

# Measurement Results

No.1-3977/22-03-04\_Annex\_MR\_A6

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## Test logging

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## EUT Information

### EUT DEFINITION

Manufacturer	SAGEMCOM BROADBAND SAS
Type	F5688W
Serial Number	QS2212959002927
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	NI
Comment 1	
Comment 2	
Temperature [°C] Min	0
Temperature [°C] Nom	20
Temperature [°C] Max	50
Voltage [V] Min	120
Voltage [V] Nom	120
Voltage [V] Max	120

# FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT80 mode U-NII-1

## Test References

TC Start	14.12.2022 18:07:06
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

## EUT Common Settings WLAN5Gx

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

## Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	None

## Test Equipment

## Test at TX 5210 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	17.31	dBm	INFO
Ant:1 BW 26dB	--	--	82.080	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.86	dBm	INFO
Ant:2 BW 26dB	--	--	81.280	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	17.6	dBm	INFO
Ant:3 BW 26dB	--	--	82.560	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	16.99	dBm	INFO
Ant:4 BW 26dB	--	--	81.440	MHz	INFO
Σ Limit absolute	--	30	23.47	dBm	PASS
Σ Limit: 11 dBm + 10 log 81.28	--	30.1	23.47	dBm	na

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	-0.06	dBm/1MHz	INFO
Ant:2 PSD	--	--	0.52	dBm/1MHz	INFO
Ant:3 PSD	--	--	0.63	dBm/1MHz	INFO
Ant:4 PSD	--	--	-0.18	dBm/1MHz	INFO
Σ	--	17	6.26	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 18:05:59
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.10	dBm	INFO
Ref. Frequency	---	---	5187.820	MHz	INFO

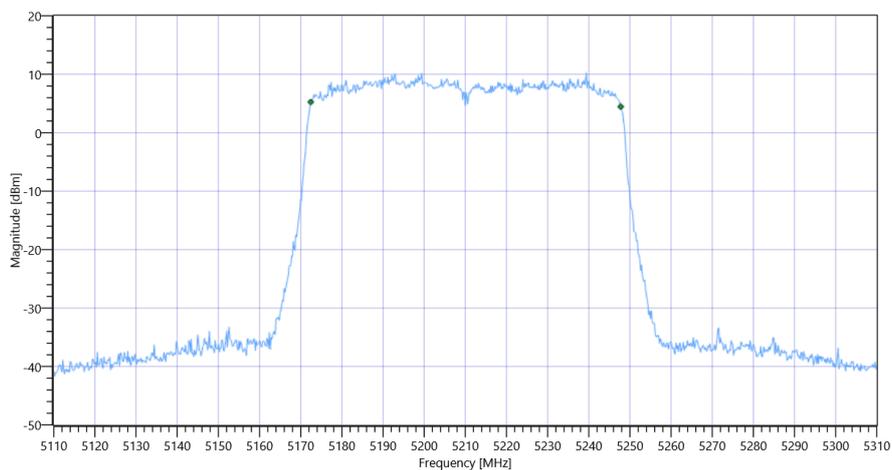
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.10   5   30
Start [MHz]   Stop [MHz]	5110.000   5310.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.325	MHz	INFO
T1 99%	5150.000000	---	5172.4376	MHz	PASS
T2 99%	---	5250.000000	5247.7622	MHz	PASS

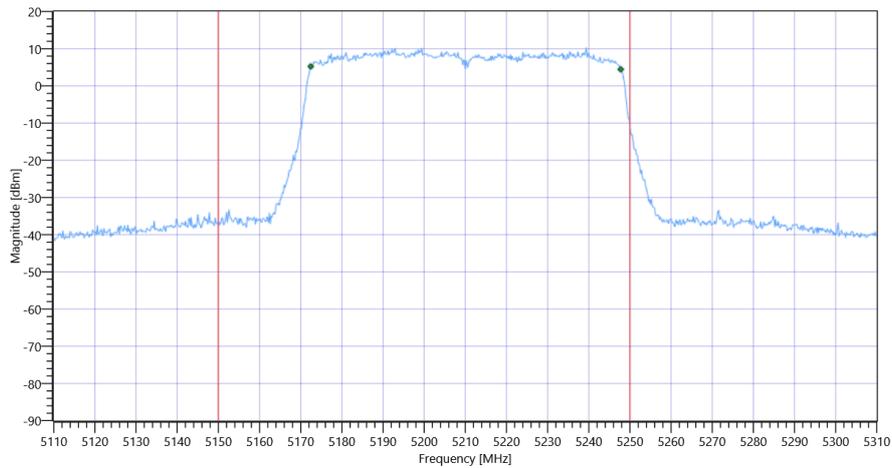
## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 99PCT

## Plot: Bandwidth within Band



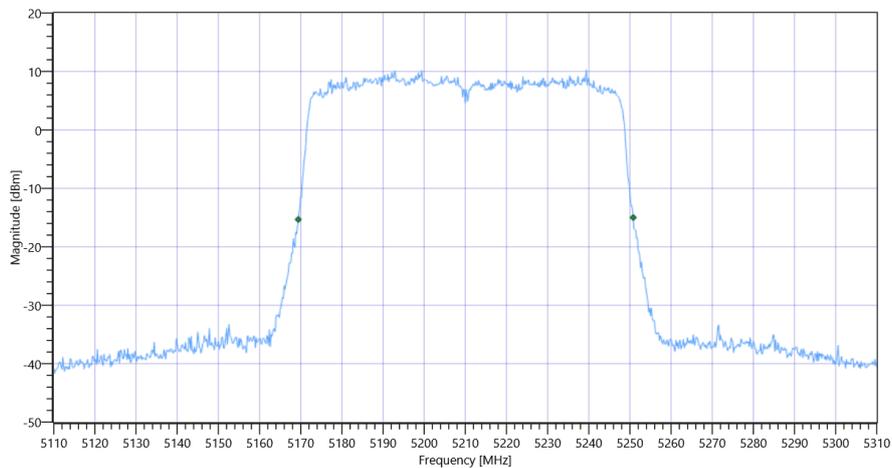


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

### RESULT

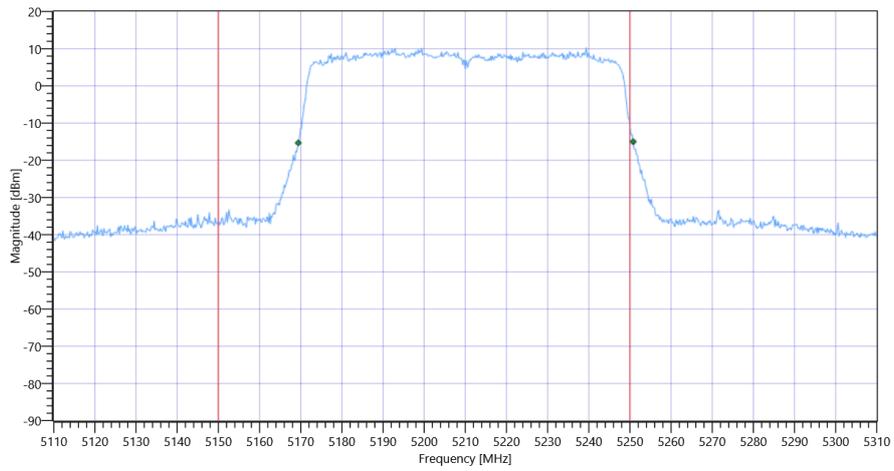
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.4	MHz	INFO
T1 26dB	5150.000000	---	5169.4000	MHz	PASS
T2 26dB	---	5250.000000	5250.8000	MHz	DFS required

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 26dB

### Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 18:03:18
Ambit Temp [°C]   Humidity [rel%]	24.3   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.27	dBm	INFO
Ref. Frequency	---	---	5212.600	MHz	INFO

Evaluation max. Duty Cycle

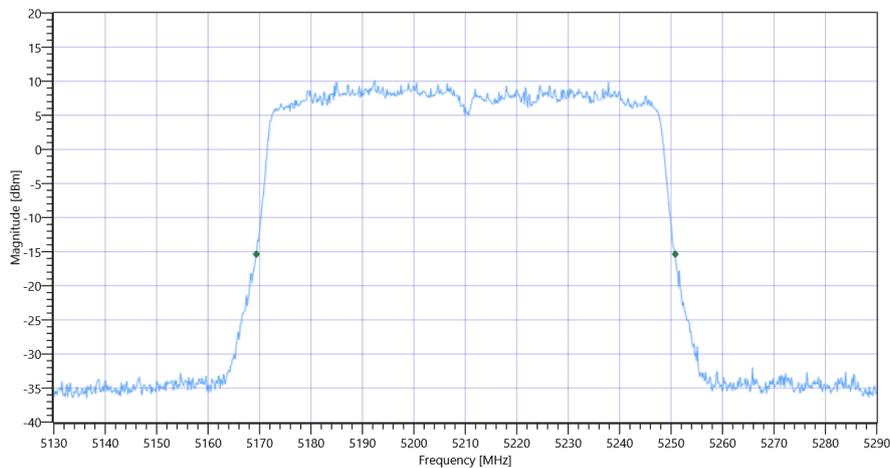
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.44	MHz	INFO
T1 26dB	---	---	5169.3600	MHz	INFO
T2 26dB	---	---	5250.8000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1\_BW

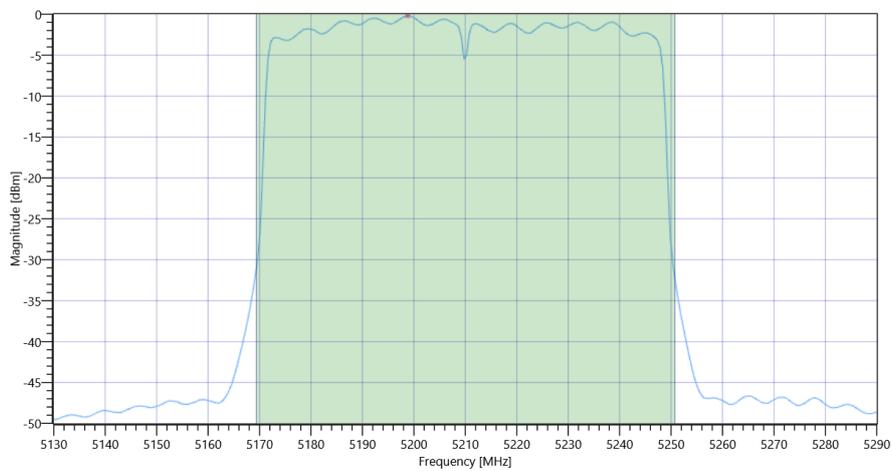
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.27   5   30
Start [MHz]   Stop [MHz]	5130.000   5290.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.99	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	16.99	dBm	PASS
Limit: 11 dBm + 10 log 81.44					
Max Output Power DC corrected	---	30.11	16.99	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-0.18	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	-0.18	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 18:02:12
Ambit Temp [°C]   Humidity [rel%]	24.3   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.14	dBm	INFO
Ref. Frequency	---	---	5212.600	MHz	INFO

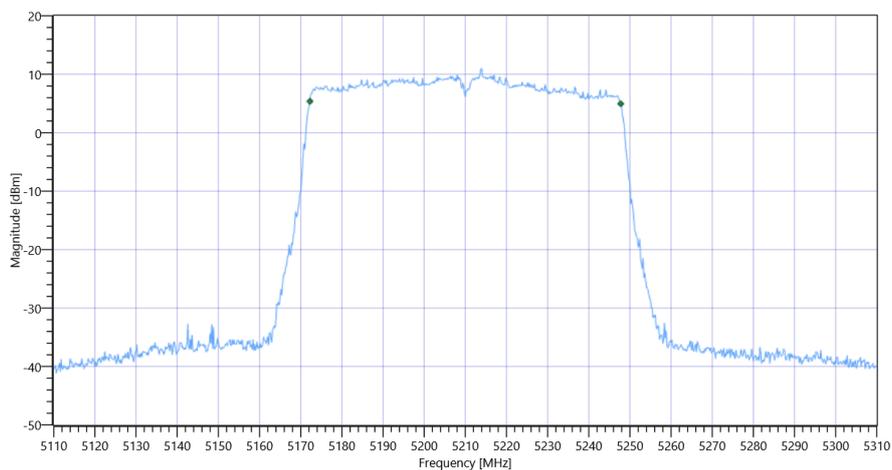
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.14   5   30
Start [MHz]   Stop [MHz]	5110.000   5310.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

## RESULT

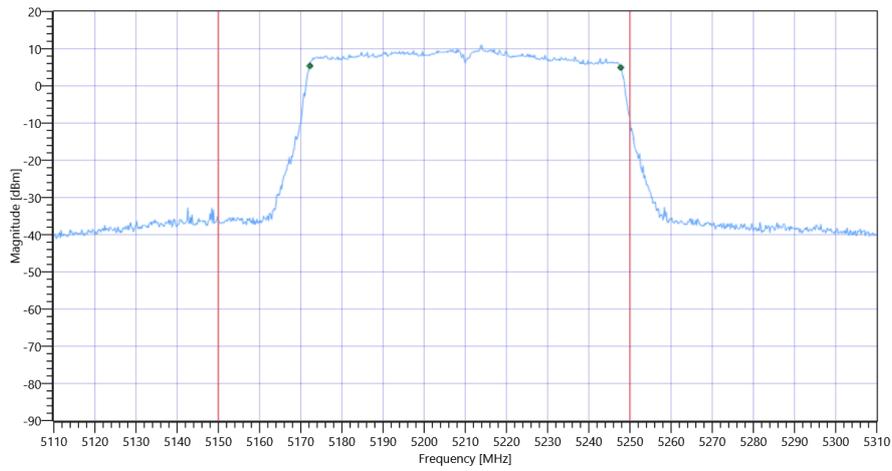
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5150.000000	---	5172.2378	MHz	PASS
T2 99%	---	5250.000000	5247.7622	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 99PCT

## Plot: Bandwidth within Band

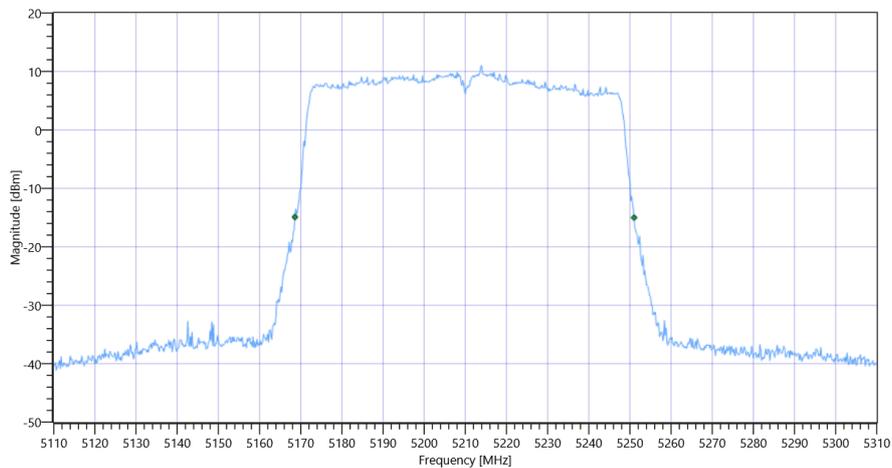


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.4	MHz	INFO
T1 26dB	5150.000000	---	5168.6000	MHz	PASS
T2 26dB	---	5250.000000	5251.0000	MHz	DFS required

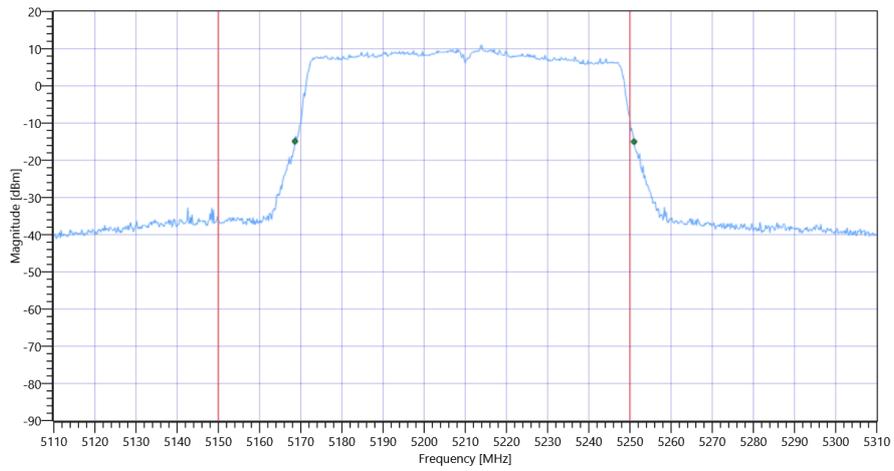
## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 26dB

## Plot: Bandwidth within Band





FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 17:59:30
Ambit Temp [°C]   Humidity [rel%]	24.3   22
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.22	dBm	INFO
Ref. Frequency	---	---	5219.590	MHz	INFO

Evaluation max. Duty Cycle

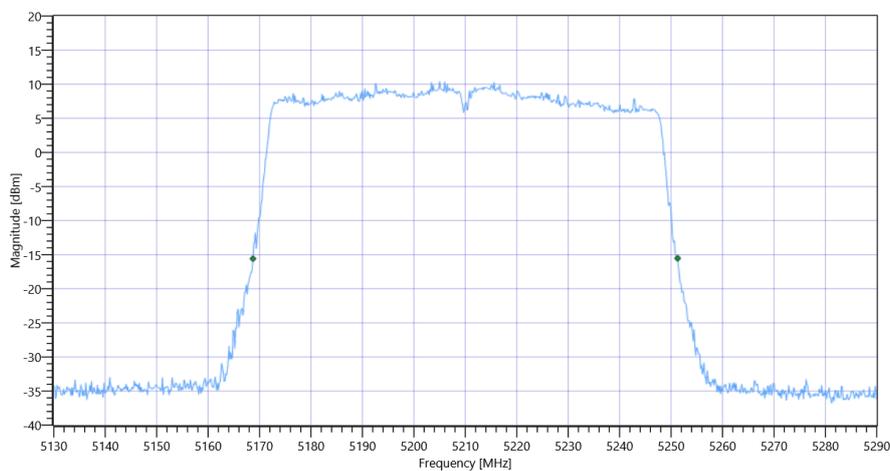
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.56	MHz	INFO
T1 26dB	---	---	5168.7200	MHz	INFO
T2 26dB	---	---	5251.2800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1\_BW

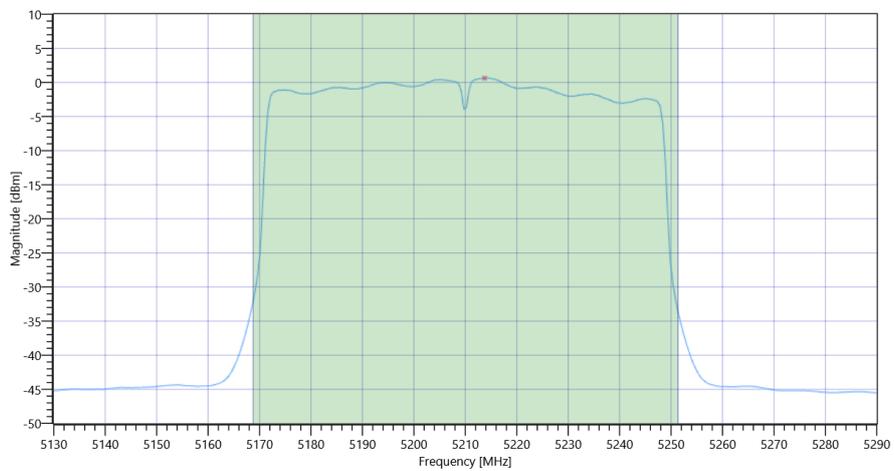
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.22   5   35
Start [MHz]   Stop [MHz]	5130.000   5290.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	17.6	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	17.6	dBm	PASS
Limit: 11 dBm + 10 log 82.56					
Max Output Power DC corrected	--	30.17	17.6	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	0.63	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	0.63	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 17:58:23
Ambit Temp [°C]   Humidity [rel%]	24.3   22
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.28	dBm	INFO
Ref. Frequency	---	---	5226.380	MHz	INFO

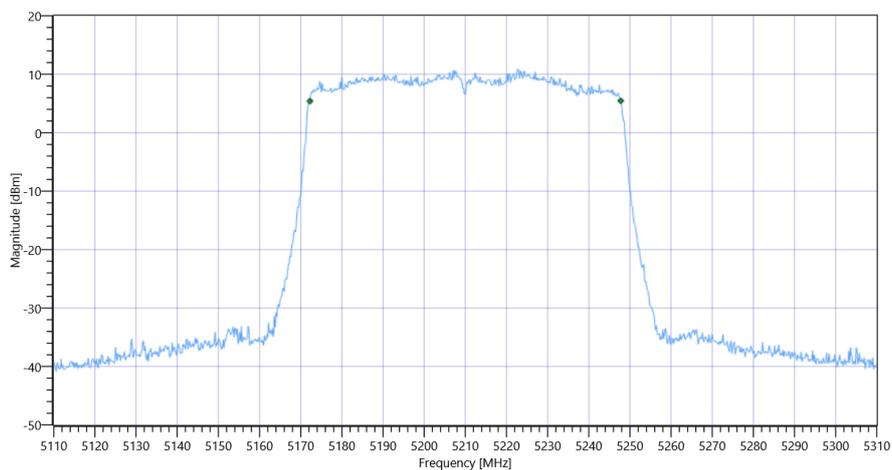
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.28   5   30
Start [MHz]   Stop [MHz]	5110.000   5310.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

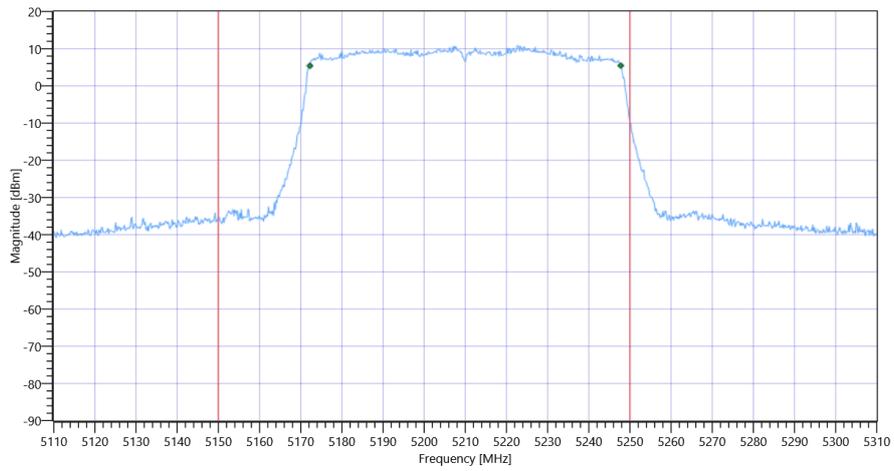
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5150.000000	---	5172.2378	MHz	PASS
T2 99%	---	5250.000000	5247.7622	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 99PCT

### Plot: Bandwidth within Band

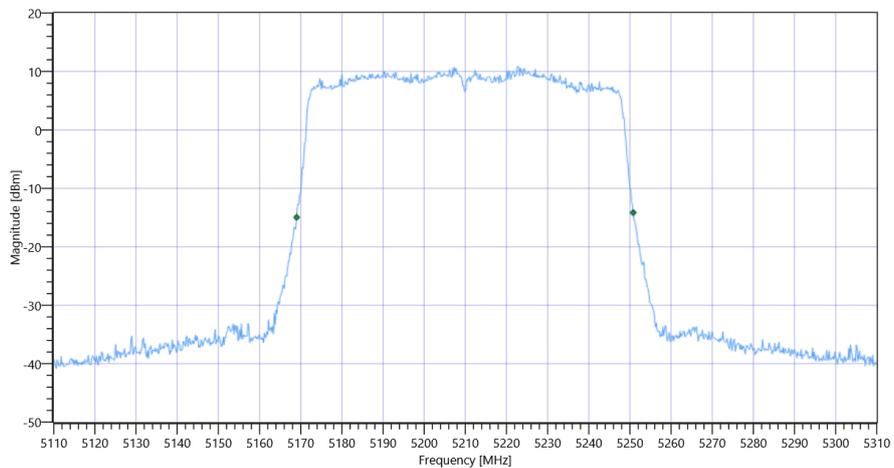


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

RESULT

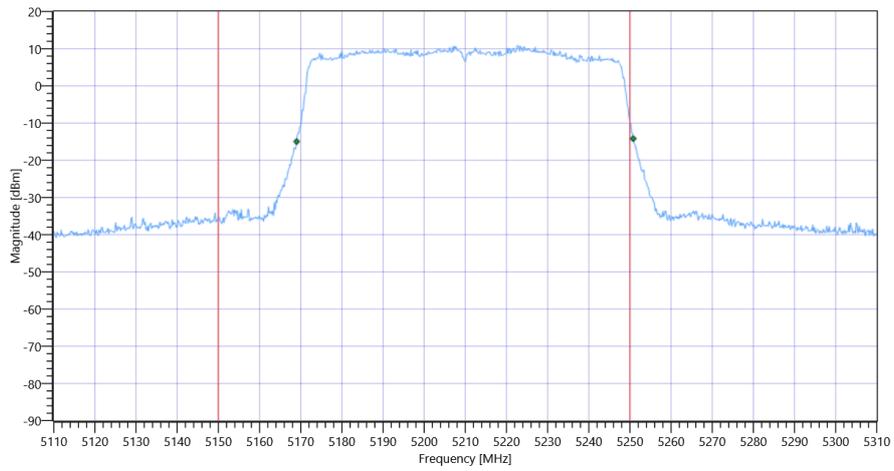
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.8	MHz	INFO
T1 26dB	5150.000000	---	5169.0000	MHz	PASS
T2 26dB	---	5250.000000	5250.8000	MHz	DFS required

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1



## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 17:55:42
Ambit Temp [°C]   Humidity [rel%]	24.3   22
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1

Add. Information

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.89	dBm	INFO
Ref. Frequency	---	---	5190.620	MHz	INFO

Evaluation max. Duty Cycle

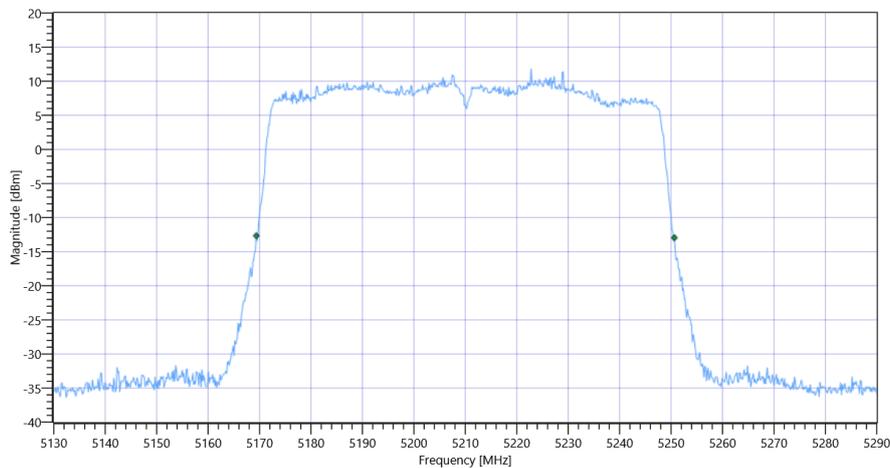
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.28	MHz	INFO
T1 26dB	---	---	5169.3600	MHz	INFO
T2 26dB	---	---	5250.6400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1\_BW

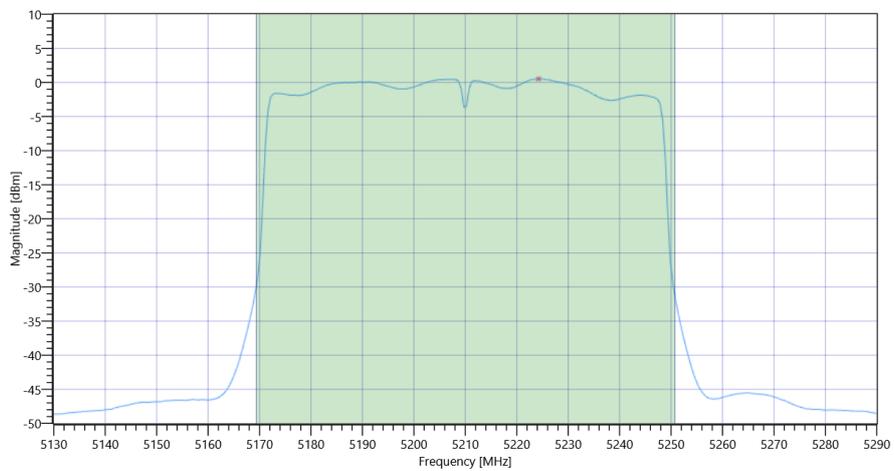
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.89   5   30
Start [MHz]   Stop [MHz]	5130.000   5290.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	17.86	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	17.86	dBm	PASS
Limit: 11 dBm + 10 log 81.28					
Max Output Power DC corrected	--	30.1	17.86	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1 Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	0.52	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	0.52	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 17:54:36
Ambit Temp [°C]   Humidity [rel%]	24.3   22
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-1
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.30	dBm	INFO
Ref. Frequency	---	---	5226.980	MHz	INFO

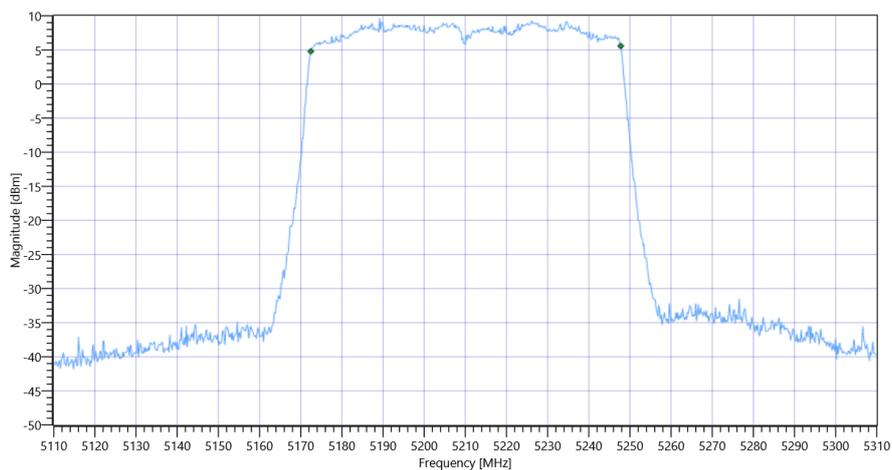
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.30   5   30
Start [MHz]   Stop [MHz]	5110.000   5310.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

## RESULT

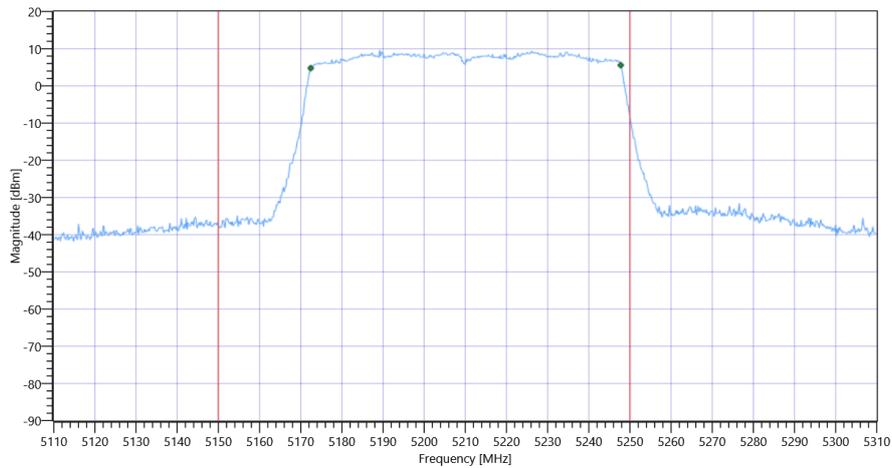
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.325	MHz	INFO
T1 99%	5150.000000	---	5172.4376	MHz	PASS
T2 99%	---	5250.000000	5247.7622	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 99PCT

## Plot: Bandwidth within Band

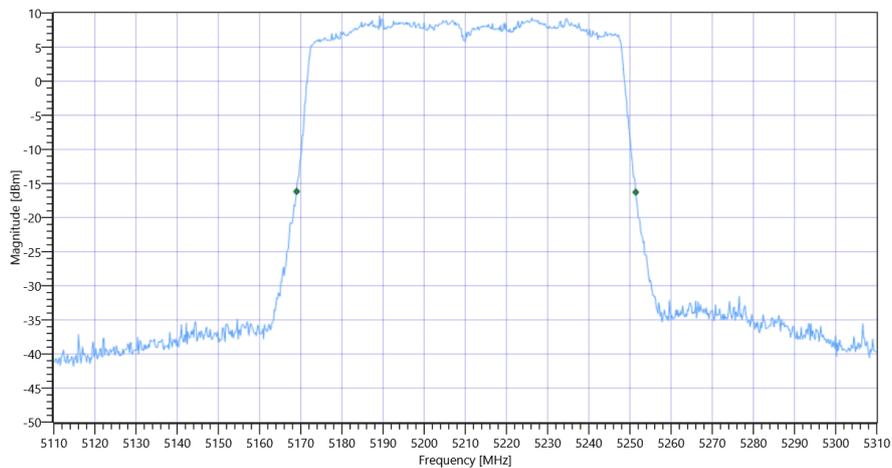


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

## RESULT

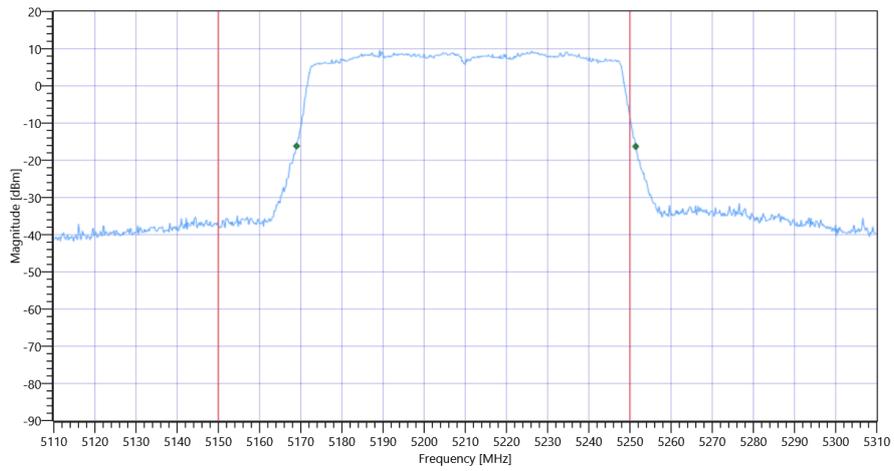
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.4	MHz	INFO
T1 26dB	5150.000000	---	5169.0000	MHz	PASS
T2 26dB	---	5250.000000	5251.4000	MHz	DFS required

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-1

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1

### Test References

TC Start	14.12.2022 17:51:54
Ambit Temp [°C]   Humidity [rel%]	24.3   22
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-1

Add. Information

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5210
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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



## Test at TX 5210 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.27	dBm	INFO
Ref. Frequency	---	---	5226.580	MHz	INFO

Evaluation max. Duty Cycle

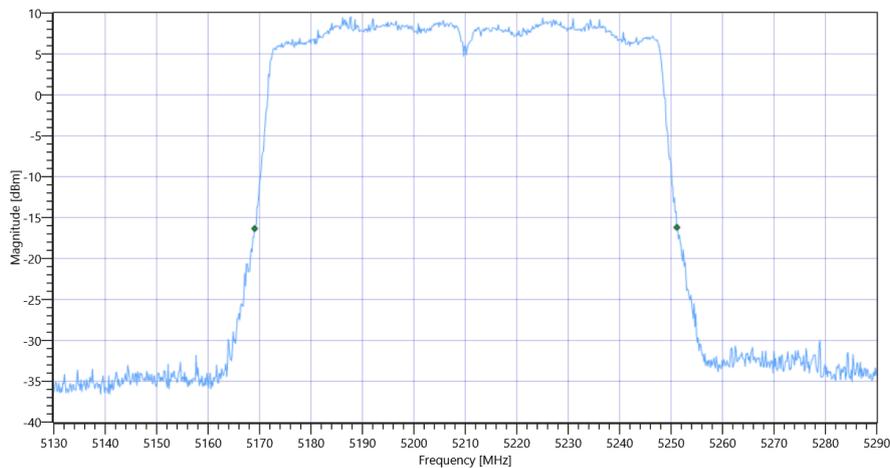
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.08	MHz	INFO
T1 26dB	---	---	5169.0400	MHz	INFO
T2 26dB	---	---	5251.1200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1\_BW

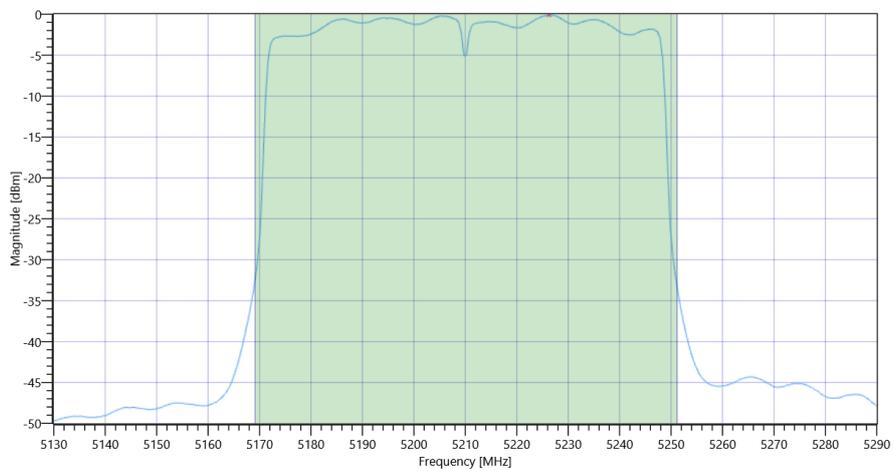
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.27   5   30
Start [MHz]   Stop [MHz]	5130.000   5290.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	17.31	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	17.31	dBm	PASS
Limit: 11 dBm + 10 log 82.08					
Max Output Power DC corrected	---	30.14	17.31	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-0.06	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	-0.06	dBm/1MHz	PASS

# FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## Test References

TC Start	14.12.2022 18:24:35
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

## EUT Common Settings WLAN5Gx

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

## Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	None

## Test Equipment

## Test at TX 5290 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	15.39	dBm	INFO
Ant:1 BW 26dB	--	--	81.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.08	dBm	INFO
Ant:2 BW 26dB	--	--	81.440	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	15.63	dBm	INFO
Ant:3 BW 26dB	--	--	82.080	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	14.38	dBm	INFO
Ant:4 BW 26dB	--	--	81.440	MHz	INFO
Σ Limit absolute	--	24	21.43	dBm	PASS
Σ Limit: 11 dBm + 10 log 81.44	--	30.11	21.43	dBm	PASS

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	-1.06	dBm/1MHz	INFO
Ant:2 PSD	--	--	-0.99	dBm/1MHz	INFO
Ant:3 PSD	--	--	-1.62	dBm/1MHz	INFO
Ant:4 PSD	--	--	-2.59	dBm/1MHz	INFO
Σ	--	11	4.5	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:23:33
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.02	dBm	INFO
Ref. Frequency	---	---	5277.410	MHz	INFO

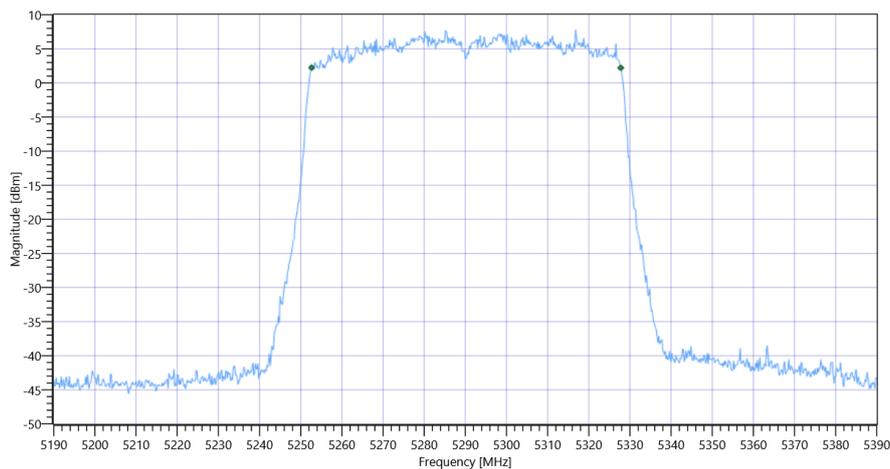
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.02   4.8   25
Start [MHz]   Stop [MHz]	5190.000   5390.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

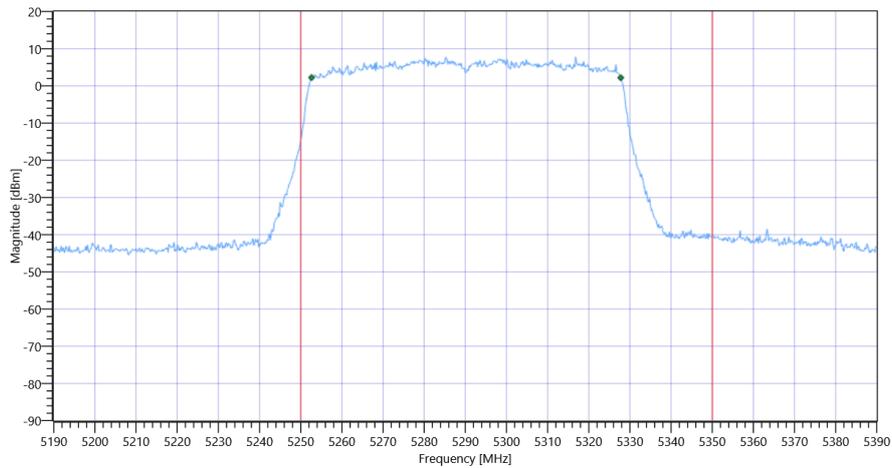
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.125	MHz	INFO
T1 99%	5250.000000	---	5252.6374	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.7622	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

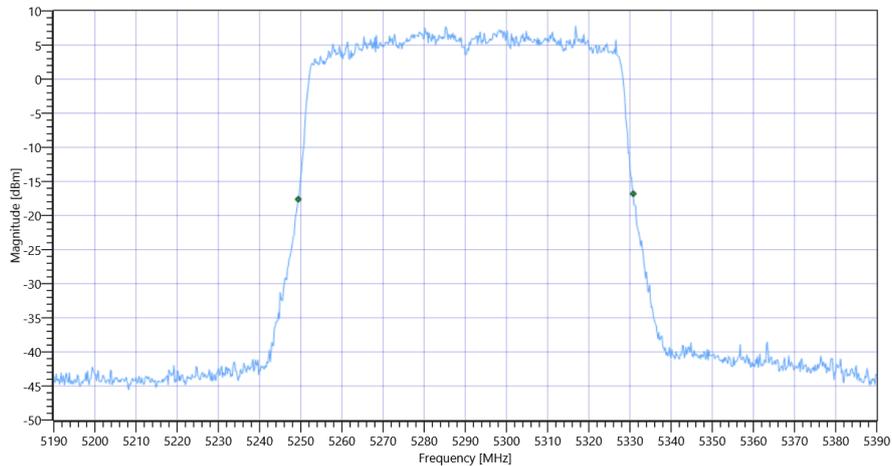


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## RESULT

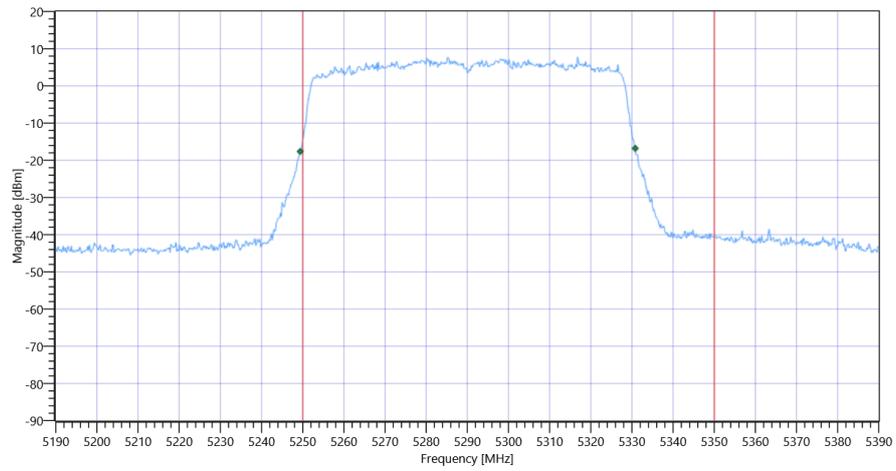
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.4	MHz	INFO
T1 26dB	5250.000000	---	5249.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.8000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A



## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:20:51
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.97	dBm	INFO
Ref. Frequency	---	---	5307.380	MHz	INFO

Evaluation max. Duty Cycle

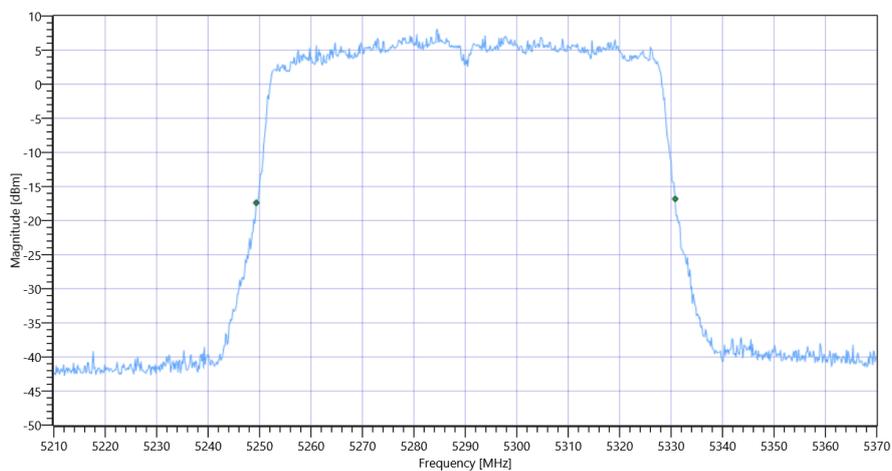
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.44	MHz	INFO
T1 26dB	---	---	5249.3600	MHz	INFO
T2 26dB	---	---	5330.8000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A\_BW

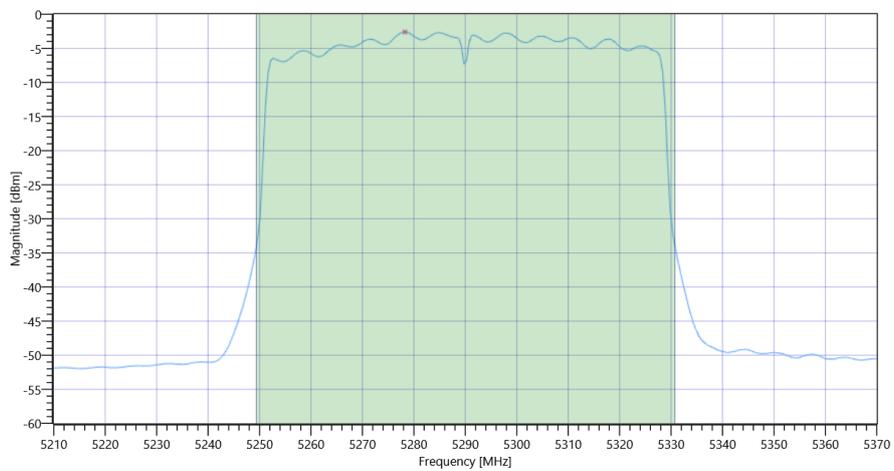
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	18.97   4.8   30
Start [MHz]   Stop [MHz]	5210.000   5370.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	14.38	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	14.38	dBm	PASS
Limit: 11 dBm + 10 log 81.44					
Max Output Power DC corrected	---	30.11	14.38	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-2.59	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-2.59	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:19:48
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.90	dBm	INFO
Ref. Frequency	---	---	5294.400	MHz	INFO

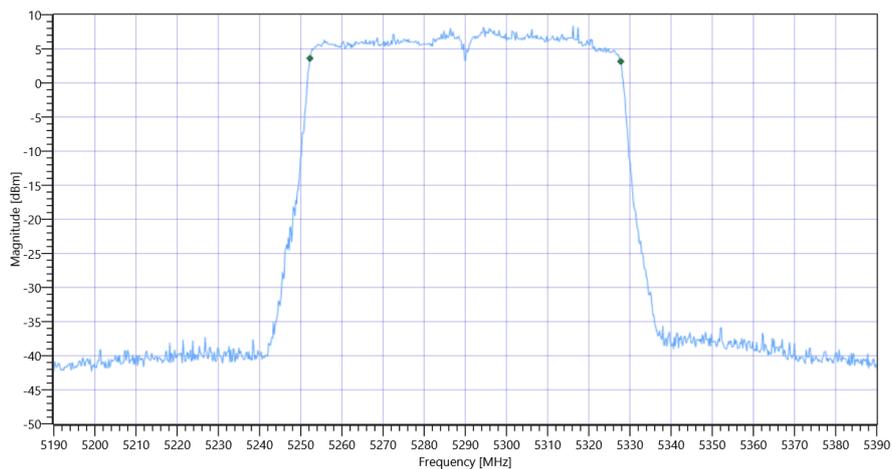
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.90   4.8   30
Start [MHz]   Stop [MHz]	5190.000   5390.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

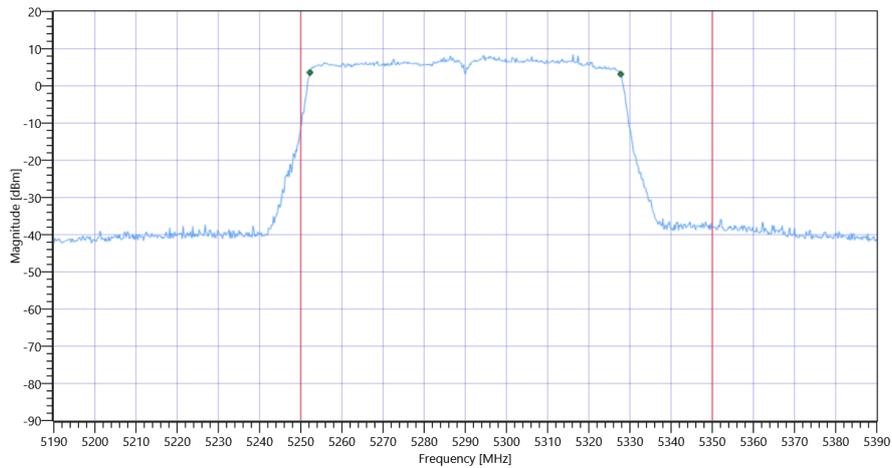
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5250.000000	---	5252.2378	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.7622	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

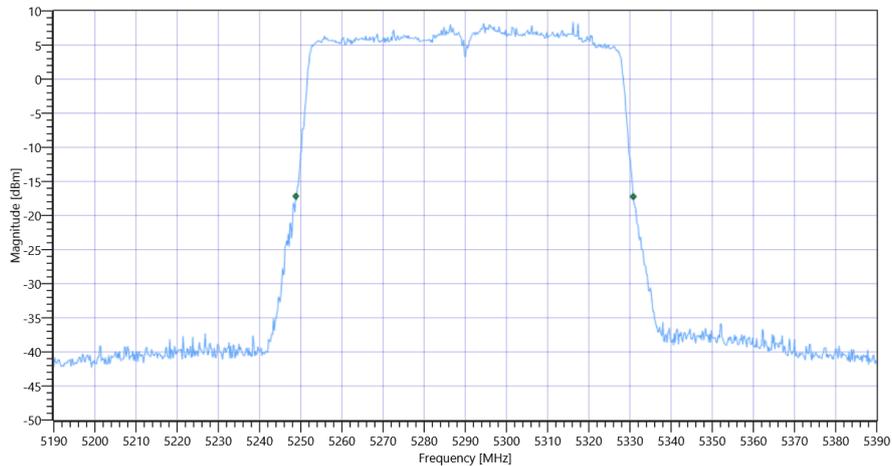


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## RESULT

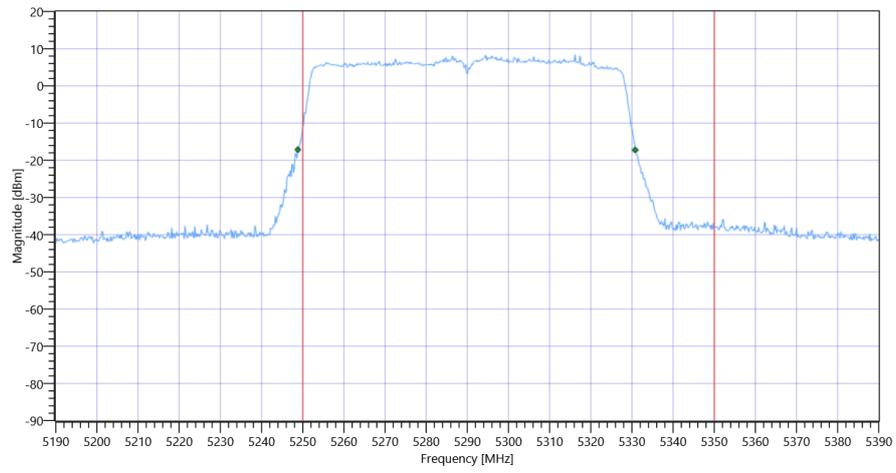
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82	MHz	INFO
T1 26dB	5250.000000	---	5248.8000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.8000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:17:06
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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



## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.36	dBm	INFO
Ref. Frequency	---	---	5295.990	MHz	INFO

Evaluation max. Duty Cycle

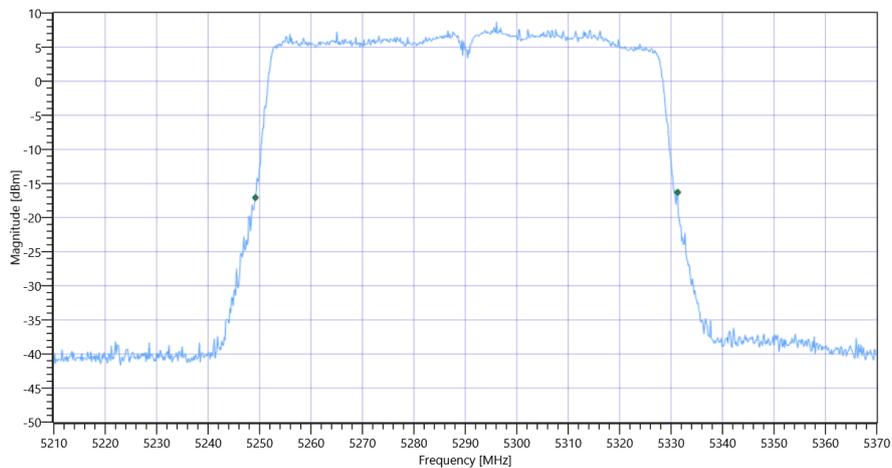
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.08	MHz	INFO
T1 26dB	---	---	5249.2000	MHz	INFO
T2 26dB	---	---	5331.2800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A\_BW

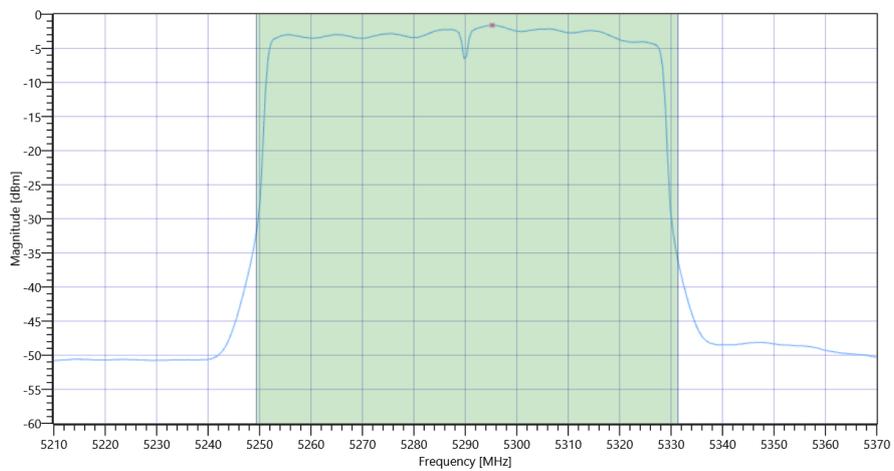
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.36   4.8   30
Start [MHz]   Stop [MHz]	5210.000   5370.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.63	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.63	dBm	PASS
Limit: 11 dBm + 10 log 82.08					
Max Output Power DC corrected	---	30.14	15.63	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-1.62	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-1.62	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:16:03
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.02	dBm	INFO
Ref. Frequency	---	---	5304.390	MHz	INFO

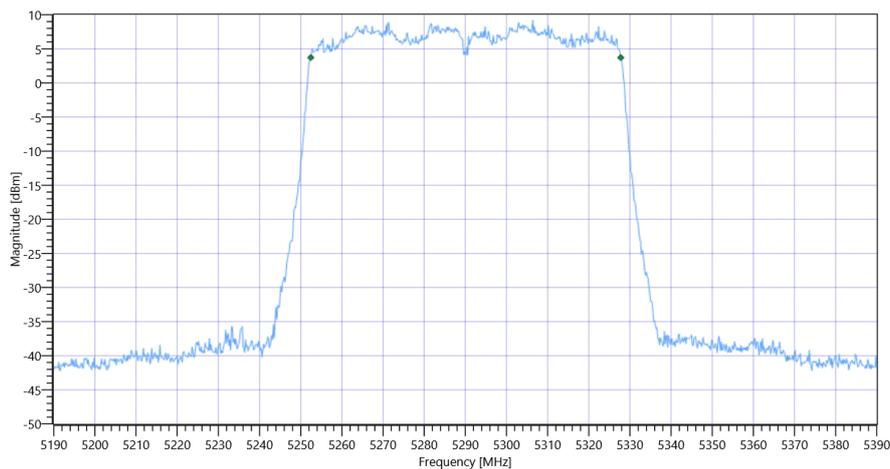
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.02   4.8   30
Start [MHz]   Stop [MHz]	5190.000   5390.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

## RESULT

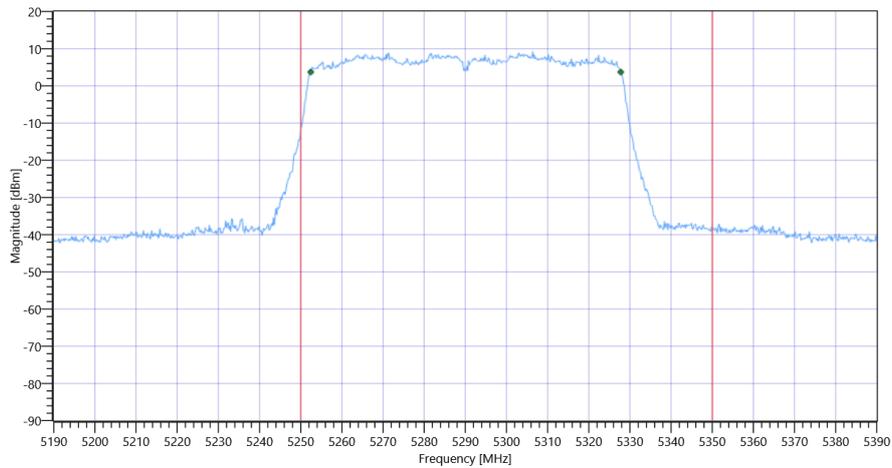
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.325	MHz	INFO
T1 99%	5250.000000	---	5252.4376	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.7622	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 99PCT

## Plot: Bandwidth within Band

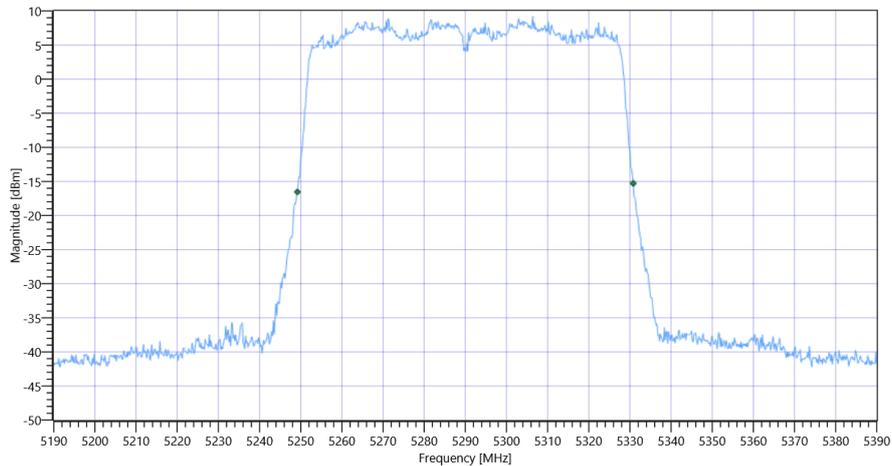


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## RESULT

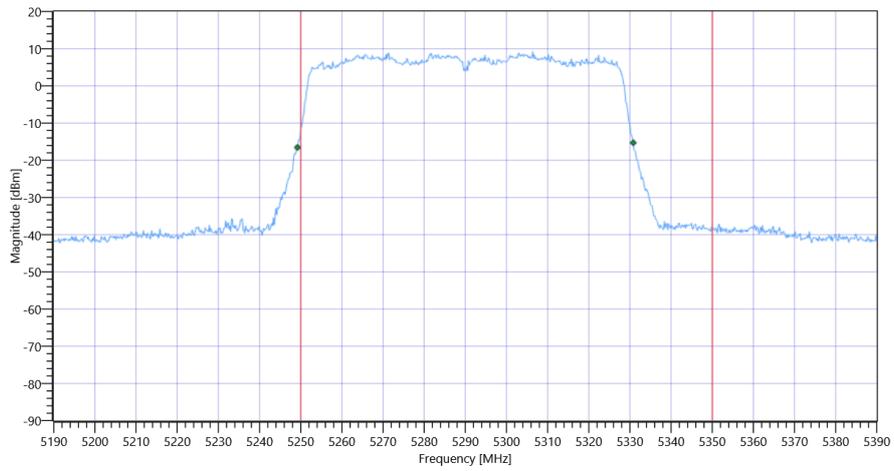
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.6	MHz	INFO
T1 26dB	5250.000000	---	5249.2000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.8000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:13:21
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.74	dBm	INFO
Ref. Frequency	---	---	5284.210	MHz	INFO

Evaluation max. Duty Cycle

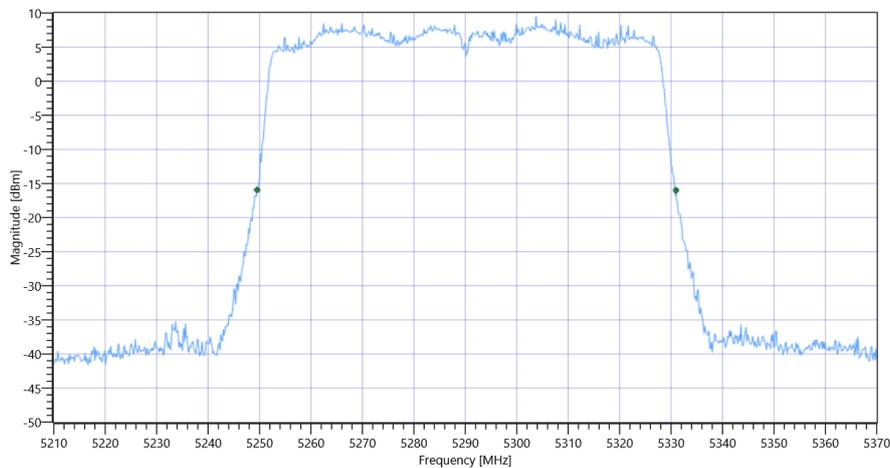
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.44	MHz	INFO
T1 26dB	---	---	5249.5200	MHz	INFO
T2 26dB	---	---	5330.9600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A\_BW

Maximum Output Power

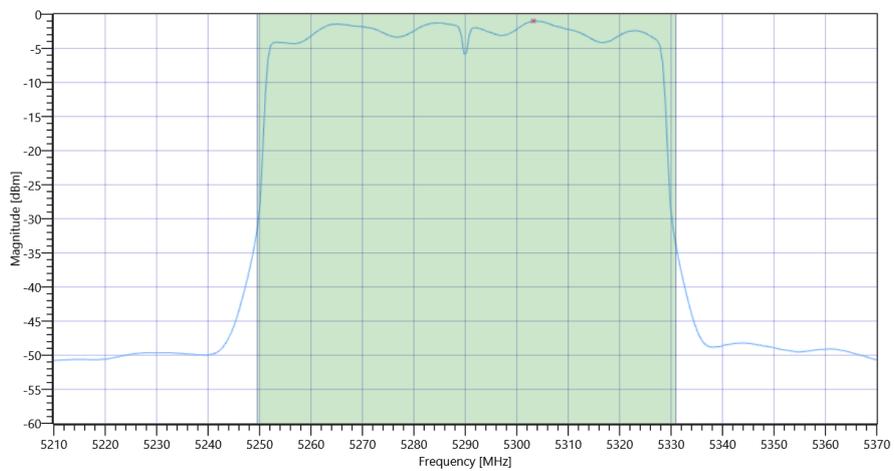
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.74   4.8   30
Start [MHz]   Stop [MHz]	5210.000   5370.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE



RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.08	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.08	dBm	PASS
Limit: 11 dBm + 10 log 81.44					
Max Output Power DC corrected	---	30.11	16.08	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-0.99	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-0.99	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:12:19
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.97	dBm	INFO
Ref. Frequency	---	---	5287.000	MHz	INFO

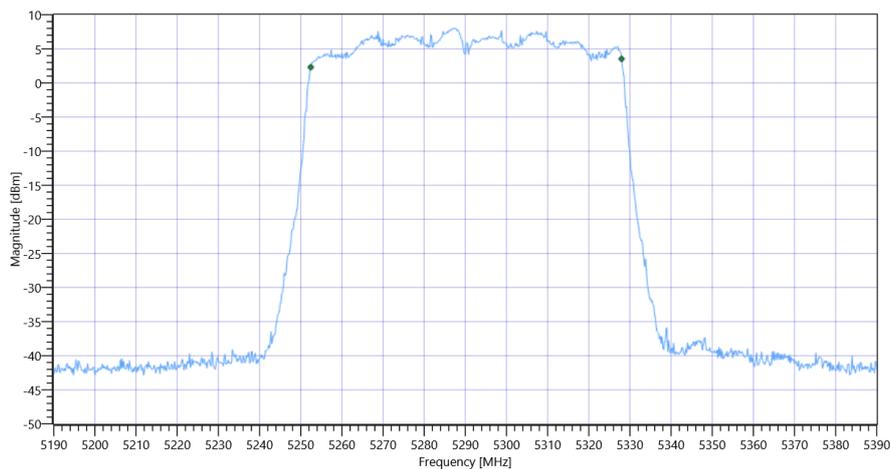
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.97   4.8   30
Start [MHz]   Stop [MHz]	5190.000   5390.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

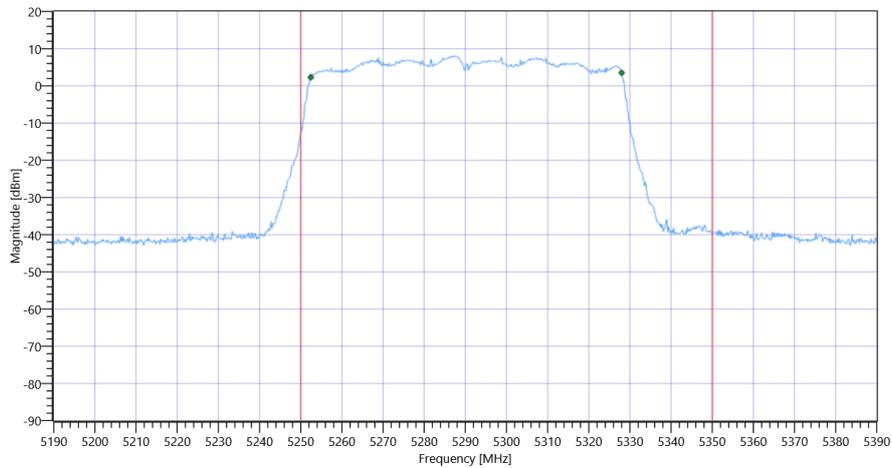
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5250.000000	---	5252.4376	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5327.9620	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

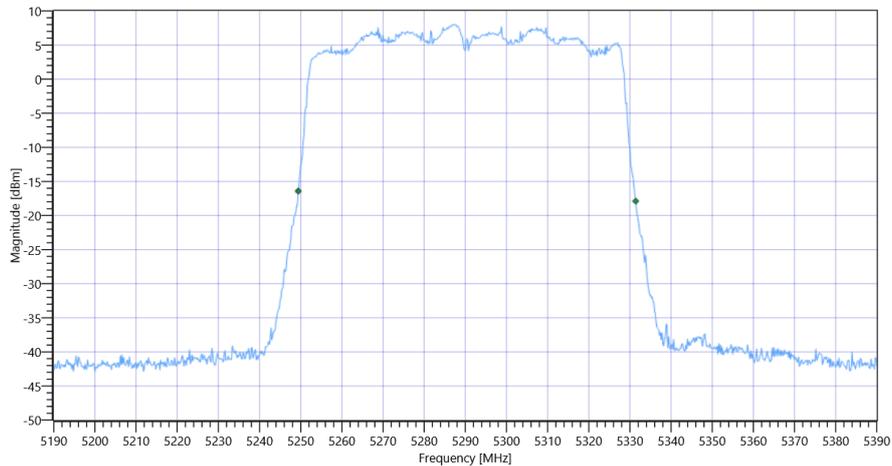


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## RESULT

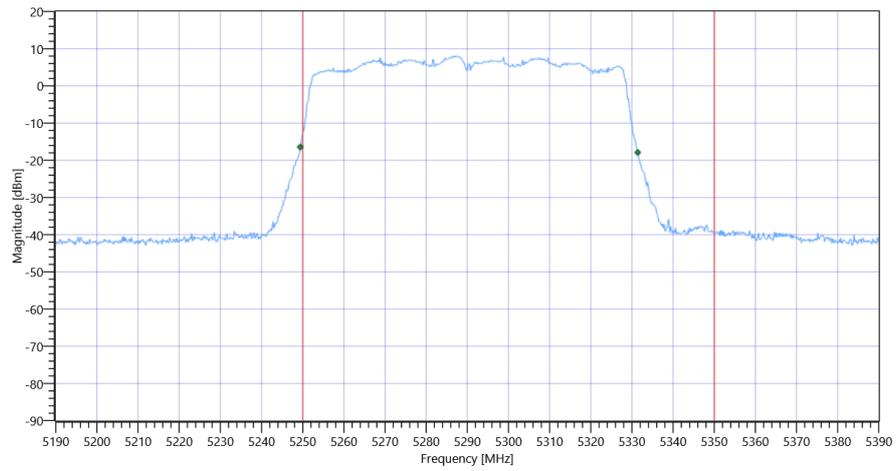
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82	MHz	INFO
T1 26dB	5250.000000	---	5249.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5331.4000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A

### Test References

TC Start	14.12.2022 18:09:37
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-2A
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5290
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5290 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.47	dBm	INFO
Ref. Frequency	---	---	5288.400	MHz	INFO

Evaluation max. Duty Cycle

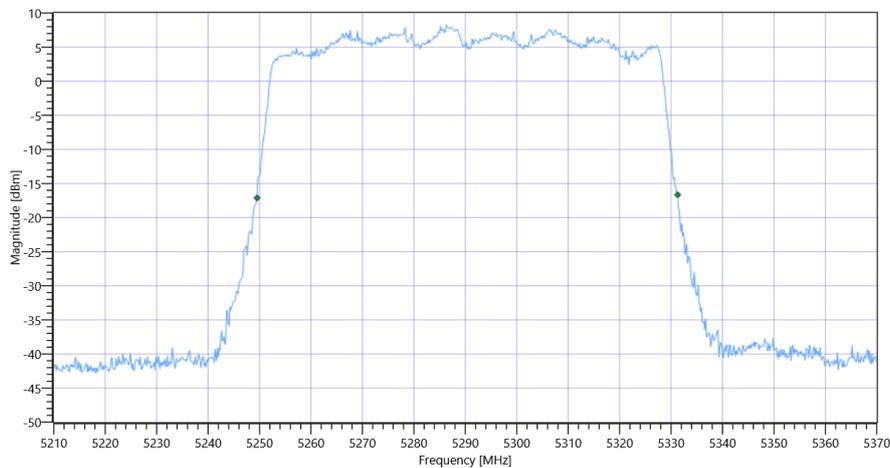
### Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.76	MHz	INFO
T1 26dB	---	---	5249.5200	MHz	INFO
T2 26dB	---	---	5331.2800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A\_BW

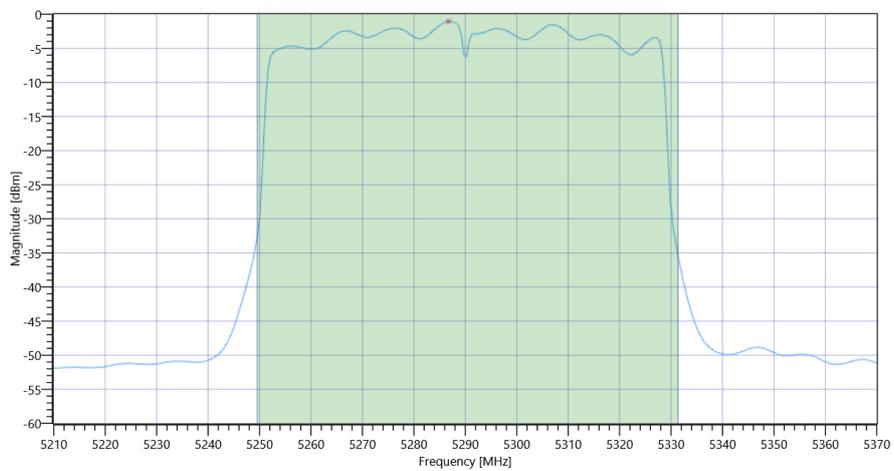
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	18.47   4.8   30
Start [MHz]   Stop [MHz]	5210.000   5370.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	107000   1   320   SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.39	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.39	dBm	PASS
Limit: 11 dBm + 10 log 81.76					
Max Output Power DC corrected	---	30.13	15.39	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT80 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-1.06	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-1.06	dBm/1MHz	PASS



## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

### Test References

TC Start	14.12.2022 18:40:47
Ambit Temp [°C]   Humidity [rel%]	24.1   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 5530
Frequency mid to test	False   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5530 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.09	dBm	INFO
Ref. Frequency	---	---	5554.780	MHz	INFO

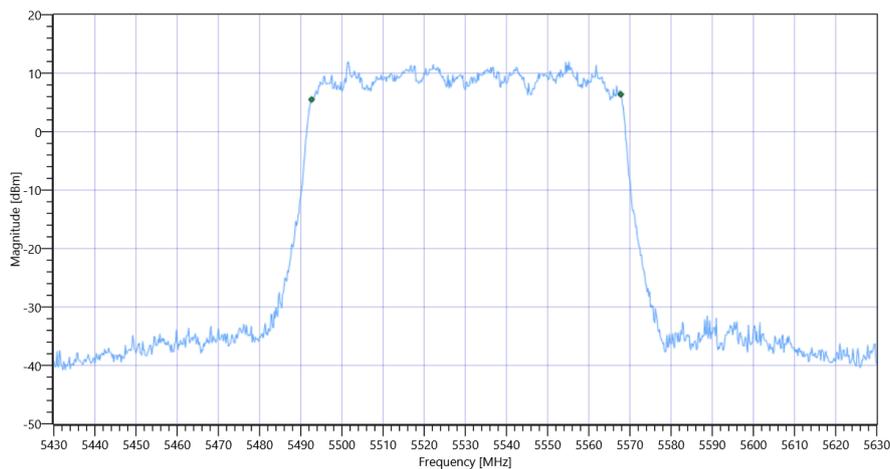
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.09   5.47   30
Start [MHz]   Stop [MHz]	5430.000   5630.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

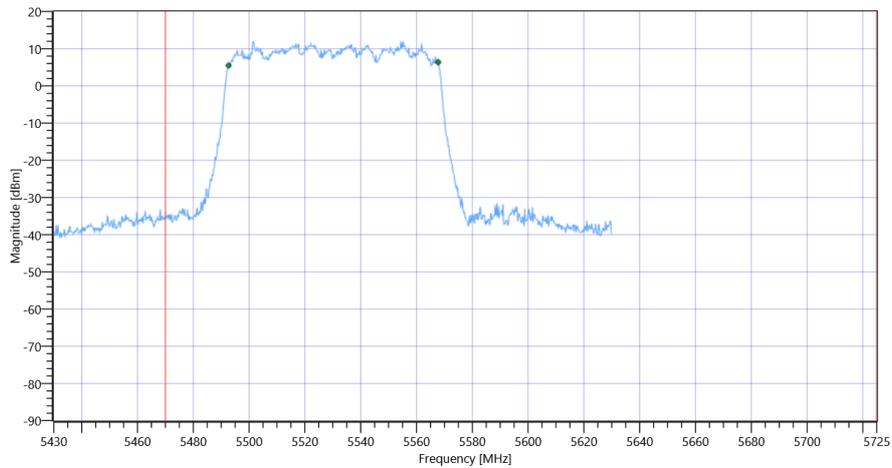
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.125	MHz	INFO
T1 99%	5470.000000	---	5492.6374	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.7622	MHz	

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 99PCT

### Plot: Bandwidth within Band

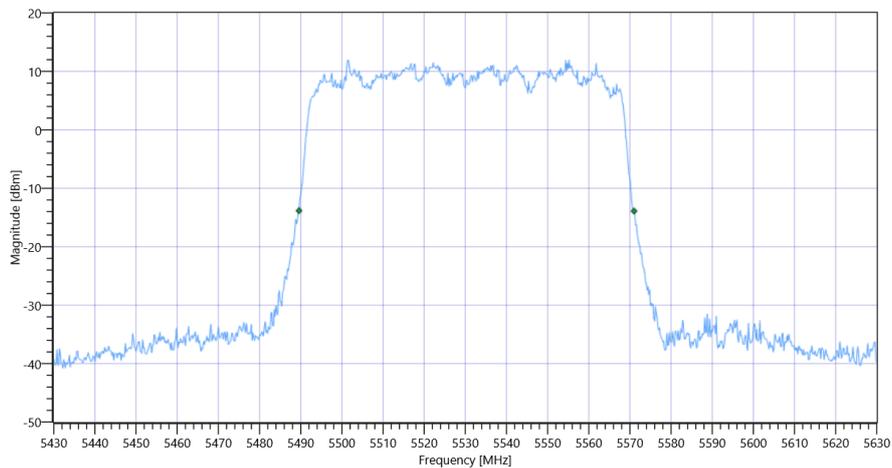


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

**RESULT**

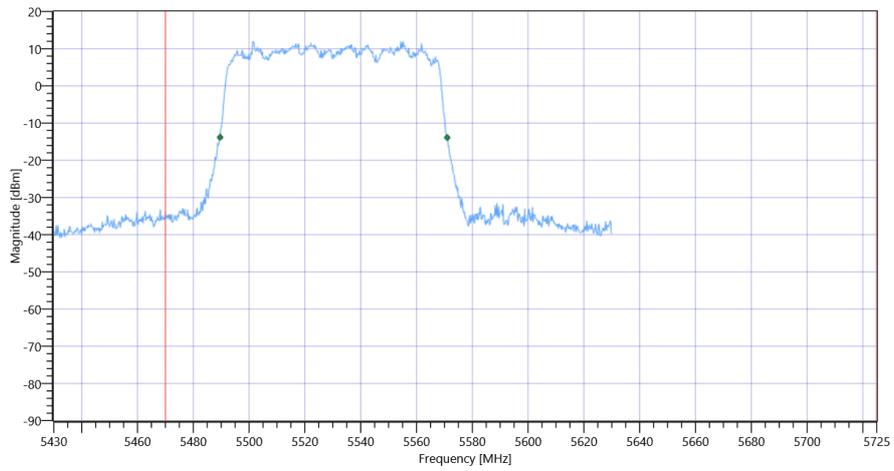
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.4	MHz	INFO
T1 26dB	5470.000000	---	5489.6000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5571.0000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

### Test References

TC Start	14.12.2022 18:37:09
Ambit Temp [°C]   Humidity [rel%]	24.1   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 5530
Frequency mid to test	False   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5530 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.21	dBm	INFO
Ref. Frequency	---	---	5533.600	MHz	INFO

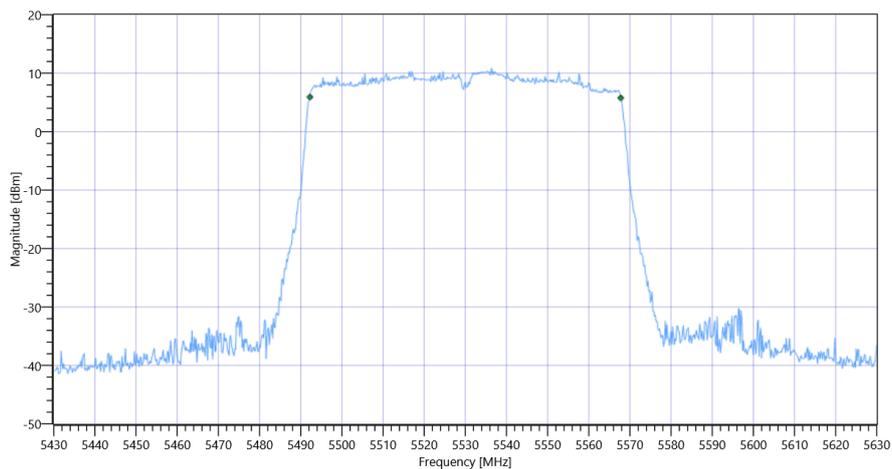
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.21   5.47   30
Start [MHz]   Stop [MHz]	5430.000   5630.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

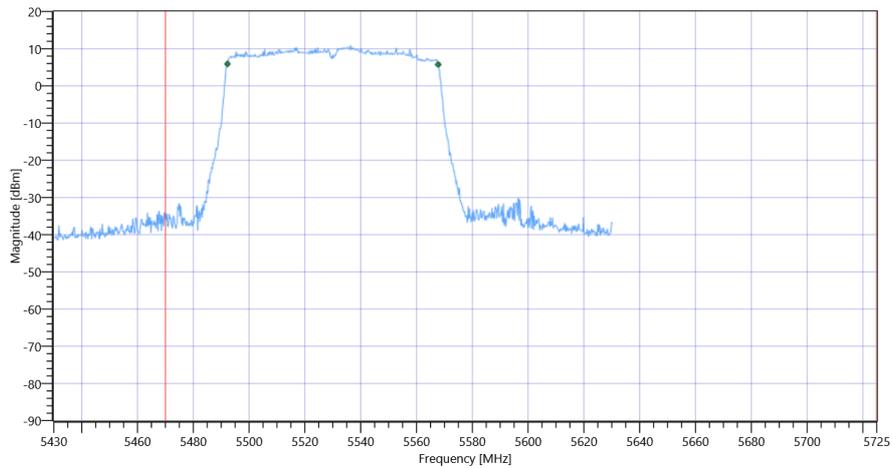
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5470.000000	---	5492.2378	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.7622	MHz	

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 99PCT

### Plot: Bandwidth within Band

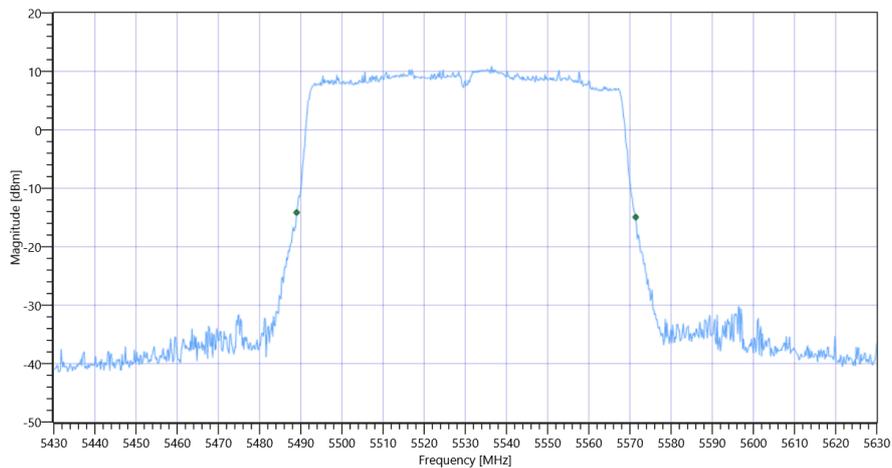


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

**RESULT**

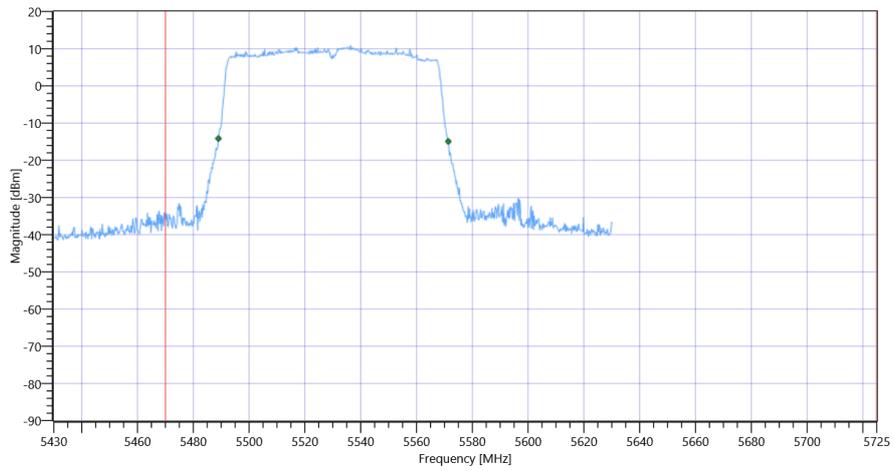
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.4	MHz	INFO
T1 26dB	5470.000000	---	5489.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5571.4000	MHz	

**Plot: Bandwidth only**



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 26dB

**Plot: Bandwidth within Band**



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C



## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

### Test References

TC Start	14.12.2022 18:33:32
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 5530
Frequency mid to test	False   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5530 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.28	dBm	INFO
Ref. Frequency	---	---	5537.590	MHz	INFO

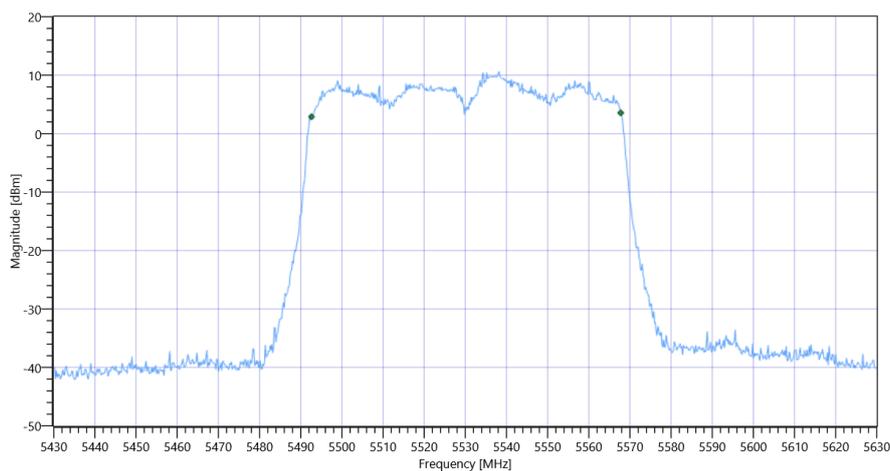
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.28   5.47   30
Start [MHz]   Stop [MHz]	5430.000   5630.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

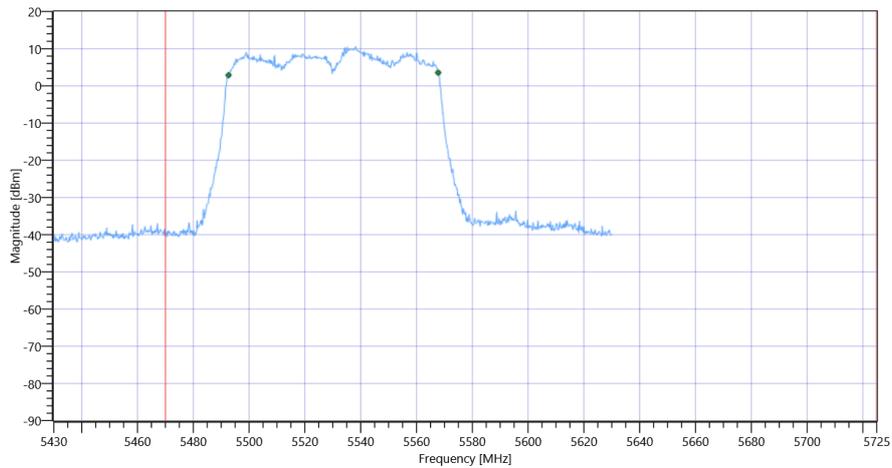
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.125	MHz	INFO
T1 99%	5470.000000	---	5492.6374	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.7622	MHz	

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 99PCT

### Plot: Bandwidth within Band

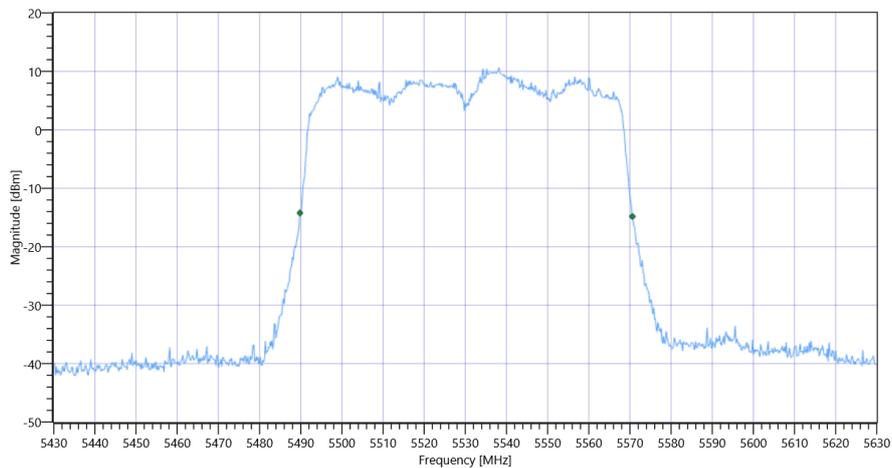


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

**RESULT**

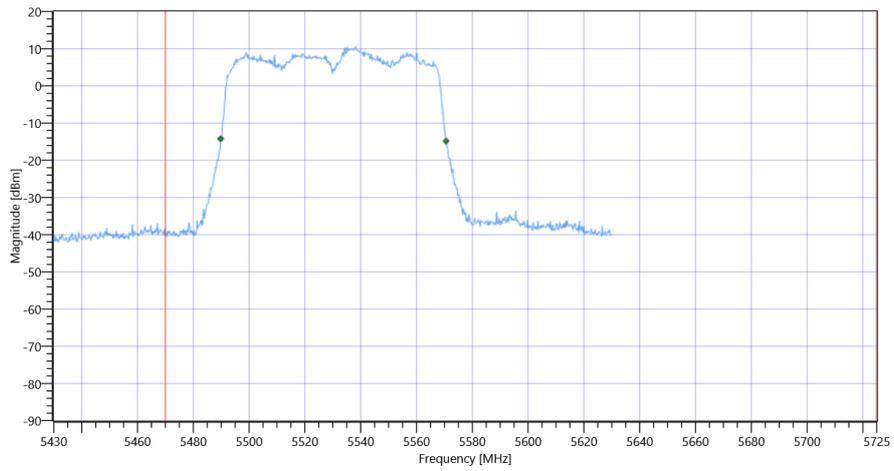
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	80.8	MHz	INFO
T1 26dB	5470.000000	---	5489.8000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5570.6000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

### Test References

TC Start	14.12.2022 18:29:56
Ambit Temp [°C]   Humidity [rel%]	24.2   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 5530
Frequency mid to test	False   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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

## Test at TX 5530 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.90	dBm	INFO
Ref. Frequency	---	---	5525.200	MHz	INFO

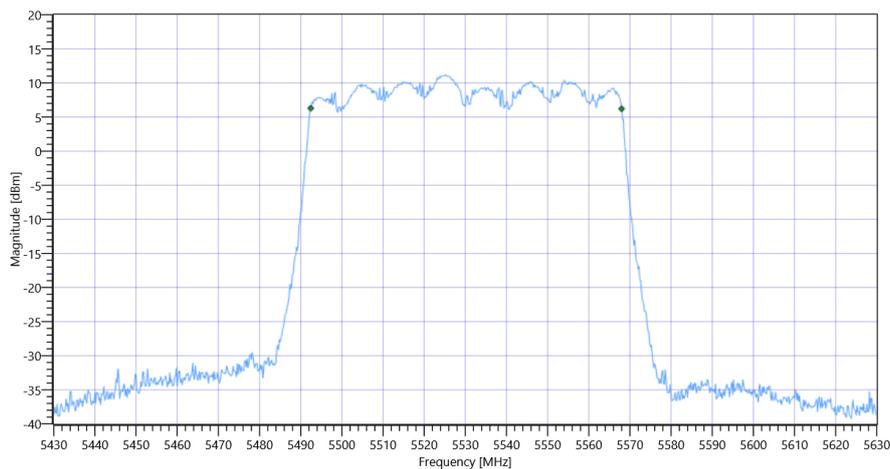
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	18.90   5.47   30
Start [MHz]   Stop [MHz]	5430.000   5630.000
RBW [MHz]   VBW [MHz]	1.000000   5.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

## RESULT

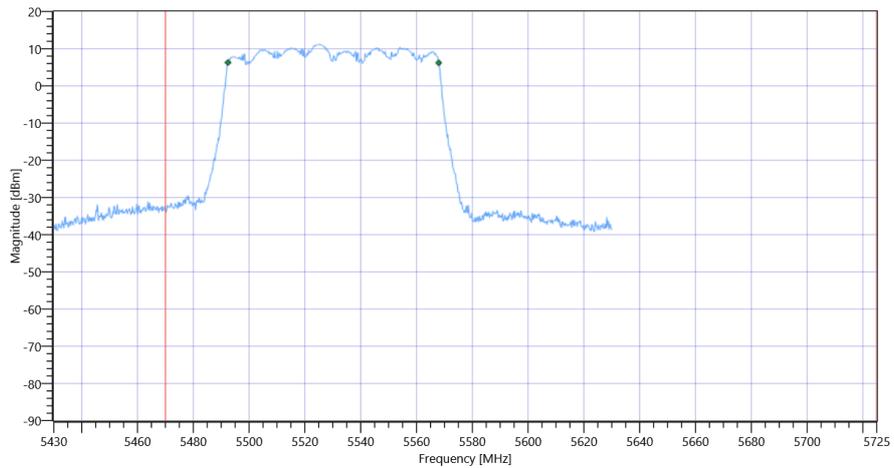
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	75.524	MHz	INFO
T1 99%	5470.000000	---	5492.4376	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5567.9620	MHz	

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 99PCT

## Plot: Bandwidth within Band

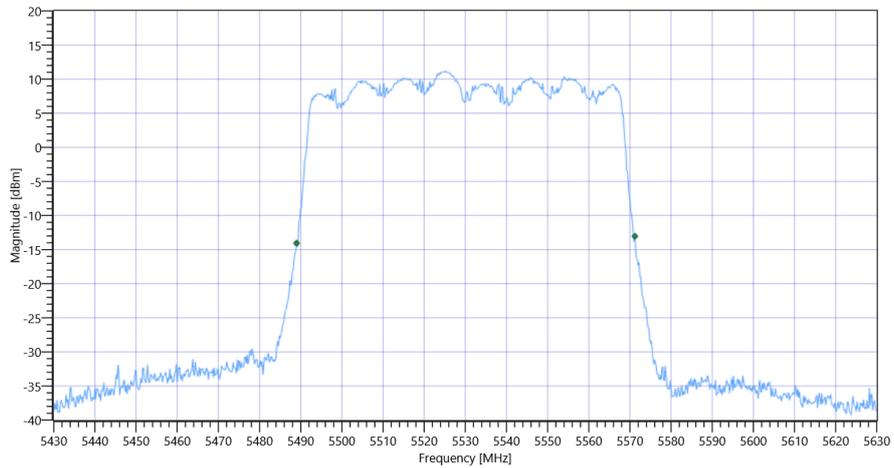


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

**RESULT**

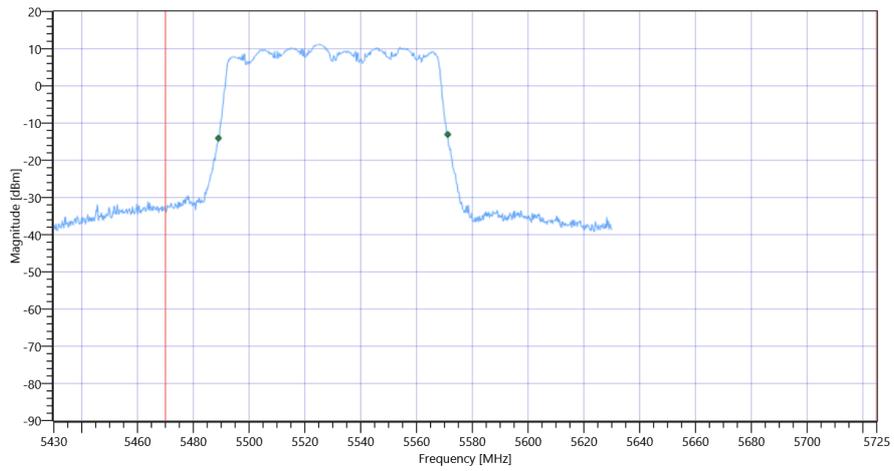
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	82.2	MHz	INFO
T1 26dB	5470.000000	---	5489.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5571.2000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C



# FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT80 mode U-NII-2C

## Test References

TC Start	14.12.2022 21:34:28
Ambit Temp [°C]   Humidity [rel%]	23.6   23
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT80 mode U-NII-2C

Add. Information

## EUT Common Settings WLAN5Gx

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

## Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 5530
Frequency mid to test	True   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	None

## Test Equipment

## Test at TX 5610 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	17.13	dBm	INFO
Ant:1 BW 26dB	--	--	81.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.69	dBm	INFO
Ant:2 BW 26dB	--	--	80.800	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	17.29	dBm	INFO
Ant:3 BW 26dB	--	--	81.920	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	17.06	dBm	INFO
Ant:4 BW 26dB	--	--	81.280	MHz	INFO
Σ Limit absolute	--	24	23.07	dBm	PASS
Σ Limit: 11 dBm + 10 log 80.8	--	30.07	23.07	dBm	PASS

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	0.94	dBm/1MHz	INFO
Ant:2 PSD	--	--	0.49	dBm/1MHz	INFO
Ant:3 PSD	--	--	-0.16	dBm/1MHz	INFO
Ant:4 PSD	--	--	1.07	dBm/1MHz	INFO
Σ	--	11	6.63	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT80 mode U-NII-2C

### Test References

TC Start	14.12.2022 21:33:29
Ambit Temp [°C]   Humidity [rel%]	23.6   23
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-2C
Add. Information	

### EUT Common Settings WLAN5Gx

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

### Test Parameter

Technology to test	WLAN5Gx ac-VHT80 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 5530
Frequency mid to test	True   Freq [MHz] 5610
Frequency high to test	False   Freq [MHz] 5690
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

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