

## Test at TX 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.40	dBm	INFO
Ref. Frequency	---	---	5827.400	MHz	INFO

Evaluation max. Duty Cycle

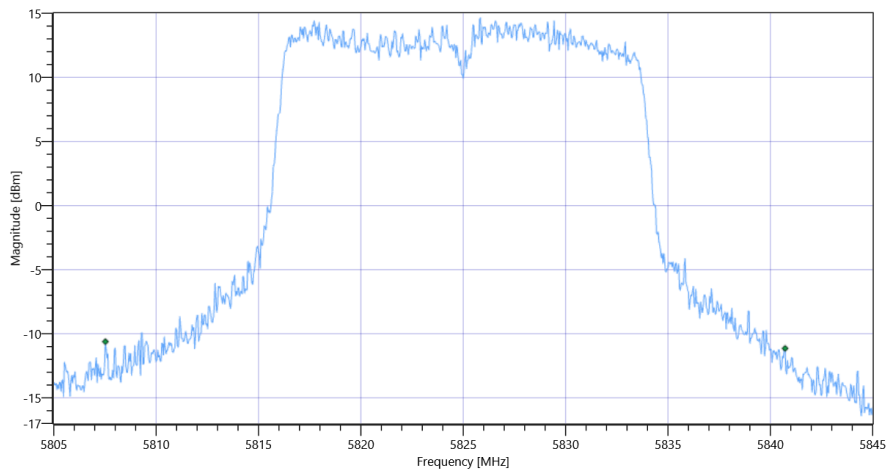
### Duty Cycle evaluation

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	---	---	33.2	MHz	INFO
T1 26dB	---	---	5807.5200	MHz	INFO
T2 26dB	---	---	5840.7200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3\_BW

Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	31.40   5.38   45
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

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	22.61	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	22.61	dBm	PASS
Limit: 11 dBm + 10 log 33.2					
Max Output Power DC corrected	--	26.21	22.61	dBm	na

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3 Max OP and PSD

## Power Spectral Density U-NII-3

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	31.40   5.38   45
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

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	8.29	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.29	dBm/0.5MHz	PASS

*FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3 PSD UNII-3*

## FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:24:52
Ambit Temp [°C]   Humidity [rel%]	25.6   16
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-VHT20 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-VHT20 mode
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]	-10
Switched Path	None

### Test Equipment

## Test at TX 5280 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	16.23	dBm	INFO
Ant:1 BW 26dB	--	--	20.480	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.6	dBm	INFO
Ant:2 BW 26dB	--	--	20.800	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	15.86	dBm	INFO
Ant:3 BW 26dB	--	--	20.880	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	15.9	dBm	INFO
Ant:4 BW 26dB	--	--	20.240	MHz	INFO
Σ Limit absolute	--	24	22.18	dBm	PASS
Σ Limit: 11 dBm + 10 log 20.24	--	24.06	22.18	dBm	PASS

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	5.45	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.28	dBm/1MHz	INFO
Ant:3 PSD	--	--	4.12	dBm/1MHz	INFO
Ant:4 PSD	--	--	4.58	dBm/1MHz	INFO
Σ	--	11	10.91	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:23:59
Ambit Temp [°C]   Humidity [rel%]	25.6   17
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.27	dBm	INFO
Ref. Frequency	---	---	5283.000	MHz	INFO

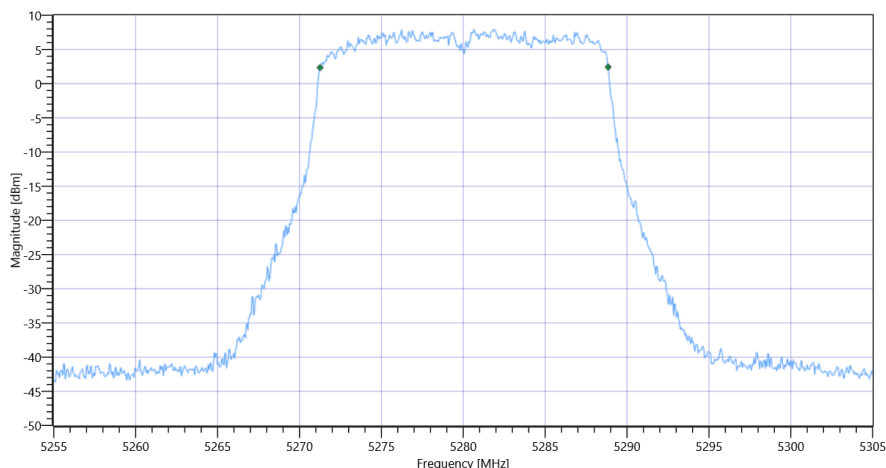
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.27   4.8   35
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

### RESULT

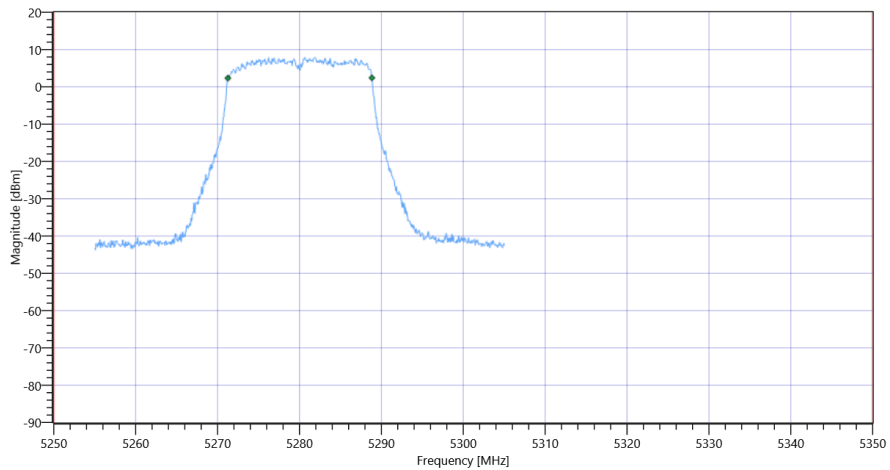
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.582	MHz	INFO
T1 99%	5250.000000	---	5271.2587	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.8412	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

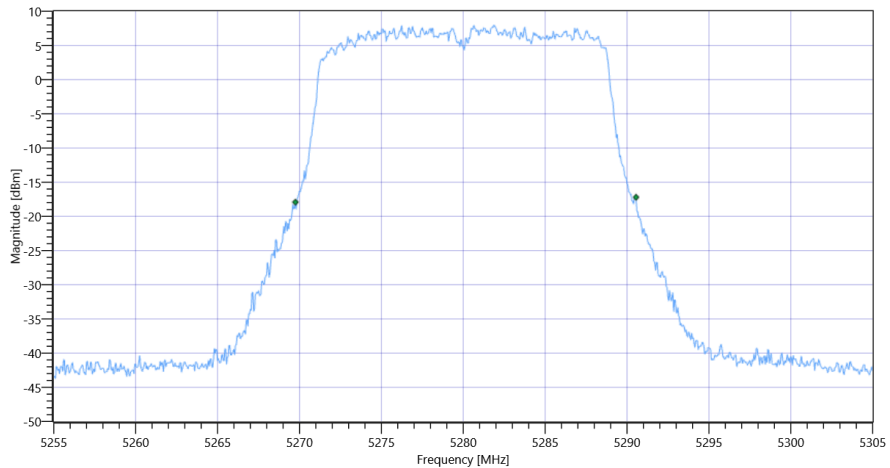


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.8	MHz	INFO
T1 26dB	5250.000000	---	5269.7500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.5500	MHz	PASS

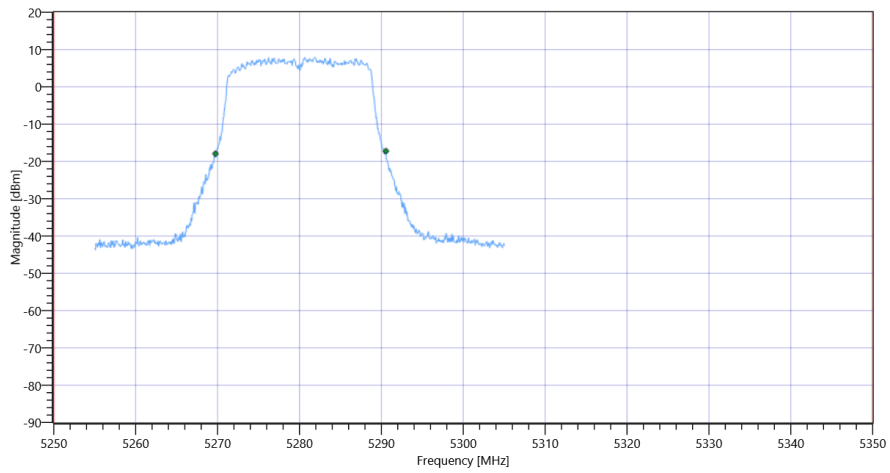
## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band





FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:22:21
Ambit Temp [°C]   Humidity [rel%]	25.7   17
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.54	dBm	INFO
Ref. Frequency	---	---	5282.200	MHz	INFO

Evaluation max. Duty Cycle

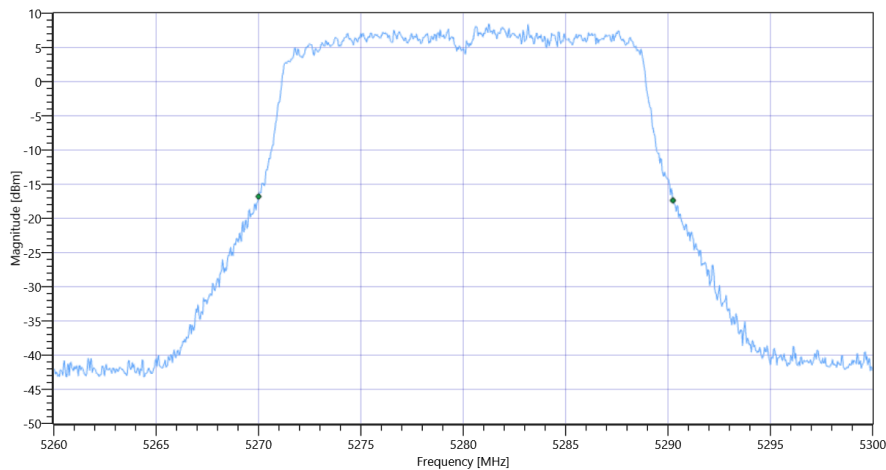
Duty Cycle evaluation

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	---	---	20.24	MHz	INFO
T1 26dB	---	---	5270.0000	MHz	INFO
T2 26dB	---	---	5290.2400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

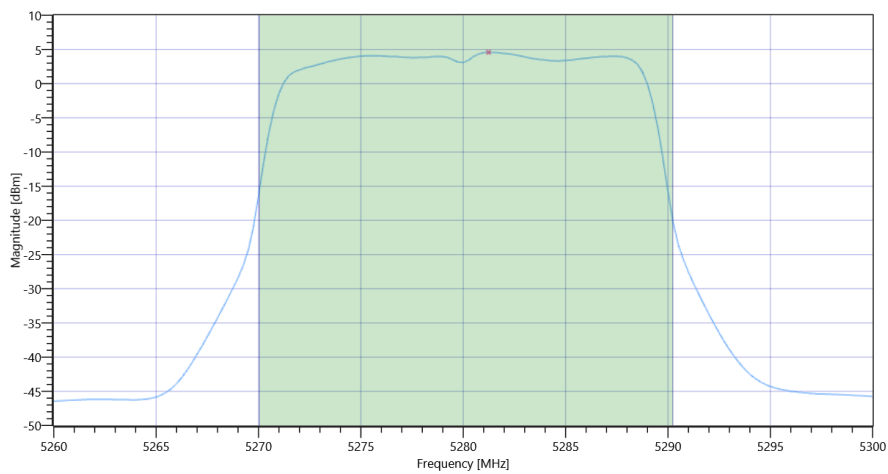
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	24.54   4.8   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.9	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.9	dBm	PASS
Limit: 11 dBm + 10 log 20.24					
Max Output Power DC corrected	---	24.06	15.9	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	4.58	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	4.58	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:21:29
Ambit Temp [°C]   Humidity [rel%]	25.7   17
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.82	dBm	INFO
Ref. Frequency	---	---	5275.600	MHz	INFO

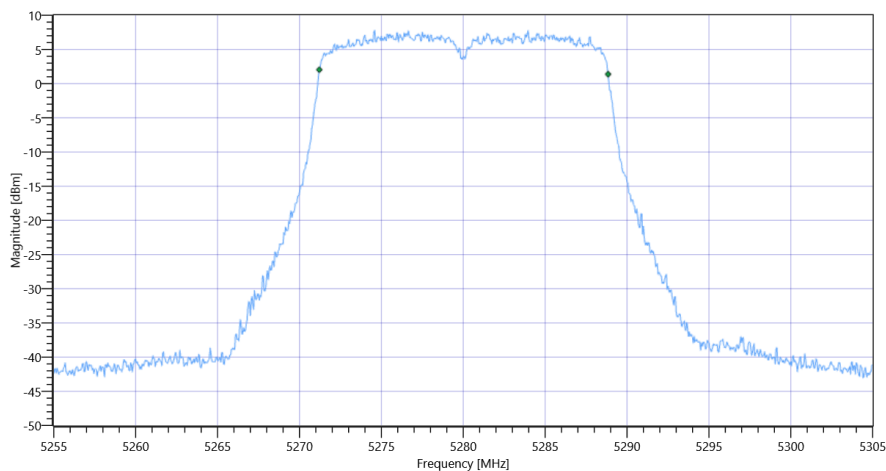
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.82   4.8   35
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

## RESULT

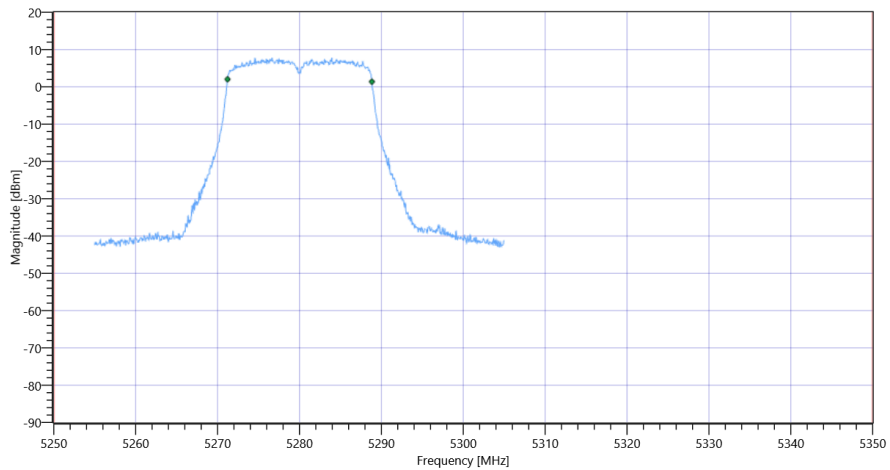
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.632	MHz	INFO
T1 99%	5250.000000	---	5271.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.8412	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

## Plot: Bandwidth within Band

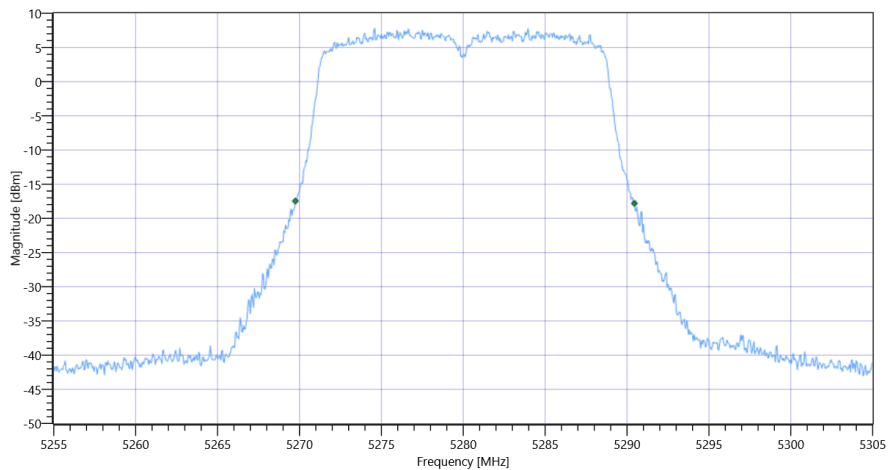


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

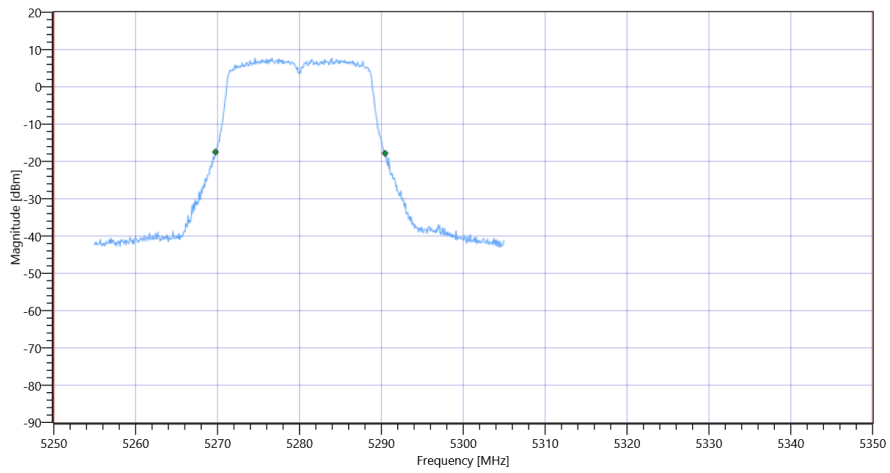
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.7	MHz	INFO
T1 26dB	5250.000000	---	5269.7500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.4500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A



## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:19:52
Ambit Temp [°C]   Humidity [rel%]	25.7   18
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.95	dBm	INFO
Ref. Frequency	---	---	5277.200	MHz	INFO

Evaluation max. Duty Cycle

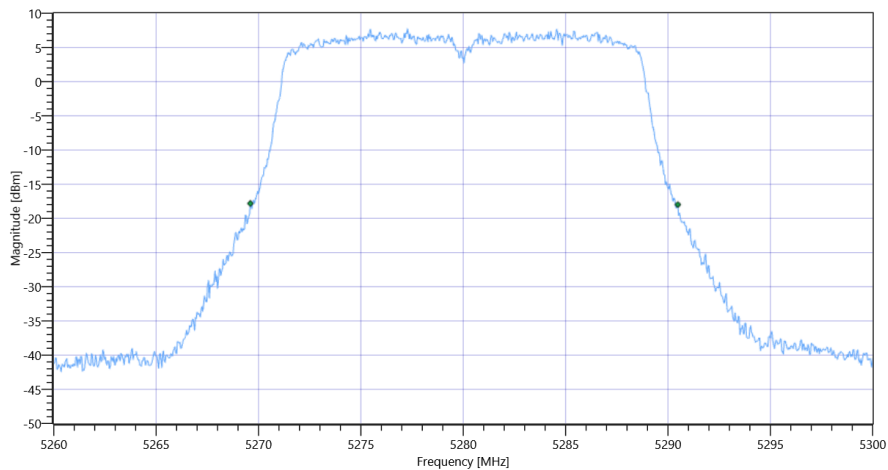
Duty Cycle evaluation

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	---	---	20.88	MHz	INFO
T1 26dB	---	---	5269.6000	MHz	INFO
T2 26dB	---	---	5290.4800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

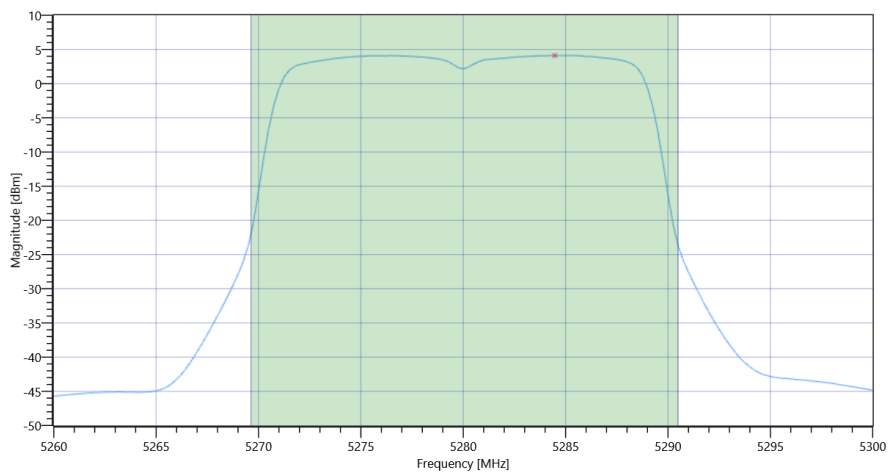
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	23.95   4.8   35
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

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.86	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.86	dBm	PASS
Limit: 11 dBm + 10 log 20.88					
Max Output Power DC corrected	---	24.2	15.86	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	4.12	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	4.12	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:19:00
Ambit Temp [°C]   Humidity [rel%]	25.7   18
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-VHT20 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-VHT20 mode
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	14.33	dBm	INFO
Ref. Frequency	---	---	5282.200	MHz	INFO

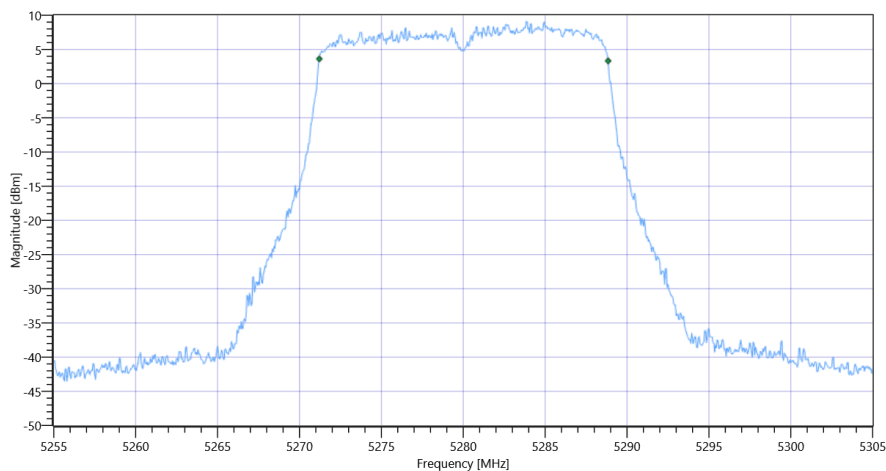
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	22.33   4.8   35
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

## RESULT

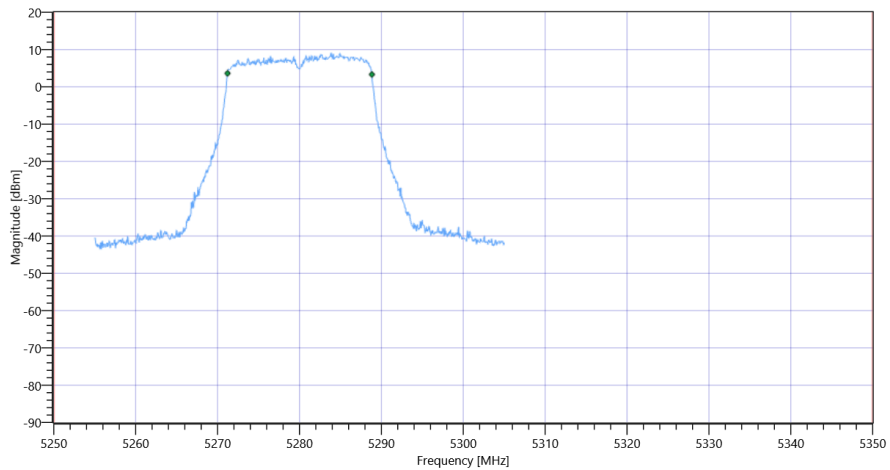
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.632	MHz	INFO
T1 99%	5250.000000	---	5271.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.8412	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

## Plot: Bandwidth within Band

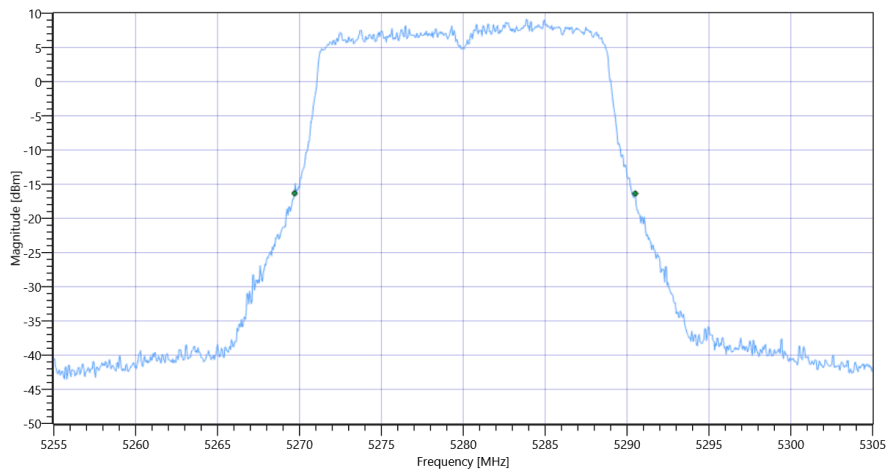


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

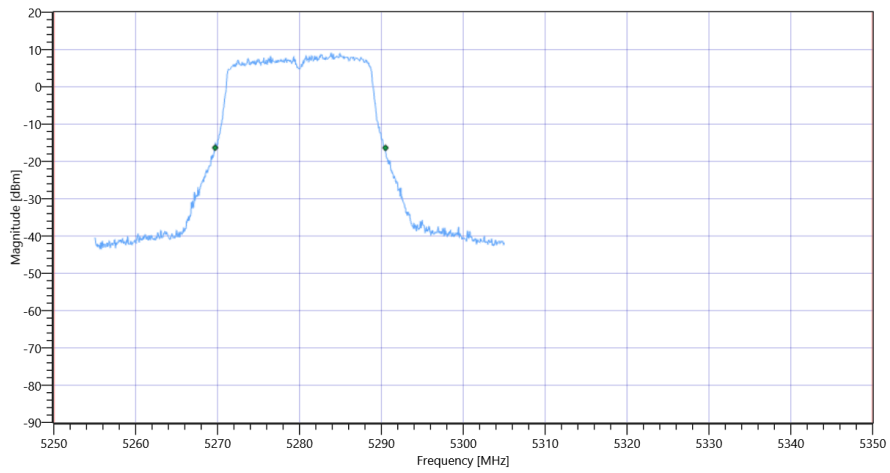
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.8	MHz	INFO
T1 26dB	5250.000000	---	5269.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.5000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:17:22
Ambit Temp [°C]   Humidity [rel%]	25.8   19
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-VHT20 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-VHT20 mode
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.86	dBm	INFO
Ref. Frequency	---	---	5284.000	MHz	INFO

Evaluation max. Duty Cycle

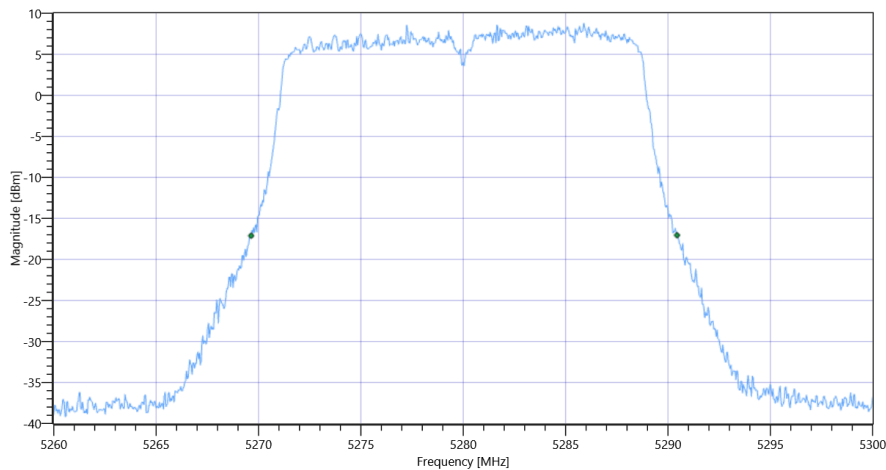
Duty Cycle evaluation

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	---	---	20.8	MHz	INFO
T1 26dB	---	---	5269.6400	MHz	INFO
T2 26dB	---	---	5290.4400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

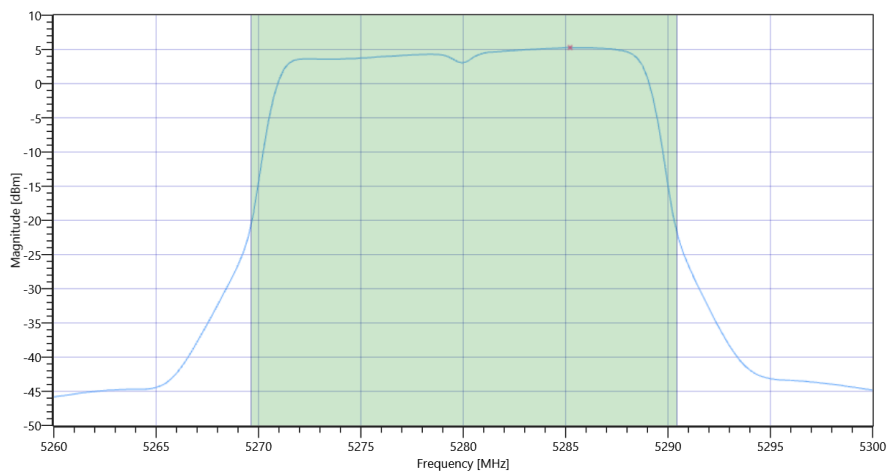
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	24.86   4.8   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	16.6	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	16.6	dBm	PASS
Limit: 11 dBm + 10 log 20.8					
Max Output Power DC corrected	--	24.18	16.6	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	5.28	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.28	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:16:31
Ambit Temp [°C]   Humidity [rel%]	25.8   19
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-VHT20 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-VHT20 mode
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.32	dBm	INFO
Ref. Frequency	---	---	5283.000	MHz	INFO

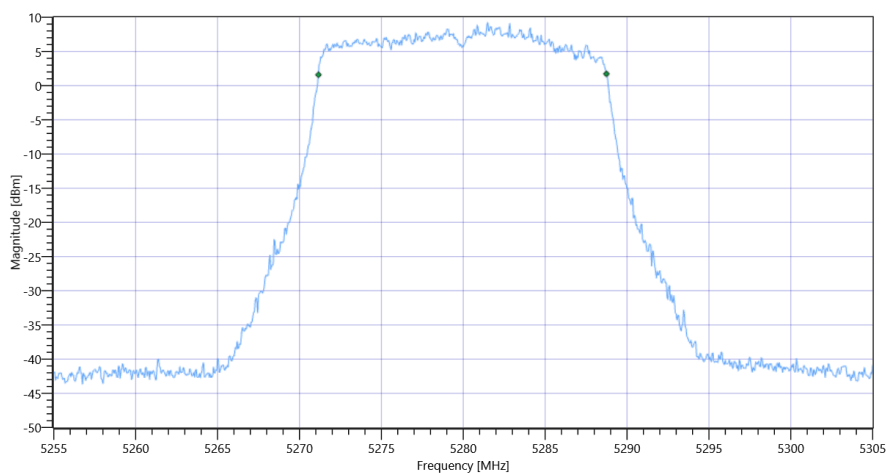
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.32   4.8   35
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

### RESULT

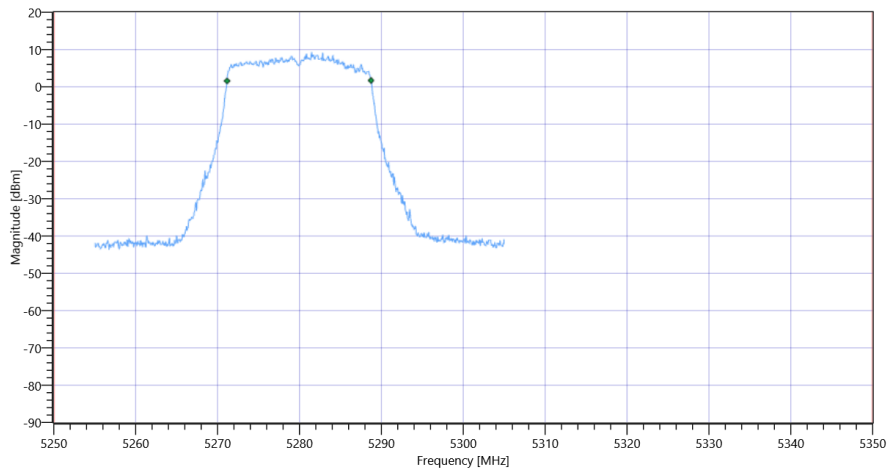
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.582	MHz	INFO
T1 99%	5250.000000	---	5271.1588	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.7413	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

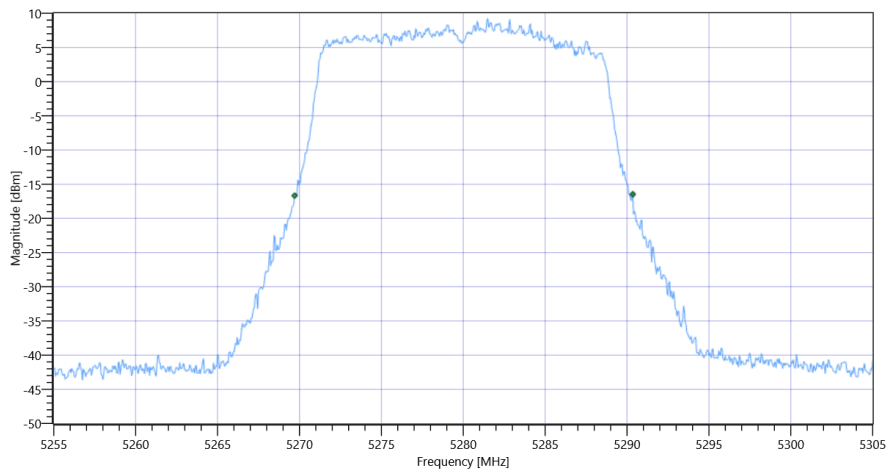


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

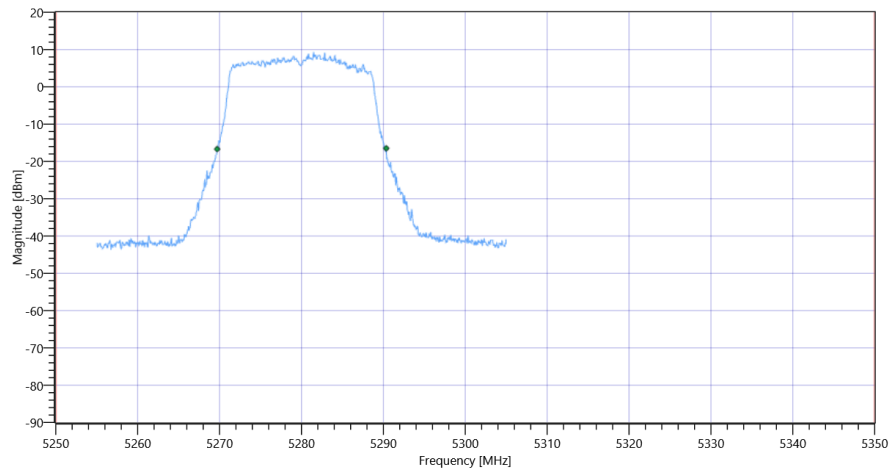
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.65	MHz	INFO
T1 26dB	5250.000000	---	5269.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.3500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:14:53
Ambit Temp [°C]   Humidity [rel%]	25.8   19
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-VHT20 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-VHT20 mode
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]	-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 5280 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.59	dBm	INFO
Ref. Frequency	---	---	5282.000	MHz	INFO

Evaluation max. Duty Cycle

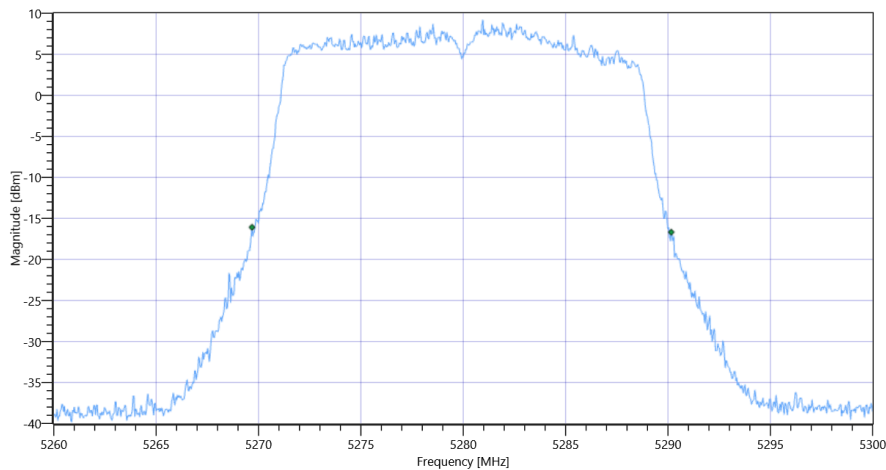
Duty Cycle evaluation

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	---	---	20.48	MHz	INFO
T1 26dB	---	---	5269.6800	MHz	INFO
T2 26dB	---	---	5290.1600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

Maximum Output Power

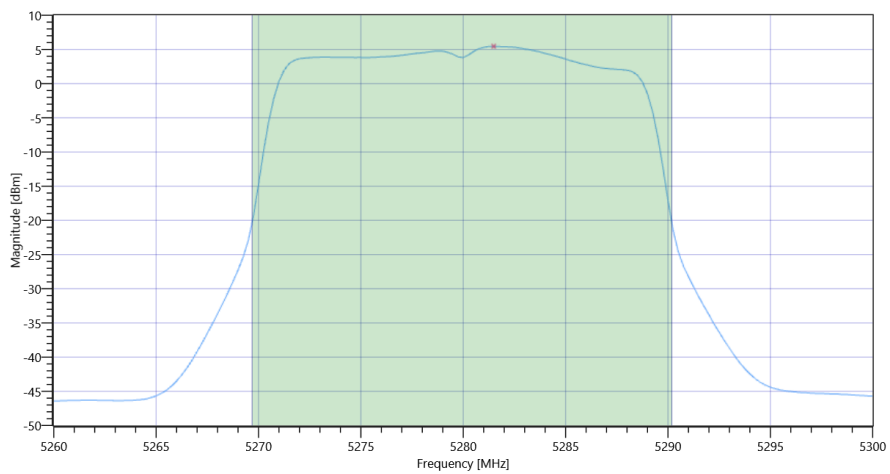
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	25.59   4.8   35
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



**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	16.23	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	16.23	dBm	PASS
Limit: 11 dBm + 10 log 20.48					
Max Output Power DC corrected	--	24.11	16.23	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	5.45	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.45	dBm/1MHz	PASS

## FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:50:25
Ambit Temp [°C]   Humidity [rel%]	25.4   19
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-VHT20 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-VHT20 mode
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]	-10
Switched Path	None

### Test Equipment

## Test at TX 5320 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:4 Max Output Power DC corrected	--	--	14.44	dBm	INFO
Ant:4 BW 26dB	--	--	20.920	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	15.86	dBm	INFO
Ant:3 BW 26dB	--	--	20.400	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.14	dBm	INFO
Ant:2 BW 26dB	--	--	20.560	MHz	INFO
Ant:1 Max Output Power DC corrected	--	--	15.9	dBm	INFO
Ant:1 BW 26dB	--	--	20.360	MHz	INFO
Σ Limit absolute	--	24	21.65	dBm	PASS
Σ Limit: 11 dBm + 10 log 20.36	--	24.09	21.65	dBm	PASS

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:4 PSD	--	--	3.03	dBm/1MHz	INFO
Ant:3 PSD	--	--	4.51	dBm/1MHz	INFO
Ant:2 PSD	--	--	4.92	dBm/1MHz	INFO
Ant:1 PSD	--	--	5.25	dBm/1MHz	INFO
Σ	--	11	10.53	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:49:33
Ambit Temp [°C]   Humidity [rel%]	25.4   19
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.05	dBm	INFO
Ref. Frequency	---	---	5320.800	MHz	INFO

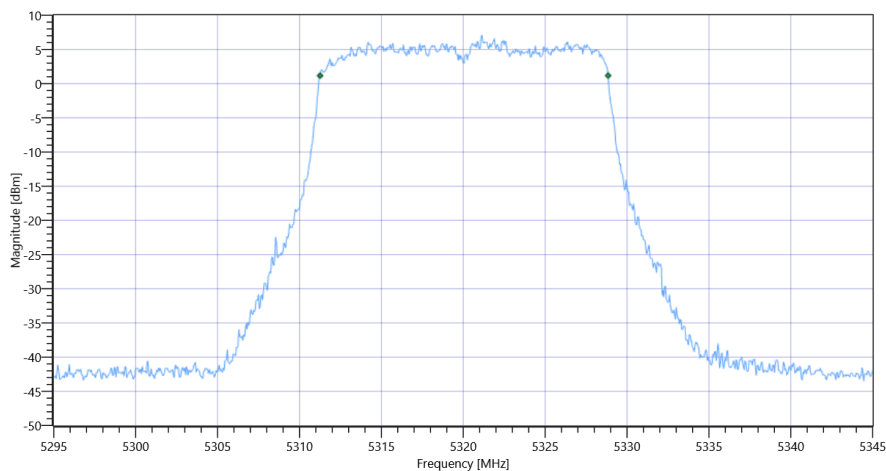
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.05   4.86   35
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

## RESULT

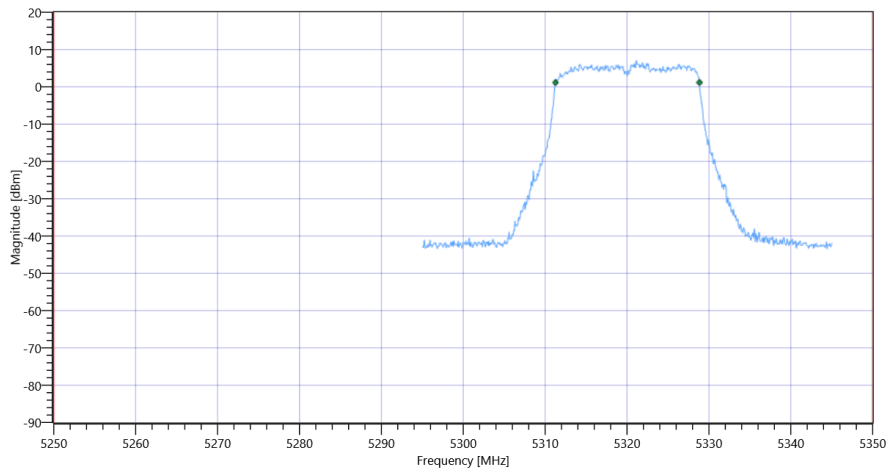
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.582	MHz	INFO
T1 99%	5250.000000	---	5311.2587	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.8412	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

## Plot: Bandwidth within Band

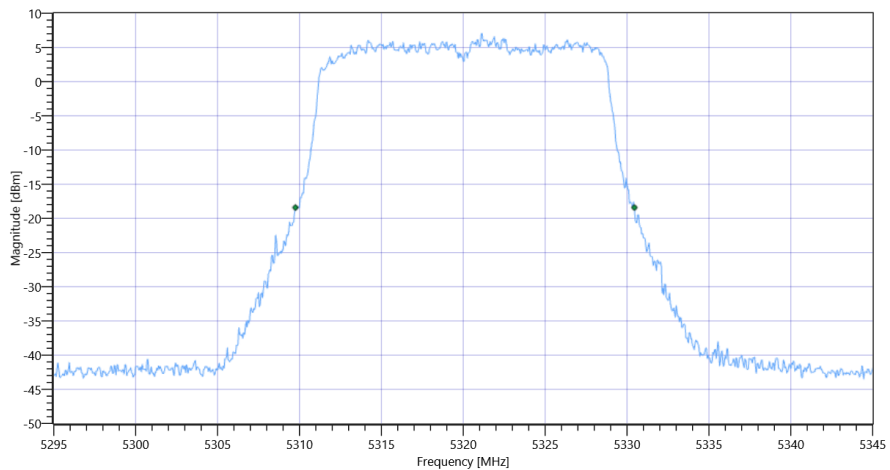


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

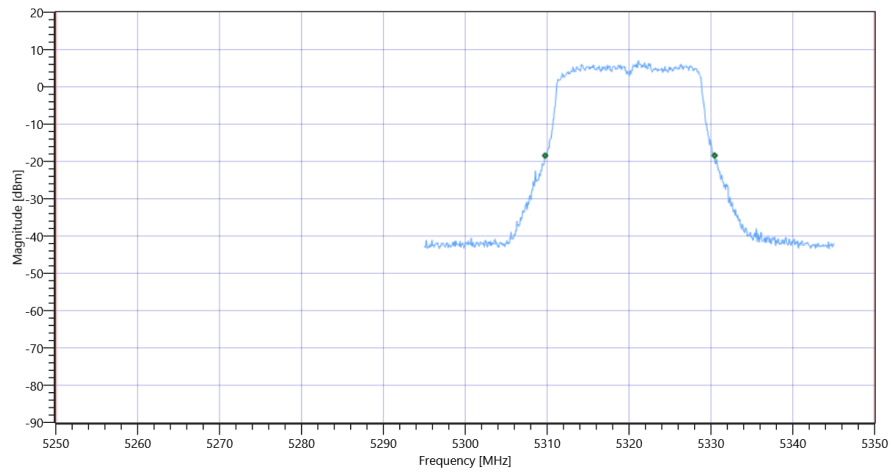
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.7	MHz	INFO
T1 26dB	5250.000000	---	5309.7500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.4500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:47:56
Ambit Temp [°C]   Humidity [rel%]	25.4   19
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	11.14	dBm	INFO
Ref. Frequency	--	--	5321.000	MHz	INFO

Evaluation max. Duty Cycle

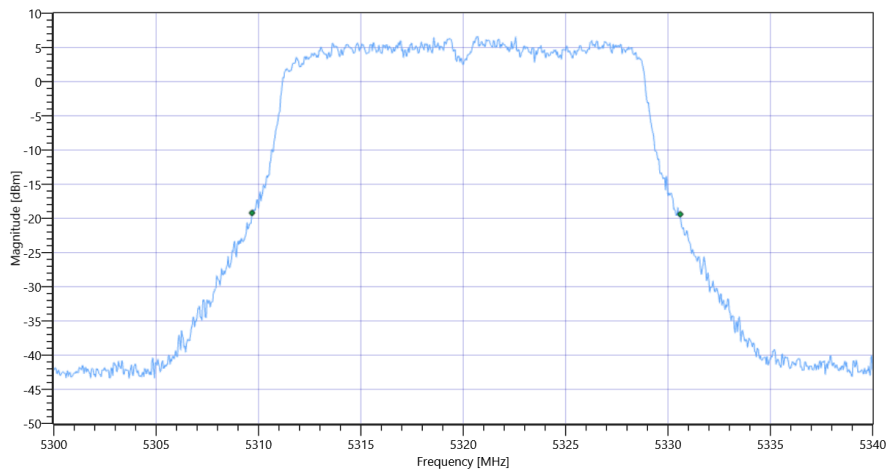
Duty Cycle evaluation

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	--	--	20.92	MHz	INFO
T1 26dB	--	--	5309.6800	MHz	INFO
T2 26dB	--	--	5330.6000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

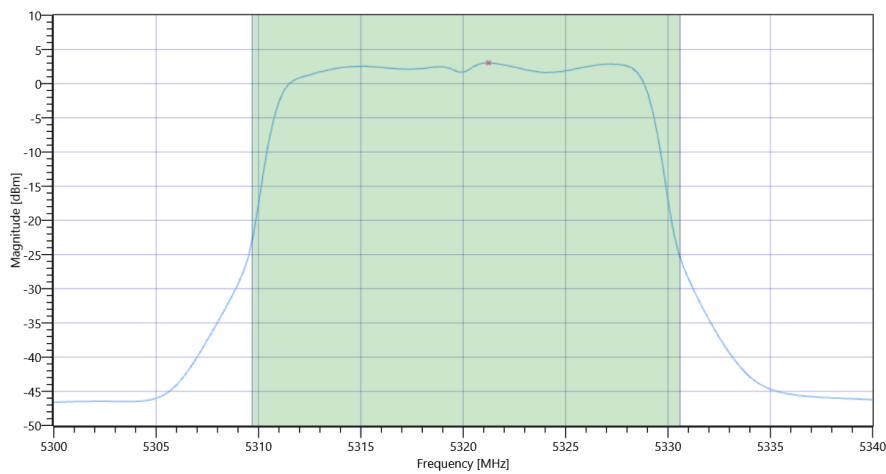
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	23.14   4.86   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	14.44	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	14.44	dBm	PASS
Limit: 11 dBm + 10 log 20.92					
Max Output Power DC corrected	--	24.21	14.44	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.03	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	3.03	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:47:04
Ambit Temp [°C]   Humidity [rel%]	25.4   19
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.40	dBm	INFO
Ref. Frequency	---	---	5318.400	MHz	INFO

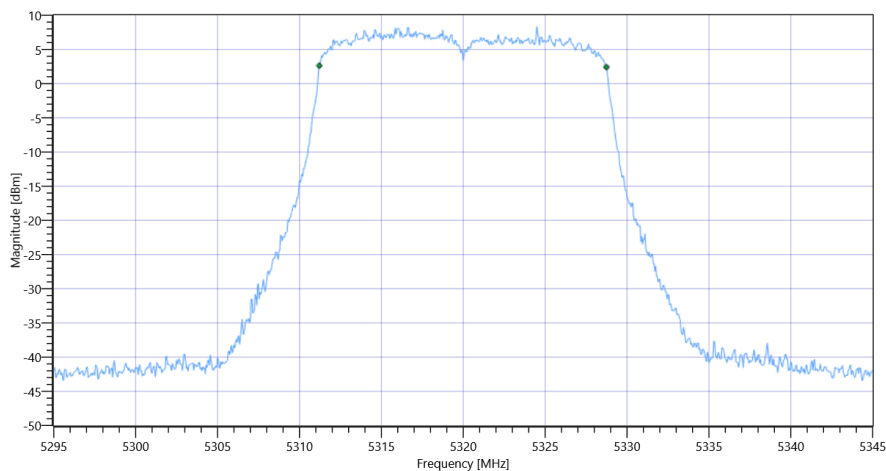
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.40   4.86   35
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

### RESULT

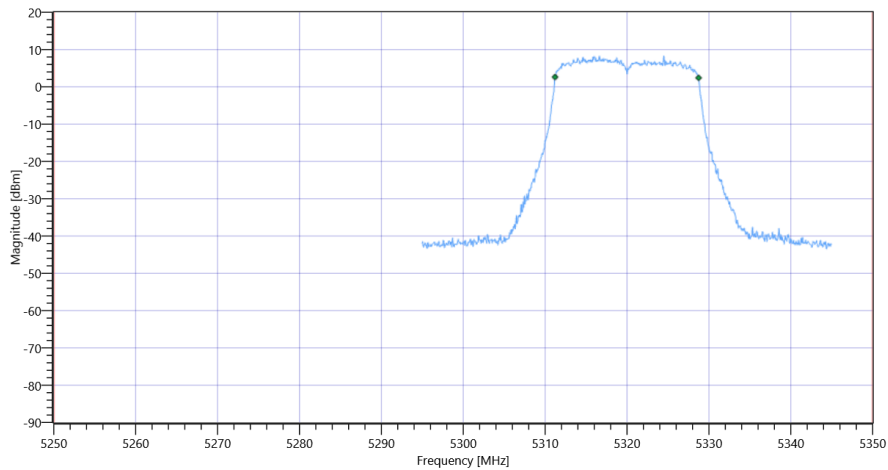
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.532	MHz	INFO
T1 99%	5250.000000	---	5311.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.7413	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

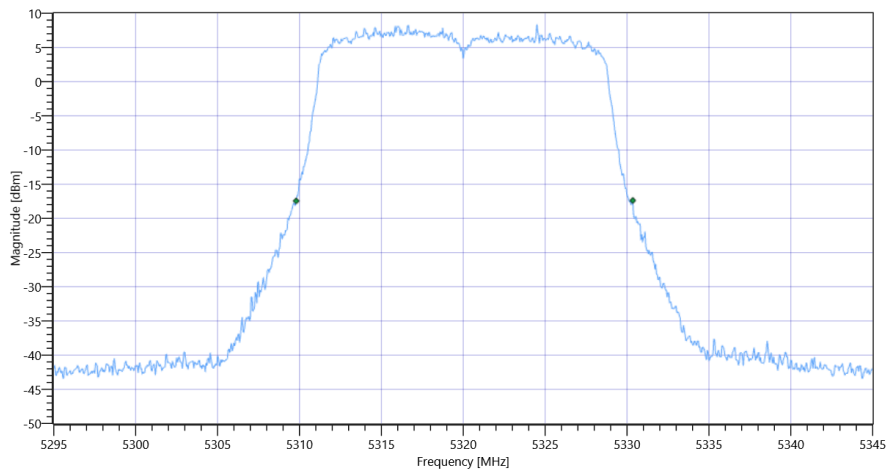


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

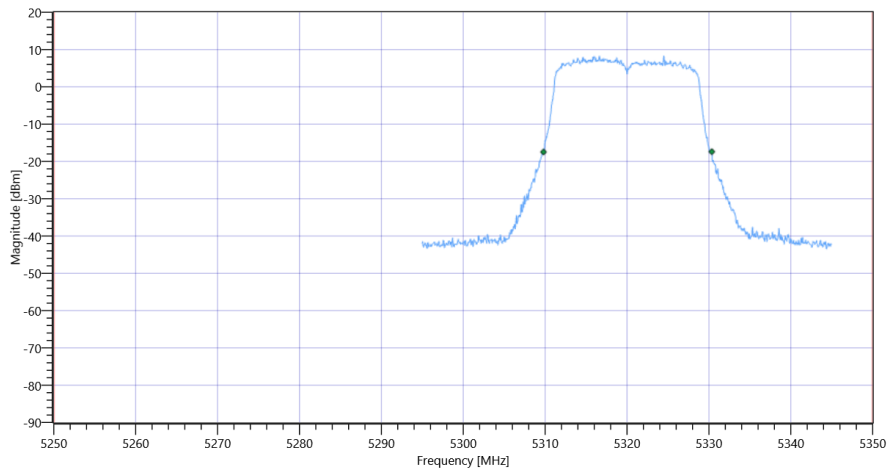
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.55	MHz	INFO
T1 26dB	5250.000000	---	5309.8000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.3500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:45:27
Ambit Temp [°C]   Humidity [rel%]	25.4   19
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.39	dBm	INFO
Ref. Frequency	---	---	5314.210	MHz	INFO

Evaluation max. Duty Cycle

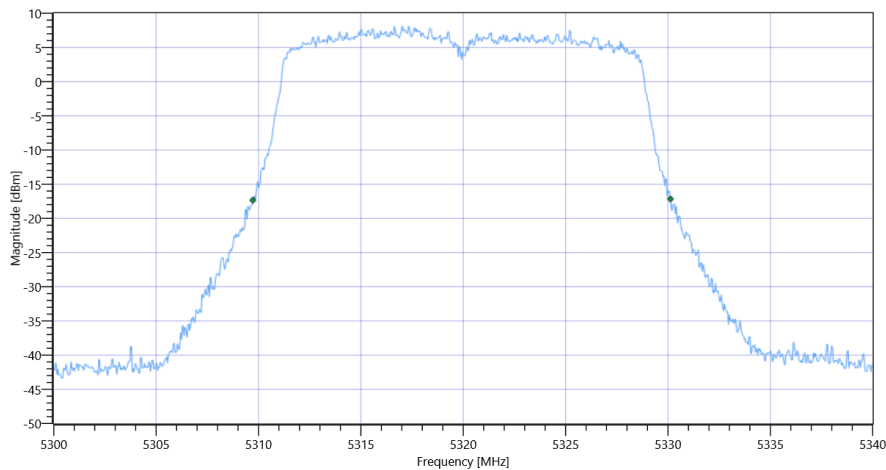
Duty Cycle evaluation

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	---	---	20.4	MHz	INFO
T1 26dB	---	---	5309.7200	MHz	INFO
T2 26dB	---	---	5330.1200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

Maximum Output Power

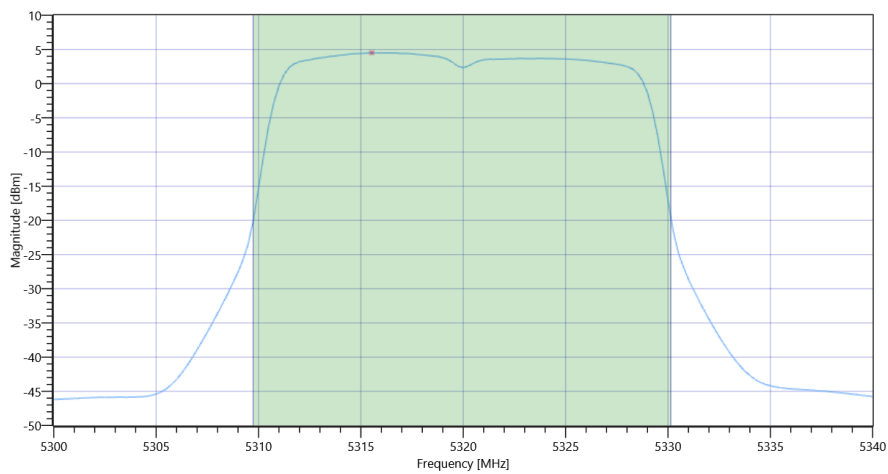
READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	24.39   4.86   35
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



**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	15.86	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	15.86	dBm	PASS
Limit: 11 dBm + 10 log 20.4					
Max Output Power DC corrected	--	24.1	15.86	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	4.51	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.51	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:44:35
Ambit Temp [°C]   Humidity [rel%]	25.3   19
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-VHT20 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-VHT20 mode
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.88	dBm	INFO
Ref. Frequency	---	---	5325.190	MHz	INFO

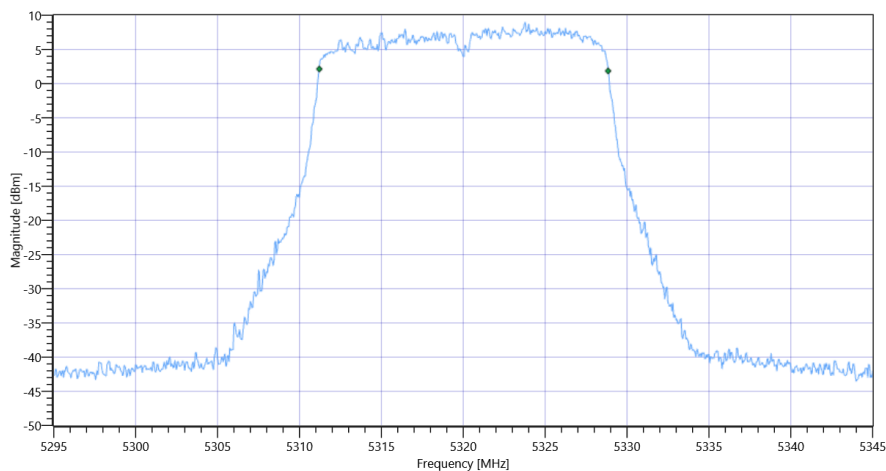
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.88   4.86   35
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

### RESULT

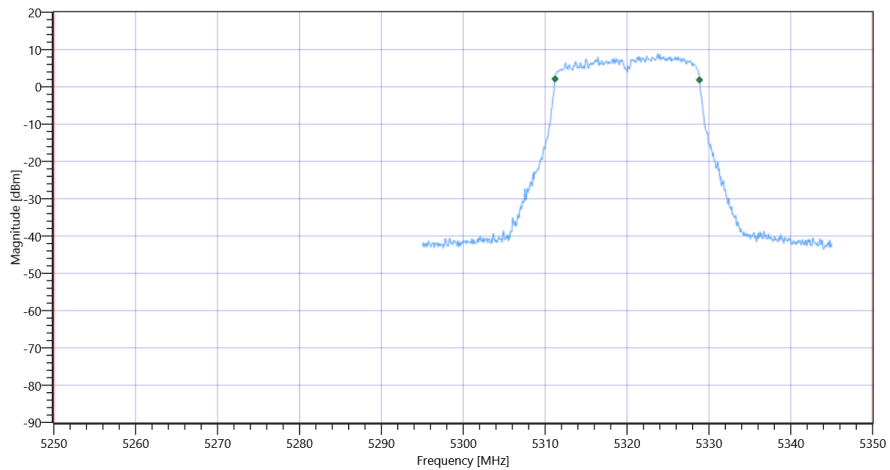
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.632	MHz	INFO
T1 99%	5250.000000	---	5311.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.8412	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

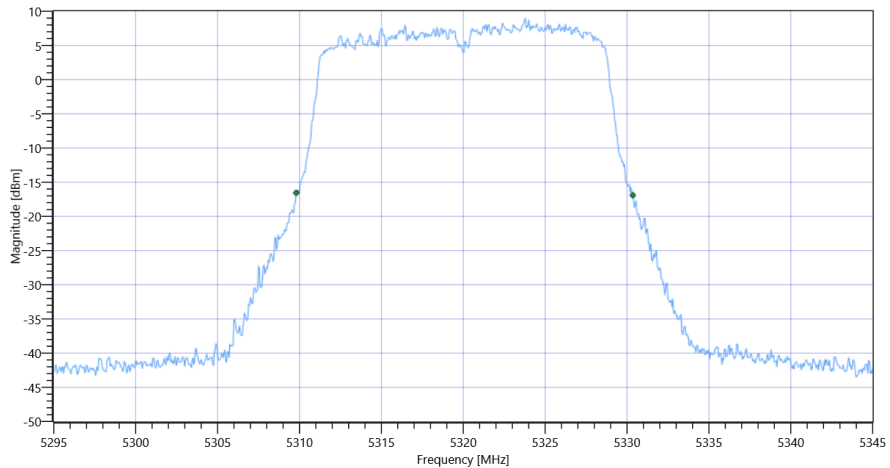


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

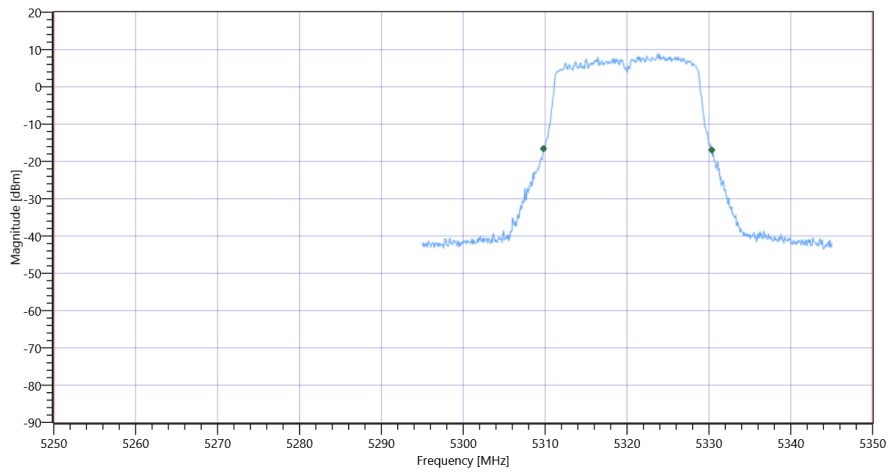
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.55	MHz	INFO
T1 26dB	5250.000000	---	5309.8000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.3500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:42:58
Ambit Temp [°C]   Humidity [rel%]	25.3   19
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-VHT20 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-VHT20 mode
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.02	dBm	INFO
Ref. Frequency	---	---	5321.600	MHz	INFO

Evaluation max. Duty Cycle

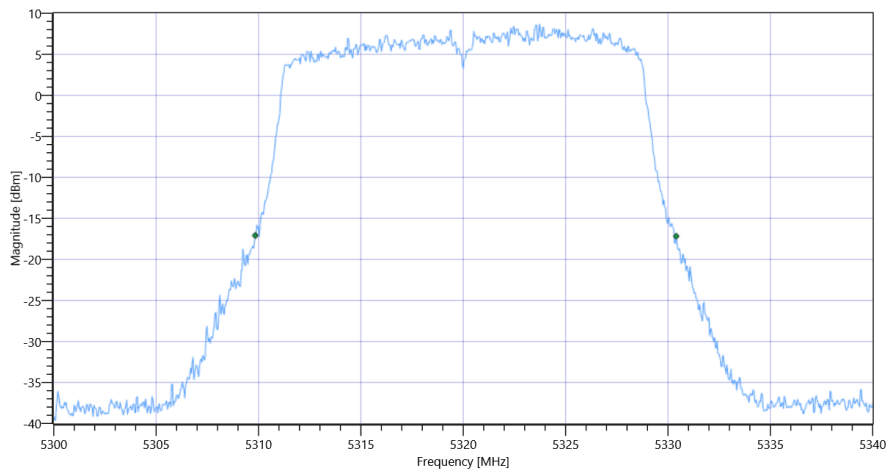
Duty Cycle evaluation

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	---	---	20.56	MHz	INFO
T1 26dB	---	---	5309.8400	MHz	INFO
T2 26dB	---	---	5330.4000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

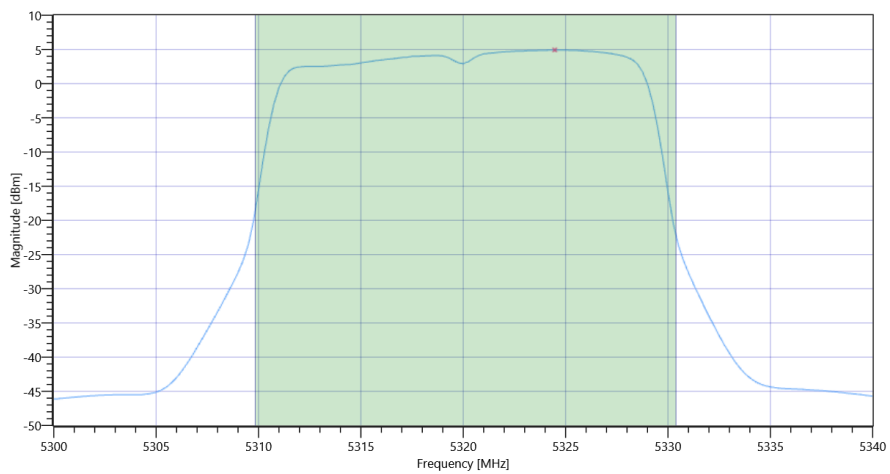
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	25.02   4.86   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	16.14	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	16.14	dBm	PASS
Limit: 11 dBm + 10 log 20.56					
Max Output Power DC corrected	--	24.13	16.14	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	4.92	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.92	dBm/1MHz	PASS



## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:42:07
Ambit Temp [°C]   Humidity [rel%]	25.3   18
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-VHT20 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-VHT20 mode
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.66	dBm	INFO
Ref. Frequency	---	---	5323.000	MHz	INFO

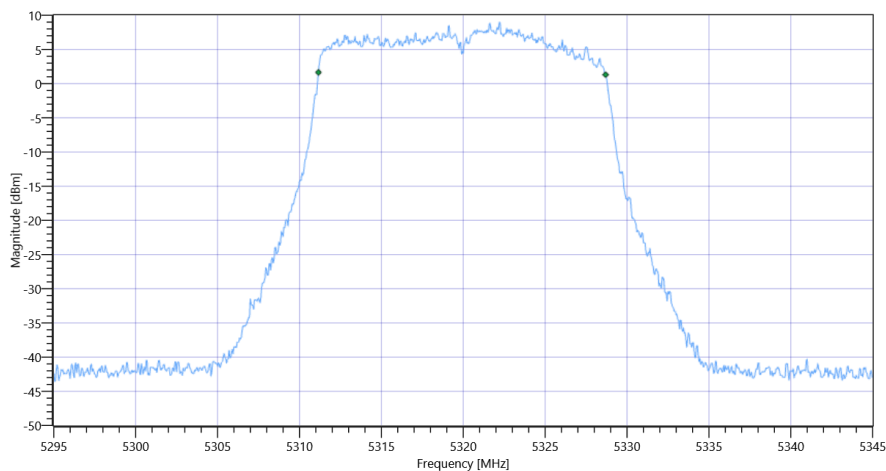
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.66   4.86   35
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

### RESULT

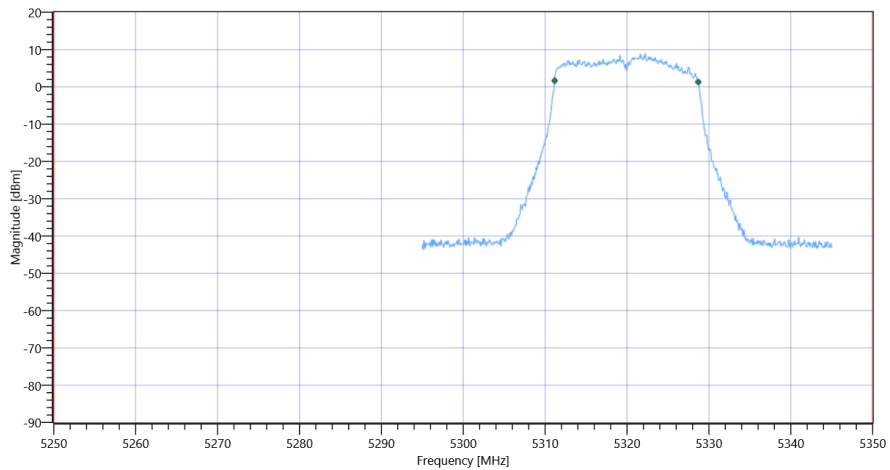
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.532	MHz	INFO
T1 99%	5250.000000	---	5311.1588	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.6913	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

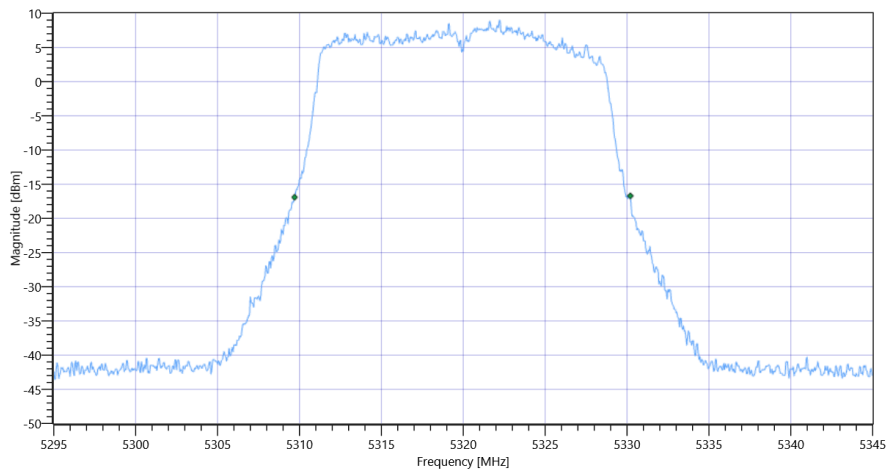


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

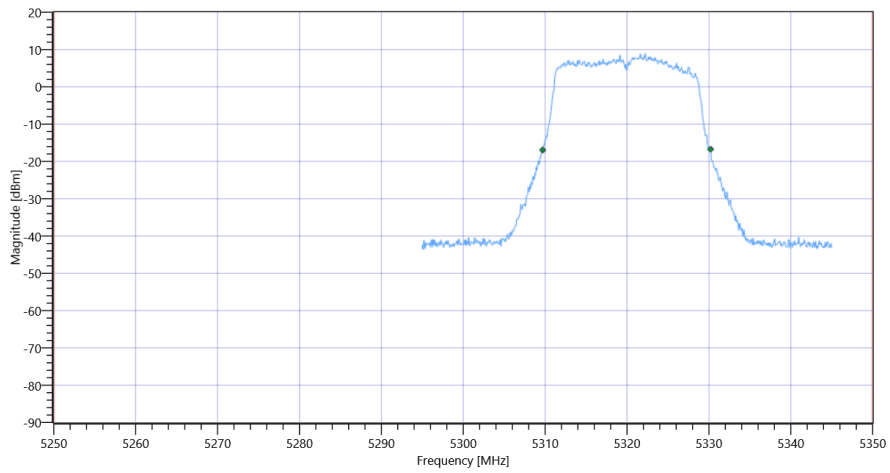
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.5	MHz	INFO
T1 26dB	5250.000000	---	5309.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.2000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:40:30
Ambit Temp [°C]   Humidity [rel%]	25.3   18
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-VHT20 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-VHT20 mode
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]	-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 5320 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.41	dBm	INFO
Ref. Frequency	---	---	5321.400	MHz	INFO

Evaluation max. Duty Cycle

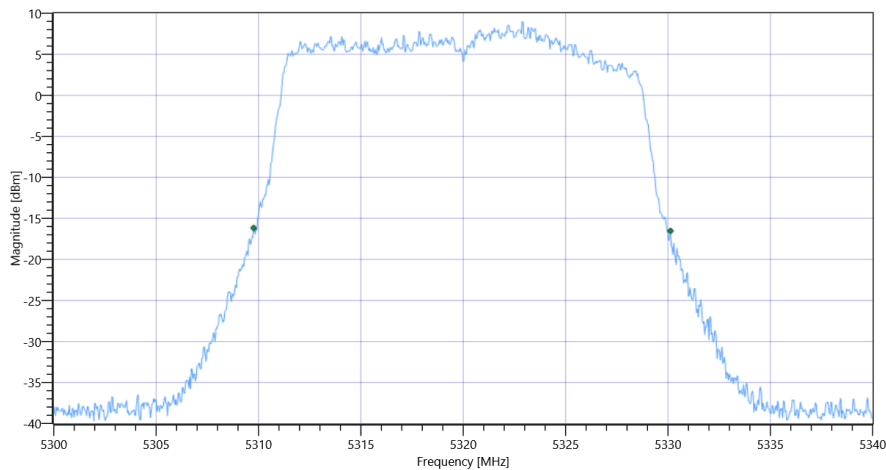
Duty Cycle evaluation

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	---	---	20.36	MHz	INFO
T1 26dB	---	---	5309.7600	MHz	INFO
T2 26dB	---	---	5330.1200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

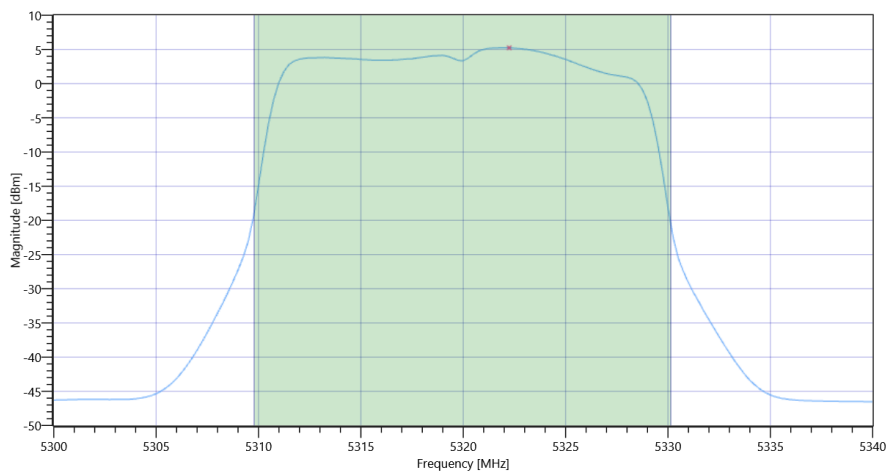
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	25.41   4.86   35
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

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.9	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.9	dBm	PASS
Limit: 11 dBm + 10 log 20.36					
Max Output Power DC corrected	---	24.09	15.9	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	5.25	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	5.25	dBm/1MHz	PASS

## FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:11:54
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
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]	-10
Switched Path	None

### Test Equipment



## Test at TX 5260 MHz

### RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	15.32	dBm	INFO
Ant:1 BW 26dB	--	--	21.200	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	16.96	dBm	INFO
Ant:2 BW 26dB	--	--	20.240	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	16.89	dBm	INFO
Ant:3 BW 26dB	--	--	20.640	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	14.74	dBm	INFO
Ant:4 BW 26dB	--	--	20.680	MHz	INFO
Σ Limit absolute	--	24	22.1	dBm	PASS
Σ Limit: 11 dBm + 10 log 20.24	--	24.06	22.1	dBm	PASS

### RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	3.99	dBm/1MHz	INFO
Ant:2 PSD	--	--	6.06	dBm/1MHz	INFO
Ant:3 PSD	--	--	5.36	dBm/1MHz	INFO
Ant:4 PSD	--	--	3.47	dBm/1MHz	INFO
Σ	--	11	10.86	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:11:02
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.78	dBm	INFO
Ref. Frequency	---	---	5263.800	MHz	INFO

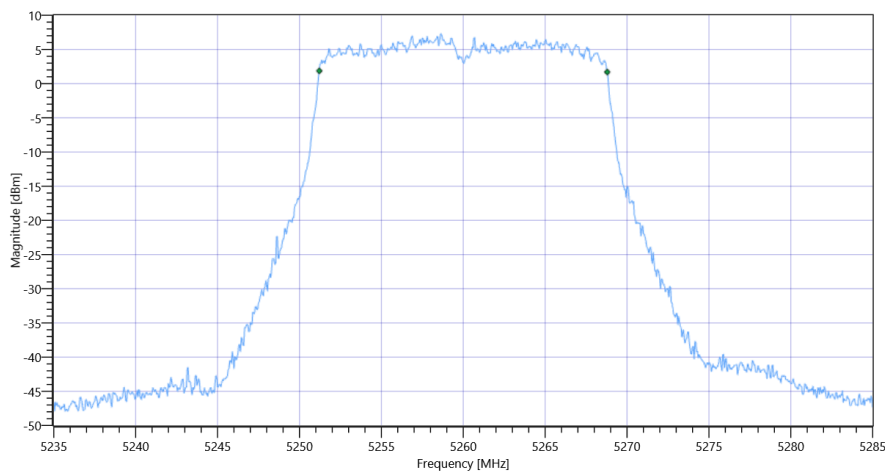
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.78   5.04   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

### RESULT

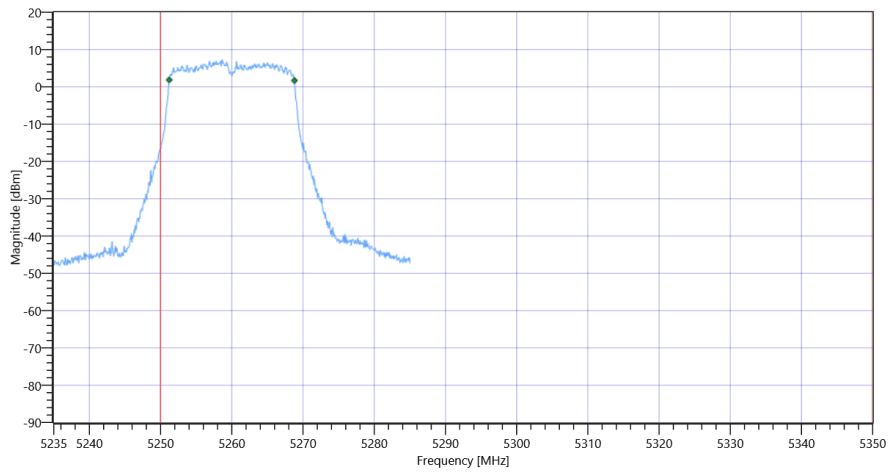
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.582	MHz	INFO
T1 99%	5250.000000	---	5251.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5268.7912	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

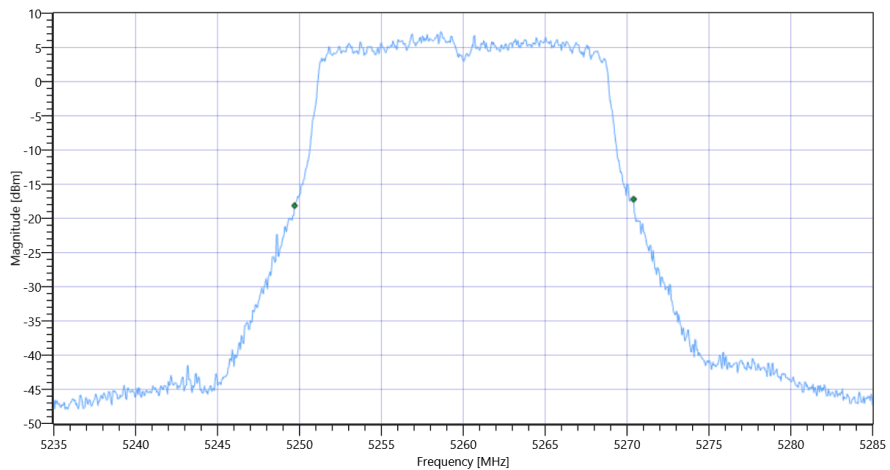


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

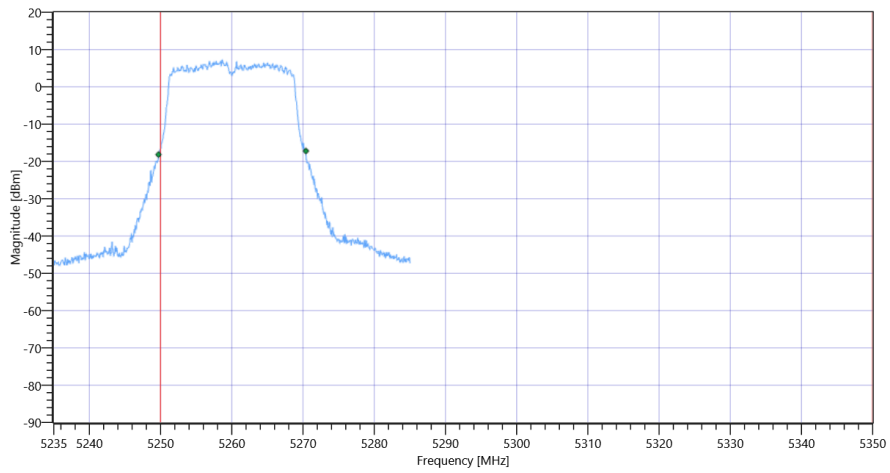
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.7	MHz	INFO
T1 26dB	5250.000000	---	5249.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5270.4000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:09:24
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
Antenna Port used	4
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.11	dBm	INFO
Ref. Frequency	---	---	5258.000	MHz	INFO

Evaluation max. Duty Cycle

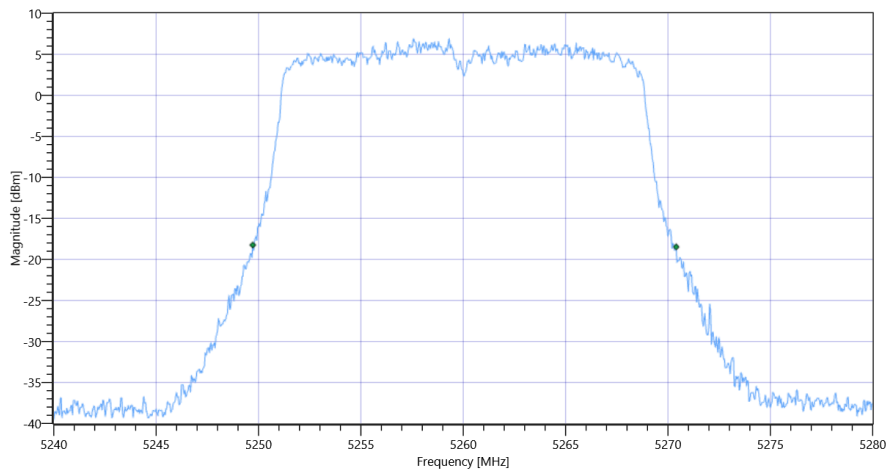
Duty Cycle evaluation

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	---	---	20.68	MHz	INFO
T1 26dB	---	---	5249.7200	MHz	INFO
T2 26dB	---	---	5270.4000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

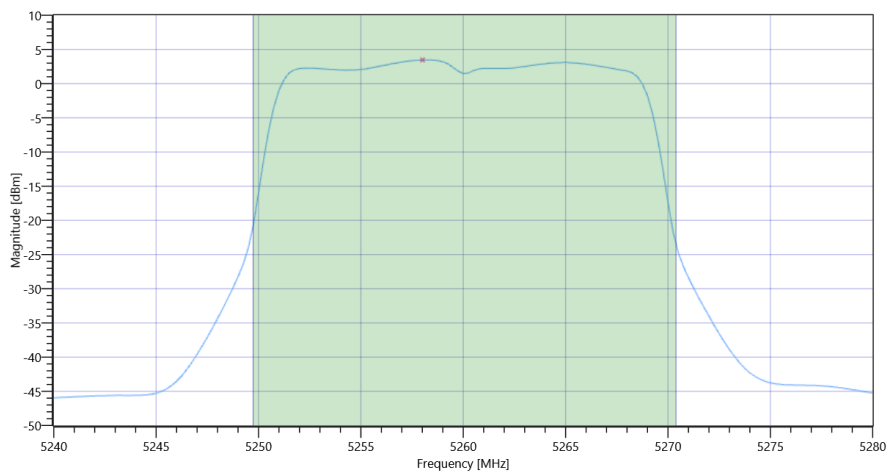
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	25.11   5.04   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	14.74	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	14.74	dBm	PASS
Limit: 11 dBm + 10 log 20.68					
Max Output Power DC corrected	---	24.16	14.74	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	3.47	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	3.47	dBm/1MHz	PASS



## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:08:32
Ambit Temp [°C]   Humidity [rel%]	25.8   19
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.74	dBm	INFO
Ref. Frequency	---	---	5256.400	MHz	INFO

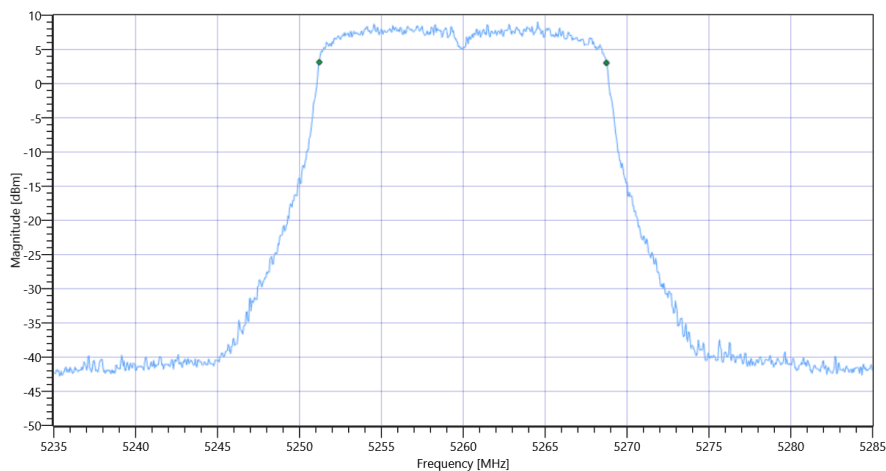
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	21.74   5.04   35
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

### RESULT

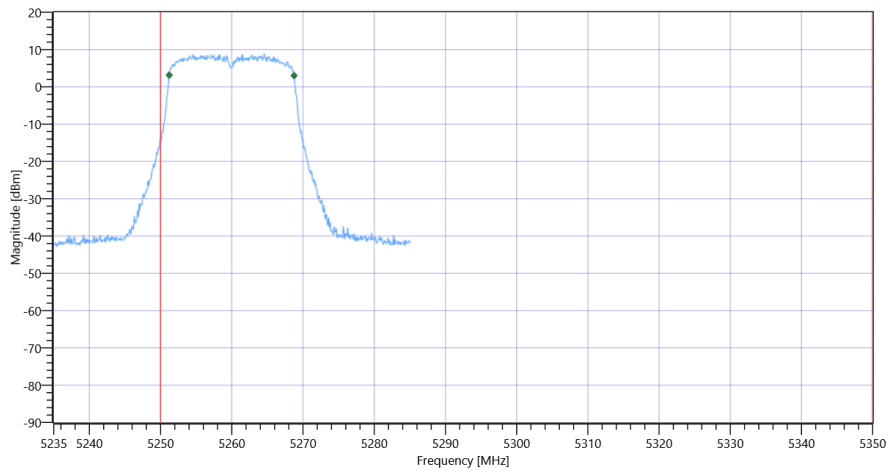
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.532	MHz	INFO
T1 99%	5250.000000	---	5251.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5268.7413	MHz	PASS

### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band

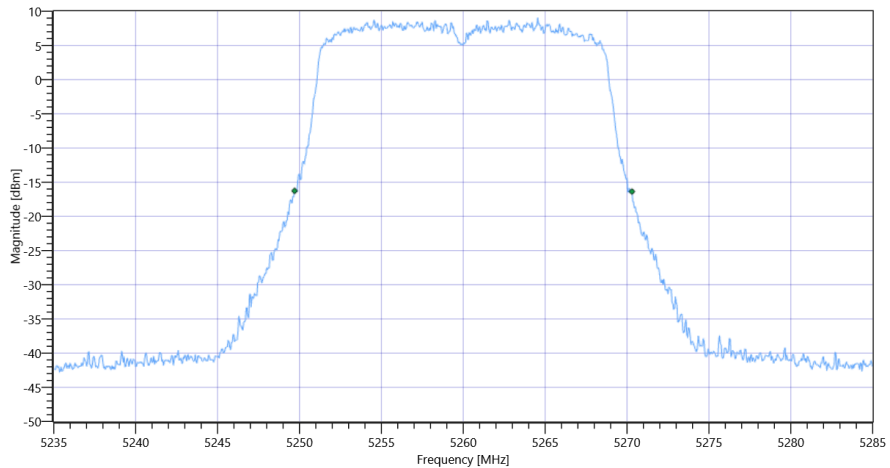


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

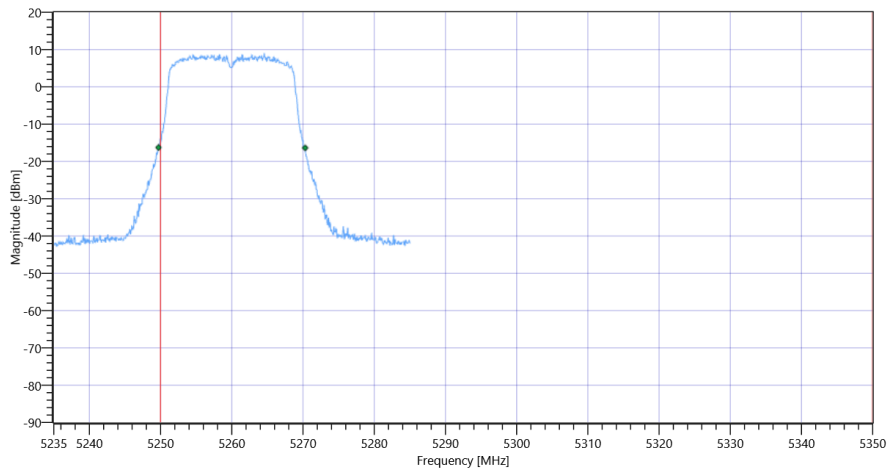
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.6	MHz	INFO
T1 26dB	5250.000000	---	5249.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5270.3000	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:06:54
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
Antenna Port used	3
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.24	dBm	INFO
Ref. Frequency	---	---	5262.400	MHz	INFO

Evaluation max. Duty Cycle

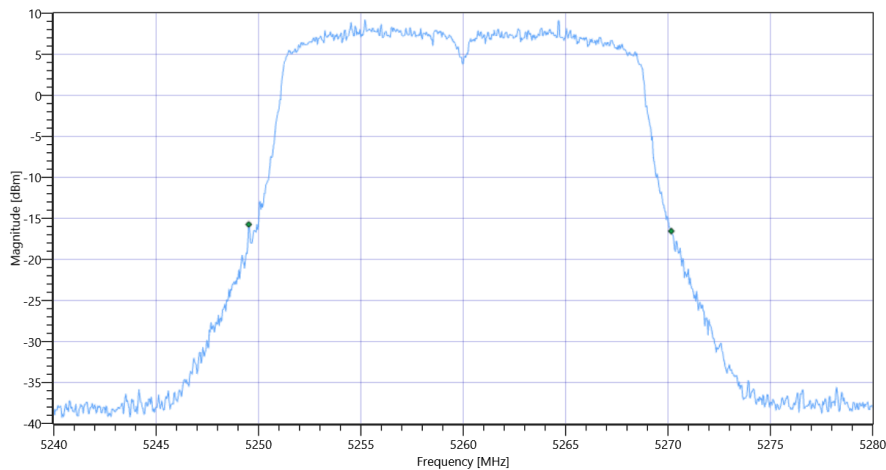
### Duty Cycle evaluation

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	---	---	20.64	MHz	INFO
T1 26dB	---	---	5249.5200	MHz	INFO
T2 26dB	---	---	5270.1600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

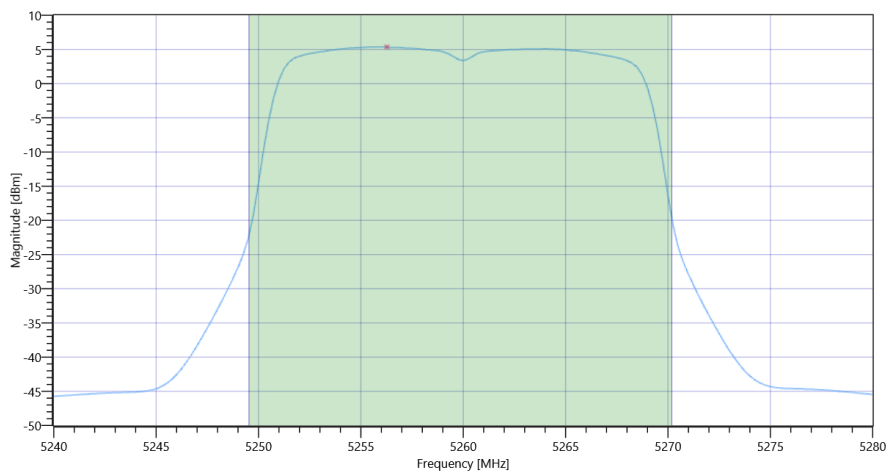
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	25.24   5.04   35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.89	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.89	dBm	PASS
Limit: 11 dBm + 10 log 20.64					
Max Output Power DC corrected	---	24.15	16.89	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	5.36	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	5.36	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:06:02
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	14.29	dBm	INFO
Ref. Frequency	---	---	5257.400	MHz	INFO

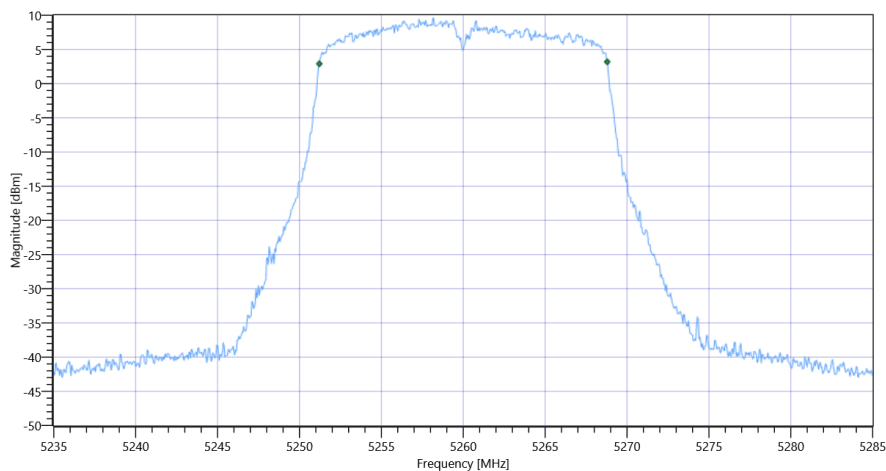
## READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	22.29   5.04   35
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

## RESULT

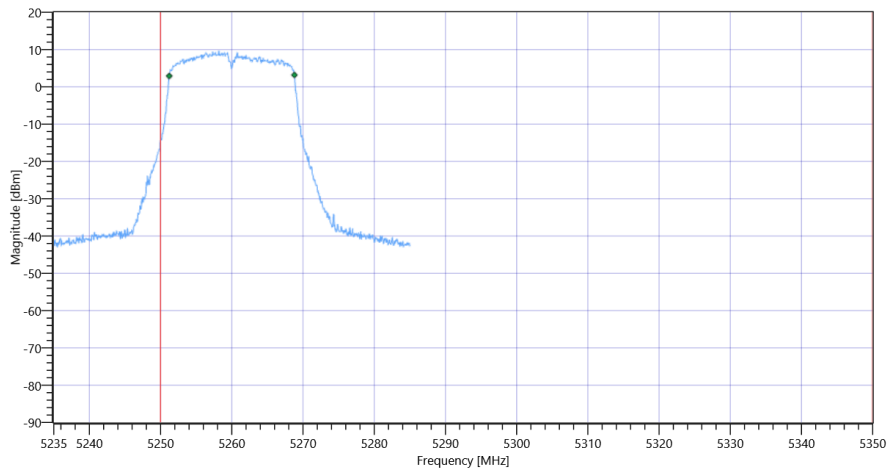
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.582	MHz	INFO
T1 99%	5250.000000	---	5251.2088	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5268.7912	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

## Plot: Bandwidth within Band

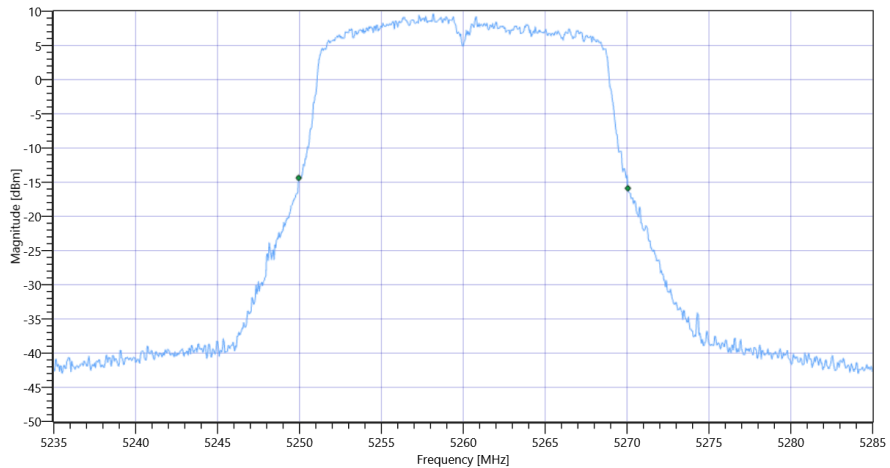


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

**RESULT**

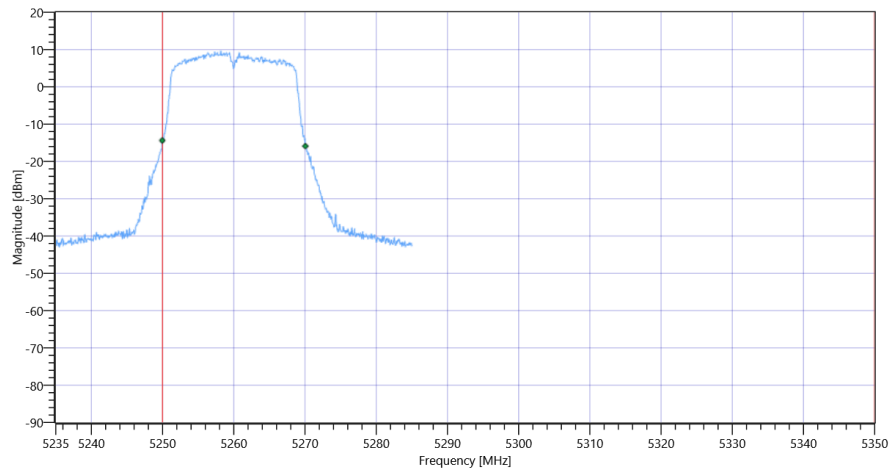
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.1	MHz	INFO
T1 26dB	5250.000000	---	5249.9500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5270.0500	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:04:25
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.41	dBm	INFO
Ref. Frequency	---	---	5257.600	MHz	INFO

Evaluation max. Duty Cycle

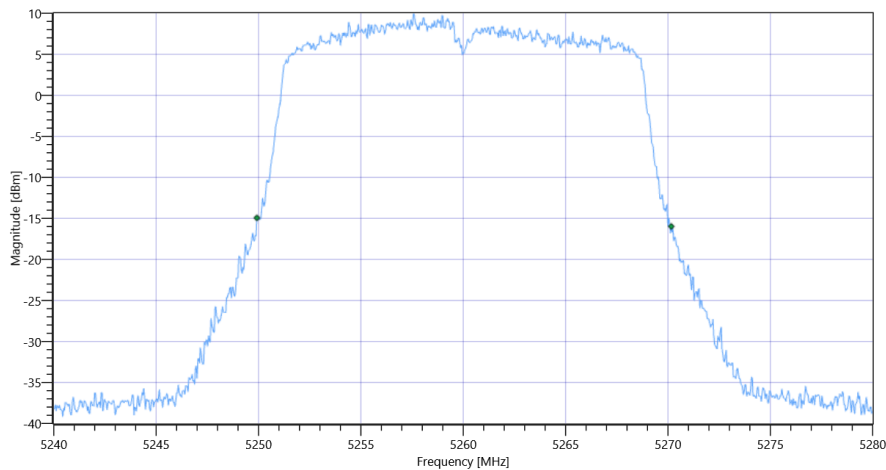
### Duty Cycle evaluation

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	---	---	20.24	MHz	INFO
T1 26dB	---	---	5249.9200	MHz	INFO
T2 26dB	---	---	5270.1600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

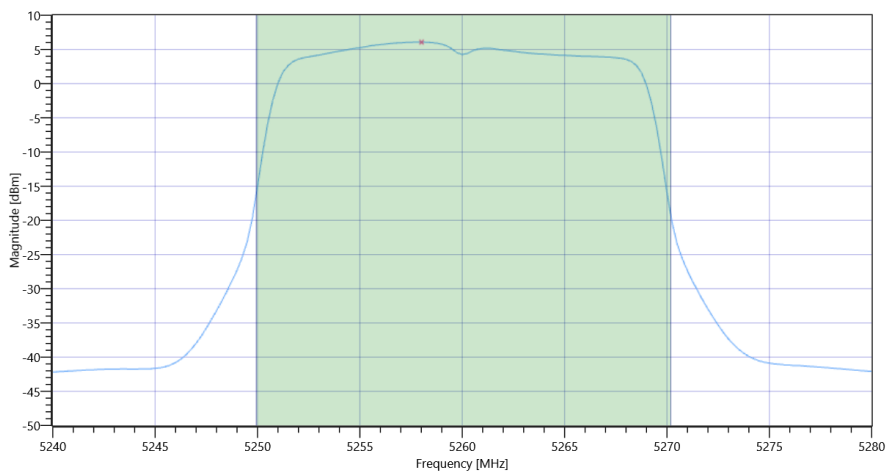
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	28.41   5.04   40
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

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.96	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.96	dBm	PASS
Limit: 11 dBm + 10 log 20.24					
Max Output Power DC corrected	---	24.06	16.96	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.06	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.06	dBm/1MHz	PASS

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:03:33
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.83	dBm	INFO
Ref. Frequency	---	---	5261.600	MHz	INFO

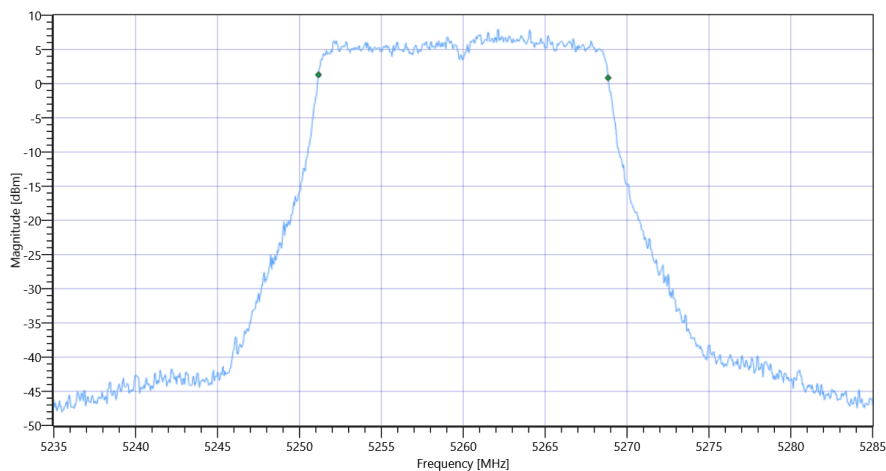
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	19.83   5.04   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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.682	MHz	INFO
T1 99%	5250.000000	---	5251.1588	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5268.8412	MHz	PASS

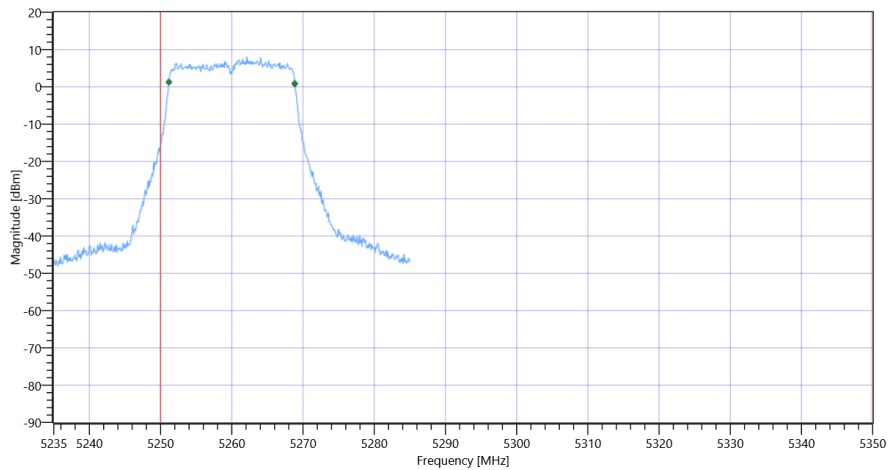
### Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 99PCT

### Plot: Bandwidth within Band



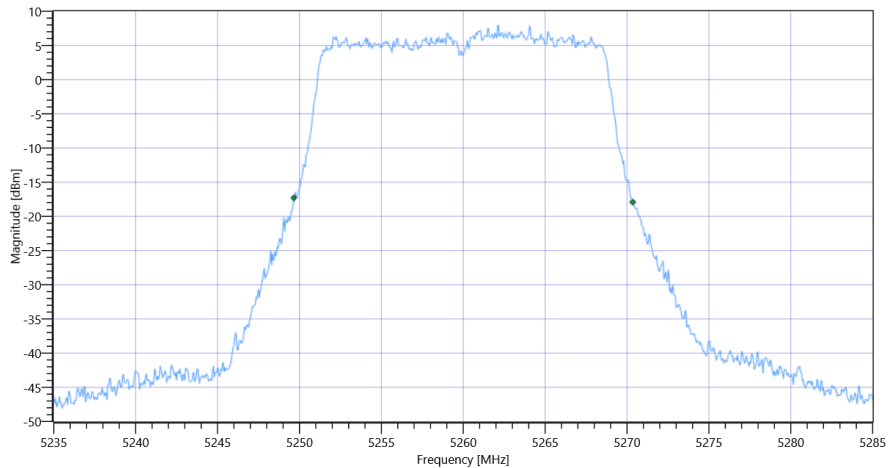


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## RESULT

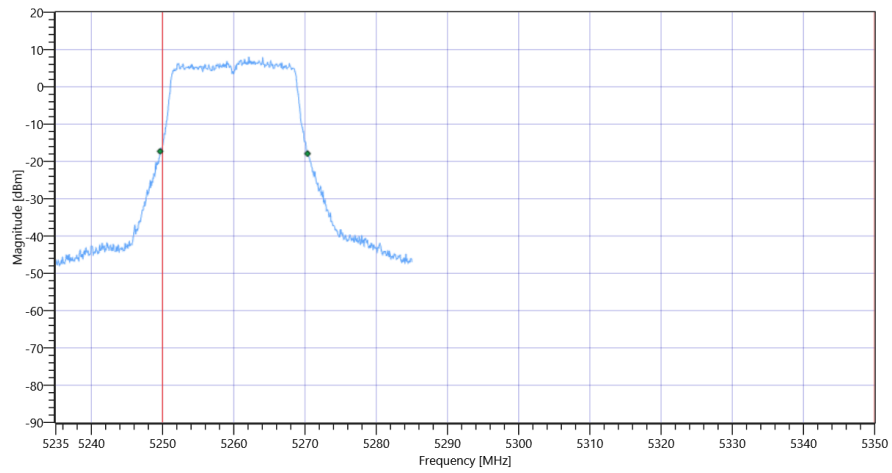
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.7	MHz	INFO
T1 26dB	5250.000000	---	5249.6500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5270.3500	MHz	PASS

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A

## FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

### Test References

TC Start	13.12.2022 14:01:56
Ambit Temp [°C]   Humidity [rel%]	25.7   19
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-VHT20 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-VHT20 mode
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]	-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 5260 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.30	dBm	INFO
Ref. Frequency	---	---	5262.600	MHz	INFO

Evaluation max. Duty Cycle

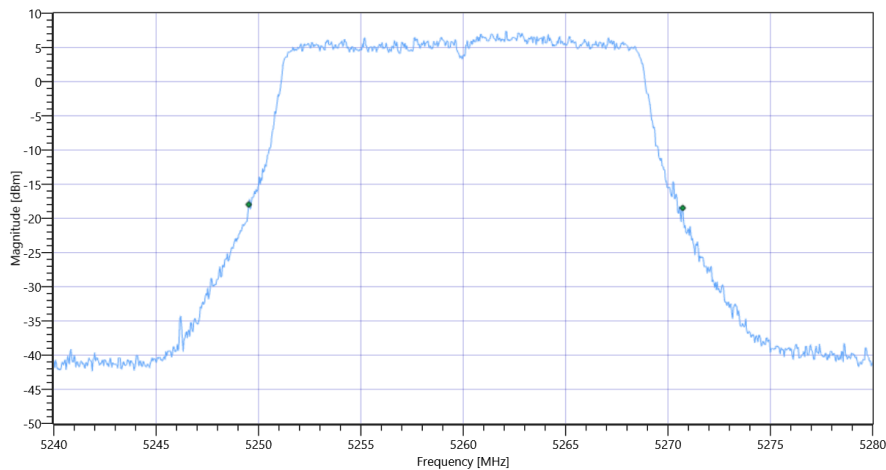
### Duty Cycle evaluation

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	---	---	21.2	MHz	INFO
T1 26dB	---	---	5249.5200	MHz	INFO
T2 26dB	---	---	5270.7200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A\_BW

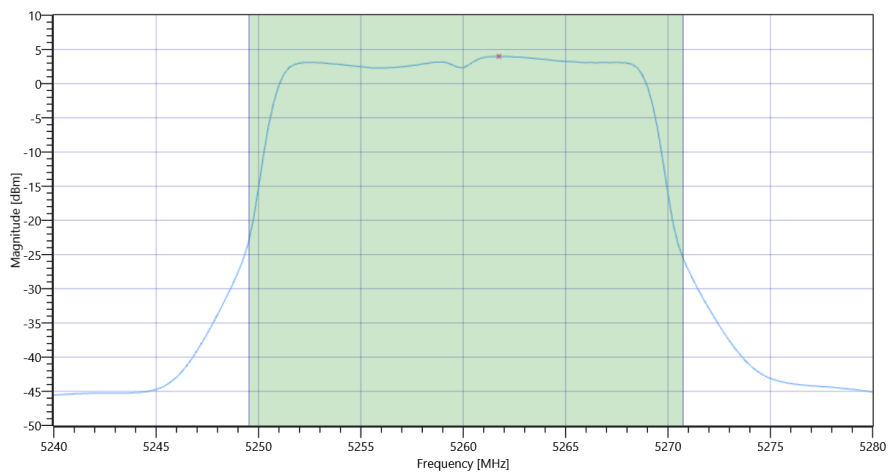
Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	24.30   5.04   35
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

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.32	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.32	dBm	PASS
Limit: 11 dBm + 10 log 21.2					
Max Output Power DC corrected	---	24.26	15.32	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	3.99	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	3.99	dBm/1MHz	PASS

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