

Test at TX 2437 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.45	dBm	INFO
Ref. Frequency	---	---	2432.300	MHz	INFO

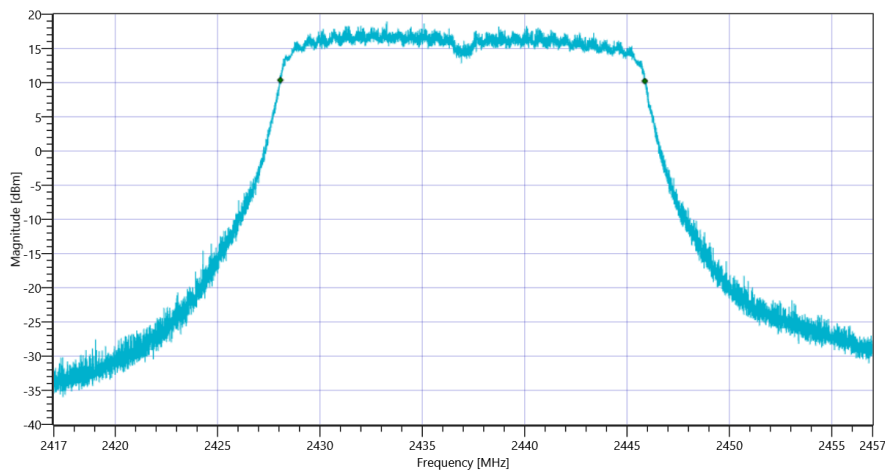
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.45 10.6 30
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

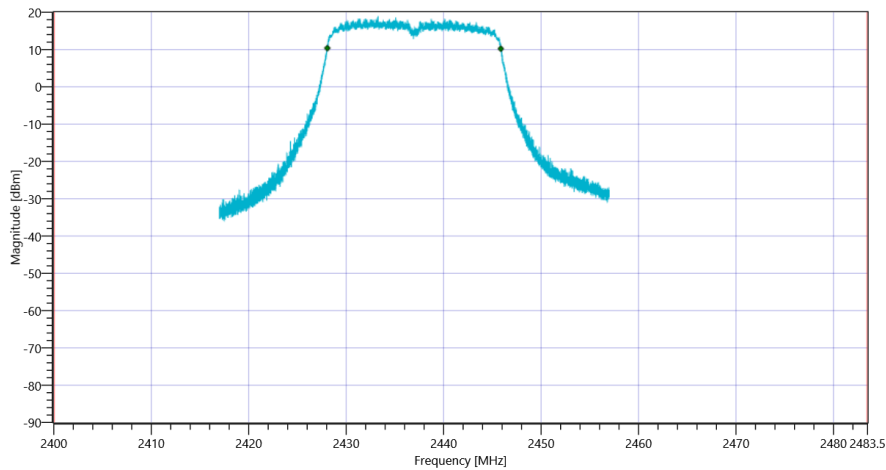
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17802.220	kHz	INFO
T1 99%	2400.000000	---	2428.0649	MHz	PASS
T2 99%	---	2483.500000	2445.8671	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 99PCT

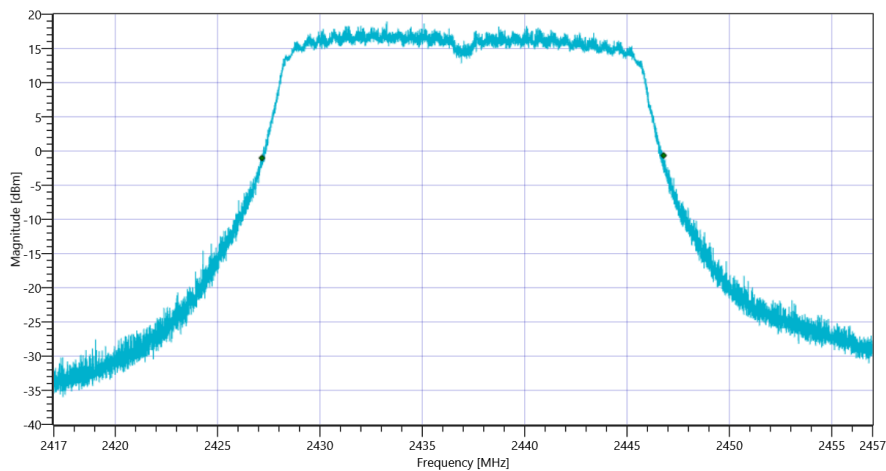
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

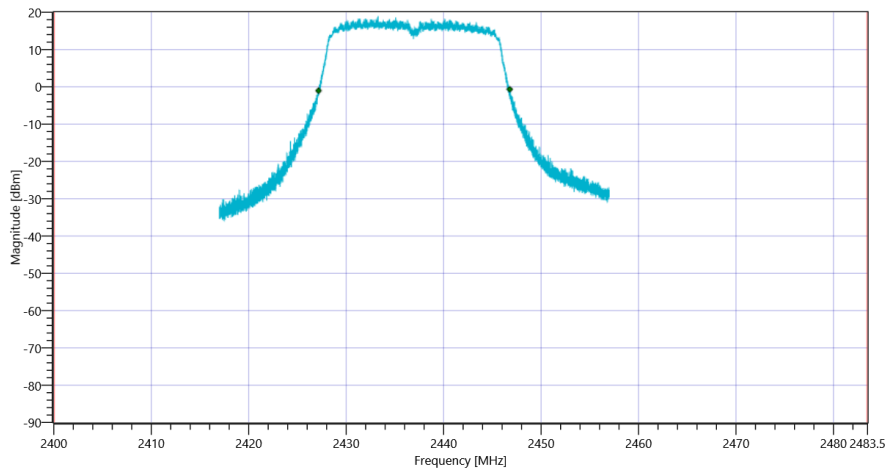
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19620	kHz	INFO
T1 20dB	2400.000000	---	2427.1680	MHz	PASS
T2 20dB	---	2483.500000	2446.7880	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:37:16
Ambit Temp [°C] Humidity [rel%]	24.0 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	19.44	dBm	INFO
Ref. Frequency	---	---	2465.700	MHz	INFO

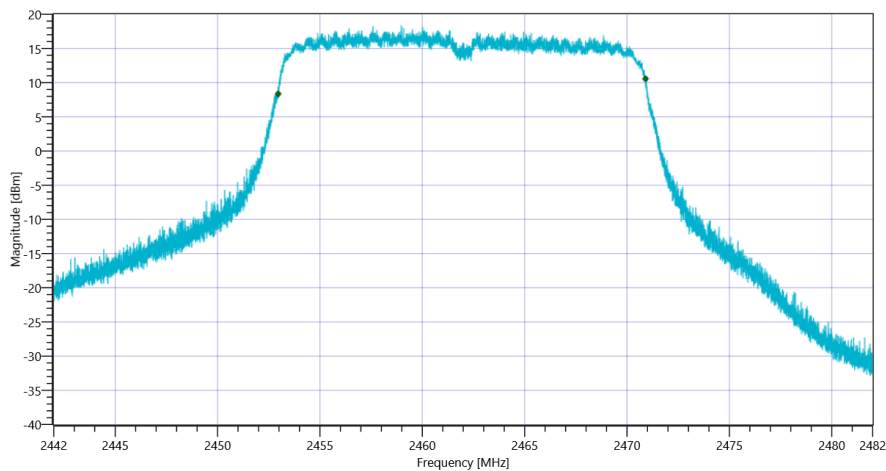
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.44 10.61 30
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

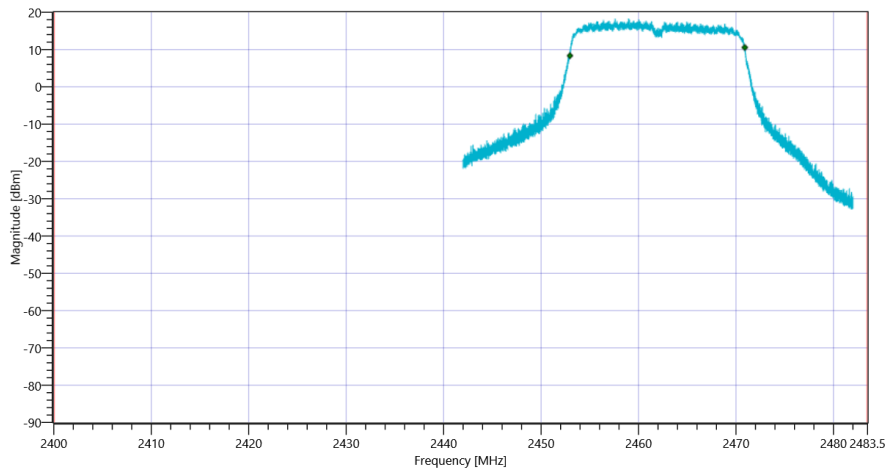
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17942.206	kHz	INFO
T1 99%	2400.000000	---	2452.9609	MHz	PASS
T2 99%	---	2483.500000	2470.9031	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 99PCT

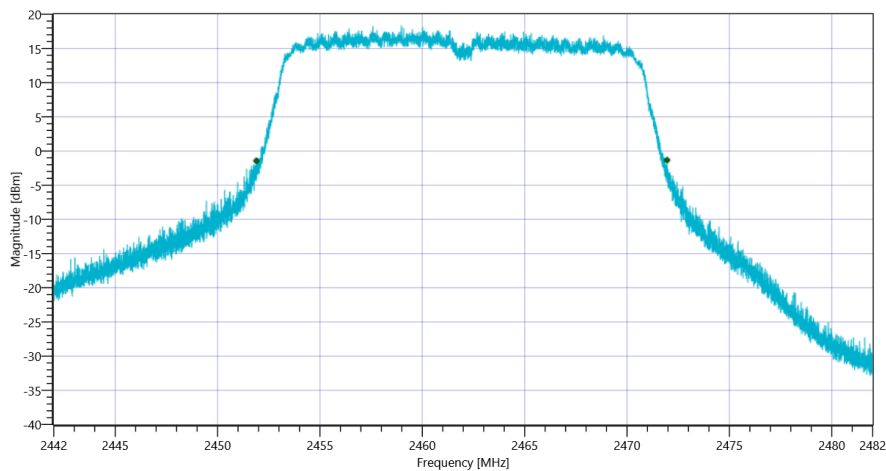
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode

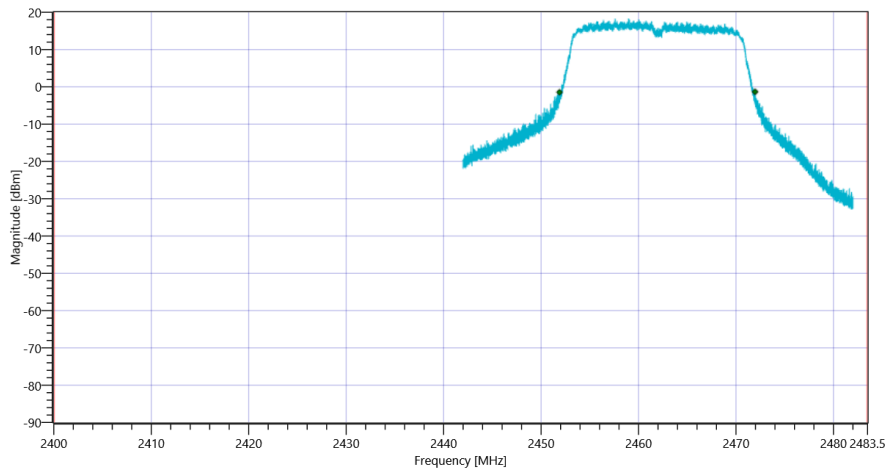
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20072	kHz	INFO	
T1 20dB	2400.000000	---	2451.8880	MHz	PASS	
T2 20dB	---	2483.500000	2471.9600	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:19:21
Ambit Temp [°C] Humidity [rel%]	23.9 18
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	19.24	dBm	INFO
Ref. Frequency	---	---	2408.200	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

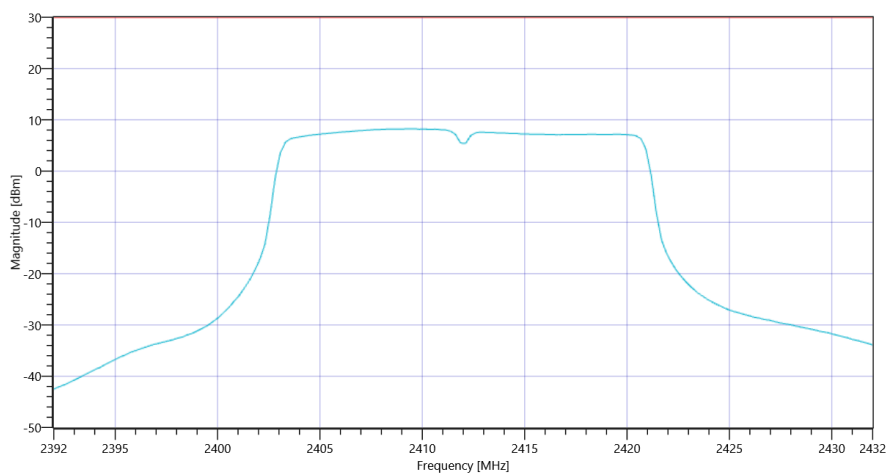
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.24 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	---	---	22.64	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	22.64	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:32:50
Ambit Temp [°C] Humidity [rel%]	23.9 18
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	20.33	dBm	INFO
Ref. Frequency	---	---	2439.900	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

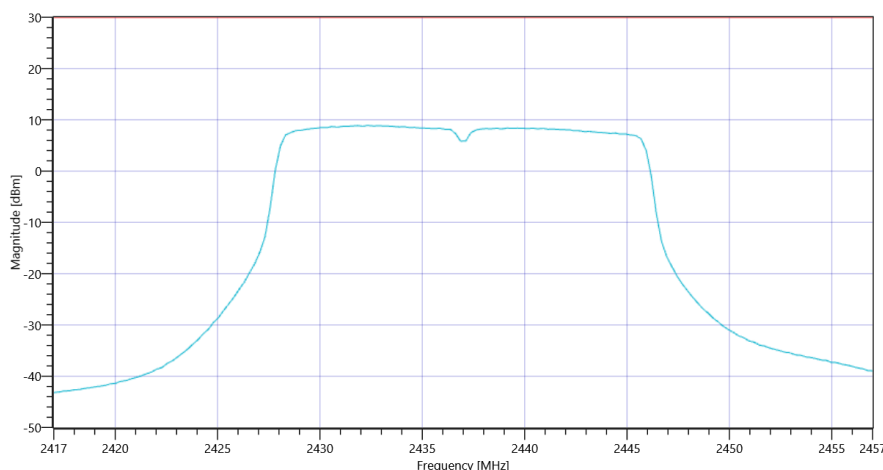
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.33 10.6 35
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	---	---	23.35	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.35	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:45:53
Ambit Temp [°C] Humidity [rel%]	24.0 18
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	22.38	dBm	INFO
Ref. Frequency	---	---	2459.000	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

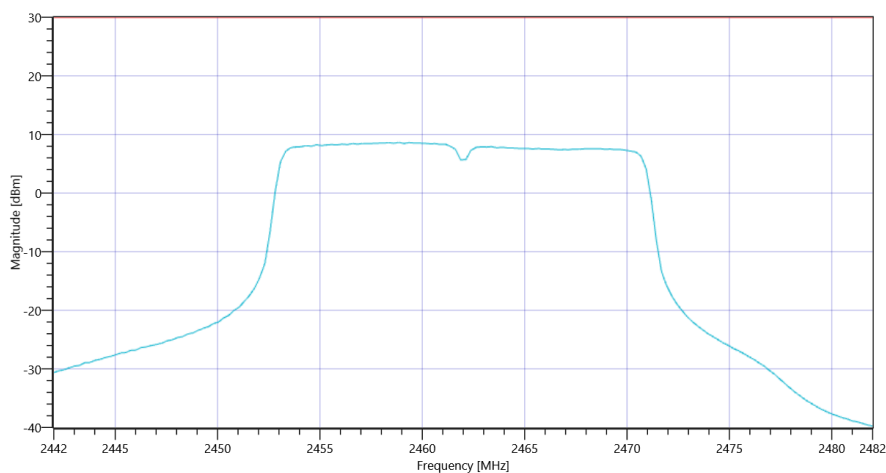
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.38 10.61 40
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	---	---	23.11	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.11	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:11:51
Ambit Temp [°C] Humidity [rel%]	23.9 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

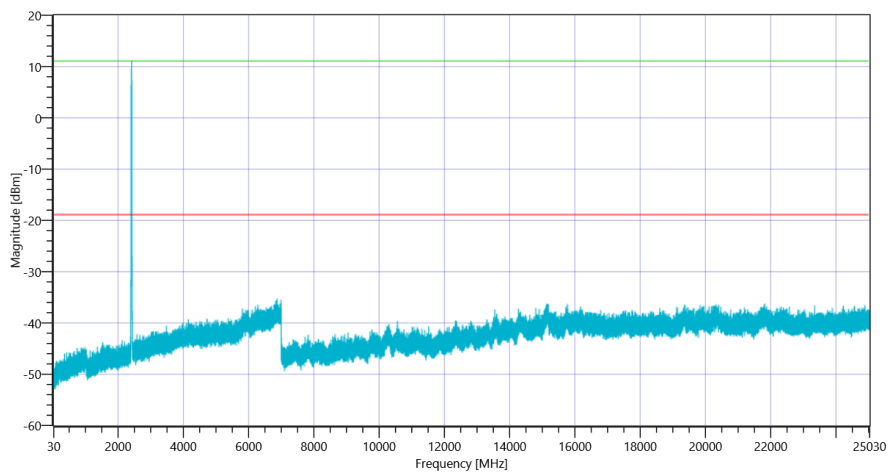
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.69	dBm	INFO
Ref. Frequency	---	---	2410.400	MHz	INFO

READ SA SETTINGS:

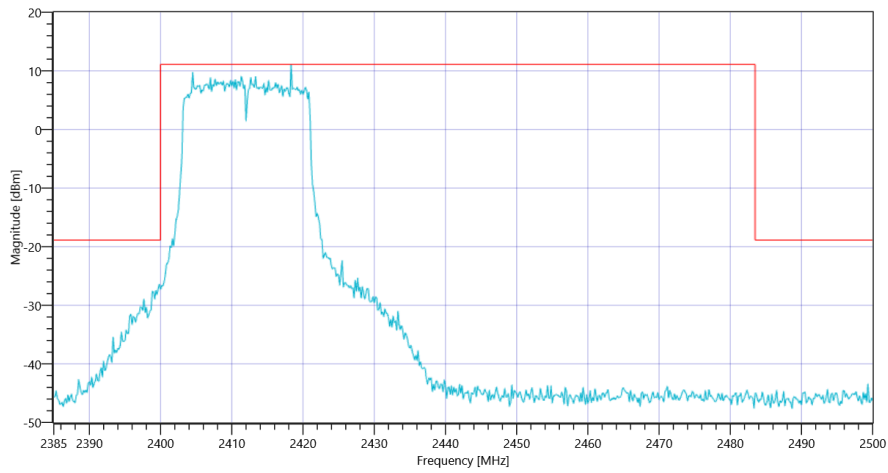
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.69 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2418.33 MHz	---	---	11.11	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	7.48	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2412



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2412

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:25:19
Ambit Temp [°C] Humidity [rel%]	23.9 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

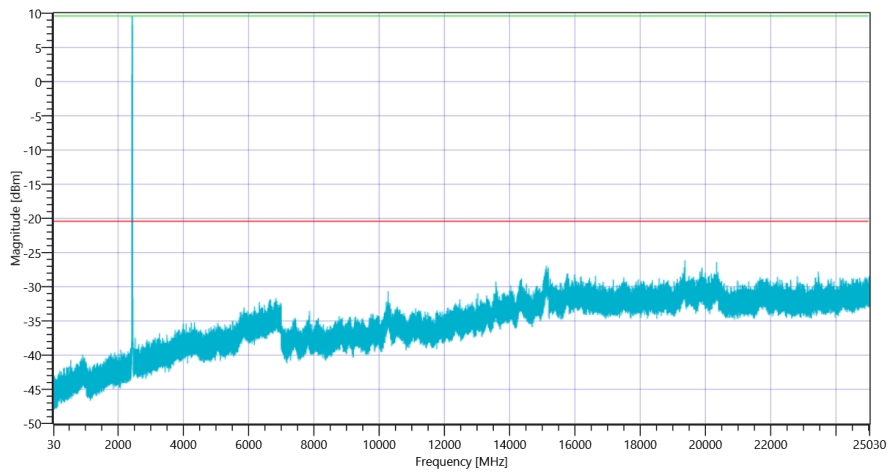
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.09	dBm	INFO
Ref. Frequency	---	---	2432.800	MHz	INFO

READ SA SETTINGS:

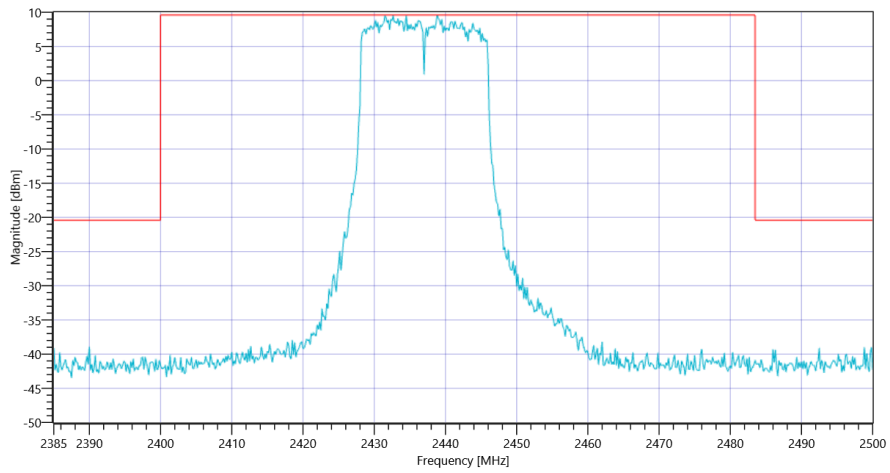
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.09 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2438.83 MHz	---	---	9.59	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-154.21	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2437



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2437

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 15:38:15
Ambit Temp [°C] Humidity [rel%]	24.0 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

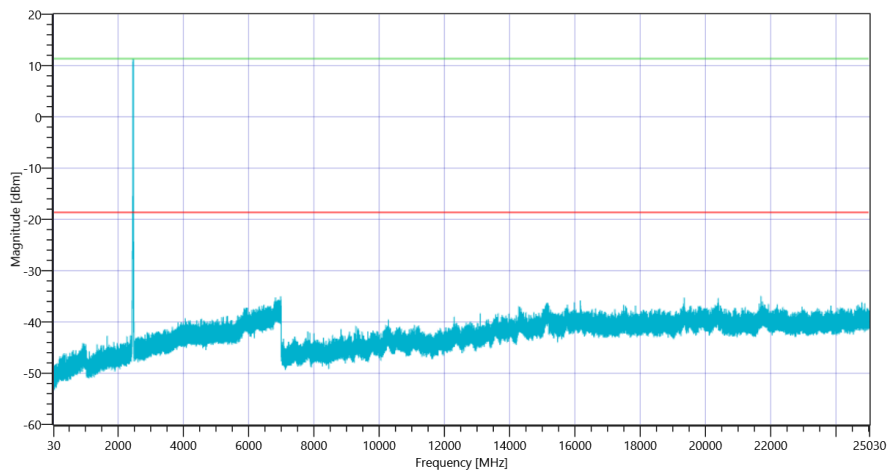
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.75	dBm	INFO
Ref. Frequency	---	---	2456.310	MHz	INFO

READ SA SETTINGS:

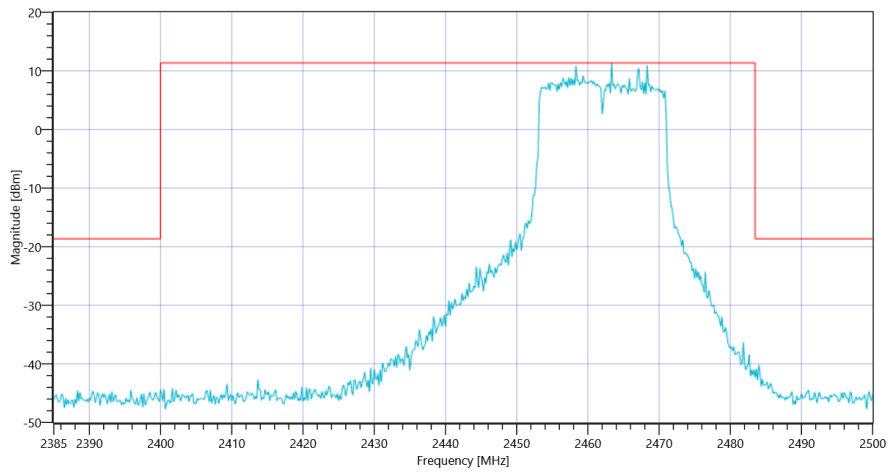
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.75 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2463.33 MHz	---	---	11.36	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 21701.167 MHz	0	---	16.31	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2462



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2462

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:02:01
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	19.89	dBm	INFO
Ref. Frequency	---	---	2415.900	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

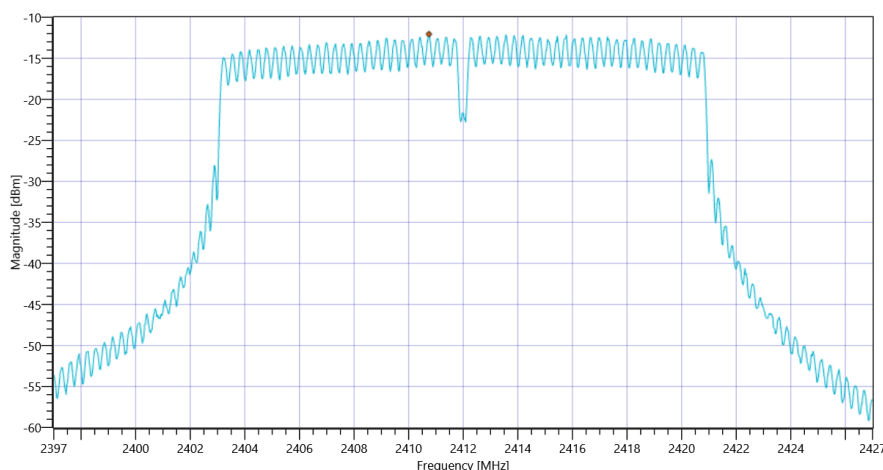
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.89 10.6 30
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	---	---	-12.05	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-12.05	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:14:19
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	21.30	dBm	INFO
Ref. Frequency	---	---	2433.400	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

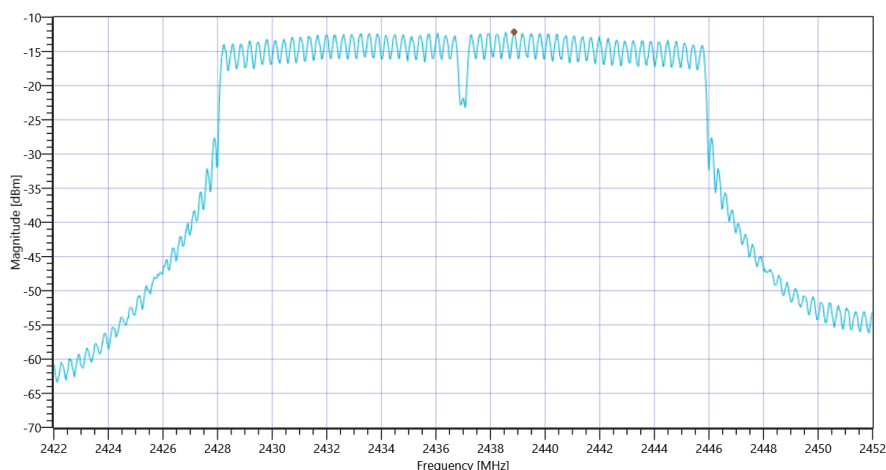
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.30 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	---	---	-12.13	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-12.13	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:26:00
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	20.62	dBm	INFO
Ref. Frequency	---	---	2460.600	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

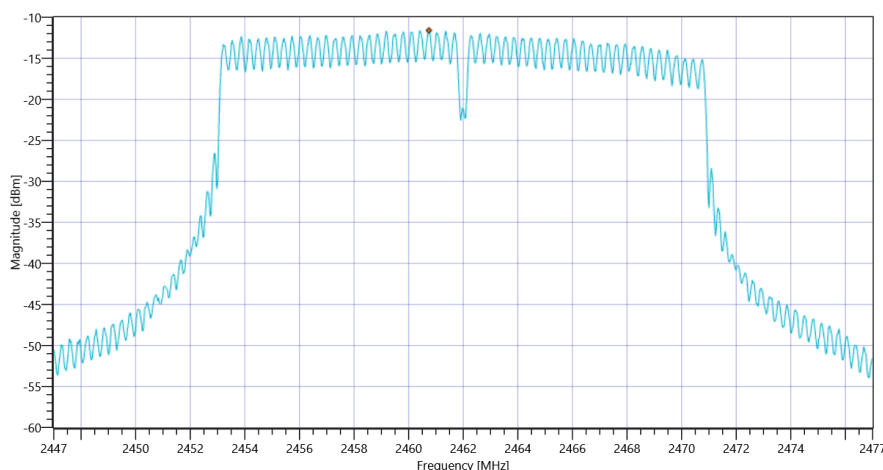
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.62 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	---	---	-11.6	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg PSD DC corrected	---	8	-11.6	dBm/3KHz	PASS



FCC Part 15.247 Avg Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:01:22
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

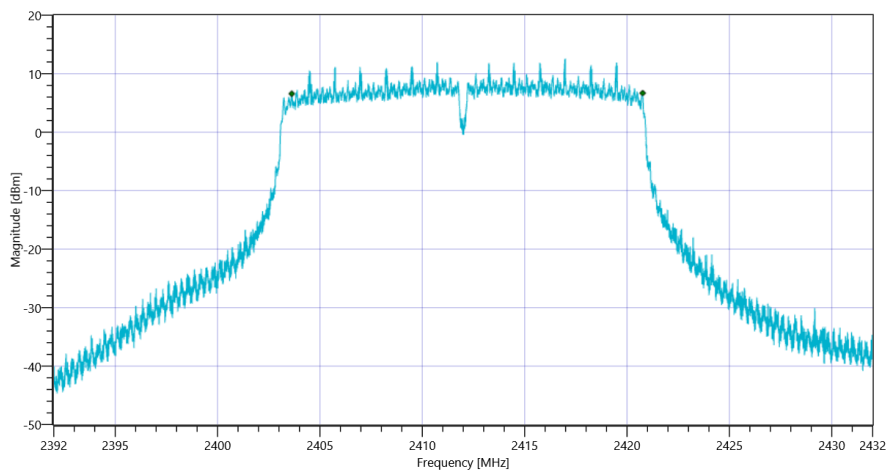
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.11	dBm	INFO
Ref. Frequency	---	---	2414.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.11 10.6 30
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	---	17140	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:13:41
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

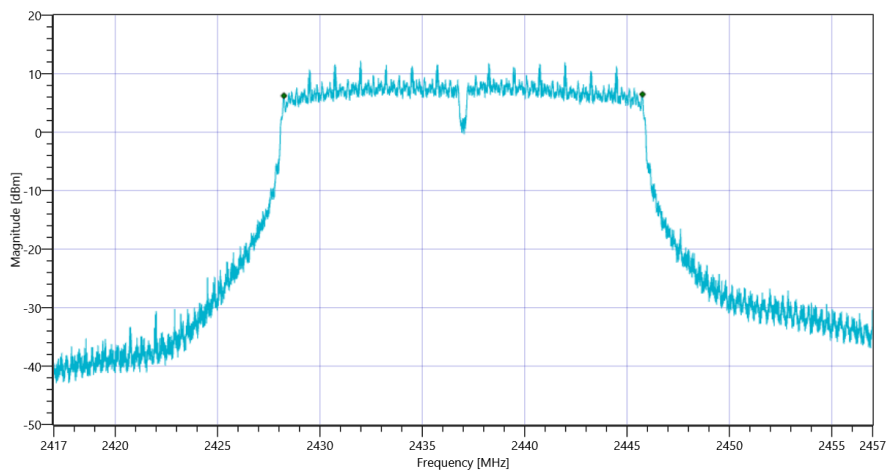
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.66	dBm	INFO
Ref. Frequency	---	---	2435.600	MHz	INFO

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	---	17516	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:25:22
Ambit Temp [°C] Humidity [rel%]	24.0 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

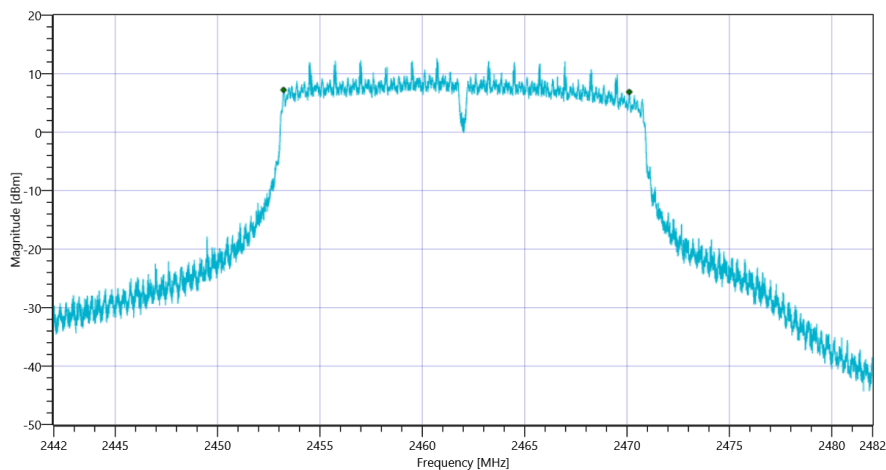
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.14	dBm	INFO
Ref. Frequency	---	---	2466.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.14 10.61 30
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	---	16888	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:03:08
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	20.09	dBm	INFO
Ref. Frequency	---	---	2412.700	MHz	INFO

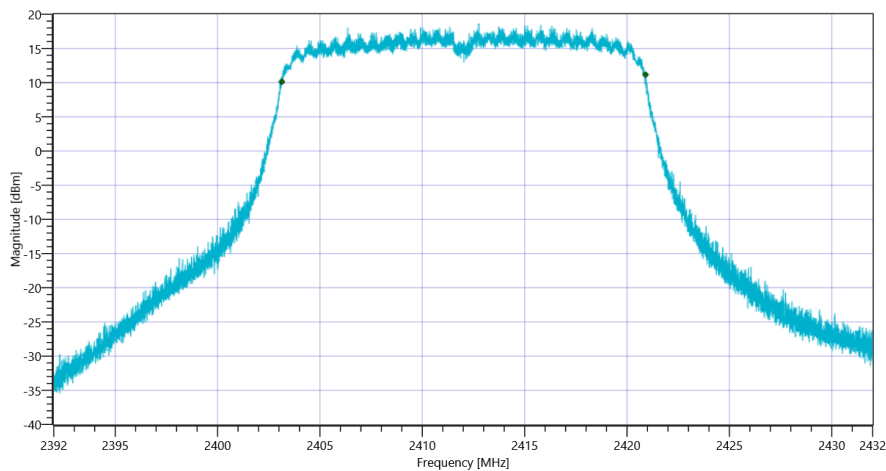
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.09 10.6 30
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

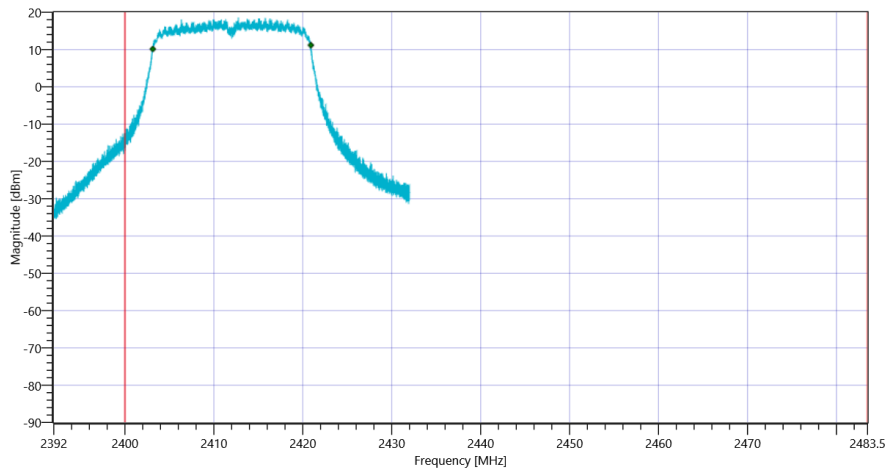
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17766.223	kHz	INFO
T1 99%	2400.000000	---	2403.1369	MHz	PASS
T2 99%	---	2483.500000	2420.9031	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 99PCT

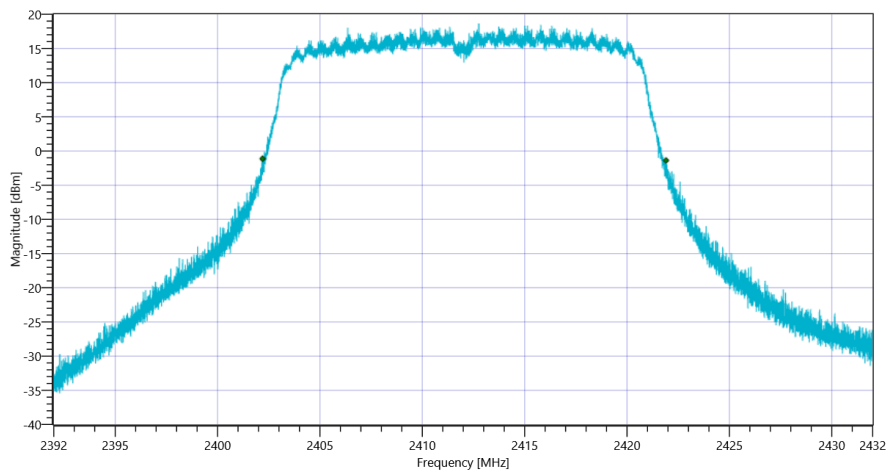
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode

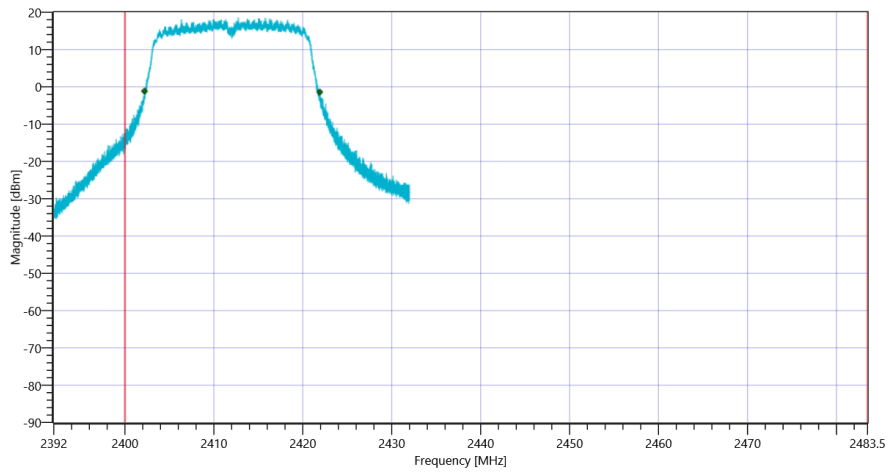
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	19708	kHz	INFO	
T1 20dB	2400.000000	---	2402.1960	MHz	PASS	
T2 20dB	---	2483.500000	2421.9040	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:15:26
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	19.79	dBm	INFO
Ref. Frequency	---	---	2430.910	MHz	INFO

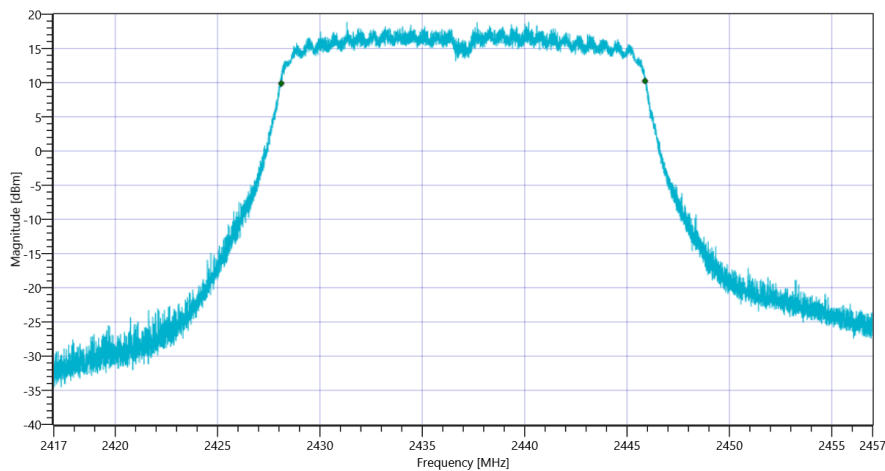
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.79 10.6 30
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

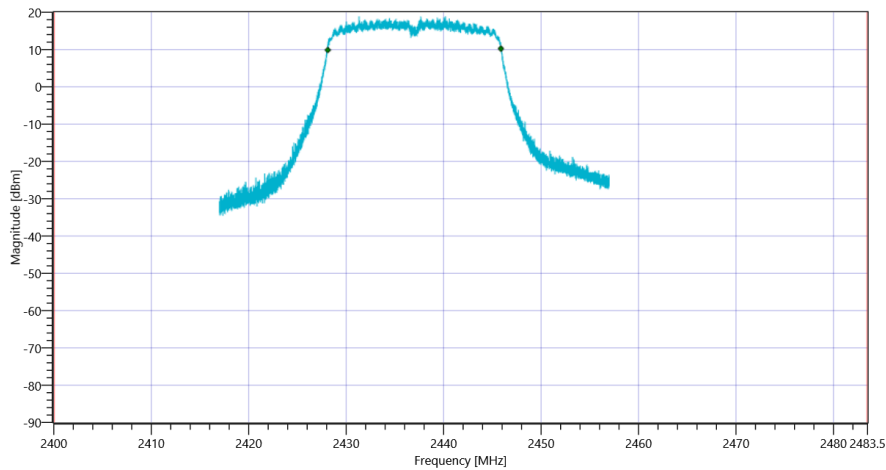
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17766.223	kHz	INFO
T1 99%	2400.000000	---	2428.1129	MHz	PASS
T2 99%	---	2483.500000	2445.8791	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 99PCT

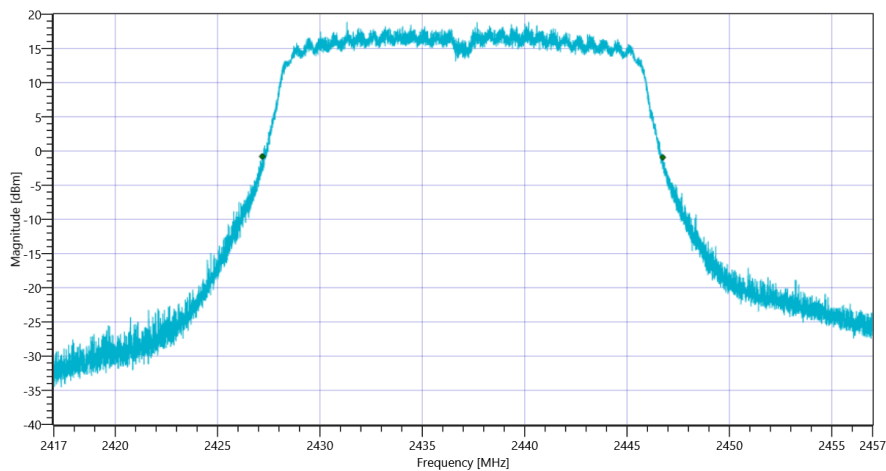
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

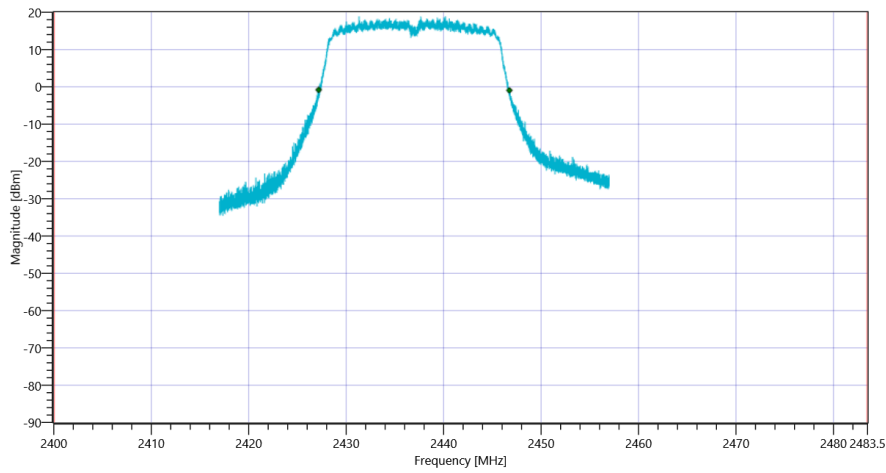
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19560	kHz	INFO
T1 20dB	2400.000000	---	2427.1840	MHz	PASS
T2 20dB	---	2483.500000	2446.7440	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:27:07
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	20.19	dBm	INFO
Ref. Frequency	---	---	2460.800	MHz	INFO

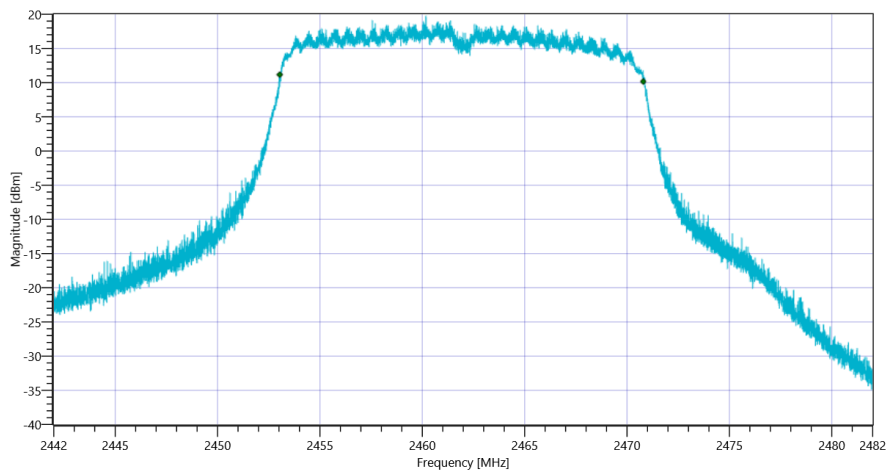
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.19 10.61 30
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

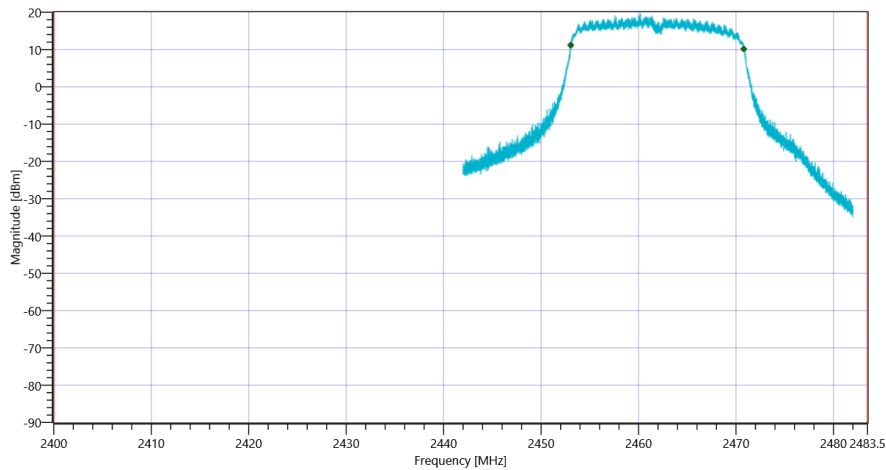
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17754.225	kHz	INFO
T1 99%	2400.000000	---	2453.0369	MHz	PASS
T2 99%	---	2483.500000	2470.7911	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 99PCT

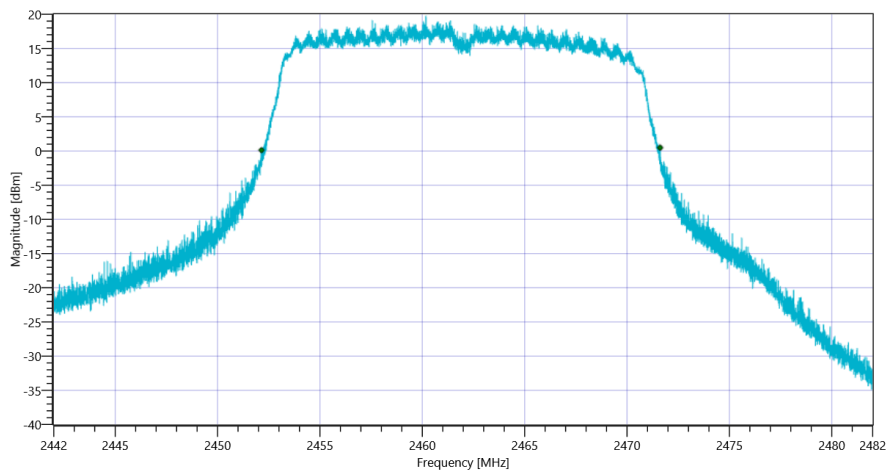
Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode

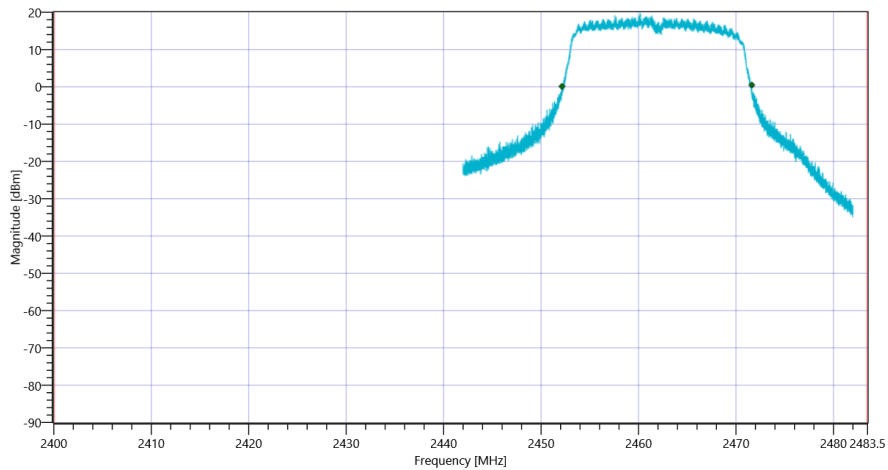
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	19472	kHz	INFO	
T1 20dB	2400.000000	---	2452.1440	MHz	PASS	
T2 20dB	---	2483.500000	2471.6160	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT:20dB ~ WLAN2G4 nHT20-mode 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:11:45
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	20.81	dBm	INFO
Ref. Frequency	---	---	2414.800	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

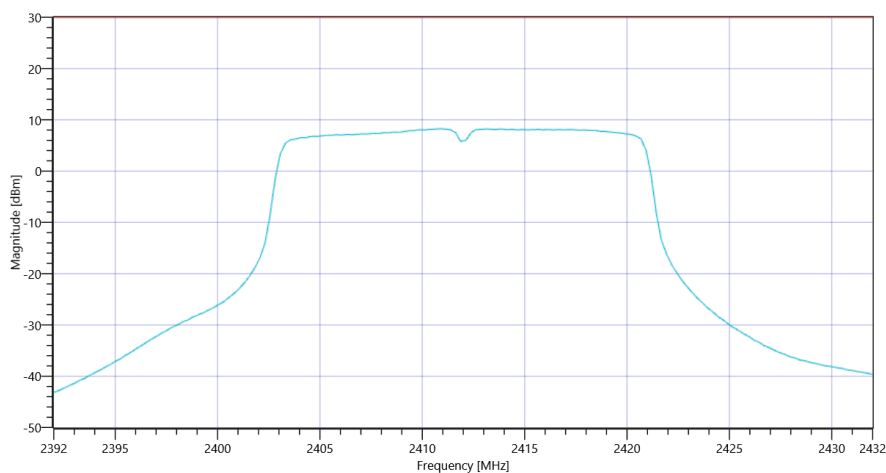
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.81 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	---	---	22.81	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	22.81	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:23:54
Ambit Temp [°C] Humidity [rel%]	24.0 18
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	22.07	dBm	INFO
Ref. Frequency	---	---	2434.000	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

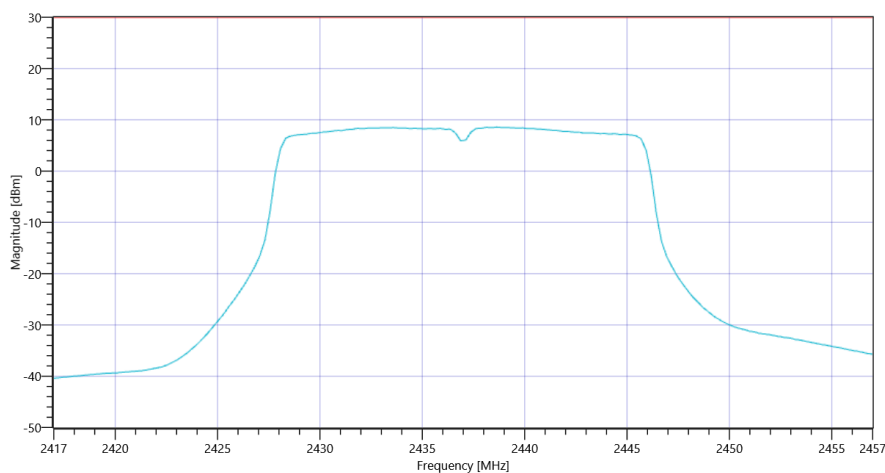
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.07 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	---	---	23.1	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Avg Output Power DC corrected	---	30	23.1	dBm	PASS



FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

General verdict

PASS

FCC Part 15.247 Maximum Avg Conducted Output Power SA DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:35:37
Ambit Temp [°C] Humidity [rel%]	24.1 17
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 nHT20-mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.	---	---	21.91	dBm	INFO
Ref. Frequency	---	---	2464.700	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

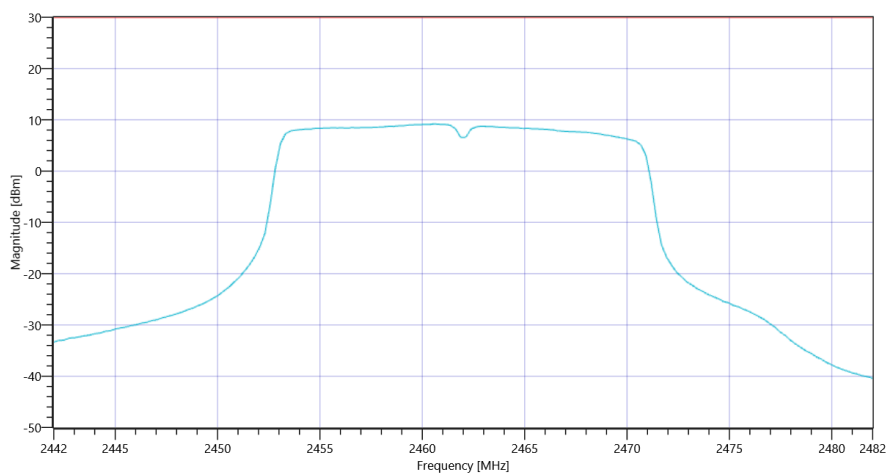
Maximum Avg. Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.91 10.61 40
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 nHT20-mode

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:04:09
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

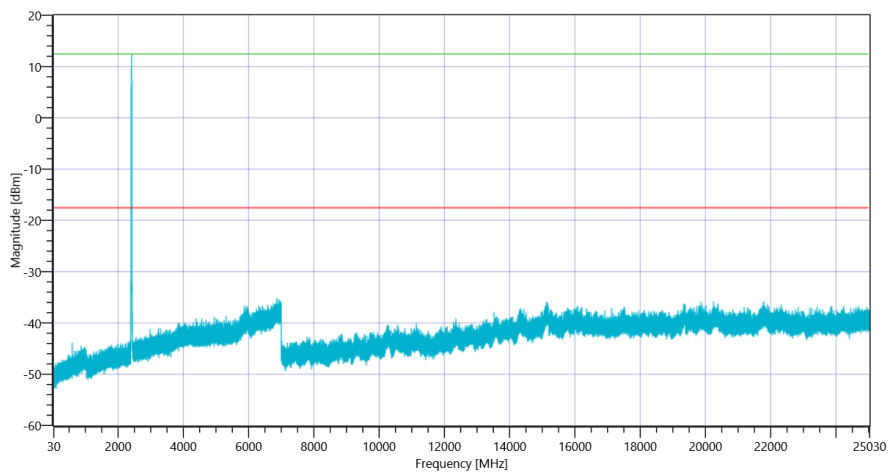
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.59	dBm	INFO
Ref. Frequency	---	---	2407.800	MHz	INFO

READ SA SETTINGS:

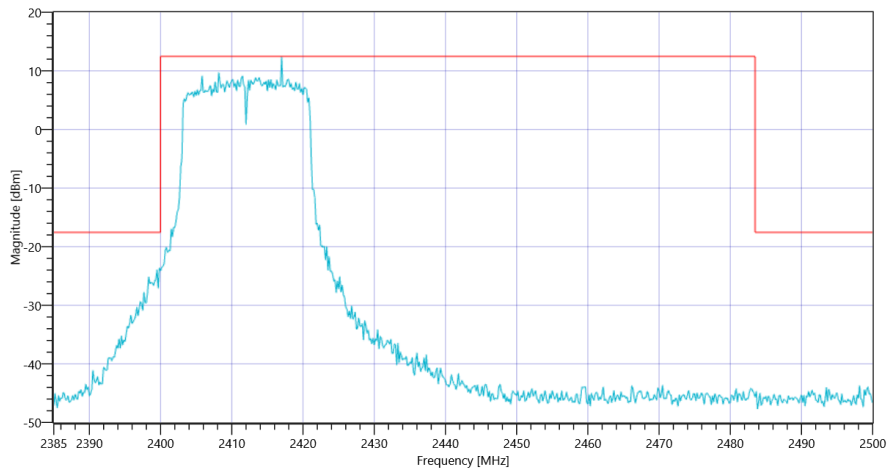
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.59 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2417.00 MHz	---	---	12.44	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	6.03	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2412



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2412

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:16:24
Ambit Temp [°C] Humidity [rel%]	24.1 18
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

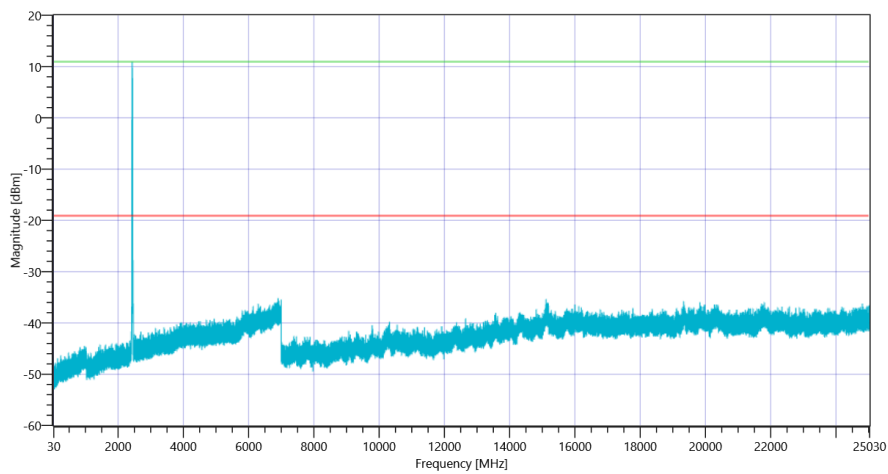
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.95	dBm	INFO
Ref. Frequency	---	---	2435.000	MHz	INFO

READ SA SETTINGS:

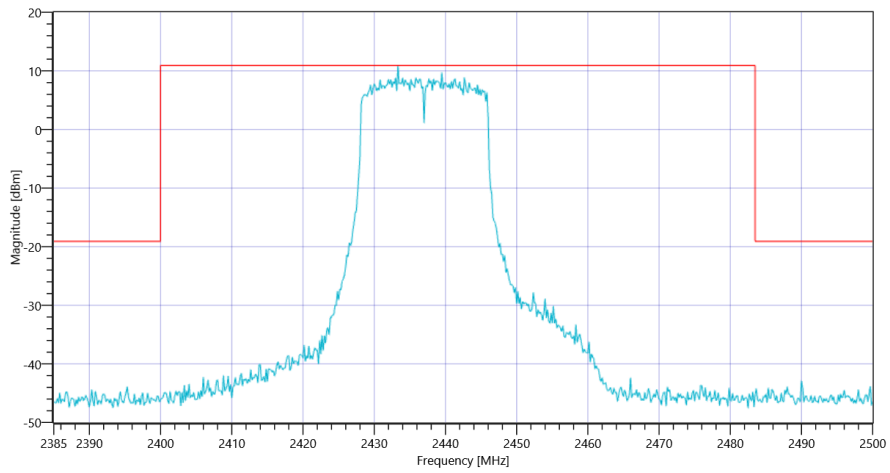
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.95 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2433.33 MHz	---	---	10.91	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6902.167 MHz	0	---	16.1	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2437



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2437

General verdict

PASS

FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode

Test References	
TC Start	10.03.2022 16:28:06
Ambit Temp [°C] Humidity [rel%]	24.1 17
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 nHT20_mode
Add. Information	

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

Test Parameter	
Technology to test	WLAN2G4 nHT20-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.

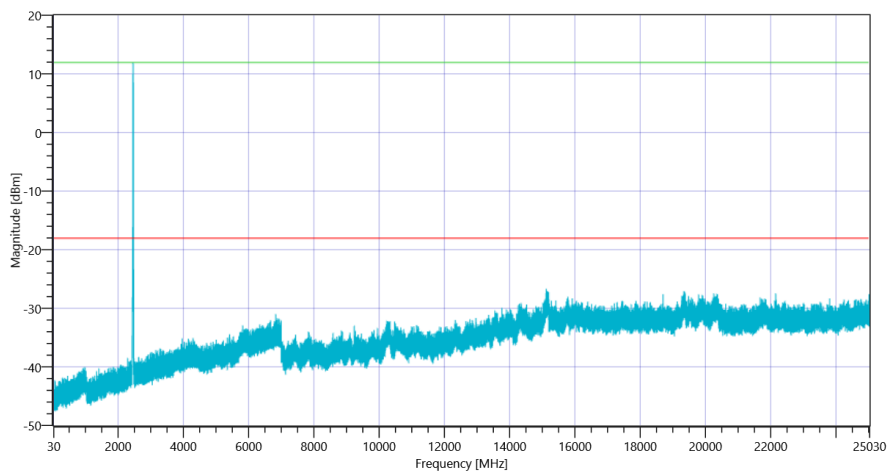
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.22	dBm	INFO
Ref. Frequency	---	---	2460.500	MHz	INFO

READ SA SETTINGS:

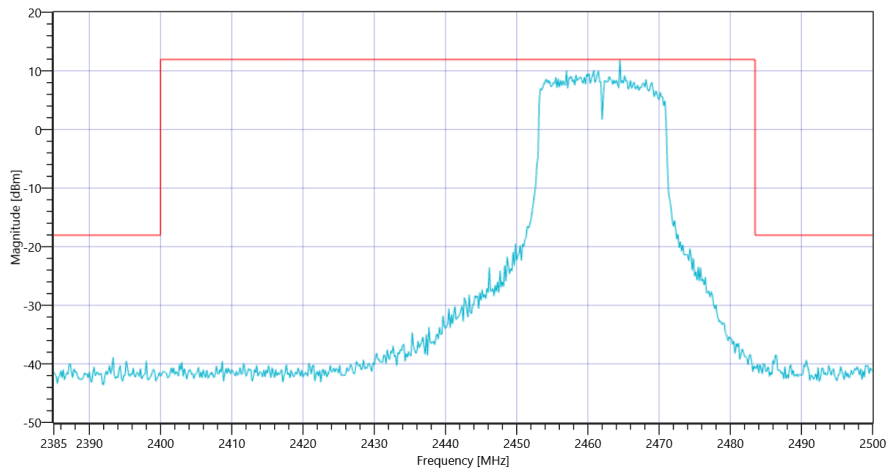
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.22 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2464.50 MHz	---	---	11.95	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 15125.5 MHz	0	---	8.63	dB	INFO



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2462



FCC Part 15.247 TX Spurious Conducted 30dBc ~ WLAN2G4 nHT20-mode 2462

General verdict

PASS

- END OF DOCUMENT -