Conducted test results

No.1-7077/23-01-04_TR1-A202-R1

January 16, 2024

Test Standard(s)	FCC 15.247 ISED RSS247

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2024.01.16 15:24:03 +01'00'

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Table of Content

NA # Message with SA scan ~

References

TC start	12.01.2024 14:21:48
Ambit temp [°C] | humidity [rel%]	22.9 | 25
System version	4.7.1.5
Standard | Version	NA | NI
Method	
Description	Message with SA Scan g mode
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	12.01.2024 14:21:48
Message	set WLAN2G4 to g mode, Frequency [MHz] 2412 ,

Equipment

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

Verdict
INFO

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:22:21
Ambit temp [°C] | humidity [rel%]	23.0 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

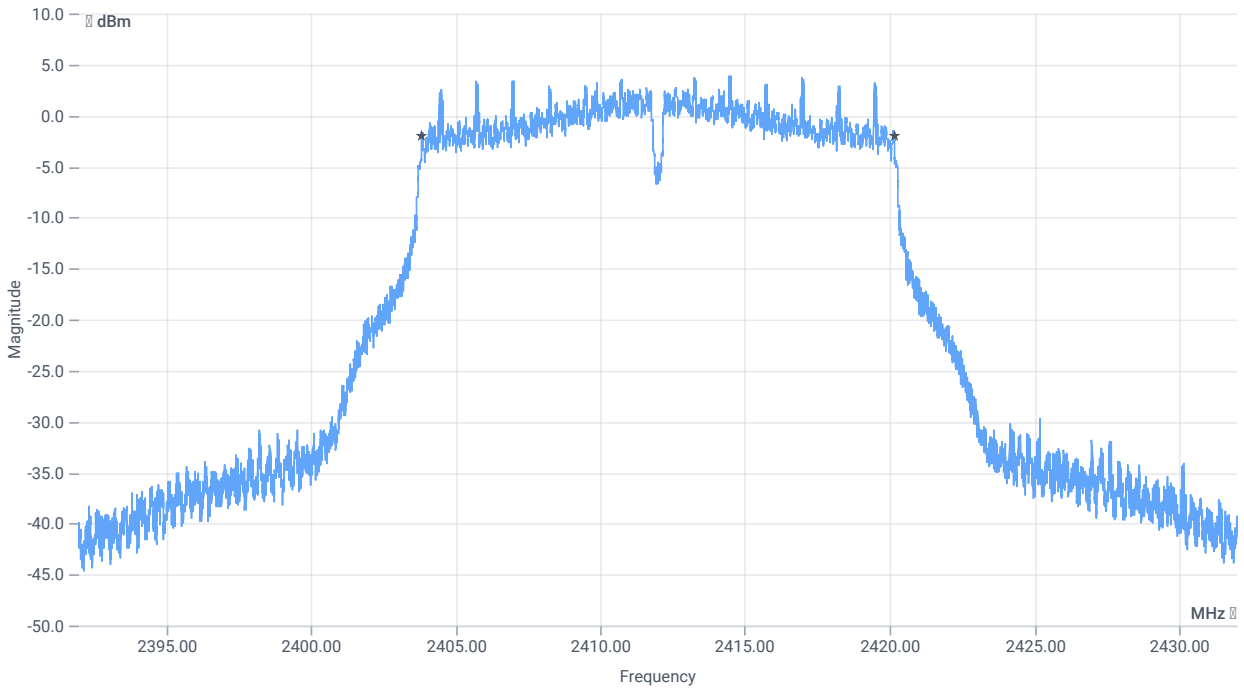
Test at TX 2412 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.98	dBm	INFO
Ref. Frequency	---	---	2413.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.98 | 13.85 | 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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16292	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:22:55
Ambit temp [°C] | humidity [rel%]	23.0 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

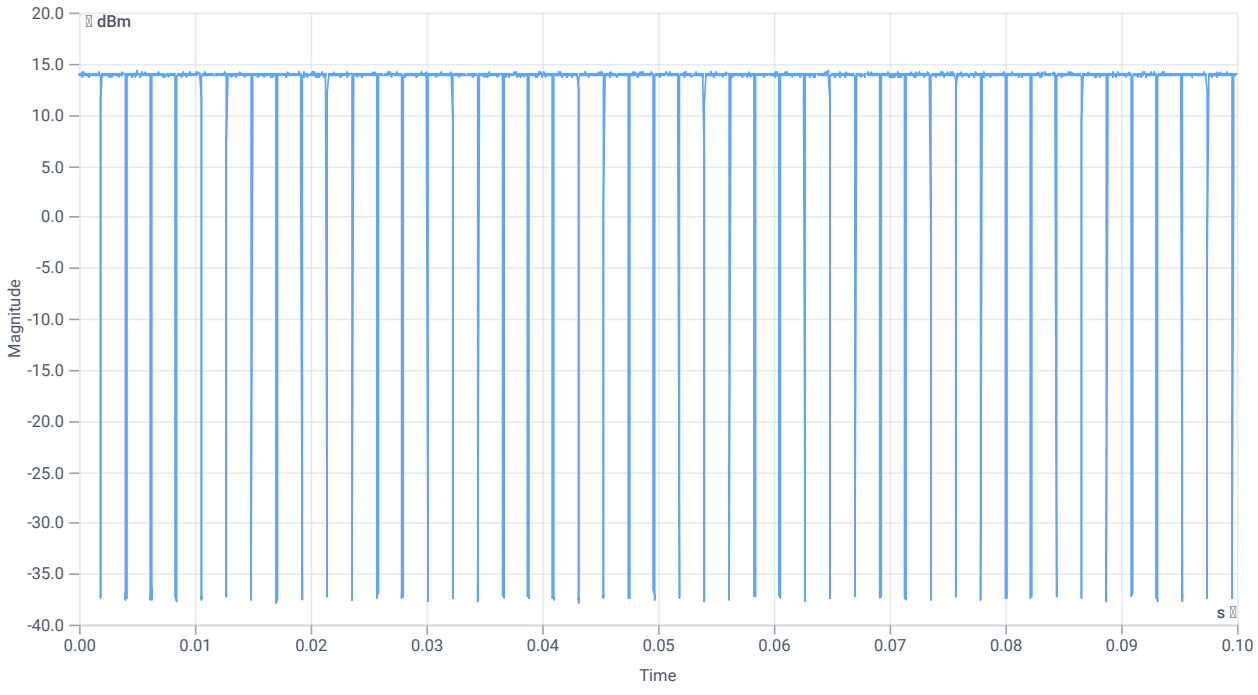
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.92	dBm	INFO
Ref. Frequency	---	---	2411.000	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

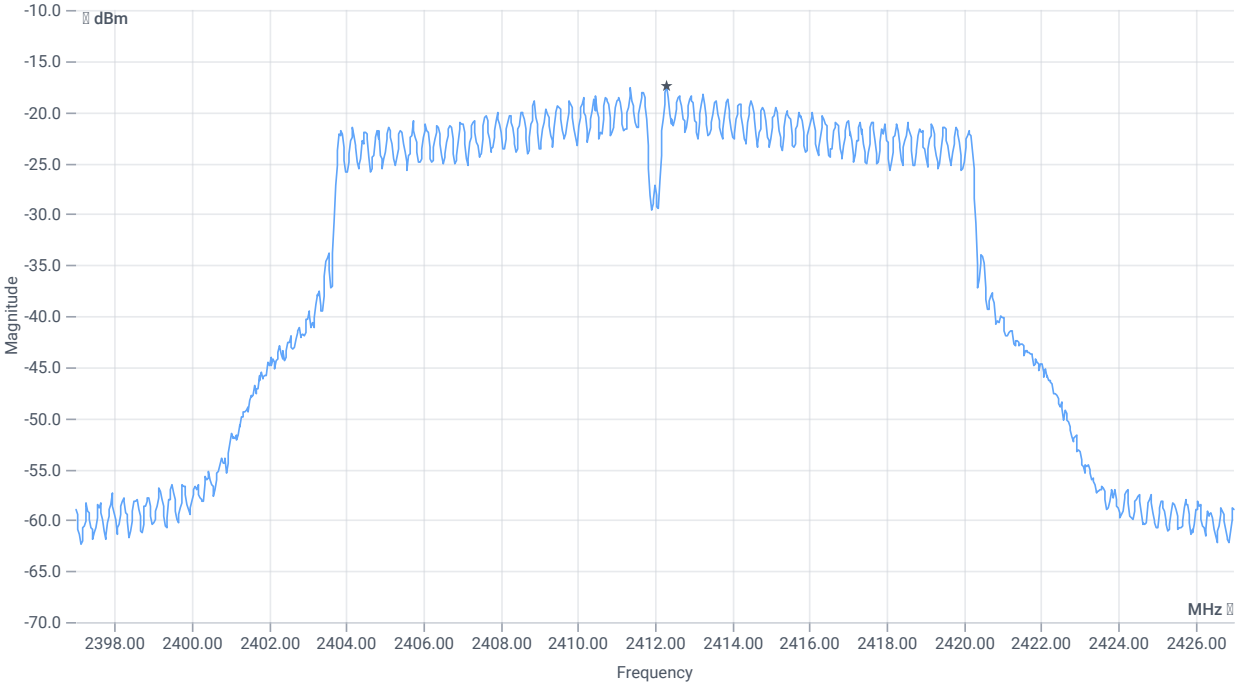


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.92 | 13.85 | 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



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-17.54	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-17.23	dBm/3kHz	PASS

Verdict

PASS

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

References

TC start	12.01.2024 14:23:59
Ambit temp [°C] | humidity [rel%]	23.0 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

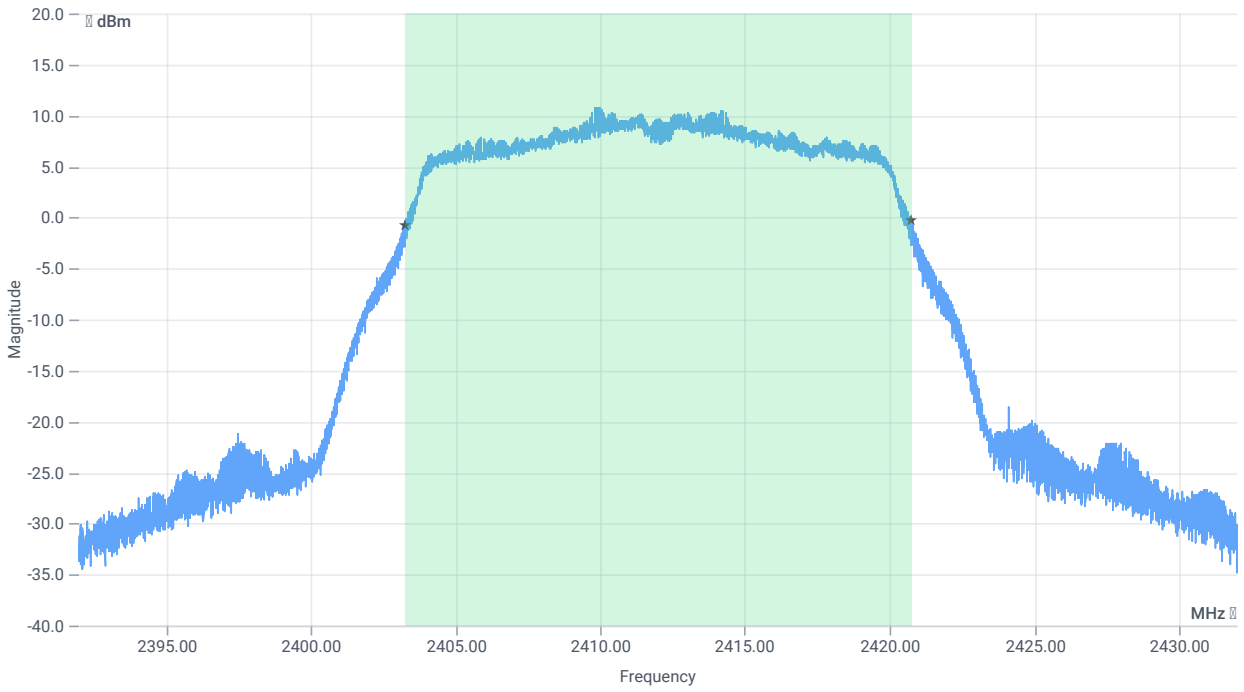
Test at TX 2412 MHz

RESULT: Reference Power cond.

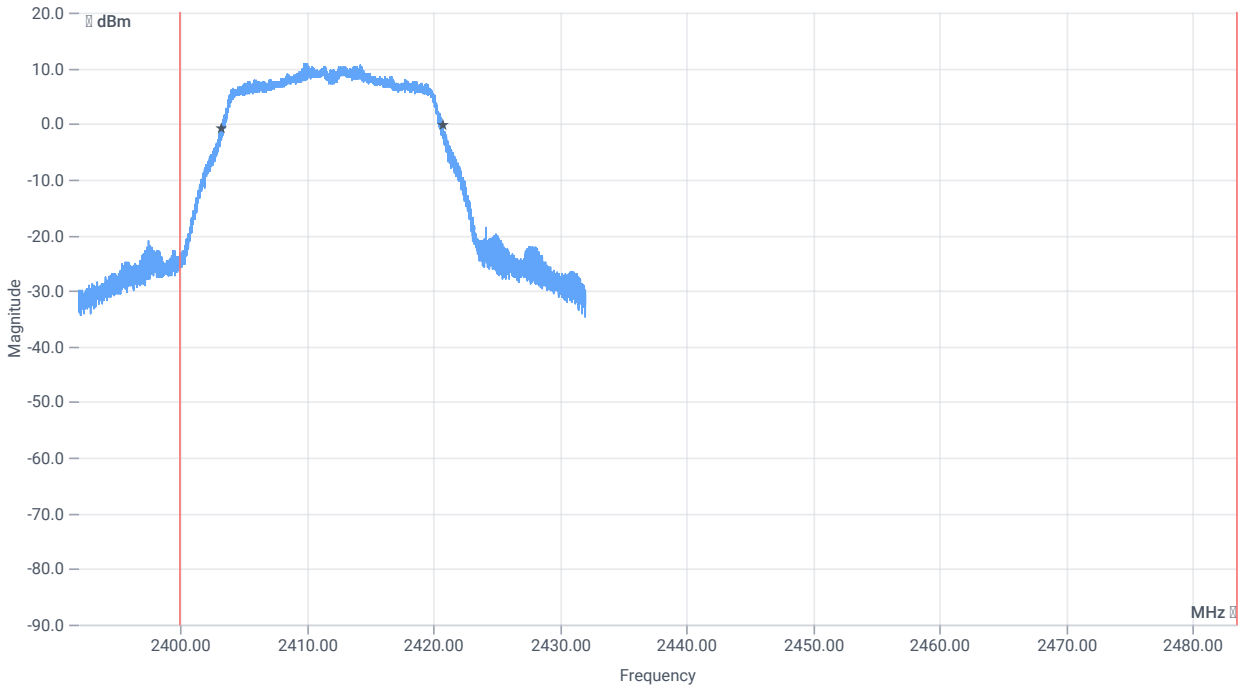
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.03	dBm	INFO
Ref. Frequency	---	---	2410.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.03 | 13.85 | 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



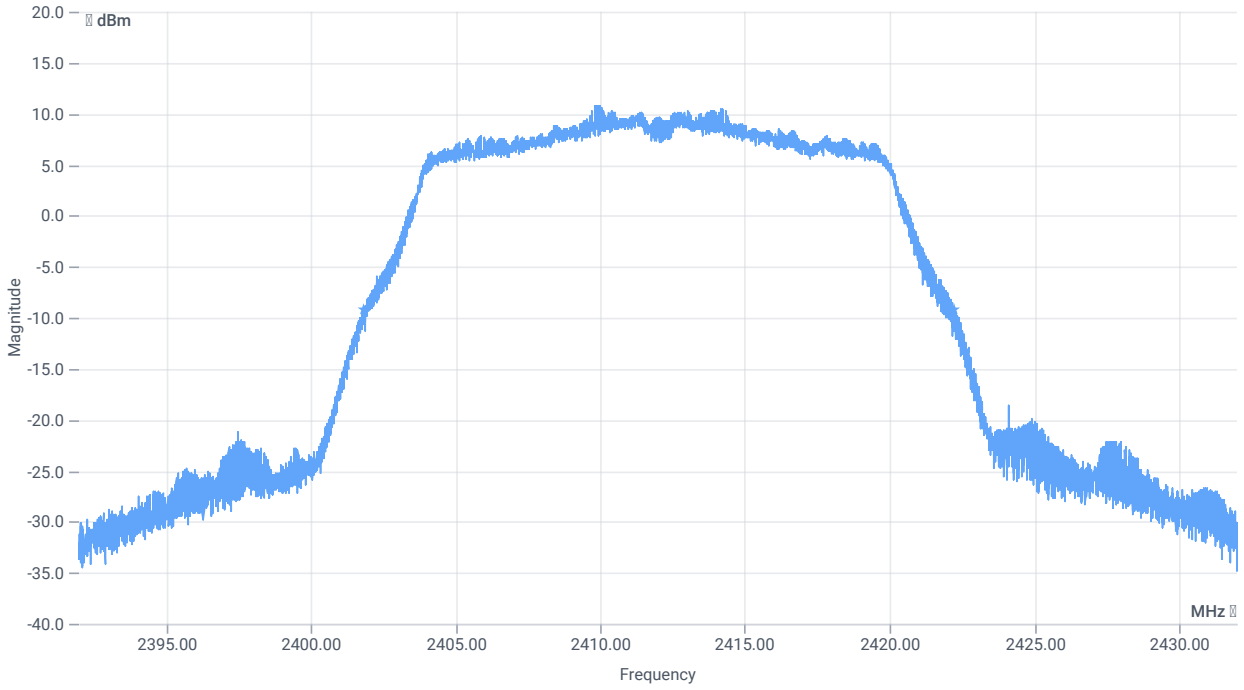
BW 99PCT



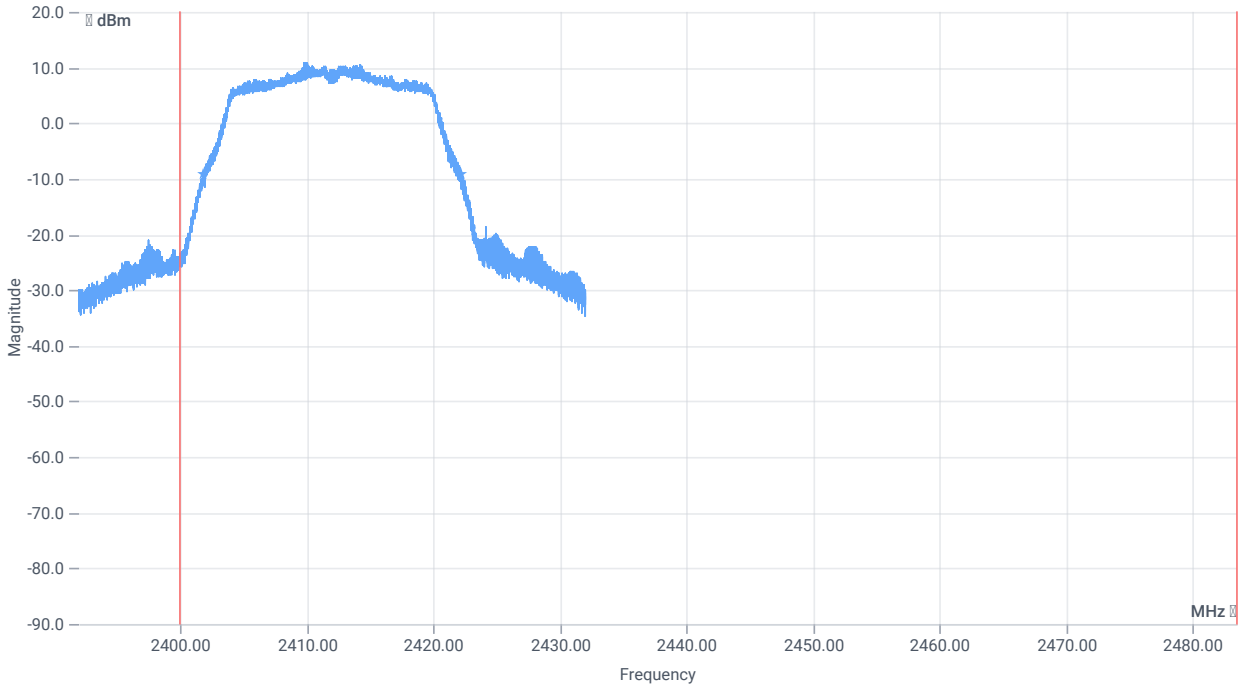
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17466.000	kHz	INFO
T1 99%	2400.000000	---	2403.2649	MHz	PASS
T2 99%	---	2483.500000	2420.7311	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20412	kHz	INFO
T1 20DB	2400.000000	---	2401.8360	MHz	PASS
T2 20dB	---	2483.500000	2422.2480	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:24:36
Ambit temp [°C] | humidity [rel%]	22.9 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

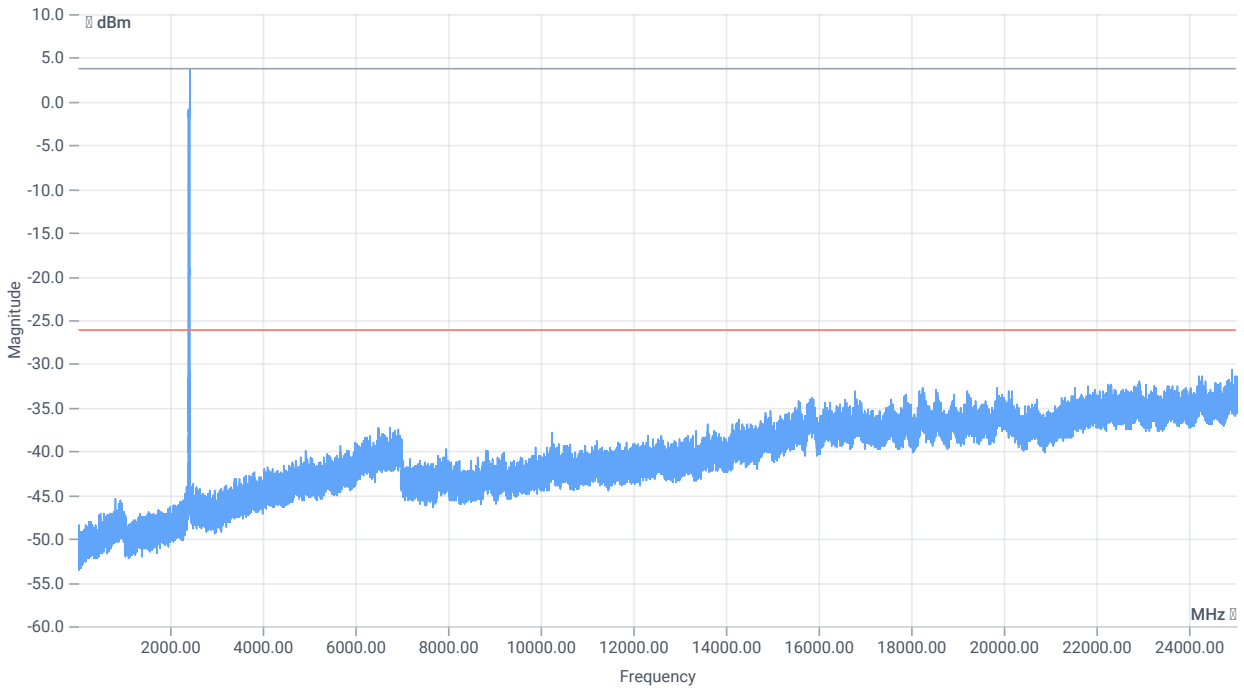
Equipment

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.

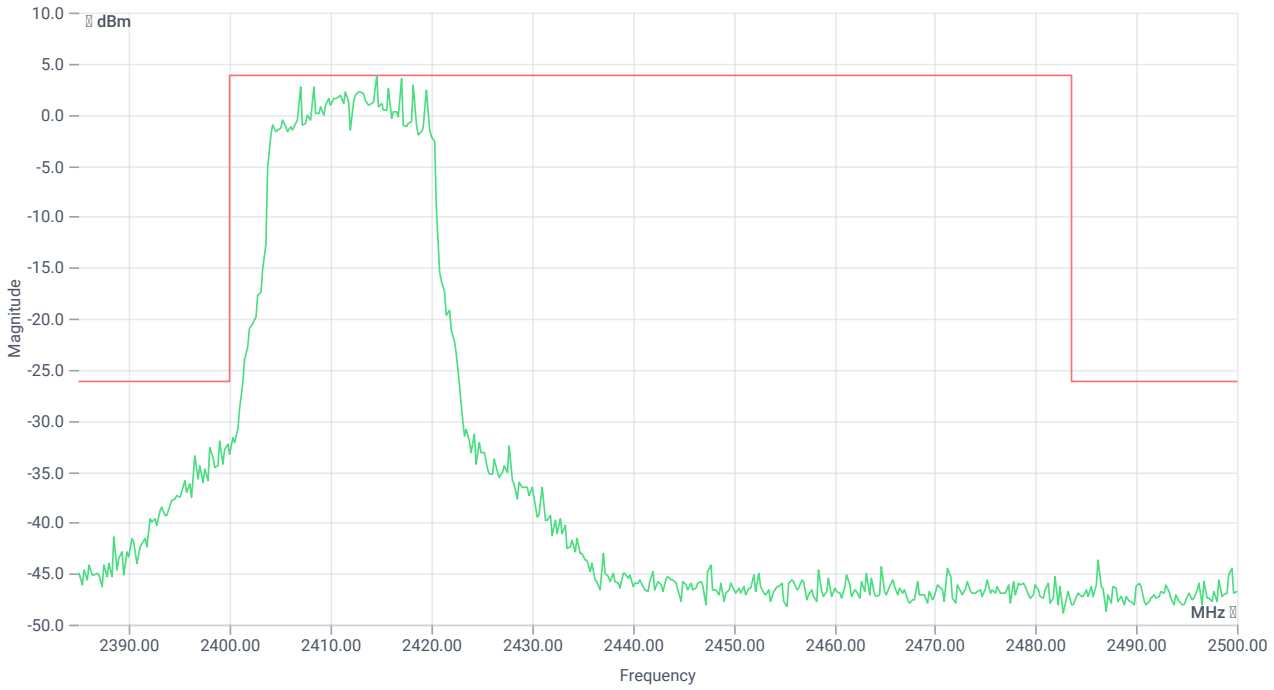
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.96	dBm	INFO
Ref. Frequency	---	---	2413.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	12.96 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2414.50 MHz	---	---	3.80	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24939.25 MHz	0	---	4.5	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:31:19
Ambit temp [°C] | humidity [rel%]	22.8 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

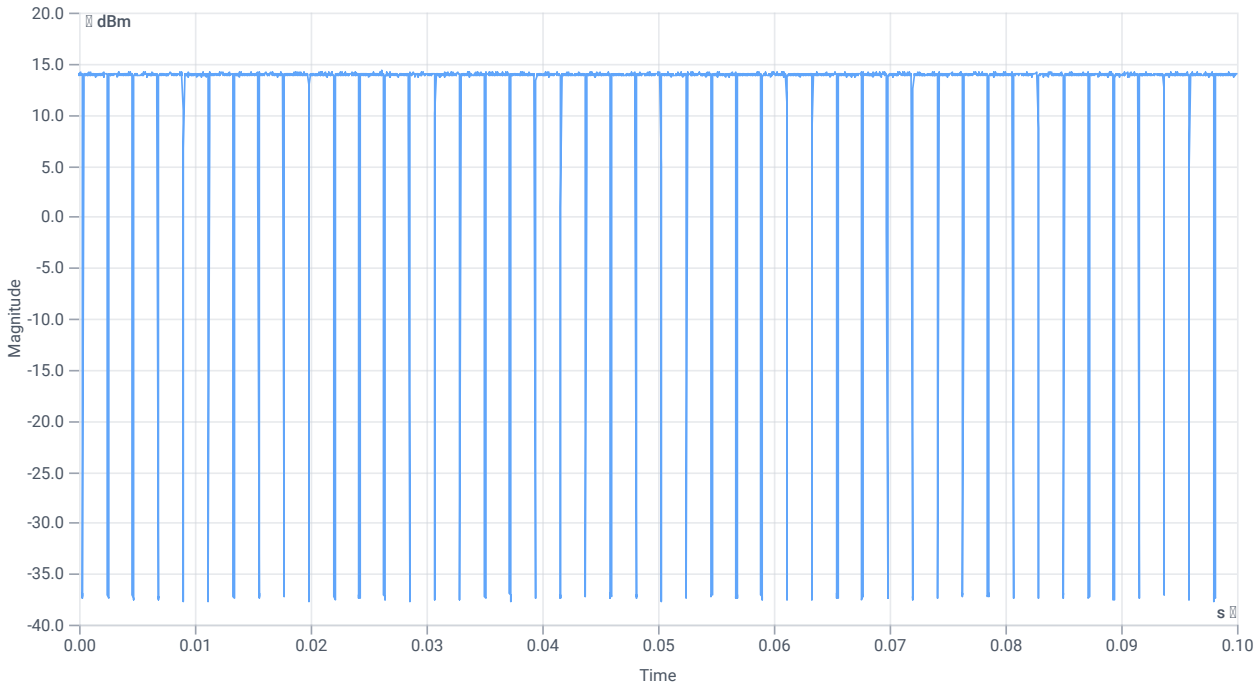
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.01	dBm	INFO
Ref. Frequency	---	---	2410.700	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

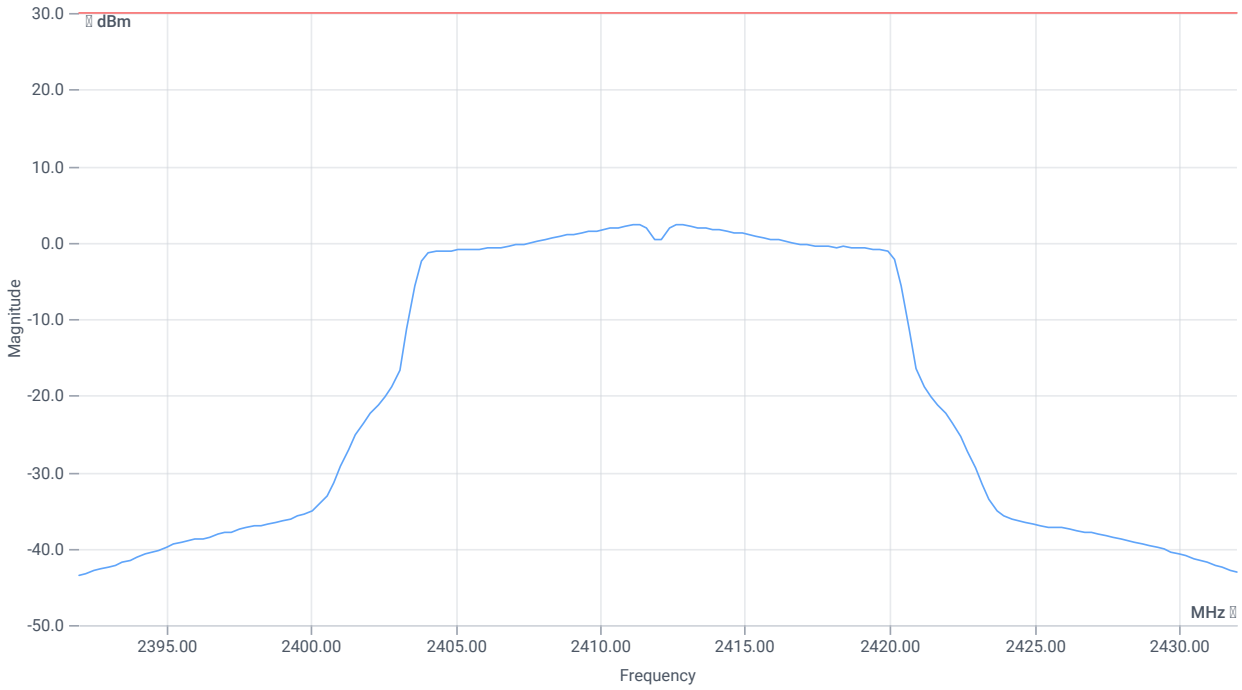


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.01 | 13.85 | 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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	15.45	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	15.76	dBm	PASS

Verdict
PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:32:33
Ambit temp [°C] | humidity [rel%]	22.8 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

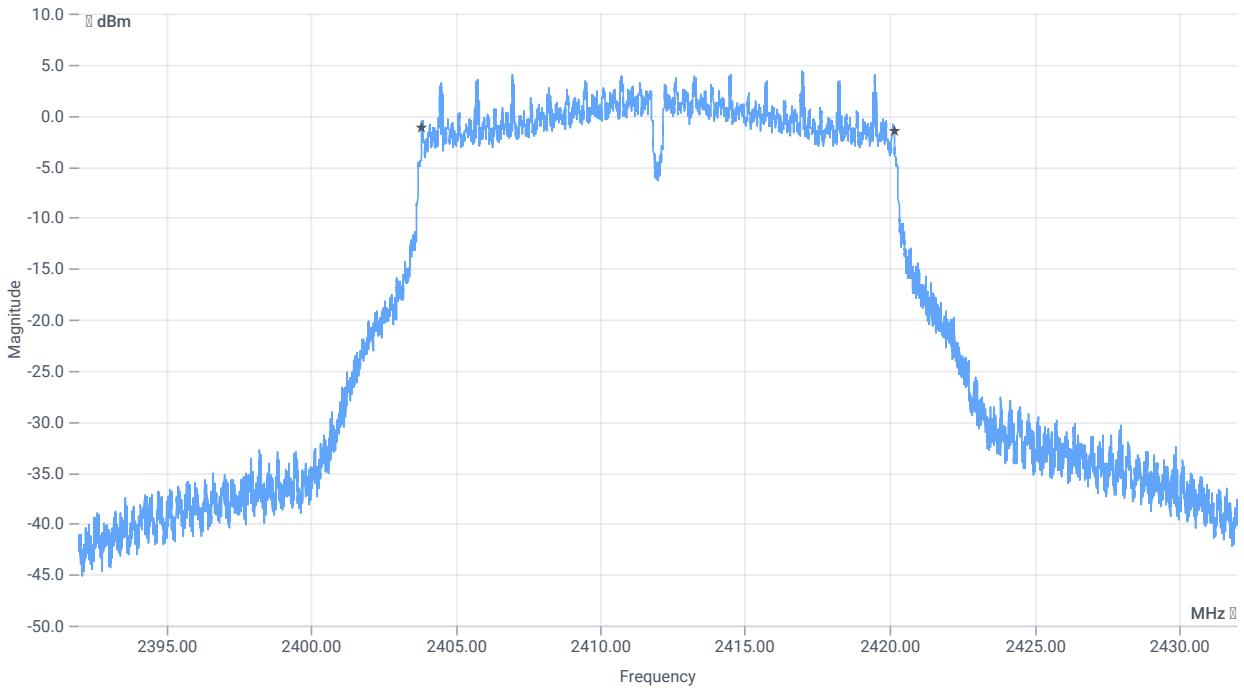
Test at TX 2412 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.28	dBm	INFO
Ref. Frequency	---	---	2414.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.28 | 13.85 | 25
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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16308	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:33:08
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

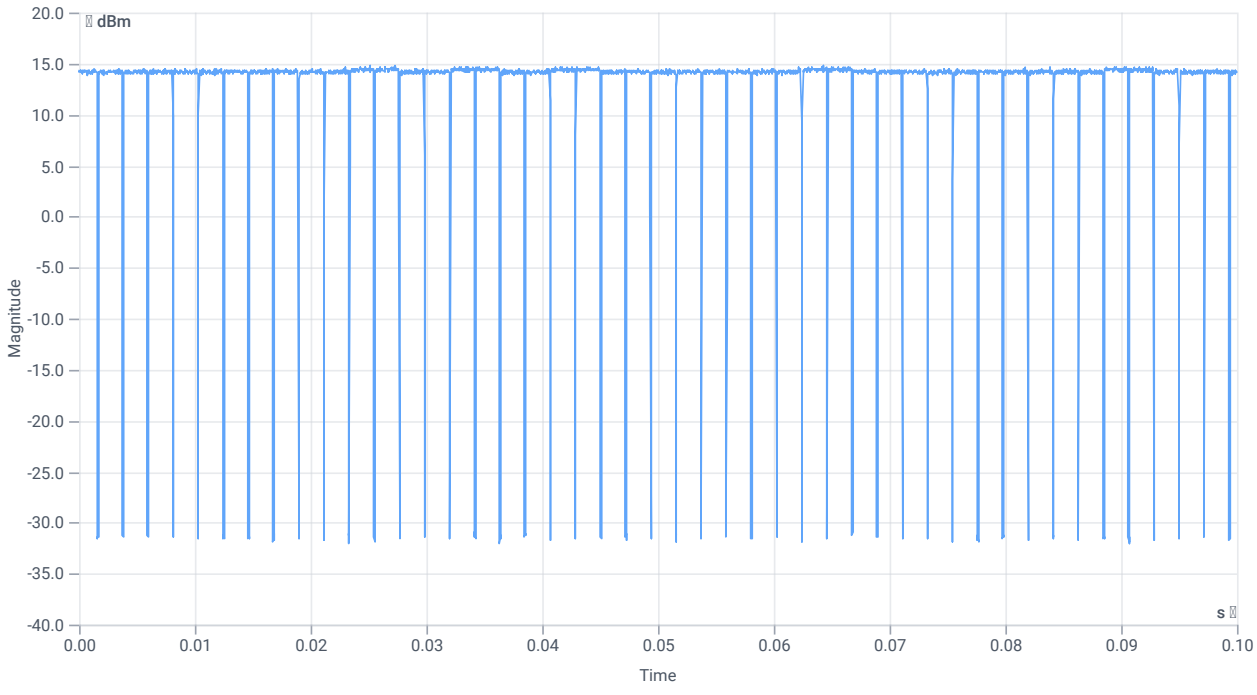
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.05	dBm	INFO
Ref. Frequency	---	---	2410.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

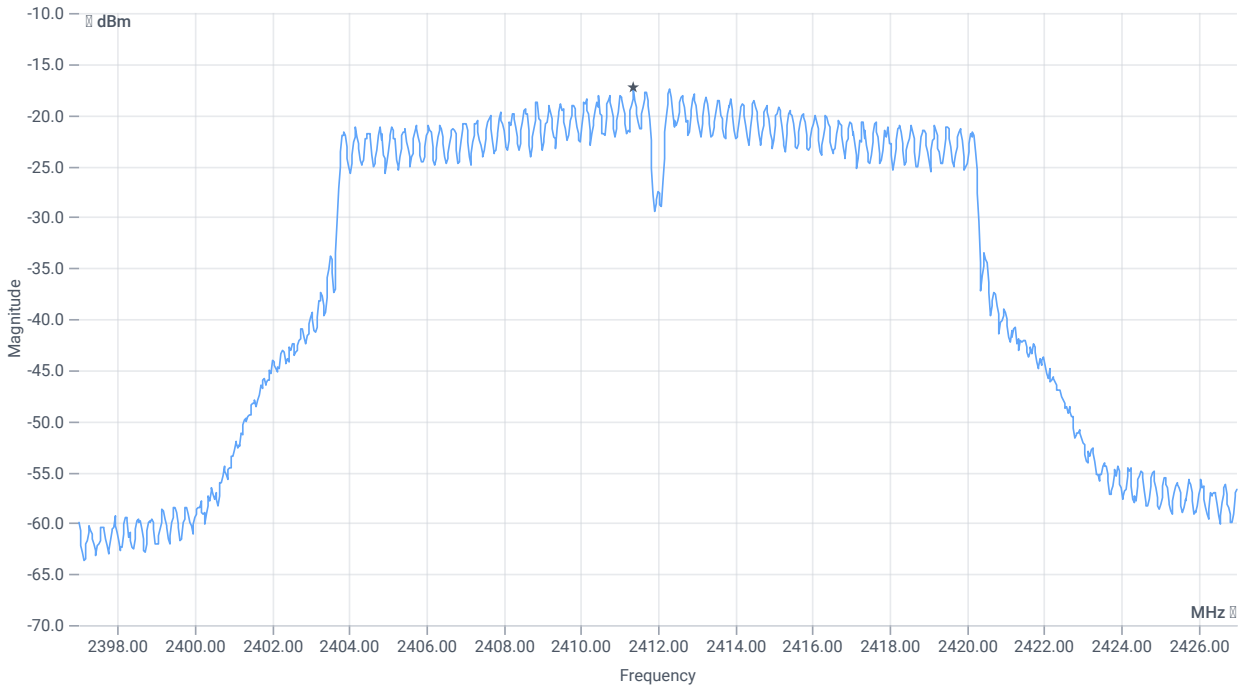


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.05 | 13.85 | 25
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



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-17.27	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-16.96	dBm/3kHz	PASS

Verdict
PASS

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

References

TC start	12.01.2024 14:34:12
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

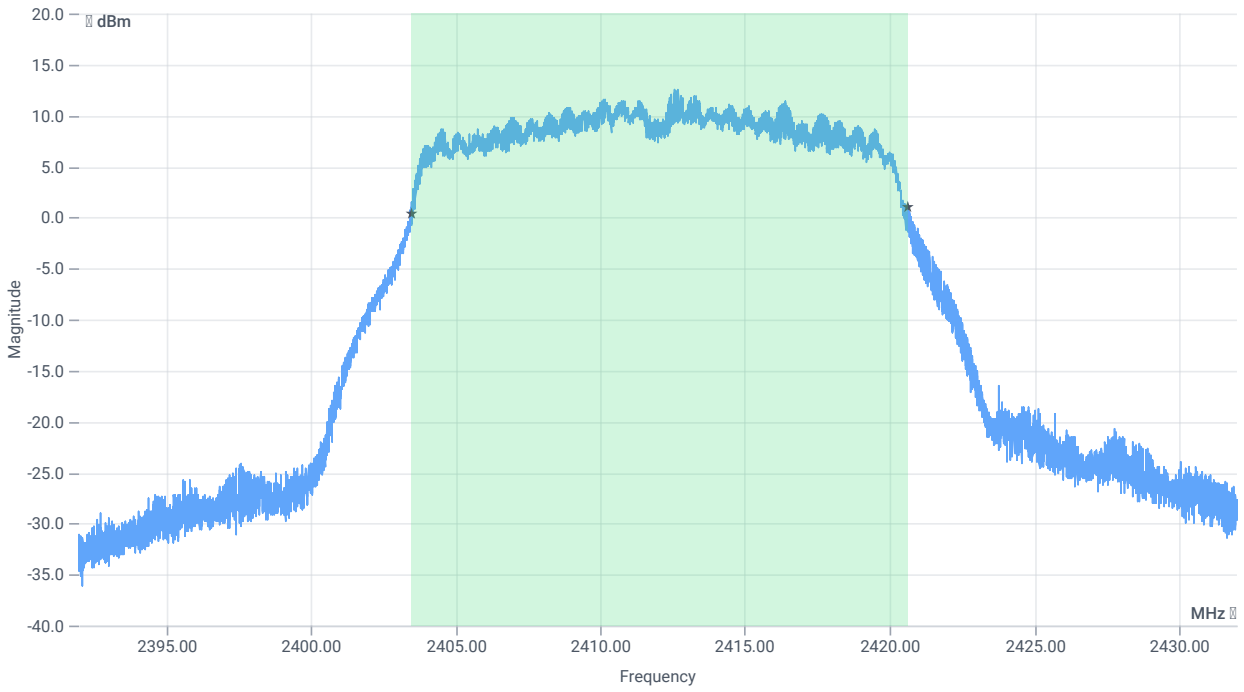
Test at TX 2412 MHz

RESULT: Reference Power cond.

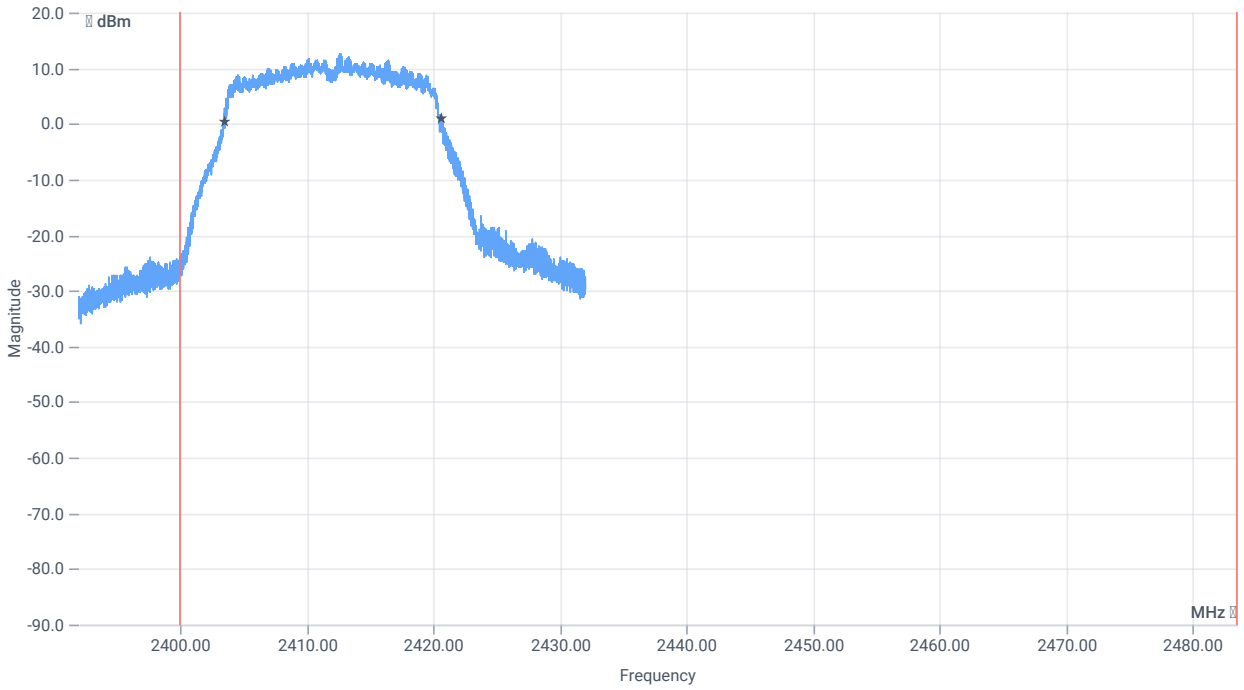
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.12	dBm	INFO
Ref. Frequency	---	---	2412.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.12 | 13.85 | 25
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



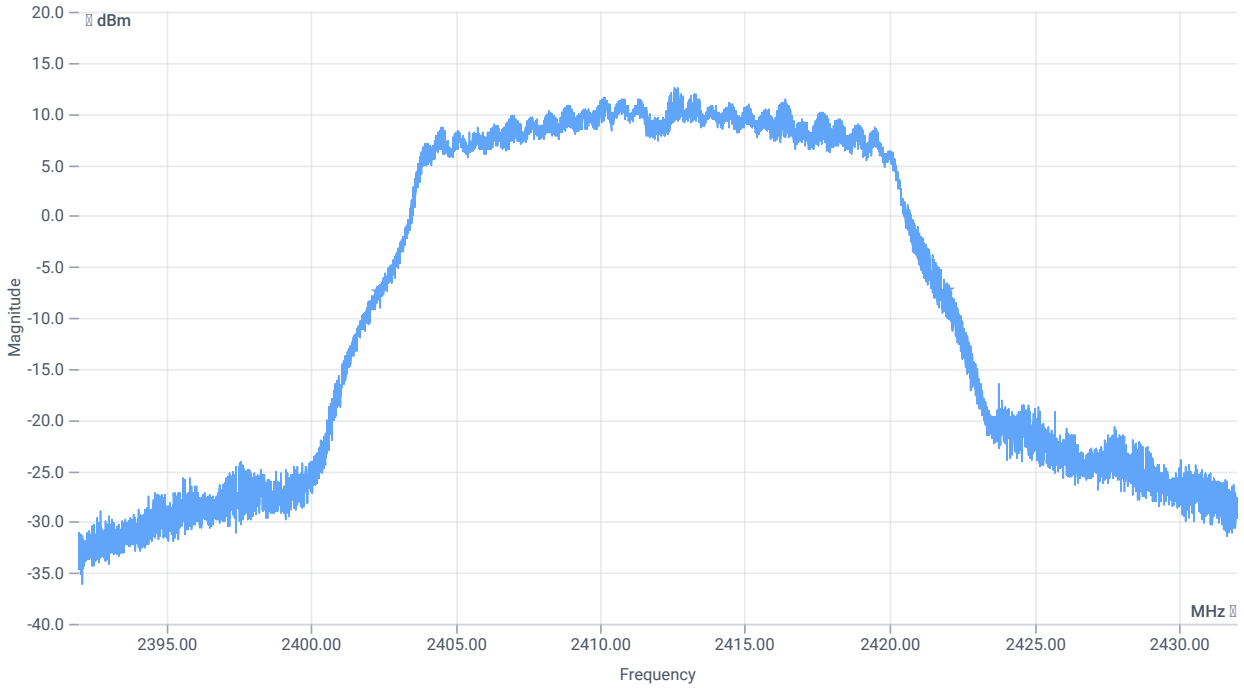
BW 99PCT



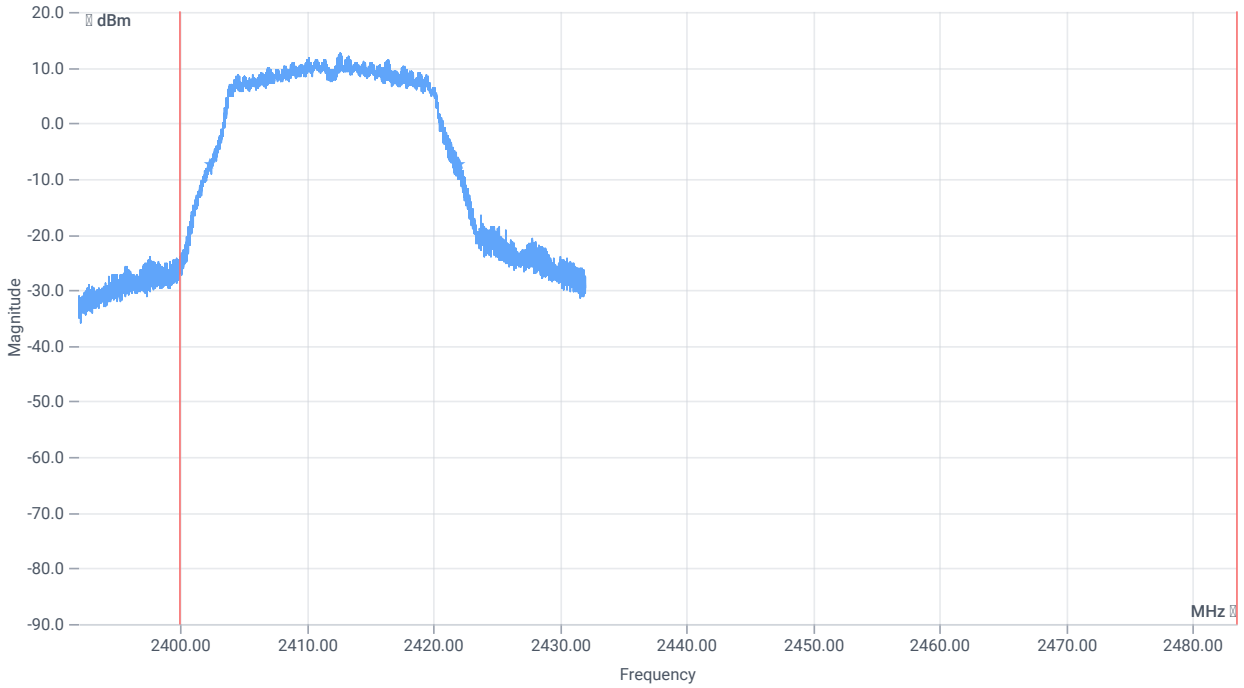
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17098.000	kHz	INFO
T1 99%	2400.000000	---	2403.5048	MHz	PASS
T2 99%	---	2483.500000	2420.6031	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19792	kHz	INFO
T1 20DB	2400.000000	---	2402.2720	MHz	PASS
T2 20dB	---	2483.500000	2422.0640	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:34:49
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

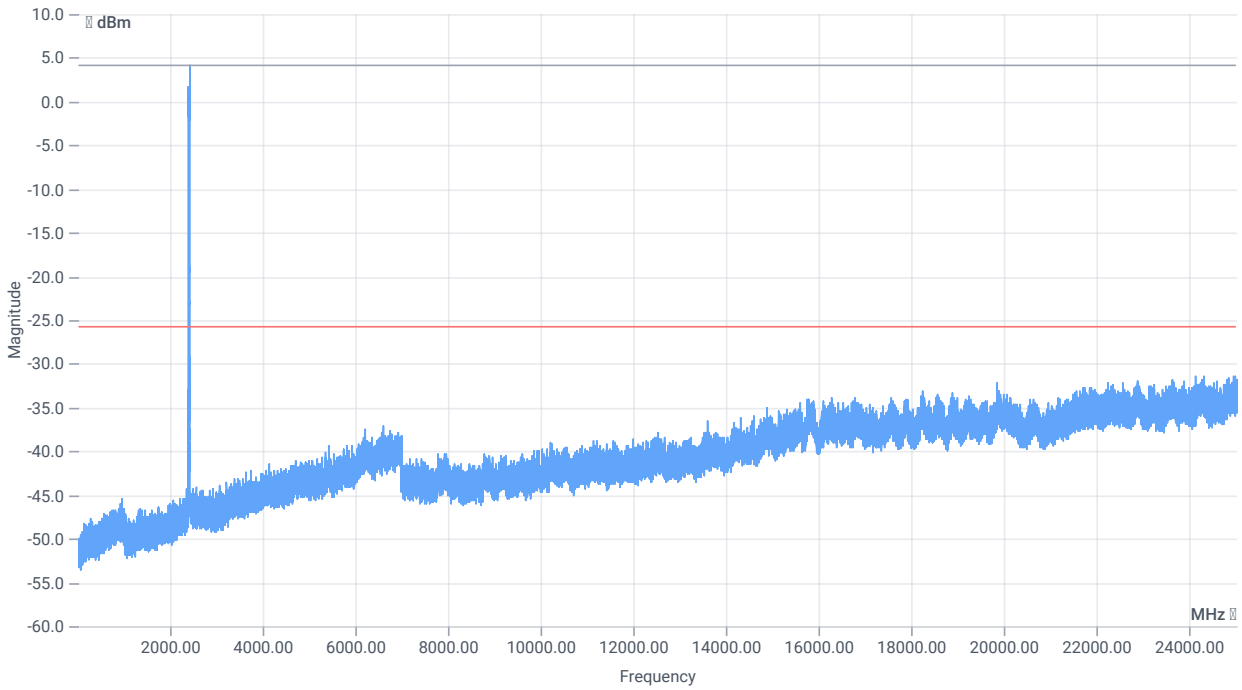
Equipment

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.

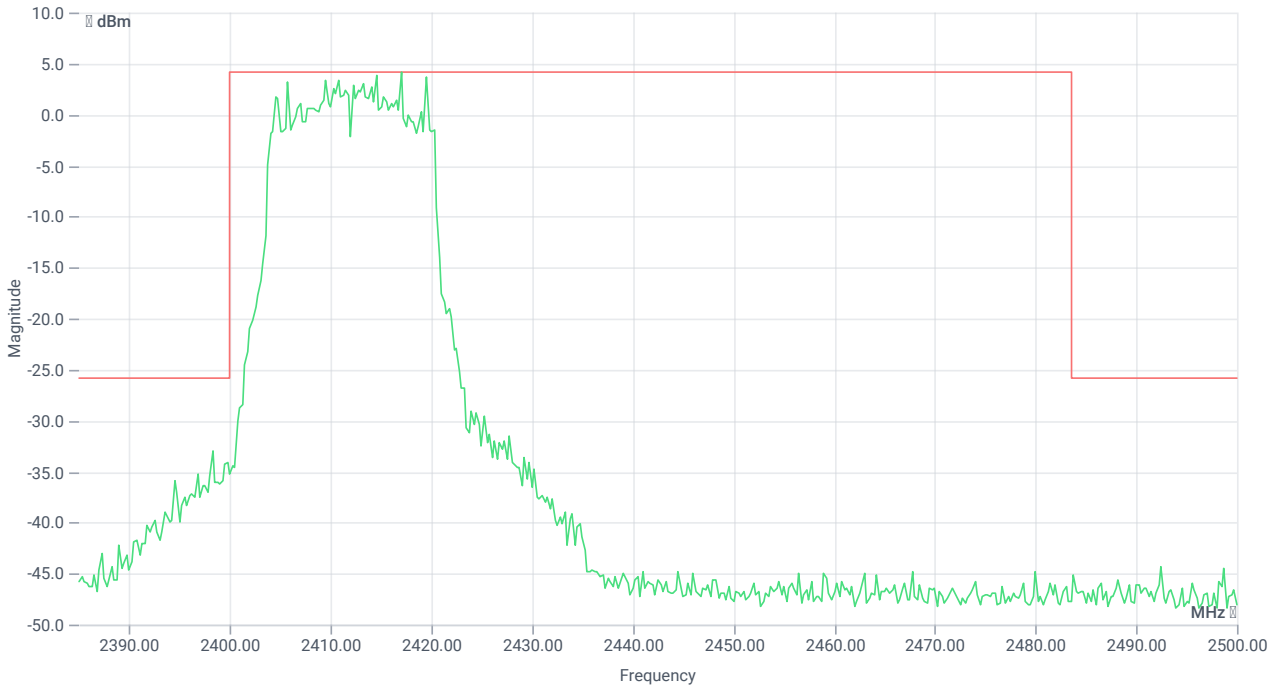
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.74	dBm	INFO
Ref. Frequency	---	---	2410.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.74 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2417.00 MHz	---	---	4.18	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-148.27	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:41:32
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

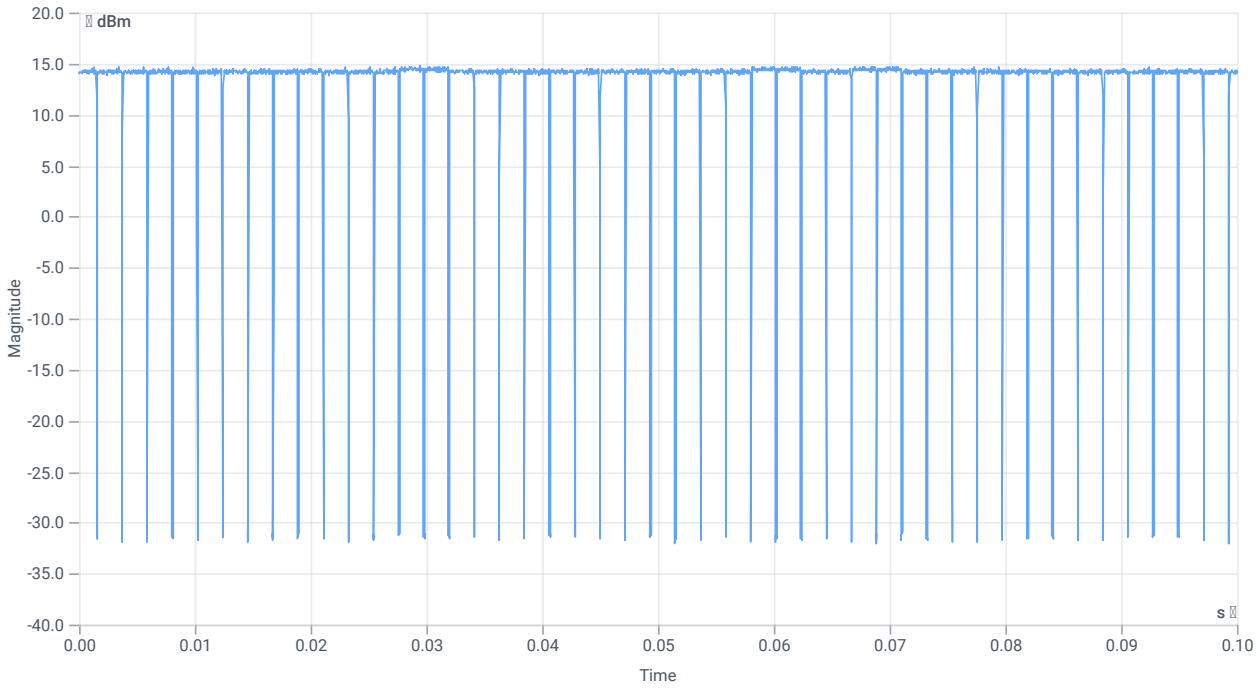
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.91	dBm	INFO
Ref. Frequency	---	---	2413.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

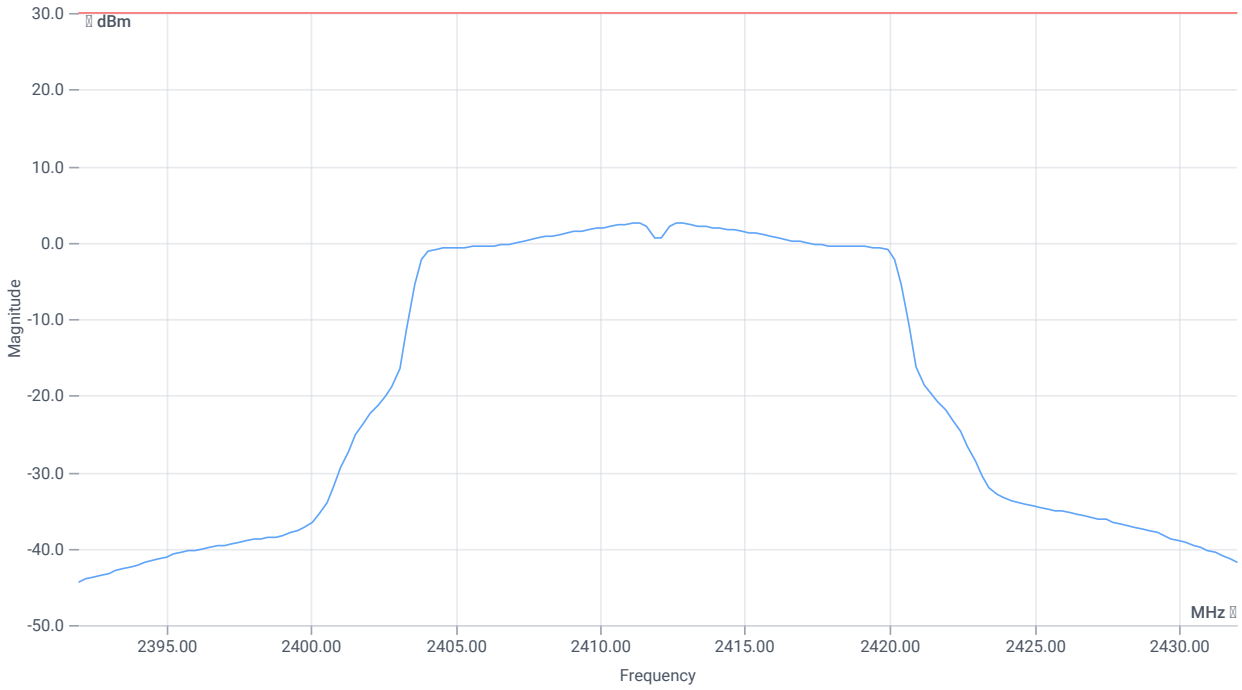


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.91 | 13.85 | 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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	15.72	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	16.03	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg output power SA DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 14:42:46
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg output power SA DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2412 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg power DC corr.	---	---	15.76	dBm	INFO
Ant:2 Avg power DC corr.	---	---	16.03	dBm	INFO
∑ Avg output power DC corr.	---	30	18.91	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg psd DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 14:42:58
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg psd DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2412 MHz

RESULT psd

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg psd DC corr	---	---	-17.23	dBm/3kHz	INFO
Ant:2 Avg psd DC corr	---	---	-16.96	dBm/3kHz	INFO
∑ Avg psd DC corr	---	8	-14.08	dBm/3kHz	PASS

Verdict
PASS

NA # Message with SA scan ~

References

TC start	12.01.2024 14:43:10
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	NA | NI
Method	
Description	Message with SA Scan g mode
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	12.01.2024 14:43:10
Message	set WLAN2G4 to g mode, Frequency [MHz] 2437 ,

Equipment

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

Verdict
INFO

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:43:49
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

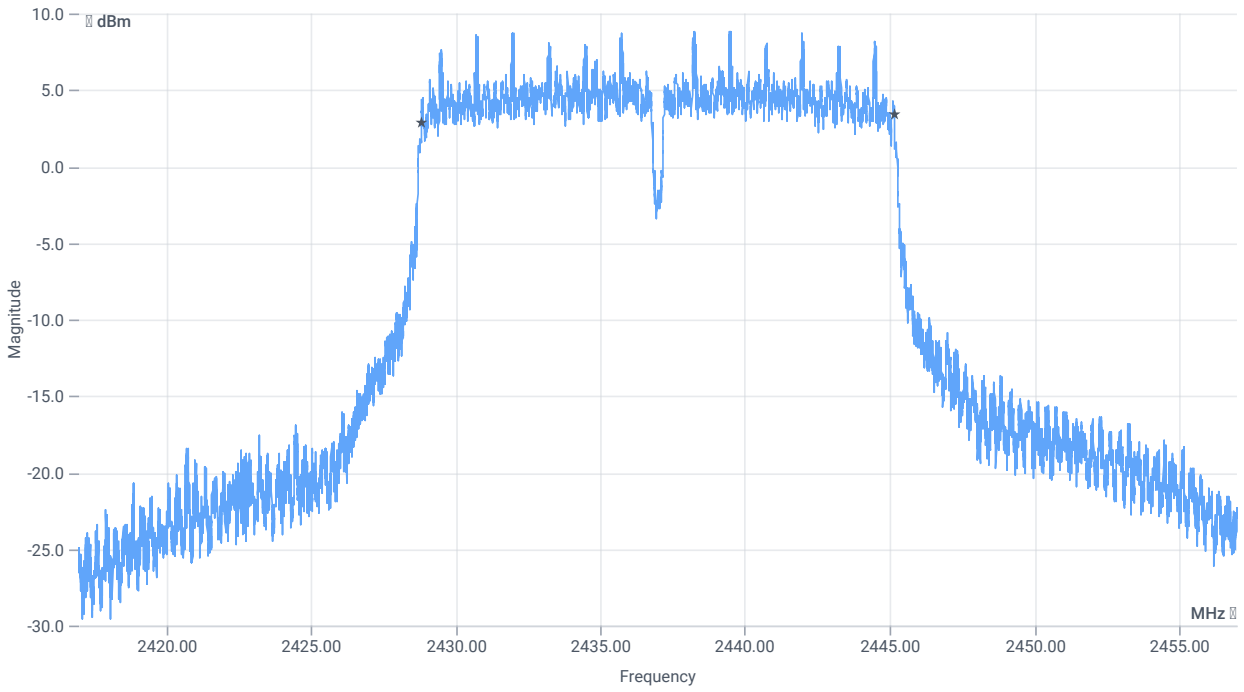
Test at TX 2437 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	17.32	dBm	INFO
Ref. Frequency	---	---	2434.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.32 | 14.01 | 25
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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16328	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:44:22
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

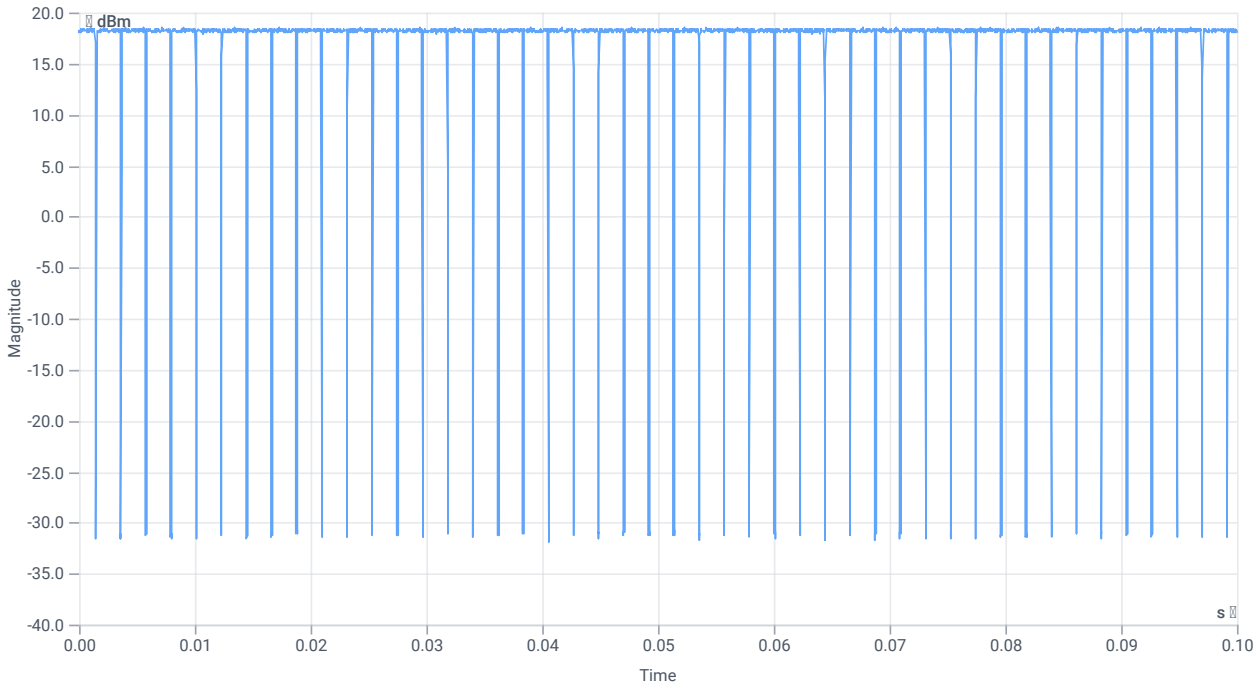
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	17.23	dBm	INFO
Ref. Frequency	---	---	2434.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

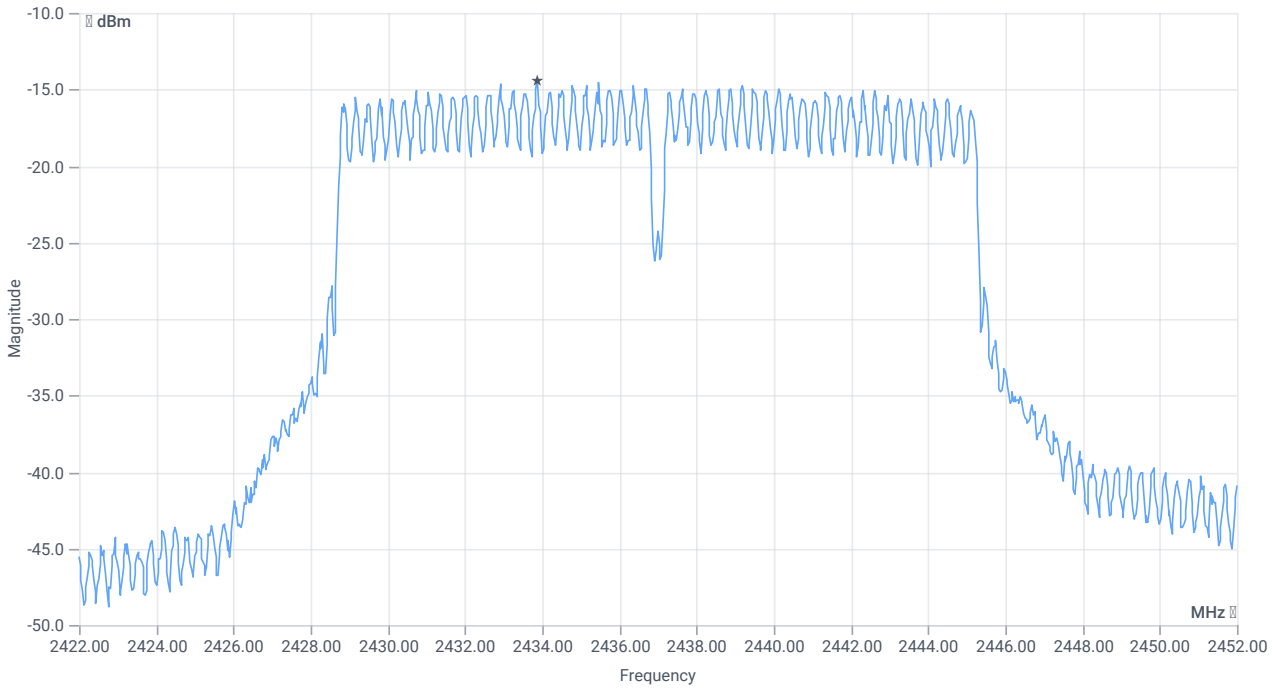


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.23 | 14.01 | 25
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



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-14.43	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-14.12	dBm/3kHz	PASS

Verdict
PASS

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

References

TC start	12.01.2024 14:45:25
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

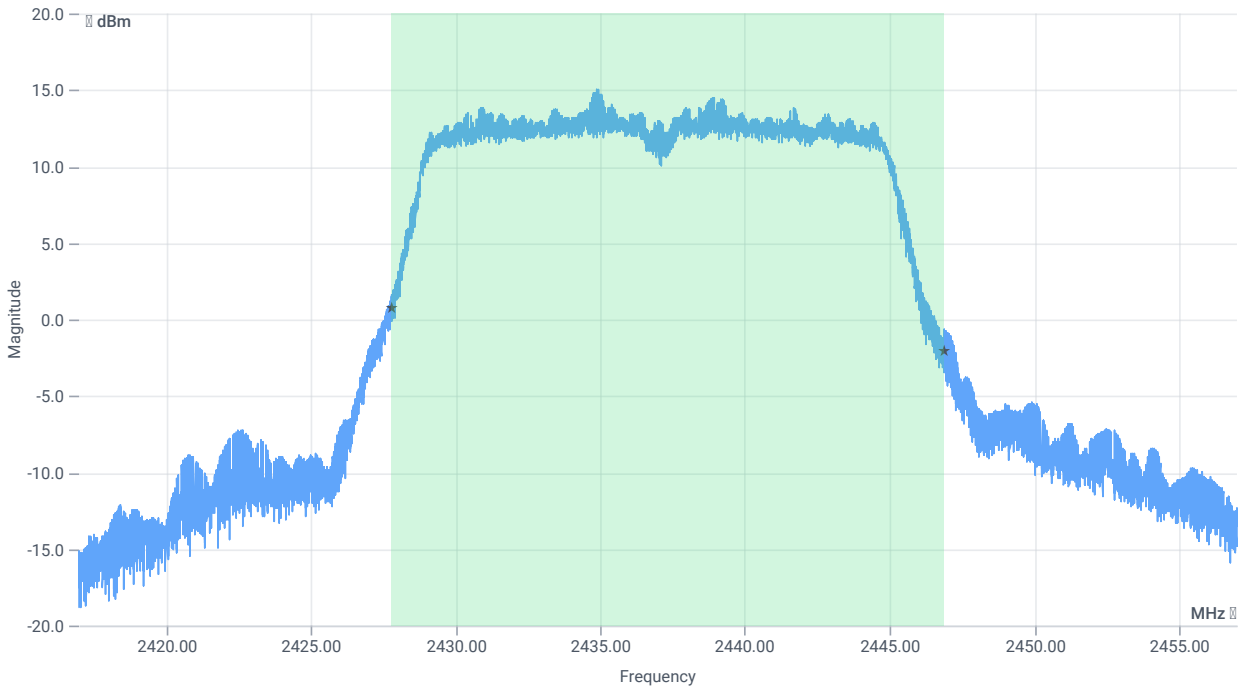
Test at TX 2437 MHz

RESULT: Reference Power cond.

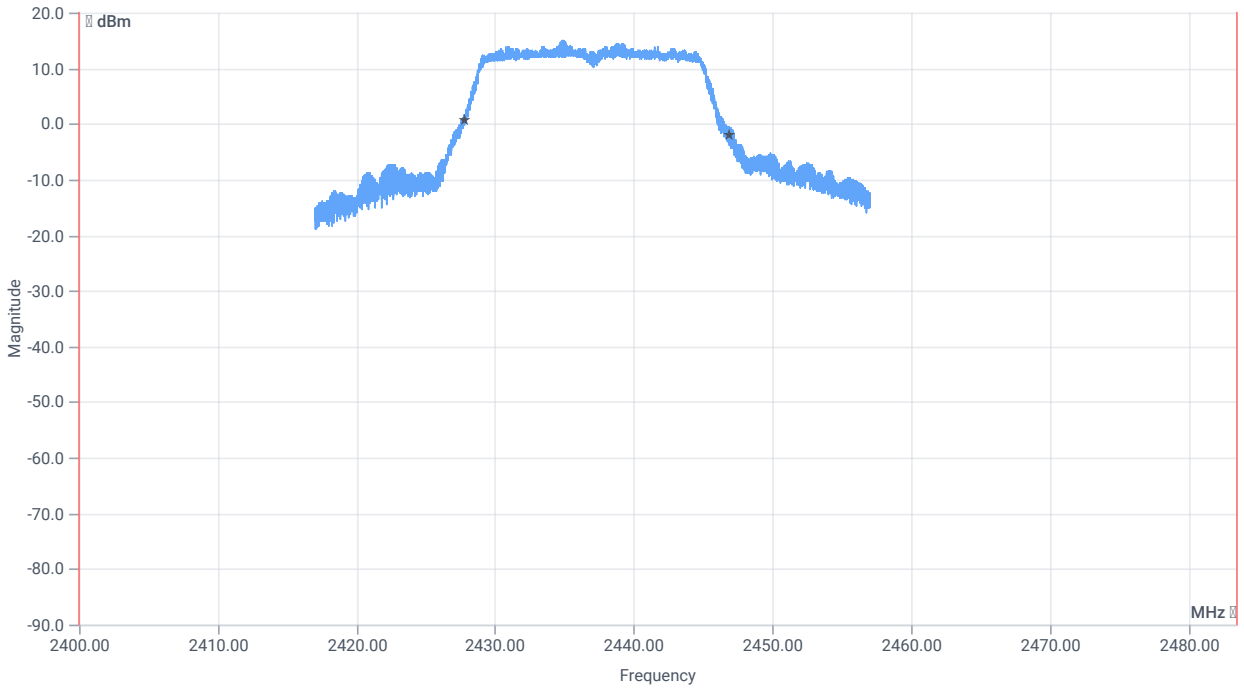
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.74	dBm	INFO
Ref. Frequency	---	---	2433.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.74 | 14.01 | 25
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



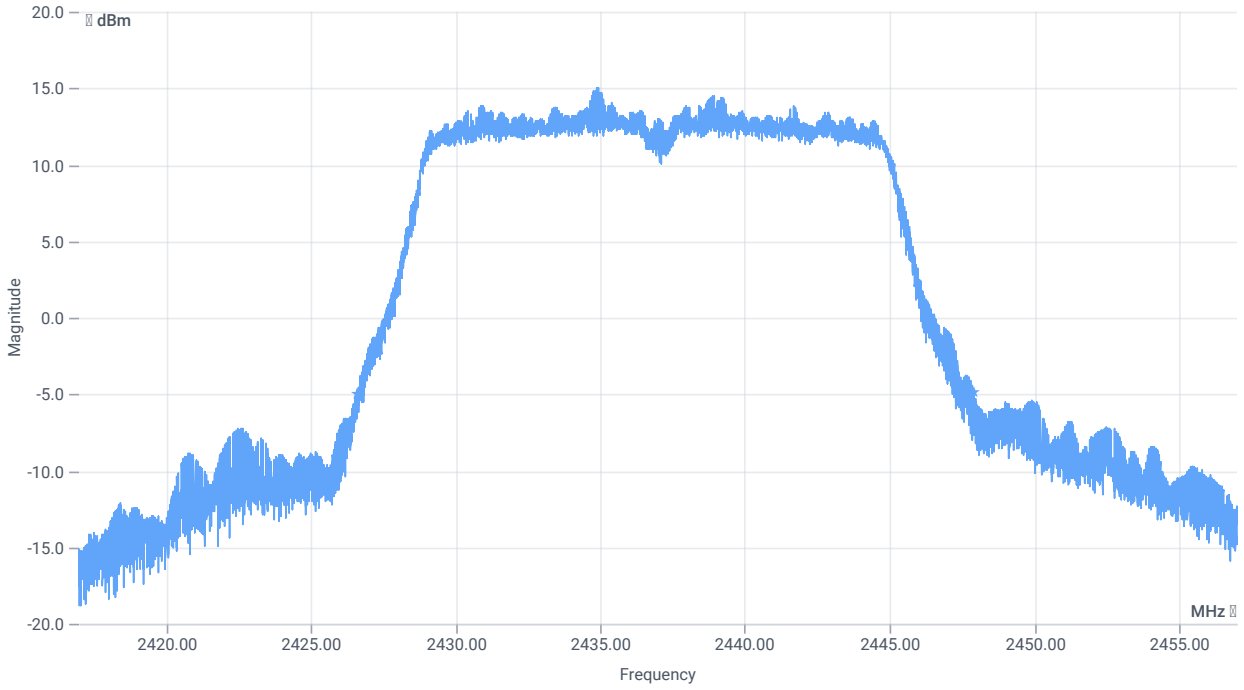
BW 99PCT



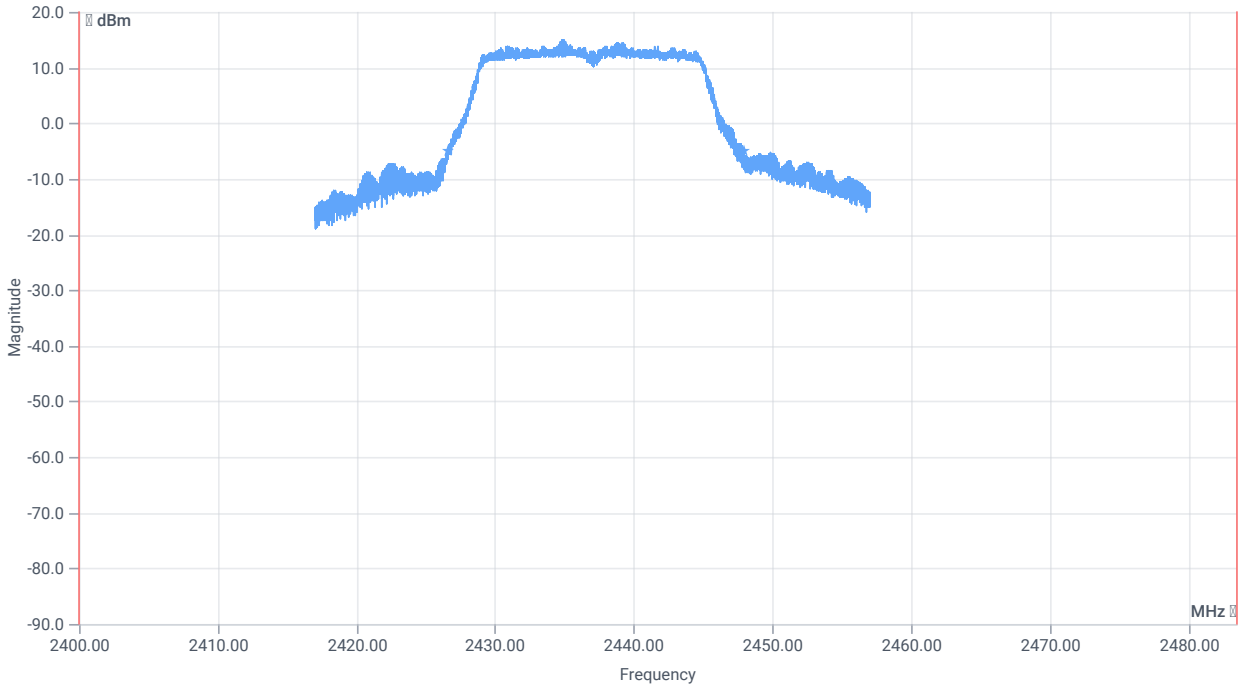
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	19078.000	kHz	INFO
T1 99%	2400.000000	---	2427.7889	MHz	PASS
T2 99%	---	2483.500000	2446.8670	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	21316	kHz	INFO
T1 20DB	2400.000000	---	2426.5800	MHz	PASS
T2 20dB	---	2483.500000	2447.8960	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:46:03
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

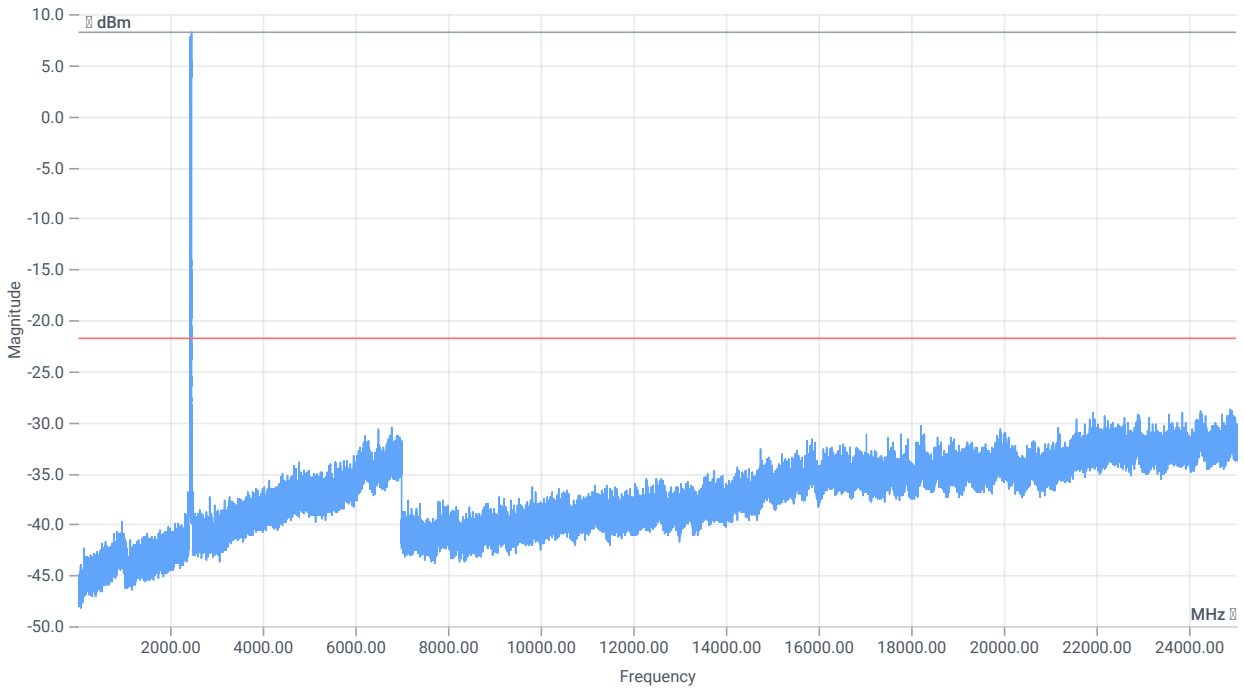
Equipment

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.

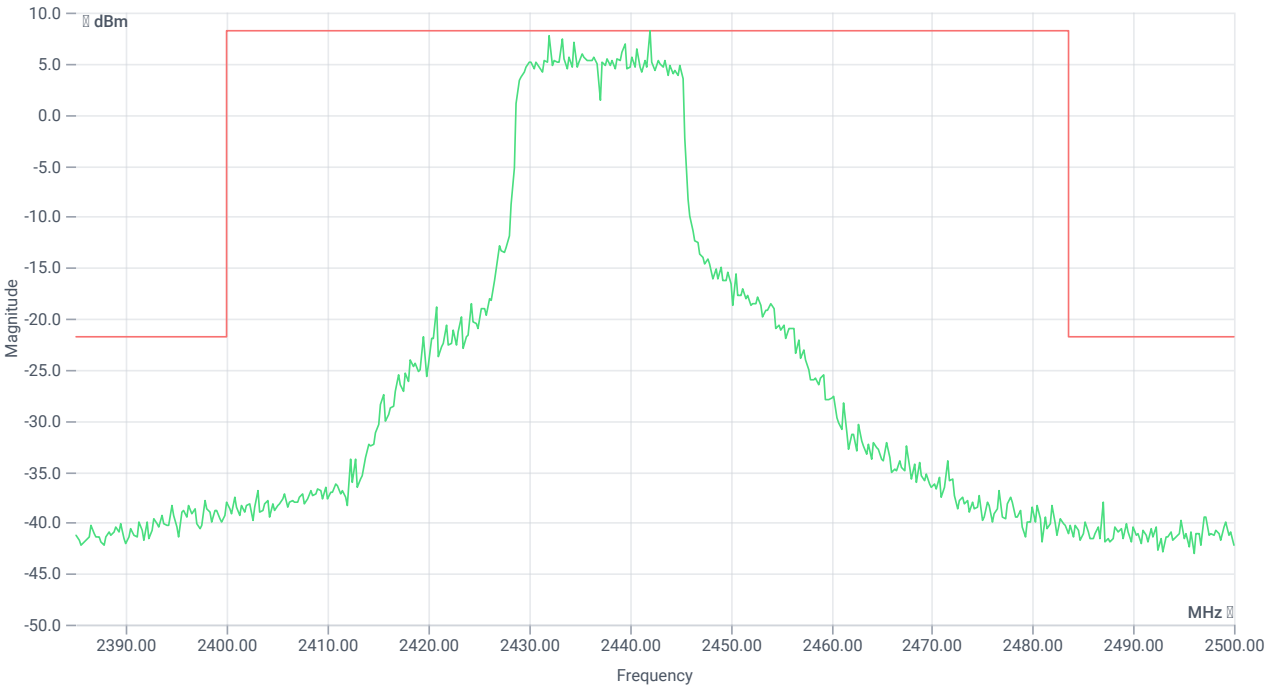
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.79	dBm	INFO
Ref. Frequency	---	---	2438.900	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	16.79 | 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 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2442.00 MHz	---	---	8.24	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24881.25 MHz	0	---	7.06	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:52:45
Ambit temp [°C] | humidity [rel%]	22.9 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

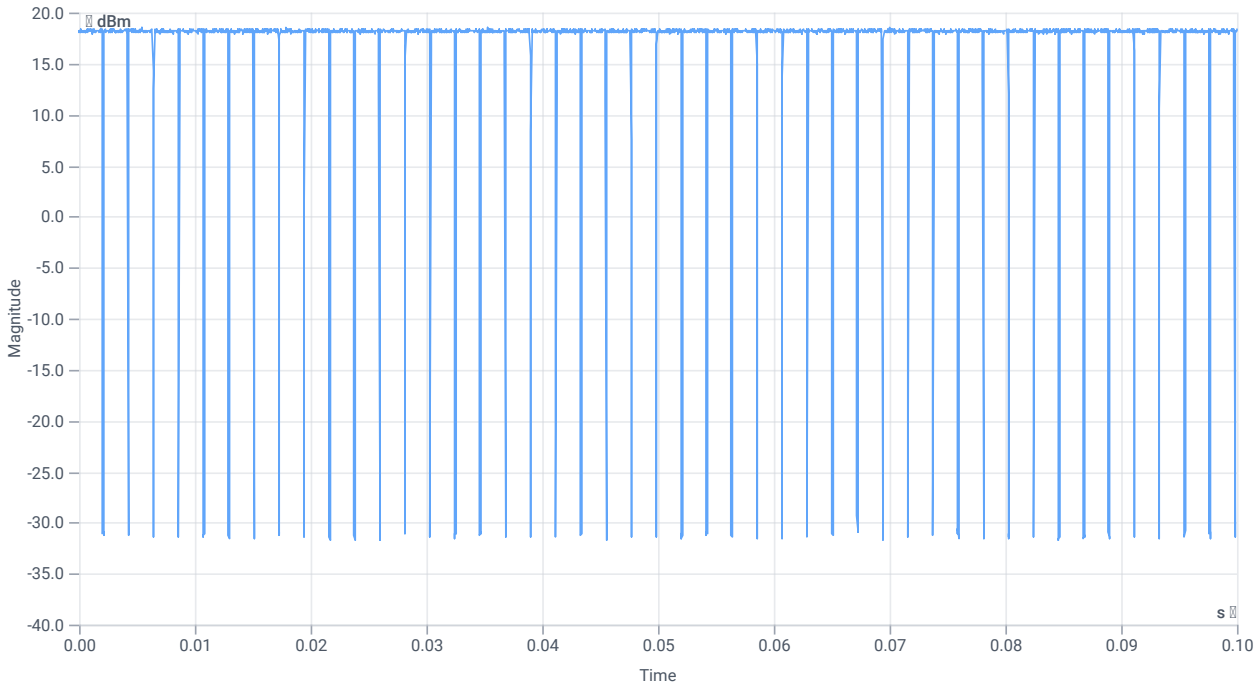
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.81	dBm	INFO
Ref. Frequency	---	---	2434.200	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

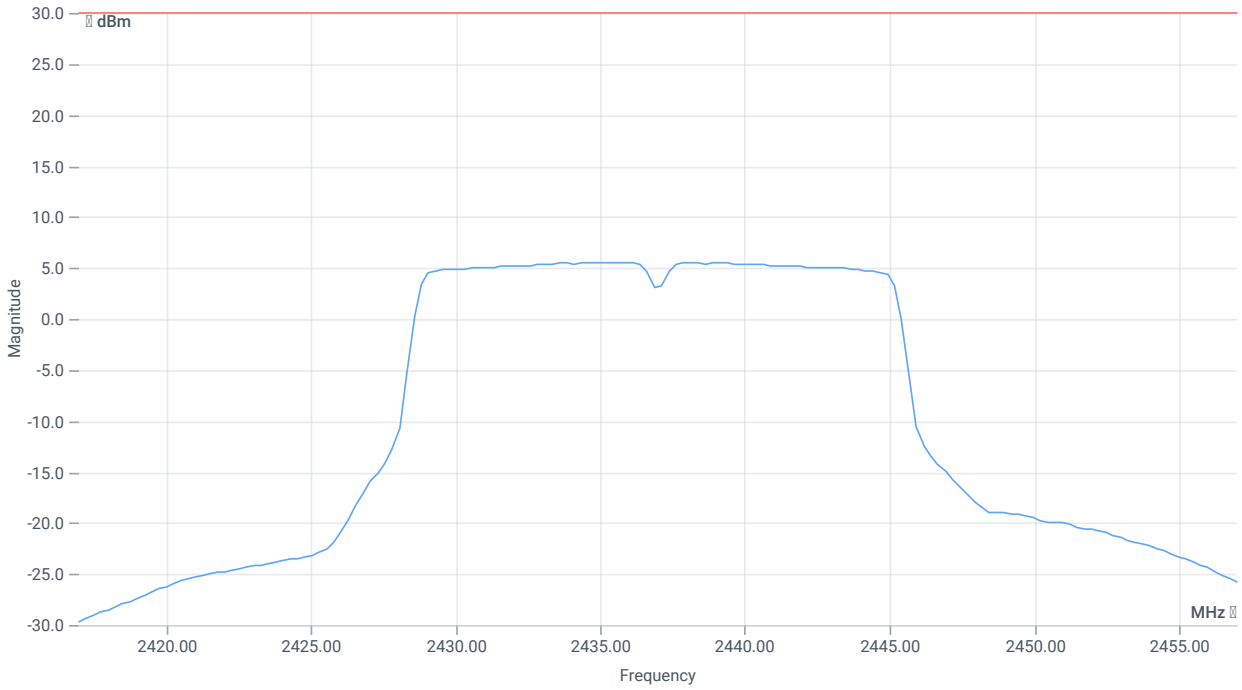


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.81 | 14.01 | 30
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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	20.06	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	20.37	dBm	PASS

Verdict
PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:53:59
Ambit temp [°C] | humidity [rel%]	22.9 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

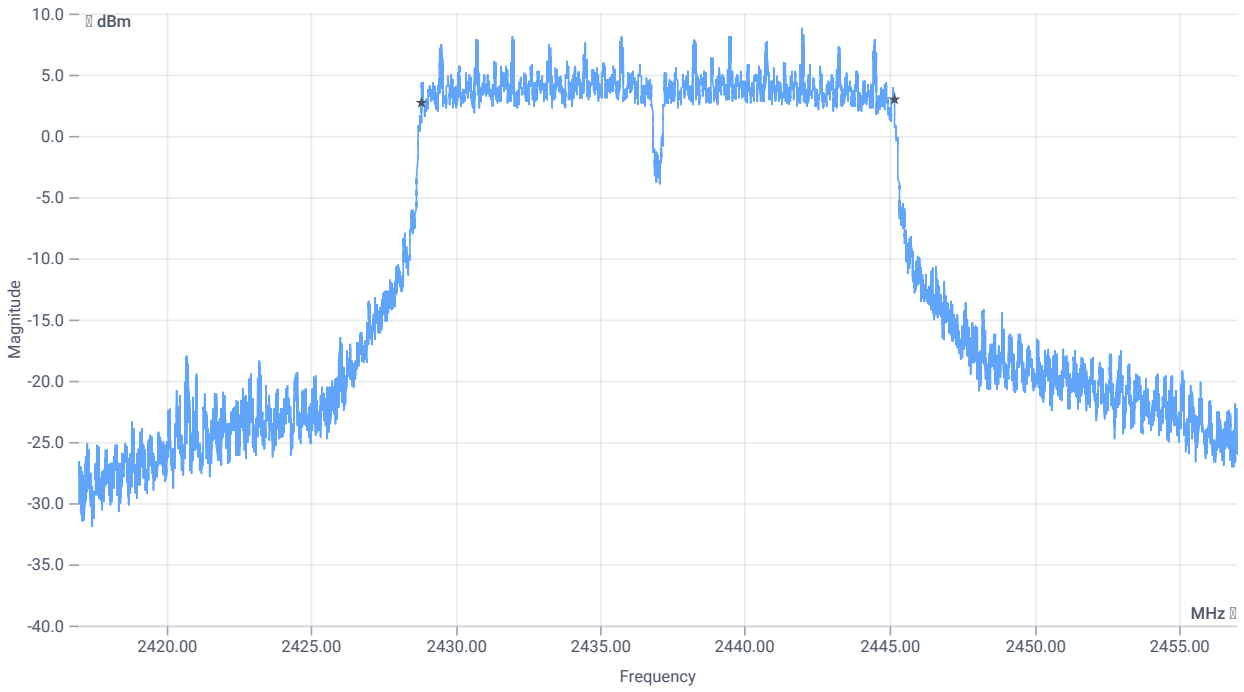
Test at TX 2437 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	18.34	dBm	INFO
Ref. Frequency	---	---	2439.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.34 | 14.01 | 25
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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16328	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:54:32
Ambit temp [°C] | humidity [rel%]	22.9 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

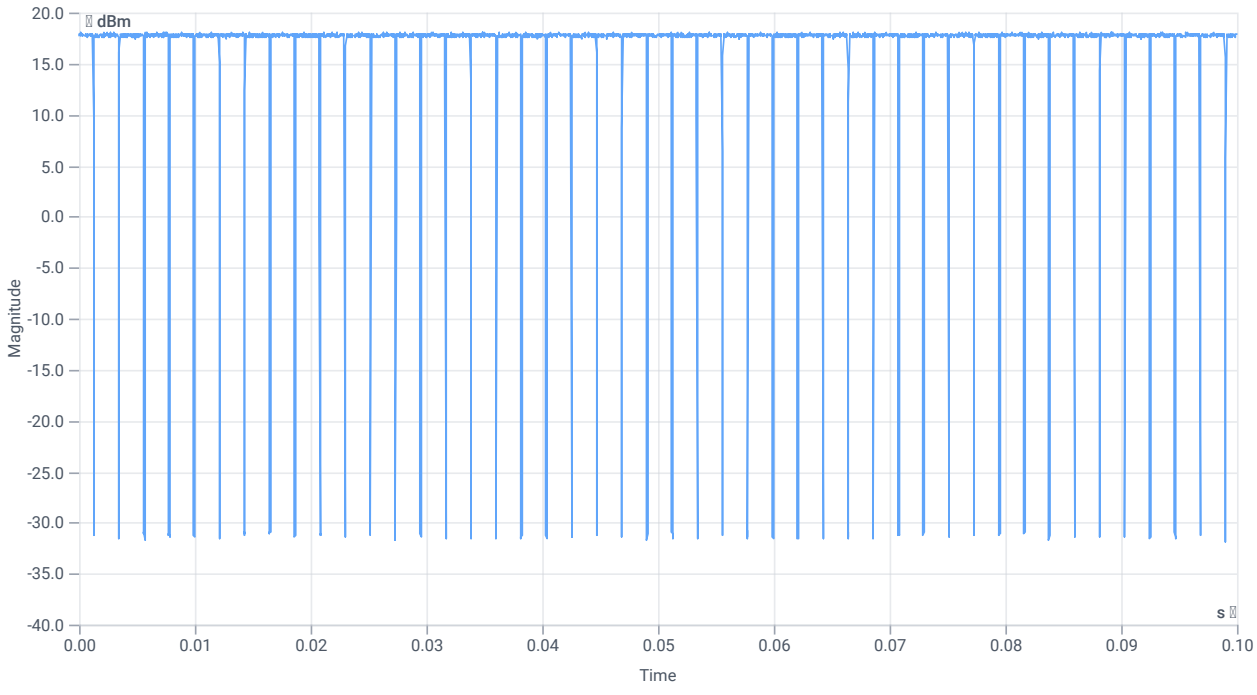
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.90	dBm	INFO
Ref. Frequency	---	---	2431.910	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

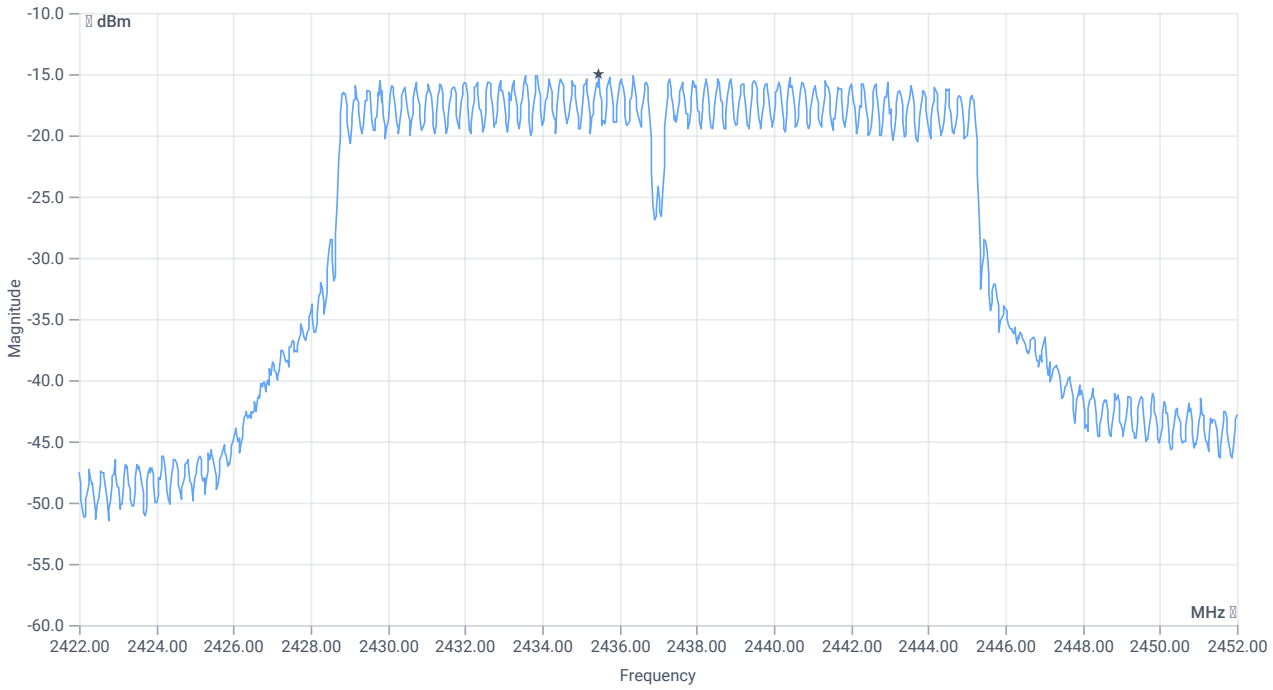


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.90 | 14.01 | 25
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



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-14.97	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-14.66	dBm/3kHz	PASS

Verdict
PASS

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

References

TC start	12.01.2024 14:55:36
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

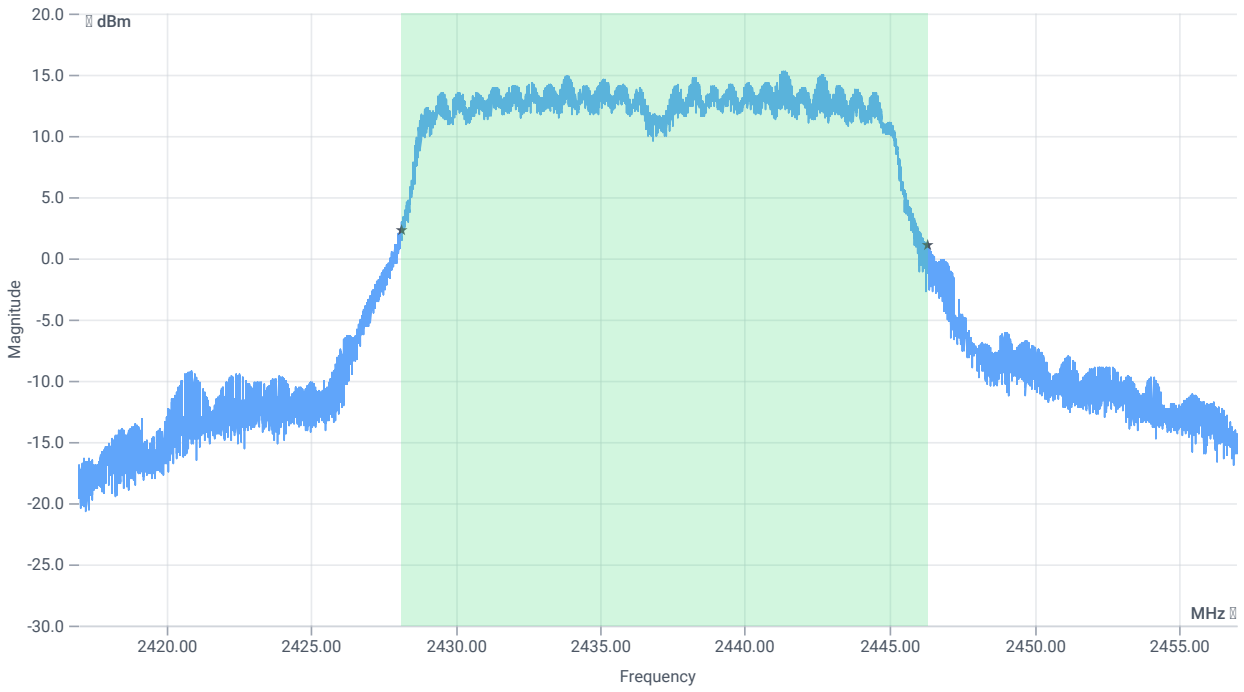
Test at TX 2437 MHz

RESULT: Reference Power cond.

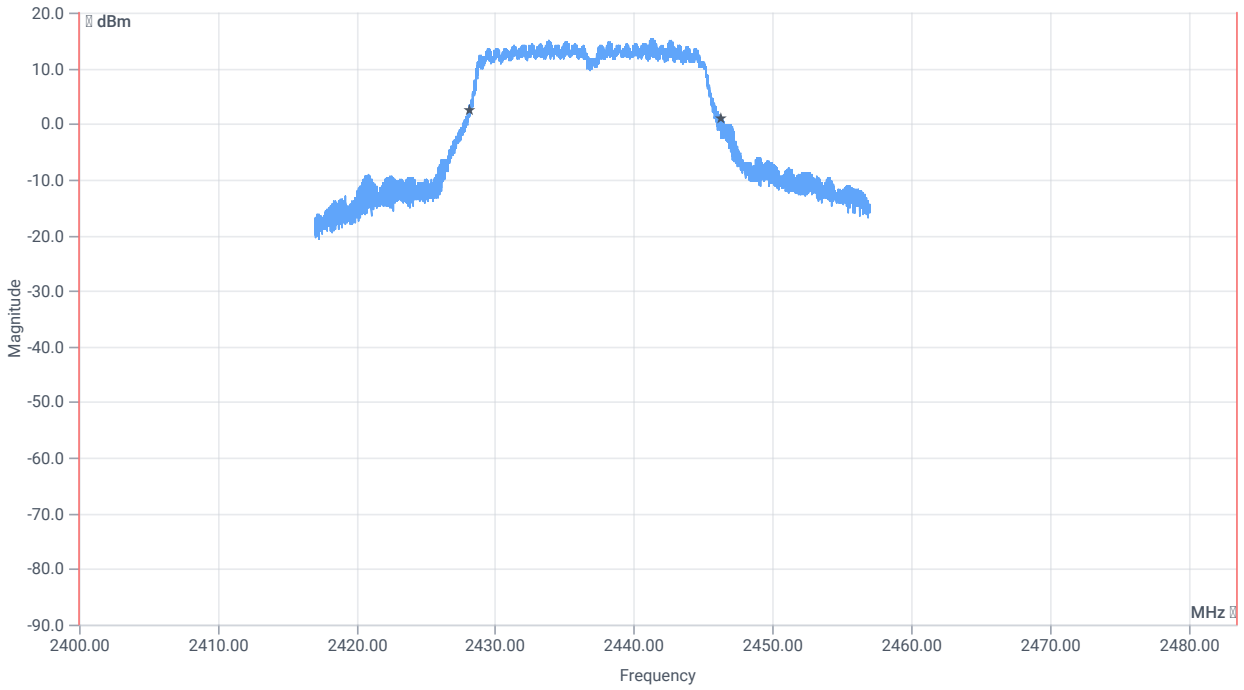
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	17.97	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.97 | 14.01 | 25
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



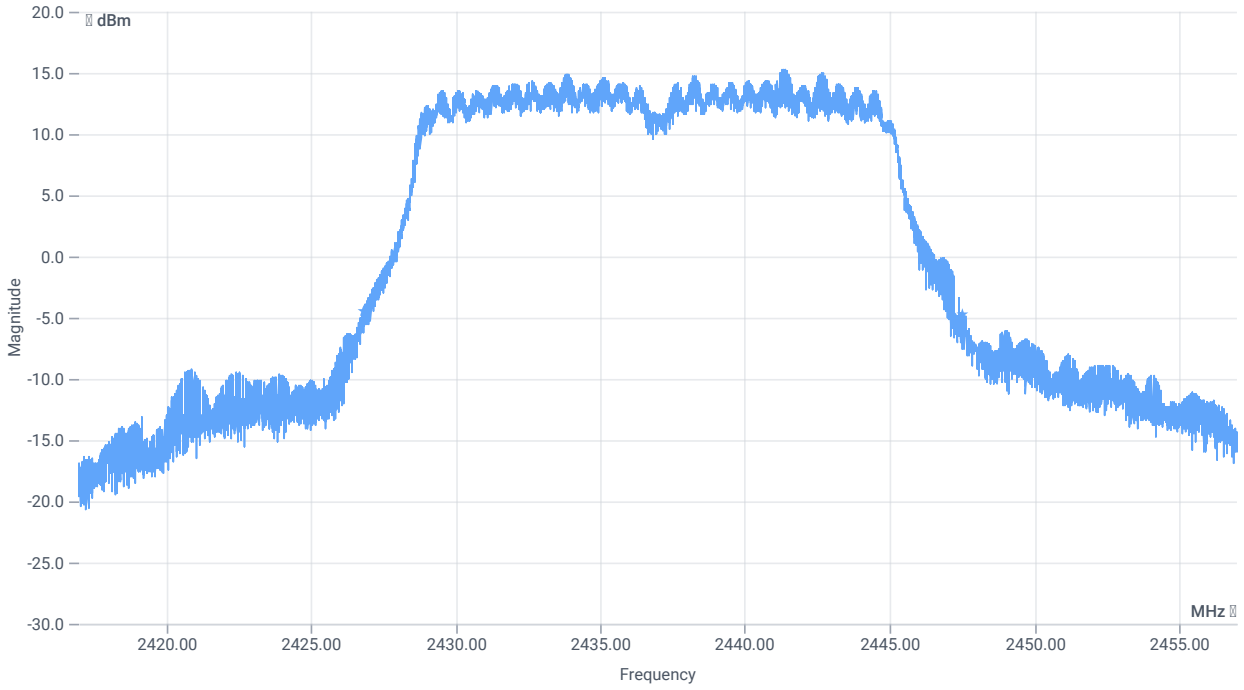
BW 99PCT



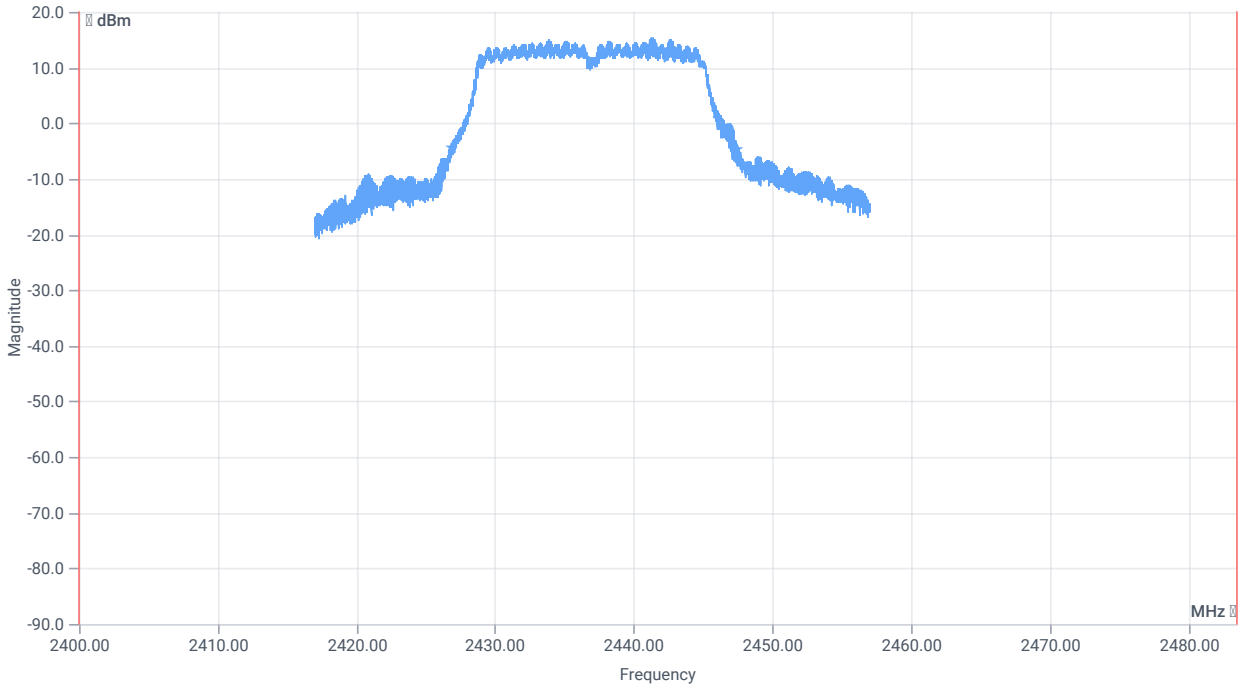
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	18118.000	kHz	INFO
T1 99%	2400.000000	---	2428.1689	MHz	PASS
T2 99%	---	2483.500000	2446.2871	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20724	kHz	INFO
T1 20DB	2400.000000	---	2426.8000	MHz	PASS
T2 20dB	---	2483.500000	2447.5240	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 14:56:13
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

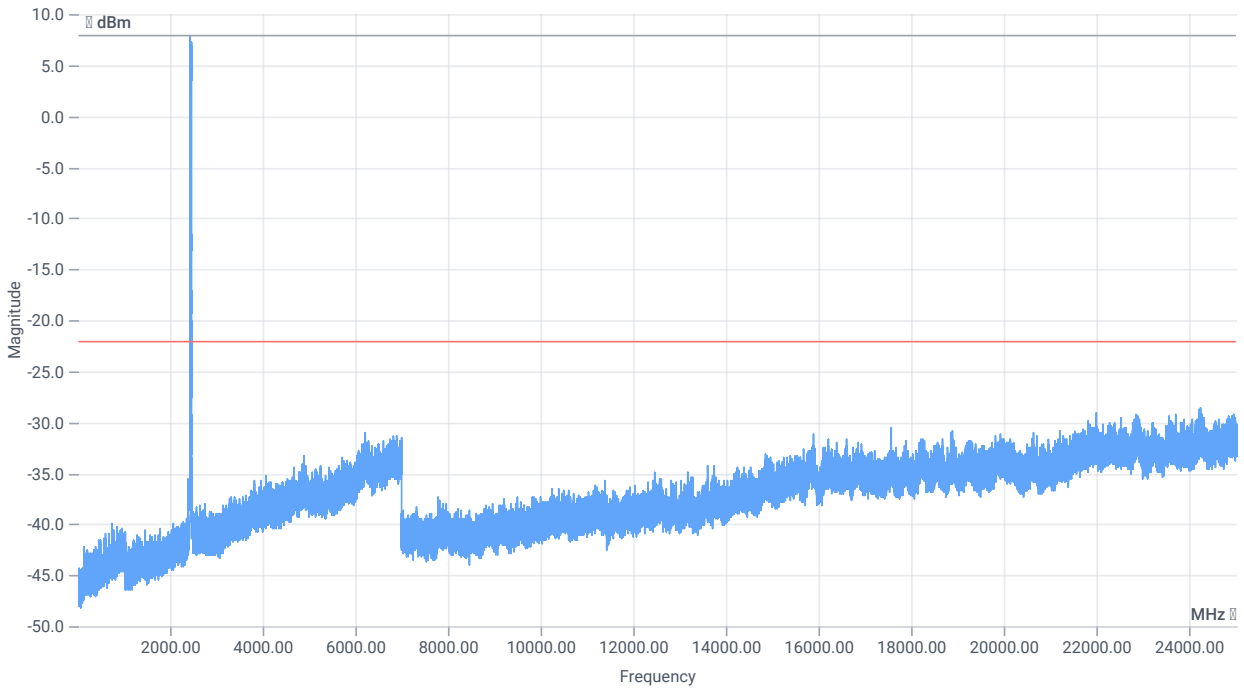
Equipment

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.

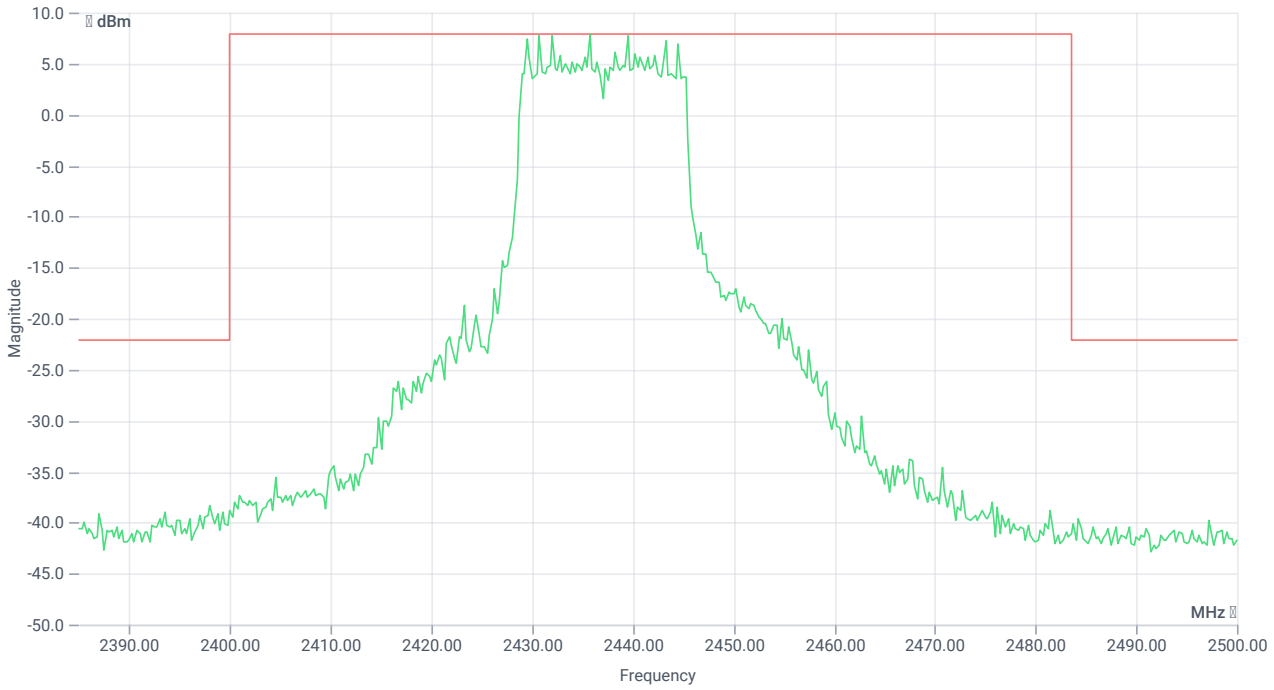
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.69	dBm	INFO
Ref. Frequency	---	---	2438.600	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	16.69 | 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 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2435.75 MHz	---	---	7.97	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24254.5 MHz	0	---	6.63	dB	INFO

Verdict

PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:02:55
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	True | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

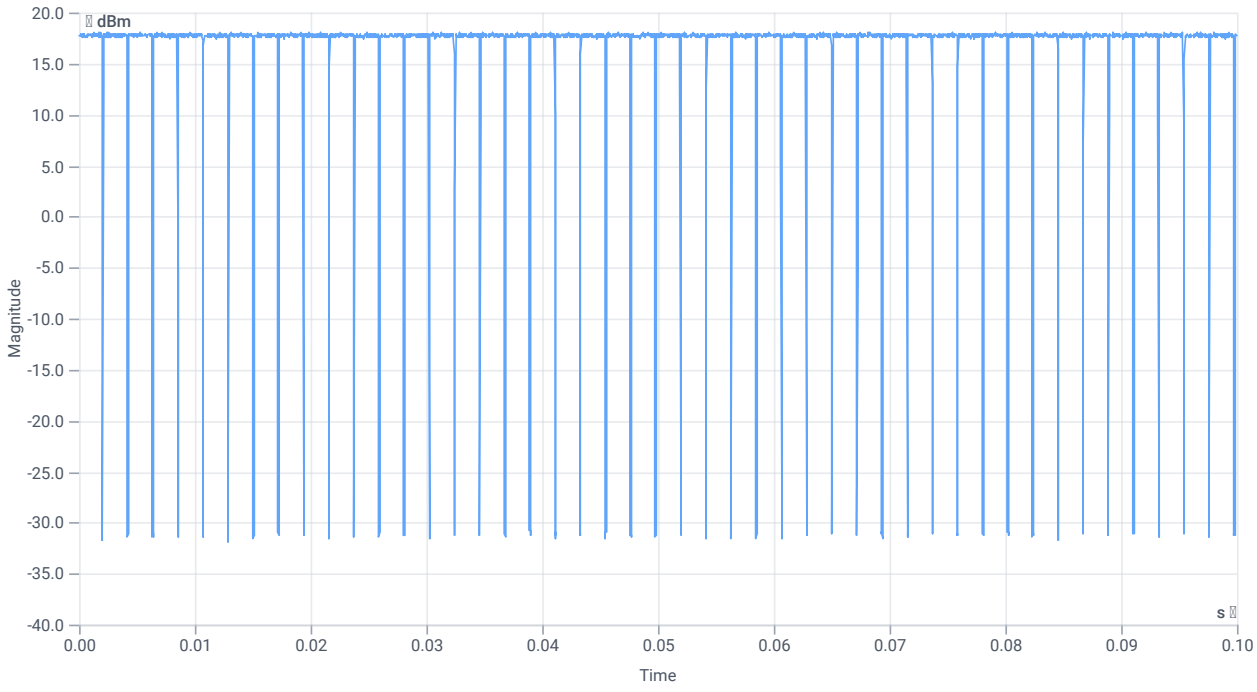
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.76	dBm	INFO
Ref. Frequency	---	---	2431.310	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

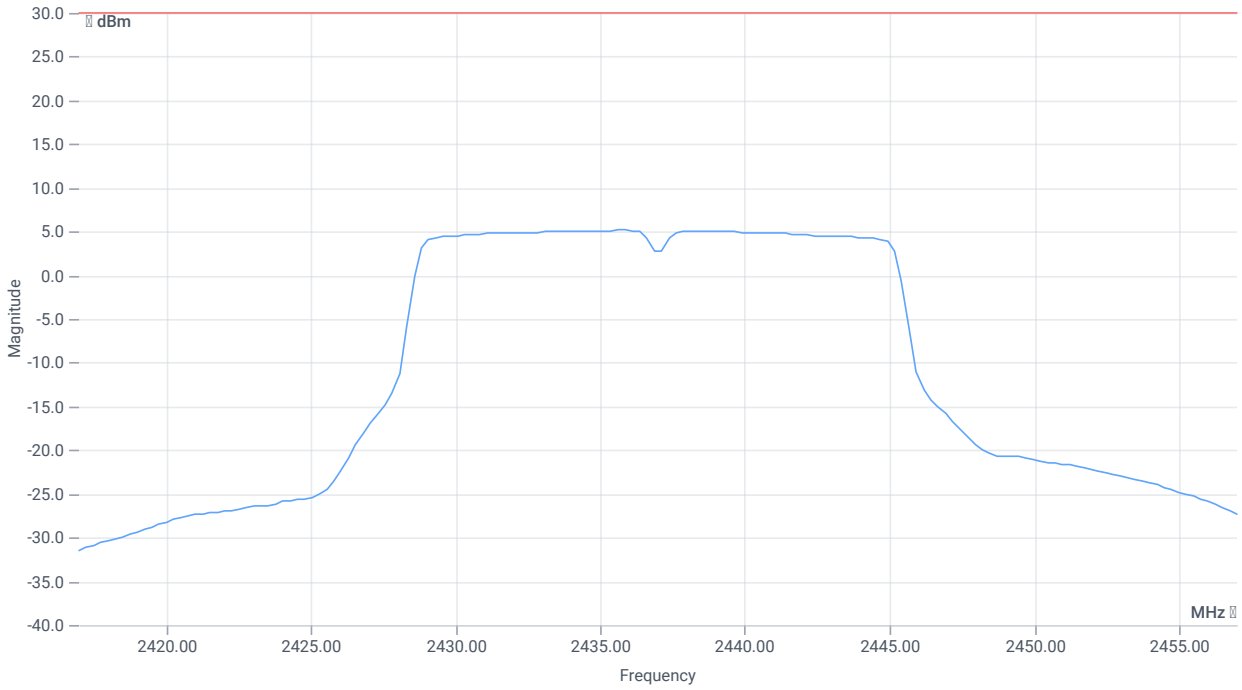


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.76 | 14.01 | 30
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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	19.63	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	19.94	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg output power SA DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 15:04:10
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg output power SA DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2437 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
∑ Avg output power DC corr.	---	30	0		PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg psd DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 15:14:04
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg psd DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2437 MHz

RESULT psd

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
∑ Avg psd DC corr	---	8	0		PASS

Verdict
PASS

NA # Message with SA scan ~

References

TC start	12.01.2024 15:14:44
Ambit temp [°C] | humidity [rel%]	22.9 | 26
System version	4.7.1.5
Standard | Version	NA | NI
Method	
Description	Message with SA Scan g mode
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	12.01.2024 15:14:44
Message	set WLAN2G4 to g mode, Frequency [MHz] 2462

Equipment

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

Verdict
INFO

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:15:47
Ambit temp [°C] | humidity [rel%]	22.9 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

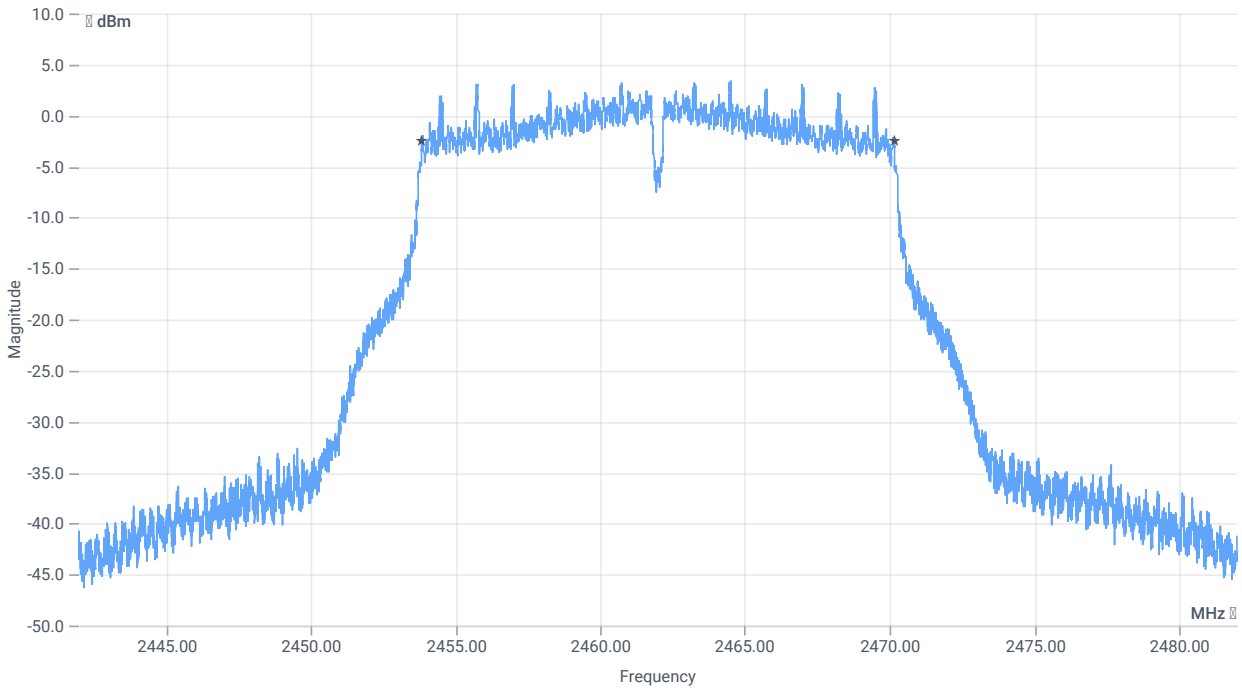
Test at TX 2462 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.61	dBm	INFO
Ref. Frequency	---	---	2459.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.61 | 14.14 | 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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16296	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:16:22
Ambit temp [°C] | humidity [rel%]	22.9 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

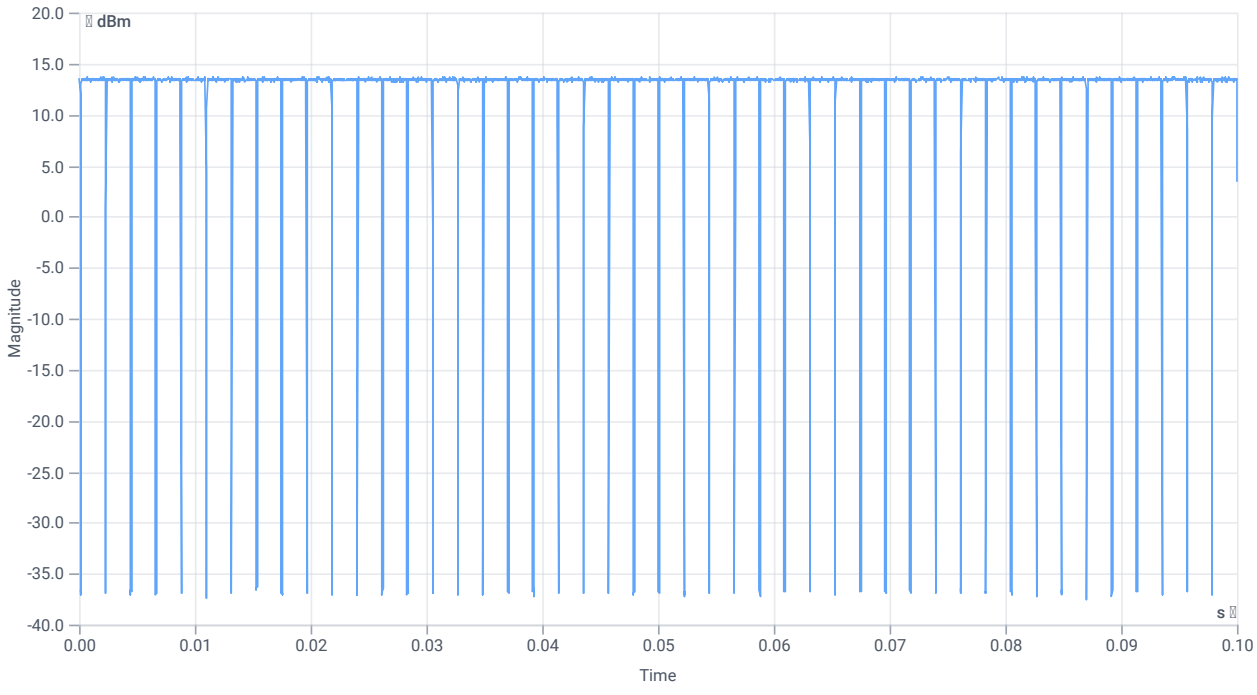
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.29	dBm	INFO
Ref. Frequency	---	---	2463.200	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

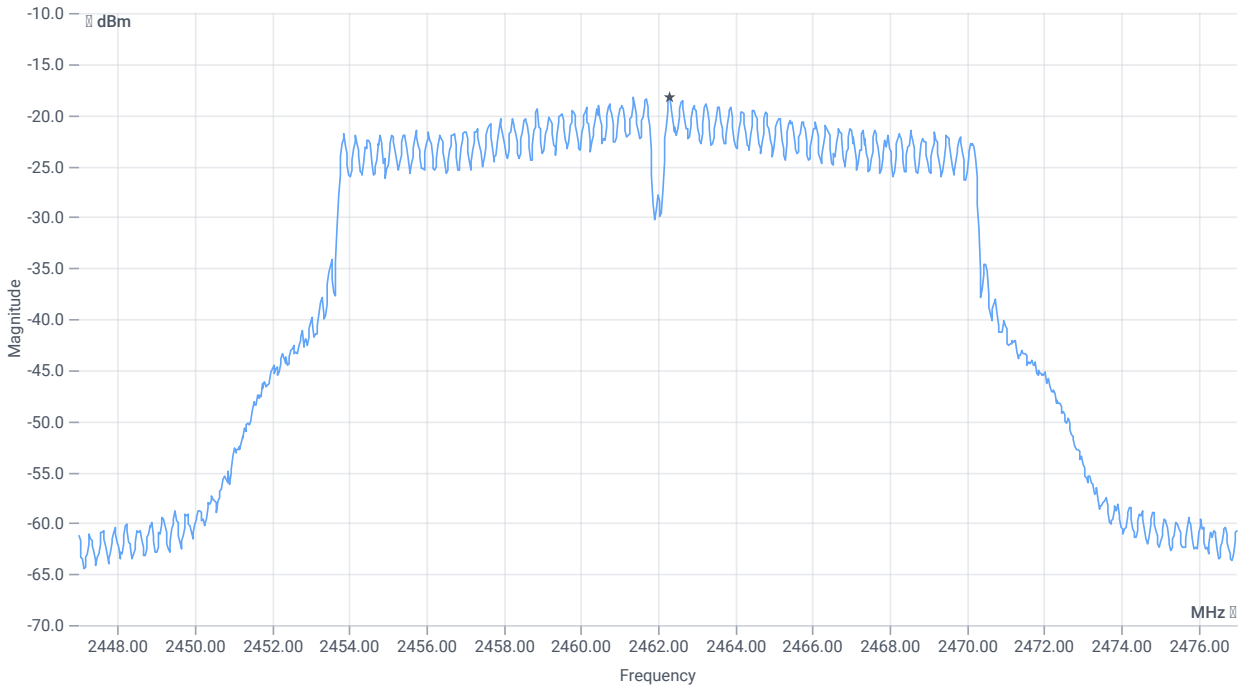


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.29 | 14.14 | 20
Start [MHz] | Stop [MHz]	2447.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-18.23	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-17.92	dBm/3kHz	PASS

Verdict
PASS

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

References

TC start	12.01.2024 15:17:24
Ambit temp [°C] | humidity [rel%]	22.9 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

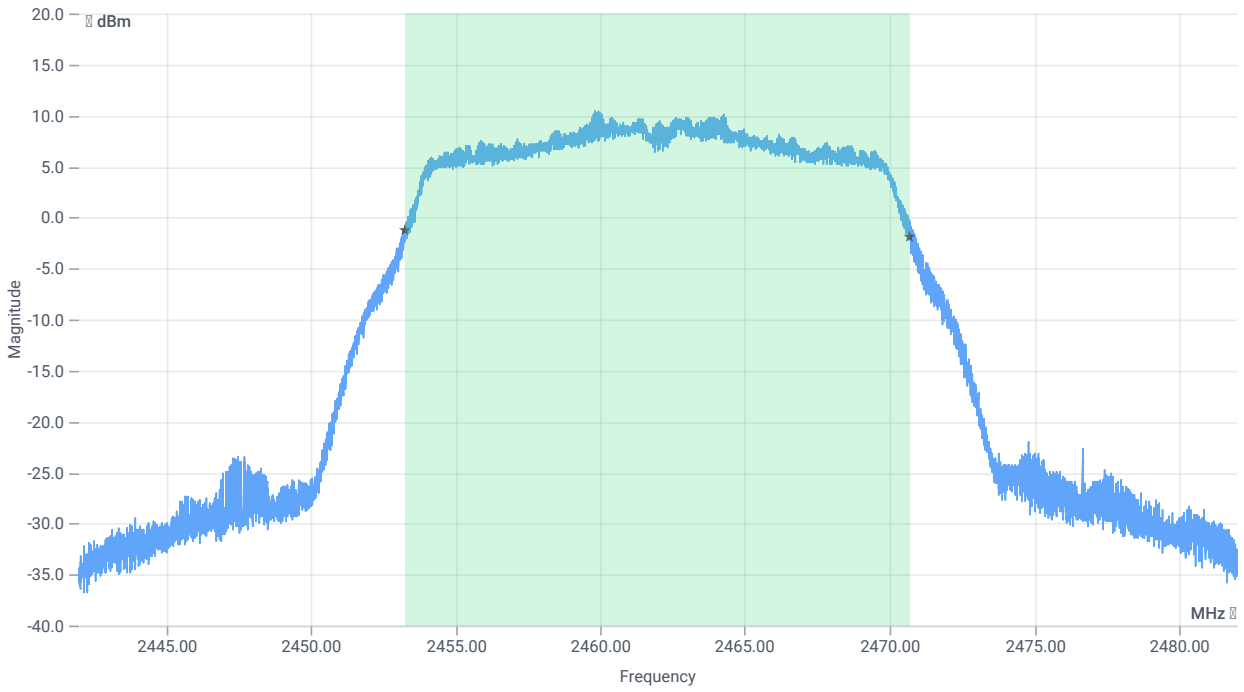
Test at TX 2462 MHz

RESULT: Reference Power cond.

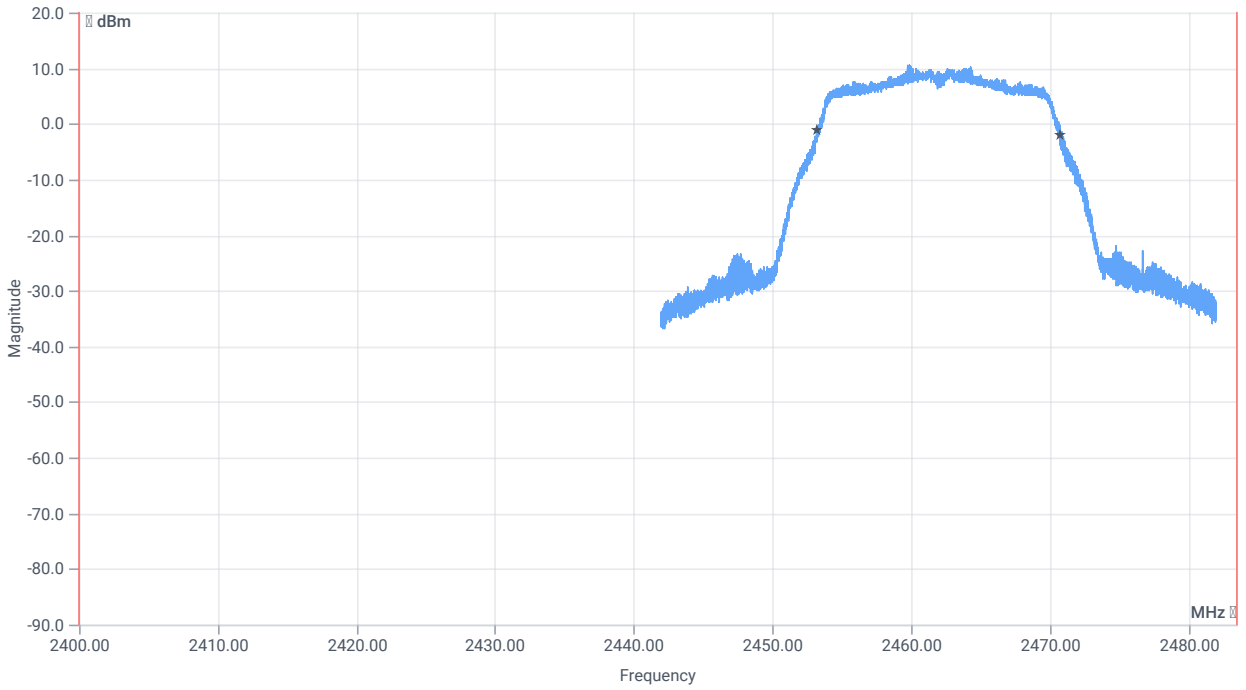
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.41	dBm	INFO
Ref. Frequency	---	---	2460.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.41 | 14.14 | 20
Start [MHz] | Stop [MHz]	2442.000 | 2482.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



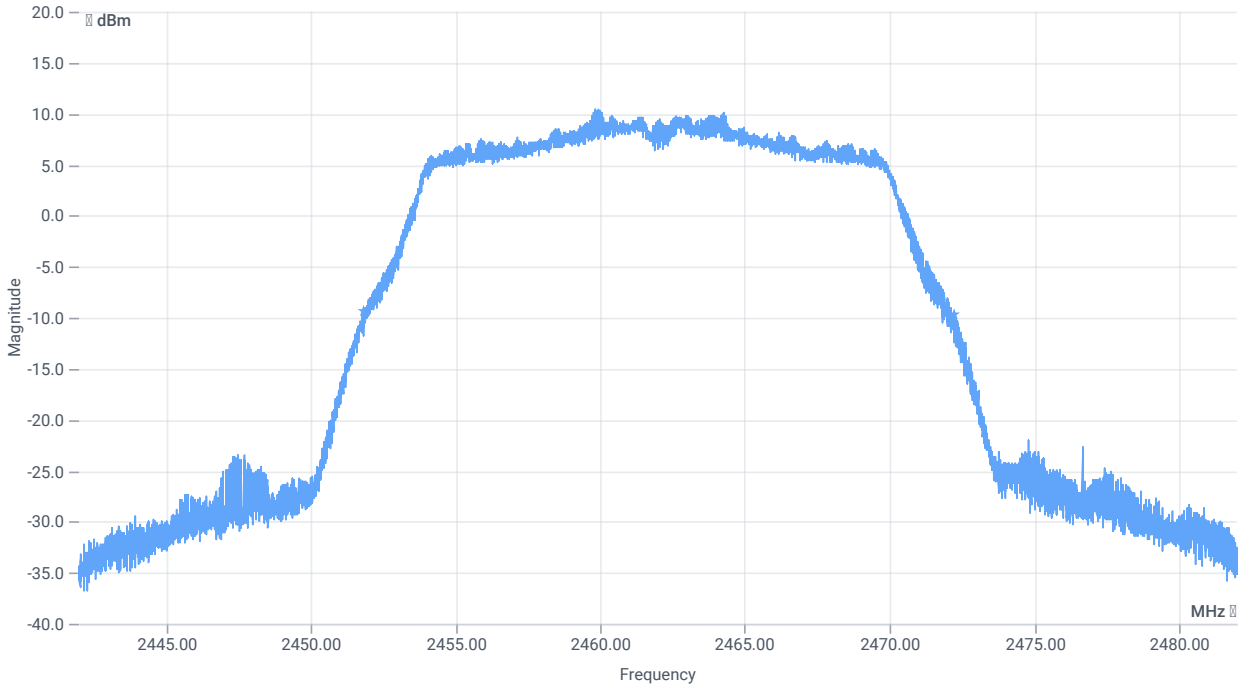
BW 99PCT



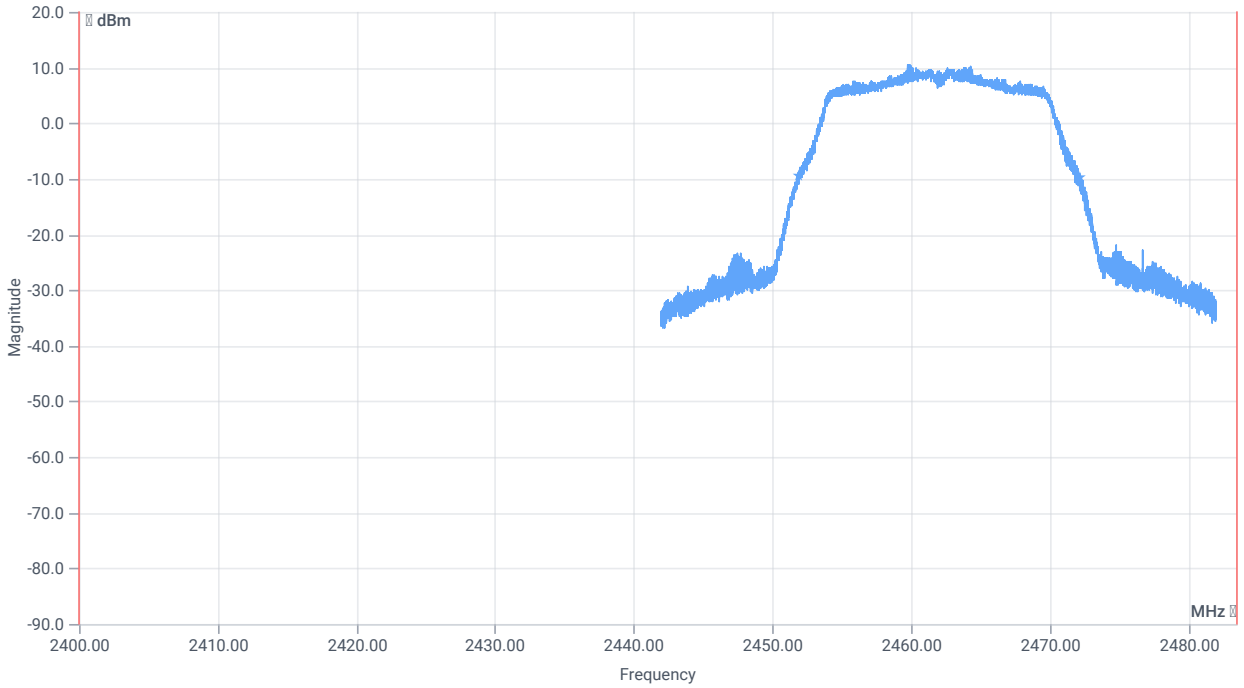
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17442.000	kHz	INFO
T1 99%	2400.000000	---	2453.2489	MHz	PASS
T2 99%	---	2483.500000	2470.6911	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20364	kHz	INFO
T1 20DB	2400.000000	---	2451.8560	MHz	PASS
T2 20dB	---	2483.500000	2472.2200	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:18:03
Ambit temp [°C] | humidity [rel%]	22.9 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

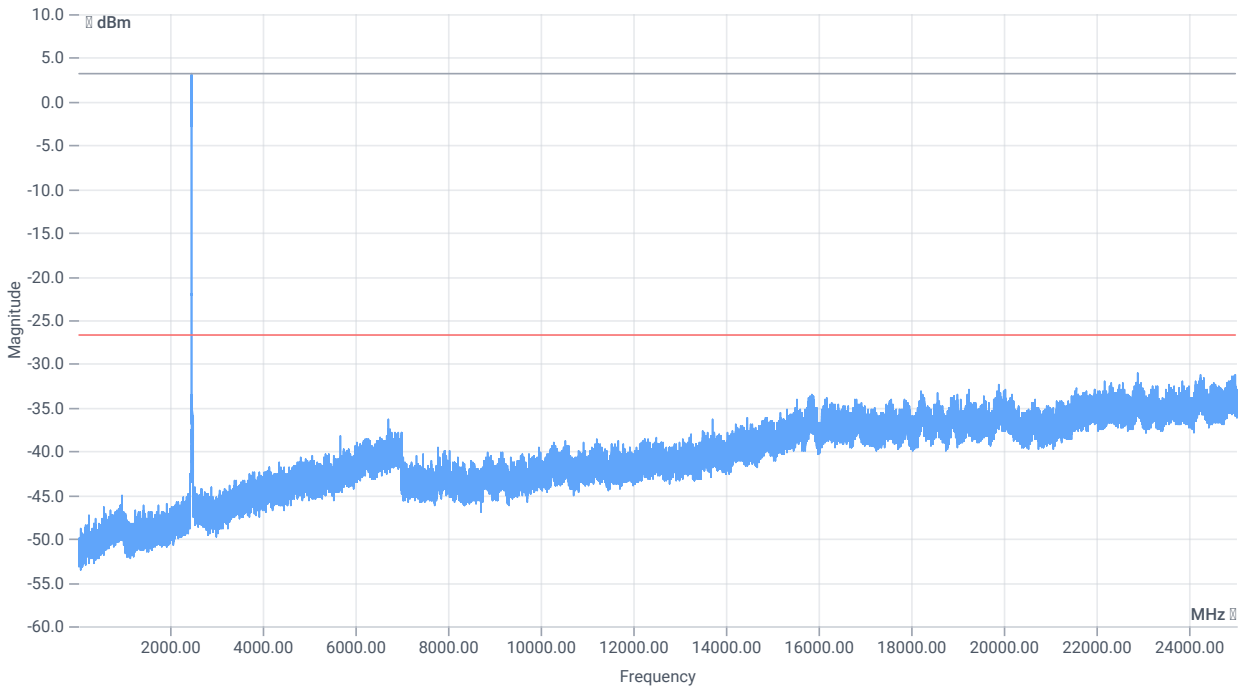
Equipment

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.

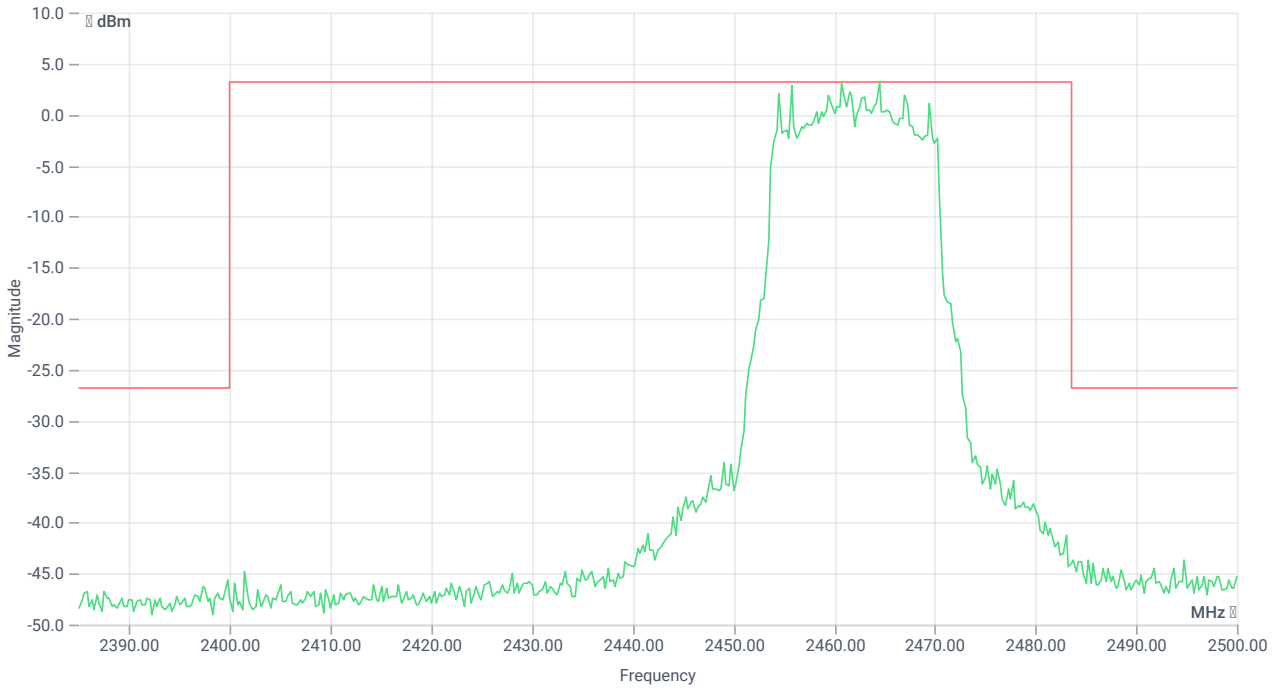
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.47	dBm	INFO
Ref. Frequency	---	---	2460.800	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	12.47 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2464.50 MHz	---	---	3.26	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 22900 MHz	0	---	4.28	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:24:46
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

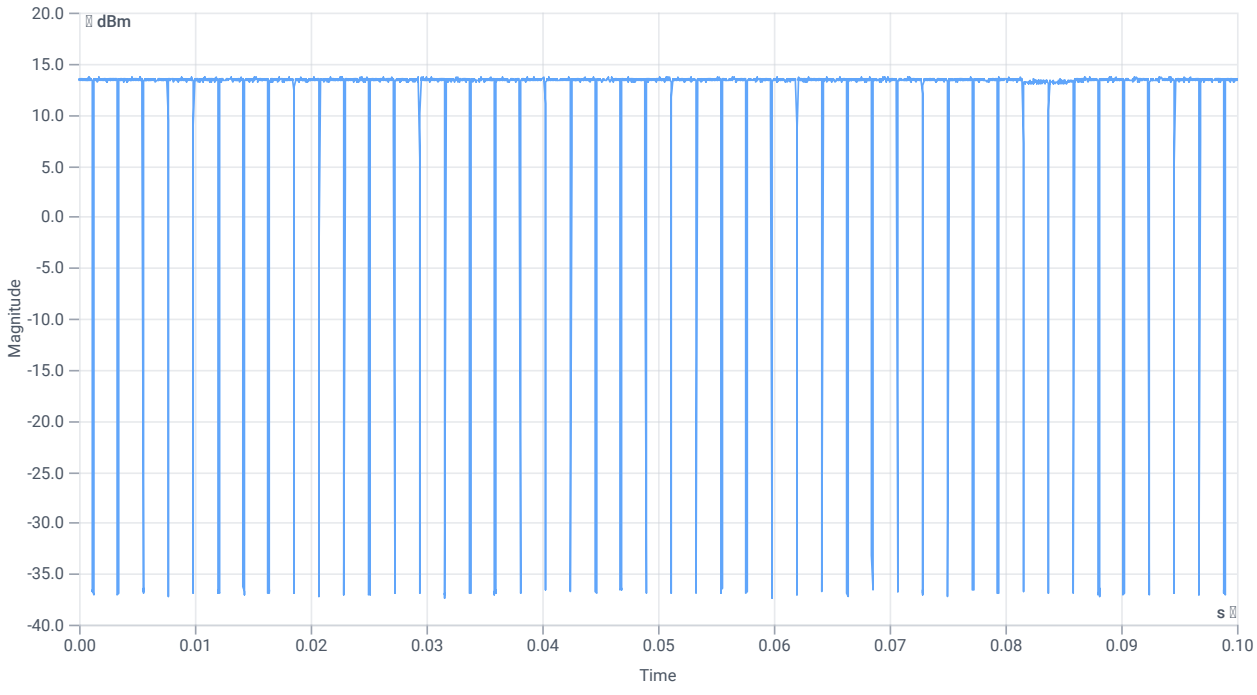
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.53	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

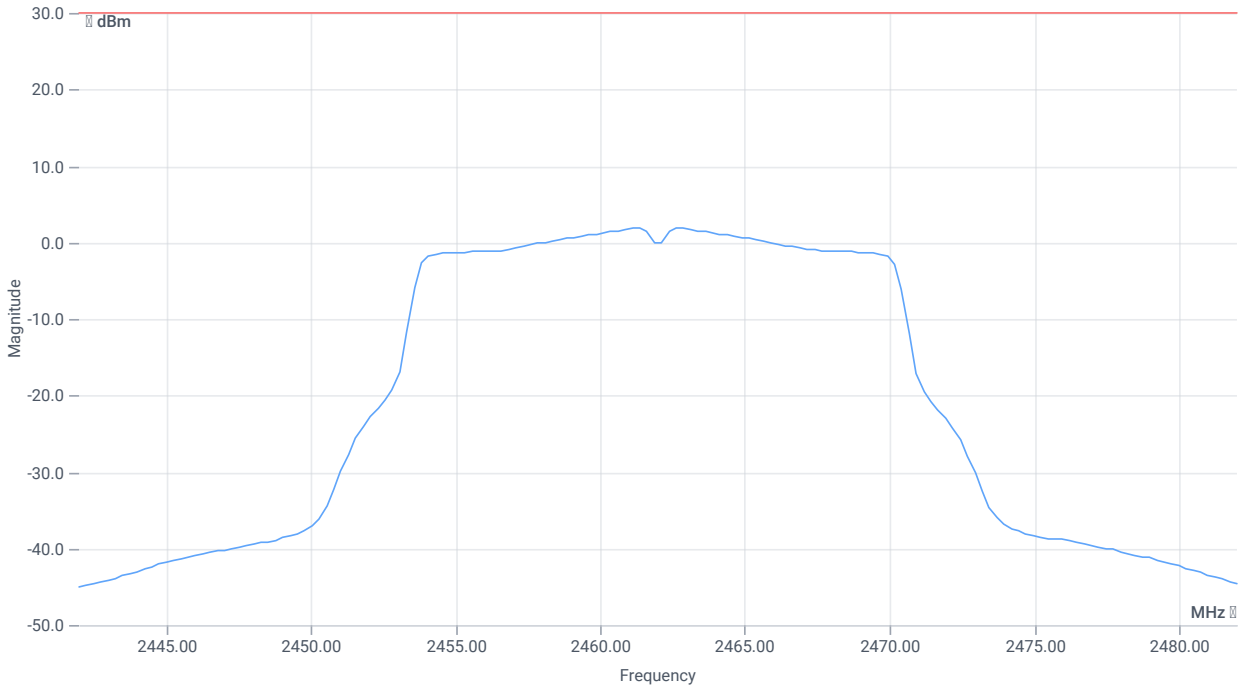


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.53 | 14.14 | 25
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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	15.01	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	15.32	dBm	PASS

Verdict
PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:26:00
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

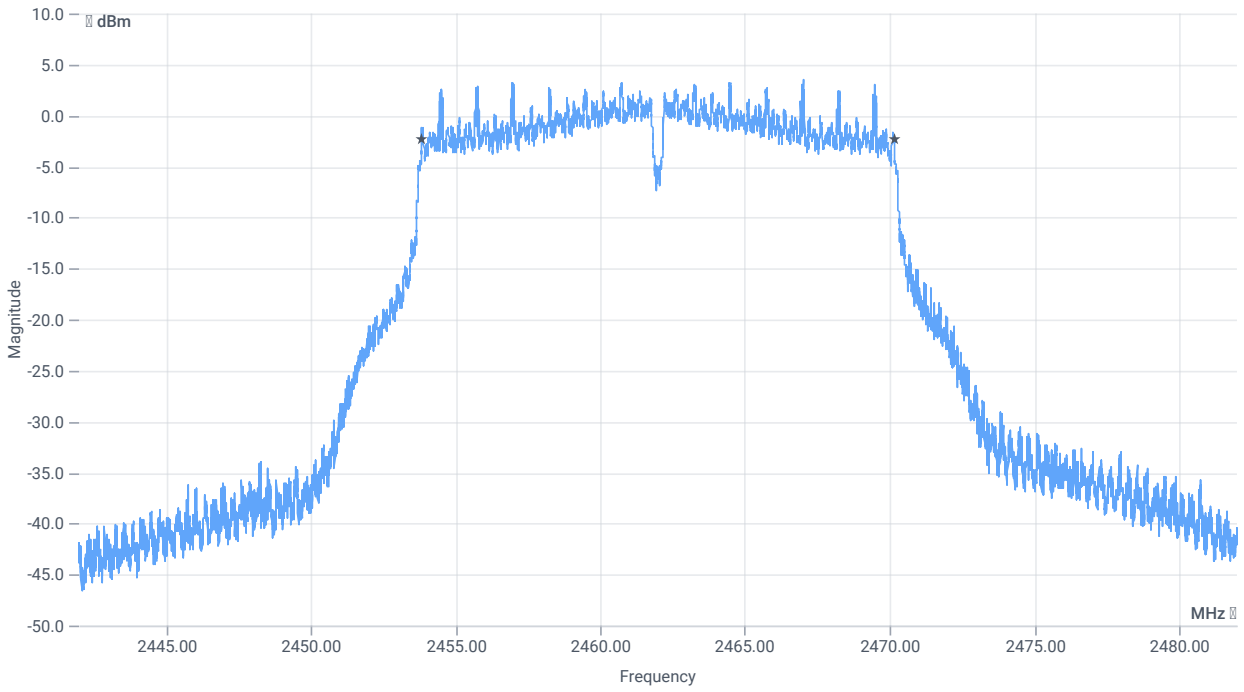
Test at TX 2462 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.70	dBm	INFO
Ref. Frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.70 | 14.14 | 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



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16308	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:26:33
Ambit temp [°C] | humidity [rel%]	22.8 | 25
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

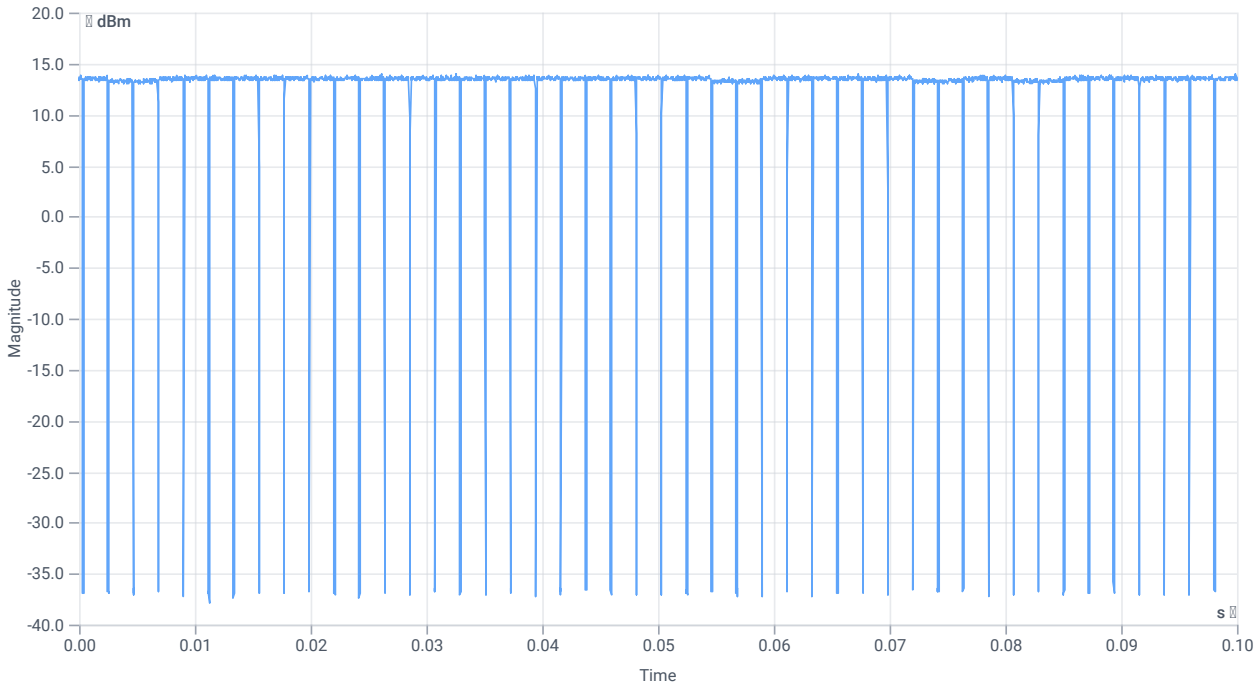
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.91	dBm	INFO
Ref. Frequency	---	---	2463.400	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

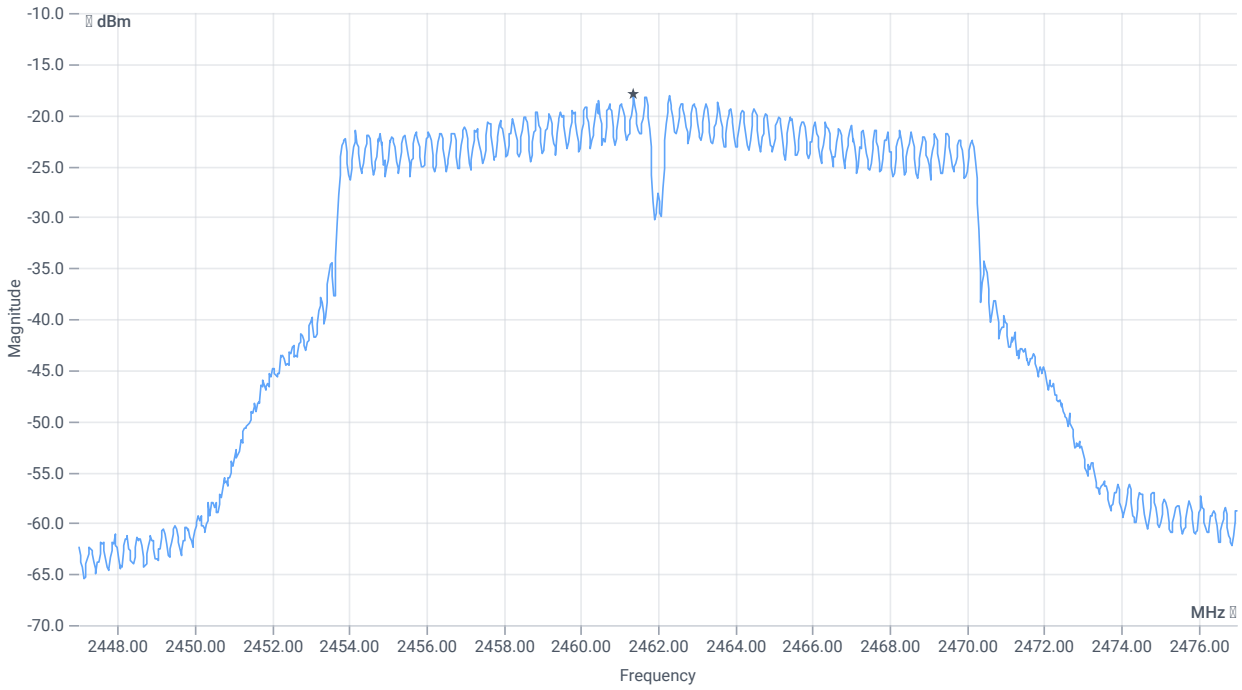


Duty cycle

Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.91 | 14.14 | 20
Start [MHz] | Stop [MHz]	2447.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-18.01	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg psd DC corrected	---	8	-17.7	dBm/3kHz	PASS

Verdict
PASS

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

References

TC start	12.01.2024 15:27:38
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

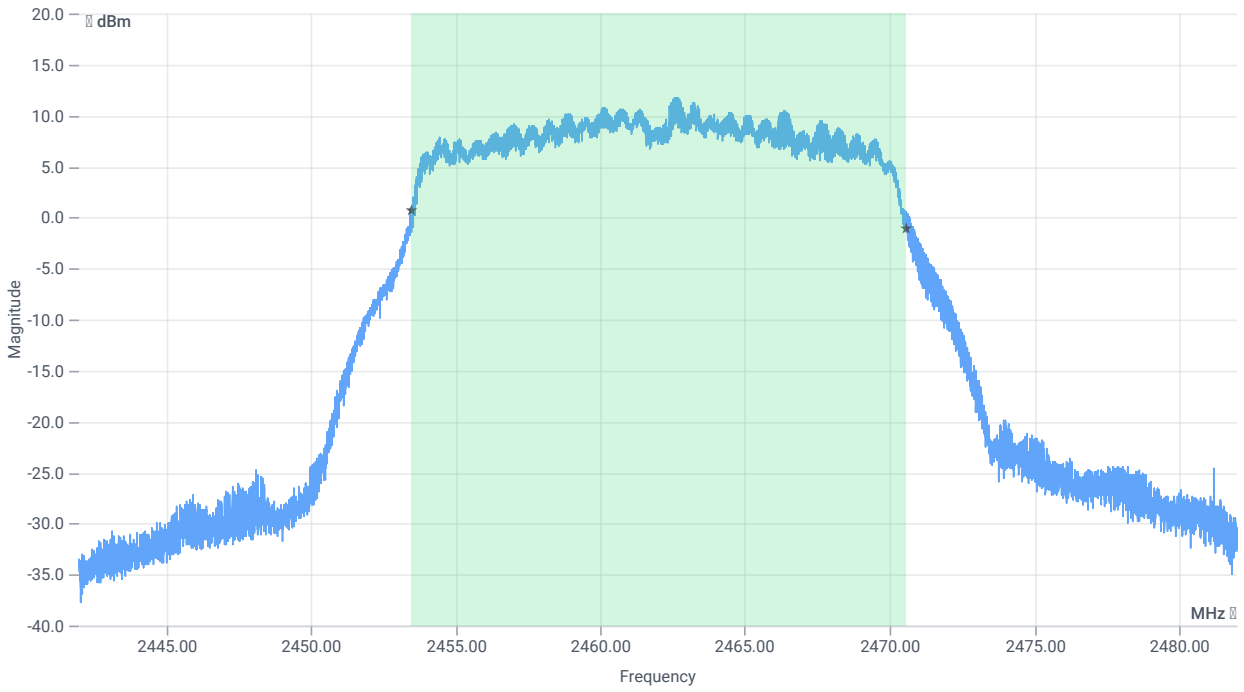
Test at TX 2462 MHz

RESULT: Reference Power cond.

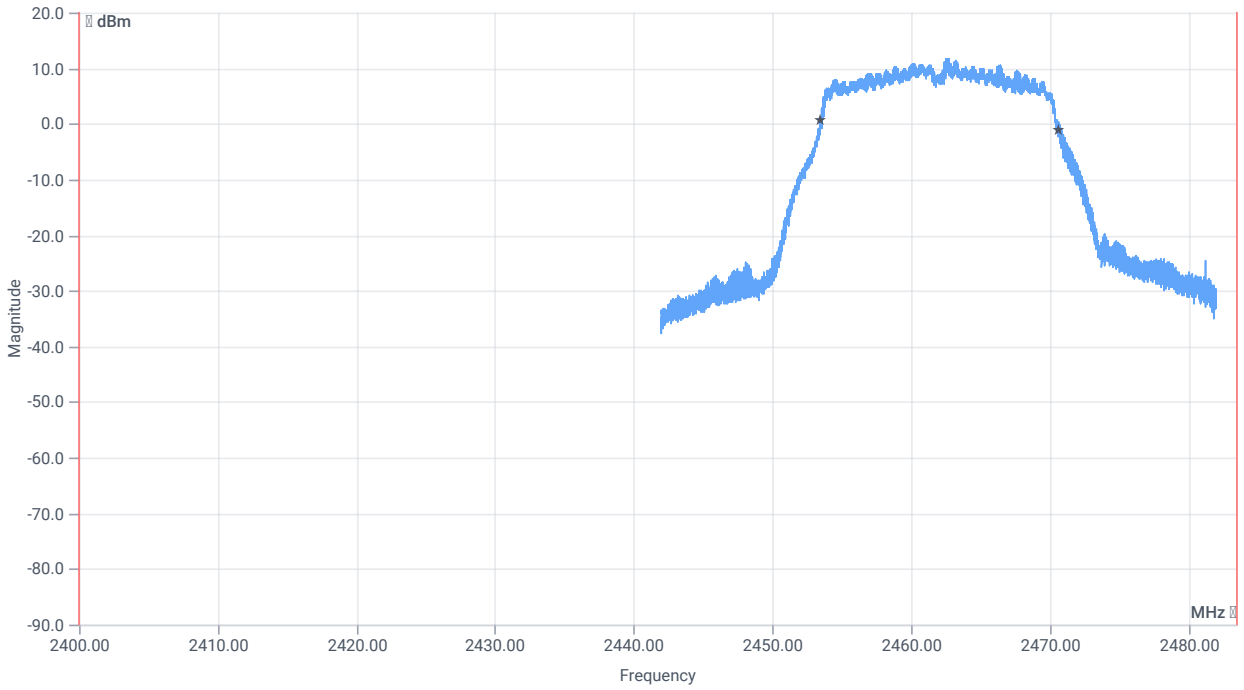
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.54	dBm	INFO
Ref. Frequency	---	---	2460.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.54 | 14.14 | 20
Start [MHz] | Stop [MHz]	2442.000 | 2482.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



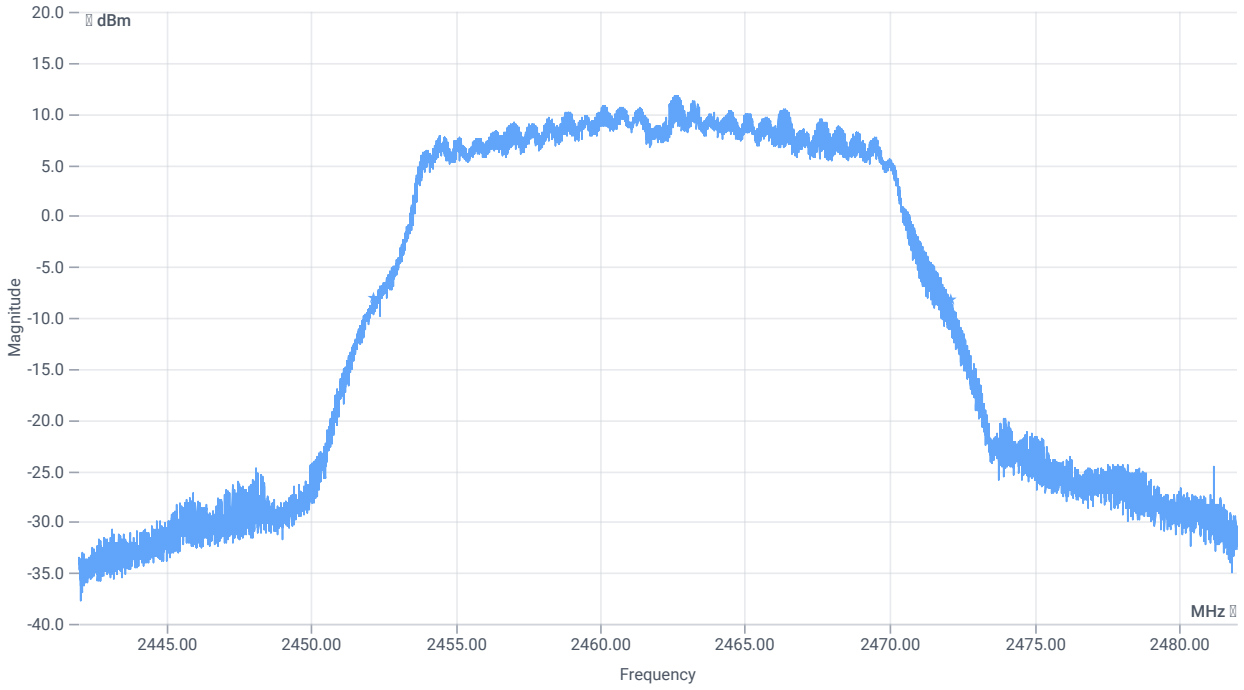
BW 99PCT



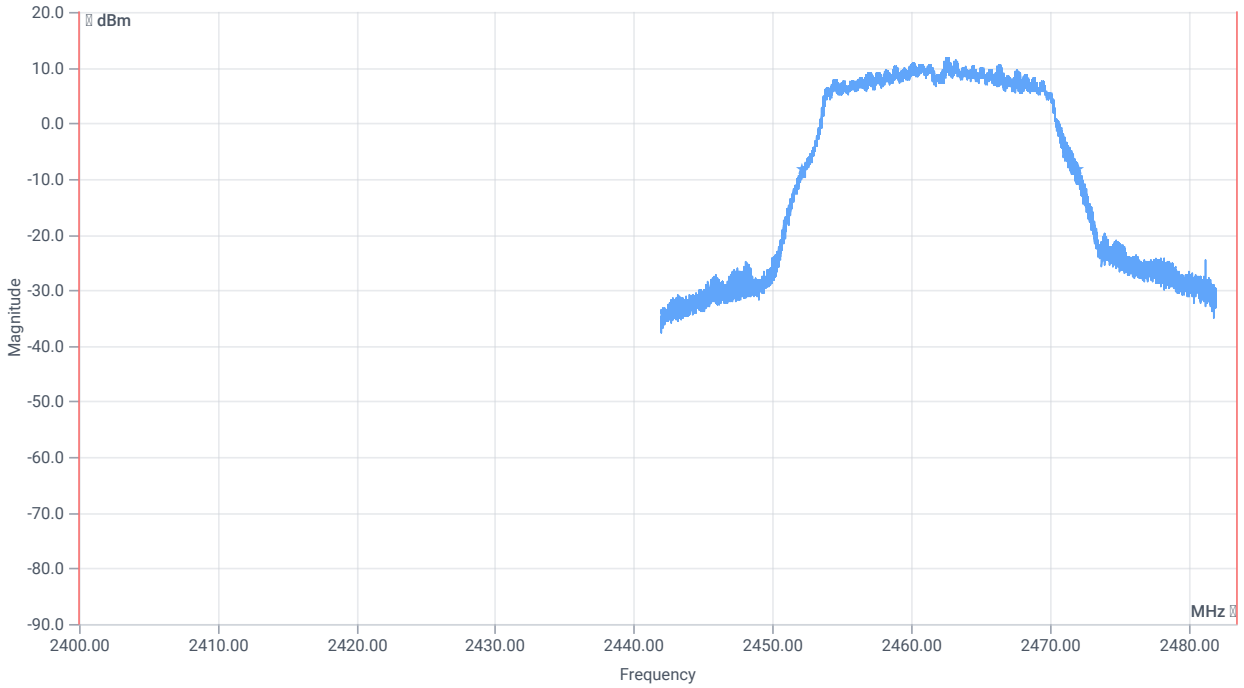
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17098.000	kHz	INFO
T1 99%	2400.000000	---	2453.4849	MHz	PASS
T2 99%	---	2483.500000	2470.5831	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19912	kHz	INFO
T1 20DB	2400.000000	---	2452.1840	MHz	PASS
T2 20dB	---	2483.500000	2472.0960	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:28:14
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

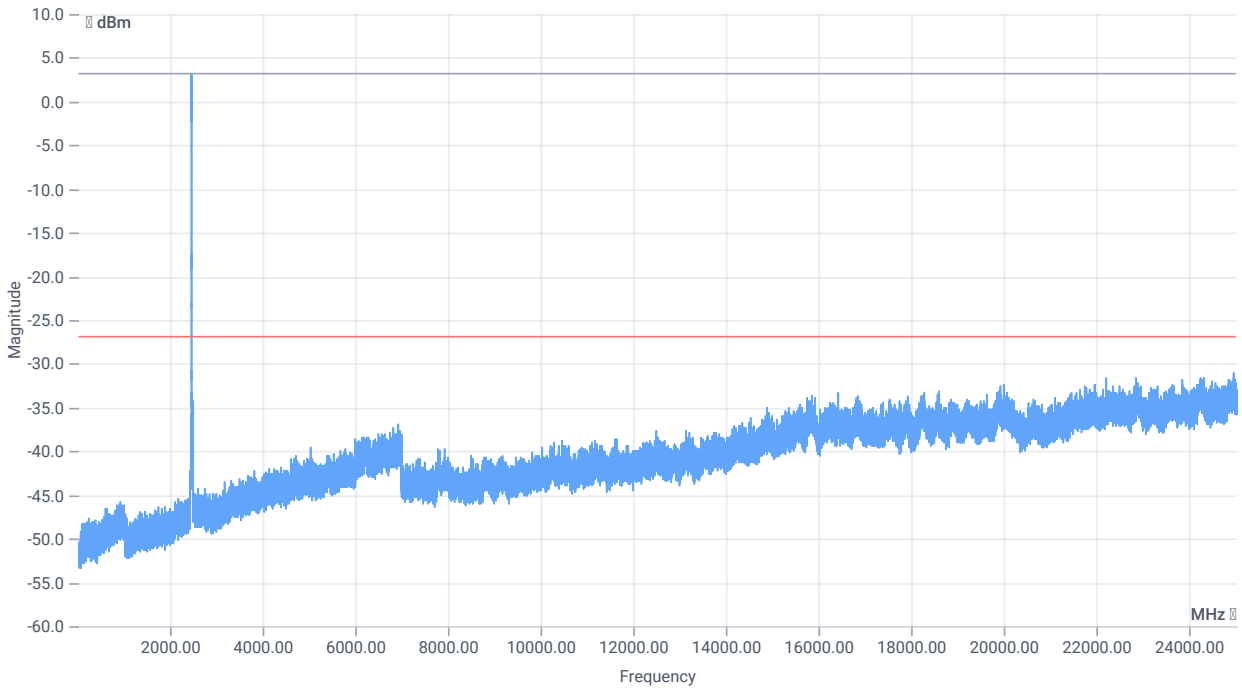
Equipment

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.

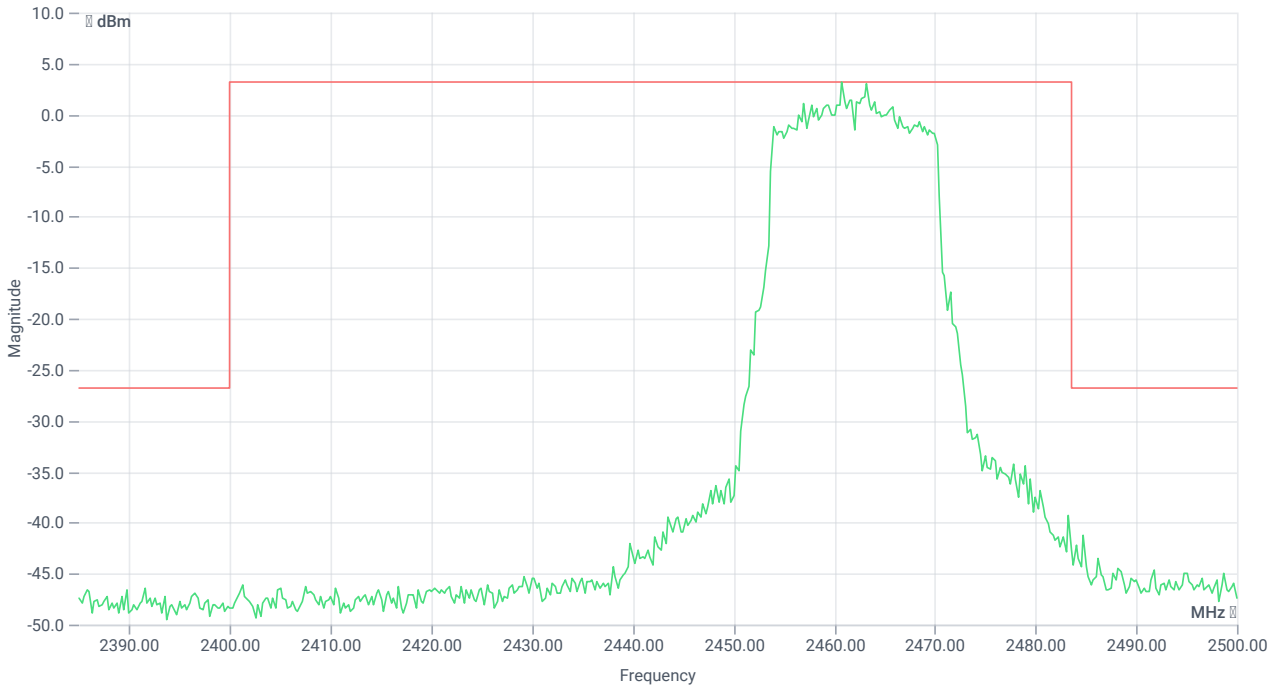
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.45	dBm	INFO
Ref. Frequency	---	---	2461.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	12.45 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2460.75 MHz	---	---	3.15	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24971.75 MHz	0	---	4.13	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	12.01.2024 15:34:57
Ambit temp [°C] | humidity [rel%]	22.8 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2412
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2462
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

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

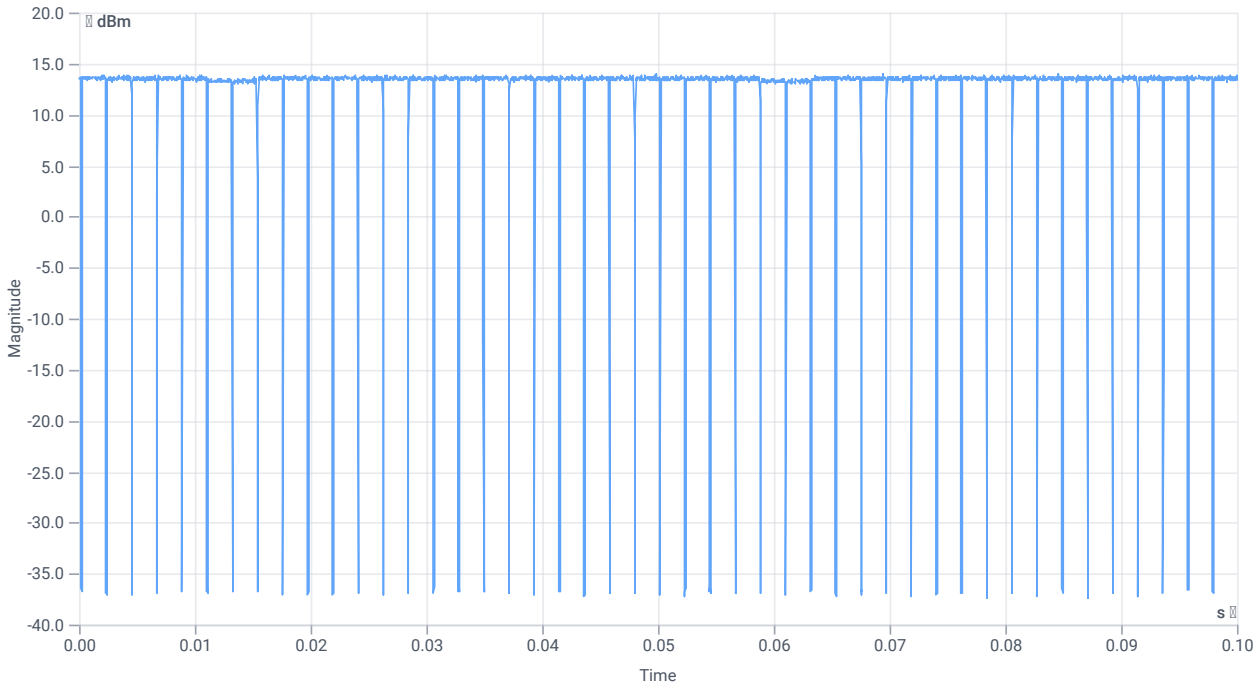
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.85	dBm	INFO
Ref. Frequency	---	---	2464.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.943	---	INFO
Duty Cycle max	---	---	0.255	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.931	---	INFO
Duty Cycle min	---	---	0.311	dB	INFO
Max TX Burst Length	---	---	2.05	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.15	ms	INFO

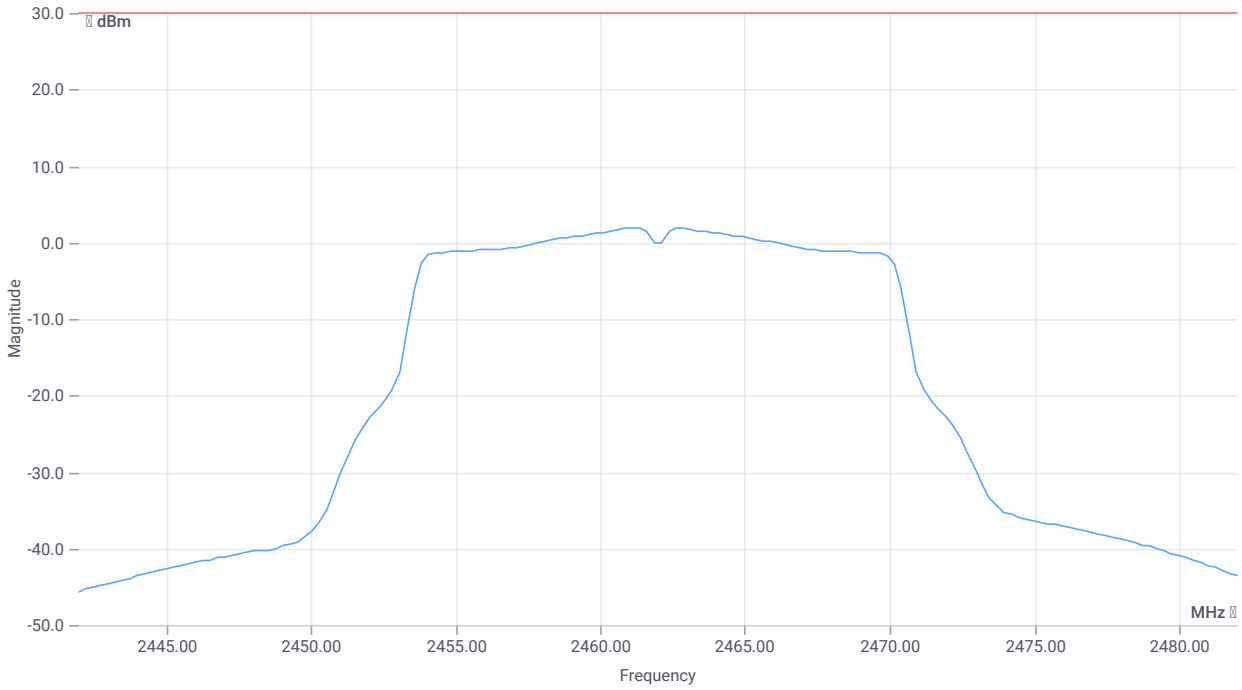


Duty cycle

Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.85 | 14.14 | 25
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



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	15.09	dBm	INFO
Duty cycle correction	---	---	0.31	dB	INFO
Avg power DC corrected	---	30	15.4	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg output power SA DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 15:36:12
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg output power SA DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2462 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
∑ Avg output power DC corr.	---	30	0		PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg psd DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	12.01.2024 15:41:16
Ambit temp [°C] | humidity [rel%]	22.7 | 26
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg psd DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
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
Full path name | type	None

Equipment

Test at TX 2462 MHz

RESULT psd

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
∑ Avg psd DC corr	---	8	0		PASS

Verdict
PASS

NA # Message with SA scan ~

References

TC start	16.01.2024 09:36:56
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	NA | NI
Method	
Description	Message with SA Scan g mode
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	16.01.2024 09:36:56
Message	set WLAN2G4 to g mode, Frequency [MHz] 2417 ,

Equipment

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

Verdict
INFO

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:37:09
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

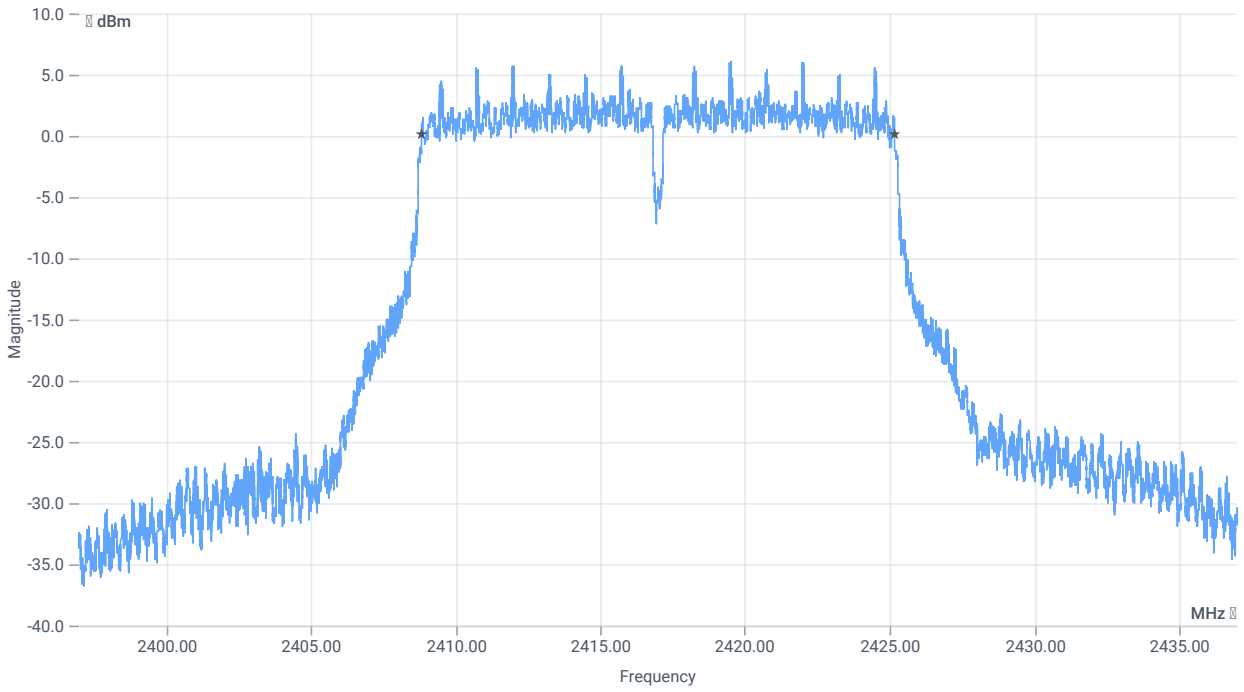
Test at TX 2417 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.22	dBm	INFO
Ref. Frequency	---	---	2421.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.22 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16336	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:37:44
Ambit temp [°C] | humidity [rel%]	21.8 | 28
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2417 MHz

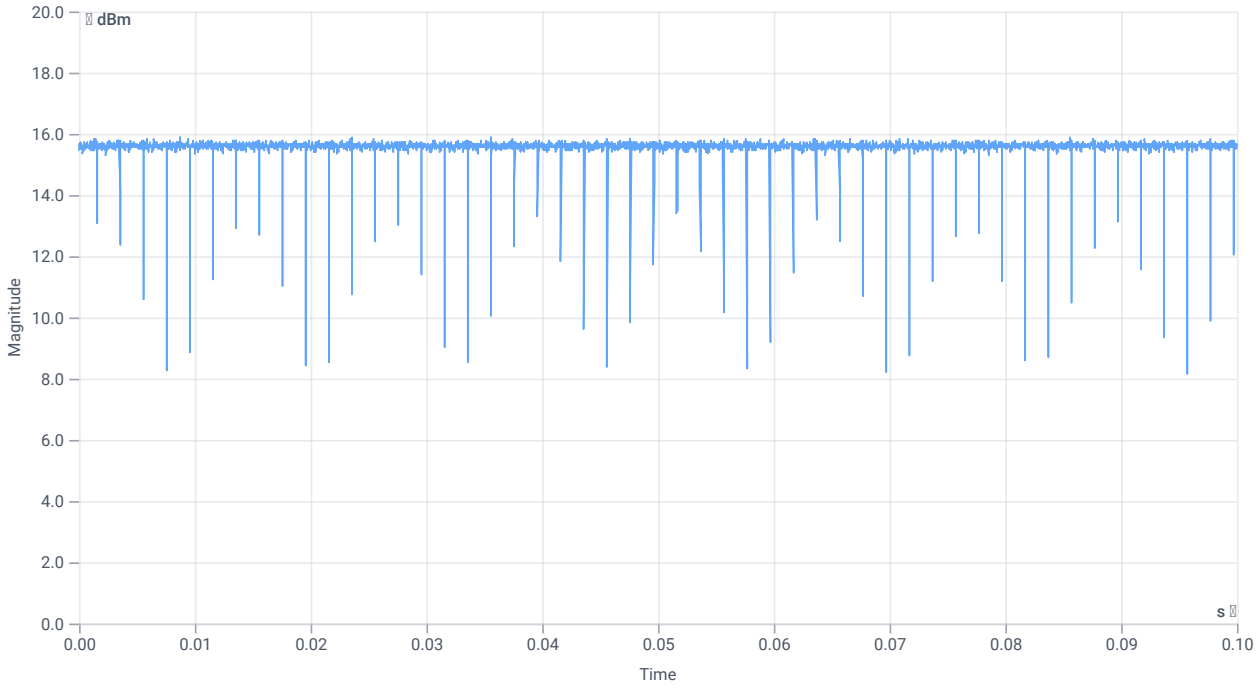
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.11	dBm	INFO
Ref. Frequency	---	---	2418.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

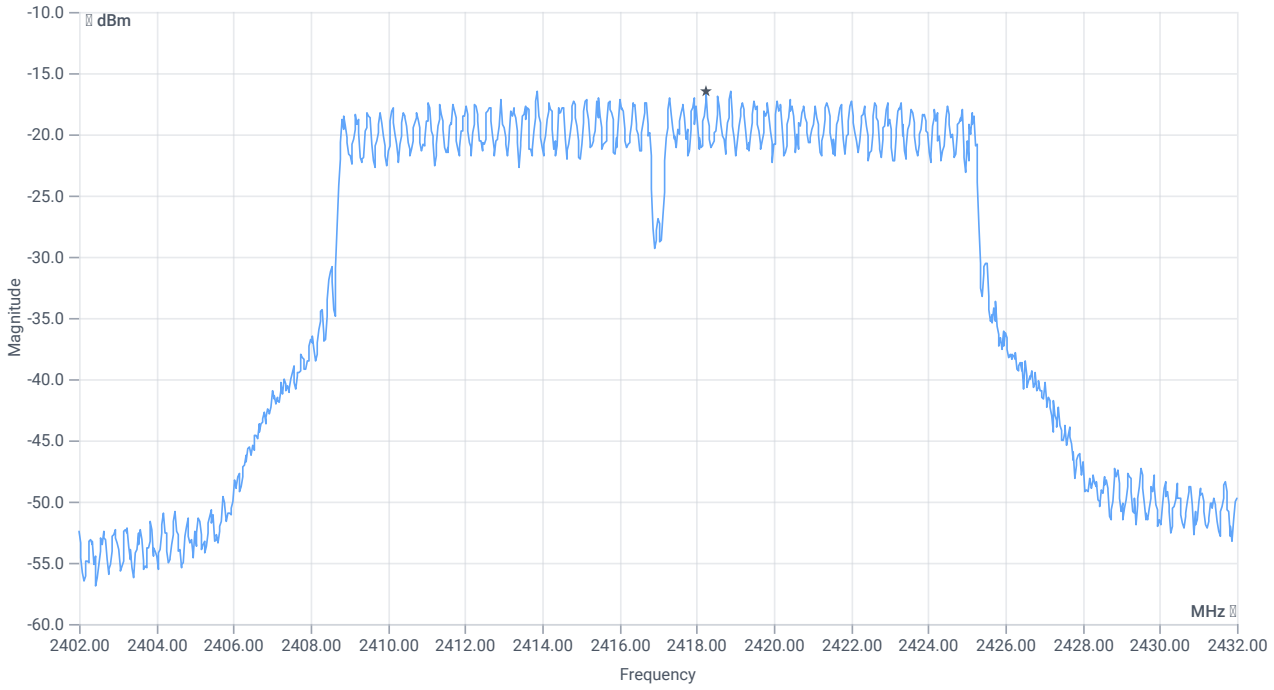
Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.11 | 13.88 | 25
Start [MHz] | Stop [MHz]	2402.000 | 2432.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-16.45	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg psd DC corrected	---	8	-16.45	dBm/3kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2024 09:38:51
Ambit temp [°C] | humidity [rel%]	21.8 | 28
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

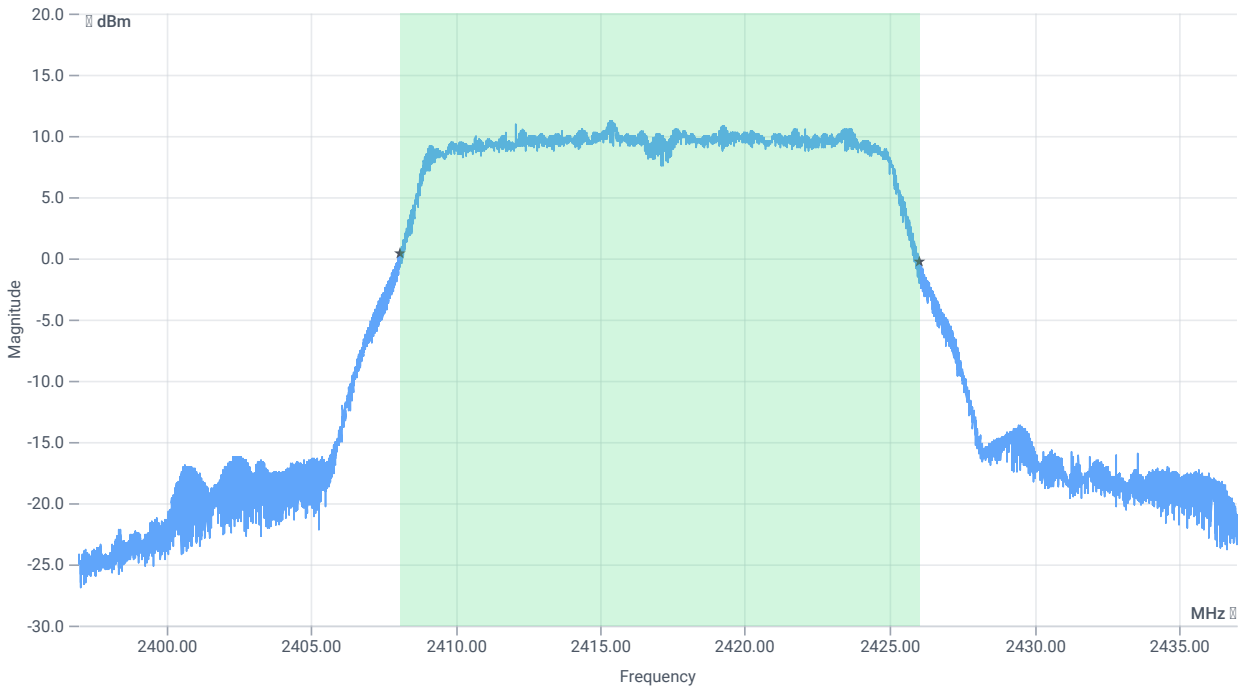
Test at TX 2417 MHz

RESULT: Reference Power cond.

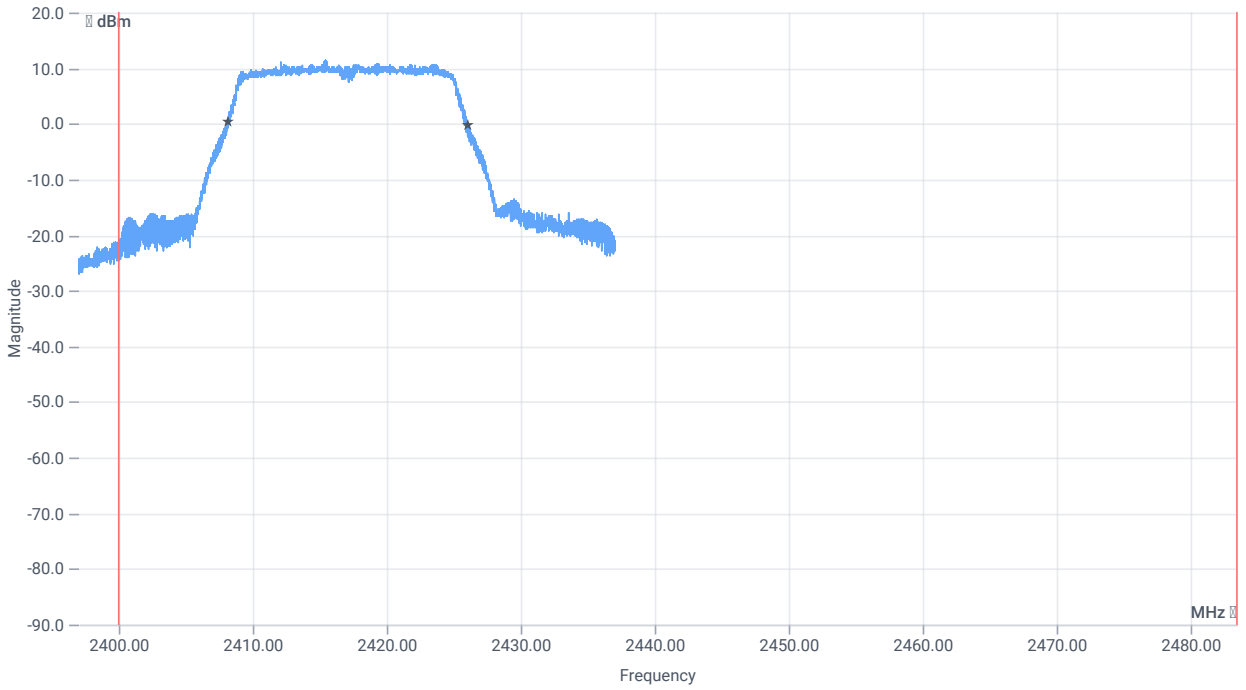
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.26	dBm	INFO
Ref. Frequency	---	---	2419.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.26 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



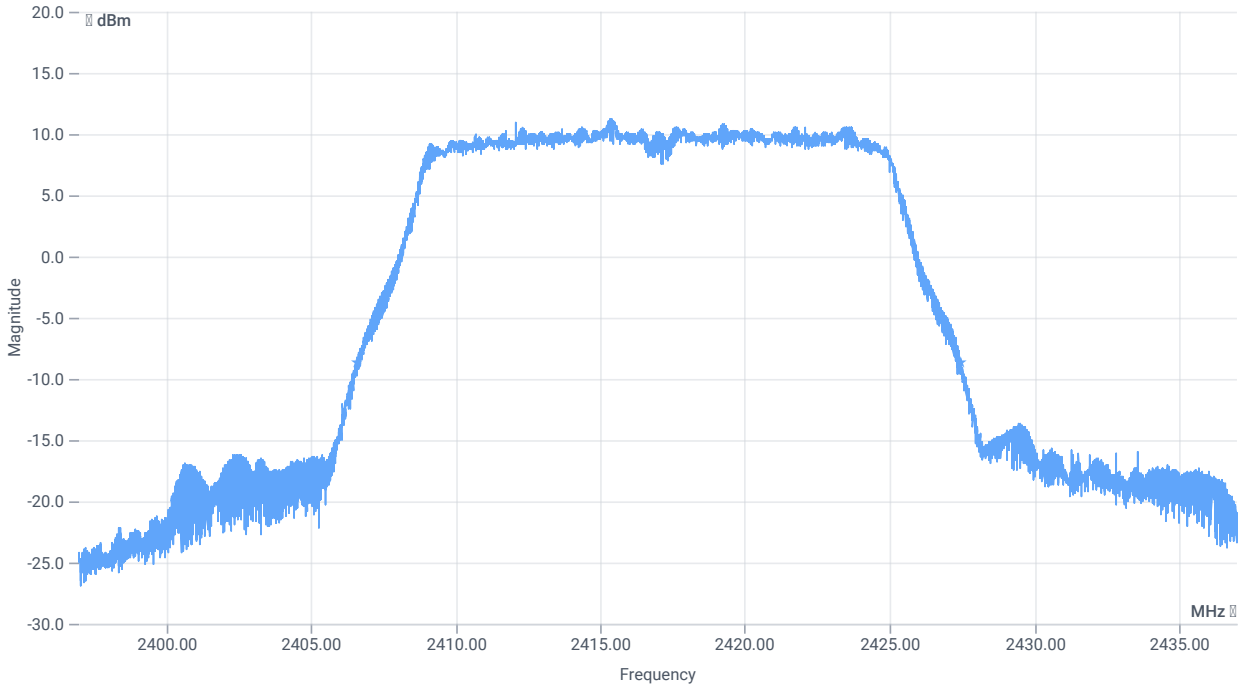
BW 99PCT



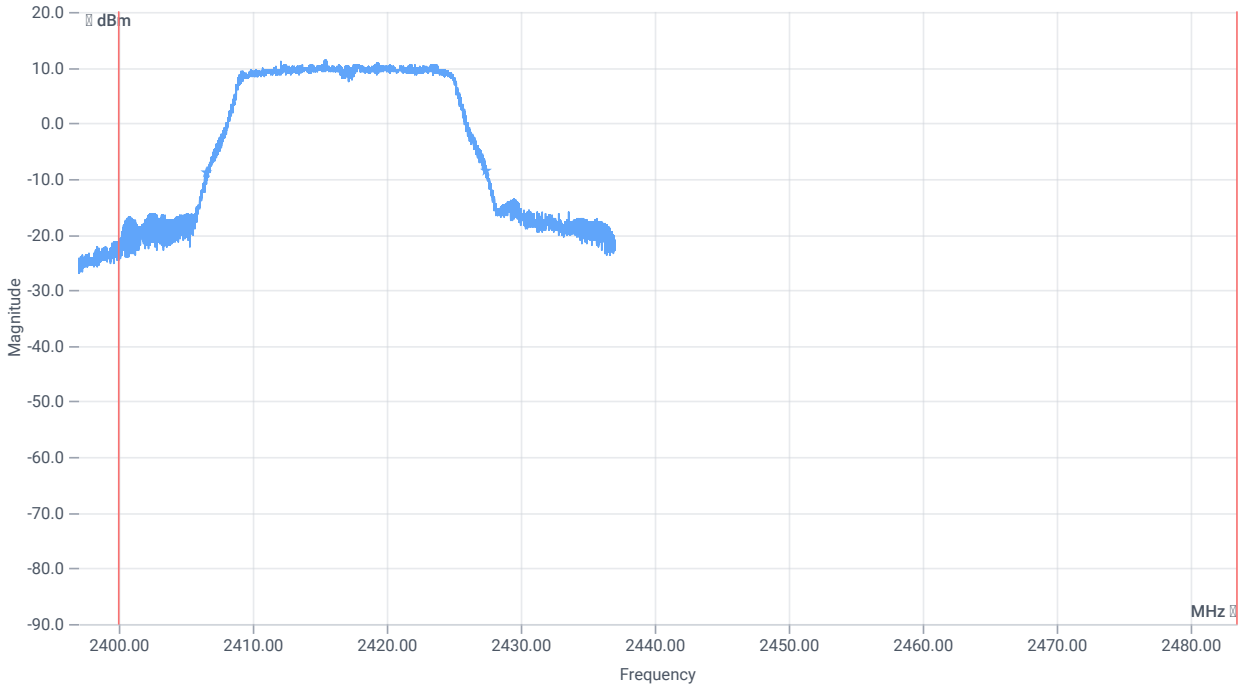
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17922.000	kHz	INFO
T1 99%	2400.000000	---	2408.1009	MHz	PASS
T2 99%	---	2483.500000	2426.0231	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20880	kHz	INFO
T1 20DB	2400.000000	---	2406.5760	MHz	PASS
T2 20dB	---	2483.500000	2427.4560	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:39:32
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

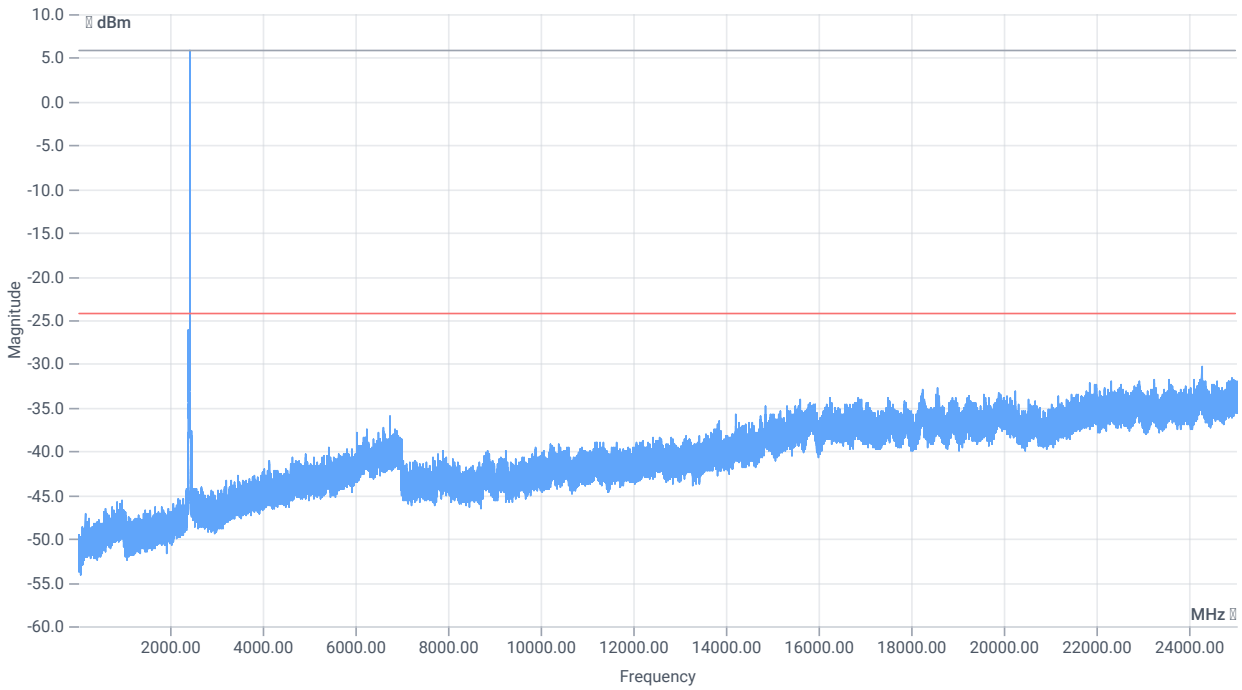
Equipment

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

Test at TX 2417 MHz

RESULT: Reference Power cond.

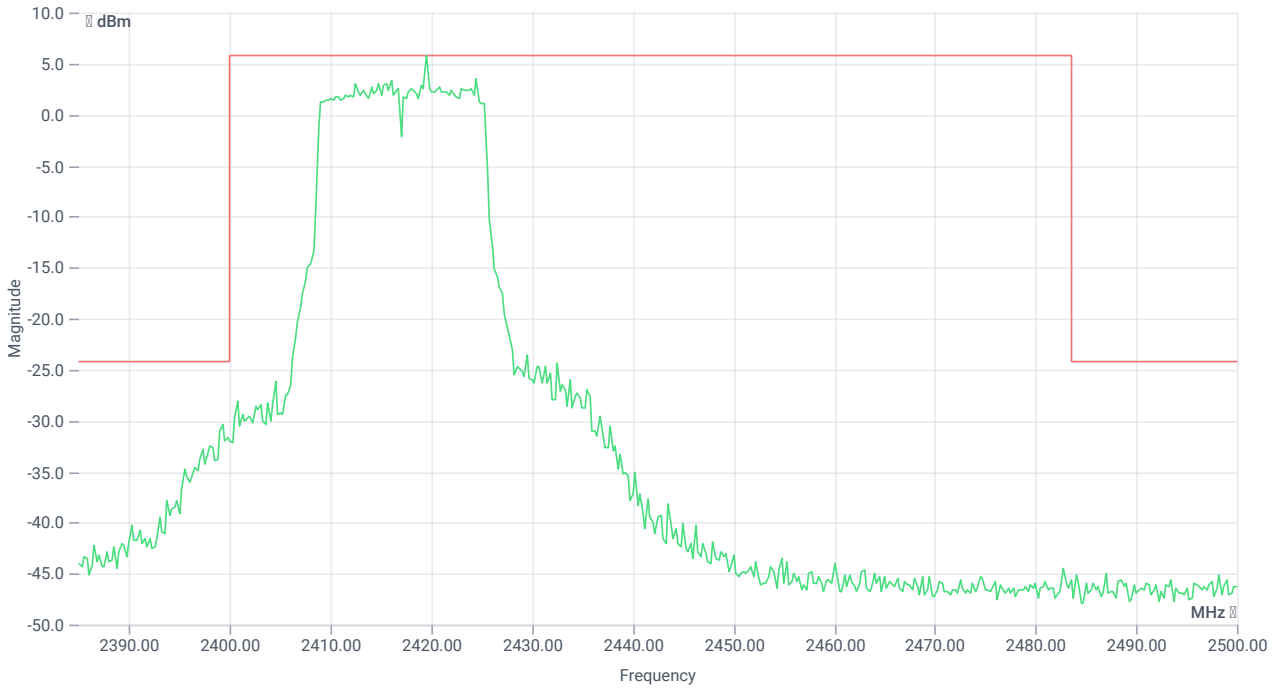
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.23	dBm	INFO
Ref. Frequency	---	---	2418.800	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.23 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2419.50 MHz	---	---	5.83	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24262 MHz	0	---	6.18	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:46:17
Ambit temp [°C] | humidity [rel%]	21.7 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2417 MHz

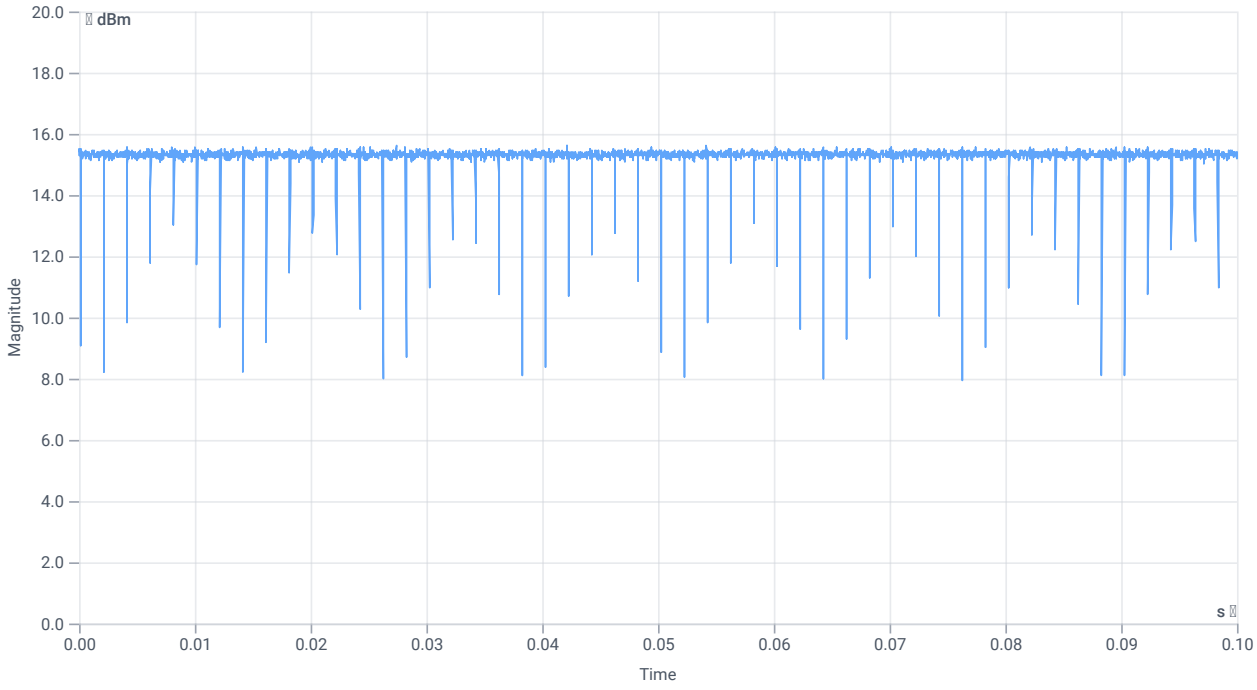
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.88	dBm	INFO
Ref. Frequency	---	---	2418.600	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

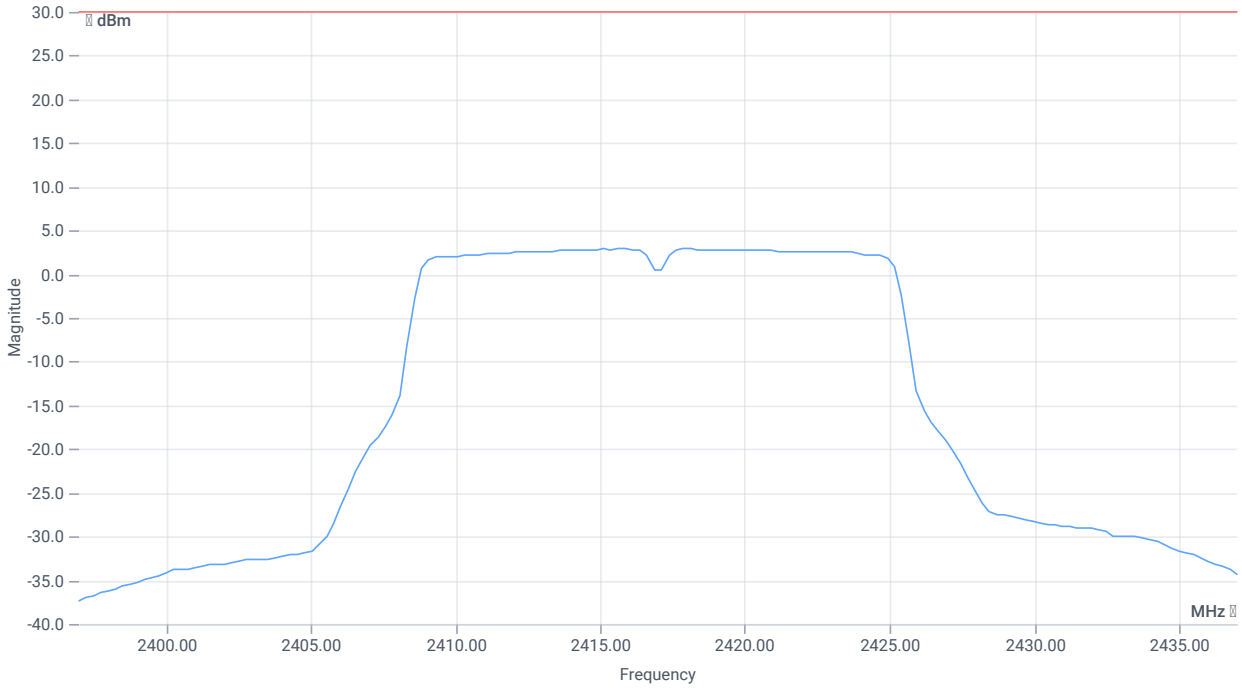
Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.88 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	500 | 100 | 160 | SWE



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	17.43	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg power DC corrected	---	30	17.43	dBm	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:47:35
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

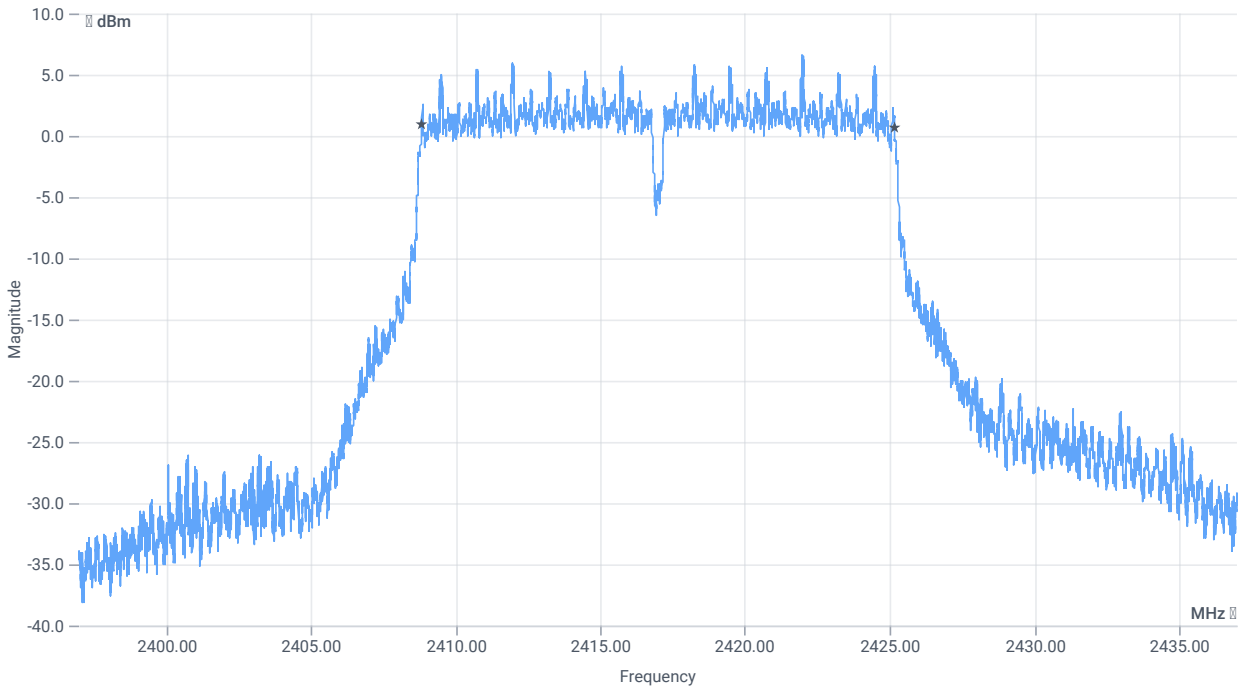
Test at TX 2417 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.66	dBm	INFO
Ref. Frequency	---	---	2421.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.66 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16336	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:48:12
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2417 MHz

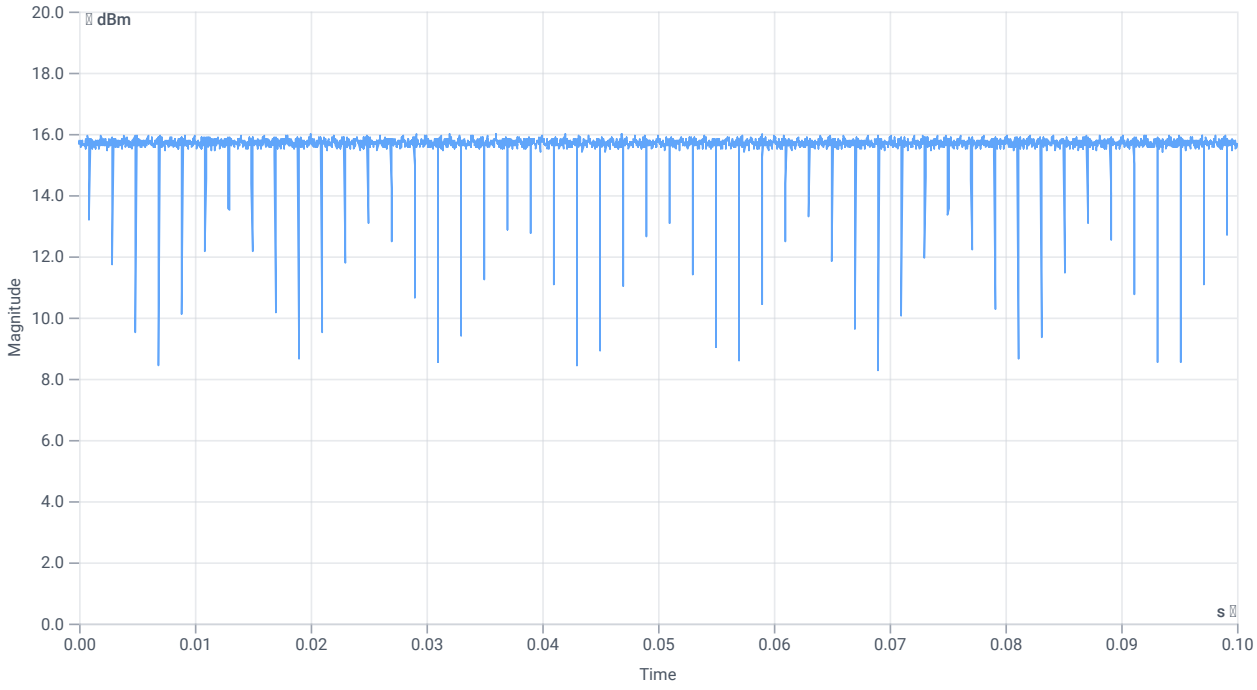
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.81	dBm	INFO
Ref. Frequency	---	---	2421.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

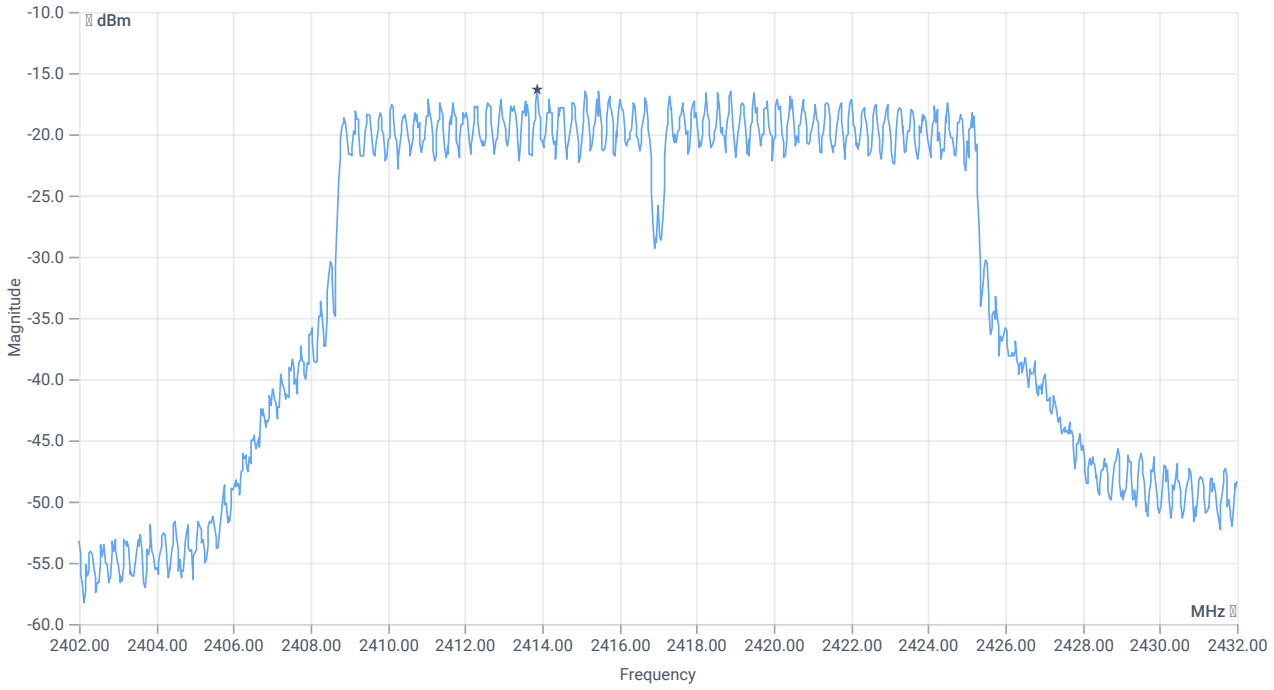
Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.81 | 13.88 | 25
Start [MHz] | Stop [MHz]	2402.000 | 2432.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-16.37	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg psd DC corrected	---	8	-16.37	dBm/3kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2024 09:49:17
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

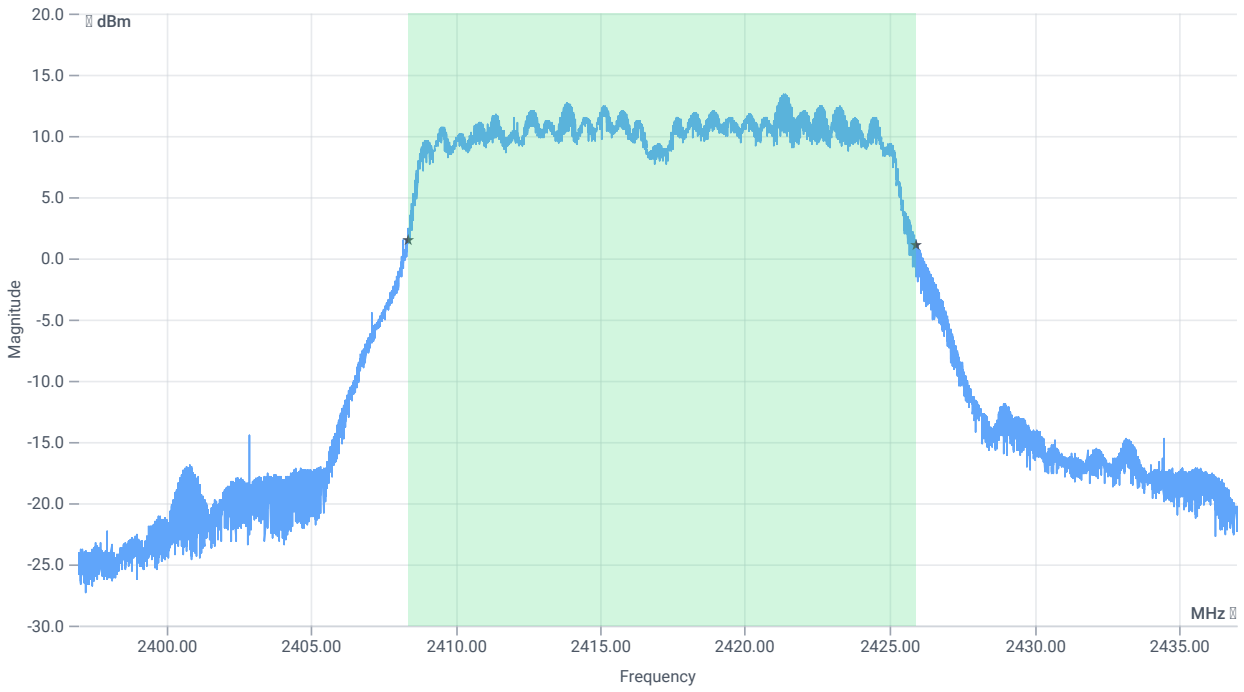
Test at TX 2417 MHz

RESULT: Reference Power cond.

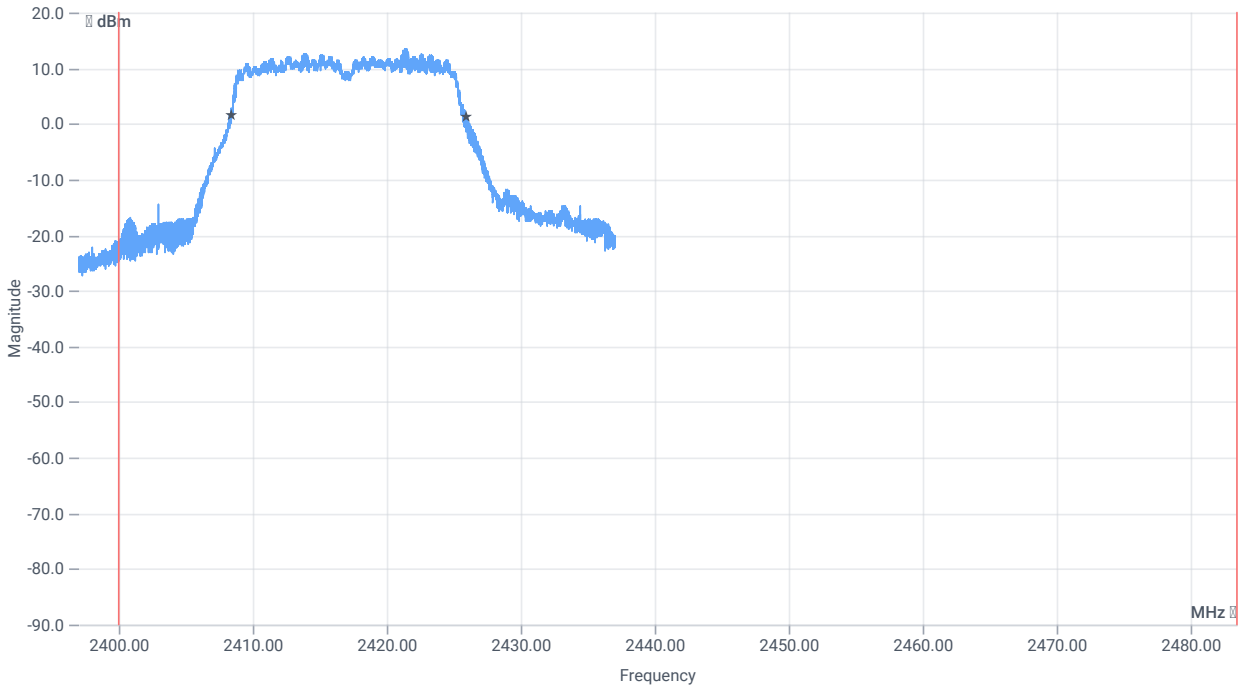
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.70	dBm	INFO
Ref. Frequency	---	---	2422.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.70 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



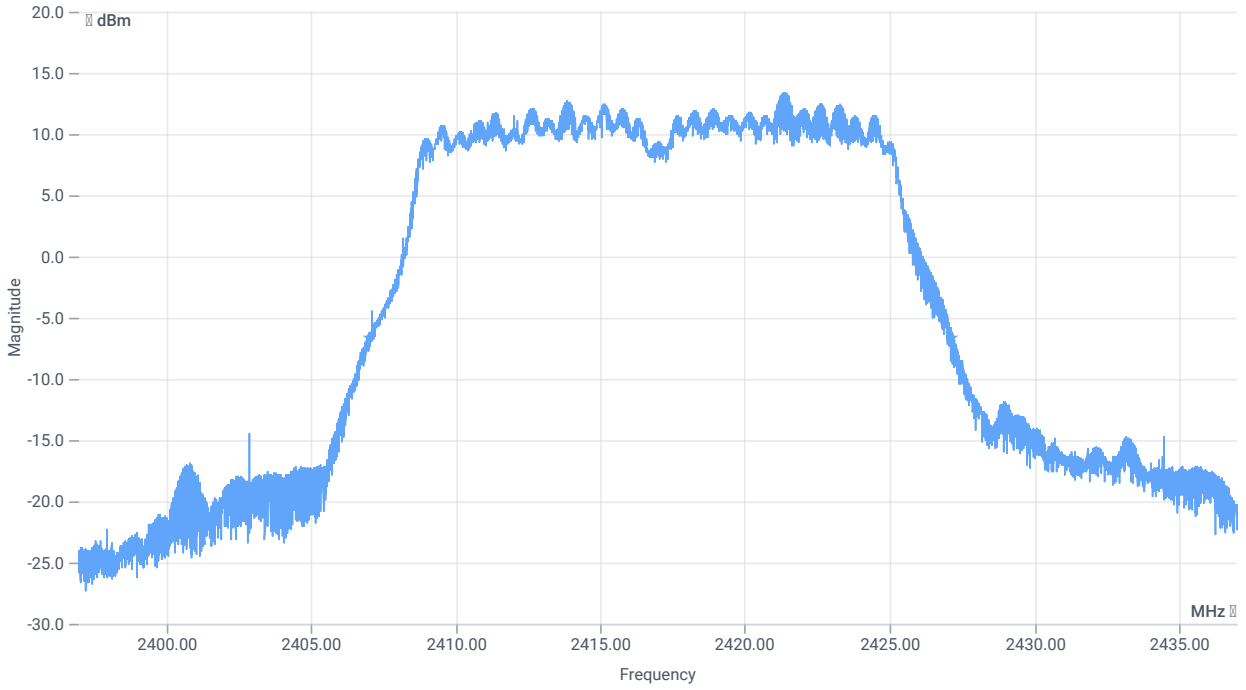
BW 99PCT



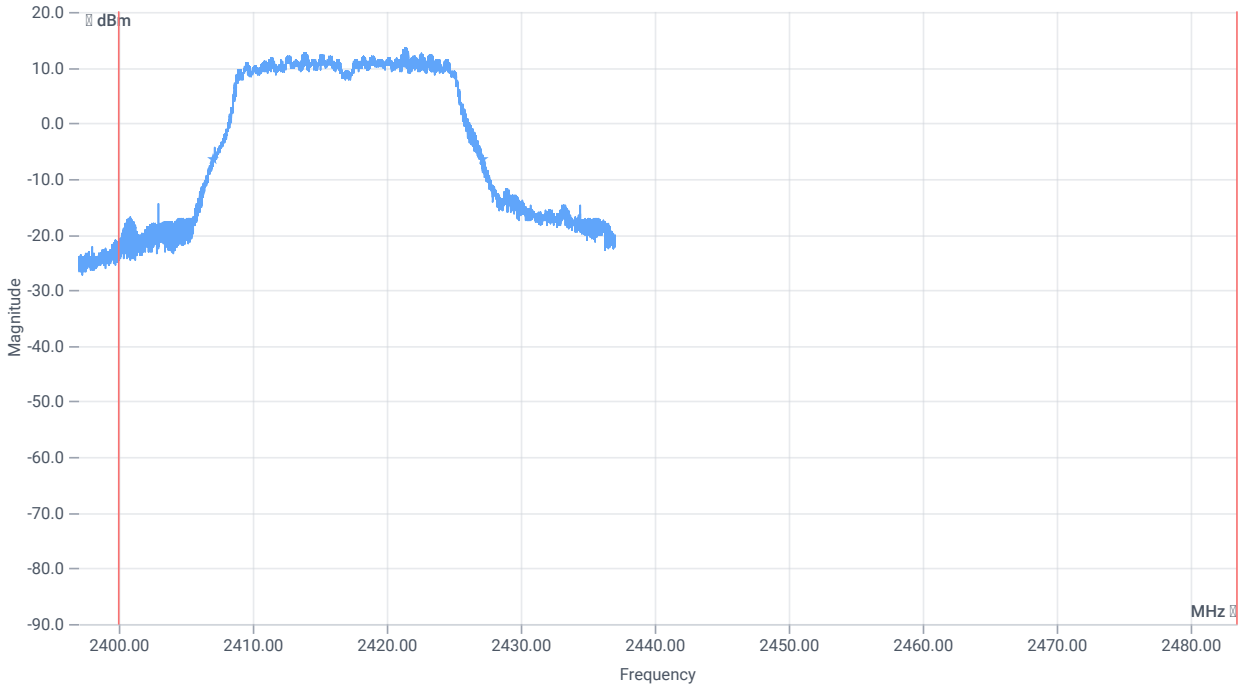
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17542.000	kHz	INFO
T1 99%	2400.000000	---	2408.3889	MHz	PASS
T2 99%	---	2483.500000	2425.9311	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20192	kHz	INFO
T1 20DB	2400.000000	---	2407.0080	MHz	PASS
T2 20dB	---	2483.500000	2427.2000	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:49:55
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

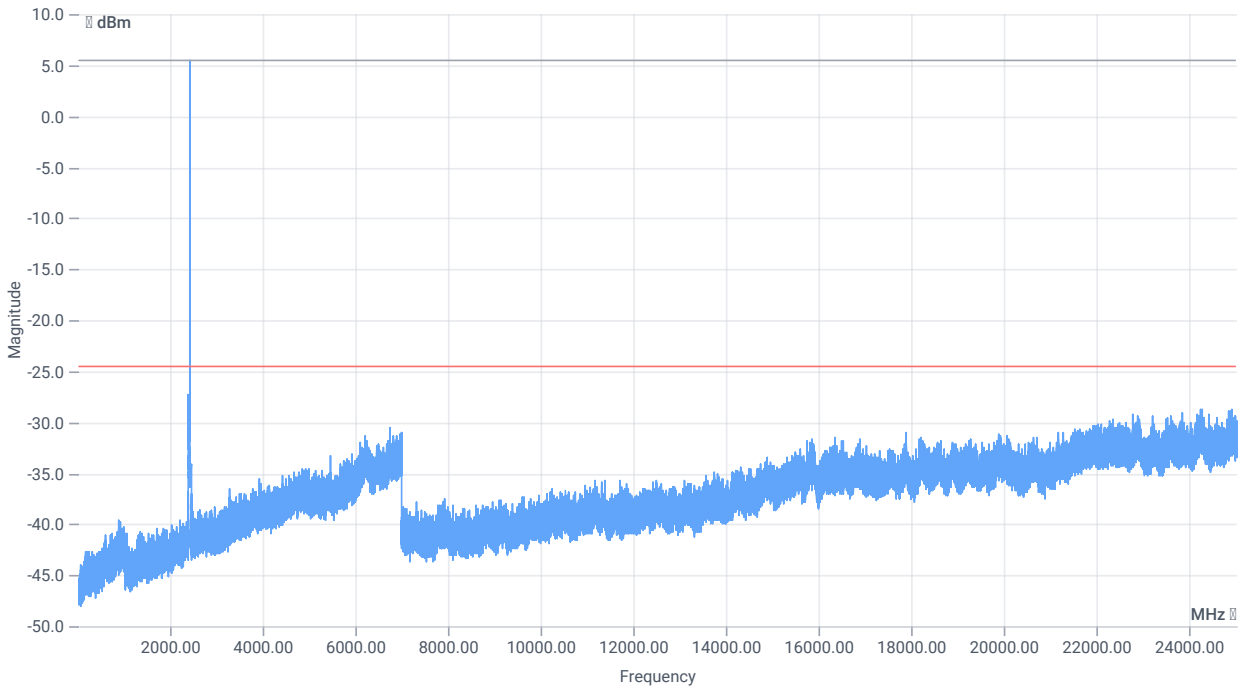
Equipment

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

Test at TX 2417 MHz

RESULT: Reference Power cond.

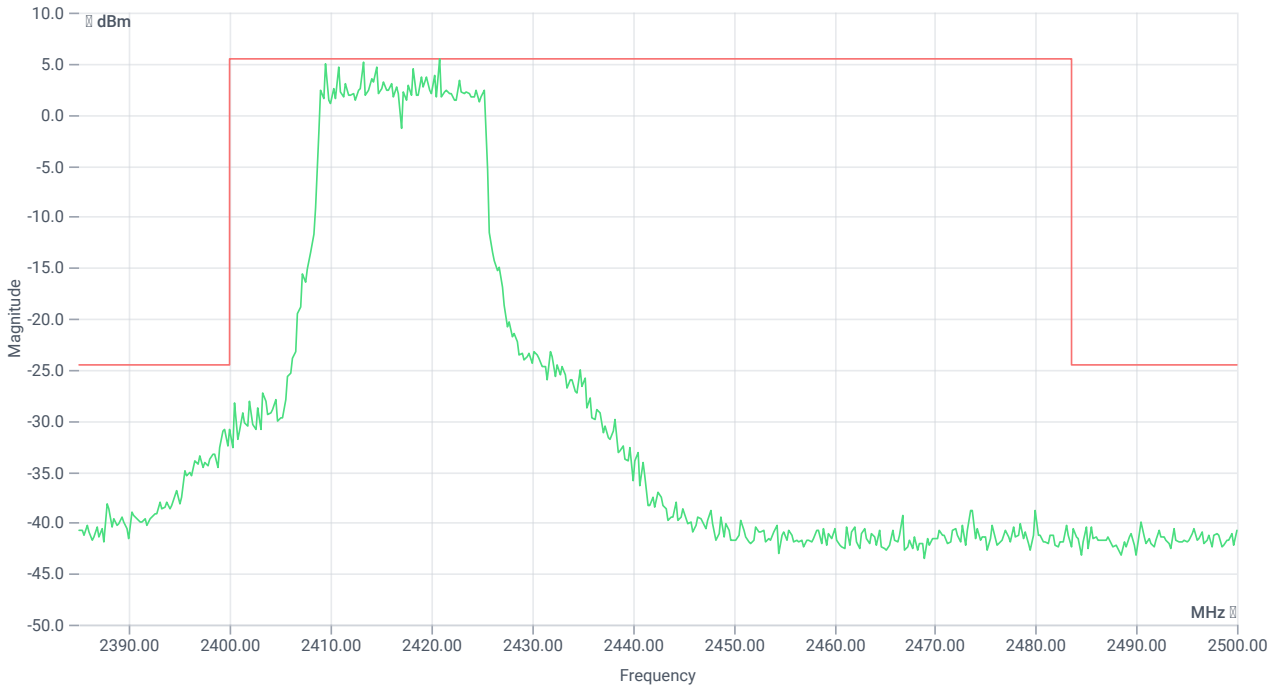
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.42	dBm	INFO
Ref. Frequency	---	---	2421.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.42 | 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 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2420.75 MHz	---	---	5.52	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24256 MHz	0	---	4.26	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:56:40
Ambit temp [°C] | humidity [rel%]	21.8 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2417 MHz

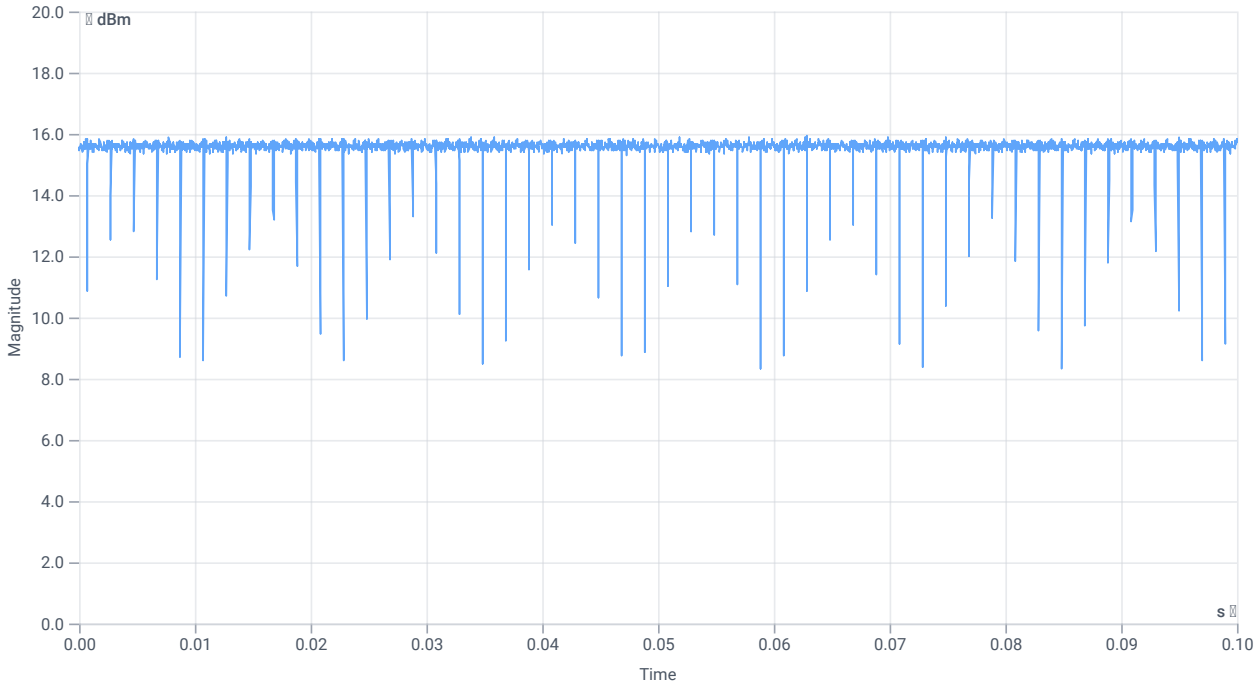
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.33	dBm	INFO
Ref. Frequency	---	---	2423.490	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

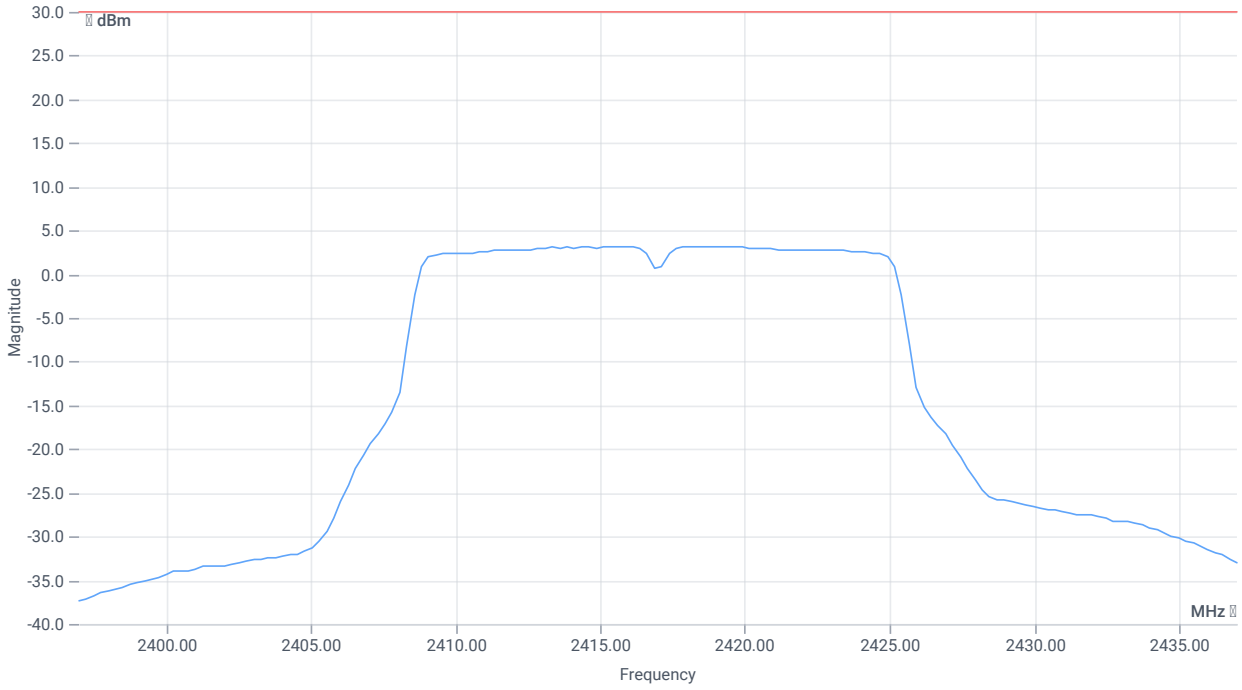
Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.33 | 13.88 | 25
Start [MHz] | Stop [MHz]	2397.000 | 2437.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	500 | 100 | 160 | SWE



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	17.68	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg power DC corrected	---	30	17.68	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg output power SA DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	16.01.2024 09:57:57
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg output power SA DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	None

Equipment

Test at TX 2417 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg power DC corr.	---	---	17.43	dBm	INFO
Ant:2 Avg power DC corr.	---	---	17.68	dBm	INFO
∑ Avg output power DC corr.	---	30	20.57	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg psd DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	16.01.2024 09:58:10
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg psd DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	False | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	None

Equipment

Test at TX 2417 MHz

RESULT psd

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg psd DC corr	---	---	-16.45	dBm/3kHz	INFO
Ant:2 Avg psd DC corr	---	---	-16.37	dBm/3kHz	INFO
∑ Avg psd DC corr	---	8	-13.4	dBm/3kHz	PASS

Verdict
PASS

NA # Message with SA scan ~

References

TC start	16.01.2024 09:58:36
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	NA | NI
Method	
Description	Message with SA Scan g mode
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	16.01.2024 09:58:37
Message	set WLAN2G4 to g mode, Frequency [MHz] 2457

Equipment

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

Verdict
INFO

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 09:59:38
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

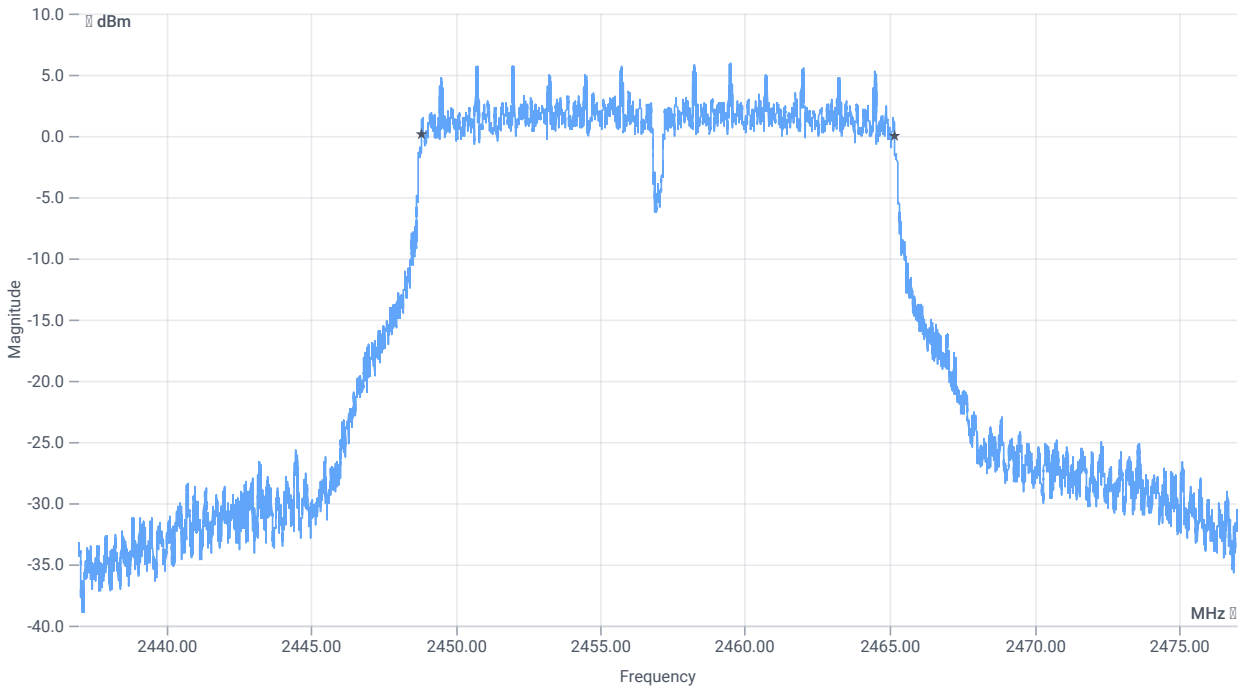
Test at TX 2457 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.33	dBm	INFO
Ref. Frequency	---	---	2455.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.33 | 14.13 | 25
Start [MHz] | Stop [MHz]	2437.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16336	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:00:12
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2457 MHz

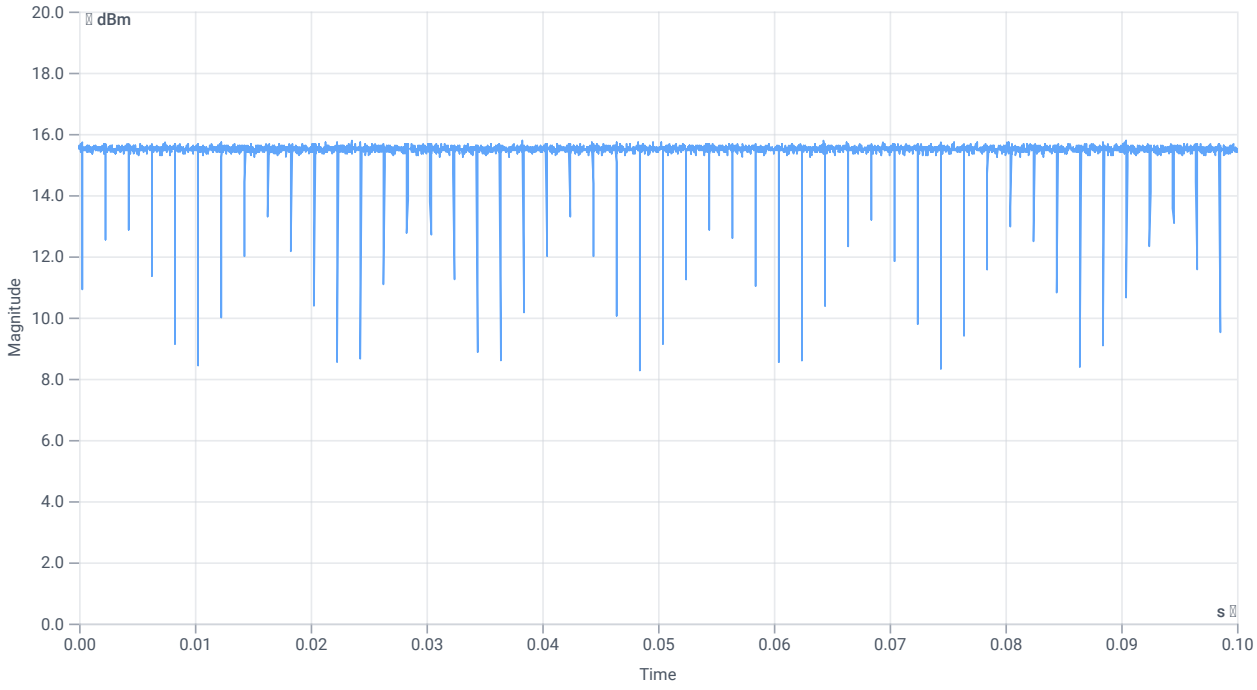
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.19	dBm	INFO
Ref. Frequency	---	---	2459.800	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

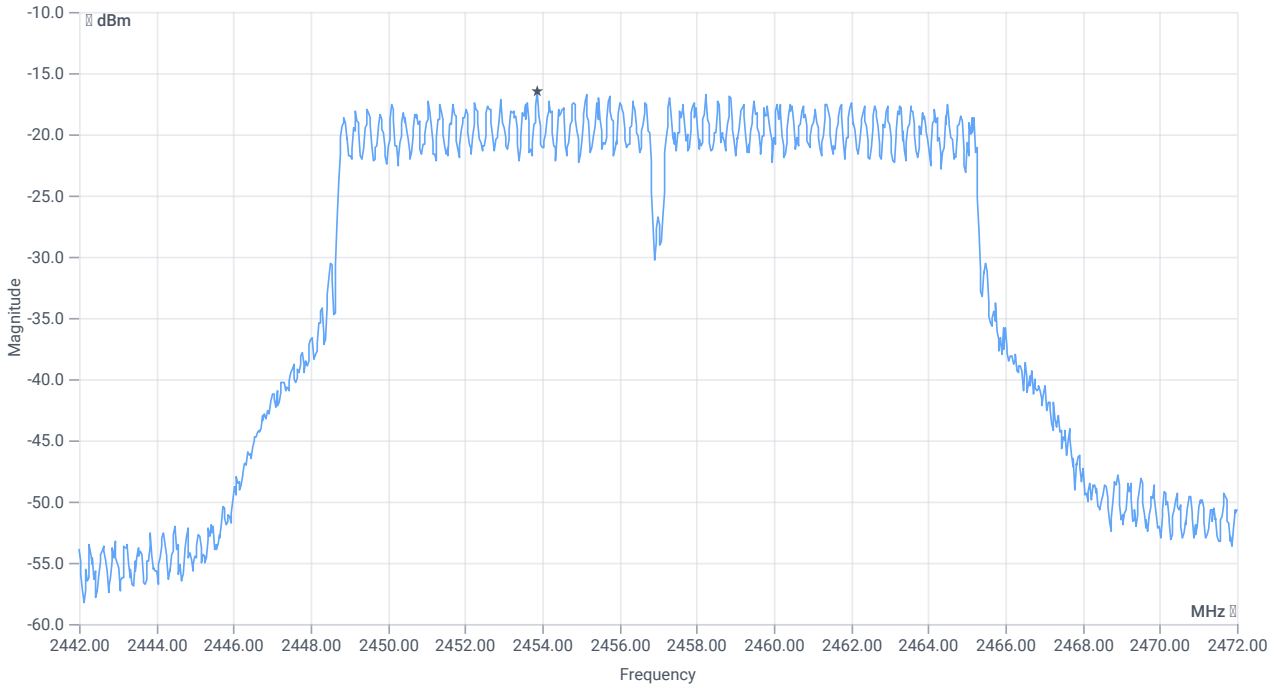
Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.19 | 14.13 | 25
Start [MHz] | Stop [MHz]	2442.000 | 2472.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-16.53	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg psd DC corrected	---	8	-16.53	dBm/3kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2024 10:01:19
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

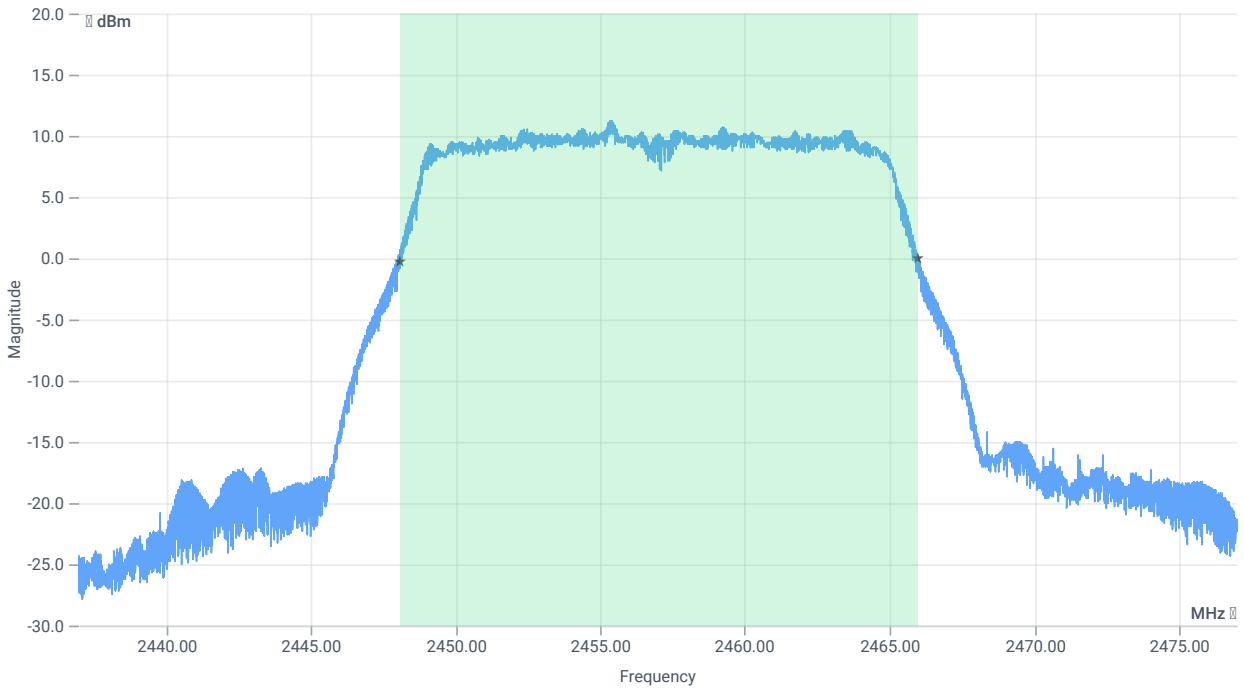
Test at TX 2457 MHz

RESULT: Reference Power cond.

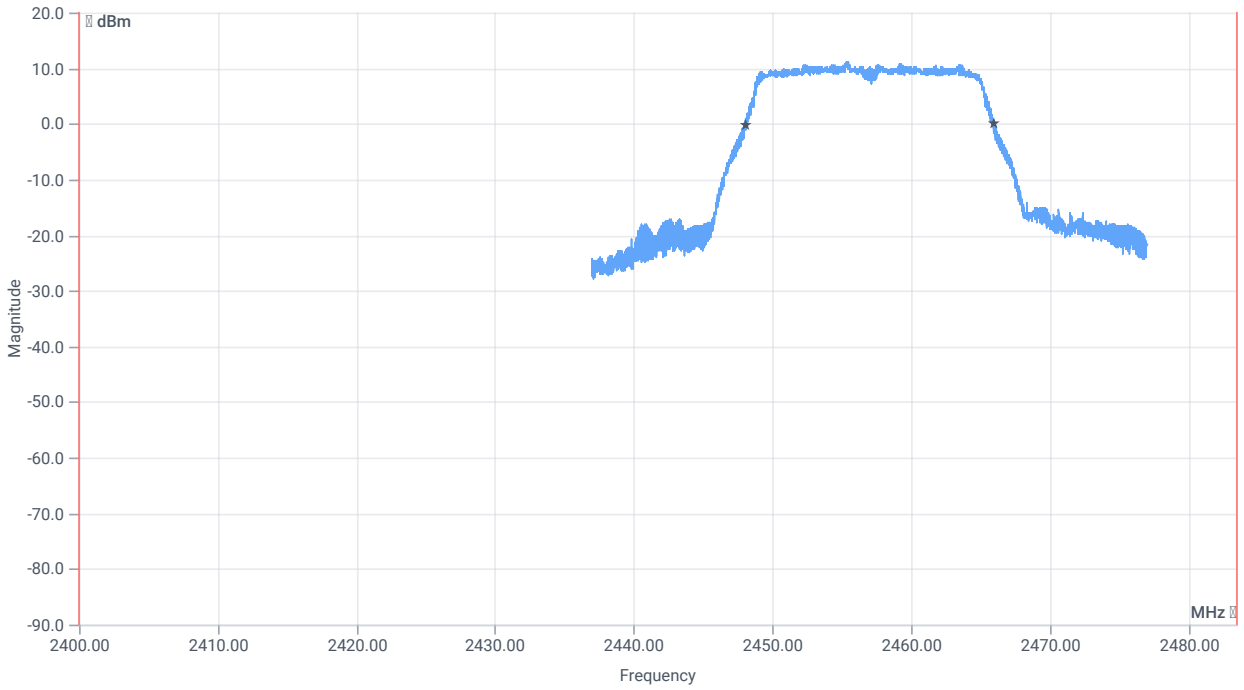
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.76	dBm	INFO
Ref. Frequency	---	---	2454.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.76 | 14.13 | 20
Start [MHz] | Stop [MHz]	2437.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



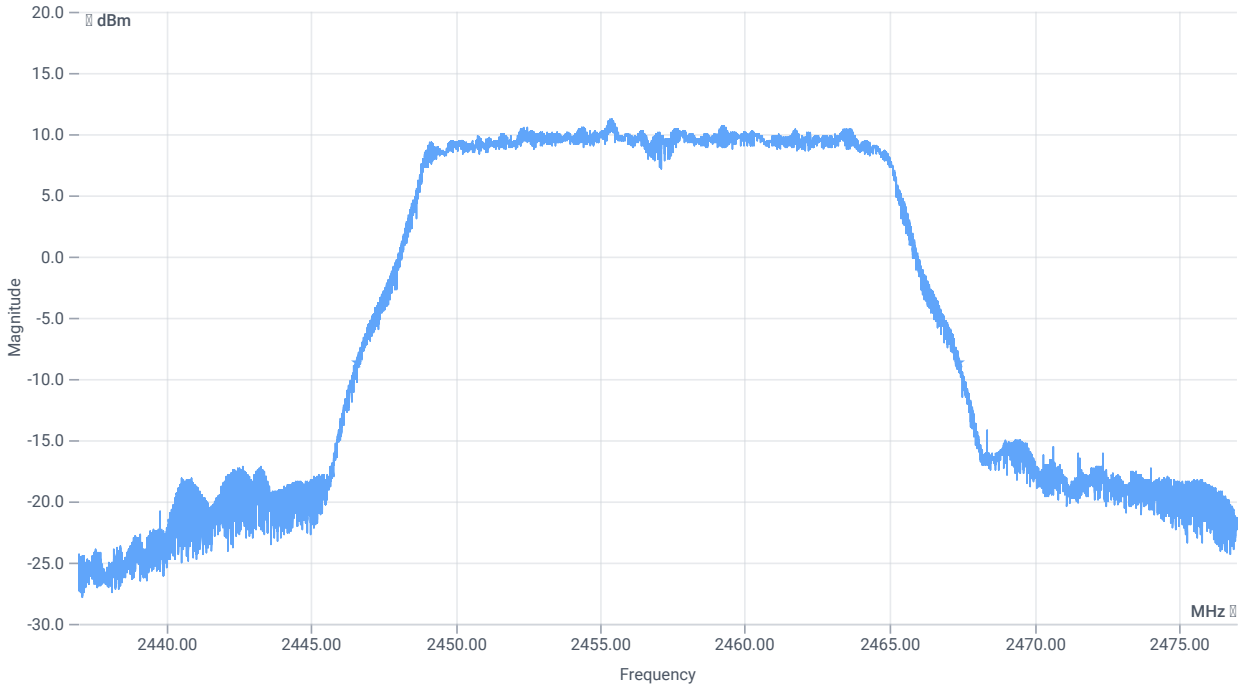
BW 99PCT



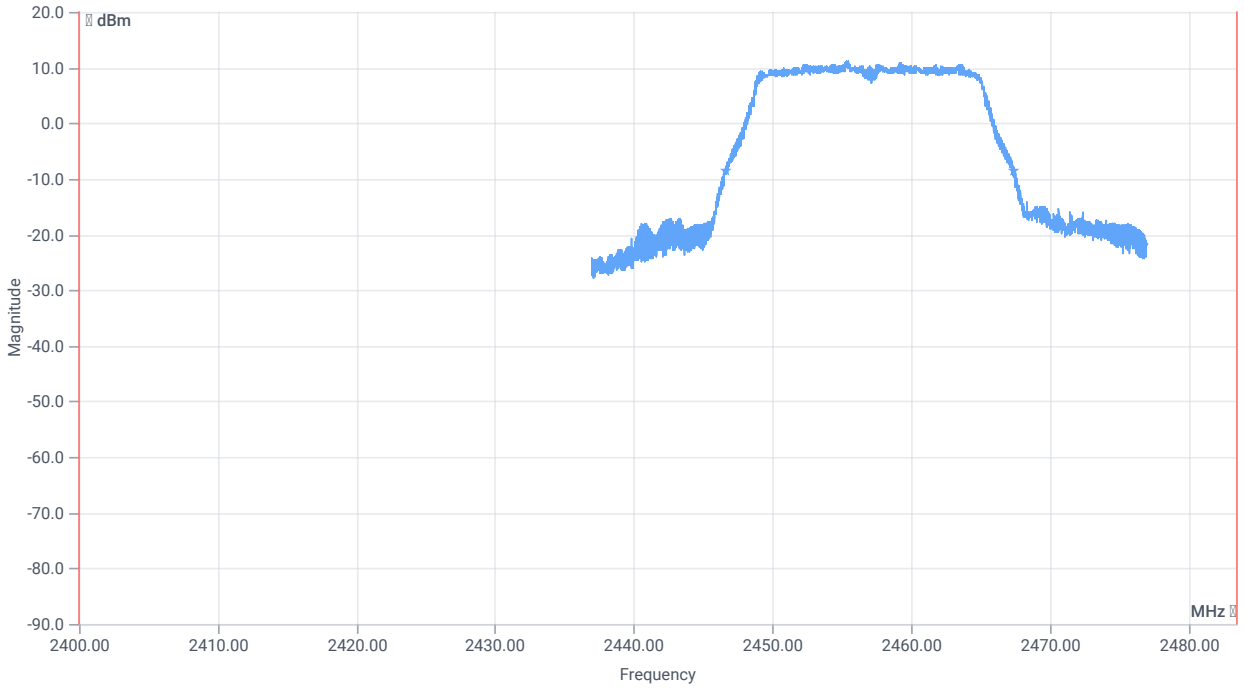
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17858.000	kHz	INFO
T1 99%	2400.000000	---	2448.1049	MHz	PASS
T2 99%	---	2483.500000	2465.9631	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20836	kHz	INFO
T1 20DB	2400.000000	---	2446.5840	MHz	PASS
T2 20dB	---	2483.500000	2467.4200	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:01:56
Ambit temp [°C] | humidity [rel%]	21.9 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

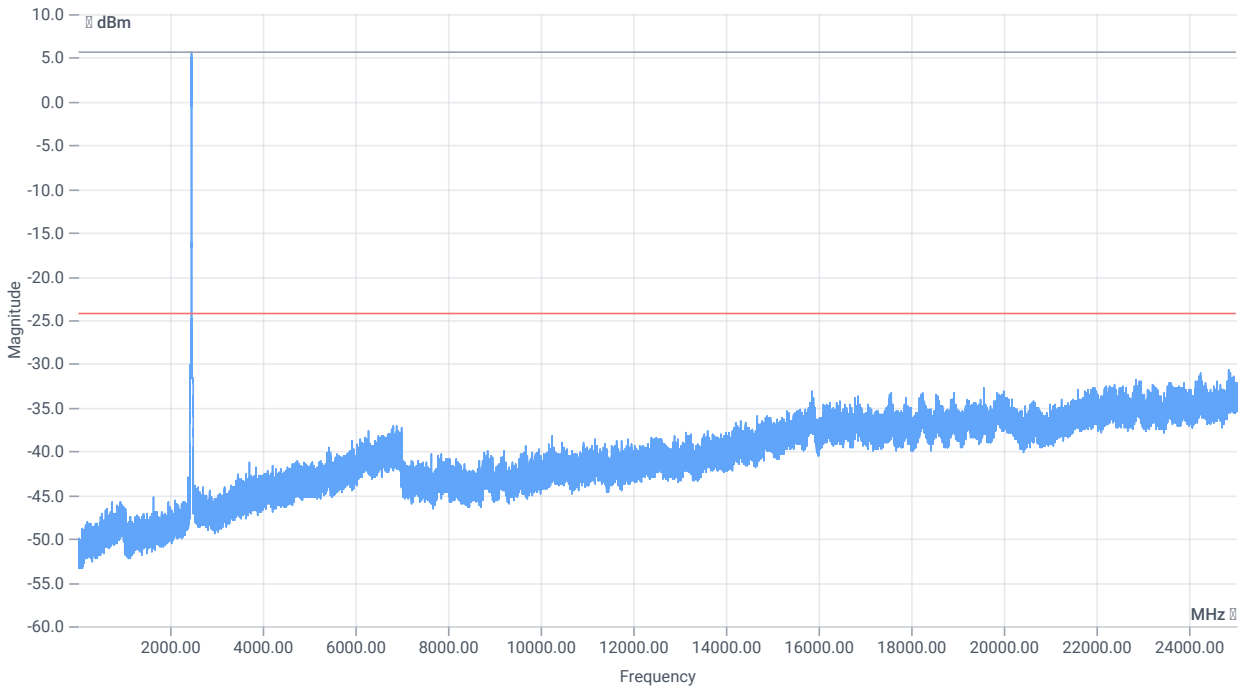
Equipment

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

Test at TX 2457 MHz

RESULT: Reference Power cond.

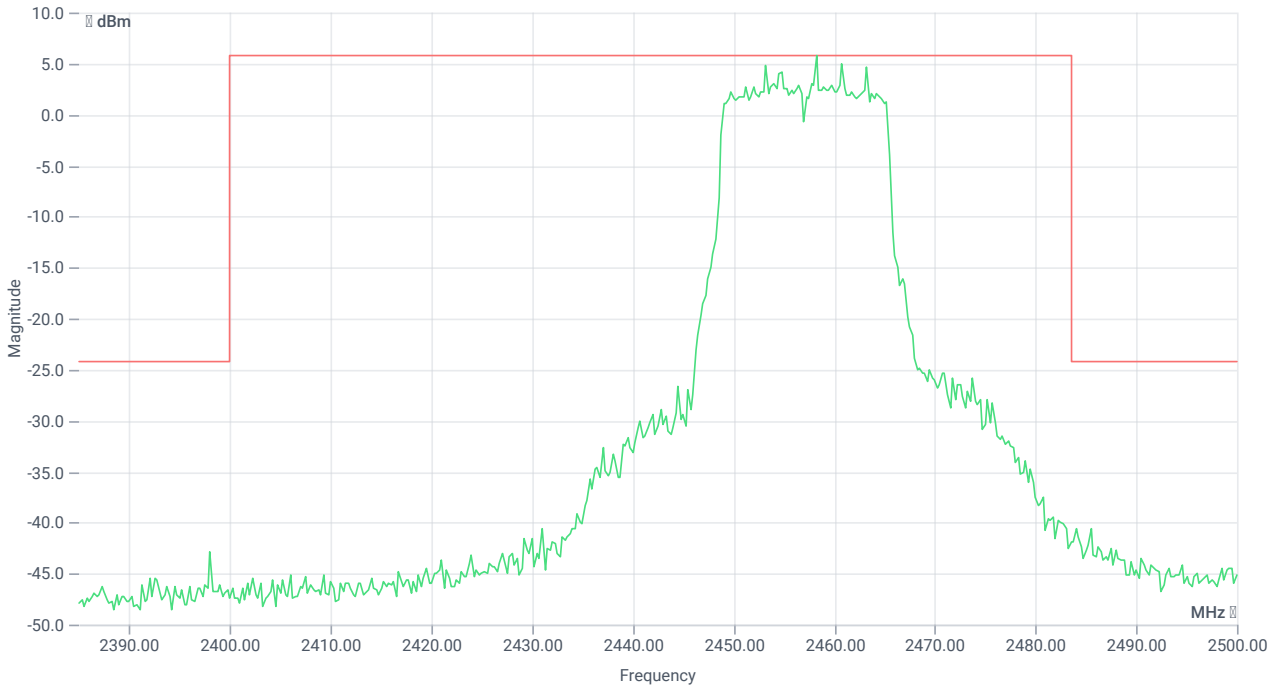
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.12	dBm	INFO
Ref. Frequency	---	---	2458.400	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.12 | 0 | 30
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	200 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2458.25 MHz	---	---	5.72	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24856 MHz	0	---	6.42	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:08:40
Ambit temp [°C] | humidity [rel%]	22.0 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2457 MHz

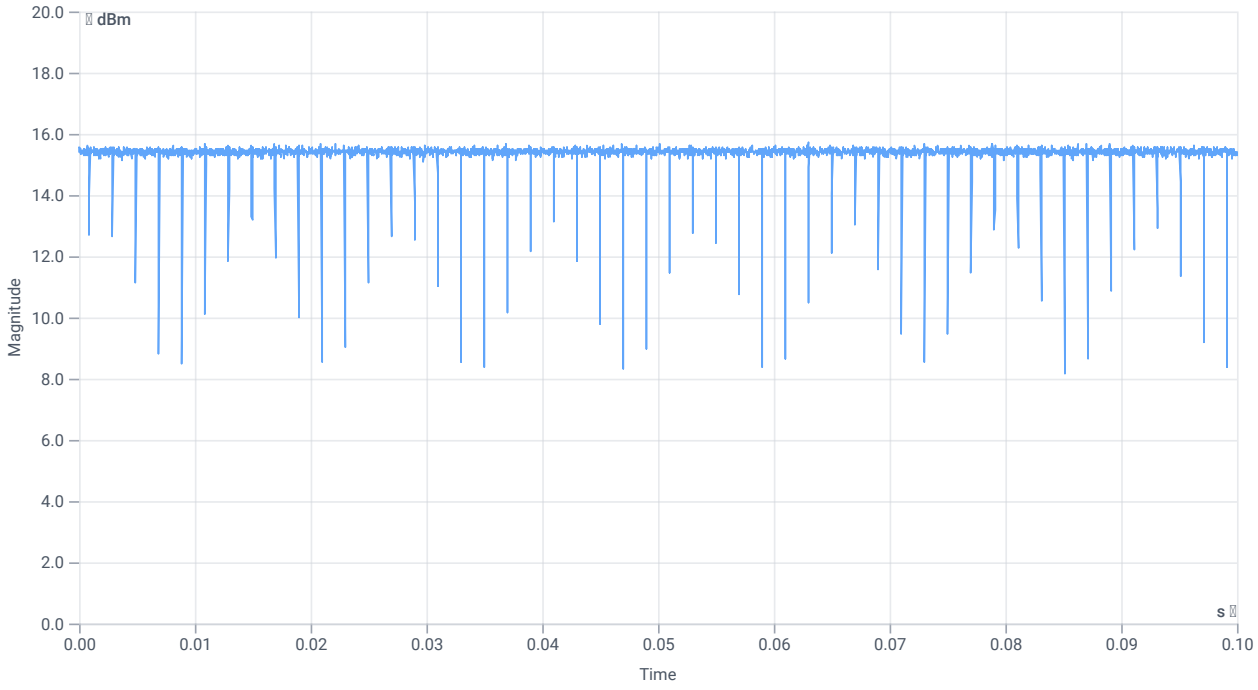
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.17	dBm	INFO
Ref. Frequency	---	---	2458.500	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

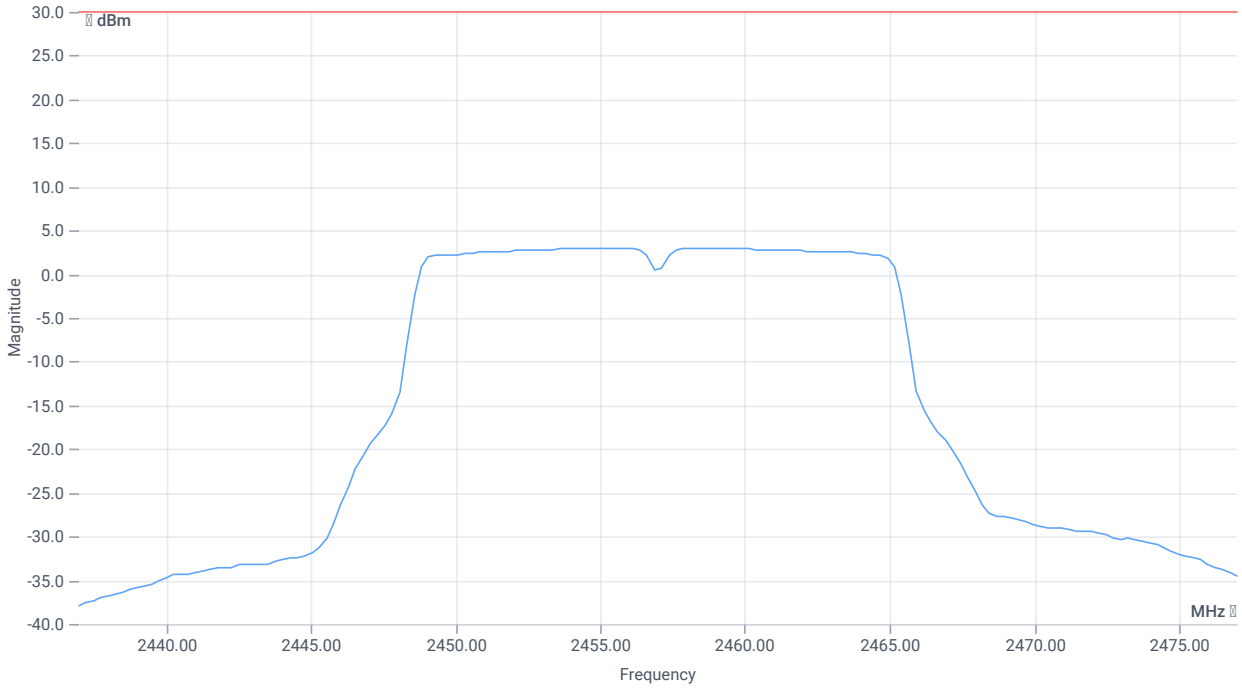
Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.17 | 14.13 | 25
Start [MHz] | Stop [MHz]	2437.000 | 2477.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	500 | 100 | 160 | SWE



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	17.55	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg power DC corrected	---	30	17.55	dBm	PASS

Verdict
PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:09:56
Ambit temp [°C] | humidity [rel%]	22.0 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

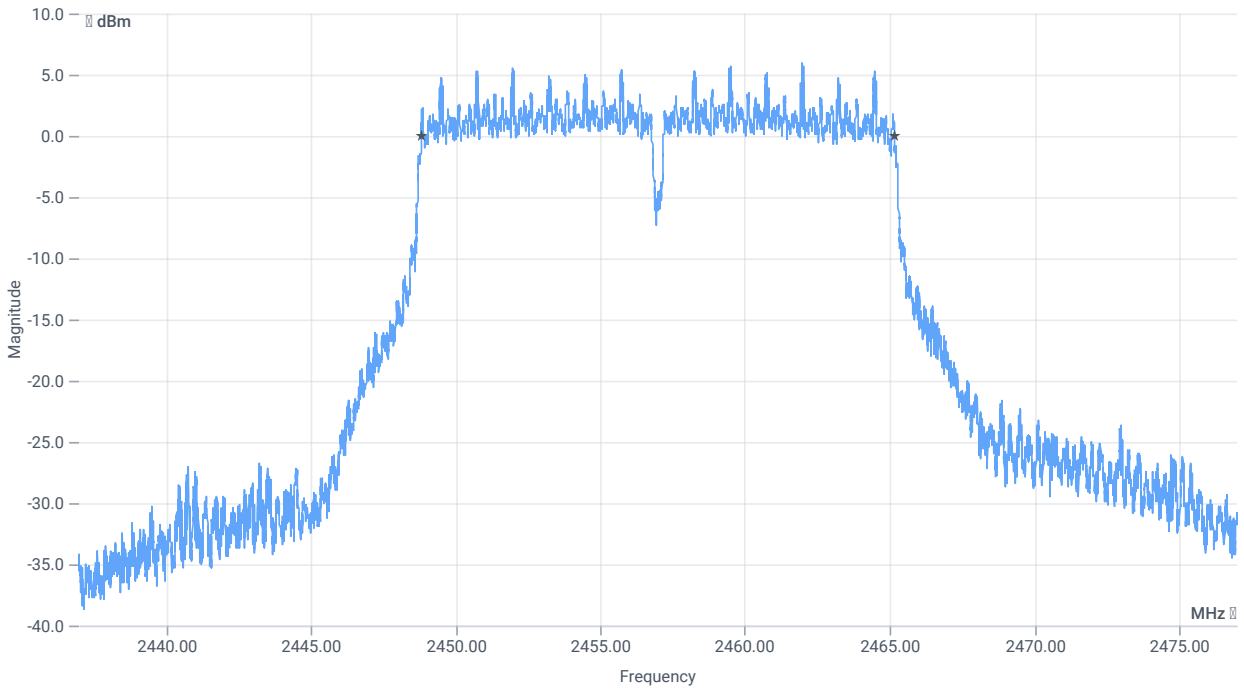
Test at TX 2457 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.48	dBm	INFO
Ref. Frequency	---	---	2455.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.48 | 14.13 | 25
Start [MHz] | Stop [MHz]	2437.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS Bandwidth (6dB)	500	---	16352	kHz	PASS

Verdict

PASS

FCC 15.247 # Avg psd DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:10:31
Ambit temp [°C] | humidity [rel%]	22.1 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
Description	FCC 15.247 Avg psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2457 MHz

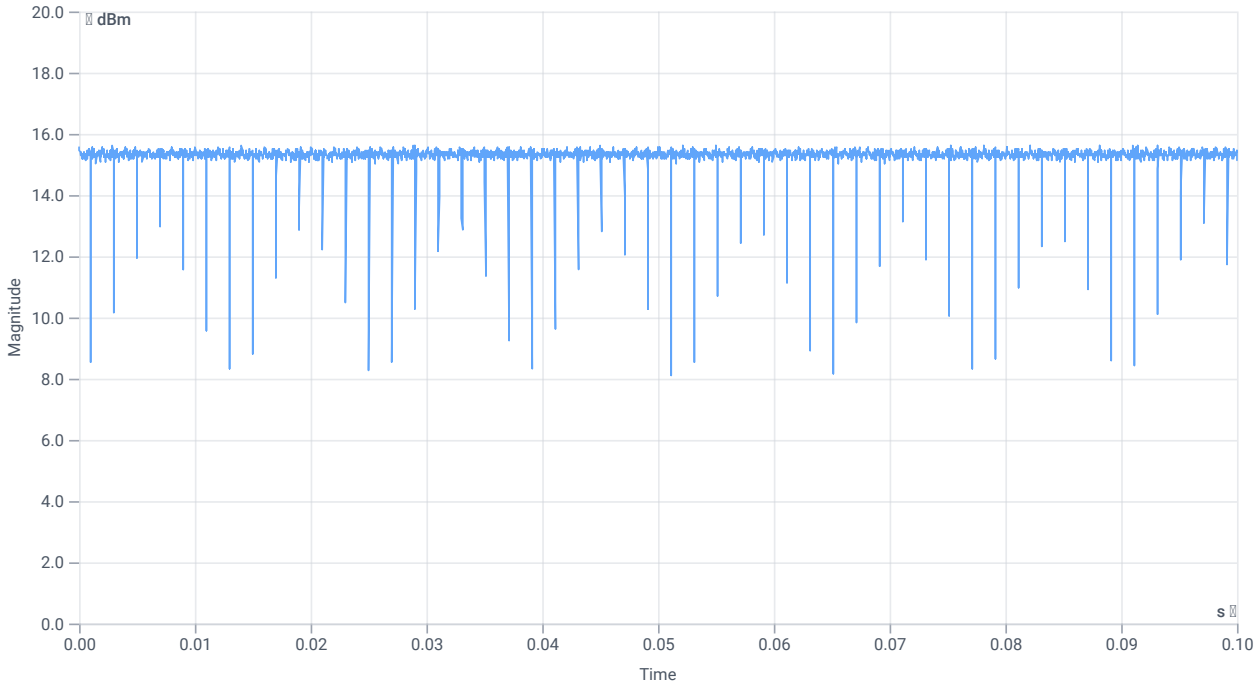
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.84	dBm	INFO
Ref. Frequency	---	---	2461.800	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

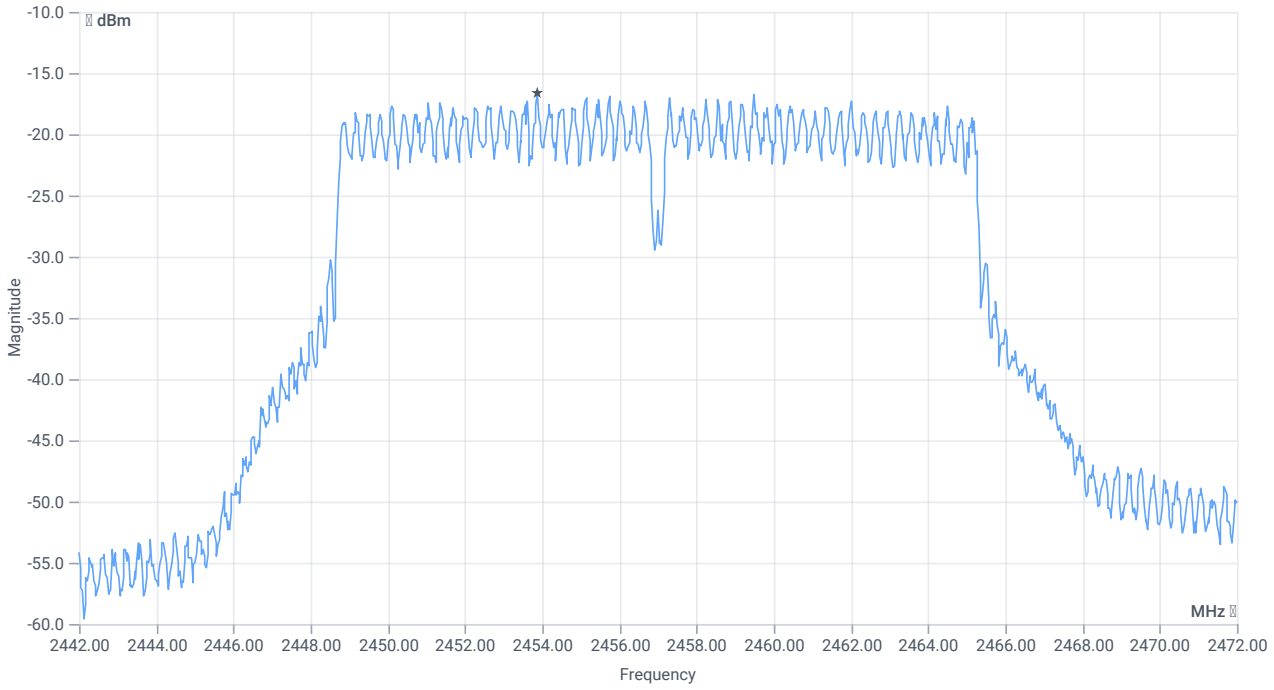
Avg. psd

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.84 | 14.13 | 25
Start [MHz] | Stop [MHz]	2442.000 | 2472.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	334 | 100 | 1001 | SWE



Avg psd

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg psd uncorrected	---	---	-16.65	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg psd DC corrected	---	8	-16.65	dBm/3kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2024 10:11:36
Ambit temp [°C] | humidity [rel%]	22.1 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

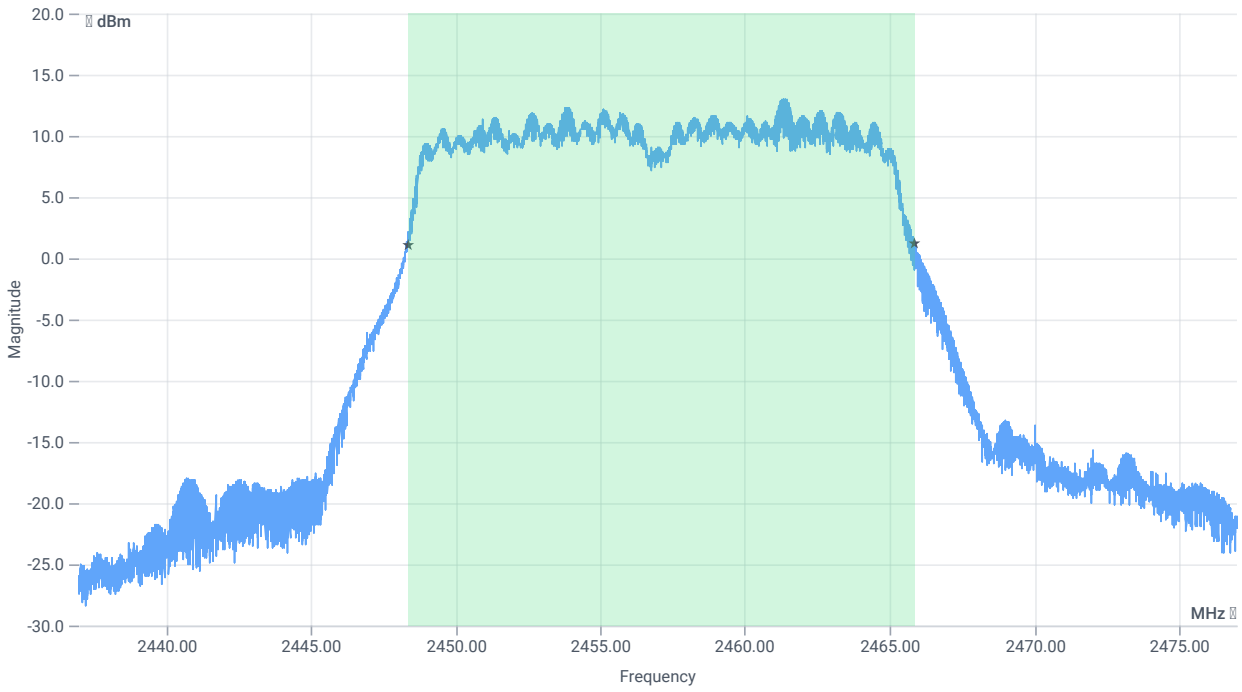
Test at TX 2457 MHz

RESULT: Reference Power cond.

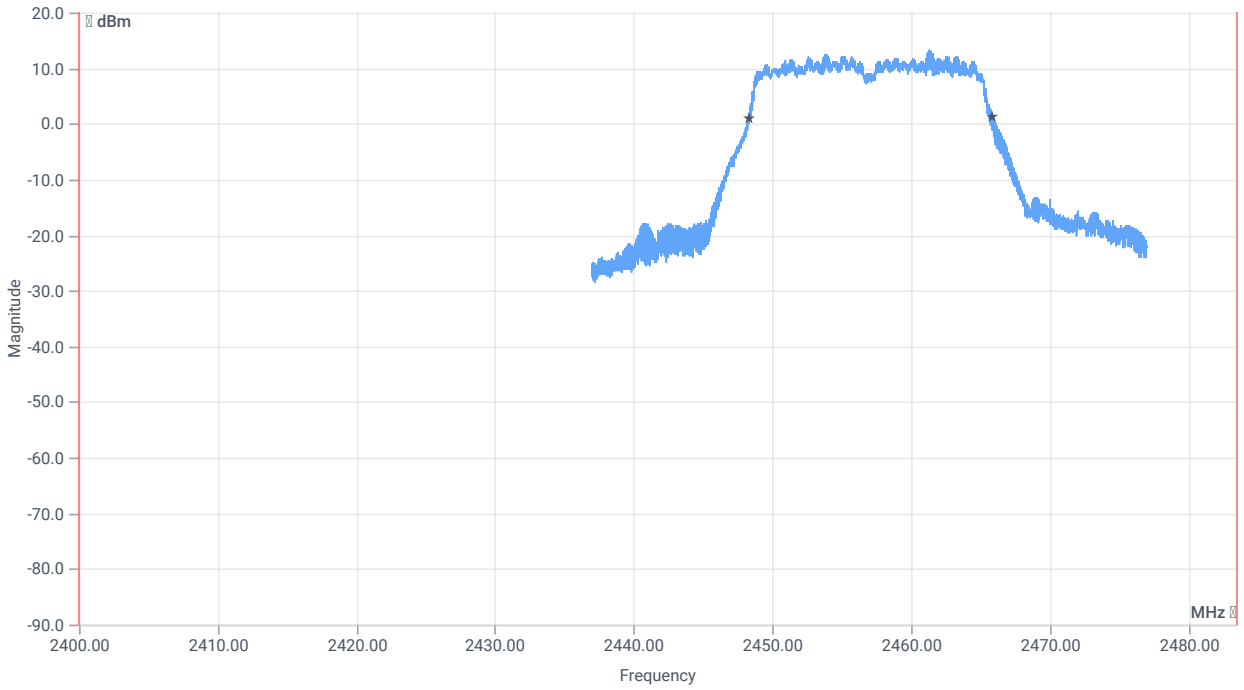
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.44	dBm	INFO
Ref. Frequency	---	---	2453.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.44 | 14.13 | 25
Start [MHz] | Stop [MHz]	2437.000 | 2477.000
RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



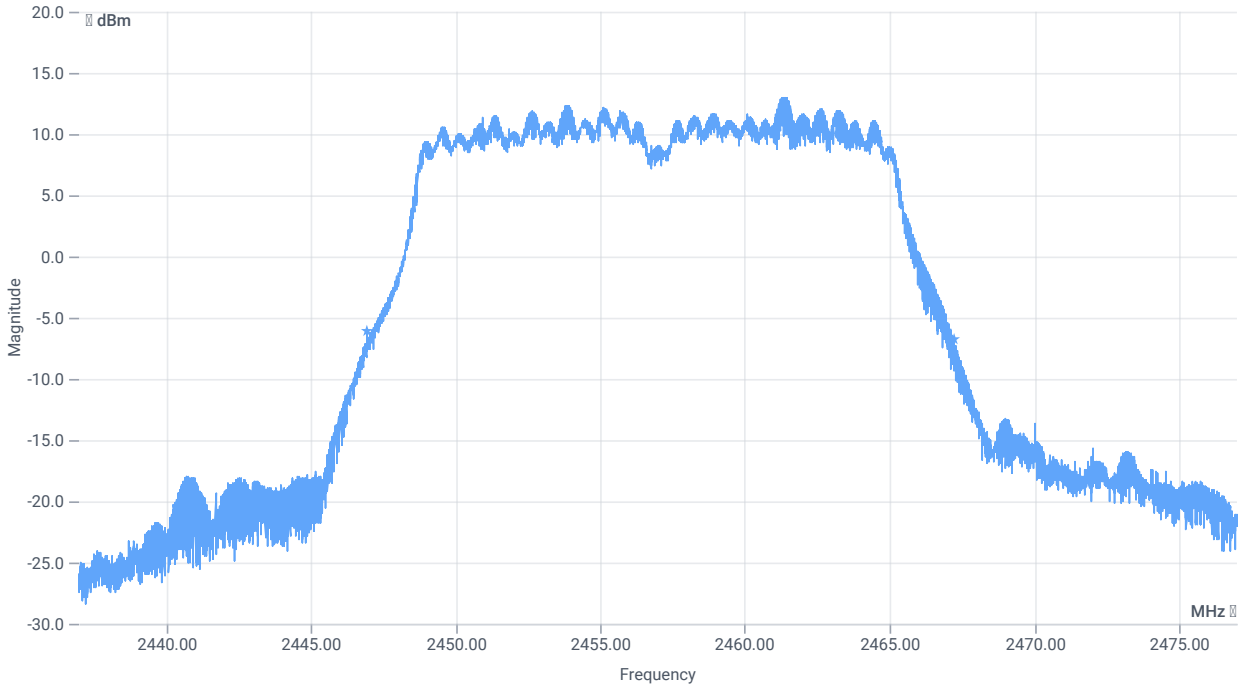
BW 99PCT



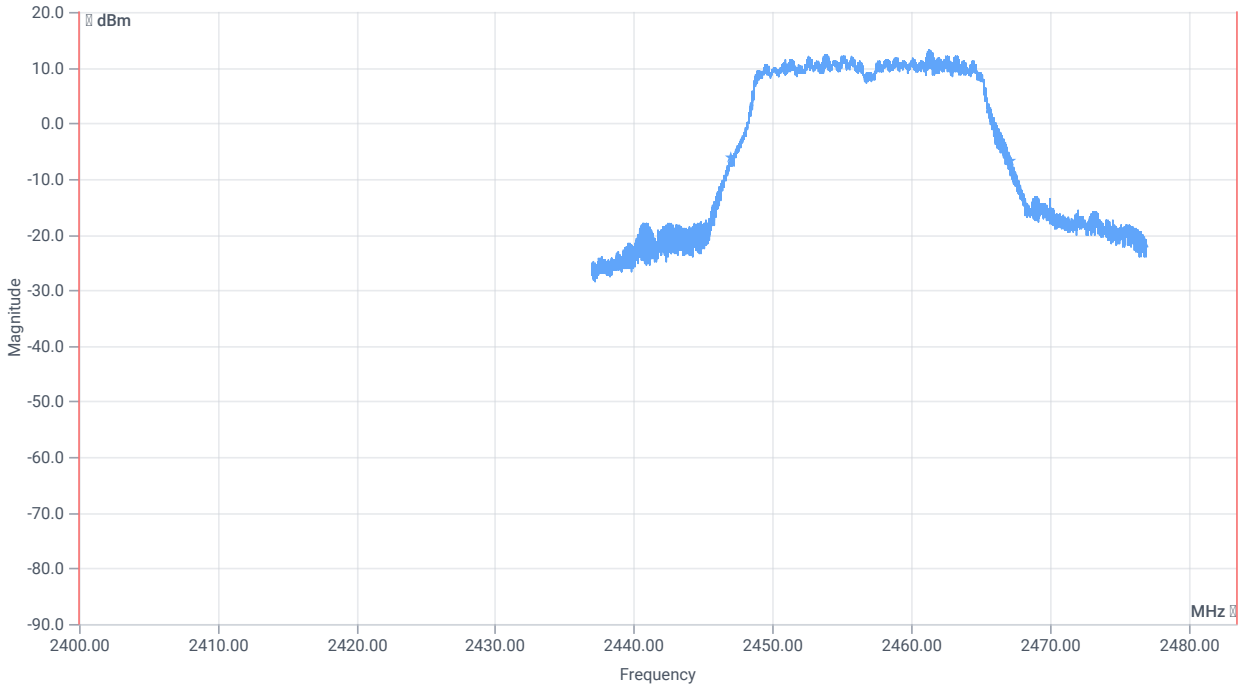
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17502.000	kHz	INFO
T1 99%	2400.000000	---	2448.3689	MHz	PASS
T2 99%	---	2483.500000	2465.8711	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	20260	kHz	INFO
T1 20DB	2400.000000	---	2446.9480	MHz	PASS
T2 20dB	---	2483.500000	2467.2080	MHz	PASS

Verdict
PASS

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:12:13
Ambit temp [°C] | humidity [rel%]	22.1 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions Conducted 30dBc DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

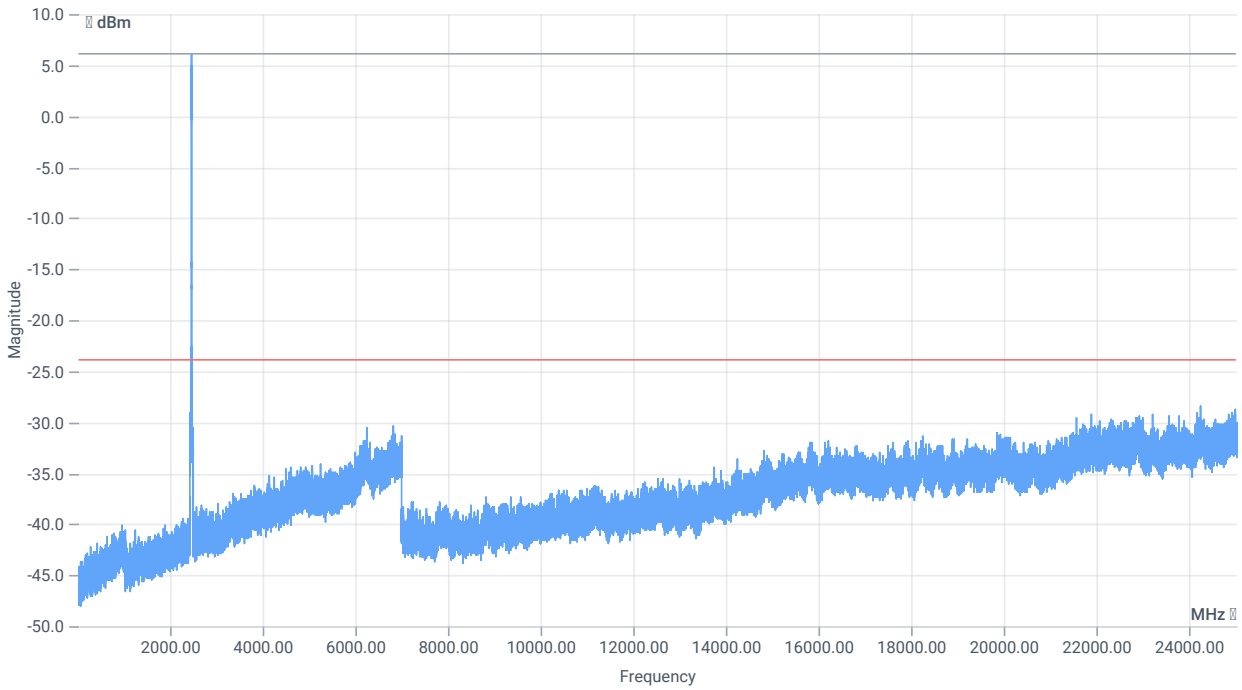
Equipment

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

Test at TX 2457 MHz

RESULT: Reference Power cond.

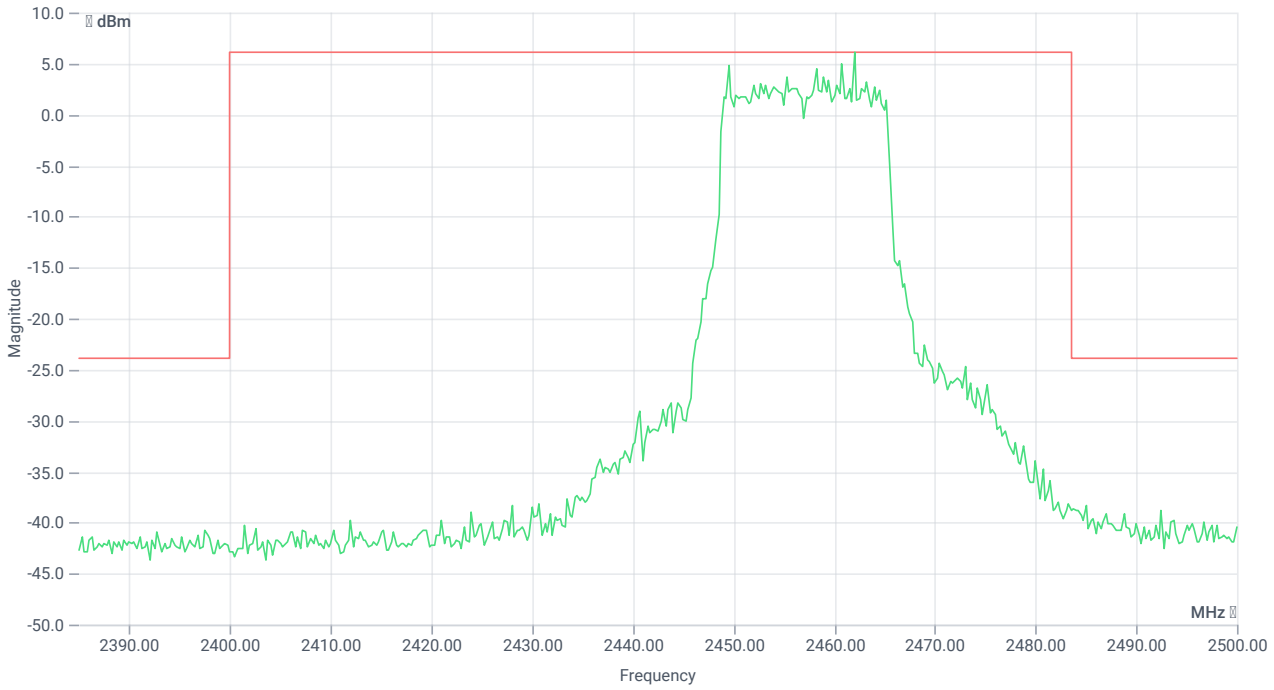
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.60	dBm	INFO
Ref. Frequency	---	---	2454.700	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.60 | 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 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2462.00 MHz	---	---	6.05	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24241 MHz	0	---	4.47	dB	INFO

Verdict
PASS

FCC 15.247 # Avg output power SA DTS ~ WLAN2G4 g mode

References

TC start	16.01.2024 10:18:57
Ambit temp [°C] | humidity [rel%]	22.2 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	ANSI C63.10-2013 Chapter 11.9.2.2.2 or .4
Description	FCC 15.247 Avg output power SA DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 2457 MHz

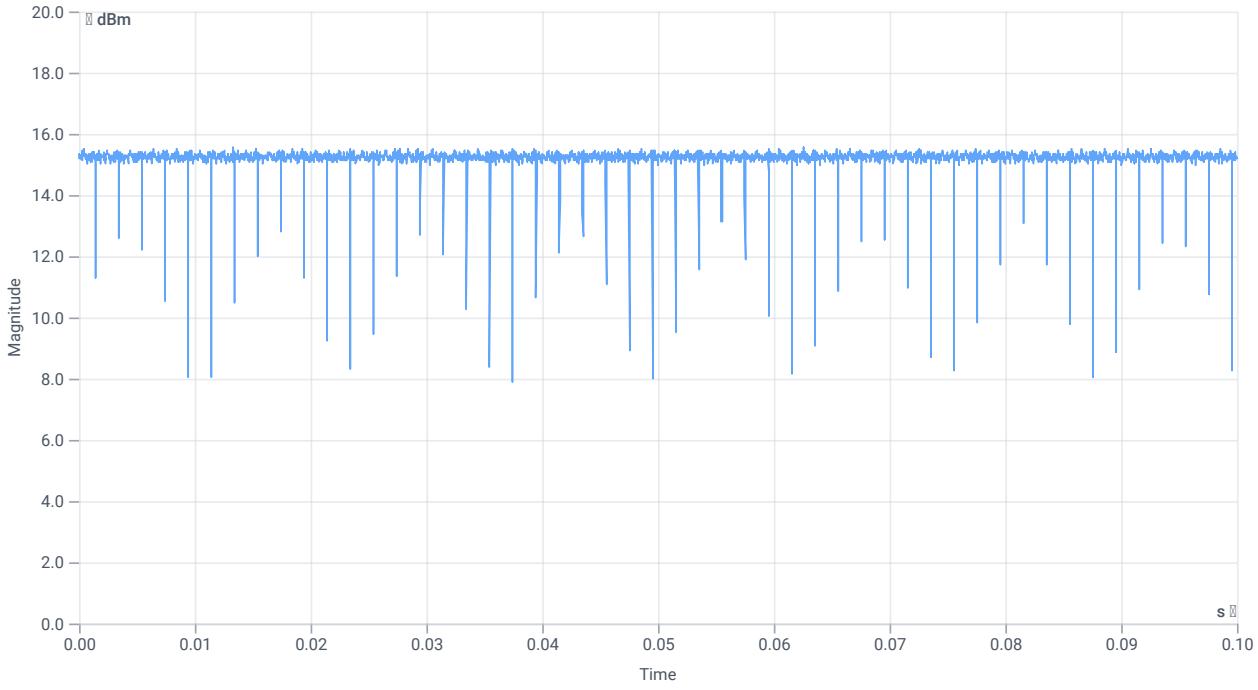
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.10	dBm	INFO
Ref. Frequency	---	---	2458.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

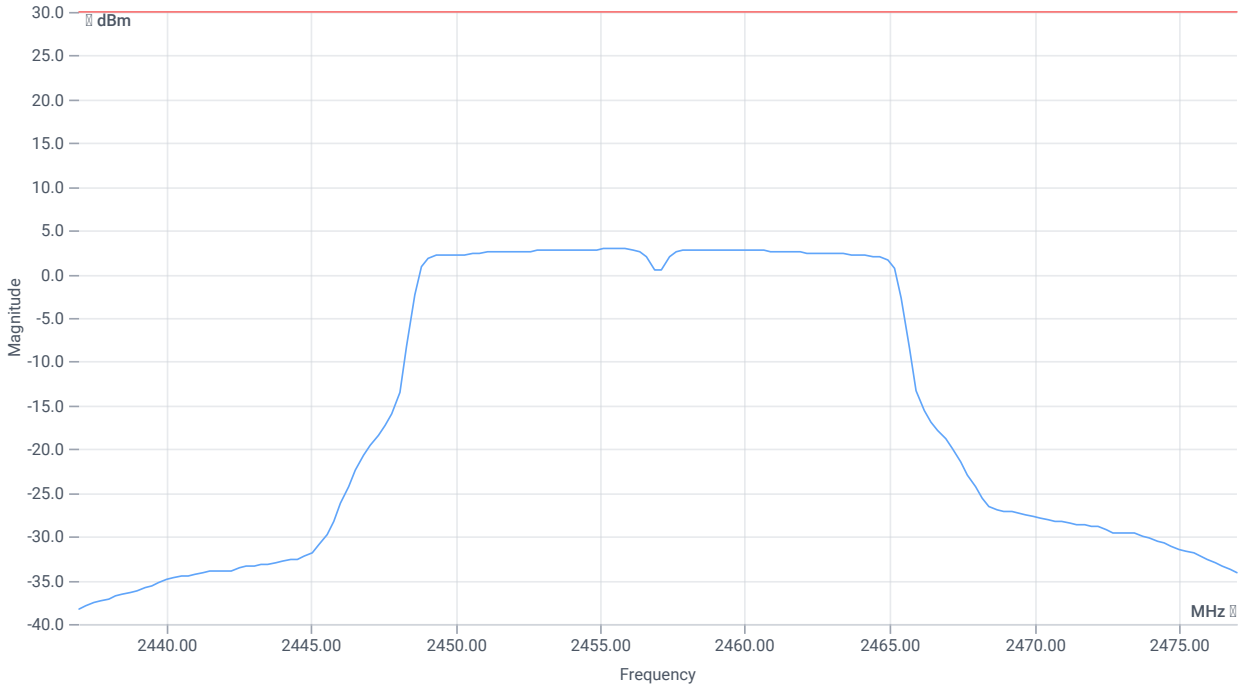
Avg output power SA DTS

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.10 | 14.13 | 25
Start [MHz] | Stop [MHz]	2437.000 | 2477.000

READ SA SETTINGS:

RBW [MHz] | VBW [MHz]	0.500000 | 2.000000
Detector | TraceMode	RMS | AVER
Sweep: time [ms] | count | points per Section | type	500 | 100 | 160 | SWE



Avg output power SA DTS

RESULT (Channel power method)

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Avg output power uncorrected	---	---	17.42	dBm	INFO
Duty cycle correction	---	---	0	dB	INFO
Avg power DC corrected	---	30	17.42	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg output power SA DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	16.01.2024 10:20:14
Ambit temp [°C] | humidity [rel%]	22.2 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg output power SA DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	None

Equipment

Test at TX 2457 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg power DC corr.	---	---	17.55	dBm	INFO
Ant:2 Avg power DC corr.	---	---	17.42	dBm	INFO
∑ Avg output power DC corr.	---	30	20.5	dBm	PASS

Verdict
PASS

FCC 15.247 # MIMO ∑ Avg psd DTS ~ WLAN2G4 g mode 2400-2483.5 MHz

References

TC start	16.01.2024 10:21:58
Ambit temp [°C] | humidity [rel%]	22.2 | 27
System version	4.7.1.5
Standard | Version	FCC 15.247 | NI
Method	
Description	MIMO ∑ FCC Avg psd DTS - WLAN2G4 g mode 2400-2483.5 MHz
Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	2
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 g mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2417
Frequency mid to test	False | Freq [MHz] 2437
Frequency high to test	True | Freq [MHz] 2457
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	None

Equipment

Test at TX 2457 MHz

RESULT psd

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Avg psd DC corr	---	---	-16.53	dBm/3kHz	INFO
Ant:2 Avg psd DC corr	---	---	-16.65	dBm/3kHz	INFO
∑ Avg psd DC corr	---	8	-13.58	dBm/3kHz	PASS

Verdict

PASS

- END OF DOCUMENT -