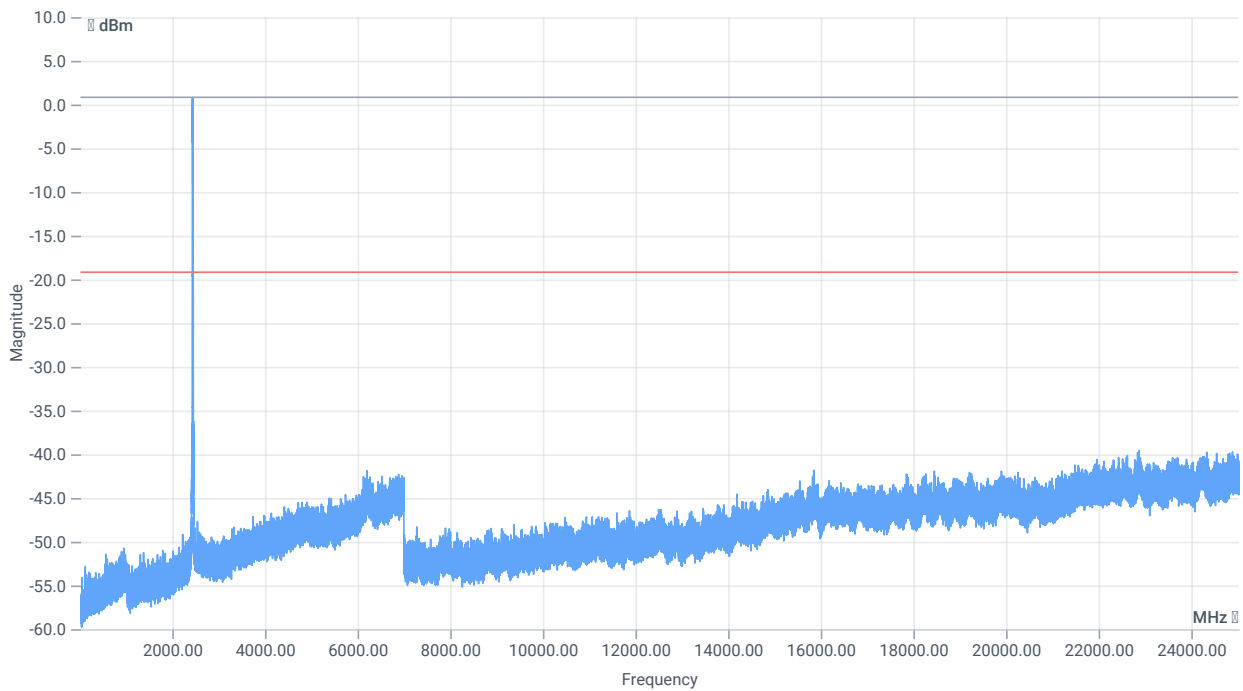


## Test at TX 2437 MHz

RESULT: Reference Power cond.

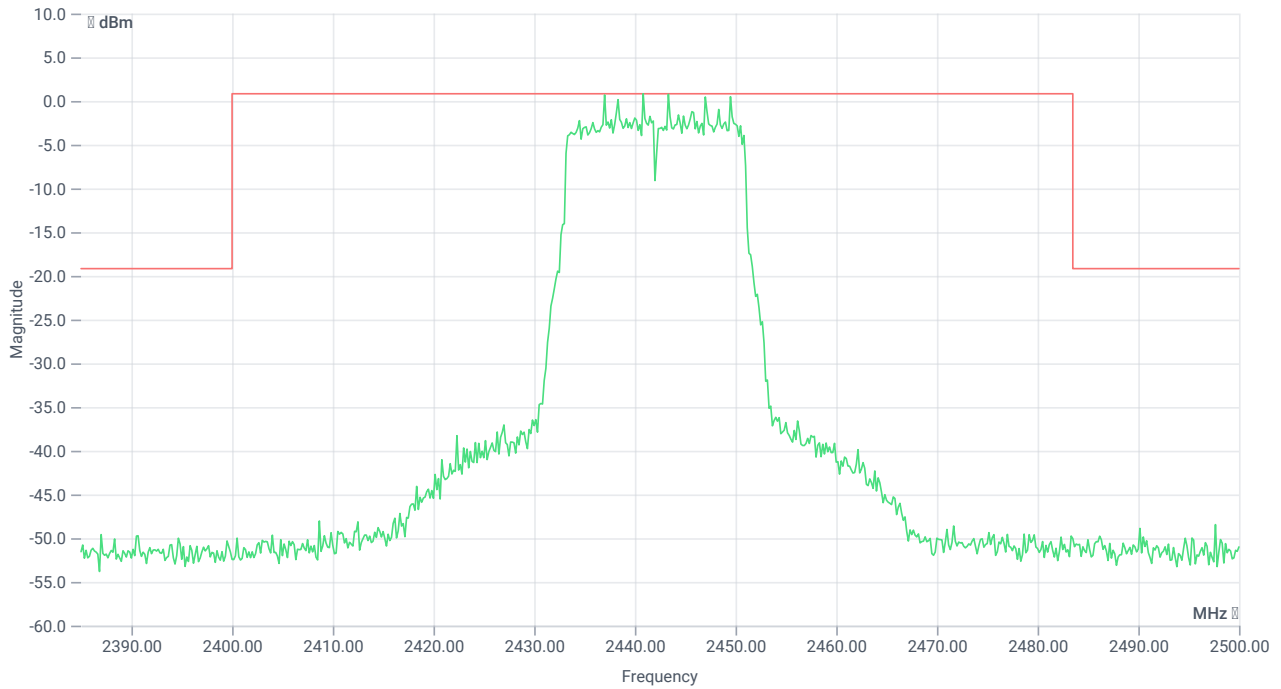
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	9.41	dBm	INFO
Ref. Frequency	--	--	2443.490	MHz	INFO



TX emissions

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	9.41   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE



TX emissions band zoomed

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2440.83 MHz	--	--	0.83	dBm	INFO
No peaks detected	--	--			PASS
Lowest margin to limit 22874.667 MHz	0	--	20.4	dB	INFO

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:59:33
Ambit Temp [°C]   Humidity [rel%]	23.5   23
System Version	3.3.4.3
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	True   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

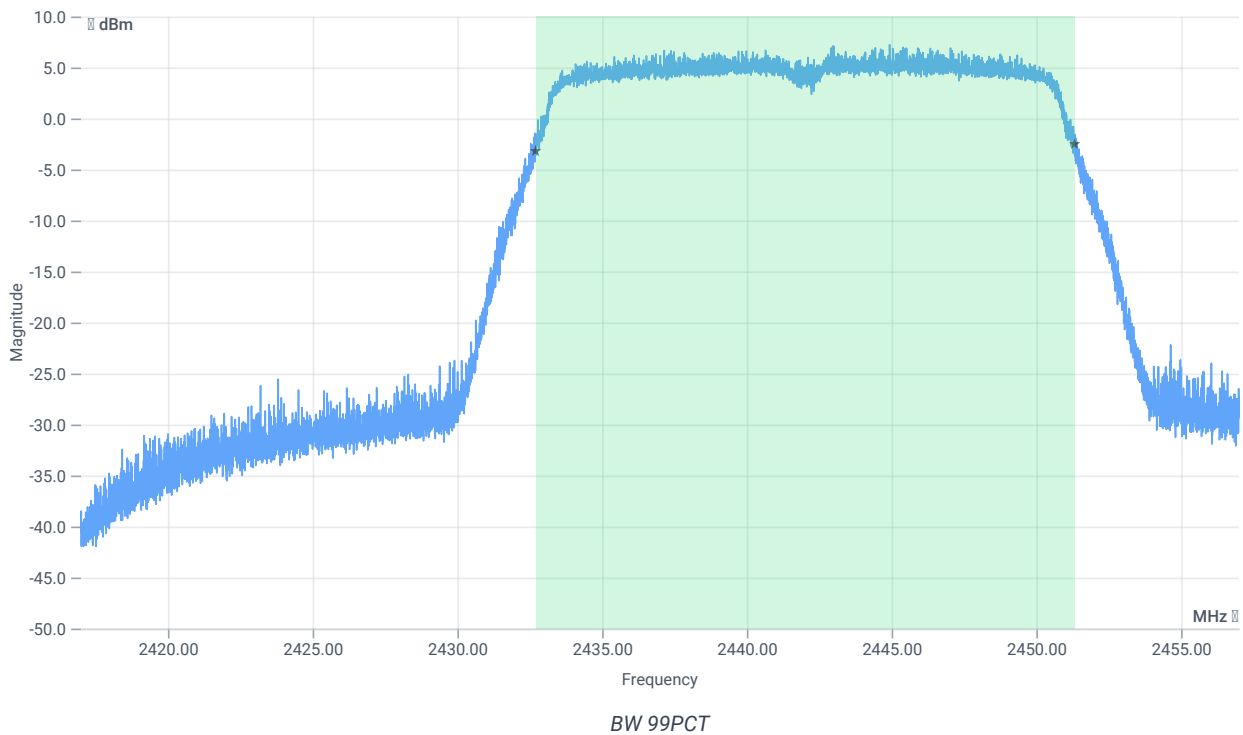
## Test at TX 2437 MHz

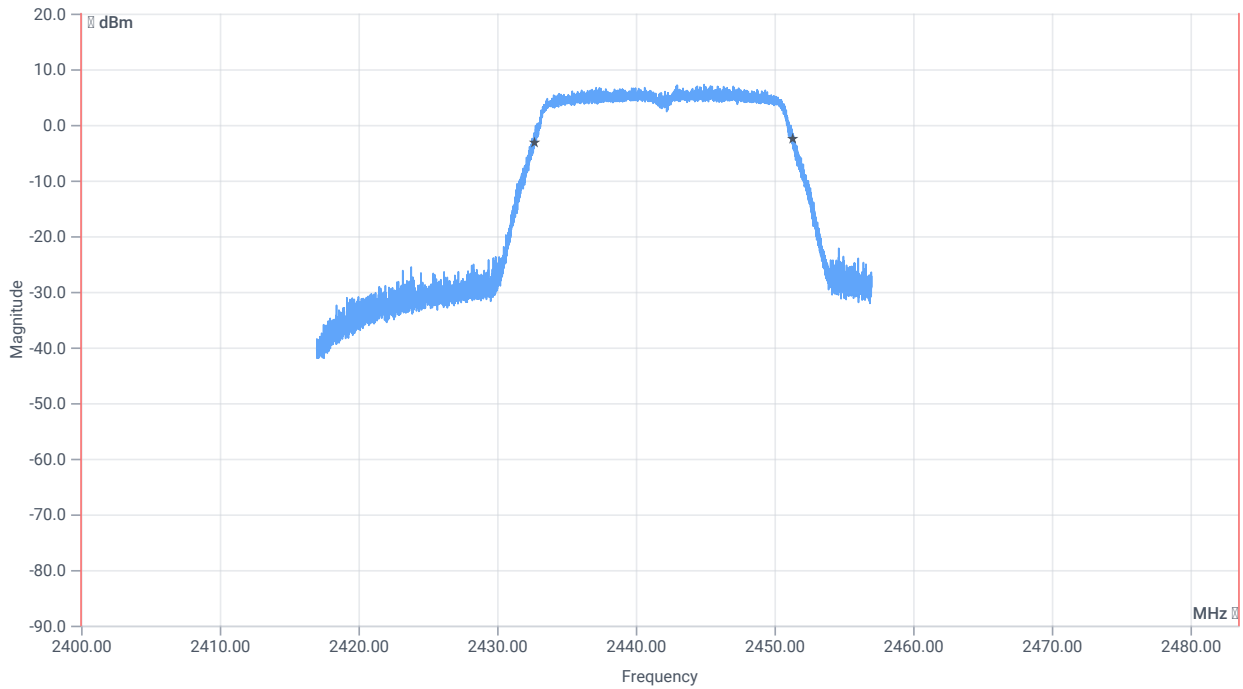
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	9.08	dBm	INFO
Ref. Frequency	--	--	2437.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.08   14.2   15
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE

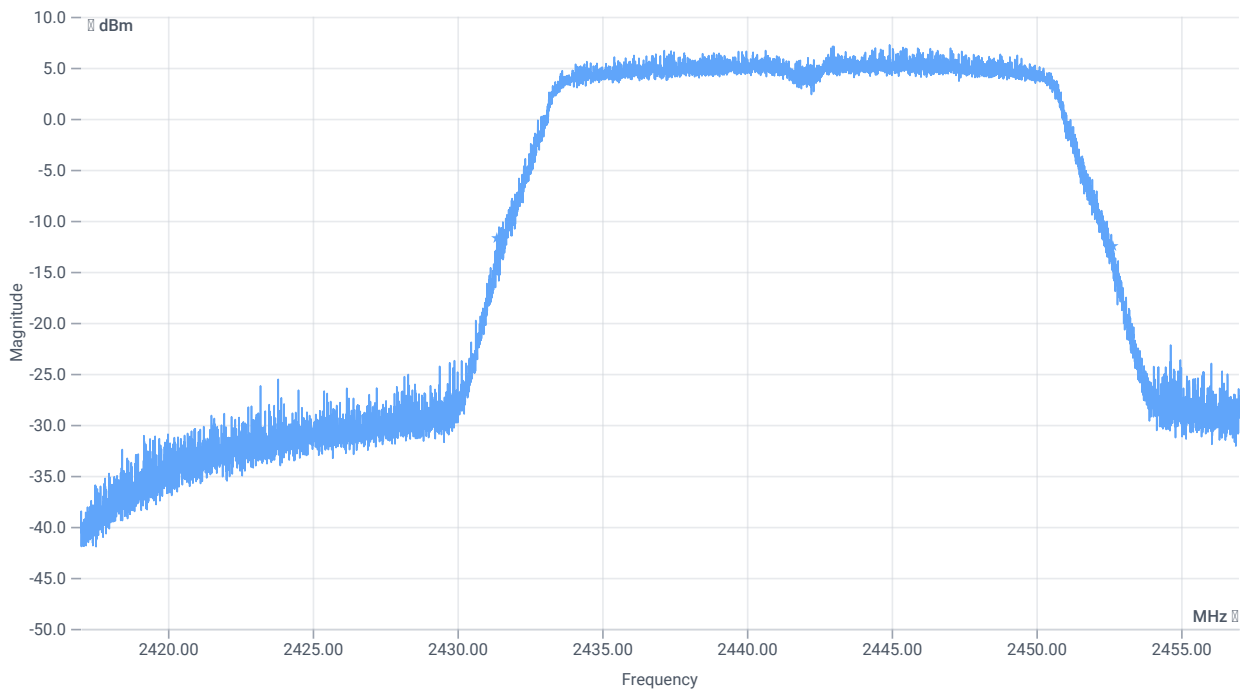




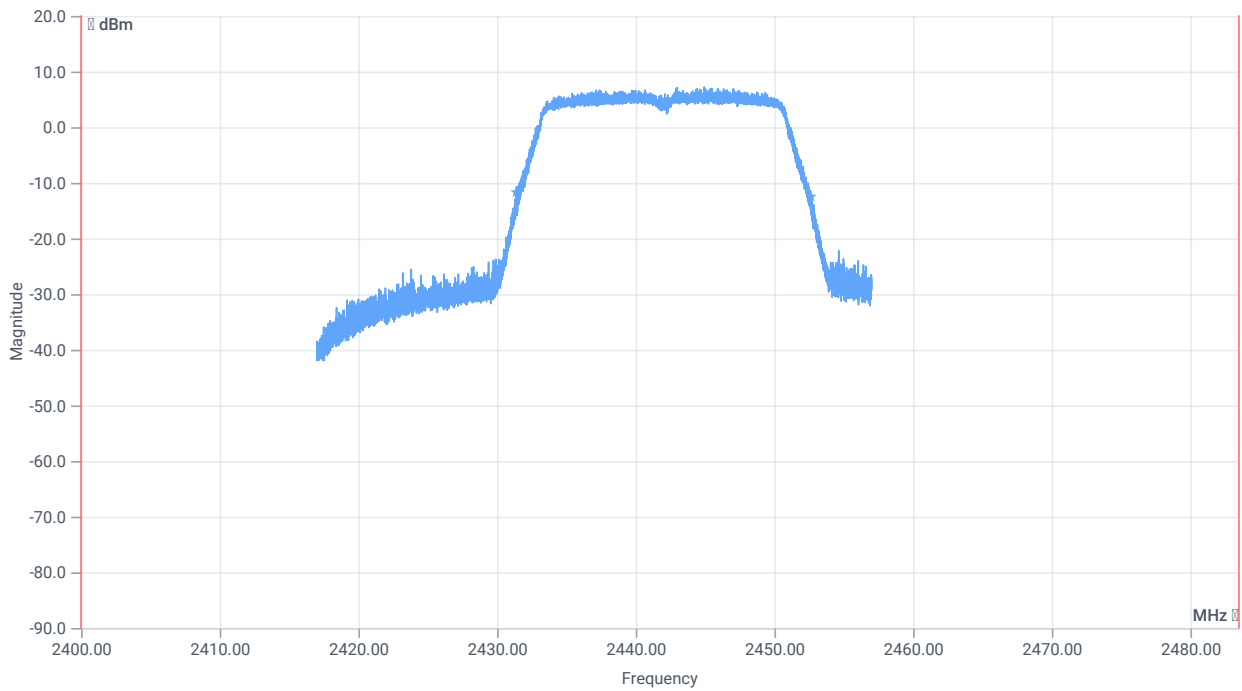
BW within Band 99PCT

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	18618.000	kHz	INFO
T1 99%	2400.000000	--	2432.7004	MHz	PASS
T2 99%	--	2483.500000	2451.3186	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	--	--	21280	kHz	INFO
T1 20DB	2400.000000	--	2431.3640	MHz	PASS
T2 20dB	--	2483.500000	2452.6440	MHz	PASS

Verdict

PASS

# FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:58:52
Ambit Temp [°C]   Humidity [rel%]	23.5   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 nHT20_mode

Add. Information

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	True   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70  
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

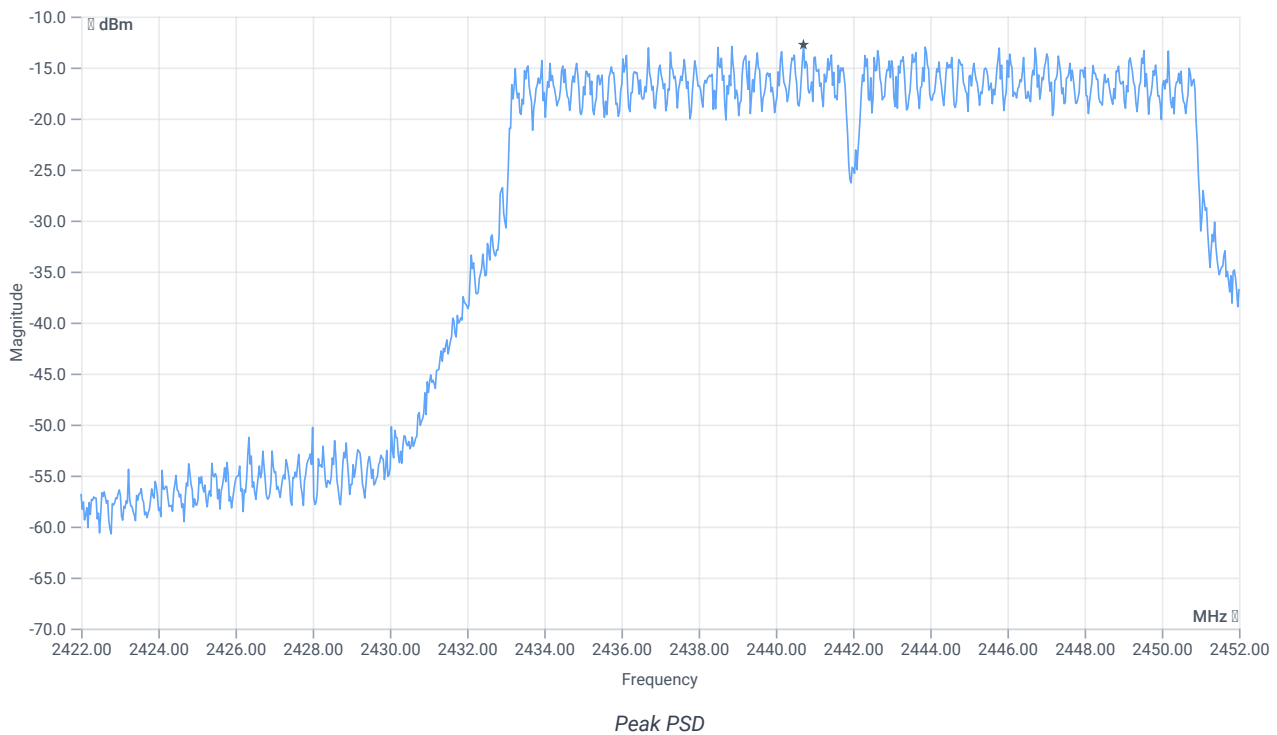
## Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.75	dBm	INFO
Ref. Frequency	---	---	2443.990	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.75   14.2   20
Start [MHz]   Stop [MHz]	2422.000   2452.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1000   20   1001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-12.77	dBm/3KHz	PASS

Verdict

PASS



## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ac-HT20 mode

### Test References

TC Start	08.02.2023 10:58:19
Ambit Temp [°C]   Humidity [rel%]	23.5   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

### EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

### Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	True   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

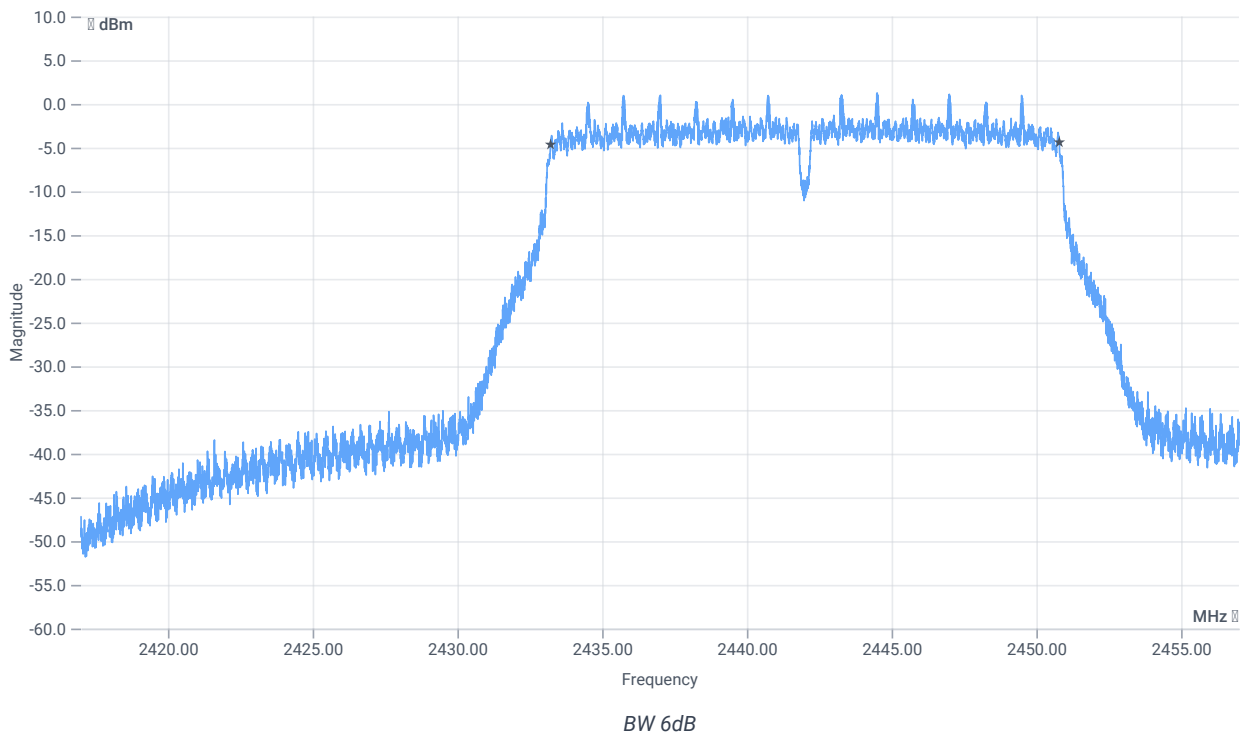
## Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	9.23	dBm	INFO
Ref. Frequency	--	--	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.23   14.2   20
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	17576	kHz	PASS

Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 ac-HT20 mode

### Test References

TC Start	08.02.2023 10:45:39
Ambit Temp [°C]   Humidity [rel%]	23.5   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 n-HT20 mode

Add. Information

### EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

### Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - PowerMeter

### Test Equipment

Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

## Test at TX 2412 MHz

### RESULT

<i>Test Description</i>	<i>Lower Limit</i>	<i>Upper Limit</i>	<i>Measured</i>	<i>Unit</i>	<i>Verdict</i>
Found Peak cond.	--	--	25.66	dBm	PASS

Verdict

PASS

# FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:38:59
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS DTS - WLAN2G4 nHT20_mode

Add. Information

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

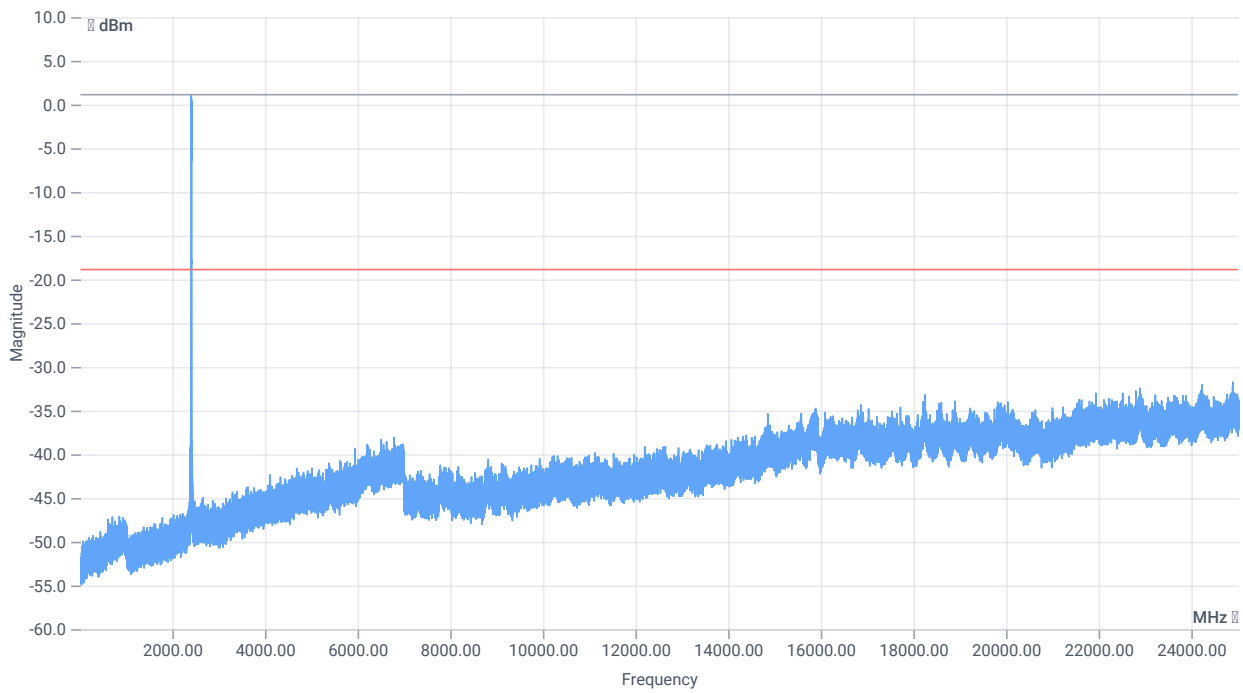
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70

Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

## Test at TX 2412 MHz

RESULT: Reference Power cond.

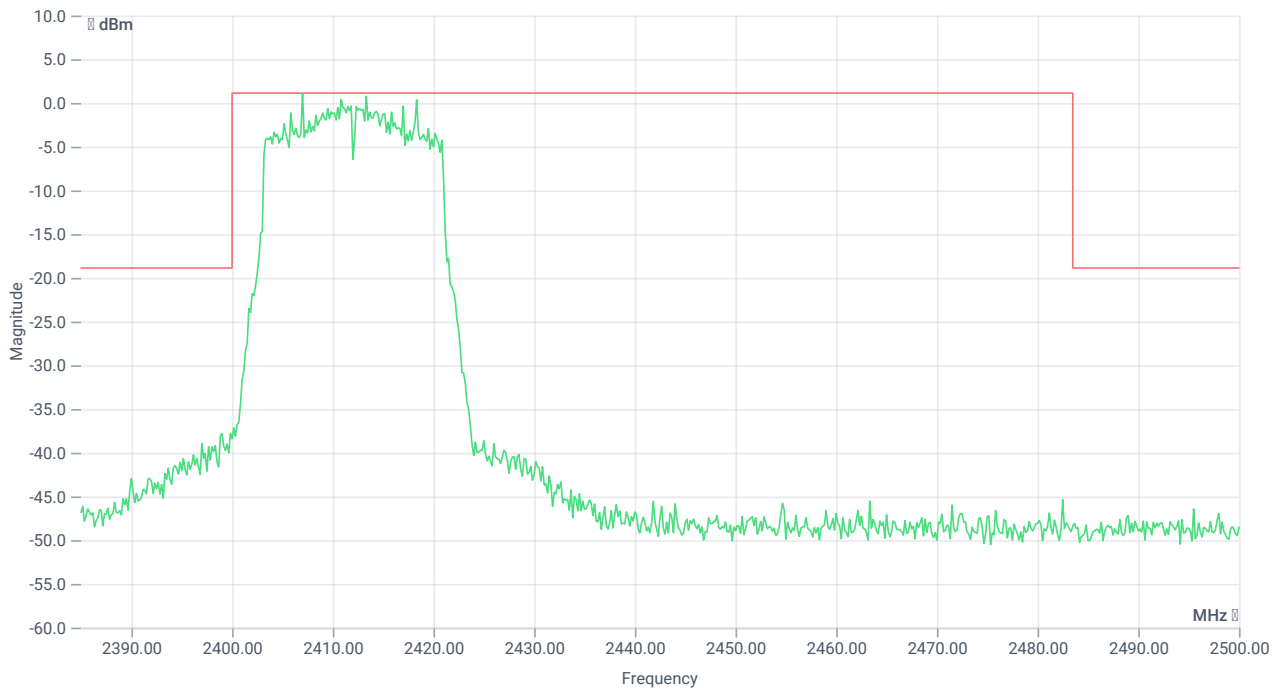
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	10.83	dBm	INFO
Ref. Frequency	--	--	2413.600	MHz	INFO



TX emissions

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.83   0   30
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE



TX emissions band zoomed

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2407.00 MHz	--	--	1.13	dBm	INFO
No peaks detected	--	--			PASS
Lowest margin to limit 24900 MHz	0	--	12.86	dB	INFO

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:38:23
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI



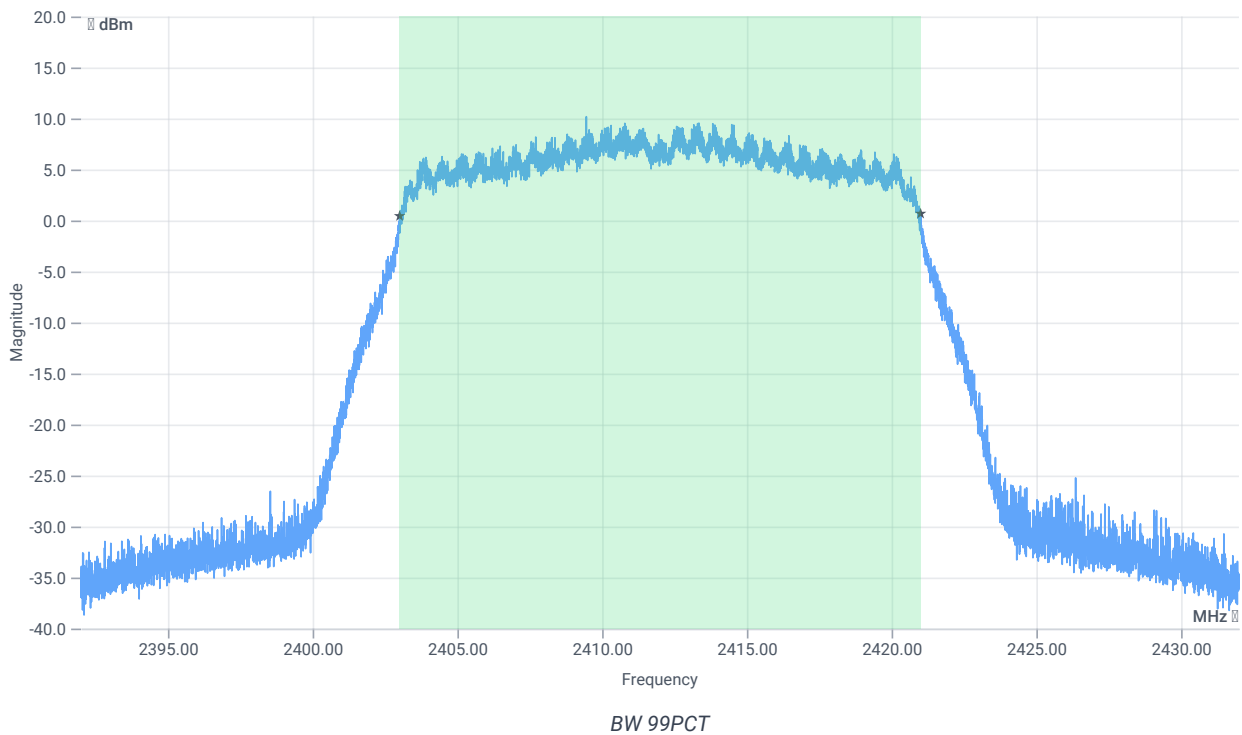
## Test at TX 2412 MHz

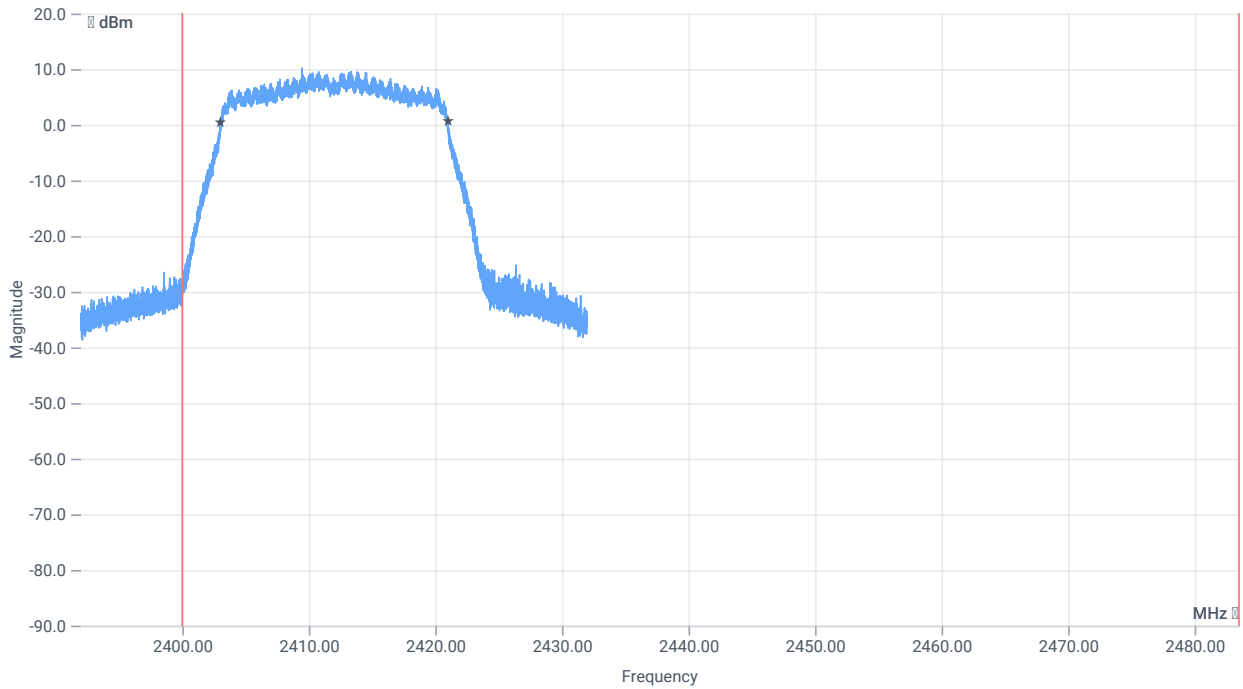
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	10.67	dBm	INFO
Ref. Frequency	--	--	2410.400	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.67   14.43   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE

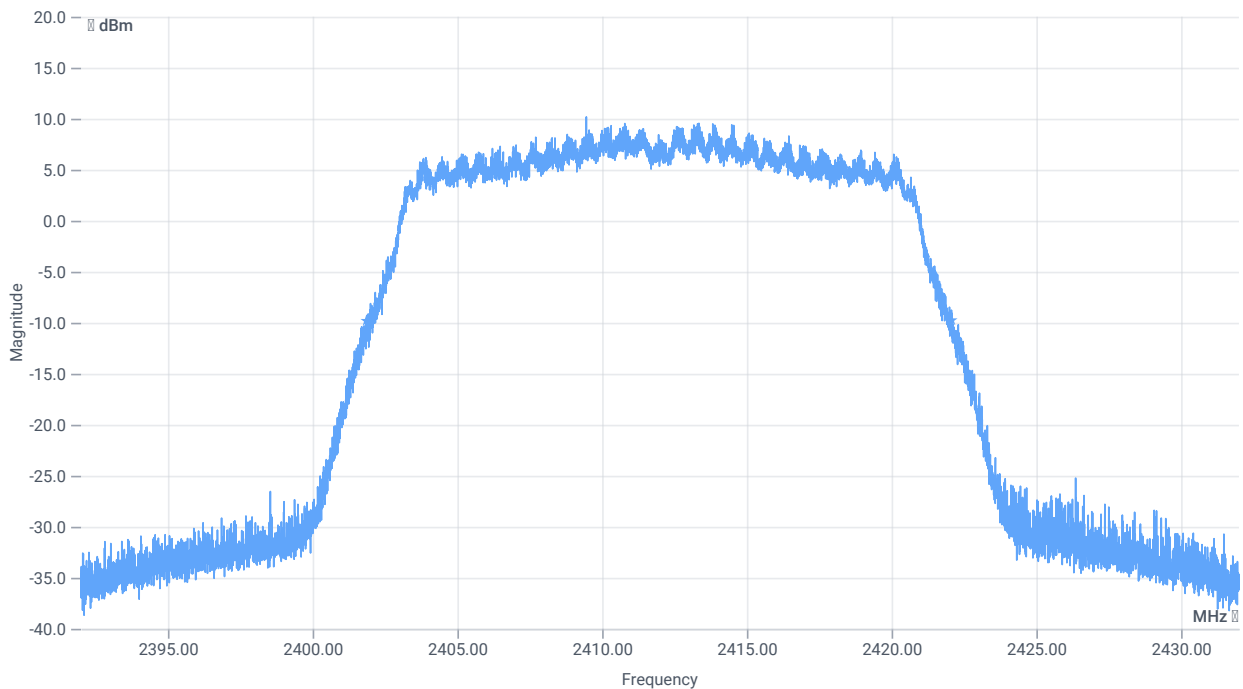




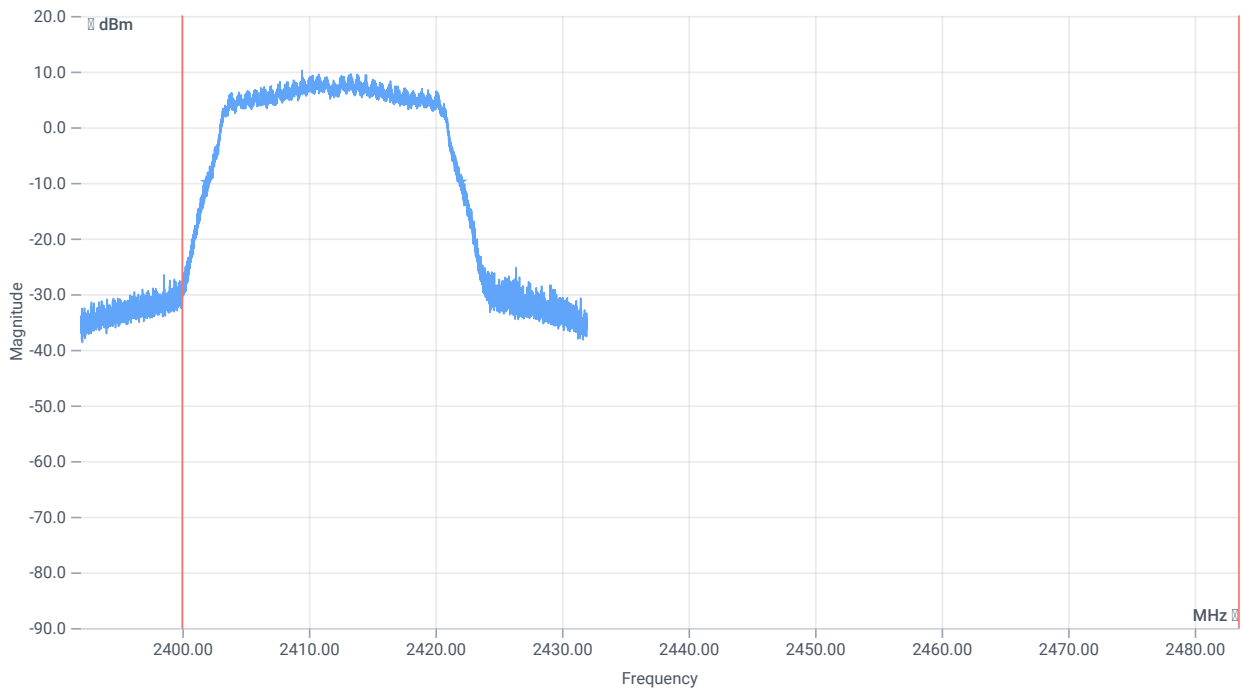
BW within Band 99PCT

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	17998.000	kHz	INFO
T1 99%	2400.000000	--	2403.0049	MHz	PASS
T2 99%	--	2483.500000	2421.0031	MHz	PASS



## BW 20dB



BW within Band 20dB

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	--	--	20228	kHz	INFO
T1 20dB	2400.000000	--	2401.8520	MHz	PASS
T2 20dB	--	2483.500000	2422.0800	MHz	PASS

## Verdict

PASS

# FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:37:42
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 nHT20_mode

Add. Information

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70  
 Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

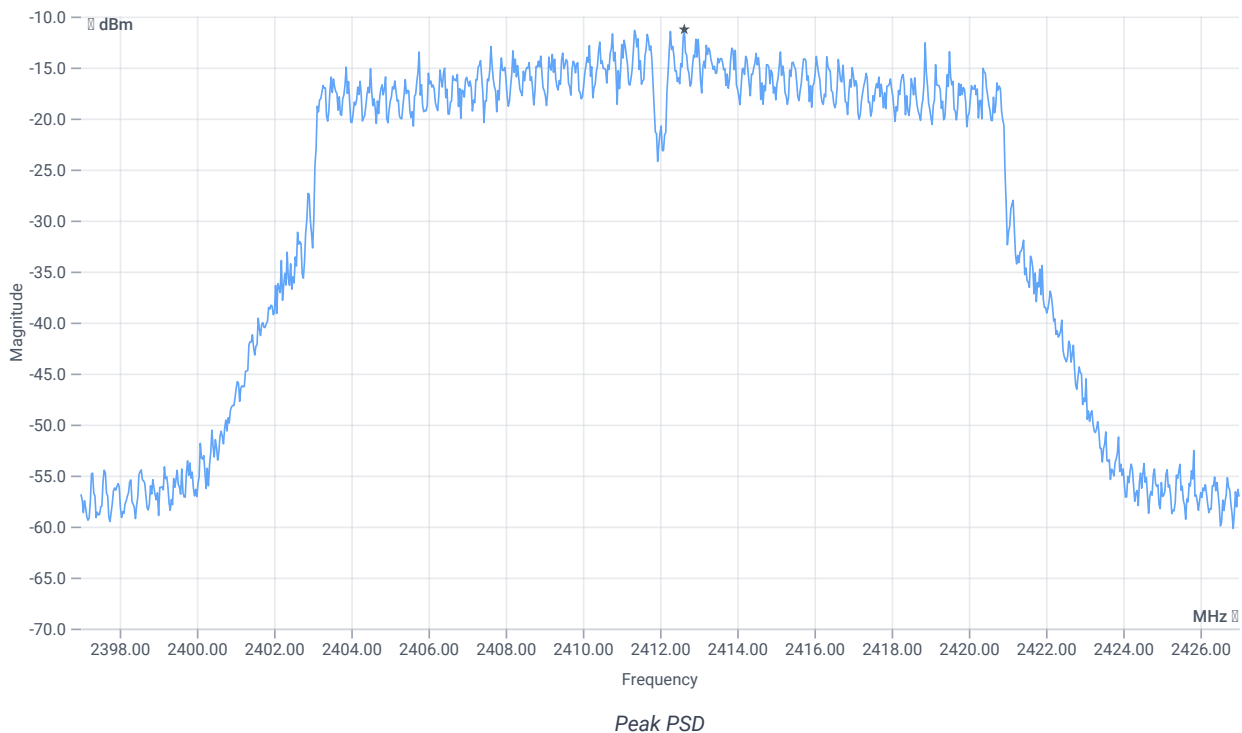
## Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	10.94	dBm	INFO
Ref. Frequency	--	--	2410.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.94   14.43   20
Start [MHz]   Stop [MHz]	2397.000   2427.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1000   20   1001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	--	8	-11.27	dBm/3KHz	PASS

Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ac-HT20 mode

### Test References

TC Start	08.02.2023 10:37:07
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

### EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

### Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

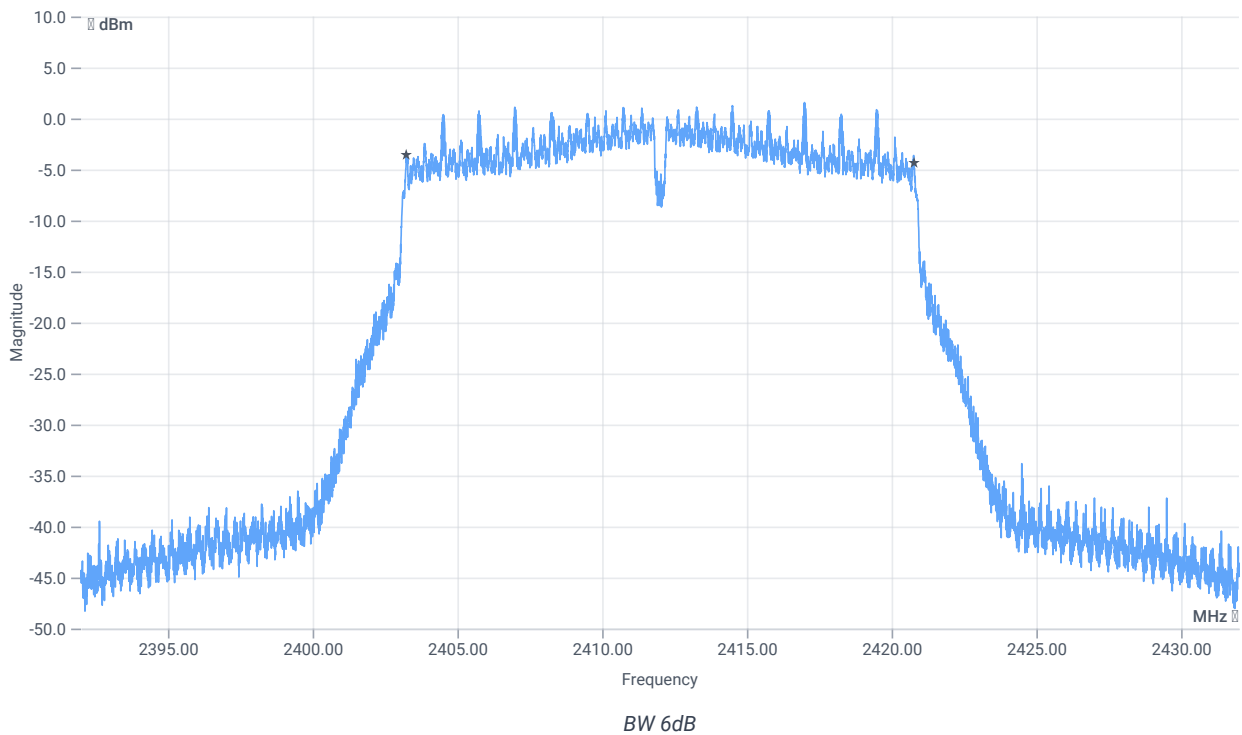
## Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	10.89	dBm	INFO
Ref. Frequency	--	--	2413.600	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.89   14.43   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	17544	kHz	PASS

Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 ac-HT20 mode

### Test References

TC Start	08.02.2023 10:36:26
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 n-HT20 mode

Add. Information

### EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

### Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - PowerMeter

### Test Equipment

Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06



## Test at TX 2412 MHz

### RESULT

<i>Test Description</i>	<i>Lower Limit</i>	<i>Upper Limit</i>	<i>Measured</i>	<i>Unit</i>	<i>Verdict</i>
Found Peak cond.	--	--	26.22	dBm	PASS

Verdict

PASS

# FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:29:47
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS DTS - WLAN2G4 nHT20_mode

Add. Information

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

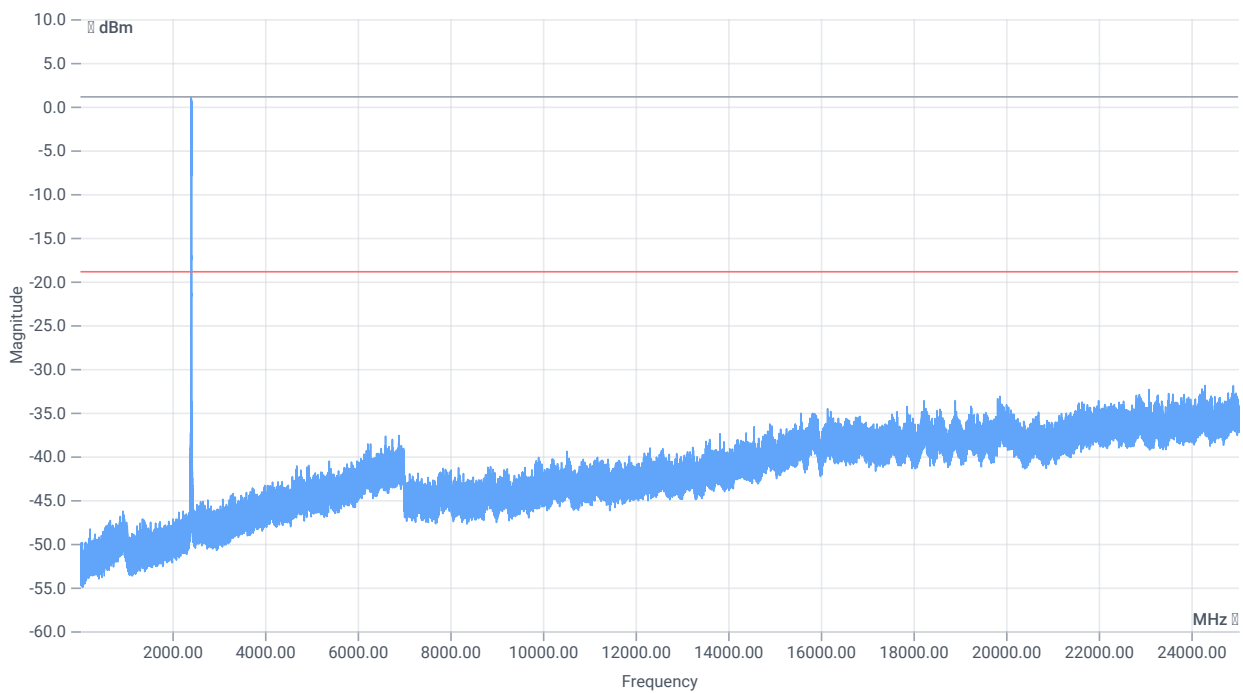
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70

Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

## Test at TX 2412 MHz

RESULT: Reference Power cond.

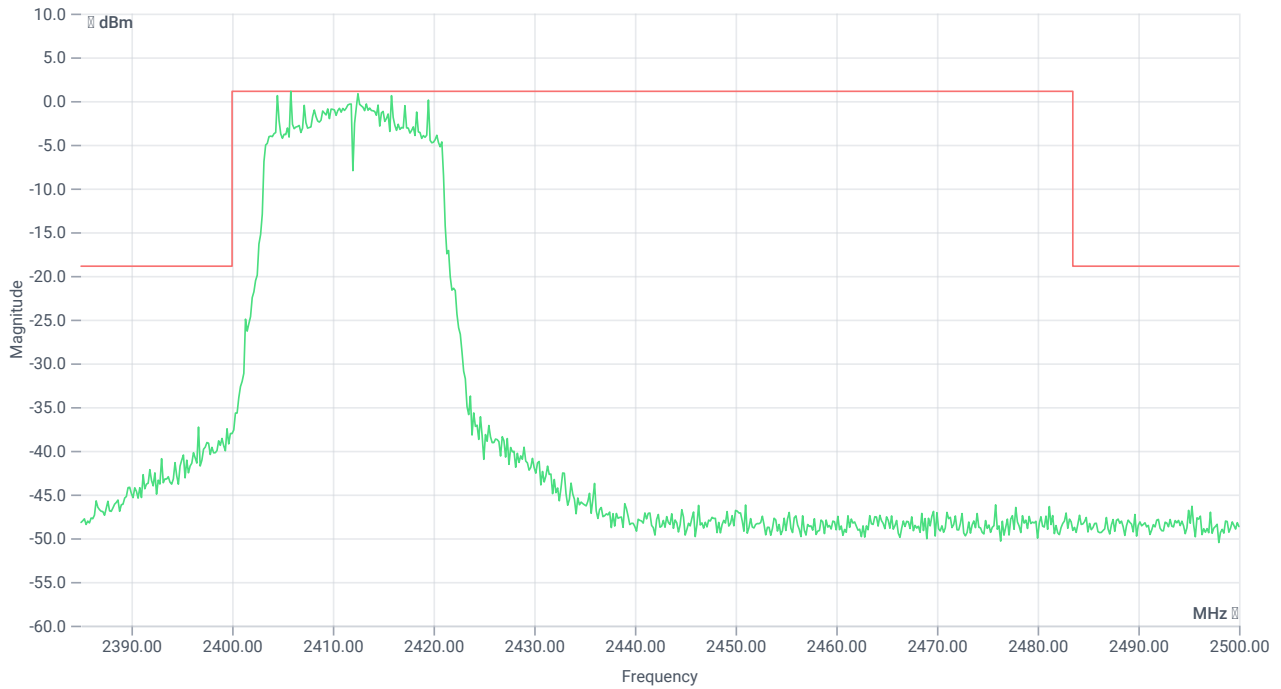
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	11.01	dBm	INFO
Ref. Frequency	--	--	2414.500	MHz	INFO



TX emissions

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	11.01   0   30
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE



TX emissions band zoomed

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2405.83 MHz	--	--	1.10	dBm	INFO
No peaks detected	--	--			PASS
Lowest margin to limit 24298.5 MHz	0	--	13	dB	INFO

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:29:10
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

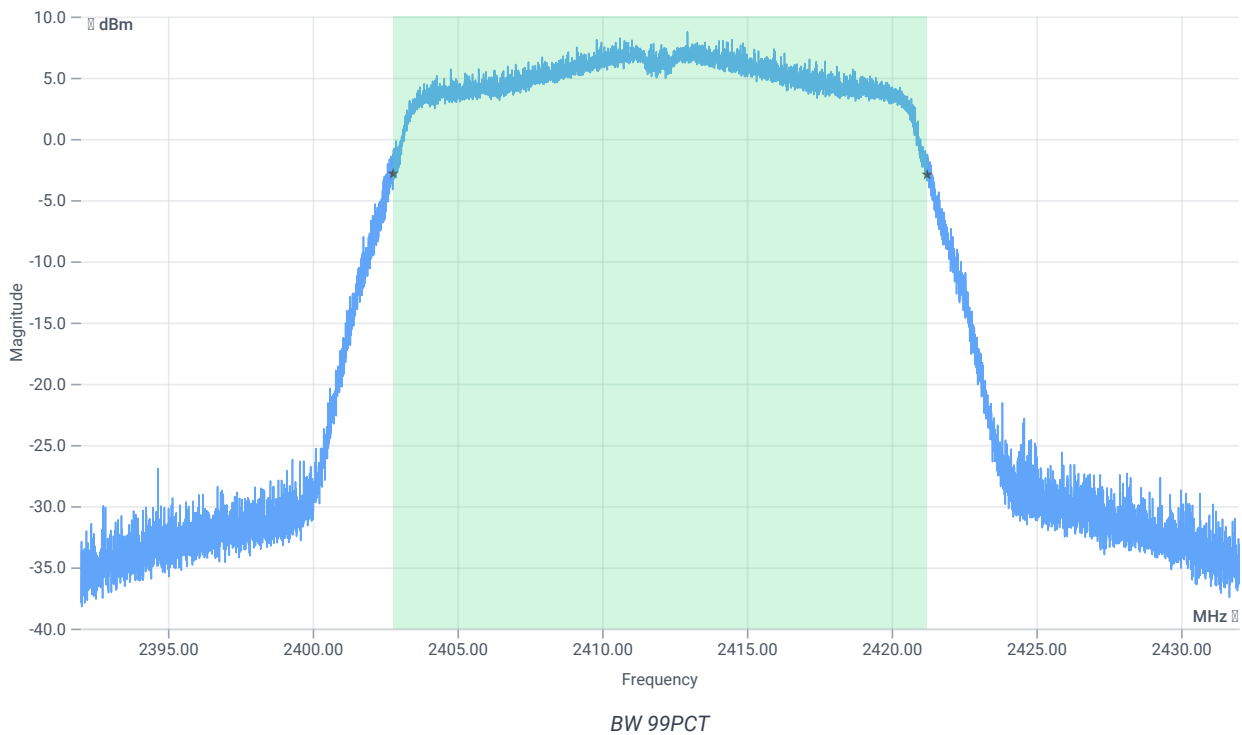
## Test at TX 2412 MHz

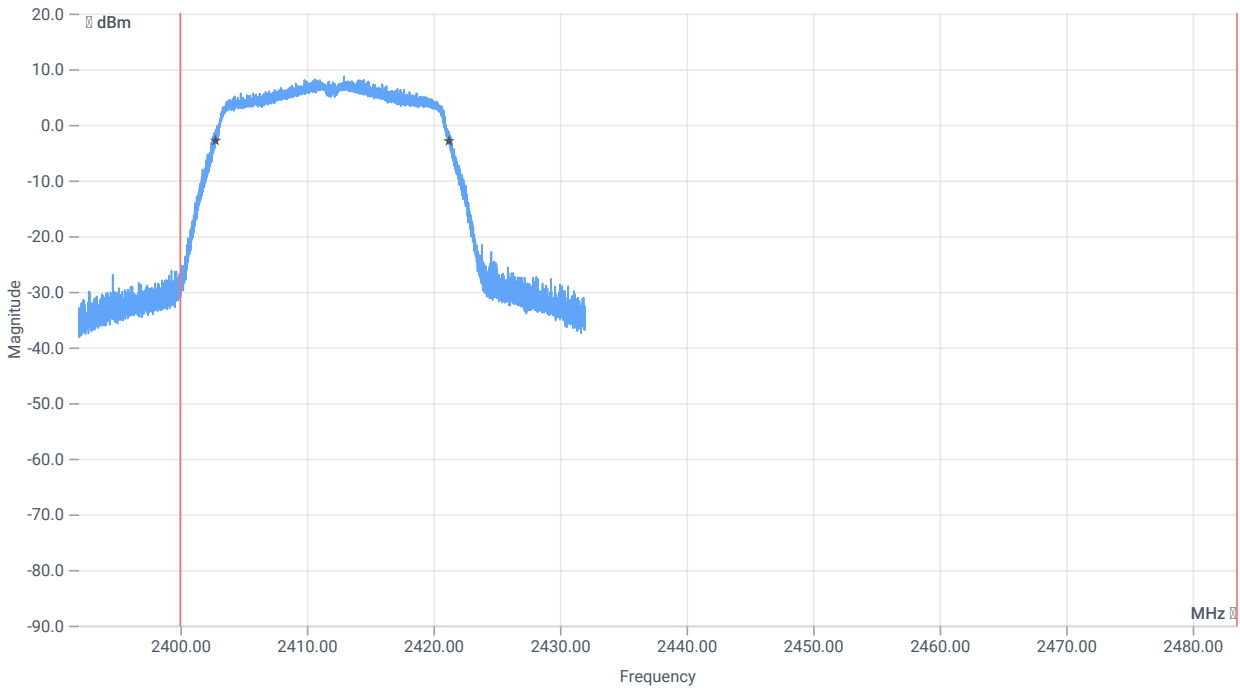
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	11.15	dBm	INFO
Ref. Frequency	--	--	2413.400	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.15   14.43   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE

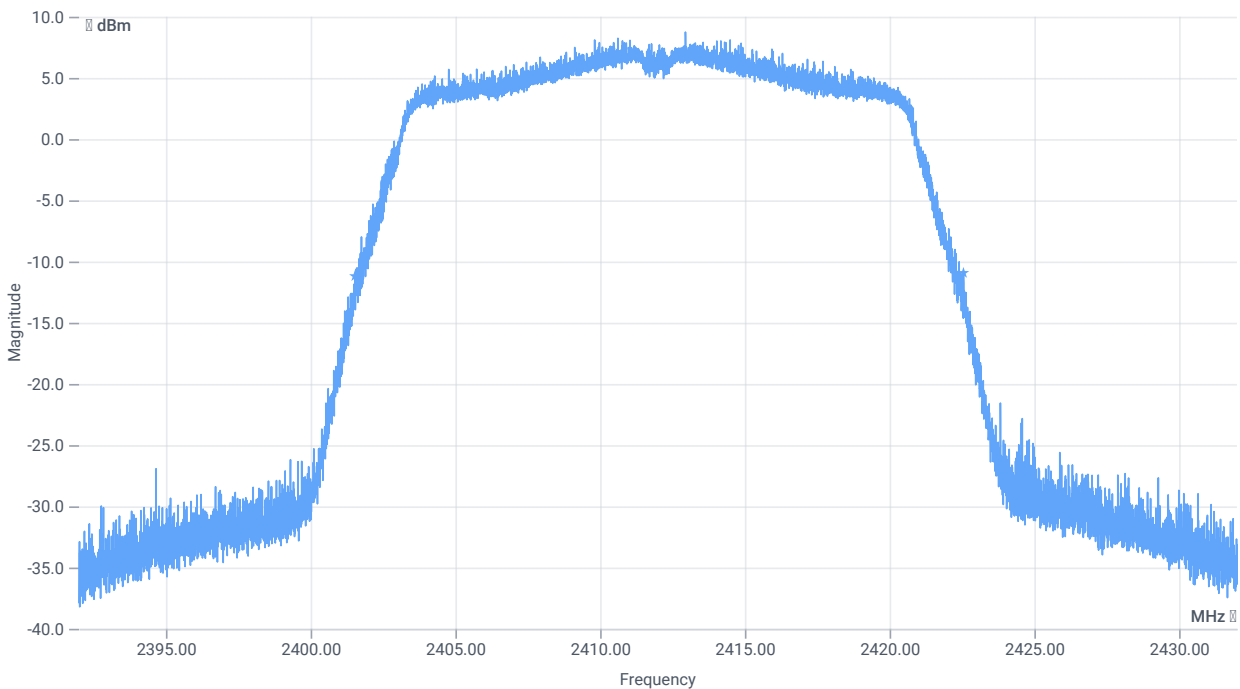




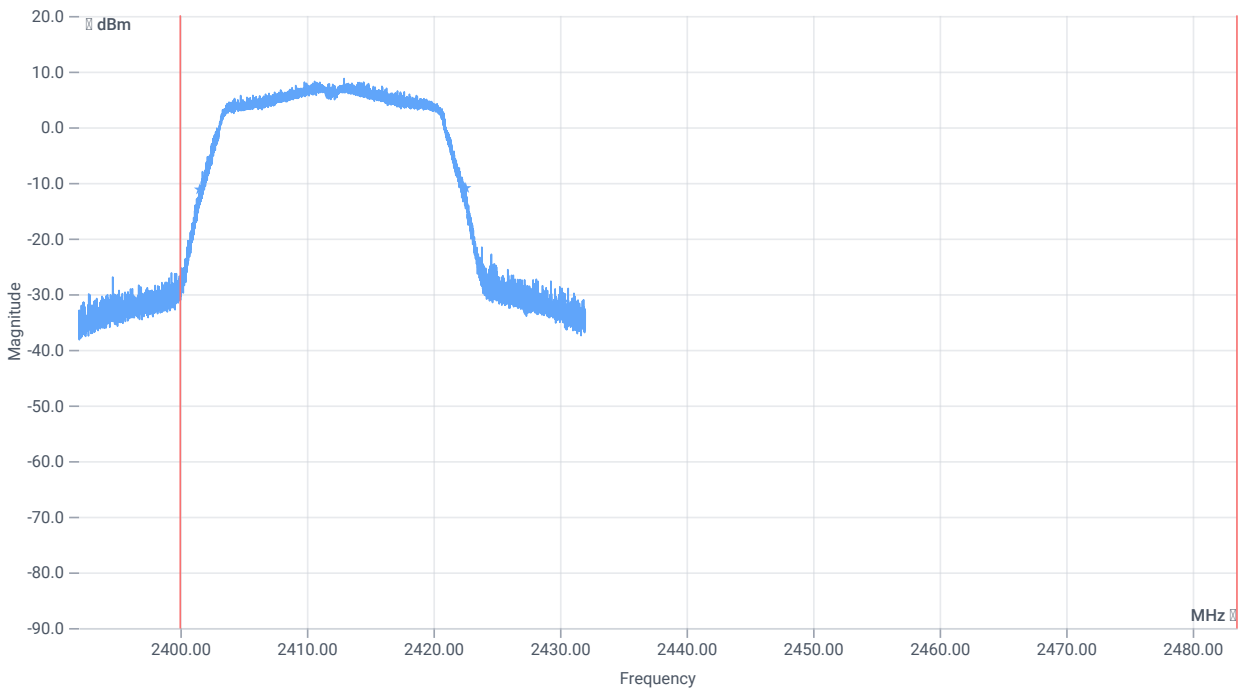
BW within Band 99PCT

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	18442.000	kHz	INFO
T1 99%	2400.000000	--	2402.7849	MHz	PASS
T2 99%	--	2483.500000	2421.2271	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	--	--	21024	kHz	INFO
T1 20dB	2400.000000	--	2401.5280	MHz	PASS
T2 20dB	--	2483.500000	2422.5520	MHz	PASS

Verdict

PASS



# FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 ac-HT20 mode

## Test References

TC Start	08.02.2023 10:28:29
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 nHT20_mode

Add. Information

## EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

## Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

## Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70  
 Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

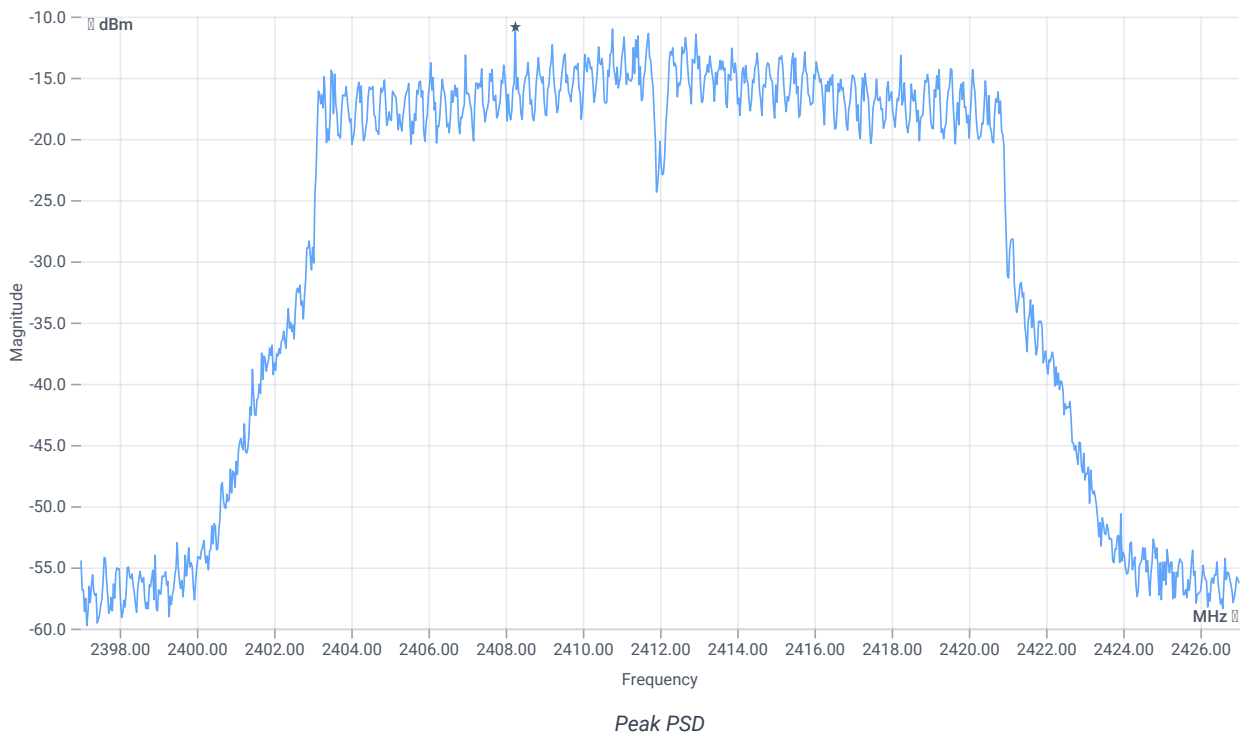
## Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	11.16	dBm	INFO
Ref. Frequency	--	--	2414.900	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.16   14.43   20
Start [MHz]   Stop [MHz]	2397.000   2427.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1000   20   1001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	--	8	-10.86	dBm/3KHz	PASS

Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ac-HT20 mode

### Test References

TC Start	08.02.2023 10:27:55
Ambit Temp [°C]   Humidity [rel%]	23.4   23
System Version	3.3.4.3
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Add. Information	

### EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

### Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	False   Freq [MHz] 2462
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

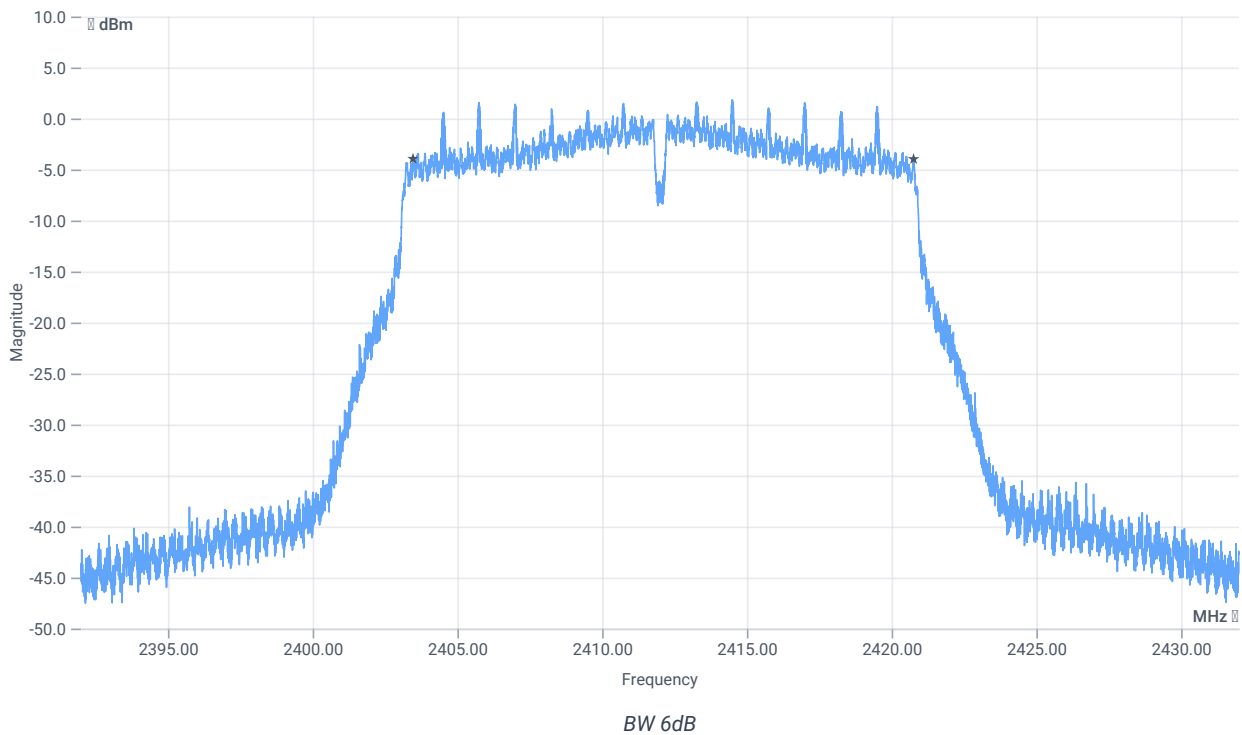
## Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	10.79	dBm	INFO
Ref. Frequency	--	--	2411.100	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.79   14.43   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE



### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	17292	kHz	PASS

Verdict

PASS

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