

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:30:59
Ambit Temp [°C] Humidity [rel%]	23.6 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.38	dBm	INFO
Ref. Frequency	---	---	2463.100	MHz	INFO

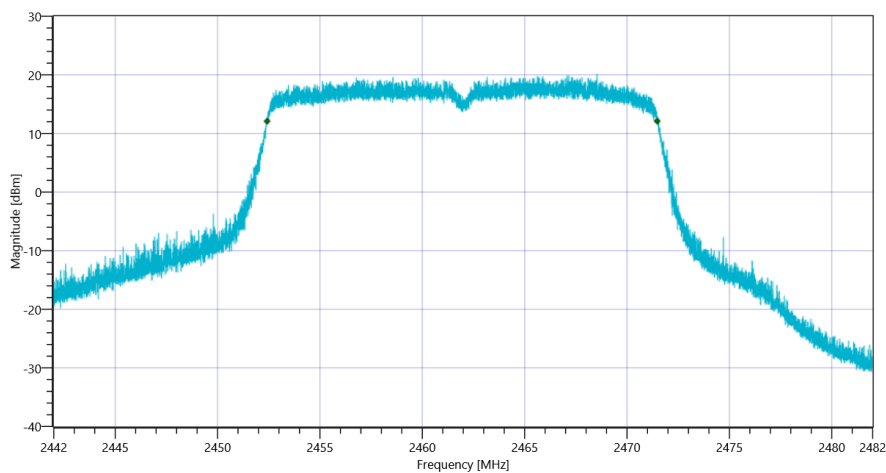
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.38 10.61 35
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

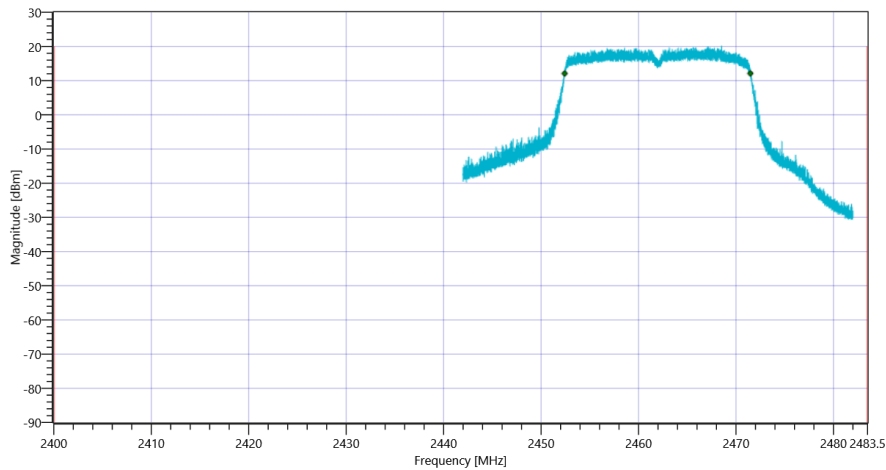
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19054.095	kHz	INFO
T1 99%	2400.000000	---	2452.4170	MHz	PASS
T2 99%	---	2483.500000	2471.4711	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 99PCT

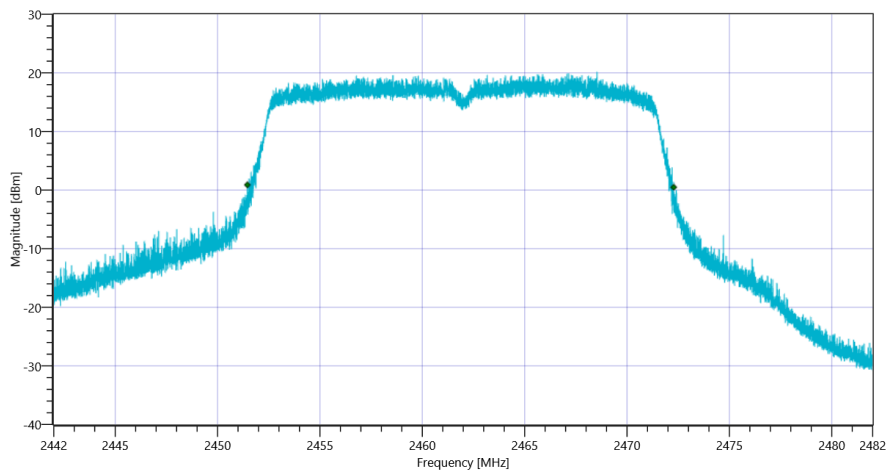
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

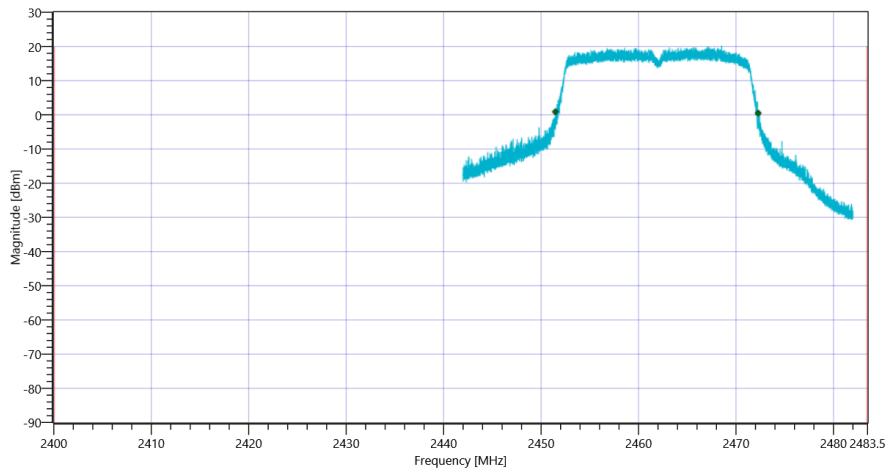
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20824	kHz	INFO	
T1 20dB	2400.000000	---	2451.4560	MHz	PASS	
T2 20dB	---	2483.500000	2472.2800	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:10:51
Ambit Temp [°C] Humidity [rel%]	23.5 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.19	dBm	INFO
Ref. Frequency	---	---	2408.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

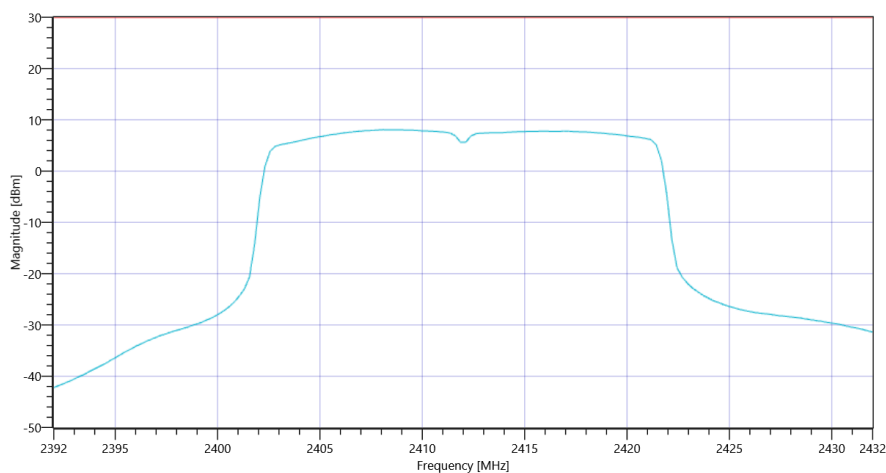
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.19 10.6 35
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
Avg Output Power uncorrected	---	---	22.8	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	22.8	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:26:54
Ambit Temp [°C] Humidity [rel%]	23.5 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.63	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

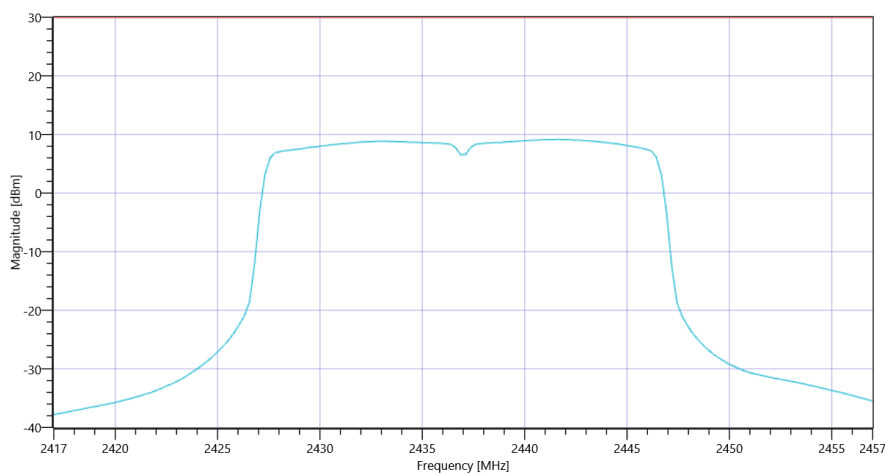
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.63 10.6 40
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
Avg Output Power uncorrected	---	---	23.94	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.94	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:39:31
Ambit Temp [°C] Humidity [rel%]	23.6 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.05	dBm	INFO
Ref. Frequency	---	---	2458.100	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

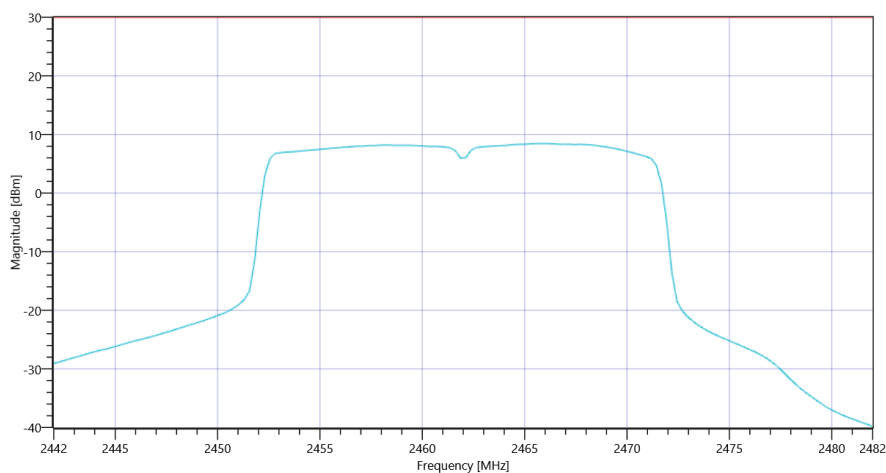
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.05 10.61 35
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
Avg Output Power uncorrected	---	---	23.29	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.29	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:03:22
Ambit Temp [°C] Humidity [rel%]	23.4 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

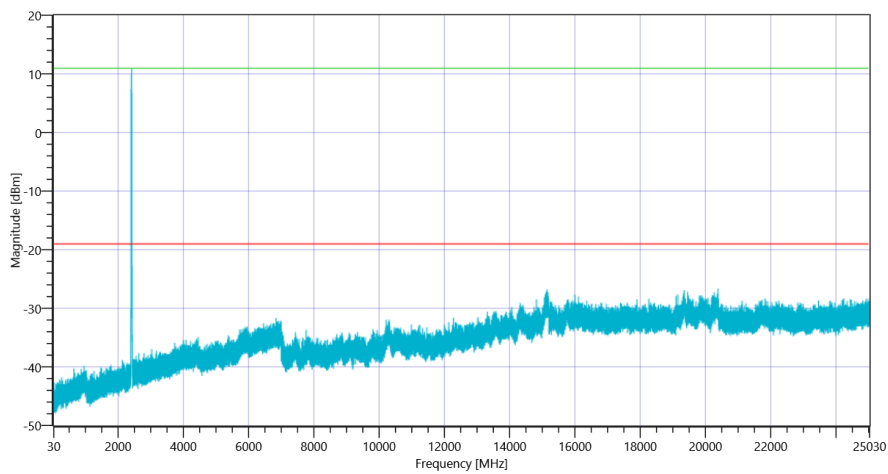
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.98	dBm	INFO
Ref. Frequency	---	---	2407.400	MHz	INFO

READ SA SETTINGS:

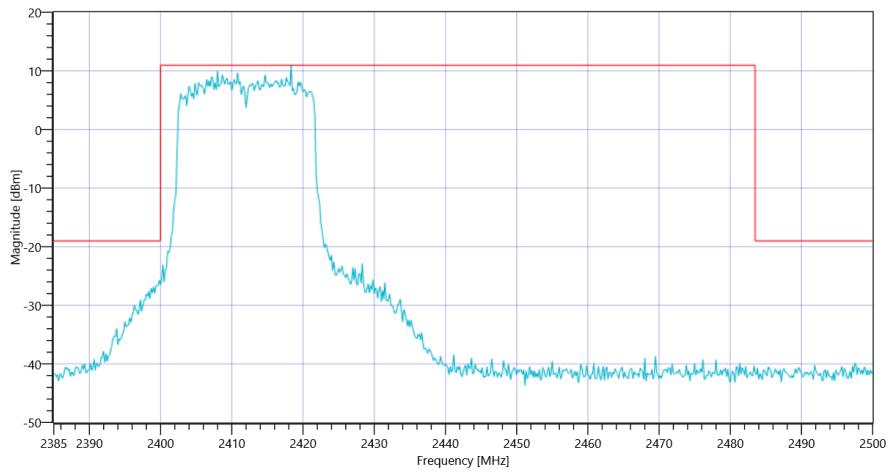
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.98 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2418.33 MHz	---	---	10.98	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	6.68	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2412



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2412

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:19:22
Ambit Temp [°C] Humidity [rel%]	23.5 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

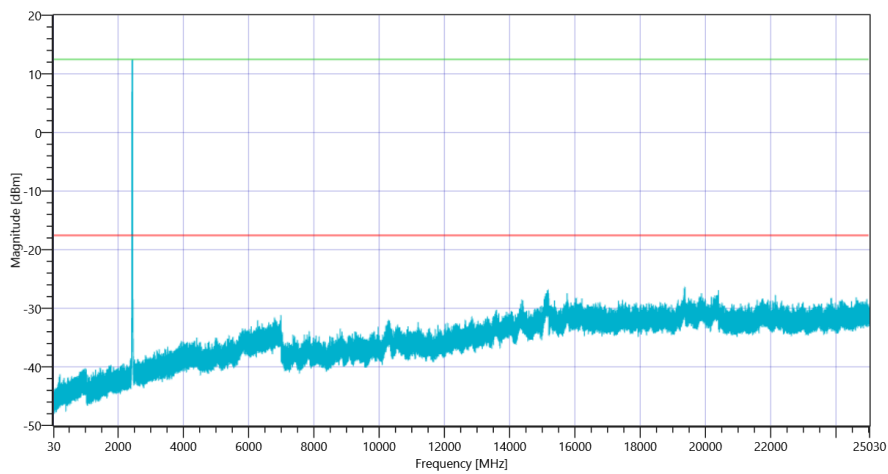
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.10	dBm	INFO
Ref. Frequency	---	---	2431.610	MHz	INFO

READ SA SETTINGS:

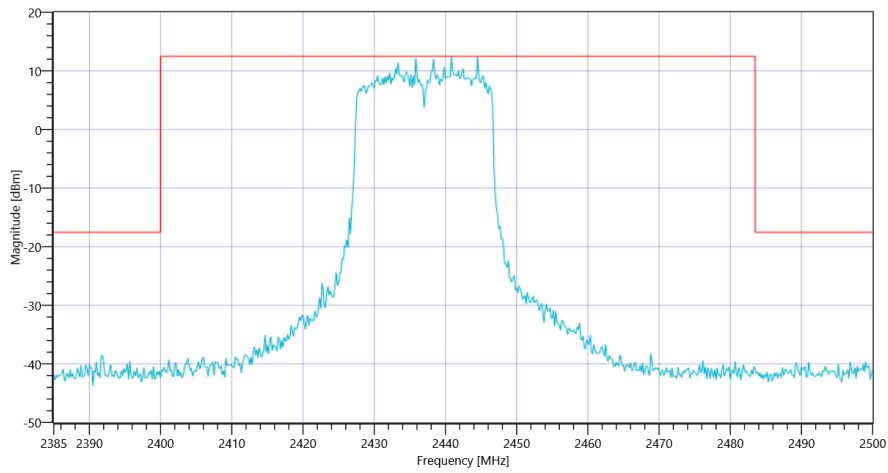
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.10 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2440.83 MHz	---	---	12.46	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 19372 MHz	0	---	8.8	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2437



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2437

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 11:31:58
Ambit Temp [°C] Humidity [rel%]	23.6 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	3
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

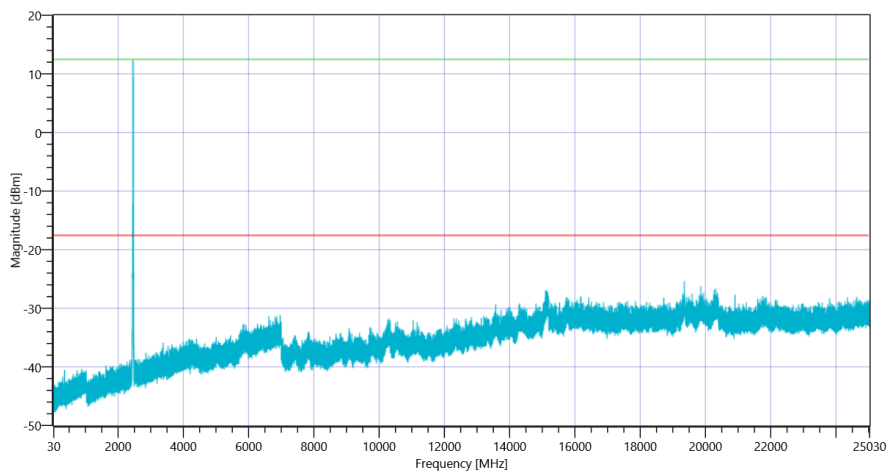
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.98	dBm	INFO
Ref. Frequency	---	---	2457.800	MHz	INFO

READ SA SETTINGS:

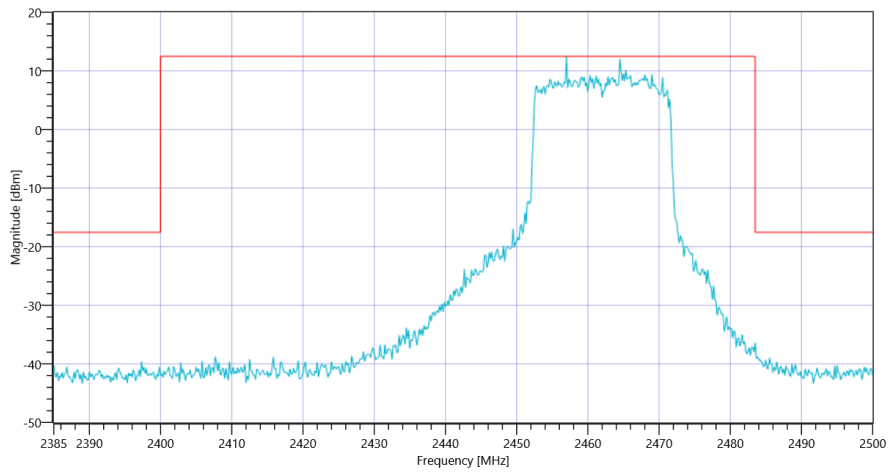
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.98 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2457.00 MHz	---	---	12.44	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 19352 MHz	0	---	7.82	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2462



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2462

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:18:08
Ambit Temp [°C] Humidity [rel%]	23.2 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.13	dBm	INFO
Ref. Frequency	---	---	2418.890	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

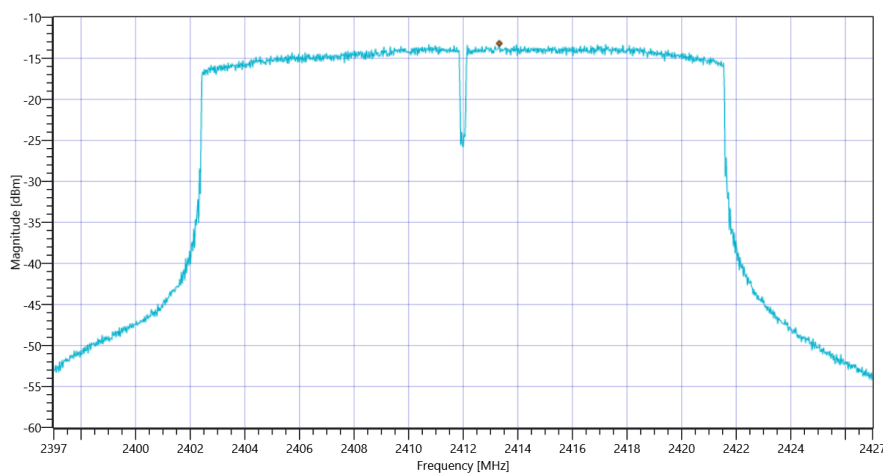
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.13 10.6 35
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
Avg PSD uncorrected	---	---	-13.18	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-13.18	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:30:26
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.35	dBm	INFO
Ref. Frequency	---	---	2432.700	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

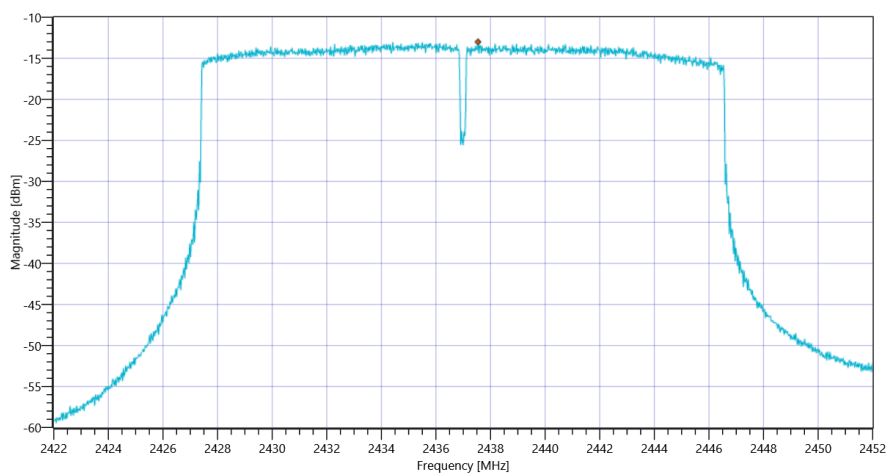
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.35 10.6 35
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
Avg PSD uncorrected	---	---	-13	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-13	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:42:35
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.18	dBm	INFO
Ref. Frequency	---	---	2459.500	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

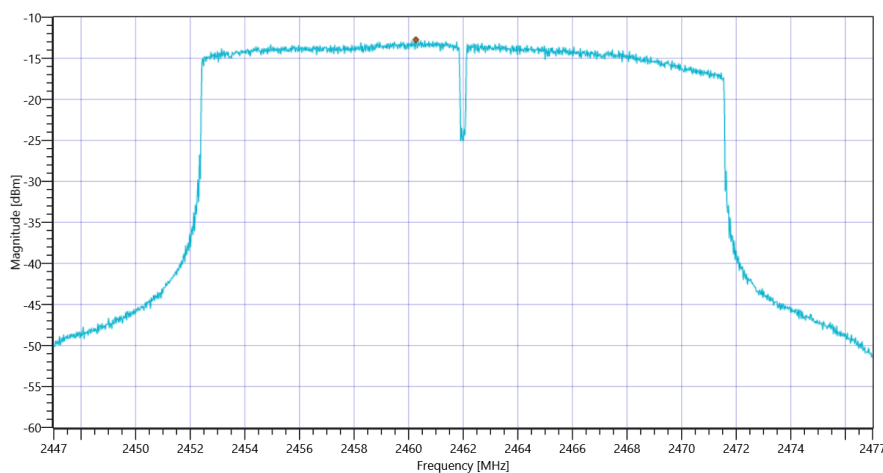
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.18 10.61 35
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
Avg PSD uncorrected	---	---	-12.75	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-12.75	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:17:29
Ambit Temp [°C] Humidity [rel%]	23.2 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

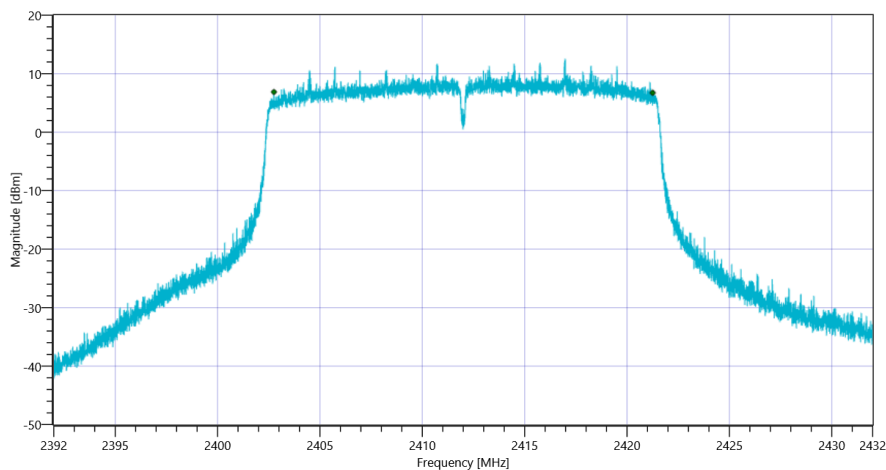
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.16	dBm	INFO
Ref. Frequency	---	---	2417.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.16 10.6 35
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	---	18500	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:29:48
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

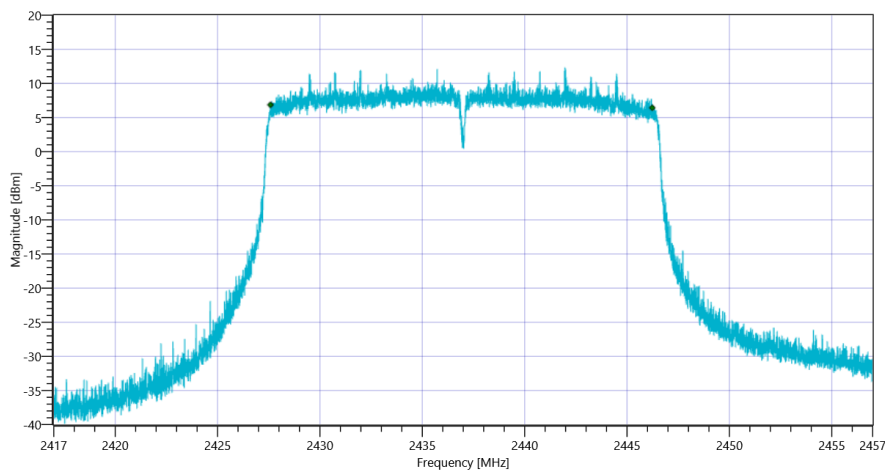
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.66	dBm	INFO
Ref. Frequency	---	---	2434.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.66 10.6 35
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	---	18648	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:41:56
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

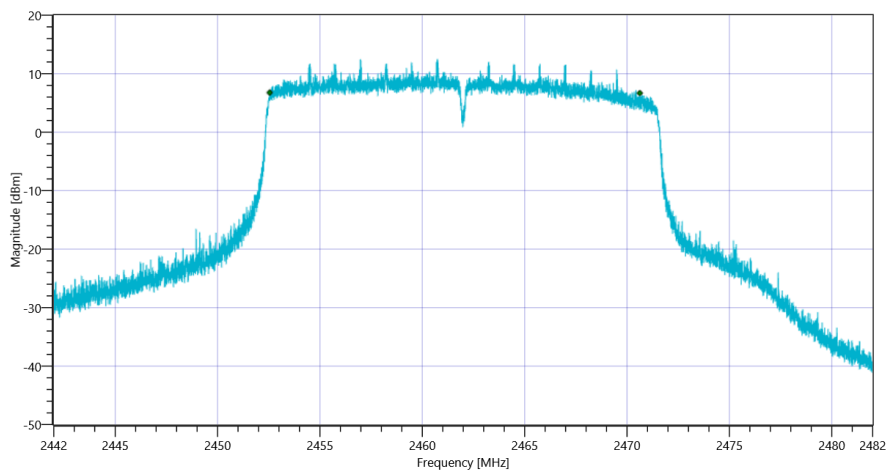
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.40	dBm	INFO
Ref. Frequency	---	---	2453.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.40 10.61 35
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	---	18080	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:19:15
Ambit Temp [°C] Humidity [rel%]	23.2 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.75	dBm	INFO
Ref. Frequency	---	---	2414.200	MHz	INFO

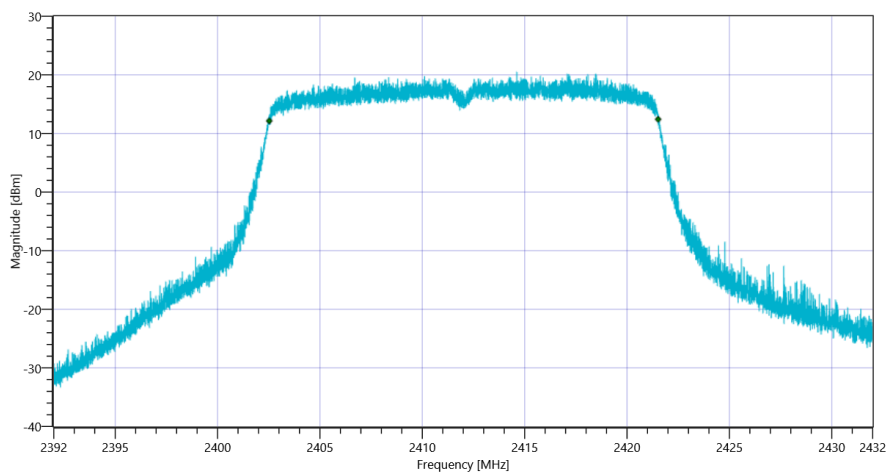
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.75 10.6 35
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

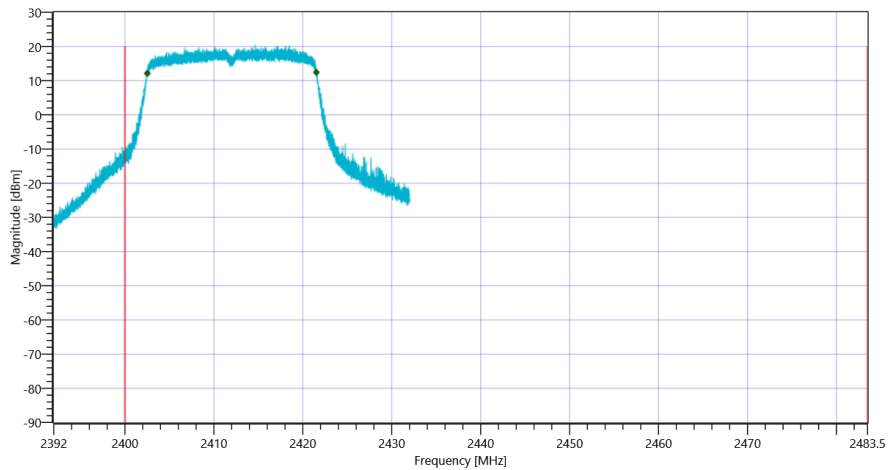
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18994.101	kHz	INFO
T1 99%	2400.000000	---	2402.5249	MHz	PASS
T2 99%	---	2483.500000	2421.5190	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 99PCT

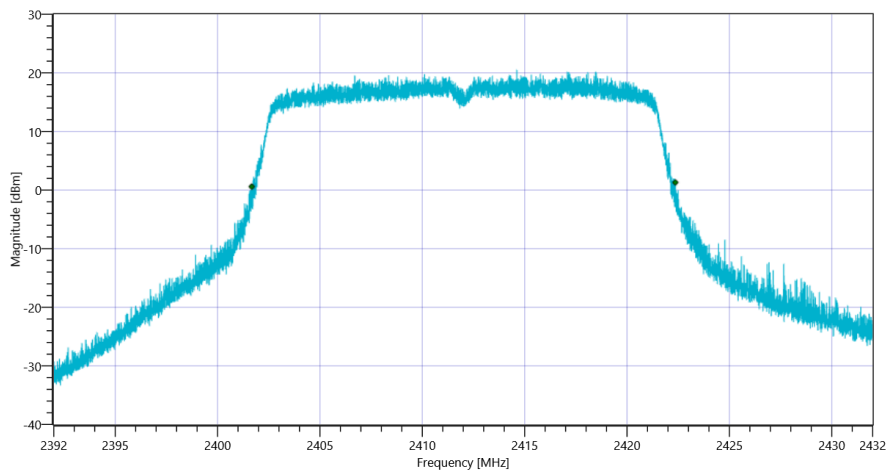
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

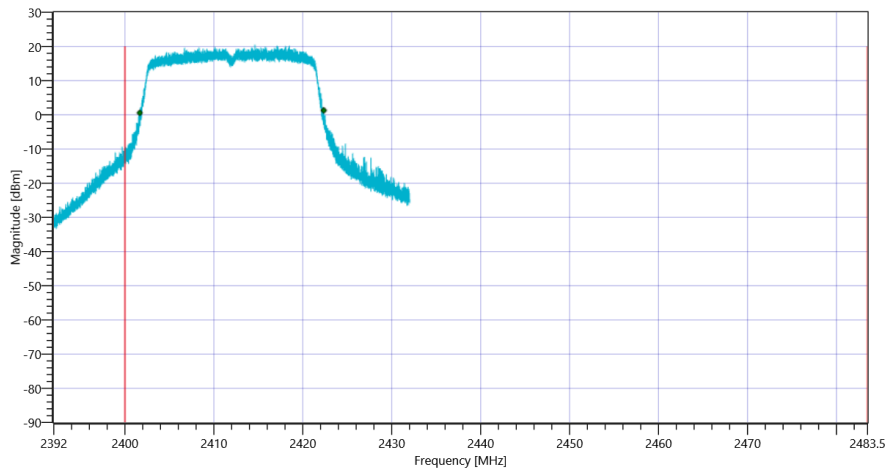
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20692	kHz	INFO
T1 20dB	2400.000000	---	2401.6680	MHz	PASS
T2 20dB	---	2483.500000	2422.3600	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:31:33
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.56	dBm	INFO
Ref. Frequency	---	---	2438.900	MHz	INFO

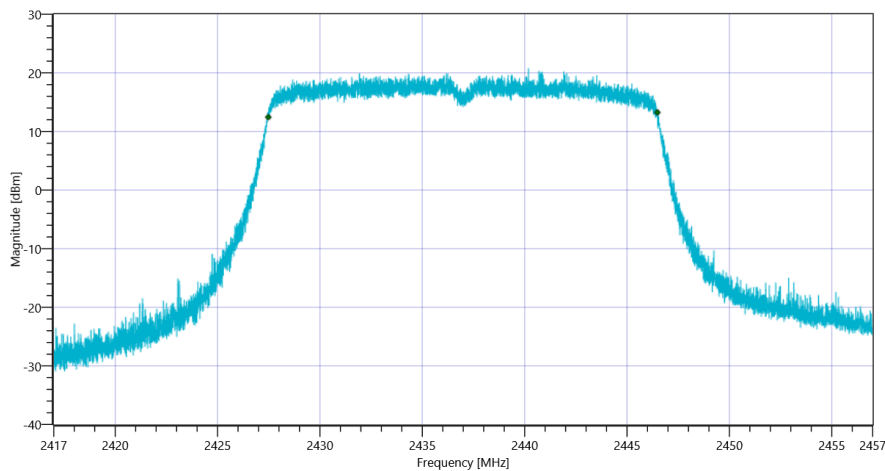
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.56 10.6 35
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

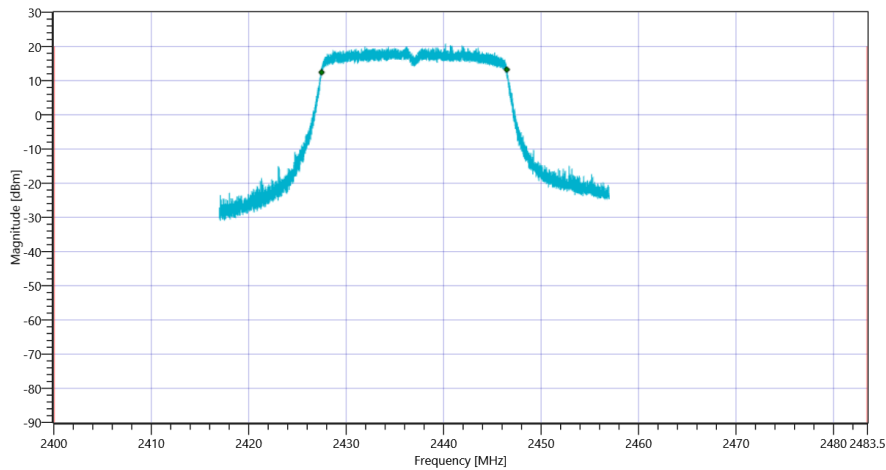
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19002.100	kHz	INFO
T1 99%	2400.000000	---	2427.4770	MHz	PASS
T2 99%	---	2483.500000	2446.4791	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 99PCT

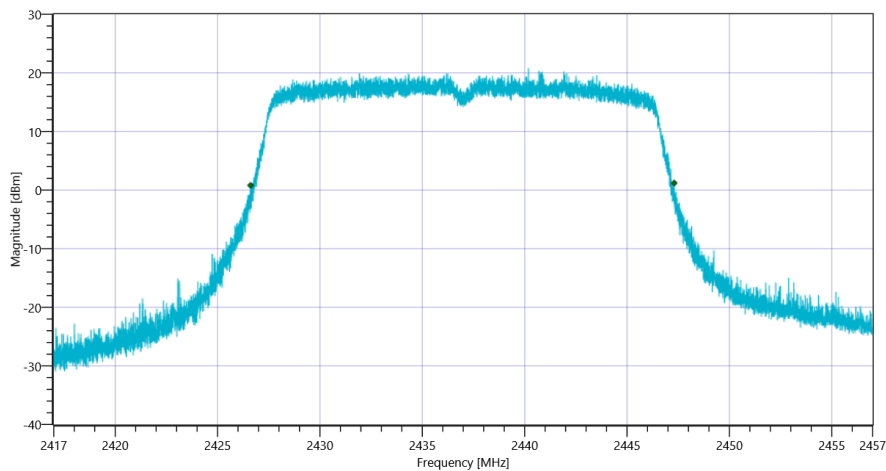
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

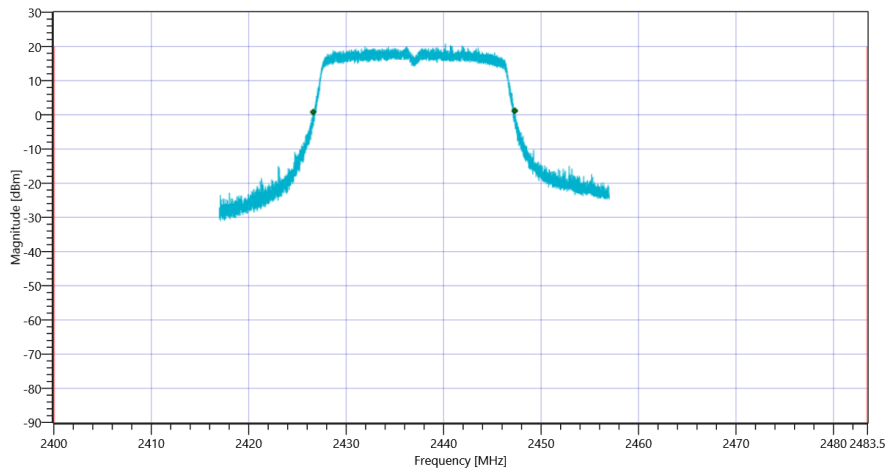
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20696	kHz	INFO	
T1 20dB	2400.000000	---	2426.6080	MHz	PASS	
T2 20dB	---	2483.500000	2447.3040	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:43:42
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.83	dBm	INFO
Ref. Frequency	---	---	2459.200	MHz	INFO

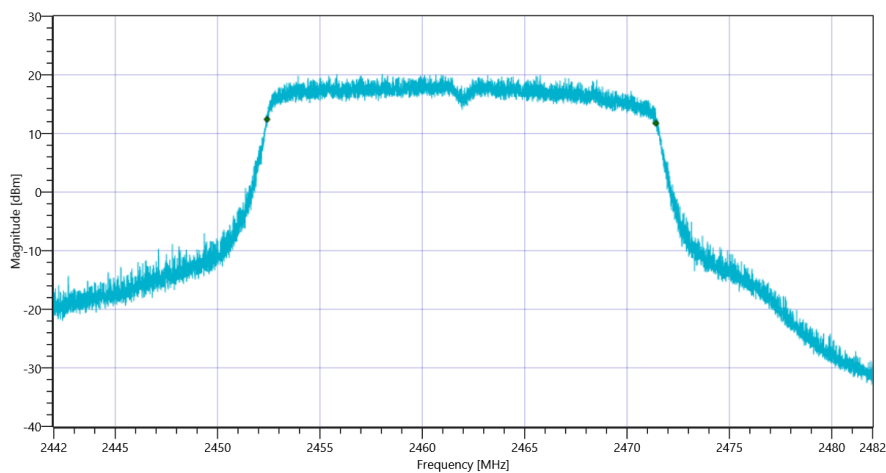
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.83 10.61 35
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

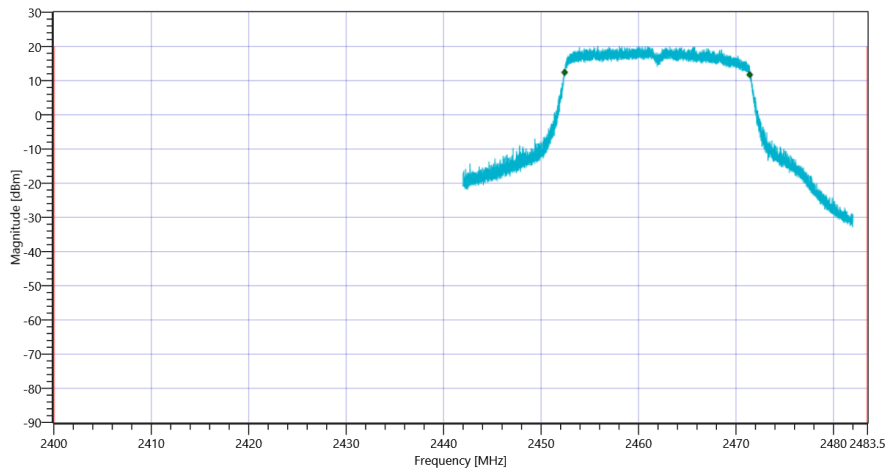
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18990.101	kHz	INFO
T1 99%	2400.000000	---	2452.4170	MHz	PASS
T2 99%	---	2483.500000	2471.4071	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 99PCT

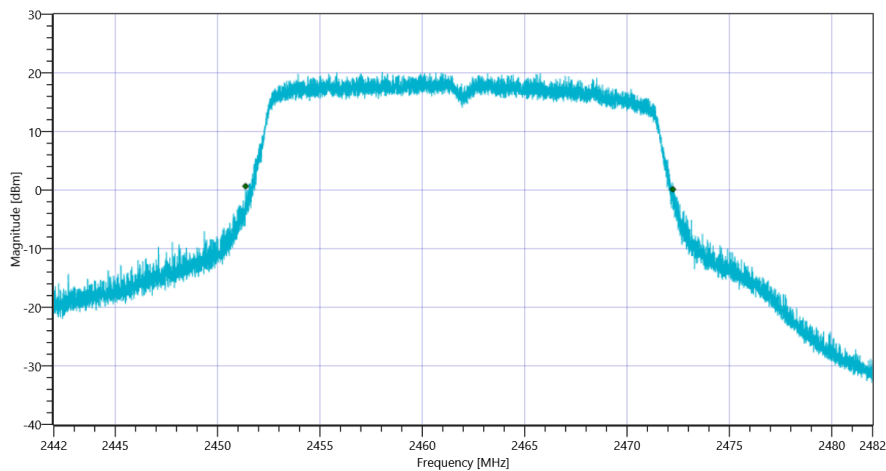
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

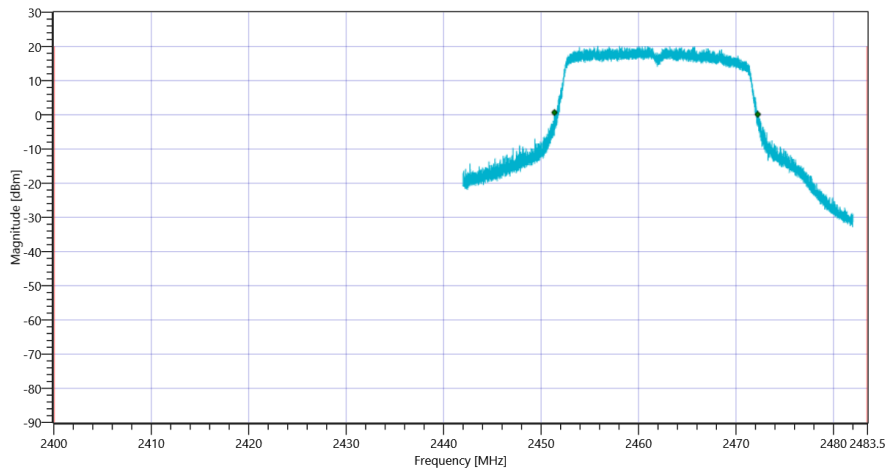
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20868	kHz	INFO	
T1 20dB	2400.000000	---	2451.3680	MHz	PASS	
T2 20dB	---	2483.500000	2472.2360	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:27:47
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.58	dBm	INFO
Ref. Frequency	---	---	2417.390	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

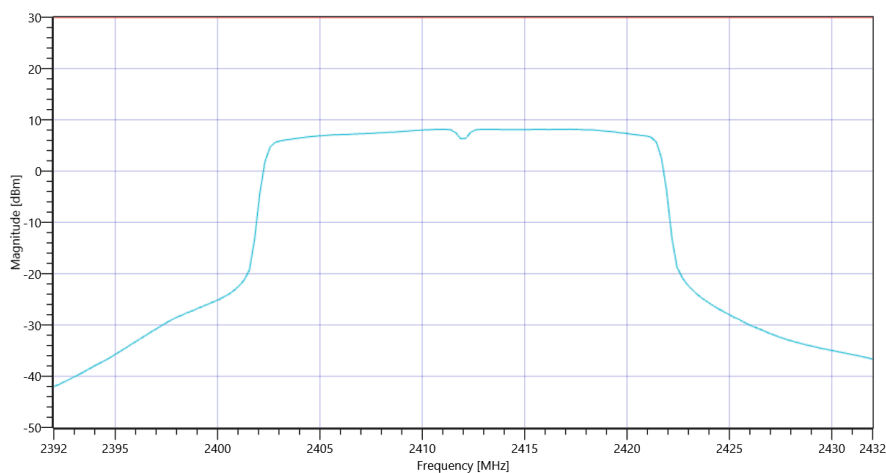
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.58 10.6 35
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
Avg Output Power uncorrected	---	---	23.08	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.08	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:40:07
Ambit Temp [°C] Humidity [rel%]	23.2 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.58	dBm	INFO
Ref. Frequency	---	---	2434.100	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

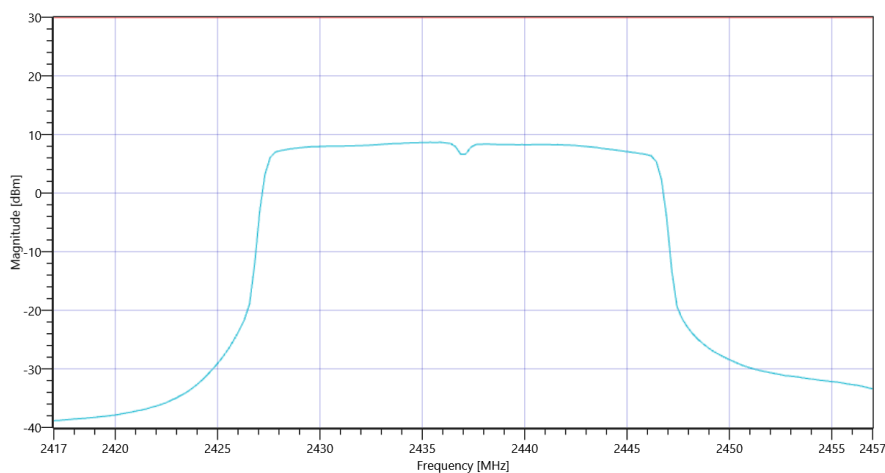
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.58 10.6 40
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
Avg Output Power uncorrected	---	---	23.5	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.5	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:52:16
Ambit Temp [°C] Humidity [rel%]	23.4 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20-mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.14	dBm	INFO
Ref. Frequency	---	---	2459.100	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

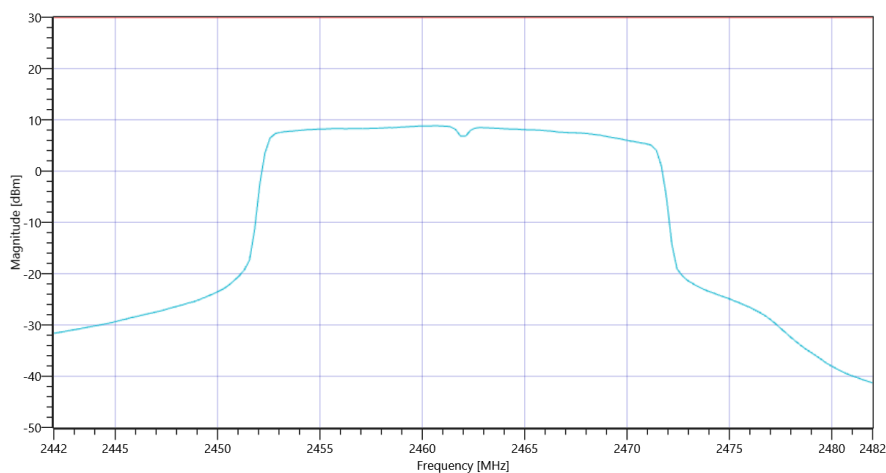
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.14 10.61 35
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
Avg Output Power uncorrected	---	---	23.4	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.4	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 axHE20-mode

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:20:17
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2412 MHz

RESULT: Reference Power cond.

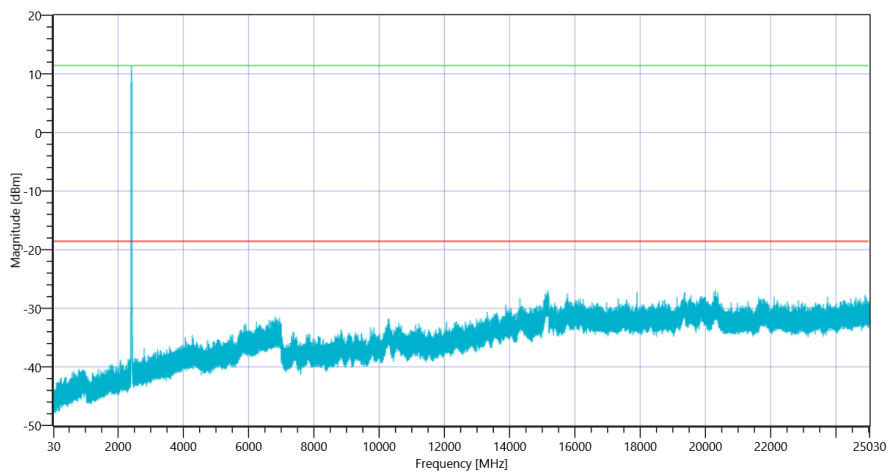
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.65	dBm	INFO
Ref. Frequency	---	---	2418.390	MHz	INFO

READ SA SETTINGS:

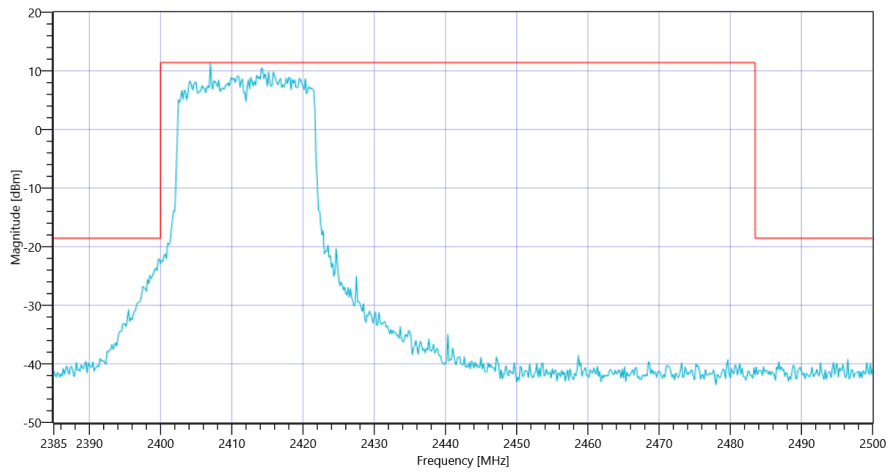
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.65 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2407.00 MHz	---	---	11.41	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	3.51	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2412



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2412

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:32:35
Ambit Temp [°C] Humidity [rel%]	23.2 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2437 MHz

RESULT: Reference Power cond.

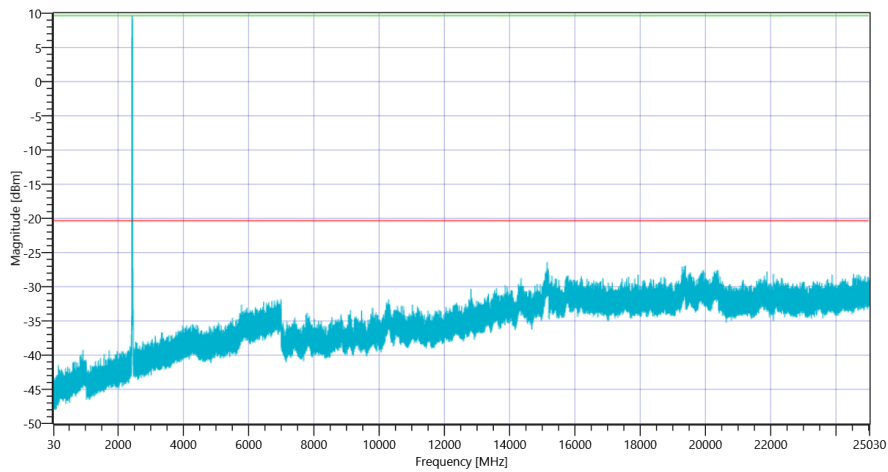
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.30	dBm	INFO
Ref. Frequency	---	---	2437.800	MHz	INFO

READ SA SETTINGS:

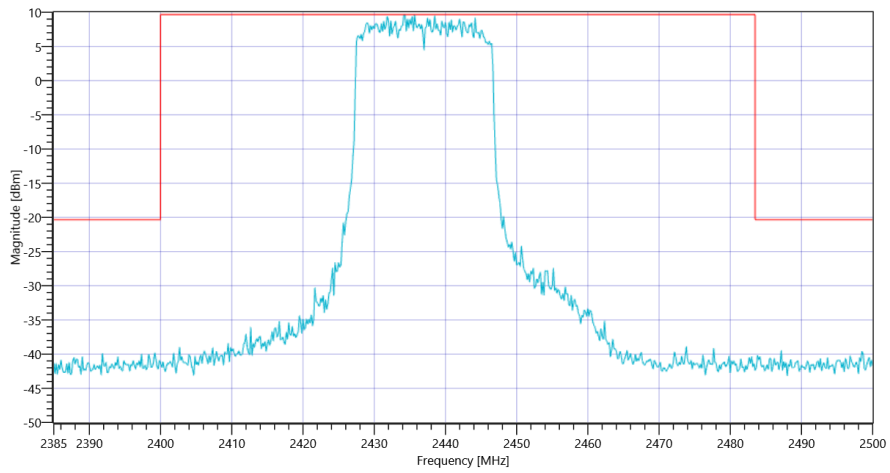
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.30 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2434.17 MHz	---	---	9.65	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 15141.5 MHz	0	---	6.04	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2437



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2437

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode

Test References	
TC Start	10.03.2022 10:44:44
Ambit Temp [°C] Humidity [rel%]	23.3 19
System Version	3.0.5.0
Test Specification	FCC Part 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 - WLAN 2G4 axHE20_mode
Add. Information	

EUT Common Settings WLAN2G4	
Number of Antenna Ports	4
User Interaction	No

Test Parameter	
Technology to test	WLAN2G4 axHE20-mode
Antenna Port used	4
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]	0.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Test at TX 2462 MHz

RESULT: Reference Power cond.

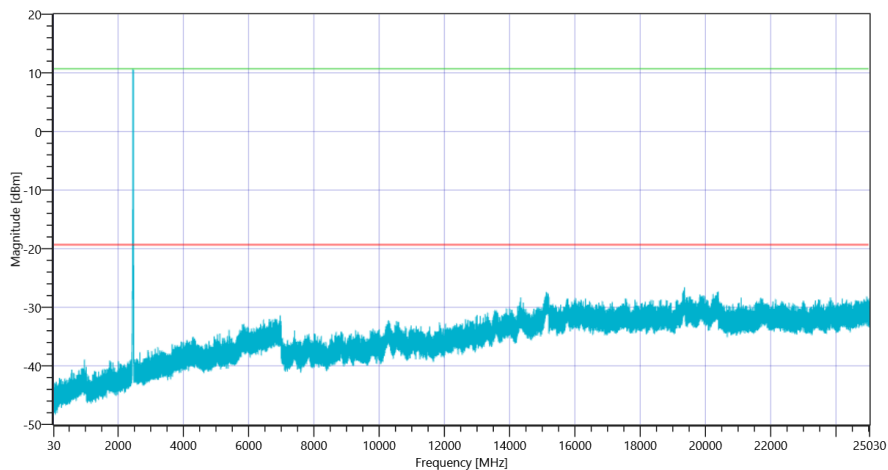
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.11	dBm	INFO
Ref. Frequency	---	---	2458.400	MHz	INFO

READ SA SETTINGS:

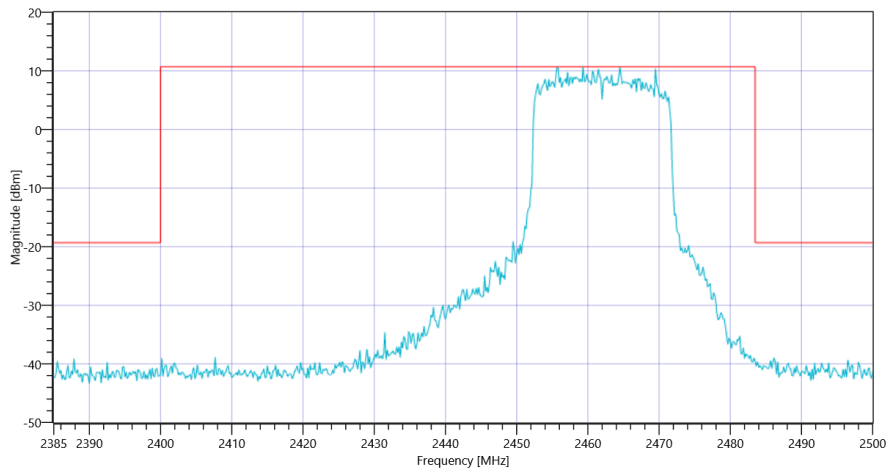
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.11 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2459.33 MHz	---	---	10.69	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 19356.333 MHz	0	---	7.29	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2462



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 axHE20-mode 2462

General verdict

PASS

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