

# Measurement Results

No.1-3977/22-01-05\_Annex\_MR\_A7

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## Test logging

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

Test/s performed:

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## EUT Information

EUT DEFINITION	
Manufacturer	SAGEMCOM BROADBAND SAS
Type	F5688W
Serial Number	DM2201959000008
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	V1.0
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 Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

Test References	
TC Start	25.03.2022 10:23:23
Ambit Temp [°C]   Humidity [rel%]	23.4   24
System Version	3.0.5.5
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT160 mode U-NII-1_2A
Add. Information	Port 1 & 3 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-1_2A
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5250
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 5250 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.69	dBm	INFO
Ref. Frequency	---	---	5218.630	MHz	INFO

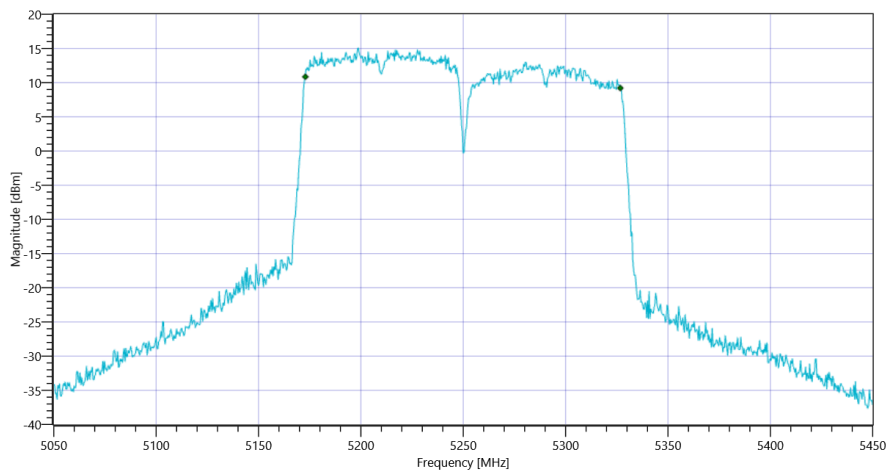
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.69   17.83   15
Start [MHz]   Stop [MHz]	5050.000   5450.000
RBW [MHz]   VBW [MHz]	2.000000   10.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

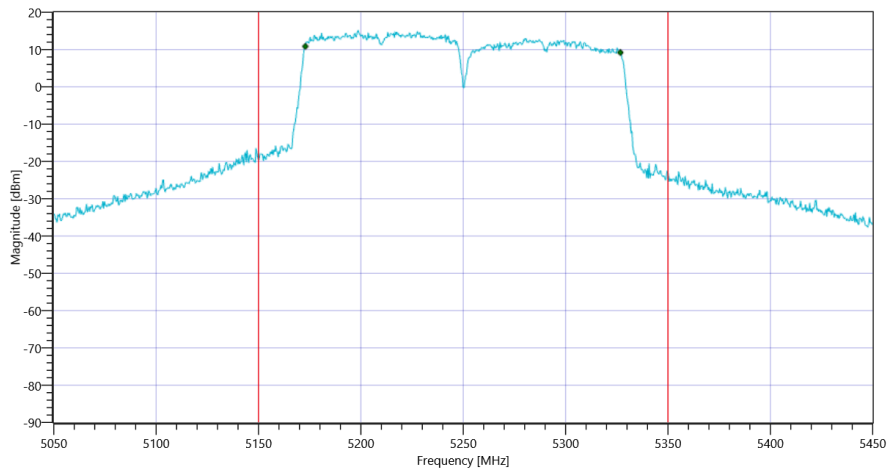
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	153.846	MHz	INFO
T1 99%	5150.000000	---	5172.8771	MHz	PASS
T2 99%	---	5350.000000	5326.7233	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A 99PCT

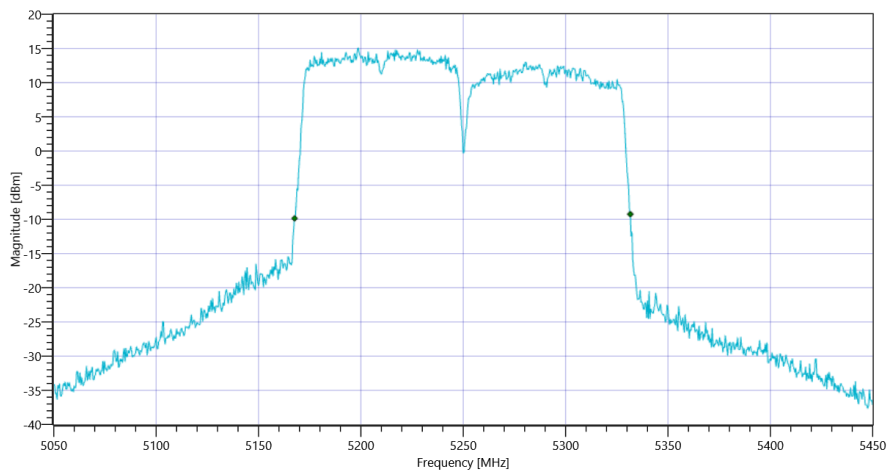
### Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

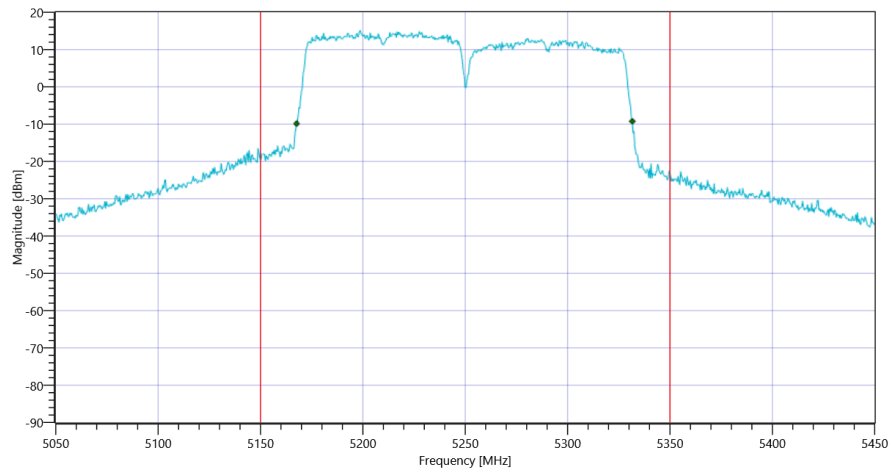
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	164	MHz	INFO
T1 26dB	5150.000000	---	5167.6000	MHz	PASS
T2 26dB	---	5350.000000	5331.6000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

General verdict

PASS

## FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

Test References	
TC Start	25.03.2022 10:16:09
Ambit Temp [°C]   Humidity [rel%]	23.4   24
System Version	3.0.5.5
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT160 mode U-NII-1_2A
Add. Information	Port 2 & 4 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-1_2A
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5250
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 5250 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.63	dBm	INFO
Ref. Frequency	---	---	5286.360	MHz	INFO

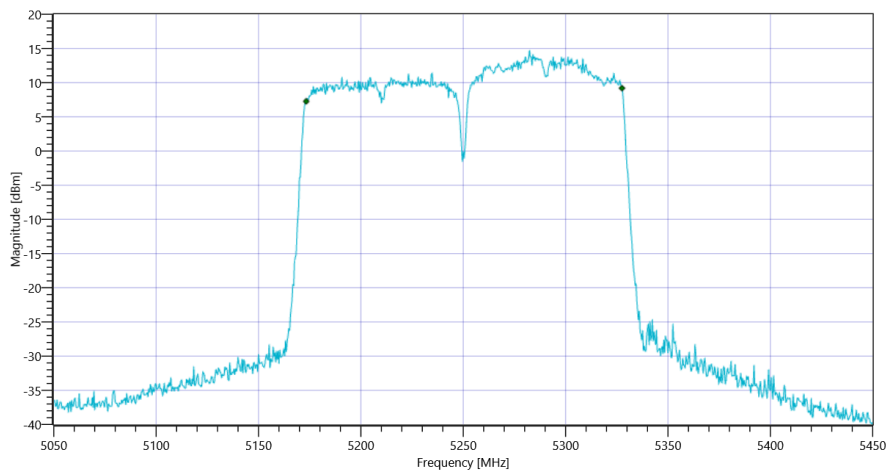
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	16.63   17.83   15
Start [MHz]   Stop [MHz]	5050.000   5450.000
RBW [MHz]   VBW [MHz]	2.000000   10.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

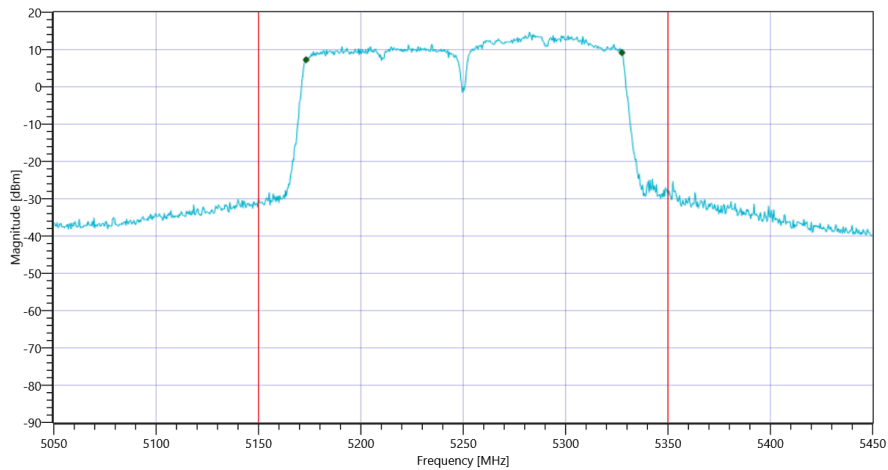
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	154.246	MHz	INFO
T1 99%	5150.000000	---	5173.2767	MHz	PASS
T2 99%	---	5350.000000	5327.5225	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A 99PCT

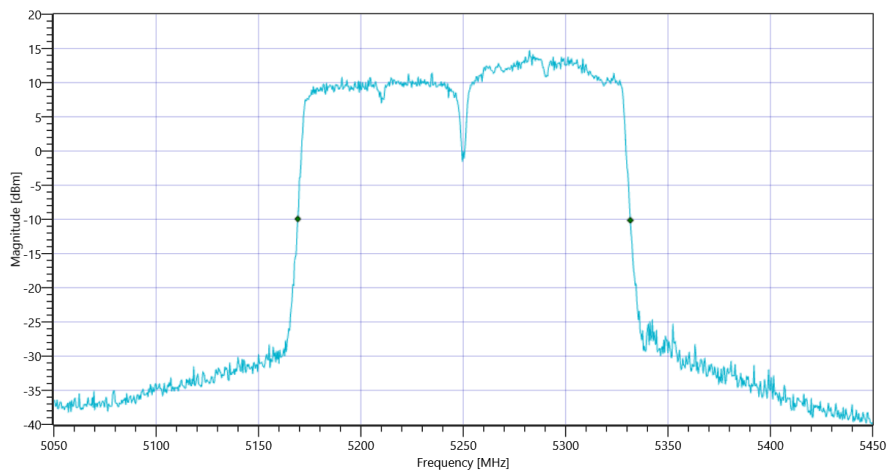
### Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

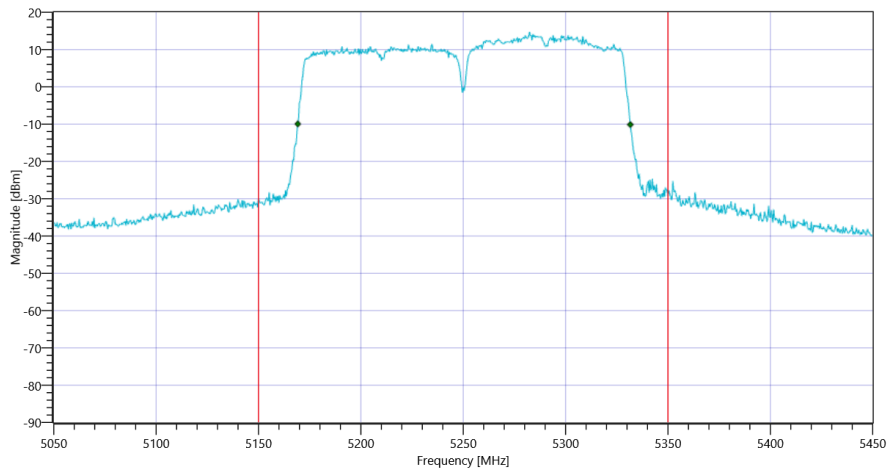
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	162.4	MHz	INFO
T1 26dB	5150.000000	---	5169.2000	MHz	PASS
T2 26dB	---	5350.000000	5331.6000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

General verdict

PASS

## FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

Test References	
TC Start	31.03.2022 17:03:31
Ambit Temp [°C]   Humidity [rel%]	25.8   28
System Version	3.0.5.9
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT160 mode U-NII-2C
Add. Information	Port 1 & 3 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-2C
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5570
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
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 5570 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	5.99	dBm	INFO
Ref. Frequency	---	---	5515.650	MHz	INFO

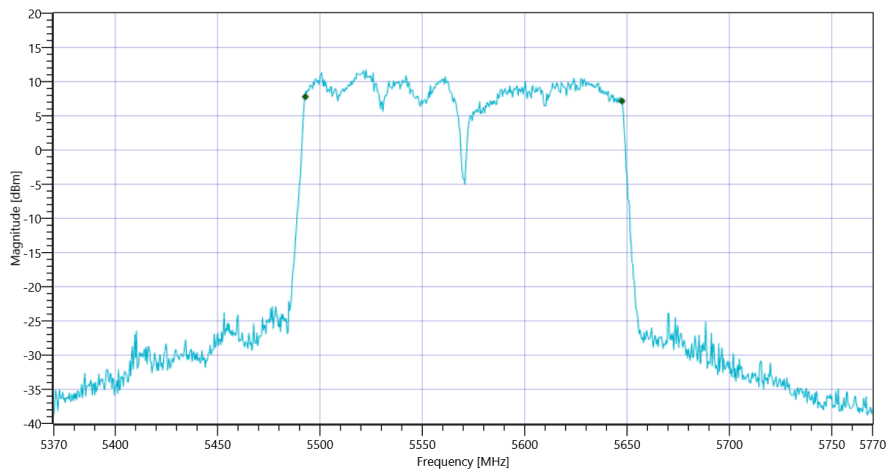
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	13.99   24.55   5
Start [MHz]   Stop [MHz]	5370.000   5770.000
RBW [MHz]   VBW [MHz]	2.000000   10.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

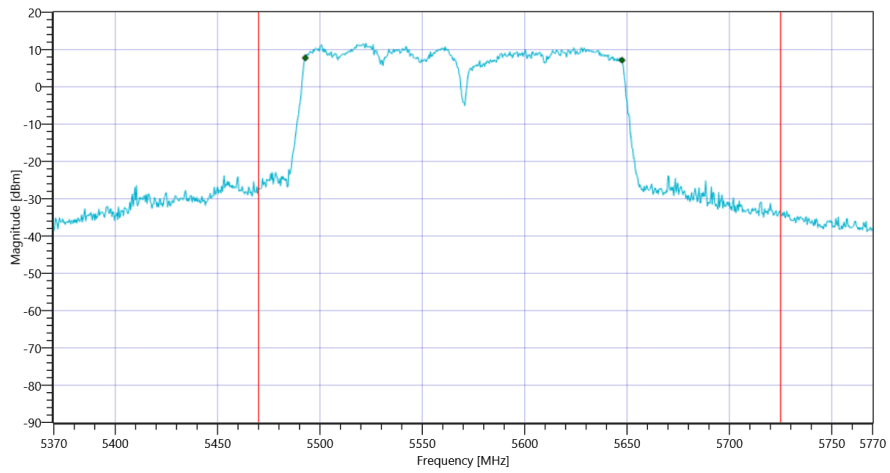
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	154.645	MHz	INFO
T1 99%	5470.000000	---	5492.8771	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5647.5225	MHz	

### Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C 99PCT

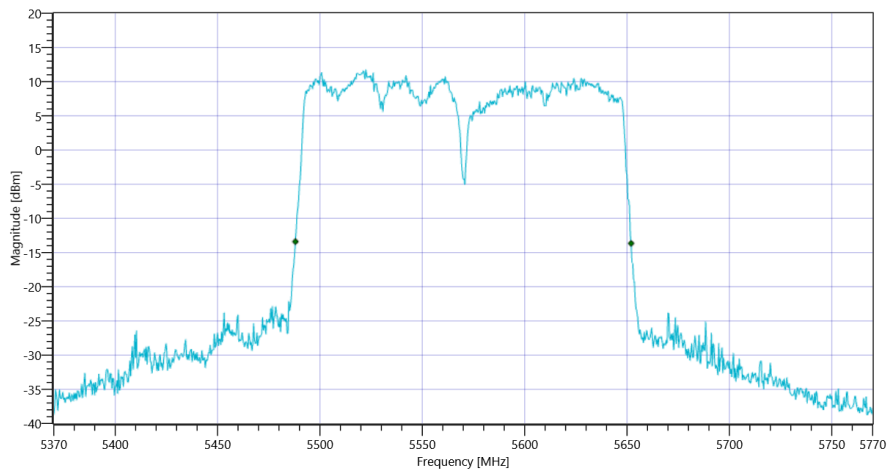
### Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

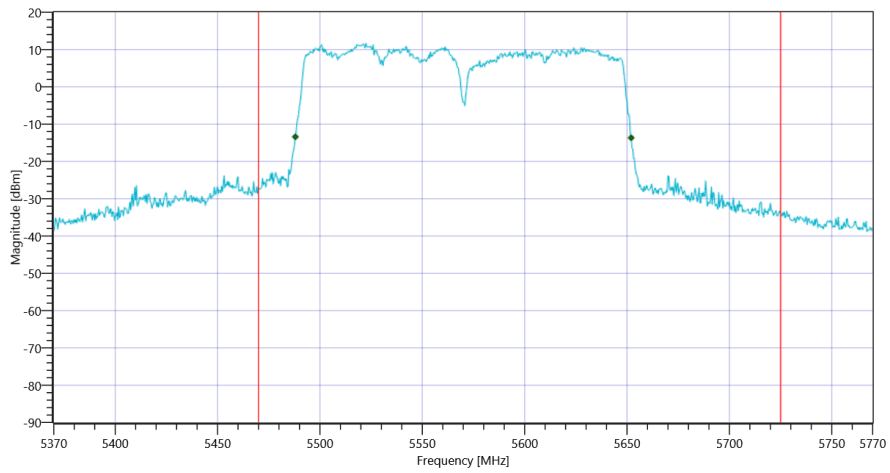
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	164	MHz	INFO
T1 26dB	5470.000000	---	5488.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5652.0000	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

General verdict

PASS

## FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C

Test References	
TC Start	31.03.2022 16:59:00
Ambit Temp [°C]   Humidity [rel%]	25.6   28
System Version	3.0.5.9
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT160 mode U-NII-2C
Add. Information	Port 1 & 3 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-2C
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5570
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
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 5570 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.96	dBm	INFO
Ref. Frequency	---	---	5518.650	MHz	INFO

## Evaluation max. Duty Cycle

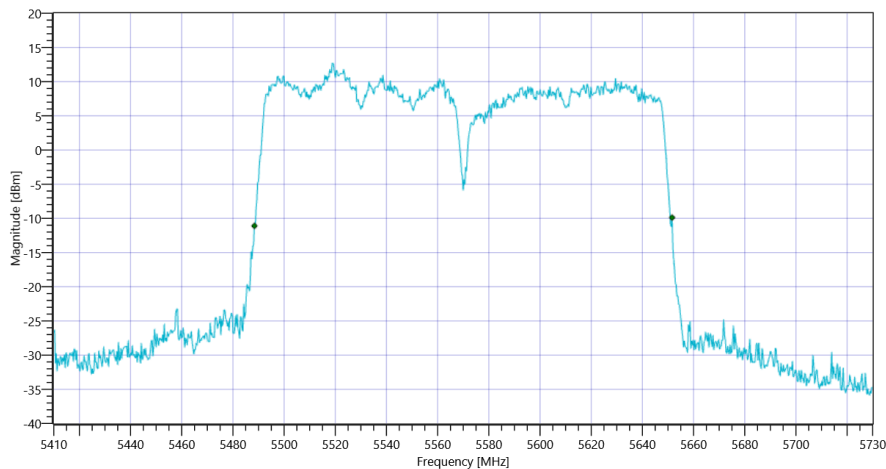
### Duty Cycle evaluation

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	---	---	163.2	MHz	INFO
T1 26dB	---	---	5488.4000	MHz	INFO
T2 26dB	---	---	5651.6000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C\_BW

## Maximum Output Power

### READ SA SETTINGS:

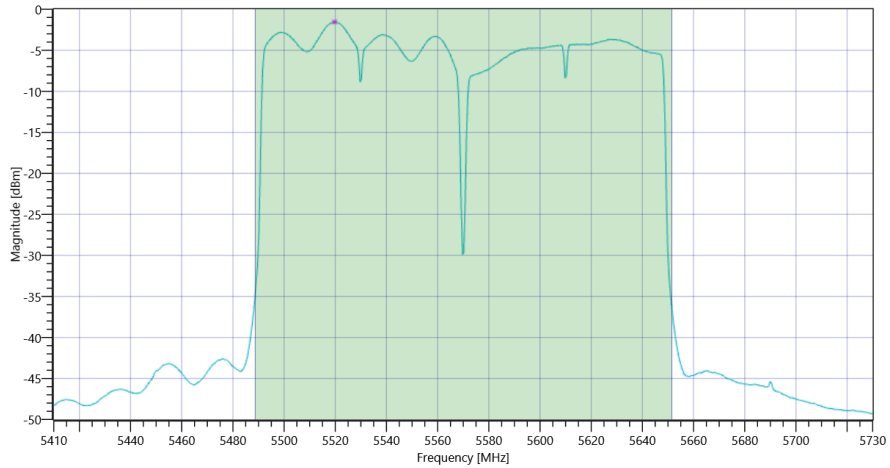
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	18.96   24.55   10
Start [MHz]   Stop [MHz]	5410.000   5730.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	214000   1   640   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	17.19	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power DC corrected	---	24	17.19	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.13	17.19	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-1.55	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-1.55	dBm/1MHz	PASS

General verdict **PASS**

## FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

Test References	
TC Start	31.03.2022 16:56:20
Ambit Temp [°C]   Humidity [rel%]	25.6   28
System Version	3.0.5.9
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT160 mode U-NII-2C
Add. Information	Port 2 & 4 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-2C
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5570
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
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 5570 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.21	dBm	INFO
Ref. Frequency	---	---	5526.640	MHz	INFO

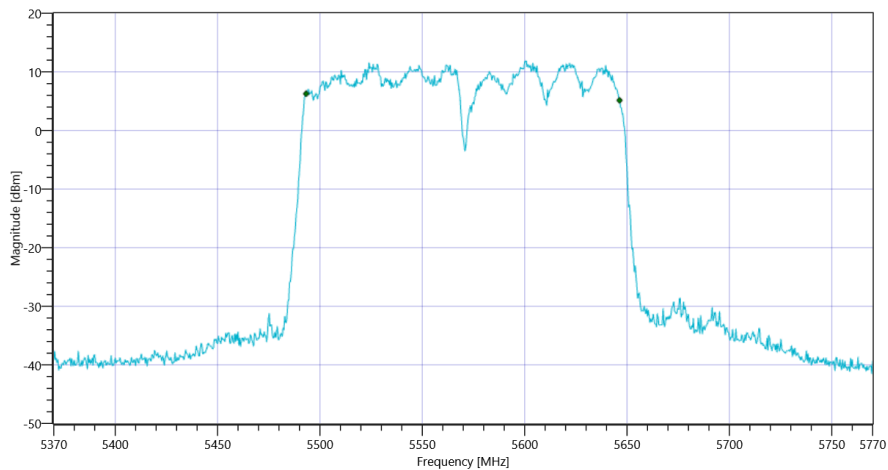
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	14.21   24.55   5
Start [MHz]   Stop [MHz]	5370.000   5770.000
RBW [MHz]   VBW [MHz]	2.000000   10.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   2500   1001   SWE

### RESULT

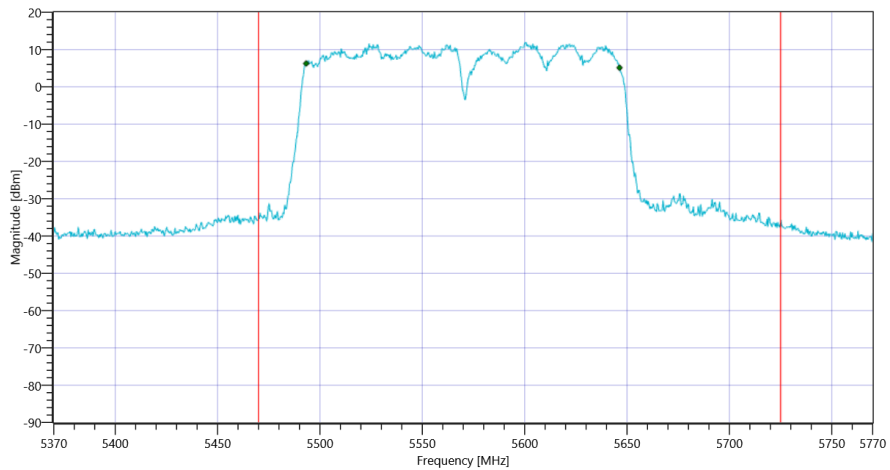
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	153.047	MHz	INFO
T1 99%	5470.000000	---	5493.2767	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5646.3237	MHz	

### Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C 99PCT

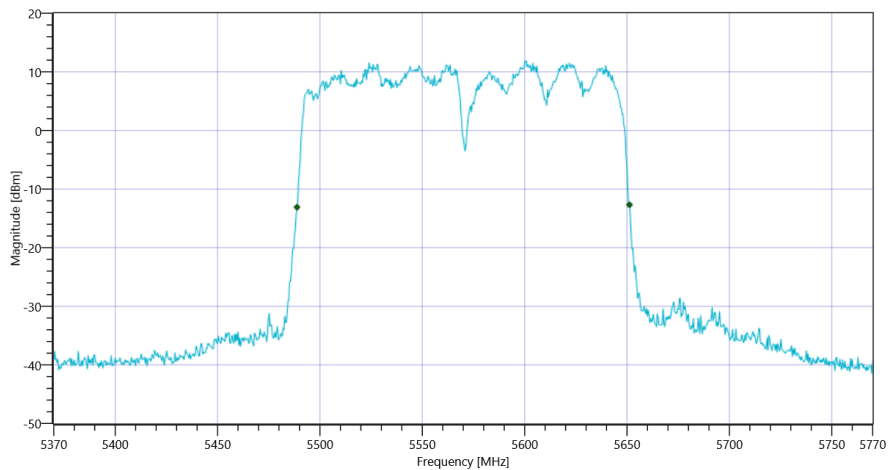
### Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

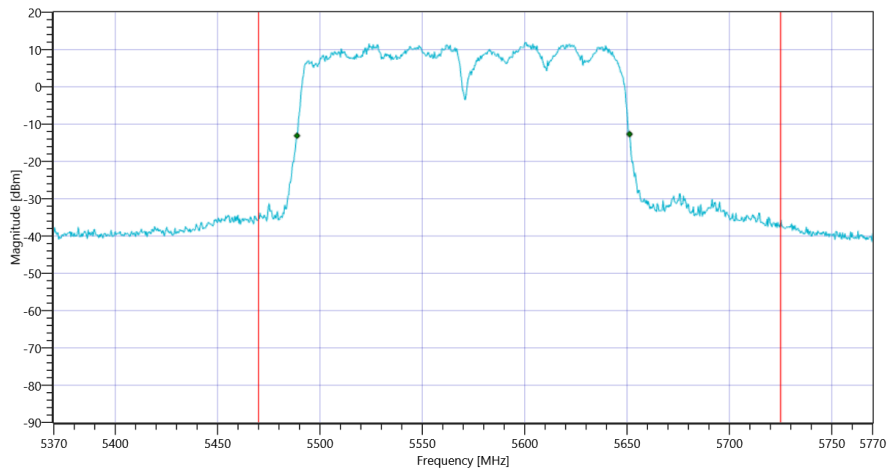
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	162.4	MHz	INFO
T1 26dB	5470.000000	---	5488.8000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5651.2000	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ac-VHT160 mode U-NII-2C

General verdict

PASS

## FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C

Test References	
TC Start	31.03.2022 16:51:47
Ambit Temp [°C]   Humidity [rel%]	25.4   28
System Version	3.0.5.9
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT160 mode U-NII-2C
Add. Information	Port 2 & 4 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-2C
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5570
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
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 5570 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	6.48	dBm	INFO
Ref. Frequency	---	---	5620.150	MHz	INFO

## Evaluation max. Duty Cycle

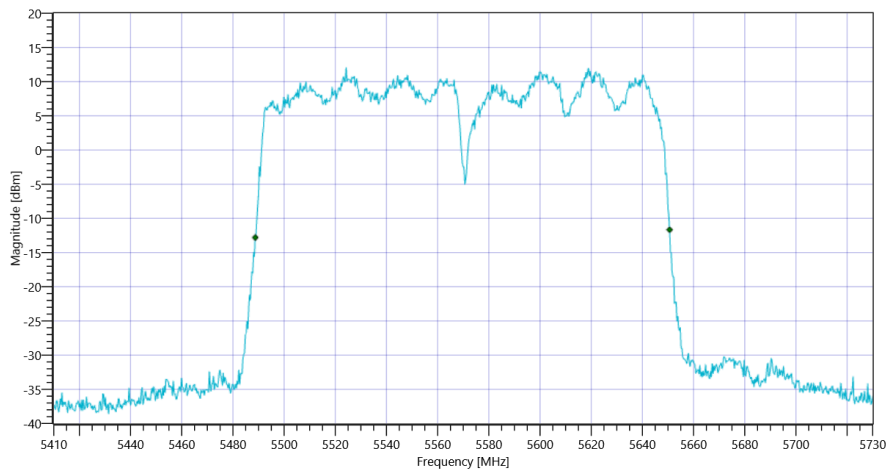
### Duty Cycle evaluation

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	---	---	161.92	MHz	INFO
T1 26dB	---	---	5488.7200	MHz	INFO
T2 26dB	---	---	5650.6400	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C\_BW

## Maximum Output Power

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	18.48   24.55   10
Start [MHz]   Stop [MHz]	5410.000   5730.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	214000   1   640   SWE

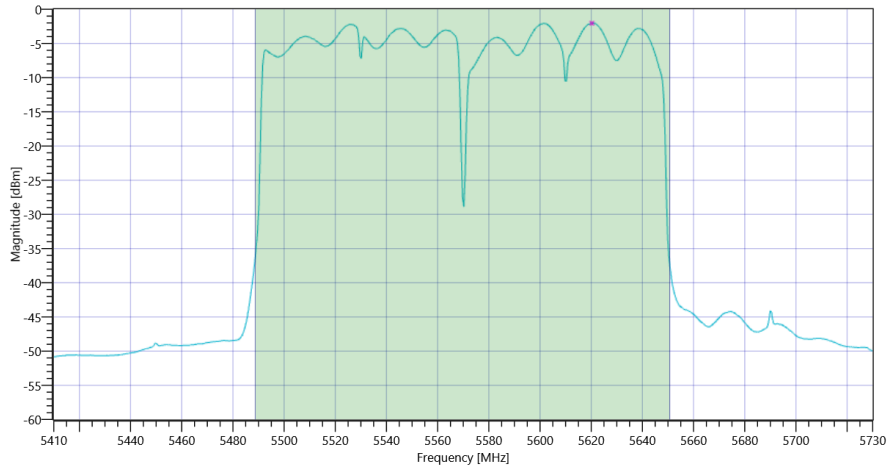
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	17.16	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					



**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power DC corrected	---	24	17.16	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.09	17.16	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-2C Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-2.05	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-2.05	dBm/1MHz	PASS

General verdict	<b>PASS</b>
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## FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

Test References	
TC Start	25.03.2022 09:58:09
Ambit Temp [°C]   Humidity [rel%]	23.2   24
System Version	3.0.5.5
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT160 mode U-NII-1_2A
Add. Information	Port 2 & 4 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-1_2A
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5250
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 5250 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.37	dBm	INFO
Ref. Frequency	---	---	5284.970	MHz	INFO

## Evaluation max. Duty Cycle

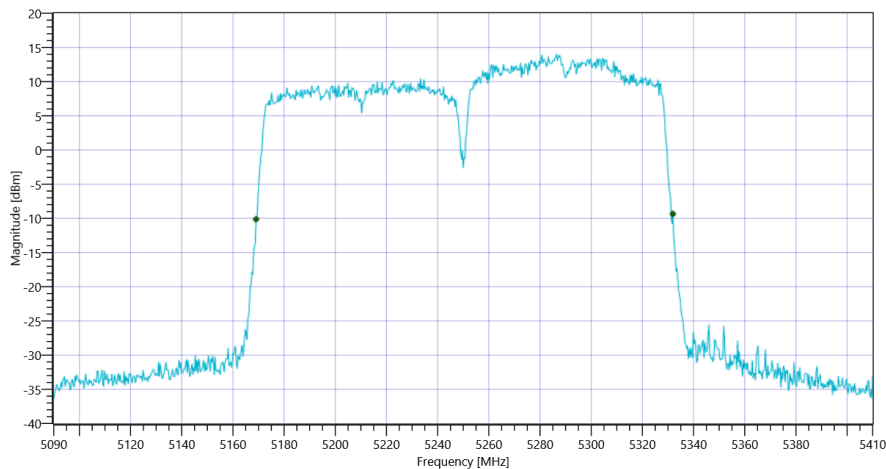
### Duty Cycle evaluation

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	---	---	162.88	MHz	INFO
T1 26dB	---	---	5169.0400	MHz	INFO
T2 26dB	---	---	5331.9200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A\_BW

## Maximum Output Power

### READ SA SETTINGS:

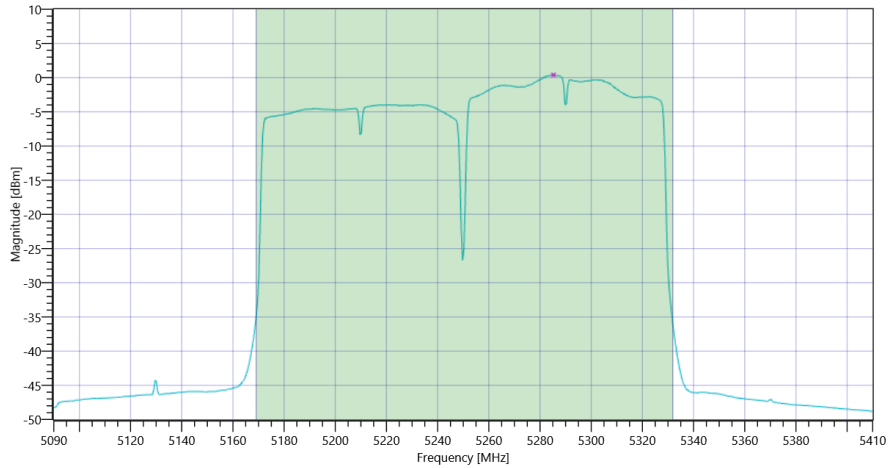
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.37   17.83   20
Start [MHz]   Stop [MHz]	5090.000   5410.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	214000   1   640   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	18.9	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power DC corrected	---	24	18.9	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.12	18.9	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	0.39	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	0.39	dBm/1MHz	PASS

General verdict	<b>PASS</b>
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## FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A

Test References	
TC Start	25.03.2022 10:04:33
Ambit Temp [°C]   Humidity [rel%]	23.3   24
System Version	3.0.5.5
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT160 mode U-NII-1_2A
Add. Information	Port 2 & 4 Combined

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	4
User Interaction	No
Device Class UNII_1	AP indoor

Test Parameter	
Technology to test	WLAN5Gx ac-VHT160 mode U-NII-1_2A
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False   Freq [MHz] 0
Frequency mid to test	True   Freq [MHz] 5250
Frequency high to test	False   Freq [MHz] 0
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 5250 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.60	dBm	INFO
Ref. Frequency	---	---	5282.170	MHz	INFO

## Evaluation max. Duty Cycle

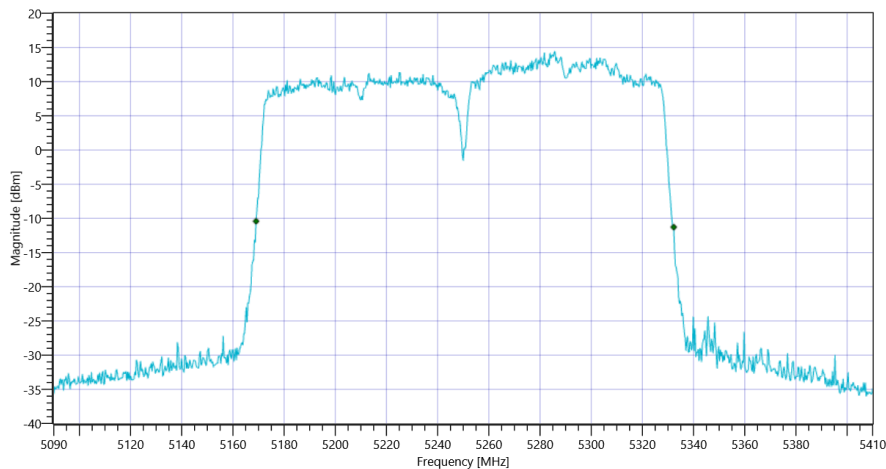
### Duty Cycle evaluation

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	---	---	163.2	MHz	INFO
T1 26dB	---	---	5169.0400	MHz	INFO
T2 26dB	---	---	5332.2400	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A\_BW

## Maximum Output Power

### READ SA SETTINGS:

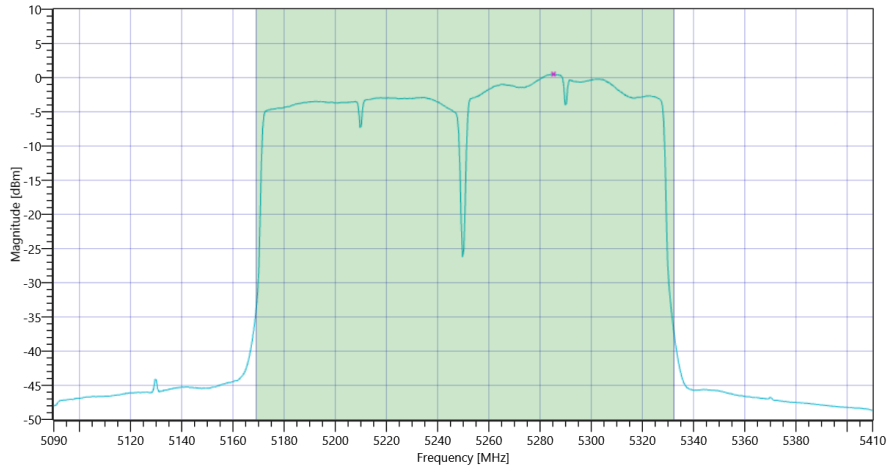
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	20.60   17.83   20
Start [MHz]   Stop [MHz]	5090.000   5410.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	RMS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	214000   1   640   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19.28	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power DC corrected	---	24	19.28	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.13	19.28	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT160 mode U-NII-1\_2A Max OP and PSD

**Power Spectral Density**

**RESULT**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	0.5	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	0.5	dBm/1MHz	PASS

General verdict **PASS**

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