

Conducted test results

No.1-7077/23-01-05_TR1-A207-R1

January 22, 2024

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

Andreas Kurzkurt
Testing Manager
Radio Labs

Table of Content

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	4
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1	8
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	12
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1	16
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	20
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	22
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1	26
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	30
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1	34
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	38
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	40
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A	44
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	49
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A	53
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	58
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	60
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A	64
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	69
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A	73
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	78
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	80
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	84
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	89
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	93
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	98
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	100
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	104
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	109
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	113
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	118
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	120
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	124
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	129
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C	133
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	138
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	140
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3	145
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	149
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	151
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3	156
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	160

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	162
FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3	164
FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3	167
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	170
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3	175
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	179
FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	181
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3	186
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	190
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	192
FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3	194
FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3	197

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:12:55
Ambit temp [°C] humidity [rel%]	21.6 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5190 MHz

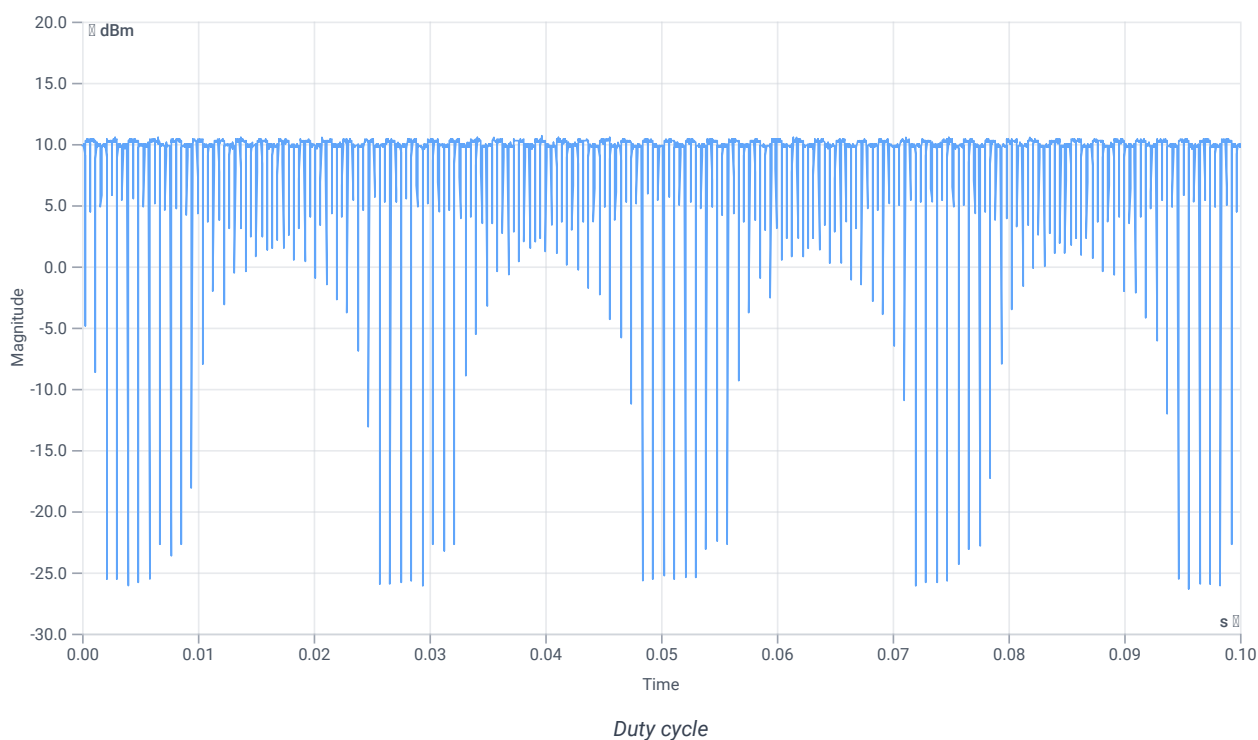
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.25	dBm	INFO
Ref. Frequency	---	---	5172.620	MHz	INFO

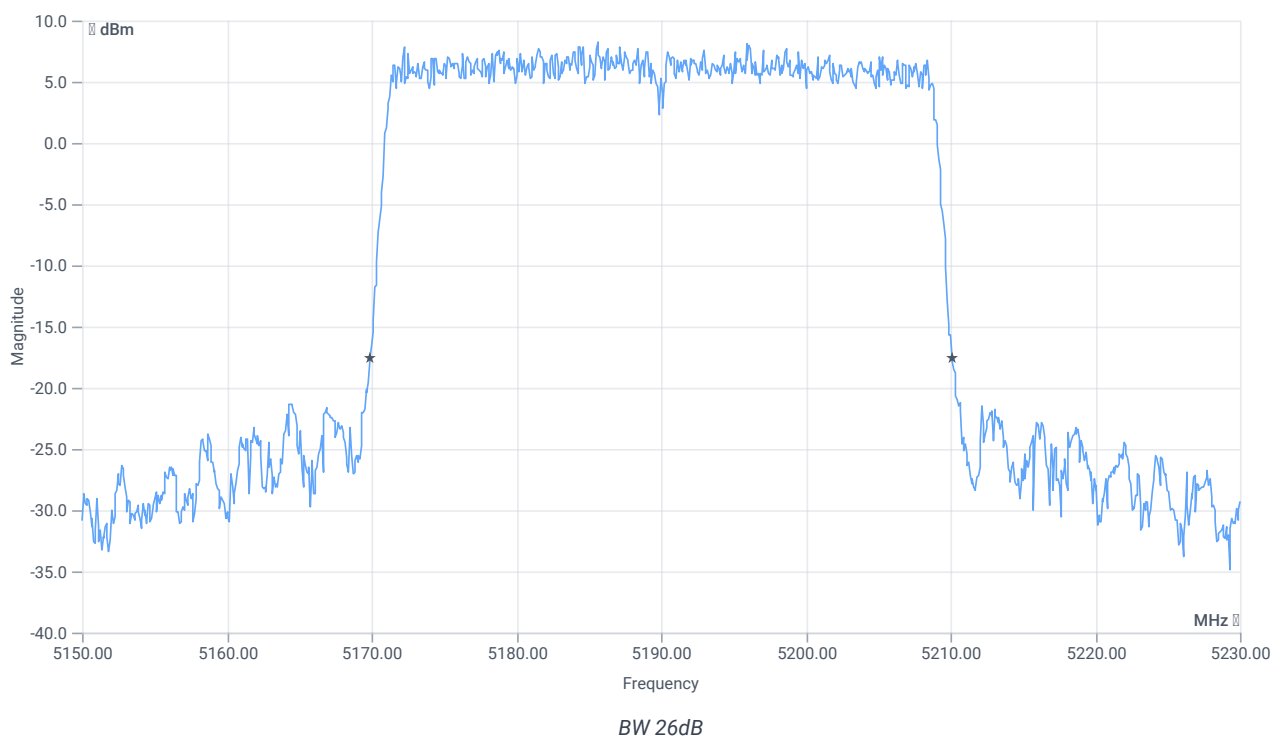
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:92					
Duty Cycle (Burst Ratio) max	---	---	0.985	---	INFO
Duty Cycle max	---	---	0.066	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.025	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



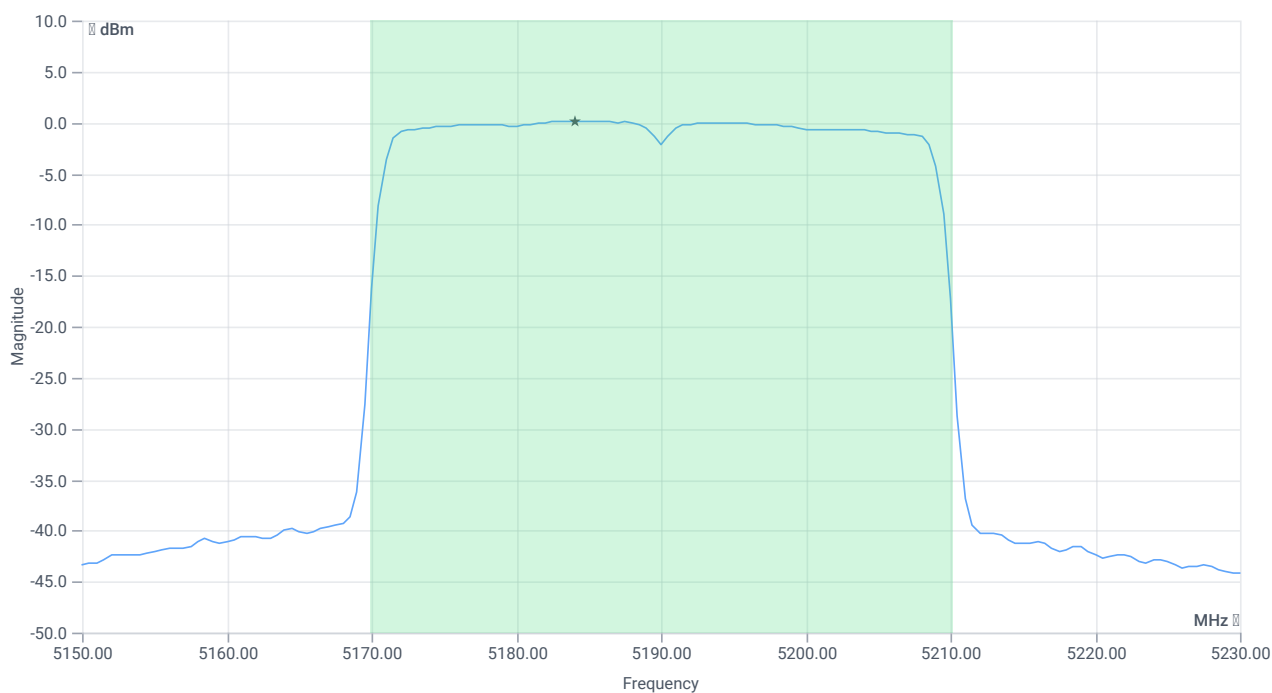
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.16	MHz	INFO
T1 26dB	---	---	5169.9200	MHz	INFO
T2 26dB	---	---	5210.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.25 16.45 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	15.09	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.46	dBm	PASS
Limit: 11 dBm + 10 log 40.16					
Max Output Power DC corrected	---	27.04	15.46	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	0.14	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	0.51	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:14:25
Ambit temp [°C] humidity [rel%]	21.6 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5190 MHz

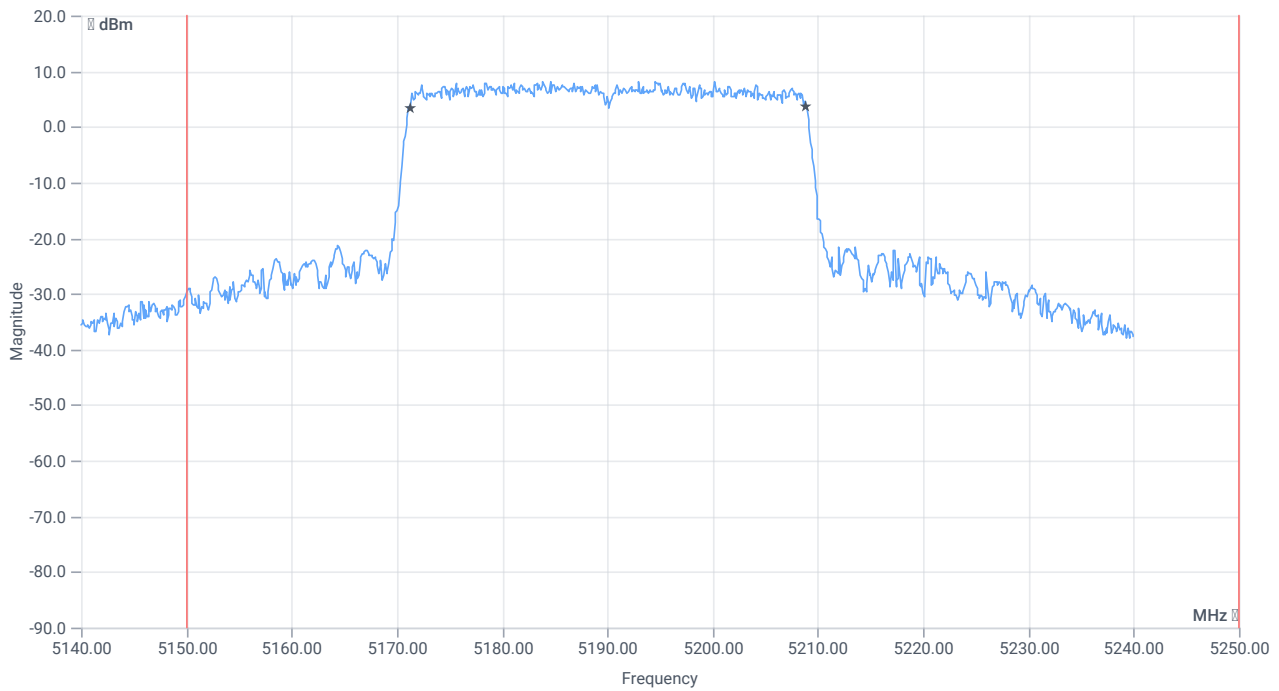
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	8.84	dBm	INFO
Ref. Frequency	---	---	5185.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.84 16.45 20
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

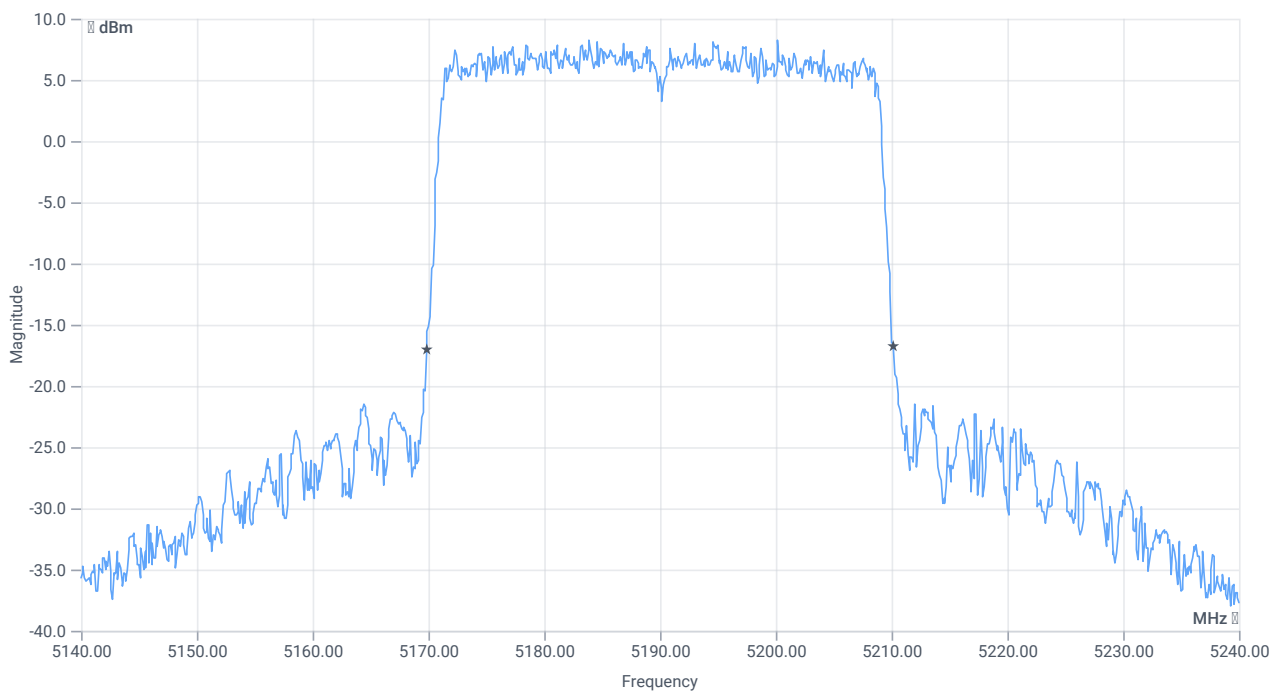




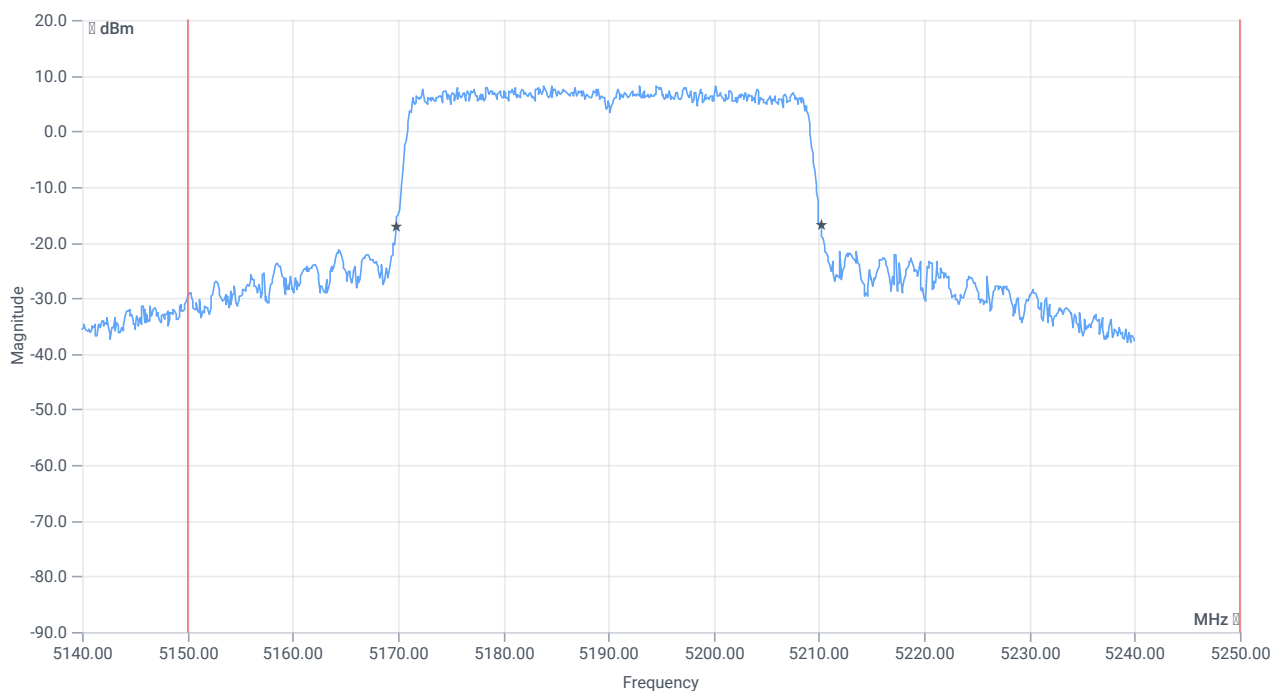
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5150.000000	---	5171.2188	MHz	PASS
T2 99%	---	5250.000000	5208.8811	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.4	MHz	INFO
T1 26dB	5150.000000	---	5169.8000	MHz	PASS
T2 26dB	---	5250.000000	5210.2000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:15:04
Ambit temp [°C] humidity [rel%]	21.6 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5190 MHz

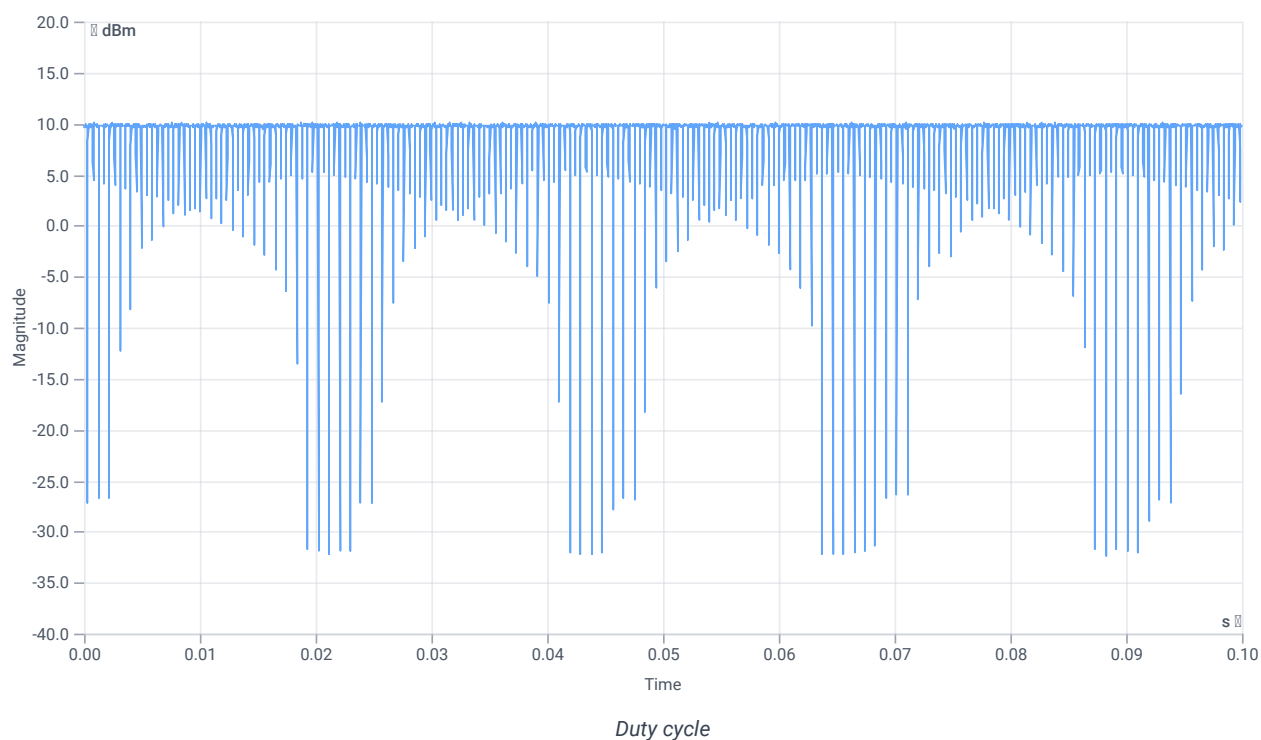
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	8.95	dBm	INFO
Ref. Frequency	---	---	5188.200	MHz	INFO

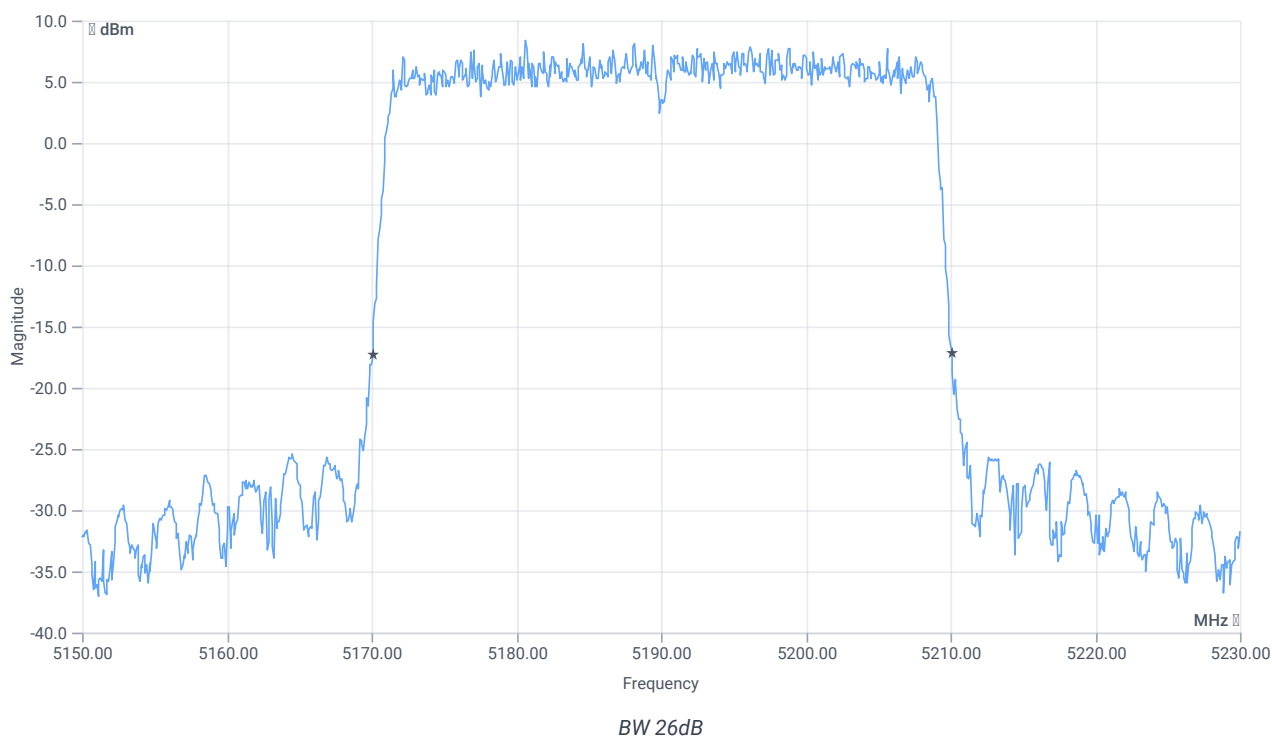
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:88					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



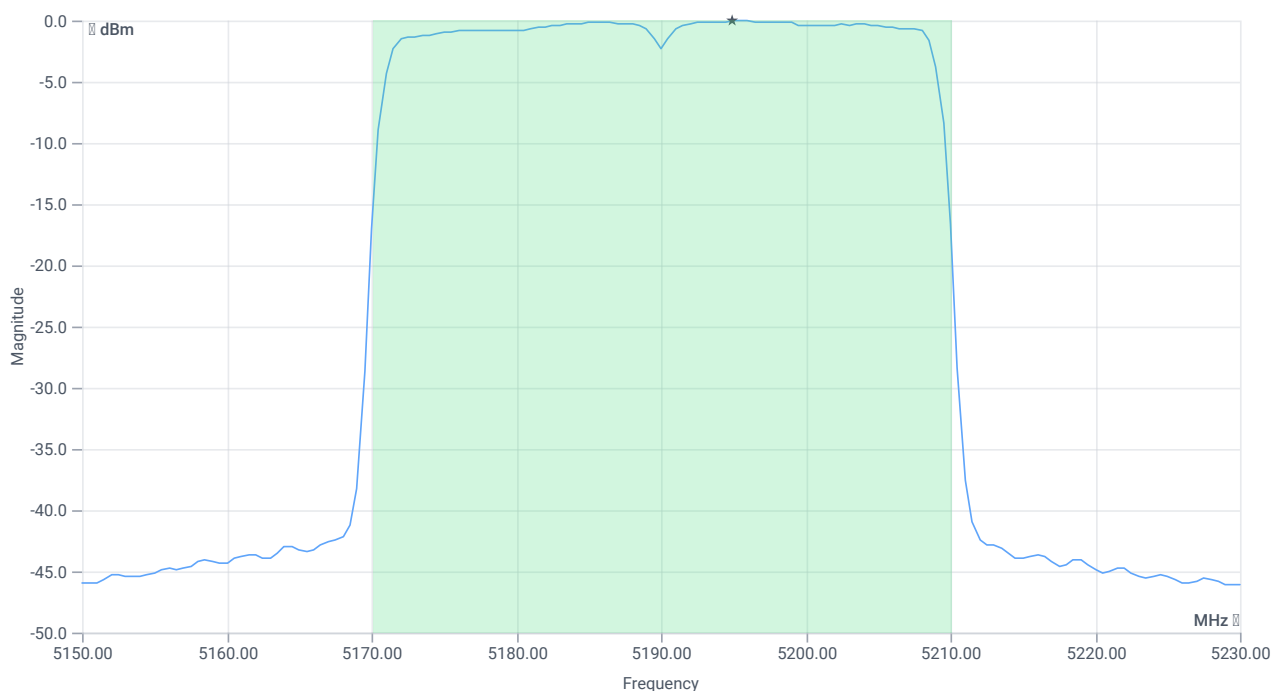
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5170.0800	MHz	INFO
T2 26dB	---	---	5210.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.95 16.45 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.95	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.32	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	15.32	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-0.03	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	0.34	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:16:34
Ambit temp [°C] humidity [rel%]	21.6 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

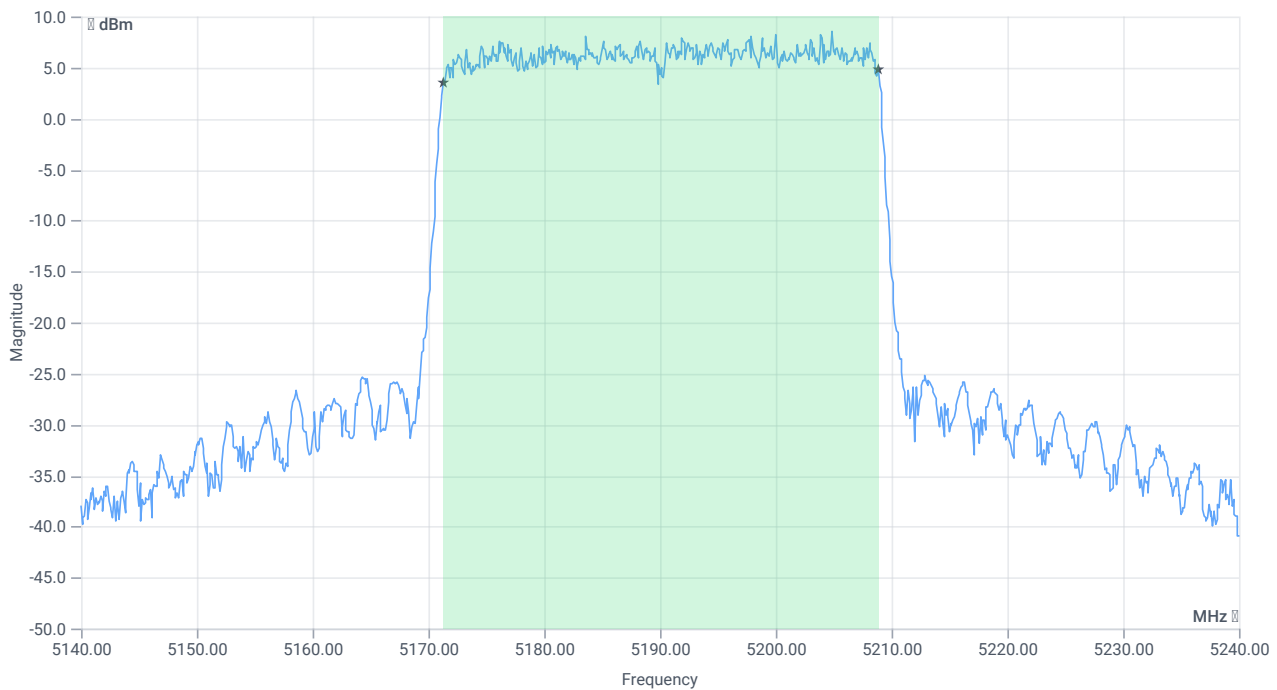
Test at TX 5190 MHz

RESULT: Reference Power cond.

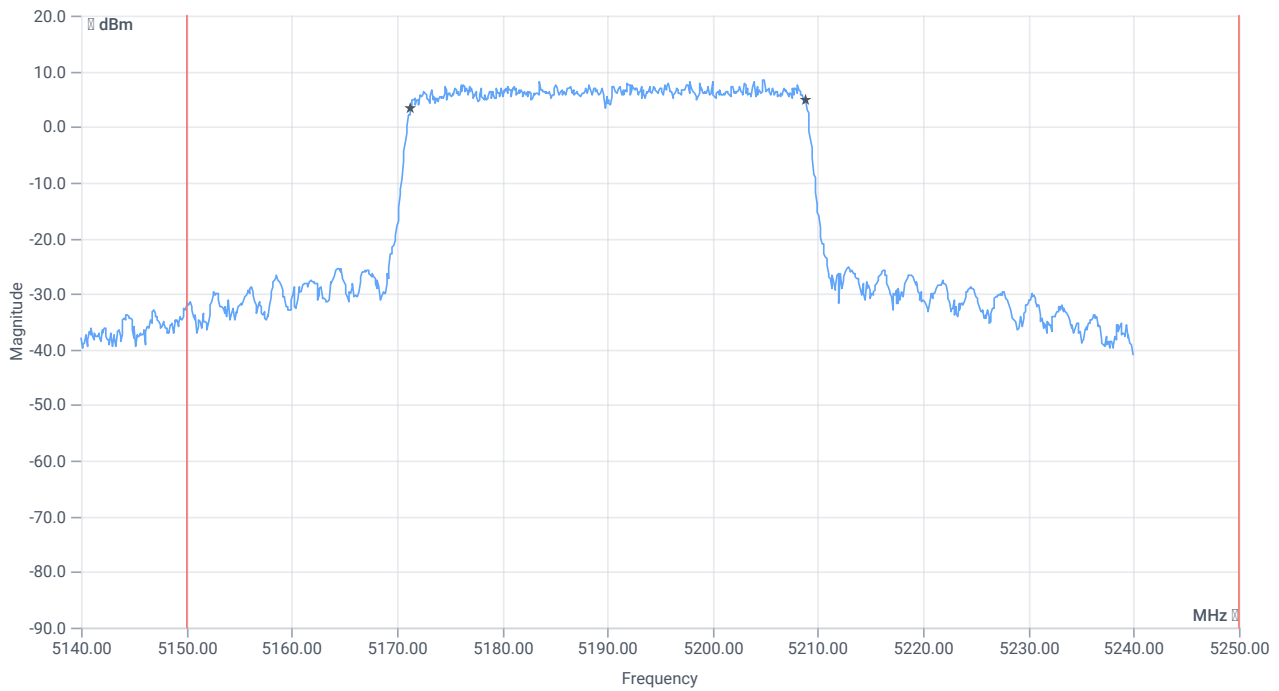
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.64	dBm	INFO
Ref. Frequency	---	---	5184.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.64 16.45 20
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



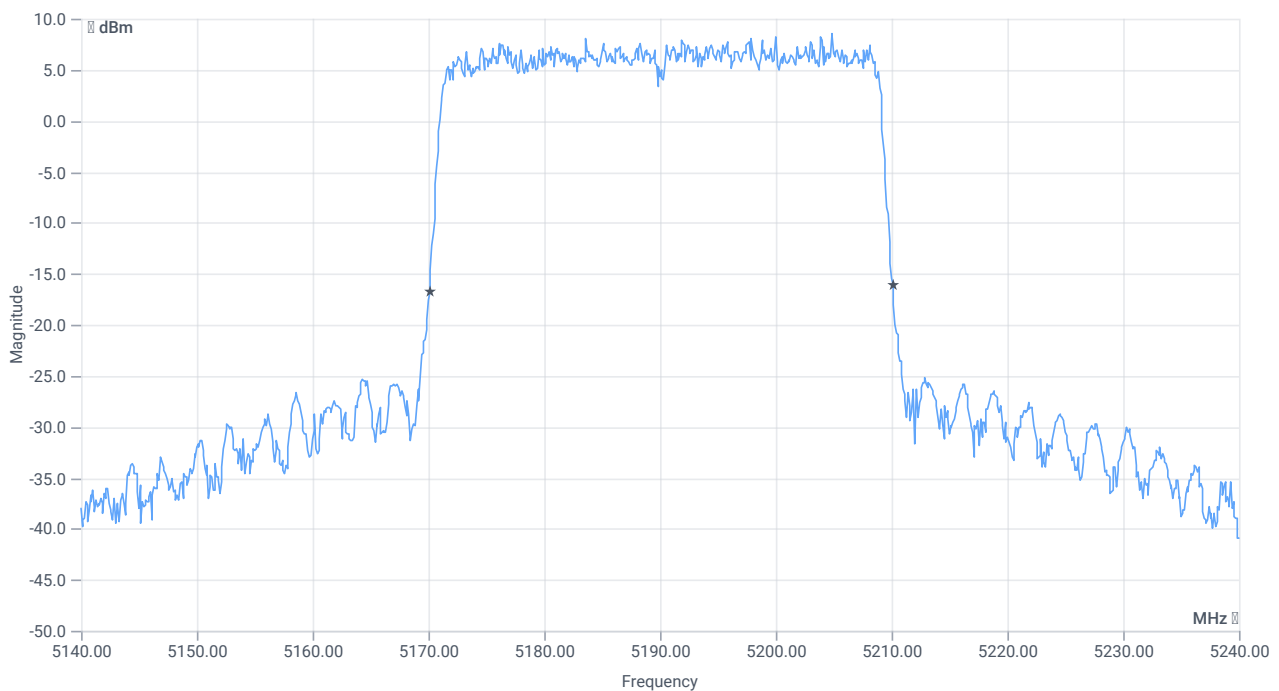
BW 99PCT



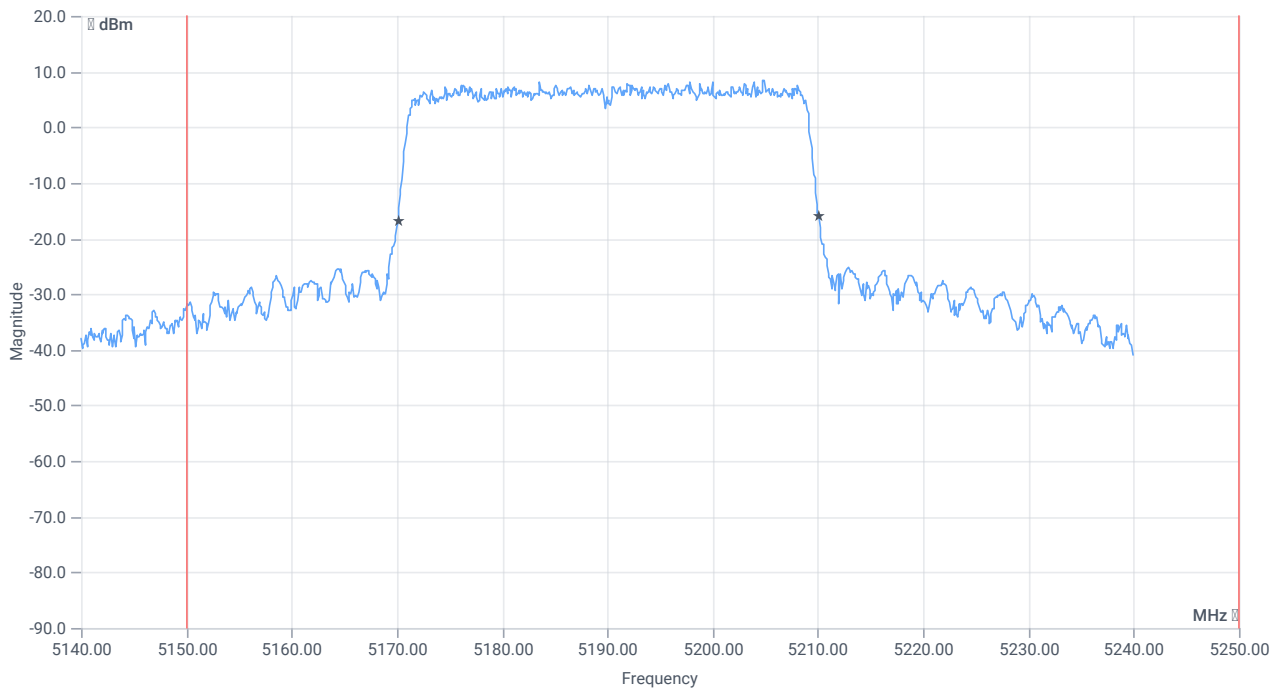
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.562	MHz	INFO
T1 99%	5150.000000	---	5171.3187	MHz	PASS
T2 99%	---	5250.000000	5208.8811	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	5150.000000	---	5170.1000	MHz	PASS
T2 26dB	---	5250.000000	5210.1000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:17:13
Ambit temp [°C] humidity [rel%]	21.6 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5190 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	15.46	dBm	INFO
Ant:1 BW 26dB	---	---	40.160	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	15.32	dBm	INFO
Ant:2 BW 26dB	---	---	40.000	MHz	INFO
Σ Limit absolute	---	24	18.4	dBm	PASS
Σ Limit: 11 dBm + 10 log 40	---	27.02	18.4	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	0.51	dBm/1MHz	INFO
Ant:2 PSD	---	---	0.34	dBm/1MHz	INFO
Σ	---	11	3.44	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:18:30
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5230 MHz

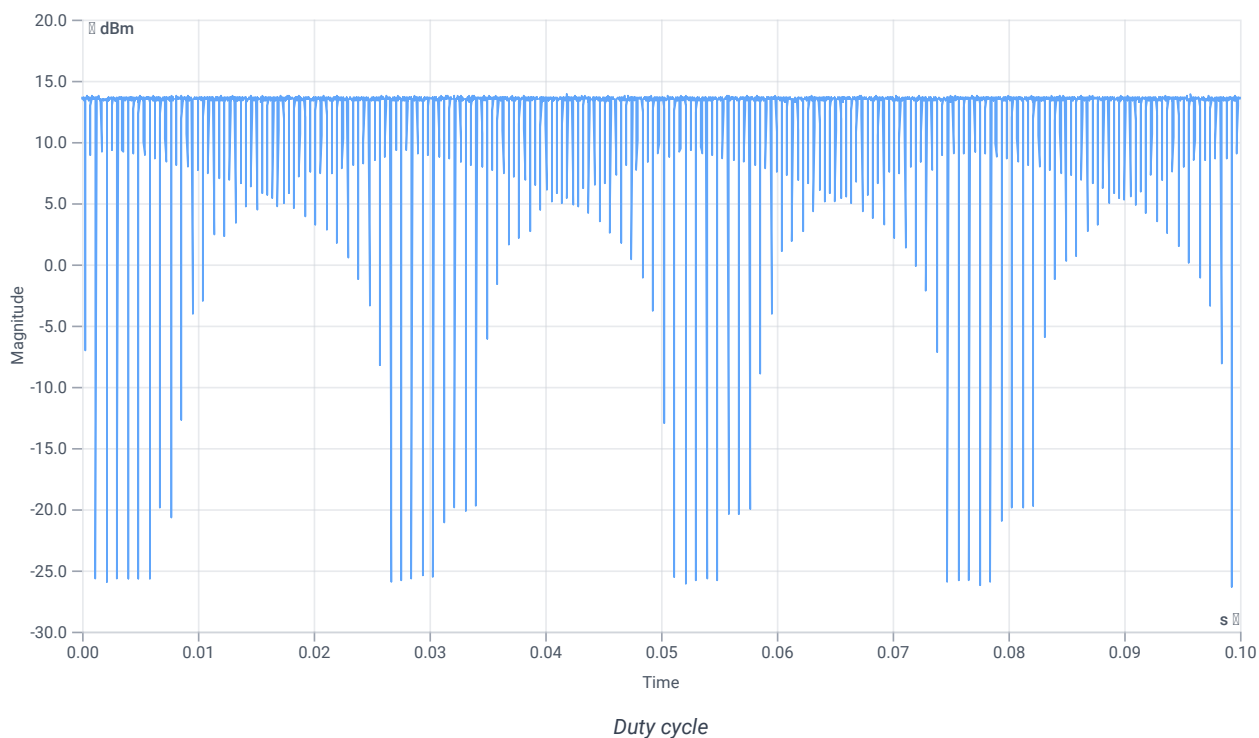
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.60	dBm	INFO
Ref. Frequency	---	---	5212.820	MHz	INFO

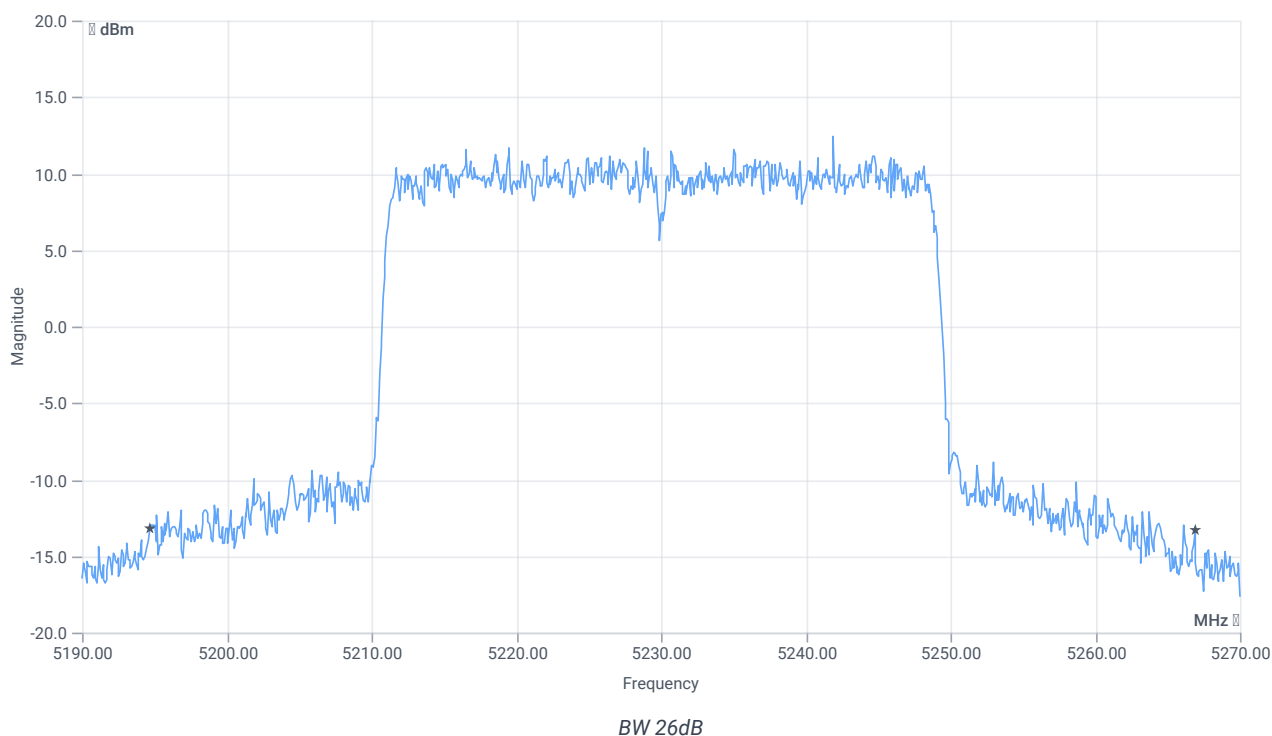
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:85					
Duty Cycle (Burst Ratio) max	---	---	0.989	---	INFO
Duty Cycle max	---	---	0.048	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	6.875	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



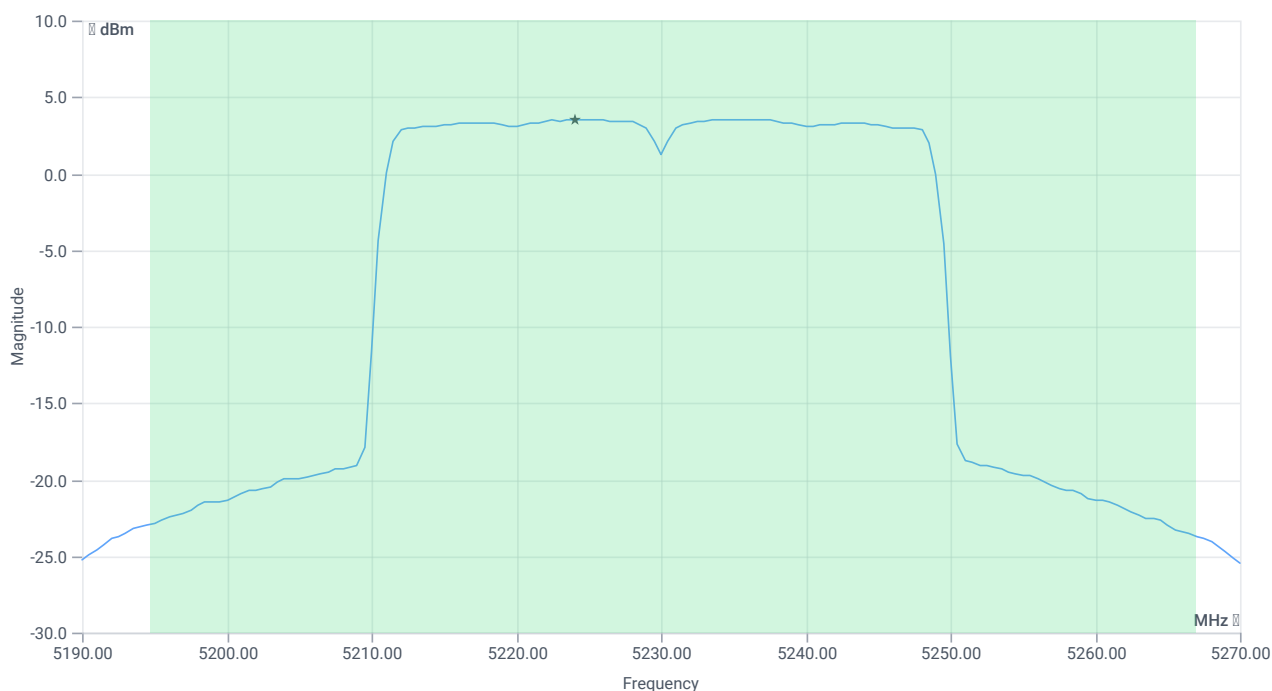
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	72.24	MHz	INFO
T1 26dB	---	---	5194.6400	MHz	INFO
T2 26dB	---	---	5266.8800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.60 16.45 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	---	---	18.73	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.1	dBm	PASS
Limit: 11 dBm + 10 log 72.24					
Max Output Power DC corrected	---	29.59	19.1	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	3.53	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	3.9	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:20:03
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

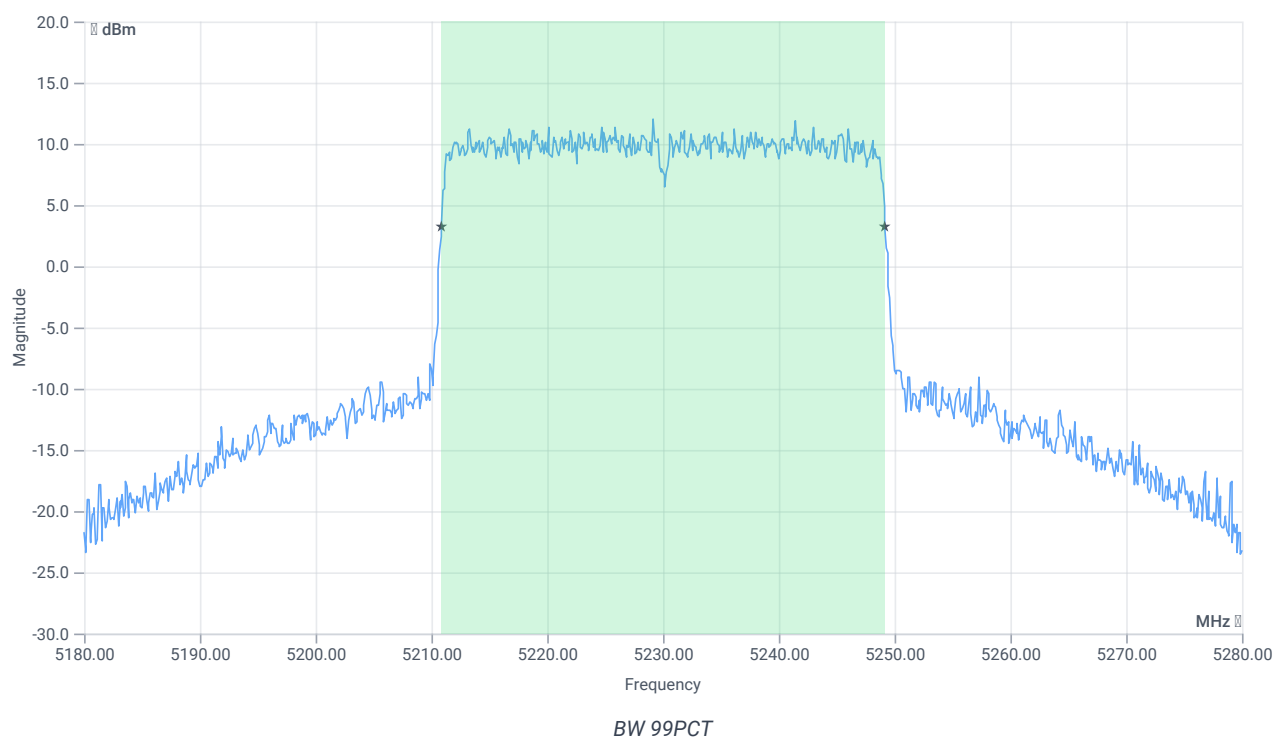
Test at TX 5230 MHz

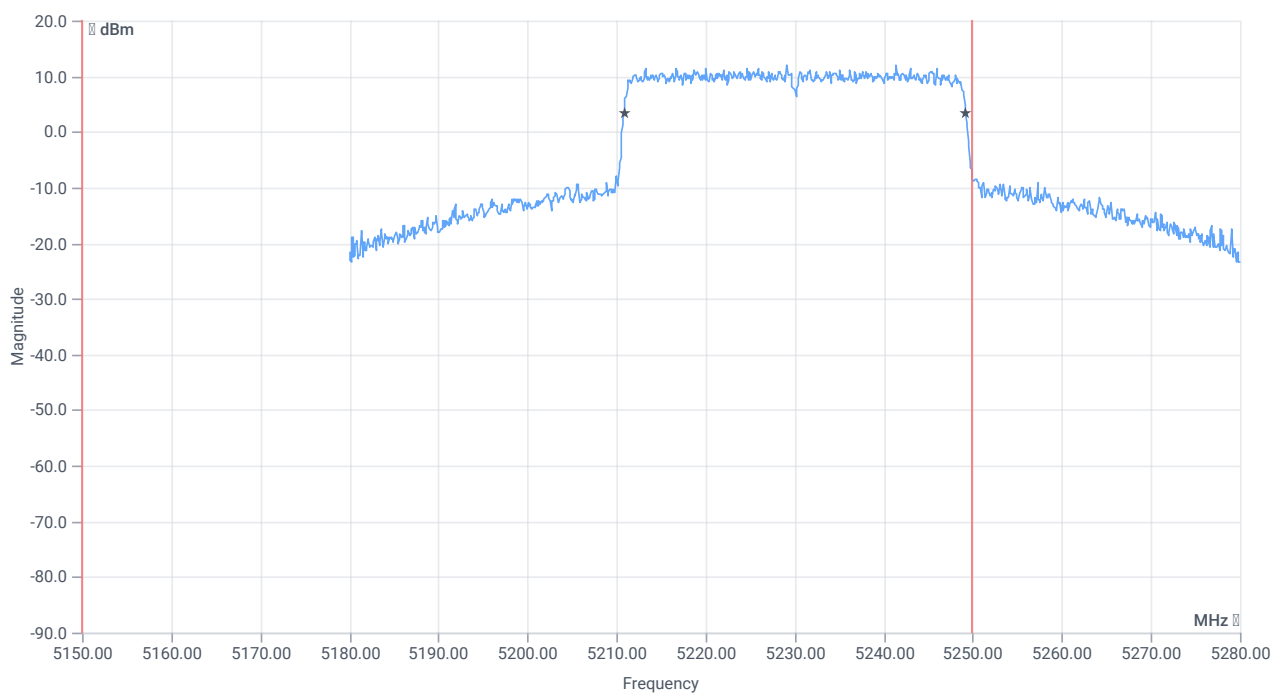
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.60	dBm	INFO
Ref. Frequency	---	---	5235.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.60 16.45 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

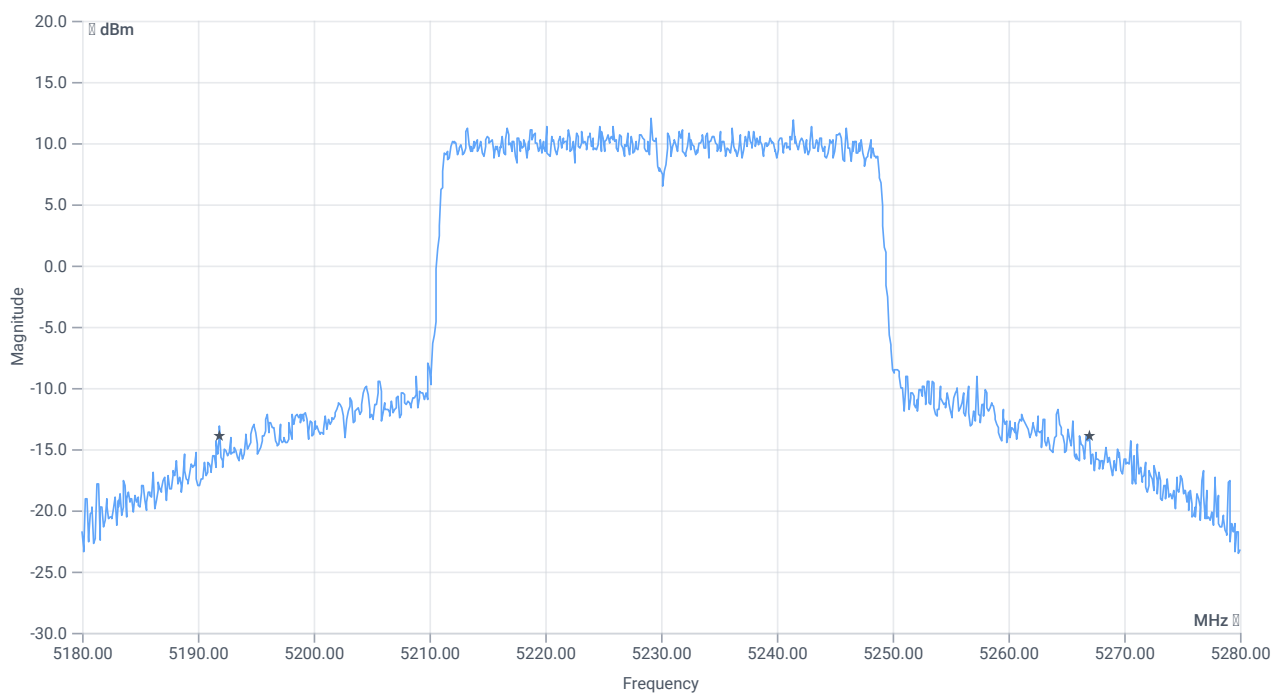




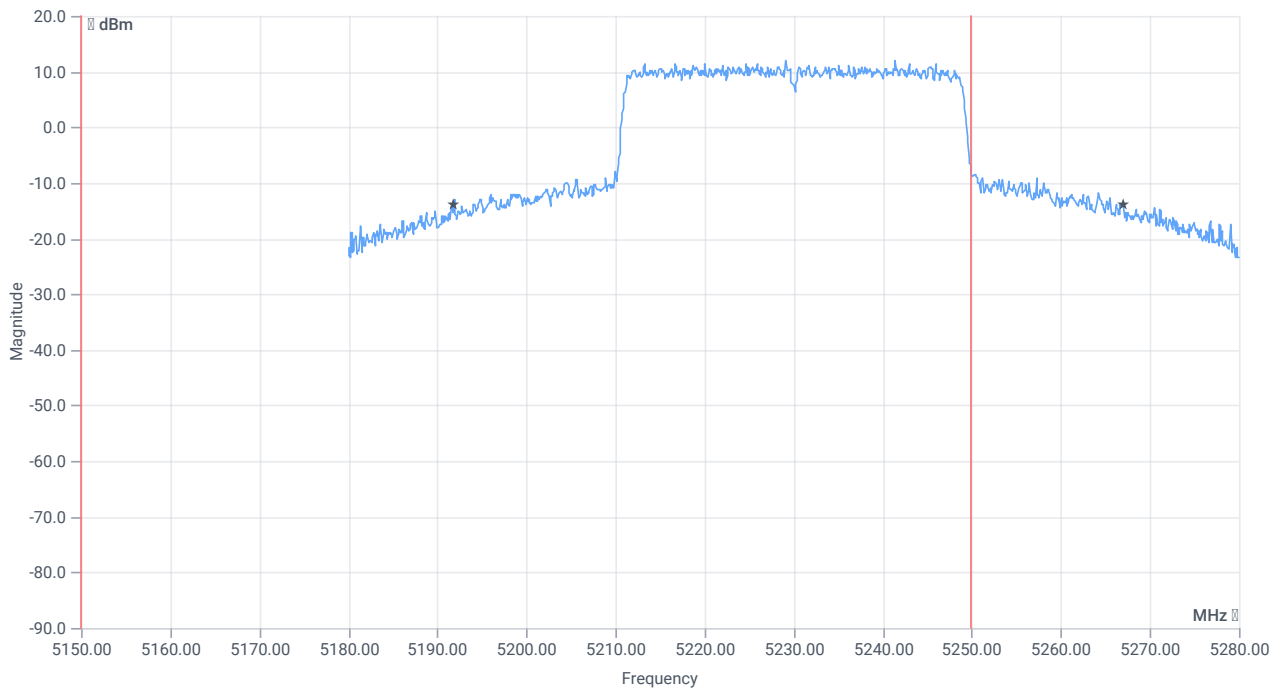
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	38.262	MHz	INFO
T1 99%	5150.000000	---	5210.9191	MHz	PASS
T2 99%	---	5250.000000	5249.1808	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	75.2	MHz	INFO
T1 26dB	5150.000000	---	5191.8000	MHz	PASS
T2 26dB	---	5250.000000	5267.0000	MHz	DFS required

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:20:40
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5230 MHz

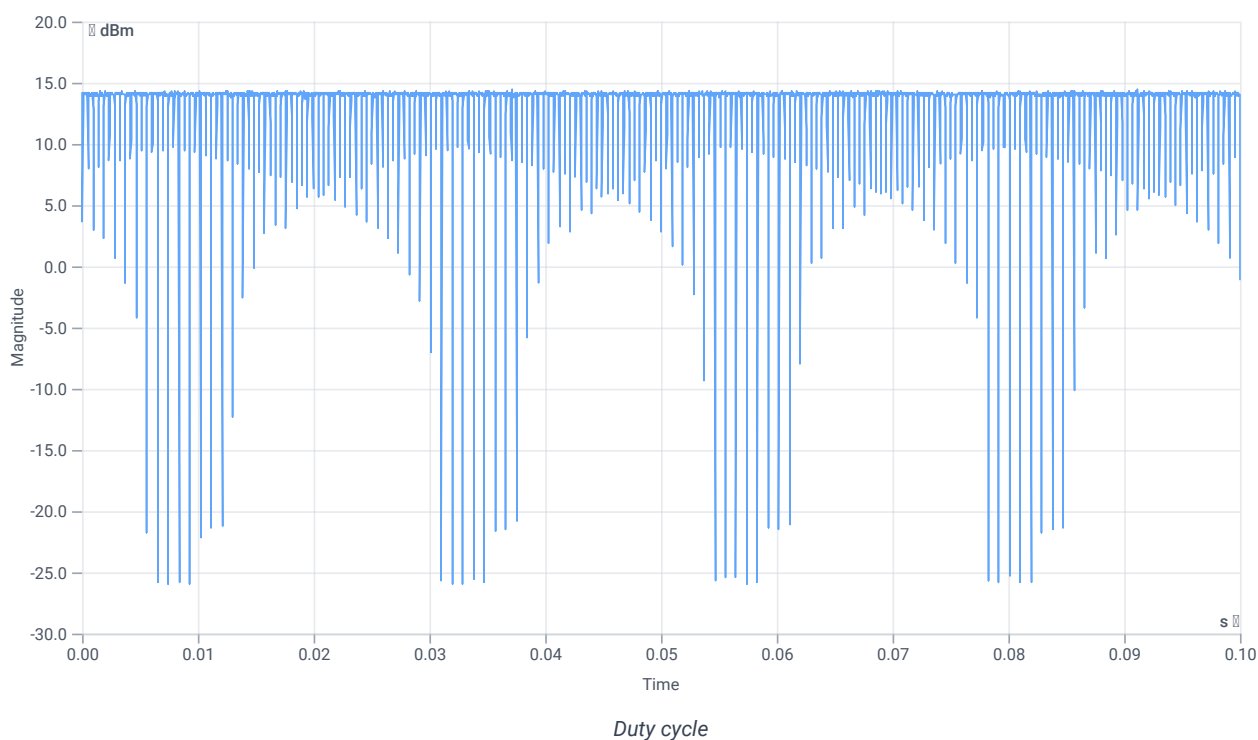
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.35	dBm	INFO
Ref. Frequency	---	---	5242.990	MHz	INFO

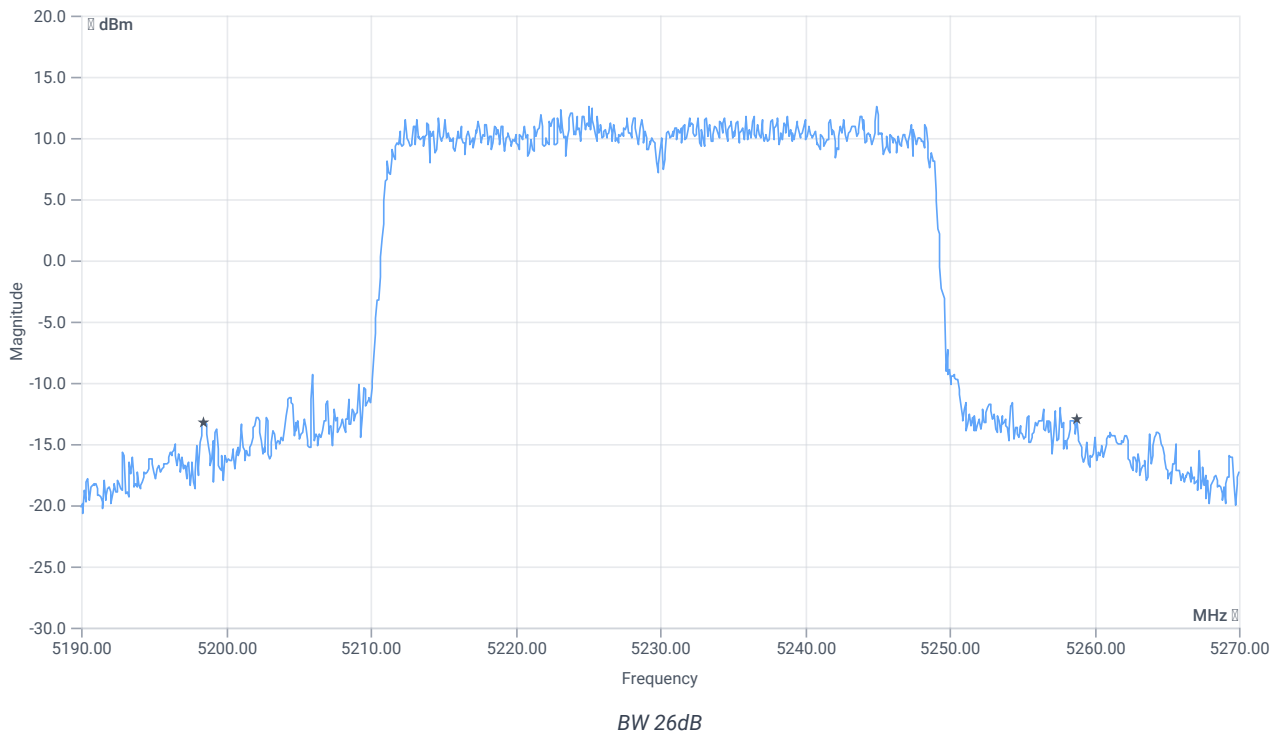
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:86					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



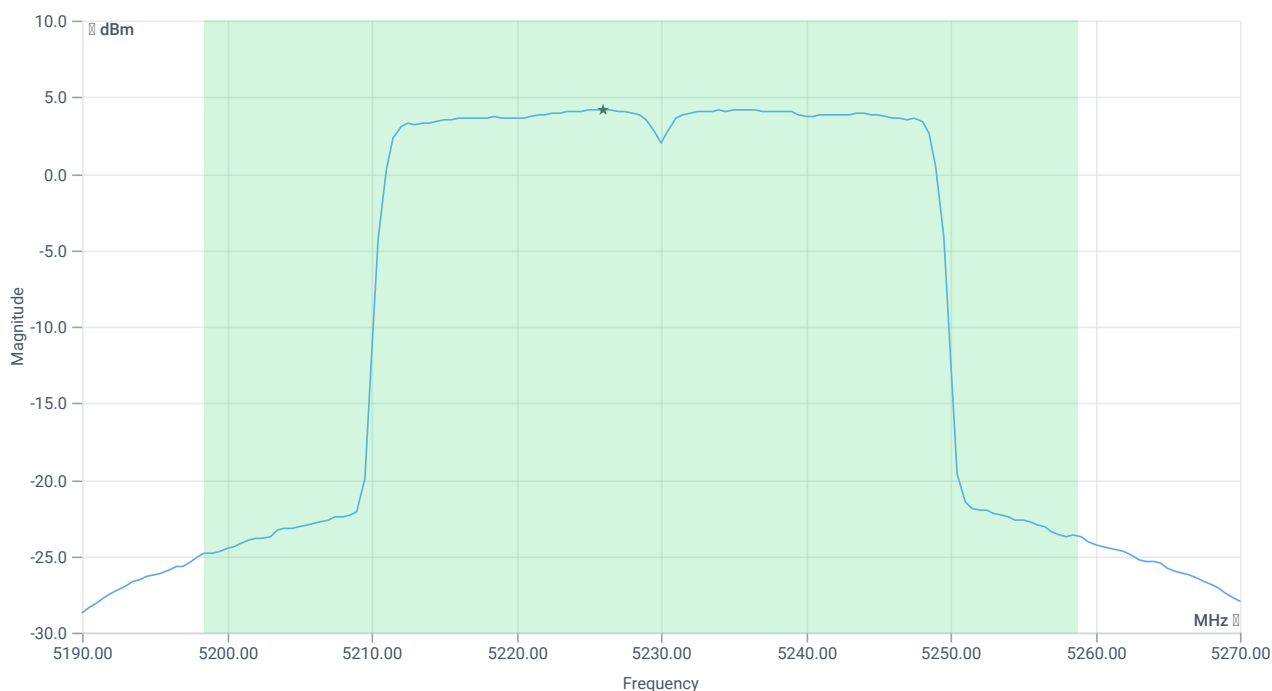
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	60.32	MHz	INFO
T1 26dB	---	---	5198.4800	MHz	INFO
T2 26dB	---	---	5258.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.35 16.45 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	---	---	19.26	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.63	dBm	PASS
Limit: 11 dBm + 10 log 60.32					
Max Output Power DC corrected	---	28.8	19.63	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.17	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	4.54	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:22:13
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

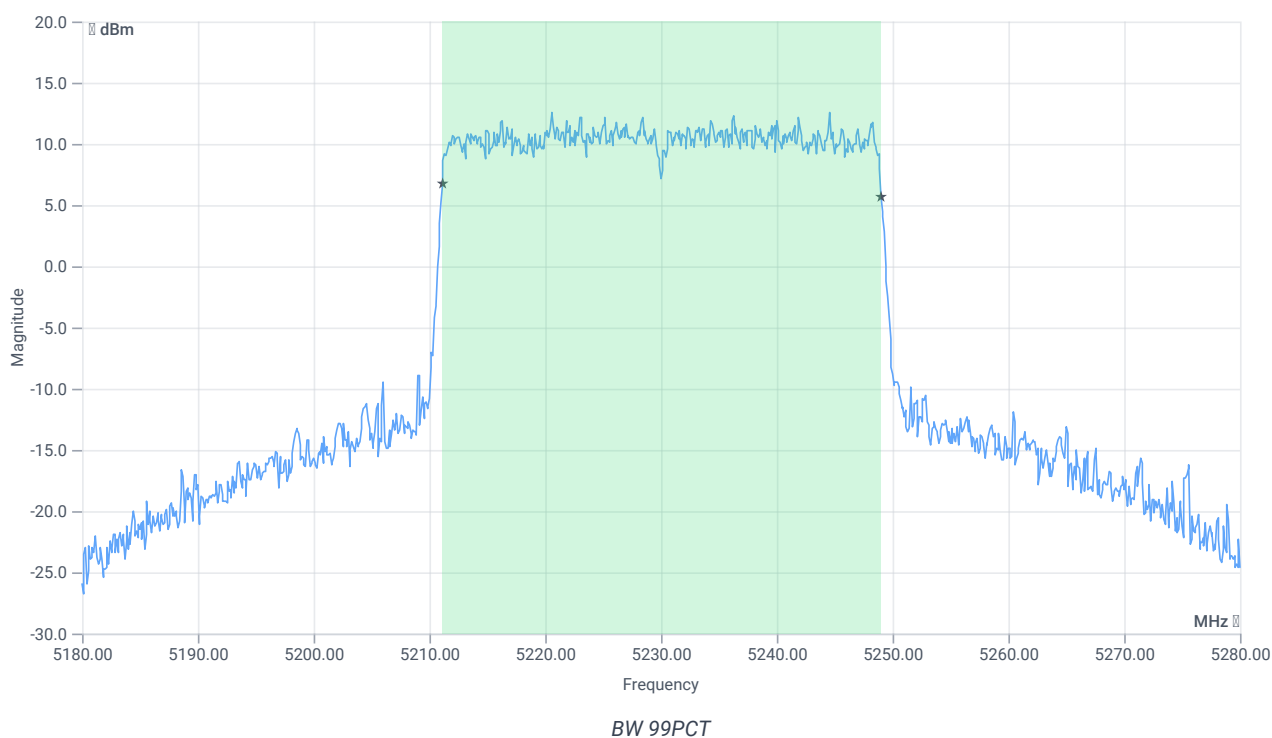
Test at TX 5230 MHz

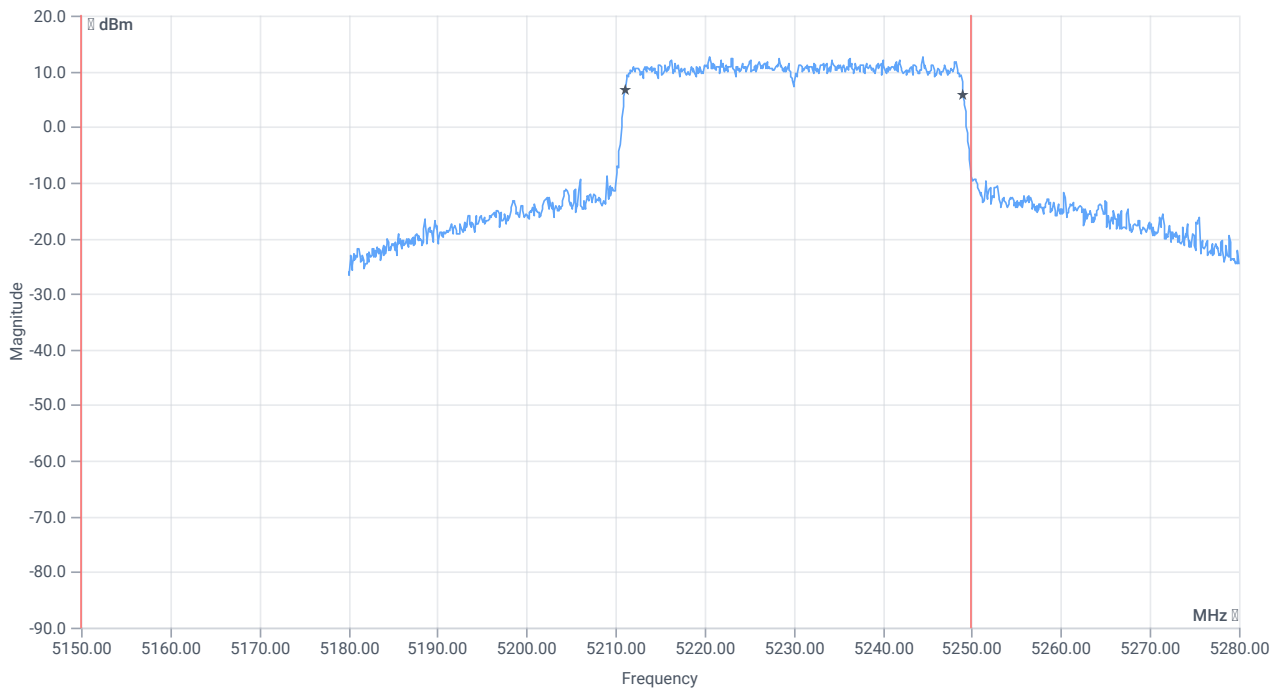
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.90	dBm	INFO
Ref. Frequency	---	---	5220.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.90 16.45 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

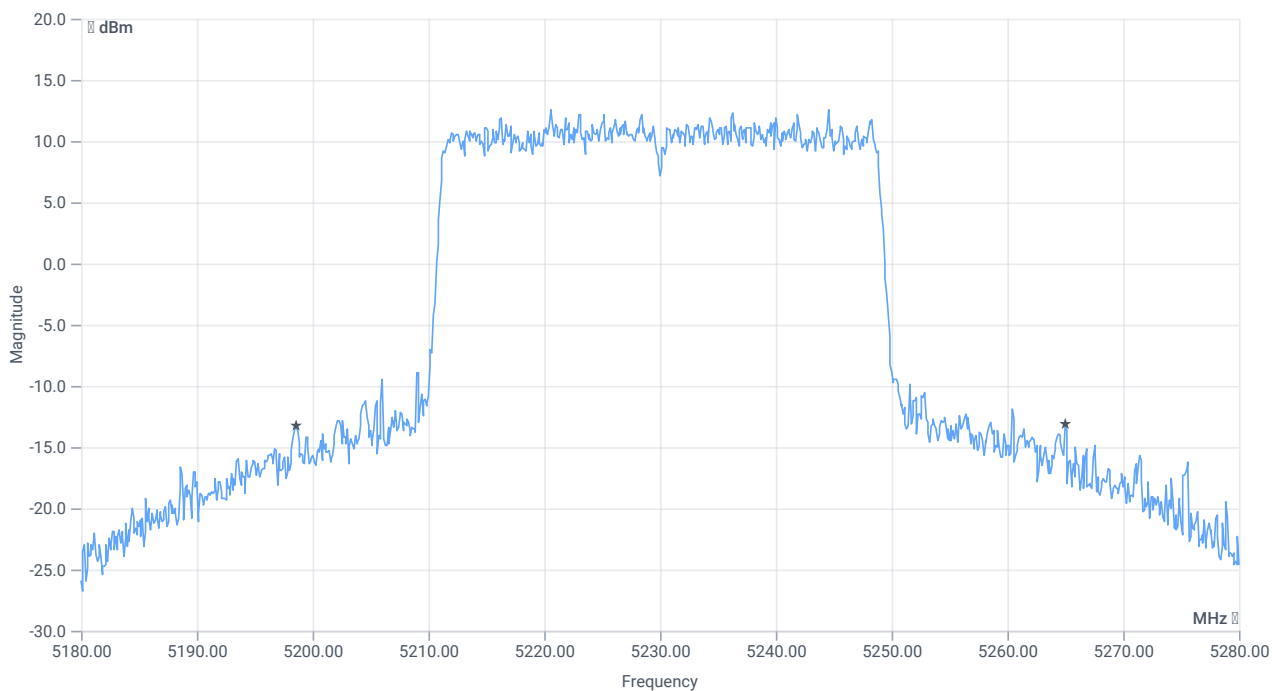




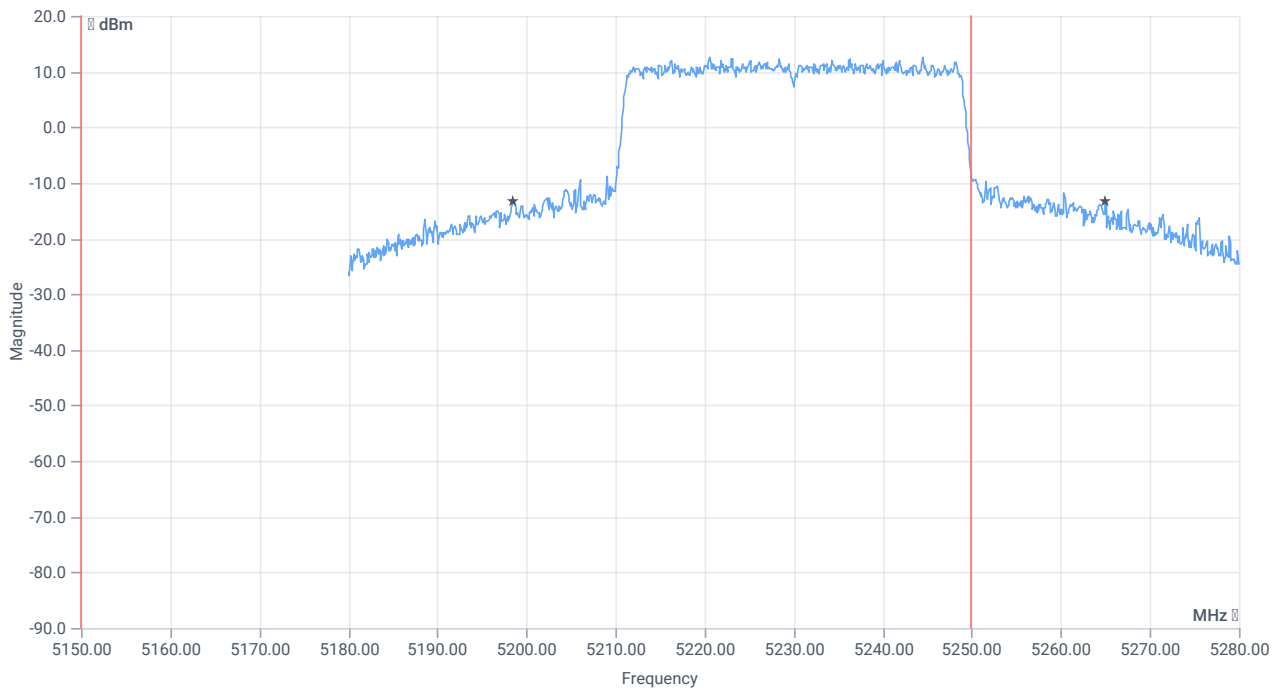
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.862	MHz	INFO
T1 99%	5150.000000	---	5211.1189	MHz	PASS
T2 99%	---	5250.000000	5248.9810	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	66.5	MHz	INFO
T1 26dB	5150.000000	---	5198.5000	MHz	PASS
T2 26dB	---	5250.000000	5265.0000	MHz	DFS required

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

TC start	19.01.2024 10:22:49
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5230 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	19.1	dBm	INFO
Ant:1 BW 26dB	---	---	72.240	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	19.63	dBm	INFO
Ant:2 BW 26dB	---	---	60.320	MHz	INFO
Σ Limit absolute	---	24	22.38	dBm	PASS
Σ Limit: 11 dBm + 10 log 60.32	---	28.8	22.38	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	3.9	dBm/1MHz	INFO
Ant:2 PSD	---	---	4.54	dBm/1MHz	INFO
Σ	---	11	7.24	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:24:07
Ambit temp [°C] humidity [rel%]	21.7 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5270 MHz

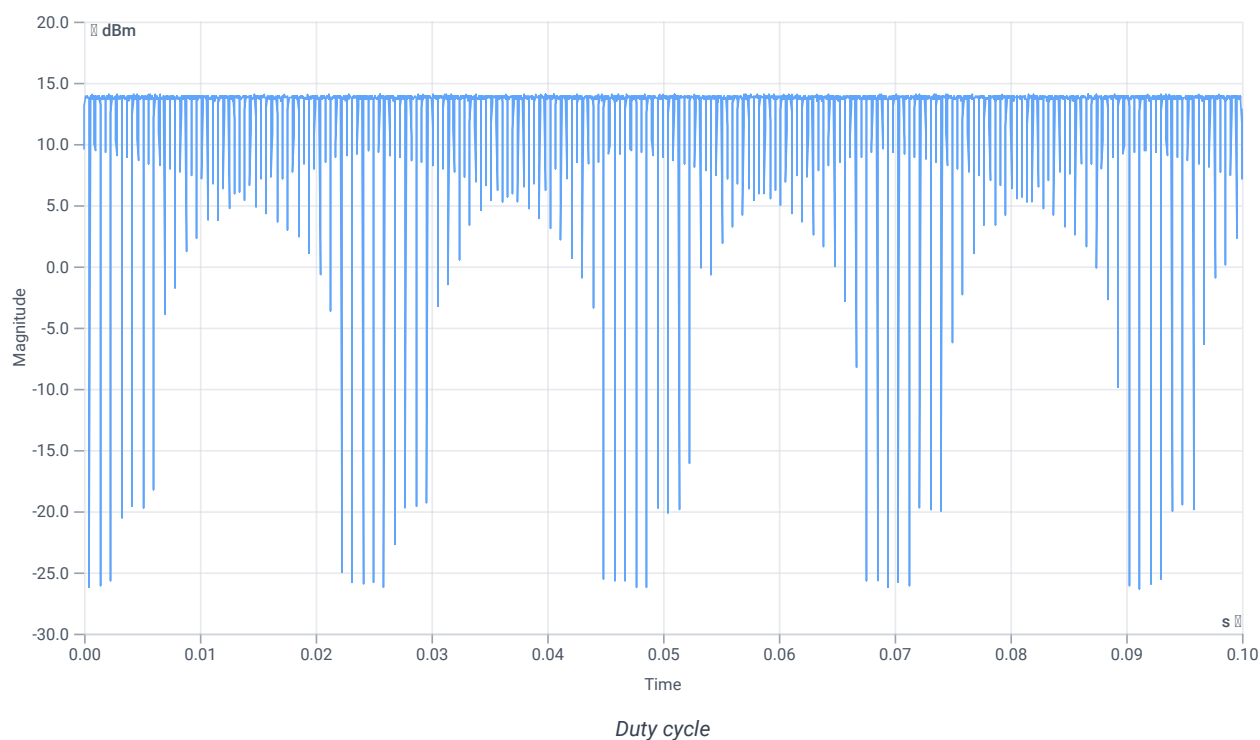
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.76	dBm	INFO
Ref. Frequency	---	---	5273.600	MHz	INFO

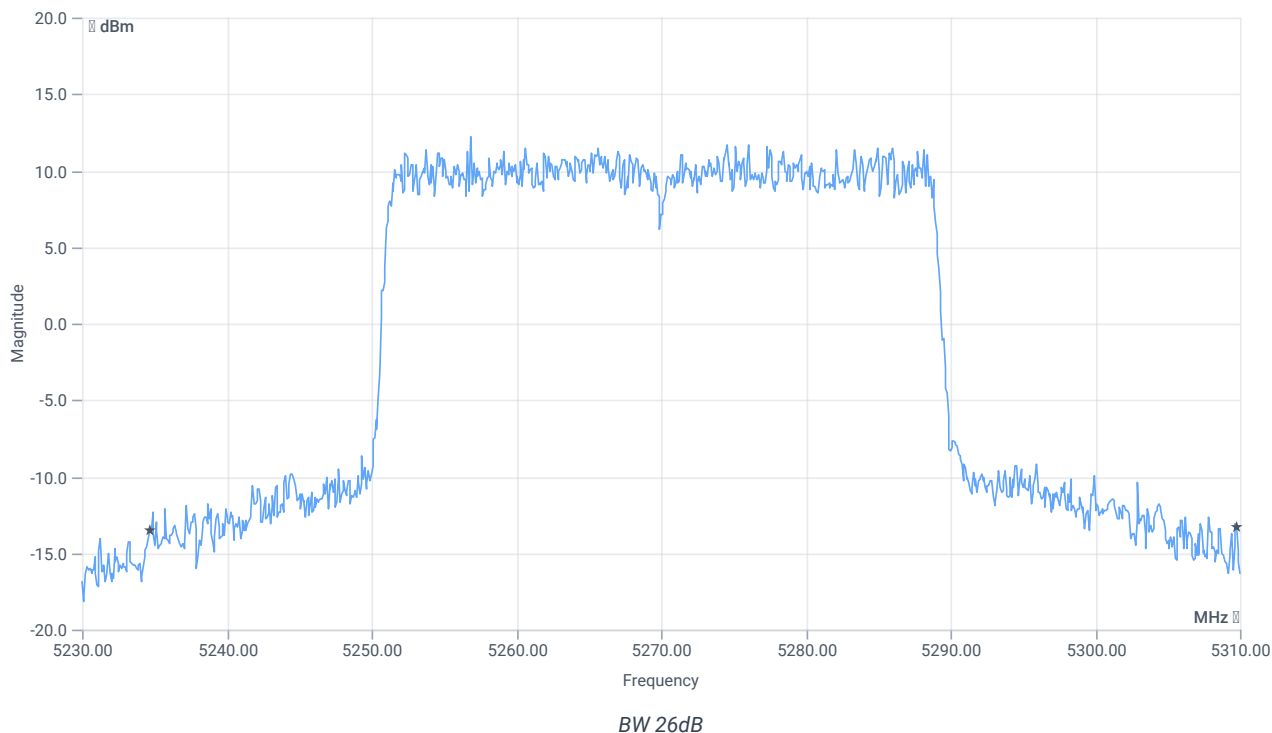
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:86					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



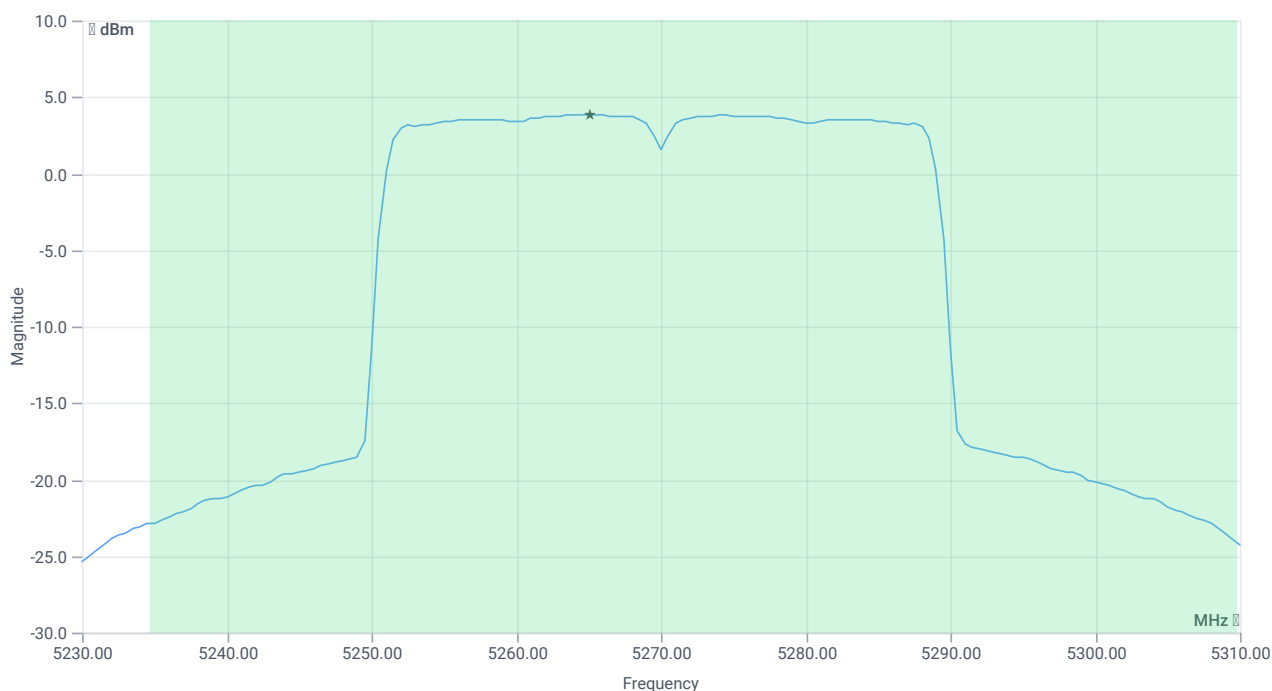
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	75.12	MHz	INFO
T1 26dB	---	---	5234.6400	MHz	INFO
T2 26dB	---	---	5309.7600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.76 16.32 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	---	---	18.99	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.36	dBm	PASS
Limit: 11 dBm + 10 log 75.12					
Max Output Power DC corrected	---	29.76	19.36	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	3.82	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	4.19	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:25:37
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

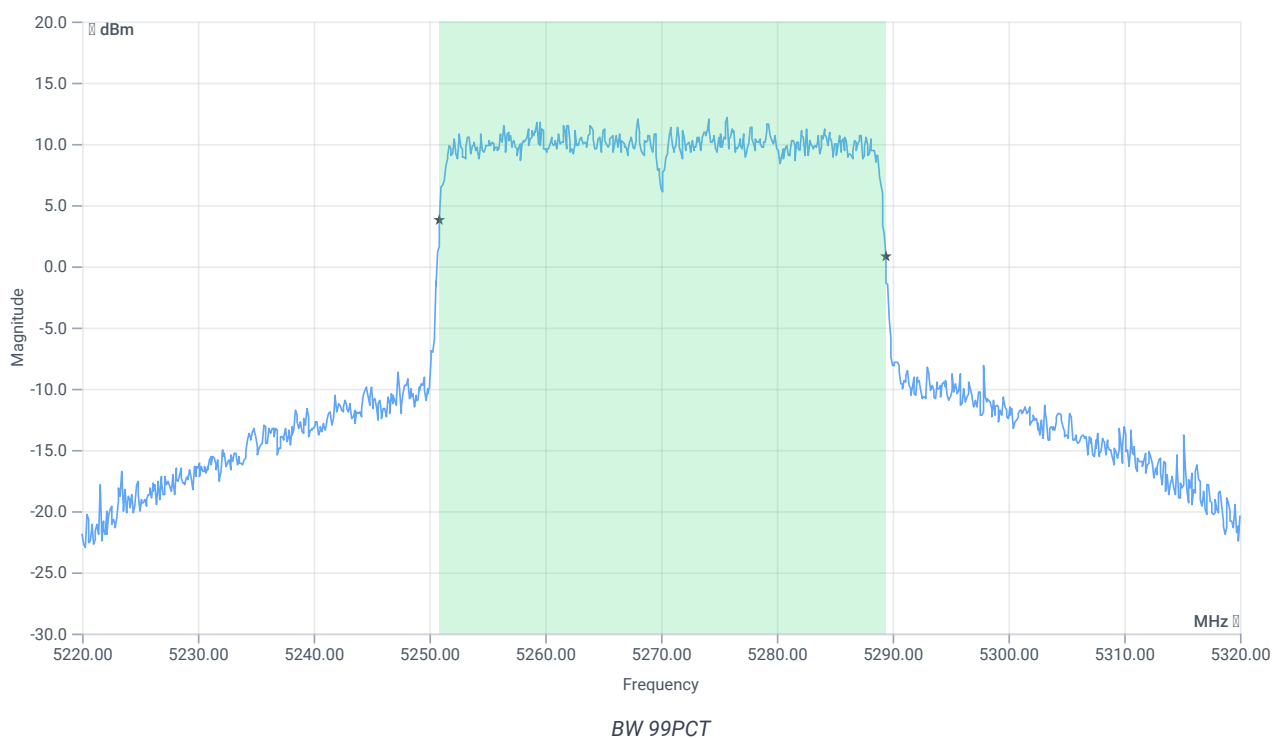
Test at TX 5270 MHz

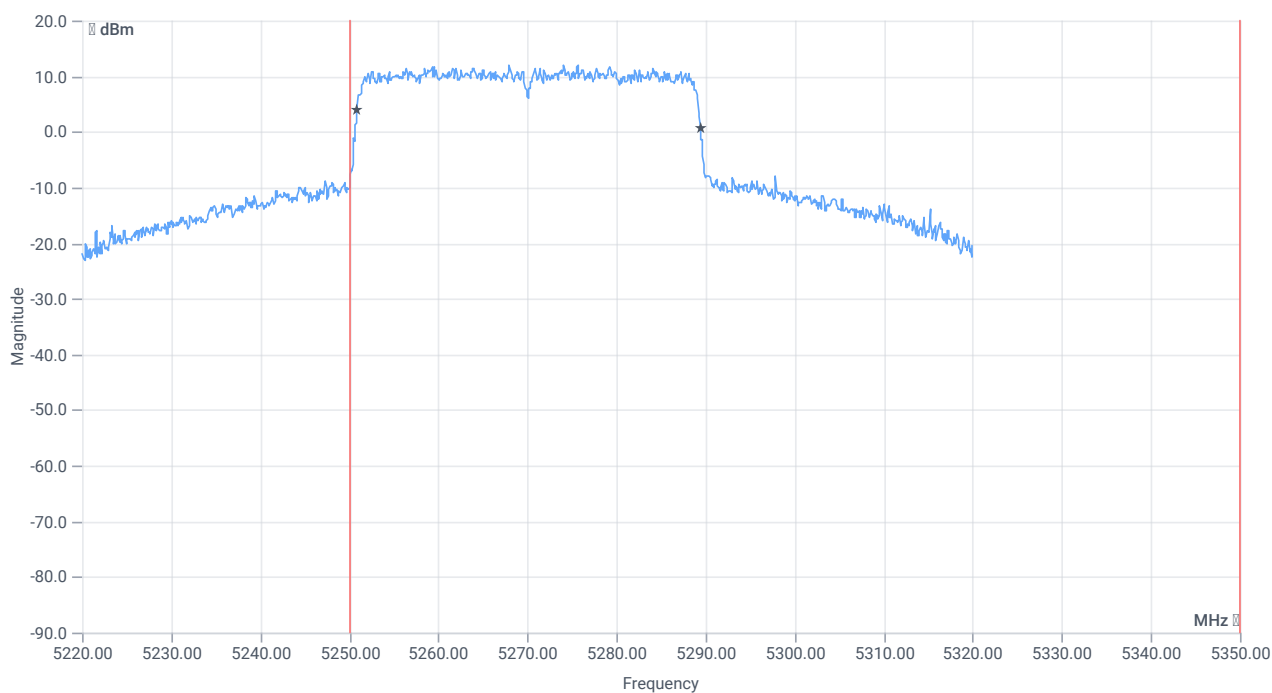
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.48	dBm	INFO
Ref. Frequency	---	---	5266.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.48 16.32 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

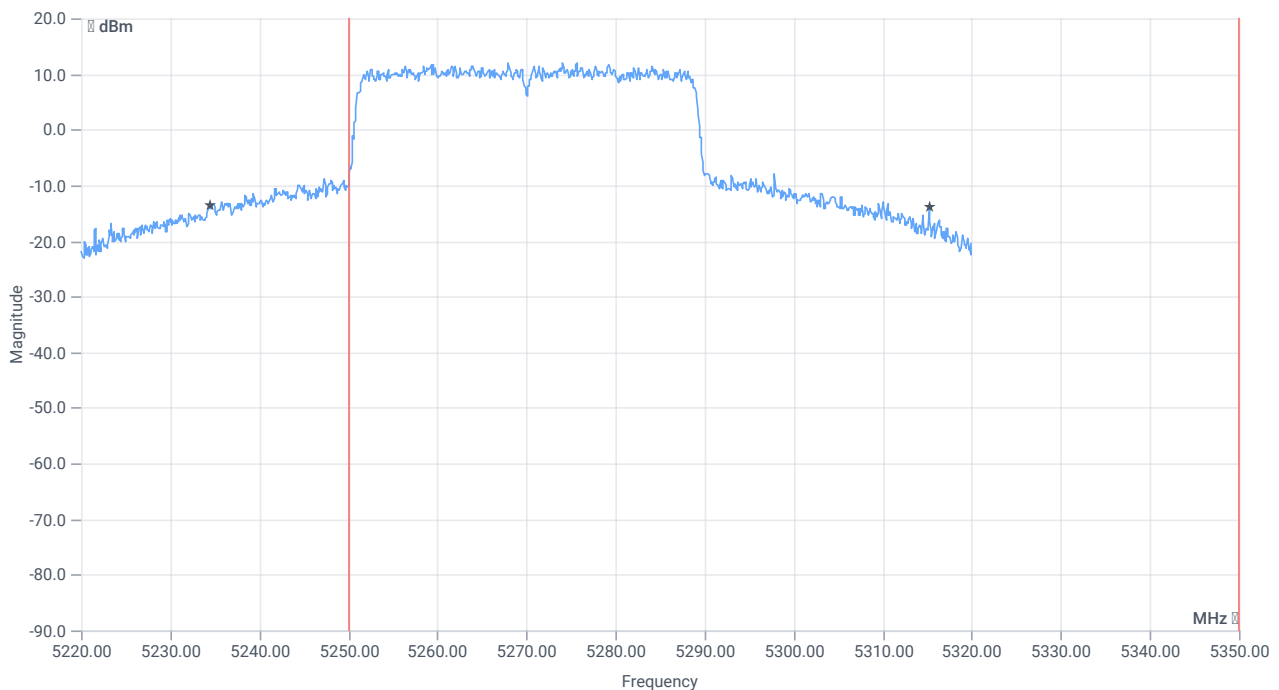
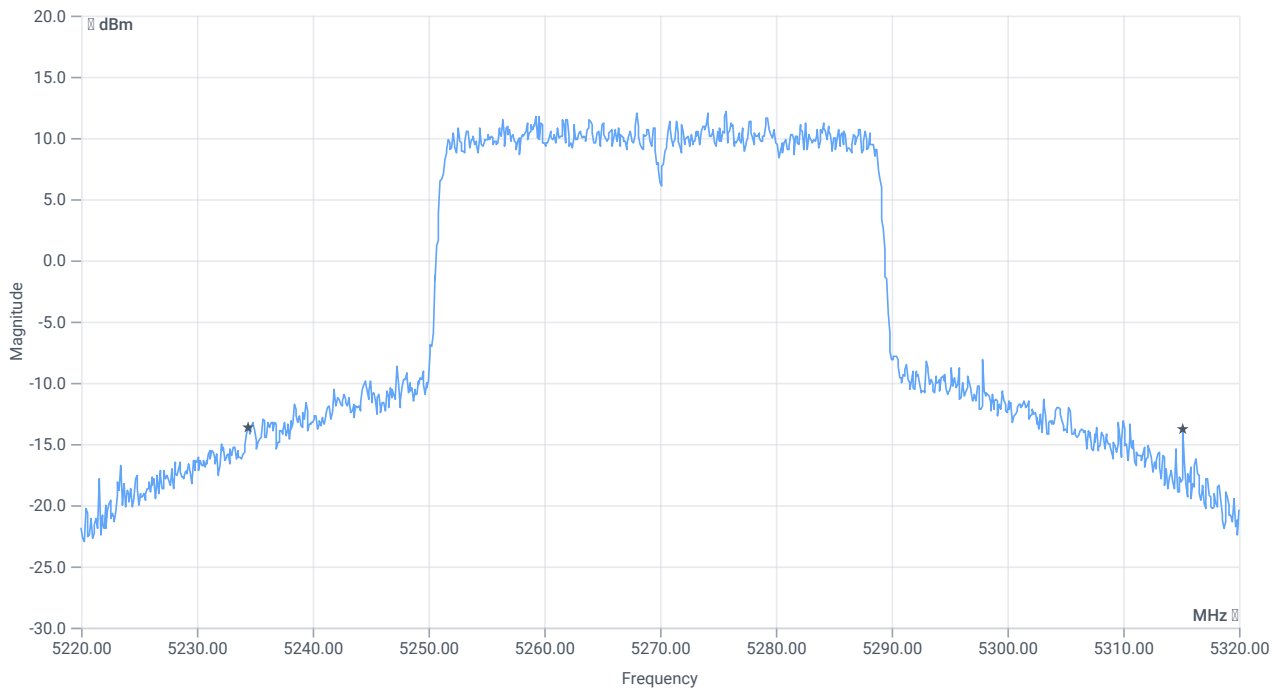




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	38.462	MHz	INFO
T1 99%	5250.000000	---	5250.9191	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5289.3806	MHz	PASS



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5234.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5315.2000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:26:16
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5270 MHz

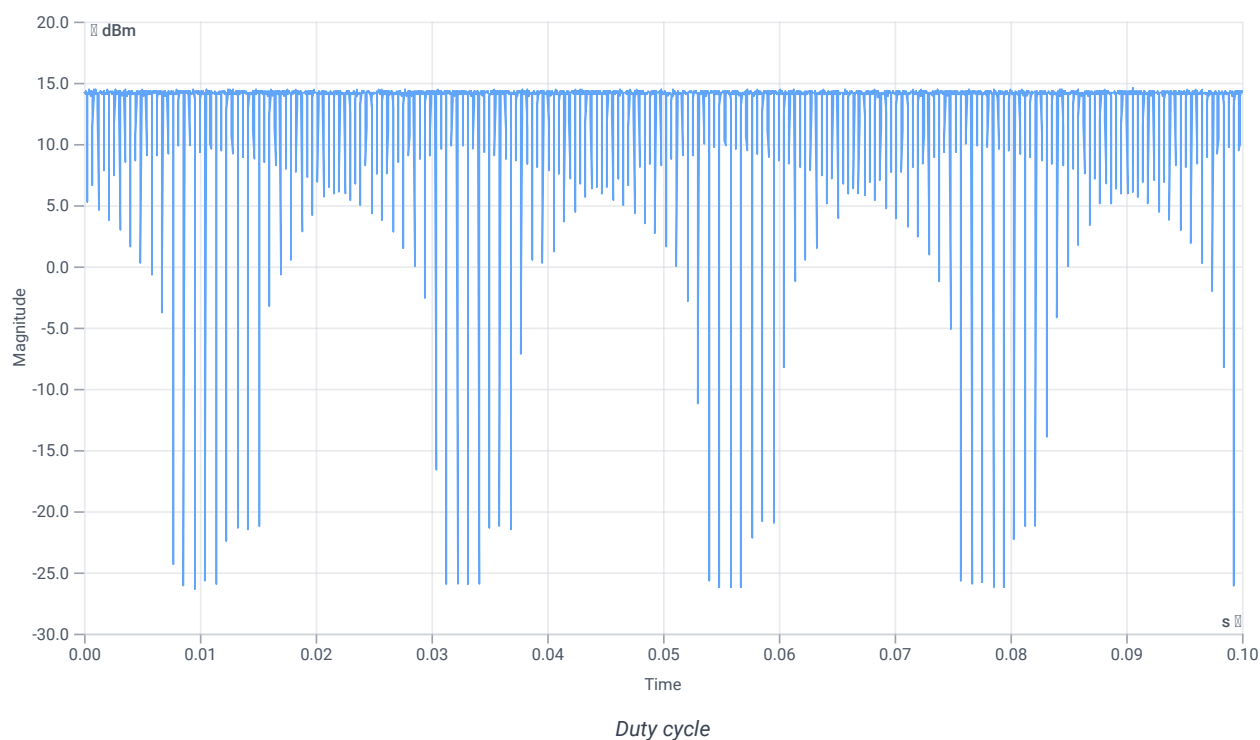
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.84	dBm	INFO
Ref. Frequency	---	---	5271.600	MHz	INFO

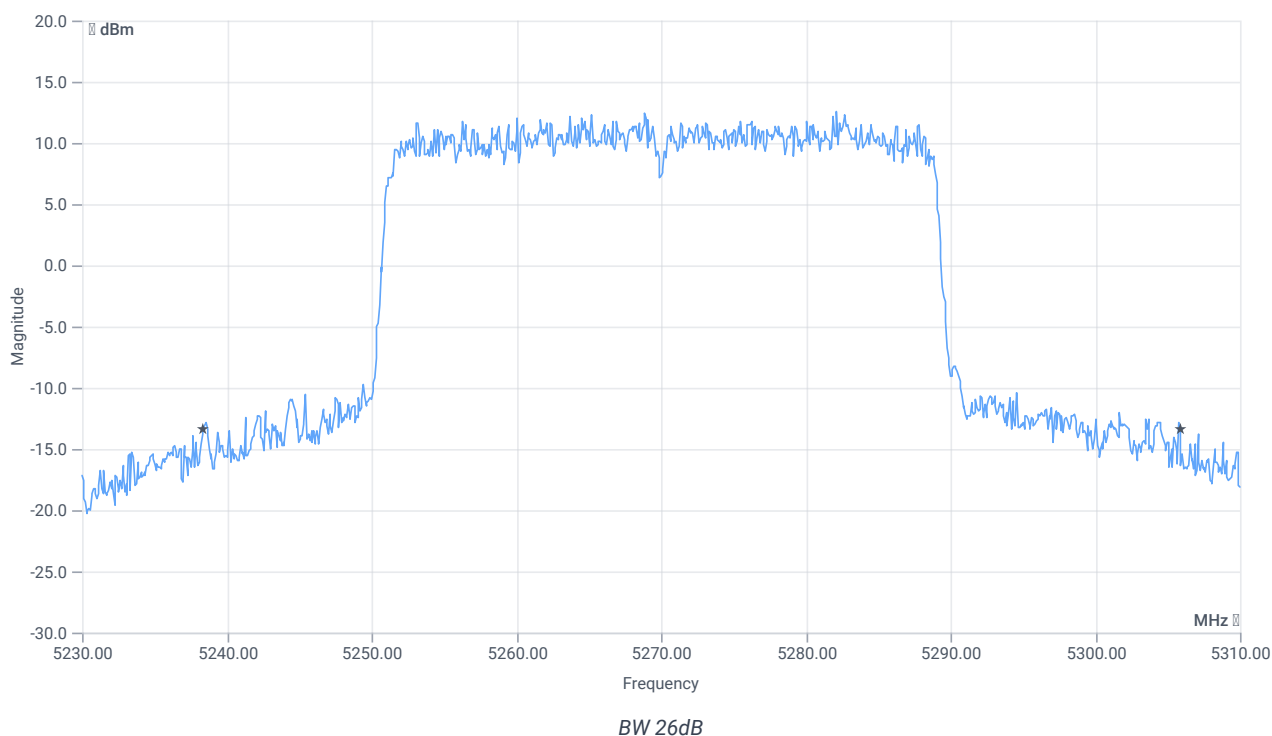
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:86					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



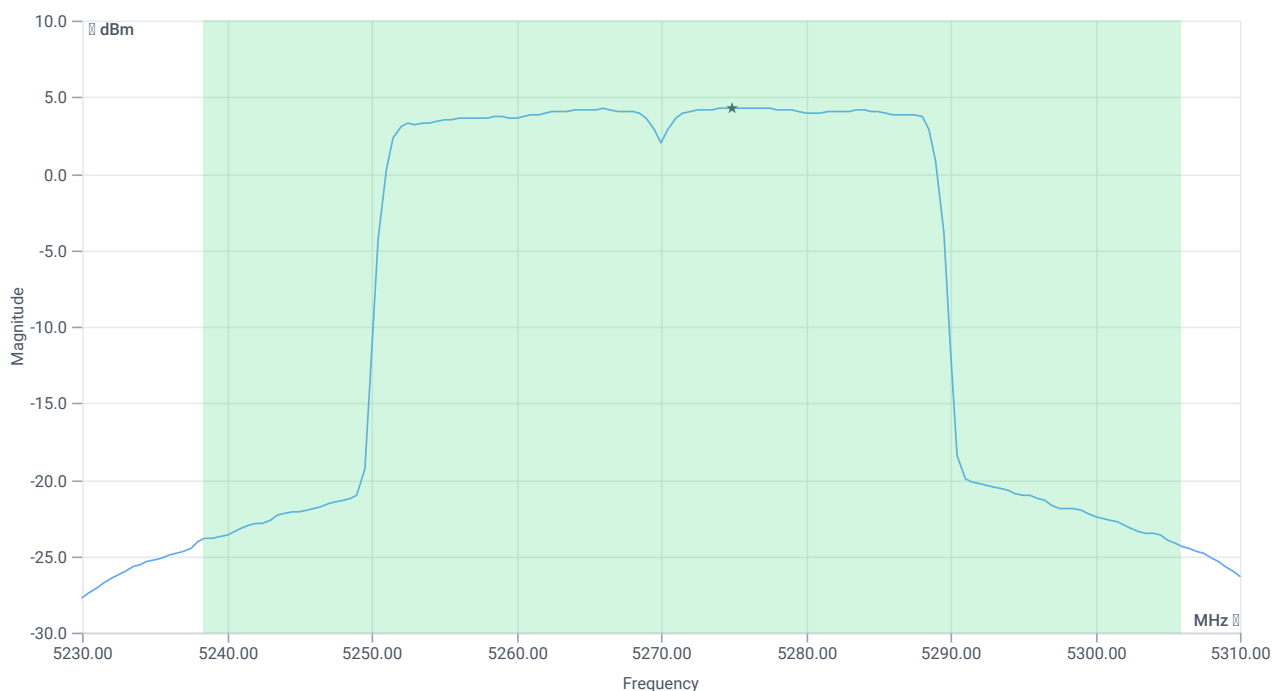
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	67.44	MHz	INFO
T1 26dB	---	---	5238.4000	MHz	INFO
T2 26dB	---	---	5305.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.84 16.32 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	---	---	19.37	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.74	dBm	PASS
Limit: 11 dBm + 10 log 67.44					
Max Output Power DC corrected	---	29.29	19.74	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.3	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	4.67	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:27:46
Ambit temp [°C] humidity [rel%]	21.7 27
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

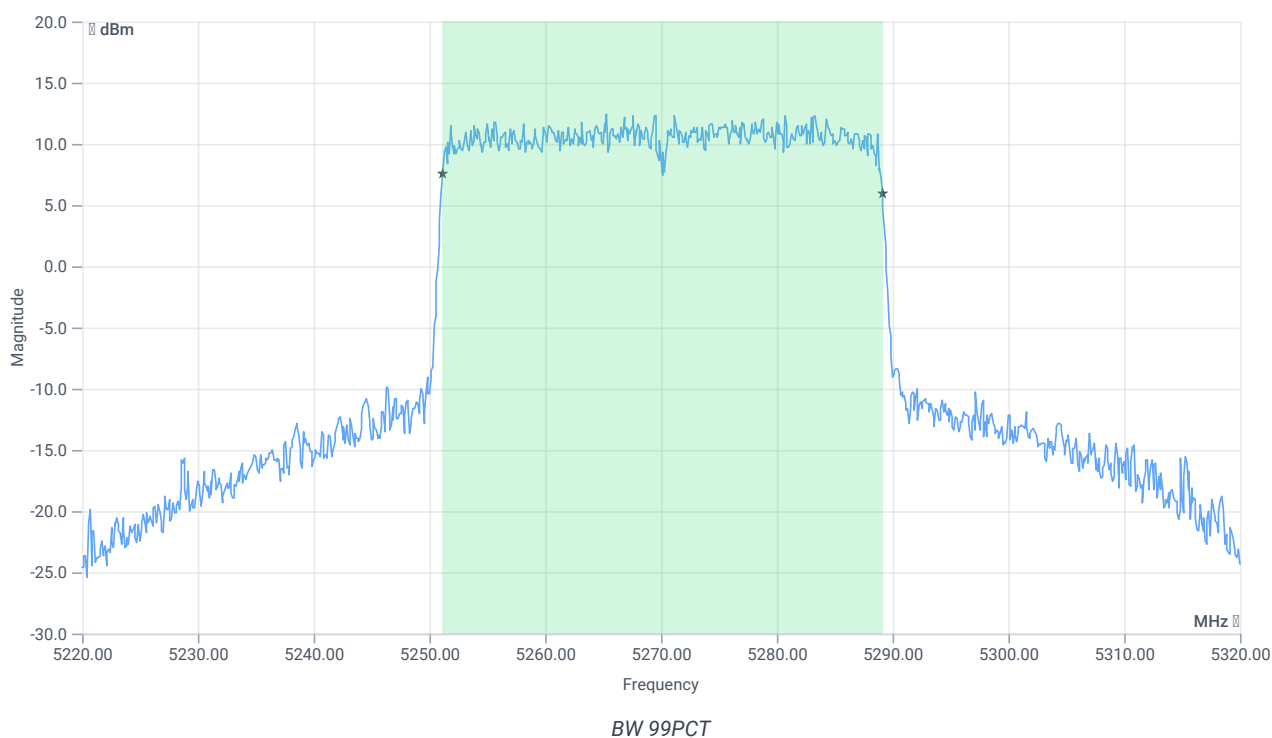
Test at TX 5270 MHz

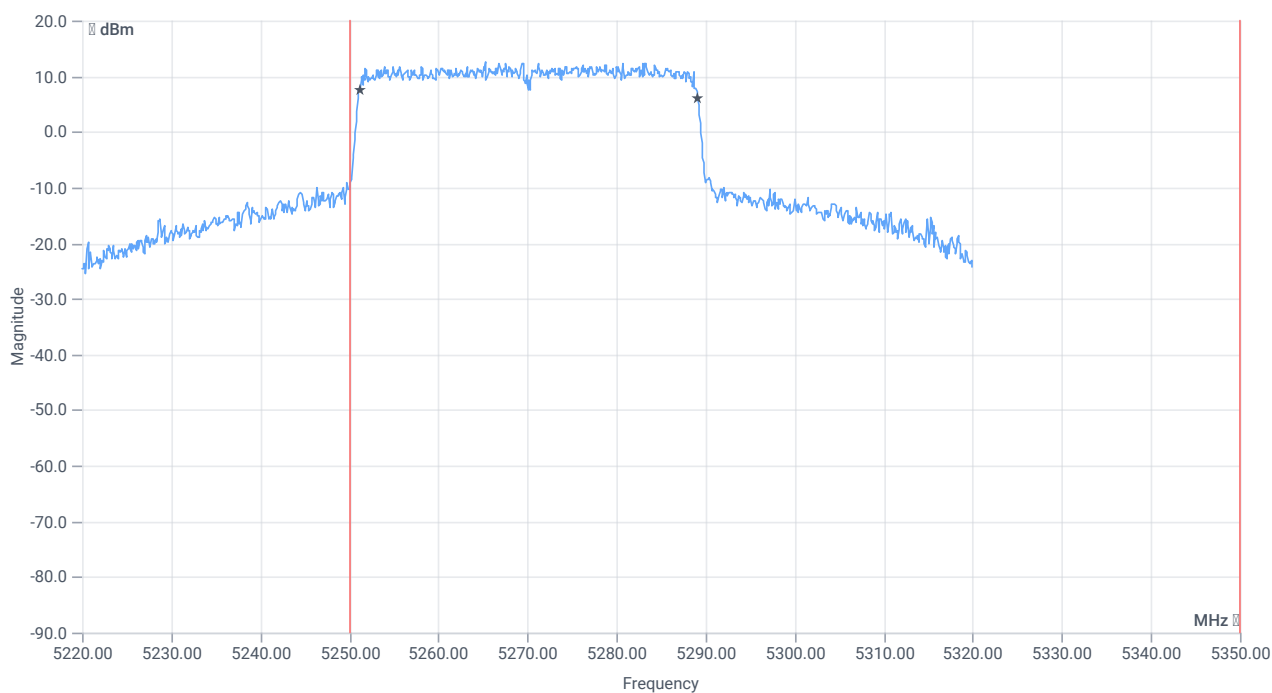
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.65	dBm	INFO
Ref. Frequency	---	---	5255.210	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.65 16.32 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

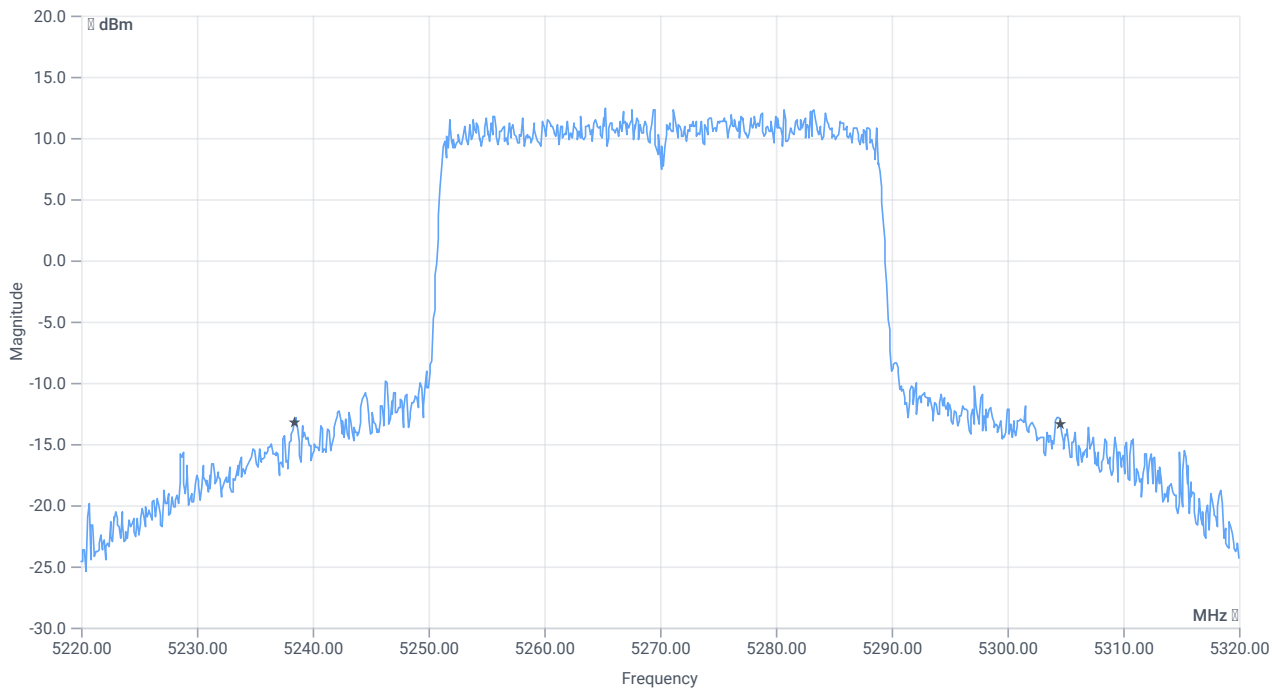




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5250.000000	---	5251.1189	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5289.0809	MHz	PASS



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	66.2	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5238.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5304.6000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:28:24
Ambit temp [°C] humidity [rel%]	21.8 27
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5270 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 Max Output Power DC corrected	---	---	19.74	dBm	INFO
Ant:2 BW 26dB	---	---	67.440	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	19.36	dBm	INFO
Ant:1 BW 26dB	---	---	75.120	MHz	INFO
Σ Limit absolute	---	24	22.56	dBm	PASS
Σ Limit: 11 dBm + 10 log 67.44	---	29.29	22.56	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 PSD	---	---	4.67	dBm/1MHz	INFO
Ant:1 PSD	---	---	4.19	dBm/1MHz	INFO
Σ	---	11	7.45	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:29:44
Ambit temp [°C] humidity [rel%]	21.8 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5310 MHz

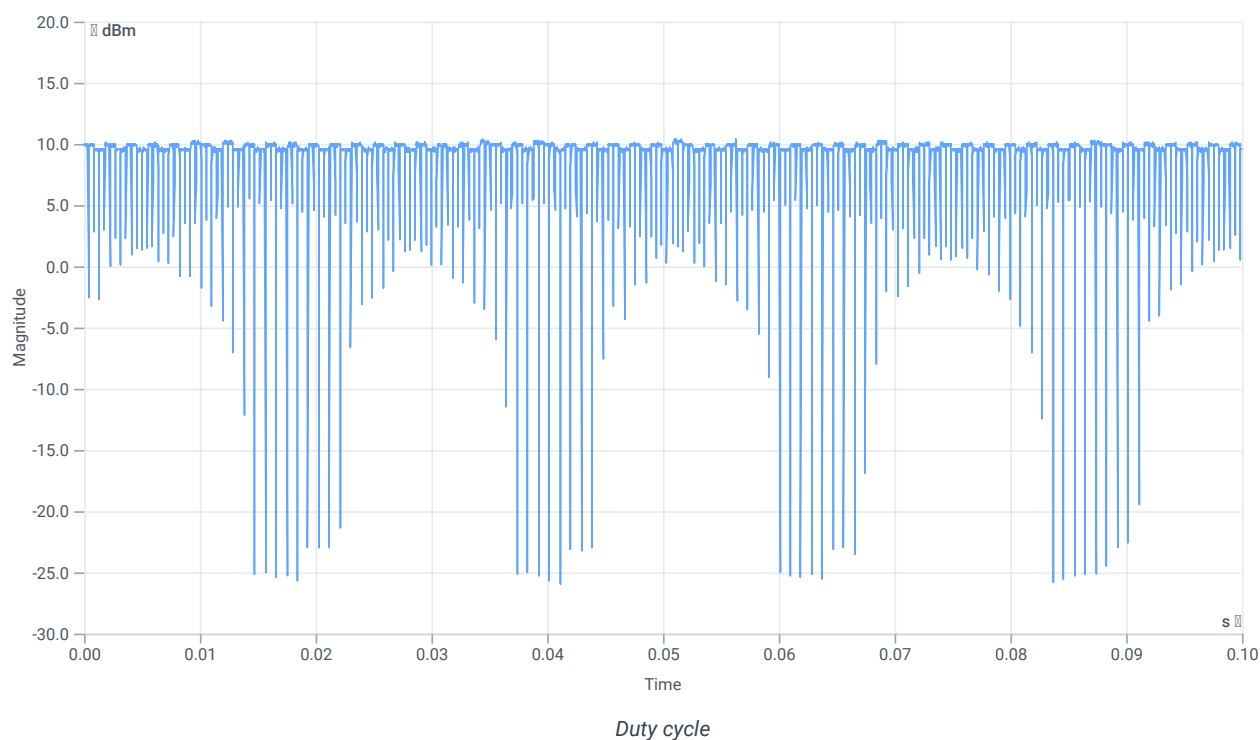
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.87	dBm	INFO
Ref. Frequency	---	---	5299.810	MHz	INFO

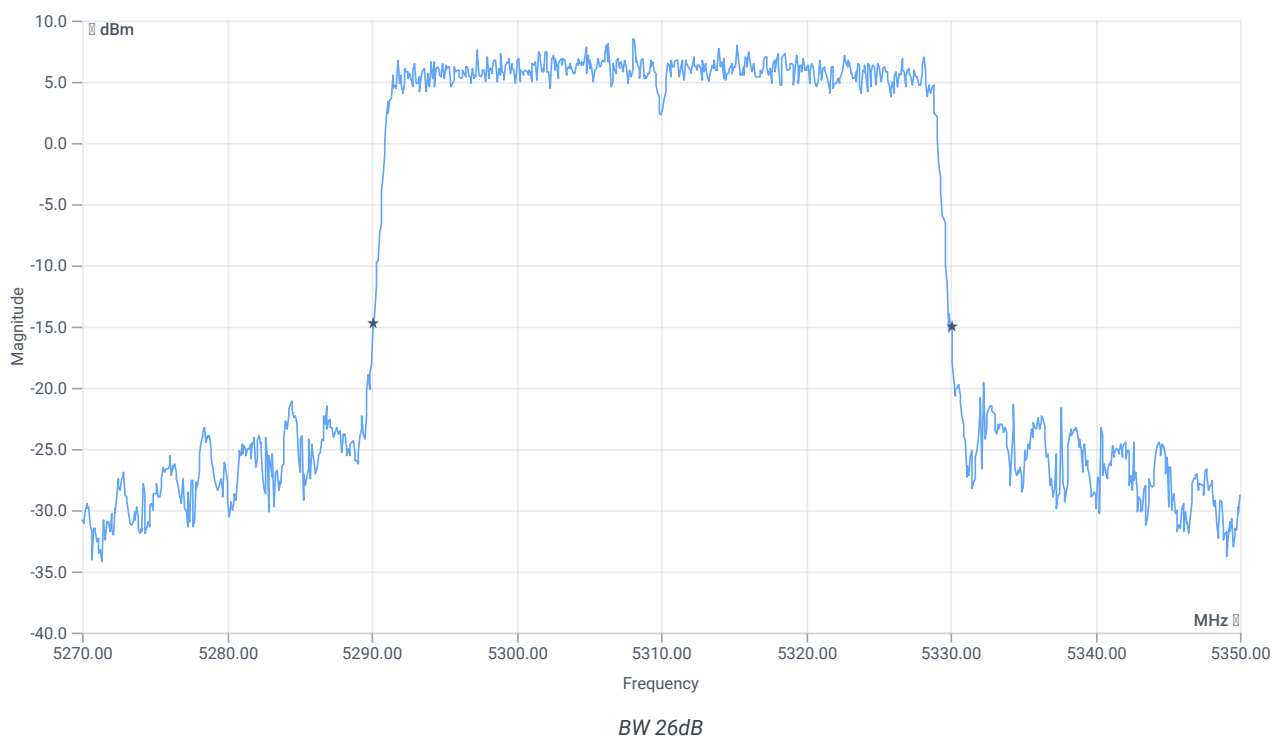
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:92					
Duty Cycle (Burst Ratio) max	---	---	0.985	---	INFO
Duty Cycle max	---	---	0.066	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.025	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



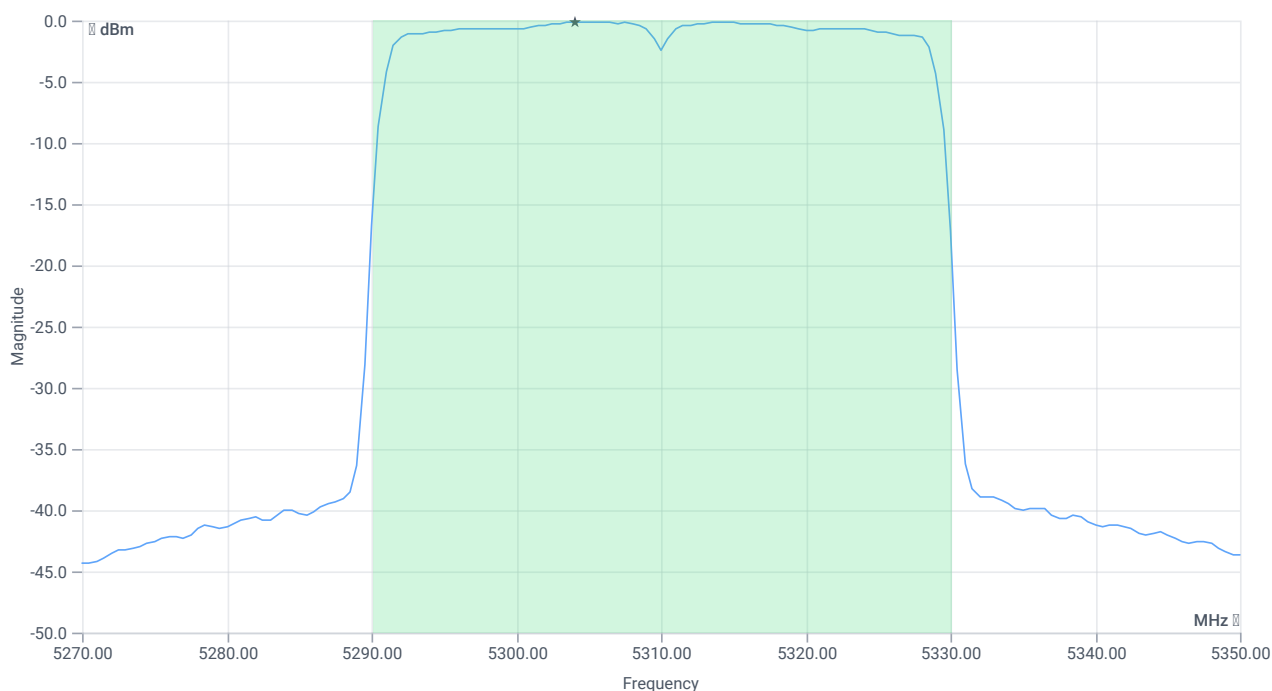
RESULT

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]	21.87 16.22 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.86	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.23	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	15.23	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	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	0.22	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:31:17
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

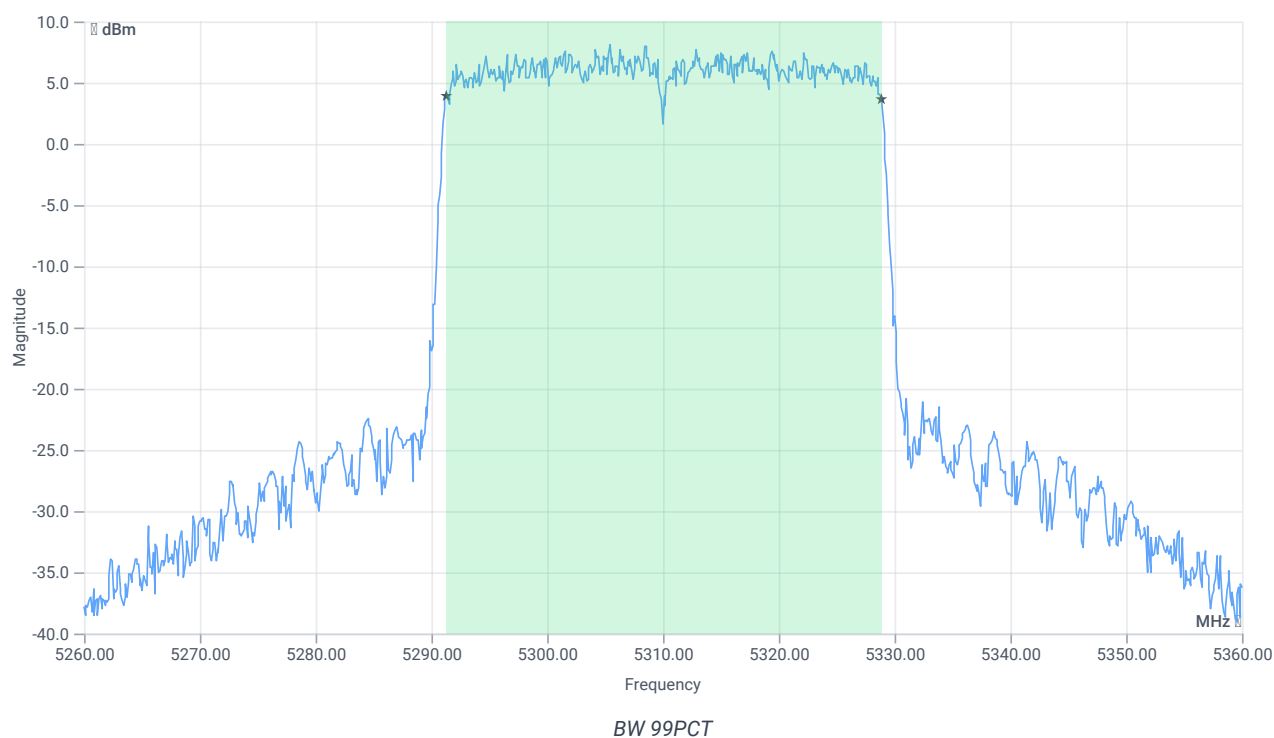
Test at TX 5310 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.71	dBm	INFO
Ref. Frequency	---	---	5308.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.71 16.22 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

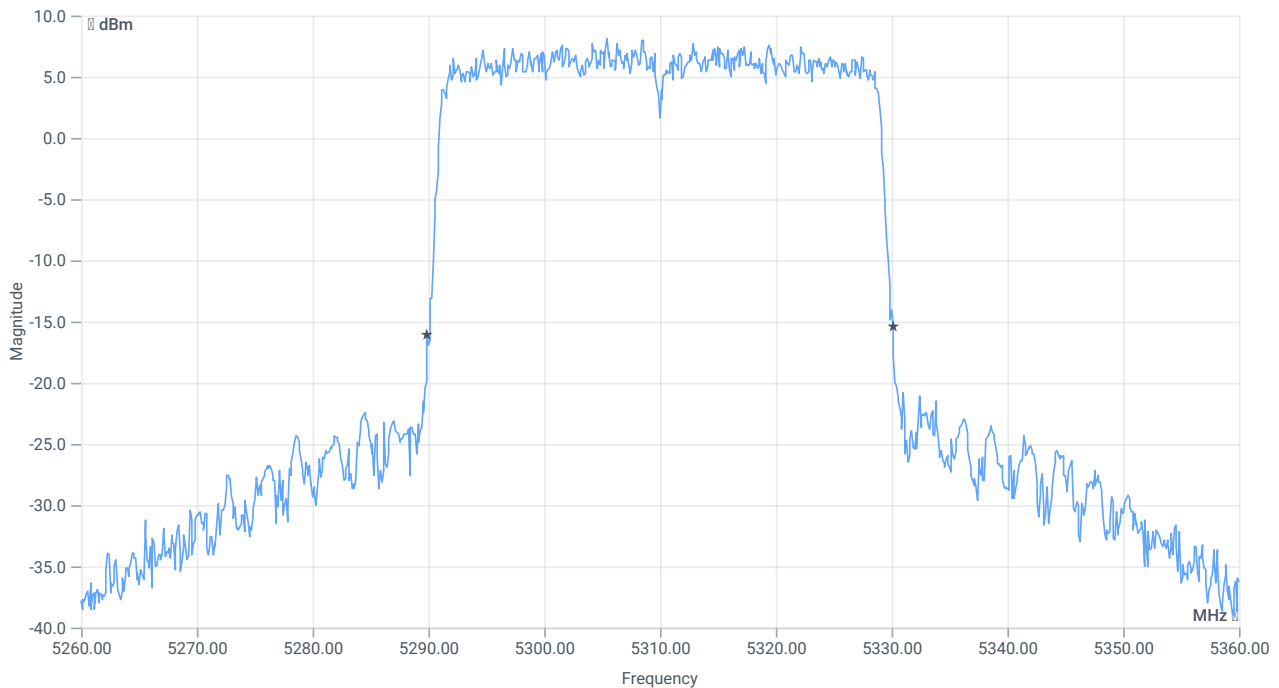




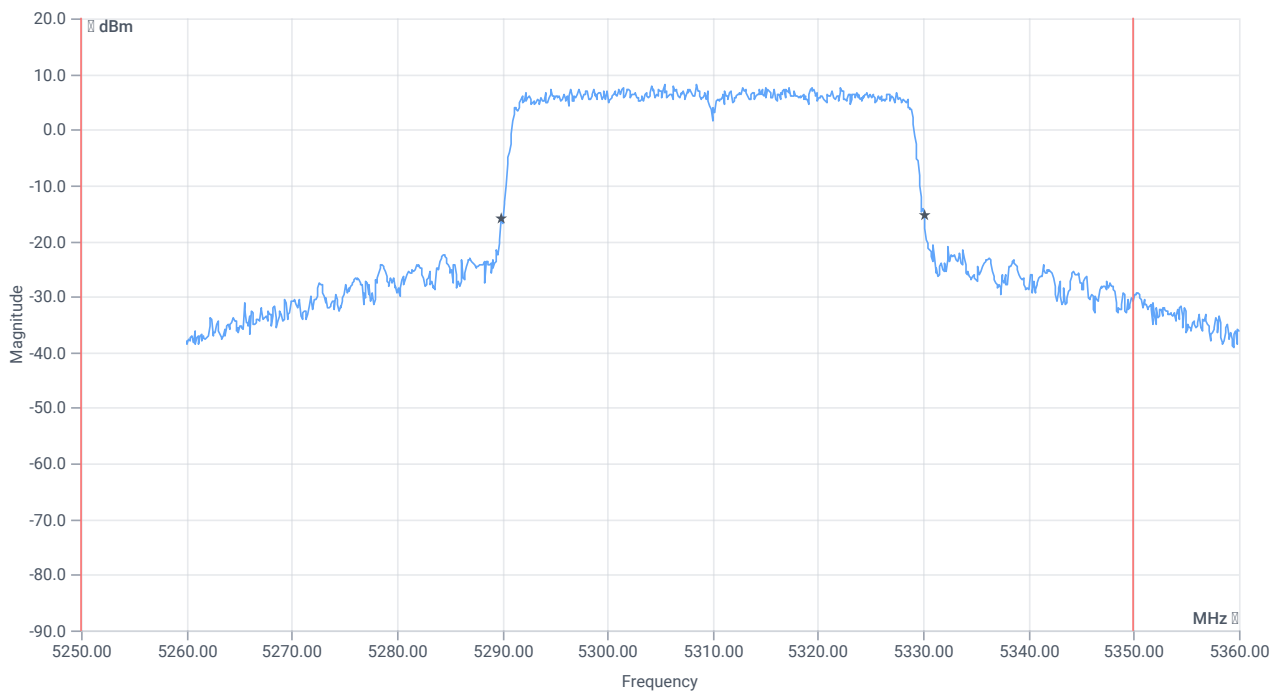
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5250.000000	---	5291.2188	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.8811	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.2	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5289.9000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.1000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:31:53
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5310 MHz

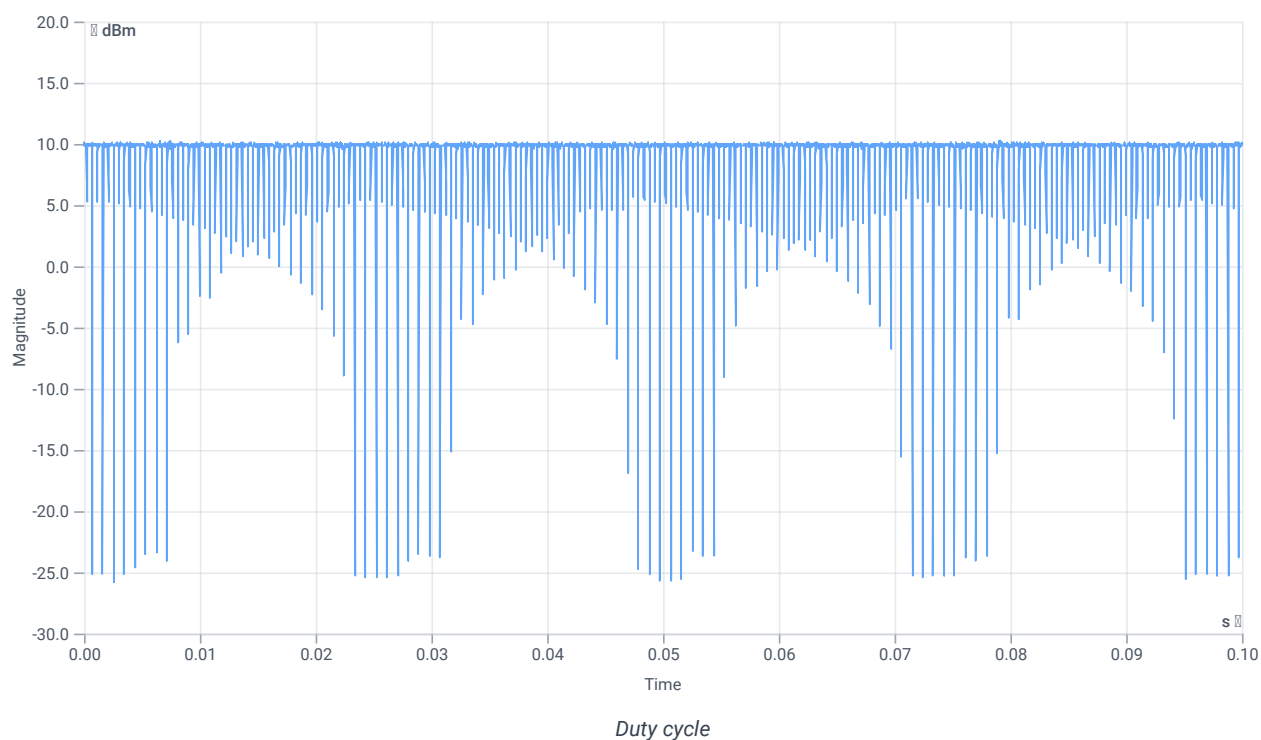
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.43	dBm	INFO
Ref. Frequency	---	---	5292.820	MHz	INFO

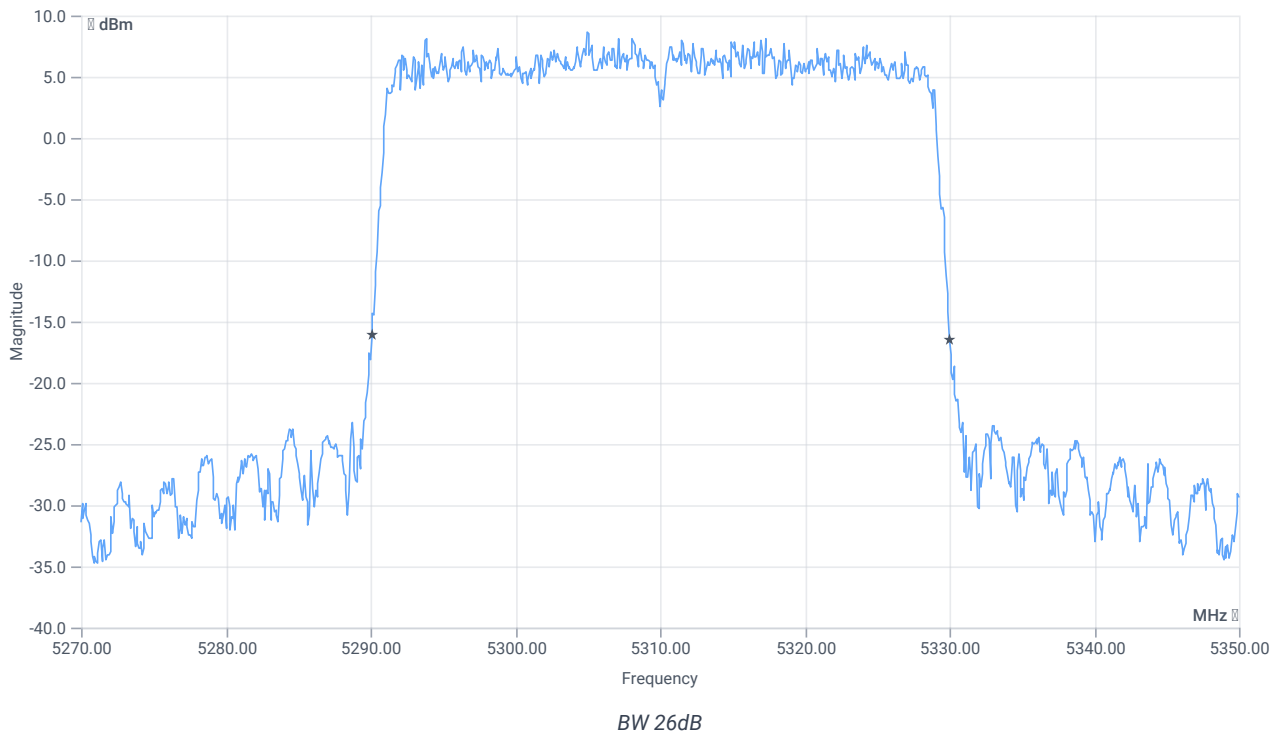
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:90					
Duty Cycle (Burst Ratio) max	---	---	0.985	---	INFO
Duty Cycle max	---	---	0.066	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.025	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



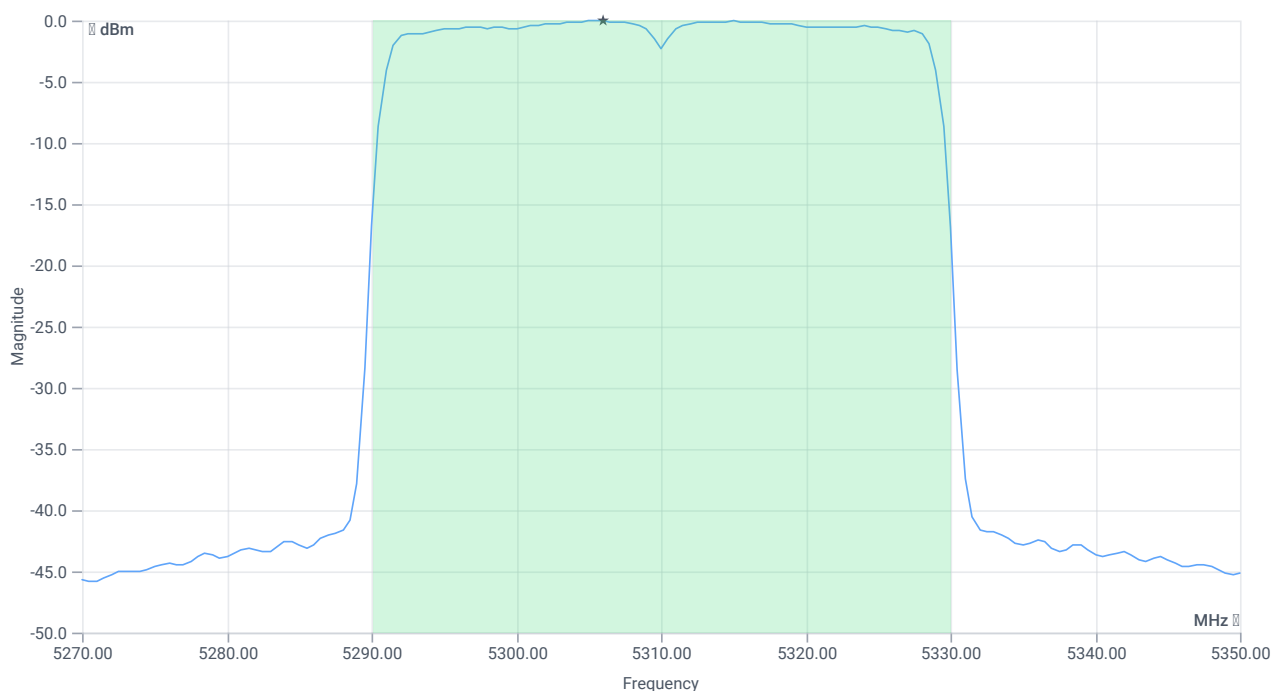
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.92	MHz	INFO
T1 26dB	---	---	5290.0800	MHz	INFO
T2 26dB	---	---	5330.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.43 16.22 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	14.98	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.35	dBm	PASS
Limit: 11 dBm + 10 log 39.92					
Max Output Power DC corrected	---	27.01	15.35	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	-0.03	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	0.34	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:33:25
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

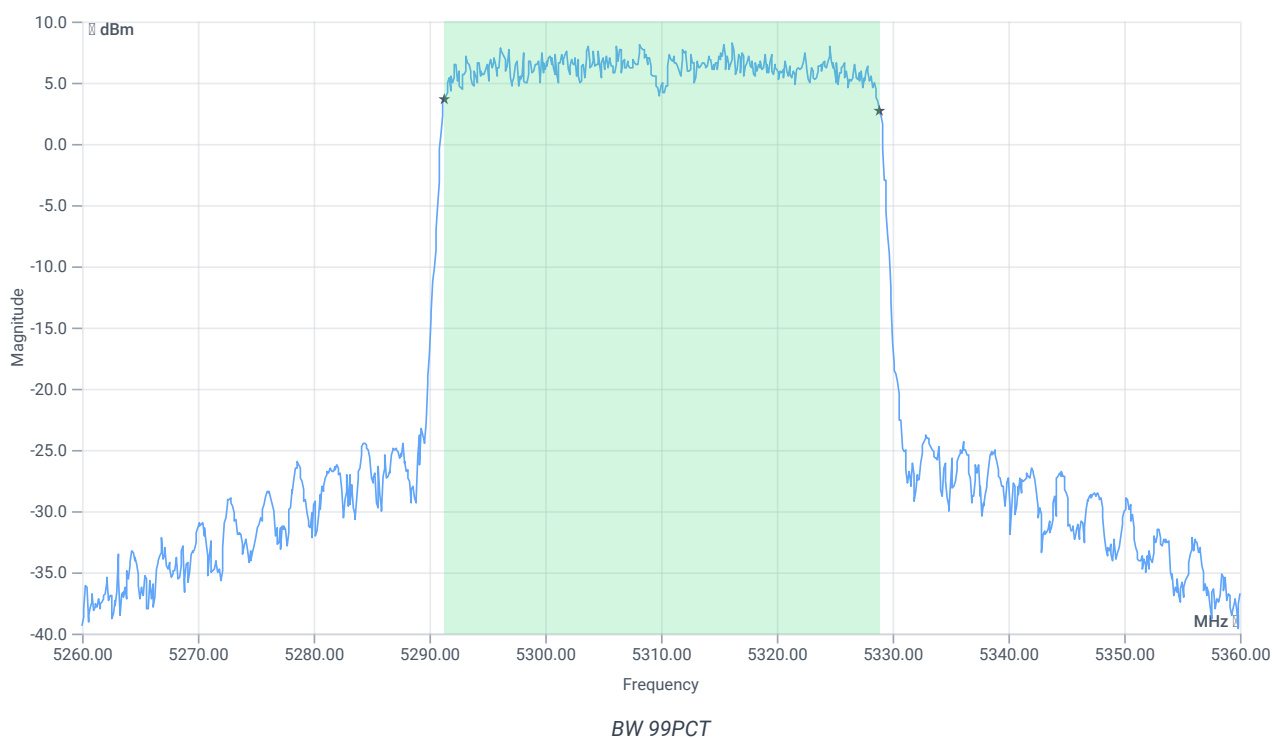
Test at TX 5310 MHz

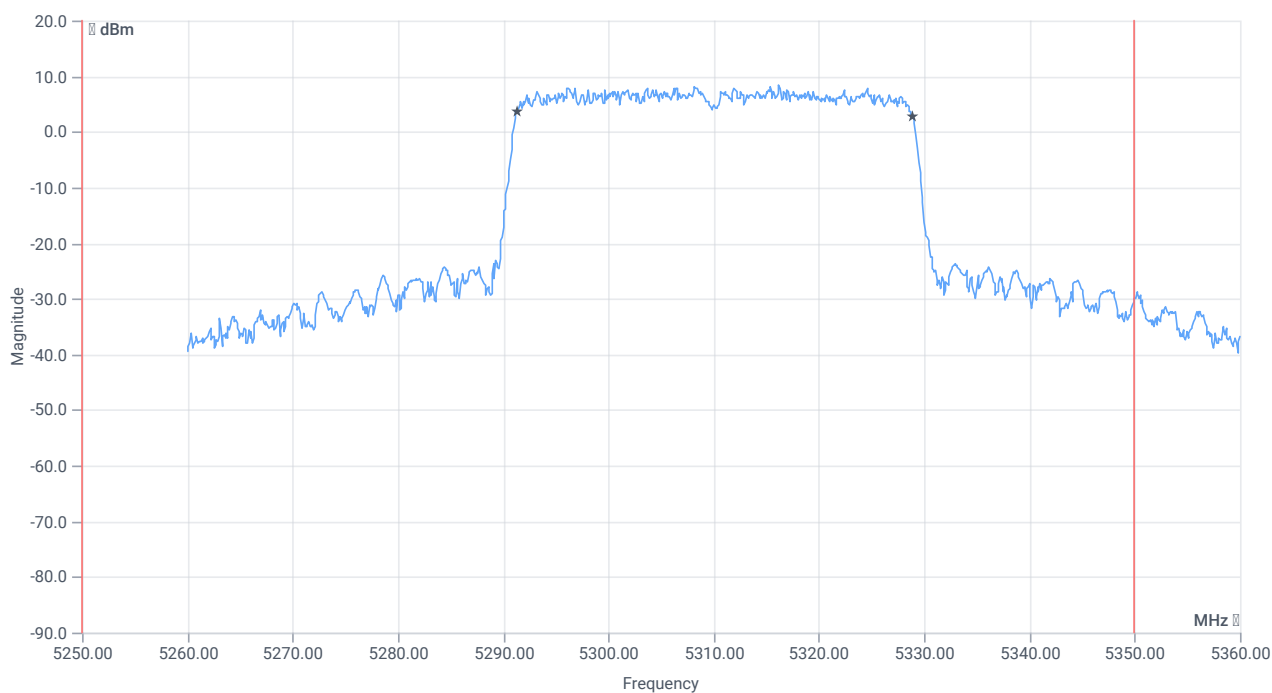
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	9.54	dBm	INFO
Ref. Frequency	---	---	5299.210	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.54 16.22 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

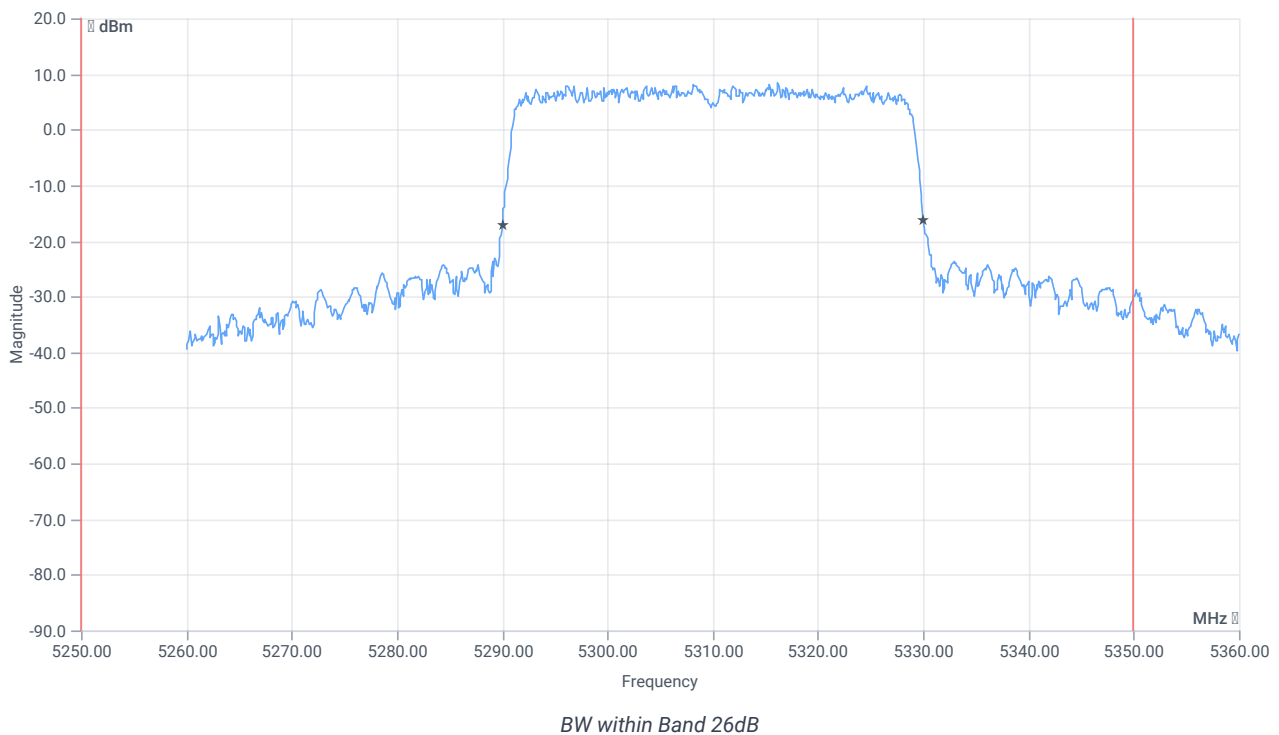
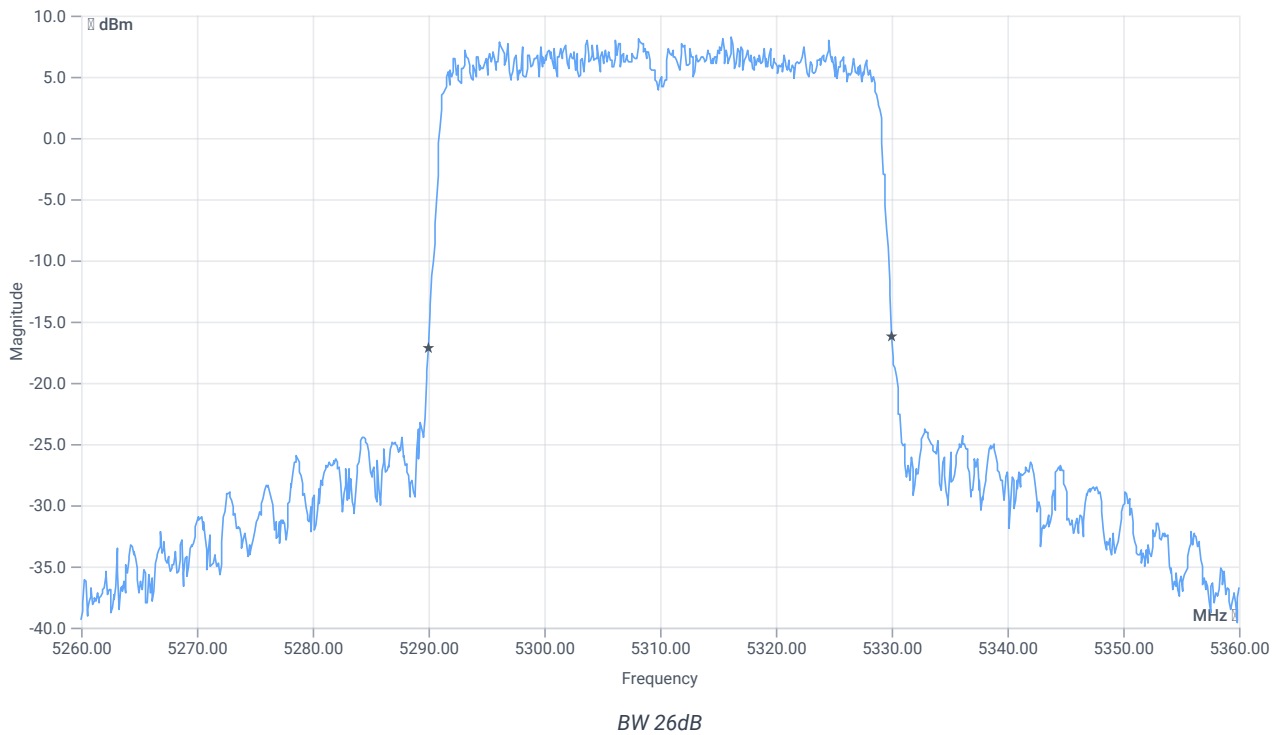




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.562	MHz	INFO
T1 99%	5250.000000	---	5291.3187	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.8811	MHz	PASS



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	---	5290.0000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

TC start	19.01.2024 10:34:02
Ambit temp [°C] humidity [rel%]	21.7 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5310 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	15.23	dBm	INFO
Ant:1 BW 26dB	---	---	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	15.35	dBm	INFO
Ant:2 BW 26dB	---	---	39.920	MHz	INFO
Σ Limit absolute	---	24	18.3	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.92	---	27.01	18.3	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	0.22	dBm/1MHz	INFO
Ant:2 PSD	---	---	0.34	dBm/1MHz	INFO
Σ	---	11	3.29	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:39:41
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5510 MHz

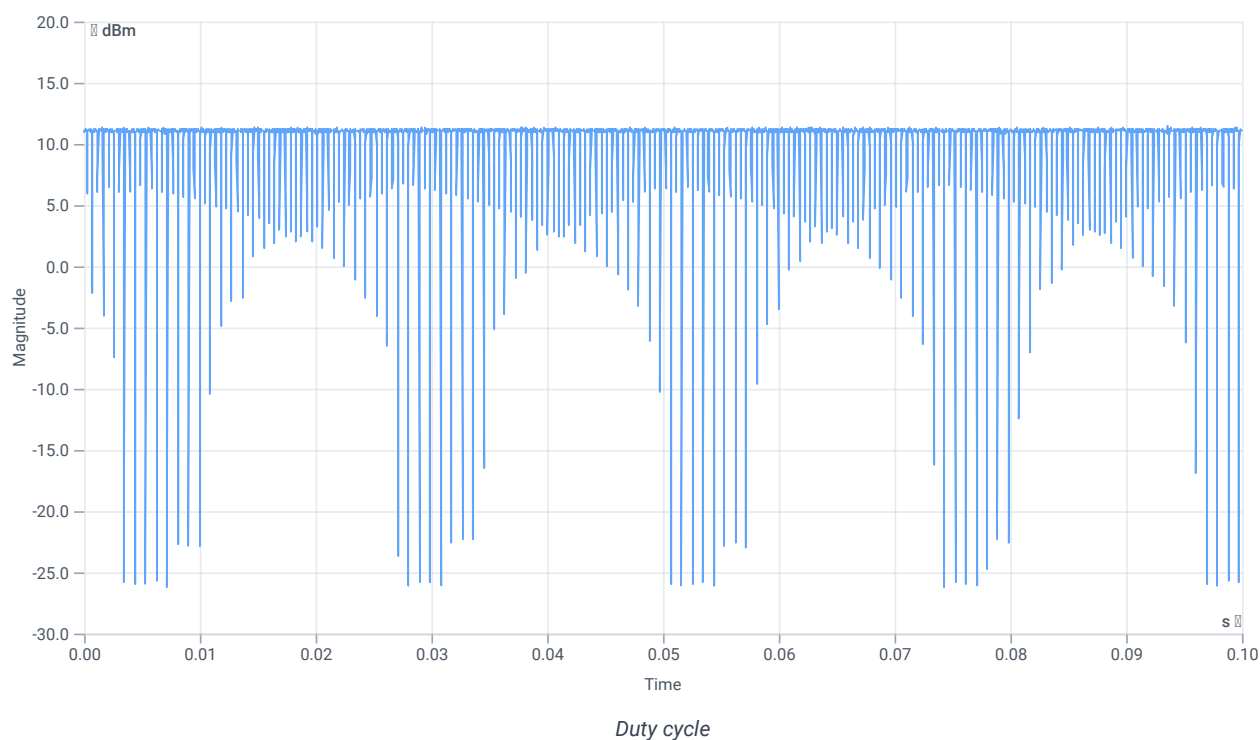
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	12.66	dBm	INFO
Ref. Frequency	---	---	5514.600	MHz	INFO

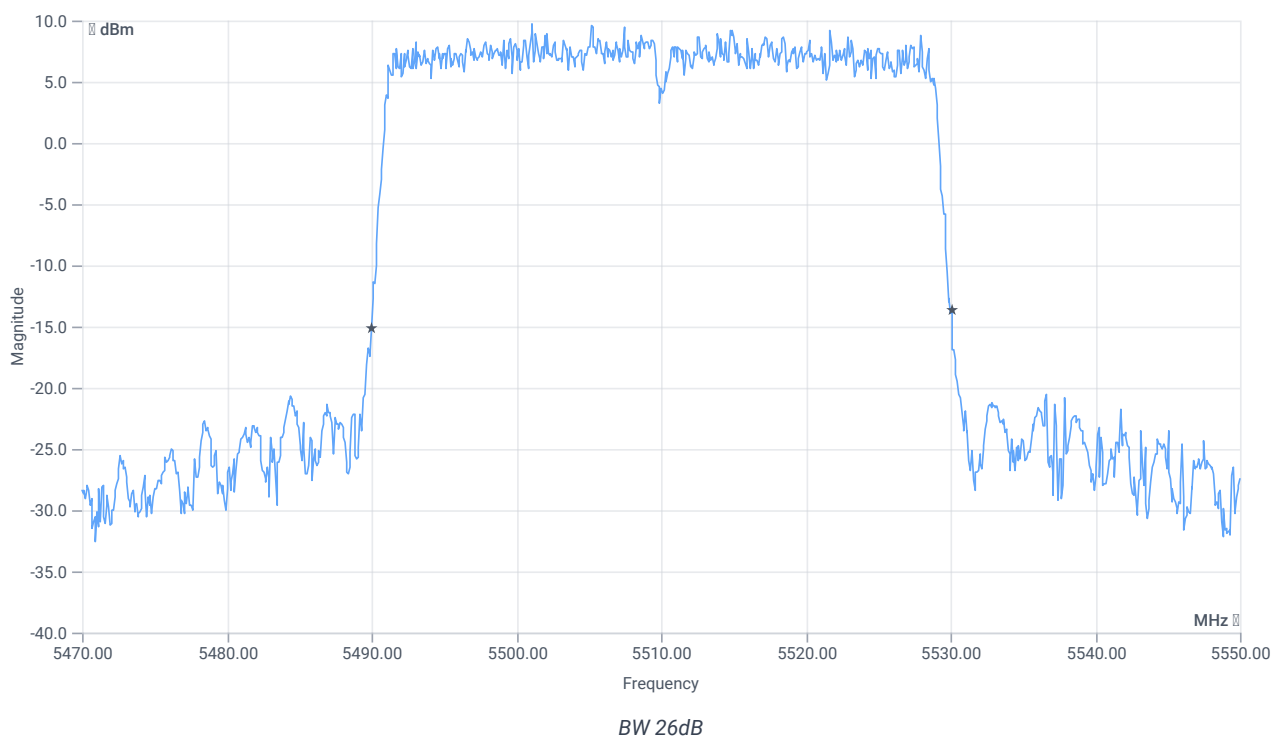
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:88					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



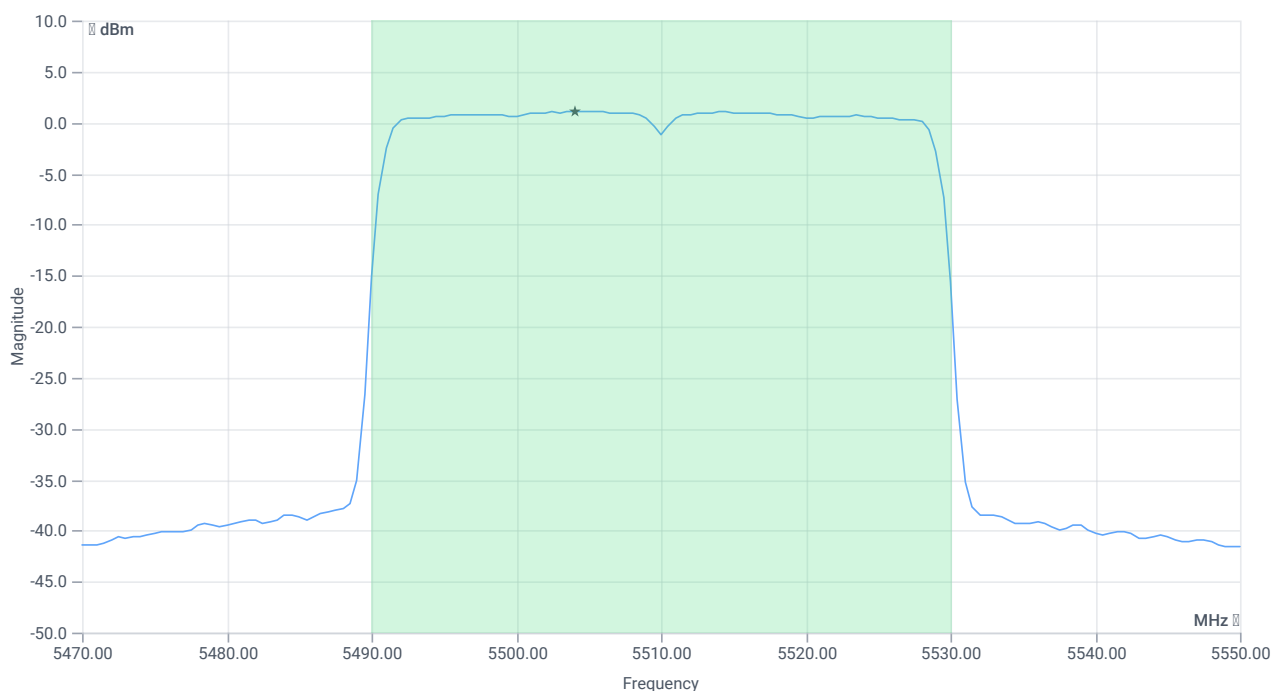
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.08	MHz	INFO
T1 26dB	---	---	5490.0000	MHz	INFO
T2 26dB	---	---	5530.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.66 16.69 25
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	16.17	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.54	dBm	PASS
Limit: 11 dBm + 10 log 40.08					
Max Output Power DC corrected	---	27.03	16.54	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	1.08	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	1.45	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:41:09
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5510 MHz

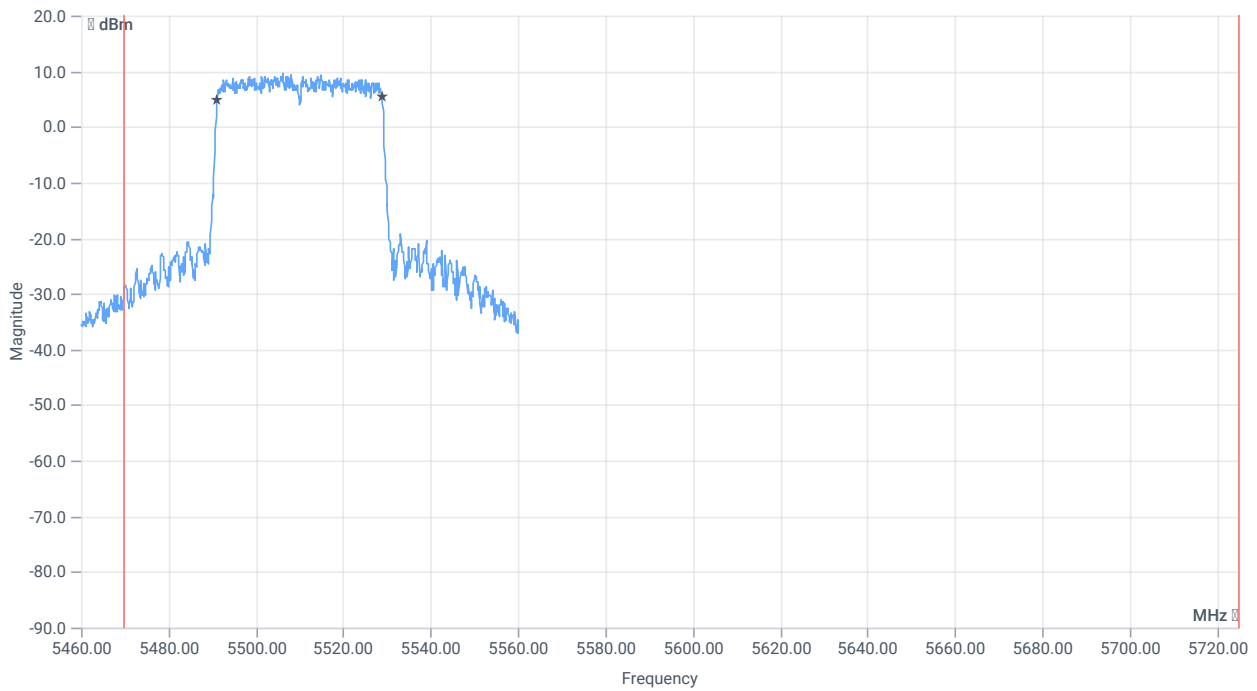
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.68	dBm	INFO
Ref. Frequency	---	---	5508.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.68 16.69 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

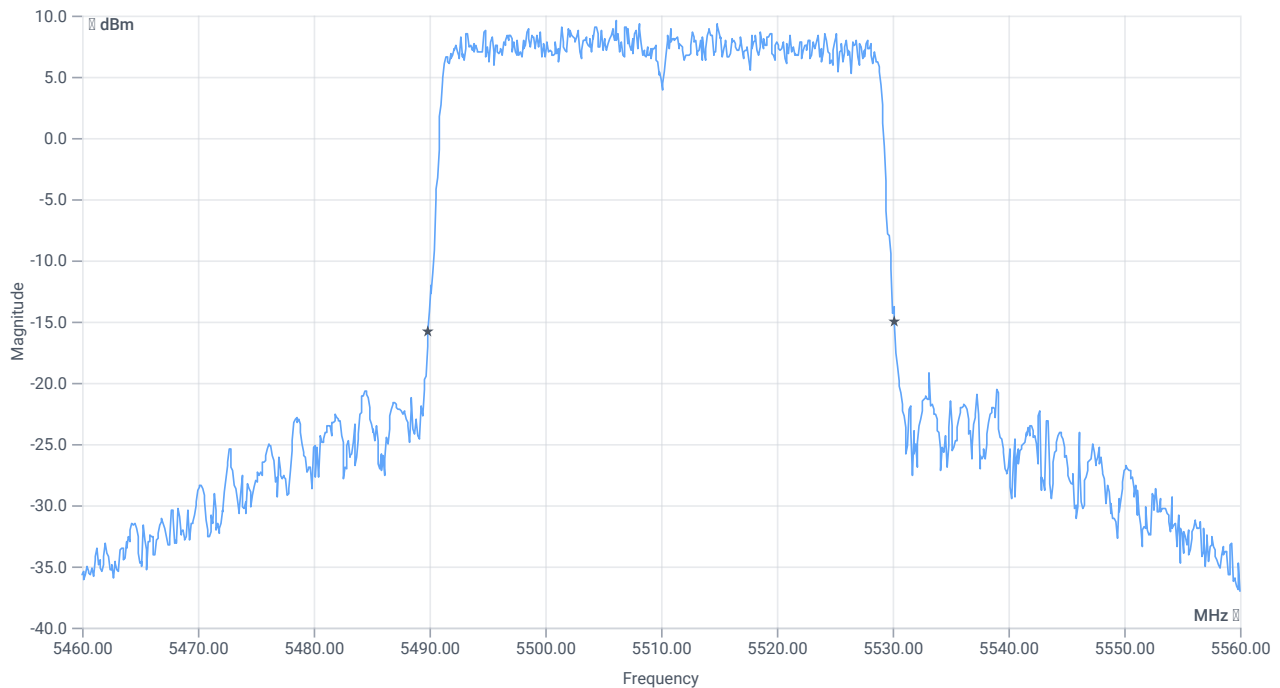




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5470.000000	---	5491.2188	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5528.8811	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.3	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5489.9000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5530.2000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:41:39
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5510 MHz

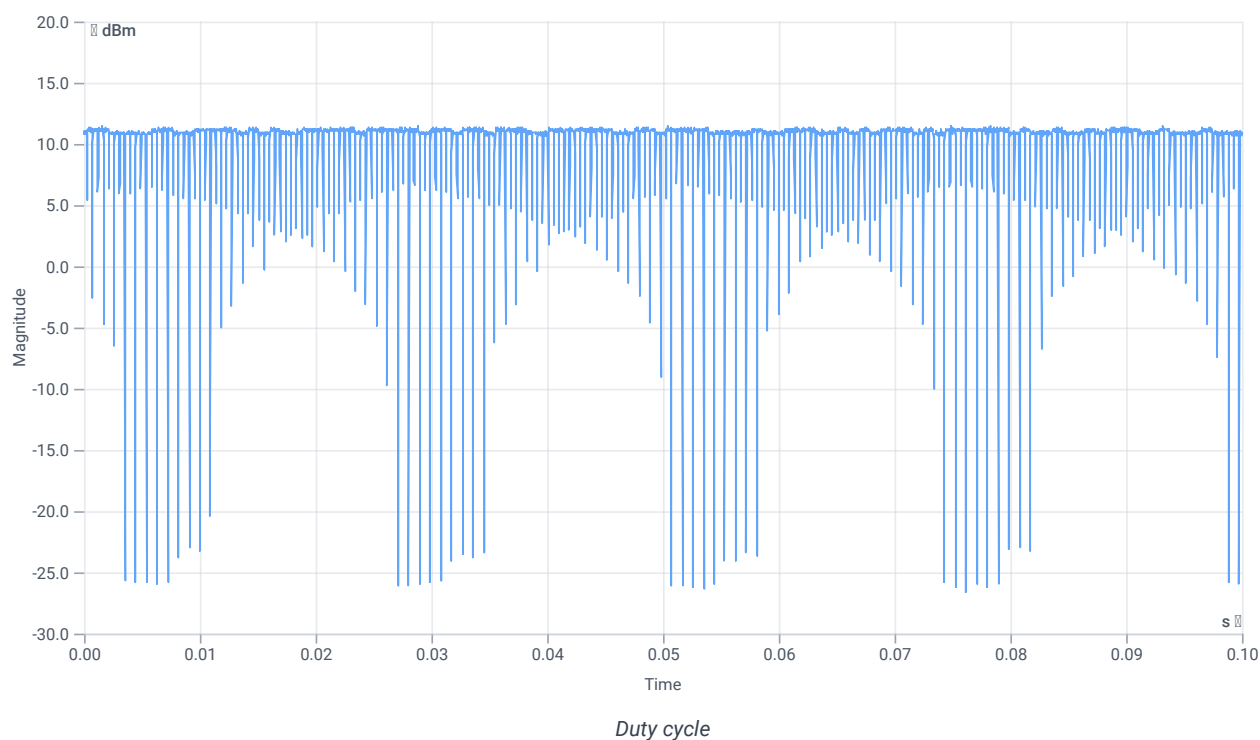
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	10.66	dBm	INFO
Ref. Frequency	---	---	5507.200	MHz	INFO

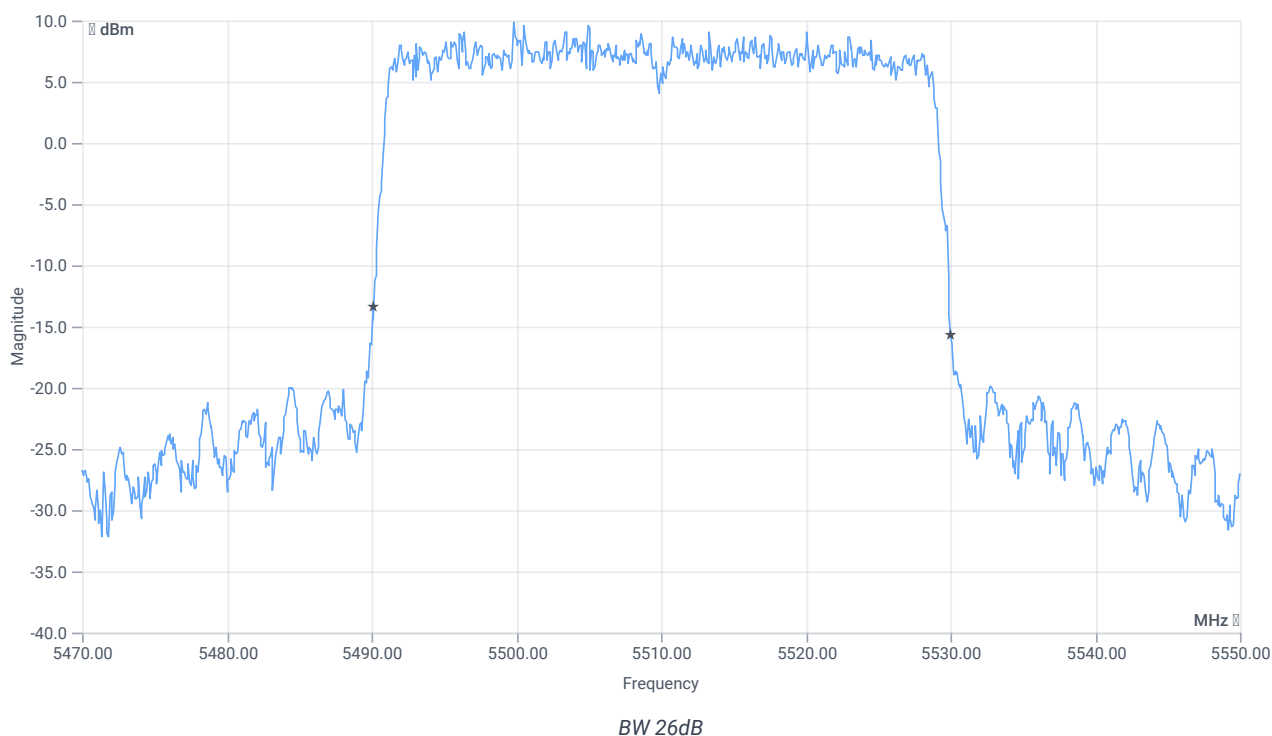
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:90					
Duty Cycle (Burst Ratio) max	---	---	0.985	---	INFO
Duty Cycle max	---	---	0.066	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.025	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



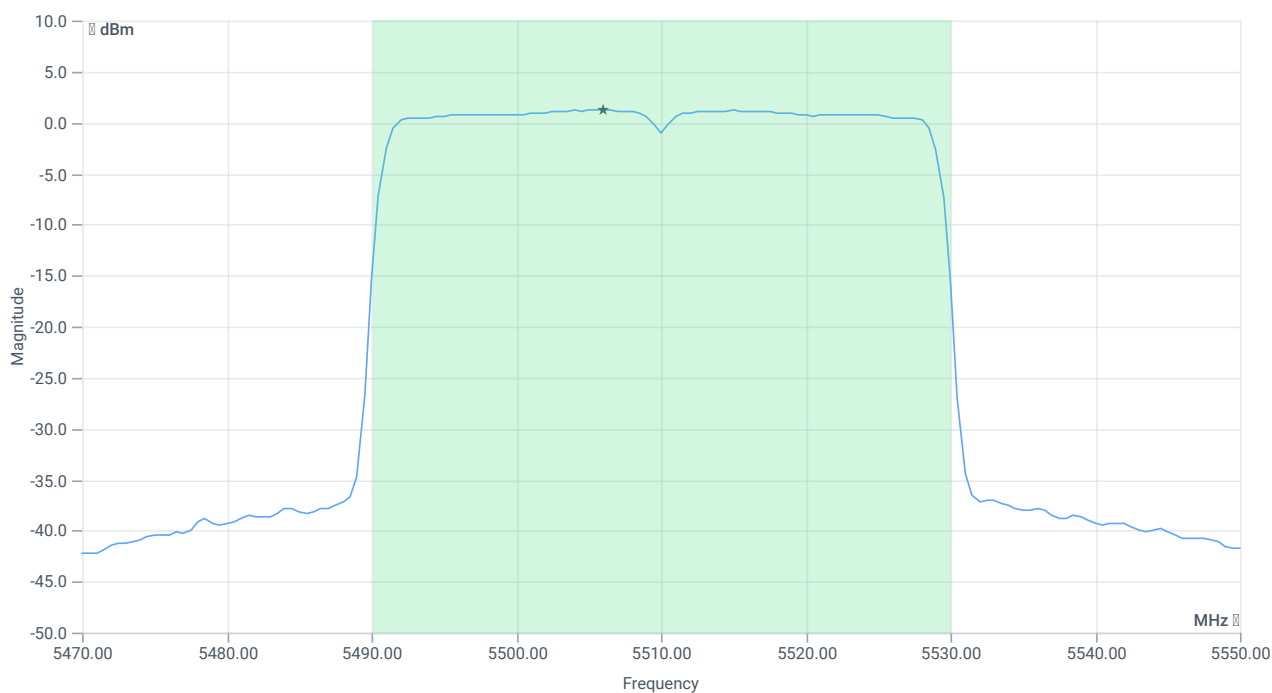
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.92	MHz	INFO
T1 26dB	---	---	5490.0800	MHz	INFO
T2 26dB	---	---	5530.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.66 16.69 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	16.27	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.64	dBm	PASS
Limit: 11 dBm + 10 log 39.92					
Max Output Power DC corrected	---	27.01	16.64	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	1.24	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	1.61	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:43:07
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5510 MHz

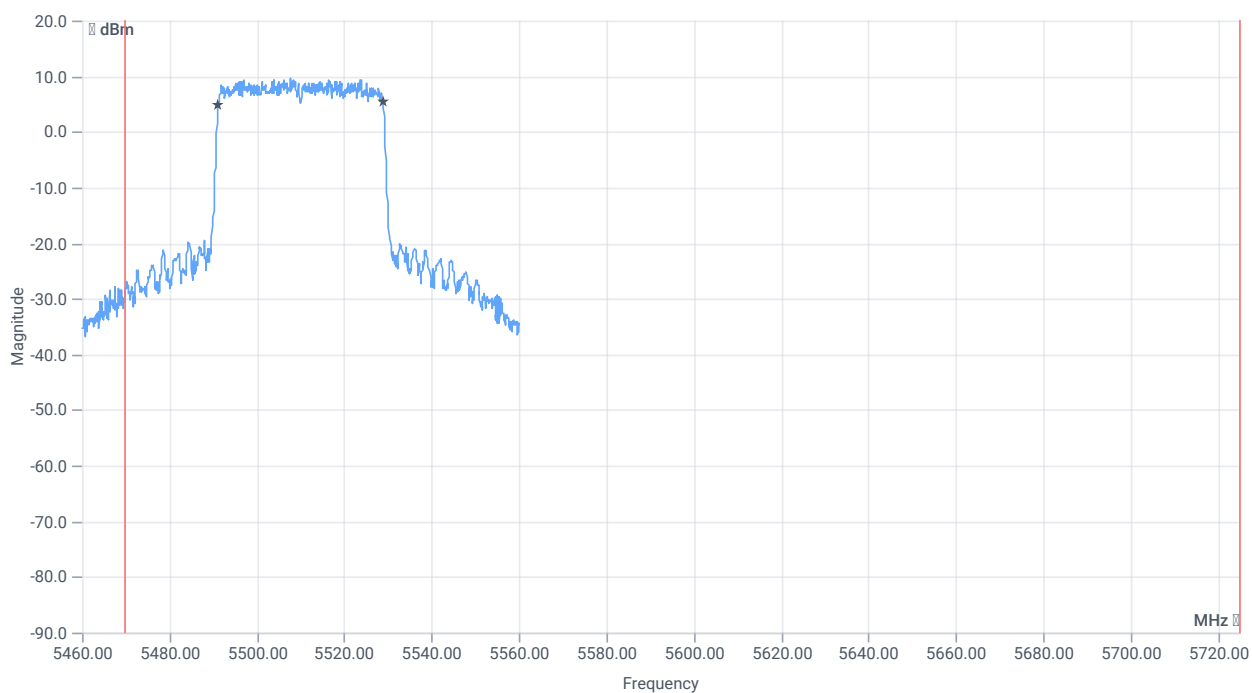
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	11.24	dBm	INFO
Ref. Frequency	---	---	5521.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.24 16.69 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

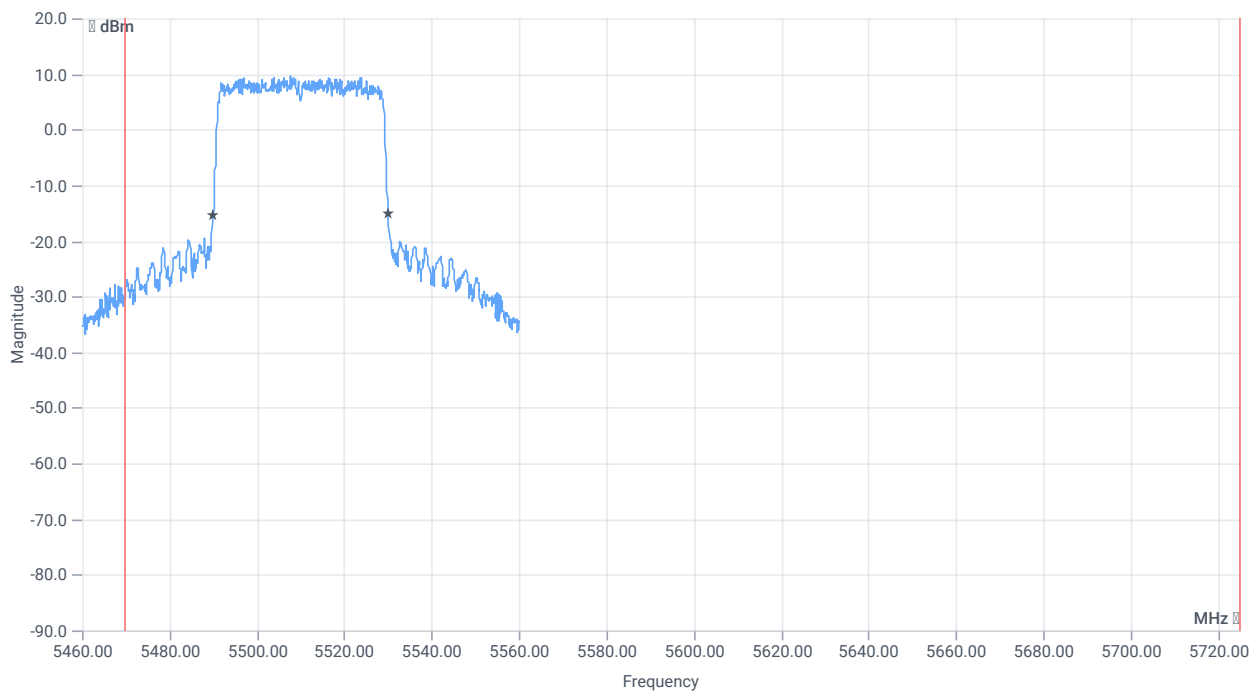
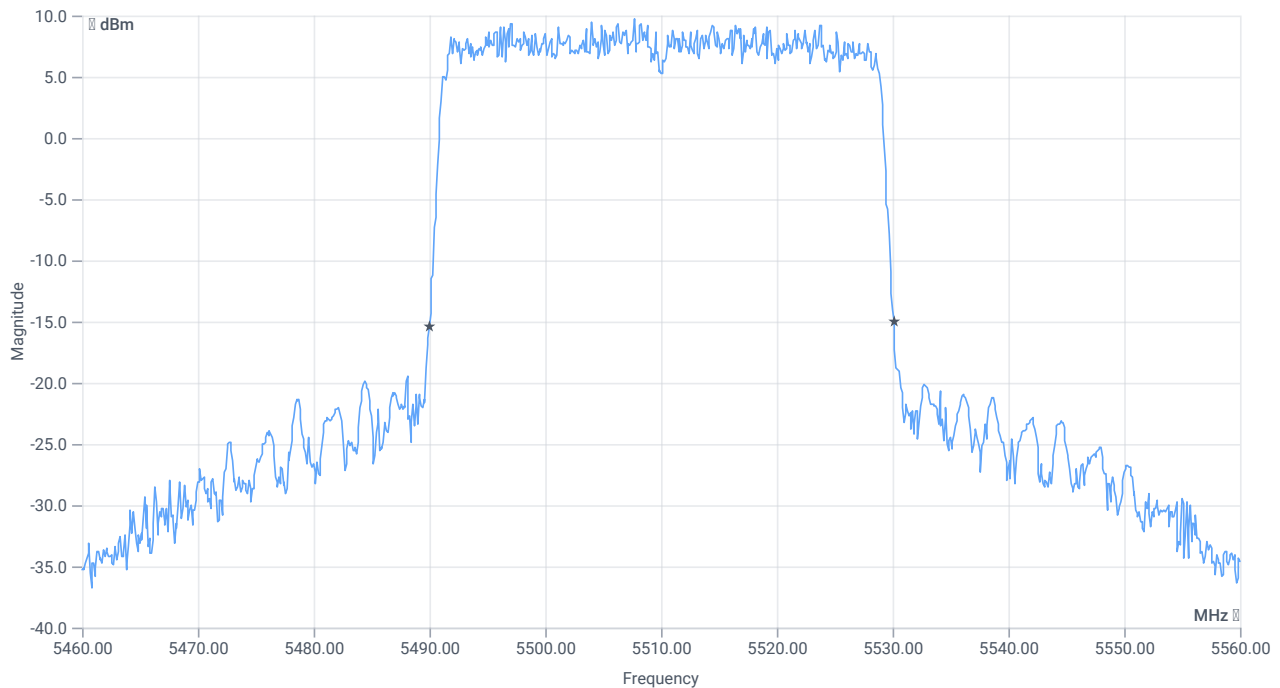




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5470.000000	---	5491.2188	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5528.8811	MHz	



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.1	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5490.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5530.1000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:43:37
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5510 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	16.54	dBm	INFO
Ant:1 BW 26dB	---	---	40.080	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	16.64	dBm	INFO
Ant:2 BW 26dB	---	---	39.920	MHz	INFO
Σ Limit absolute	---	24	19.6	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.92	---	27.01	19.6	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	1.45	dBm/1MHz	INFO
Ant:2 PSD	---	---	1.61	dBm/1MHz	INFO
Σ	---	11	4.54	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:48:43
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5590 MHz

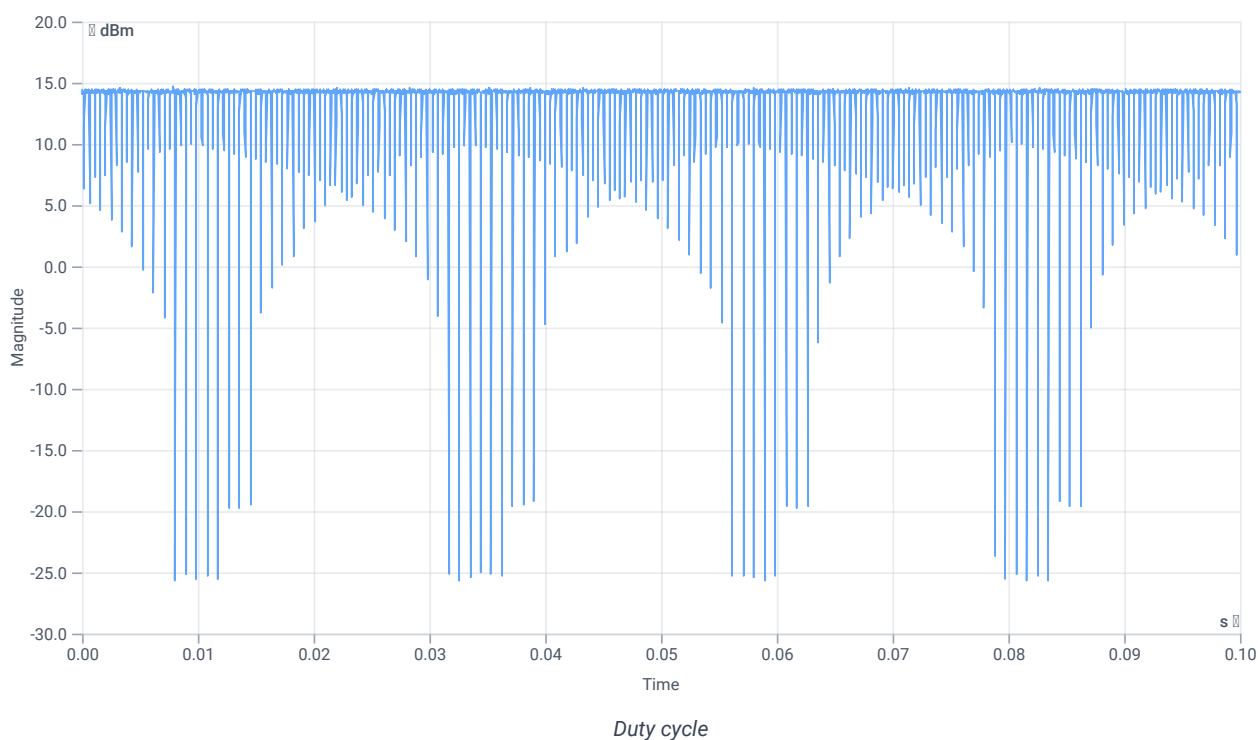
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.68	dBm	INFO
Ref. Frequency	---	---	5598.390	MHz	INFO

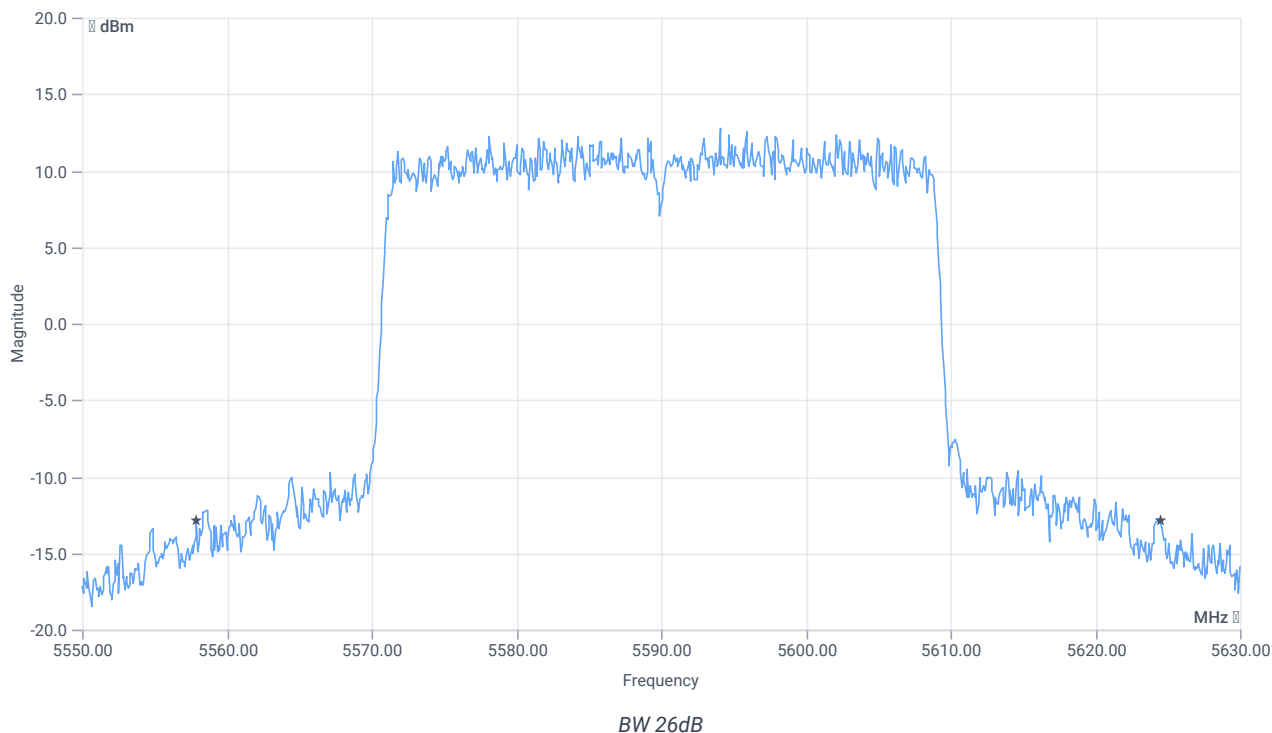
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:87					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



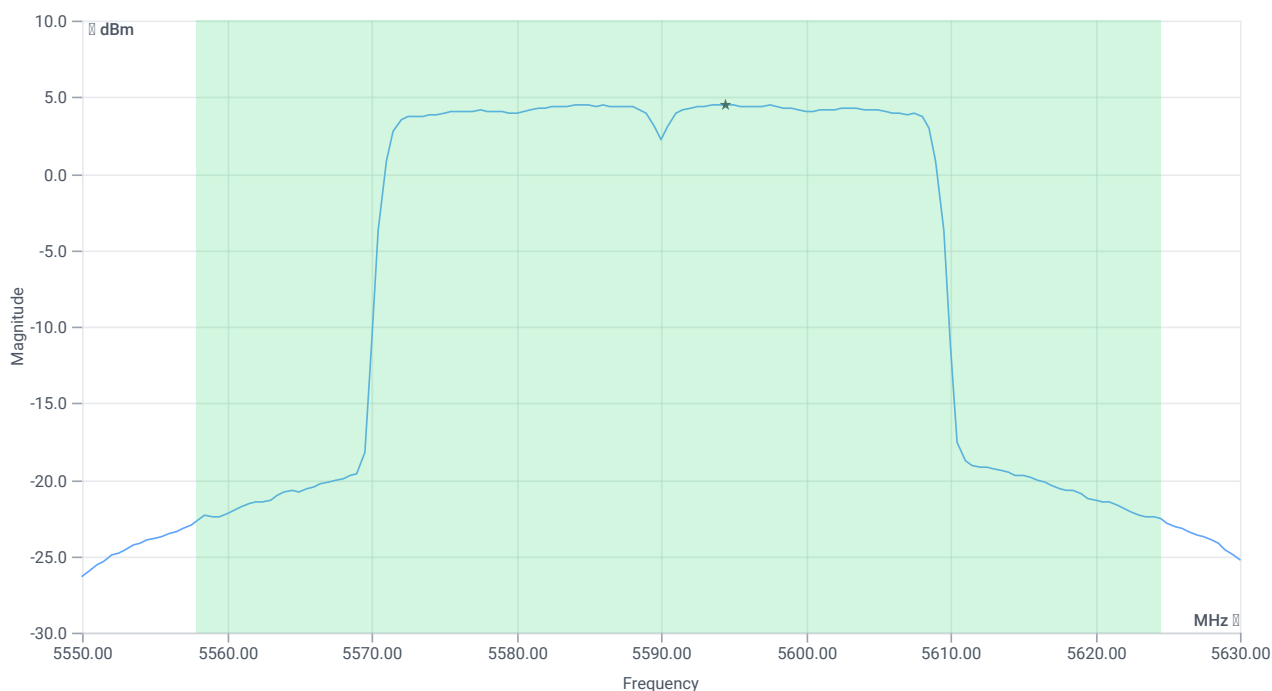
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	66.64	MHz	INFO
T1 26dB	---	---	5557.9200	MHz	INFO
T2 26dB	---	---	5624.5600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.68 16.82 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	---	---	19.63	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20	dBm	PASS
Limit: 11 dBm + 10 log 66.64					
Max Output Power DC corrected	---	29.24	20	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.47	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	4.84	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:50:09
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

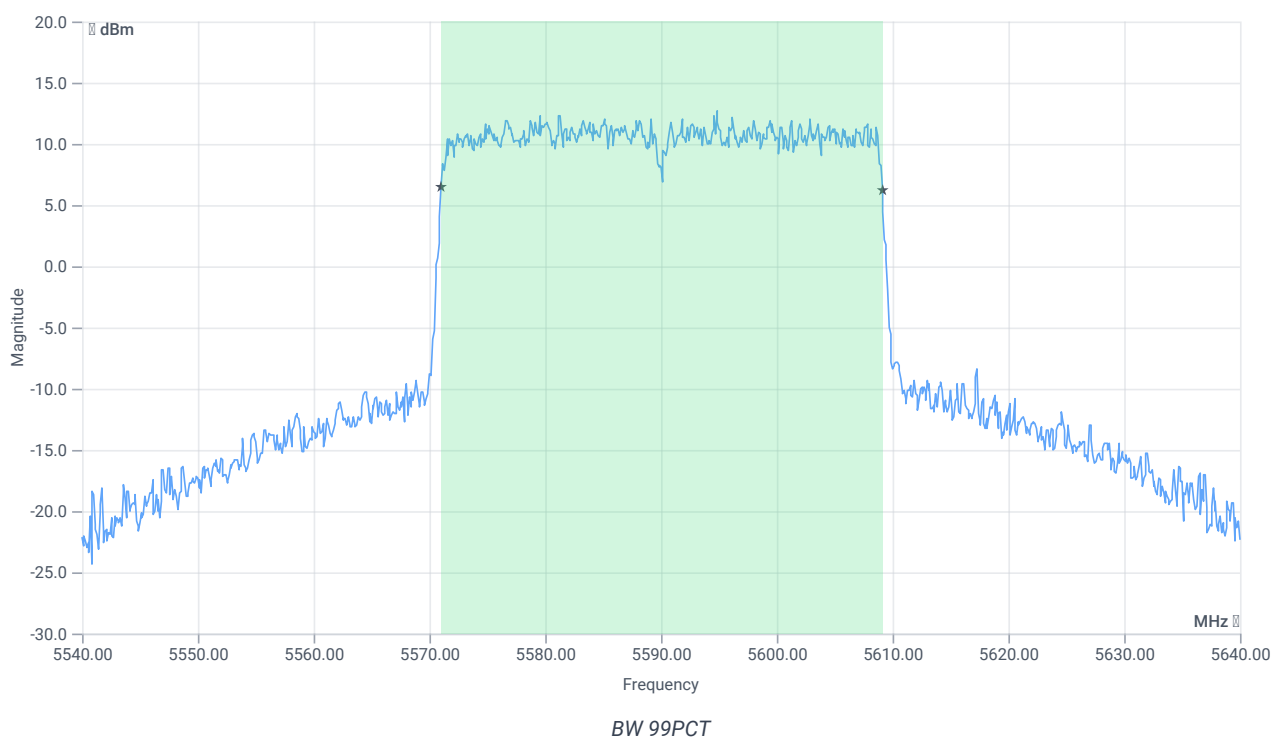
Test at TX 5590 MHz

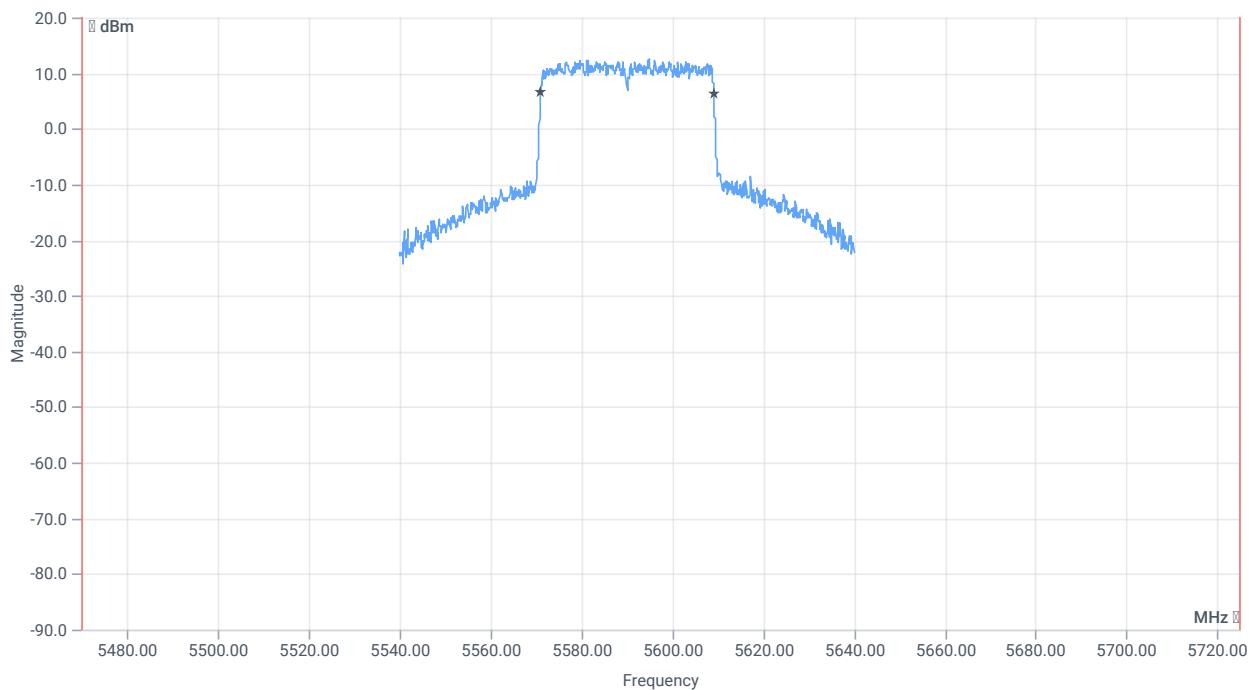
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.05	dBm	INFO
Ref. Frequency	---	---	5592.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.05 16.82 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

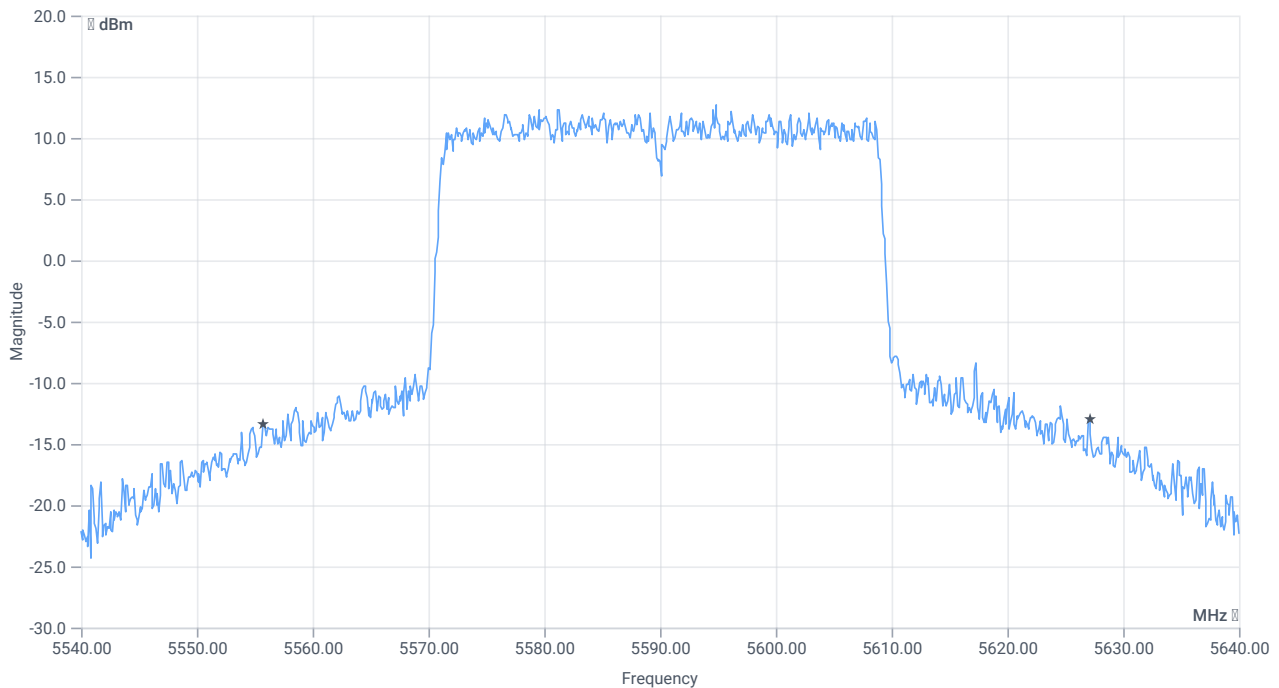




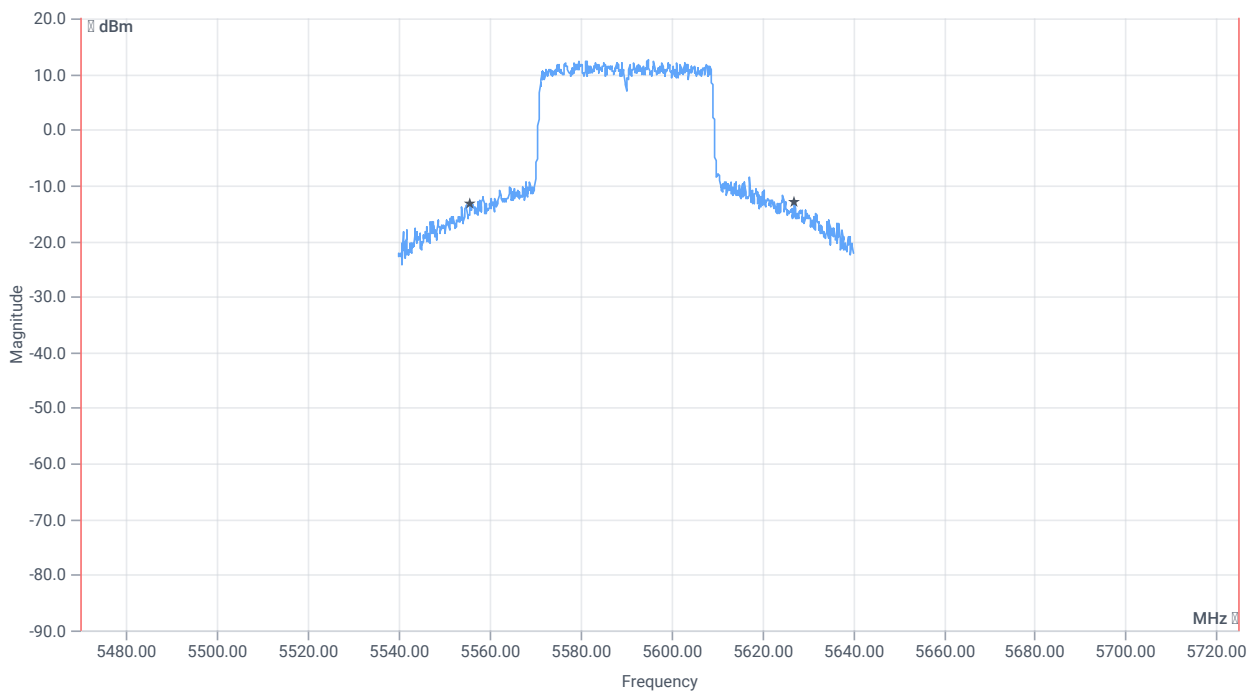
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	38.062	MHz	INFO
T1 99%	5470.000000	---	5571.0190	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5609.0809	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	71.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5555.7000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5627.1000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:50:40
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5590 MHz

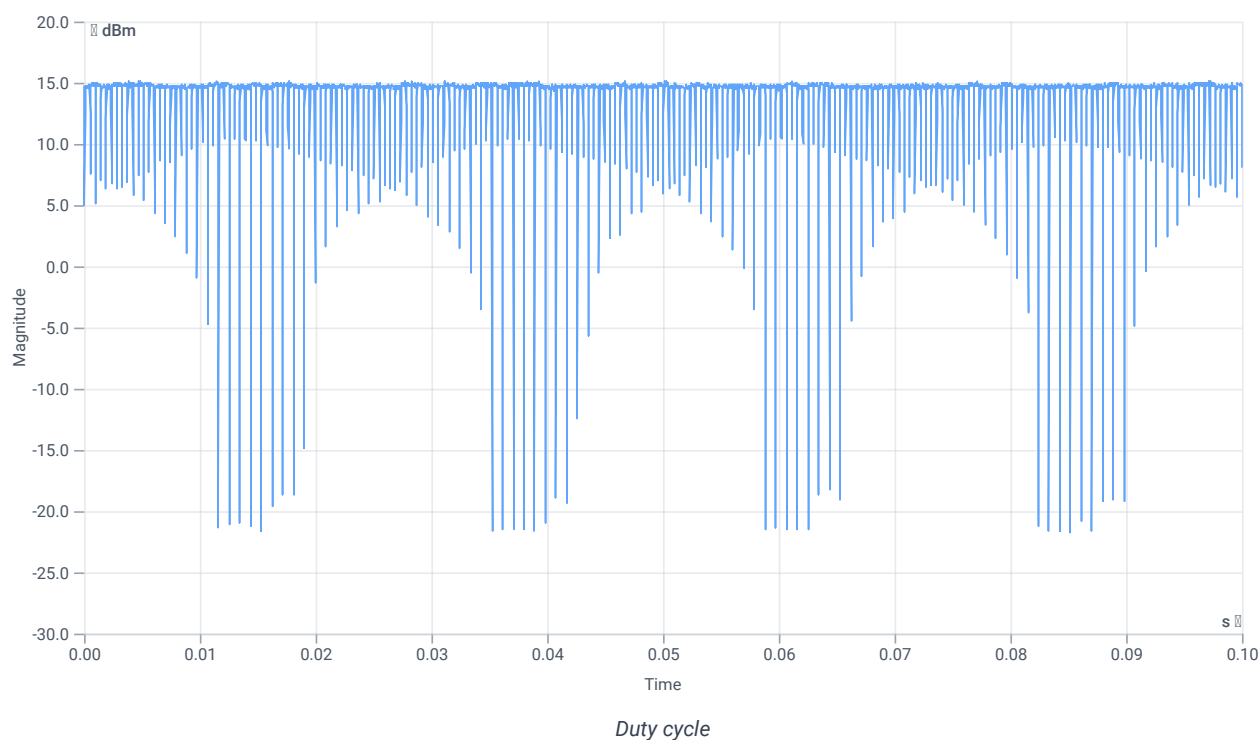
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.82	dBm	INFO
Ref. Frequency	---	---	5595.590	MHz	INFO

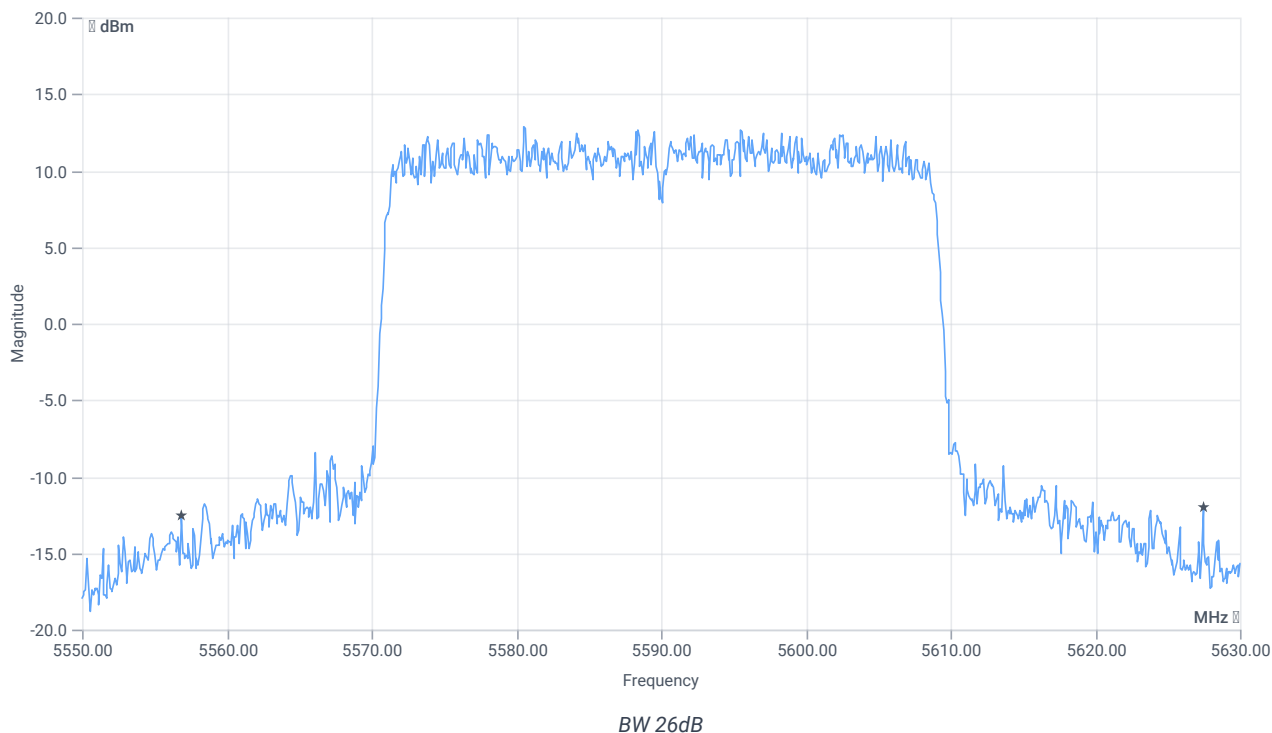
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:86					
Duty Cycle (Burst Ratio) max	---	---	0.985	---	INFO
Duty Cycle max	---	---	0.066	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.025	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



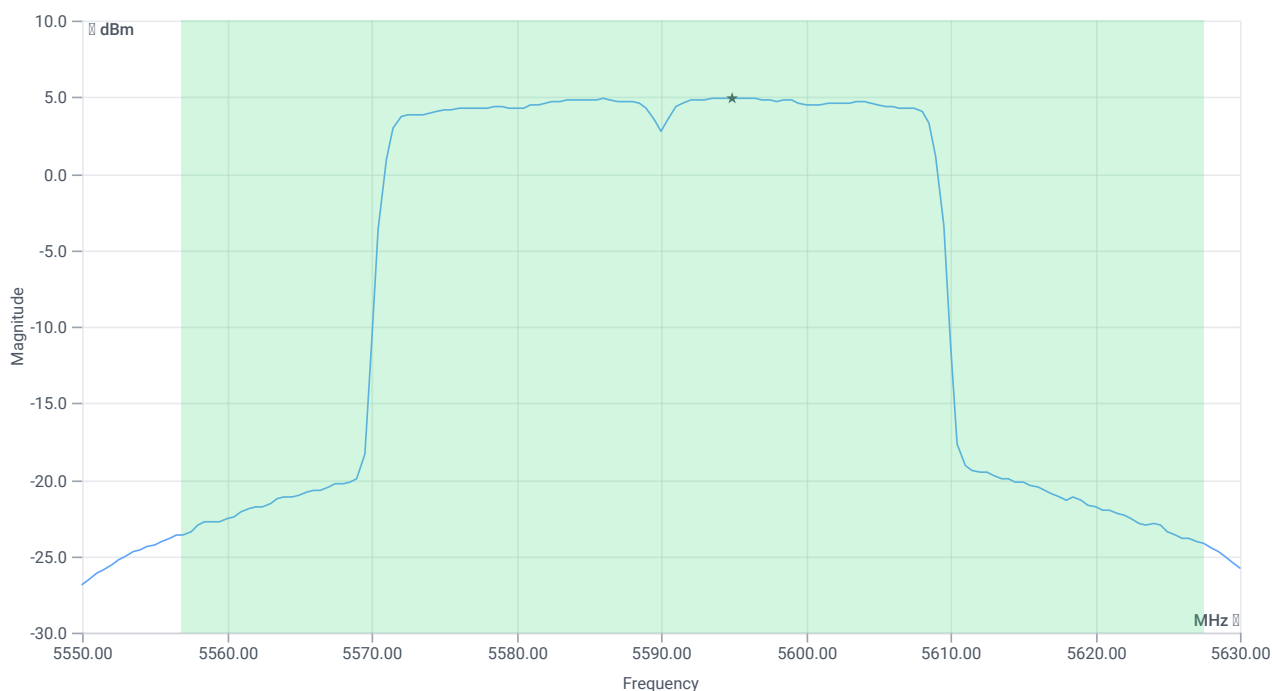
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	70.56	MHz	INFO
T1 26dB	---	---	5556.8800	MHz	INFO
T2 26dB	---	---	5627.4400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.82 16.82 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	---	---	19.98	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.35	dBm	PASS
Limit: 11 dBm + 10 log 70.56					
Max Output Power DC corrected	---	29.49	20.35	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.94	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	5.31	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:52:06
Ambit temp [°C] humidity [rel%]	21.8 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

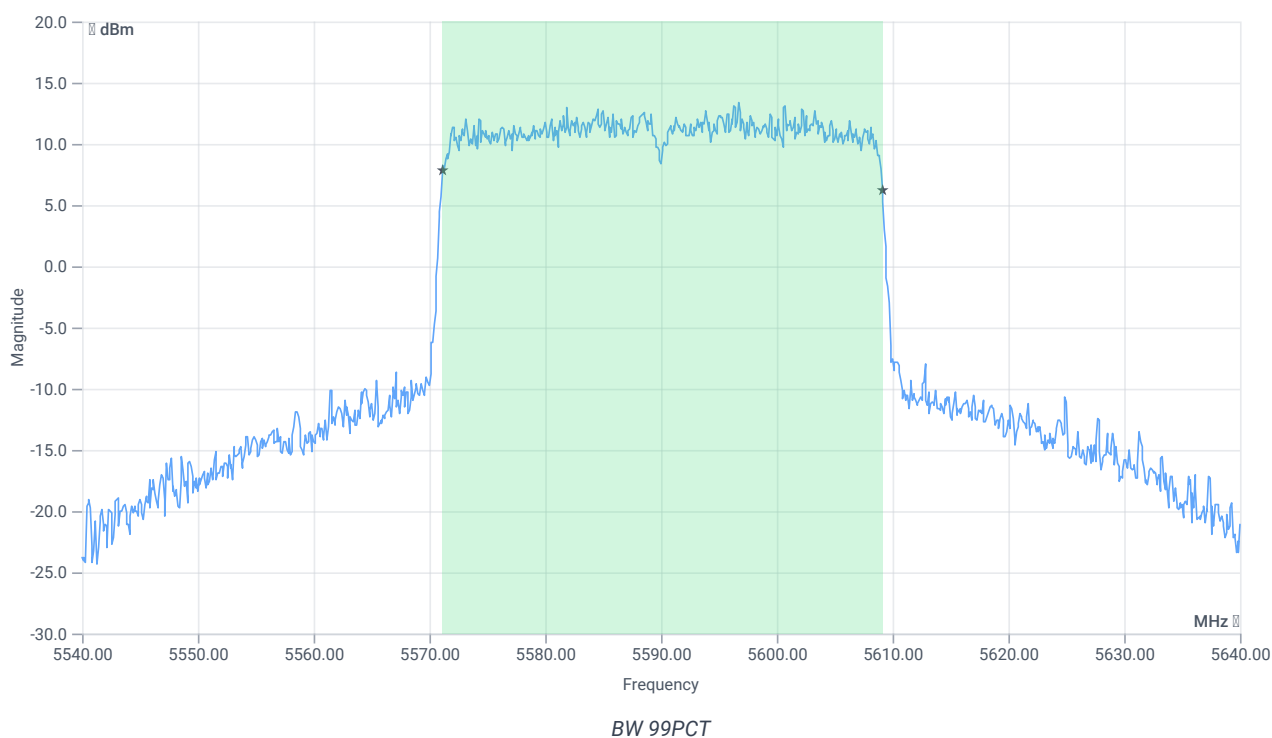
Test at TX 5590 MHz

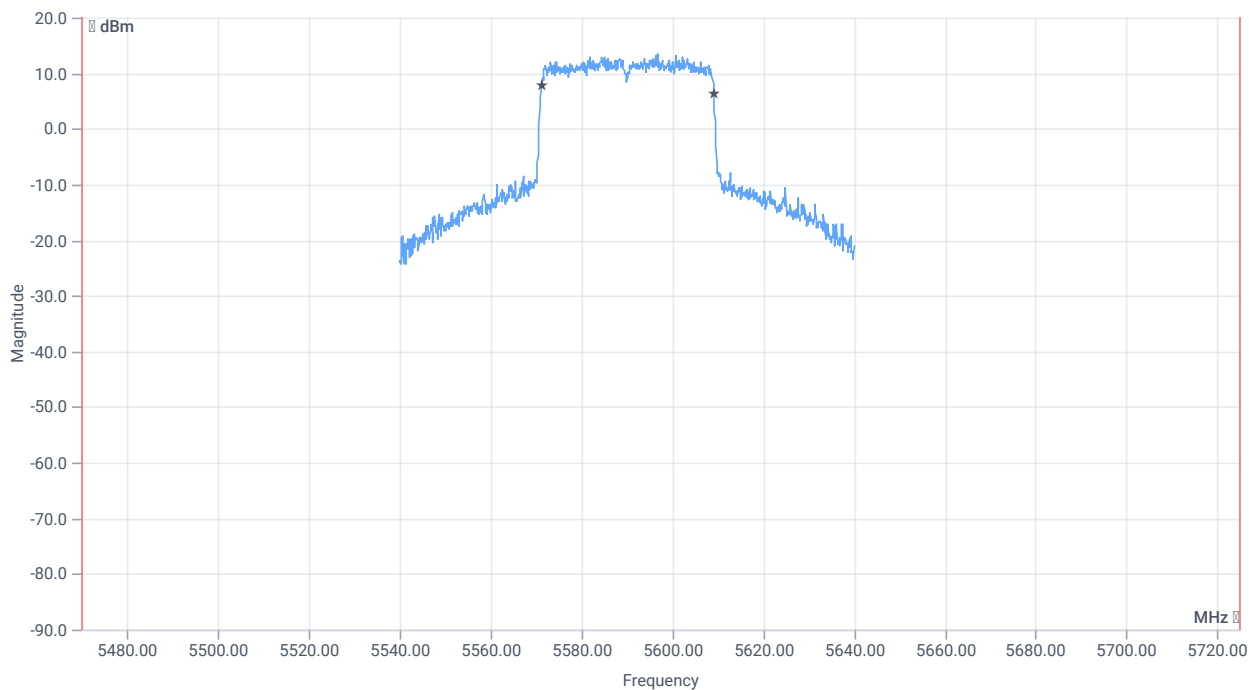
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.00	dBm	INFO
Ref. Frequency	---	---	5587.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.00 16.82 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

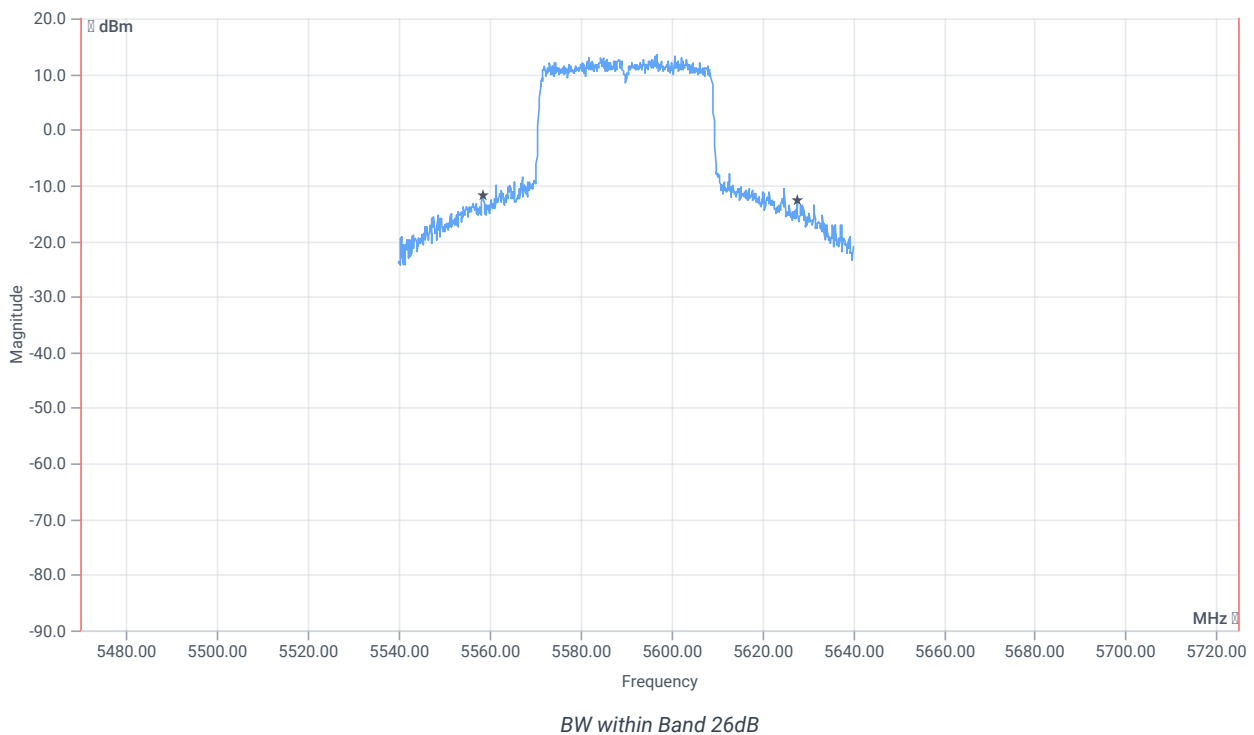
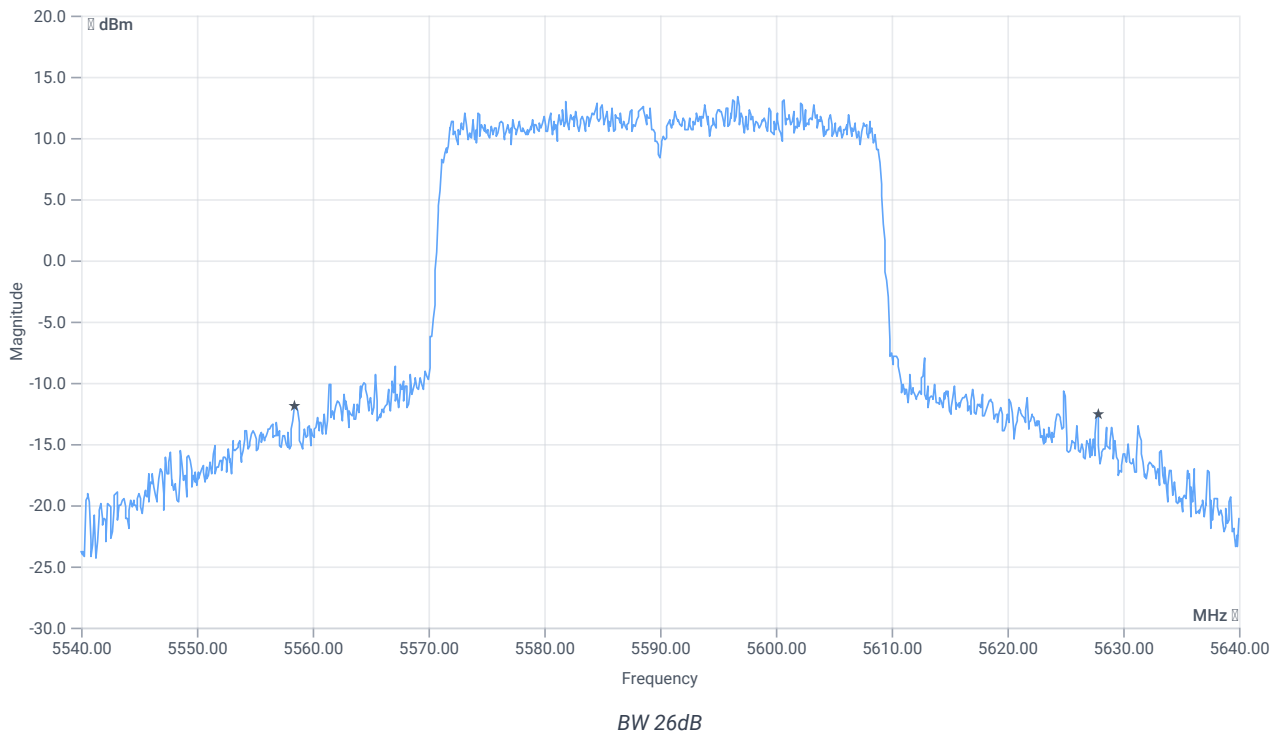




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5470.000000	---	5571.1189	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5609.0809	MHz	



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	69.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5558.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5627.8000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:52:38
Ambit temp [°C] humidity [rel%]	21.8 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	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	dBm	INFO
Ant:1 BW 26dB	---	---	66.640	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	20.35	dBm	INFO
Ant:2 BW 26dB	---	---	70.560	MHz	INFO
Σ Limit absolute	---	24	23.19	dBm	PASS
Σ Limit: 11 dBm + 10 log 66.64	---	29.24	23.19	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	4.84	dBm/1MHz	INFO
Ant:2 PSD	---	---	5.31	dBm/1MHz	INFO
Σ	---	11	8.09	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:55:15
Ambit temp [°C] humidity [rel%]	21.9 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5670 MHz

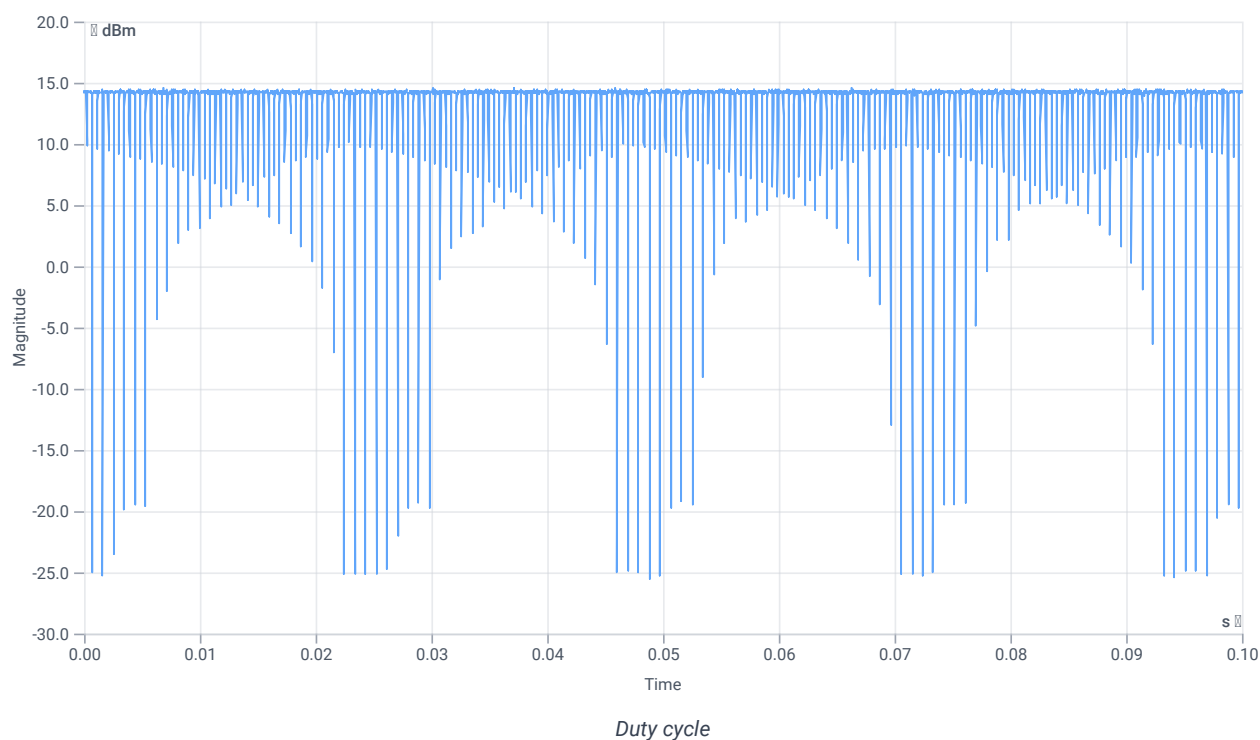
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.97	dBm	INFO
Ref. Frequency	---	---	5677.990	MHz	INFO

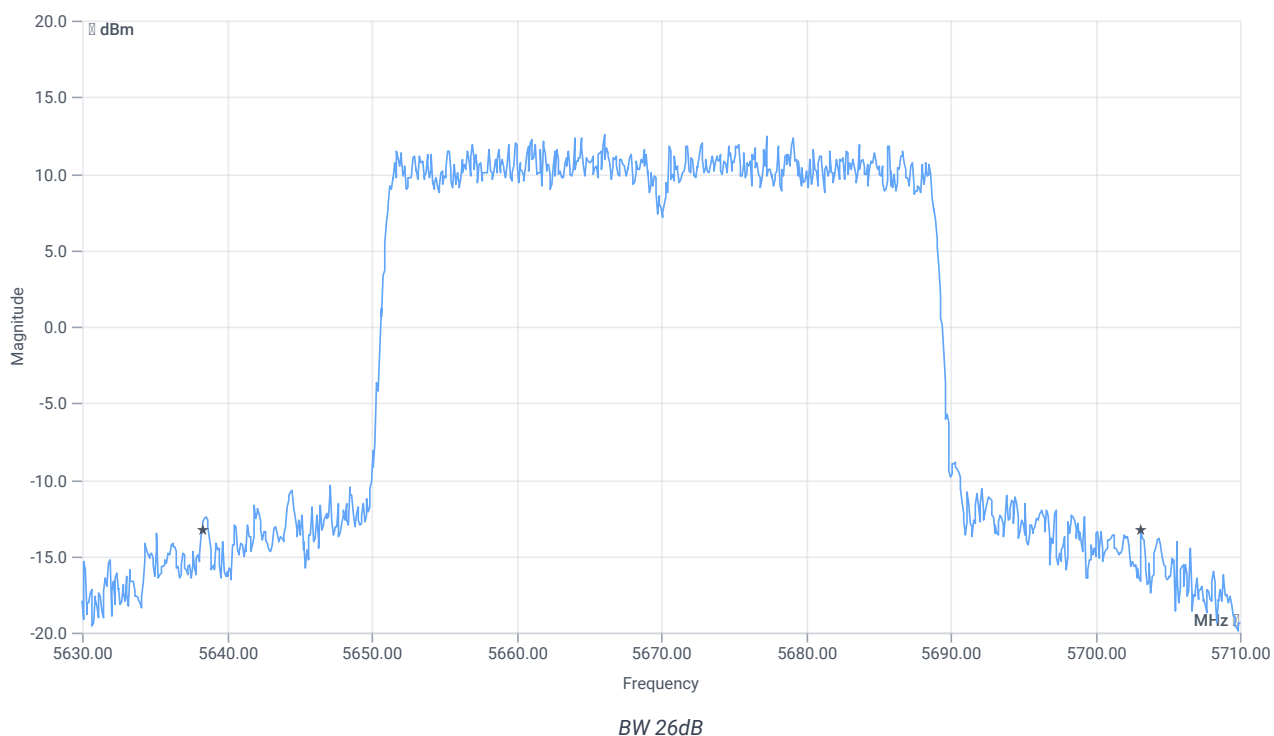
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:86					
Duty Cycle (Burst Ratio) max	---	---	0.989	---	INFO
Duty Cycle max	---	---	0.048	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	6.875	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



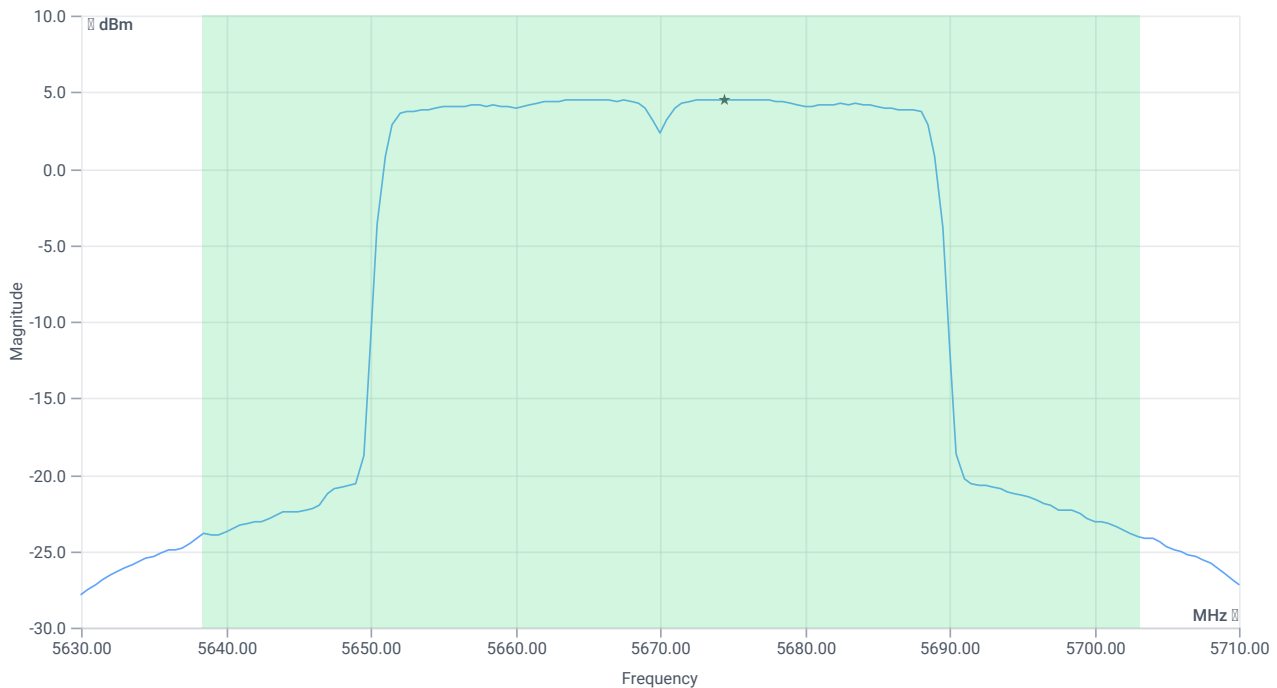
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	64.88	MHz	INFO
T1 26dB	---	---	5638.3200	MHz	INFO
T2 26dB	---	---	5703.2000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.97 16.78 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	---	---	19.65	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.02	dBm	PASS
Limit: 11 dBm + 10 log 64.88					
Max Output Power DC corrected	---	29.12	20.02	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.53	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	4.9	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:56:42
Ambit temp [°C] humidity [rel%]	21.9 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

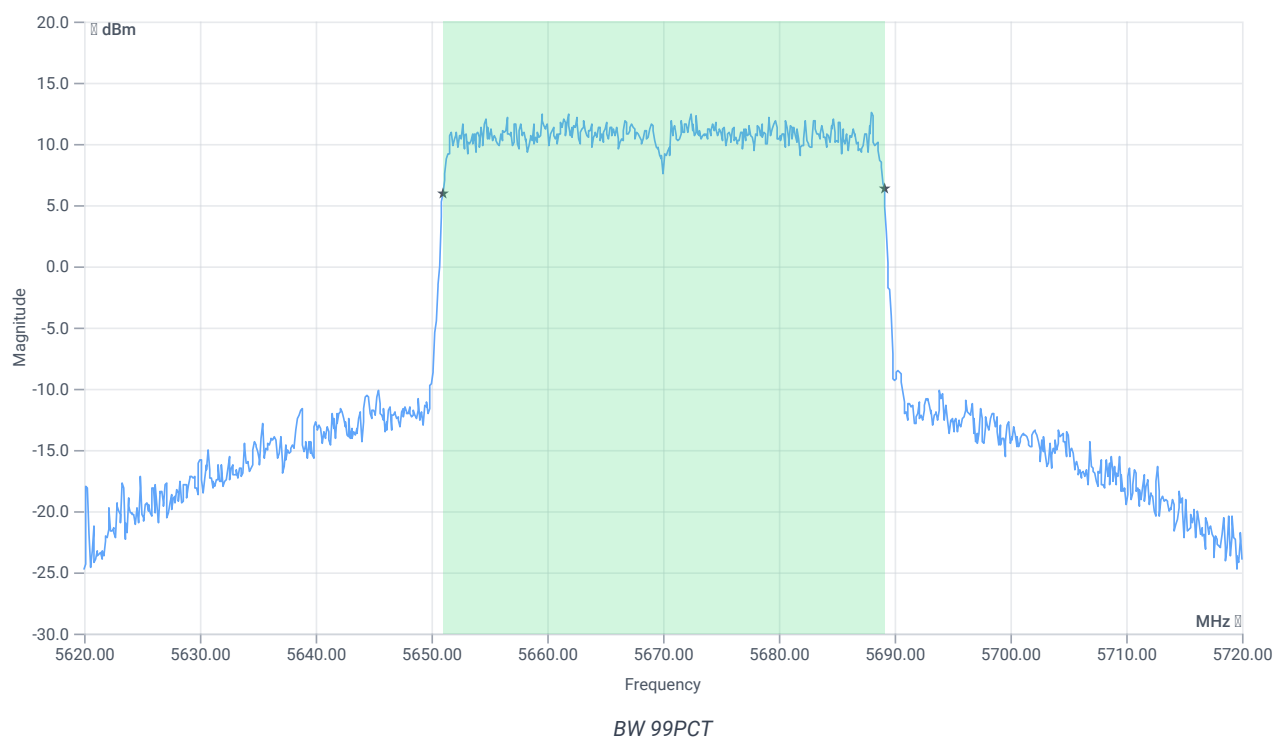
Test at TX 5670 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.31	dBm	INFO
Ref. Frequency	---	---	5675.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.31 16.78 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

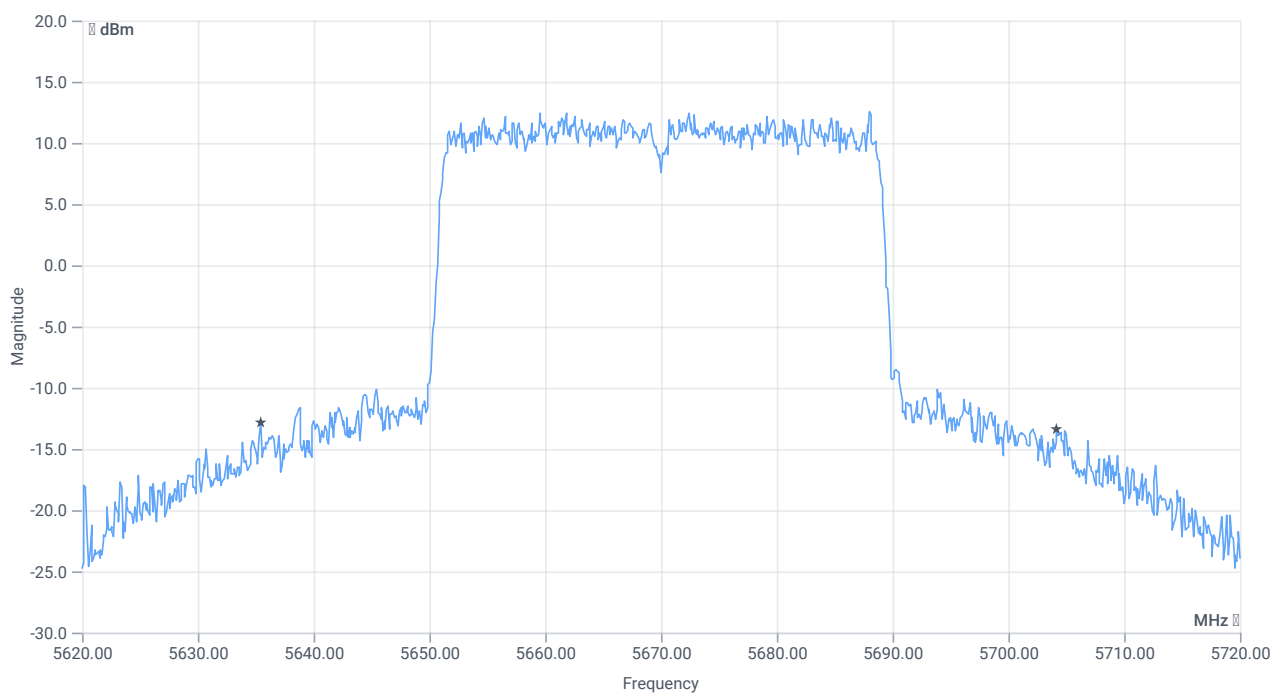




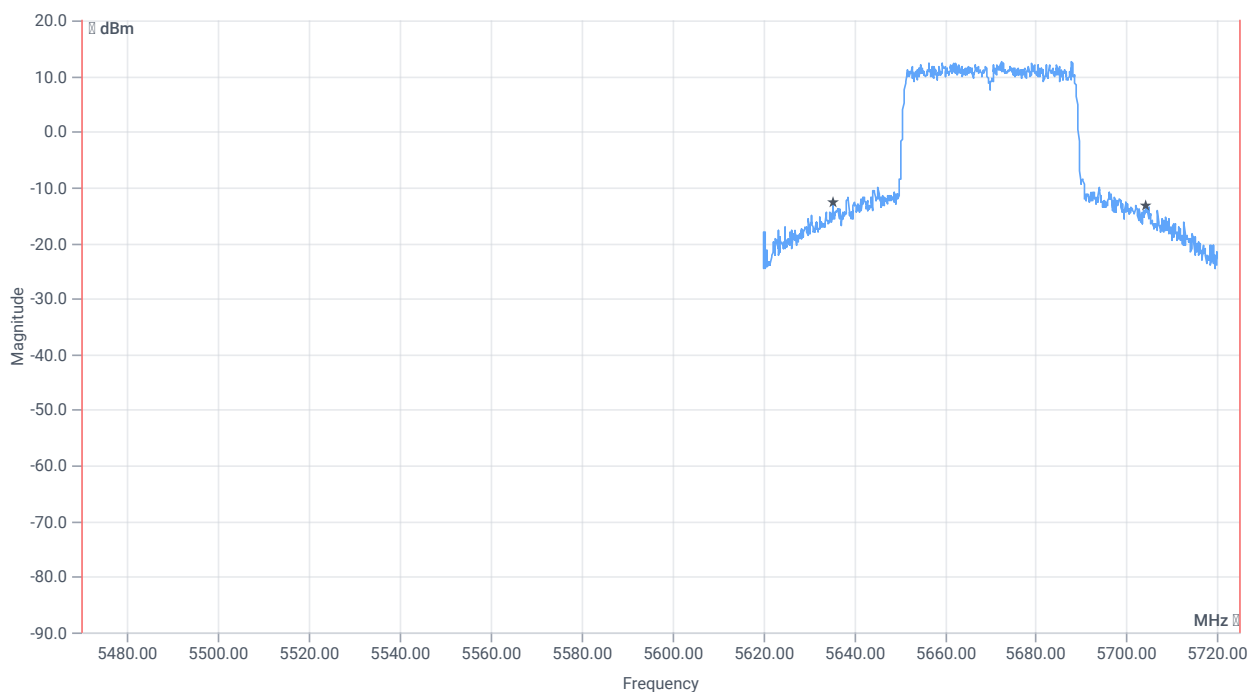
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	38.062	MHz	INFO
T1 99%	5470.000000	---	5651.0190	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5689.0809	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	68.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5635.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5704.2000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:57:12
Ambit temp [°C] humidity [rel%]	21.9 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5670 MHz

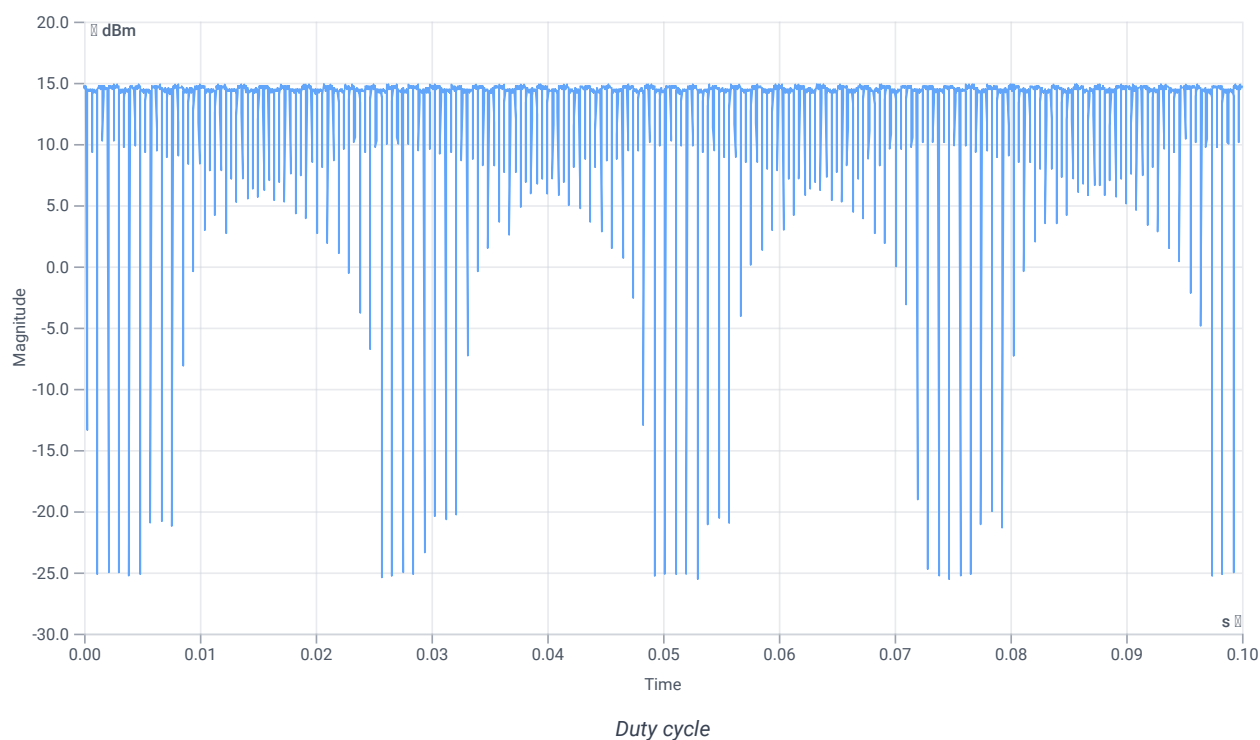
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.16	dBm	INFO
Ref. Frequency	---	---	5686.380	MHz	INFO

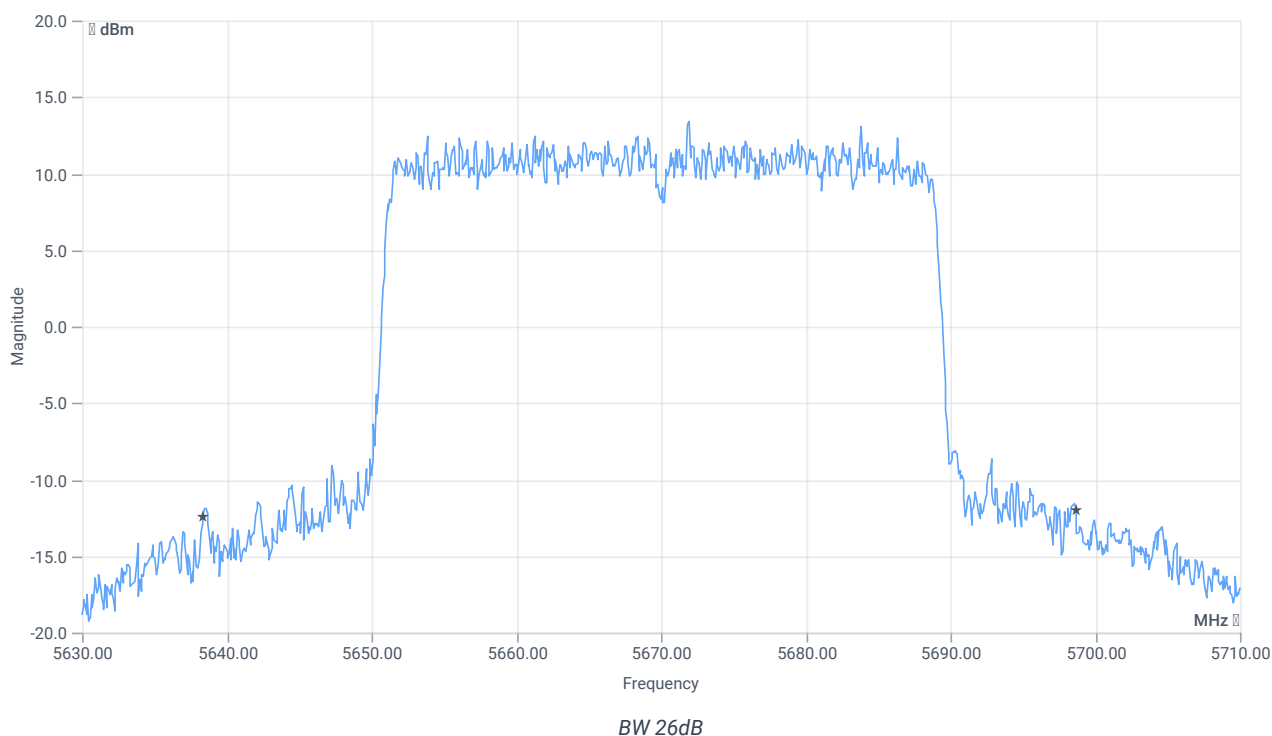
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:87					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



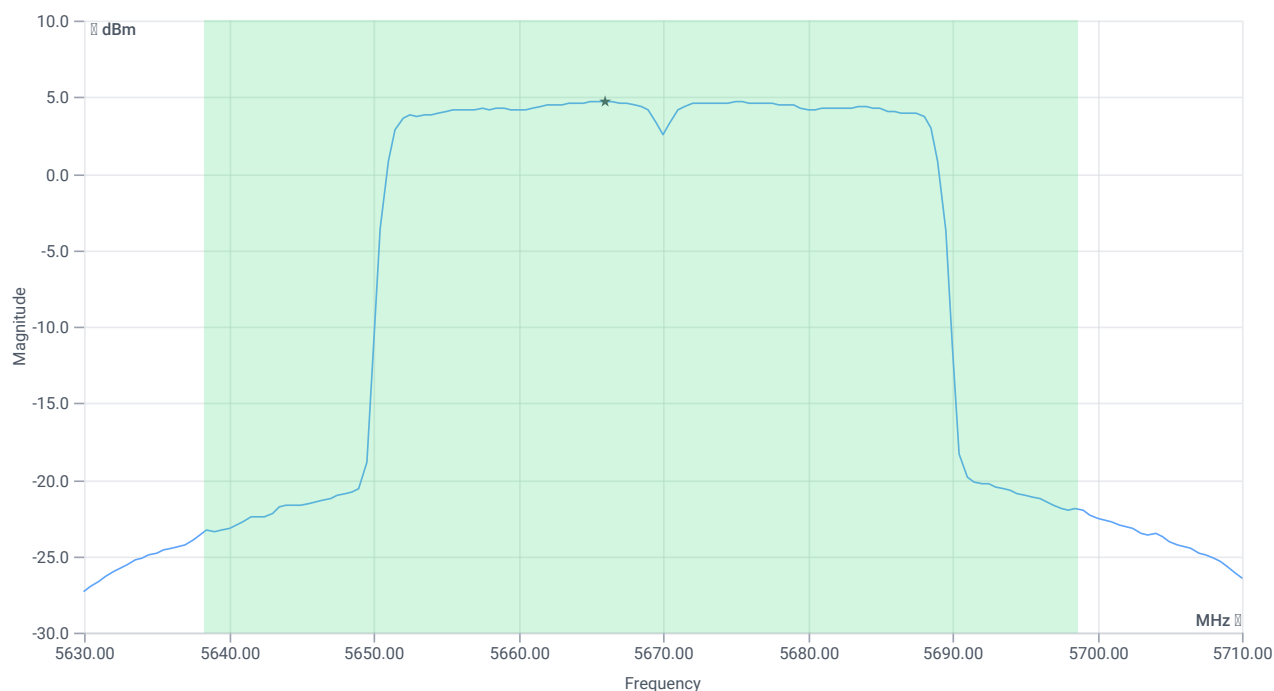
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	60.24	MHz	INFO
T1 26dB	---	---	5638.4000	MHz	INFO
T2 26dB	---	---	5698.6400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.16 16.78 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	---	---	19.77	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.14	dBm	PASS
Limit: 11 dBm + 10 log 60.24					
Max Output Power DC corrected	---	28.8	20.14	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	4.72	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	11	5.09	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:58:40
Ambit temp [°C] humidity [rel%]	21.9 28
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5670 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.59	dBm	INFO
Ref. Frequency	---	---	5679.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.59 16.78 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

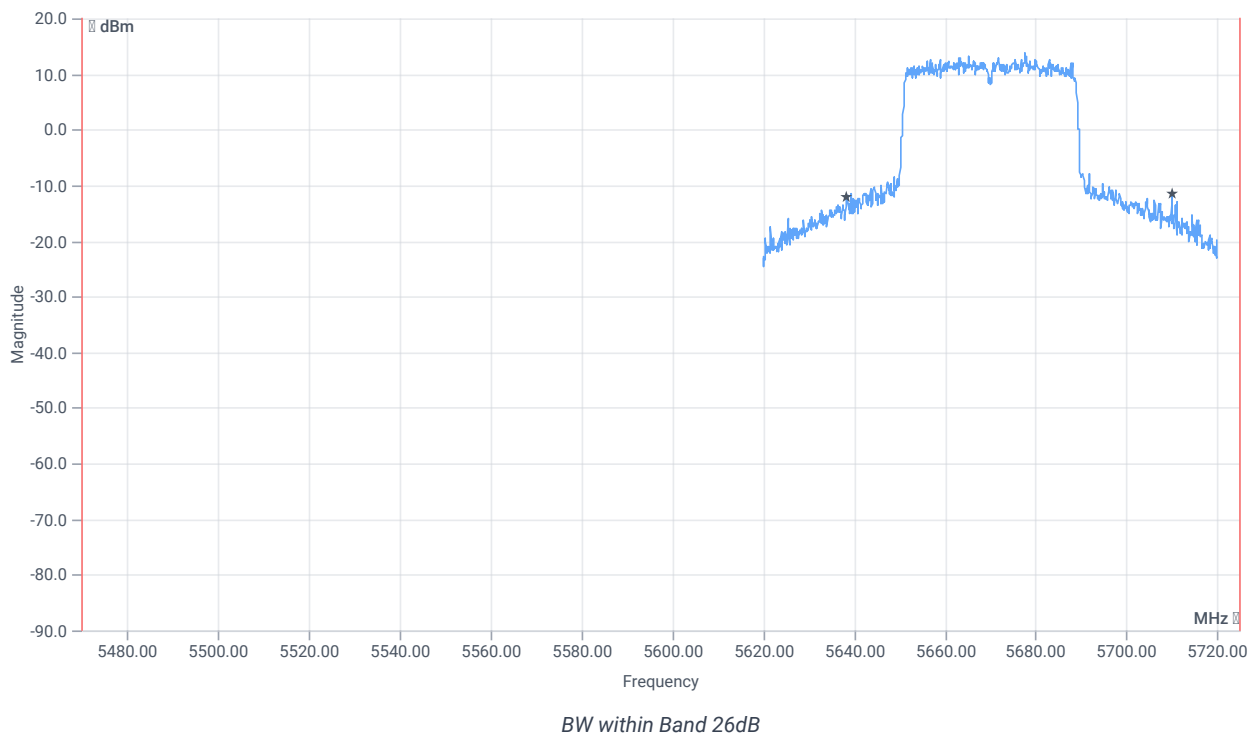
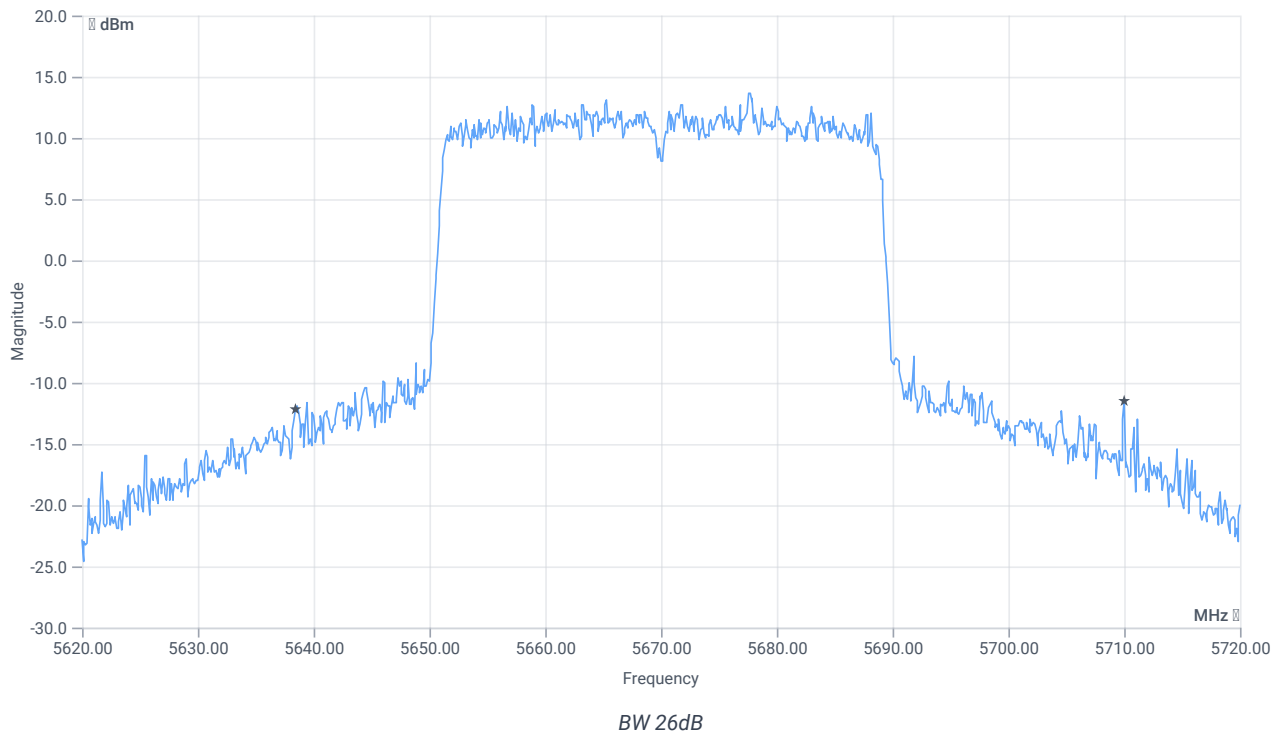




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5470.000000	---	5651.1189	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5689.0809	MHz	



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	71.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	---	5638.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5710.0000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

TC start	19.01.2024 10:59:10
Ambit temp [°C] humidity [rel%]	22.0 28
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5670 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 Max Output Power DC corrected	---	---	20.14	dBm	INFO
Ant:2 BW 26dB	---	---	60.240	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	20.02	dBm	INFO
Ant:1 BW 26dB	---	---	64.880	MHz	INFO
Σ Limit absolute	---	24	23.09	dBm	PASS
Σ Limit: 11 dBm + 10 log 60.24	---	28.8	23.09	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:2 PSD	---	---	5.09	dBm/1MHz	INFO
Ant:1 PSD	---	---	4.9	dBm/1MHz	INFO
Σ	---	11	8.01	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:03:35
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5755 MHz

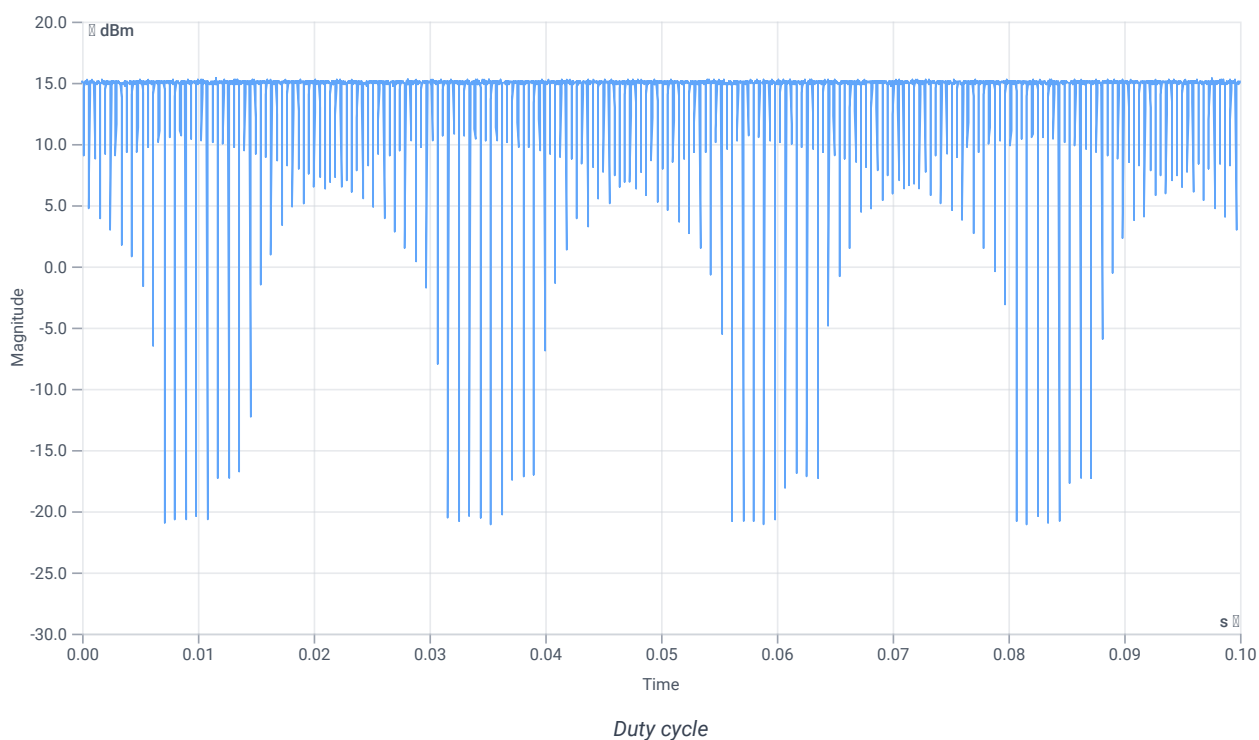
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.05	dBm	INFO
Ref. Frequency	---	---	5746.010	MHz	INFO

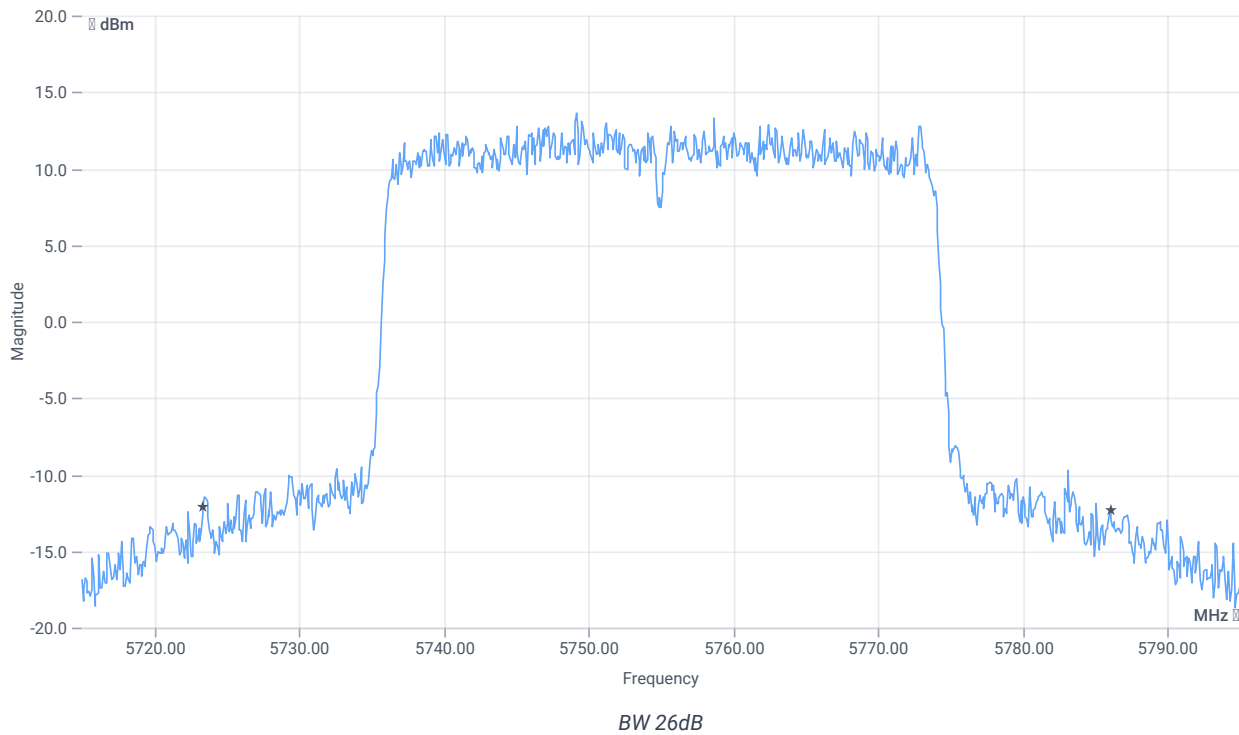
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:87					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



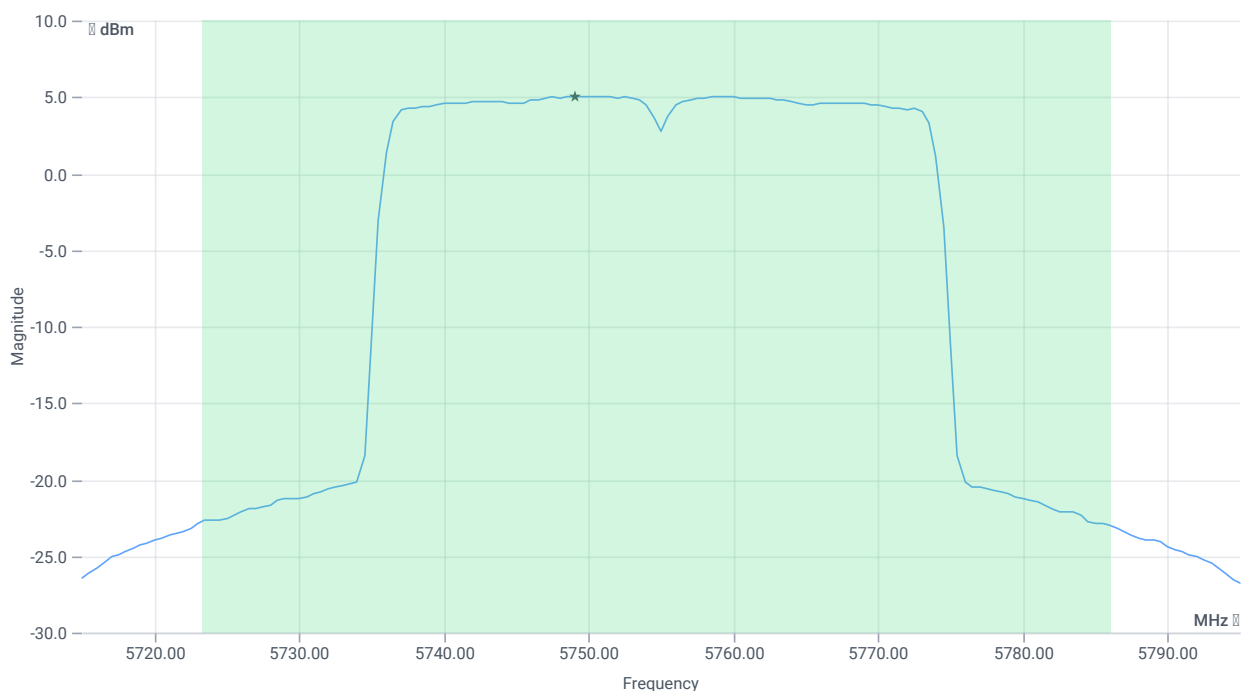
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	62.64	MHz	INFO
T1 26dB	---	---	5723.4000	MHz	INFO
T2 26dB	---	---	5786.0400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.05 16.87 25
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

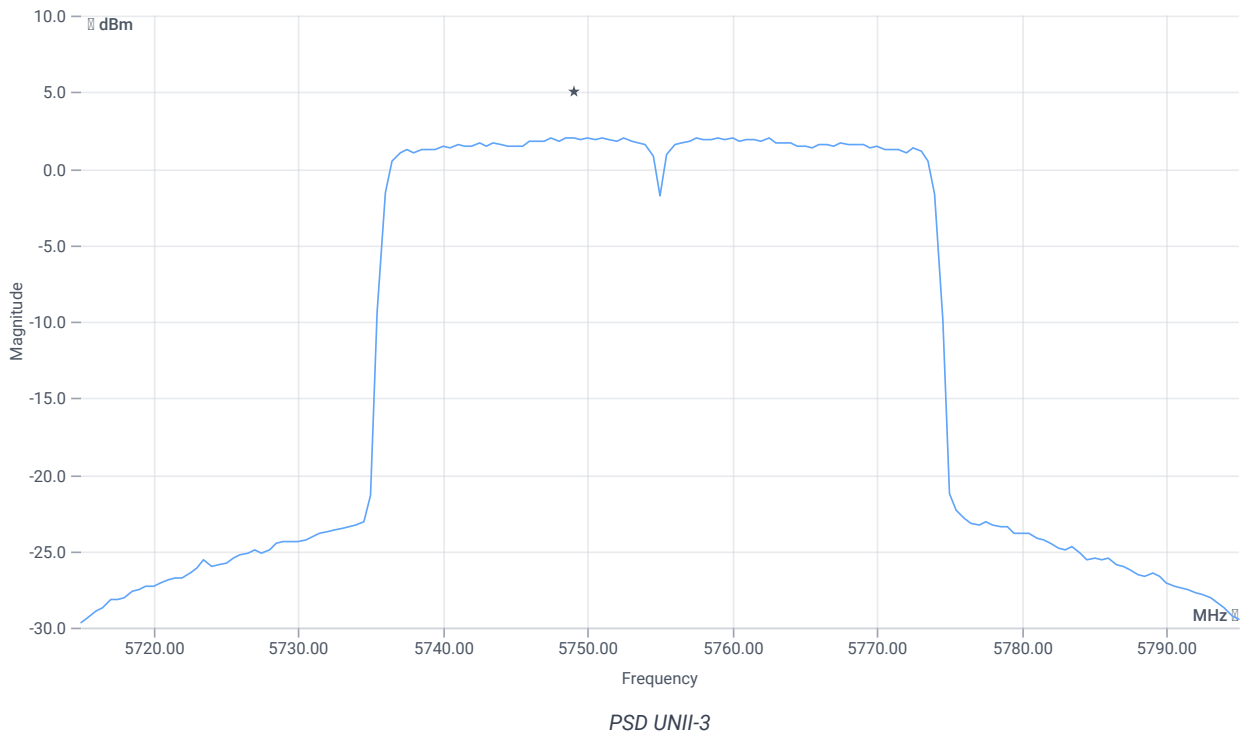
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	20.14	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	20.51	dBm	PASS
Limit: 11 dBm + 10 log 62.64					
Max Output Power DC corrected	---	28.97	20.51	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.05 16.87 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	2.02	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	30	2.39	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:06:01
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

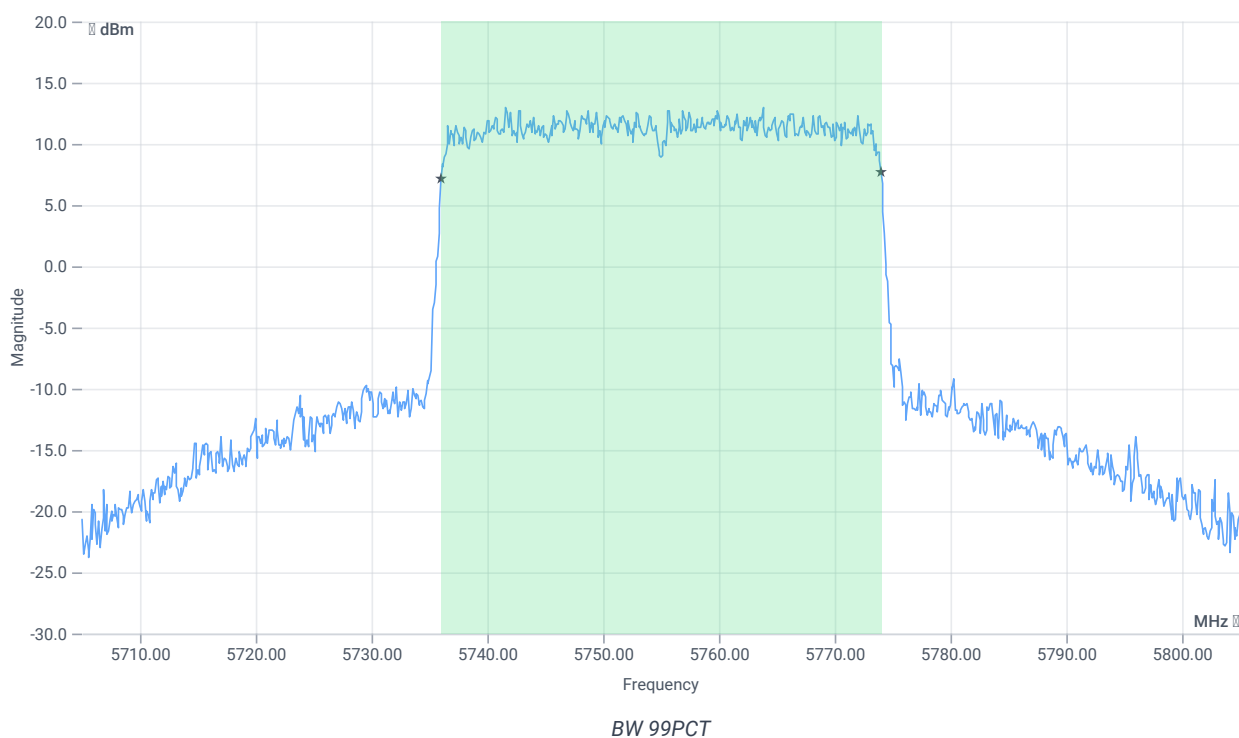
Test at TX 5755 MHz

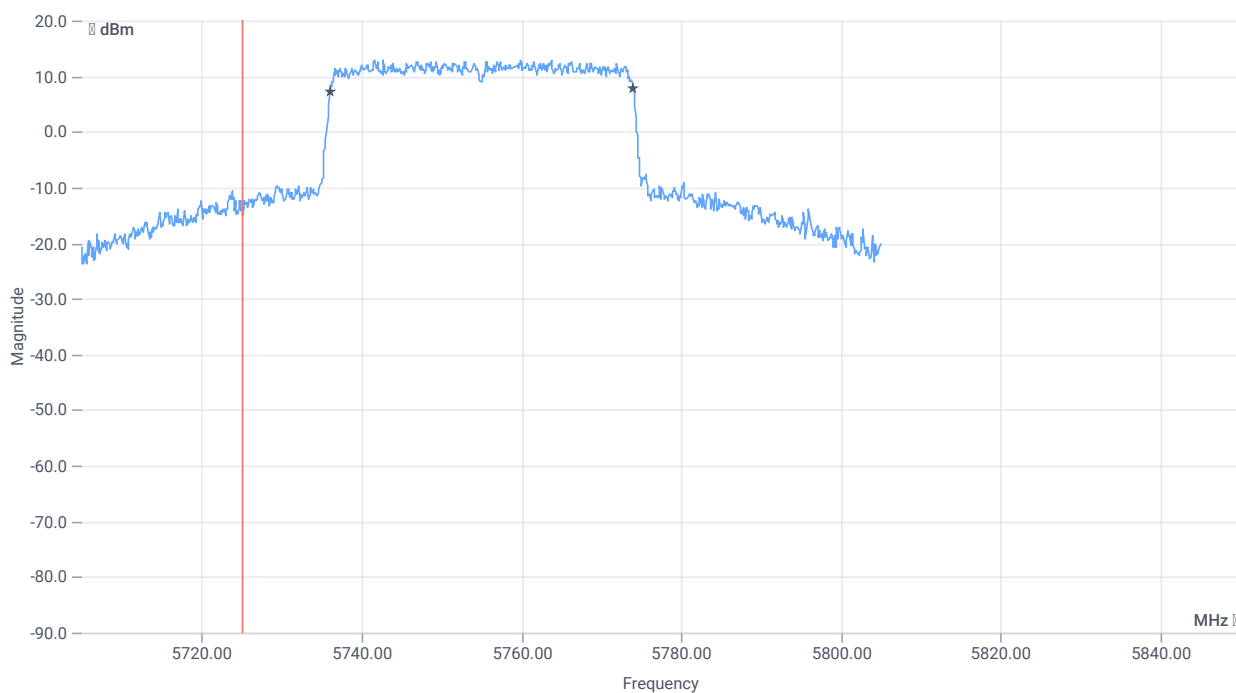
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.05	dBm	INFO
Ref. Frequency	---	---	5764.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.05 16.87 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

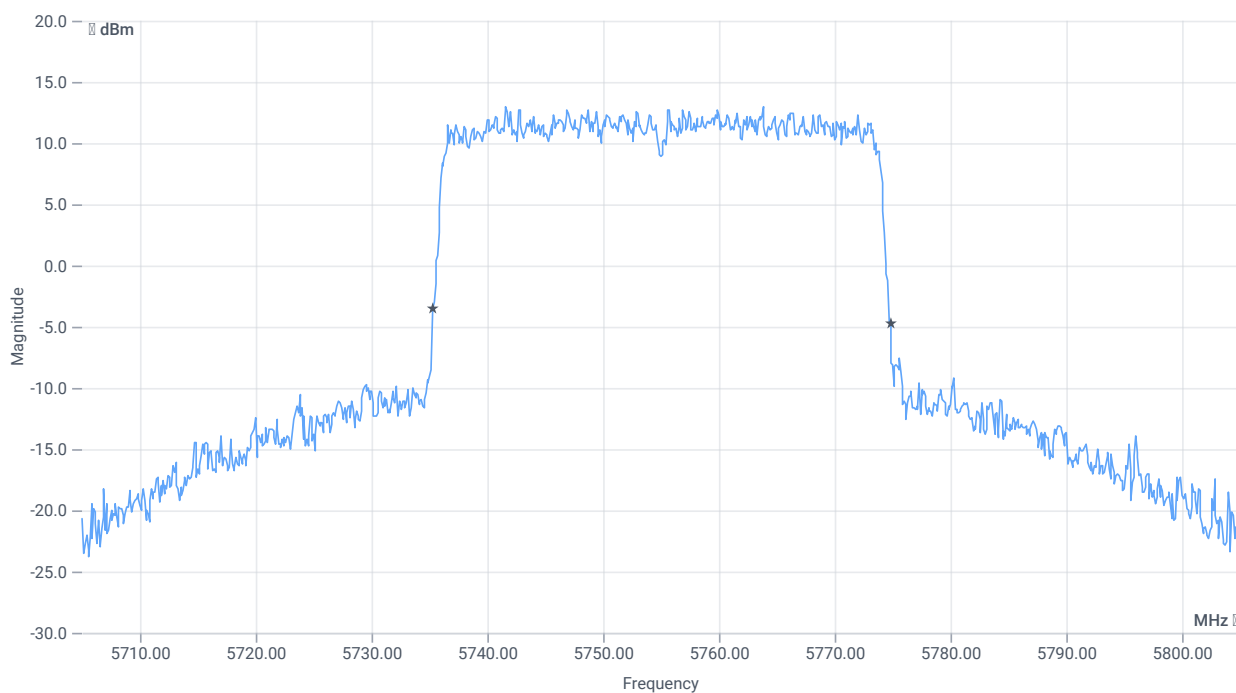




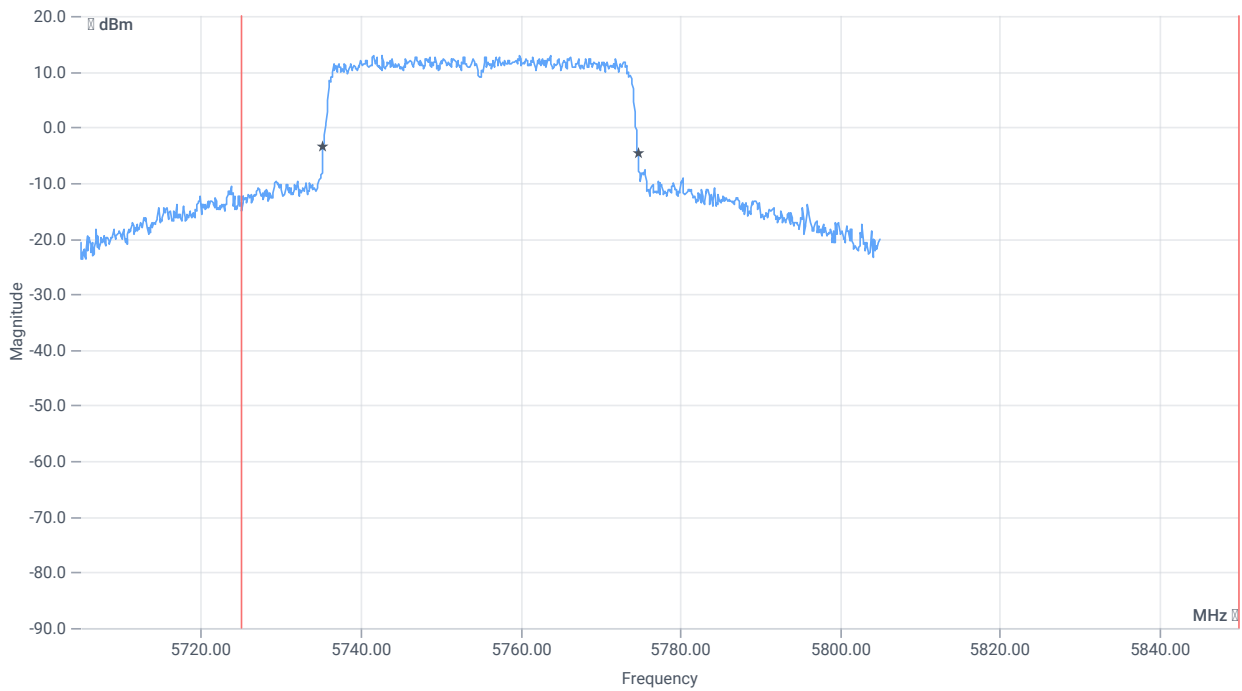
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5725.000000	---	5736.0190	MHz	PASS
T2 99%	---	5850.000000	5773.9810	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	39.5	MHz	INFO
T1 20dB	5725.000000	---	5735.3000	MHz	PASS
T2 20dB	---	5850.000000	5774.8000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:06:31
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

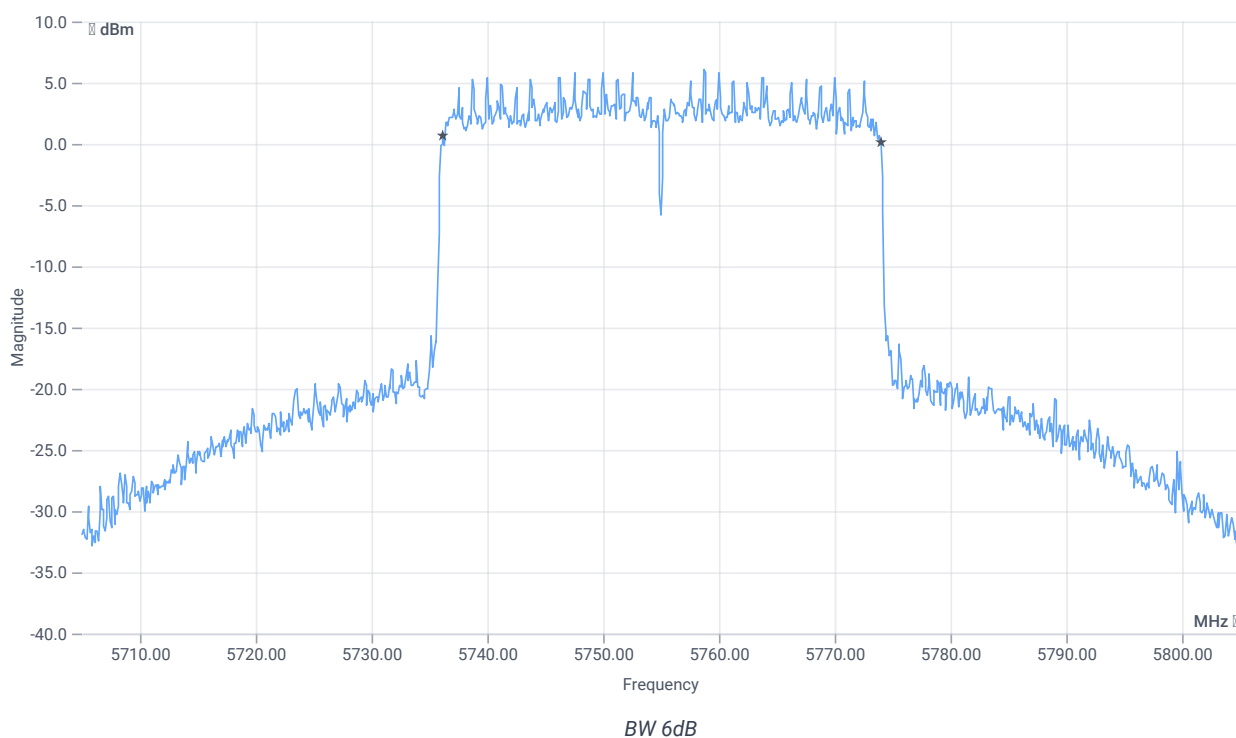
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.06	dBm	INFO
Ref. Frequency	---	---	5760.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.06 16.87 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	---	37.8	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:06:55
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5755 MHz

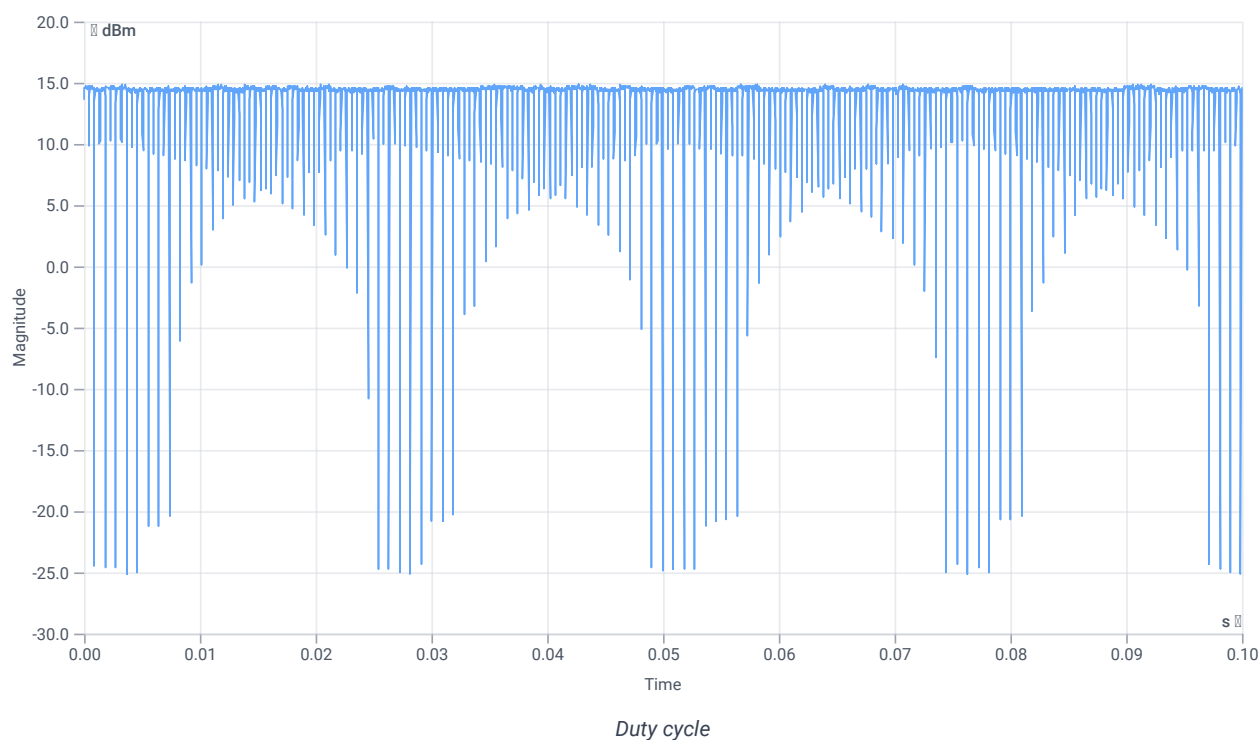
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.70	dBm	INFO
Ref. Frequency	---	---	5741.810	MHz	INFO

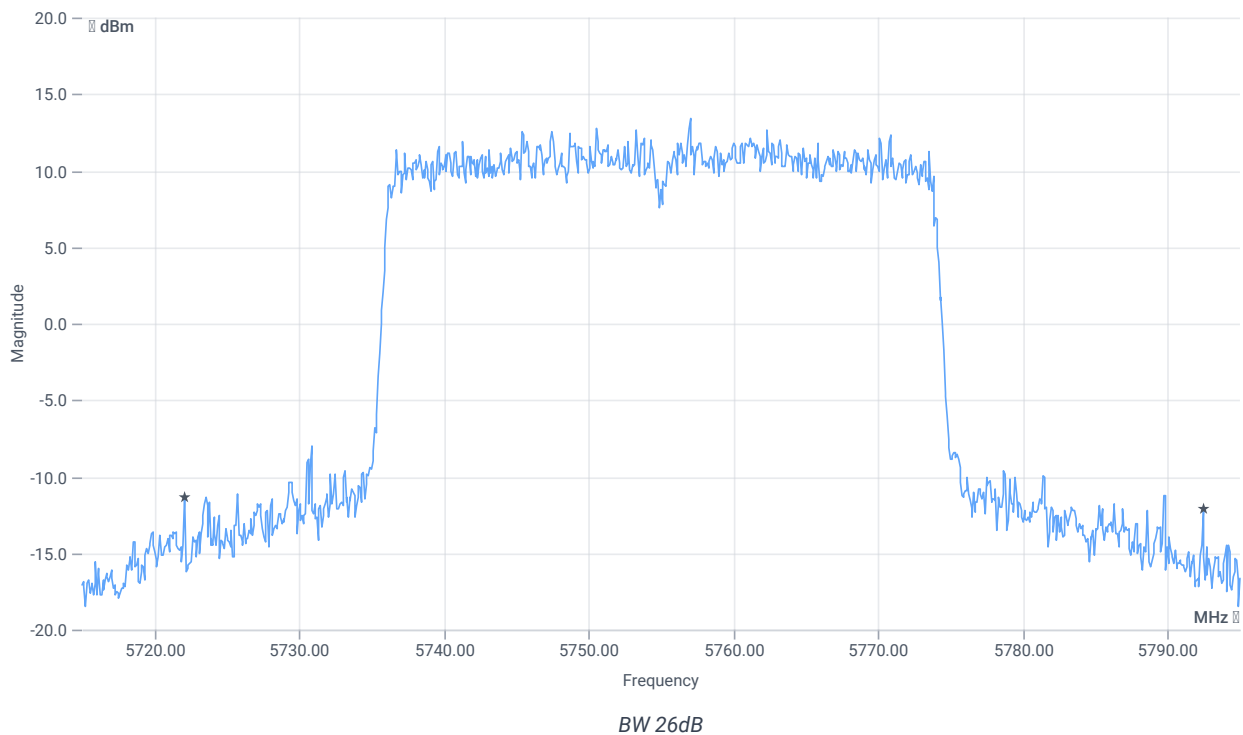
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:89					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



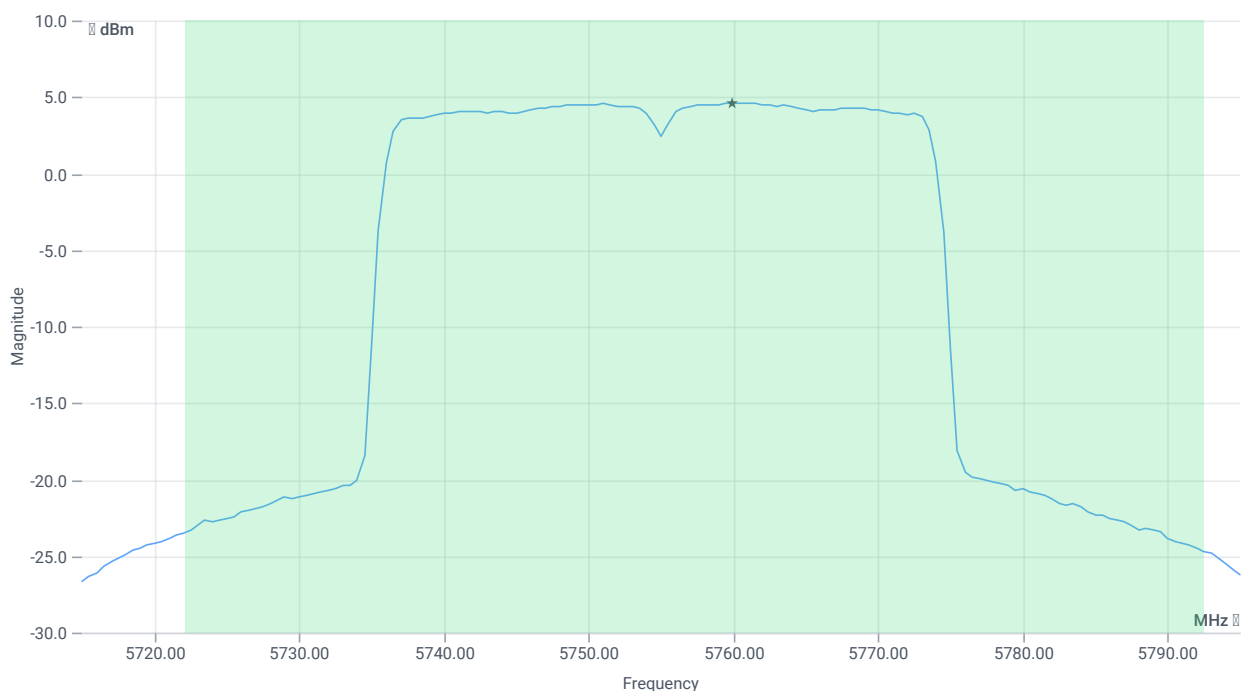
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	70.4	MHz	INFO
T1 26dB	---	---	5722.0400	MHz	INFO
T2 26dB	---	---	5792.4400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.70 16.87 25
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

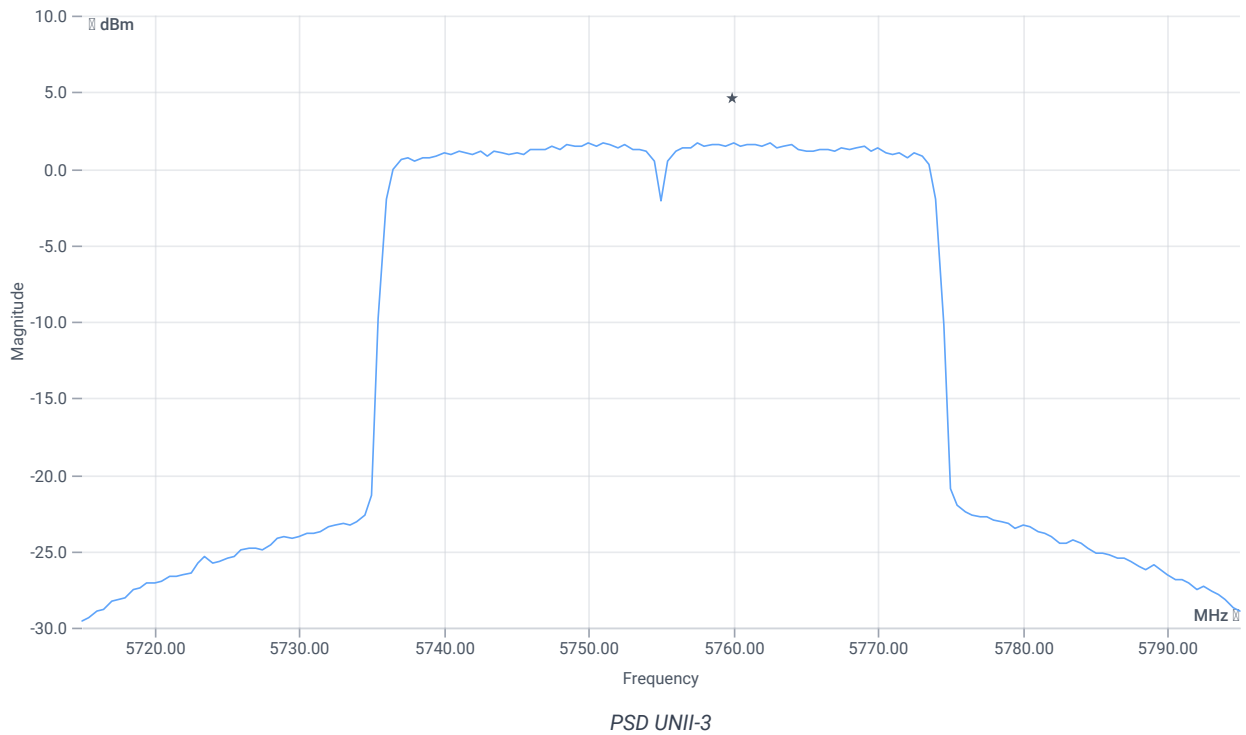
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	19.65	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	20.02	dBm	PASS
Limit: 11 dBm + 10 log 70.4					
Max Output Power DC corrected	---	29.48	20.02	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.70 16.87 25
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	1.71	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	30	2.08	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:09:20
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

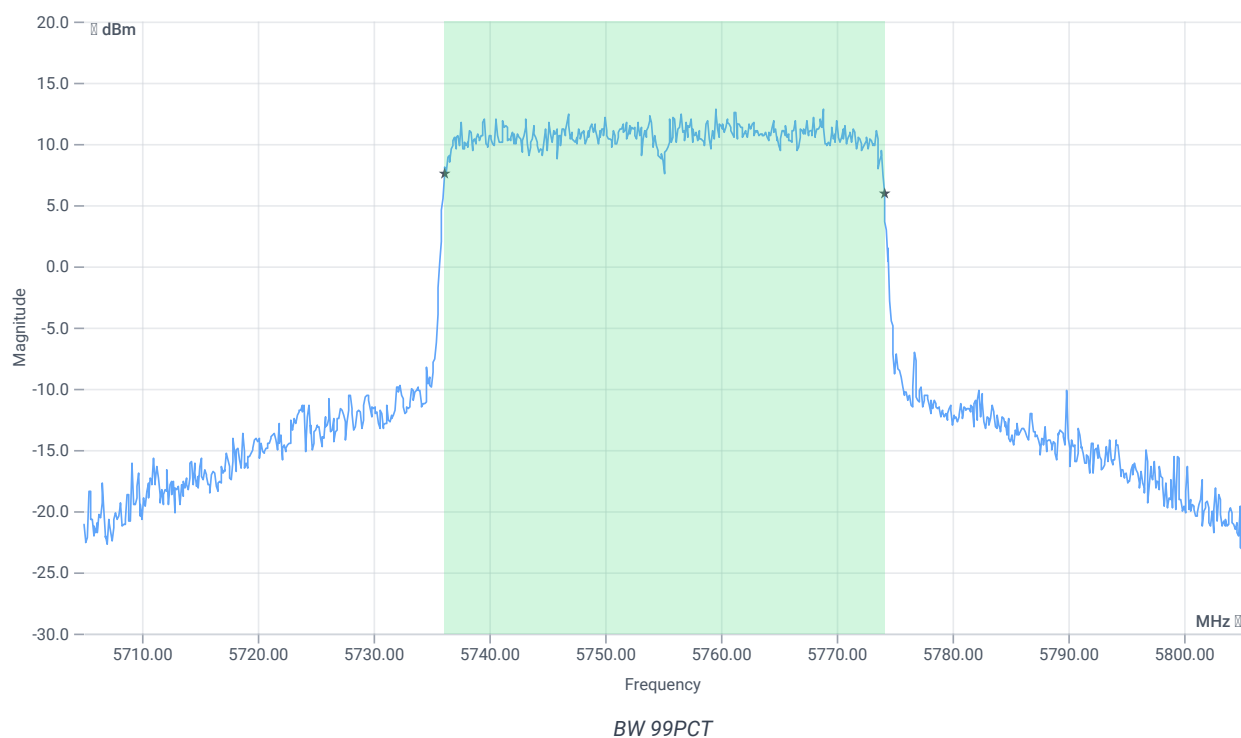
Test at TX 5755 MHz

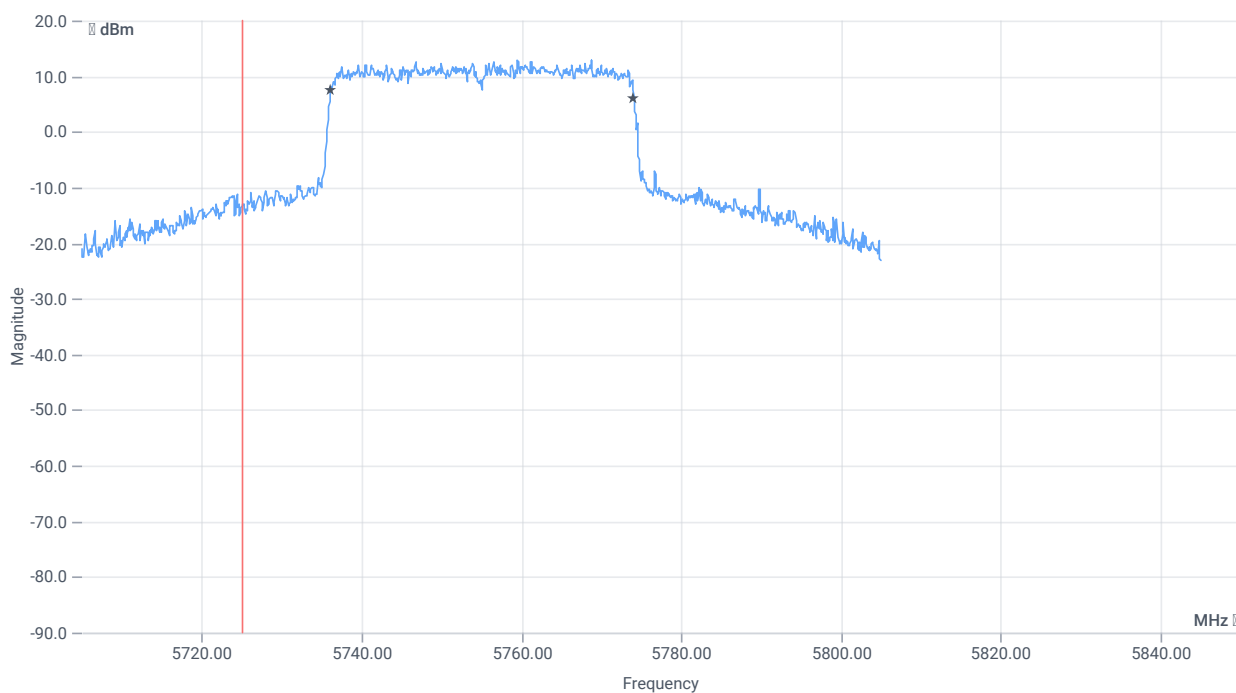
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.68	dBm	INFO
Ref. Frequency	---	---	5749.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.68 16.87 20
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

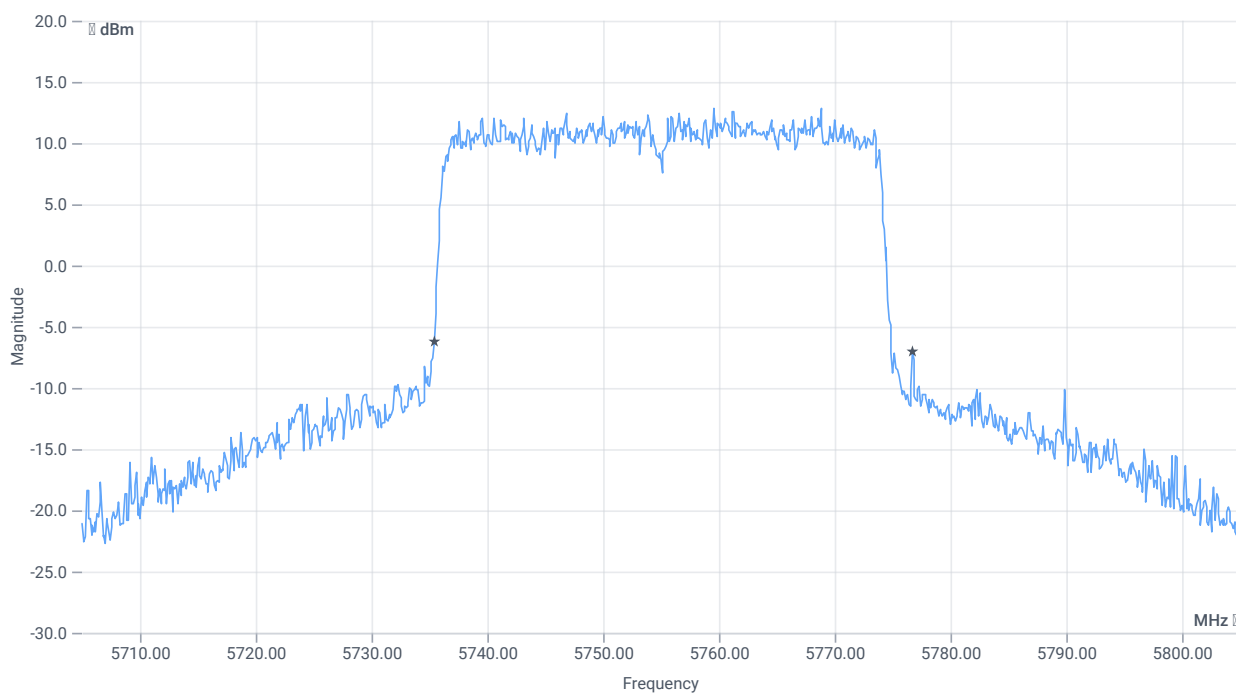




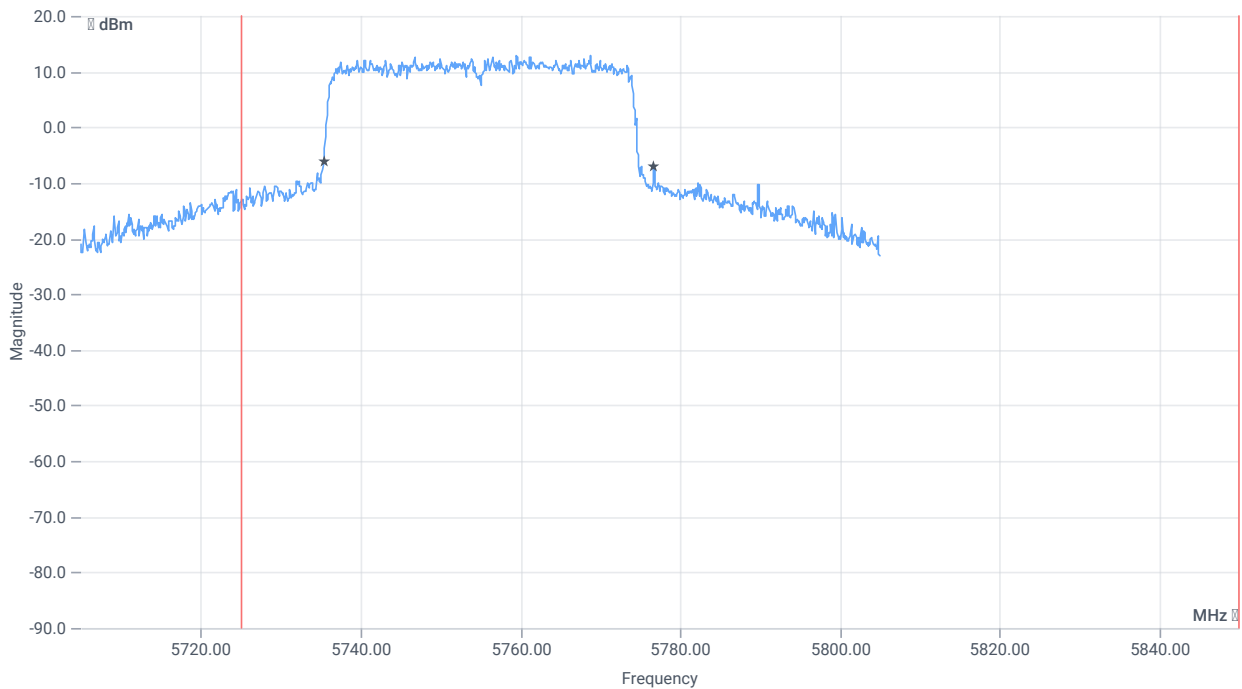
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5725.000000	---	5736.1189	MHz	PASS
T2 99%	---	5850.000000	5774.0809	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	41.3	MHz	INFO
T1 20dB	5725.000000	---	5735.4000	MHz	PASS
T2 20dB	---	5850.000000	5776.7000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:09:51
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

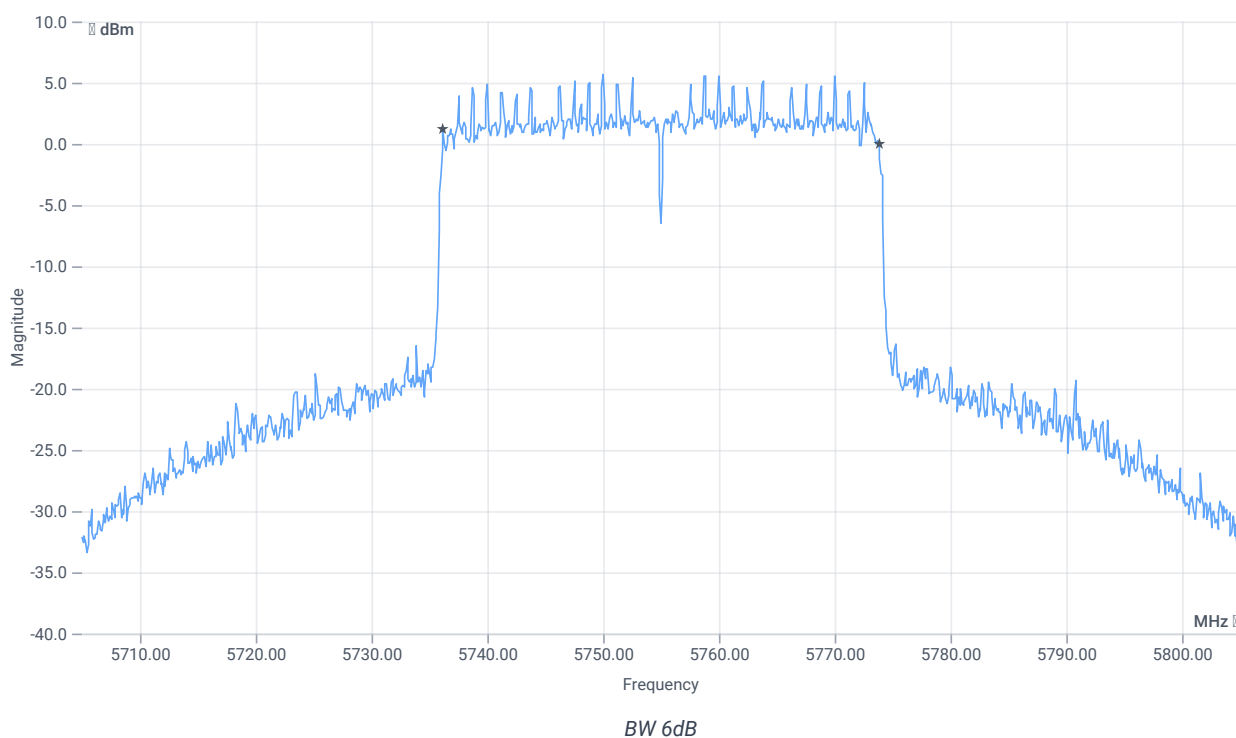
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	15.74	dBm	INFO
Ref. Frequency	---	---	5760.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.74 16.87 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	---	37.6	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:10:16
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5755 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	20.51	dBm	INFO
Ant:1 BW 26dB	---	---	62.640	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	20.02	dBm	INFO
Ant:2 BW 26dB	---	---	70.400	MHz	INFO
Σ Limit absolute	---	30	23.28	dBm	PASS
Σ Limit: 11 dBm + 10 log 62.64	---	28.97	23.28	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	2.39	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	2.08	dBm/0.5MHz	INFO
Σ	---	30	5.25	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 14:14:24
Ambit temp [°C] humidity [rel%]	22.7 24
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	3.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5755 MHz

RESULT: Reference Power cond.

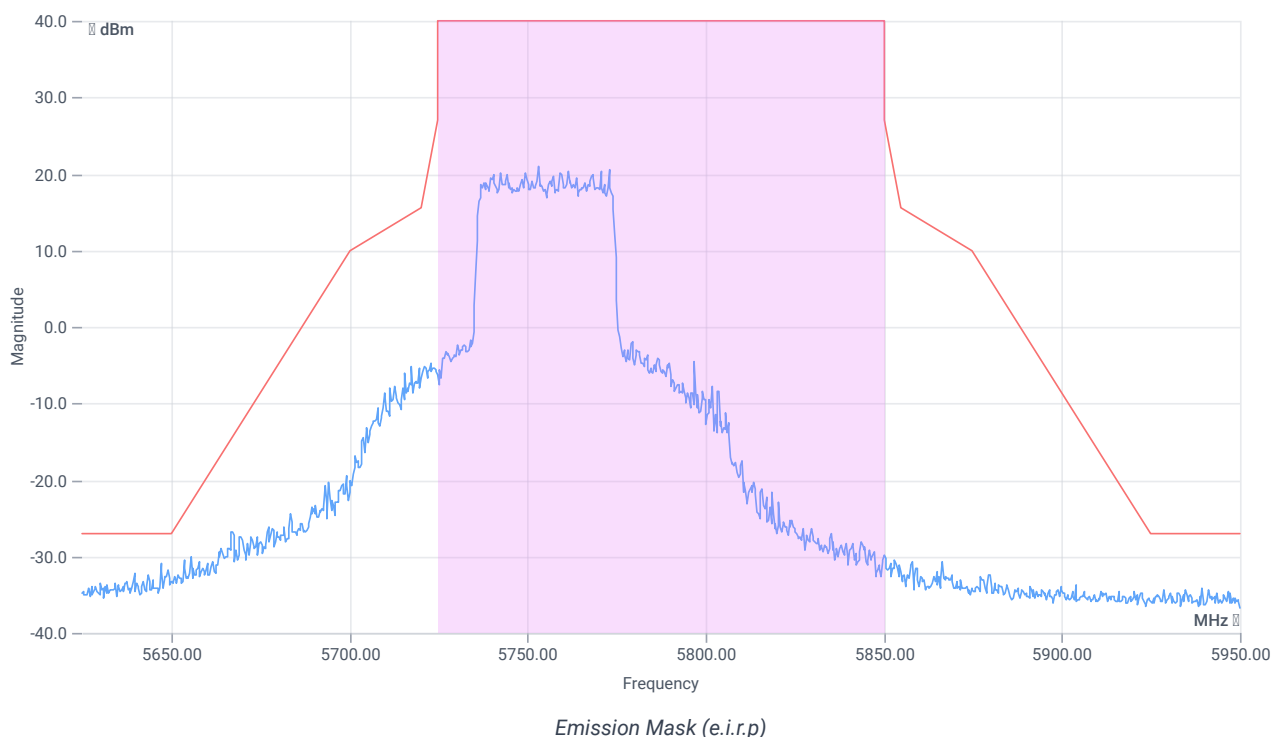
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.85	dBm	INFO
Ref. Frequency	---	---	5740.410	MHz	INFO

Antenna gain

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

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.85 18.87 20
Start [MHz] Stop [MHz]	5625.000 5950.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
-------------	-------------	-------------	----------	------	---------

Verdict

PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 14:15:02
Ambit temp [°C] humidity [rel%]	22.6 25
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	3.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5755 MHz

RESULT: Reference Power cond.

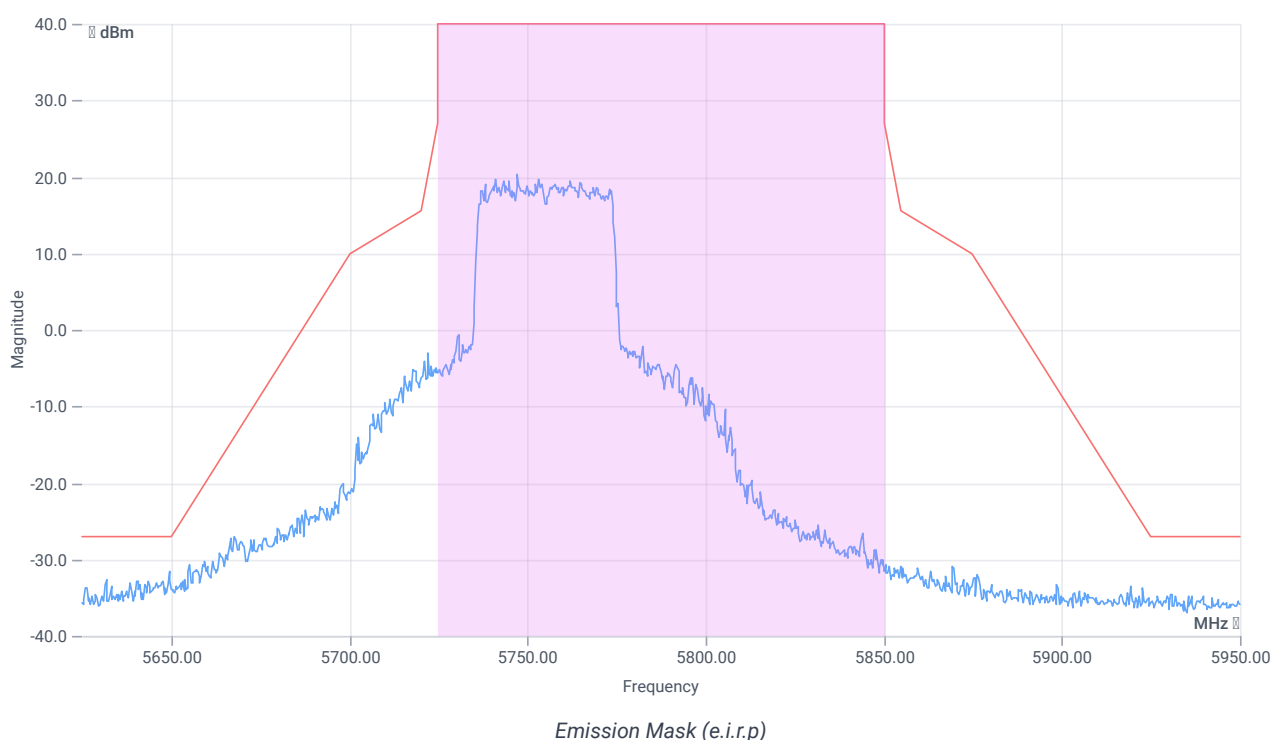
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.21	dBm	INFO
Ref. Frequency	---	---	5757.000	MHz	INFO

Antenna gain

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

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.21 18.87 20
Start [MHz] Stop [MHz]	5625.000 5950.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
-------------	-------------	-------------	----------	------	---------

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:12:19
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5795 MHz

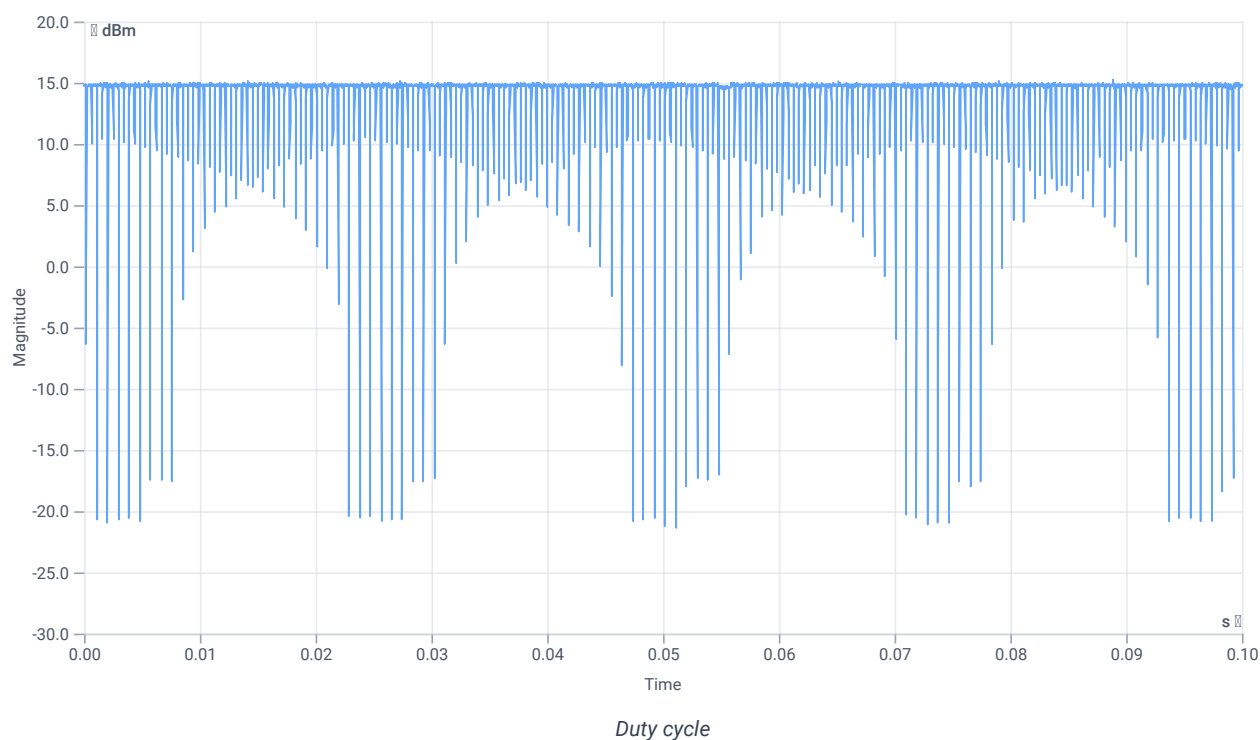
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.79	dBm	INFO
Ref. Frequency	---	---	5785.410	MHz	INFO

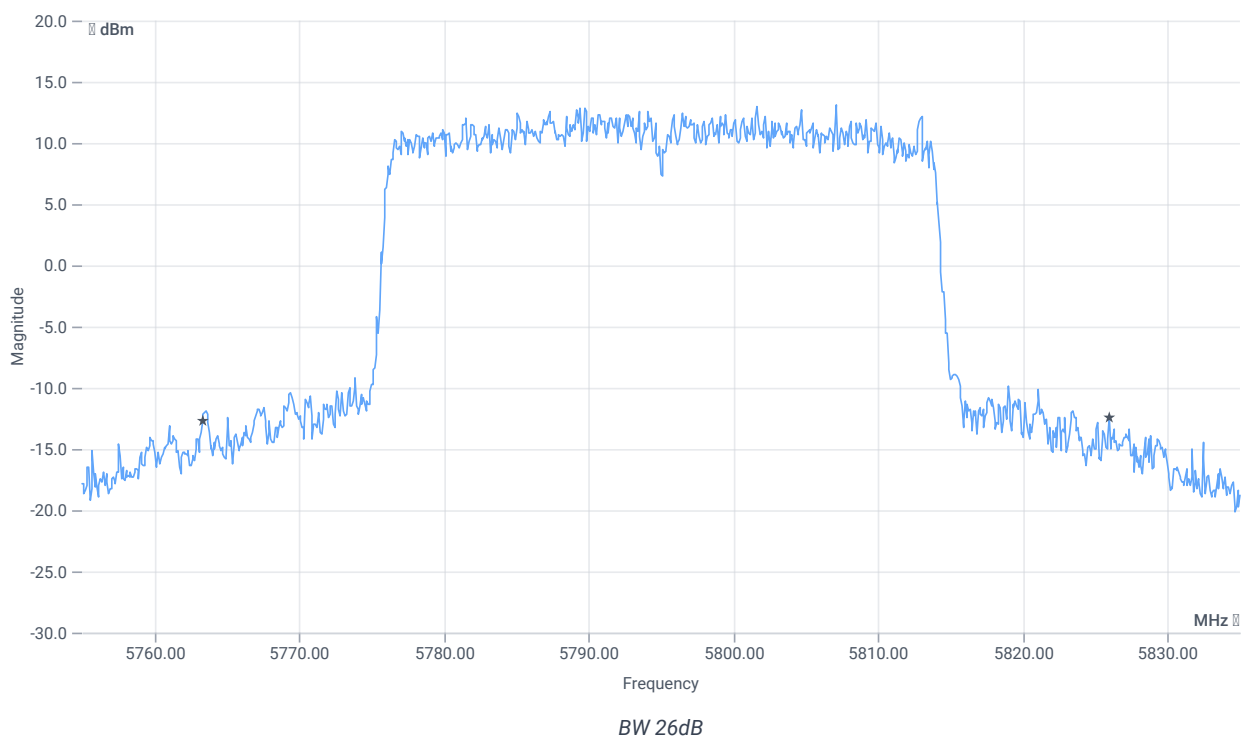
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:89					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



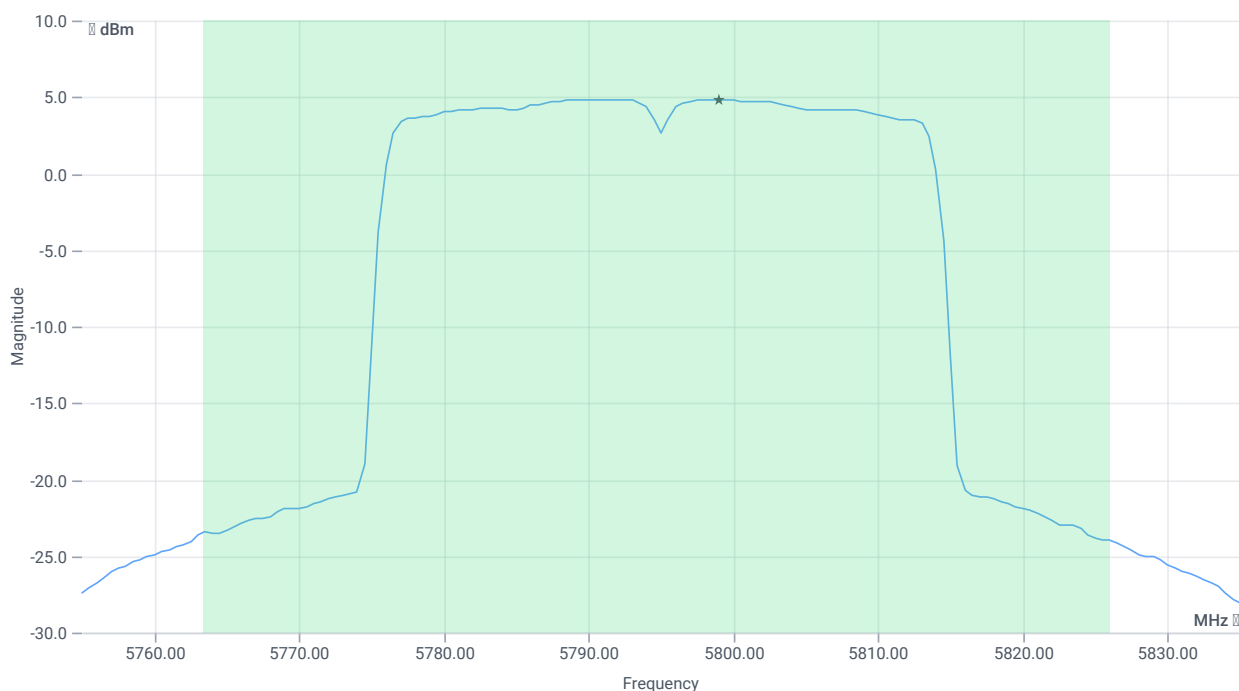
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	62.64	MHz	INFO
T1 26dB	---	---	5763.3200	MHz	INFO
T2 26dB	---	---	5825.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.79 16.77 25
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

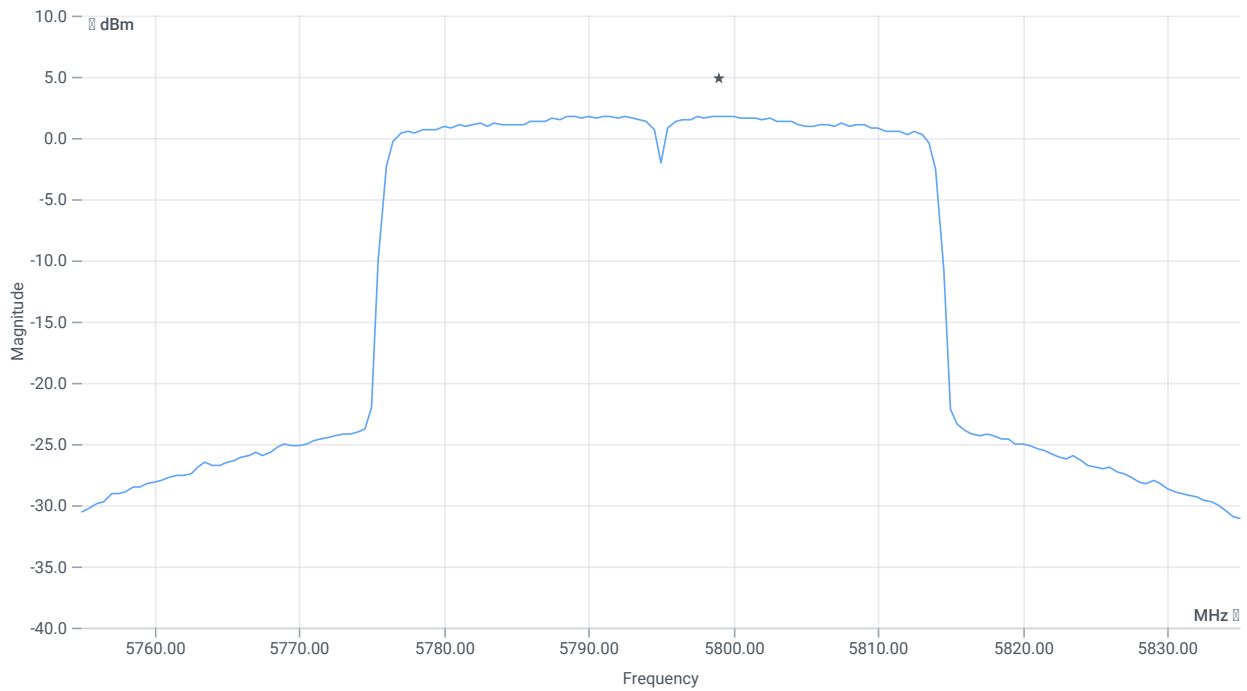
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	19.78	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	20.15	dBm	PASS
Limit: 11 dBm + 10 log 62.64					
Max Output Power DC corrected	---	28.97	20.15	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.79 16.77 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	---	---	1.81	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	30	2.18	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:14:45
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

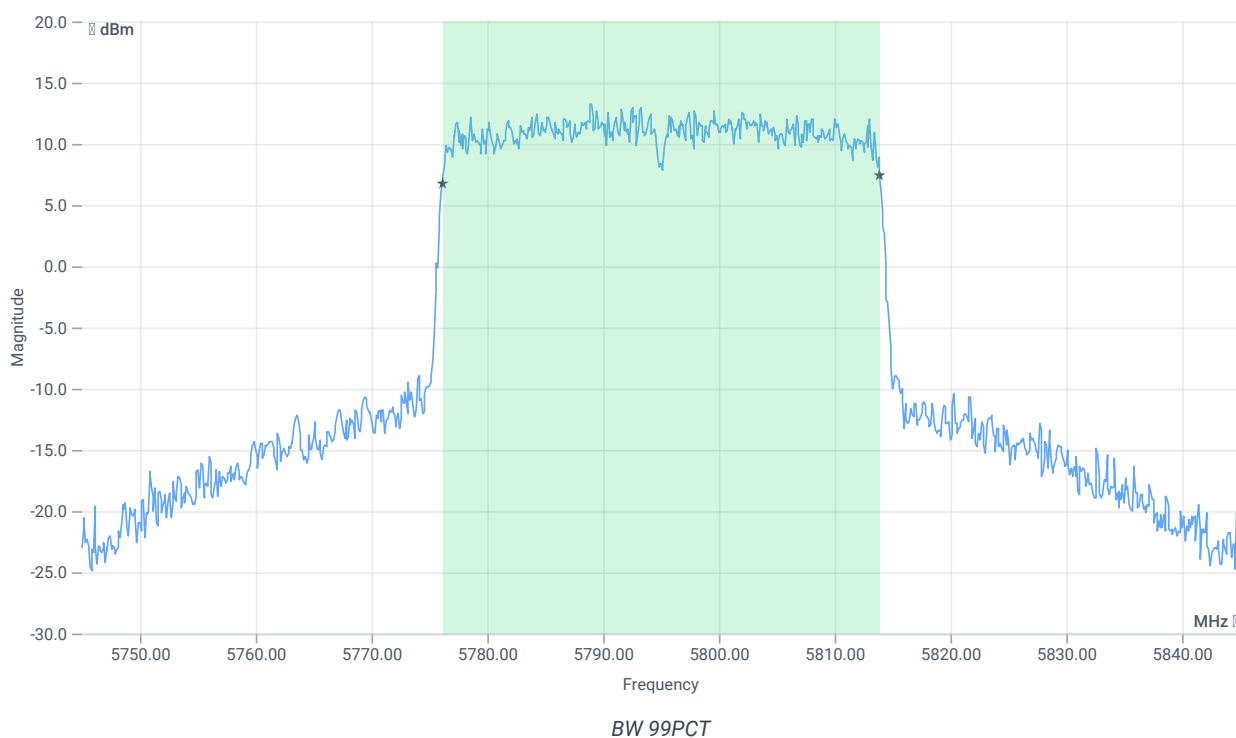
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.57	dBm	INFO
Ref. Frequency	---	---	5800.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.57 16.77 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

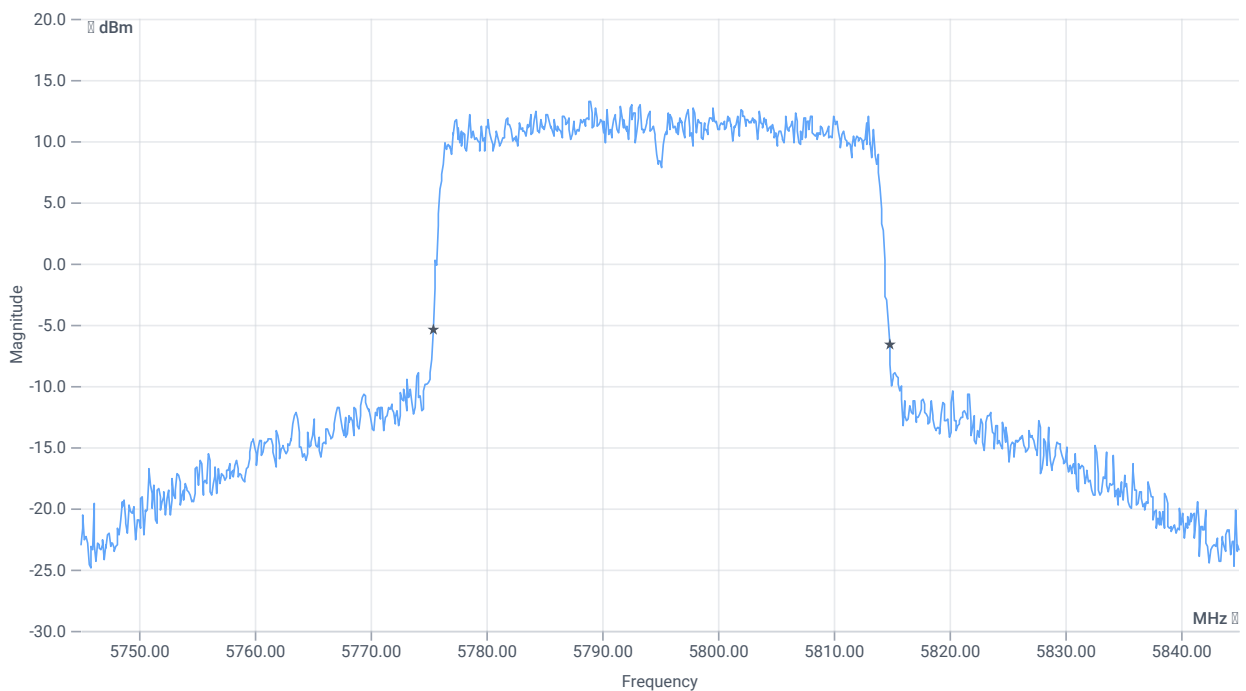




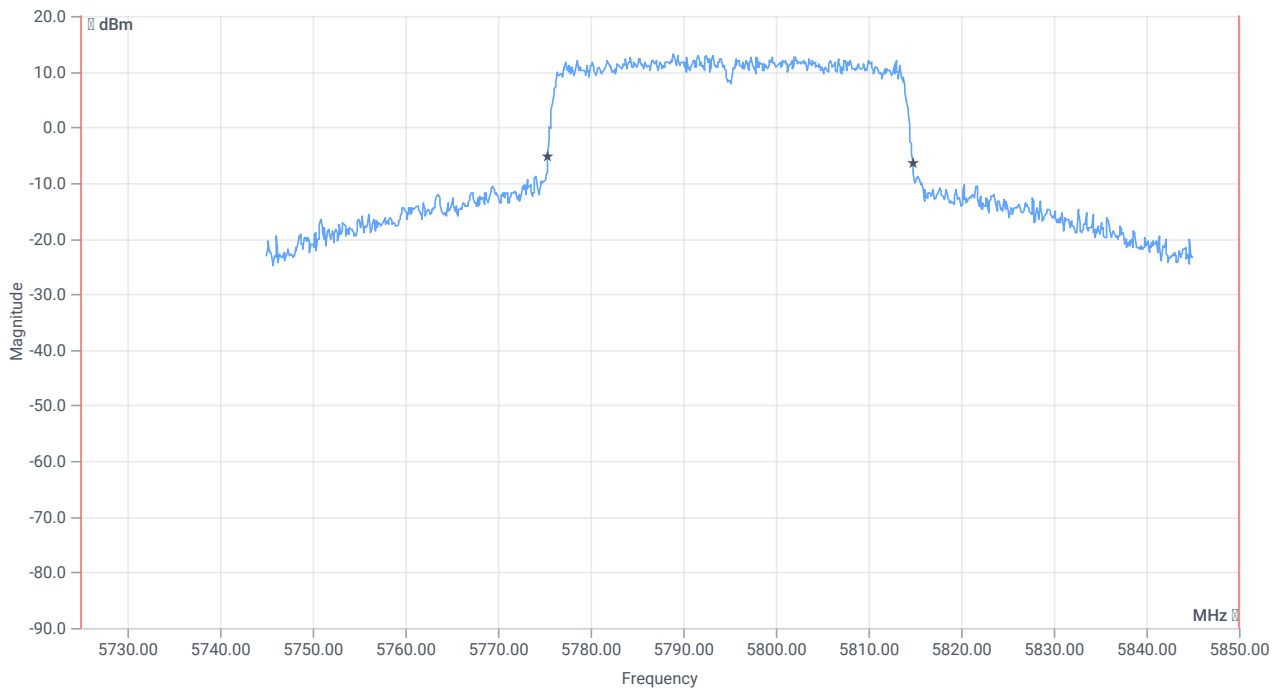
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5725.000000	---	5776.1189	MHz	PASS
T2 99%	---	5850.000000	5813.8811	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	39.4	MHz	INFO
T1 20dB	5725.000000	---	5775.4000	MHz	PASS
T2 20dB	---	5850.000000	5814.8000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:15:15
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

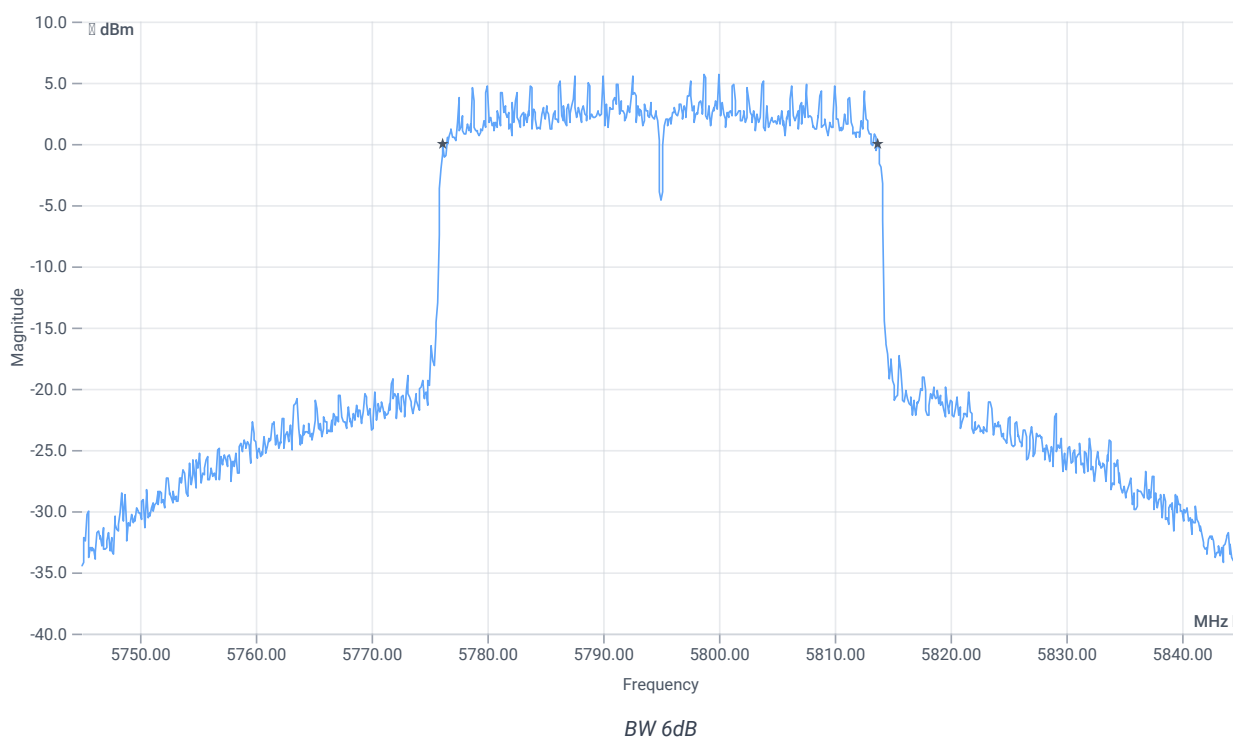
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.74	dBm	INFO
Ref. Frequency	---	---	5785.210	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.74 16.77 25
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	---	37.5	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:15:39
Ambit temp [°C] humidity [rel%]	21.9 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5795 MHz

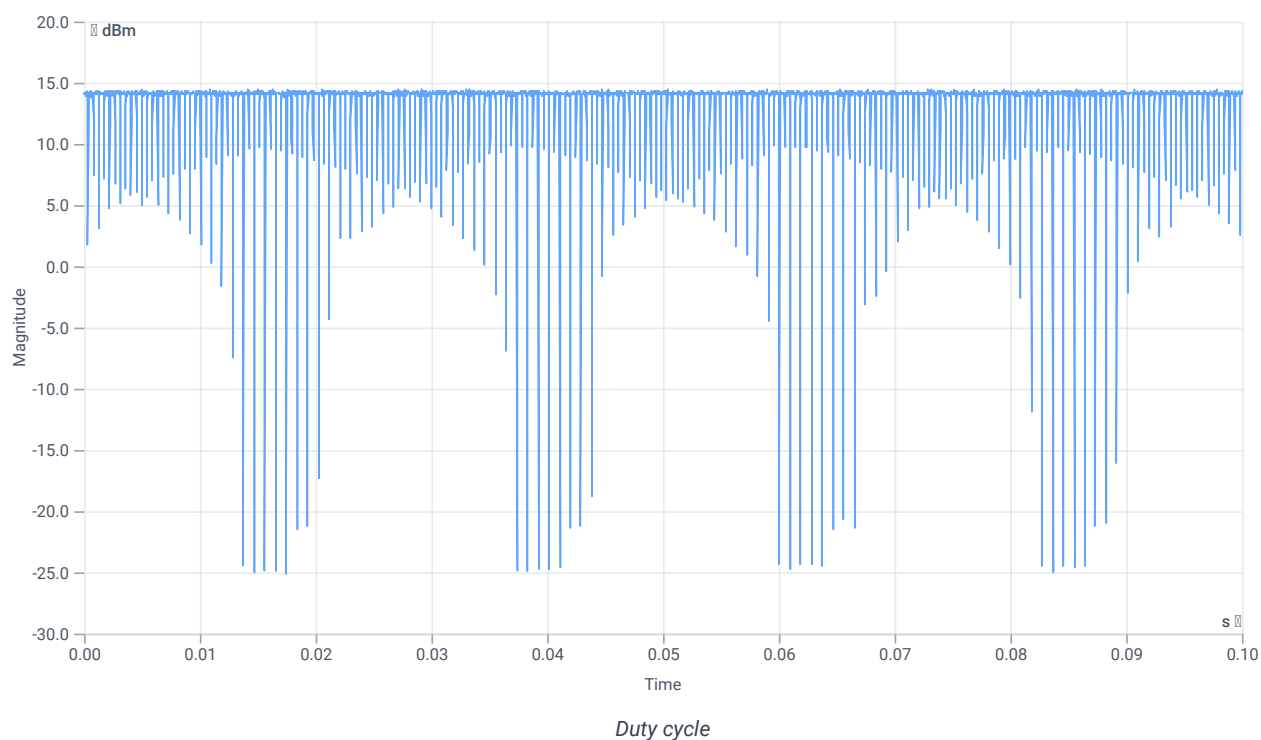
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.42	dBm	INFO
Ref. Frequency	---	---	5797.000	MHz	INFO

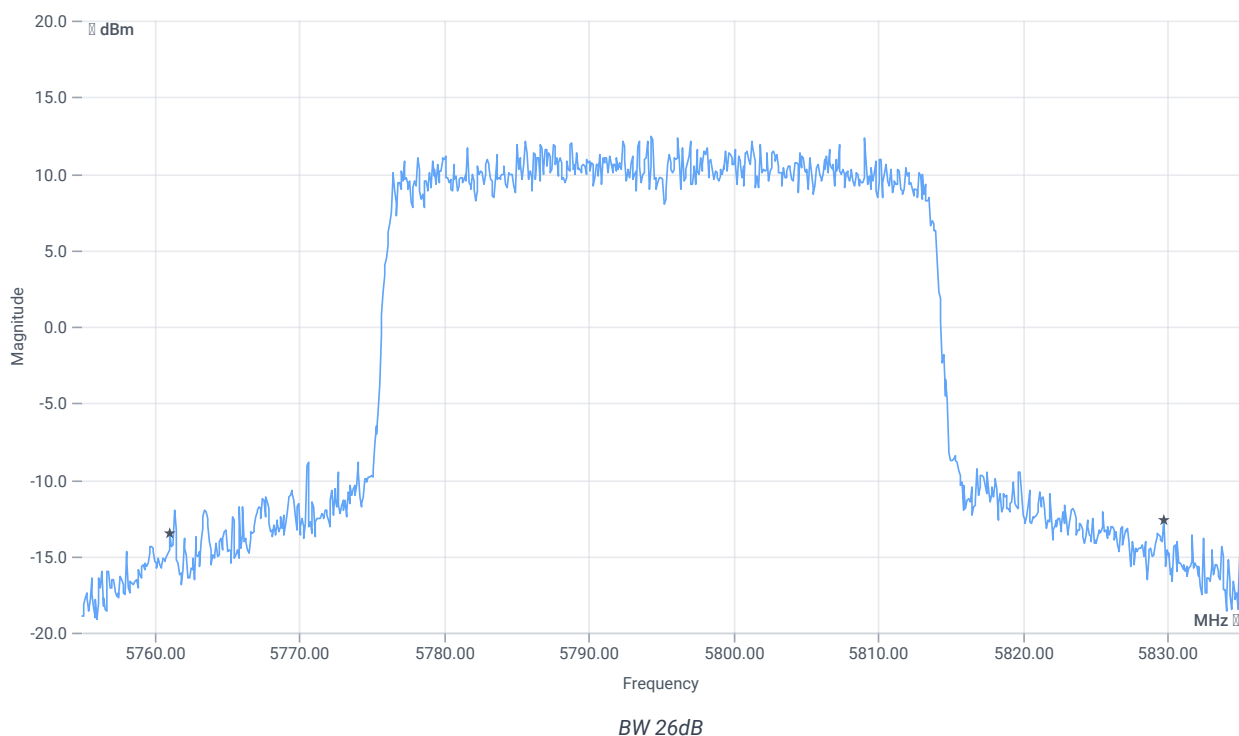
Evaluation max. Duty Cycle

Duty Cycle evaluation

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Result Summary					
Number of detected Bursts:84					
Duty Cycle (Burst Ratio) max	---	---	0.988	---	INFO
Duty Cycle max	---	---	0.052	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.919	---	INFO
Duty Cycle min	---	---	0.367	dB	INFO
Max TX Burst Length	---	---	5.95	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



Evaluation Bandwidth



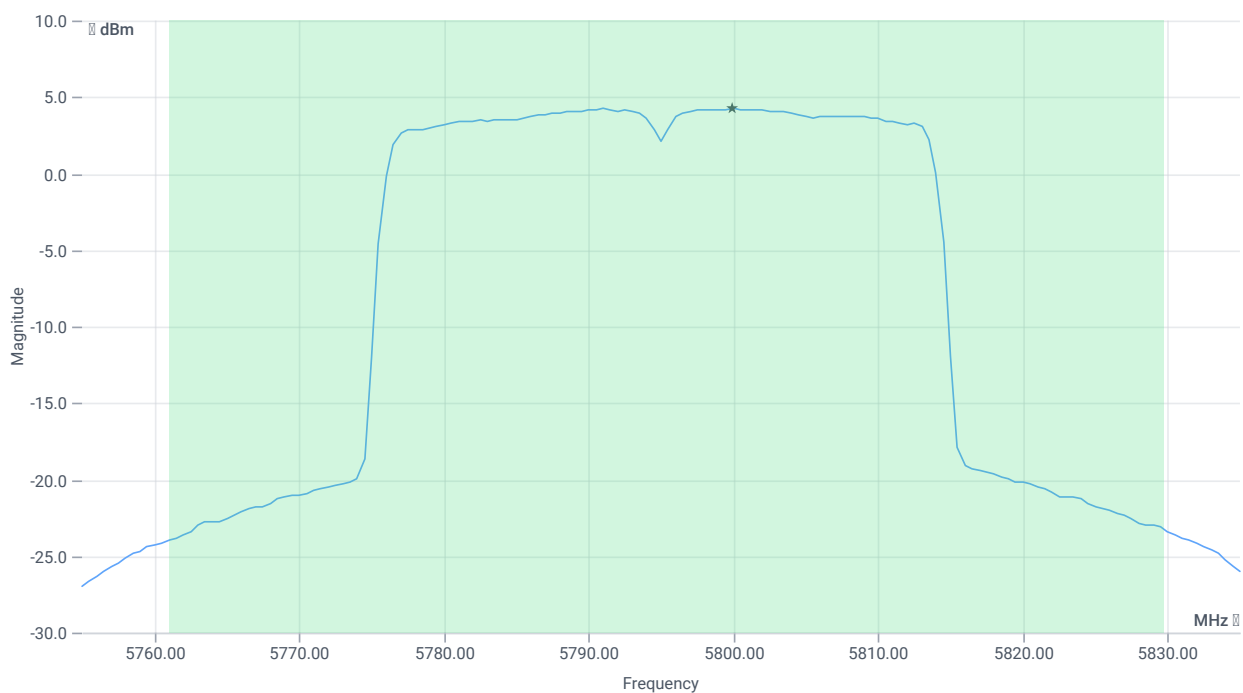
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	68.64	MHz	INFO
T1 26dB	---	---	5761.0800	MHz	INFO
T2 26dB	---	---	5829.7200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.42 16.77 25
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

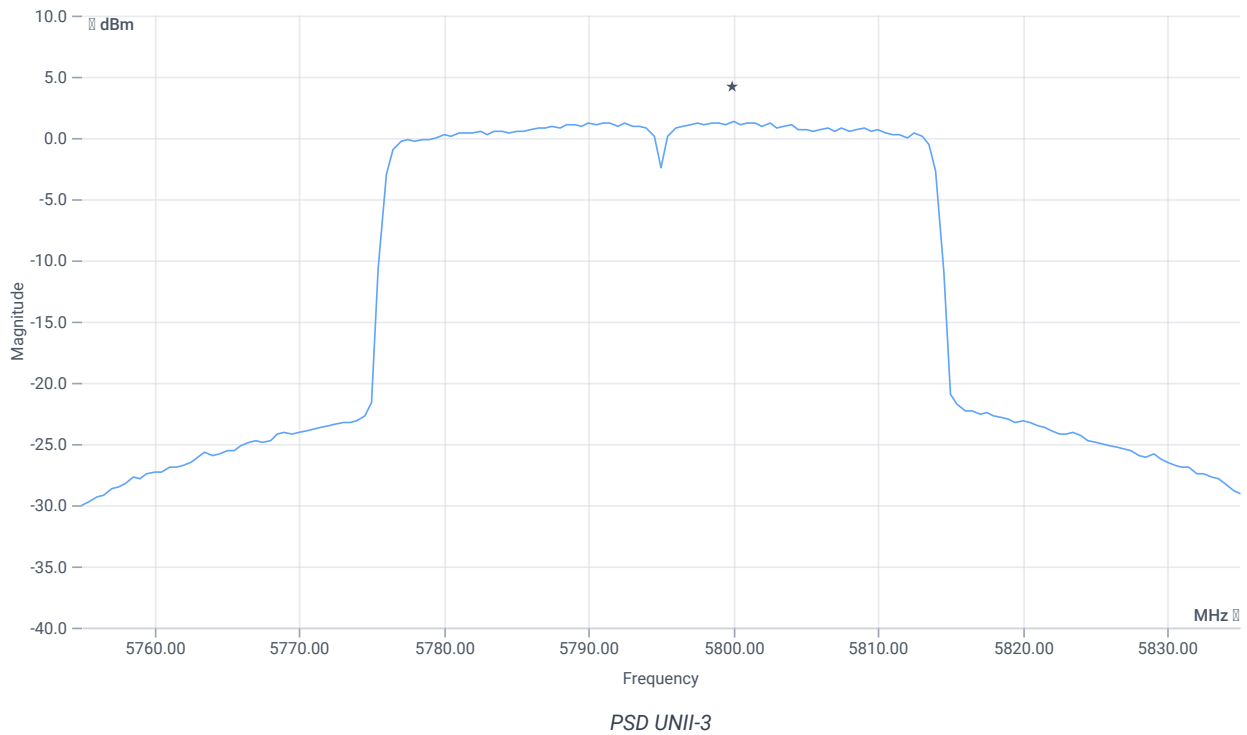
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	---	---	19.19	dBm	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	19.56	dBm	PASS
Limit: 11 dBm + 10 log 68.64					
Max Output Power DC corrected	---	29.37	19.56	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.42 16.77 25
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	---	---	1.32	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.37	dB	INFO
Power Spectral Density DC corrected	---	30	1.69	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:18:04
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

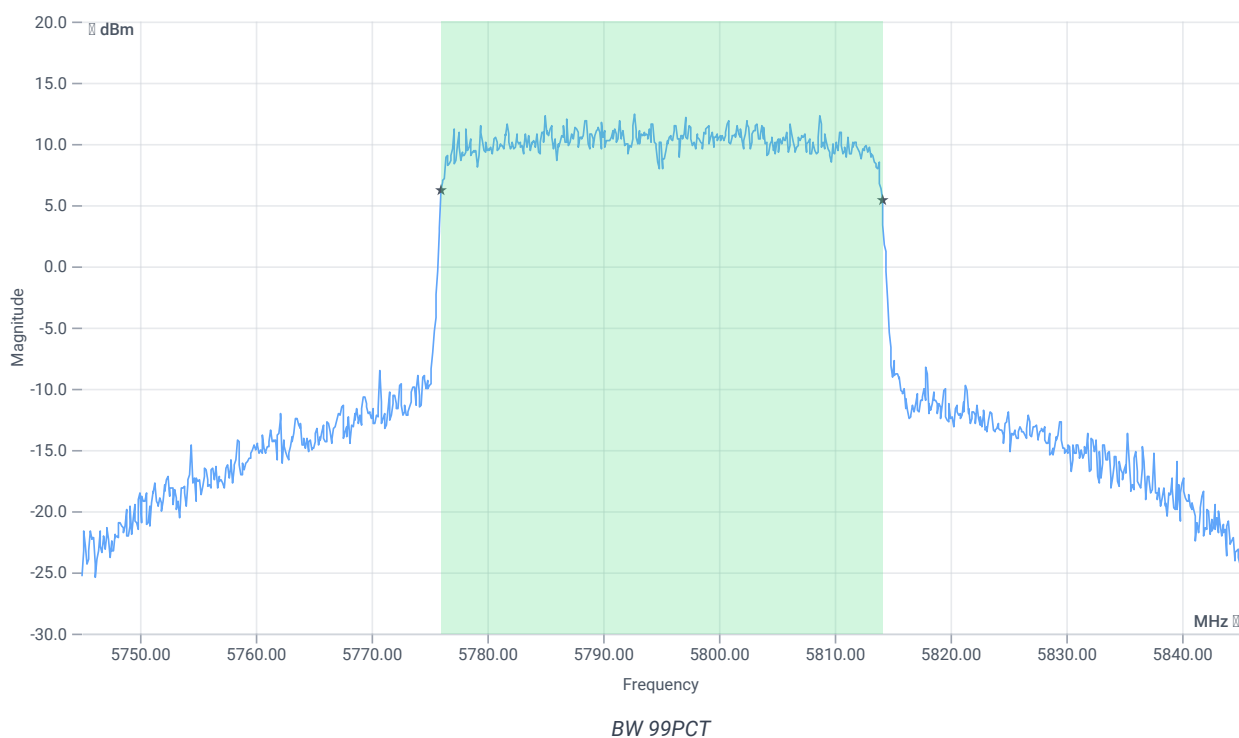
Test at TX 5795 MHz

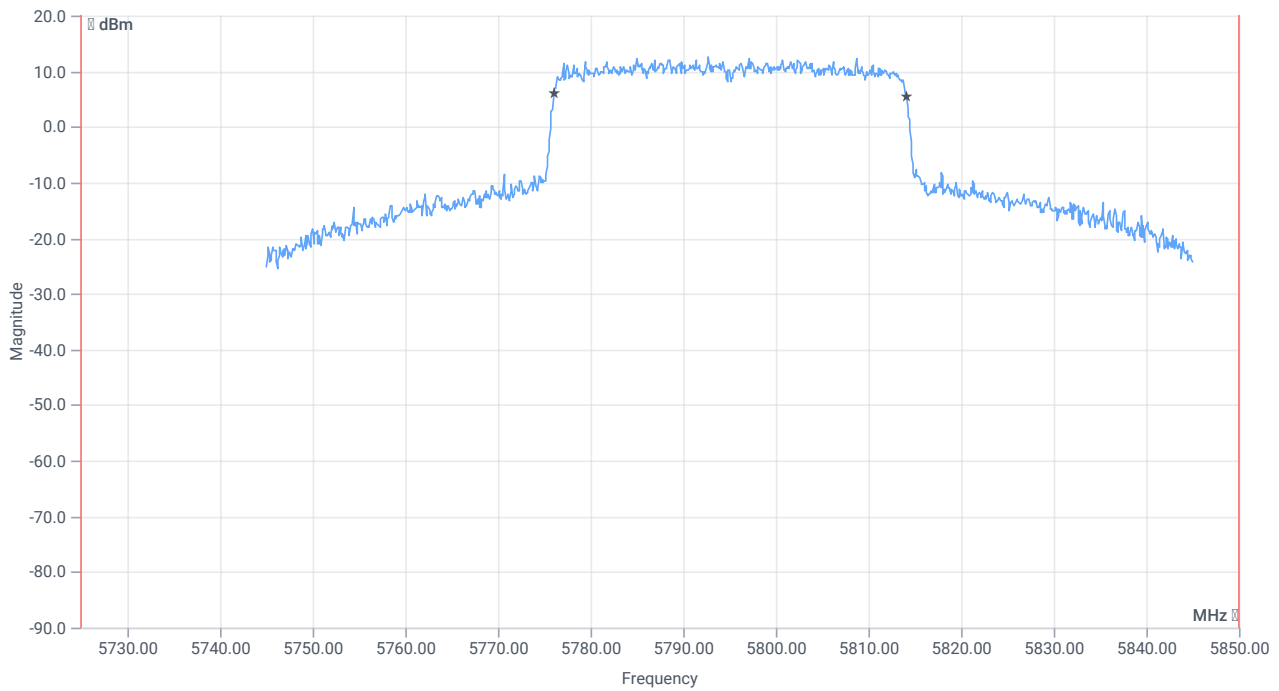
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	13.76	dBm	INFO
Ref. Frequency	---	---	5778.420	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.76 16.77 20
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

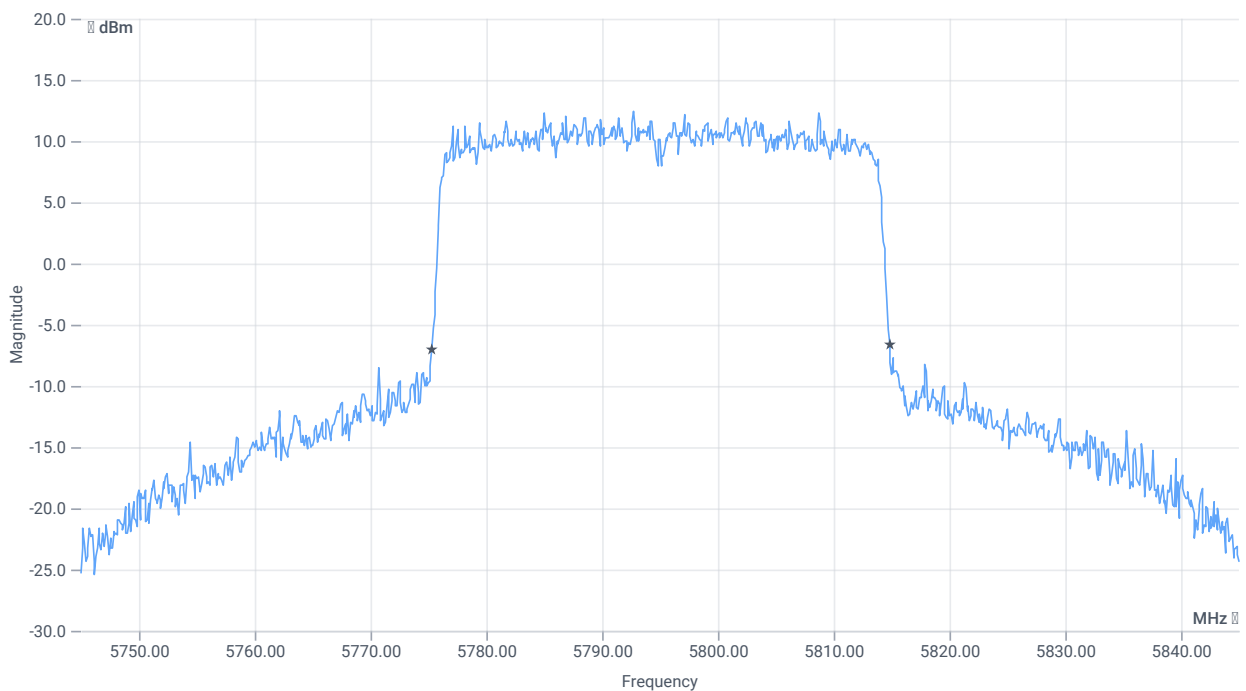




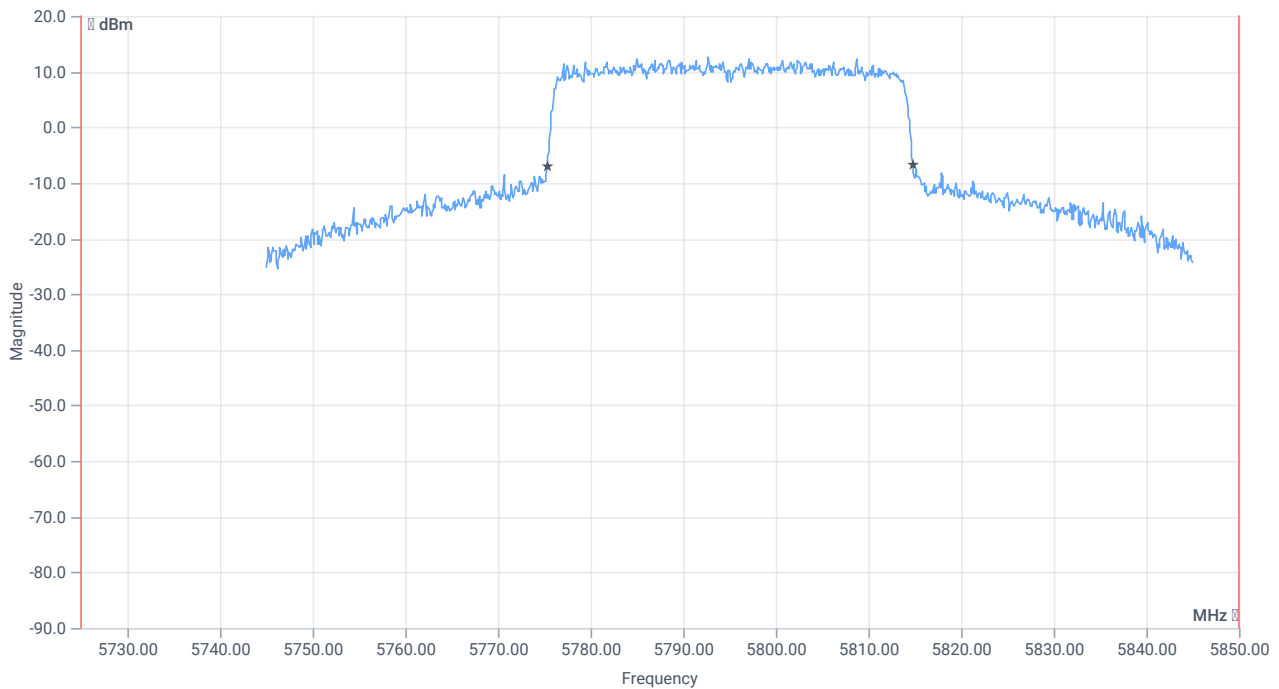
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	38.062	MHz	INFO
T1 99%	5725.000000	---	5776.0190	MHz	PASS
T2 99%	---	5850.000000	5814.0809	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	39.5	MHz	INFO
T1 20dB	5725.000000	---	5775.3000	MHz	PASS
T2 20dB	---	5850.000000	5814.8000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:18:35
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

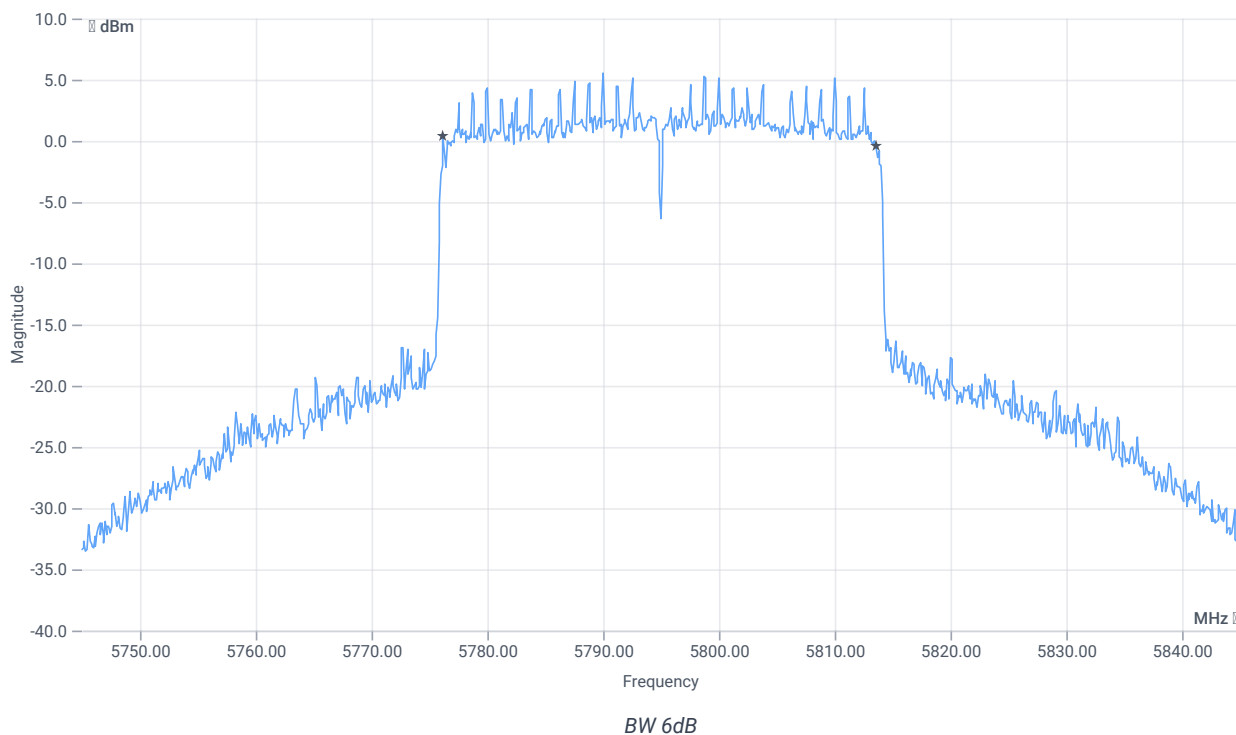
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.01	dBm	INFO
Ref. Frequency	---	---	5785.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.01 16.77 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	---	37.3	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 11:19:00
Ambit temp [°C] humidity [rel%]	22.0 29
System version	4.7.1.5
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	1.4
Full path name type	None

Equipment

Test at TX 5795 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	---	---	20.15	dBm	INFO
Ant:1 BW 26dB	---	---	62.640	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	19.56	dBm	INFO
Ant:2 BW 26dB	---	---	68.640	MHz	INFO
Σ Limit absolute	---	30	22.88	dBm	PASS
Σ Limit: 11 dBm + 10 log 62.64	---	28.97	22.88	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	---	---	2.18	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	1.69	dBm/0.5MHz	INFO
Σ	---	30	4.95	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 14:16:20
Ambit temp [°C] humidity [rel%]	22.7 25
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	3.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5795 MHz

RESULT: Reference Power cond.

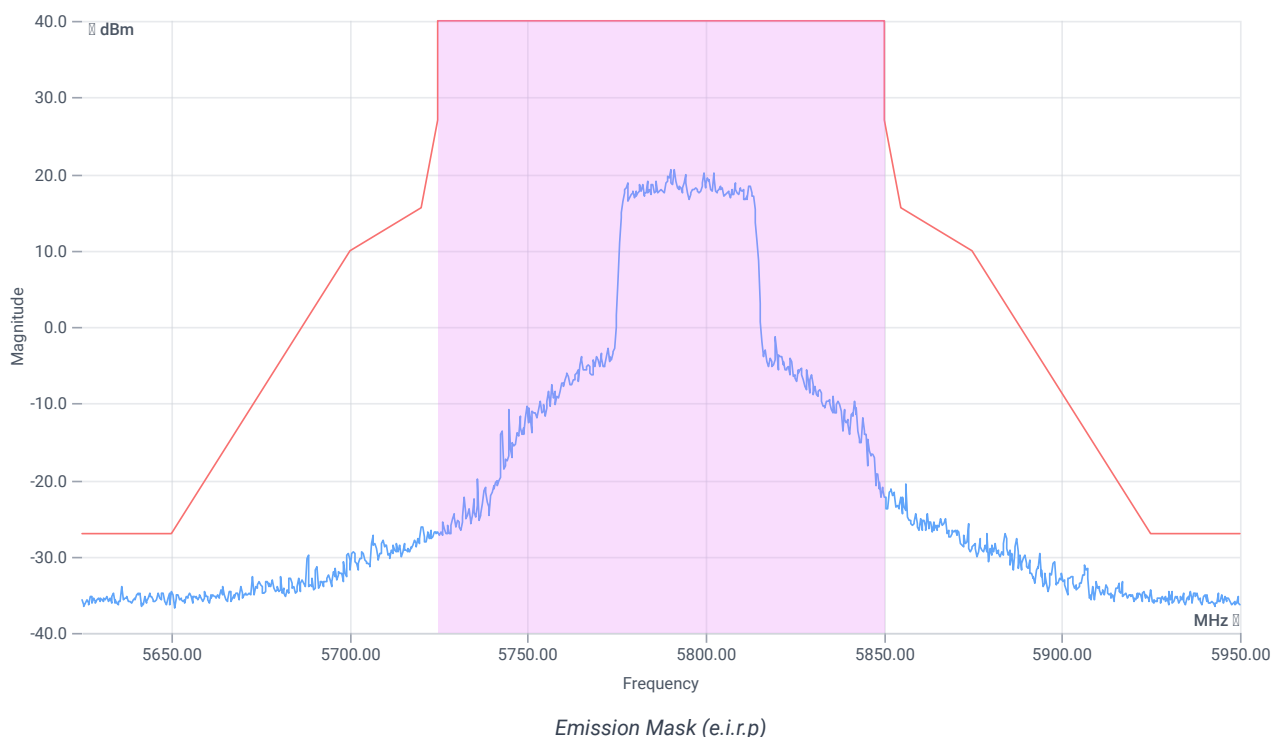
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.91	dBm	INFO
Ref. Frequency	---	---	5792.200	MHz	INFO

Antenna gain

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

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.91 18.77 20
Start [MHz] Stop [MHz]	5625.000 5950.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
-------------	-------------	-------------	----------	------	---------

Verdict

PASS

FCC 15.407, ISED RSS247 # Emission mask (eirp) ~ WLAN5Gx ax-HE40 U-NII-3

References

TC start	19.01.2024 14:16:57
Ambit temp [°C] humidity [rel%]	22.7 26
System version	4.7.1.5
Standard Version	FCC 15.407, ISED RSS247 NI
Method	NI
Description	FCC 15.407 Emission mask - WLAN5Gx ax-HE40 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	3.4
Full path name type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5795 MHz

RESULT: Reference Power cond.

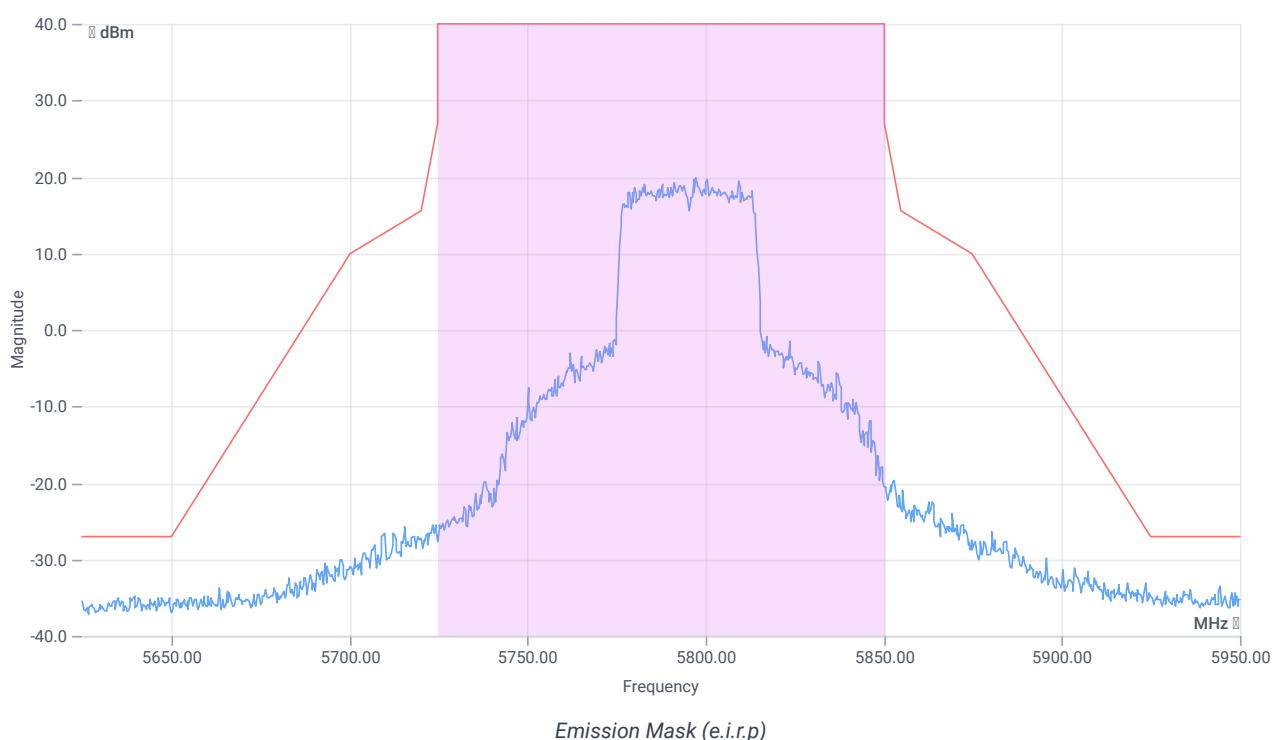
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	16.52	dBm	INFO
Ref. Frequency	---	---	5809.990	MHz	INFO

Antenna gain

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

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.52 18.77 20
Start [MHz] Stop [MHz]	5625.000 5950.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
-------------	-------------	-------------	----------	------	---------

Verdict

PASS

- END OF DOCUMENT -