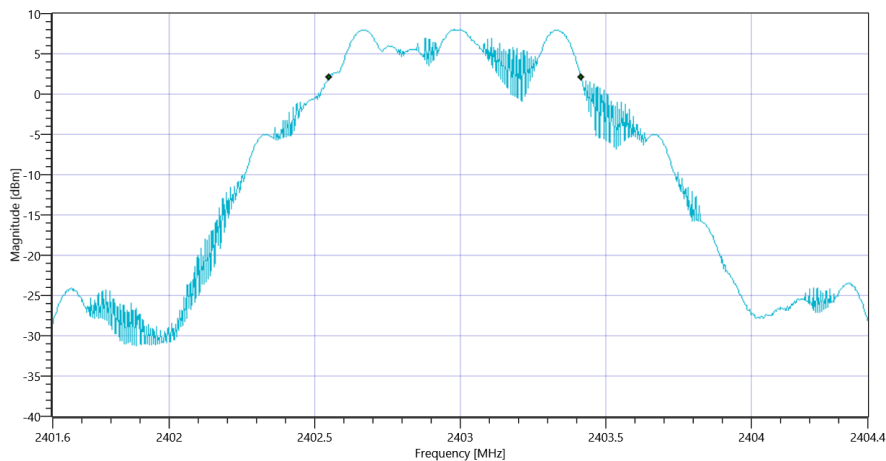
## Test at TX 2403 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.60
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.600
Freq. Stop [MHz]	2404.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: DTS Bandwidth

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.868	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4 DTS BW \_30072018\_164402.png

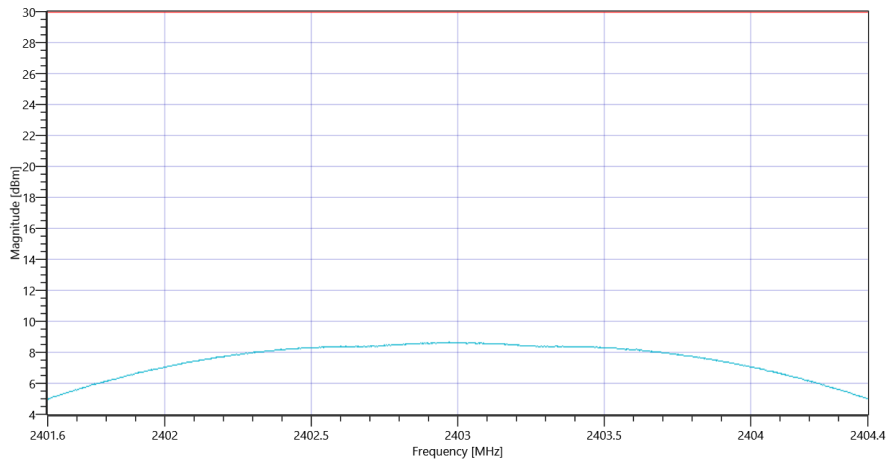
### READ SA SETTINGS:

Ref. Level [dBm]	18.60
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	25
Freq. Start [MHz]	2401.600
Freq. Stop [MHz]	2404.400
Resolution BW. [MHz]	2.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.66	dBm	PASS
Peak Power	---	1000	7.345139	mW	PASS

Frequency at Peak	--	2402.969	MHz	Information
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Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4\_30072018\_164416.png

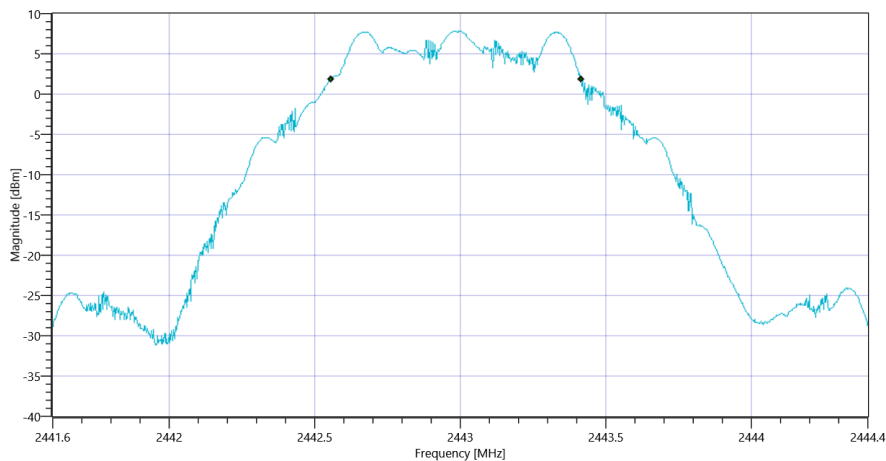
## Test at TX 2443 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.35
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	20
Freq. Start [MHz]	2441.600
Freq. Stop [MHz]	2444.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: DTS Bandwidth

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.86	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4 DTS BW \_30072018\_164510.png

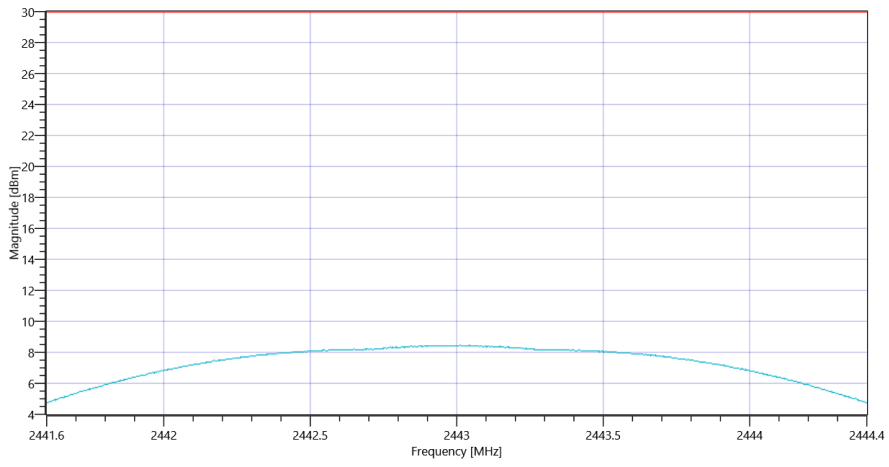
### READ SA SETTINGS:

Ref. Level [dBm]	18.35
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	25
Freq. Start [MHz]	2441.600
Freq. Stop [MHz]	2444.400
Resolution BW. [MHz]	2.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.46	dBm	PASS
Peak Power	---	1000	7.014553	mW	PASS

Frequency at Peak	--	--	2443.011	MHz	Information
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Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4\_30072018\_164525.png



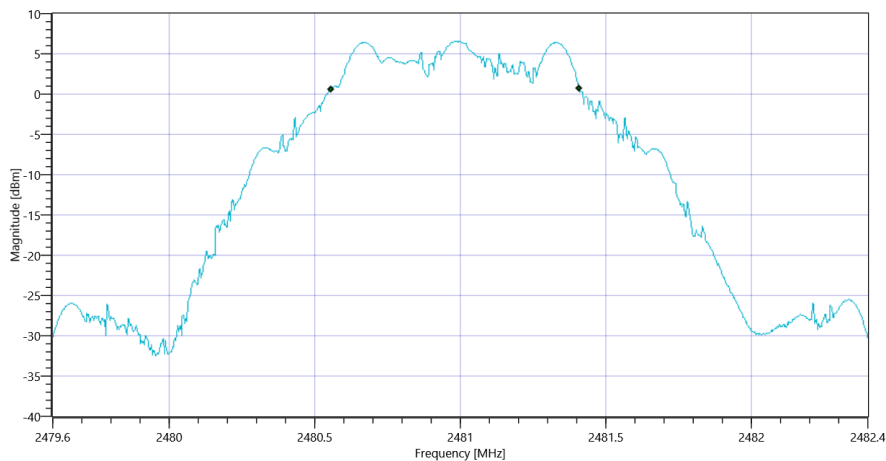
## Test at TX 2481 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	12.10
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.600
Freq. Stop [MHz]	2482.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: DTS Bandwidth

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.854	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4 DTS BW \_30072018\_164614.png

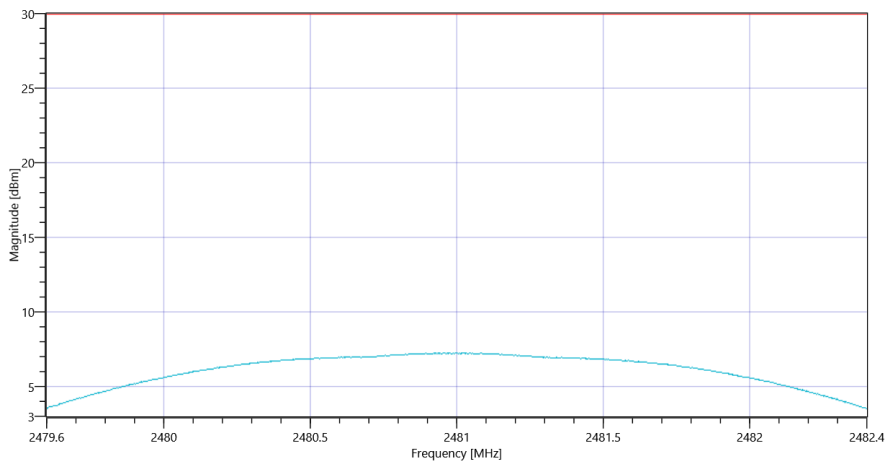
### READ SA SETTINGS:

Ref. Level [dBm]	17.10
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	25
Freq. Start [MHz]	2479.600
Freq. Stop [MHz]	2482.400
Resolution BW. [MHz]	2.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.25	dBm	PASS
Peak Power	---	1000	5.308844	mW	PASS

Frequency at Peak	--	--	2481.003	MHz	Information
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Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS Generic 2G4\_30072018\_164629.png

TEST FINISHED		
General Verdict	30.07.2018 16:46:29 / RT: 186 s	PASS

## 2. FCC Part 15.247 Bandwidth 6dB DTS Generic 2G4

Test References	
TC Start	30.07.2018 16:46:31
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V04 - Chapter 8.1 DTS Bandwidth
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1   TCID_FCC15247_1
My Description	FCC 15.247 Bandwidth 6dB DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

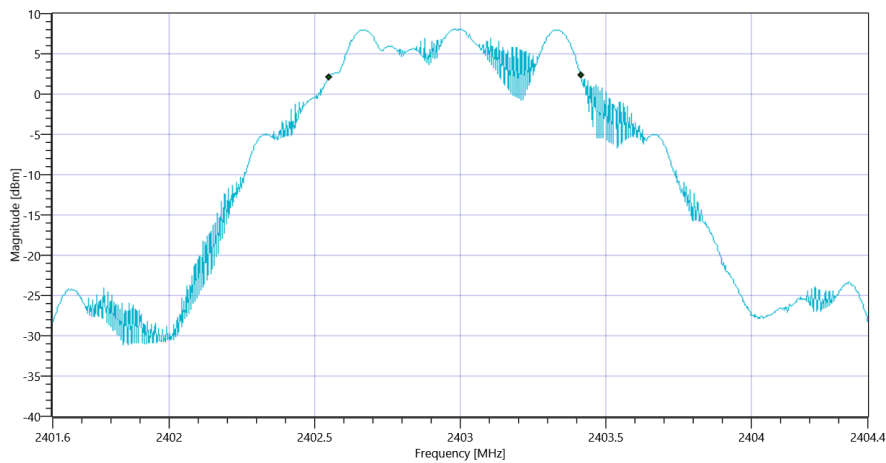
## Test at TX 2403 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.61
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.600
Freq. Stop [MHz]	2404.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_6dB\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.865	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 6dB DTS Generic 2G4\_30072018\_164712.png

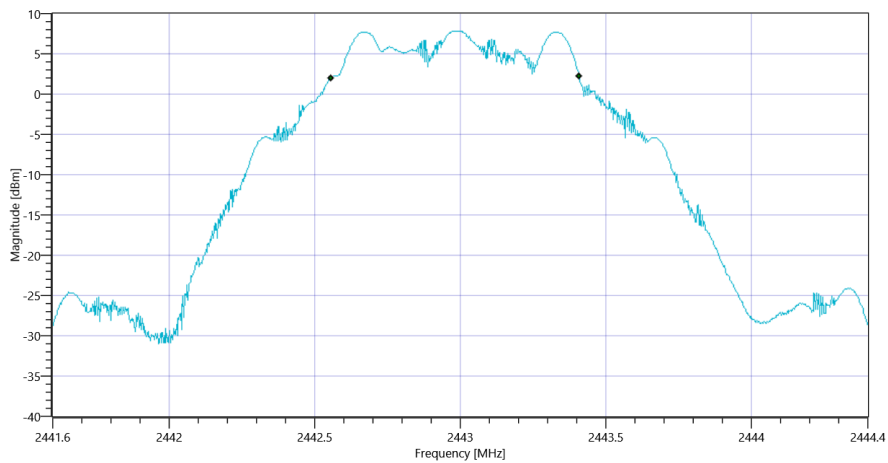
## Test at TX 2443 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.37
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	20
Freq. Start [MHz]	2441.600
Freq. Stop [MHz]	2444.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_6dB\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.854	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 6dB DTS Generic 2G4\_30072018\_164754.png

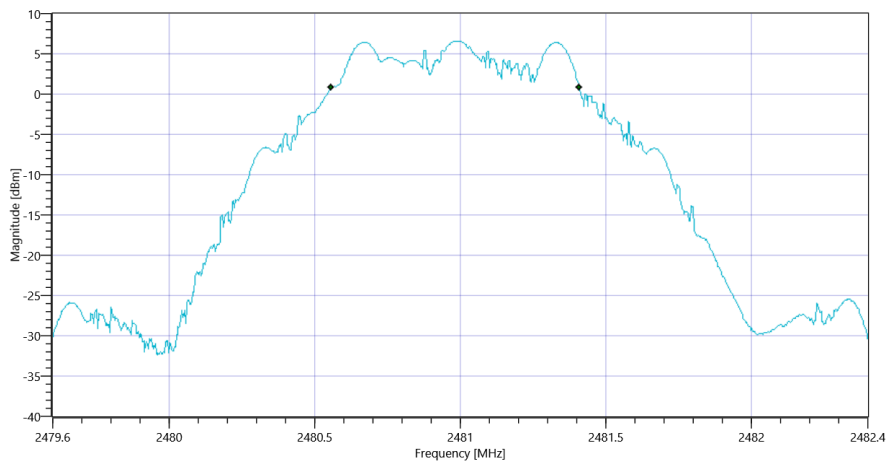
## Test at TX 2481 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	12.14
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.600
Freq. Stop [MHz]	2482.400
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_6dB\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.854	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 6dB DTS Generic 2G4\_30072018\_164836.png

### TEST FINISHED

General Verdict

30.07.2018 16:48:36 / RT: 125 s

PASS

### 3. FCC Part 15.247 Peak Power Spectral Density DTS Generic 2G4

Test References	
TC Start	30.07.2018 16:48:38
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V04 - Chapter 10.2 Peak PSD
Class / TC Version / TC ID	TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1   TCID_FCC15247_6
My Description	FCC 15.247 Peak Power Spectral Density DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

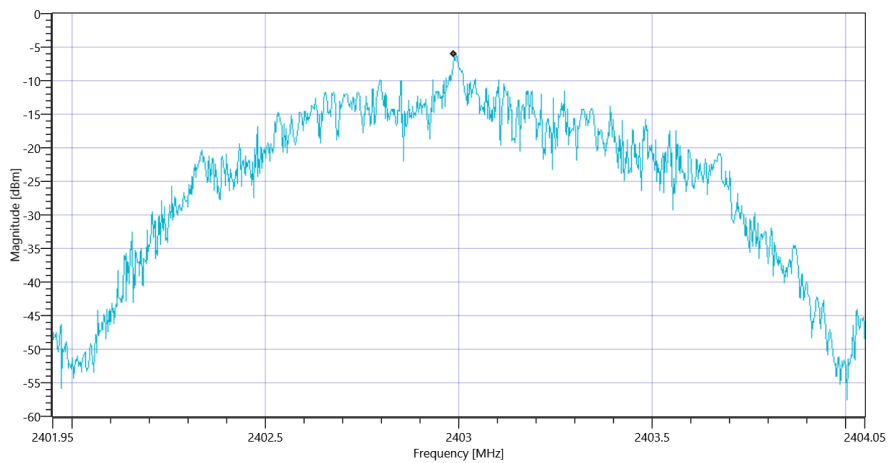
## Test at TX 2403 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.68
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.950
Freq. Stop [MHz]	2404.050
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Peak\_Power\_Spectral\_Density\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-6.02	dBm/3KHz	PASS



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS Generic 2G4\_30072018\_164937.png



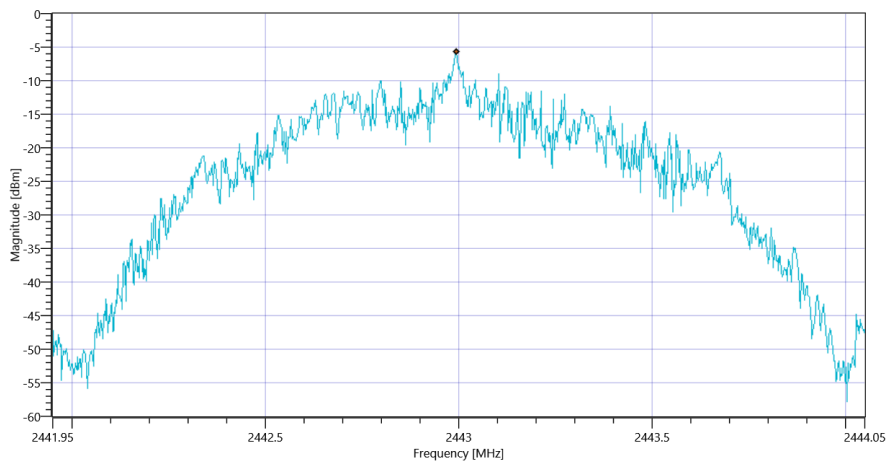
## Test at TX 2443 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	13.40
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	20
Freq. Start [MHz]	2441.950
Freq. Stop [MHz]	2444.050
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Peak\_Power\_Spectral\_Density\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-5.74	dBm/3KHz	PASS



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS Generic 2G4\_30072018\_165026.png

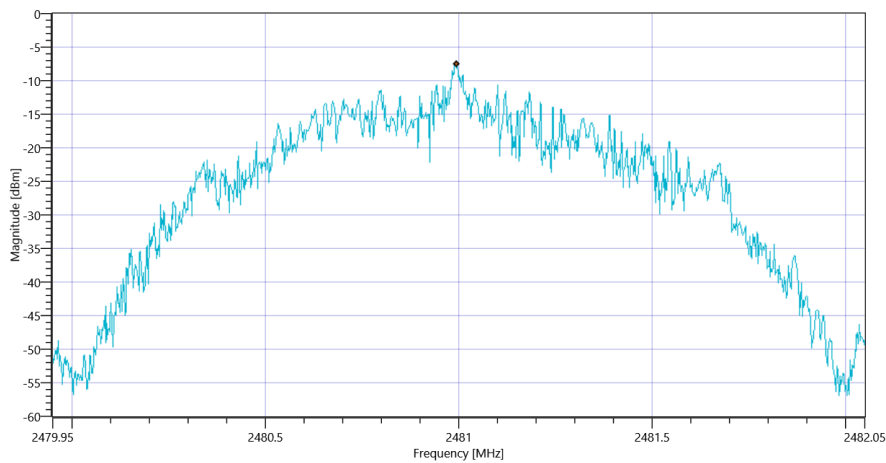
## Test at TX 2481 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	12.16
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.950
Freq. Stop [MHz]	2482.050
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Peak\_Power\_Spectral\_Density\_DTS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-7.5	dBm/3KHz	PASS



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS Generic 2G4\_30072018\_165116.png

### TEST FINISHED

General Verdict

30.07.2018 16:51:16 / RT: 157 s

PASS

## 4. FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4

Test References	
TC Start	30.07.2018 16:51:17
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2   TCID_FCC15247_2
My Description	FCC 15.247 Bandwidth 99PCT - 20dB DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

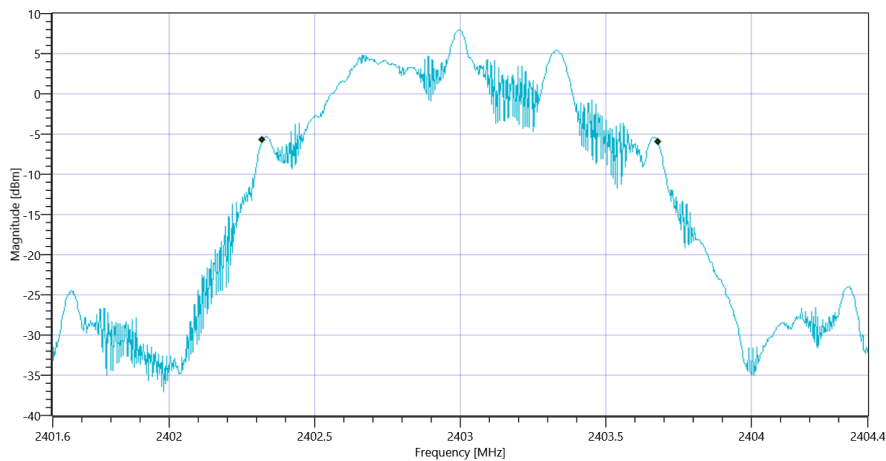
## Test at TX 2403 MHz

### READ SA SETTINGS:

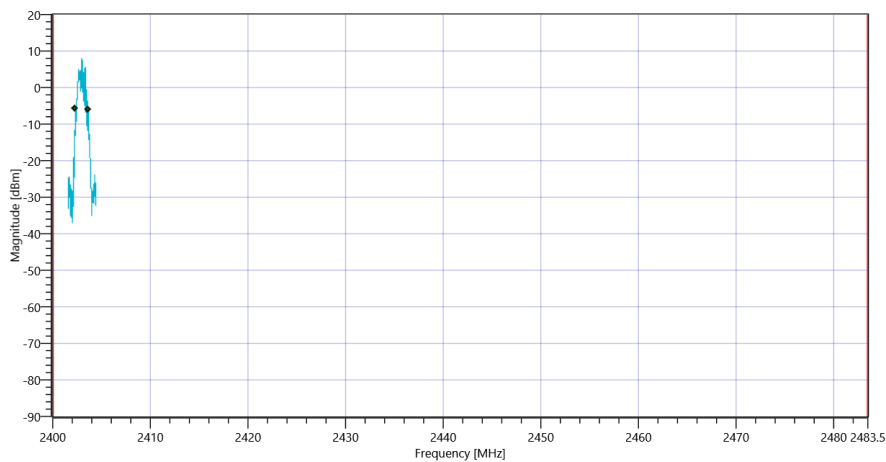
Ref. Level [dBm]	13.68
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.600
Freq. Stop [MHz]	2404.400
Resolution BW. [MHz]	0.050000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.359	MHz	Information
T1	2400.000000	---	2402.3203	MHz	PASS
T2	---	2483.500000	2403.6797	MHz	PASS

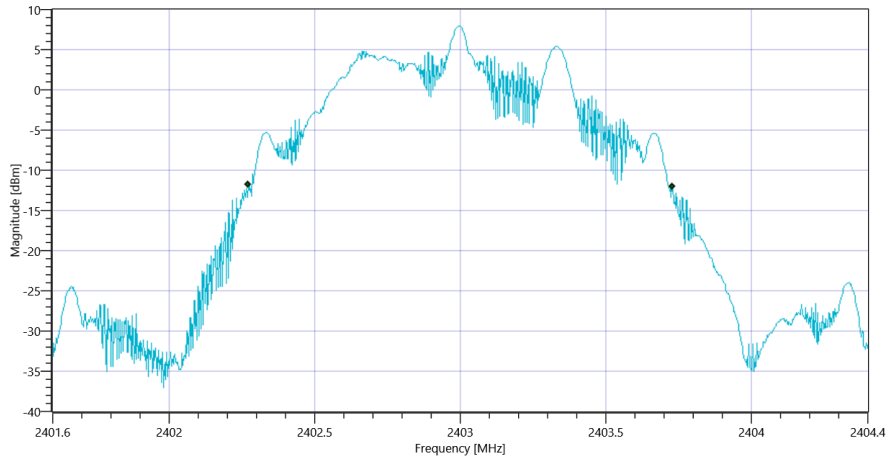


Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4 99PCT\_30072018\_165205.png

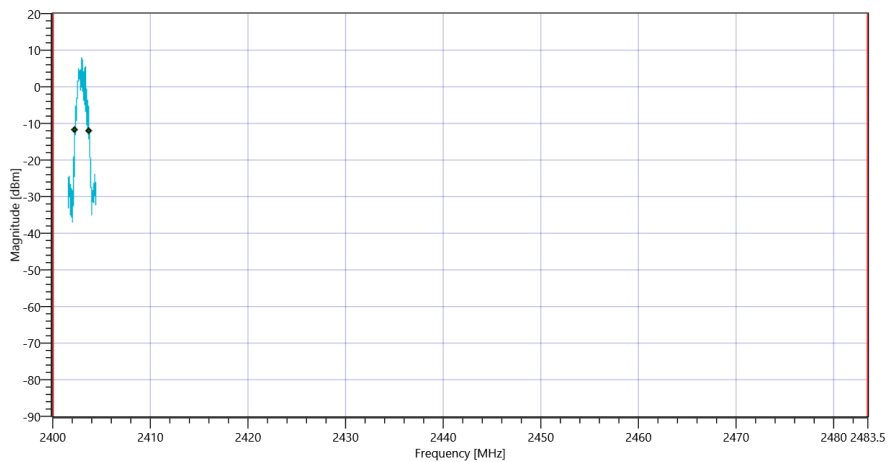


Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4\_30072018\_165208.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1.456	MHz	Information
T1 20dB	2400.000000	---	2402.2720	MHz	PASS
T2 20dB	---	2483.500000	2403.7280	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4 20dB\_30072018\_165211.png



Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4\_30072018\_165214.png

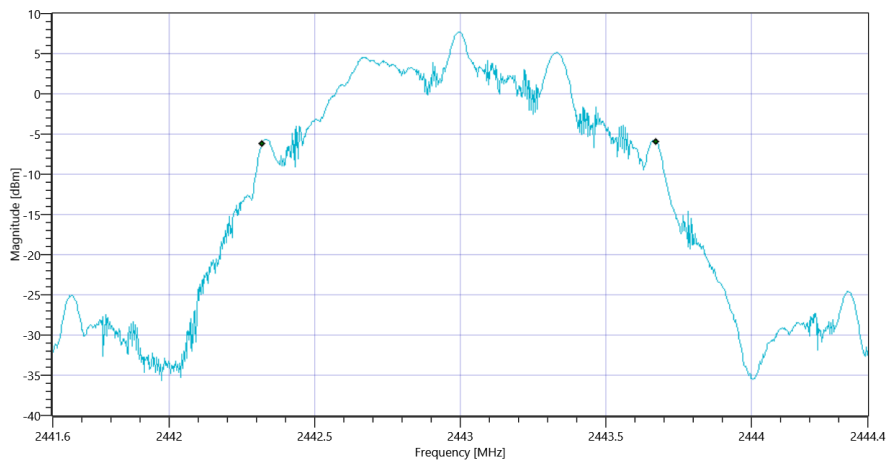
## Test at TX 2443 MHz

### READ SA SETTINGS:

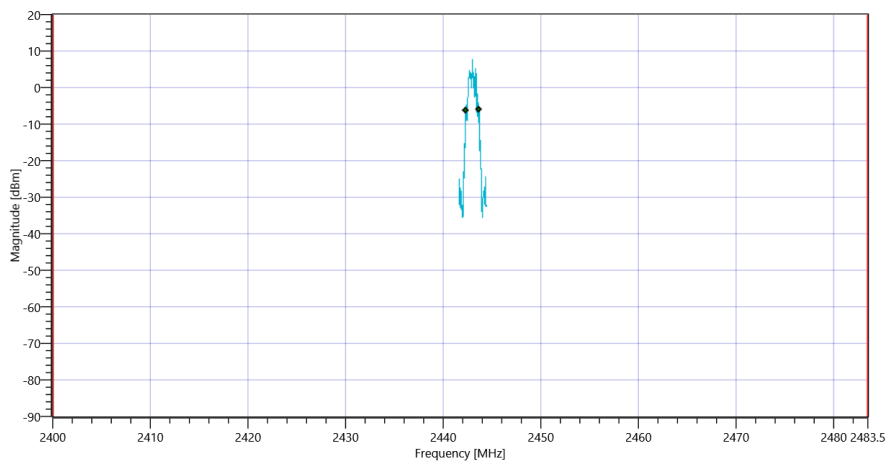
Ref. Level [dBm]	13.47
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	20
Freq. Start [MHz]	2441.600
Freq. Stop [MHz]	2444.400
Resolution BW. [MHz]	0.050000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.354	MHz	Information
T1	2400.000000	---	2442.3203	MHz	PASS
T2	---	2483.500000	2443.6741	MHz	PASS

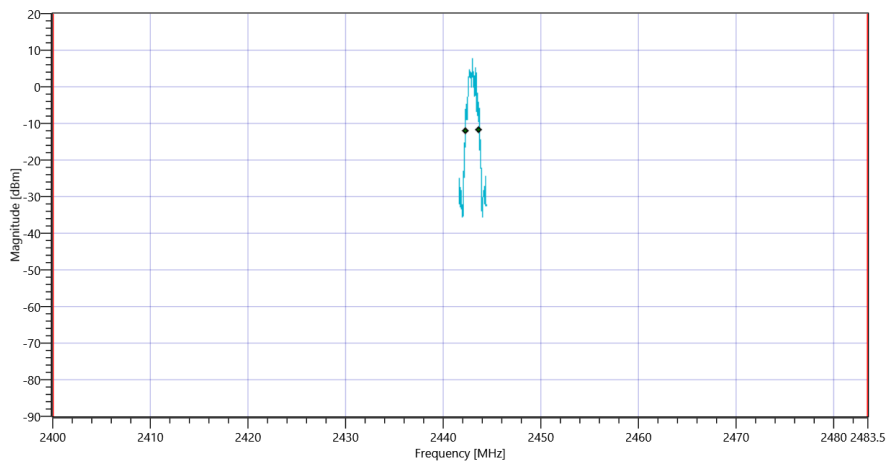
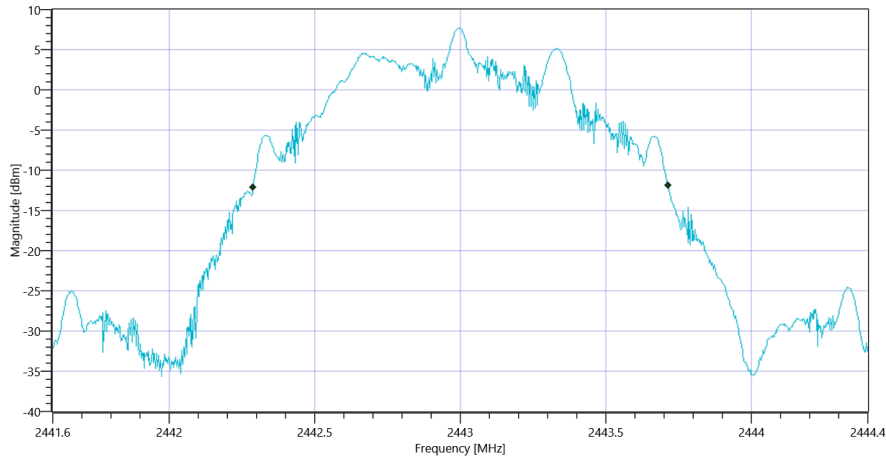


Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4 99PCT\_30072018\_165254.png



Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4\_30072018\_165257.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1.425	MHz	Information
T1 20dB	2400.000000	---	2442.2888	MHz	PASS
T2 20dB	---	2483.500000	2443.7140	MHz	PASS



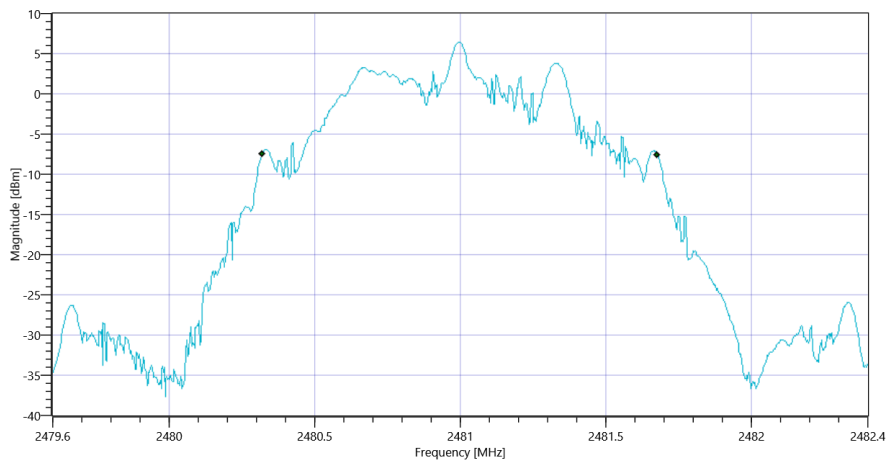
## Test at TX 2481 MHz

### READ SA SETTINGS:

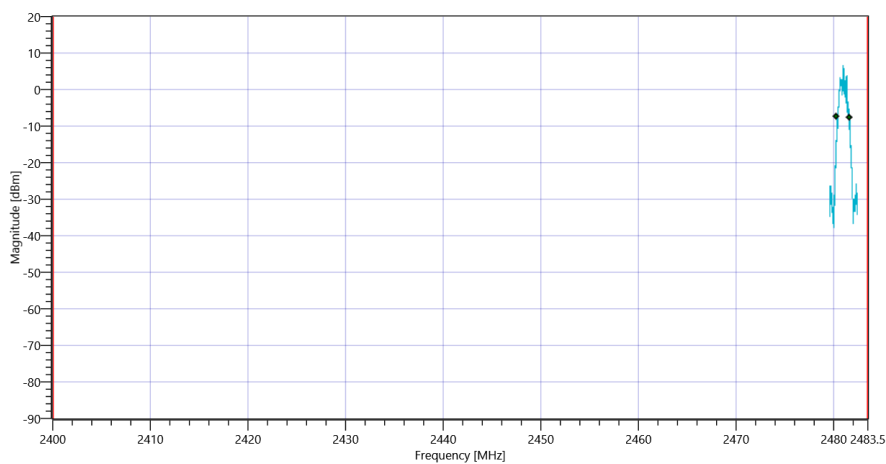
Ref. Level [dBm]	12.20
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.600
Freq. Stop [MHz]	2482.400
Resolution BW. [MHz]	0.050000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.357	MHz	Information
T1	2400.000000	---	2480.3203	MHz	PASS
T2	---	2483.500000	2481.6769	MHz	PASS



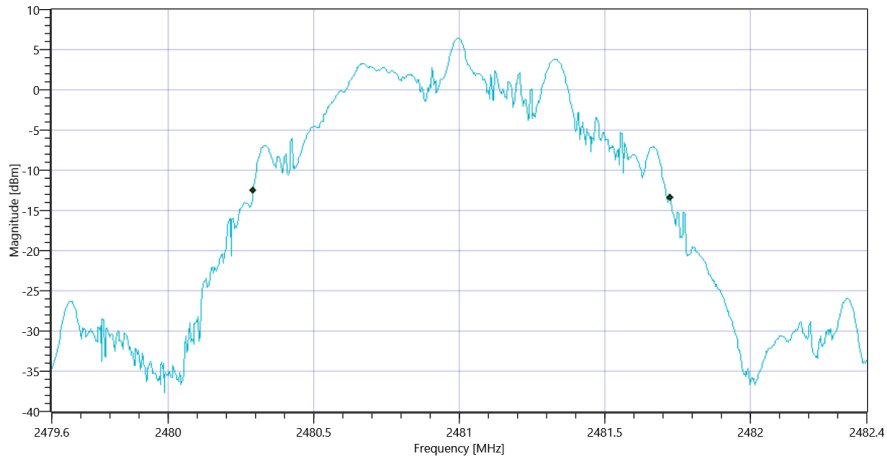
Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4 99PCT\_30072018\_165344.png



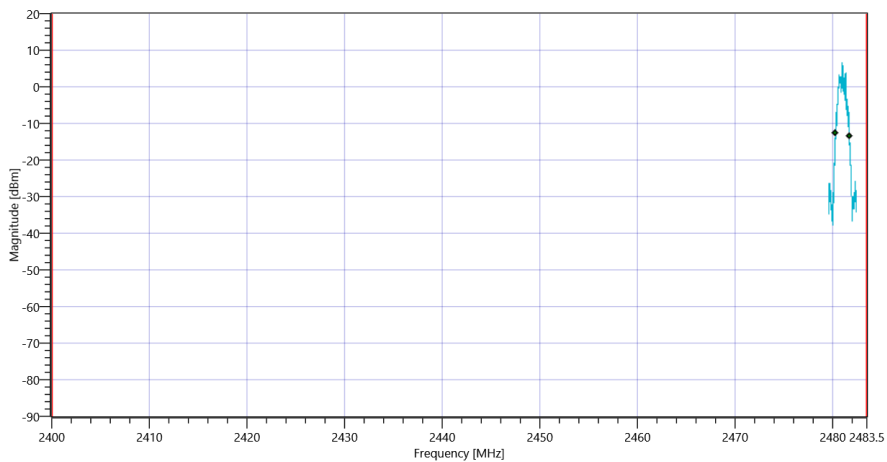
Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4\_30072018\_165347.png



RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1.434	MHz	Information
T1 20dB	2400.000000	---	2480.2916	MHz	PASS
T2 20dB	---	2483.500000	2481.7252	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4 20dB\_30072018\_165351.png



Plot\_FCC Part 15.247 Bandwidth 99PCT - 20dB Generic 2G4\_30072018\_165354.png

TEST FINISHED		
General Verdict	30.07.2018 16:53:54 / RT: 156 s	PASS

## 5. FCC Part 15.247 TX Spurious Conducted Generic 2G4

Test References	
TC Start	30.07.2018 16:53:56
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1   TCID_FCC15247_8
My Description	FCC 15.247 TX Emissions Conducted DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

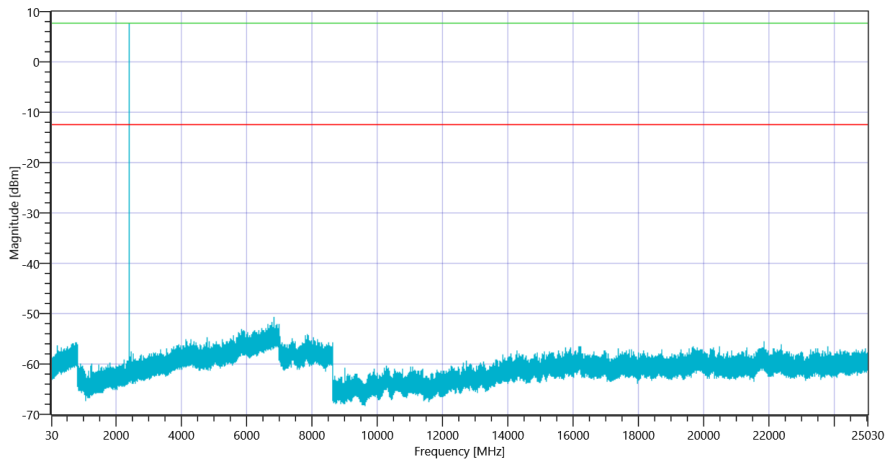
## Test at TX 2403 MHz

### READ SA SETTINGS:

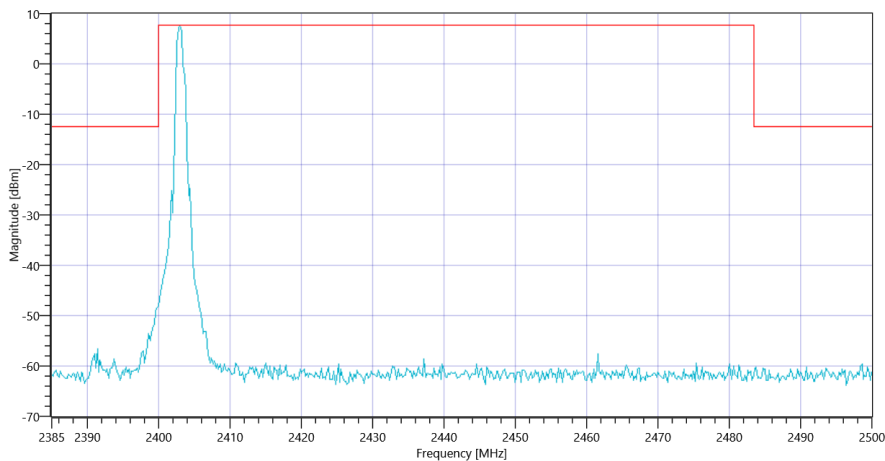
Ref. Level [dBm]	13.66
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	3
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2403.00 MHz	---	---	7.63	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2403\_30072018\_165950.png



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2403\_30072018\_165953.png

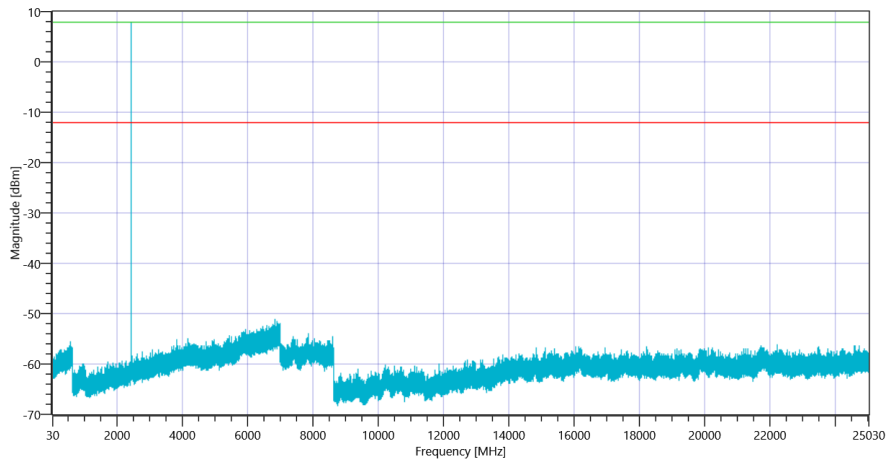
## Test at TX 2443 MHz

### READ SA SETTINGS:

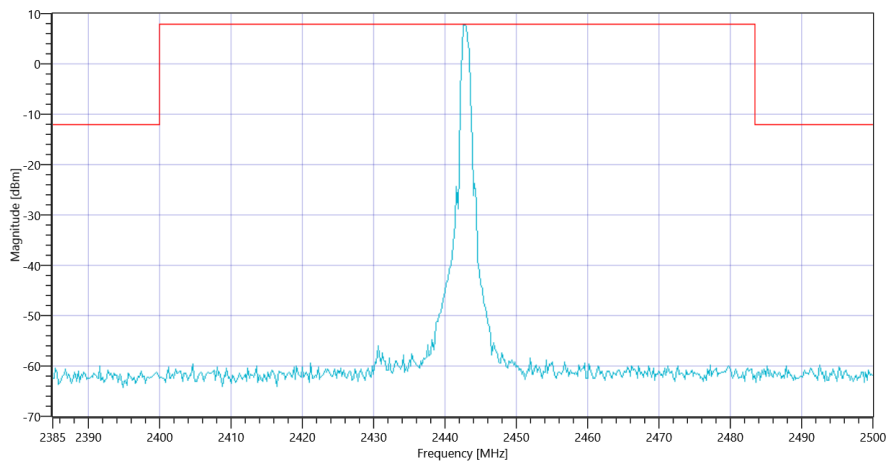
Ref. Level [dBm]	13.57
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	3
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2442.60 MHz	---	---	7.87	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2443\_30072018\_170931.png



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2443\_30072018\_170933.png

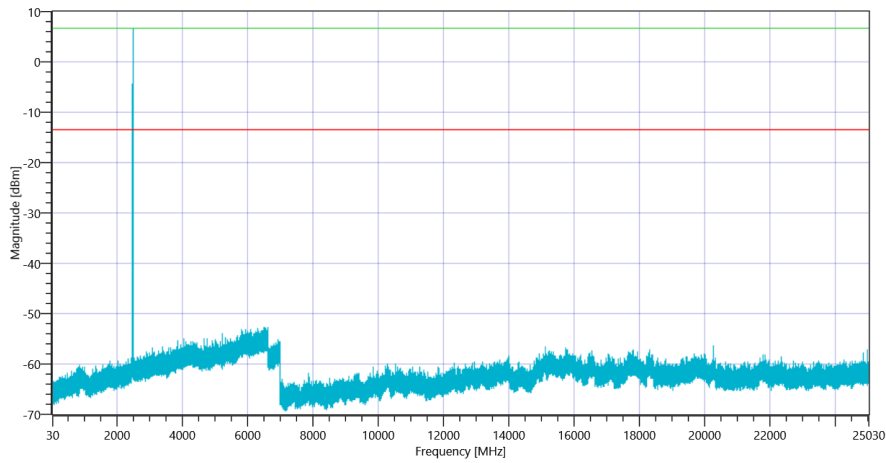
## Test at TX 2481 MHz

### READ SA SETTINGS:

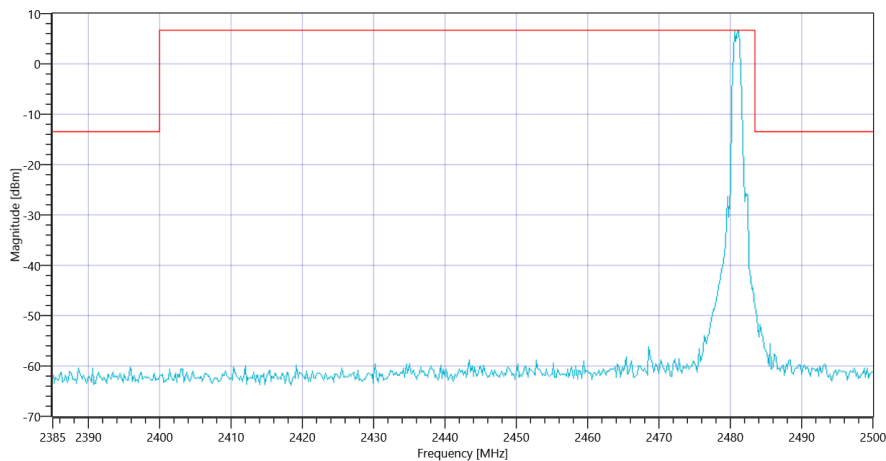
Ref. Level [dBm]	12.39
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	3
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2481.00 MHz	---	---	6.59	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2481\_30072018\_172138.png



Plot\_FCC Part 15.247 TX Spurious Conduced Generic 2G4 2481\_30072018\_172140.png

### TEST FINISHED

General Verdict	30.07.2018 17:21:41 / RT: 1665 s	PASS
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## 6. FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Generic 2G4

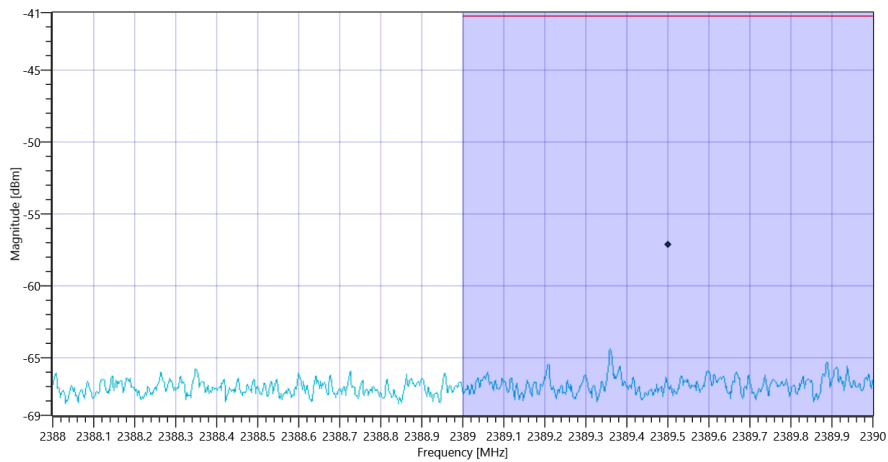
Test References	
TC Start	30.07.2018 17:21:43
System Version	1.0.0.9
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V04 - 13.3.3 EUT transmissions with max hold
Class / TC Version / TC ID	TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01 Version: 0.0.1   TCID_FCC15247_7
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	False   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2403 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.94
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2388.000
Freq. Stop [MHz]	2390.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.005000
Detector	POS
Sweep Time [ms]	3
Sweep Points/Section	1001
Sweep Count	300
Sweep Mode	MAXH
Used Sweep Type	SWE
Marker Method	Band Power

RESULT: TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power without Antenna Gain	---	-41.23	-57.13	dBm	Information
Band Power incl. Antenna Gain	---	-41.23	-56.33	dBm	PASS

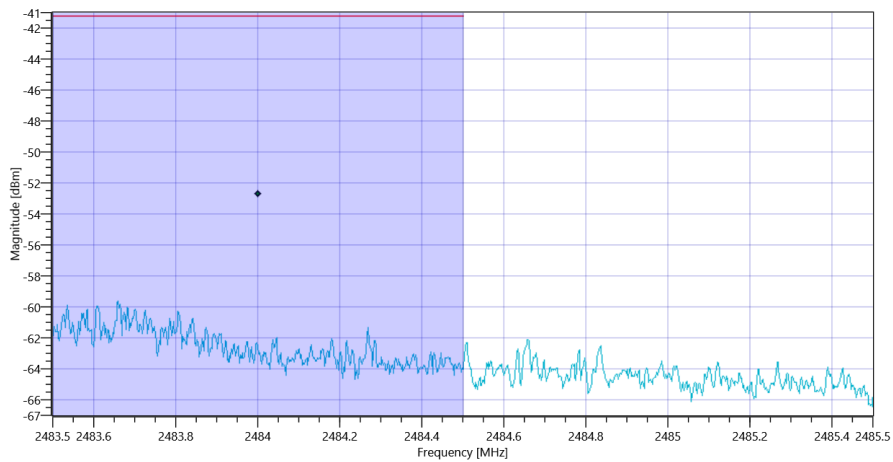


Plot\_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Generic 2G4\_30072018\_173703.png

## Test at TX 2481 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	12.46
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	20
Freq. Start [MHz]	2483.500
Freq. Stop [MHz]	2485.500
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.005000
Detector	POS
Sweep Time [ms]	3
Sweep Points/Section	1001
Sweep Count	300
Sweep Mode	MAXH
Used Sweep Type	SWE
Marker Method	Band Power

RESULT: TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power without Antenna Gain	---	-41.23	-52.7	dBm	Information
Band Power incl. Antenna Gain	---	-41.23	-51.9	dBm	PASS



Plot\_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Generic 2G4\_30072018\_173743.png

TEST FINISHED		
General Verdict	30.07.2018 17:37:43 / RT: 960 s	PASS



## 7. Common2G4 Peak Output Power conducted 3MHz\_3MHz Generic 2G4

Test References	
TC Start	01.08.2018 11:34:45
System Version	1.0.0.9
Test Specification	None
Test Method	
Class / TC Version / TC ID	TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1   TCID_Common2G4_1
My Description	Peak Output Power conducted 3MHz/3MHz - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2403
Frequency mid to test	True   Freq [MHz] 2443
Frequency high to test	True   Freq [MHz] 2481
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.40   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

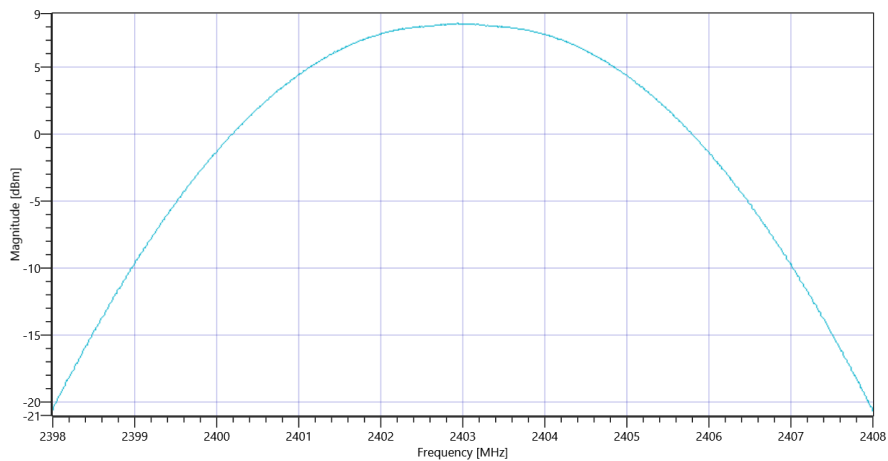
## Test at TX 2403 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	18.18
Ref. Lev. offs [dB]	10.9
Input Attenuation [dB]	25
Freq. Start [MHz]	2398.000
Freq. Stop [MHz]	2408.000
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	3.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.25	dBm	Information
Peak Power	---	1000	6.683439	mW	Information
Frequency at Peak	---	---	2402.95	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz Generic 2G4\_01082018\_113604.png

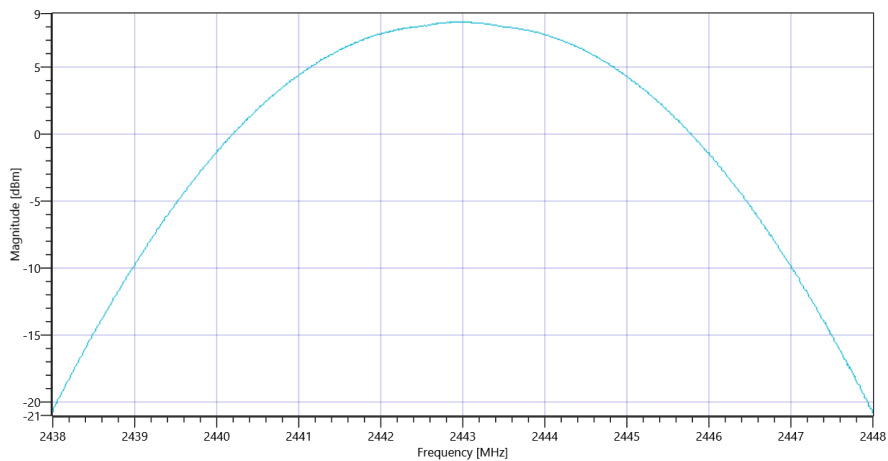
## Test at TX 2443 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	18.26
Ref. Lev. offs [dB]	11.01
Input Attenuation [dB]	25
Freq. Start [MHz]	2438.000
Freq. Stop [MHz]	2448.000
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	3.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.35	dBm	Information
Peak Power	---	1000	6.839116	mW	Information
Frequency at Peak	---	---	2443.07	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz Generic 2G4\_01082018\_113702.png

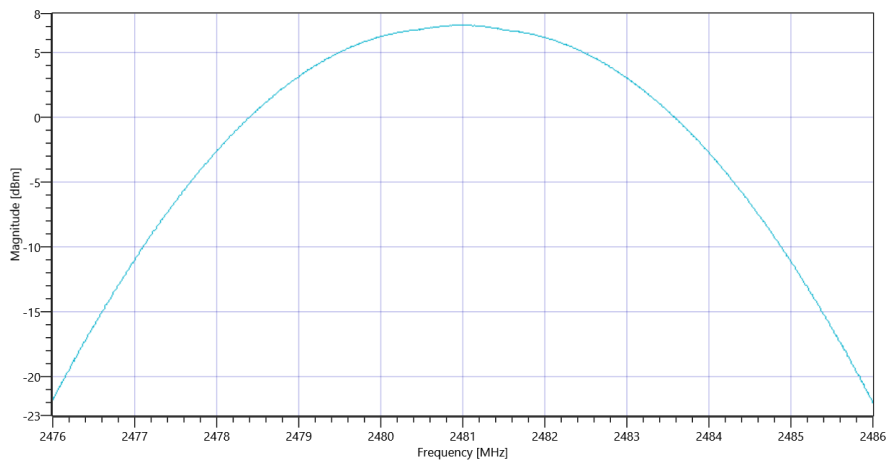
## Test at TX 2481 MHz

### READ SA SETTINGS:

Ref. Level [dBm]	16.94
Ref. Lev. offs [dB]	11.06
Input Attenuation [dB]	25
Freq. Start [MHz]	2476.000
Freq. Stop [MHz]	2486.000
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	3.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.1	dBm	Information
Peak Power	---	1000	5.128614	mW	Information
Frequency at Peak	---	---	2480.9	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz Generic 2G4\_01082018\_113744.png

### TEST FINISHED

General Verdict

01.08.2018 11:37:44 / RT: 179 s

PASS