

# Measurement Results

No.1-4095/22-01-04\_Annex\_MR\_A3

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## Test logging

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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 n-HT20 mode

Test References	
TC Start	06.07.2022 10:17:58
Ambit Temp [°C]   Humidity [rel%]	23.4   38
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 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

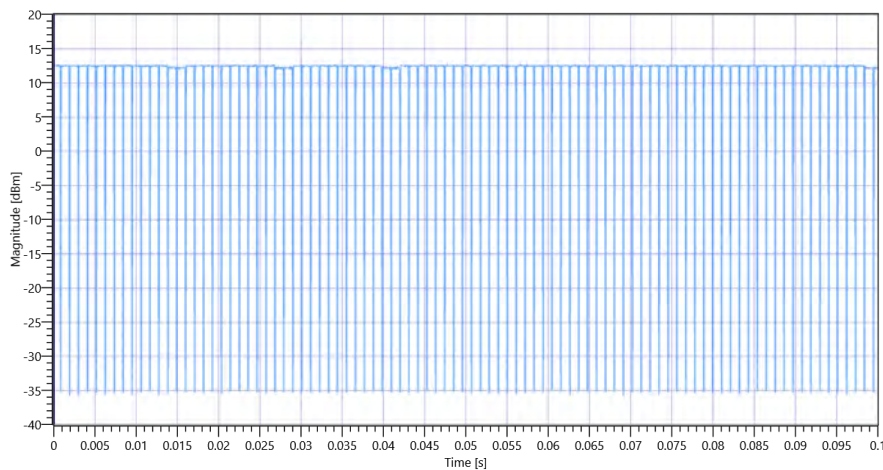
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.69	dBm	INFO
Ref. Frequency	---	---	2410.600	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2412 MHz - DutyCycle

## Avg. PSD

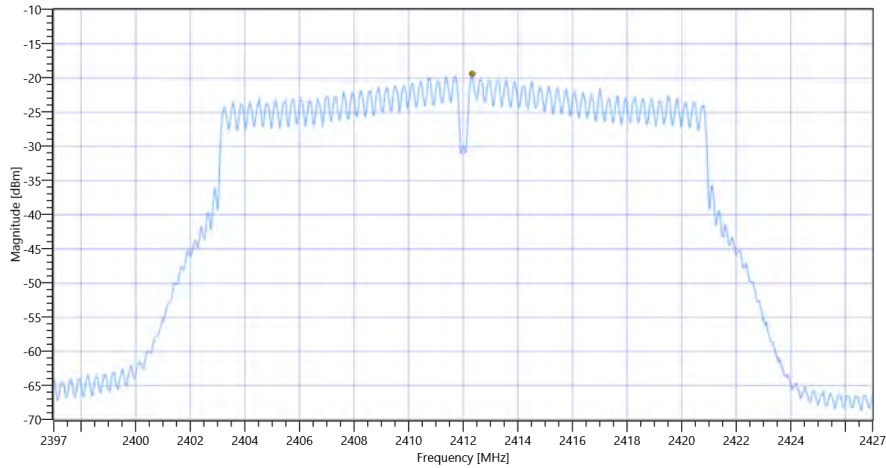
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.69   15.93   20
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	---	---	-19.37	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-18.73	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:31:50
Ambit Temp [°C]   Humidity [rel%]	23.6   37
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 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

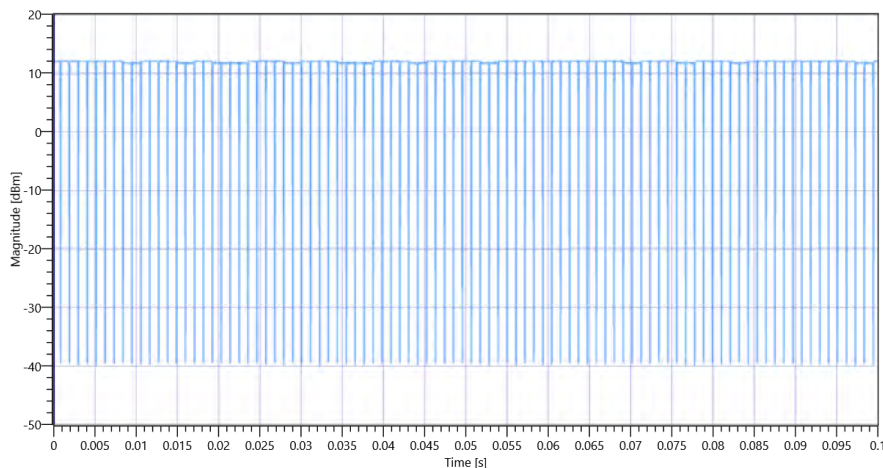
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.45	dBm	INFO
Ref. Frequency	---	---	2439.500	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:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2437 MHz - DutyCycle

## Avg. PSD

### READ SA SETTINGS:

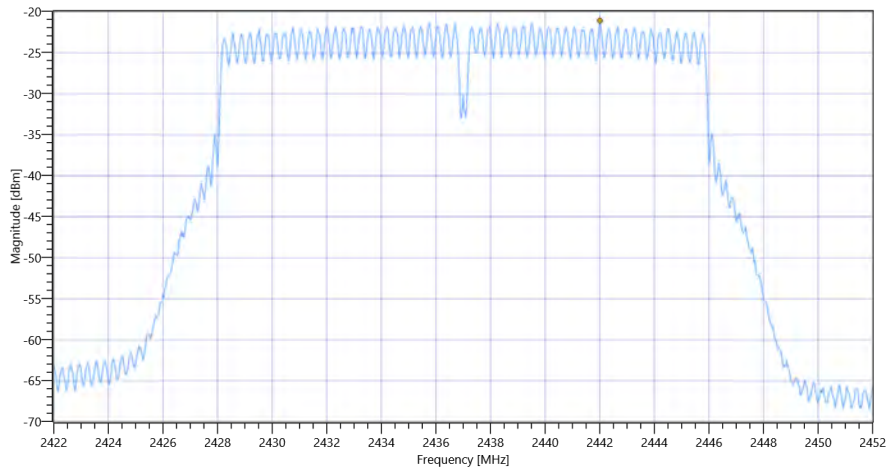
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.45   15.7   15
Start [MHz]   Stop [MHz]	2422.000   2452.000
RBW [MHz]   VBW [MHz]	0.003000   0.010000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	334   100   1001   SWE

### 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	---	---	-21.09	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-20.45	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:46:52
Ambit Temp [°C]   Humidity [rel%]	23.8   36
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 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	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

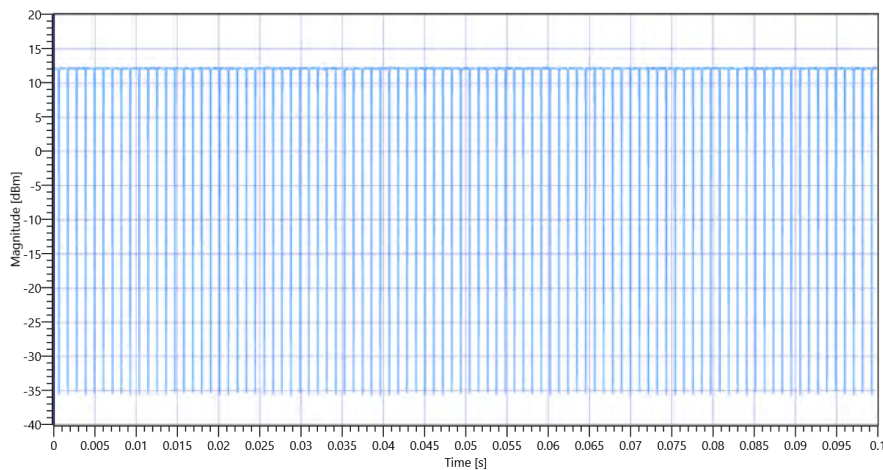
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.74	dBm	INFO
Ref. Frequency	---	---	2462.900	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2462 MHz - DutyCycle

## Avg. PSD

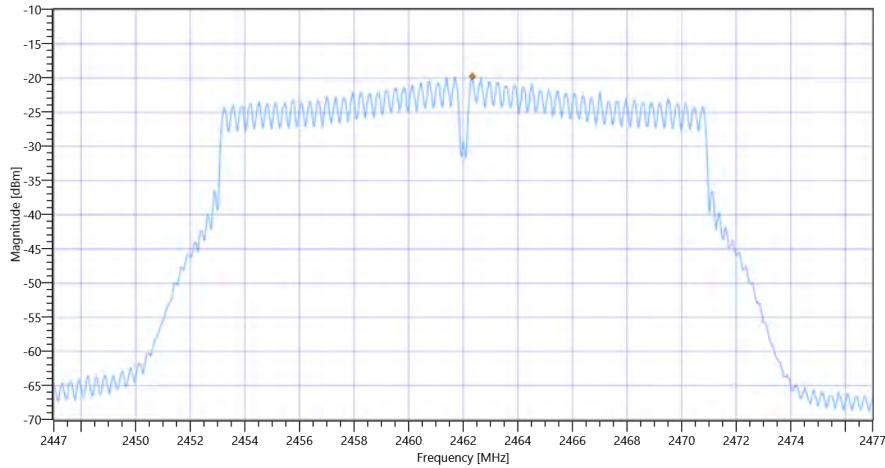
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.74   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	---	---	-19.75	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-19.11	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:01:16
Ambit Temp [°C]   Humidity [rel%]	24.2   36
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 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

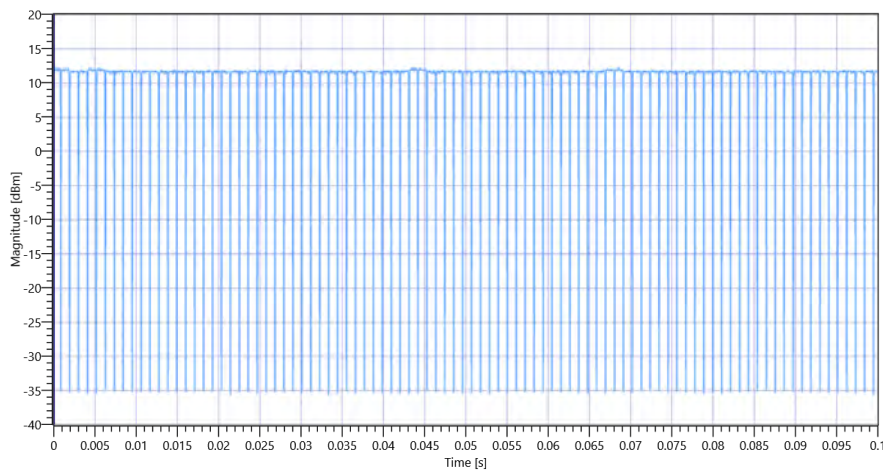
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.35	dBm	INFO
Ref. Frequency	---	---	2413.900	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2412 MHz - DutyCycle

## Avg. PSD

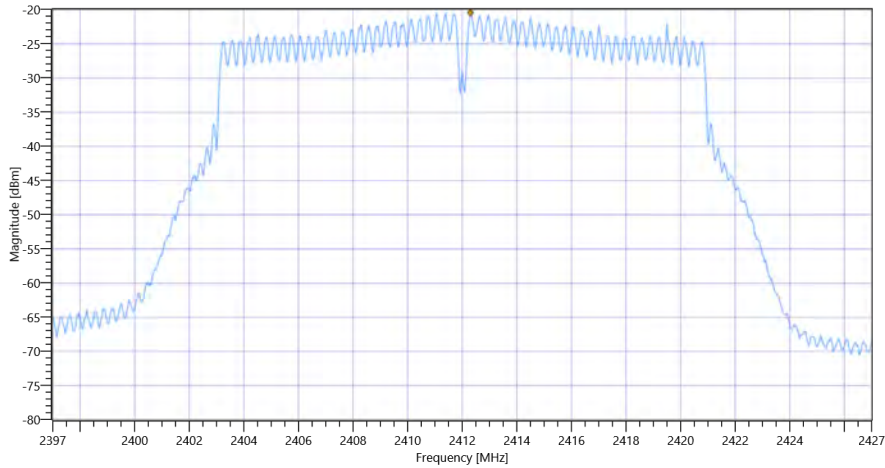
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.35   15.93   20
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	---	---	-20.43	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-19.79	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:16:31
Ambit Temp [°C]   Humidity [rel%]	24.5   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 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	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

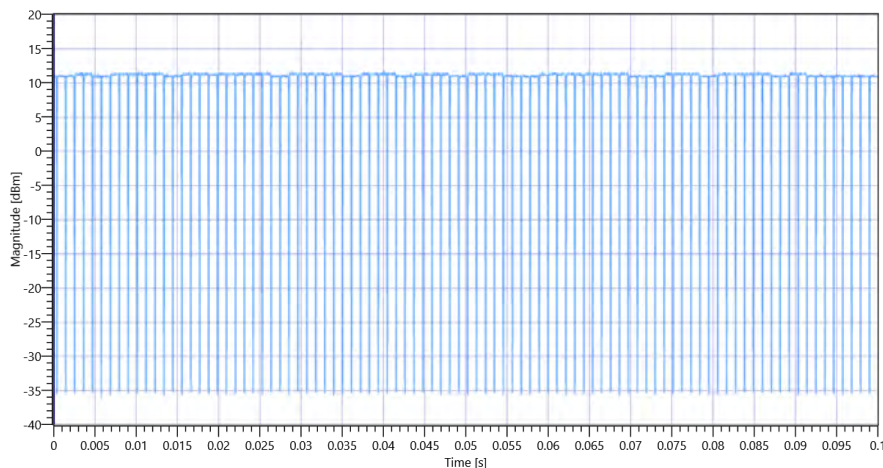
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.22	dBm	INFO
Ref. Frequency	---	---	2435.100	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2437 MHz - DutyCycle

## Avg. PSD

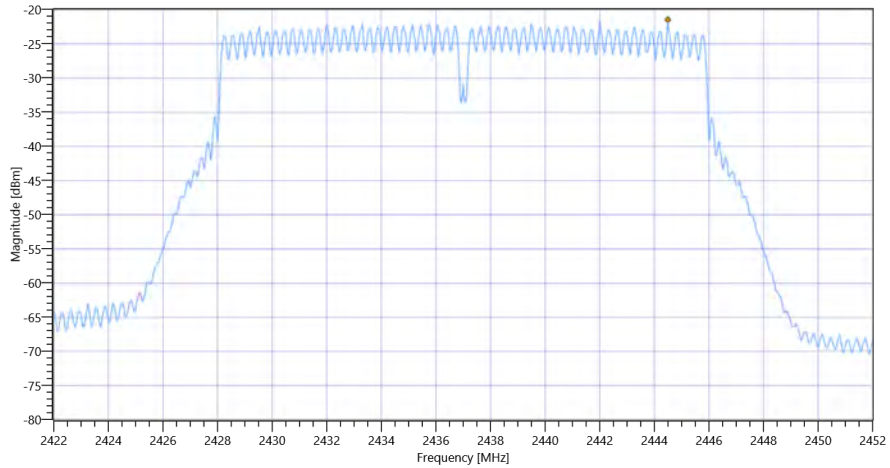
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.22   15.7   20
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	---	---	-21.47	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-20.83	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:33:04
Ambit Temp [°C]   Humidity [rel%]	24.9   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 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	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

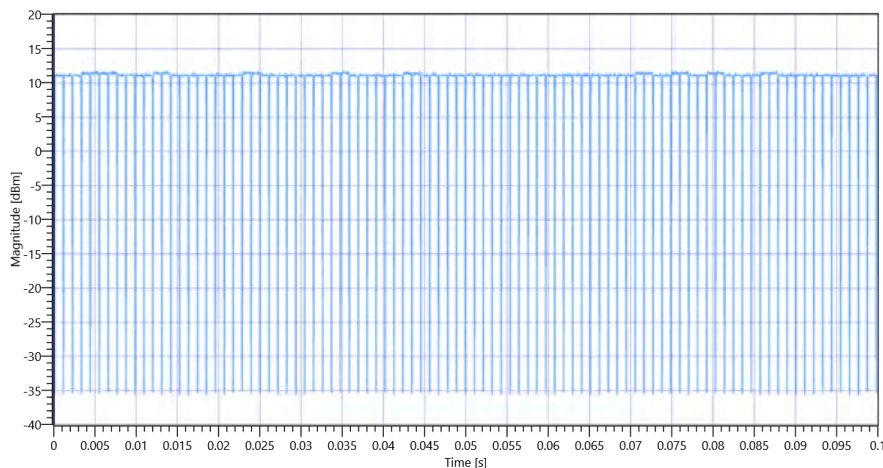
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.78	dBm	INFO
Ref. Frequency	---	---	2462.900	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:92					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2462 MHz - DutyCycle

## Avg. PSD

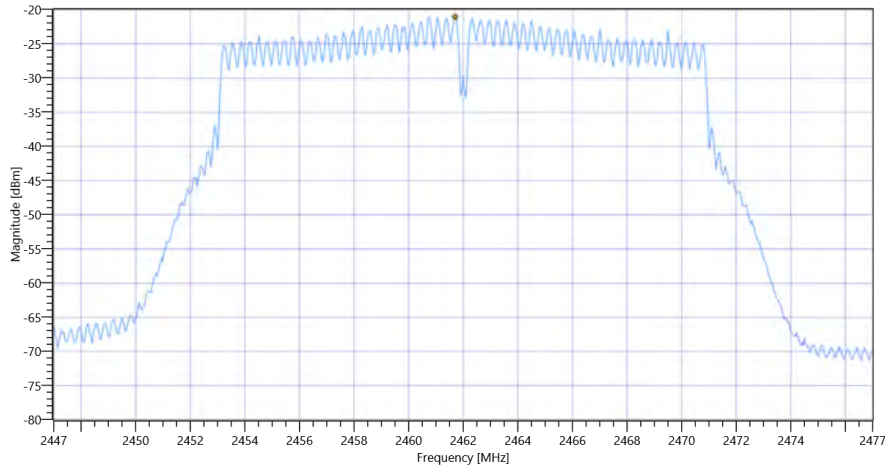
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.78   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
------------------	-------------	-------------	----------	------	---------

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-21.03	dBm	INFO
Duty cycle correction	---	---	0.64	dB	INFO
Avg PSD DC corrected	---	8	-20.39	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 n-HT20 mode

General verdict	PASS
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## FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:17:19
Ambit Temp [°C]   Humidity [rel%]	23.4   38
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 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.

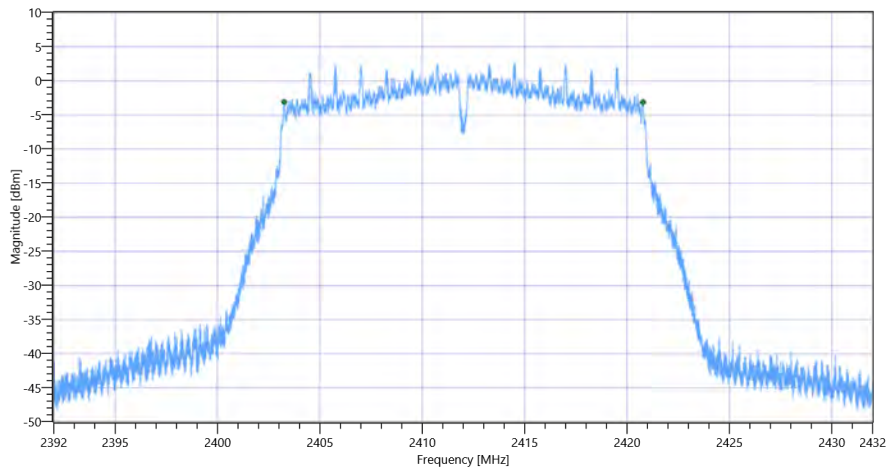
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.20	dBm	INFO
Ref. Frequency	---	---	2413.100	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.20   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	---	17520	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 10:31:13
Ambit Temp [°C]   Humidity [rel%]	23.6   37
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 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.

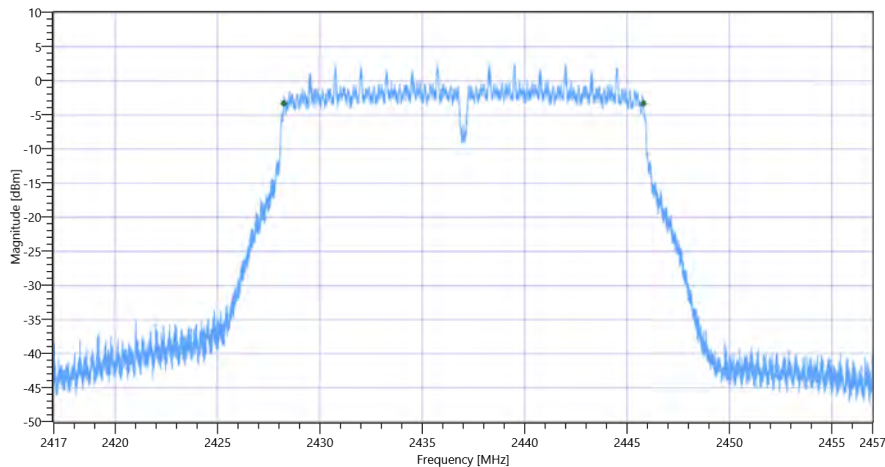
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.29	dBm	INFO
Ref. Frequency	---	---	2438.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.29   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	---	17572	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 10:46:14
Ambit Temp [°C]   Humidity [rel%]	23.8   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 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	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.

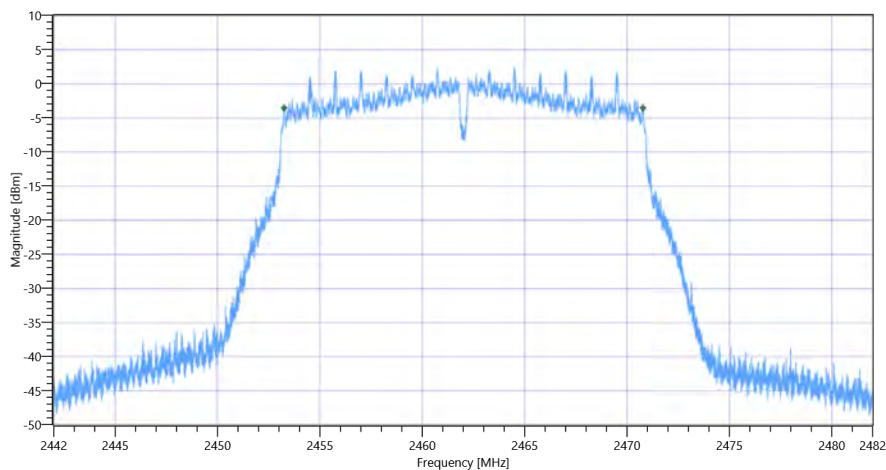
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.93	dBm	INFO
Ref. Frequency	---	---	2460.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.93   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	---	17528	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:00:37
Ambit Temp [°C]   Humidity [rel%]	24.2   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 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.

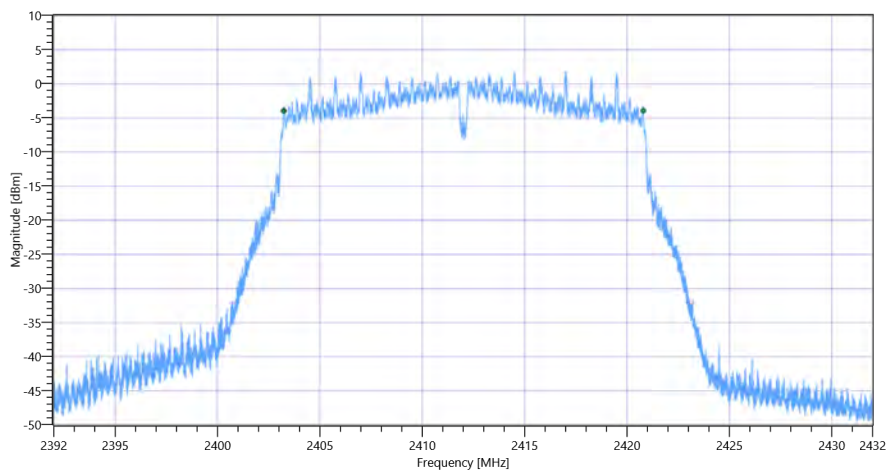
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.46	dBm	INFO
Ref. Frequency	---	---	2415.200	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.46   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	---	17560	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:15:53
Ambit Temp [°C]   Humidity [rel%]	24.5   35
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 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	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.

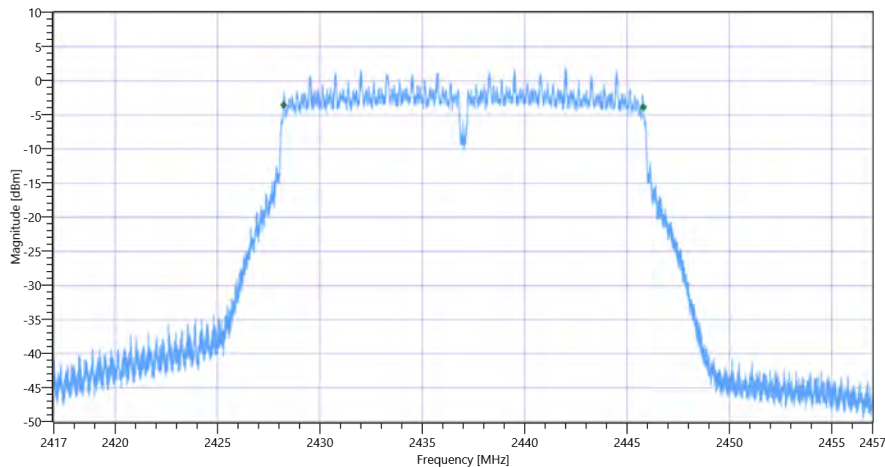
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.76	dBm	INFO
Ref. Frequency	---	---	2440.100	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.76   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	---	17580	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:32:26
Ambit Temp [°C]   Humidity [rel%]	24.8   35
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 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	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.

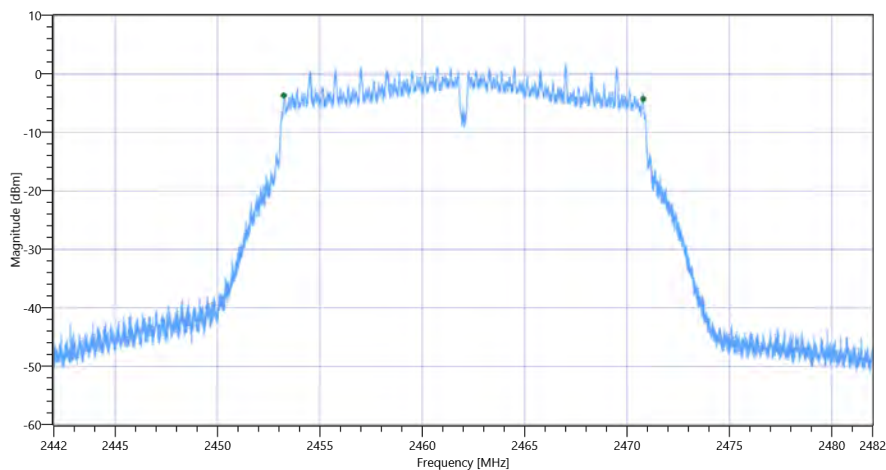
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.48	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.48   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	---	17560	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 10:19:11
Ambit Temp [°C]   Humidity [rel%]	23.5   37
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 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.	---	---	11.44	dBm	INFO
Ref. Frequency	---	---	2413.100	MHz	INFO

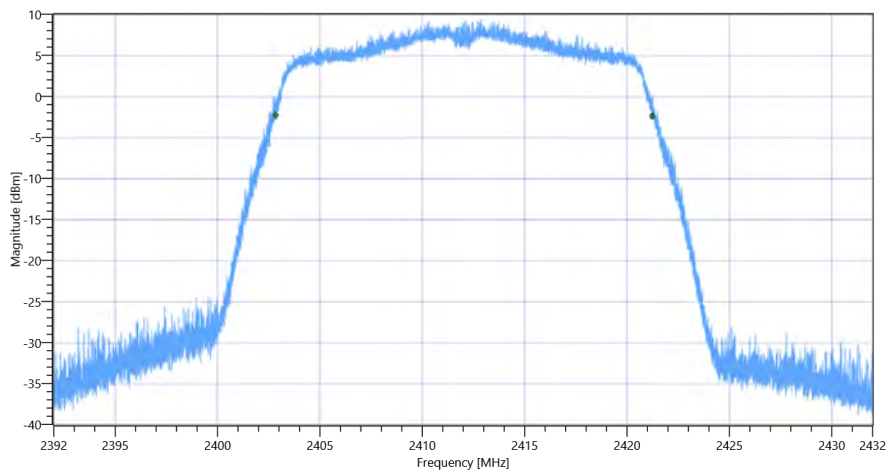
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.44   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

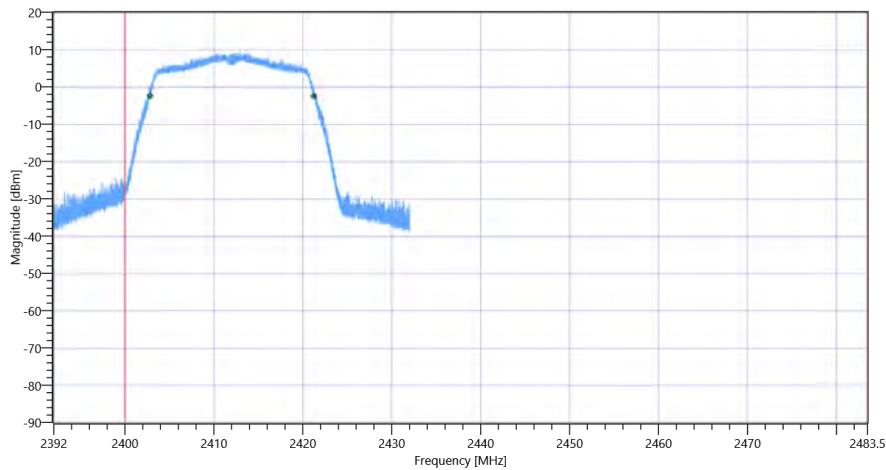
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18402.160	kHz	INFO
T1 99%	2400.000000	---	2402.8289	MHz	PASS
T2 99%	---	2483.500000	2421.2311	MHz	PASS

### Plot: Bandwidth only



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

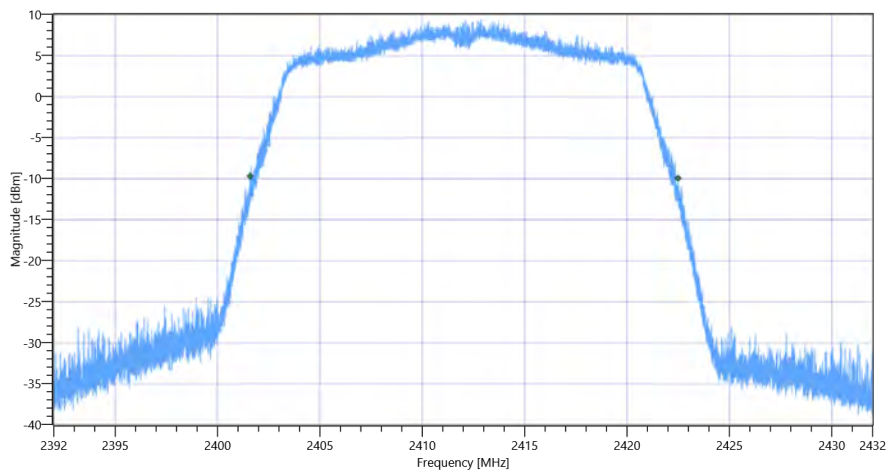
### Plot: Bandwidth within Band



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

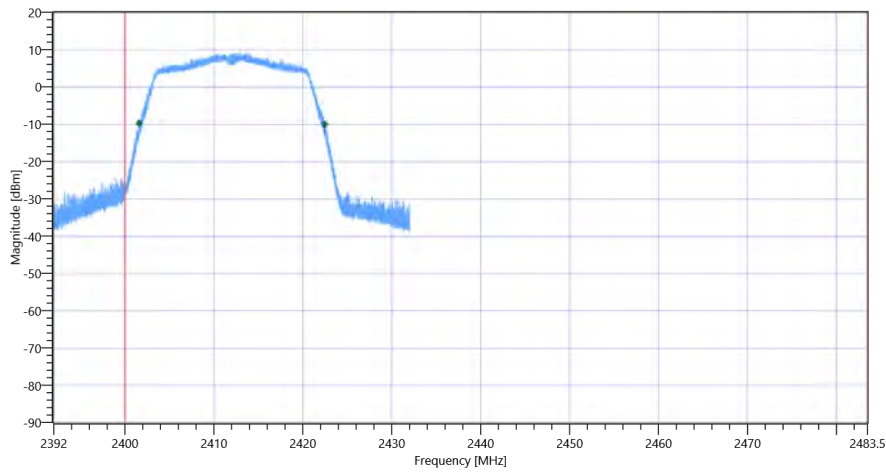
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20900	kHz	INFO
T1 20dB	2400.000000	---	2401.5880	MHz	PASS
T2 20dB	---	2483.500000	2422.4880	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 10:33:04
Ambit Temp [°C]   Humidity [rel%]	23.6   37
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 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.	---	---	10.18	dBm	INFO
Ref. Frequency	---	---	2438.300	MHz	INFO

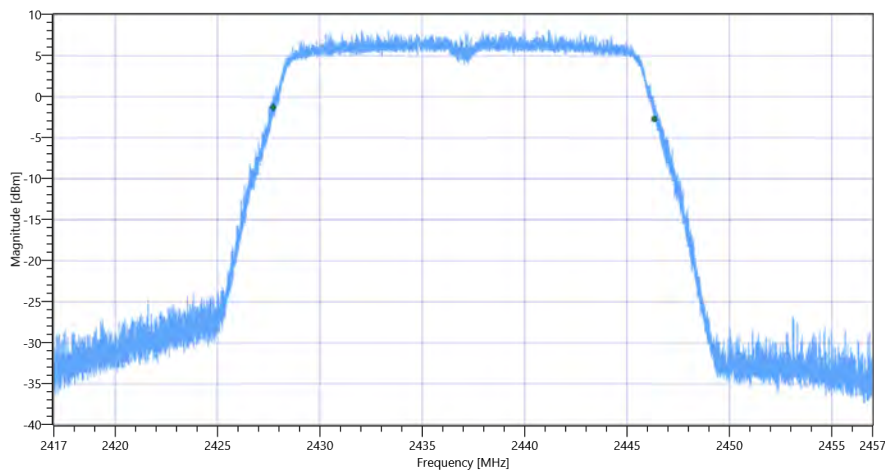
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.18   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

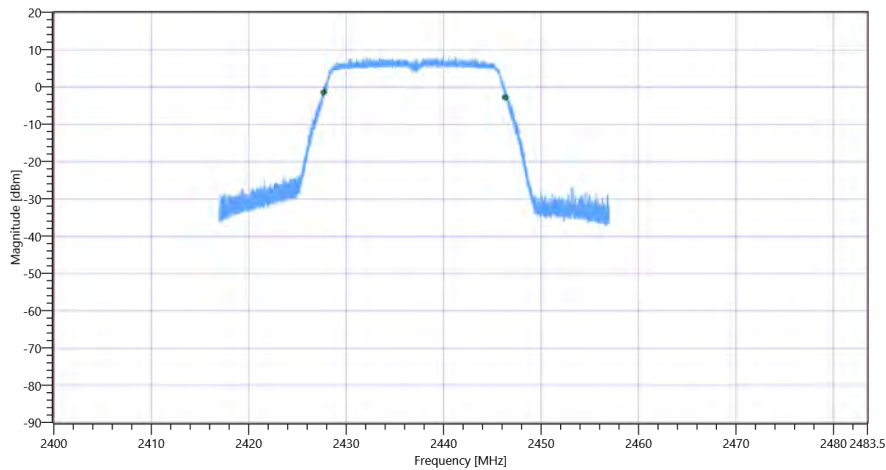
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18610.139	kHz	INFO
T1 99%	2400.000000	---	2427.7129	MHz	PASS
T2 99%	---	2483.500000	2446.3231	MHz	PASS

### Plot: Bandwidth only



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

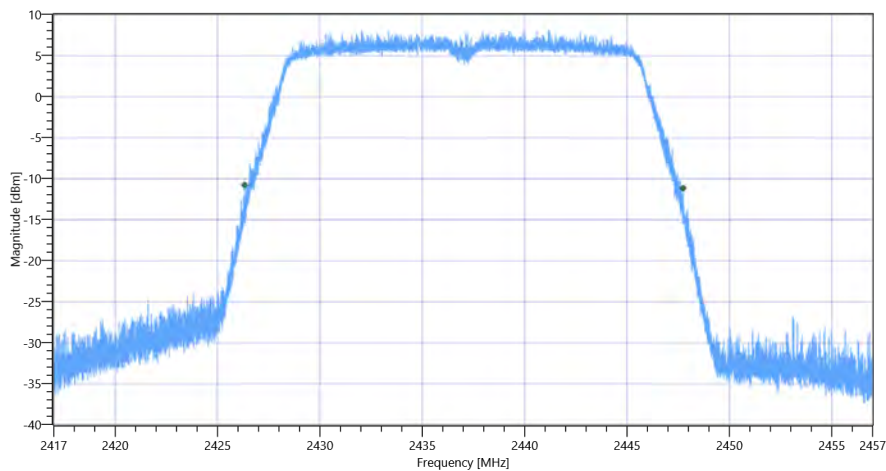
### Plot: Bandwidth within Band



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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	21420	kHz	INFO
T1 20dB	2400.000000	---	2426.3200	MHz	PASS
T2 20dB	---	2483.500000	2447.7400	MHz	PASS

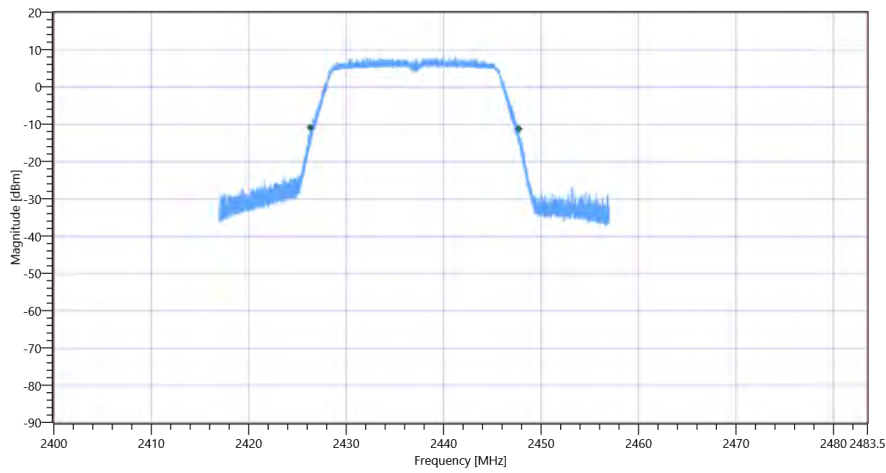
Plot: Bandwidth only



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

Plot: Bandwidth within Band





General verdict

PASS

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

Test References	
TC Start	06.07.2022 10:48:06
Ambit Temp [°C]   Humidity [rel%]	23.9   36
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 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	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.	---	---	11.19	dBm	INFO
Ref. Frequency	---	---	2463.100	MHz	INFO

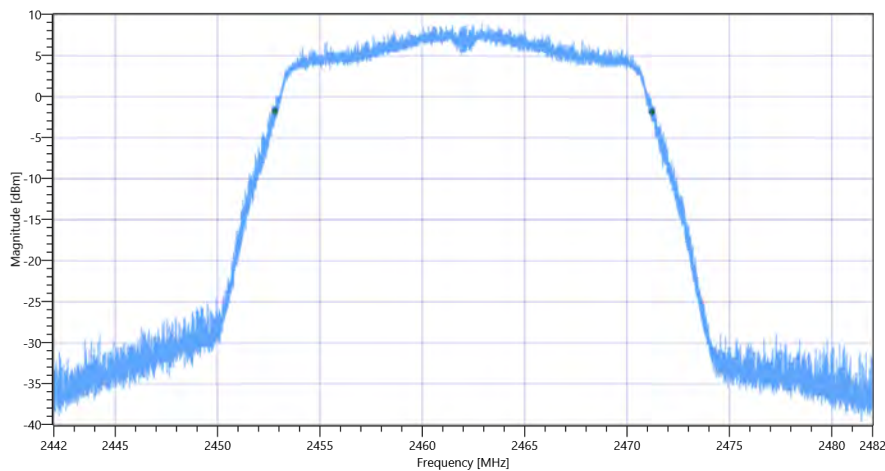
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.19   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

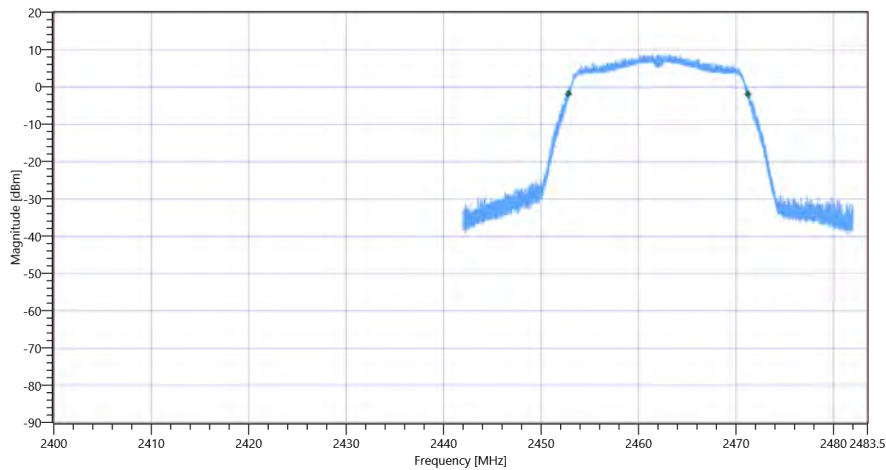
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18410.159	kHz	INFO
T1 99%	2400.000000	---	2452.8089	MHz	PASS
T2 99%	---	2483.500000	2471.2191	MHz	PASS

### Plot: Bandwidth only



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

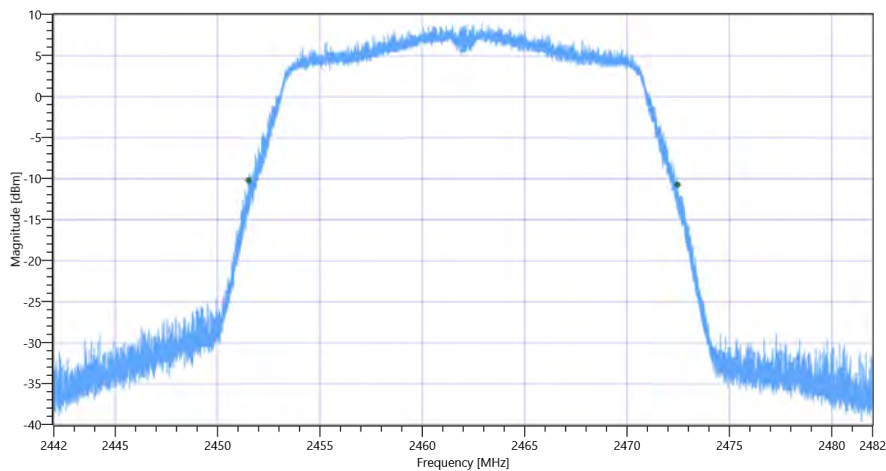
### Plot: Bandwidth within Band



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

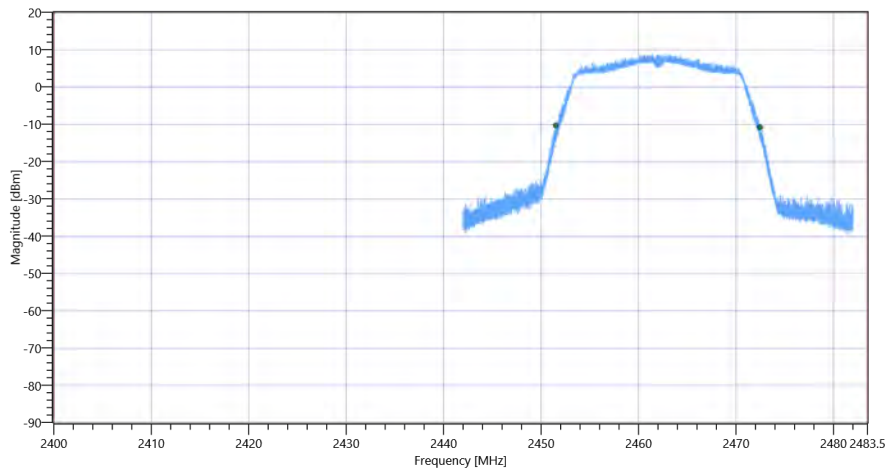
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20956	kHz	INFO	
T1 20DB	2400.000000	---	2451.5120	MHz	PASS	
T2 20dB	---	2483.500000	2472.4680	MHz	PASS	

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:02:29
Ambit Temp [°C]   Humidity [rel%]	24.2   36
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 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.	---	---	10.96	dBm	INFO
Ref. Frequency	---	---	2413.500	MHz	INFO

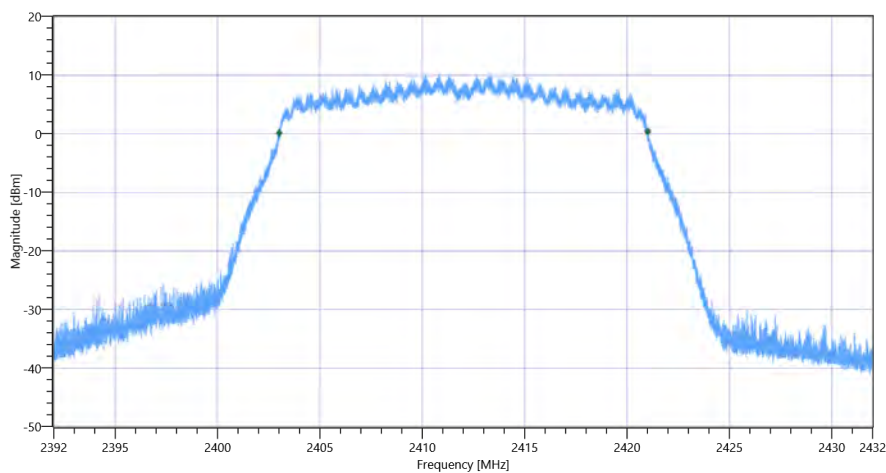
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.96   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

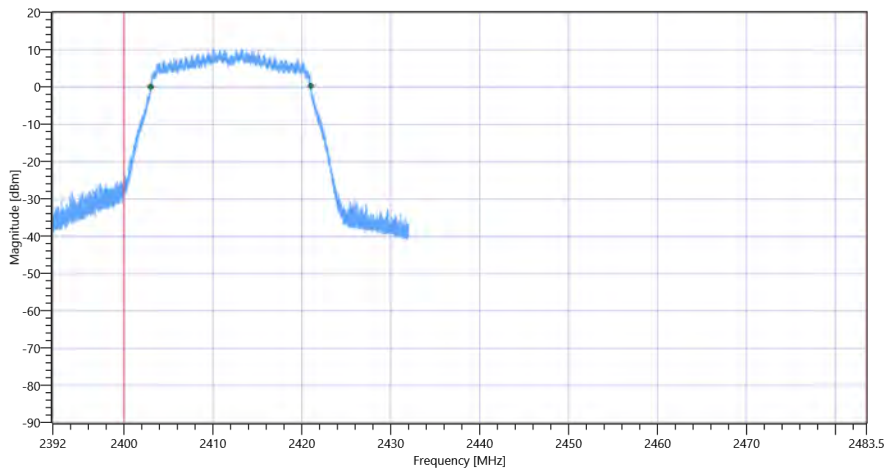
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17998.200	kHz	INFO
T1 99%	2400.000000	---	2403.0129	MHz	PASS
T2 99%	---	2483.500000	2421.0111	MHz	PASS

### Plot: Bandwidth only



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

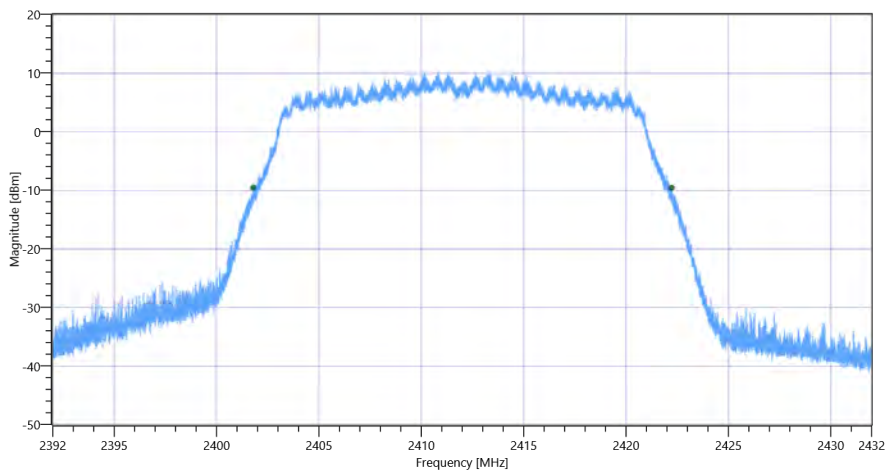
### Plot: Bandwidth within Band



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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20448	kHz	INFO
T1 20dB	2400.000000	---	2401.7840	MHz	PASS
T2 20dB	---	2483.500000	2422.2320	MHz	PASS

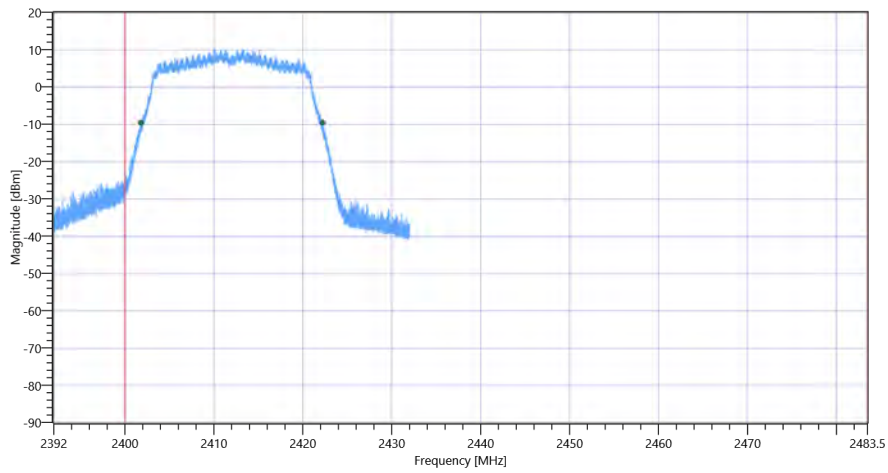
Plot: Bandwidth only



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

Plot: Bandwidth within Band





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

General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:17:44
Ambit Temp [°C]   Humidity [rel%]	24.5   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 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	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.	---	---	10.65	dBm	INFO
Ref. Frequency	---	---	2432.500	MHz	INFO

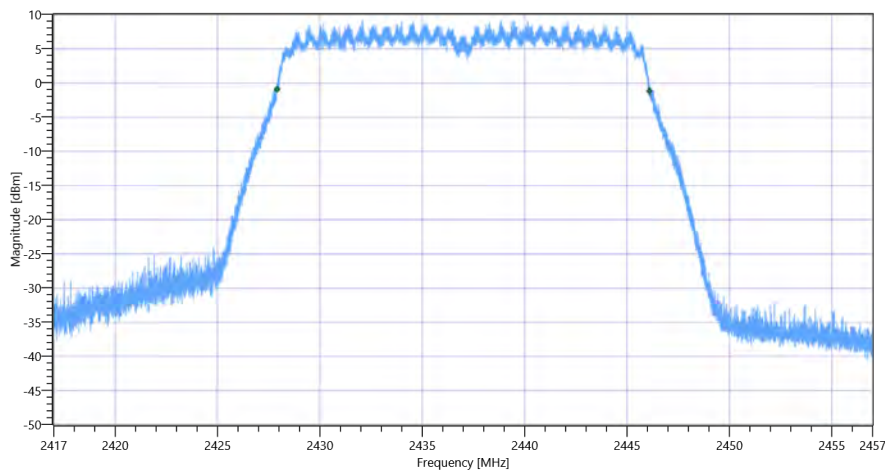
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.65   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

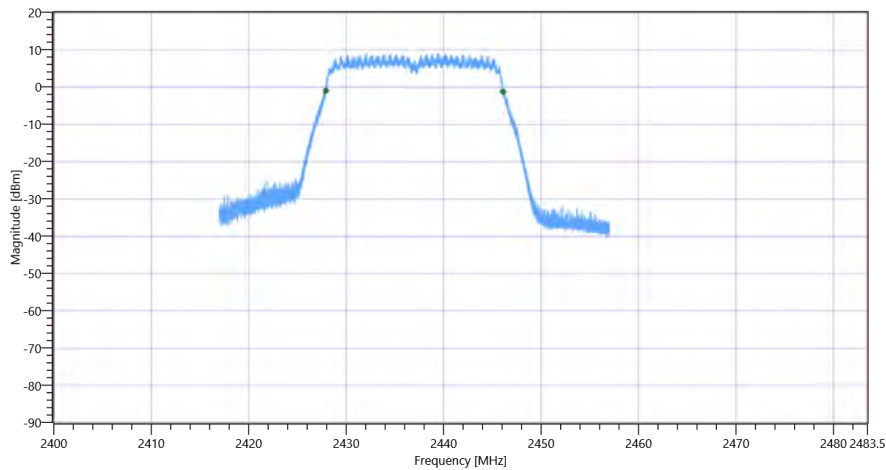
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18178.182	kHz	INFO
T1 99%	2400.000000	---	2427.9129	MHz	PASS
T2 99%	---	2483.500000	2446.0911	MHz	PASS

### Plot: Bandwidth only



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

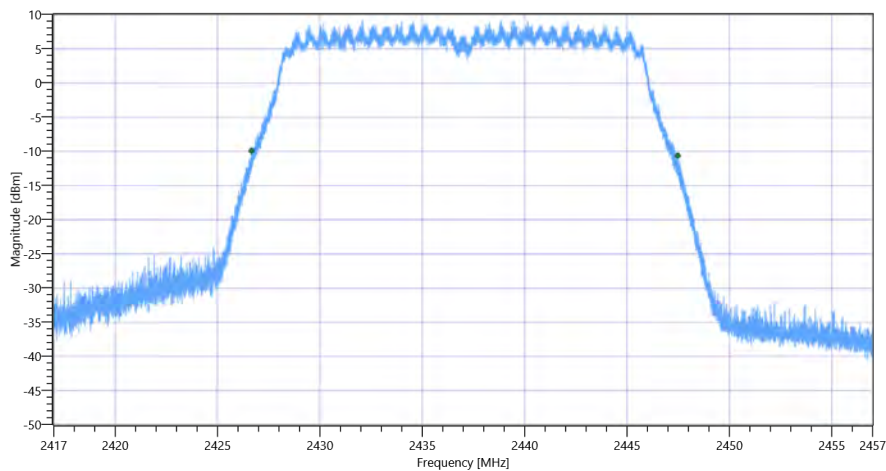
### Plot: Bandwidth within Band



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

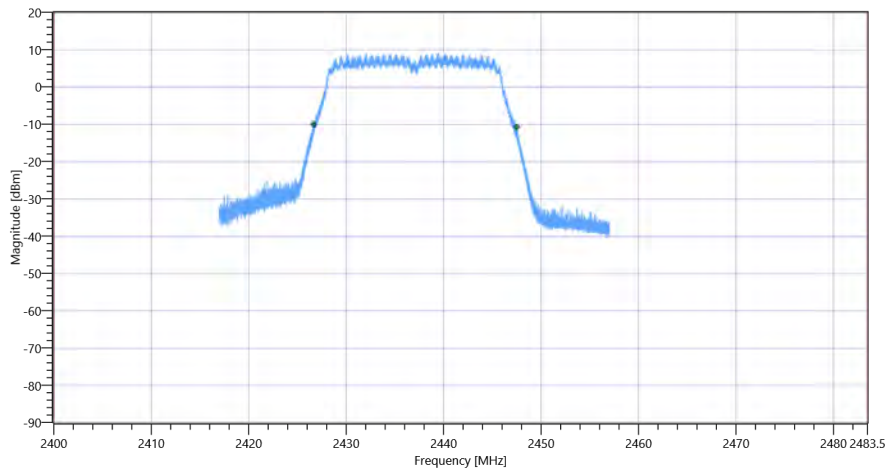
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20828	kHz	INFO
T1 20dB	2400.000000	---	2426.6560	MHz	PASS
T2 20dB	---	2483.500000	2447.4840	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



General verdict

PASS

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

Test References	
TC Start	06.07.2022 11:34:18
Ambit Temp [°C]   Humidity [rel%]	24.8   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 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	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.	---	---	10.46	dBm	INFO
Ref. Frequency	---	---	2460.900	MHz	INFO

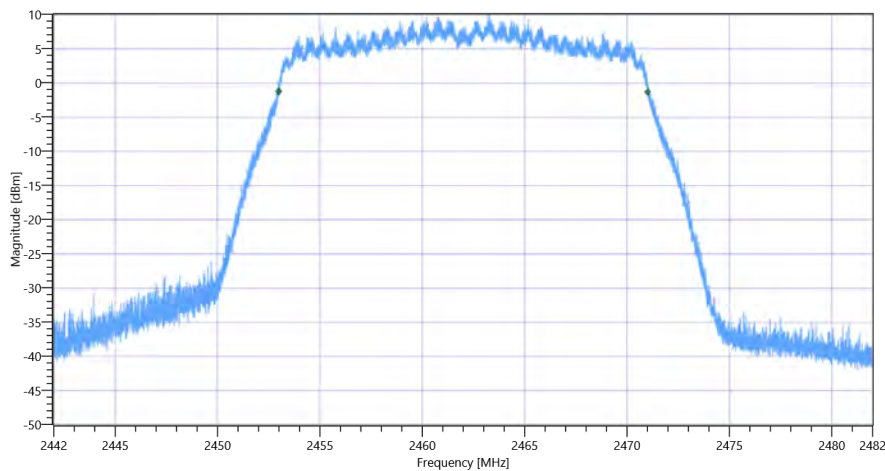
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	15.46   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

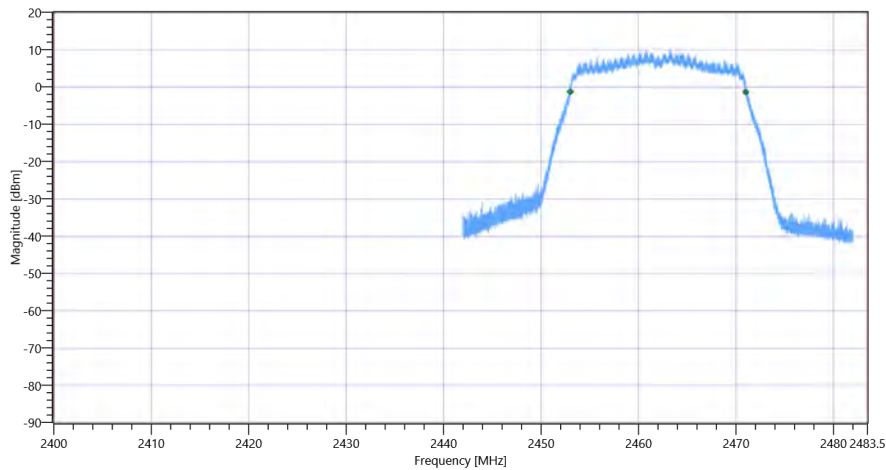
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18014.199	kHz	INFO
T1 99%	2400.000000	---	2452.9929	MHz	PASS
T2 99%	---	2483.500000	2471.0071	MHz	PASS

### Plot: Bandwidth only



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

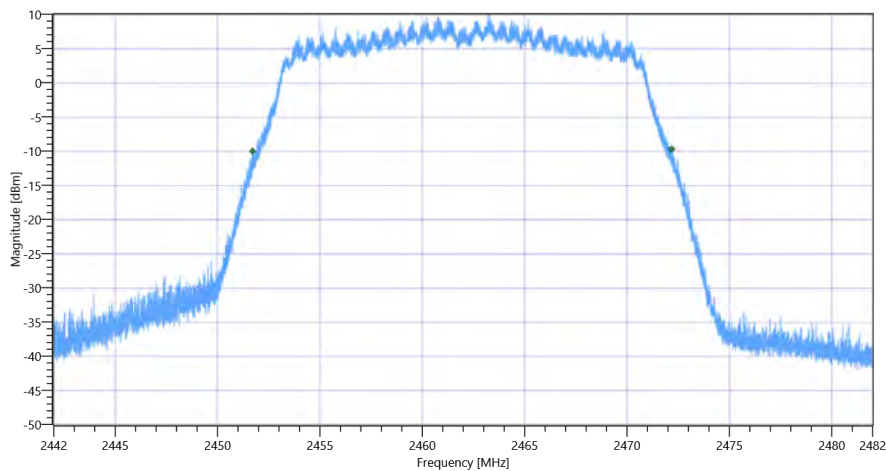
### Plot: Bandwidth within Band



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

RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20464	kHz	INFO	
T1 20dB	2400.000000	---	2451.7080	MHz	PASS	
T2 20dB	---	2483.500000	2472.1720	MHz	PASS	

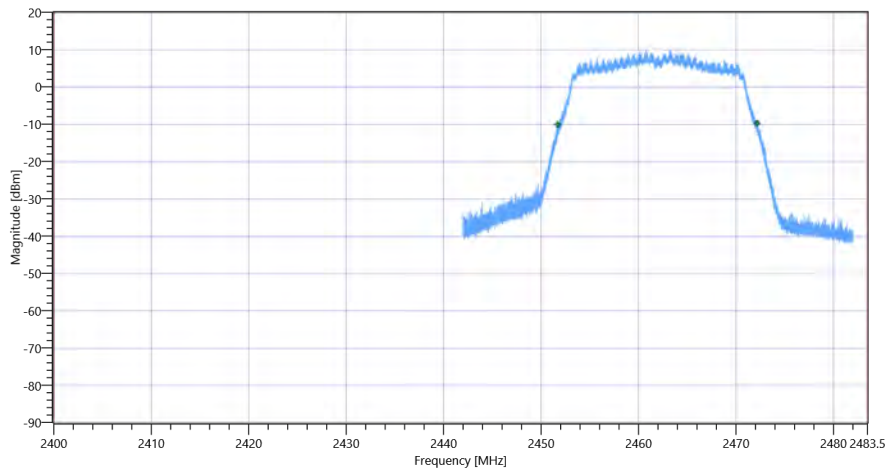
Plot: Bandwidth only



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

Plot: Bandwidth within Band





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

General verdict

PASS

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:28:44
Ambit Temp [°C]   Humidity [rel%]	23.6   37
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 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

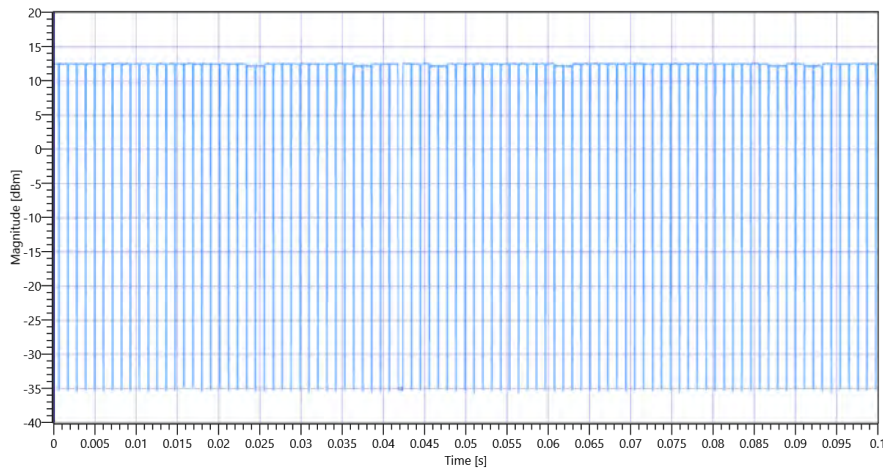
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.43	dBm	INFO
Ref. Frequency	---	---	2413.200	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.603	---	INFO
Duty Cycle min	---	---	2.197	dB	INFO
Max TX Burst Length	---	---	0.975	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.625	ms	INFO



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode 2412 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

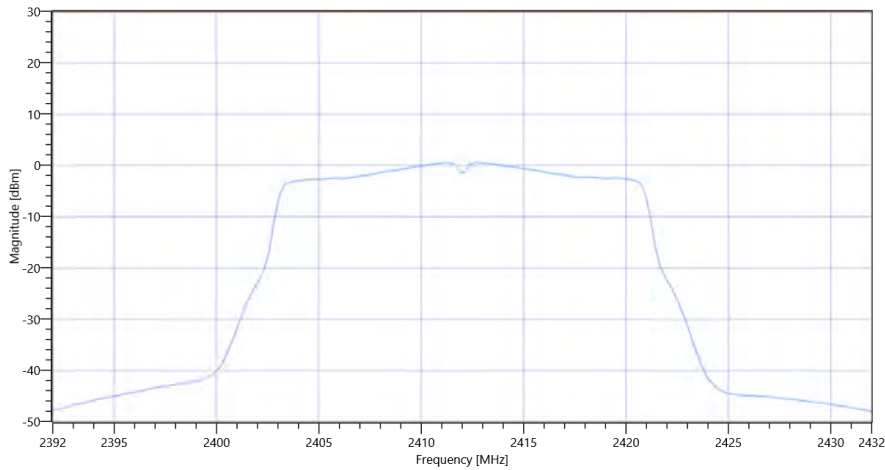
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.43   15.93   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### 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	---	---	13.95	dBm	INFO
Duty Cycle Correction	---	---	2.2	dB	INFO
Avg Output Power DC corrected	---	30	16.15	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

**PASS**

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:42:42
Ambit Temp [°C]   Humidity [rel%]	23.8   36
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 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

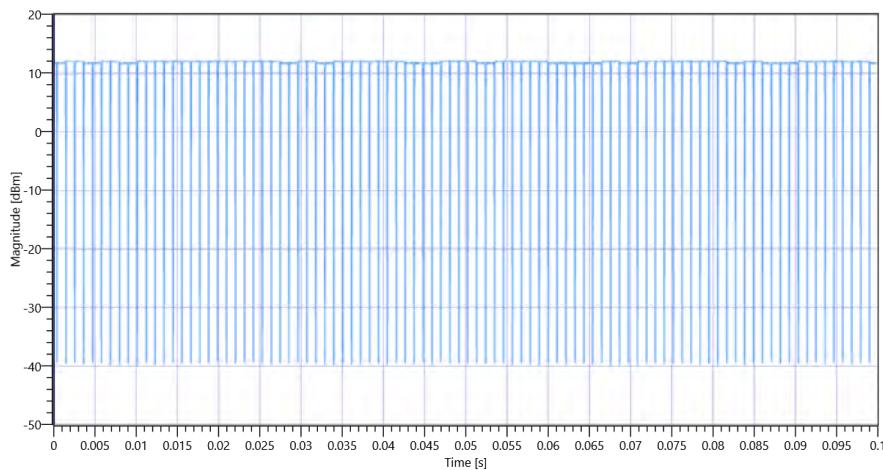
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.24	dBm	INFO
Ref. Frequency	---	---	2434.400	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:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2437 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

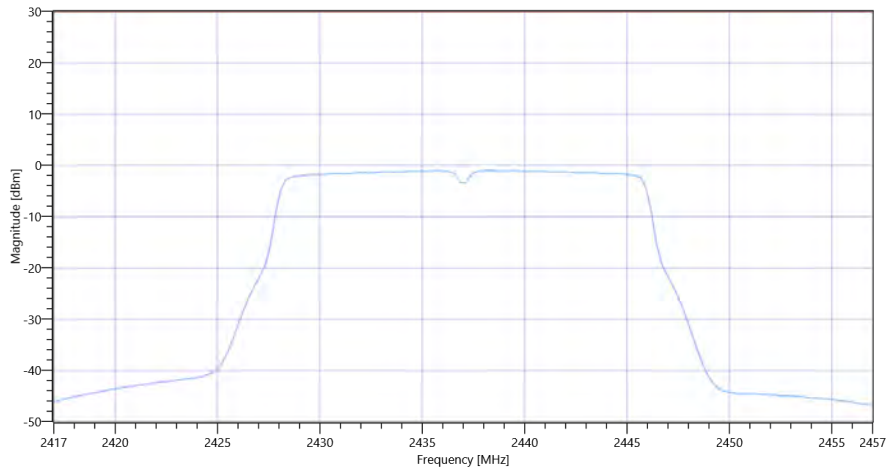
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.24   15.7   20
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### 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	---	---	13.8	dBm	INFO
Duty Cycle Correction	---	---	0.64	dB	INFO
Avg Output Power DC corrected	---	30	14.44	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

PASS

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:57:41
Ambit Temp [°C]   Humidity [rel%]	24.1   36
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 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	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

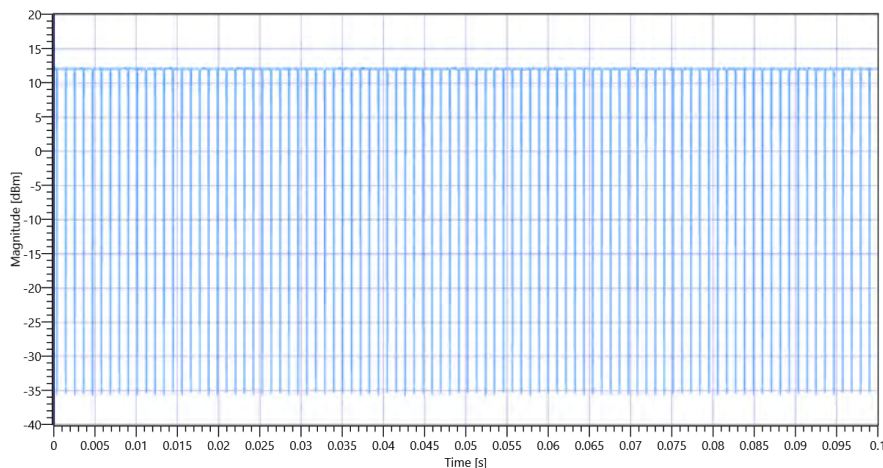
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.28	dBm	INFO
Ref. Frequency	---	---	2460.100	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2462 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

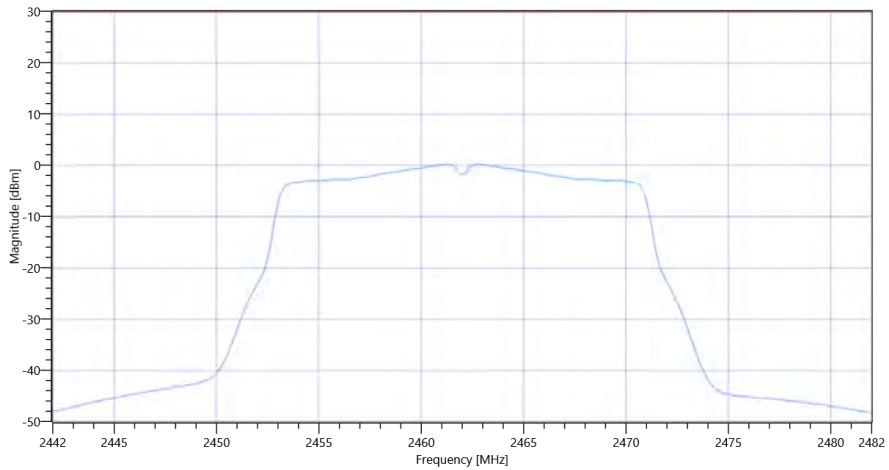
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.28   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### 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	---	---	13.58	dBm	INFO
Duty Cycle Correction	---	---	0.64	dB	INFO
Avg Output Power DC corrected	---	30	14.22	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

**PASS**

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:12:05
Ambit Temp [°C]   Humidity [rel%]	24.4   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 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

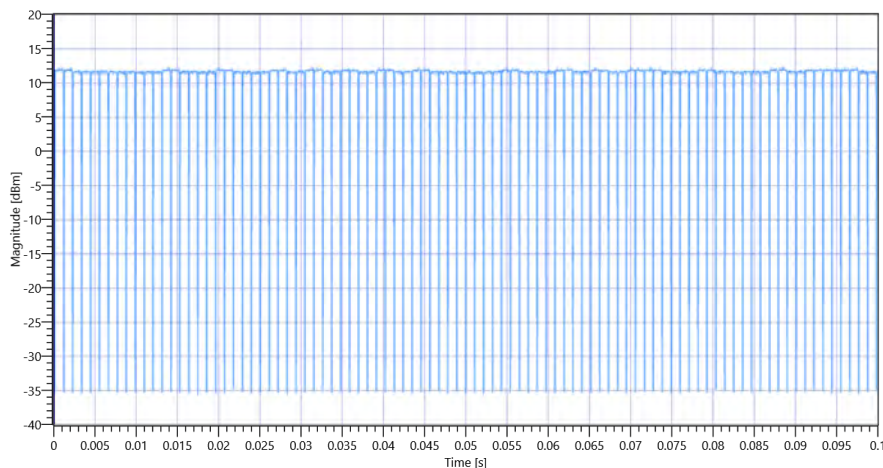
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.32	dBm	INFO
Ref. Frequency	---	---	2411.400	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:92					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2412 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

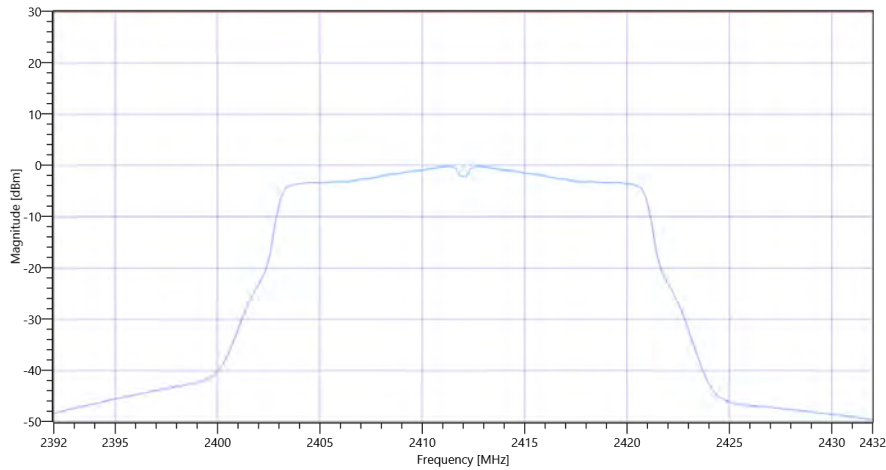
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.32   15.93   20
Start [MHz]   Stop [MHz]	2392.000   2432.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### 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	---	---	13.18	dBm	INFO
Duty Cycle Correction	---	---	0.64	dB	INFO
Avg Output Power DC corrected	---	30	13.82	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

**PASS**

## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:29:45
Ambit Temp [°C]   Humidity [rel%]	24.8   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 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	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

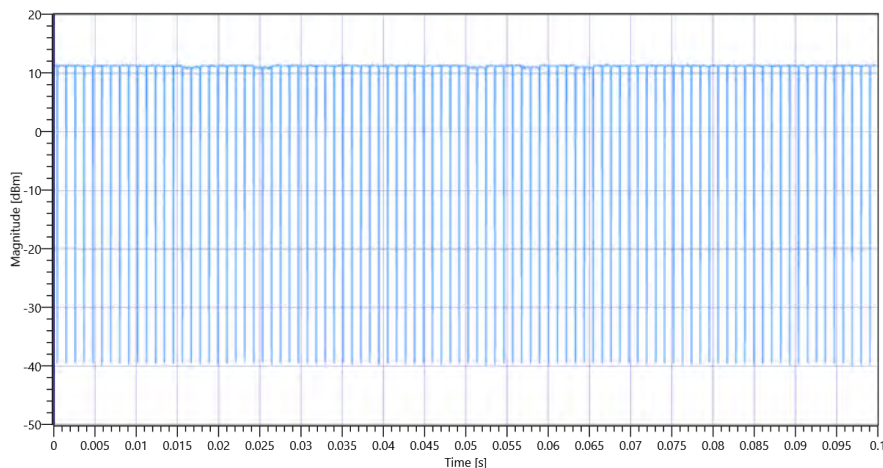
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.69	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

## Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2437 MHz - DutyCycle

## Maximum Avg. Output Power

READ SA SETTINGS:

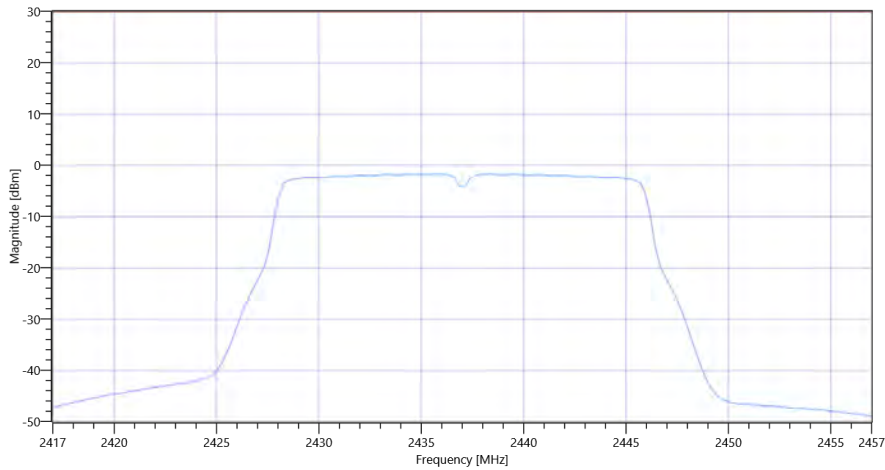
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.69   15.7   20
Start [MHz]   Stop [MHz]	2417.000   2457.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

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	---	---	13.13	dBm	INFO
Duty Cycle Correction	---	---	0.64	dB	INFO
Avg Output Power DC corrected	---	30	13.77	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

**PASS**



## FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:43:57
Ambit Temp [°C]   Humidity [rel%]	24.8   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 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	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

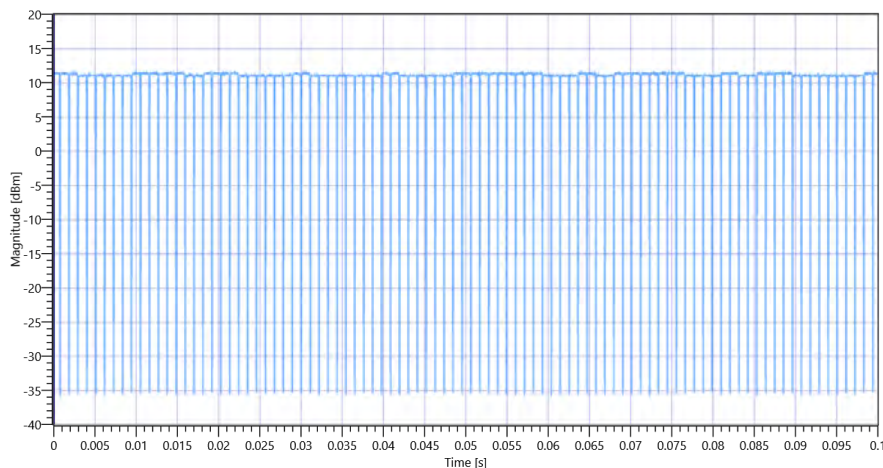
### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.65	dBm	INFO
Ref. Frequency	---	---	2463.600	MHz	INFO

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:91					
Duty Cycle (Burst Ratio) max	---	---	0.886	---	INFO
Duty Cycle max	---	---	0.526	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.864	---	INFO
Duty Cycle min	---	---	0.635	dB	INFO
Max TX Burst Length	---	---	0.975	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 n-HT20 mode 2462 MHz - DutyCycle

## Maximum Avg. Output Power

### READ SA SETTINGS:

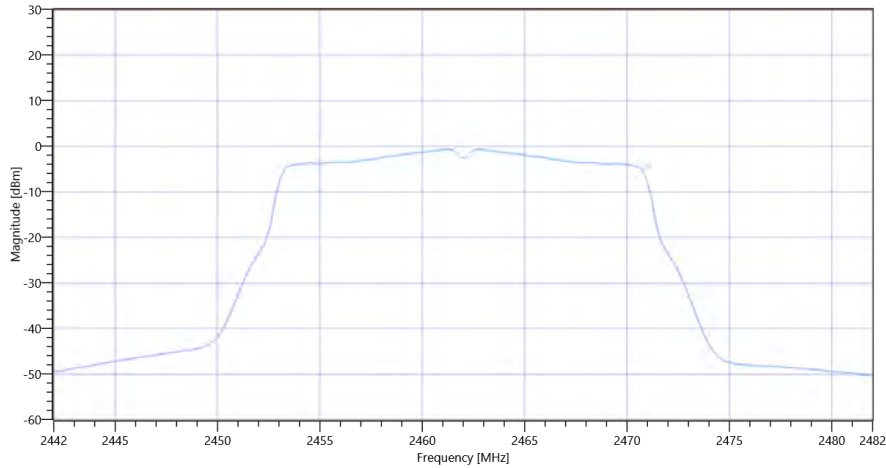
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.65   15.54   20
Start [MHz]   Stop [MHz]	2442.000   2482.000
RBW [MHz]   VBW [MHz]	0.500000   2.000000
Detector   TraceMode	RMS   AVER
Sweep: Time [ms]   Count   Points per Section   Type	500   100   160   SWE

### 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	---	---	12.73	dBm	INFO
Duty Cycle Correction	---	---	0.64	dB	INFO
Avg Output Power DC corrected	---	30	13.37	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 n-HT20 mode

General verdict

**PASS**

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:20:08
Ambit Temp [°C]   Humidity [rel%]	23.5   37
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 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.

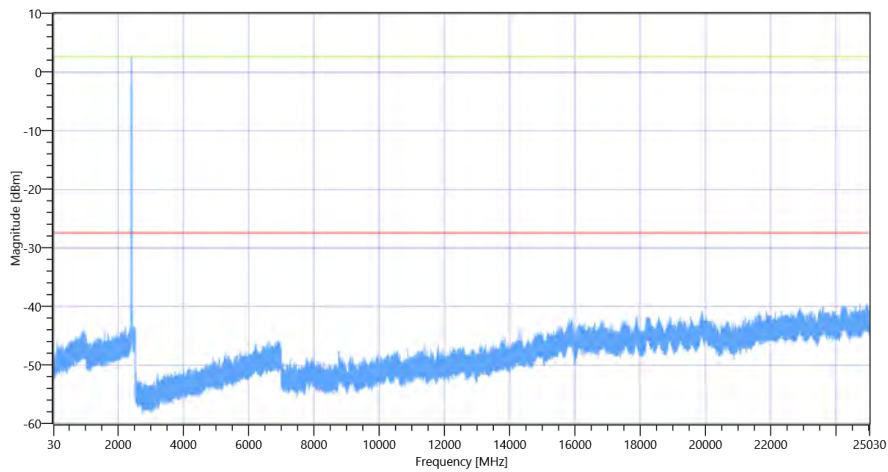
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.38	dBm	INFO
Ref. Frequency	---	---	2413.200	MHz	INFO

### READ SA SETTINGS:

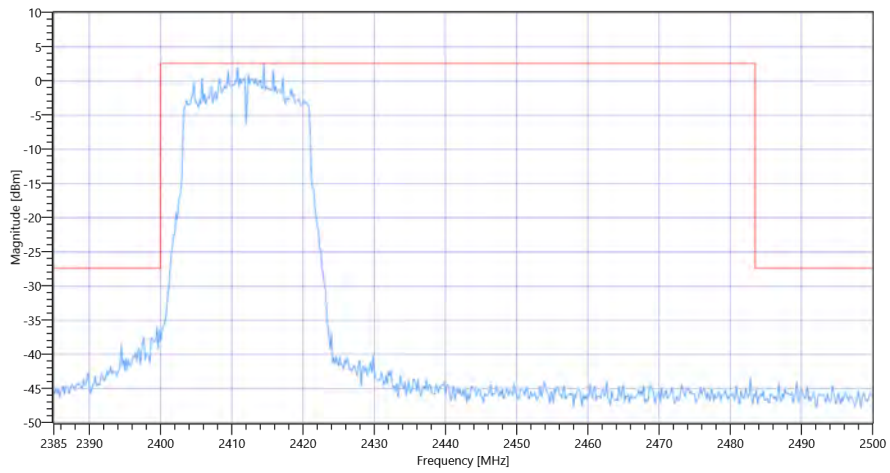
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2414.50 MHz	---	---	2.59	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.5 MHz	0	---	8.5	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2412

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:34:01
Ambit Temp [°C]   Humidity [rel%]	23.6   37
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 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.

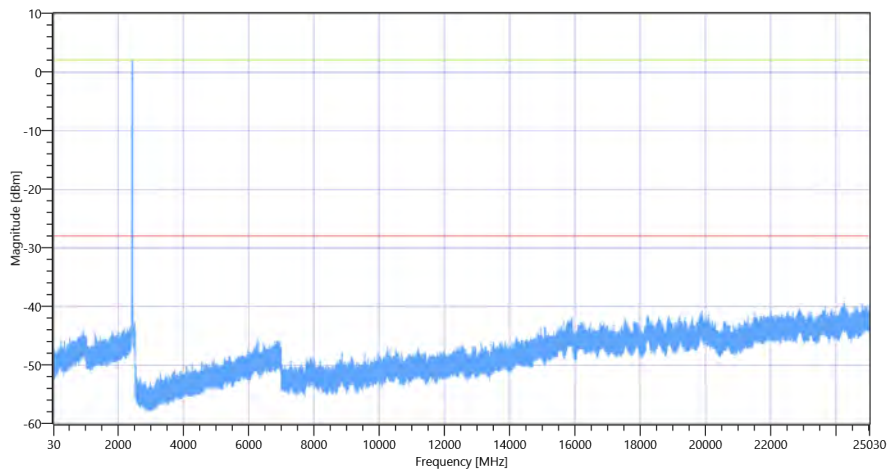
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.25	dBm	INFO
Ref. Frequency	---	---	2434.300	MHz	INFO

### 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

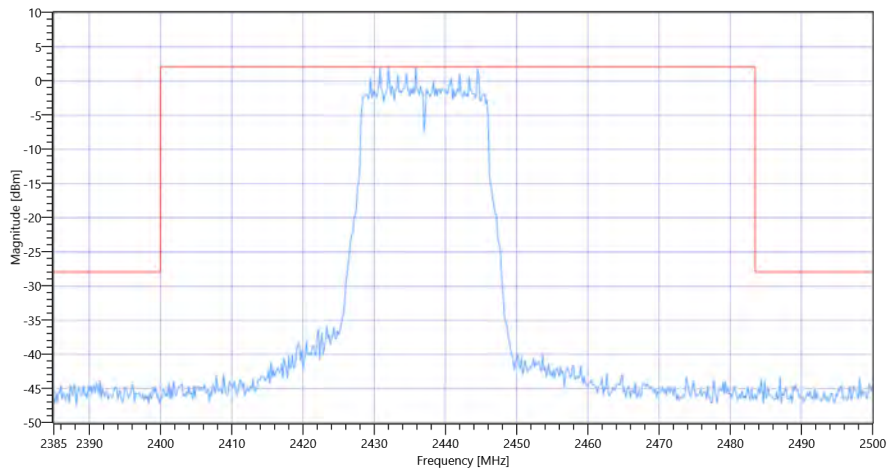
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2430.83 MHz	---	---	2.06	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24248 MHz	0	---	11.08	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2437





FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2437

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 10:49:04
Ambit Temp [°C]   Humidity [rel%]	23.9   36
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 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	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.

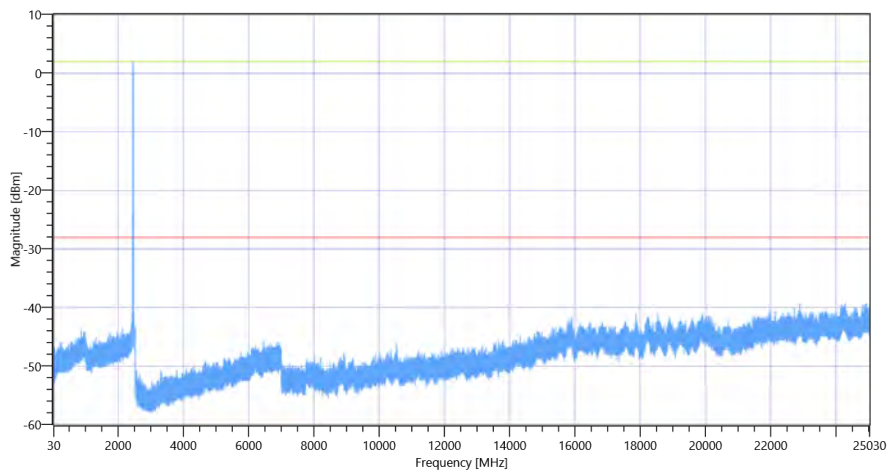
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.32	dBm	INFO
Ref. Frequency	---	---	2461.100	MHz	INFO

### READ SA SETTINGS:

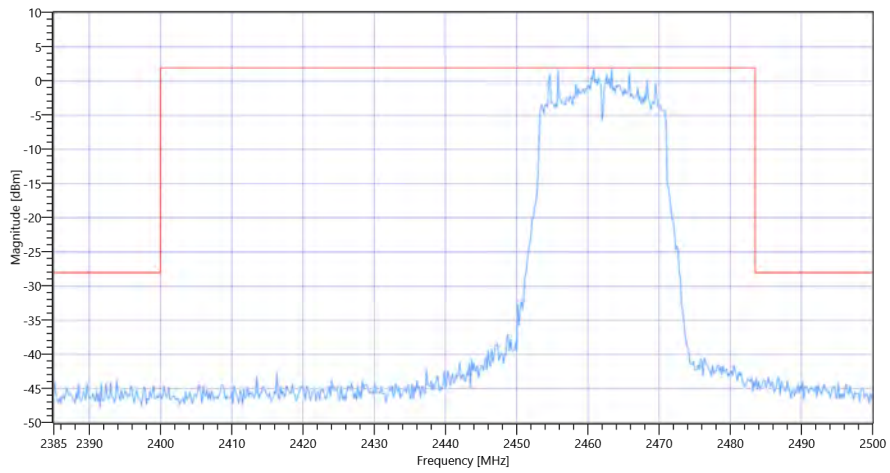
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2460.83 MHz	---	---	1.97	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24931.667 MHz	0	---	11.08	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2462



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2462

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:03:27
Ambit Temp [°C]   Humidity [rel%]	24.3   36
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 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.

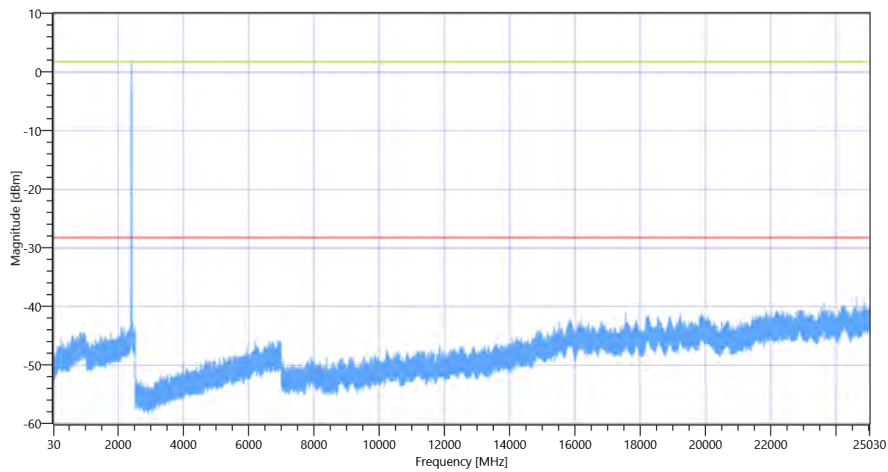
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.46	dBm	INFO
Ref. Frequency	---	---	2413.100	MHz	INFO

### READ SA SETTINGS:

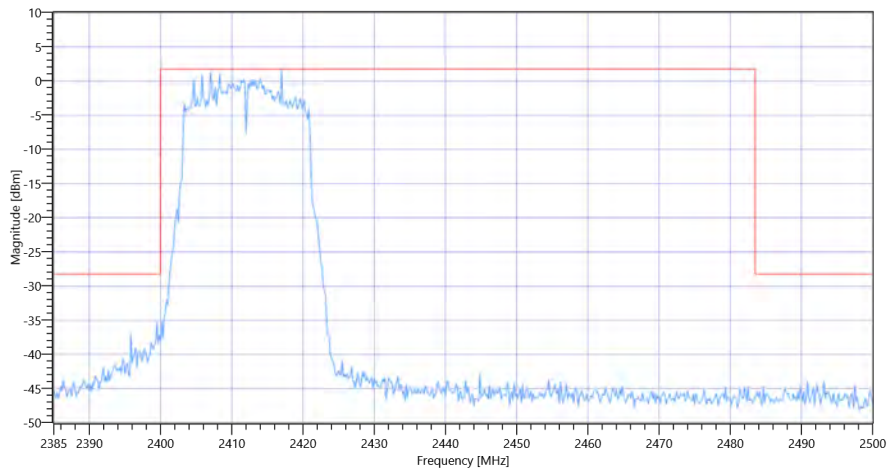
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2417.00 MHz	---	---	1.78	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.5 MHz	0	---	7.08	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2412

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:21:07
Ambit Temp [°C]   Humidity [rel%]	24.5   35
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 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	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.

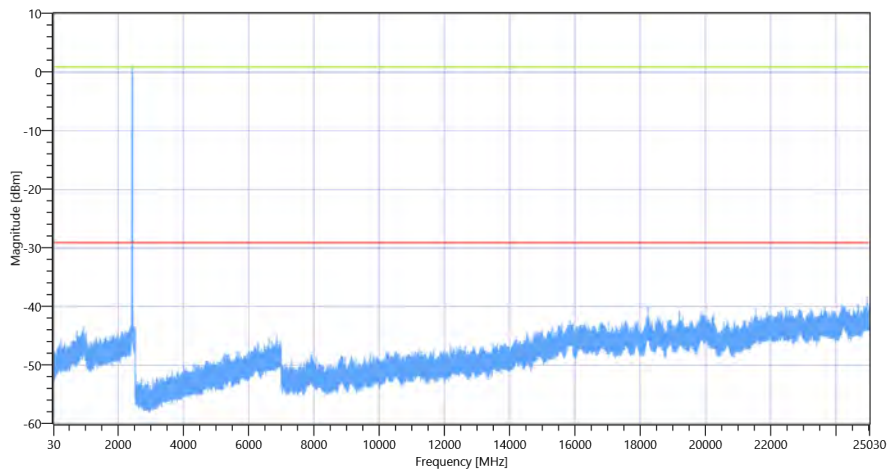
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.16	dBm	INFO
Ref. Frequency	---	---	2440.600	MHz	INFO

### READ SA SETTINGS:

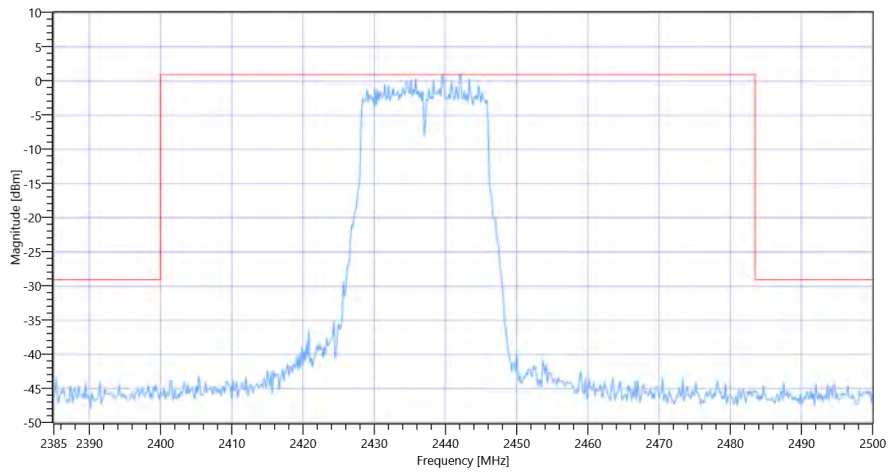
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2442.17 MHz	---	---	0.93	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-151.23	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2437



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2437

General verdict

PASS

## FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	06.07.2022 11:35:16
Ambit Temp [°C]   Humidity [rel%]	24.8   35
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 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	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.

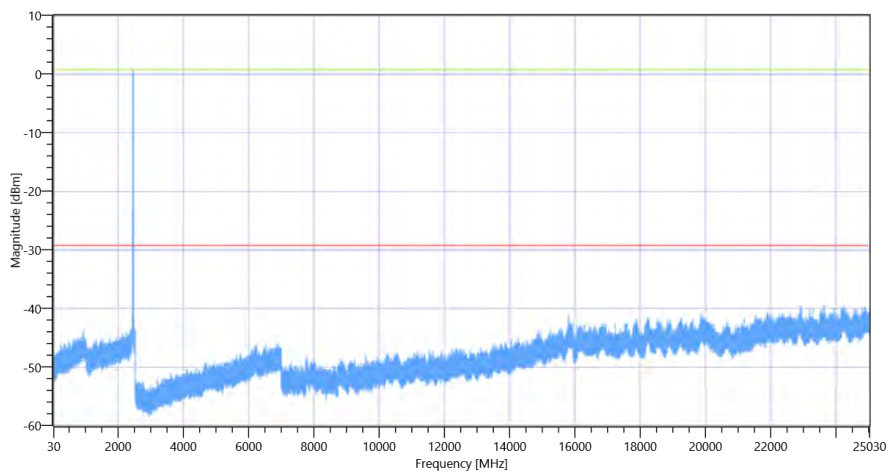
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.53	dBm	INFO
Ref. Frequency	---	---	2461.300	MHz	INFO

### READ SA SETTINGS:

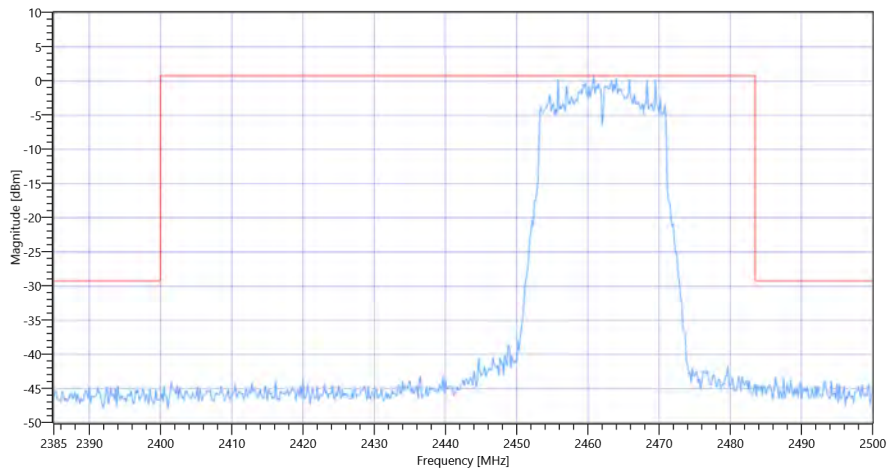
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.00   0   20
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2460.83 MHz	---	---	0.78	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 23633.5 MHz	0	---	9.75	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2462



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 n-HT20 mode 2462

General verdict

PASS

- END OF DOCUMENT -