

Measurement Results

No.1-3977/22-01-05_Annex_MR_A1

Test logging

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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 a mode U-NII-1

Test References	
TC Start	29.03.2022 14:54:32
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.43	dBm	INFO
Ref. Frequency	---	---	5183.200	MHz	INFO

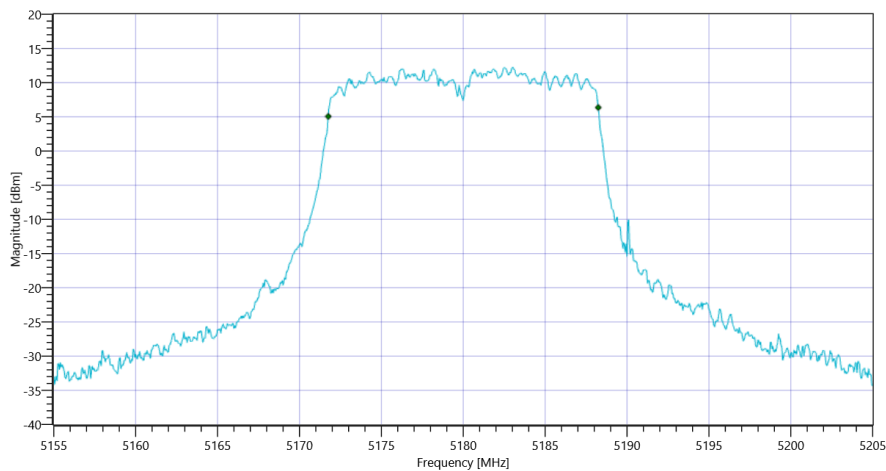
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.43 17.09 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

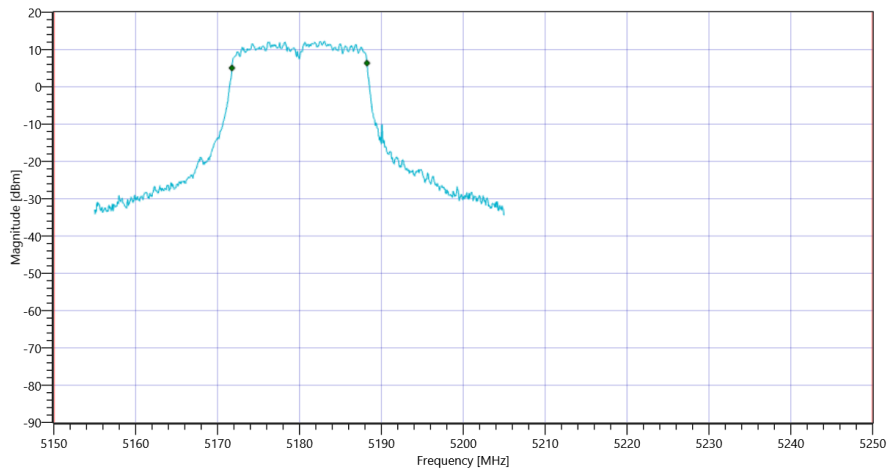
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.484	MHz	INFO
T1 99%	5150.000000	---	5171.7582	MHz	PASS
T2 99%	---	5250.000000	5188.2418	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISM Bandwidths ~ WLAN5Gx a mode U-NII-1 99PCT

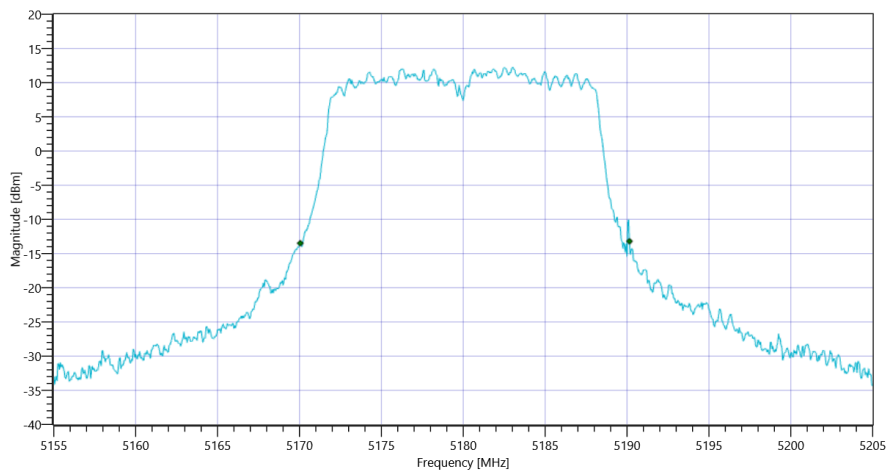
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

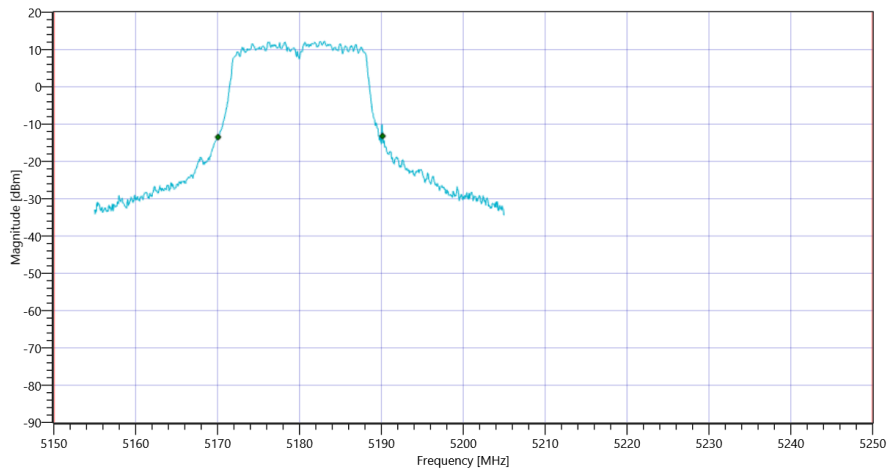
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20.1	MHz	INFO	
T1 26dB	5150.000000	---	5170.0500	MHz	PASS	
T2 26dB	---	5250.000000	5190.1500	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:52:51
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.62	dBm	INFO
Ref. Frequency	---	---	5183.000	MHz	INFO

Evaluation max. Duty Cycle

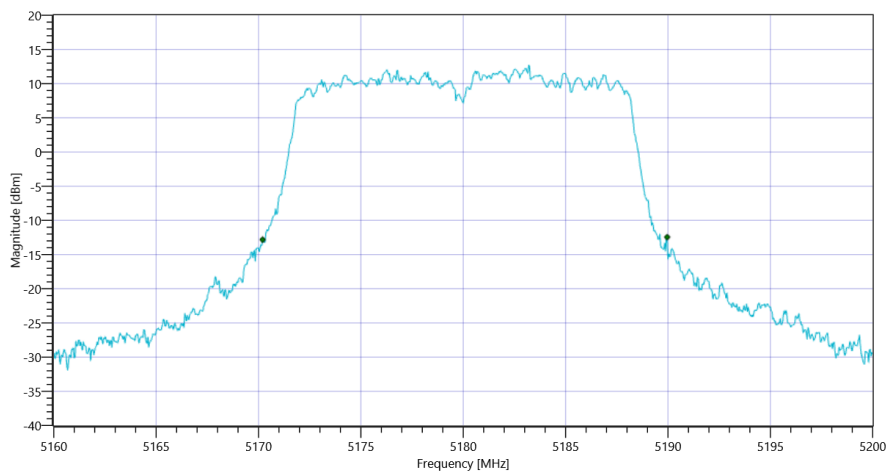
Duty Cycle evaluation

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	---	---	19.76	MHz	INFO
T1 26dB	---	---	5170.2000	MHz	INFO
T2 26dB	---	---	5189.9600	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:

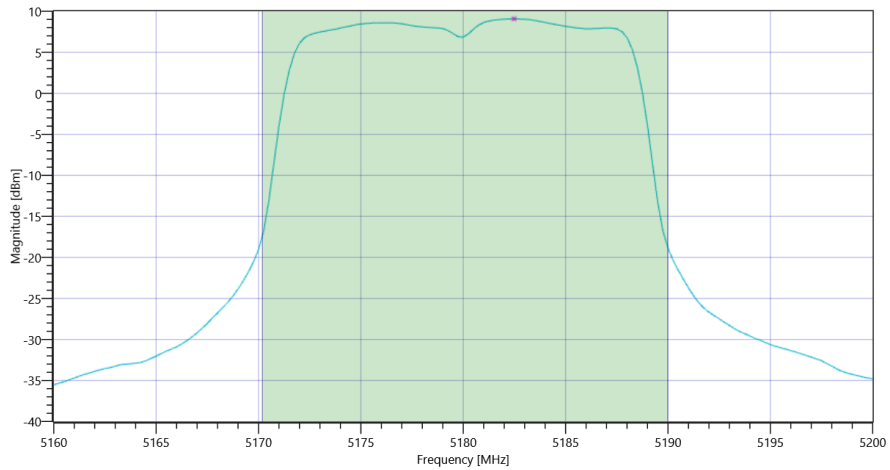
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.62 17.09 30
Start [MHz] Stop [MHz]	5160.000 5200.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	20.09	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	---	30	20.09	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.96	20.09	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	9.08	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	9.08	dBm/1MHz	PASS

General verdict **PASS**

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:51:52
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	15.66	dBm	INFO
Ref. Frequency	---	---	5178.600	MHz	INFO

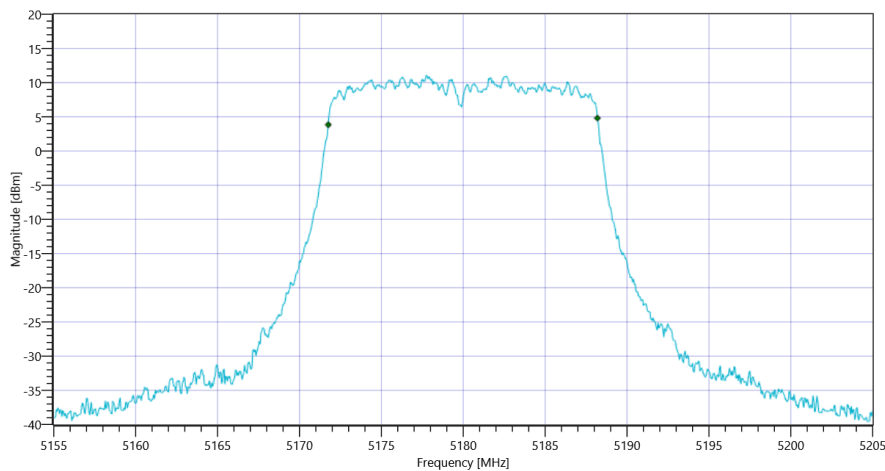
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.66 17.09 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

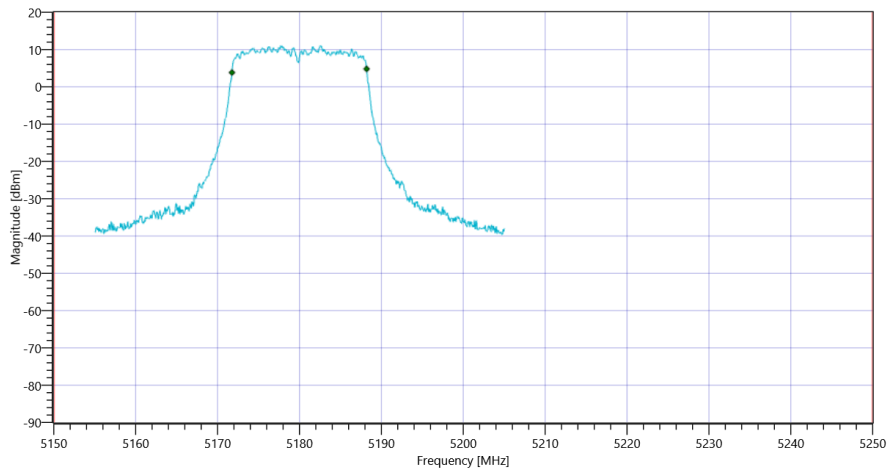
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.434	MHz	INFO
T1 99%	5150.000000	---	5171.7582	MHz	PASS
T2 99%	---	5250.000000	5188.1918	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 99PCT

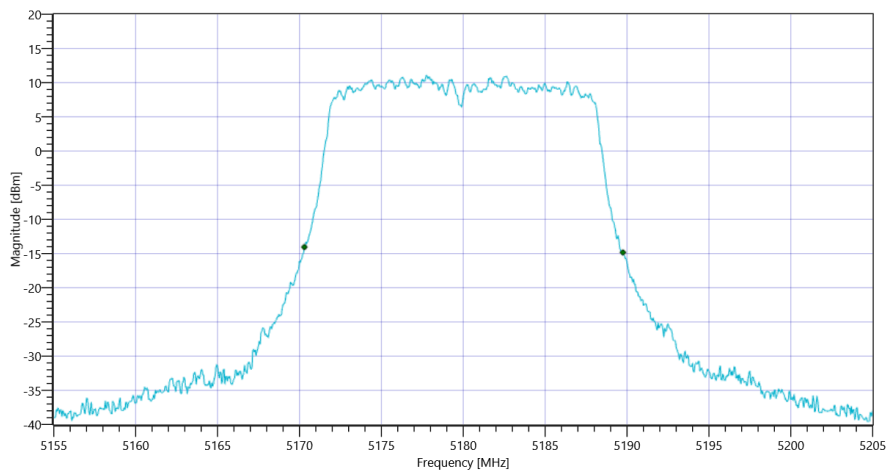
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

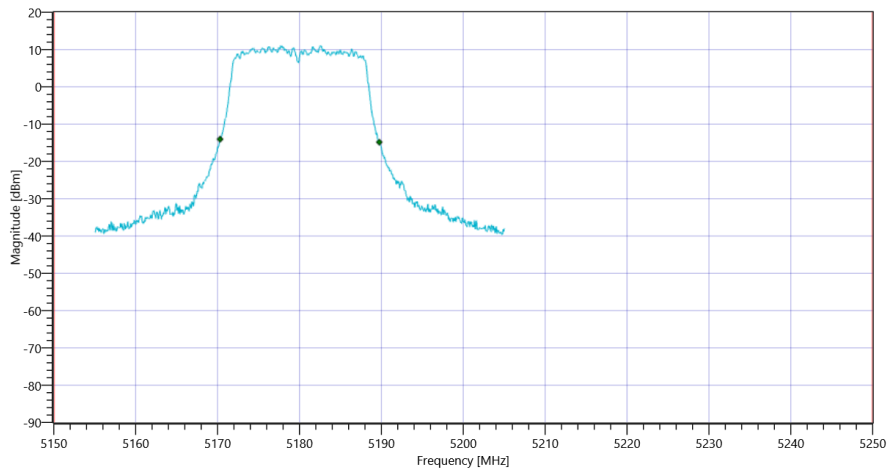
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	19.45	MHz	INFO	
T1 26dB	5150.000000	---	5170.3000	MHz	PASS	
T2 26dB	---	5250.000000	5189.7500	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:50:11
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	15.47	dBm	INFO
Ref. Frequency	---	---	5178.800	MHz	INFO

Evaluation max. Duty Cycle

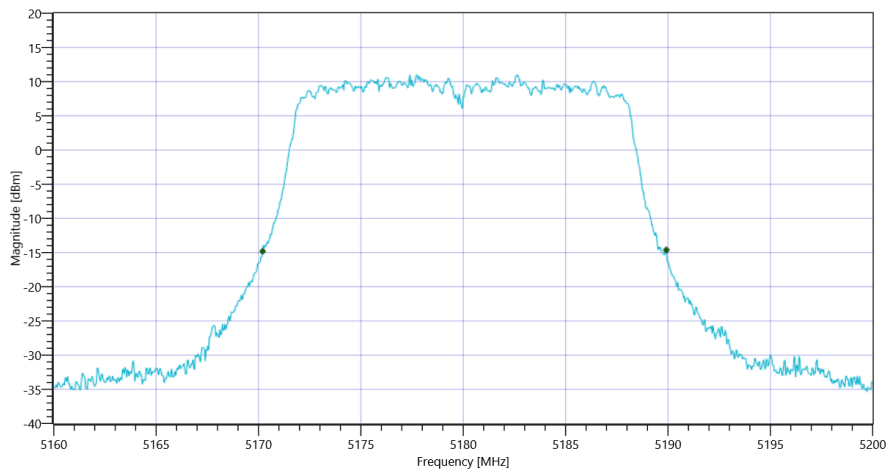
Duty Cycle evaluation

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	---	---	19.72	MHz	INFO
T1 26dB	---	---	5170.2000	MHz	INFO
T2 26dB	---	---	5189.9200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:

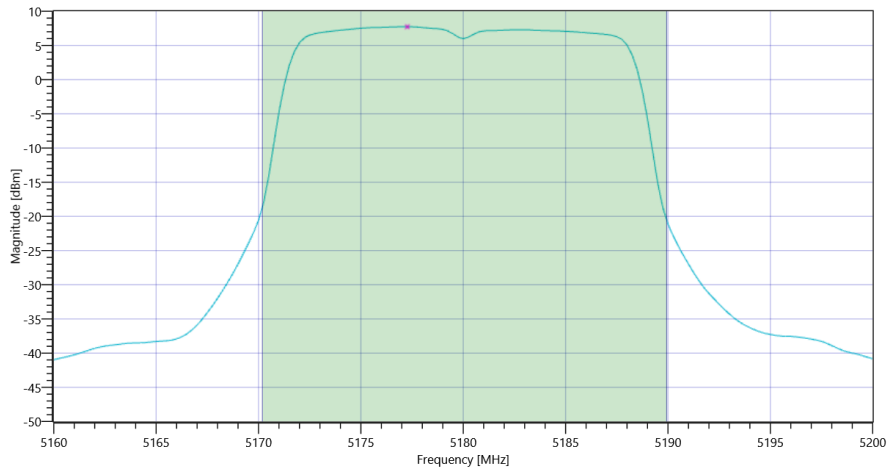
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.47 17.09 25
Start [MHz] Stop [MHz]	5160.000 5200.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19.02	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	---	30	19.02	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.95	19.02	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.73	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	7.73	dBm/1MHz	PASS

General verdict **PASS**

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:49:13
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.77	dBm	INFO
Ref. Frequency	---	---	5183.400	MHz	INFO

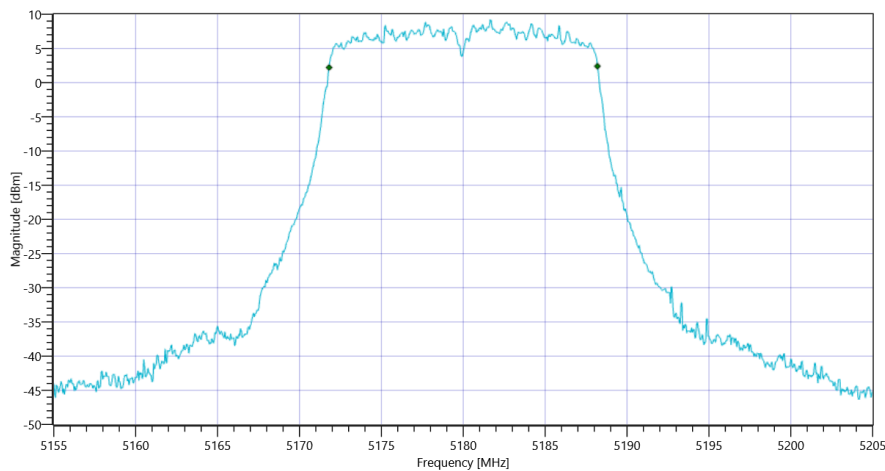
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.77 17.09 20
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

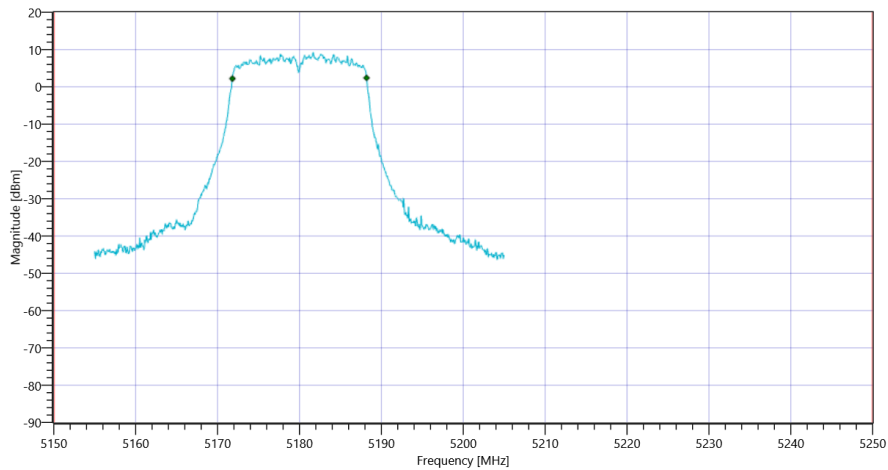
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.384	MHz	INFO
T1 99%	5150.000000	---	5171.8082	MHz	PASS
T2 99%	---	5250.000000	5188.1918	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 99PCT

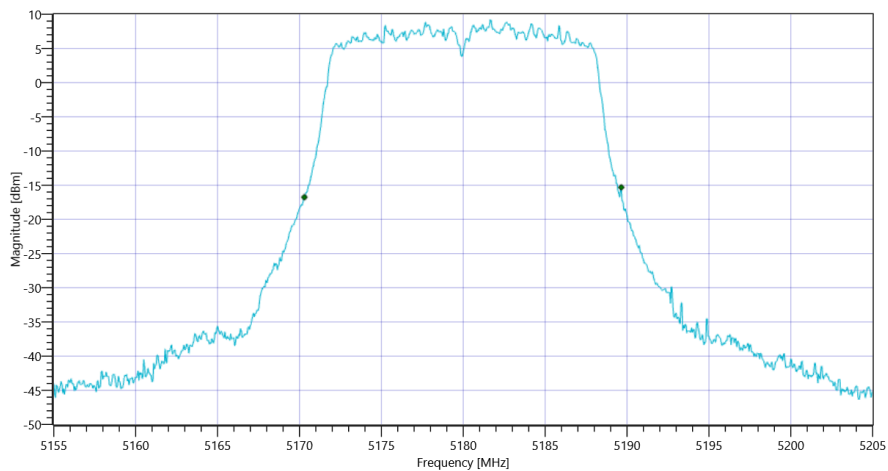
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

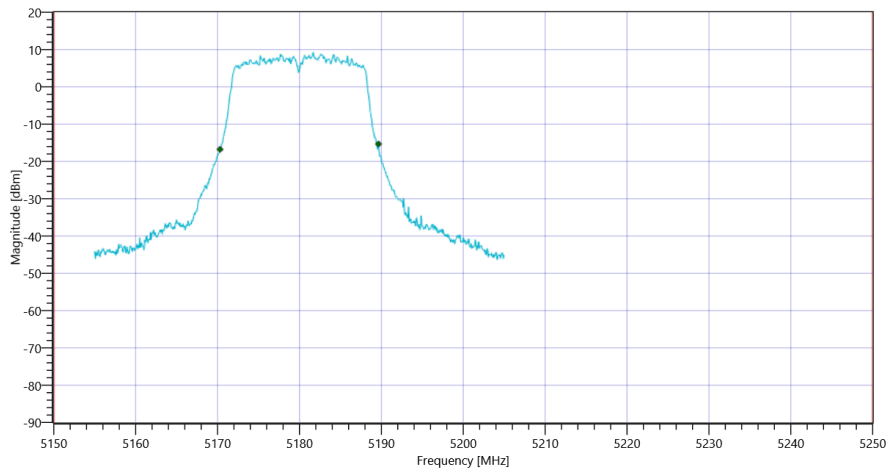
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	19.35	MHz	INFO	
T1 26dB	5150.000000	---	5170.3000	MHz	PASS	
T2 26dB	---	5250.000000	5189.6500	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:47:32
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.00	dBm	INFO
Ref. Frequency	---	---	5176.800	MHz	INFO

Evaluation max. Duty Cycle

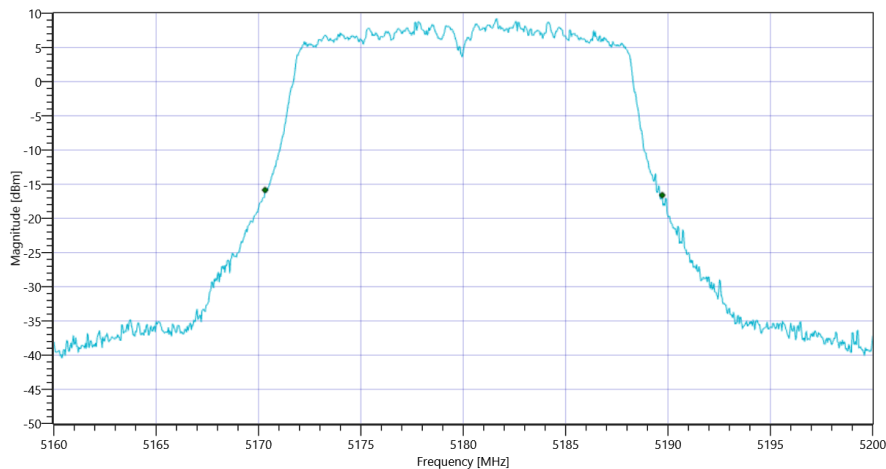
Duty Cycle evaluation

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	---	---	19.4	MHz	INFO
T1 26dB	---	---	5170.3200	MHz	INFO
T2 26dB	---	---	5189.7200	MHz	INFO



Maximum Output Power

READ SA SETTINGS:

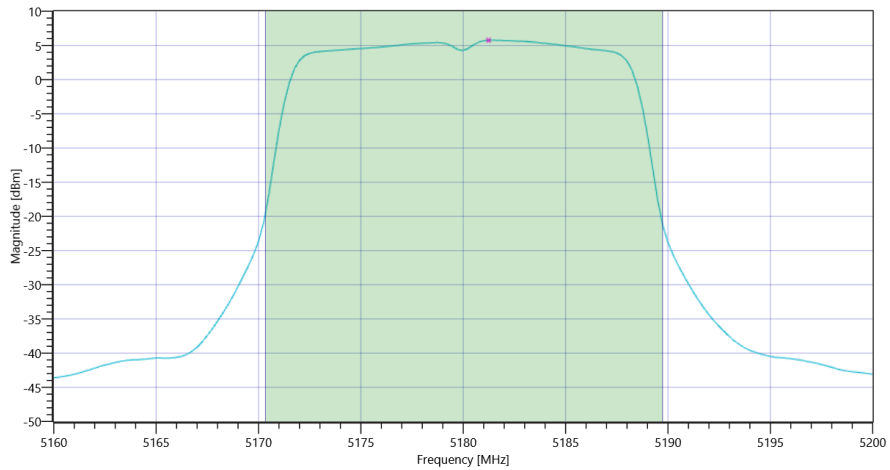
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.00 17.09 25
Start [MHz] Stop [MHz]	5160.000 5200.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	16.78	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	---	30	16.78	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.88	16.78	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	5.75	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	5.75	dBm/1MHz	PASS

General verdict	PASS
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FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:46:33
Ambit Temp [°C] Humidity [rel%]	25.0 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.80	dBm	INFO
Ref. Frequency	---	---	5179.400	MHz	INFO

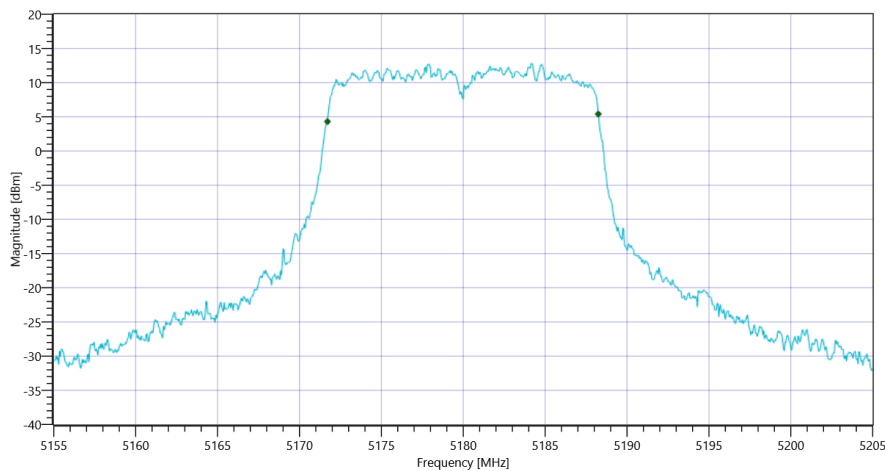
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.80 17.09 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

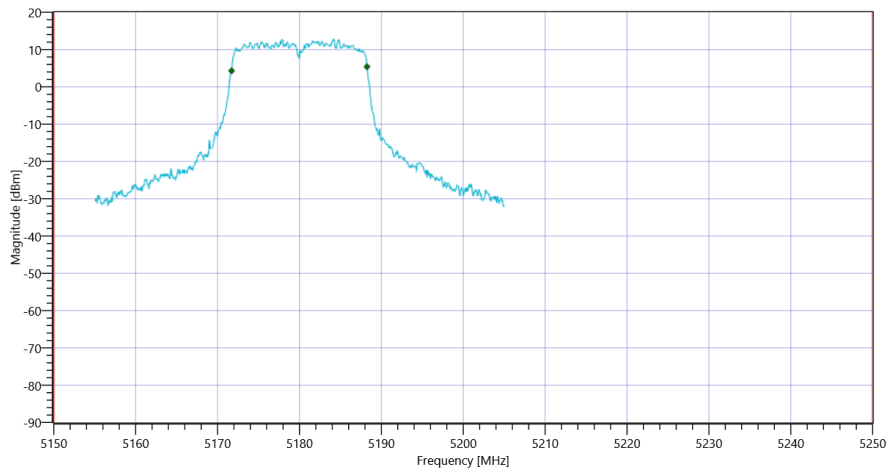
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.533	MHz	INFO
T1 99%	5150.000000	---	5171.7083	MHz	PASS
T2 99%	---	5250.000000	5188.2418	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 99PCT

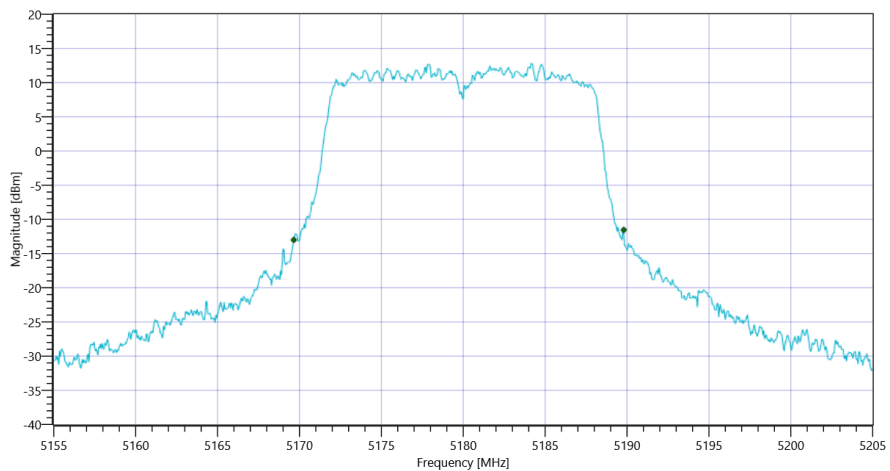
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

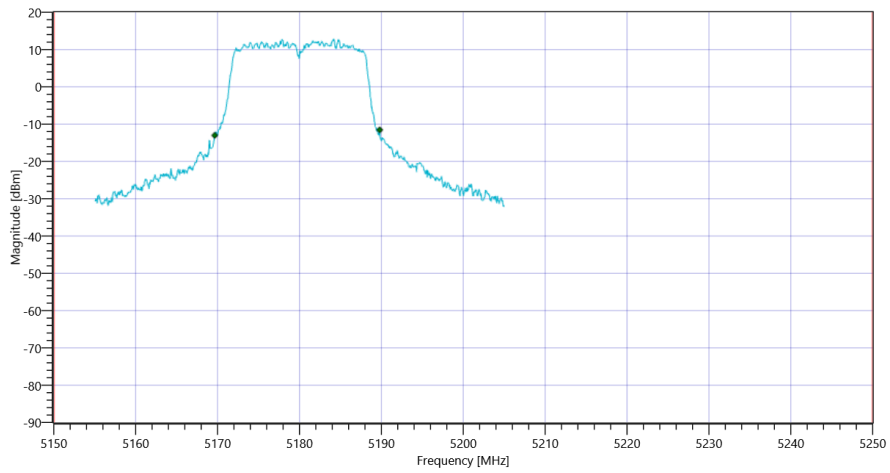
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	20.15	MHz	INFO	
T1 26dB	5150.000000	---	5169.6500	MHz	PASS	
T2 26dB	---	5250.000000	5189.8000	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-1

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1

Test References	
TC Start	29.03.2022 14:44:51
Ambit Temp [°C] Humidity [rel%]	25.1 24
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 a mode U-NII-1
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 a mode U-NII-1
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	False Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5180 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.59	dBm	INFO
Ref. Frequency	---	---	5182.400	MHz	INFO

Evaluation max. Duty Cycle

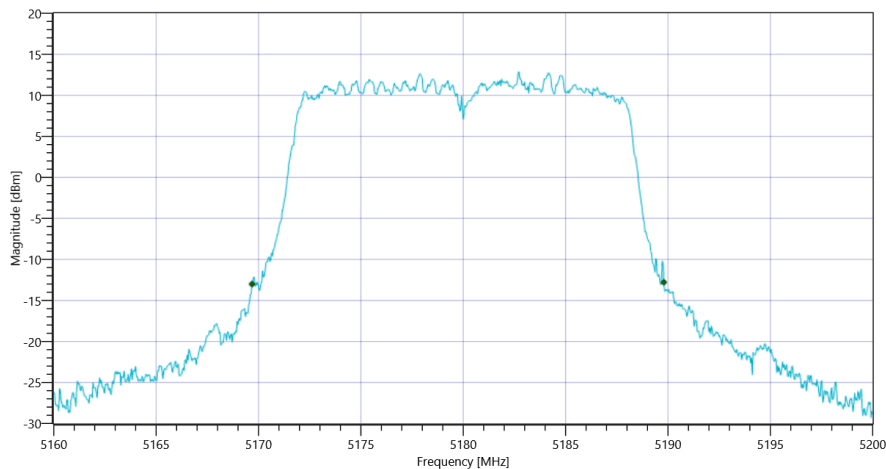
Duty Cycle evaluation

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	---	---	20.12	MHz	INFO
T1 26dB	---	---	5169.6800	MHz	INFO
T2 26dB	---	---	5189.8000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:

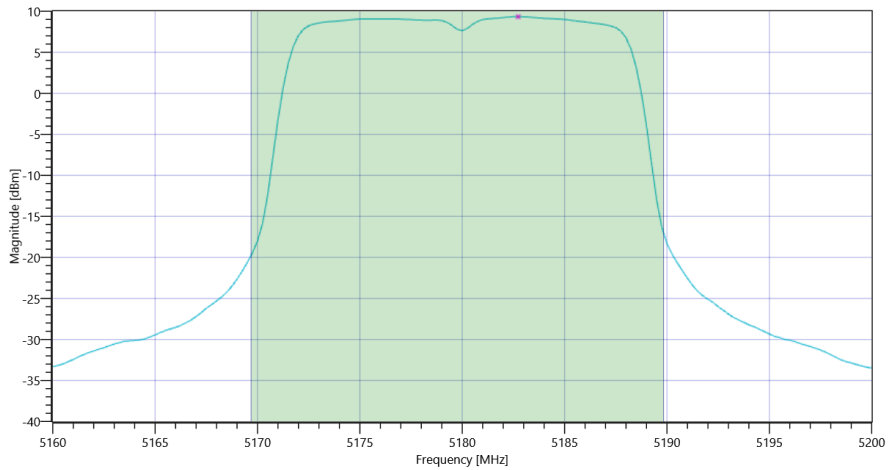
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.59 17.09 30
Start [MHz] Stop [MHz]	5160.000 5200.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	20.71	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	---	30	20.71	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.04	20.71	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	9.34	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	9.34	dBm/1MHz	PASS

General verdict **PASS**

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:13:13
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.26	dBm	INFO
Ref. Frequency	---	---	5822.800	MHz	INFO

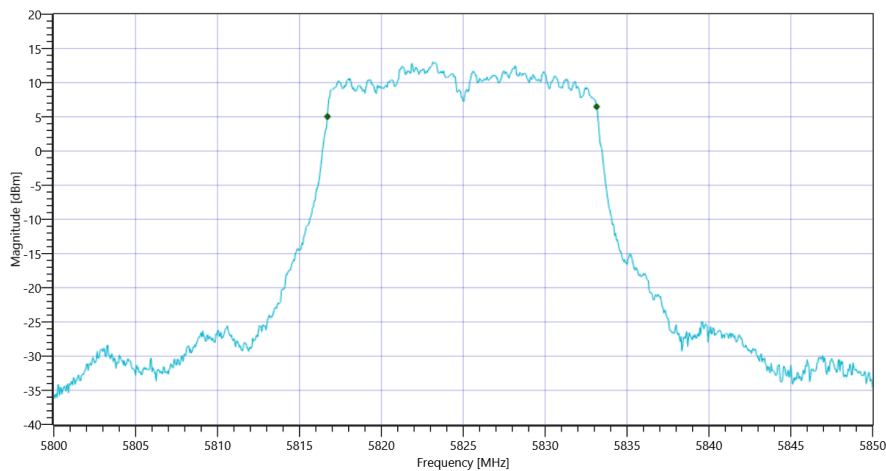
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.26 17.84 25
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

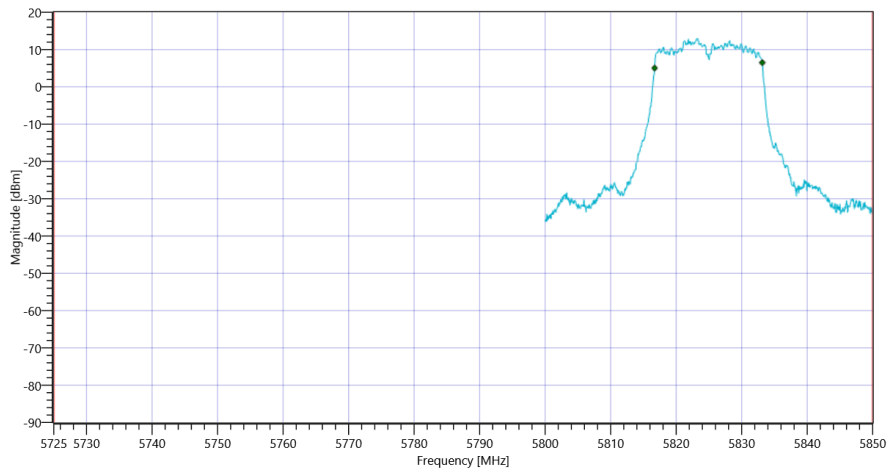
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.434	MHz	INFO
T1 99%	5725.000000	---	5816.7083	MHz	PASS
T2 99%	---	5850.000000	5833.1419	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

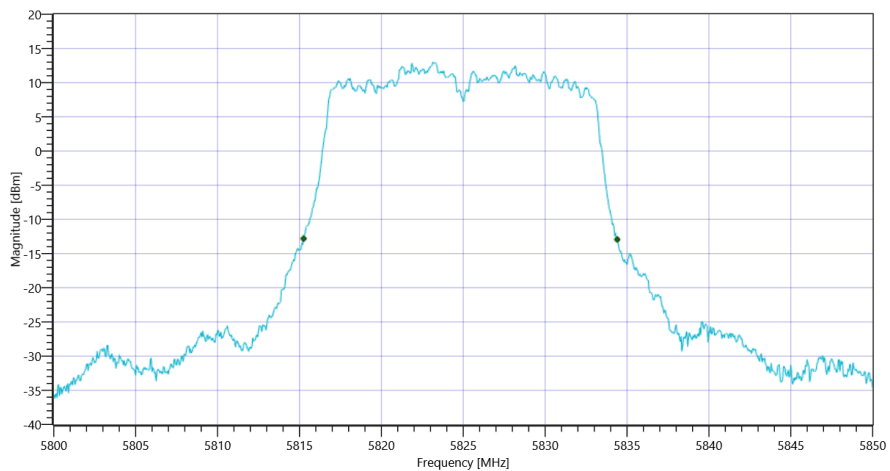
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

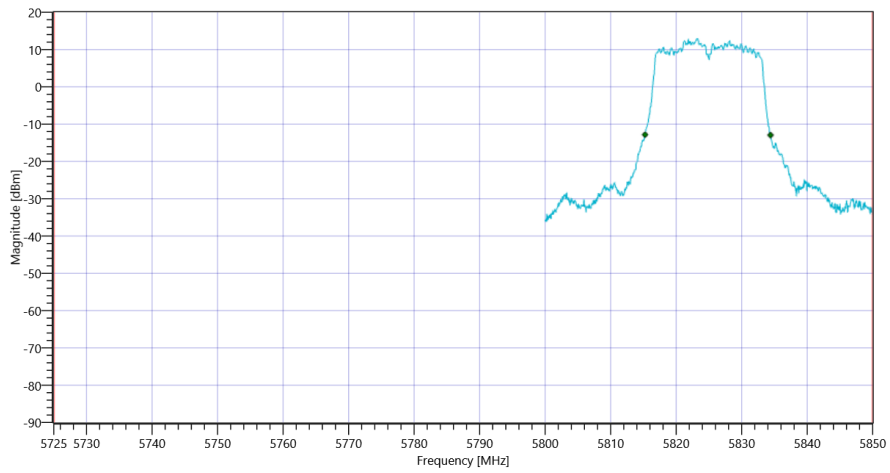
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19.15	MHz	INFO
T1 26dB	5725.000000	---	5815.2500	MHz	PASS
T2 26dB	---	5850.000000	5834.4000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:10:29
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.37	dBm	INFO
Ref. Frequency	---	---	5821.600	MHz	INFO

Evaluation max. Duty Cycle

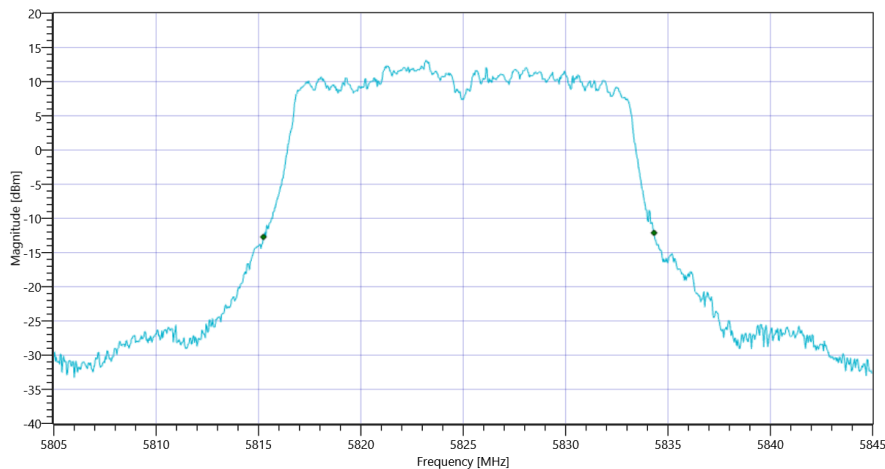
Duty Cycle evaluation

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	---	---	19.08	MHz	INFO
T1 26dB	---	---	5815.2400	MHz	INFO
T2 26dB	---	---	5834.3200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

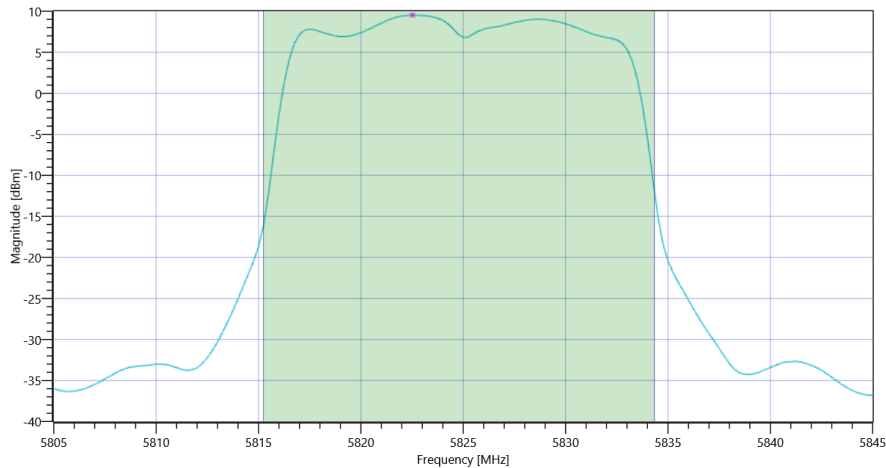
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.37 17.84 30
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	20.06	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	---	30	20.06	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.81	20.06	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

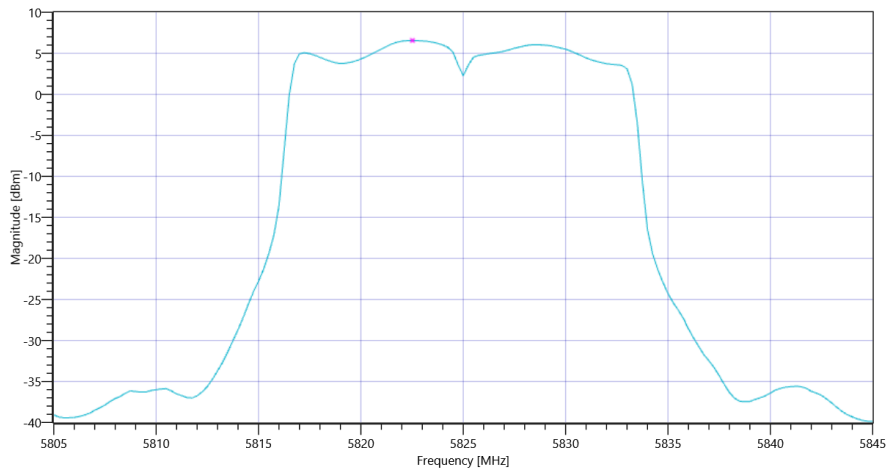
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.37 17.84 30
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	---	---	6.56	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	6.56	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:08:41
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.17	dBm	INFO
Ref. Frequency	---	---	5830.590	MHz	INFO

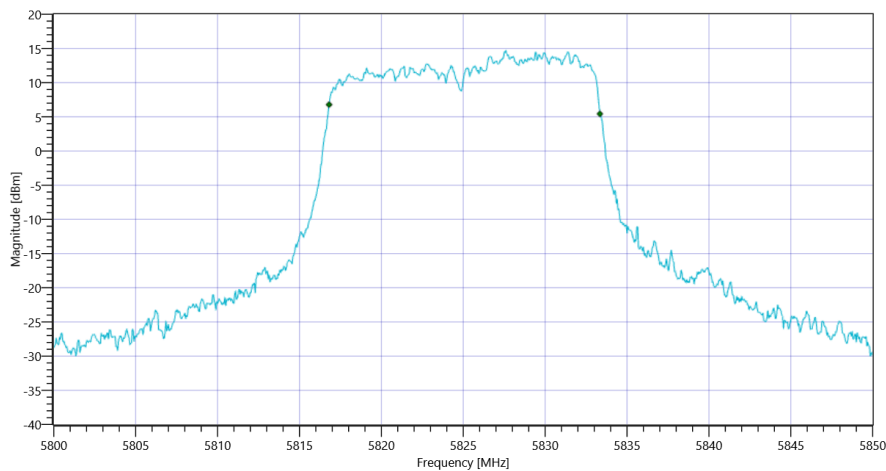
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.17 17.84 25
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

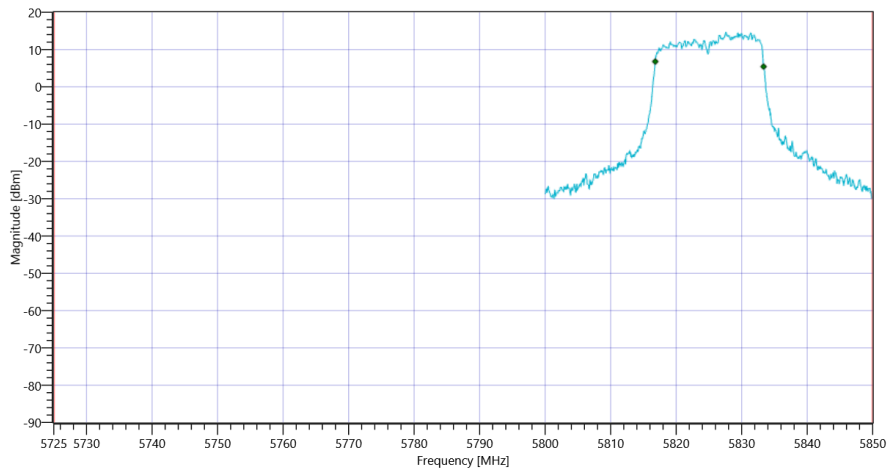
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.533	MHz	INFO
T1 99%	5725.000000	---	5816.8082	MHz	PASS
T2 99%	---	5850.000000	5833.3417	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

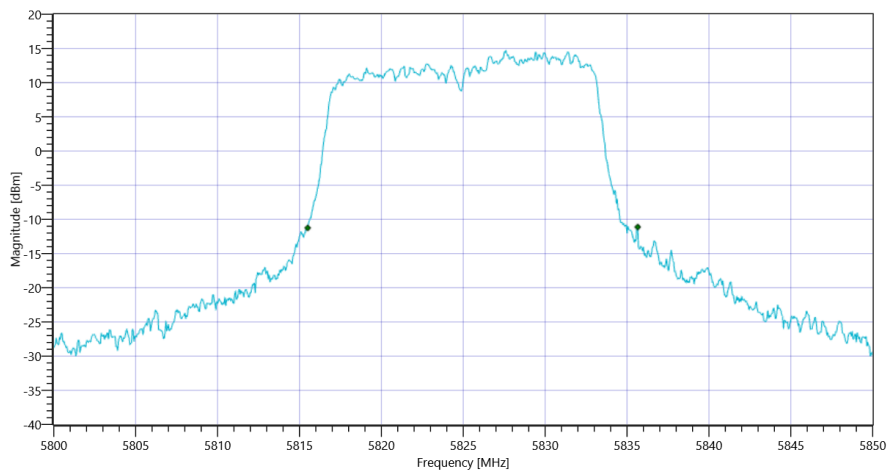
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

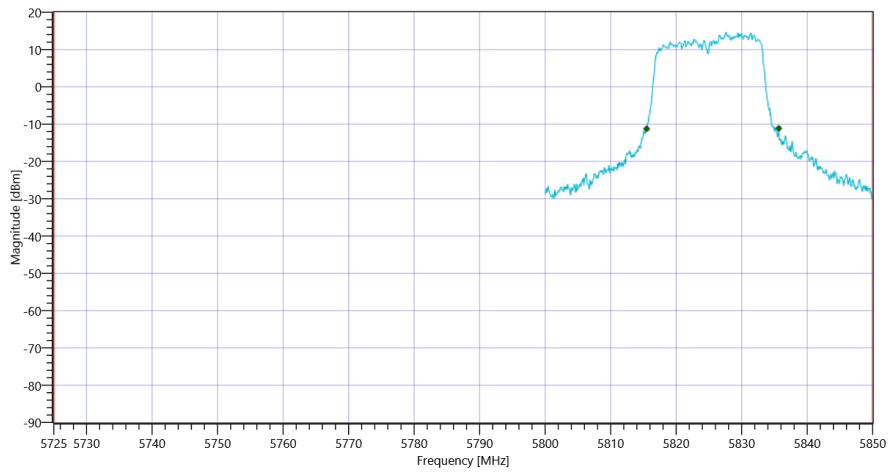
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20.15	MHz	INFO
T1 26dB	5725.000000	---	5815.5000	MHz	PASS
T2 26dB	---	5850.000000	5835.6500	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:05:56
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.15	dBm	INFO
Ref. Frequency	---	---	5829.000	MHz	INFO

Evaluation max. Duty Cycle

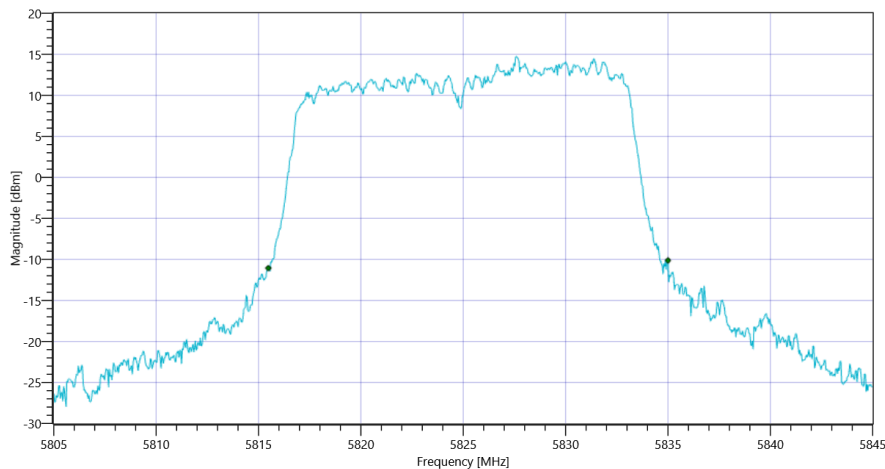
Duty Cycle evaluation

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	---	---	19.52	MHz	INFO
T1 26dB	---	---	5815.4800	MHz	INFO
T2 26dB	---	---	5835.0000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

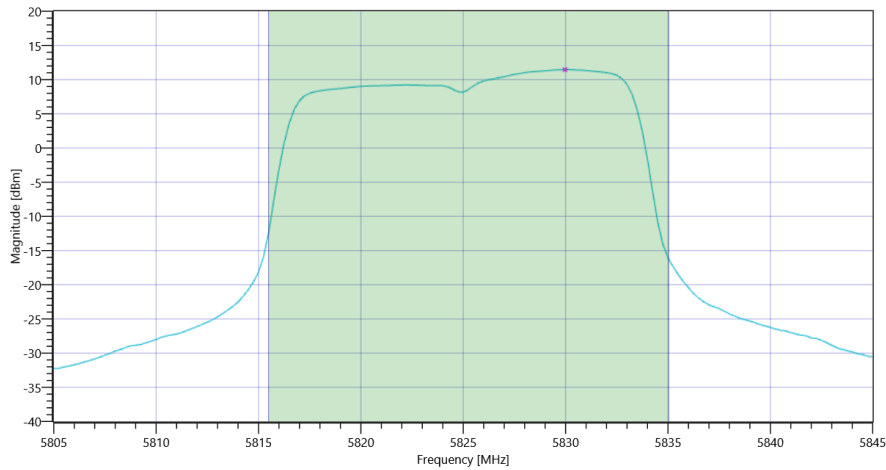
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.15 17.84 30
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	21.82	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	---	30	21.82	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.9	21.82	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

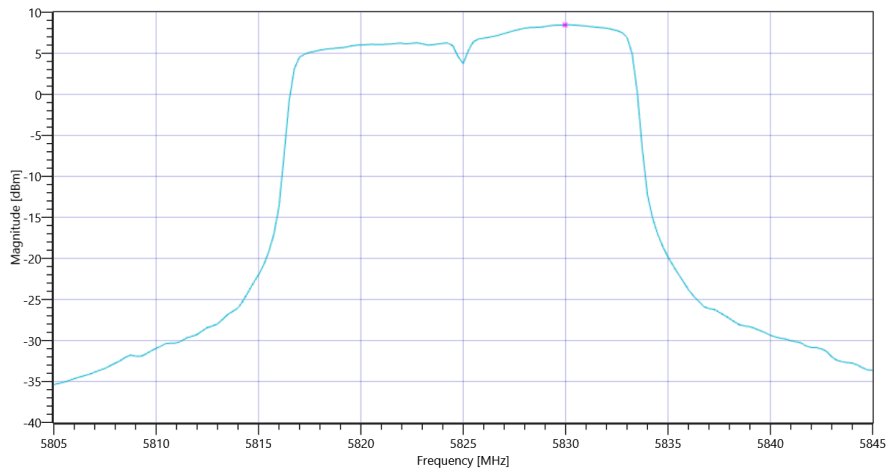
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.15 17.84 30
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	---	---	8.45	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.45	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:04:09
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.63	dBm	INFO
Ref. Frequency	---	---	5819.210	MHz	INFO

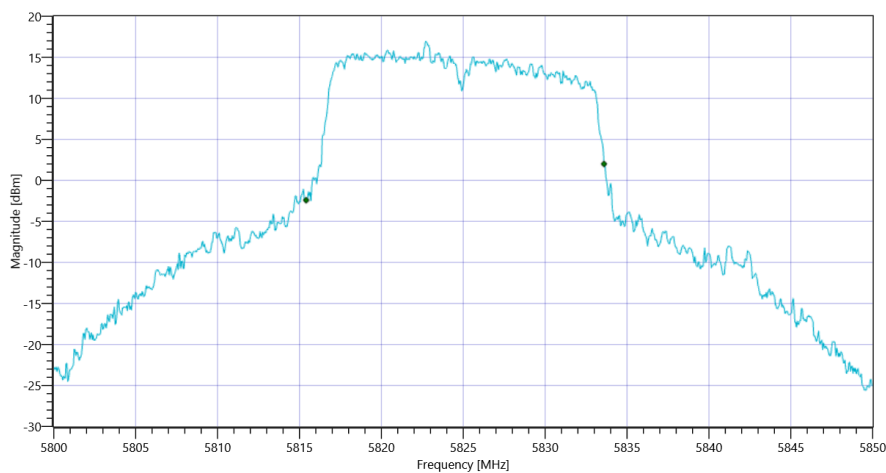
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.63 17.84 30
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

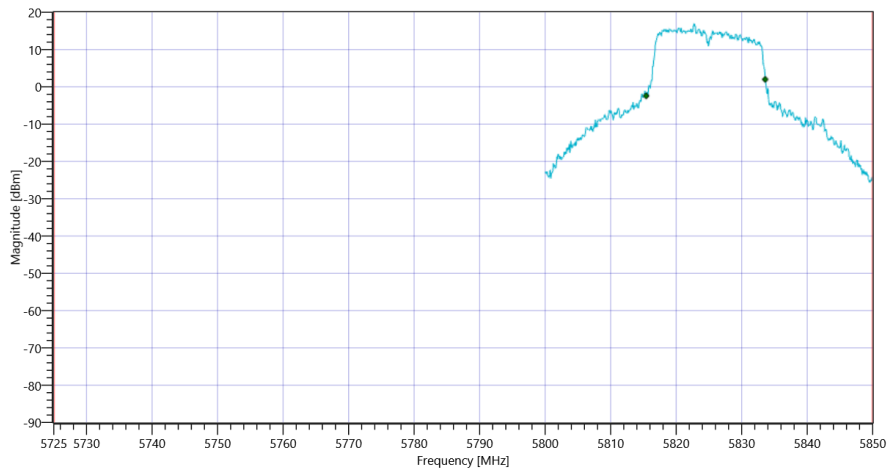
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.182	MHz	INFO
T1 99%	5725.000000	---	5815.4096	MHz	PASS
T2 99%	---	5850.000000	5833.5914	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

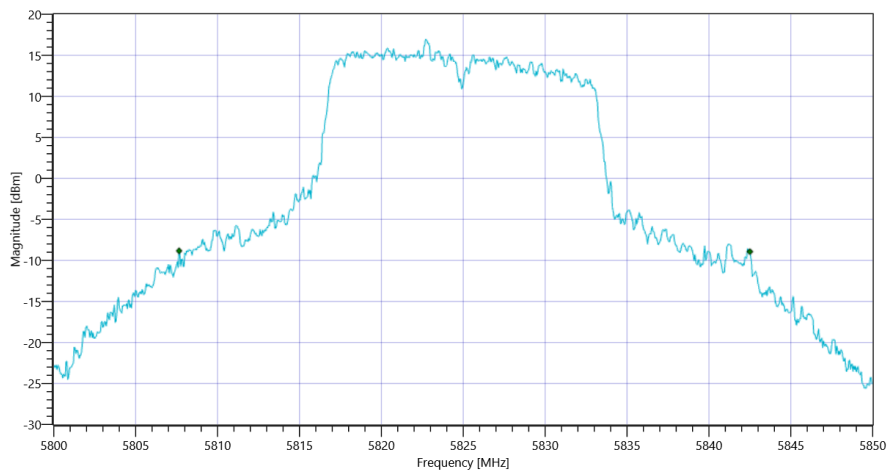
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

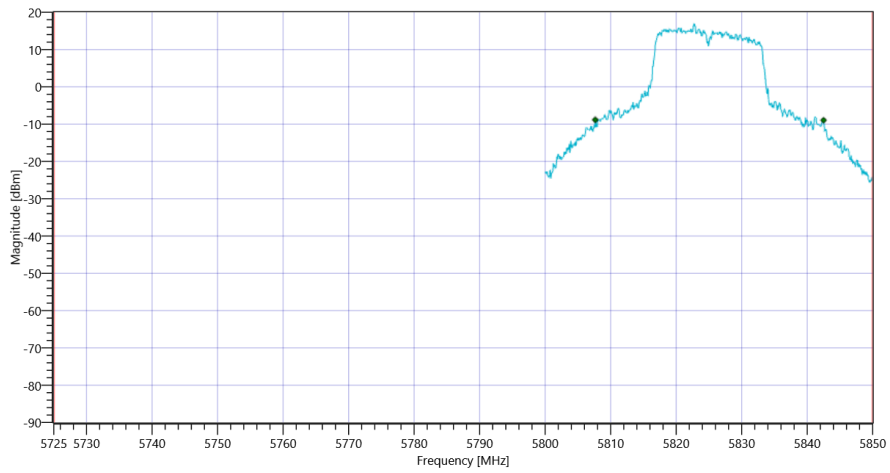
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	34.85	MHz	INFO
T1 26dB	5725.000000	---	5807.6500	MHz	PASS
T2 26dB	---	5850.000000	5842.5000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 17:01:24
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.08	dBm	INFO
Ref. Frequency	---	---	5823.000	MHz	INFO

Evaluation max. Duty Cycle

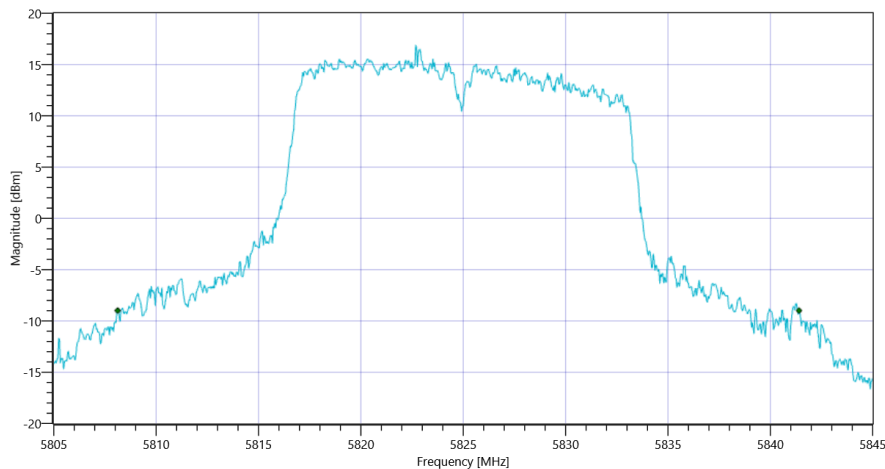
Duty Cycle evaluation

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	---	---	33.28	MHz	INFO
T1 26dB	---	---	5808.1200	MHz	INFO
T2 26dB	---	---	5841.4000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

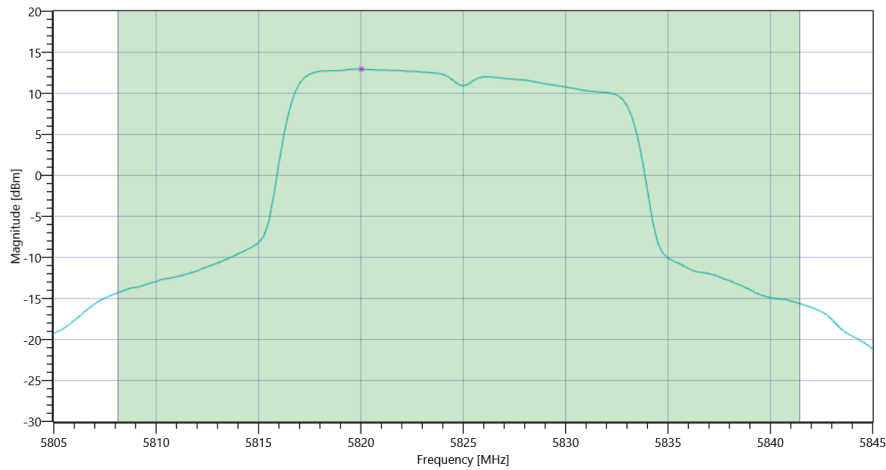
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.08 17.84 30
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.81	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	---	30	23.81	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	26.22	23.81	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

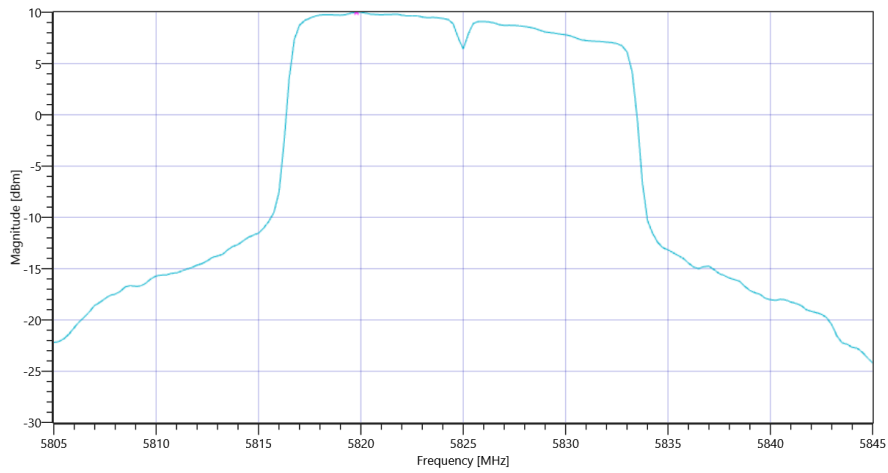
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.08 17.84 30
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	---	---	10	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	10	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:59:37
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.48	dBm	INFO
Ref. Frequency	---	---	5820.400	MHz	INFO

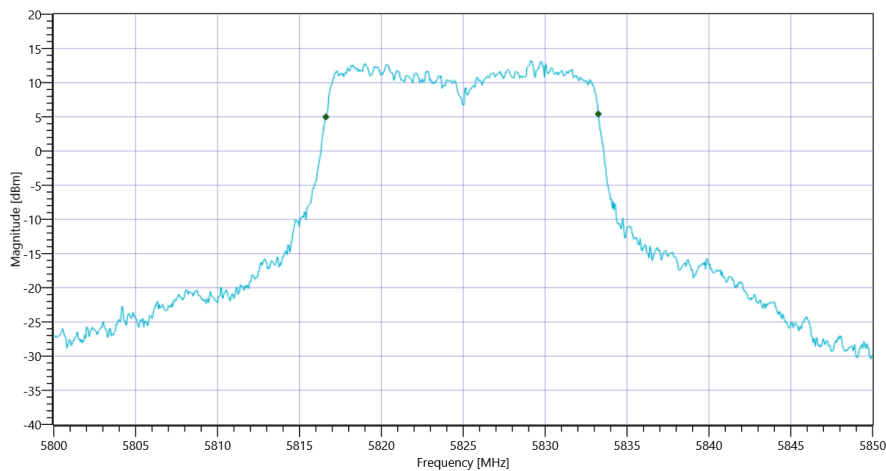
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.48 17.84 25
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

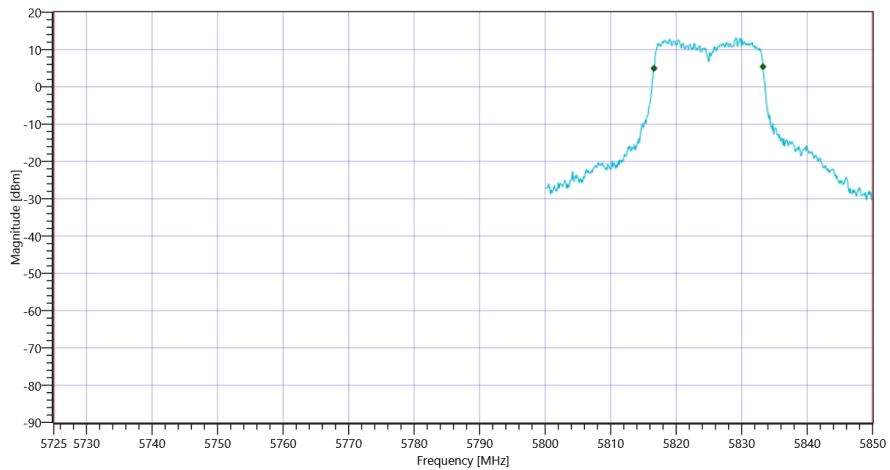
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.633	MHz	INFO
T1 99%	5725.000000	---	5816.6084	MHz	PASS
T2 99%	---	5850.000000	5833.2418	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISM Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

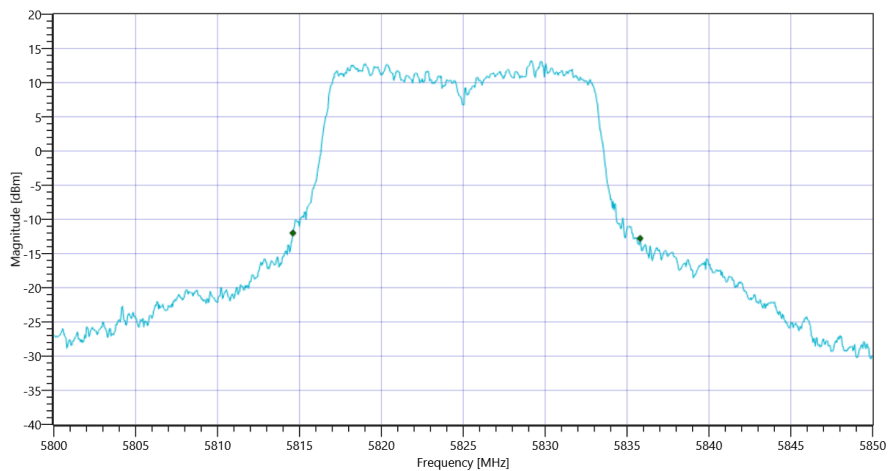
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

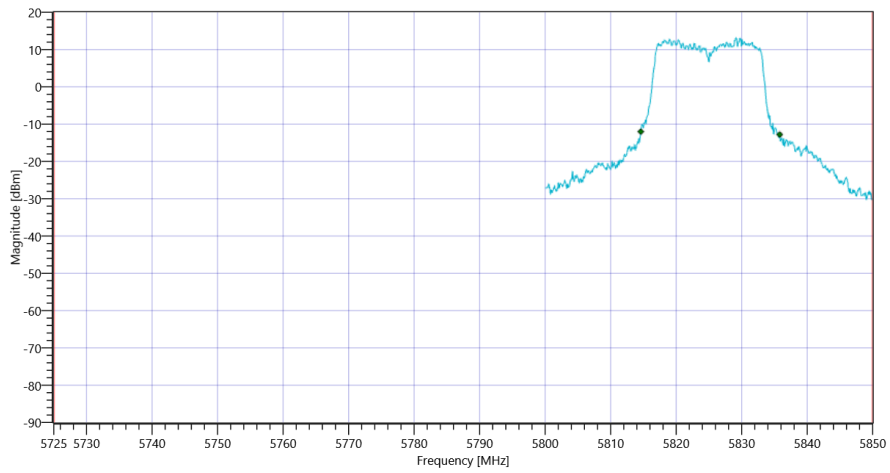
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	21.2	MHz	INFO
T1 26dB	5725.000000	---	5814.6000	MHz	PASS
T2 26dB	---	5850.000000	5835.8000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:56:53
Ambit Temp [°C] Humidity [rel%]	25.2 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.63	dBm	INFO
Ref. Frequency	---	---	5819.610	MHz	INFO

Evaluation max. Duty Cycle

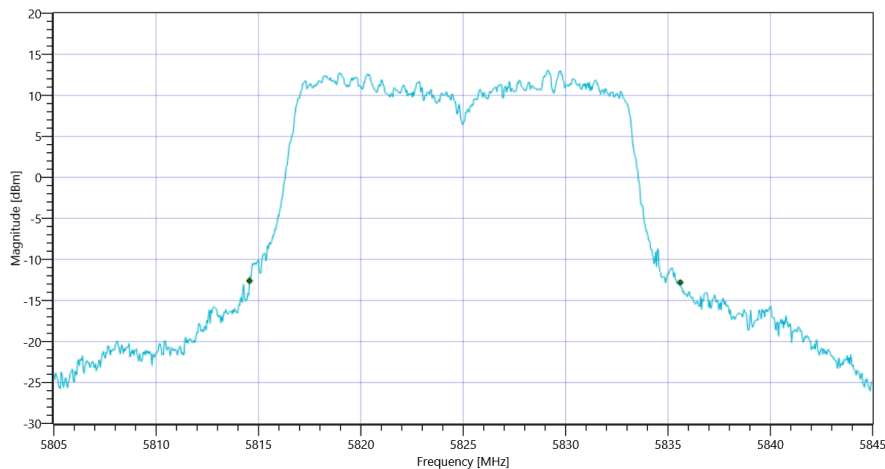
Duty Cycle evaluation

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	---	---	21.04	MHz	INFO
T1 26dB	---	---	5814.5600	MHz	INFO
T2 26dB	---	---	5835.6000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

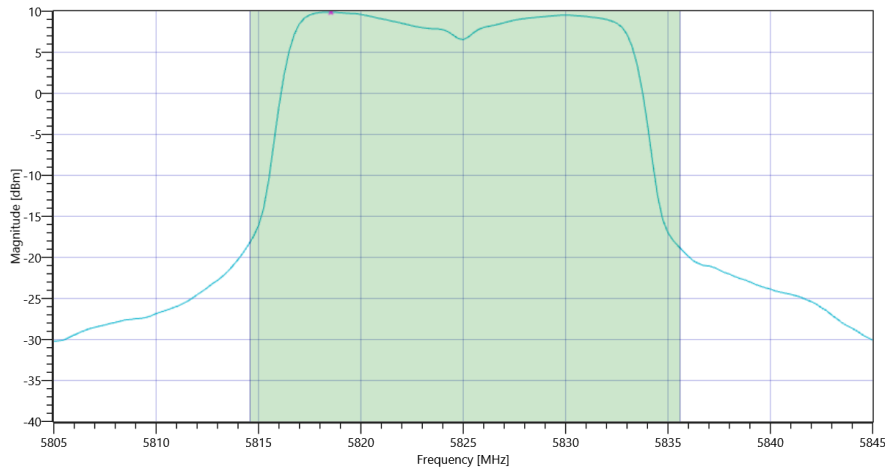
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.63 17.84 30
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	20.82	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	---	30	20.82	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.23	20.82	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

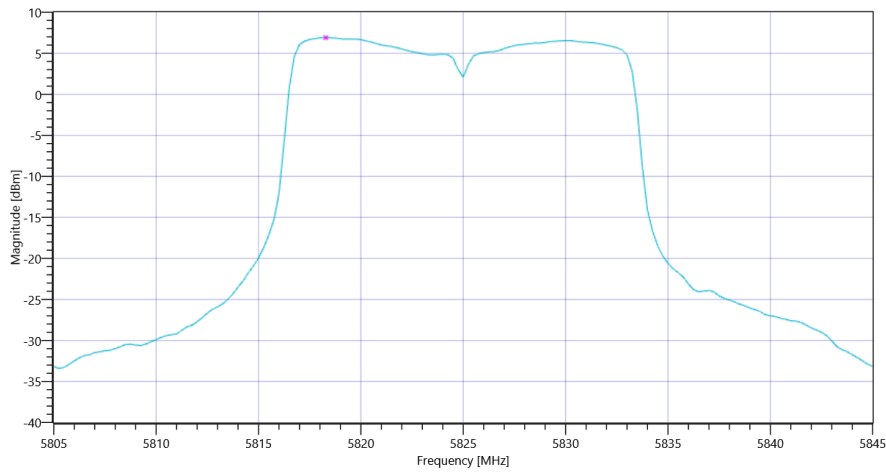
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.63 17.84 30
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	---	---	6.9	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	6.9	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:54:53
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.16	dBm	INFO
Ref. Frequency	---	---	5782.000	MHz	INFO

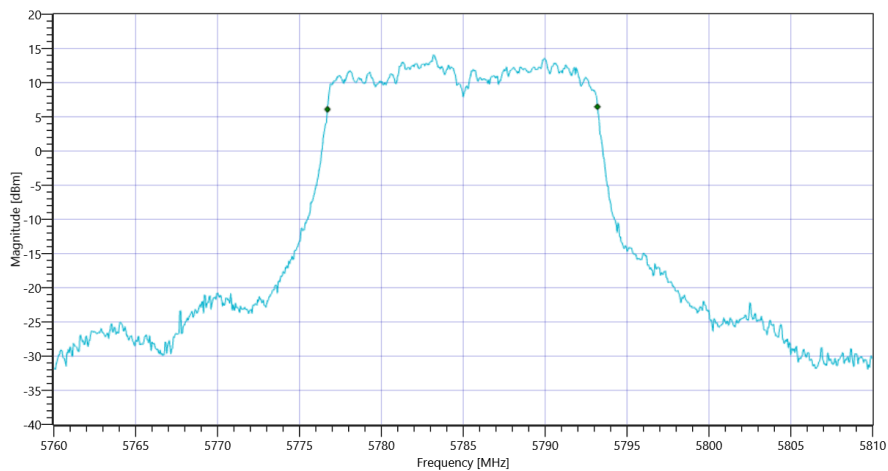
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.16 17.86 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

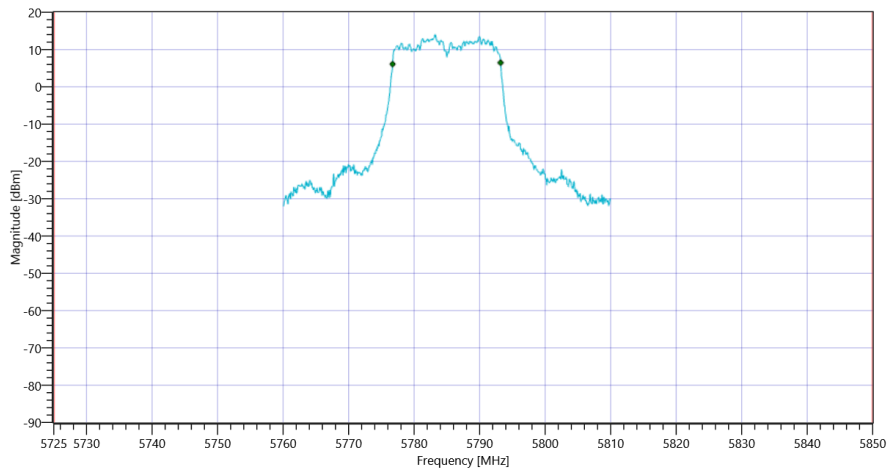
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.484	MHz	INFO
T1 99%	5725.000000	---	5776.7083	MHz	PASS
T2 99%	---	5850.000000	5793.1918	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

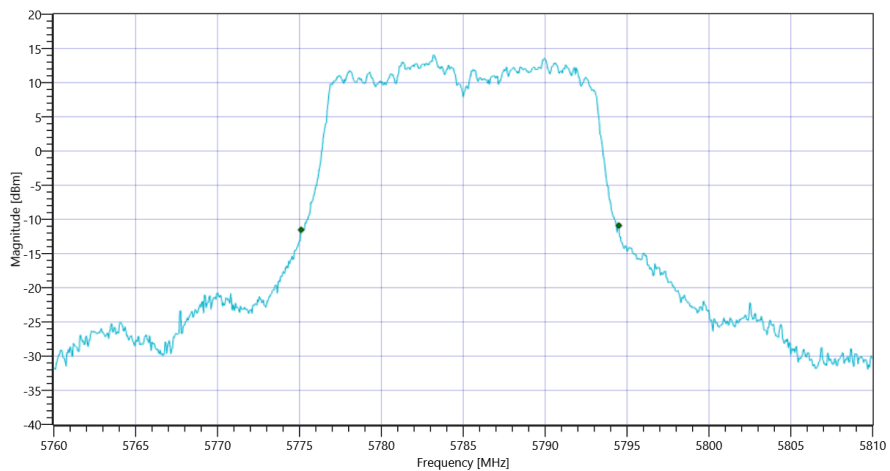
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

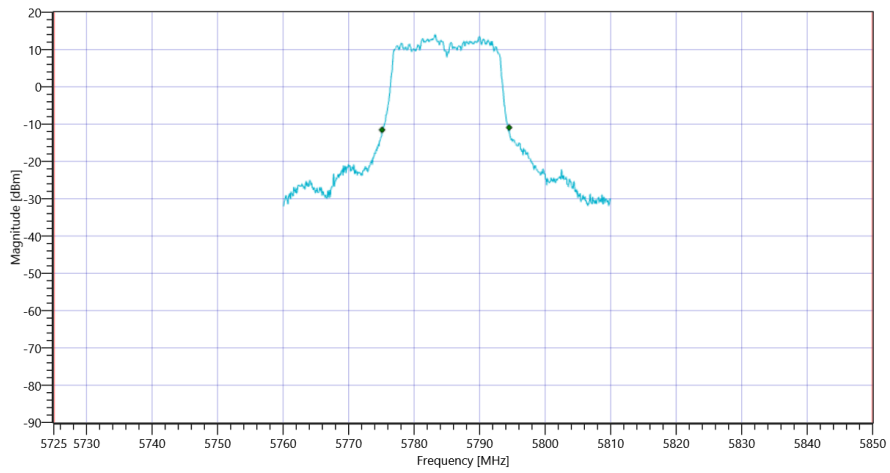
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19.4	MHz	INFO
T1 26dB	5725.000000	---	5775.1000	MHz	PASS
T2 26dB	---	5850.000000	5794.5000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:52:09
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.21	dBm	INFO
Ref. Frequency	---	---	5782.800	MHz	INFO

Evaluation max. Duty Cycle

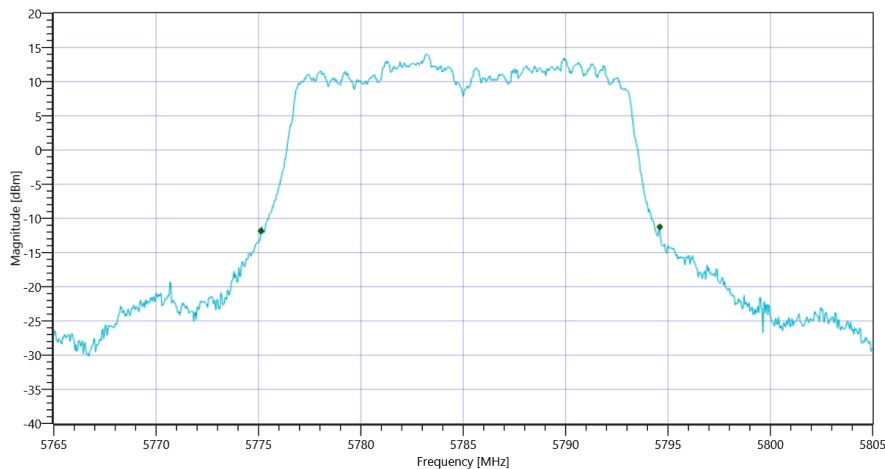
Duty Cycle evaluation

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	---	---	19.48	MHz	INFO
T1 26dB	---	---	5775.1200	MHz	INFO
T2 26dB	---	---	5794.6000	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

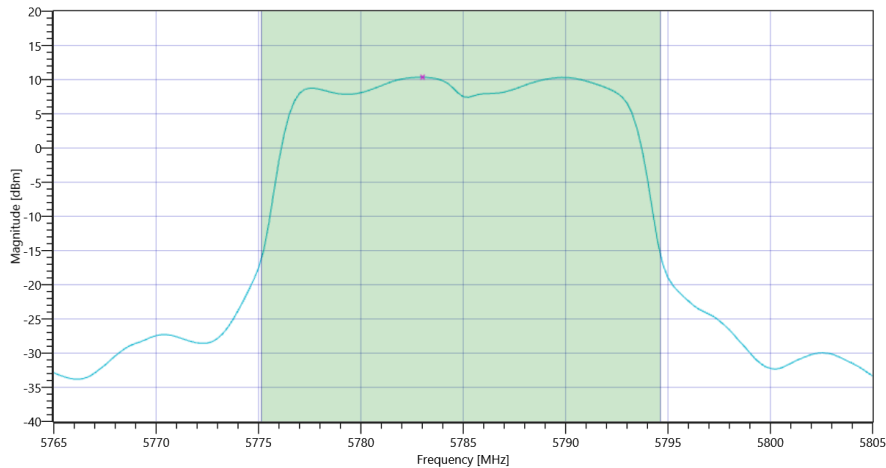
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.21 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	21	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	---	30	21	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.9	21	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

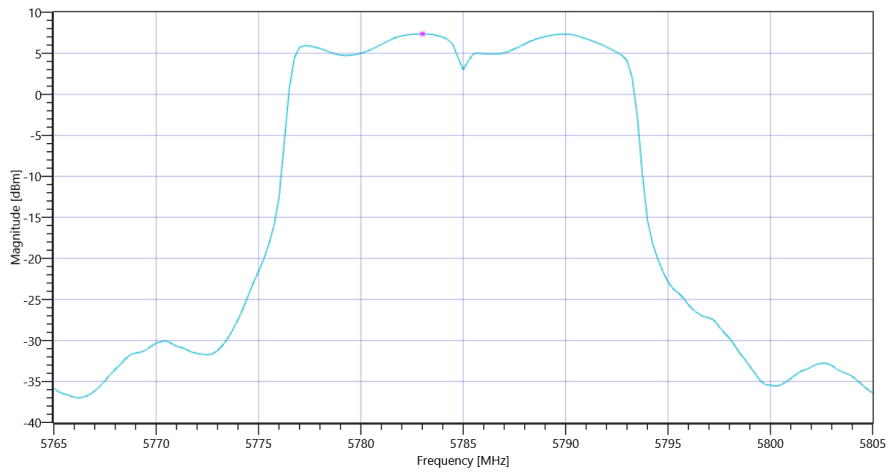
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.21 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.36	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.36	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:47:32
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.23	dBm	INFO
Ref. Frequency	---	---	5781.600	MHz	INFO

Evaluation max. Duty Cycle

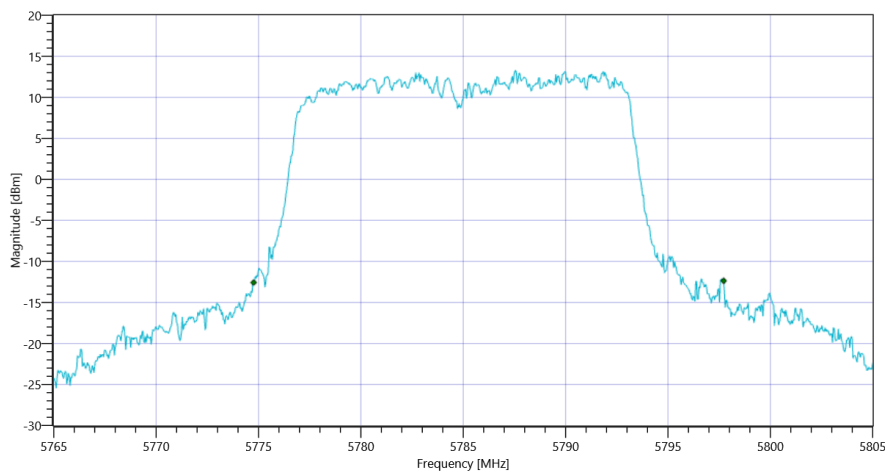
Duty Cycle evaluation

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	---	---	22.96	MHz	INFO
T1 26dB	---	---	5774.7600	MHz	INFO
T2 26dB	---	---	5797.7200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

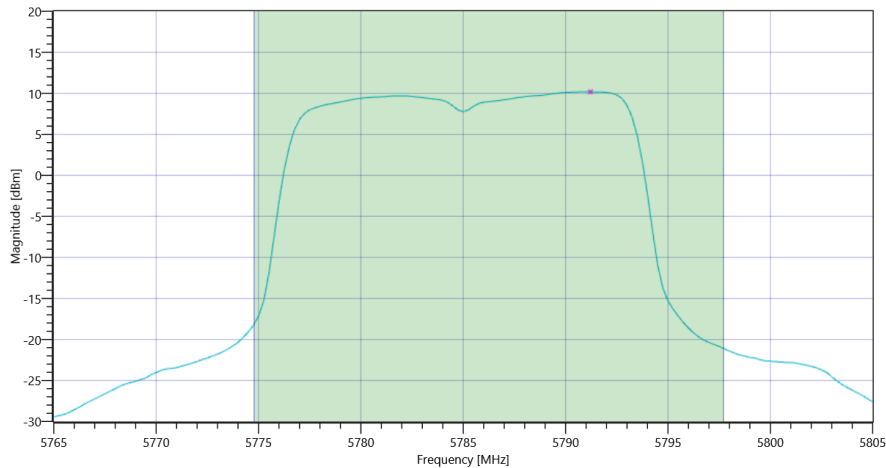
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.23 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	21.27	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	---	30	21.27	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.61	21.27	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

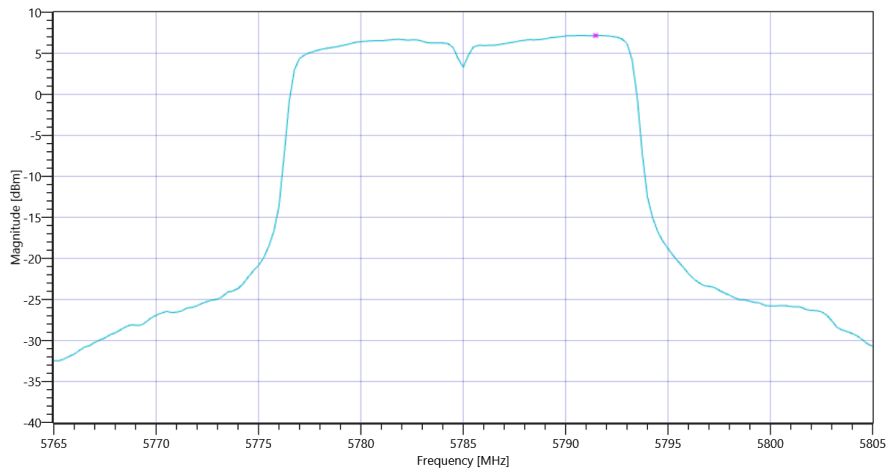
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.23 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.16	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.16	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:50:16
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.50	dBm	INFO
Ref. Frequency	---	---	5790.990	MHz	INFO

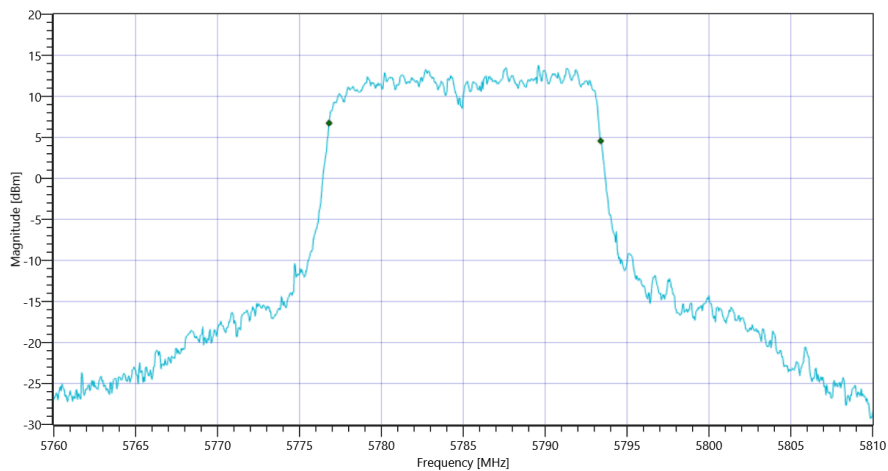
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.50 17.86 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

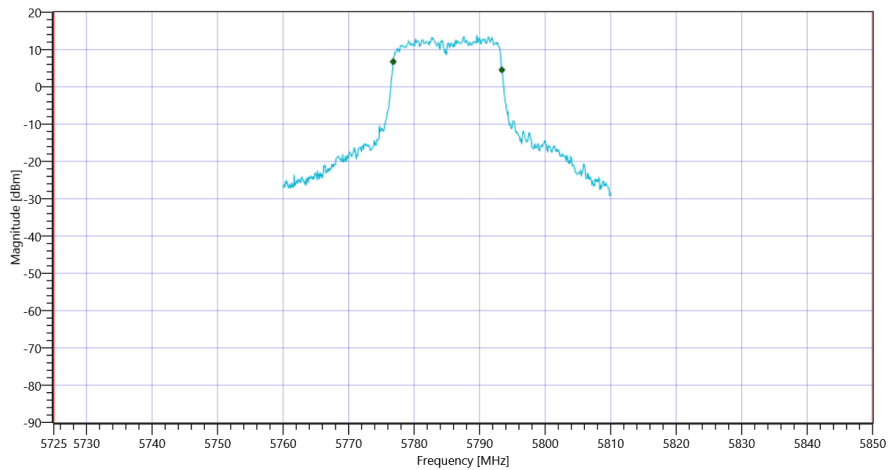
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.583	MHz	INFO
T1 99%	5725.000000	---	5776.8082	MHz	PASS
T2 99%	---	5850.000000	5793.3916	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

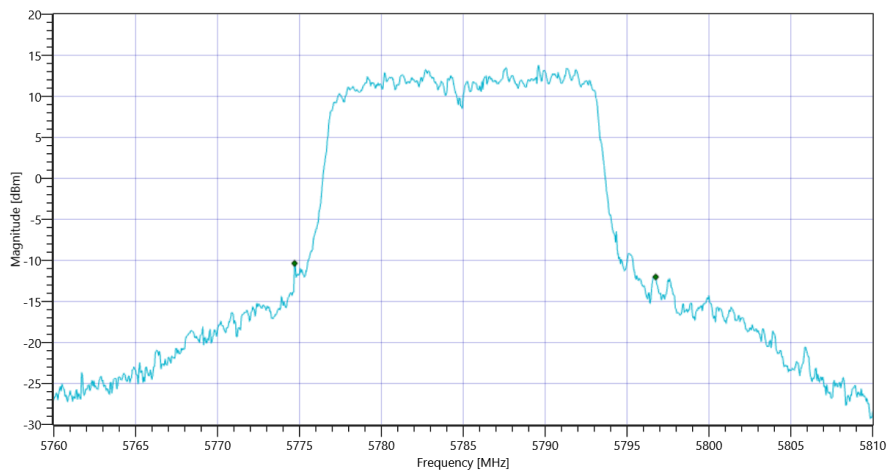
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

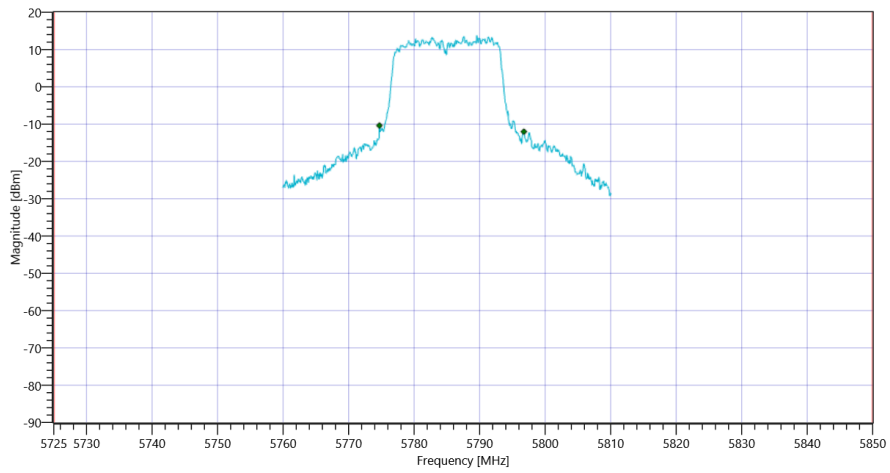
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	22.05	MHz	INFO
T1 26dB	5725.000000	---	5774.7000	MHz	PASS
T2 26dB	---	5850.000000	5796.7500	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:45:41
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.80	dBm	INFO
Ref. Frequency	---	---	5787.400	MHz	INFO

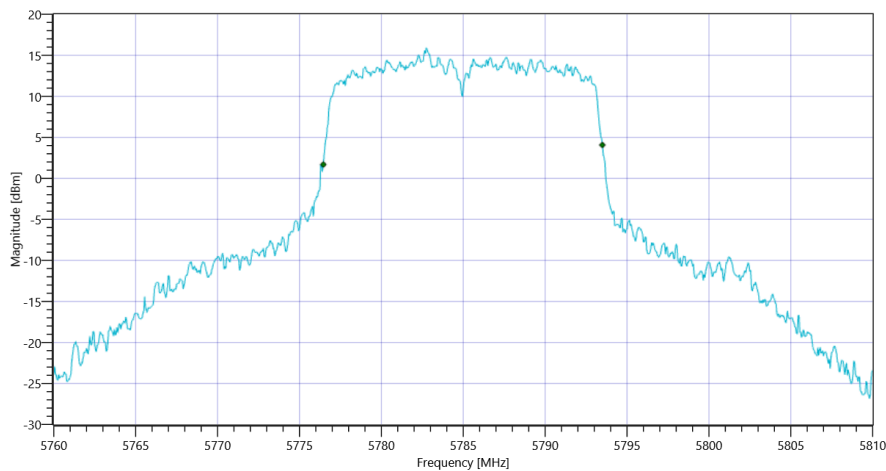
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.80 17.86 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

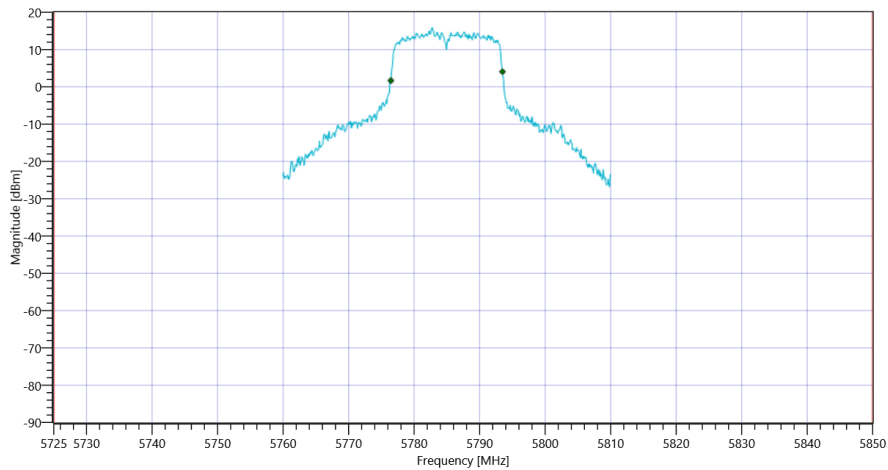
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.033	MHz	INFO
T1 99%	5725.000000	---	5776.4585	MHz	PASS
T2 99%	---	5850.000000	5793.4915	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

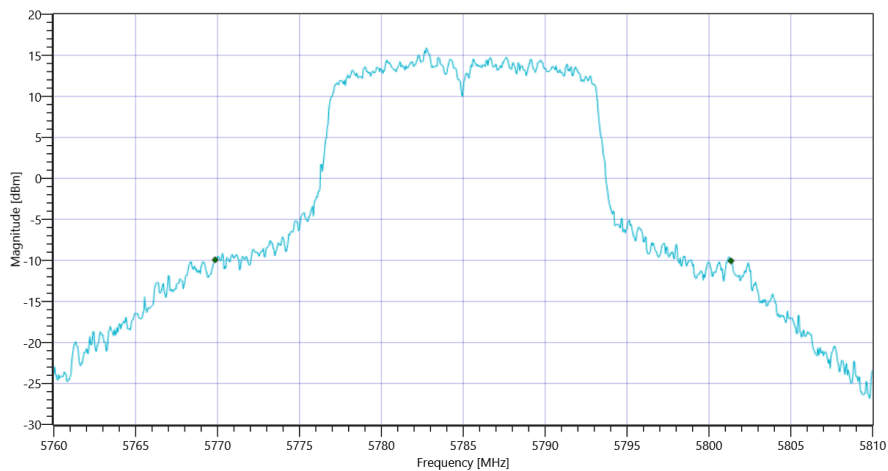
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

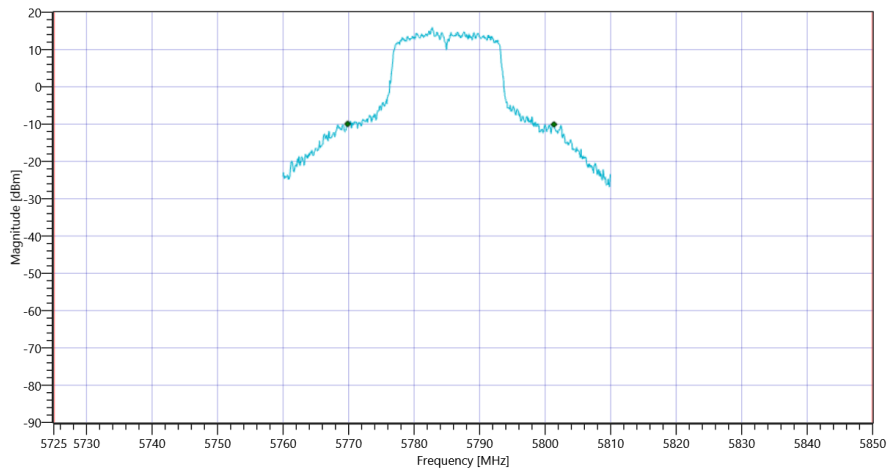
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	31.5	MHz	INFO
T1 26dB	5725.000000	---	5769.8500	MHz	PASS
T2 26dB	---	5850.000000	5801.3500	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:42:56
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.93	dBm	INFO
Ref. Frequency	---	---	5782.200	MHz	INFO

Evaluation max. Duty Cycle

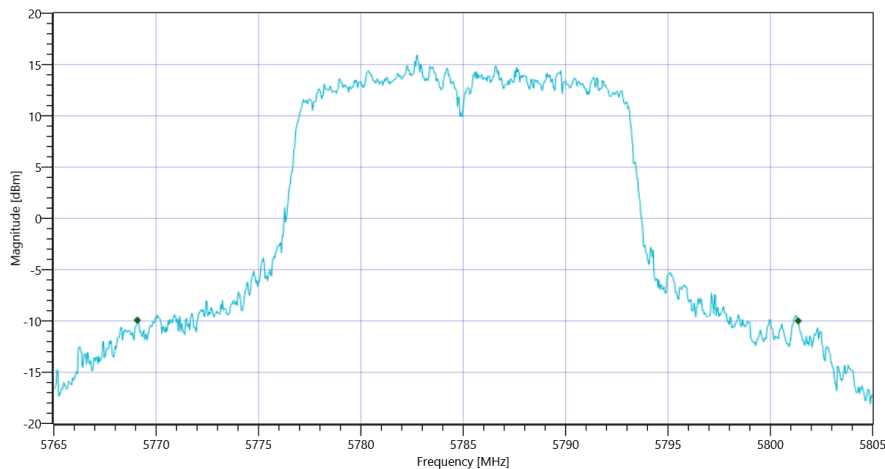
Duty Cycle evaluation

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	---	---	32.28	MHz	INFO
T1 26dB	---	---	5769.0800	MHz	INFO
T2 26dB	---	---	5801.3600	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

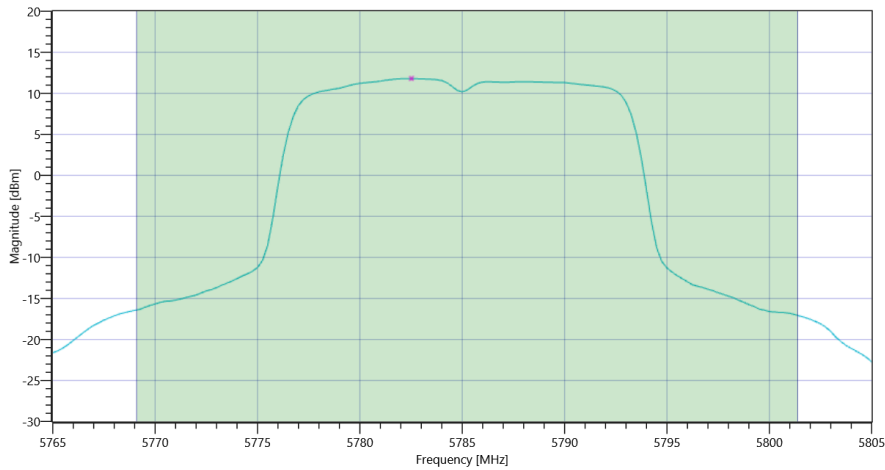
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.93 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.99	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	---	30	22.99	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	26.09	22.99	dBm	not applicable



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

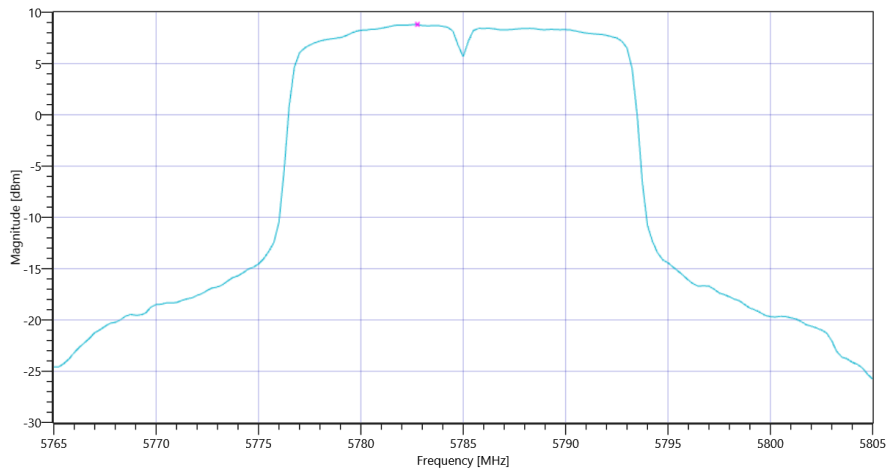
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.93 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.81	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.81	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict

PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:41:04
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.29	dBm	INFO
Ref. Frequency	---	---	5781.200	MHz	INFO

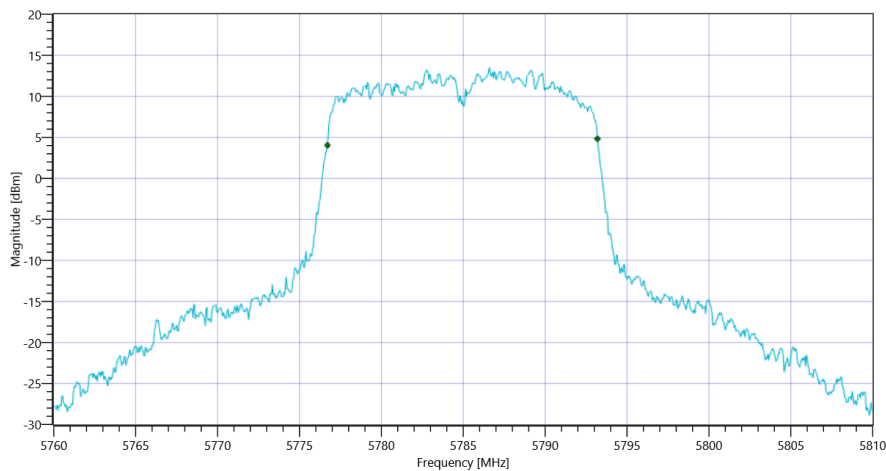
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.29 17.86 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

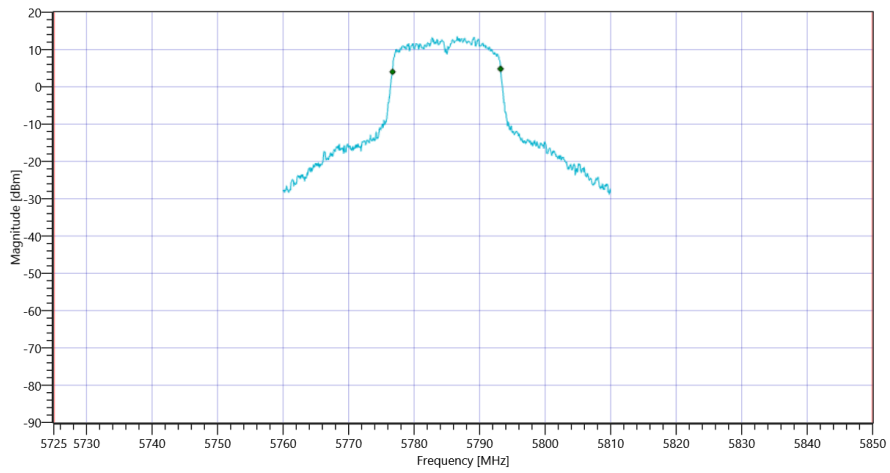
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.484	MHz	INFO
T1 99%	5725.000000	---	5776.7083	MHz	PASS
T2 99%	---	5850.000000	5793.1918	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

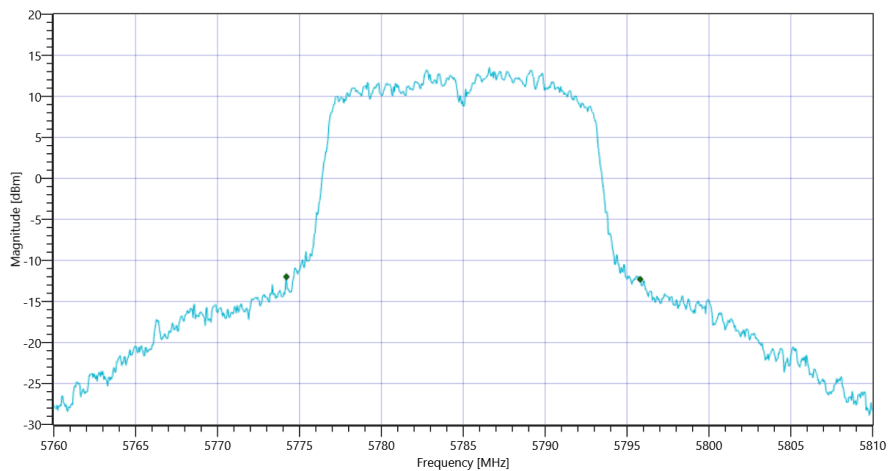
Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

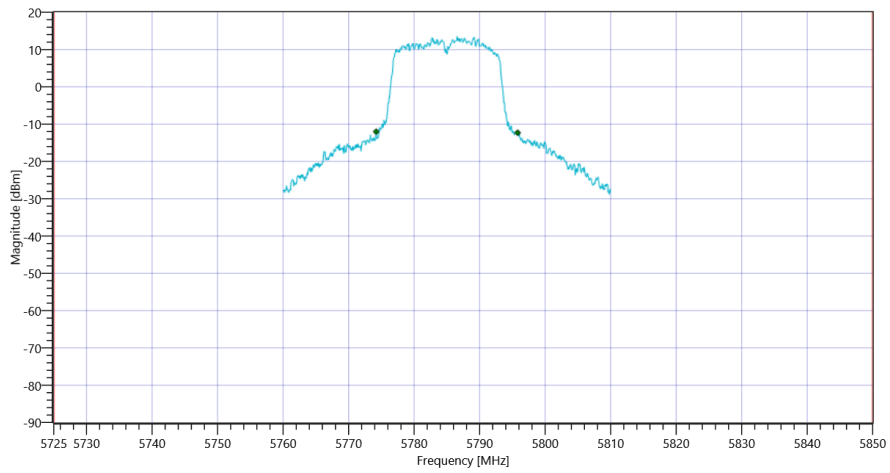
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	21.6	MHz	INFO
T1 26dB	5725.000000	---	5774.2000	MHz	PASS
T2 26dB	---	5850.000000	5795.8000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISSED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict

PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	29.03.2022 16:38:20
Ambit Temp [°C] Humidity [rel%]	25.1 23
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 a mode U-NII-3
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 a mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0.5
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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.12	dBm	INFO
Ref. Frequency	---	---	5788.800	MHz	INFO

Evaluation max. Duty Cycle

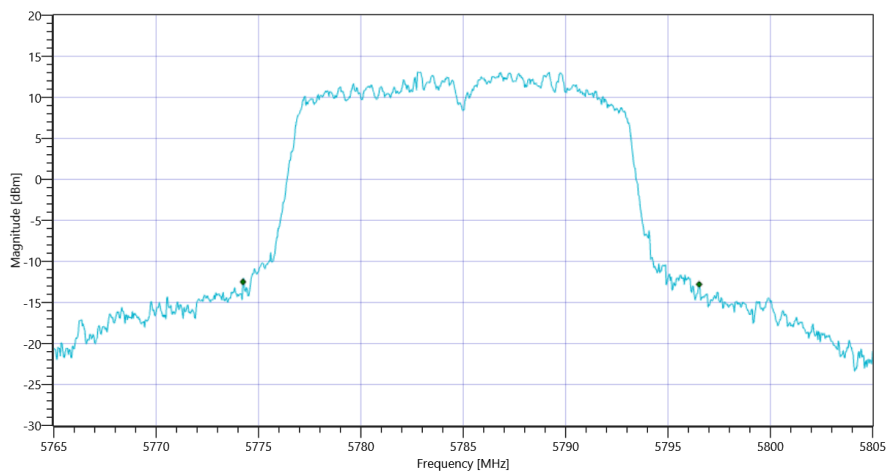
Duty Cycle evaluation

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	---	---	22.28	MHz	INFO
T1 26dB	---	---	5774.2400	MHz	INFO
T2 26dB	---	---	5796.5200	MHz	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.12 17.86 30
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	20.94	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					