Measurement Results

No.1-4095/22-01-04_Annex_MR_A4

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EUT Information

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

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 11:52:50
Ambit Temp [°C] | Humidity [rel%]	25.0 | 34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

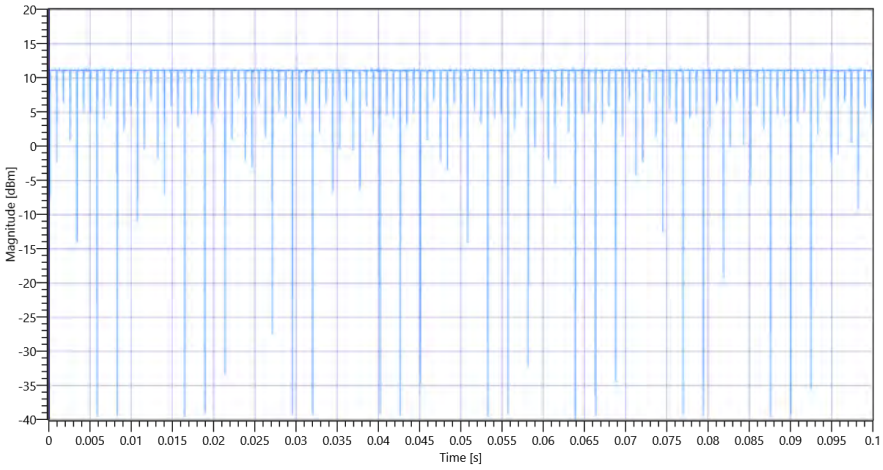
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.43	dBm	INFO
Ref. Frequency	---	---	2411.100	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:58					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



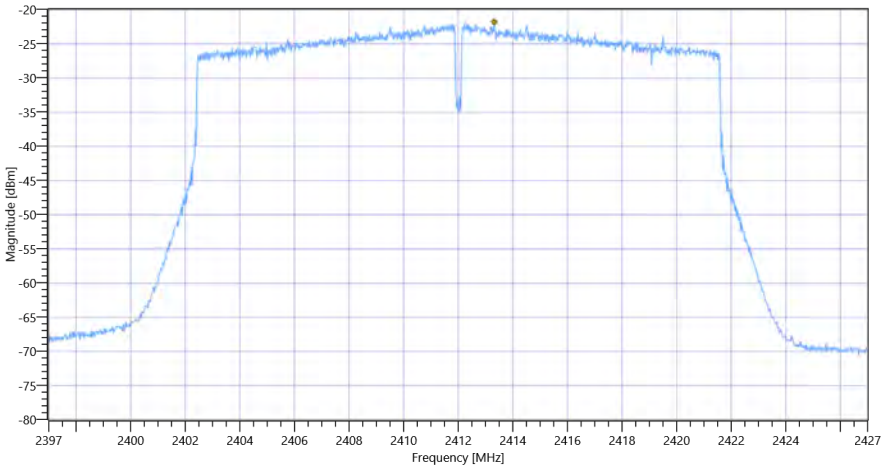
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2412 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.43 | 15.93 | 15
Start [MHz] | Stop [MHz]	2397.000 | 2427.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-21.78	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-21.37	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:40:25
Ambit Temp [°C] | Humidity [rel%]	25.1 | 33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

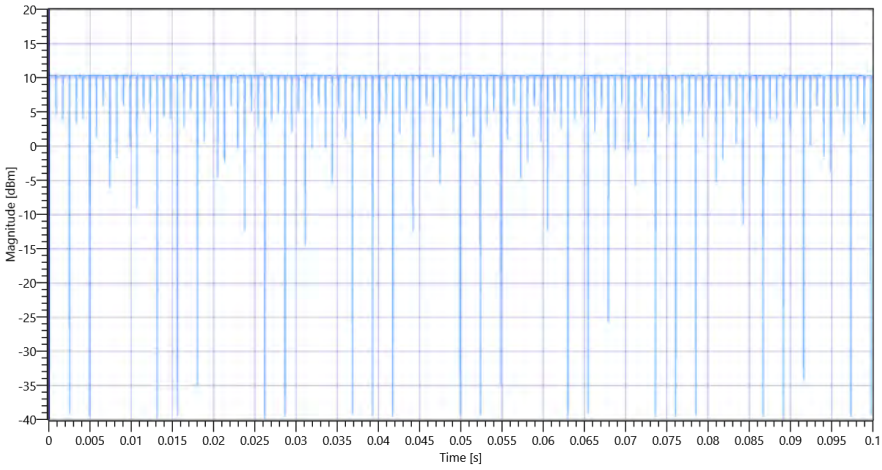
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.39	dBm	INFO
Ref. Frequency	---	---	2432.400	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:54					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



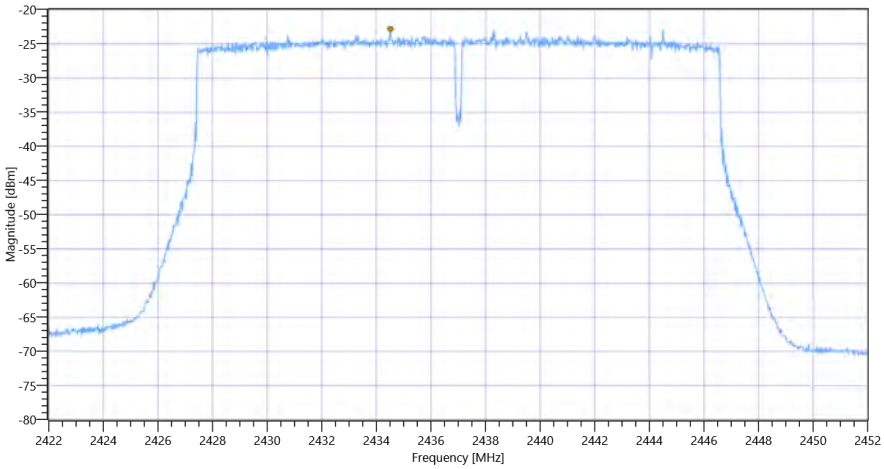
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2437 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.39 | 15.7 | 15
Start [MHz] | Stop [MHz]	2422.000 | 2452.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-22.83	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-22.42	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:56:42
Ambit Temp [°C] | Humidity [rel%]	25.4 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

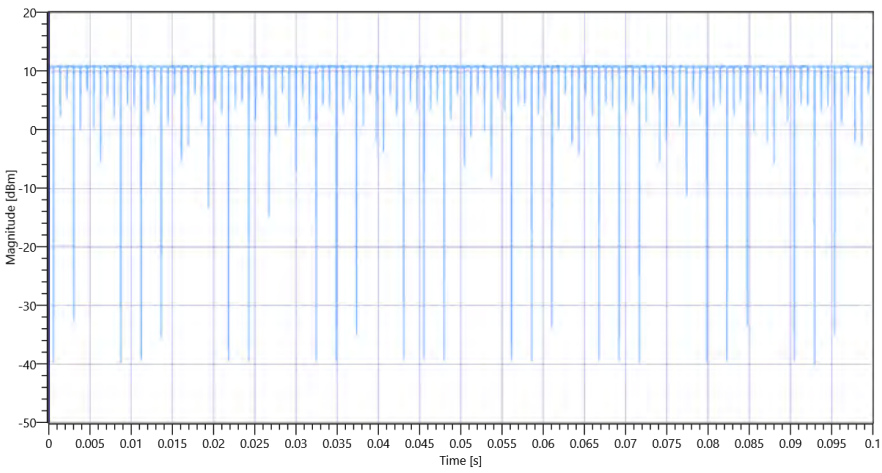
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.73	dBm	INFO
Ref. Frequency	---	---	2459.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:54					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



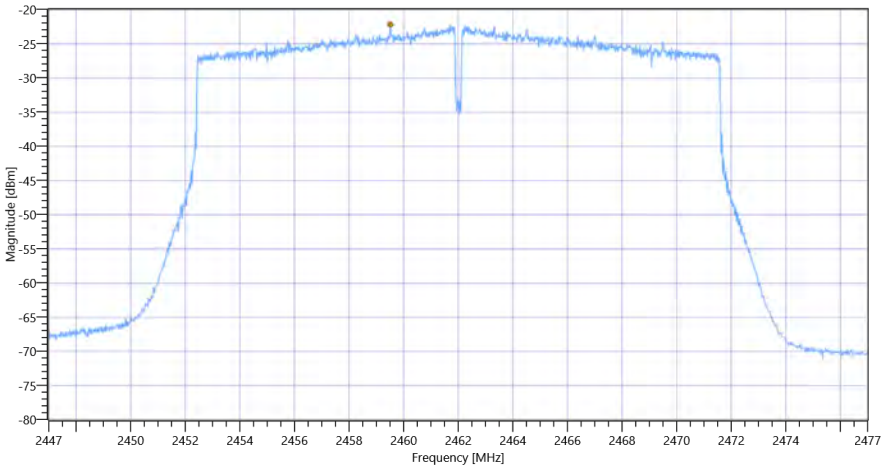
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2462 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.73 | 15.54 | 15
Start [MHz] | Stop [MHz]	2447.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-22.19	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-21.78	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:11:01
Ambit Temp [°C] | Humidity [rel%]	25.7 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

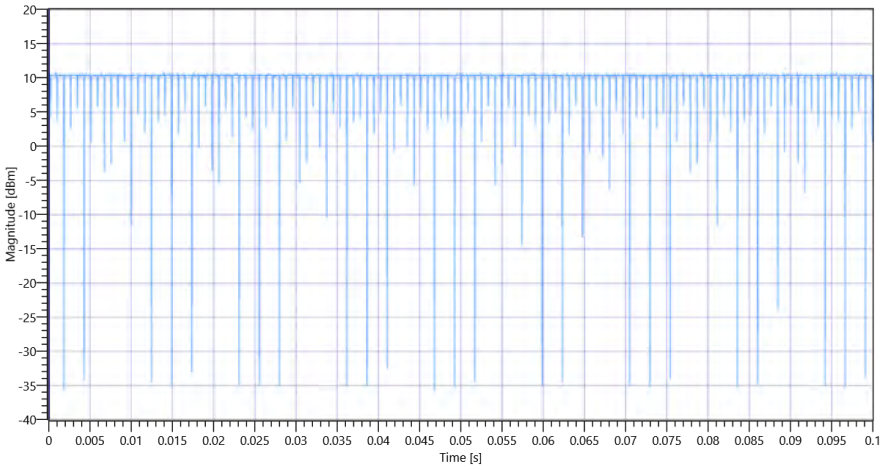
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.06	dBm	INFO
Ref. Frequency	---	---	2412.600	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:58					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



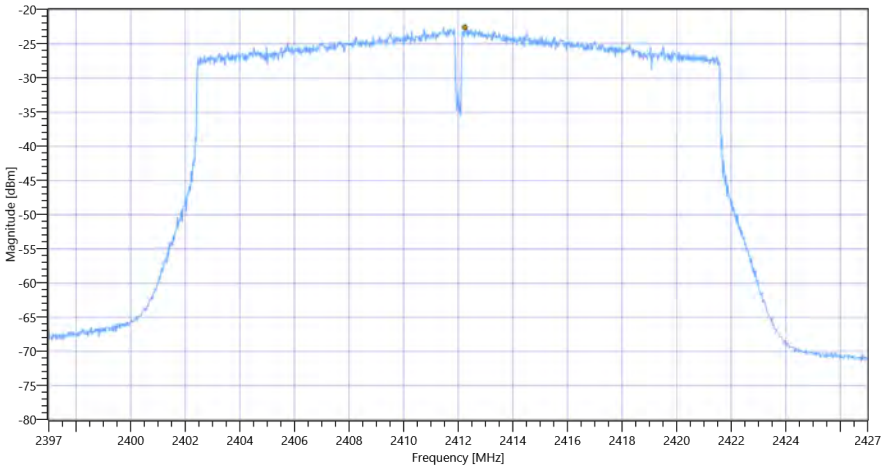
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2412 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	16.06 | 15.93 | 20
Start [MHz] | Stop [MHz]	2397.000 | 2427.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-22.56	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-22.15	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:26:48
Ambit Temp [°C] | Humidity [rel%]	25.8 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

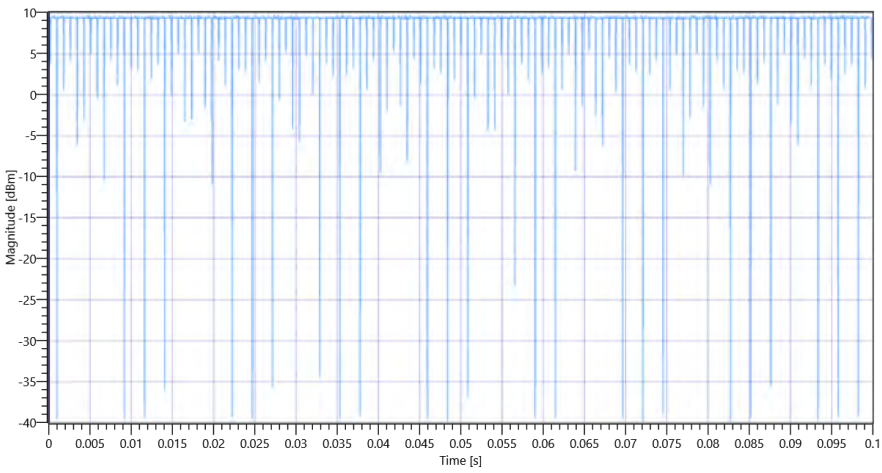
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.61	dBm	INFO
Ref. Frequency	---	---	2443.890	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:53					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



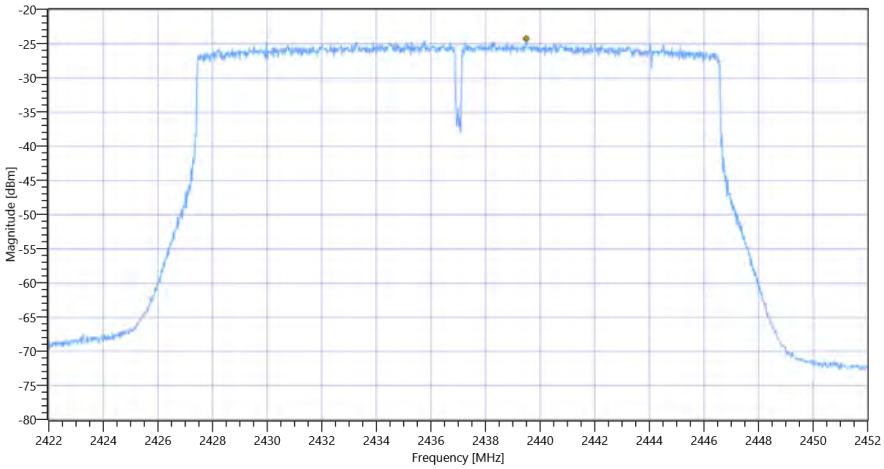
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2437 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.61 | 15.7 | 15
Start [MHz] | Stop [MHz]	2422.000 | 2452.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-24.23	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-23.82	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:40:58
Ambit Temp [°C] | Humidity [rel%]	26.1 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

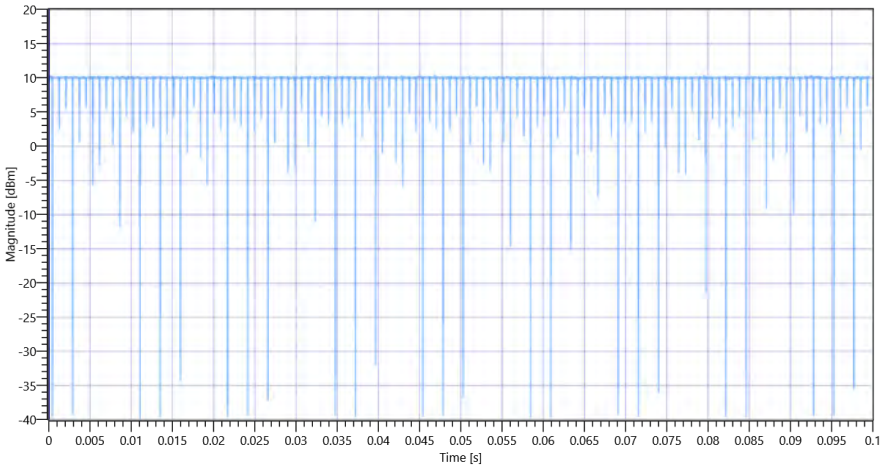
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.96	dBm	INFO
Ref. Frequency	---	---	2458.200	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:56					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



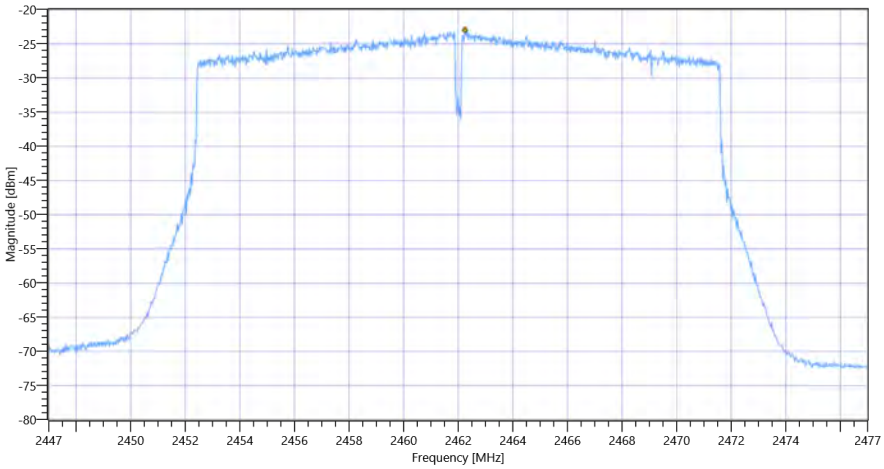
FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20 2462 MHz - DutyCycle

Avg. PSD

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.96 | 15.54 | 15
Start [MHz] | Stop [MHz]	2447.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	334 | 100 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	---	---	-22.99	dBm	INFO
Duty cycle correction	---	---	0.41	dB	INFO
Avg PSD DC corrected	---	8	-22.58	dBm/3KHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 11:52:10
Ambit Temp [°C] | Humidity [rel%]	25.0 | 34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

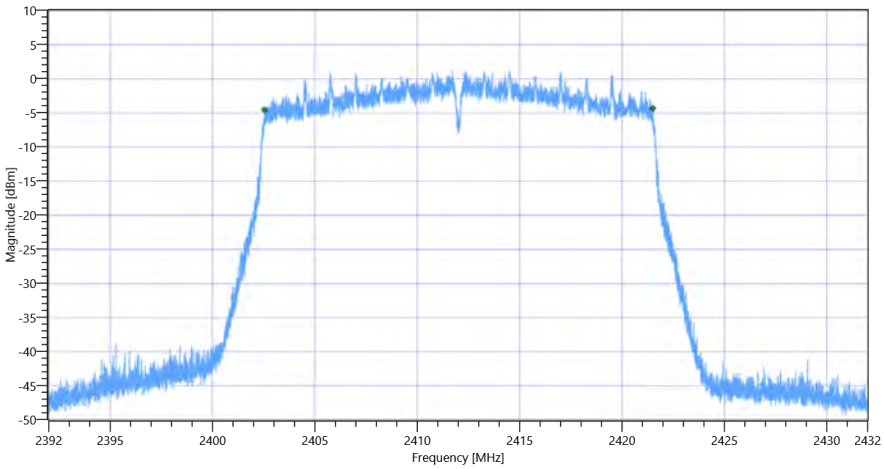
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.59	dBm	INFO
Ref. Frequency	---	---	2414.700	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.59 | 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	---	18960	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:39:48
Ambit Temp [°C] | Humidity [rel%]	25.1 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

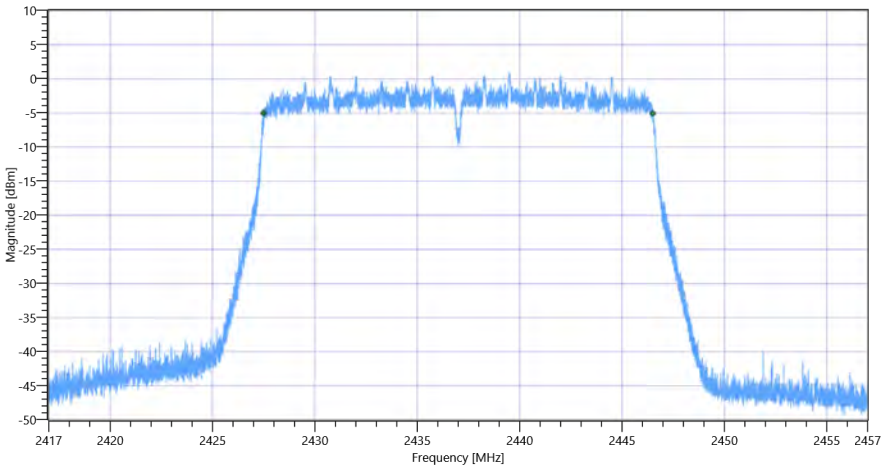
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.95	dBm	INFO
Ref. Frequency	---	---	2435.200	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.95 | 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	---	19016	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:56:04
Ambit Temp [°C] | Humidity [rel%]	25.4 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

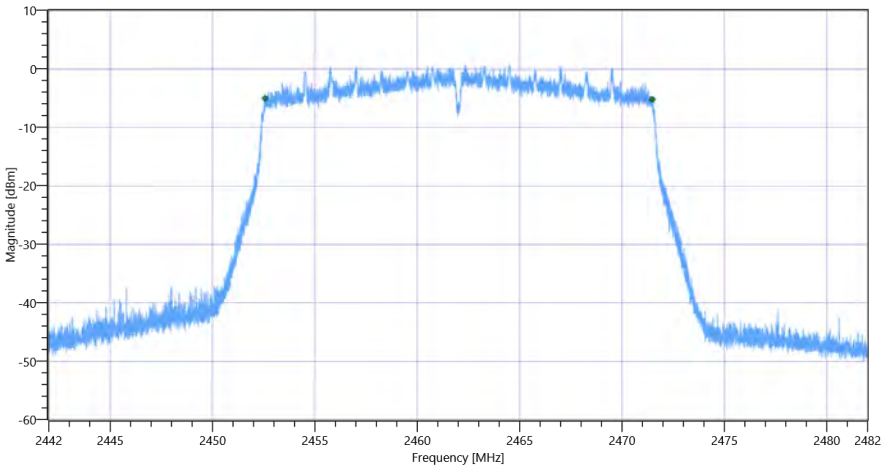
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.19	dBm	INFO
Ref. Frequency	---	---	2462.500	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	16.19 | 15.54 | 20
Start [MHz] | Stop [MHz]	2442.000 | 2482.000
RBW [MHz] | VBW [MHz]	0.100000 | 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	---	18908	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:10:22
Ambit Temp [°C] | Humidity [rel%]	25.7 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

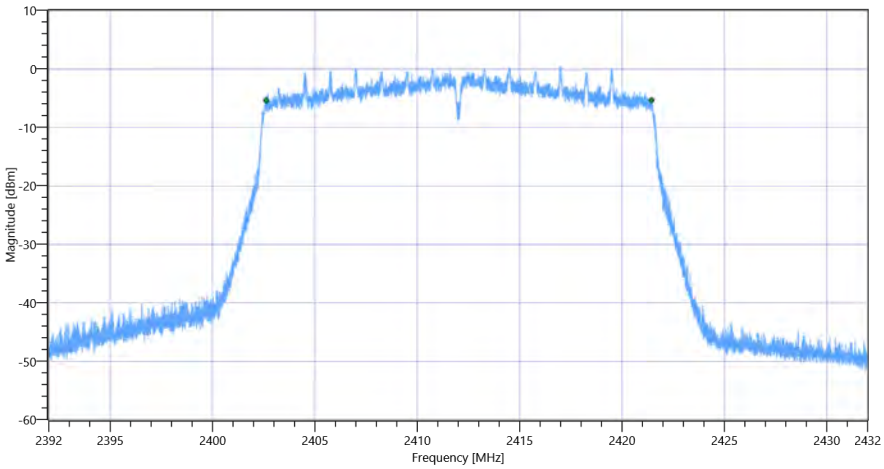
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.49	dBm	INFO
Ref. Frequency	---	---	2405.910	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.49 | 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	---	18816	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:26:09
Ambit Temp [°C] | Humidity [rel%]	25.8 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

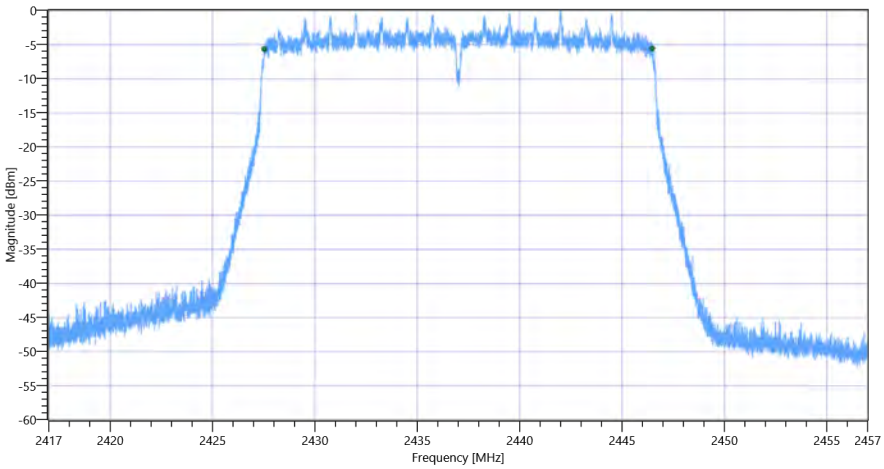
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.98	dBm	INFO
Ref. Frequency	---	---	2434.000	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.98 | 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	---	18952	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:40:19
Ambit Temp [°C] | Humidity [rel%]	26.1 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

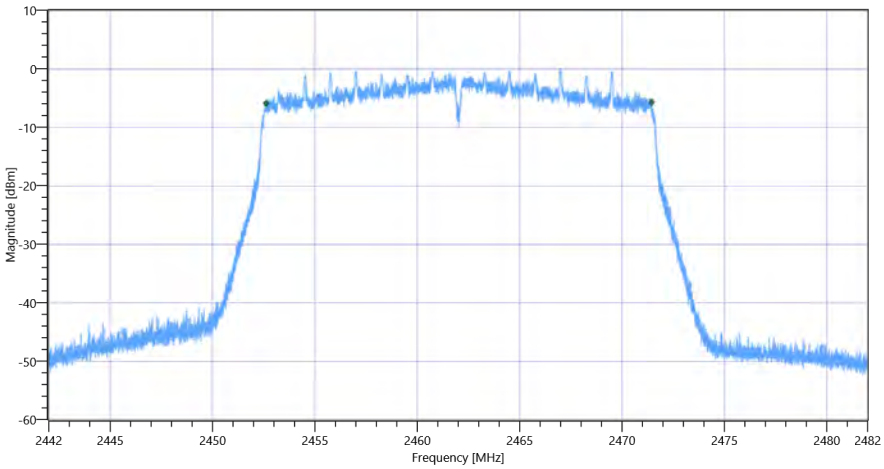
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.08	dBm	INFO
Ref. Frequency	---	---	2463.400	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.08 | 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	---	18832	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 11:54:01
Ambit Temp [°C] | Humidity [rel%]	25.0 | 34
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

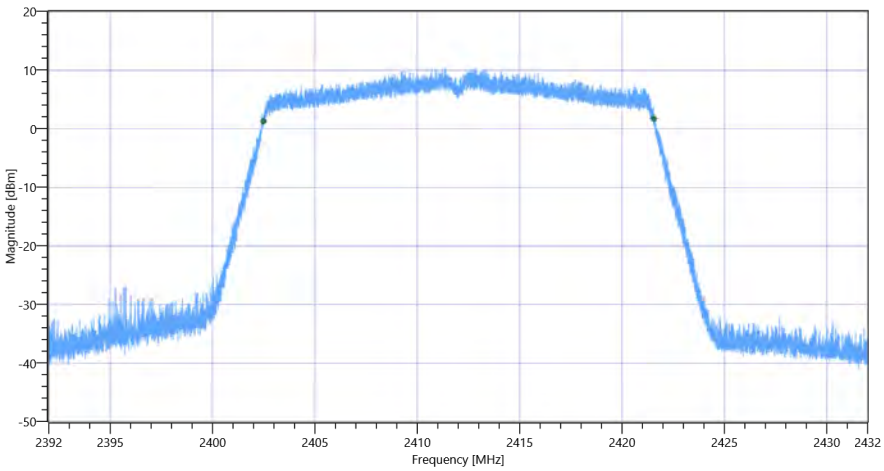
Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.45	dBm	INFO
Ref. Frequency	---	---	2411.200	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	16.45 | 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

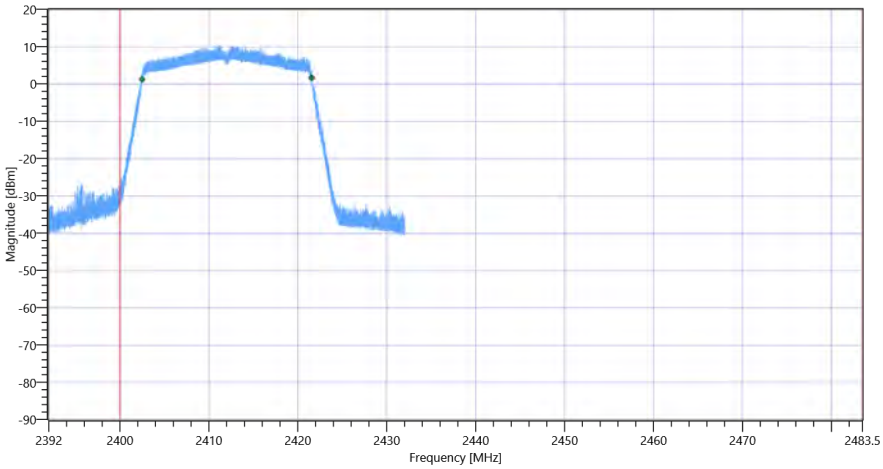
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19074.093	kHz	INFO
T1 99%	2400.000000	---	2402.4890	MHz	PASS
T2 99%	---	2483.500000	2421.5630	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

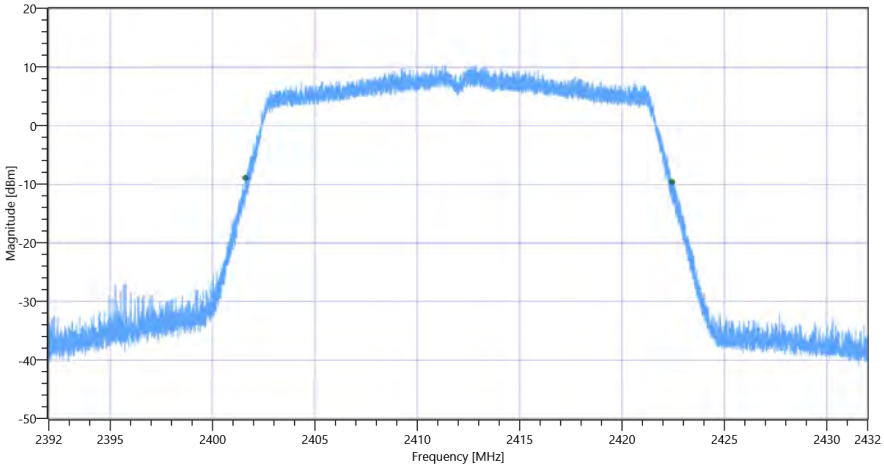
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

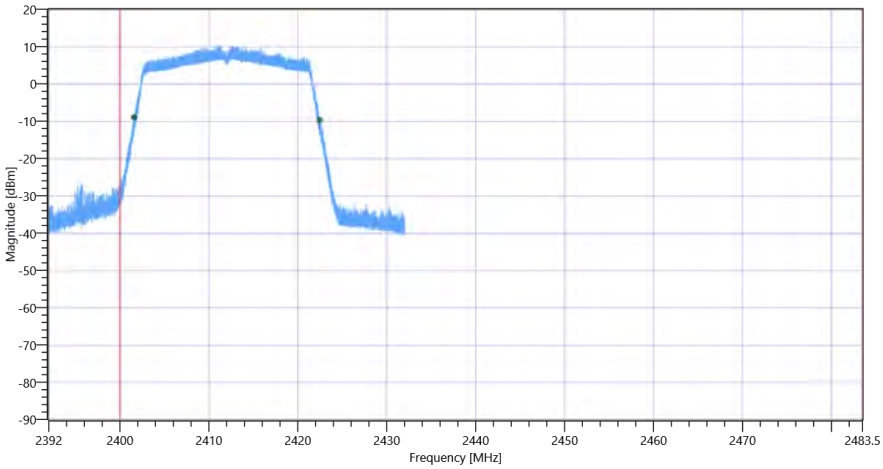
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20844	kHz	INFO
T1 20DB	2400.000000	---	2401.6000	MHz	PASS
T2 20dB	---	2483.500000	2422.4440	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:41:38
Ambit Temp [°C] | Humidity [rel%]	25.1 | 33
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

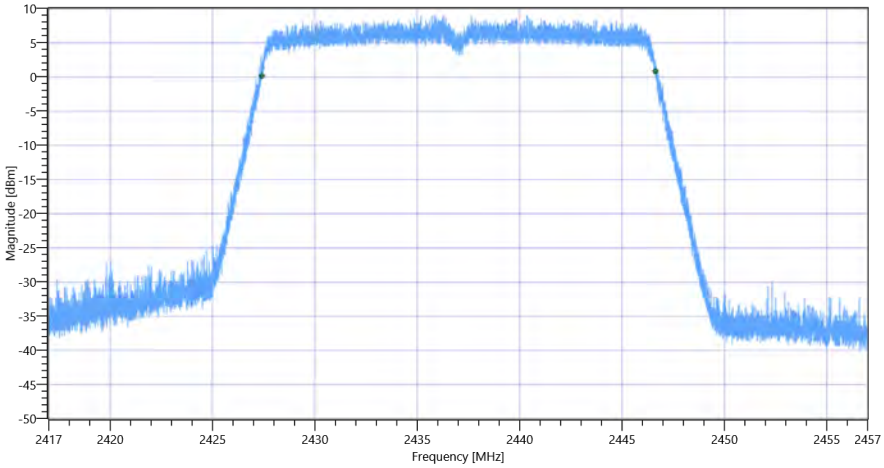
Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.85	dBm	INFO
Ref. Frequency	---	---	2441.100	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.85 | 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

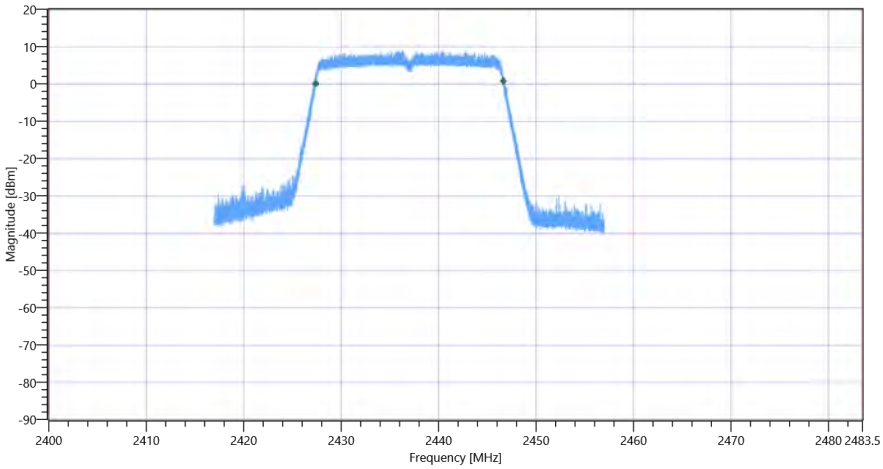
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19230.077	kHz	INFO
T1 99%	2400.000000	---	2427.4050	MHz	PASS
T2 99%	---	2483.500000	2446.6350	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

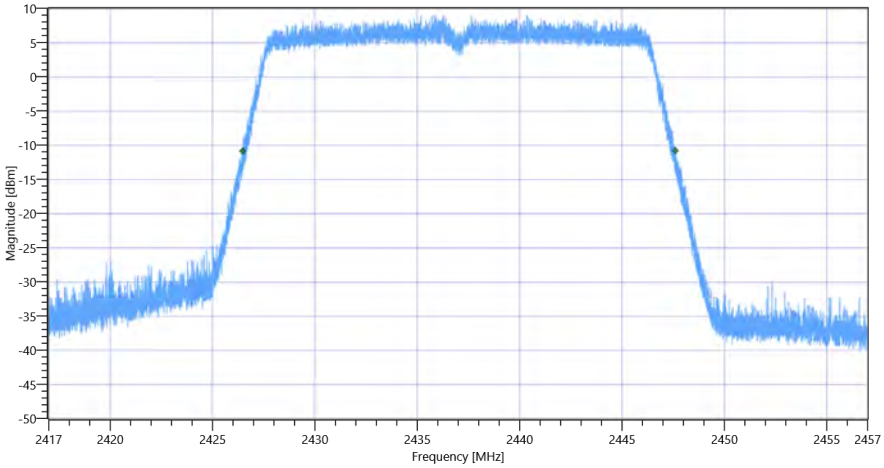
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

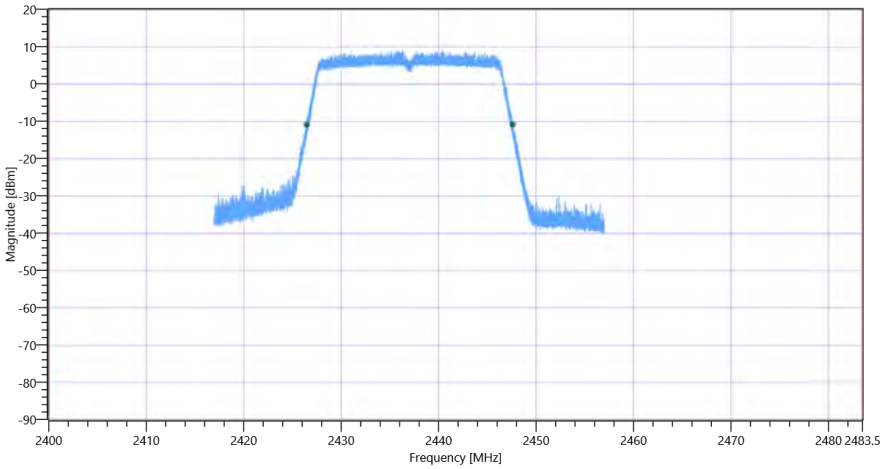
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	21136	kHz	INFO
T1 20DB	2400.000000	---	2426.4680	MHz	PASS
T2 20dB	---	2483.500000	2447.6040	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:57:55
Ambit Temp [°C] | Humidity [rel%]	25.4 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

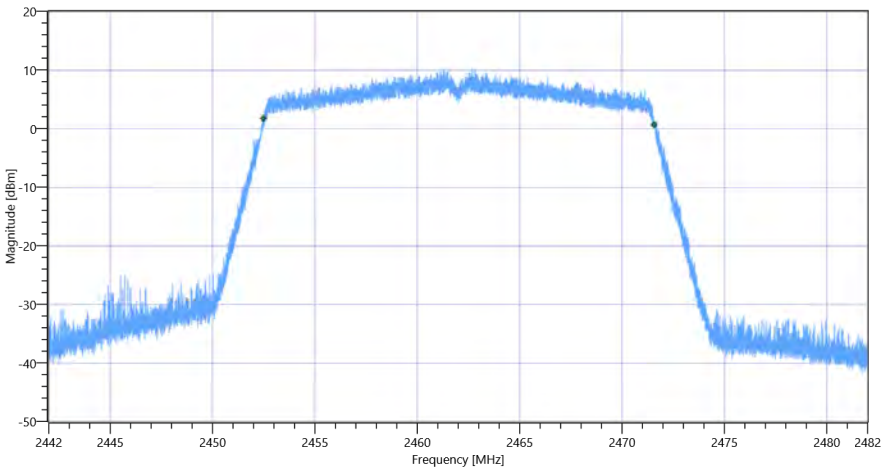
Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.21	dBm	INFO
Ref. Frequency	---	---	2466.300	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.21 | 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

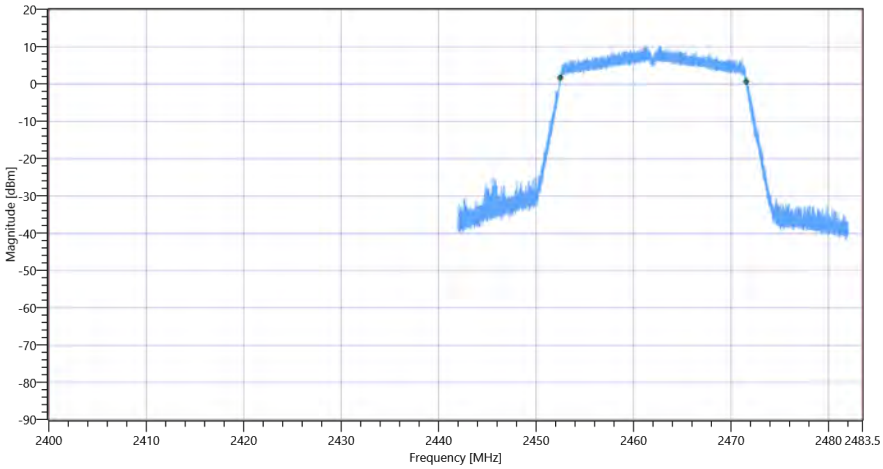
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19086.091	kHz	INFO
T1 99%	2400.000000	---	2452.4770	MHz	PASS
T2 99%	---	2483.500000	2471.5630	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

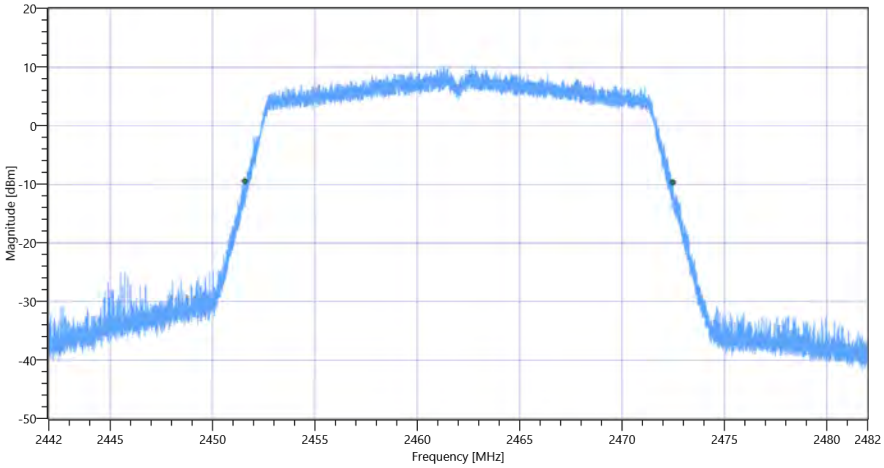
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

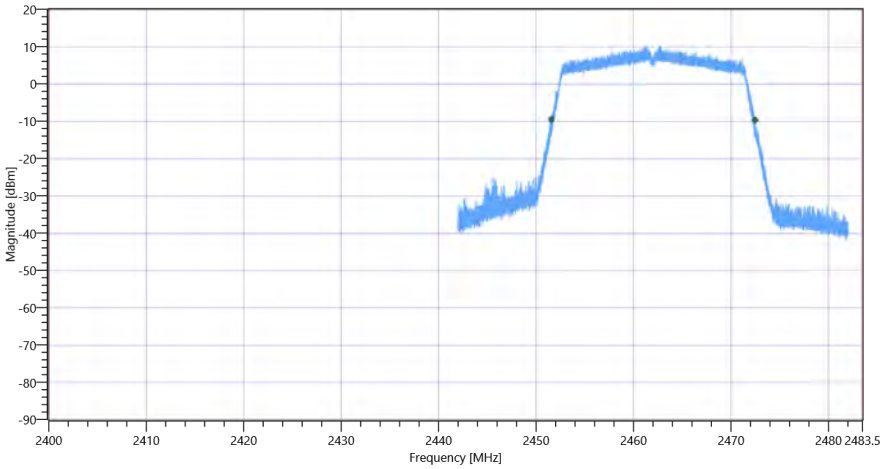
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20912	kHz	INFO
T1 20DB	2400.000000	---	2451.5680	MHz	PASS
T2 20dB	---	2483.500000	2472.4800	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:12:14
Ambit Temp [°C] | Humidity [rel%]	25.7 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

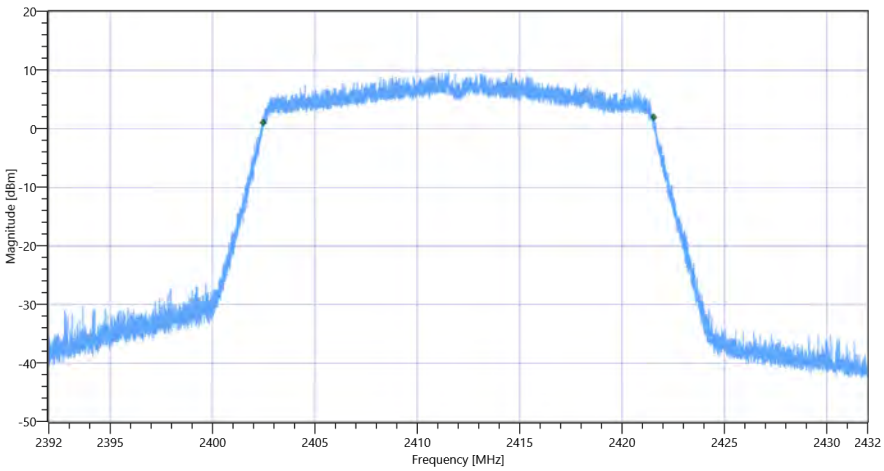
Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.42	dBm	INFO
Ref. Frequency	---	---	2412.600	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.42 | 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

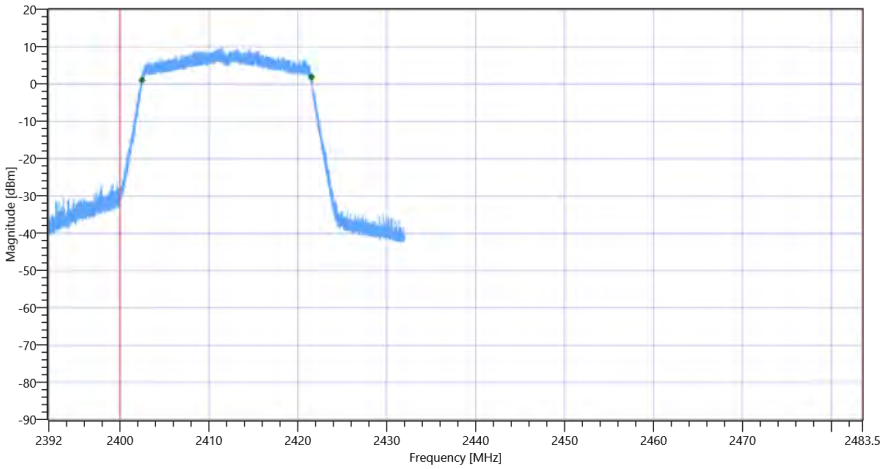
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19074.093	kHz	INFO
T1 99%	2400.000000	---	2402.4690	MHz	PASS
T2 99%	---	2483.500000	2421.5430	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

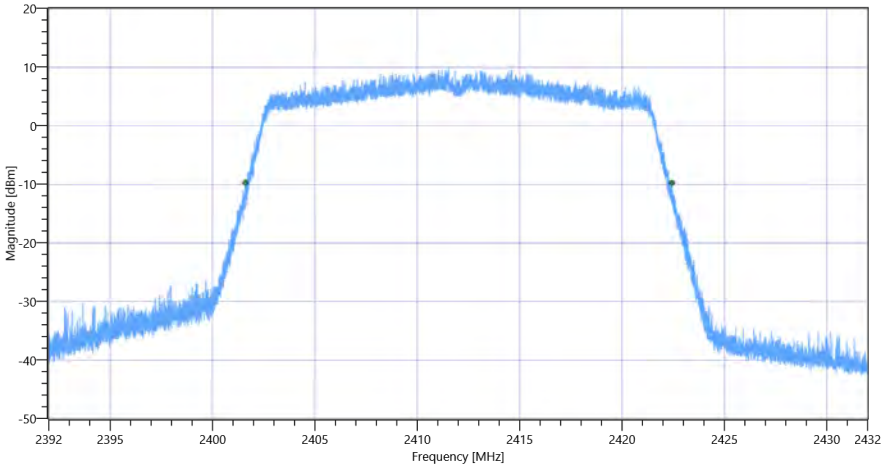
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

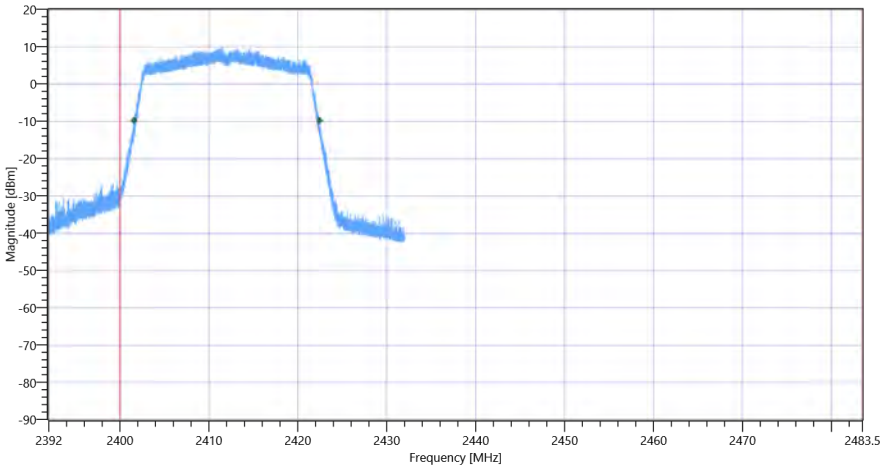
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20836	kHz	INFO
T1 20DB	2400.000000	---	2401.6000	MHz	PASS
T2 20dB	---	2483.500000	2422.4360	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:28:00
Ambit Temp [°C] | Humidity [rel%]	25.8 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

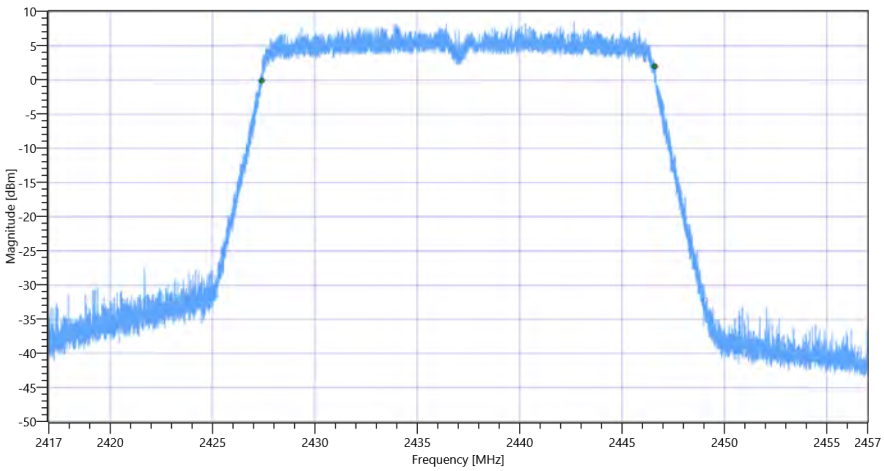
Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.05	dBm	INFO
Ref. Frequency	---	---	2435.800	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.05 | 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

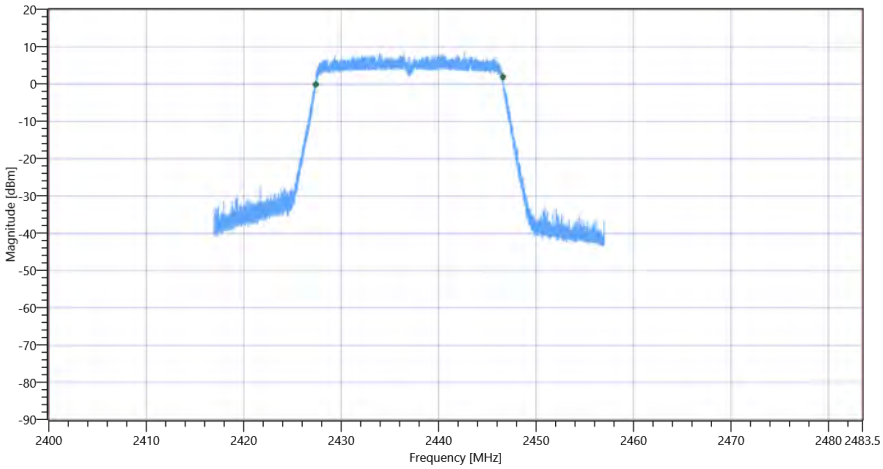
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19206.079	kHz	INFO
T1 99%	2400.000000	---	2427.4010	MHz	PASS
T2 99%	---	2483.500000	2446.6070	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

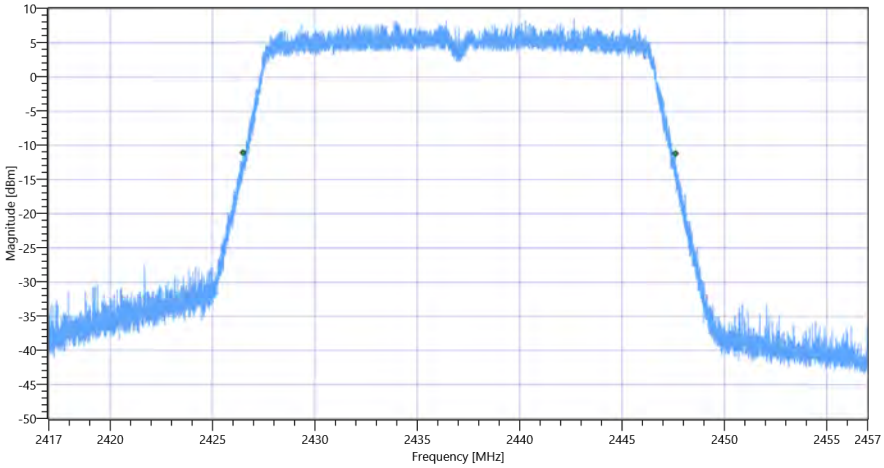
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

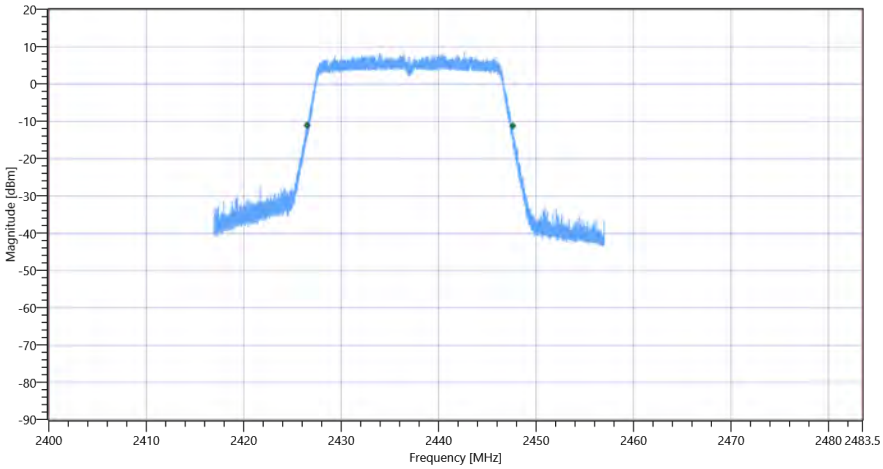
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	21120	kHz	INFO
T1 20DB	2400.000000	---	2426.4880	MHz	PASS
T2 20dB	---	2483.500000	2447.6080	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:42:11
Ambit Temp [°C] | Humidity [rel%]	26.2 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

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

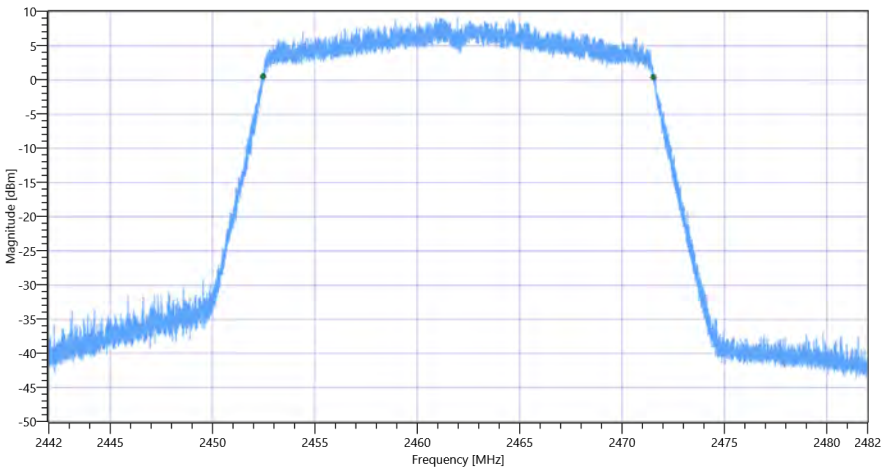
Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.42	dBm	INFO
Ref. Frequency	---	---	2462.700	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.42 | 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

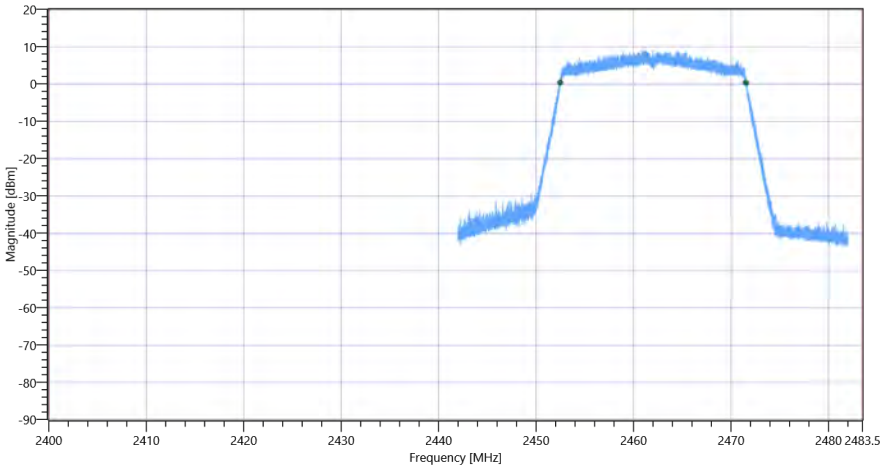
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	19066.093	kHz	INFO
T1 99%	2400.000000	---	2452.4690	MHz	PASS
T2 99%	---	2483.500000	2471.5350	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 99PCT

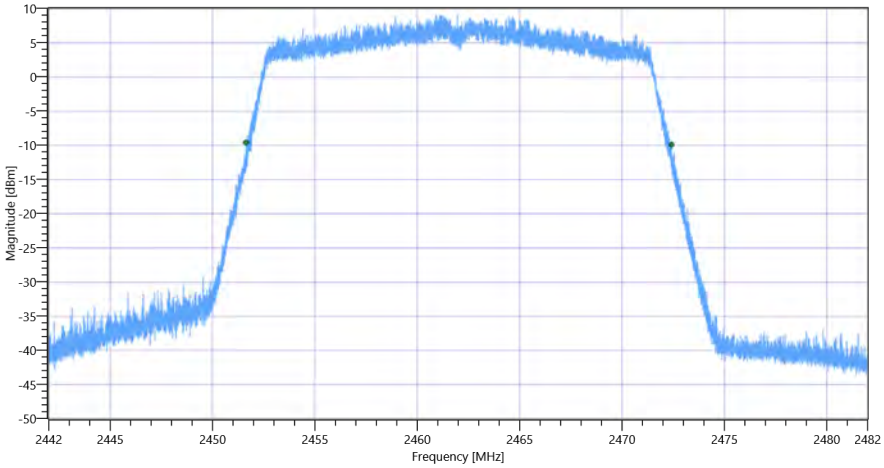
Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

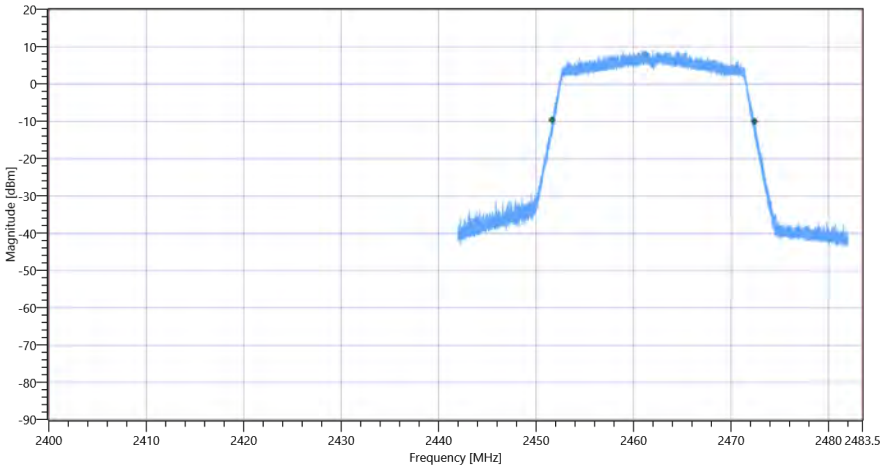
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20788	kHz	INFO
T1 20DB	2400.000000	---	2451.6320	MHz	PASS
T2 20dB	---	2483.500000	2472.4200	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:03:44
Ambit Temp [°C] | Humidity [rel%]	25.0 | 33
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

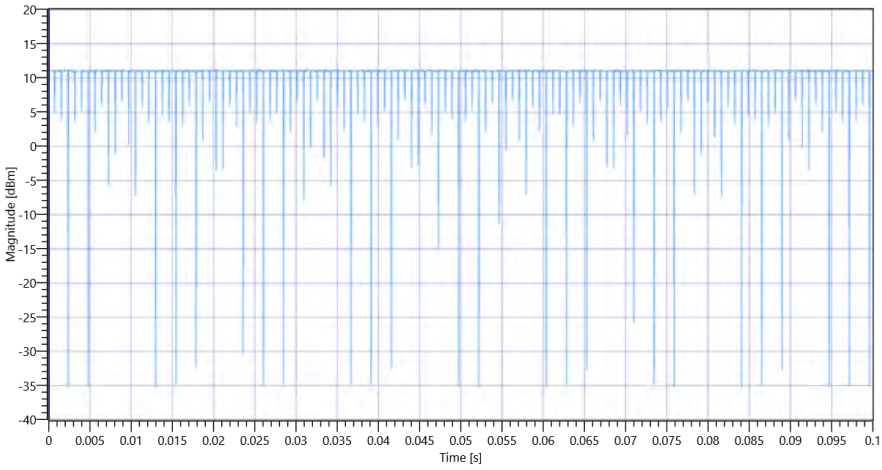
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.32	dBm	INFO
Ref. Frequency	---	---	2413.000	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:53					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



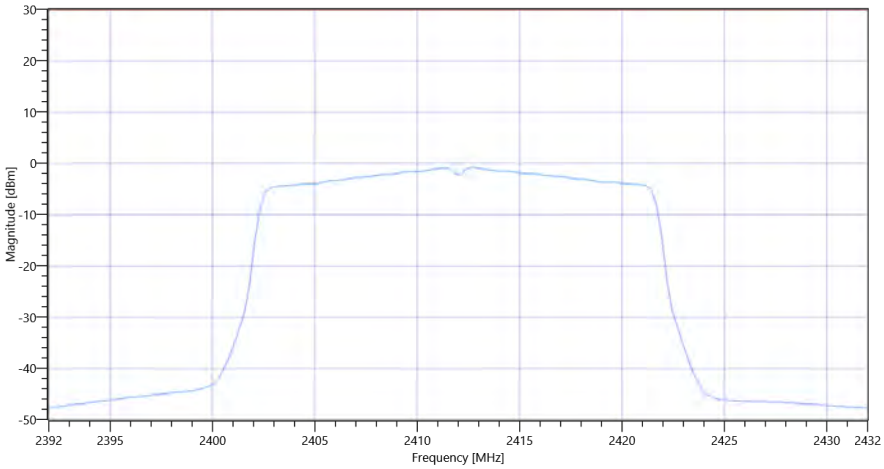
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2412 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.32 | 15.93 | 25
Start [MHz] | Stop [MHz]	2392.000 | 2432.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	13.01	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	13.42	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:51:12
Ambit Temp [°C] | Humidity [rel%]	25.3 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

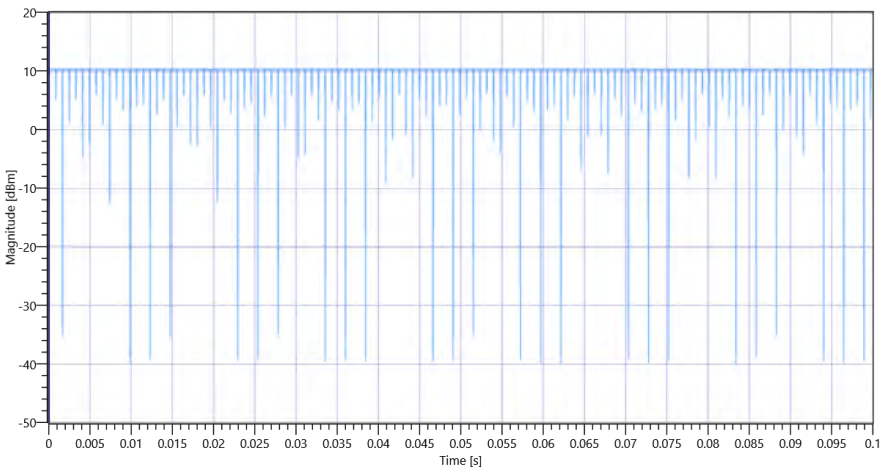
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.17	dBm	INFO
Ref. Frequency	---	---	2428.810	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:54					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



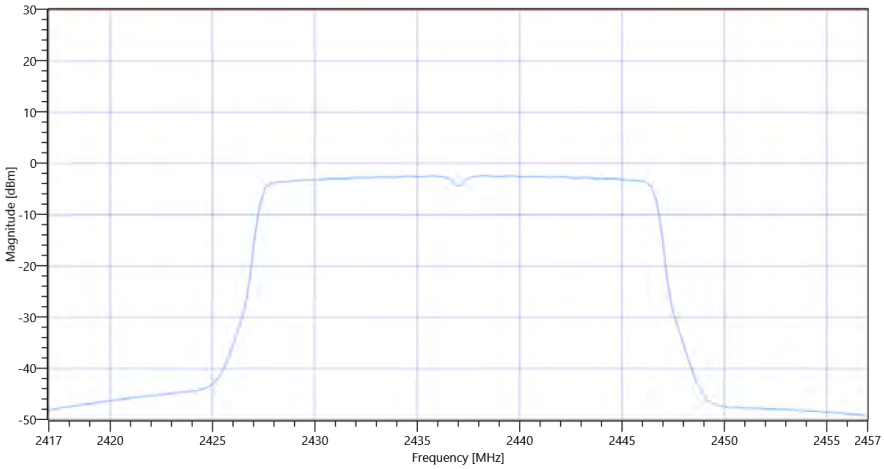
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2437 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.17 | 15.7 | 20
Start [MHz] | Stop [MHz]	2417.000 | 2457.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.65	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	13.06	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:07:36
Ambit Temp [°C] | Humidity [rel%]	25.6 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

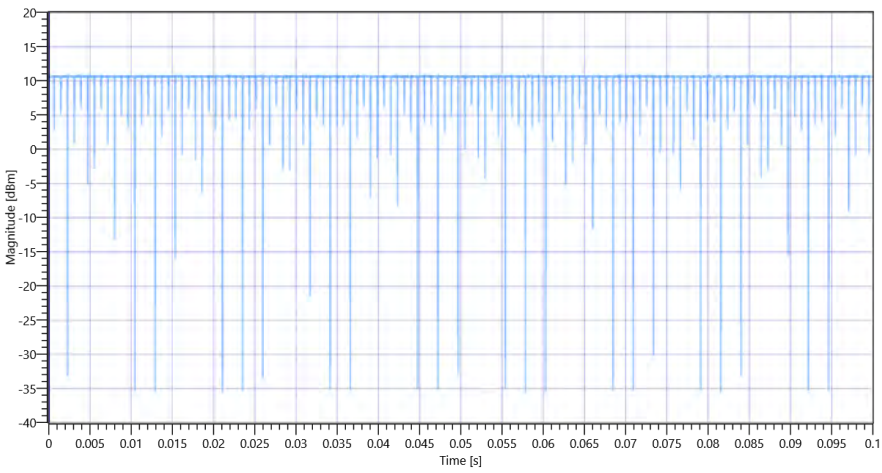
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.73	dBm	INFO
Ref. Frequency	---	---	2465.000	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:57					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



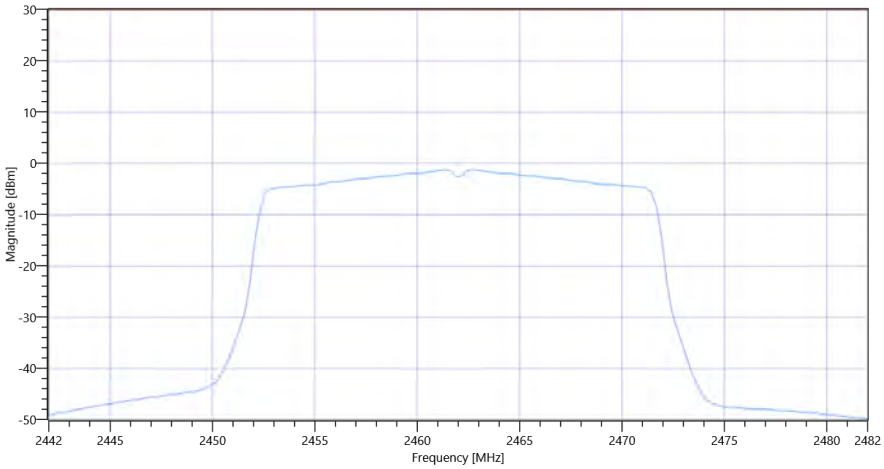
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2462 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.73 | 15.54 | 20
Start [MHz] | Stop [MHz]	2442.000 | 2482.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.63	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	13.04	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:23:27
Ambit Temp [°C] | Humidity [rel%]	25.8 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

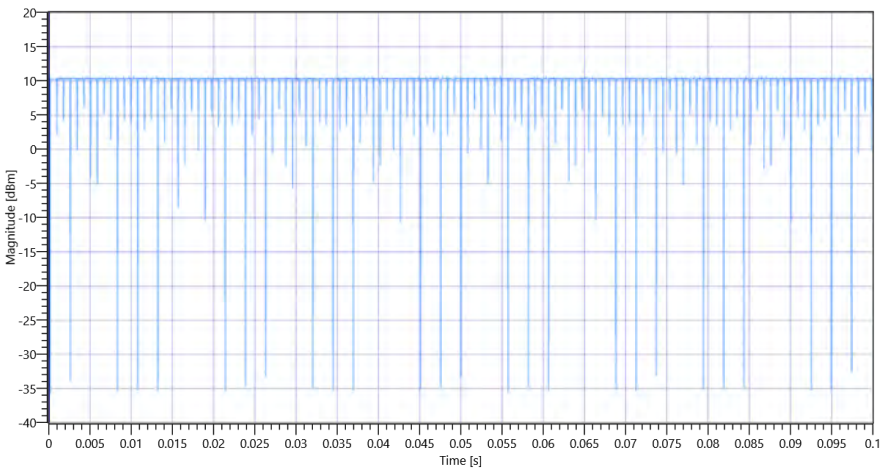
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.58	dBm	INFO
Ref. Frequency	---	---	2414.700	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:57					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



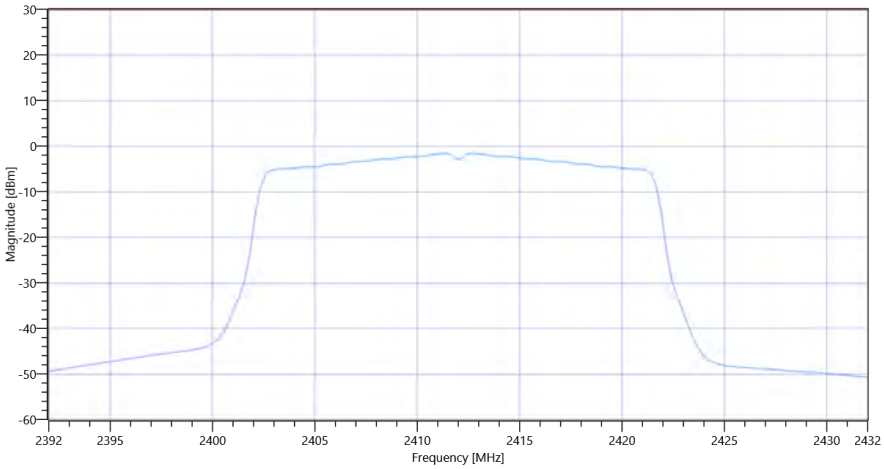
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2412 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.58 | 15.93 | 20
Start [MHz] | Stop [MHz]	2392.000 | 2432.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	12.29	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	12.7	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:37:40
Ambit Temp [°C] | Humidity [rel%]	26.1 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

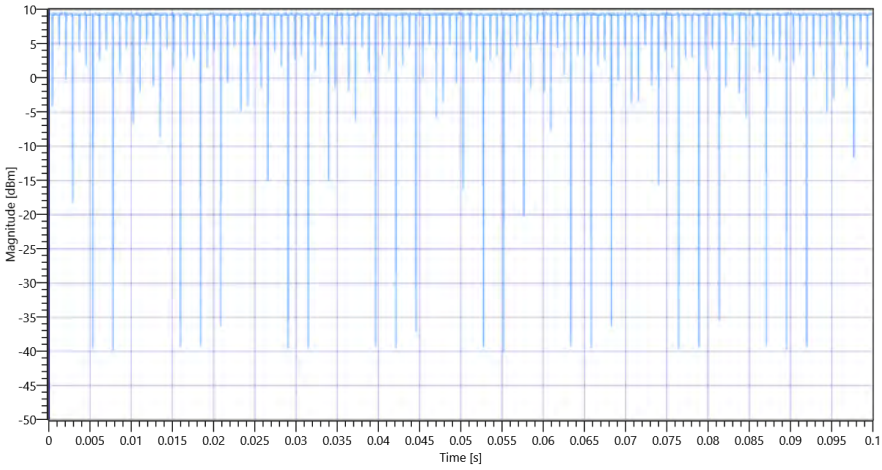
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.05	dBm	INFO
Ref. Frequency	---	---	2434.100	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:55					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



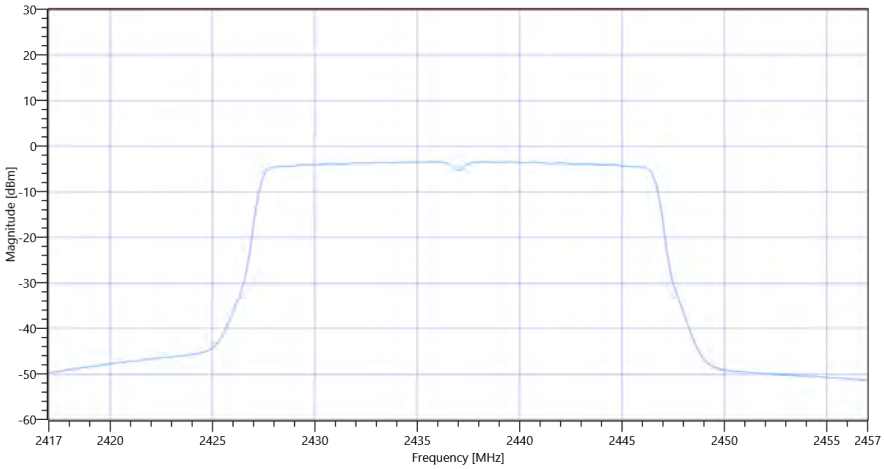
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2437 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.05 | 15.7 | 20
Start [MHz] | Stop [MHz]	2417.000 | 2457.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	11.66	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	12.07	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:51:47
Ambit Temp [°C] | Humidity [rel%]	26.3 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
TC Version	0.0.1
My Description	FCC 15.247 Max Avg Output Power Conducted SA DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

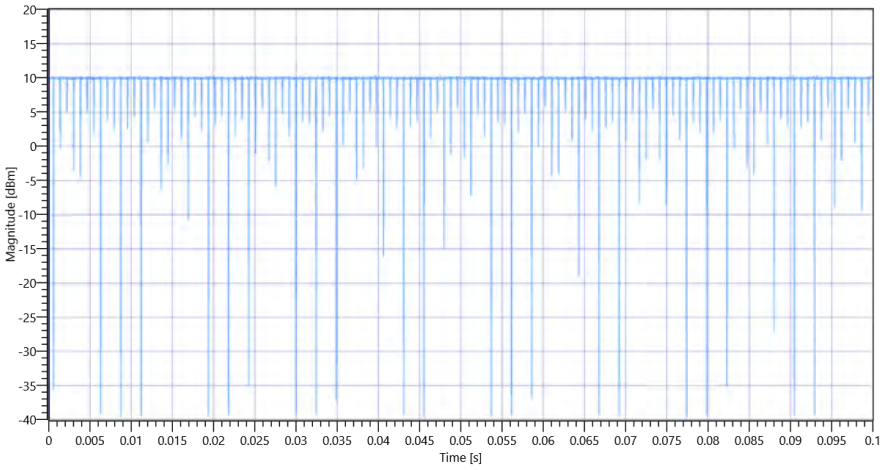
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.93	dBm	INFO
Ref. Frequency	---	---	2460.000	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:55					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



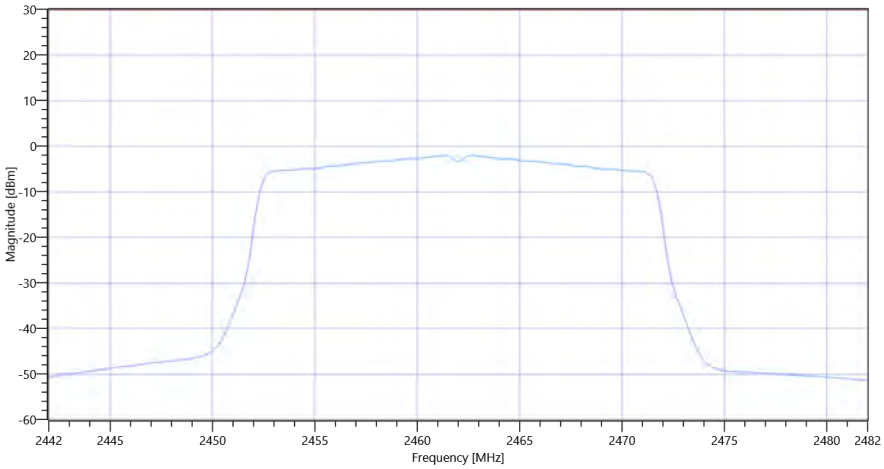
FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20 2462 MHz - DutyCycle

Maximum Avg. Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.93 | 15.54 | 20
Start [MHz] | Stop [MHz]	2442.000 | 2482.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: Time [ms] | Count | Points per Section | Type	500 | 100 | 160 | SWE

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict

RESULT (Channel Power method)					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg Output Power uncorrected	---	---	11.85	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Avg Output Power DC corrected	---	30	12.26	dBm	PASS



FCC 15.247 # Maximum avg conducted output power SA DTS ~ WLAN2G4 ax-HE20

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 11:54:58
Ambit Temp [°C] | Humidity [rel%]	25.1 | 34
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

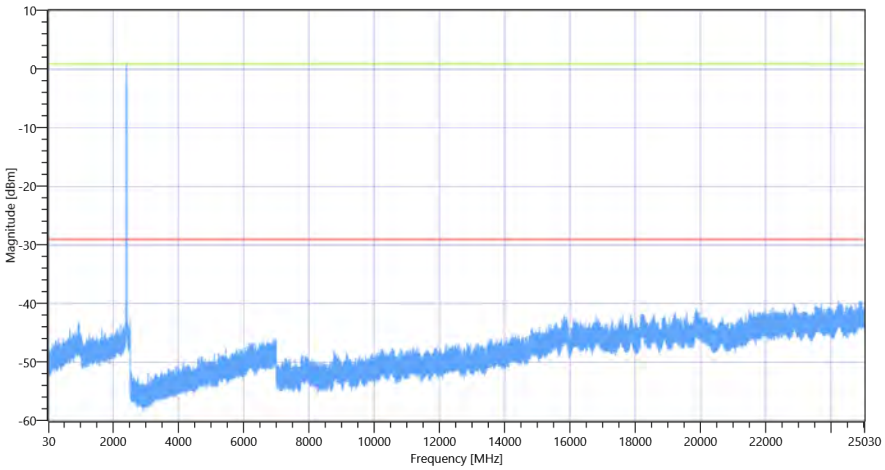
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

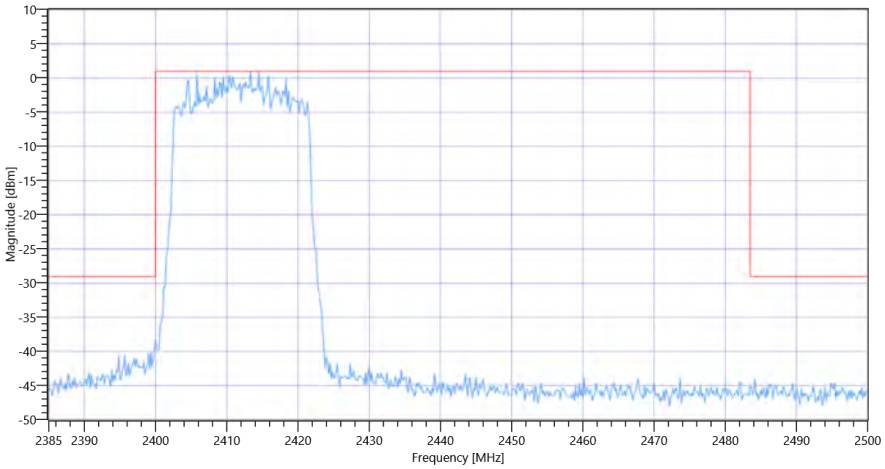
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.95	dBm	INFO
Ref. Frequency	---	---	2412.700	MHz	INFO

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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2413.33 MHz	---	---	0.98	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24231.333 MHz	0	---	10.38	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2412

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:42:34
Ambit Temp [°C] | Humidity [rel%]	25.2 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

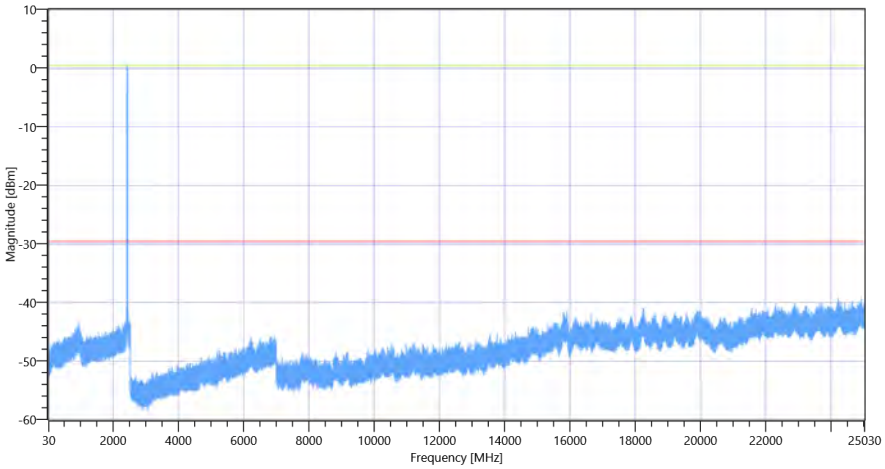
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

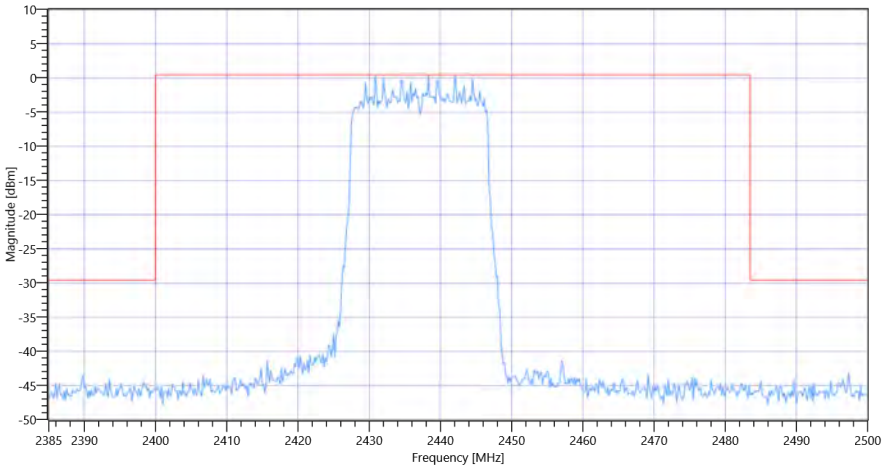
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.40	dBm	INFO
Ref. Frequency	---	---	2438.600	MHz	INFO

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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2438.33 MHz	---	---	0.46	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-150.77	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2437



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2437

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 12:58:52
Ambit Temp [°C] | Humidity [rel%]	25.4 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

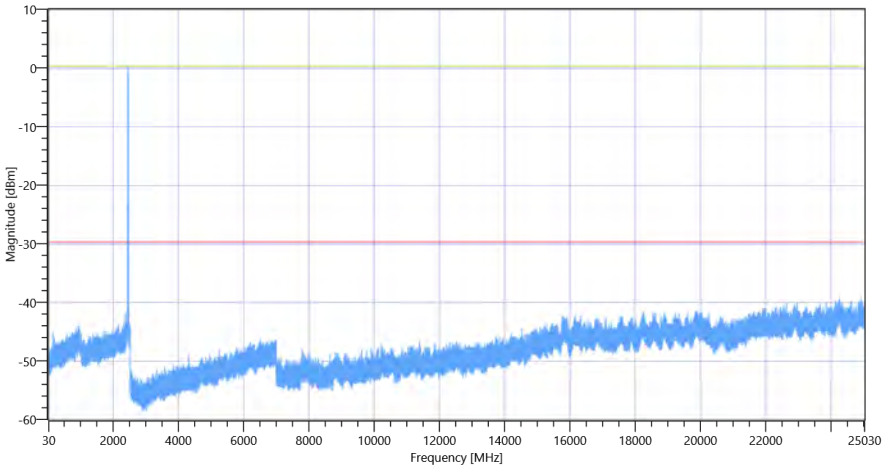
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

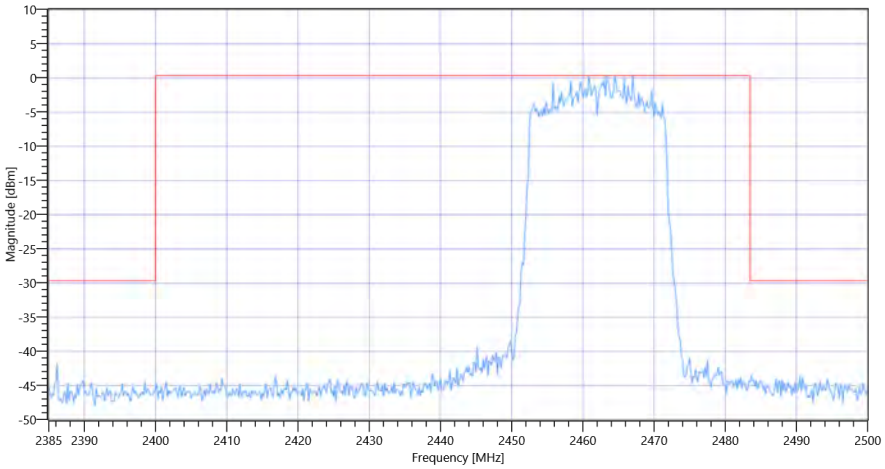
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.96	dBm	INFO
Ref. Frequency	---	---	2459.900	MHz	INFO

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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2467.00 MHz	---	---	0.38	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24908.5 MHz	0	---	9.32	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2462



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2462

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:14:50
Ambit Temp [°C] | Humidity [rel%]	25.7 | 32
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

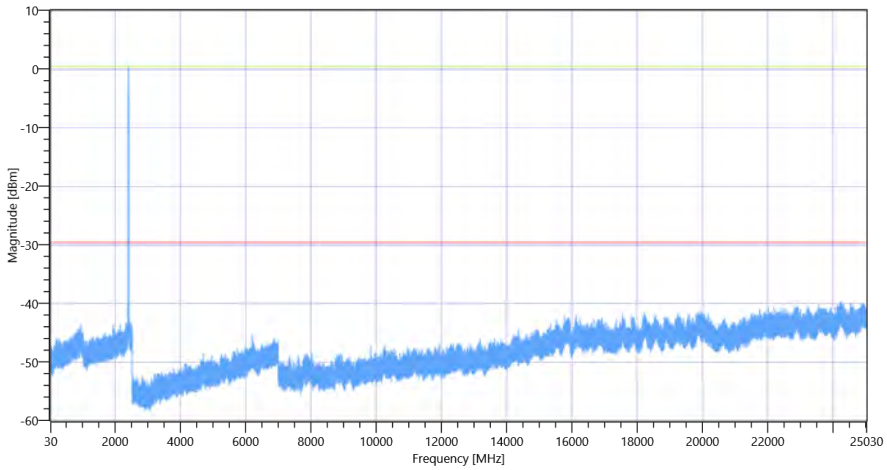
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2412 MHz

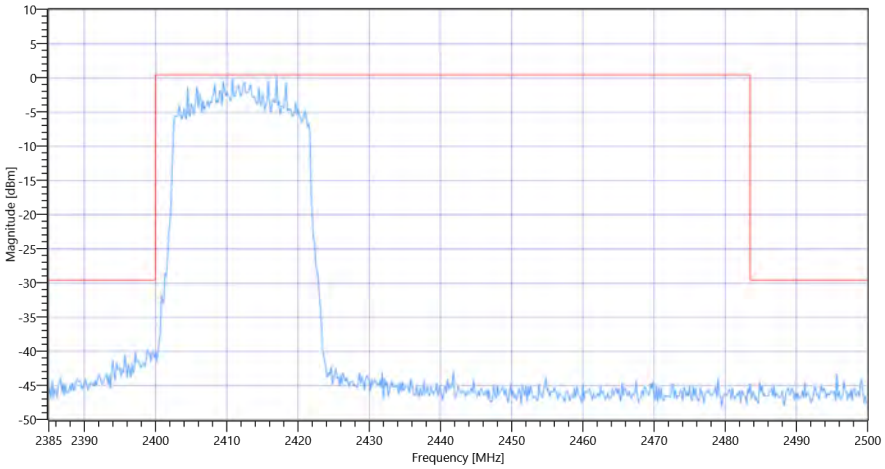
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.66	dBm	INFO
Ref. Frequency	---	---	2412.900	MHz	INFO

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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2417.00 MHz	---	---	0.46	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24250.167 MHz	0	---	10.06	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2412



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2412

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:28:57
Ambit Temp [°C] | Humidity [rel%]	25.8 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

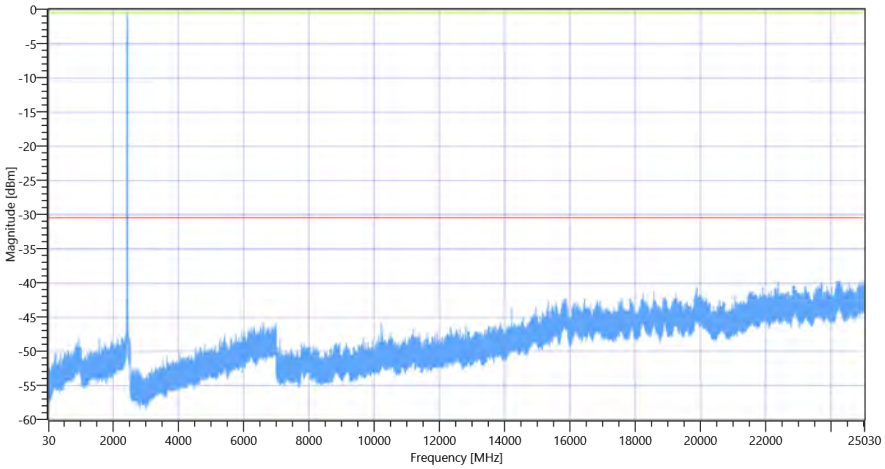
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2437 MHz

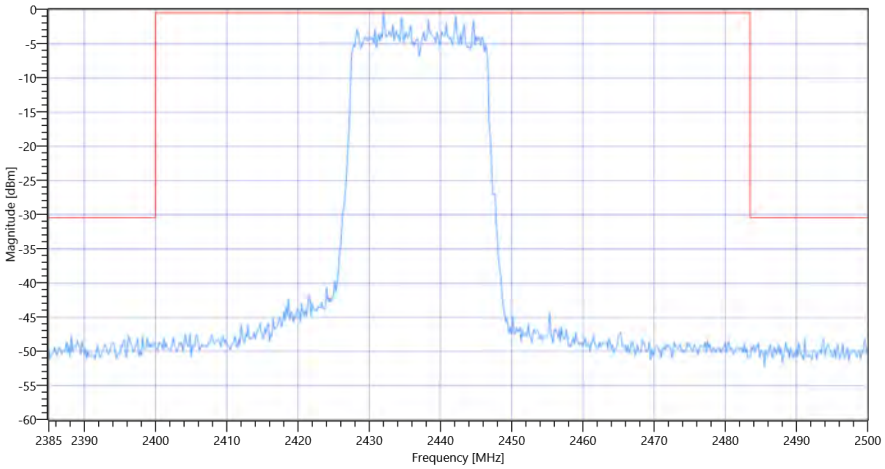
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.98	dBm	INFO
Ref. Frequency	---	---	2442.190	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.98 | 0 | 20
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	200 | 25 | 3001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2432.00 MHz	---	---	-0.47	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24215.5 MHz	0	---	9.11	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2437



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2437

General verdict	PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20

Test References	
TC Start	06.07.2022 13:43:08
Ambit Temp [°C] | Humidity [rel%]	26.2 | 31
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted 30dBc DTS DTS - WLAN2G4 ax-HE20
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

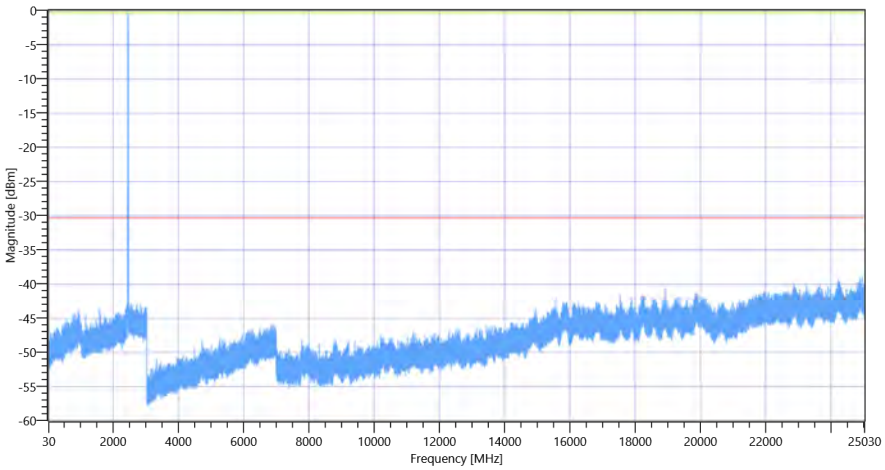
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2462 MHz

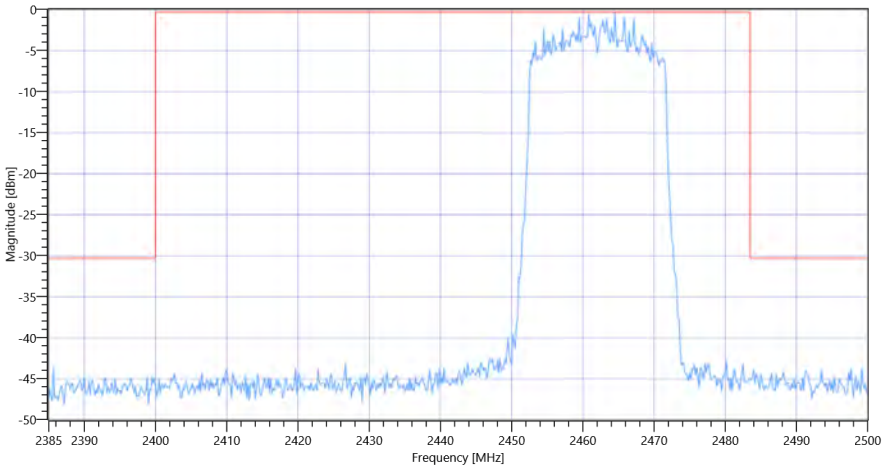
RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.86	dBm	INFO
Ref. Frequency	---	---	2461.300	MHz	INFO

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

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2464.50 MHz	---	---	-0.33	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24957.333 MHz	0	---	8.56	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2462



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE20 2462

General verdict	PASS

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