

Measurement Results

No.1-3977/22-01-05_Annex_MR_A11

Test logging

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Test/s performed:

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Lab Manager
Radio Communications

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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 ax-HE160 U-NII-1_2A

Test References	
TC Start	25.03.2022 09:45:00
Ambit Temp [°C] Humidity [rel%]	23.2 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 ax-HE160 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 ax-HE160 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.	---	---	9.05	dBm	INFO
Ref. Frequency	---	---	5290.960	MHz	INFO

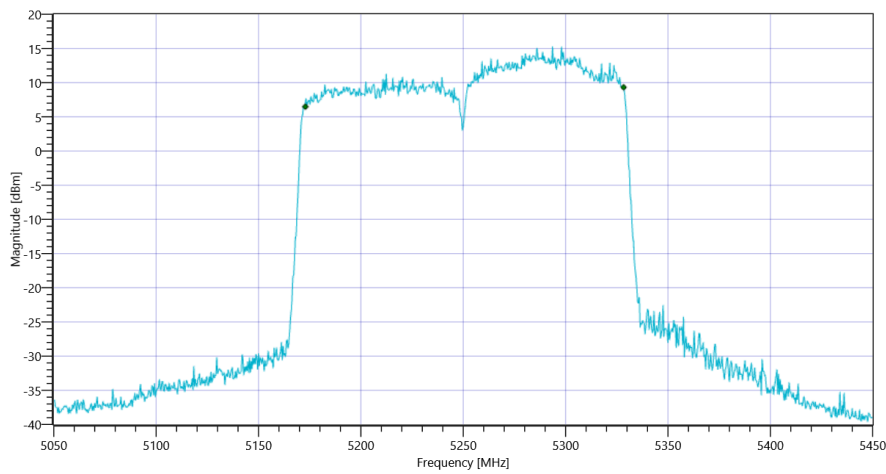
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.05 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

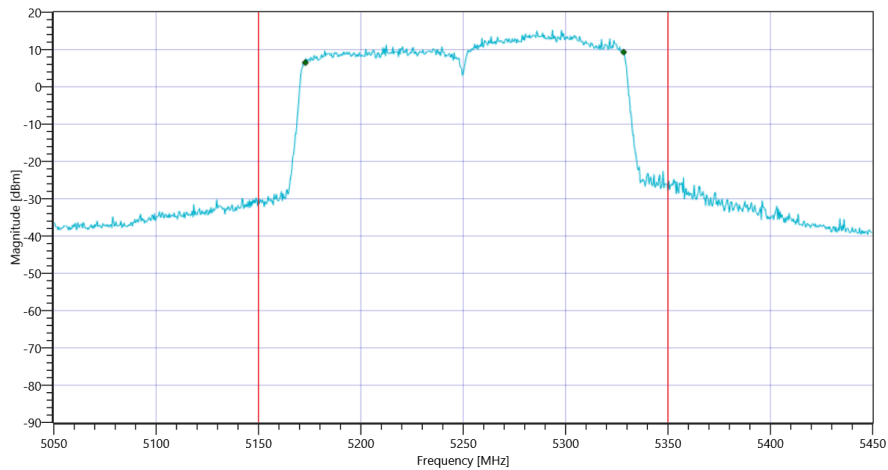
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	155.445	MHz	INFO
T1 99%	5150.000000	---	5172.8771	MHz	PASS
T2 99%	---	5350.000000	5328.3217	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A 99PCT

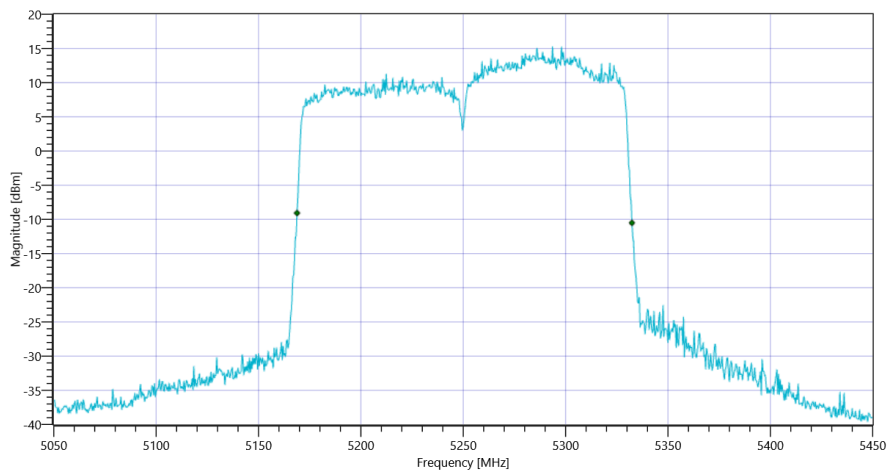
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A

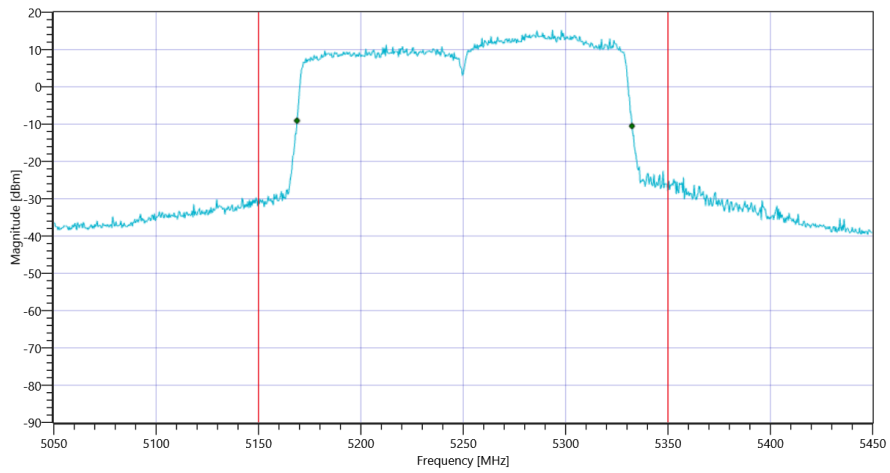
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	163.6	MHz	INFO
T1 26dB	5150.000000	---	5168.8000	MHz	PASS
T2 26dB	---	5350.000000	5332.4000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A

Test References	
TC Start	25.03.2022 09:37:27
Ambit Temp [°C] Humidity [rel%]	23.1 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 ax-HE160 U-NII-1_2A
Add. Information	

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

Test Parameter	
Technology to test	WLAN5Gx ax-HE160 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.	---	---	10.40	dBm	INFO
Ref. Frequency	---	---	5264.390	MHz	INFO

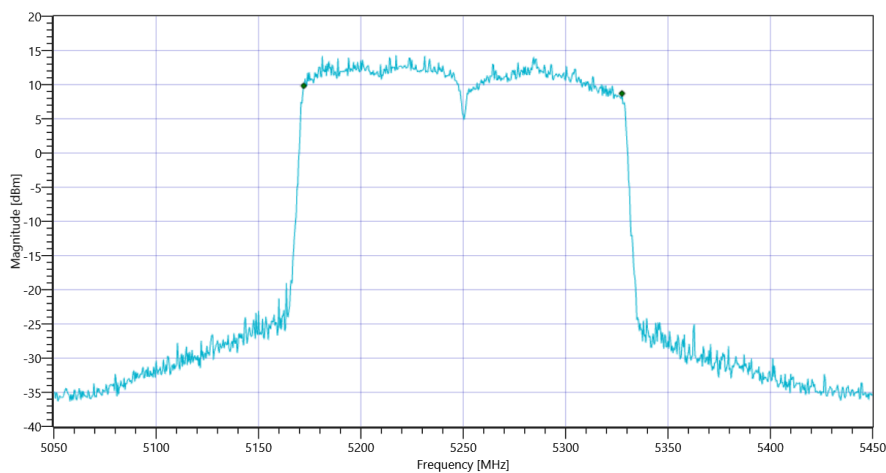
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.40 17.83 20
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

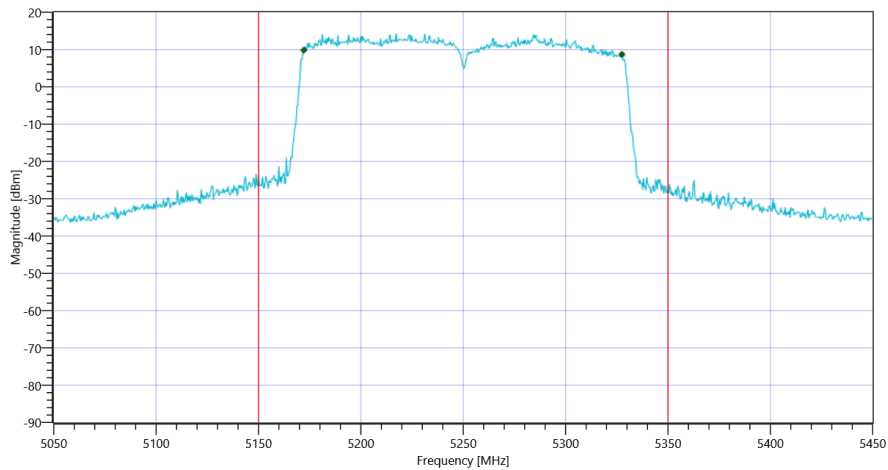
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	155.445	MHz	INFO
T1 99%	5150.000000	---	5172.0779	MHz	PASS
T2 99%	---	5350.000000	5327.5225	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A 99PCT

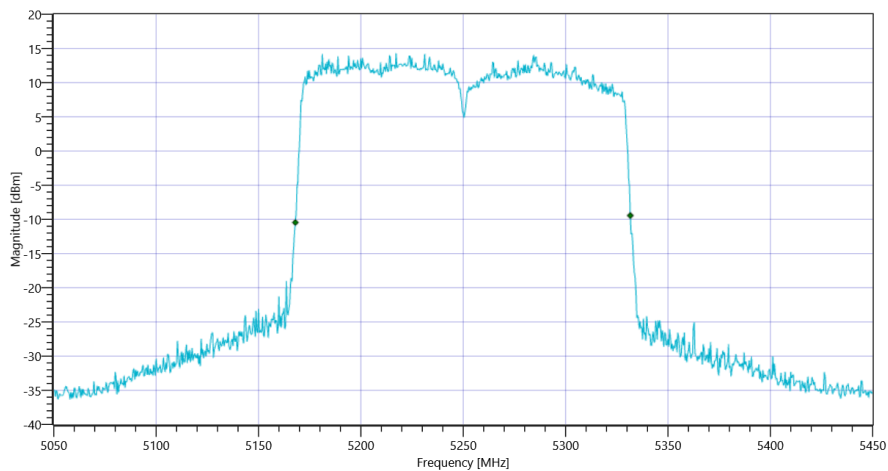
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A

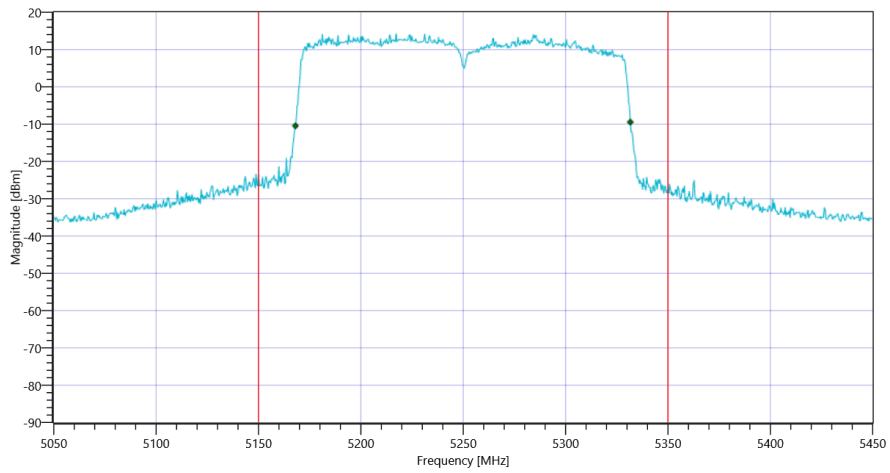
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	163.6	MHz	INFO	
T1 26dB	5150.000000	---	5168.0000	MHz	PASS	
T2 26dB	---	5350.000000	5331.6000	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-1_2A

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

Test References	
TC Start	31.03.2022 16:25:40
Ambit Temp [°C] Humidity [rel%]	25.2 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 ax-HE160 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 ax-HE160 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.	---	---	7.16	dBm	INFO
Ref. Frequency	---	---	5617.550	MHz	INFO

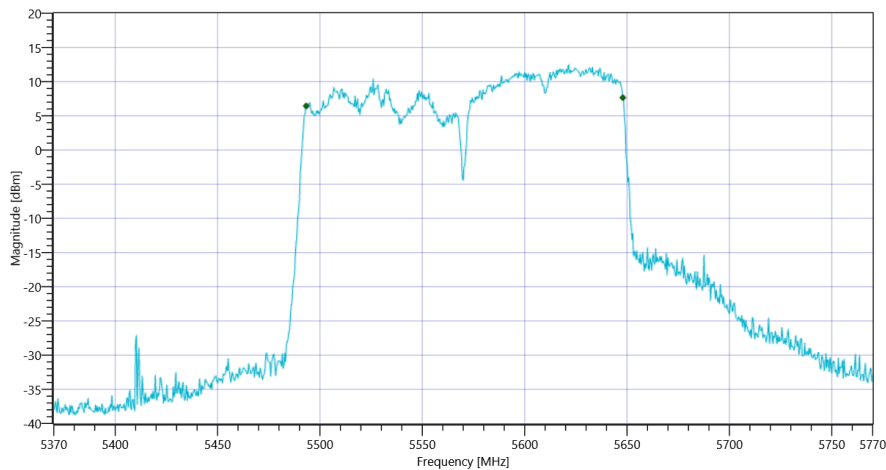
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.16 24.55 10
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

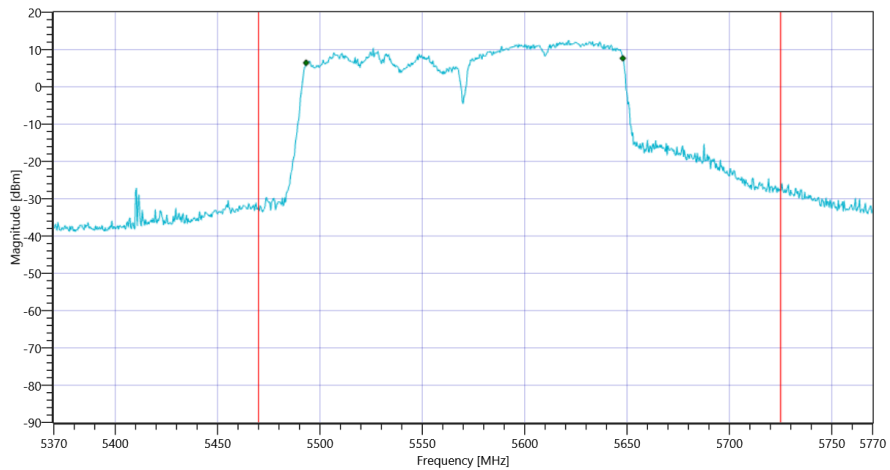
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	154.645	MHz	INFO
T1 99%	5470.000000	---	5493.2767	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5647.9221	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C 99PCT

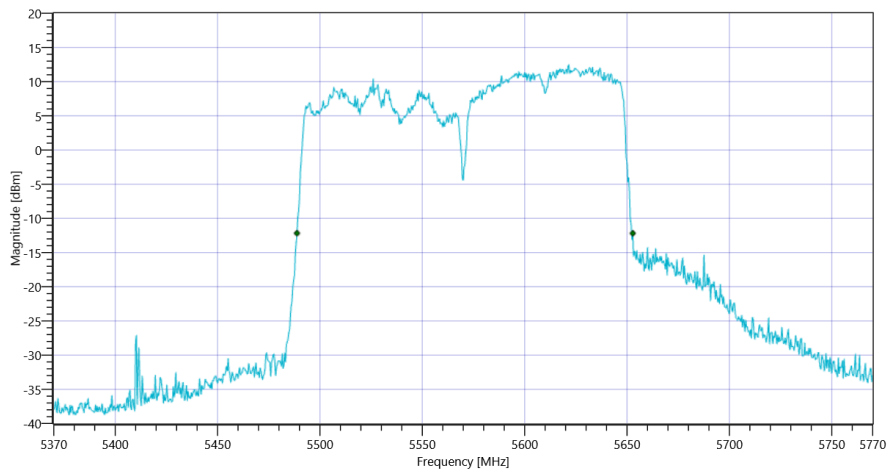
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

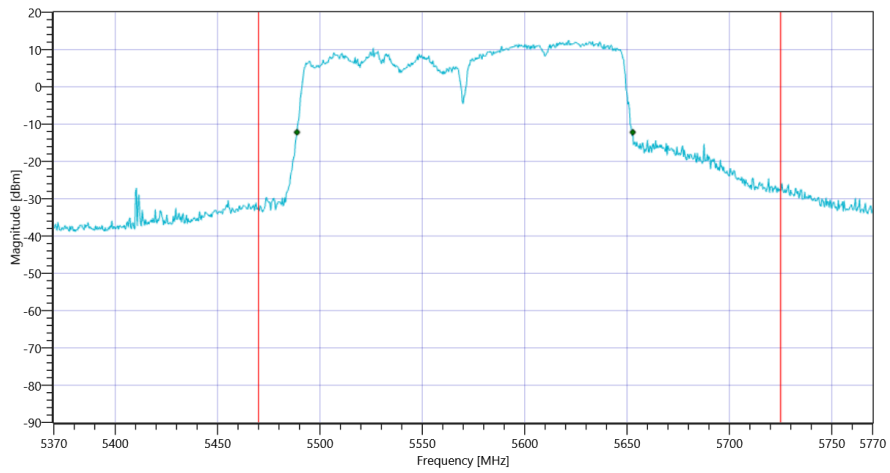
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	164	MHz	INFO
T1 26dB	5470.000000	---	5488.8000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5652.8000	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C

Test References	
TC Start	31.03.2022 16:21:09
Ambit Temp [°C] Humidity [rel%]	25.3 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 ax-HE160 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 ax-HE160 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.	---	---	7.78	dBm	INFO
Ref. Frequency	---	---	5625.740	MHz	INFO

Evaluation max. Duty Cycle

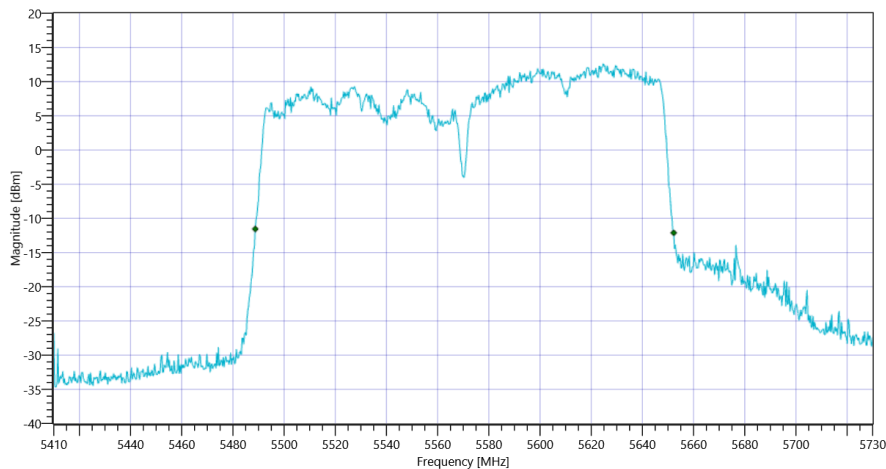
Duty Cycle evaluation

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	---	---	163.52	MHz	INFO
T1 26dB	---	---	5488.7200	MHz	INFO
T2 26dB	---	---	5652.2400	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C_BW

Maximum Output Power

READ SA SETTINGS:

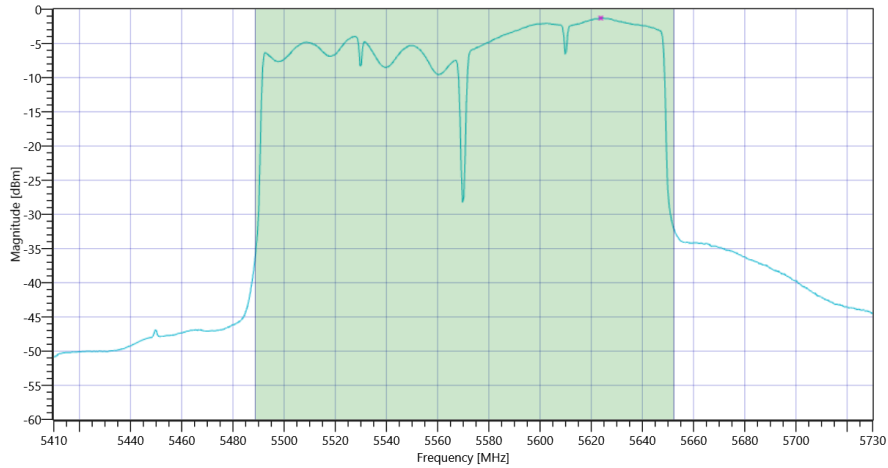
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.78 24.55 10
Start [MHz] Stop [MHz]	5410.000 5730.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	214000 1 640 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	17.44	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	17.44	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.14	17.44	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-1.28	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-1.28	dBm/1MHz	PASS

General verdict	PASS
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FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

Test References	
TC Start	31.03.2022 16:46:21
Ambit Temp [°C] Humidity [rel%]	25.2 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 ax-HE160 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 ax-HE160 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.	---	---	6.26	dBm	INFO
Ref. Frequency	---	---	5561.010	MHz	INFO

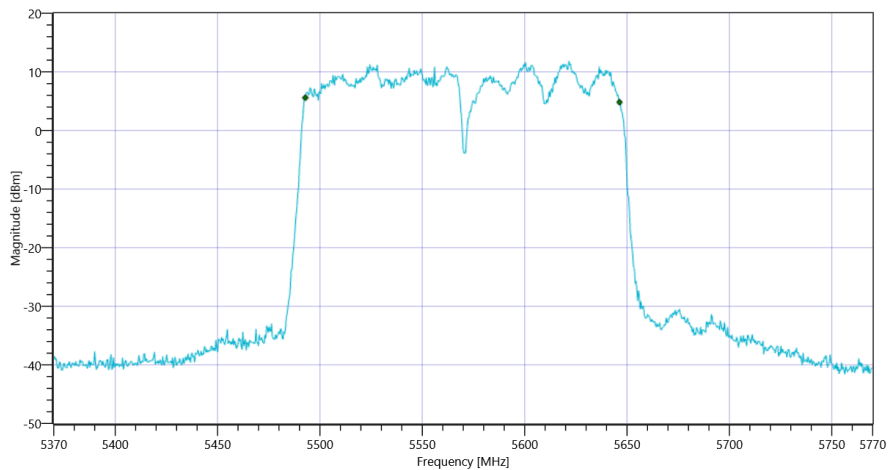
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.26 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

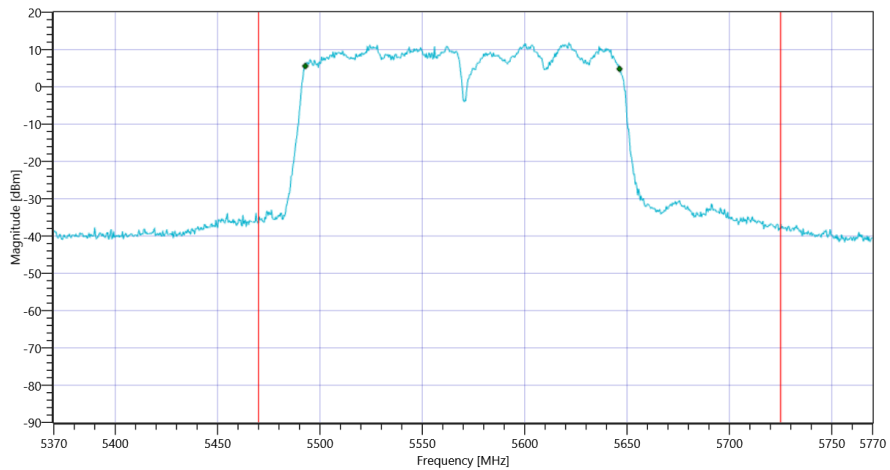
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	153.447	MHz	INFO
T1 99%	5470.000000	---	5492.8771	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5646.3237	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C 99PCT

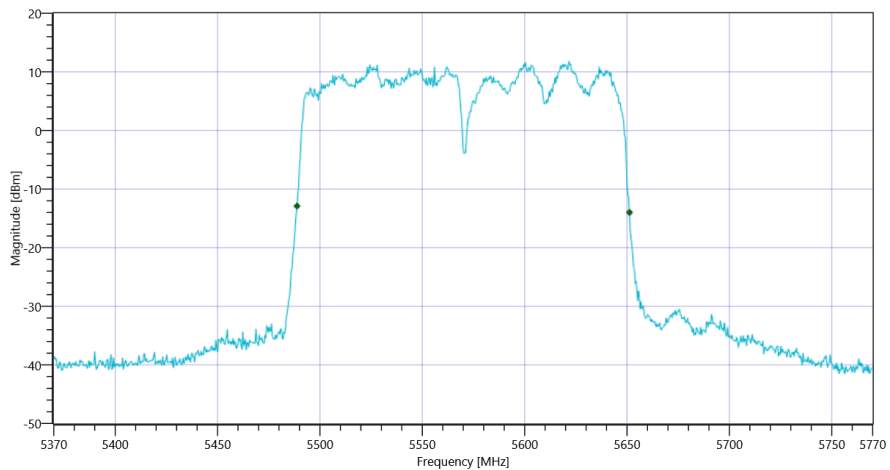
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

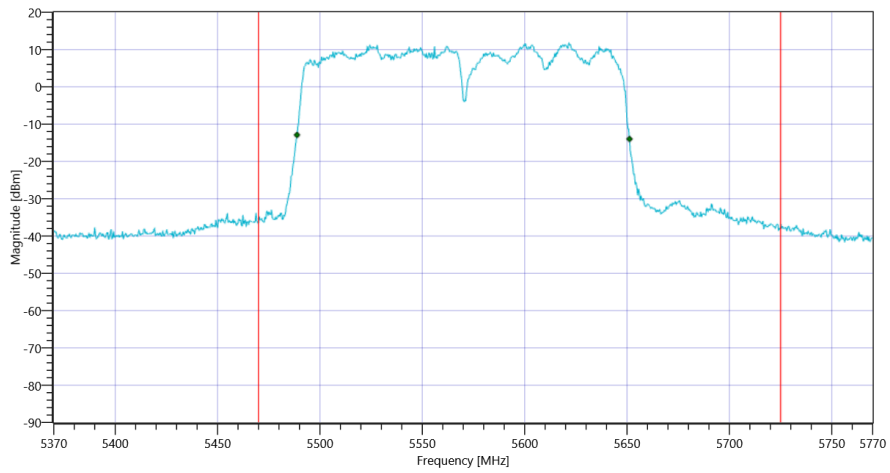
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	162.4	MHz	INFO
T1 26dB	5470.000000	---	5488.8000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5651.2000	MHz	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx ax-HE160 U-NII-2C

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C

Test References	
TC Start	31.03.2022 16:41:49
Ambit Temp [°C] Humidity [rel%]	25.2 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 ax-HE160 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 ax-HE160 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.	---	---	6.09	dBm	INFO
Ref. Frequency	---	---	5630.740	MHz	INFO

Evaluation max. Duty Cycle

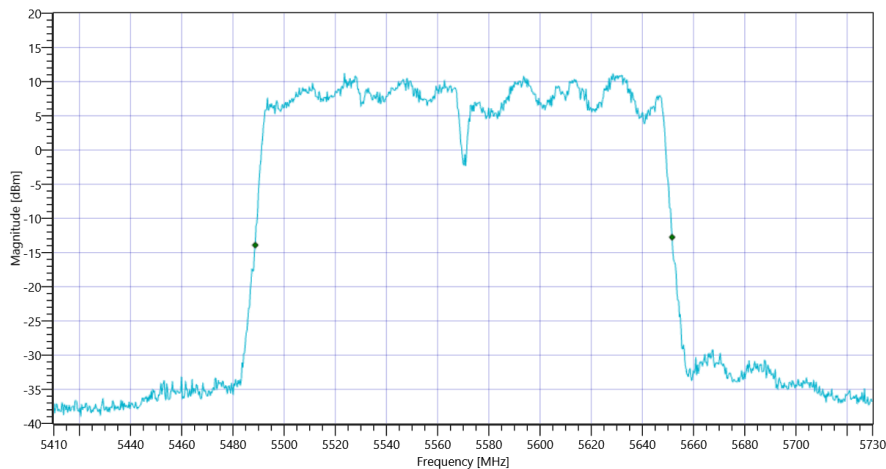
Duty Cycle evaluation

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	---	---	5488.7200	MHz	INFO
T2 26dB	---	---	5651.6000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C_BW

Maximum Output Power

READ SA SETTINGS:

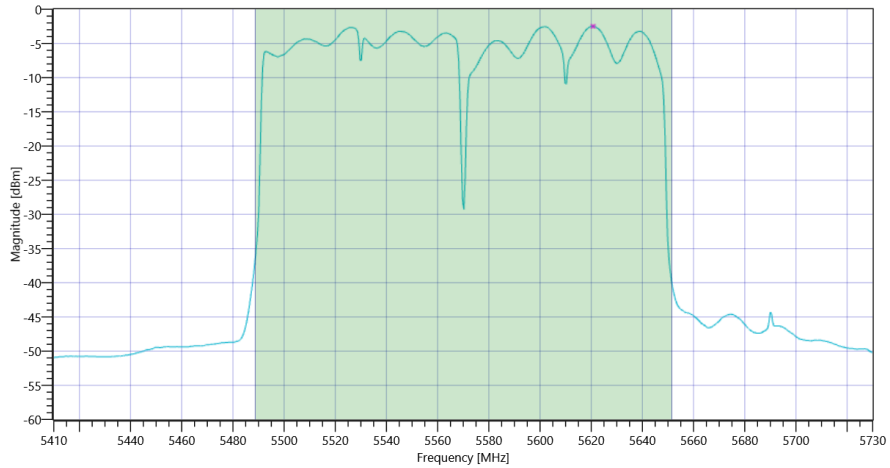
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.09 24.55 10
Start [MHz] Stop [MHz]	5410.000 5730.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	214000 1 640 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.83	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	16.83	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.12	16.83	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-2.49	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	-2.49	dBm/1MHz	PASS

General verdict	PASS
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FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-1_2A

Test References	
TC Start	25.03.2022 09:40:25
Ambit Temp [°C] Humidity [rel%]	23.1 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 ax-HE160 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 ax-HE160 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.	---	---	10.82	dBm	INFO
Ref. Frequency	---	---	5288.560	MHz	INFO

Evaluation max. Duty Cycle

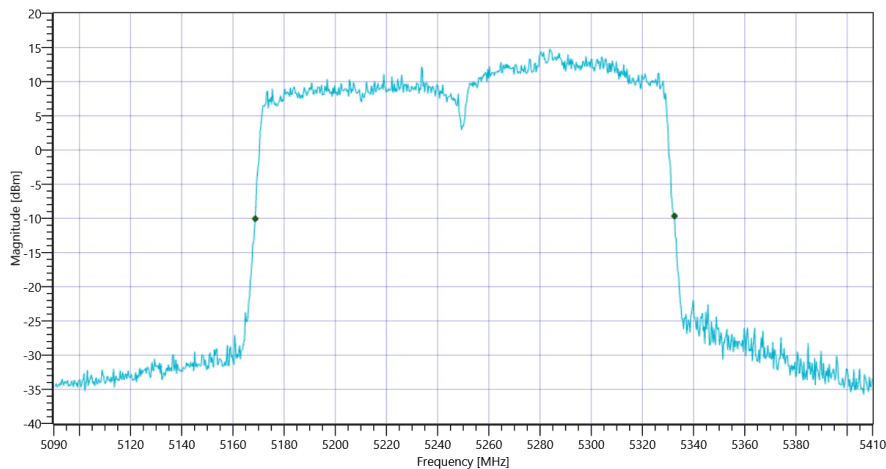
Duty Cycle evaluation

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	---	---	163.84	MHz	INFO
T1 26dB	---	---	5168.7200	MHz	INFO
T2 26dB	---	---	5332.5600	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-1_2A_BW

Maximum Output Power

READ SA SETTINGS:

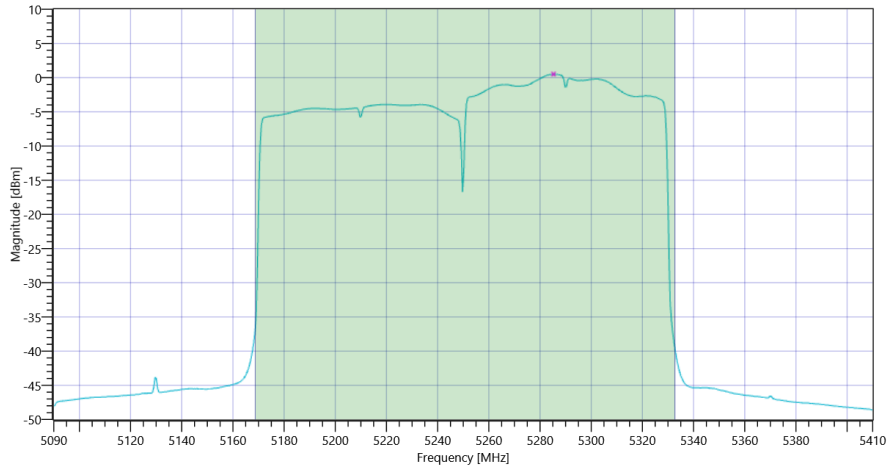
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.82 17.83 20
Start [MHz] Stop [MHz]	5090.000 5410.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	214000 1 640 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19.1	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	19.1	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.14	19.1	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 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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FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-1_2A

Test References	
TC Start	25.03.2022 09:32:50
Ambit Temp [°C] Humidity [rel%]	23.1 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 ax-HE160 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 ax-HE160 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.	---	---	9.87	dBm	INFO
Ref. Frequency	---	---	5202.450	MHz	INFO

Evaluation max. Duty Cycle

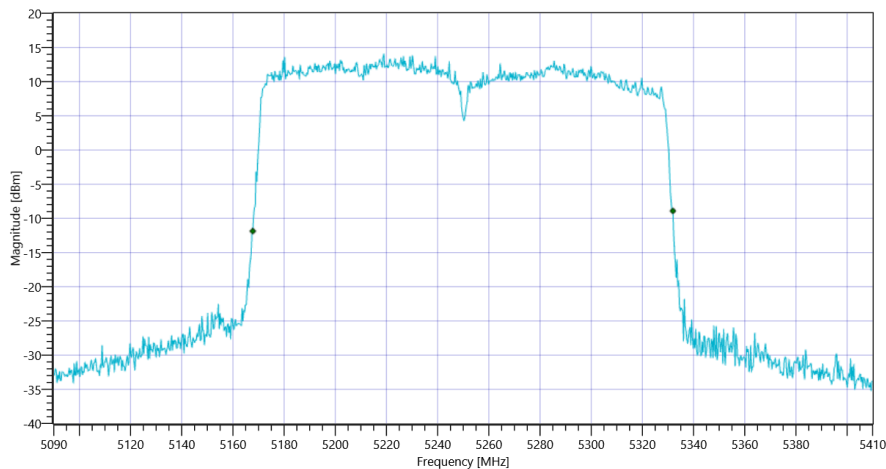
Duty Cycle evaluation

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	---	---	164.16	MHz	INFO
T1 26dB	---	---	5167.7600	MHz	INFO
T2 26dB	---	---	5331.9200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 U-NII-1_2A_BW

Maximum Output Power

READ SA SETTINGS:

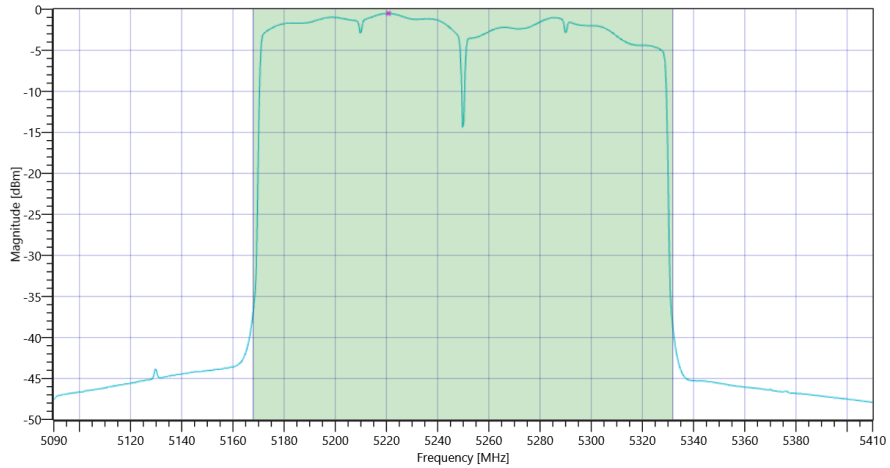
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.87 17.83 20
Start [MHz] Stop [MHz]	5090.000 5410.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	214000 1 640 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19.7	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	19.7	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	33.15	19.7	dBm	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ax-HE160 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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