

Measurement Results

No.1-4711/22-01-12_log1_conducted

Test logging

This document is electronically signed and valid without handwritten signature.
For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Test/s performed:



cn=Michael Dorongovski, o=CTC
advanced GmbH, ou=DOR-210422,
email=Michael.Dorongovski@ctcadv
anced.com, c=DE
2023.02.09 17:47:58 +01'00'

Michael Dorongovski
Lang Manager
Radio Labs

Message with SA scan ~

Test References

TC Start	02.11.2022 09:25:21
Ambit Temp [°C] Humidity [rel%]	25.8 39
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan b mode
Add. Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 09:25:22
Message	set WLAN2G4 to b mode, Frequency [MHz] 2412 ,

Test Equipment

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:29:29
Ambit Temp [°C] Humidity [rel%]	25.9 39
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

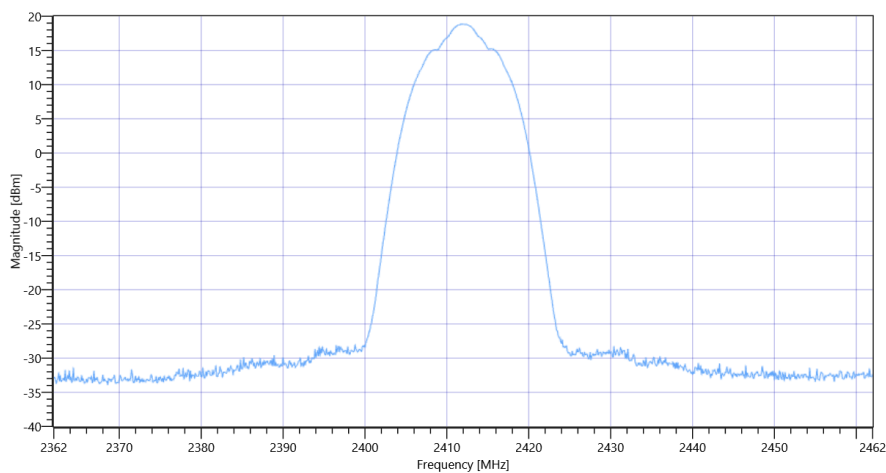
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.68	dBm	INFO
Ref. Frequency	---	---	2413.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.68 15.93 25
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	18.84	dBm	INFO
Peak Power	---	---	76.559661	mW	INFO
Frequency at Peak	---	---	2411.8	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:30:05
Ambit Temp [°C] Humidity [rel%]	25.9 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

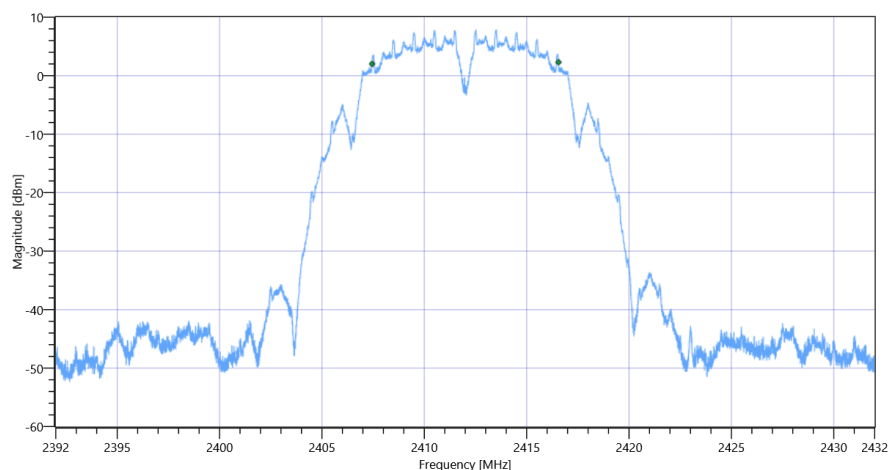
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.32	dBm	INFO
Ref. Frequency	---	---	2413.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.32 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	---	9108	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:30:46
Ambit Temp [°C] Humidity [rel%]	25.9 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

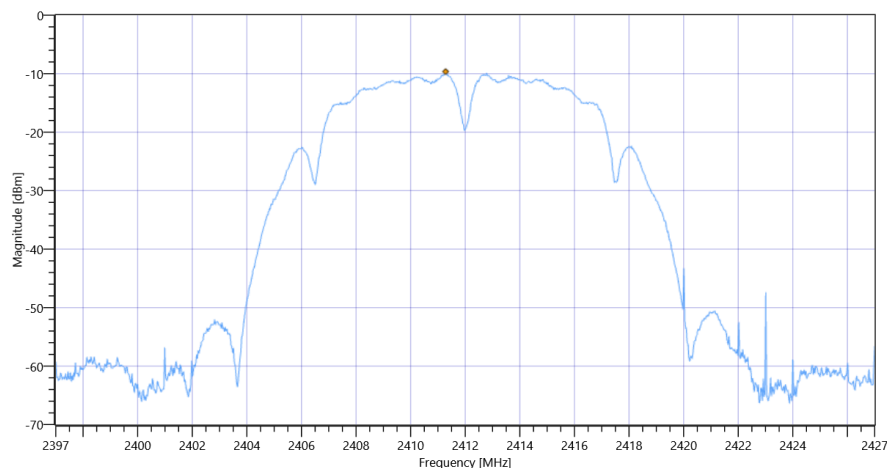
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.43	dBm	INFO
Ref. Frequency	---	---	2413.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.43 15.93 20
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-9.64	dBm/3KHz	PASS



FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 09:31:33
Ambit Temp [°C] Humidity [rel%]	26.0 38
System Version	3.3.1.5
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	13.55	dBm	INFO
Ref. Frequency	---	---	2413.400	MHz	INFO

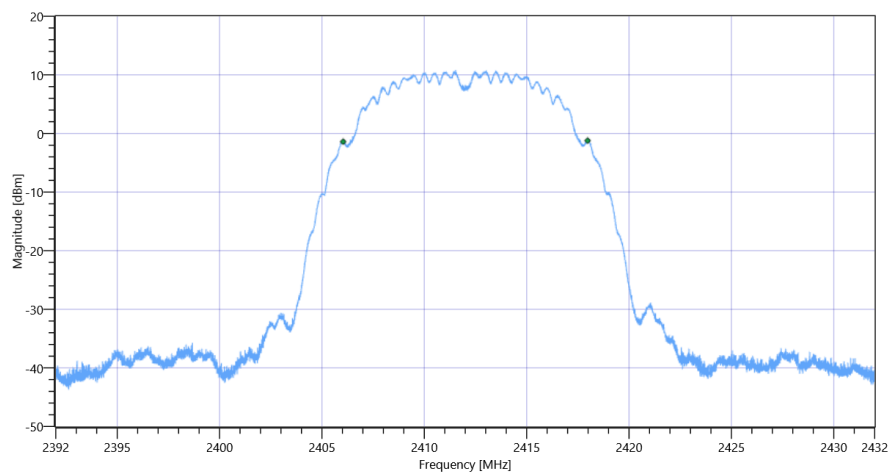
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.55 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

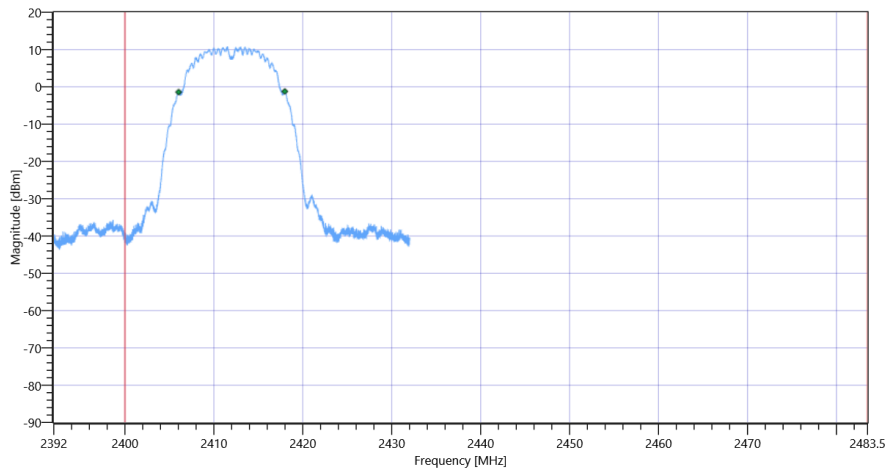
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	11939.000	kHz	INFO
T1 99%	2400.000000	---	2406.0366	MHz	PASS
T2 99%	---	2483.500000	2417.9754	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 99PCT

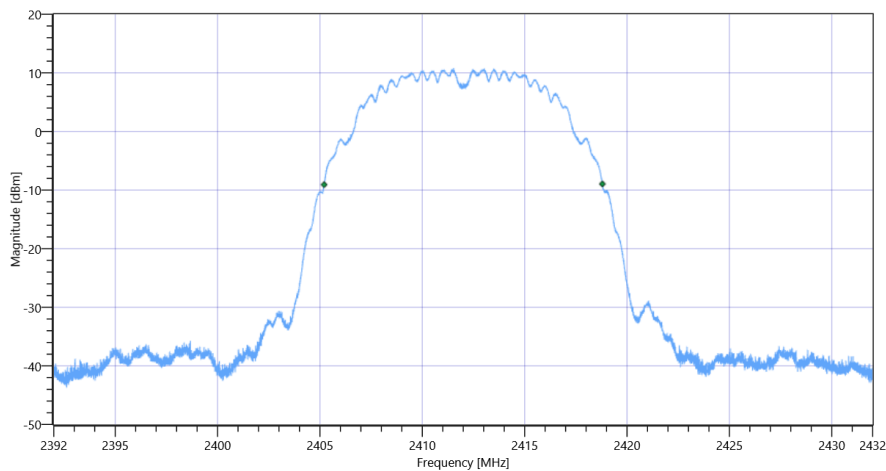
Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

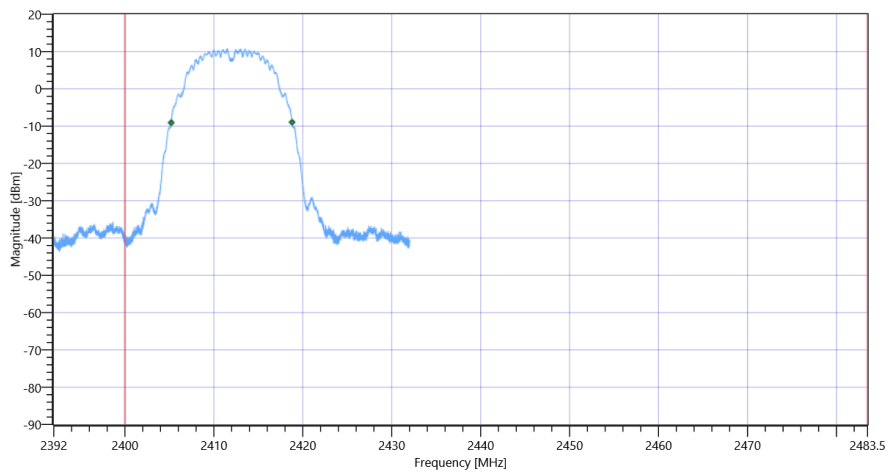
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	13592	kHz	INFO
T1 20dB	2400.000000	---	2405.2040	MHz	PASS
T2 20dB	---	2483.500000	2418.7960	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:32:34
Ambit Temp [°C] Humidity [rel%]	26.0 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

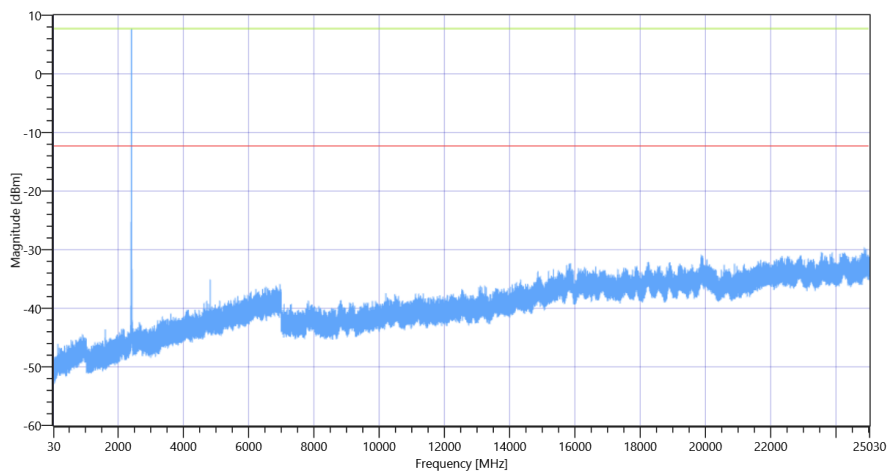
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.49	dBm	INFO
Ref. Frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

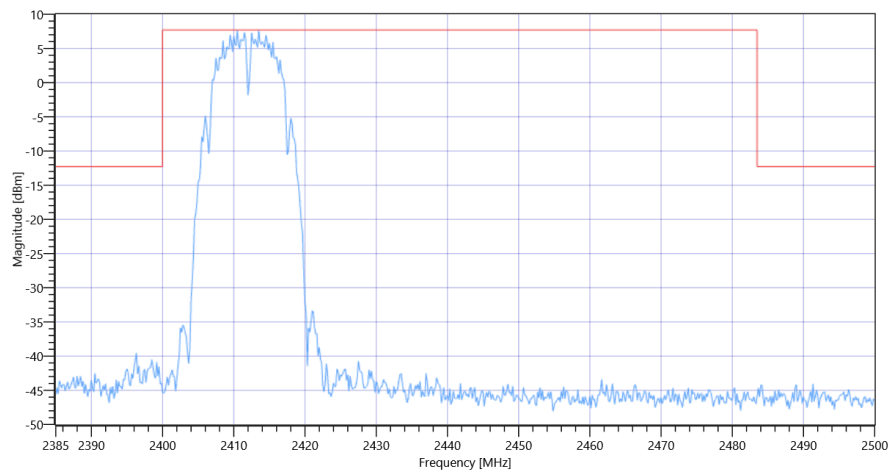
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.49 0 30
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2410.50 MHz	---	---	7.70	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24874.5 MHz	0	---	17.33	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2412



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2412

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:41:40
Ambit Temp [°C] Humidity [rel%]	26.1 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

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

Test Equipment	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06	

Test at TX 2412 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	22.58	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References

TC Start	02.11.2022 09:41:53
Ambit Temp [°C] Humidity [rel%]	26.1 38
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan b mode
Add. Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 09:41:54
Message	set WLAN2G4 to b mode, Frequency [MHz] 2437 ,

Test Equipment

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:43:30
Ambit Temp [°C] Humidity [rel%]	26.1 38
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

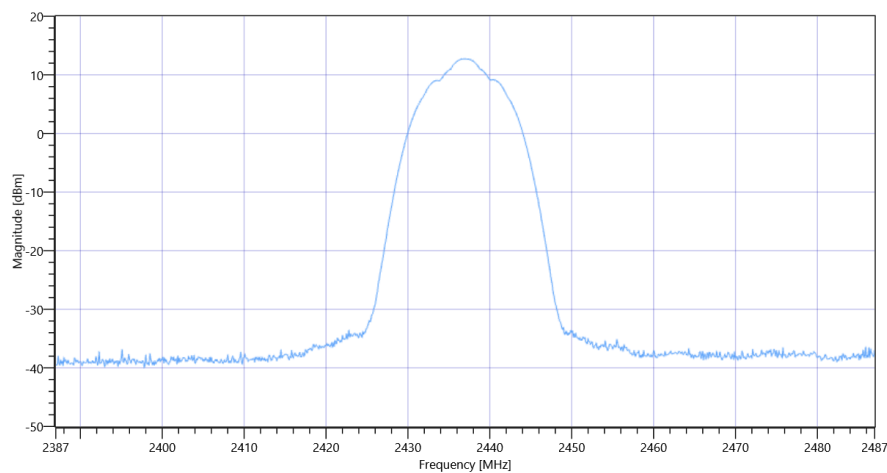
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.50	dBm	INFO
Ref. Frequency	---	---	2438.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.50 15.7 20
Start [MHz] Stop [MHz]	2387.000 2487.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	12.74	dBm	INFO
Peak Power	---	---	18.793168	mW	INFO
Frequency at Peak	---	---	2437.2	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:44:06
Ambit Temp [°C] Humidity [rel%]	26.2 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

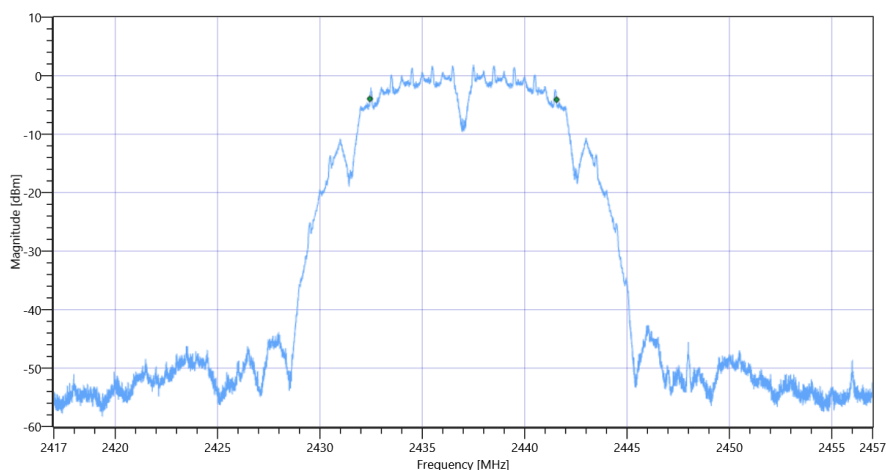
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.44	dBm	INFO
Ref. Frequency	---	---	2438.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.44 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	---	9120	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:44:46
Ambit Temp [°C] Humidity [rel%]	26.2 38
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

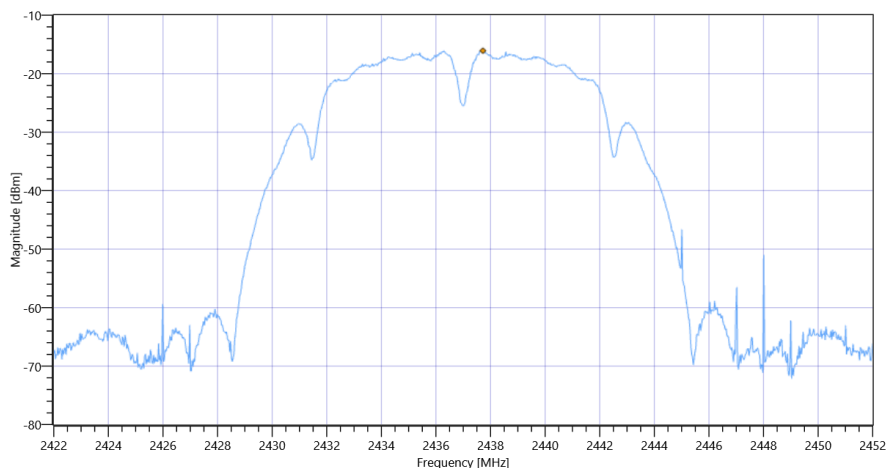
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.34	dBm	INFO
Ref. Frequency	---	---	2438.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.34 15.7 15
Start [MHz] Stop [MHz]	2422.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-16.07	dBm/3KHz	PASS



FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 09:45:33
Ambit Temp [°C] Humidity [rel%]	26.2 38
System Version	3.3.1.5
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	7.44	dBm	INFO
Ref. Frequency	---	---	2435.700	MHz	INFO

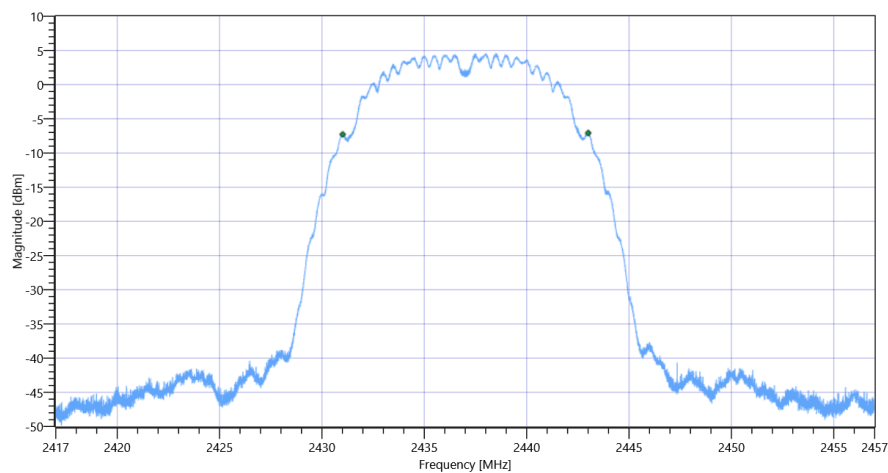
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.44 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

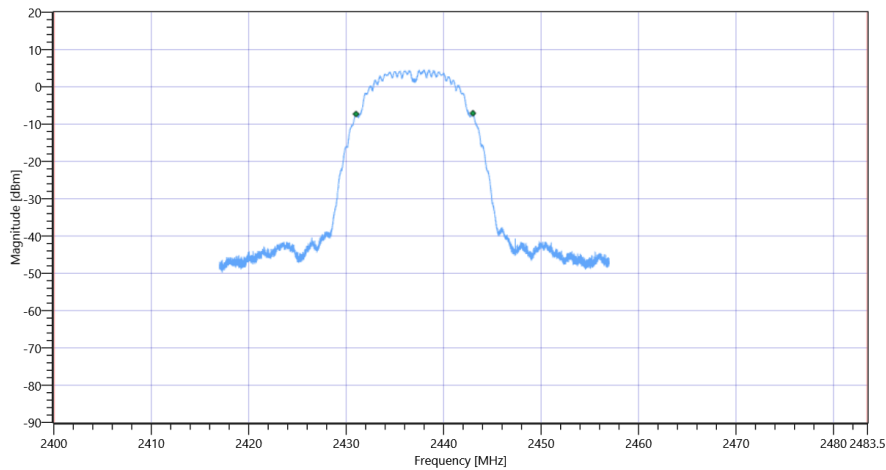
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	11991.000	kHz	INFO
T1 99%	2400.000000	---	2431.0126	MHz	PASS
T2 99%	---	2483.500000	2443.0034	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 99PCT

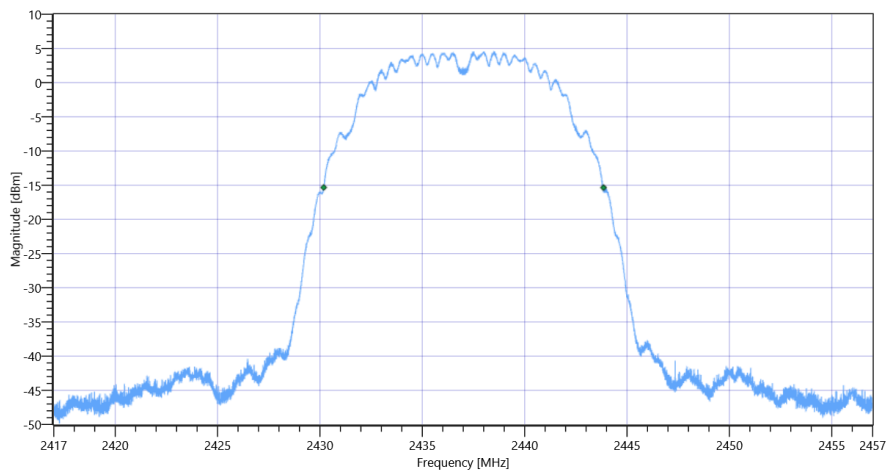
Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

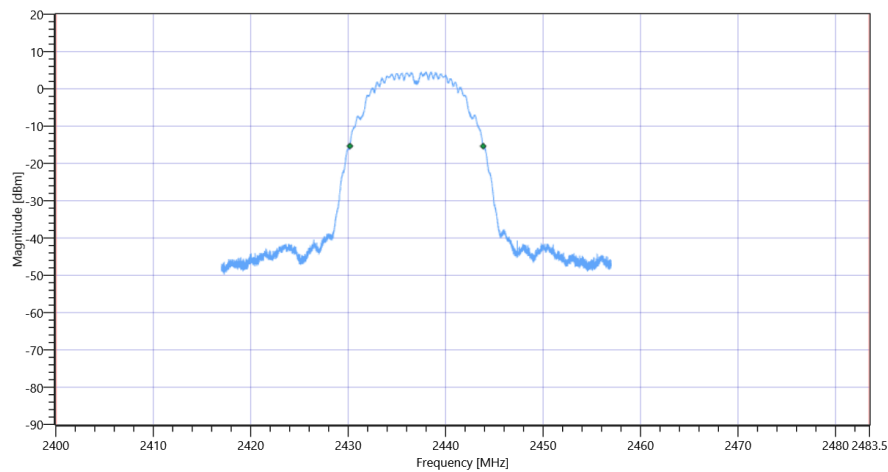
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	13668	kHz	INFO
T1 20dB	2400.000000	---	2430.1840	MHz	PASS
T2 20dB	---	2483.500000	2443.8520	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 09:54:17
Ambit Temp [°C] Humidity [rel%]	26.3 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

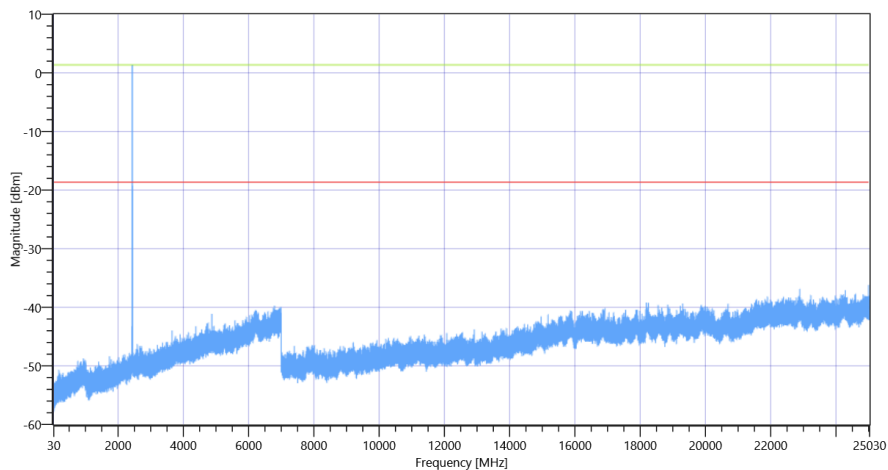
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.42	dBm	INFO
Ref. Frequency	---	---	2438.200	MHz	INFO

READ SA SETTINGS:

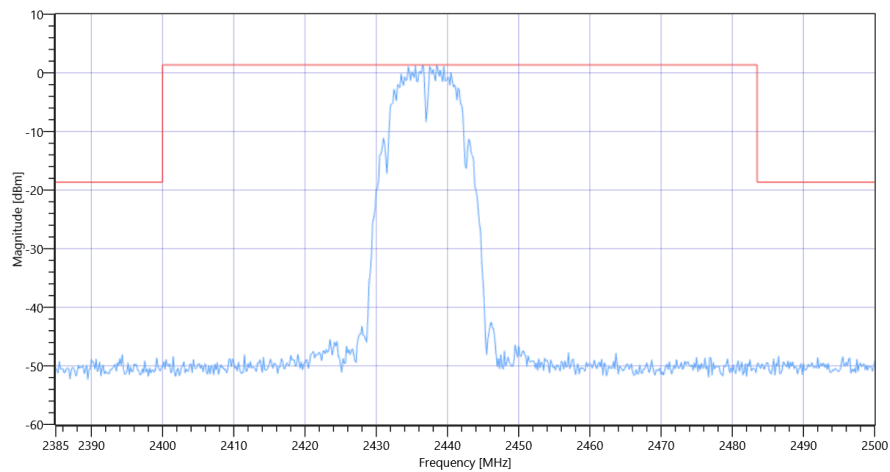
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	7.42 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2436.50 MHz	---	---	1.36	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24999.167 MHz	0	---	17.57	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2437



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2437

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:03:25
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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 - PowerMeter

Test Equipment	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06	

Test at TX 2437 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	16.68	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References

TC Start	02.11.2022 10:03:39
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan b mode
Add. Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 10:03:40
Message	set WLAN2G4 to b mode, Frequency [MHz] 2462

Test Equipment

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:05:44
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

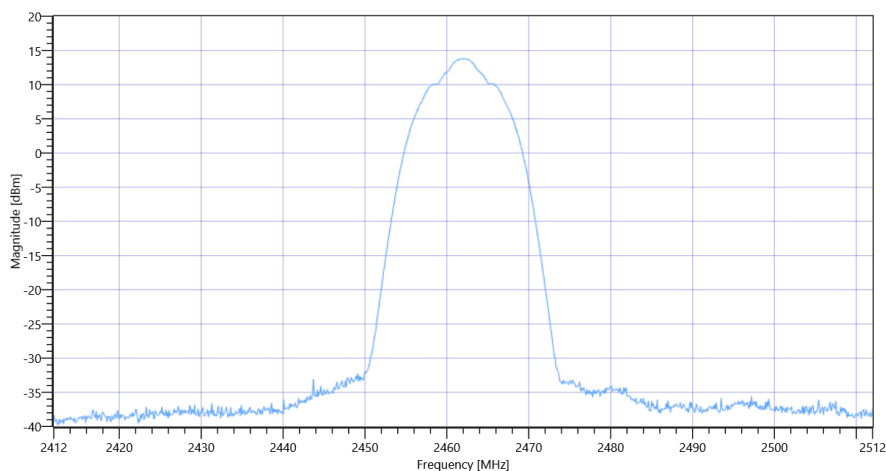
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.67	dBm	INFO
Ref. Frequency	---	---	2463.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.67 15.54 20
Start [MHz] Stop [MHz]	2412.000 2512.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	13.79	dBm	INFO
Peak Power	---	---	23.933158	mW	INFO
Frequency at Peak	---	---	2461.8	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:06:20
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

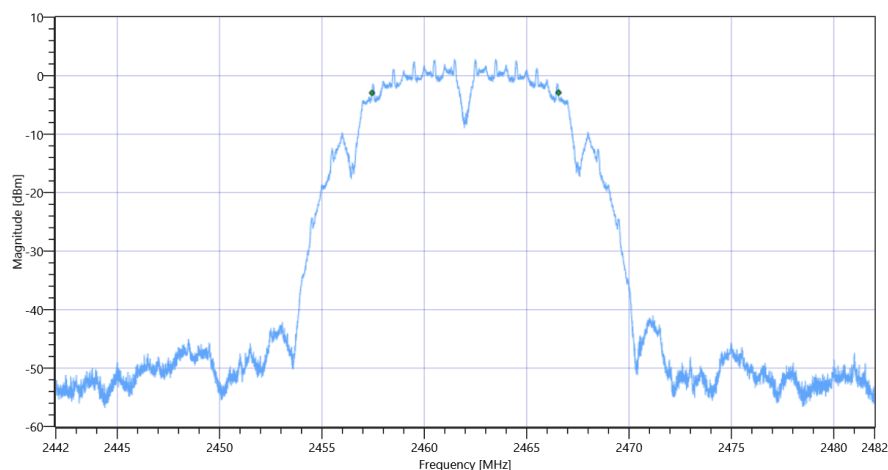
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.53	dBm	INFO
Ref. Frequency	---	---	2460.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.53 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	---	9112	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:07:00
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

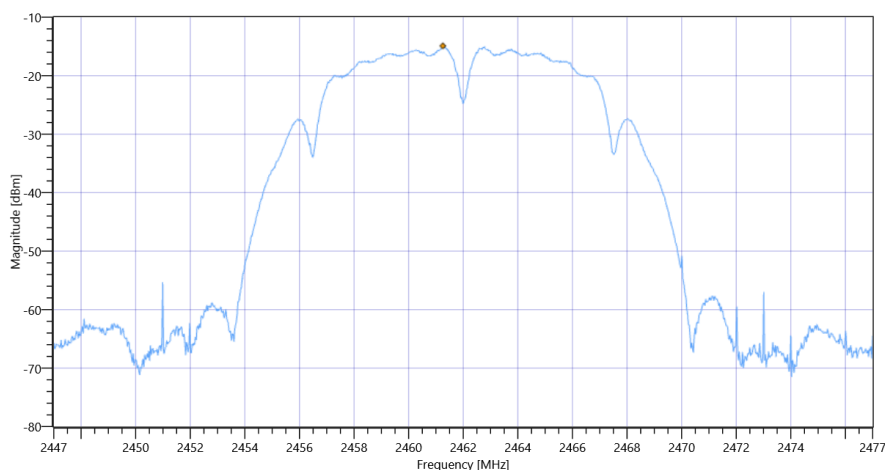
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.37	dBm	INFO
Ref. Frequency	---	---	2463.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.37 15.54 15
Start [MHz] Stop [MHz]	2447.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-14.91	dBm/3KHz	PASS



FCC 15.247 # Peak power spectral density DTS ~ WLAN2G4 b mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 10:07:47
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	8.59	dBm	INFO
Ref. Frequency	---	---	2460.400	MHz	INFO

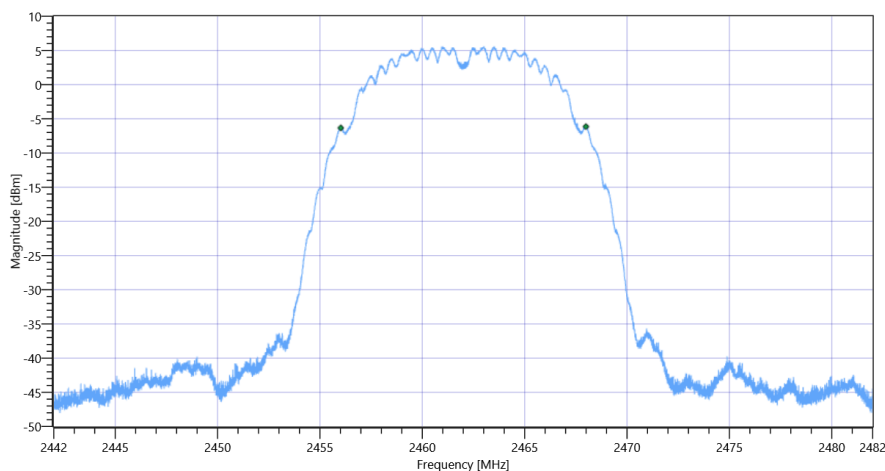
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.59 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

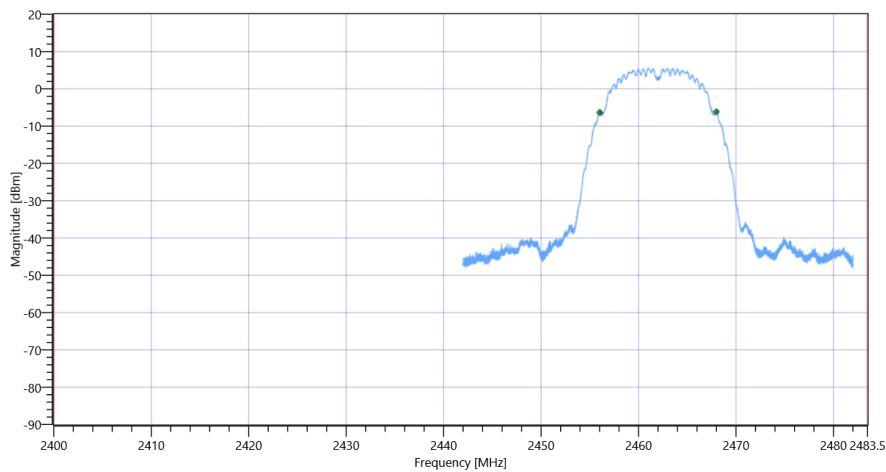
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	11975.000	kHz	INFO
T1 99%	2400.000000	---	2456.0166	MHz	PASS
T2 99%	---	2483.500000	2467.9914	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 99PCT

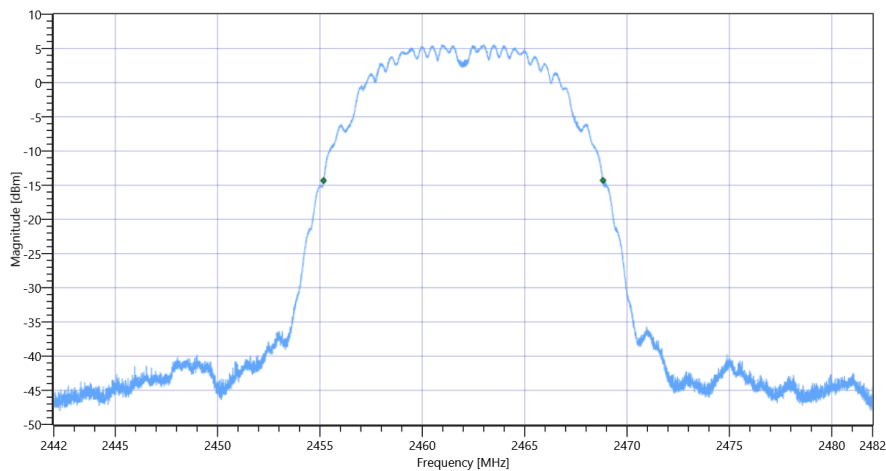
Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

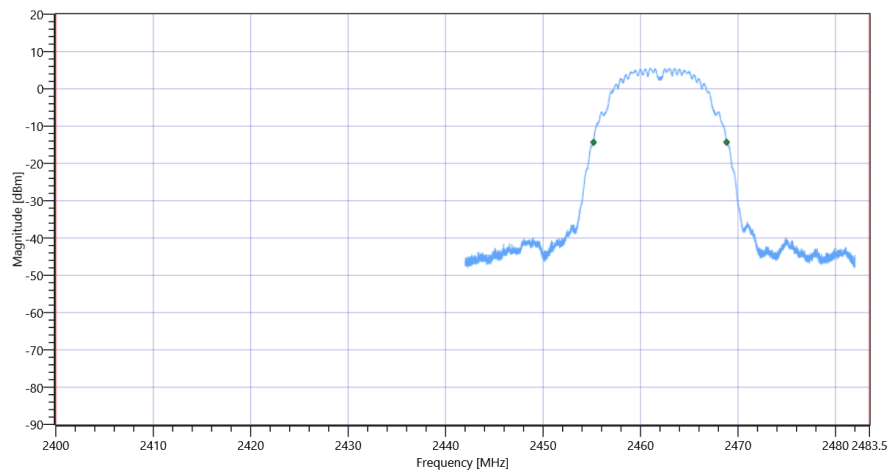
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	13648	kHz	INFO
T1 20dB	2400.000000	---	2455.1760	MHz	PASS
T2 20dB	---	2483.500000	2468.8240	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:08:49
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

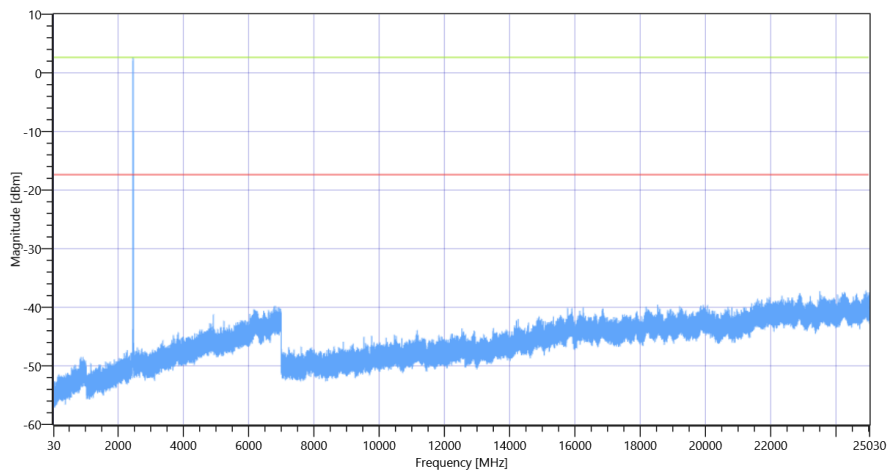
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.50	dBm	INFO
Ref. Frequency	---	---	2463.400	MHz	INFO

READ SA SETTINGS:

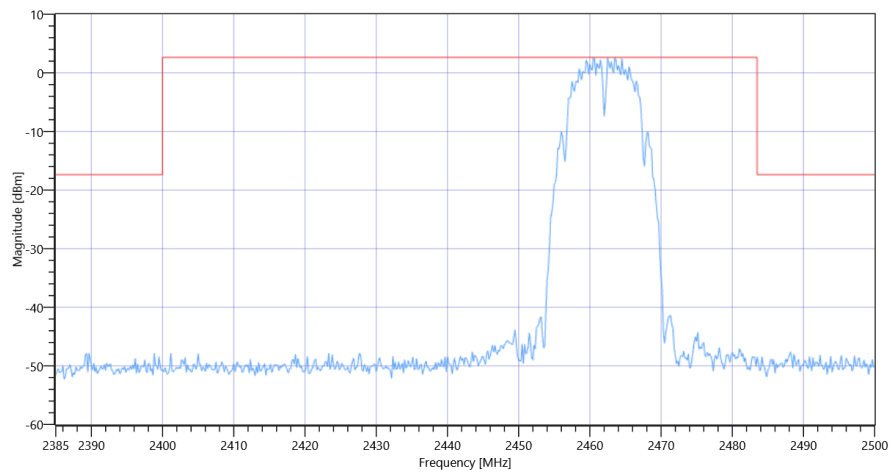
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.50 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2463.50 MHz	---	---	2.63	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24908.833 MHz	0	---	19.78	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2462



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode 2462

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 b mode

Test References	
TC Start	02.11.2022 10:17:57
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 b mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 b 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 - PowerMeter

Test Equipment	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06	

Test at TX 2462 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	17.79	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References	
TC Start	02.11.2022 10:18:10
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan g mode
Add. Information	

Test Parameter	
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 10:18:11
Message	set WLAN2G4 to g mode, Frequency [MHz] 2412 ,

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 10:19:18
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

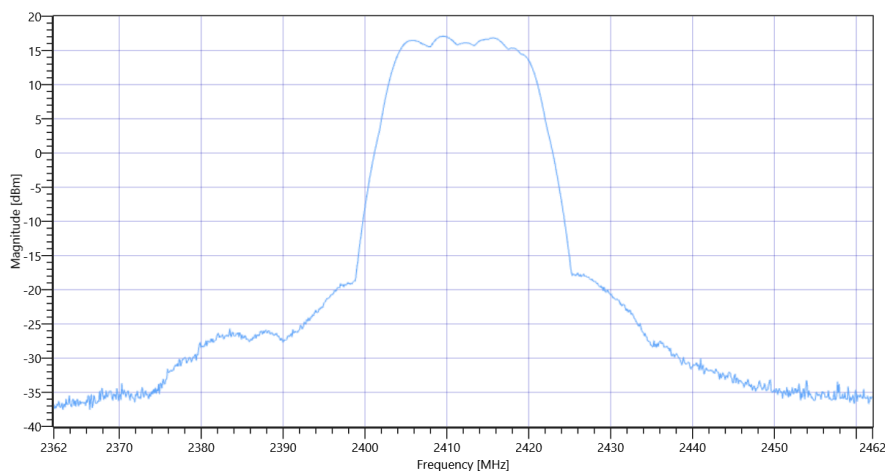
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.71	dBm	INFO
Ref. Frequency	---	---	2414.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.71 15.93 20
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	17.08	dBm	INFO
Peak Power	---	---	51.0505	mW	INFO
Frequency at Peak	---	---	2409.6	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 g mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 10:19:54
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

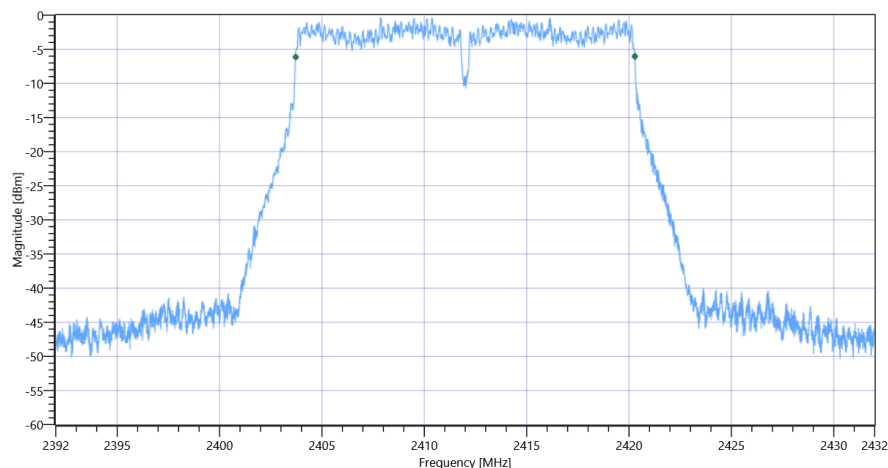
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.73	dBm	INFO
Ref. Frequency	---	---	2414.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.73 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	---	16568	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 10:20:35
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

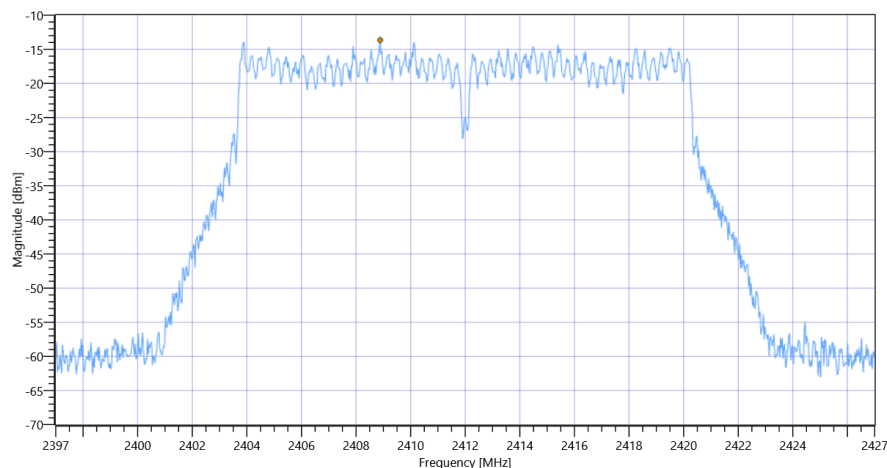
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.38	dBm	INFO
Ref. Frequency	---	---	2416.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.38 15.93 15
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-13.65	dBm/3KHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	02.11.2022 10:21:23
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	10.43	dBm	INFO
Ref. Frequency	---	---	2415.100	MHz	INFO

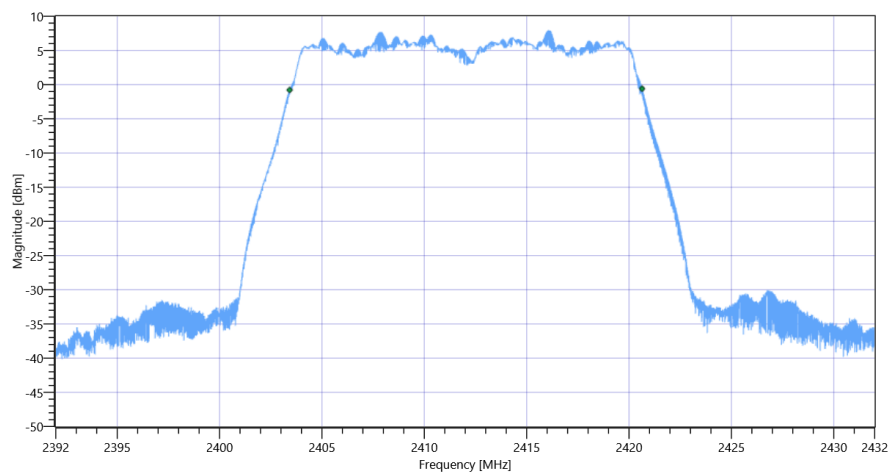
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.43 15.93 15
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

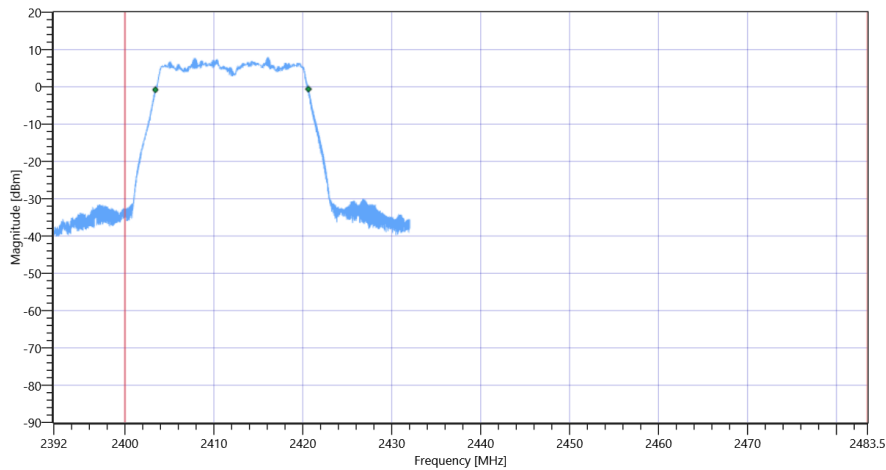
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17214.000	kHz	INFO
T1 99%	2400.000000	---	2403.4209	MHz	PASS
T2 99%	---	2483.500000	2420.6351	MHz	PASS

Plot: Bandwidth only



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

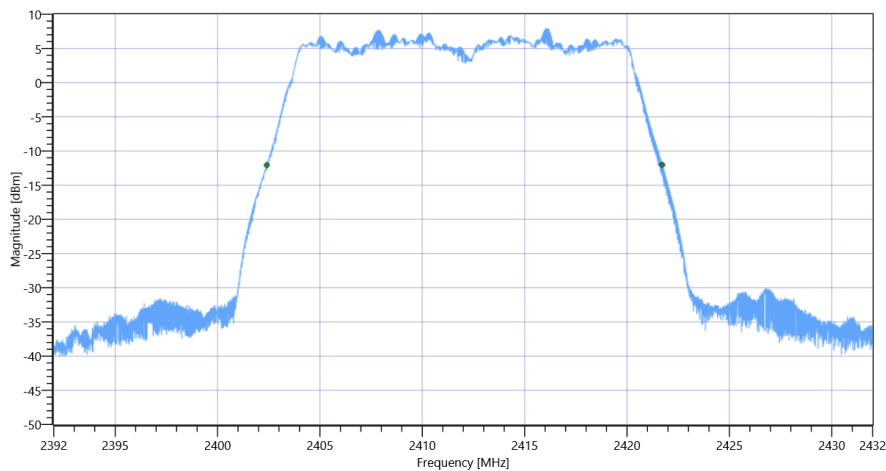
Plot: Bandwidth within Band



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

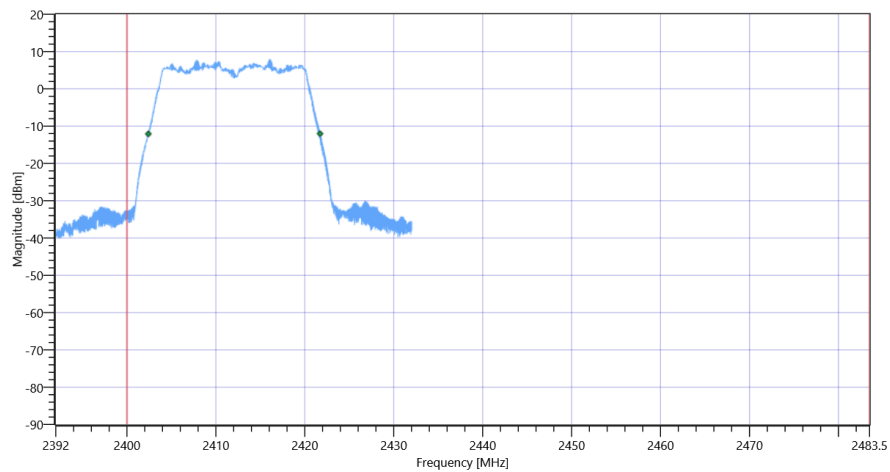
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19312	kHz	INFO
T1 20dB	2400.000000	---	2402.4040	MHz	PASS
T2 20dB	---	2483.500000	2421.7160	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 10:22:24
Ambit Temp [°C] Humidity [rel%]	26.4 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

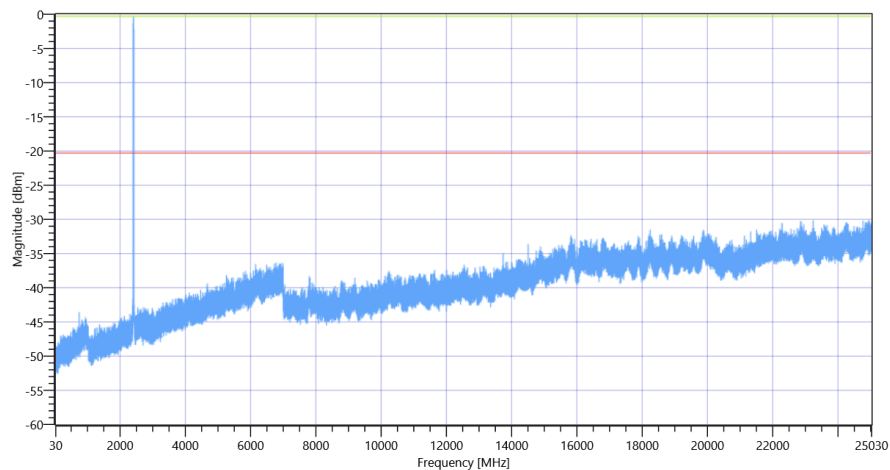
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.47	dBm	INFO
Ref. Frequency	---	---	2415.000	MHz	INFO

READ SA SETTINGS:

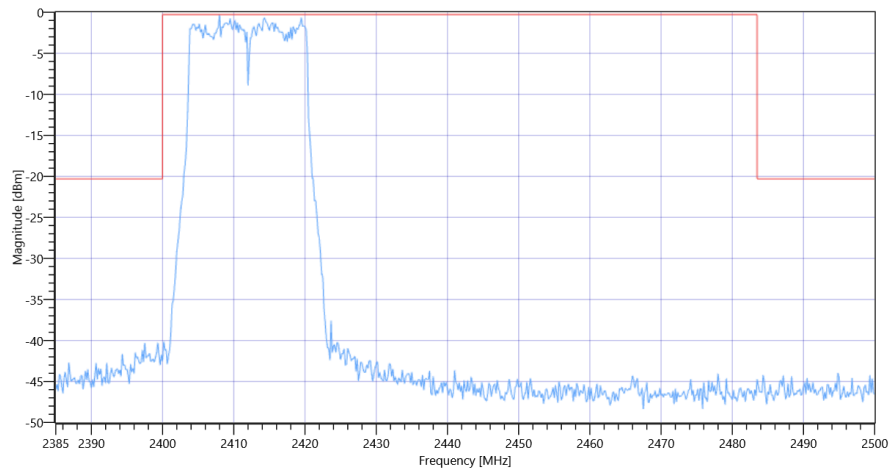
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.47 0 30
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2408.00 MHz	---	---	-0.30	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24939.667 MHz	0	---	9.79	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2412



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2412

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 15:14:21
Ambit Temp [°C] Humidity [rel%]	26.1 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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 - PowerMeter

Test Equipment	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06	

Test at TX 2412 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	26.58	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References

TC Start	02.11.2022 10:30:57
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan g mode
Add. Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 10:30:58
Message	set WLAN2G4 to g mode, Frequency [MHz] 2437 ,

Test Equipment

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 10:31:51
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

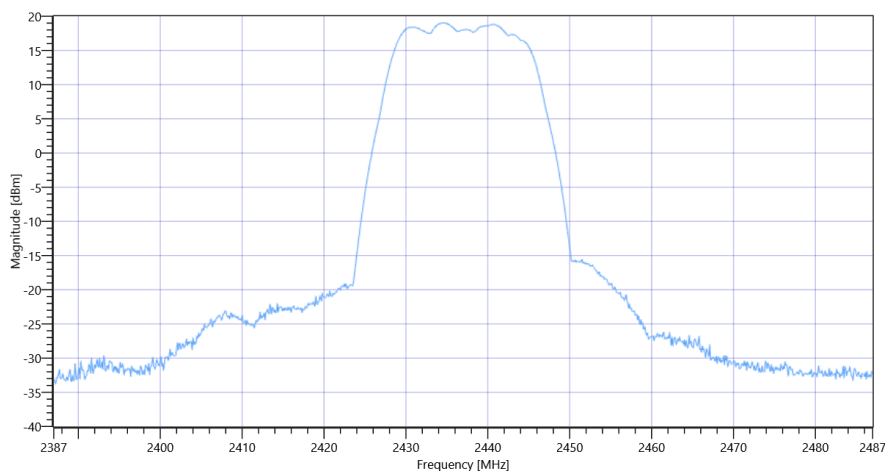
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.72	dBm	INFO
Ref. Frequency	---	---	2439.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.72 15.7 25
Start [MHz] Stop [MHz]	2387.000 2487.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	19.03	dBm	INFO
Peak Power	---	---	79.983426	mW	INFO
Frequency at Peak	---	---	2434.5	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 g mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 10:32:28
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

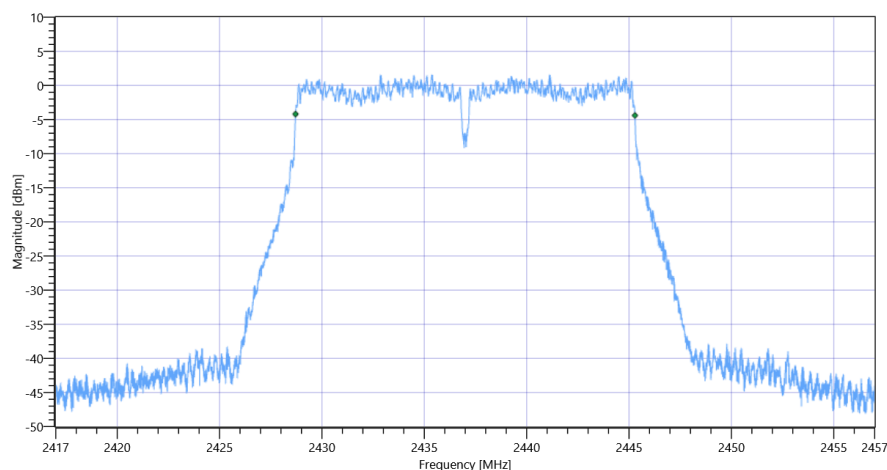
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.62	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.62 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	---	16580	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 10:33:08
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

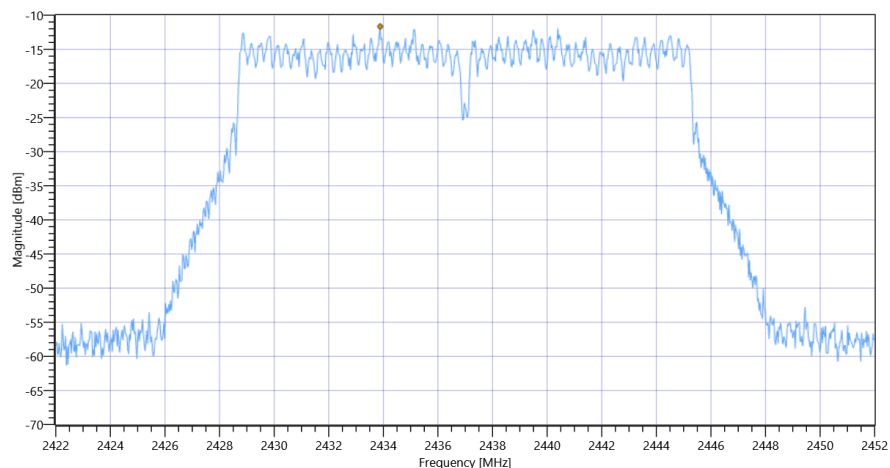
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.42	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.42 15.7 20
Start [MHz] Stop [MHz]	2422.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-11.65	dBm/3KHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	02.11.2022 10:33:55
Ambit Temp [°C] Humidity [rel%]	26.5 37
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	12.55	dBm	INFO
Ref. Frequency	---	---	2439.600	MHz	INFO

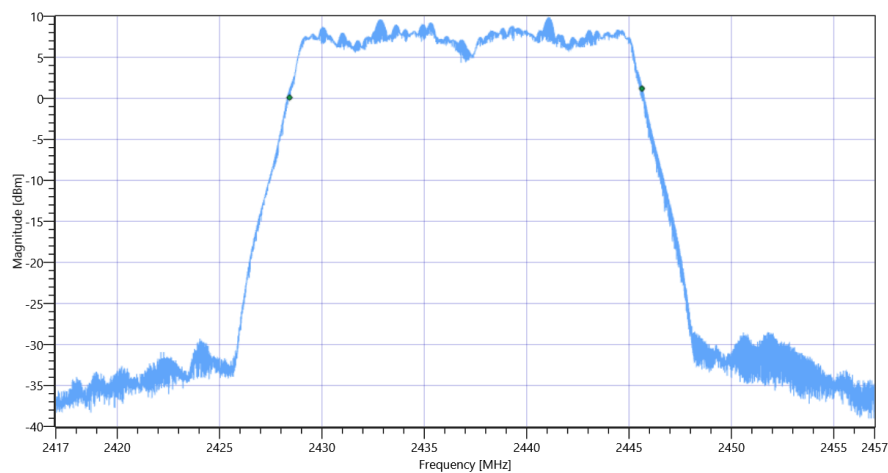
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.55 15.7 20
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

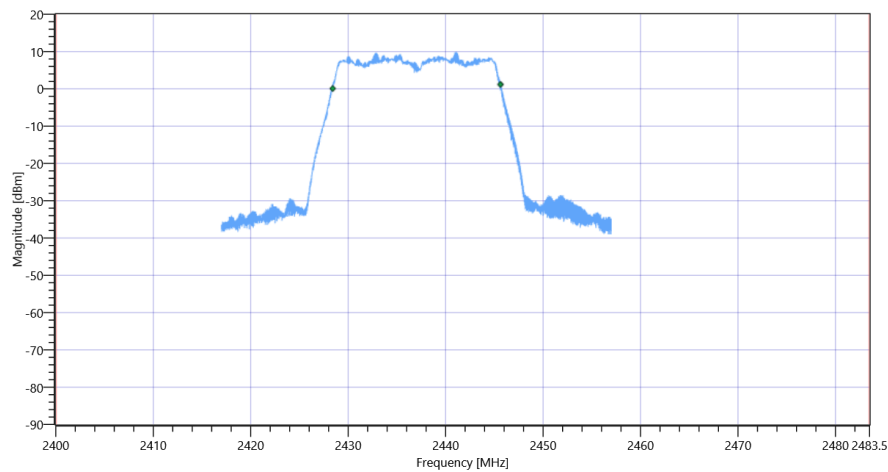
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17210.000	kHz	INFO
T1 99%	2400.000000	---	2428.4169	MHz	PASS
T2 99%	---	2483.500000	2445.6271	MHz	PASS

Plot: Bandwidth only



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

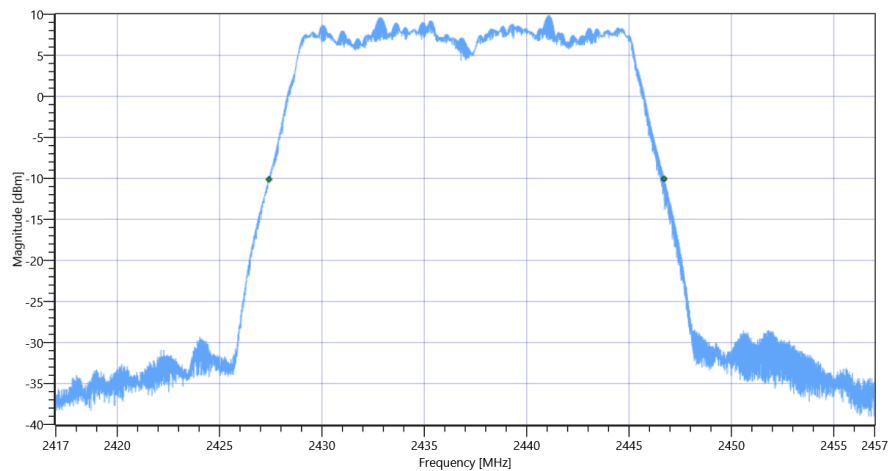
Plot: Bandwidth within Band



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

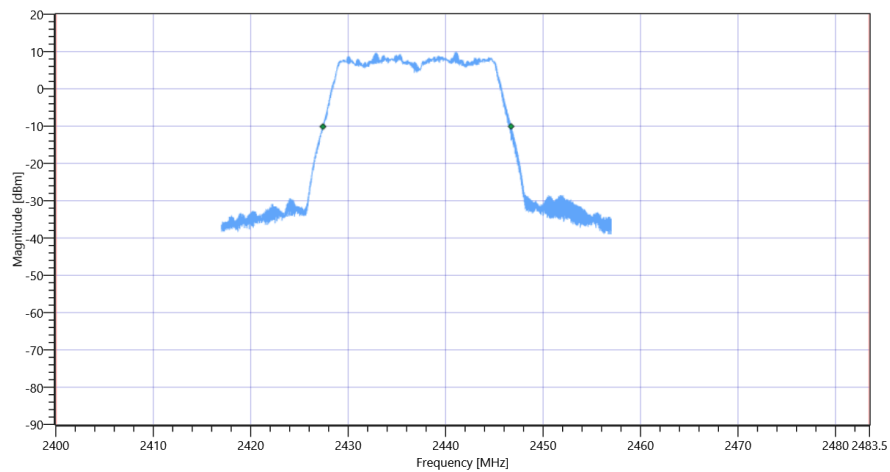
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19304	kHz	INFO
T1 20dB	2400.000000	---	2427.4120	MHz	PASS
T2 20dB	---	2483.500000	2446.7160	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 11:33:42
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

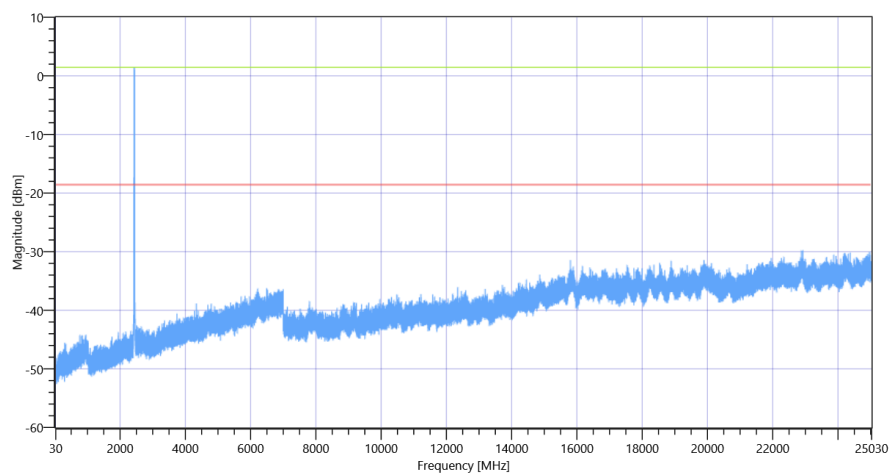
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.78	dBm	INFO
Ref. Frequency	---	---	2432.900	MHz	INFO

READ SA SETTINGS:

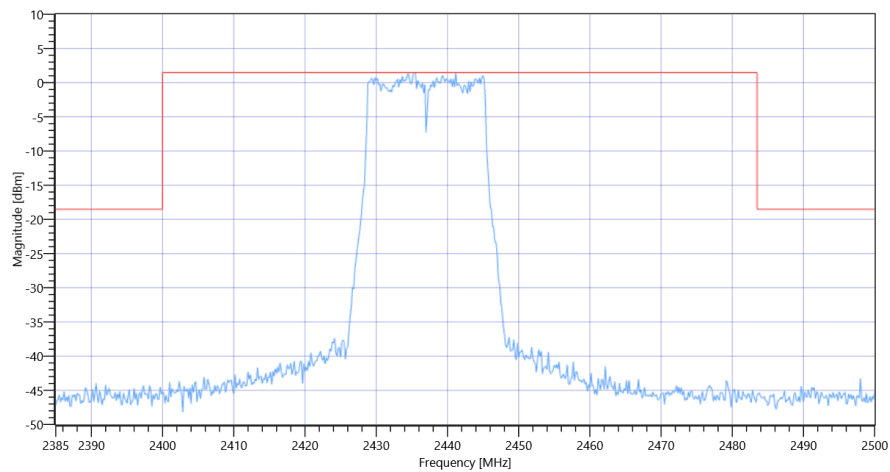
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.78 0 30
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2435.33 MHz	---	---	1.46	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 22923 MHz	0	---	11.24	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2437



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2437

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 11:43:32
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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 - PowerMeter

Test Equipment	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06	

Test at TX 2437 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	26.6	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References

TC Start	02.11.2022 11:43:46
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan g mode
Add. Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 11:43:47
Message	set WLAN2G4 to g mode, Frequency [MHz] 2462

Test Equipment

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 11:45:38
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

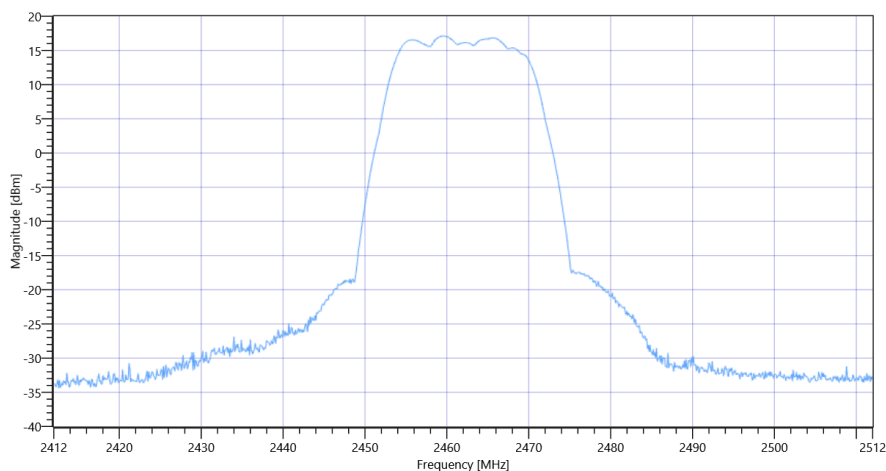
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.81	dBm	INFO
Ref. Frequency	---	---	2464.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.81 15.54 25
Start [MHz] Stop [MHz]	2412.000 2512.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	17.12	dBm	INFO
Peak Power	---	---	51.522864	mW	INFO
Frequency at Peak	---	---	2459.5	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 g mode

General verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 11:46:15
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

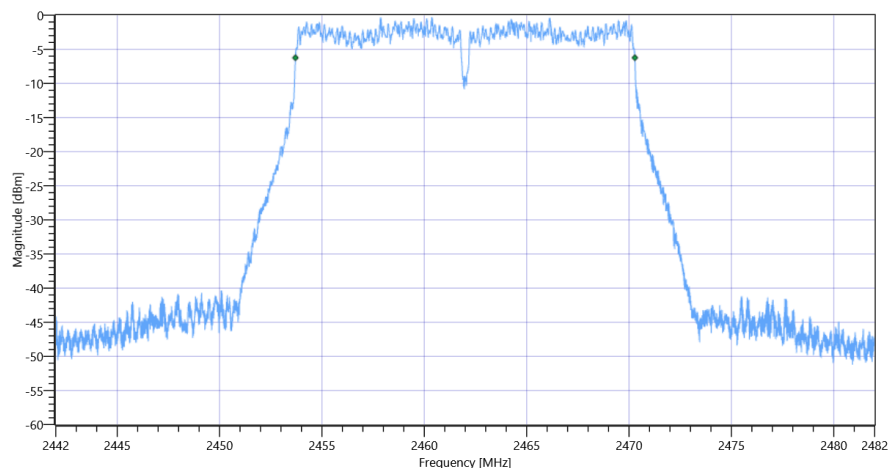
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.69	dBm	INFO
Ref. Frequency	---	---	2464.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.69 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	---	16580	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

General verdict

PASS

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

Test References	
TC Start	02.11.2022 11:46:55
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

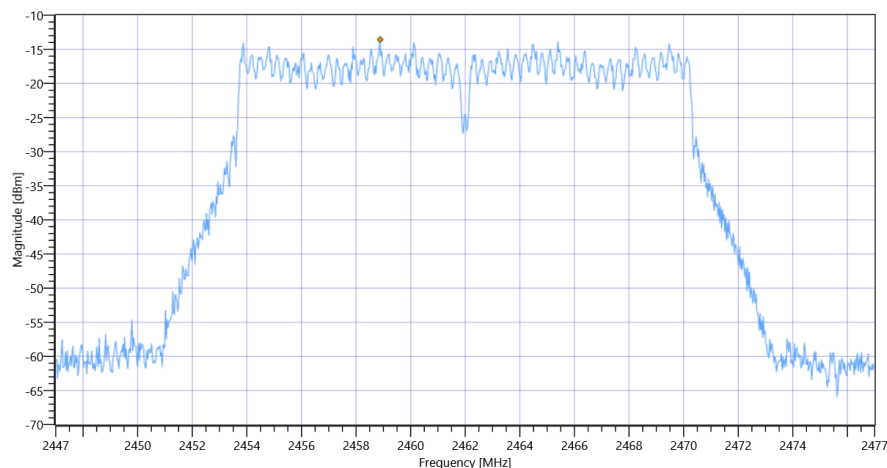
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.86	dBm	INFO
Ref. Frequency	---	---	2457.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.86 15.54 20
Start [MHz] Stop [MHz]	2447.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-13.56	dBm/3KHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	02.11.2022 11:47:43
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
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	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
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.	---	---	10.31	dBm	INFO
Ref. Frequency	---	---	2469.190	MHz	INFO

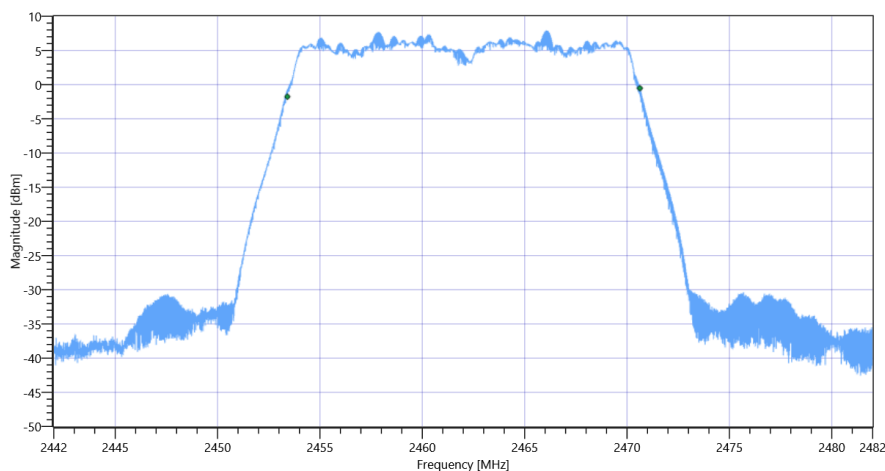
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.31 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

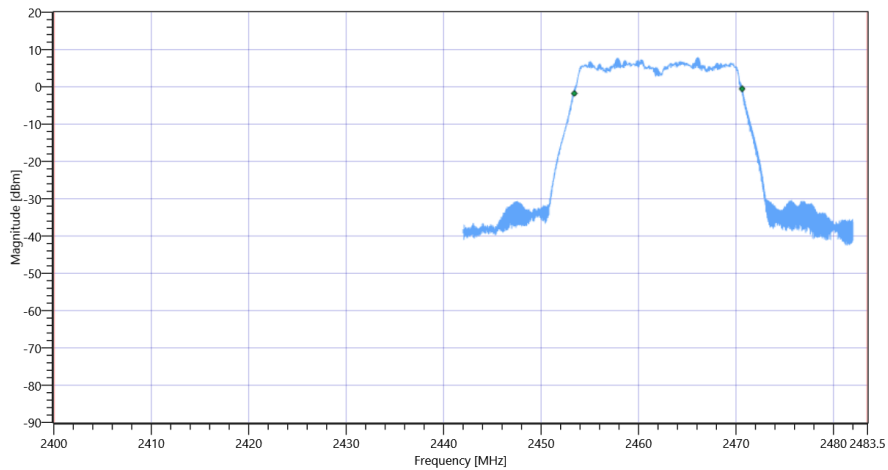
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17218.000	kHz	INFO
T1 99%	2400.000000	---	2453.4089	MHz	PASS
T2 99%	---	2483.500000	2470.6271	MHz	PASS

Plot: Bandwidth only



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

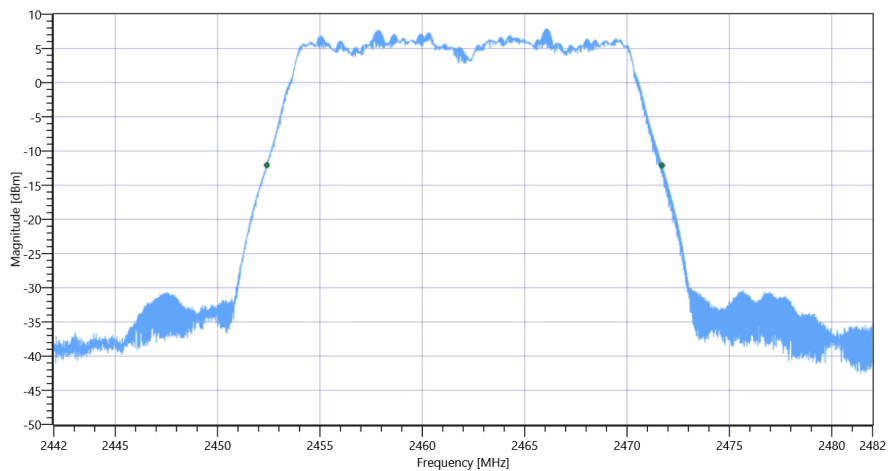
Plot: Bandwidth within Band



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

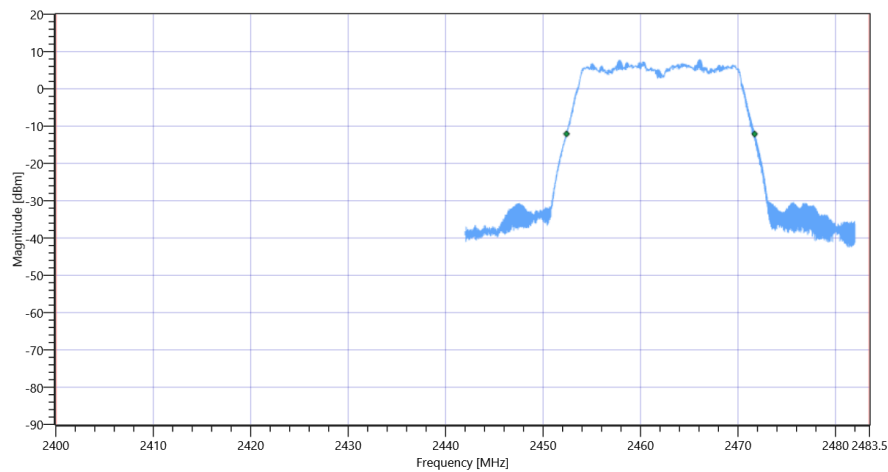
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19304	kHz	INFO
T1 20dB	2400.000000	---	2452.4040	MHz	PASS
T2 20dB	---	2483.500000	2471.7080	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

General verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

Test References	
TC Start	02.11.2022 11:48:46
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

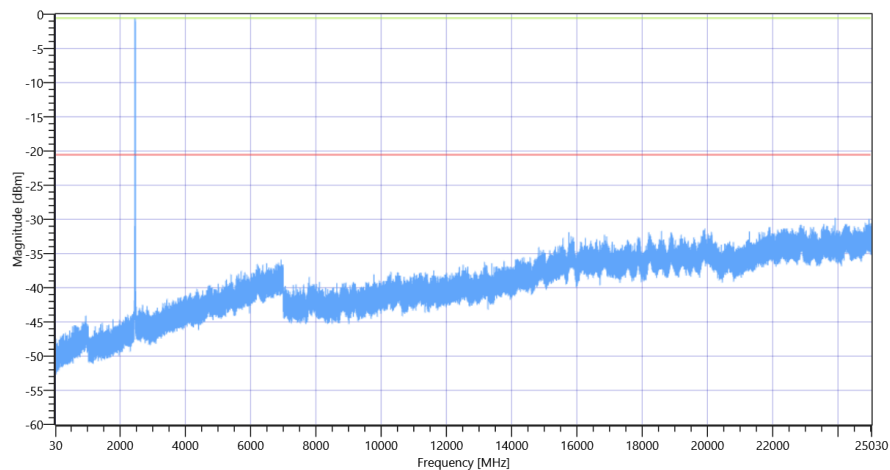
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.65	dBm	INFO
Ref. Frequency	---	---	2465.900	MHz	INFO

READ SA SETTINGS:

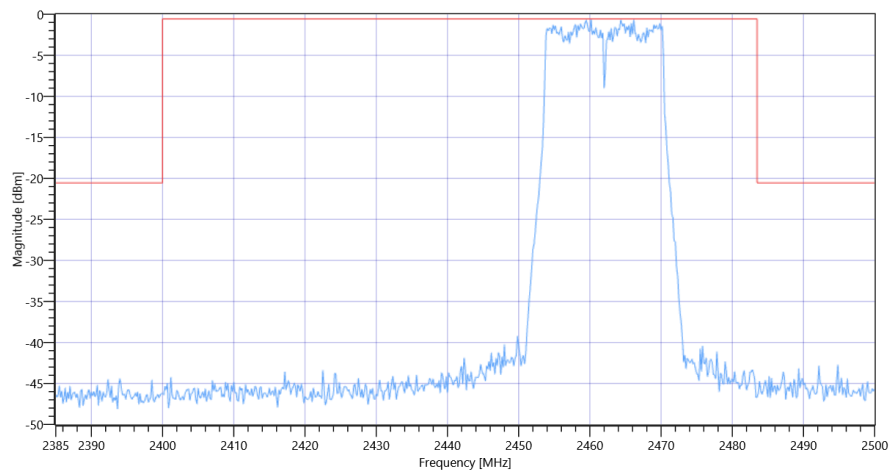
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.65 0 30
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2460.17 MHz	---	---	-0.56	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 23912.667 MHz	0	---	9.23	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2462



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode 2462

General verdict

PASS

FCC 15.247 # Maximum peak conducted output power PM DTS ~ WLAN2G4 g mode

Test References

TC Start	02.11.2022 11:57:56
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
TC Version	0.0.1
My Description	FCC 15.247 Max Peak Output Power Powermeter Conducted DTS - WLAN2G4 g mode
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	1
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 - PowerMeter

Test Equipment

Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test at TX 2462 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	24.63	dBm	PASS
General verdict			PASS		

Message with SA scan ~

Test References	
TC Start	02.11.2022 11:58:09
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	-
Test Method	
TC Version	0.0.1
My Description	Message with SA Scan n-HT20 mode
Add. Information	

Test Parameter	
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.11.2022 11:58:10
Message	set WLAN2G4 to n-HT20 mode, Frequency [MHz] 2412 ,

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

General verdict

INFO

Common 2G4 # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT20 mode

Test References

TC Start	02.11.2022 12:04:44
Ambit Temp [°C] Humidity [rel%]	26.9 36
System Version	3.3.1.5
Test Specification	Common 2G4 - none
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz WLAN2G4 n-HT20 mode
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	1
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
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.

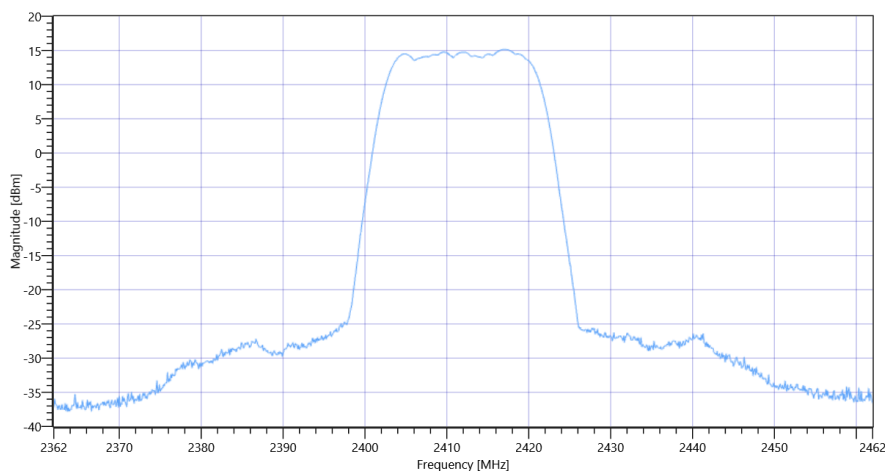
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.19	dBm	INFO
Ref. Frequency	---	---	2419.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.19 15.93 20
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 10 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	15.14	dBm	INFO
Peak Power	---	---	32.658783	mW	INFO
Frequency at Peak	---	---	2417.09	MHz	INFO



Common 2G4 # Peak output power 3MHz-3MHz ~ WLAN2G4 n-HT20 mode

General verdict

PASS

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

Test References

TC Start	02.11.2022 12:05:21
Ambit Temp [°C] Humidity [rel%]	26.9 36
System Version	3.3.1.5
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	1
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
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.

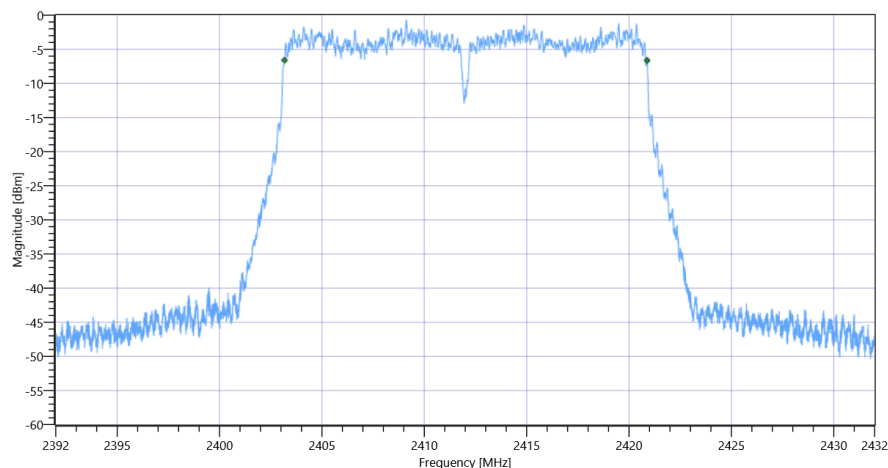
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.56	dBm	INFO
Ref. Frequency	---	---	2408.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.56 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	---	17708	kHz	PASS



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

General verdict

PASS

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

Test References

TC Start	02.11.2022 12:06:02
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN2G4 nHT20_mode
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	1
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
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.

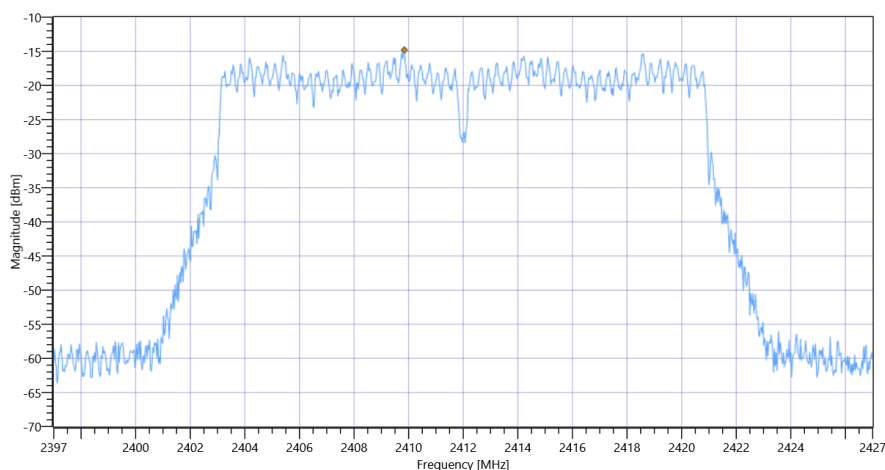
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.18	dBm	INFO
Ref. Frequency	---	---	2413.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.18 15.93 15
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1000 20 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-14.8	dBm/3KHz	PASS



FCC 15.247 # Peak power spectral density 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	02.11.2022 12:06:50
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
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	1
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
 Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92
 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.	---	---	9.24	dBm	INFO
Ref. Frequency	---	---	2414.800	MHz	INFO

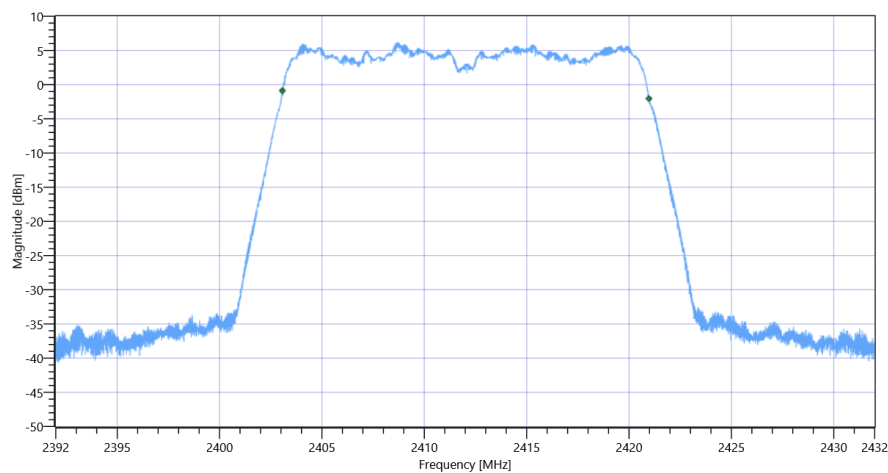
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.24 15.93 15
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

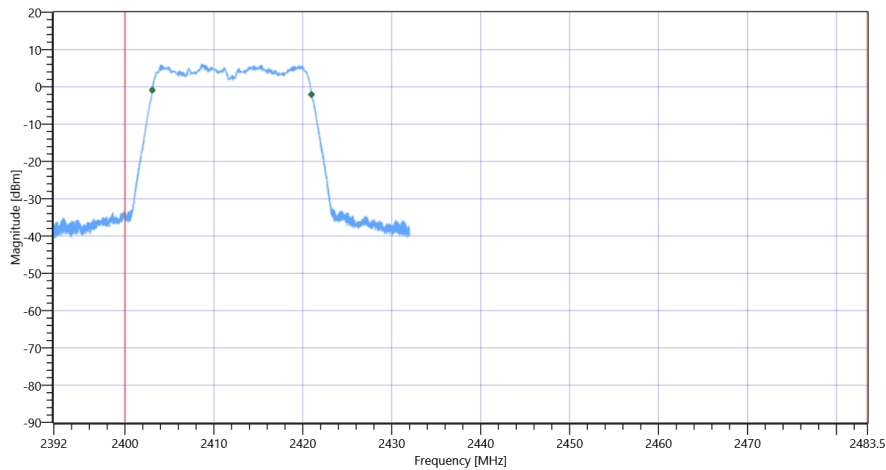
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17902.000	kHz	INFO
T1 99%	2400.000000	---	2403.0689	MHz	PASS
T2 99%	---	2483.500000	2420.9711	MHz	PASS

Plot: Bandwidth only



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

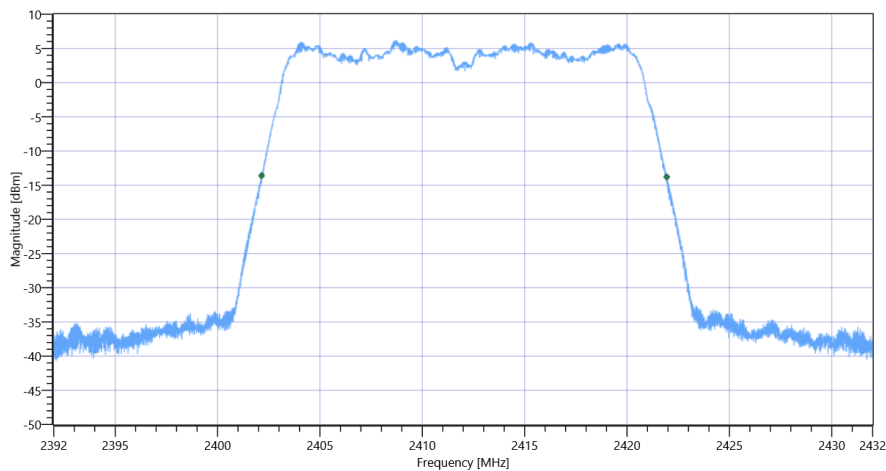
Plot: Bandwidth within Band



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

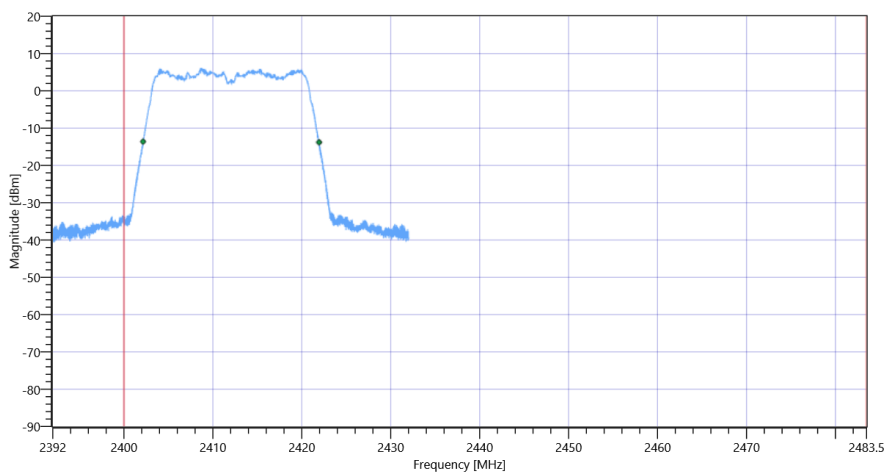
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19792	kHz	INFO
T1 20dB	2400.000000	---	2402.1480	MHz	PASS
T2 20dB	---	2483.500000	2421.9400	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISSED 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 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT20 mode

Test References	
TC Start	02.11.2022 12:07:52
Ambit Temp [°C] Humidity [rel%]	26.8 36
System Version	3.3.1.5
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS DTS - WLAN2G4 nHT20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	1
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	
Signaling unit,ANRITSU,MT8000A,6272278642,9.50.6.92	
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

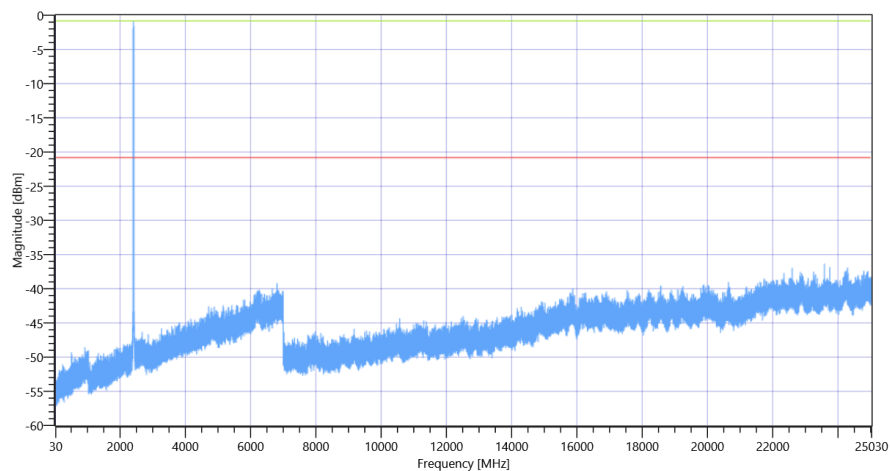
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.43	dBm	INFO
Ref. Frequency	---	---	2419.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.43 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2409.17 MHz	---	---	-0.83	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 23580.5 MHz	0	---	15.5	dB	INFO



FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT20 mode 2412