Conducted test results

No.1-7077/23-01-05_TR1-A208-R1

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Test Standard(s) FCC 15.407

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Authorized

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FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

References

TC start	19.01.2024 11:26:02
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5210
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5210 MHz

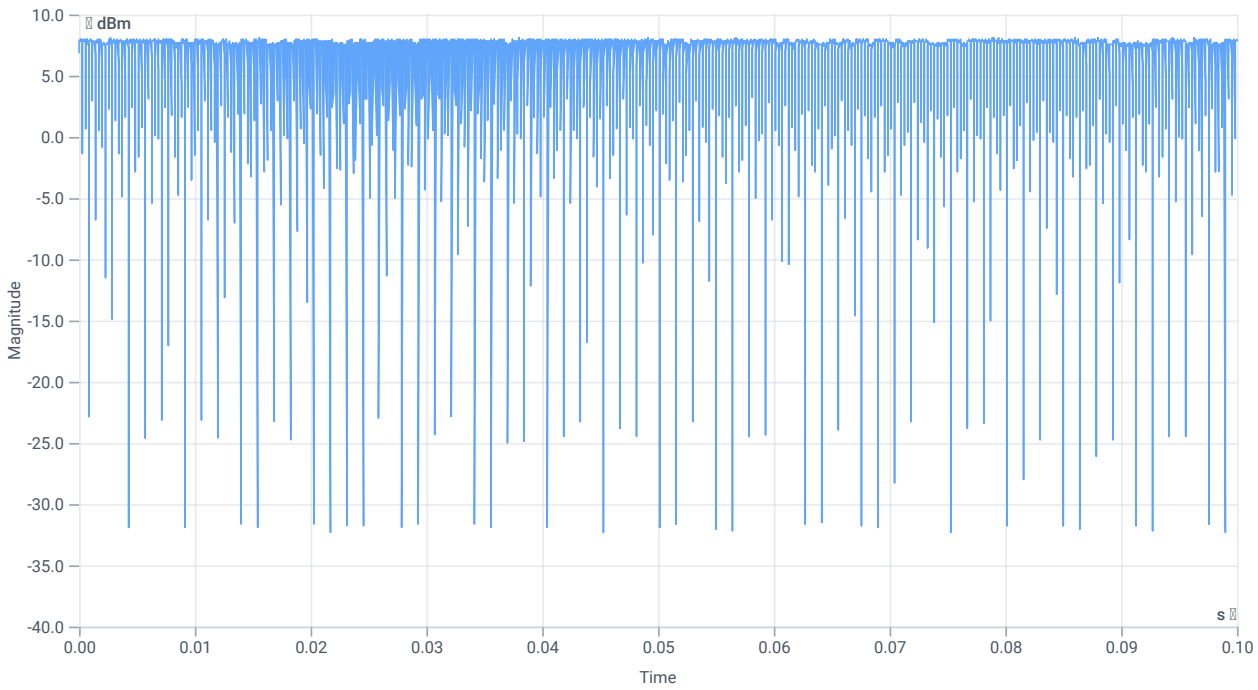
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.45	dBm	INFO
Ref. Frequency	---	---	5205.000	MHz	INFO

Evaluation max. Duty Cycle

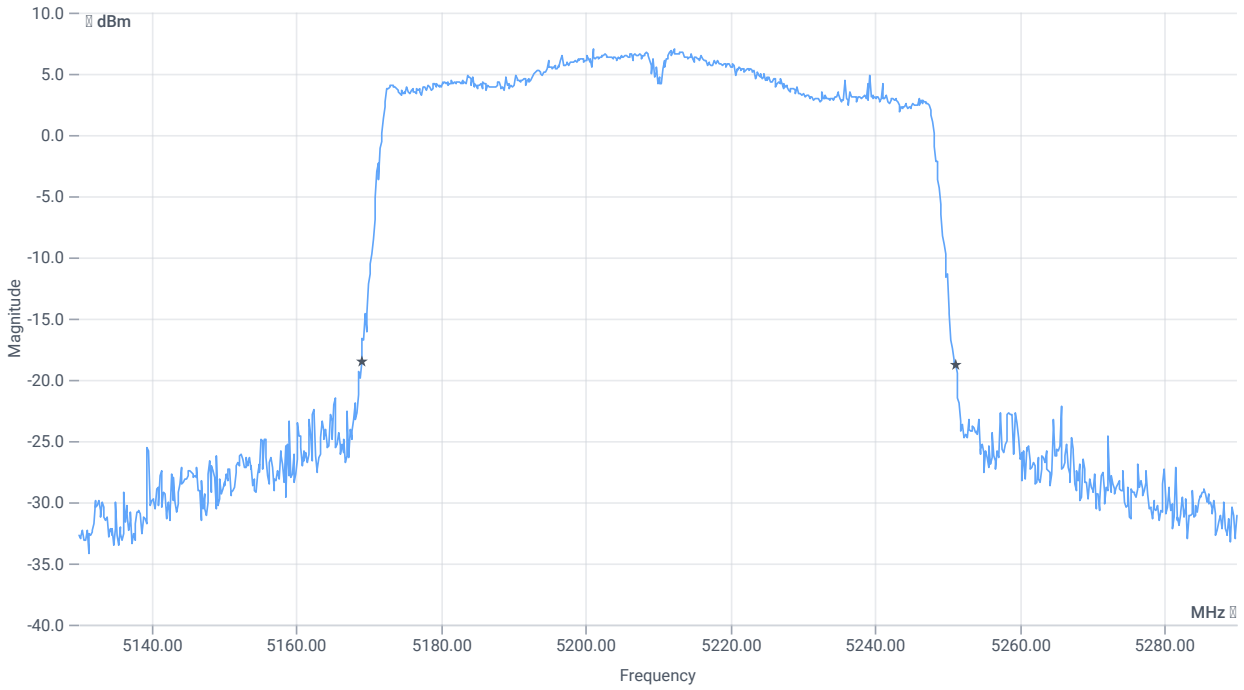
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:153					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

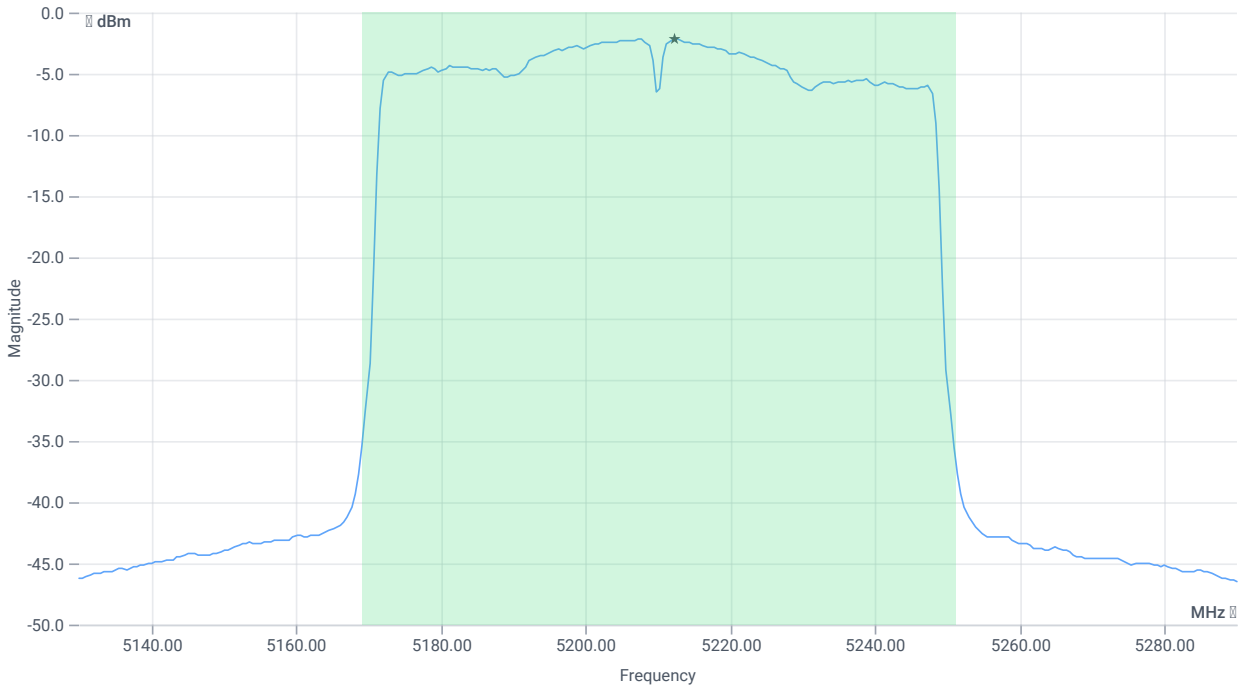
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	82.08	MHz	INFO
T1 26dB	---	---	5169.0400	MHz	INFO
T2 26dB	---	---	5251.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.45 | 16.4 | 20
Start [MHz] | Stop [MHz]	5130.000 | 5290.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.47	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.85	dBm	PASS
Limit: 11 dBm + 10 log 82.08					
Max Output Power DC corrected	---	30.14	15.85	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-2.13	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	-0.75	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

References

TC start	19.01.2024 11:28:32
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5210
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

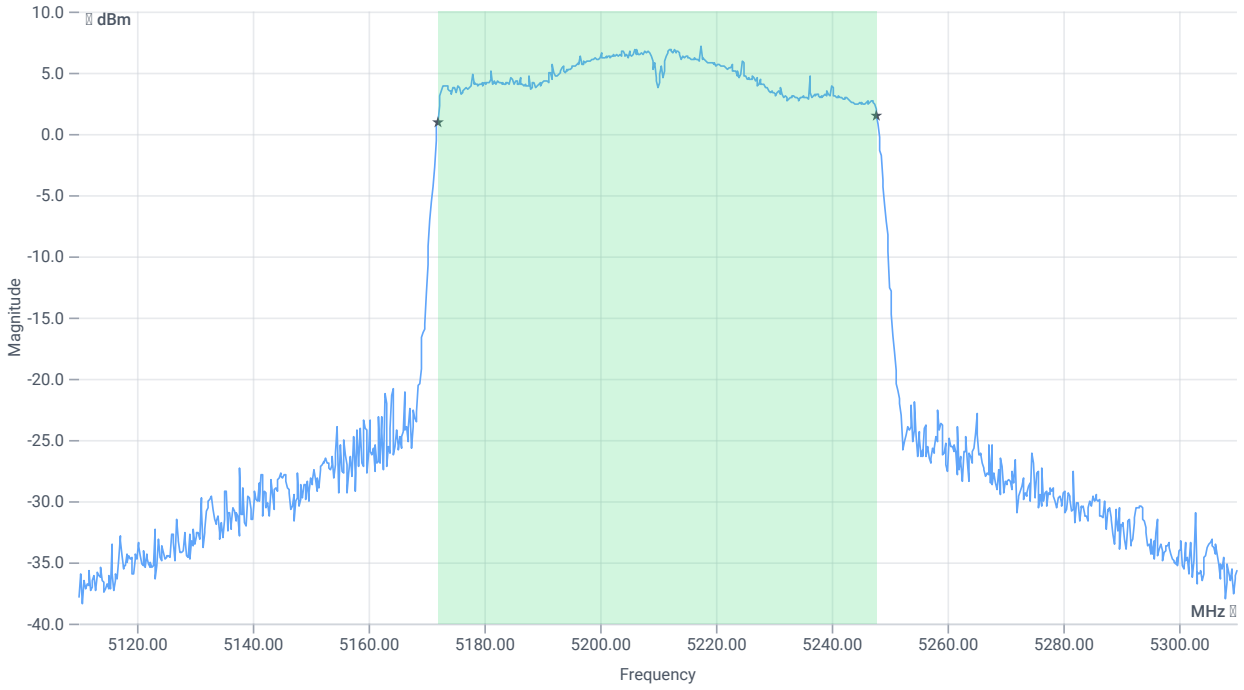
Test at TX 5210 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.18	dBm	INFO
Ref. Frequency	---	---	5207.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.18 | 16.4 | 15
Start [MHz] | Stop [MHz]	5110.000 | 5310.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE

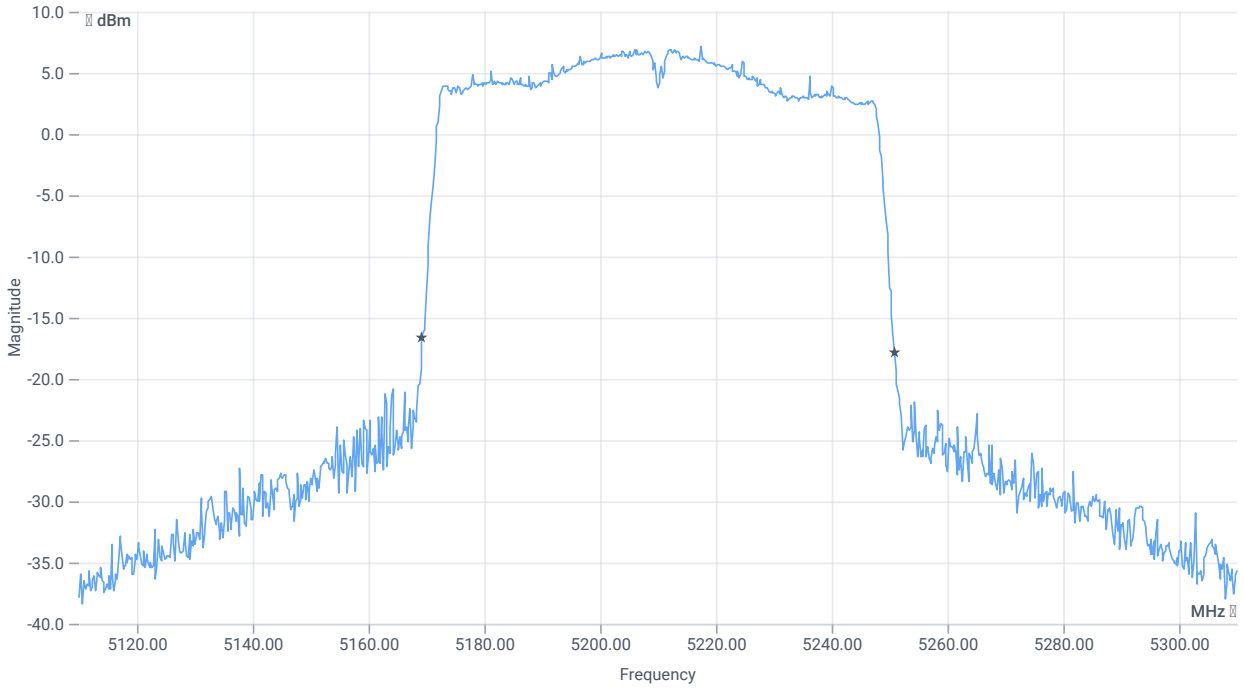


BW 99PCT

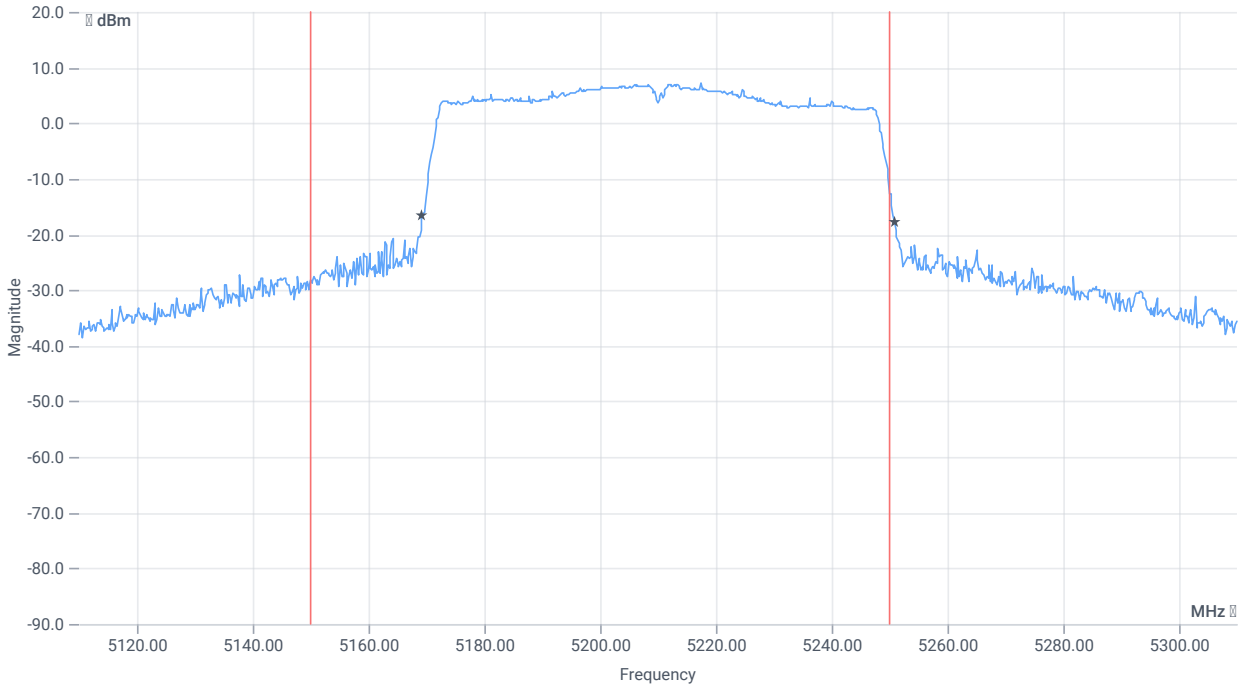
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.724	MHz	INFO
T1 99%	5150.000000	---	5172.0380	MHz	PASS
T2 99%	---	5250.000000	5247.7622	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.6	MHz	INFO
T1 26dB	5150.000000	---	5169.2000	MHz	PASS
T2 26dB	---	5250.000000	5250.8000	MHz	DFS required

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

References

TC start	19.01.2024 11:29:16
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5210
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5210 MHz

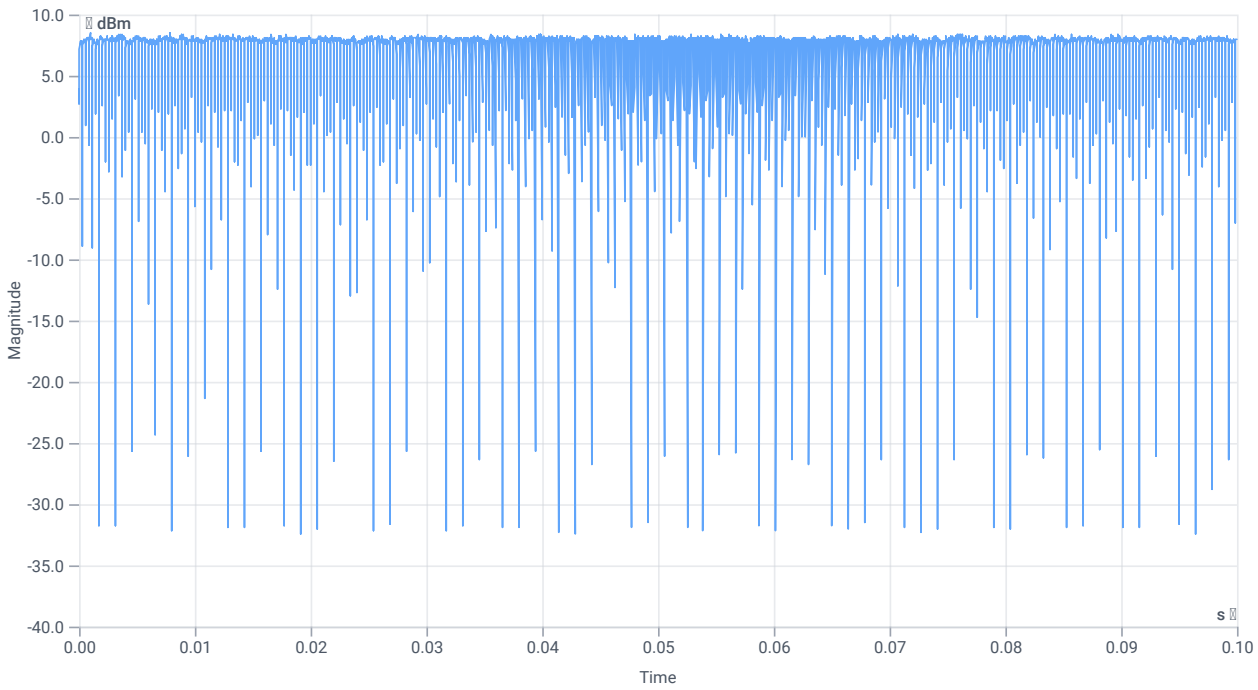
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.48	dBm	INFO
Ref. Frequency	---	---	5208.600	MHz	INFO

Evaluation max. Duty Cycle

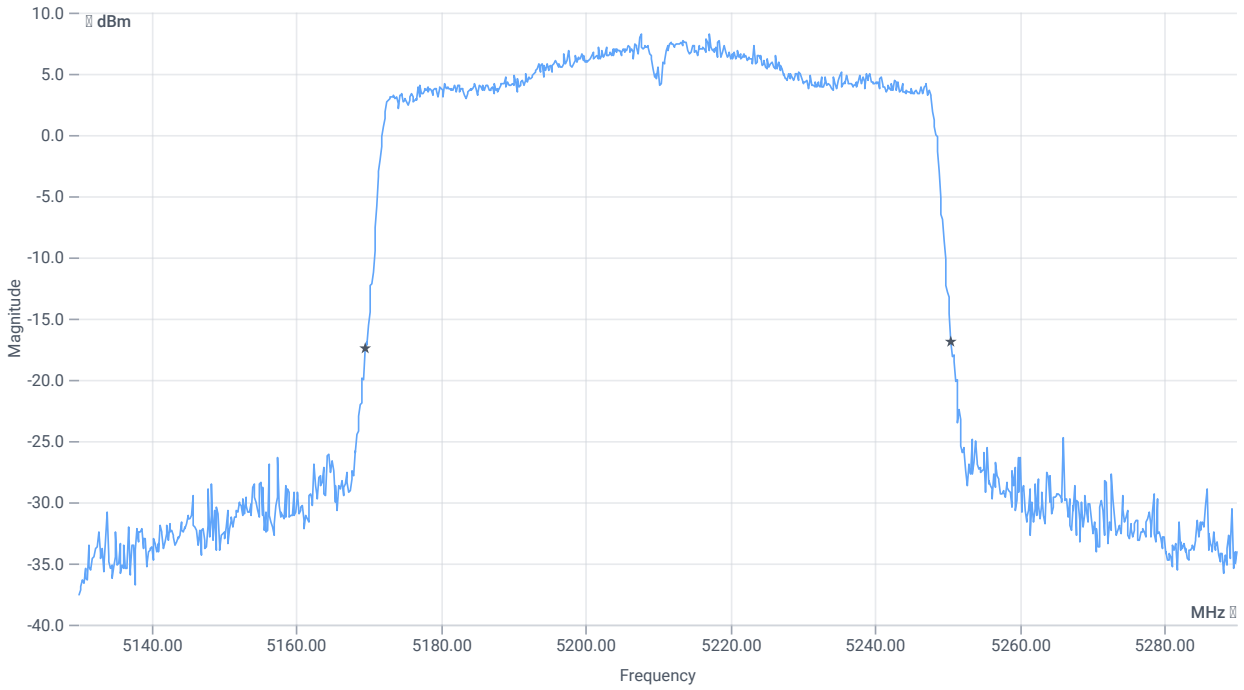
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:161					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

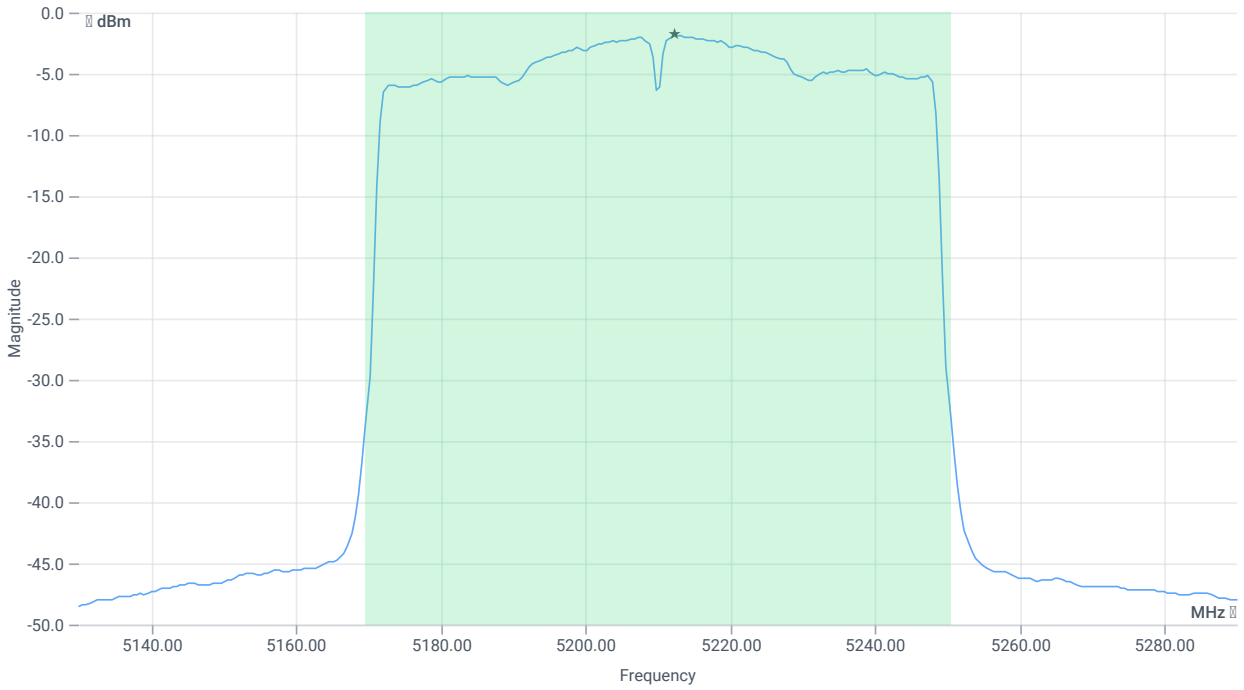
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80.96	MHz	INFO
T1 26dB	---	---	5169.5200	MHz	INFO
T2 26dB	---	---	5250.4800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.48 | 16.4 | 20
Start [MHz] | Stop [MHz]	5130.000 | 5290.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.6	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.98	dBm	PASS
Limit: 11 dBm + 10 log 80.96					
Max Output Power DC corrected	---	30.08	15.98	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-1.8	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	-0.42	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

References

TC start	19.01.2024 11:31:47
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5210
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

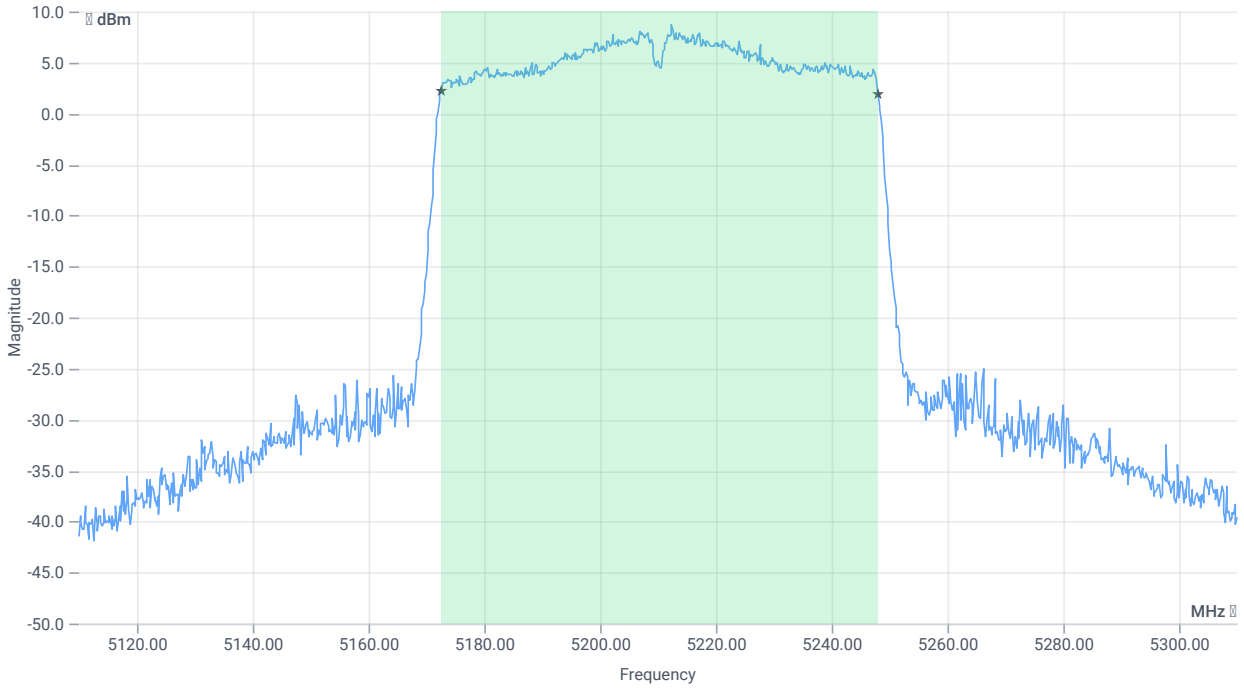
Test at TX 5210 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.18	dBm	INFO
Ref. Frequency	---	---	5215.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.18 | 16.4 | 15
Start [MHz] | Stop [MHz]	5110.000 | 5310.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE

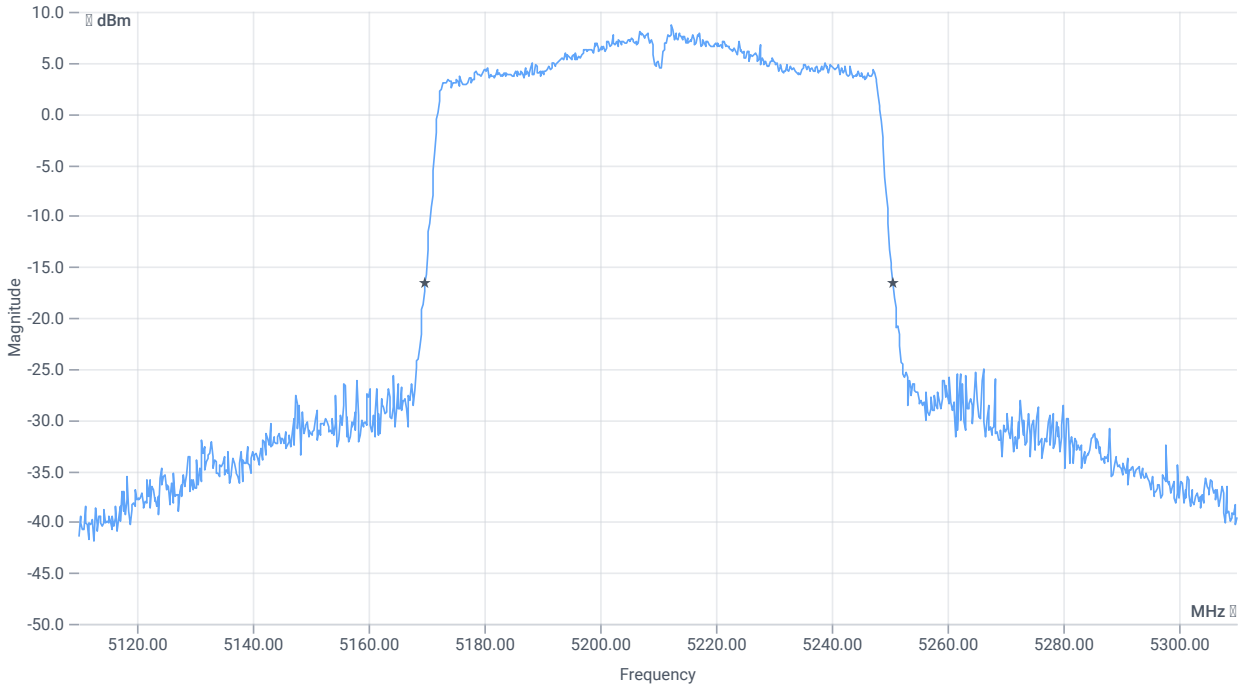


BW 99PCT

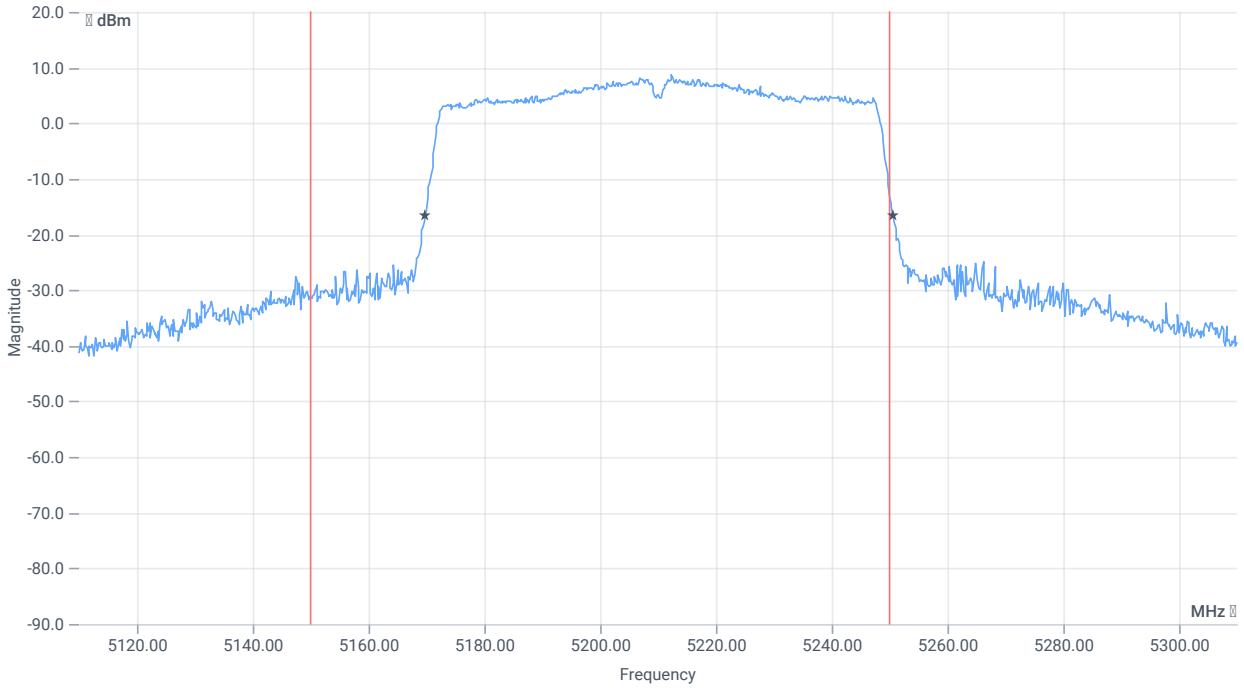
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5150.000000	---	5172.4376	MHz	PASS
T2 99%	---	5250.000000	5247.9620	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80.8	MHz	INFO
T1 26dB	5150.000000	---	5169.8000	MHz	PASS
T2 26dB	---	5250.000000	5250.6000	MHz	DFS required

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

References

TC start	19.01.2024 11:32:30
Ambit temp [°C] | humidity [rel%]	22.0 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5210
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5210 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 Max Output Power DC corrected	---	---	15.98	dBm	INFO
Ant:2 BW 26dB	---	---	80.960	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	15.85	dBm	INFO
Ant:1 BW 26dB	---	---	82.080	MHz	INFO
∑ Limit absolute	---	24	18.93	dBm	PASS
∑ Limit: 11 dBm + 10 log 80.96	---	30.08	18.93	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 PSD	---	---	-0.42	dBm/1MHz	INFO
Ant:1 PSD	---	---	-0.75	dBm/1MHz	INFO
∑	---	11	2.43	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

References

TC start	19.01.2024 11:44:33
Ambit temp [°C] | humidity [rel%]	22.0 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5290
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5290 MHz

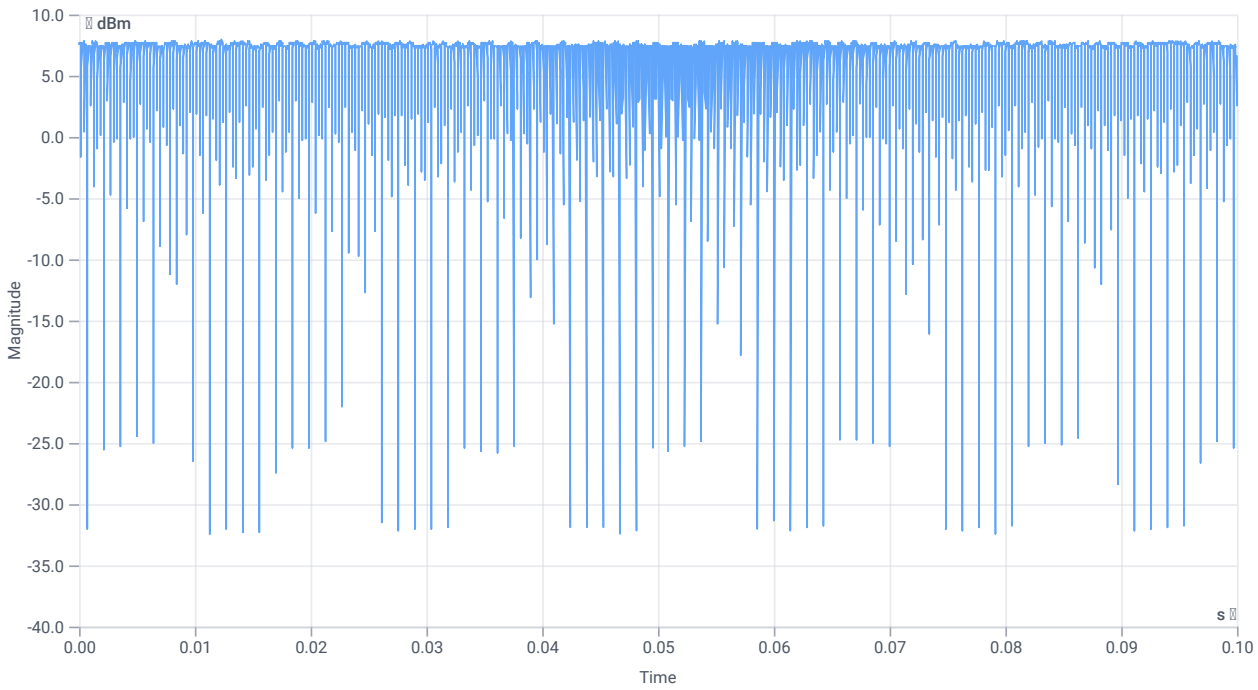
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.20	dBm	INFO
Ref. Frequency	---	---	5292.200	MHz	INFO

Evaluation max. Duty Cycle

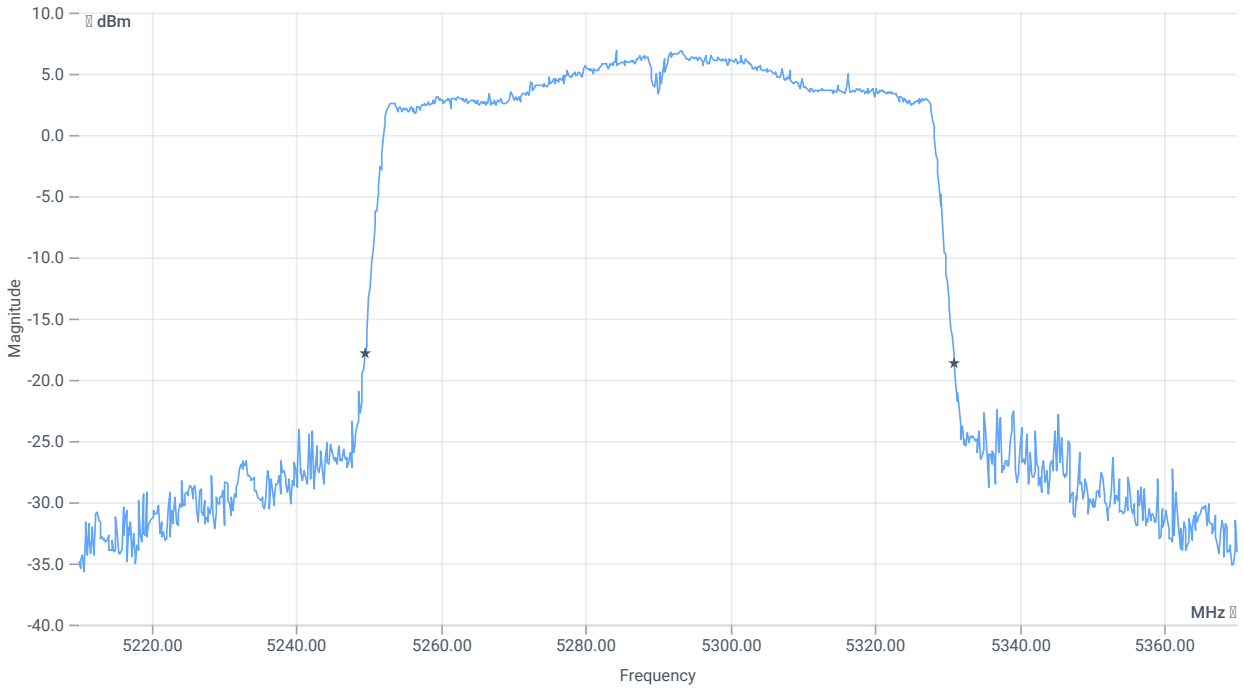
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:155					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

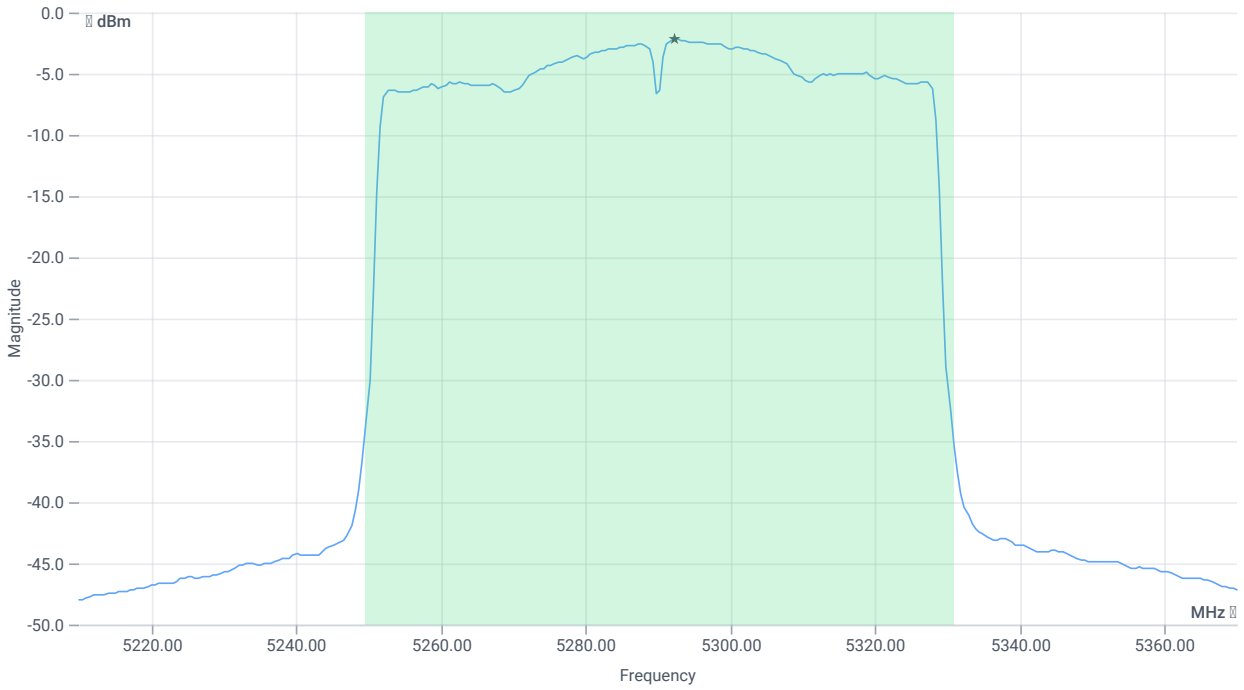
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.44	MHz	INFO
T1 26dB	---	---	5249.5200	MHz	INFO
T2 26dB	---	---	5330.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.20 | 16.2 | 20
Start [MHz] | Stop [MHz]	5210.000 | 5370.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.2	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.58	dBm	PASS
Limit: 11 dBm + 10 log 81.44					
Max Output Power DC corrected	---	30.11	15.58	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-2.14	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	-0.76	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

References

TC start	19.01.2024 11:47:05
Ambit temp [°C] | humidity [rel%]	22.0 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5290
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

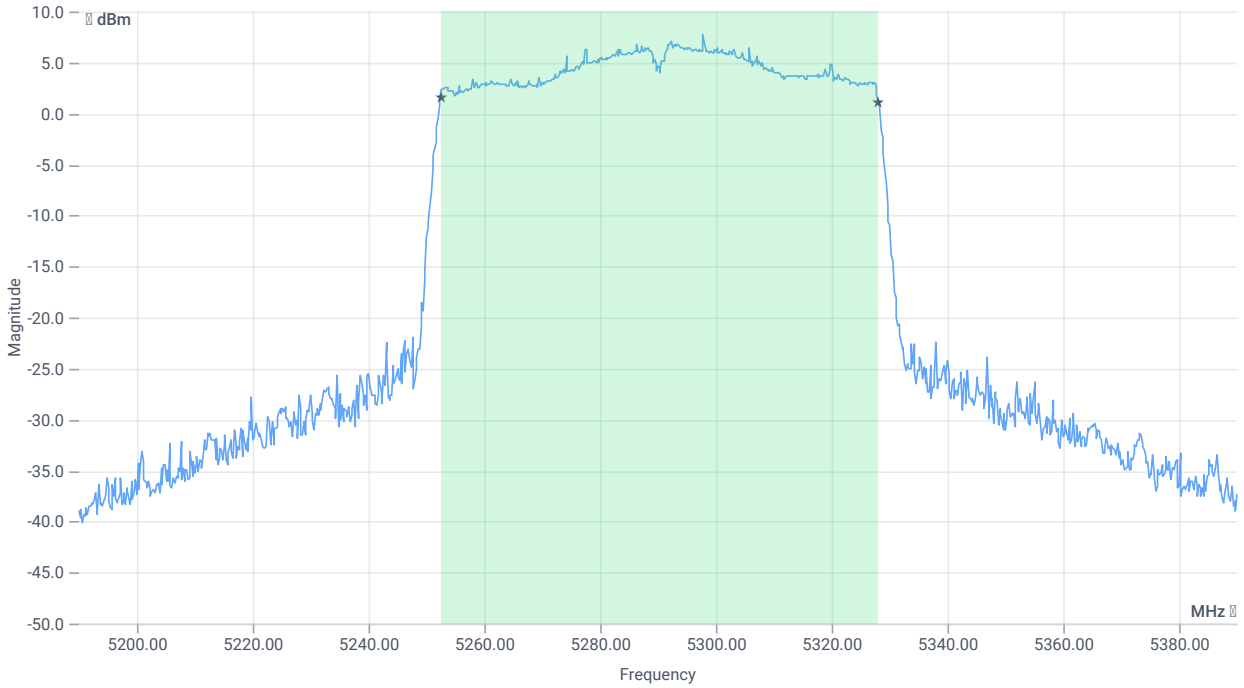
Test at TX 5290 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	5.47	dBm	INFO
Ref. Frequency	---	---	5292.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.47 | 16.2 | 15
Start [MHz] | Stop [MHz]	5190.000 | 5390.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE

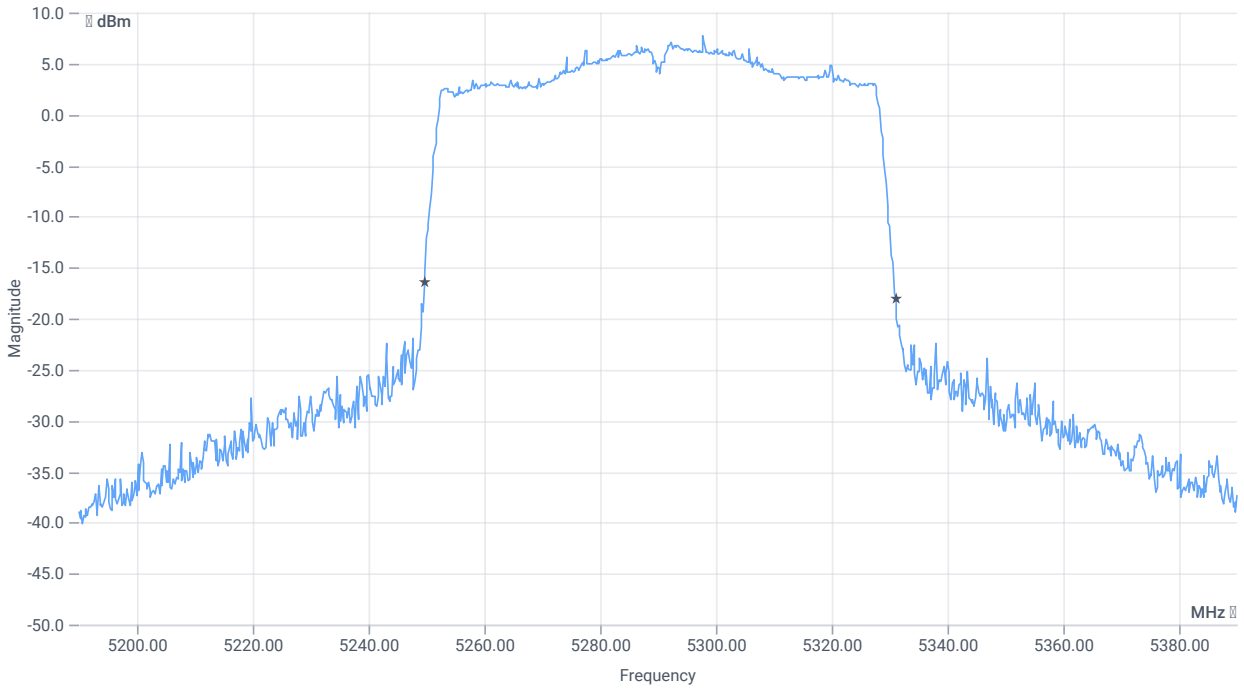


BW 99PCT

BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5250.000000	---	5252.4376	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.9620	MHz	PASS



BW 26dB

BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5249.6000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5331.0000	MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

References

TC start	19.01.2024 11:47:45
Ambit temp [°C] | humidity [rel%]	22.0 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5290
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5290 MHz

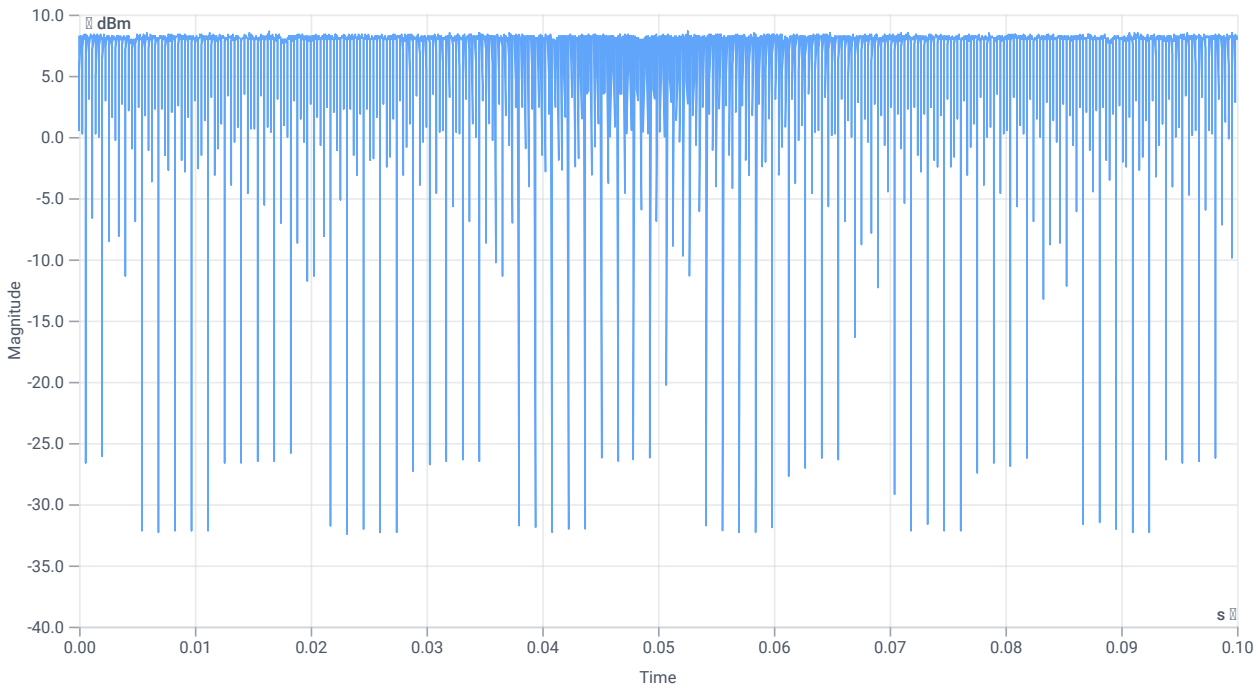
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	7.89	dBm	INFO
Ref. Frequency	---	---	5297.790	MHz	INFO

Evaluation max. Duty Cycle

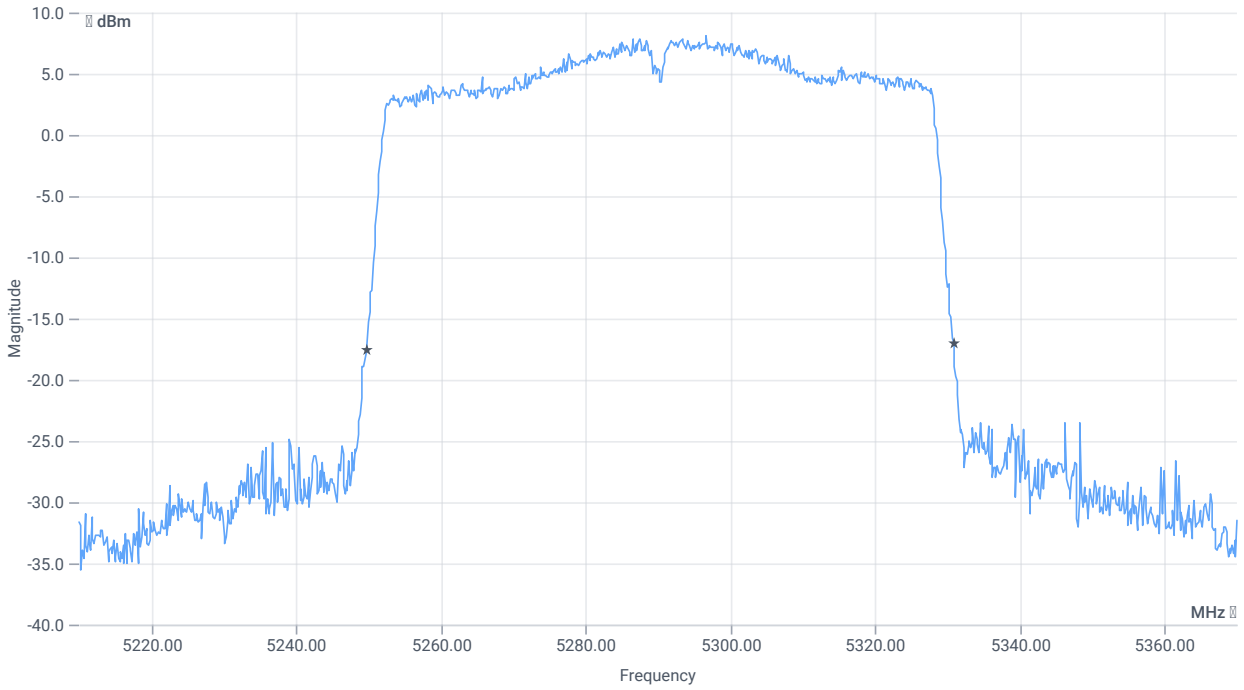
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:158					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

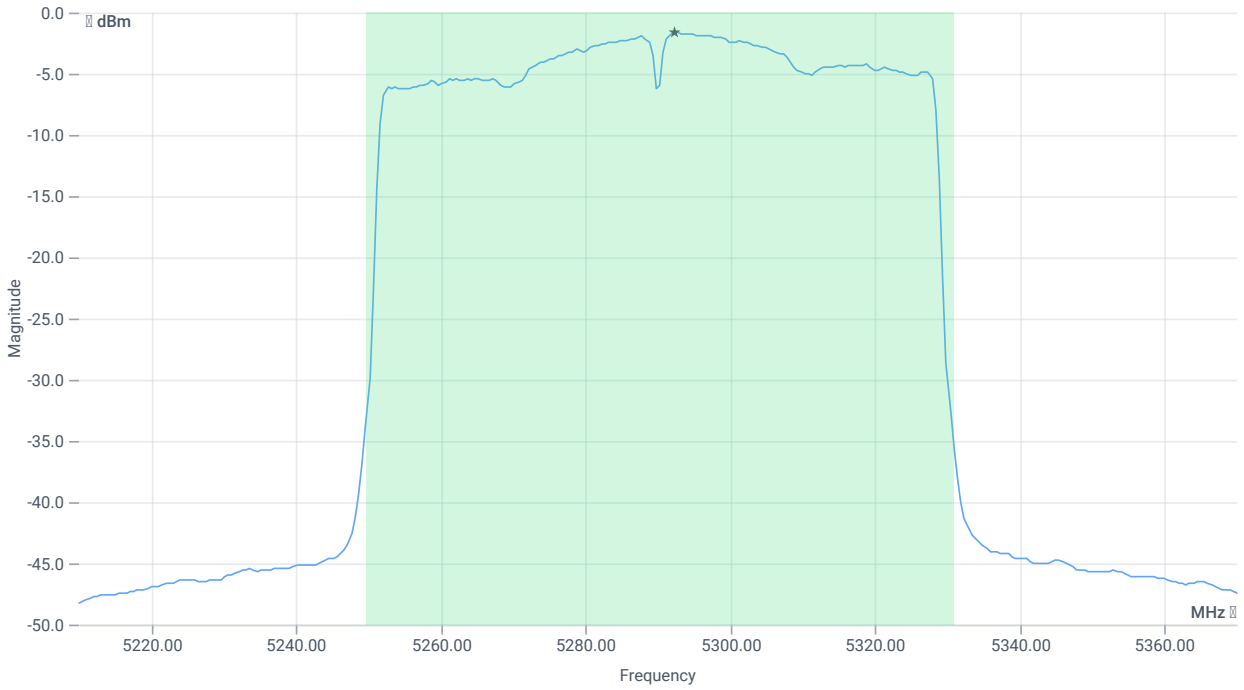
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.12	MHz	INFO
T1 26dB	---	---	5249.6800	MHz	INFO
T2 26dB	---	---	5330.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.89 | 16.2 | 20
Start [MHz] | Stop [MHz]	5210.000 | 5370.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.73	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.11	dBm	PASS
Limit: 11 dBm + 10 log 81.12					
Max Output Power DC corrected	---	30.09	16.11	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-1.6	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	-0.22	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

References

TC start	19.01.2024 11:50:16
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5290
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

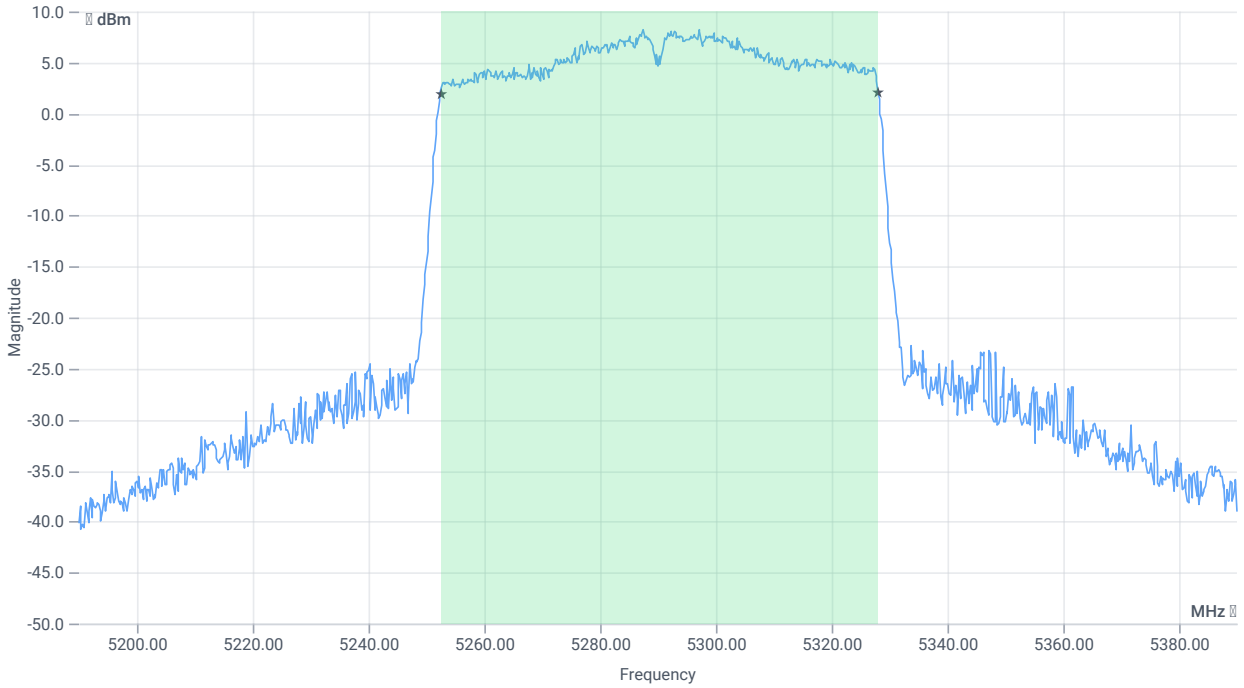
Test at TX 5290 MHz

RESULT: Reference Power cond.

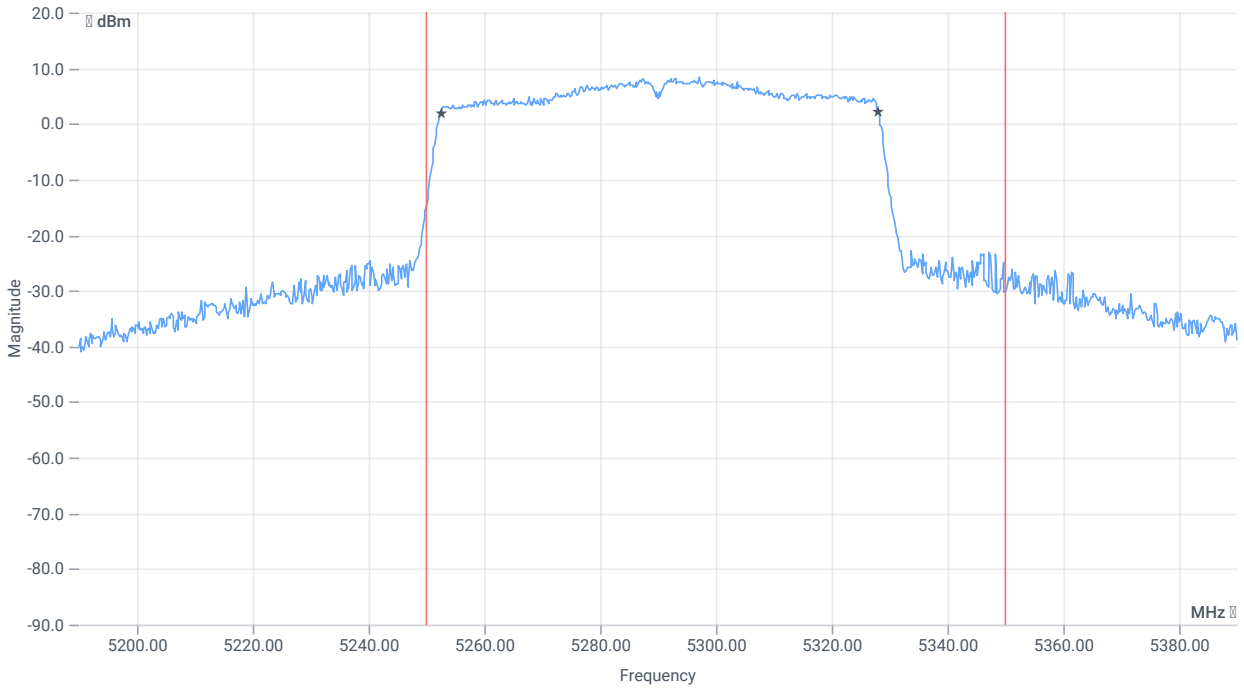
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.91	dBm	INFO
Ref. Frequency	---	---	5284.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.91 | 16.2 | 15
Start [MHz] | Stop [MHz]	5190.000 | 5390.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



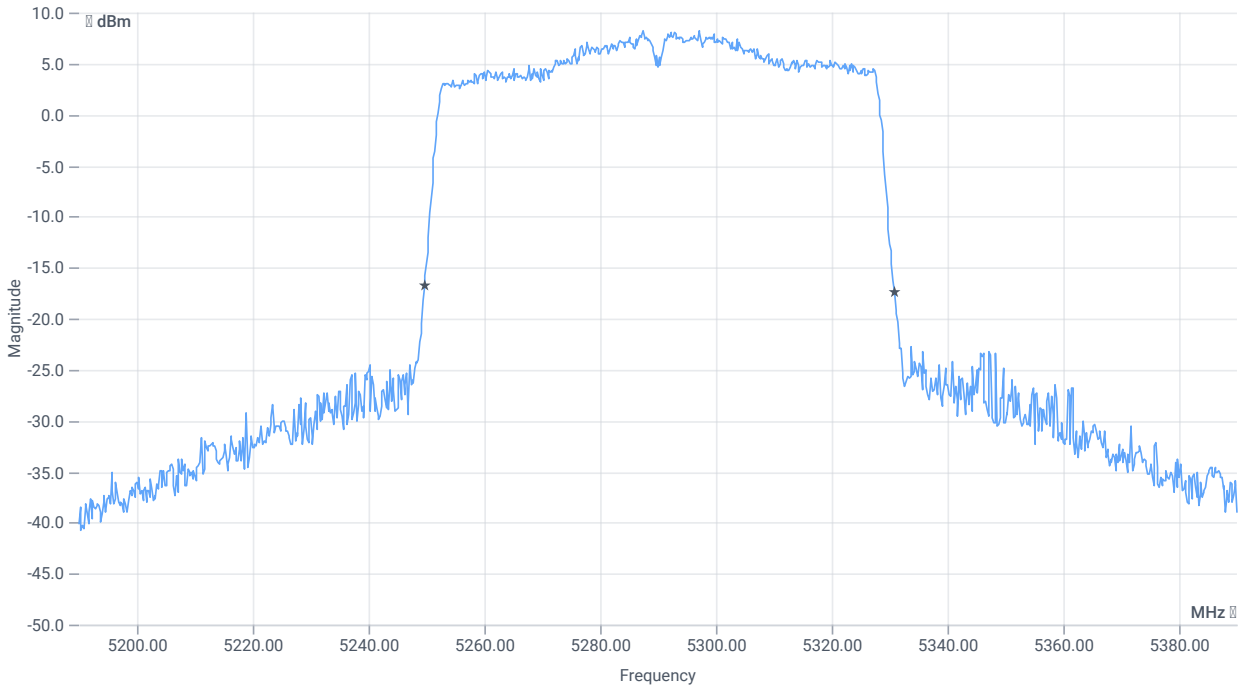
BW 99PCT



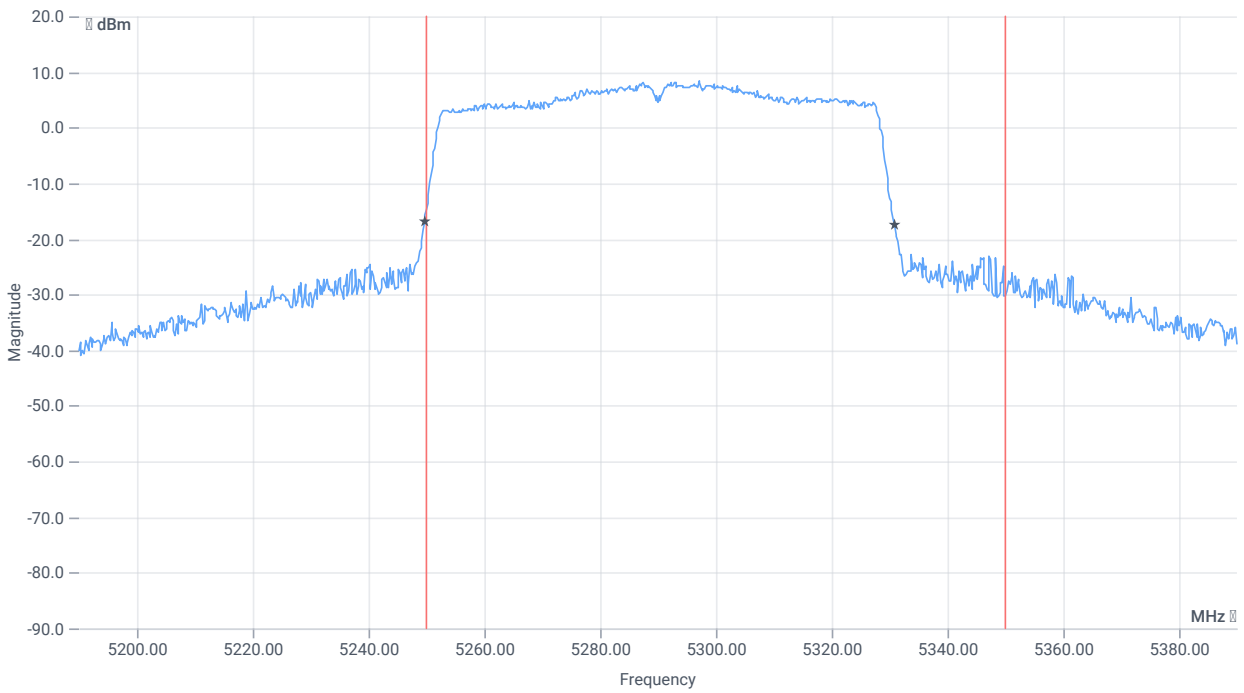
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5250.000000	---	5252.4376	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.9620	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.2	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5249.6000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.8000	MHz	PASS

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

References

TC start	19.01.2024 11:50:56
Ambit temp [°C] | humidity [rel%]	22.0 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5290
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5290 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	15.58	dBm	INFO
Ant:1 BW 26dB	---	---	81.440	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	16.11	dBm	INFO
Ant:2 BW 26dB	---	---	81.120	MHz	INFO
∑ Limit absolute	---	24	18.86	dBm	PASS
∑ Limit: 11 dBm + 10 log 81.12	---	30.09	18.86	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	-0.76	dBm/1MHz	INFO
Ant:2 PSD	---	---	-0.22	dBm/1MHz	INFO
∑	---	11	2.53	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 11:55:20
Ambit temp [°C] | humidity [rel%]	22.1 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5530 MHz

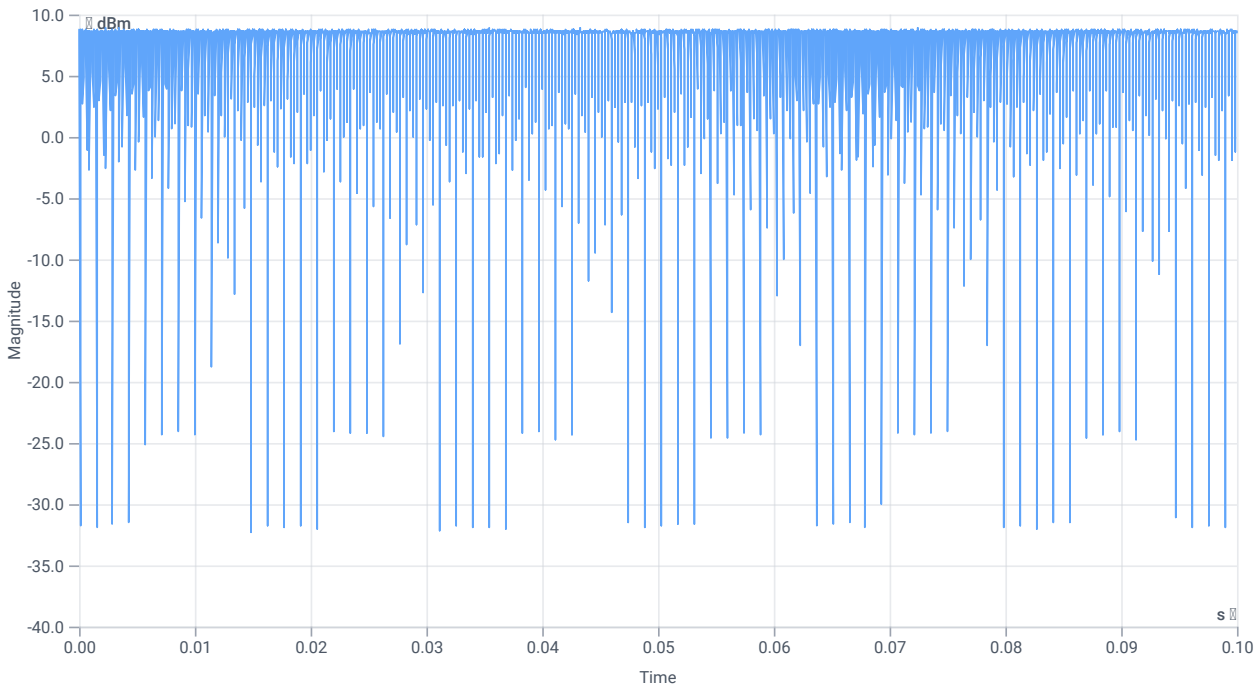
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	6.81	dBm	INFO
Ref. Frequency	---	---	5531.600	MHz	INFO

Evaluation max. Duty Cycle

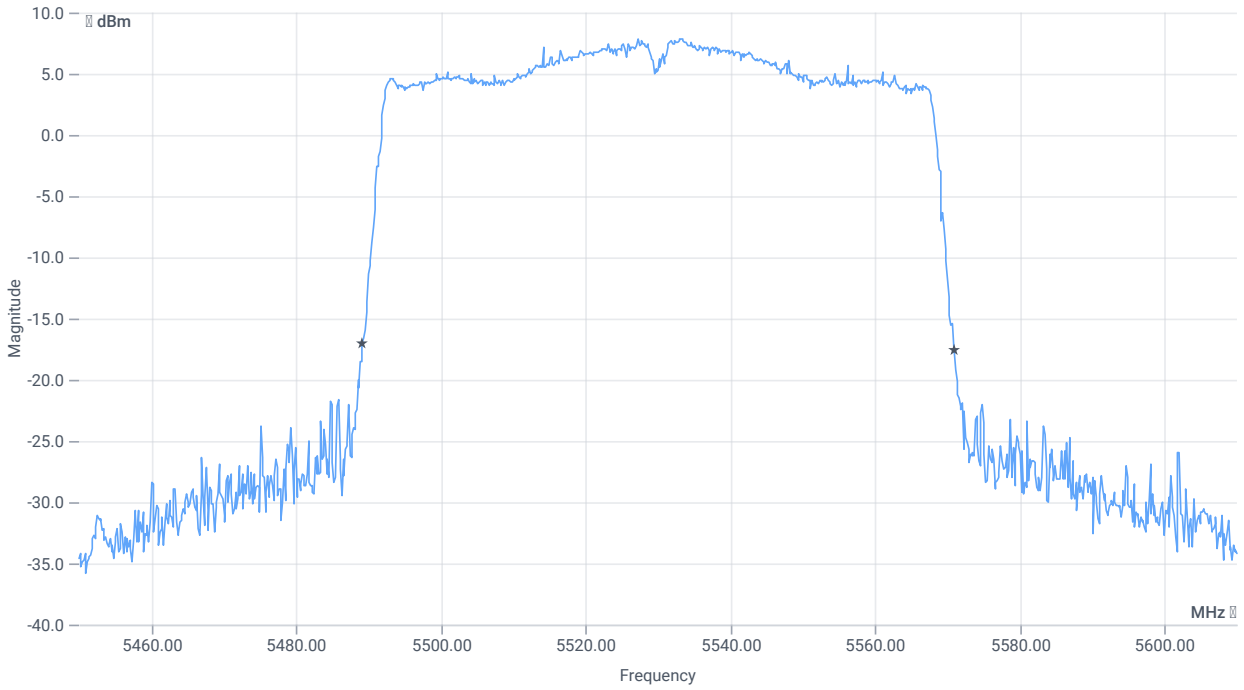
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:155					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

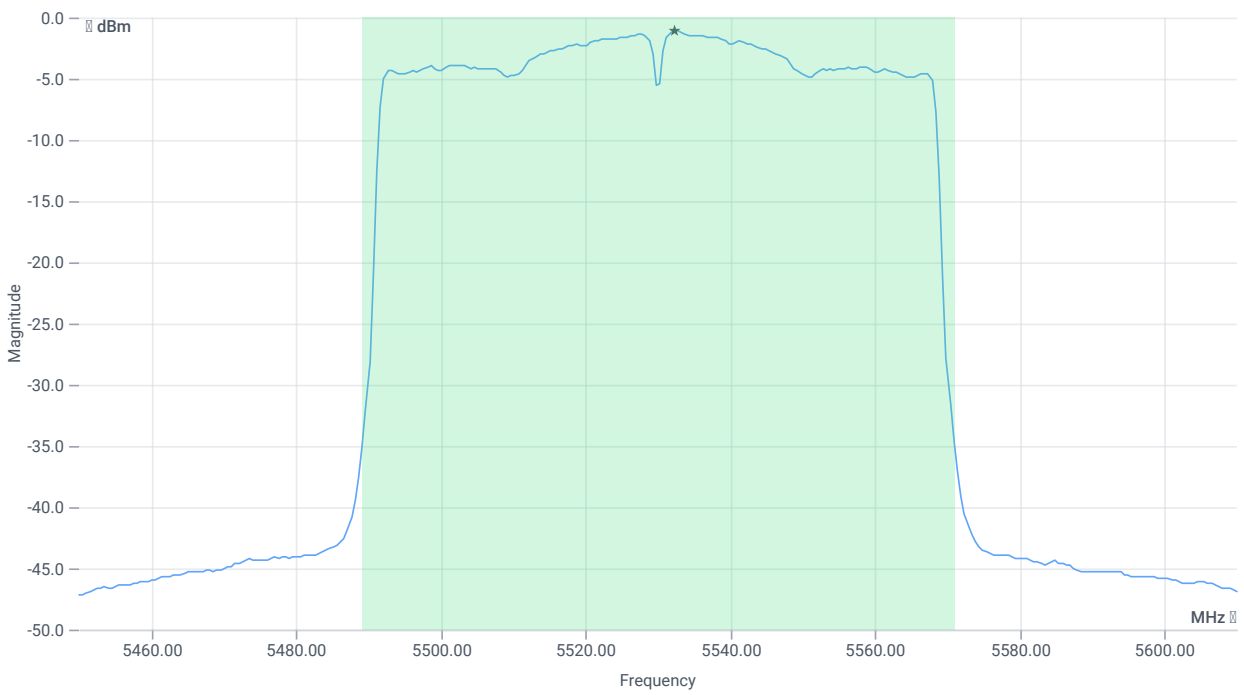
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.76	MHz	INFO
T1 26dB	---	---	5489.2000	MHz	INFO
T2 26dB	---	---	5570.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.81 | 16.87 | 20
Start [MHz] | Stop [MHz]	5450.000 | 5610.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	15.41	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.79	dBm	PASS
Limit: 11 dBm + 10 log 81.76					
Max Output Power DC corrected	---	30.13	16.79	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-1.11	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	0.27	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 11:57:47
Ambit temp [°C] | humidity [rel%]	22.2 | 28
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

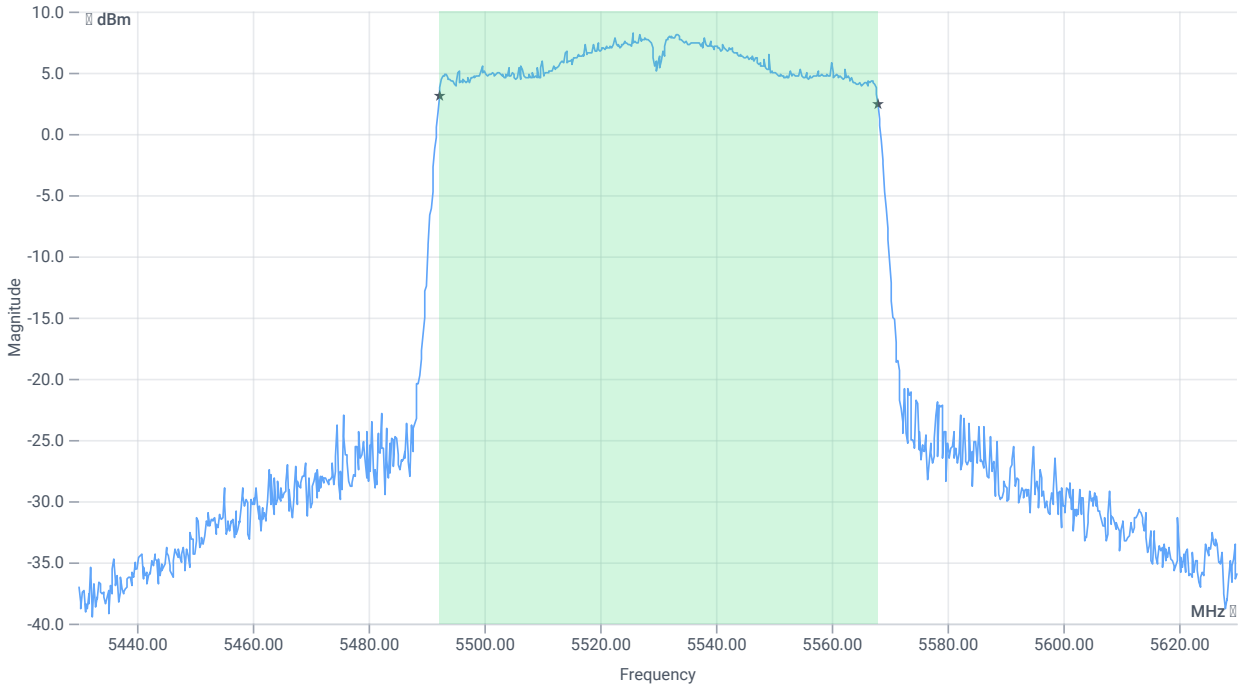
Test at TX 5530 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	7.37	dBm	INFO
Ref. Frequency	---	---	5531.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.37 | 16.87 | 15
Start [MHz] | Stop [MHz]	5430.000 | 5630.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE

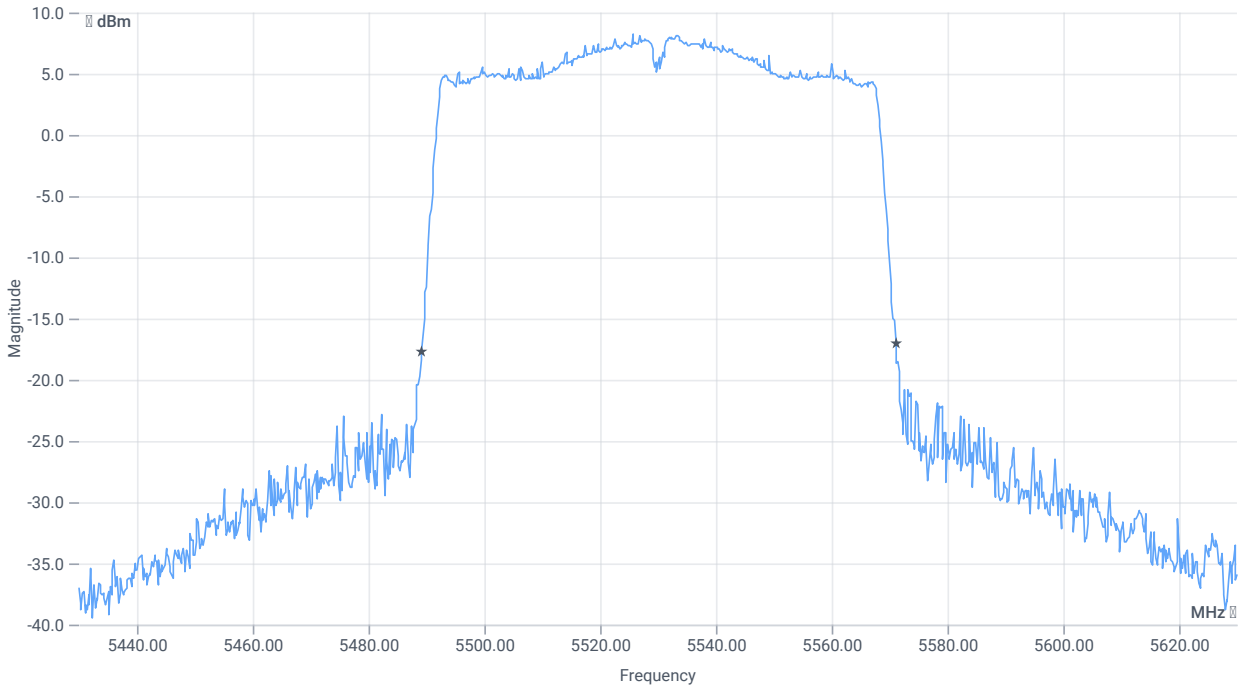


BW 99PCT

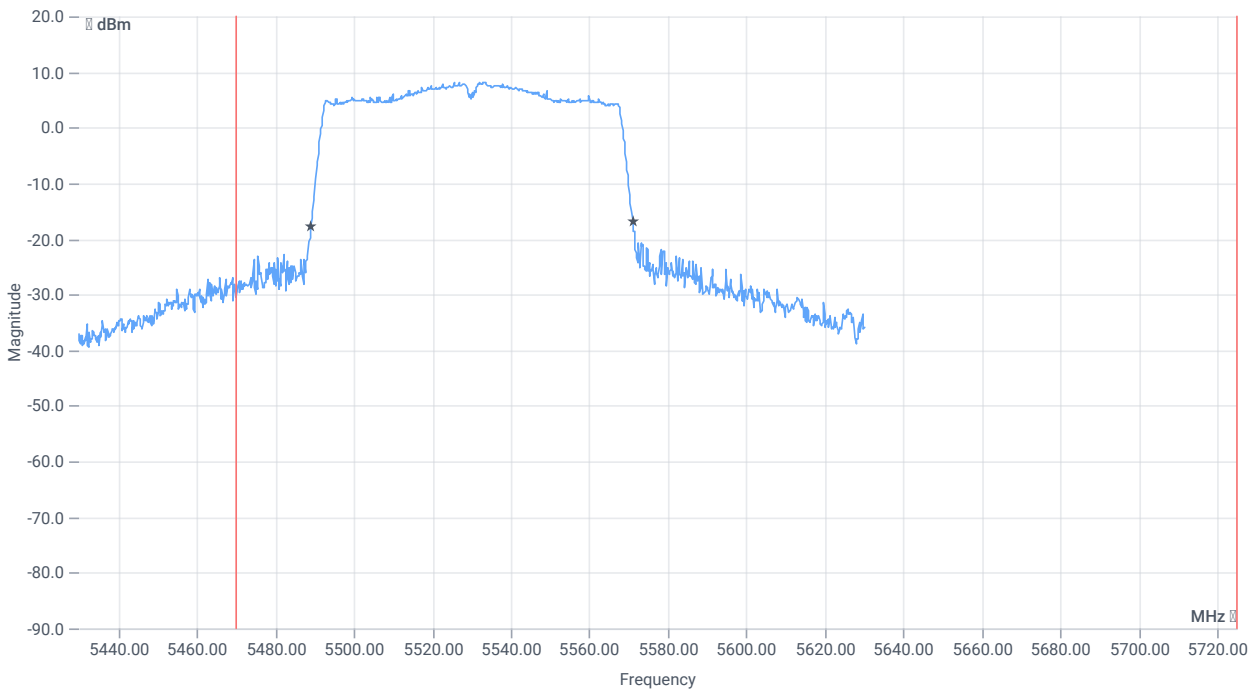
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.724	MHz	INFO
T1 99%	5470.000000	---	5492.2378	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.9620	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5489.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5571.0000	MHz	

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 11:58:23
Ambit temp [°C] | humidity [rel%]	22.2 | 28
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5530 MHz

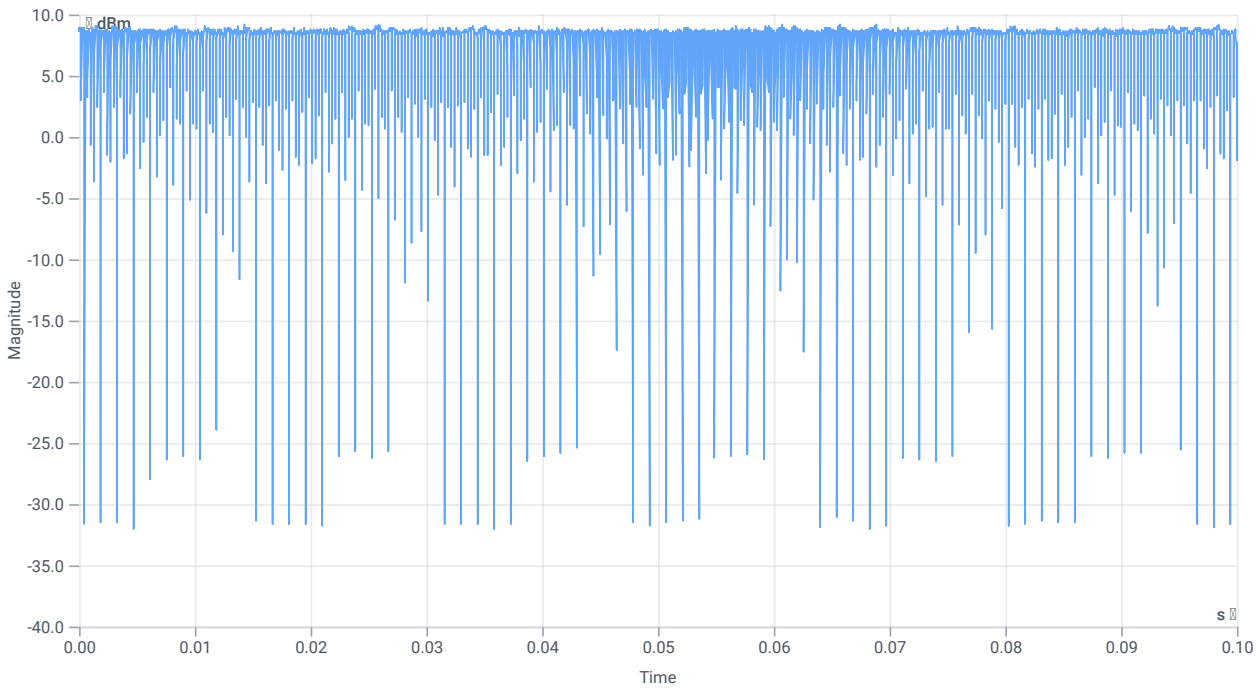
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	7.86	dBm	INFO
Ref. Frequency	---	---	5531.600	MHz	INFO

Evaluation max. Duty Cycle

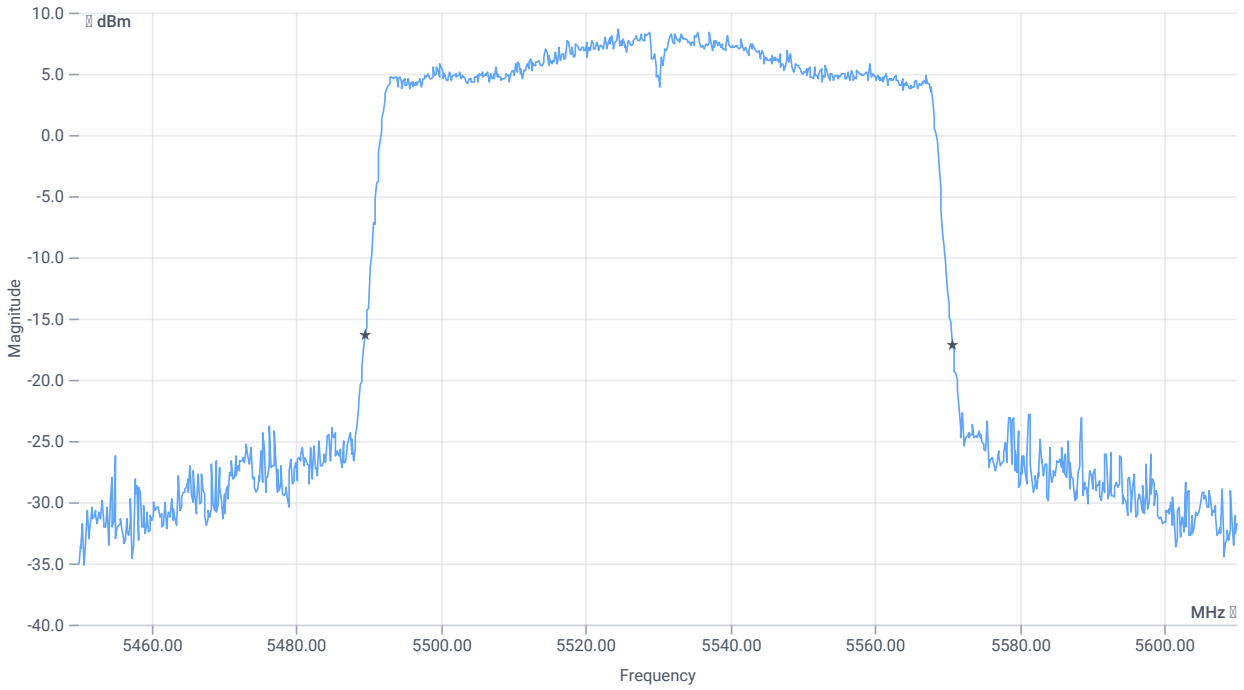
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:160					
Duty Cycle (Burst Ratio) max	---	---	0.912	---	INFO
Duty Cycle max	---	---	0.4	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.727	---	INFO
Duty Cycle min	---	---	1.385	dB	INFO
Max TX Burst Length	---	---	0.775	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

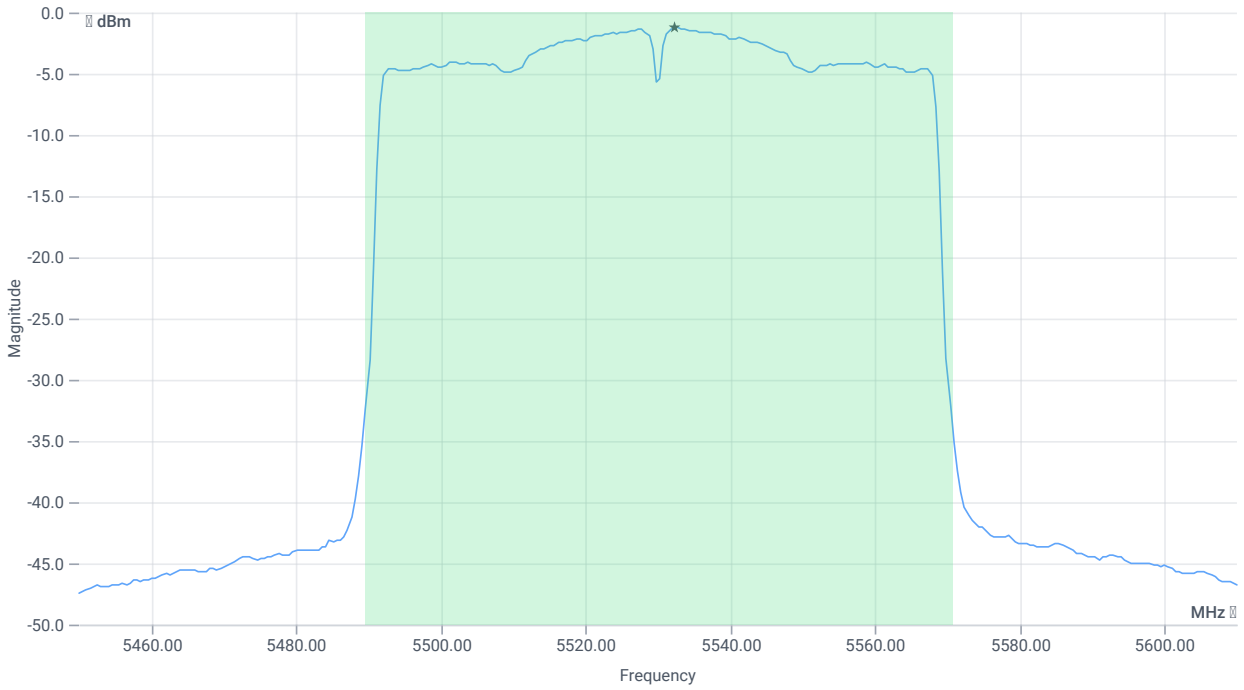
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81.12	MHz	INFO
T1 26dB	---	---	5489.5200	MHz	INFO
T2 26dB	---	---	5570.6400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.86 | 16.87 | 20
Start [MHz] | Stop [MHz]	5450.000 | 5610.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	15.34	dBm	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.72	dBm	PASS
Limit: 11 dBm + 10 log 81.12					
Max Output Power DC corrected	---	30.09	16.72	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-1.21	dBm/1MHz	INFO
Duty Cycle Correction	---	---	1.38	dB	INFO
Power Spectral Density DC corrected	---	11	0.17	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:00:50
Ambit temp [°C] | humidity [rel%]	22.2 | 28
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

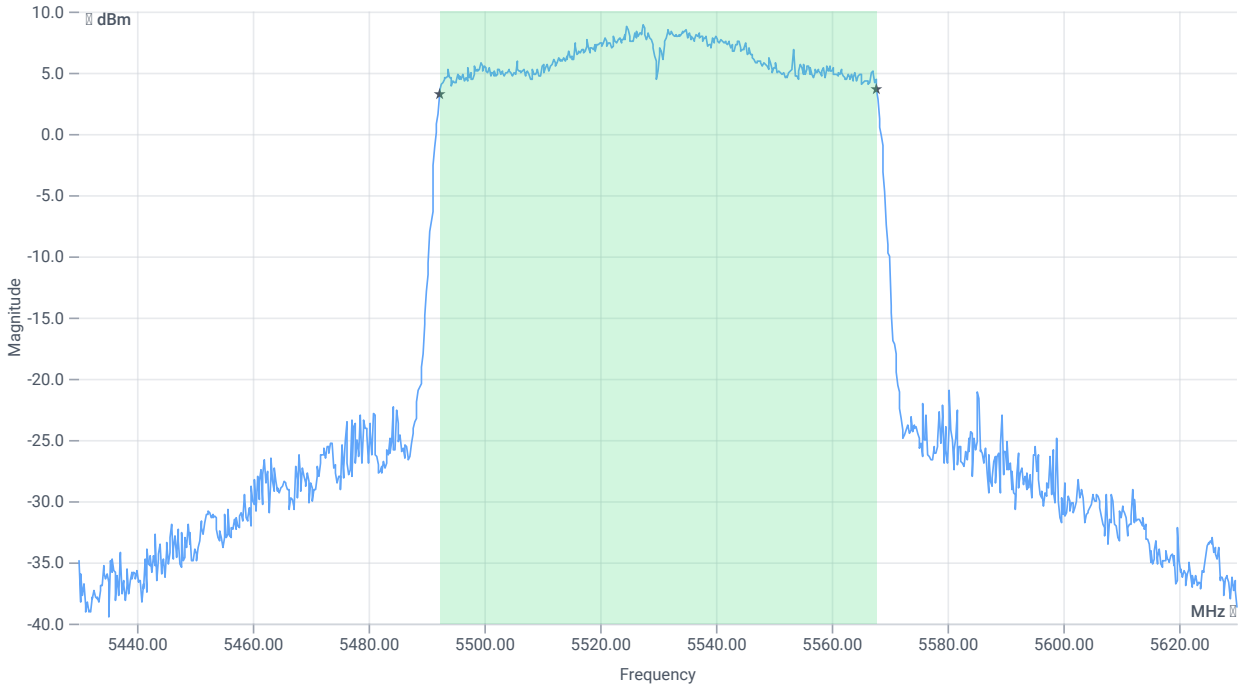
Test at TX 5530 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	7.69	dBm	INFO
Ref. Frequency	---	---	5519.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.69 | 16.87 | 15
Start [MHz] | Stop [MHz]	5430.000 | 5630.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE

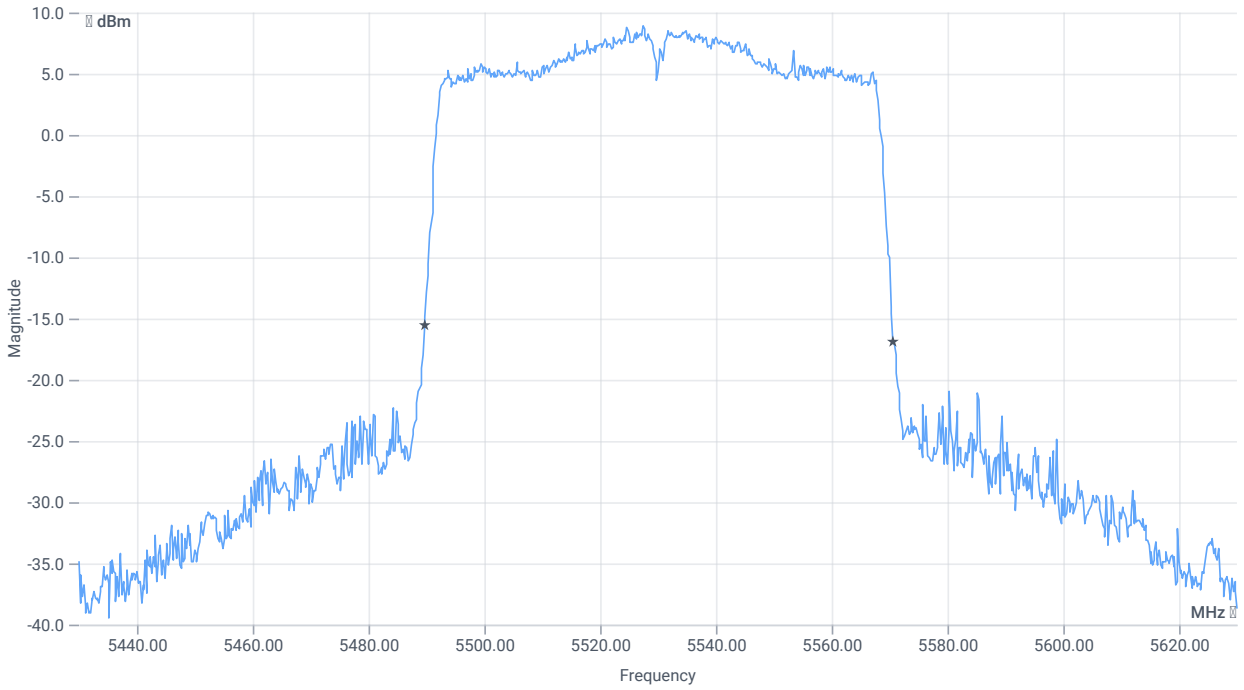


BW 99PCT

BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5470.000000	---	5492.2378	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.7622	MHz	



BW 26dB

BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	81	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5489.6000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5570.6000	MHz	

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:01:27
Ambit temp [°C] | humidity [rel%]	22.2 | 28
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5530 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	16.79	dBm	INFO
Ant:1 BW 26dB	---	---	81.760	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	16.72	dBm	INFO
Ant:2 BW 26dB	---	---	81.120	MHz	INFO
∑ Limit absolute	---	24	19.77	dBm	PASS
∑ Limit: 11 dBm + 10 log 81.12	---	30.09	19.77	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	0.27	dBm/1MHz	INFO
Ant:2 PSD	---	---	0.17	dBm/1MHz	INFO
∑	---	11	3.23	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:07:04
Ambit temp [°C] | humidity [rel%]	22.2 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	True | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5610 MHz

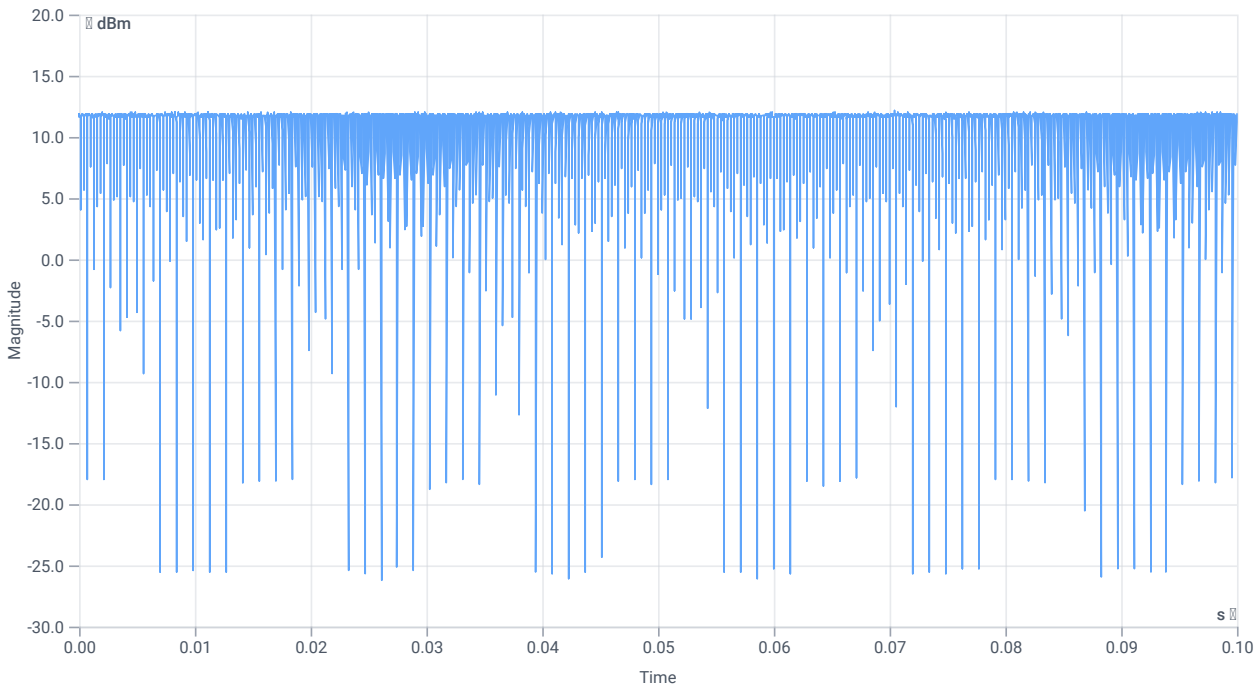
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.73	dBm	INFO
Ref. Frequency	---	---	5582.630	MHz	INFO

Evaluation max. Duty Cycle

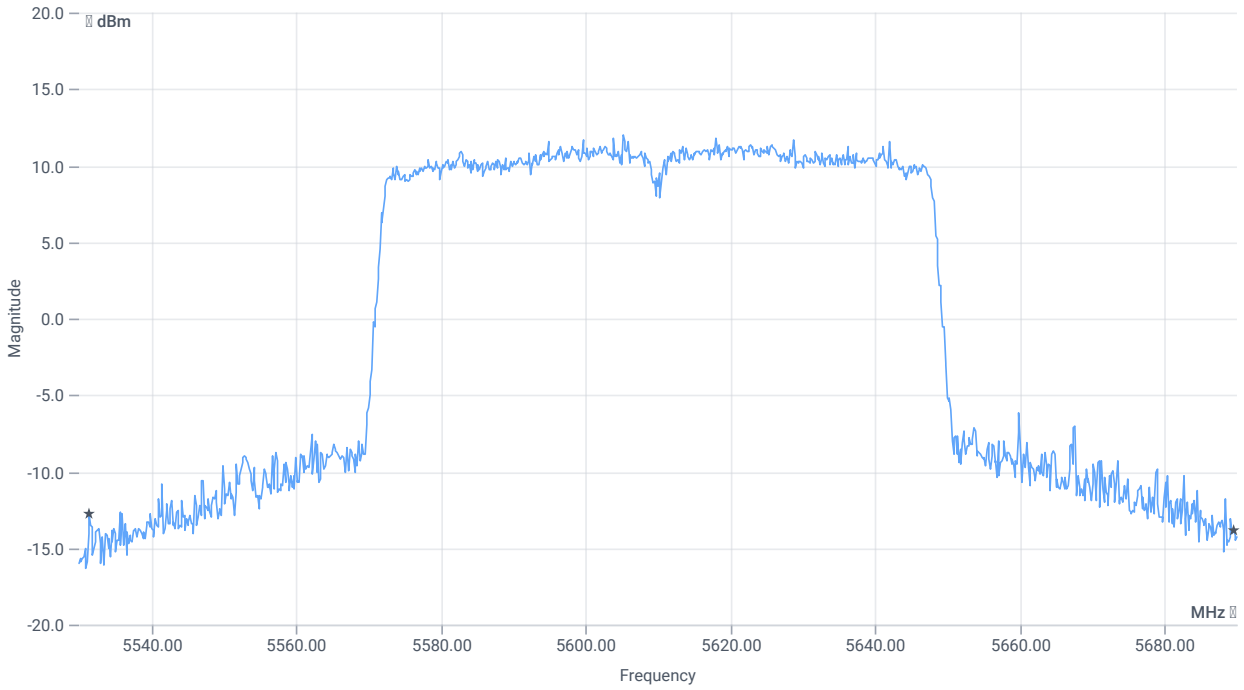
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:131					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

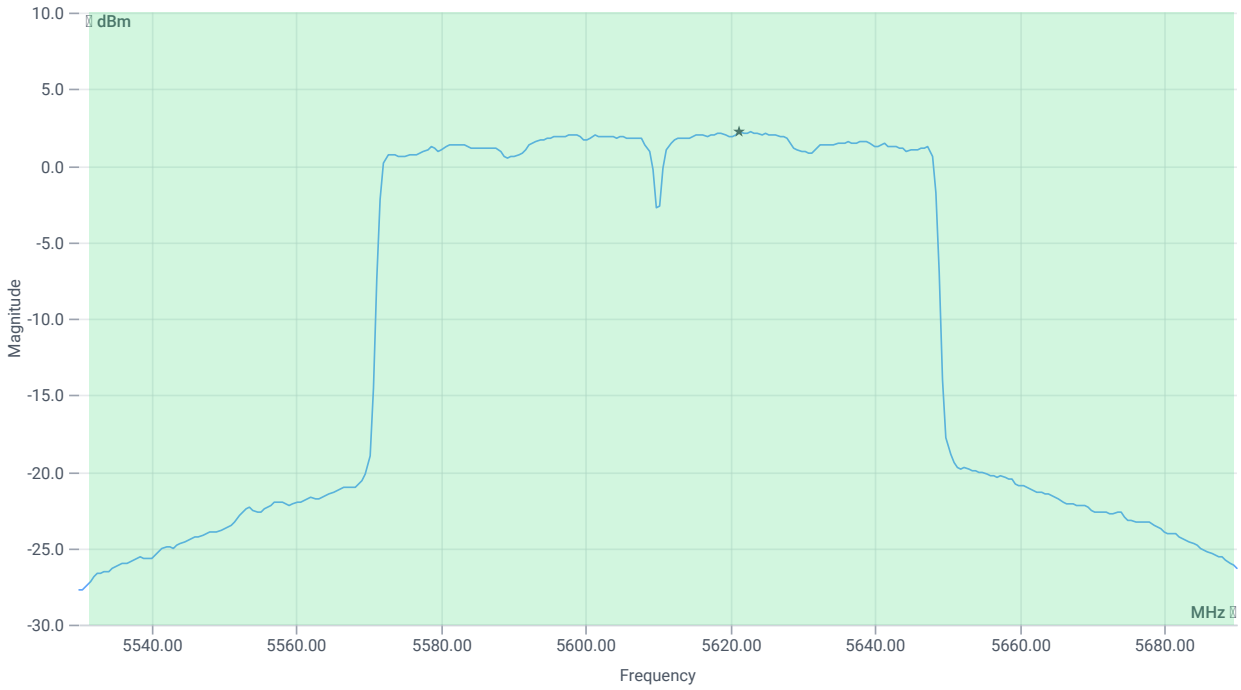
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	158.08	MHz	INFO
T1 26dB	---	---	5531.4400	MHz	INFO
T2 26dB	---	---	5689.5200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.73 | 16.72 | 25
Start [MHz] | Stop [MHz]	5530.000 | 5690.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	19.99	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.59	dBm	PASS
Limit: 11 dBm + 10 log 158.08					
Max Output Power DC corrected	---	32.99	20.59	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	2.2	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	11	2.8	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:09:31
Ambit temp [°C] | humidity [rel%]	22.2 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	True | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

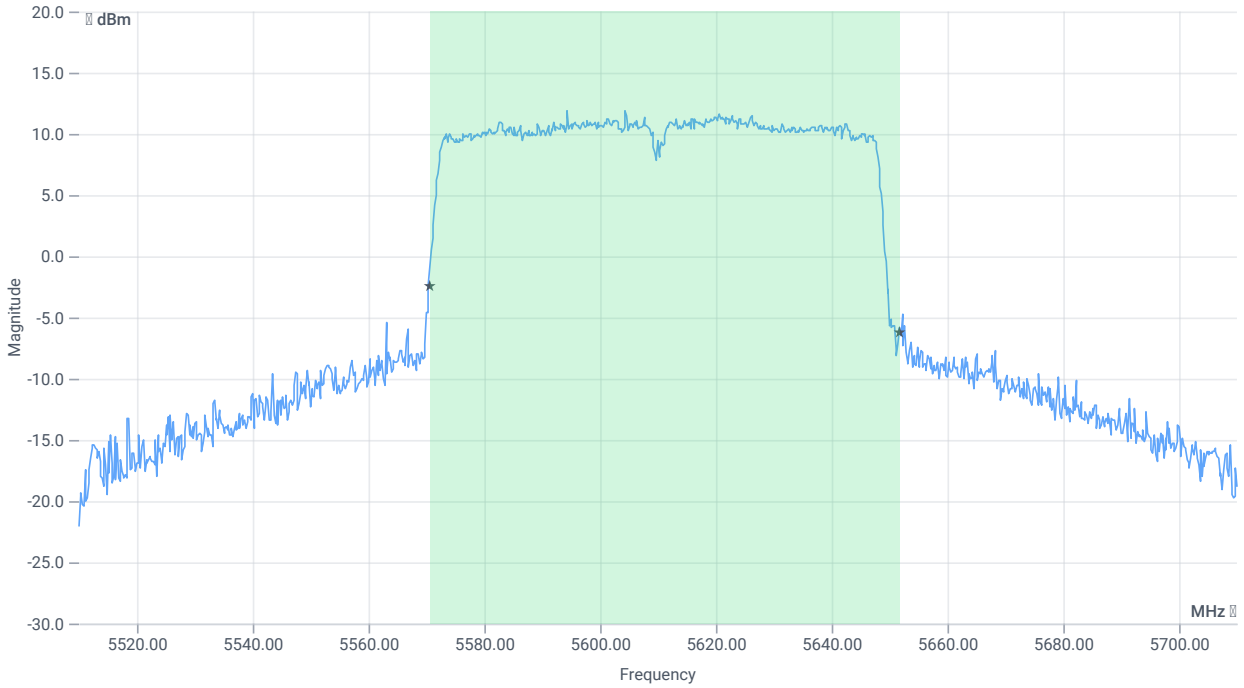
Test at TX 5610 MHz

RESULT: Reference Power cond.

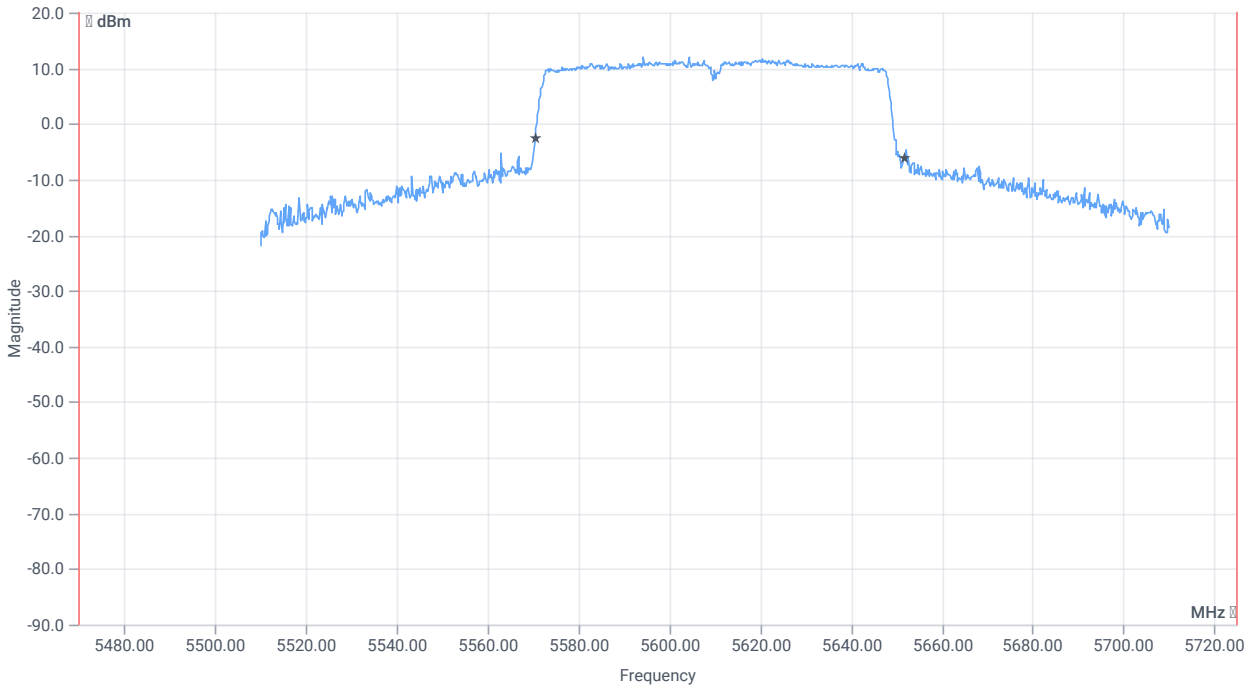
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.02	dBm	INFO
Ref. Frequency	---	---	5622.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.02 | 16.72 | 20
Start [MHz] | Stop [MHz]	5510.000 | 5710.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



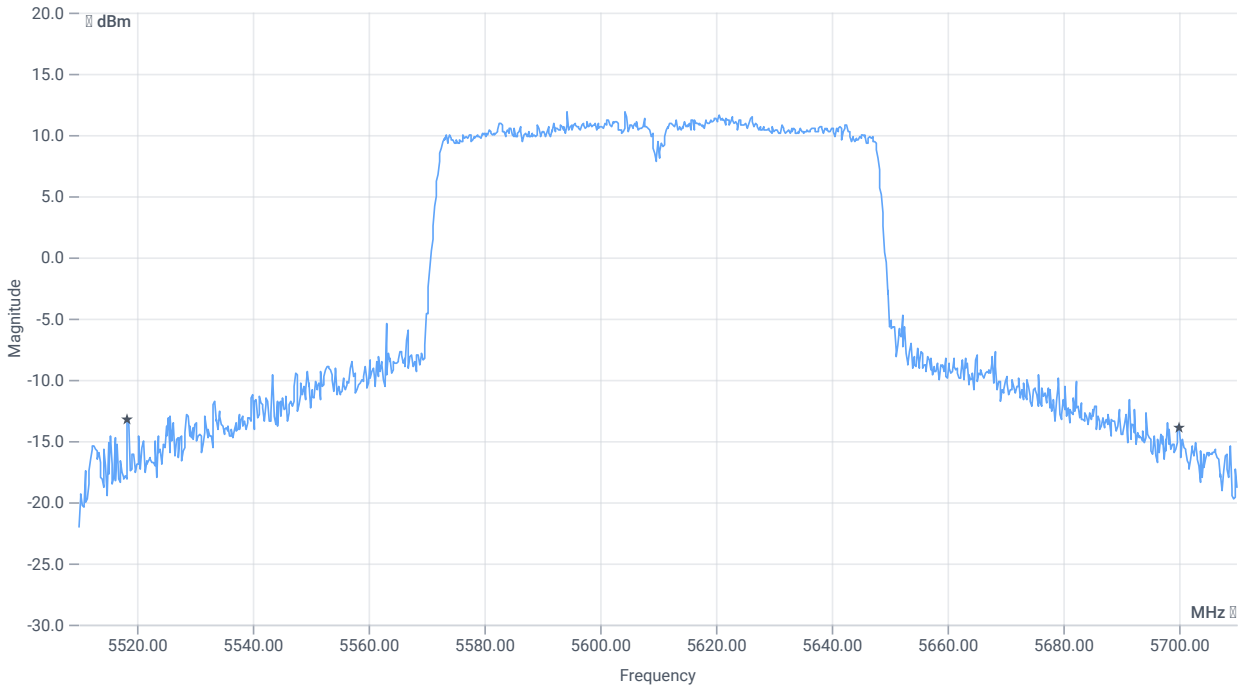
BW 99PCT



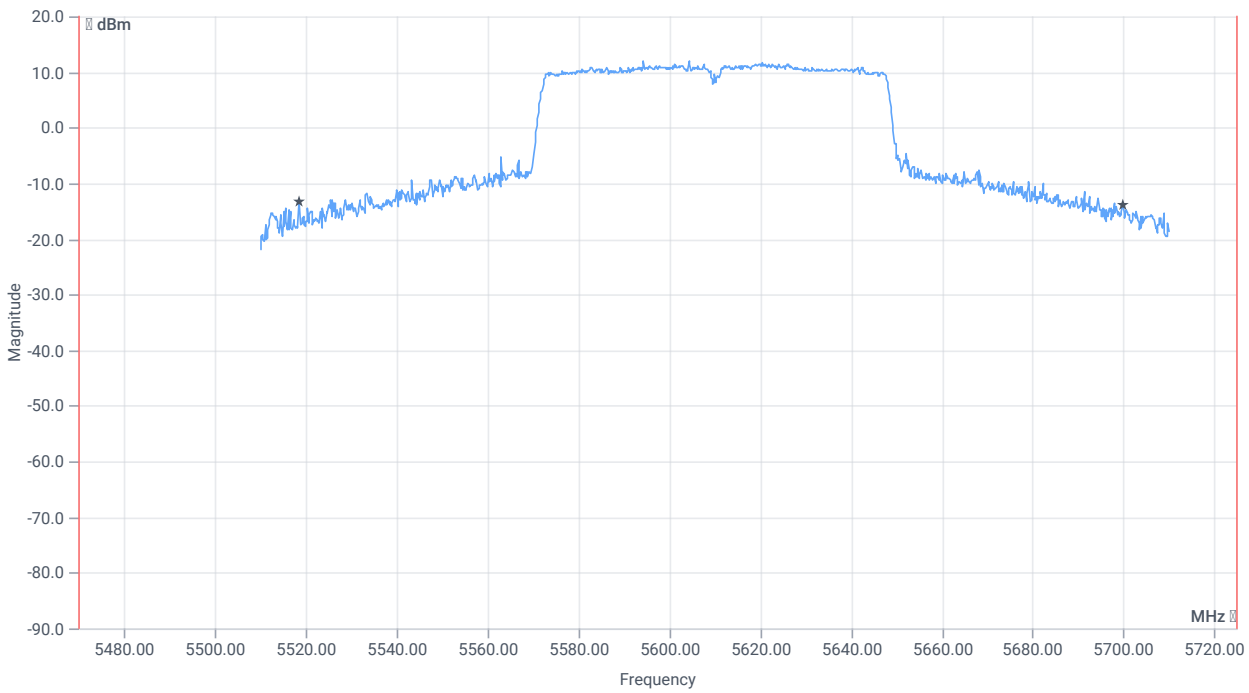
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	81.319	MHz	INFO
T1 99%	5470.000000	---	5570.4396	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5651.7582	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	181.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5518.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5700.0000	MHz	

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:10:07
Ambit temp [°C] | humidity [rel%]	22.2 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	True | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5610 MHz

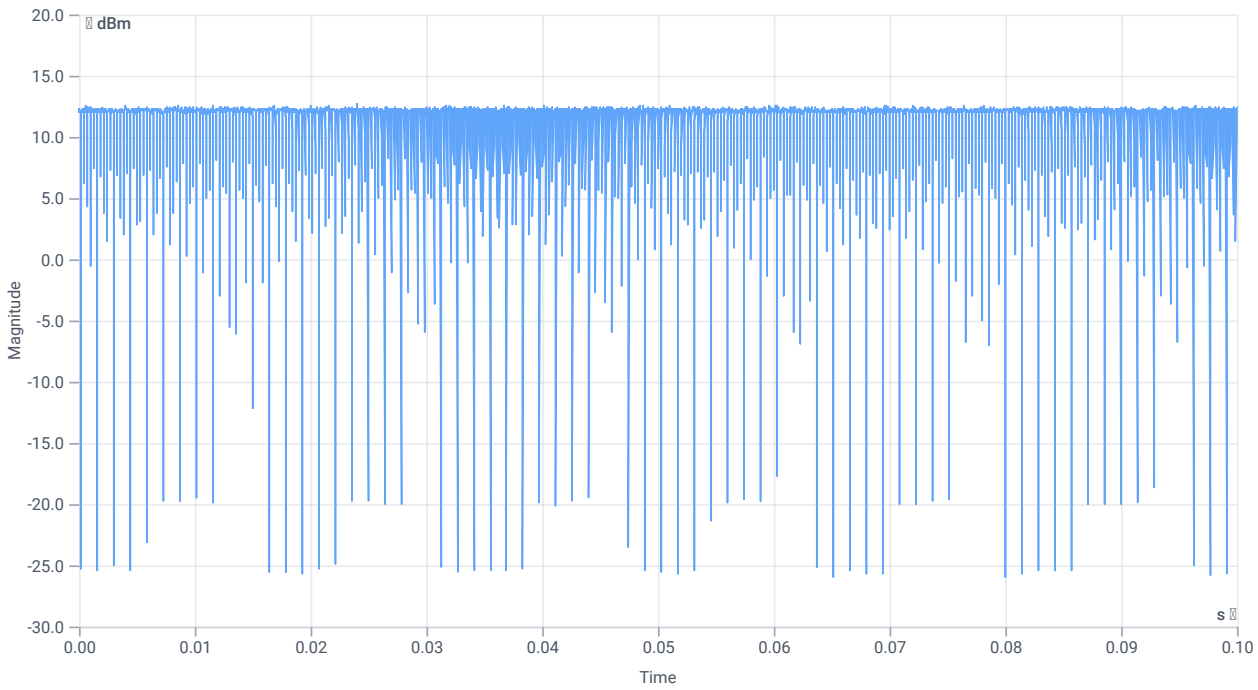
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.48	dBm	INFO
Ref. Frequency	---	---	5608.200	MHz	INFO

Evaluation max. Duty Cycle

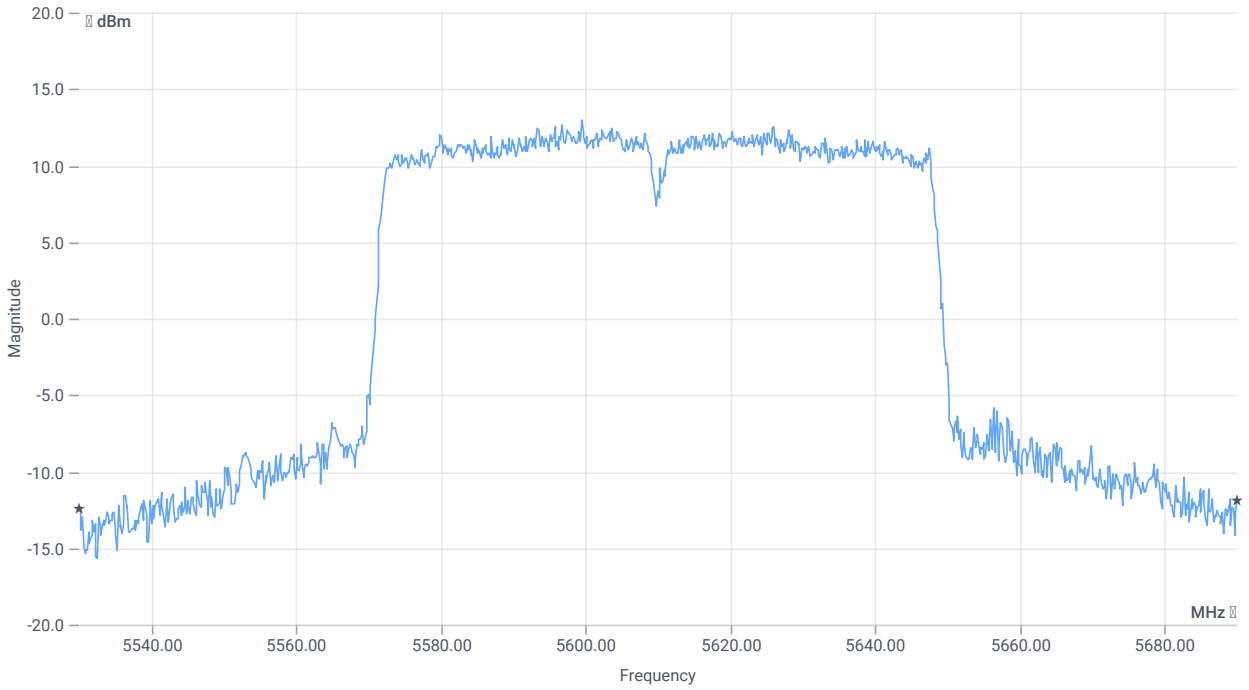
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:137					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

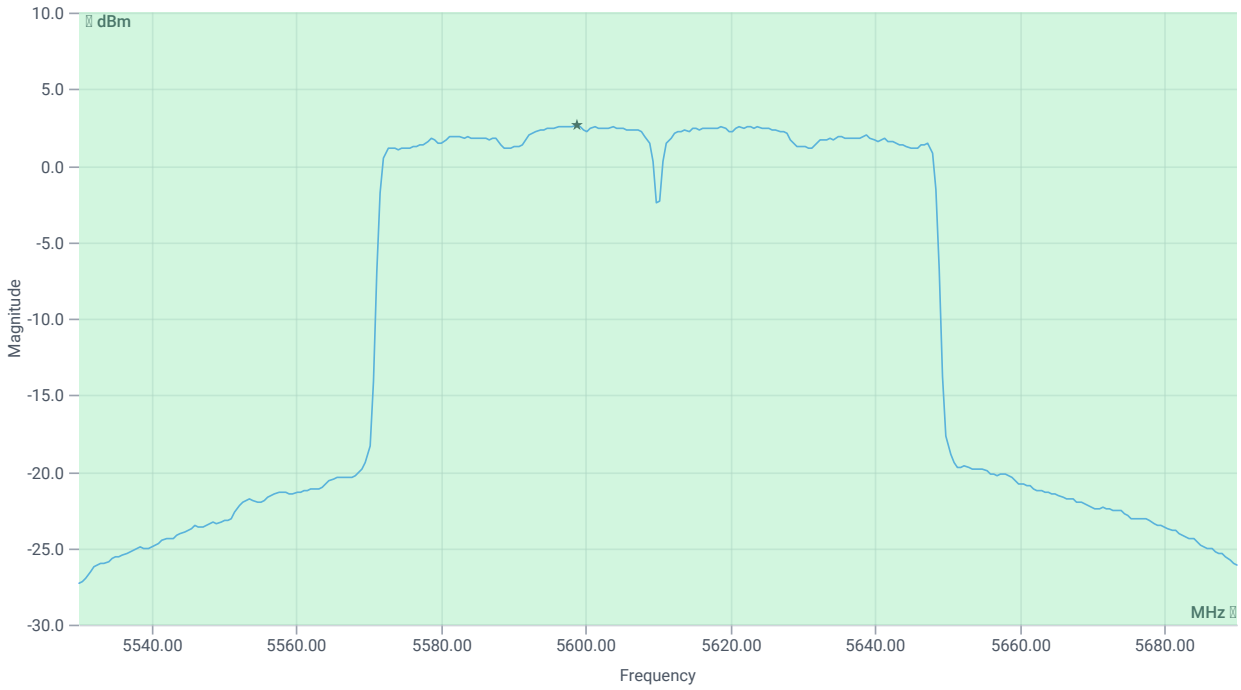
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	160	MHz	INFO
T1 26dB	---	---	5530.0000	MHz	INFO
T2 26dB	---	---	5690.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.48 | 16.72 | 25
Start [MHz] | Stop [MHz]	5530.000 | 5690.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	20.45	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	21.05	dBm	PASS
Limit: 11 dBm + 10 log 160					
Max Output Power DC corrected	---	33.04	21.05	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	2.65	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	11	3.25	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:12:34
Ambit temp [°C] | humidity [rel%]	22.2 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	True | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

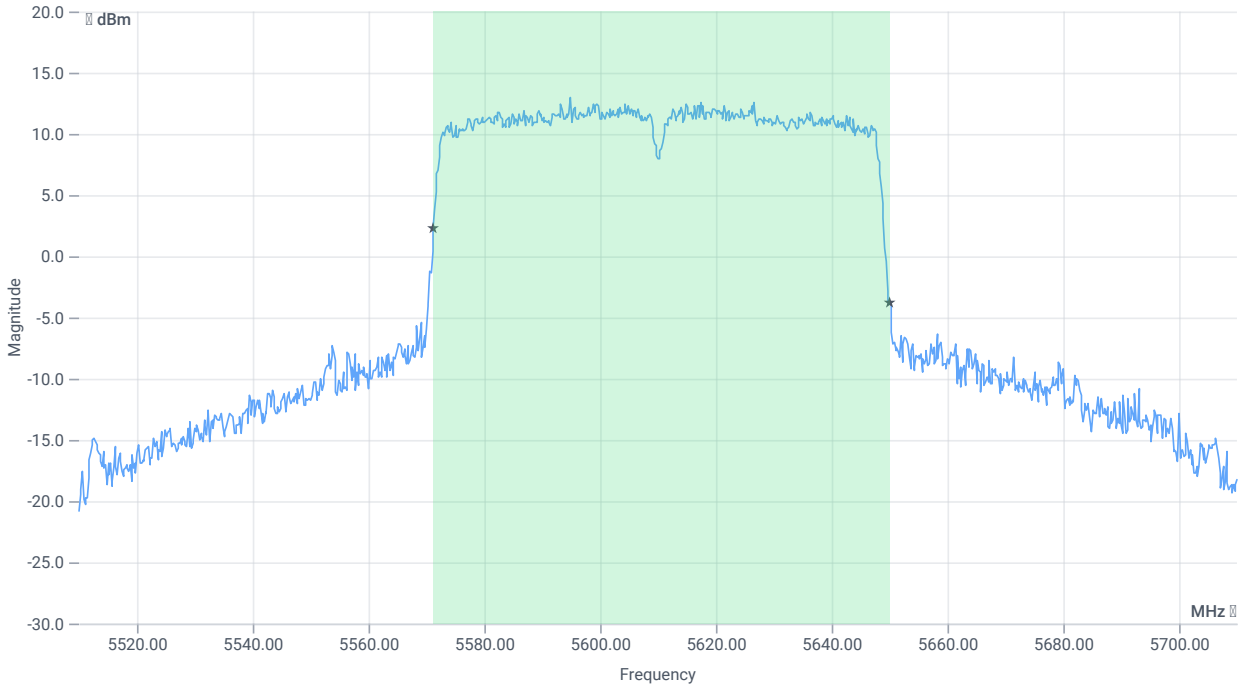
Test at TX 5610 MHz

RESULT: Reference Power cond.

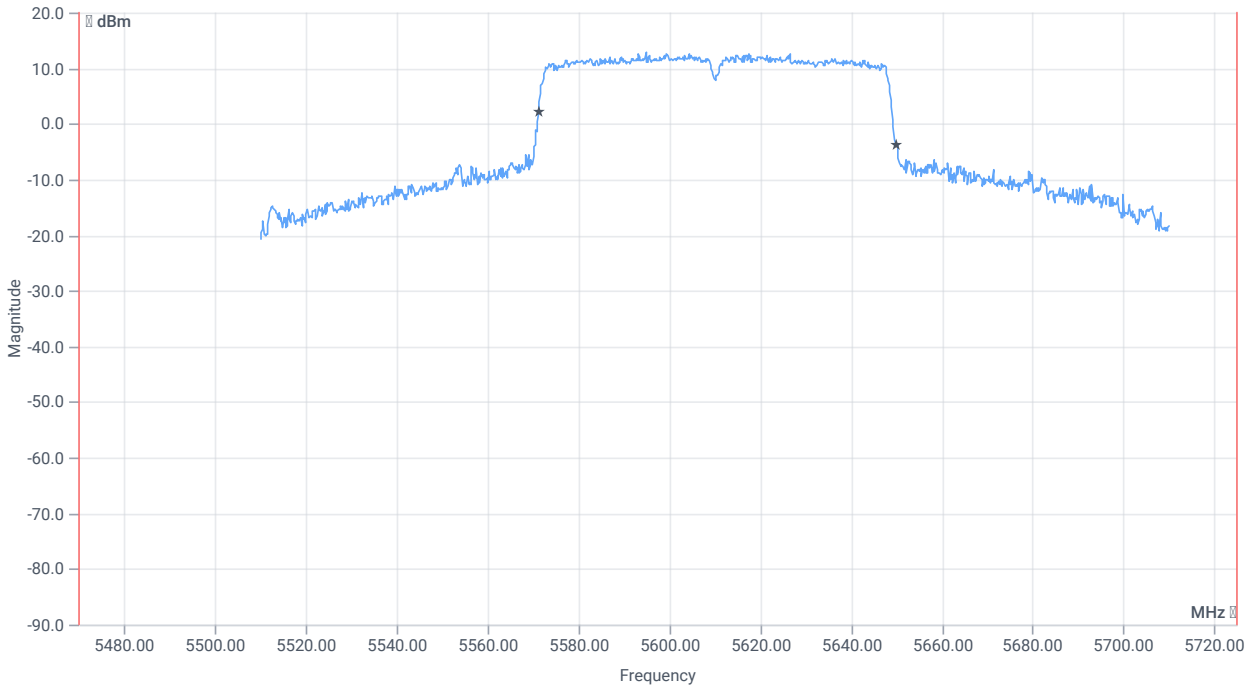
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.67	dBm	INFO
Ref. Frequency	---	---	5599.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.67 | 16.72 | 20
Start [MHz] | Stop [MHz]	5510.000 | 5710.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



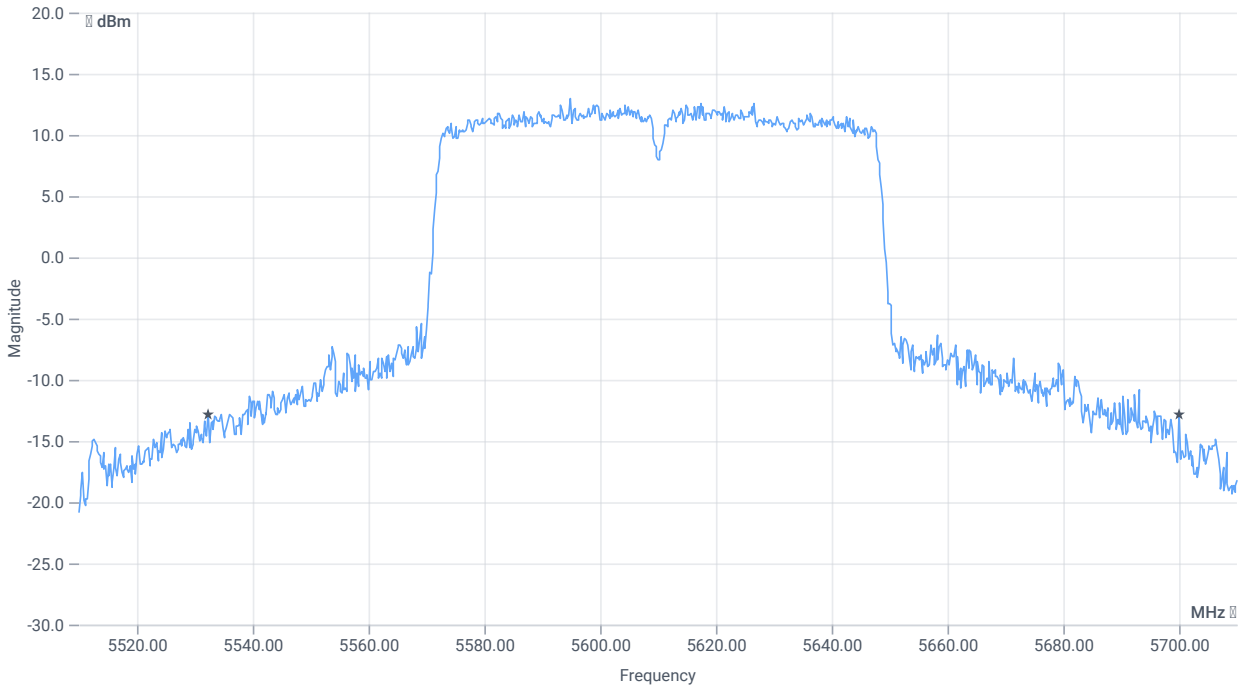
BW 99PCT



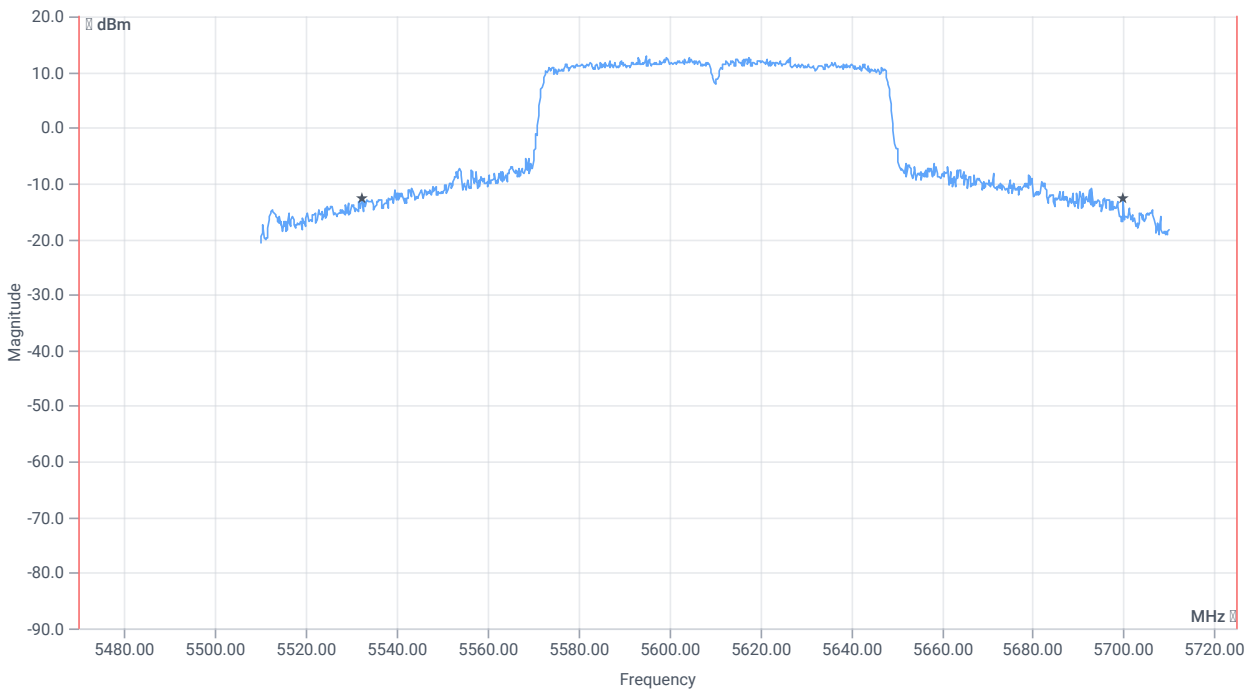
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	78.721	MHz	INFO
T1 99%	5470.000000	---	5571.2388	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5649.9600	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	167.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5532.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5700.0000	MHz	

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	19.01.2024 12:13:10
Ambit temp [°C] | humidity [rel%]	22.2 | 29
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	True | Freq [MHz] 5610
Frequency high to test	False | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5610 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	20.59	dBm	INFO
Ant:1 BW 26dB	---	---	158.080	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	21.05	dBm	INFO
Ant:2 BW 26dB	---	---	160.000	MHz	INFO
∑ Limit absolute	---	24	23.84	dBm	PASS
∑ Limit: 11 dBm + 10 log 158.08	---	32.99	23.84	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	2.8	dBm/1MHz	INFO
Ant:2 PSD	---	---	3.25	dBm/1MHz	INFO
∑	---	11	6.04	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	22.01.2024 09:32:20
Ambit temp [°C] | humidity [rel%]	19.9 | 35
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	True | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5690 MHz

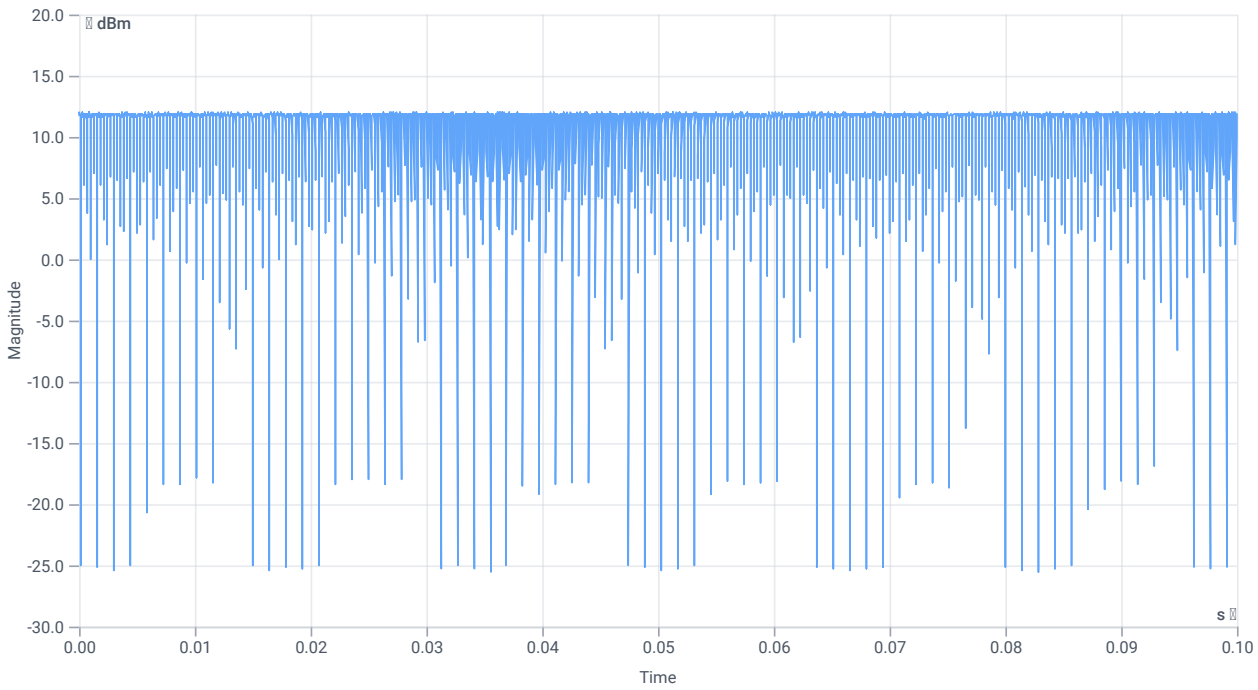
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.85	dBm	INFO
Ref. Frequency	---	---	5679.010	MHz	INFO

Evaluation max. Duty Cycle

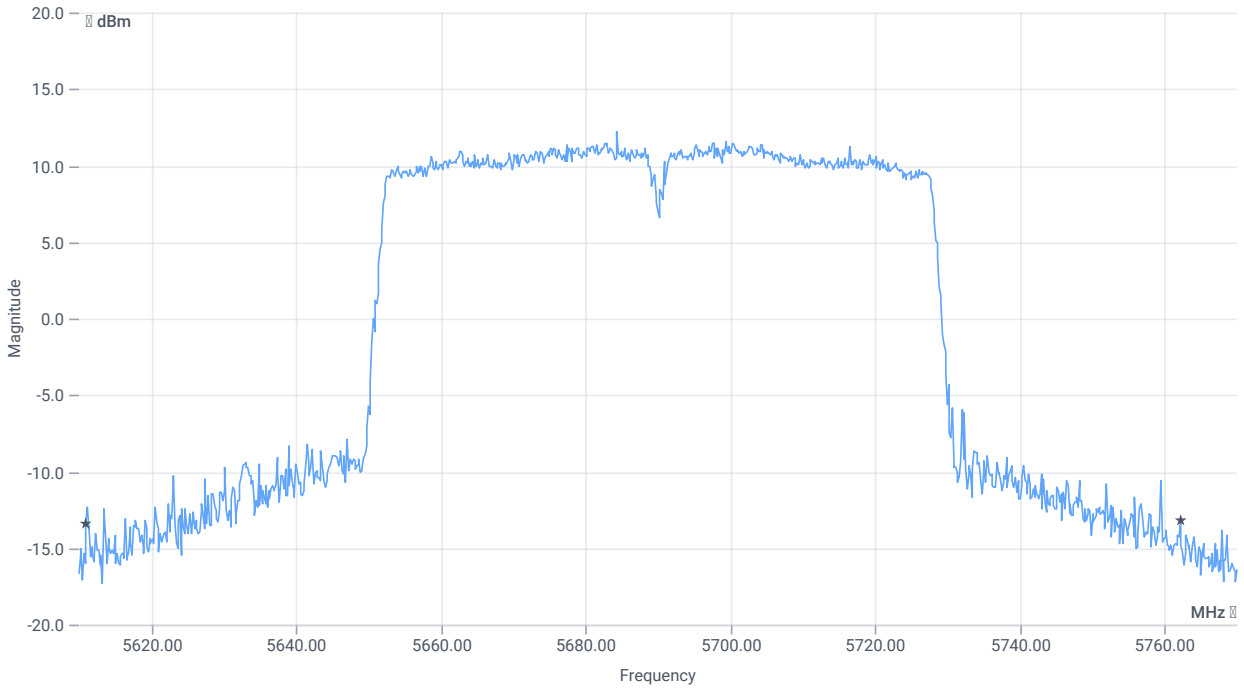
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:131					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

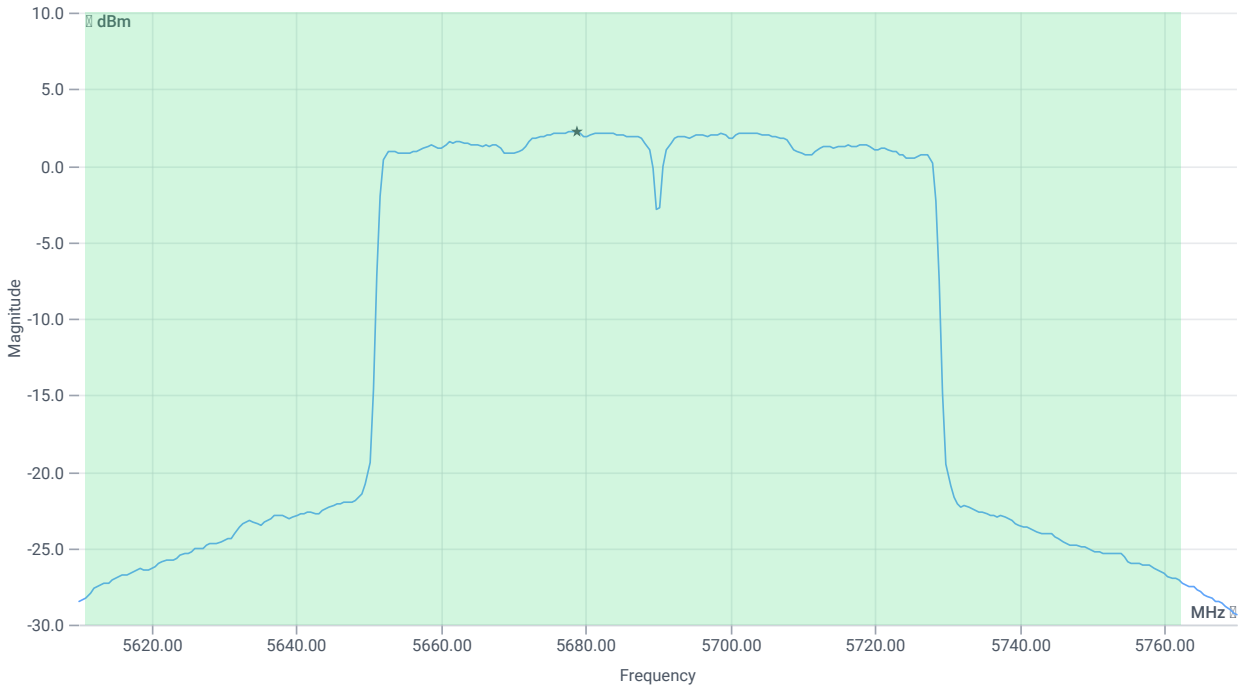
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	151.2	MHz	INFO
T1 26dB	---	---	5610.9600	MHz	INFO
T2 26dB	---	---	5762.1600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.85 | 16.66 | 25
Start [MHz] | Stop [MHz]	5610.000 | 5770.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	20.01	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.61	dBm	PASS
Limit: 11 dBm + 10 log 151.2					
Max Output Power DC corrected	---	32.8	20.61	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	2.22	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	11	2.82	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	22.01.2024 09:34:44
Ambit temp [°C] | humidity [rel%]	19.9 | 34
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	True | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

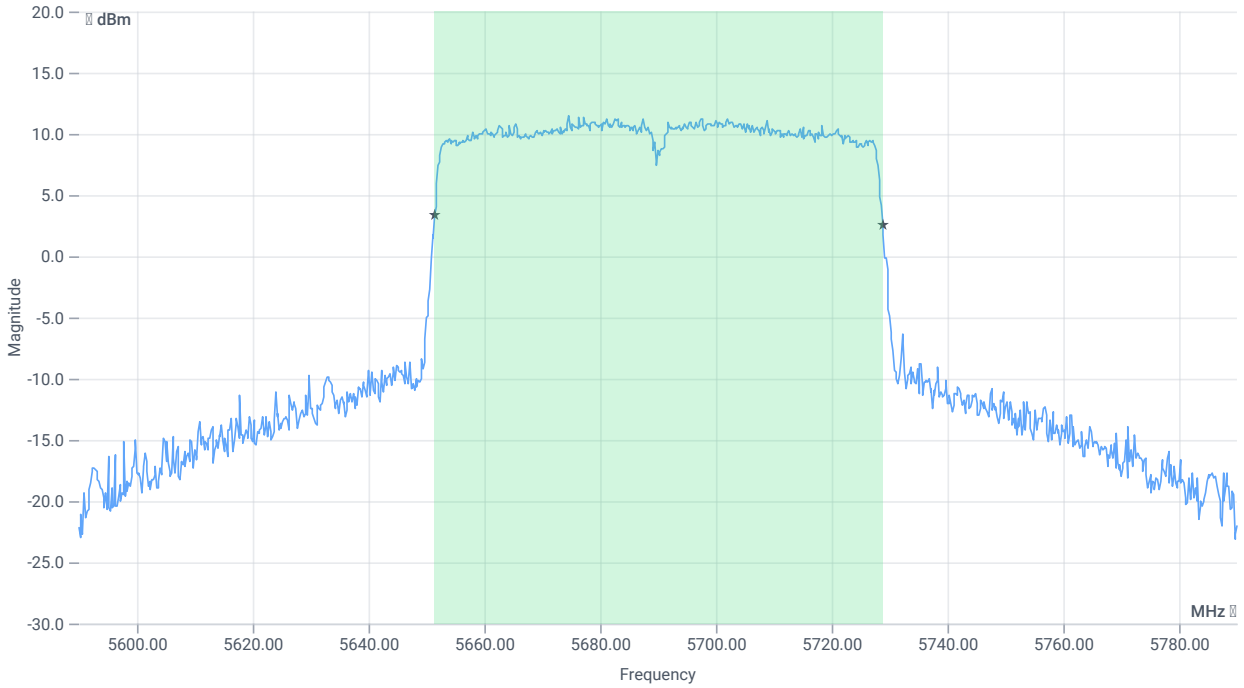
Test at TX 5690 MHz

RESULT: Reference Power cond.

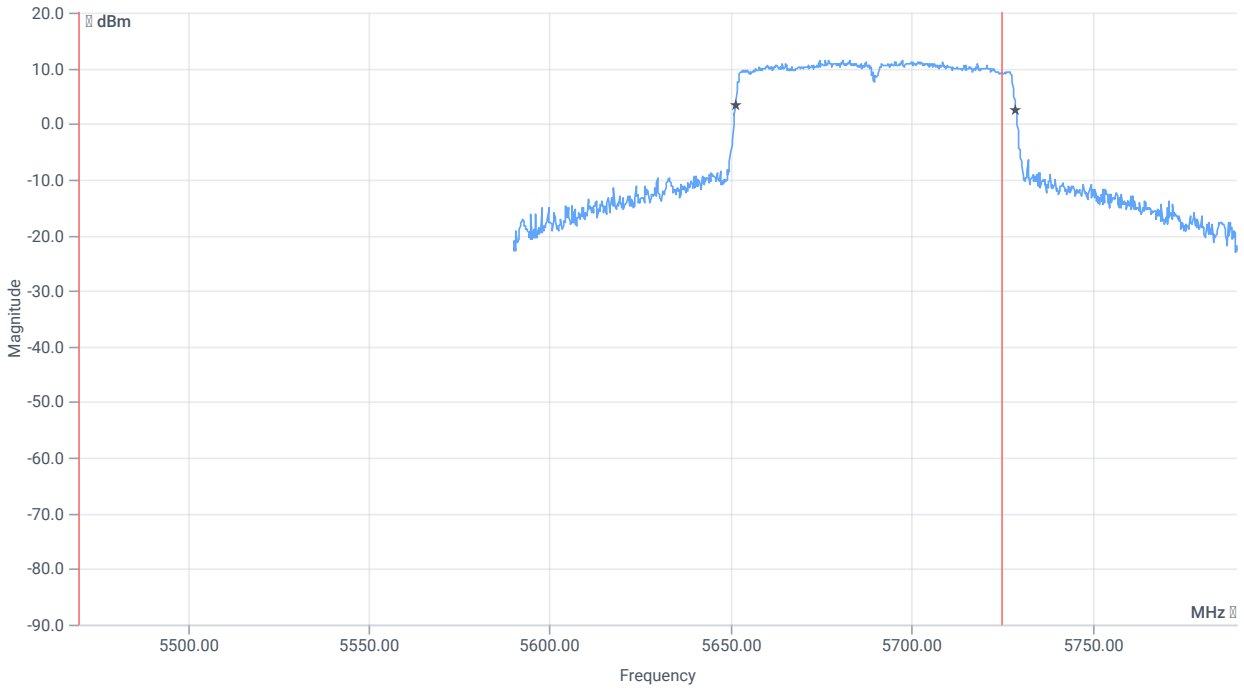
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.50	dBm	INFO
Ref. Frequency	---	---	5698.790	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	18.50 | 16.66 | 20
Start [MHz] | Stop [MHz]	5590.000 | 5790.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



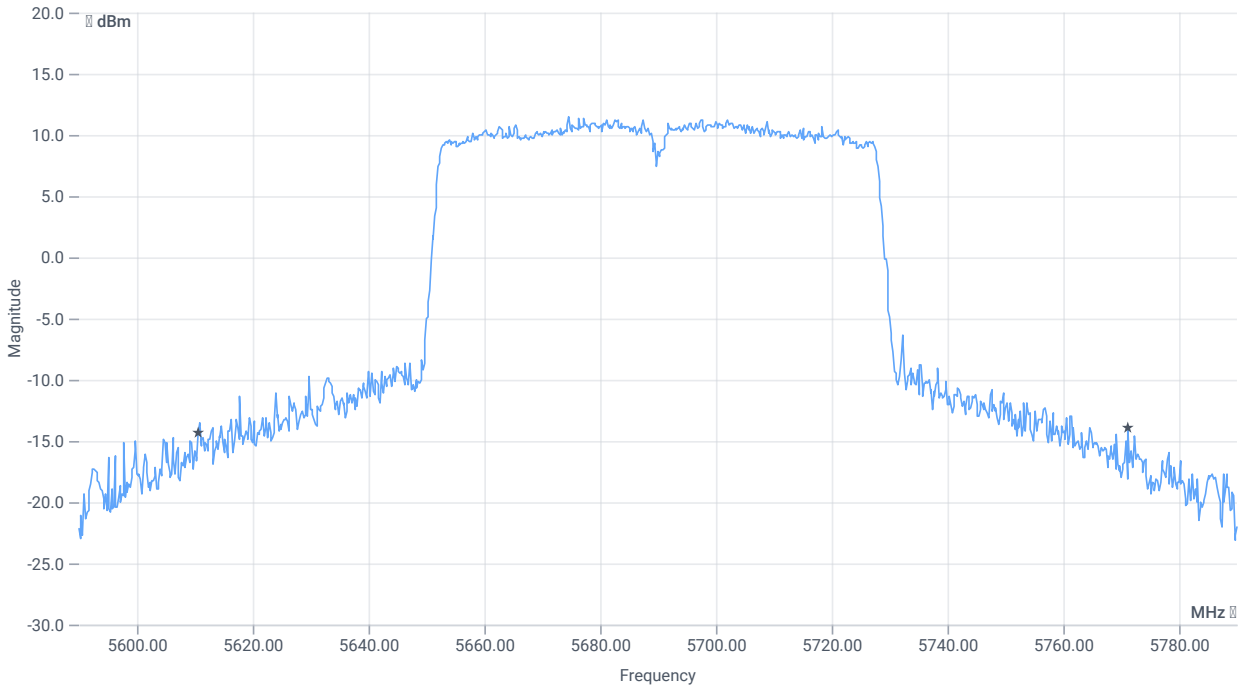
BW 99PCT



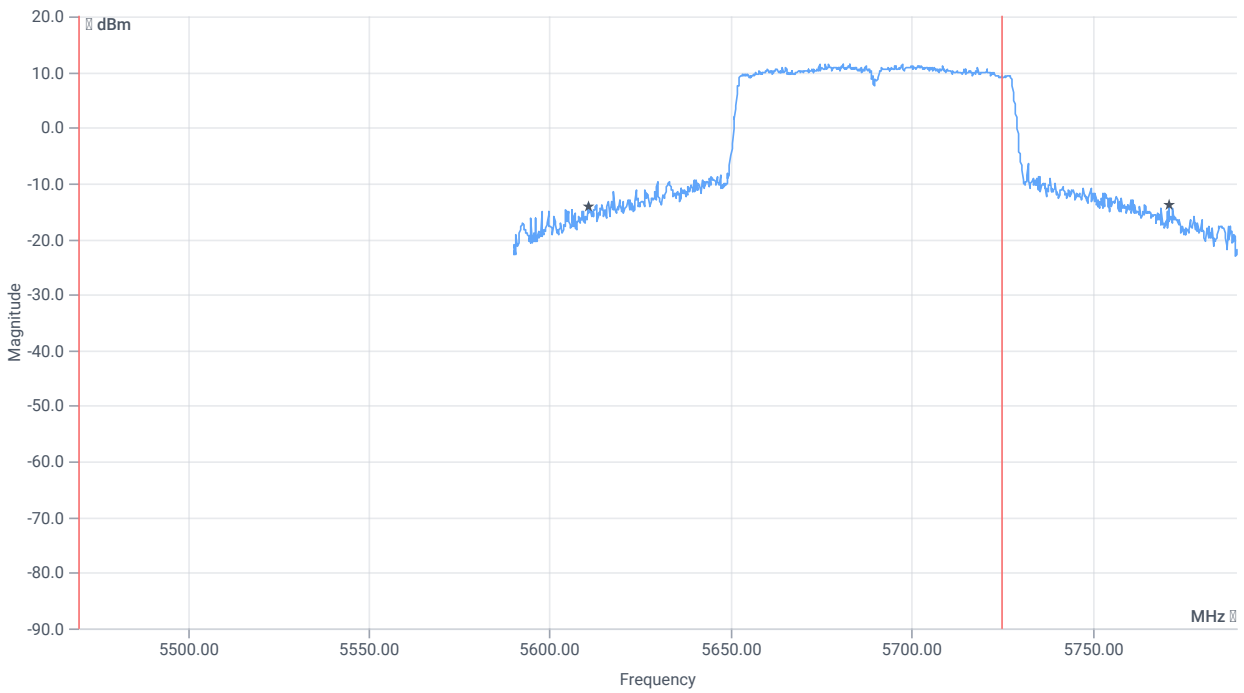
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	77.323	MHz	INFO
T1 99%	5470.000000	---	5651.4386	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5728.7612	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	160.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5610.6000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5771.2000	MHz	

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	22.01.2024 09:35:21
Ambit temp [°C] | humidity [rel%]	19.9 | 34
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	True | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5690 MHz

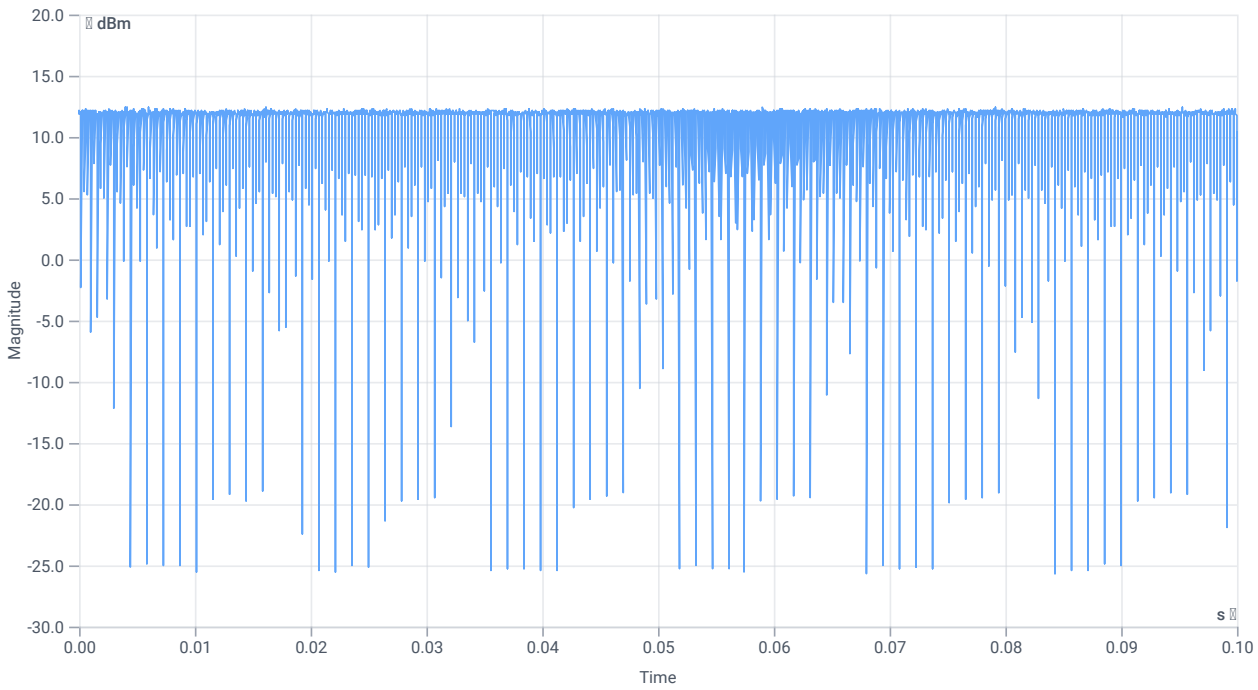
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.89	dBm	INFO
Ref. Frequency	---	---	5685.000	MHz	INFO

Evaluation max. Duty Cycle

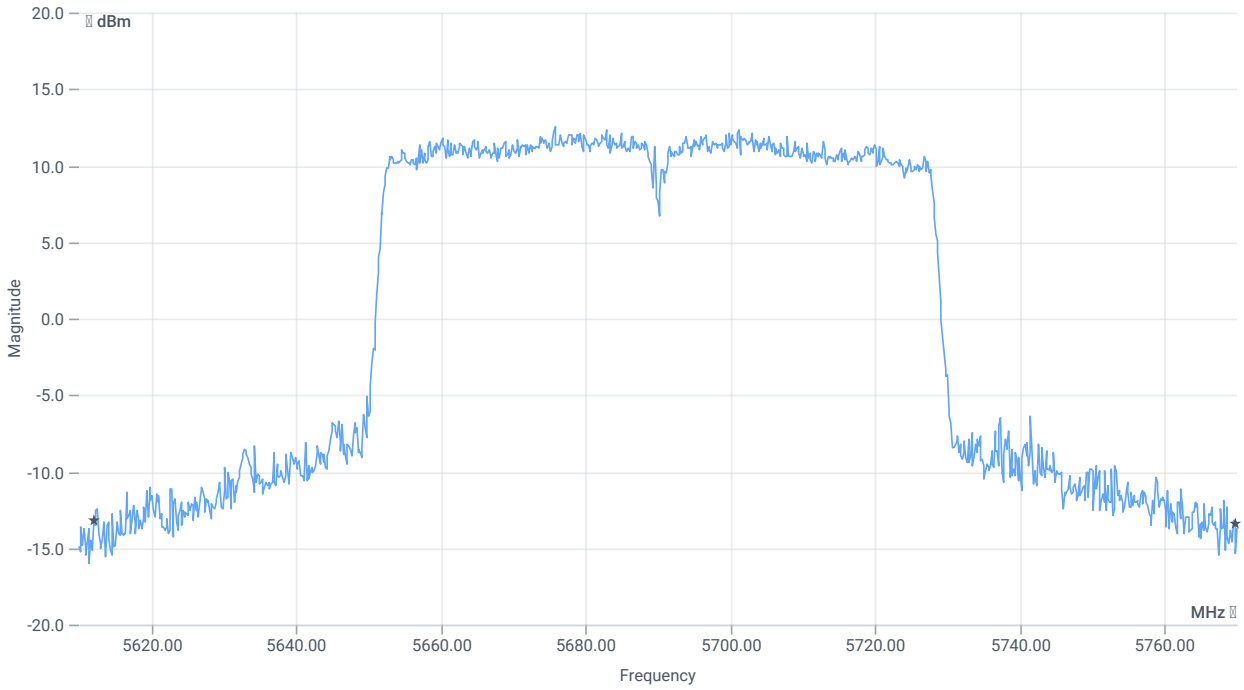
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:138					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

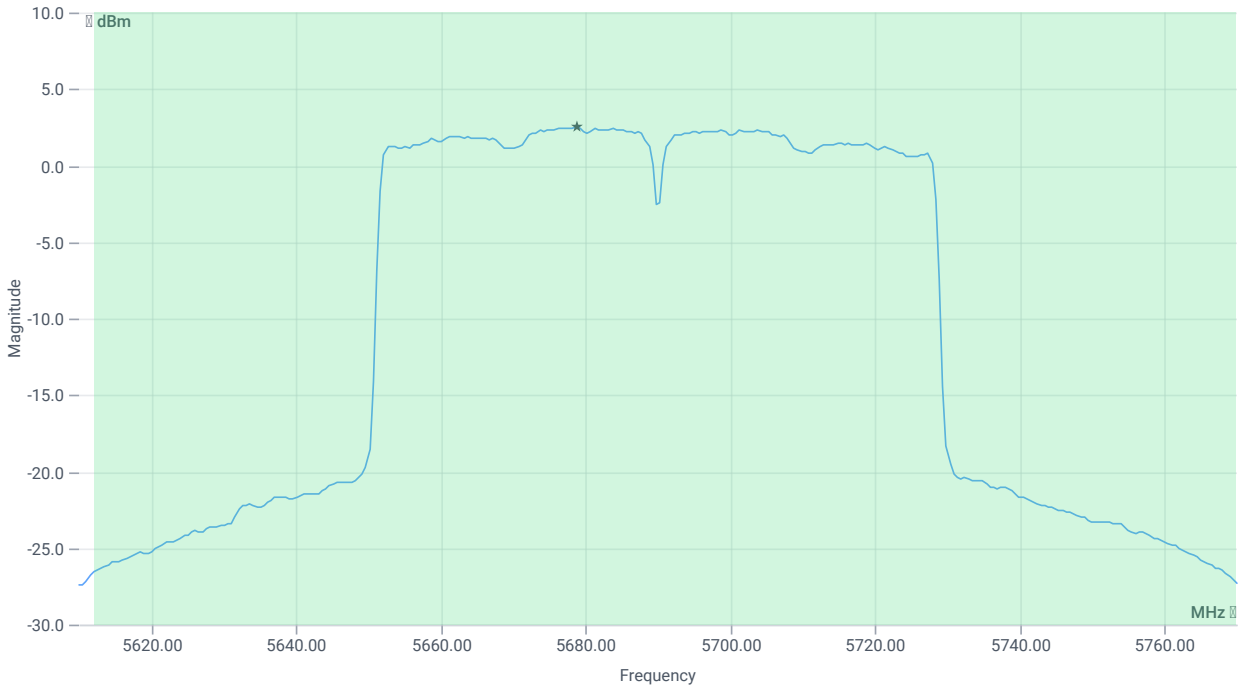
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	157.6	MHz	INFO
T1 26dB	---	---	5612.0800	MHz	INFO
T2 26dB	---	---	5769.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.89 | 16.66 | 25
Start [MHz] | Stop [MHz]	5610.000 | 5770.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	20.26	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.86	dBm	PASS
Limit: 11 dBm + 10 log 157.6					
Max Output Power DC corrected	---	32.98	20.86	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	2.55	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	11	3.15	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	22.01.2024 09:37:45
Ambit temp [°C] | humidity [rel%]	19.9 | 34
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	True | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

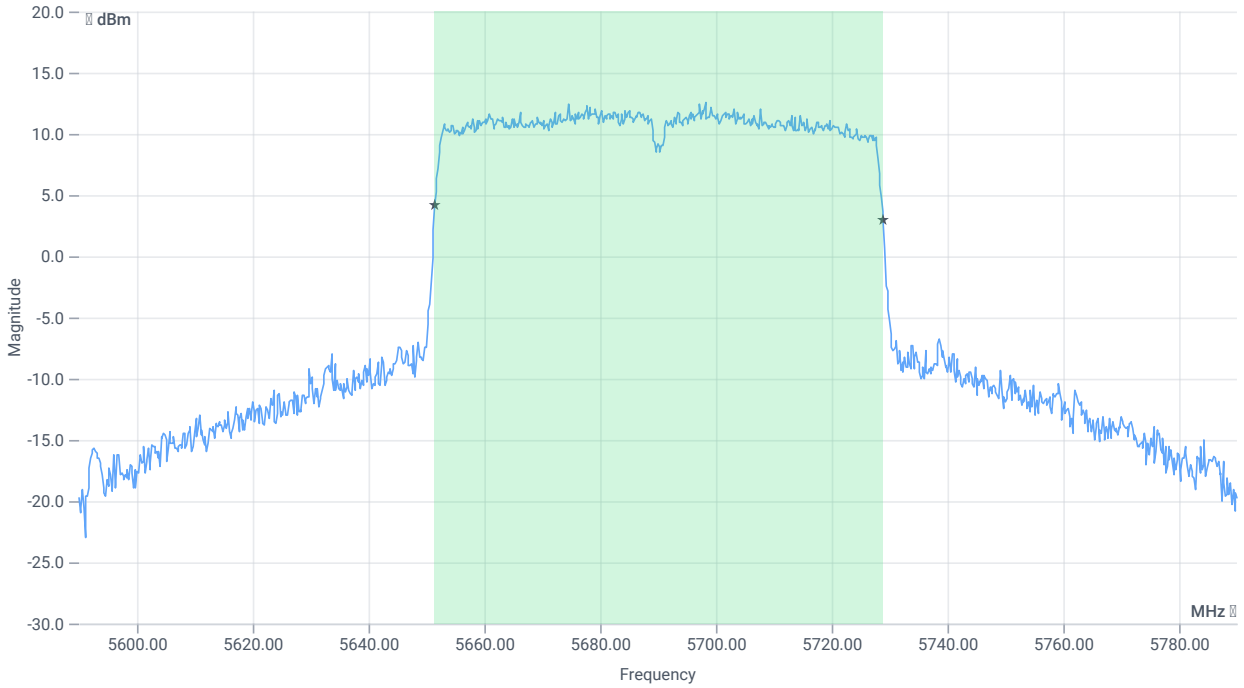
Test at TX 5690 MHz

RESULT: Reference Power cond.

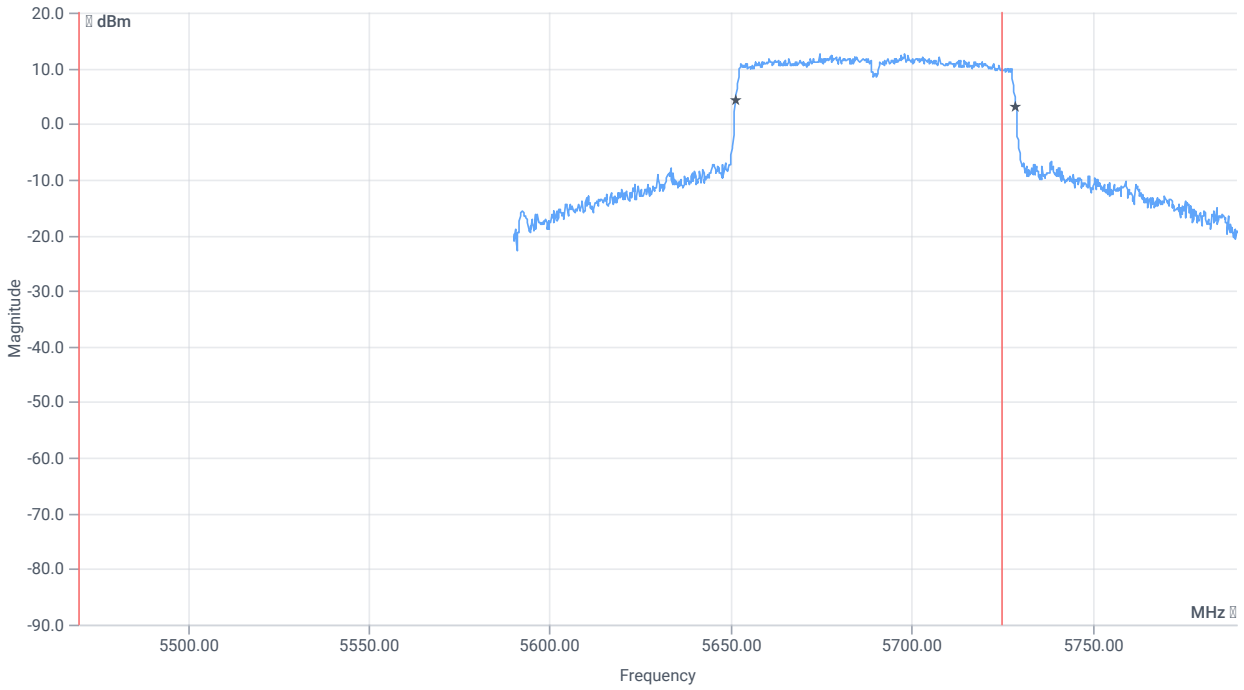
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.09	dBm	INFO
Ref. Frequency	---	---	5698.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.09 | 16.66 | 20
Start [MHz] | Stop [MHz]	5590.000 | 5790.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



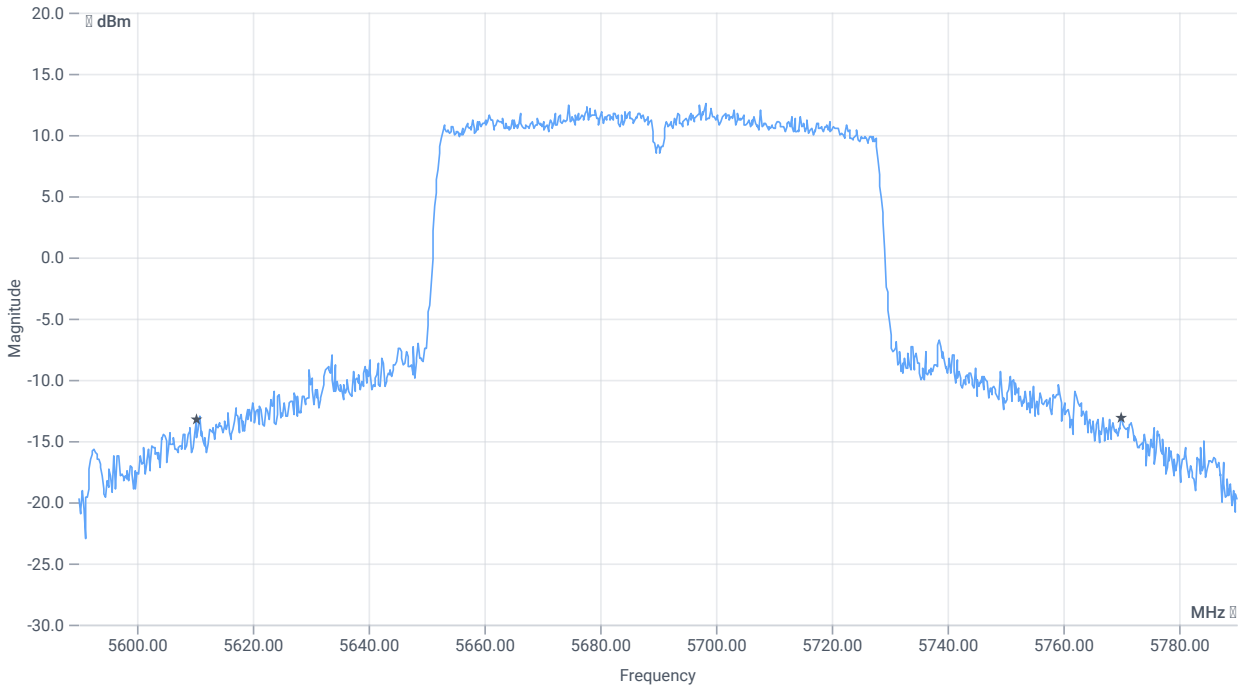
BW 99PCT



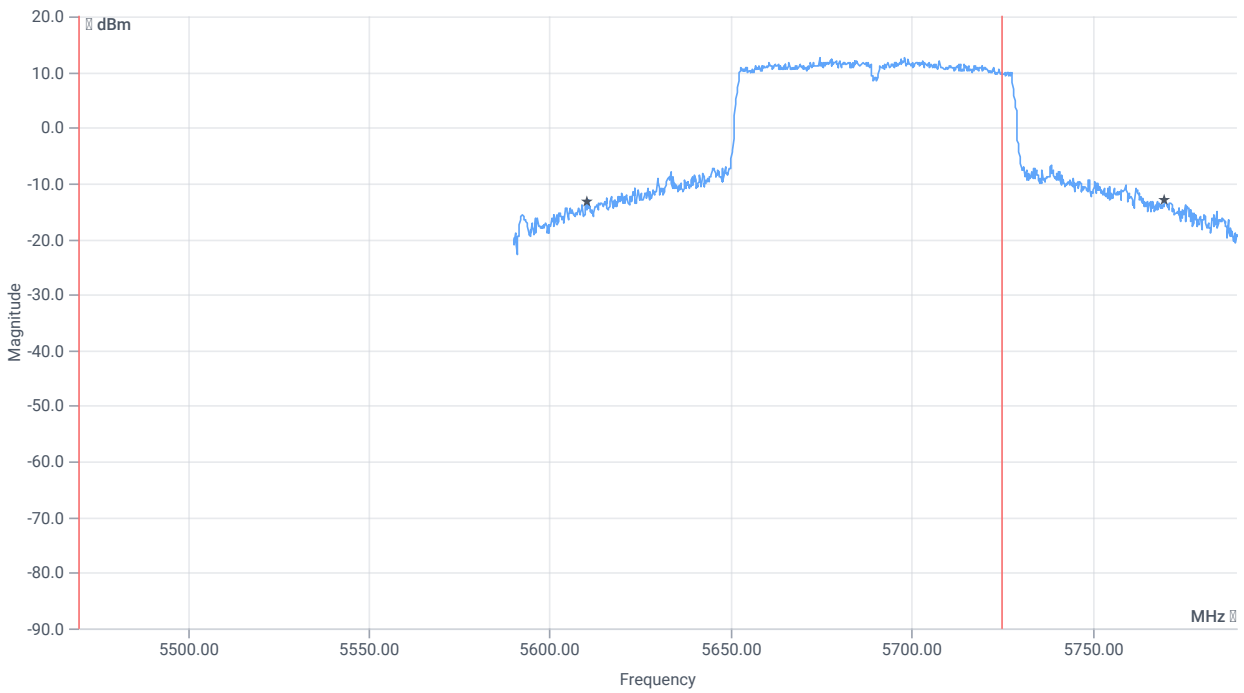
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	77.522	MHz	INFO
T1 99%	5470.000000	---	5651.4386	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5728.9610	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	159.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5610.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5770.0000	MHz	

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2C

References

TC start	22.01.2024 09:38:22
Ambit temp [°C] | humidity [rel%]	20.0 | 34
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5530
Frequency mid to test	False | Freq [MHz] 5610
Frequency high to test	True | Freq [MHz] 5690
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5690 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	20.61	dBm	INFO
Ant:1 BW 26dB	---	---	151.200	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	20.86	dBm	INFO
Ant:2 BW 26dB	---	---	157.600	MHz	INFO
∑ Limit absolute	---	24	23.75	dBm	PASS
∑ Limit: 11 dBm + 10 log 151.2	---	32.8	23.75	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	2.82	dBm/1MHz	INFO
Ant:2 PSD	---	---	3.15	dBm/1MHz	INFO
∑	---	11	6	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:04:24
Ambit temp [°C] | humidity [rel%]	20.2 | 32
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5775 MHz

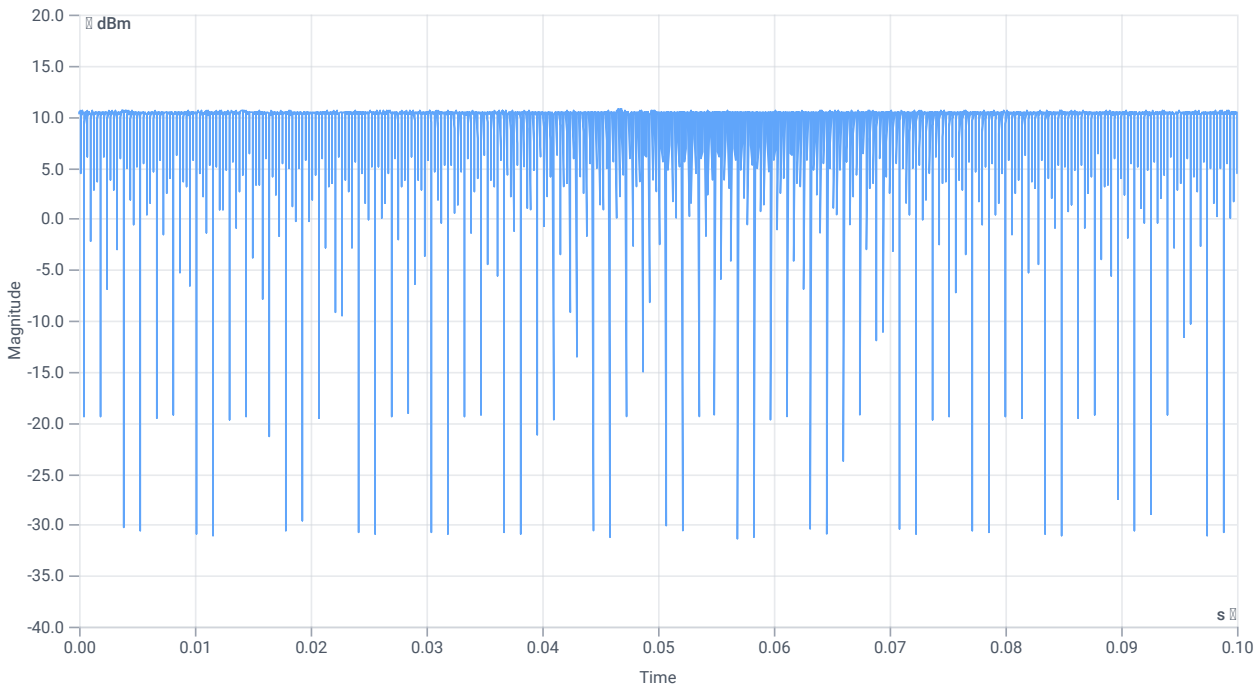
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.33	dBm	INFO
Ref. Frequency	---	---	5787.590	MHz	INFO

Evaluation max. Duty Cycle

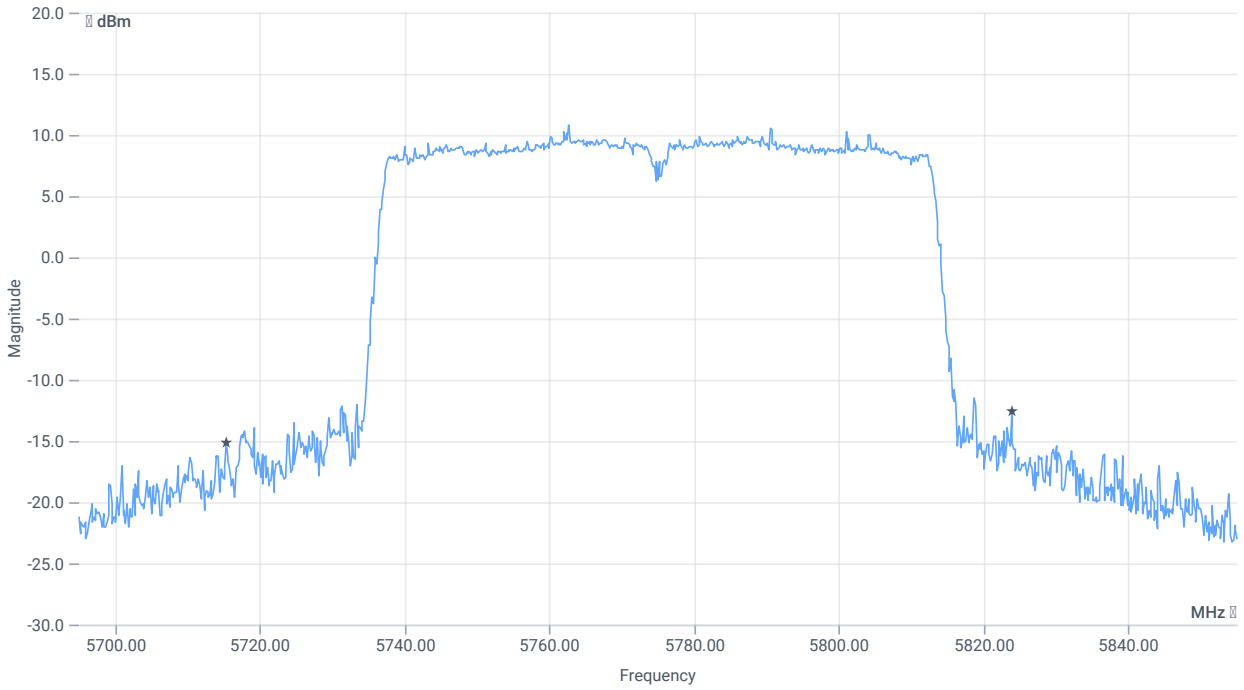
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:138					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

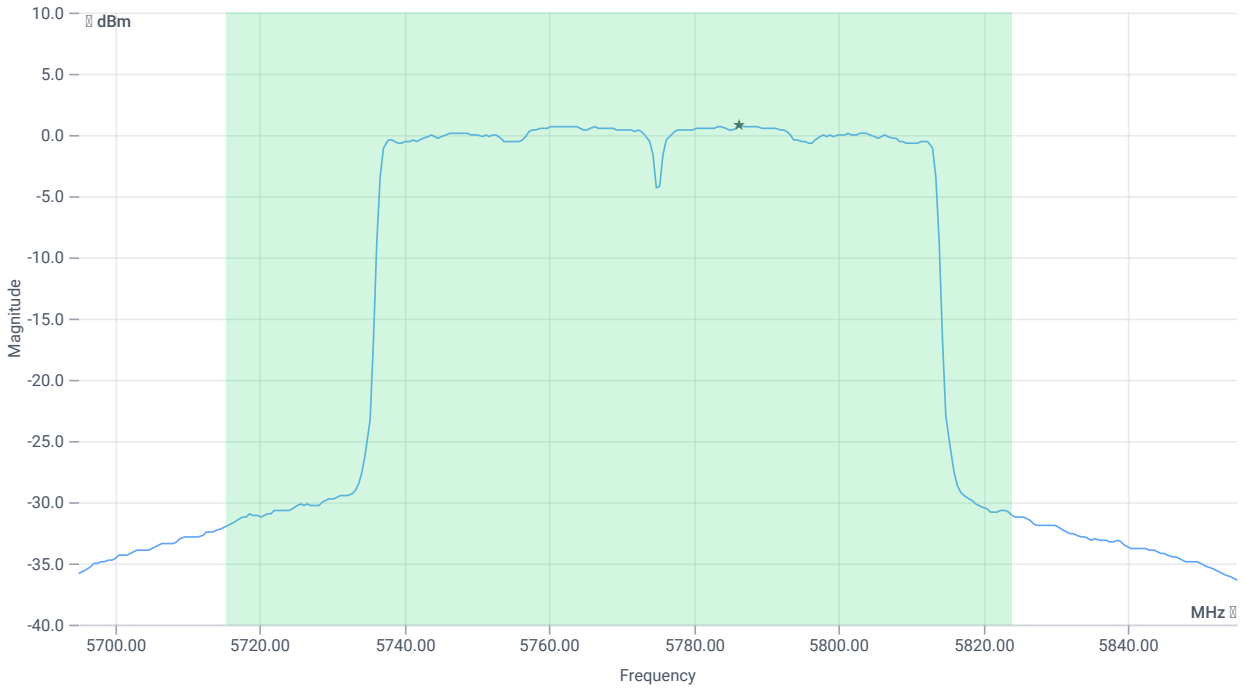
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	108.48	MHz	INFO
T1 26dB	---	---	5715.3200	MHz	INFO
T2 26dB	---	---	5823.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.33 | 16.82 | 20
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

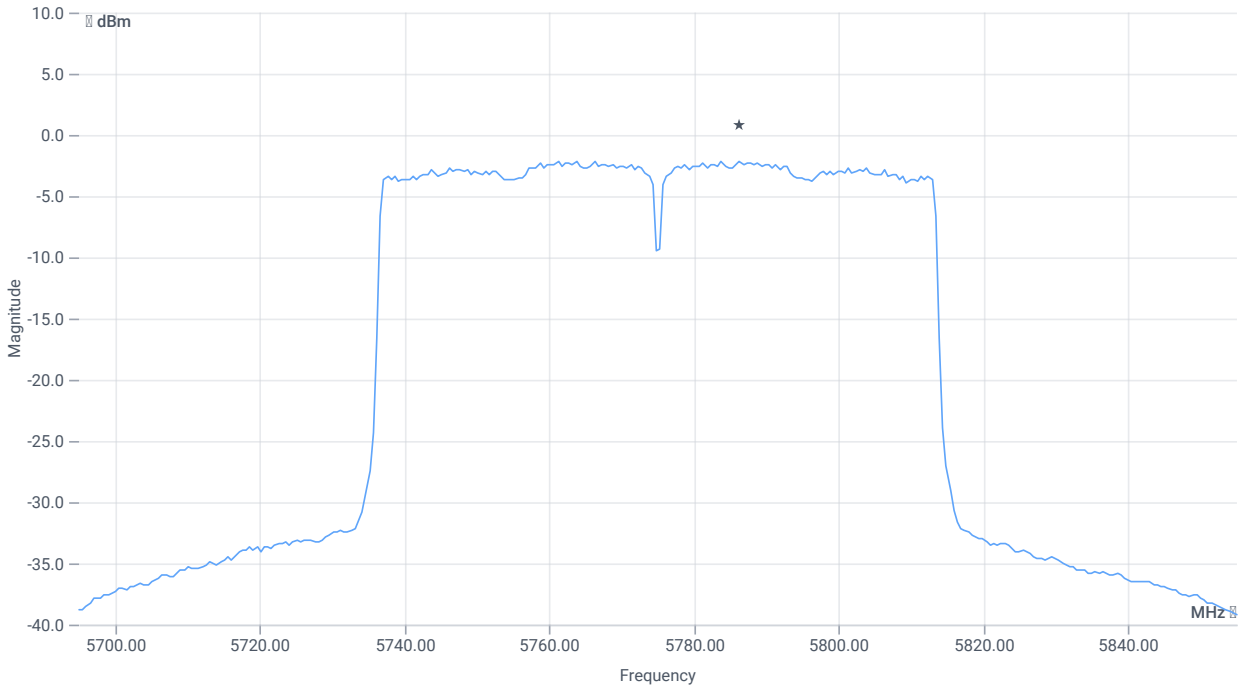
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	18.61	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	19.21	dBm	PASS
Limit: 11 dBm + 10 log 108.48					
Max Output Power DC corrected	---	31.35	19.21	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.33 | 16.82 | 20
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-2.1	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	30	-1.5	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:08:52
Ambit temp [°C] | humidity [rel%]	20.2 | 32
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

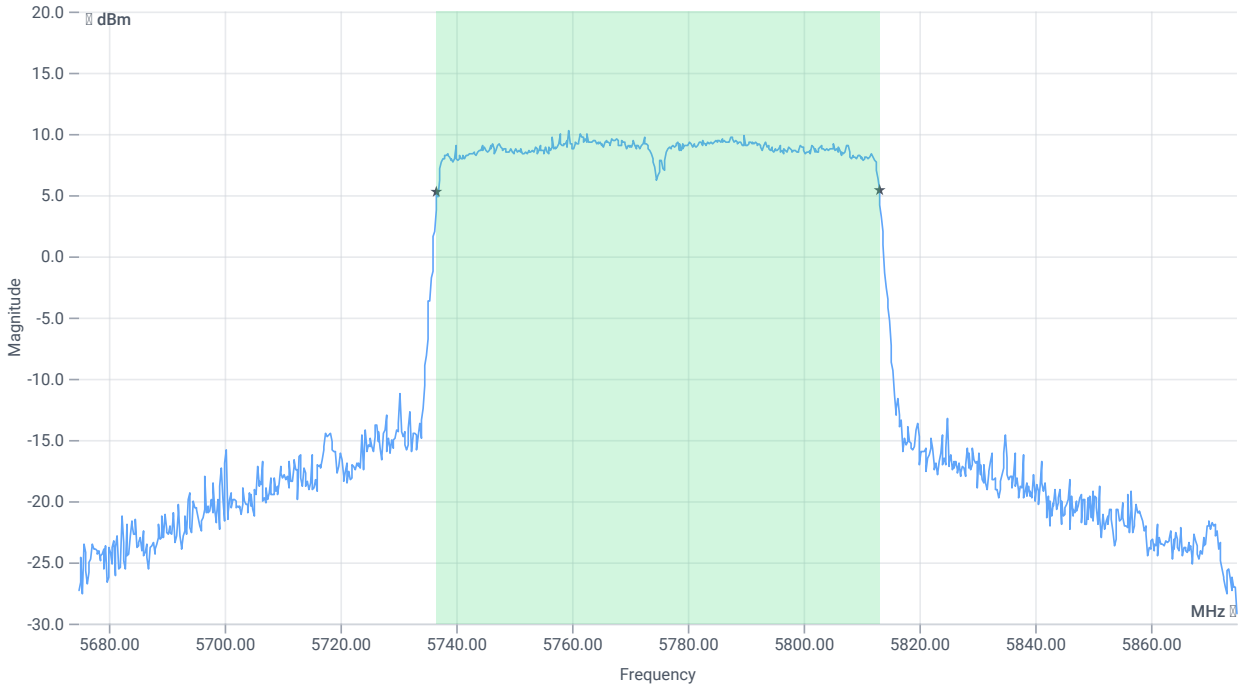
Test at TX 5775 MHz

RESULT: Reference Power cond.

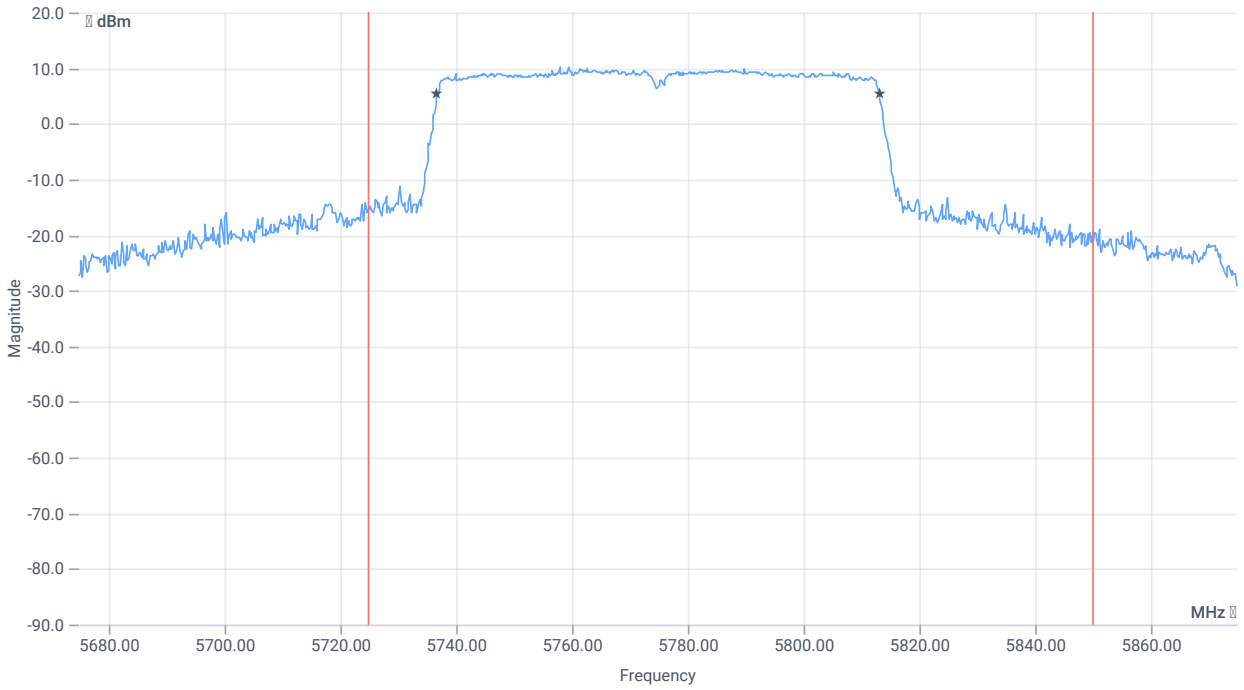
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.16	dBm	INFO
Ref. Frequency	---	---	5751.220	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.16 | 16.82 | 20
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



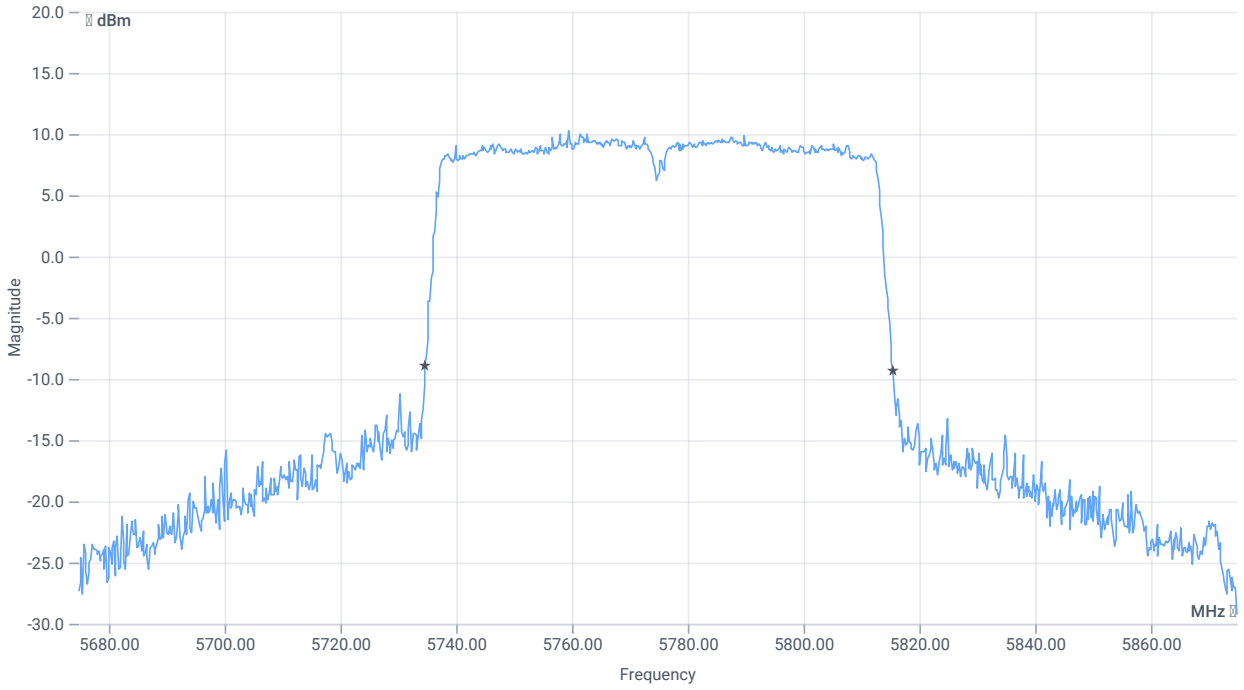
BW 99PCT



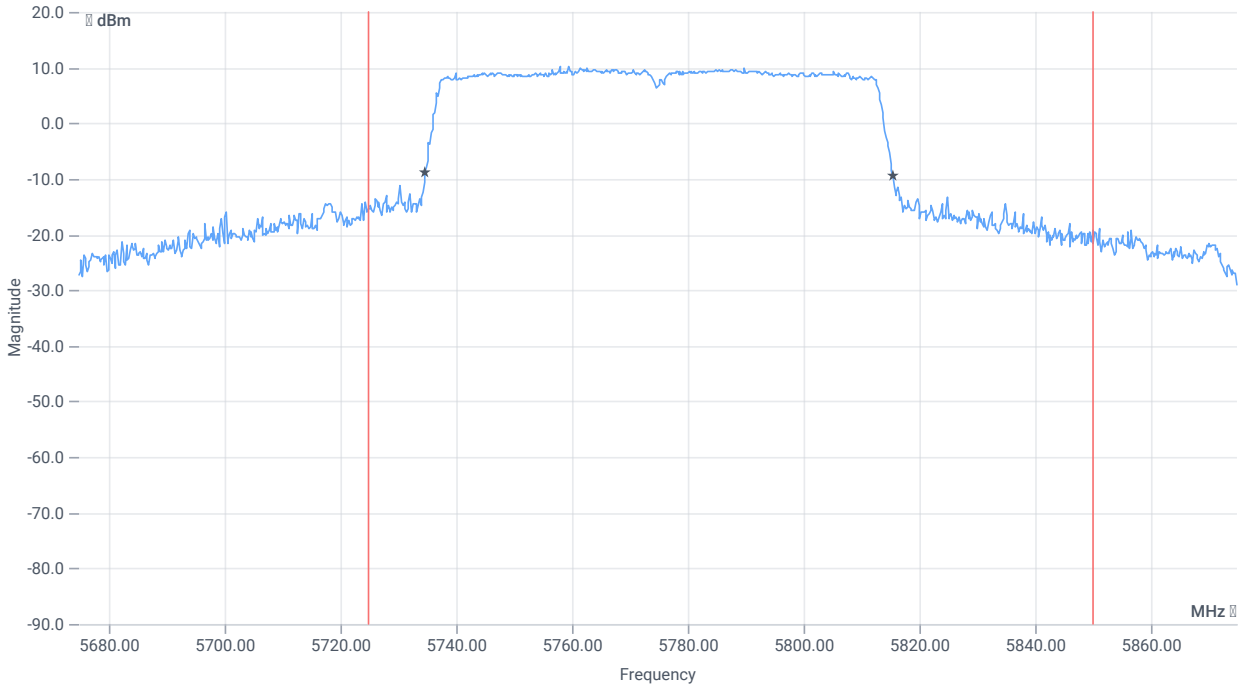
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	76.324	MHz	INFO
T1 99%	5725.000000	---	5736.8382	MHz	PASS
T2 99%	---	5850.000000	5813.1618	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	80.8	MHz	INFO
T1 20dB	5725.000000	---	5734.8000	MHz	PASS
T2 20dB	---	5850.000000	5815.6000	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:09:32
Ambit temp [°C] | humidity [rel%]	20.2 | 31
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

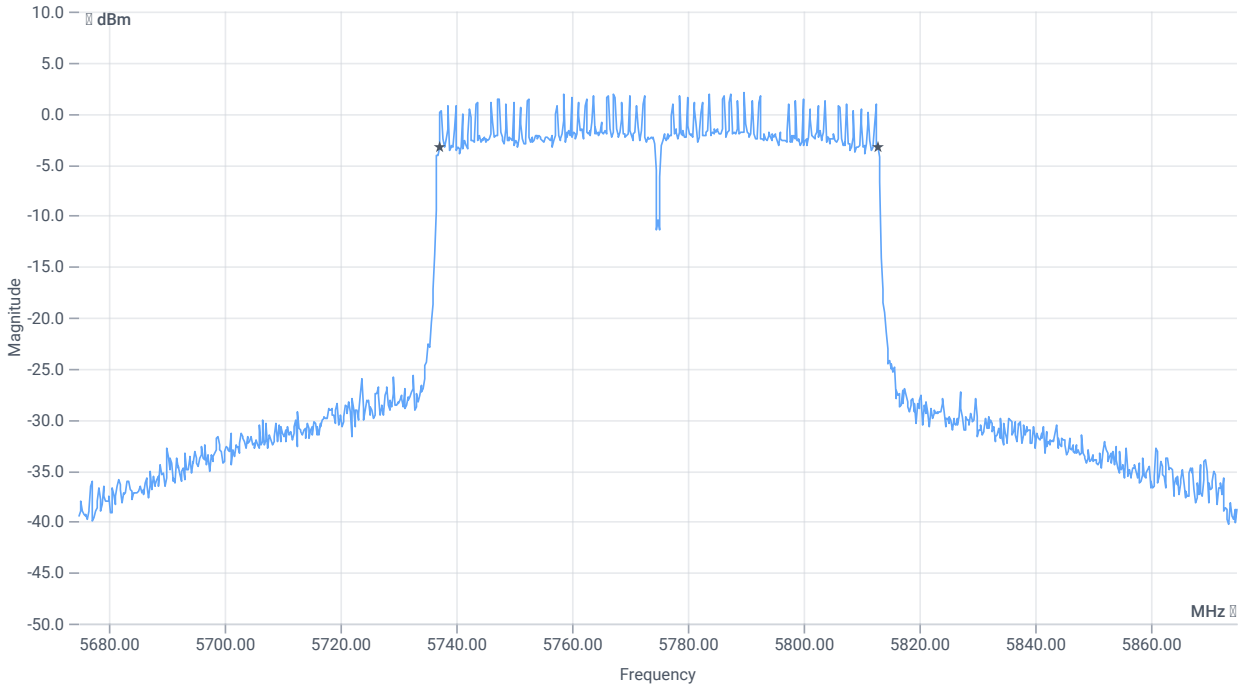
Test at TX 5775 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	8.98	dBm	INFO
Ref. Frequency	---	---	5787.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.98 | 16.82 | 20
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	---	75.8	MHz	PASS

Verdict
PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:10:43
Ambit temp [°C] | humidity [rel%]	20.2 | 31
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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 5775 MHz

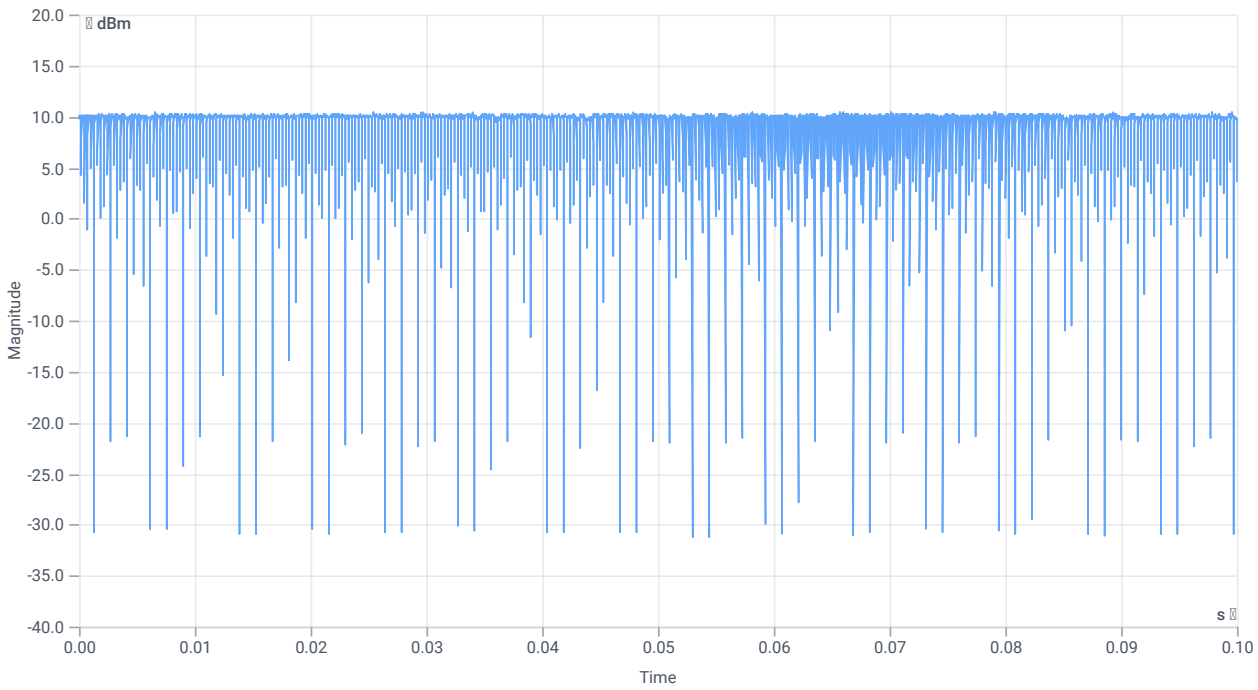
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.56	dBm	INFO
Ref. Frequency	---	---	5763.810	MHz	INFO

Evaluation max. Duty Cycle

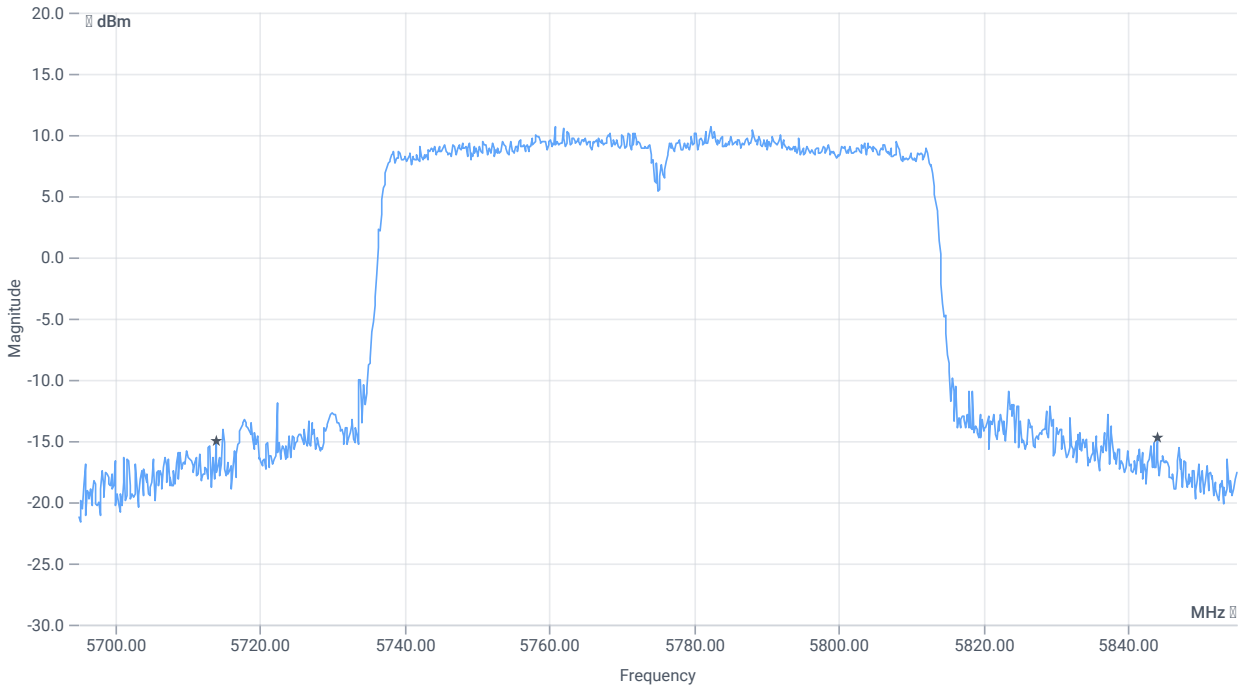
Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:139					
Duty Cycle (Burst Ratio) max	---	---	0.947	---	INFO
Duty Cycle max	---	---	0.237	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.87	---	INFO
Duty Cycle min	---	---	0.605	dB	INFO
Max TX Burst Length	---	---	1.35	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

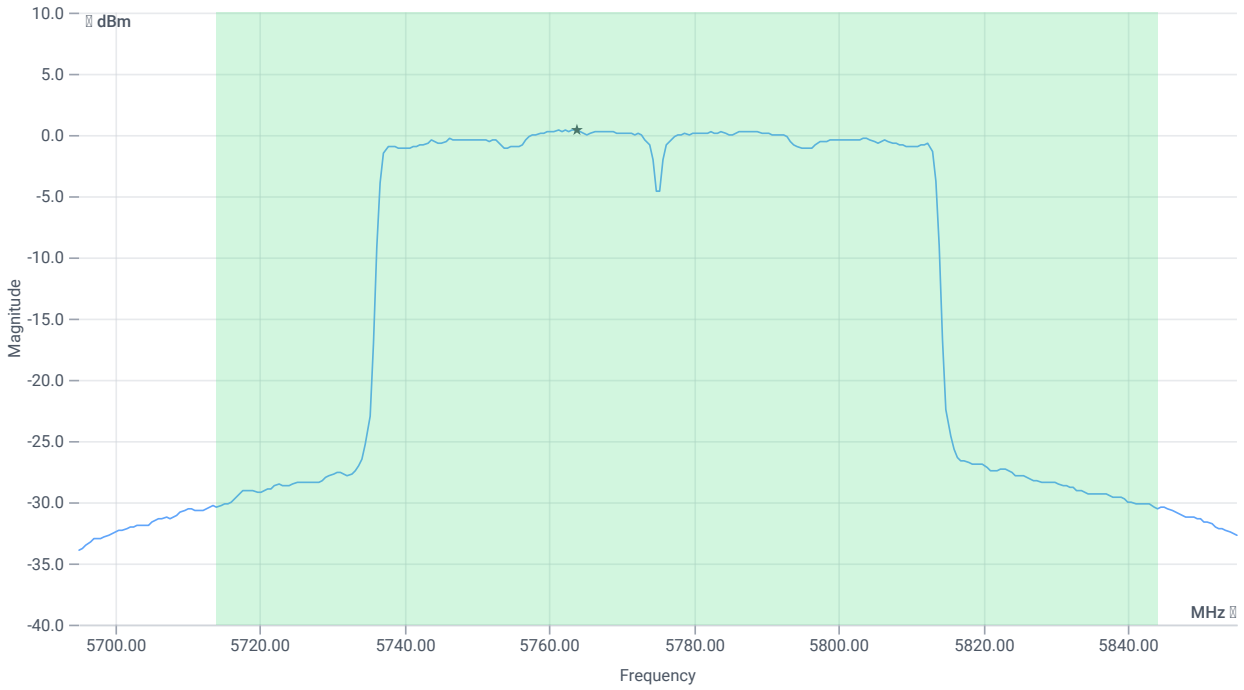
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	130.08	MHz	INFO
T1 26dB	---	---	5713.8800	MHz	INFO
T2 26dB	---	---	5843.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.56 | 16.82 | 20
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



Max OP and PSD

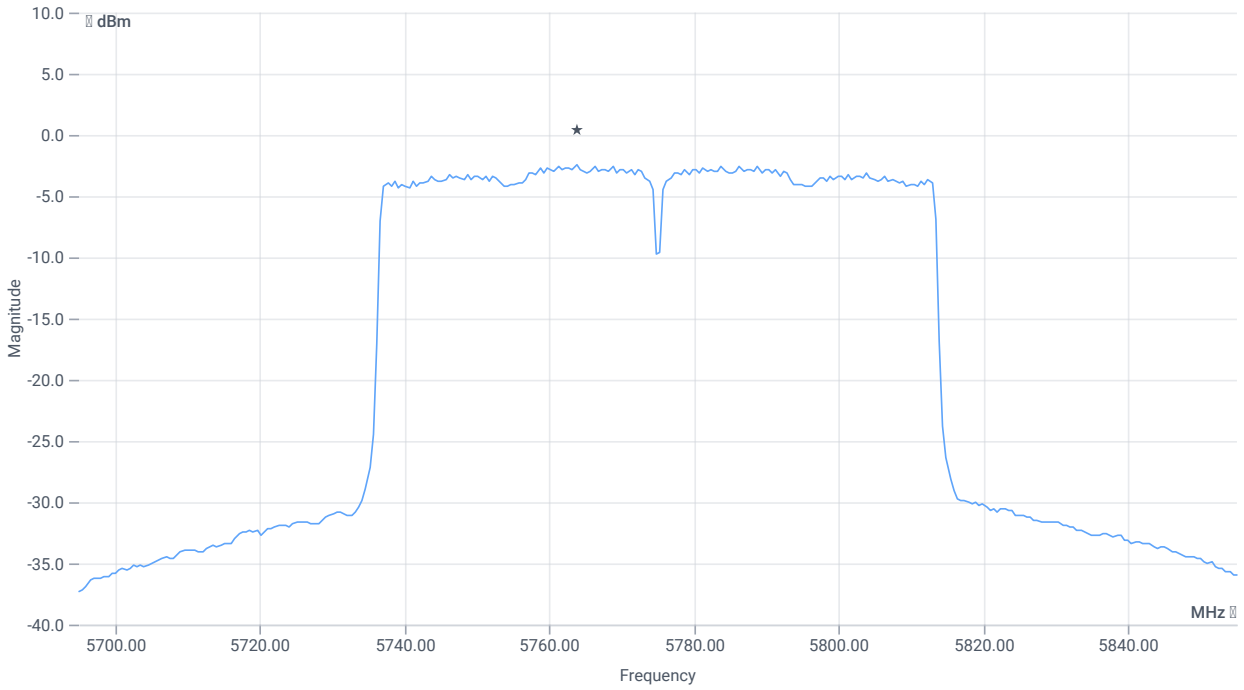
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	18.23	dBm	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	18.83	dBm	PASS
Limit: 11 dBm + 10 log 130.08					
Max Output Power DC corrected	---	32.14	18.83	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.56 | 16.82 | 20
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: time [ms] | count | points per Section | type	107000 | 1 | 320 | SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-2.43	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.6	dB	INFO
Power Spectral Density DC corrected	---	30	-1.83	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:15:12
Ambit temp [°C] | humidity [rel%]	20.2 | 31
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

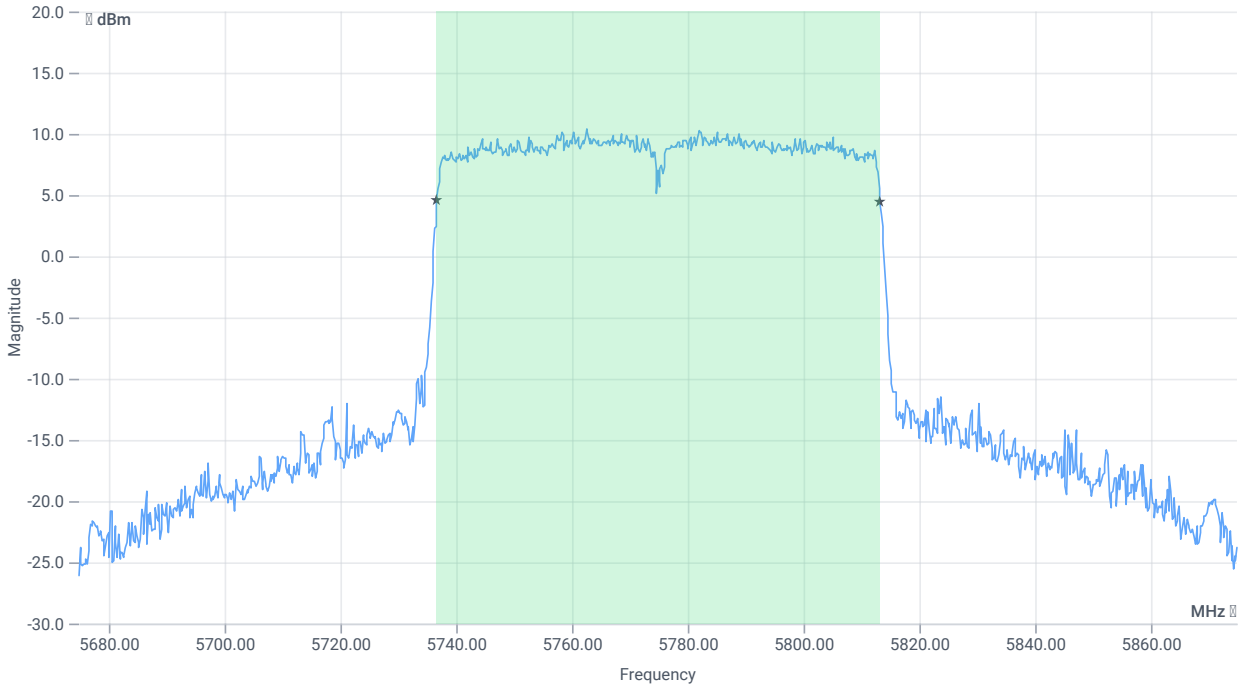
Test at TX 5775 MHz

RESULT: Reference Power cond.

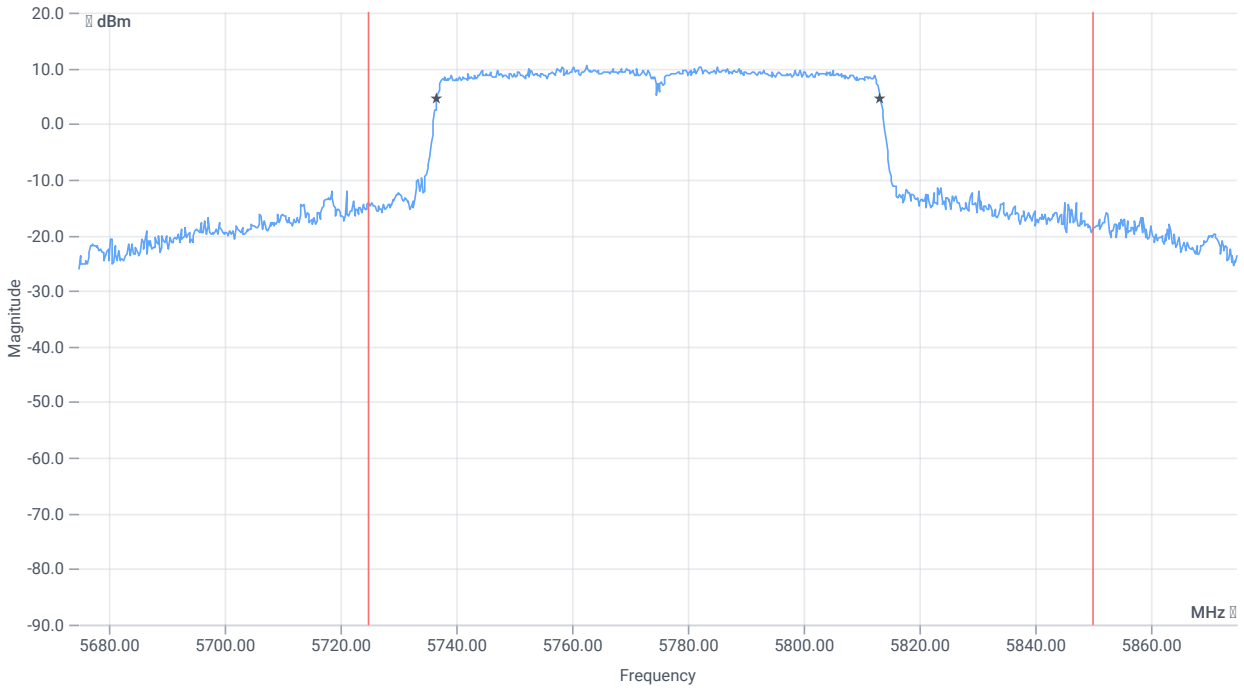
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.46	dBm	INFO
Ref. Frequency	---	---	5789.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	17.46 | 16.82 | 20
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



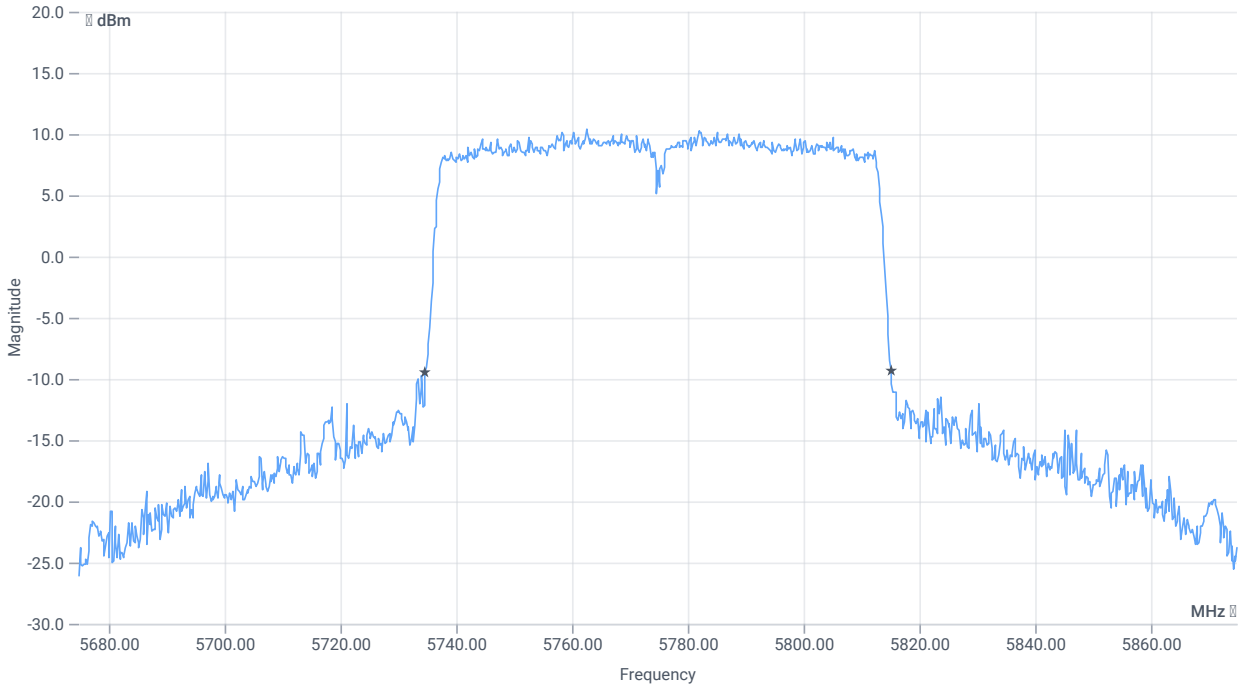
BW 99PCT



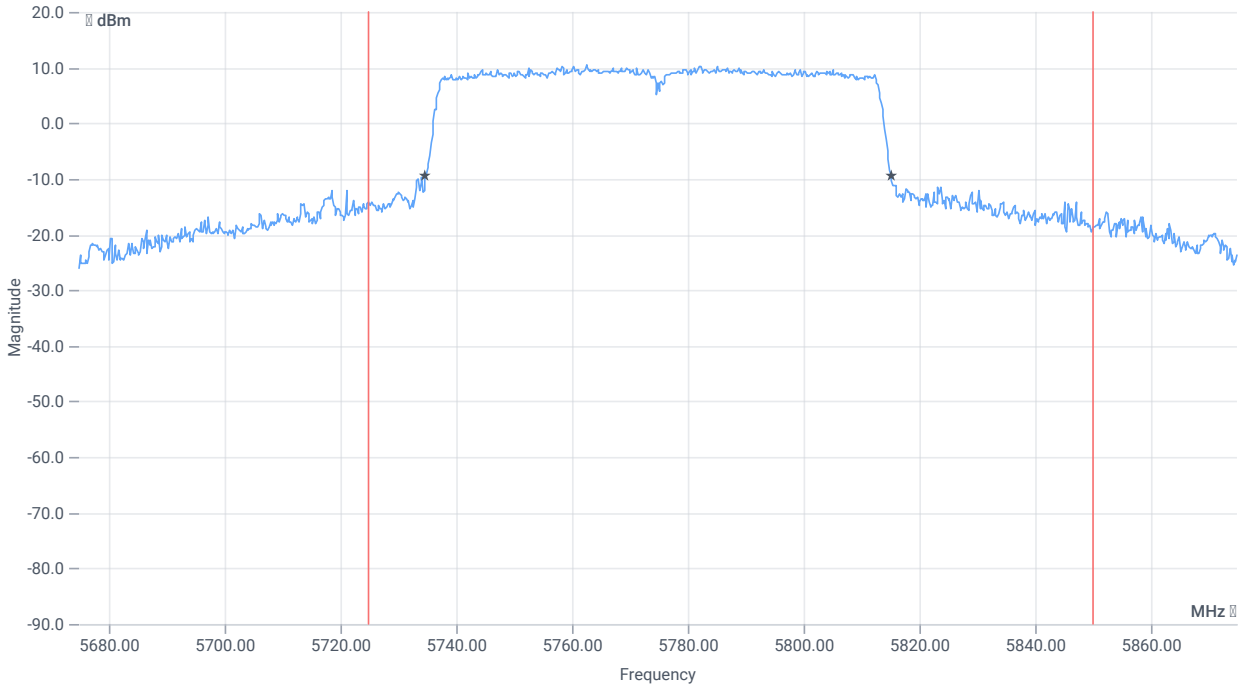
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	76.523	MHz	INFO
T1 99%	5725.000000	---	5736.8382	MHz	PASS
T2 99%	---	5850.000000	5813.3616	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	80.4	MHz	INFO
T1 20dB	5725.000000	---	5734.8000	MHz	PASS
T2 20dB	---	5850.000000	5815.2000	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:15:52
Ambit temp [°C] | humidity [rel%]	20.2 | 31
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
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

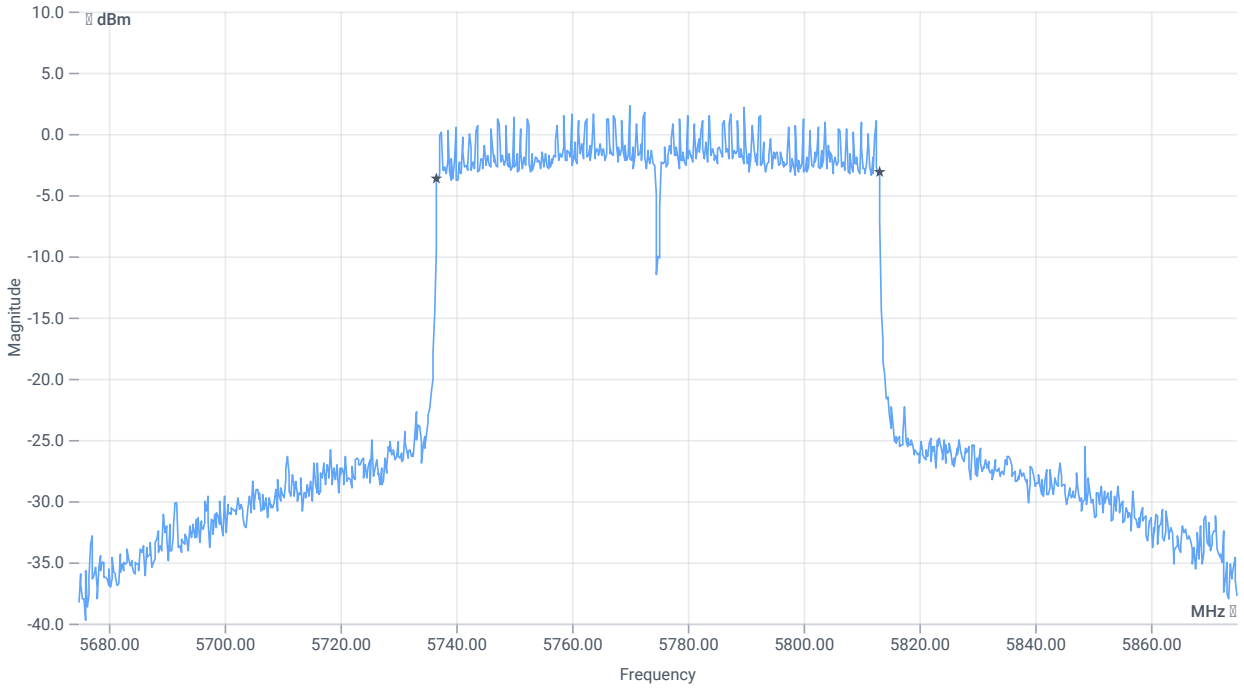
Test at TX 5775 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.11	dBm	INFO
Ref. Frequency	---	---	5765.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.12 | 16.82 | 20
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	---	76.4	MHz	PASS

Verdict
PASS

FCC 15.407 # MIMO ∑ Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	22.01.2024 08:16:22
Ambit temp [°C] | humidity [rel%]	20.2 | 31
System version	4.7.1.5
Standard | Version	FCC 15.407 | NI
Method	
Description	MIMO ∑ FCC Power & psd - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	1.4
Full path name | type	None

Equipment

Test at TX 5775 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	19.21	dBm	INFO
Ant:1 BW 26dB	---	---	108.480	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	18.83	dBm	INFO
Ant:2 BW 26dB	---	---	130.080	MHz	INFO
∑ Limit absolute	---	30	22.03	dBm	PASS
∑ Limit: 11 dBm + 10 log 108.48	---	31.35	22.03	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	-1.5	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	-1.83	dBm/0.5MHz	INFO
∑	---	30	1.35	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	19.01.2024 14:21:32
Ambit temp [°C] | humidity [rel%]	23.0 | 26
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	3.4
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 5775 MHz

RESULT: Reference Power cond.

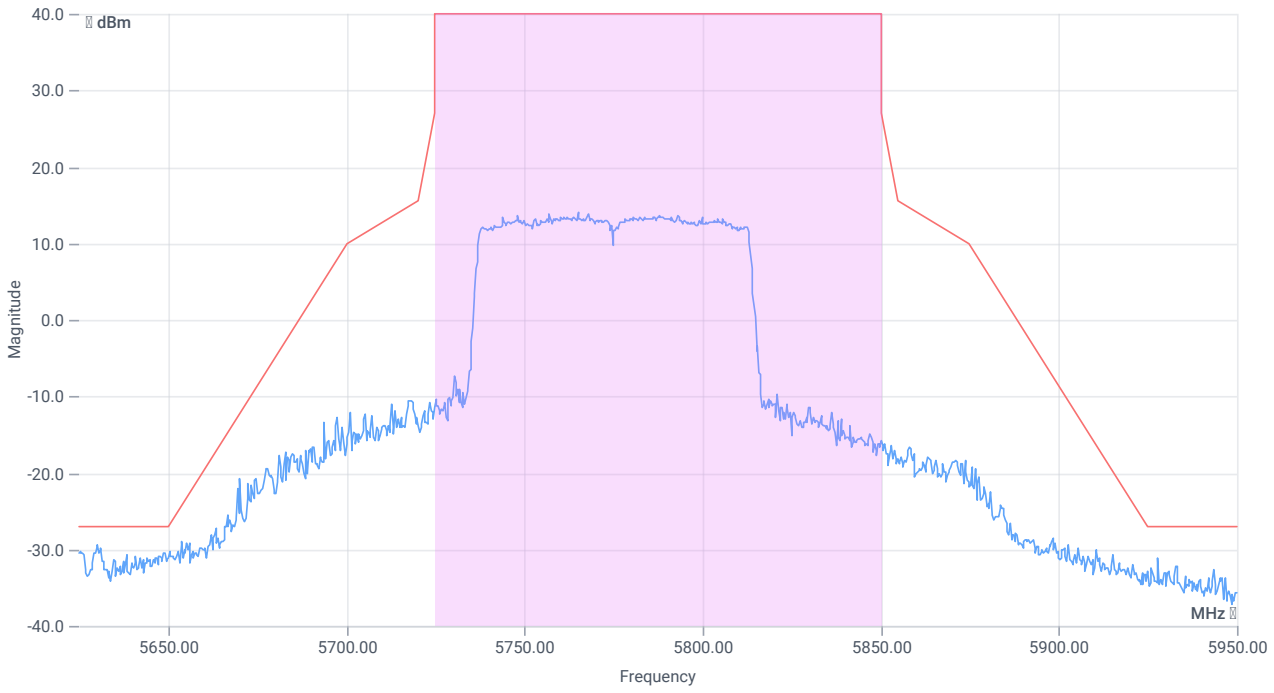
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.97	dBm	INFO
Ref. Frequency	---	---	5764.410	MHz	INFO

Antenna gain

Considered antenna gain [dBi]:	2 / max found in range 5625 to 5950 MHz

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.97 | 18.82 | 15
Start [MHz] | Stop [MHz]	5625.000 | 5950.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



Emission Mask (e.i.r.p)

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT

Verdict
PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ac-VHT80 mode U-NII-3

References

TC start	19.01.2024 14:22:09
Ambit temp [°C] | humidity [rel%]	23.0 | 26
System version	4.7.1.5
Standard | Version	FCC 15.407, ISED RSS247 | NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ac-VHT80 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	3.4
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 5775 MHz

RESULT: Reference Power cond.

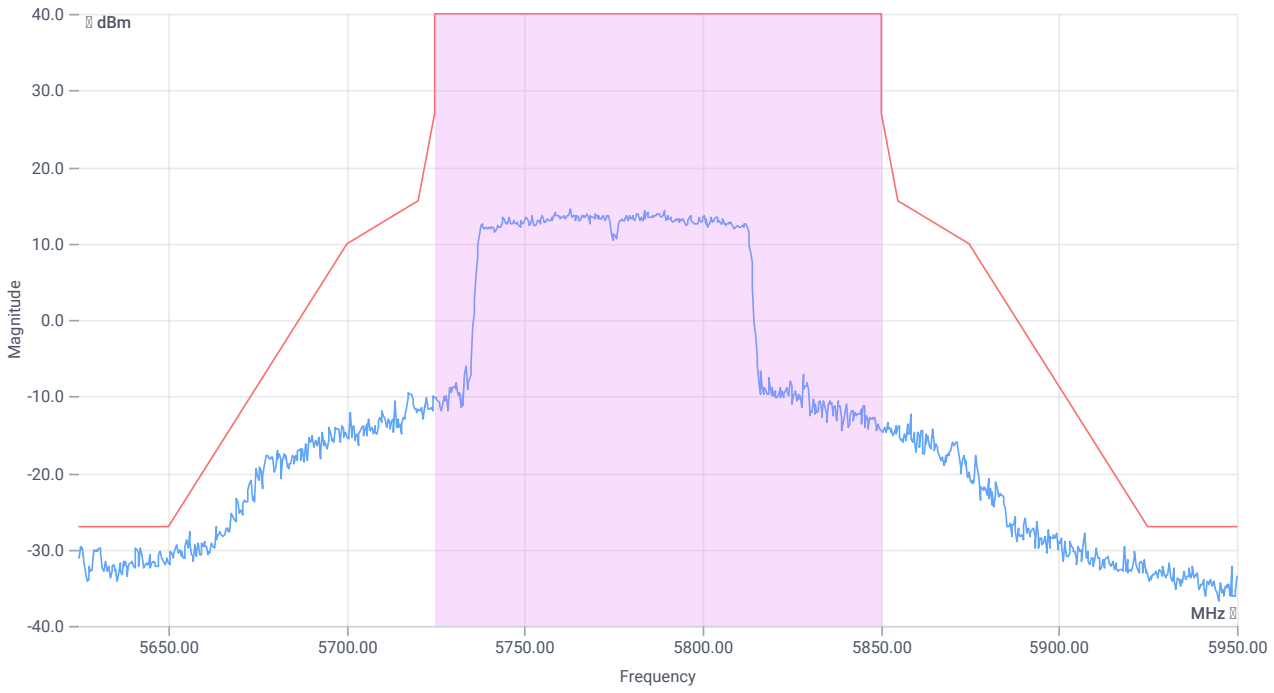
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.14	dBm	INFO
Ref. Frequency	---	---	5761.610	MHz	INFO

Antenna gain

Considered antenna gain [dBi]:	2 / max found in range 5625 to 5950 MHz

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.14 | 18.82 | 15
Start [MHz] | Stop [MHz]	5625.000 | 5950.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2500 | 1001 | SWE



Emission Mask (e.i.r.p)

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT

Verdict
PASS

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