

Measurements Results

No.1-5618/22-01-11_Annex_MR

Test logging

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EUT Information

EUT DEFINITION

Manufacturer	Teledyne Flir
Type	Flir-E1330
Serial Number	Prot 2.12
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	NI
Comment 1	
Comment 2	
Temperature [°C] Min	-15
Temperature [°C] Nom	20
Temperature [°C] Max	40
Voltage [V] Min	3.3
Voltage [V] Nom	3.7
Voltage [V] Max	4.2

FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:03:38
Ambit Temp [°C] Humidity [rel%]	22.9 42
System Version	4.0.1.0
Test Specification	FCC 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	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx a mode
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
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

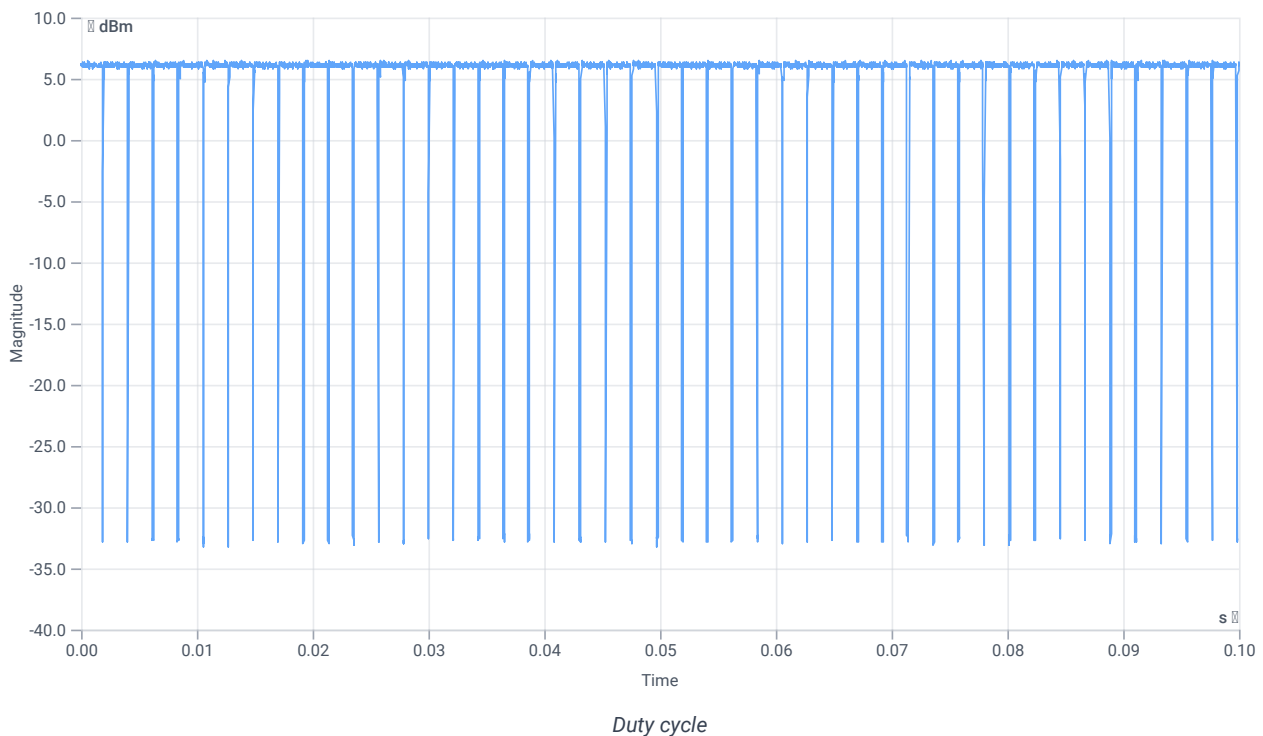
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.53	dBm	INFO
Ref. Frequency	--	--	5181.600	MHz	INFO

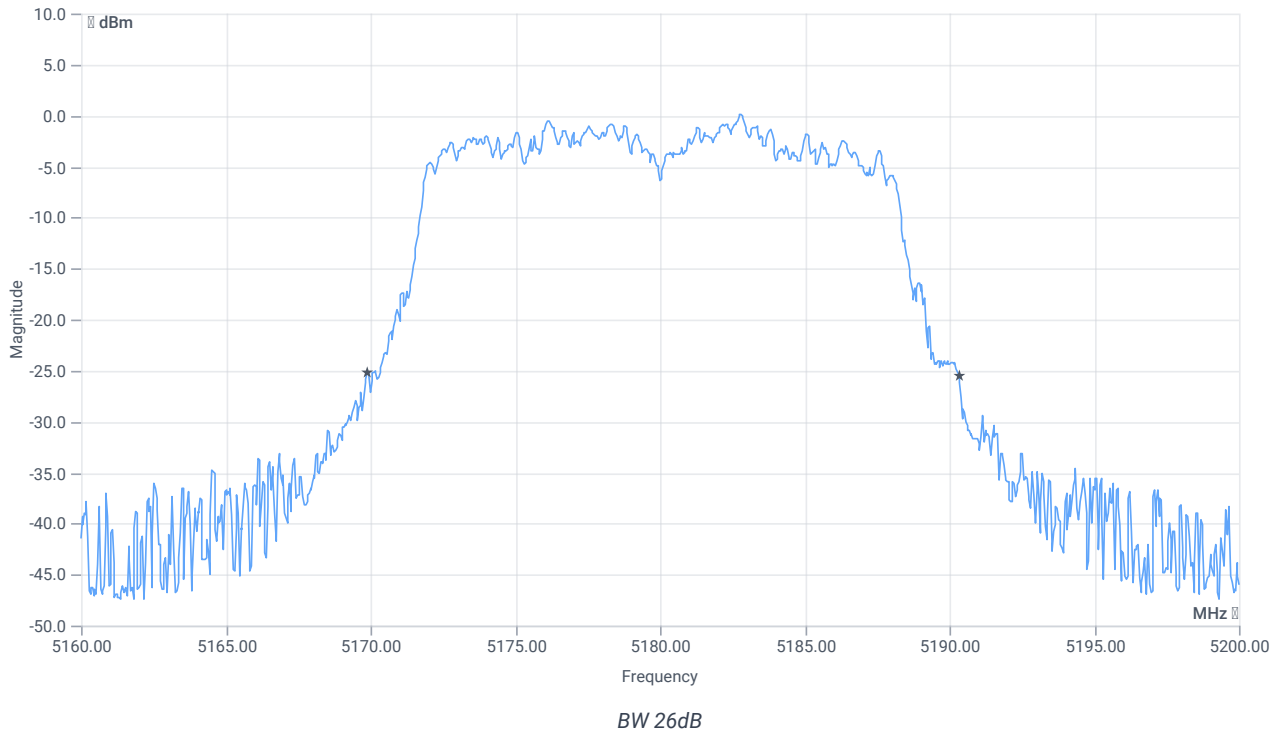
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	--	--	0.942	--	INFO
Duty Cycle max	--	--	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	--	--	0.899	--	INFO
Duty Cycle min	--	--	0.462	dB	INFO
Max TX Burst Length	--	--	2.025	ms	INFO
Min Gap Length	--	--	0.125	ms	INFO
Max Gap Length	--	--	0.225	ms	INFO



Evaluation Bandwidth



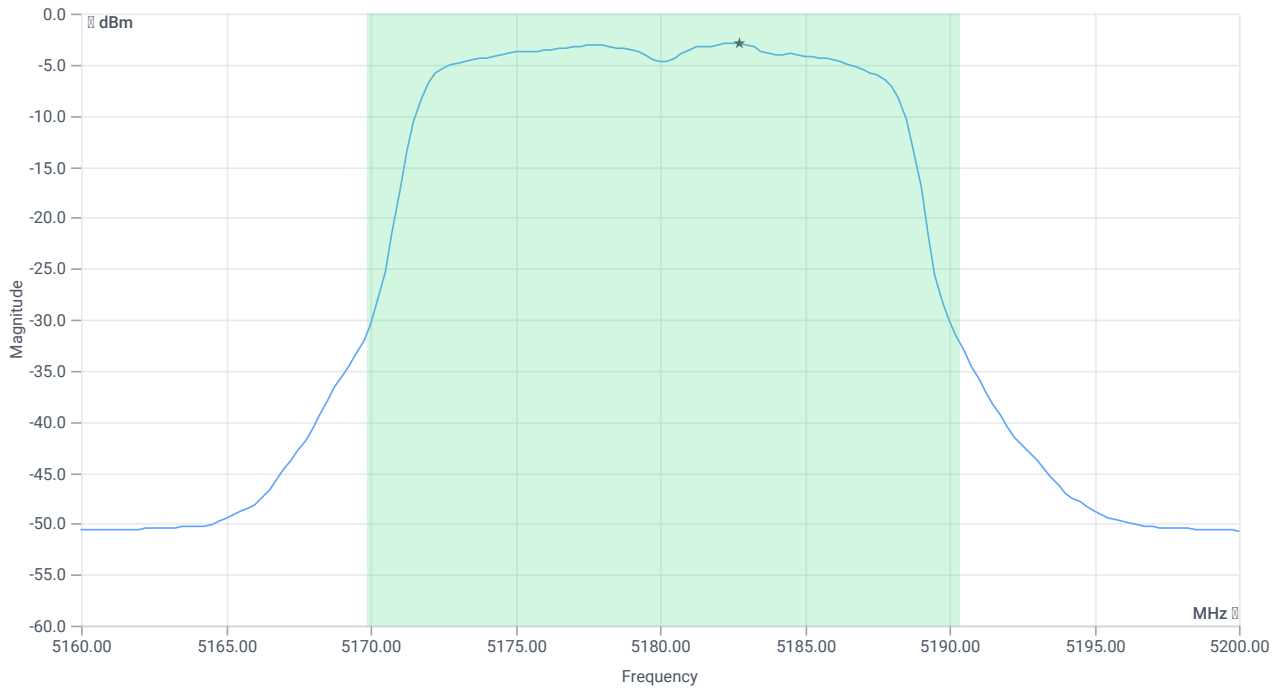
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.44	MHz	INFO
T1 26dB	---	---	5169.8800	MHz	INFO
T2 26dB	---	---	5190.3200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.53 15.09 20
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



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	7.86	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.32	dBm	PASS
Limit: 11 dBm + 10 log 20.44					
Max Output Power DC corrected	--	24.1	8.32	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.86	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.4	dBm/1MHz	PASS

Verdict

PASS

ISED RSS247 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:05:10
Ambit Temp [°C] Humidity [rel%]	23.0 41
System Version	4.0.1.0
Test Specification	ISED RSS247 -
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
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
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

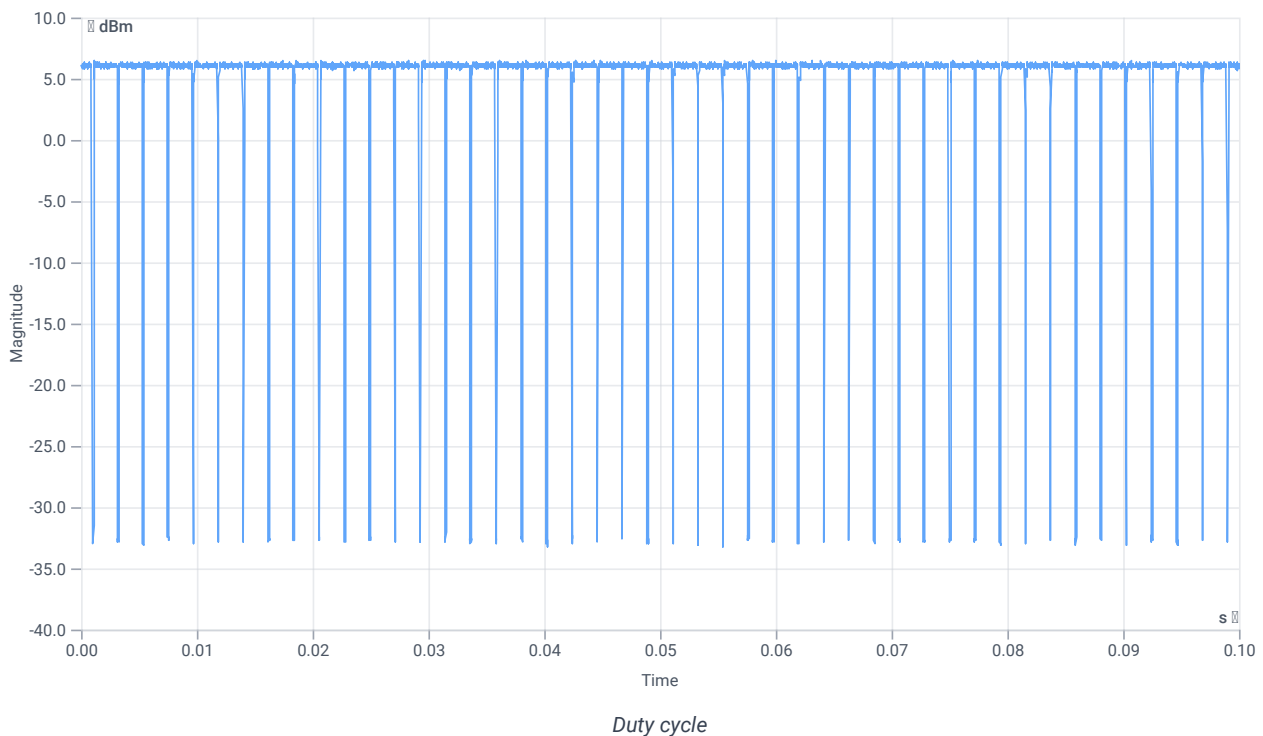
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	5.25	dBm	INFO
Ref. Frequency	---	---	5183.200	MHz	INFO

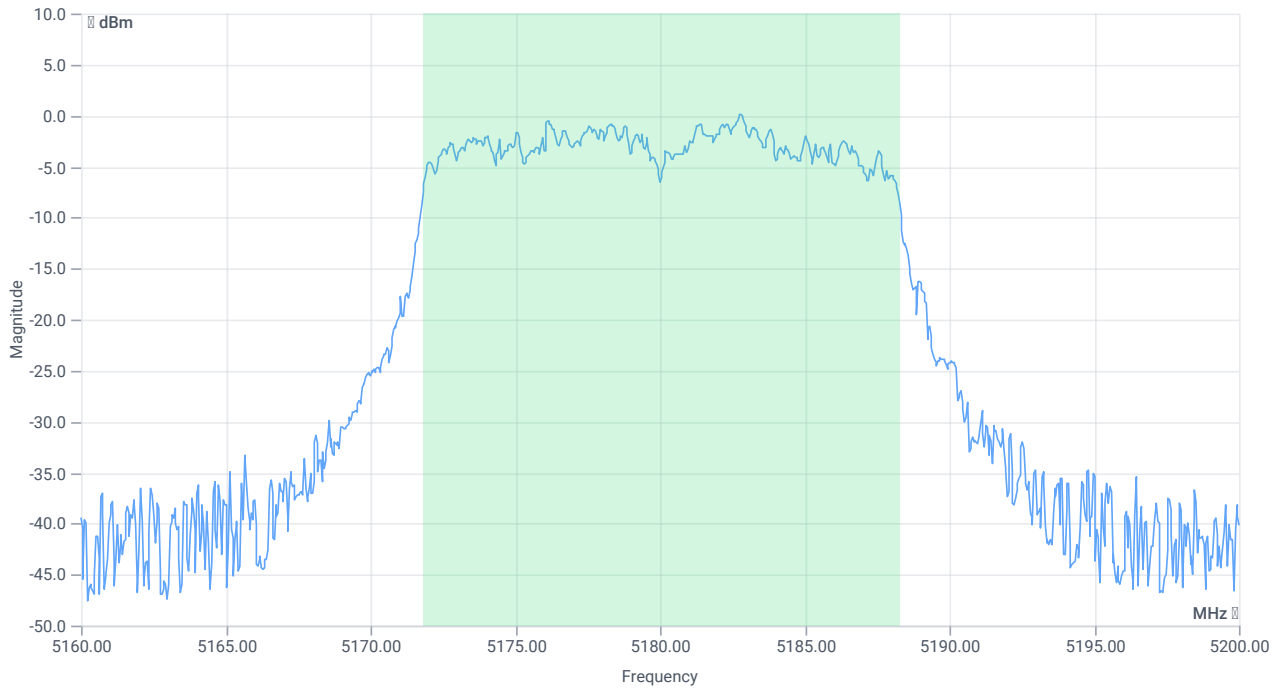
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	---	---	0.942	---	INFO
Duty Cycle max	---	---	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.899	---	INFO
Duty Cycle min	---	---	0.462	dB	INFO
Max TX Burst Length	---	---	2.025	ms	INFO
Min Gap Length	---	---	0.125	ms	INFO
Max Gap Length	---	---	0.225	ms	INFO



Evaluation Bandwidth



BW 99PCT

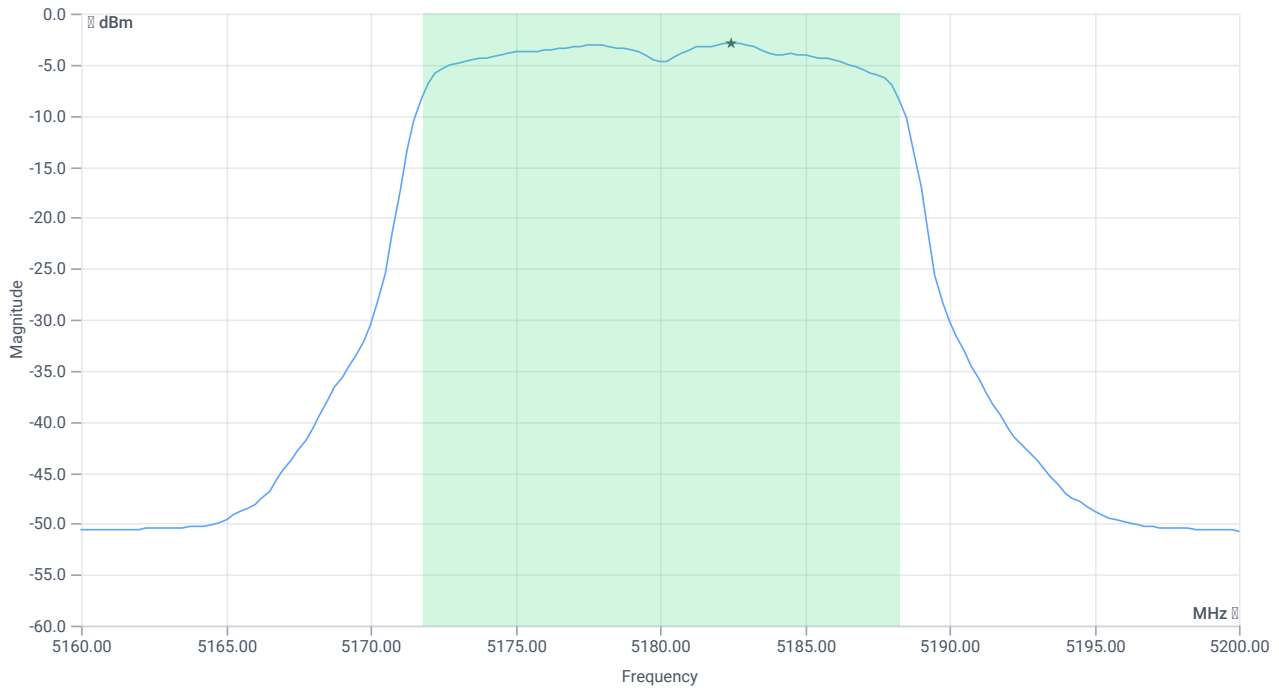
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.464	MHz	INFO
T1 99%	---	---	5171.8082	MHz	INFO
T2 99%	---	---	5188.2717	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.25 15.09 20
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



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	7.8	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.26	dBm	na
Limit: 11 dBm + 10 log 16.464					
Max Output Power DC corrected	--	23.17	8.26	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.84	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.38	dBm/1MHz	PASS

Verdict

PASS

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

Test References

TC Start	11.05.2023 13:06:41
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
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
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

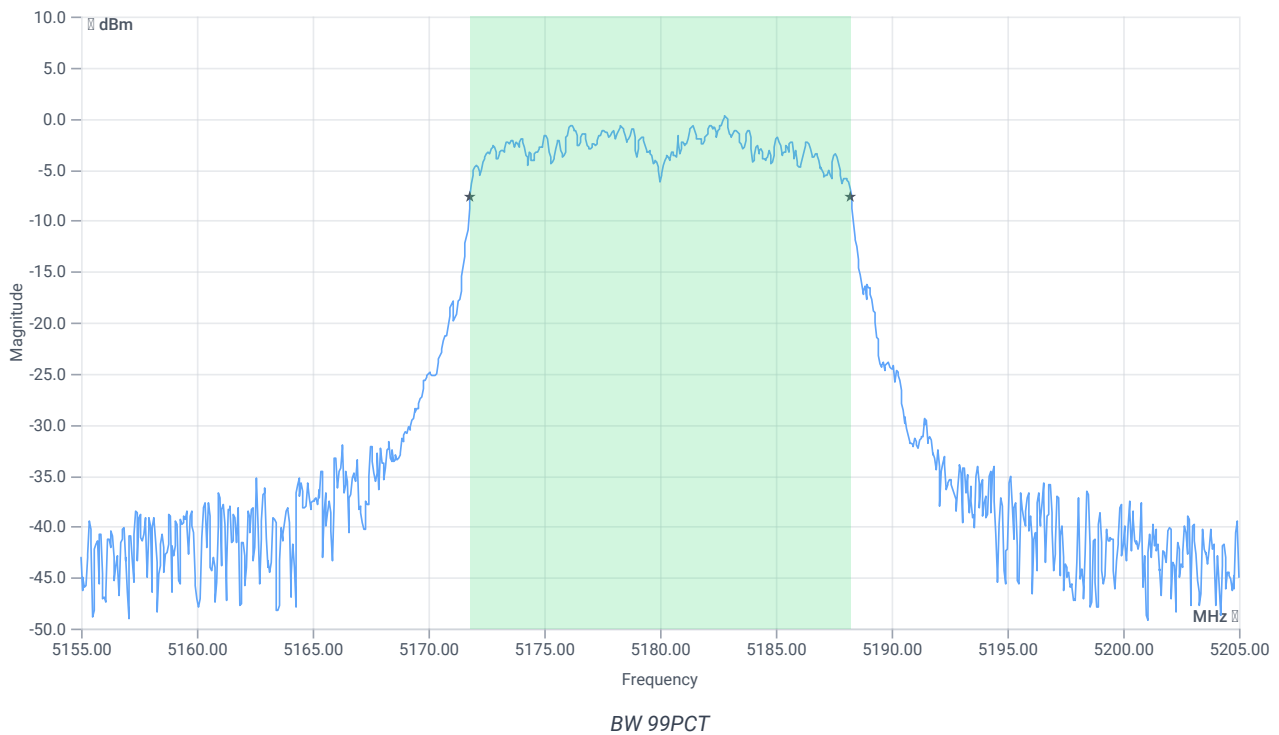
Test at TX 5180 MHz

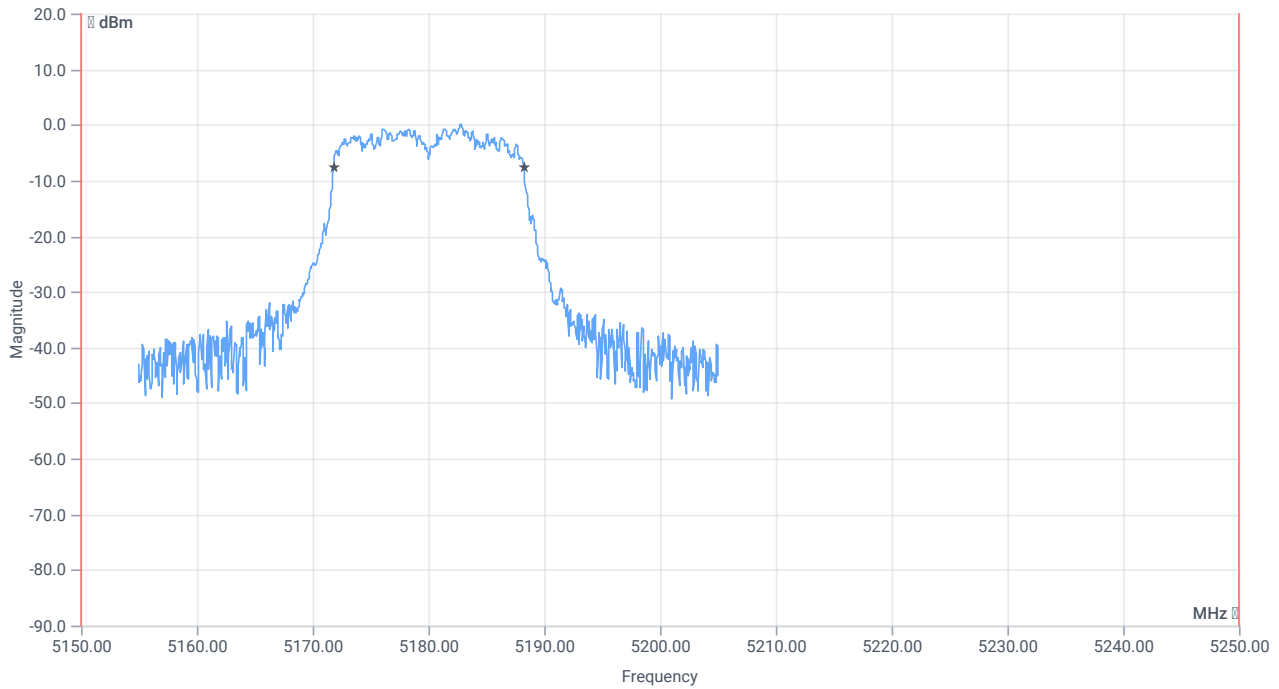
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.27	dBm	INFO
Ref. Frequency	--	--	5183.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.27 15.09 15
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

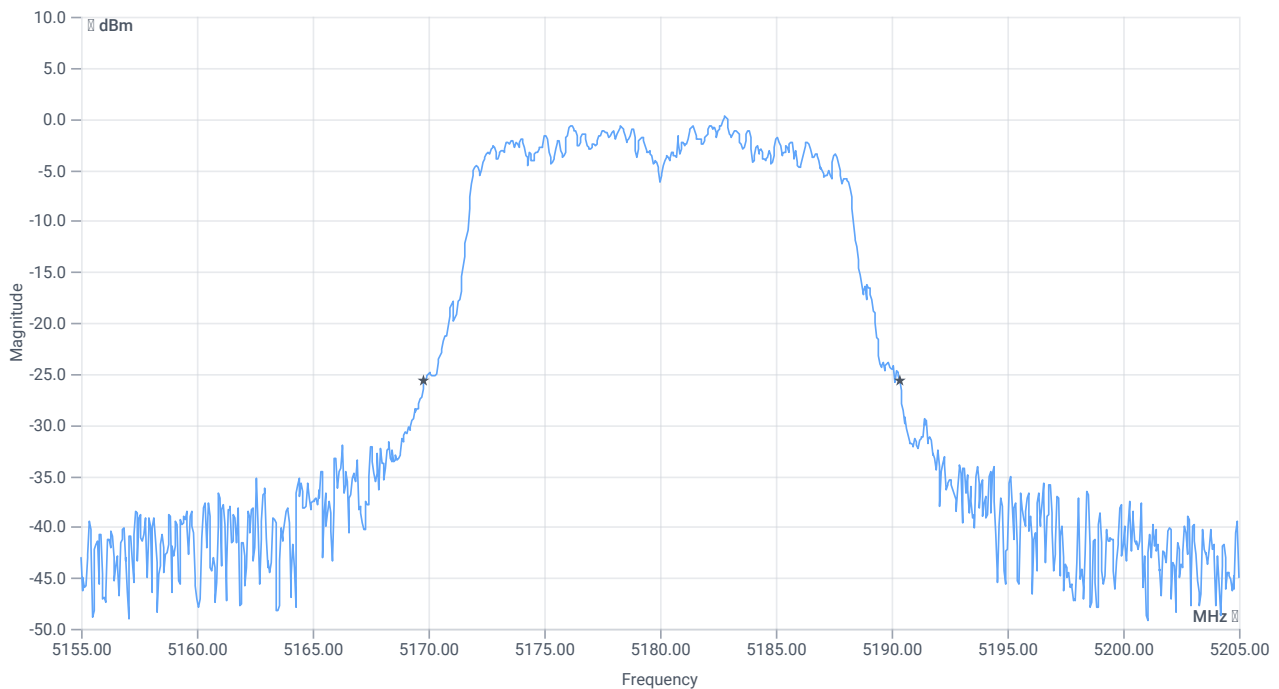




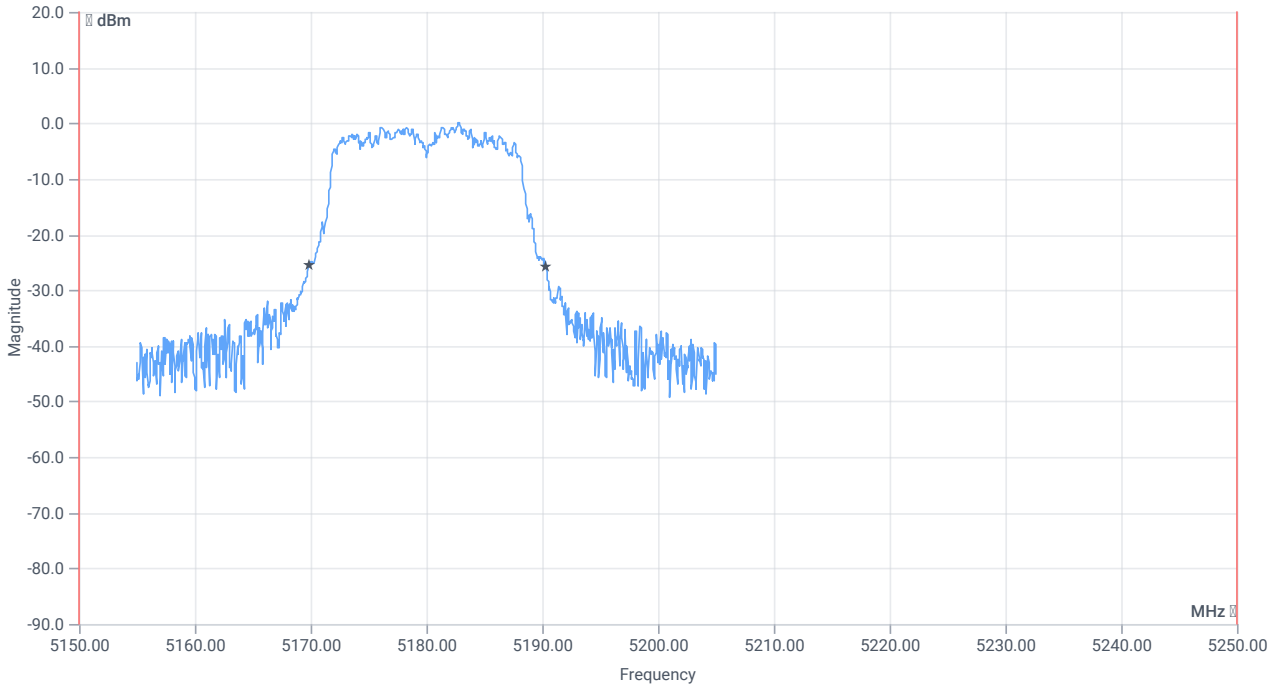
BW within Band 99PCT

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	16.434	MHz	INFO
T1 99%	5150.000000	--	5171.8082	MHz	PASS
T2 99%	--	5250.000000	5188.2418	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.55	MHz	INFO
T1 26dB	5150.000000	---	5169.8000	MHz	PASS
T2 26dB	---	5250.000000	5190.3500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:08:29
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	FCC 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	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True 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
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 5200 MHz

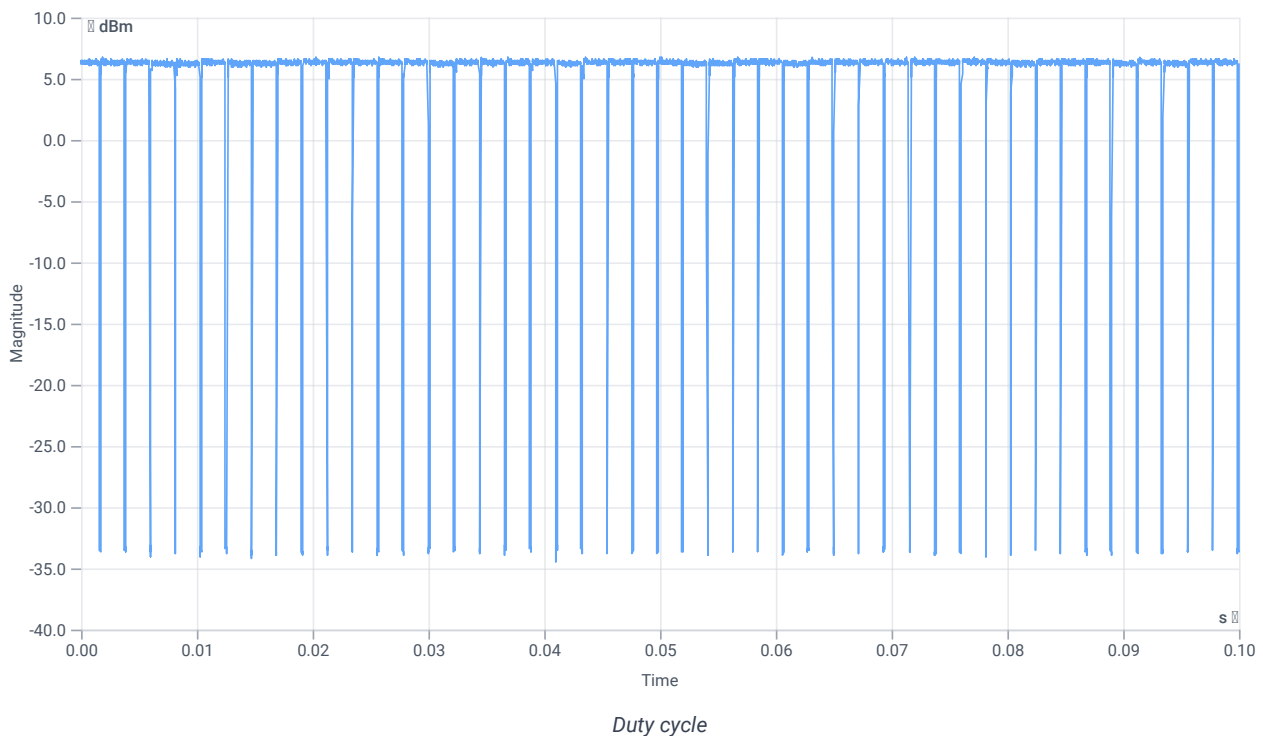
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.19	dBm	INFO
Ref. Frequency	--	--	5203.600	MHz	INFO

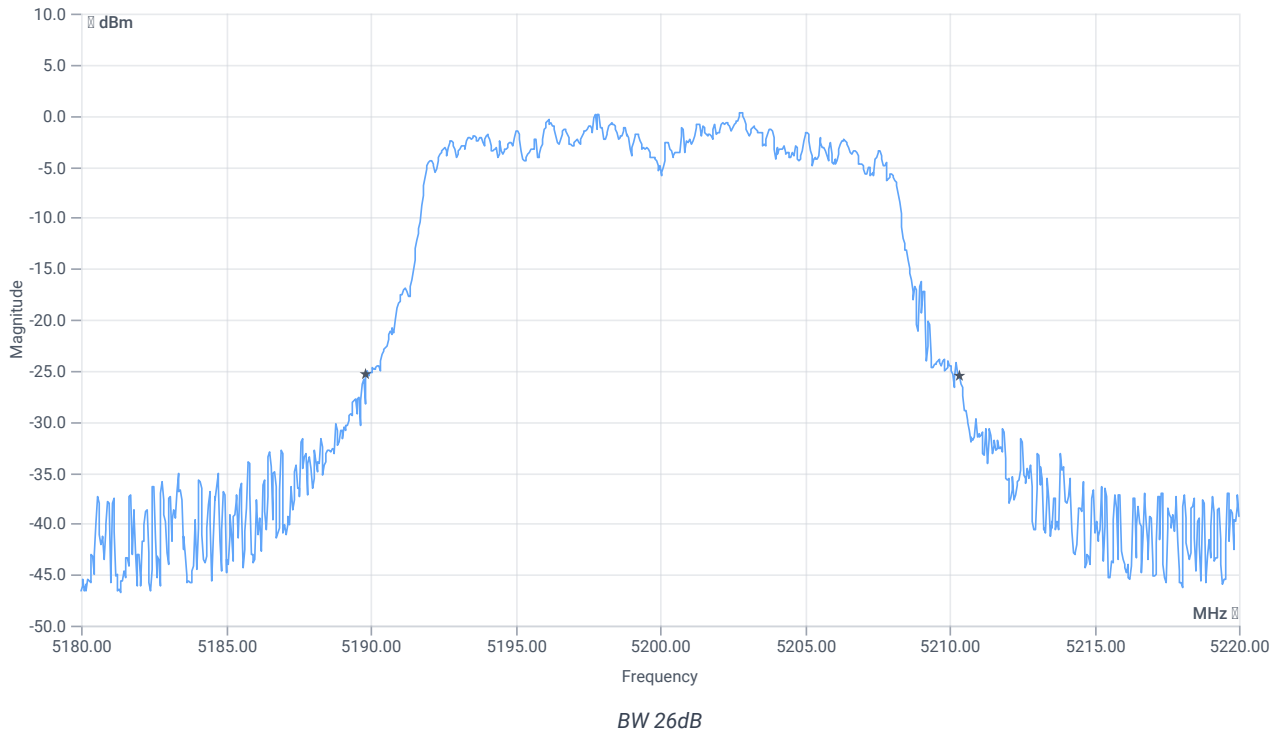
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	--	--	0.942	--	INFO
Duty Cycle max	--	--	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	--	--	0.899	--	INFO
Duty Cycle min	--	--	0.462	dB	INFO
Max TX Burst Length	--	--	2.025	ms	INFO
Min Gap Length	--	--	0.125	ms	INFO
Max Gap Length	--	--	0.225	ms	INFO



Evaluation Bandwidth



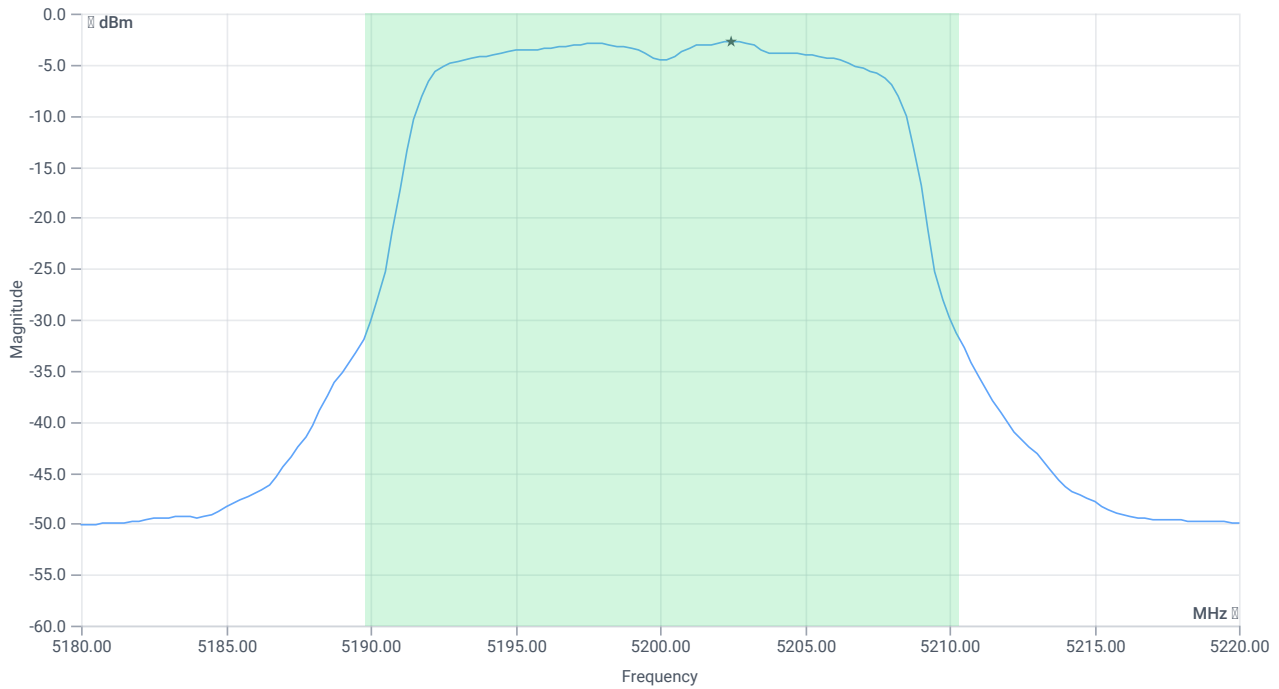
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.52	MHz	INFO
T1 26dB	---	---	5189.8400	MHz	INFO
T2 26dB	---	---	5210.3600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.19 15.01 20
Start [MHz] Stop [MHz]	5180.000 5220.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	8.02	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.48	dBm	PASS
Limit: 11 dBm + 10 log 20.52					
Max Output Power DC corrected	--	24.12	8.48	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.71	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.25	dBm/1MHz	PASS

Verdict

PASS

ISED RSS247 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:09:57
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	ISED RSS247 -
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True 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
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 5200 MHz

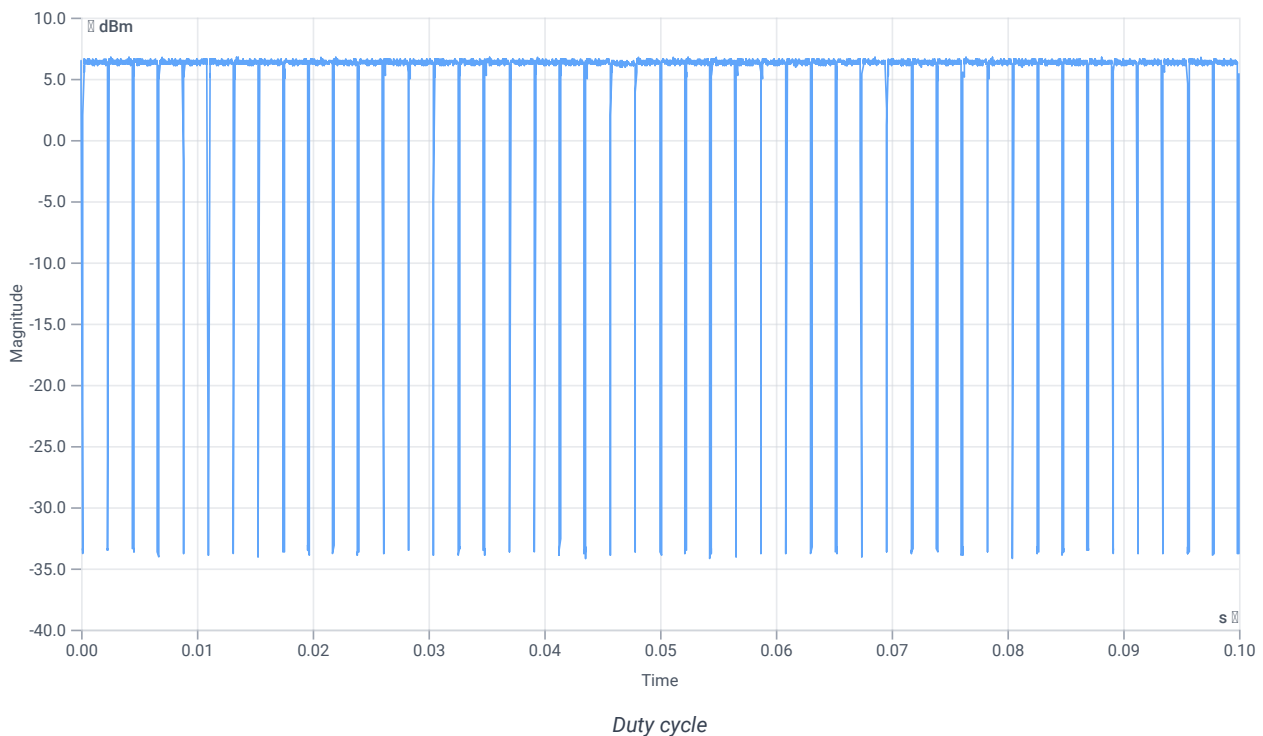
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.44	dBm	INFO
Ref. Frequency	--	--	5203.000	MHz	INFO

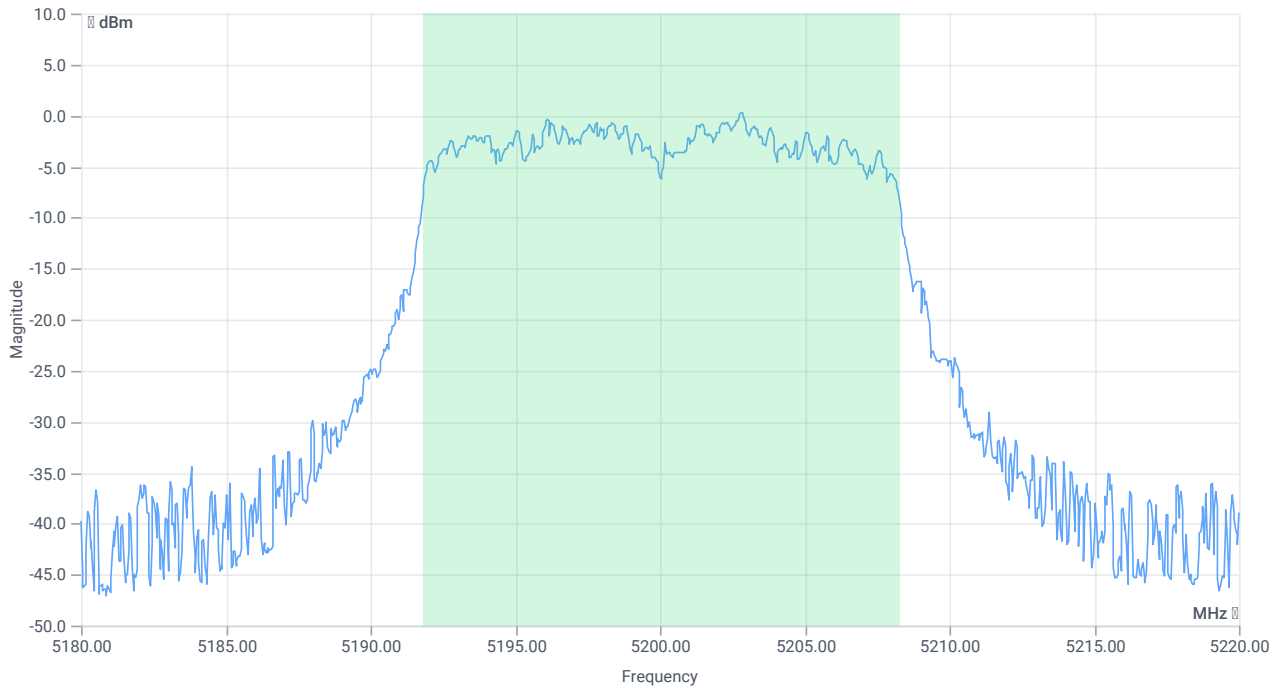
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:46					
Duty Cycle (Burst Ratio) max	--	--	0.942	--	INFO
Duty Cycle max	--	--	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	--	--	0.899	--	INFO
Duty Cycle min	--	--	0.462	dB	INFO
Max TX Burst Length	--	--	2.025	ms	INFO
Min Gap Length	--	--	0.125	ms	INFO
Max Gap Length	--	--	0.225	ms	INFO



Evaluation Bandwidth



BW 99PCT

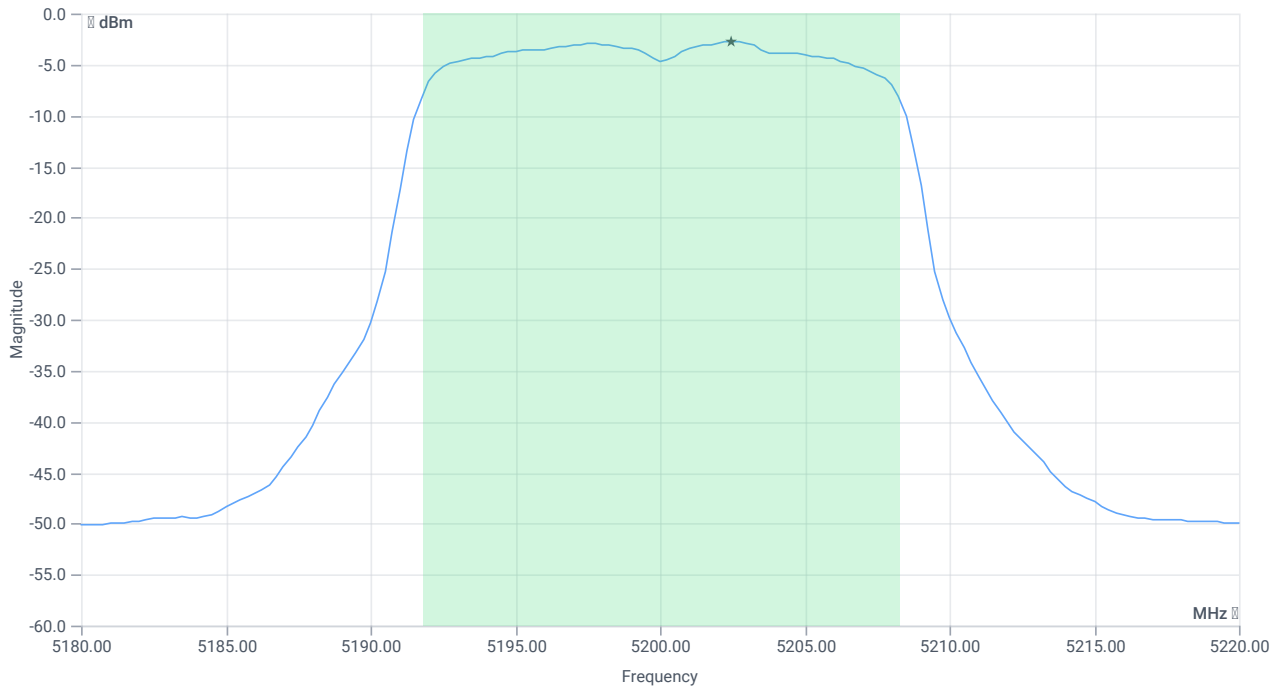
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.464	MHz	INFO
T1 99%	---	---	5191.8082	MHz	INFO
T2 99%	---	---	5208.2717	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.44 15.01 20
Start [MHz] Stop [MHz]	5180.000 5220.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	7.92	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.38	dBm	na
Limit: 11 dBm + 10 log 16.464					
Max Output Power DC corrected	--	23.17	8.38	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.73	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.27	dBm/1MHz	PASS

Verdict

PASS

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

Test References

TC Start	11.05.2023 13:11:26
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	True 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
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

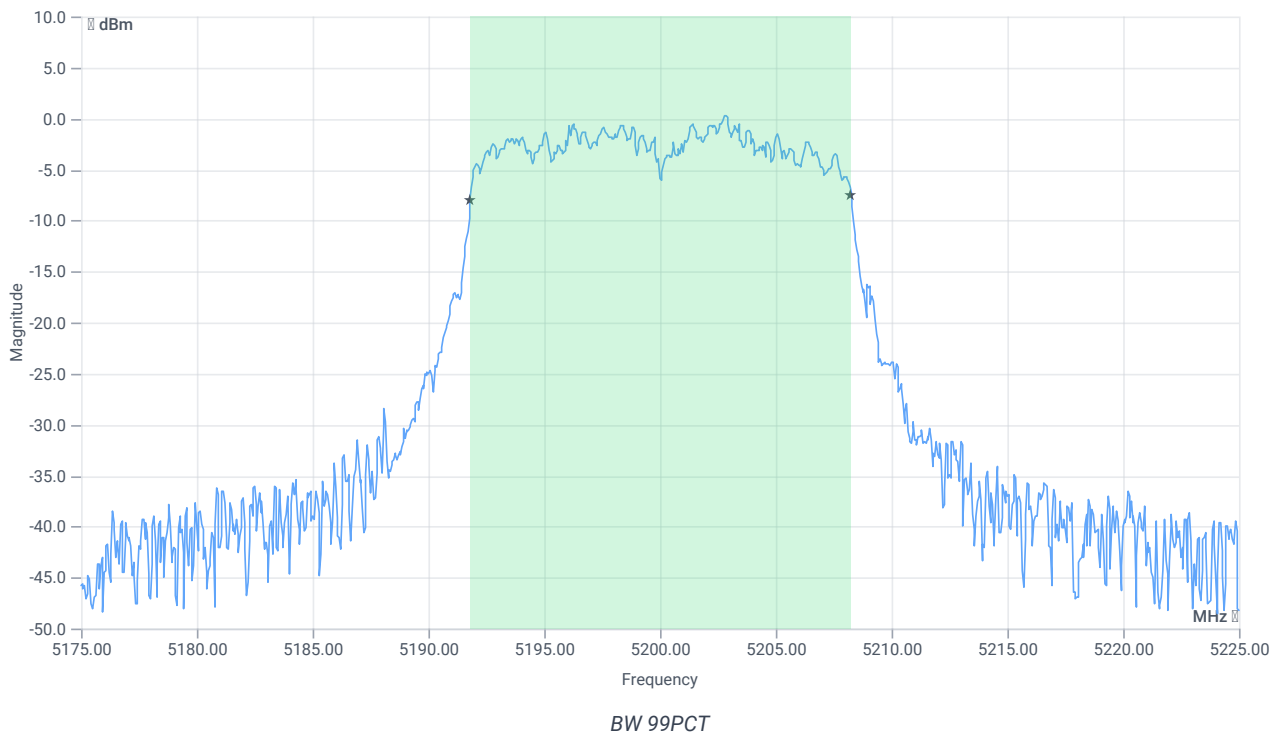
Test at TX 5200 MHz

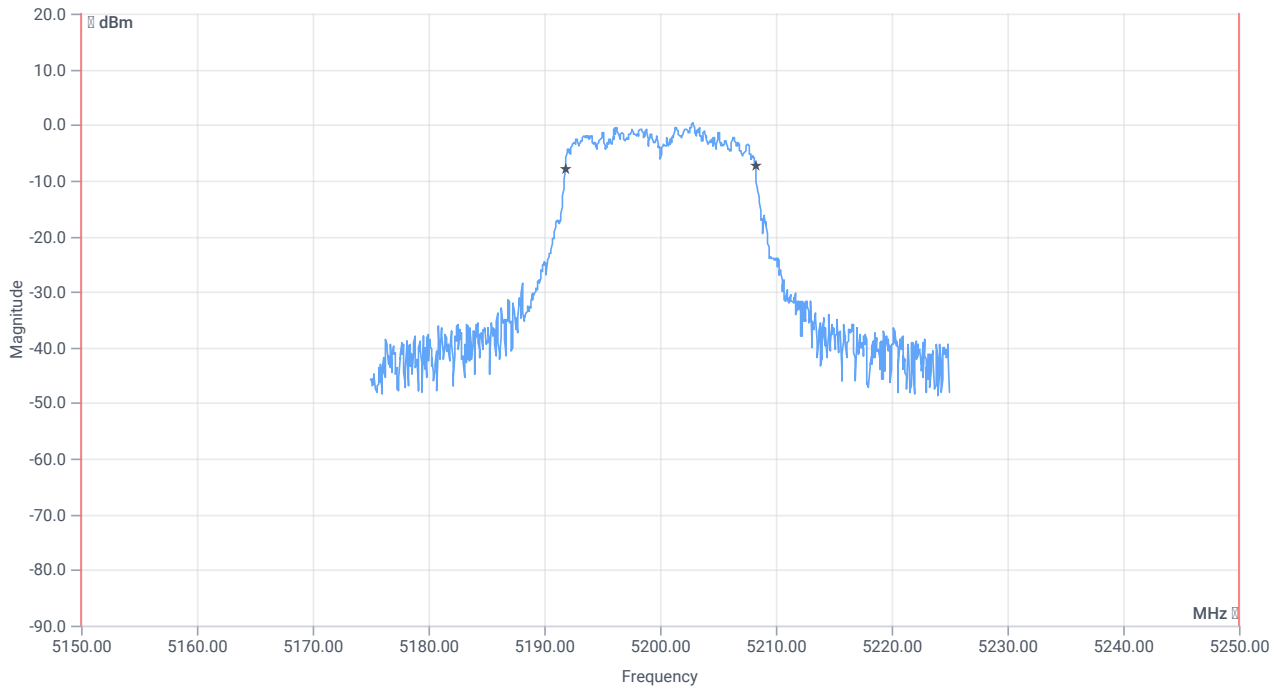
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.62	dBm	INFO
Ref. Frequency	--	--	5201.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.62 15.01 15
Start [MHz] Stop [MHz]	5175.000 5225.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

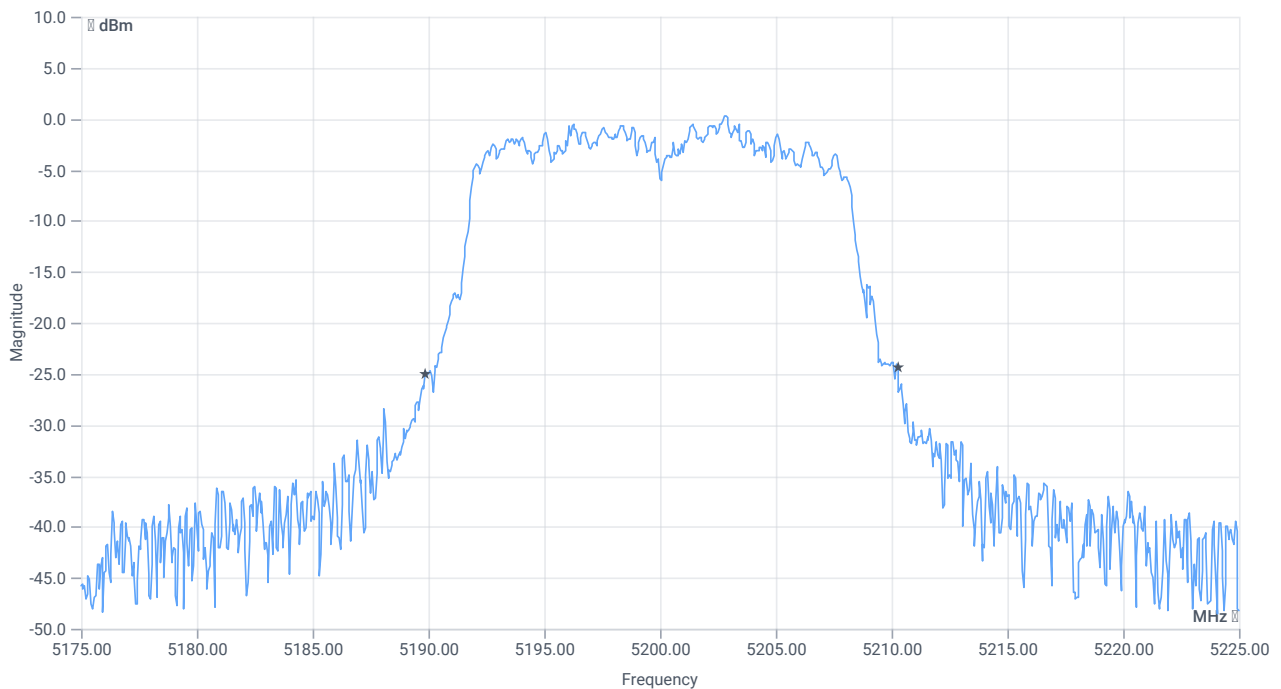




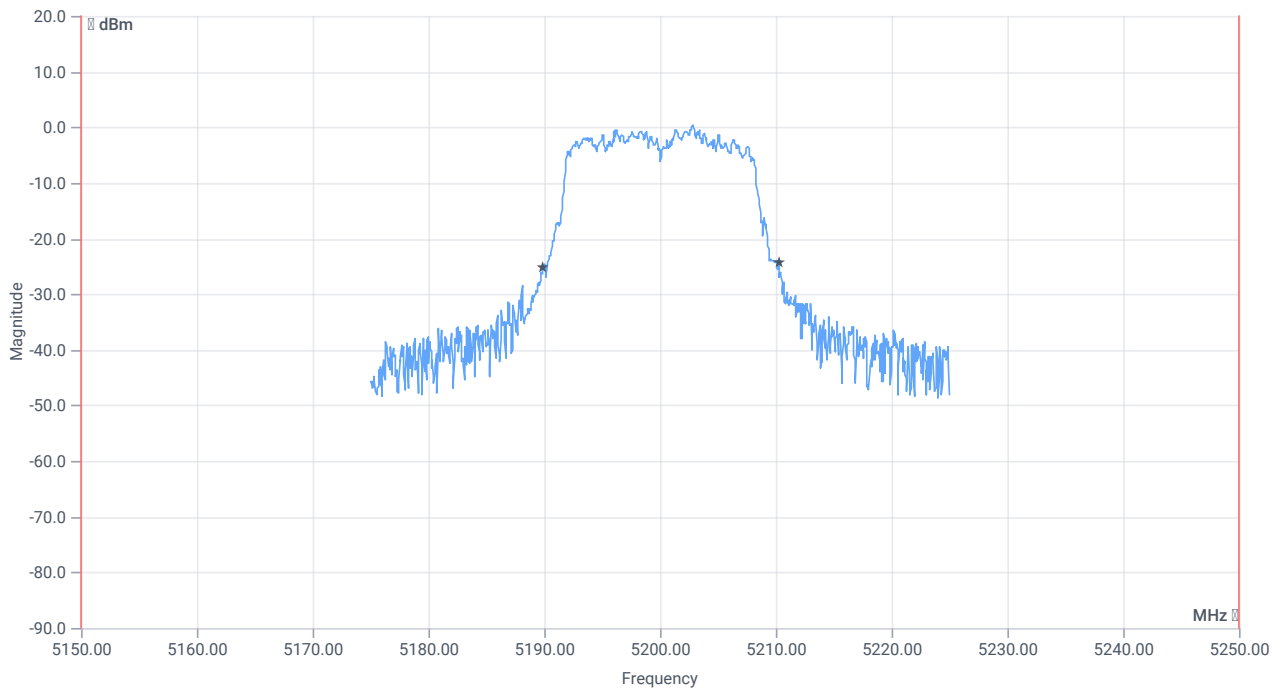
BW within Band 99PCT

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	16.434	MHz	INFO
T1 99%	5150.000000	--	5191.8082	MHz	PASS
T2 99%	--	5250.000000	5208.2418	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.4	MHz	INFO
T1 26dB	5150.000000	---	5189.8500	MHz	PASS
T2 26dB	---	5250.000000	5210.2500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:16:00
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	FCC 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	1
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
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 5240 MHz

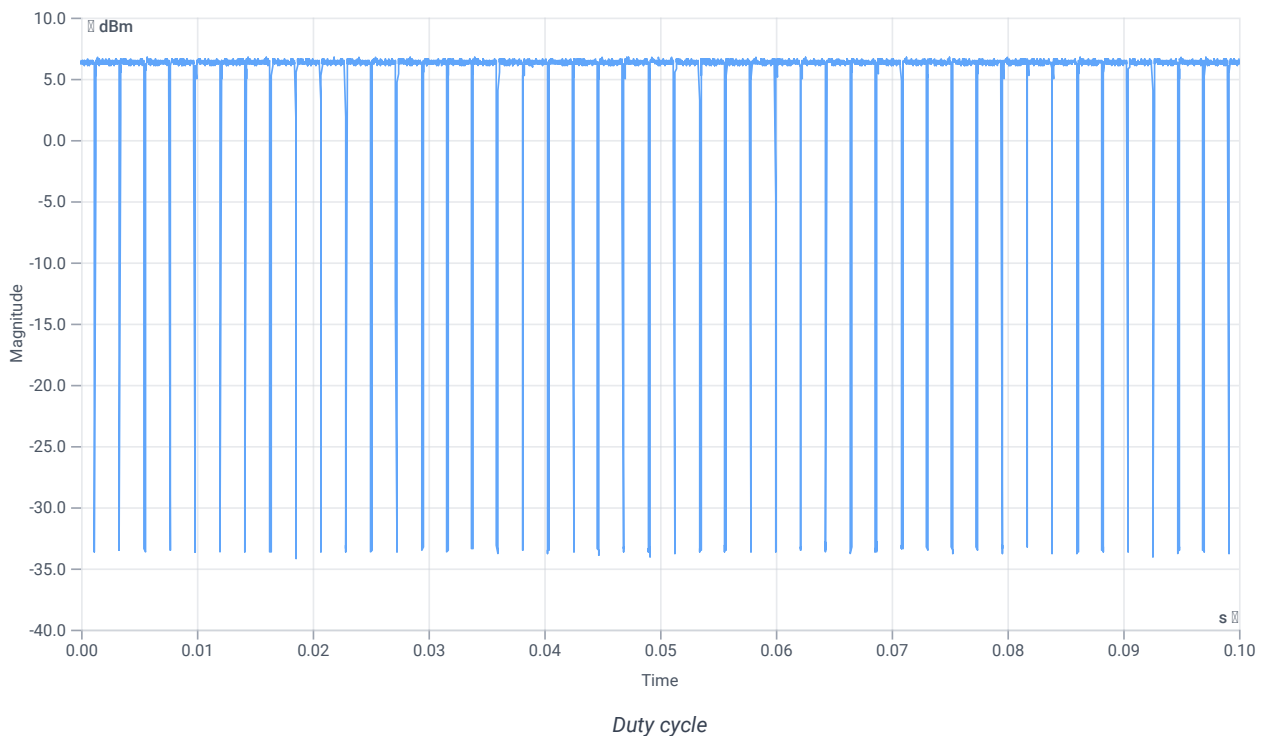
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.57	dBm	INFO
Ref. Frequency	--	--	5241.600	MHz	INFO

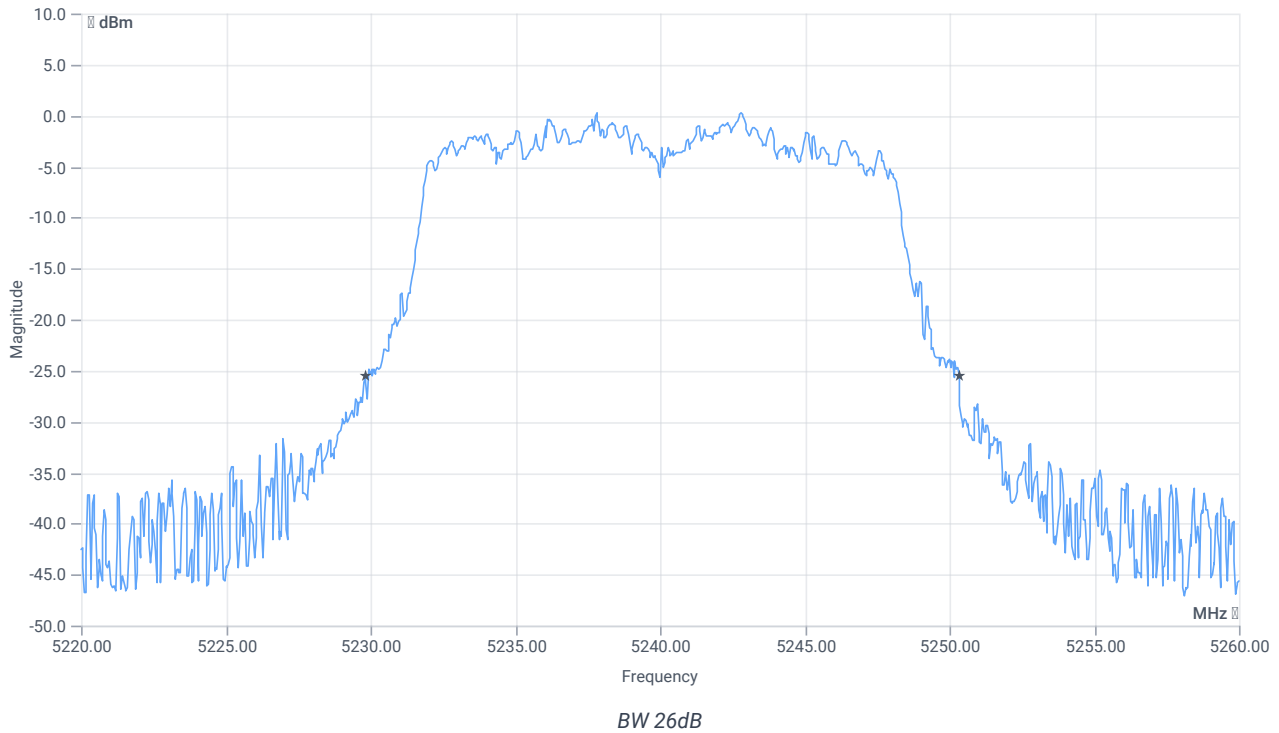
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	--	--	0.942	--	INFO
Duty Cycle max	--	--	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	--	--	0.899	--	INFO
Duty Cycle min	--	--	0.462	dB	INFO
Max TX Burst Length	--	--	2.025	ms	INFO
Min Gap Length	--	--	0.125	ms	INFO
Max Gap Length	--	--	0.225	ms	INFO



Evaluation Bandwidth



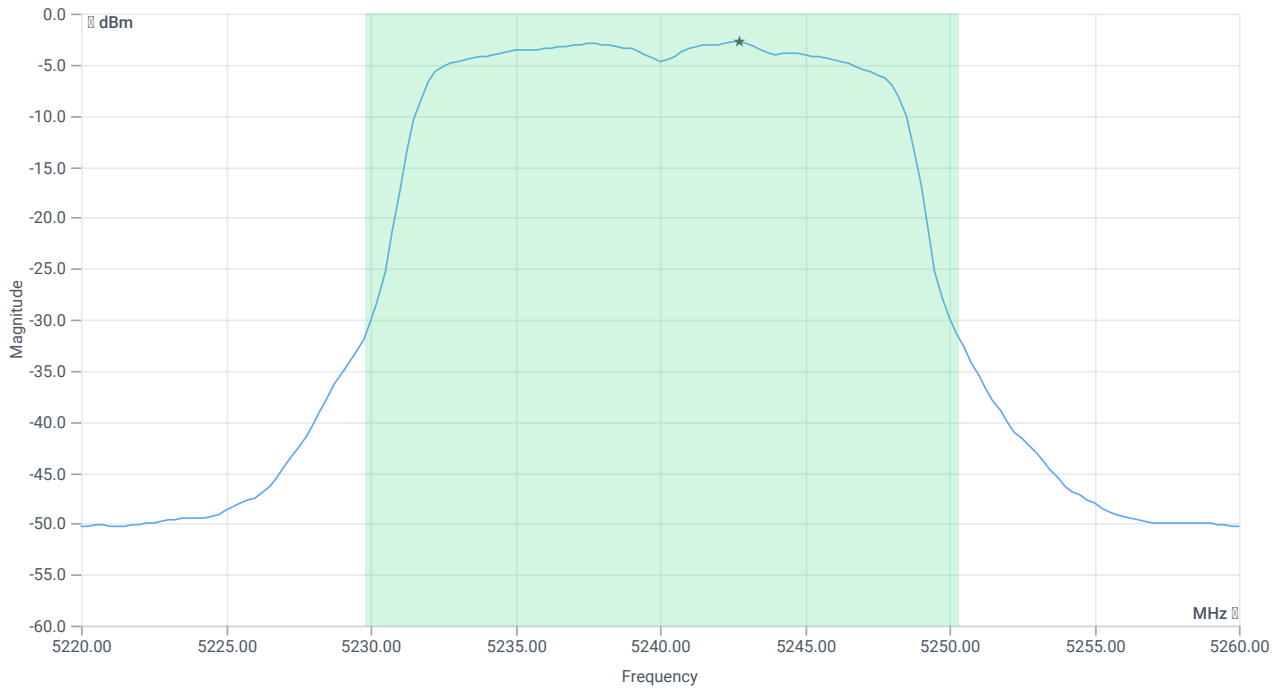
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.52	MHz	INFO
T1 26dB	---	---	5229.8000	MHz	INFO
T2 26dB	---	---	5250.3200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.57 15.07 20
Start [MHz] Stop [MHz]	5220.000 5260.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	7.99	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.45	dBm	PASS
Limit: 11 dBm + 10 log 20.52					
Max Output Power DC corrected	--	24.12	8.45	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.75	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.29	dBm/1MHz	PASS

Verdict

PASS

ISED RSS247 # Max output power and psd ~ WLAN5Gx a mode U-NII-1

Test References

TC Start	11.05.2023 13:17:28
Ambit Temp [°C] Humidity [rel%]	22.9 42
System Version	4.0.1.0
Test Specification	ISED RSS247 -
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
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 5240 MHz

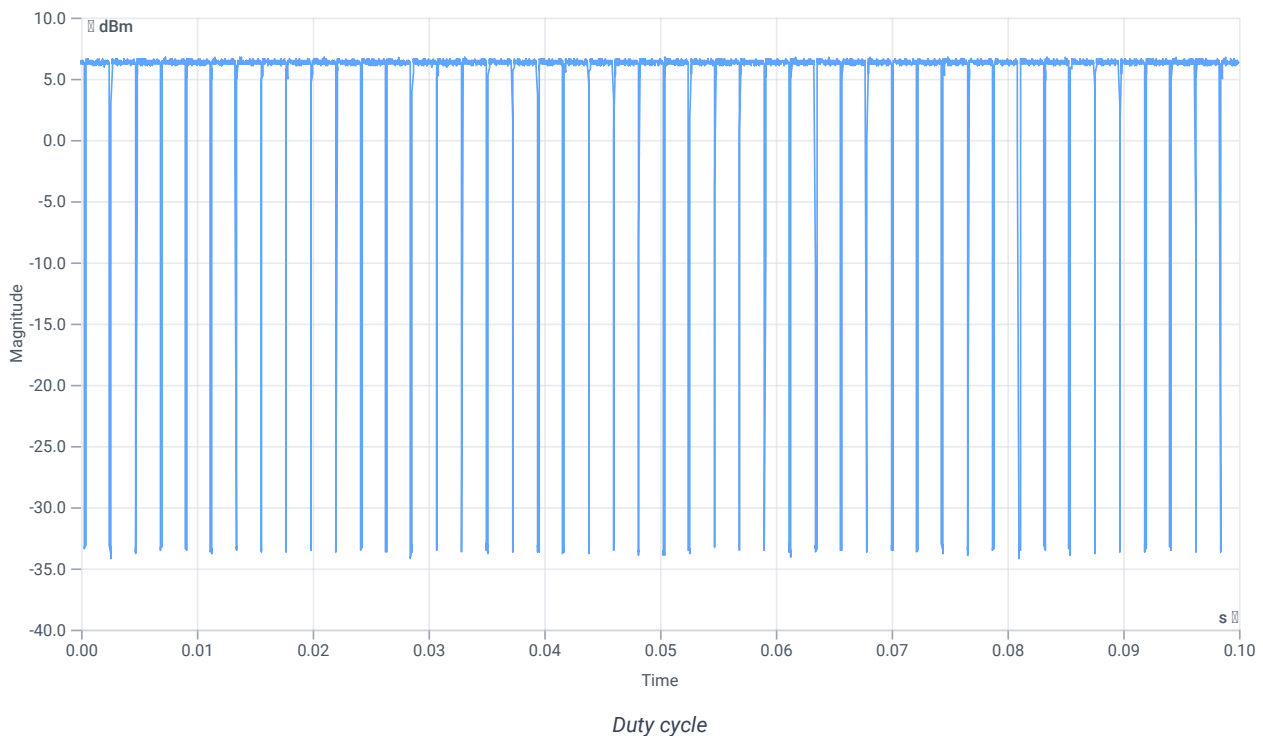
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.26	dBm	INFO
Ref. Frequency	--	--	5241.200	MHz	INFO

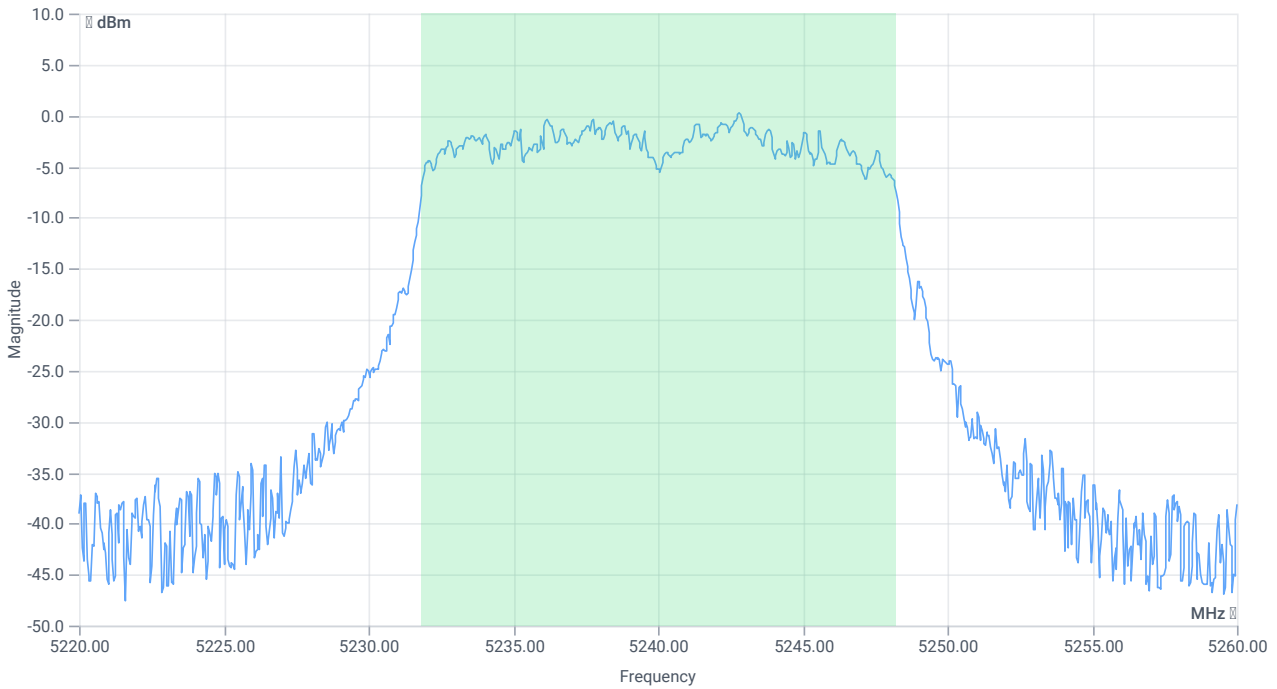
Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:45					
Duty Cycle (Burst Ratio) max	--	--	0.942	--	INFO
Duty Cycle max	--	--	0.259	dB	INFO
Duty Cycle (Burst Ratio) min	--	--	0.899	--	INFO
Duty Cycle min	--	--	0.462	dB	INFO
Max TX Burst Length	--	--	2.025	ms	INFO
Min Gap Length	--	--	0.125	ms	INFO
Max Gap Length	--	--	0.225	ms	INFO



Evaluation Bandwidth



BW 99PCT

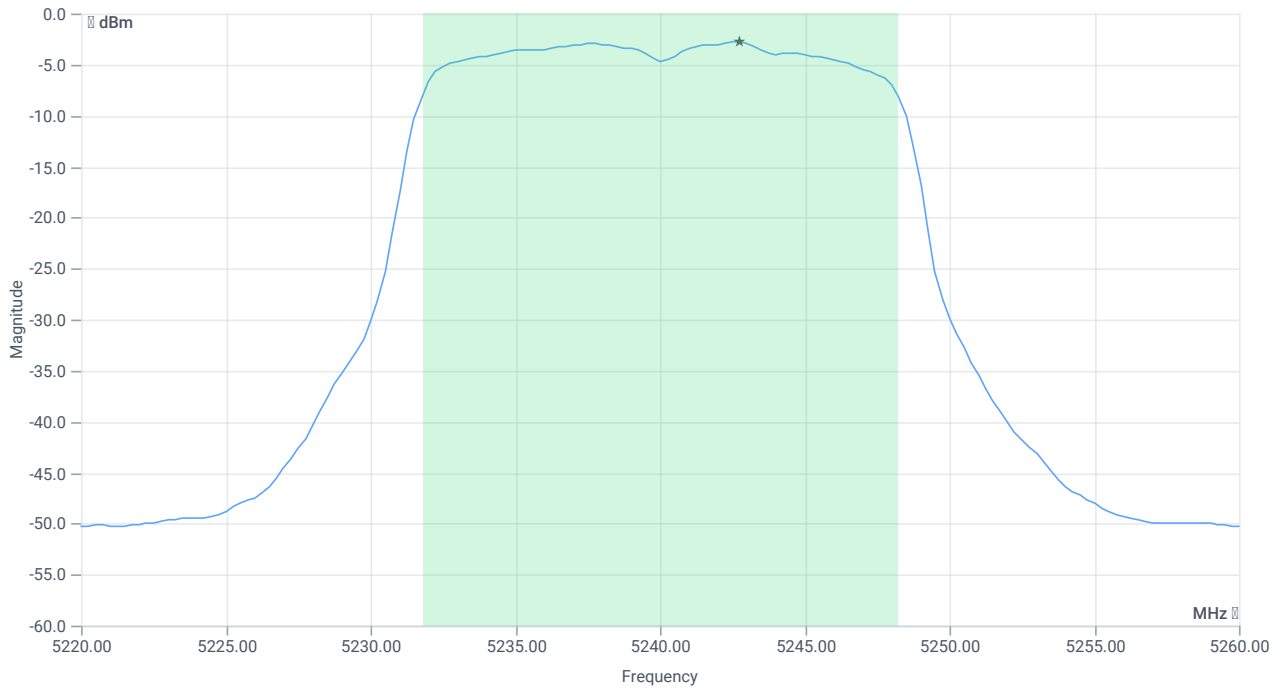
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.424	MHz	INFO
T1 99%	---	---	5231.8082	MHz	INFO
T2 99%	---	---	5248.2318	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.26 15.07 20
Start [MHz] Stop [MHz]	5220.000 5260.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE



Max OP and PSD

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	7.91	dBm	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	8.37	dBm	na
Limit: 11 dBm + 10 log 16.424					
Max Output Power DC corrected	--	23.15	8.37	dBm	na

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	-2.77	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0.46	dB	INFO
Power Spectral Density DC corrected	--	11	-2.31	dBm/1MHz	PASS

Verdict

PASS

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

Test References

TC Start	11.05.2023 13:18:56
Ambit Temp [°C] Humidity [rel%]	22.9 41
System Version	4.0.1.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx a mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5180
Frequency mid to test	False Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
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

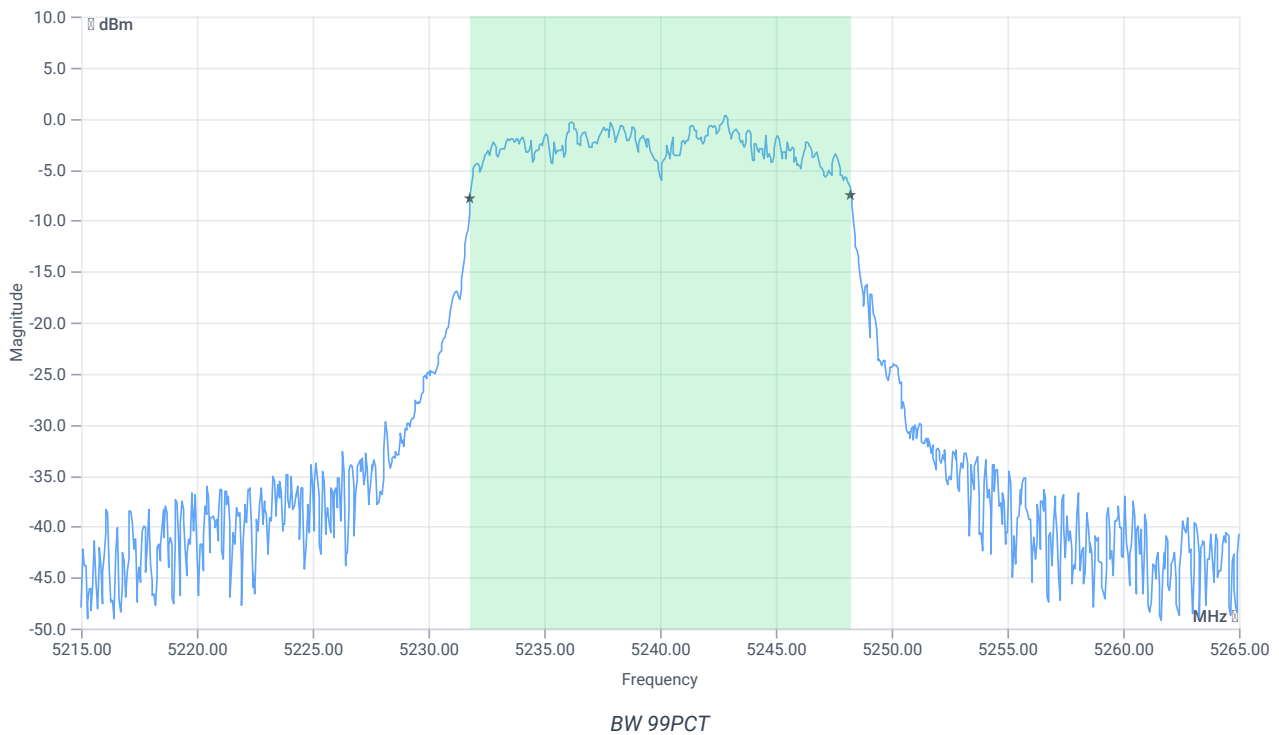
Test at TX 5240 MHz

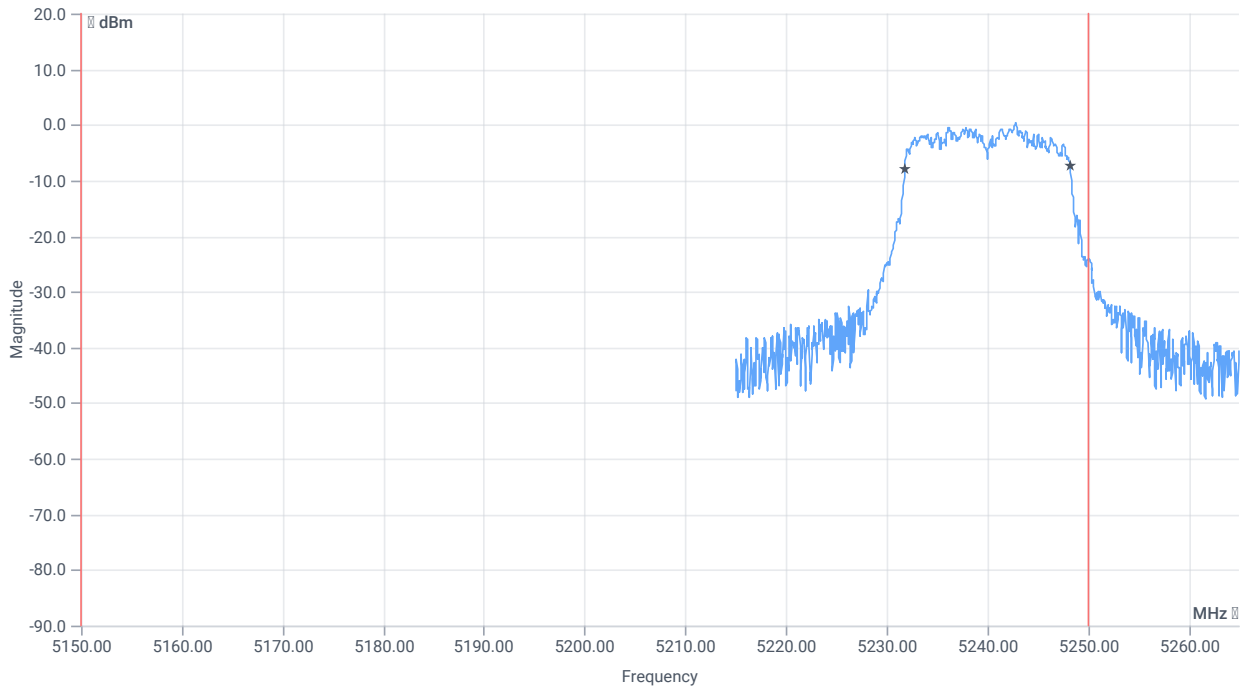
RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	5.30	dBm	INFO
Ref. Frequency	--	--	5235.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.30 15.07 15
Start [MHz] Stop [MHz]	5215.000 5265.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

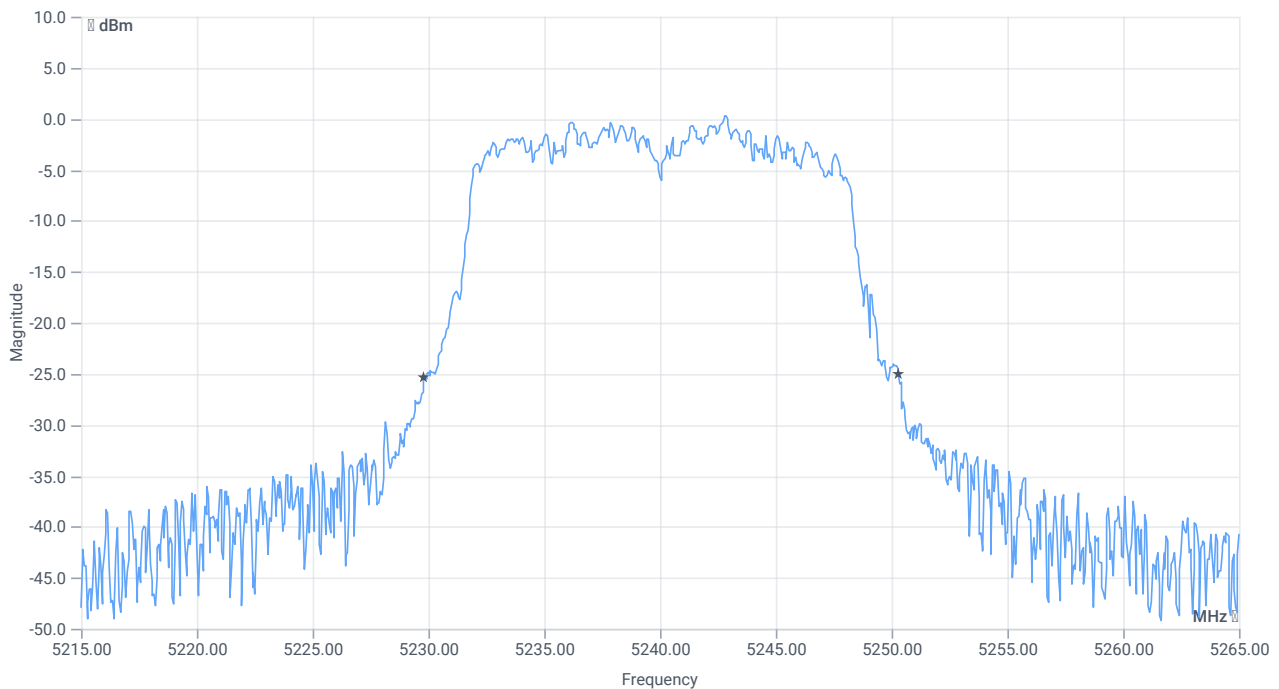




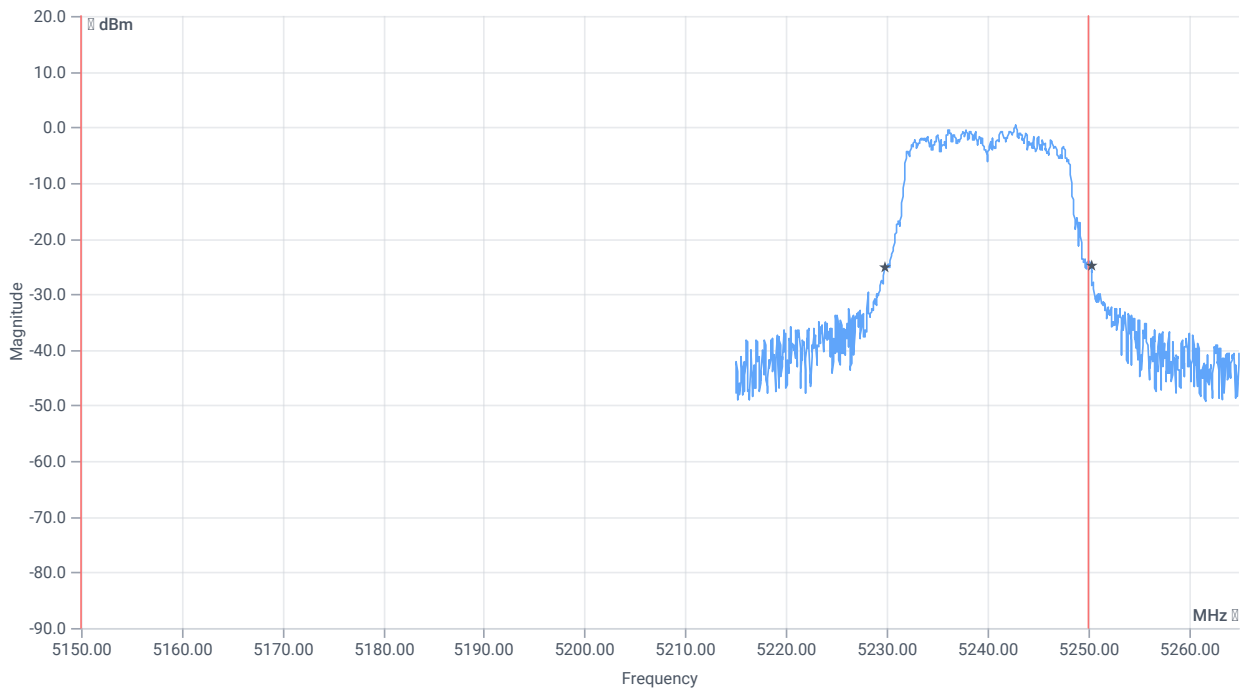
BW within Band 99PCT

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	16.434	MHz	INFO
T1 99%	5150.000000	--	5231.8082	MHz	PASS
T2 99%	--	5250.000000	5248.2418	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.5	MHz	INFO
T1 26dB	5150.000000	---	5229.8000	MHz	PASS
T2 26dB	---	5250.000000	5250.3000	MHz	DFS required

Verdict

PASS

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