

# Measurement Results

No.1-4095/22-01-04\_Annex\_MR\_A2

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## Test logging

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Document authorized:

Test/s performed:

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**Michael Dorongovski**  
Lab Manager  
Radio Communications

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**Andreas Kurzkurt**  
Testing Manager  
Radio Communications

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## EUT Information

EUT DEFINITION	
Manufacturer	Sagemcom
Type	DIW377 UHD ALT US
Serial Number	NI
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	NI
Comment 1	
Comment 2	
Temperature [°C] Min	-20
Temperature [°C] Nom	20
Temperature [°C] Max	55
Voltage [V] Min	3.3
Voltage [V] Nom	3.8
Voltage [V] Max	4.2

## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:24:47
Ambit Temp [°C]   Humidity [rel%]	25.2   35
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

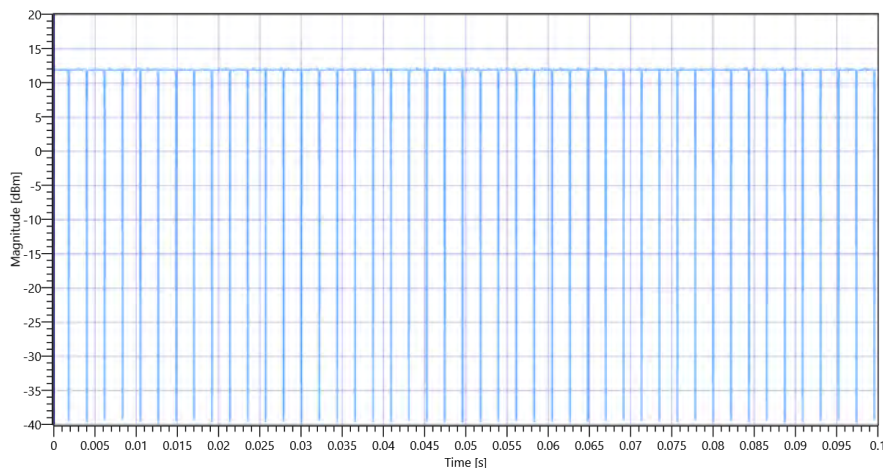
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.72	dBm	INFO
Ref. Frequency	---	---	2412.900	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2412 MHz - DutyCycle

## Avg. PSD

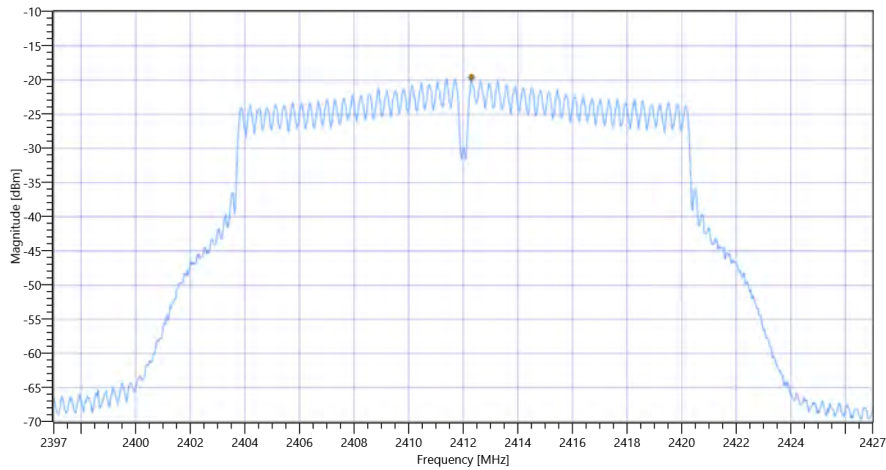
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.72   15.93   15
Start [MHz]   Stop [MHz]	2397.000   2427.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-19.61	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-19.3	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:40:41
Ambit Temp [°C]   Humidity [rel%]	25.2   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

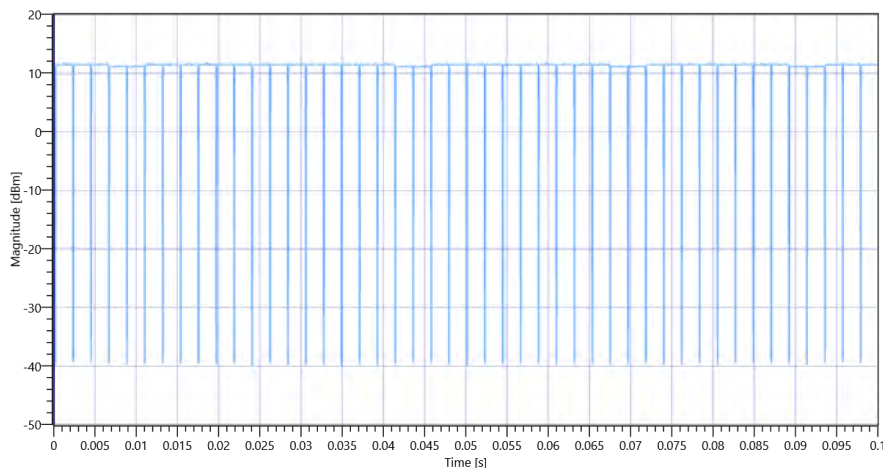
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.79	dBm	INFO
Ref. Frequency	---	---	2439.200	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2437 MHz - DutyCycle

## Avg. PSD

READ SA SETTINGS:

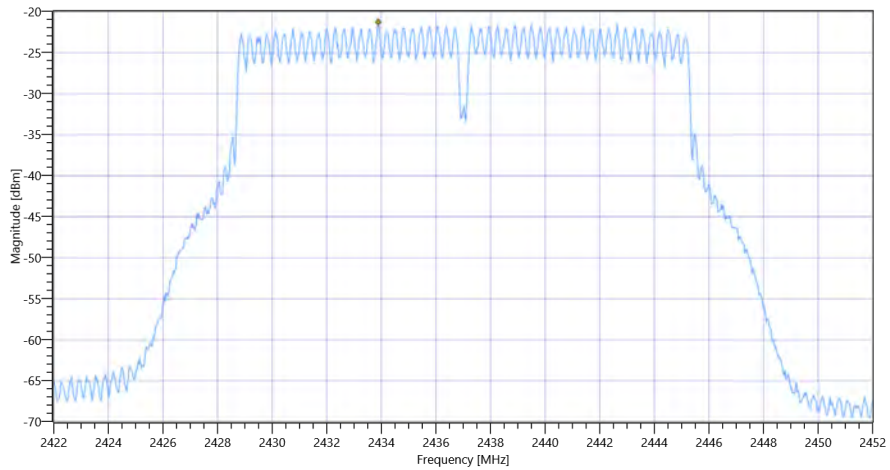
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.79   15.7   15
Start [MHz]   Stop [MHz]	2422.000   2452.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-21.26	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-20.95	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:54:45
Ambit Temp [°C]   Humidity [rel%]	25.3   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

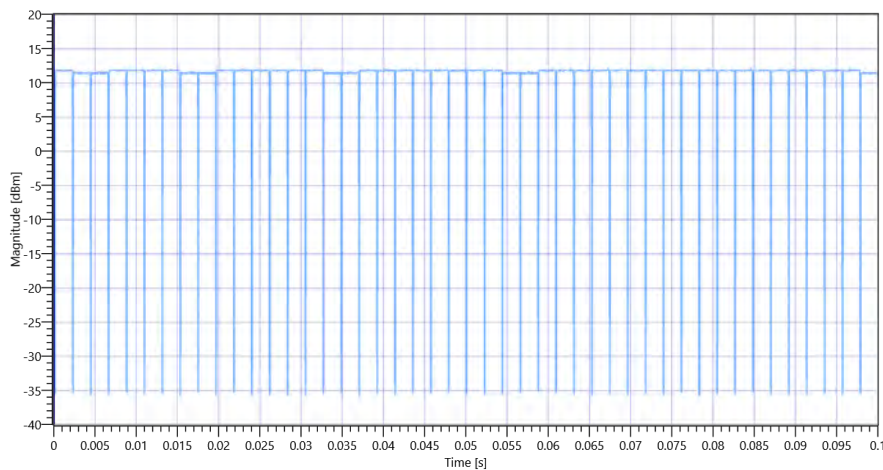
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.71	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2462 MHz - DutyCycle

## Avg. PSD

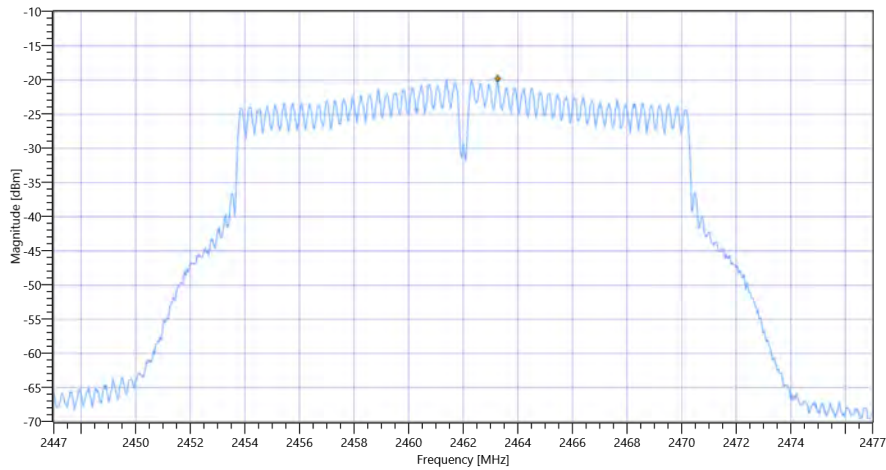
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.71   15.54   20
Start [MHz]   Stop [MHz]	2447.000   2477.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-19.76	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-19.45	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:11:11
Ambit Temp [°C]   Humidity [rel%]	25.5   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

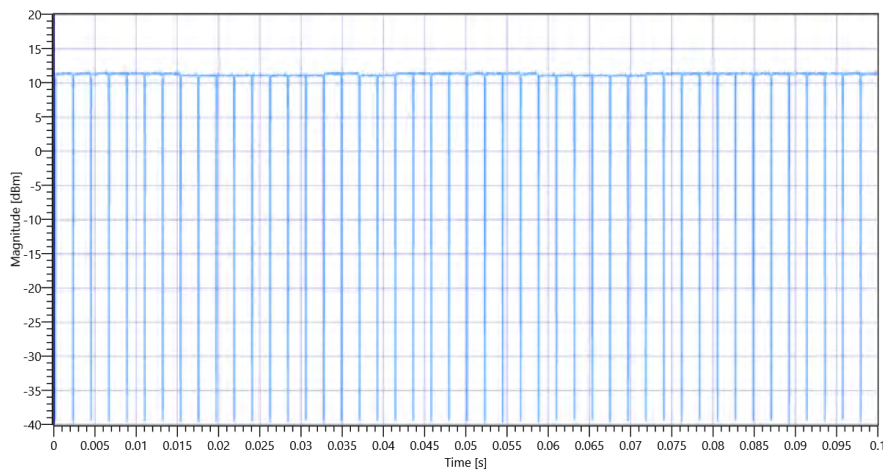
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.35	dBm	INFO
Ref. Frequency	---	---	2414.300	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2412 MHz - DutyCycle

## Avg. PSD

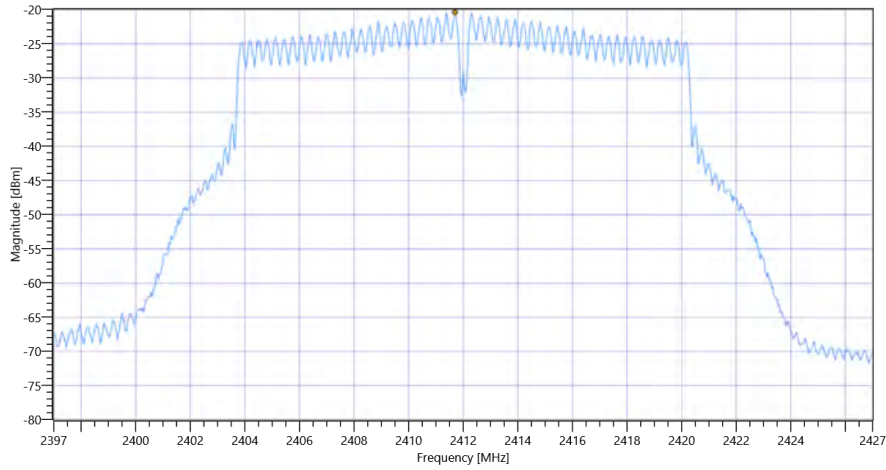
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.35   15.93   15
Start [MHz]   Stop [MHz]	2397.000   2427.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-20.35	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-20.04	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:54:35
Ambit Temp [°C]   Humidity [rel%]	25.8   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
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

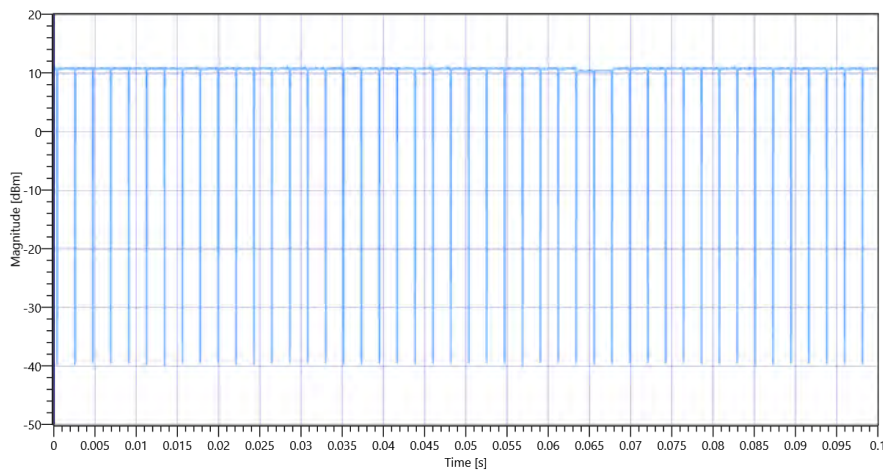
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.01	dBm	INFO
Ref. Frequency	---	---	2441.700	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2437 MHz - DutyCycle

## Avg. PSD

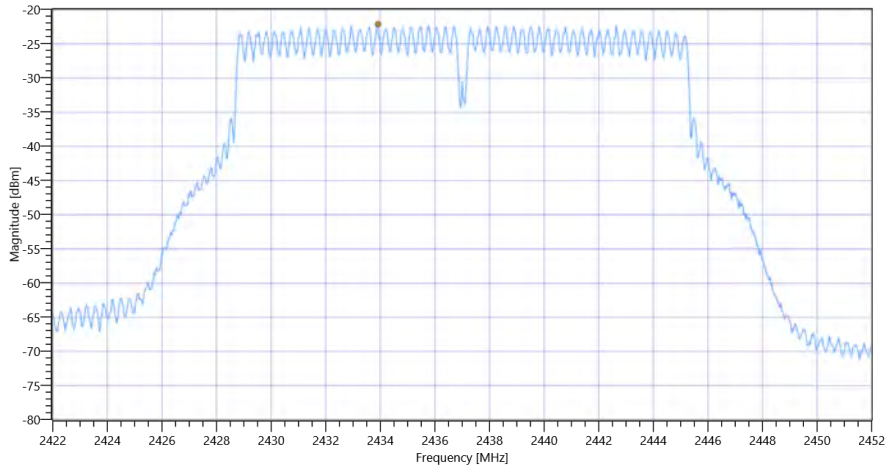
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.01   15.7   15
Start [MHz]   Stop [MHz]	2422.000   2452.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-22.14	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-21.83	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:12:06
Ambit Temp [°C]   Humidity [rel%]	25.9   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

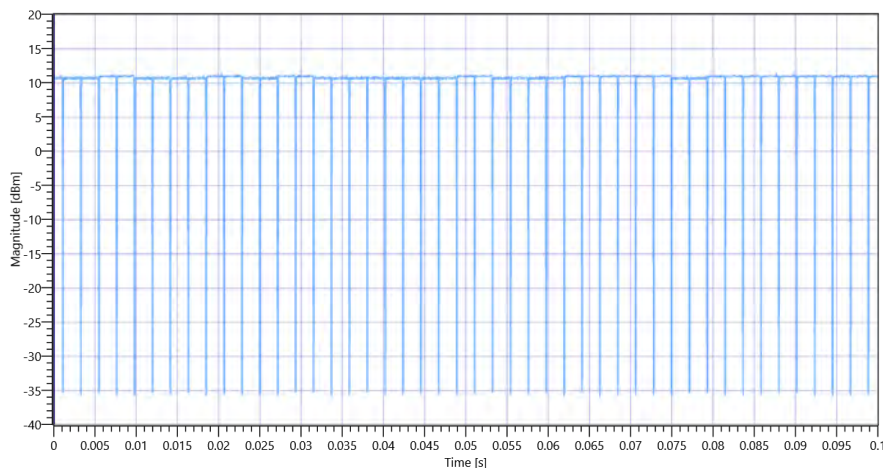
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.89	dBm	INFO
Ref. Frequency	---	---	2460.500	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode 2462 MHz - DutyCycle

## Avg. PSD

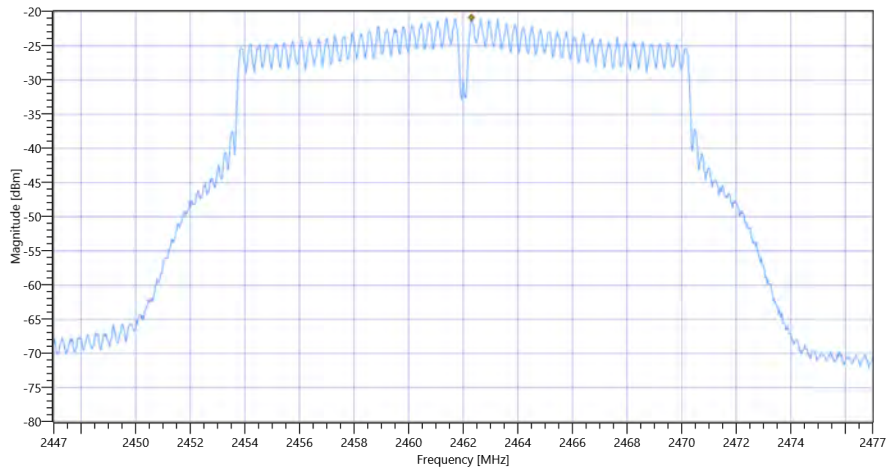
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.89   15.54   20
Start [MHz]   Stop [MHz]	2447.000   2477.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-20.87	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg PSD DC corrected	---	8	-20.56	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:24:08
Ambit Temp [°C]   Humidity [rel%]	25.2   36
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

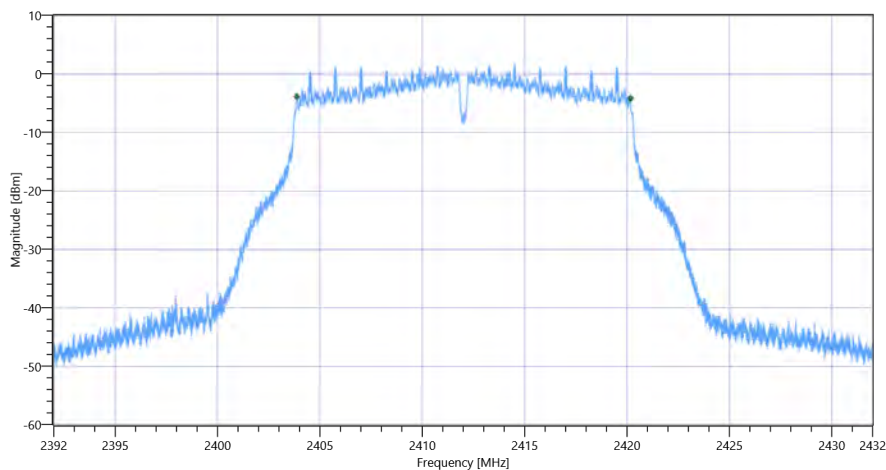
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.58	dBm	INFO
Ref. Frequency	---	---	2412.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.58   15.93   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	---	16292	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:40:04
Ambit Temp [°C]   Humidity [rel%]	25.2   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

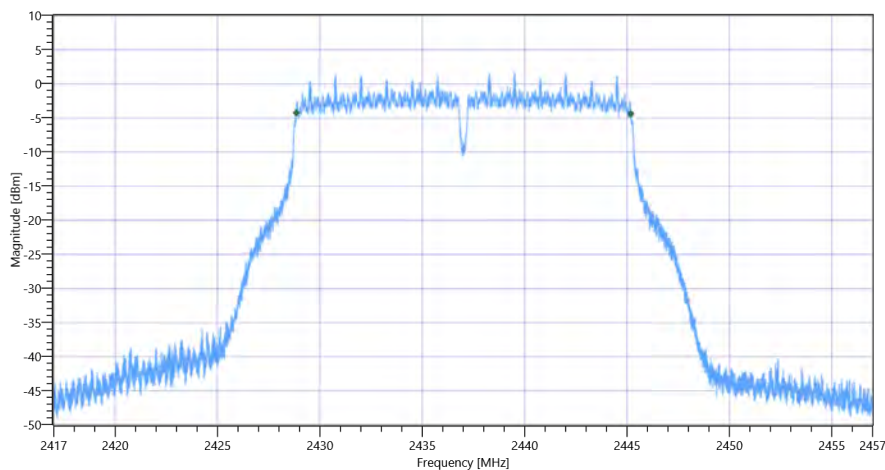
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.91	dBm	INFO
Ref. Frequency	---	---	2440.400	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.91   15.7   15
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	---	16348	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:54:07
Ambit Temp [°C]   Humidity [rel%]	25.3   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

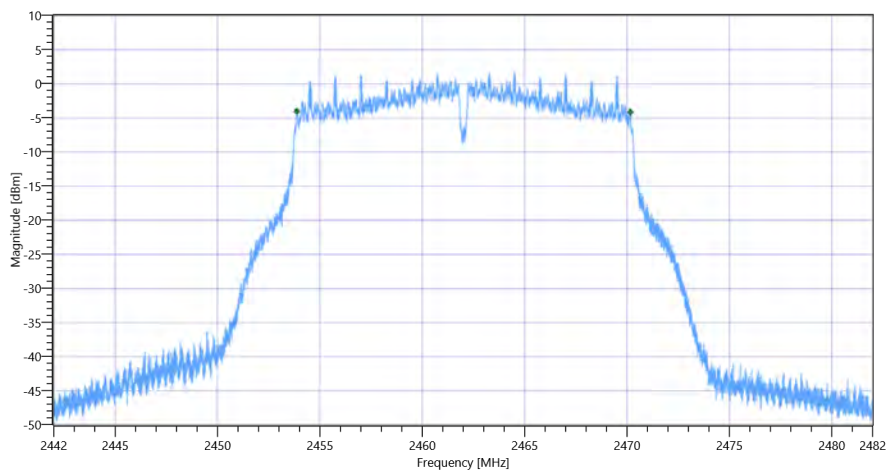
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.77	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.77   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
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	---	16292	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:10:32
Ambit Temp [°C]   Humidity [rel%]	25.5   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

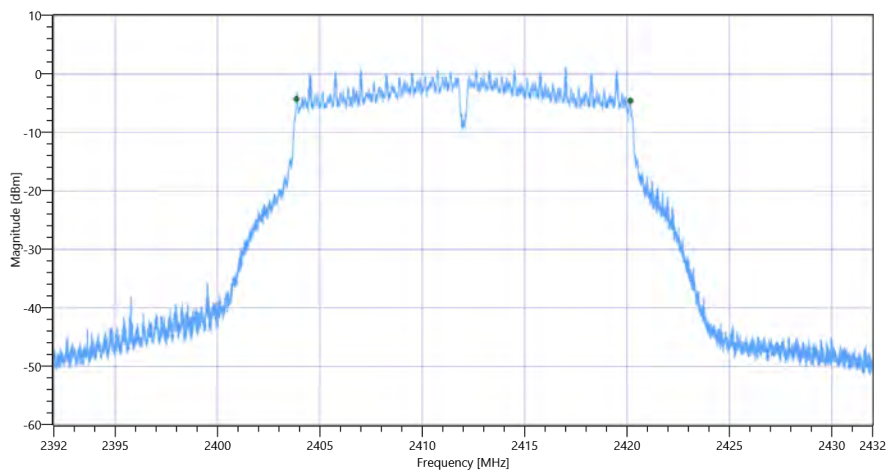
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.04	dBm	INFO
Ref. Frequency	---	---	2411.200	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.04   15.93   15
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	---	16312	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:53:57
Ambit Temp [°C]   Humidity [rel%]	25.8   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
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.

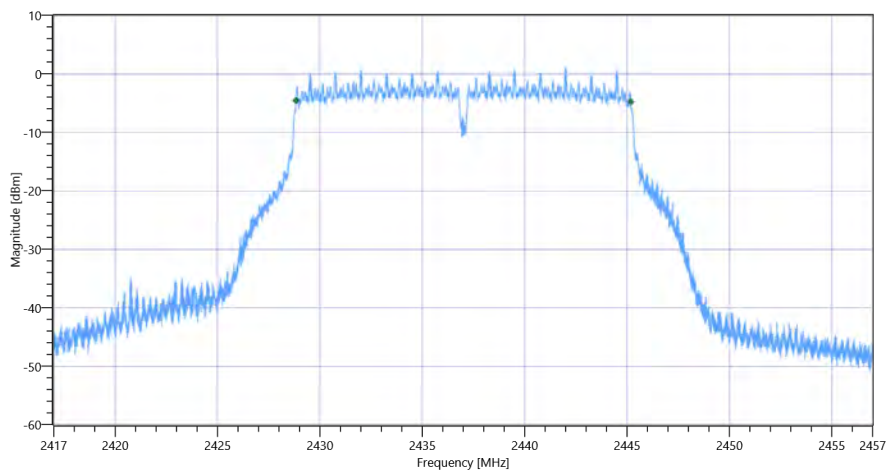
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.44	dBm	INFO
Ref. Frequency	---	---	2439.400	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.44   15.7   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	---	16352	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:11:27
Ambit Temp [°C]   Humidity [rel%]	25.9   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

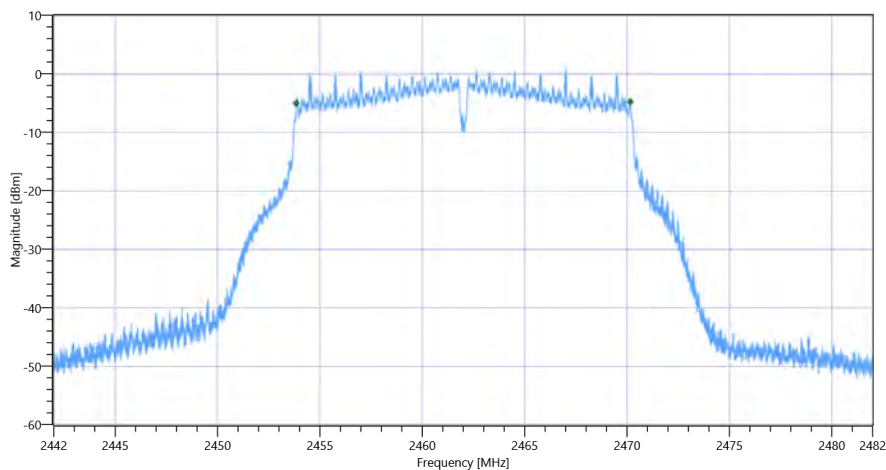
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.93	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.93   15.54   15
Start [MHz]   Stop [MHz]	2442.000   2482.000
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	---	16320	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:25:58
Ambit Temp [°C]   Humidity [rel%]	25.2   35
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.	---	---	11.10	dBm	INFO
Ref. Frequency	---	---	2413.300	MHz	INFO

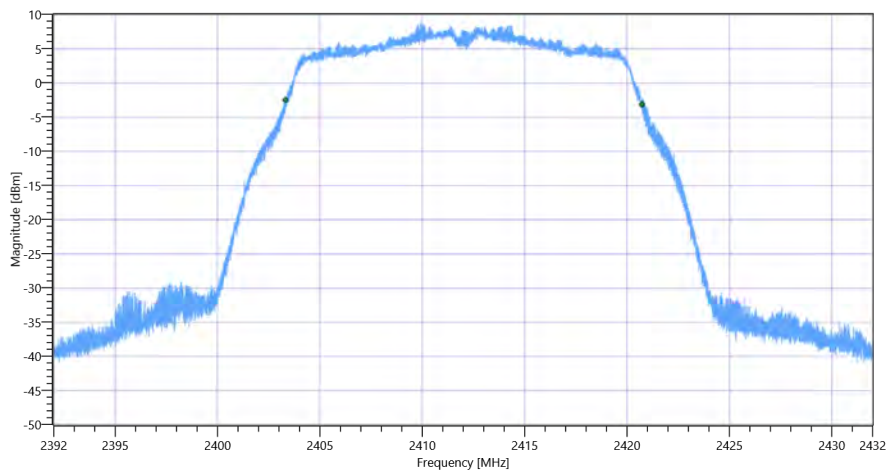
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.10   15.93   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

### RESULT

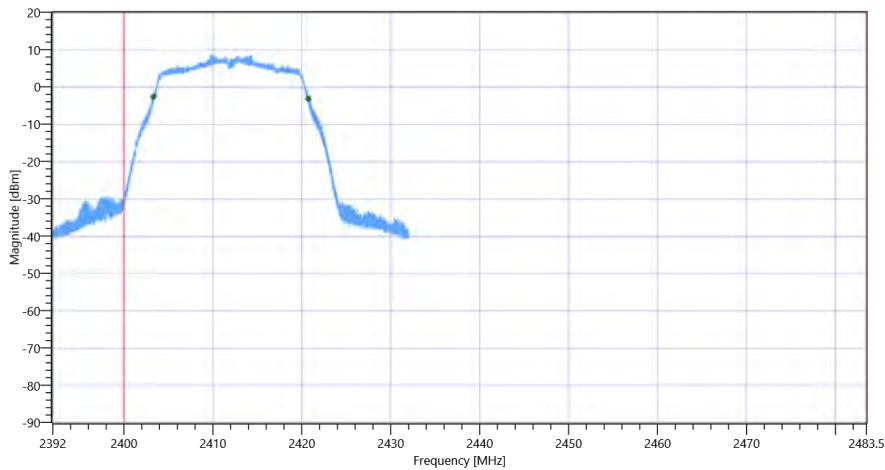
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17414.259	kHz	INFO
T1 99%	2400.000000	---	2403.3129	MHz	PASS
T2 99%	---	2483.500000	2420.7271	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

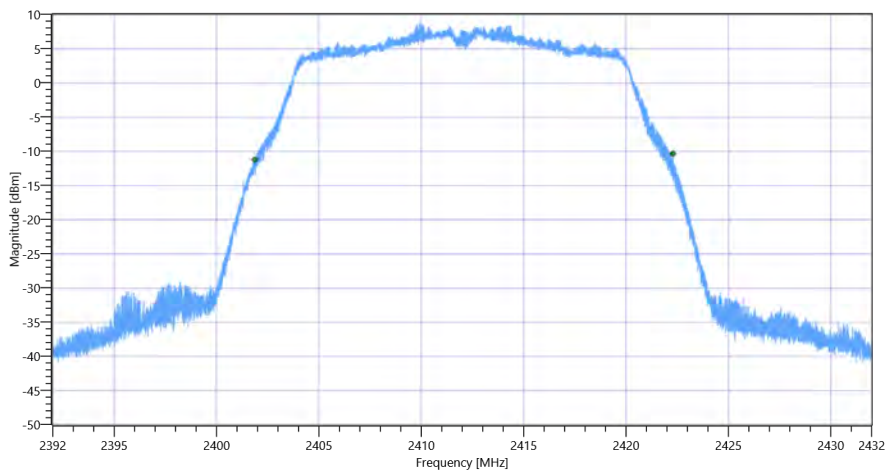
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

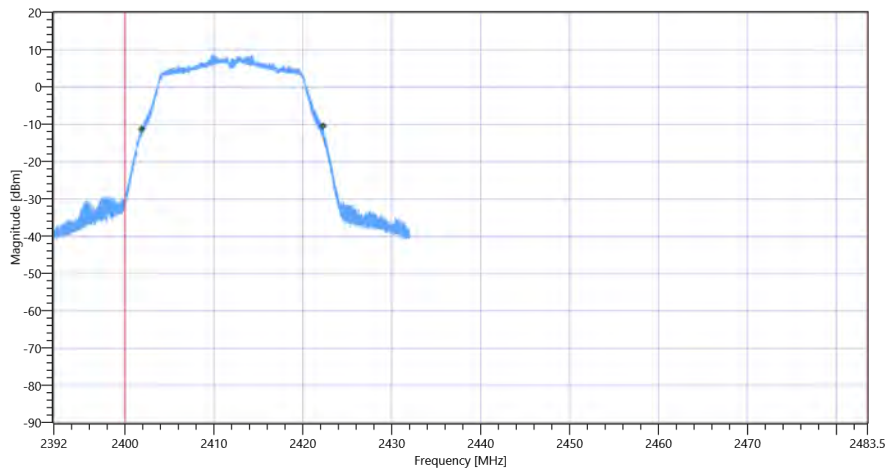
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20420	kHz	INFO	
T1 20dB	2400.000000	---	2401.8680	MHz	PASS	
T2 20dB	---	2483.500000	2422.2880	MHz	PASS	

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:41:53
Ambit Temp [°C]   Humidity [rel%]	25.2   34
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.	---	---	9.83	dBm	INFO
Ref. Frequency	---	---	2435.800	MHz	INFO

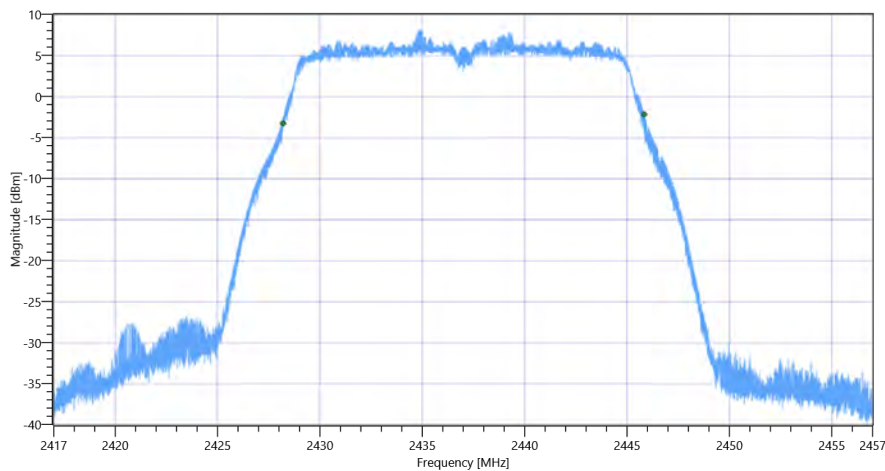
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.83   15.7   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

### RESULT

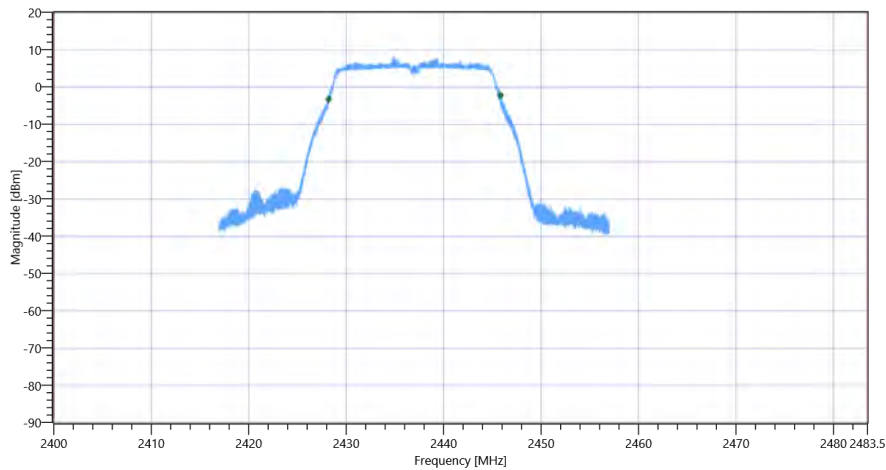
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17646.235	kHz	INFO
T1 99%	2400.000000	---	2428.1929	MHz	PASS
T2 99%	---	2483.500000	2445.8391	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

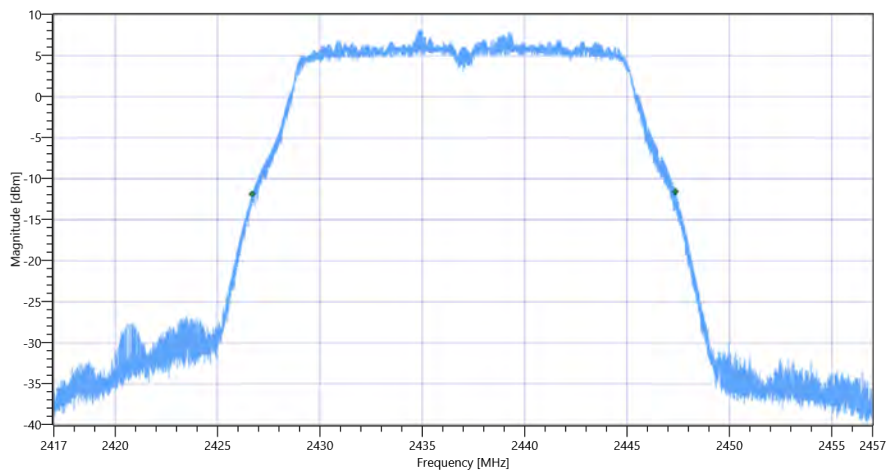
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20680	kHz	INFO
T1 20dB	2400.000000	---	2426.6880	MHz	PASS
T2 20dB	---	2483.500000	2447.3680	MHz	PASS

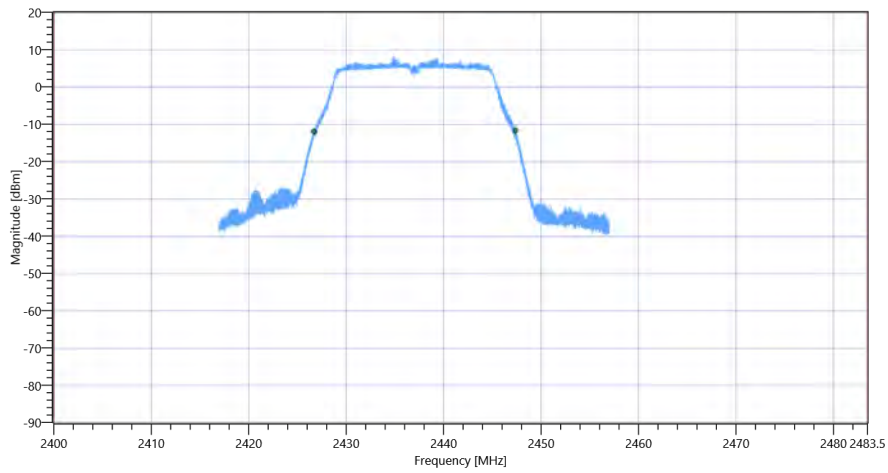
Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band





FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:55:57
Ambit Temp [°C]   Humidity [rel%]	25.3   33
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.22	dBm	INFO
Ref. Frequency	---	---	2460.600	MHz	INFO

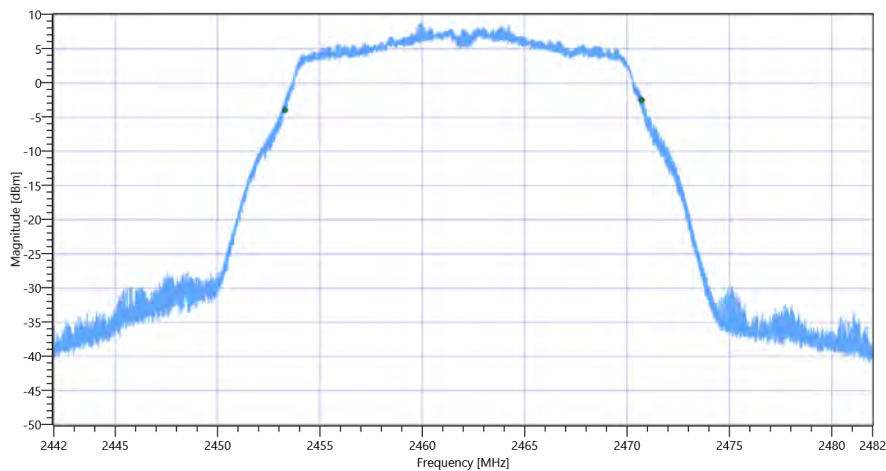
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.22   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE

### RESULT

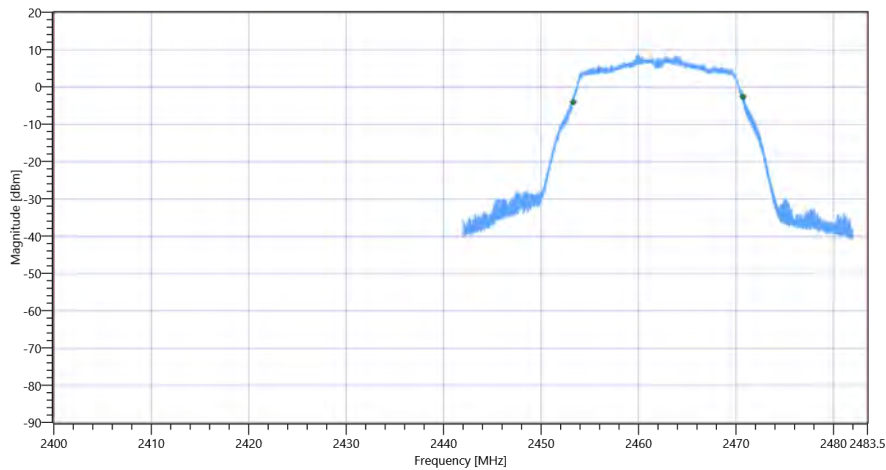
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17414.259	kHz	INFO
T1 99%	2400.000000	---	2453.2969	MHz	PASS
T2 99%	---	2483.500000	2470.7111	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

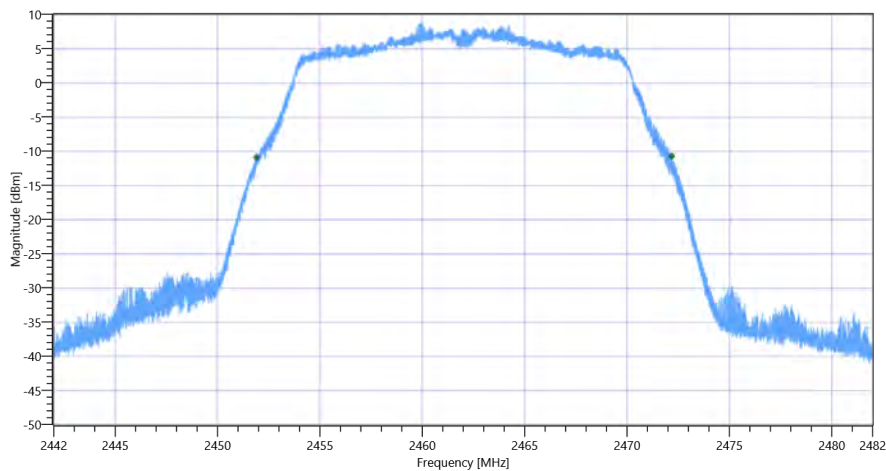
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

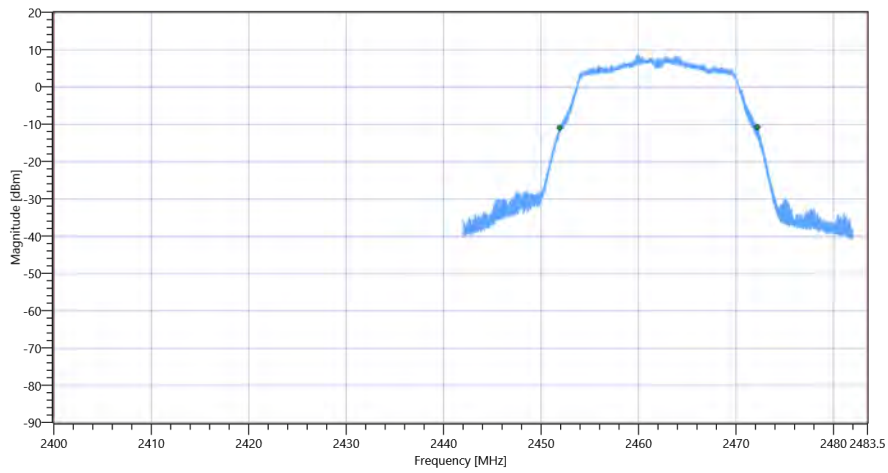
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20288	kHz	INFO
T1 20dB	2400.000000	---	2451.8960	MHz	PASS
T2 20dB	---	2483.500000	2472.1840	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:12:23
Ambit Temp [°C]   Humidity [rel%]	25.5   34
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.	---	---	12.64	dBm	INFO
Ref. Frequency	---	---	2412.600	MHz	INFO

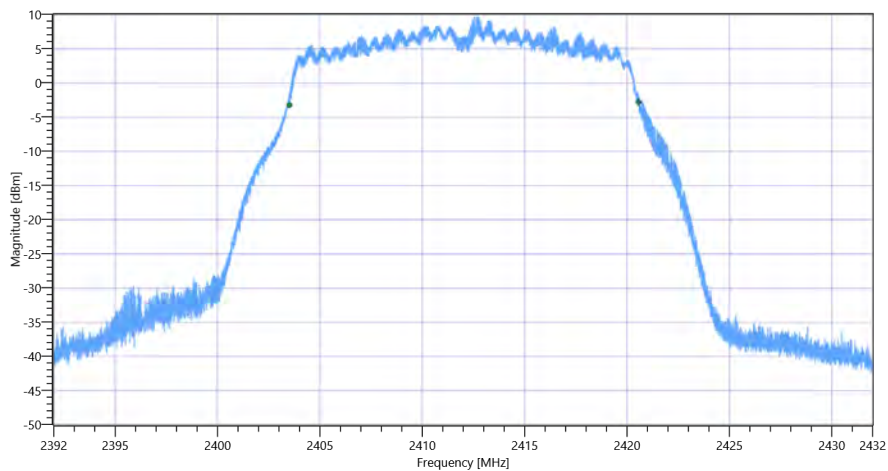
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.64   15.93   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

### RESULT

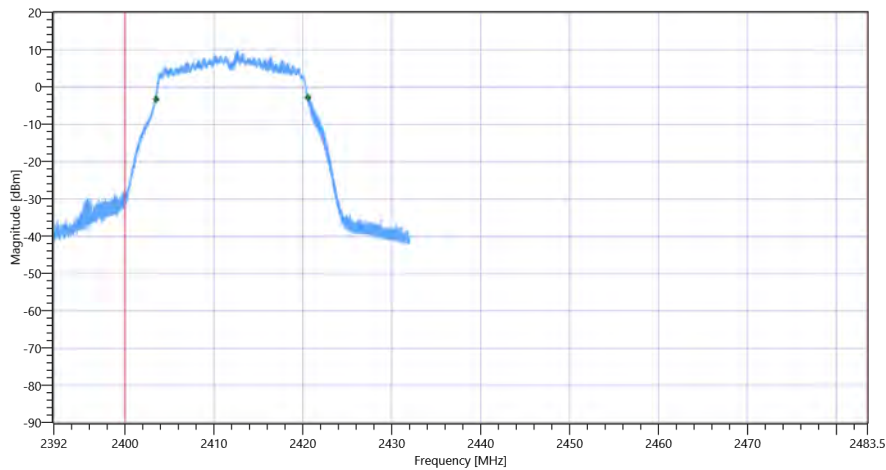
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17054.295	kHz	INFO
T1 99%	2400.000000	---	2403.5128	MHz	PASS
T2 99%	---	2483.500000	2420.5671	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

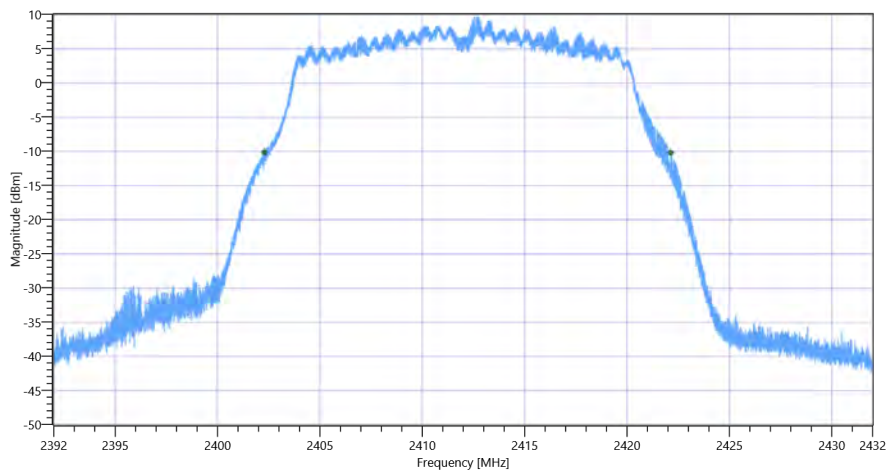
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19852	kHz	INFO
T1 20dB	2400.000000	---	2402.2840	MHz	PASS
T2 20dB	---	2483.500000	2422.1360	MHz	PASS

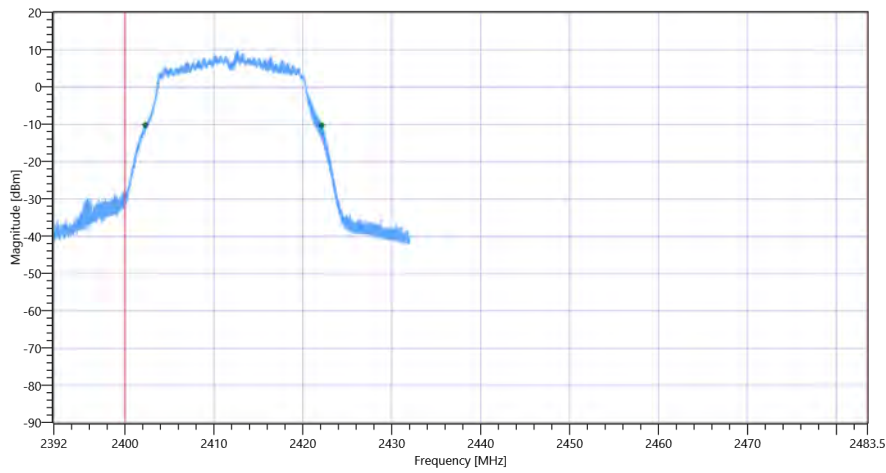
Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band





FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:07:45
Ambit Temp [°C]   Humidity [rel%]	25.9   33
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
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.	---	---	9.13	dBm	INFO
Ref. Frequency	---	---	2441.700	MHz	INFO

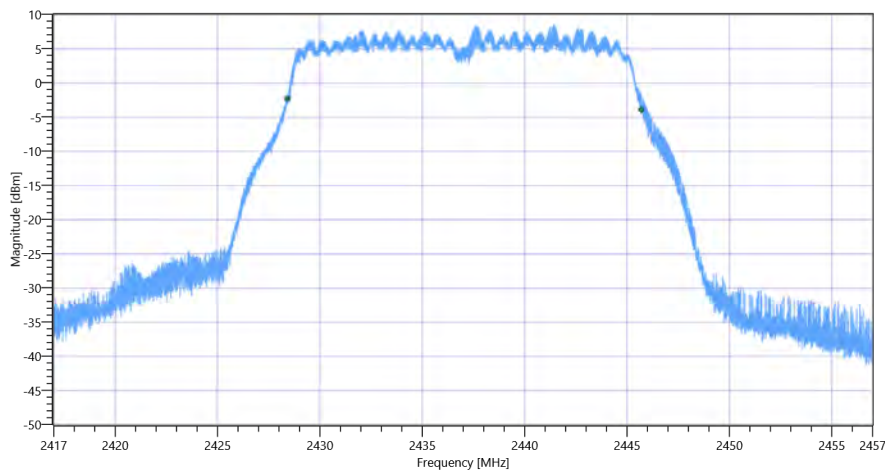
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.13   15.7   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

### RESULT

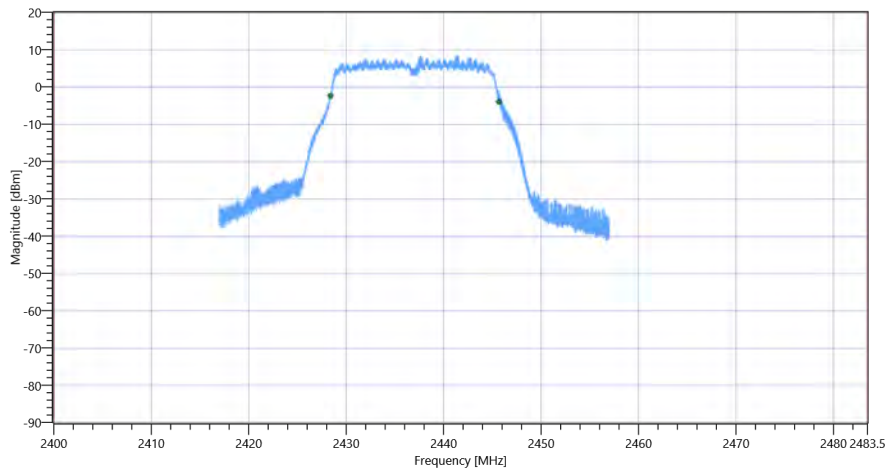
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17294.271	kHz	INFO
T1 99%	2400.000000	---	2428.3969	MHz	PASS
T2 99%	---	2483.500000	2445.6911	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

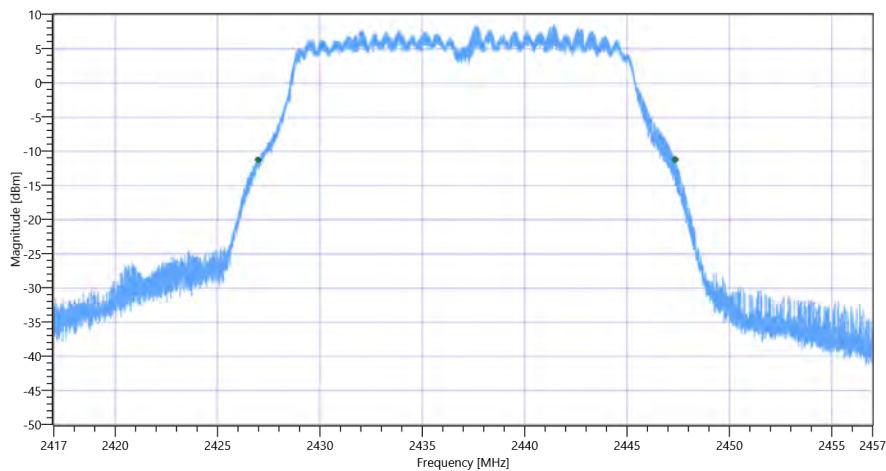
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

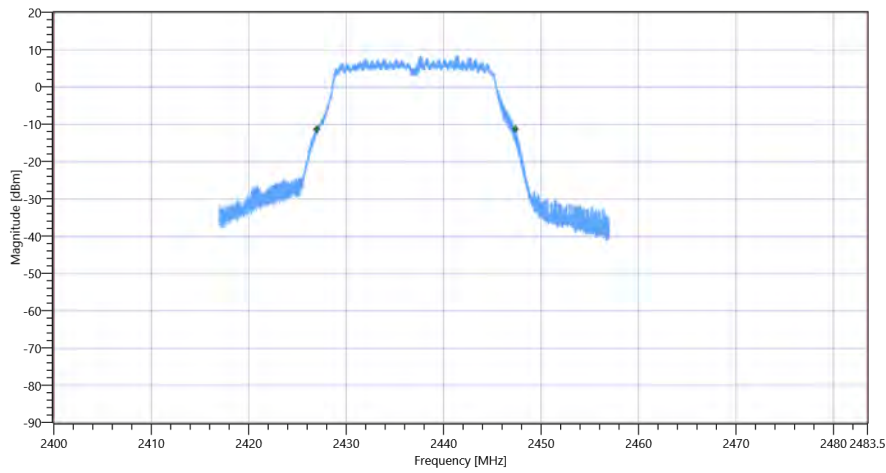
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20392	kHz	INFO
T1 20dB	2400.000000	---	2426.9720	MHz	PASS
T2 20dB	---	2483.500000	2447.3640	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:13:19
Ambit Temp [°C]   Humidity [rel%]	25.9   32
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.19	dBm	INFO
Ref. Frequency	---	---	2464.600	MHz	INFO

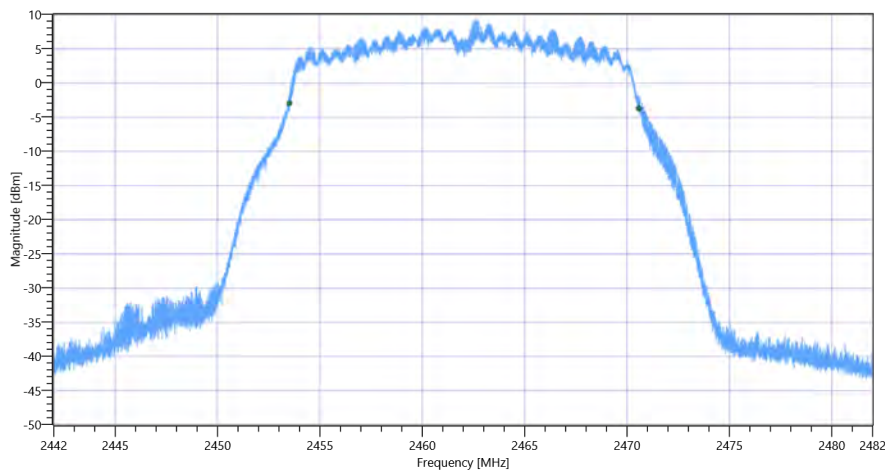
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.19   15.54   15
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE

### RESULT

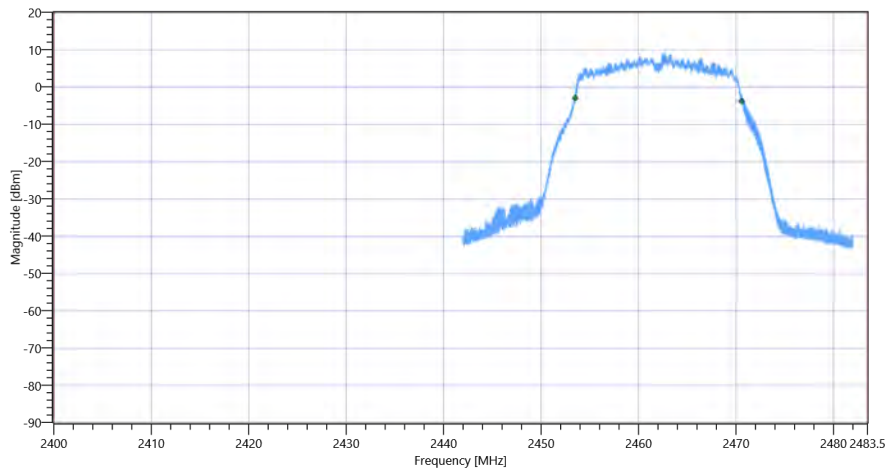
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17066.293	kHz	INFO
T1 99%	2400.000000	---	2453.5088	MHz	PASS
T2 99%	---	2483.500000	2470.5751	MHz	PASS

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 99PCT

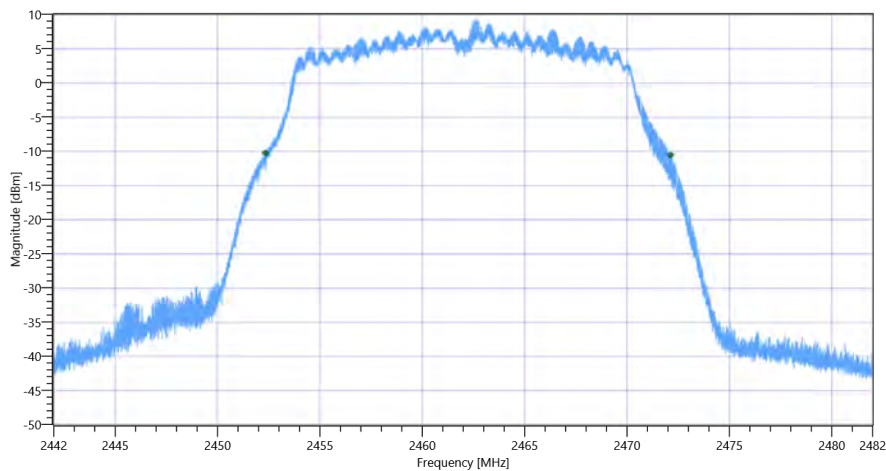
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19796	kHz	INFO
T1 20dB	2400.000000	---	2452.3320	MHz	PASS
T2 20dB	---	2483.500000	2472.1280	MHz	PASS

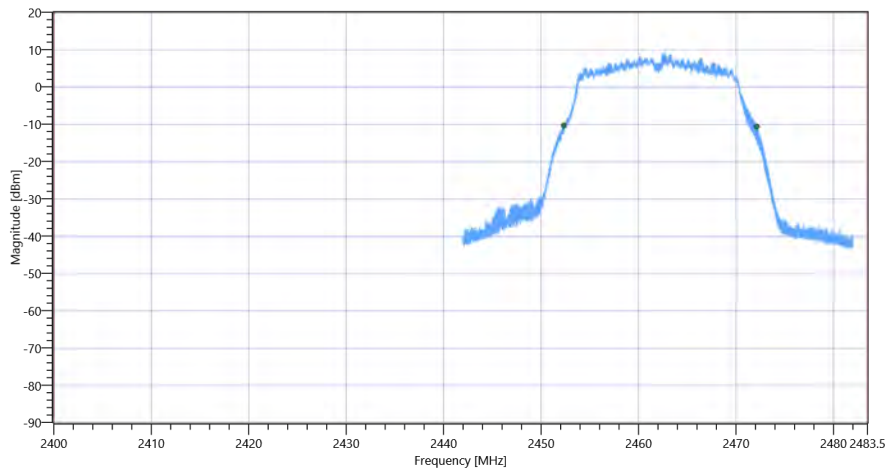
Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode 20dB

Plot: Bandwidth within Band





FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:35:20
Ambit Temp [°C]   Humidity [rel%]	25.2   35
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

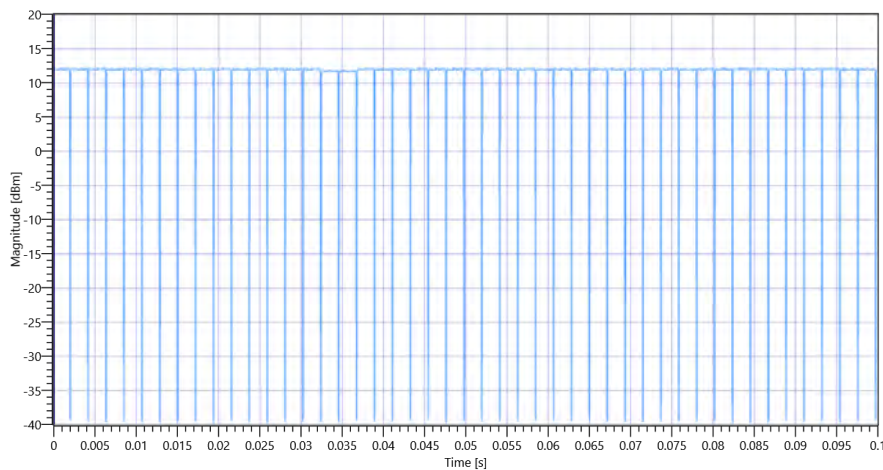
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.92	dBm	INFO
Ref. Frequency	---	---	2413.400	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2412 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

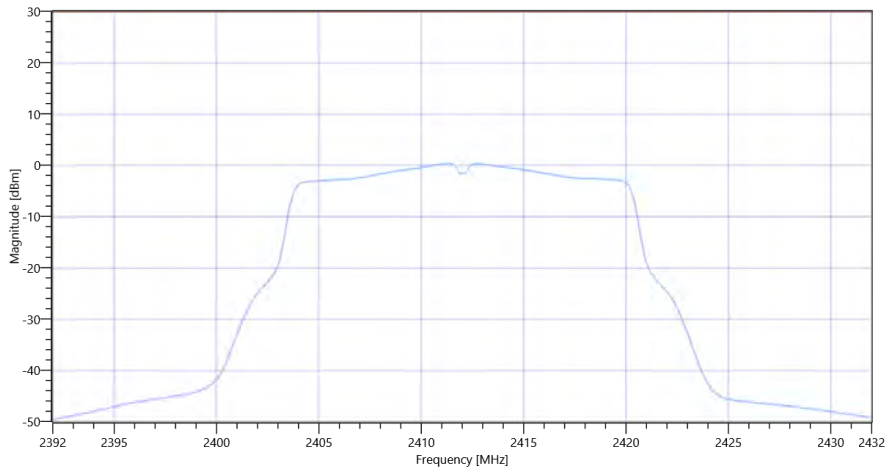
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.92   15.93   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	13.48	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	13.79	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

**PASS**

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 14:51:16
Ambit Temp [°C]   Humidity [rel%]	25.2   33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

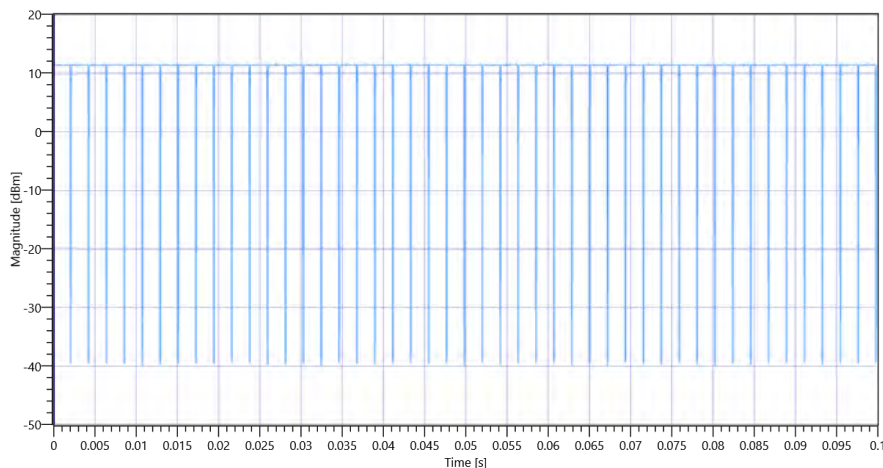
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.95	dBm	INFO
Ref. Frequency	---	---	2438.700	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
<b>Result Summary</b>					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2437 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

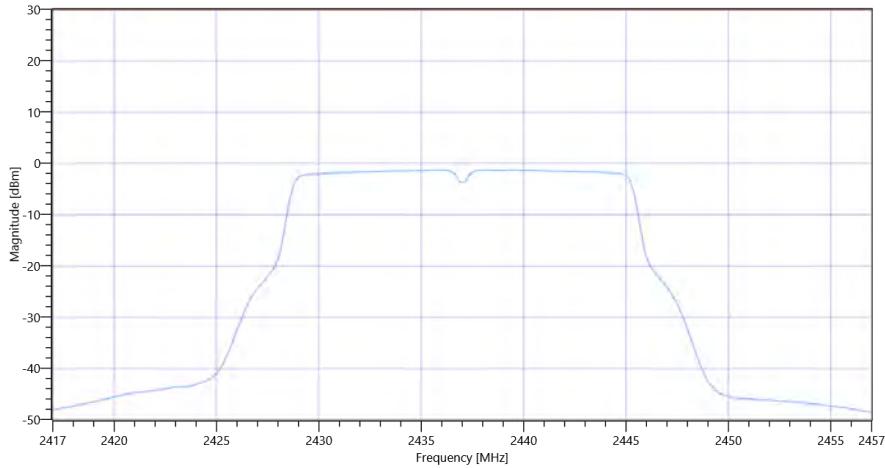
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.95   15.7   20
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	13.29	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	13.6	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:05:20
Ambit Temp [°C]   Humidity [rel%]	25.4   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

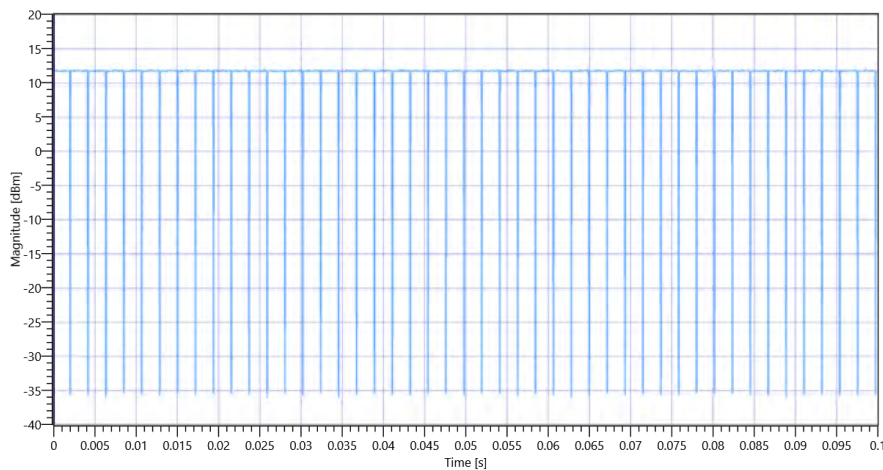
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.46	dBm	INFO
Ref. Frequency	---	---	2462.800	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
<b>Result Summary</b>					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2462 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

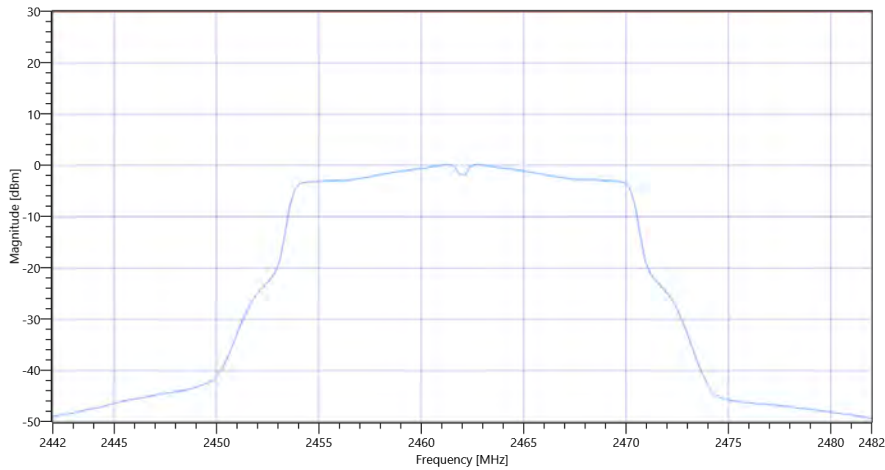
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.46   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	13.29	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	13.6	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

**PASS**

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:21:48
Ambit Temp [°C]   Humidity [rel%]	25.5   34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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

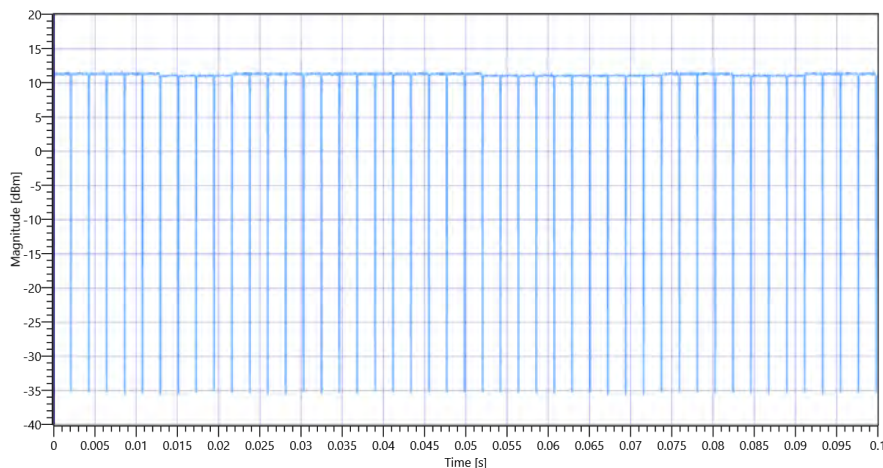
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.69	dBm	INFO
Ref. Frequency	---	---	2412.600	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
<b>Result Summary</b>					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2412 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

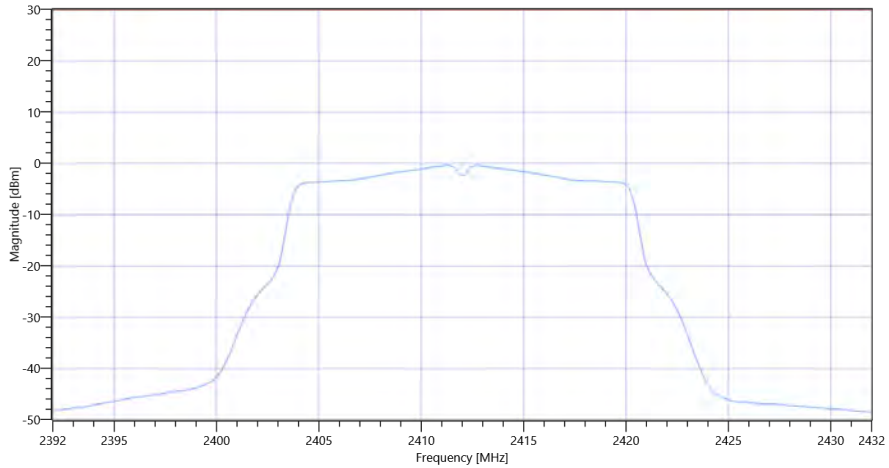
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	22.69   15.93   25
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.77	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	13.08	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

PASS

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:08:47
Ambit Temp [°C]   Humidity [rel%]	25.9   32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
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

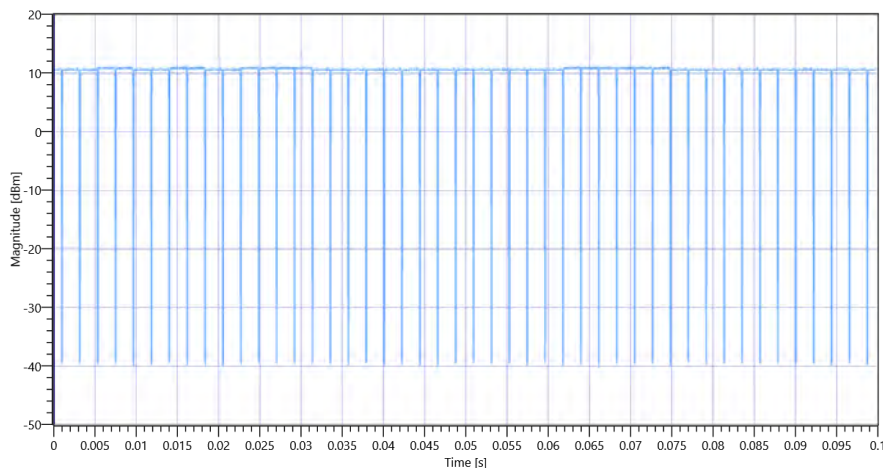
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.40	dBm	INFO
Ref. Frequency	---	---	2435.000	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2437 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

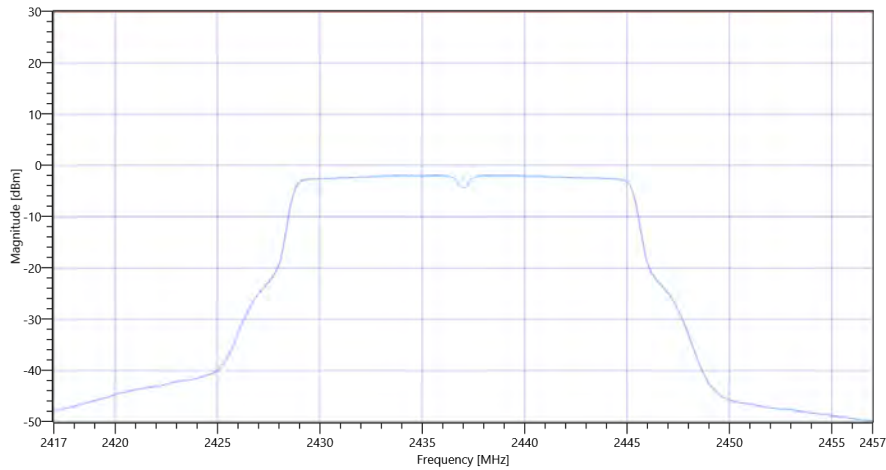
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.40   15.7   20
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.62	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	12.93	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

**PASS**



## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:27:31
Ambit Temp [°C]   Humidity [rel%]	25.9   32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

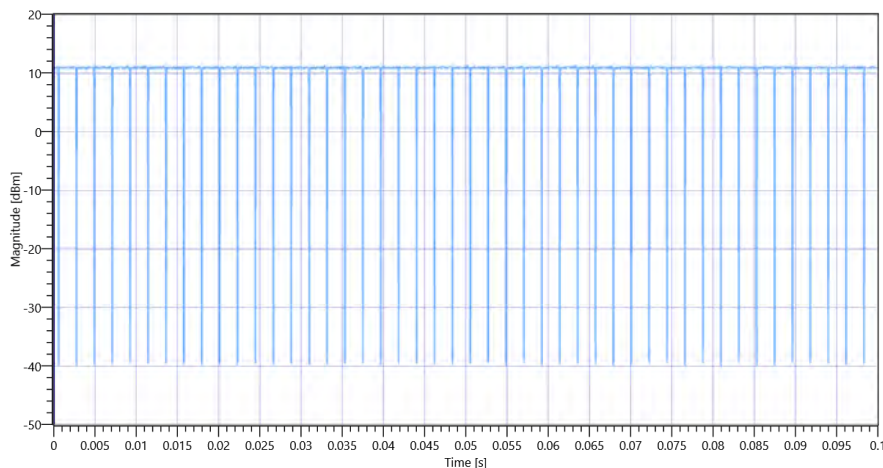
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.19	dBm	INFO
Ref. Frequency	---	---	2460.600	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
<b>Result Summary</b>					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode 2462 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

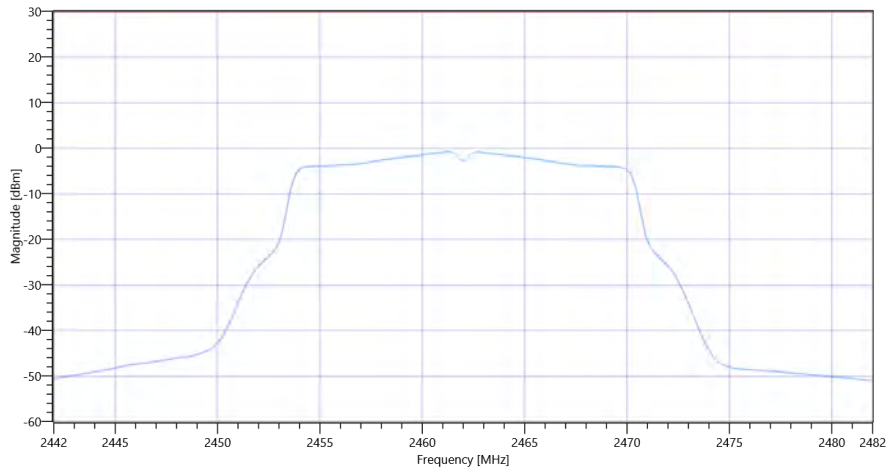
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.19   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### RESULT (Channel Power method)

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
------------------	-------------	-------------	----------	------	---------

**RESULT (Channel Power method)**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.38	dBm	INFO
Duty Cycle Correction	---	---	0.31	dB	INFO
Avg Output Power DC corrected	---	30	12.69	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 g mode

General verdict

**PASS**

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:29:25
Ambit Temp [°C]   Humidity [rel%]	26.0   32
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

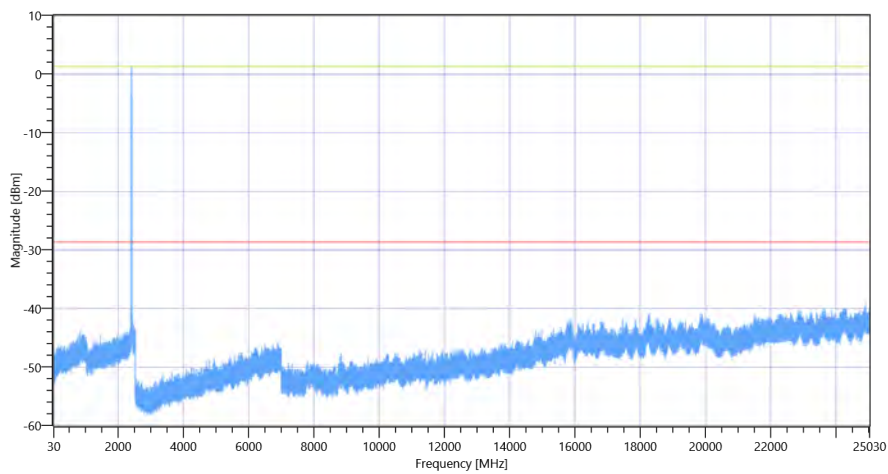
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.22	dBm	INFO
Ref. Frequency	---	---	2410.600	MHz	INFO

### READ SA SETTINGS:

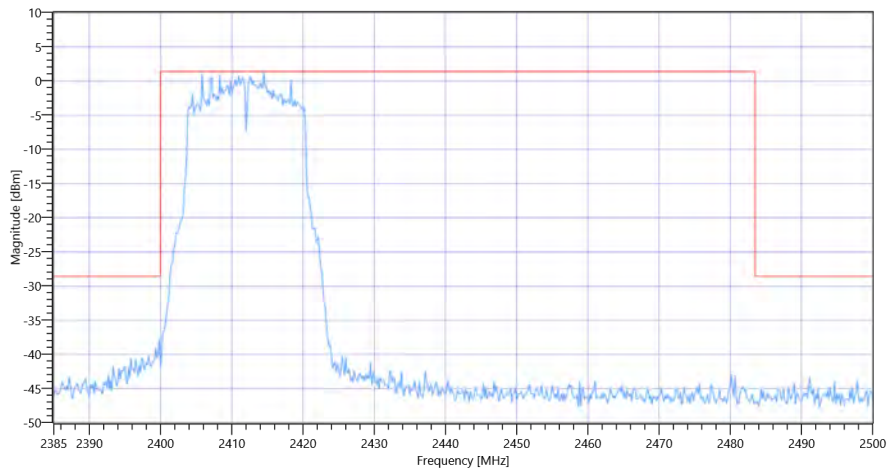
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2414.50 MHz	---	---	1.38	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	9.02	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2412

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:47:25
Ambit Temp [°C]   Humidity [rel%]	26.0   32
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

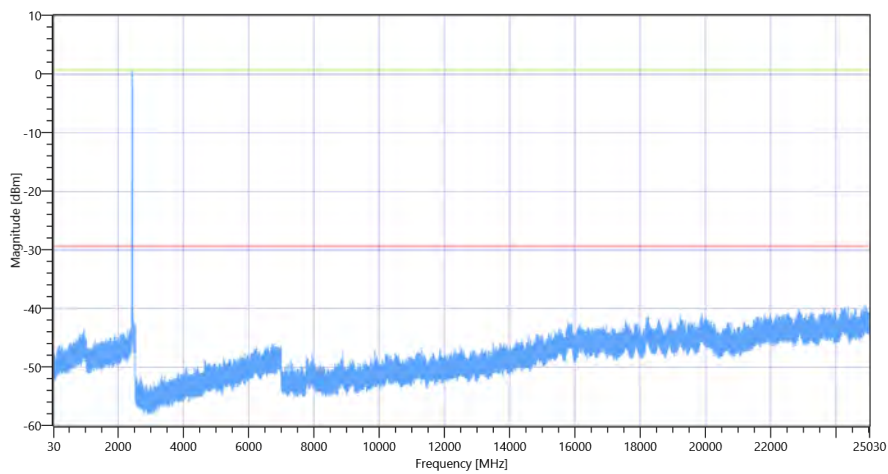
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.42	dBm	INFO
Ref. Frequency	---	---	2434.900	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
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

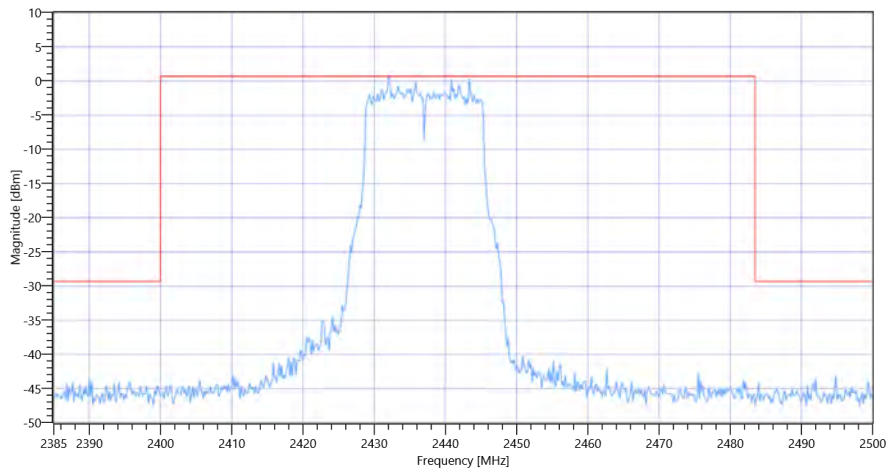
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2432.17 MHz	---	---	0.69	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24921 MHz	0	---	10.12	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2437





FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2437

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:55:31
Ambit Temp [°C]   Humidity [rel%]	26.0   33
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

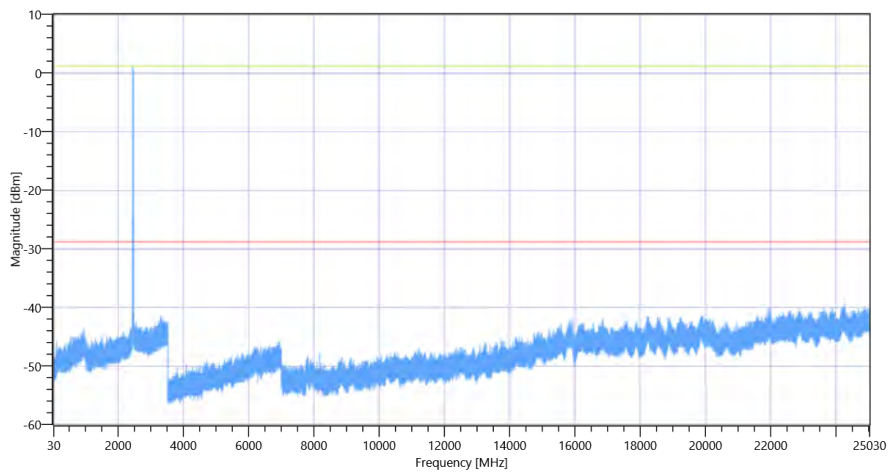
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.09	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

### READ SA SETTINGS:

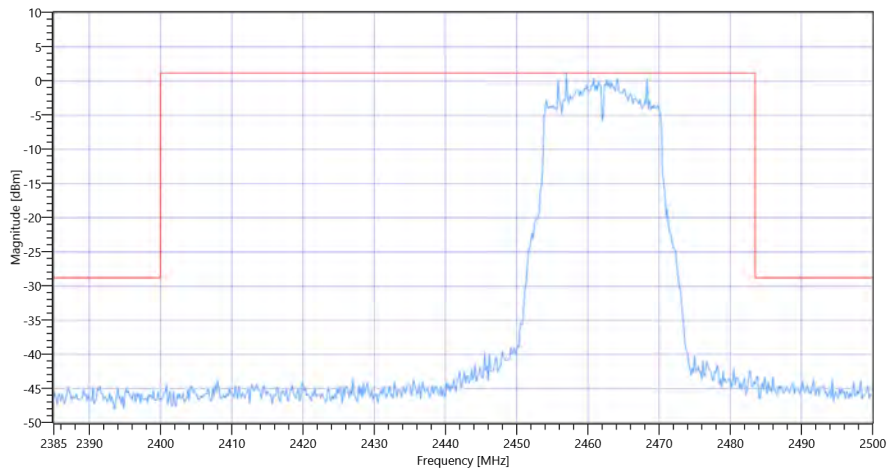
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2457.00 MHz	---	---	1.20	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24275.167 MHz	0	---	10.2	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2462



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2462

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:38:53
Ambit Temp [°C]   Humidity [rel%]	26.0   32
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g 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.

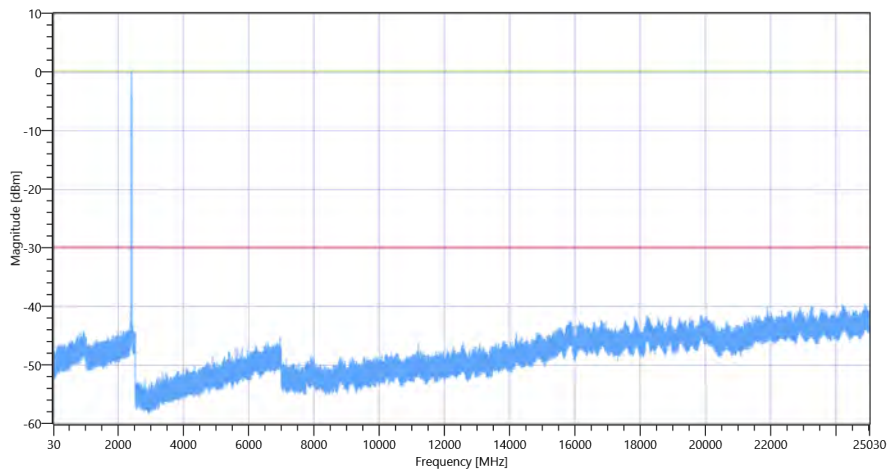
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.50	dBm	INFO
Ref. Frequency	---	---	2413.100	MHz	INFO

### READ SA SETTINGS:

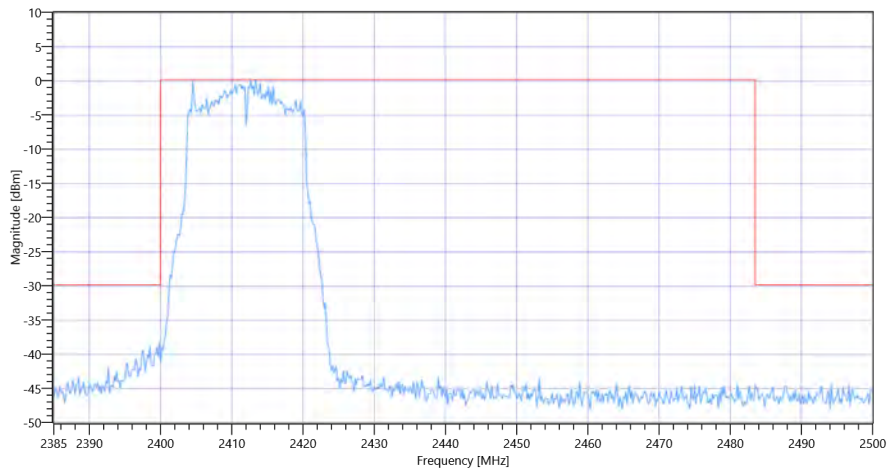
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2412.67 MHz	---	---	0.17	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	8.38	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2412

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 15:57:21
Ambit Temp [°C]   Humidity [rel%]	25.9   33
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
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.

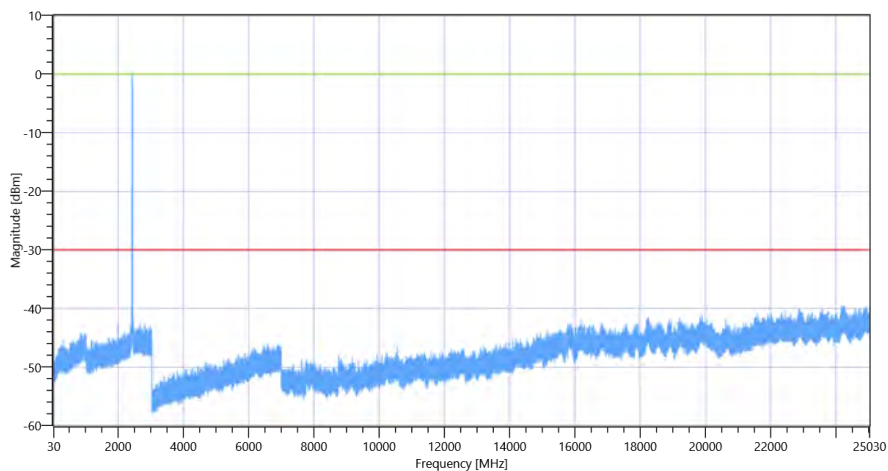
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.85	dBm	INFO
Ref. Frequency	---	---	2435.300	MHz	INFO

### READ SA SETTINGS:

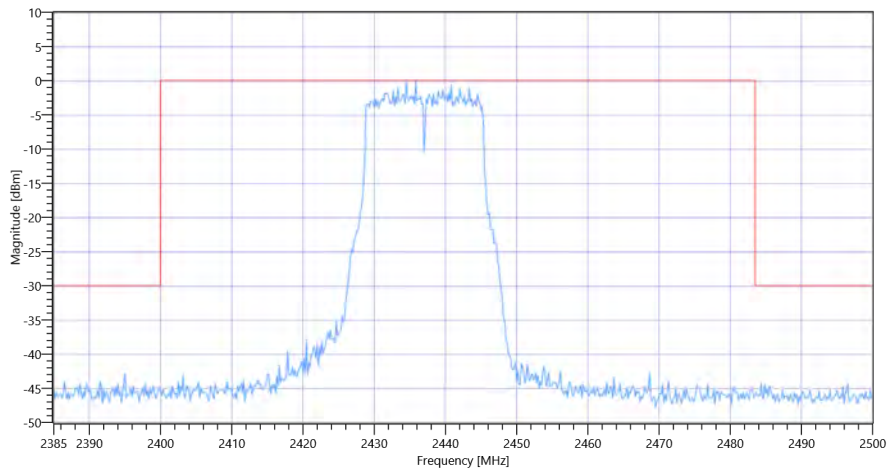
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2435.83 MHz	---	---	0.07	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-150.16	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2437



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2437

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

Test References	
TC Start	05.07.2022 16:14:17
Ambit Temp [°C]   Humidity [rel%]	25.9   32
System Version	3.2.0.2
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 30dBc DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	2
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 g mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 2412
Frequency mid to test	False   Freq [MHz] 2437
Frequency high to test	True   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 2462 MHz

### RESULT: Reference Power cond.

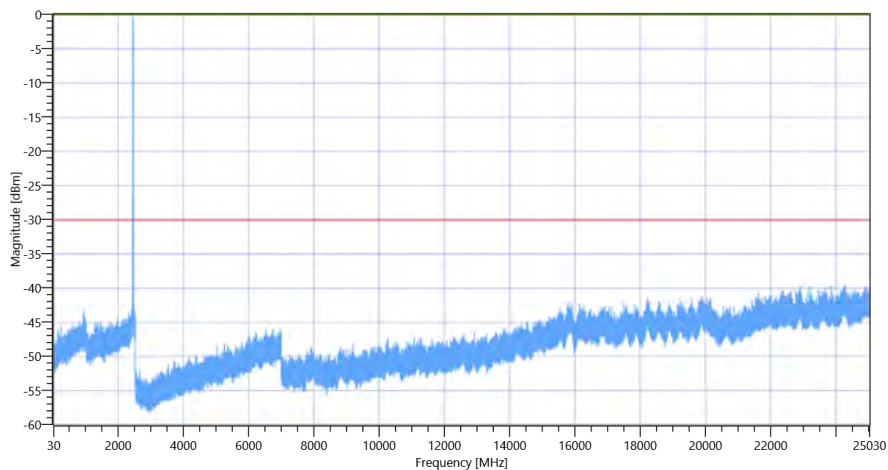
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.30	dBm	INFO
Ref. Frequency	---	---	2459.600	MHz	INFO

### READ SA SETTINGS:

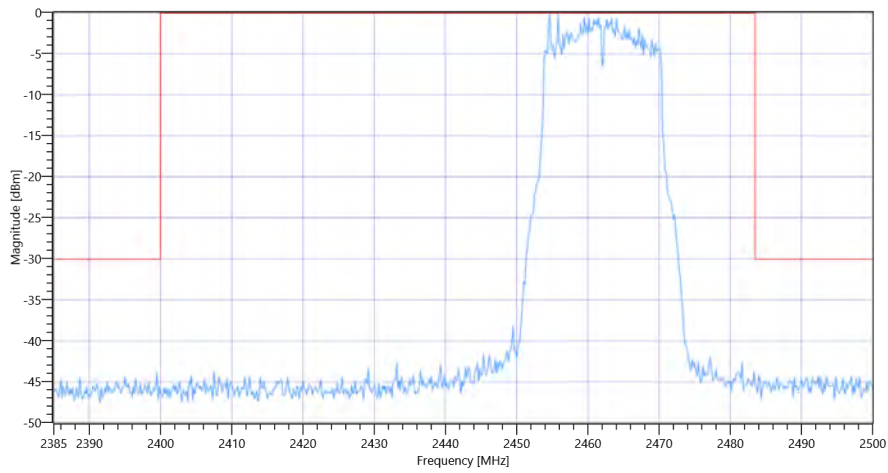
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2455.83 MHz	---	---	-0.06	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24267.833 MHz	0	---	9.38	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode 2462



General verdict

PASS

- END OF DOCUMENT -