

Conducted test results

No.23-1-0061401T004a-A6f

August 03, 2023

Test Standard(s) FCC 15.407

This document is electronically signed and valid without handwritten signature.
Public keys for verification of the electronic signatures can be requested at the testing laboratory.

Authorized

David Lang
Lab Manager
Radio Labs

Table of Content

# Message with SA scan ~	4
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	5
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1	9
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	13
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1	17
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	21
# Message with SA scan ~	23
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	24
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1	28
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	32
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1	36
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1	40
# Message with SA scan ~	42
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	43
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A	47
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	52
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A	56
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	61
# Message with SA scan ~	63
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	64
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A	68
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	73
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A	77
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A	82
# Message with SA scan ~	84
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	85
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	89
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	94
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	98
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	103
# Message with SA scan ~	105
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	106
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	110
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	115
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	119
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	124
# Message with SA scan ~	126
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	127
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	131
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C	136
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	141

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C	145
NA # Message with SA scan ~	147
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	148
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3	153
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3	157
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	159
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3	164
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3	168
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	170
NA # Message with SA scan ~	172
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	173
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3	178
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3	182
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	184
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3	189
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3	193
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3	195

Message with SA scan ~

References

TC start	27.07.2023 08:42:12
Ambit temp [°C] humidity [rel%]	24.1 51
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 08:42:13
Message	set WLAN5Gx to ac_VHT40_U_NII_1, Frequency [MHz] 5190 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:42:21
Ambit temp [°C] humidity [rel%]	24.1 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS50

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5190 MHz

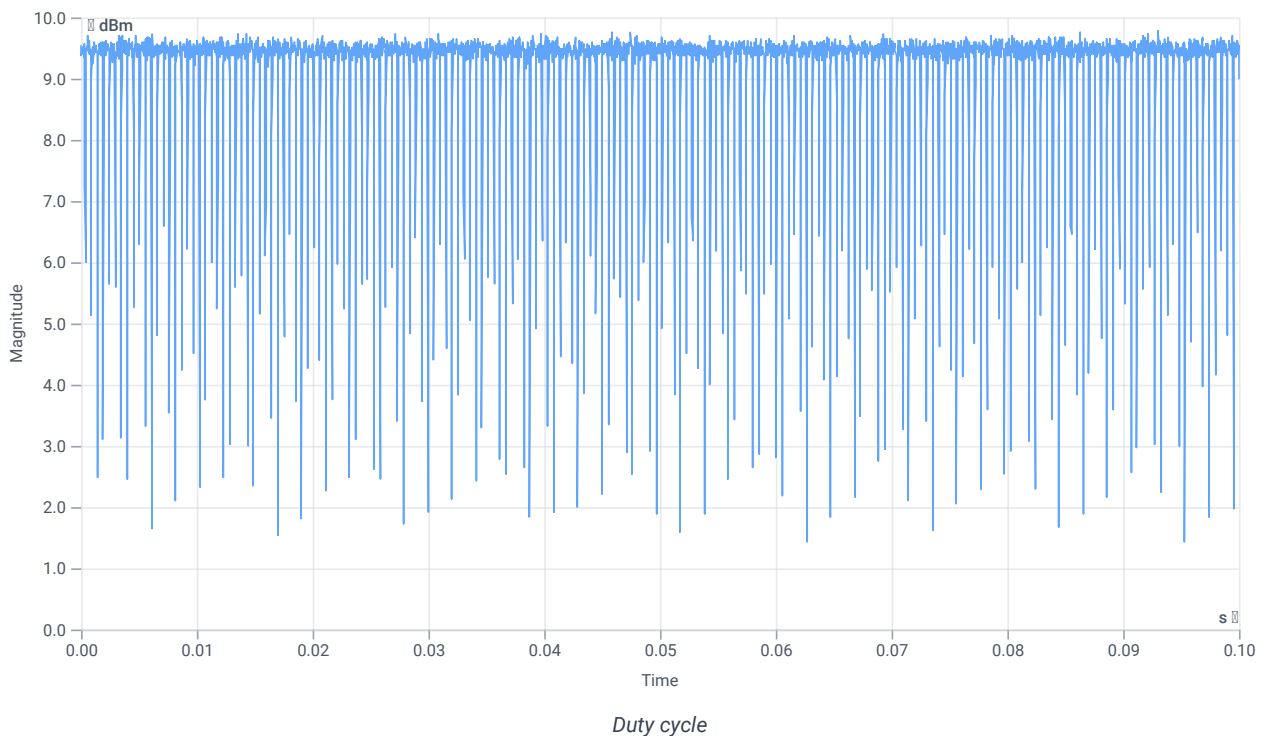
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.24	dBm	INFO
Ref. Frequency	--	--	5188.200	MHz	INFO

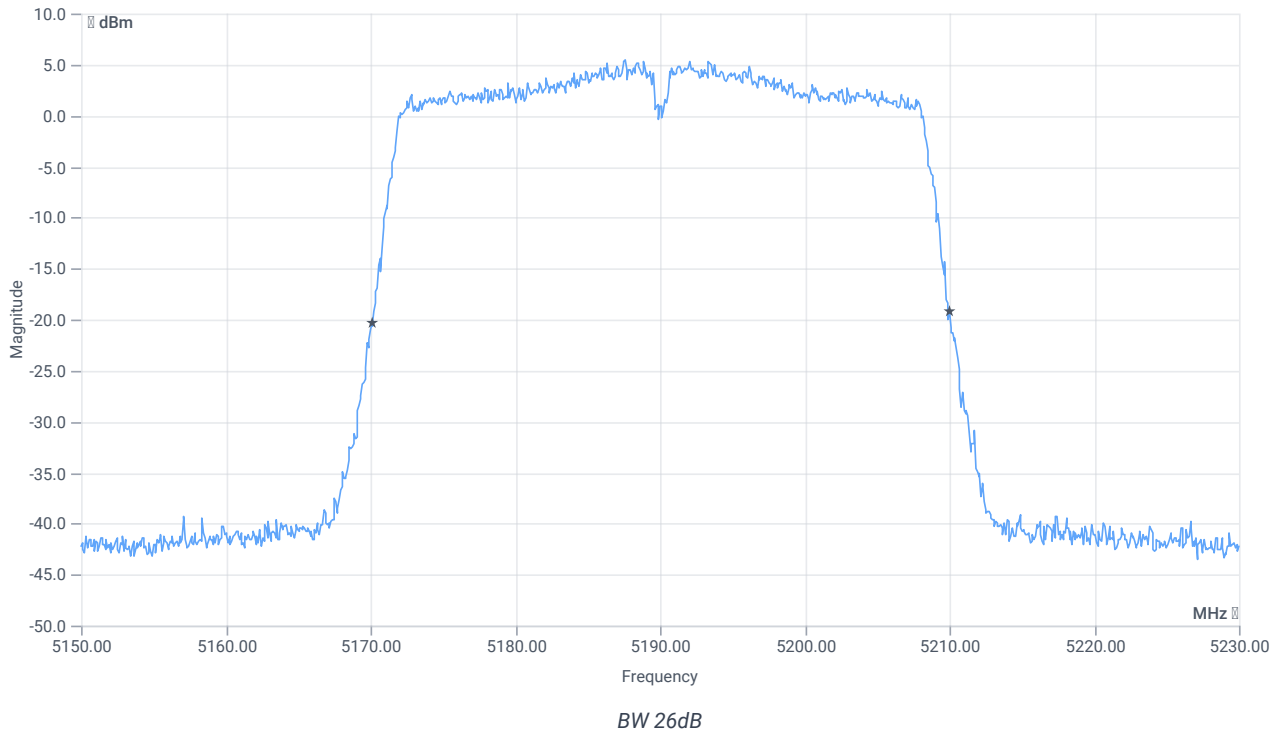
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



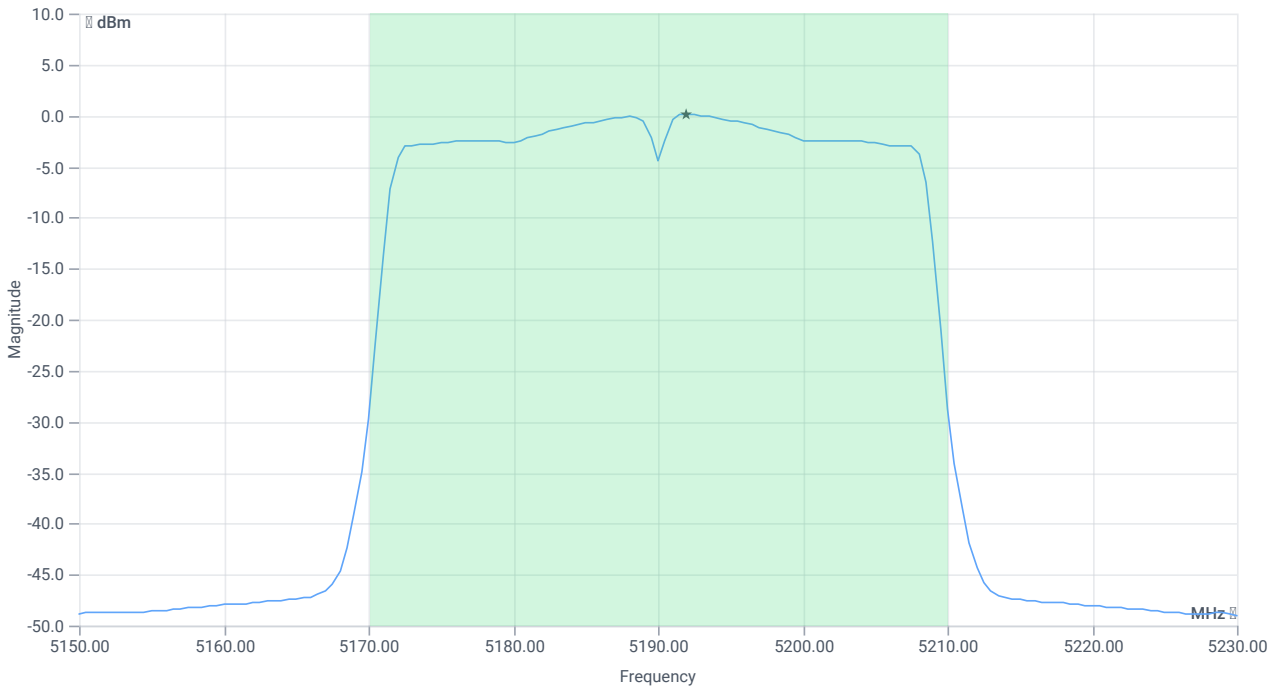
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.92	MHz	INFO
T1 26dB	---	---	5170.0800	MHz	INFO
T2 26dB	---	---	5210.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.24 16.35 20
Start [MHz] Stop [MHz]	5150.000 5230.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	13.69	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	13.69	dBm	PASS
Limit: 11 dBm + 10 log 39.92					
Max Output Power DC corrected	--	27.01	13.69	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	0.1	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	0.1	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:43:57
Ambit temp [°C] humidity [rel%]	24.1 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS50

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

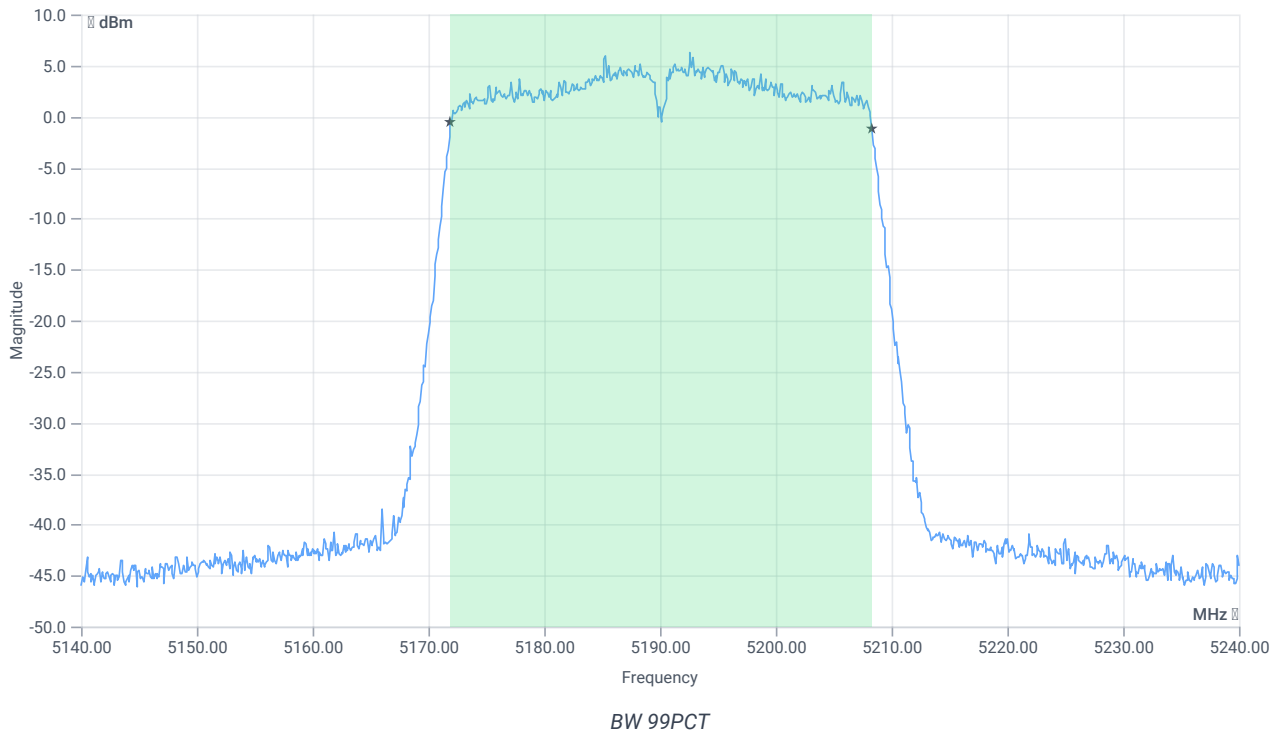
Test at TX 5190 MHz

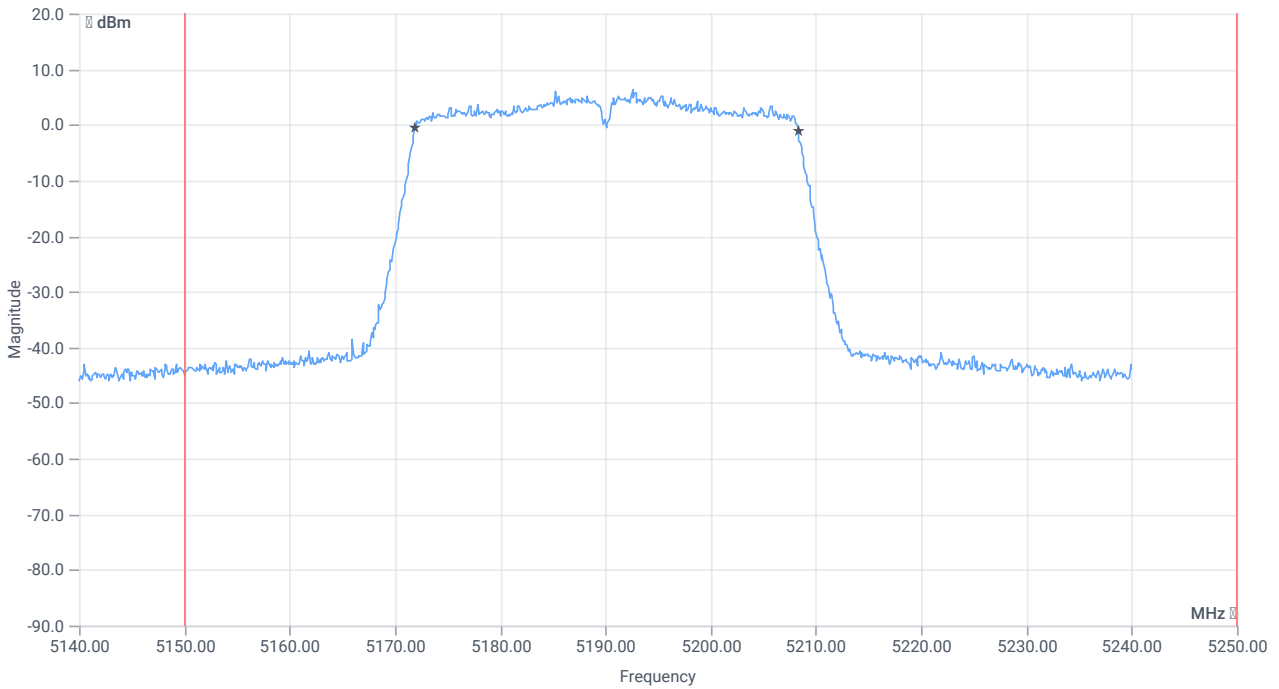
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.08	dBm	INFO
Ref. Frequency	--	--	5188.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.08 16.35 15
Start [MHz] Stop [MHz]	5140.000 5240.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

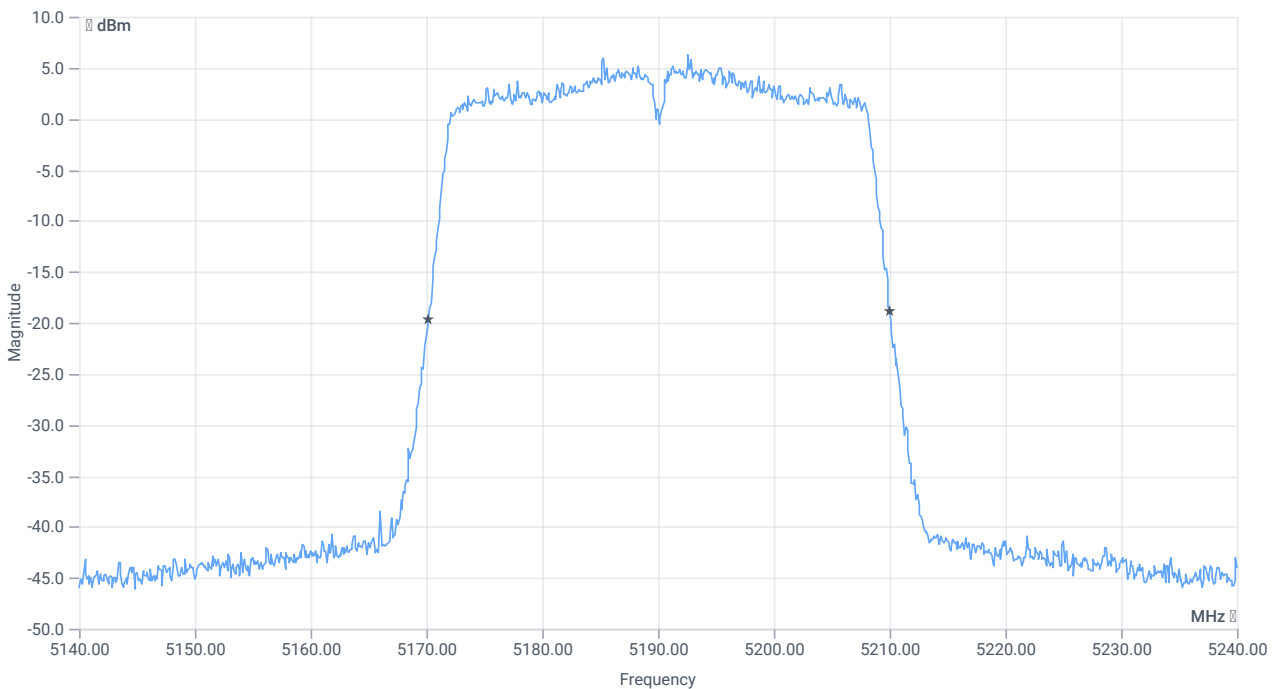




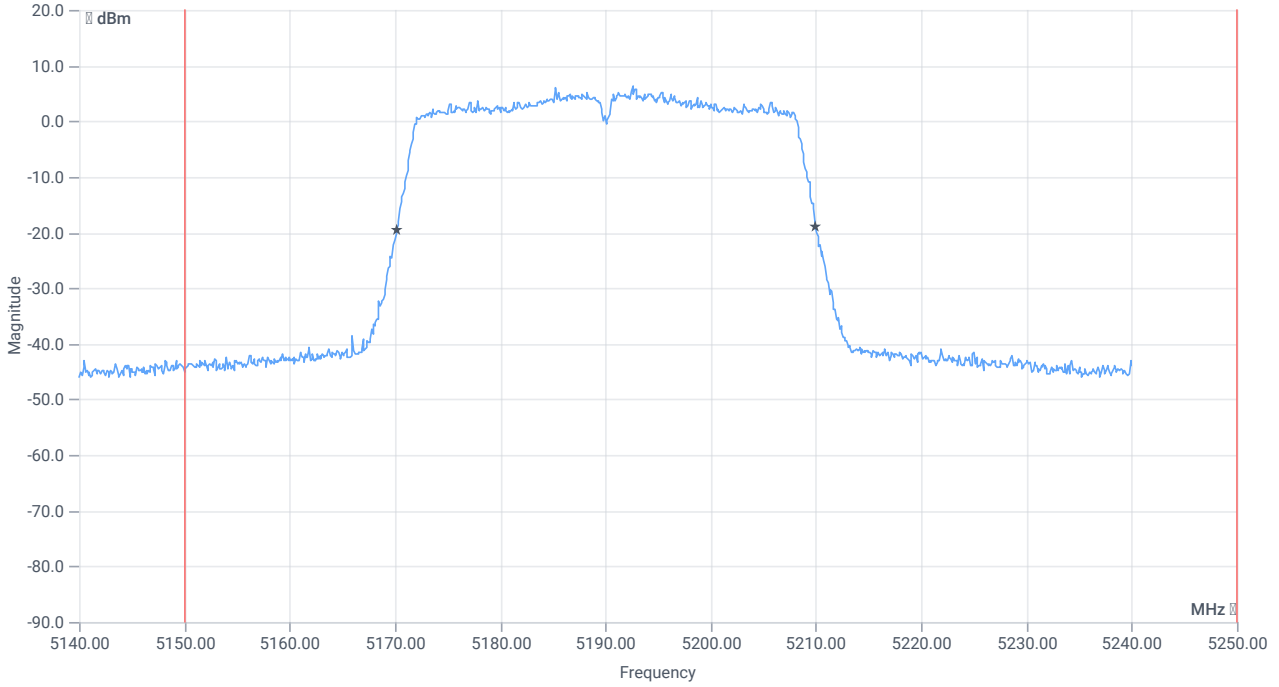
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5150.000000	--	5171.9181	MHz	PASS
T2 99%	--	5250.000000	5208.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	39.8	MHz	INFO
T1 26dB	5150.000000	--	5170.2000	MHz	PASS
T2 26dB	--	5250.000000	5210.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:44:37
Ambit temp [°C] humidity [rel%]	24.1 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS50

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5190 MHz

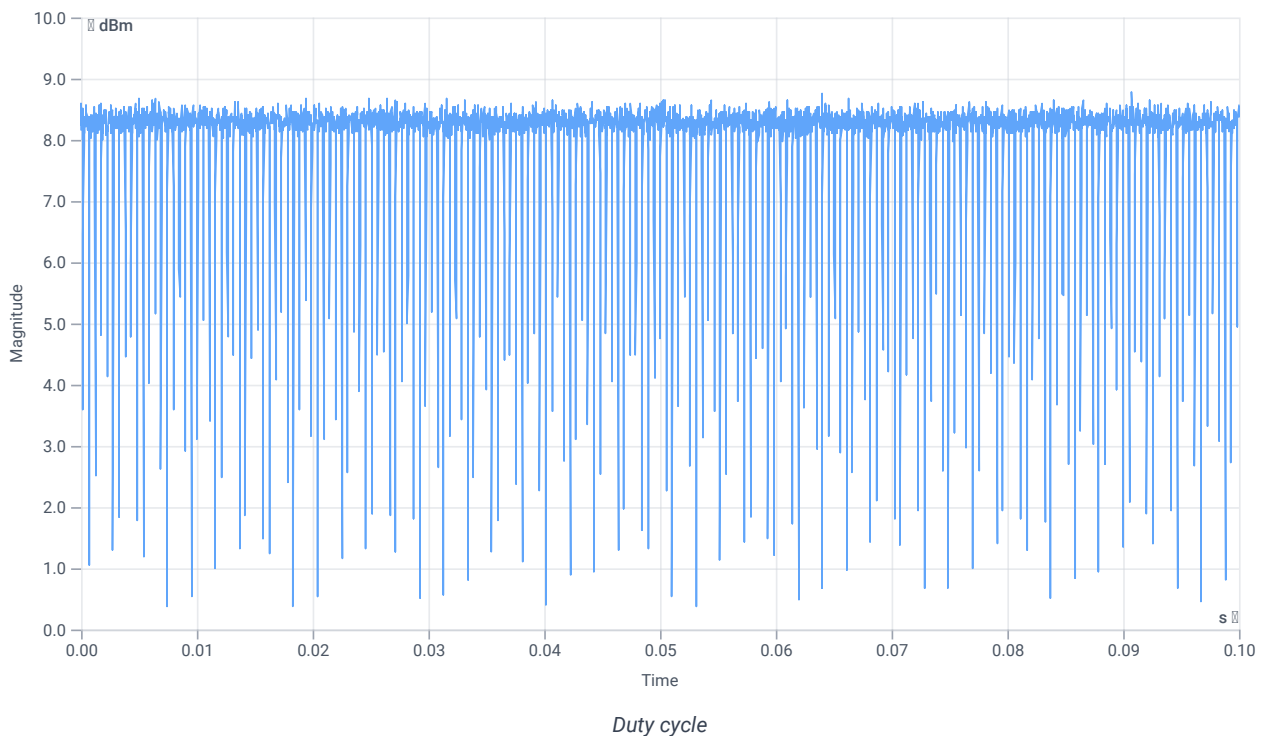
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	7.92	dBm	INFO
Ref. Frequency	--	--	5192.400	MHz	INFO

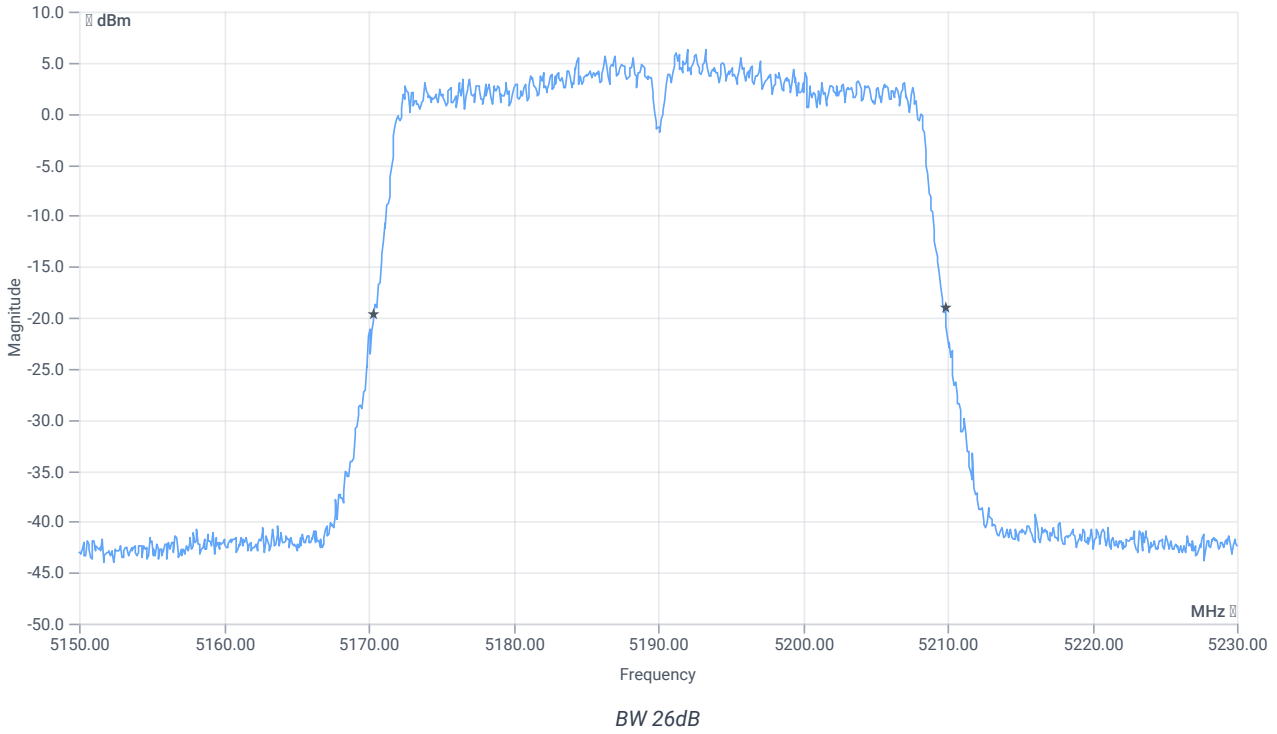
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



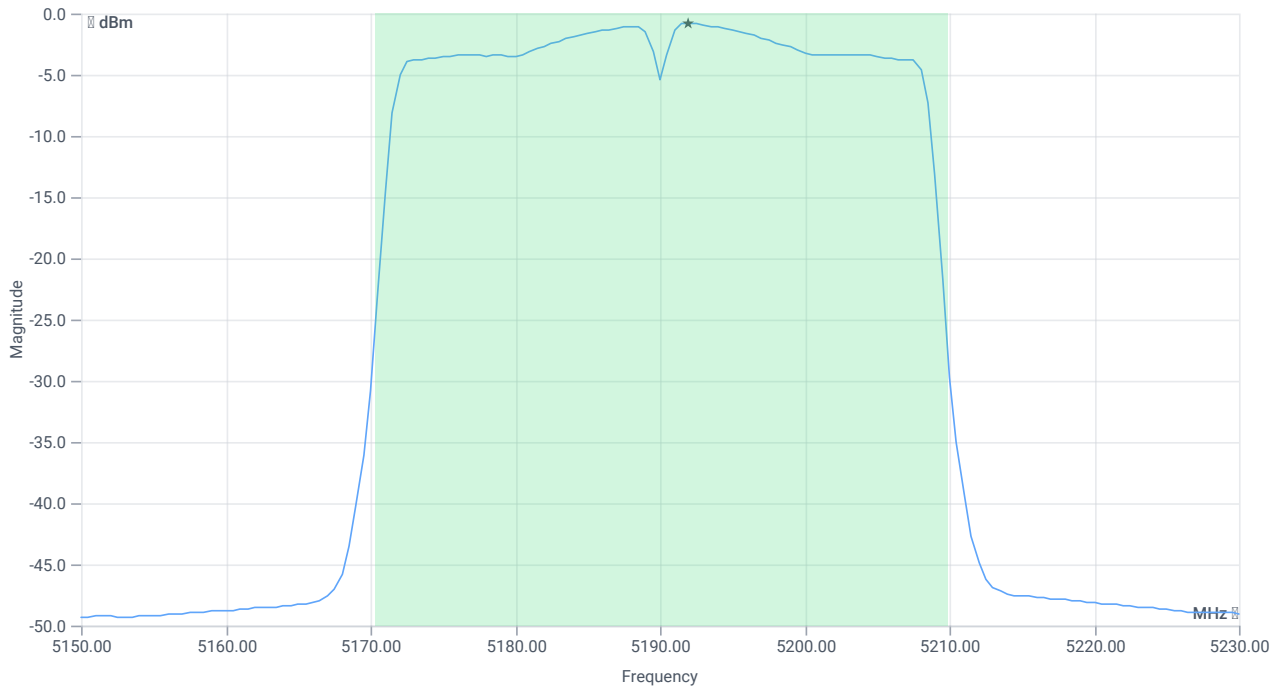
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.44	MHz	INFO
T1 26dB	---	---	5170.4000	MHz	INFO
T2 26dB	---	---	5209.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.92 16.35 20
Start [MHz] Stop [MHz]	5150.000 5230.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	12.81	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	12.81	dBm	PASS
Limit: 11 dBm + 10 log 39.44					
Max Output Power DC corrected	--	26.96	12.81	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	-0.78	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	-0.78	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:46:13
Ambit temp [°C] humidity [rel%]	24.1 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS50

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

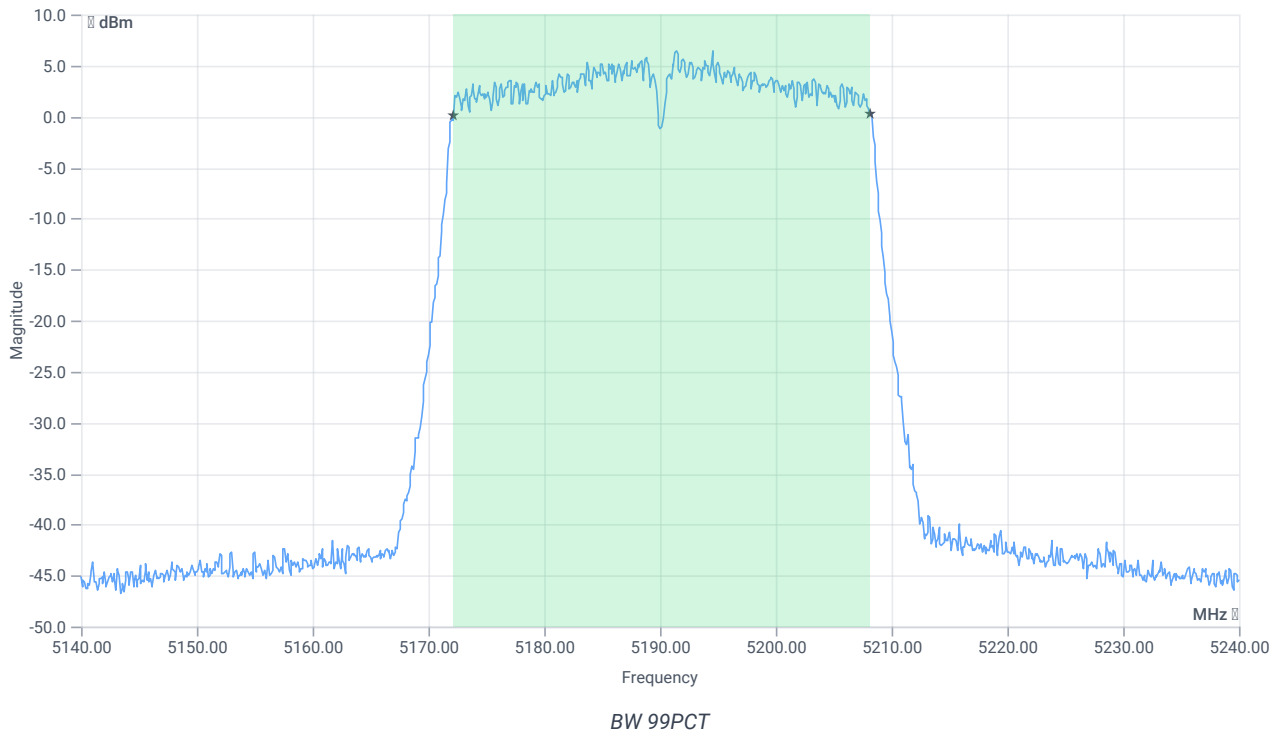
Test at TX 5190 MHz

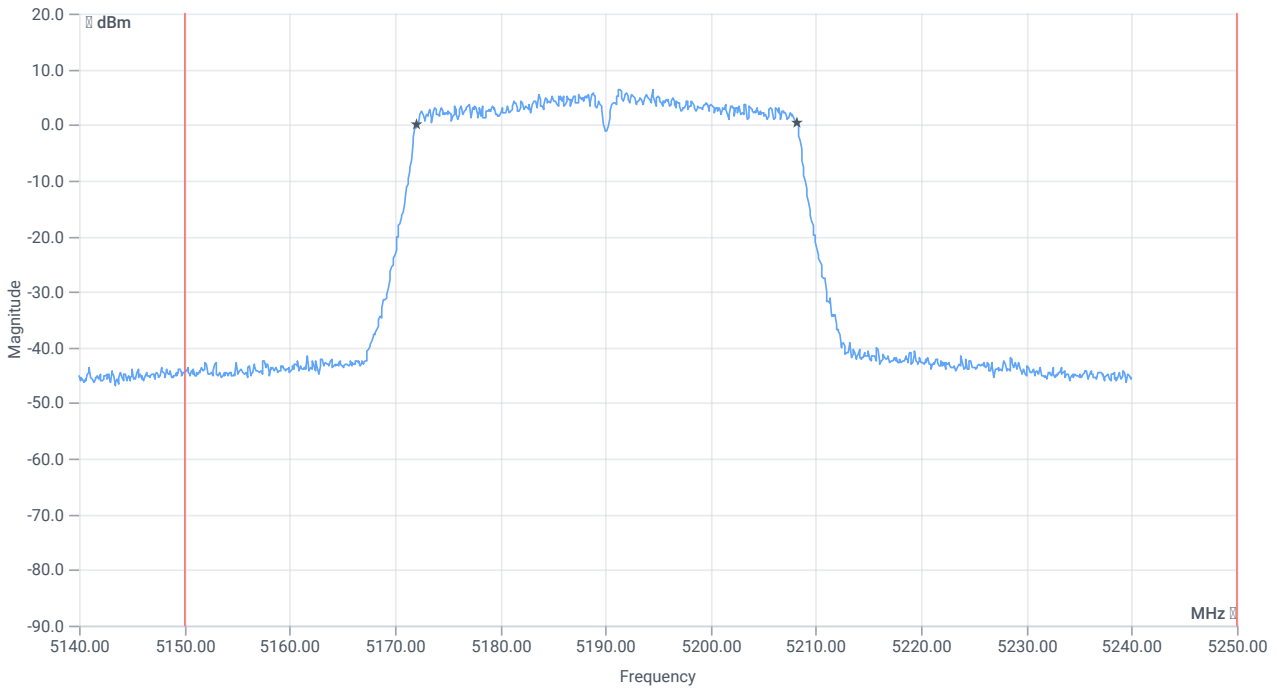
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	6.97	dBm	INFO
Ref. Frequency	--	--	5187.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.97 16.35 15
Start [MHz] Stop [MHz]	5140.000 5240.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

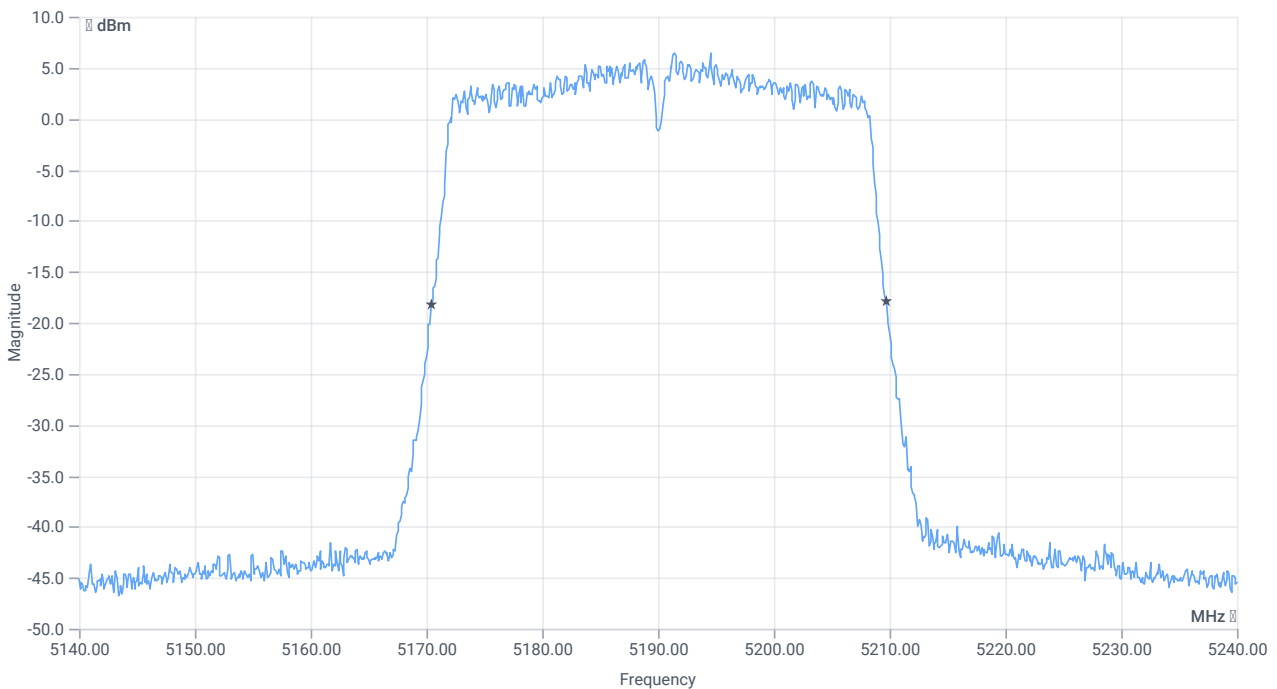




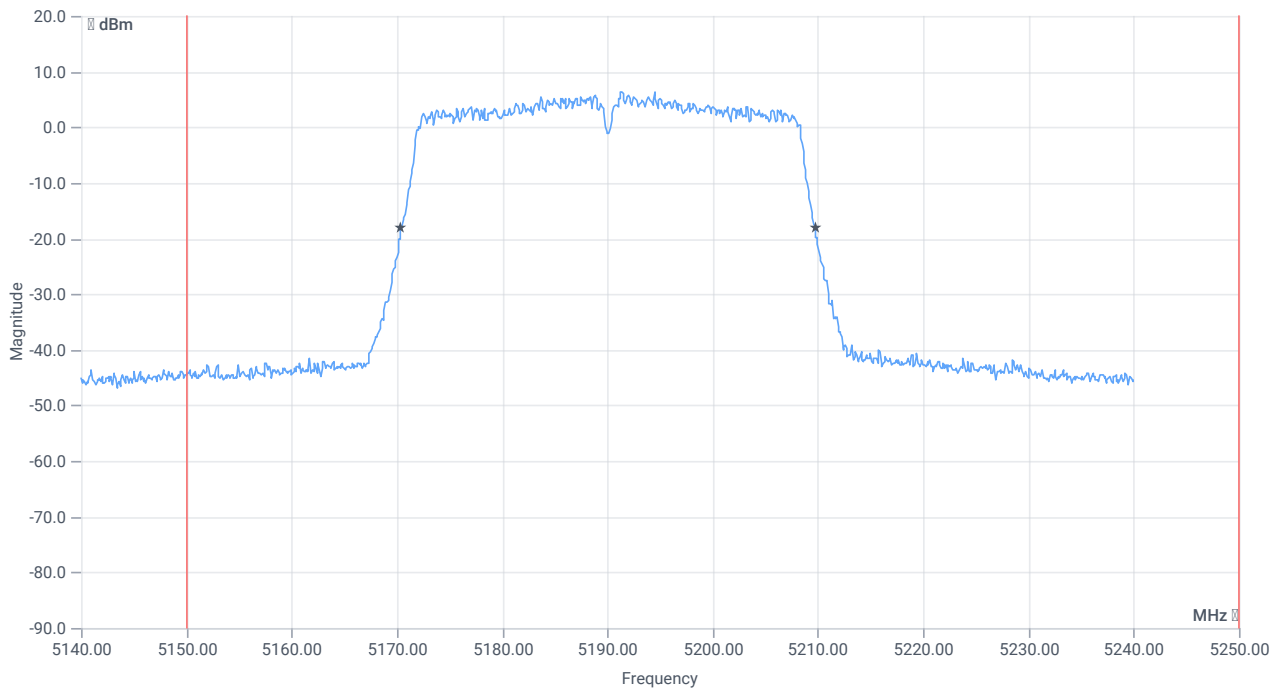
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.064	MHz	INFO
T1 99%	5150.000000	--	5172.1179	MHz	PASS
T2 99%	--	5250.000000	5208.1818	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	39.3	MHz	INFO
T1 26dB	5150.000000	--	5170.4000	MHz	PASS
T2 26dB	--	5250.000000	5209.7000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:46:53
Ambit temp [°C] humidity [rel%]	24.1 51
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5190 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	13.69	dBm	INFO
Ant:1 BW 26dB	--	--	39.920	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	12.81	dBm	INFO
Ant:2 BW 26dB	--	--	39.440	MHz	INFO
Σ Limit absolute	--	24	16.28	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.44	--	26.96	16.28	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	0.1	dBm/1MHz	INFO
Ant:2 PSD	--	--	-0.78	dBm/1MHz	INFO
Σ	--	11	2.69	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 08:57:54
Ambit temp [°C] humidity [rel%]	24.3 50
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 08:57:54
Message	set WLAN5Gx to ac_VHT40_U_NII_1, Frequency [MHz] 5230

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:58:04
Ambit temp [°C] humidity [rel%]	24.3 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5230 MHz

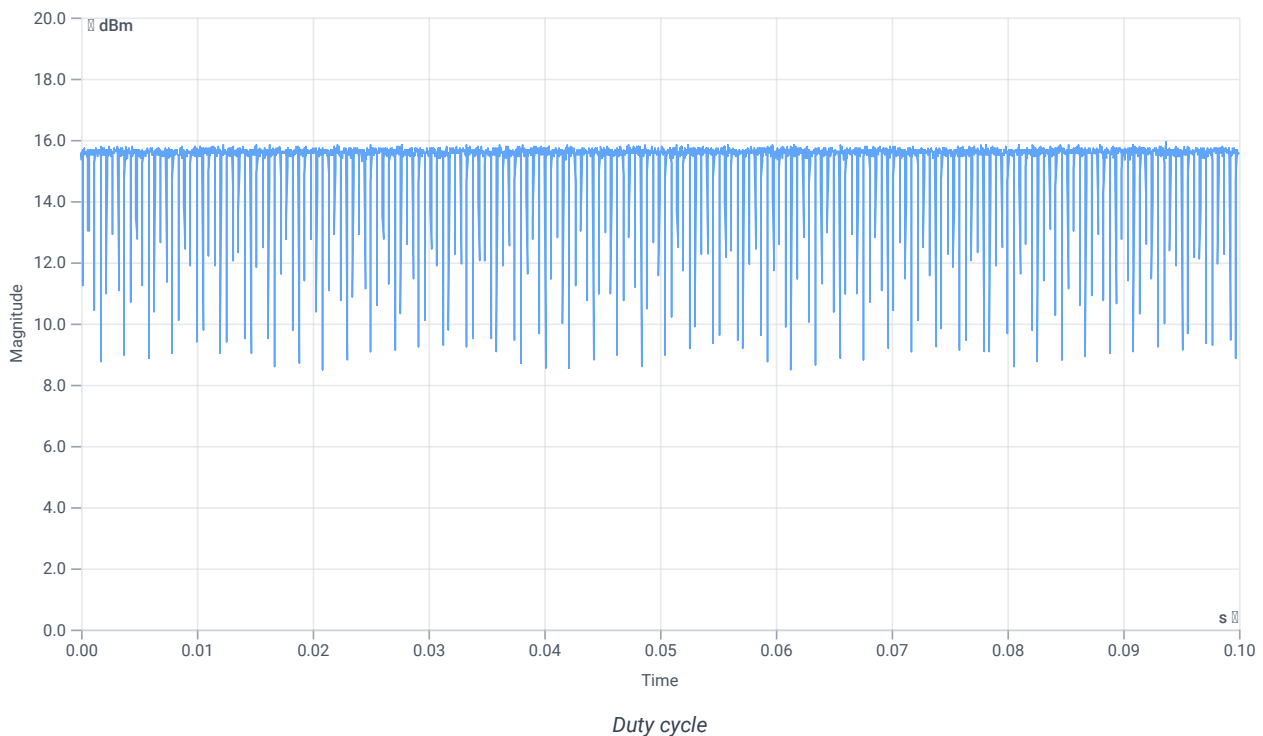
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.16	dBm	INFO
Ref. Frequency	--	--	5229.200	MHz	INFO

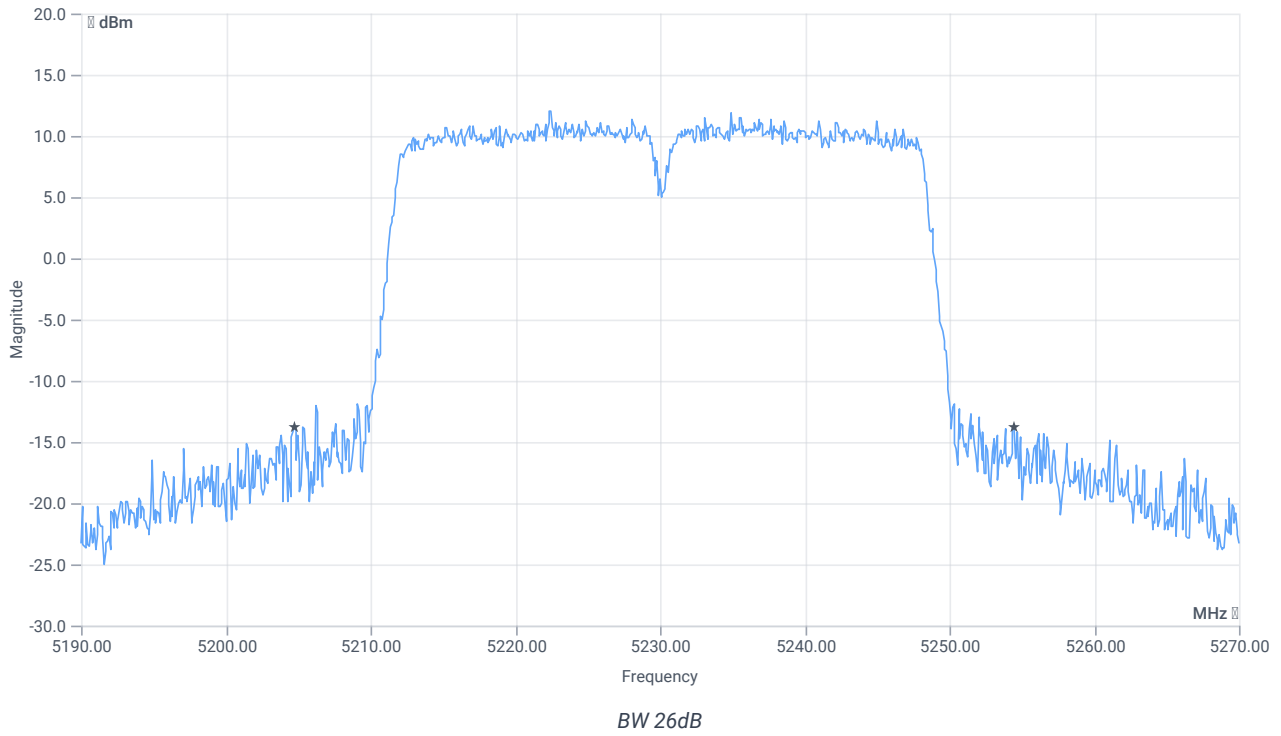
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



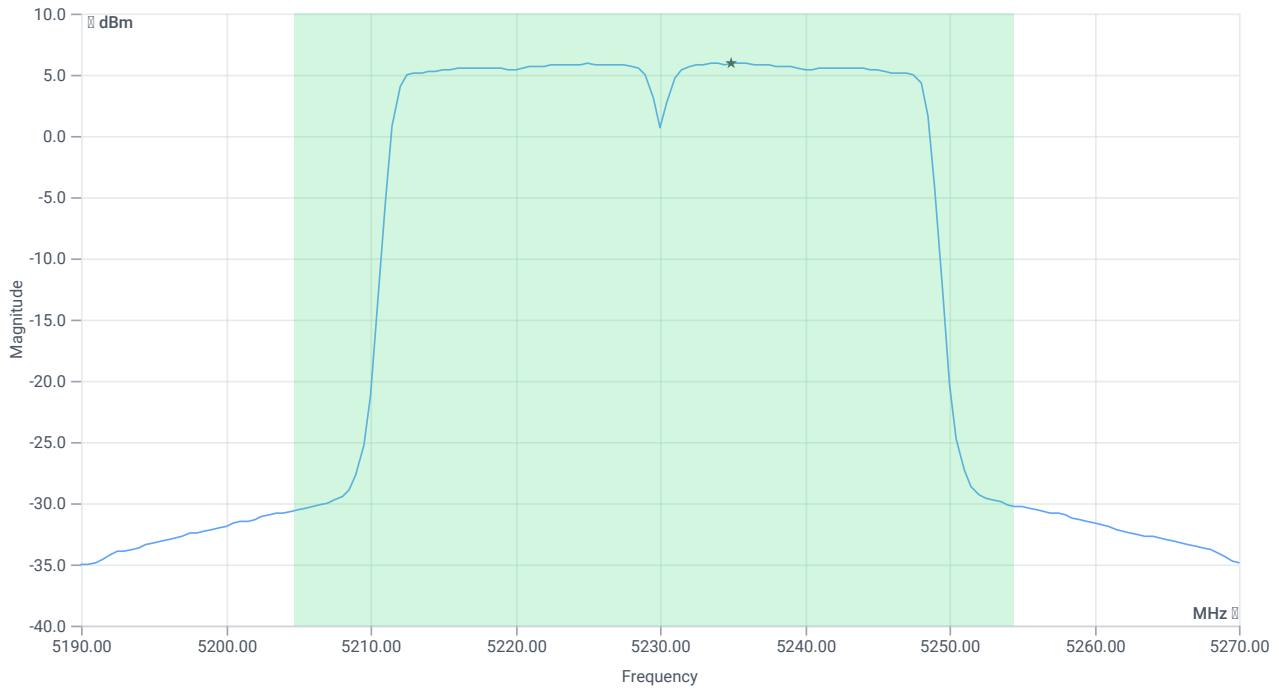
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	49.76	MHz	INFO
T1 26dB	---	---	5204.7200	MHz	INFO
T2 26dB	---	---	5254.4800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.16 16.34 25
Start [MHz] Stop [MHz]	5190.000 5270.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.82	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.82	dBm	PASS
Limit: 11 dBm + 10 log 49.76					
Max Output Power DC corrected	--	27.97	20.82	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.91	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.91	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 08:59:38
Ambit temp [°C] humidity [rel%]	24.3 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

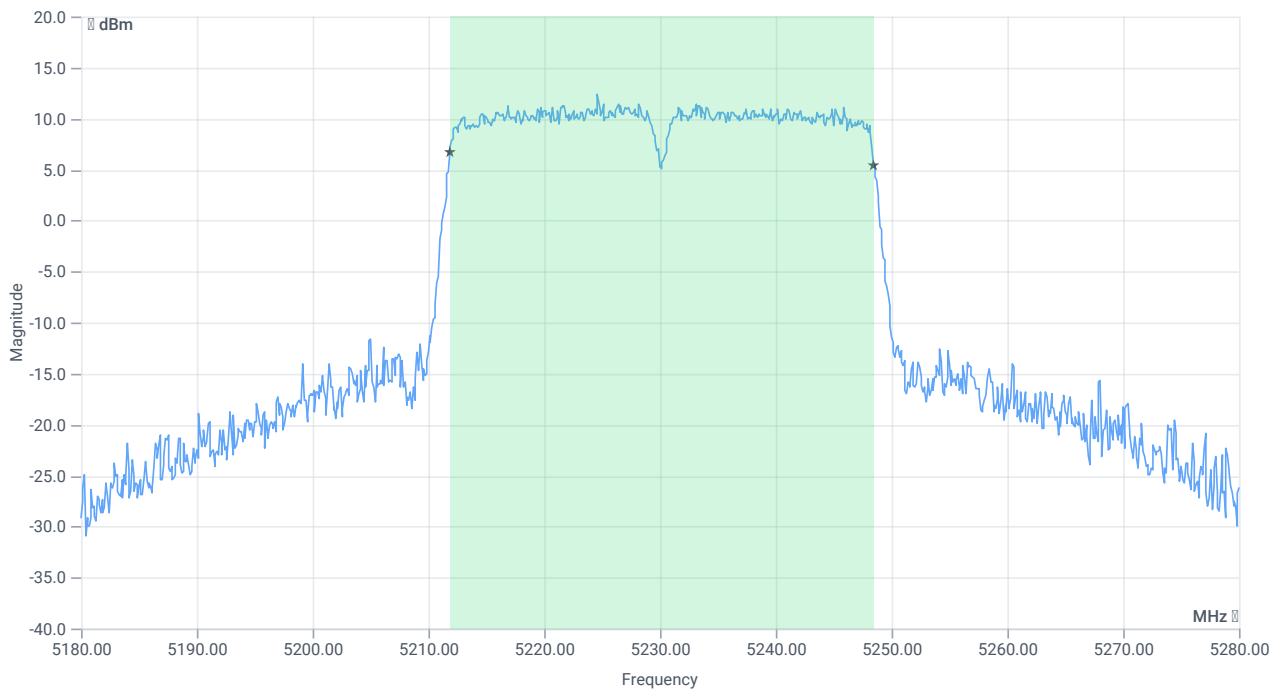
Test at TX 5230 MHz

RESULT: Reference Power cond.

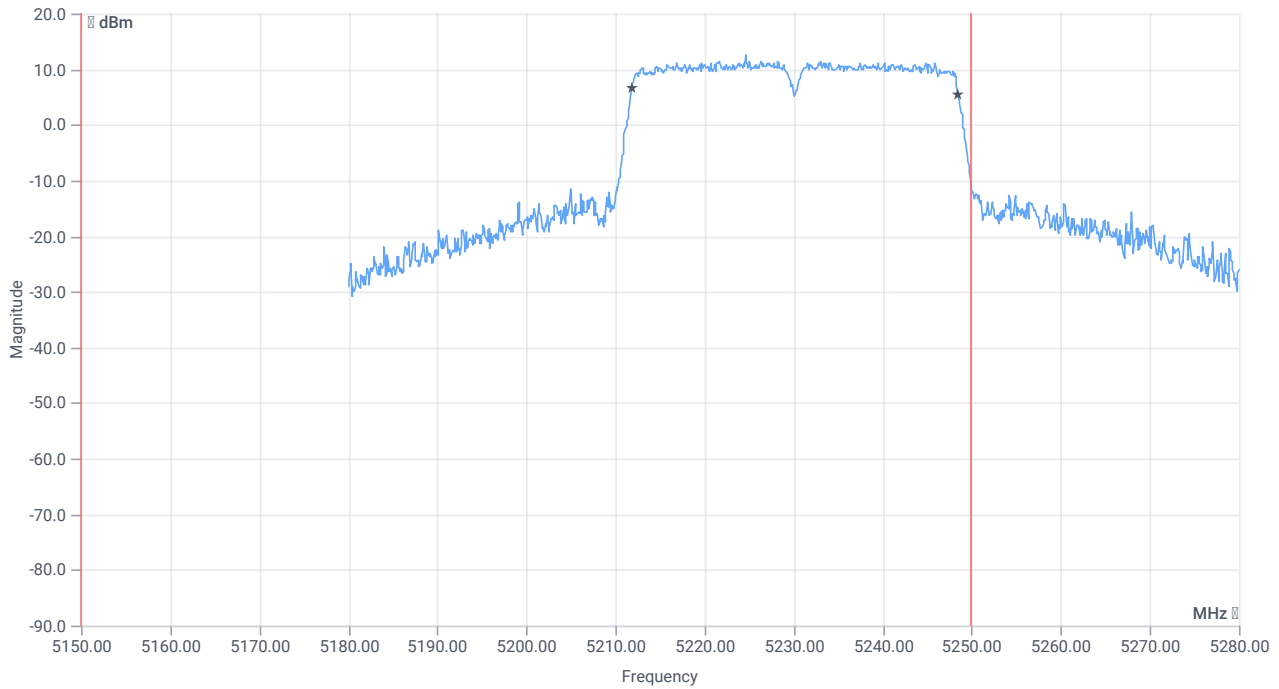
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.66	dBm	INFO
Ref. Frequency	--	--	5224.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.66 16.34 25
Start [MHz] Stop [MHz]	5180.000 5280.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



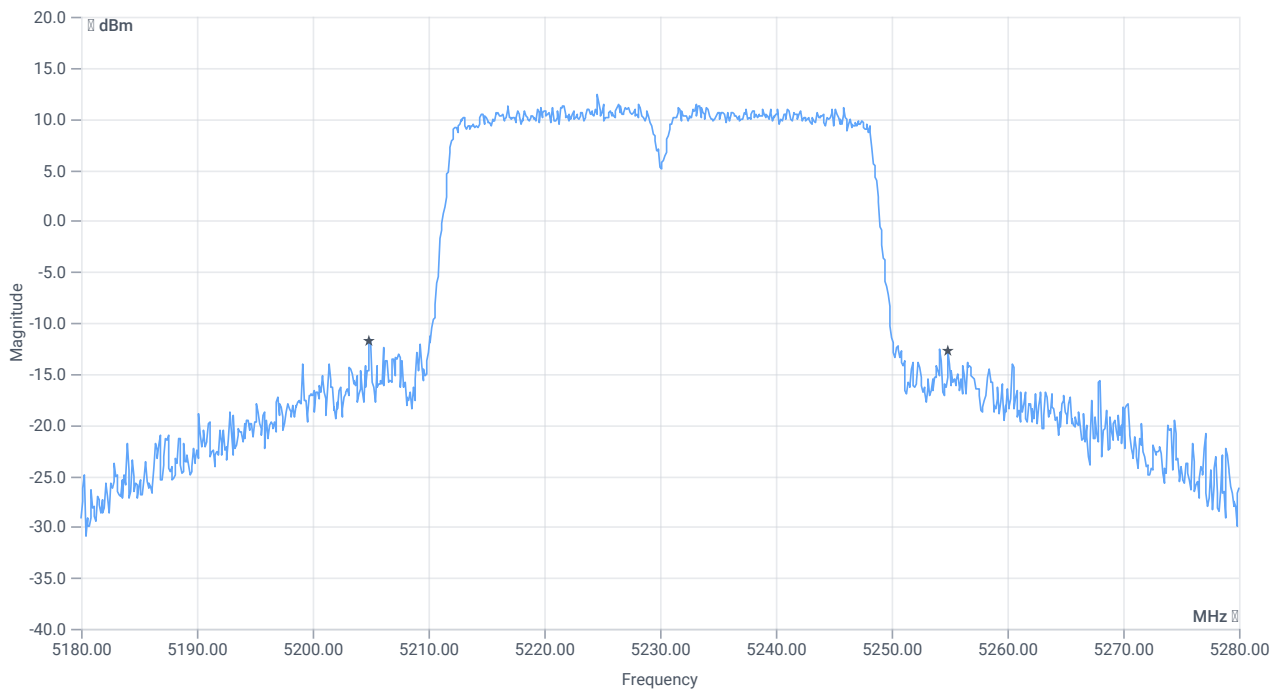
BW 99PCT



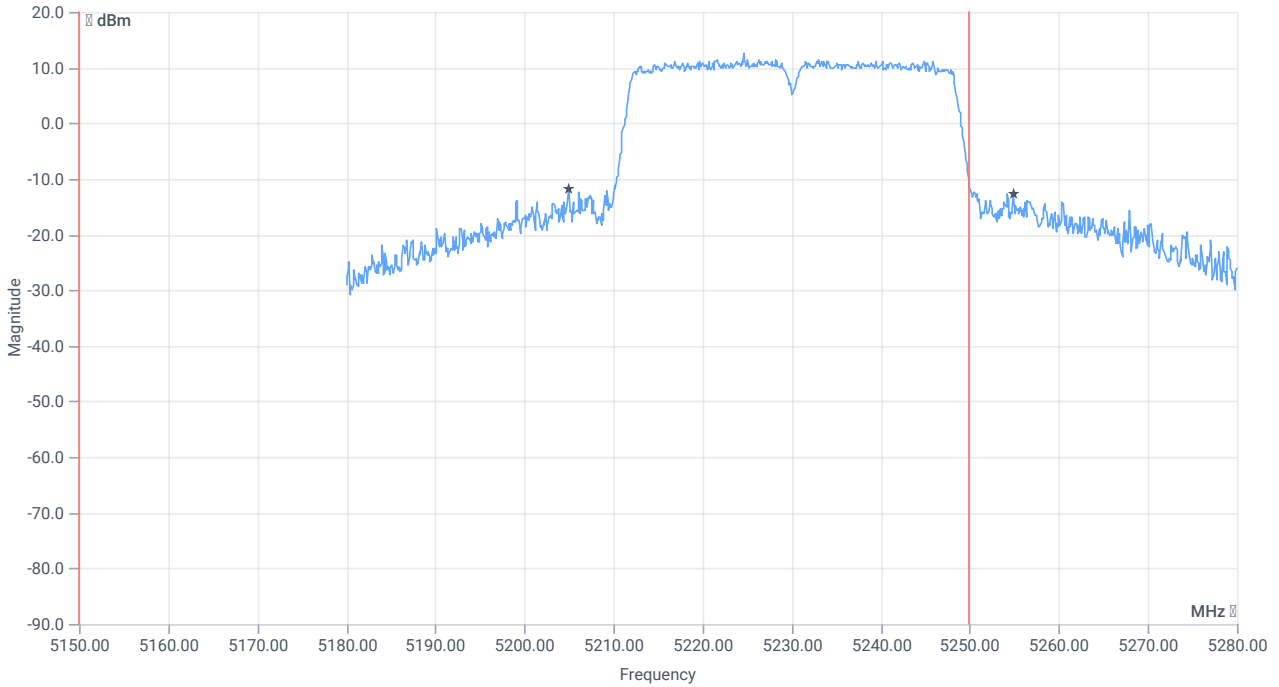
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5150.000000	--	5211.8182	MHz	PASS
T2 99%	--	5250.000000	5248.4815	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	50	MHz	INFO
T1 26dB	5150.000000	---	5204.9000	MHz	PASS
T2 26dB	---	5250.000000	5254.9000	MHz	DFS required

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 09:00:19
Ambit temp [°C] humidity [rel%]	24.3 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5230 MHz

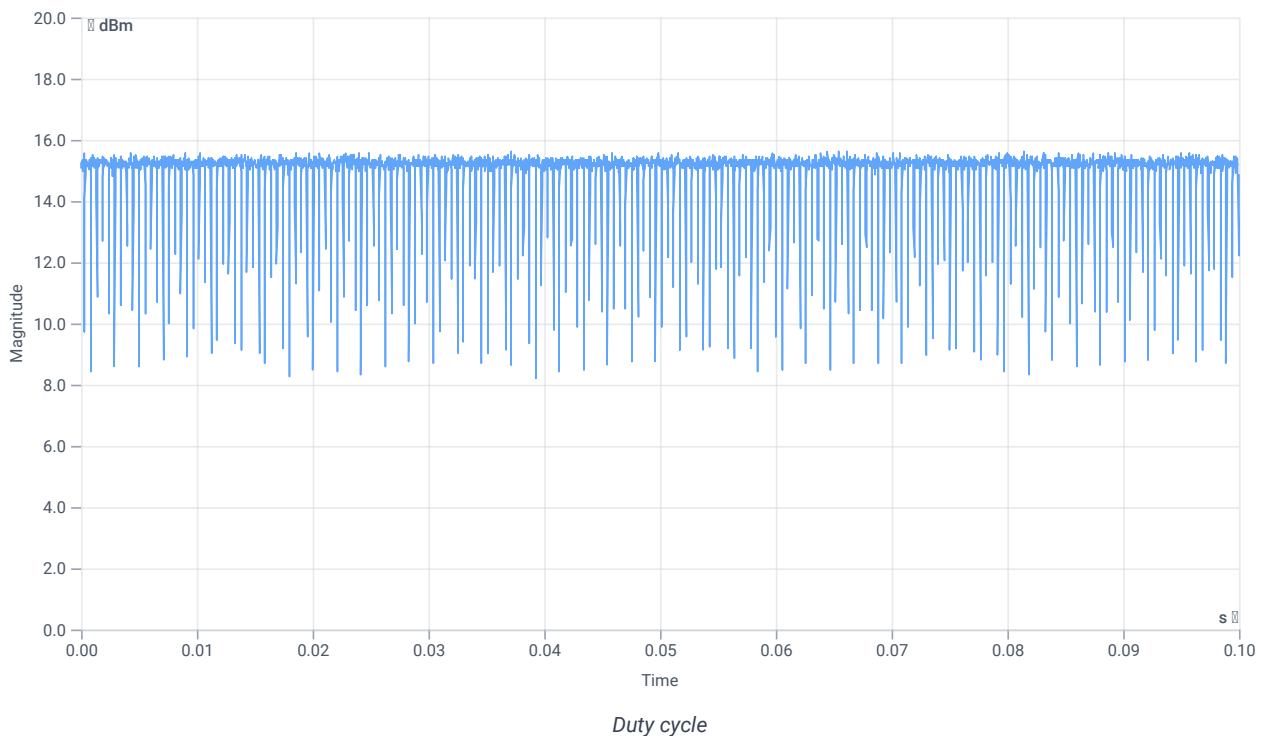
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.07	dBm	INFO
Ref. Frequency	--	--	5221.610	MHz	INFO

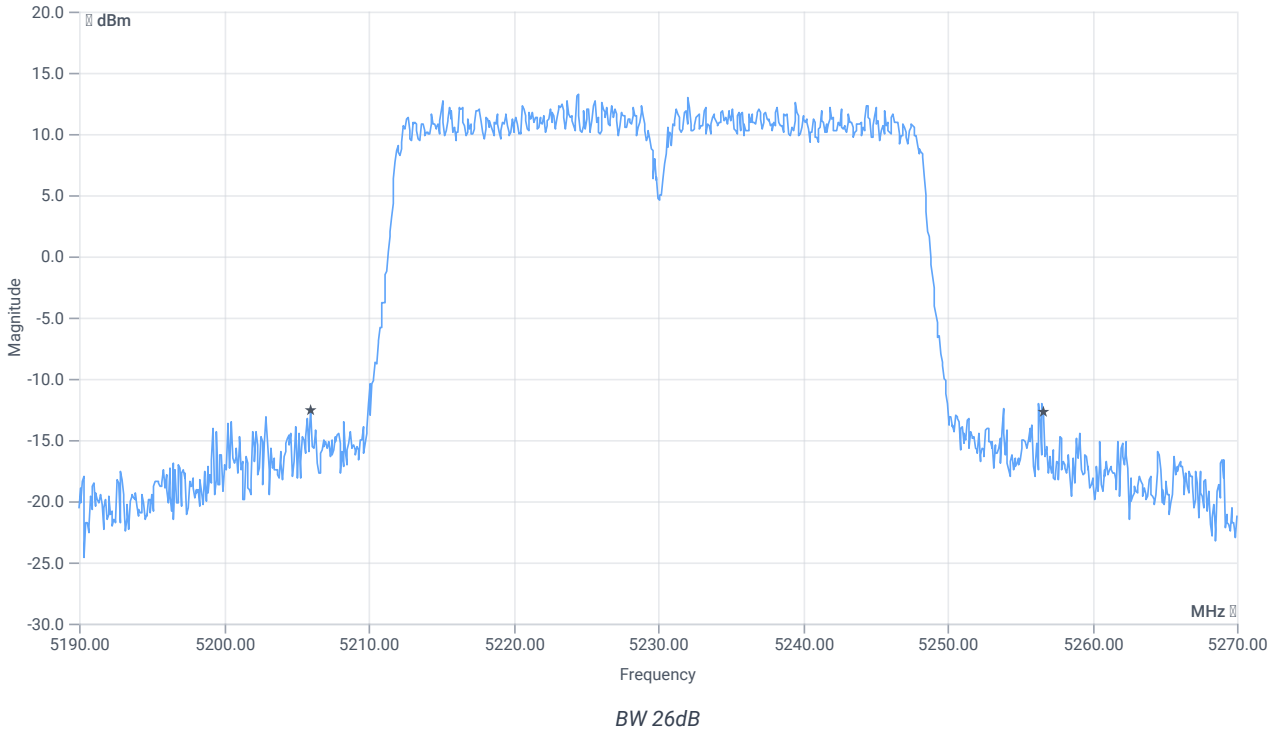
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



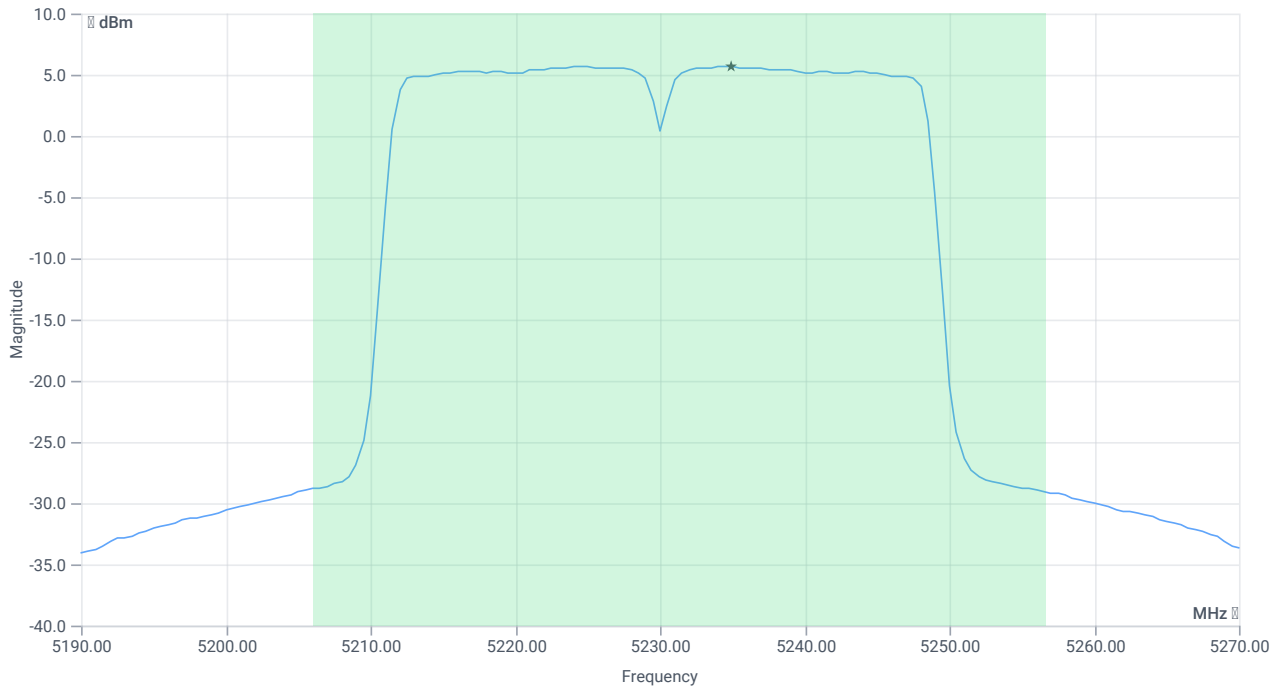
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	50.64	MHz	INFO
T1 26dB	---	---	5206.0000	MHz	INFO
T2 26dB	---	---	5256.6400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.07 16.34 25
Start [MHz] Stop [MHz]	5190.000 5270.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.53	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.53	dBm	PASS
Limit: 11 dBm + 10 log 50.64					
Max Output Power DC corrected	--	28.04	20.53	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.65	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.65	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 09:01:53
Ambit temp [°C] humidity [rel%]	24.3 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

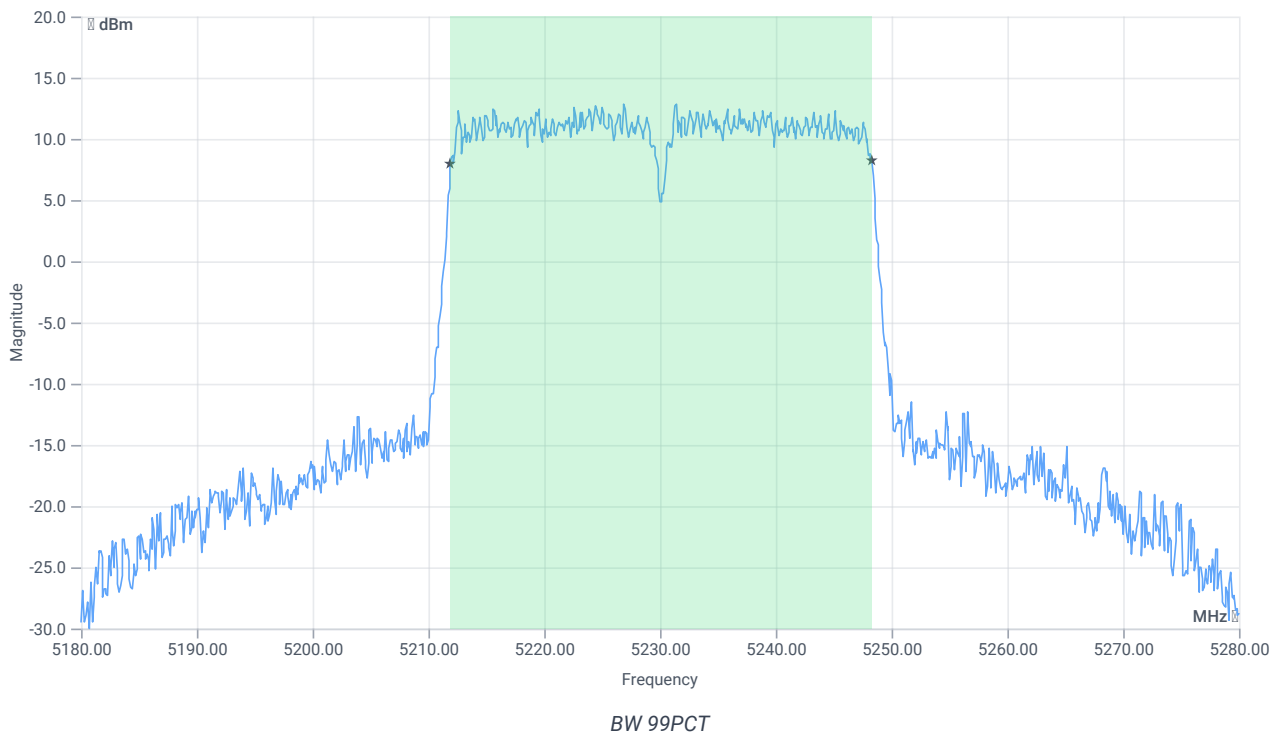
Test at TX 5230 MHz

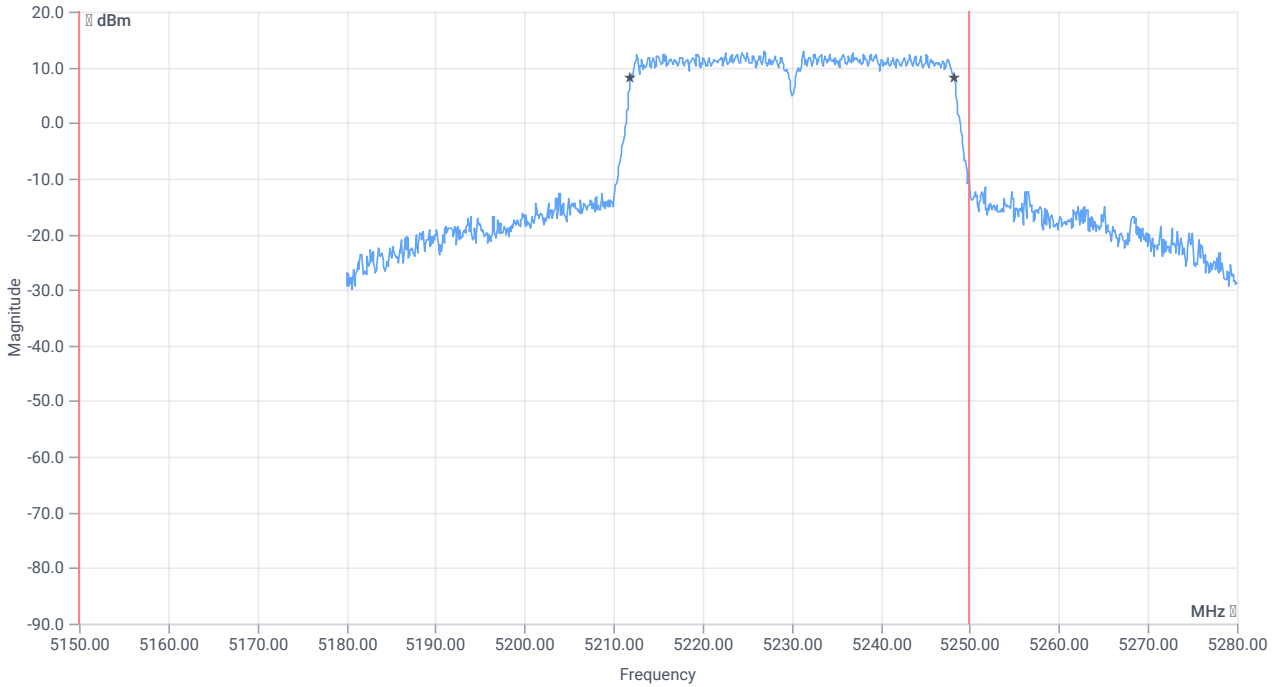
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.72	dBm	INFO
Ref. Frequency	--	--	5234.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.72 16.34 25
Start [MHz] Stop [MHz]	5180.000 5280.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

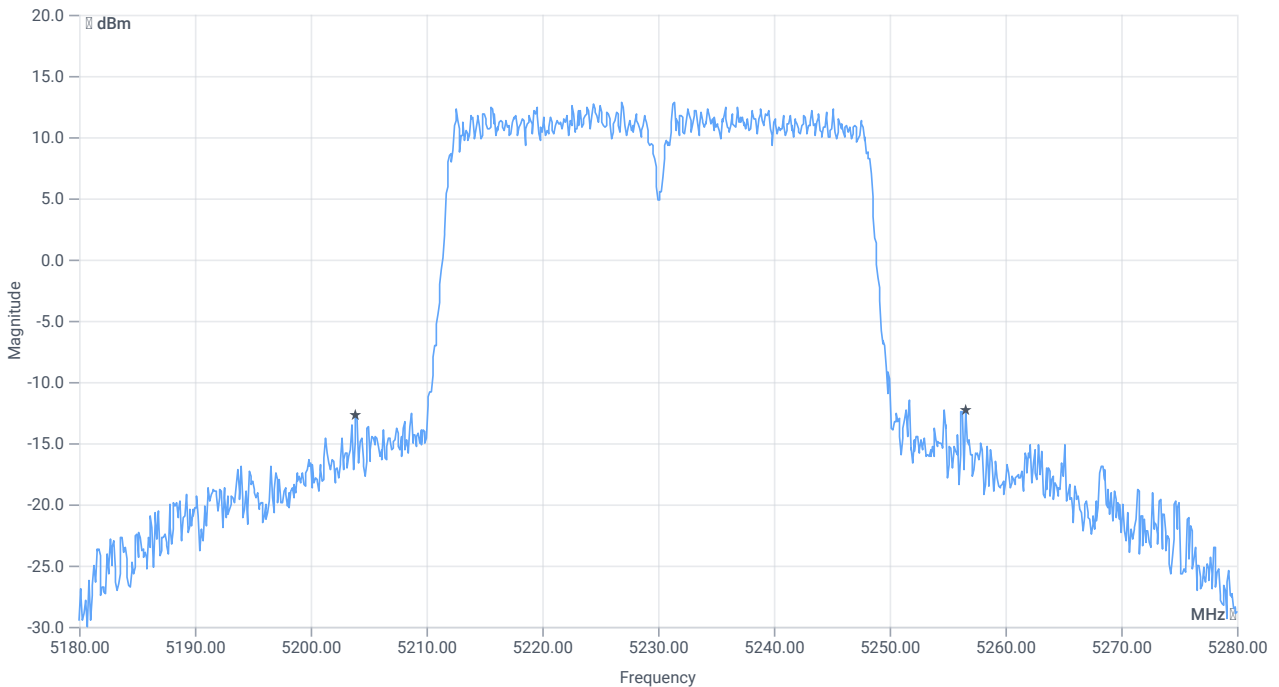




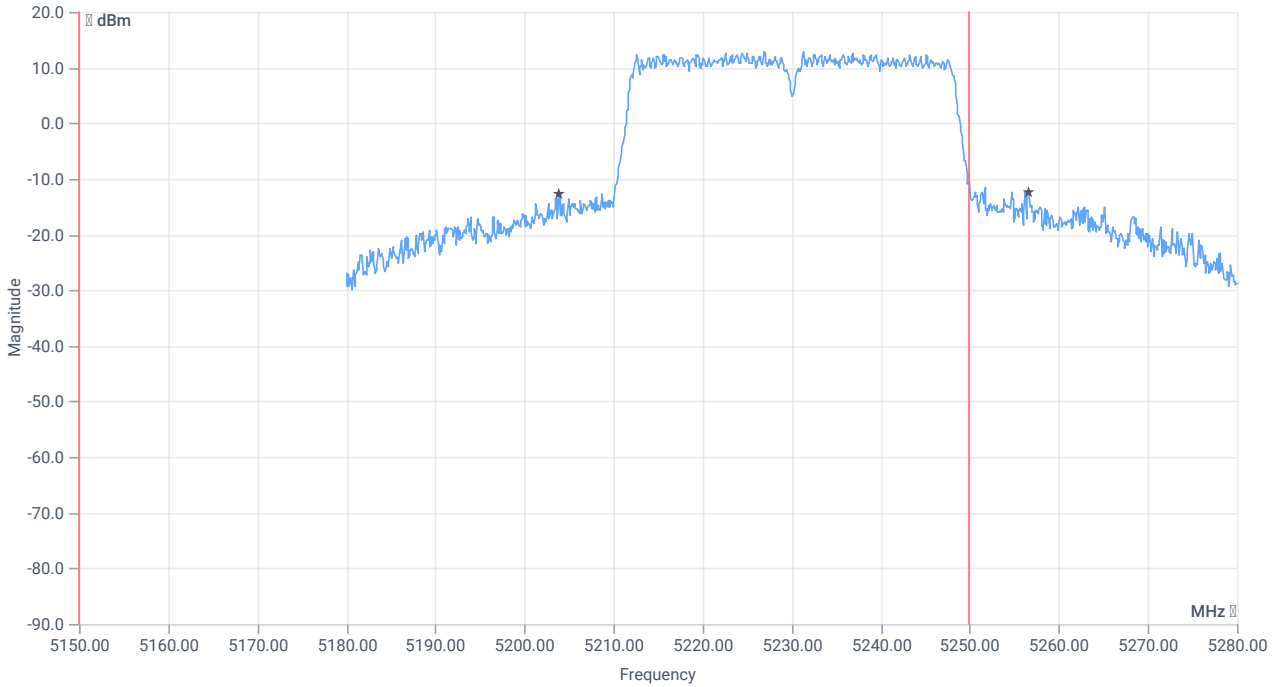
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5150.000000	--	5211.9181	MHz	PASS
T2 99%	--	5250.000000	5248.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	52.7	MHz	INFO
T1 26dB	5150.000000	---	5203.9000	MHz	PASS
T2 26dB	---	5250.000000	5256.6000	MHz	DFS required

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-1

References

TC start	27.07.2023 09:02:32
Ambit temp [°C] humidity [rel%]	24.4 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-1
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5230 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.82	dBm	INFO
Ant:1 BW 26dB	--	--	49.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.53	dBm	INFO
Ant:2 BW 26dB	--	--	50.640	MHz	INFO
Σ Limit absolute	--	24	23.69	dBm	PASS
Σ Limit: 11 dBm + 10 log 49.76	--	27.97	23.69	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	5.91	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.65	dBm/1MHz	INFO
Σ	--	11	8.79	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 09:15:08
Ambit temp [°C] humidity [rel%]	24.6 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 09:15:09
Message	set WLAN5Gx to ac_VHT40_U_NII_2A, Frequency [MHz] 5270 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:15:19
Ambit temp [°C] humidity [rel%]	24.6 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5270 MHz

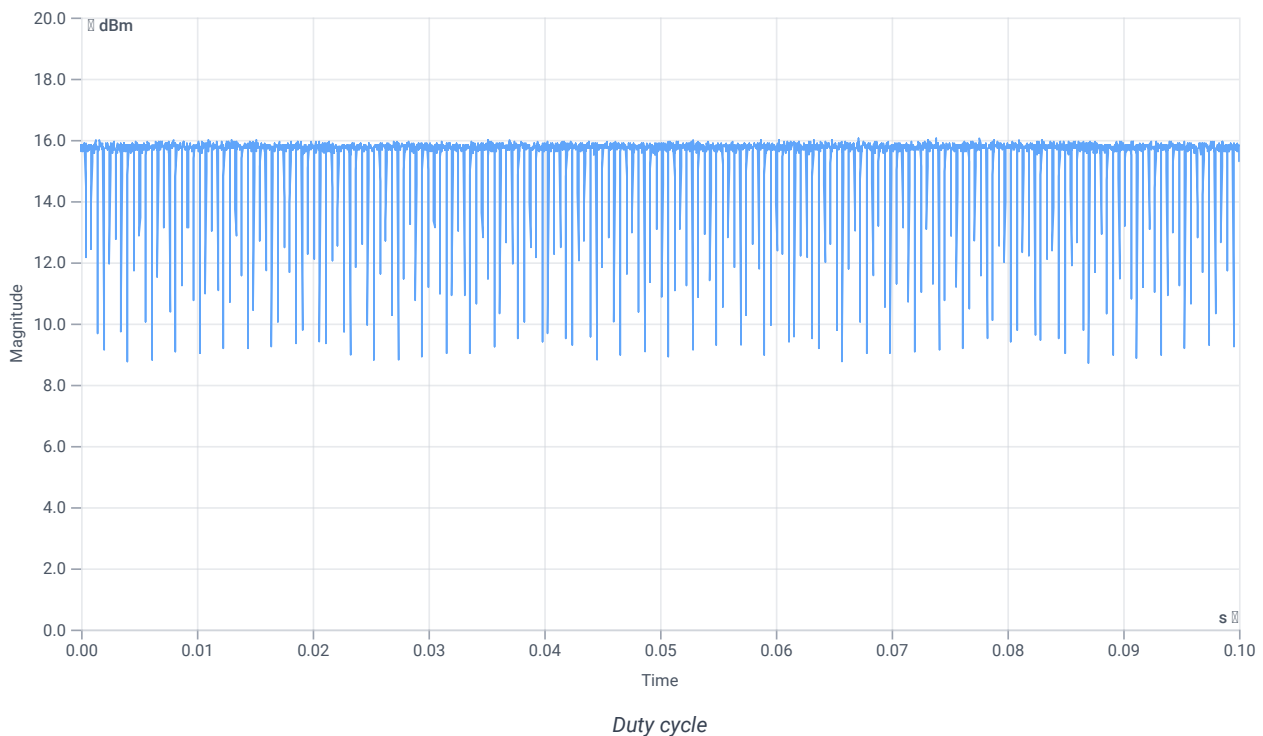
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.17	dBm	INFO
Ref. Frequency	--	--	5265.400	MHz	INFO

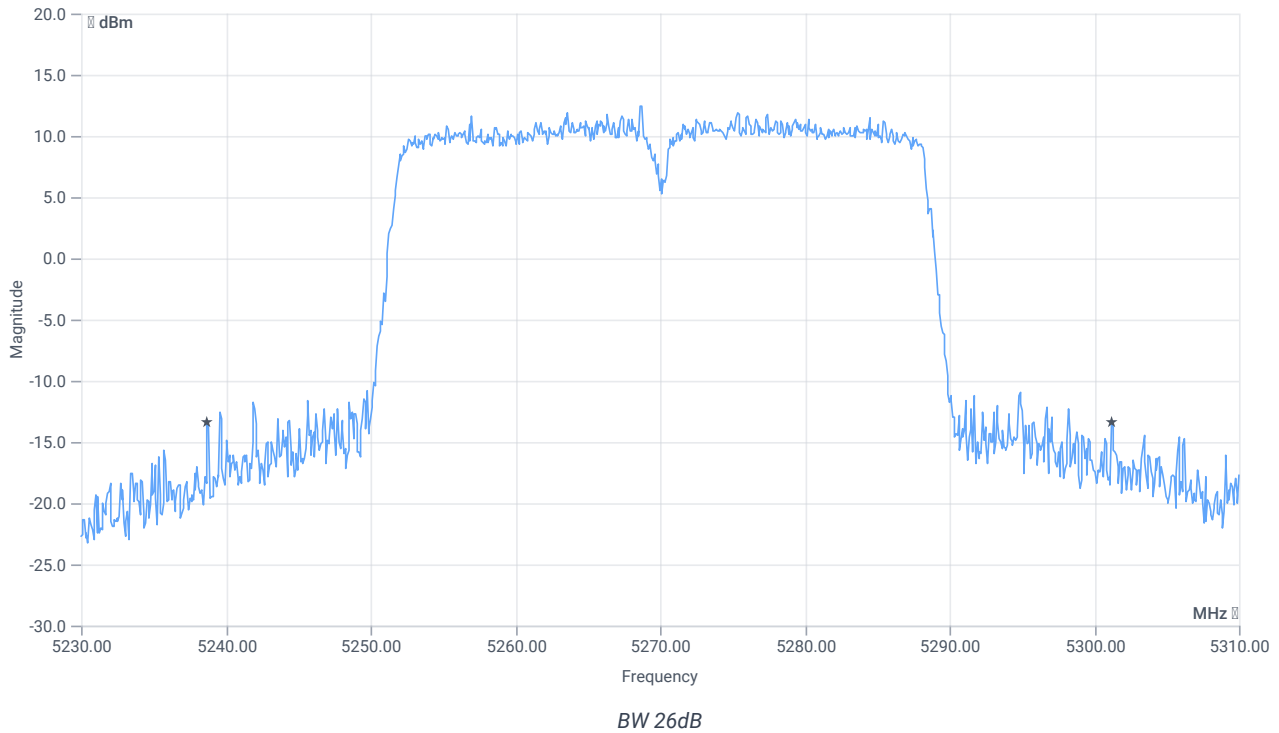
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



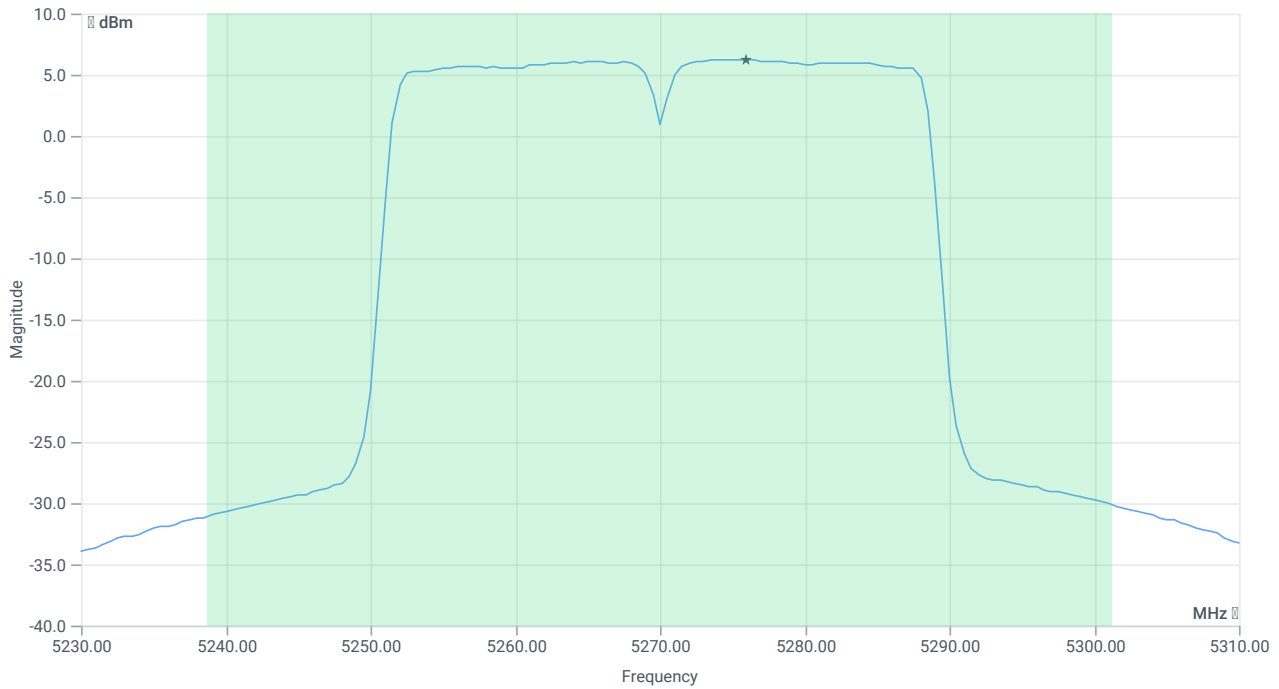
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	62.48	MHz	INFO
T1 26dB	---	---	5238.7200	MHz	INFO
T2 26dB	---	---	5301.2000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.17 16.22 25
Start [MHz] Stop [MHz]	5230.000 5310.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	21.07	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	21.07	dBm	PASS
Limit: 11 dBm + 10 log 62.48					
Max Output Power DC corrected	--	28.96	21.07	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.23	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.23	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:16:51
Ambit temp [°C] humidity [rel%]	24.6 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

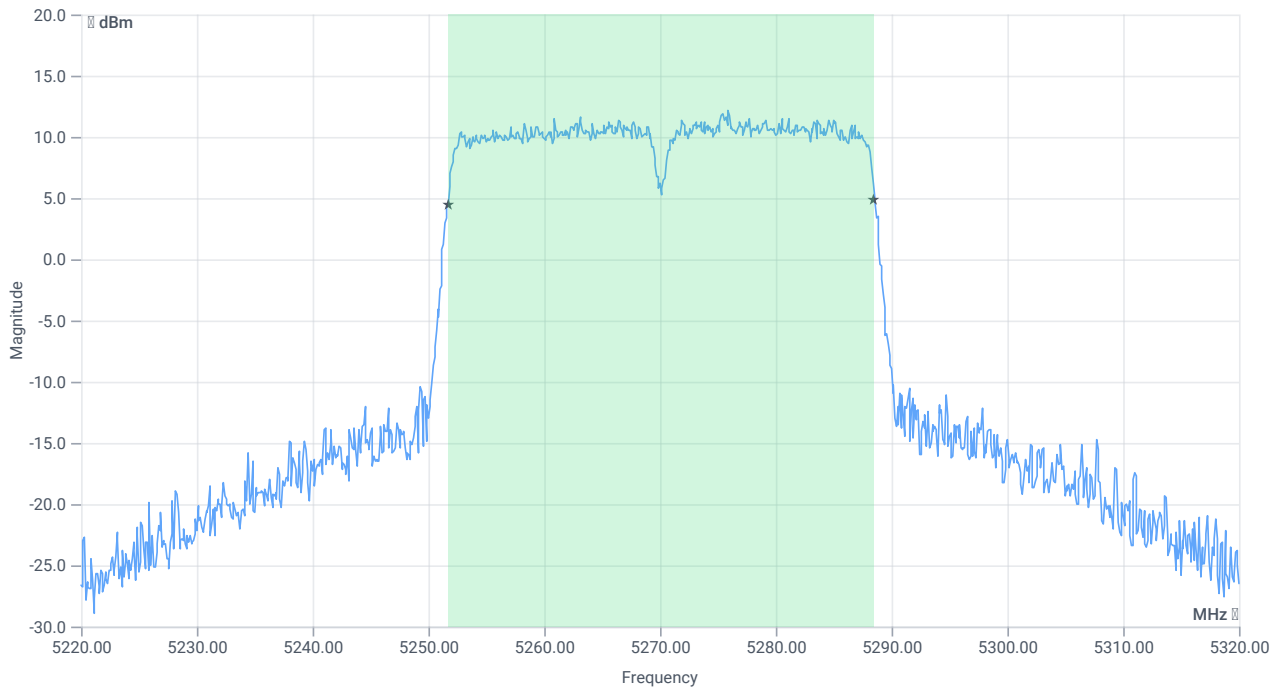
Test at TX 5270 MHz

RESULT: Reference Power cond.

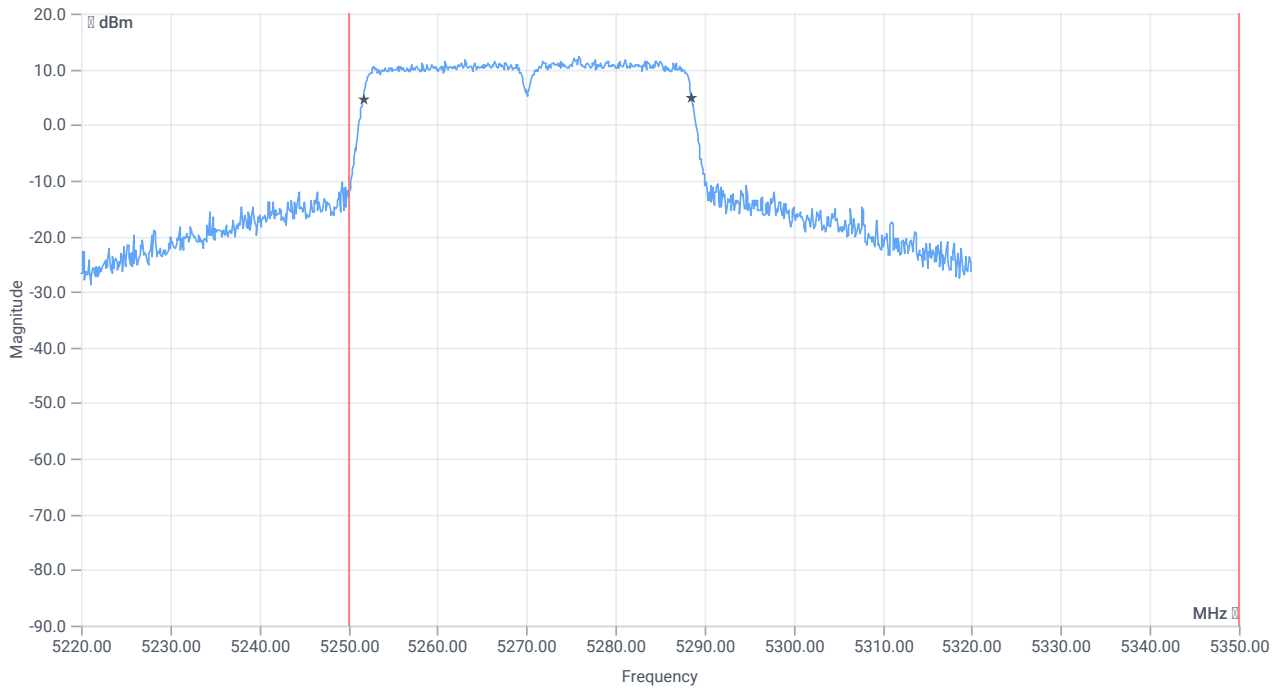
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.16	dBm	INFO
Ref. Frequency	--	--	5266.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.16 16.22 25
Start [MHz] Stop [MHz]	5220.000 5320.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



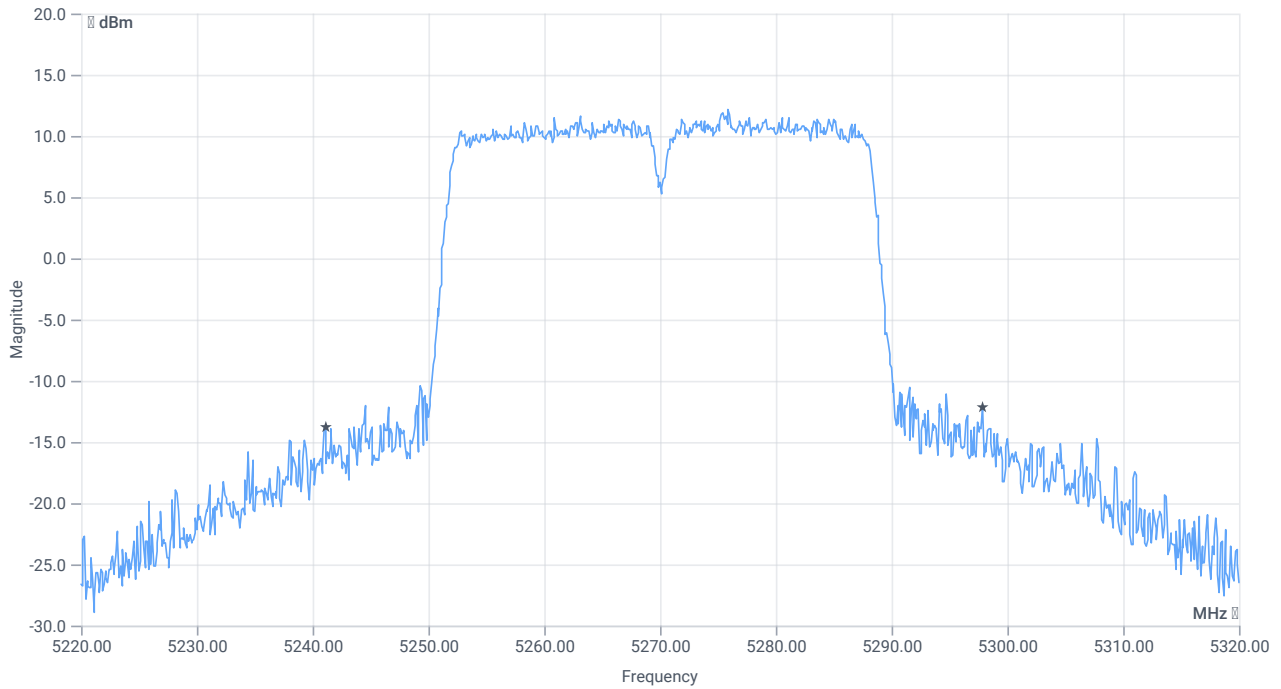
BW 99PCT



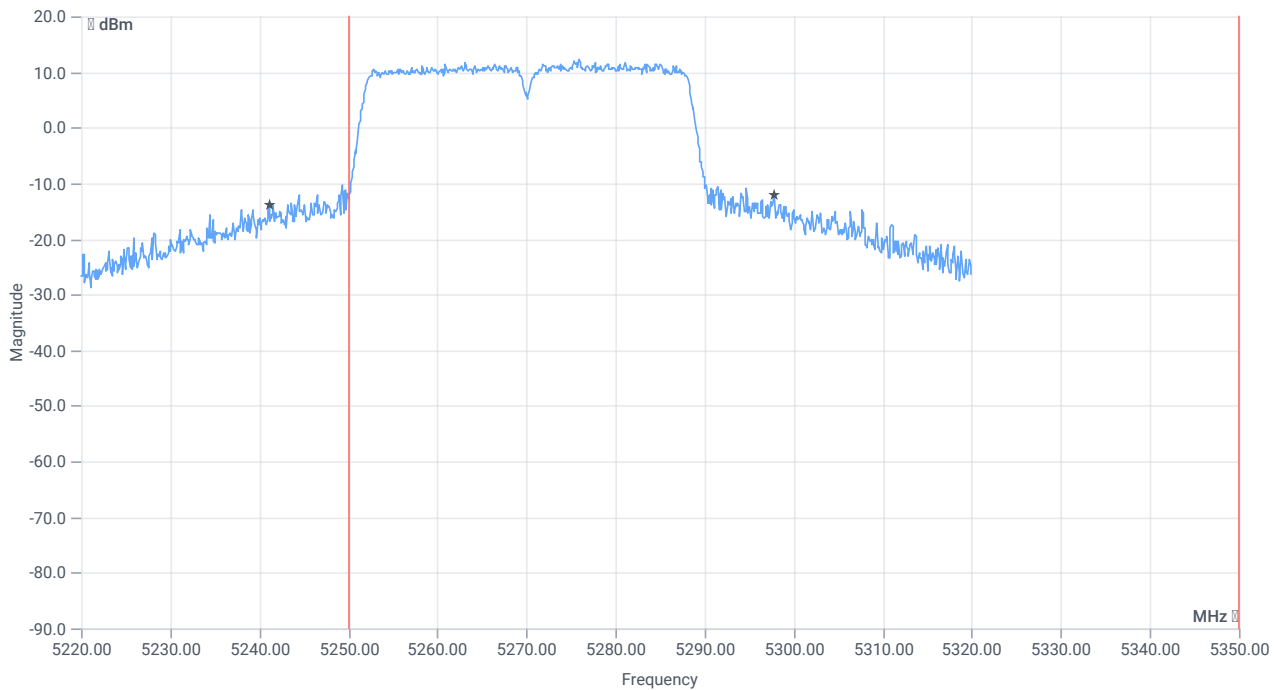
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.763	MHz	INFO
T1 99%	5250.000000	--	5251.7183	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5288.4815	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	56.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5241.1000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5297.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:17:29
Ambit temp [°C] humidity [rel%]	24.6 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5270 MHz

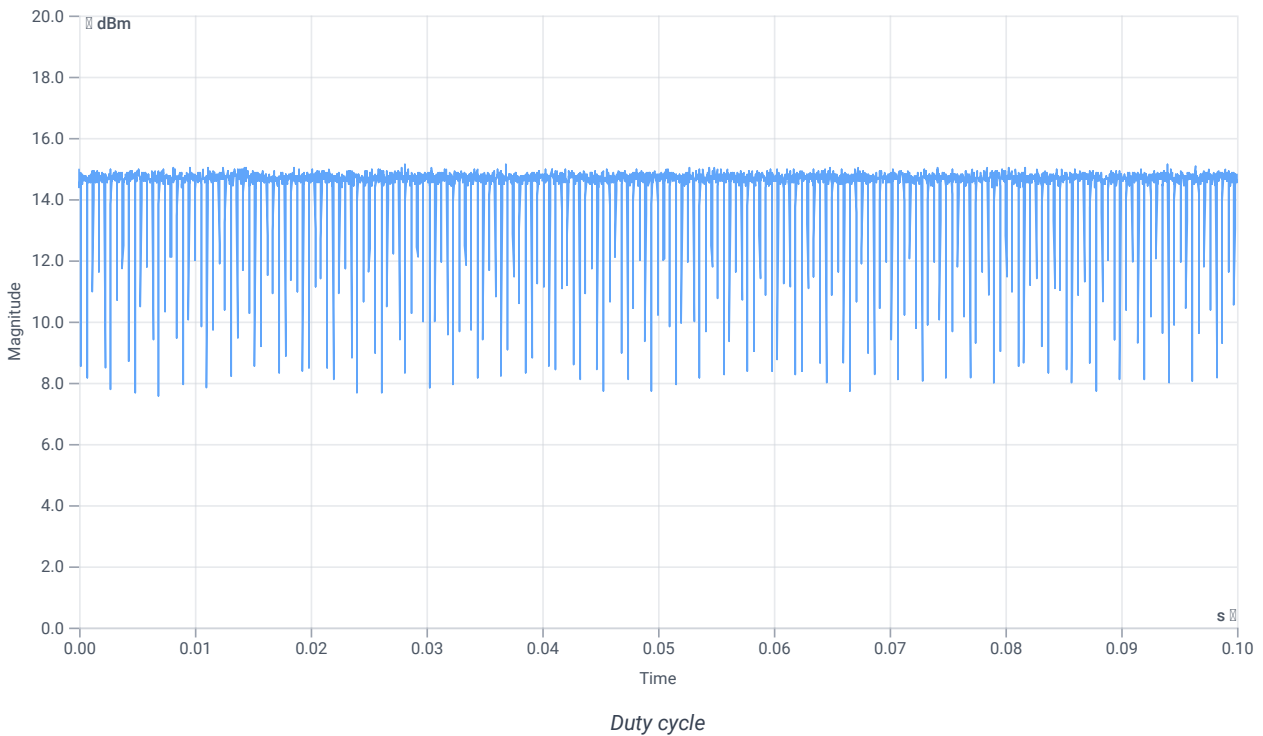
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.79	dBm	INFO
Ref. Frequency	--	--	5282.390	MHz	INFO

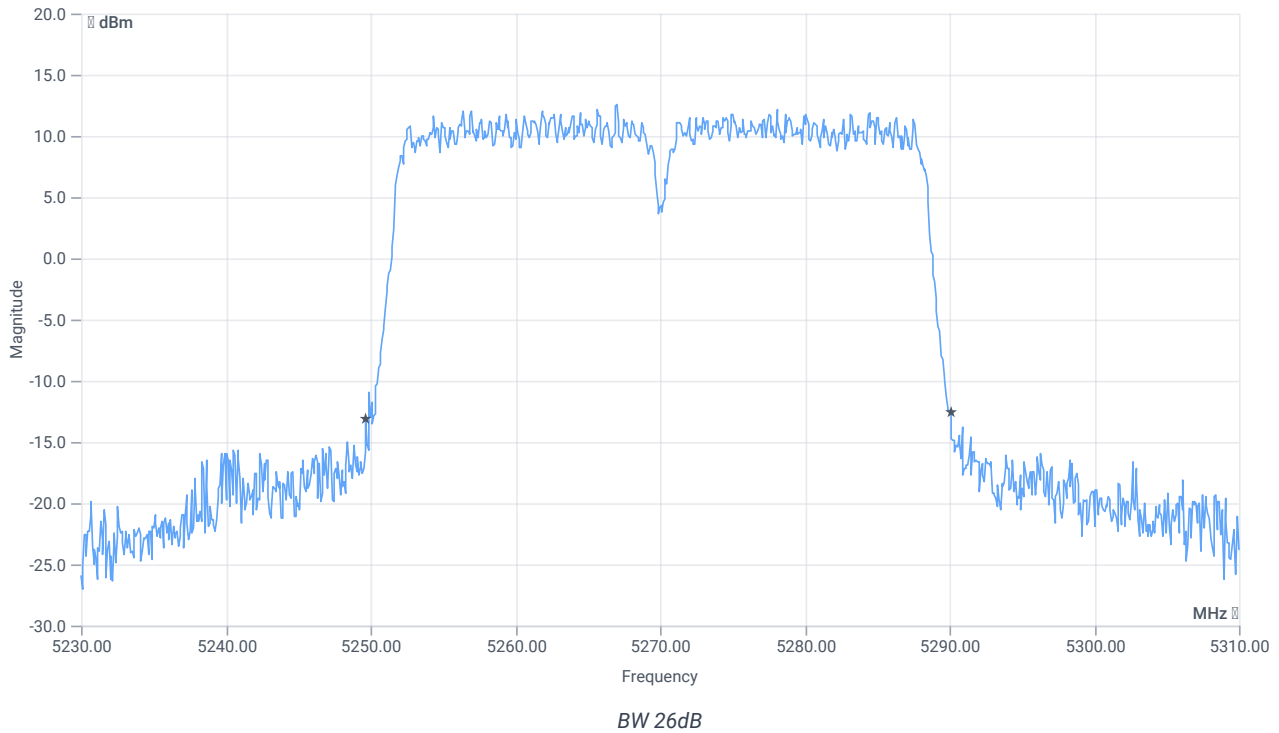
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



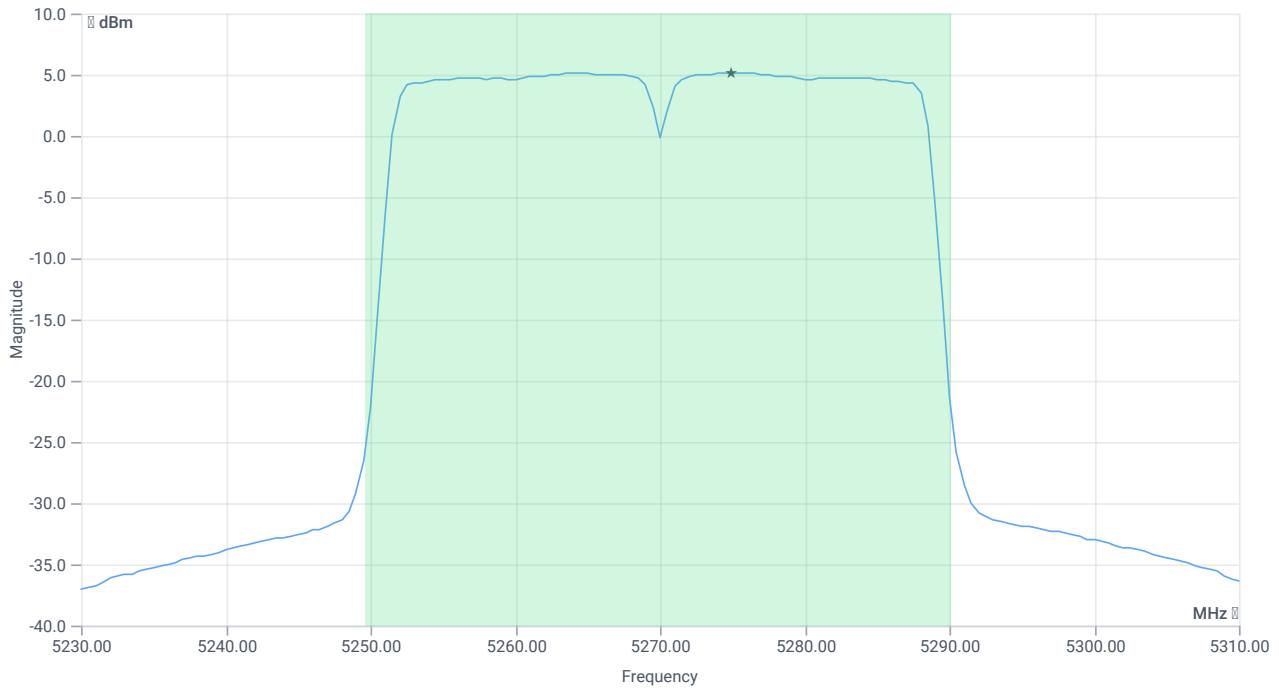
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.4	MHz	INFO
T1 26dB	---	---	5249.6800	MHz	INFO
T2 26dB	---	---	5290.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.79 16.22 25
Start [MHz] Stop [MHz]	5230.000 5310.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.03	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.03	dBm	PASS
Limit: 11 dBm + 10 log 40.4					
Max Output Power DC corrected	--	27.06	20.03	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.13	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.13	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:19:02
Ambit temp [°C] humidity [rel%]	24.7 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

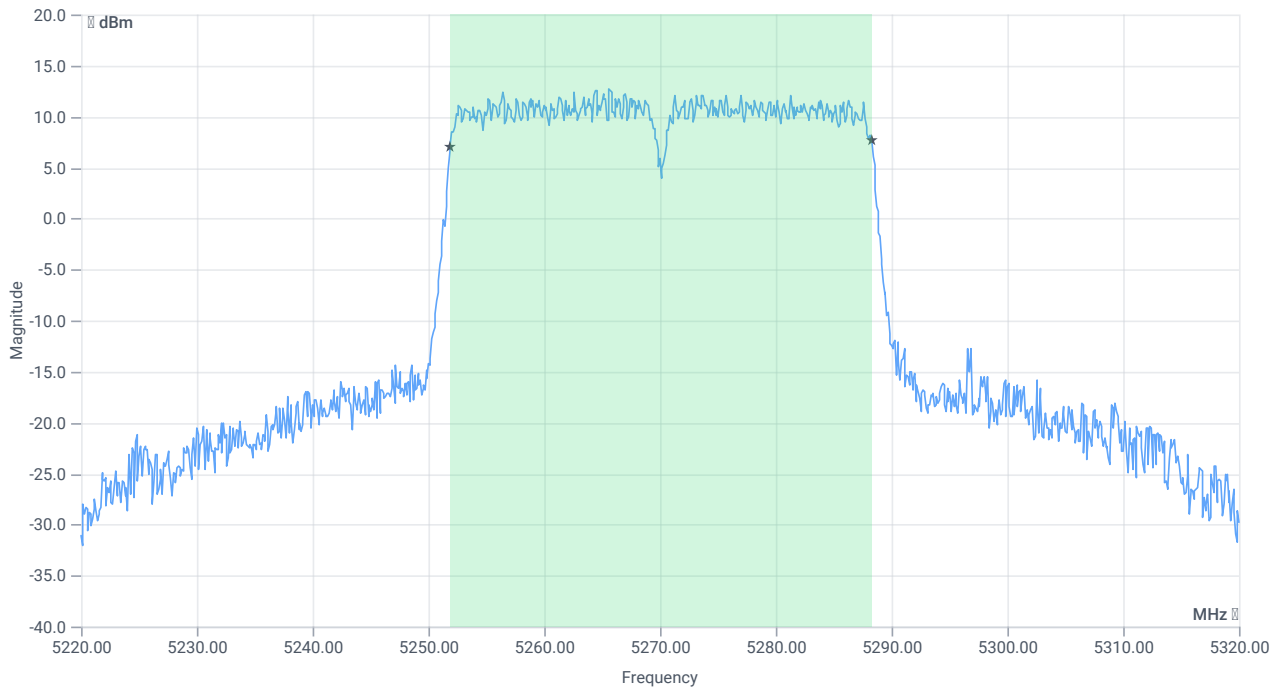
Test at TX 5270 MHz

RESULT: Reference Power cond.

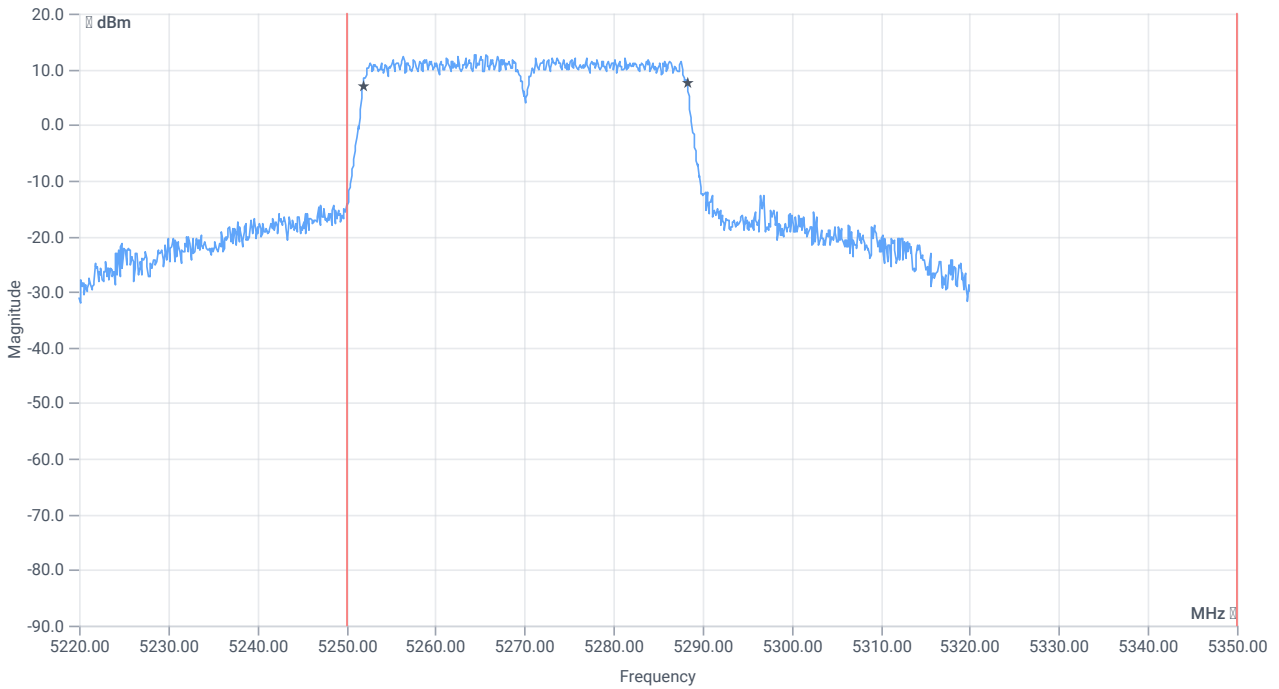
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.25	dBm	INFO
Ref. Frequency	--	--	5274.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.25 16.22 25
Start [MHz] Stop [MHz]	5220.000 5320.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



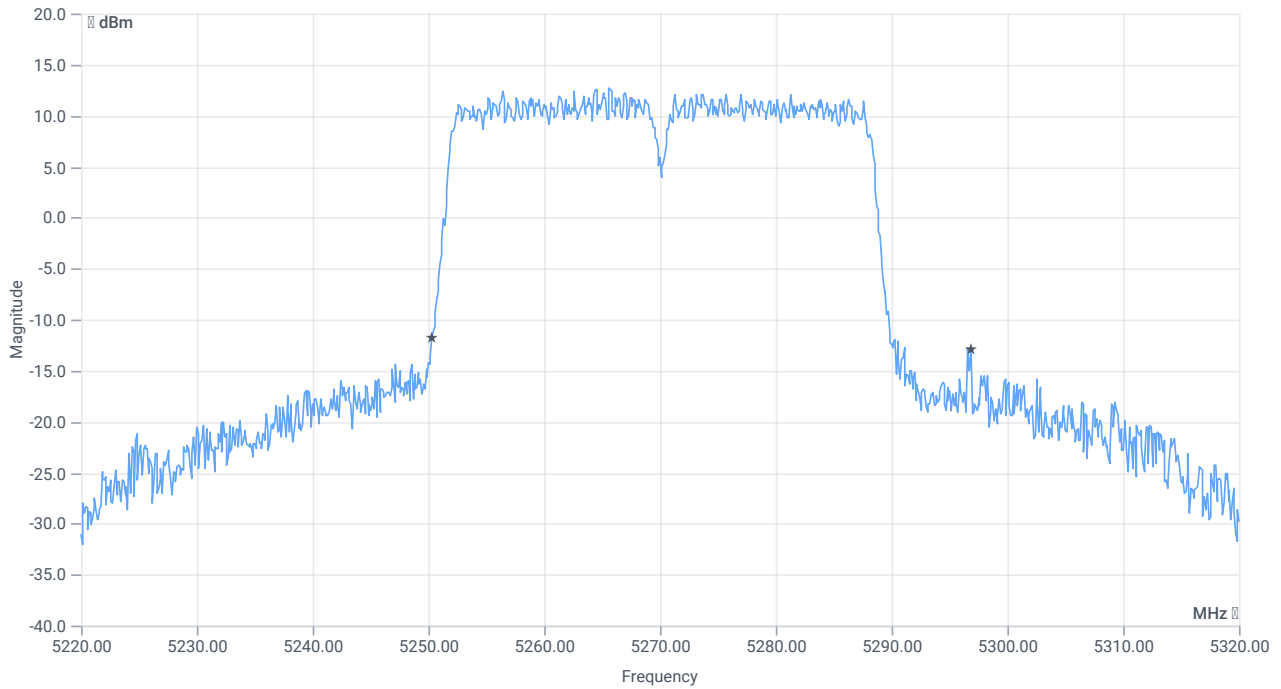
BW 99PCT



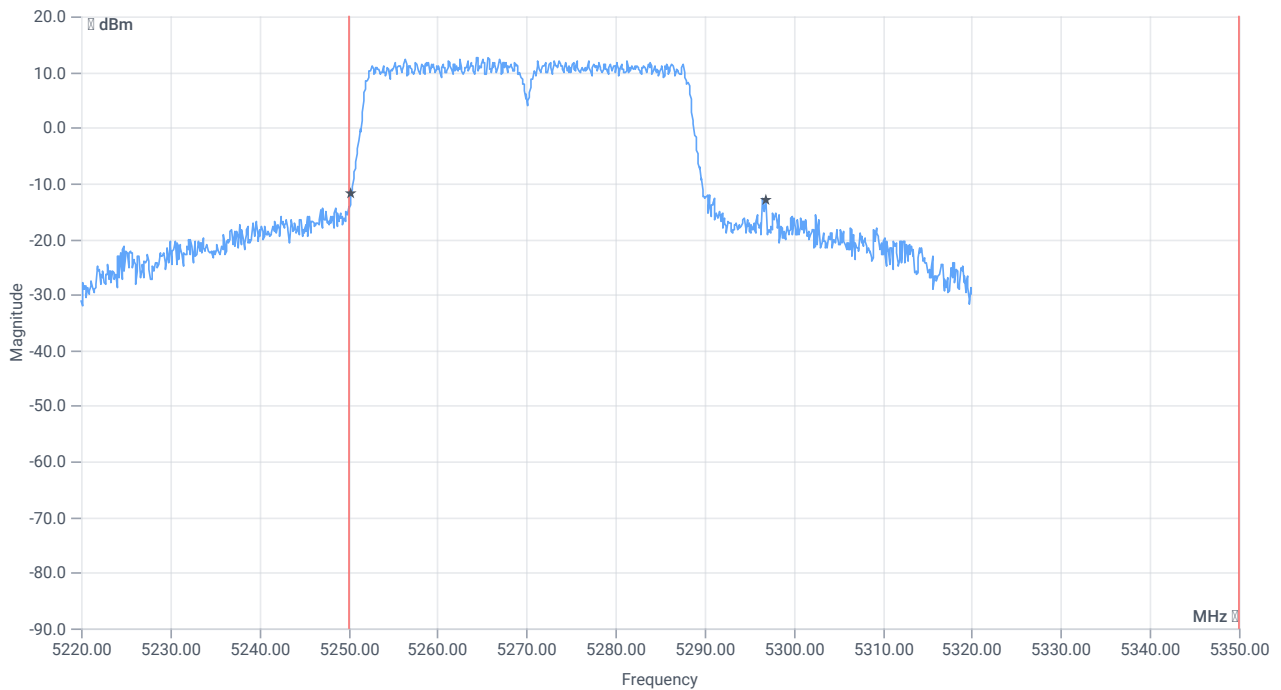
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5250.000000	--	5251.9181	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5288.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	46.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5250.3000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5296.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:19:40
Ambit temp [°C] humidity [rel%]	24.7 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS79

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5270 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	21.07	dBm	INFO
Ant:1 BW 26dB	--	--	62.480	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.03	dBm	INFO
Ant:2 BW 26dB	--	--	40.400	MHz	INFO
Σ Limit absolute	--	24	23.59	dBm	PASS
Σ Limit: 11 dBm + 10 log 40.4	--	27.06	23.59	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.23	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.13	dBm/1MHz	INFO
Σ	--	11	8.73	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 09:21:25
Ambit temp [°C] humidity [rel%]	24.7 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 09:21:25
Message	set WLAN5Gx to ac_VHT40_U_NII_2A, Frequency [MHz] 5310

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:21:34
Ambit temp [°C] humidity [rel%]	24.7 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS52

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5310 MHz

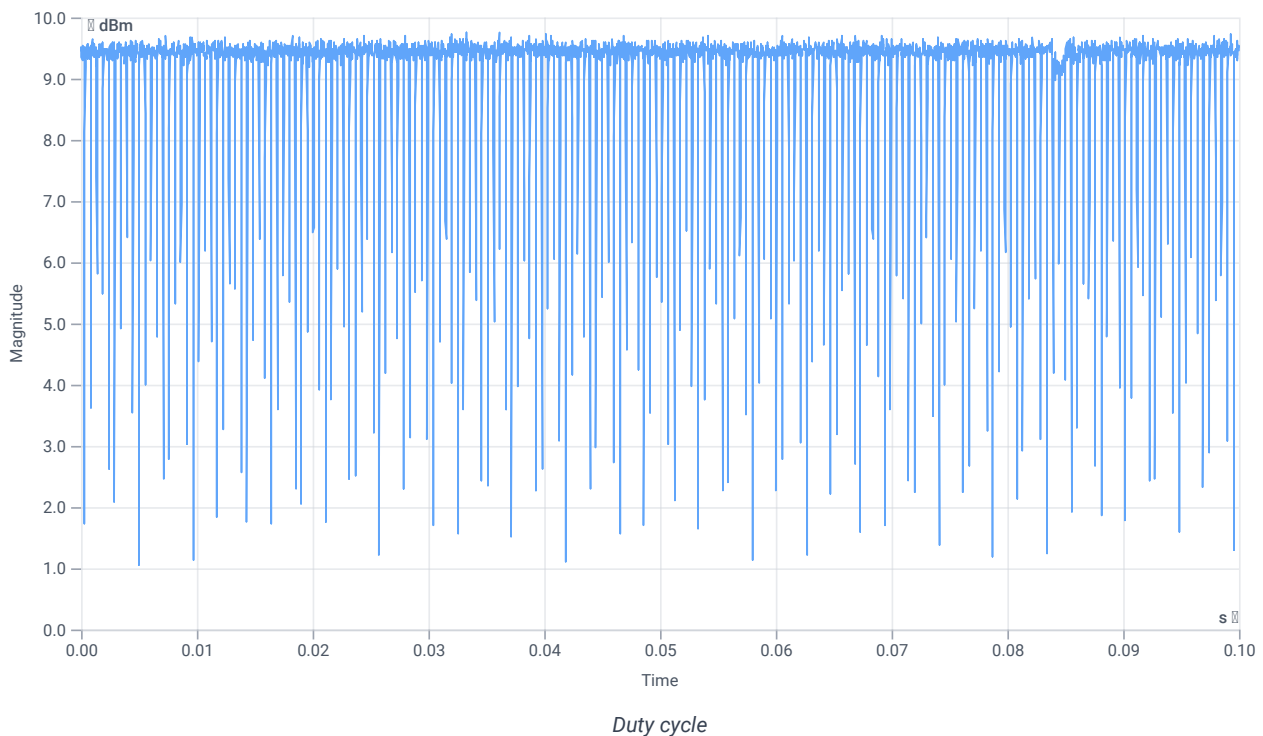
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.01	dBm	INFO
Ref. Frequency	--	--	5315.390	MHz	INFO

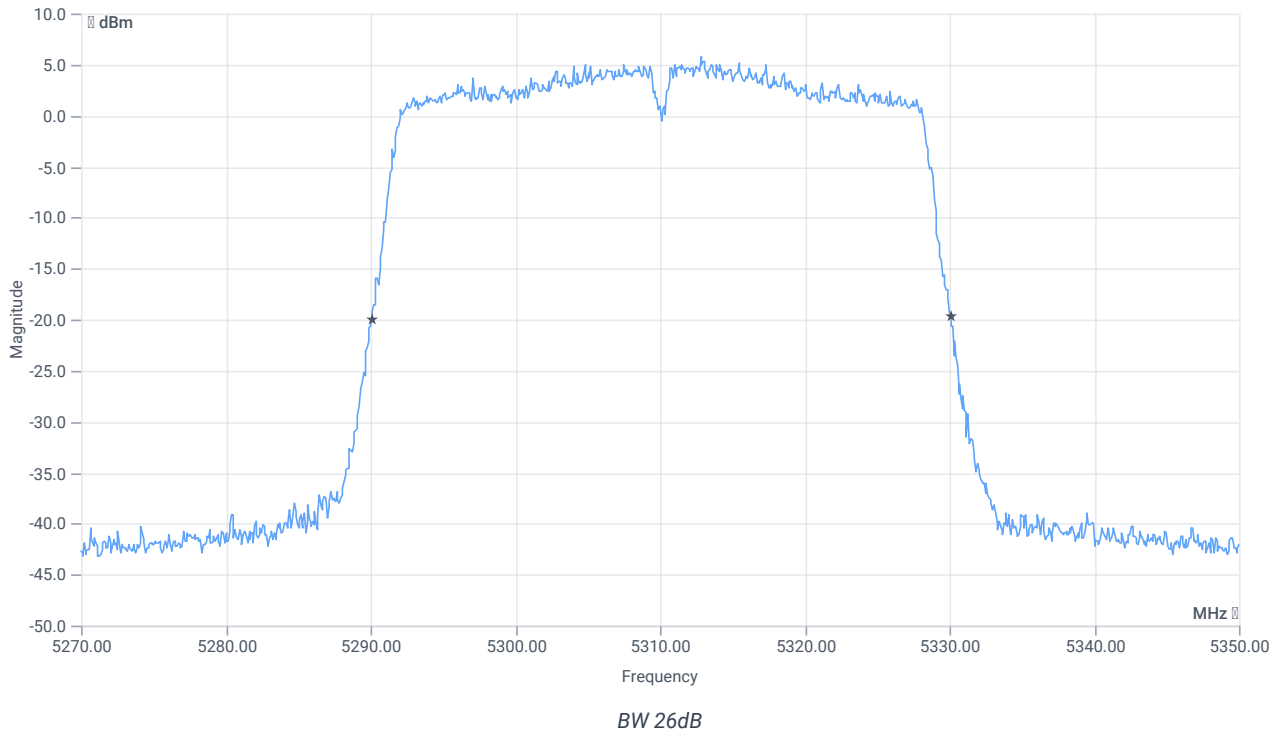
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



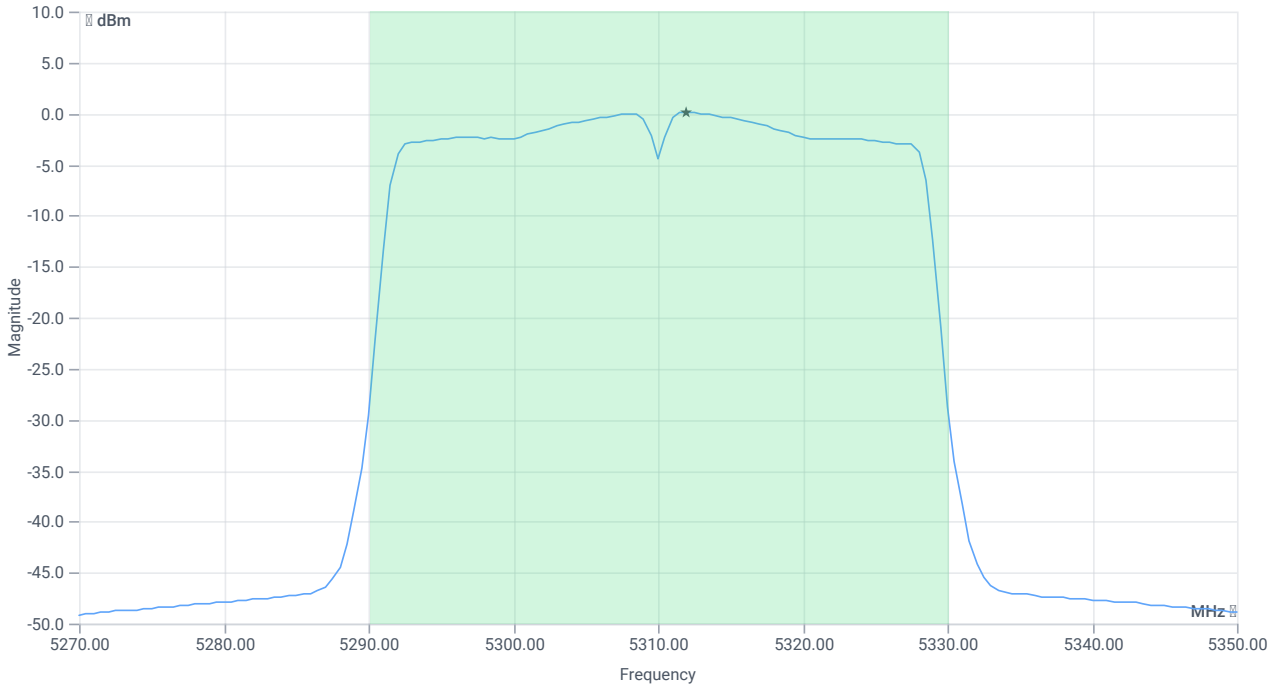
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5290.0800	MHz	INFO
T2 26dB	---	---	5330.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.01 16.12 20
Start [MHz] Stop [MHz]	5270.000 5350.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	13.76	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	13.76	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	13.76	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	0.15	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	0.15	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:23:07
Ambit temp [°C] humidity [rel%]	24.8 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS52

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

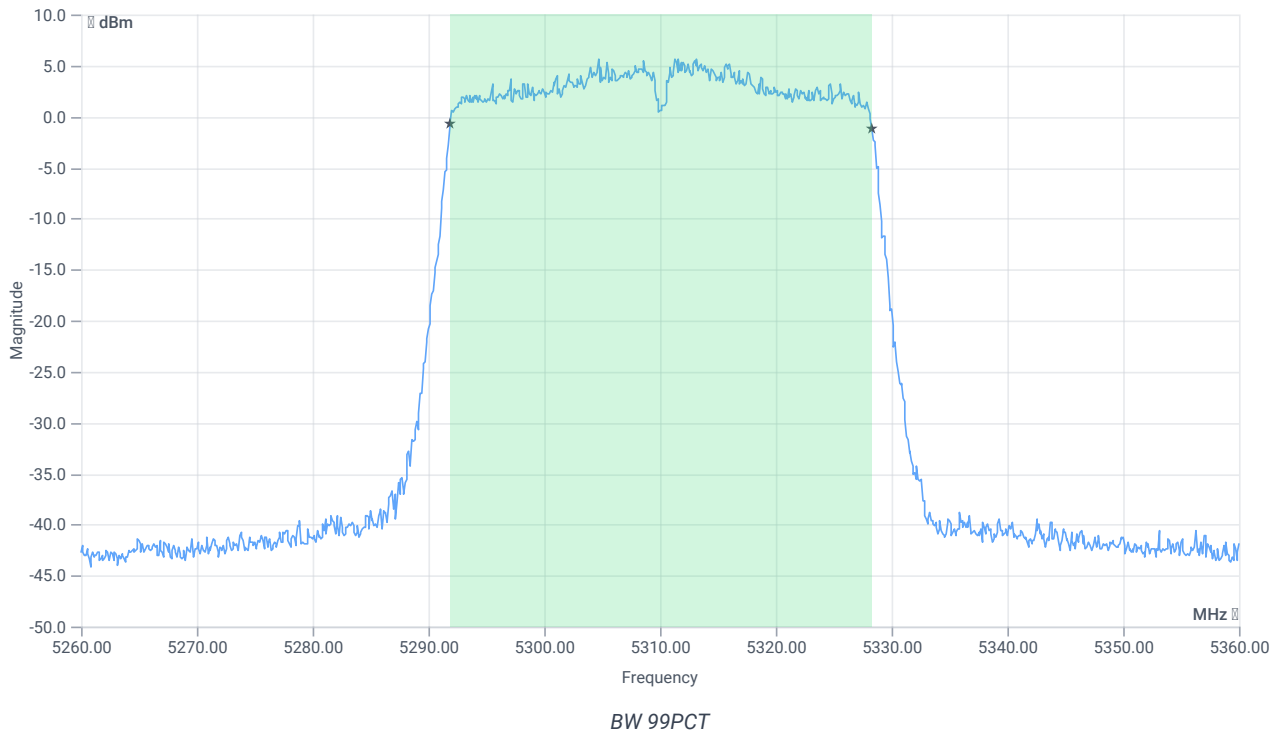
Test at TX 5310 MHz

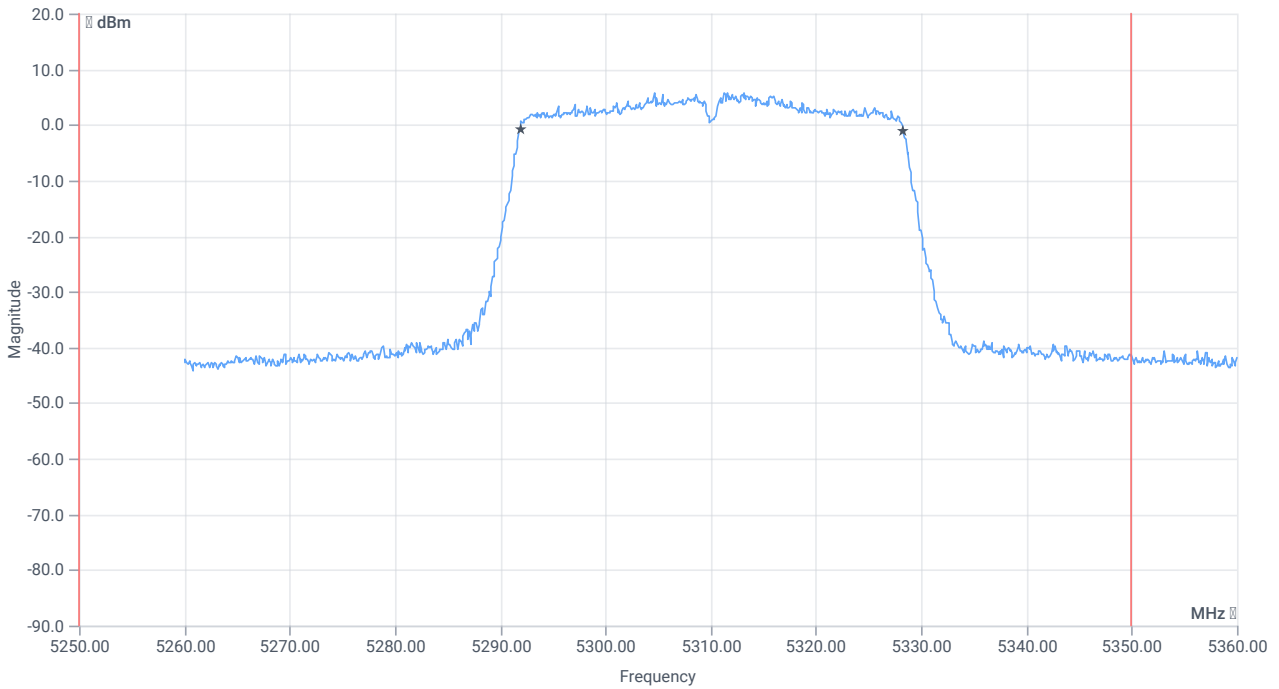
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.24	dBm	INFO
Ref. Frequency	--	--	5311.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.24 16.12 20
Start [MHz] Stop [MHz]	5260.000 5360.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

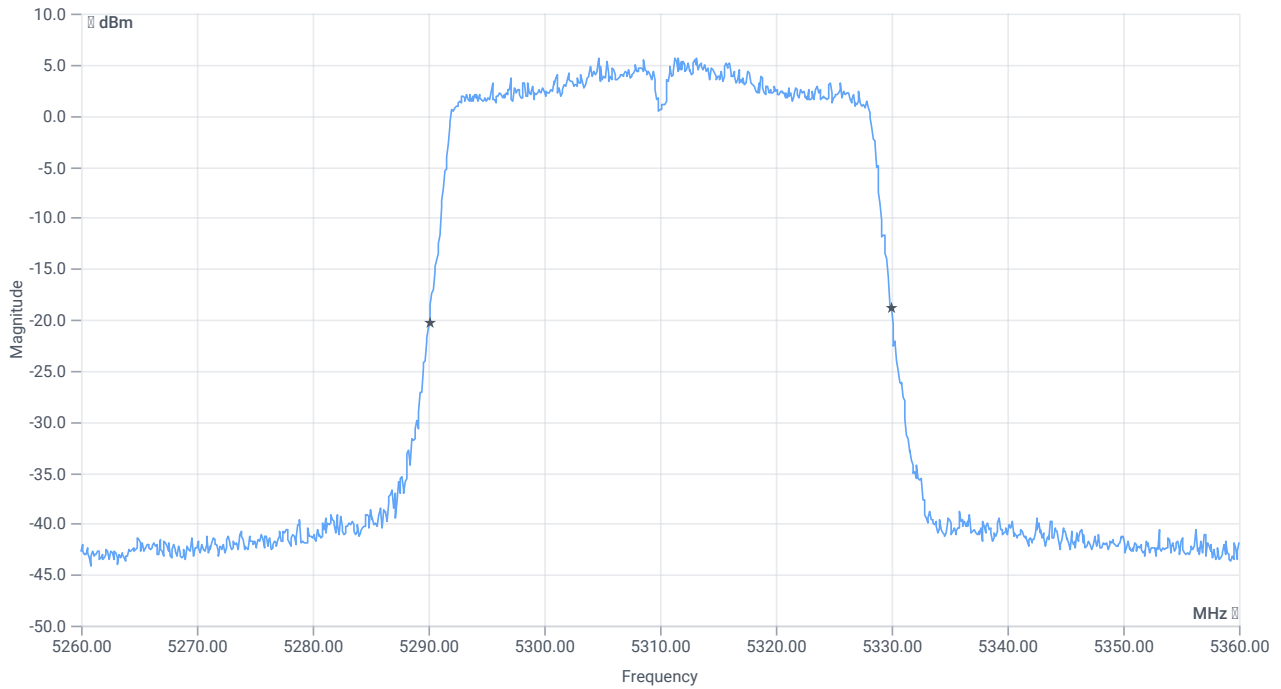




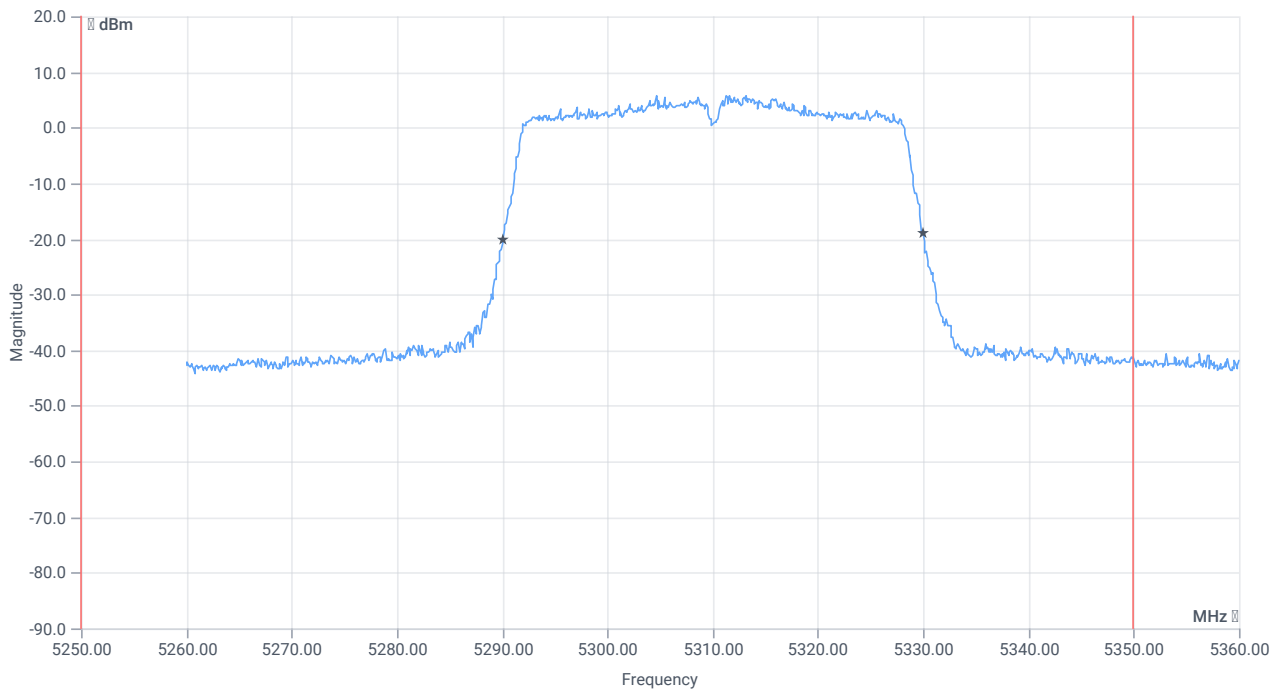
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5250.000000	--	5291.9181	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5328.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.9	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5290.1000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5330.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:23:45
Ambit temp [°C] humidity [rel%]	24.8 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS52

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5310 MHz

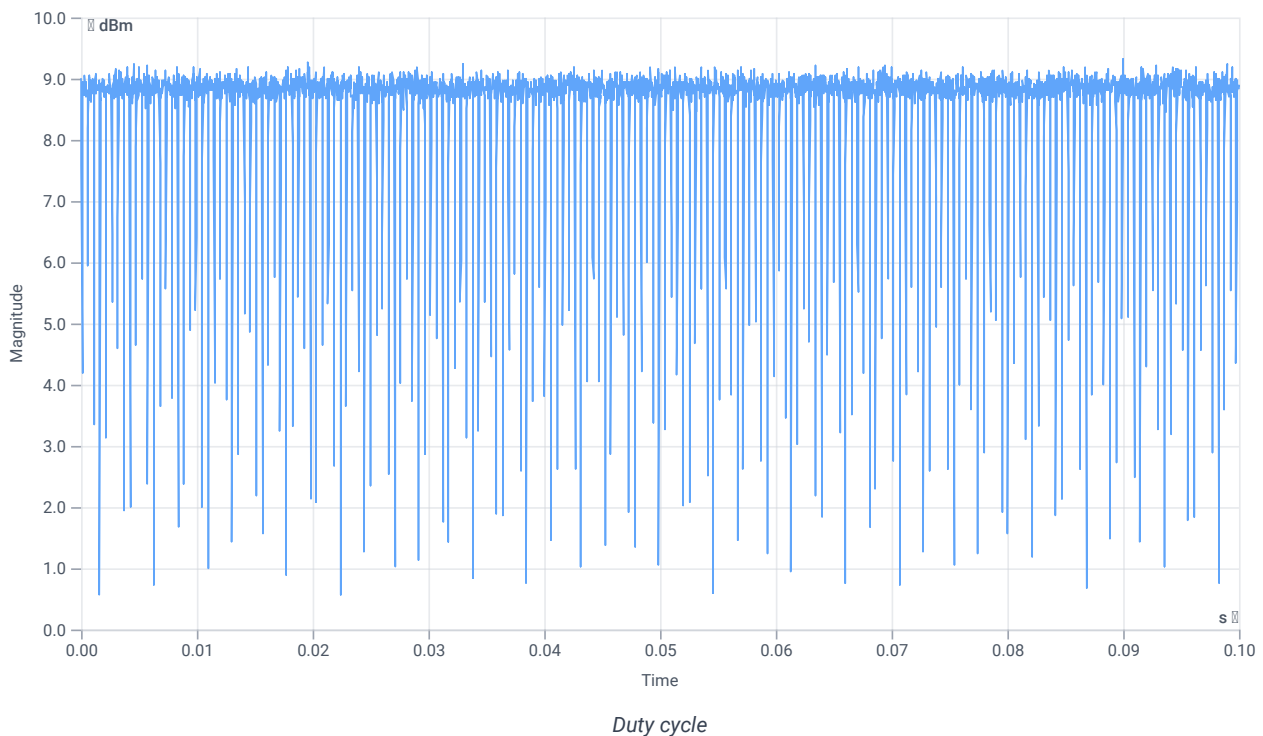
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	7.54	dBm	INFO
Ref. Frequency	--	--	5313.200	MHz	INFO

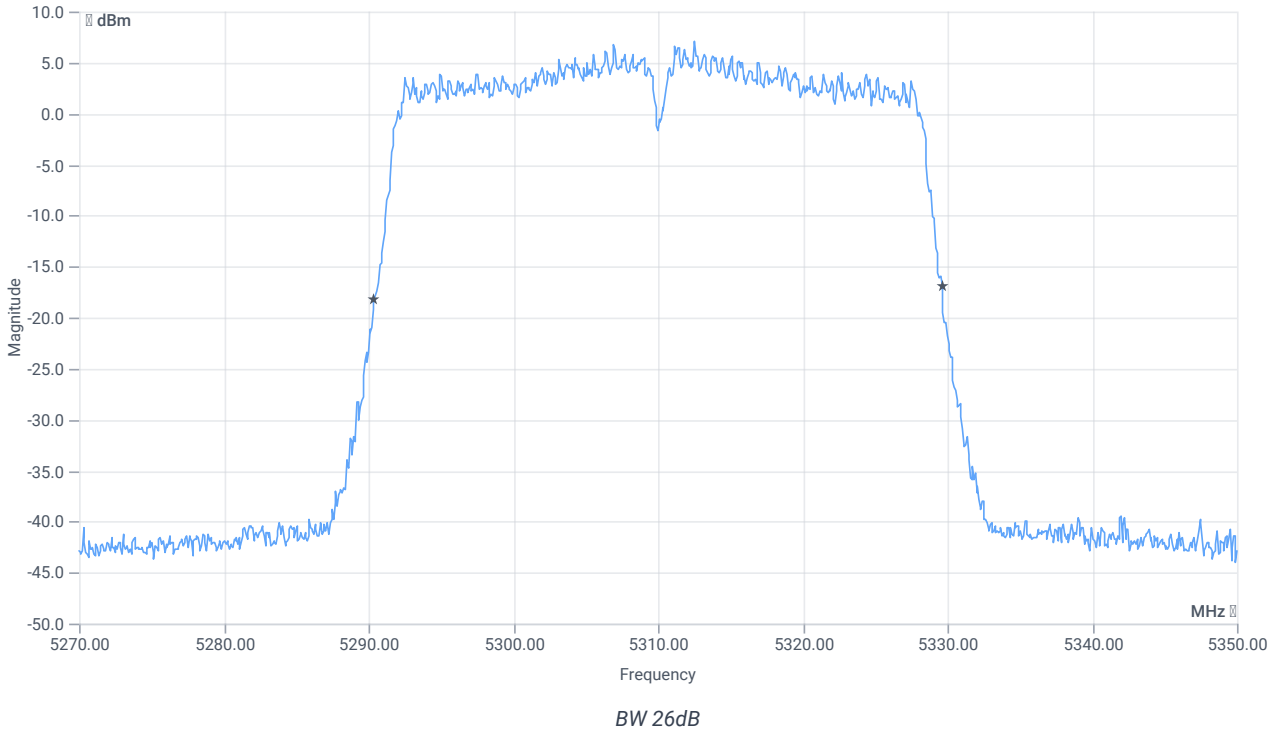
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



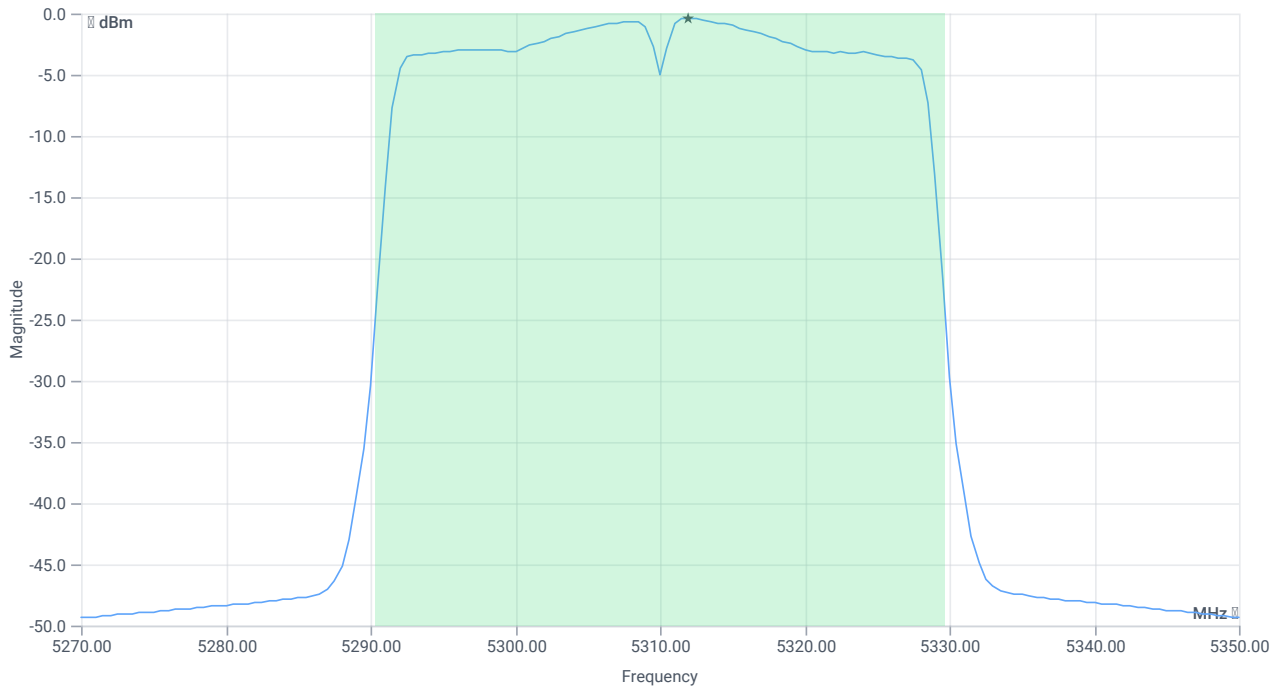
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.2	MHz	INFO
T1 26dB	---	---	5290.4000	MHz	INFO
T2 26dB	---	---	5329.6000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.54 16.12 20
Start [MHz] Stop [MHz]	5270.000 5350.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	13.17	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	13.17	dBm	PASS
Limit: 11 dBm + 10 log 39.2					
Max Output Power DC corrected	--	26.93	13.17	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	-0.39	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	-0.39	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:25:18
Ambit temp [°C] humidity [rel%]	24.8 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS52

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

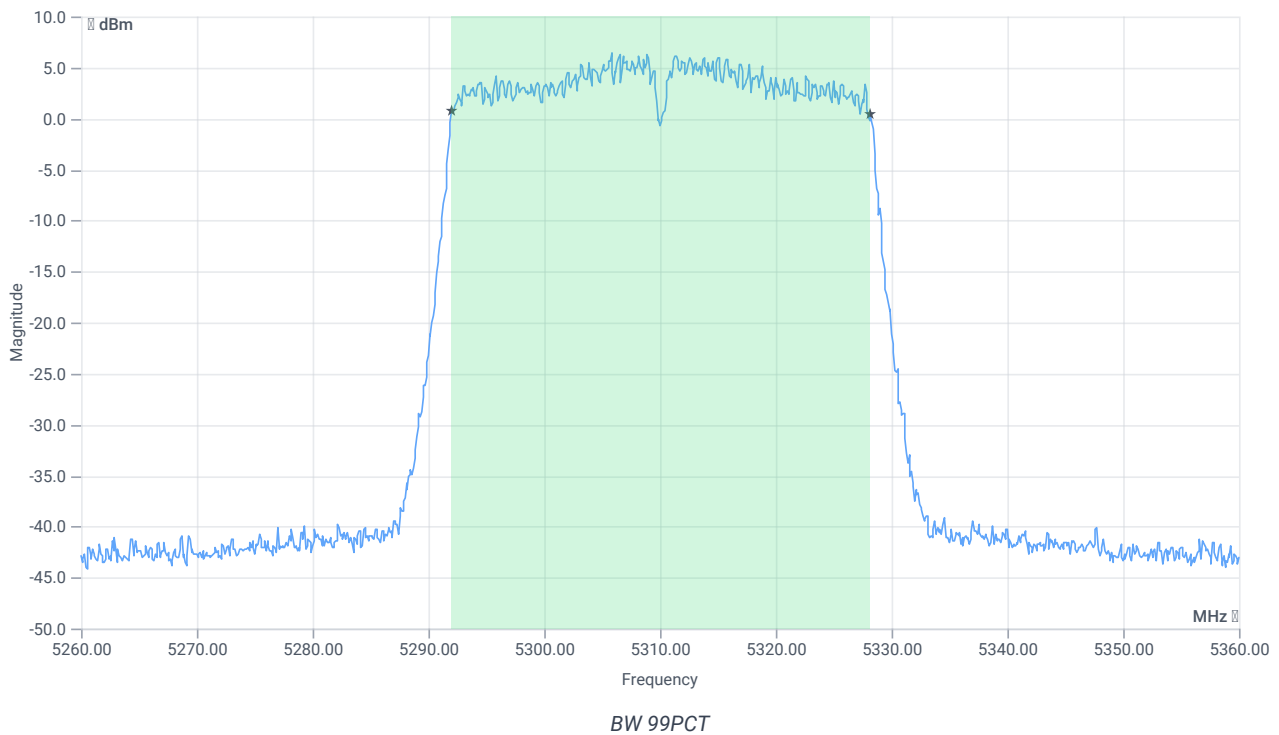
Test at TX 5310 MHz

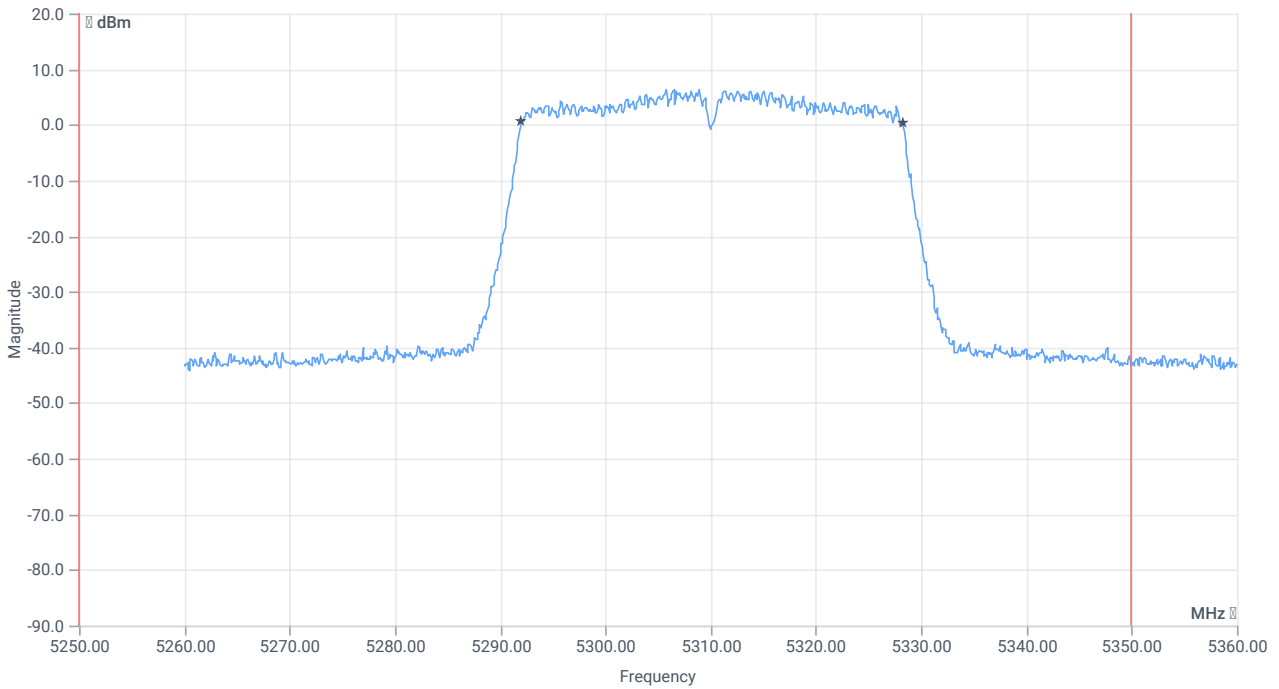
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	9.12	dBm	INFO
Ref. Frequency	--	--	5312.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.12 16.12 20
Start [MHz] Stop [MHz]	5260.000 5360.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

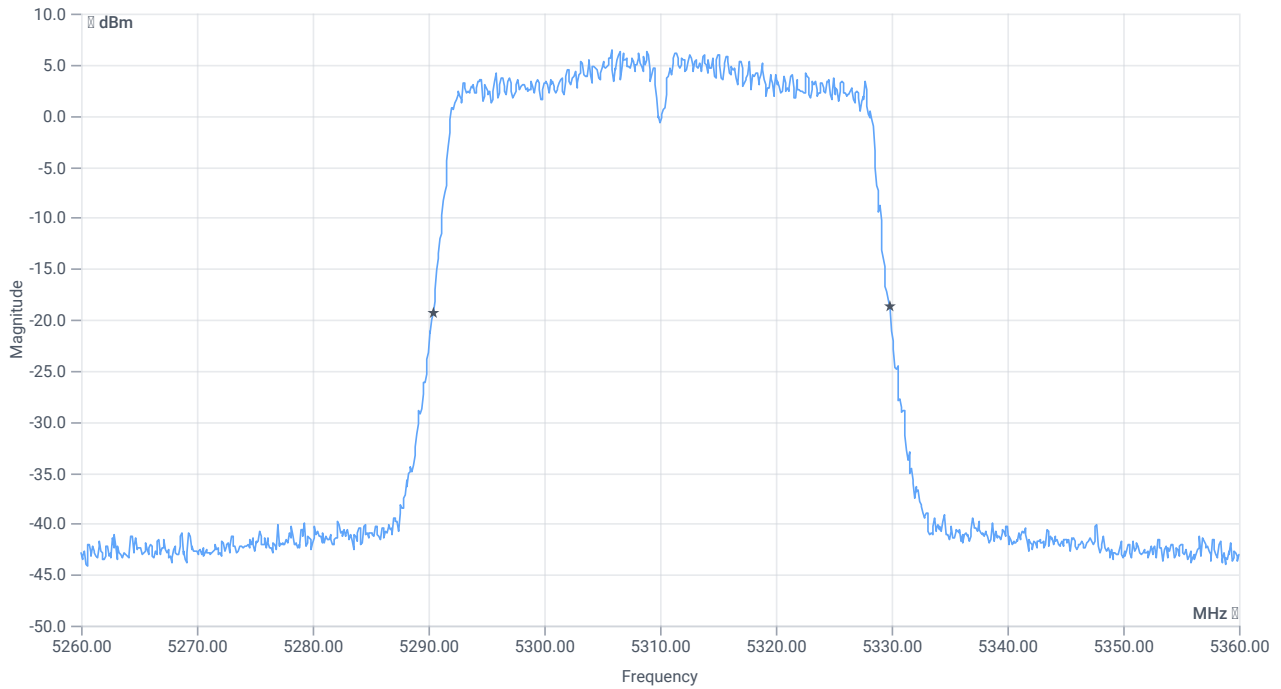




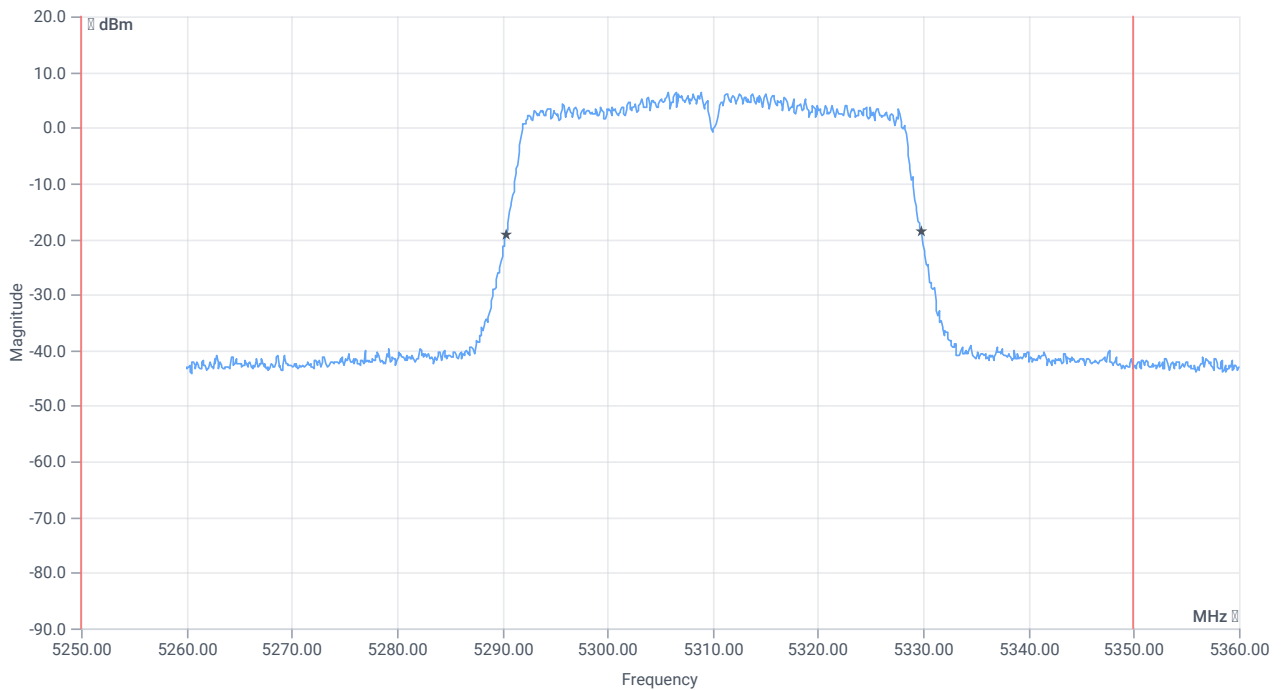
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.164	MHz	INFO
T1 99%	5250.000000	--	5292.0180	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5328.1818	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.5	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5290.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5329.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2A

References

TC start	27.07.2023 09:25:56
Ambit temp [°C] humidity [rel%]	24.8 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-2A
Information	PS52

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5310 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	13.76	dBm	INFO
Ant:1 BW 26dB	--	--	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	13.17	dBm	INFO
Ant:2 BW 26dB	--	--	39.200	MHz	INFO
Σ Limit absolute	--	24	16.49	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.2	--	26.93	16.49	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	0.15	dBm/1MHz	INFO
Ant:2 PSD	--	--	-0.39	dBm/1MHz	INFO
Σ	--	11	2.9	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 09:27:32
Ambit temp [°C] humidity [rel%]	24.8 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 09:27:33
Message	set WLAN5Gx to ac_VHT40_U_NII_2C, Frequency [MHz] 5510 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:15:23
Ambit temp [°C] humidity [rel%]	24.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS62

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5510 MHz

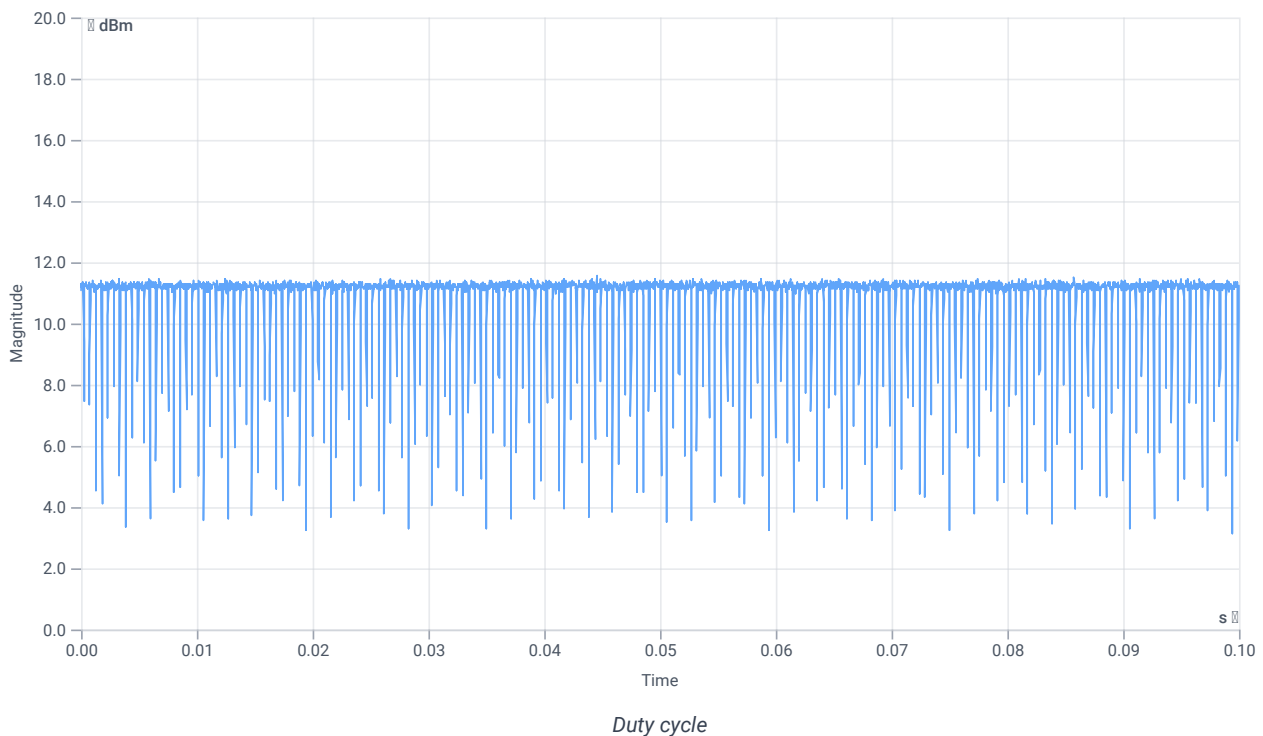
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	9.81	dBm	INFO
Ref. Frequency	--	--	5513.200	MHz	INFO

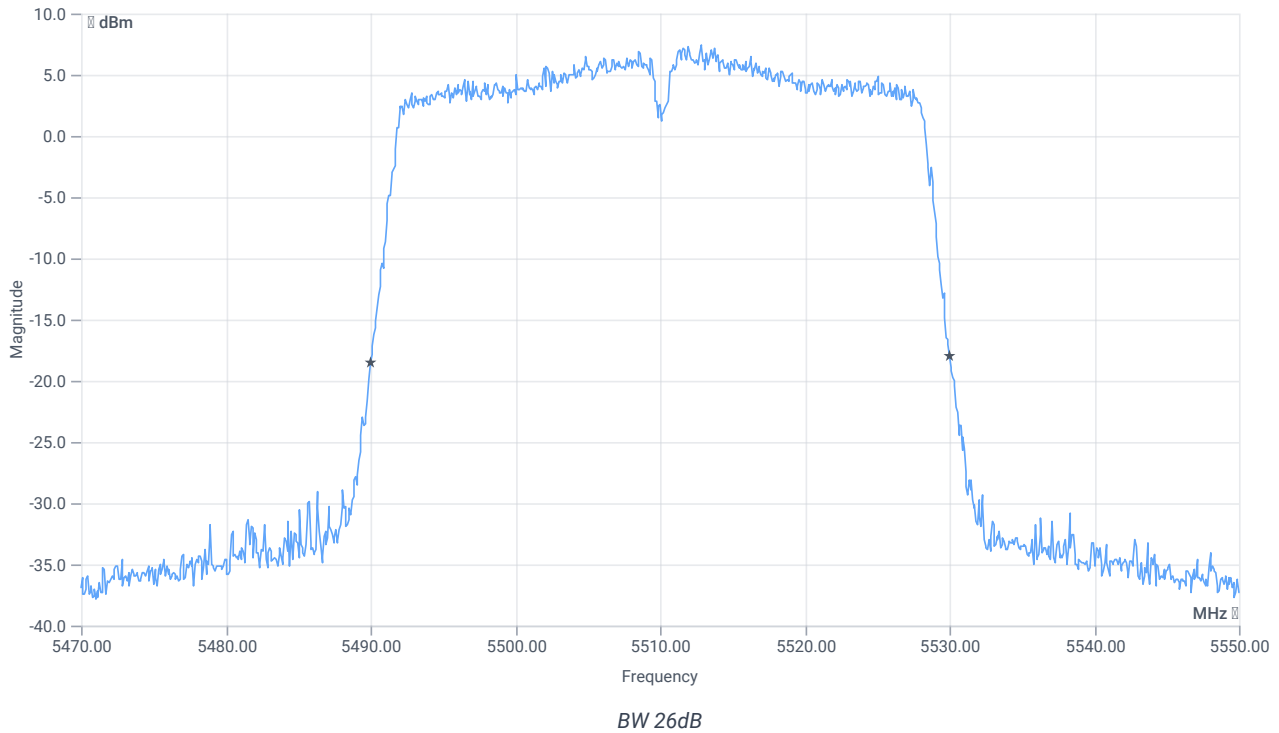
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



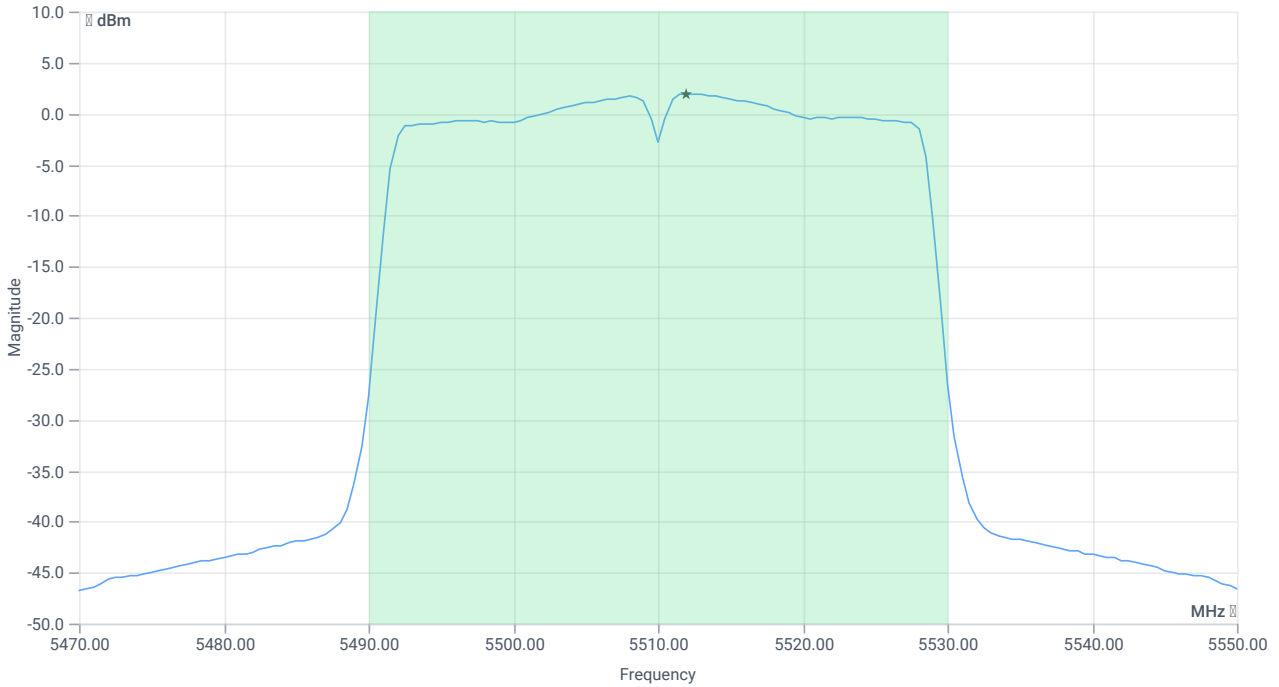
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5490.0000	MHz	INFO
T2 26dB	---	---	5530.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.81 16.59 20
Start [MHz] Stop [MHz]	5470.000 5550.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	15.56	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	15.56	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	15.56	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	1.93	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	1.93	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:16:51
Ambit temp [°C] humidity [rel%]	24.9 49
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS62

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

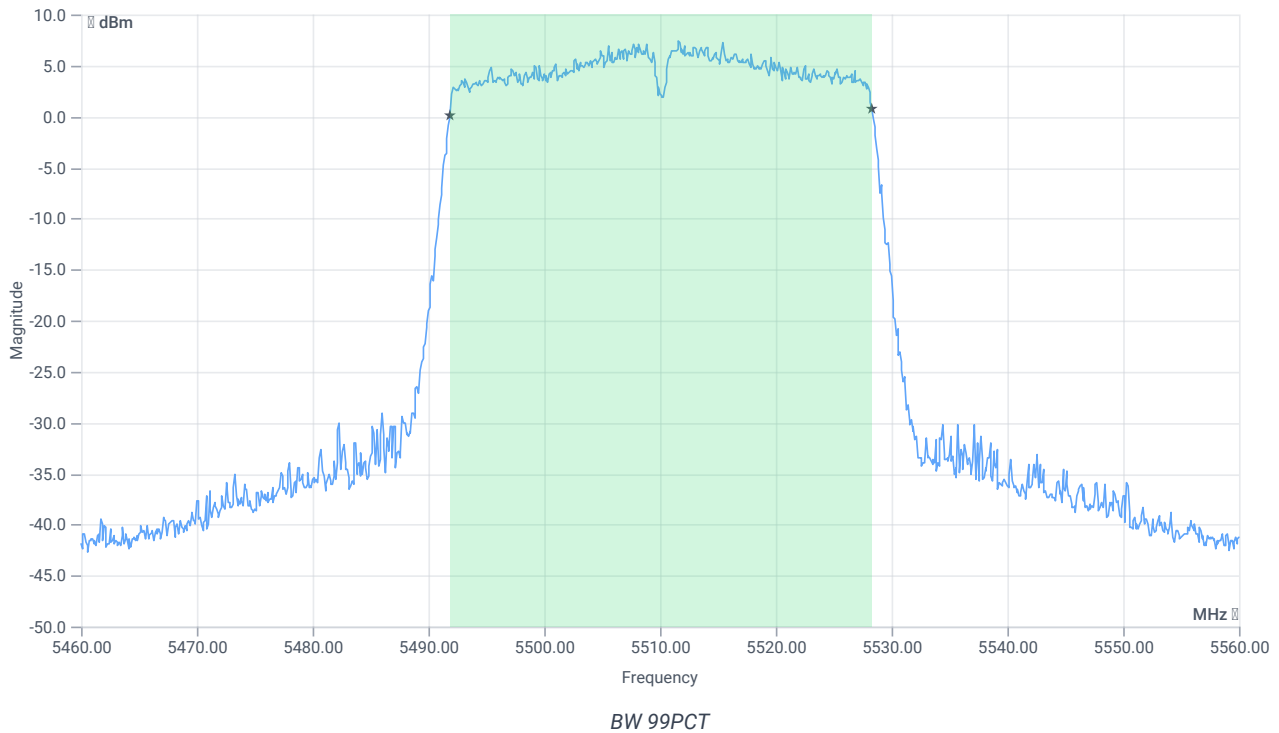
Test at TX 5510 MHz

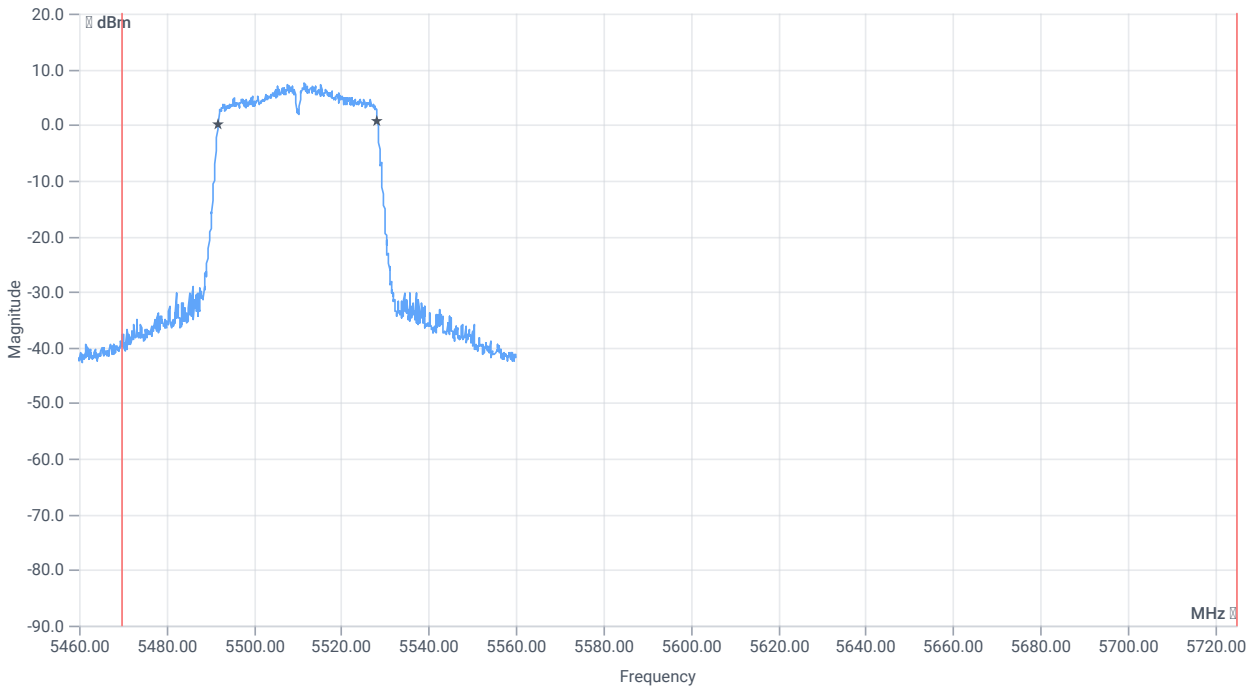
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	10.22	dBm	INFO
Ref. Frequency	--	--	5512.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.22 16.59 20
Start [MHz] Stop [MHz]	5460.000 5560.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

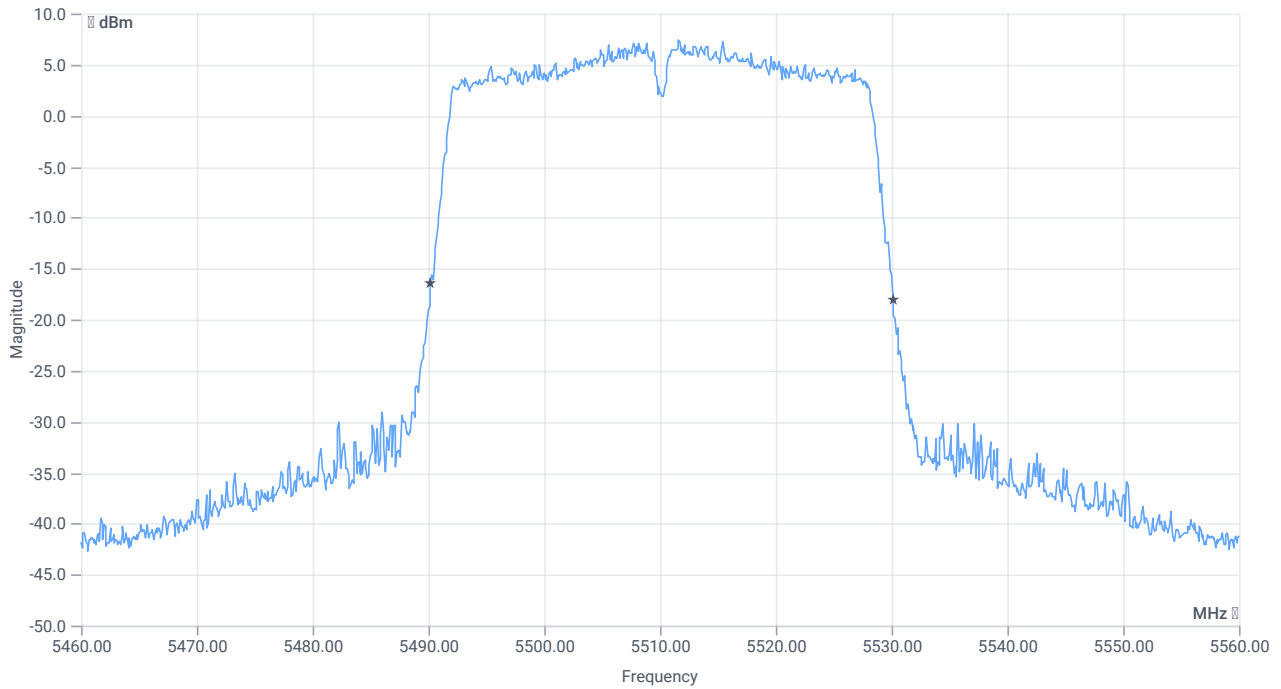




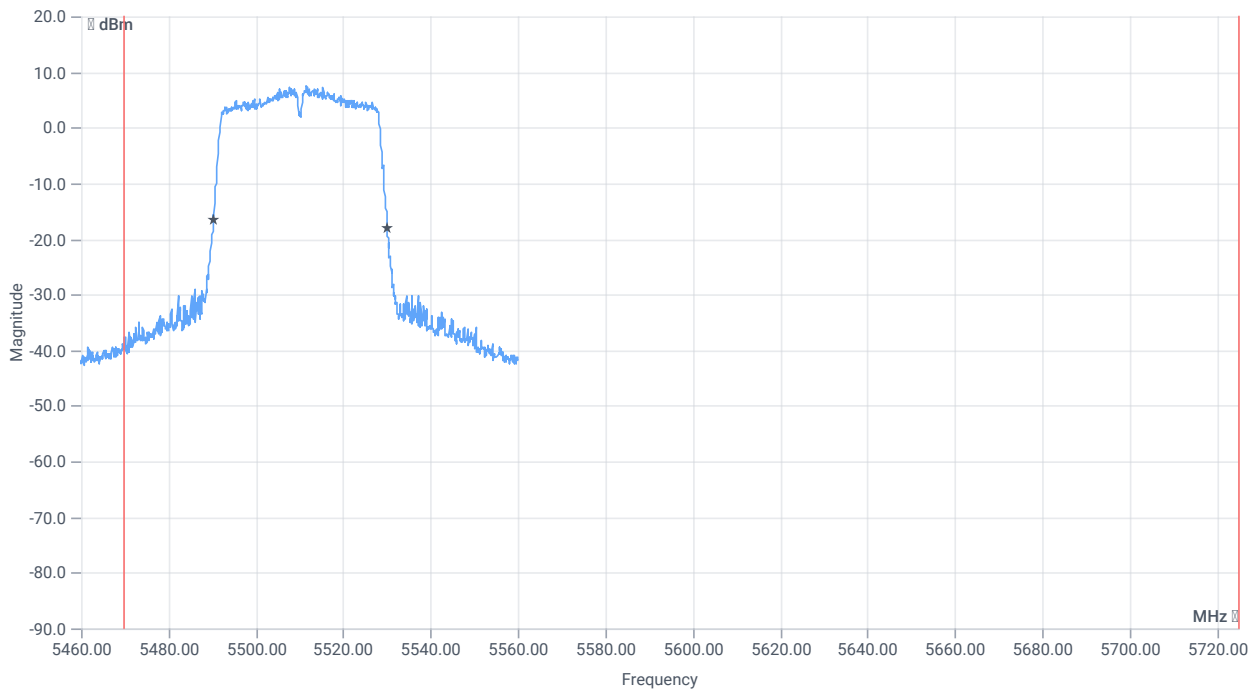
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5491.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5528.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.9	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5490.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5530.1000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:17:23
Ambit temp [°C] humidity [rel%]	24.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS62

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5510 MHz

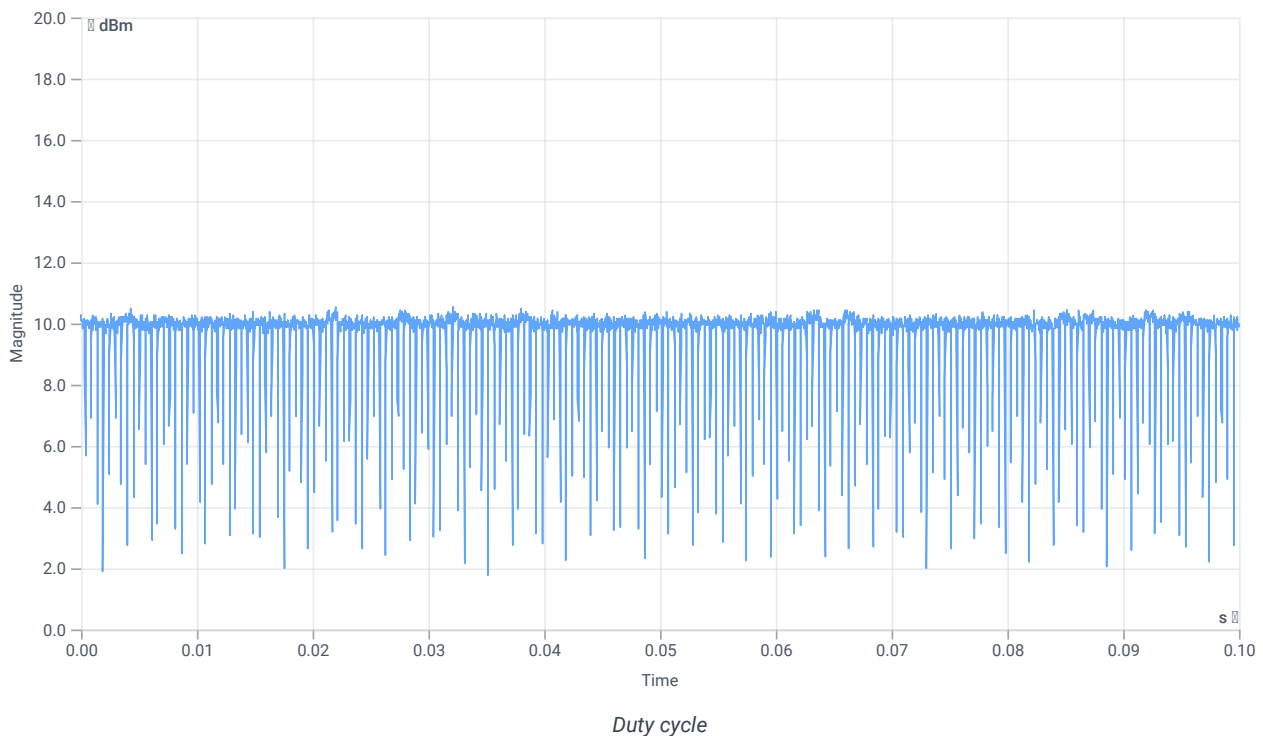
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.48	dBm	INFO
Ref. Frequency	--	--	5507.800	MHz	INFO

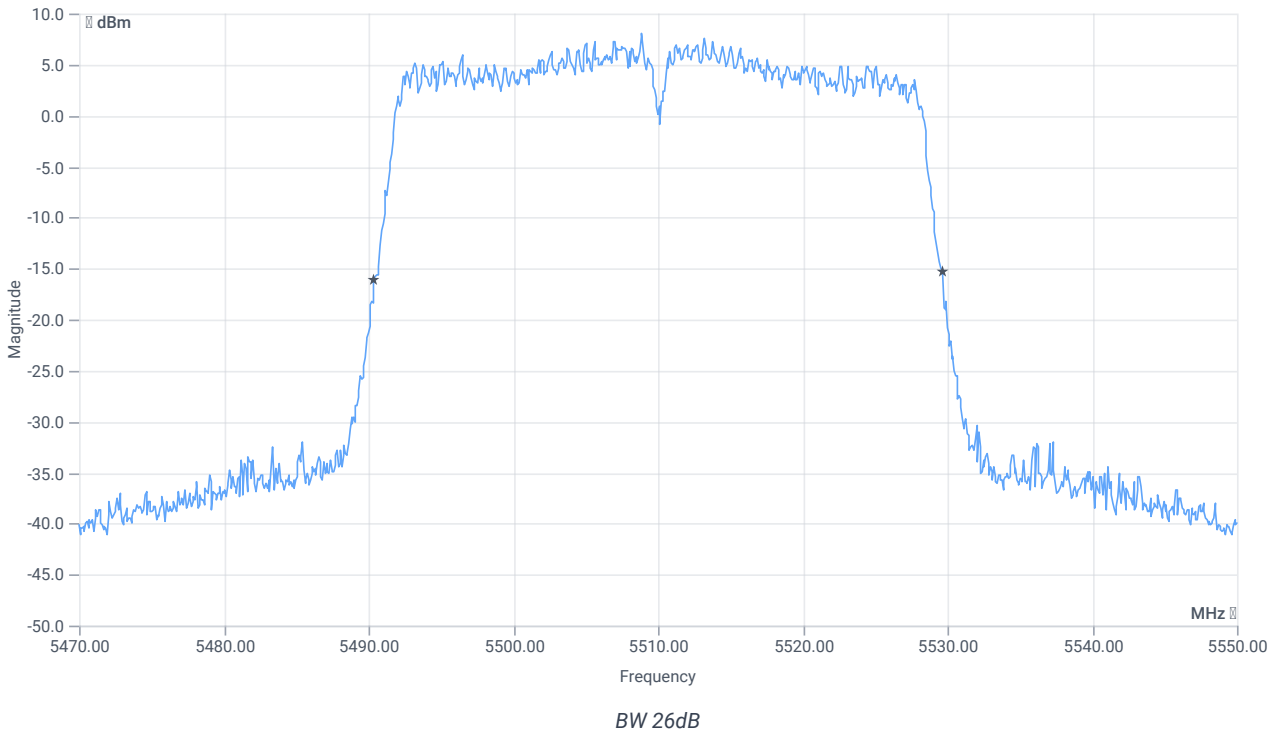
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



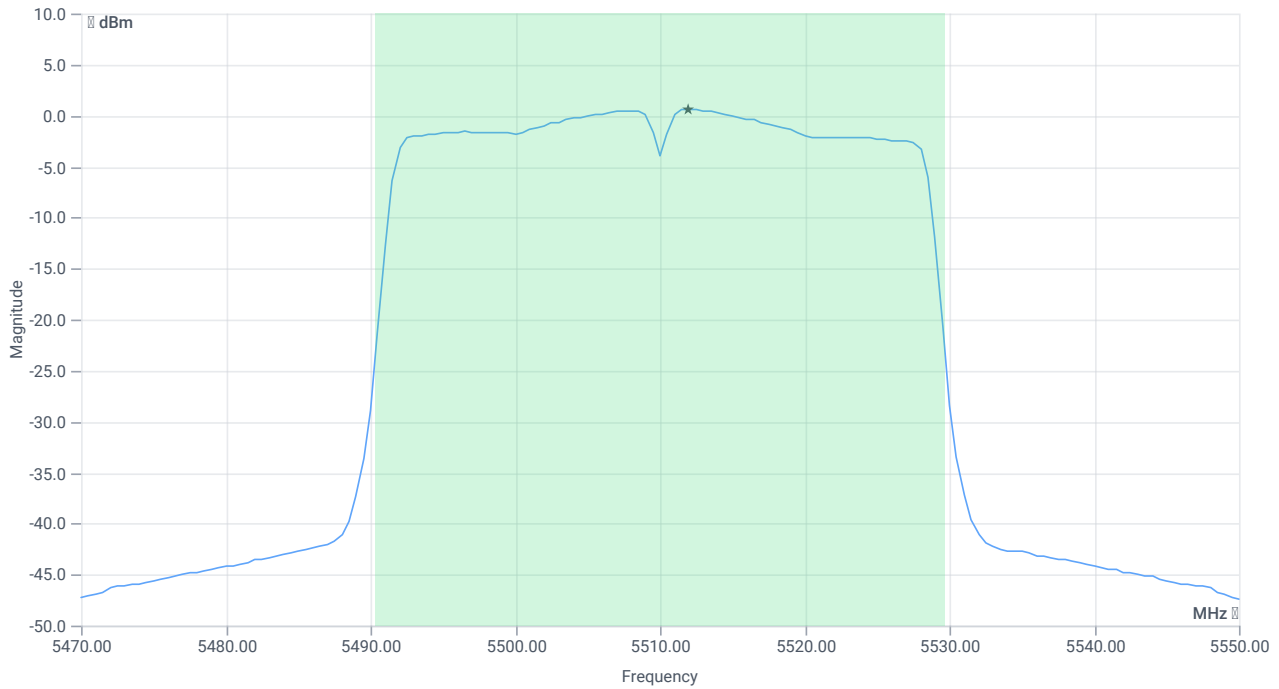
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.28	MHz	INFO
T1 26dB	---	---	5490.4000	MHz	INFO
T2 26dB	---	---	5529.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.48 16.59 20
Start [MHz] Stop [MHz]	5470.000 5550.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	14.31	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	14.31	dBm	PASS
Limit: 11 dBm + 10 log 39.28					
Max Output Power DC corrected	--	26.94	14.31	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	0.64	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	0.64	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:18:51
Ambit temp [°C] humidity [rel%]	24.9 49
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS62

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

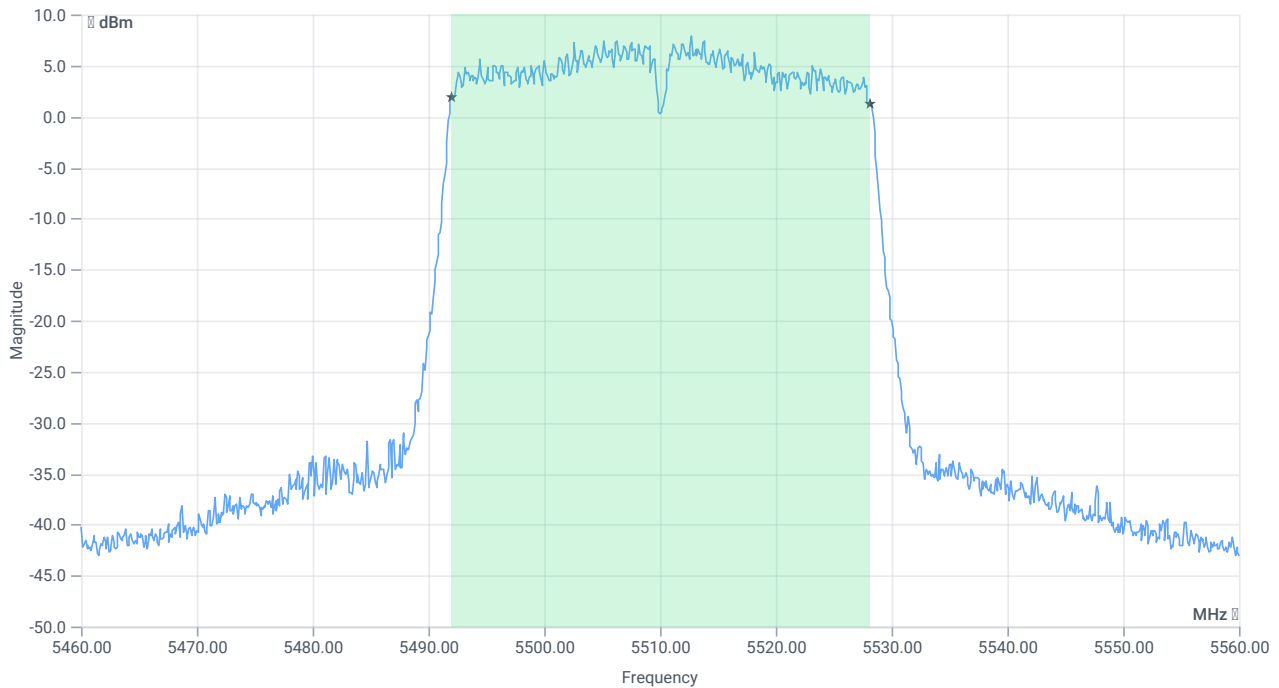
Test at TX 5510 MHz

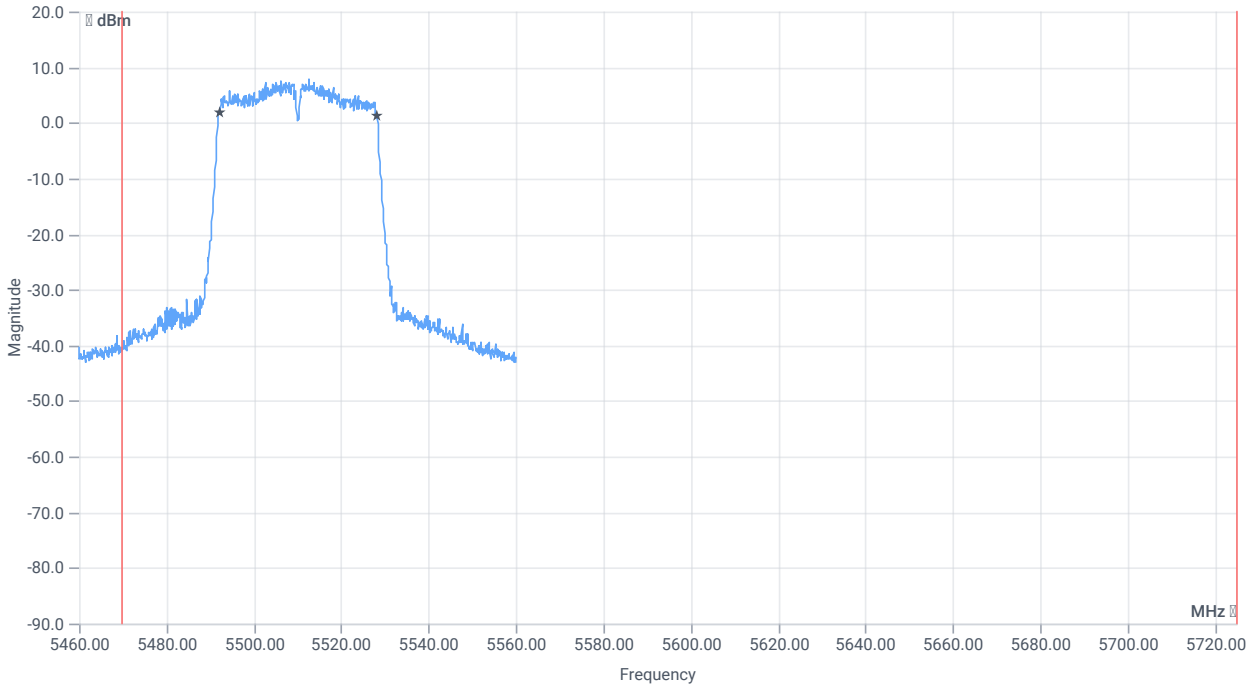
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	9.20	dBm	INFO
Ref. Frequency	--	--	5514.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.20 16.59 20
Start [MHz] Stop [MHz]	5460.000 5560.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

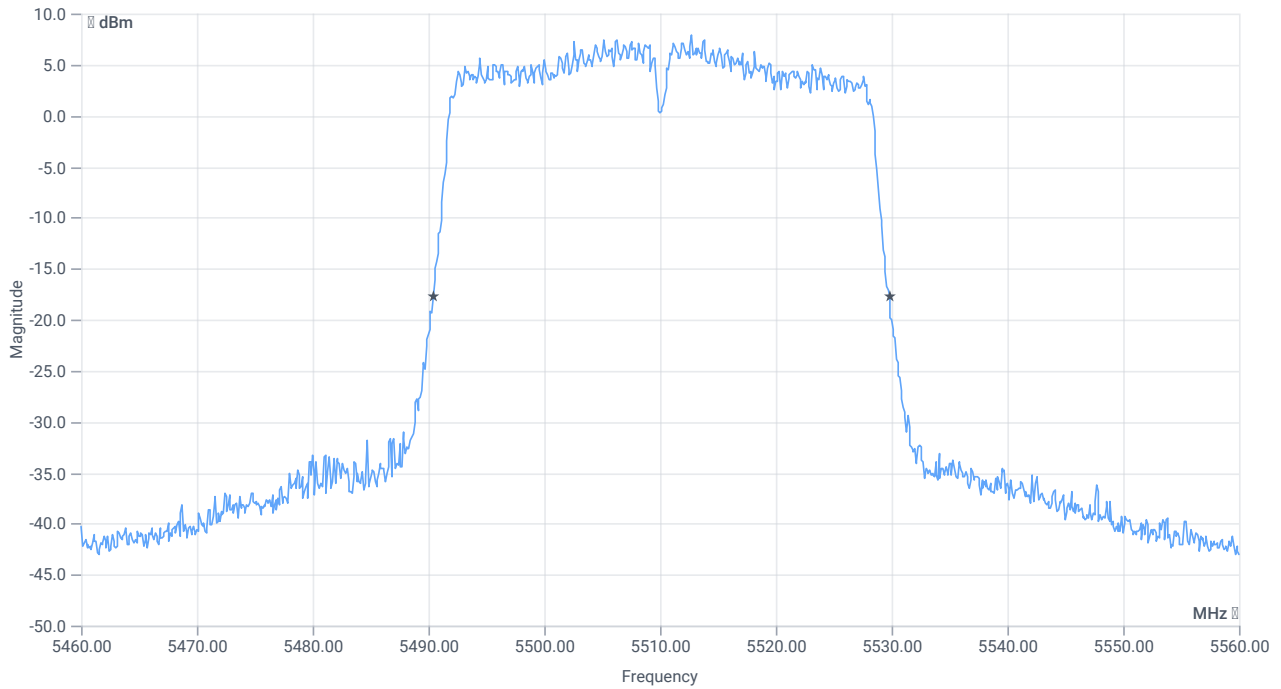




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.164	MHz	INFO
T1 99%	5470.000000	--	5492.0180	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5528.1818	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5490.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5529.8000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:19:23
Ambit temp [°C] humidity [rel%]	24.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS62

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5510 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	15.56	dBm	INFO
Ant:1 BW 26dB	--	--	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	14.31	dBm	INFO
Ant:2 BW 26dB	--	--	39.280	MHz	INFO
Σ Limit absolute	--	24	17.99	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.28	--	26.94	17.99	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	1.93	dBm/1MHz	INFO
Ant:2 PSD	--	--	0.64	dBm/1MHz	INFO
Σ	--	11	4.34	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 10:25:25
Ambit temp [°C] humidity [rel%]	24.9 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 10:25:26
Message	set WLAN5Gx to ac_VHT40_U_NII_2C, Frequency [MHz] 5590 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:25:38
Ambit temp [°C] humidity [rel%]	24.9 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5590 MHz

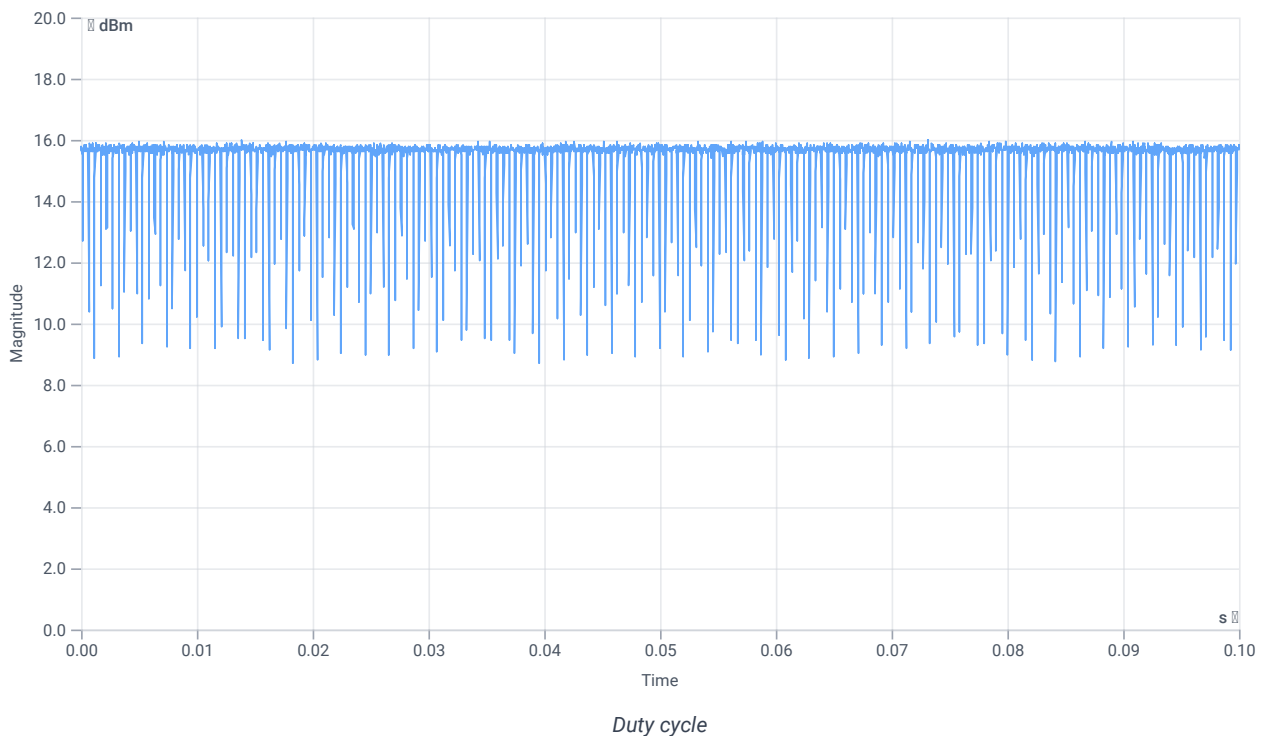
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.19	dBm	INFO
Ref. Frequency	--	--	5593.000	MHz	INFO

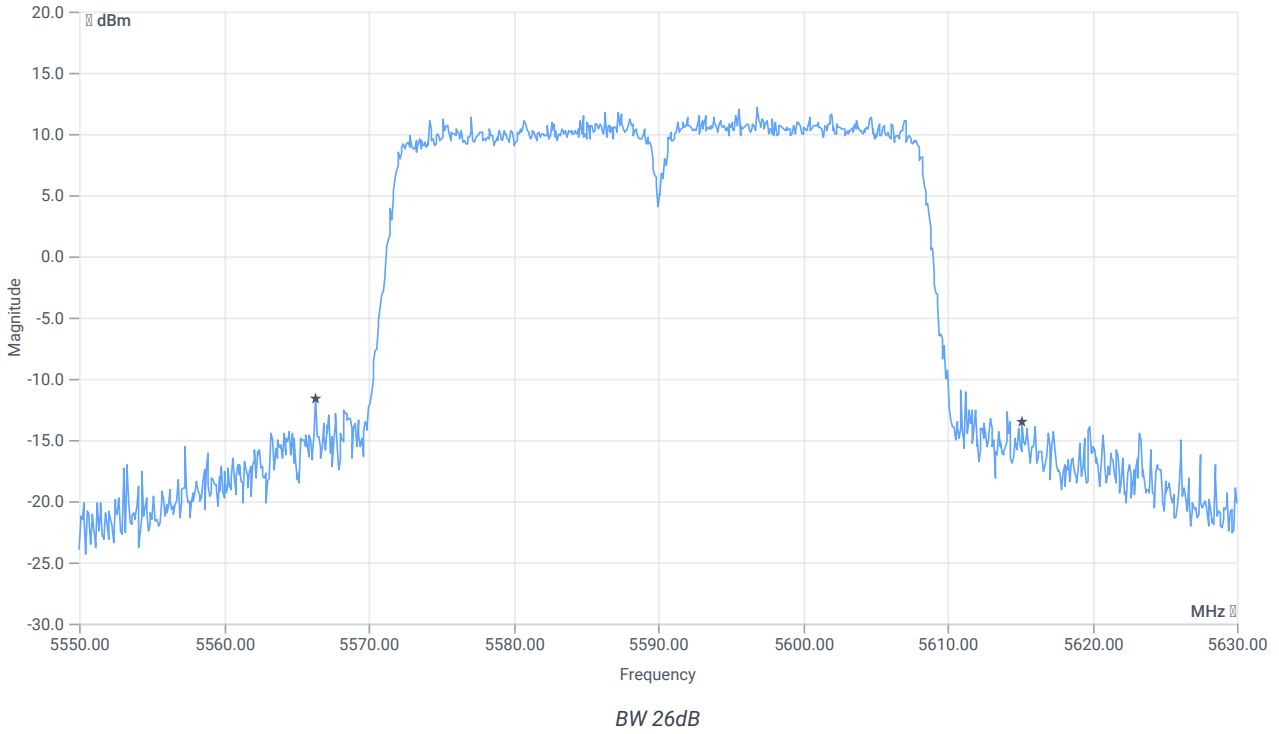
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



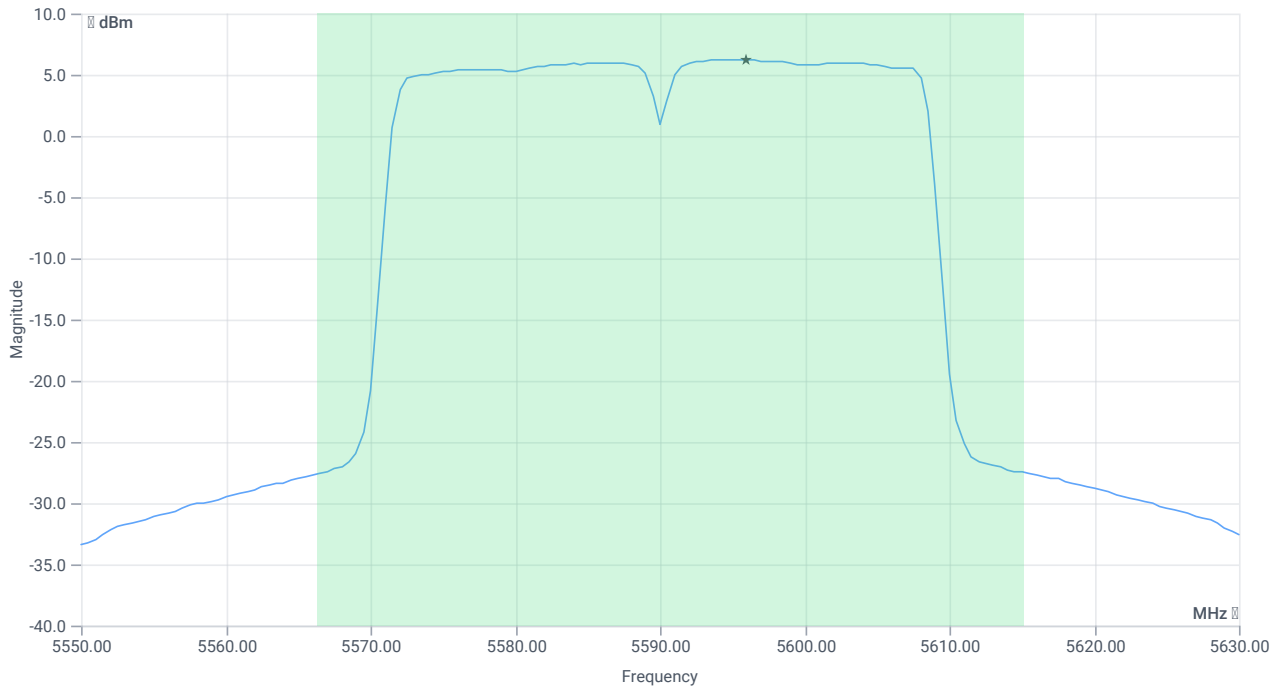
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	48.88	MHz	INFO
T1 26dB	---	---	5566.3200	MHz	INFO
T2 26dB	---	---	5615.2000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.19 16.72 25
Start [MHz] Stop [MHz]	5550.000 5630.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.96	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.96	dBm	PASS
Limit: 11 dBm + 10 log 48.88					
Max Output Power DC corrected	--	27.89	20.96	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.2	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.2	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:27:05
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

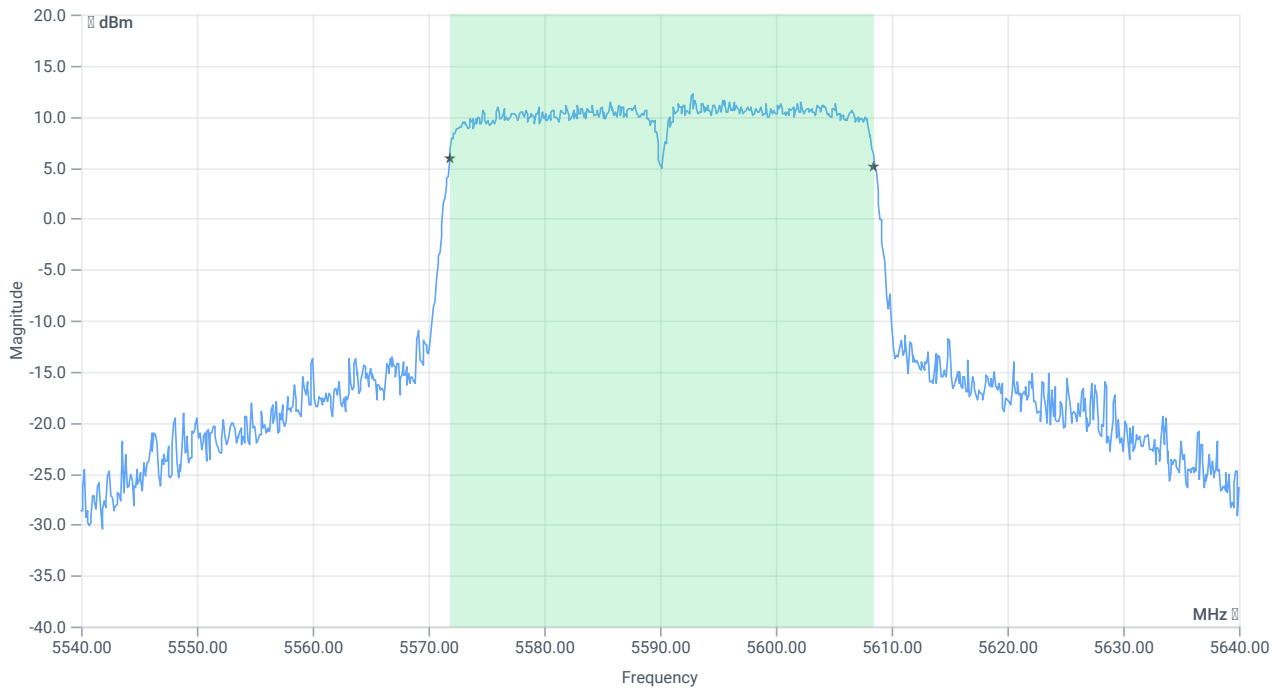
Test at TX 5590 MHz

RESULT: Reference Power cond.

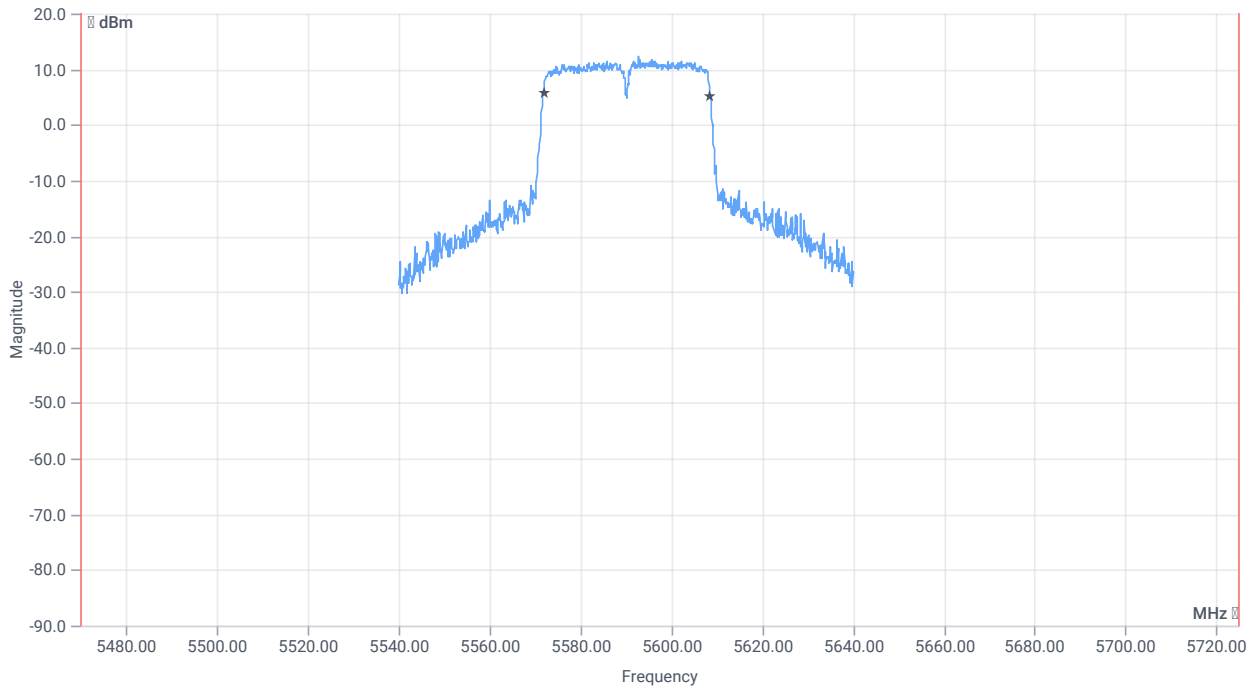
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.31	dBm	INFO
Ref. Frequency	--	--	5599.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.31 16.72 25
Start [MHz] Stop [MHz]	5540.000 5640.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



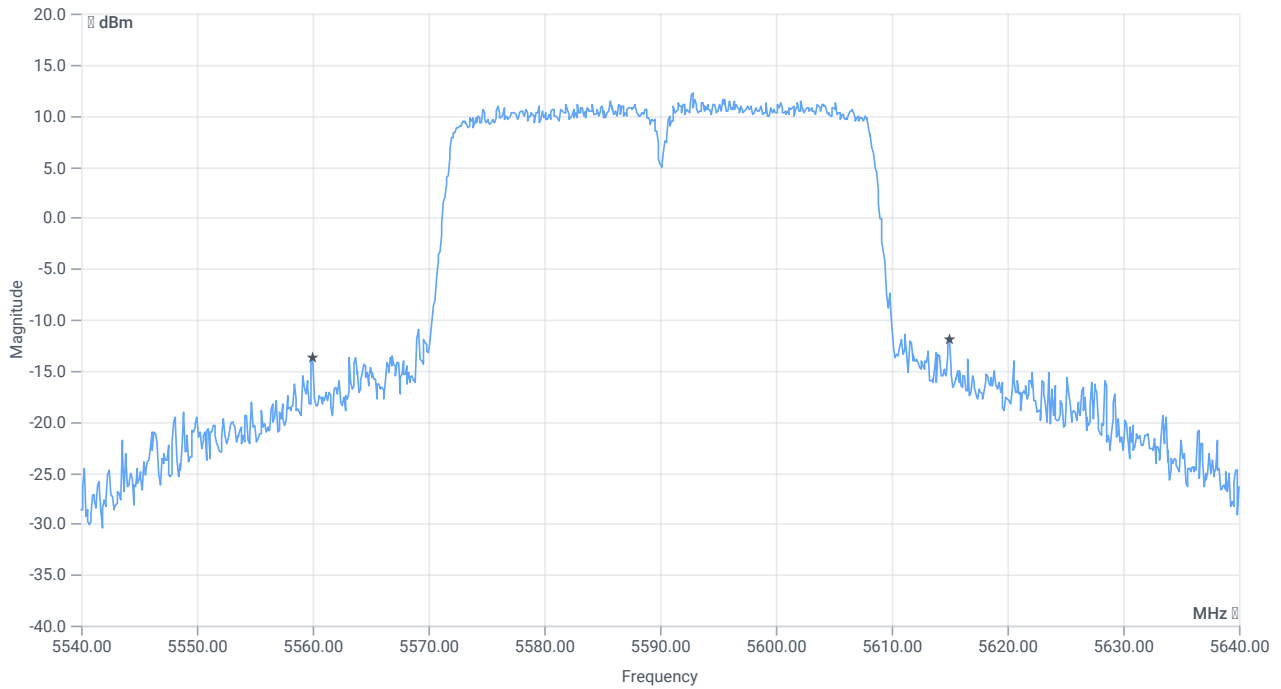
BW 99PCT



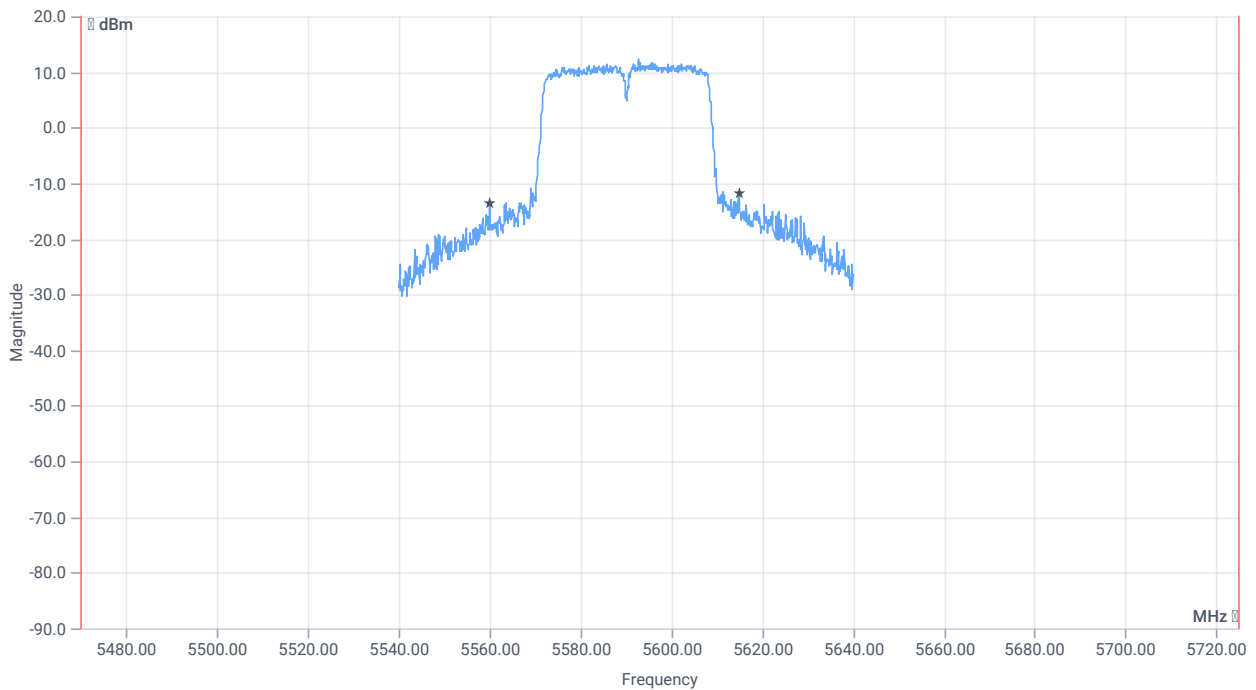
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5470.000000	--	5571.8182	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5608.4815	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	55	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5560.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5615.0000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:27:37
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5590 MHz

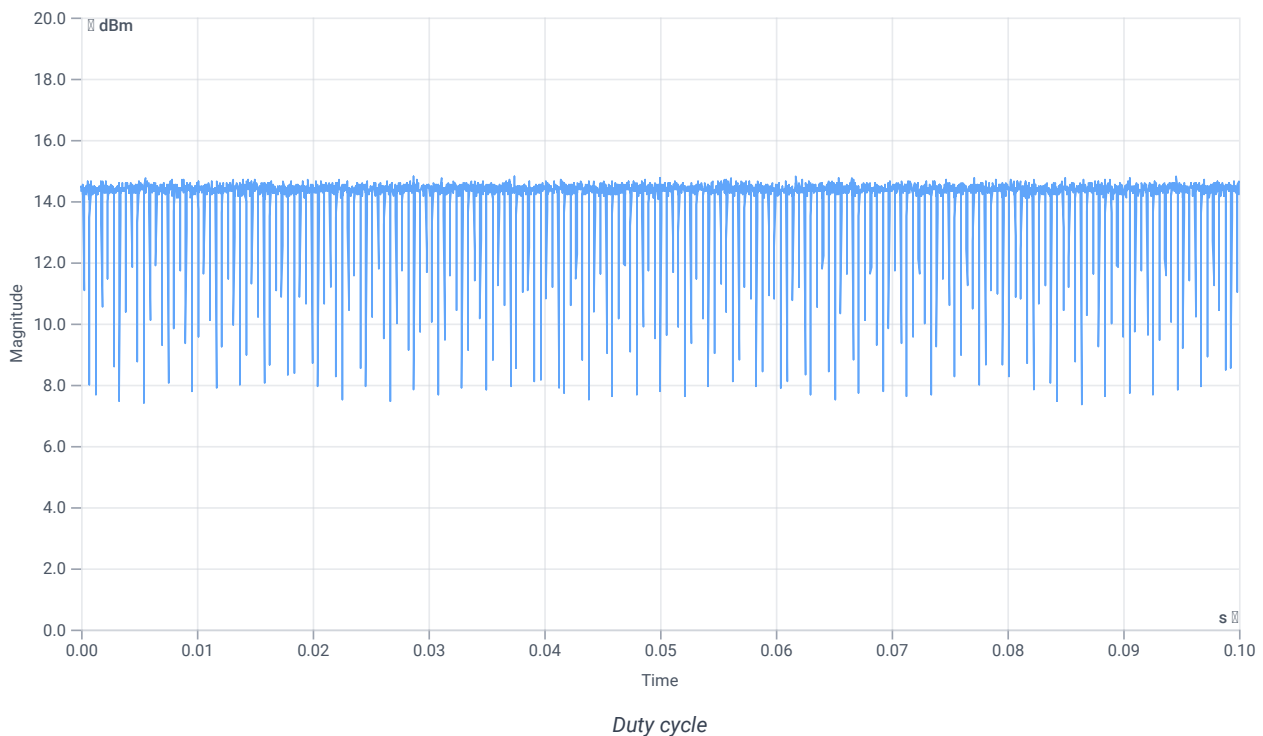
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.82	dBm	INFO
Ref. Frequency	--	--	5597.990	MHz	INFO

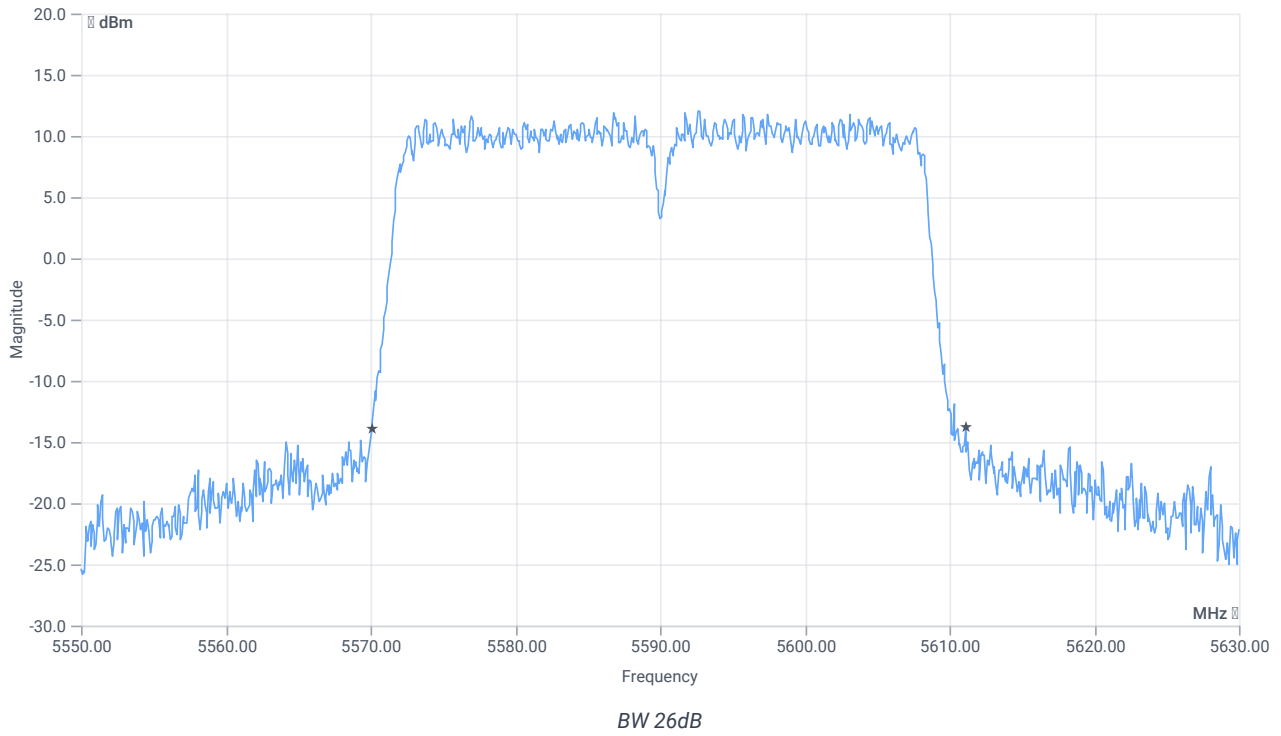
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



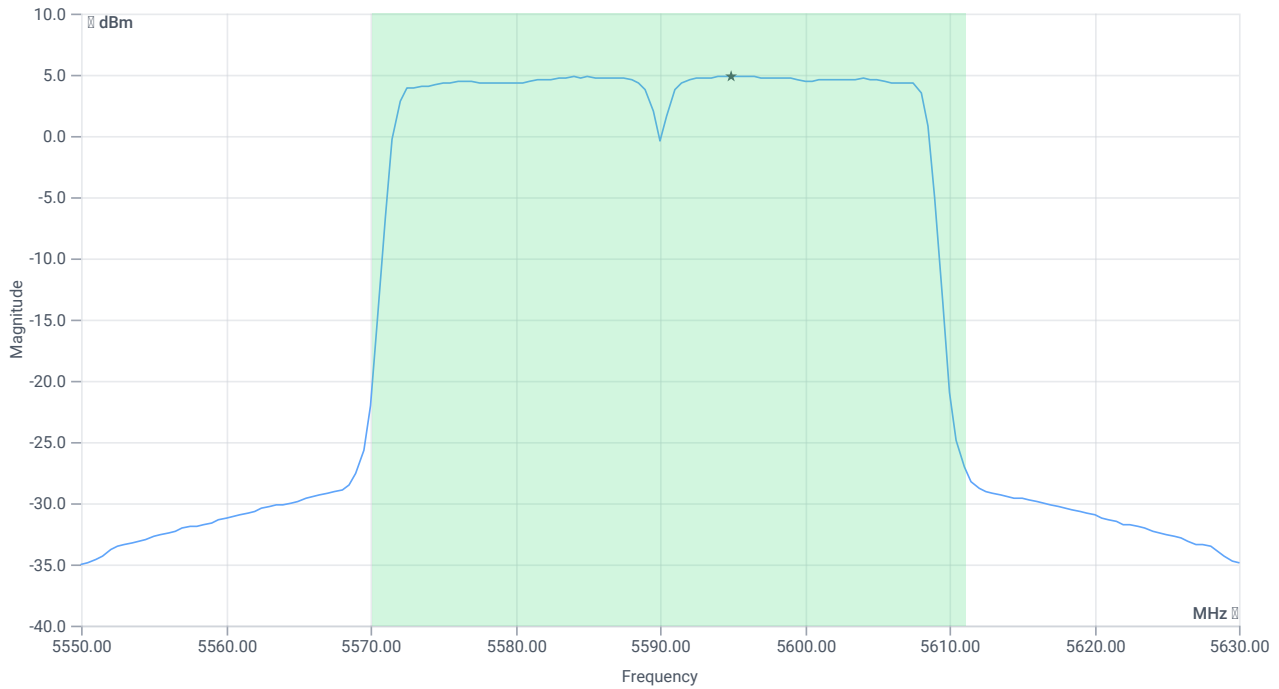
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	41.04	MHz	INFO
T1 26dB	---	---	5570.0800	MHz	INFO
T2 26dB	---	---	5611.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.82 16.72 25
Start [MHz] Stop [MHz]	5550.000 5630.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.79	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.79	dBm	PASS
Limit: 11 dBm + 10 log 41.04					
Max Output Power DC corrected	--	27.13	19.79	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	4.89	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.89	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:29:04
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

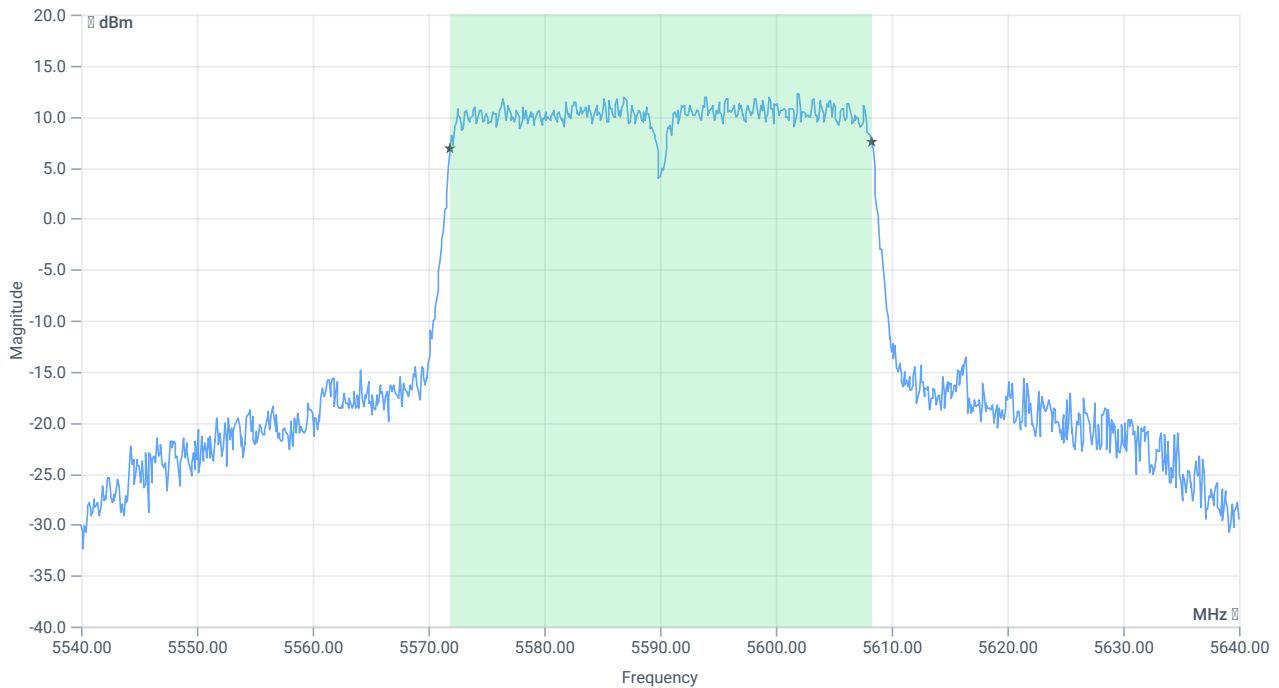
Test at TX 5590 MHz

RESULT: Reference Power cond.

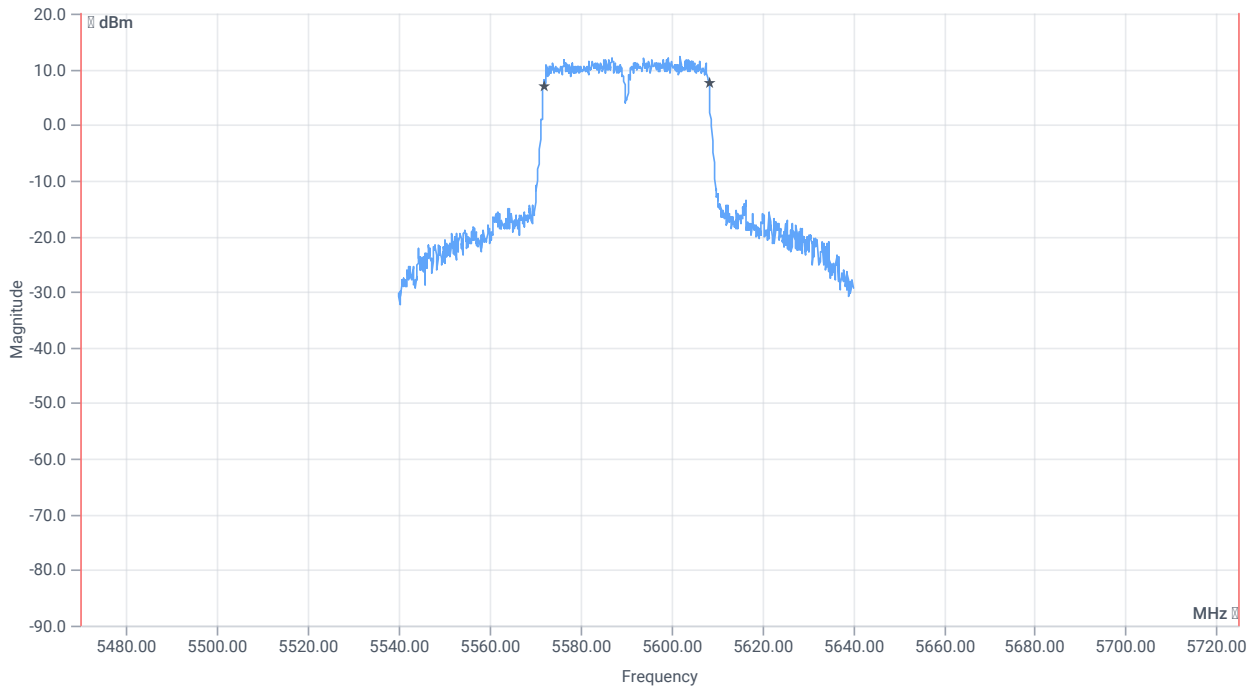
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.69	dBm	INFO
Ref. Frequency	--	--	5603.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.69 16.72 25
Start [MHz] Stop [MHz]	5540.000 5640.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



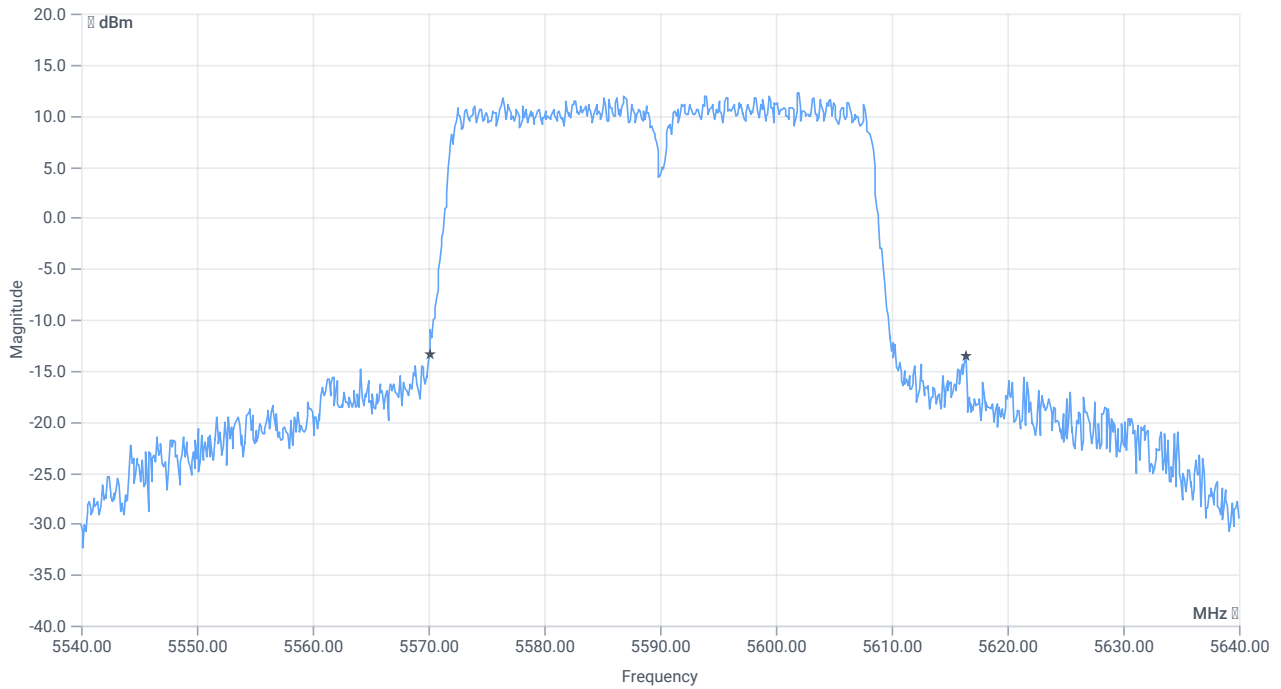
BW 99PCT



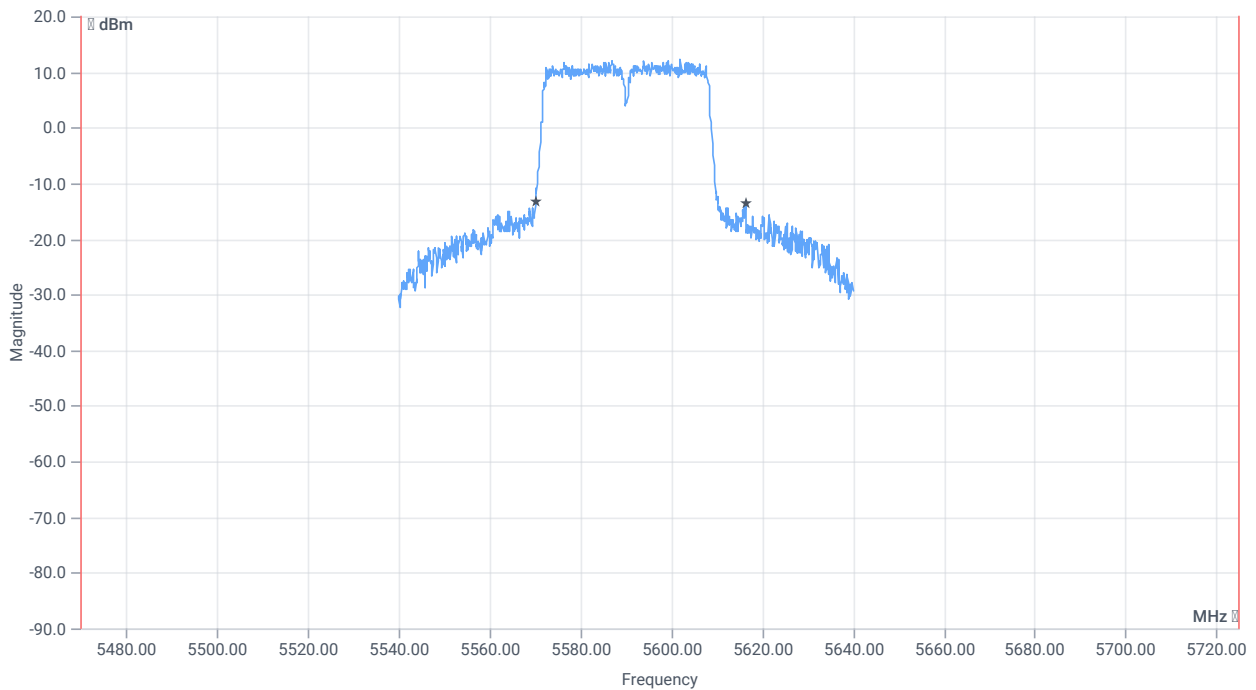
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5571.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5608.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	46.3	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5570.1000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5616.4000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:29:36
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5590 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.96	dBm	INFO
Ant:1 BW 26dB	--	--	48.880	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.79	dBm	INFO
Ant:2 BW 26dB	--	--	41.040	MHz	INFO
Σ Limit absolute	--	24	23.42	dBm	PASS
Σ Limit: 11 dBm + 10 log 41.04	--	27.13	23.42	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.2	dBm/1MHz	INFO
Ant:2 PSD	--	--	4.89	dBm/1MHz	INFO
Σ	--	11	8.6	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	27.07.2023 10:30:51
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	27.07.2023 10:30:52
Message	set WLAN5Gx to ac_VHT40_U_NII_2C, Frequency [MHz] 5670

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:30:59
Ambit temp [°C] humidity [rel%]	25.0 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5670 MHz

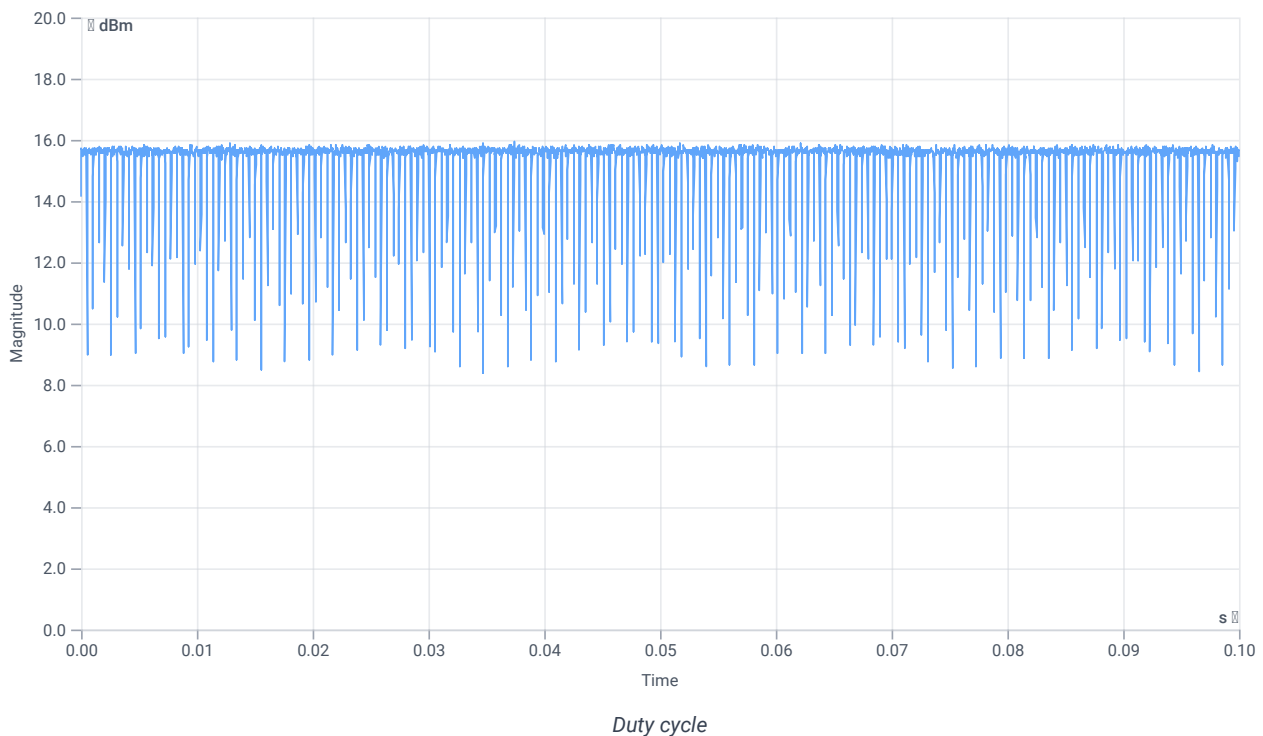
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.09	dBm	INFO
Ref. Frequency	--	--	5678.790	MHz	INFO

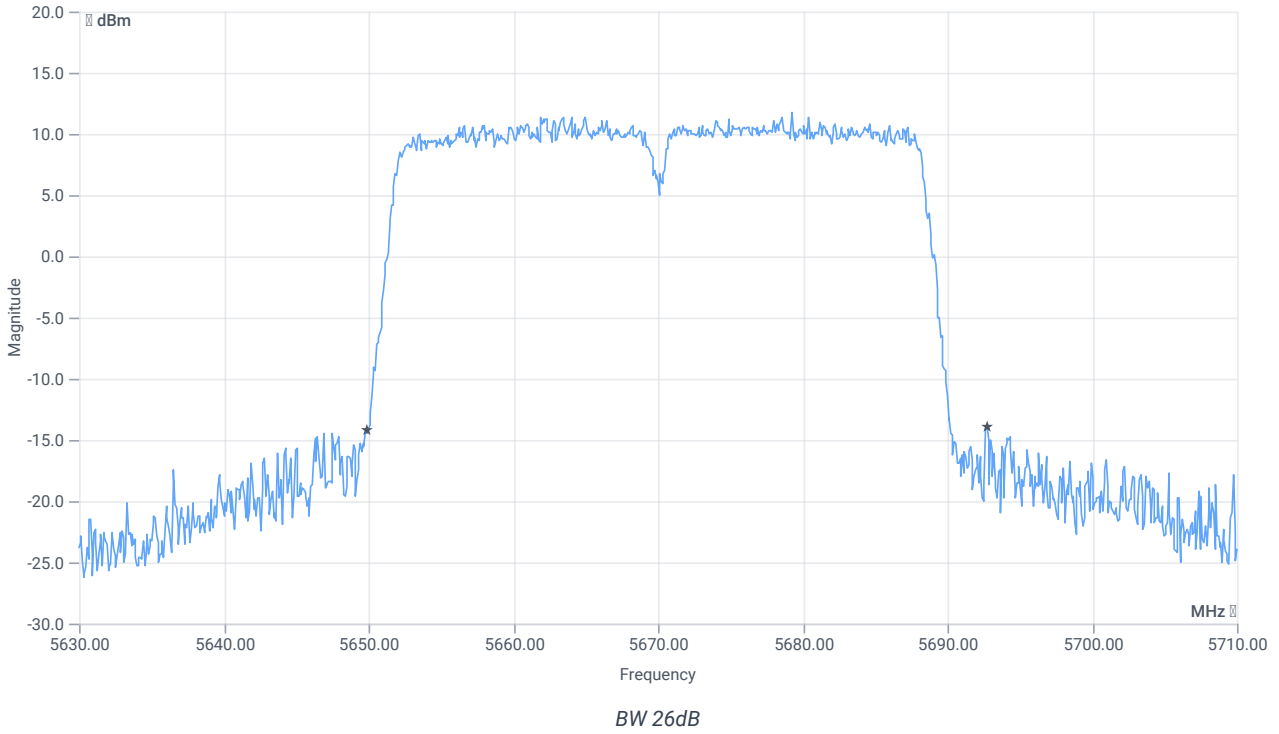
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



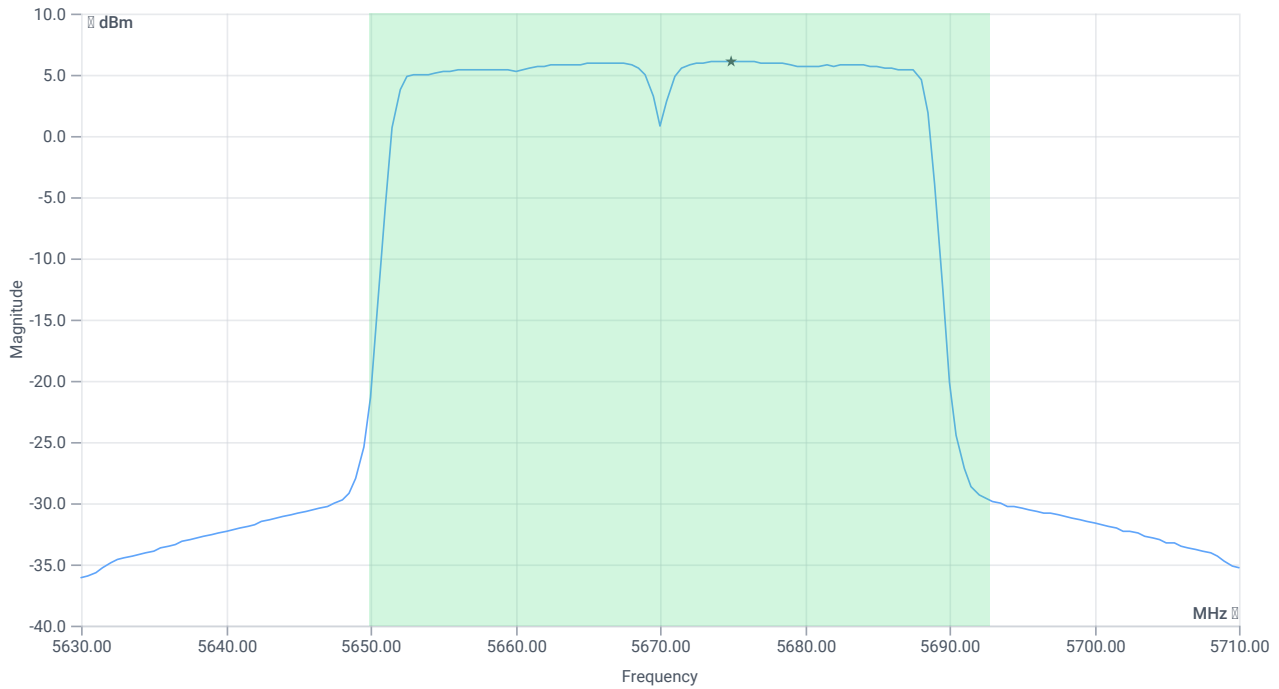
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	42.88	MHz	INFO
T1 26dB	---	---	5649.8400	MHz	INFO
T2 26dB	---	---	5692.7200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.09 16.68 25
Start [MHz] Stop [MHz]	5630.000 5710.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.91	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.91	dBm	PASS
Limit: 11 dBm + 10 log 42.88					
Max Output Power DC corrected	--	27.32	20.91	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.08	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.08	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:32:26
Ambit temp [°C] humidity [rel%]	25.1 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

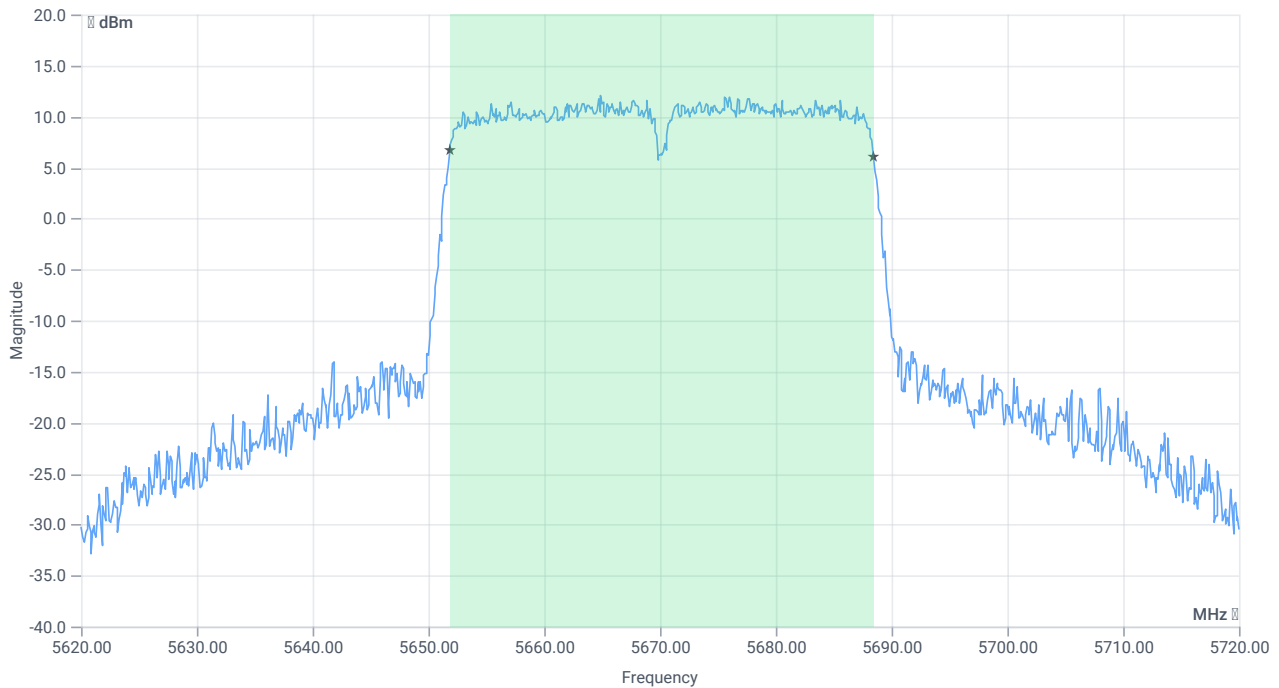
Test at TX 5670 MHz

RESULT: Reference Power cond.

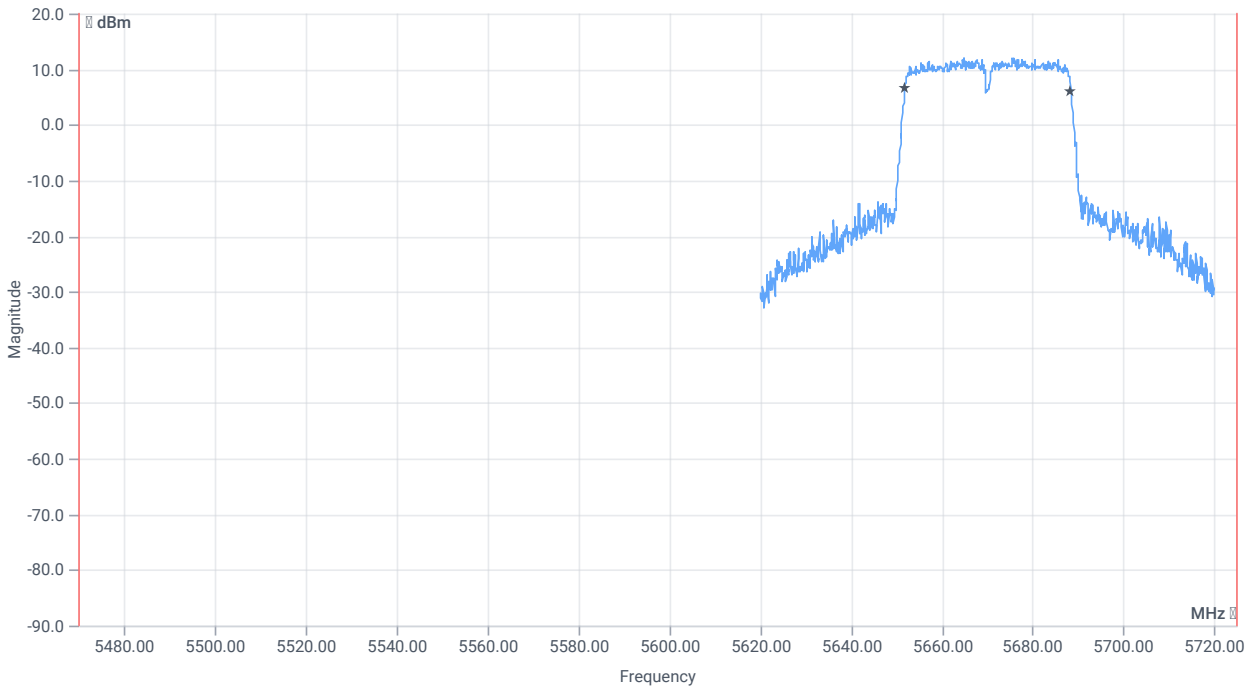
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.86	dBm	INFO
Ref. Frequency	--	--	5666.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.86 16.68 25
Start [MHz] Stop [MHz]	5620.000 5720.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



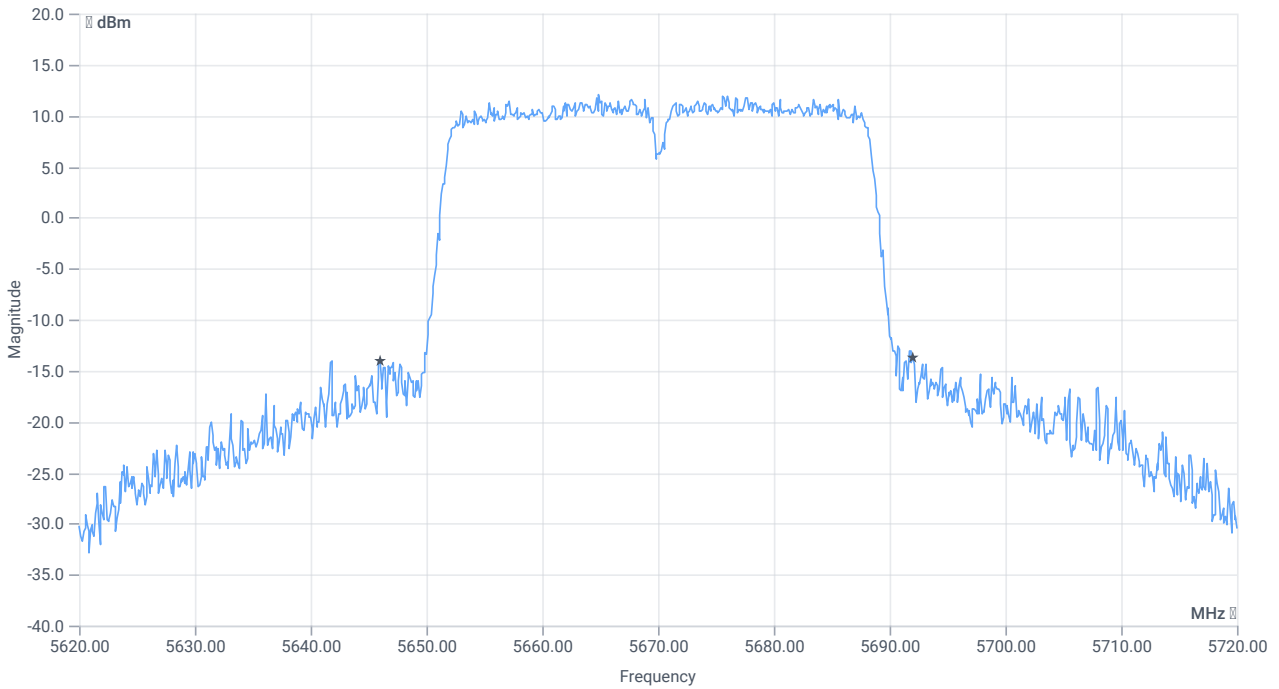
BW 99PCT



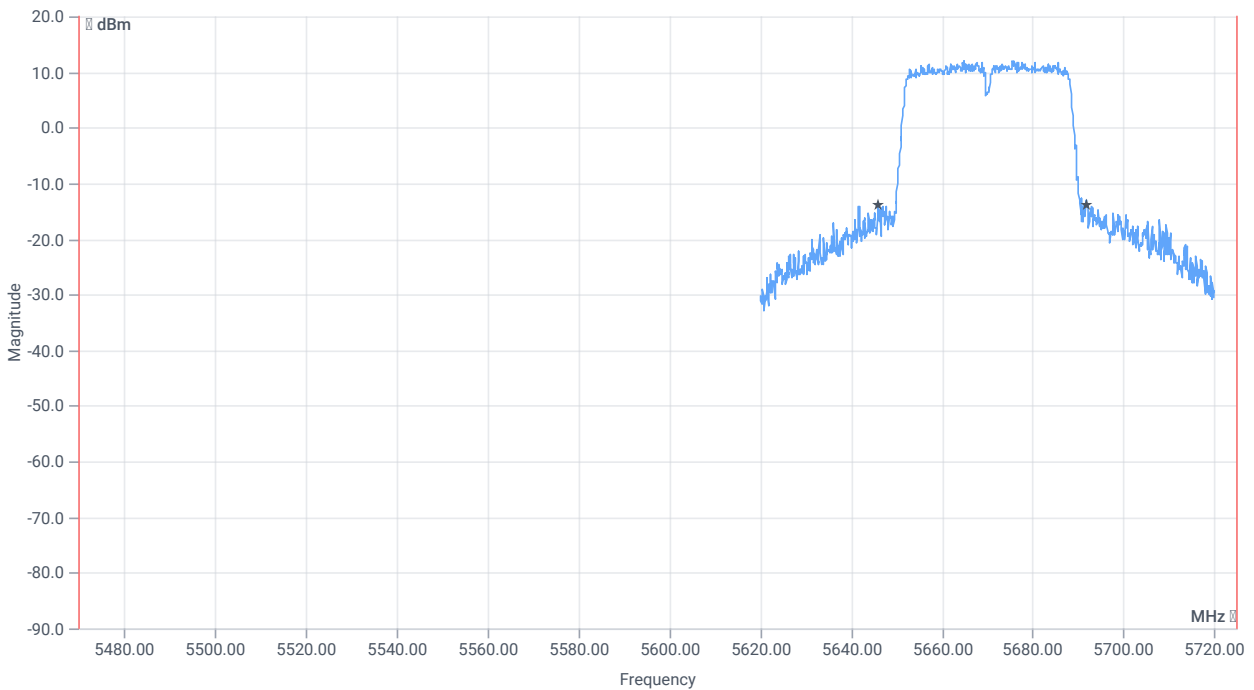
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.563	MHz	INFO
T1 99%	5470.000000	--	5651.8182	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5688.3816	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	46	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5646.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5692.0000	MHz	

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:32:57
Ambit temp [°C] humidity [rel%]	25.1 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

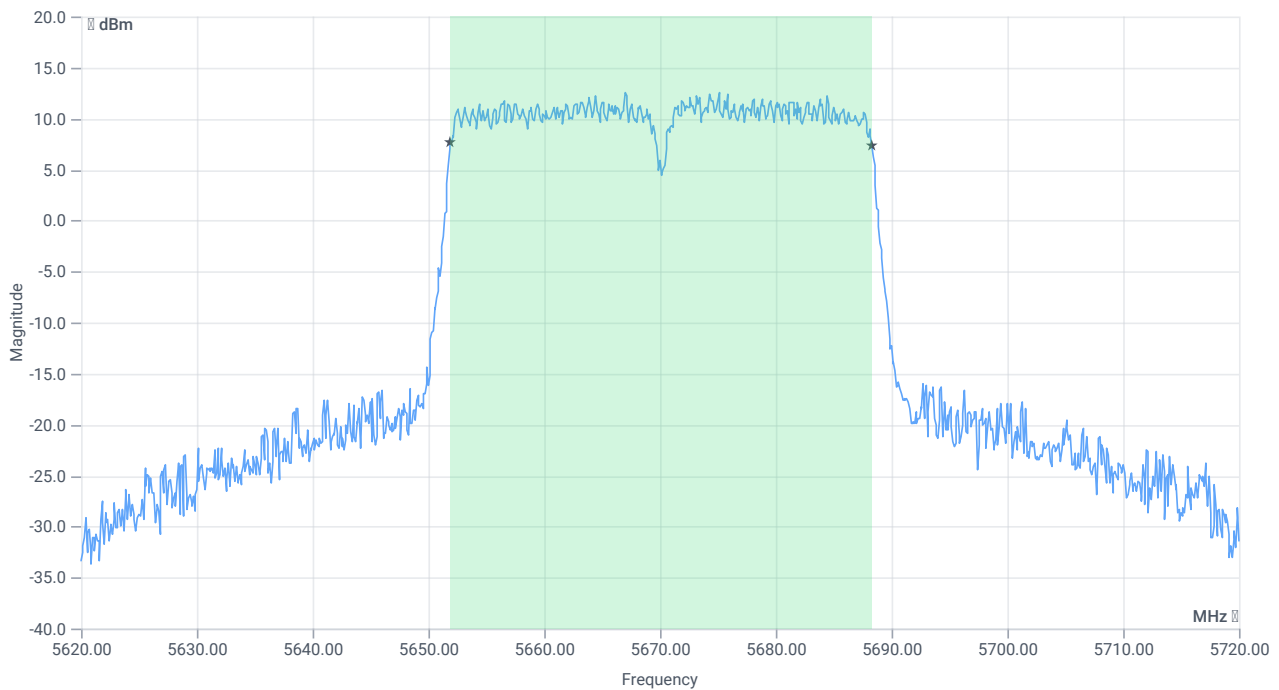
Test at TX 5670 MHz

RESULT: Reference Power cond.

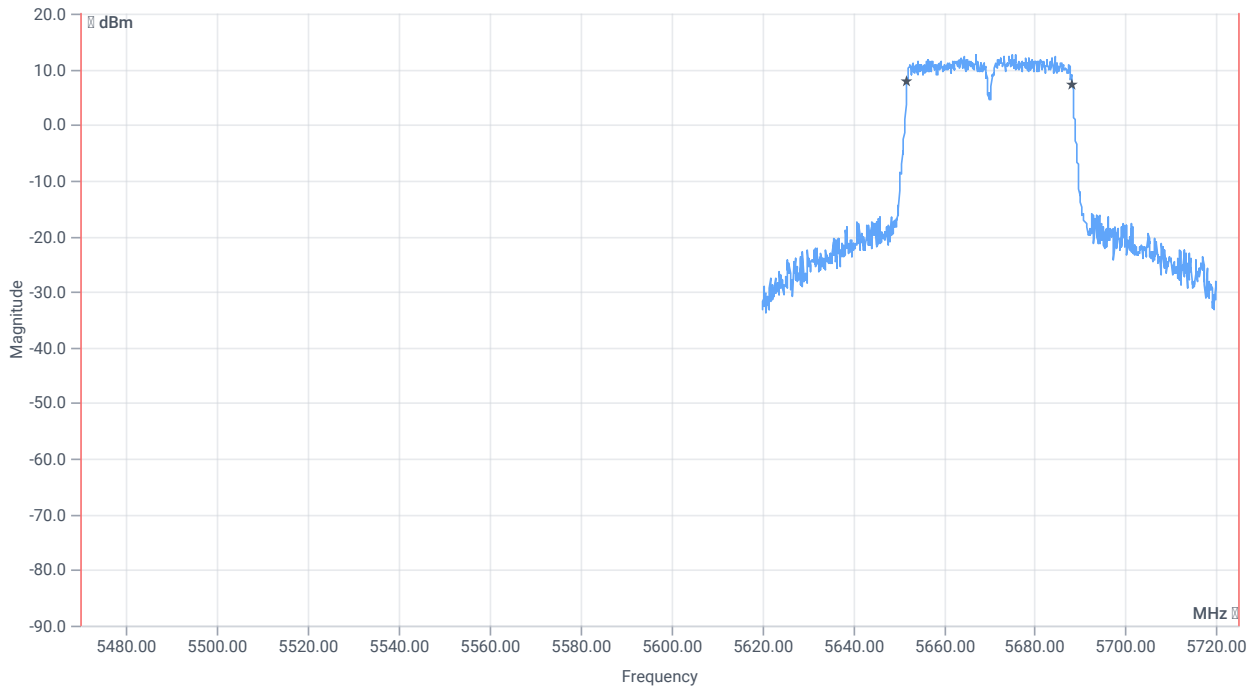
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.69	dBm	INFO
Ref. Frequency	--	--	5674.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.69 16.68 25
Start [MHz] Stop [MHz]	5620.000 5720.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



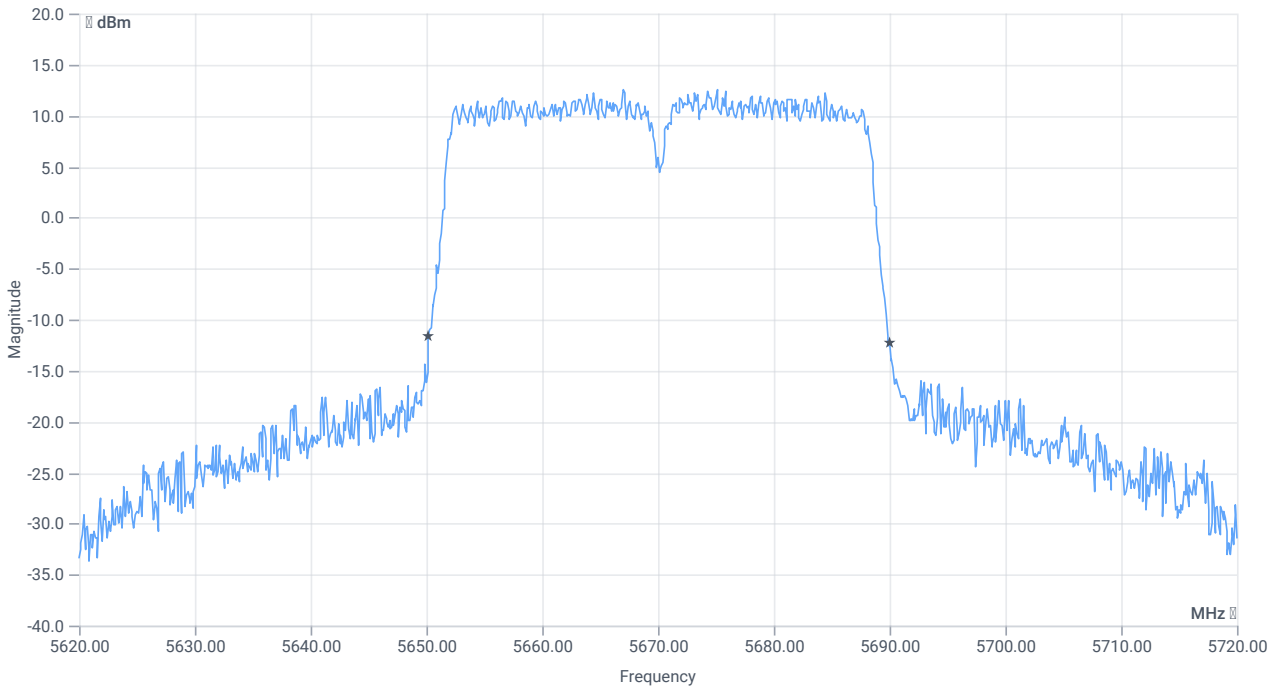
BW 99PCT



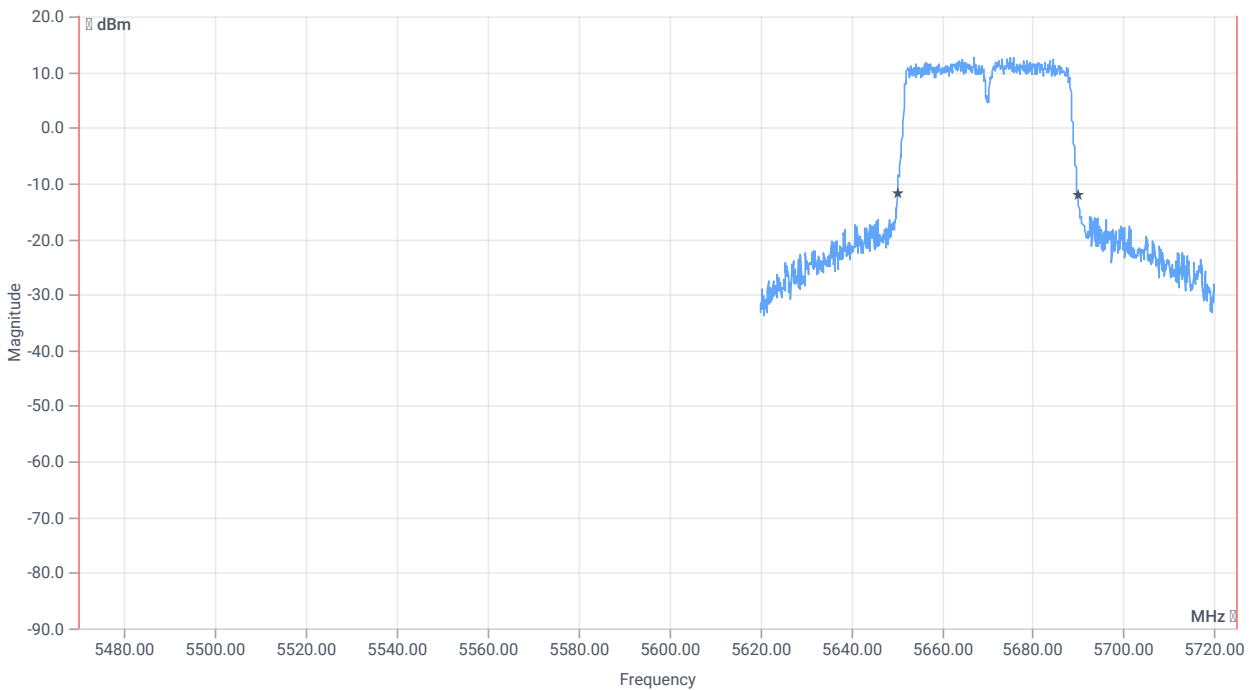
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5651.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5688.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5650.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5690.0000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:33:28
Ambit temp [°C] humidity [rel%]	25.1 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5670 MHz

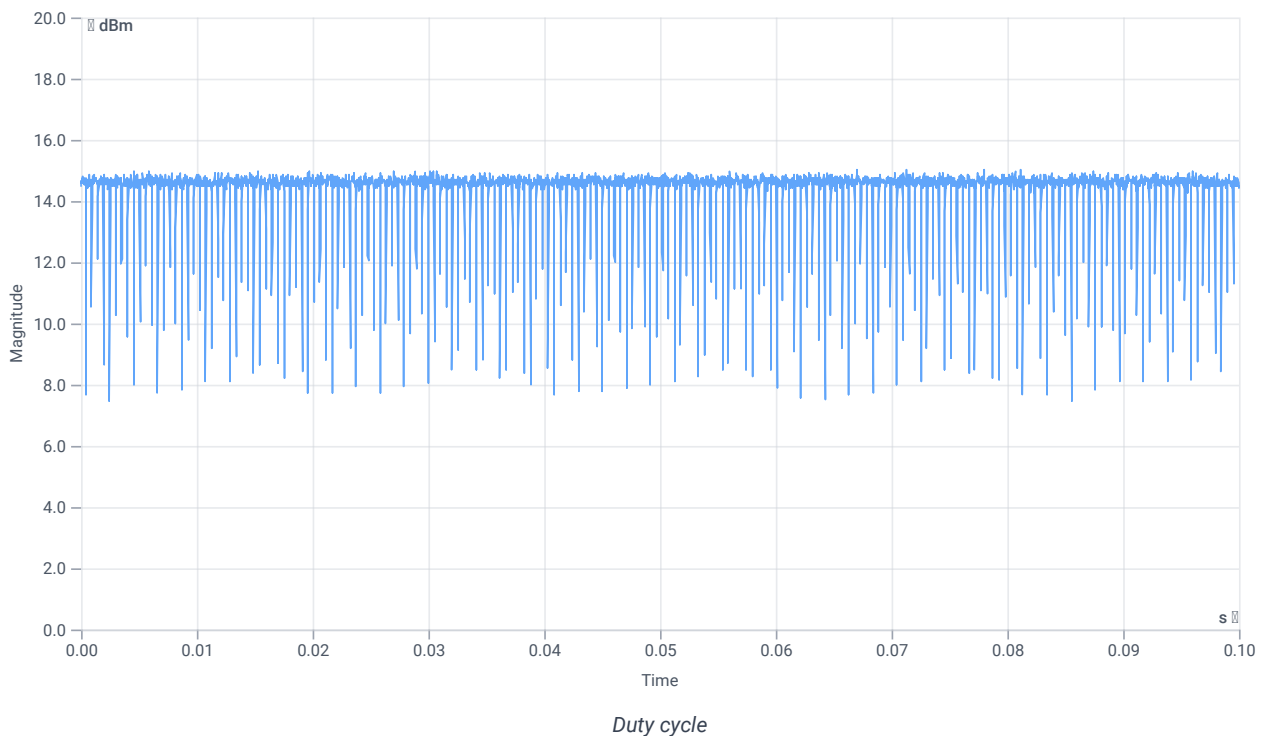
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.65	dBm	INFO
Ref. Frequency	--	--	5676.190	MHz	INFO

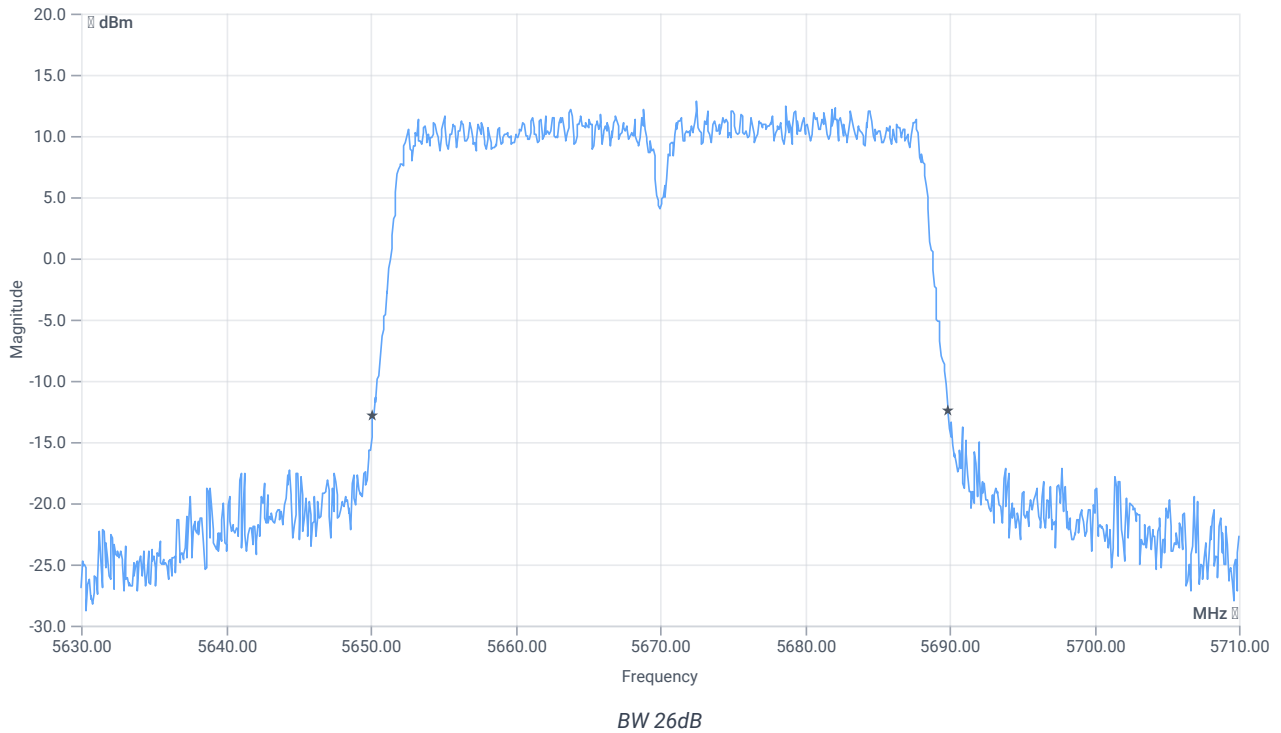
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



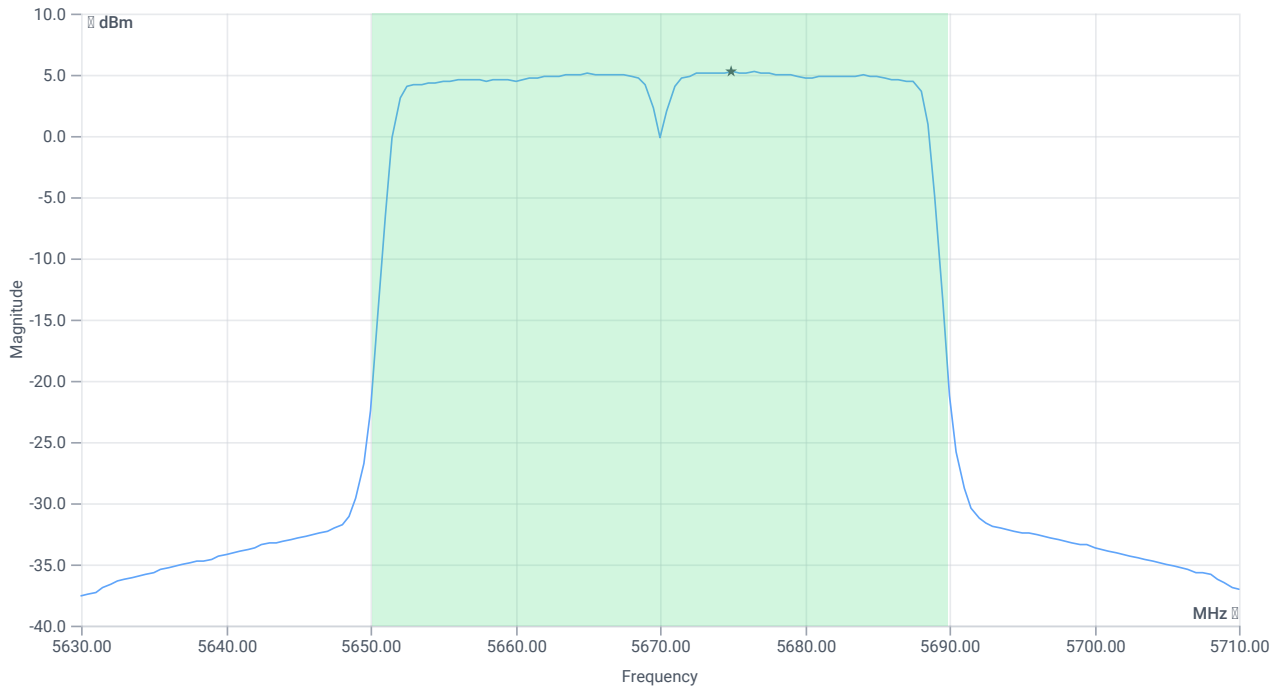
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.76	MHz	INFO
T1 26dB	---	---	5650.1600	MHz	INFO
T2 26dB	---	---	5689.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.65 16.68 25
Start [MHz] Stop [MHz]	5630.000 5710.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.05	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.05	dBm	PASS
Limit: 11 dBm + 10 log 39.76					
Max Output Power DC corrected	--	26.99	20.05	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.25	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.25	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

References

TC start	27.07.2023 10:34:56
Ambit temp [°C] humidity [rel%]	25.1 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-2C
Information	PS80

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5670 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.91	dBm	INFO
Ant:1 BW 26dB	--	--	42.880	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.05	dBm	INFO
Ant:2 BW 26dB	--	--	39.760	MHz	INFO
Σ Limit absolute	--	24	23.51	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.76	--	26.99	23.51	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.08	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.25	dBm/1MHz	INFO
Σ	--	11	8.7	dBm/1MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 10:46:46
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan ac_VHT40_U_NII_3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 10:46:46
Message	set WLAN5Gx to ac_VHT40_U_NII_3, Frequency [MHz] 5755 , Information: PS96

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:47:27
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5755 MHz

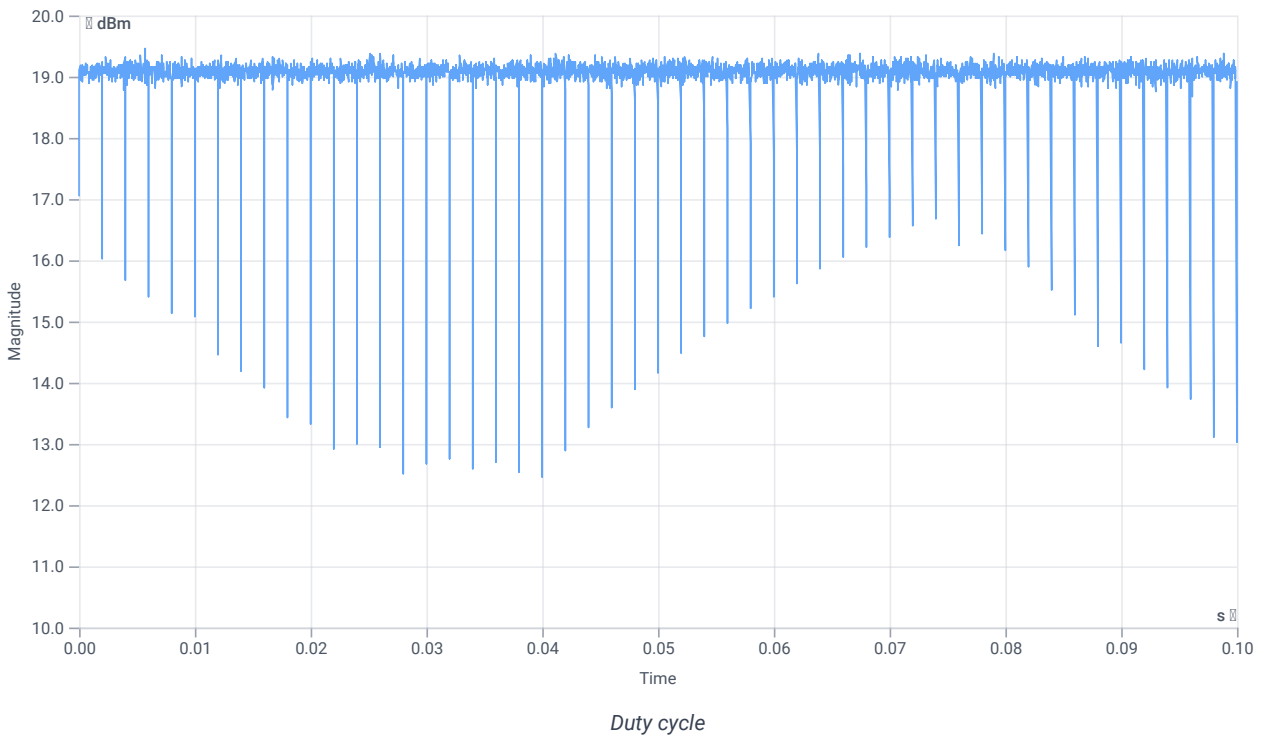
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.79	dBm	INFO
Ref. Frequency	--	--	5751.600	MHz	INFO

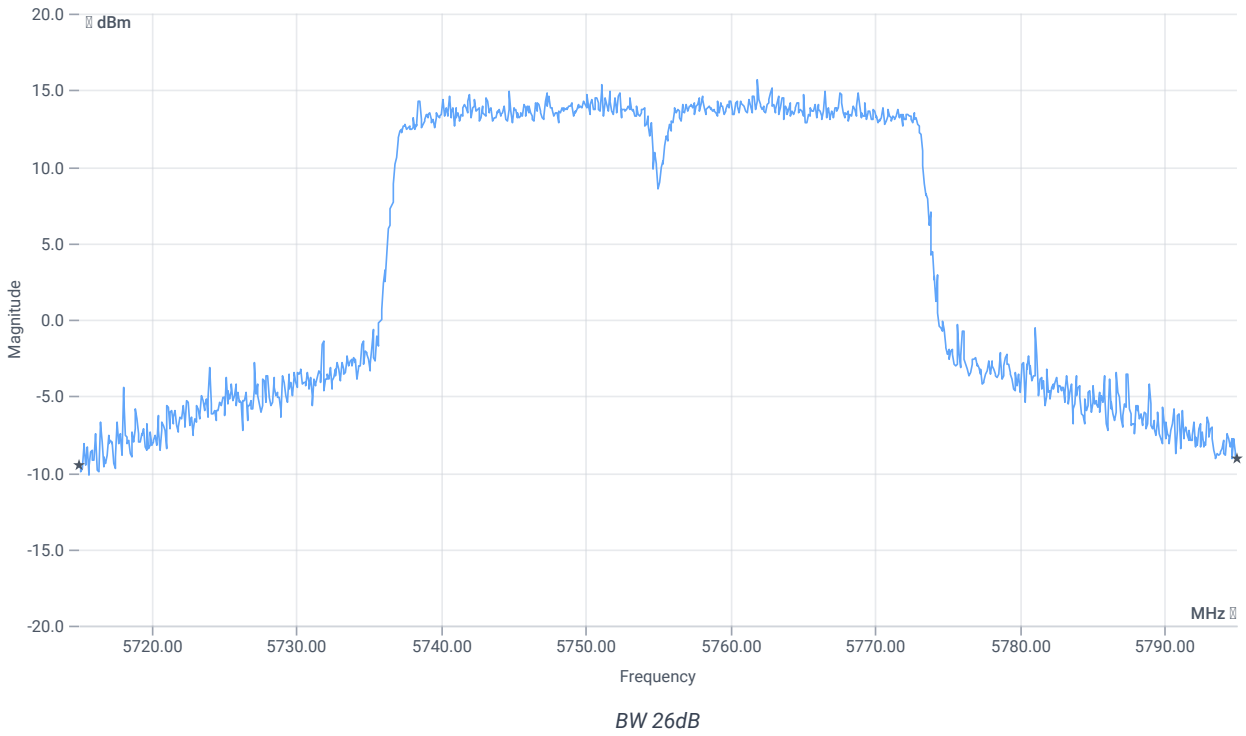
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



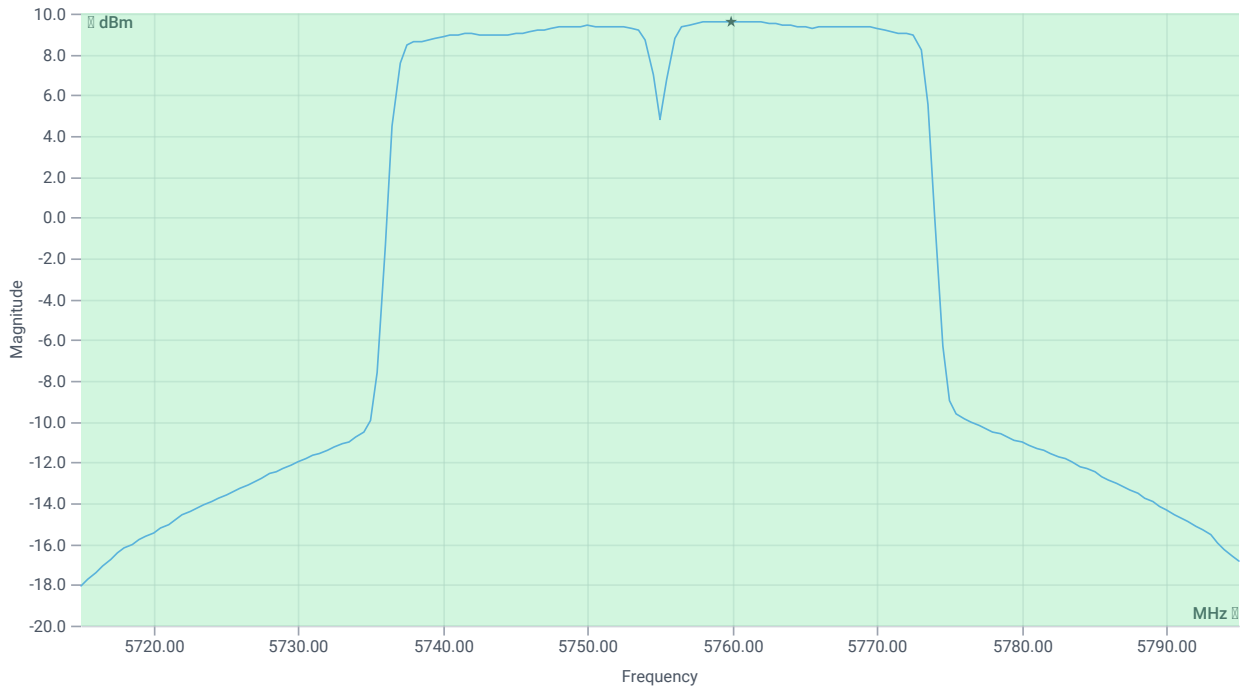
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5715.0000	MHz	INFO
T2 26dB	---	---	5795.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.79 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

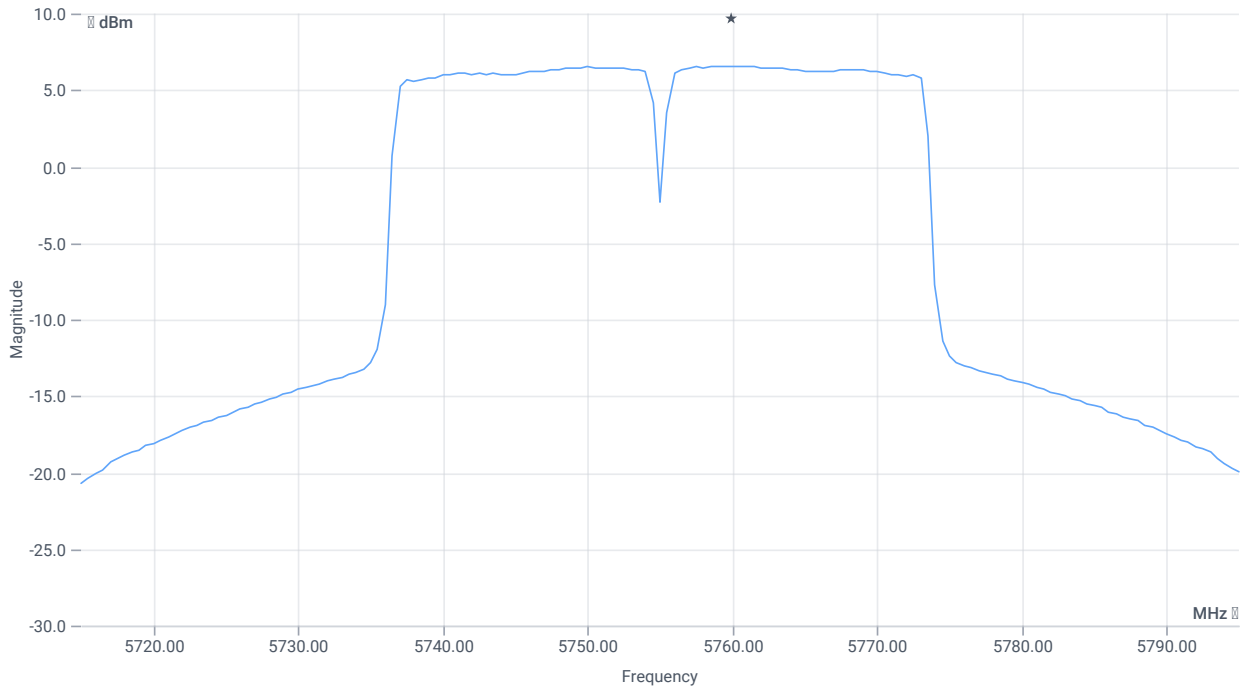
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.55	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.55	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.55	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.79 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.59	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.59	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:49:54
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
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-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

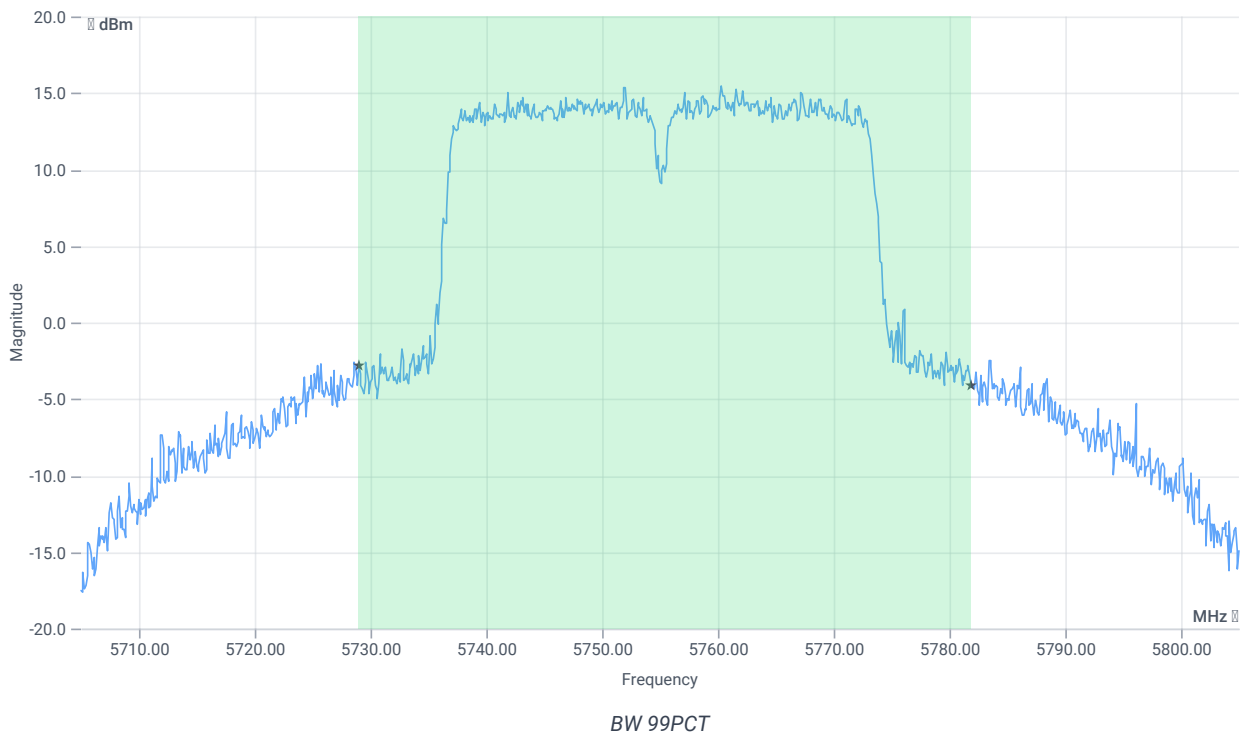
Test at TX 5755 MHz

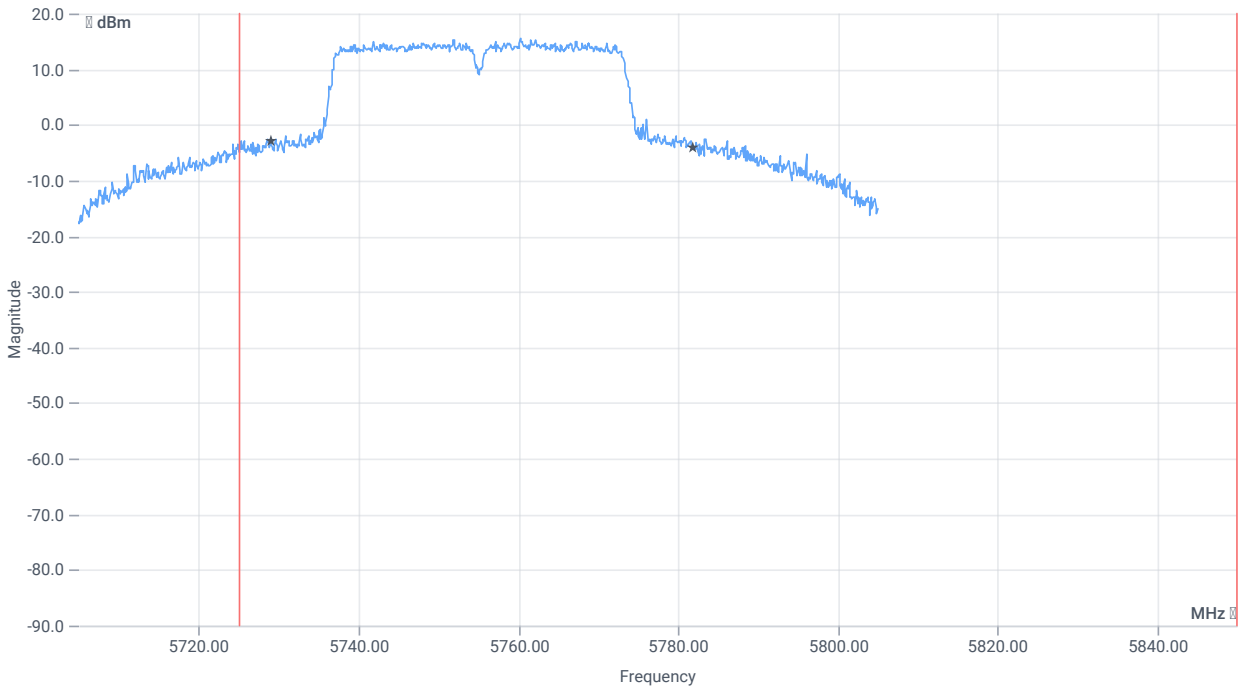
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.87	dBm	INFO
Ref. Frequency	--	--	5747.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.87 16.77 25
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

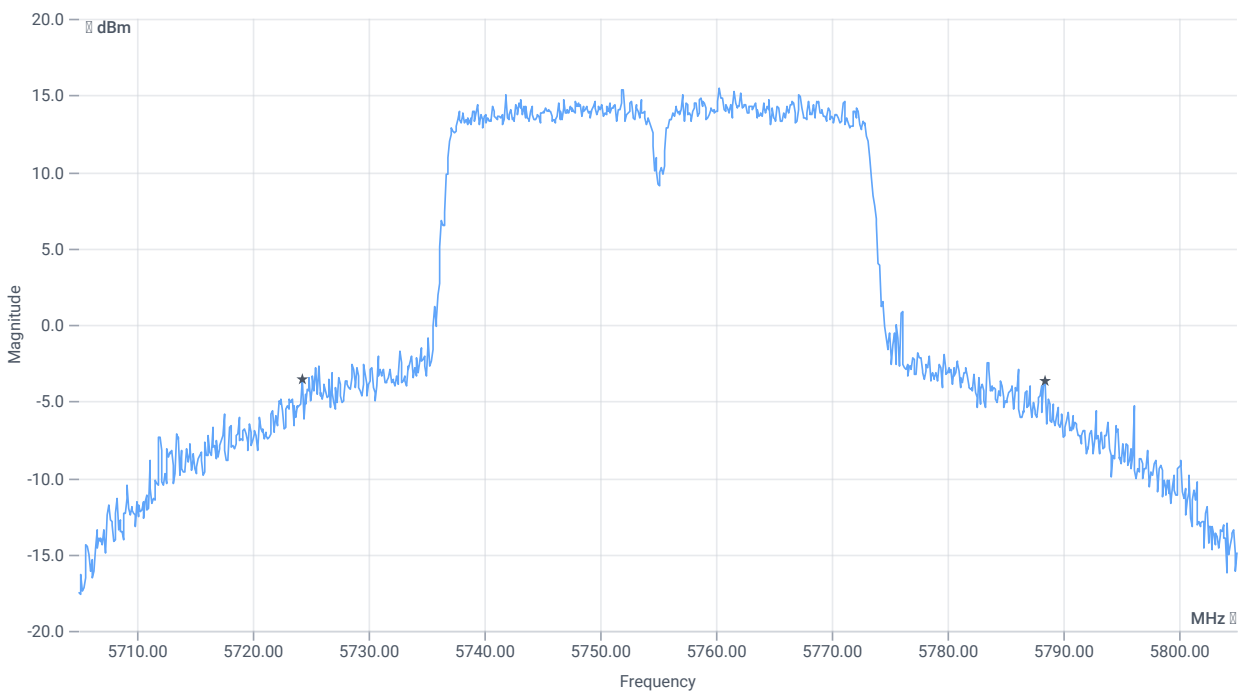




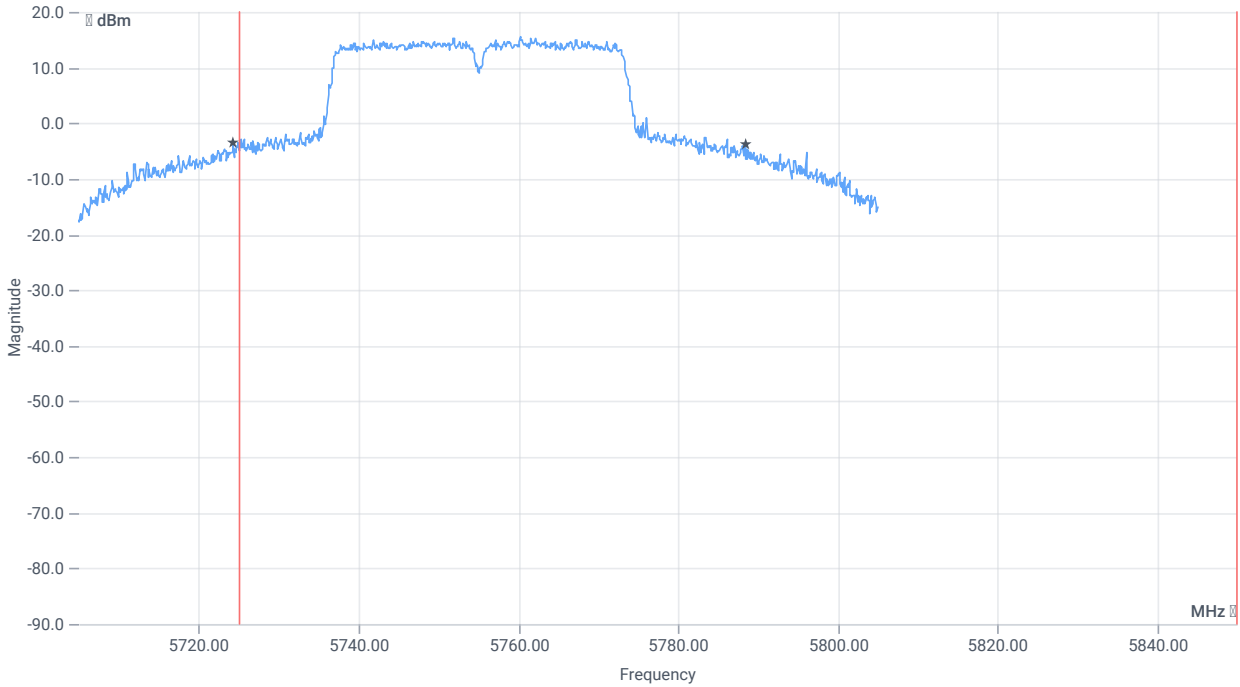
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	52.847	MHz	INFO
T1 99%	5725.000000	--	5729.0260	MHz	PASS
T2 99%	--	5850.000000	5781.8731	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	64.1	MHz	INFO
T1 20dB	5725.000000	--	5724.3000	MHz	DFS required
T2 20dB	--	5850.000000	5788.4000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:50:26
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

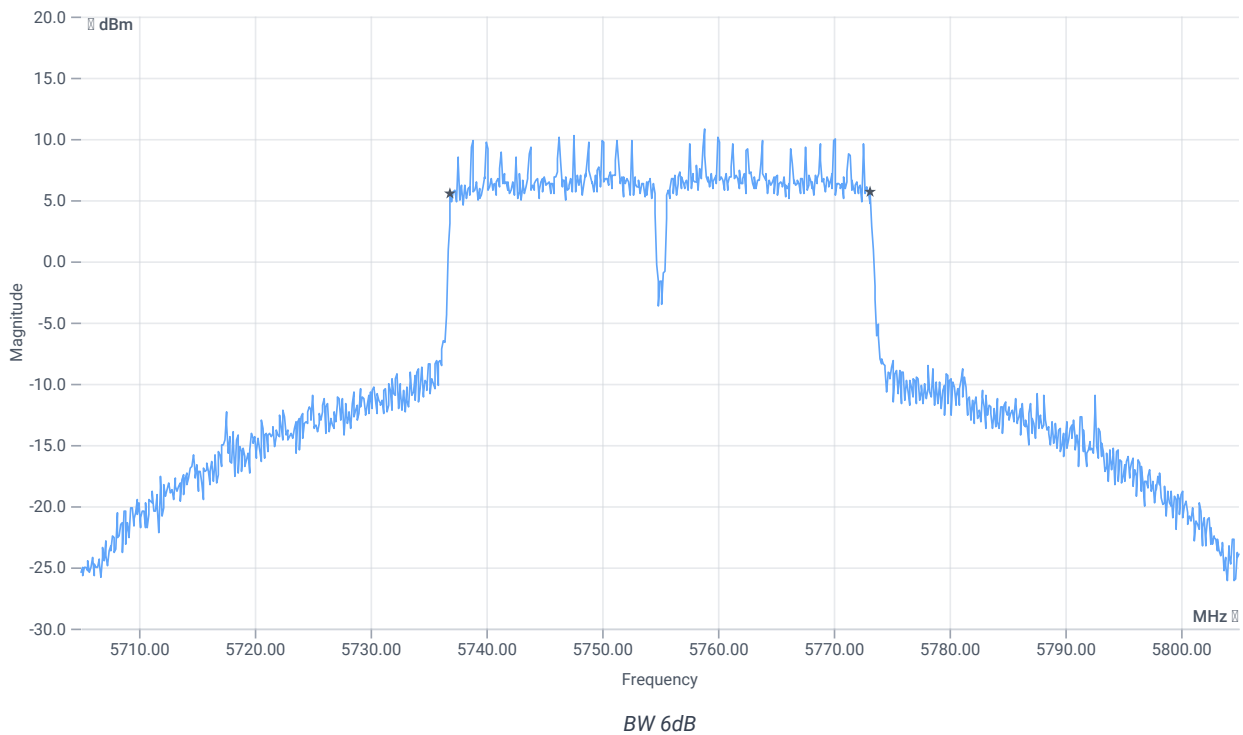
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.61	dBm	INFO
Ref. Frequency	--	--	5771.380	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.61 16.77 30
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	2 1500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:50:52
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5755 MHz

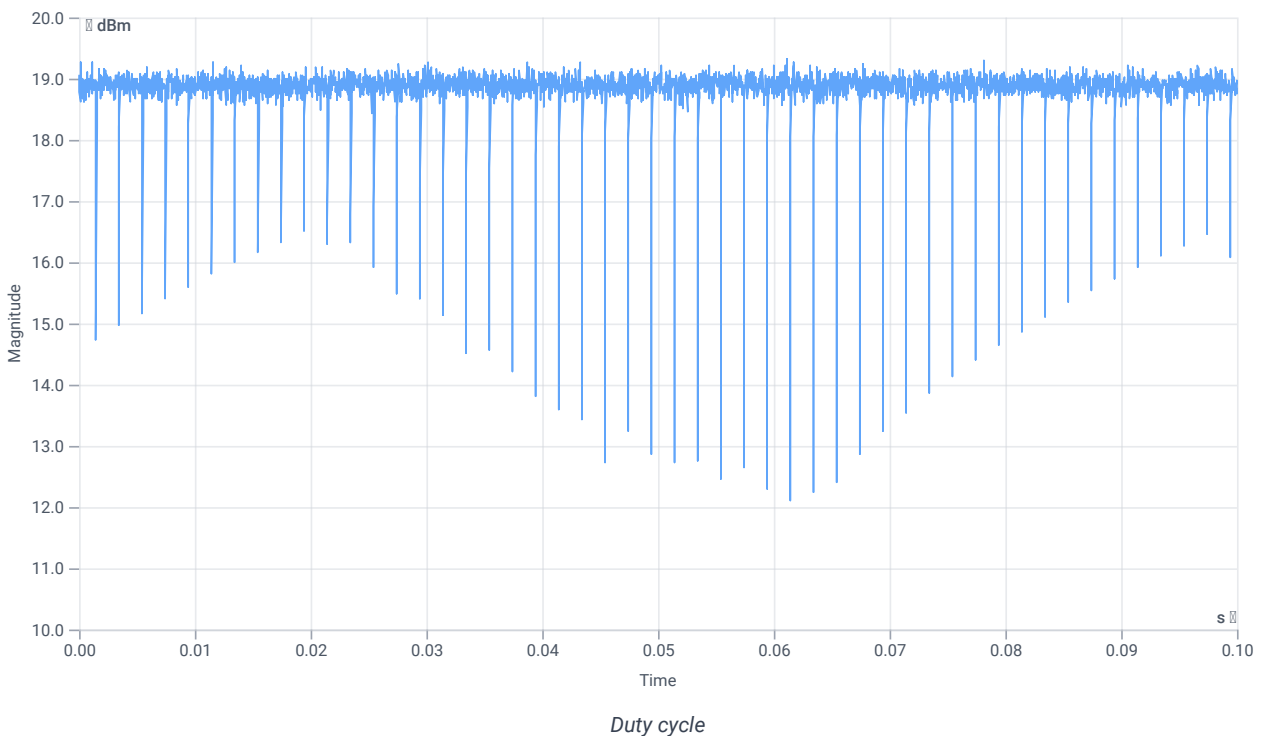
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.13	dBm	INFO
Ref. Frequency	--	--	5763.390	MHz	INFO

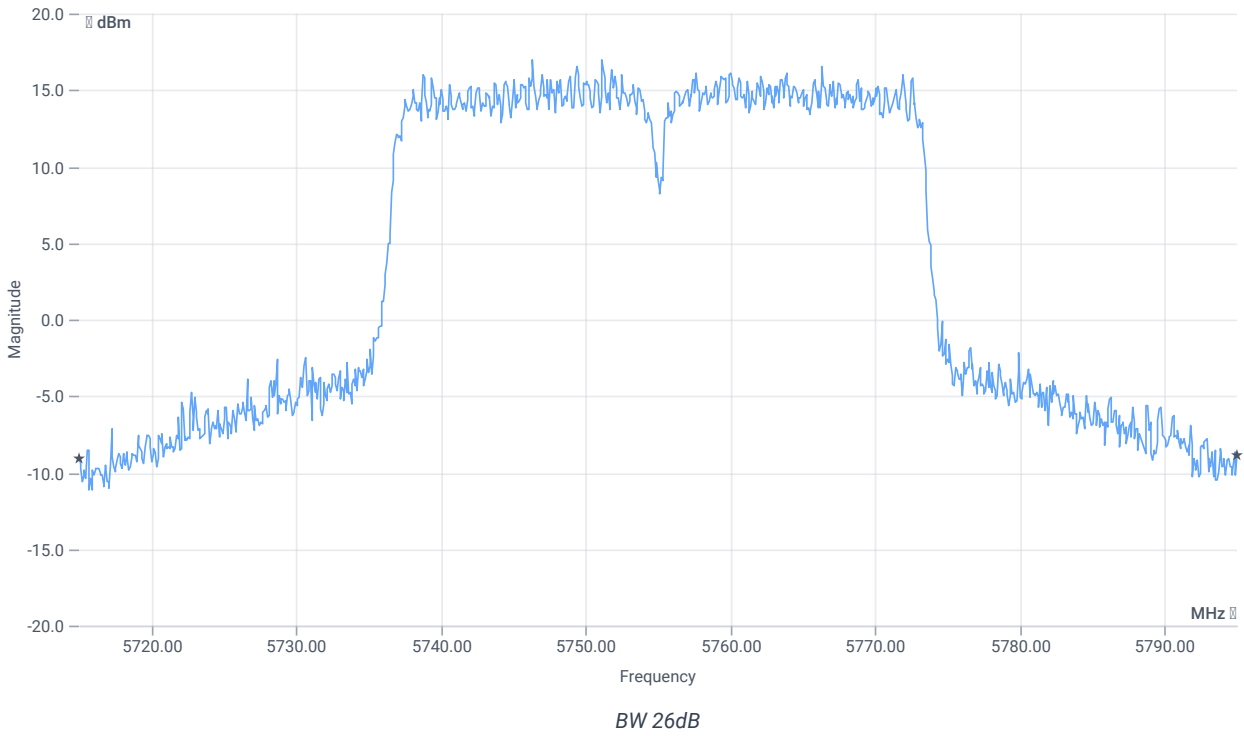
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



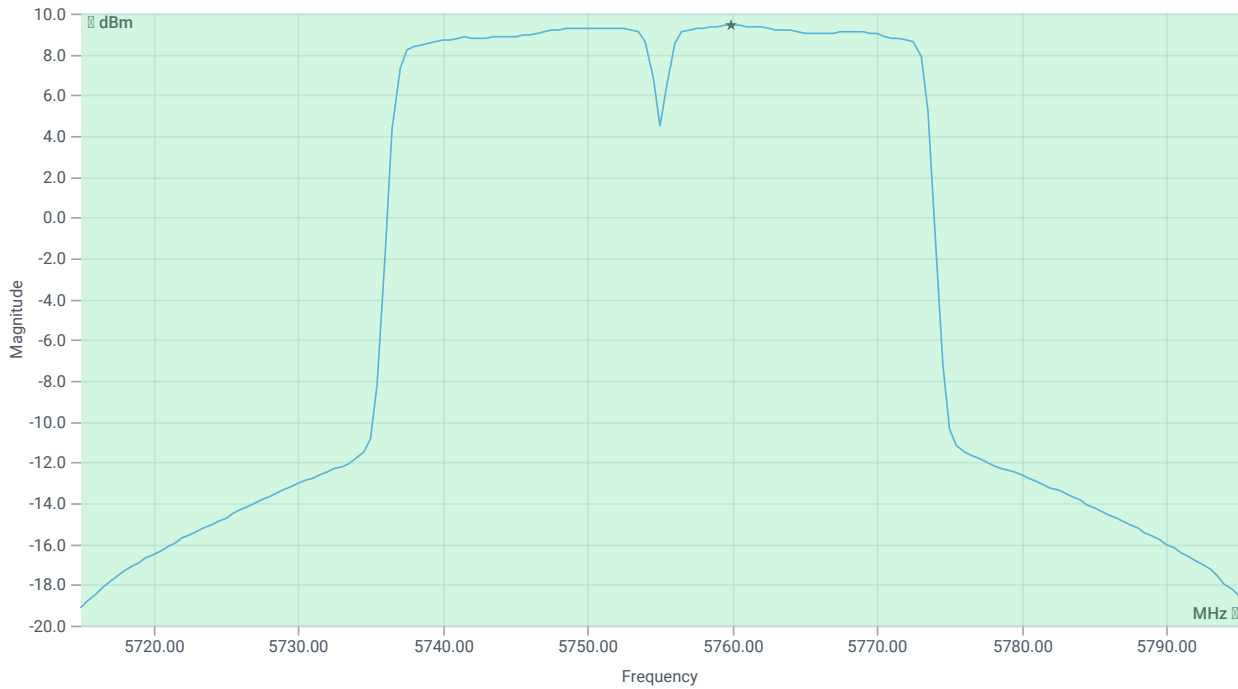
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5715.0000	MHz	INFO
T2 26dB	---	---	5795.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.13 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

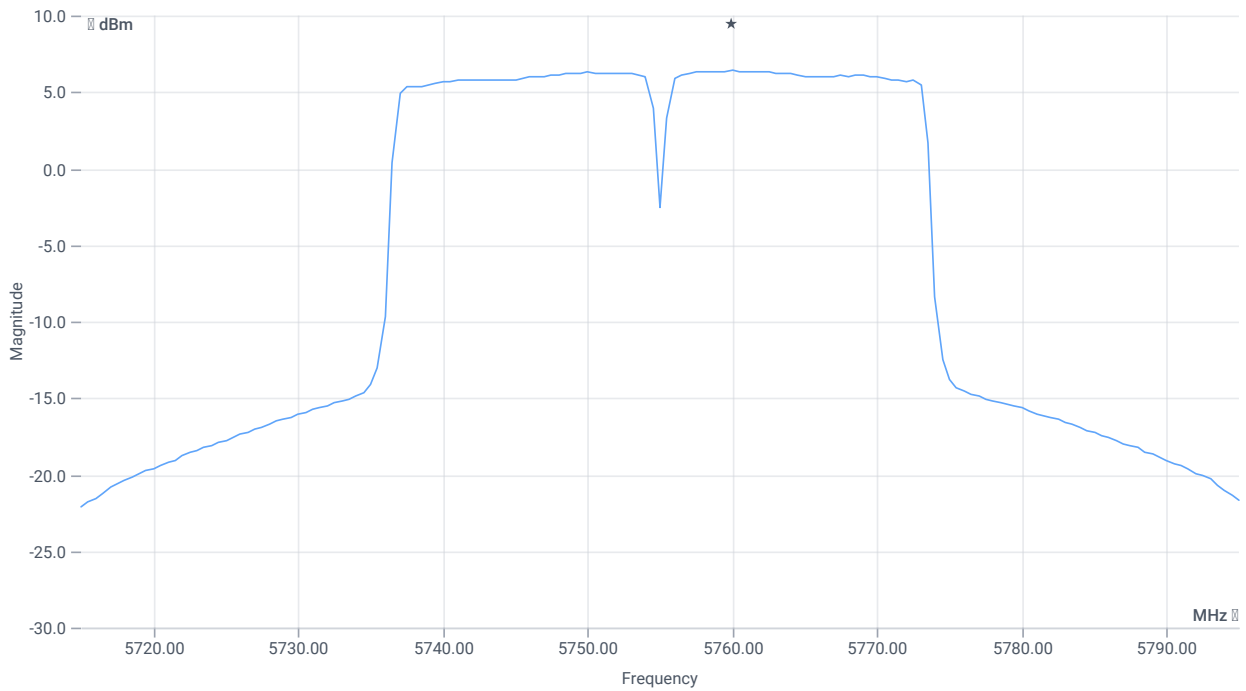
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.33	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.33	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.33	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.13 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.42	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.42	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:53:19
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
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-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

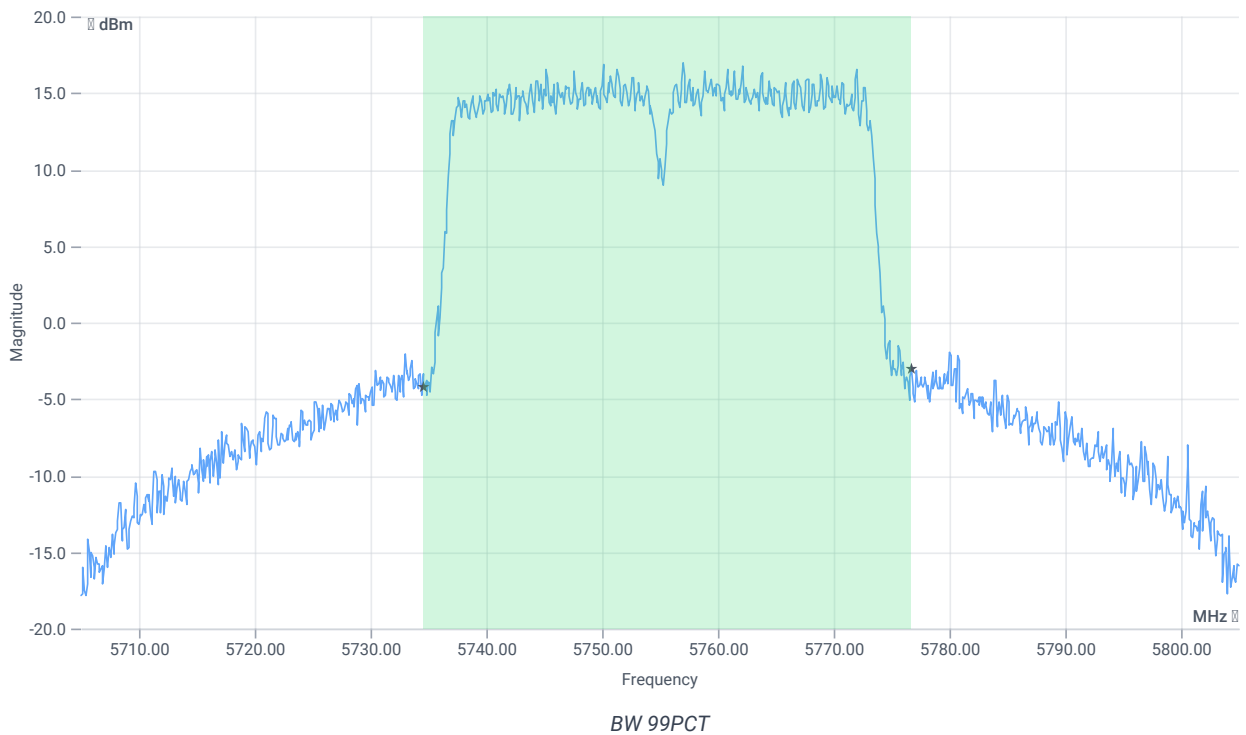
Test at TX 5755 MHz

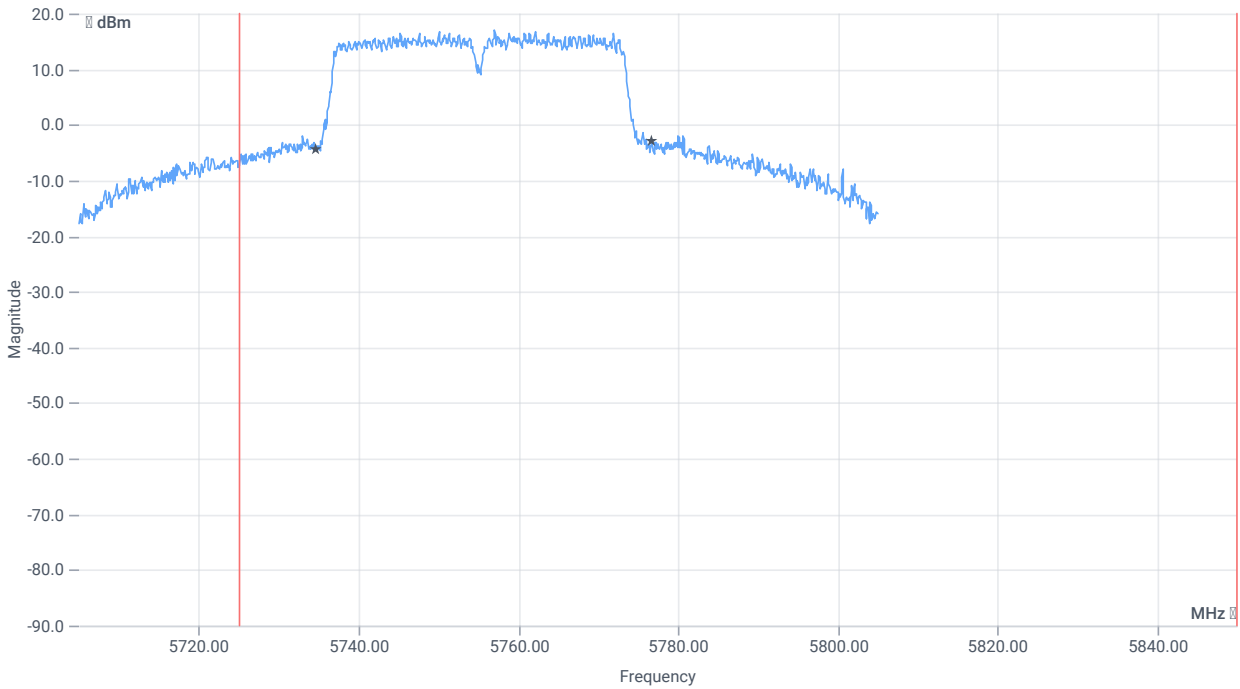
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.46	dBm	INFO
Ref. Frequency	--	--	5759.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.46 16.77 25
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

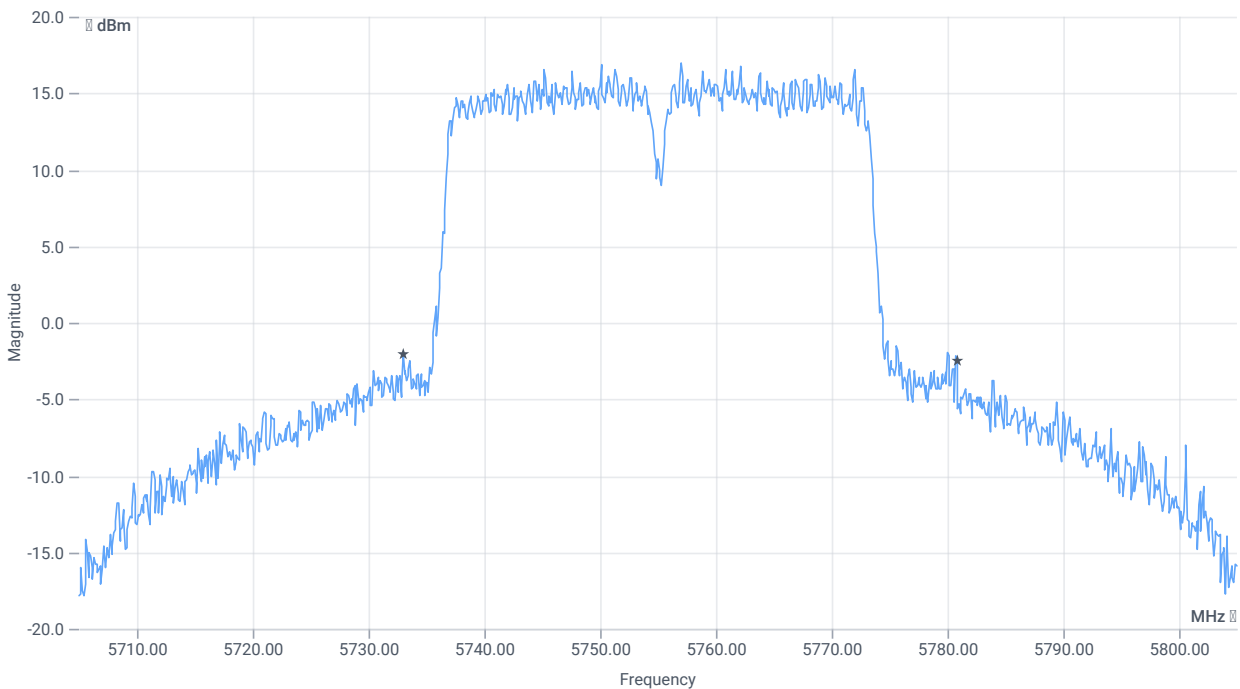




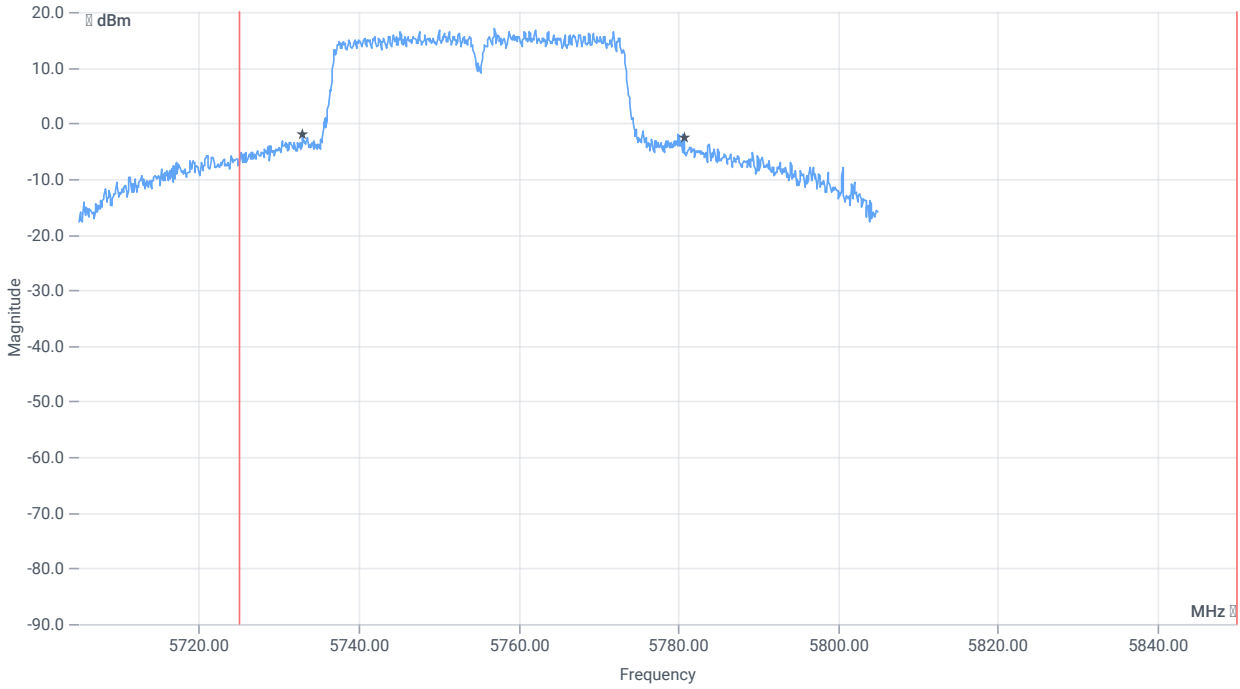
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	42.058	MHz	INFO
T1 99%	5725.000000	--	5734.6204	MHz	PASS
T2 99%	--	5850.000000	5776.6783	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	47.8	MHz	INFO
T1 20dB	5725.000000	---	5733.0000	MHz	PASS
T2 20dB	---	5850.000000	5780.8000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:53:50
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

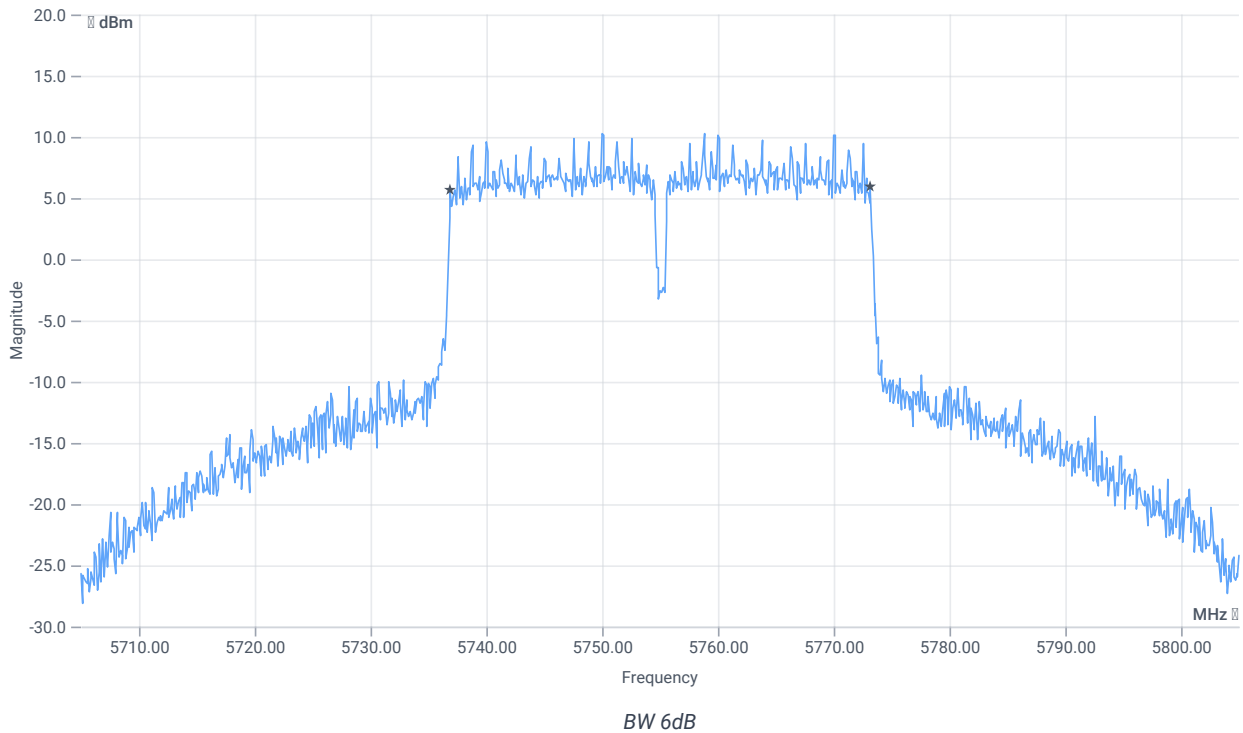
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.02	dBm	INFO
Ref. Frequency	--	--	5759.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.02 16.77 30
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	2 1500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 10:54:15
Ambit temp [°C] humidity [rel%]	25.6 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5755 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.55	dBm	INFO
Ant:1 BW 26dB	--	--	80.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.33	dBm	INFO
Ant:2 BW 26dB	--	--	80.000	MHz	INFO
Σ Limit absolute	--	30	27.45	dBm	PASS
Σ Limit: 11 dBm + 10 log 80	--	30.03	27.45	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.59	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	6.42	dBm/0.5MHz	INFO
Σ	--	30	9.52	dBm/0.5MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 11:00:56
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan ac_VHT40_U_NII_3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 11:00:57
Message	set WLAN5Gx to ac_VHT40_U_NII_3, Frequency [MHz] 5795 Information: PS96

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:01:22
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5795 MHz

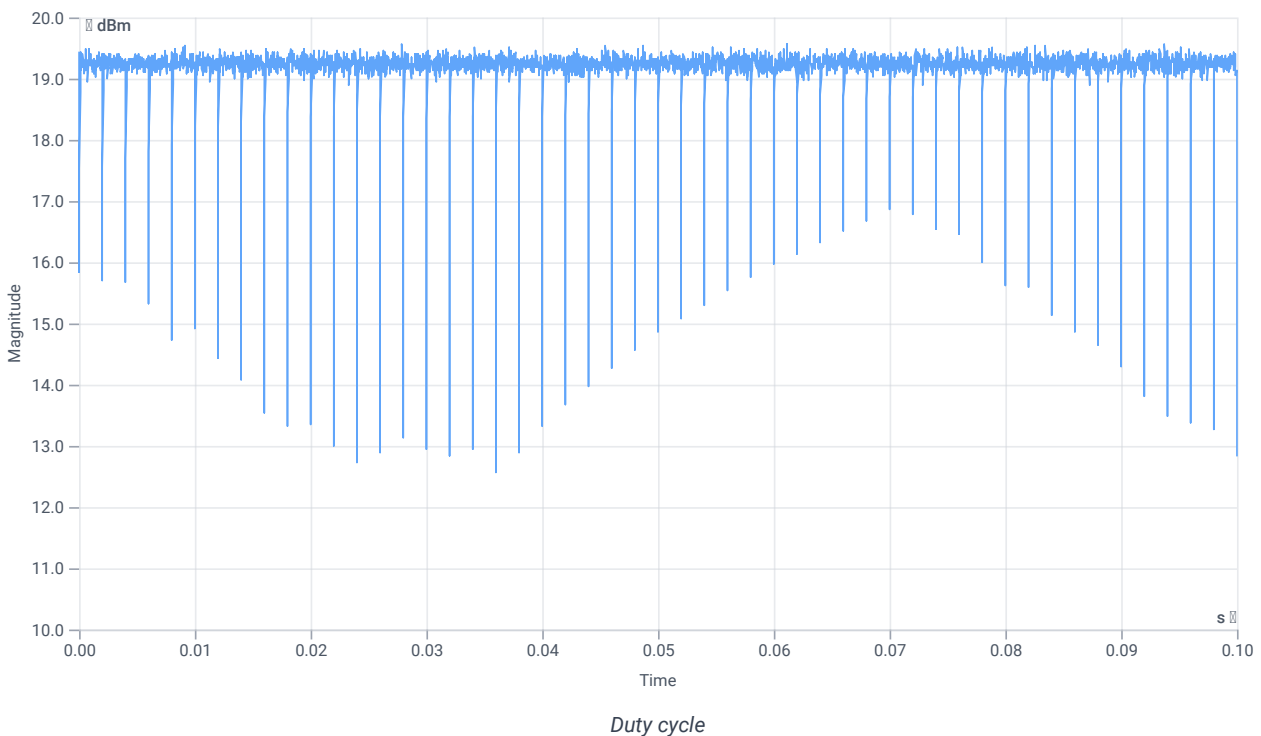
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.98	dBm	INFO
Ref. Frequency	--	--	5789.610	MHz	INFO

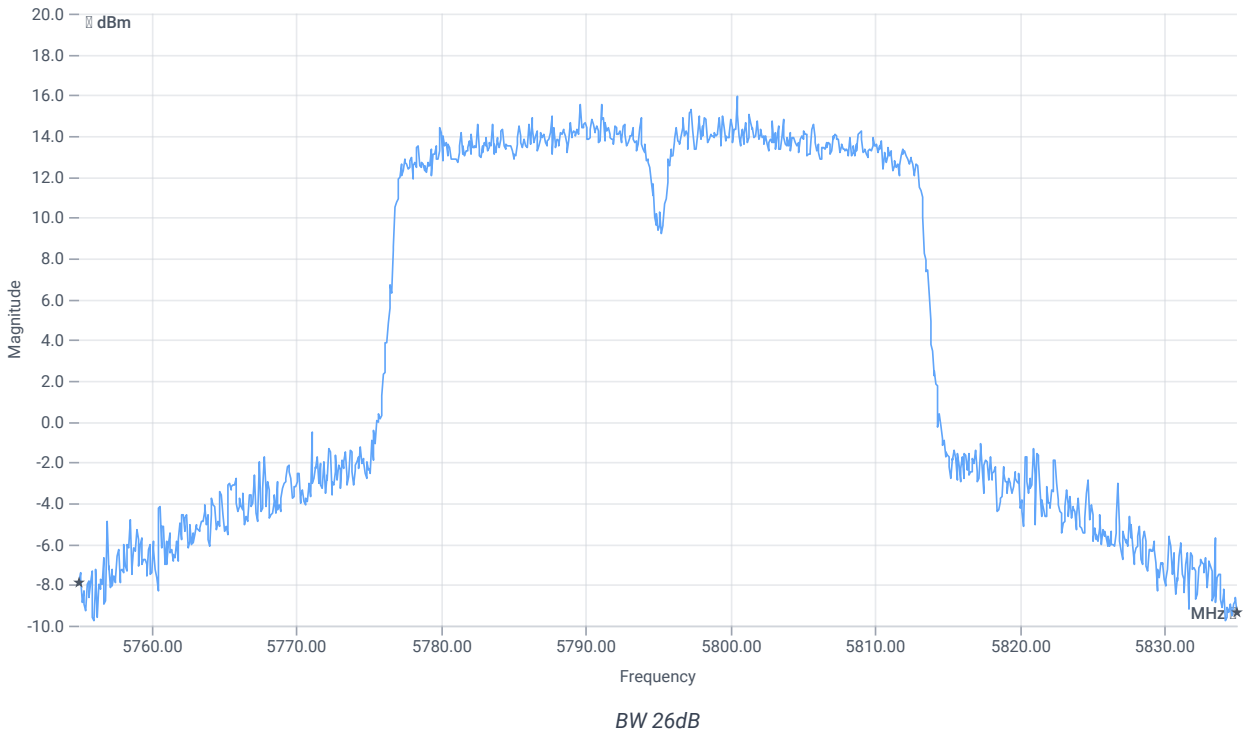
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



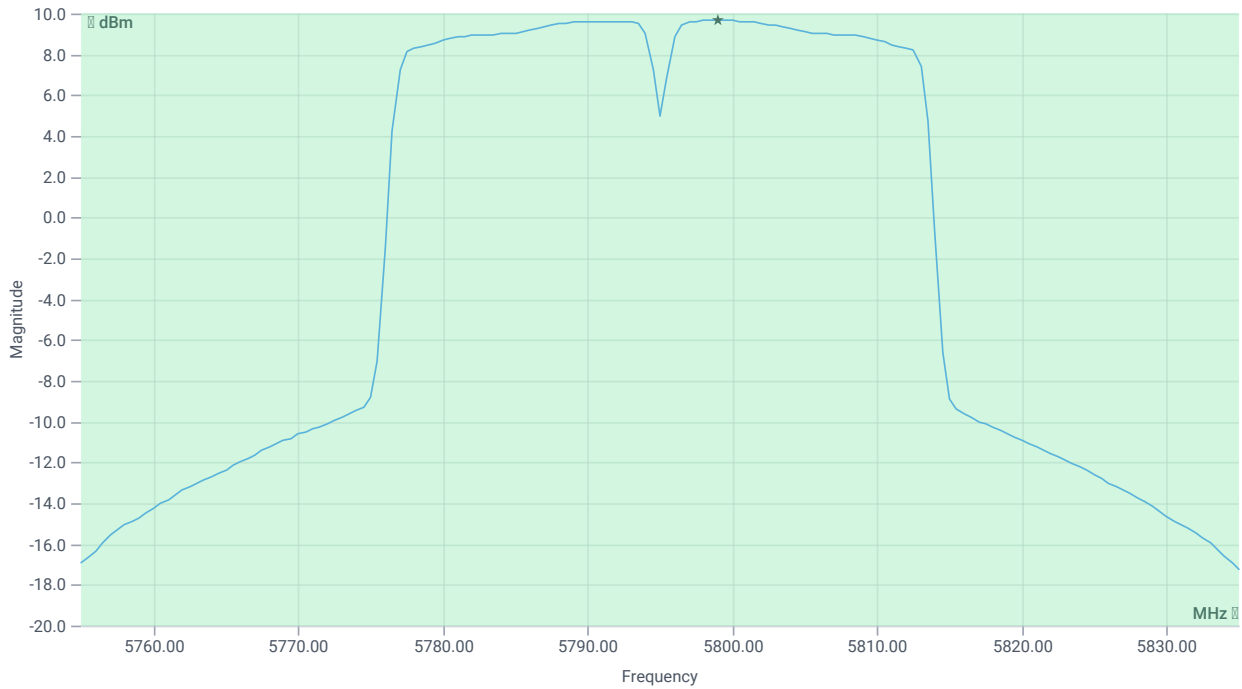
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5755.0000	MHz	INFO
T2 26dB	---	---	5835.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.98 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

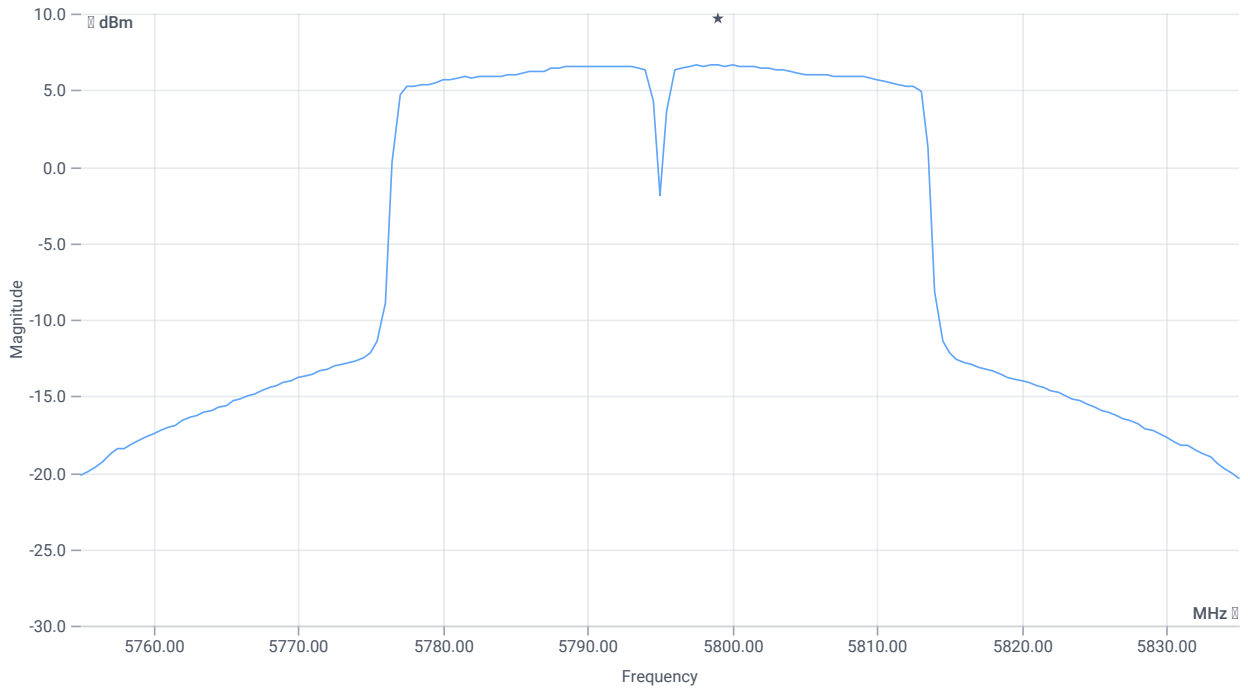
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.47	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.47	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.47	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.98 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.63	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.63	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:03:49
Ambit temp [°C] humidity [rel%]	25.6 50
System version	4.6.0.3
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-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

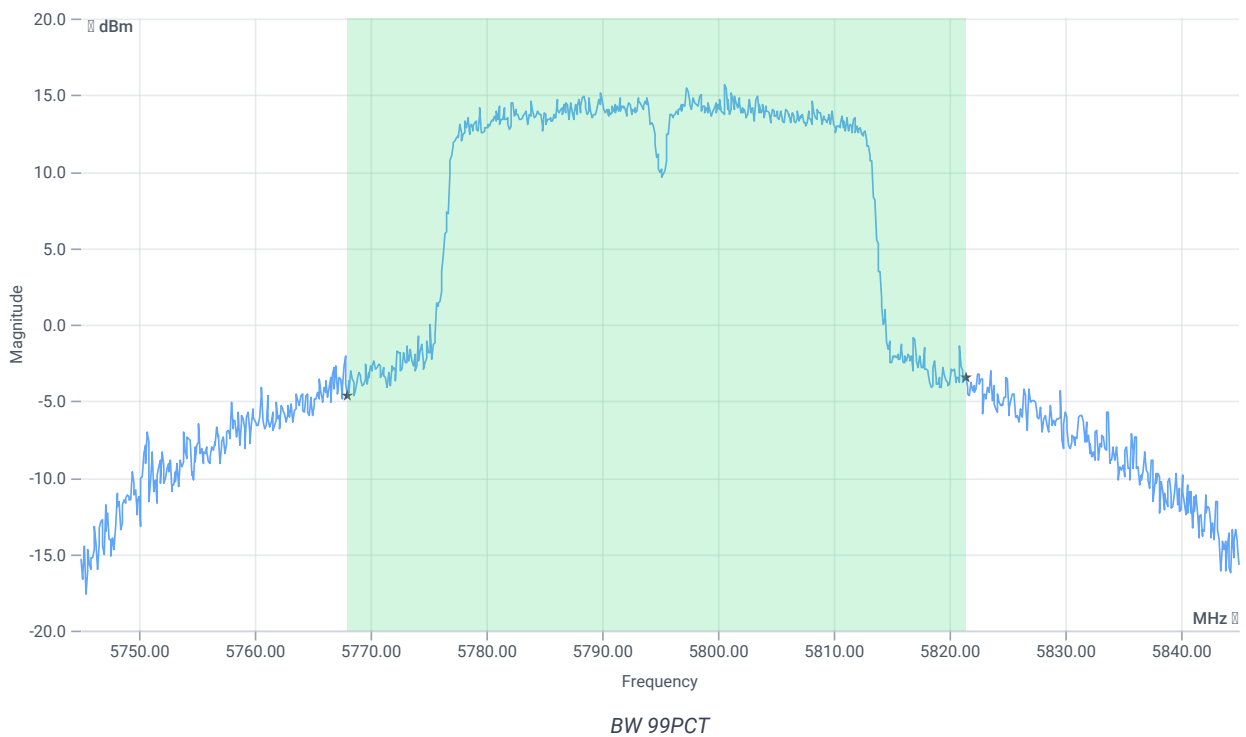
Test at TX 5795 MHz

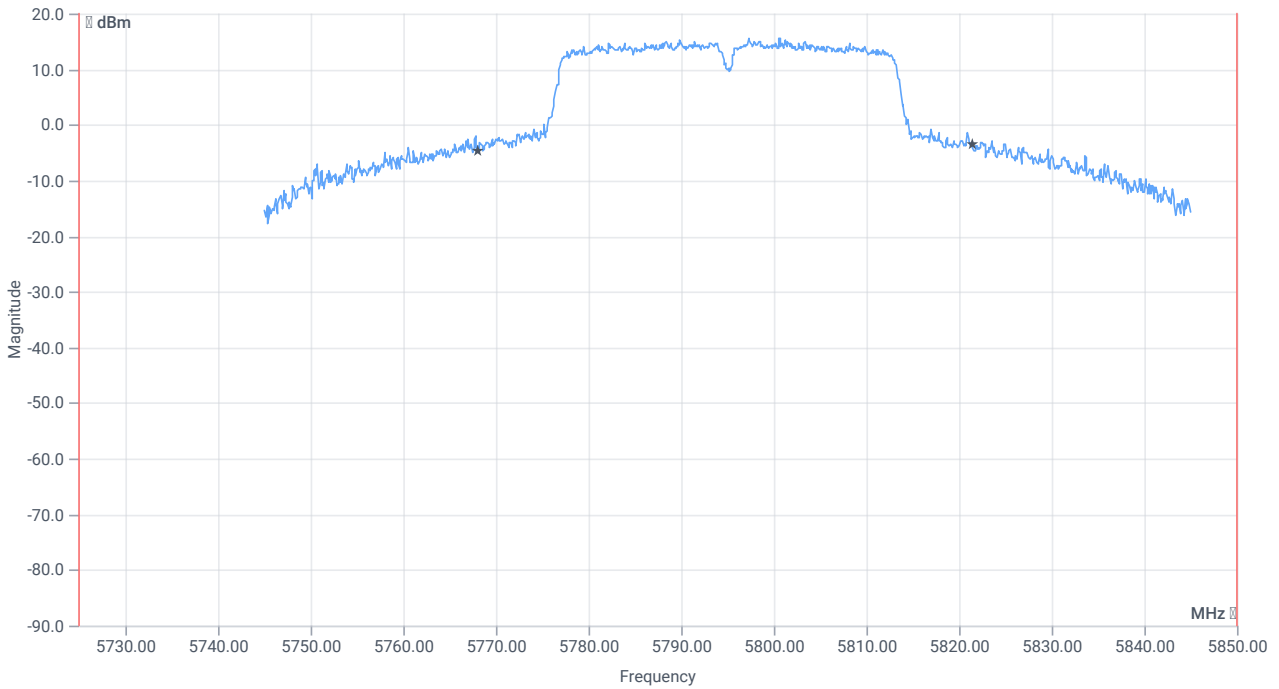
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.08	dBm	INFO
Ref. Frequency	--	--	5787.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.08 16.67 25
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

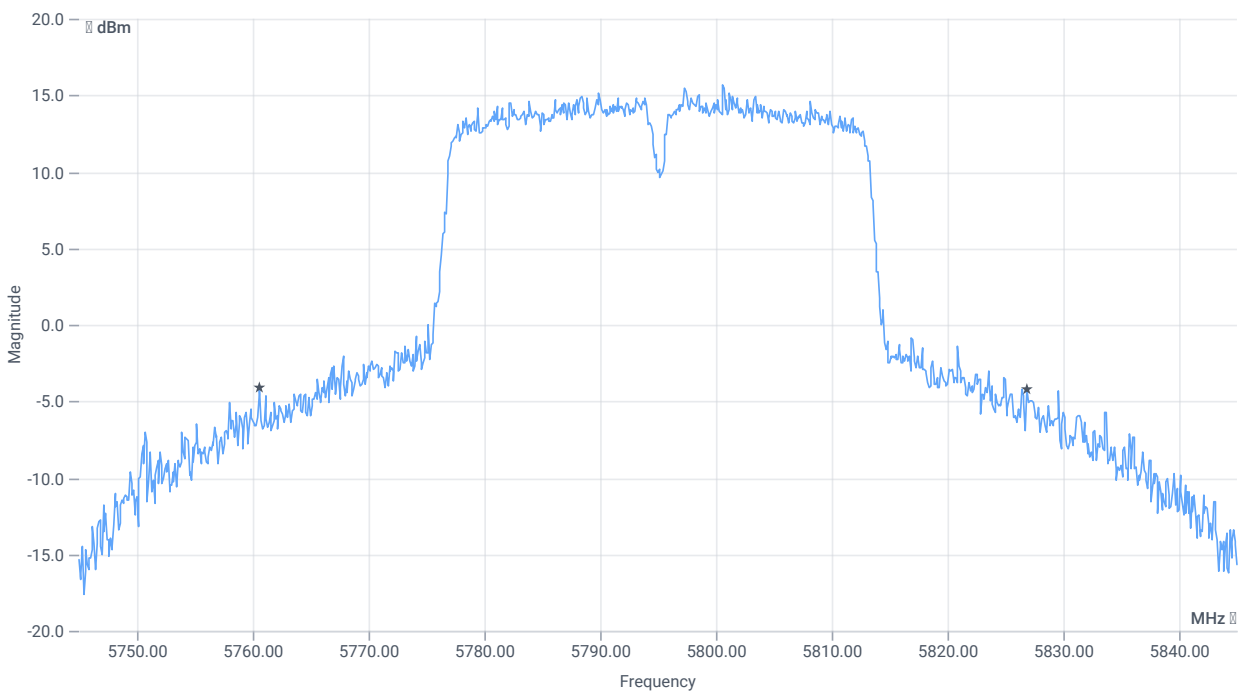




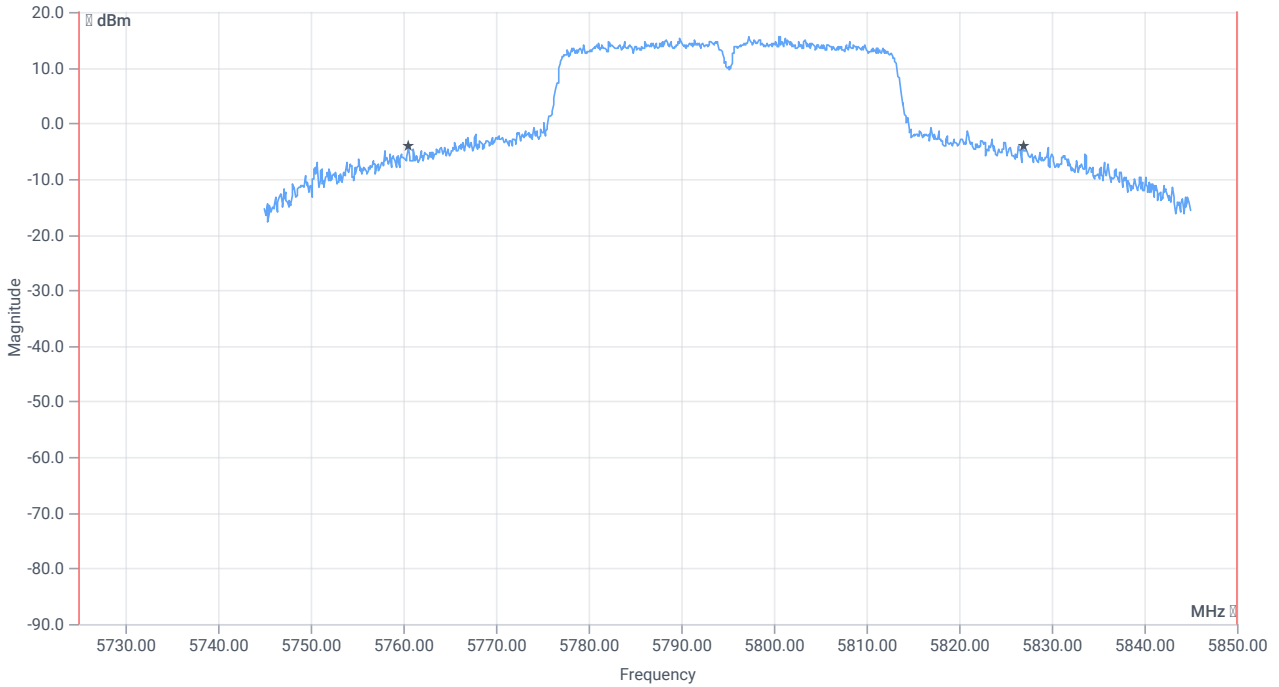
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	53.347	MHz	INFO
T1 99%	5725.000000	--	5768.0270	MHz	PASS
T2 99%	--	5850.000000	5821.3736	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	66.3	MHz	INFO
T1 20dB	5725.000000	--	5760.6000	MHz	PASS
T2 20dB	--	5850.000000	5826.9000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:04:20
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

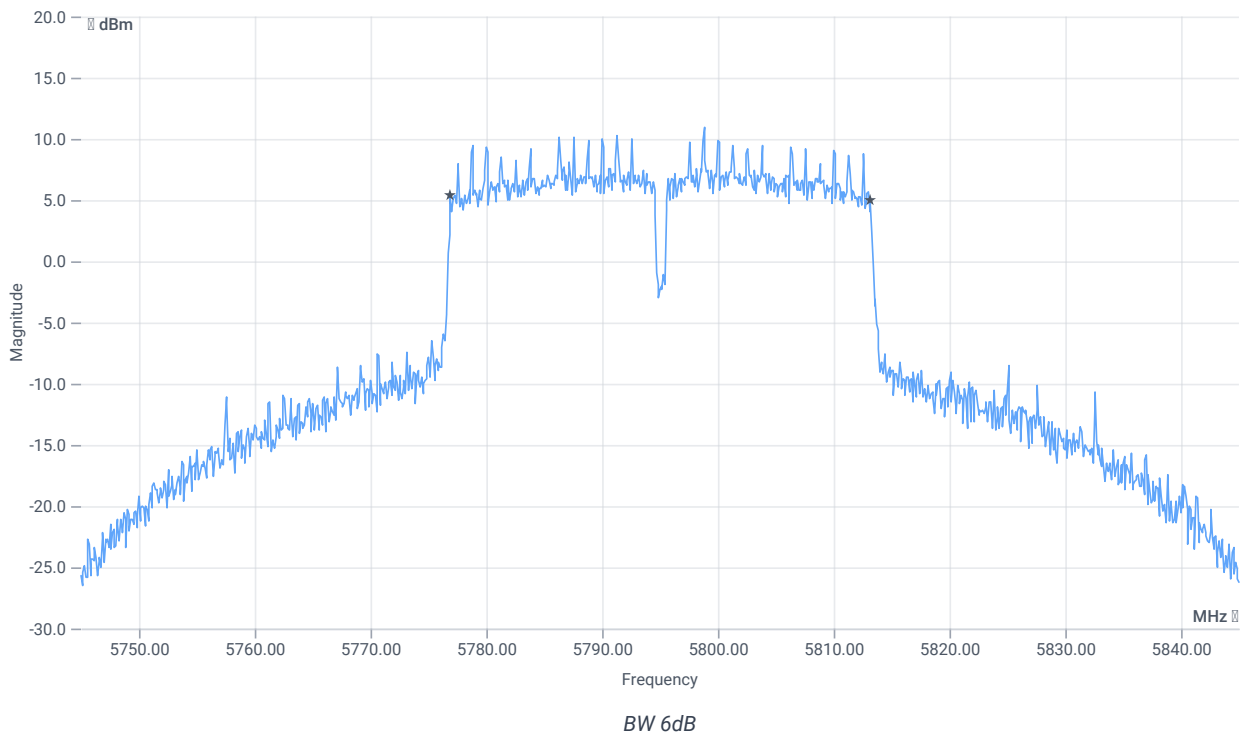
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.12	dBm	INFO
Ref. Frequency	--	--	5790.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.12 16.67 30
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	2 1500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:04:45
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	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 5795 MHz

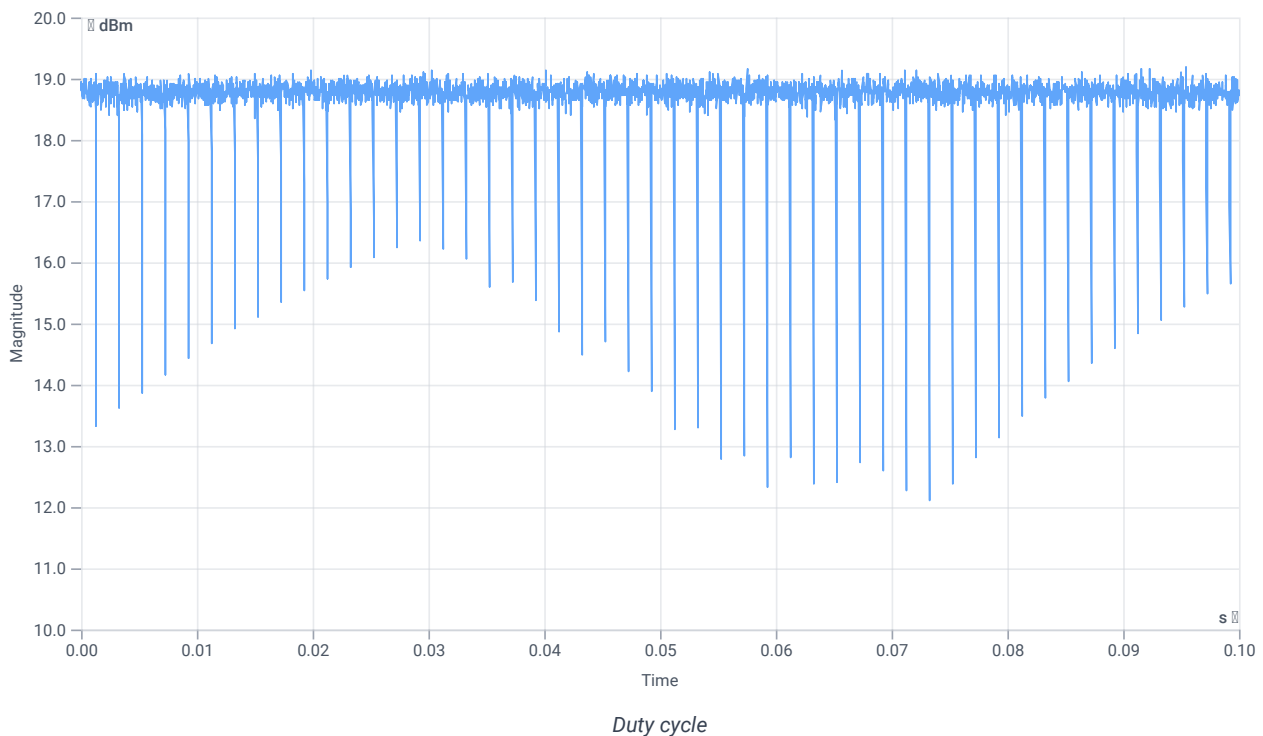
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.20	dBm	INFO
Ref. Frequency	--	--	5791.000	MHz	INFO

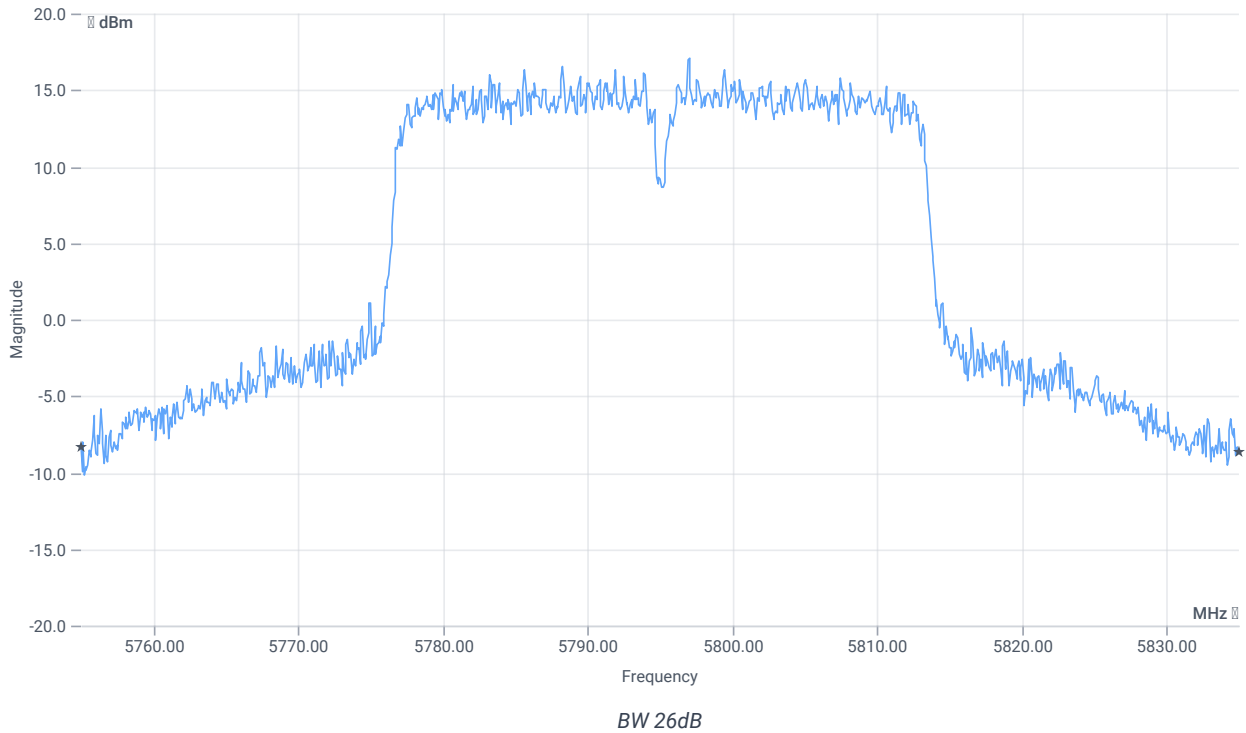
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



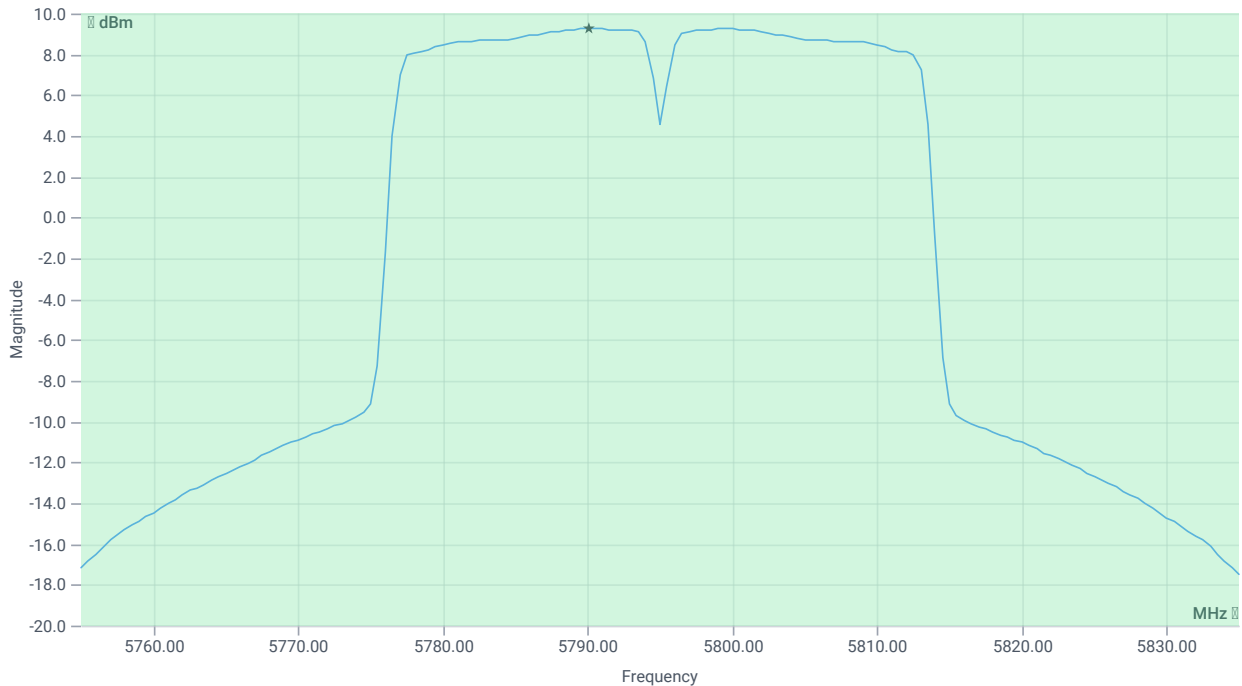
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5755.0000	MHz	INFO
T2 26dB	---	---	5835.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.20 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

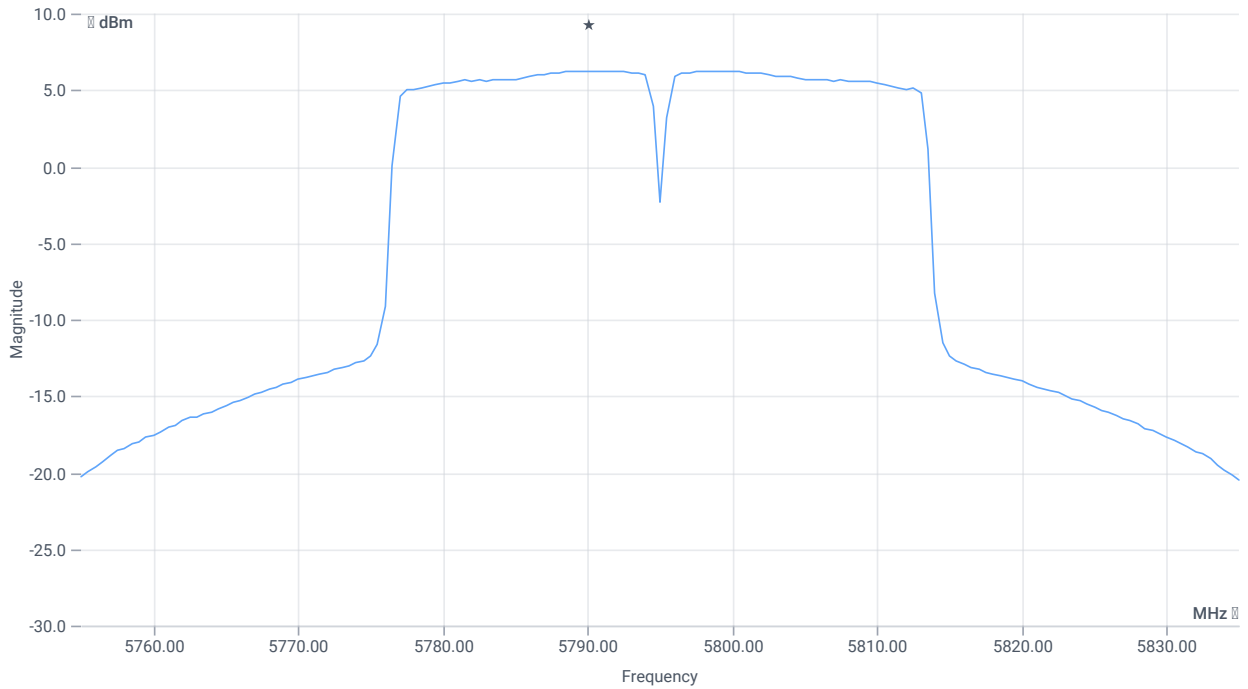
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.14	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.14	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.14	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.20 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



PSD UNII-3

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.26	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.26	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:07:11
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
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-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

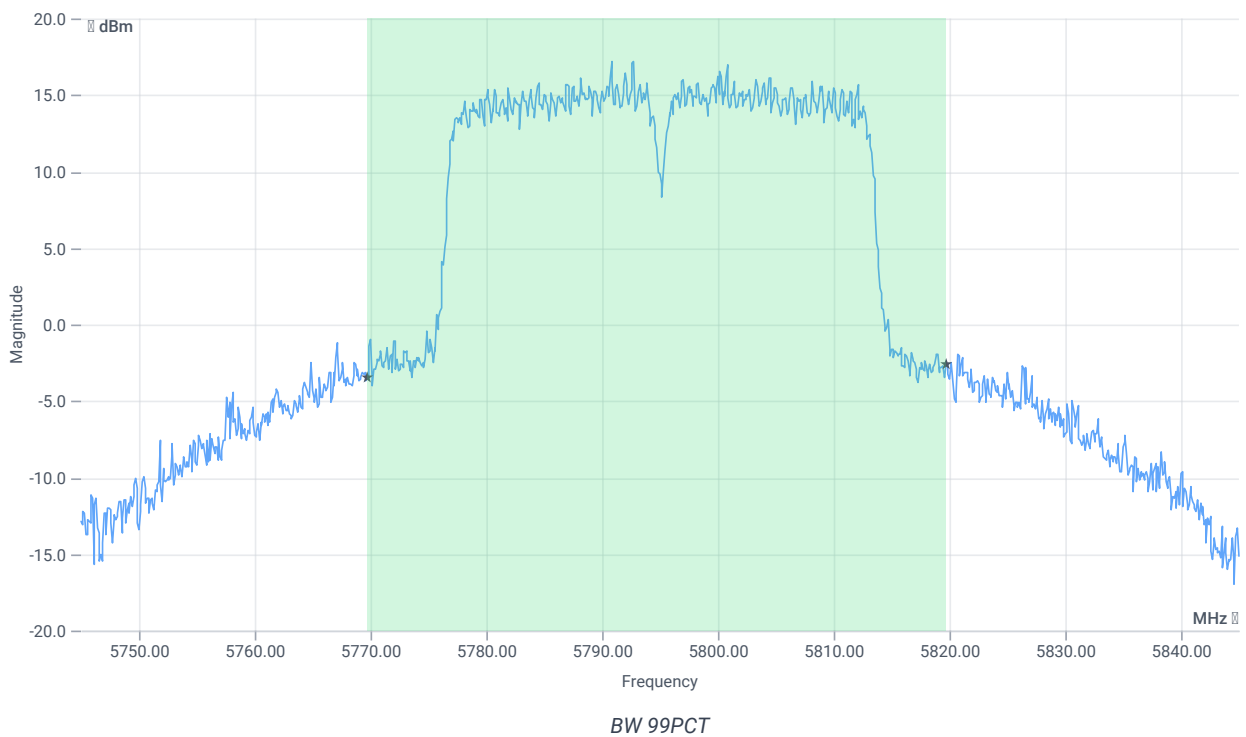
Test at TX 5795 MHz

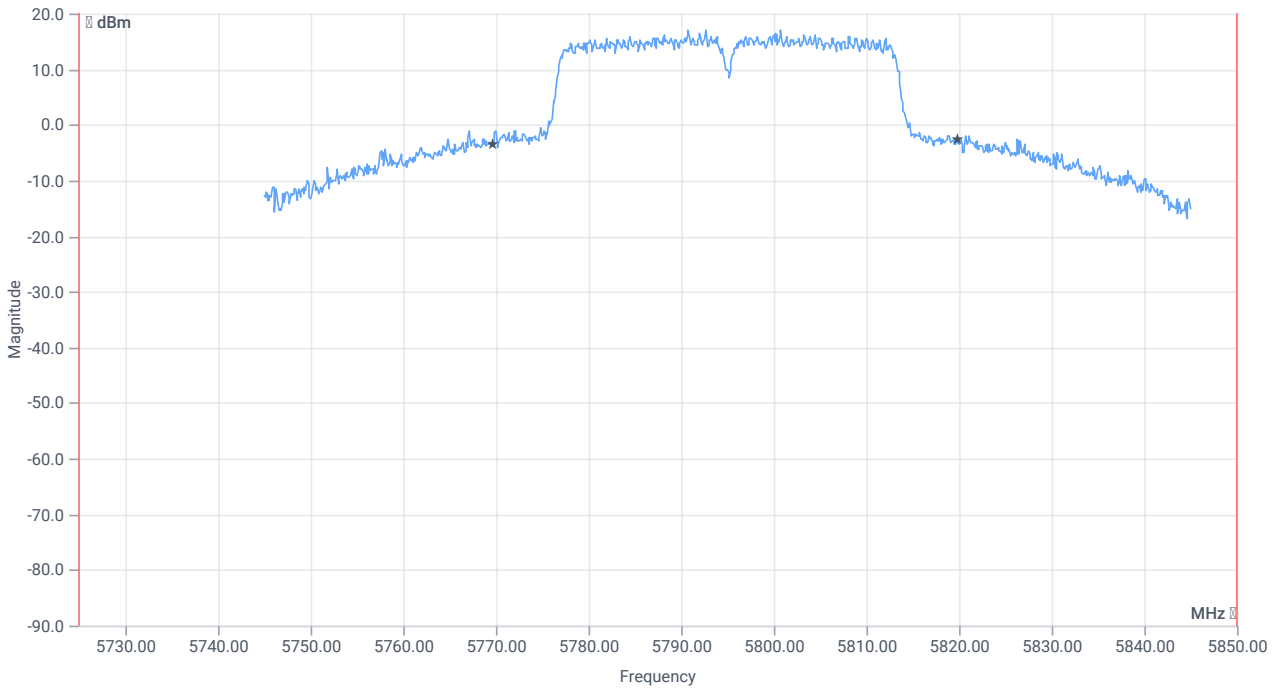
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.09	dBm	INFO
Ref. Frequency	--	--	5790.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.09 16.67 25
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

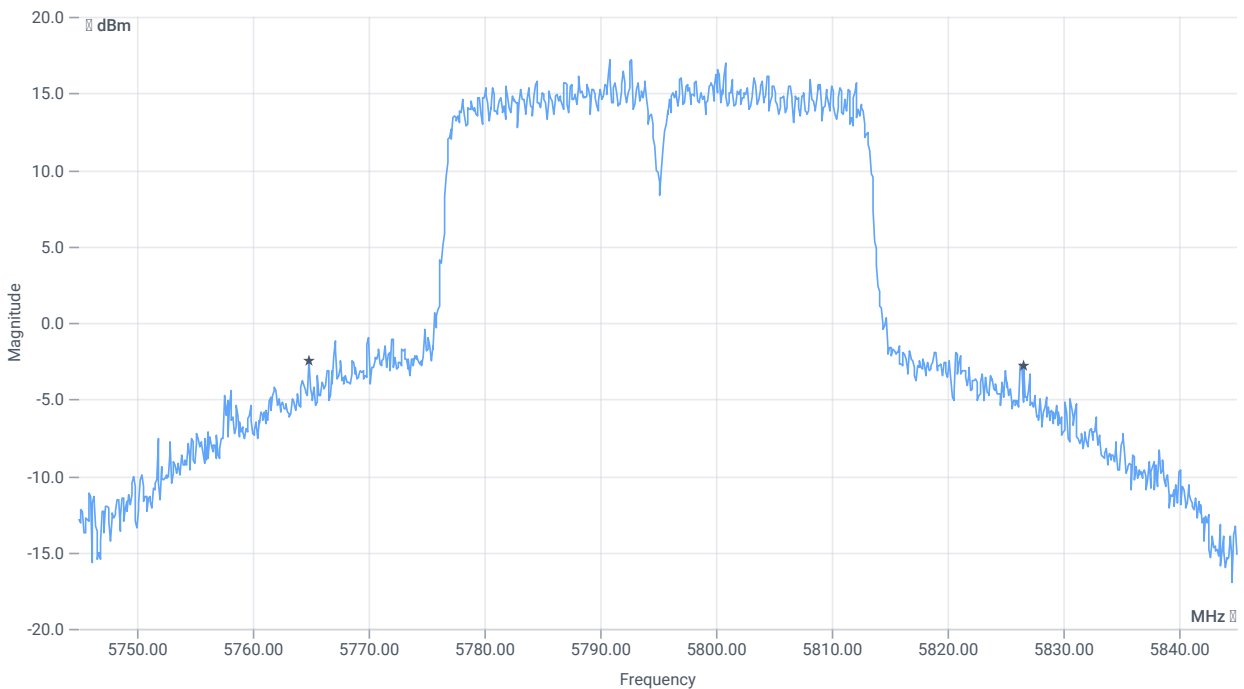




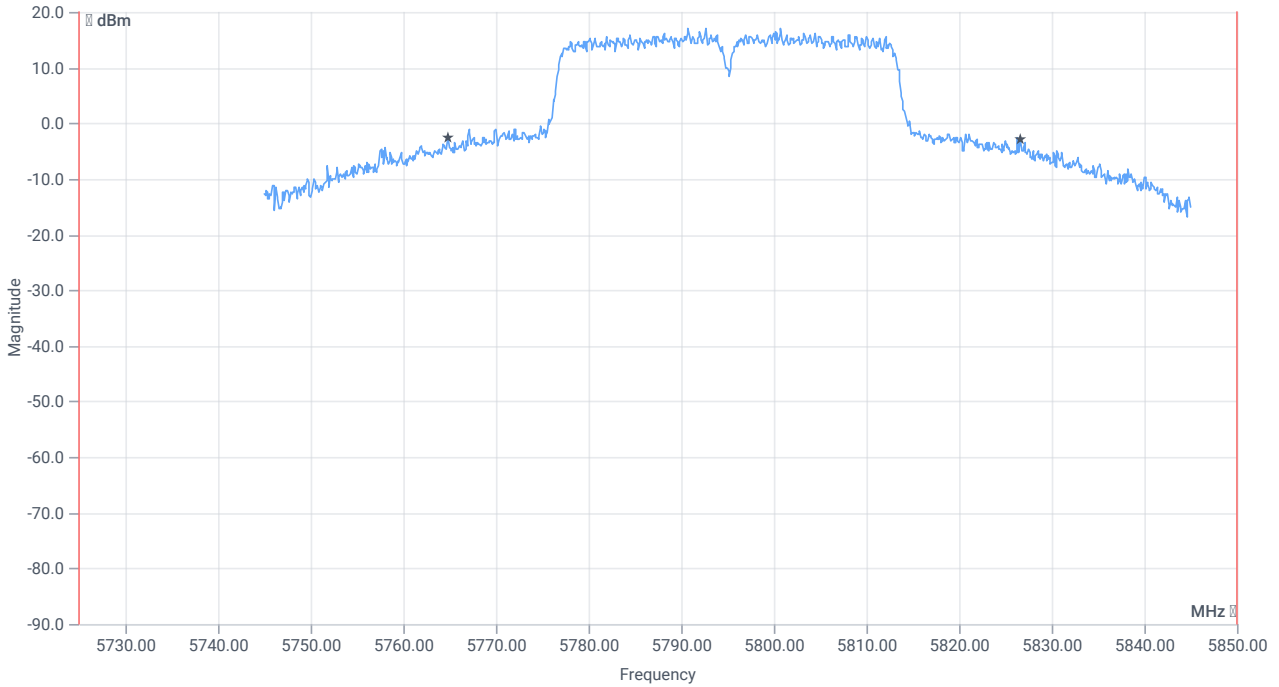
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	50.05	MHz	INFO
T1 99%	5725.000000	--	5769.7253	MHz	PASS
T2 99%	--	5850.000000	5819.7752	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	61.8	MHz	INFO
T1 20dB	5725.000000	---	5764.8000	MHz	PASS
T2 20dB	---	5850.000000	5826.6000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:07:43
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

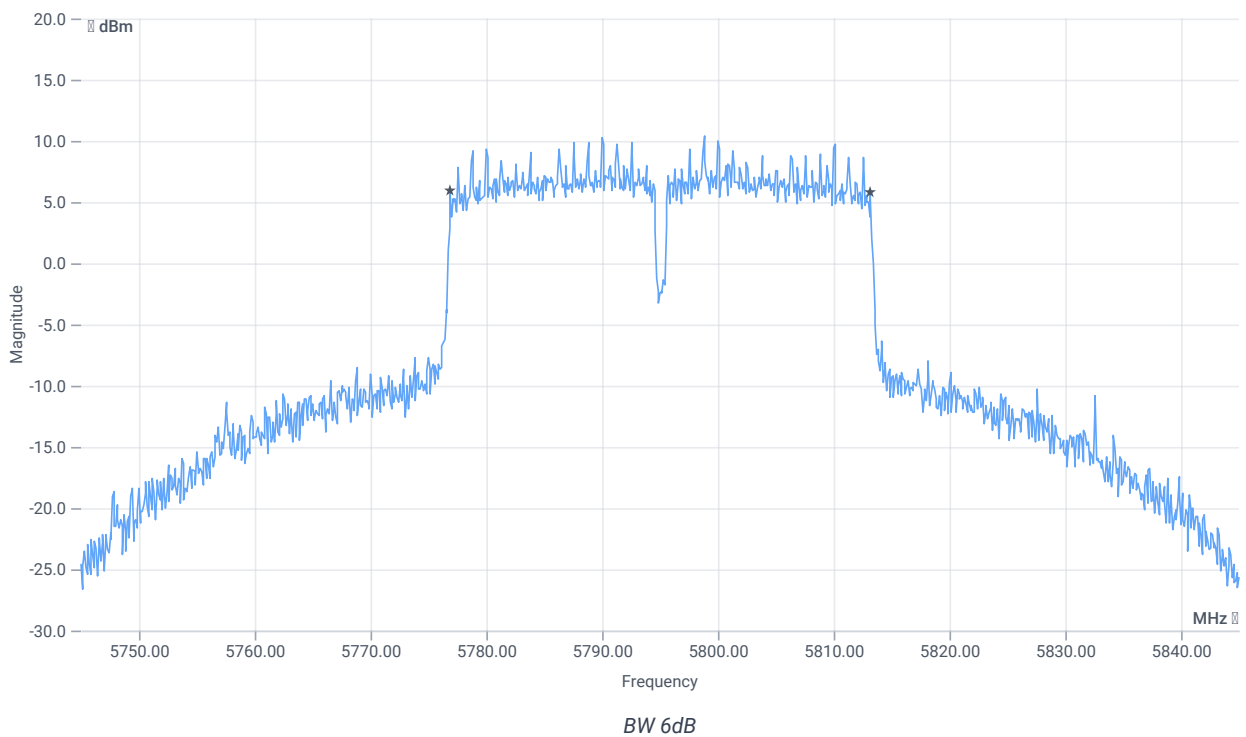
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.55	dBm	INFO
Ref. Frequency	--	--	5800.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.55 16.67 30
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	2 1500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

References

TC start	02.08.2023 11:08:09
Ambit temp [°C] humidity [rel%]	25.7 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT40 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5795 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.47	dBm	INFO
Ant:1 BW 26dB	--	--	80.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.14	dBm	INFO
Ant:2 BW 26dB	--	--	80.000	MHz	INFO
Σ Limit absolute	--	30	27.32	dBm	PASS
Σ Limit: 11 dBm + 10 log 80	--	30.03	27.32	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.63	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	6.26	dBm/0.5MHz	INFO
Σ	--	30	9.46	dBm/0.5MHz	PASS

Verdict

PASS

- END OF DOCUMENT -