

Conducted test results

No.23-1-0061401T004a-A6d

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Test Standard(s) FCC 15.407

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Authorized

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Message with SA scan ~

References

TC start	25.07.2023 15:59:59
Ambit temp [°C] humidity [rel%]	24.9 54
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA WLAN5Gx ax-HE20 U-NII-1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 15:59:59
Message	set WLAN5Gx to WLAN5Gx ax-HE20 U-NII-1, Frequency [MHz] 5180 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:00:09
Ambit temp [°C] humidity [rel%]	24.8 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS64

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5180 MHz

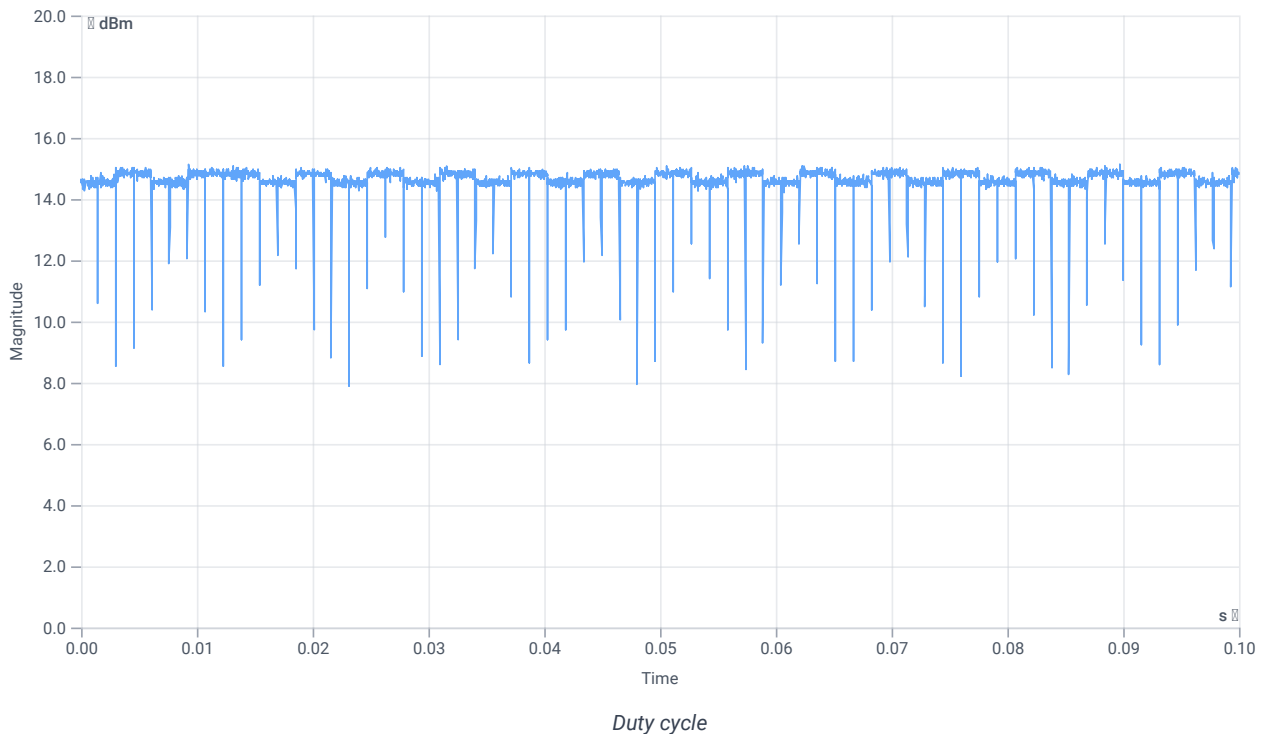
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.88	dBm	INFO
Ref. Frequency	--	--	5177.800	MHz	INFO

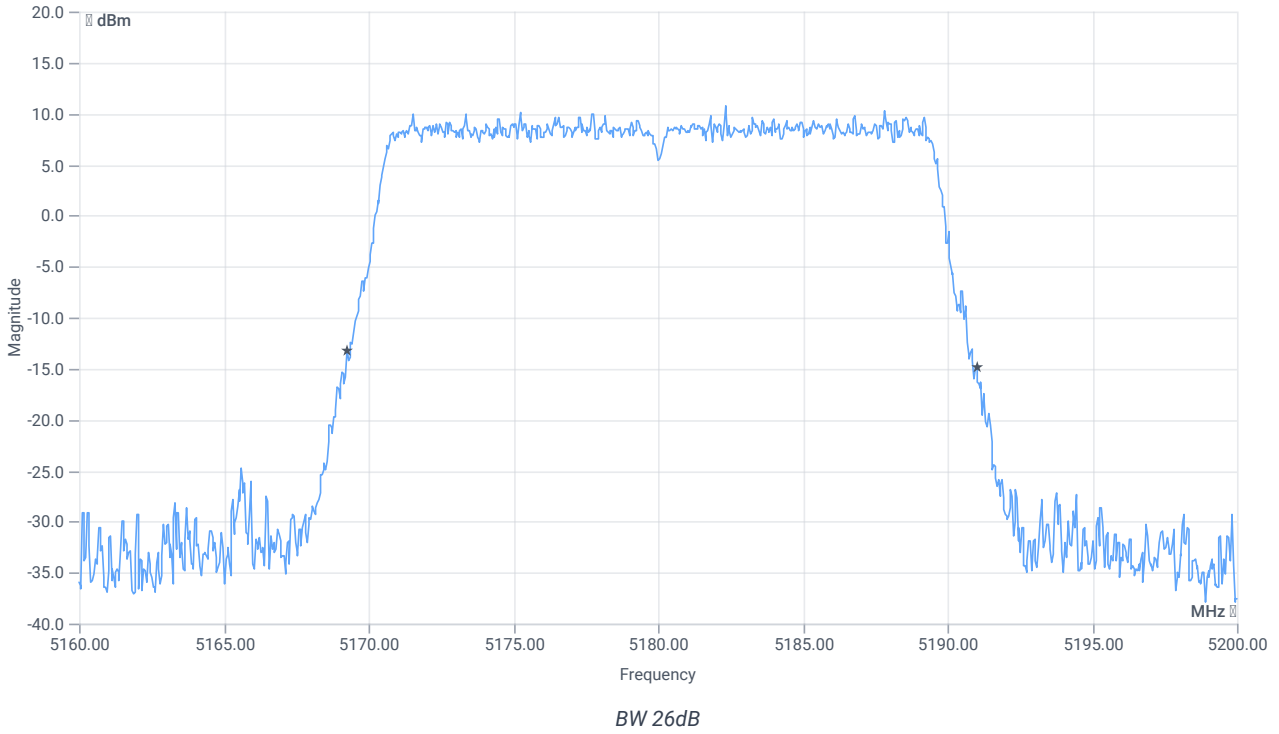
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



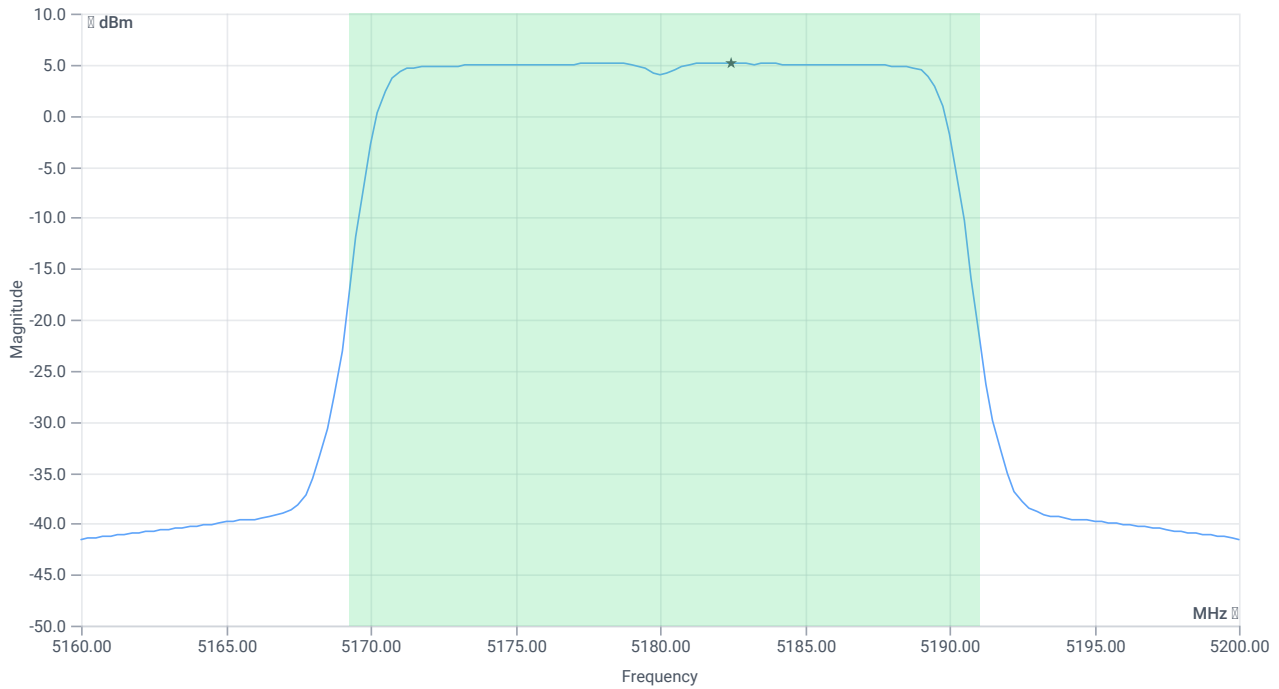
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5169.2400	MHz	INFO
T2 26dB	---	---	5191.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.88 16.39 25
Start [MHz] Stop [MHz]	5160.000 5200.000
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	--	--	17.46	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.46	dBm	PASS
Limit: 11 dBm + 10 log 21.76					
Max Output Power DC corrected	--	24.38	17.46	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.08	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.08	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:01:40
Ambit temp [°C] humidity [rel%]	24.9 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS64

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5180 MHz

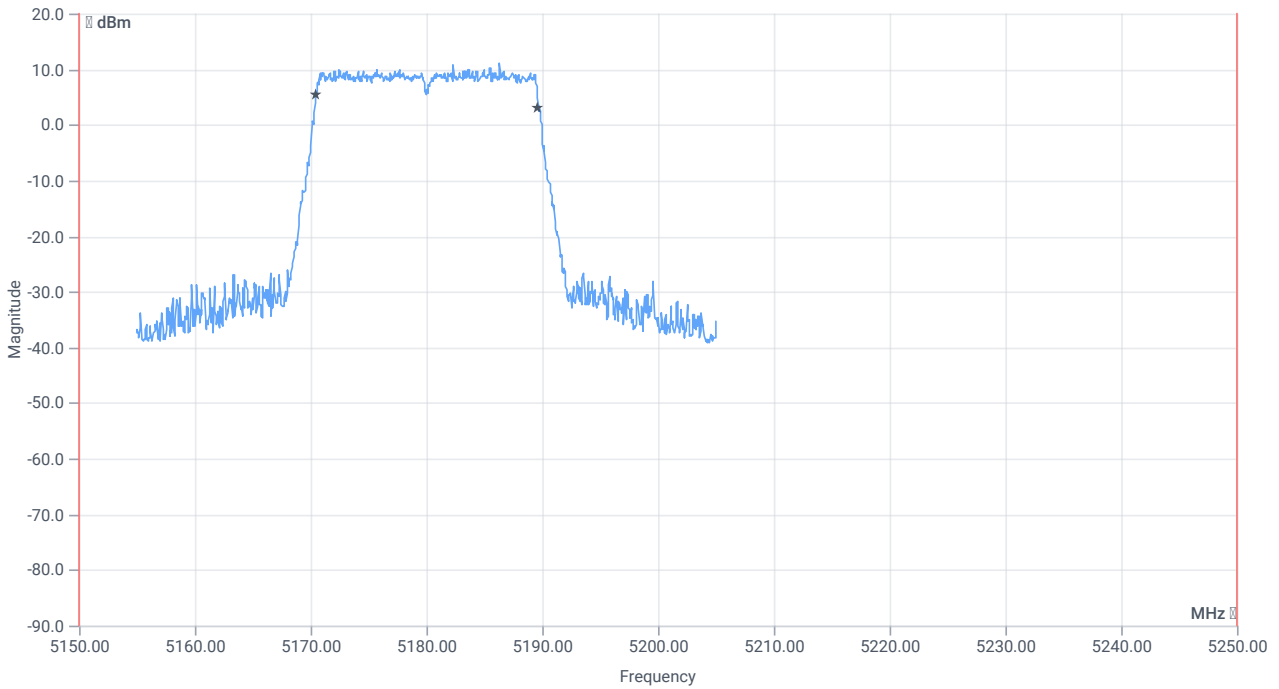
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.56	dBm	INFO
Ref. Frequency	--	--	5183.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.56 16.39 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

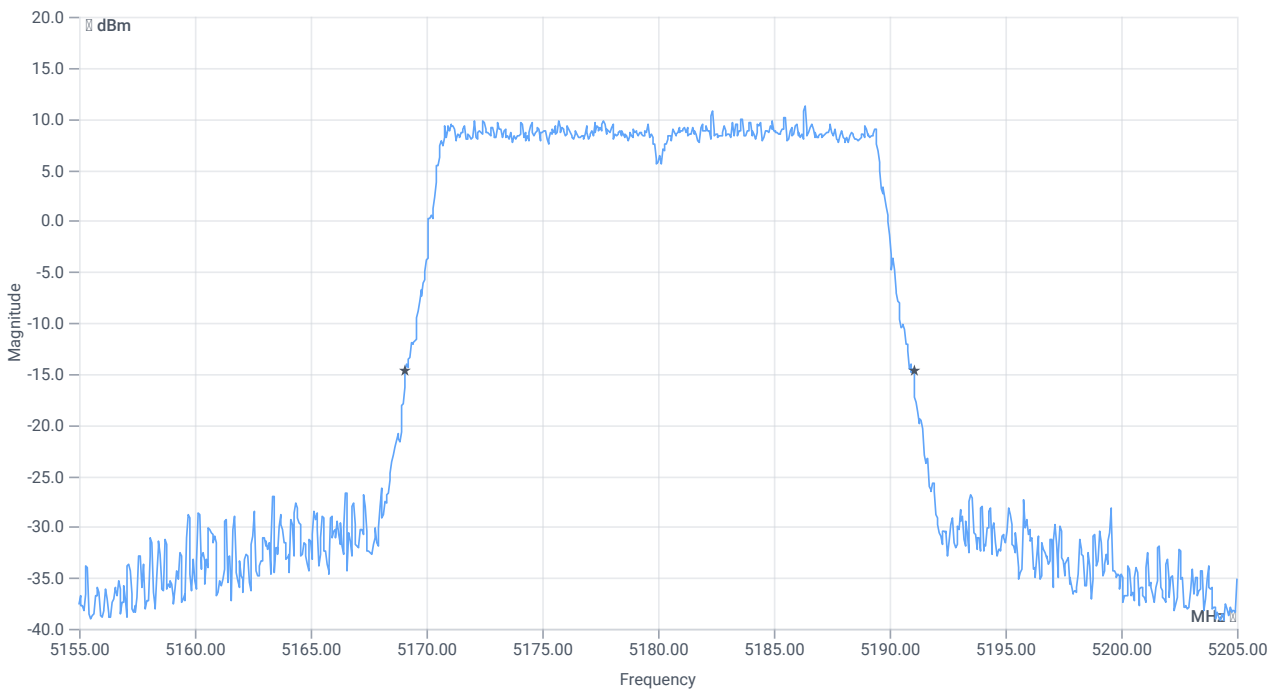




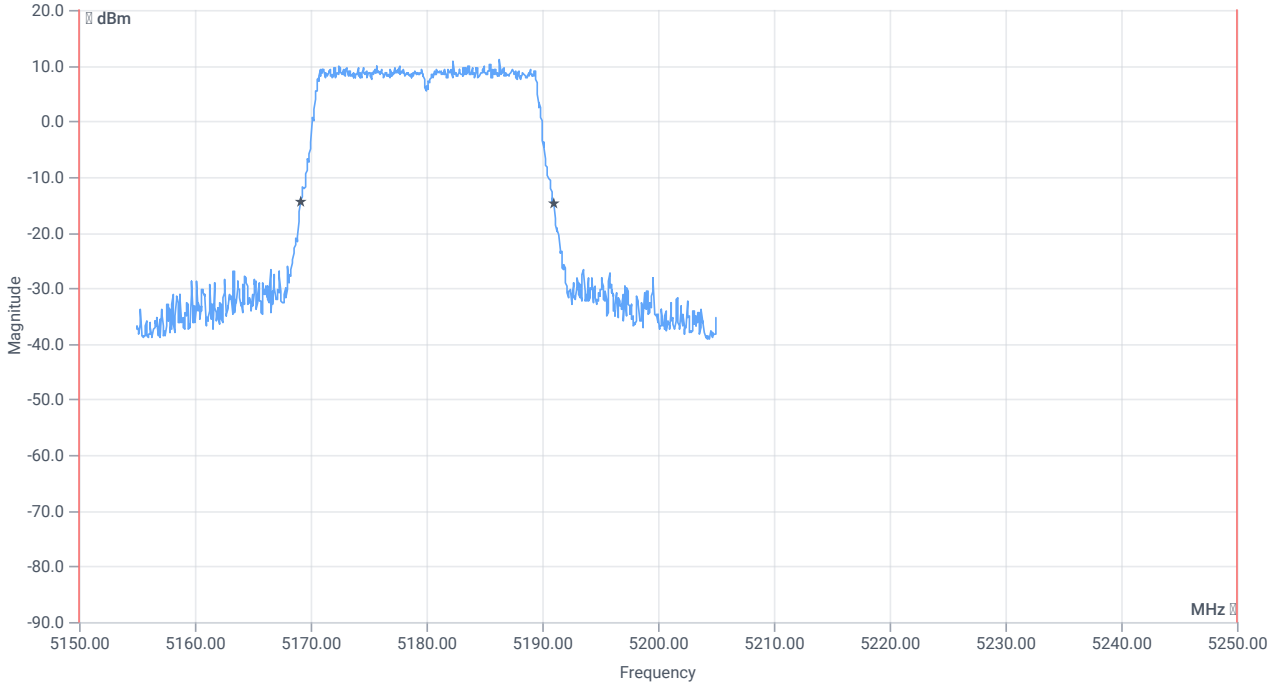
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5150.000000	--	5170.4595	MHz	PASS
T2 99%	--	5250.000000	5189.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.95	MHz	INFO
T1 26dB	5150.000000	---	5169.1000	MHz	PASS
T2 26dB	---	5250.000000	5191.0500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:02:17
Ambit temp [°C] humidity [rel%]	24.9 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS64

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5180 MHz

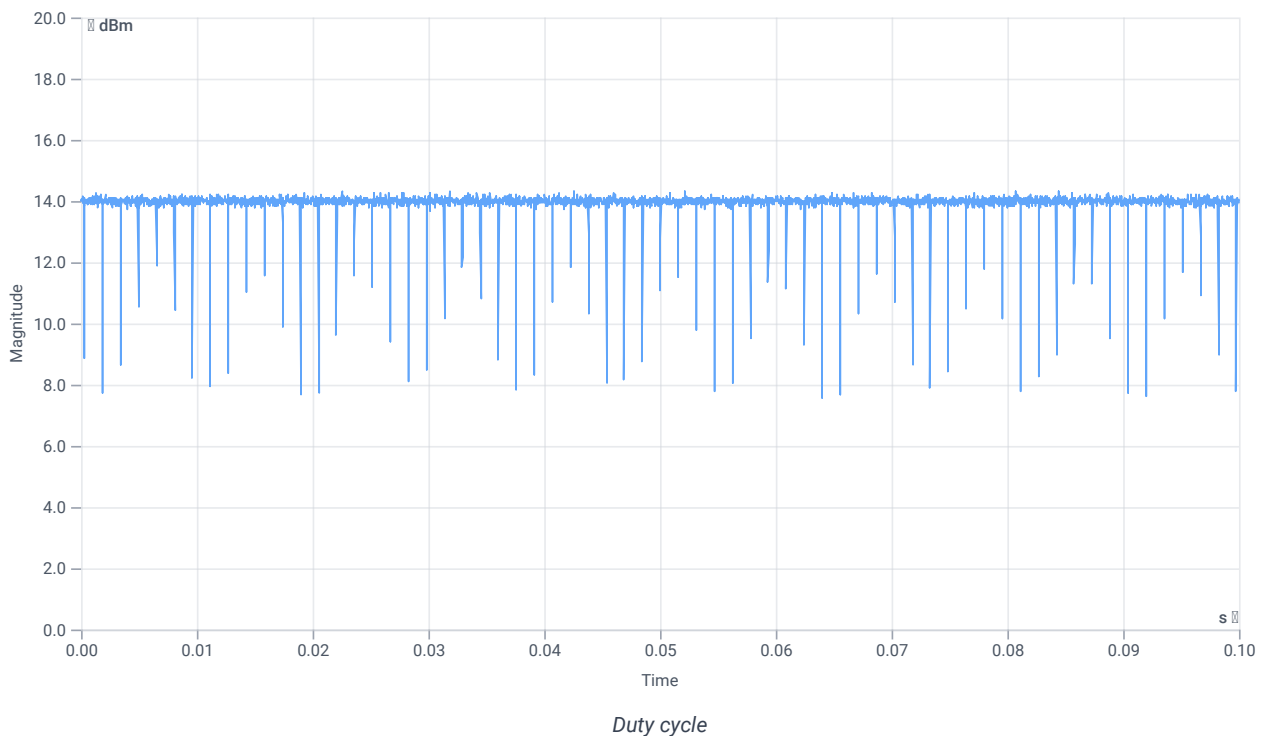
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.05	dBm	INFO
Ref. Frequency	--	--	5185.390	MHz	INFO

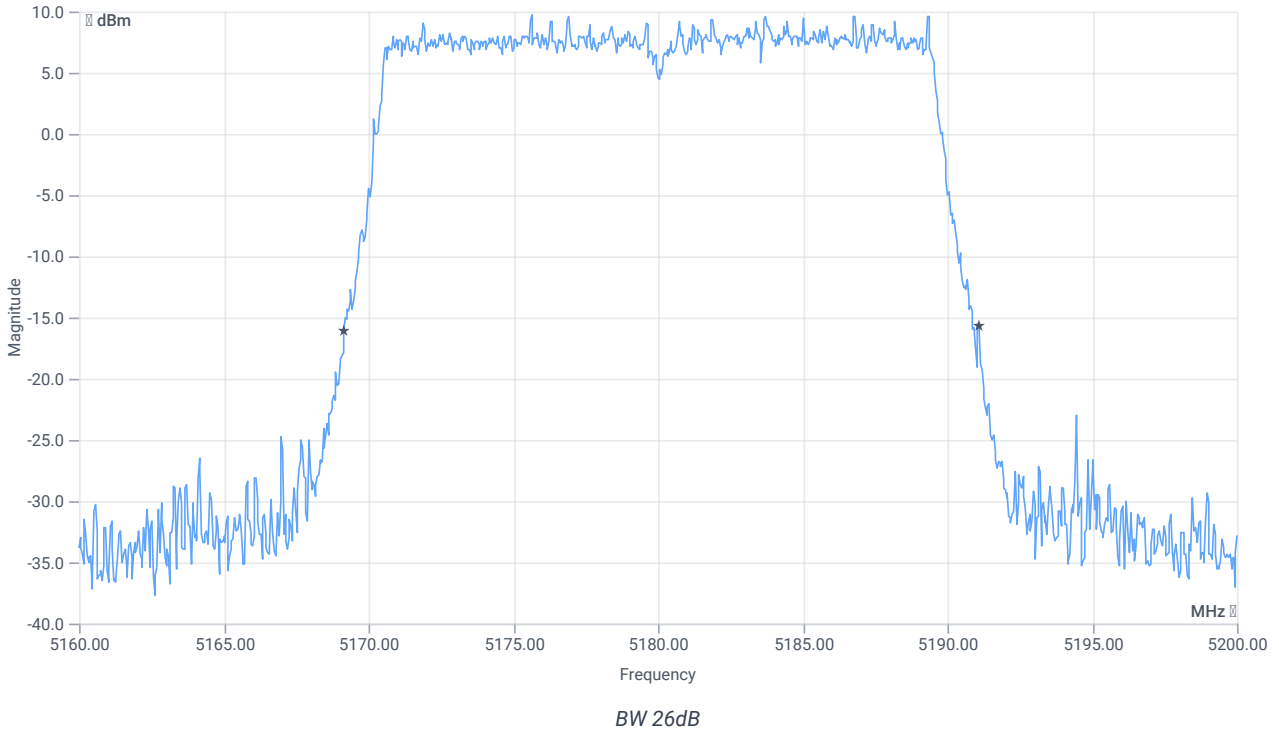
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



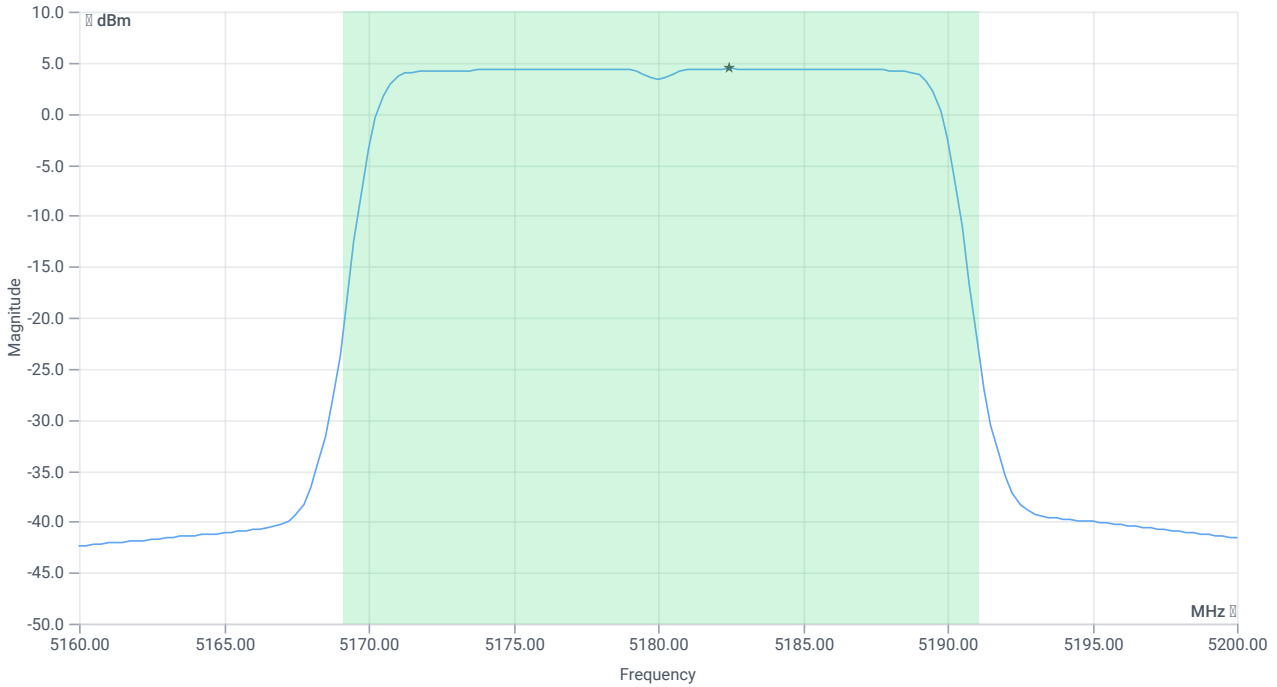
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.92	MHz	INFO
T1 26dB	---	---	5169.1600	MHz	INFO
T2 26dB	---	---	5191.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.05 16.39 25
Start [MHz] Stop [MHz]	5160.000 5200.000
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	--	--	16.78	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	16.78	dBm	PASS
Limit: 11 dBm + 10 log 21.92					
Max Output Power DC corrected	--	24.41	16.78	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	4.41	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.41	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:03:48
Ambit temp [°C] humidity [rel%]	24.9 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS64

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

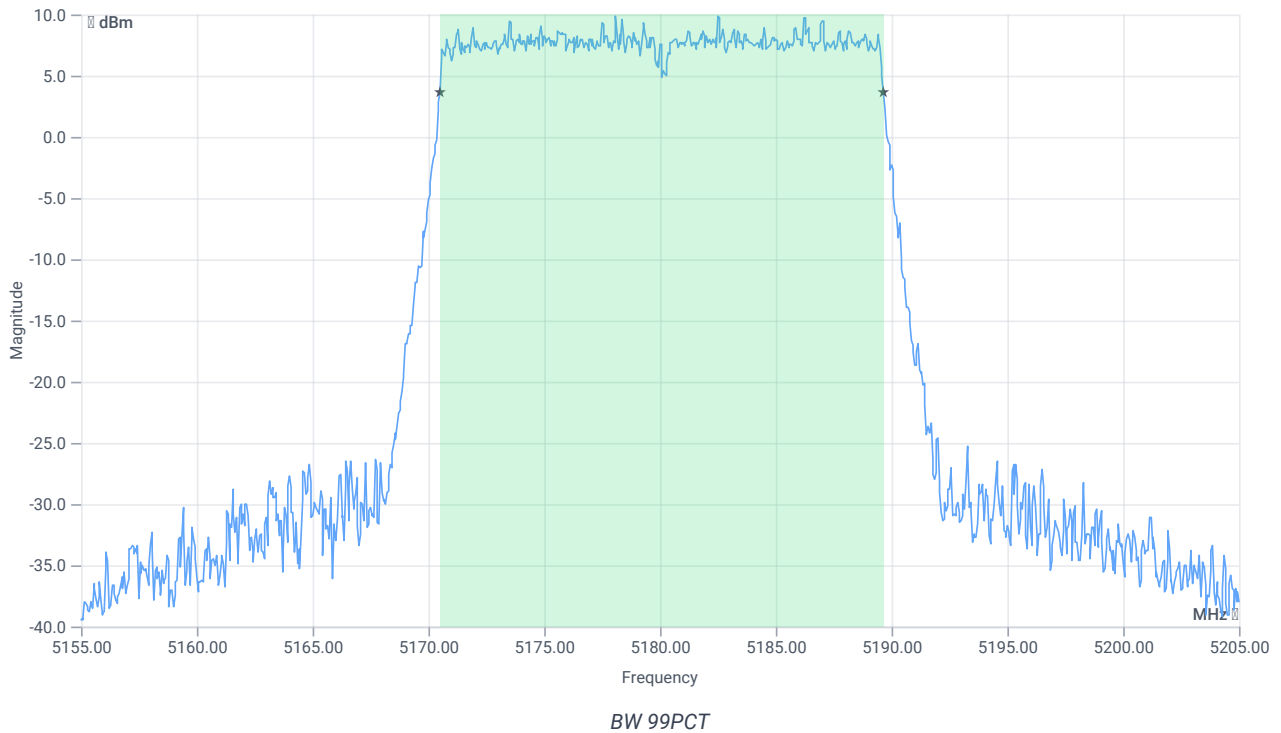
Test at TX 5180 MHz

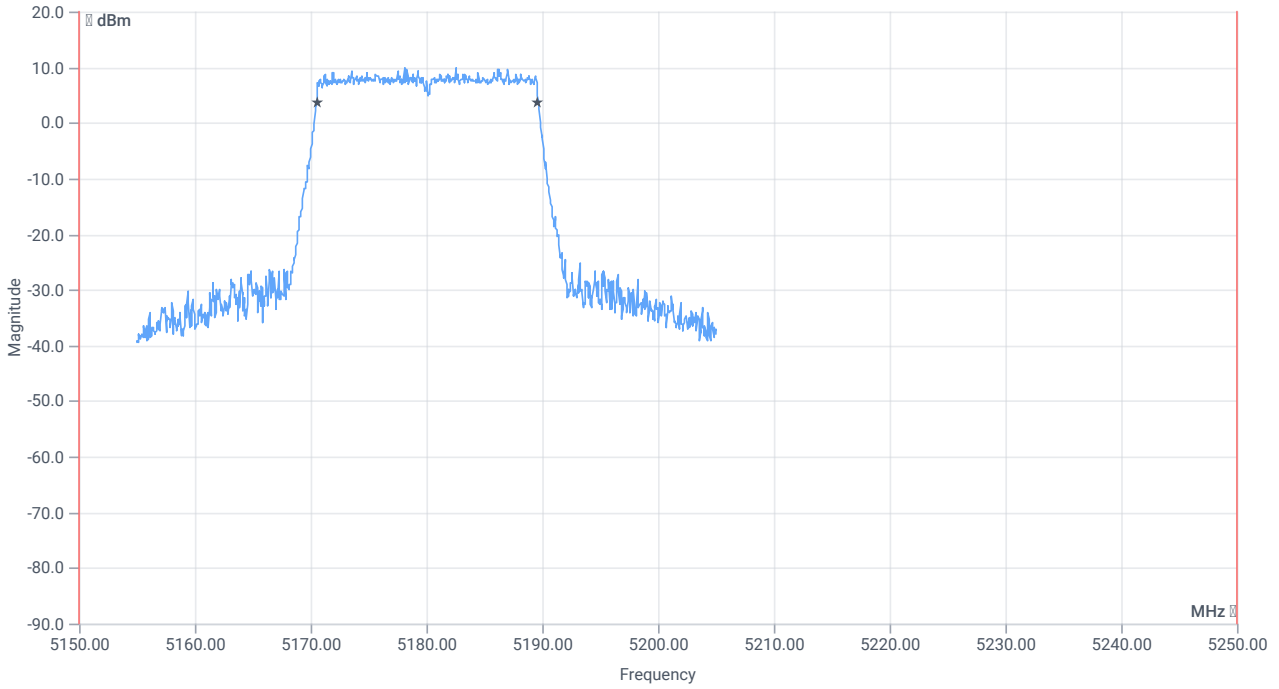
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.39	dBm	INFO
Ref. Frequency	--	--	5171.210	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.39 16.39 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

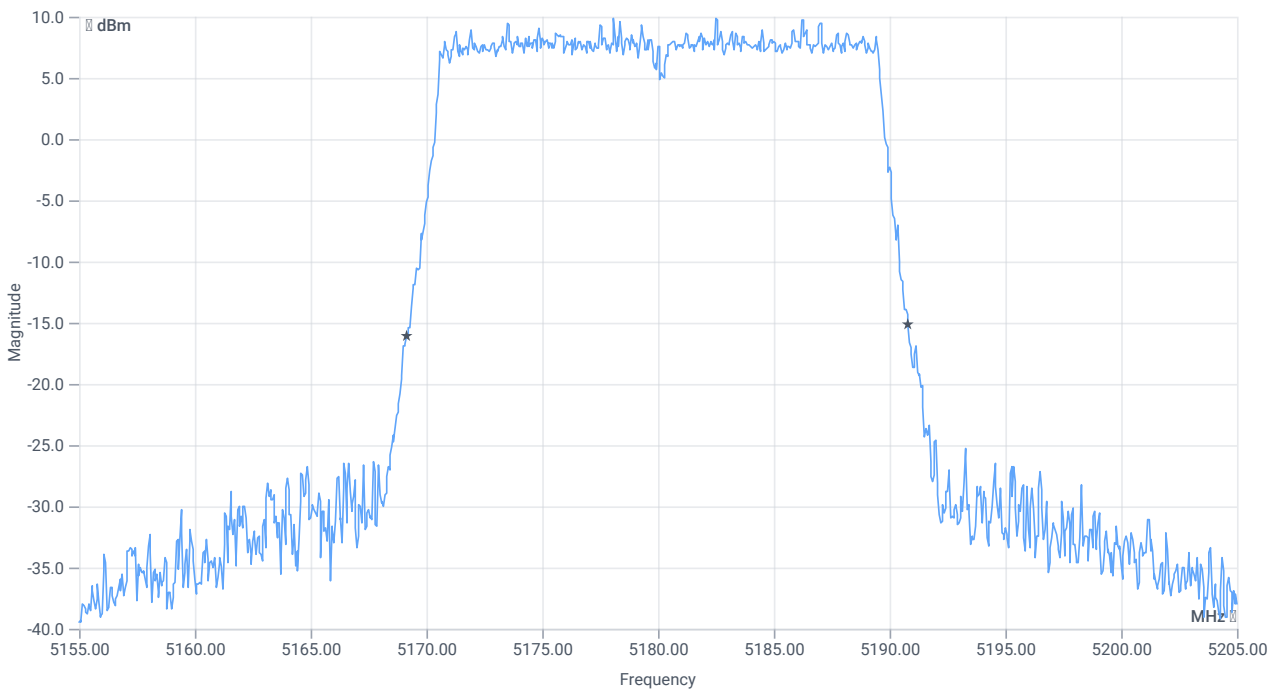




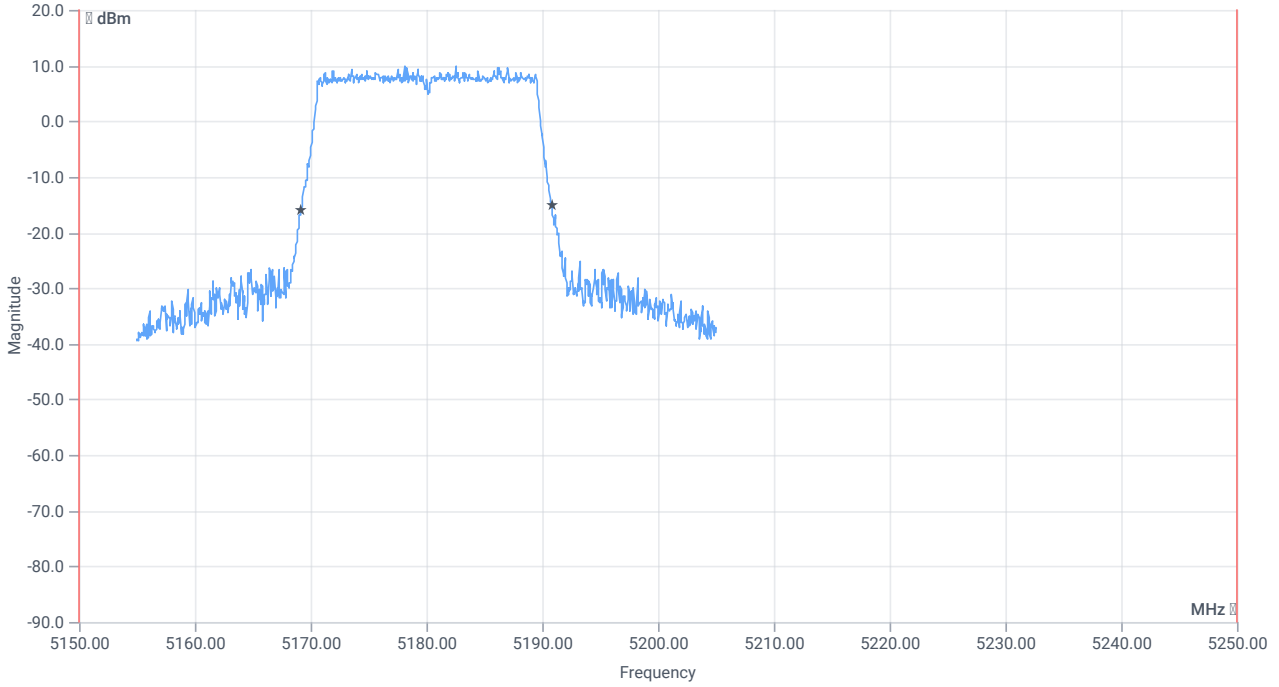
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.131	MHz	INFO
T1 99%	5150.000000	--	5170.5095	MHz	PASS
T2 99%	--	5250.000000	5189.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.65	MHz	INFO
T1 26dB	5150.000000	---	5169.1500	MHz	PASS
T2 26dB	---	5250.000000	5190.8000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:04:25
Ambit temp [°C] humidity [rel%]	24.9 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-1
Information	PS64

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5180 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.46	dBm	INFO
Ant:1 BW 26dB	--	--	21.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.78	dBm	INFO
Ant:2 BW 26dB	--	--	21.920	MHz	INFO
Σ Limit absolute	--	24	20.14	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.76	--	24.38	20.14	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	5.08	dBm/1MHz	INFO
Ant:2 PSD	--	--	4.41	dBm/1MHz	INFO
Σ	--	11	7.77	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	25.07.2023 16:06:14
Ambit temp [°C] humidity [rel%]	24.9 53
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA WLAN5Gx ax-HE20 U-NII-1
Information	PS76

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 16:06:15
Message	set WLAN5Gx to WLAN5Gx ax-HE20 U-NII-1, Frequency [MHz] 5200 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:06:23
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5200 MHz

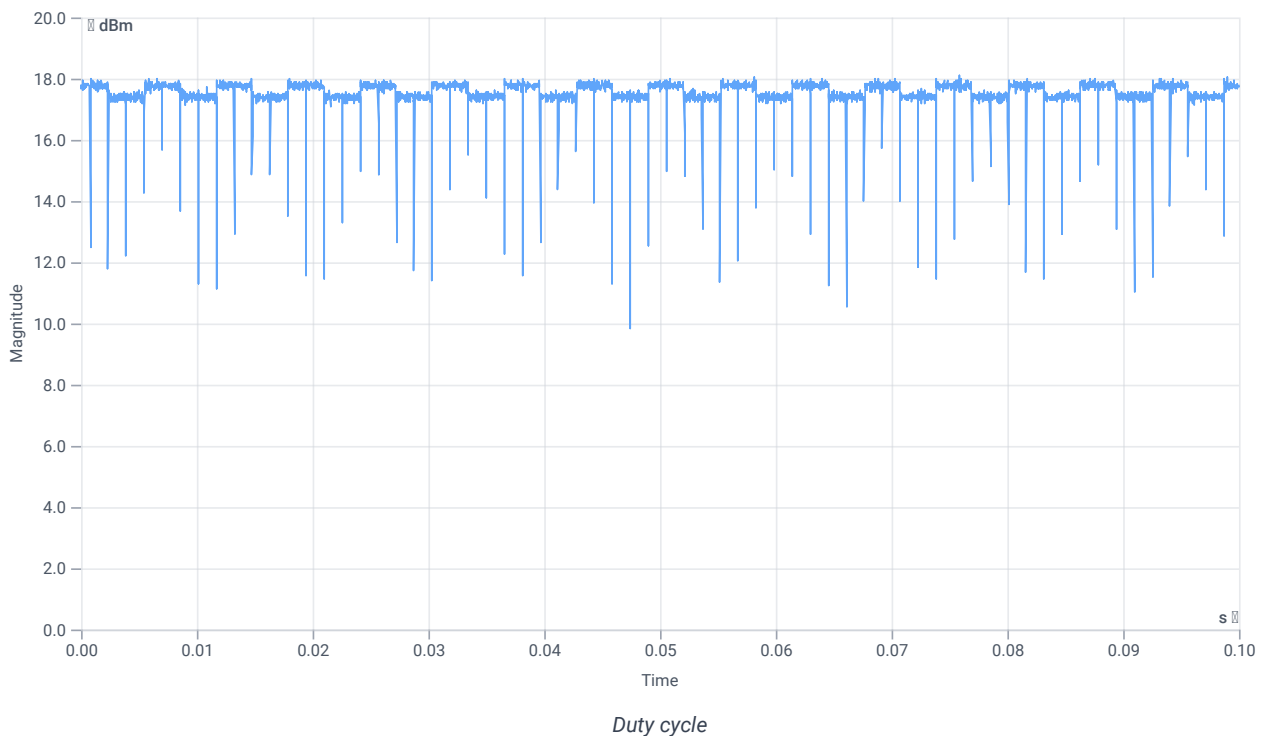
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.76	dBm	INFO
Ref. Frequency	--	--	5196.000	MHz	INFO

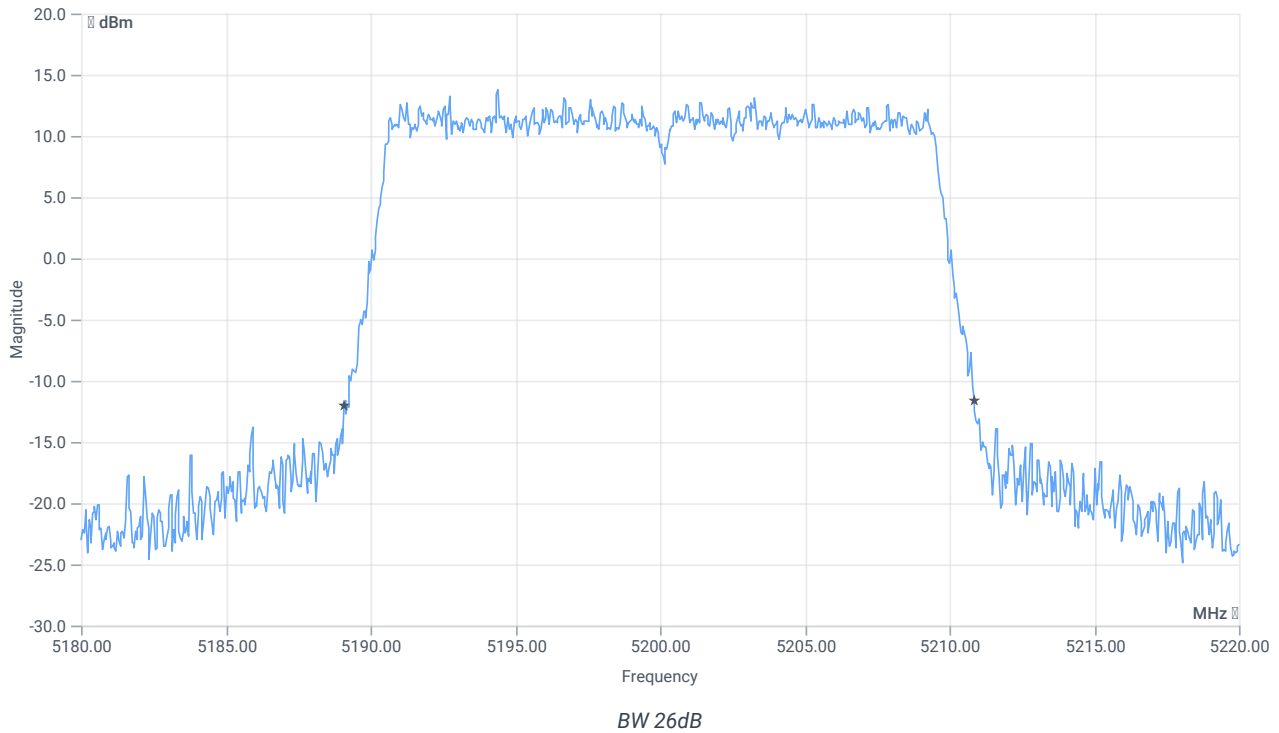
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



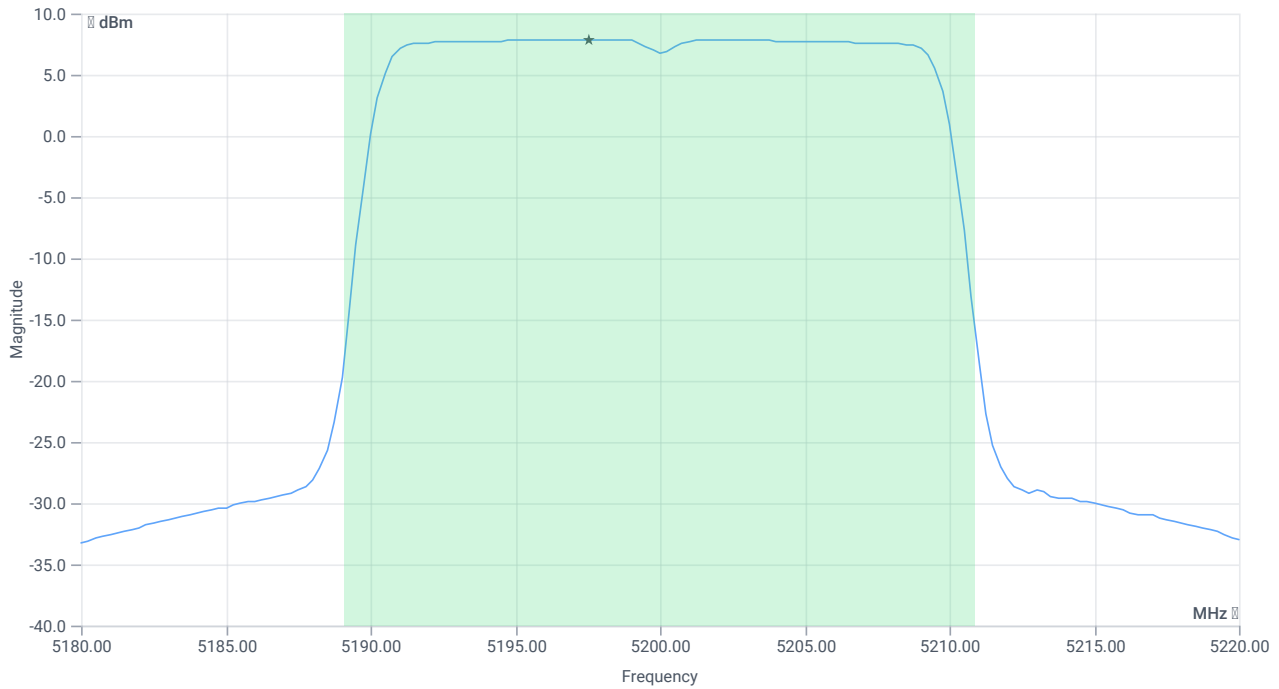
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5189.0800	MHz	INFO
T2 26dB	---	---	5210.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.76 16.31 30
Start [MHz] Stop [MHz]	5180.000 5220.000
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	--	--	20.21	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.21	dBm	PASS
Limit: 11 dBm + 10 log 21.76					
Max Output Power DC corrected	--	24.38	20.21	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.85	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.85	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:07:51
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

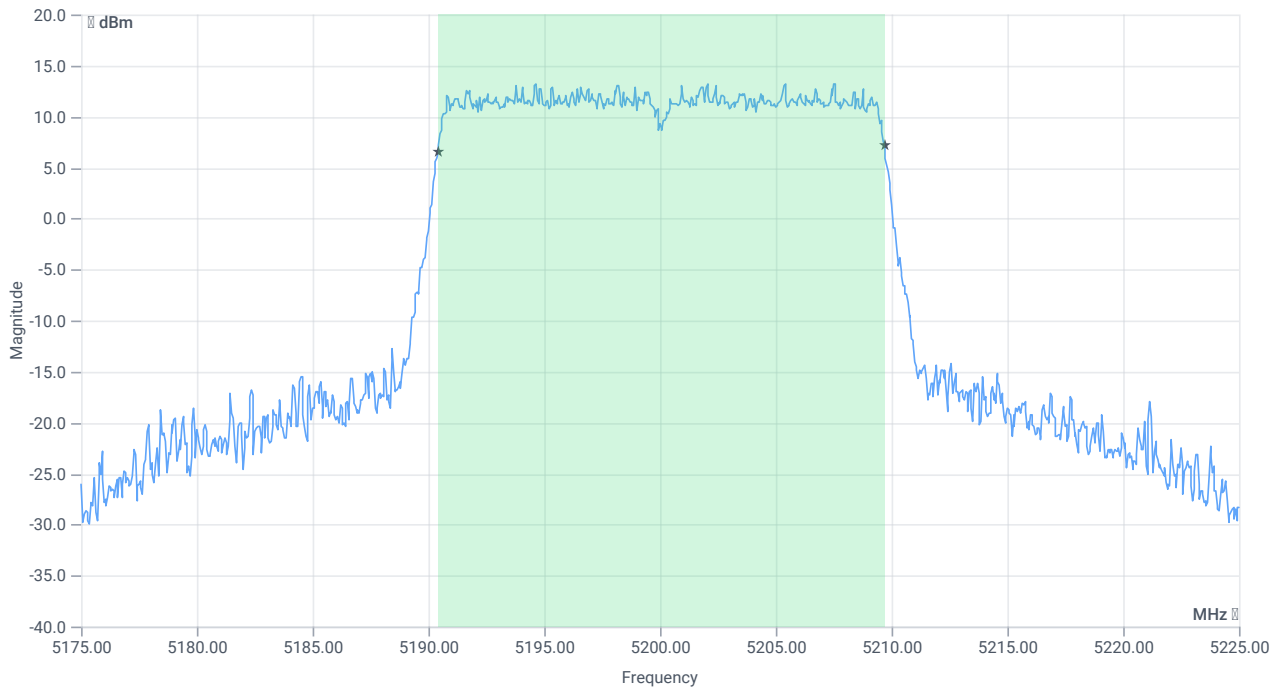
Test at TX 5200 MHz

RESULT: Reference Power cond.

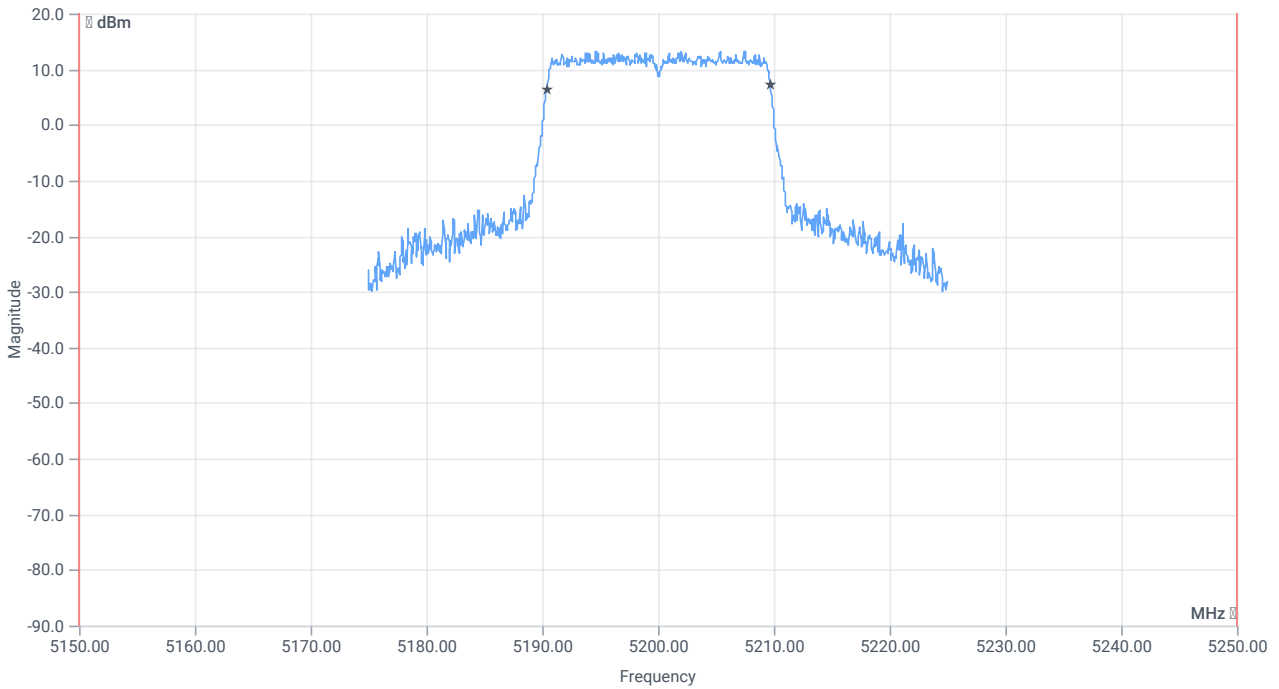
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.26	dBm	INFO
Ref. Frequency	--	--	5195.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.26 16.31 25
Start [MHz] Stop [MHz]	5175.000 5225.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



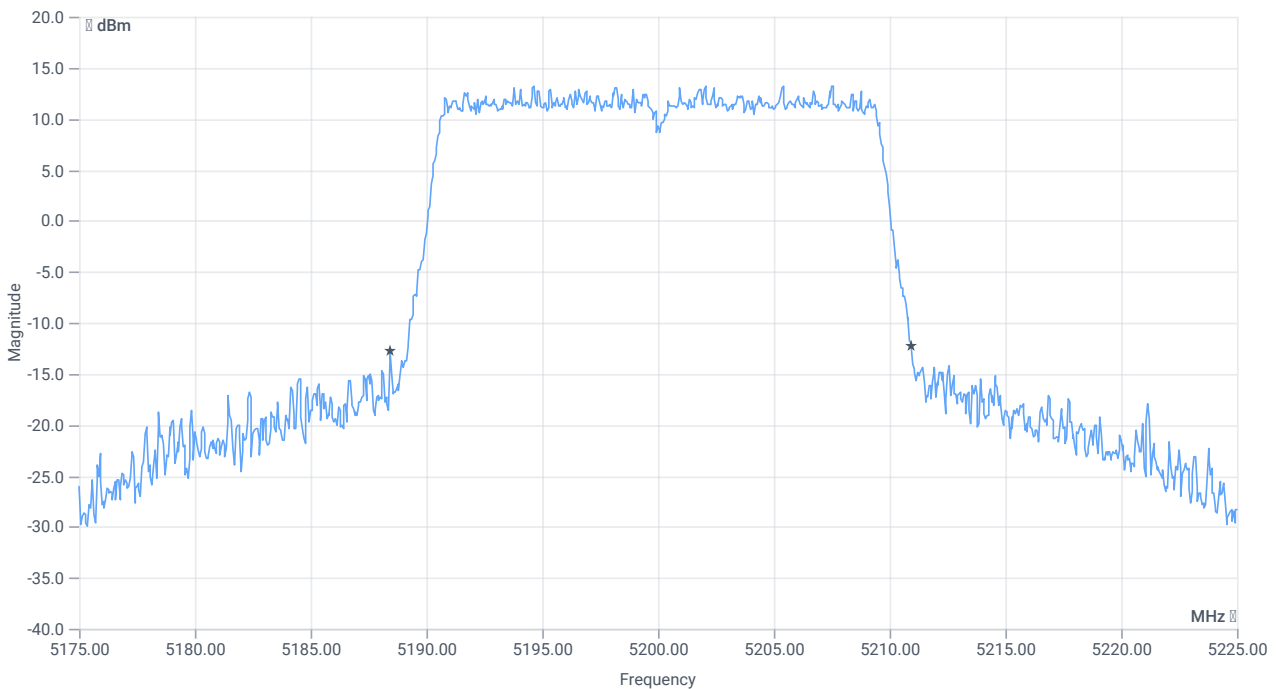
BW 99PCT



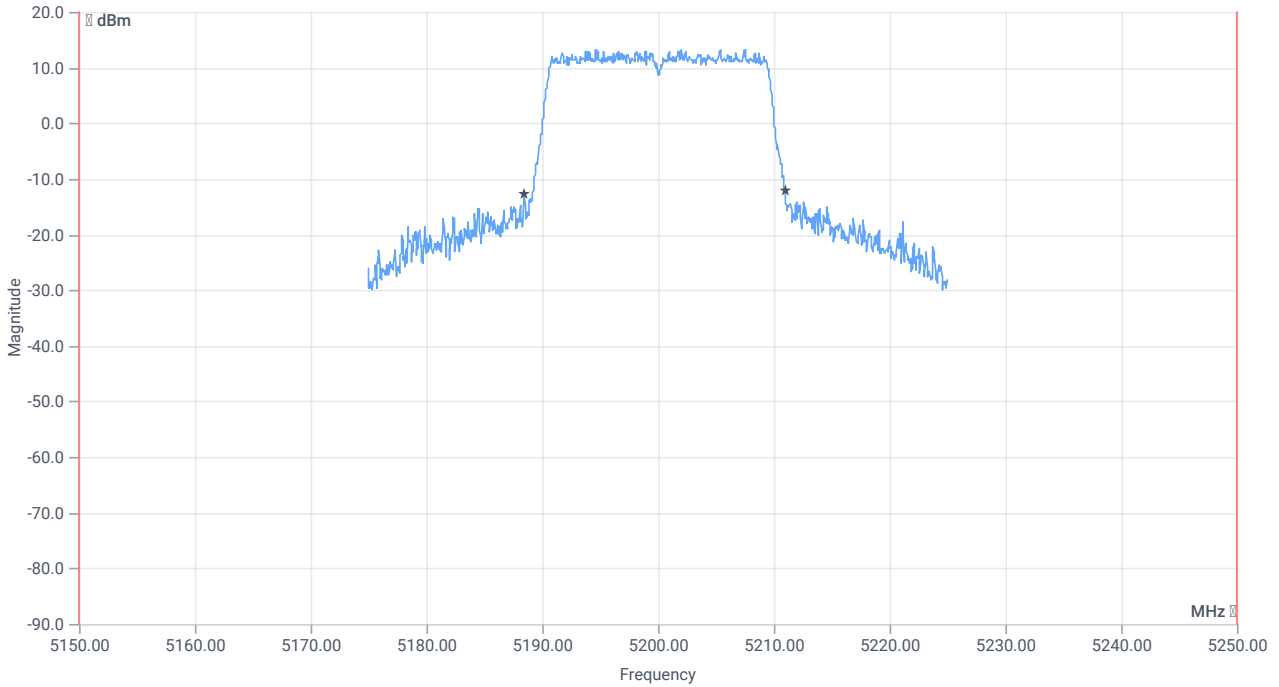
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.281	MHz	INFO
T1 99%	5150.000000	--	5190.4096	MHz	PASS
T2 99%	--	5250.000000	5209.6903	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	22.5	MHz	INFO
T1 26dB	5150.000000	---	5188.4500	MHz	PASS
T2 26dB	---	5250.000000	5210.9500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:08:28
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5200 MHz

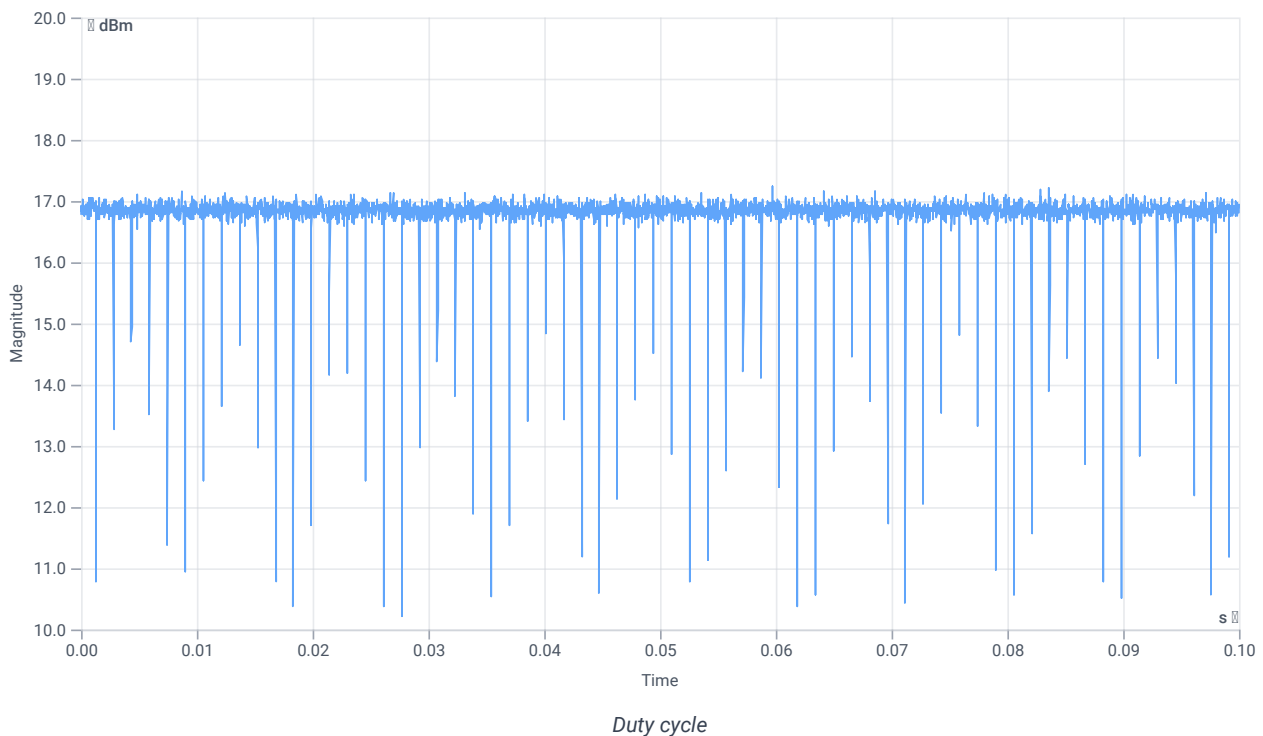
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.52	dBm	INFO
Ref. Frequency	--	--	5203.200	MHz	INFO

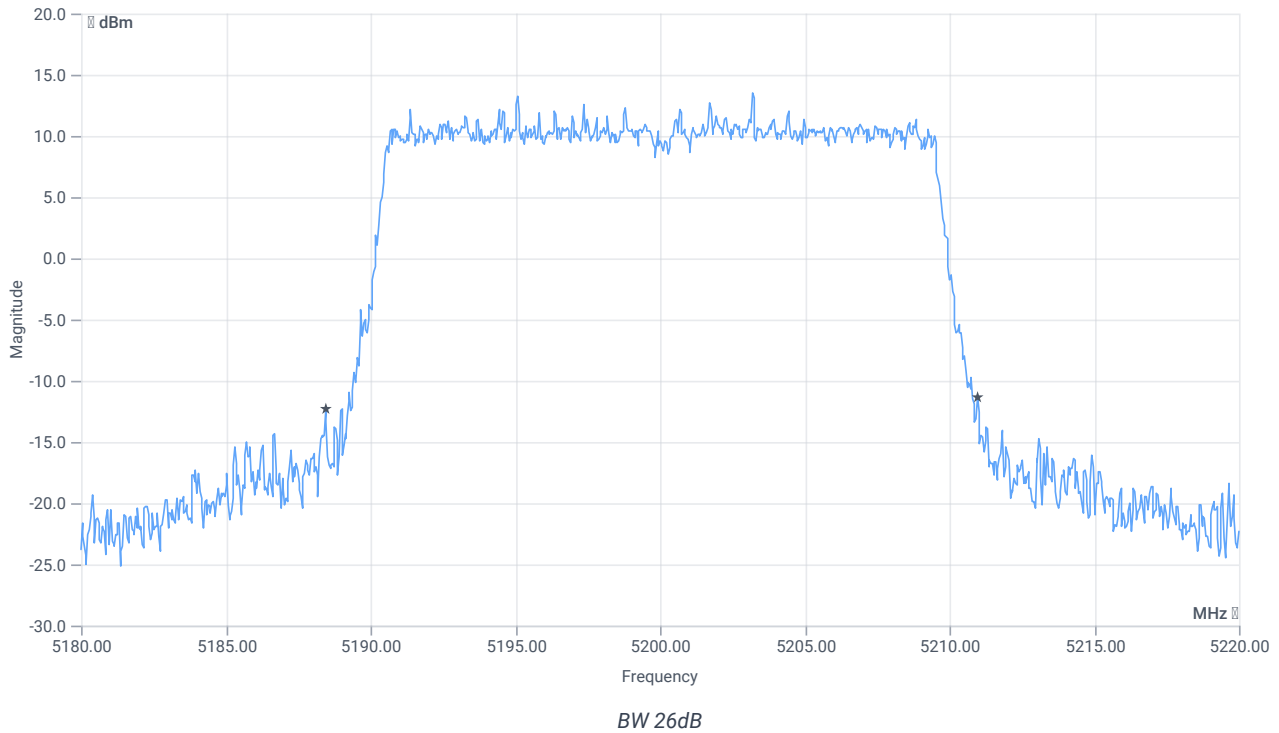
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



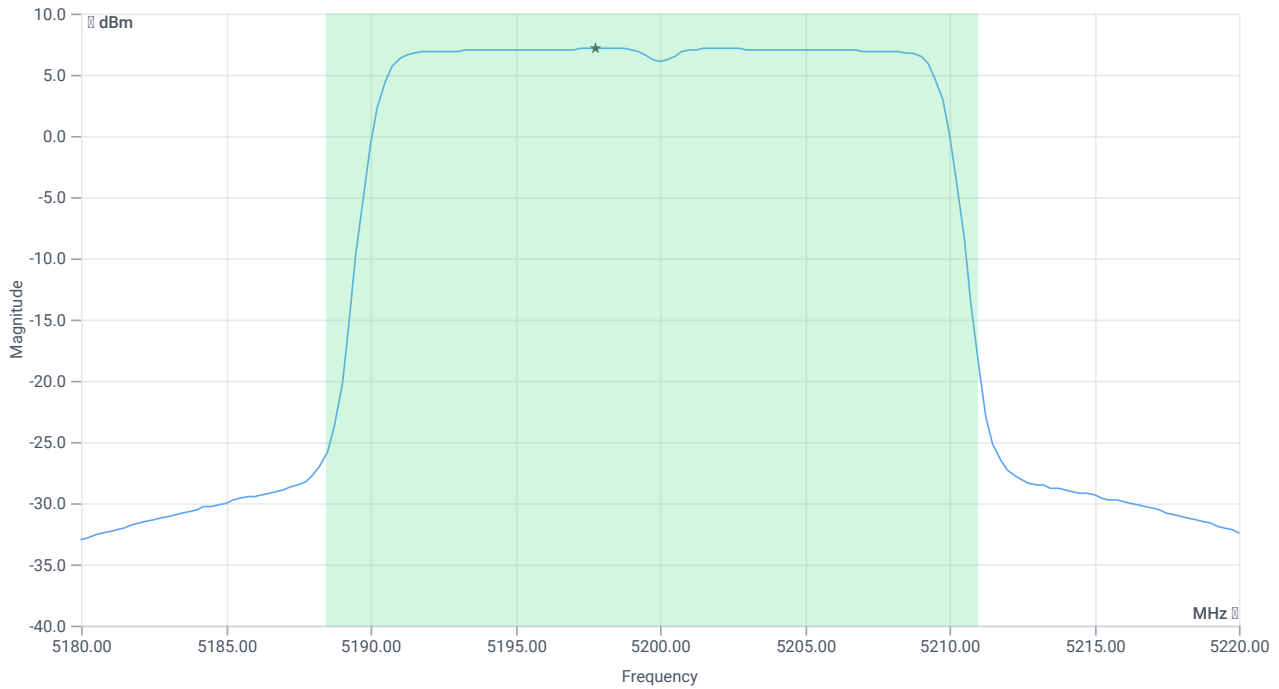
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	22.52	MHz	INFO
T1 26dB	---	---	5188.4400	MHz	INFO
T2 26dB	---	---	5210.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.52 16.31 30
Start [MHz] Stop [MHz]	5180.000 5220.000
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	--	--	19.49	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.49	dBm	PASS
Limit: 11 dBm + 10 log 22.52					
Max Output Power DC corrected	--	24.53	19.49	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.11	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.11	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:09:55
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

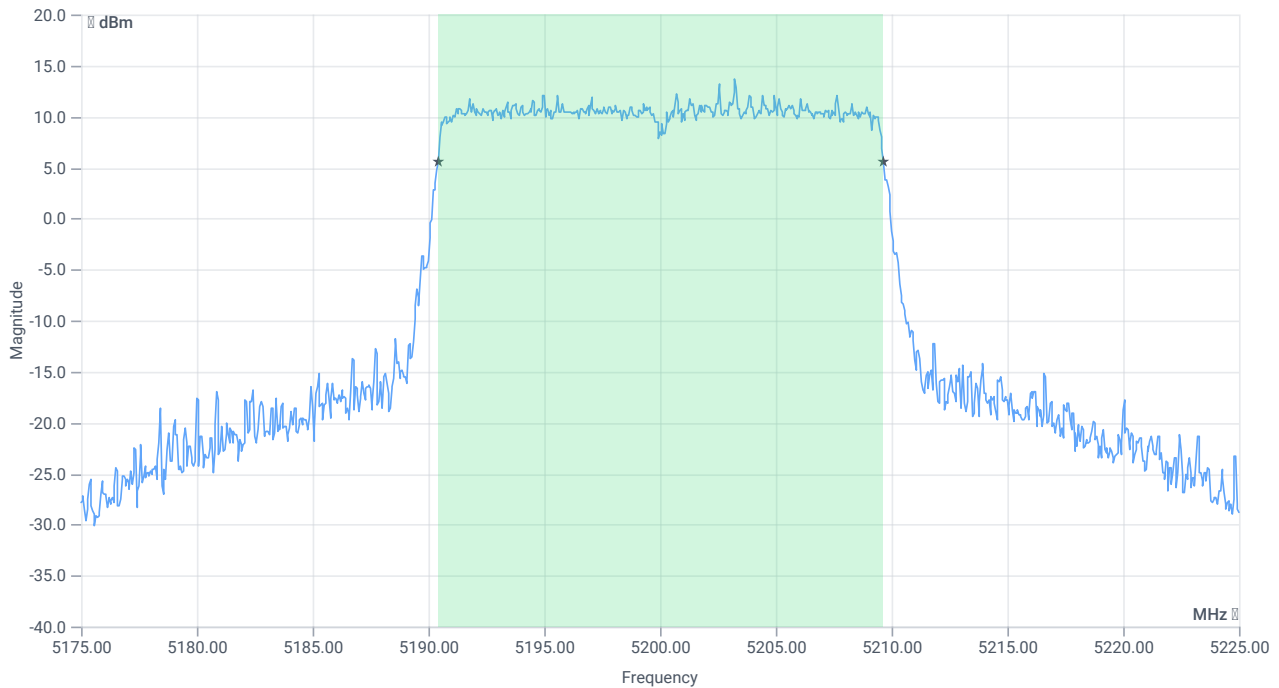
Test at TX 5200 MHz

RESULT: Reference Power cond.

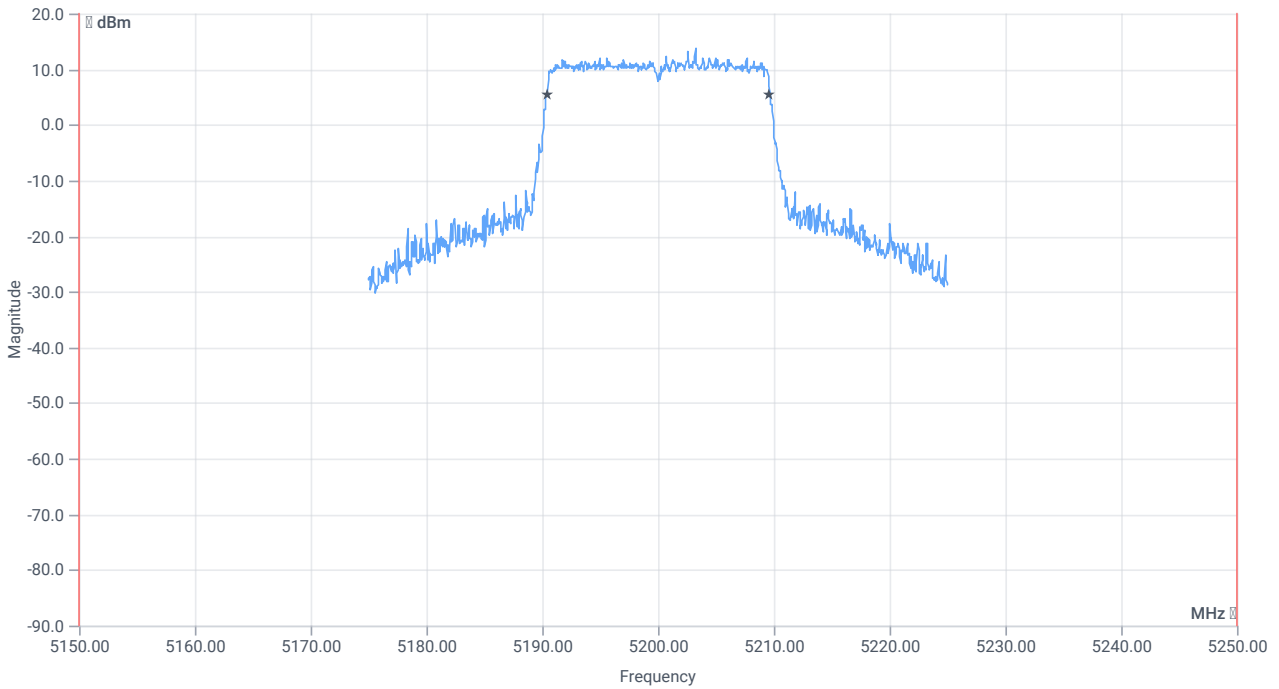
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.90	dBm	INFO
Ref. Frequency	--	--	5198.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.90 16.31 25
Start [MHz] Stop [MHz]	5175.000 5225.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



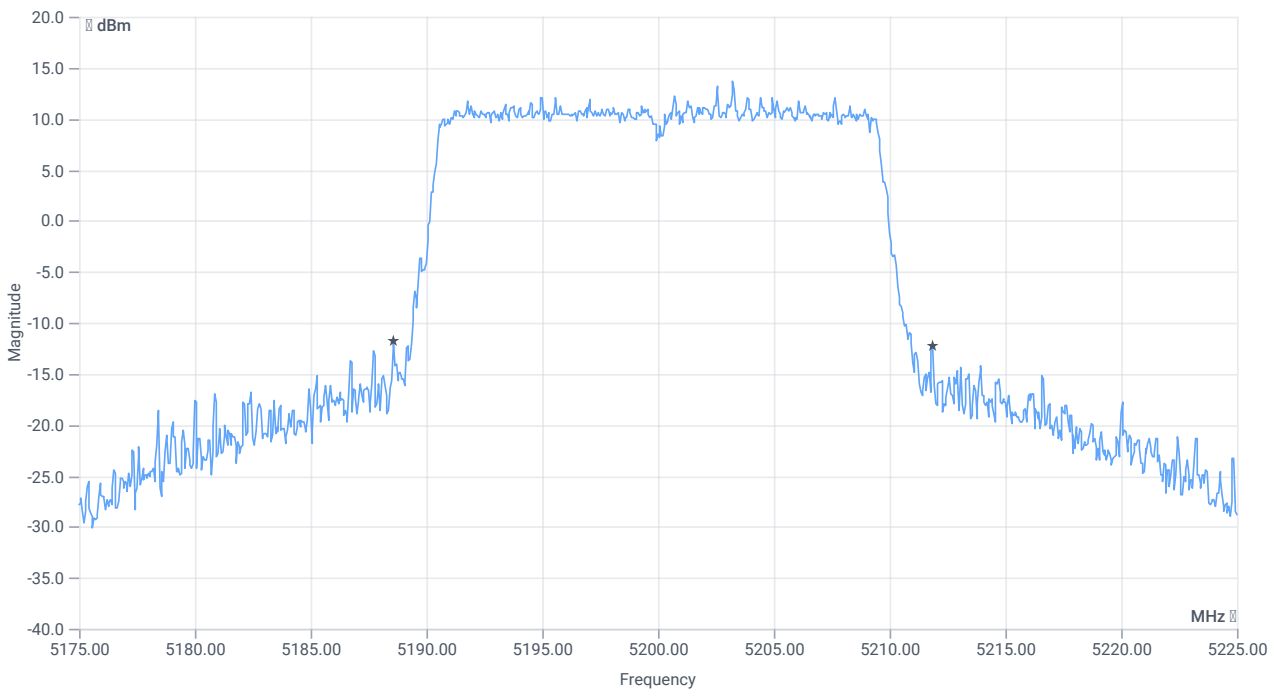
BW 99PCT



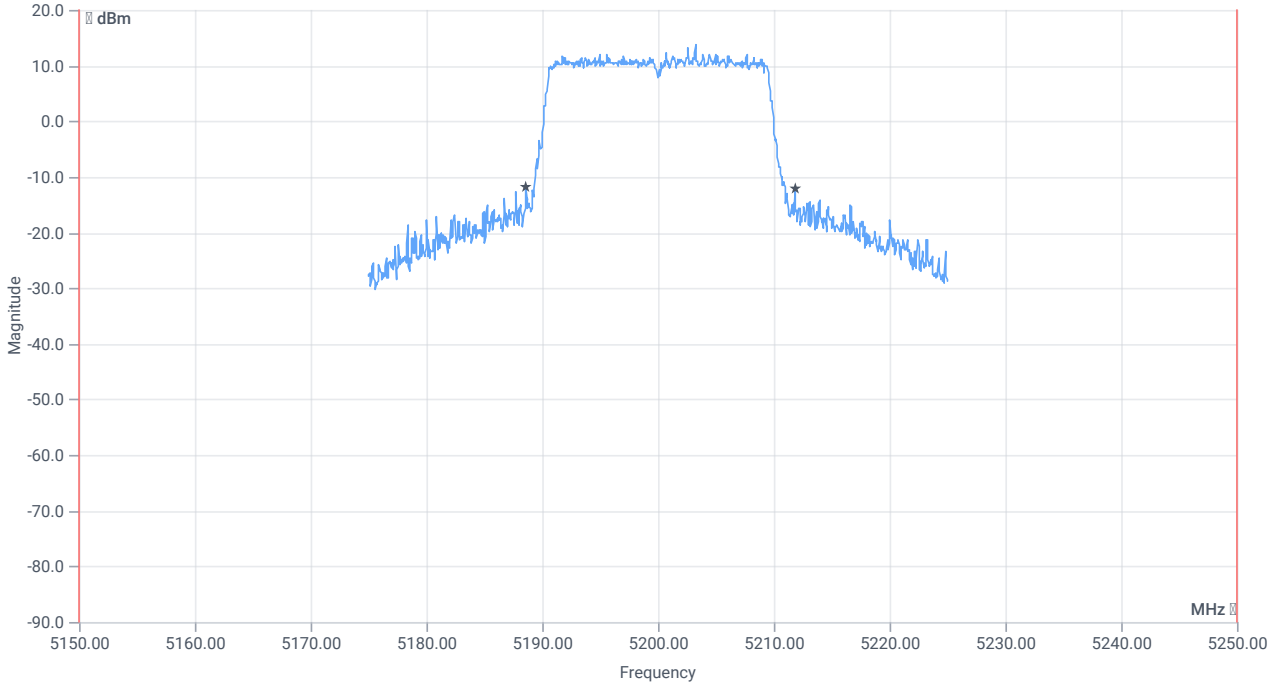
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5150.000000	--	5190.4096	MHz	PASS
T2 99%	--	5250.000000	5209.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.25	MHz	INFO
T1 26dB	5150.000000	---	5188.6000	MHz	PASS
T2 26dB	---	5250.000000	5211.8500	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:10:32
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5200 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.21	dBm	INFO
Ant:1 BW 26dB	--	--	21.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.49	dBm	INFO
Ant:2 BW 26dB	--	--	22.520	MHz	INFO
Σ Limit absolute	--	24	22.88	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.76	--	24.38	22.88	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.85	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.11	dBm/1MHz	INFO
Σ	--	11	10.51	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	25.07.2023 16:11:40
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA WLAN5Gx ax-HE20 U-NII-1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 16:11:40
Message	set WLAN5Gx to WLAN5Gx ax-HE20 U-NII-1, Frequency [MHz] 5240

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:11:49
Ambit temp [°C] humidity [rel%]	25.0 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5240 MHz

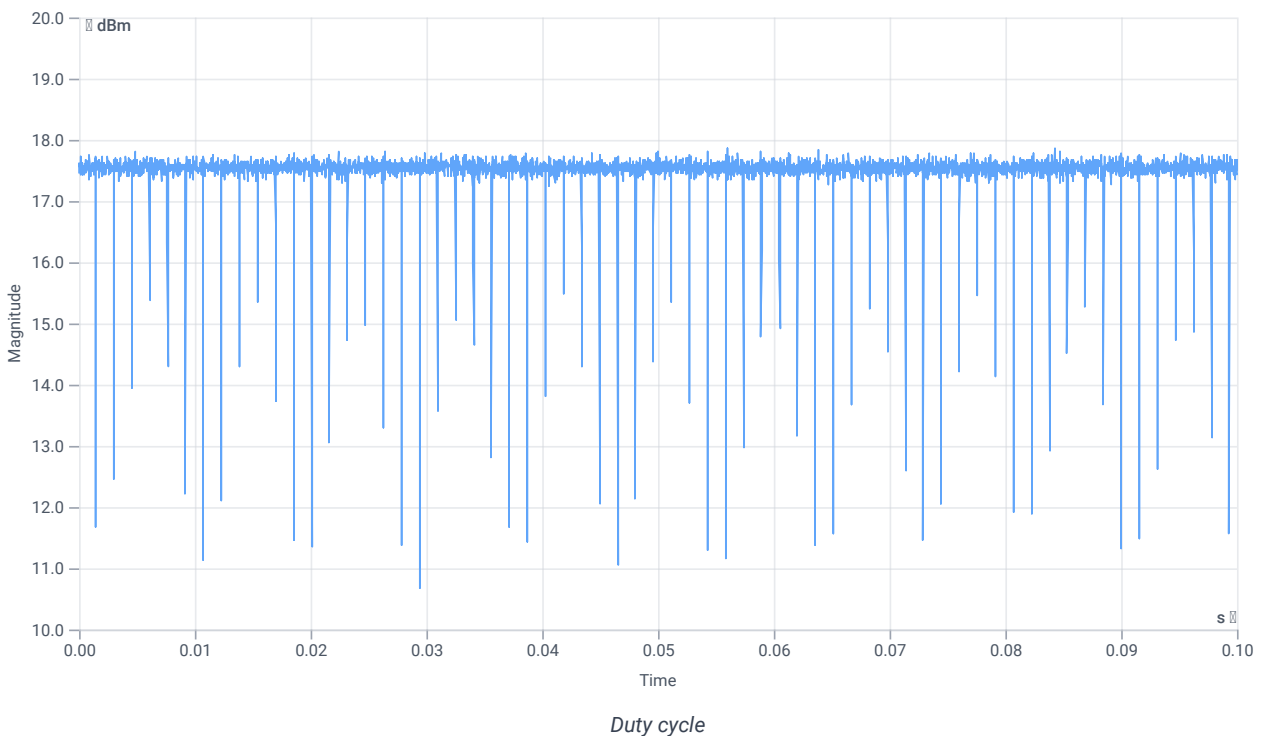
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.12	dBm	INFO
Ref. Frequency	--	--	5245.000	MHz	INFO

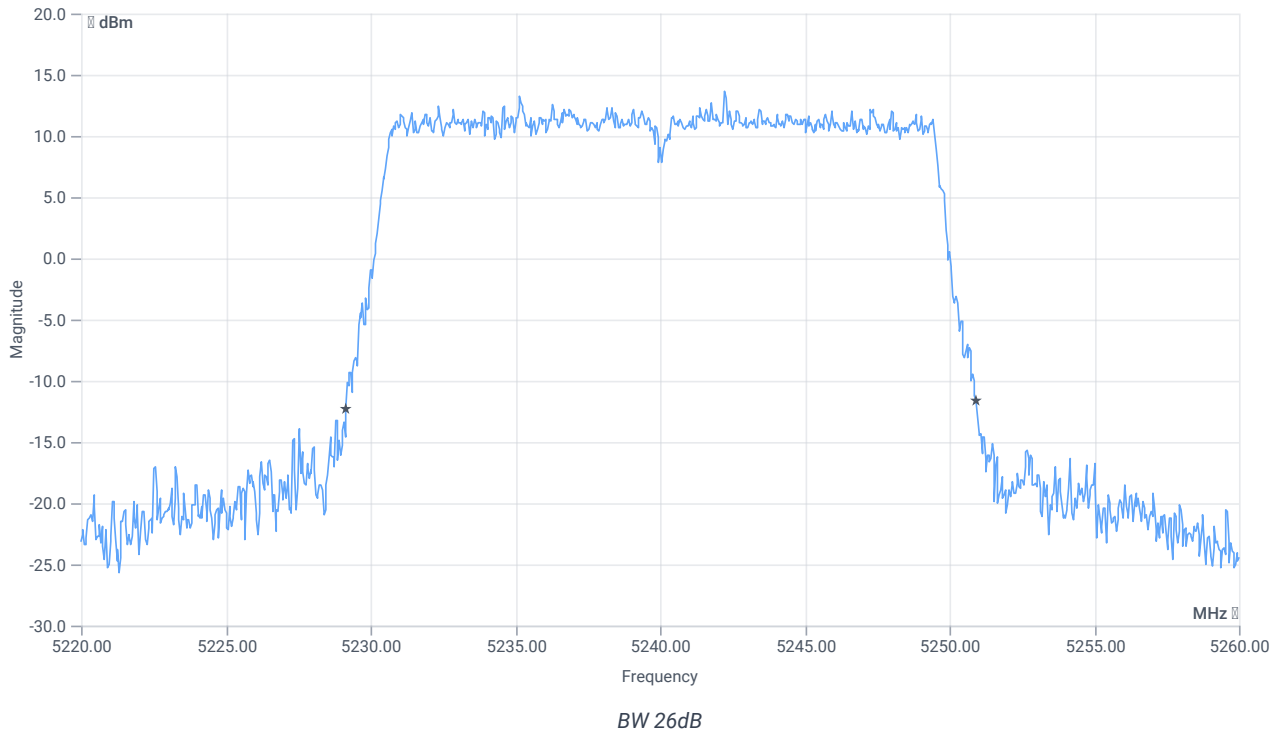
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



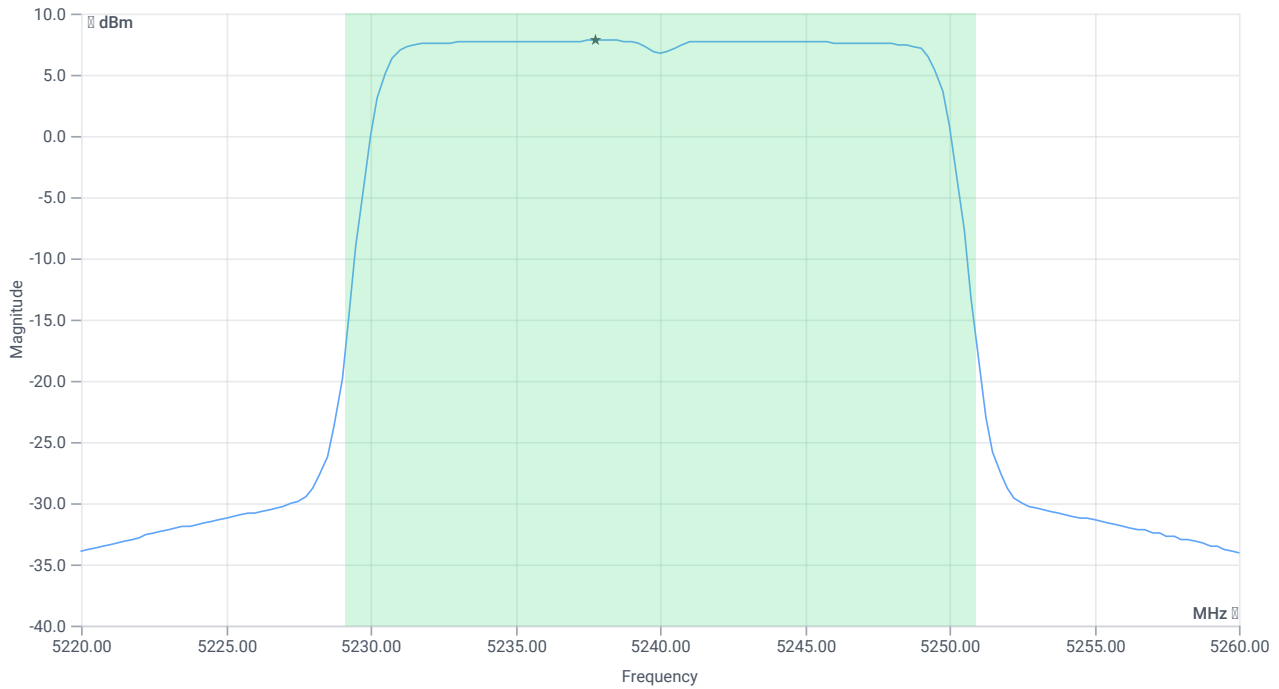
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5229.1600	MHz	INFO
T2 26dB	---	---	5250.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.12 16.37 30
Start [MHz] Stop [MHz]	5220.000 5260.000
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	--	--	20.16	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.16	dBm	PASS
Limit: 11 dBm + 10 log 21.76					
Max Output Power DC corrected	--	24.38	20.16	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.78	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.78	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:13:16
Ambit temp [°C] humidity [rel%]	25.1 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

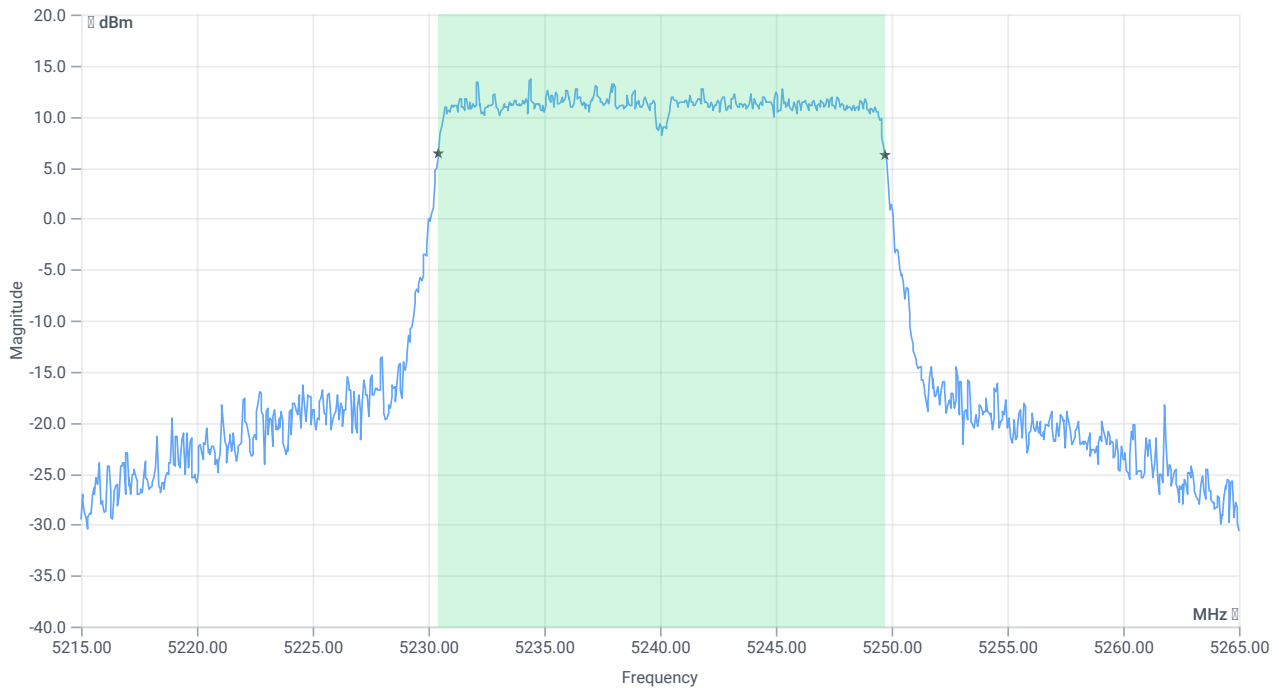
Test at TX 5240 MHz

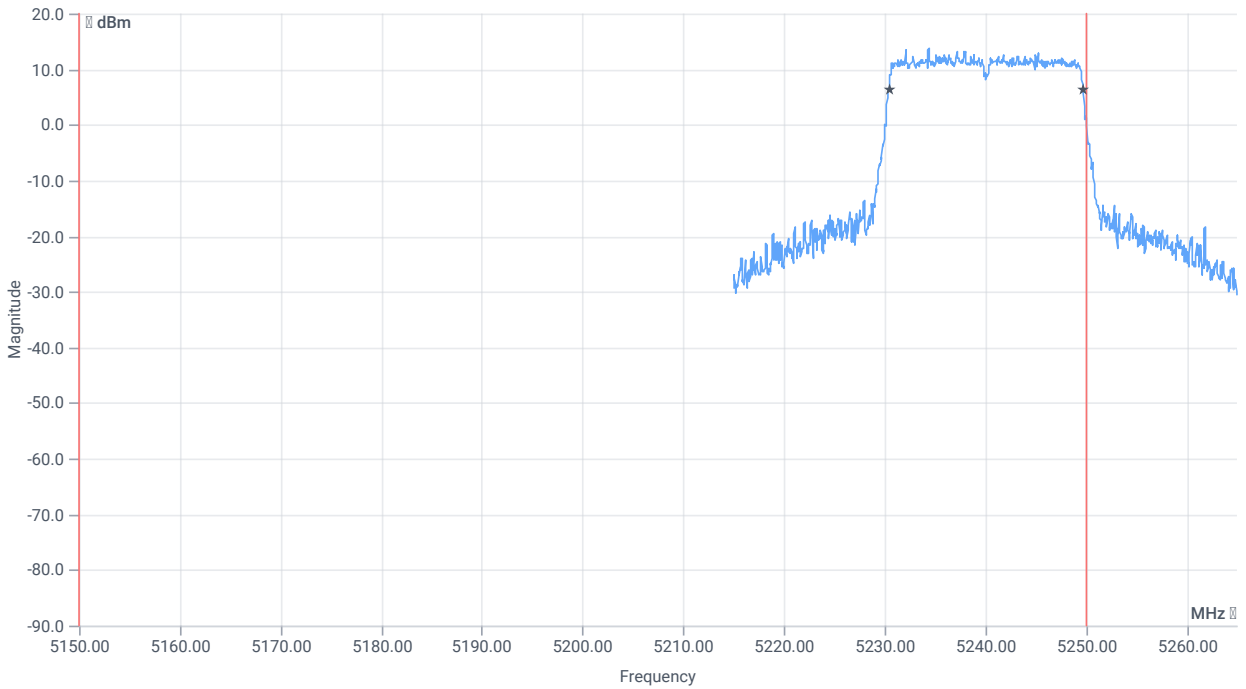
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.00	dBm	INFO
Ref. Frequency	--	--	5234.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.00 16.37 25
Start [MHz] Stop [MHz]	5215.000 5265.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

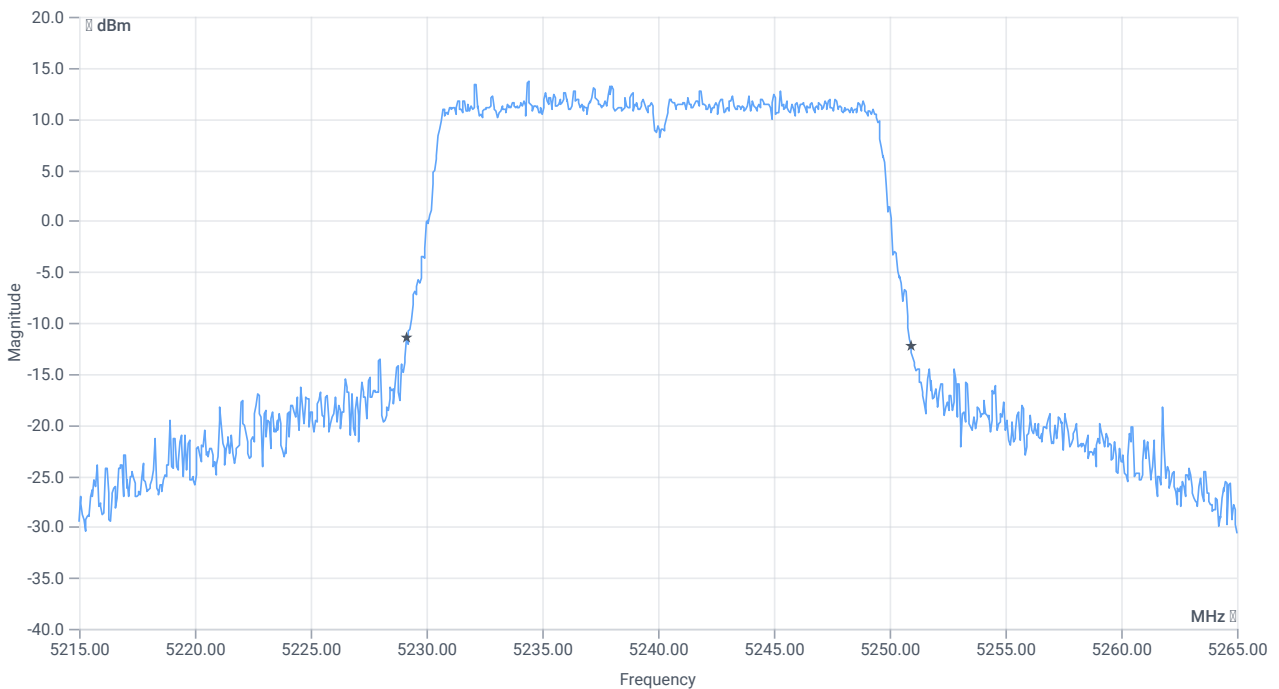




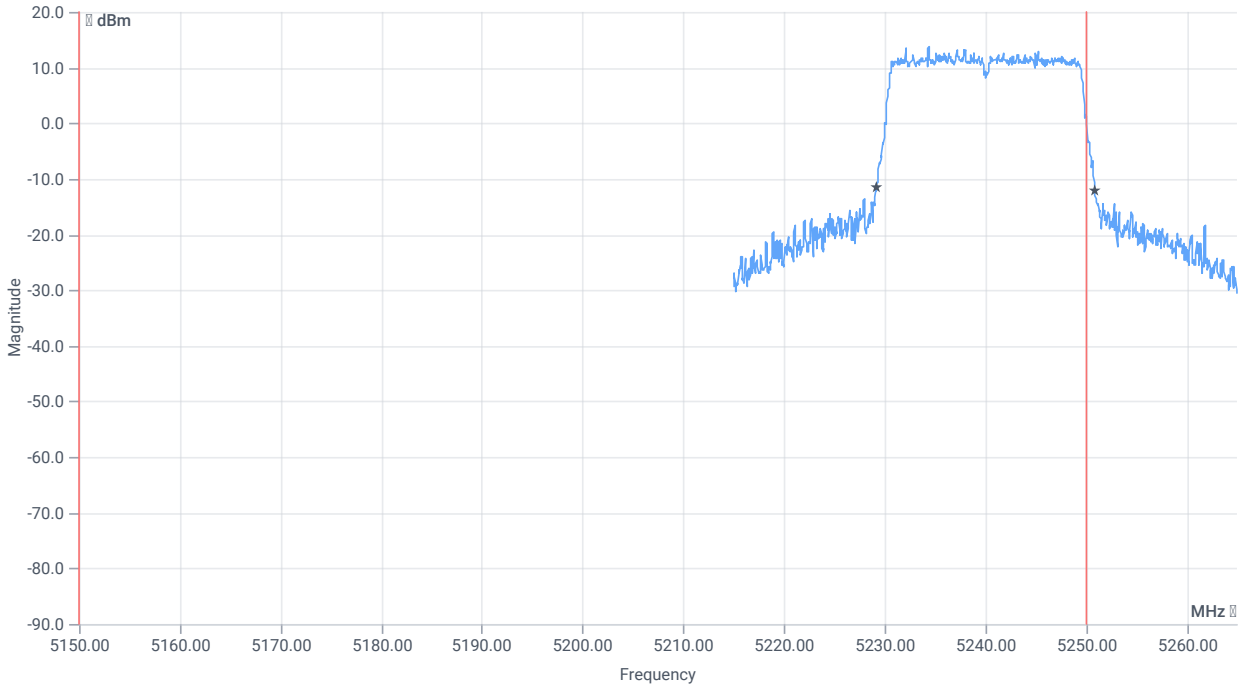
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5150.000000	--	5230.4595	MHz	PASS
T2 99%	--	5250.000000	5249.6903	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.75	MHz	INFO
T1 26dB	5150.000000	---	5229.1500	MHz	PASS
T2 26dB	---	5250.000000	5250.9000	MHz	DFS required

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:13:47
Ambit temp [°C] humidity [rel%]	25.1 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5240 MHz

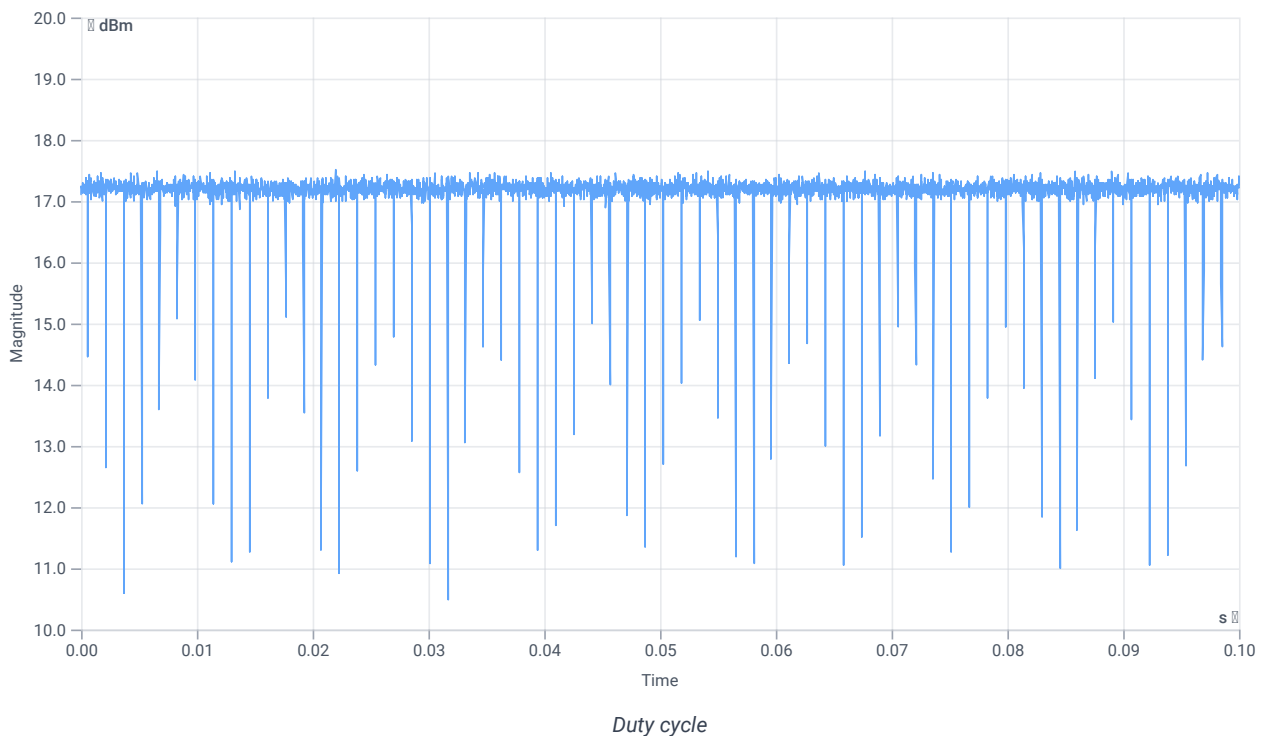
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.54	dBm	INFO
Ref. Frequency	--	--	5232.410	MHz	INFO

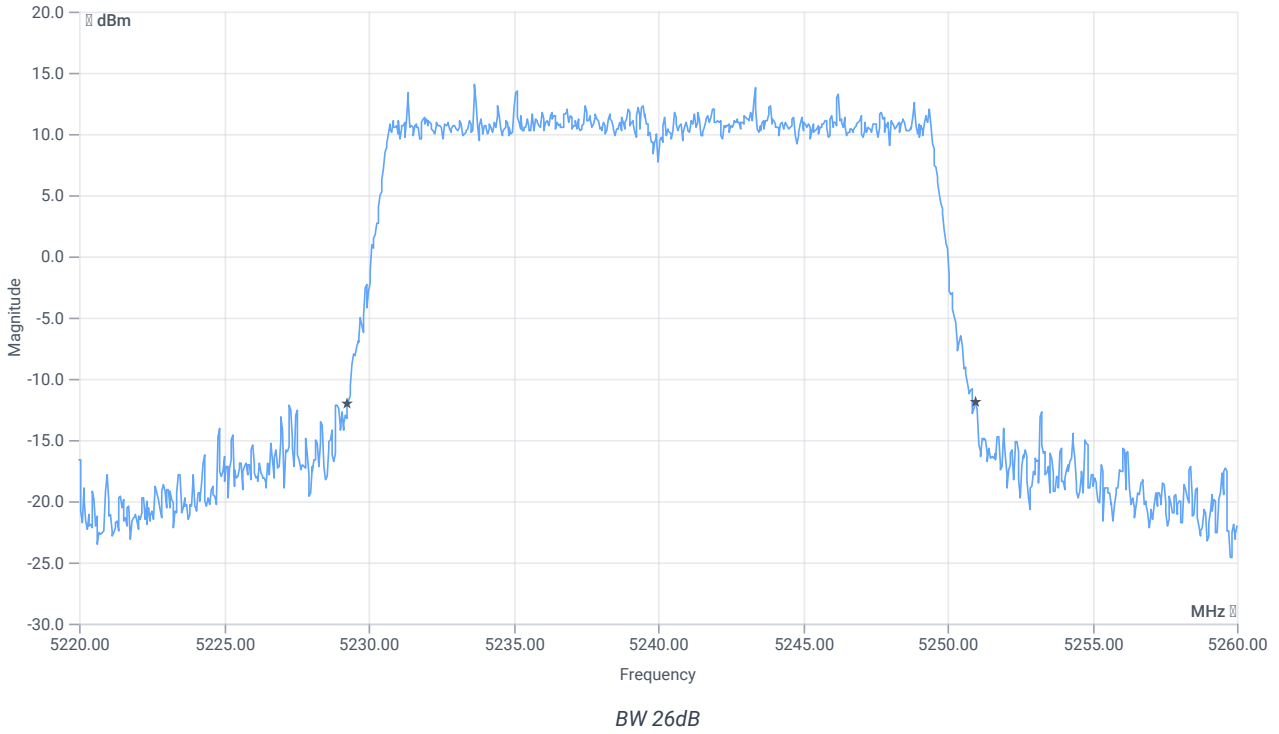
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



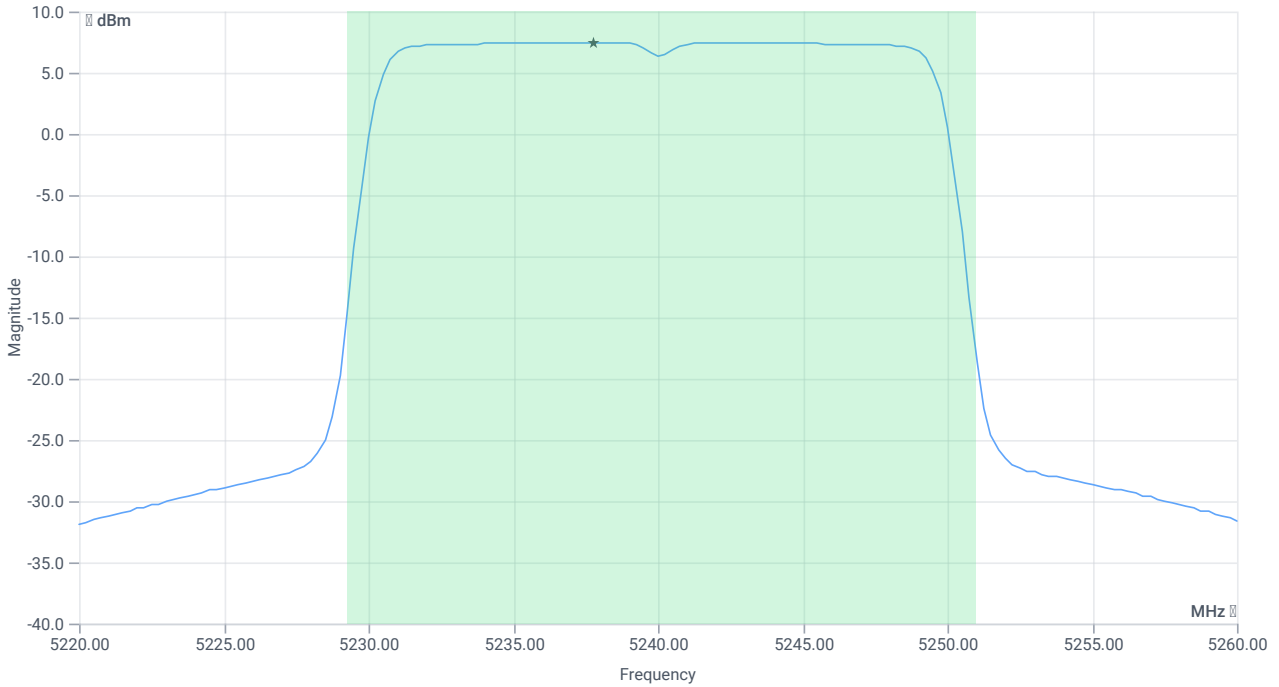
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.68	MHz	INFO
T1 26dB	---	---	5229.2800	MHz	INFO
T2 26dB	---	---	5250.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.54 16.37 30
Start [MHz] Stop [MHz]	5220.000 5260.000
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	--	--	19.86	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.86	dBm	PASS
Limit: 11 dBm + 10 log 21.68					
Max Output Power DC corrected	--	24.36	19.86	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.47	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.47	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:15:15
Ambit temp [°C] humidity [rel%]	25.1 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

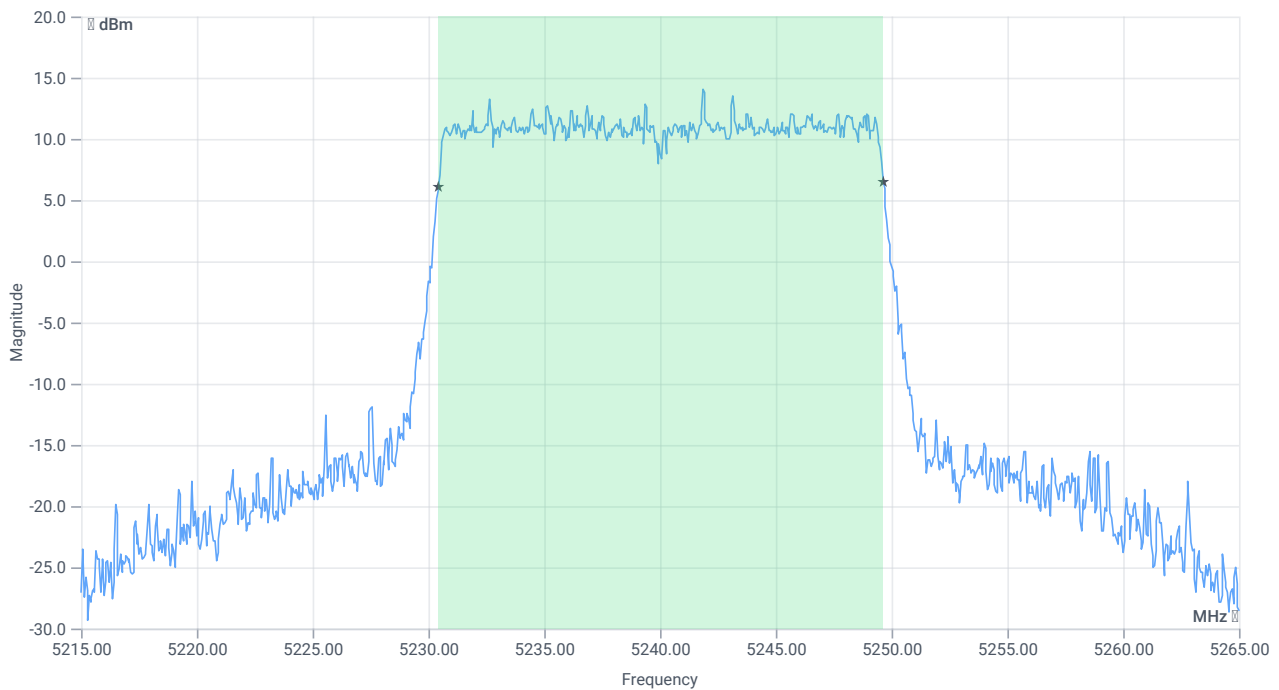
Test at TX 5240 MHz

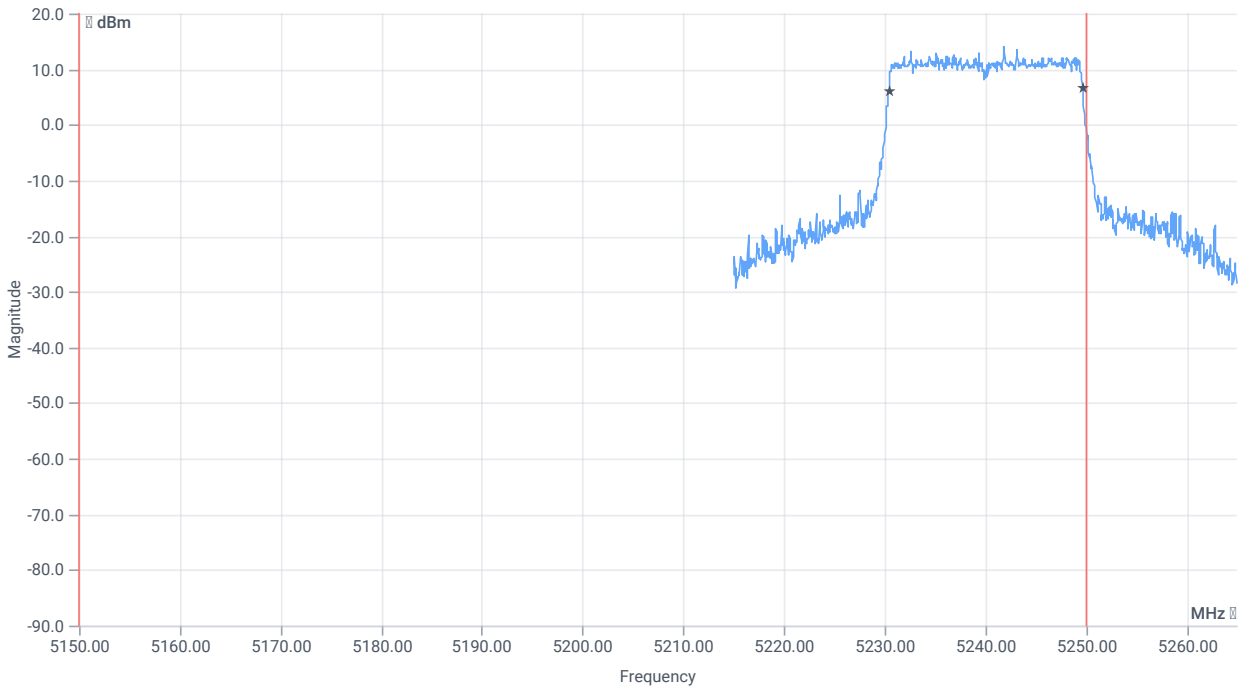
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.21	dBm	INFO
Ref. Frequency	--	--	5234.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.21 16.37 25
Start [MHz] Stop [MHz]	5215.000 5265.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

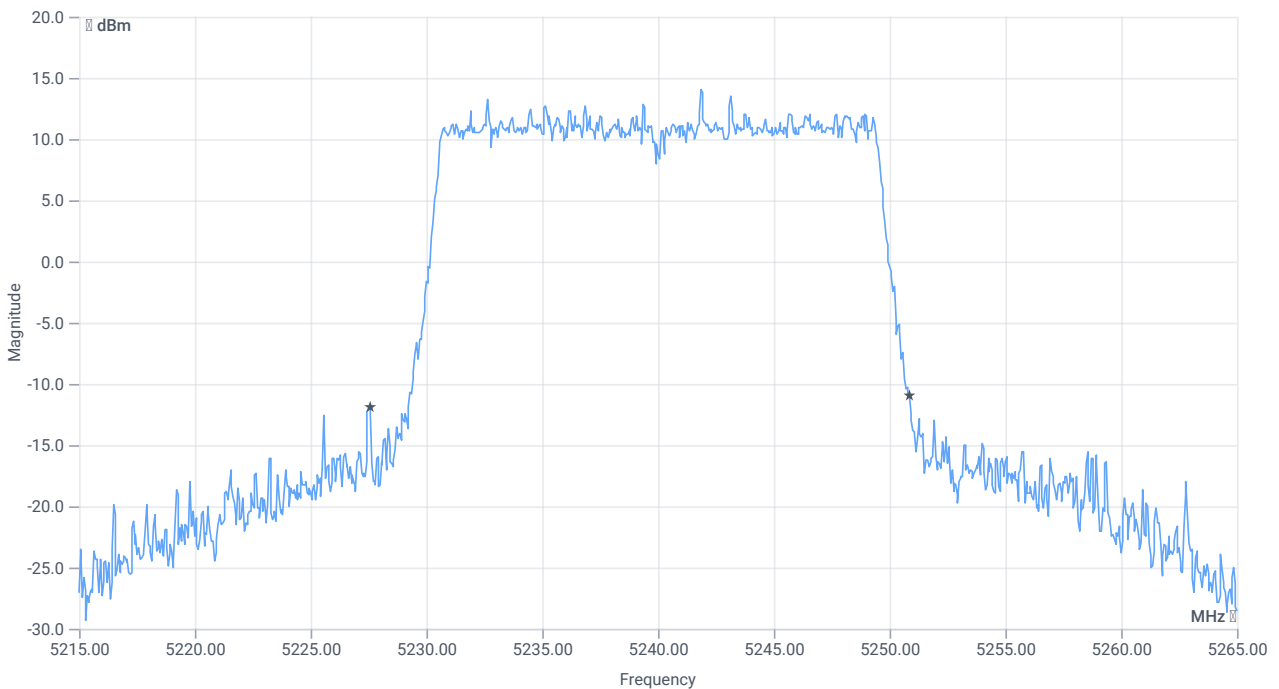




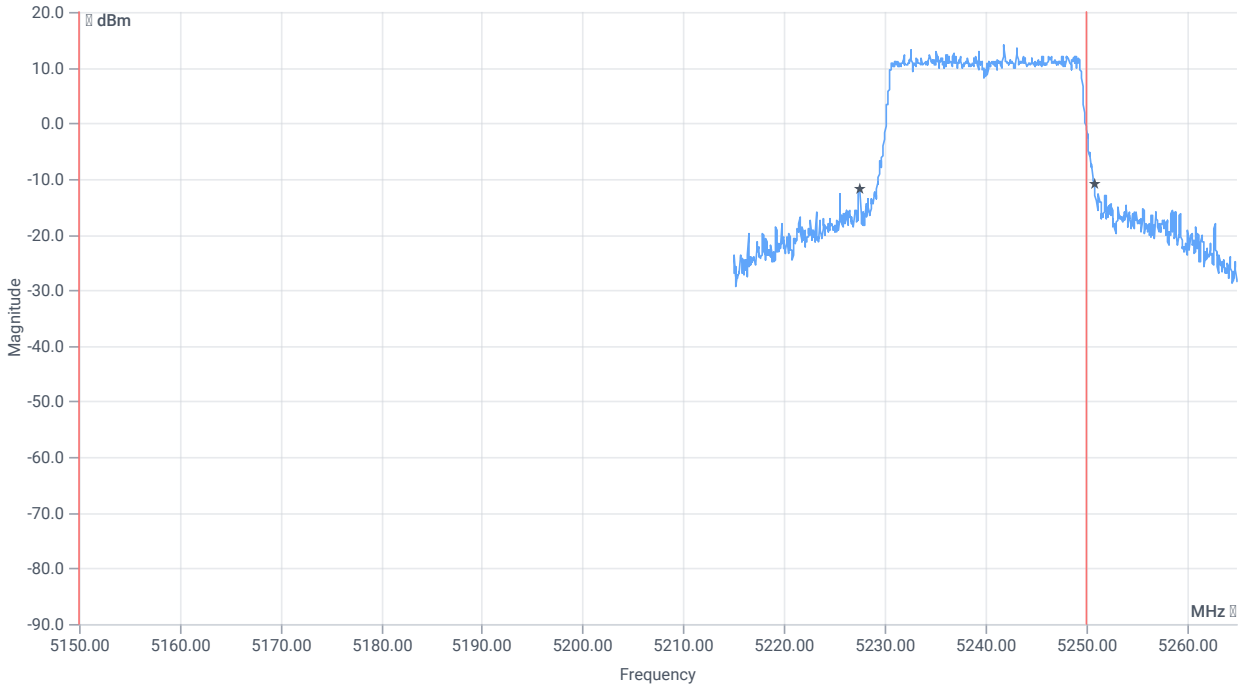
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5150.000000	--	5230.4595	MHz	PASS
T2 99%	--	5250.000000	5249.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.3	MHz	INFO
T1 26dB	5150.000000	---	5227.5500	MHz	PASS
T2 26dB	---	5250.000000	5250.8500	MHz	DFS required

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

References

TC start	25.07.2023 16:15:46
Ambit temp [°C] humidity [rel%]	25.1 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-1
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5240 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.16	dBm	INFO
Ant:1 BW 26dB	--	--	21.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.86	dBm	INFO
Ant:2 BW 26dB	--	--	21.680	MHz	INFO
Σ Limit absolute	--	24	23.02	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.68	--	24.36	23.02	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.78	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.47	dBm/1MHz	INFO
Σ	--	11	10.64	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	25.07.2023 16:24:27
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax-HE20 U-NII-2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 16:24:27
Message	set WLAN5Gx to ax-HE20 U-NII-2A, Frequency [MHz] 5260 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:24:36
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5260 MHz

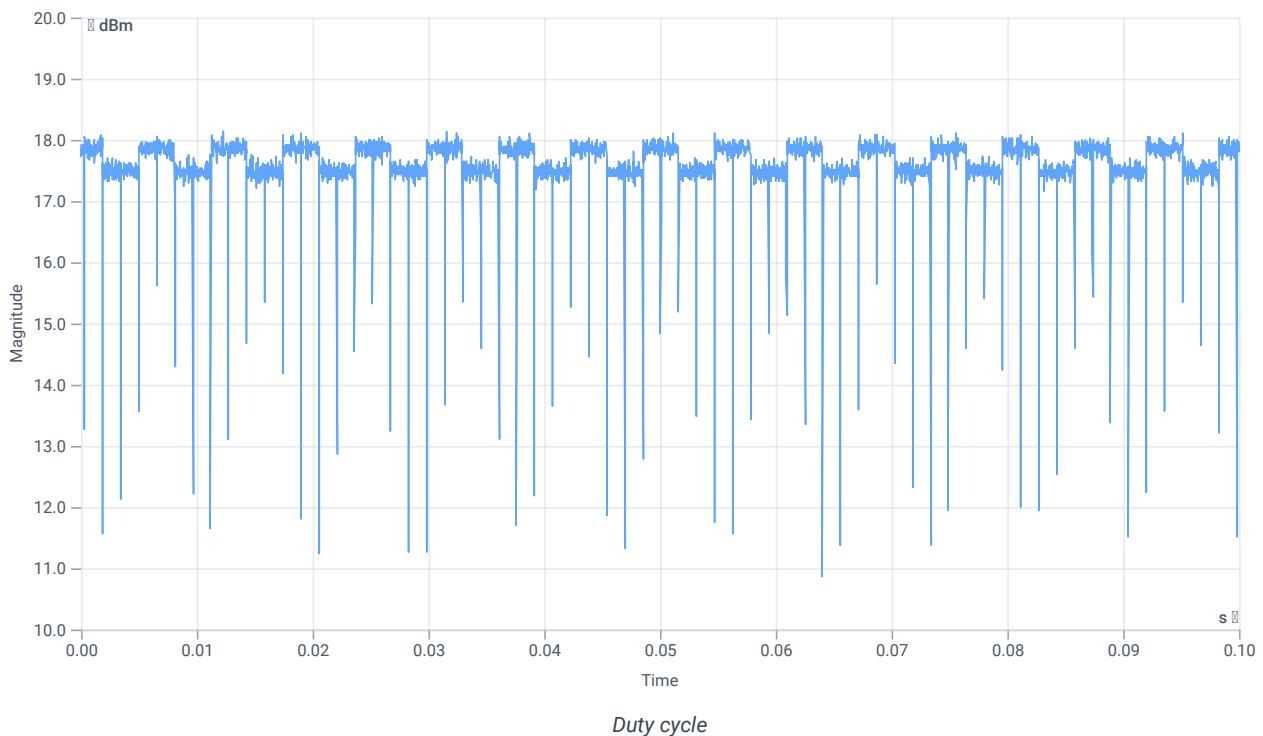
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	19.18	dBm	INFO
Ref. Frequency	--	--	5262.400	MHz	INFO

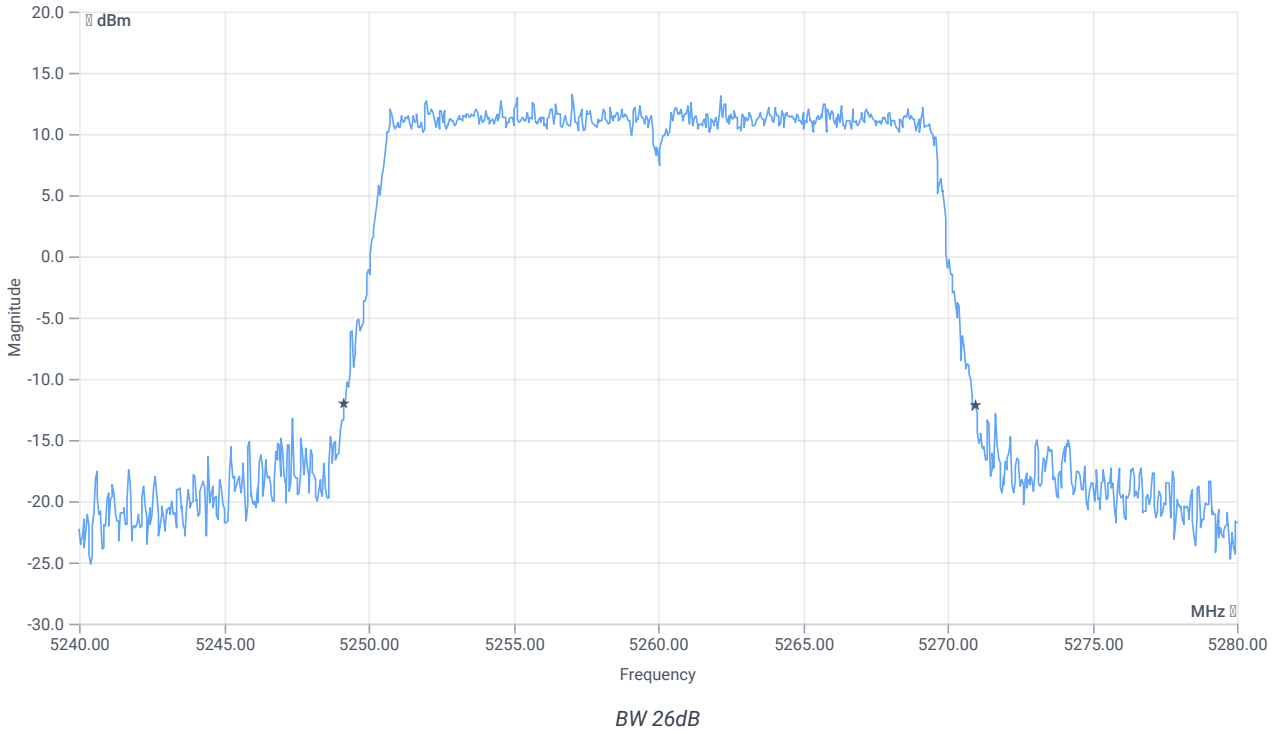
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



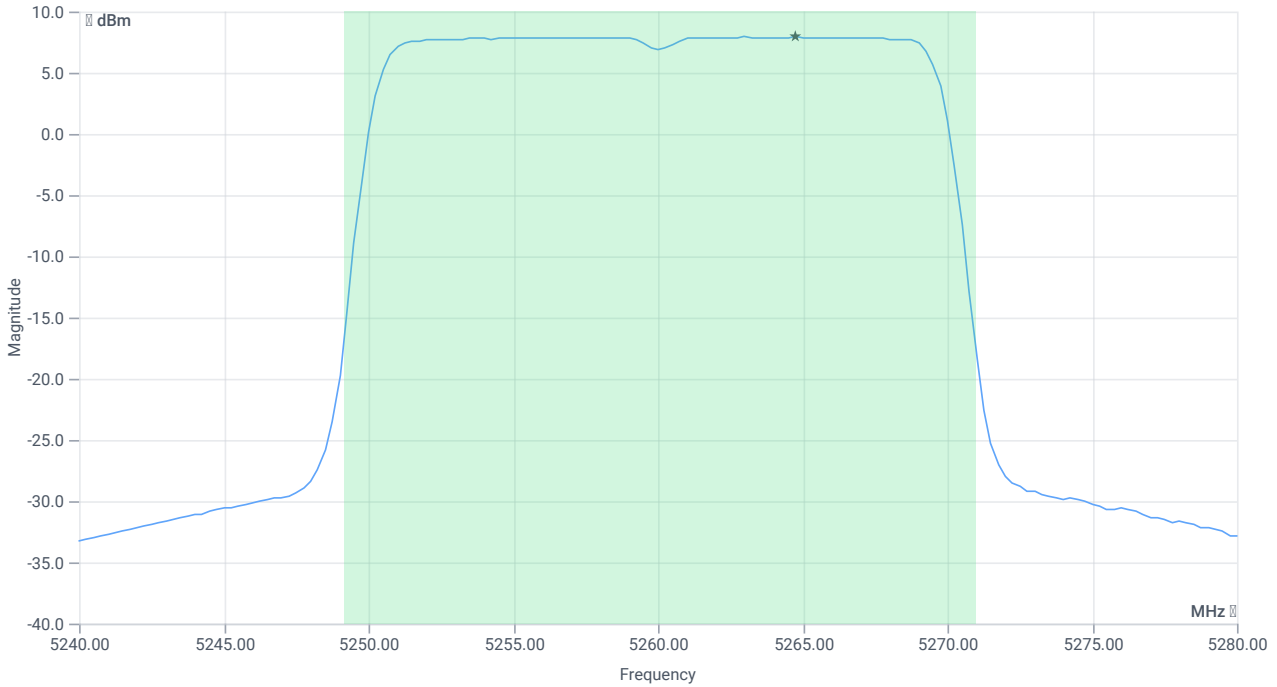
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.8	MHz	INFO
T1 26dB	---	---	5249.1600	MHz	INFO
T2 26dB	---	---	5270.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.18 16.34 30
Start [MHz] Stop [MHz]	5240.000 5280.000
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	--	--	20.31	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.31	dBm	PASS
Limit: 11 dBm + 10 log 21.8					
Max Output Power DC corrected	--	24.38	20.31	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.93	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.93	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:26:04
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

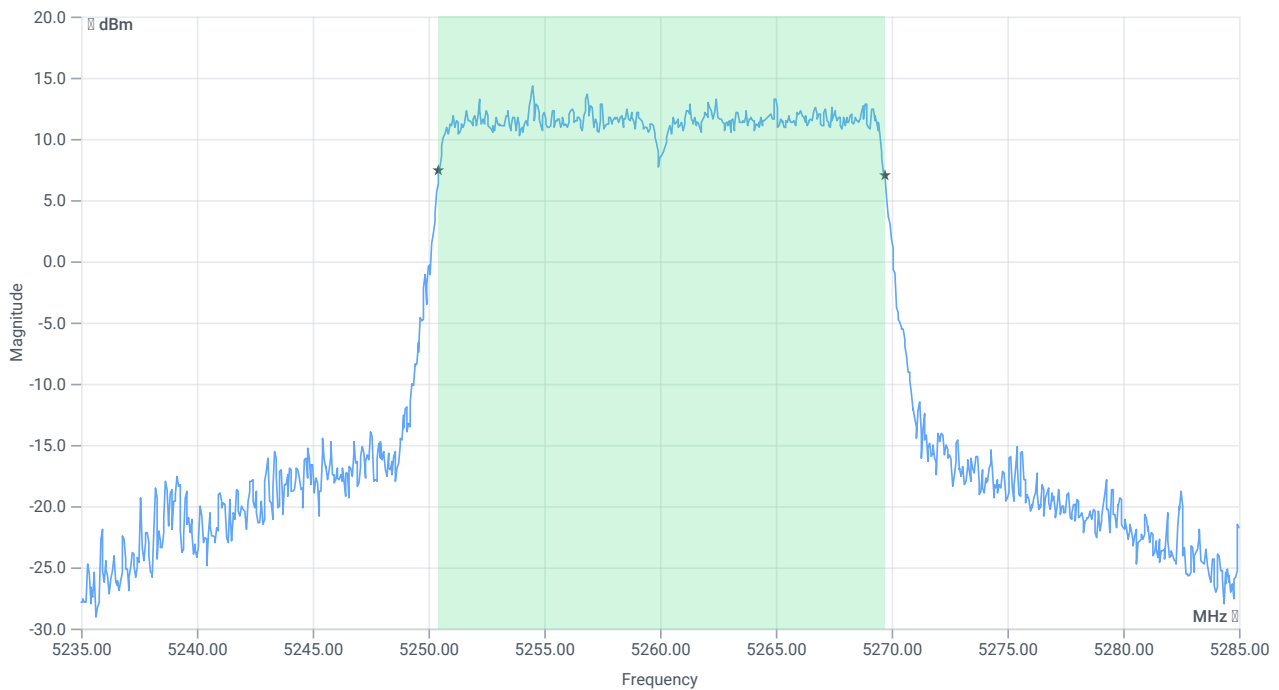
Test at TX 5260 MHz

RESULT: Reference Power cond.

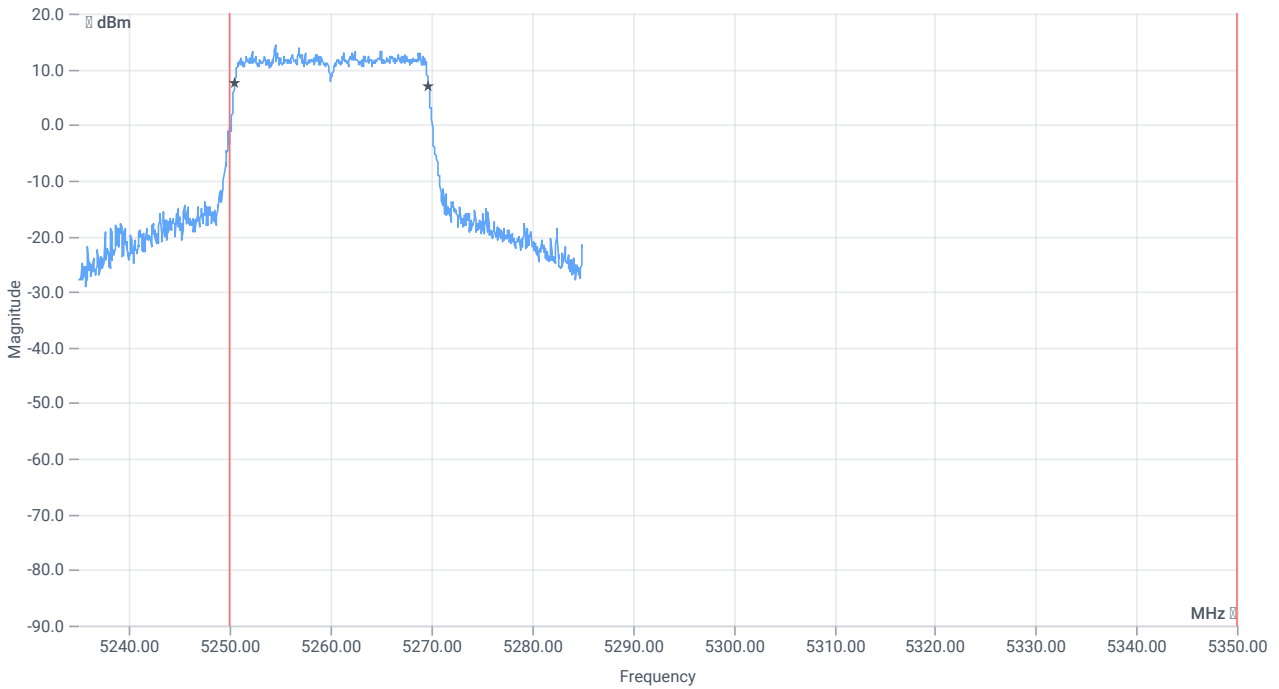
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	19.18	dBm	INFO
Ref. Frequency	--	--	5258.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.18 16.34 30
Start [MHz] Stop [MHz]	5235.000 5285.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



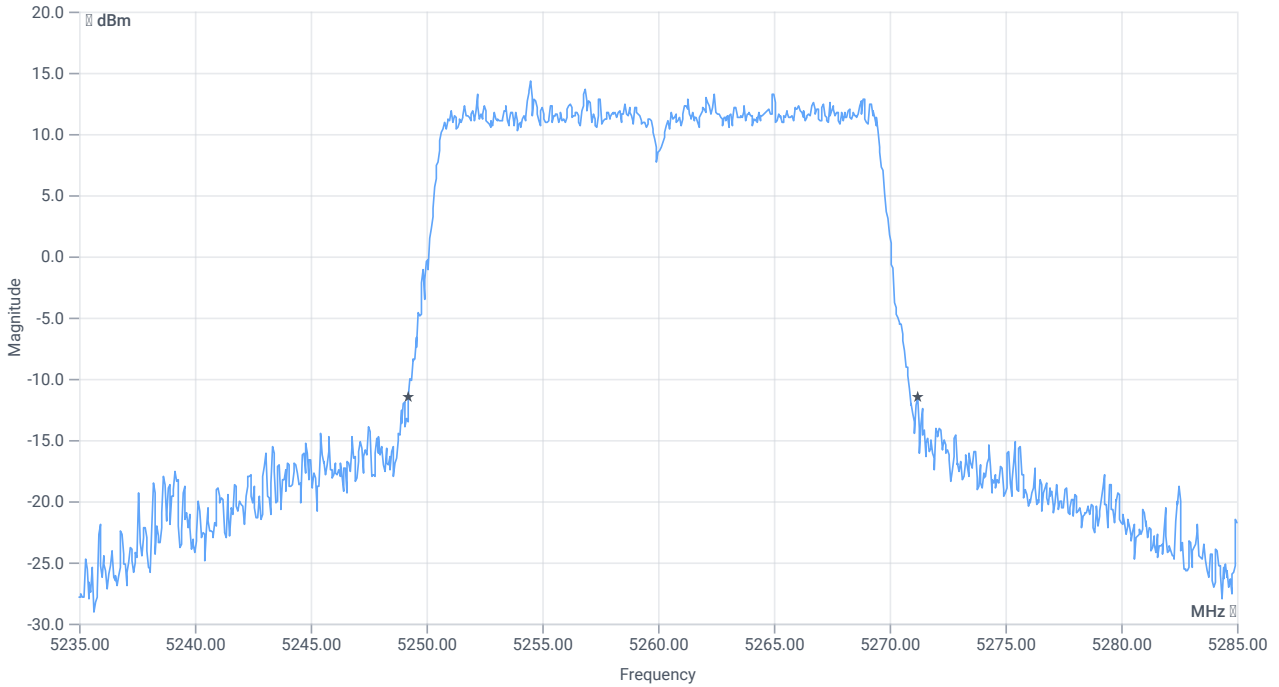
BW 99PCT



BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5250.000000	--	5250.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5269.6903	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.95	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5249.2500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5271.2000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:26:35
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5260 MHz

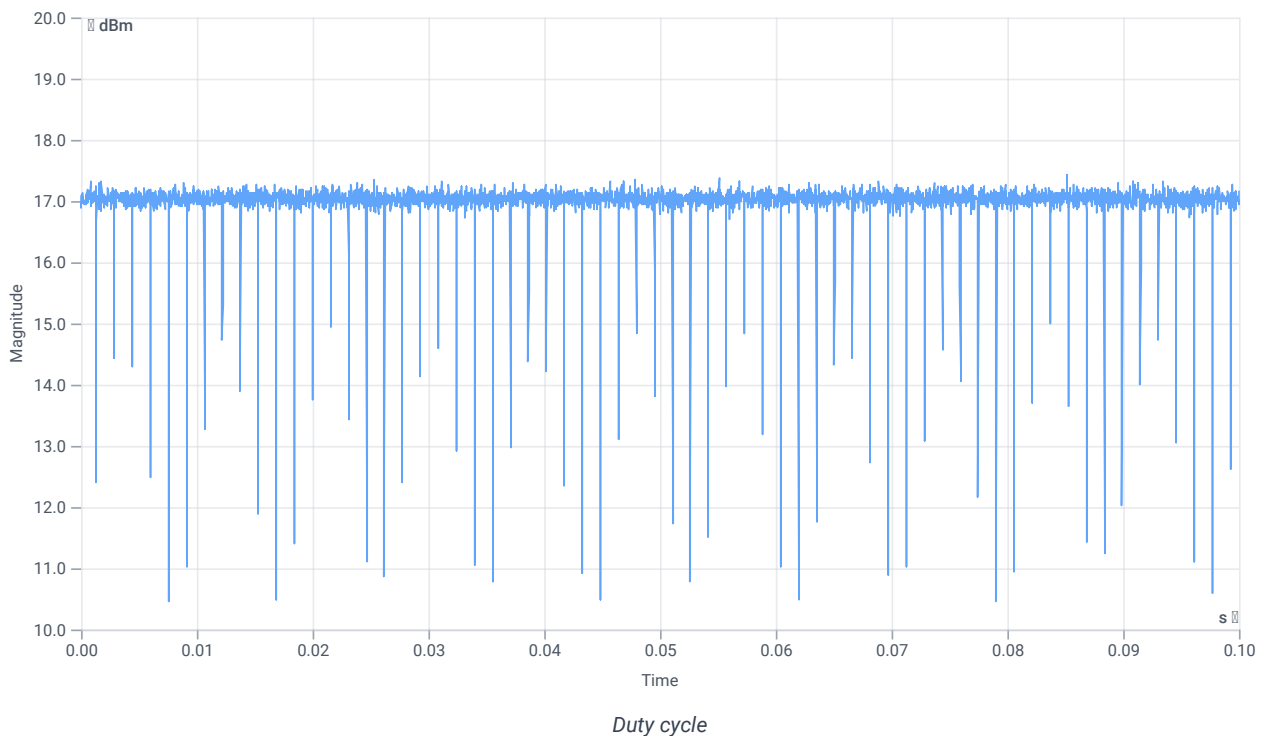
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.68	dBm	INFO
Ref. Frequency	--	--	5255.600	MHz	INFO

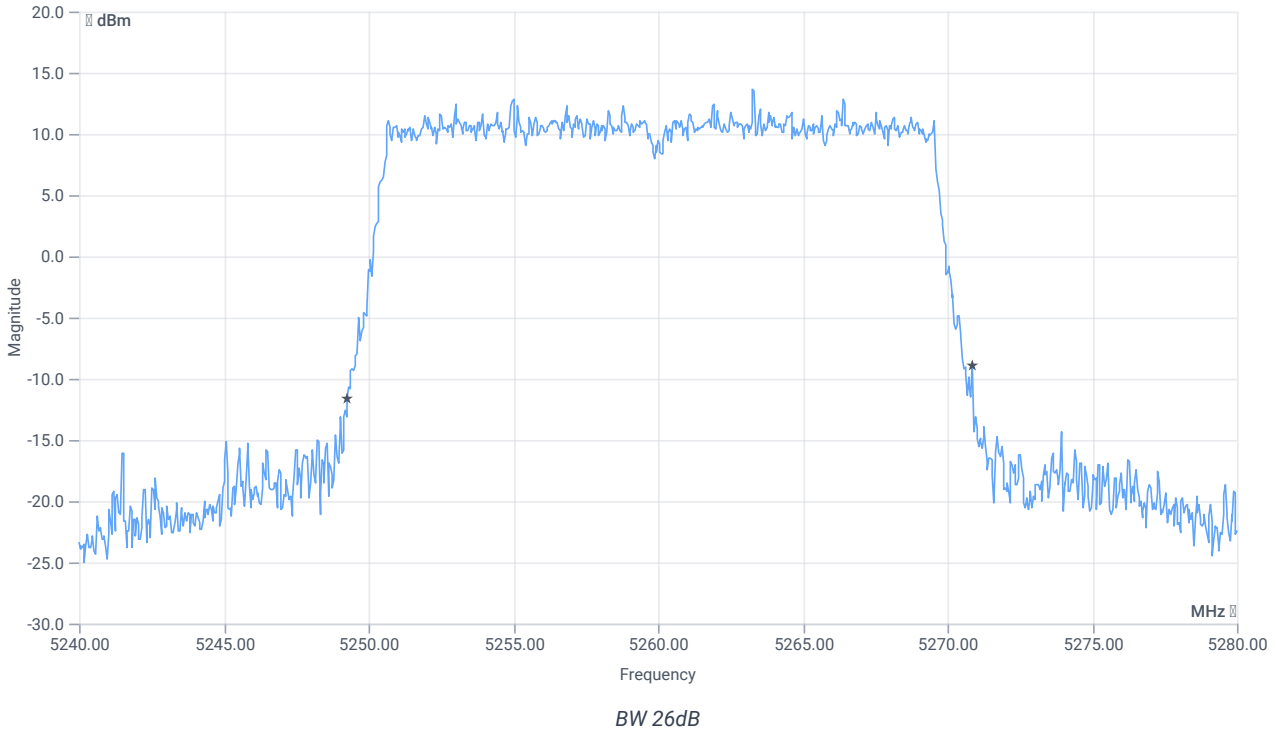
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



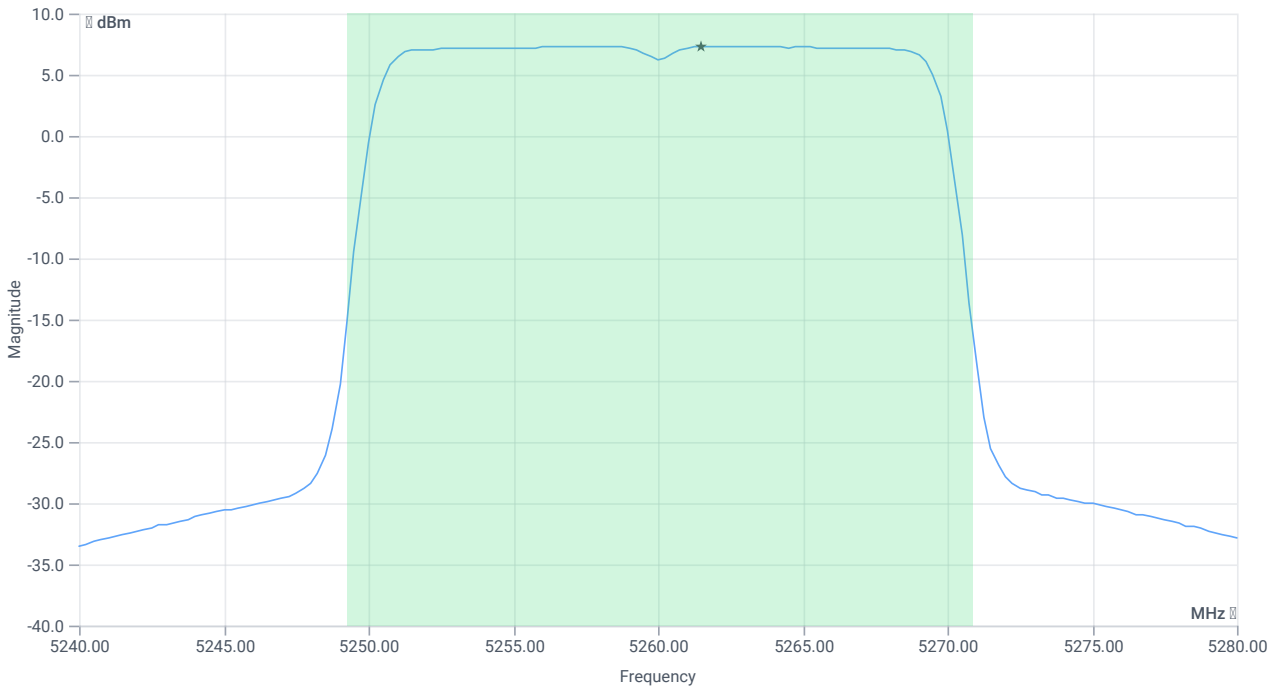
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.6	MHz	INFO
T1 26dB	---	---	5249.2800	MHz	INFO
T2 26dB	---	---	5270.8800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.68 16.34 30
Start [MHz] Stop [MHz]	5240.000 5280.000
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	--	--	19.68	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.68	dBm	PASS
Limit: 11 dBm + 10 log 21.6					
Max Output Power DC corrected	--	24.34	19.68	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.28	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.28	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:28:02
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

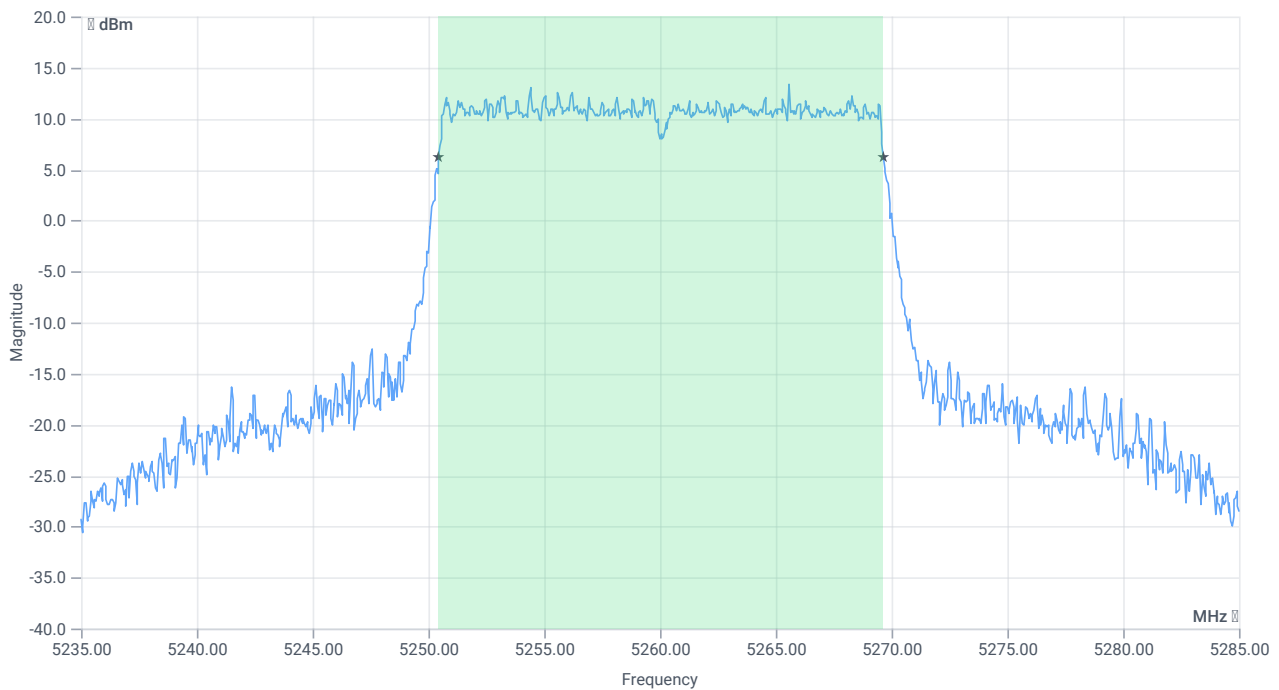
Test at TX 5260 MHz

RESULT: Reference Power cond.

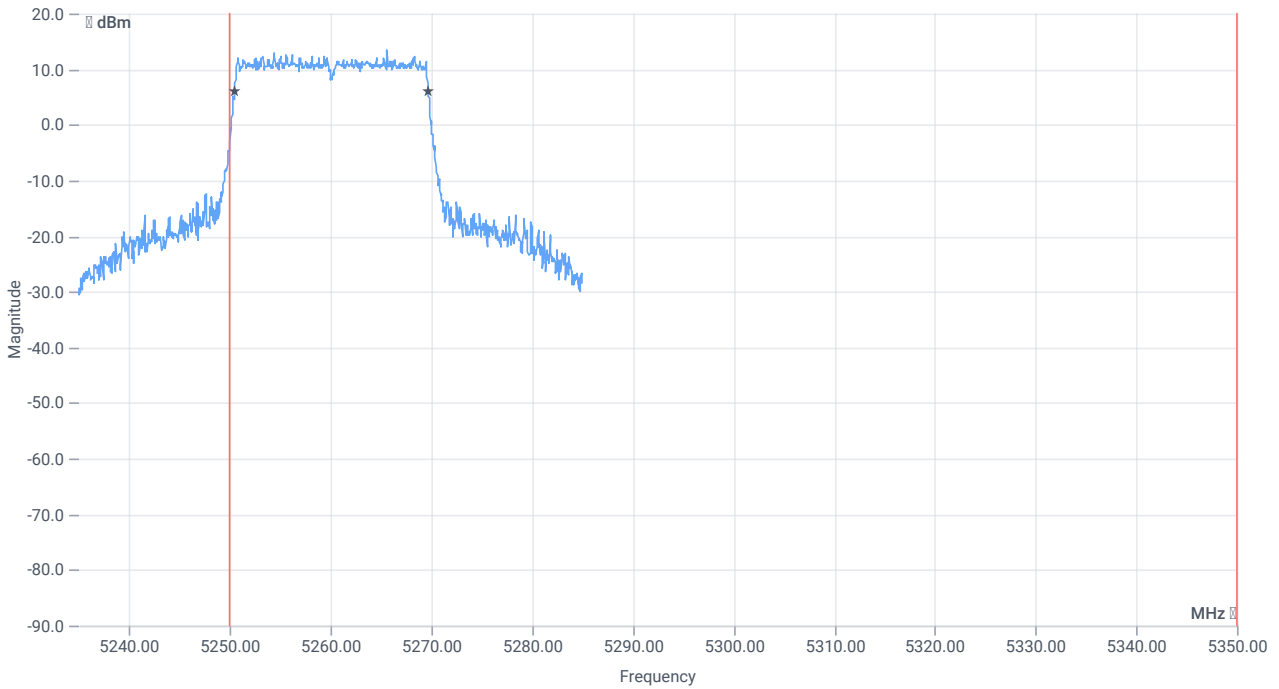
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.31	dBm	INFO
Ref. Frequency	--	--	5254.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.31 16.34 25
Start [MHz] Stop [MHz]	5235.000 5285.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



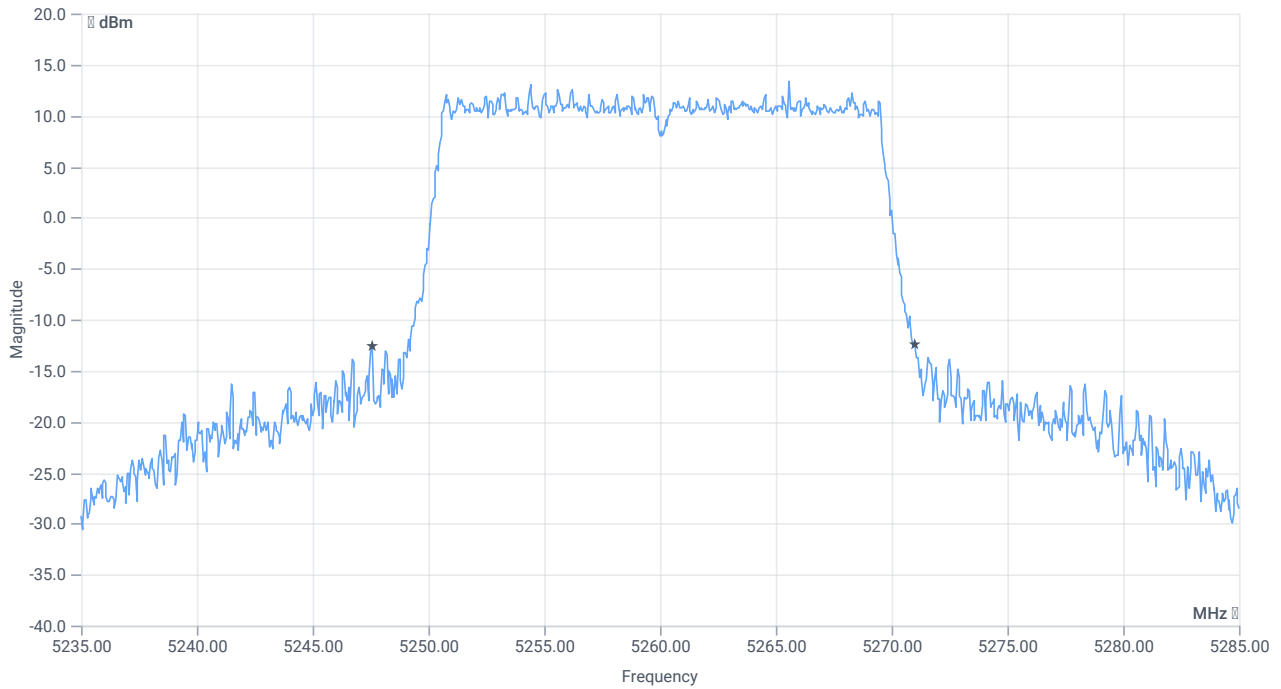
BW 99PCT



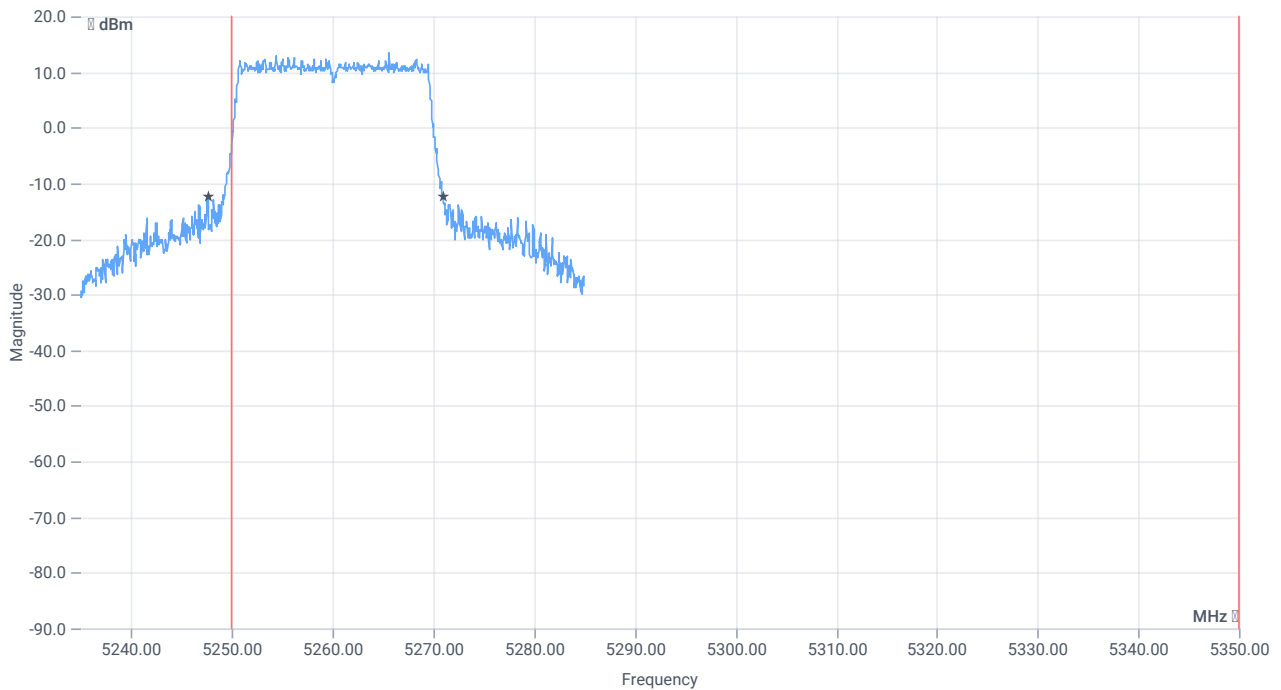
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5250.000000	--	5250.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5269.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5247.6000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5271.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:28:33
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5260 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.31	dBm	INFO
Ant:1 BW 26dB	--	--	21.800	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.68	dBm	INFO
Ant:2 BW 26dB	--	--	21.600	MHz	INFO
Σ Limit absolute	--	24	23.02	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.6	--	24.34	23.02	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.93	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.28	dBm/1MHz	INFO
Σ	--	11	10.63	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	25.07.2023 16:29:56
Ambit temp [°C] humidity [rel%]	25.3 53
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax-HE20 U-NII-2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 16:29:56
Message	set WLAN5Gx to ax-HE20 U-NII-2A, Frequency [MHz] 5280 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:30:06
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5280 MHz

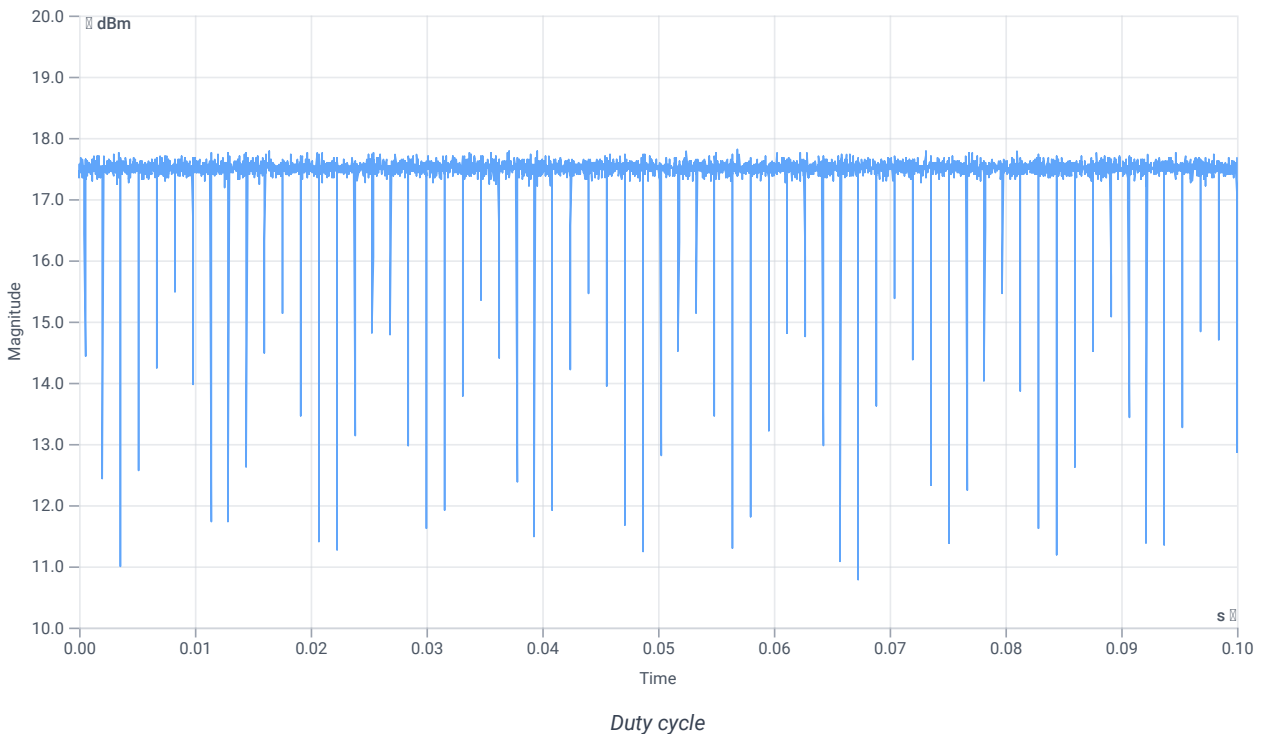
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.99	dBm	INFO
Ref. Frequency	--	--	5278.600	MHz	INFO

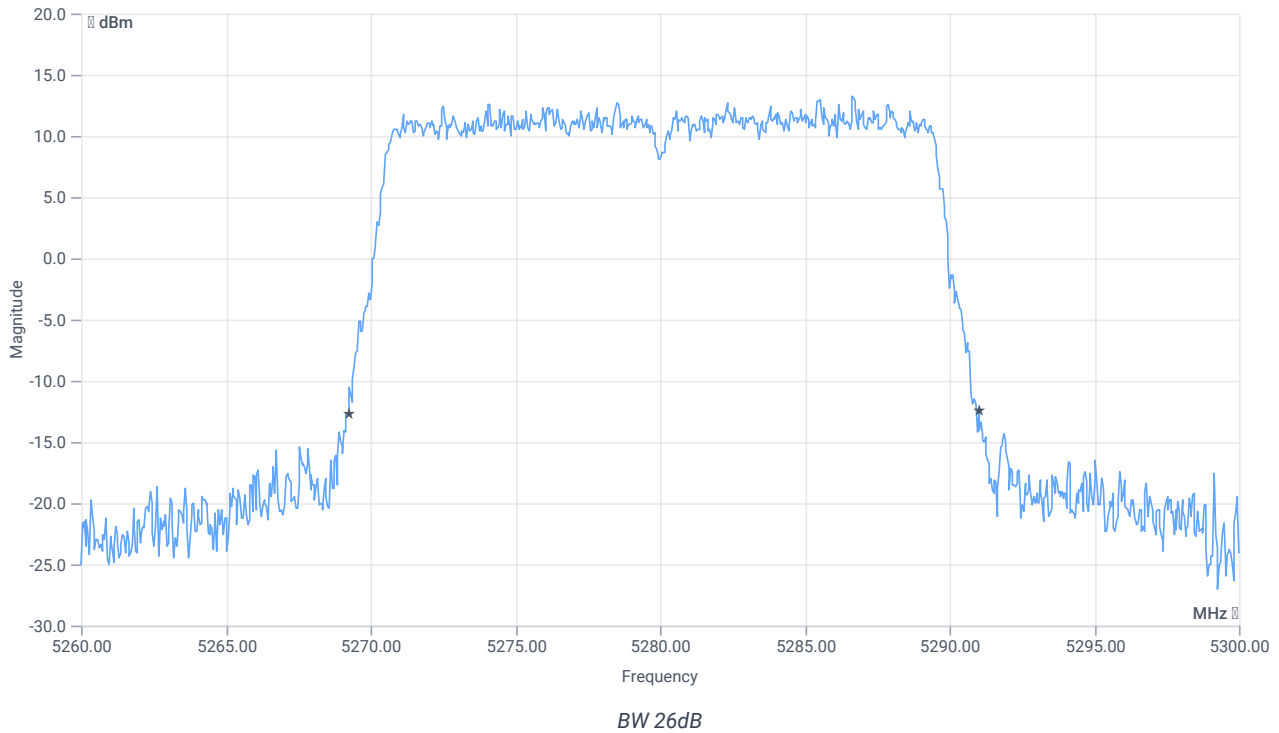
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



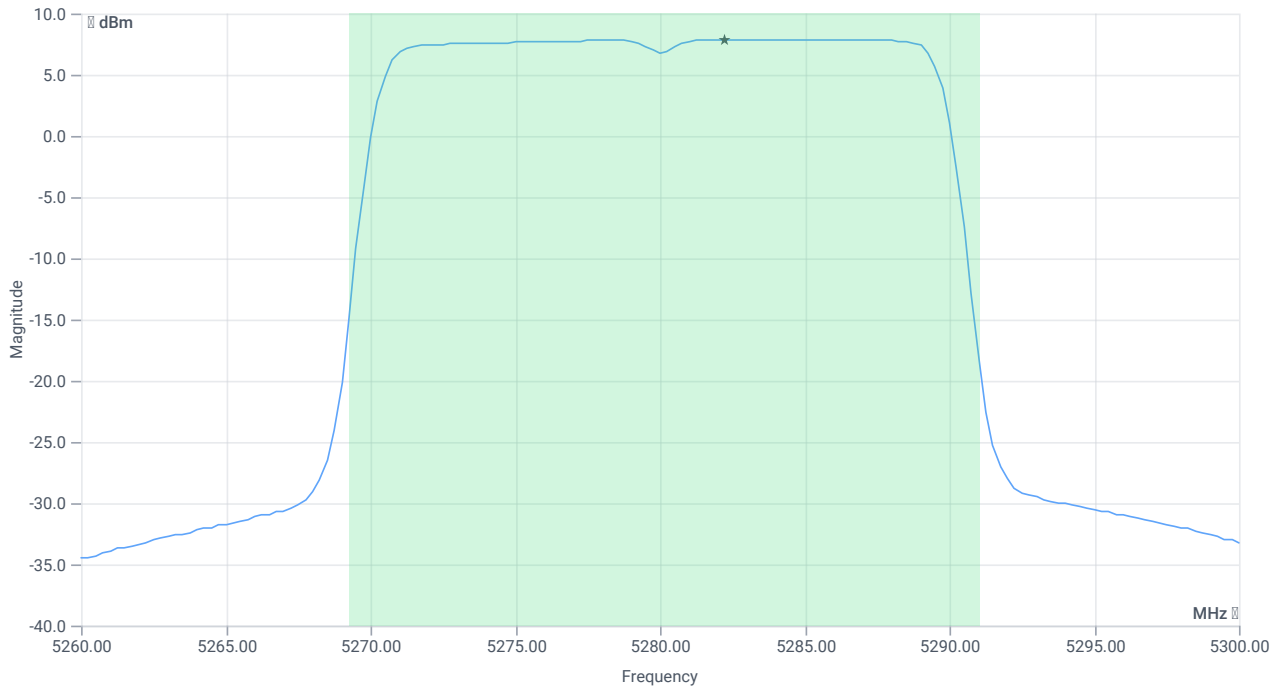
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5269.2400	MHz	INFO
T2 26dB	---	---	5291.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.99 16.1 30
Start [MHz] Stop [MHz]	5260.000 5300.000
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	--	--	20.21	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.21	dBm	PASS
Limit: 11 dBm + 10 log 21.76					
Max Output Power DC corrected	--	24.38	20.21	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.89	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.89	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:31:33
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

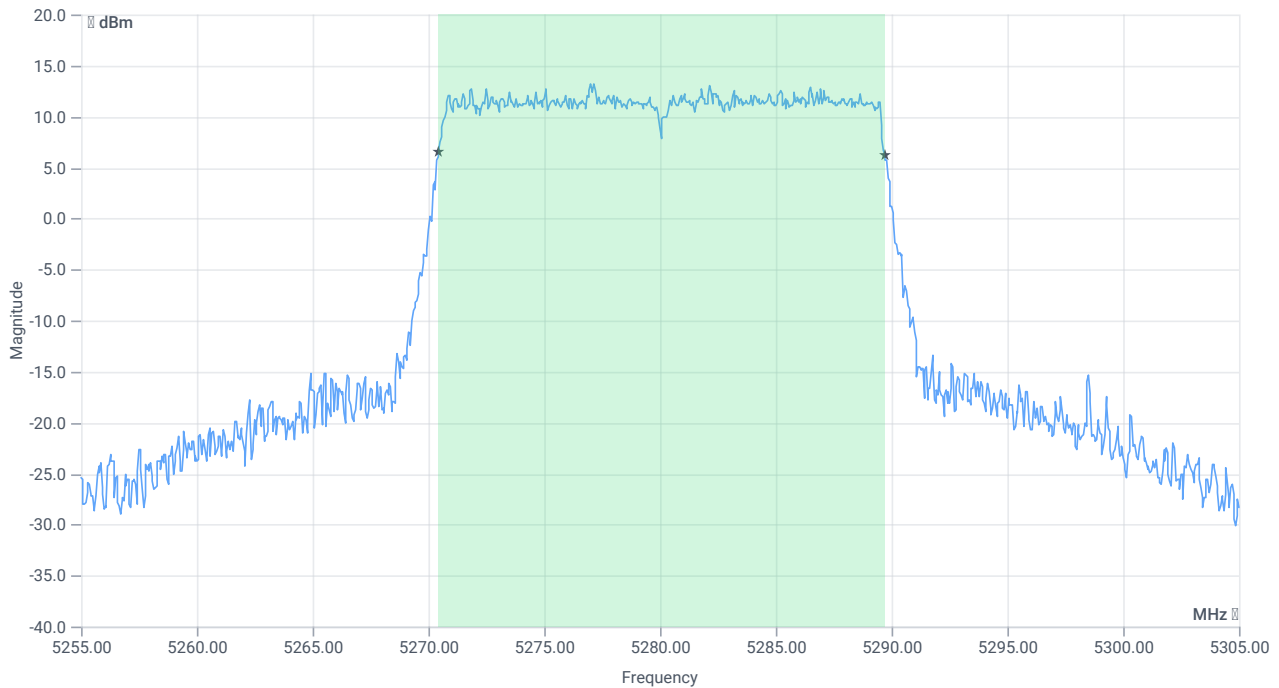
Test at TX 5280 MHz

RESULT: Reference Power cond.

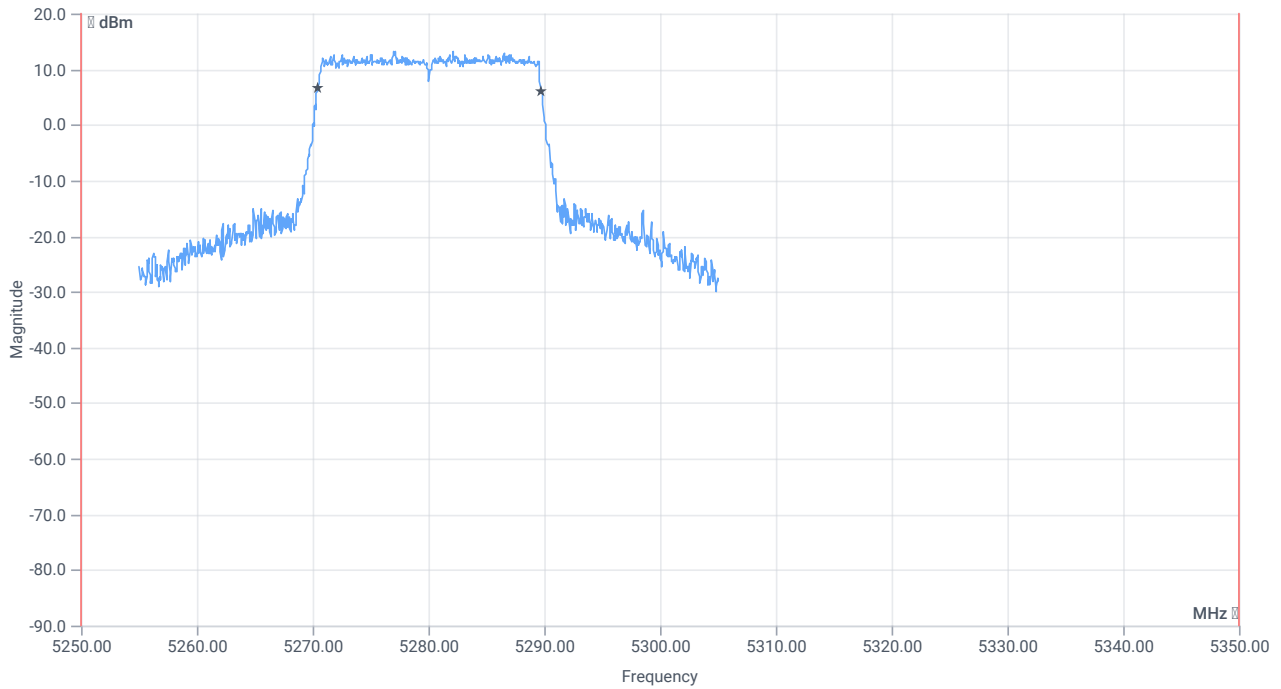
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.85	dBm	INFO
Ref. Frequency	--	--	5287.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.85 16.1 25
Start [MHz] Stop [MHz]	5255.000 5305.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



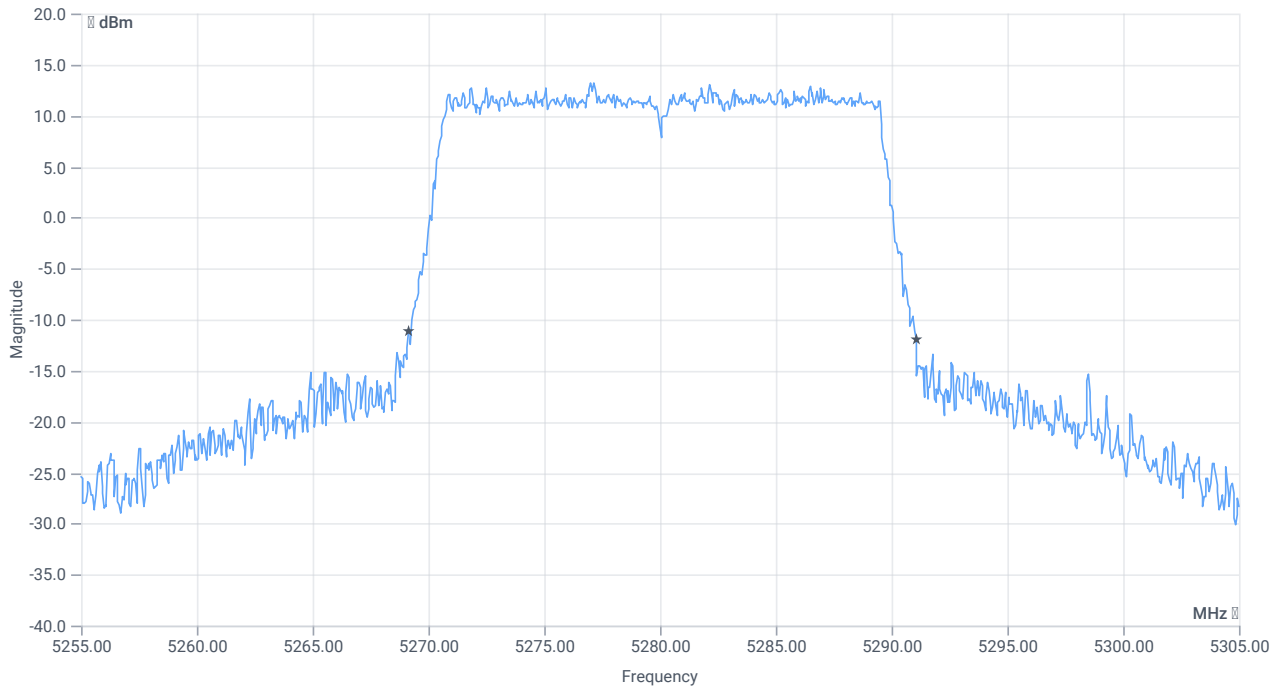
BW 99PCT



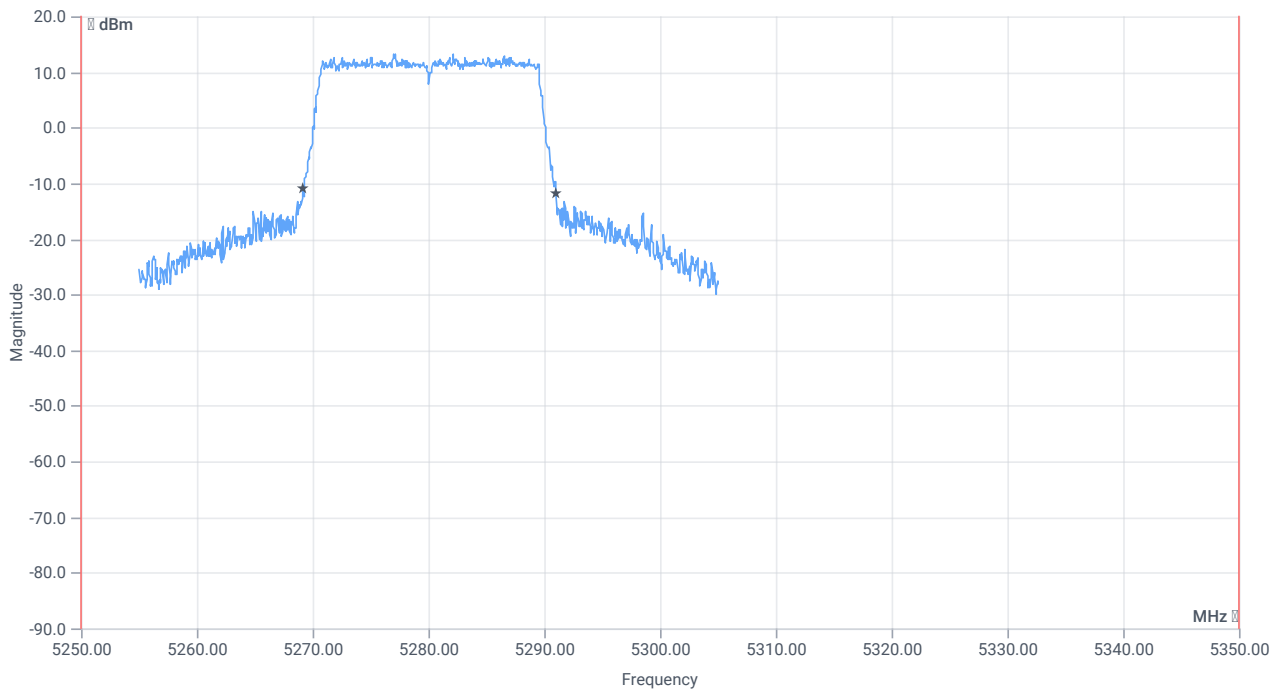
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5250.000000	--	5270.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5289.6903	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.9	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5269.1500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5291.0500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:32:04
Ambit temp [°C] humidity [rel%]	25.3 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5280 MHz

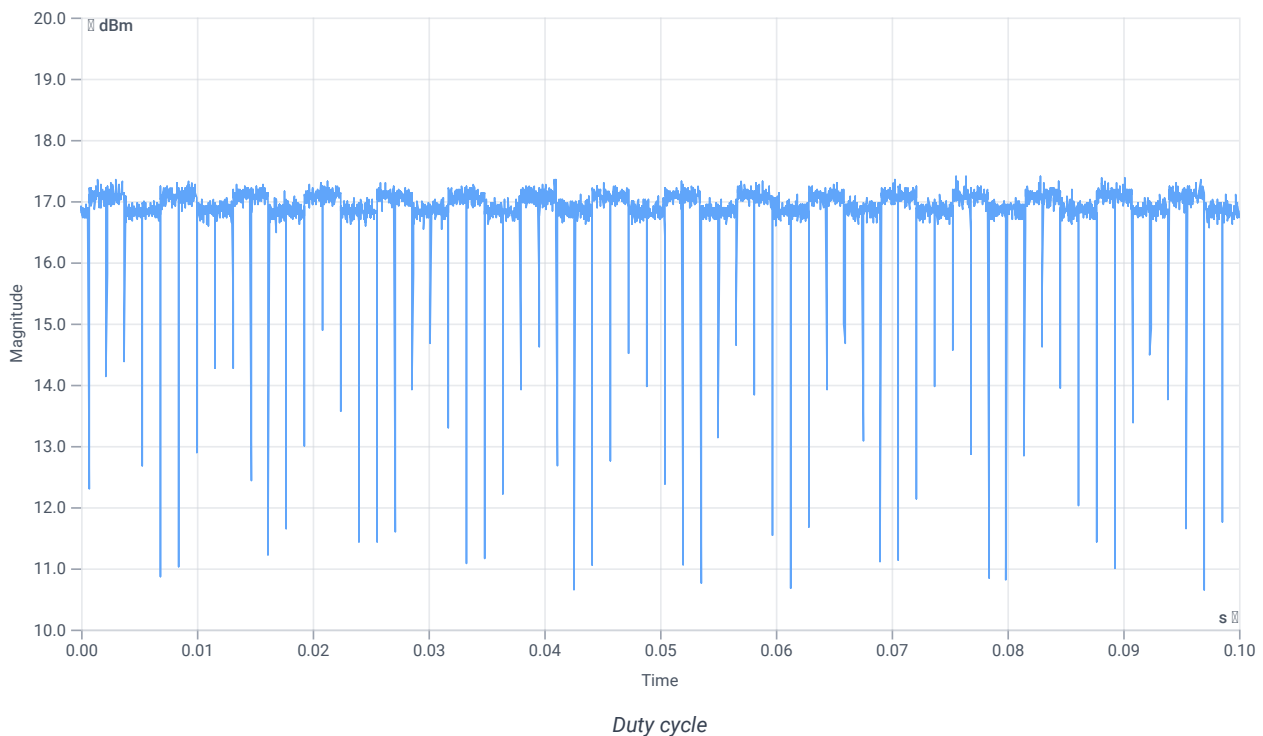
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.20	dBm	INFO
Ref. Frequency	--	--	5278.200	MHz	INFO

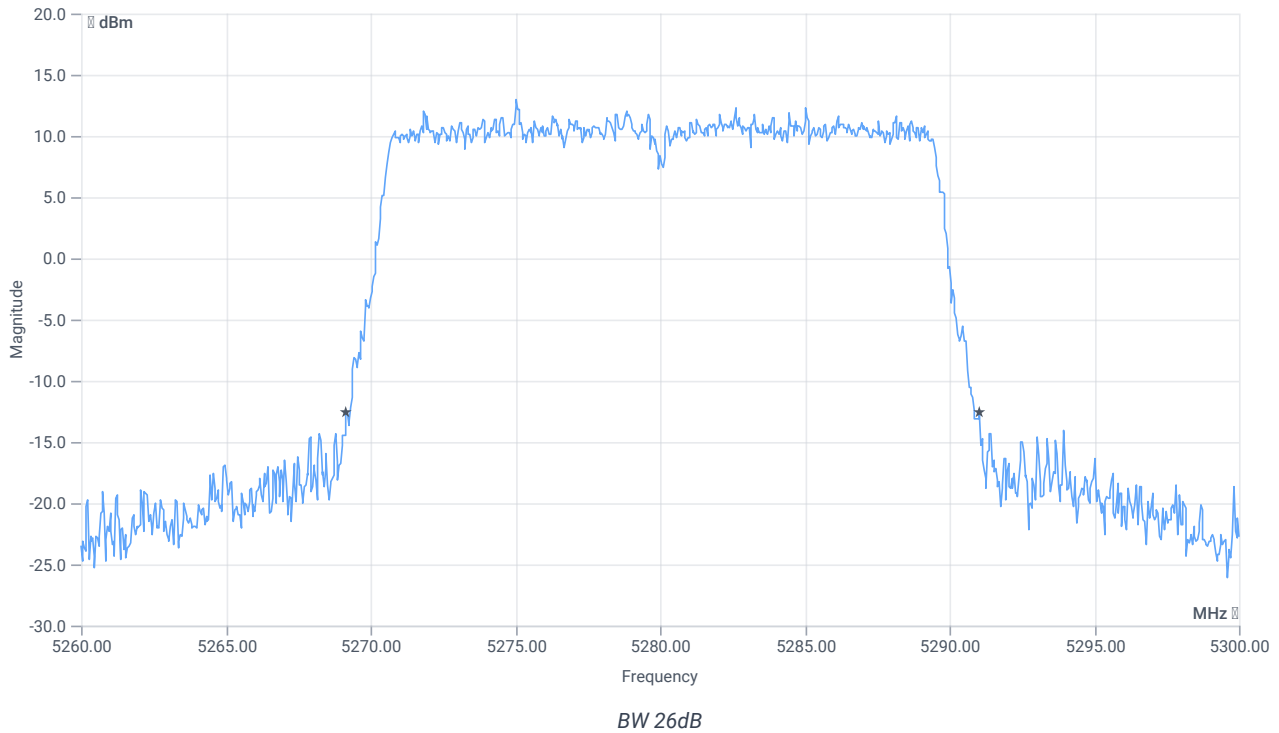
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



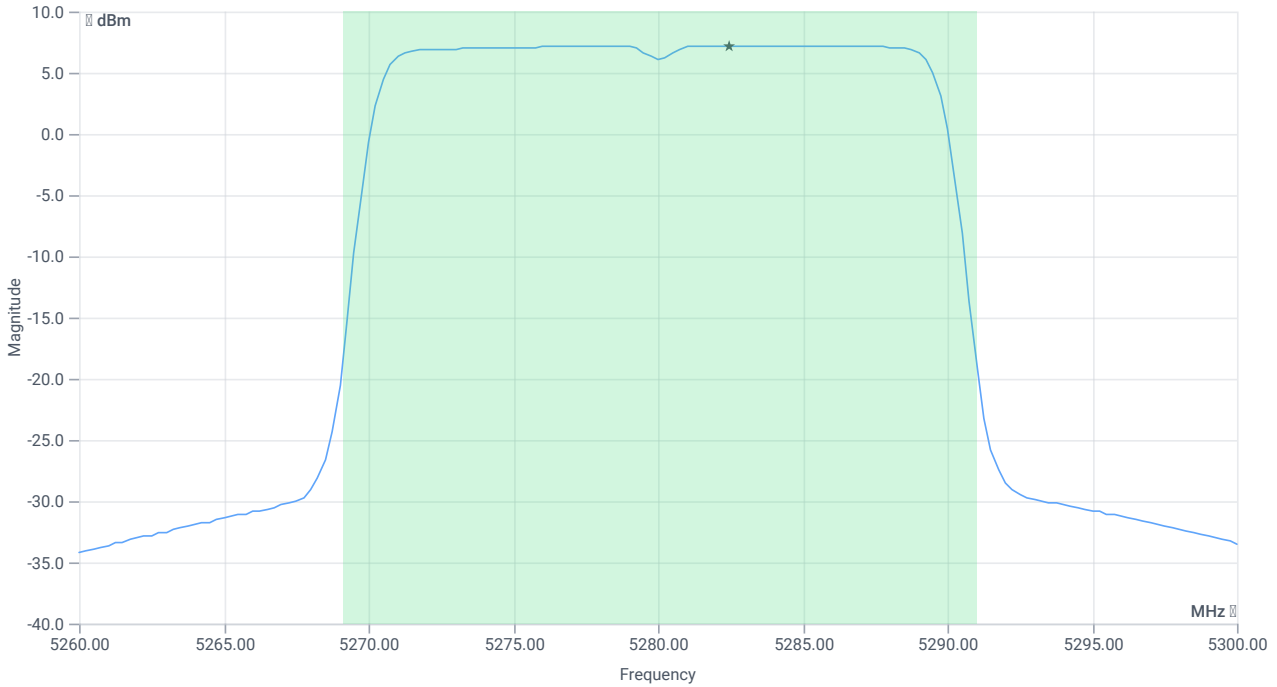
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5269.1600	MHz	INFO
T2 26dB	---	---	5291.0400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.20 16.1 30
Start [MHz] Stop [MHz]	5260.000 5300.000
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	--	--	19.58	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.58	dBm	PASS
Limit: 11 dBm + 10 log 21.88					
Max Output Power DC corrected	--	24.4	19.58	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.22	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.22	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:33:32
Ambit temp [°C] humidity [rel%]	25.2 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

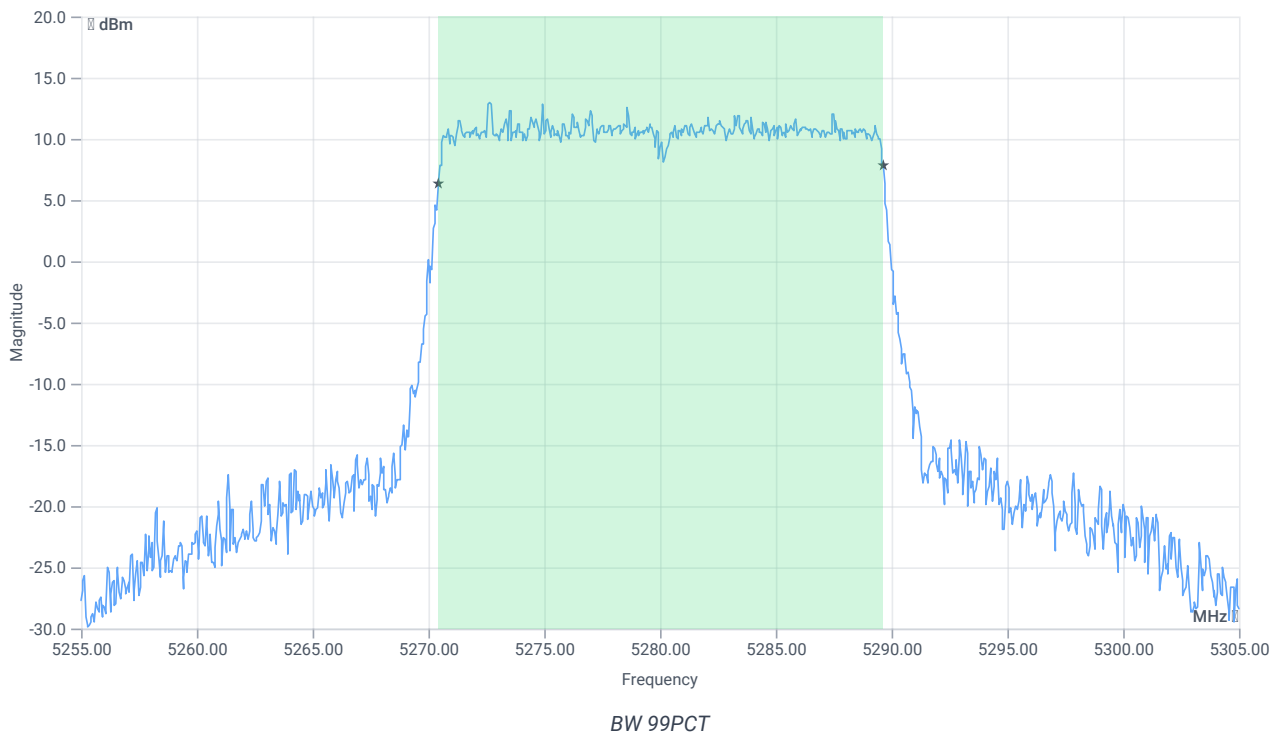
Test at TX 5280 MHz

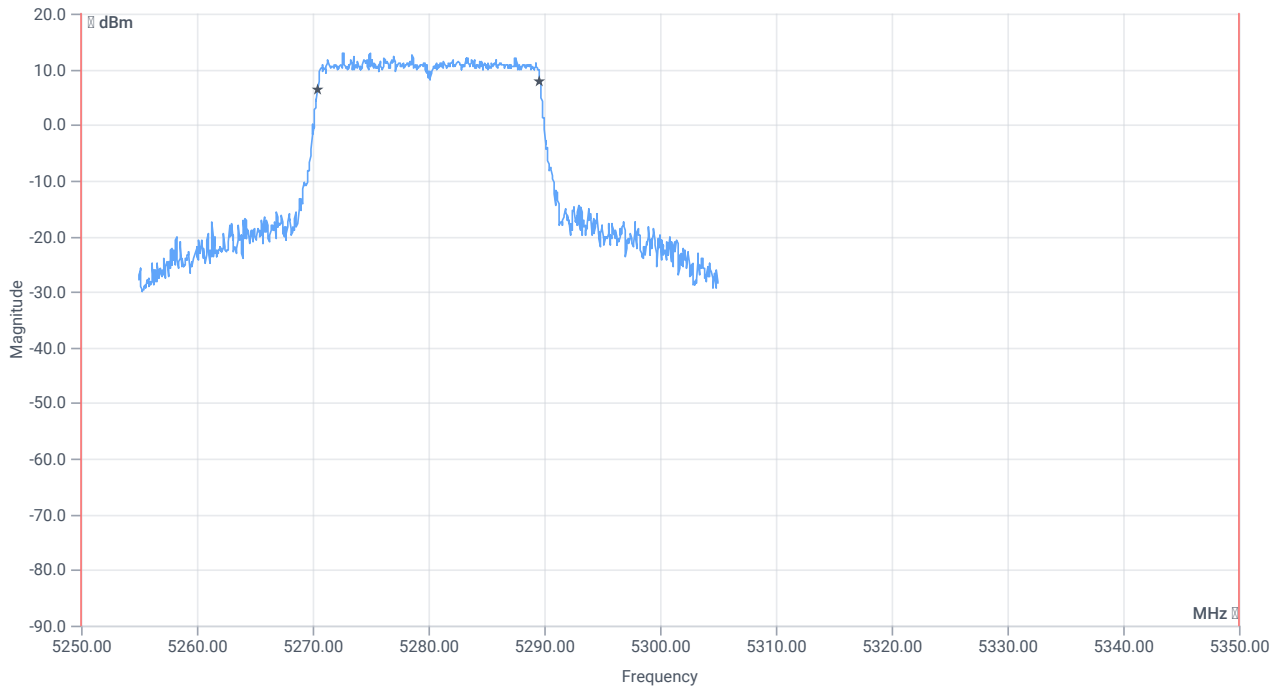
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.75	dBm	INFO
Ref. Frequency	--	--	5285.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.75 16.1 25
Start [MHz] Stop [MHz]	5255.000 5305.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

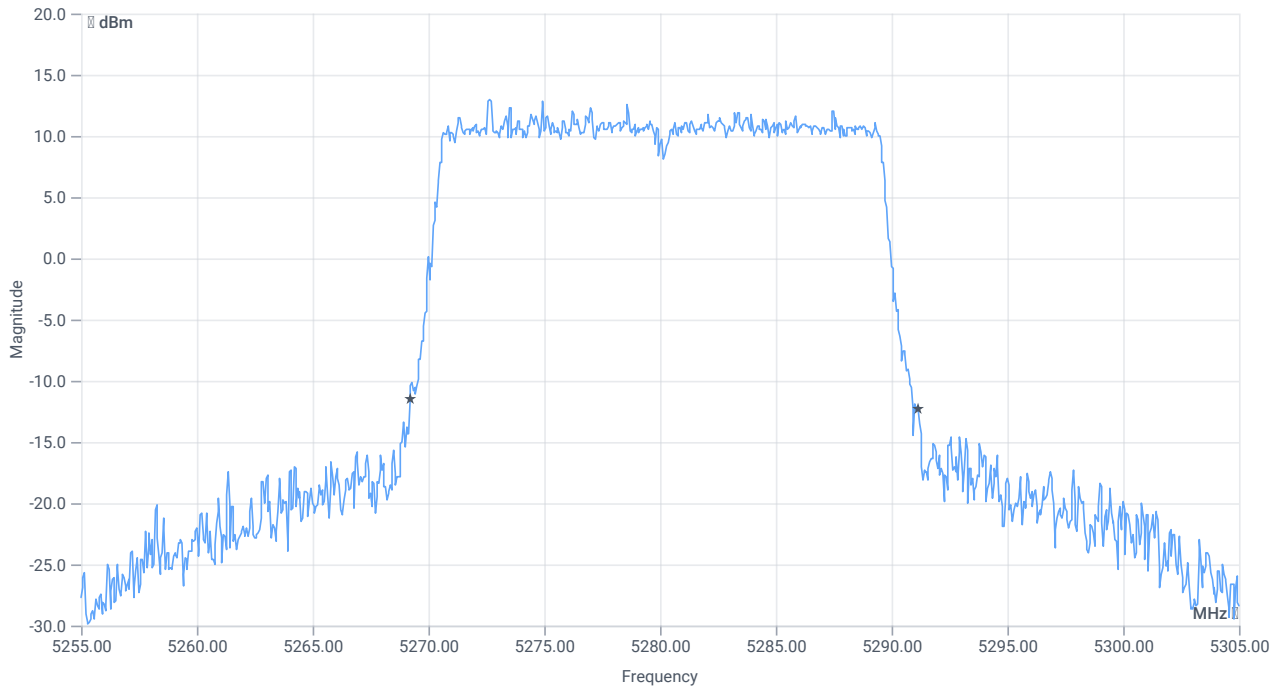




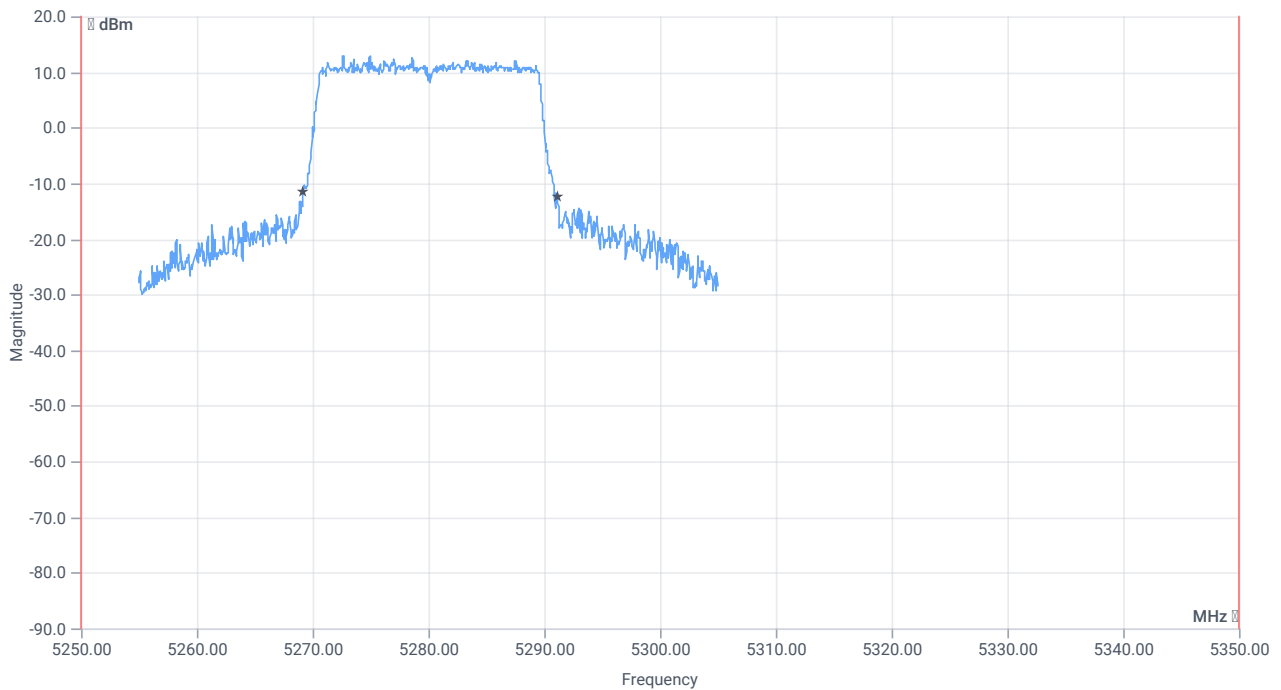
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5250.000000	--	5270.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5289.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.95	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5269.2000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5291.1500	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:34:03
Ambit temp [°C] humidity [rel%]	25.3 53
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2A
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	False Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5280 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.21	dBm	INFO
Ant:1 BW 26dB	--	--	21.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.58	dBm	INFO
Ant:2 BW 26dB	--	--	21.880	MHz	INFO
Σ Limit absolute	--	24	22.92	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.76	--	24.38	22.92	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.89	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.22	dBm/1MHz	INFO
Σ	--	11	10.58	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	25.07.2023 16:35:48
Ambit temp [°C] humidity [rel%]	25.3 52
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax-HE20 U-NII-2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	25.07.2023 16:35:48
Message	set WLAN5Gx to ax-HE20 U-NII-2A, Frequency [MHz] 5320

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:36:05
Ambit temp [°C] humidity [rel%]	25.3 52
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS66

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5320 MHz

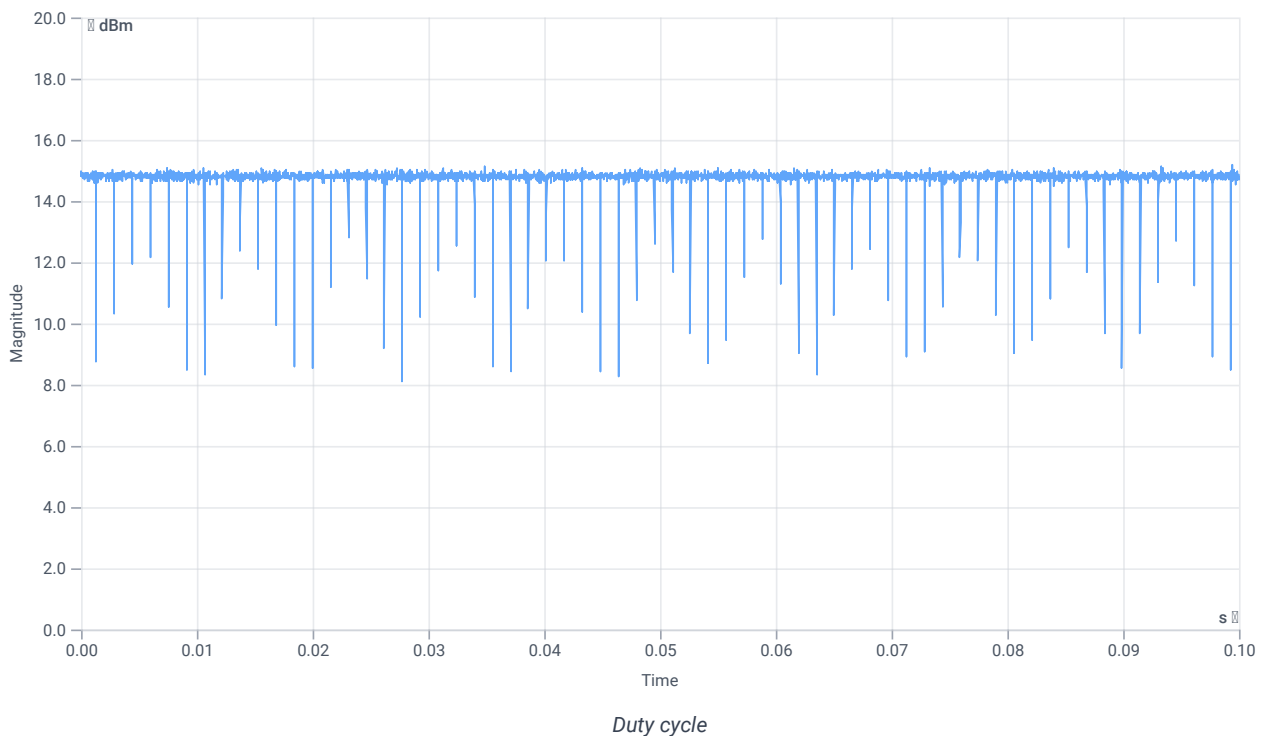
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.95	dBm	INFO
Ref. Frequency	--	--	5325.000	MHz	INFO

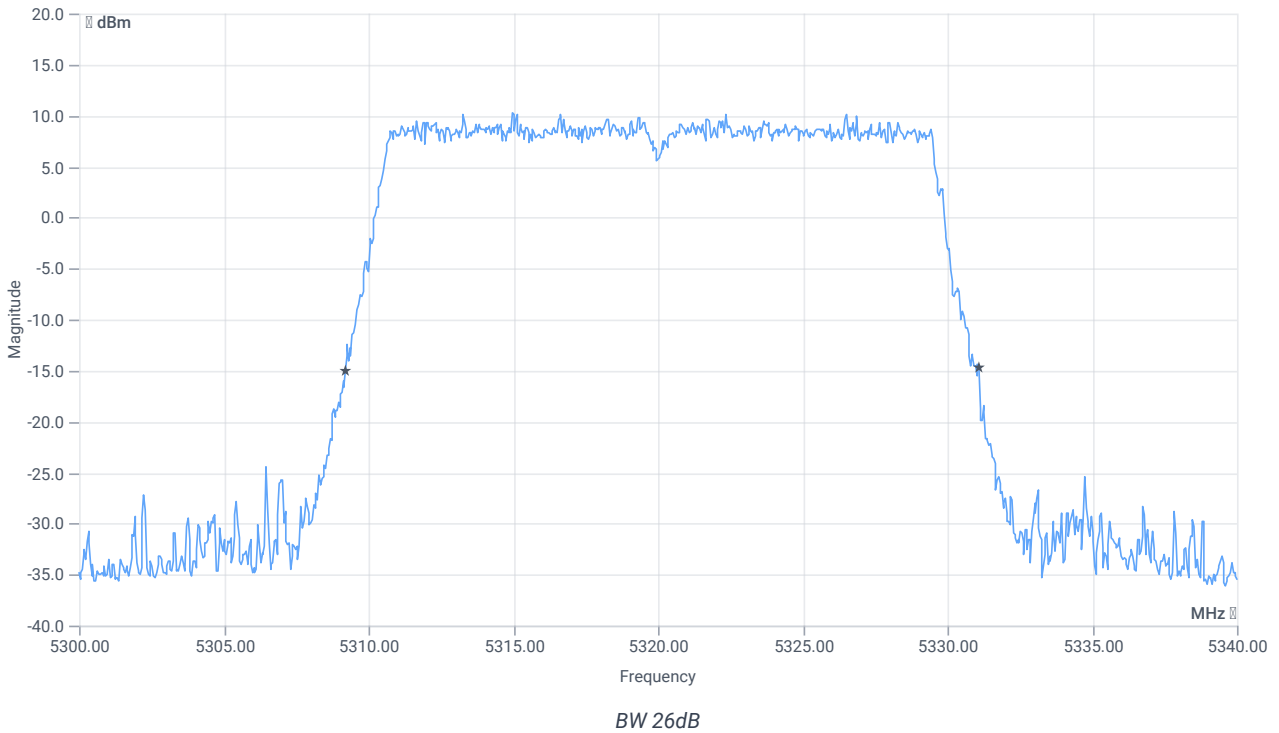
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



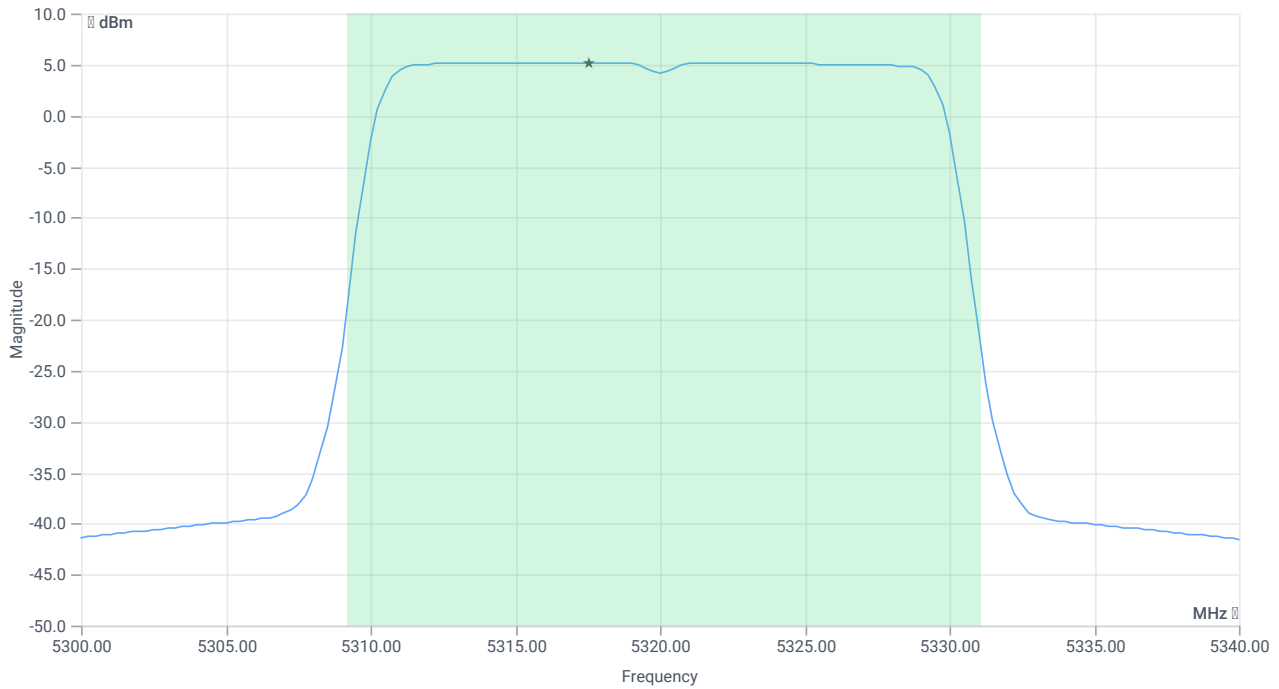
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5309.2000	MHz	INFO
T2 26dB	---	---	5331.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.95 16.16 25
Start [MHz] Stop [MHz]	5300.000 5340.000
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	--	--	17.58	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.58	dBm	PASS
Limit: 11 dBm + 10 log 21.88					
Max Output Power DC corrected	--	24.4	17.58	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.21	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.21	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:37:32
Ambit temp [°C] humidity [rel%]	25.3 52
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS66

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

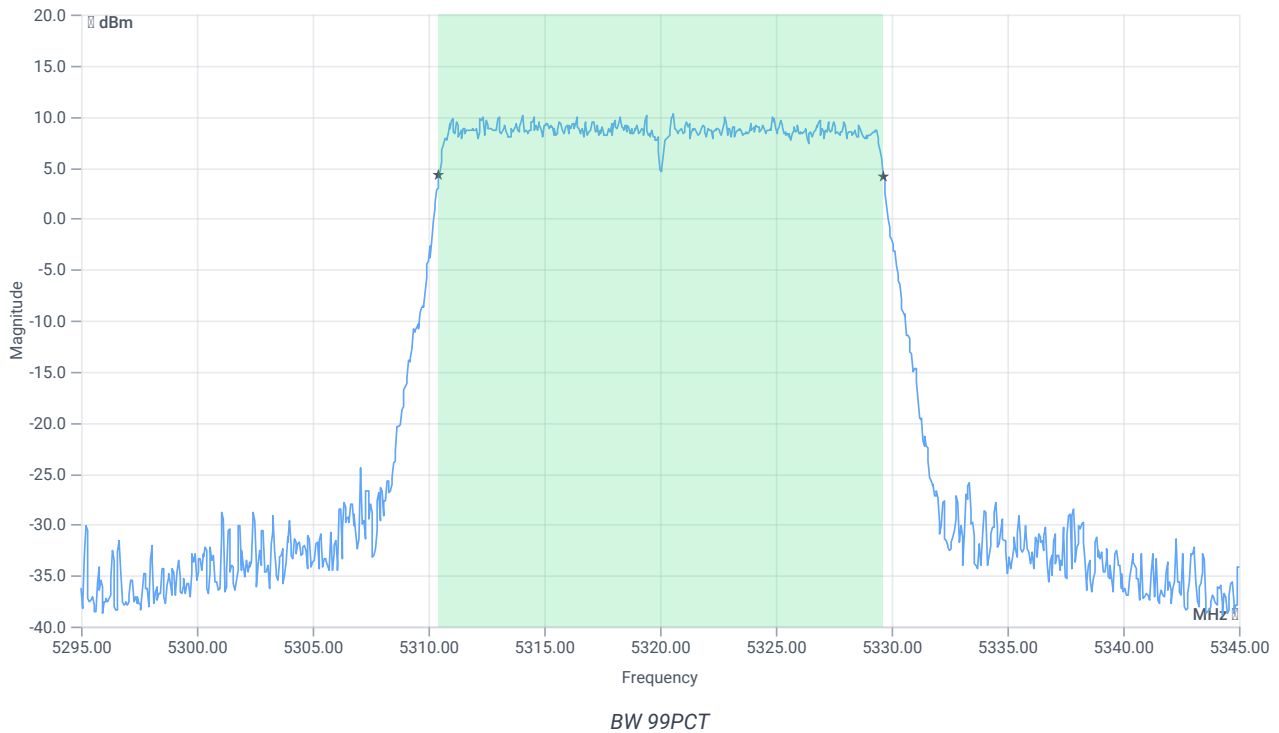
Test at TX 5320 MHz

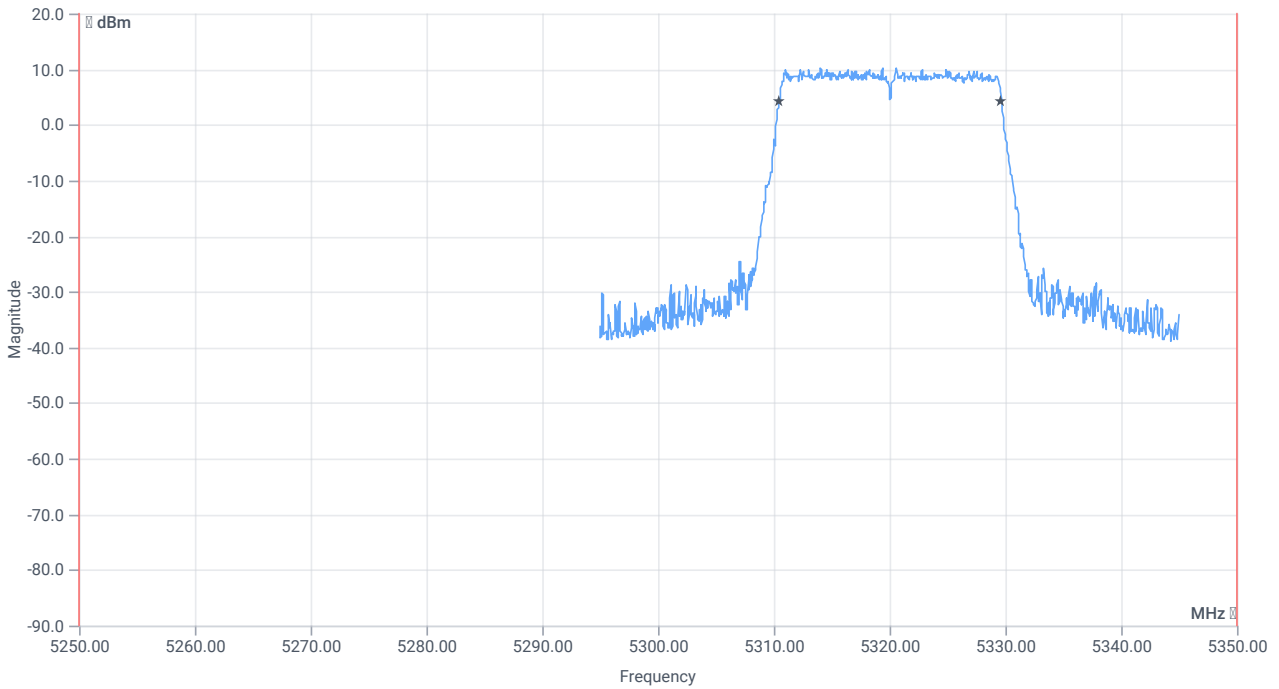
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.28	dBm	INFO
Ref. Frequency	--	--	5322.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.28 16.16 25
Start [MHz] Stop [MHz]	5295.000 5345.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

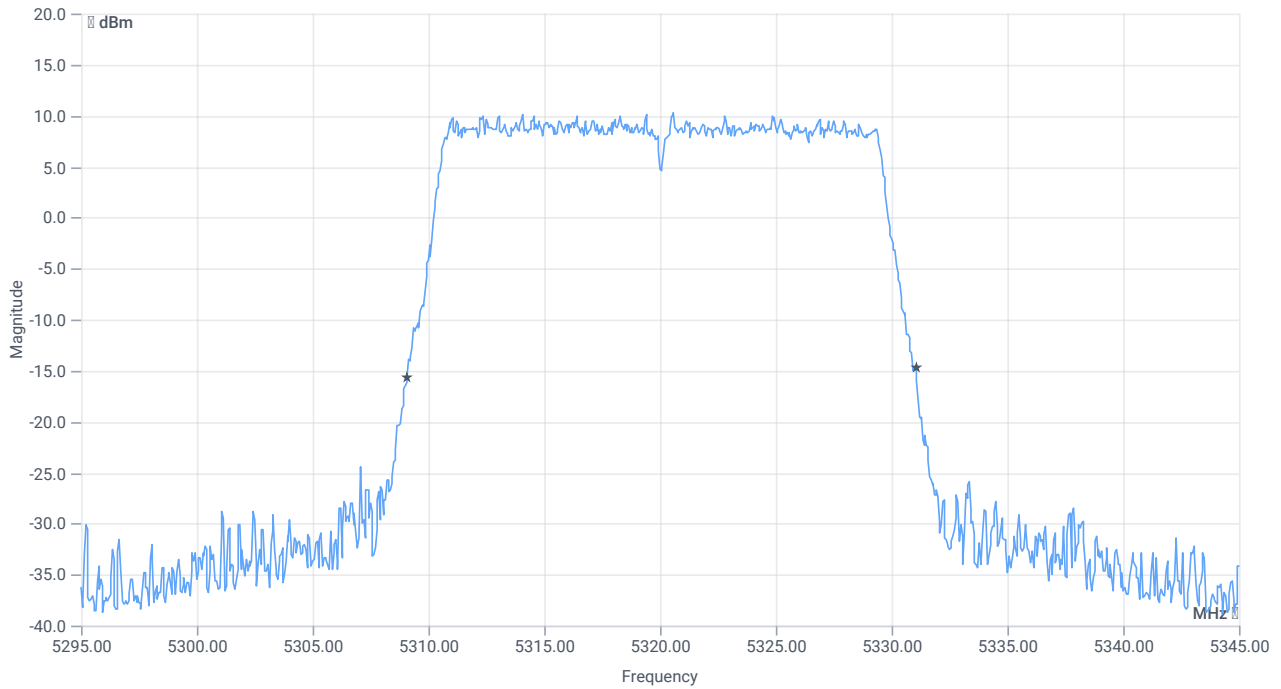




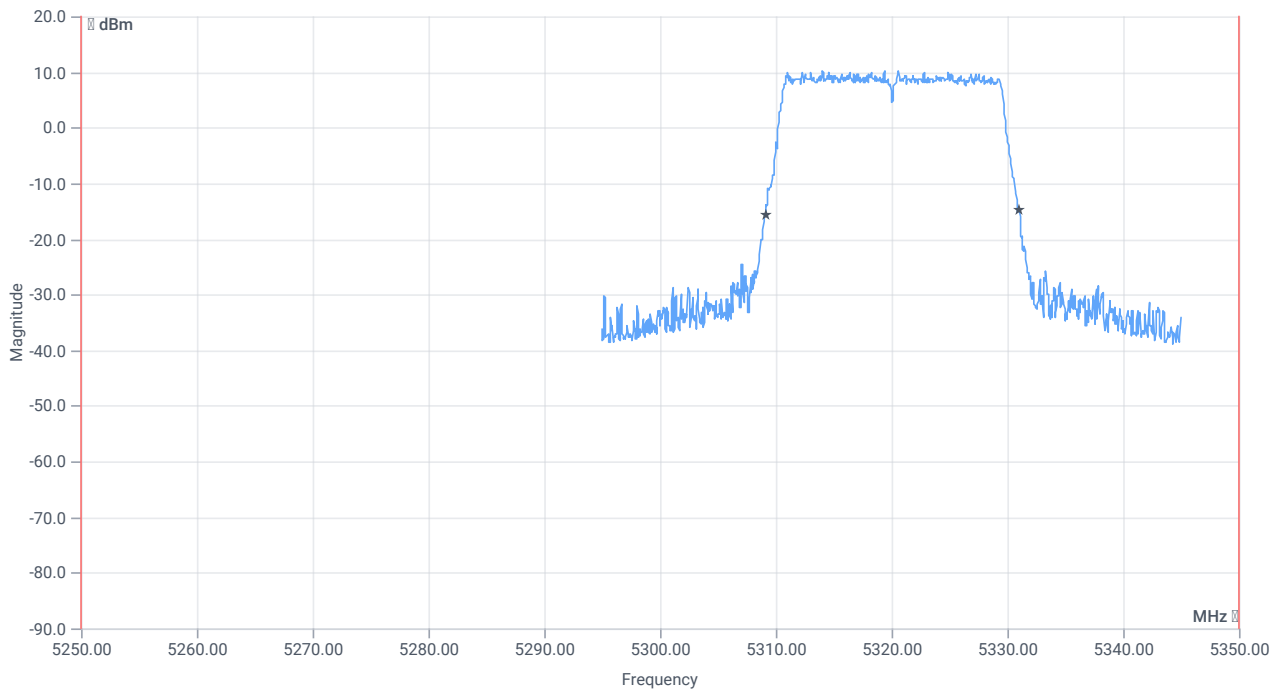
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5250.000000	--	5310.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5329.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.95	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5309.1000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5331.0500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:38:03
Ambit temp [°C] humidity [rel%]	25.3 52
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Information	PS66

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5320 MHz

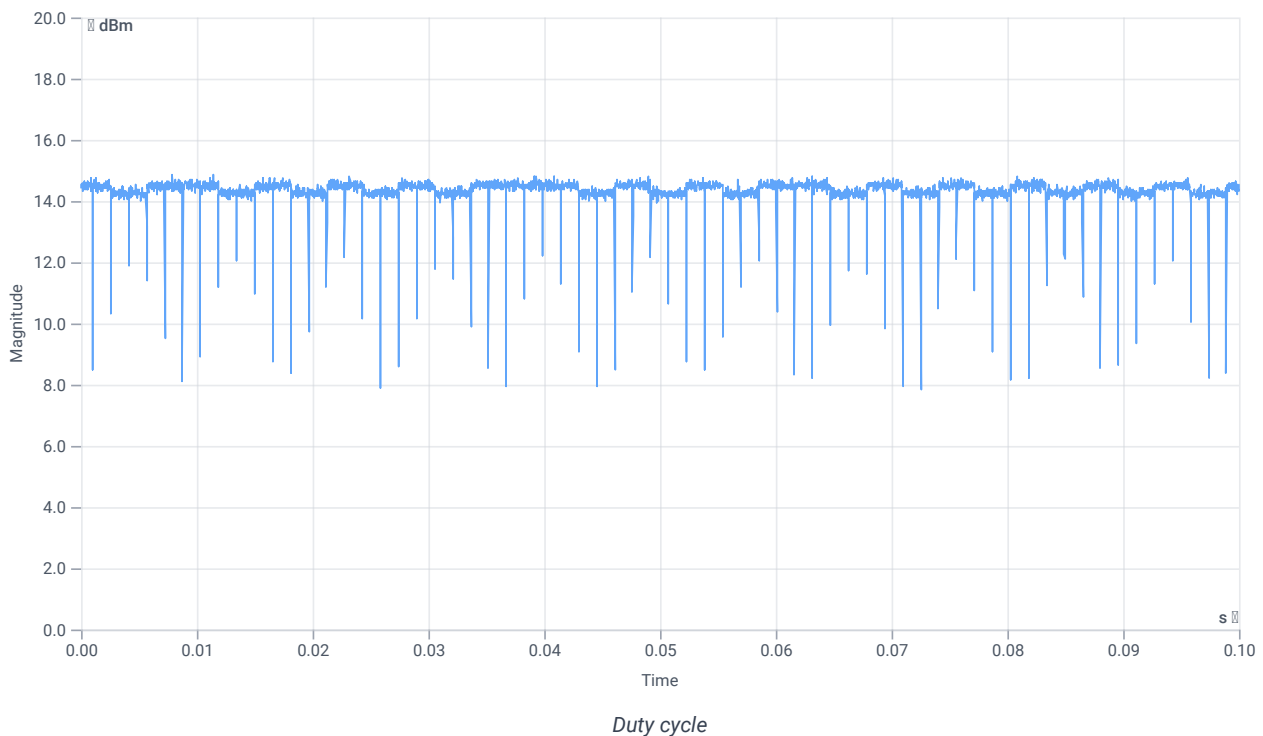
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.22	dBm	INFO
Ref. Frequency	--	--	5312.810	MHz	INFO

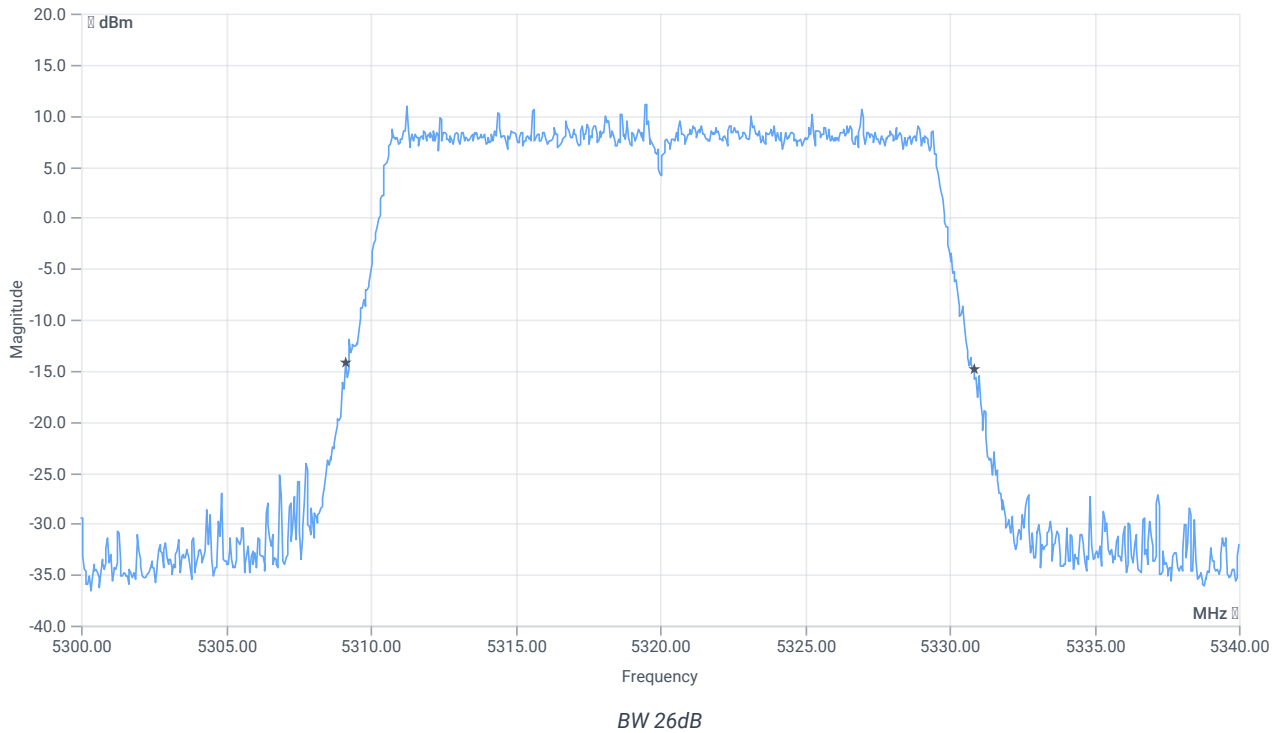
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



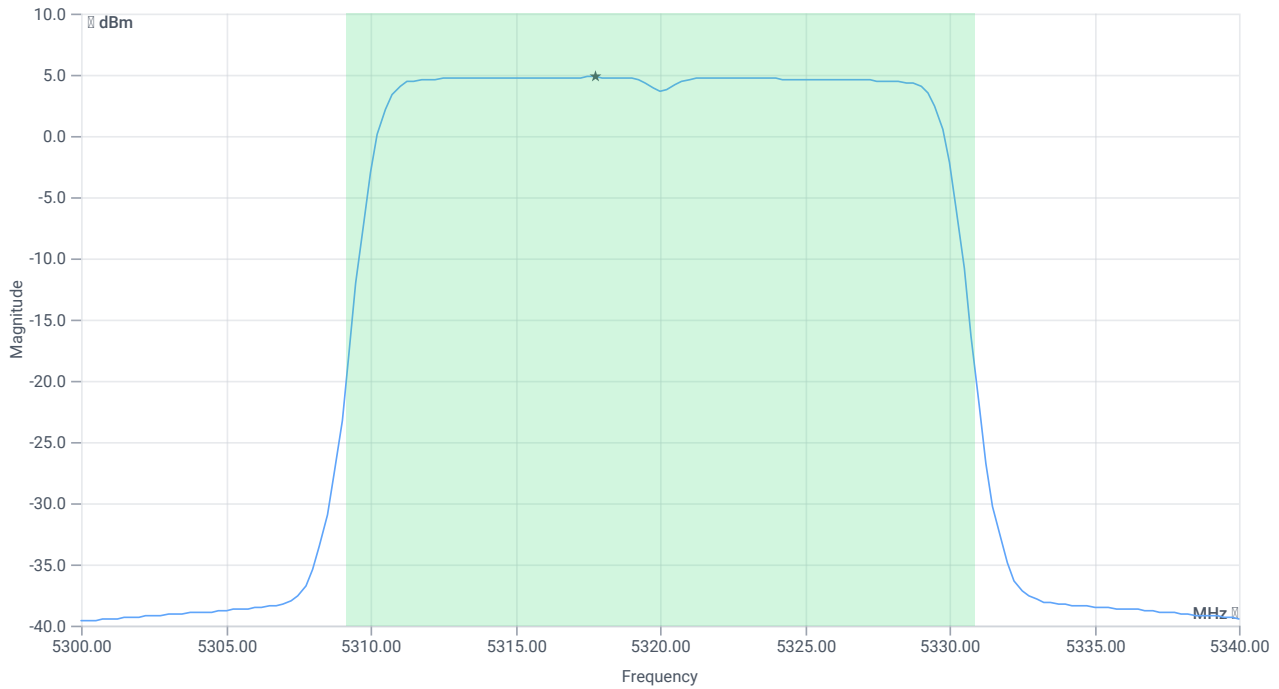
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.72	MHz	INFO
T1 26dB	---	---	5309.1200	MHz	INFO
T2 26dB	---	---	5330.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.22 16.16 30
Start [MHz] Stop [MHz]	5300.000 5340.000
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	--	--	17.14	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.14	dBm	PASS
Limit: 11 dBm + 10 log 21.72					
Max Output Power DC corrected	--	24.37	17.14	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	4.81	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.81	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:39:31
Ambit temp [°C] humidity [rel%]	25.3 53
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2A
Information	PS66

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5320 MHz

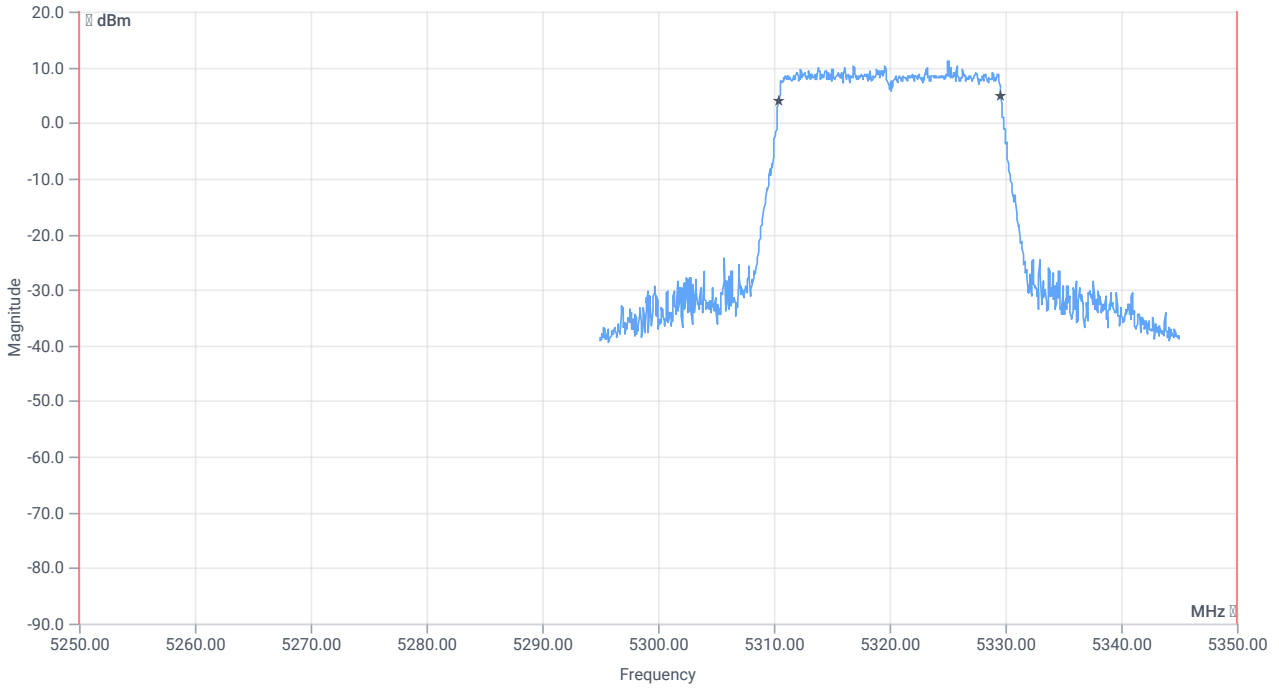
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.66	dBm	INFO
Ref. Frequency	--	--	5316.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.66 16.16 25
Start [MHz] Stop [MHz]	5295.000 5345.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

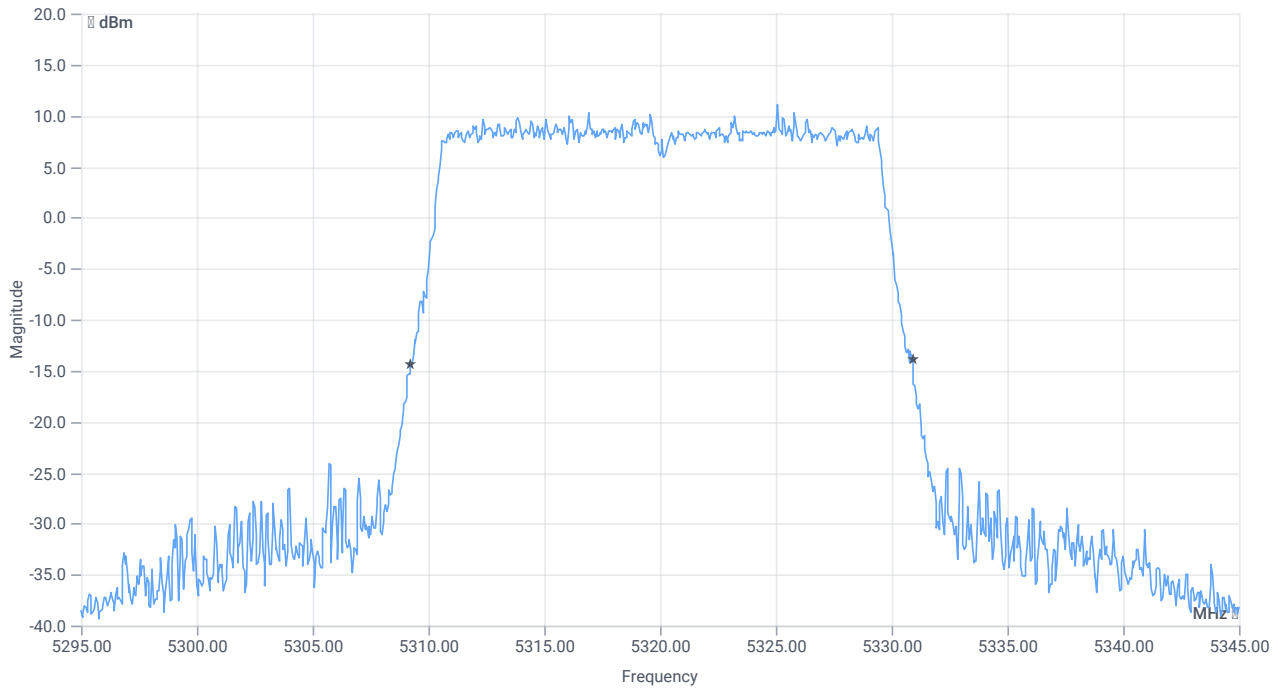




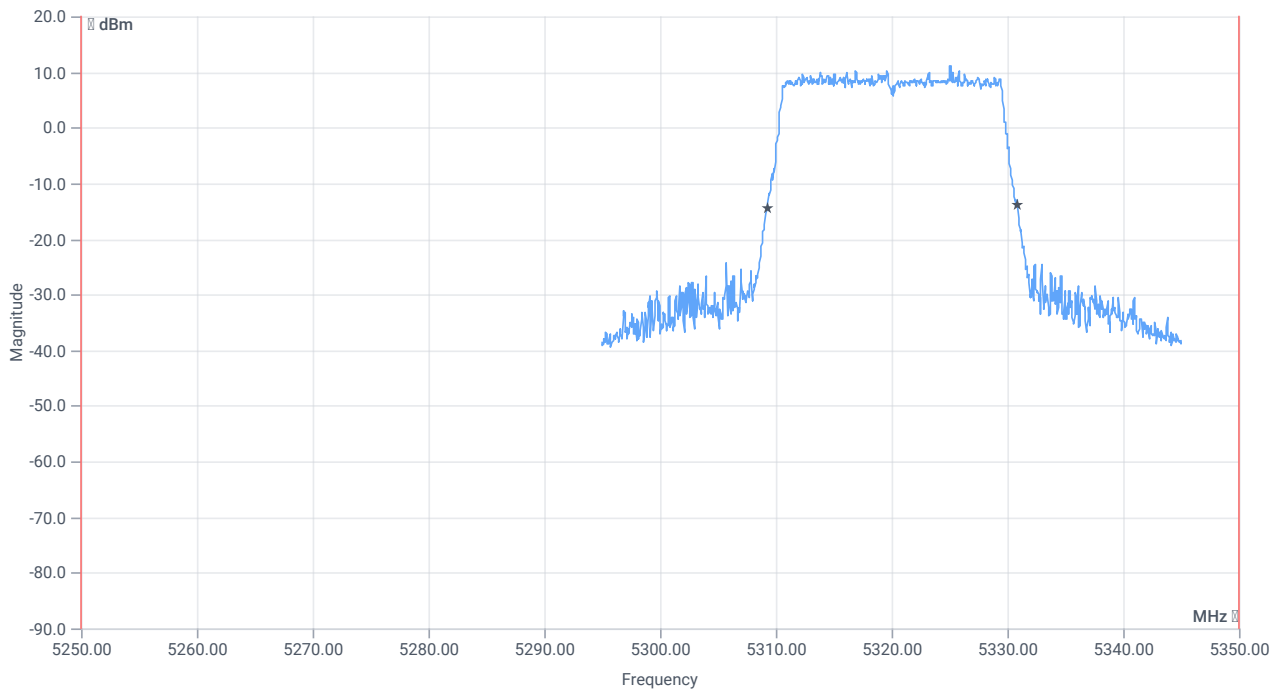
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.131	MHz	INFO
T1 99%	5250.000000	--	5310.4595	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5329.5904	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.65	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5309.2500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5330.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

References

TC start	25.07.2023 16:40:02
Ambit temp [°C] humidity [rel%]	25.3 52
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2A
Information	PS66

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5260
Frequency mid to test	False Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5320 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.58	dBm	INFO
Ant:1 BW 26dB	--	--	21.880	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.14	dBm	INFO
Ant:2 BW 26dB	--	--	21.720	MHz	INFO
Σ Limit absolute	--	24	20.38	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.72	--	24.37	20.38	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	5.21	dBm/1MHz	INFO
Ant:2 PSD	--	--	4.81	dBm/1MHz	INFO
Σ	--	11	8.02	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 08:08:57
Ambit temp [°C] humidity [rel%]	23.5 51
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax_HE20_U_NII_2C
Information	PS76

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 08:08:58
Message	set WLAN5Gx to ax_HE20_U_NII_2C, Frequency [MHz] 5500 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:09:08
Ambit temp [°C] humidity [rel%]	23.5 51
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5500 MHz

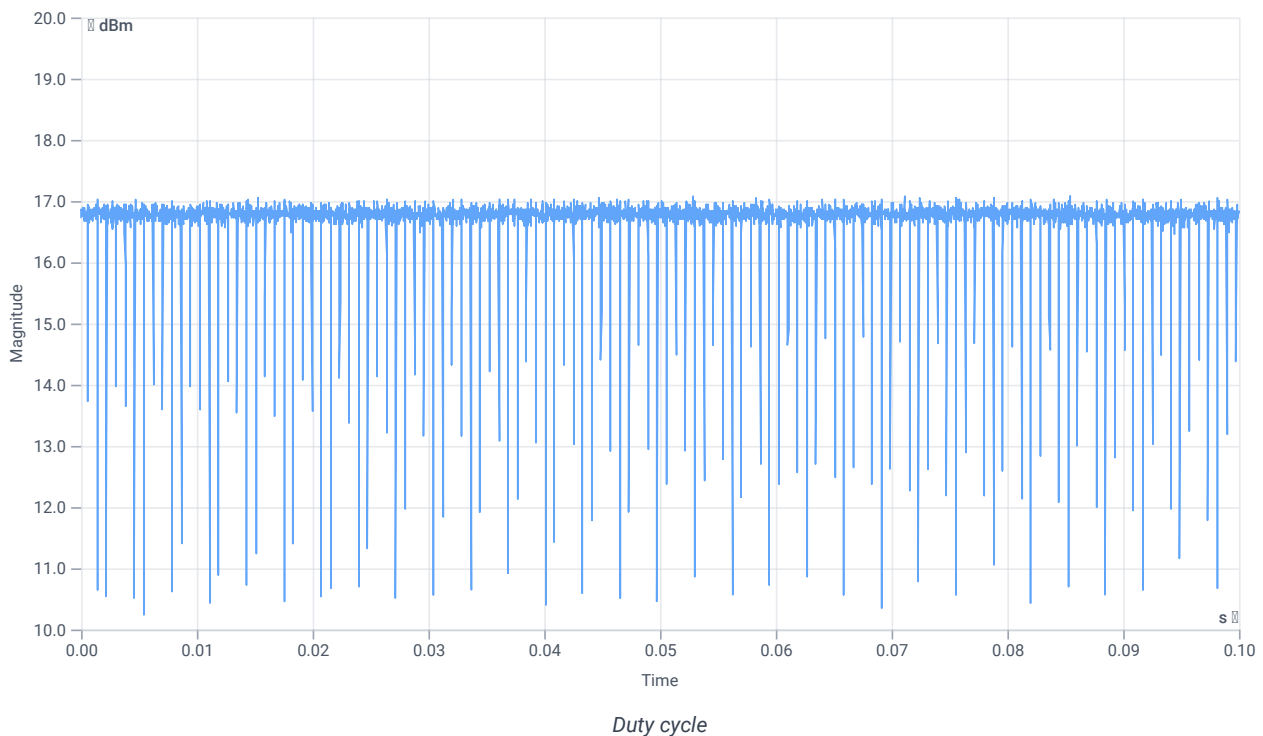
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.70	dBm	INFO
Ref. Frequency	--	--	5505.990	MHz	INFO

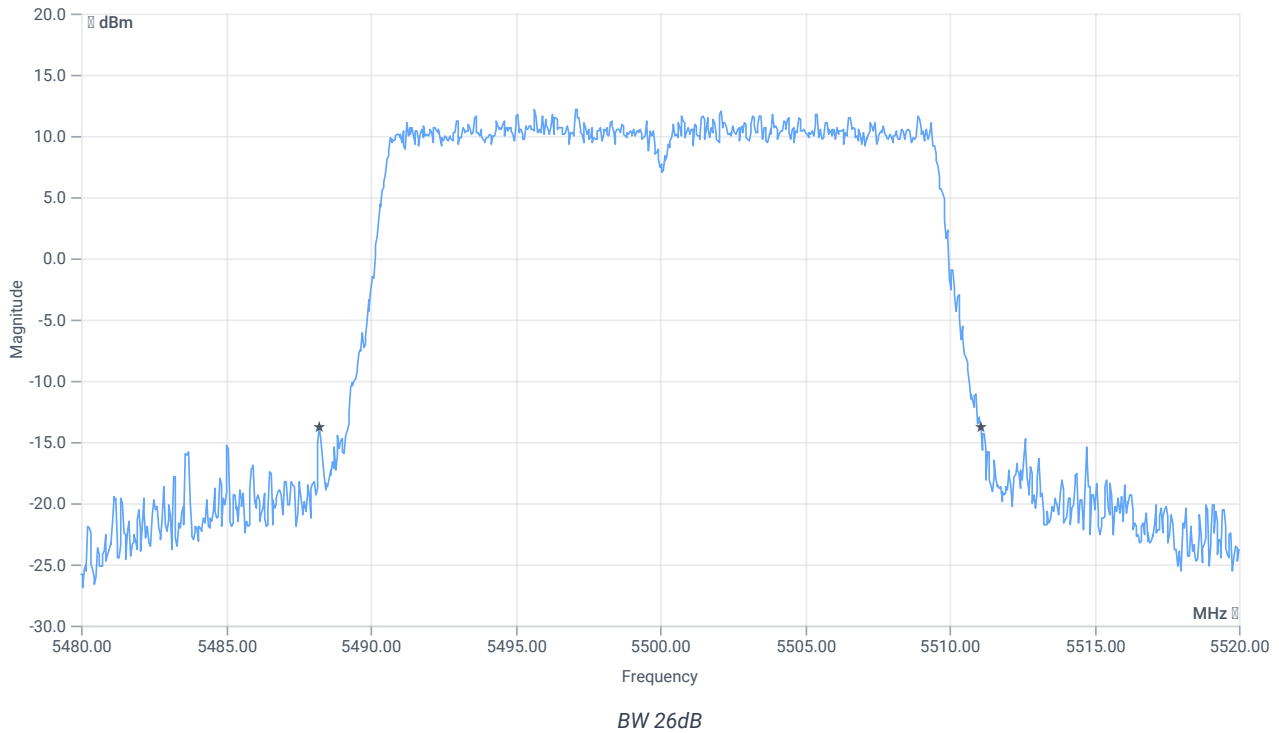
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



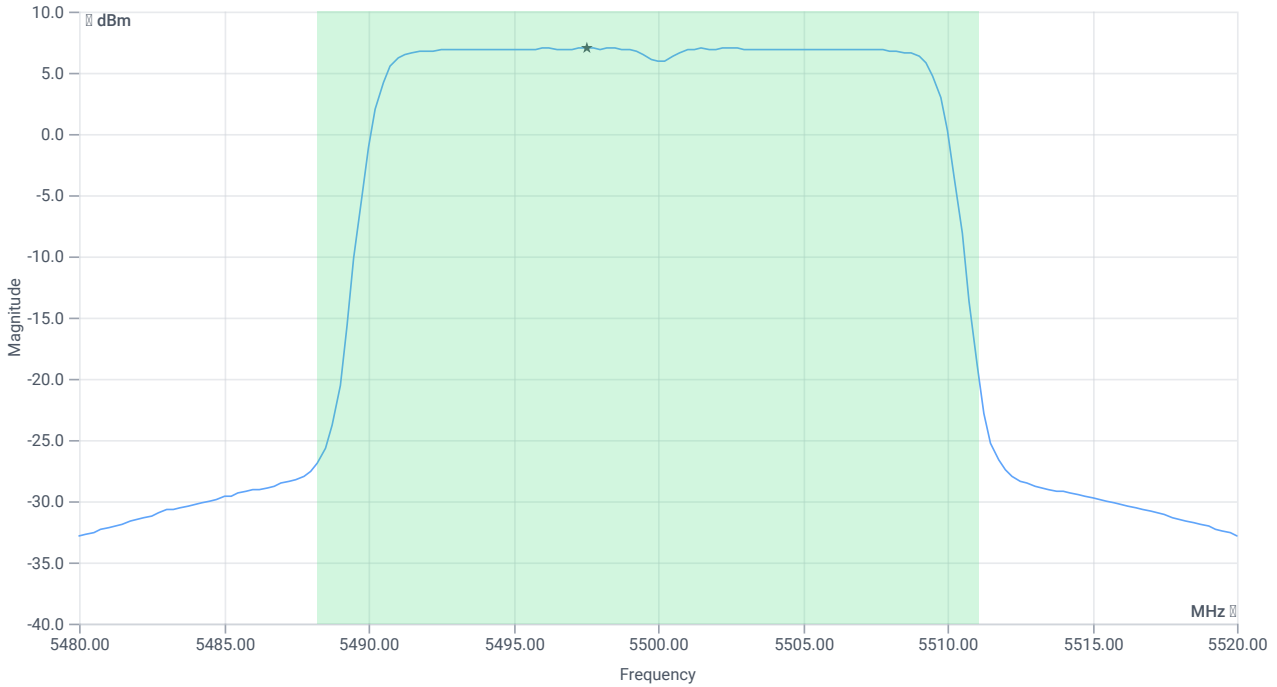
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	22.84	MHz	INFO
T1 26dB	---	---	5488.2400	MHz	INFO
T2 26dB	---	---	5511.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.70 16.59 30
Start [MHz] Stop [MHz]	5480.000 5520.000
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	--	--	19.36	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.36	dBm	PASS
Limit: 11 dBm + 10 log 22.84					
Max Output Power DC corrected	--	24.59	19.36	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.99	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.99	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:10:39
Ambit temp [°C] humidity [rel%]	23.5 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

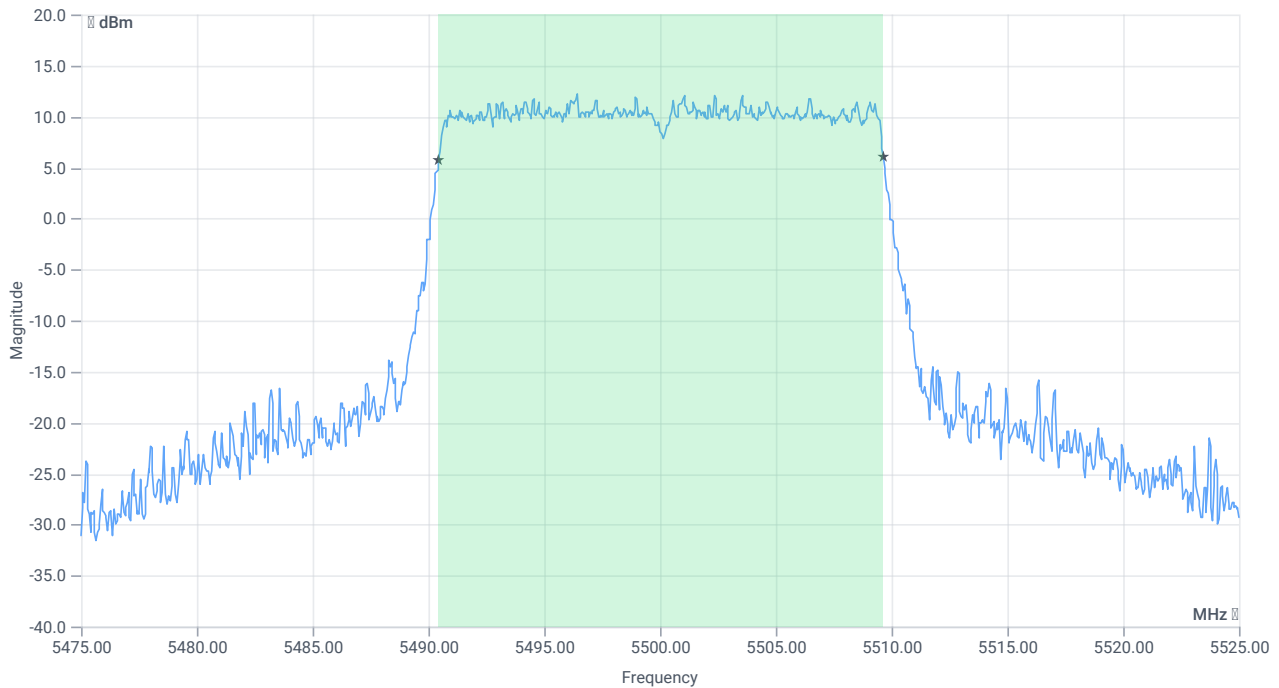
Test at TX 5500 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.13	dBm	INFO
Ref. Frequency	--	--	5504.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.13 16.59 25
Start [MHz] Stop [MHz]	5475.000 5525.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

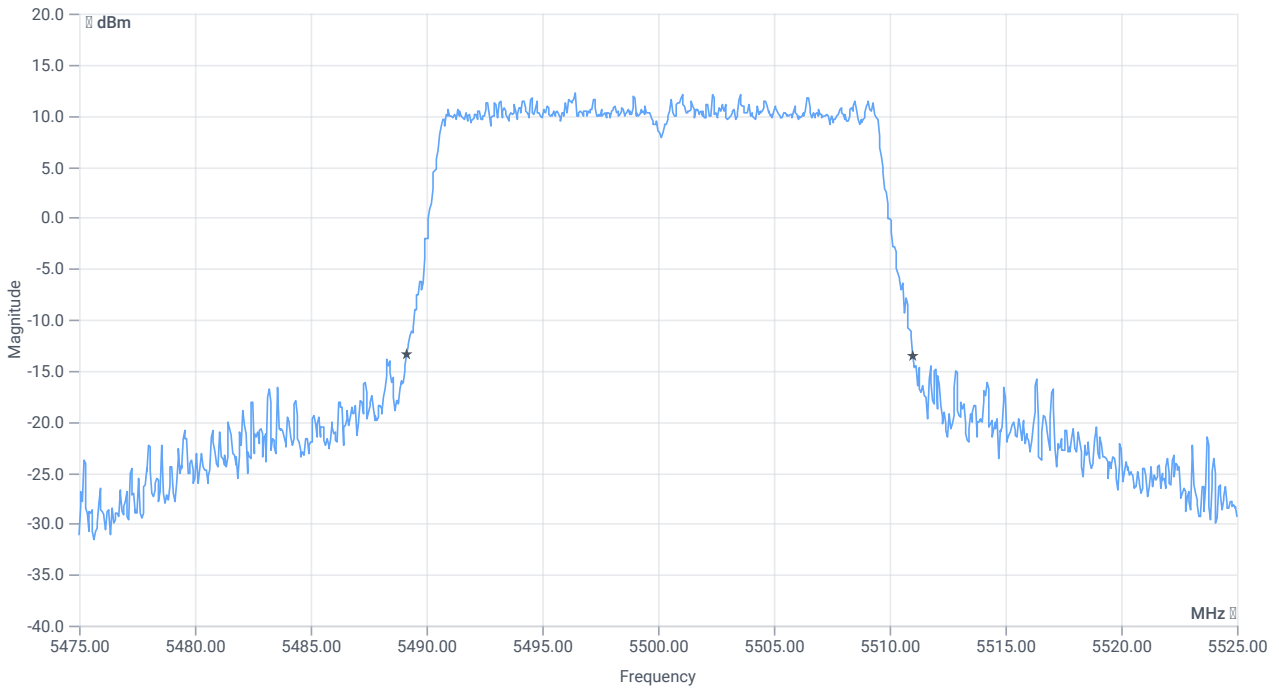




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5470.000000	--	5490.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5509.6404	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.85	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5489.1500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5511.0000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:11:13
Ambit temp [°C] humidity [rel%]	23.5 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5500 MHz

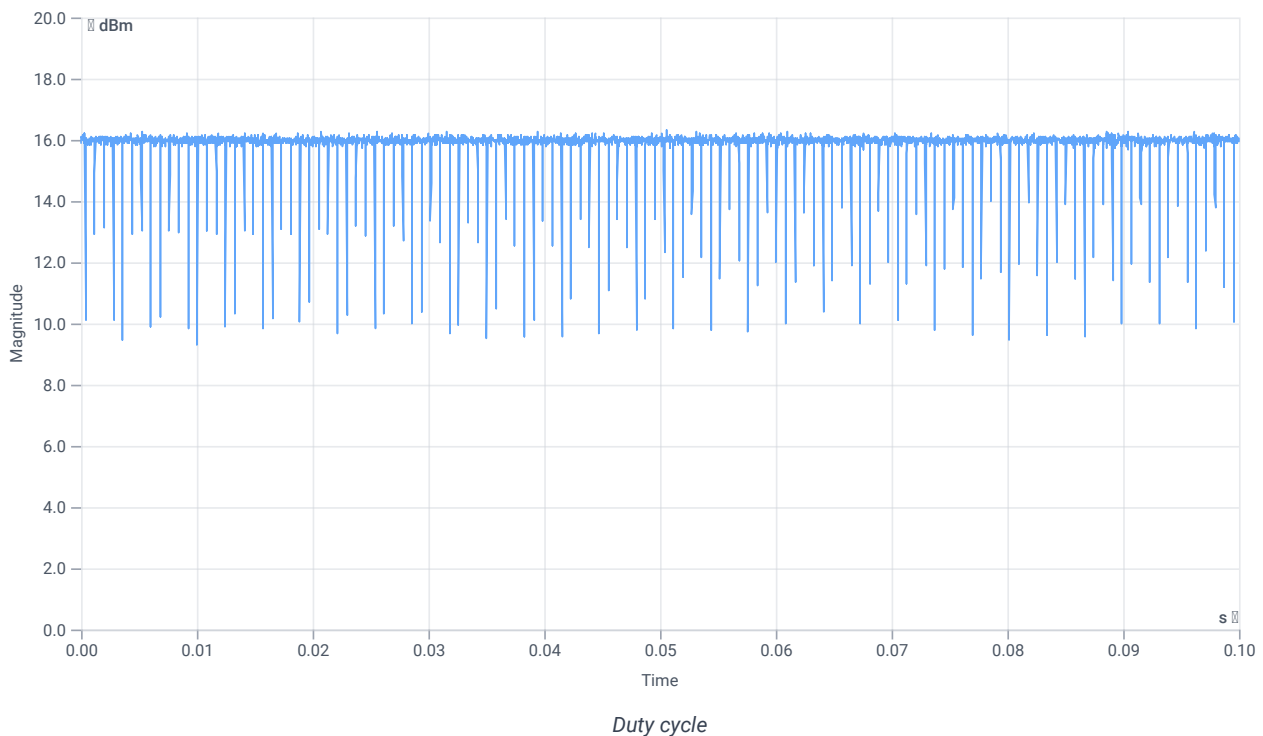
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.74	dBm	INFO
Ref. Frequency	--	--	5495.600	MHz	INFO

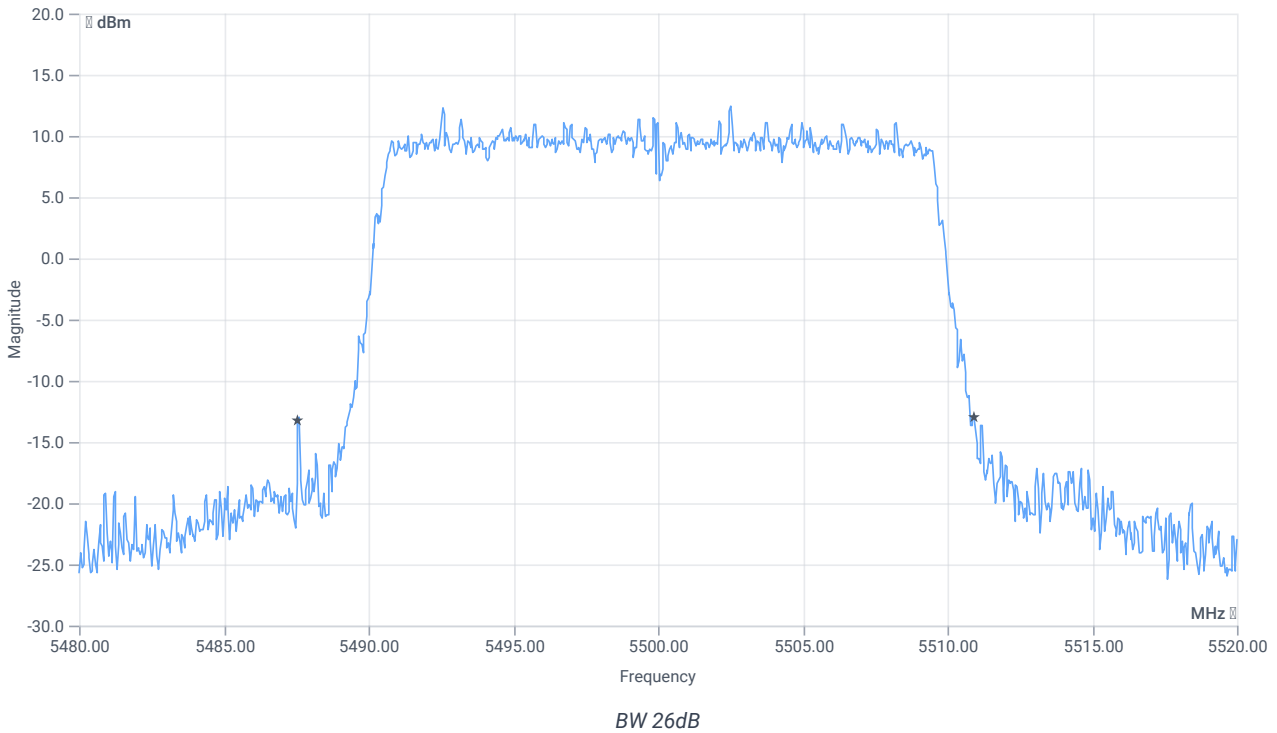
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



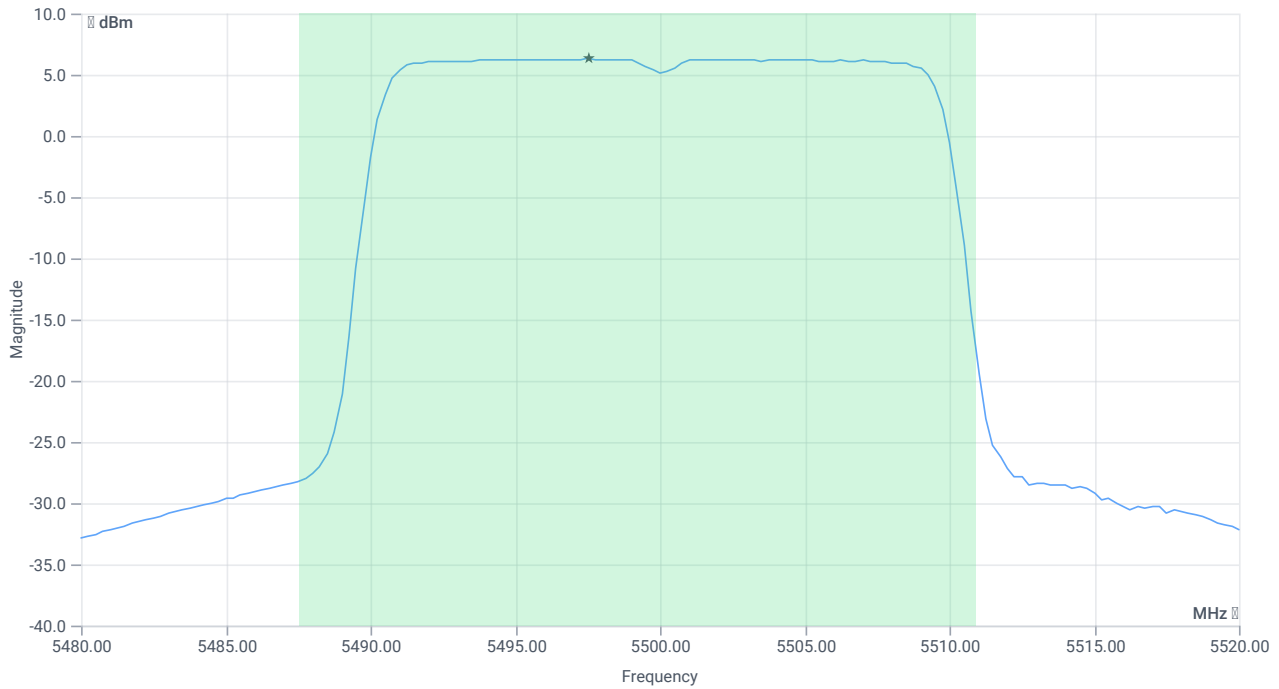
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.36	MHz	INFO
T1 26dB	---	---	5487.5600	MHz	INFO
T2 26dB	---	---	5510.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.74 16.59 30
Start [MHz] Stop [MHz]	5480.000 5520.000
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	--	--	18.63	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.63	dBm	PASS
Limit: 11 dBm + 10 log 23.36					
Max Output Power DC corrected	--	24.68	18.63	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.3	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.3	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:12:44
Ambit temp [°C] humidity [rel%]	23.5 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

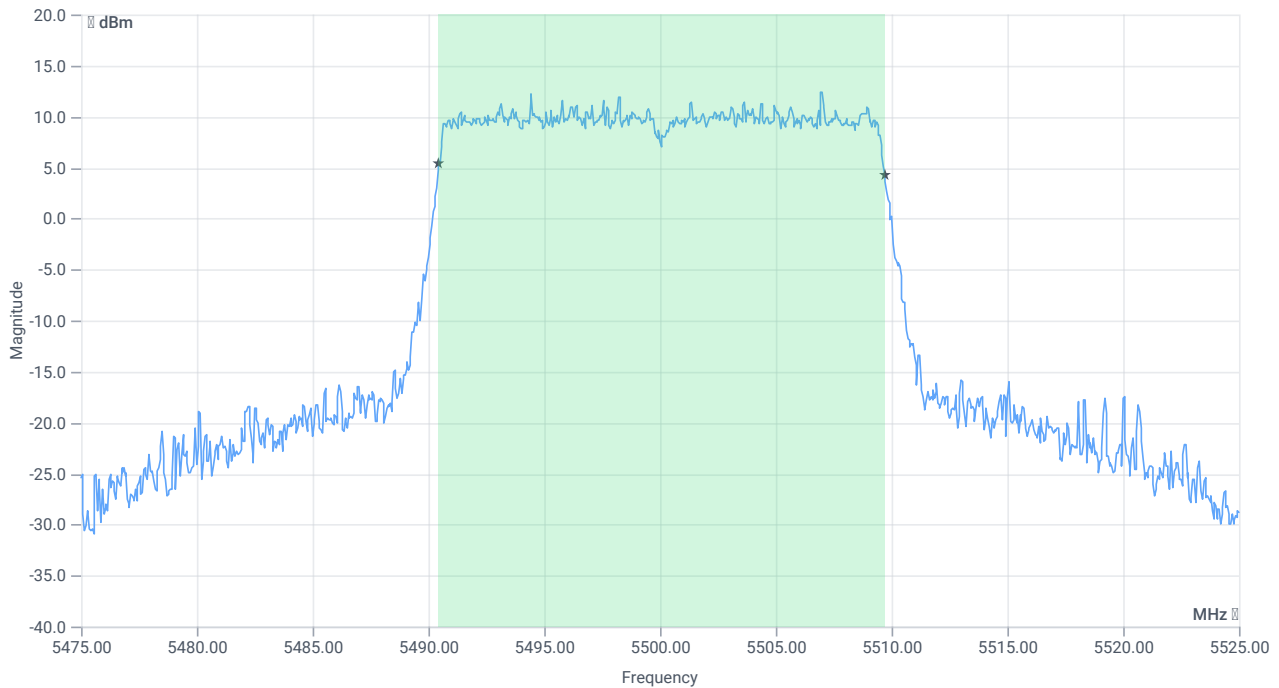
Test at TX 5500 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.74	dBm	INFO
Ref. Frequency	--	--	5504.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.74 16.59 25
Start [MHz] Stop [MHz]	5475.000 5525.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



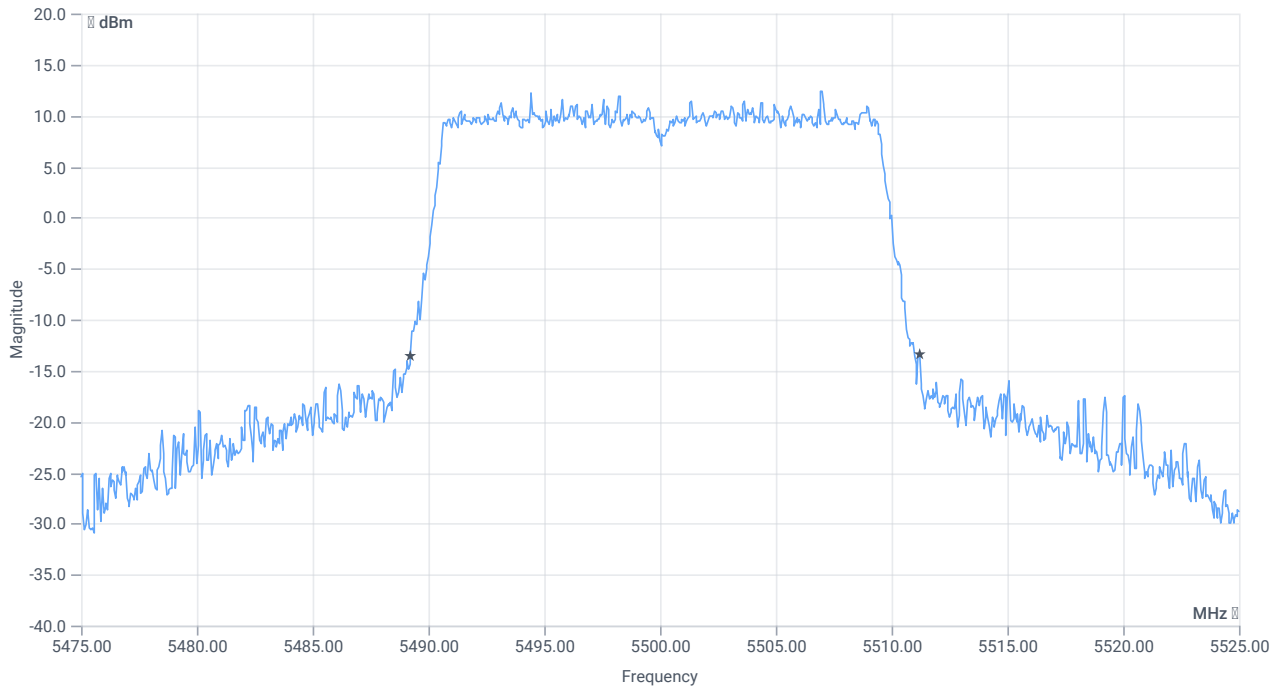
BW 99PCT



BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5470.000000	--	5490.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5509.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.95	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5489.2500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5511.2000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:14:21
Ambit temp [°C] humidity [rel%]	23.5 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5500 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	19.36	dBm	INFO
Ant:1 BW 26dB	--	--	22.840	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	18.63	dBm	INFO
Ant:2 BW 26dB	--	--	23.360	MHz	INFO
Σ Limit absolute	--	24	22.02	dBm	PASS
Σ Limit: 11 dBm + 10 log 22.84	--	24.59	22.02	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.99	dBm/1MHz	INFO
Ant:2 PSD	--	--	6.3	dBm/1MHz	INFO
Σ	--	11	9.67	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 08:27:56
Ambit temp [°C] humidity [rel%]	23.8 50
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax_HE20_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 08:27:56
Message	set WLAN5Gx to ax_HE20_U_NII_2C, Frequency [MHz] 5500 , 5600 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:28:14
Ambit temp [°C] humidity [rel%]	23.8 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5600 MHz

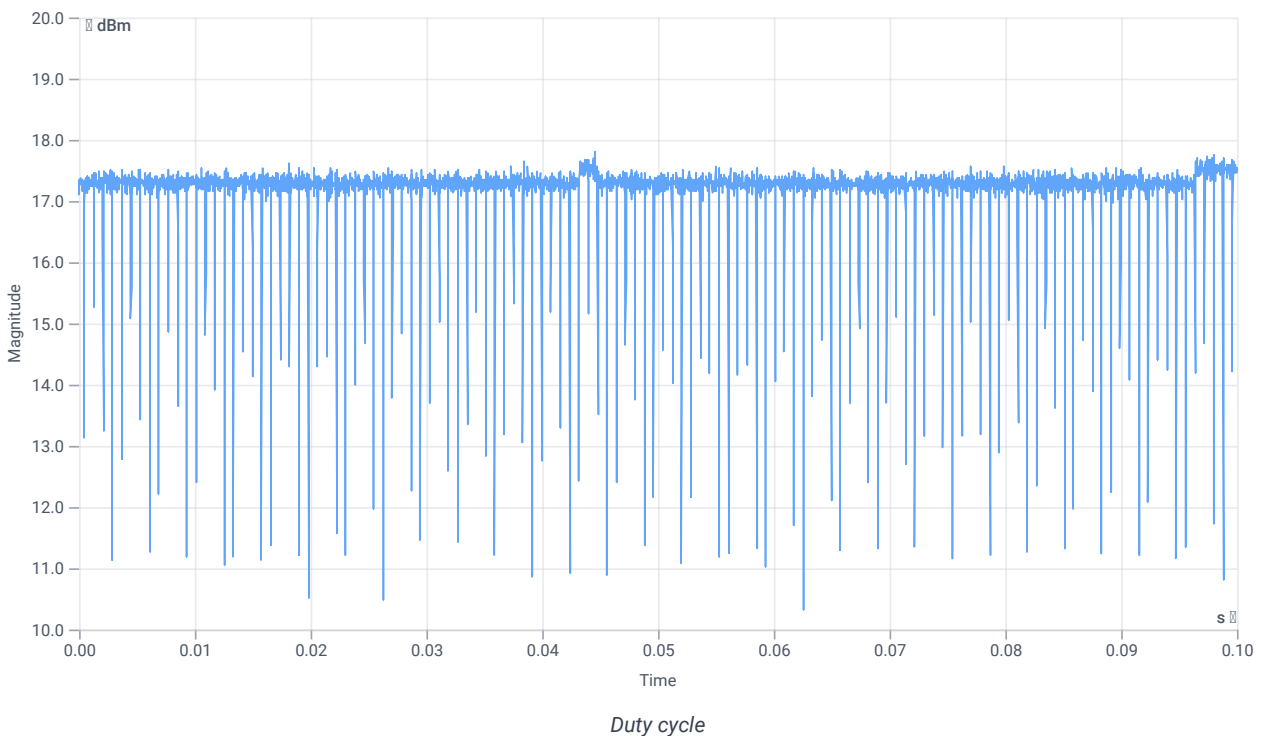
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.05	dBm	INFO
Ref. Frequency	--	--	5592.210	MHz	INFO

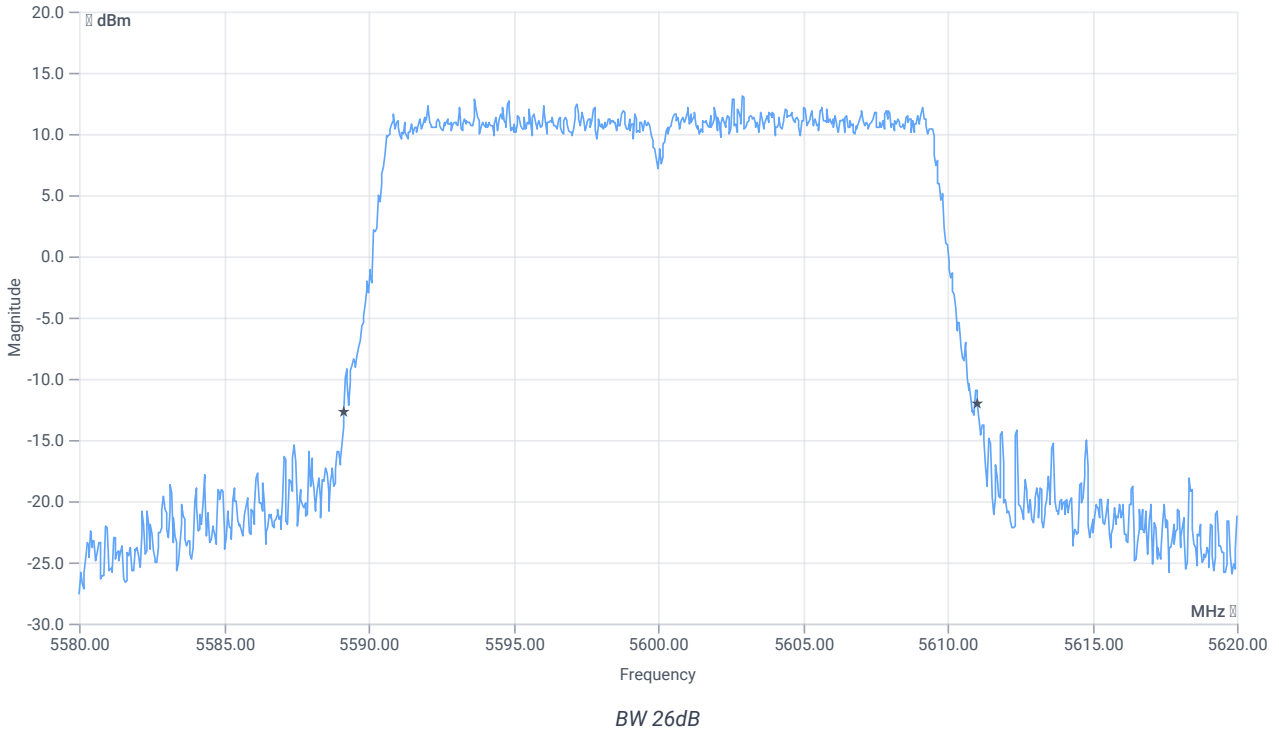
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



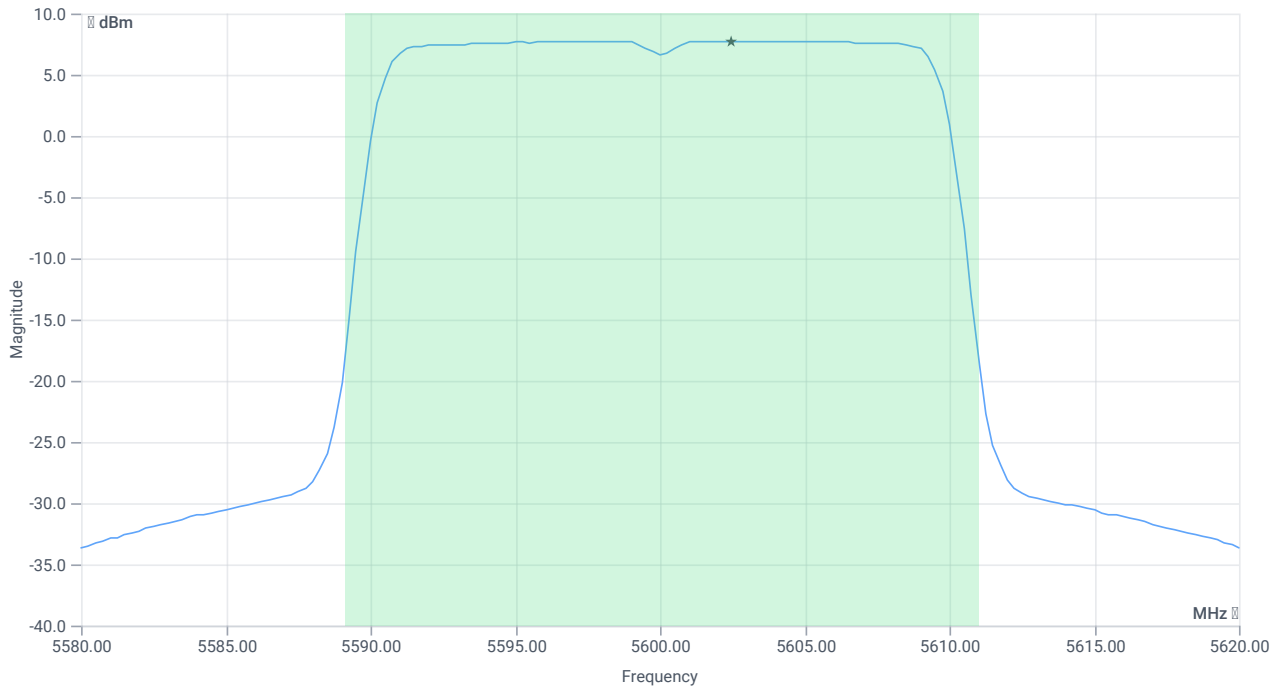
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5589.1600	MHz	INFO
T2 26dB	---	---	5611.0400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.05 16.64 30
Start [MHz] Stop [MHz]	5580.000 5620.000
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	--	--	20.09	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.09	dBm	PASS
Limit: 11 dBm + 10 log 21.88					
Max Output Power DC corrected	--	24.4	20.09	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.76	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.76	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:29:42
Ambit temp [°C] humidity [rel%]	23.9 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

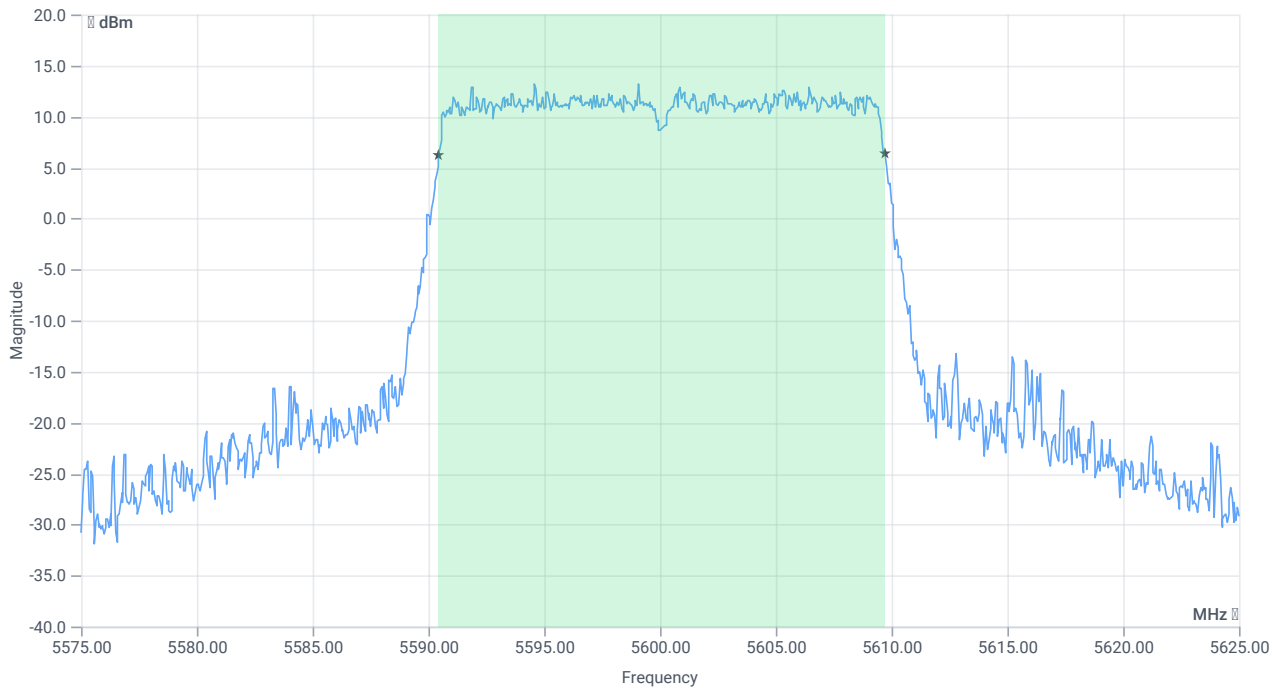
Test at TX 5600 MHz

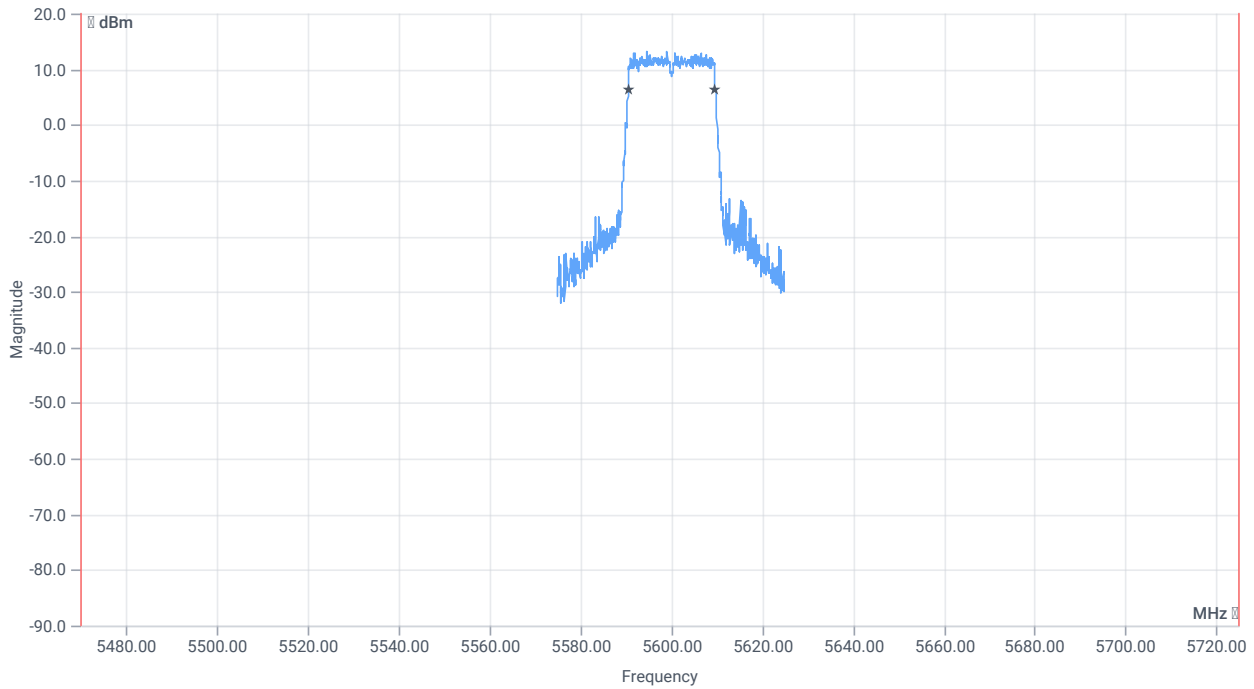
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.45	dBm	INFO
Ref. Frequency	--	--	5603.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.45 16.64 25
Start [MHz] Stop [MHz]	5575.000 5625.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

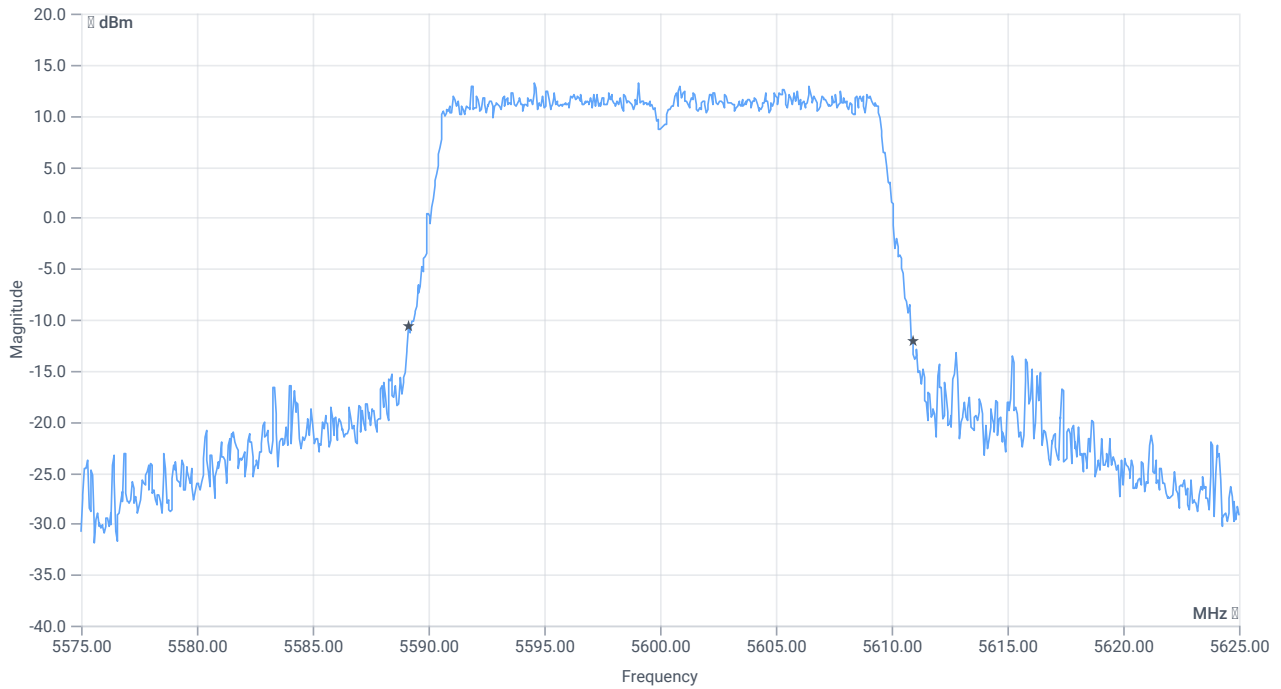




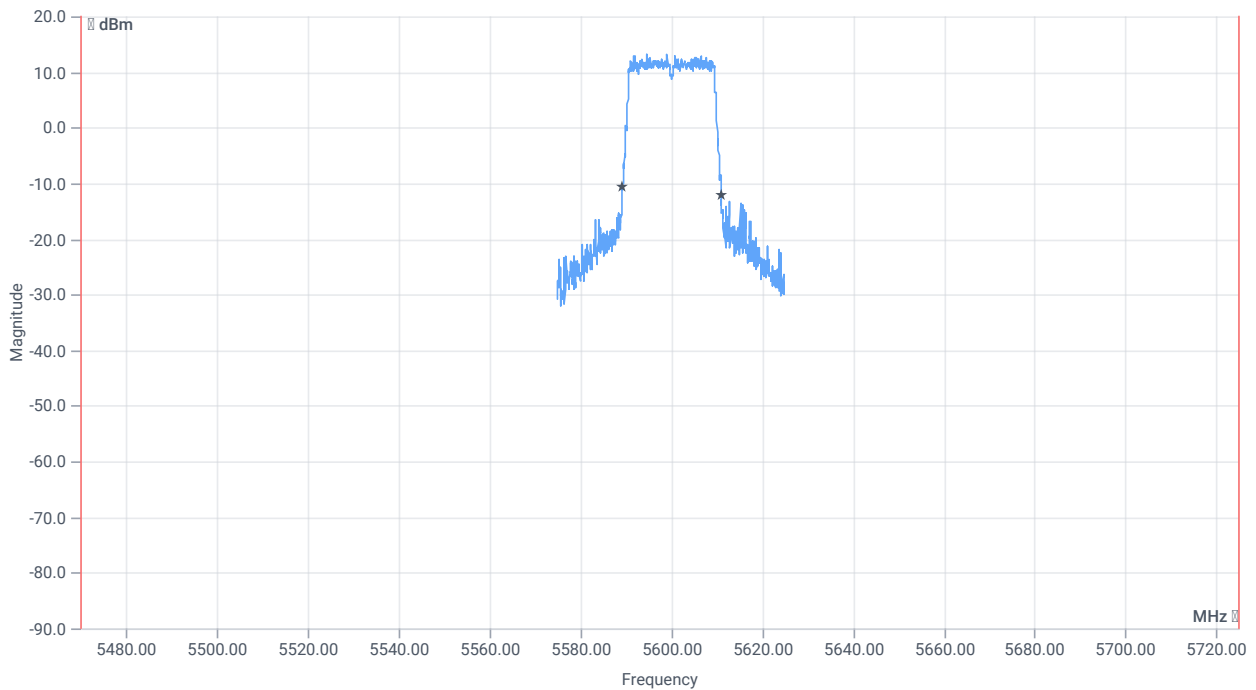
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5470.000000	--	5590.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5609.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.75	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5589.1500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5610.9000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:30:14
Ambit temp [°C] humidity [rel%]	23.9 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5600 MHz

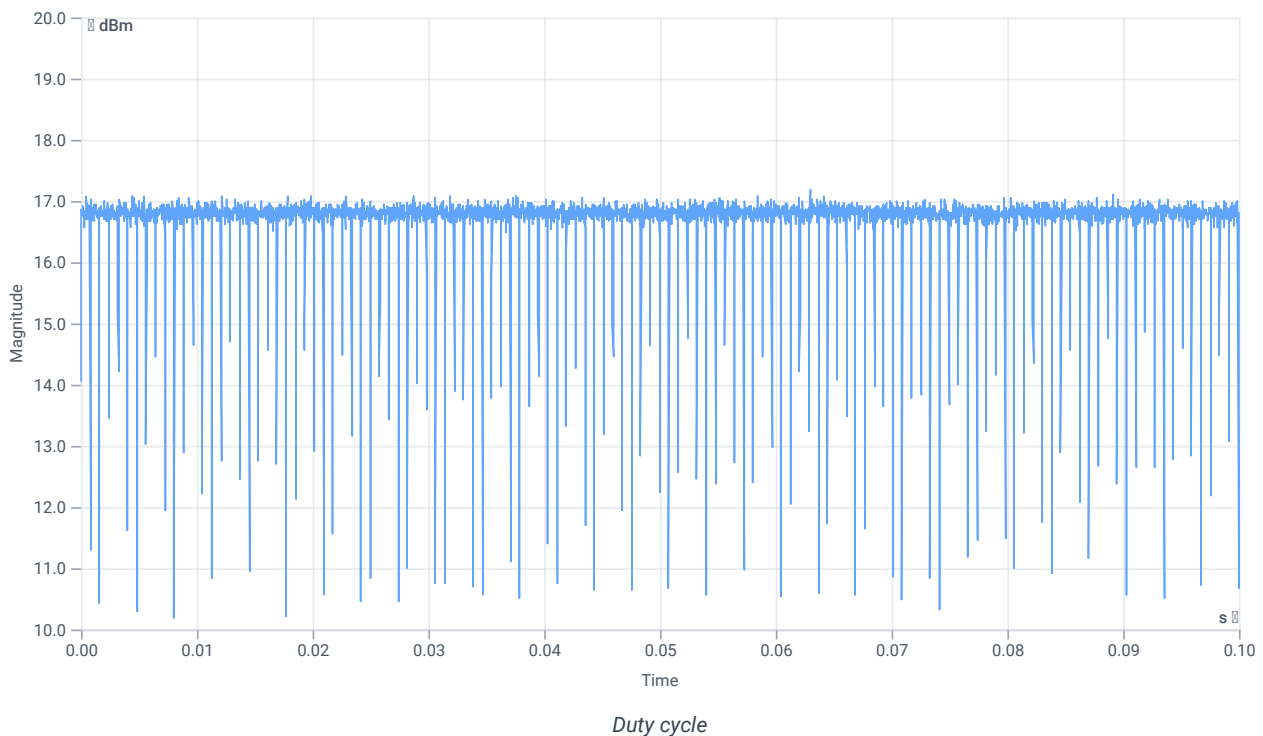
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.41	dBm	INFO
Ref. Frequency	--	--	5602.400	MHz	INFO

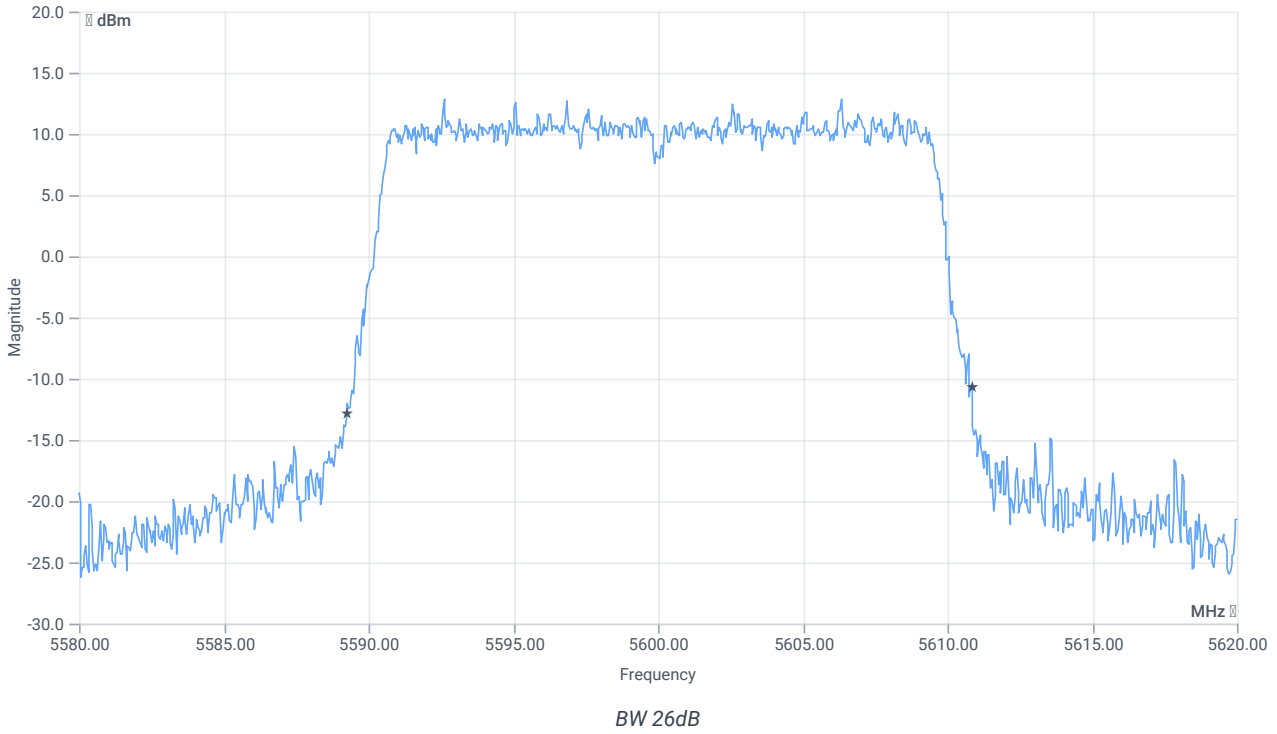
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



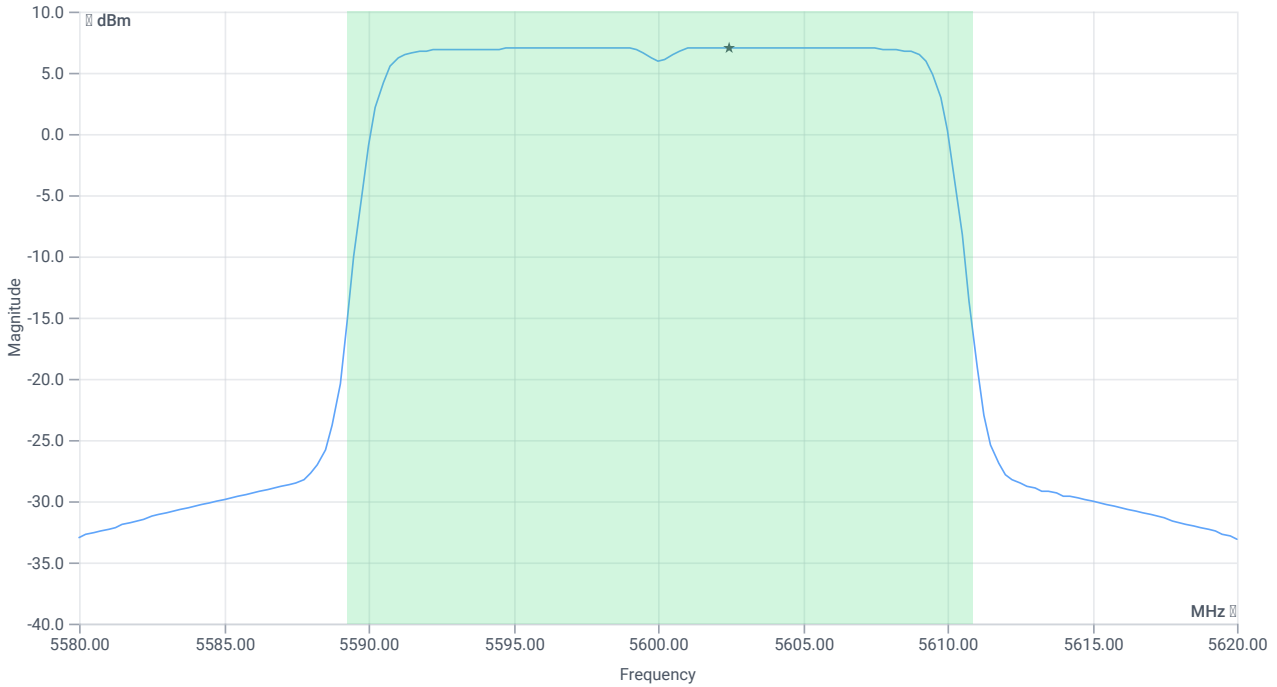
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.6	MHz	INFO
T1 26dB	---	---	5589.2400	MHz	INFO
T2 26dB	---	---	5610.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.41 16.64 30
Start [MHz] Stop [MHz]	5580.000 5620.000
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	--	--	19.46	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.46	dBm	PASS
Limit: 11 dBm + 10 log 21.6					
Max Output Power DC corrected	--	24.34	19.46	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.09	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.09	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:31:42
Ambit temp [°C] humidity [rel%]	23.9 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

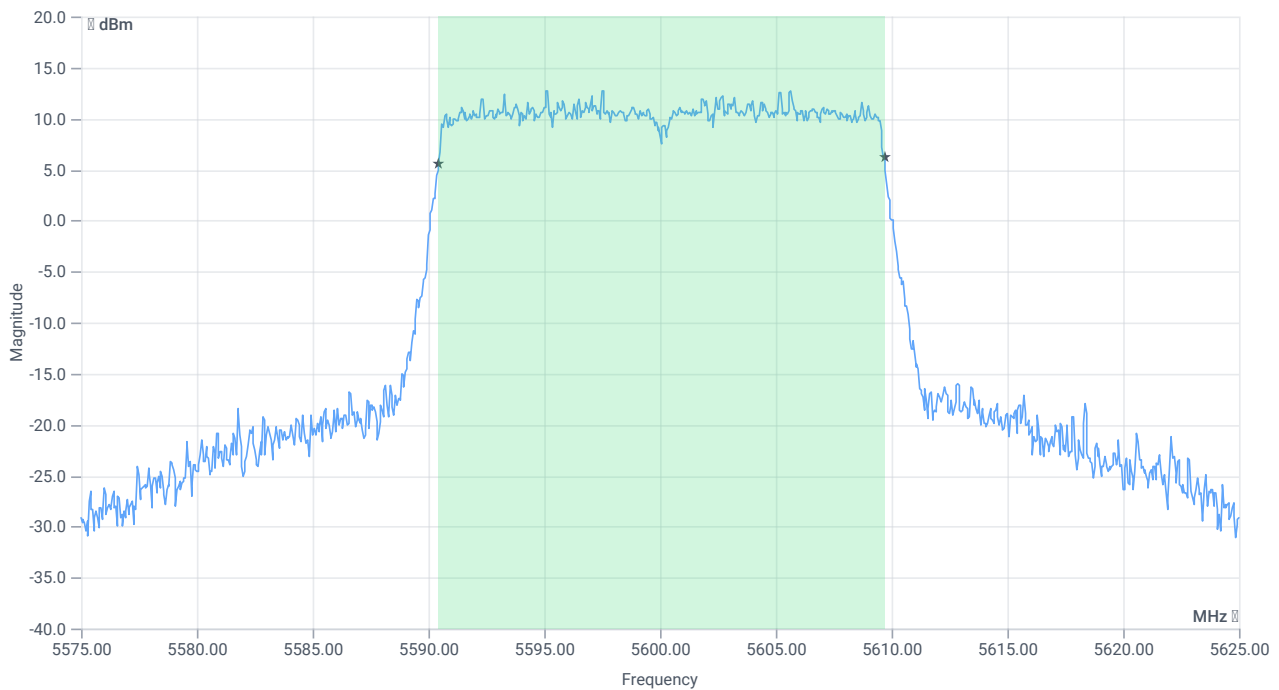
Test at TX 5600 MHz

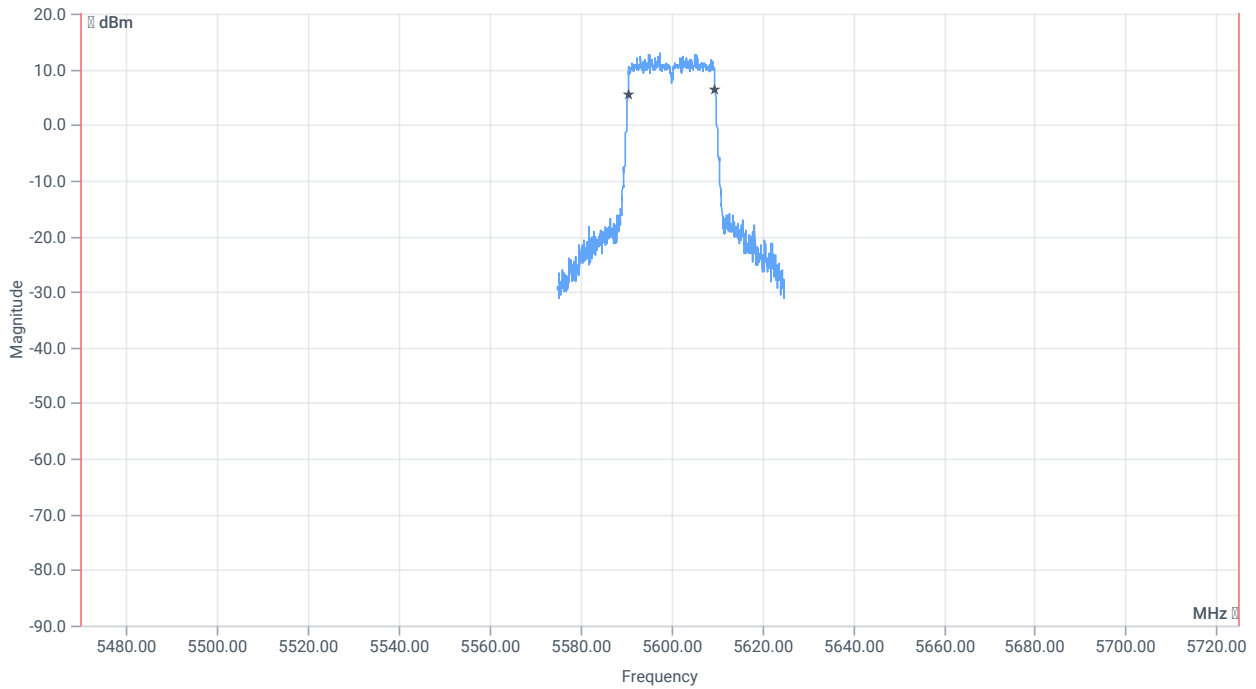
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.28	dBm	INFO
Ref. Frequency	--	--	5602.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.28 16.64 25
Start [MHz] Stop [MHz]	5575.000 5625.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

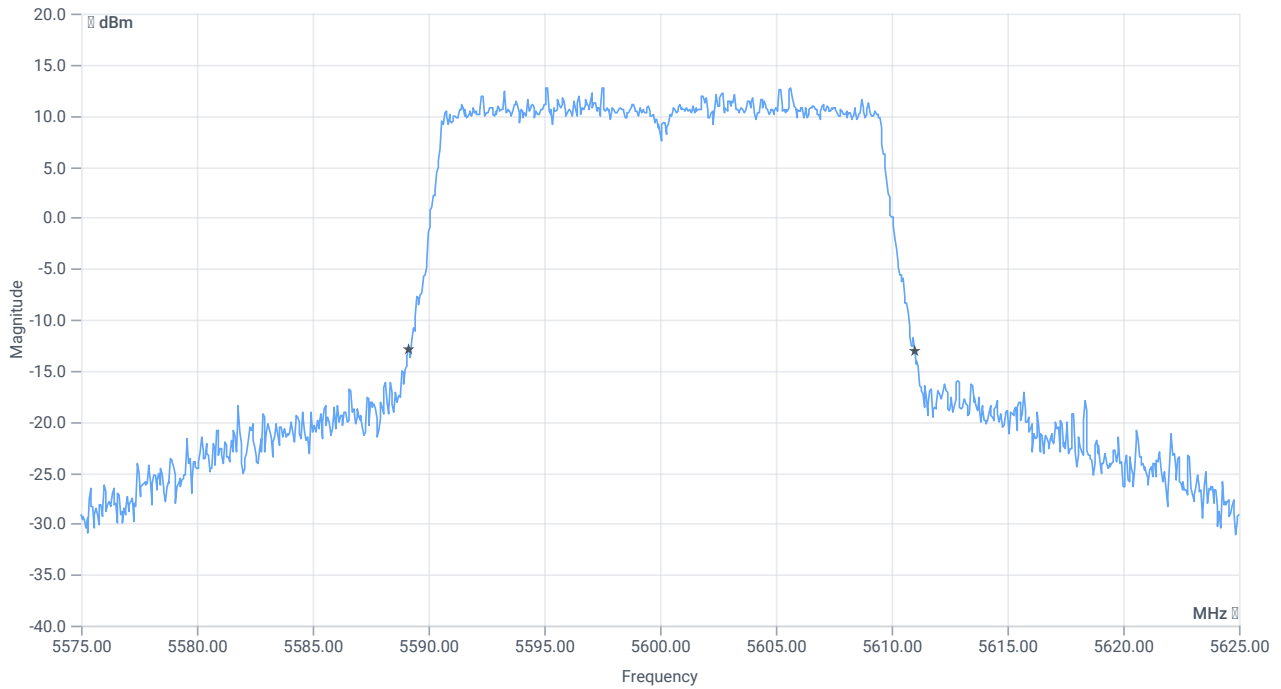




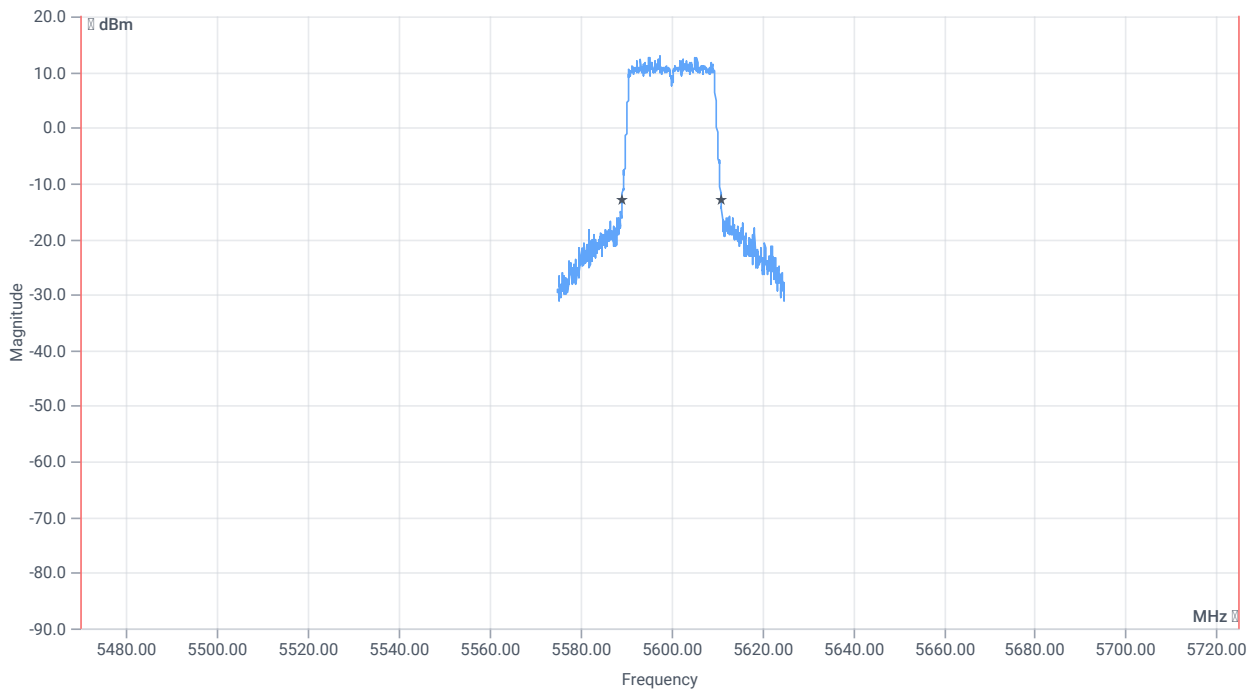
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5470.000000	--	5590.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5609.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.85	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5589.1500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5611.0000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:32:14
Ambit temp [°C] humidity [rel%]	23.9 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	False Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5600 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.09	dBm	INFO
Ant:1 BW 26dB	--	--	21.880	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.46	dBm	INFO
Ant:2 BW 26dB	--	--	21.600	MHz	INFO
Σ Limit absolute	--	24	22.8	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.6	--	24.34	22.8	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.76	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.09	dBm/1MHz	INFO
Σ	--	11	10.45	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 08:33:20
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ax_HE20_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 08:33:20
Message	set WLAN5Gx to ax_HE20_U_NII_2C, Frequency [MHz] 5720

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:33:42
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5720 MHz

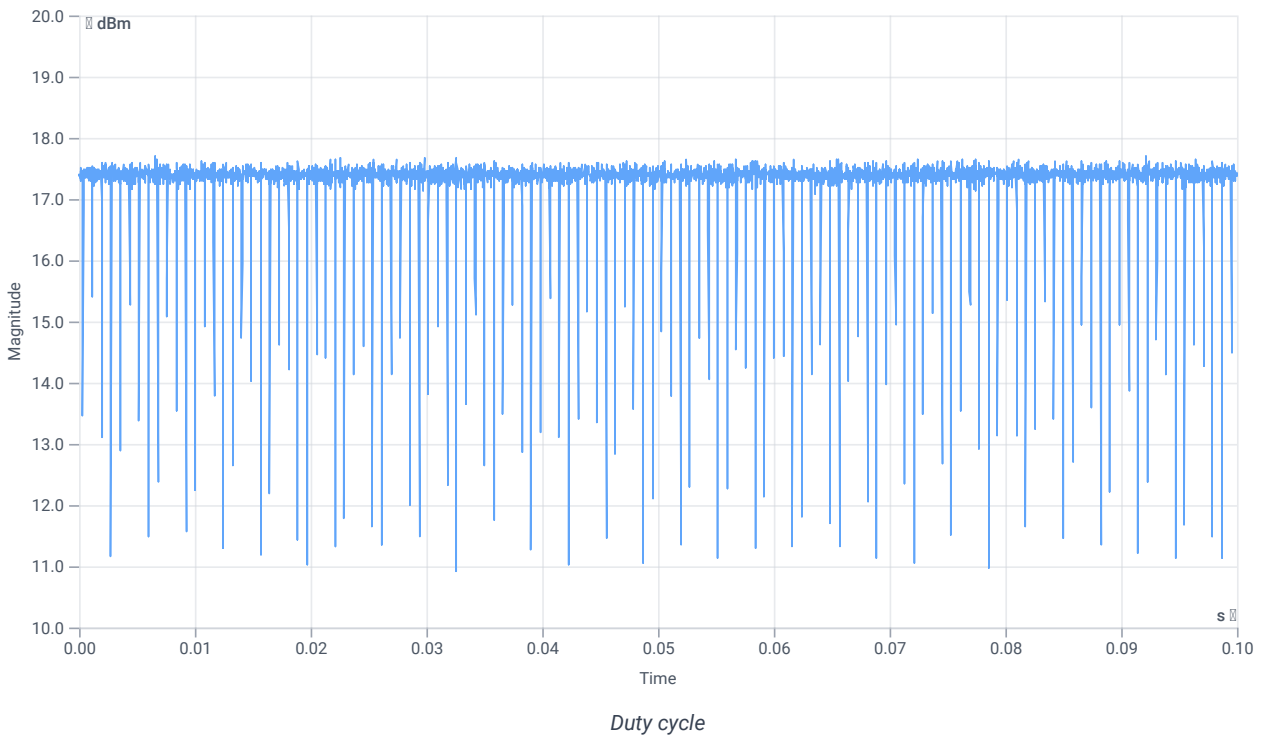
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.60	dBm	INFO
Ref. Frequency	--	--	5725.000	MHz	INFO

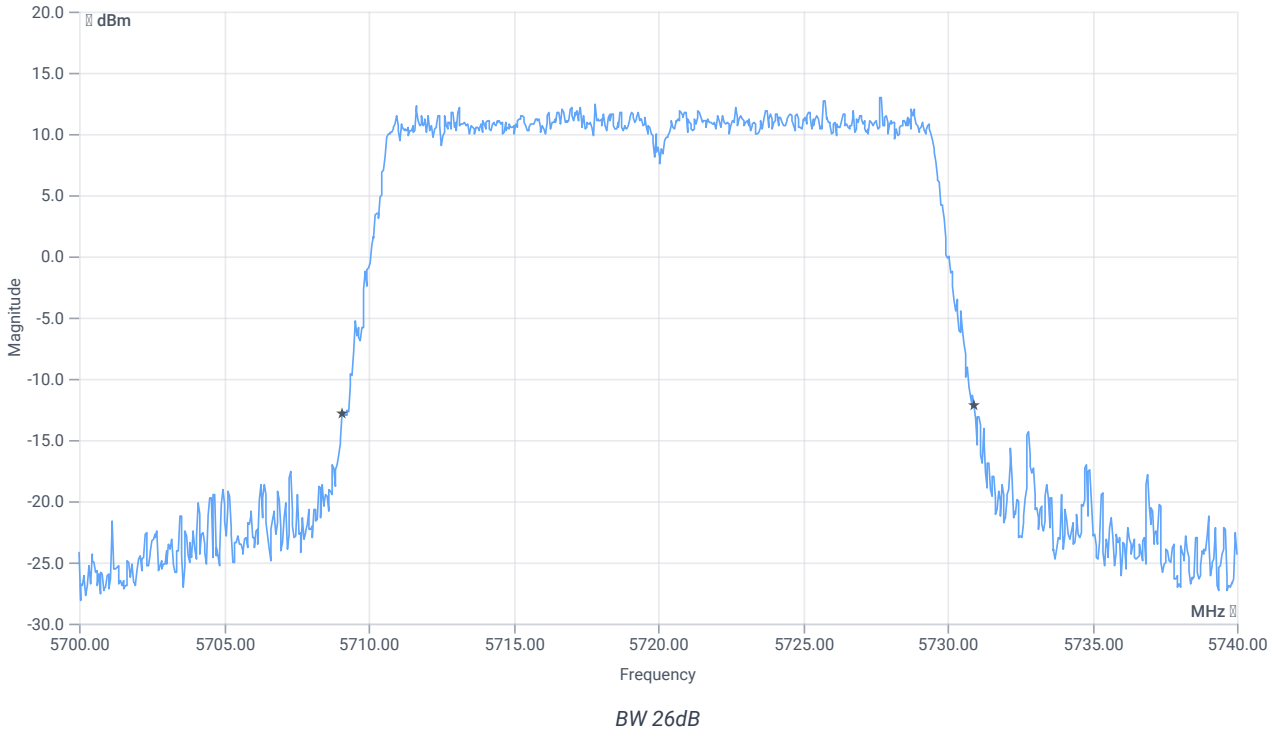
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



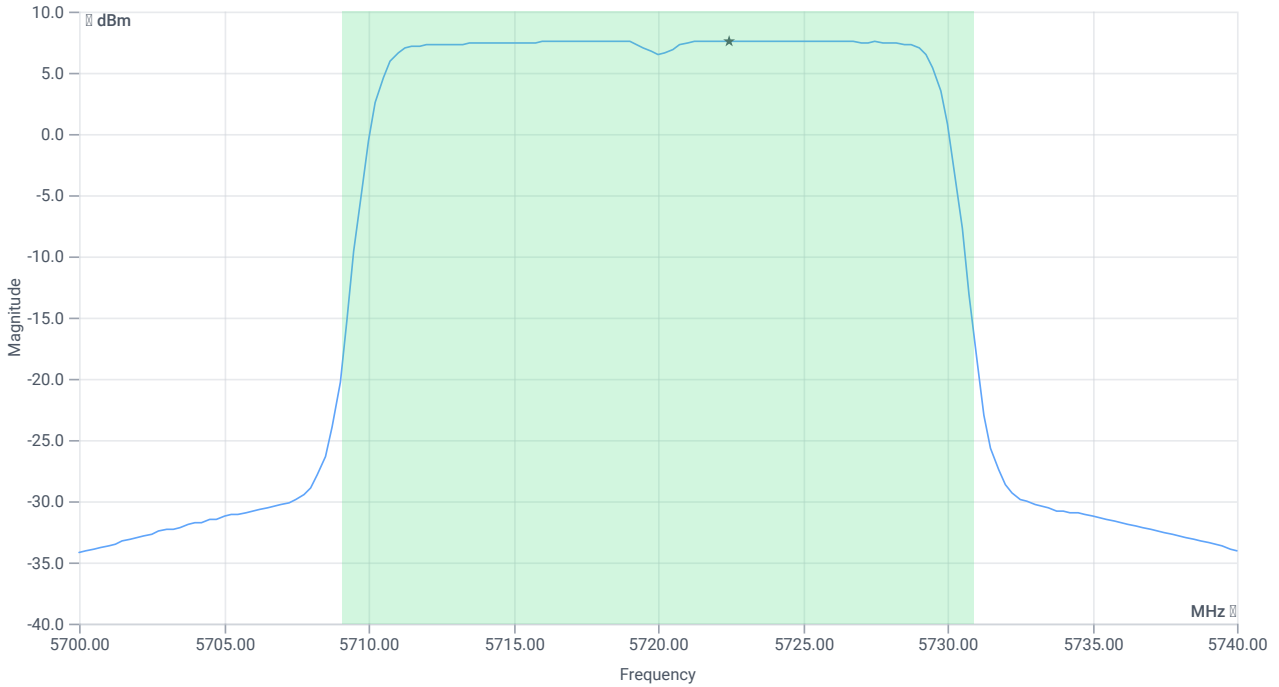
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.84	MHz	INFO
T1 26dB	---	---	5709.0800	MHz	INFO
T2 26dB	---	---	5730.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.60 16.59 30
Start [MHz] Stop [MHz]	5700.000 5740.000
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	--	--	19.96	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.96	dBm	PASS
Limit: 11 dBm + 10 log 21.84					
Max Output Power DC corrected	--	24.39	19.96	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.62	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.62	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:35:10
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

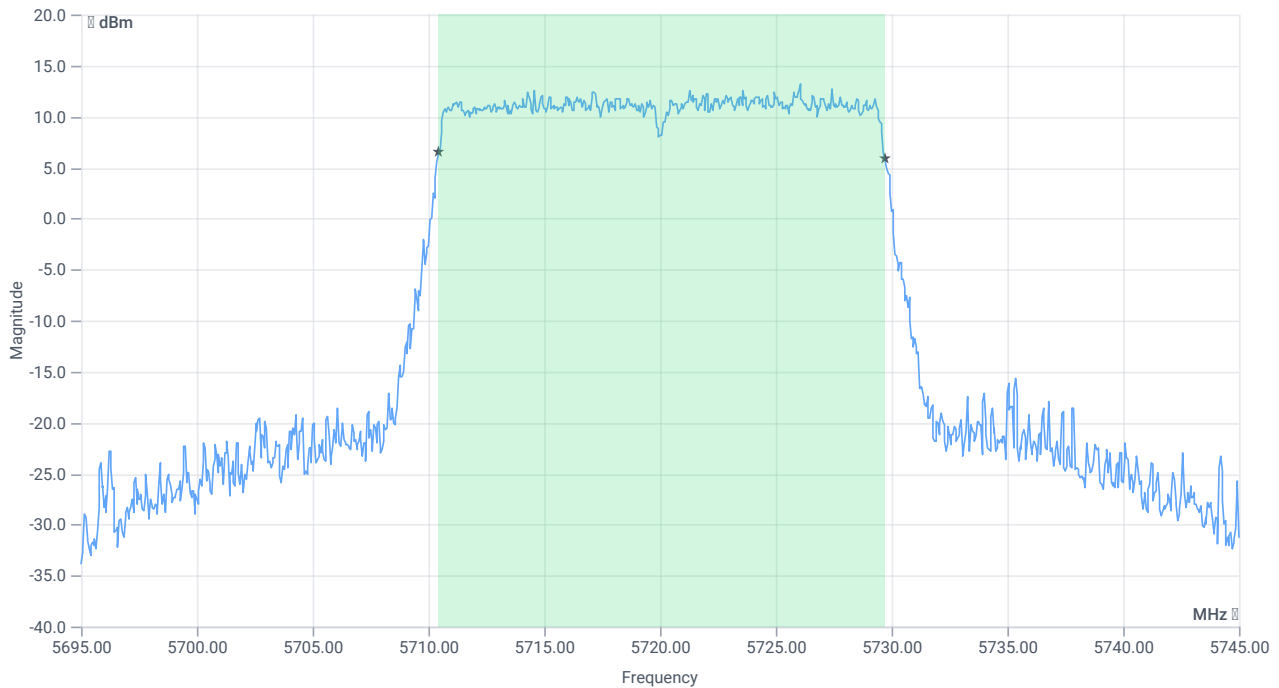
Test at TX 5720 MHz

RESULT: Reference Power cond.

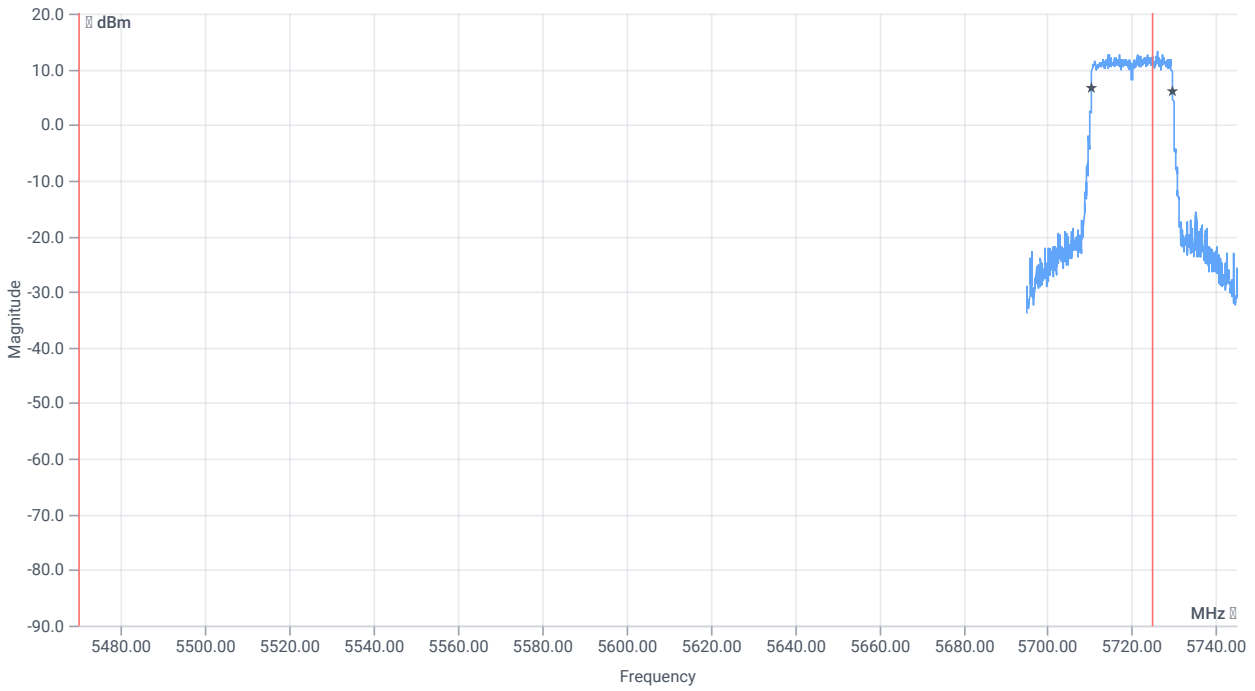
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.45	dBm	INFO
Ref. Frequency	--	--	5720.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.45 16.59 25
Start [MHz] Stop [MHz]	5695.000 5745.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



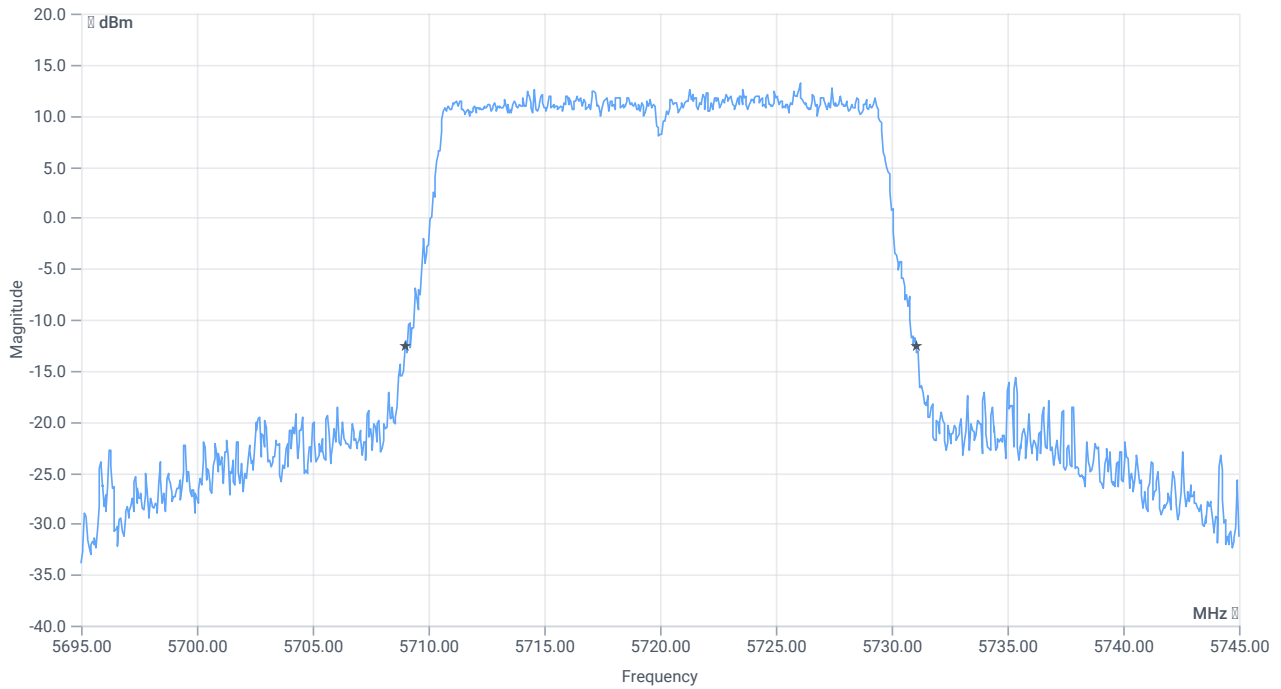
BW 99PCT



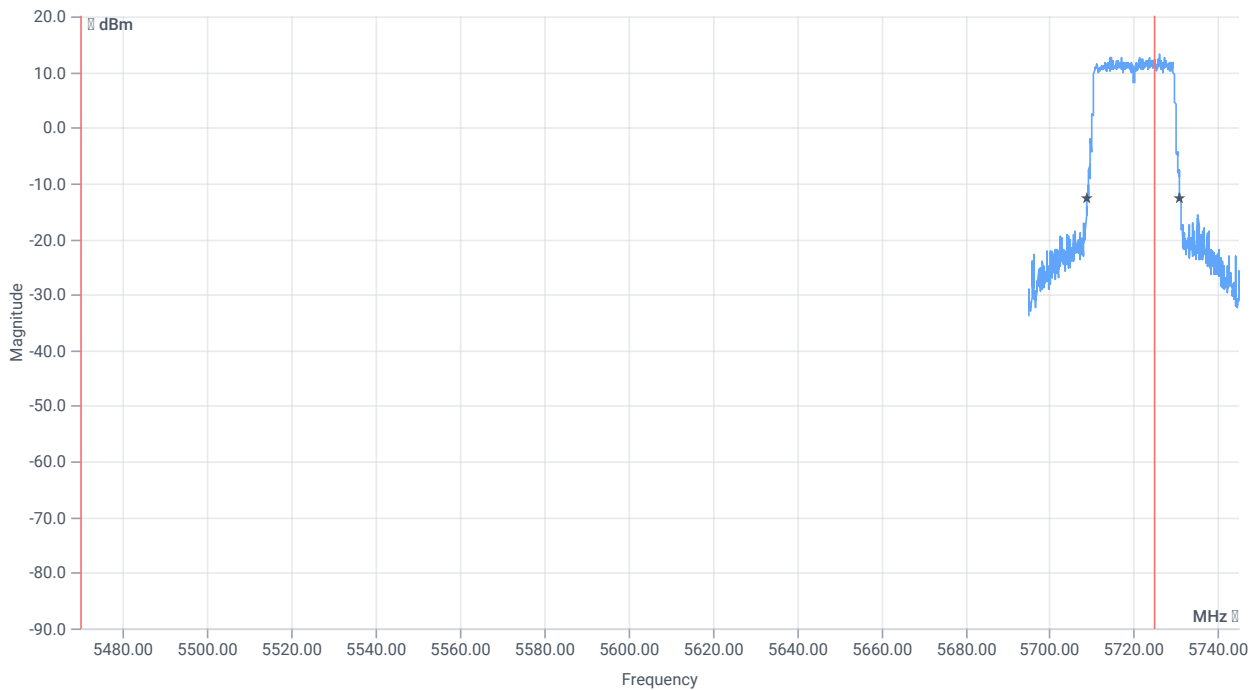
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5470.000000	--	5710.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5729.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	22.05	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5709.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5731.0500	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:35:42
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5720 MHz

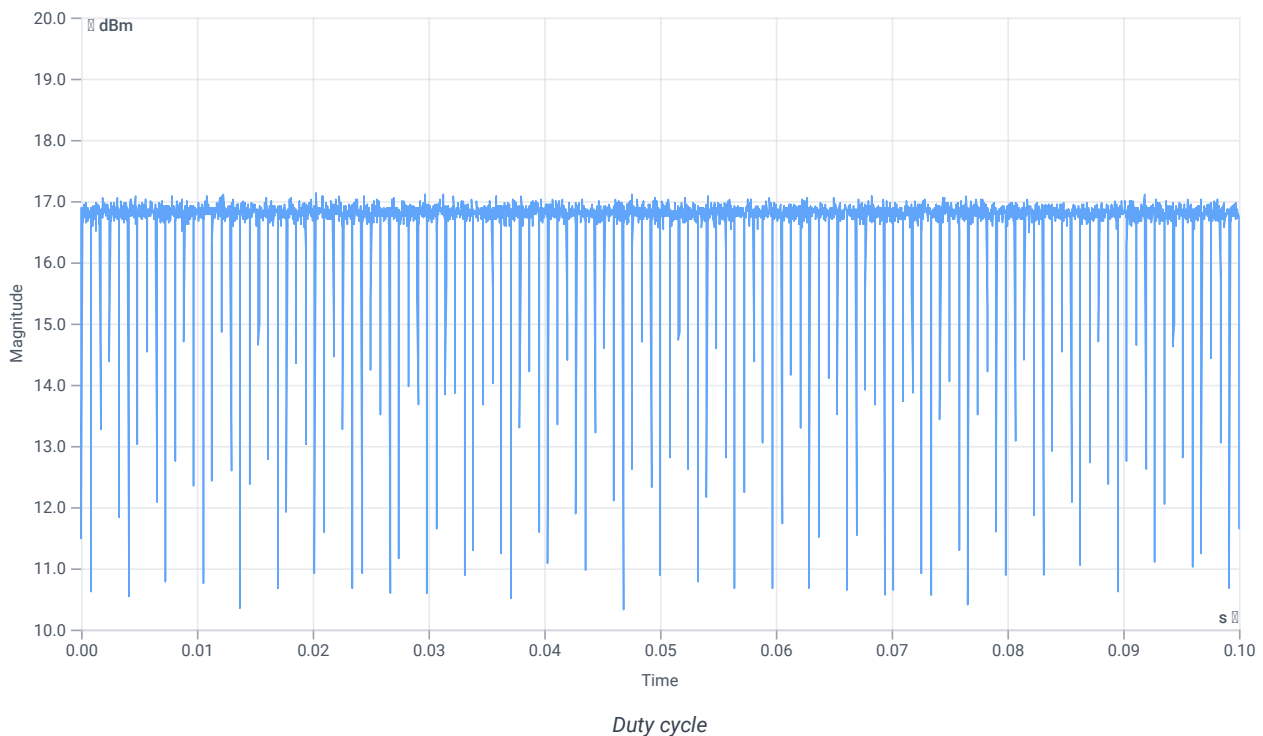
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.91	dBm	INFO
Ref. Frequency	--	--	5716.400	MHz	INFO

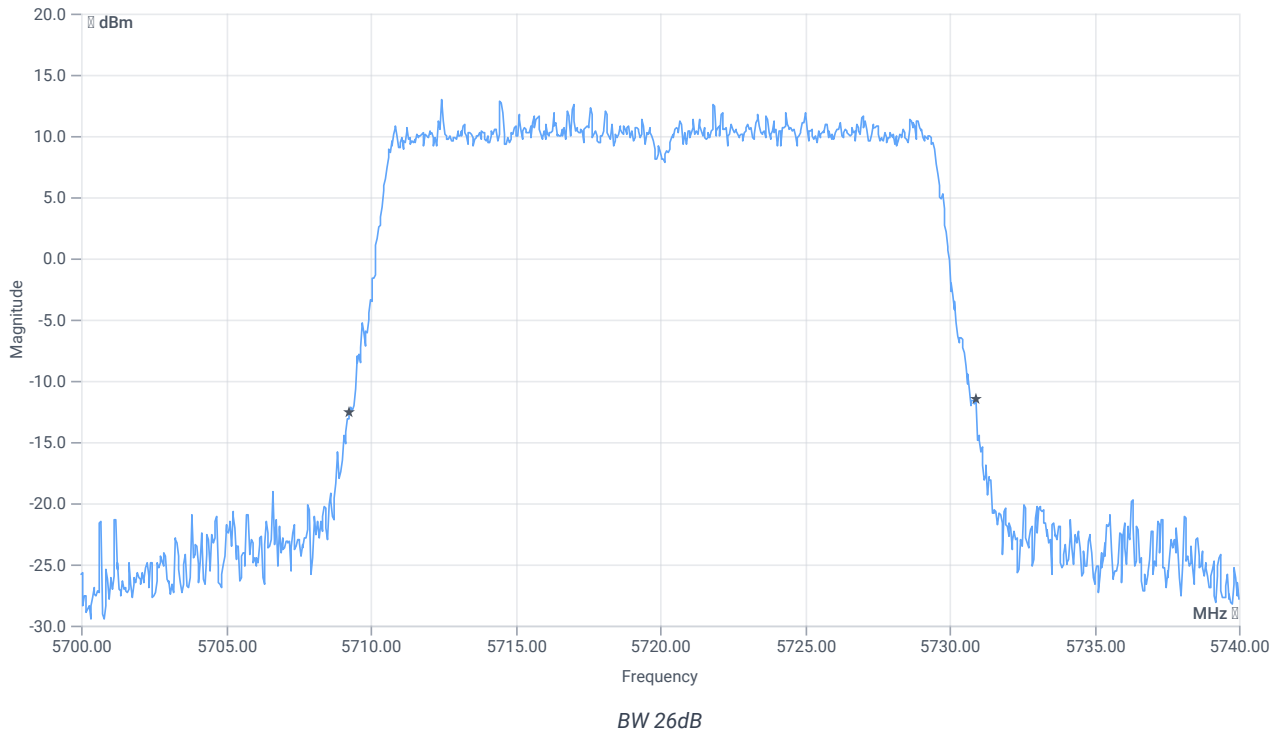
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



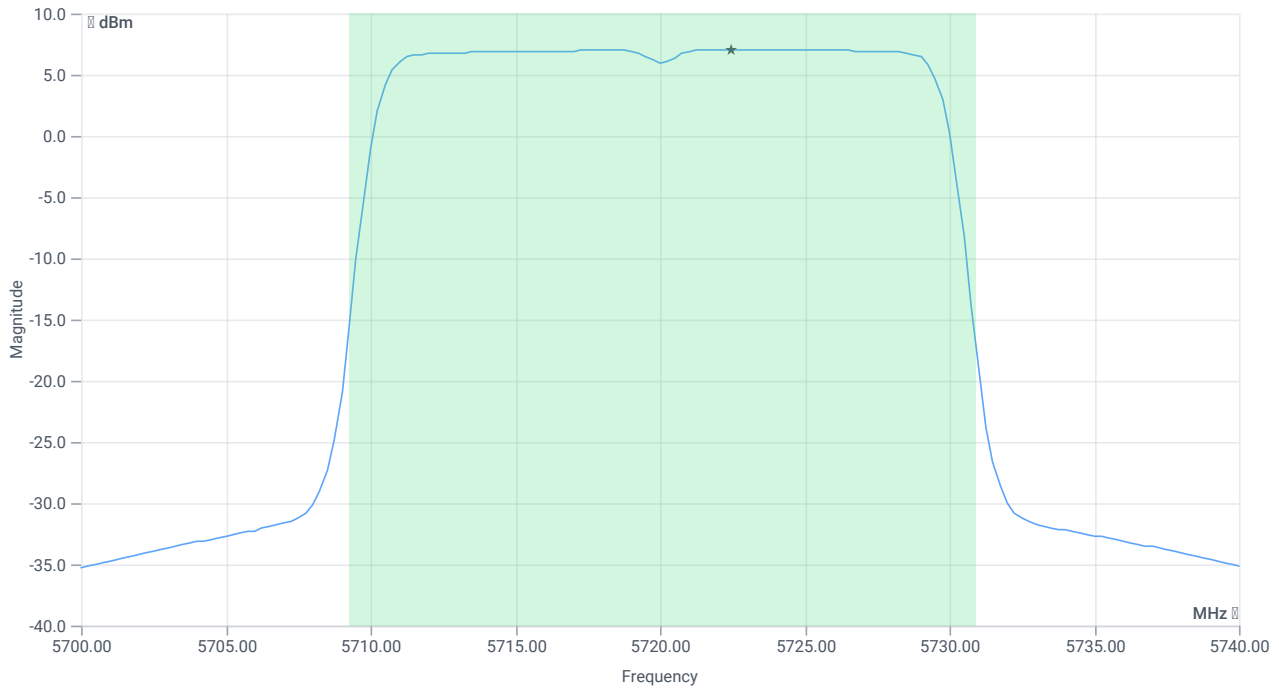
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.64	MHz	INFO
T1 26dB	---	---	5709.2800	MHz	INFO
T2 26dB	---	---	5730.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.91 16.59 30
Start [MHz] Stop [MHz]	5700.000 5740.000
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	--	--	19.4	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.4	dBm	PASS
Limit: 11 dBm + 10 log 21.64					
Max Output Power DC corrected	--	24.35	19.4	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.05	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.05	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:37:10
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

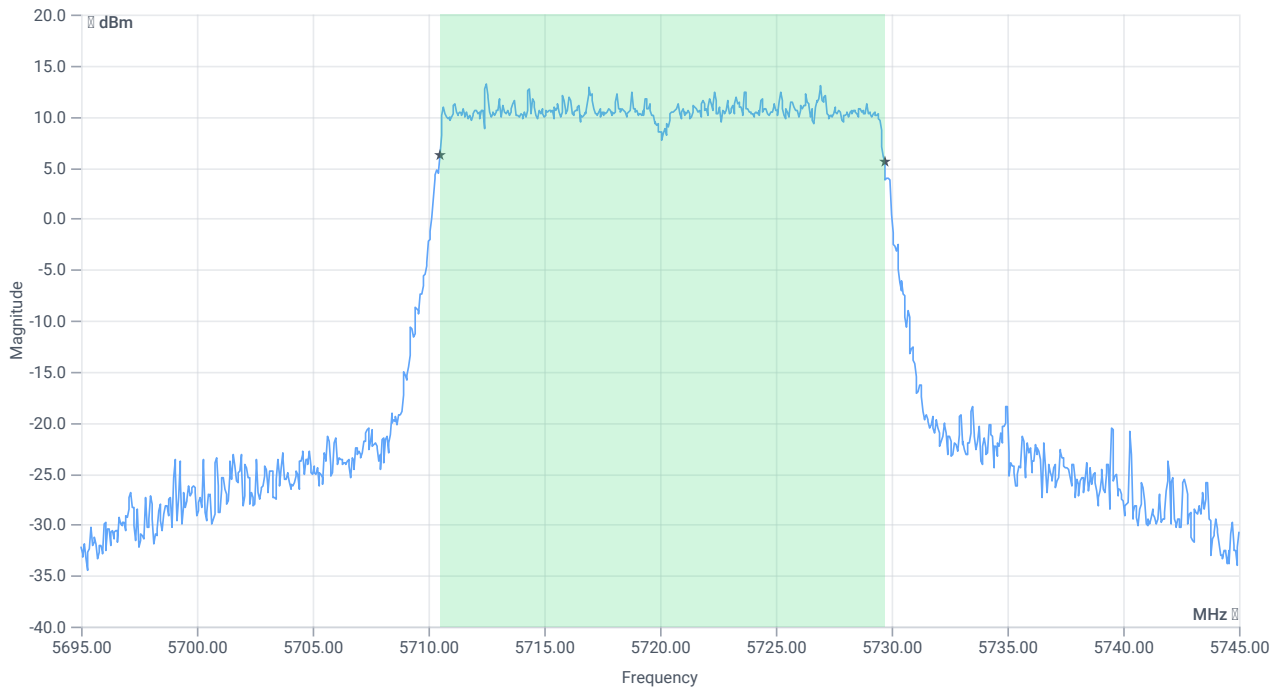
Test at TX 5720 MHz

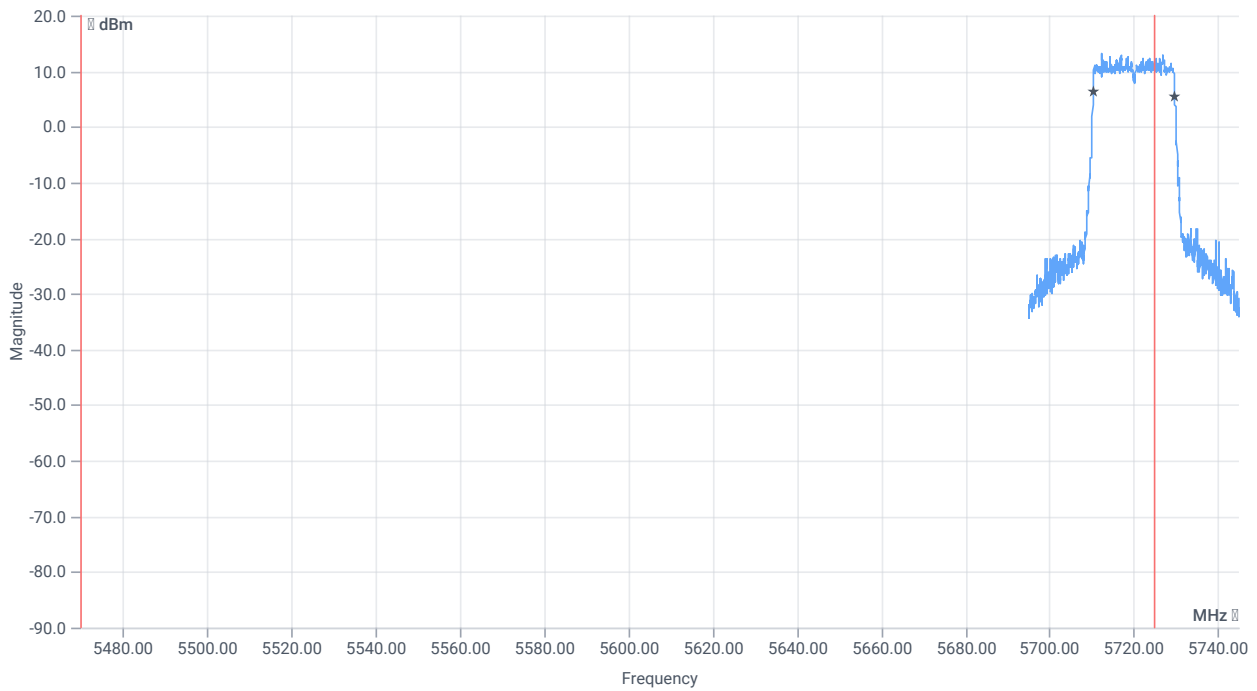
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.15	dBm	INFO
Ref. Frequency	--	--	5725.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.15 16.59 25
Start [MHz] Stop [MHz]	5695.000 5745.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

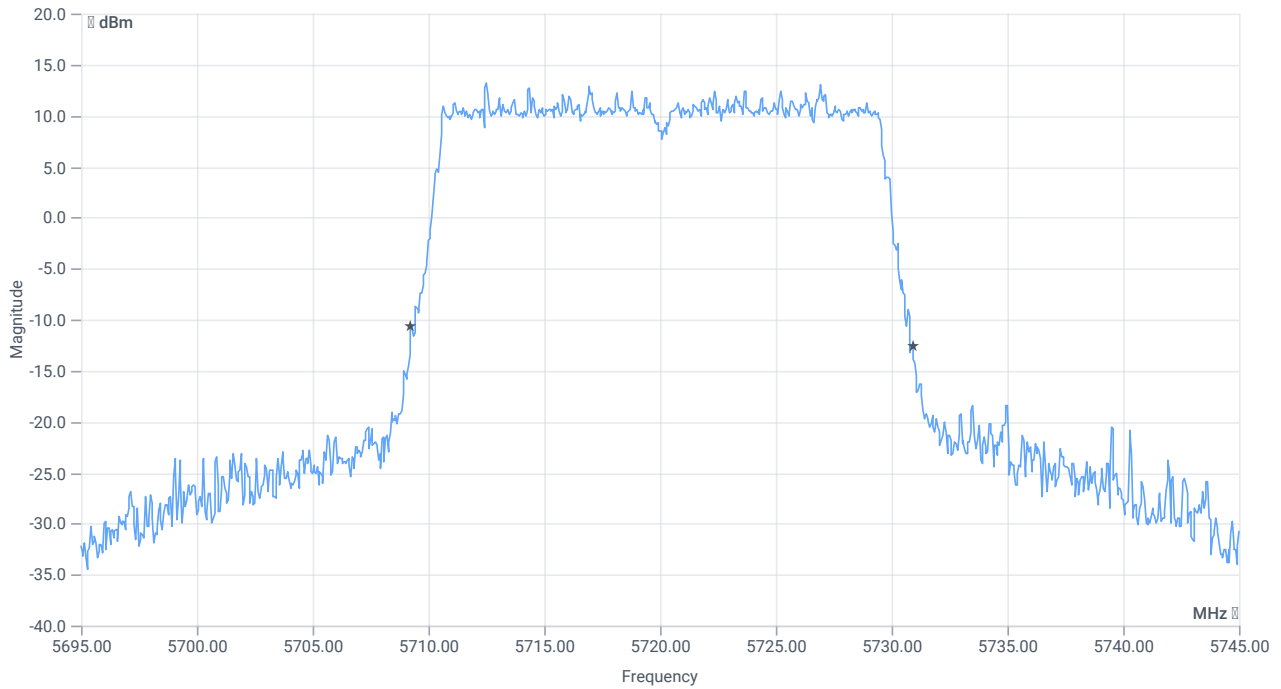




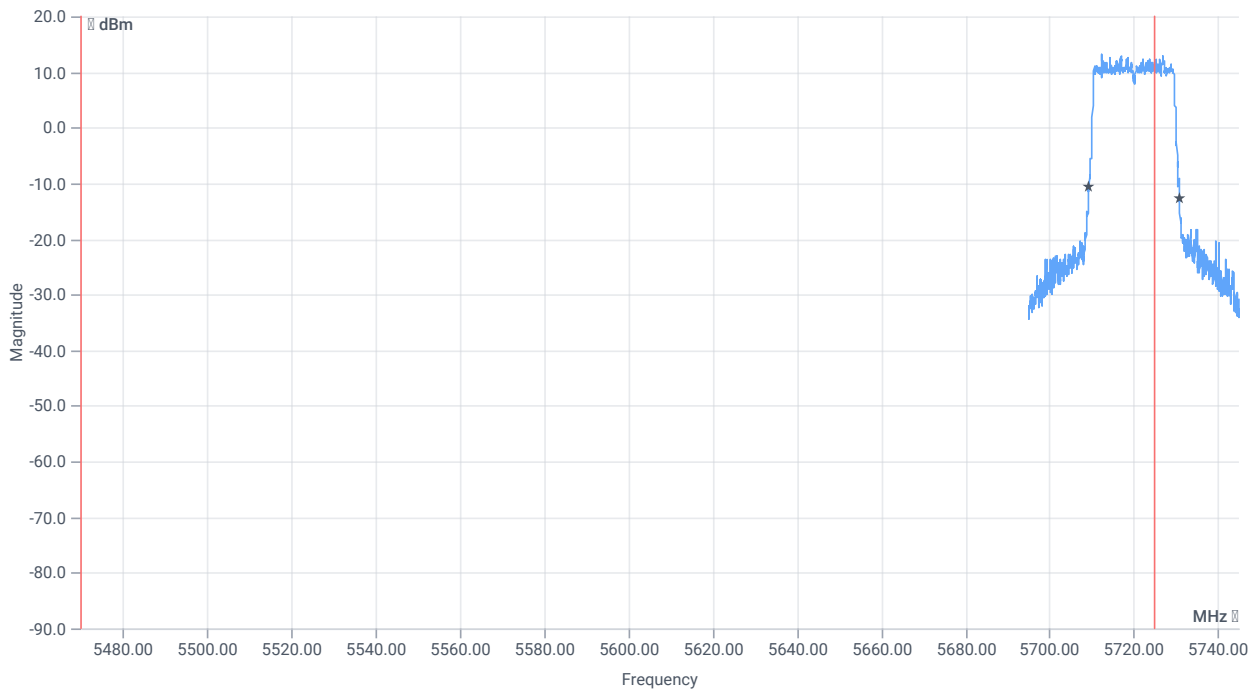
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5470.000000	--	5710.5095	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5729.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.65	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5709.2500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5730.9000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

References

TC start	26.07.2023 08:37:42
Ambit temp [°C] humidity [rel%]	23.9 49
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-2C
Information	PS76

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5500
Frequency mid to test	False Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5720
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5720 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	19.96	dBm	INFO
Ant:1 BW 26dB	--	--	21.840	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.4	dBm	INFO
Ant:2 BW 26dB	--	--	21.640	MHz	INFO
Σ Limit absolute	--	24	22.7	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.64	--	24.35	22.7	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.62	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.05	dBm/1MHz	INFO
Σ	--	11	10.35	dBm/1MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 09:13:28
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan ax-HE20 U-NII-3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 09:13:29
Message	set WLAN5Gx to ax-HE20 U-NII-3, Frequency [MHz] 5745 , Information: PS96

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:13:41
Ambit temp [°C] humidity [rel%]	25.1 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5745 MHz

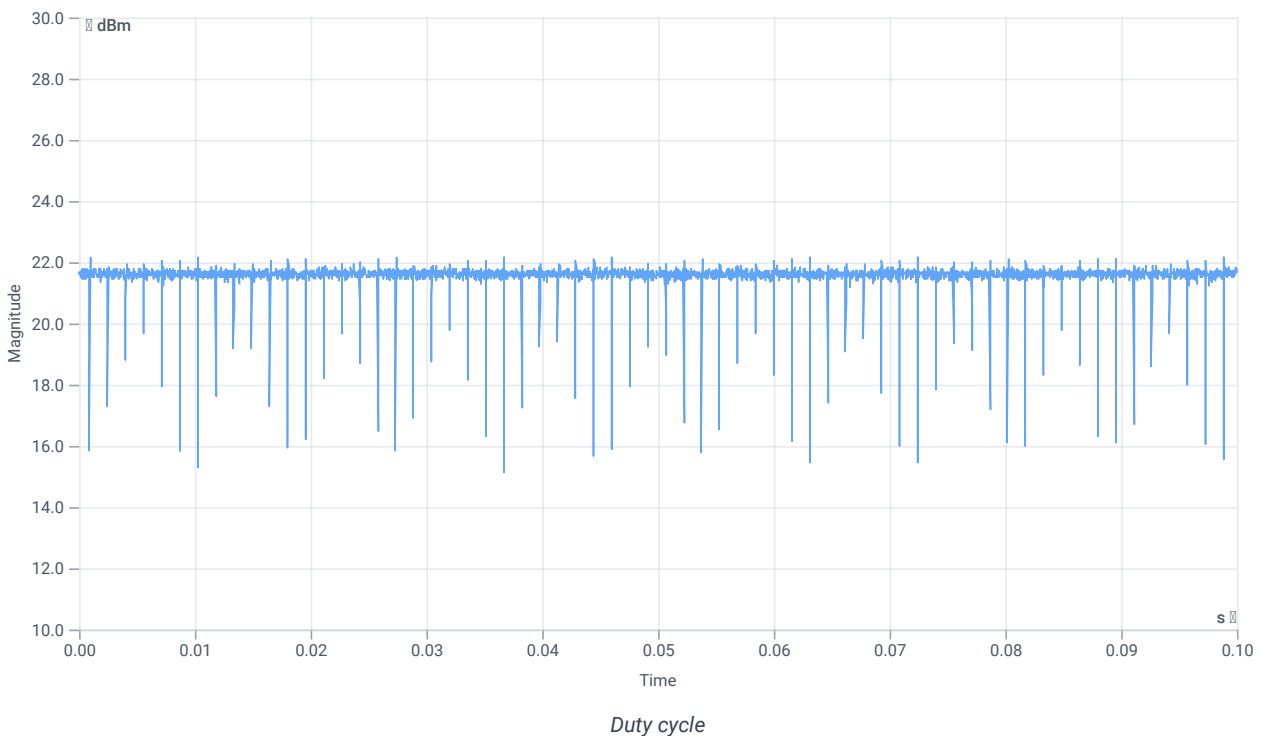
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.32	dBm	INFO
Ref. Frequency	--	--	5741.200	MHz	INFO

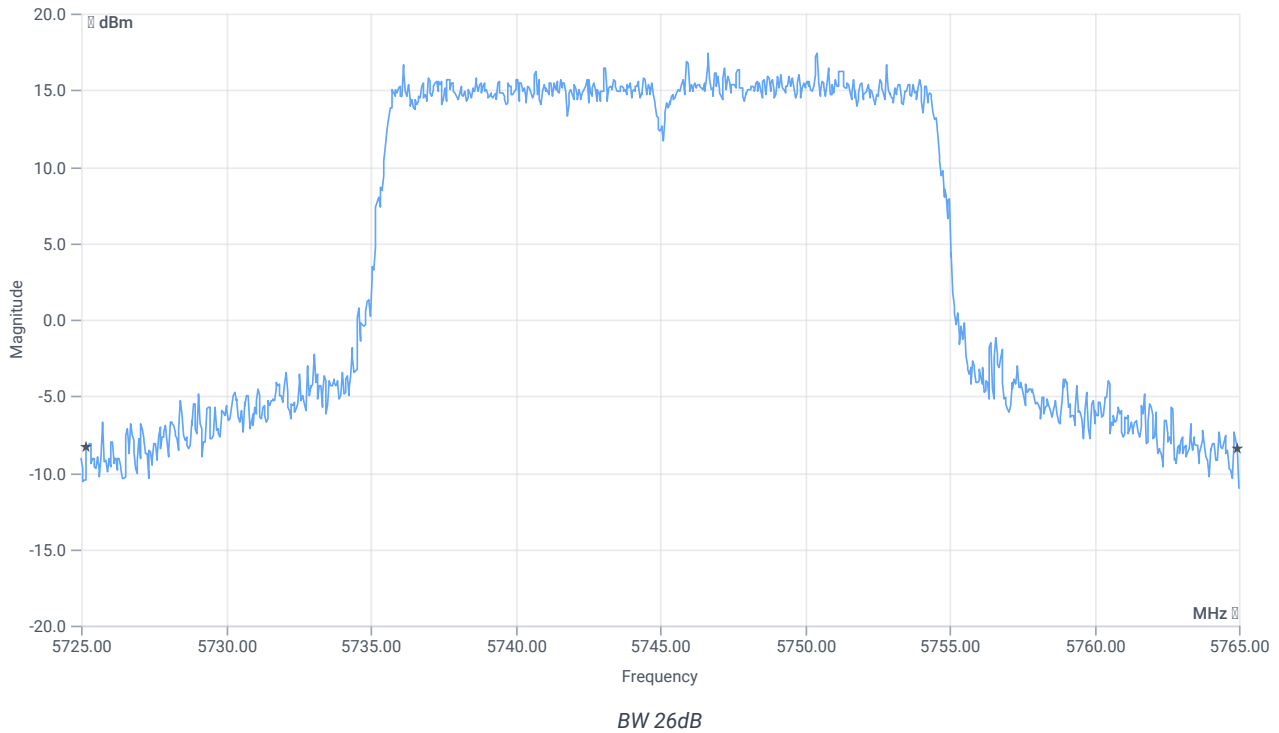
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



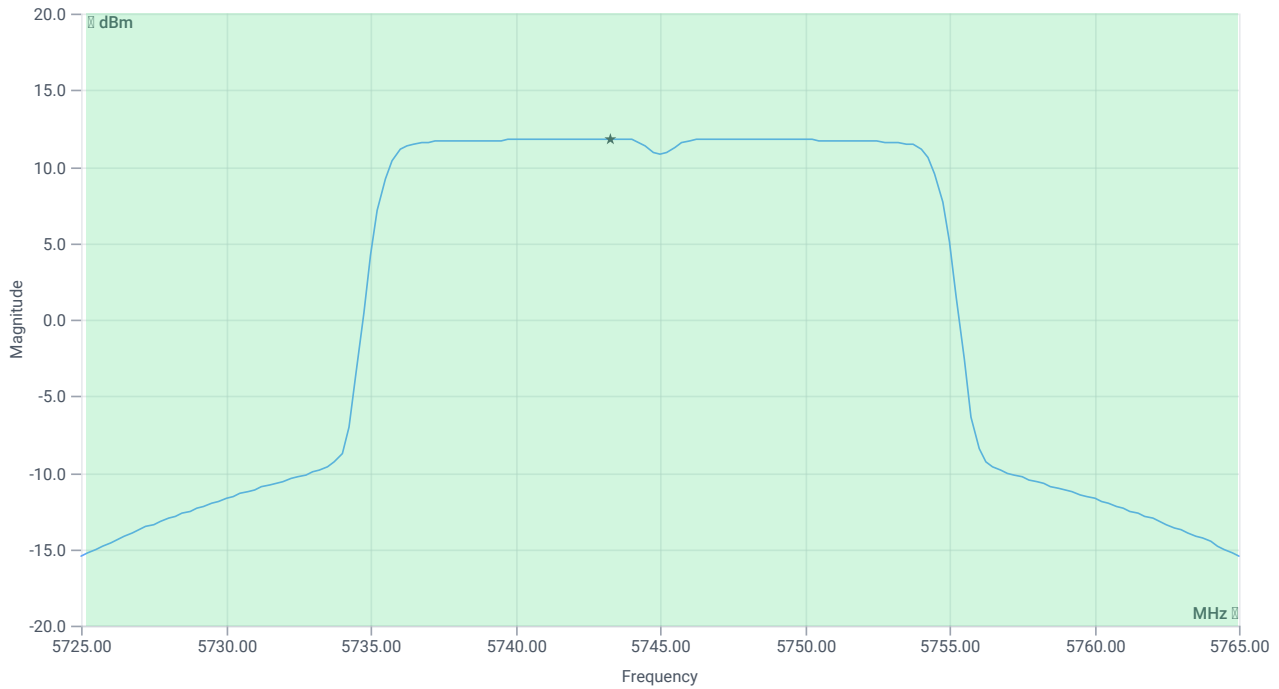
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.76	MHz	INFO
T1 26dB	---	---	5725.2000	MHz	INFO
T2 26dB	---	---	5764.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.32 16.72 30
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

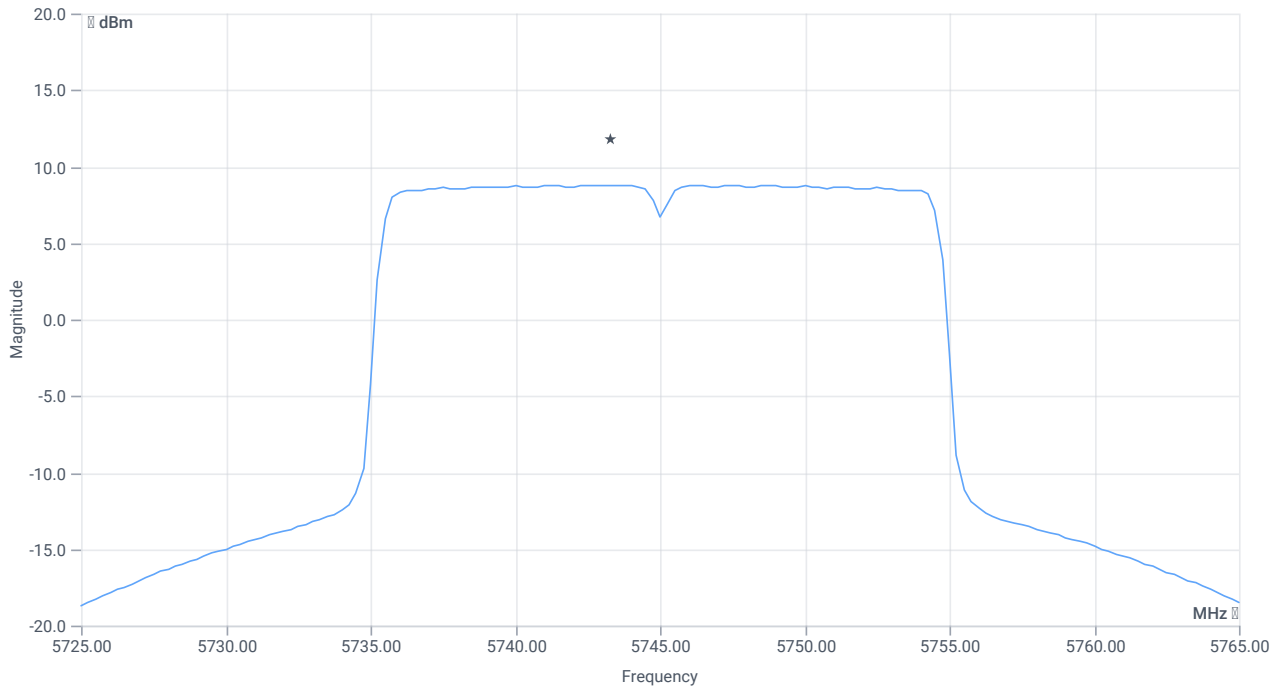
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.22	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.22	dBm	PASS
Limit: 11 dBm + 10 log 39.76					
Max Output Power DC corrected	--	26.99	24.22	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.32 16.72 35
Start [MHz] Stop [MHz]	5725.000 5765.000
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	--	--	8.79	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.79	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:16:08
Ambit temp [°C] humidity [rel%]	25.1 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

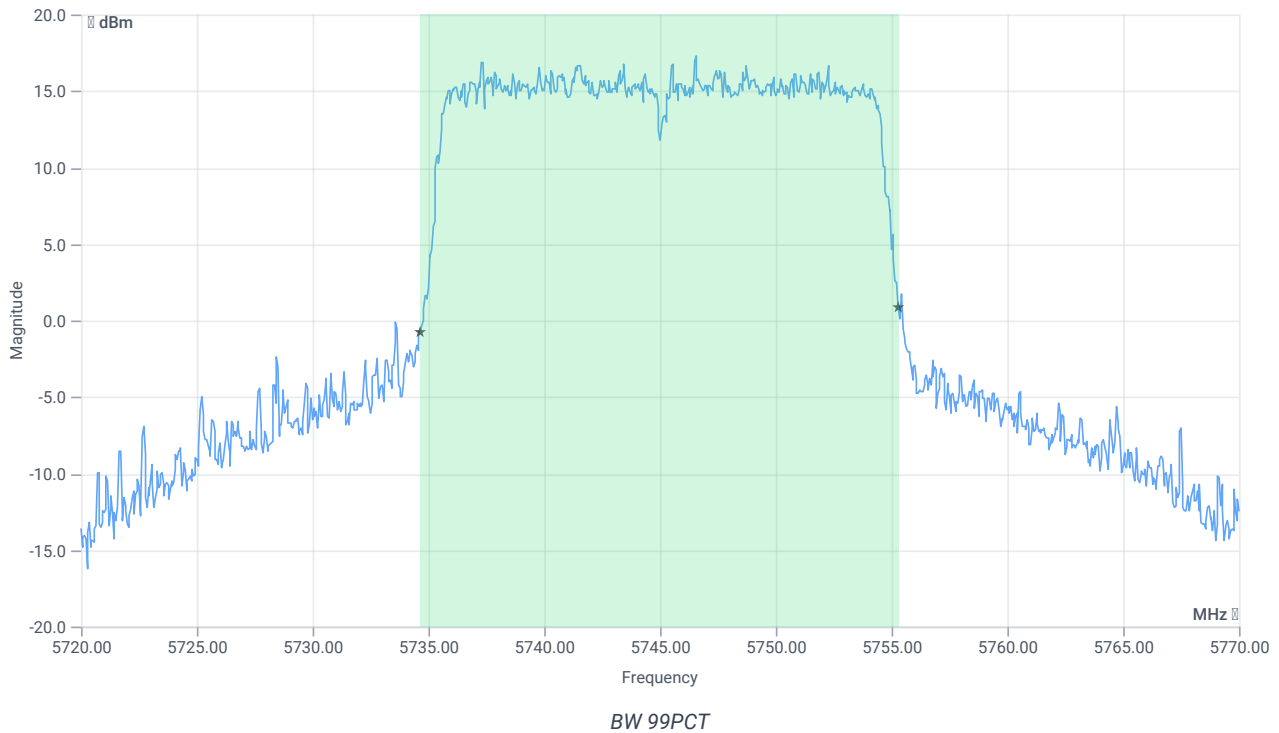
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.94	dBm	INFO
Ref. Frequency	--	--	5744.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.94 16.72 30
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

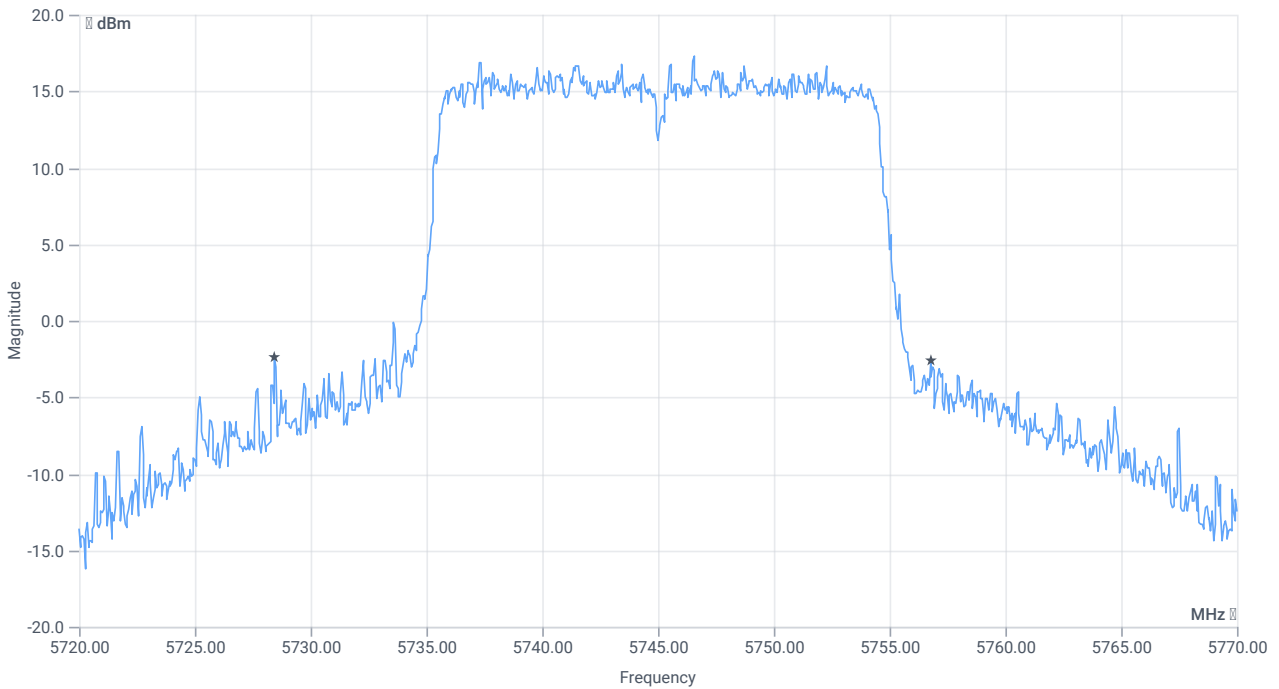




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	20.629	MHz	INFO
T1 99%	5725.000000	--	5734.6603	MHz	PASS
T2 99%	--	5850.000000	5755.2897	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	28.3	MHz	INFO
T1 20dB	5725.000000	---	5728.4500	MHz	PASS
T2 20dB	---	5850.000000	5756.7500	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:16:40
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

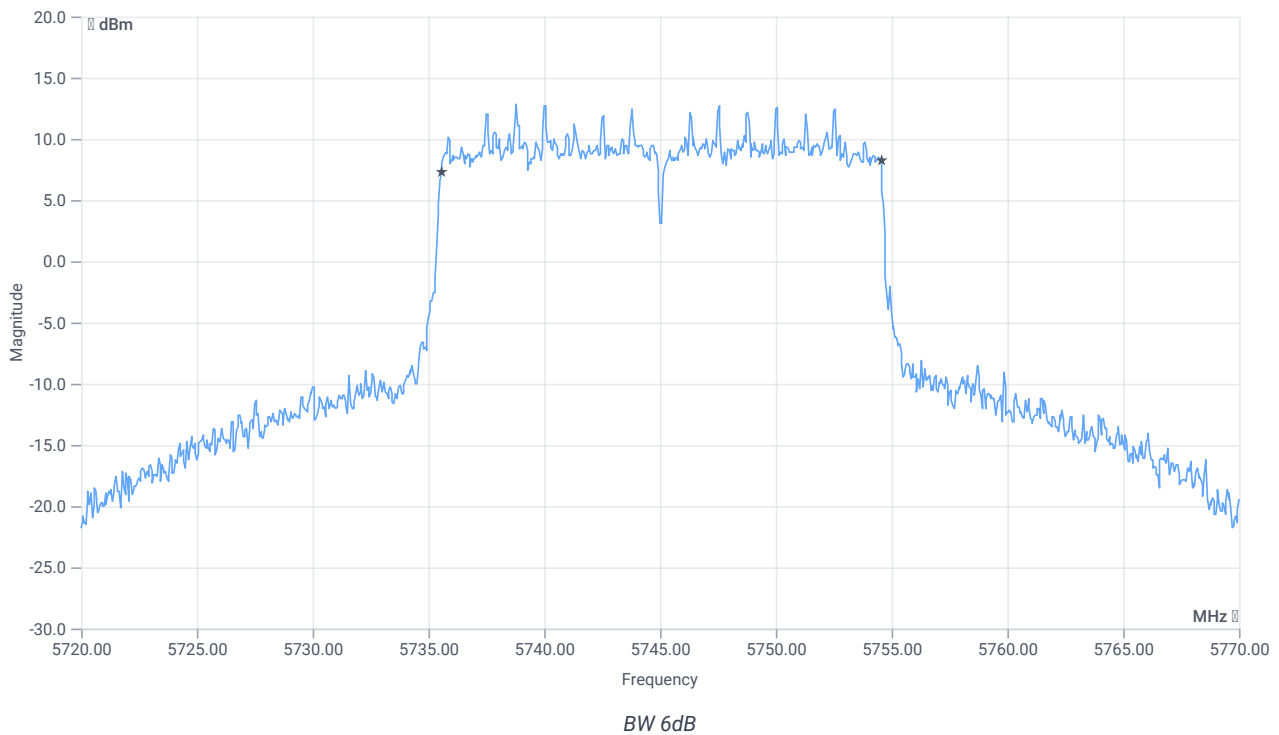
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.40	dBm	INFO
Ref. Frequency	--	--	5749.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.40 16.72 35
Start [MHz] Stop [MHz]	5720.000 5770.000
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	--	19	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:17:23
Ambit temp [°C] humidity [rel%]	25.1 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5745 MHz

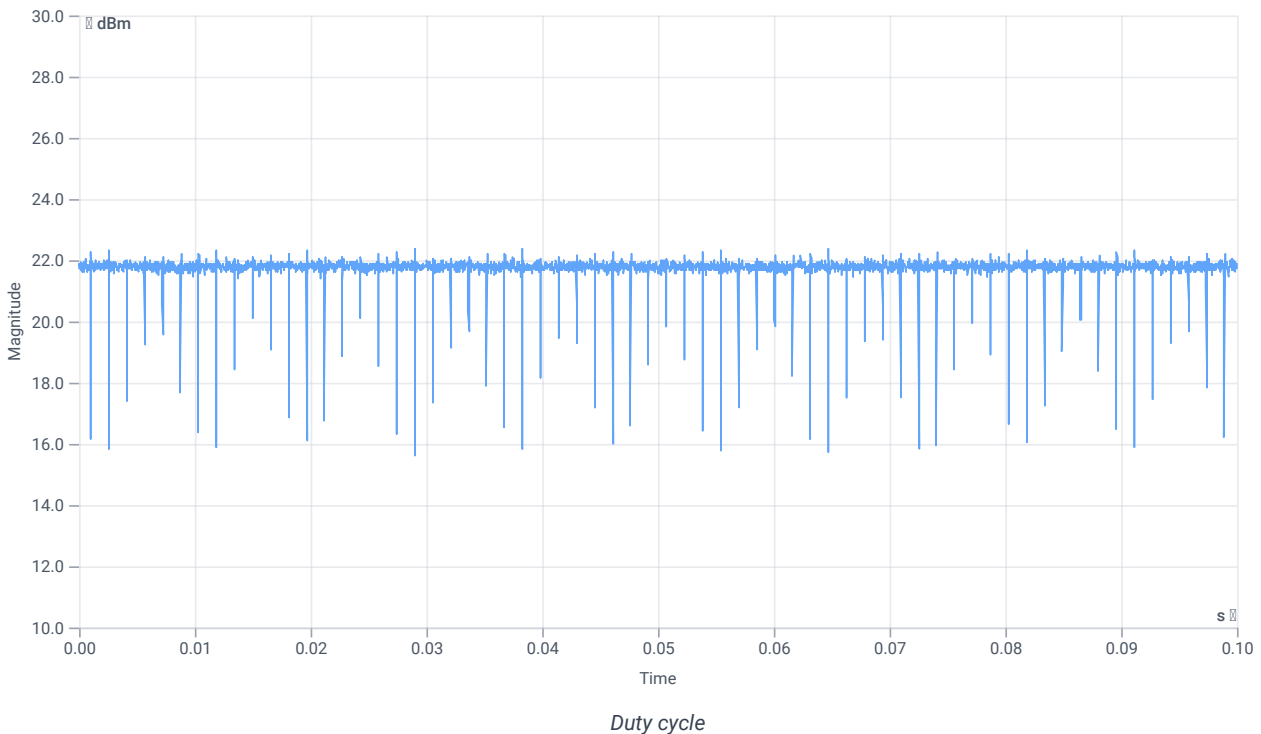
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.40	dBm	INFO
Ref. Frequency	--	--	5739.010	MHz	INFO

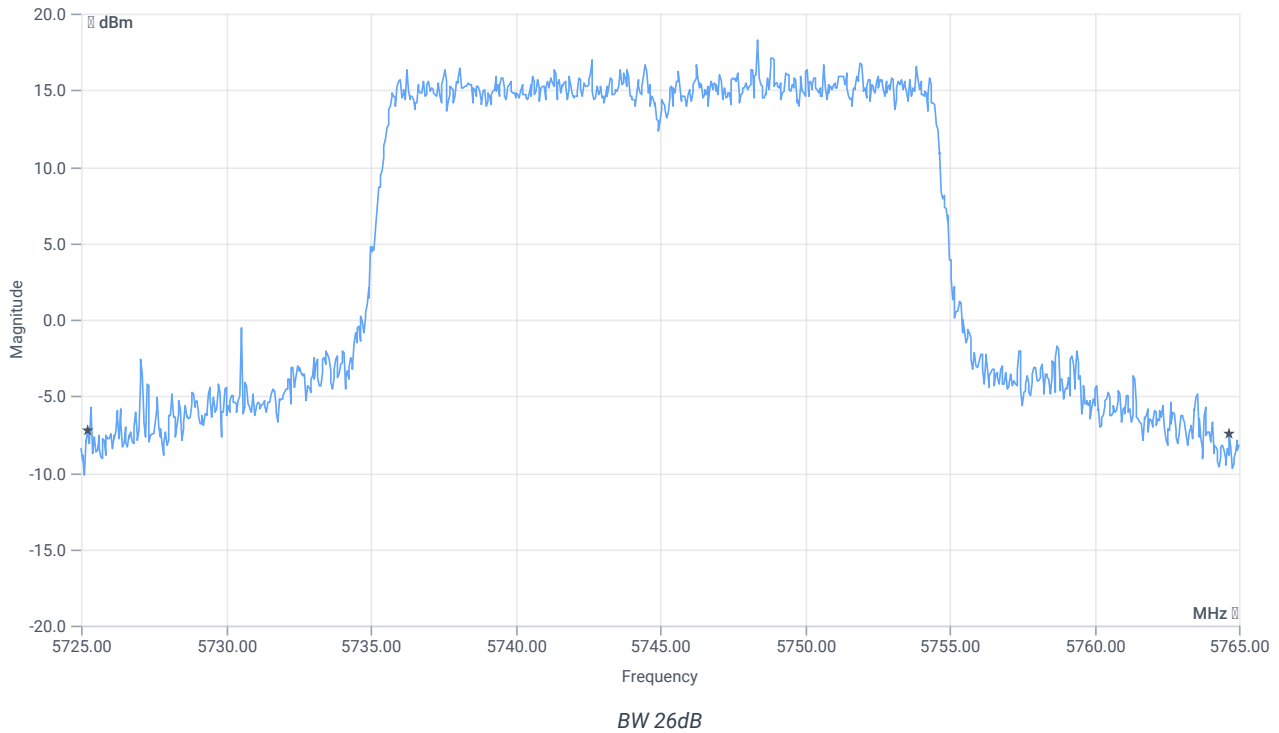
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



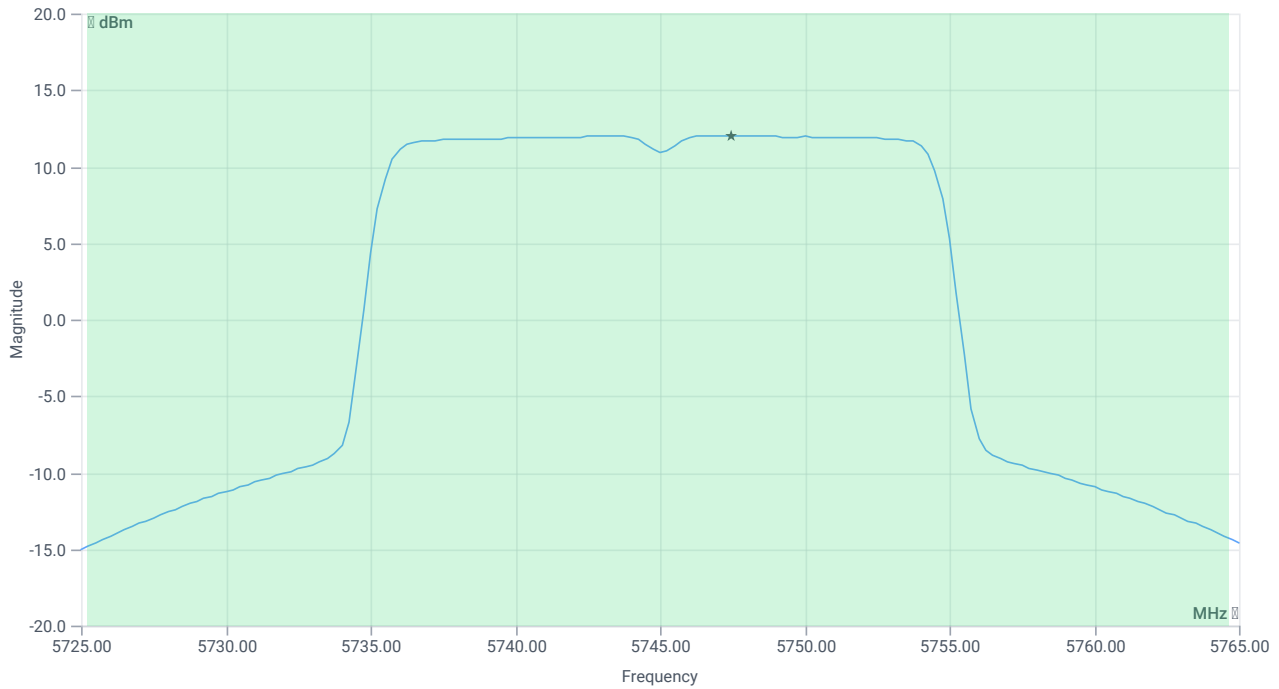
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.44	MHz	INFO
T1 26dB	---	---	5725.2400	MHz	INFO
T2 26dB	---	---	5764.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.40 16.72 30
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

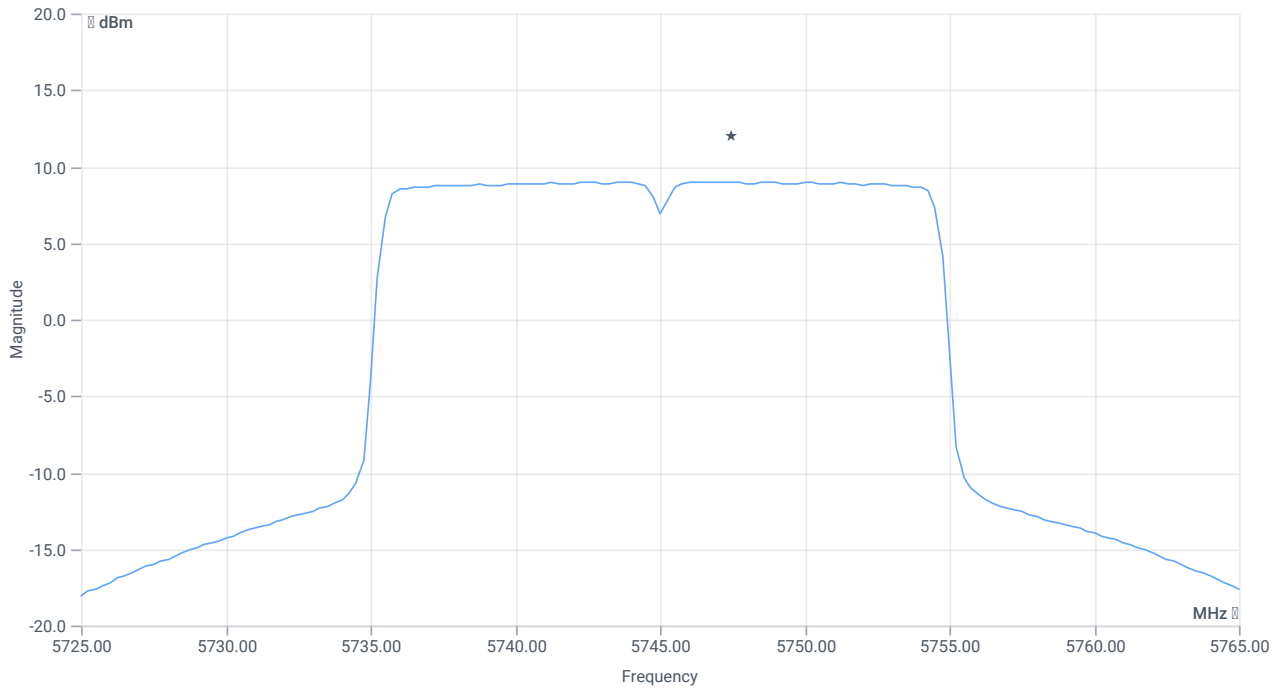
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.39	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.39	dBm	PASS
Limit: 11 dBm + 10 log 39.44					
Max Output Power DC corrected	--	26.96	24.39	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.40 16.72 35
Start [MHz] Stop [MHz]	5725.000 5765.000
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	--	--	9.01	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	9.01	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:19:49
Ambit temp [°C] humidity [rel%]	25.1 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

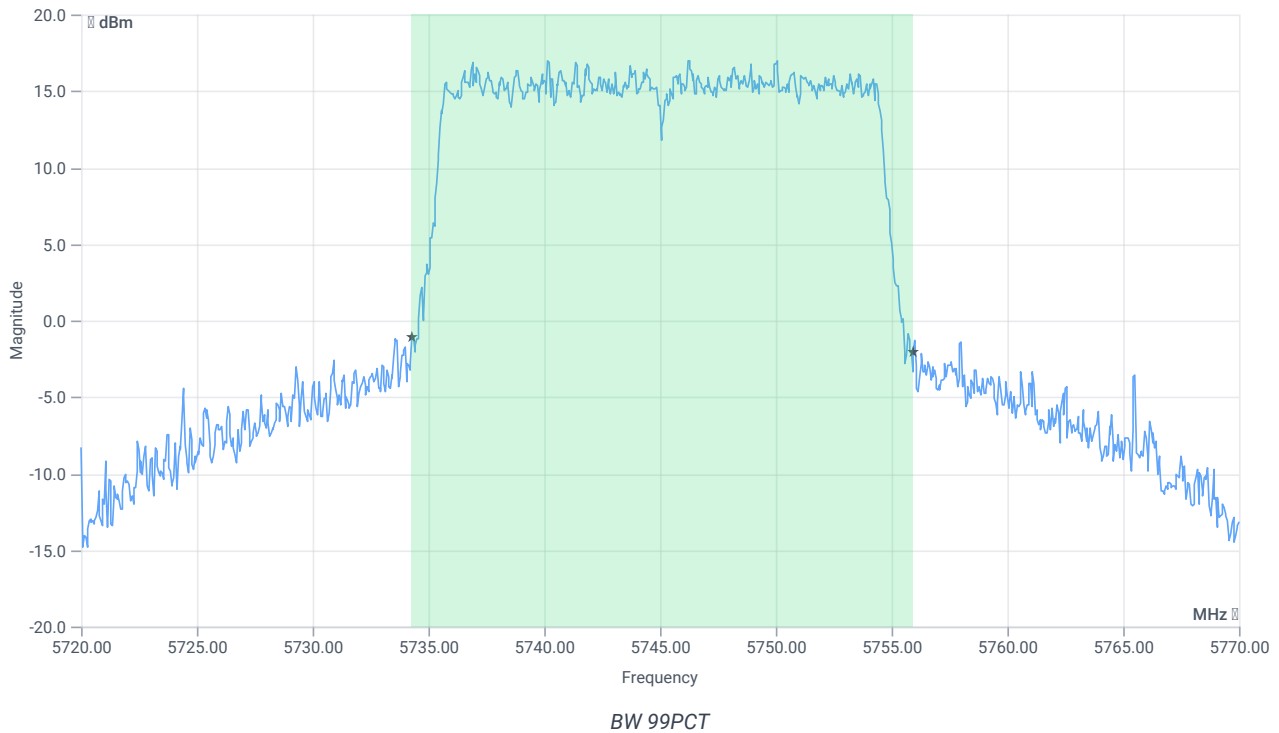
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.75	dBm	INFO
Ref. Frequency	--	--	5740.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.75 16.72 30
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

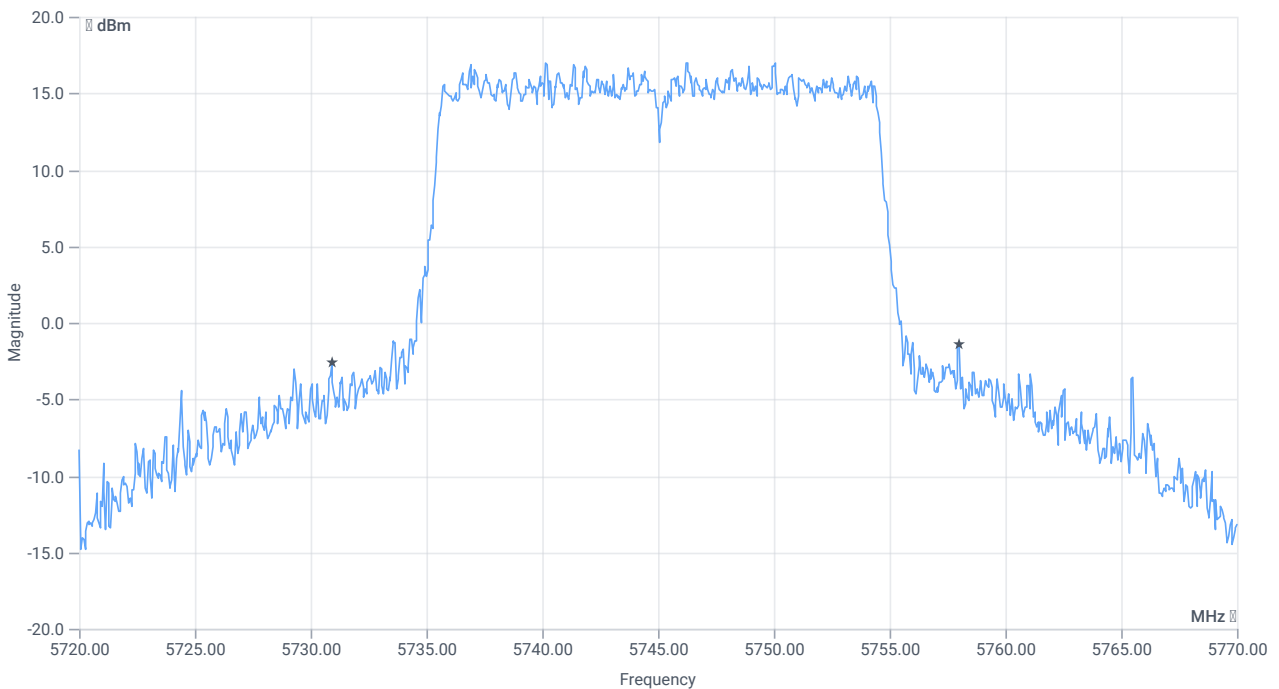




BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	21.628	MHz	INFO
T1 99%	5725.000000	--	5734.3107	MHz	PASS
T2 99%	--	5850.000000	5755.9391	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	27.1	MHz	INFO
T1 20dB	5725.000000	---	5730.9000	MHz	PASS
T2 20dB	---	5850.000000	5758.0000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:20:21
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

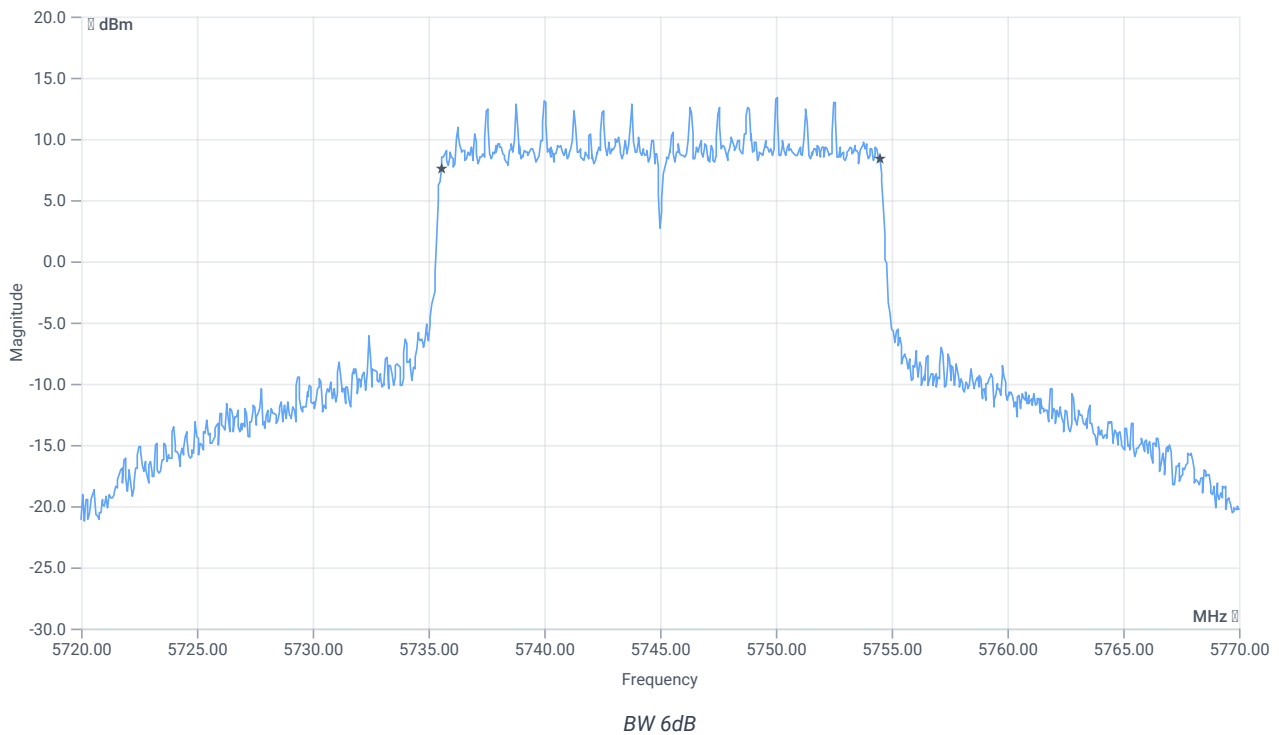
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.77	dBm	INFO
Ref. Frequency	--	--	5737.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.77 16.72 35
Start [MHz] Stop [MHz]	5720.000 5770.000
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	--	18.95	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:21:06
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5745 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.22	dBm	INFO
Ant:1 BW 26dB	--	--	39.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.39	dBm	INFO
Ant:2 BW 26dB	--	--	39.440	MHz	INFO
Σ Limit absolute	--	30	27.32	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.44	--	26.96	27.32	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	8.79	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	9.01	dBm/0.5MHz	INFO
Σ	--	30	11.91	dBm/0.5MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 09:32:16
Ambit temp [°C] humidity [rel%]	25.1 52
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan ax-HE20 U-NII-3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 09:32:17
Message	set WLAN5Gx to ax-HE20 U-NII-3, Frequency [MHz] 5785 , Information: PS96

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:32:37
Ambit temp [°C] humidity [rel%]	25.1 52
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5785 MHz

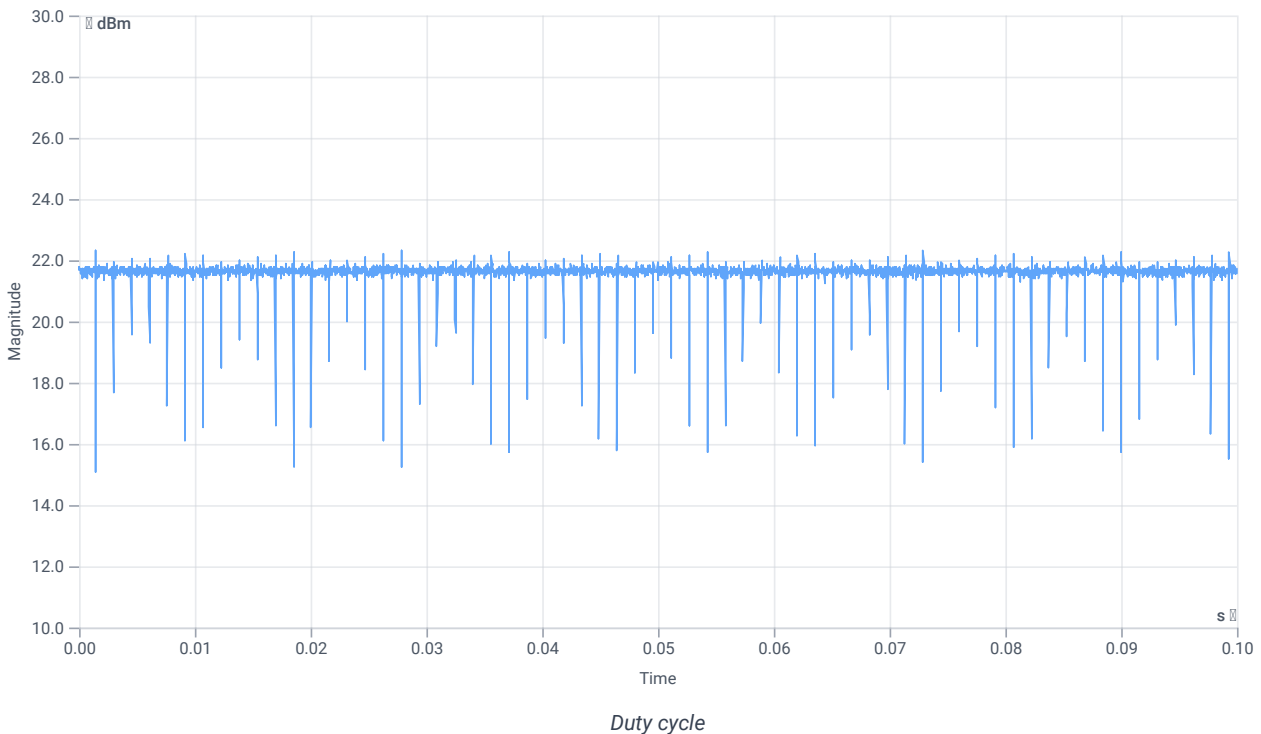
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.18	dBm	INFO
Ref. Frequency	--	--	5789.200	MHz	INFO

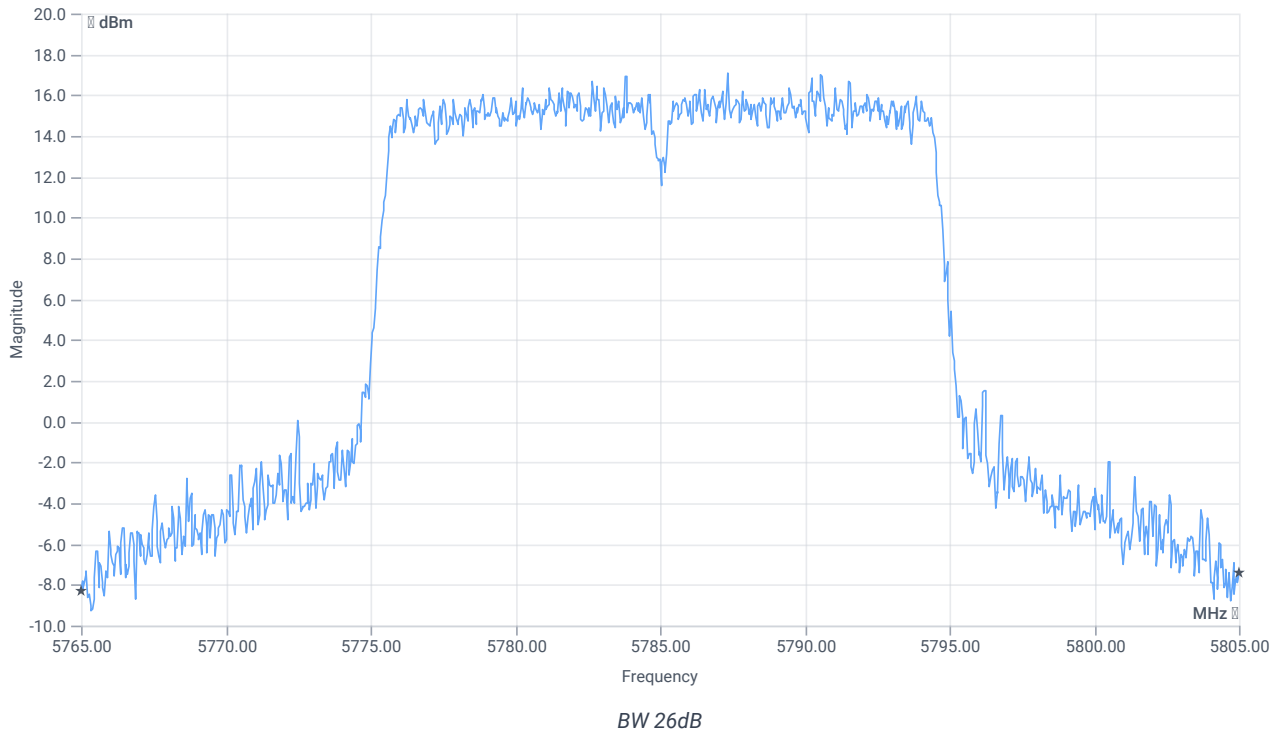
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



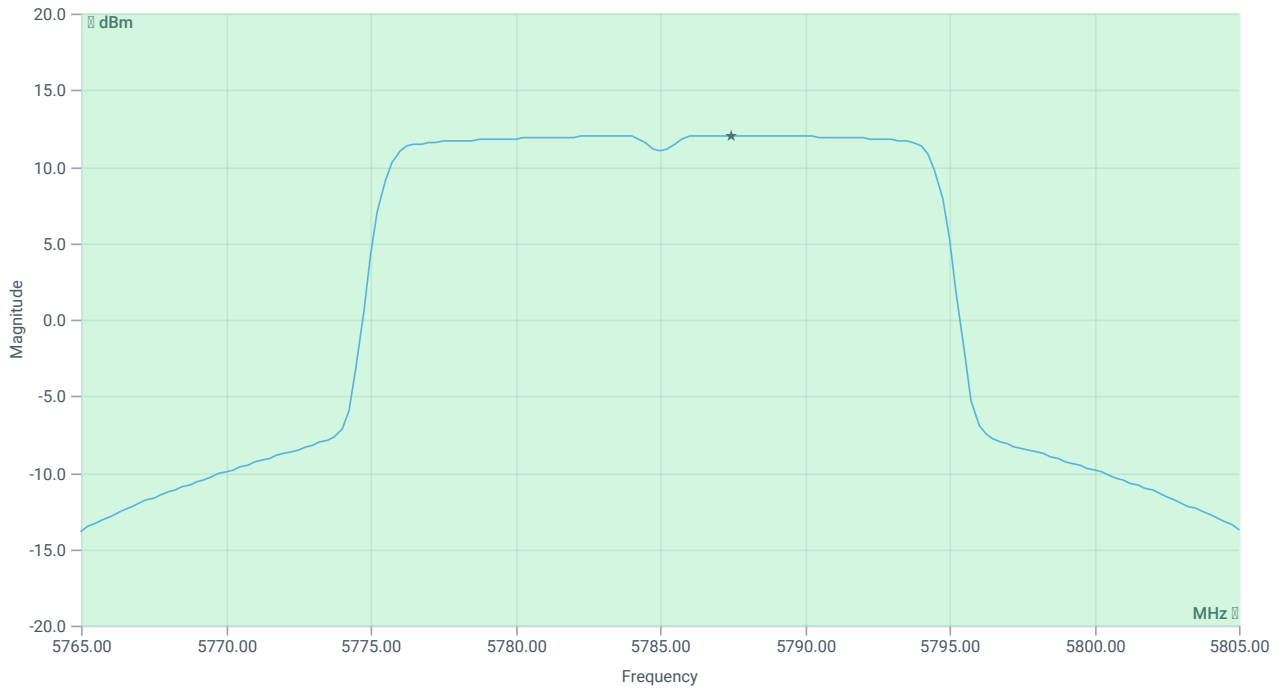
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5765.0000	MHz	INFO
T2 26dB	---	---	5805.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.18 16.7 35
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

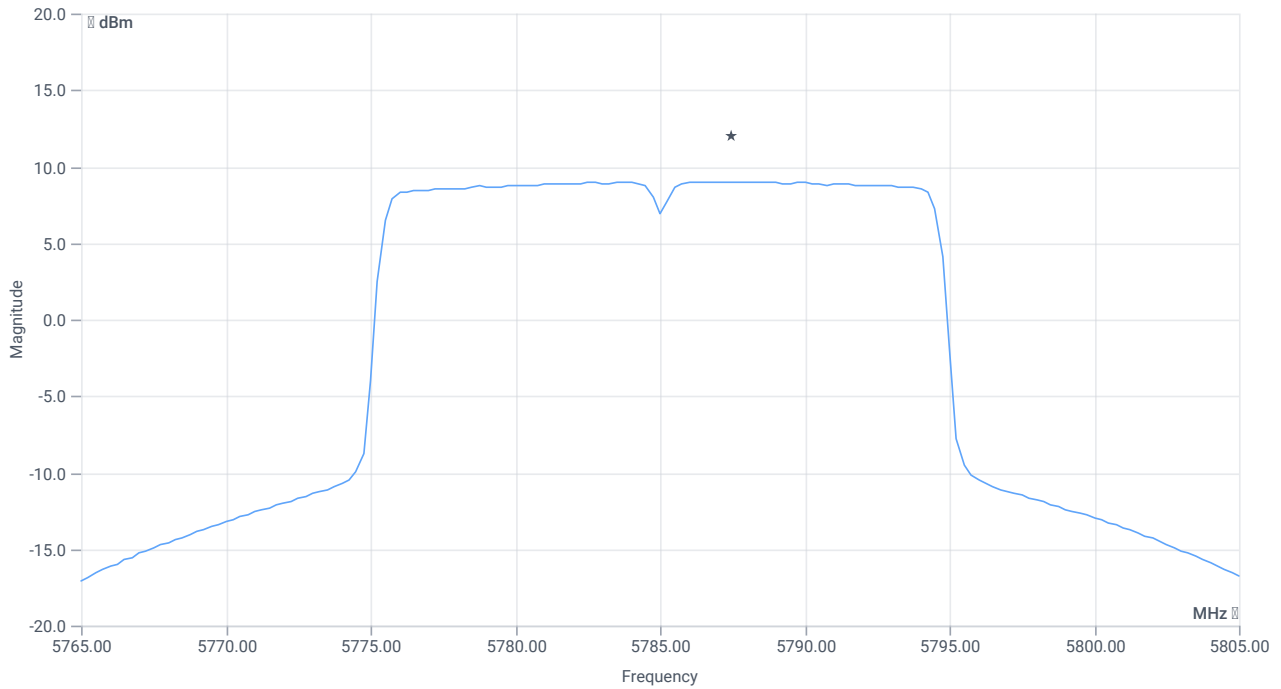
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.39	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.39	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	24.39	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.18 16.7 35
Start [MHz] Stop [MHz]	5765.000 5805.000
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	--	--	9.02	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	9.02	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:35:05
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

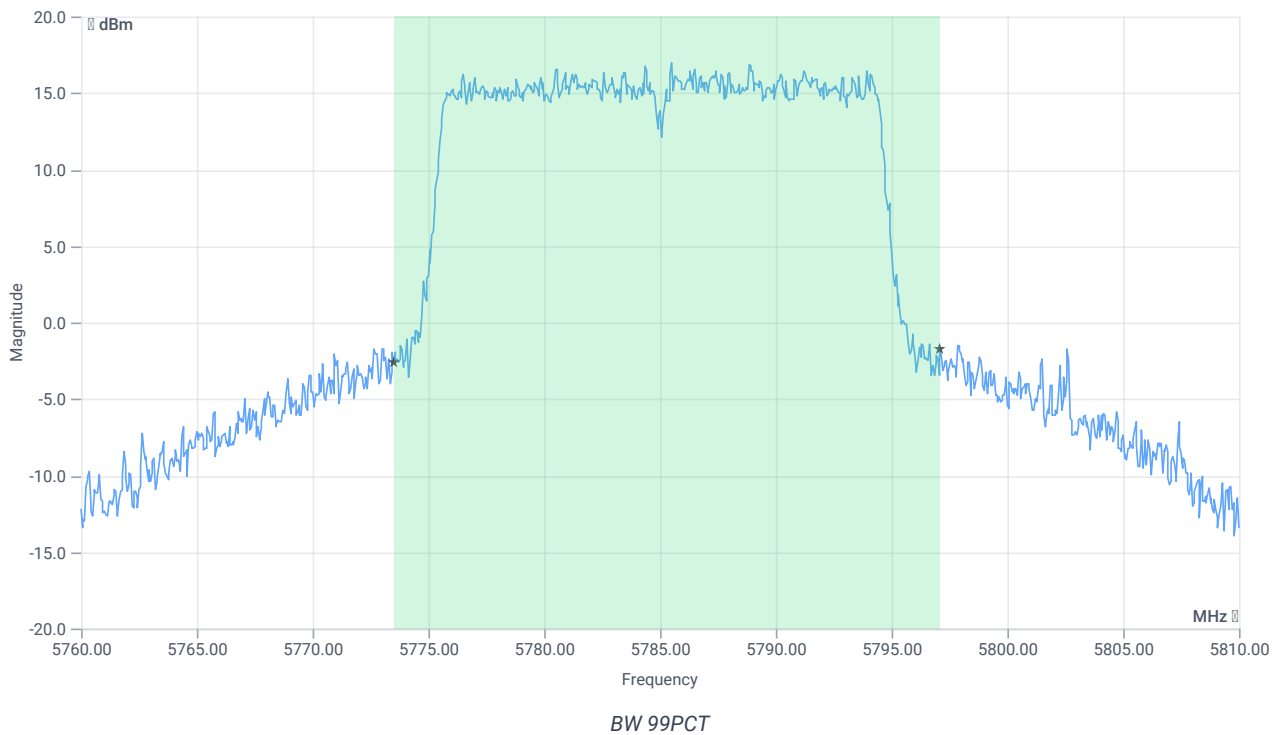
Test at TX 5785 MHz

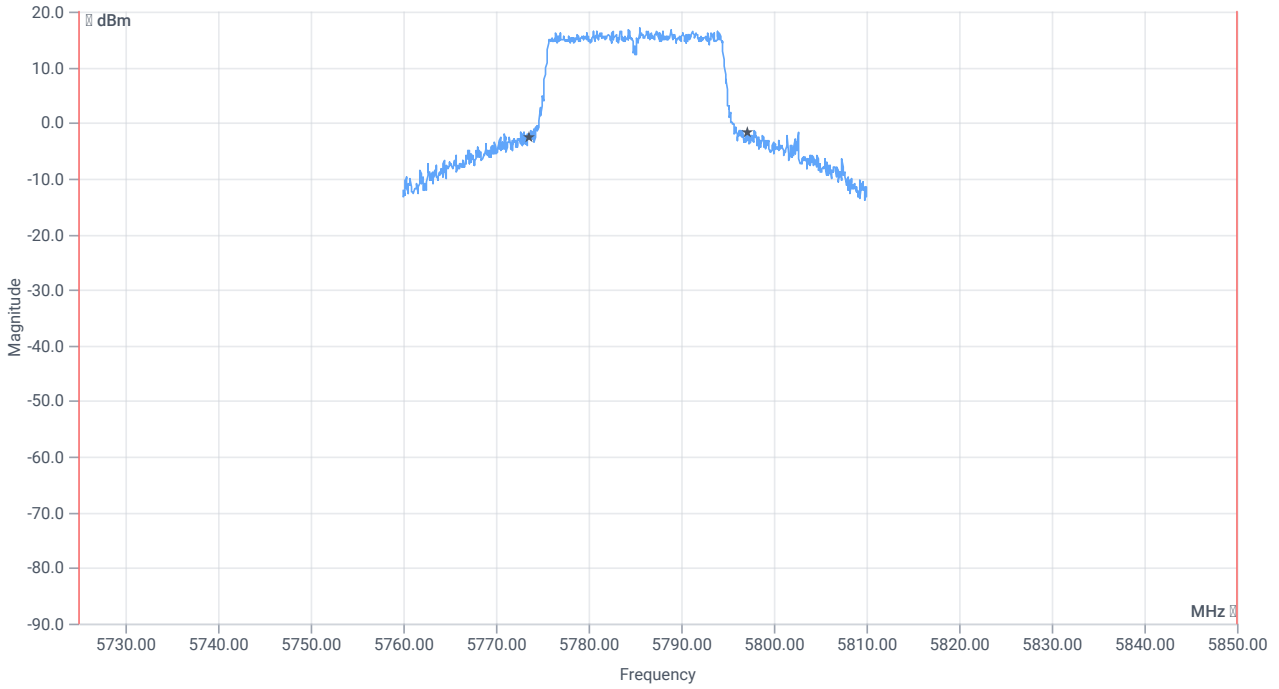
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.68	dBm	INFO
Ref. Frequency	--	--	5780.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.68 16.7 30
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

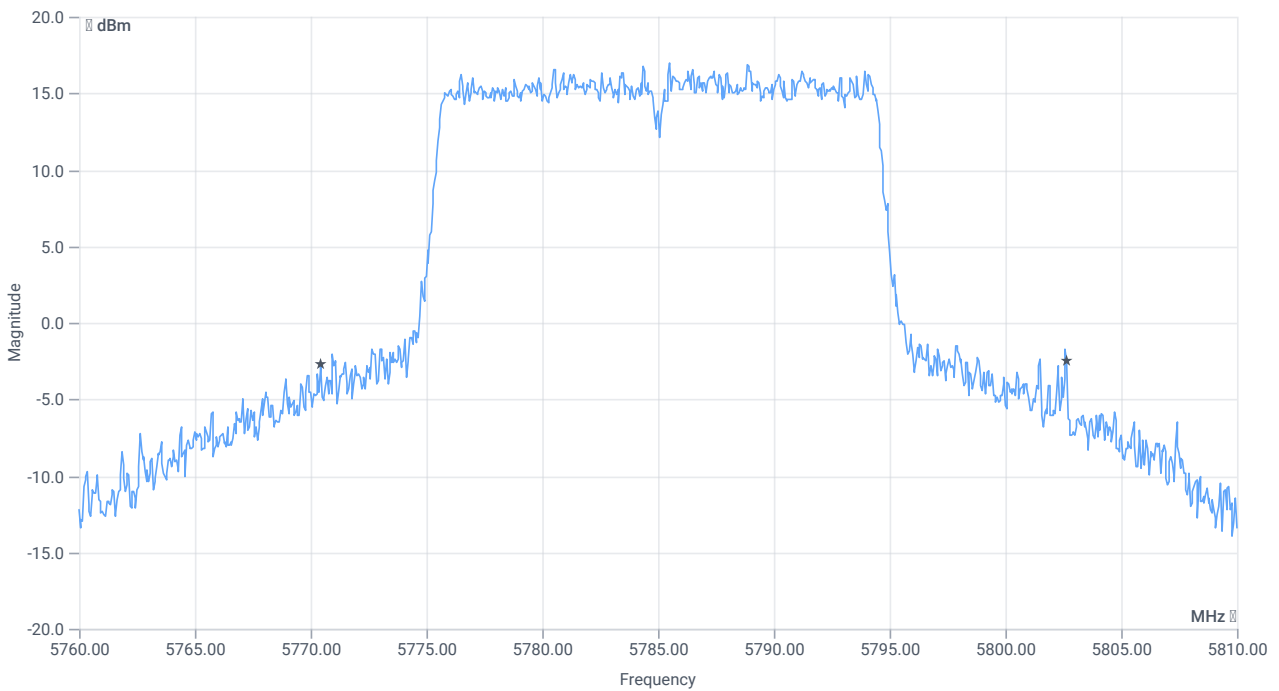




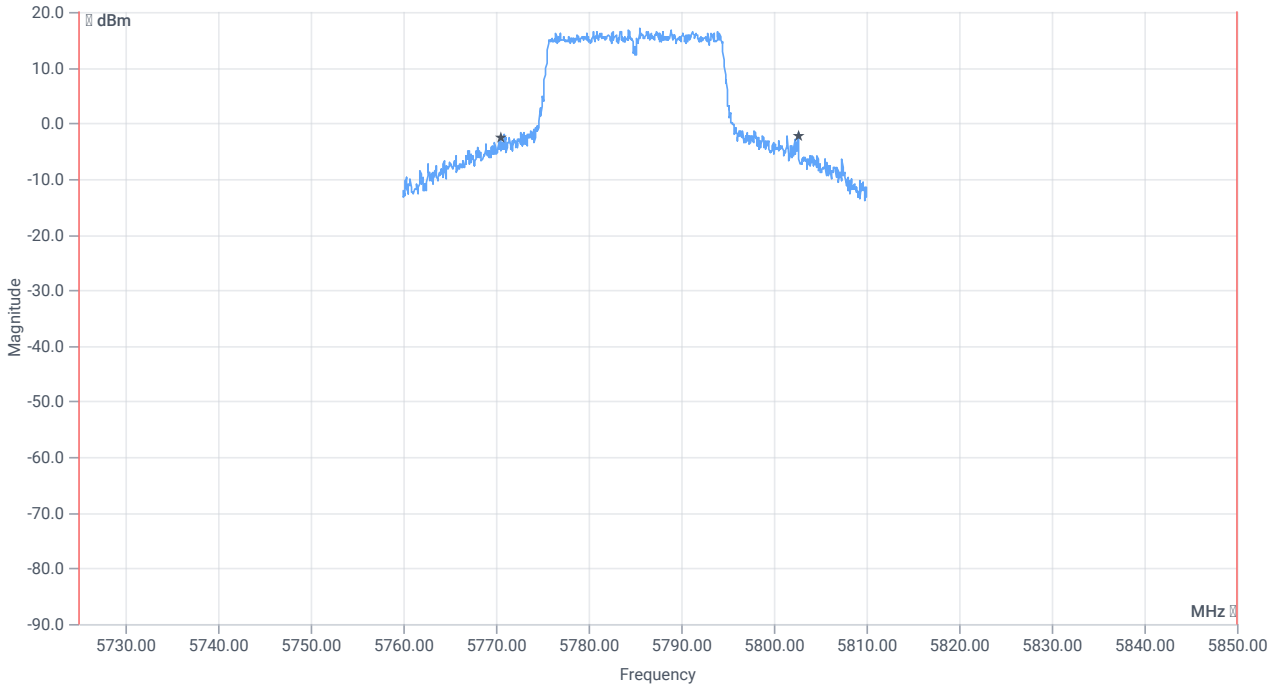
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	23.576	MHz	INFO
T1 99%	5725.000000	--	5773.5115	MHz	PASS
T2 99%	--	5850.000000	5797.0879	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	32.2	MHz	INFO
T1 20dB	5725.000000	--	5770.4500	MHz	PASS
T2 20dB	--	5850.000000	5802.6500	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:35:36
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

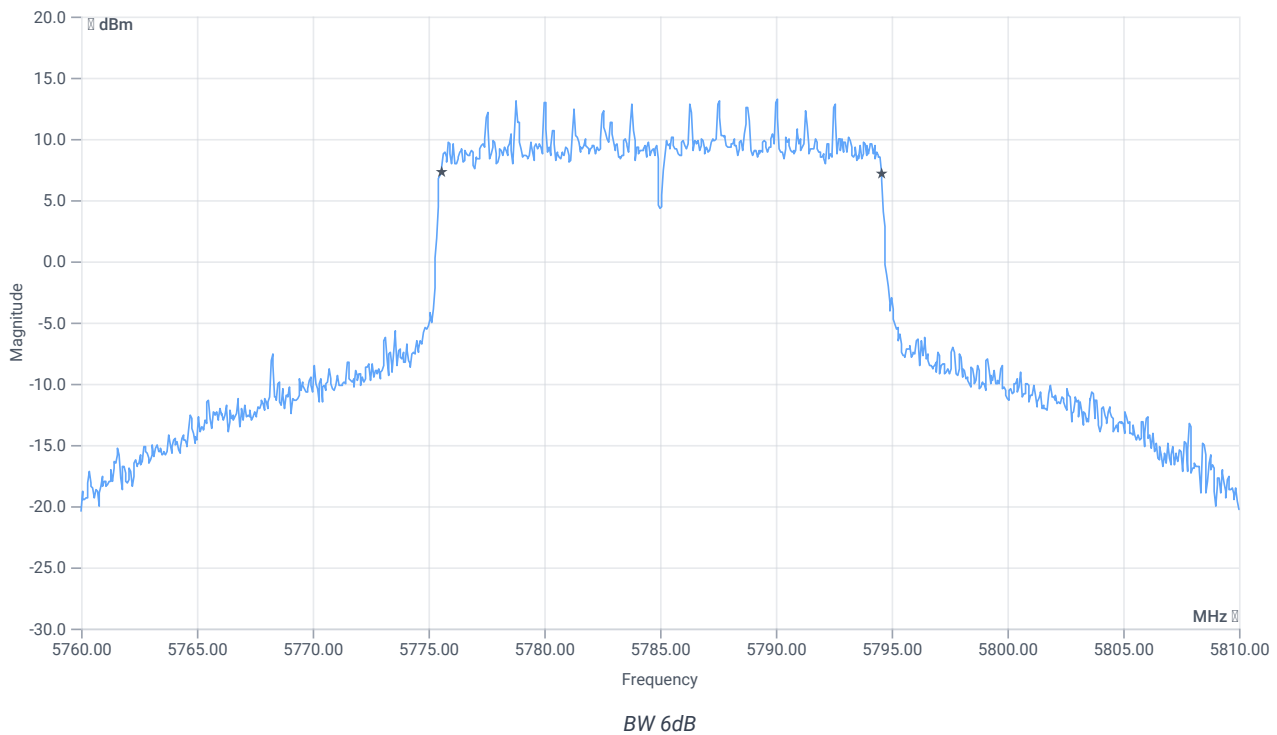
Test at TX 5785 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.75	dBm	INFO
Ref. Frequency	--	--	5782.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.75 16.7 35
Start [MHz] Stop [MHz]	5760.000 5810.000
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	--	19	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:36:55
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5785 MHz

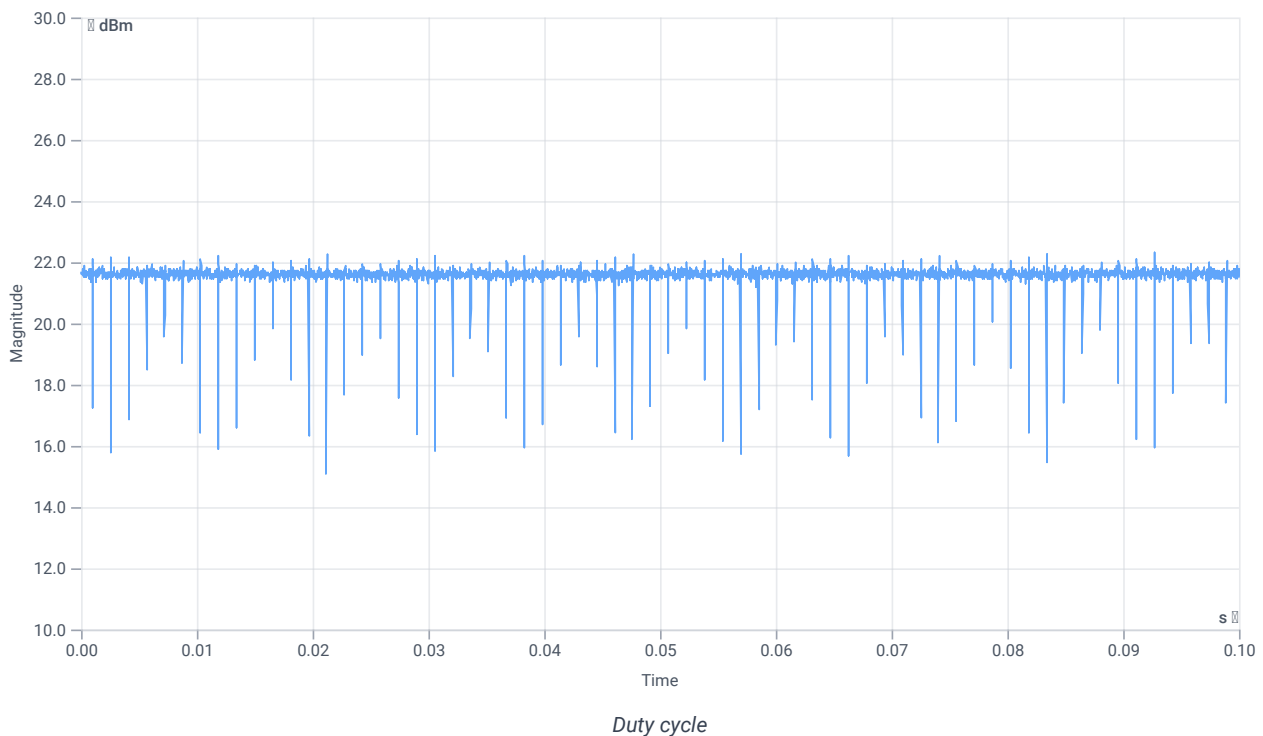
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.65	dBm	INFO
Ref. Frequency	--	--	5782.800	MHz	INFO

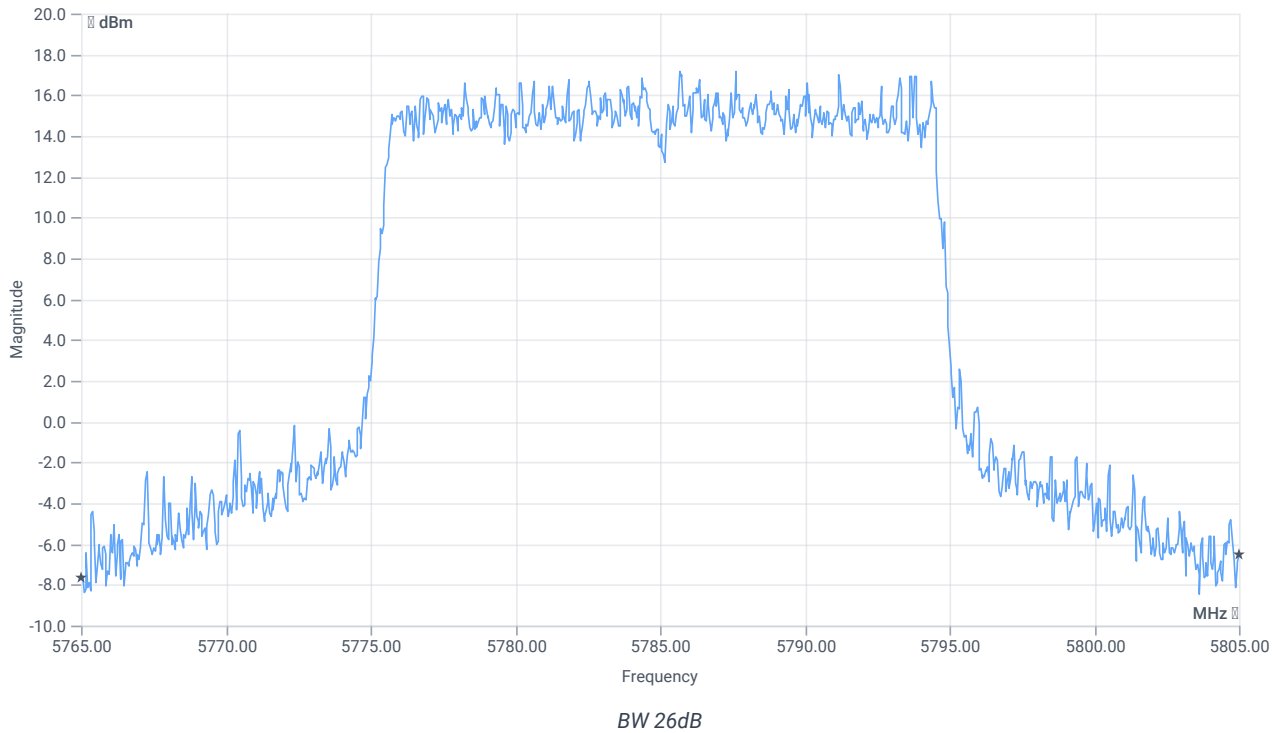
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



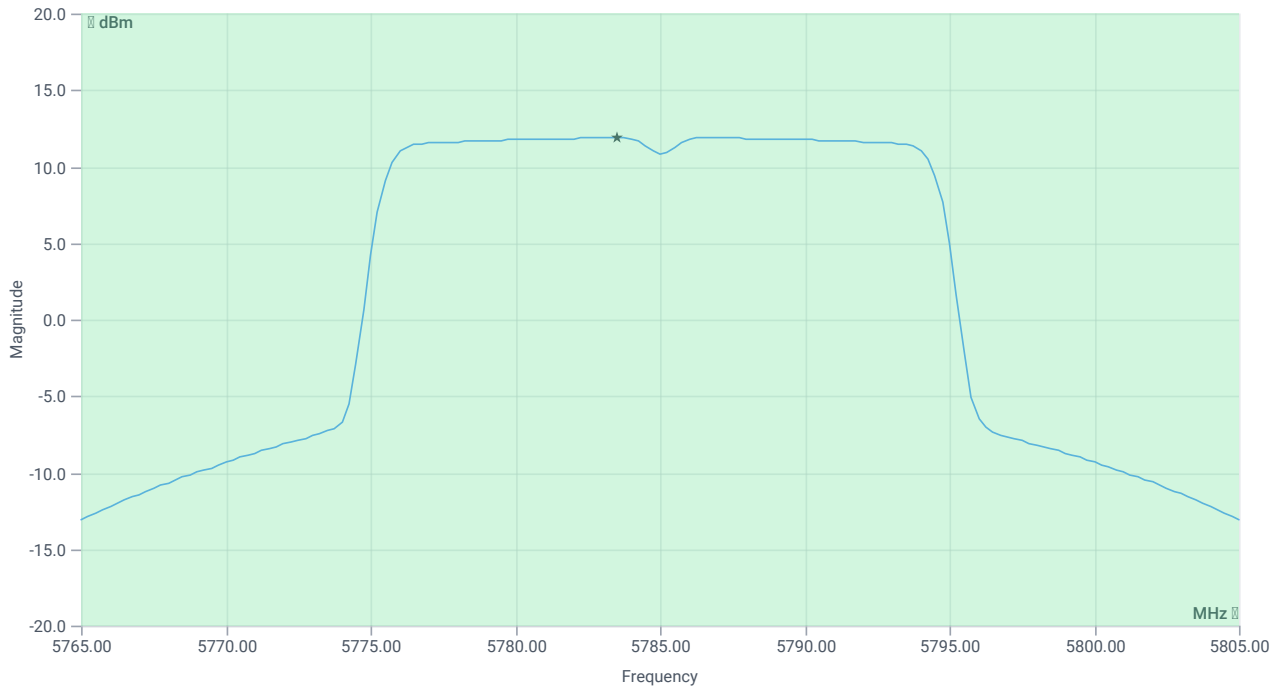
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5765.0000	MHz	INFO
T2 26dB	---	---	5805.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.65 16.7 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

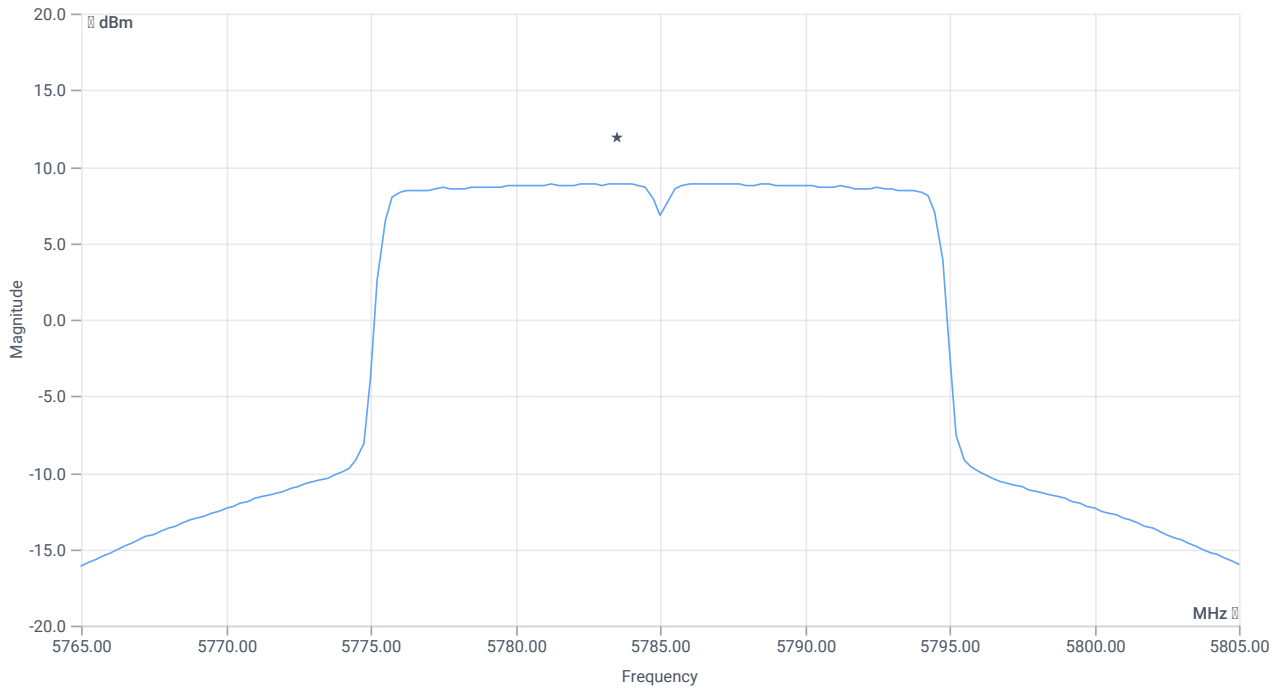
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.25	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.25	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	24.25	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.65 16.7 35
Start [MHz] Stop [MHz]	5765.000 5805.000
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	--	--	8.9	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.9	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:39:23
Ambit temp [°C] humidity [rel%]	25.2 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

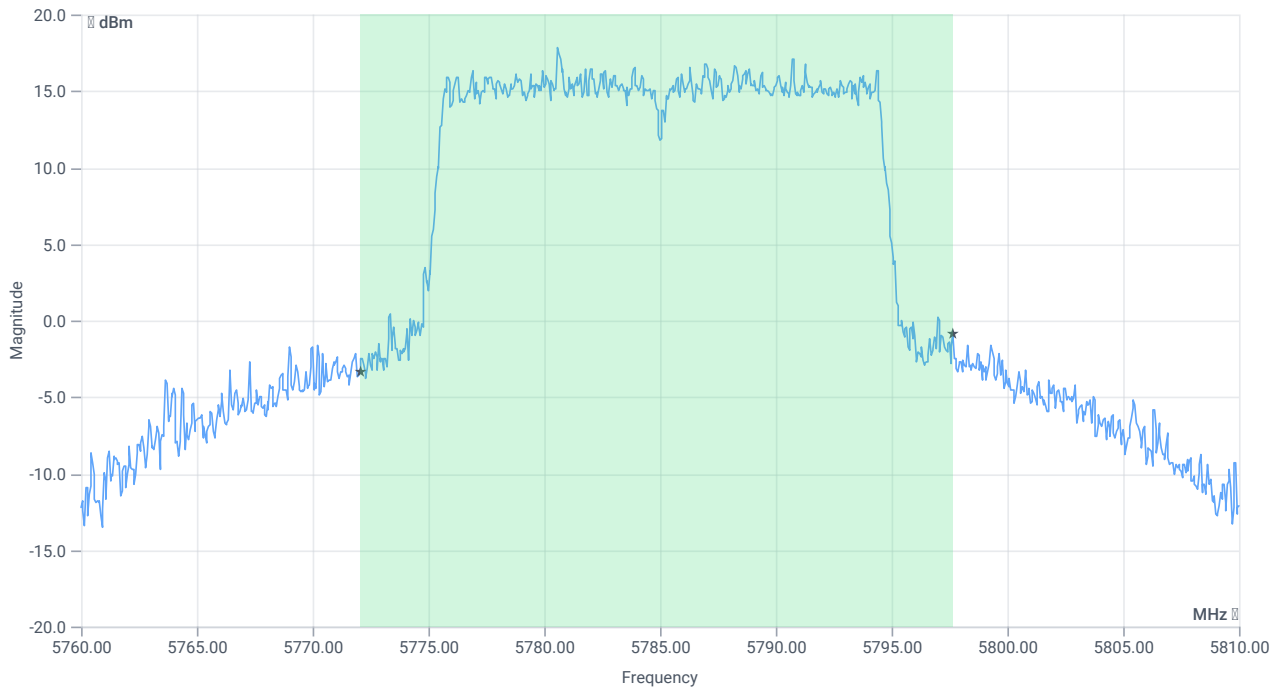
Test at TX 5785 MHz

RESULT: Reference Power cond.

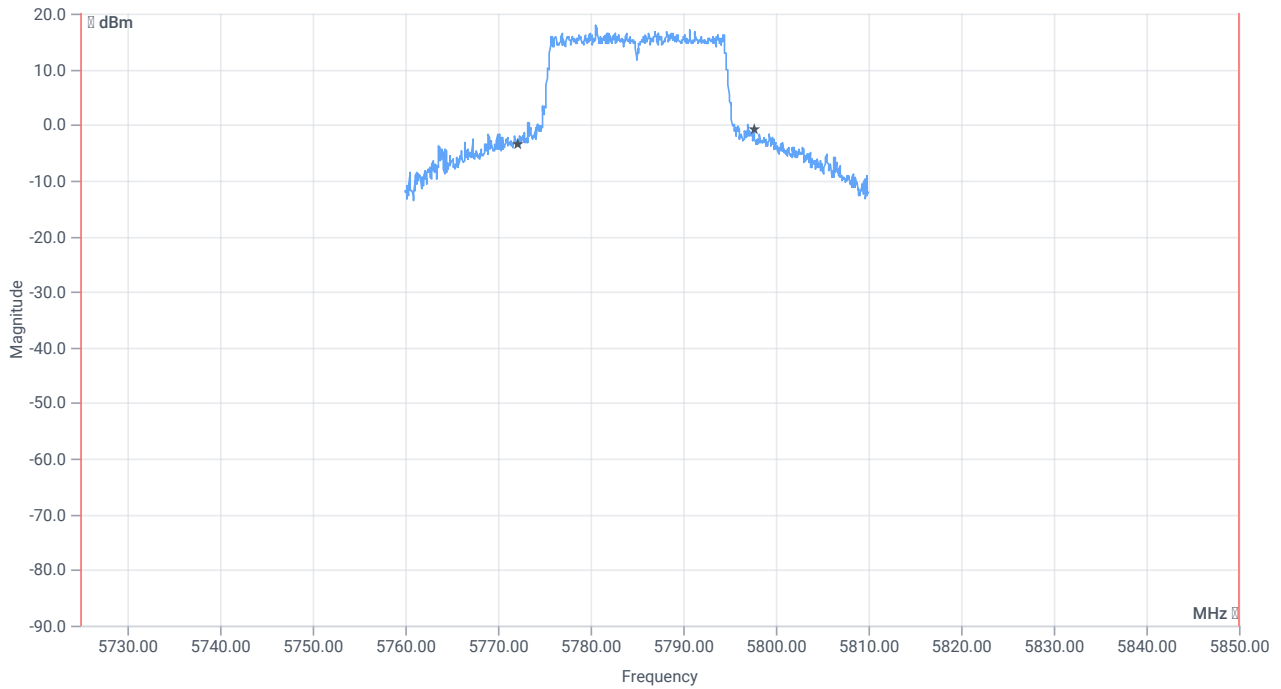
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.84	dBm	INFO
Ref. Frequency	--	--	5789.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.84 16.7 30
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



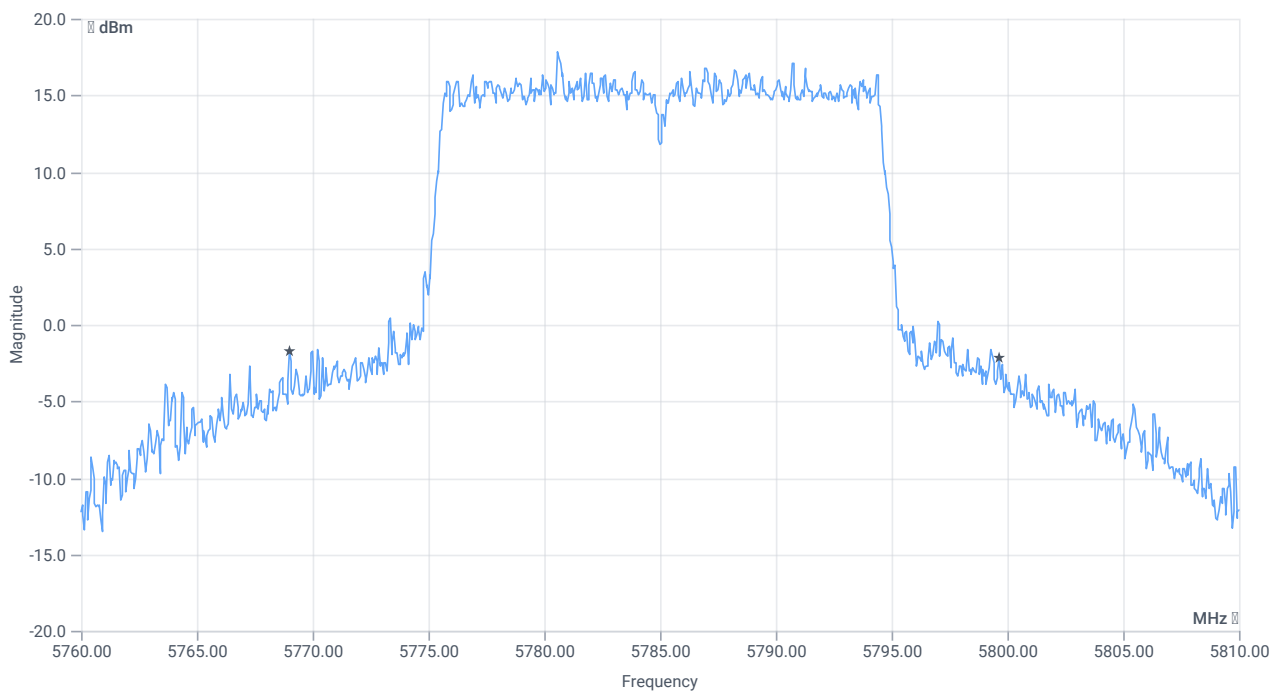
BW 99PCT



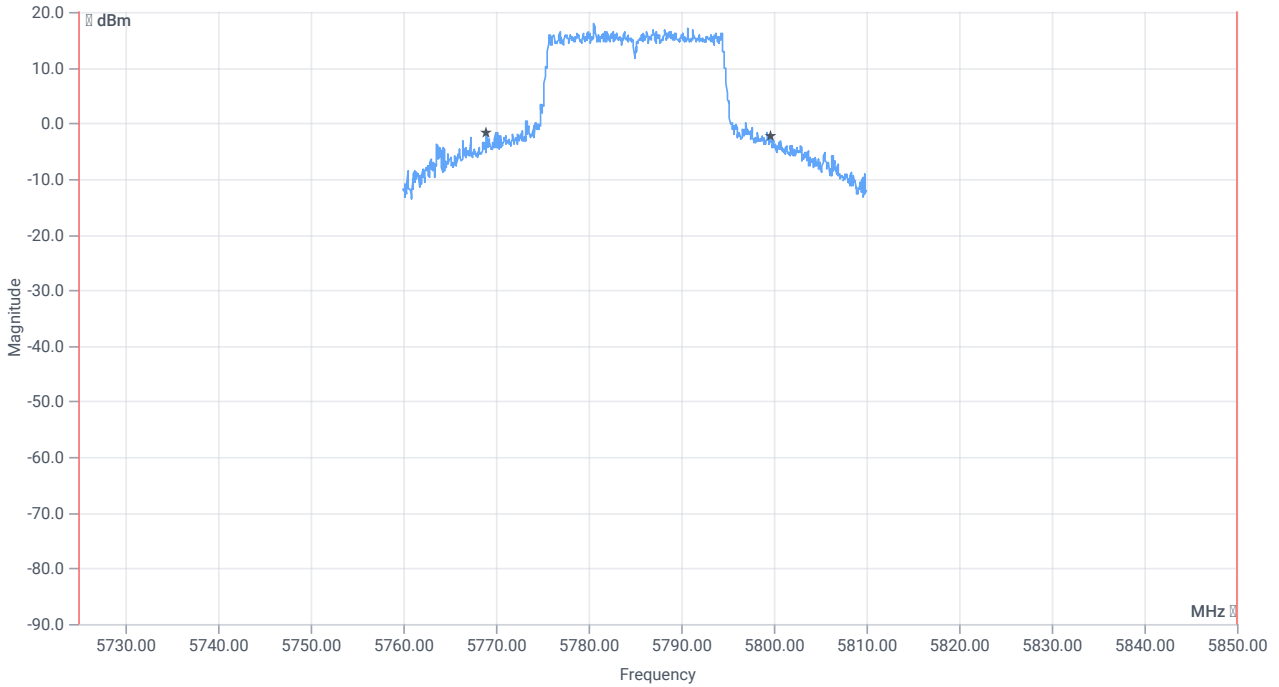
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	25.574	MHz	INFO
T1 99%	5725.000000	--	5772.0629	MHz	PASS
T2 99%	--	5850.000000	5797.6374	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	30.65	MHz	INFO
T1 20dB	5725.000000	--	5769.0000	MHz	PASS
T2 20dB	--	5850.000000	5799.6500	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:39:54
Ambit temp [°C] humidity [rel%]	25.1 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

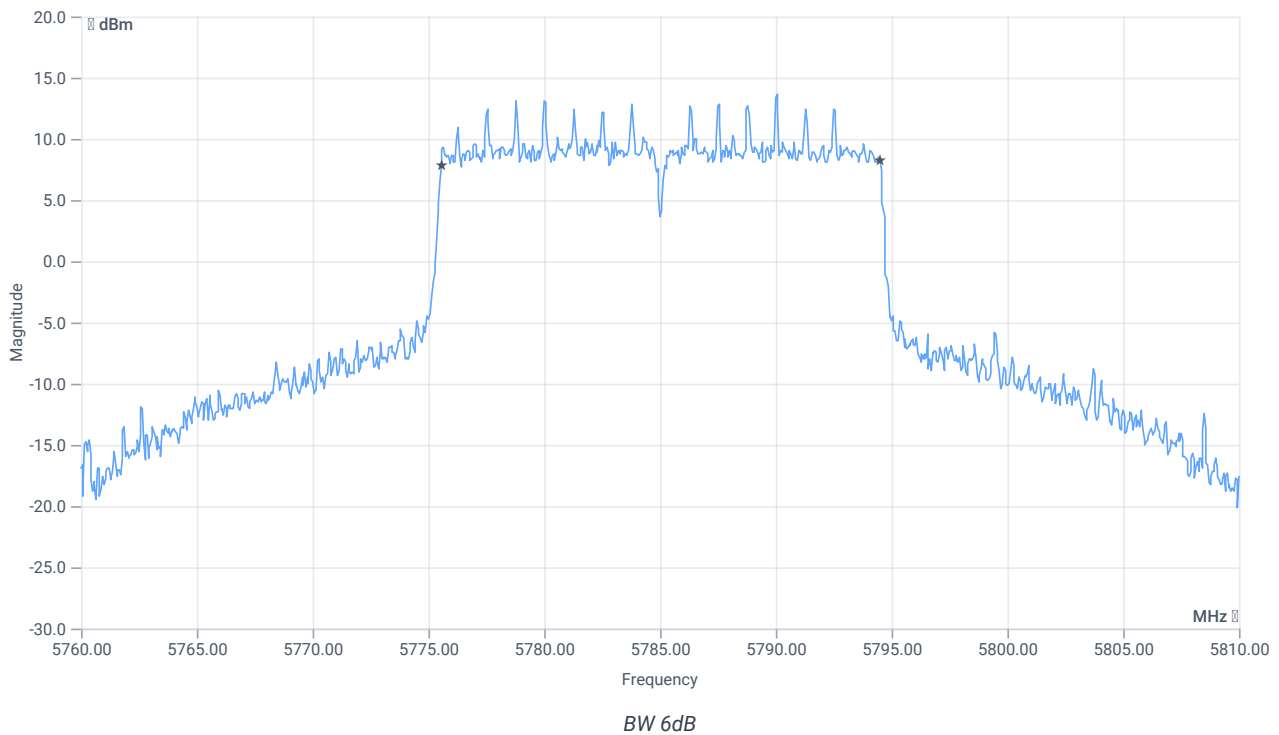
Test at TX 5785 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.14	dBm	INFO
Ref. Frequency	--	--	5780.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.14 16.7 35
Start [MHz] Stop [MHz]	5760.000 5810.000
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	--	18.95	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:40:41
Ambit temp [°C] humidity [rel%]	25.2 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5785 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.39	dBm	INFO
Ant:1 BW 26dB	--	--	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.25	dBm	INFO
Ant:2 BW 26dB	--	--	40.000	MHz	INFO
Σ Limit absolute	--	30	27.33	dBm	PASS
Σ Limit: 11 dBm + 10 log 40	--	27.02	27.33	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	9.02	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	8.9	dBm/0.5MHz	INFO
Σ	--	30	11.97	dBm/0.5MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 08:57:44
Ambit temp [°C] humidity [rel%]	24.9 50
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan ax-HE20 U-NII-3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 08:57:44
Message	set WLAN5Gx to ax-HE20 U-NII-3, Frequency [MHz] 5825 Information: PS96

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 08:58:11
Ambit temp [°C] humidity [rel%]	24.9 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5825 MHz

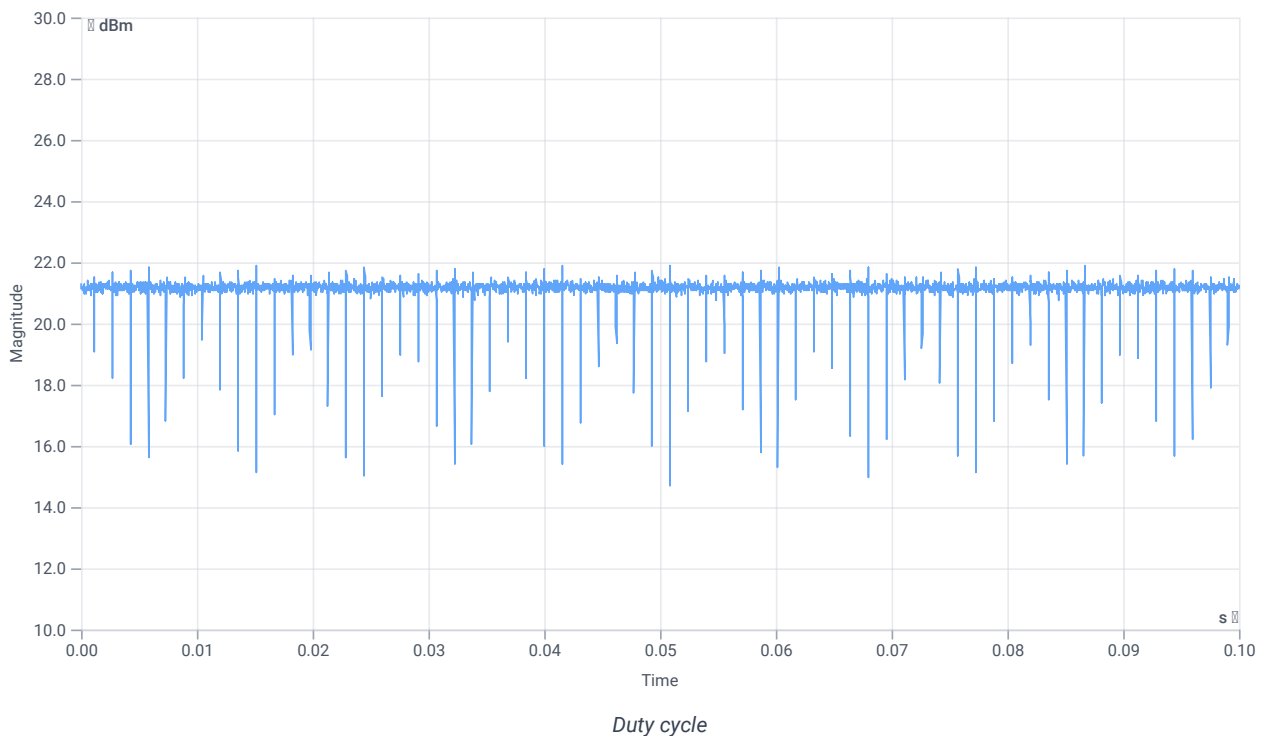
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	20.60	dBm	INFO
Ref. Frequency	--	--	5832.390	MHz	INFO

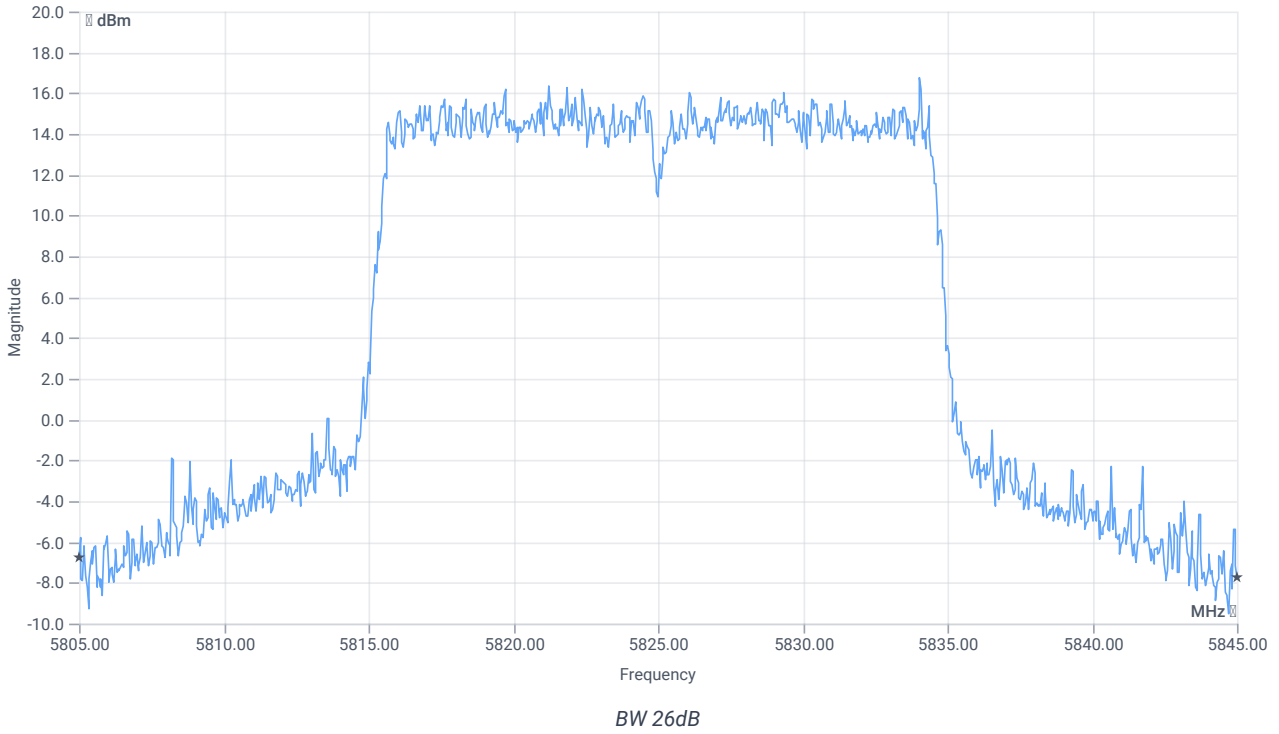
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



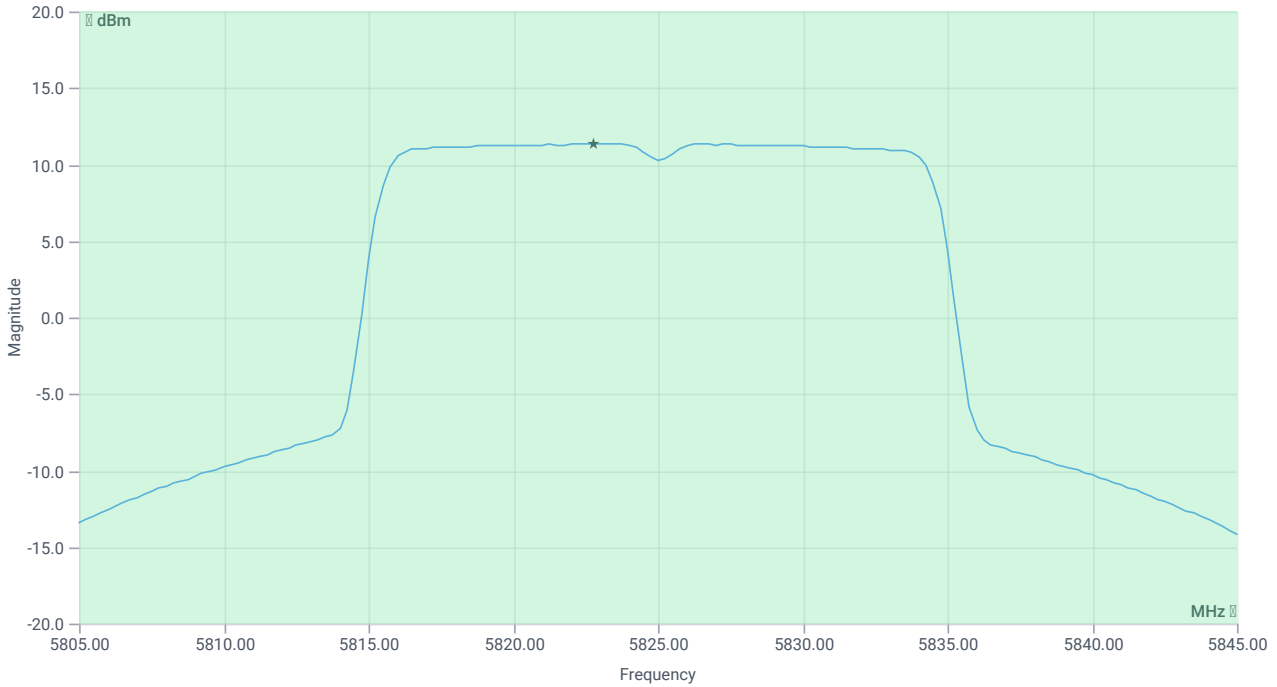
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5805.0000	MHz	INFO
T2 26dB	---	---	5845.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.60 16.68 30
Start [MHz] Stop [MHz]	5805.000 5845.000
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

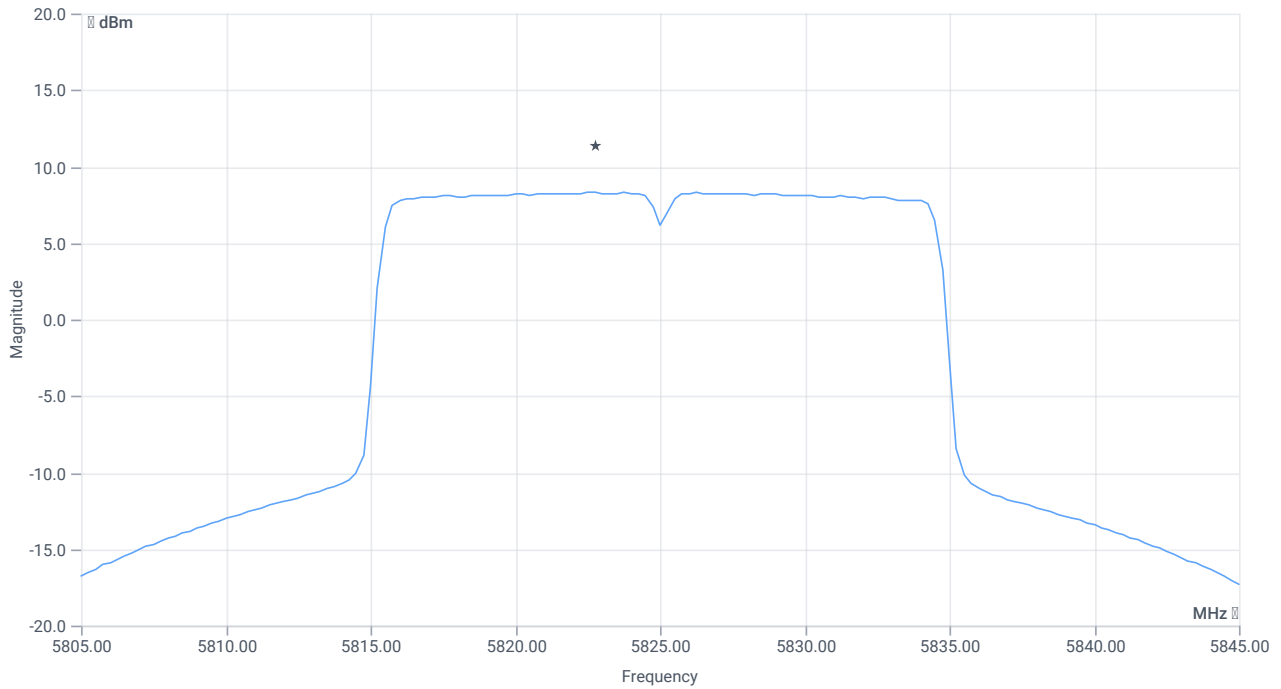
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	23.73	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	23.73	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	23.73	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.60 16.68 35
Start [MHz] Stop [MHz]	5805.000 5845.000
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	--	--	8.3	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.3	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:00:38
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

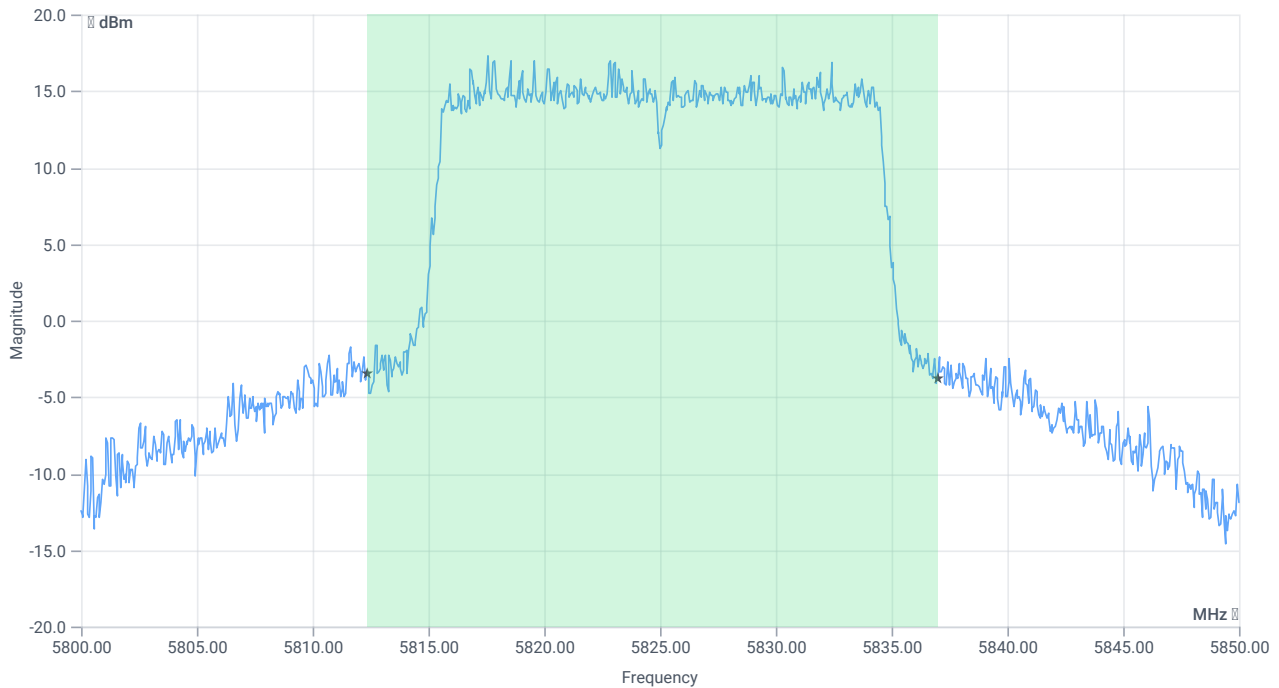
Test at TX 5825 MHz

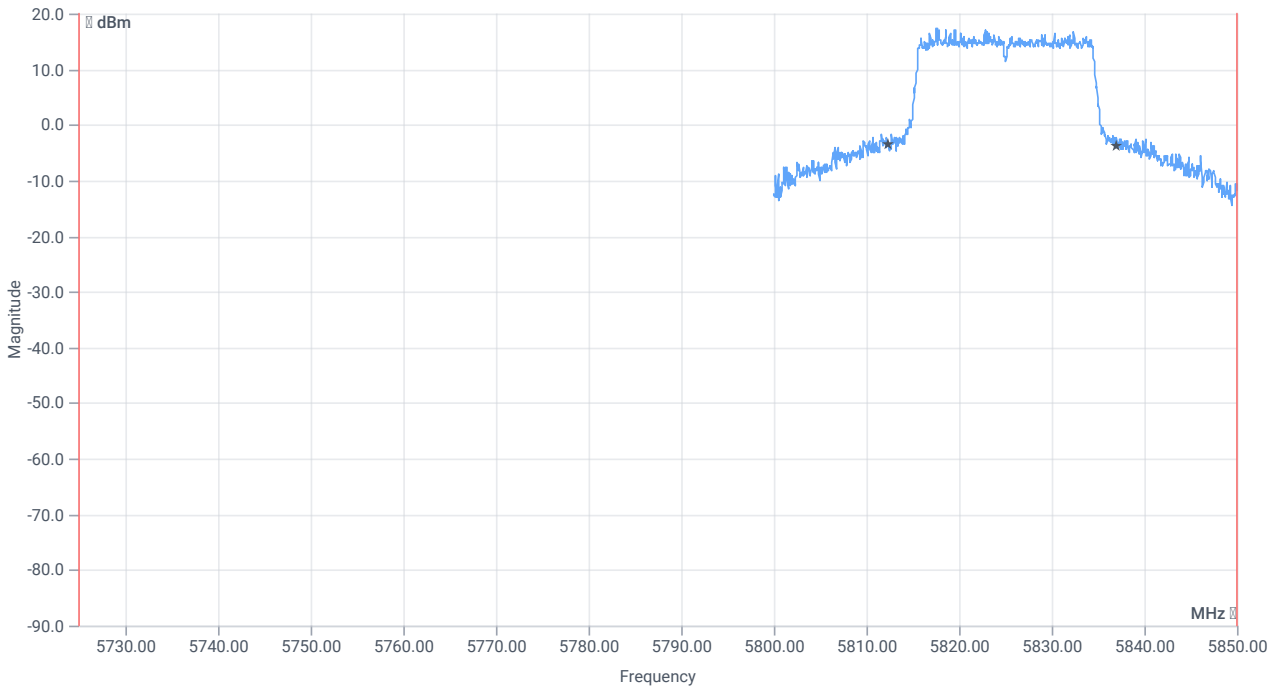
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.55	dBm	INFO
Ref. Frequency	--	--	5823.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.55 16.68 30
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

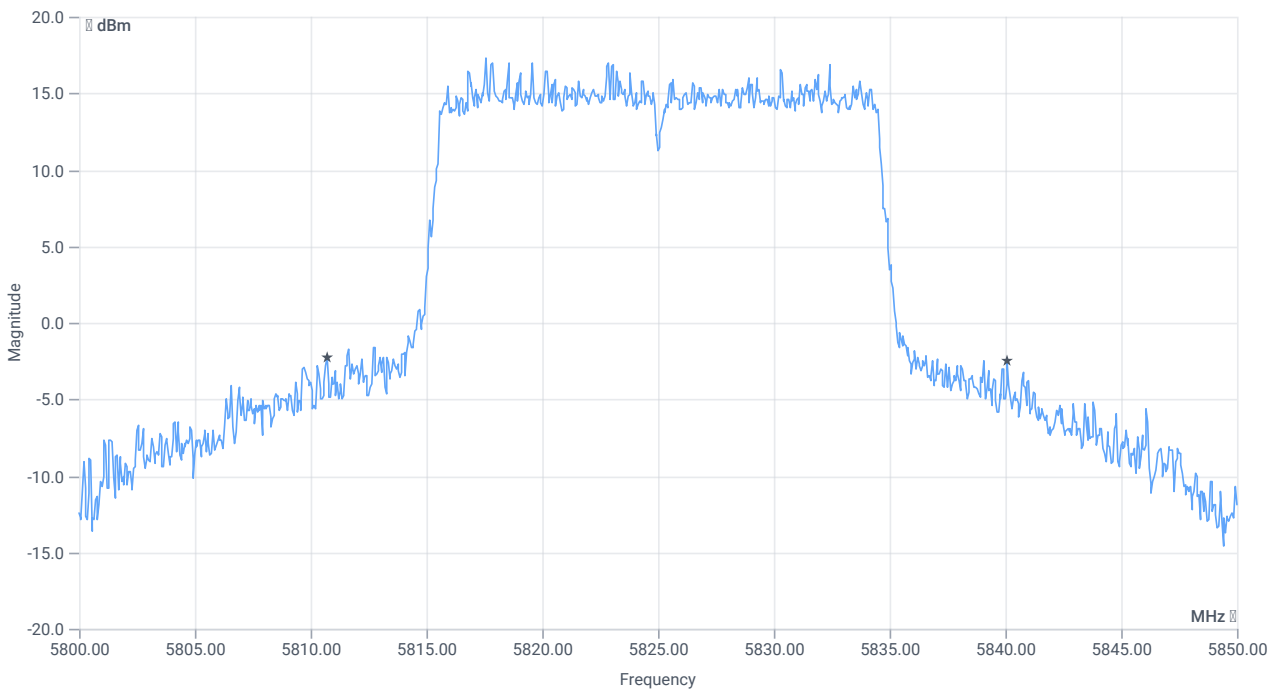




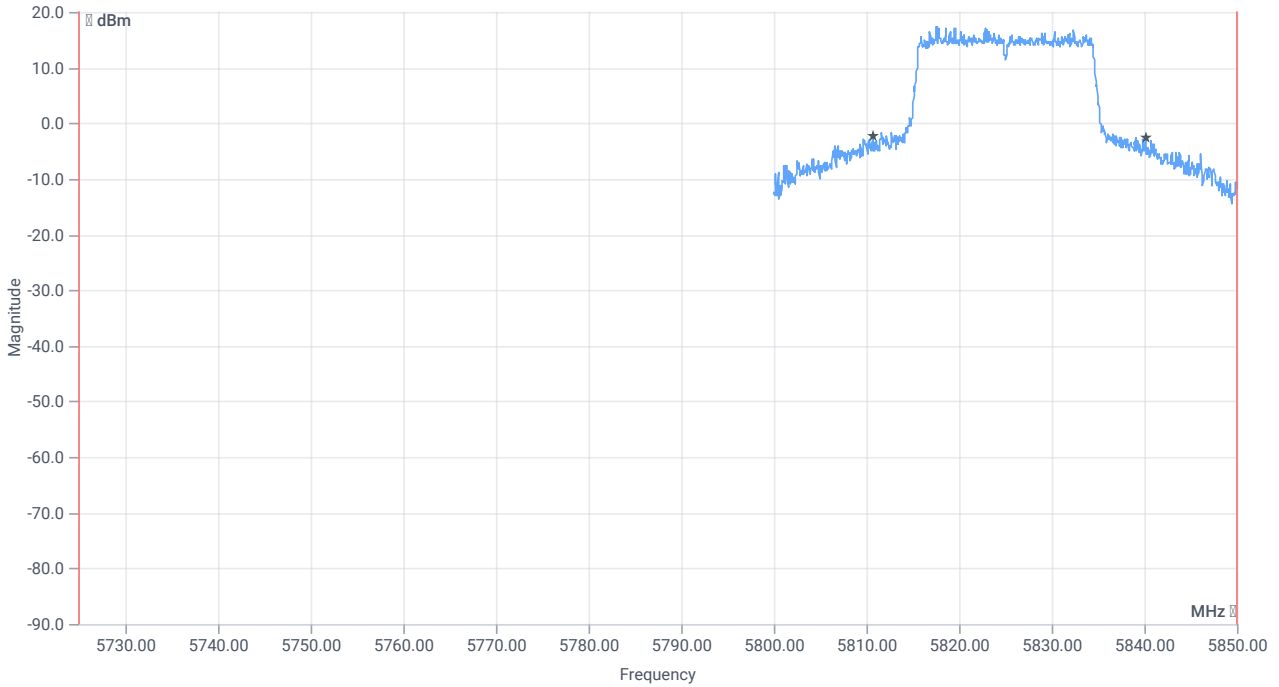
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	24.625	MHz	INFO
T1 99%	5725.000000	--	5812.3626	MHz	PASS
T2 99%	--	5850.000000	5836.9880	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	29.4	MHz	INFO
T1 20dB	5725.000000	--	5810.7000	MHz	PASS
T2 20dB	--	5850.000000	5840.1000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:01:16
Ambit temp [°C] humidity [rel%]	24.9 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

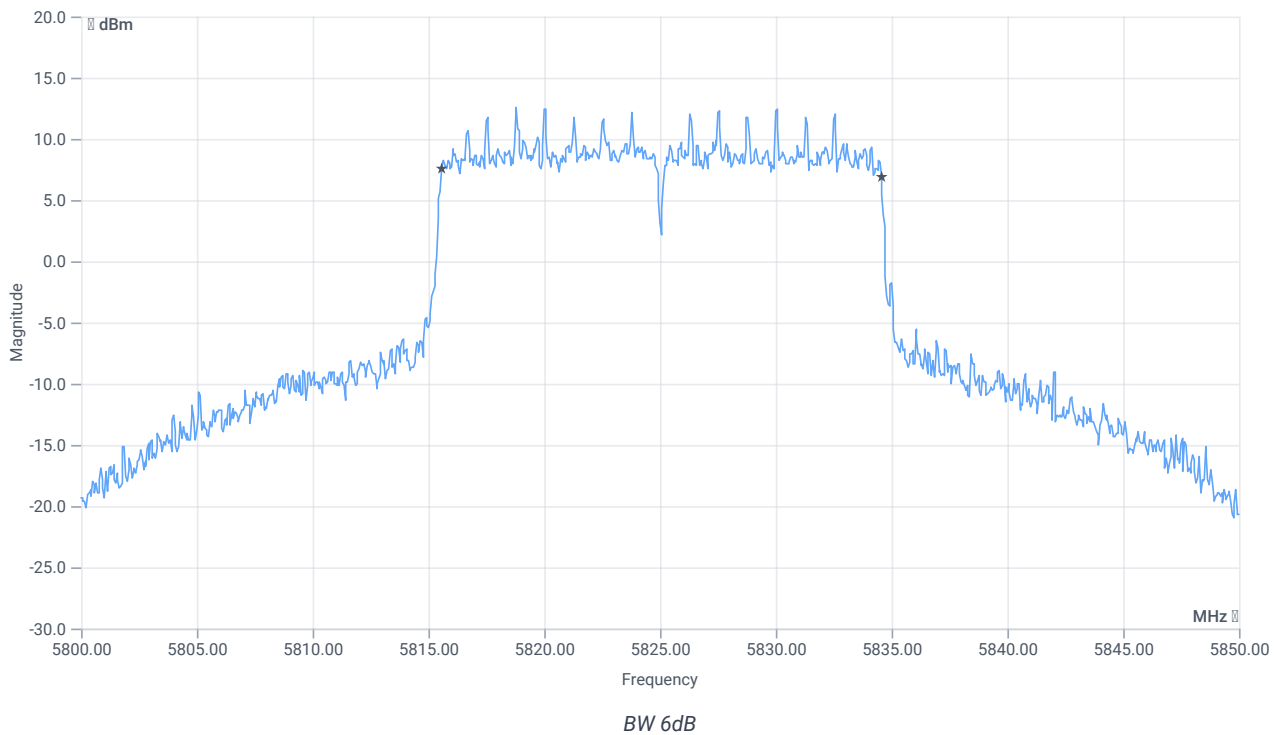
Test at TX 5825 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.23	dBm	INFO
Ref. Frequency	--	--	5816.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.23 16.68 35
Start [MHz] Stop [MHz]	5800.000 5850.000
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	--	19	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:01:52
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5825 MHz

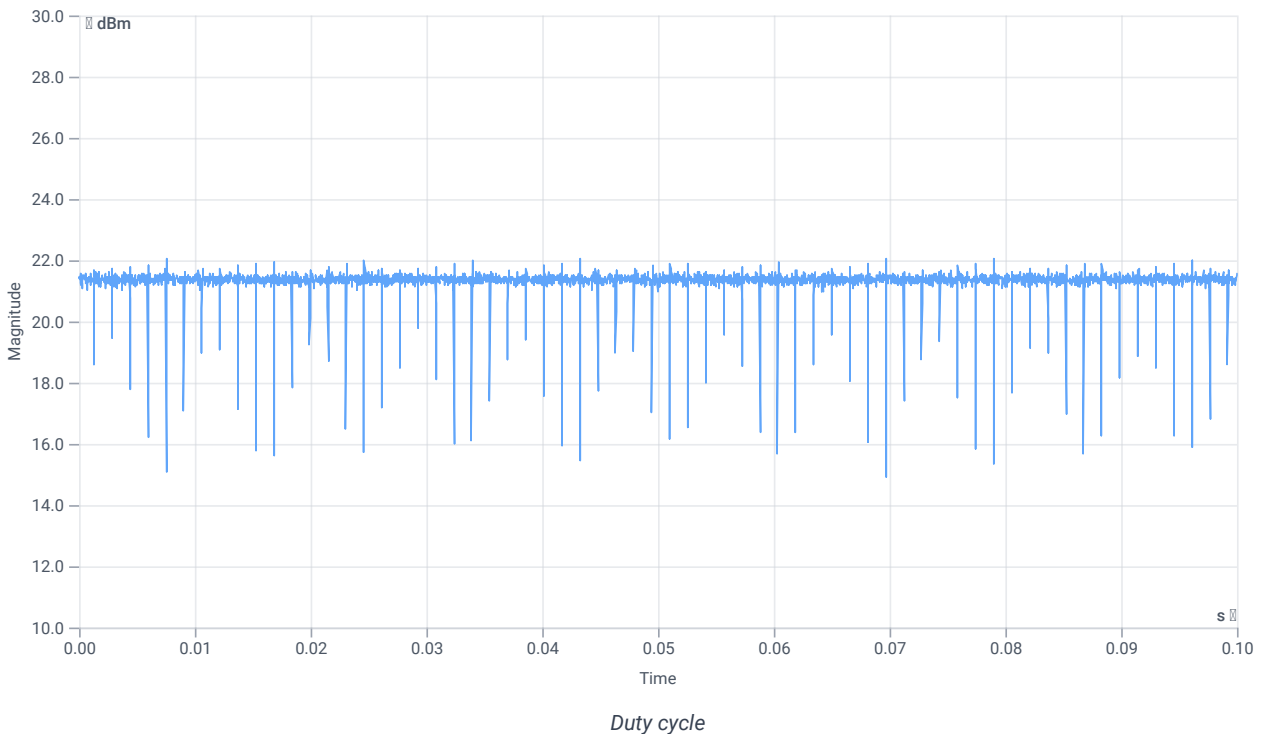
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.24	dBm	INFO
Ref. Frequency	--	--	5827.600	MHz	INFO

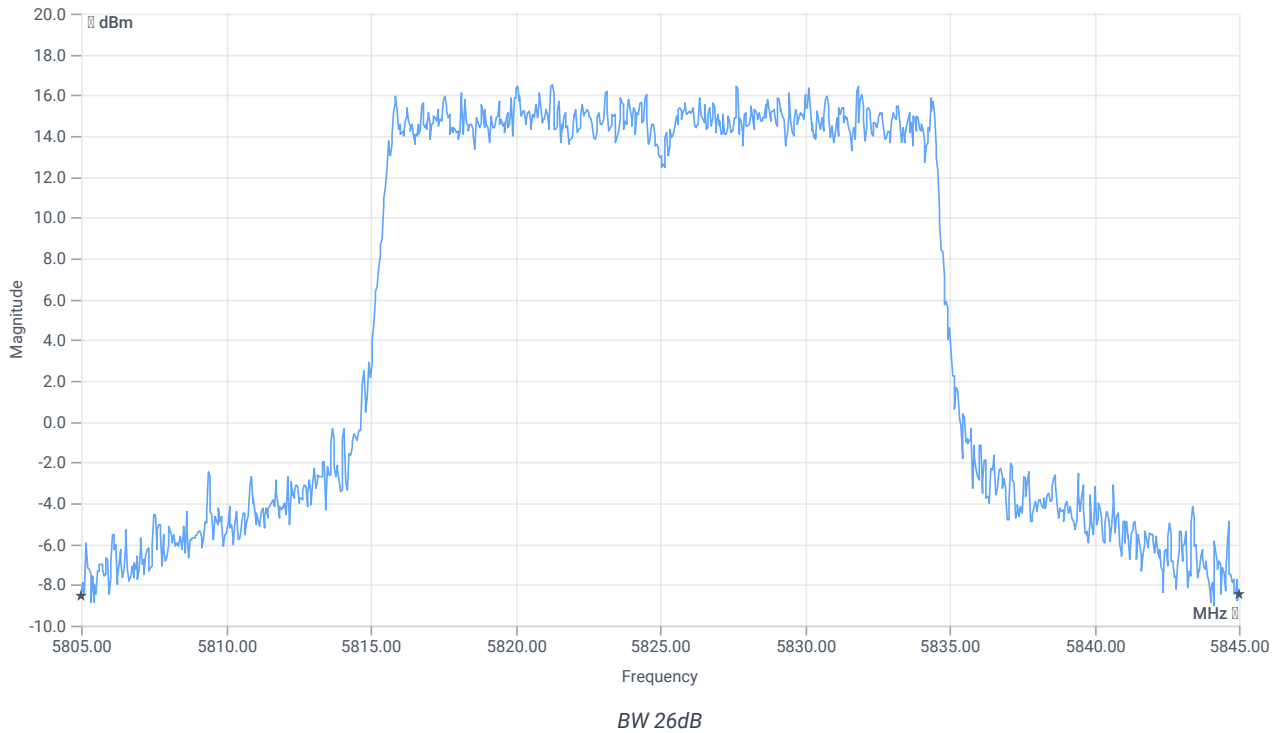
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



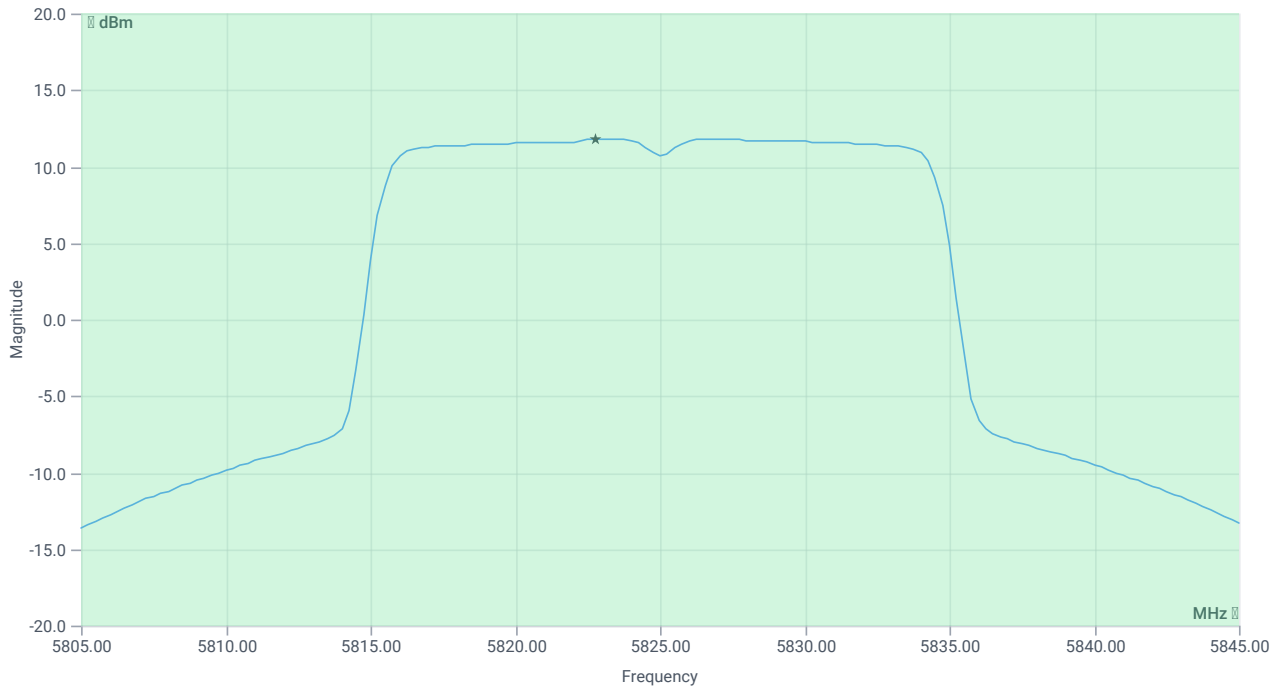
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5805.0000	MHz	INFO
T2 26dB	---	---	5845.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.24 16.68 35
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: time [ms] count points per Section type	53700 1 161 SWE



Max OP and PSD

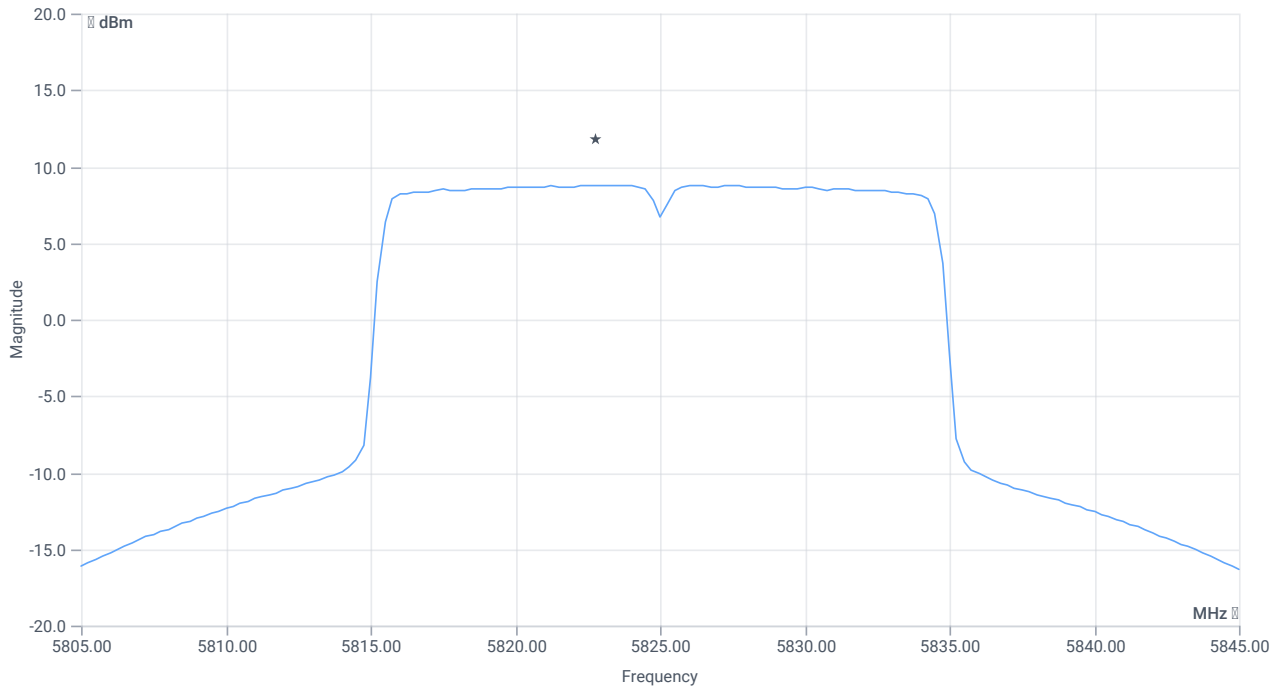
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.09	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.09	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	24.09	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.24 16.68 35
Start [MHz] Stop [MHz]	5805.000 5845.000
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	--	--	8.79	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.79	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:04:19
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

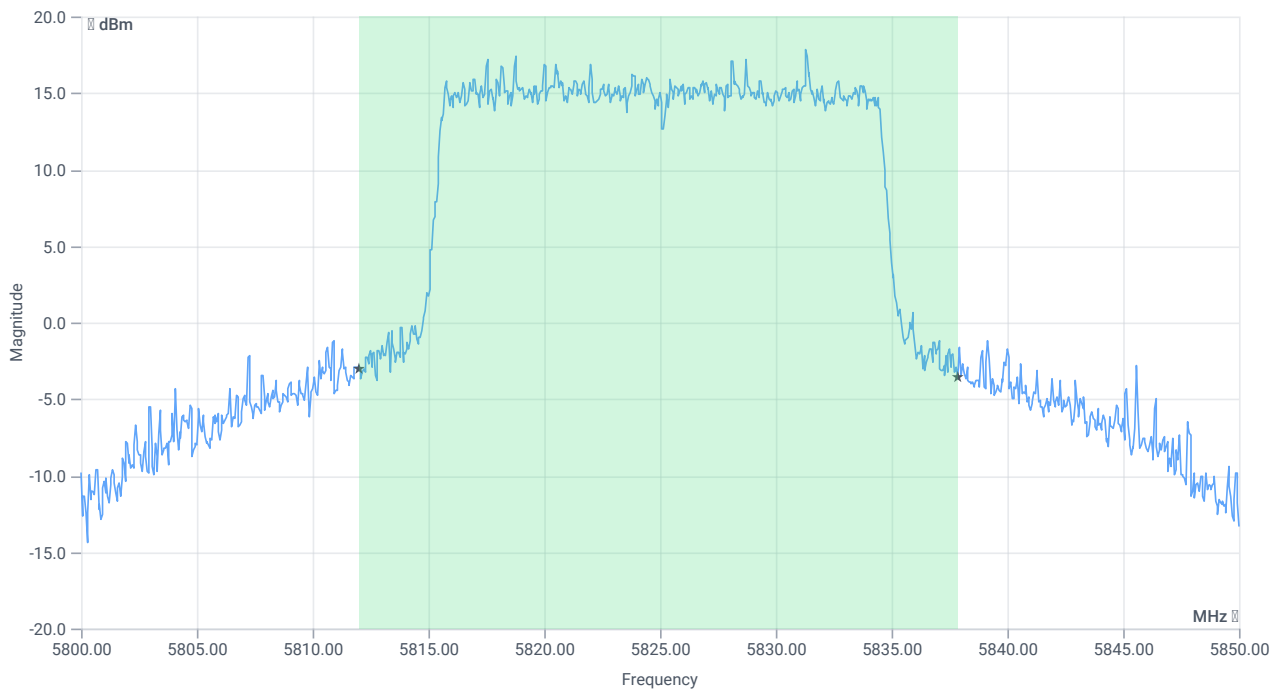
Test at TX 5825 MHz

RESULT: Reference Power cond.

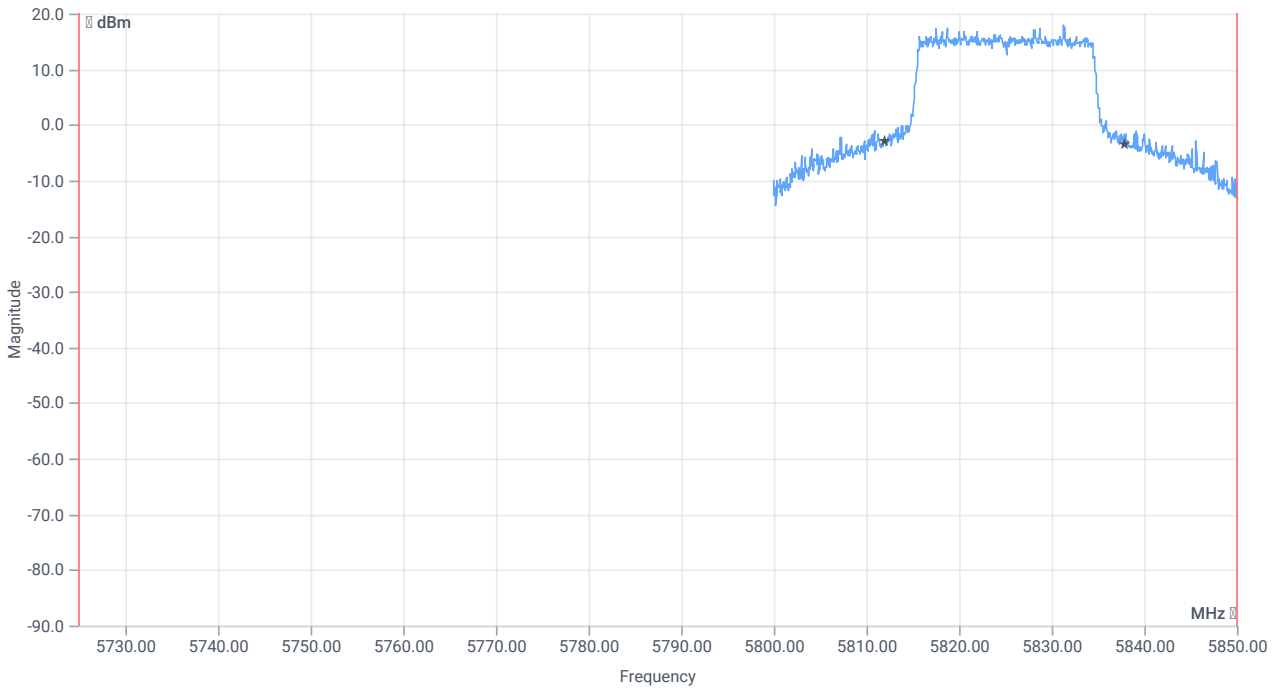
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.76	dBm	INFO
Ref. Frequency	--	--	5821.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.76 16.68 30
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



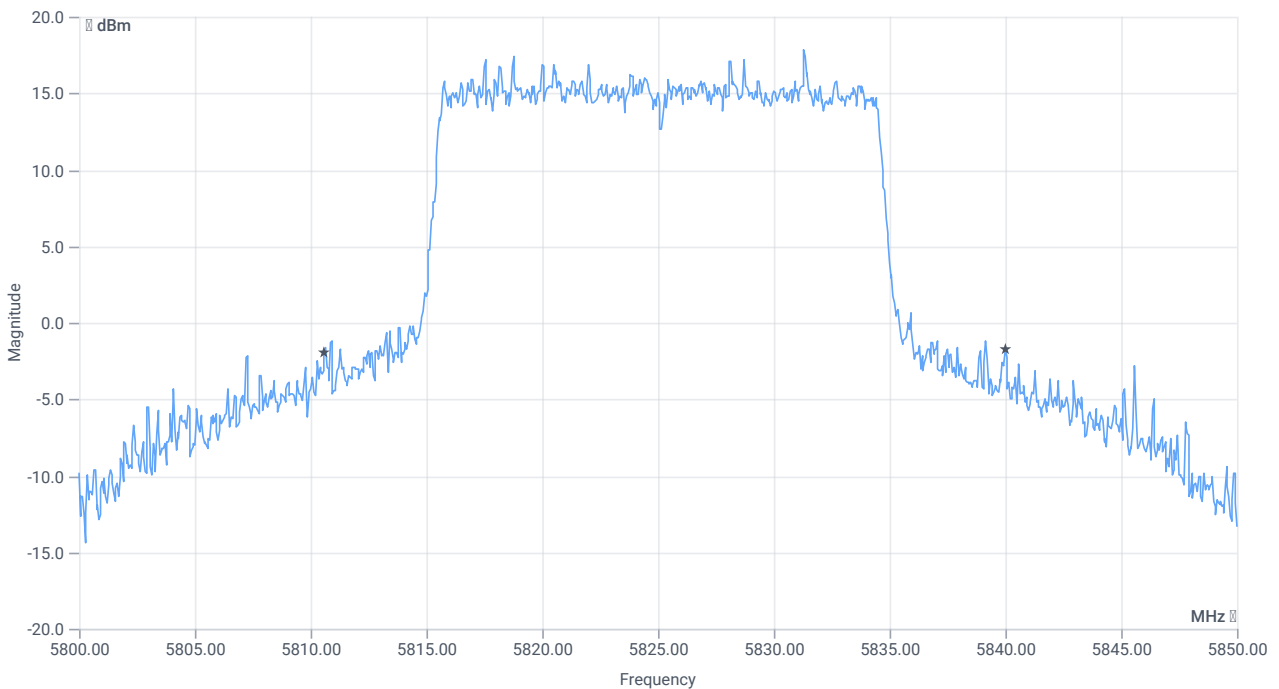
BW 99PCT



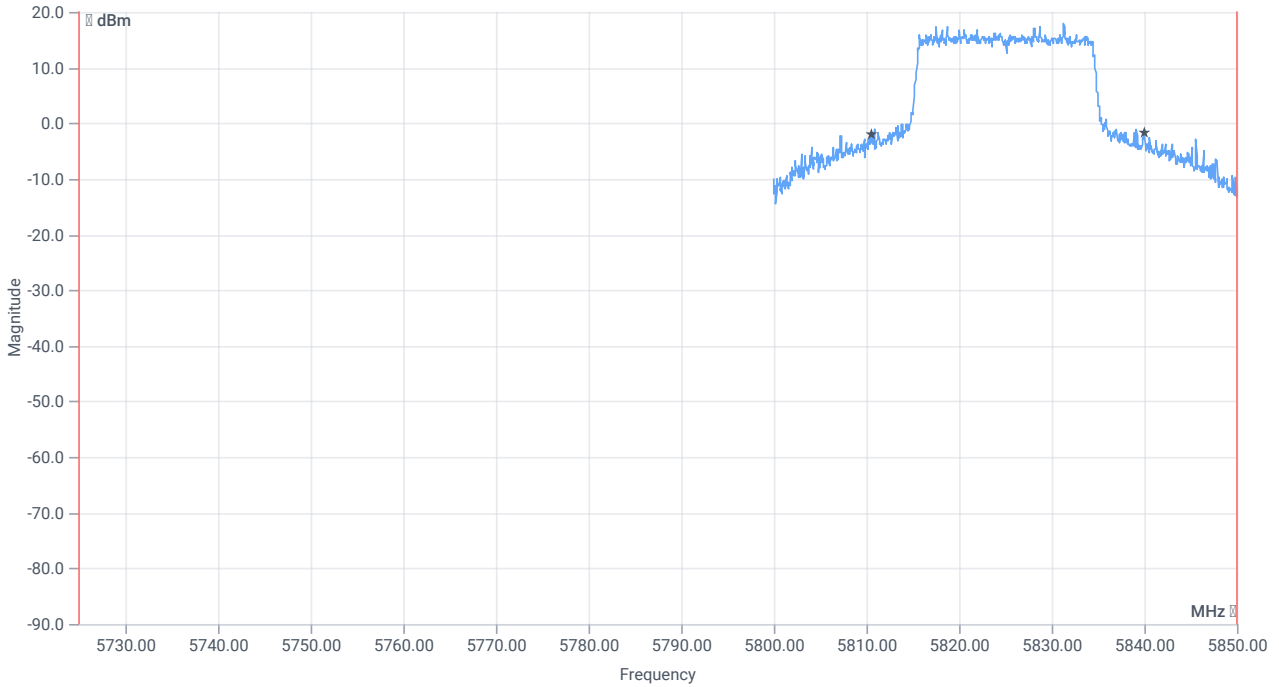
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	25.824	MHz	INFO
T1 99%	5725.000000	--	5812.0130	MHz	PASS
T2 99%	--	5850.000000	5837.8372	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	29.4	MHz	INFO
T1 20dB	5725.000000	--	5810.6000	MHz	PASS
T2 20dB	--	5850.000000	5840.0000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:04:56
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE20 U-NII-3
Information	PS96

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

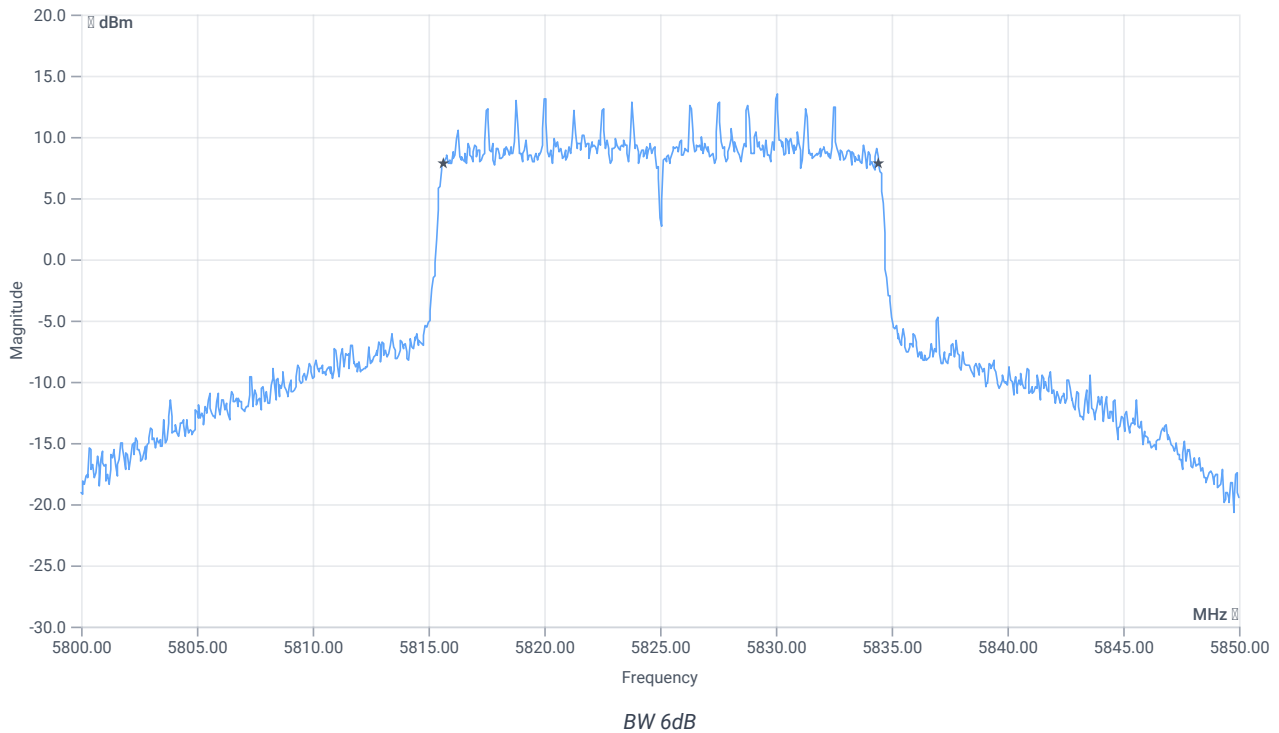
Test at TX 5825 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	21.16	dBm	INFO
Ref. Frequency	--	--	5828.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.16 16.68 35
Start [MHz] Stop [MHz]	5800.000 5850.000
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	--	18.8	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

References

TC start	02.08.2023 09:05:34
Ambit temp [°C] humidity [rel%]	25.0 50
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ax-HE20 U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE20
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5825 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	23.73	dBm	INFO
Ant:1 BW 26dB	--	--	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.09	dBm	INFO
Ant:2 BW 26dB	--	--	40.000	MHz	INFO
Σ Limit absolute	--	30	26.92	dBm	PASS
Σ Limit: 11 dBm + 10 log 40	--	27.02	26.92	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	8.3	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	8.79	dBm/0.5MHz	INFO
Σ	--	30	11.56	dBm/0.5MHz	PASS

Verdict

PASS

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