Measurement Results

No.1-5761/23-01-05_Annex_MR_3

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cn=David Lang, o=CTC advanced GmbH, ou=LNG-211202, email=david.lang@ctcadvanced.com, c=DE
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David Lang
Lab Manager
Radio Communications

CTC advanced GmbH
Untertuerkheimer Str. 6-10
66117 Saarbruecken / Germany
Phone: +49 681 5 98 - 0
Fax: +49 681 5 98 - 9075
web: ctcadvanced.com
e-mail: mail@ctcadvanced.com

Table of Content

EUT Information

EUT DEFINITION

Manufacturer	Sagemcom
Type	Video Soundbox
Serial Number	Config#1 (conducted)
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	M393 AL VSB-3
Comment 1	
Comment 2	
Temperature [°C] Min	0
Temperature [°C] Nom	20
Temperature [°C] Max	40
Voltage [V] Min	103.5 V AC
Voltage [V] Nom	115 V AC
Voltage [V] Max	126.5 V AC

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

Test References

TC Start	10.02.2023 09:45:45
Ambit Temp [°C] | Humidity [rel%]	21.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5320 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 Max Output Power DC corrected	---	---	17.3	dBm	INFO
Ant:2 BW 26dB	---	---	21.480	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	16.47	dBm	INFO
Ant:1 BW 26dB	---	---	21.520	MHz	INFO
∑ Limit absolute	---	24	19.92	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.48	---	24.32	19.92	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 PSD	---	---	6.57	dBm/1MHz	INFO
Ant:1 PSD	---	---	5.71	dBm/1MHz	INFO
∑	---	11	9.17	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:45:14
Ambit Temp [°C] | Humidity [rel%]	21.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

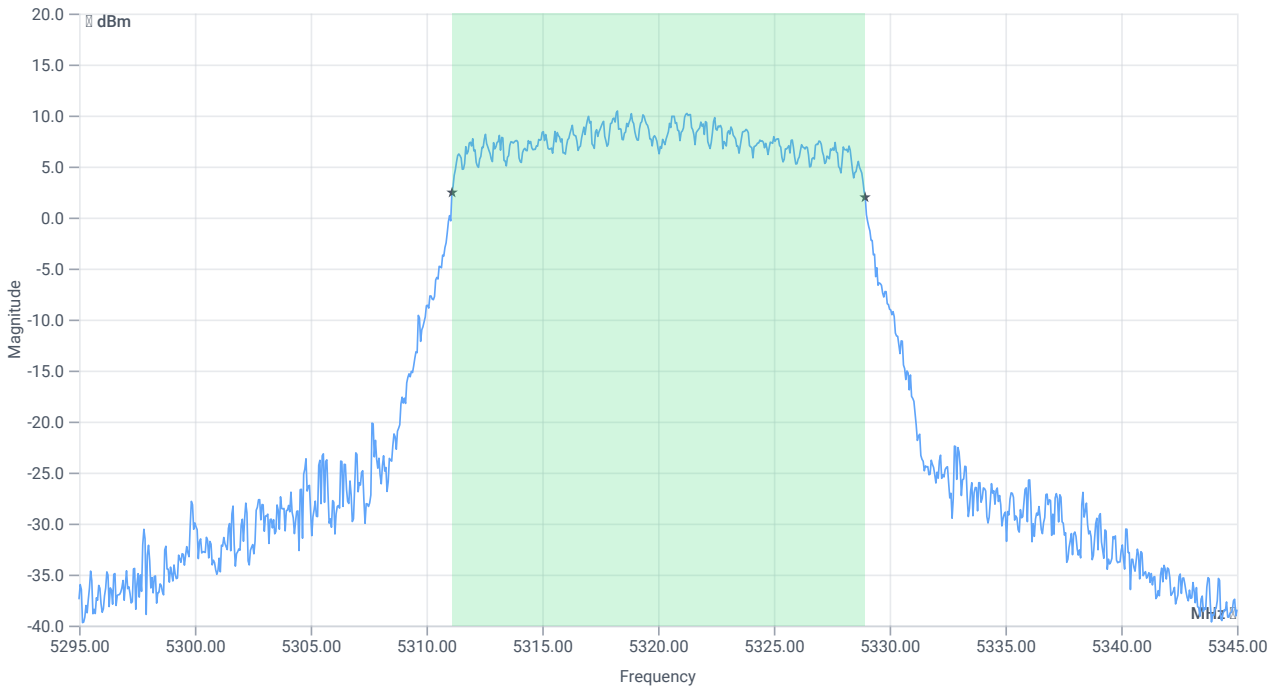
Test at TX 5320 MHz

RESULT: Reference Power cond.

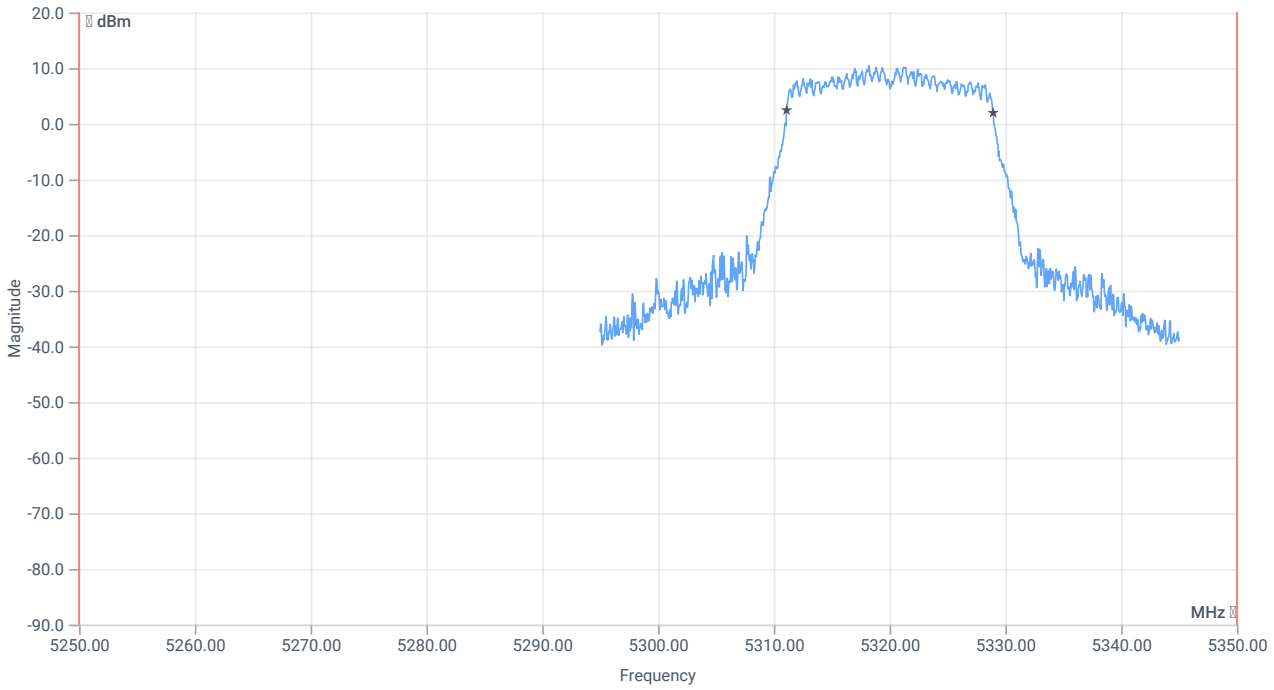
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.69	dBm	INFO
Ref. Frequency	---	---	5318.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.69 | 16.26 | 25
Start [MHz] | Stop [MHz]	5295.000 | 5345.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



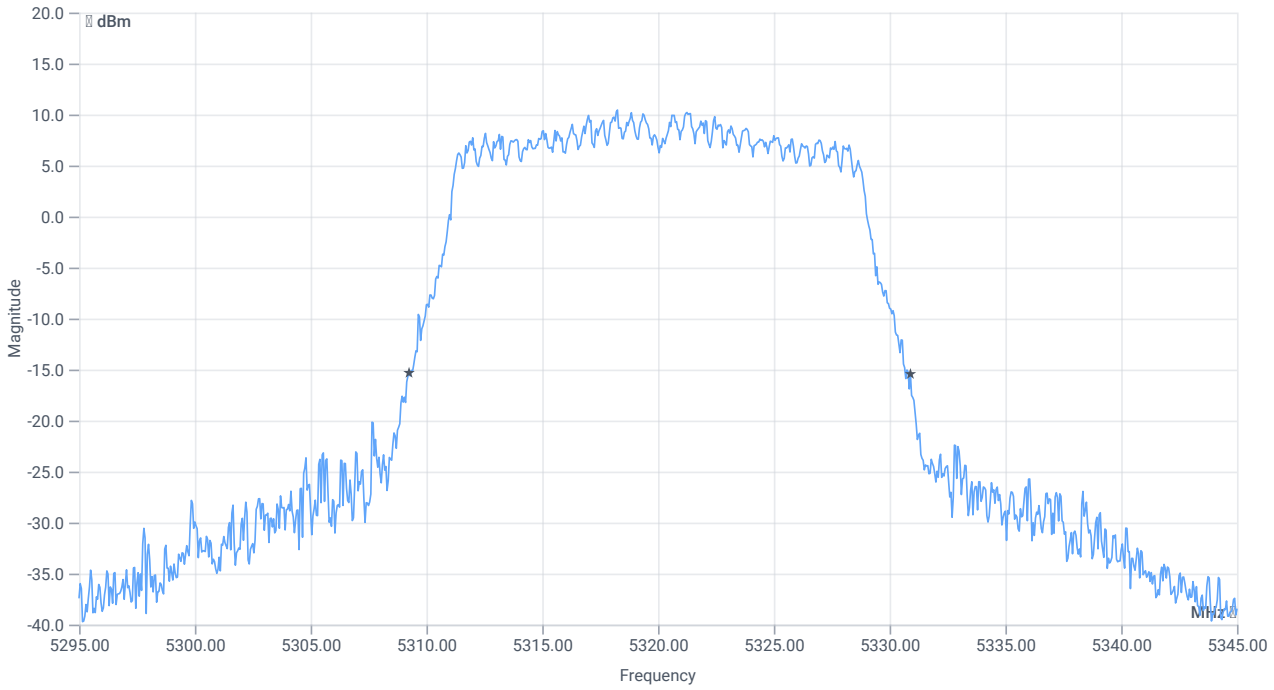
BW 99PCT



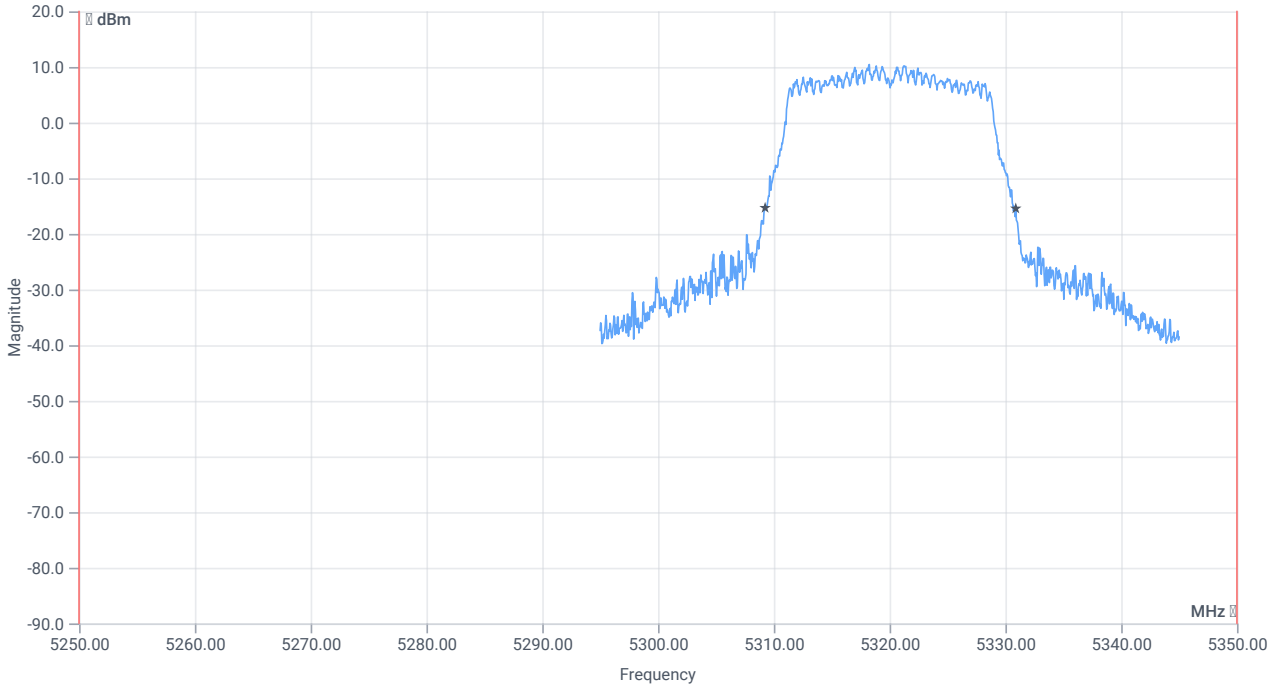
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	17.832	MHz	INFO
T1 99%	5250.000000	---	5311.1089	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5328.9411	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.65	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5309.2500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.9000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:43:47
Ambit Temp [°C] | Humidity [rel%]	21.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5320 MHz

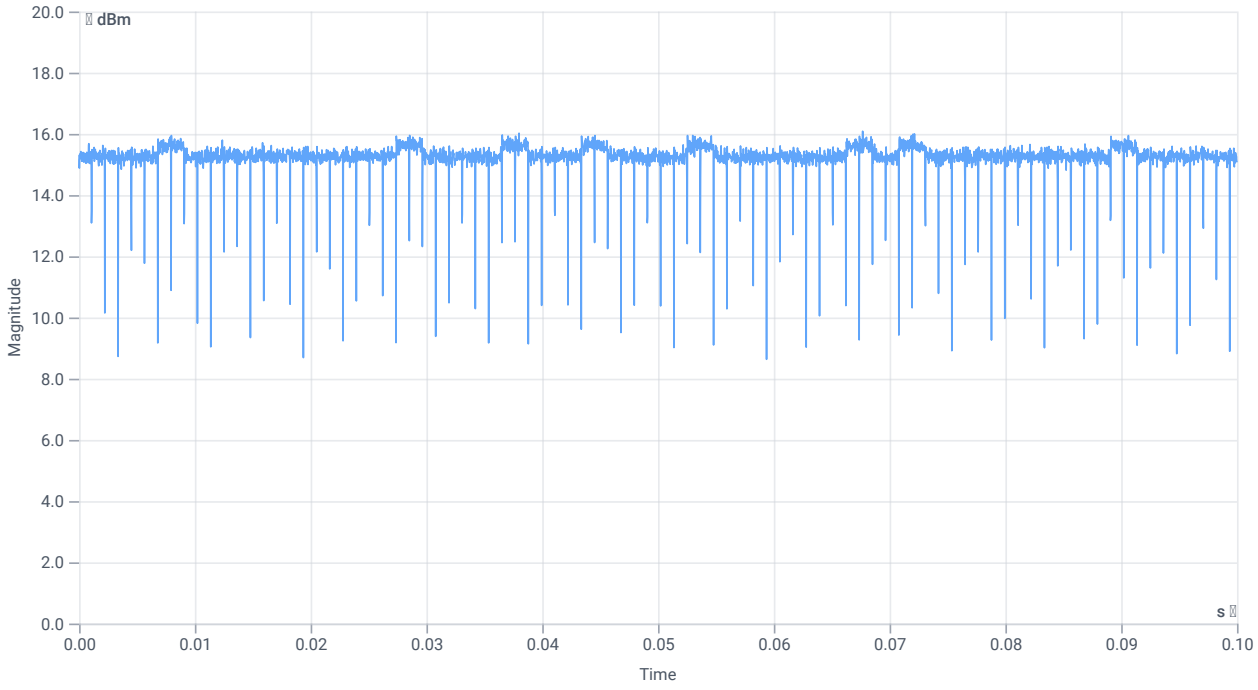
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.74	dBm	INFO
Ref. Frequency	---	---	5321.200	MHz	INFO

Evaluation max. Duty Cycle

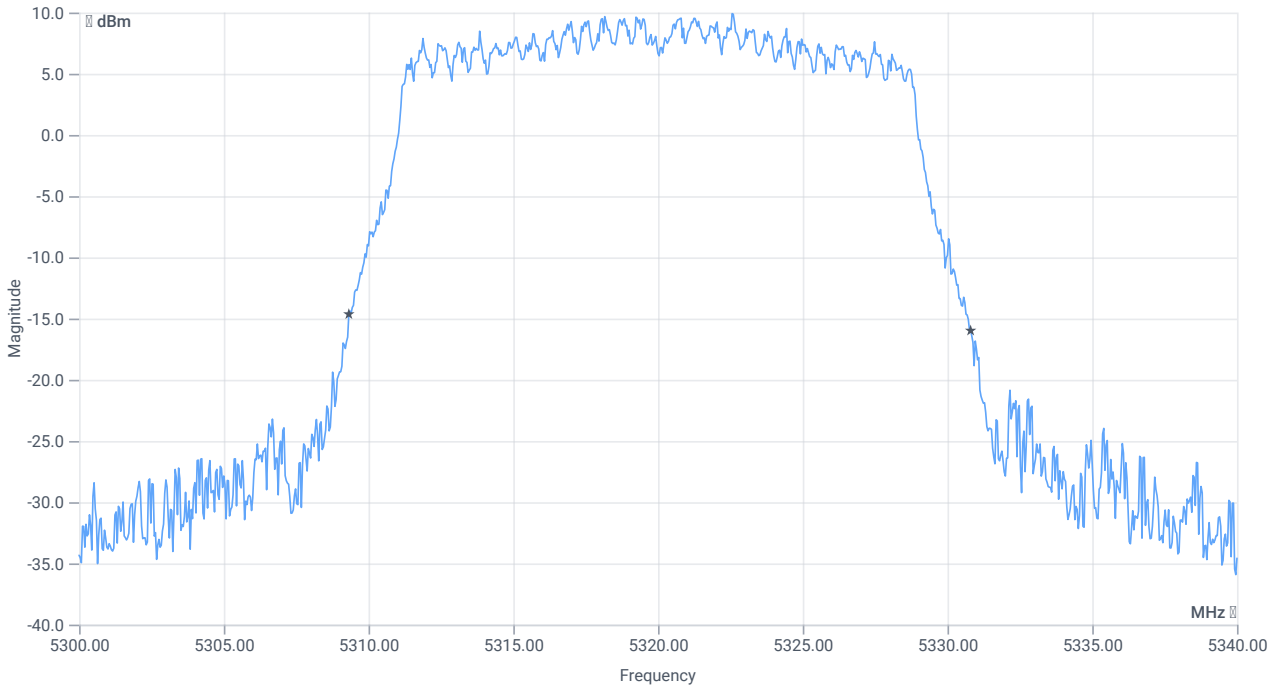
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

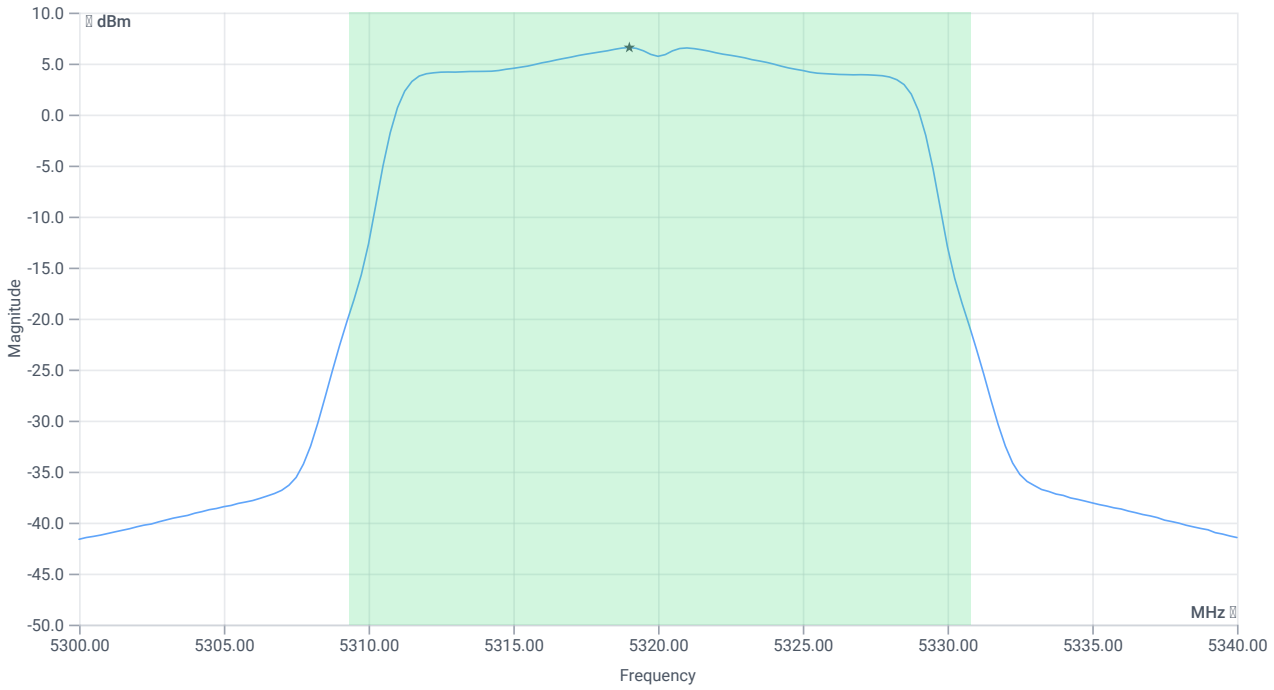
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.48	MHz	INFO
T1 26dB	---	---	5309.3200	MHz	INFO
T2 26dB	---	---	5330.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.74 | 16.26 | 25
Start [MHz] | Stop [MHz]	5300.000 | 5340.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	17.3	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	17.3	dBm	PASS
Limit: 11 dBm + 10 log	21.48				
Max Output Power DC corrected	---	24.32	17.3	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.57	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.57	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:43:17
Ambit Temp [°C] | Humidity [rel%]	21.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

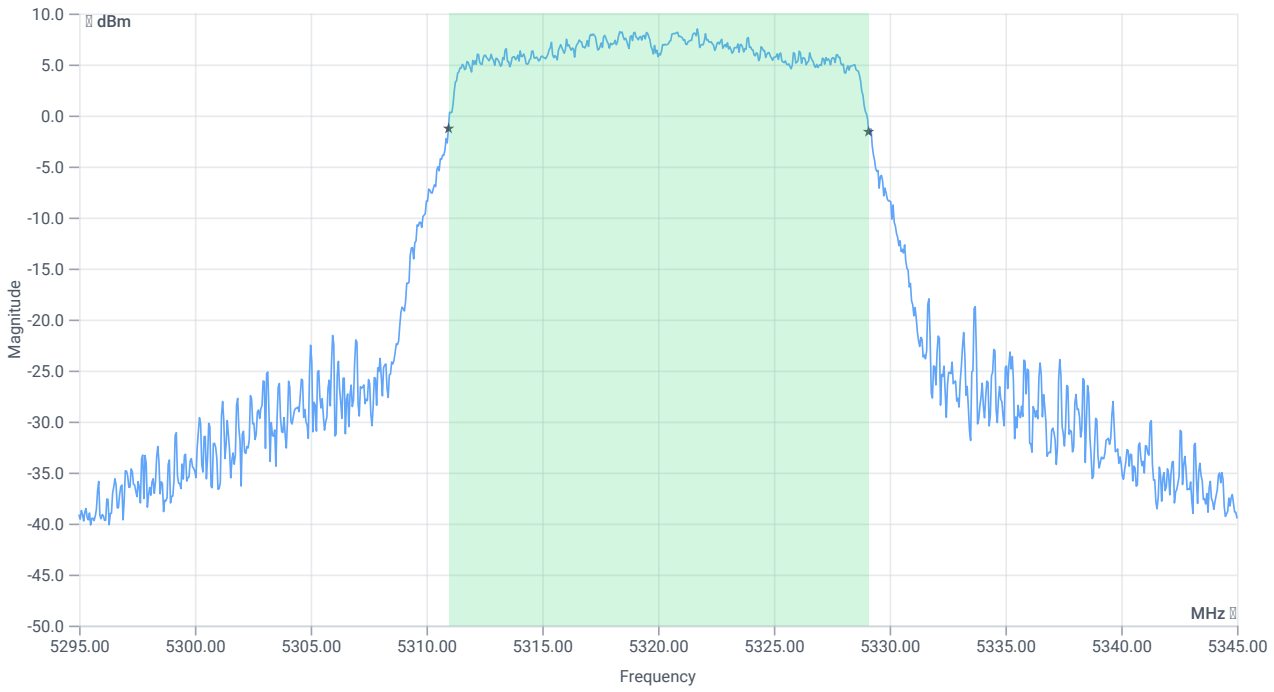
Test at TX 5320 MHz

RESULT: Reference Power cond.

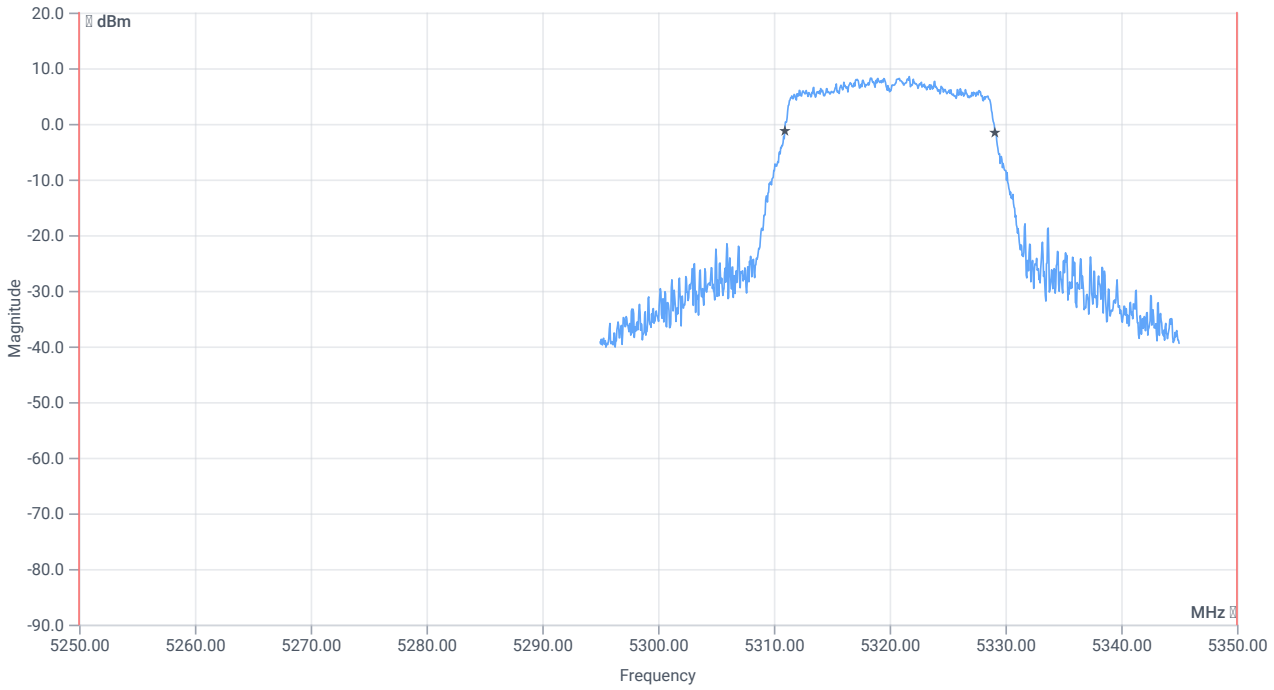
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	13.35	dBm	INFO
Ref. Frequency	---	---	5321.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	21.35 | 16.26 | 25
Start [MHz] | Stop [MHz]	5295.000 | 5345.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



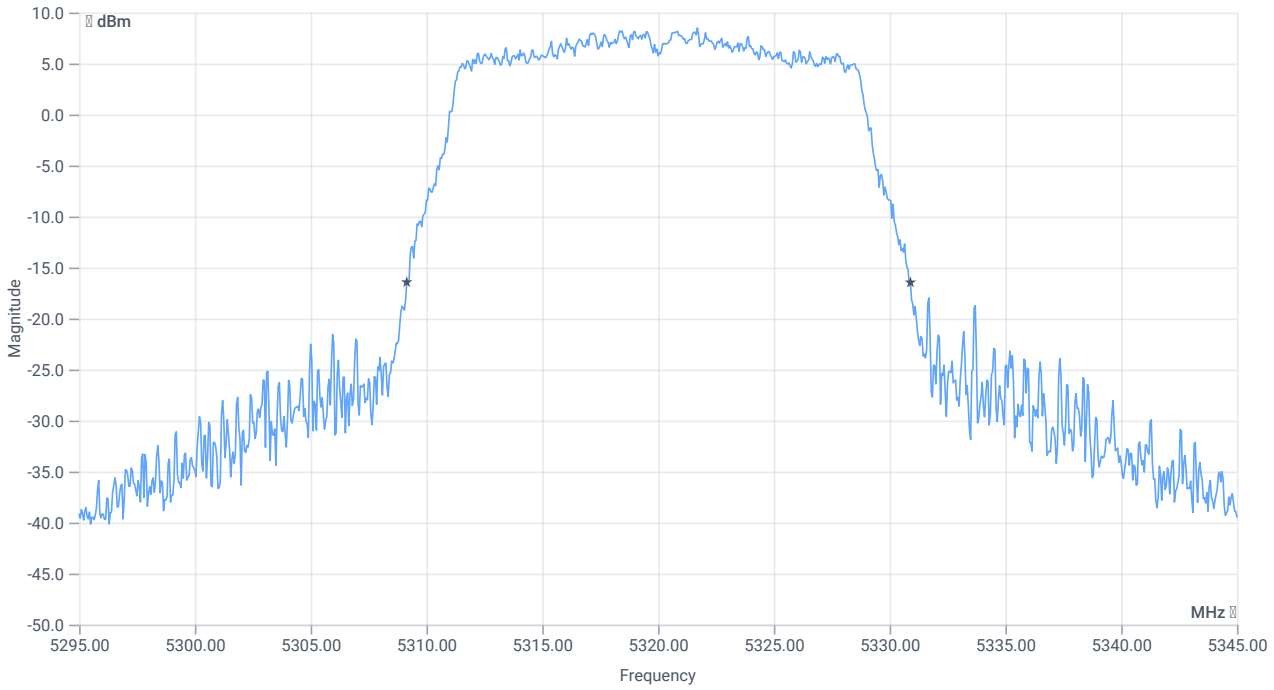
BW 99PCT



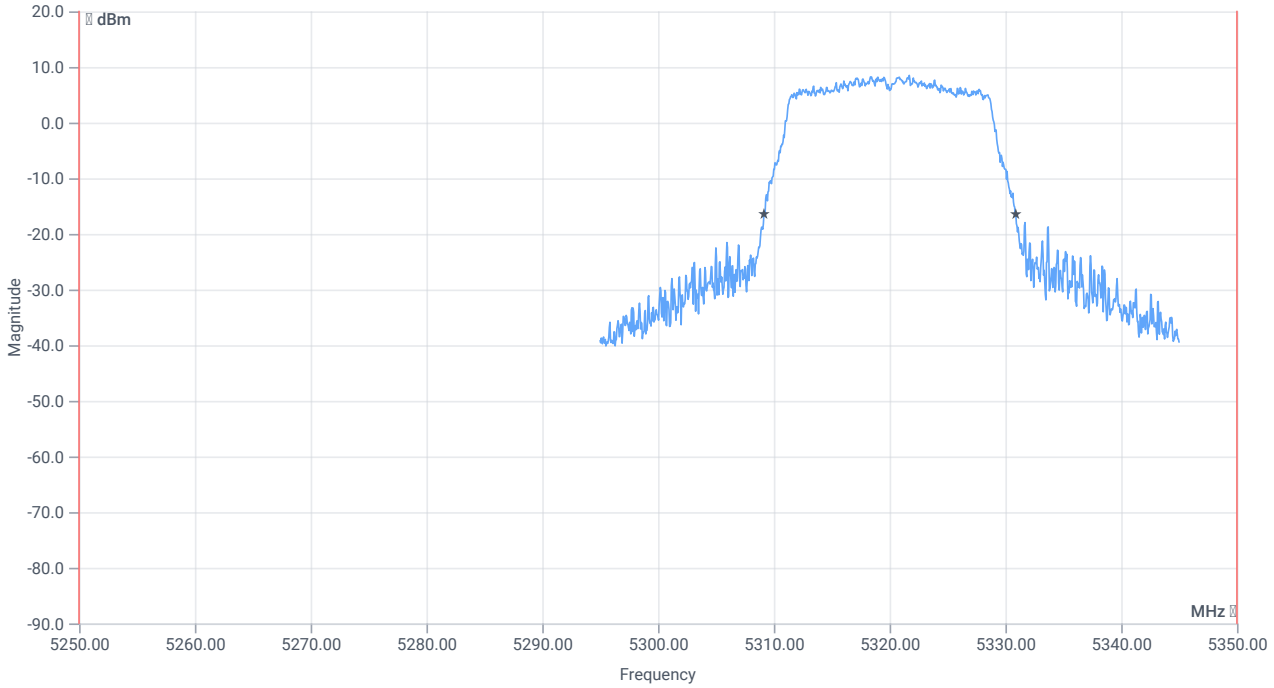
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.132	MHz	INFO
T1 99%	5250.000000	---	5310.9590	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5329.0909	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.75	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5309.1500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5330.9000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:41:50
Ambit Temp [°C] | Humidity [rel%]	21.6 | 24
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5320 MHz

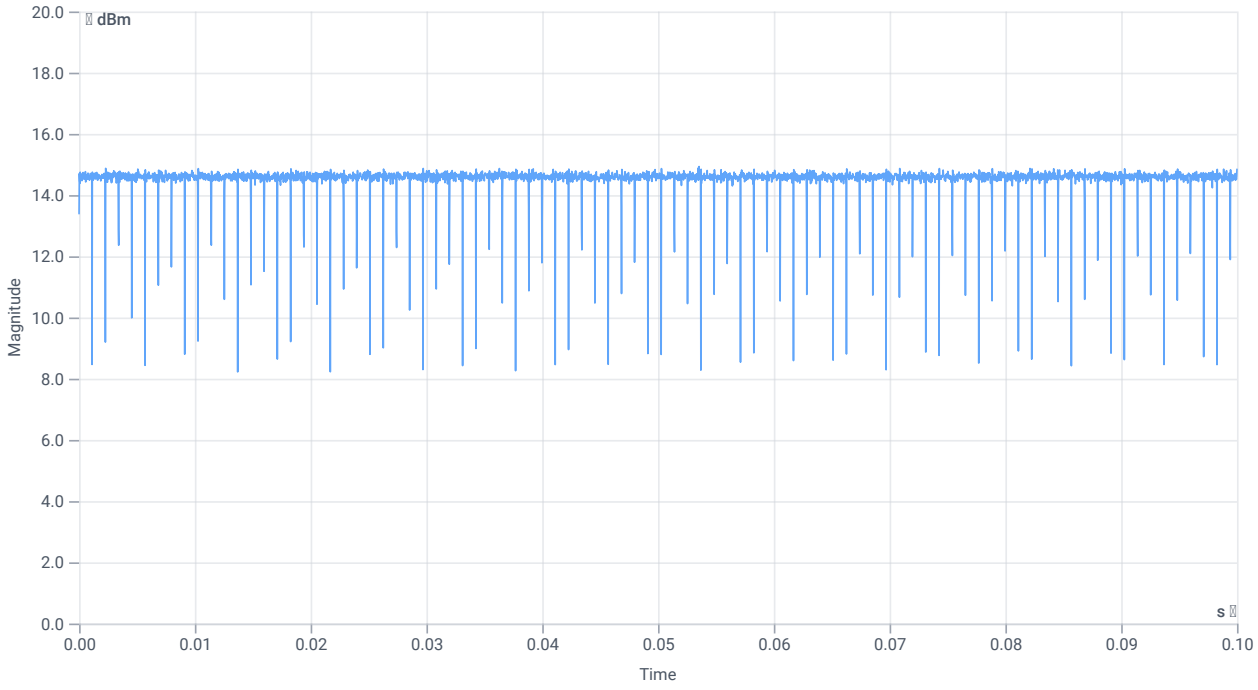
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	13.07	dBm	INFO
Ref. Frequency	---	---	5322.800	MHz	INFO

Evaluation max. Duty Cycle

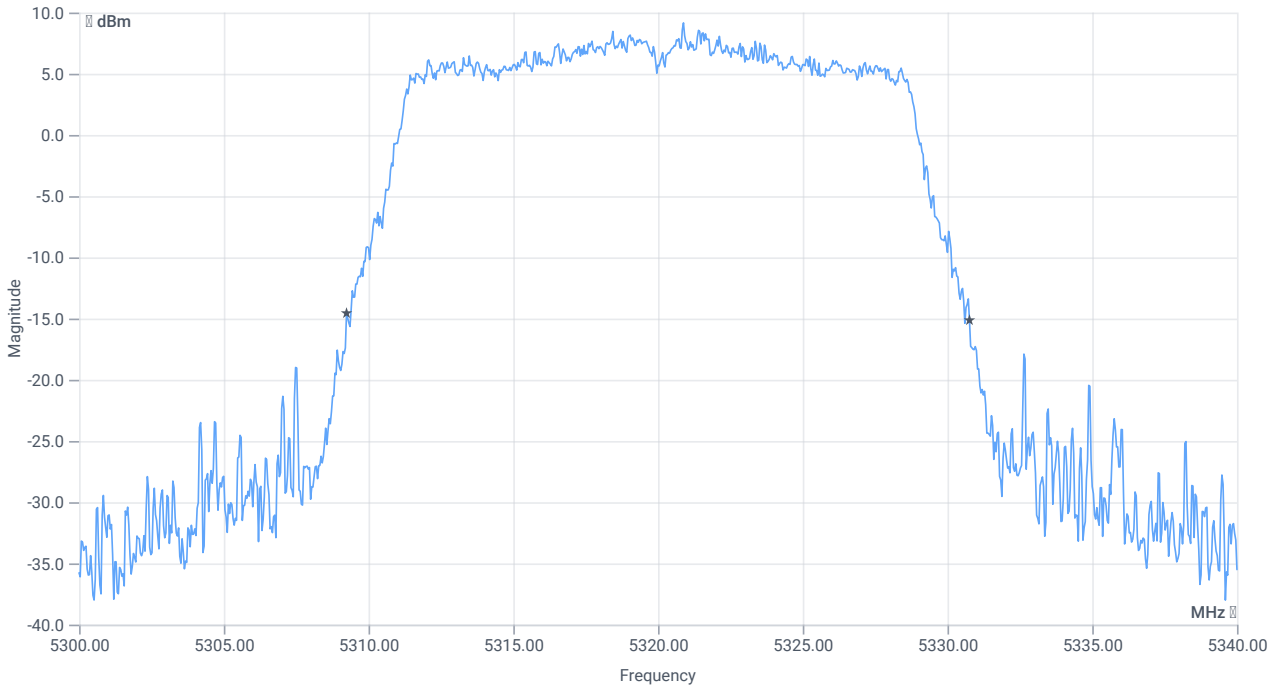
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

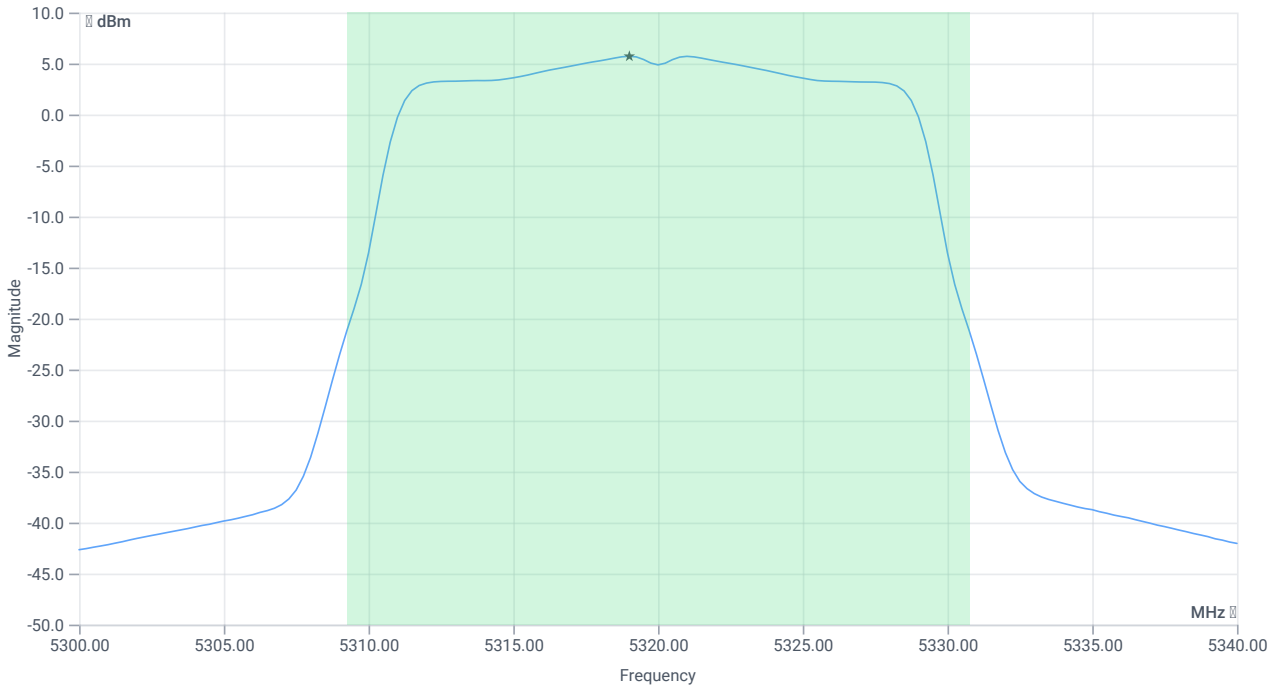
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.52	MHz	INFO
T1 26dB	---	---	5309.2400	MHz	INFO
T2 26dB	---	---	5330.7600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	25.07 | 16.26 | 25
Start [MHz] | Stop [MHz]	5300.000 | 5340.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	16.47	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.47	dBm	PASS
Limit: 11 dBm + 10 log	21.52				
Max Output Power DC corrected	---	24.33	16.47	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	5.71	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	5.71	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:37:46
Ambit Temp [°C] | Humidity [rel%]	21.5 | 26
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	True | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5280 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	19.58	dBm	INFO
Ant:1 BW 26dB	---	---	27.680	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	19.91	dBm	INFO
Ant:2 BW 26dB	---	---	28.000	MHz	INFO
∑ Limit absolute	---	24	22.76	dBm	PASS
∑ Limit: 11 dBm + 10 log 27.68	---	25.42	22.76	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	7.57	dBm/1MHz	INFO
Ant:2 PSD	---	---	7.83	dBm/1MHz	INFO
∑	---	11	10.71	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:37:15
Ambit Temp [°C] | Humidity [rel%]	21.5 | 26
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	True | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

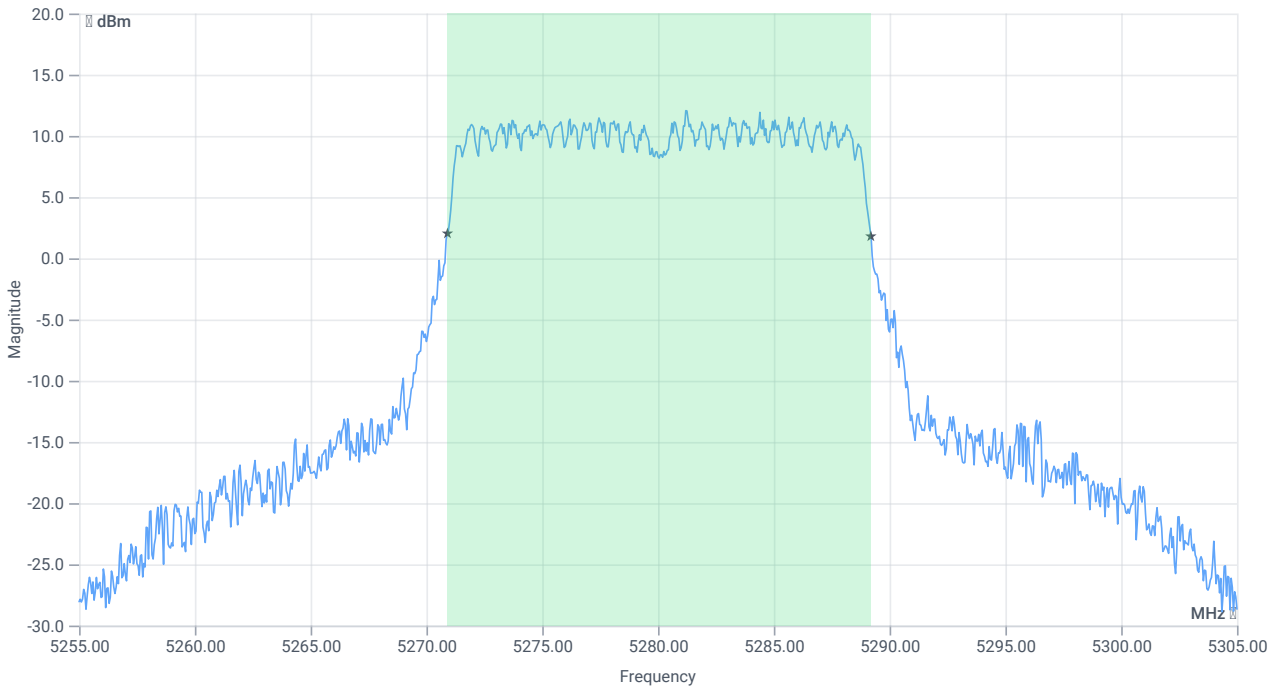
Test at TX 5280 MHz

RESULT: Reference Power cond.

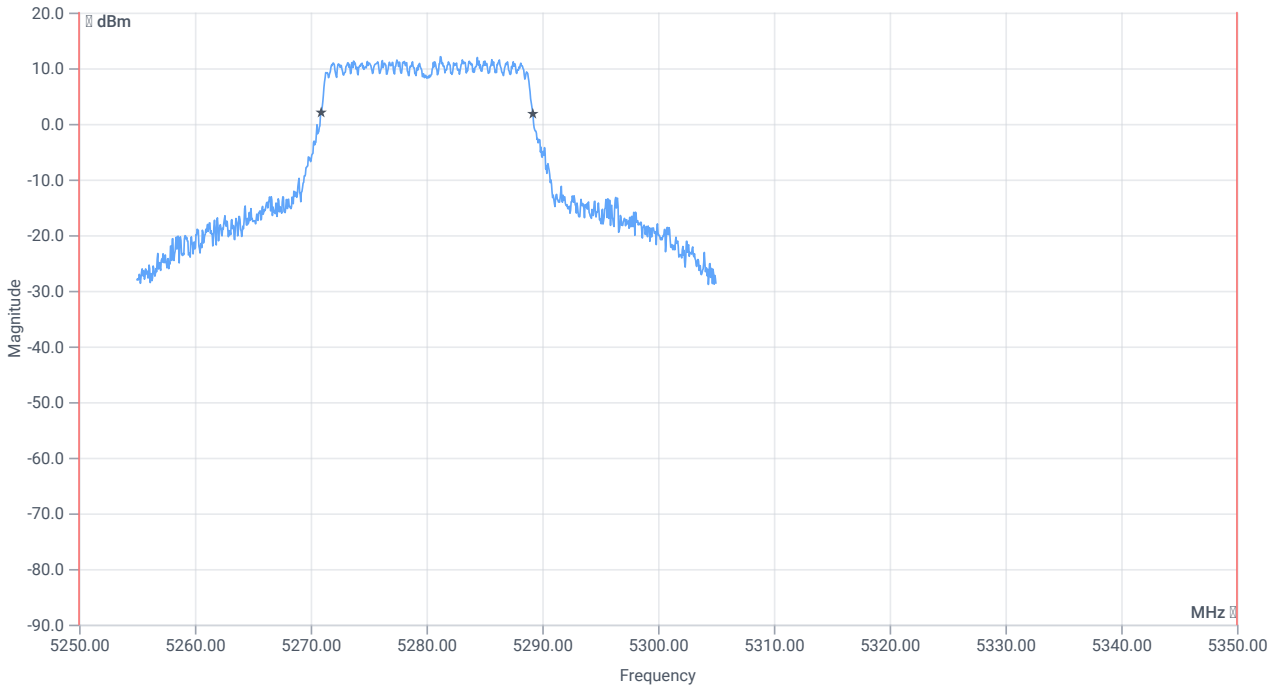
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.43	dBm	INFO
Ref. Frequency	---	---	5282.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.43 | 16.2 | 25
Start [MHz] | Stop [MHz]	5255.000 | 5305.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



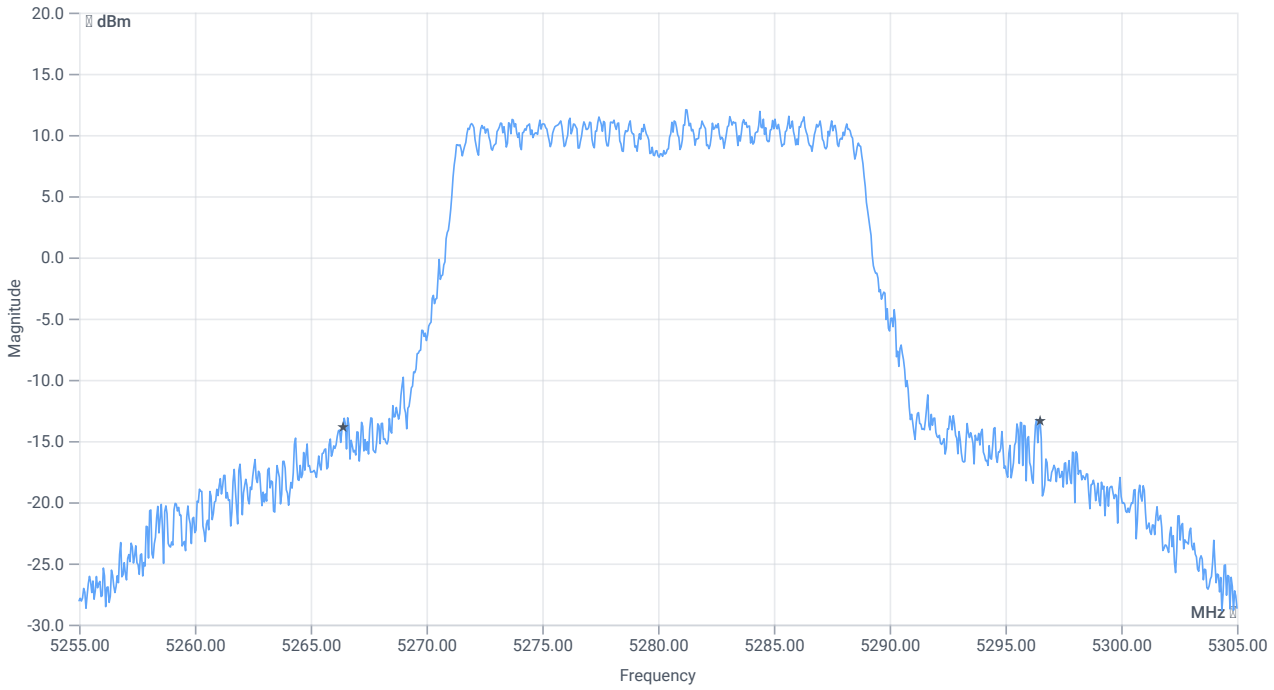
BW 99PCT



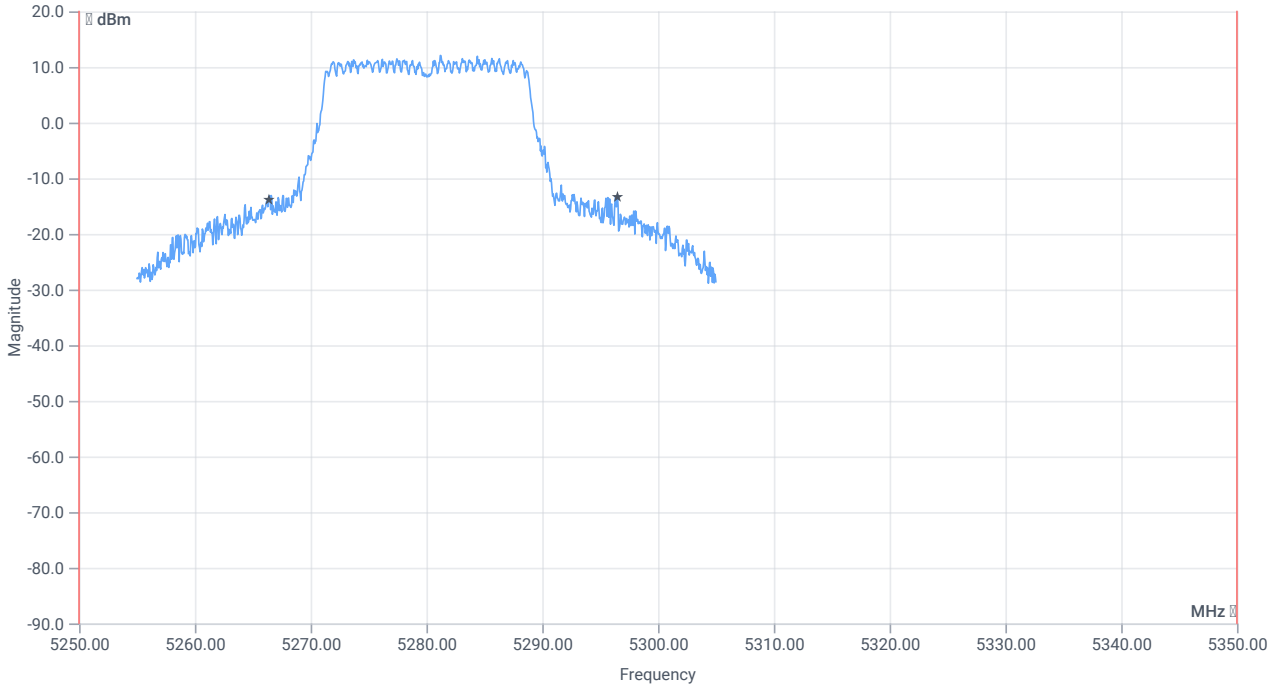
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.282	MHz	INFO
T1 99%	5250.000000	---	5270.9091	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5289.1908	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	30.1	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5266.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5296.5000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:32:18
Ambit Temp [°C] | Humidity [rel%]	21.5 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	True | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5280 MHz

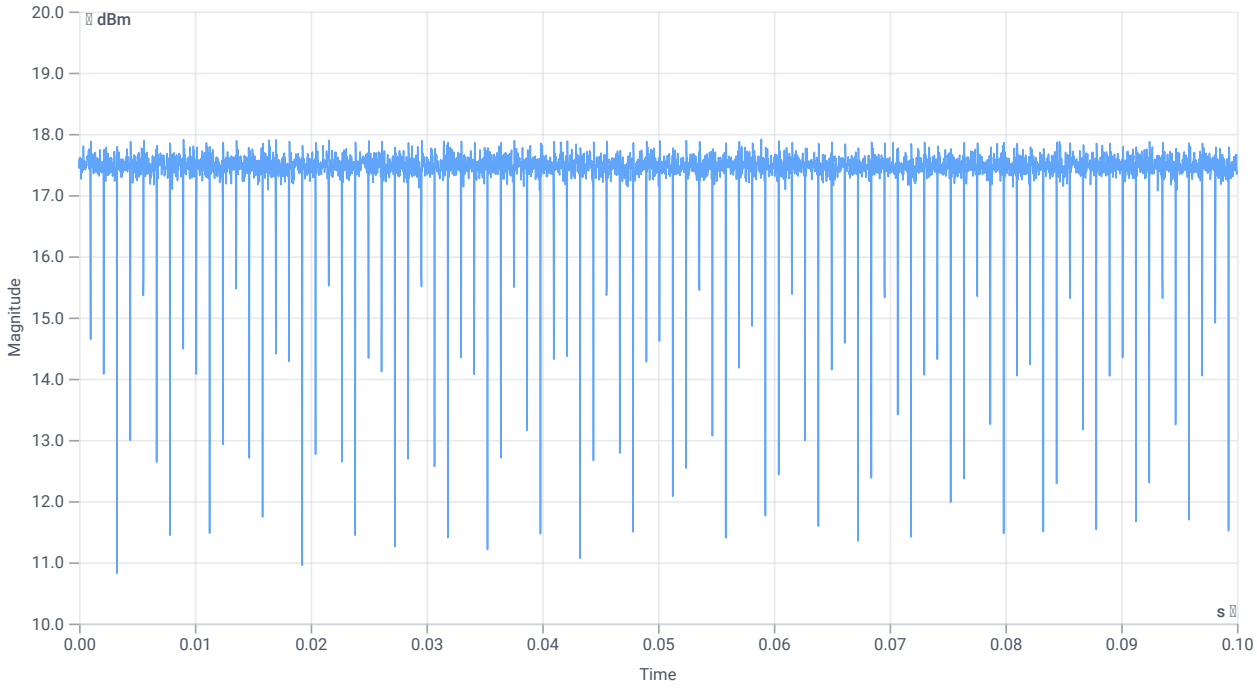
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	17.15	dBm	INFO
Ref. Frequency	---	---	5285.590	MHz	INFO

Evaluation max. Duty Cycle

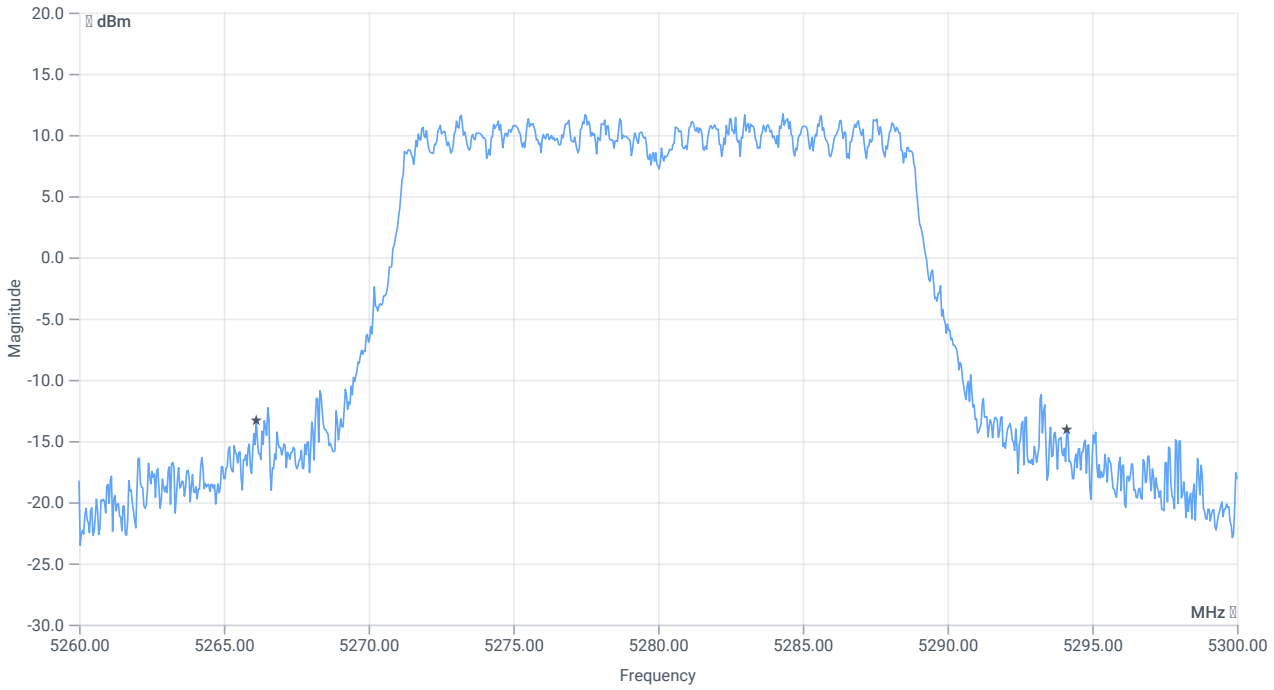
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

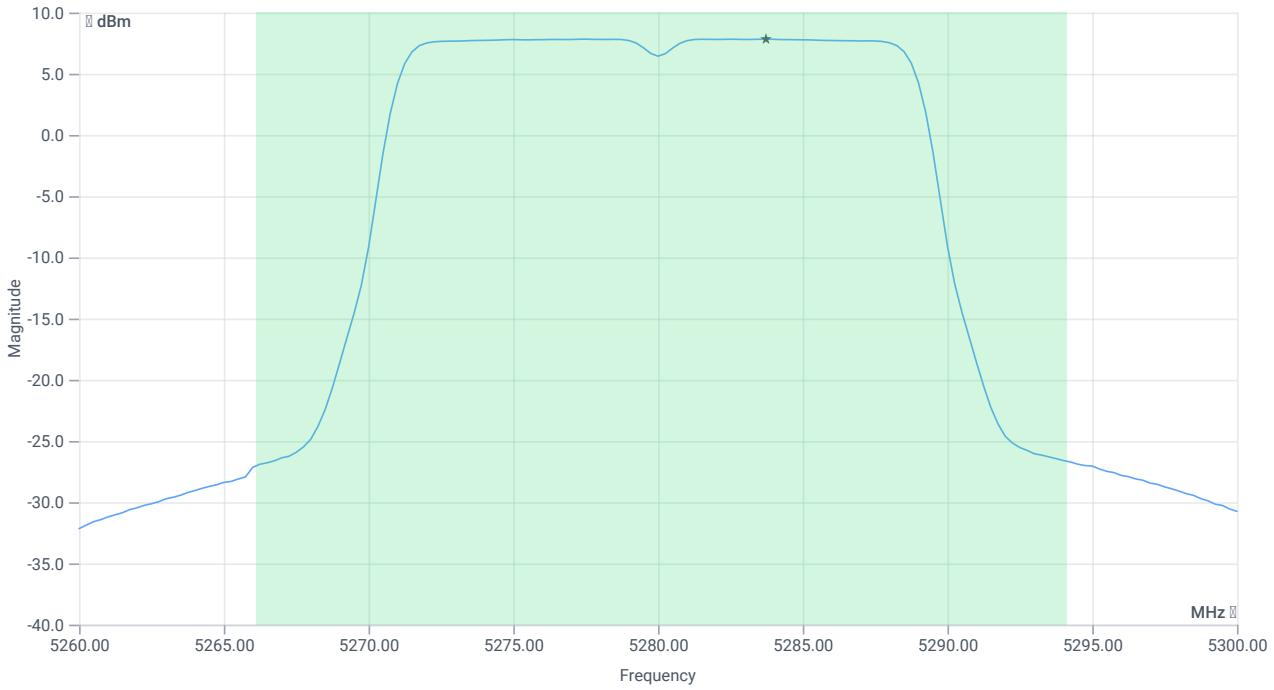
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	28	MHz	INFO
T1 26dB	---	---	5266.1200	MHz	INFO
T2 26dB	---	---	5294.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	29.15 | 16.2 | 30
Start [MHz] | Stop [MHz]	5260.000 | 5300.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	19.91	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.91	dBm	PASS
Limit: 11 dBm + 10 log 28					
Max Output Power DC corrected	---	25.47	19.91	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	7.83	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	7.83	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:31:48
Ambit Temp [°C] | Humidity [rel%]	21.5 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	True | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

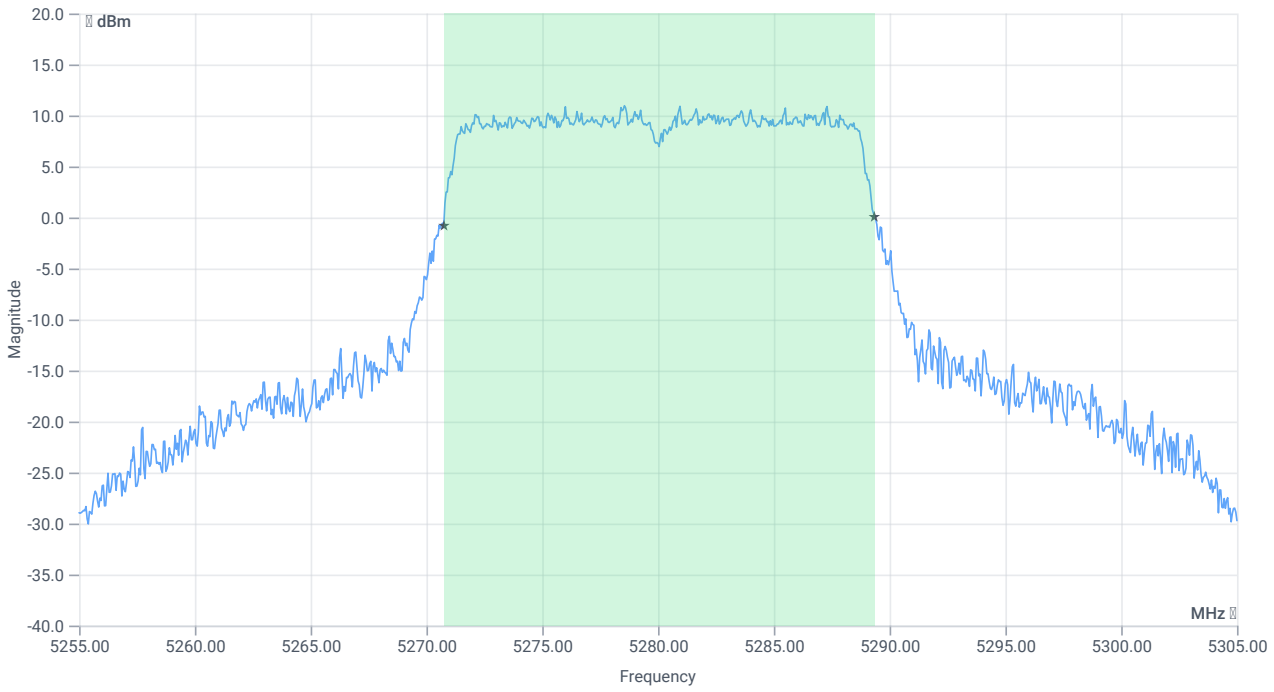
Test at TX 5280 MHz

RESULT: Reference Power cond.

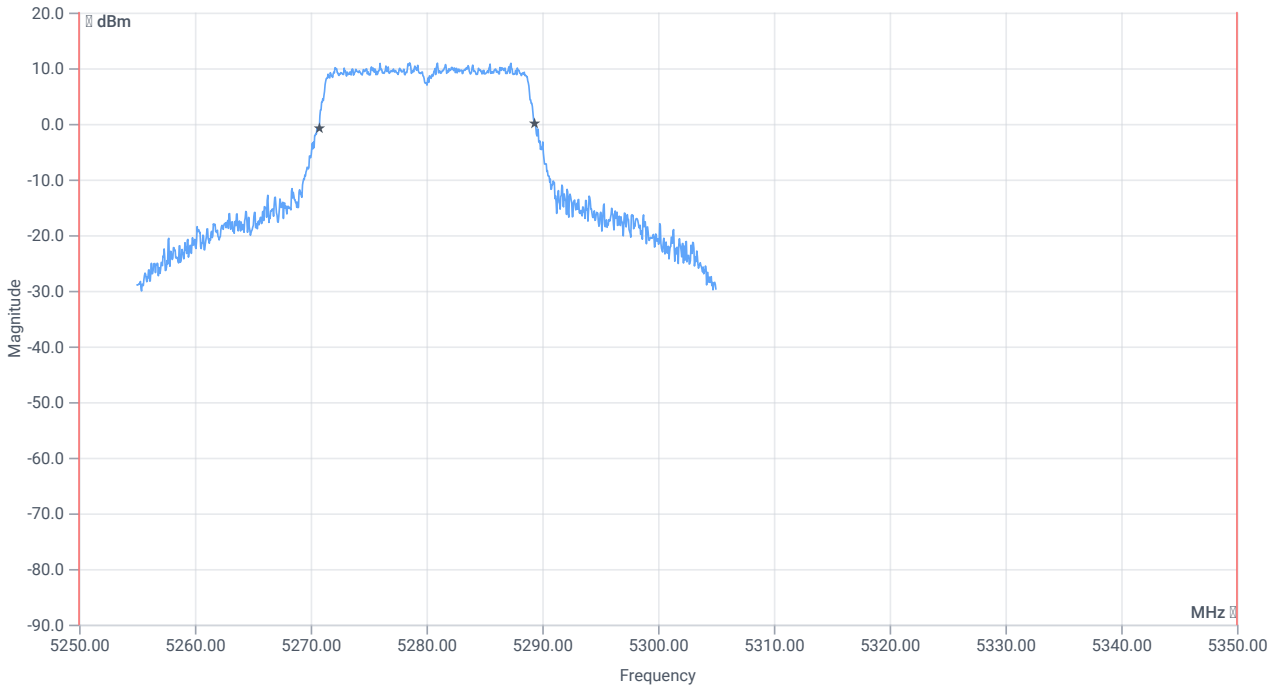
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.73	dBm	INFO
Ref. Frequency	---	---	5277.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.73 | 16.2 | 25
Start [MHz] | Stop [MHz]	5255.000 | 5305.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



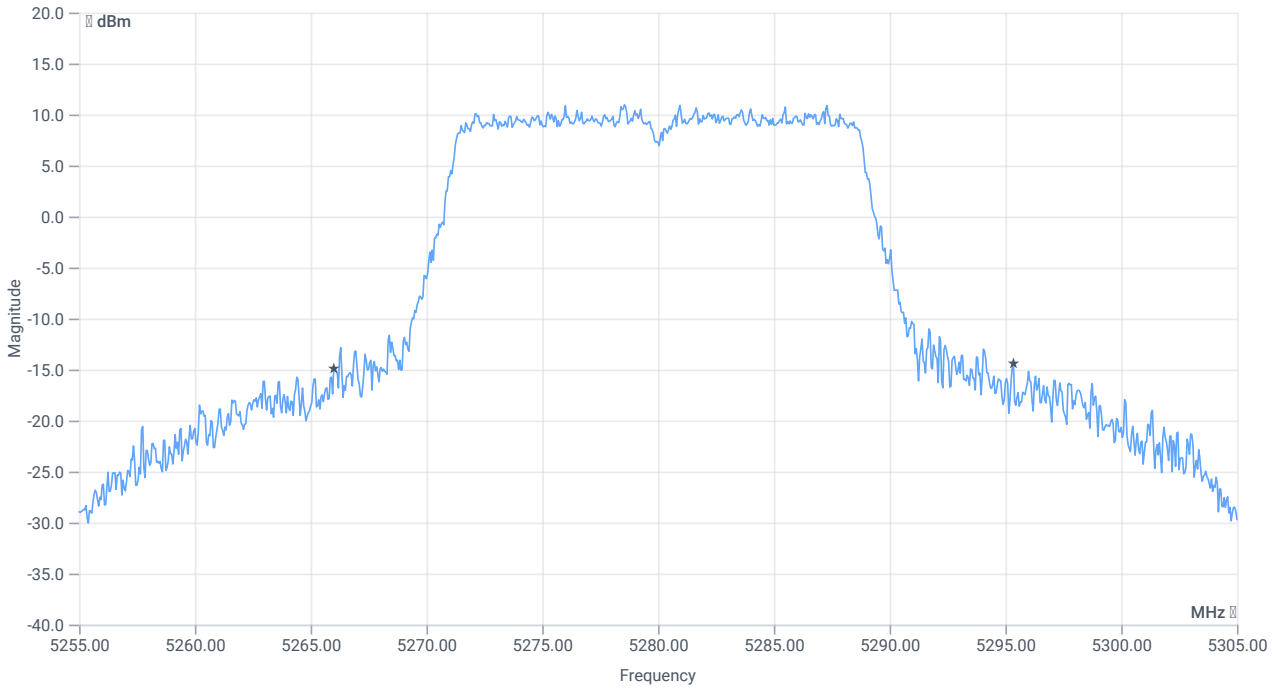
BW 99PCT



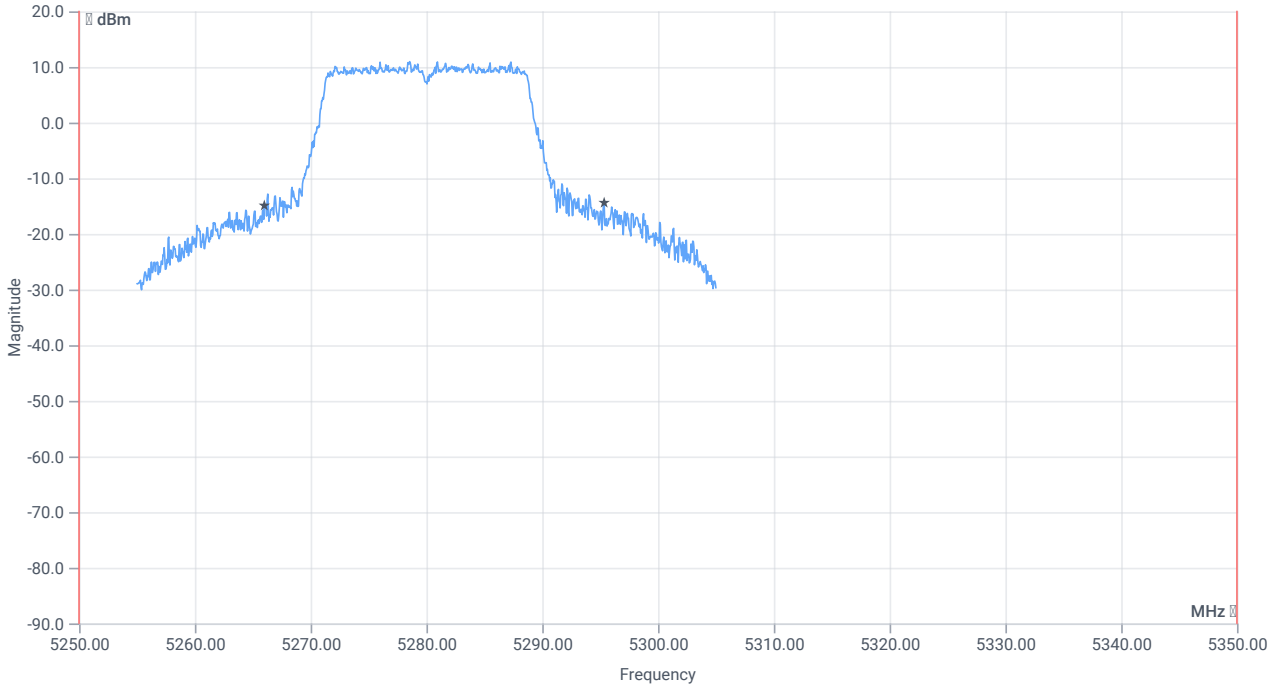
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.581	MHz	INFO
T1 99%	5250.000000	---	5270.7592	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5289.3407	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.35	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5266.0000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5295.3500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:30:21
Ambit Temp [°C] | Humidity [rel%]	21.5 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	True | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5280 MHz

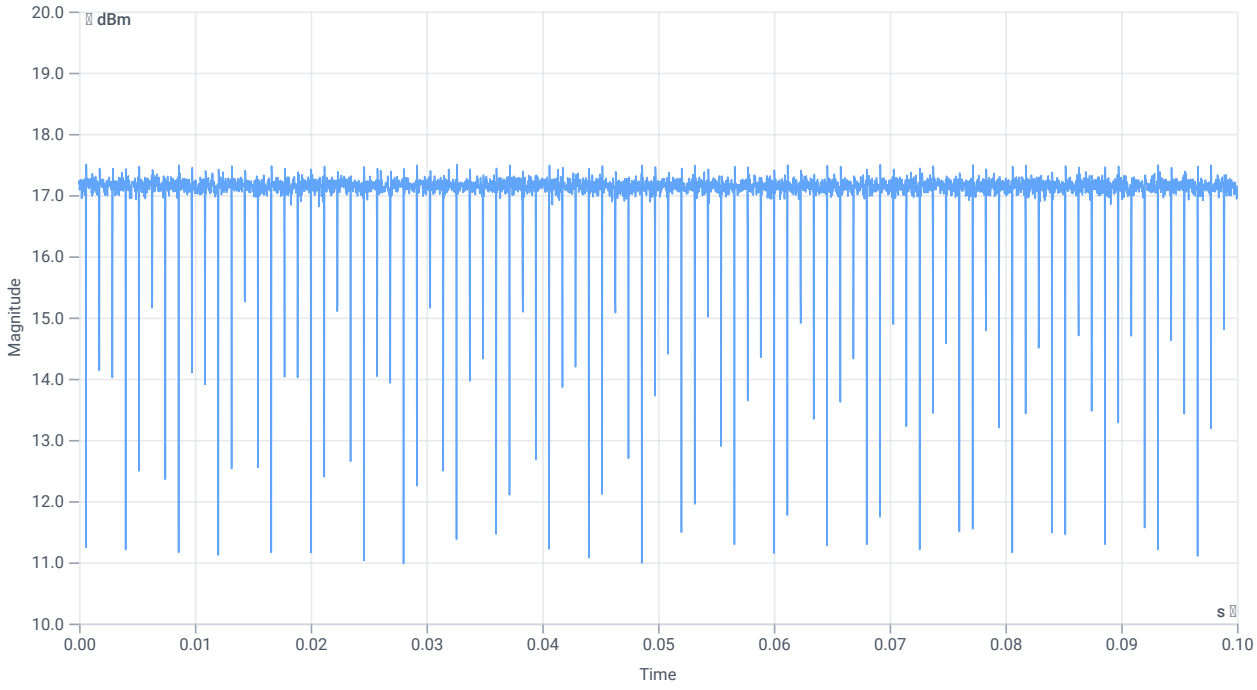
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.09	dBm	INFO
Ref. Frequency	---	---	5275.400	MHz	INFO

Evaluation max. Duty Cycle

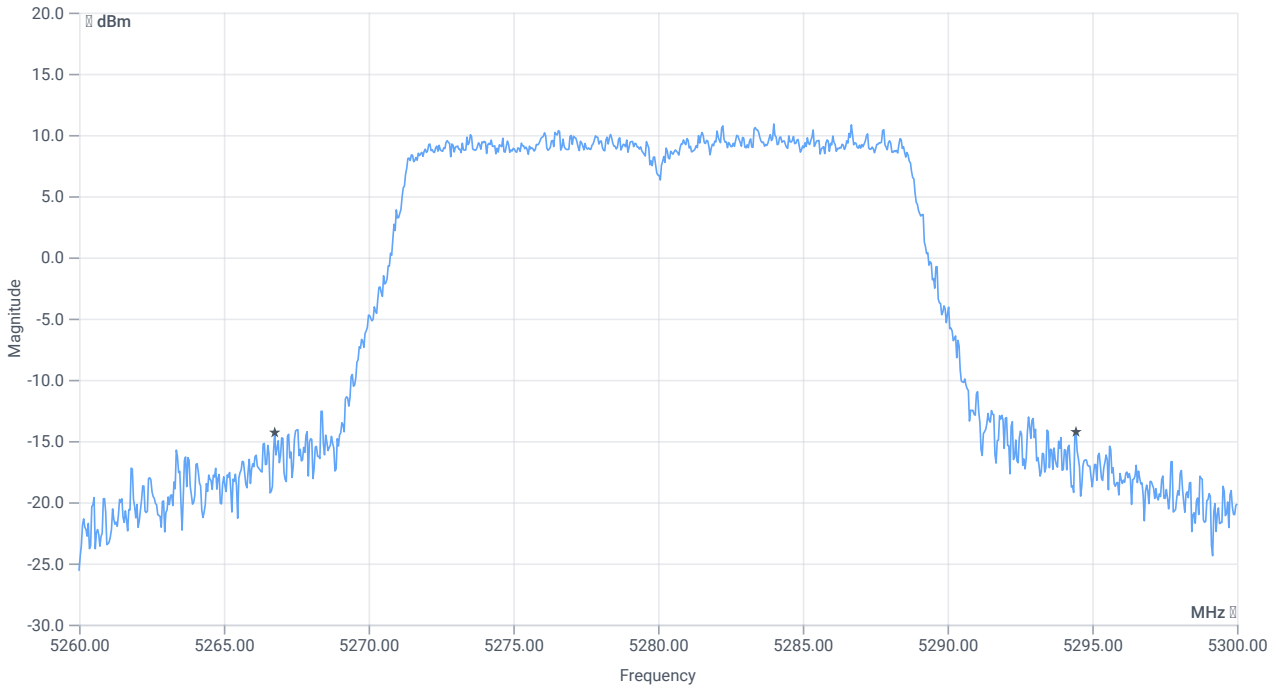
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

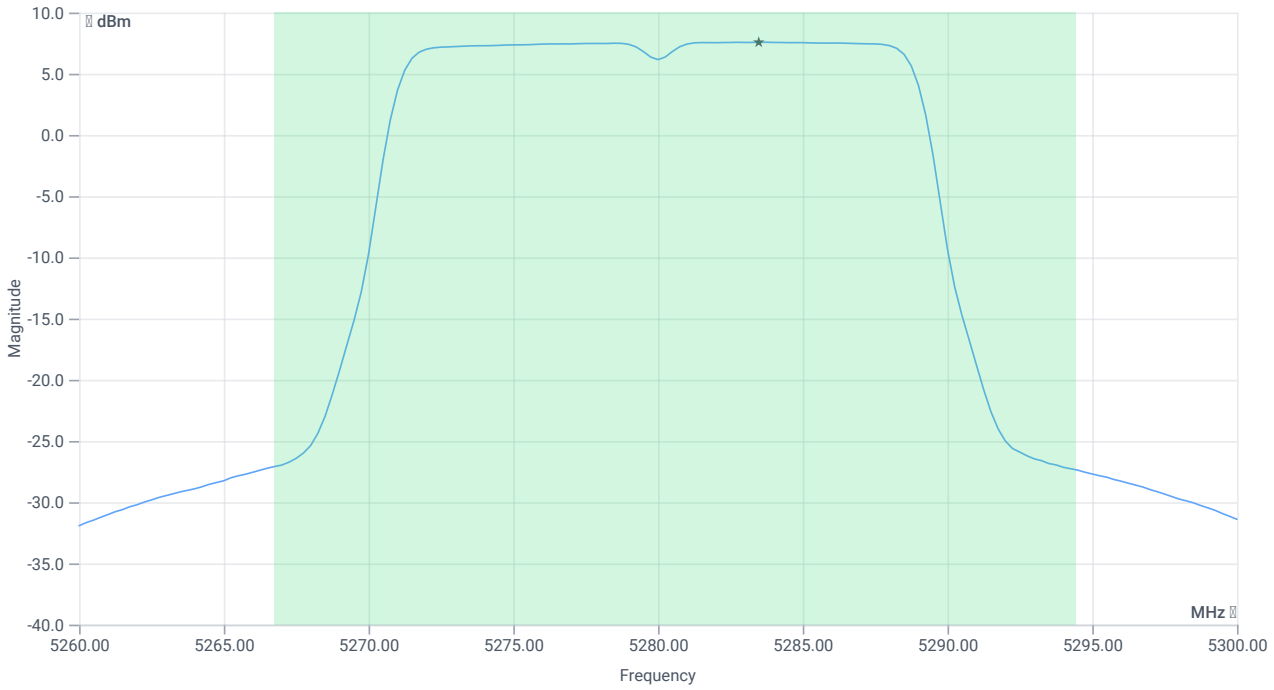
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	27.68	MHz	INFO
T1 26dB	---	---	5266.7600	MHz	INFO
T2 26dB	---	---	5294.4400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.09 | 16.2 | 30
Start [MHz] | Stop [MHz]	5260.000 | 5300.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	19.58	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.58	dBm	PASS
Limit: 11 dBm + 10 log 27.68					
Max Output Power DC corrected	---	25.42	19.58	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	7.57	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	7.57	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:29:19
Ambit Temp [°C] | Humidity [rel%]	21.4 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5260 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 Max Output Power DC corrected	---	---	20.12	dBm	INFO
Ant:2 BW 26dB	---	---	24.800	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	19.3	dBm	INFO
Ant:1 BW 26dB	---	---	28.440	MHz	INFO
∑ Limit absolute	---	24	22.74	dBm	PASS
∑ Limit: 11 dBm + 10 log 24.8	---	24.94	22.74	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 PSD	---	---	8.09	dBm/1MHz	INFO
Ant:1 PSD	---	---	7.21	dBm/1MHz	INFO
∑	---	11	10.68	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:28:49
Ambit Temp [°C] | Humidity [rel%]	21.4 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

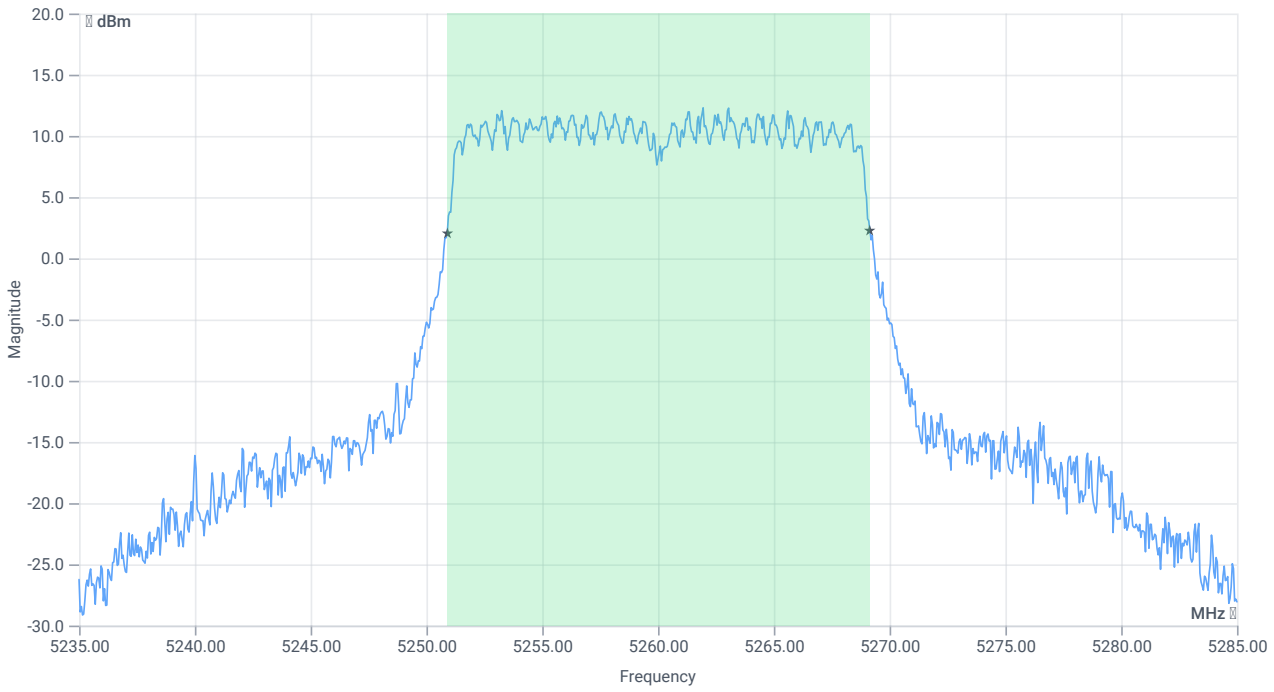
Test at TX 5260 MHz

RESULT: Reference Power cond.

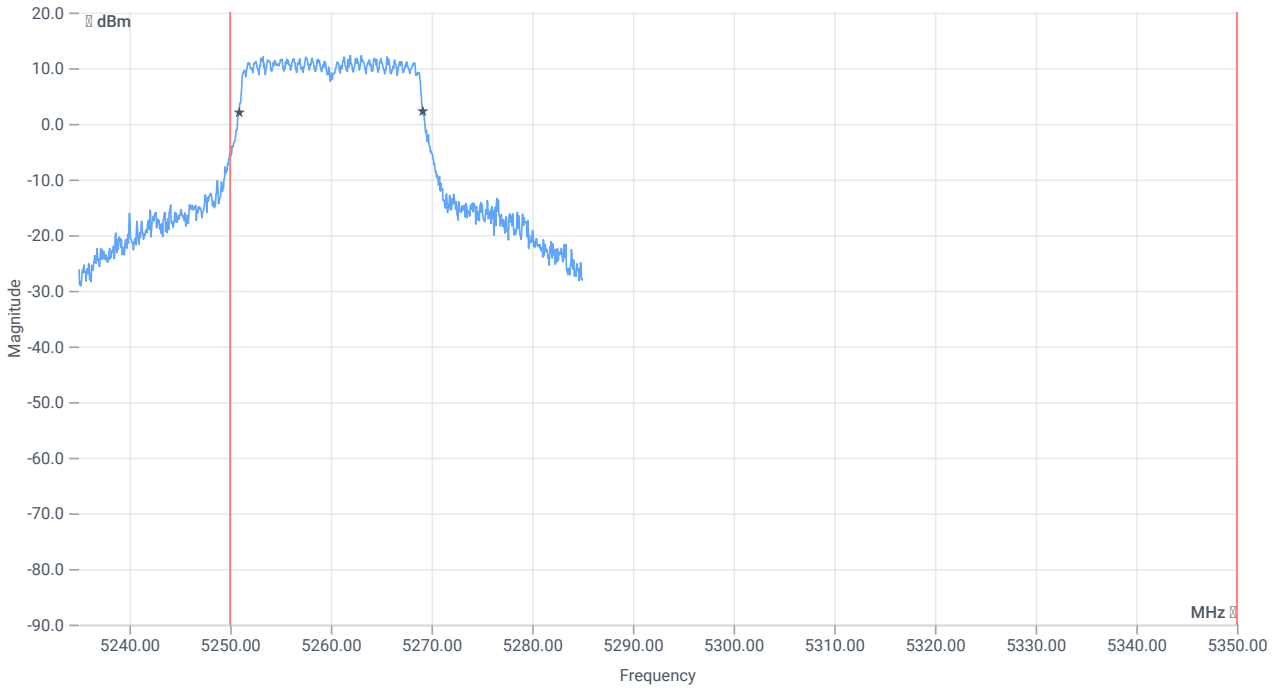
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.52	dBm	INFO
Ref. Frequency	---	---	5261.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.52 | 16.44 | 25
Start [MHz] | Stop [MHz]	5235.000 | 5285.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



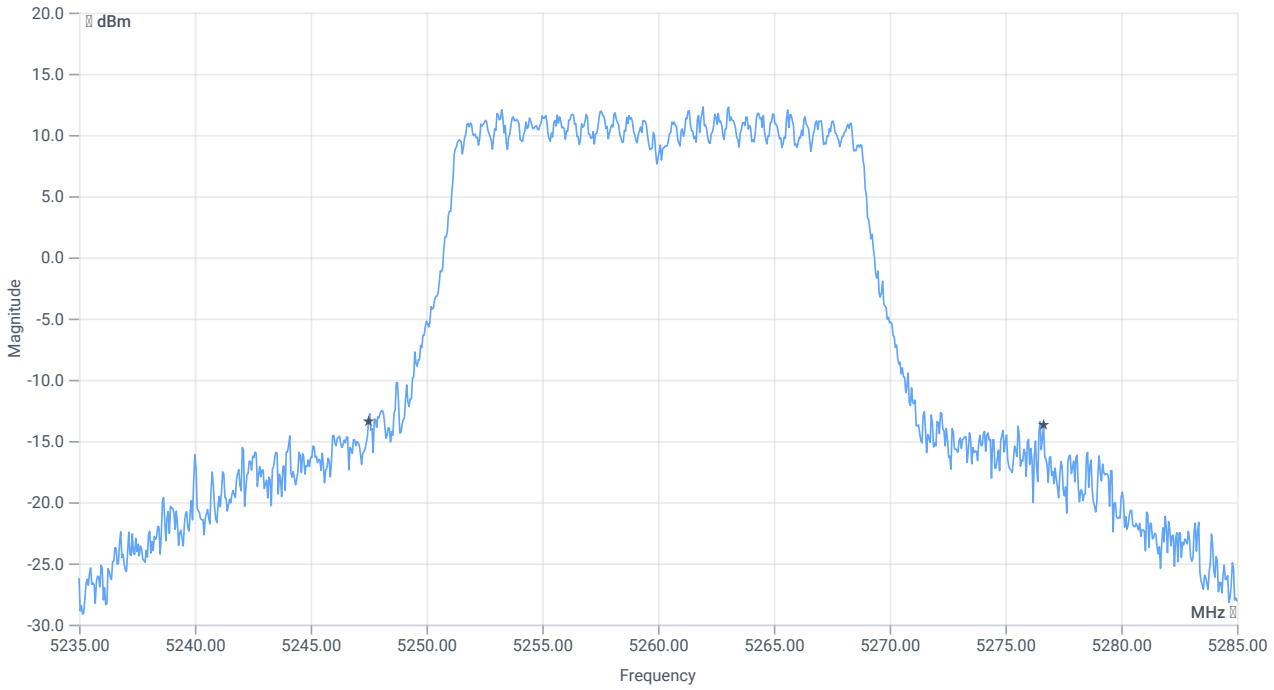
BW 99PCT



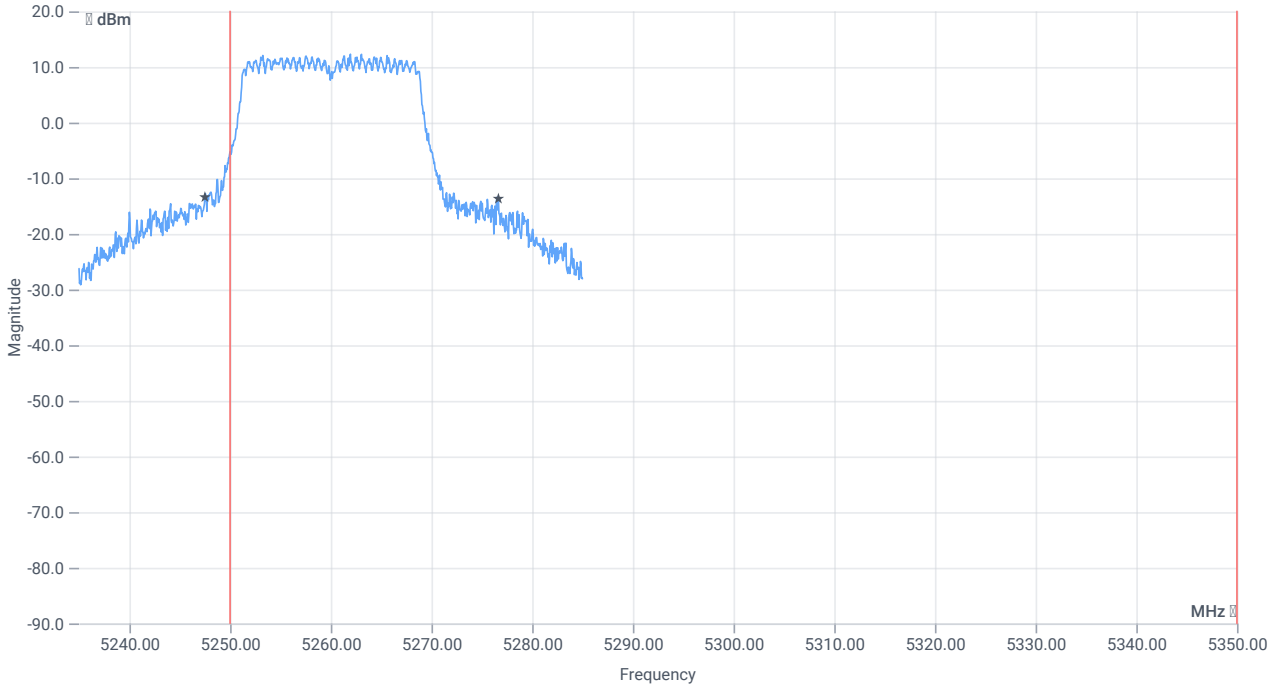
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.232	MHz	INFO
T1 99%	5250.000000	---	5250.9091	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5269.1409	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.15	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5247.5000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5276.6500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:27:20
Ambit Temp [°C] | Humidity [rel%]	21.5 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5260 MHz

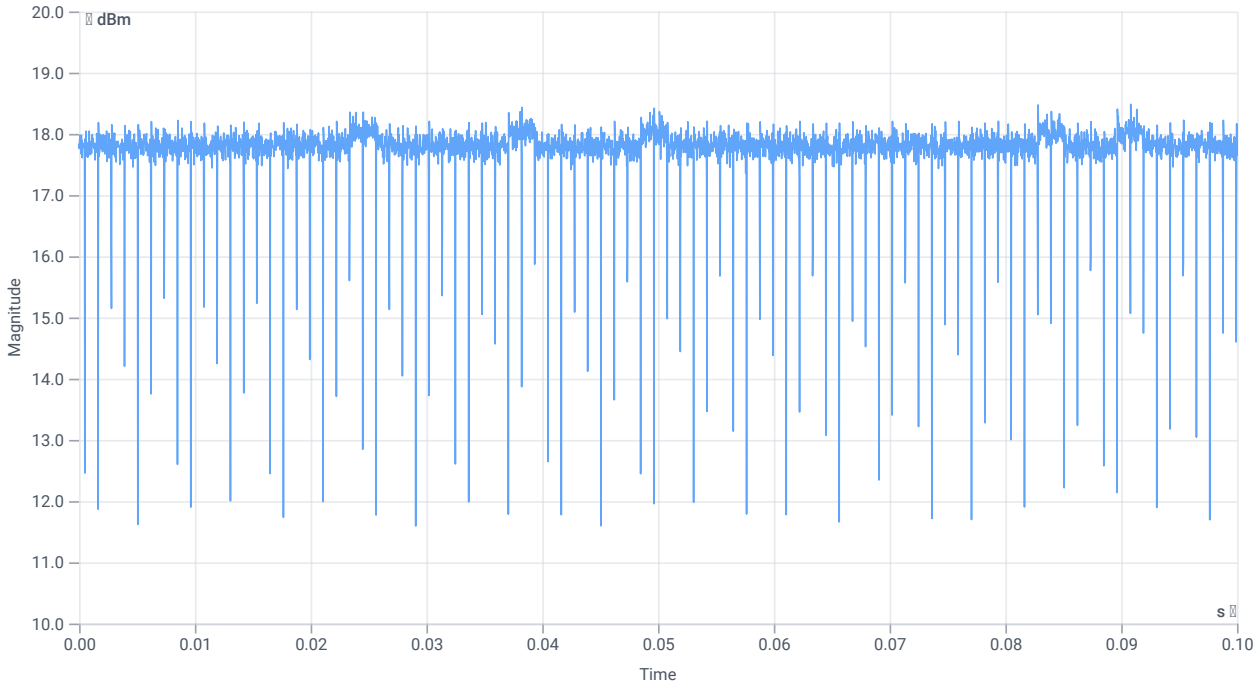
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.87	dBm	INFO
Ref. Frequency	---	---	5265.390	MHz	INFO

Evaluation max. Duty Cycle

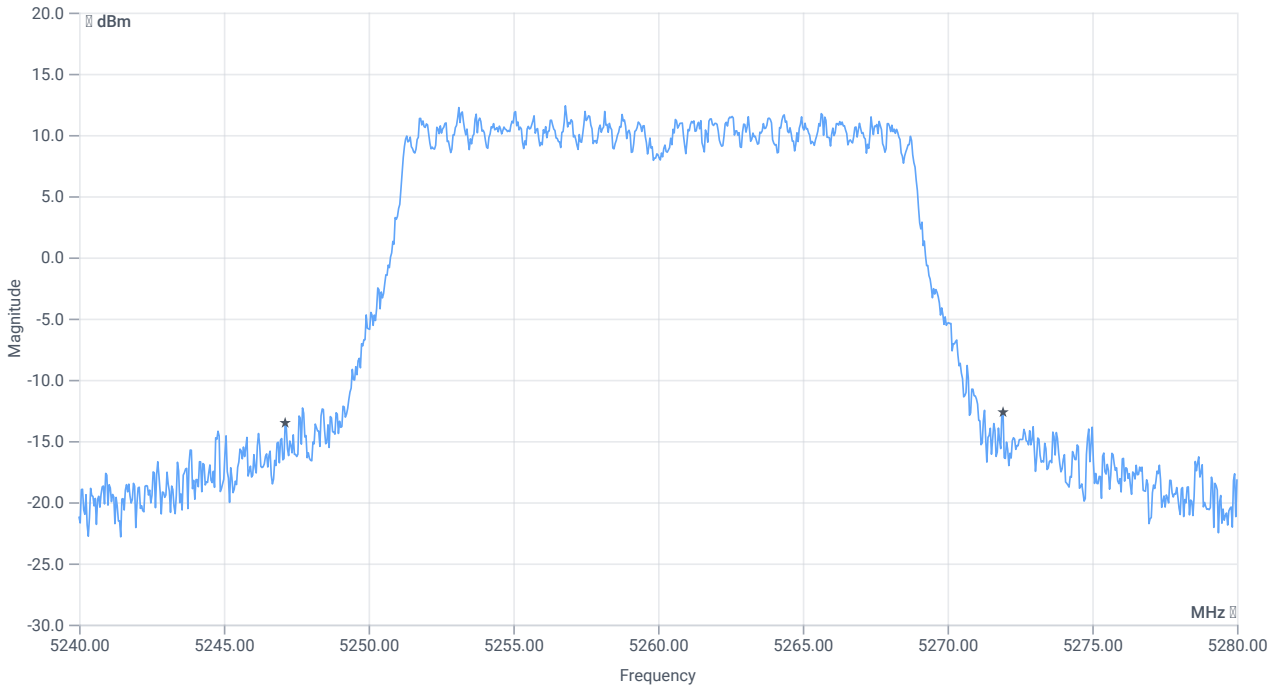
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

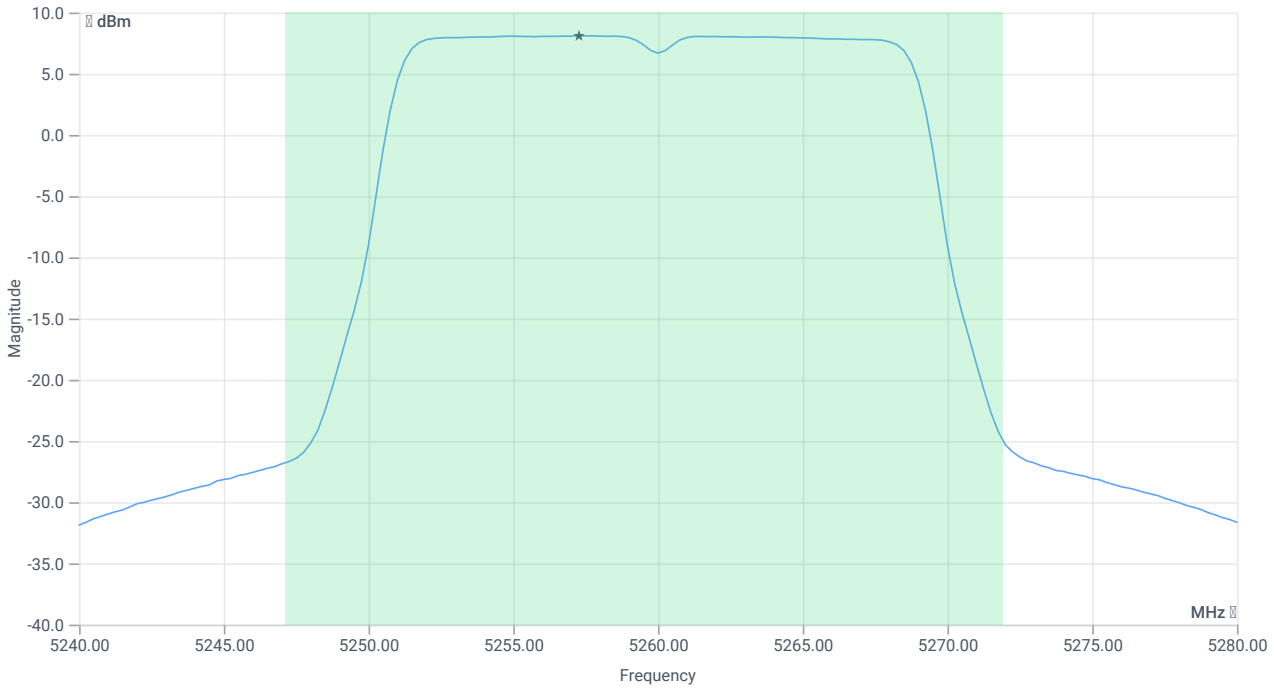
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	24.8	MHz	INFO
T1 26dB	---	---	5247.1200	MHz	INFO
T2 26dB	---	---	5271.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.87 | 16.44 | 30
Start [MHz] | Stop [MHz]	5240.000 | 5280.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	20.12	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.12	dBm	PASS
Limit: 11 dBm + 10 log	24.8				
Max Output Power DC corrected	---	24.94	20.12	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	8.09	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	8.09	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:26:50
Ambit Temp [°C] | Humidity [rel%]	21.4 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

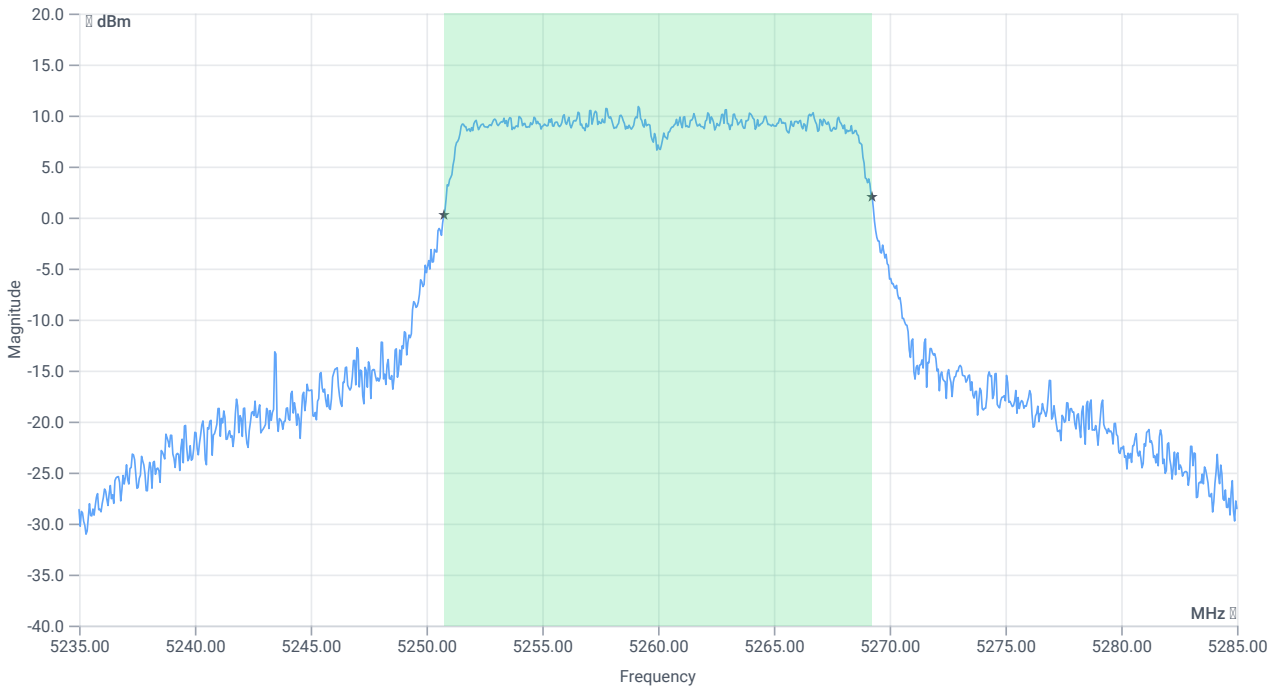
Test at TX 5260 MHz

RESULT: Reference Power cond.

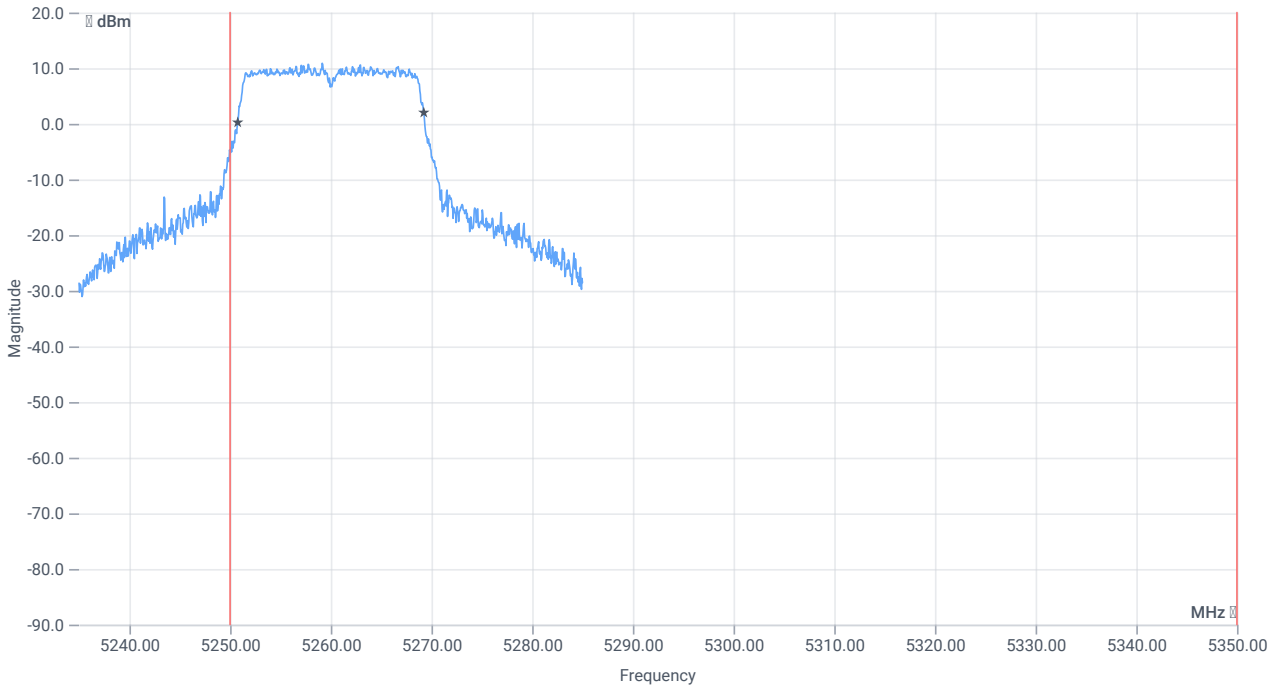
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.36	dBm	INFO
Ref. Frequency	---	---	5262.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.36 | 16.44 | 25
Start [MHz] | Stop [MHz]	5235.000 | 5285.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



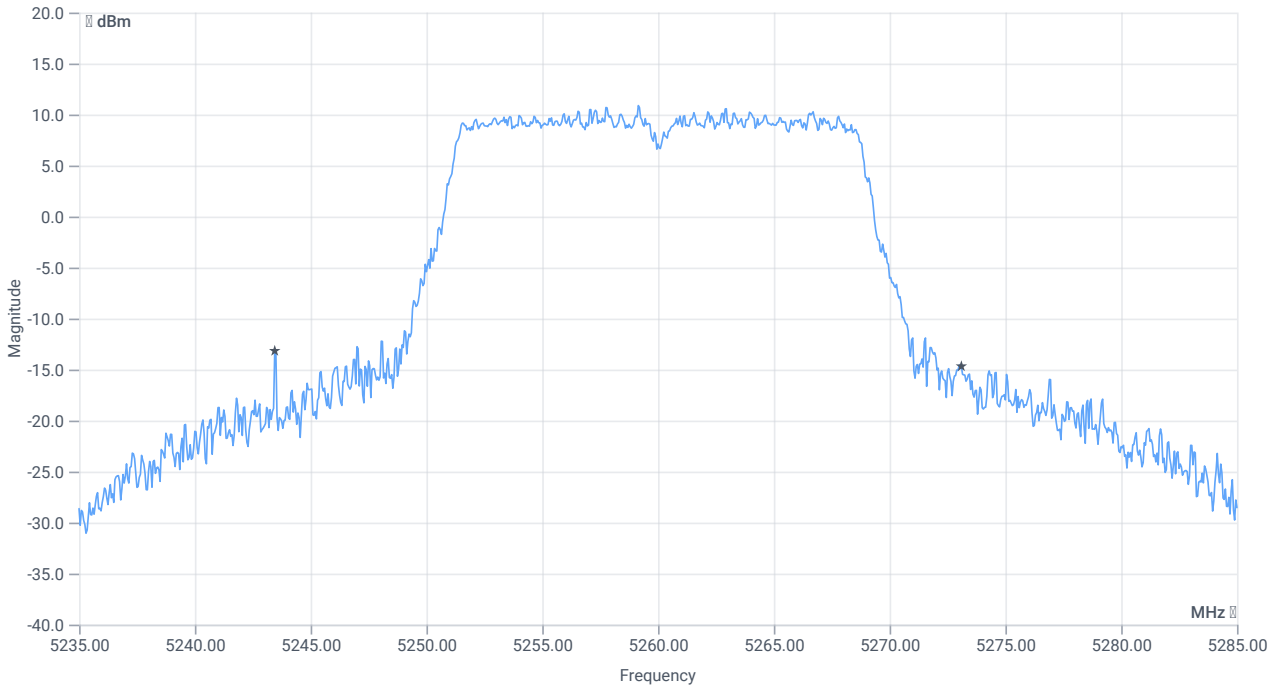
BW 99PCT



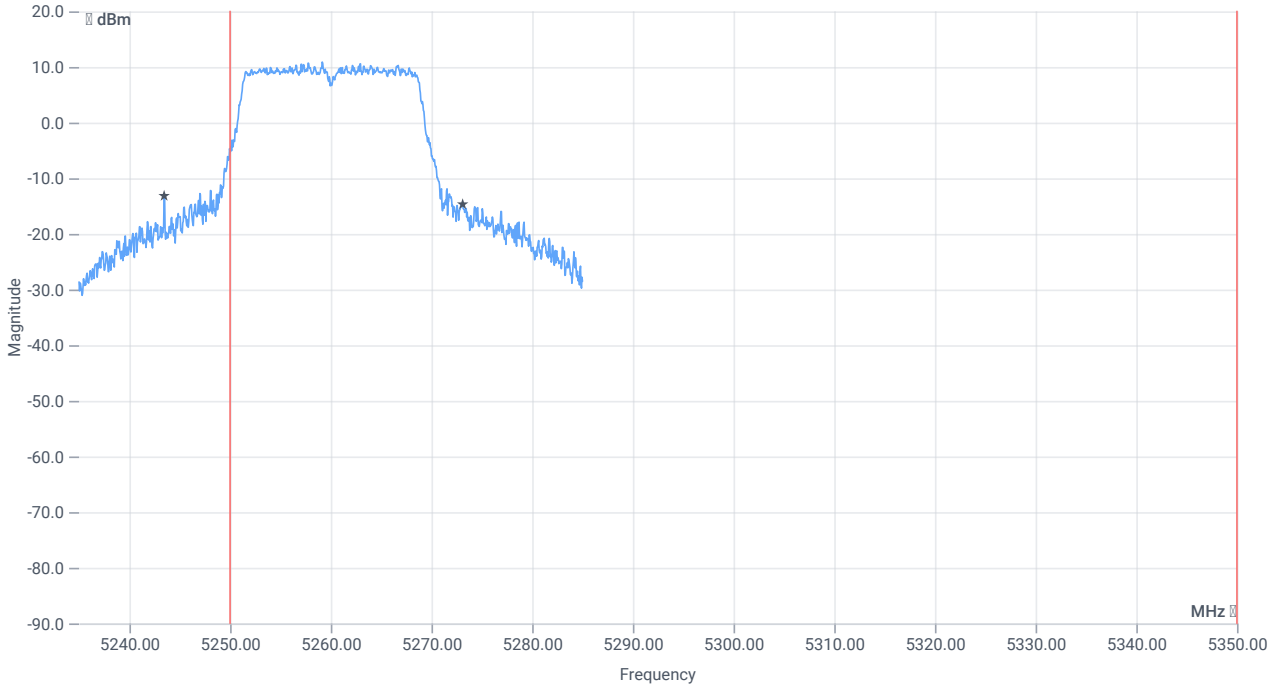
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.482	MHz	INFO
T1 99%	5250.000000	---	5250.7592	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5269.2408	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.65	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5250.000000	---	5243.4500	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5273.1000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	10.02.2023 09:25:23
Ambit Temp [°C] | Humidity [rel%]	21.4 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	False | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5260 MHz

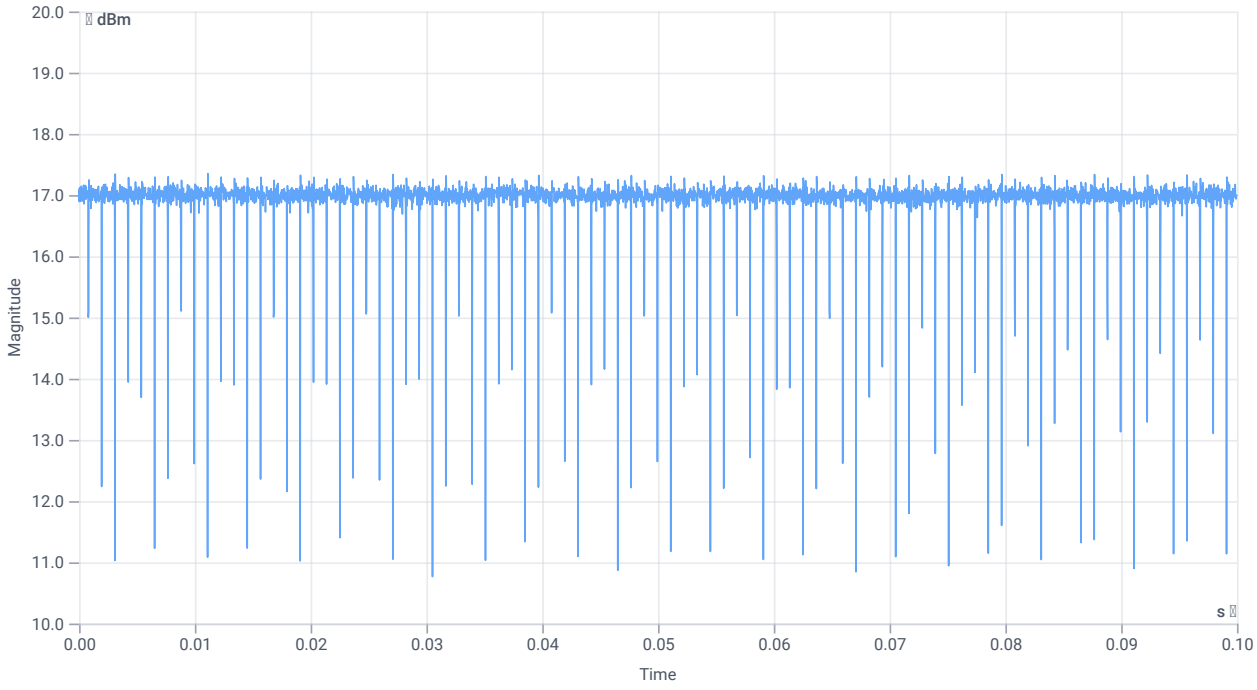
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.63	dBm	INFO
Ref. Frequency	---	---	5262.200	MHz	INFO

Evaluation max. Duty Cycle

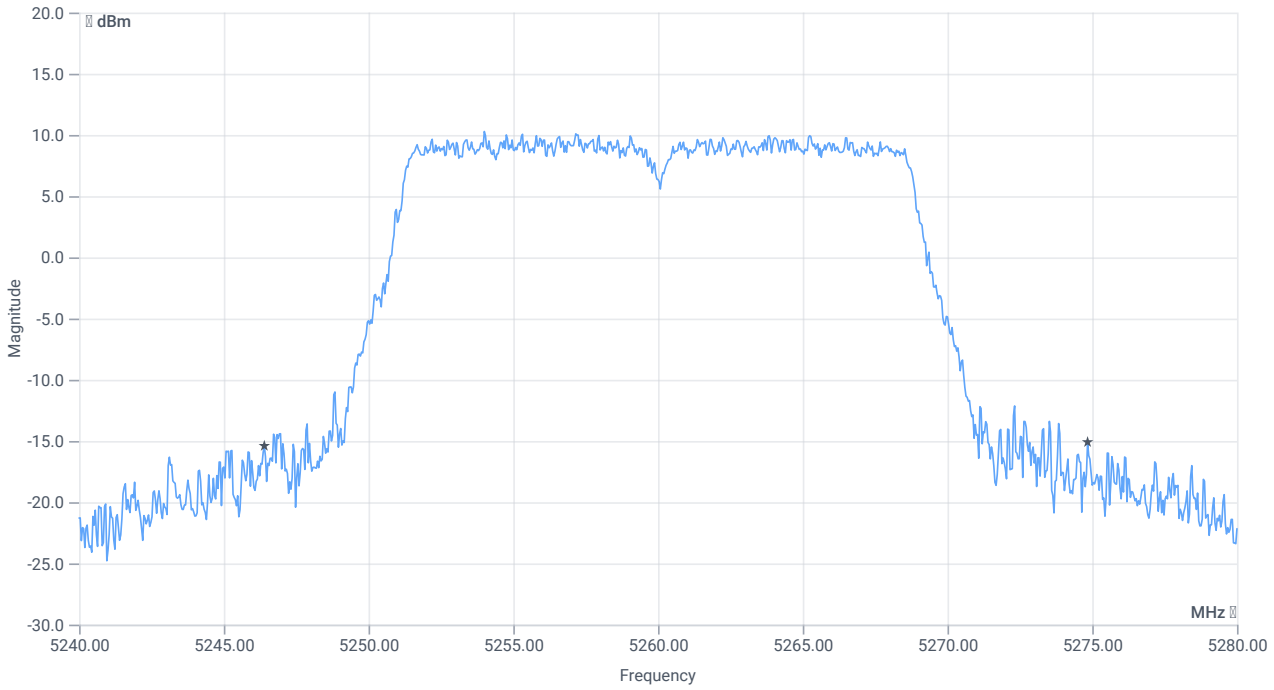
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

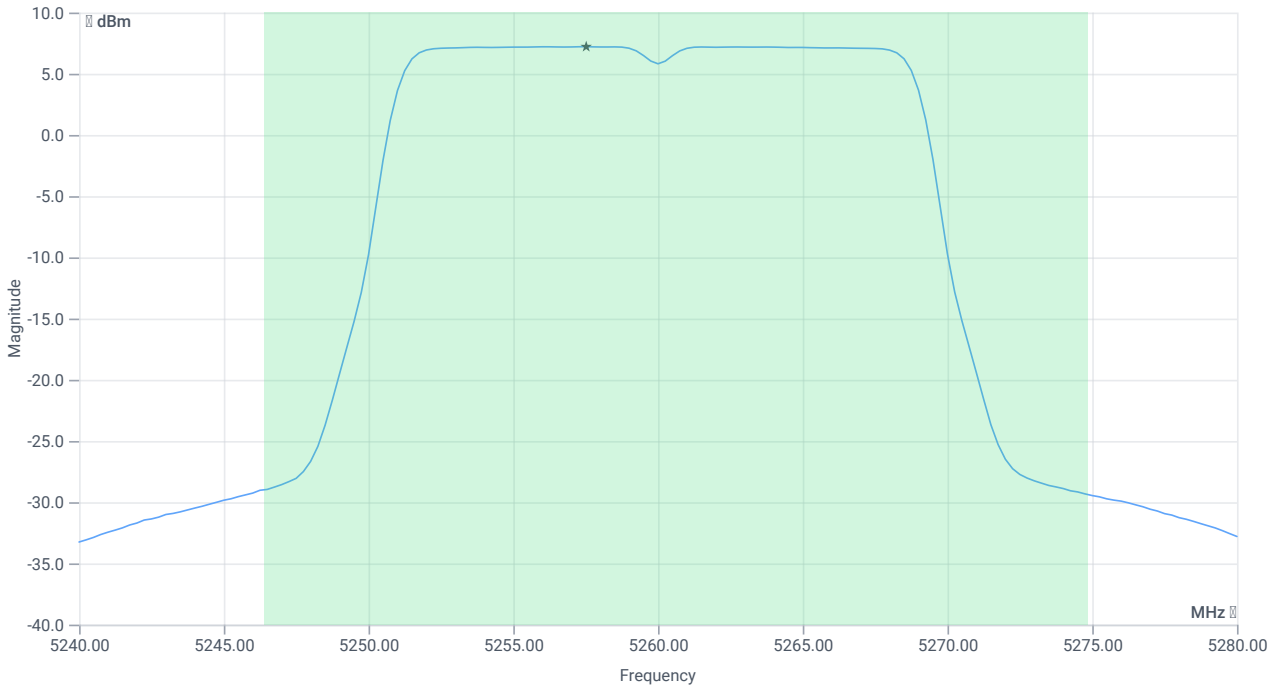
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	28.44	MHz	INFO
T1 26dB	---	---	5246.4000	MHz	INFO
T2 26dB	---	---	5274.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.63 | 16.44 | 30
Start [MHz] | Stop [MHz]	5240.000 | 5280.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	19.3	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.3	dBm	PASS
Limit: 11 dBm + 10 log	28.44				
Max Output Power DC corrected	---	25.54	19.3	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	7.21	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	7.21	dBm/1MHz	PASS

Verdict
PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:47:30
Ambit Temp [°C] | Humidity [rel%]	21.0 | 26
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
Switched Path	None

Test Equipment

Test at TX 5240 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	19.76	dBm	INFO
Ant:1 BW 26dB	---	---	30.520	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	20.15	dBm	INFO
Ant:2 BW 26dB	---	---	29.680	MHz	INFO
∑ Limit absolute	---	24	22.97	dBm	PASS
∑ Limit: 11 dBm + 10 log 29.68	---	25.72	22.97	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	7.73	dBm/1MHz	INFO
Ant:2 PSD	---	---	8.14	dBm/1MHz	INFO
∑	---	11	10.95	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:47:00
Ambit Temp [°C] | Humidity [rel%]	21.0 | 26
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

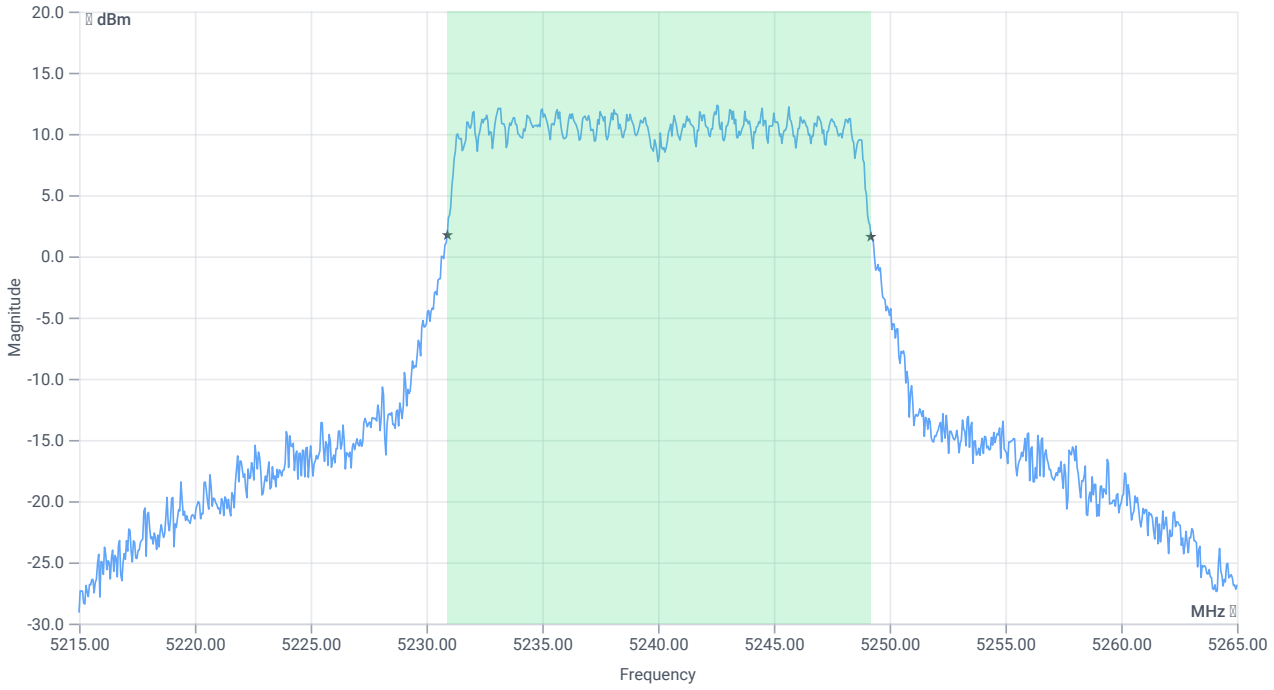
Test at TX 5240 MHz

RESULT: Reference Power cond.

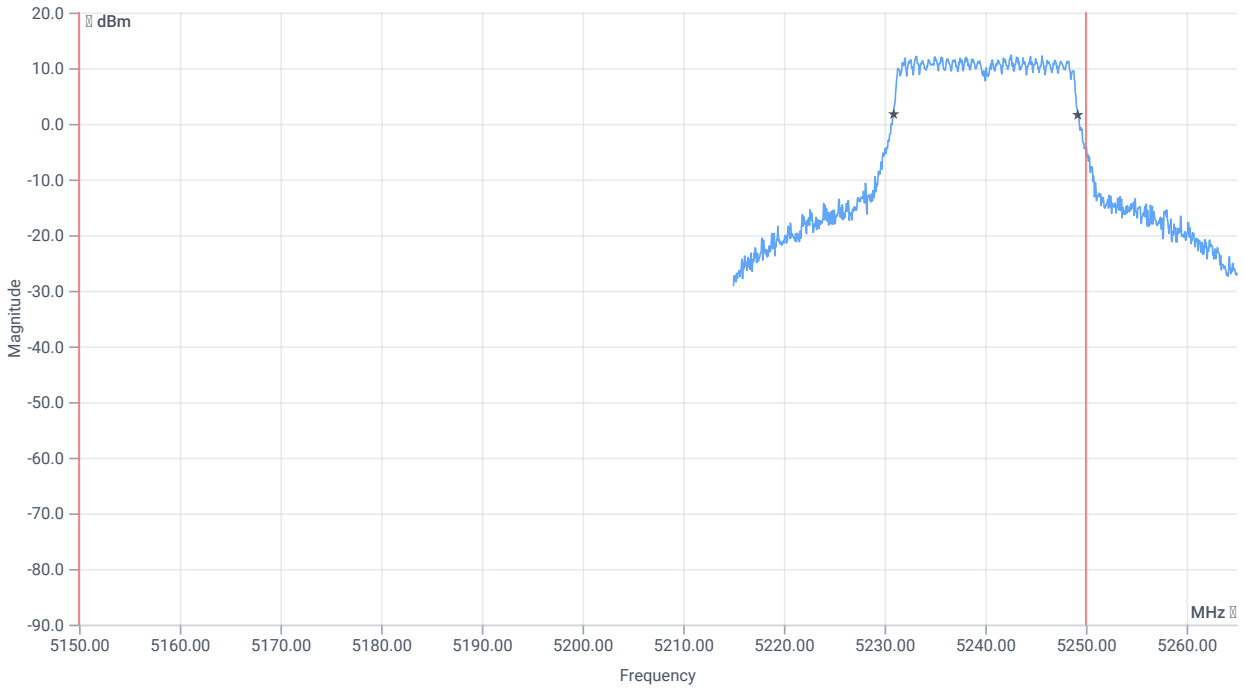
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.57	dBm	INFO
Ref. Frequency	---	---	5244.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.57 | 16.47 | 25
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



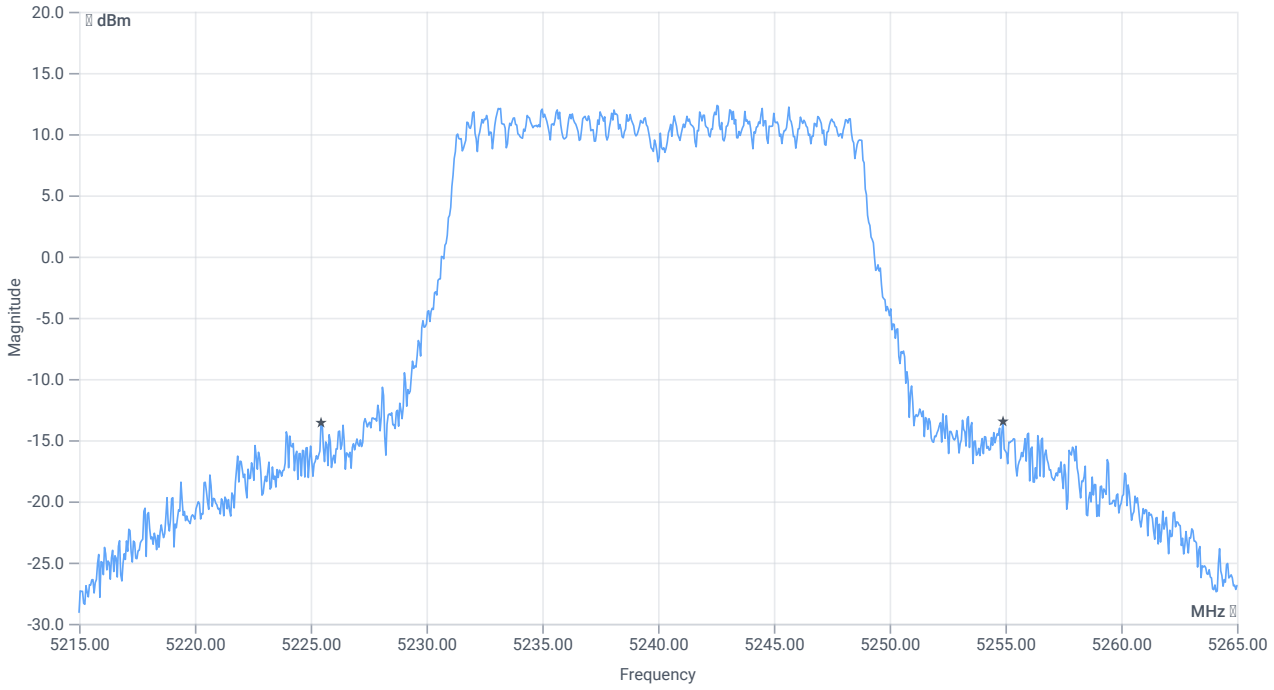
BW 99PCT



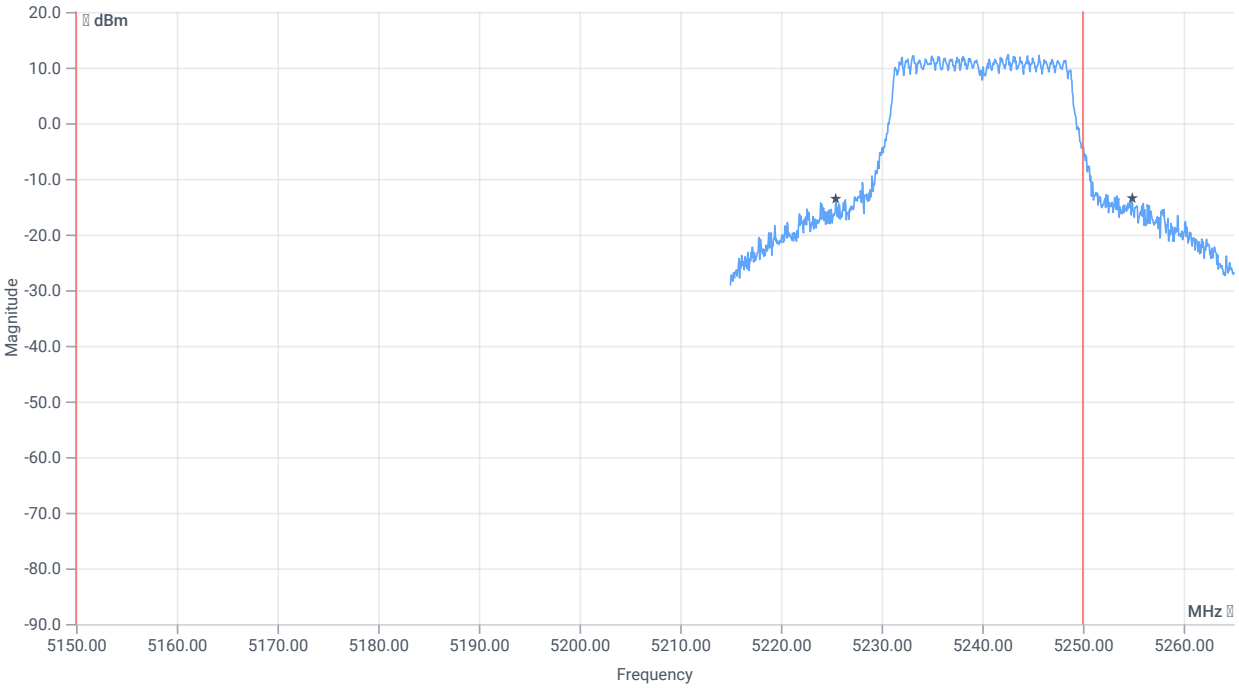
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.282	MHz	INFO
T1 99%	5150.000000	---	5230.9091	MHz	PASS
T2 99%	---	5250.000000	5249.1908	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.45	MHz	INFO
T1 26dB	5150.000000	---	5225.4500	MHz	PASS
T2 26dB	---	5250.000000	5254.9000	MHz	DFS required

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:45:31
Ambit Temp [°C] | Humidity [rel%]	21.0 | 26
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

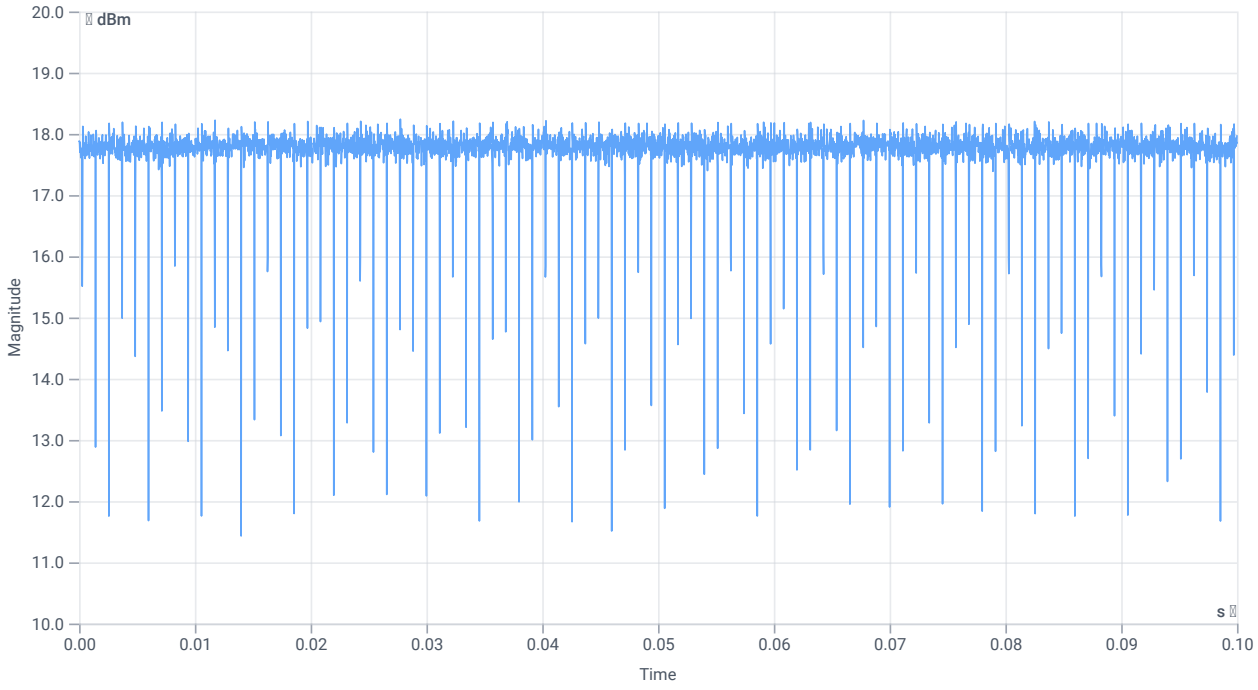
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.94	dBm	INFO
Ref. Frequency	---	---	5232.610	MHz	INFO

Evaluation max. Duty Cycle

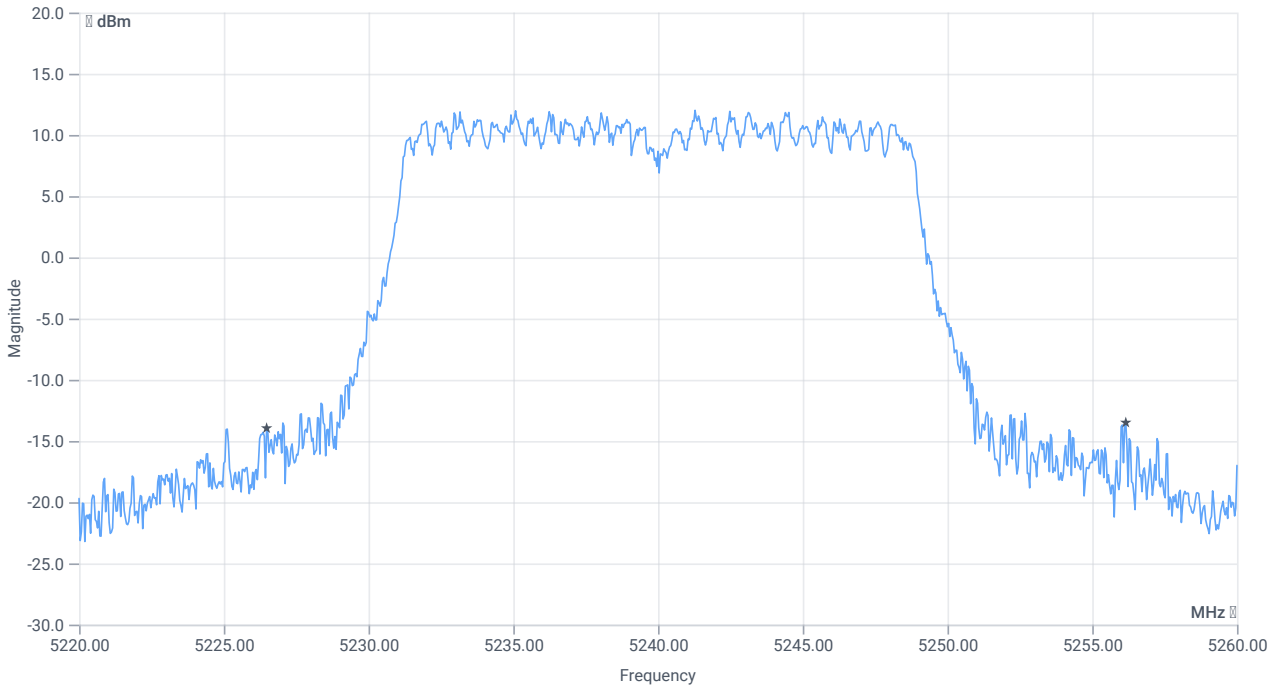
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

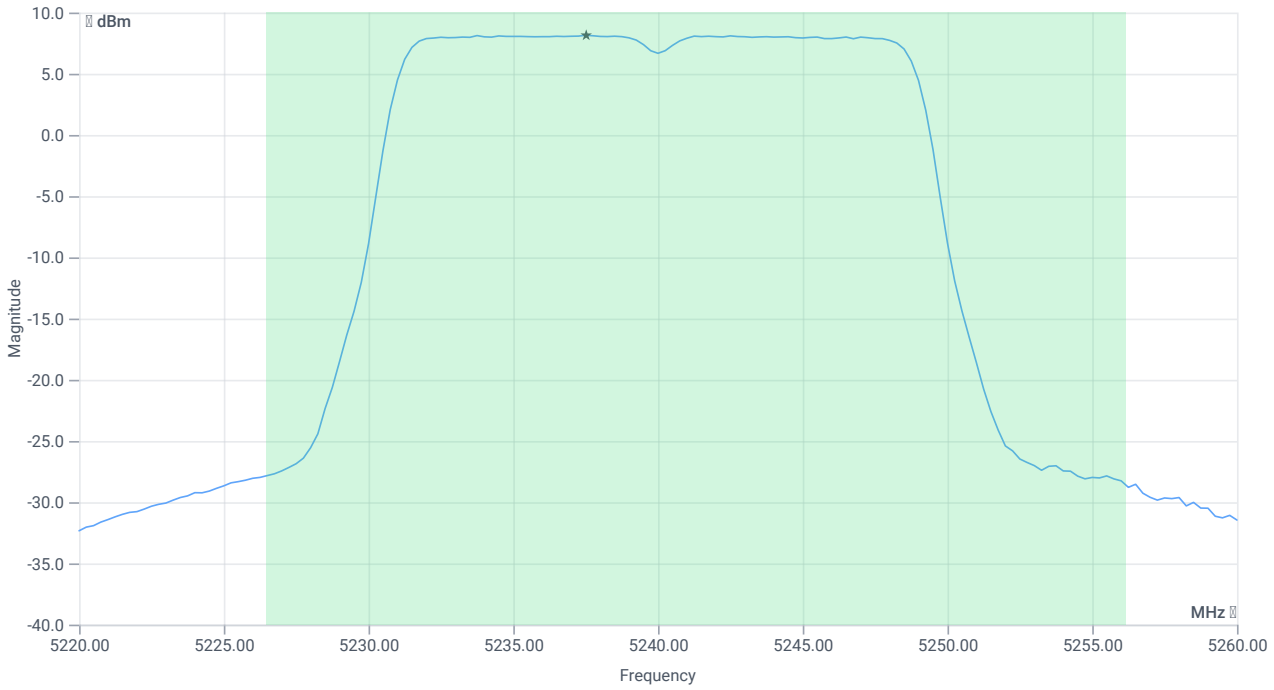
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.68	MHz	INFO
T1 26dB	---	---	5226.4800	MHz	INFO
T2 26dB	---	---	5256.1600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.94 | 16.47 | 30
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	---	---	20.15	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	20.15	dBm	PASS
Limit: 11 dBm + 10 log	29.68				
Max Output Power DC corrected	---	25.72	20.15	dBm	na

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	8.14	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	8.14	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:45:01
Ambit Temp [°C] | Humidity [rel%]	21.0 | 26
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

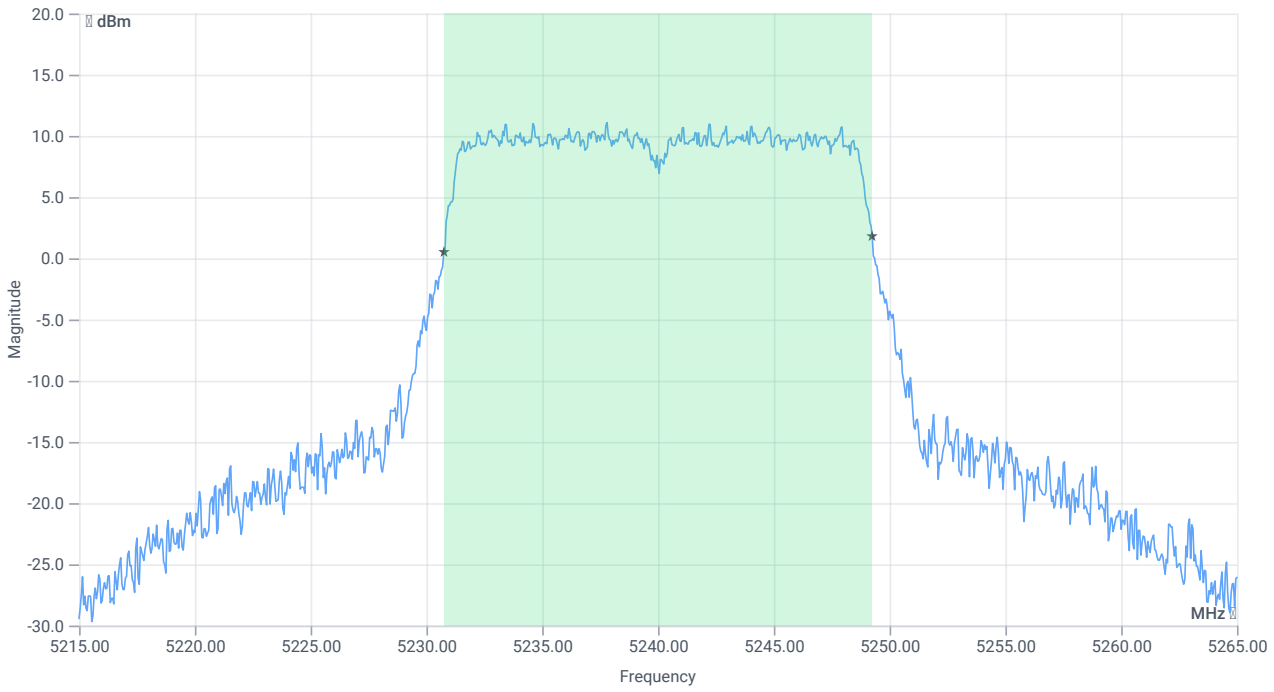
Test at TX 5240 MHz

RESULT: Reference Power cond.

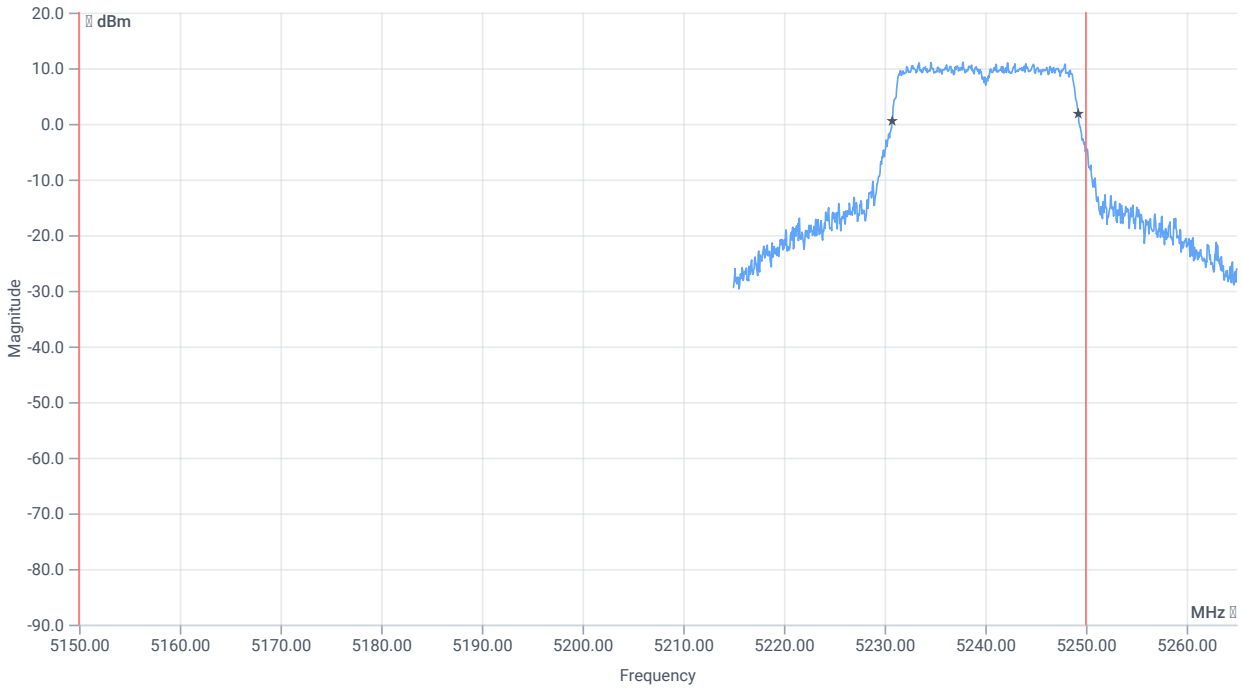
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	16.13	dBm	INFO
Ref. Frequency	---	---	5242.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.13 | 16.47 | 25
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



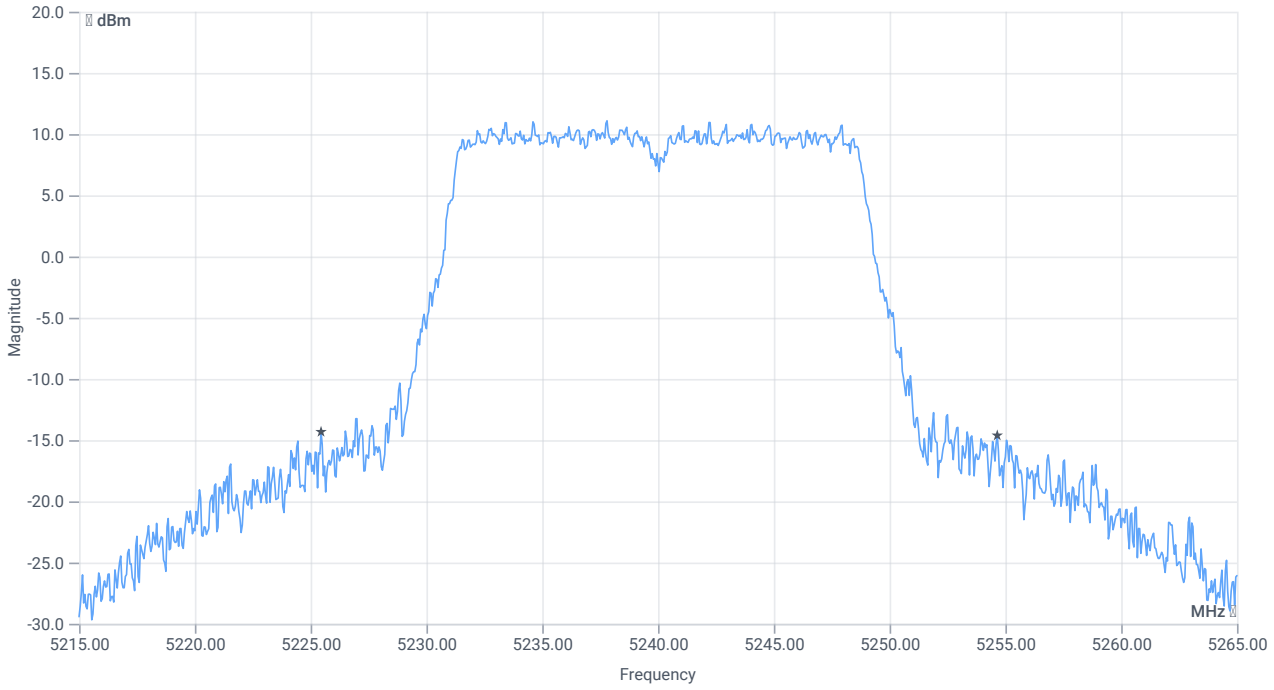
BW 99PCT



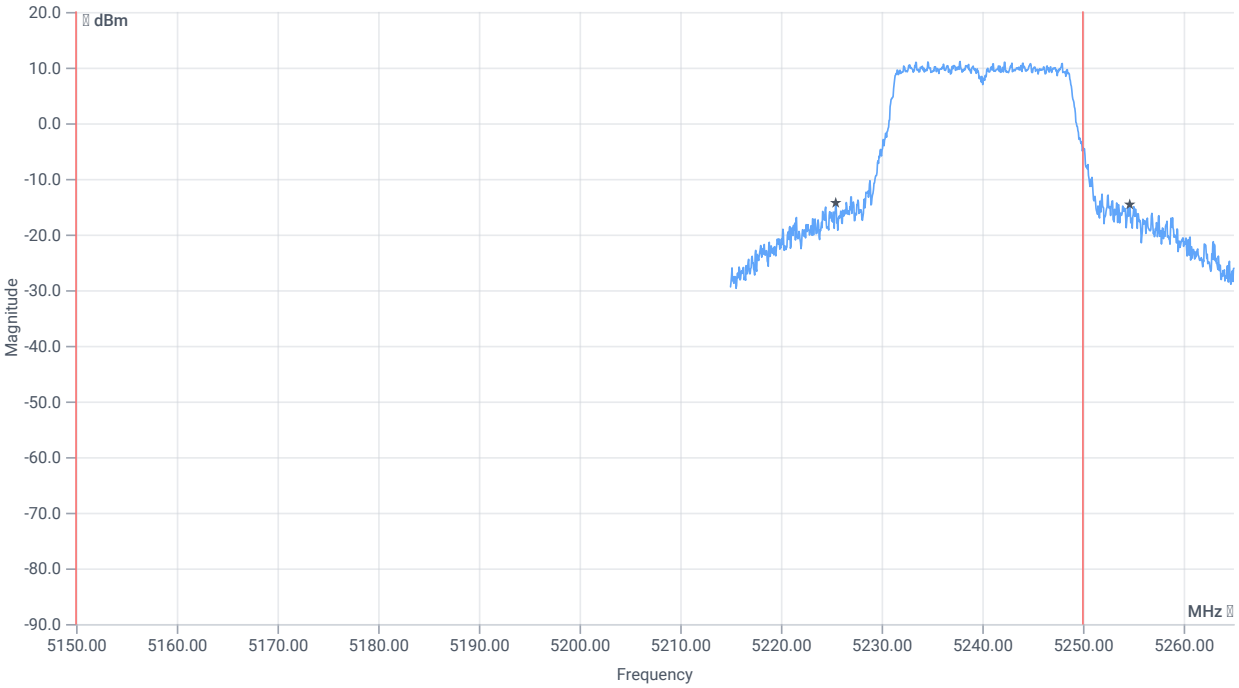
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.482	MHz	INFO
T1 99%	5150.000000	---	5230.7592	MHz	PASS
T2 99%	---	5250.000000	5249.2408	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	29.2	MHz	INFO
T1 26dB	5150.000000	---	5225.4500	MHz	PASS
T2 26dB	---	5250.000000	5254.6500	MHz	DFS required

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:43:33
Ambit Temp [°C] | Humidity [rel%]	21.0 | 26
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

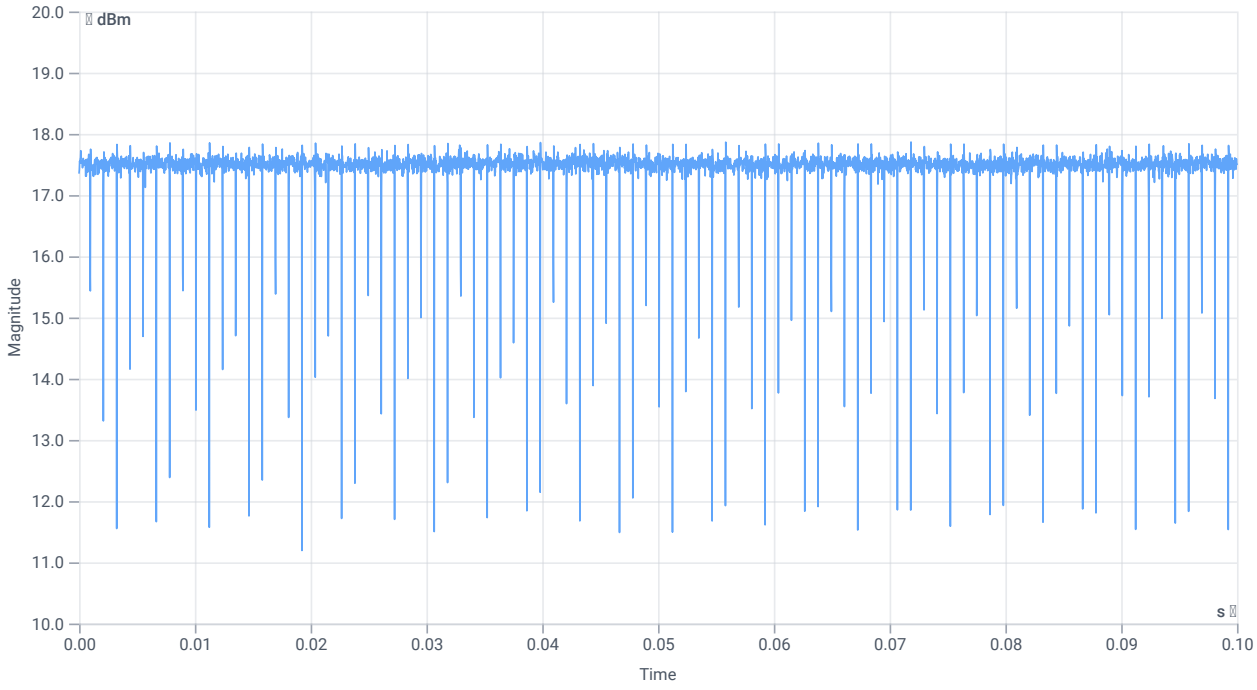
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.92	dBm	INFO
Ref. Frequency	---	---	5242.400	MHz	INFO

Evaluation max. Duty Cycle

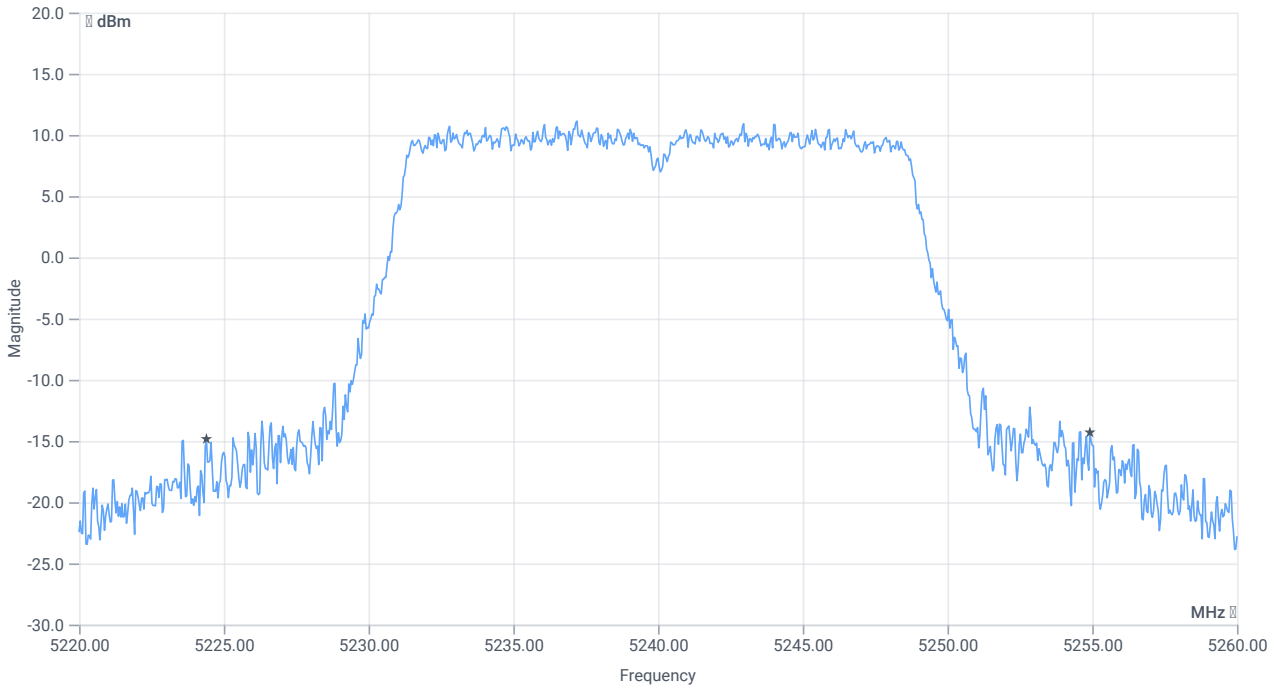
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

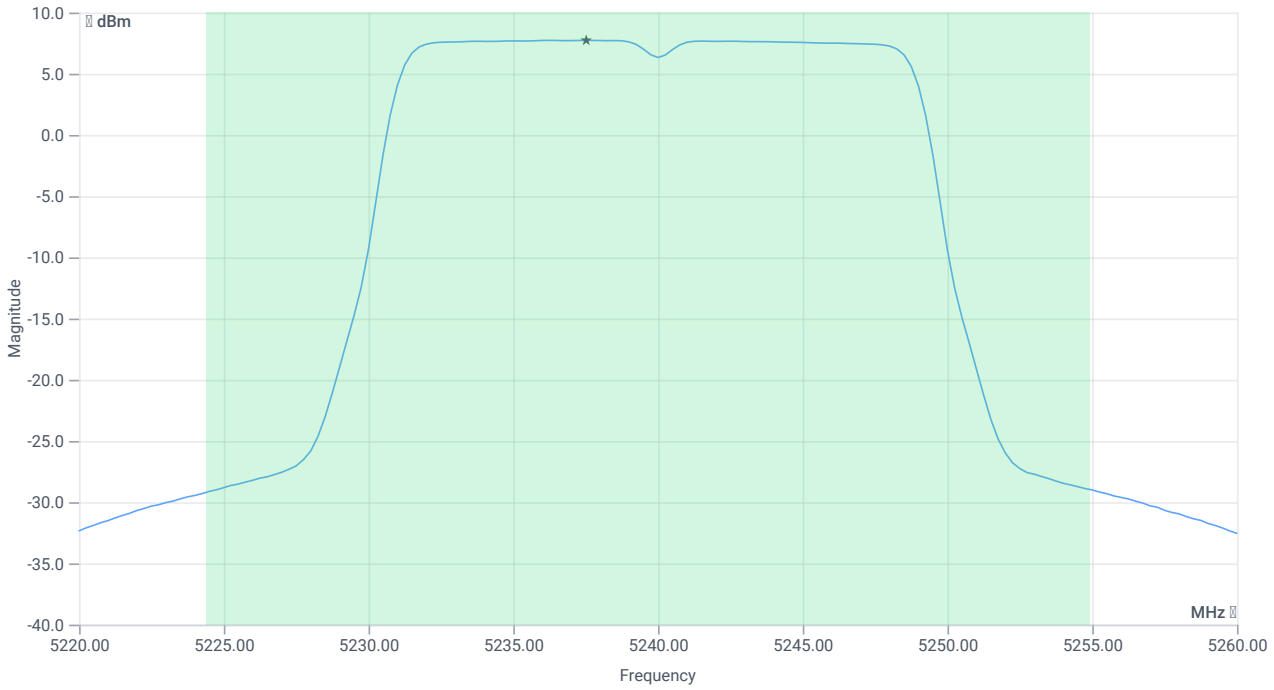
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	30.52	MHz	INFO
T1 26dB	---	---	5224.4000	MHz	INFO
T2 26dB	---	---	5254.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.92 | 16.47 | 30
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	---	---	19.76	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.76	dBm	PASS
Limit: 11 dBm + 10 log	30.52				
Max Output Power DC corrected	---	25.85	19.76	dBm	na

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	---	11	7.73	dBm/1MHz	PASS

Verdict
PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:31:26
Ambit Temp [°C] | Humidity [rel%]	20.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
Switched Path	None

Test Equipment

Test at TX 5200 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	14.9	dBm	INFO
Ant:1 BW 26dB	---	---	22.120	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	15.43	dBm	INFO
Ant:2 BW 26dB	---	---	21.680	MHz	INFO
∑ Limit absolute	---	24	18.18	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.68	---	24.36	18.18	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	2.86	dBm/1MHz	INFO
Ant:2 PSD	---	---	3.4	dBm/1MHz	INFO
∑	---	11	6.15	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:30:47
Ambit Temp [°C] | Humidity [rel%]	20.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

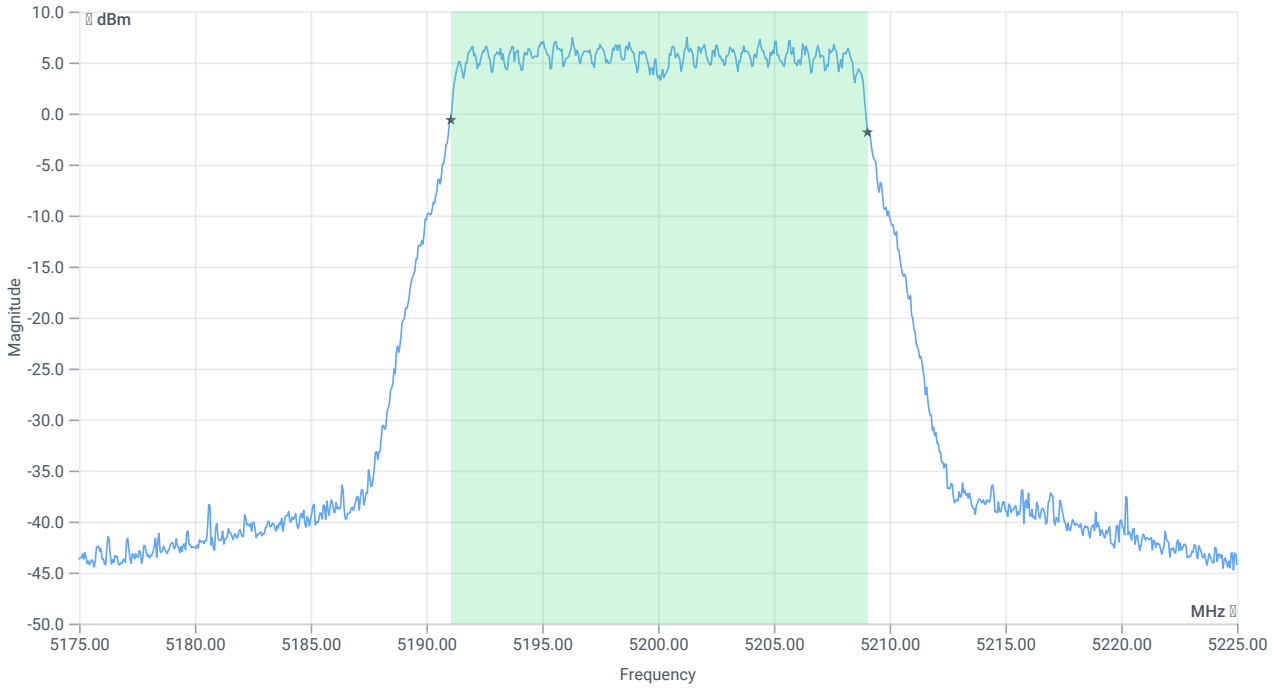
Test at TX 5200 MHz

RESULT: Reference Power cond.

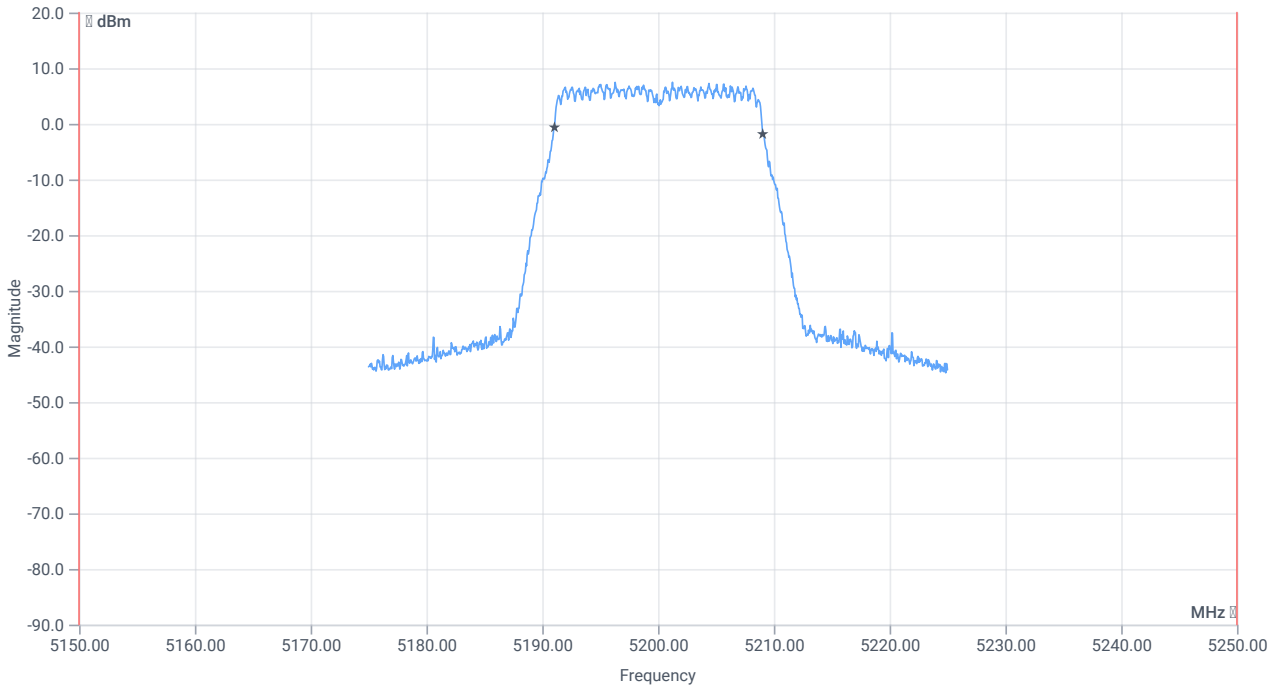
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	11.80	dBm	INFO
Ref. Frequency	---	---	5205.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.80 | 16.41 | 20
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



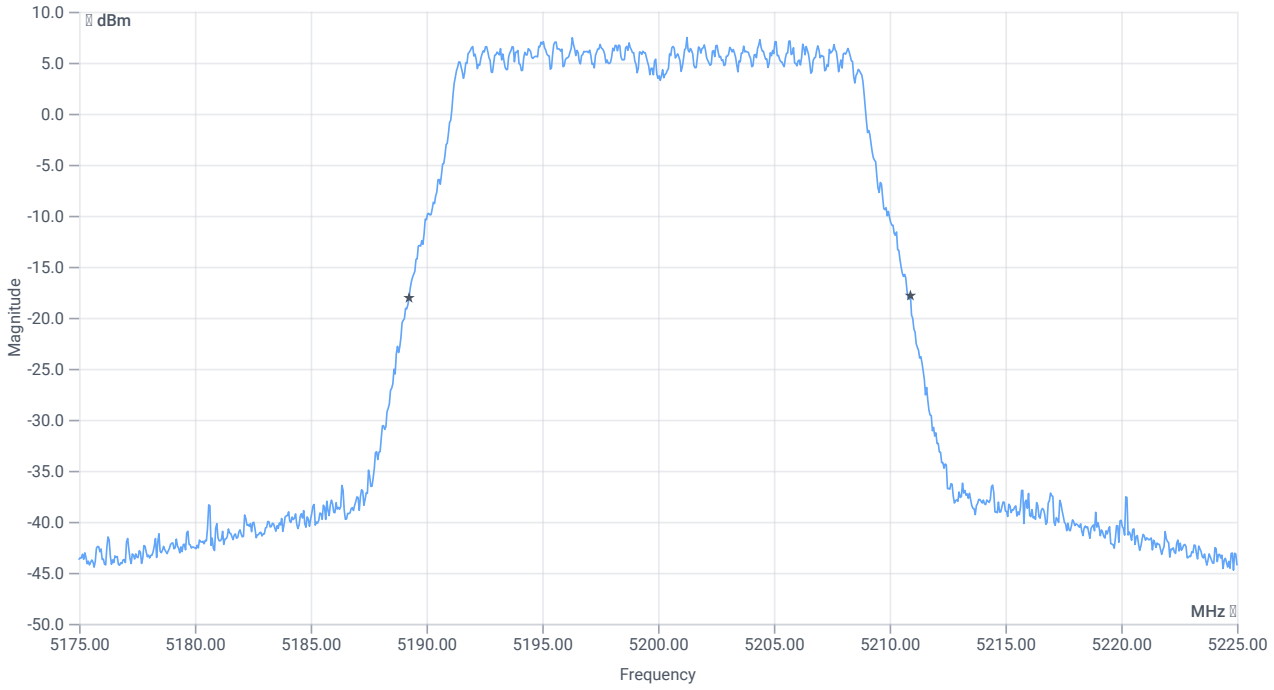
BW 99PCT



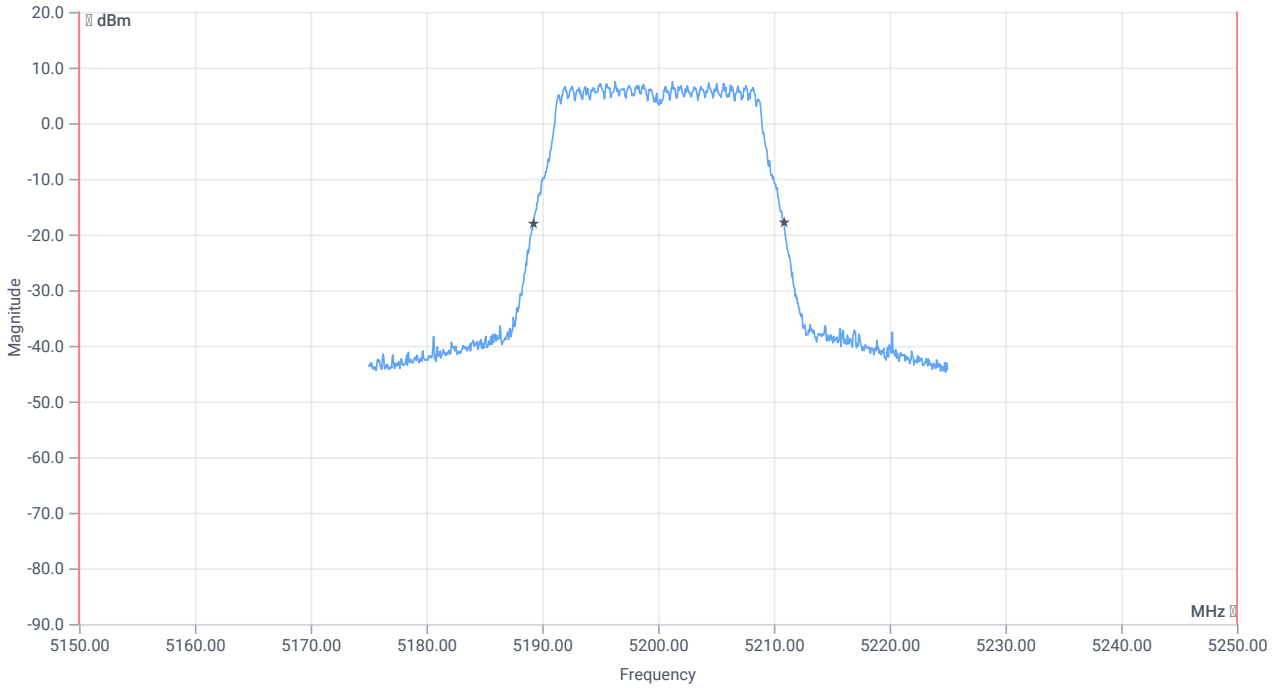
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	17.982	MHz	INFO
T1 99%	5150.000000	---	5191.0589	MHz	PASS
T2 99%	---	5250.000000	5209.0410	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.65	MHz	INFO
T1 26dB	5150.000000	---	5189.2500	MHz	PASS
T2 26dB	---	5250.000000	5210.9000	MHz	PASS

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:29:18
Ambit Temp [°C] | Humidity [rel%]	20.7 | 25
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

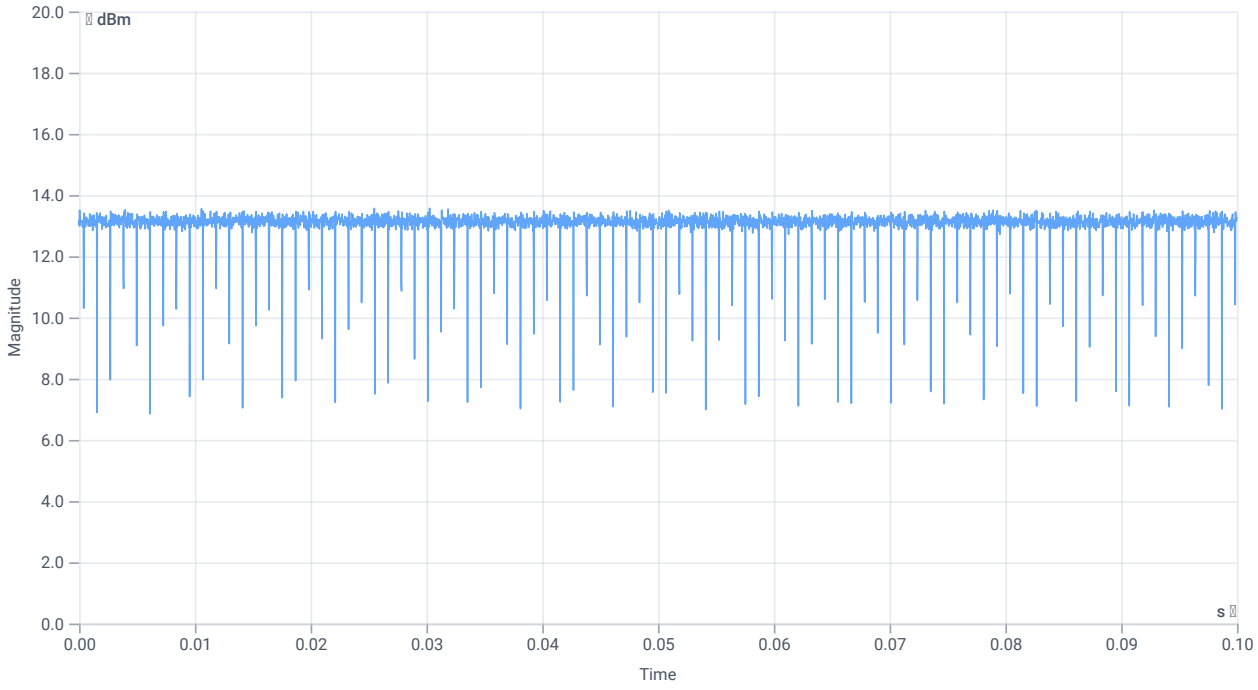
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	12.16	dBm	INFO
Ref. Frequency	---	---	5194.210	MHz	INFO

Evaluation max. Duty Cycle

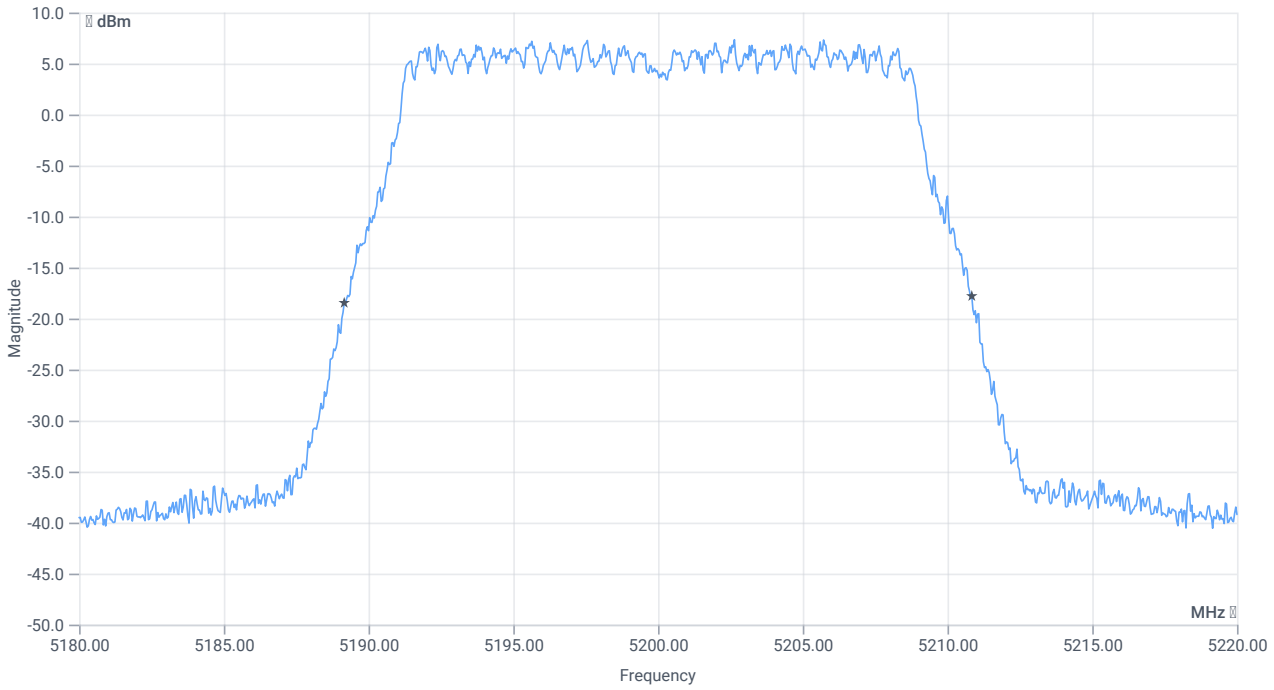
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

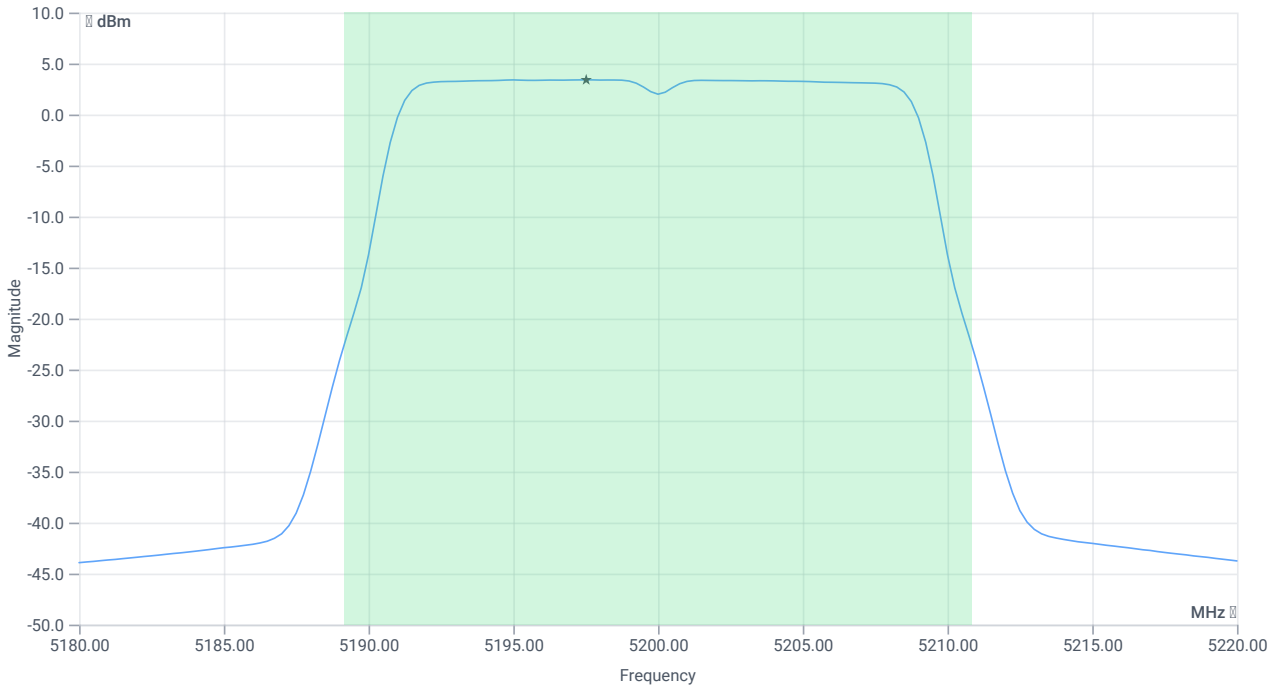
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.68	MHz	INFO
T1 26dB	---	---	5189.1600	MHz	INFO
T2 26dB	---	---	5210.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.16 | 16.41 | 25
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	---	---	15.43	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.43	dBm	PASS
Limit: 11 dBm + 10 log	21.68				
Max Output Power DC corrected	---	24.36	15.43	dBm	na

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	3.4	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	3.4	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:28:39
Ambit Temp [°C] | Humidity [rel%]	20.6 | 25
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

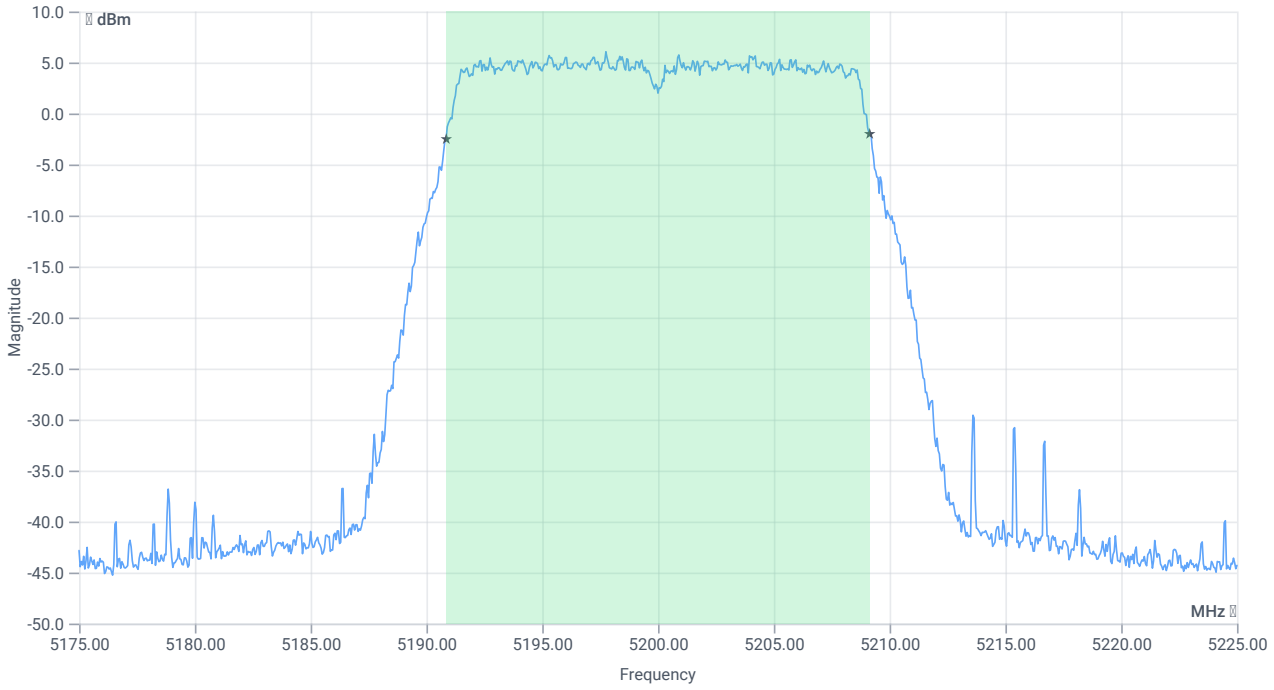
Test at TX 5200 MHz

RESULT: Reference Power cond.

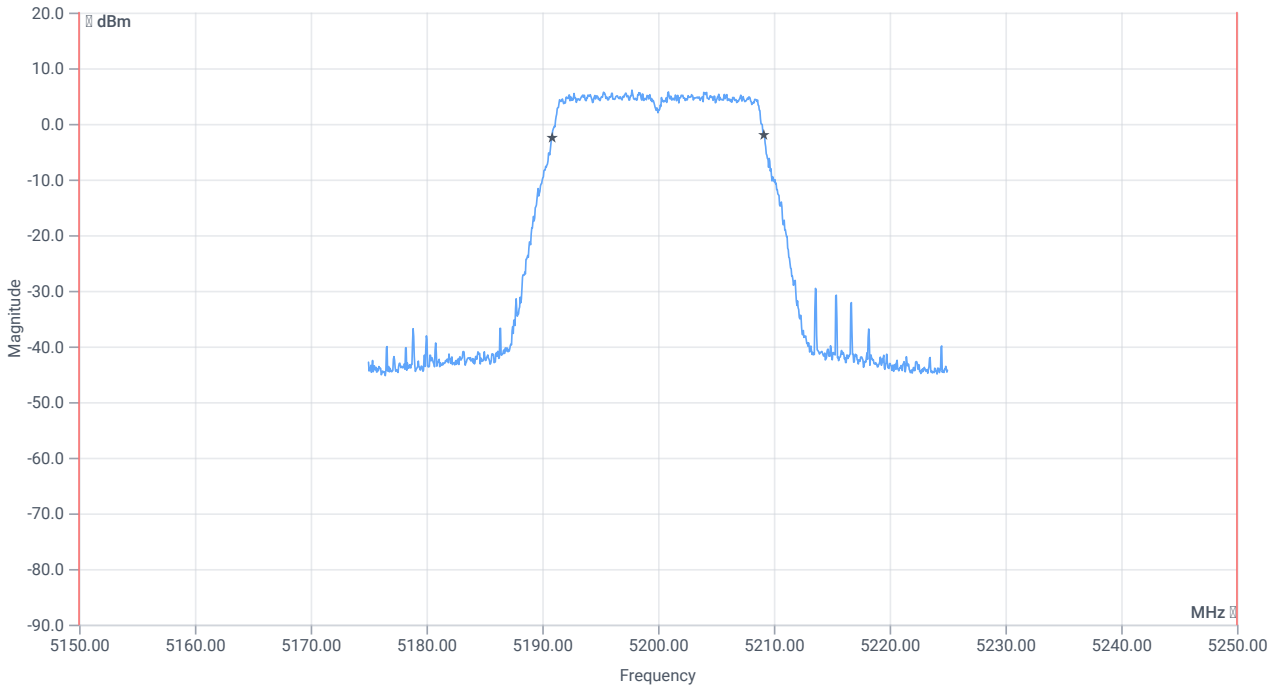
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	11.24	dBm	INFO
Ref. Frequency	---	---	5197.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.24 | 16.41 | 20
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



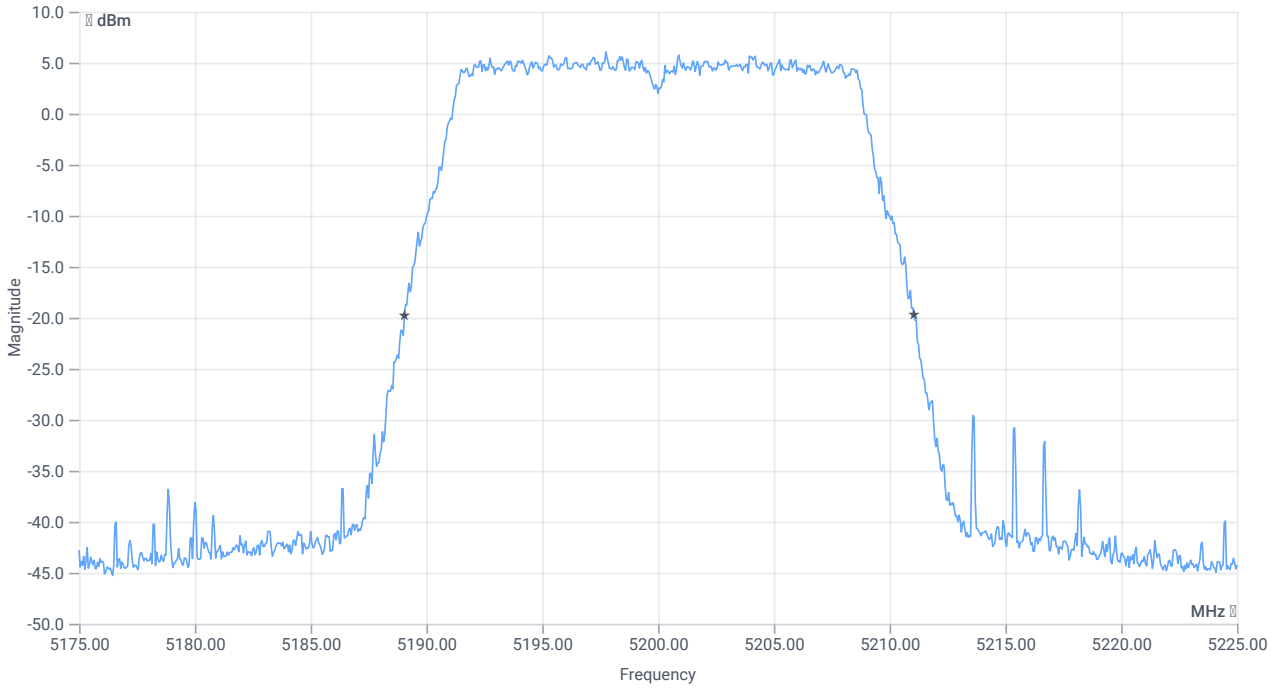
BW 99PCT



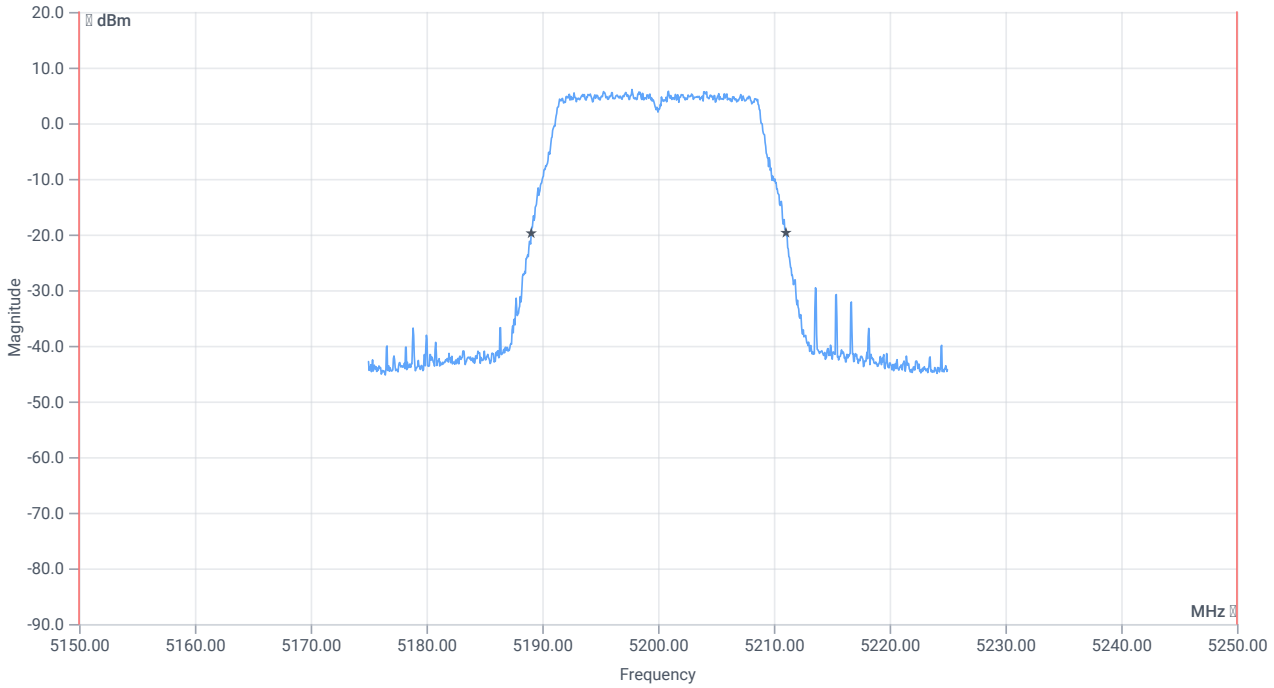
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.282	MHz	INFO
T1 99%	5150.000000	---	5190.8591	MHz	PASS
T2 99%	---	5250.000000	5209.1409	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	22	MHz	INFO
T1 26dB	5150.000000	---	5189.0500	MHz	PASS
T2 26dB	---	5250.000000	5211.0500	MHz	PASS

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:27:11
Ambit Temp [°C] | Humidity [rel%]	20.6 | 26
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

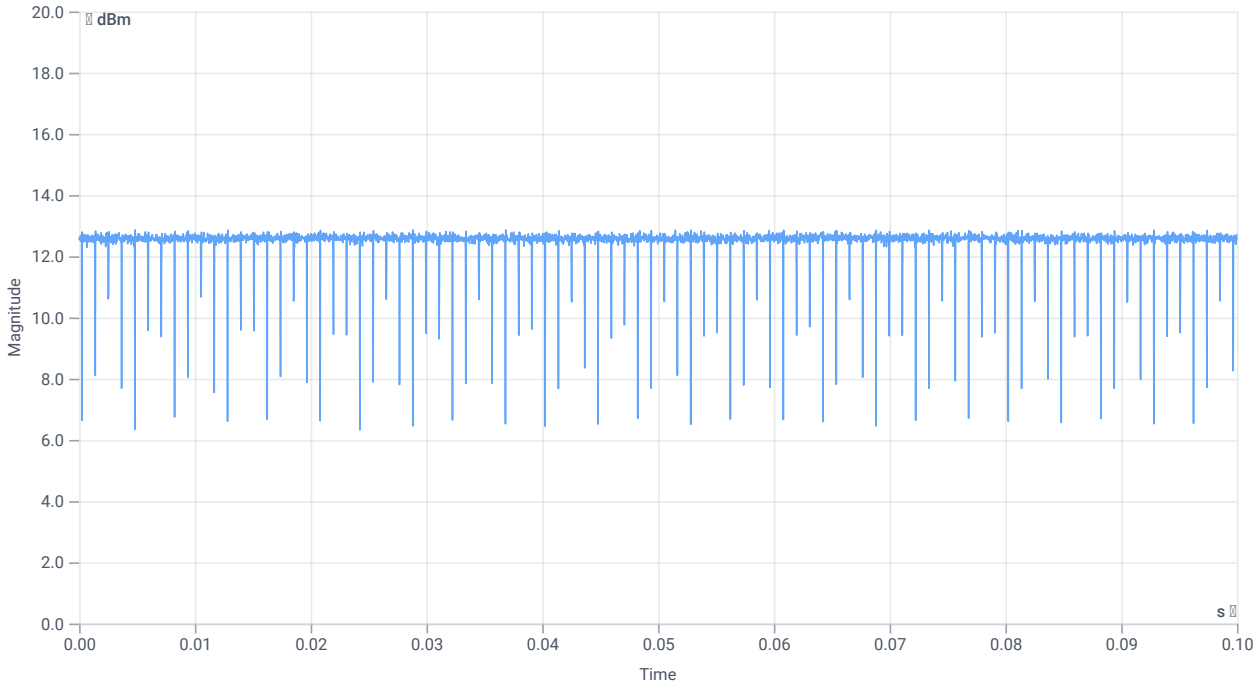
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	10.78	dBm	INFO
Ref. Frequency	---	---	5204.400	MHz	INFO

Evaluation max. Duty Cycle

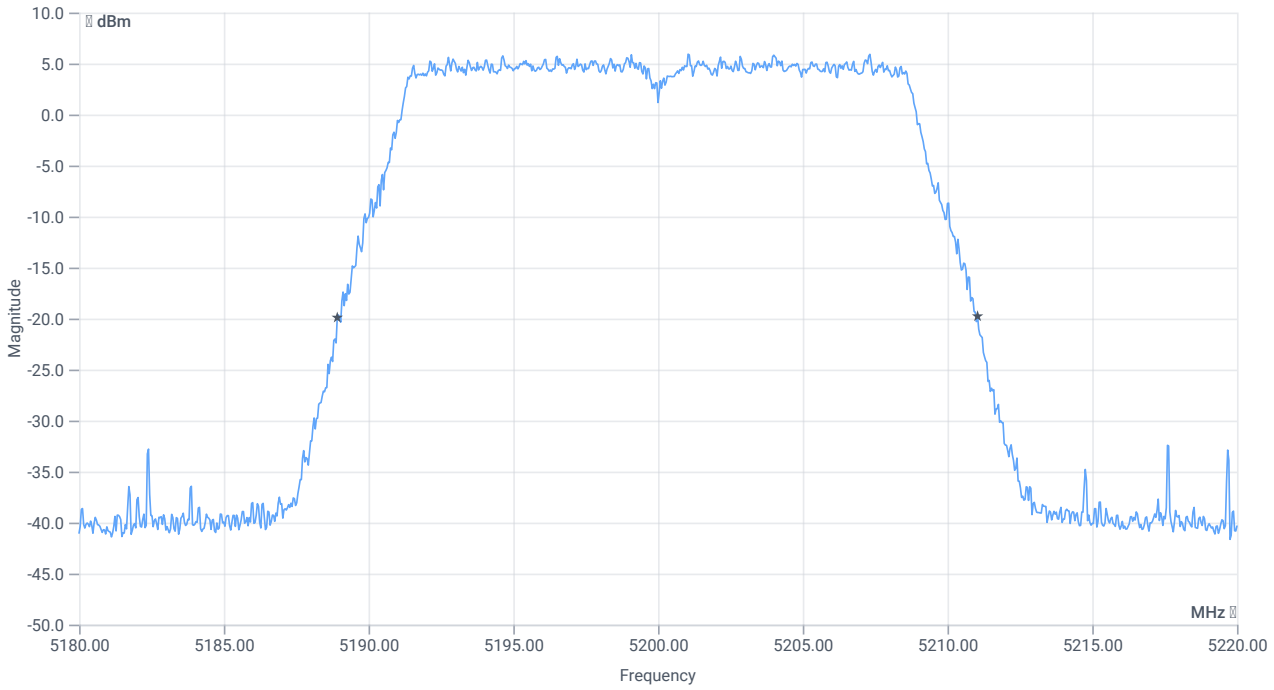
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

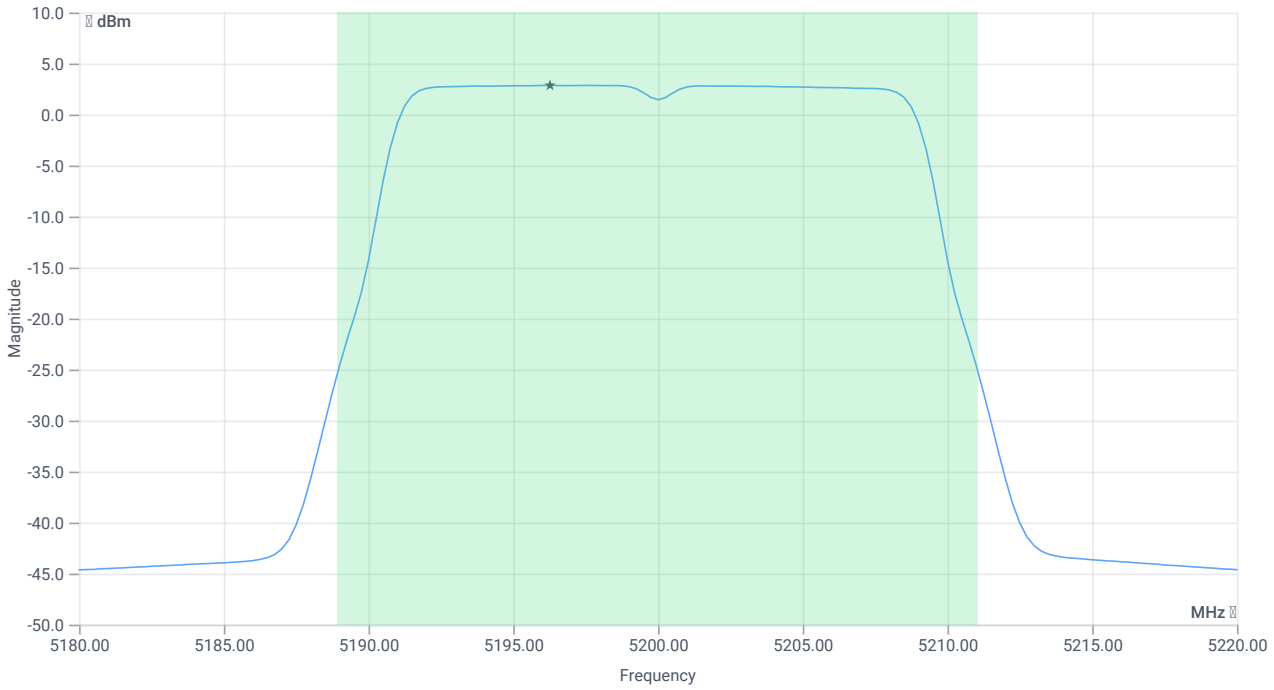
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	22.12	MHz	INFO
T1 26dB	---	---	5188.9200	MHz	INFO
T2 26dB	---	---	5211.0400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.78 | 16.41 | 25
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	---	---	14.9	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	14.9	dBm	PASS
Limit: 11 dBm + 10 log	22.12				
Max Output Power DC corrected	---	24.45	14.9	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	dB	INFO
Power Spectral Density DC corrected	---	11	2.86	dBm/1MHz	PASS

Verdict
PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:17:27
Ambit Temp [°C] | Humidity [rel%]	20.4 | 27
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 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]	1.4
Switched Path	None

Test Equipment

Test at TX 5180 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	15.16	dBm	INFO
Ant:1 BW 26dB	---	---	21.680	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	15.19	dBm	INFO
Ant:2 BW 26dB	---	---	21.600	MHz	INFO
∑ Limit absolute	---	24	18.19	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.6	---	24.34	18.19	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	4.41	dBm/1MHz	INFO
Ant:2 PSD	---	---	4.45	dBm/1MHz	INFO
∑	---	11	7.44	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:16:48
Ambit Temp [°C] | Humidity [rel%]	20.4 | 27
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 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]	1.4
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

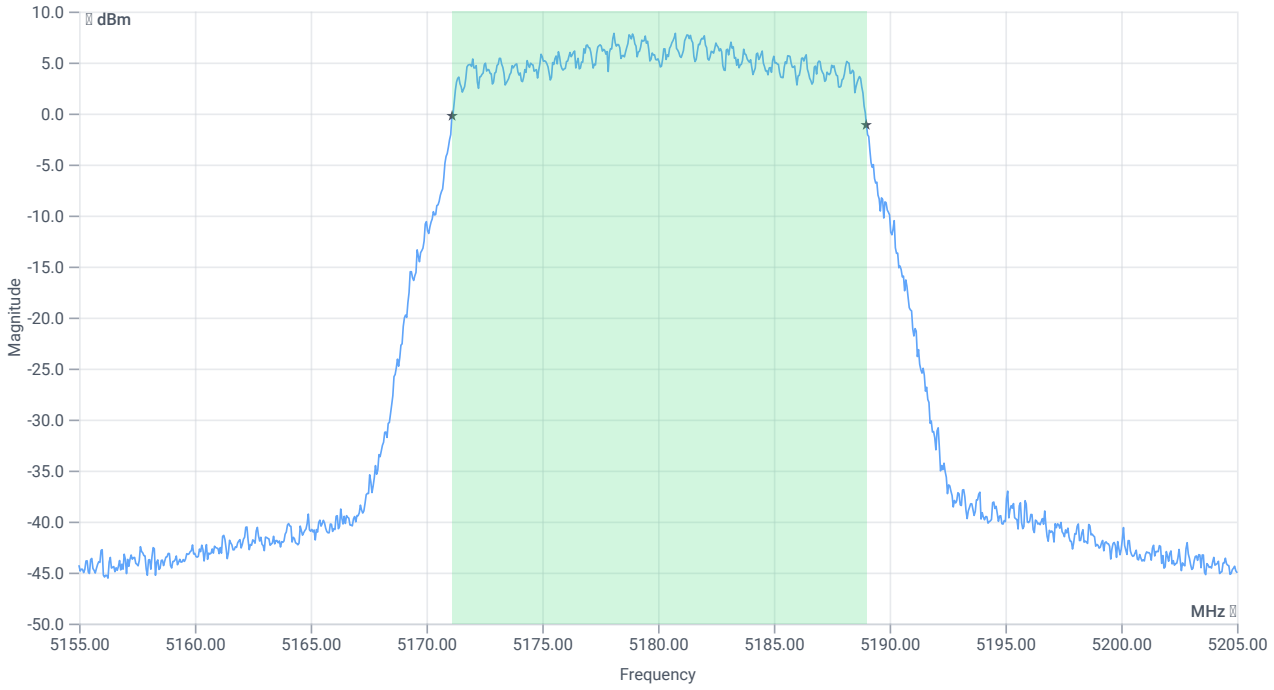
Test at TX 5180 MHz

RESULT: Reference Power cond.

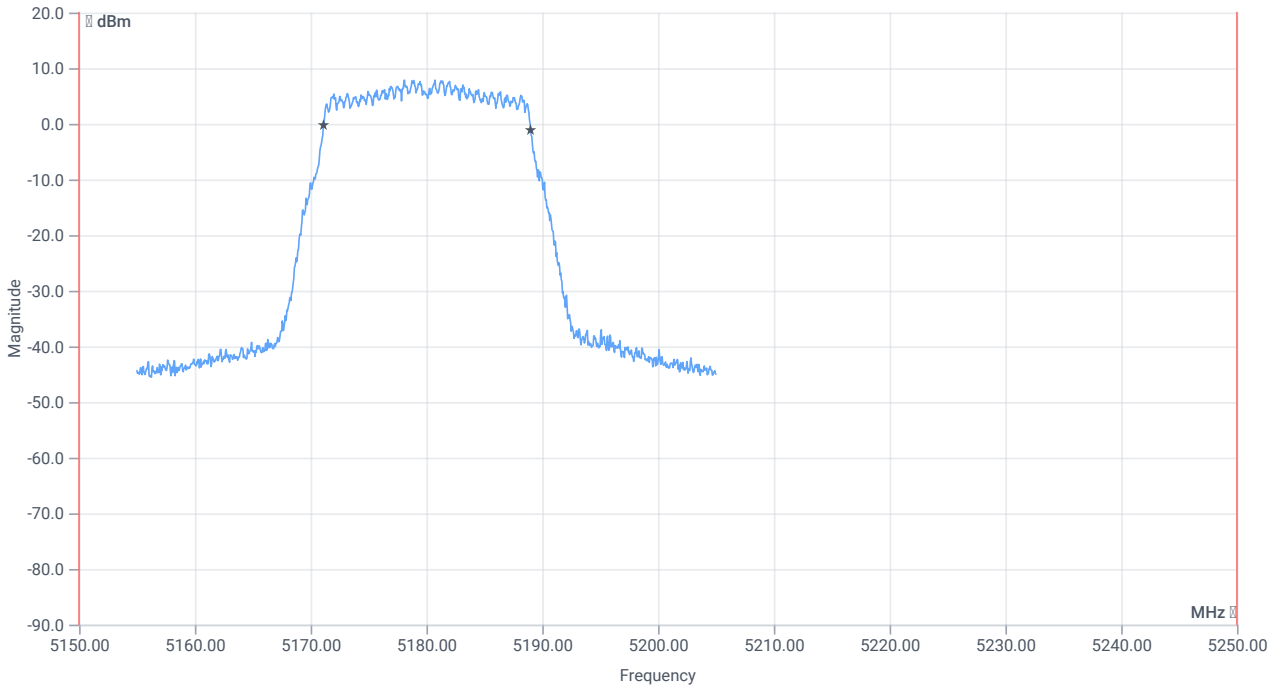
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	12.87	dBm	INFO
Ref. Frequency	---	---	5181.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	20.87 | 16.49 | 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



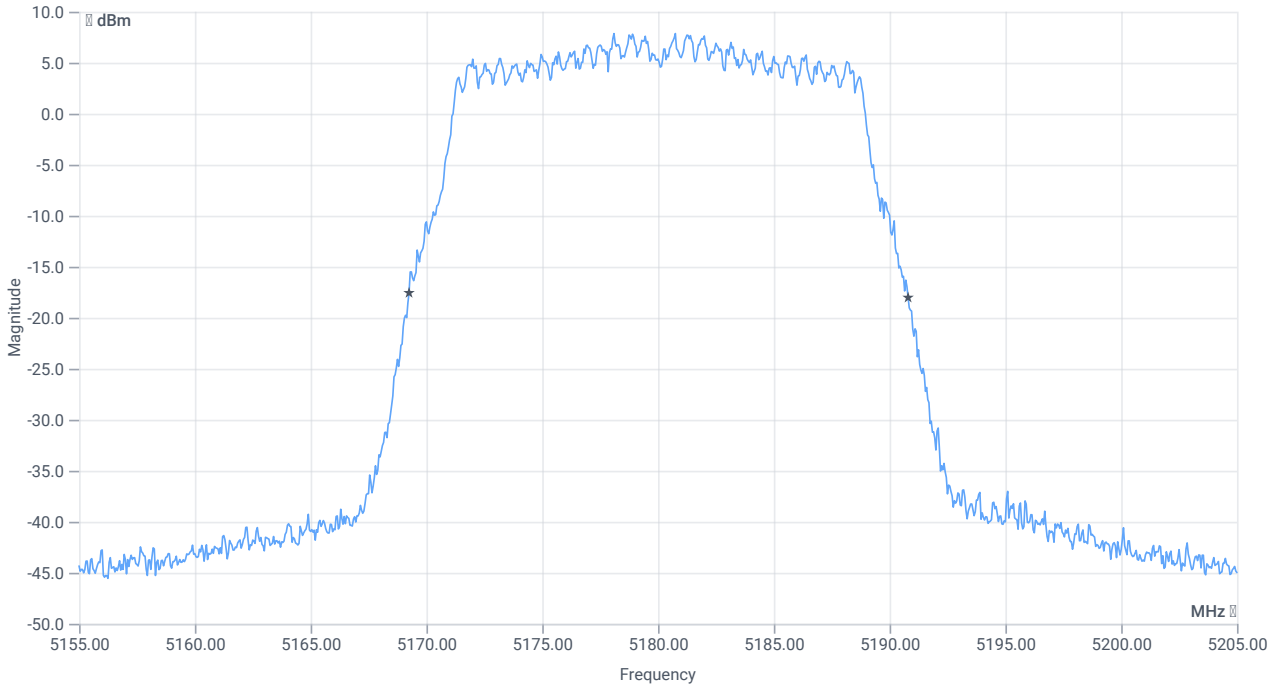
BW 99PCT



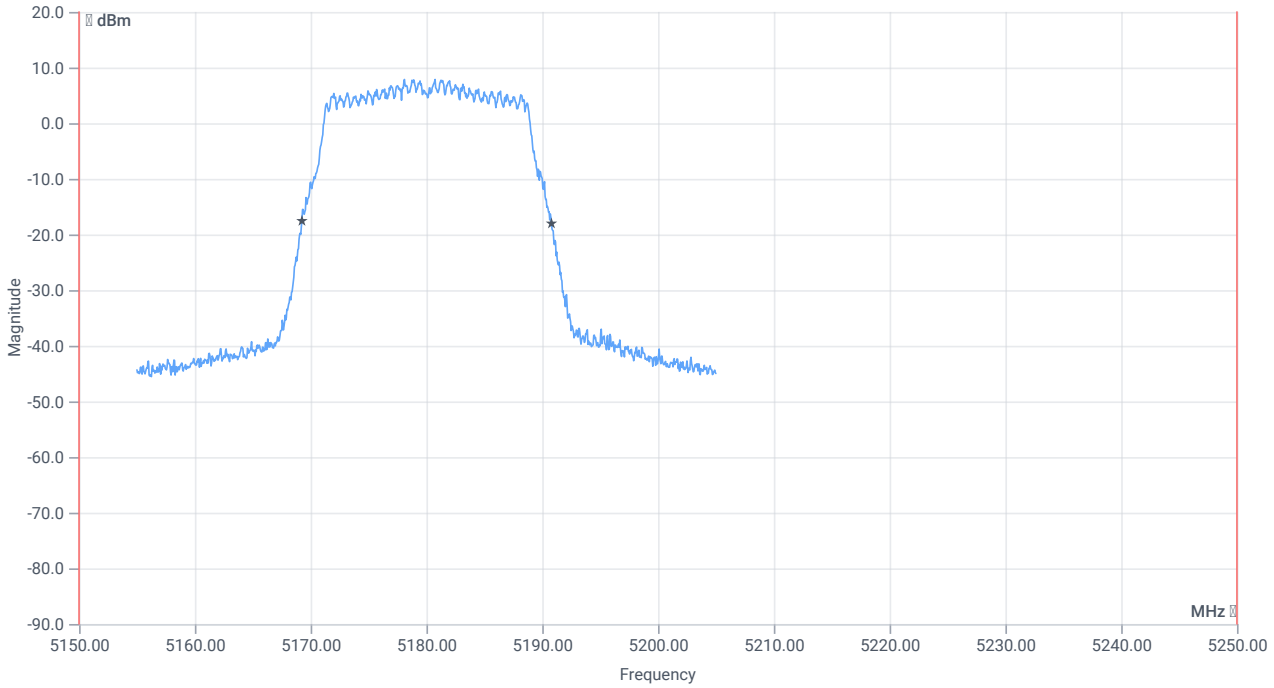
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	17.882	MHz	INFO
T1 99%	5150.000000	---	5171.1089	MHz	PASS
T2 99%	---	5250.000000	5188.9910	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.55	MHz	INFO
T1 26dB	5150.000000	---	5169.2500	MHz	PASS
T2 26dB	---	5250.000000	5190.8000	MHz	PASS

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:15:13
Ambit Temp [°C] | Humidity [rel%]	20.3 | 27
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 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]	1.4
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

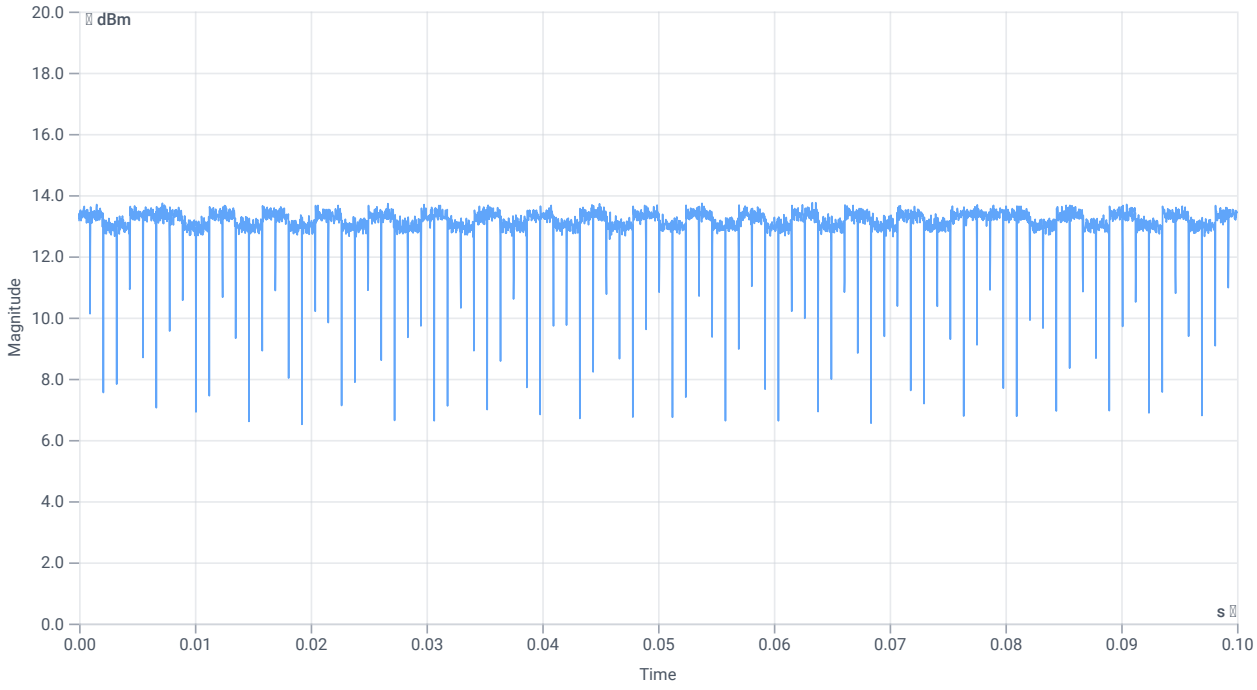
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	12.59	dBm	INFO
Ref. Frequency	---	---	5177.600	MHz	INFO

Evaluation max. Duty Cycle

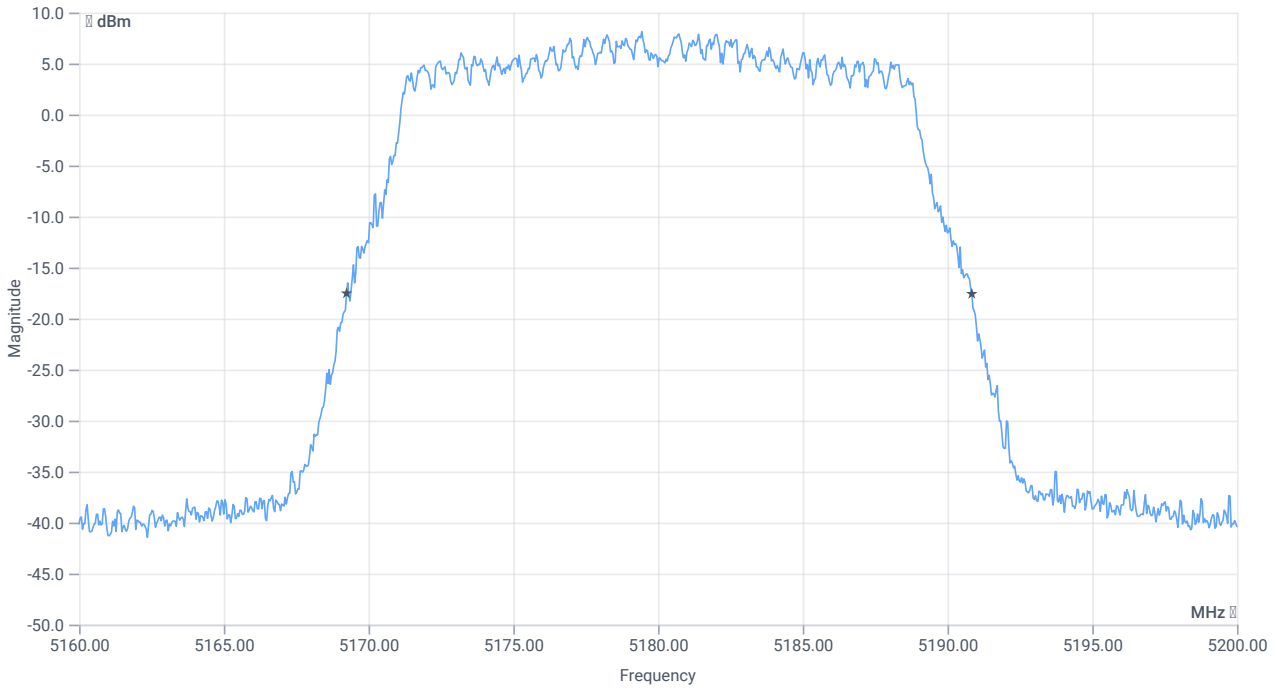
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

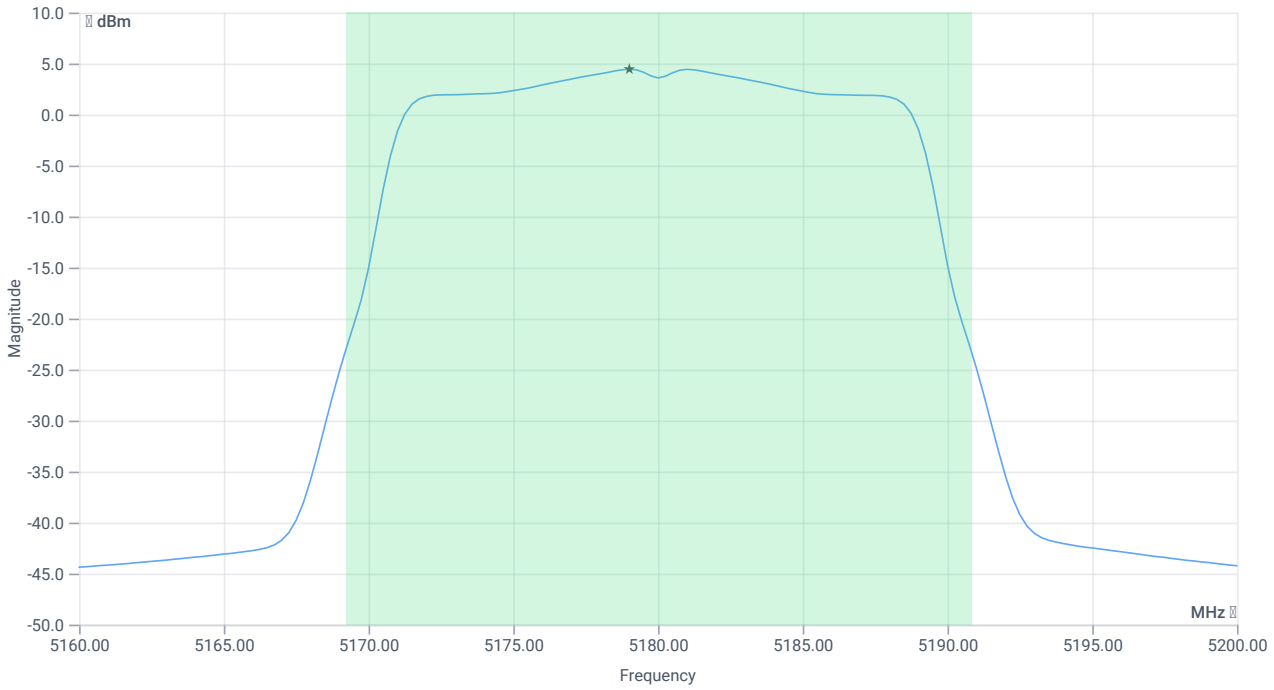
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.6	MHz	INFO
T1 26dB	---	---	5169.2400	MHz	INFO
T2 26dB	---	---	5190.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.59 | 16.49 | 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



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	15.19	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.19	dBm	PASS
Limit: 11 dBm + 10 log 21.6					
Max Output Power DC corrected	---	24.34	15.19	dBm	na

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	4.45	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	4.45	dBm/1MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:14:33
Ambit Temp [°C] | Humidity [rel%]	20.3 | 27
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 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]	1.4
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

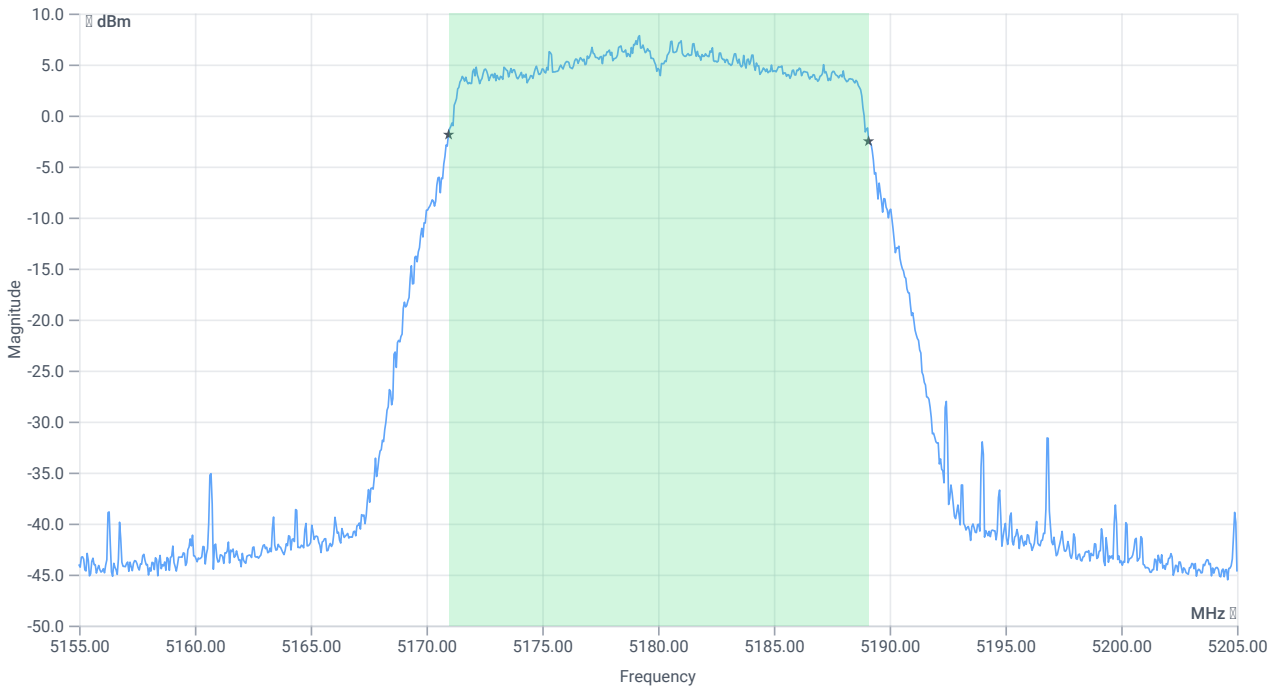
Test at TX 5180 MHz

RESULT: Reference Power cond.

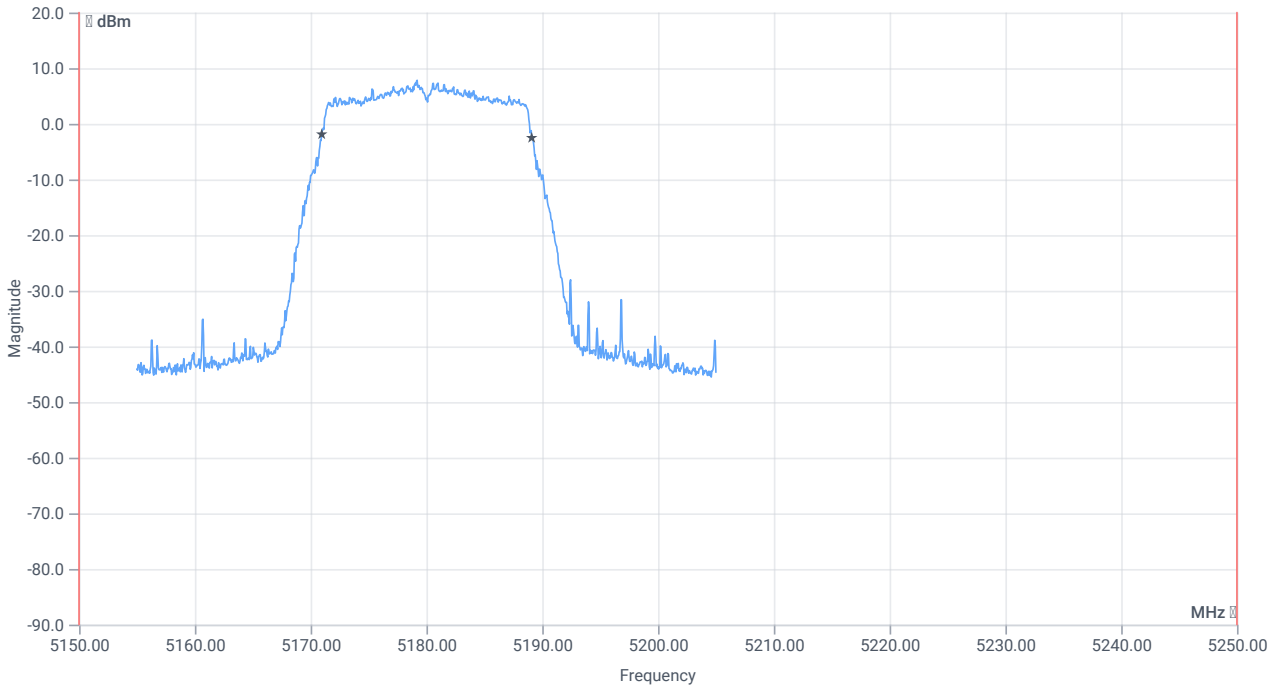
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	11.80	dBm	INFO
Ref. Frequency	---	---	5178.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.80 | 16.49 | 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



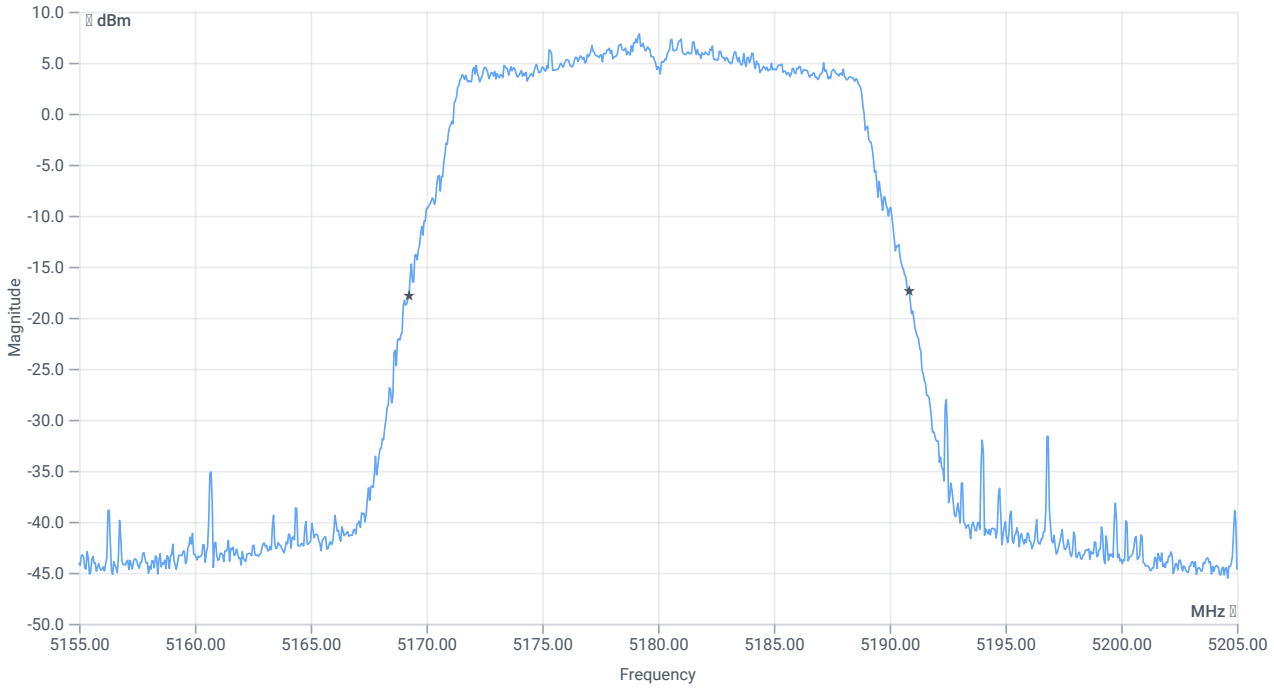
BW 99PCT



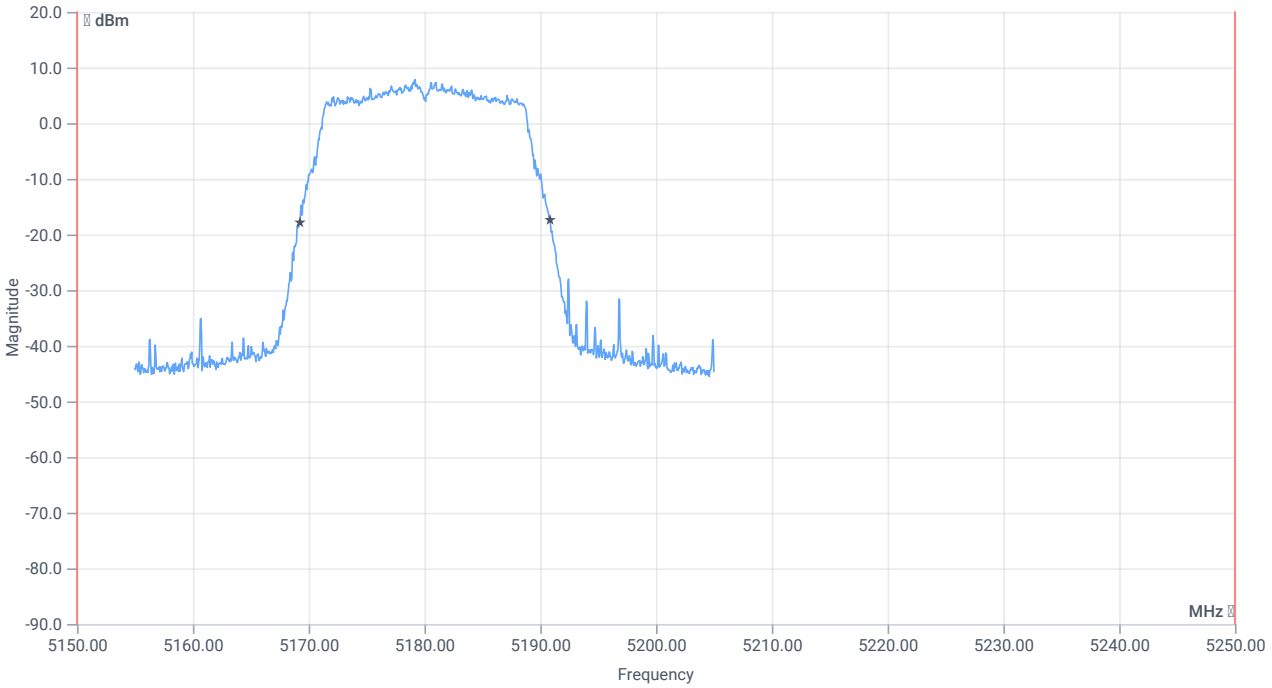
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.132	MHz	INFO
T1 99%	5150.000000	---	5170.9590	MHz	PASS
T2 99%	---	5250.000000	5189.0909	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.6	MHz	INFO
T1 26dB	5150.000000	---	5169.2500	MHz	PASS
T2 26dB	---	5250.000000	5190.8500	MHz	PASS

Verdict
PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

Test References

TC Start	10.02.2023 08:12:58
Ambit Temp [°C] | Humidity [rel%]	20.2 | 27
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 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]	1.4
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

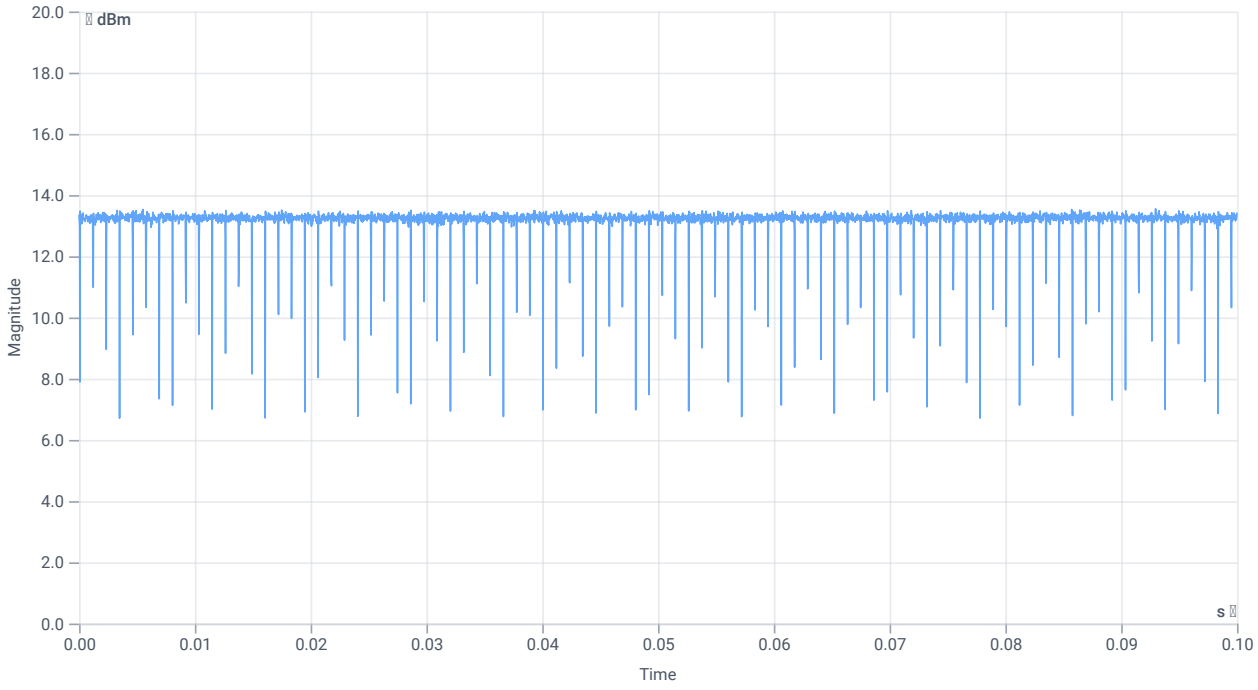
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	12.12	dBm	INFO
Ref. Frequency	---	---	5179.000	MHz	INFO

Evaluation max. Duty Cycle

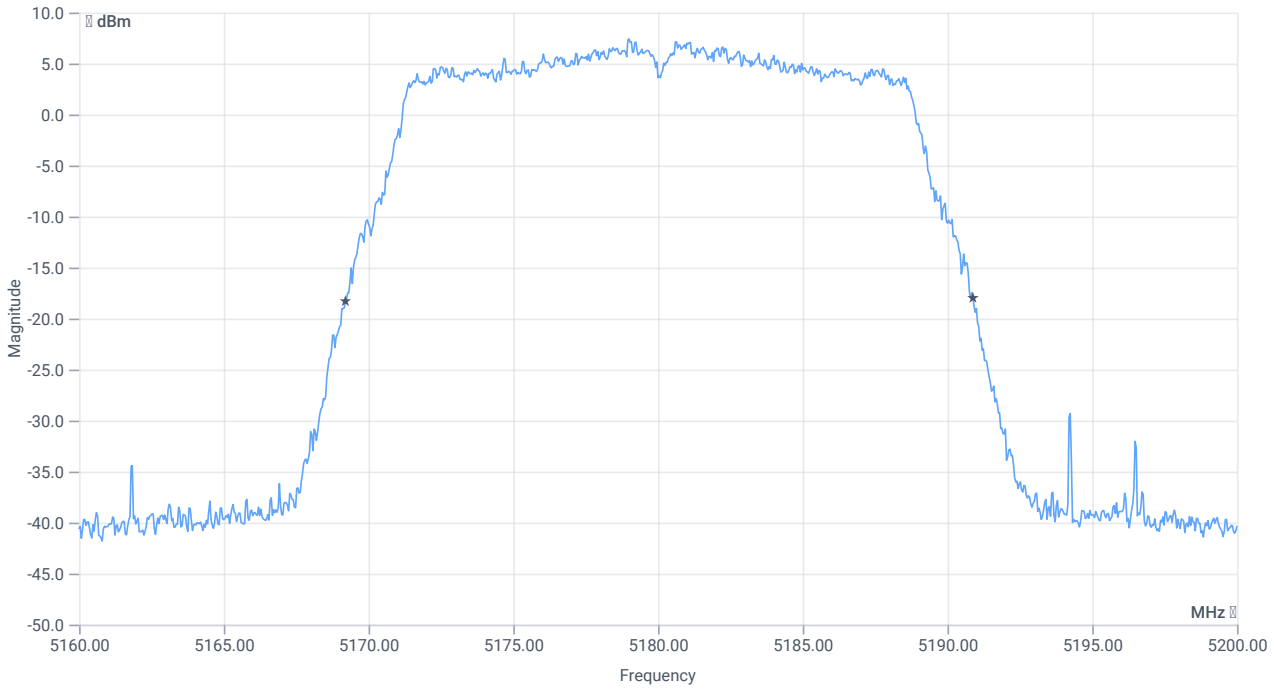
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

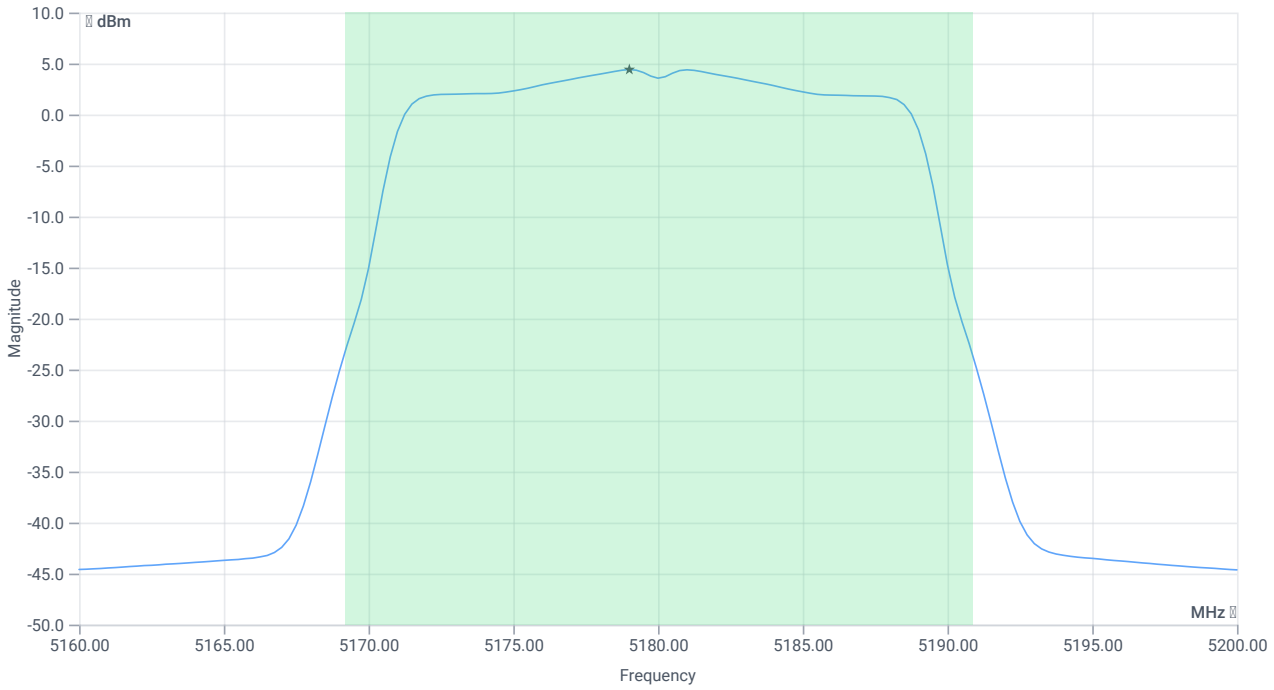
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.68	MHz	INFO
T1 26dB	---	---	5169.2000	MHz	INFO
T2 26dB	---	---	5190.8800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.12 | 16.49 | 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



Max OP and PSD

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	15.16	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.16	dBm	PASS
Limit: 11 dBm + 10 log	21.68				
Max Output Power DC corrected	---	24.36	15.16	dBm	na

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	4.41	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	4.41	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:51:11
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5720 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	19.1	dBm	INFO
Ant:1 BW 26dB	---	---	23.440	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	18.93	dBm	INFO
Ant:2 BW 26dB	---	---	21.840	MHz	INFO
∑ Limit absolute	---	24	22.03	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.84	---	24.39	22.03	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	7.03	dBm/1MHz	INFO
Ant:2 PSD	---	---	6.86	dBm/1MHz	INFO
∑	---	11	9.96	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:50:40
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

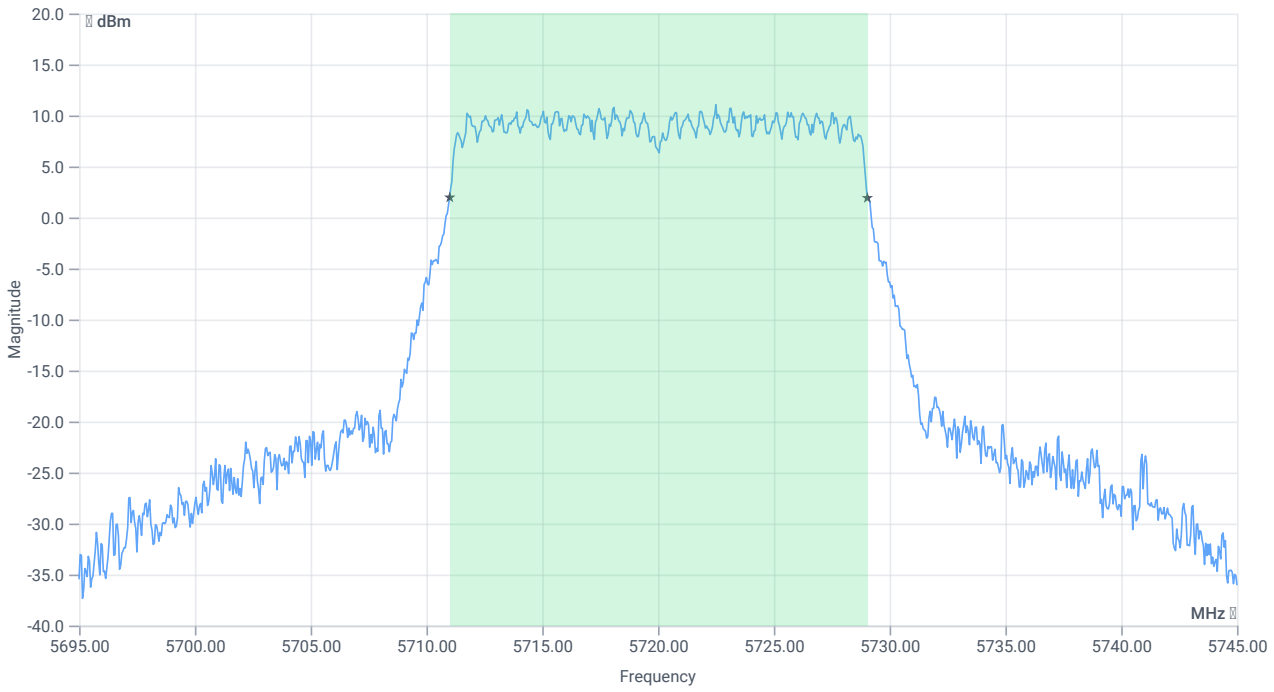
Test at TX 5720 MHz

RESULT: Reference Power cond.

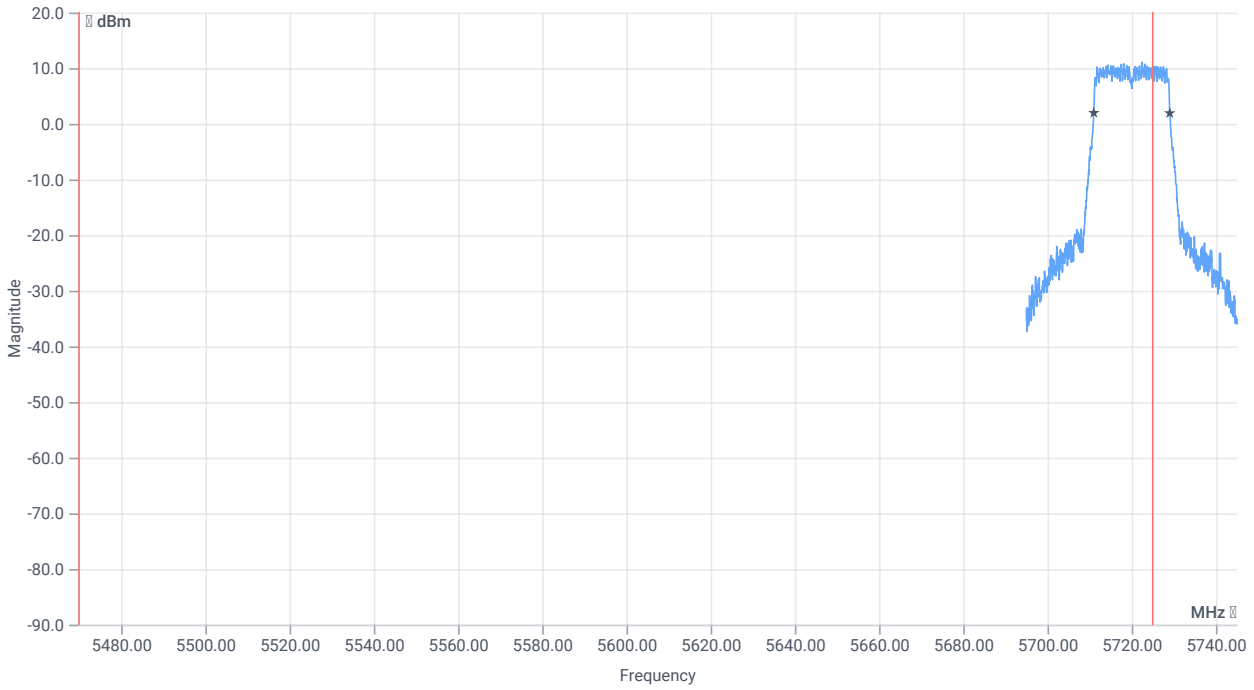
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.28	dBm	INFO
Ref. Frequency	---	---	5716.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.28 | 16.69 | 25
Start [MHz] | Stop [MHz]	5695.000 | 5745.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



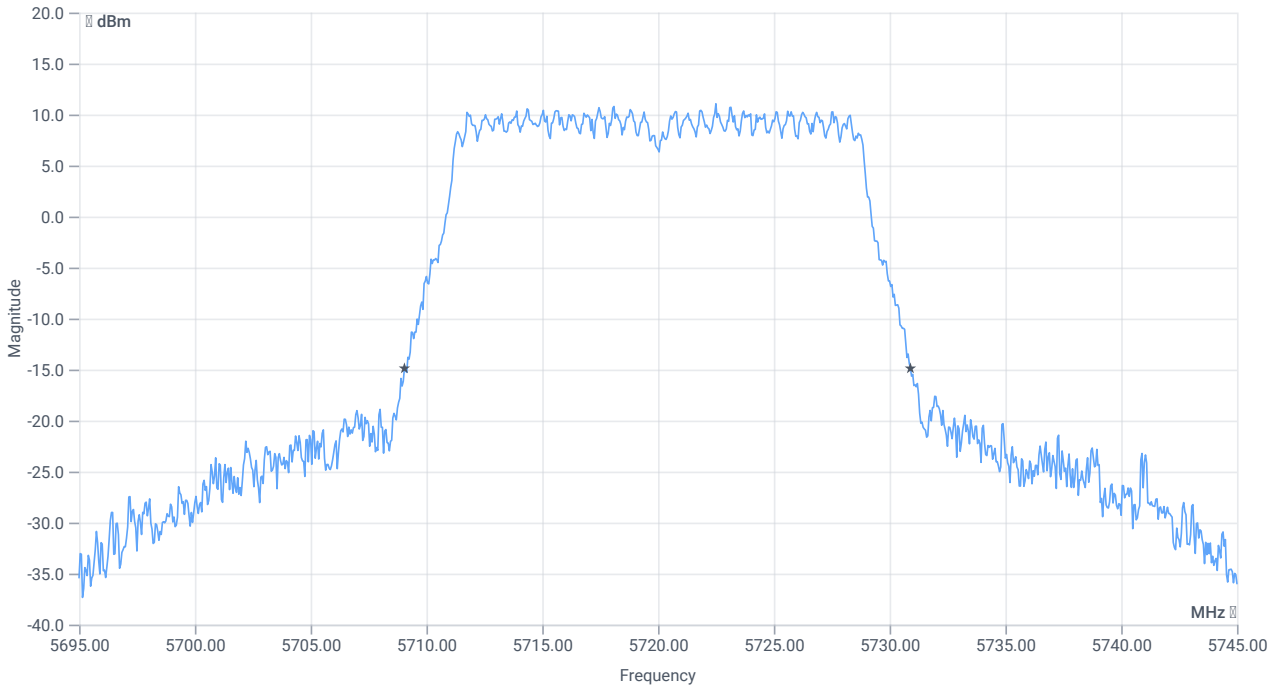
BW 99PCT



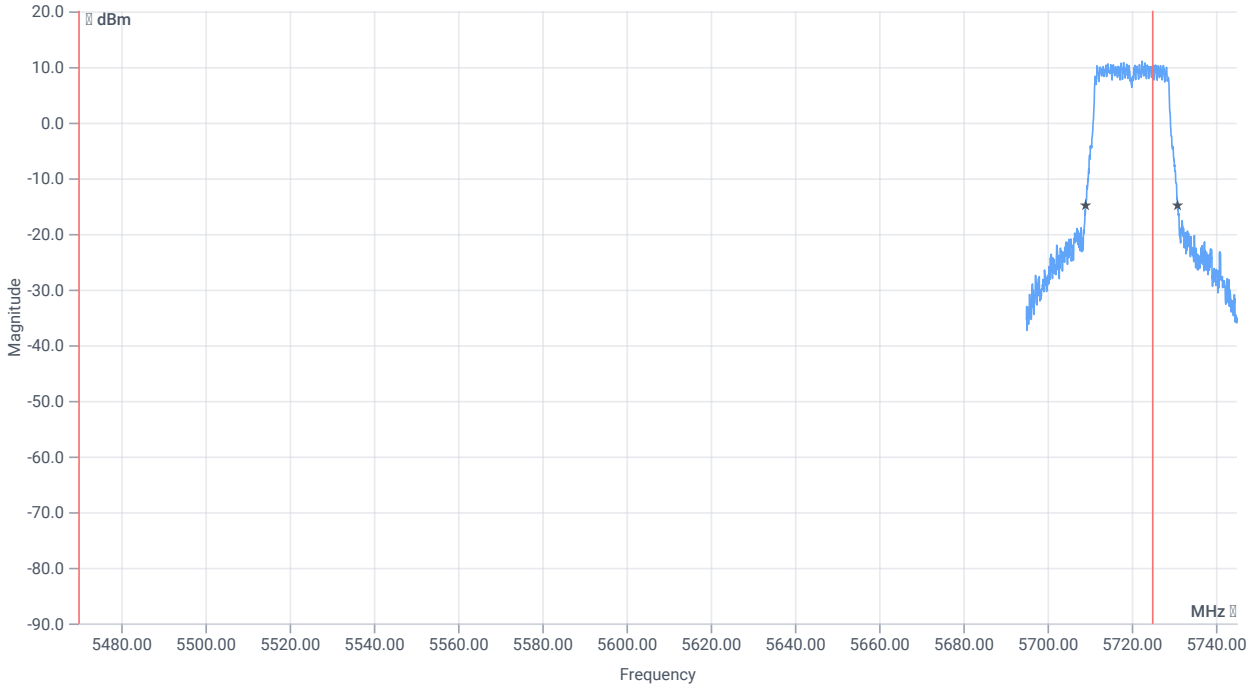
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.032	MHz	INFO
T1 99%	5470.000000	---	5711.0090	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5729.0410	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.85	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5709.0500	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5730.9000	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:49:14
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5720 MHz

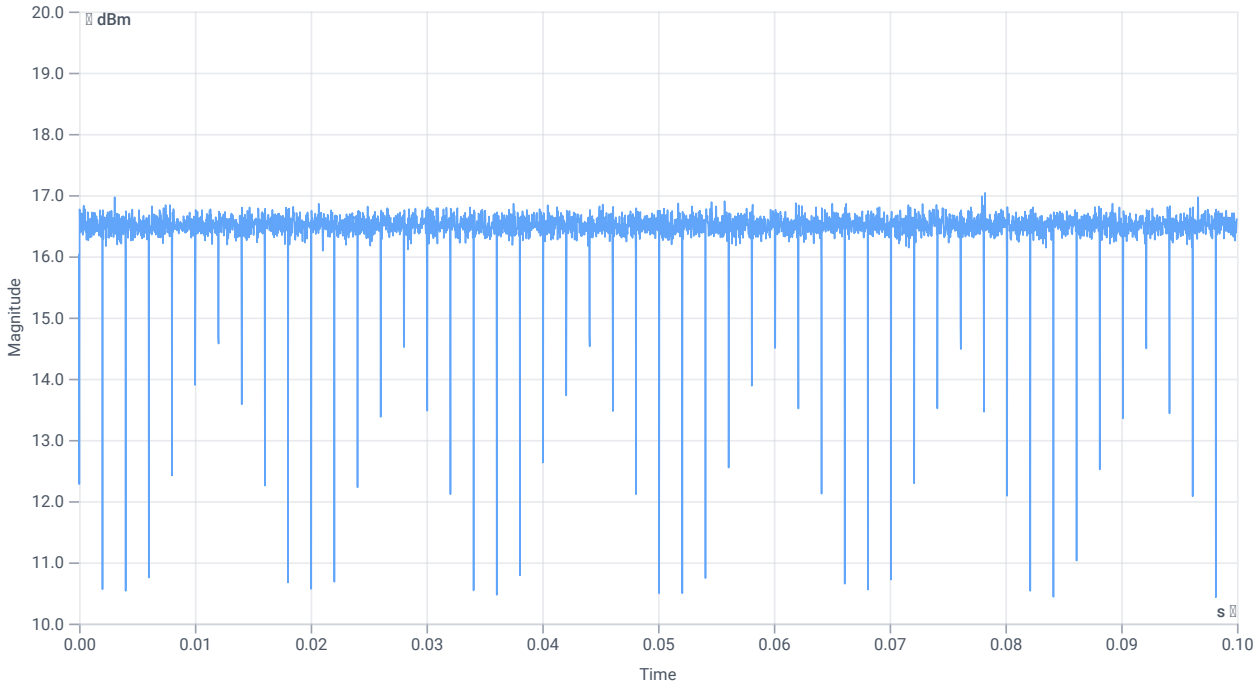
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.23	dBm	INFO
Ref. Frequency	---	---	5715.600	MHz	INFO

Evaluation max. Duty Cycle

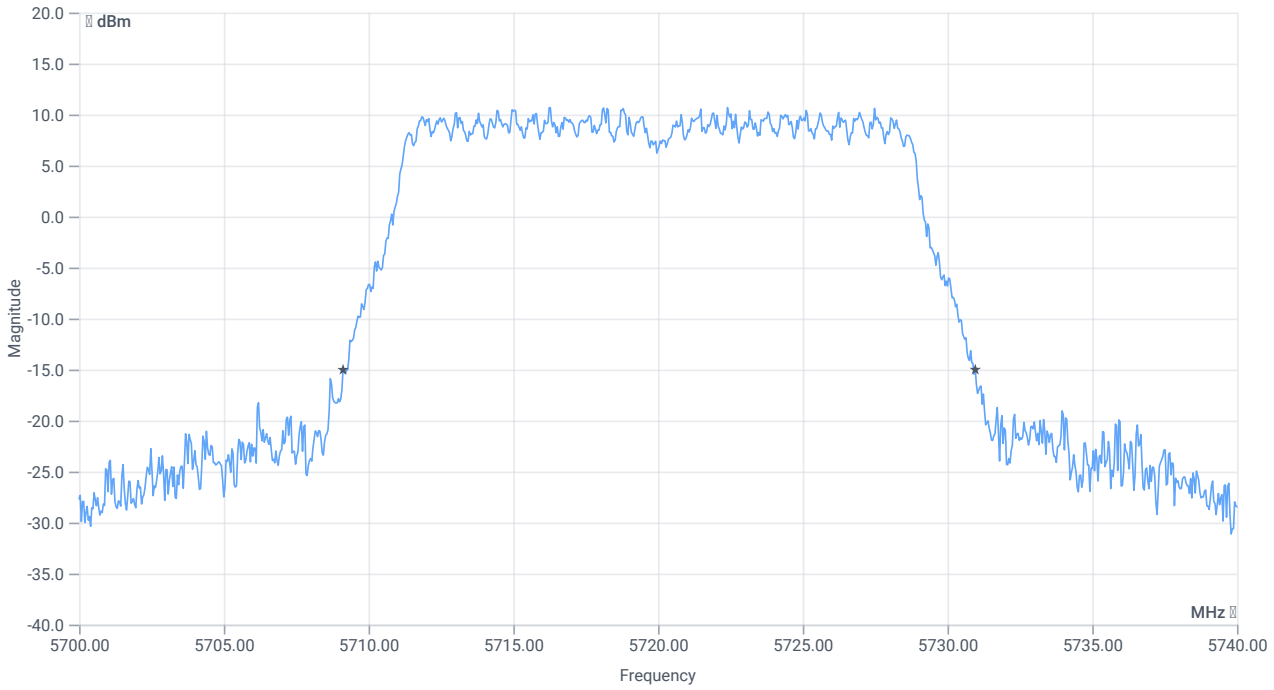
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

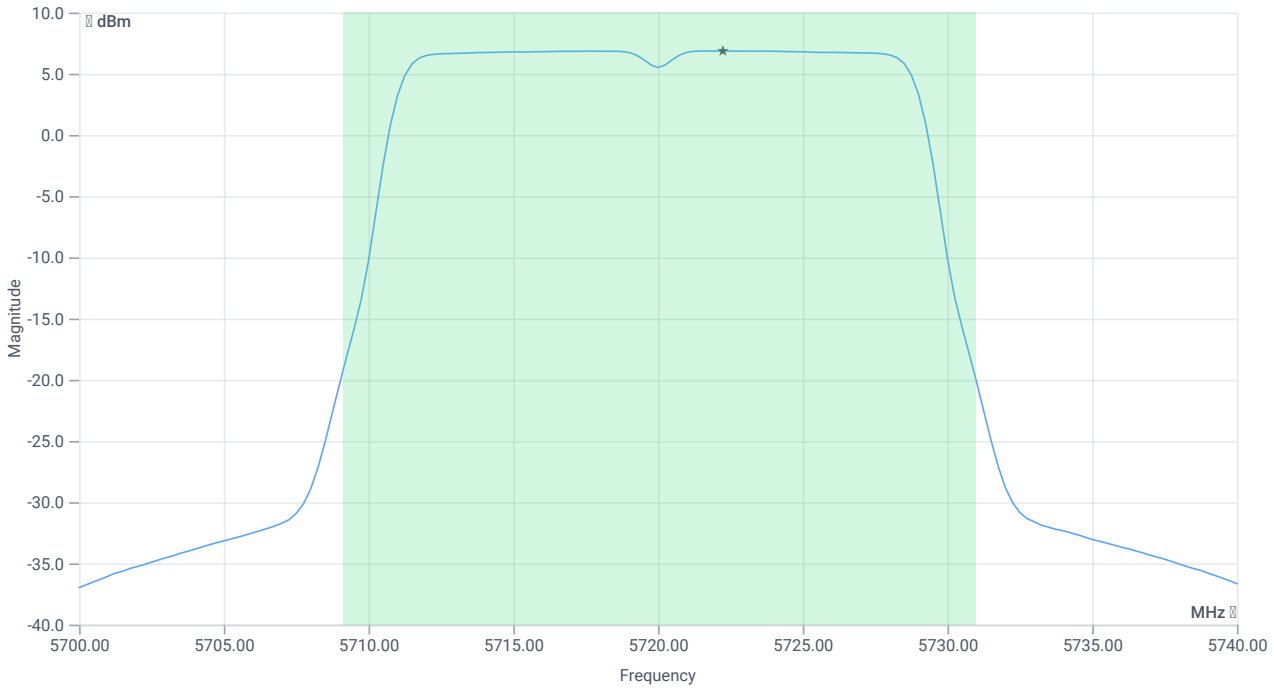
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.84	MHz	INFO
T1 26dB	---	---	5709.1200	MHz	INFO
T2 26dB	---	---	5730.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.23 | 16.69 | 25
Start [MHz] | Stop [MHz]	5700.000 | 5740.000
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	---	---	18.93	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	18.93	dBm	PASS
Limit: 11 dBm + 10 log	21.84				
Max Output Power DC corrected	---	24.39	18.93	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.86	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.86	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:48:44
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

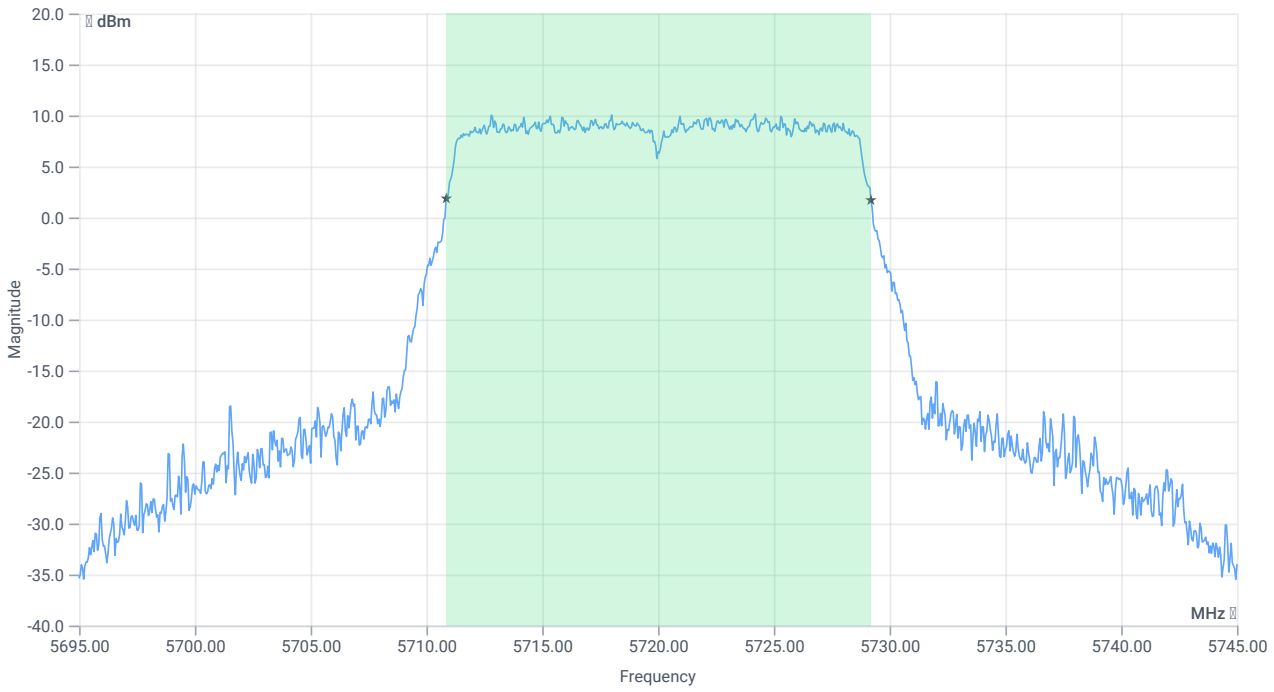
Test at TX 5720 MHz

RESULT: Reference Power cond.

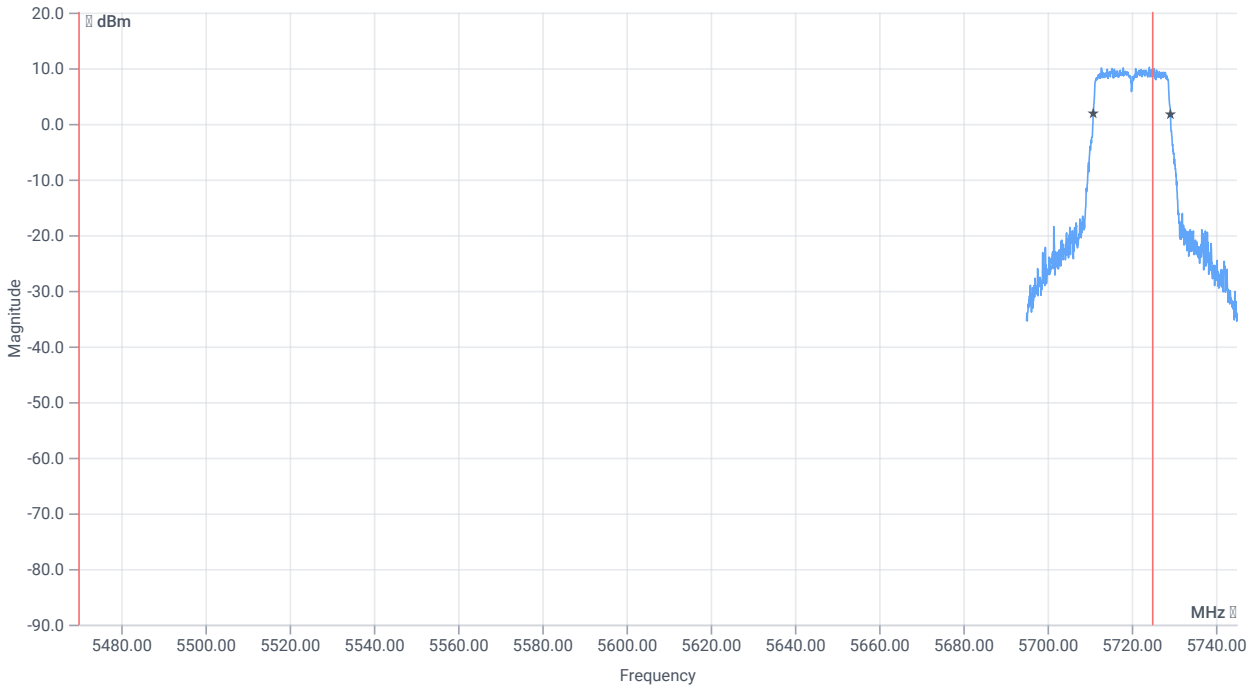
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.53	dBm	INFO
Ref. Frequency	---	---	5718.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.53 | 16.69 | 25
Start [MHz] | Stop [MHz]	5695.000 | 5745.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



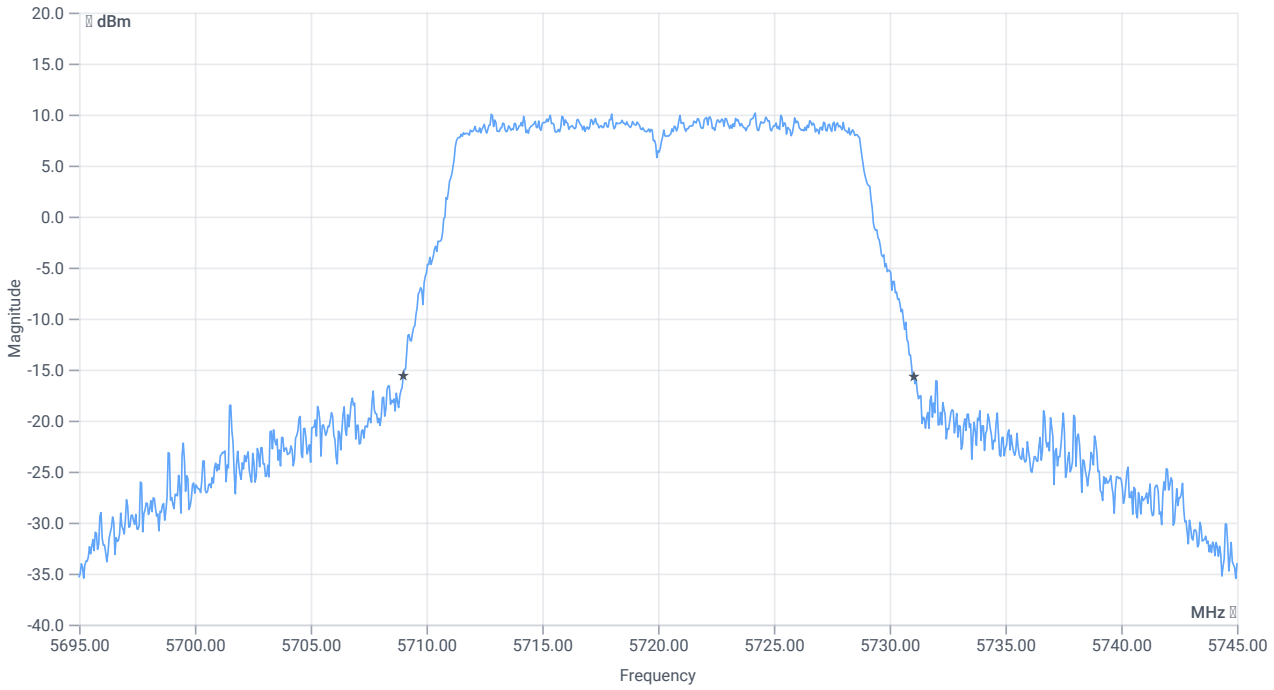
BW 99PCT



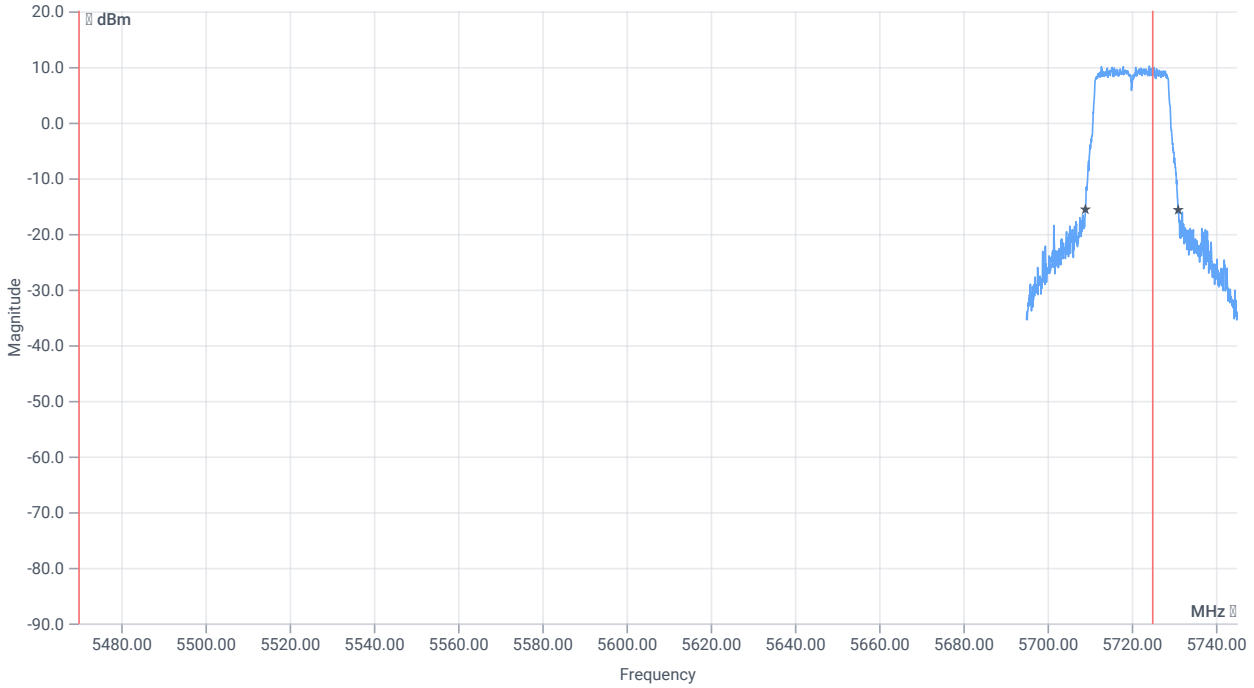
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.332	MHz	INFO
T1 99%	5470.000000	---	5710.8591	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5729.1908	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	22.05	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5709.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5731.0500	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:47:18
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5720 MHz

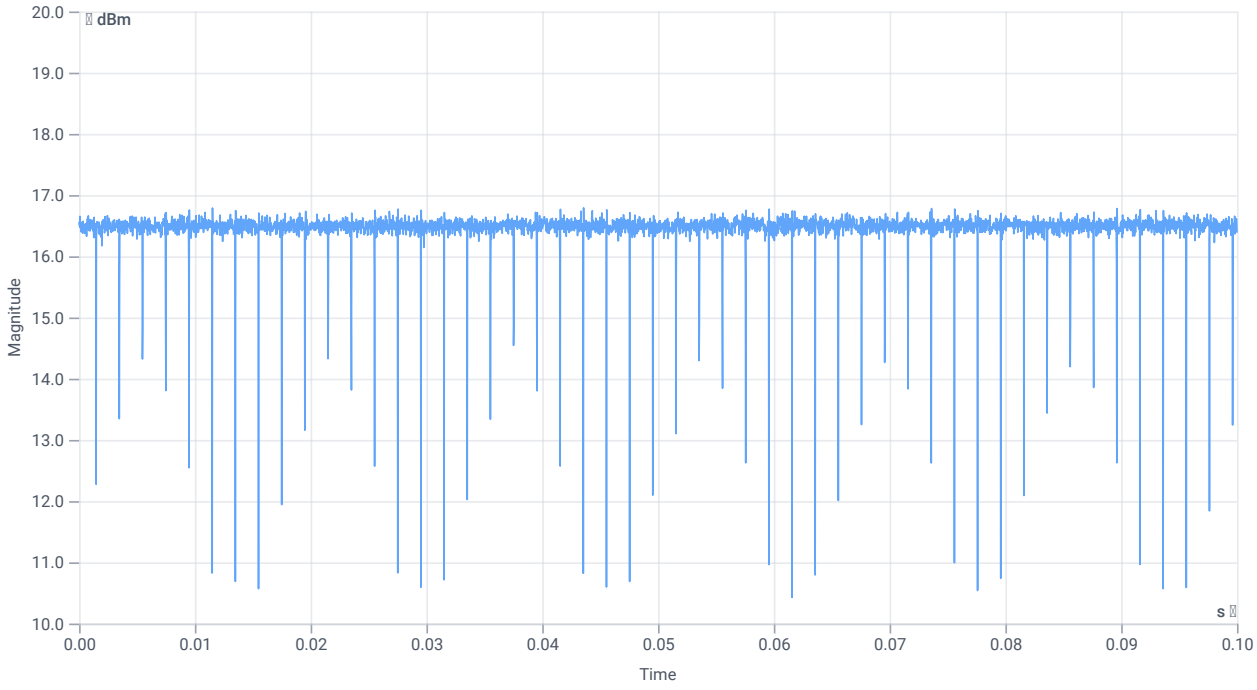
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.98	dBm	INFO
Ref. Frequency	---	---	5723.800	MHz	INFO

Evaluation max. Duty Cycle

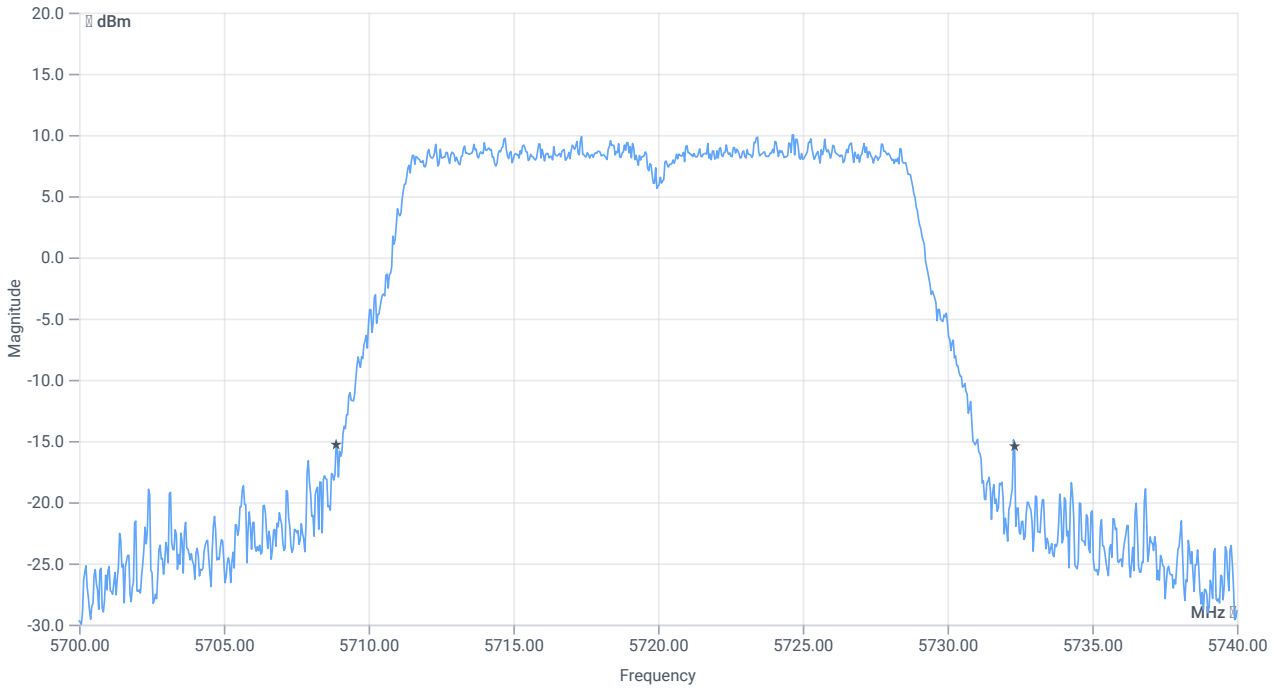
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

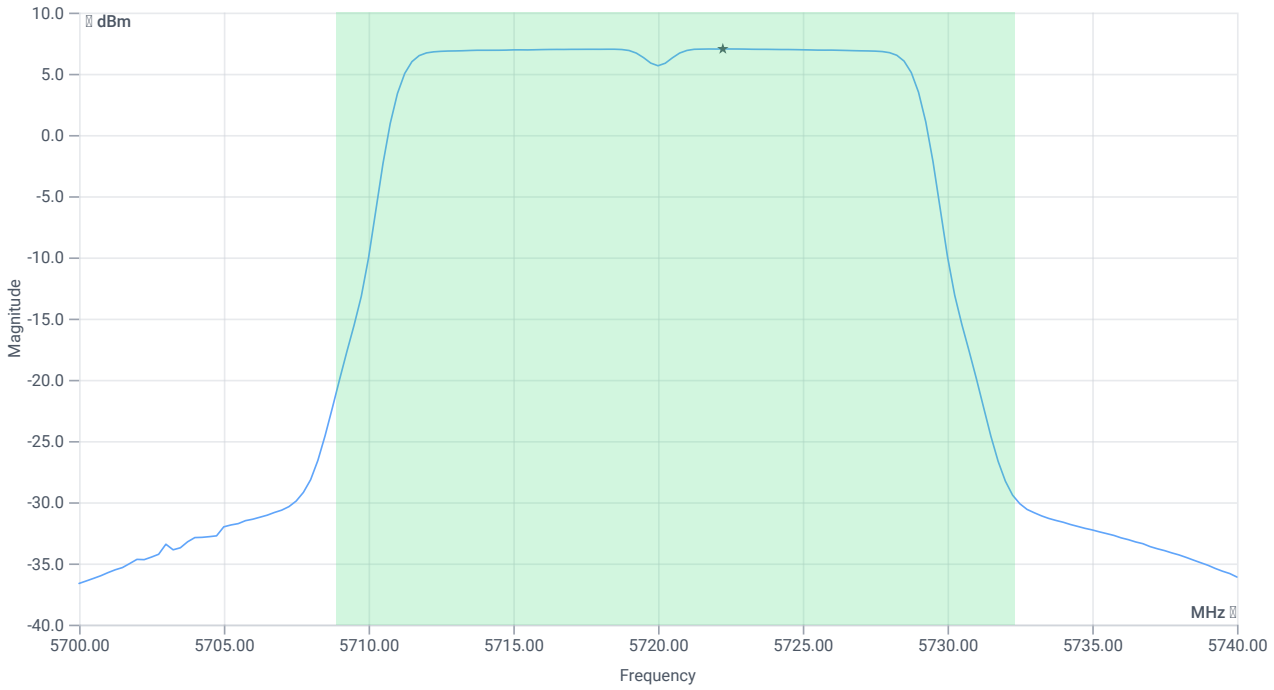
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	23.44	MHz	INFO
T1 26dB	---	---	5708.8800	MHz	INFO
T2 26dB	---	---	5732.3200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.98 | 16.69 | 25
Start [MHz] | Stop [MHz]	5700.000 | 5740.000
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	---	---	19.1	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.1	dBm	PASS
Limit: 11 dBm + 10 log	23.44				
Max Output Power DC corrected	---	24.7	19.1	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	7.03	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	7.03	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:40:57
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5600 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 Max Output Power DC corrected	---	---	18.77	dBm	INFO
Ant:2 BW 26dB	---	---	21.800	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	18.87	dBm	INFO
Ant:1 BW 26dB	---	---	21.760	MHz	INFO
∑ Limit absolute	---	24	21.83	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.76	---	24.38	21.83	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 PSD	---	---	6.75	dBm/1MHz	INFO
Ant:1 PSD	---	---	6.82	dBm/1MHz	INFO
∑	---	11	9.8	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:40:27
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

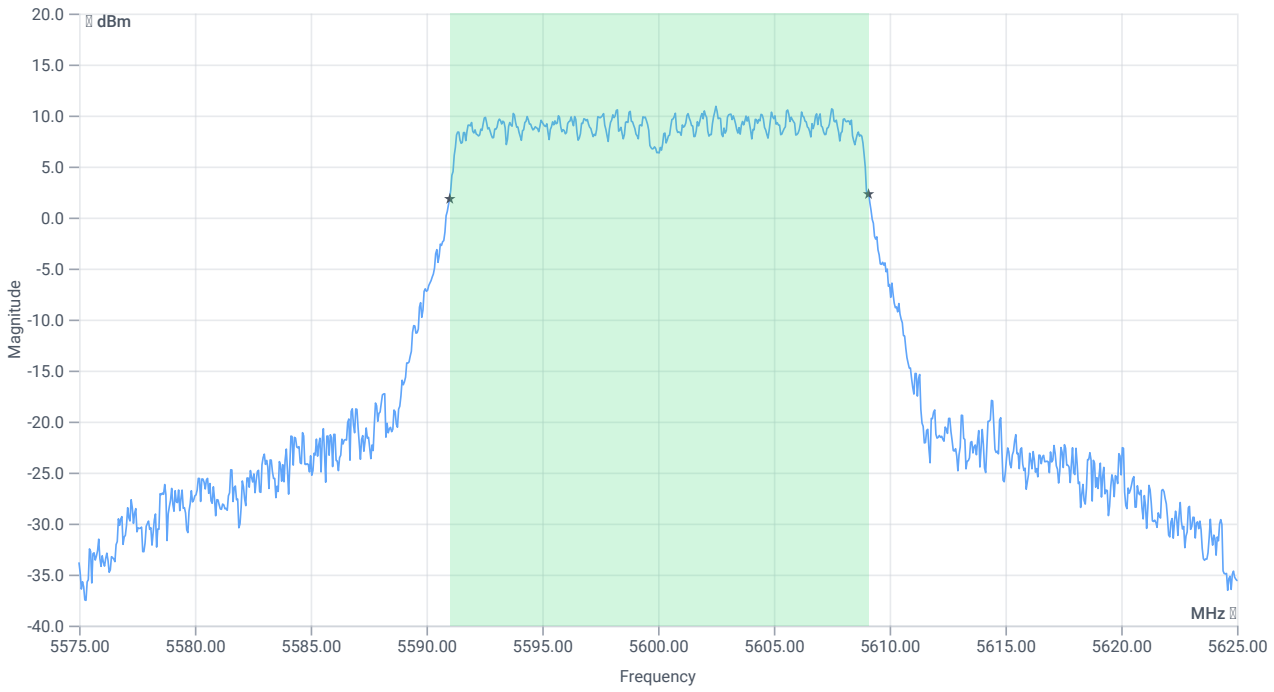
Test at TX 5600 MHz

RESULT: Reference Power cond.

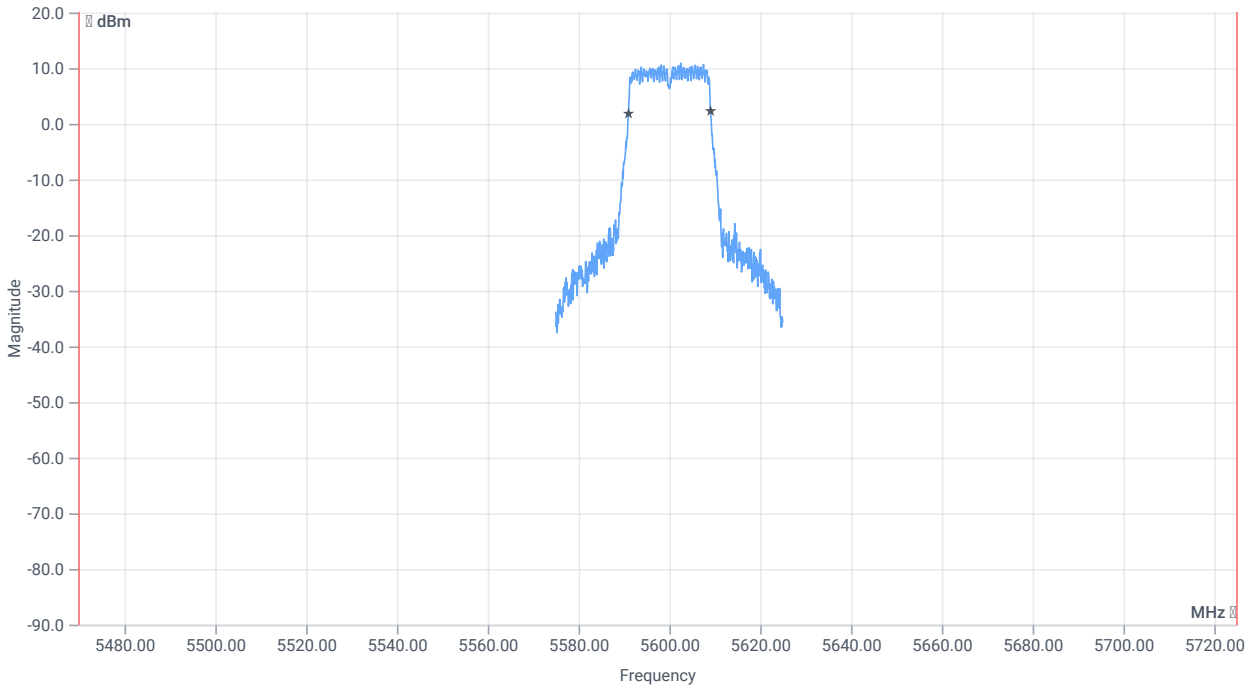
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.84	dBm	INFO
Ref. Frequency	---	---	5602.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.84 | 16.74 | 25
Start [MHz] | Stop [MHz]	5575.000 | 5625.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



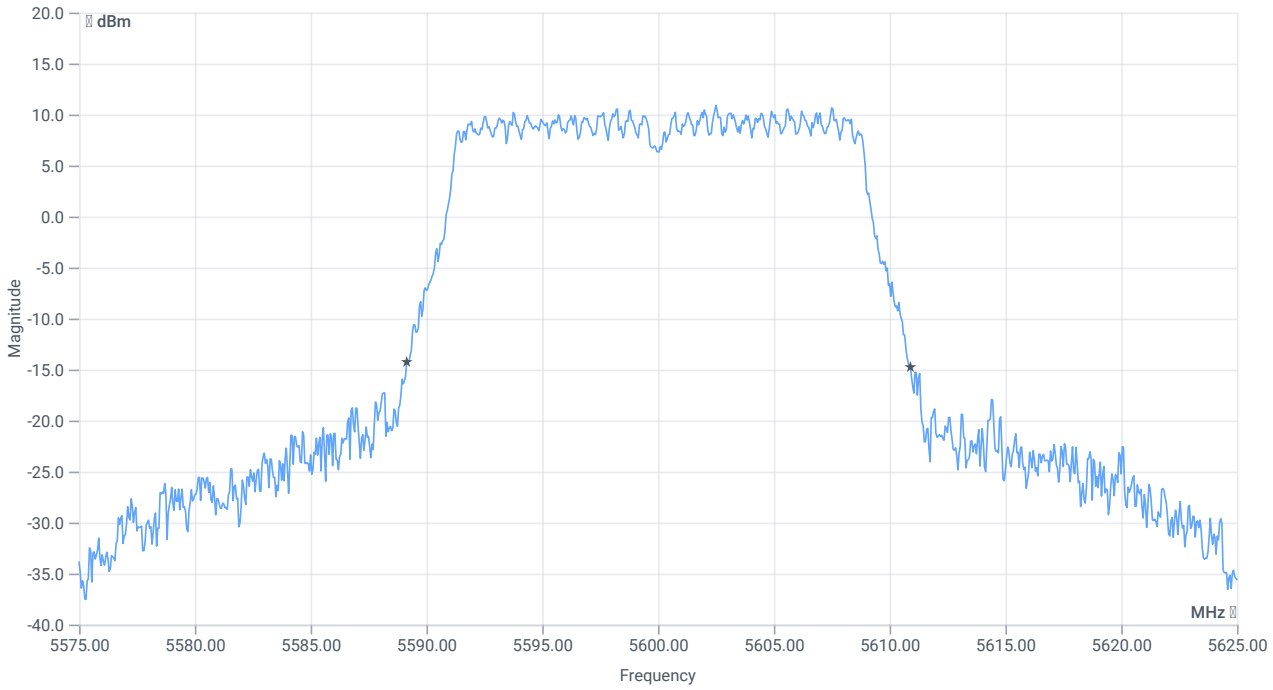
BW 99PCT



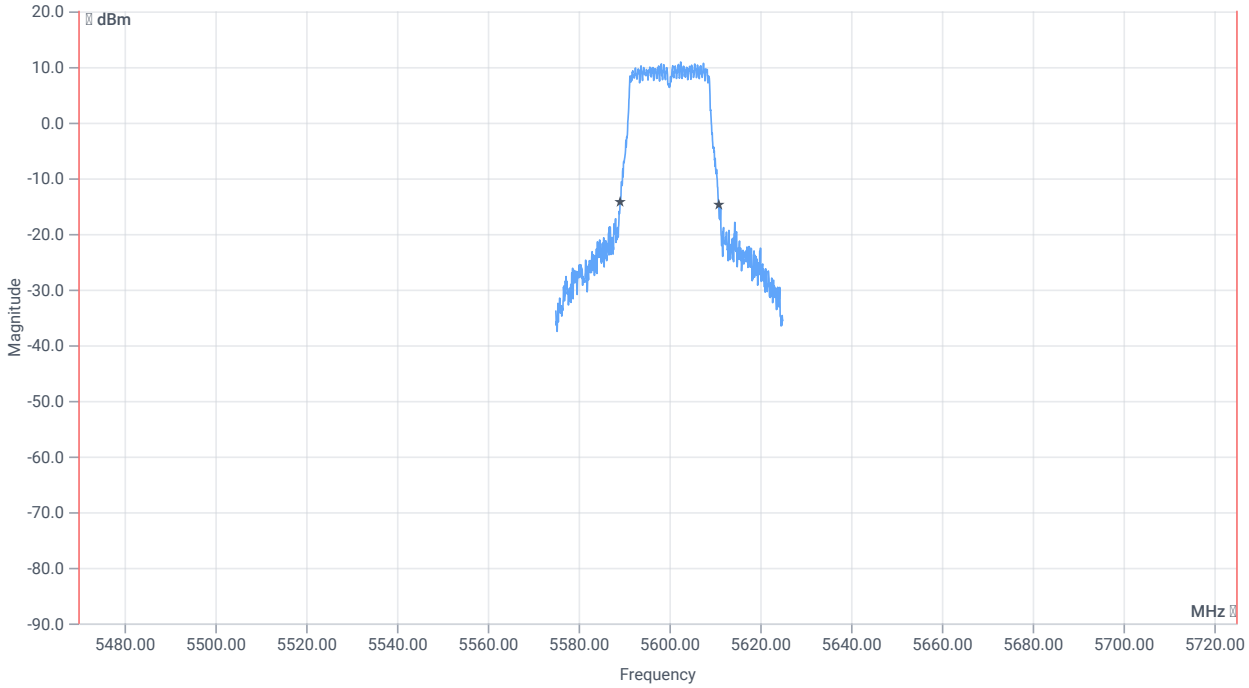
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.082	MHz	INFO
T1 99%	5470.000000	---	5591.0090	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5609.0909	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.75	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5589.1500	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5610.9000	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:39:00
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5600 MHz

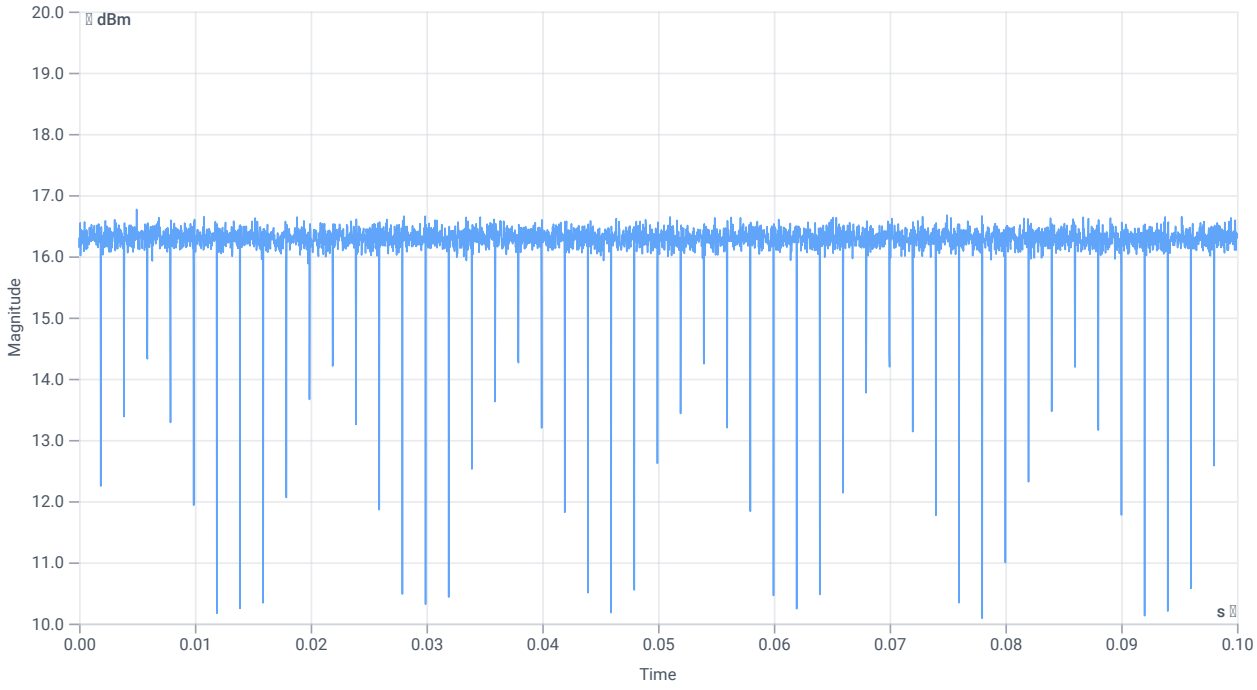
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.04	dBm	INFO
Ref. Frequency	---	---	5601.800	MHz	INFO

Evaluation max. Duty Cycle

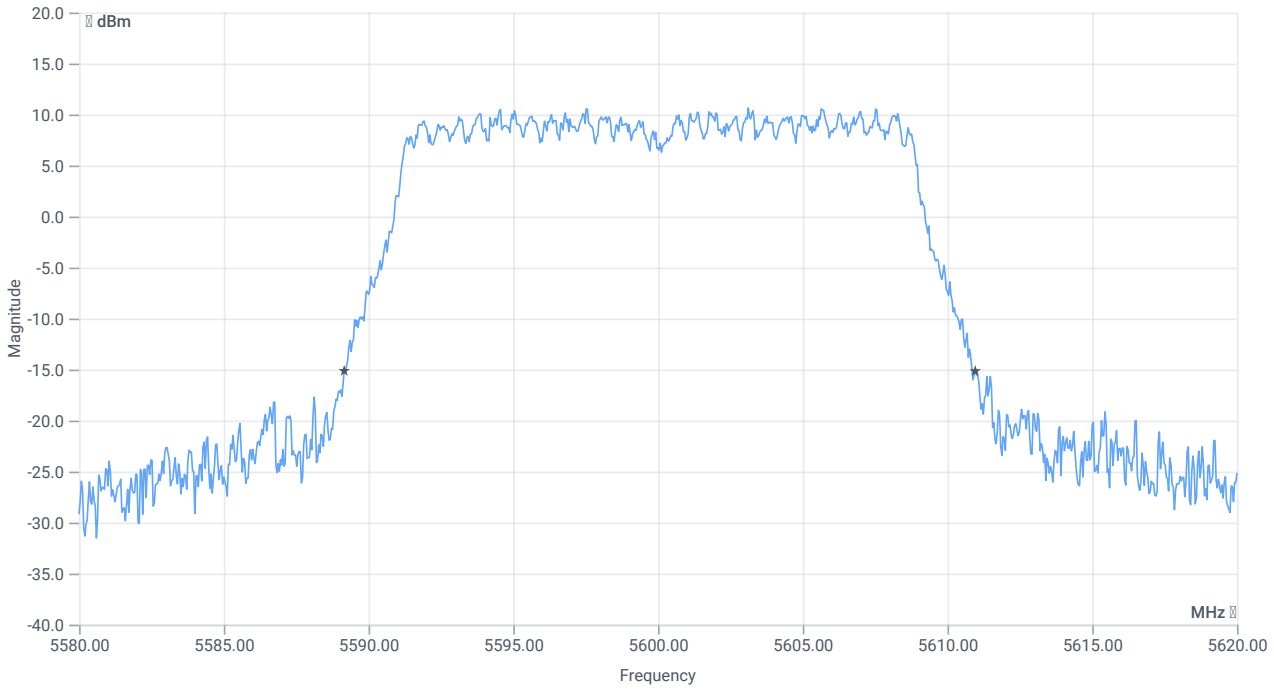
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

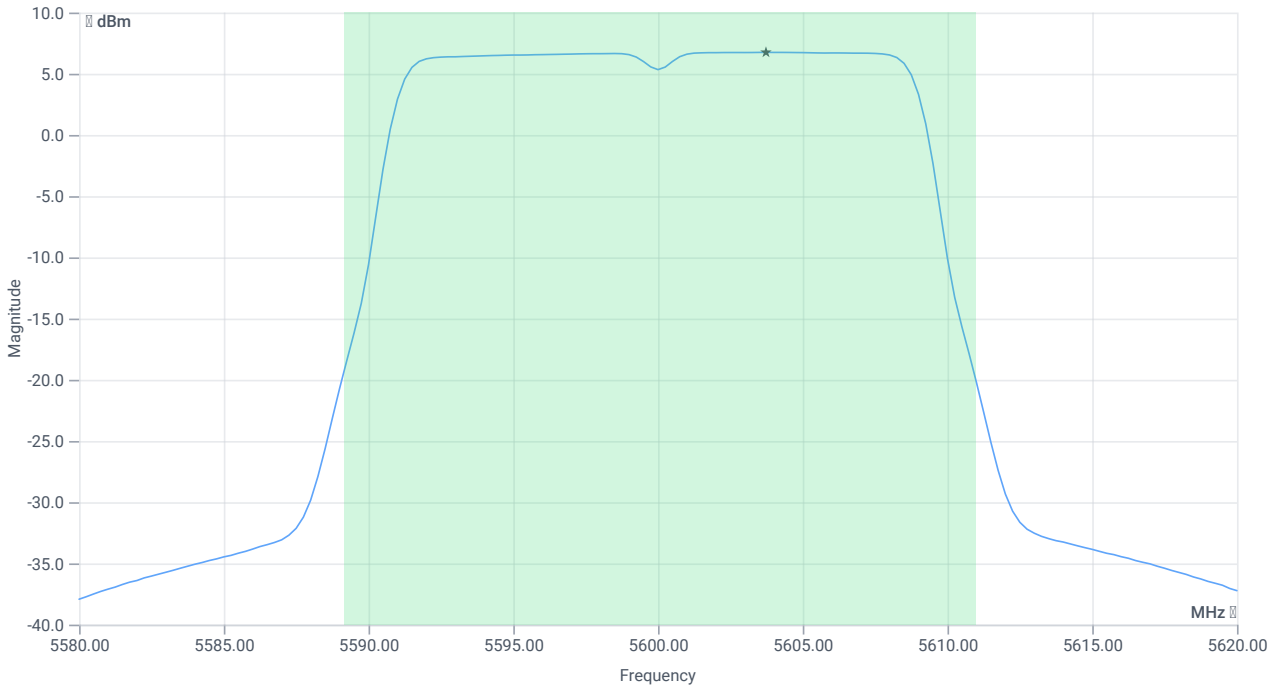
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.8	MHz	INFO
T1 26dB	---	---	5589.1600	MHz	INFO
T2 26dB	---	---	5610.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.04 | 16.74 | 25
Start [MHz] | Stop [MHz]	5580.000 | 5620.000
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	---	---	18.77	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	18.77	dBm	PASS
Limit: 11 dBm + 10 log	21.8				
Max Output Power DC corrected	---	24.38	18.77	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.75	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.75	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:38:29
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

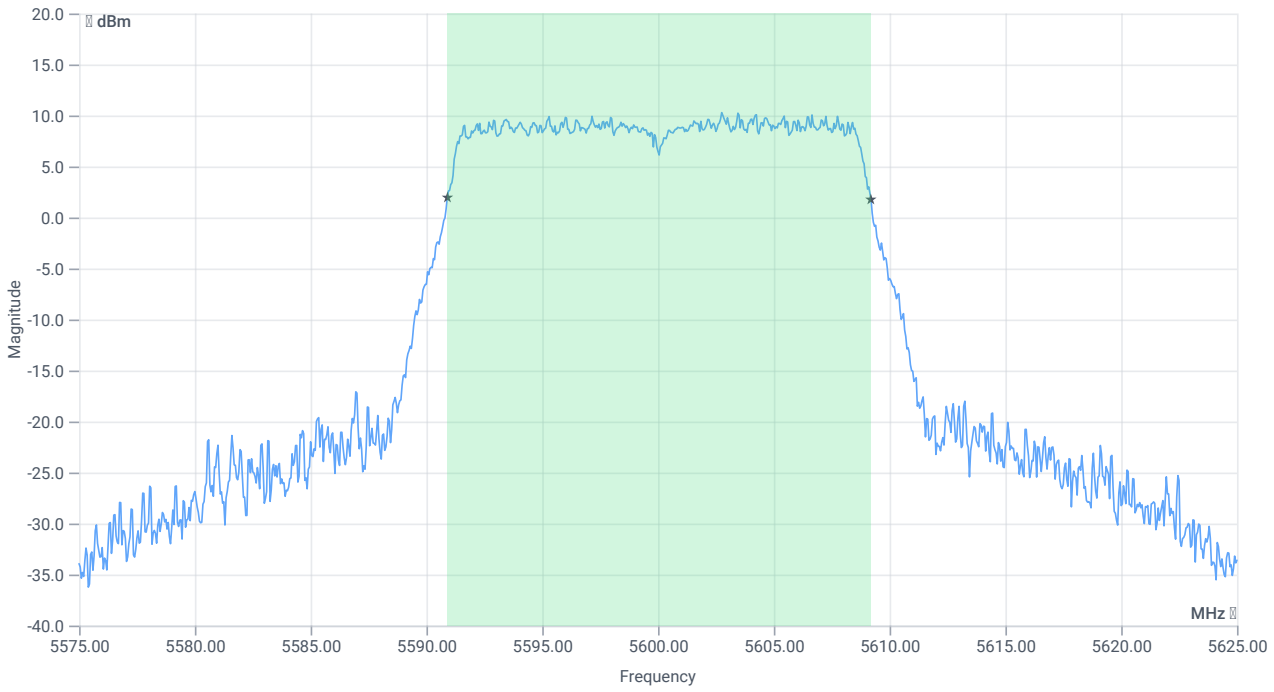
Test at TX 5600 MHz

RESULT: Reference Power cond.

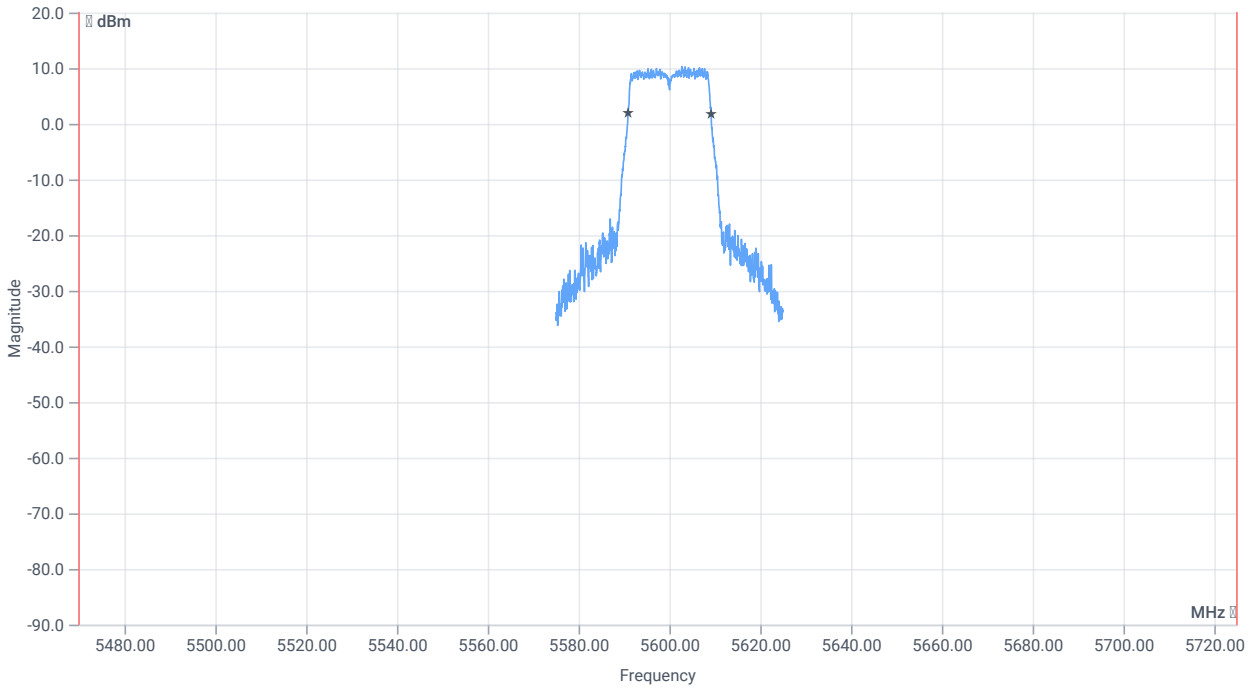
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.76	dBm	INFO
Ref. Frequency	---	---	5592.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.76 | 16.74 | 25
Start [MHz] | Stop [MHz]	5575.000 | 5625.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



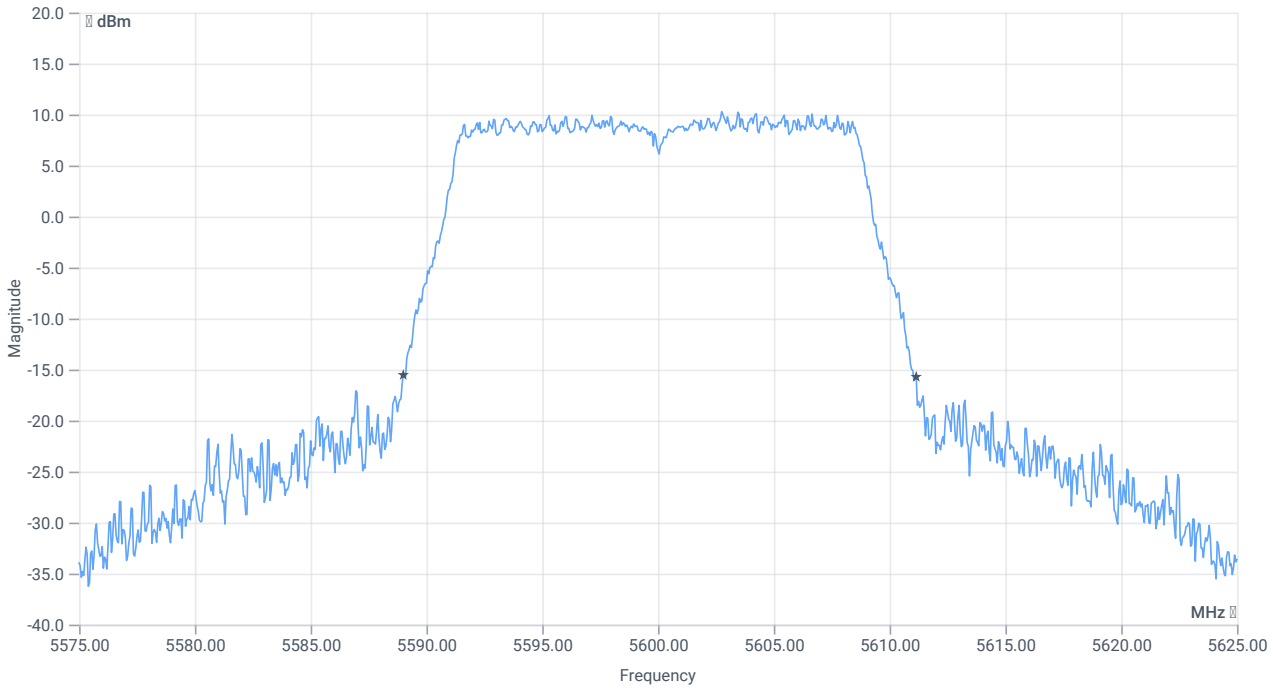
BW 99PCT



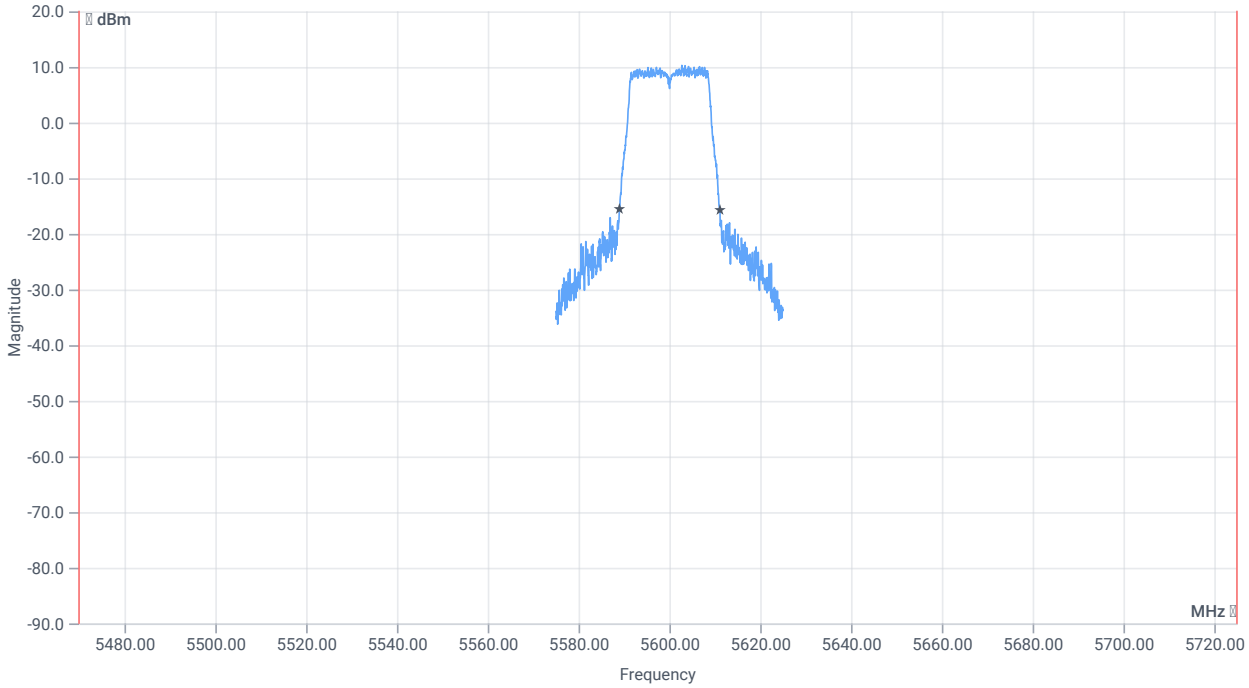
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.282	MHz	INFO
T1 99%	5470.000000	---	5590.9091	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5609.1908	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	22.15	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5589.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5611.1500	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:37:03
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5600 MHz

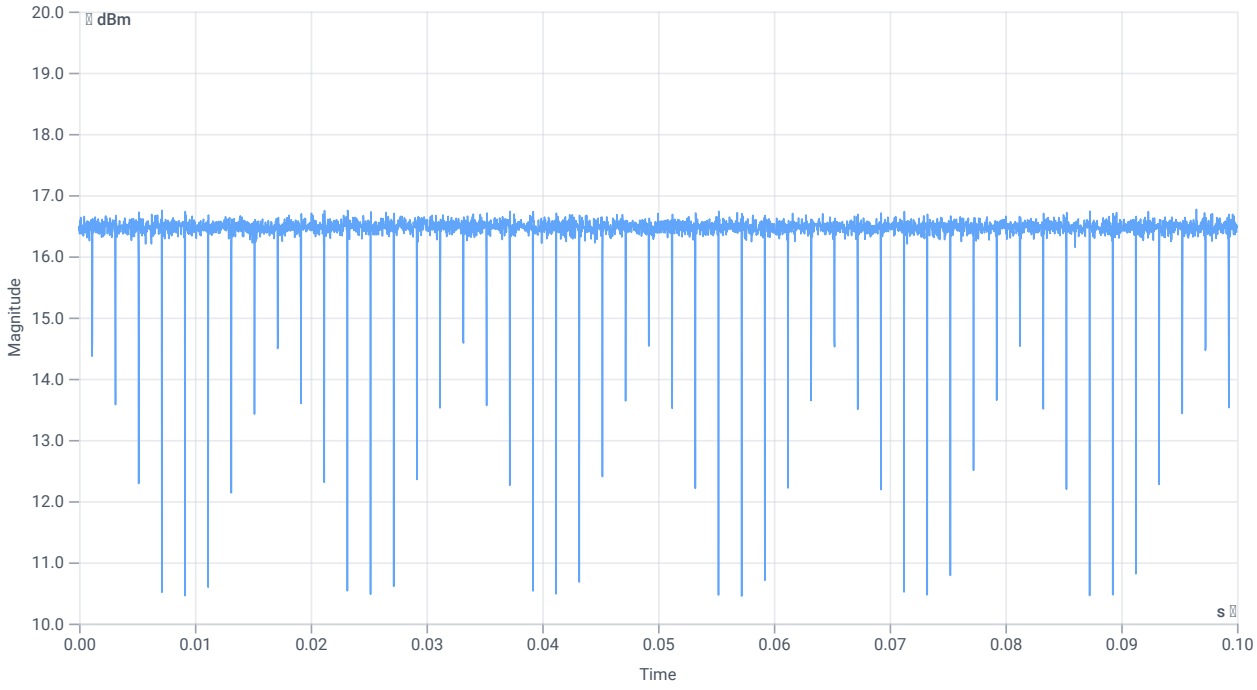
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.94	dBm	INFO
Ref. Frequency	---	---	5602.800	MHz	INFO

Evaluation max. Duty Cycle

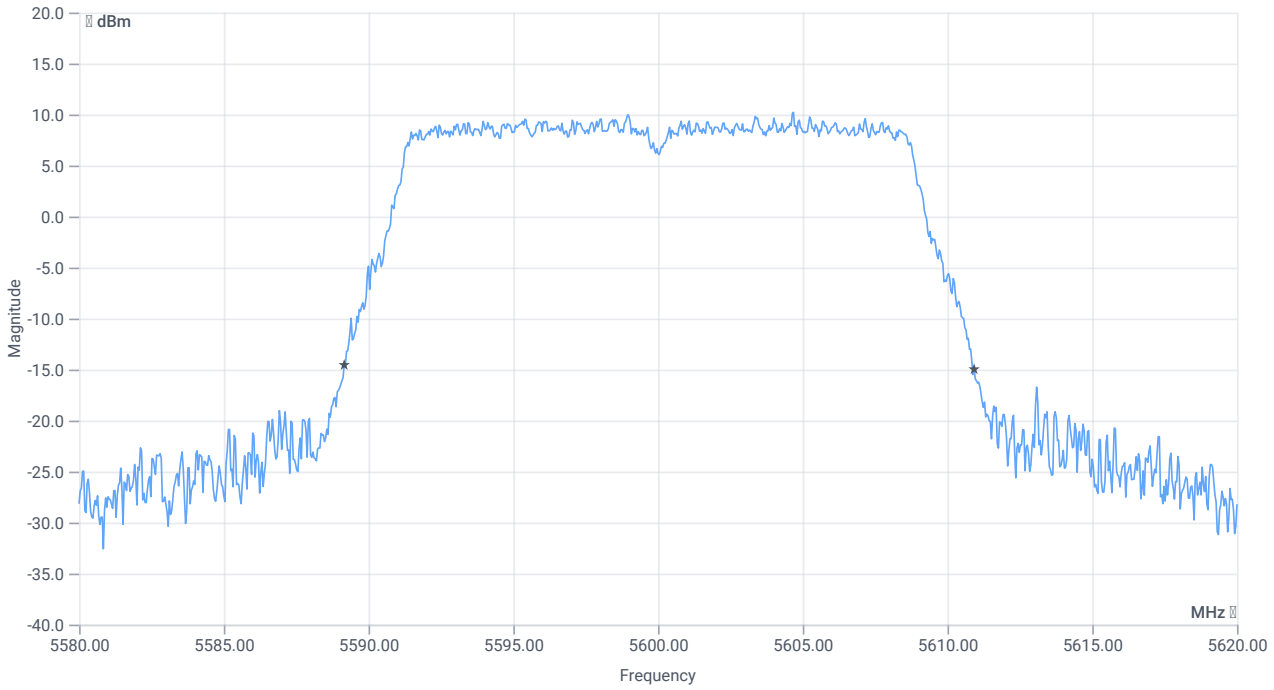
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

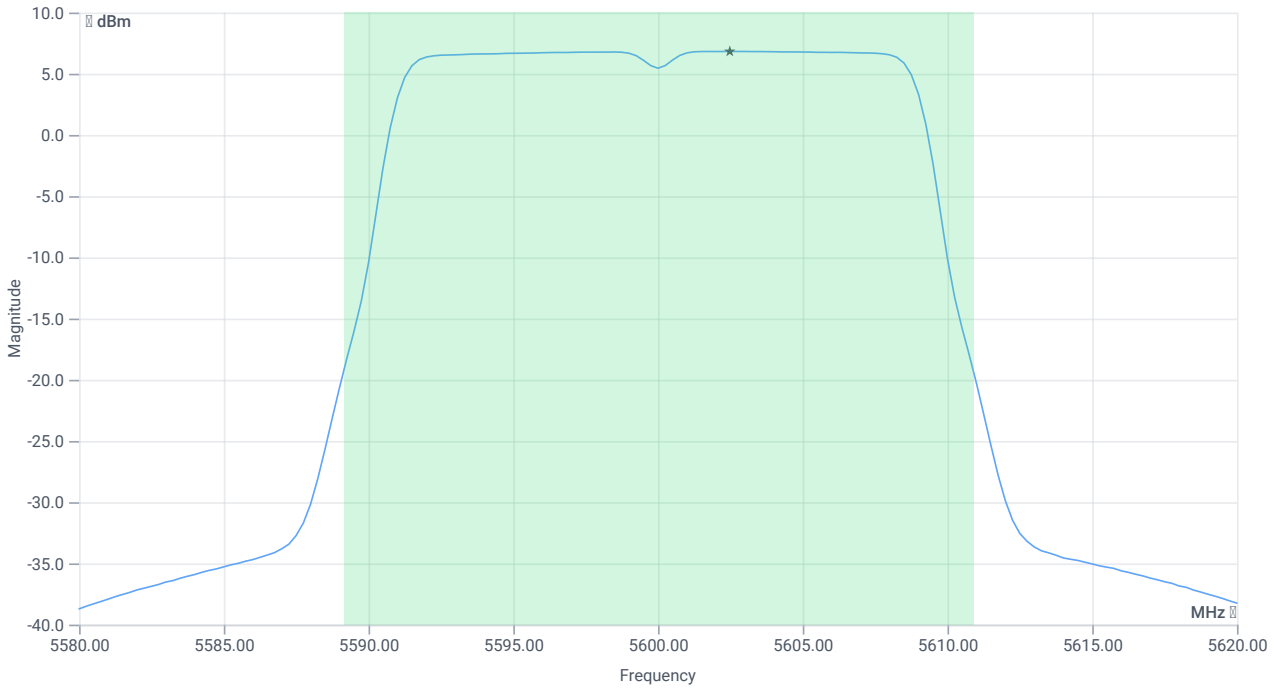
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5589.1600	MHz	INFO
T2 26dB	---	---	5610.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.94 | 16.74 | 25
Start [MHz] | Stop [MHz]	5580.000 | 5620.000
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	---	---	18.87	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	18.87	dBm	PASS
Limit: 11 dBm + 10 log	21.76				
Max Output Power DC corrected	---	24.38	18.87	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.82	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.82	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:35:09
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5500 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 Max Output Power DC corrected	---	---	17.65	dBm	INFO
Ant:2 BW 26dB	---	---	21.760	MHz	INFO
Ant:1 Max Output Power DC corrected	---	---	17.51	dBm	INFO
Ant:1 BW 26dB	---	---	21.880	MHz	INFO
∑ Limit absolute	---	24	20.59	dBm	PASS
∑ Limit: 11 dBm + 10 log 21.76	---	24.38	20.59	dBm	PASS

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:2 PSD	---	---	6.94	dBm/1MHz	INFO
Ant:1 PSD	---	---	6.75	dBm/1MHz	INFO
∑	---	11	9.86	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:34:38
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

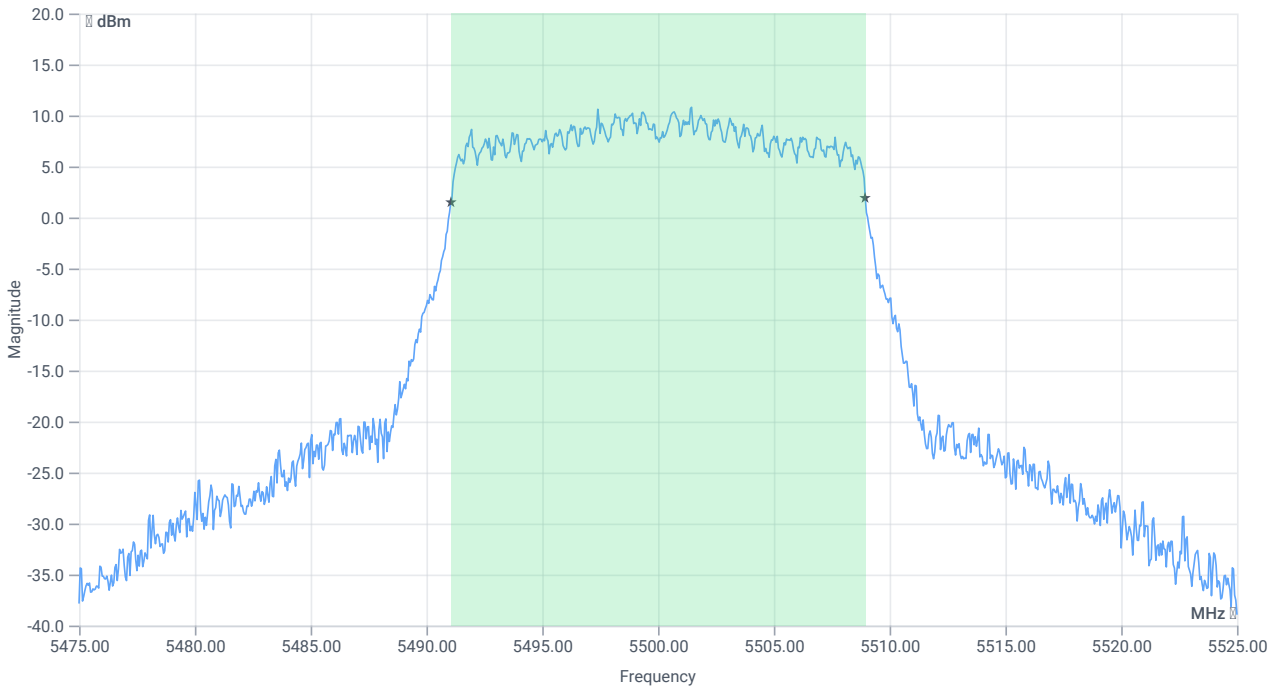
Test at TX 5500 MHz

RESULT: Reference Power cond.

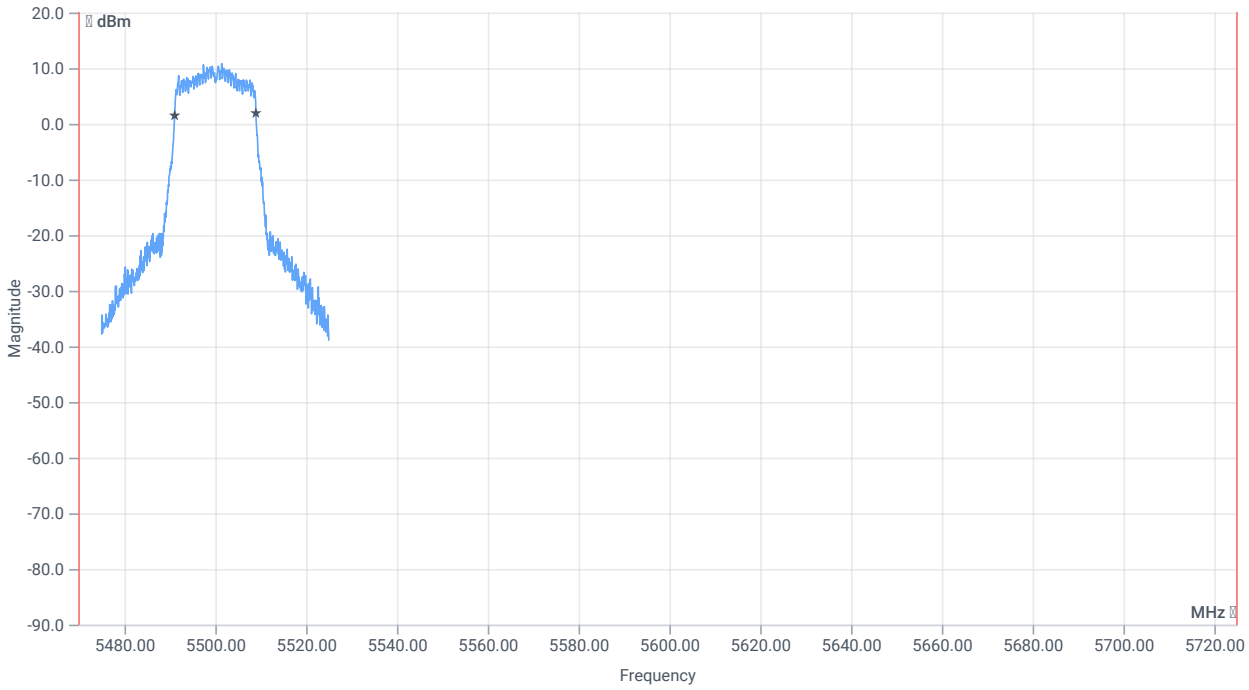
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.13	dBm	INFO
Ref. Frequency	---	---	5499.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.13 | 16.7 | 25
Start [MHz] | Stop [MHz]	5475.000 | 5525.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



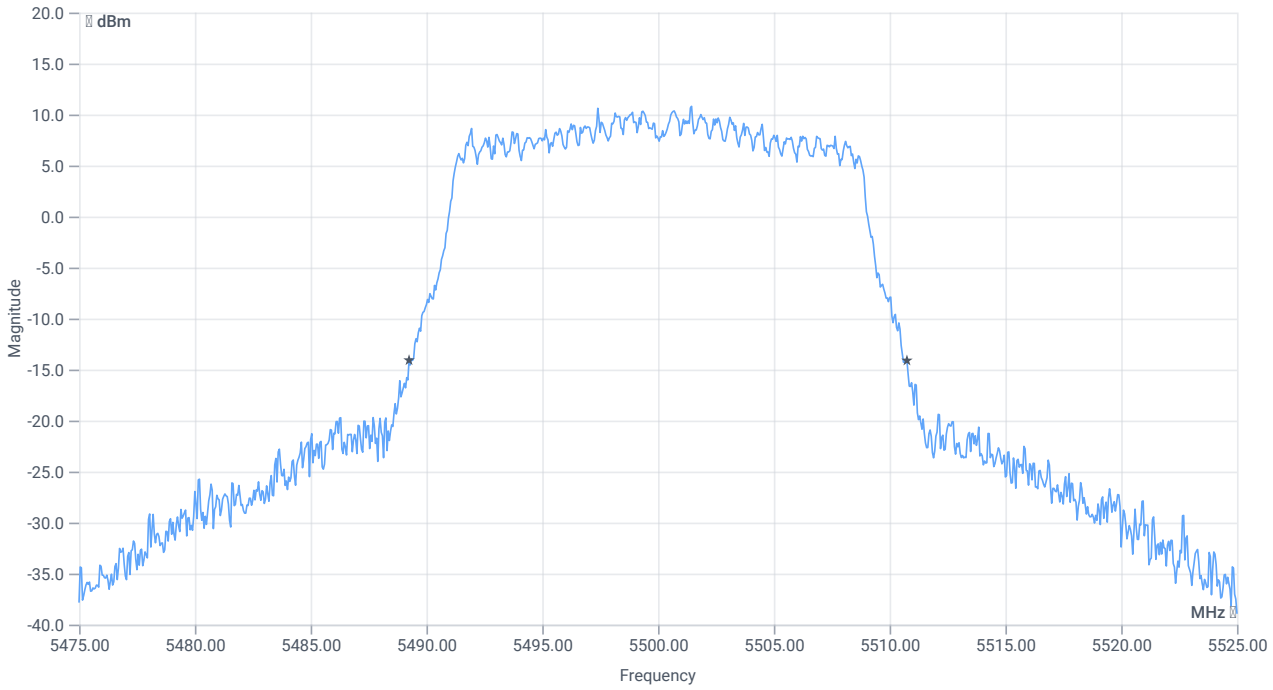
BW 99PCT



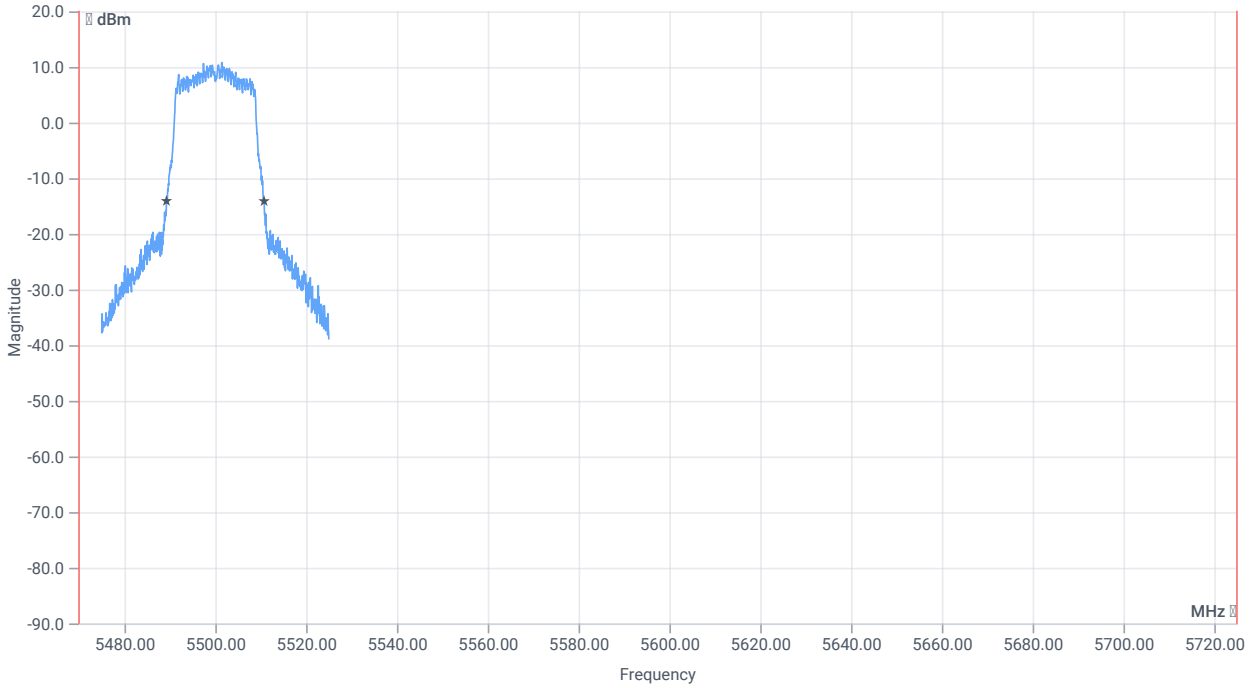
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	17.882	MHz	INFO
T1 99%	5470.000000	---	5491.0589	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5508.9411	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.5	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5489.2500	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5510.7500	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:33:12
Ambit Temp [°C] | Humidity [rel%]	22.6 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5500 MHz

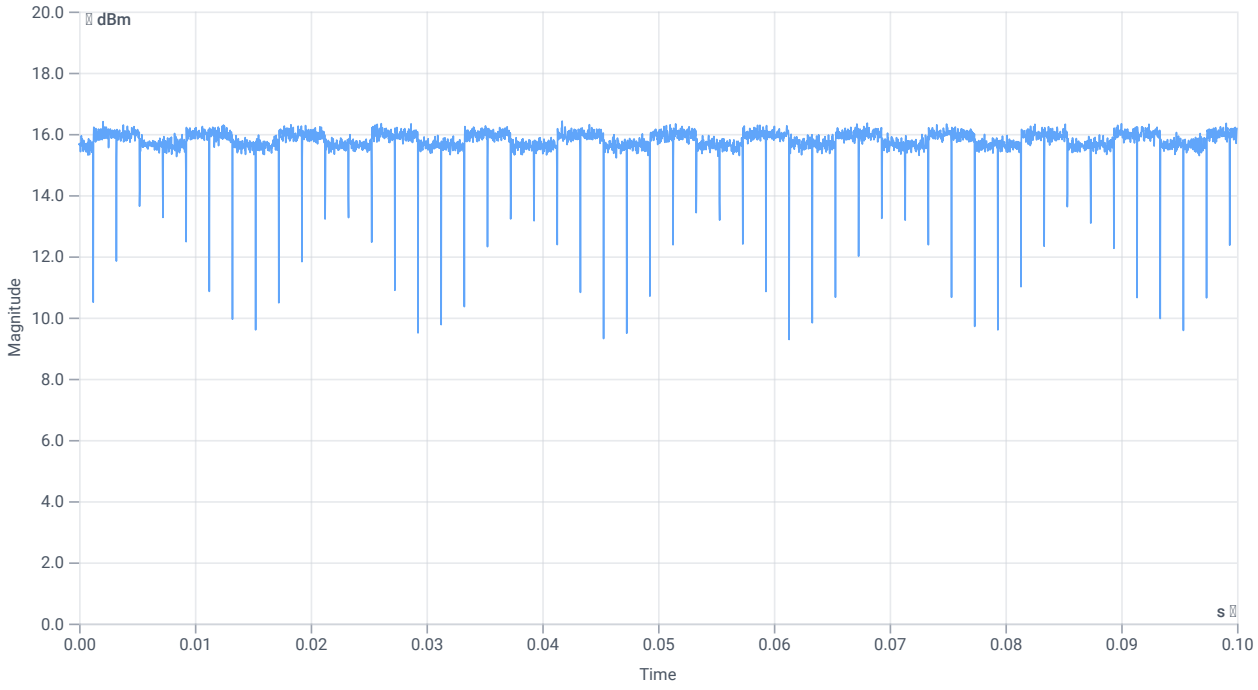
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	15.30	dBm	INFO
Ref. Frequency	---	---	5497.800	MHz	INFO

Evaluation max. Duty Cycle

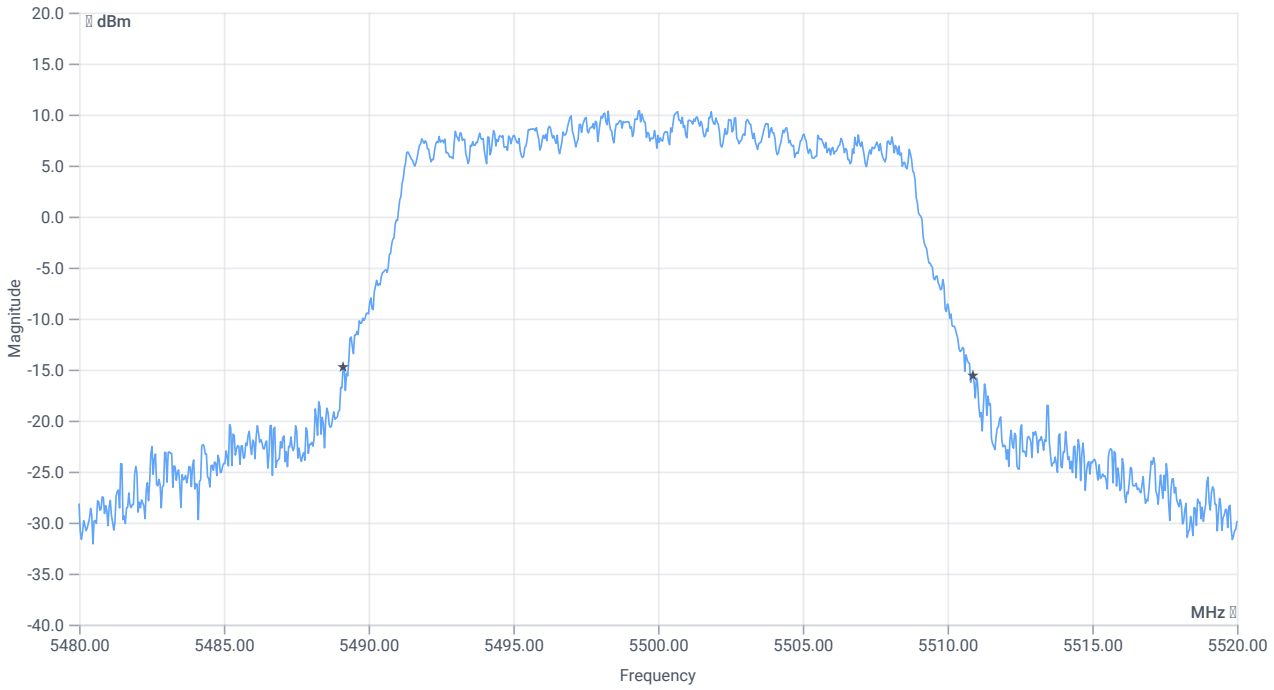
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

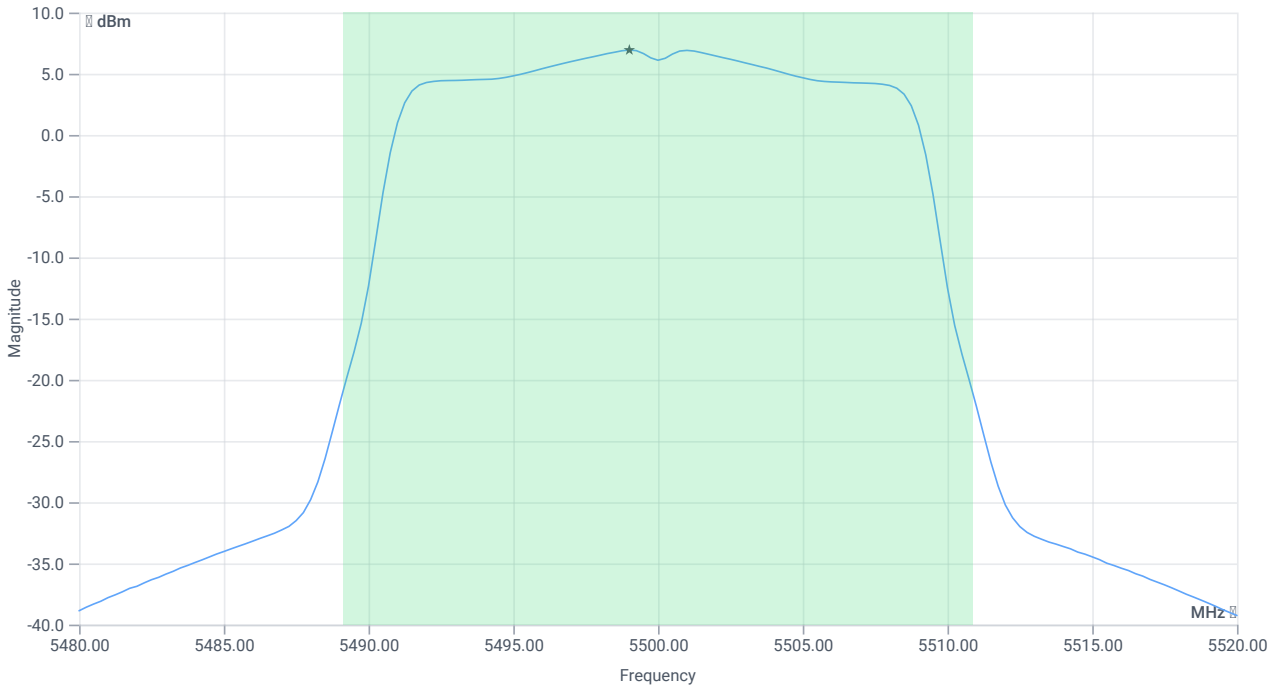
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5489.1200	MHz	INFO
T2 26dB	---	---	5510.8800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.30 | 16.7 | 25
Start [MHz] | Stop [MHz]	5480.000 | 5520.000
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	---	---	17.65	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	17.65	dBm	PASS
Limit: 11 dBm + 10 log	21.76				
Max Output Power DC corrected	---	24.38	17.65	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.94	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.94	dBm/1MHz	PASS

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:32:41
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

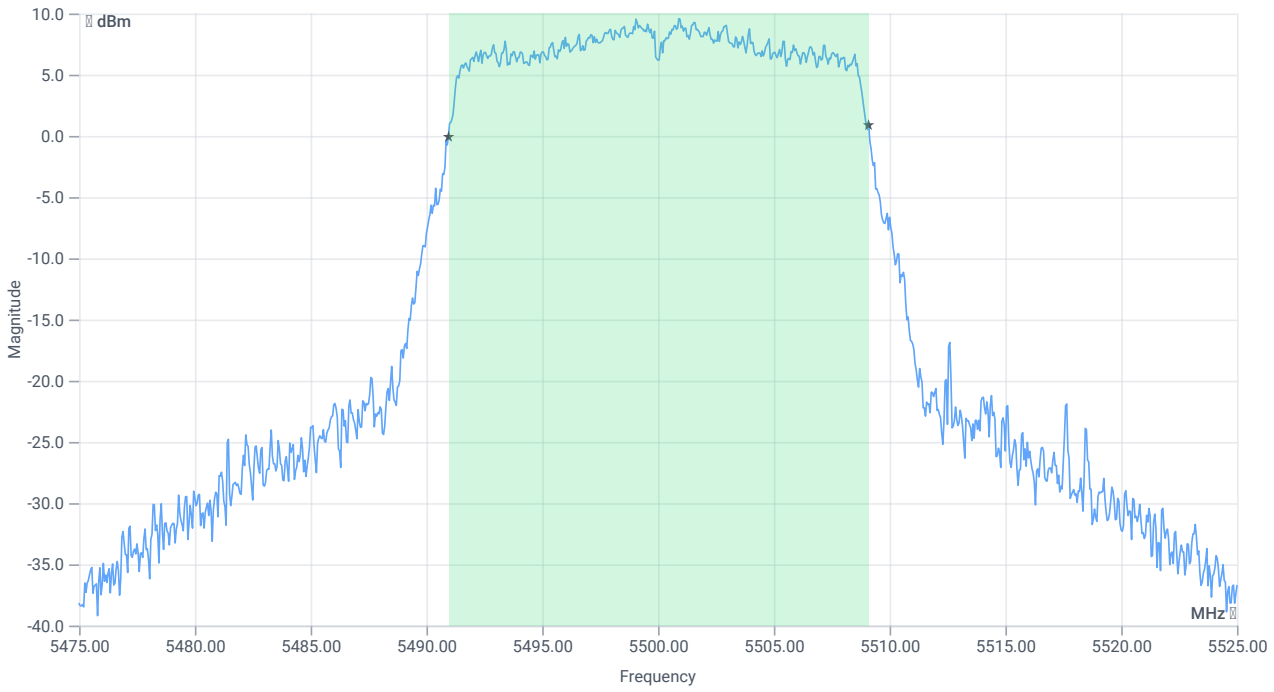
Test at TX 5500 MHz

RESULT: Reference Power cond.

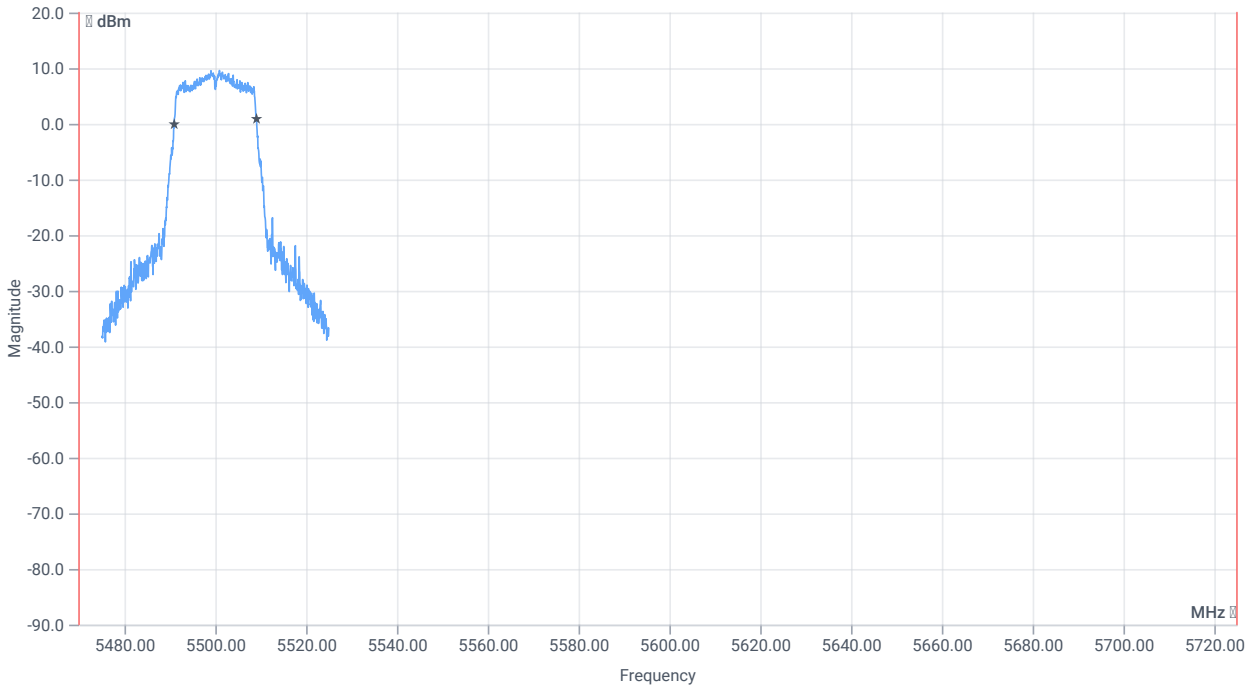
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.62	dBm	INFO
Ref. Frequency	---	---	5498.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.62 | 16.7 | 25
Start [MHz] | Stop [MHz]	5475.000 | 5525.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



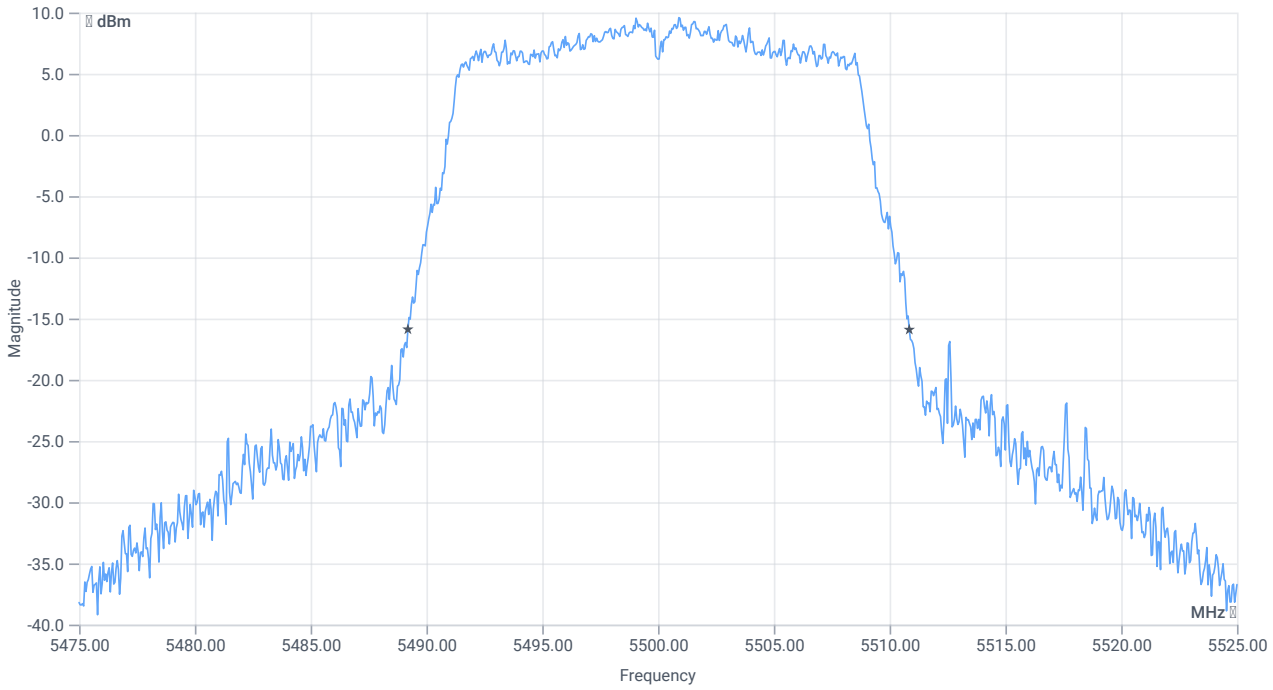
BW 99PCT



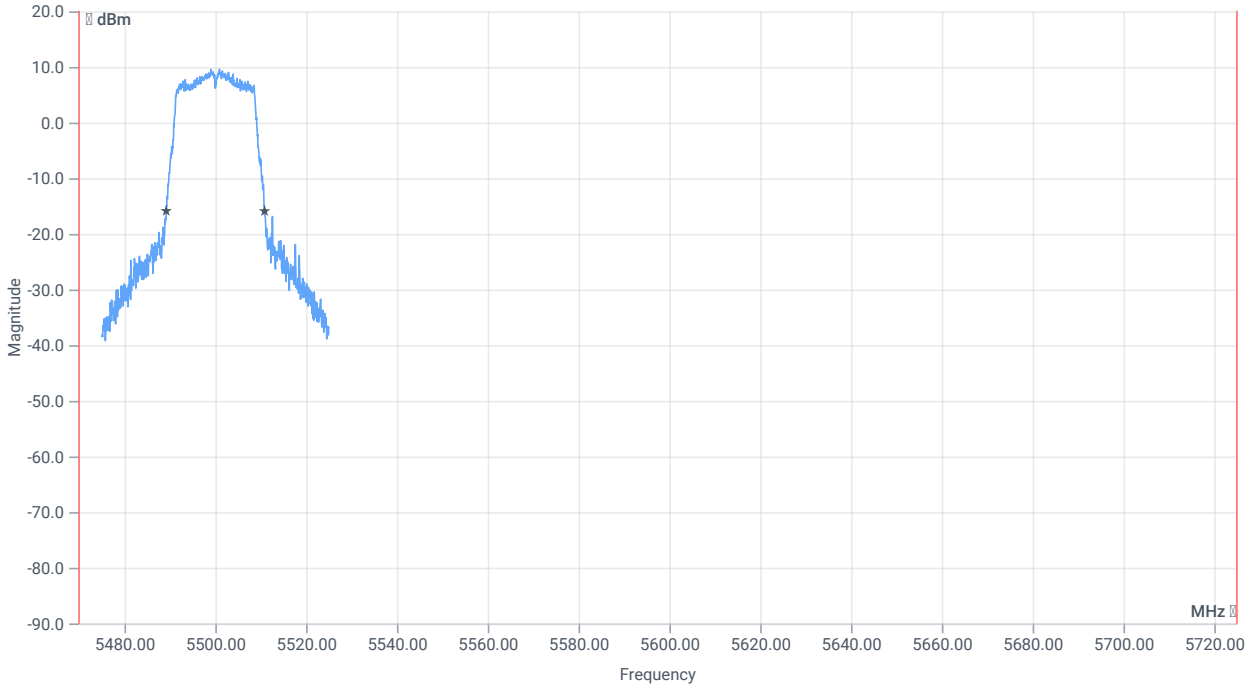
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	18.132	MHz	INFO
T1 99%	5470.000000	---	5490.9590	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5509.0909	MHz	



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.65	MHz	INFO

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
T1 26dB	5470.000000	---	5489.2000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5510.8500	MHz	

Verdict
PASS

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

Test References

TC Start	28.02.2023 14:31:14
Ambit Temp [°C] | Humidity [rel%]	22.5 | 23
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5720
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5500 MHz

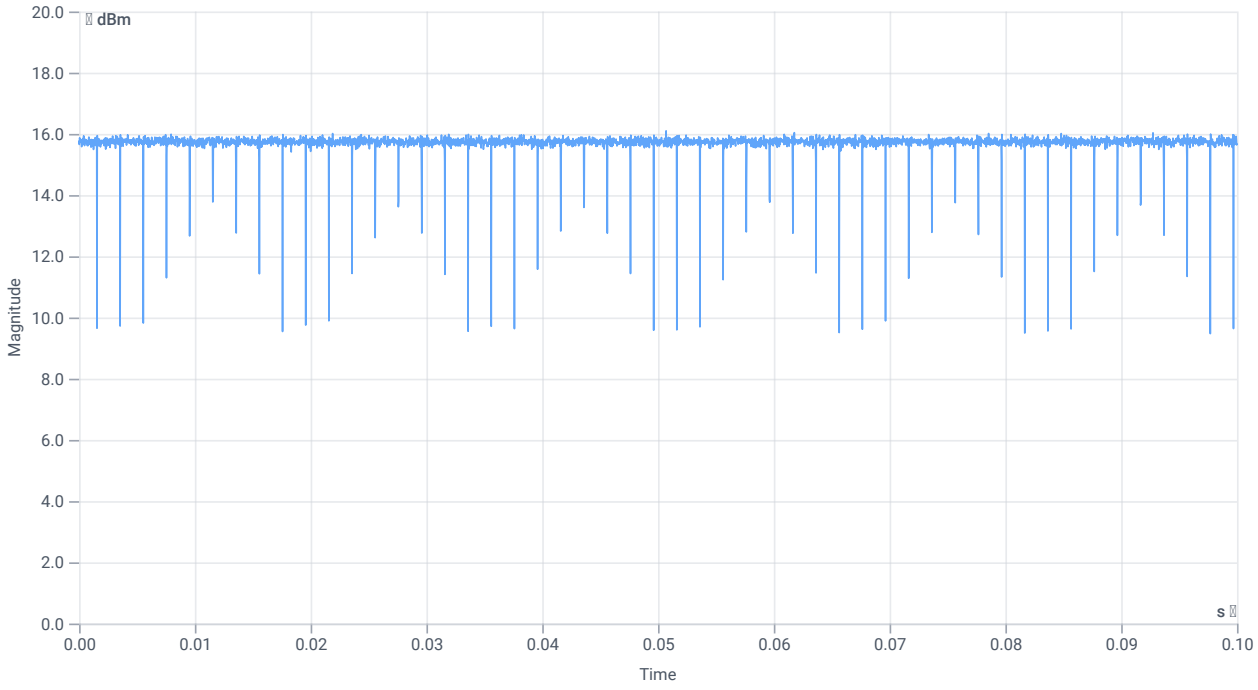
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	14.60	dBm	INFO
Ref. Frequency	---	---	5498.600	MHz	INFO

Evaluation max. Duty Cycle

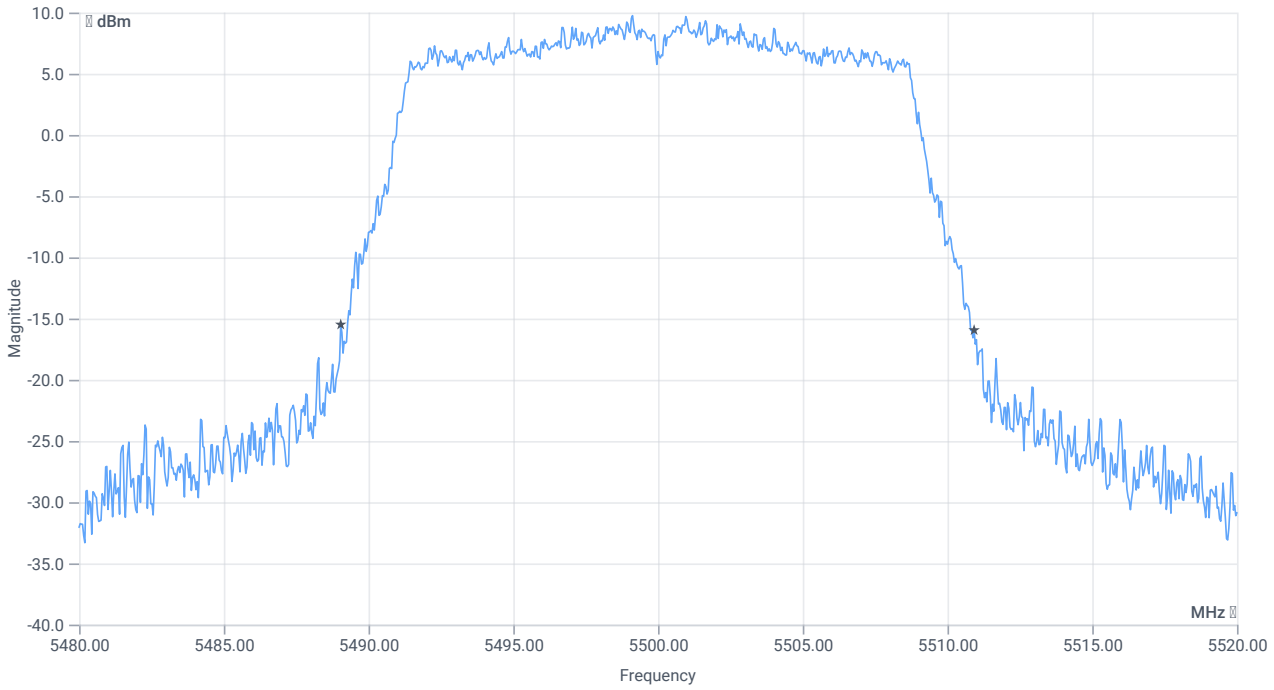
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

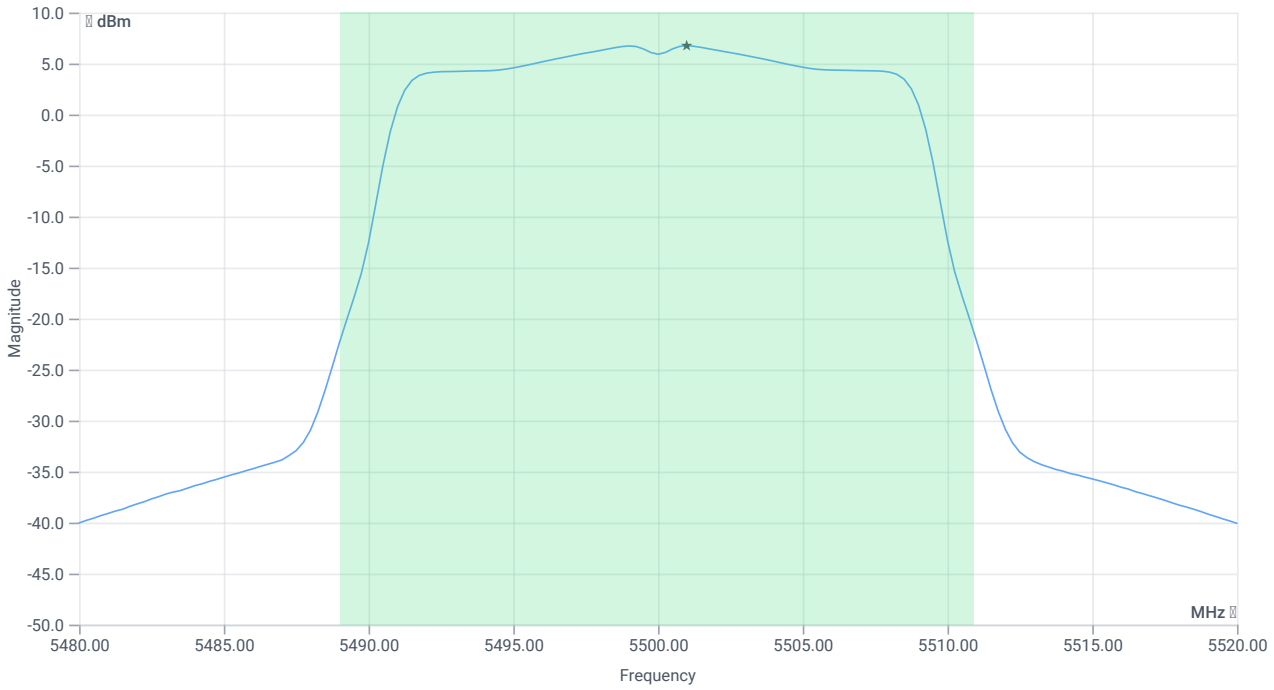
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5489.0400	MHz	INFO
T2 26dB	---	---	5510.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.60 | 16.7 | 25
Start [MHz] | Stop [MHz]	5480.000 | 5520.000
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	---	---	17.51	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	17.51	dBm	PASS
Limit: 11 dBm + 10 log 21.88					
Max Output Power DC corrected	---	24.4	17.51	dBm	PASS

Power Spectral Density

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	6.75	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	6.75	dBm/1MHz	PASS

Verdict
PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:58:07
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	True | Freq [MHz] 5785
Frequency high to test	True | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	None

Test Equipment

Test at TX 5745 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	23.71	dBm	INFO
Ant:1 BW 26dB	---	---	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	24.16	dBm	INFO
Ant:2 BW 26dB	---	---	40.000	MHz	INFO
∑ Limit absolute	---	30	26.95	dBm	PASS
∑ Limit: 11 dBm + 10 log 40	---	27.02	26.95	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	8.63	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	9.03	dBm/0.5MHz	INFO
∑	---	30	11.84	dBm/0.5MHz	PASS

Test at TX 5785 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	23.53	dBm	INFO
Ant:1 BW 26dB	---	---	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	23.55	dBm	INFO
Ant:2 BW 26dB	---	---	40.000	MHz	INFO
∑ Limit absolute	---	30	26.55	dBm	PASS
∑ Limit: 11 dBm + 10 log 40	---	27.02	26.55	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	8.45	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	8.52	dBm/0.5MHz	INFO
∑	---	30	11.5	dBm/0.5MHz	PASS

Test at TX 5825 MHz

RESULT Power

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 Max Output Power DC corrected	---	---	22.64	dBm	INFO
Ant:1 BW 26dB	---	---	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	---	---	23.12	dBm	INFO
Ant:2 BW 26dB	---	---	40.000	MHz	INFO
∑ Limit absolute	---	30	25.9	dBm	PASS
∑ Limit: 11 dBm + 10 log 40	---	27.02	25.9	dBm	na

RESULT PSD

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ant:1 PSD	---	---	7.48	dBm/0.5MHz	INFO
Ant:2 PSD	---	---	8.19	dBm/0.5MHz	INFO
∑	---	30	10.86	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:54:00
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

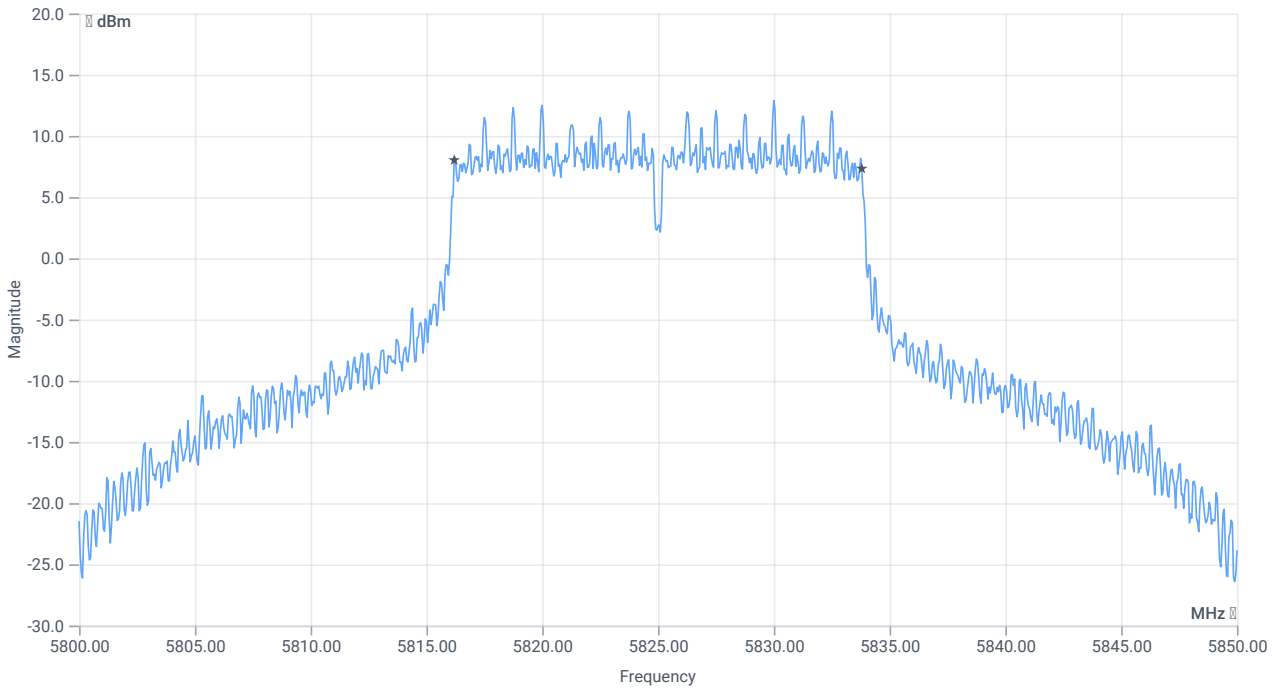
Test at TX 5825 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	19.86	dBm	INFO
Ref. Frequency	---	---	5822.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.86 | 16.78 | 35
Start [MHz] | Stop [MHz]	5800.000 | 5850.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:53:23
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

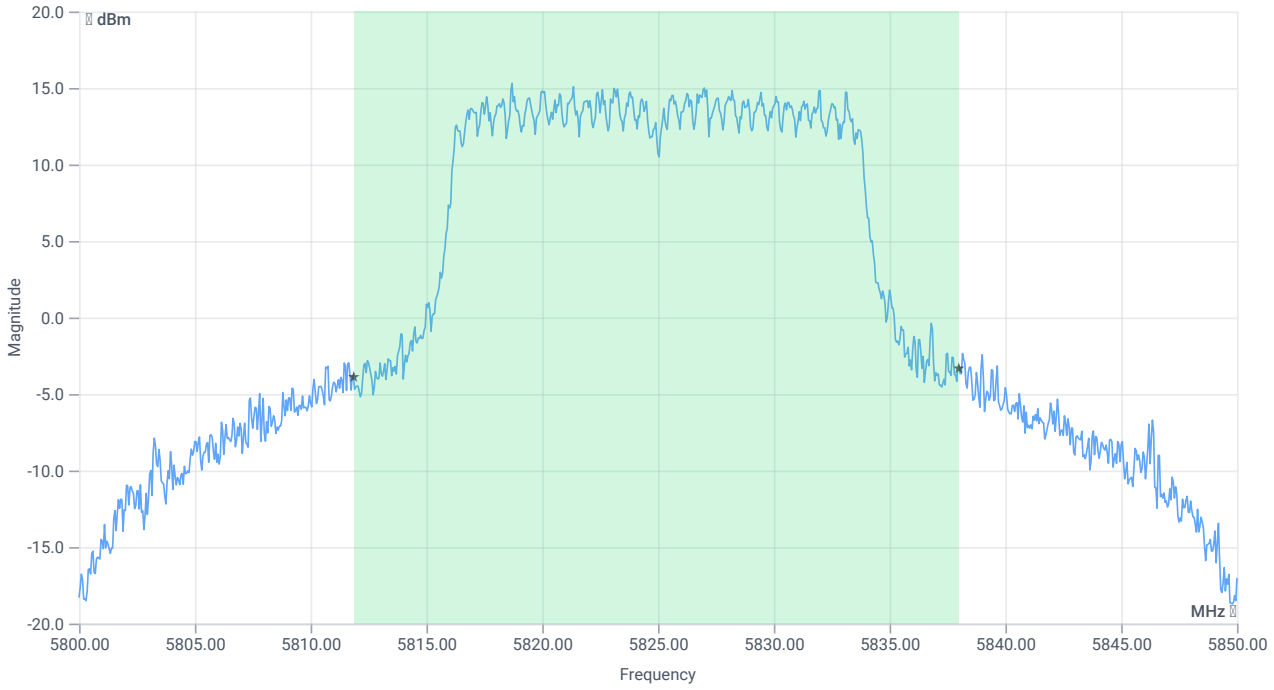
Test at TX 5825 MHz

RESULT: Reference Power cond.

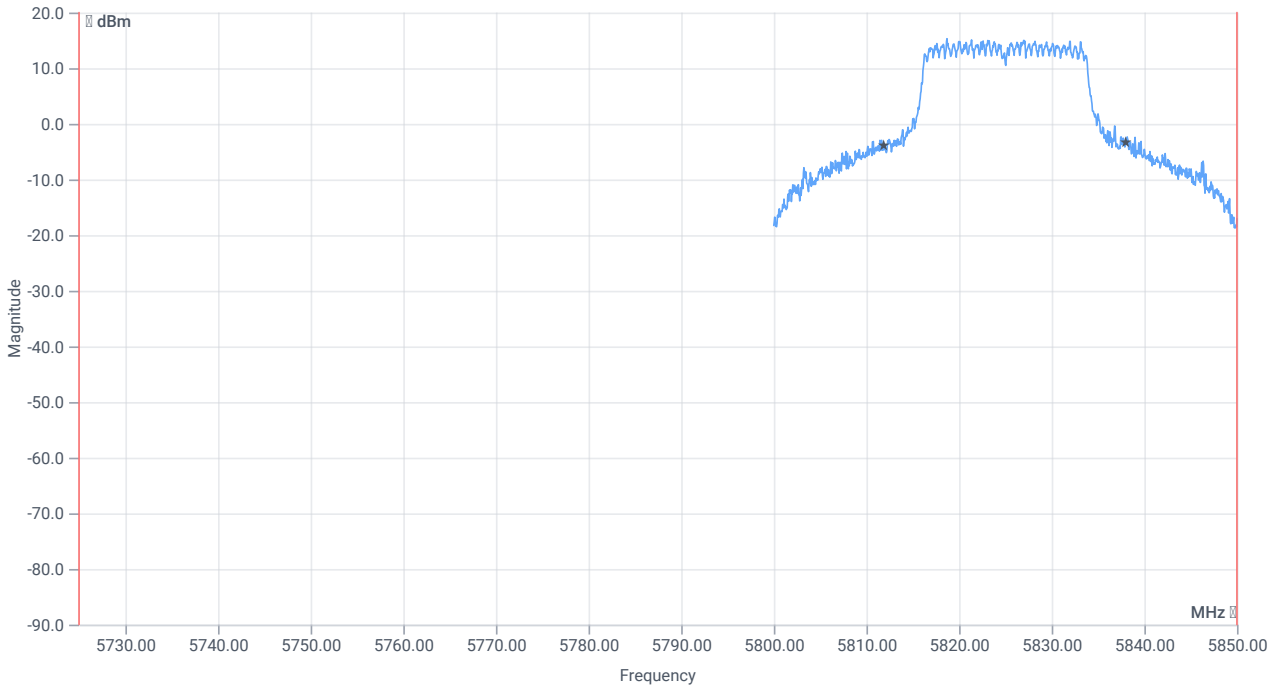
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.40	dBm	INFO
Ref. Frequency	---	---	5829.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.40 | 16.78 | 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



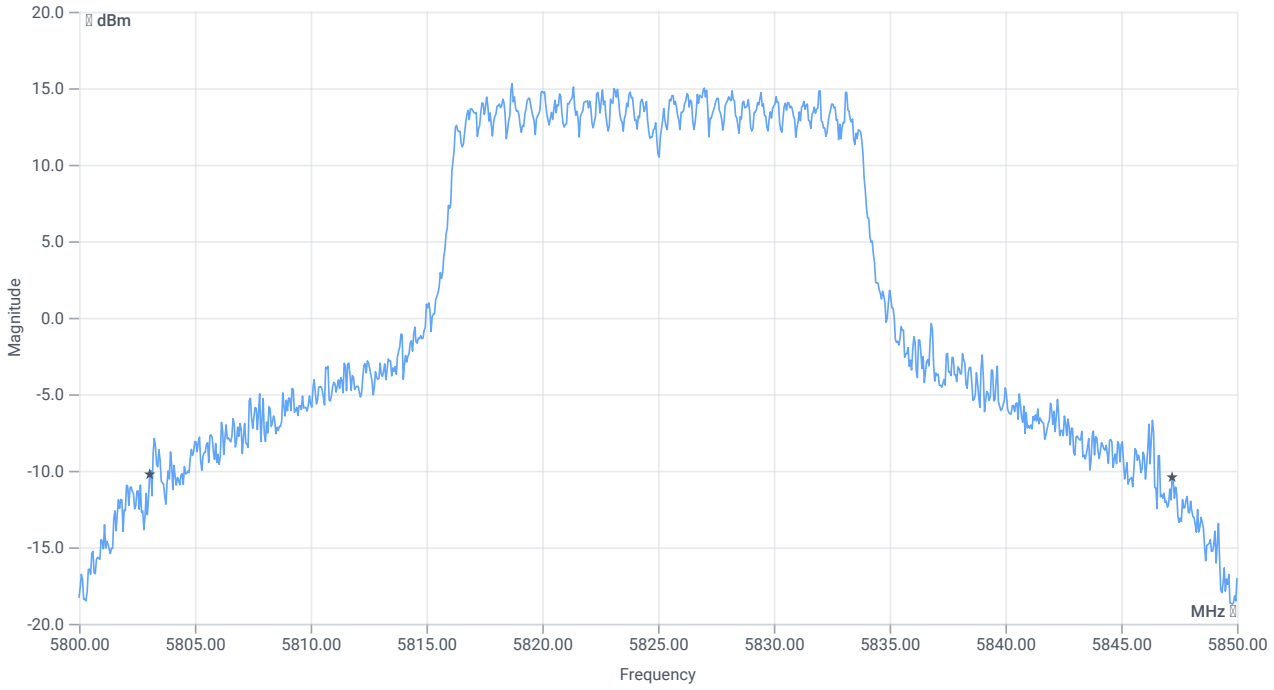
BW 99PCT



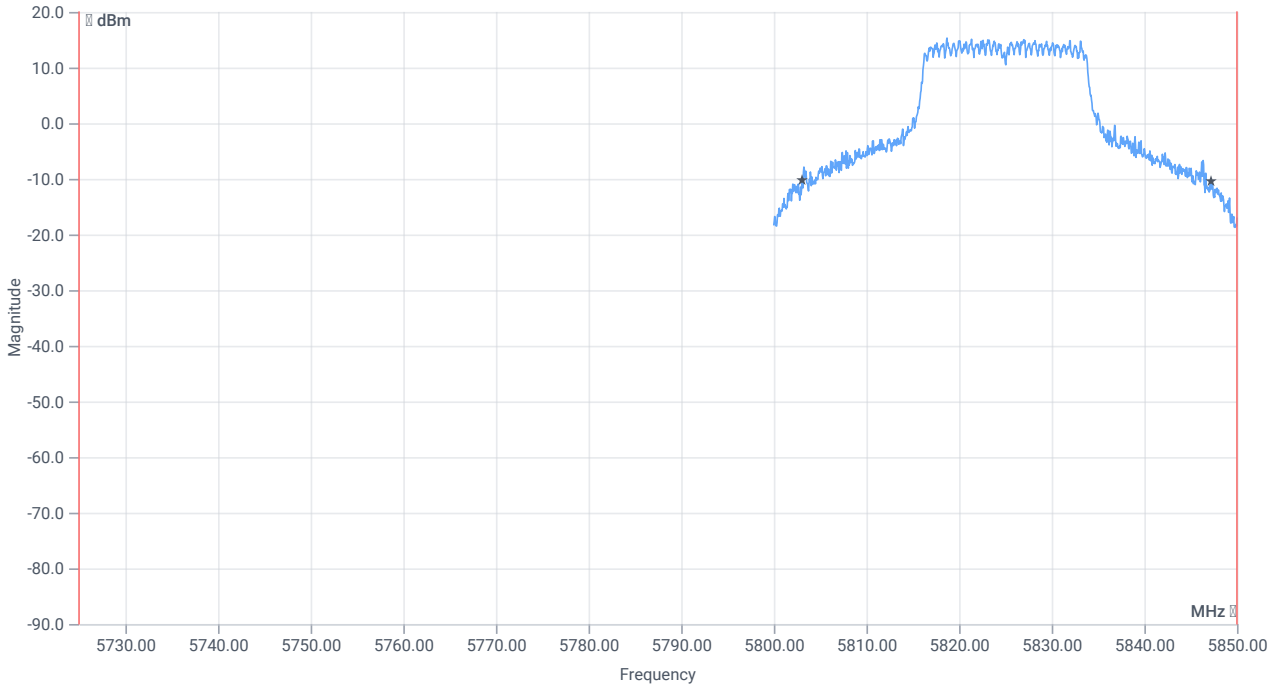
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	26.124	MHz	INFO
T1 99%	5725.000000	---	5811.8631	MHz	PASS
T2 99%	---	5850.000000	5837.9870	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	44.15	MHz	INFO
T1 26dB	5725.000000	---	5803.0500	MHz	PASS
T2 26dB	---	5850.000000	5847.2000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:50:58
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

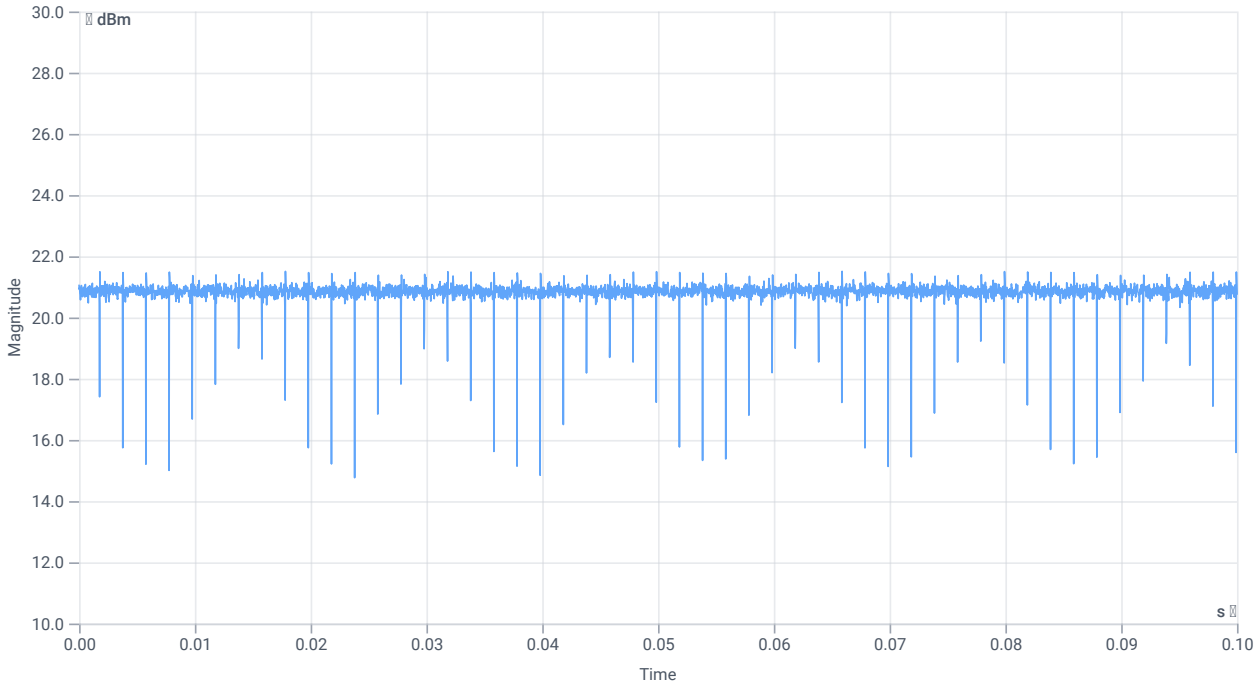
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.59	dBm	INFO
Ref. Frequency	---	---	5828.000	MHz	INFO

Evaluation max. Duty Cycle

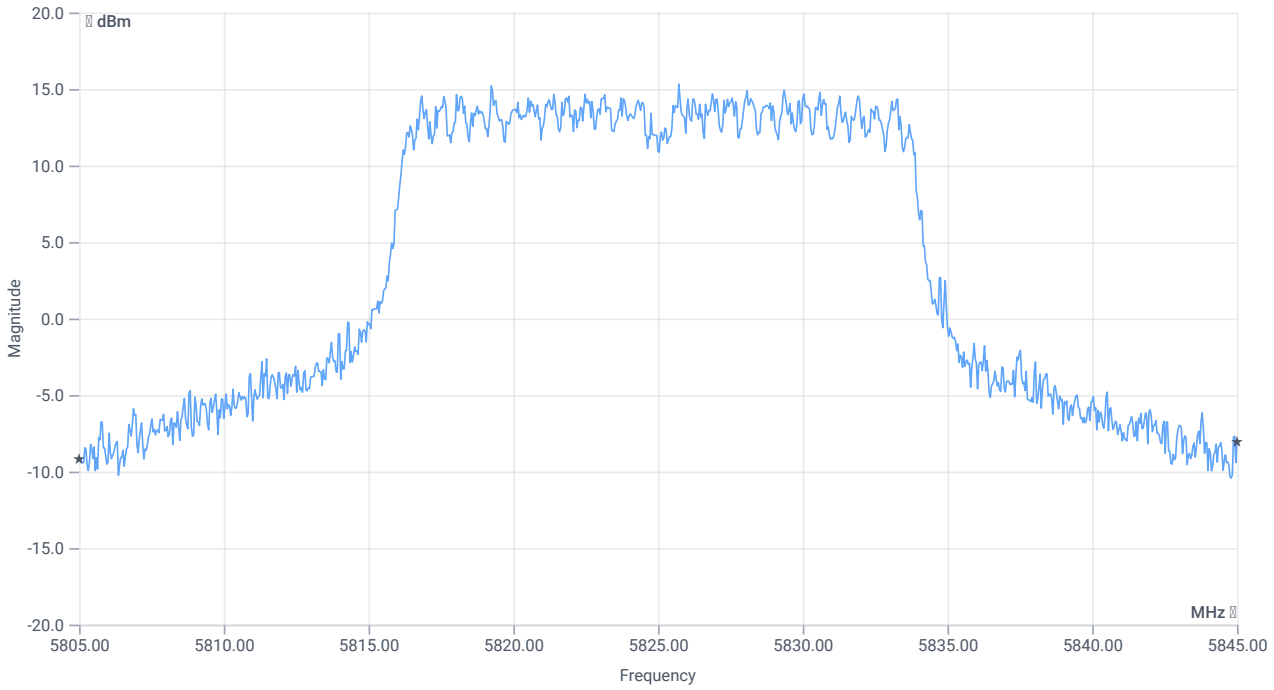
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

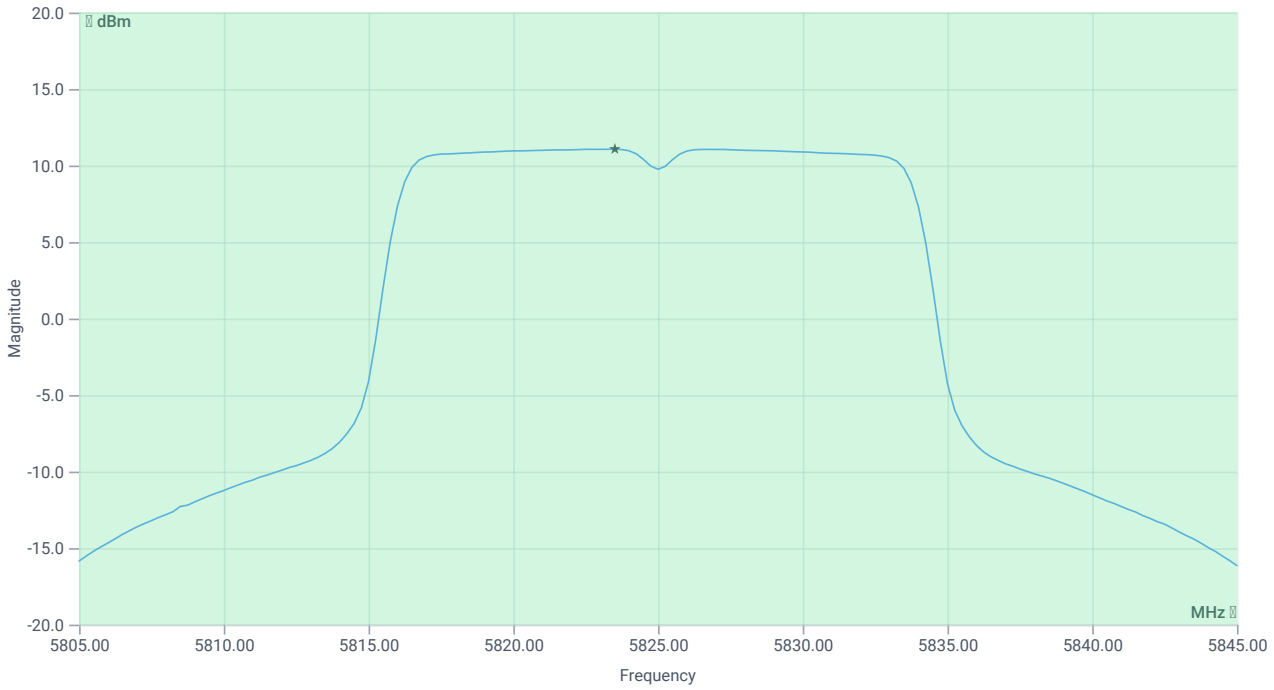
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5805.0000	MHz	INFO
T2 26dB	---	---	5845.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.59 | 16.78 | 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



Max OP and PSD

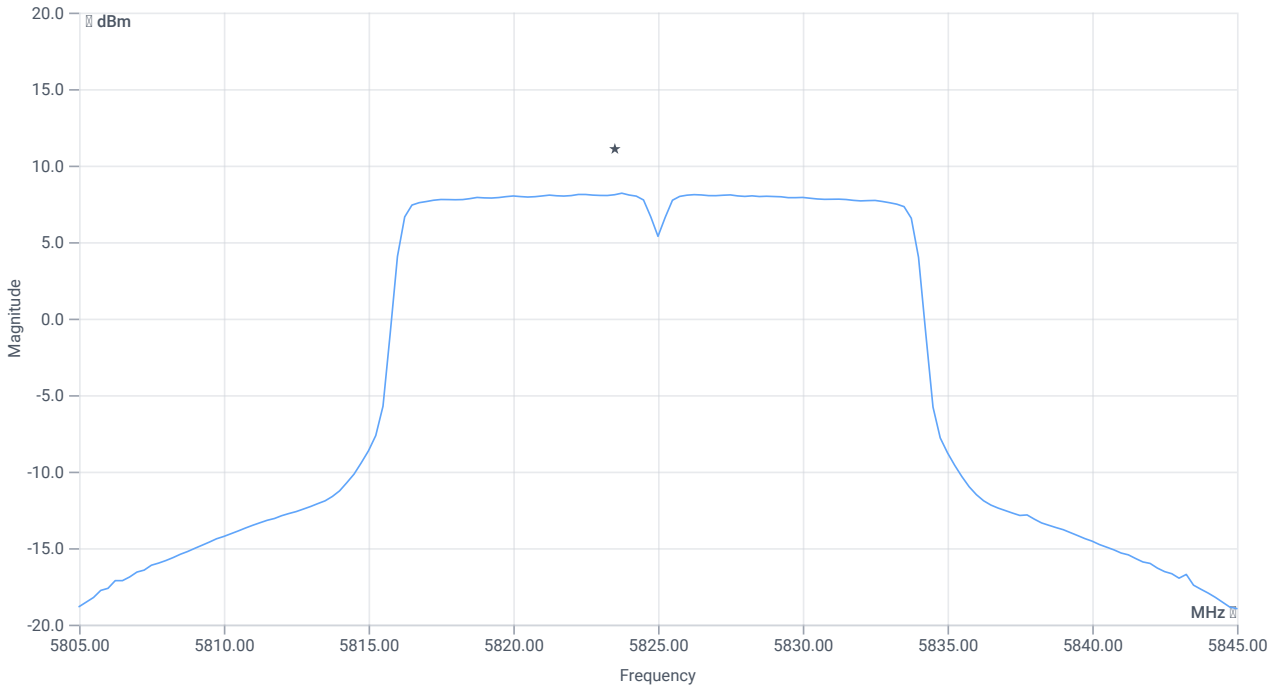
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	23.12	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.12	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	23.12	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.59 | 16.78 | 35
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



PSD UNII-3

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	8.19	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.19	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:50:22
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

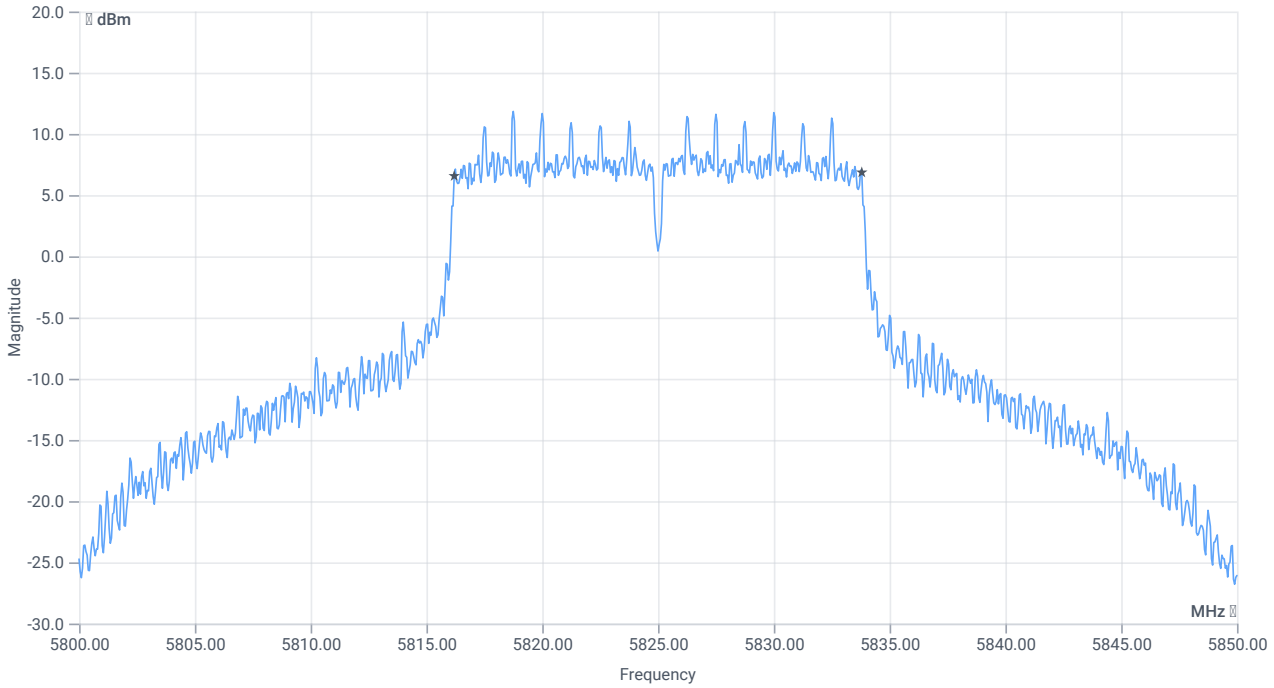
Test at TX 5825 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	18.98	dBm	INFO
Ref. Frequency	---	---	5823.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	30.98 | 16.78 | 30
Start [MHz] | Stop [MHz]	5800.000 | 5850.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:49:45
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

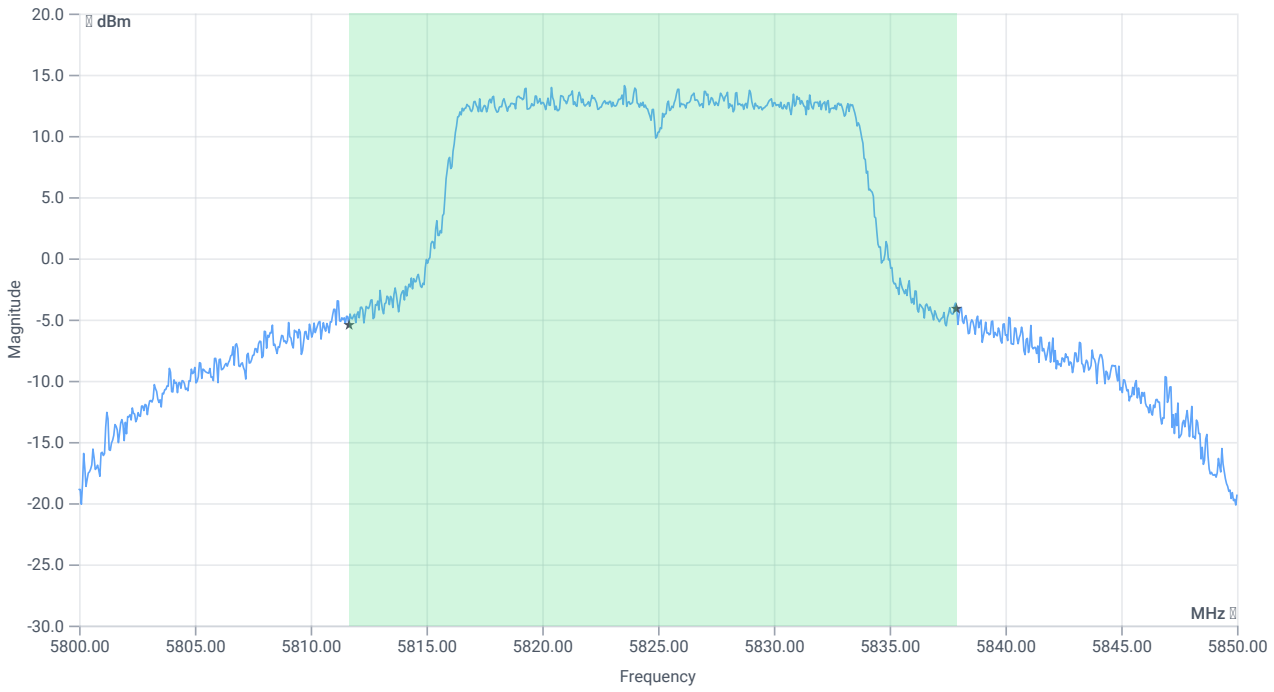
Test at TX 5825 MHz

RESULT: Reference Power cond.

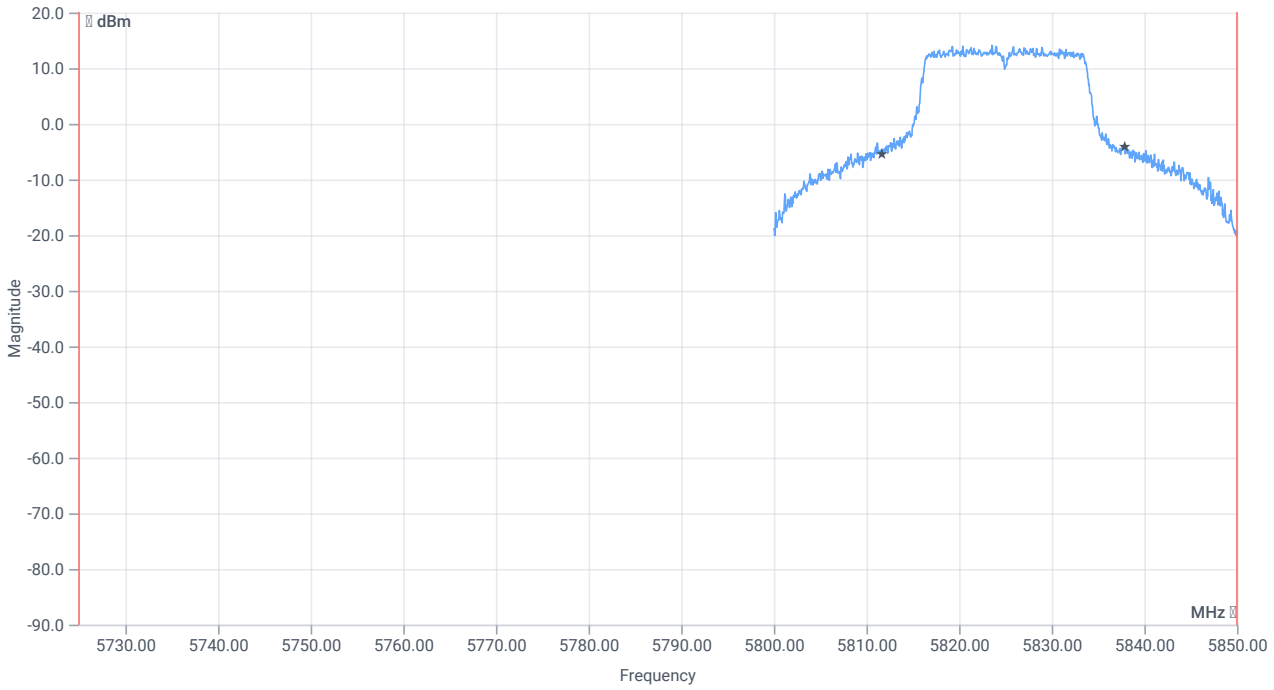
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	18.90	dBm	INFO
Ref. Frequency	---	---	5828.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.90 | 16.78 | 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



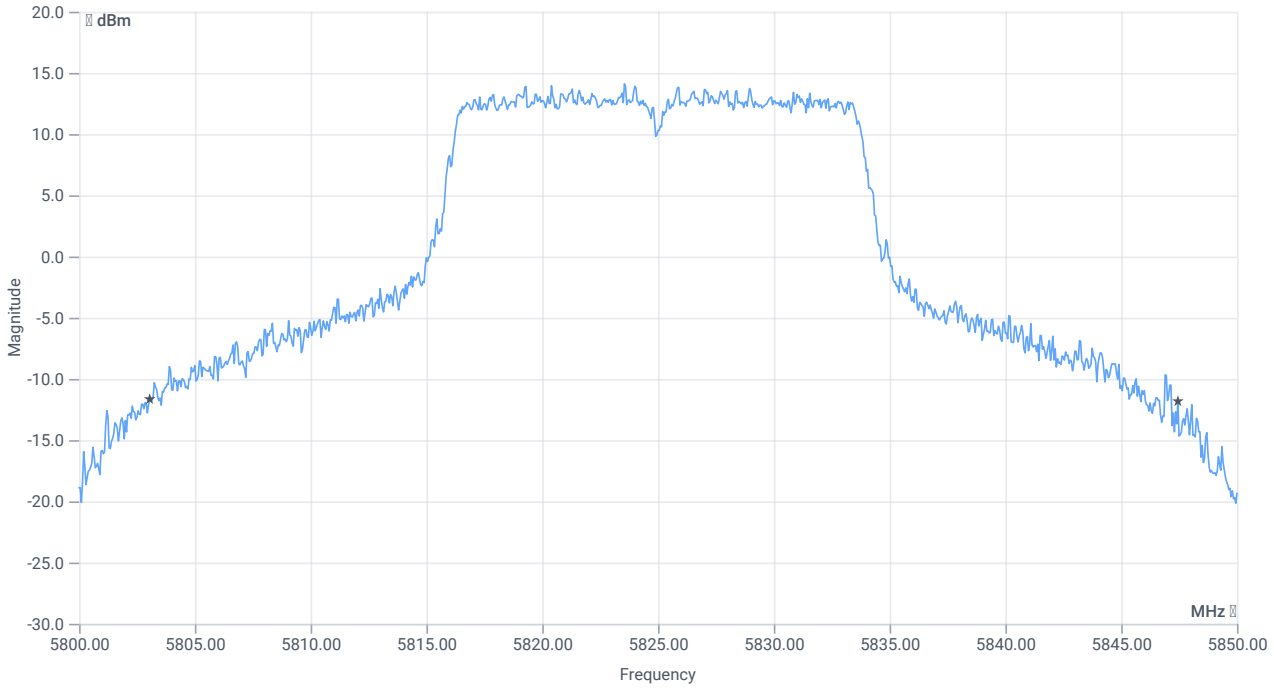
BW 99PCT



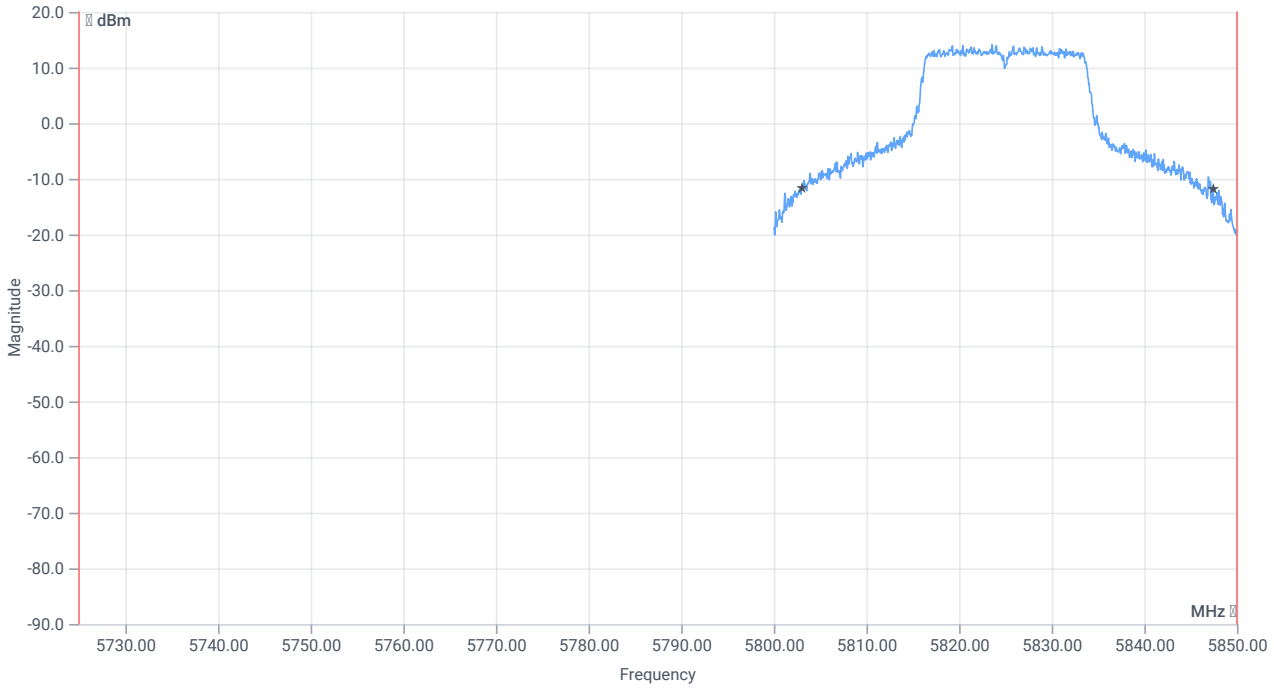
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	26.224	MHz	INFO
T1 99%	5725.000000	---	5811.6633	MHz	PASS
T2 99%	---	5850.000000	5837.8871	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	44.4	MHz	INFO
T1 26dB	5725.000000	---	5803.0500	MHz	PASS
T2 26dB	---	5850.000000	5847.4500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:47:21
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

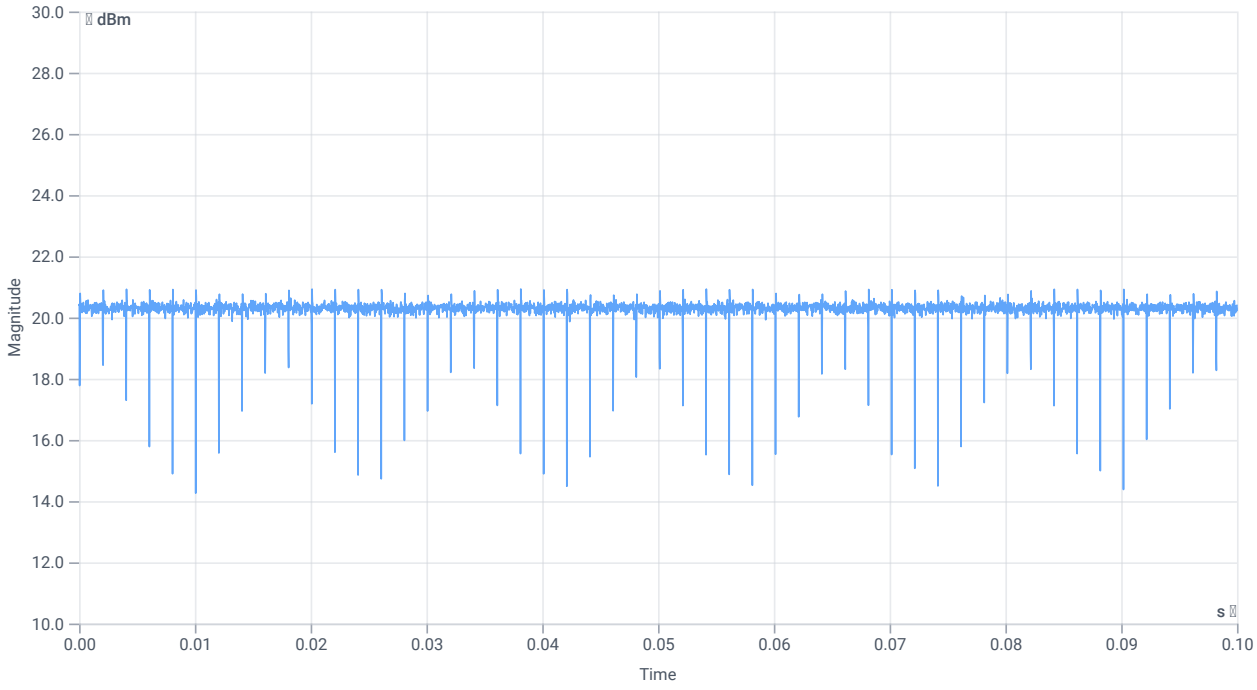
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	18.82	dBm	INFO
Ref. Frequency	---	---	5828.600	MHz	INFO

Evaluation max. Duty Cycle

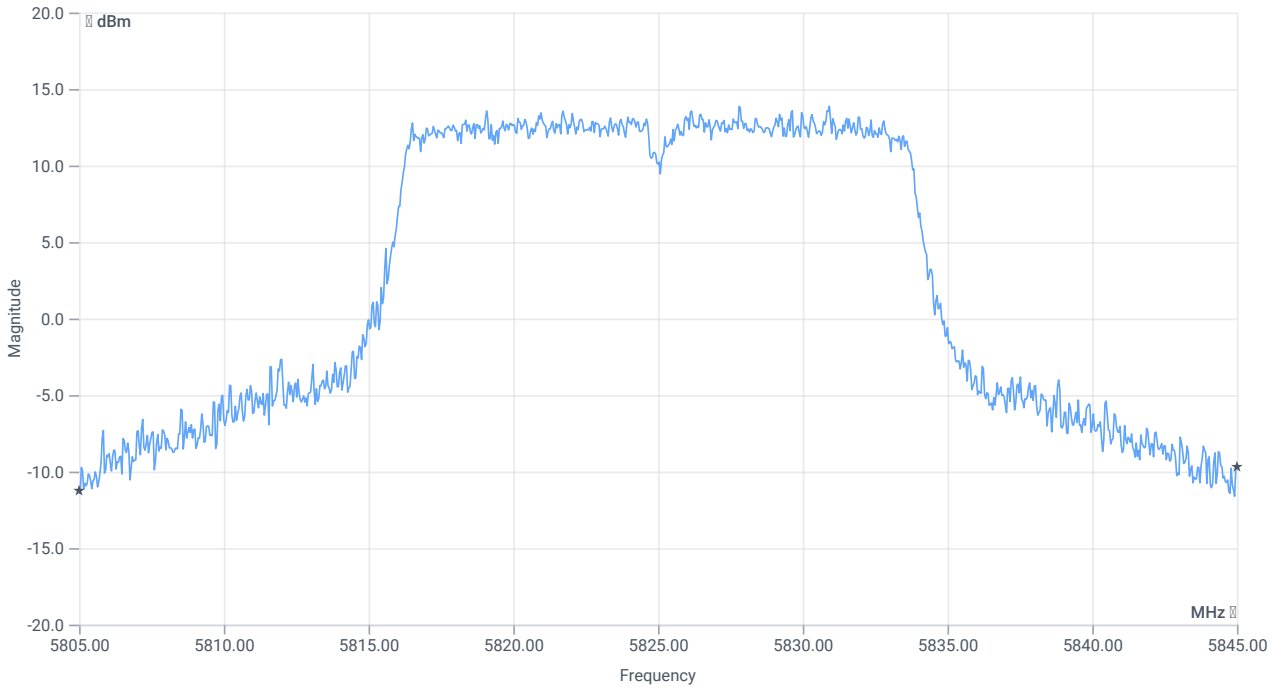
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

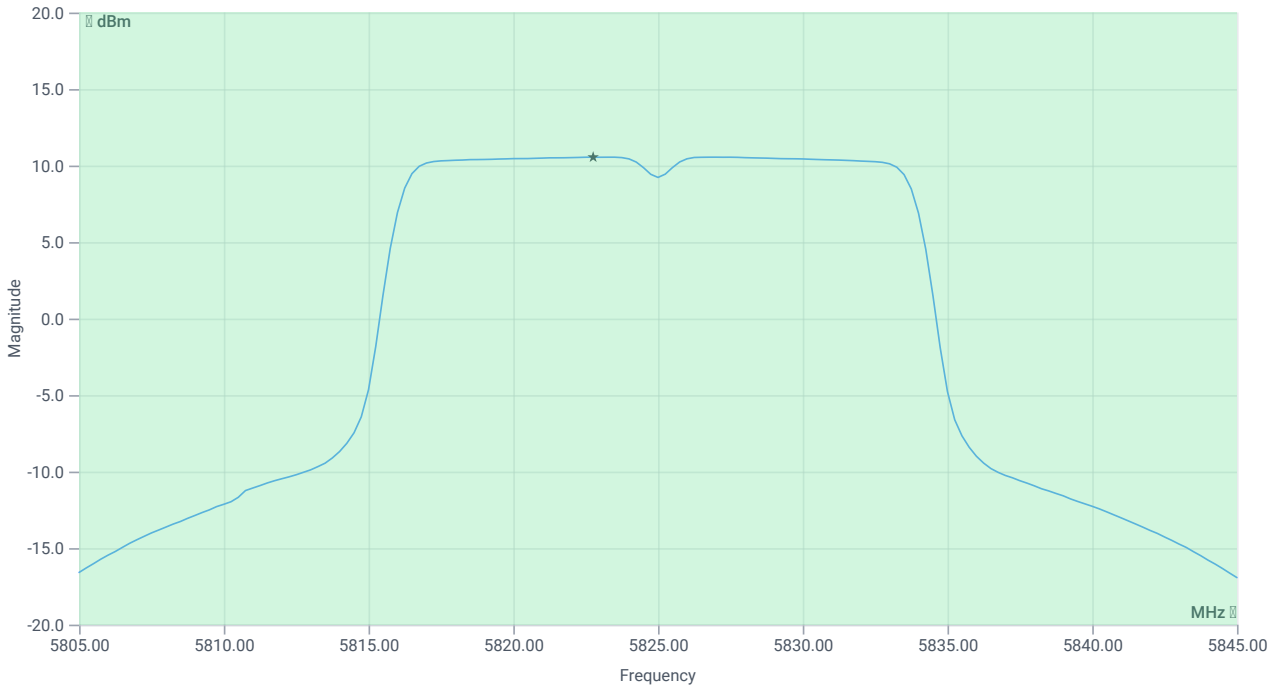
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5805.0000	MHz	INFO
T2 26dB	---	---	5845.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	30.82 | 16.78 | 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



Max OP and PSD

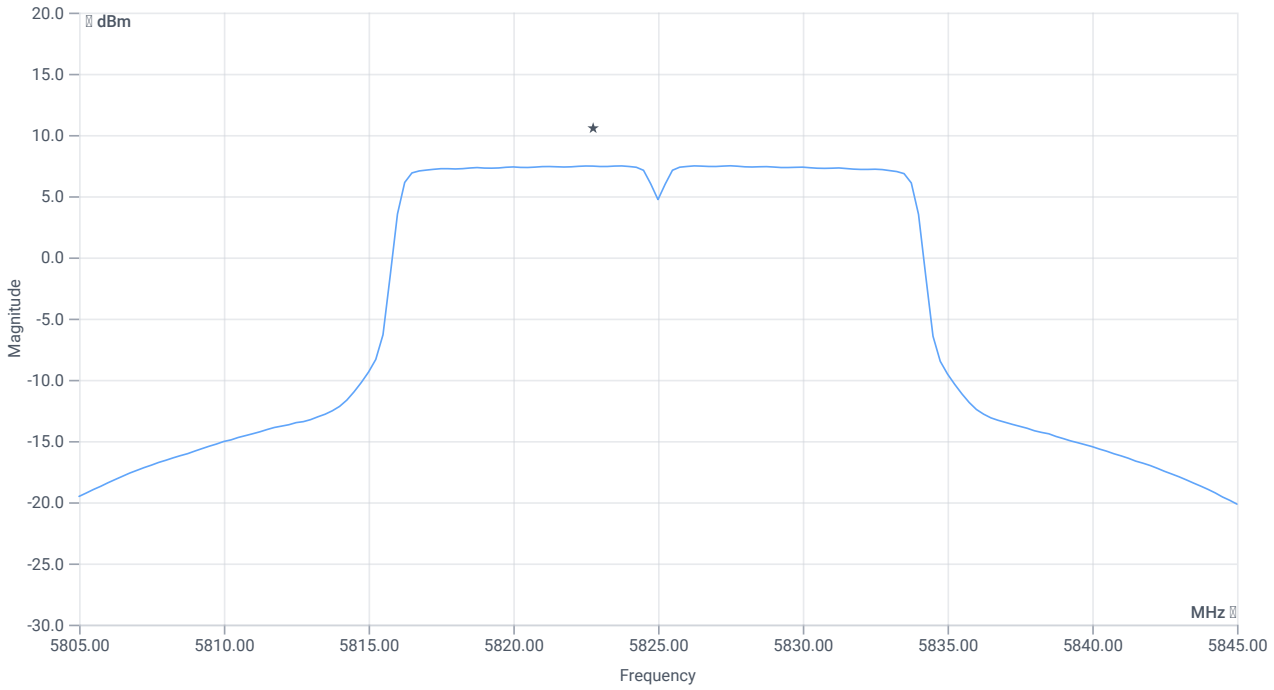
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	22.64	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.64	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	22.64	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	30.82 | 16.78 | 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



PSD UNII-3

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	7.48	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.48	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:45:32
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

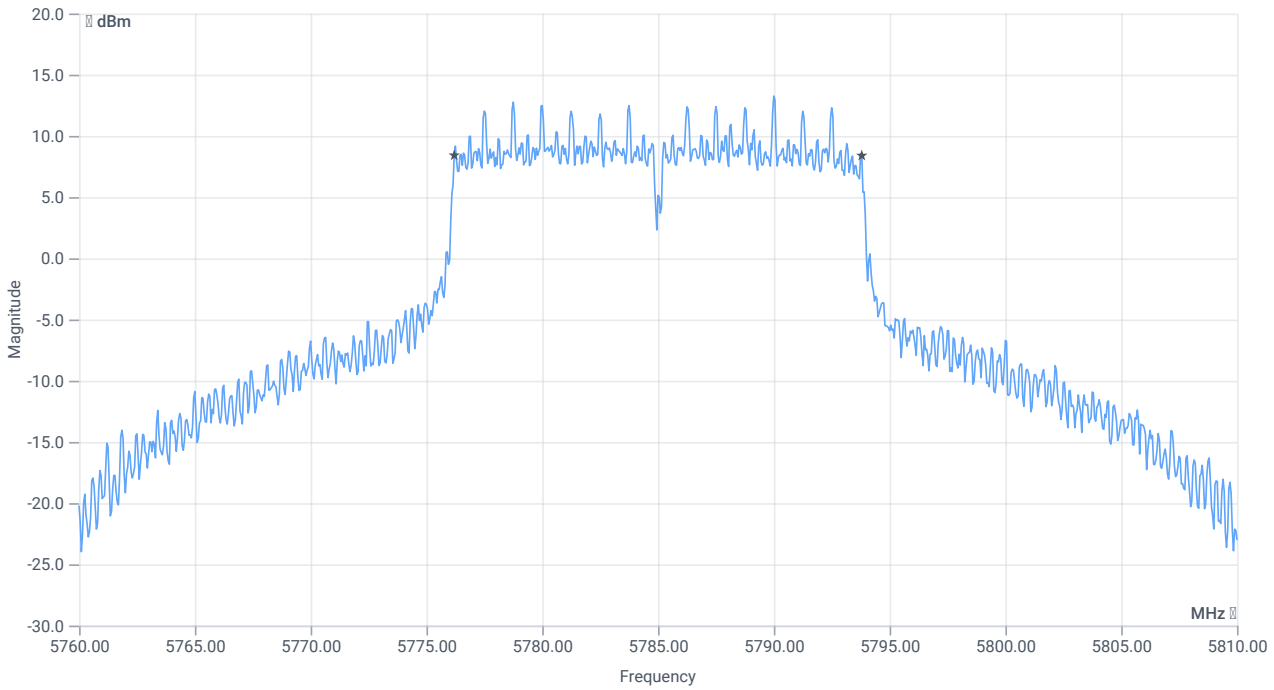
Test at TX 5785 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.41	dBm	INFO
Ref. Frequency	---	---	5787.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.41 | 16.8 | 35
Start [MHz] | Stop [MHz]	5760.000 | 5810.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:45:01
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

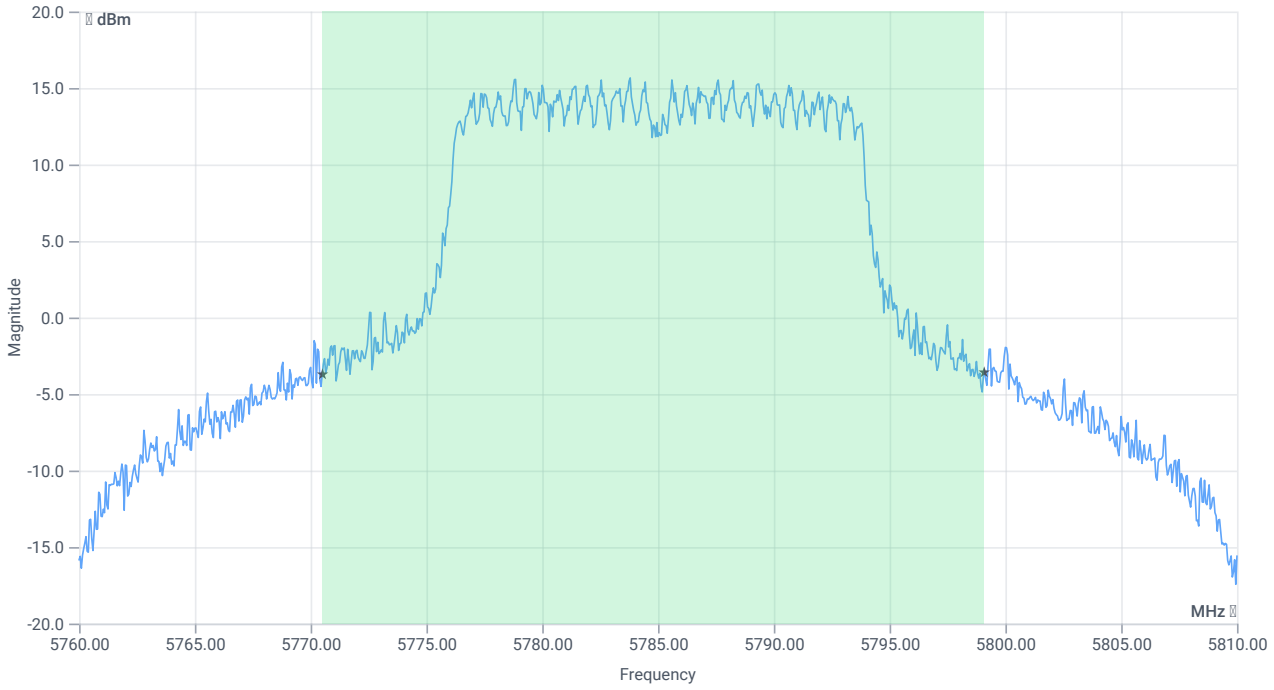
Test at TX 5785 MHz

RESULT: Reference Power cond.

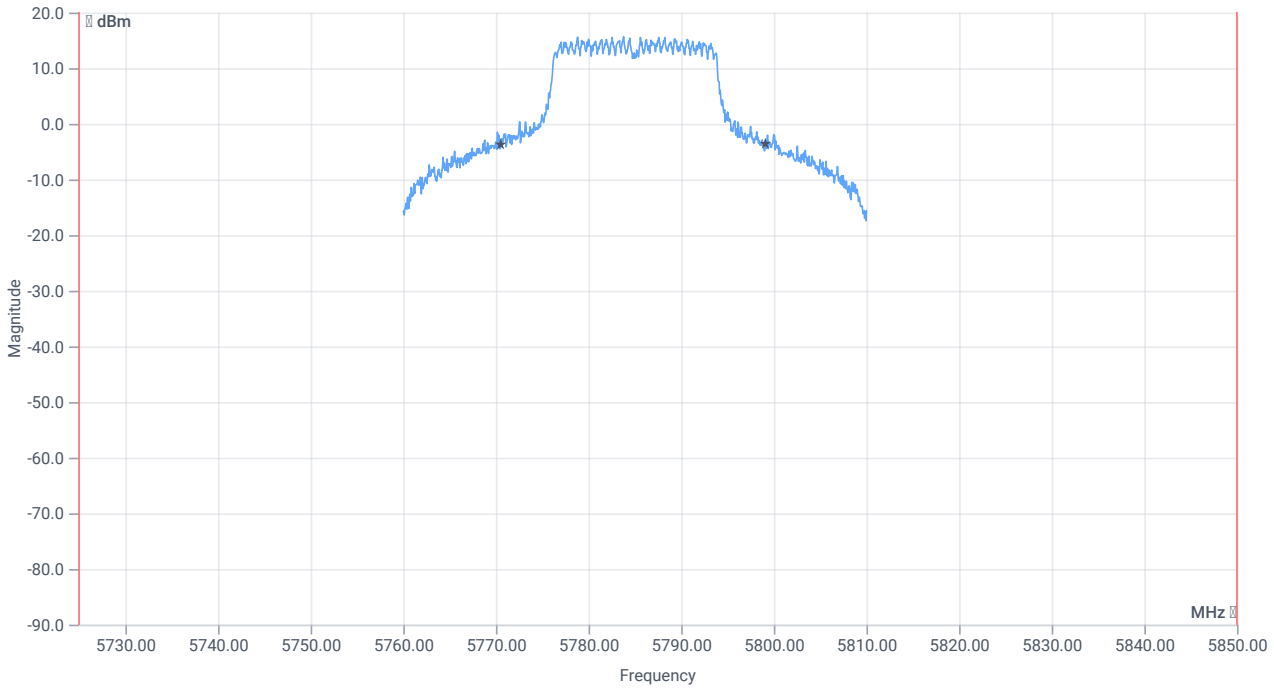
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.31	dBm	INFO
Ref. Frequency	---	---	5786.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.31 | 16.8 | 30
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



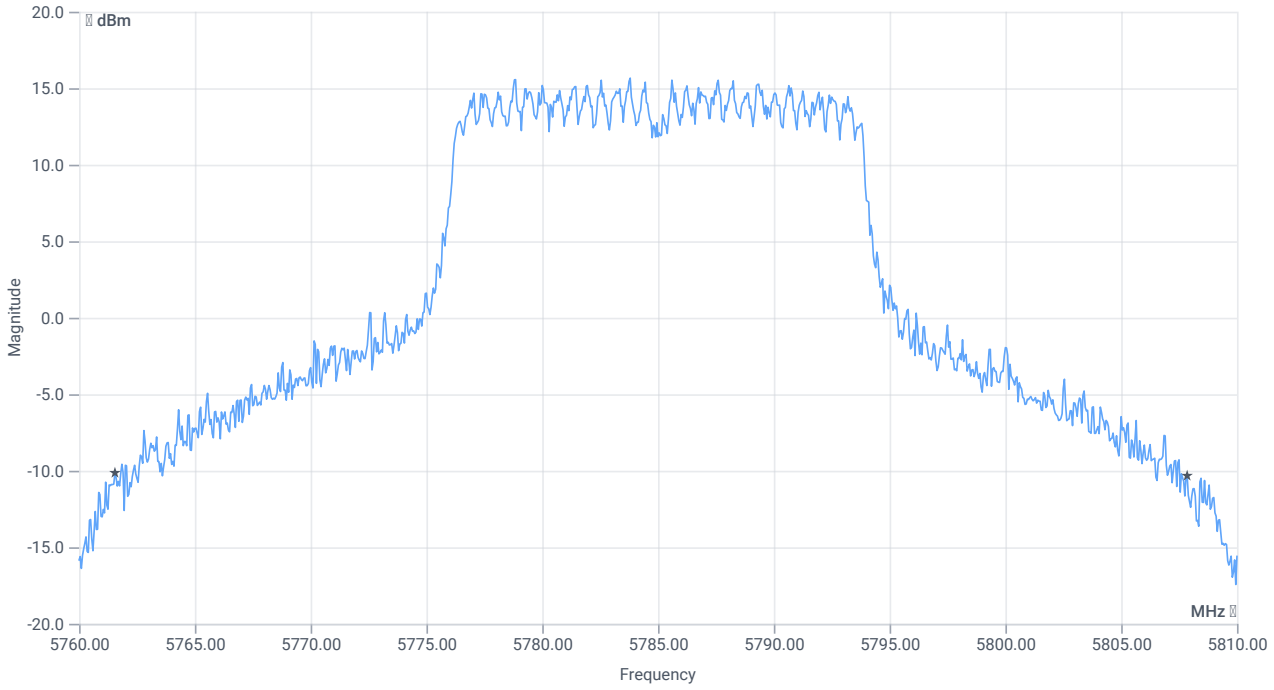
BW 99PCT



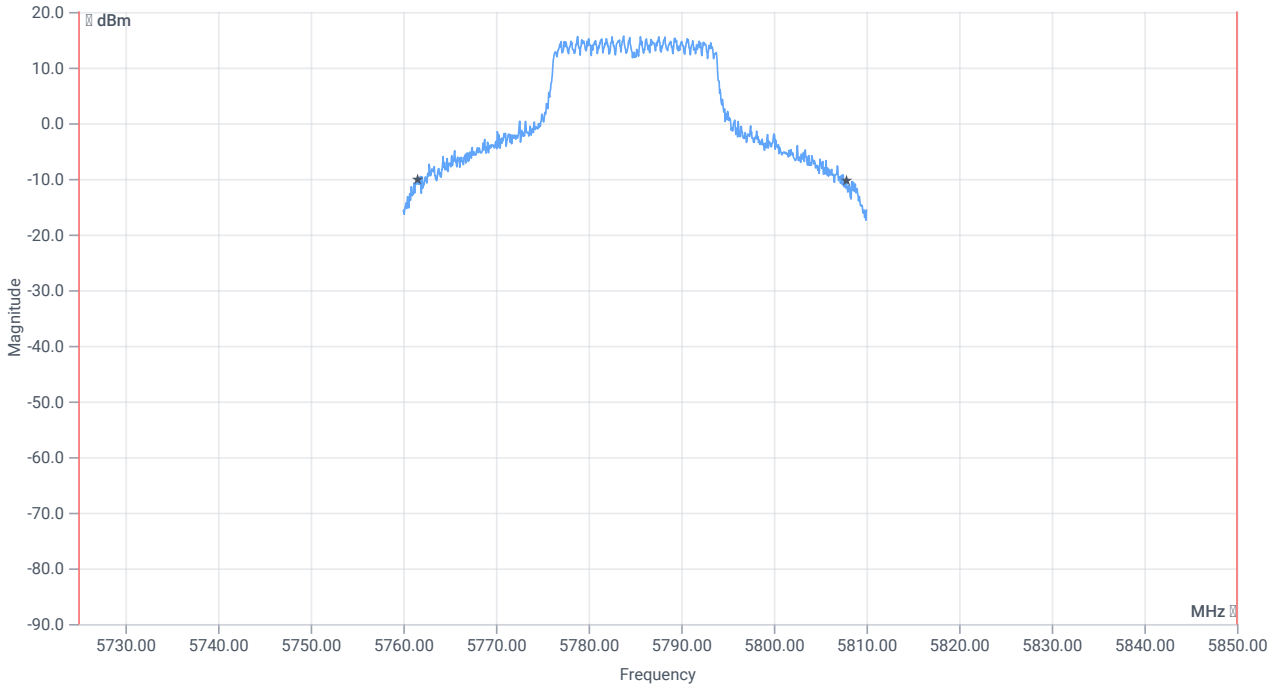
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	28.571	MHz	INFO
T1 99%	5725.000000	---	5770.5145	MHz	PASS
T2 99%	---	5850.000000	5799.0859	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	46.3	MHz	INFO
T1 26dB	5725.000000	---	5761.5500	MHz	PASS
T2 26dB	---	5850.000000	5807.8500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:42:36
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

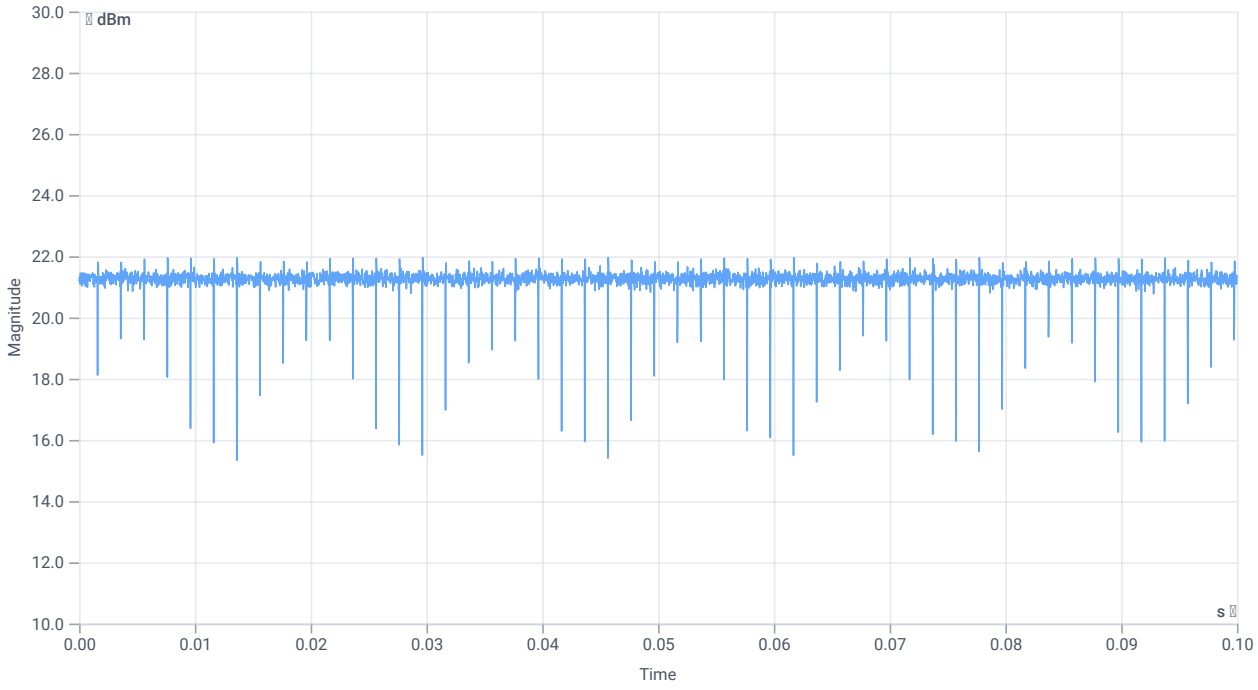
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	19.92	dBm	INFO
Ref. Frequency	---	---	5779.410	MHz	INFO

Evaluation max. Duty Cycle

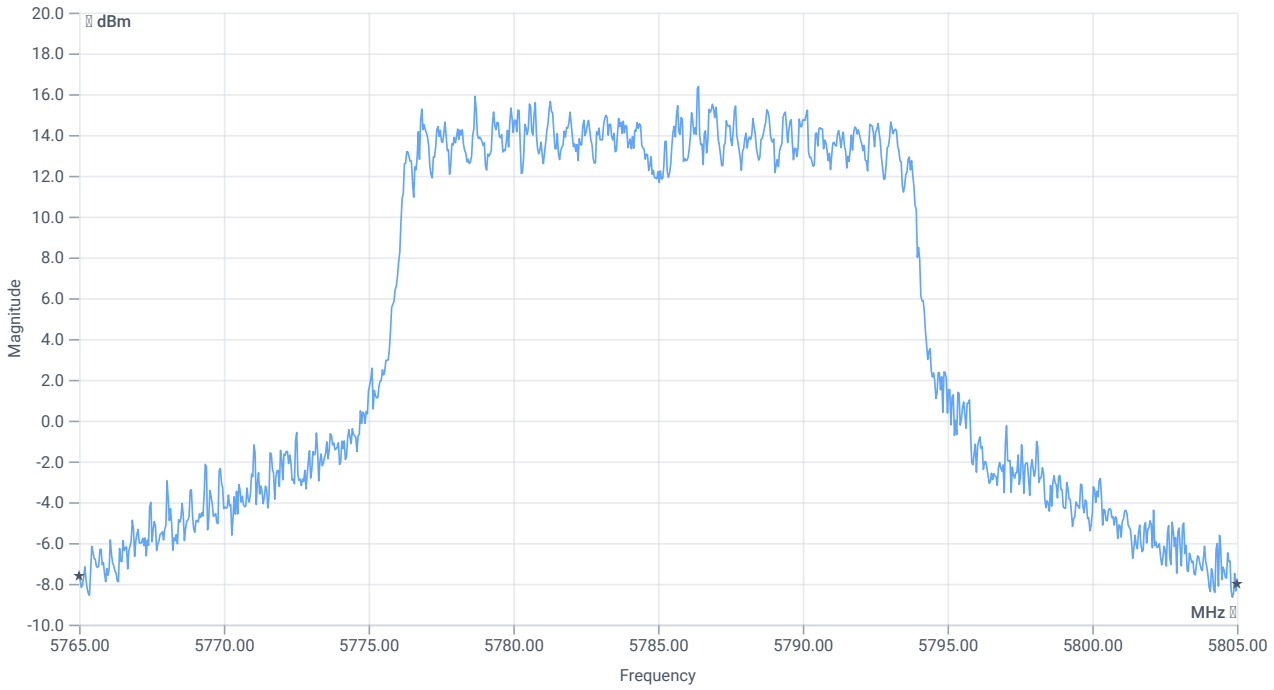
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

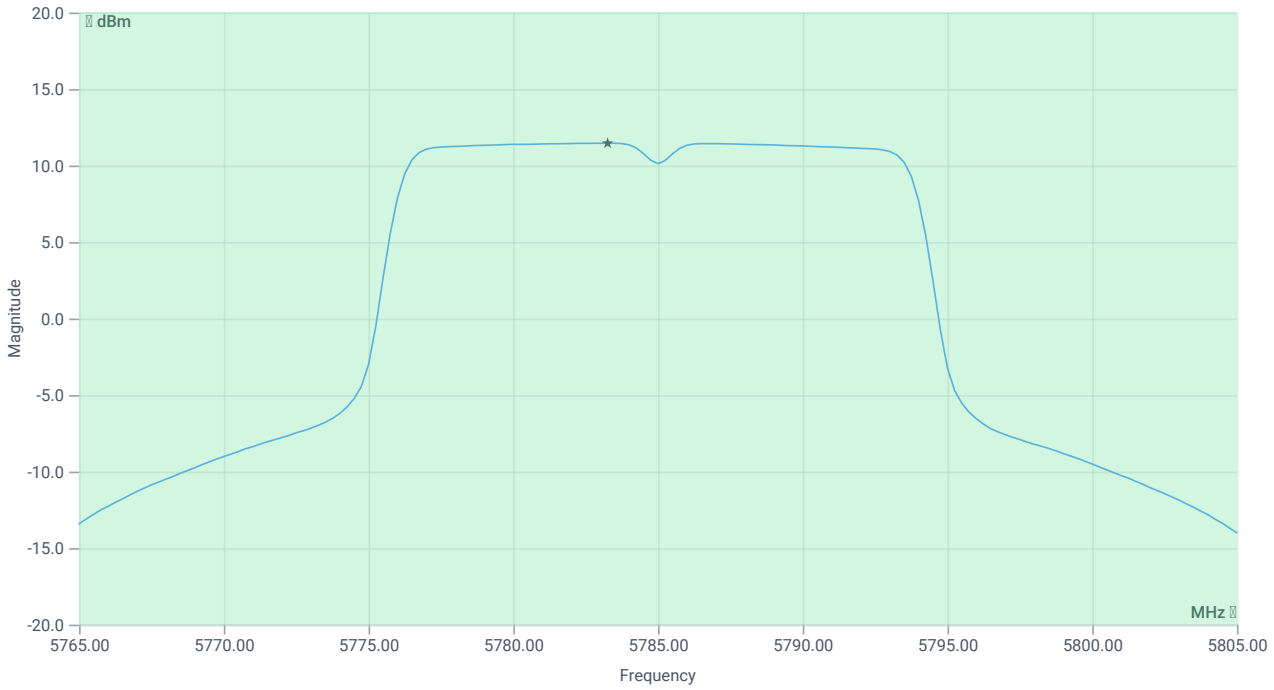
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5765.0000	MHz	INFO
T2 26dB	---	---	5805.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.92 | 16.8 | 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



Max OP and PSD

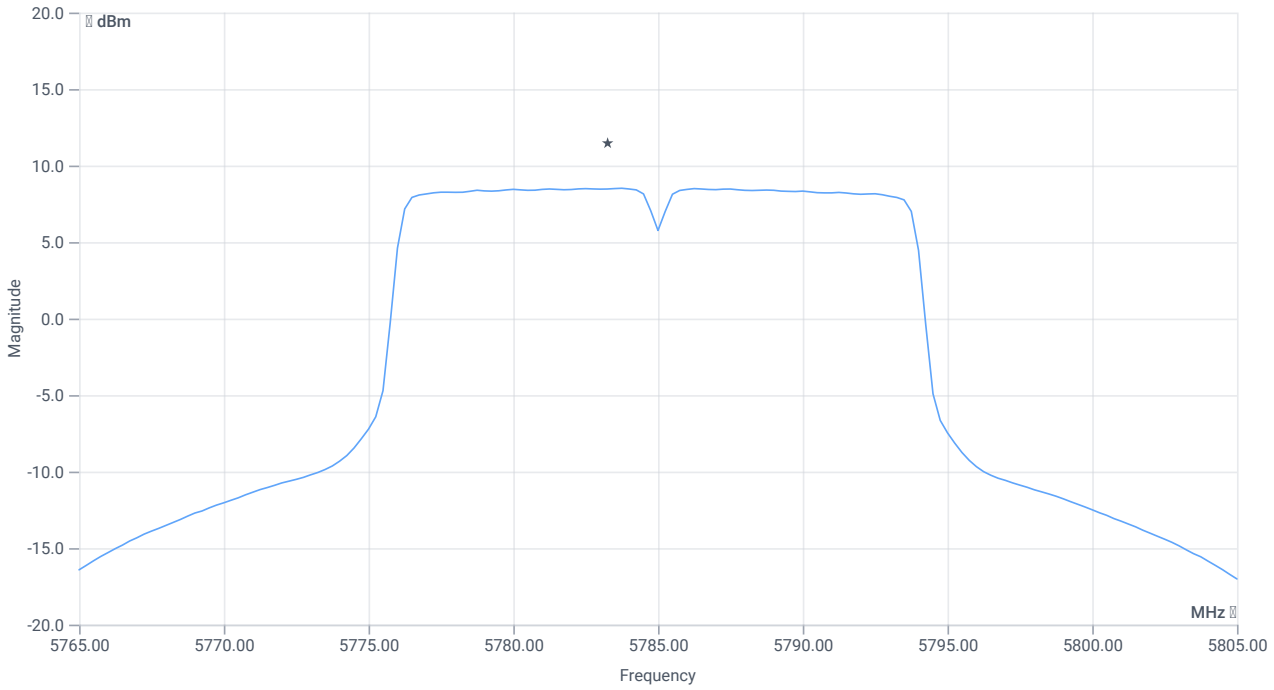
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	23.55	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.55	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	23.55	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.92 | 16.8 | 35
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



PSD UNII-3

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	8.52	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.52	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:41:49
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

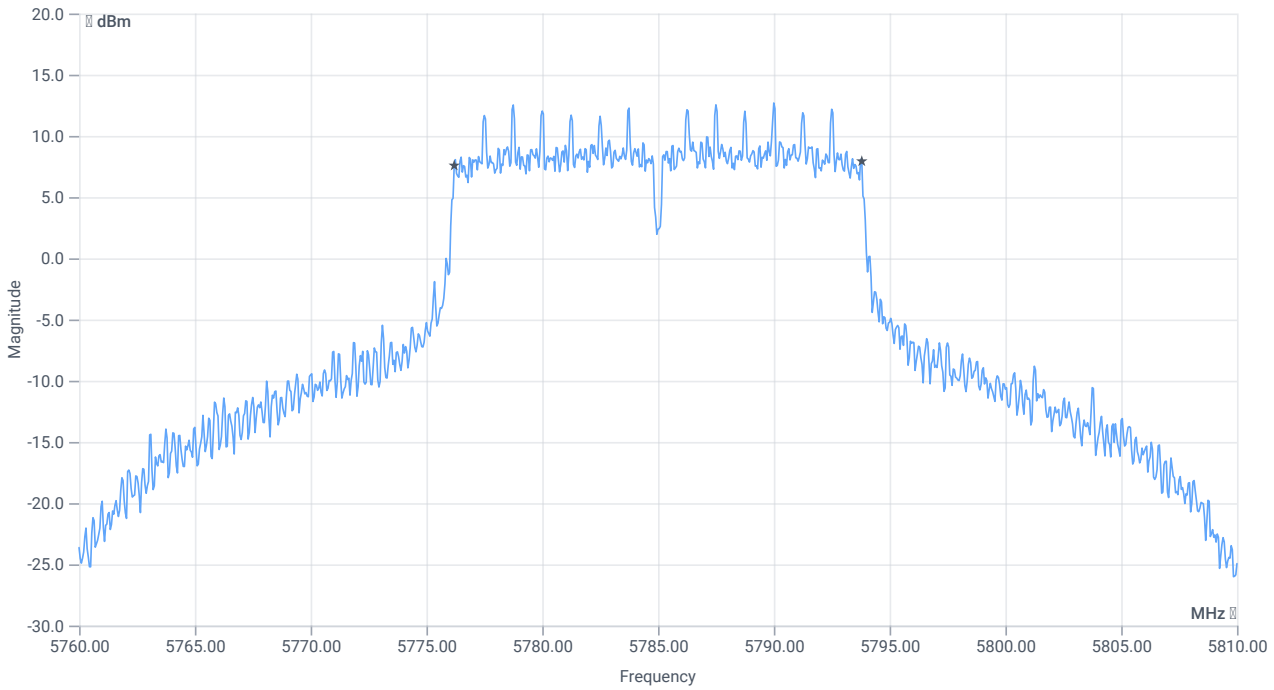
Test at TX 5785 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.03	dBm	INFO
Ref. Frequency	---	---	5782.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.03 | 16.8 | 35
Start [MHz] | Stop [MHz]	5760.000 | 5810.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:41:18
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

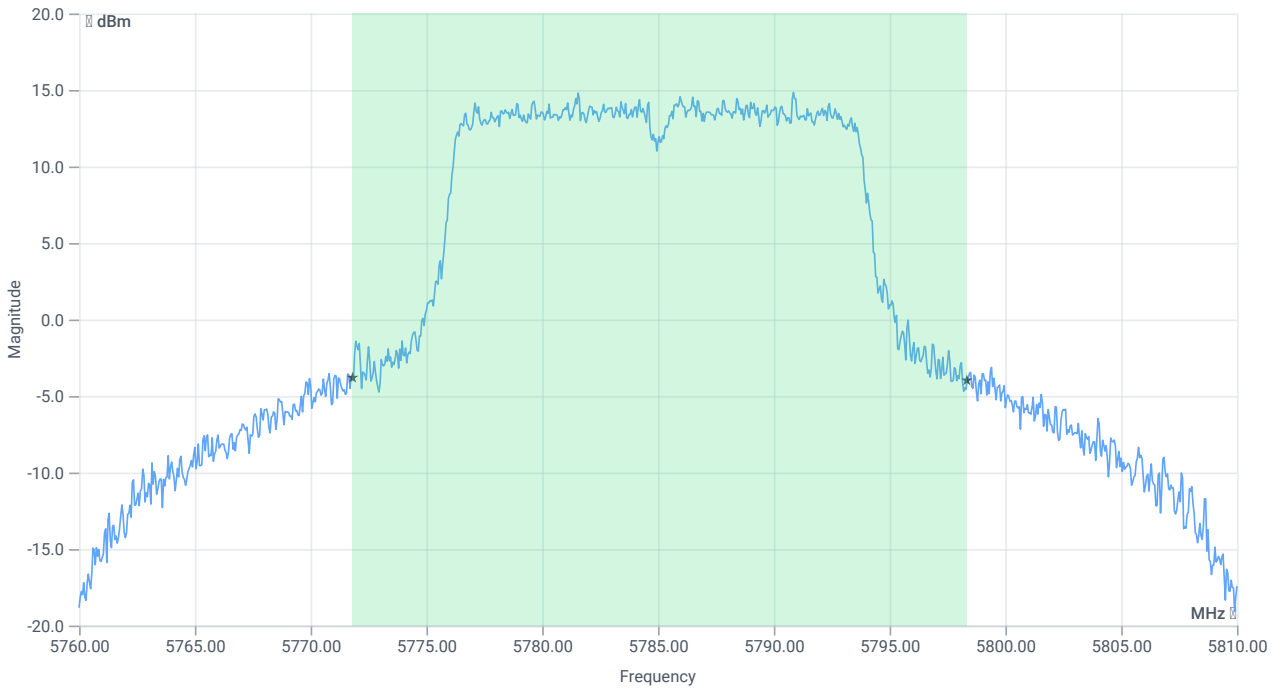
Test at TX 5785 MHz

RESULT: Reference Power cond.

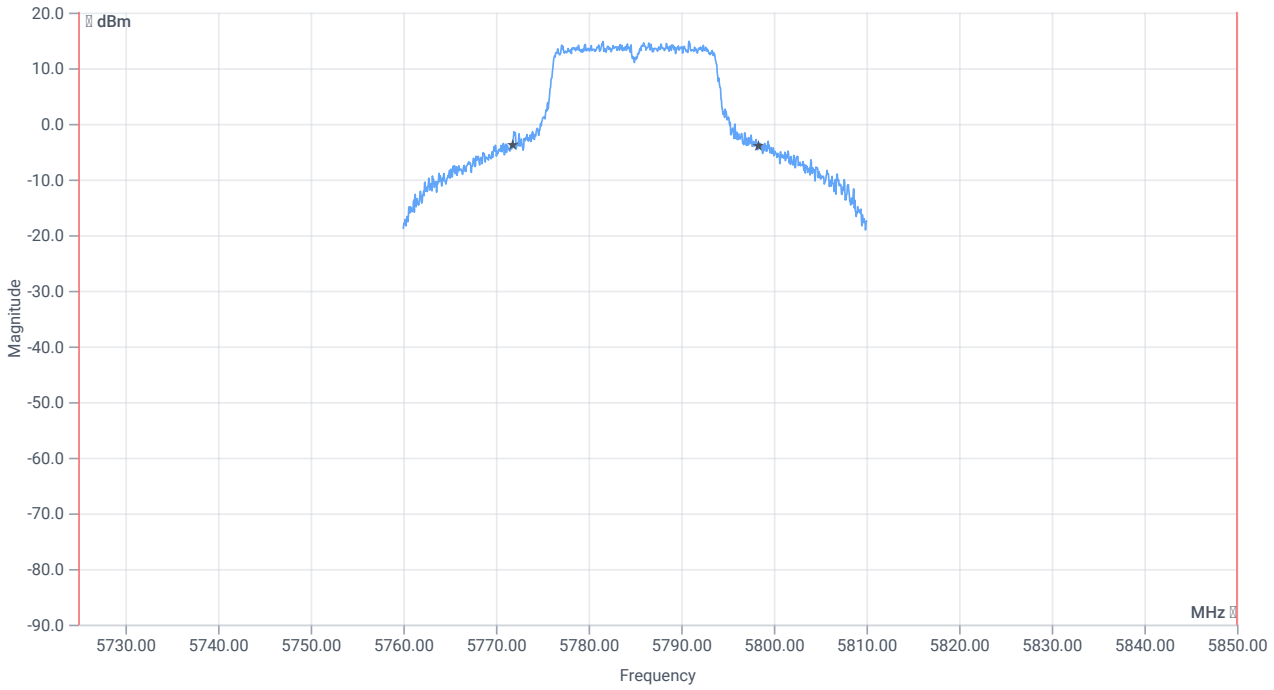
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	19.81	dBm	INFO
Ref. Frequency	---	---	5789.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.81 | 16.8 | 30
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



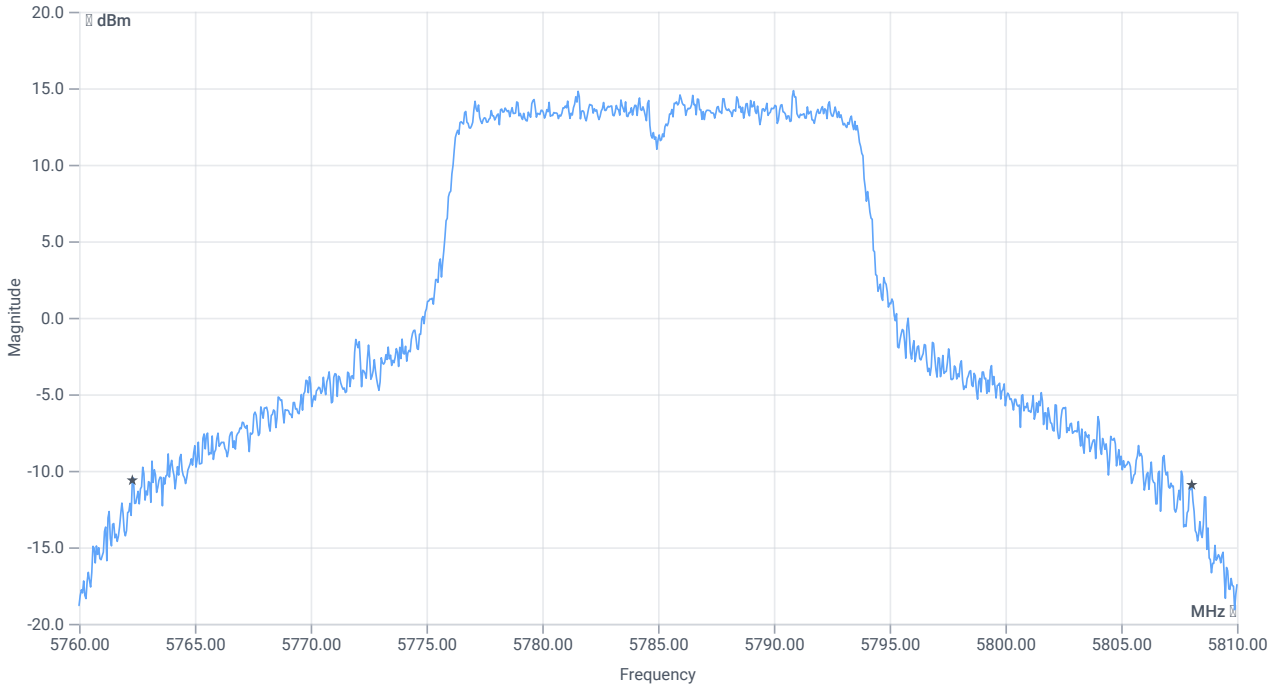
BW 99PCT



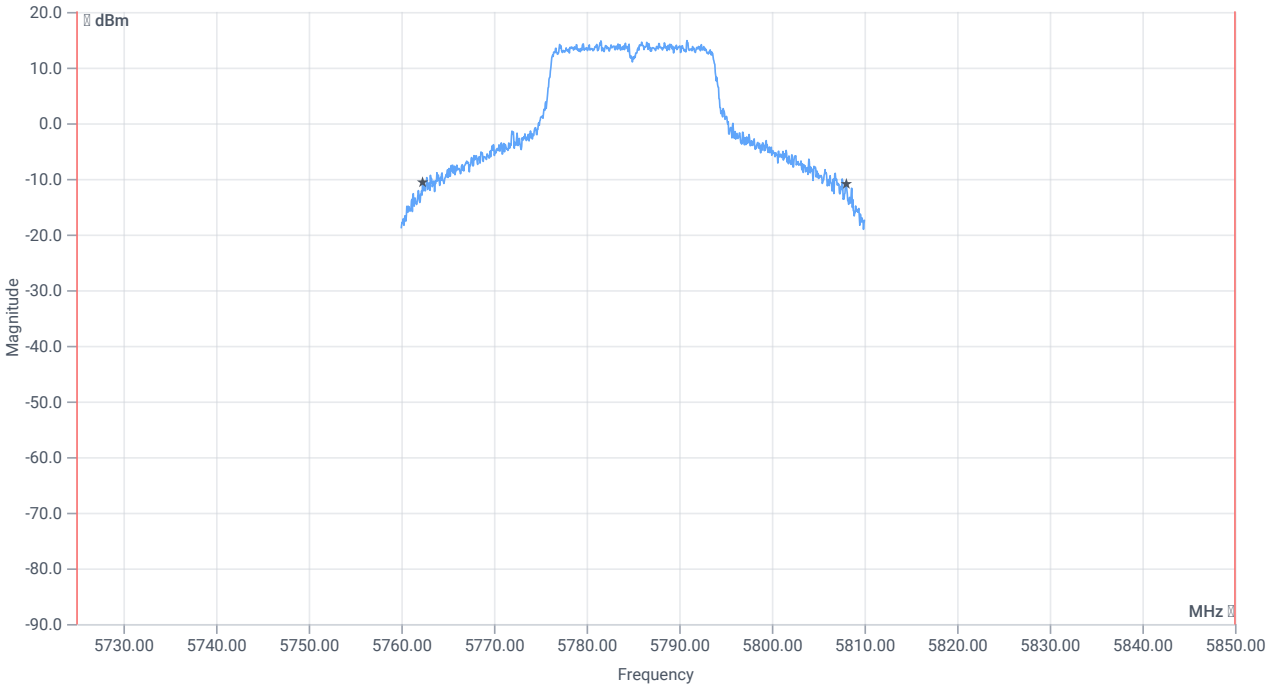
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	26.523	MHz	INFO
T1 99%	5725.000000	---	5771.8132	MHz	PASS
T2 99%	---	5850.000000	5798.3367	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	45.75	MHz	INFO
T1 26dB	5725.000000	---	5762.3000	MHz	PASS
T2 26dB	---	5850.000000	5808.0500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:38:53
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 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]	1.4
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

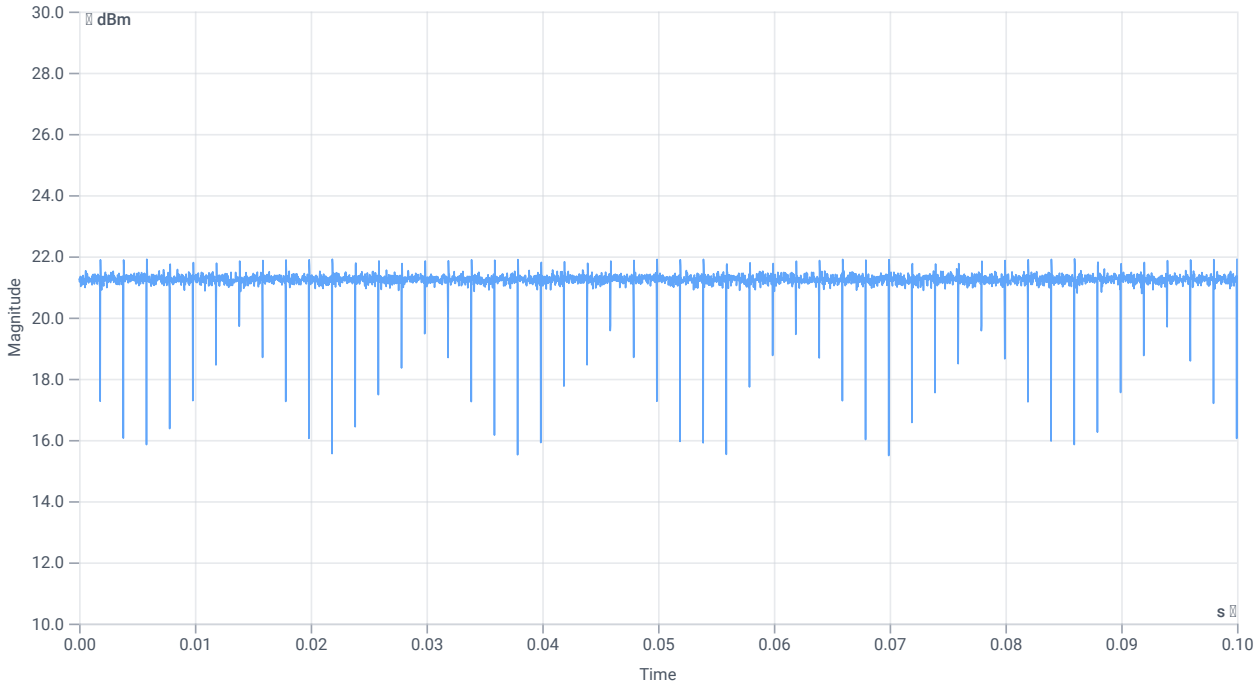
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	19.32	dBm	INFO
Ref. Frequency	---	---	5789.000	MHz	INFO

Evaluation max. Duty Cycle

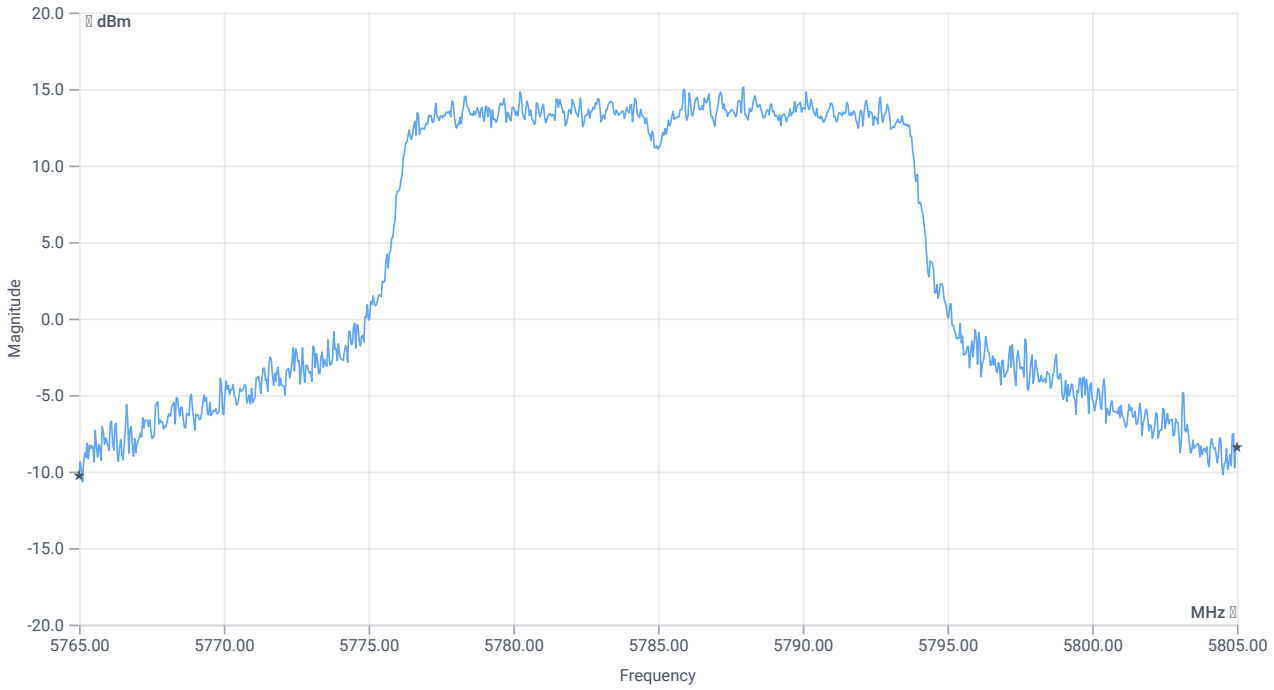
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

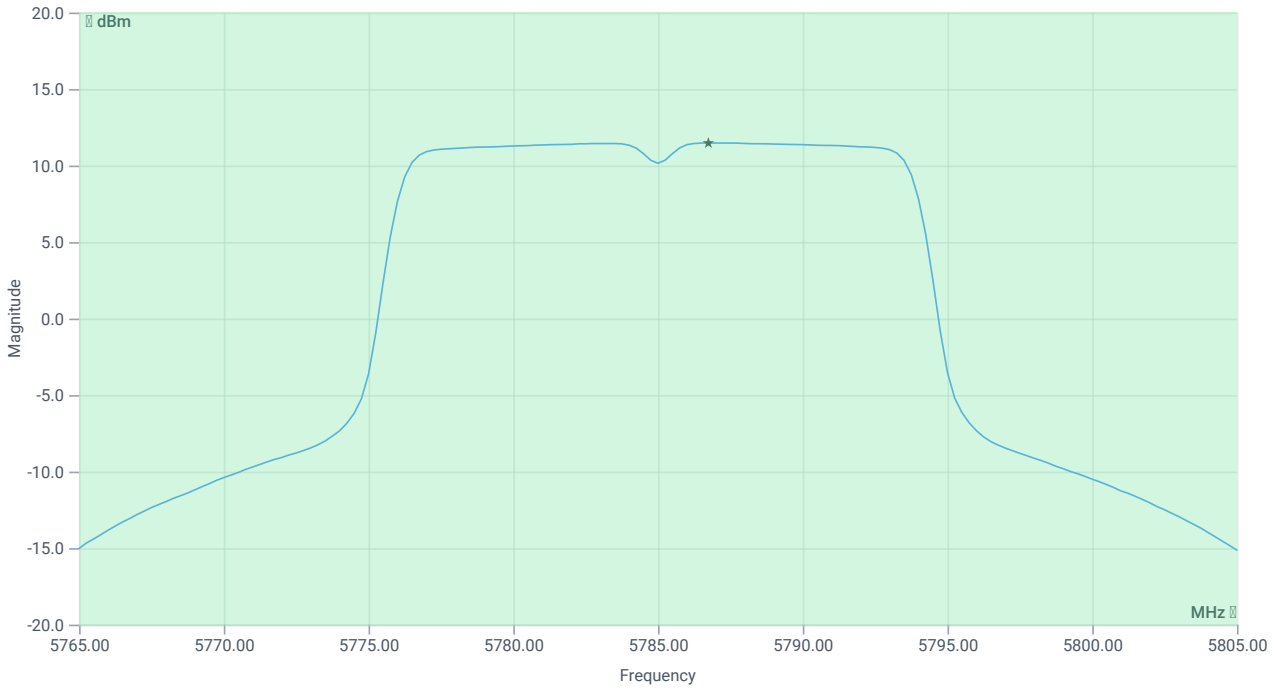
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5765.0000	MHz	INFO
T2 26dB	---	---	5805.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.32 | 16.8 | 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



Max OP and PSD

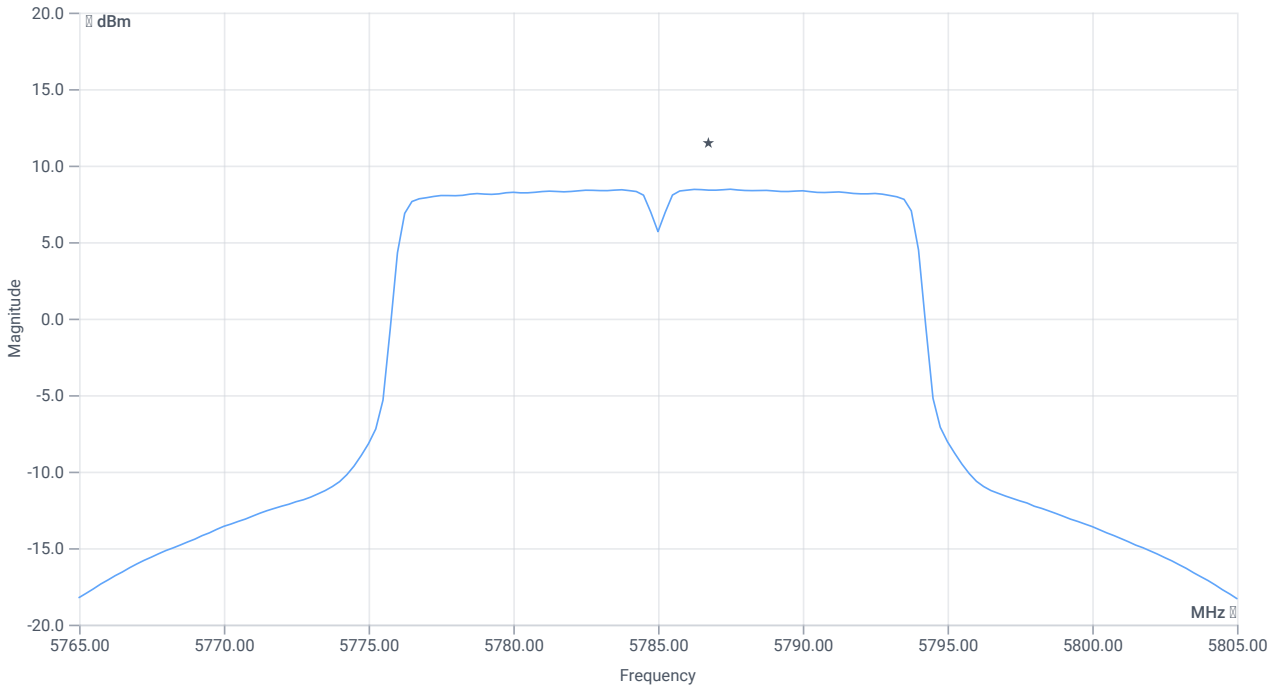
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	23.53	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.53	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	23.53	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.32 | 16.8 | 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



PSD UNII-3

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

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:35:40
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

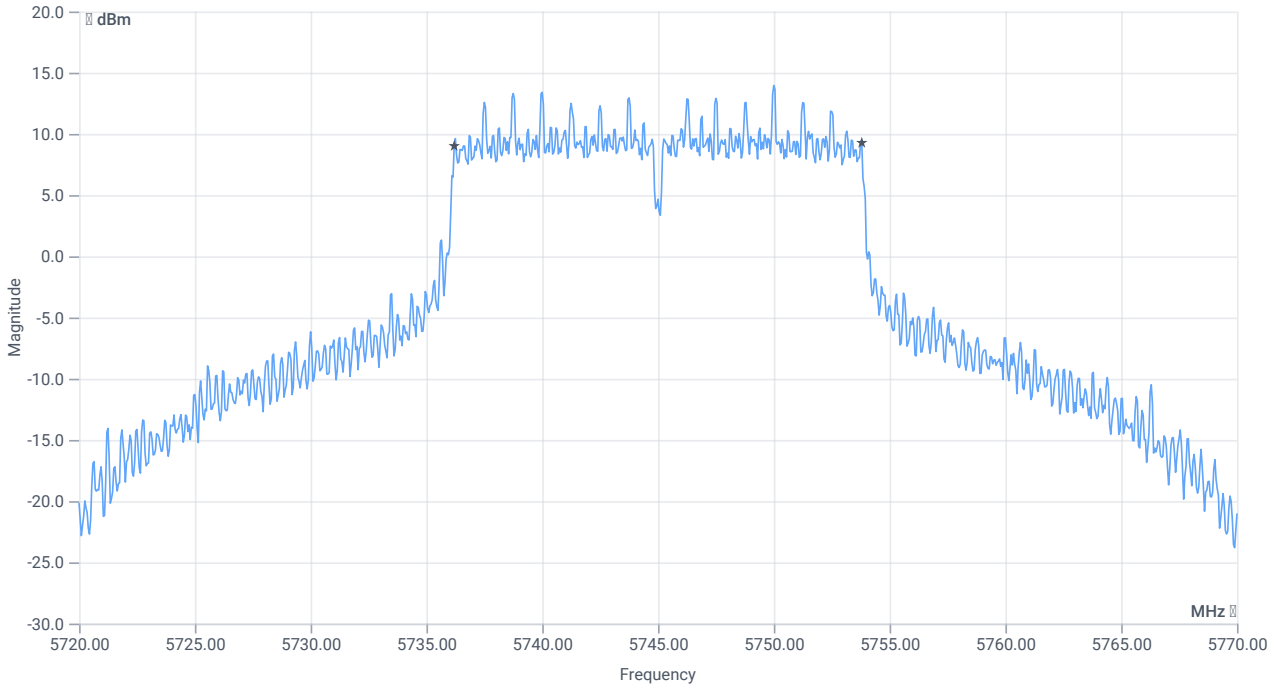
Test at TX 5745 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	21.11	dBm	INFO
Ref. Frequency	---	---	5740.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	33.11 | 16.82 | 35
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:35:09
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

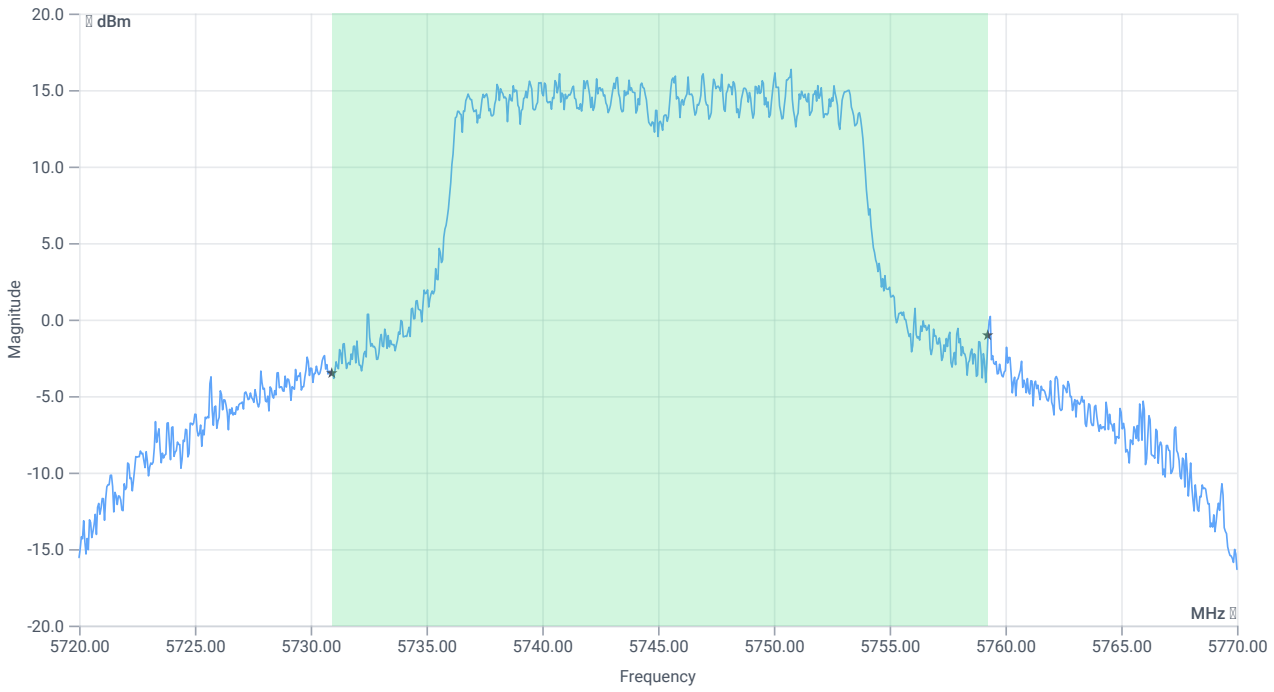
Test at TX 5745 MHz

RESULT: Reference Power cond.

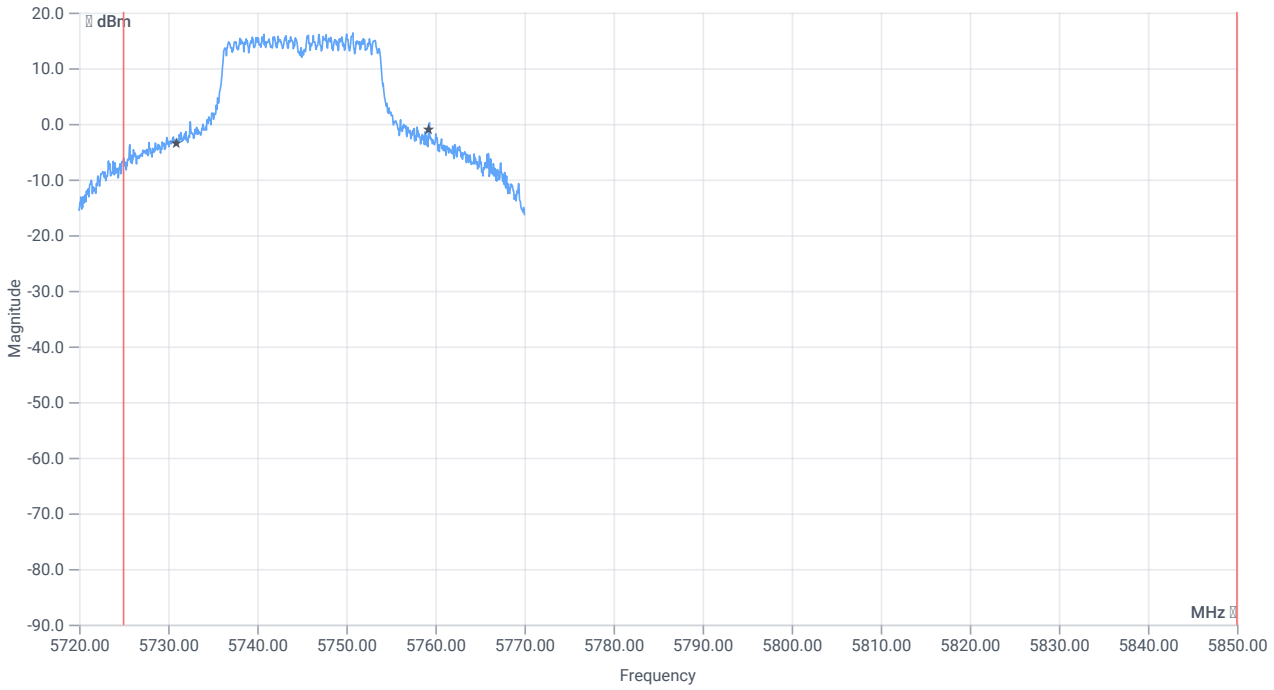
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.95	dBm	INFO
Ref. Frequency	---	---	5741.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.95 | 16.82 | 30
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



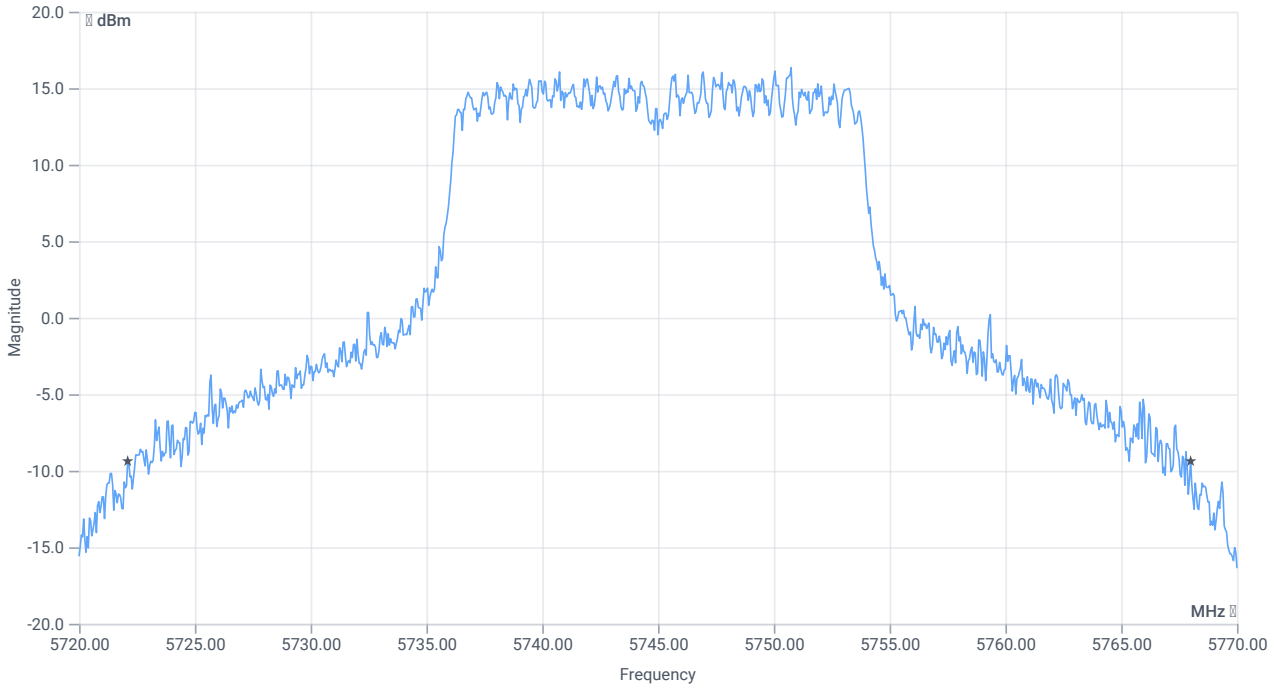
BW 99PCT



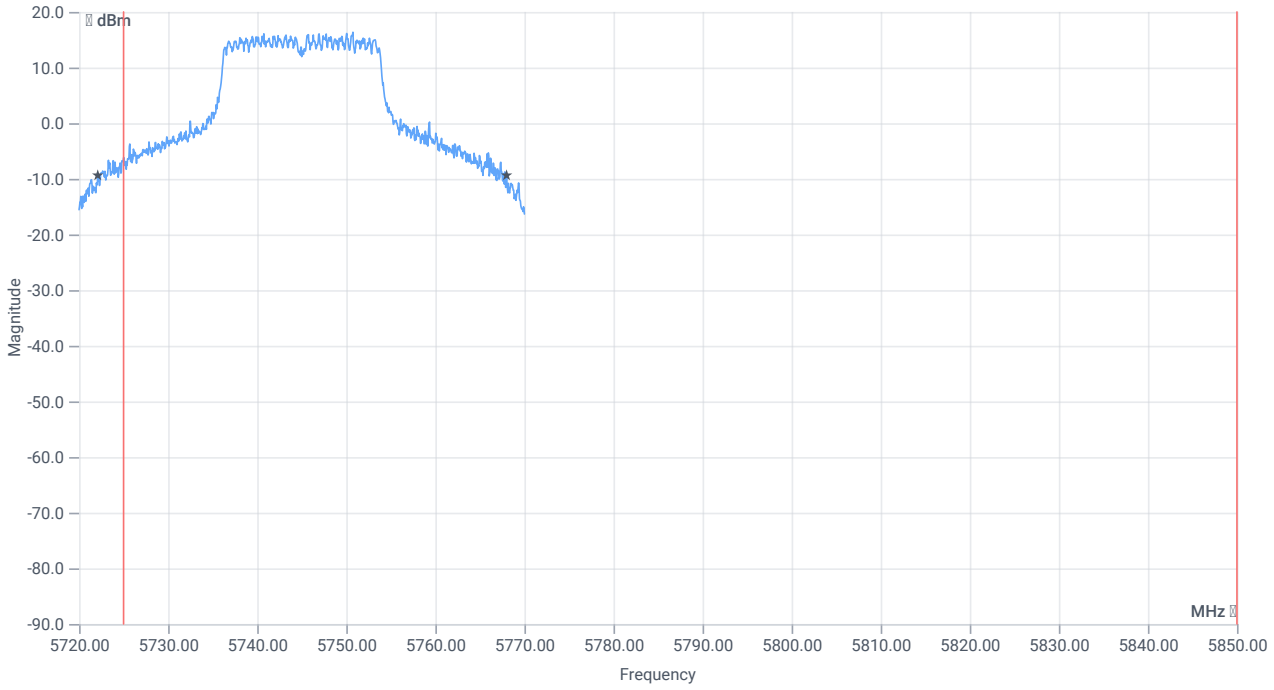
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	28.322	MHz	INFO
T1 99%	5725.000000	---	5730.9141	MHz	PASS
T2 99%	---	5850.000000	5759.2358	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	45.9	MHz	INFO
T1 26dB	5725.000000	---	5722.1000	MHz	DFS required
T2 26dB	---	5850.000000	5768.0000	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:32:44
Ambit Temp [°C] | Humidity [rel%]	22.9 | 33
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5745 MHz

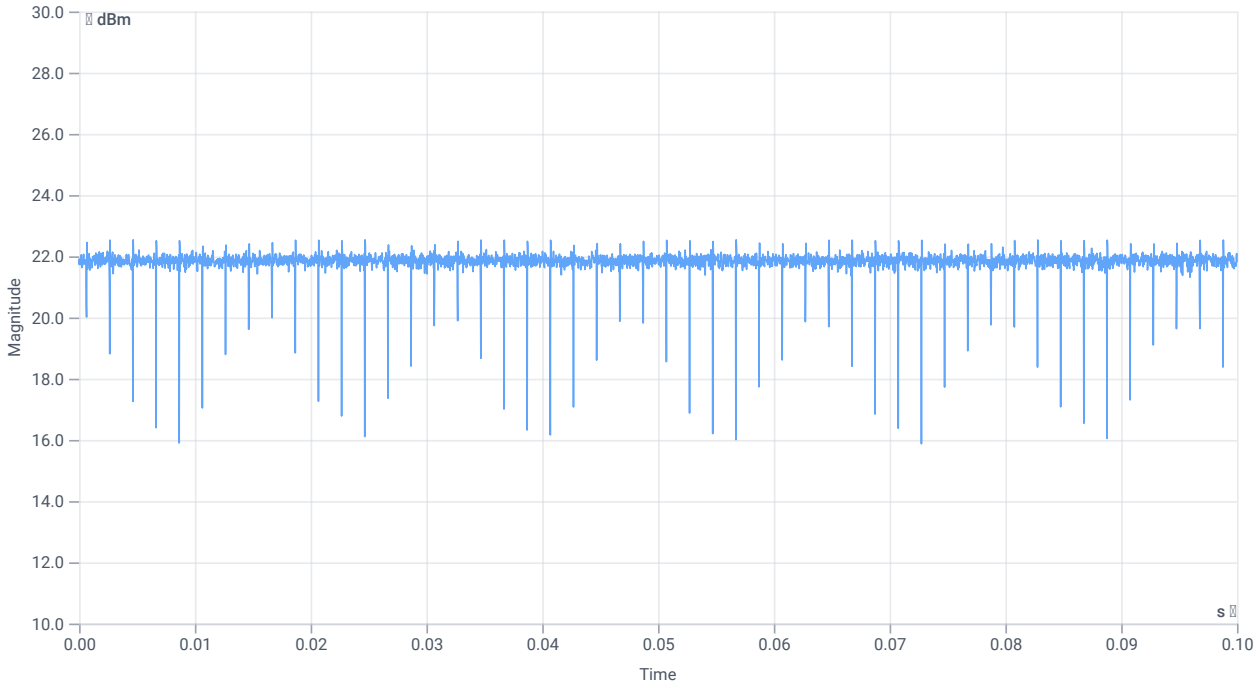
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.88	dBm	INFO
Ref. Frequency	---	---	5740.000	MHz	INFO

Evaluation max. Duty Cycle

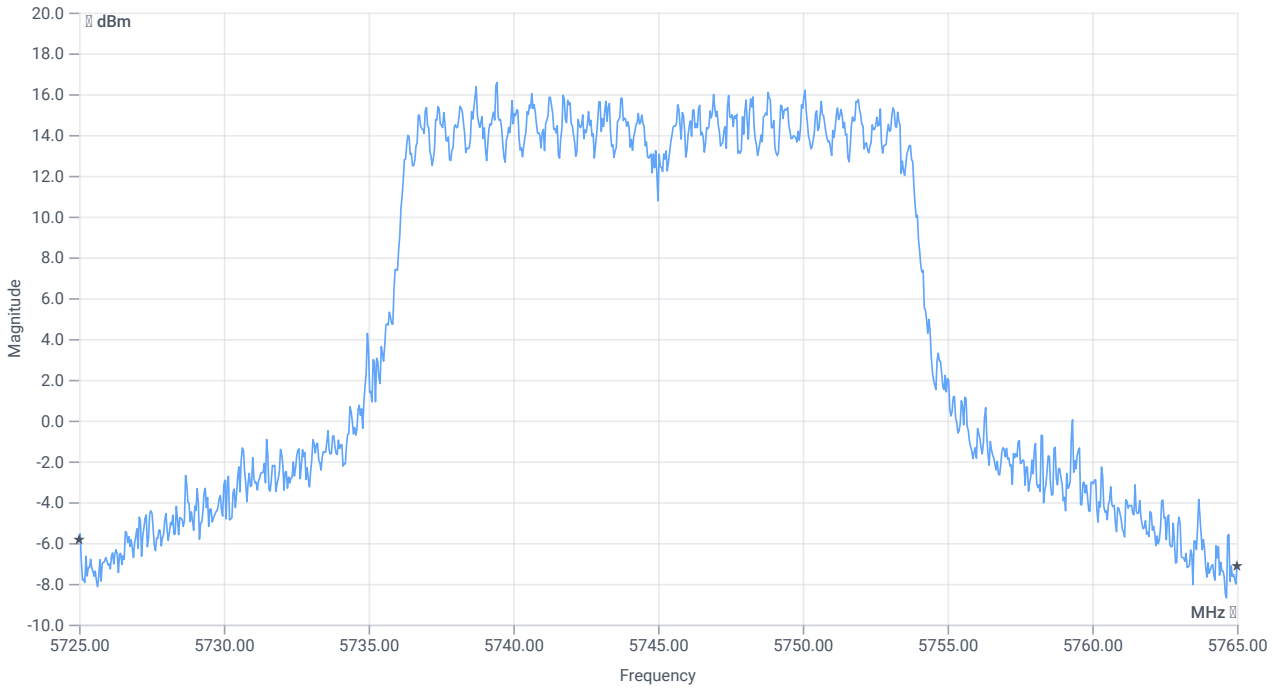
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

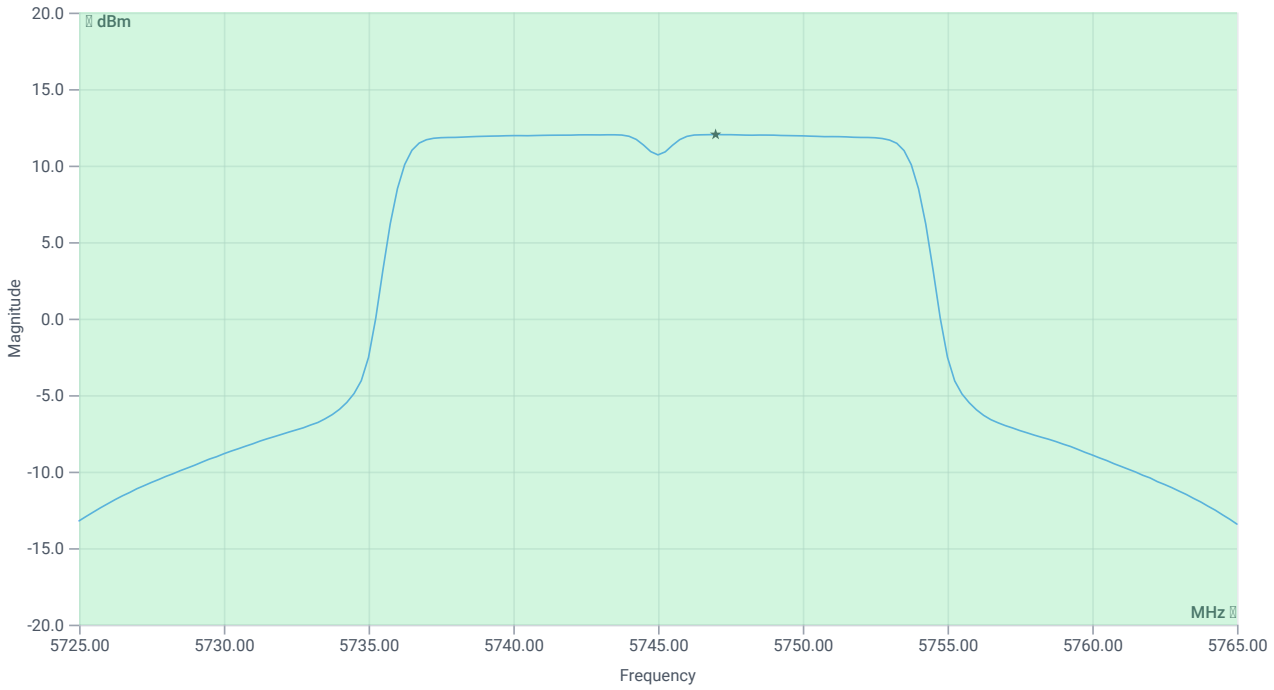
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5725.0000	MHz	INFO
T2 26dB	---	---	5765.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.88 | 16.82 | 35
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
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

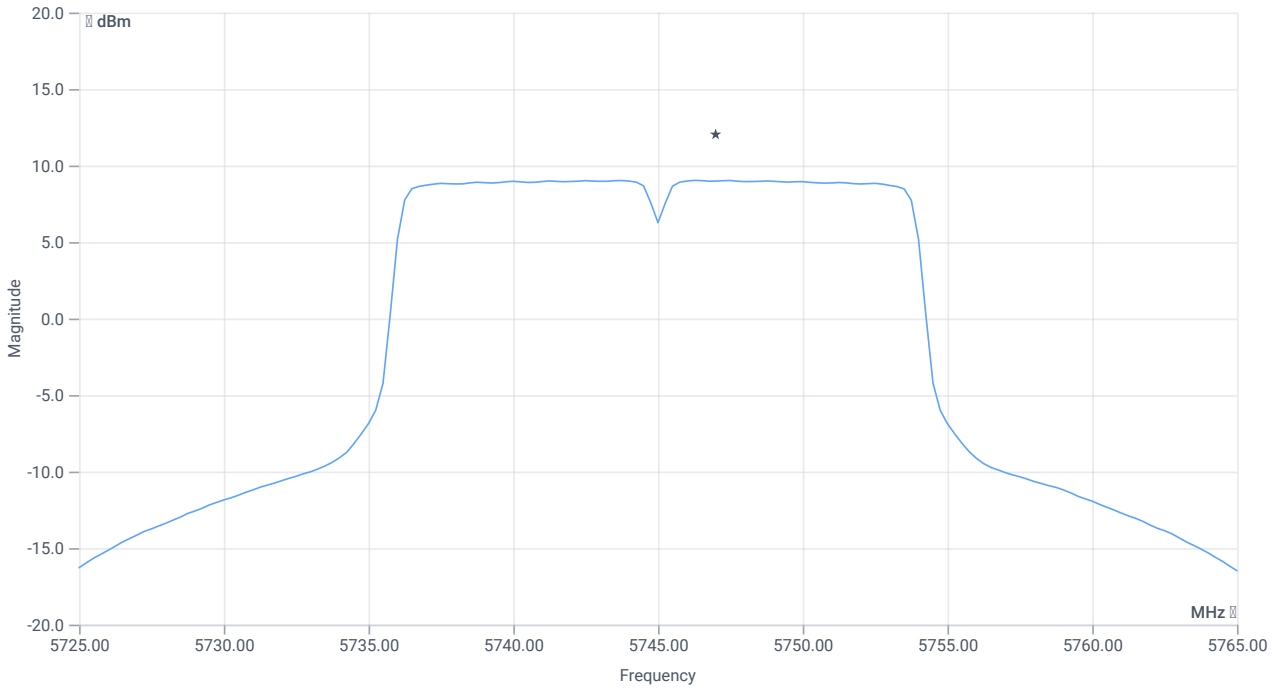
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	24.16	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	24.16	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	24.16	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.88 | 16.82 | 35
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



PSD UNII-3

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	9.03	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	9.03	dBm/0.5MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:32:00
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

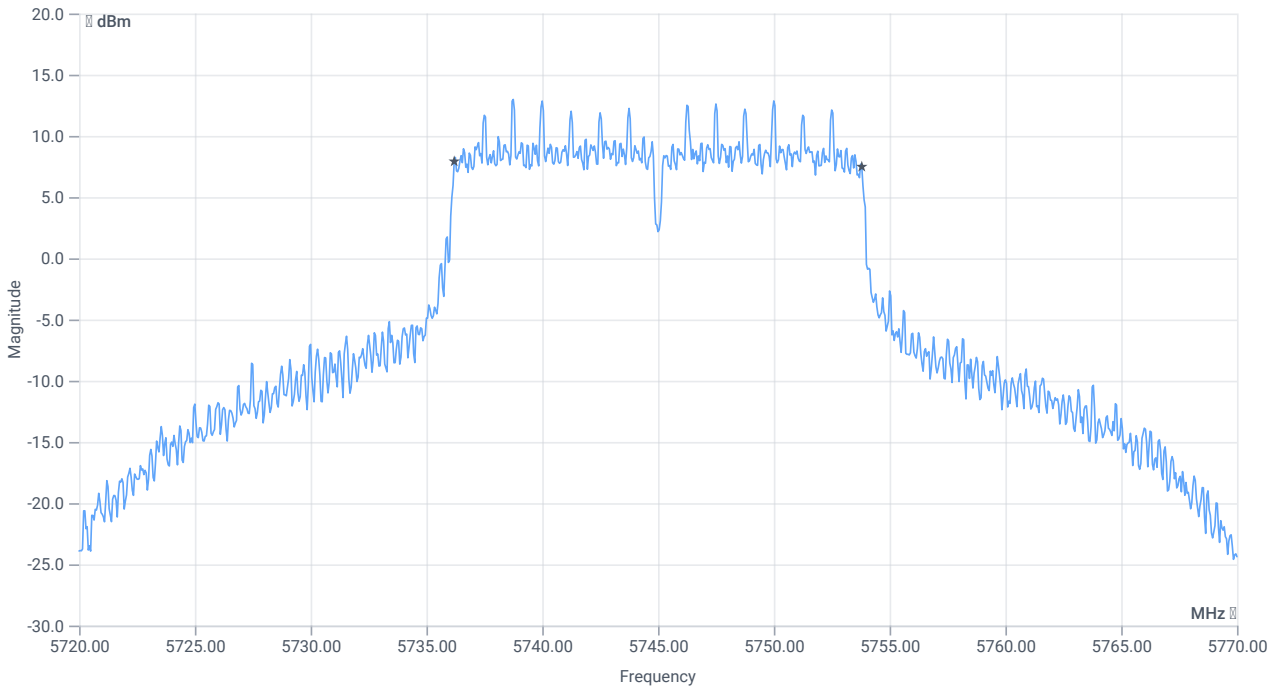
Test at TX 5745 MHz

RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.02	dBm	INFO
Ref. Frequency	---	---	5740.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.02 | 16.82 | 35
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE



BW 6dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth (6dB)	0.500	---	17.6	MHz	PASS

Verdict
PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

Test References

TC Start	21.02.2023 14:31:29
Ambit Temp [°C] | Humidity [rel%]	23.0 | 33
System Version	3.5.0.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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

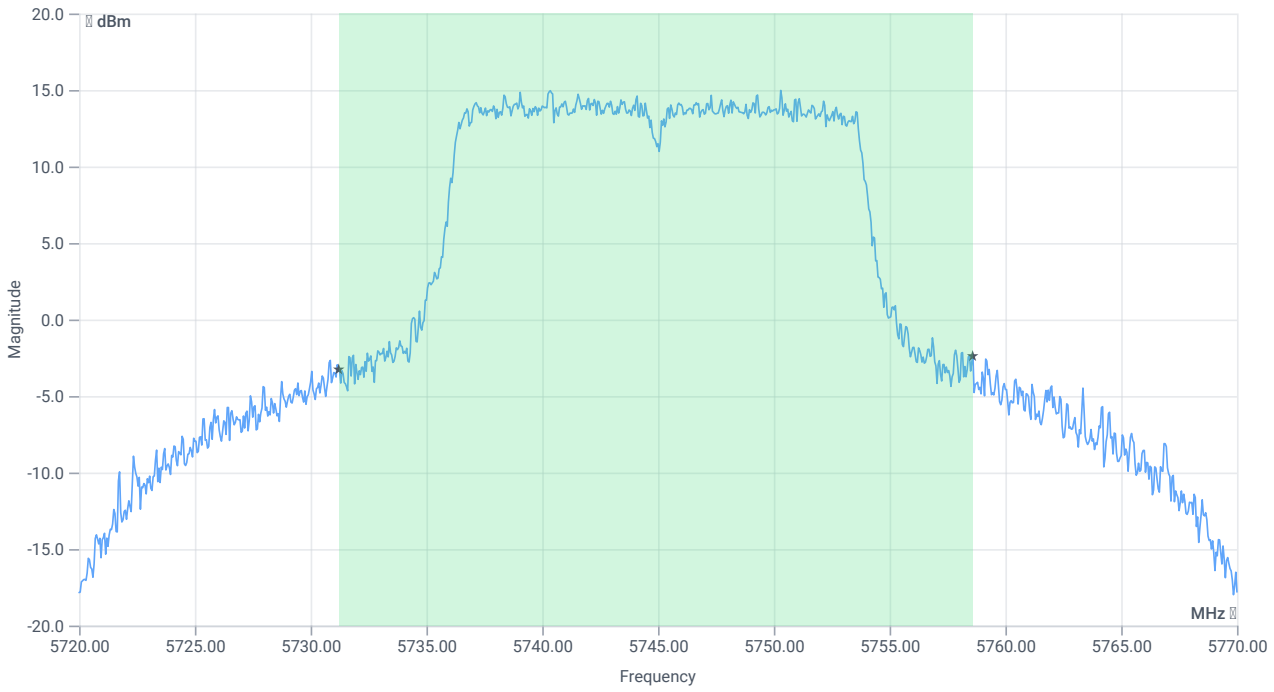
Test at TX 5745 MHz

RESULT: Reference Power cond.

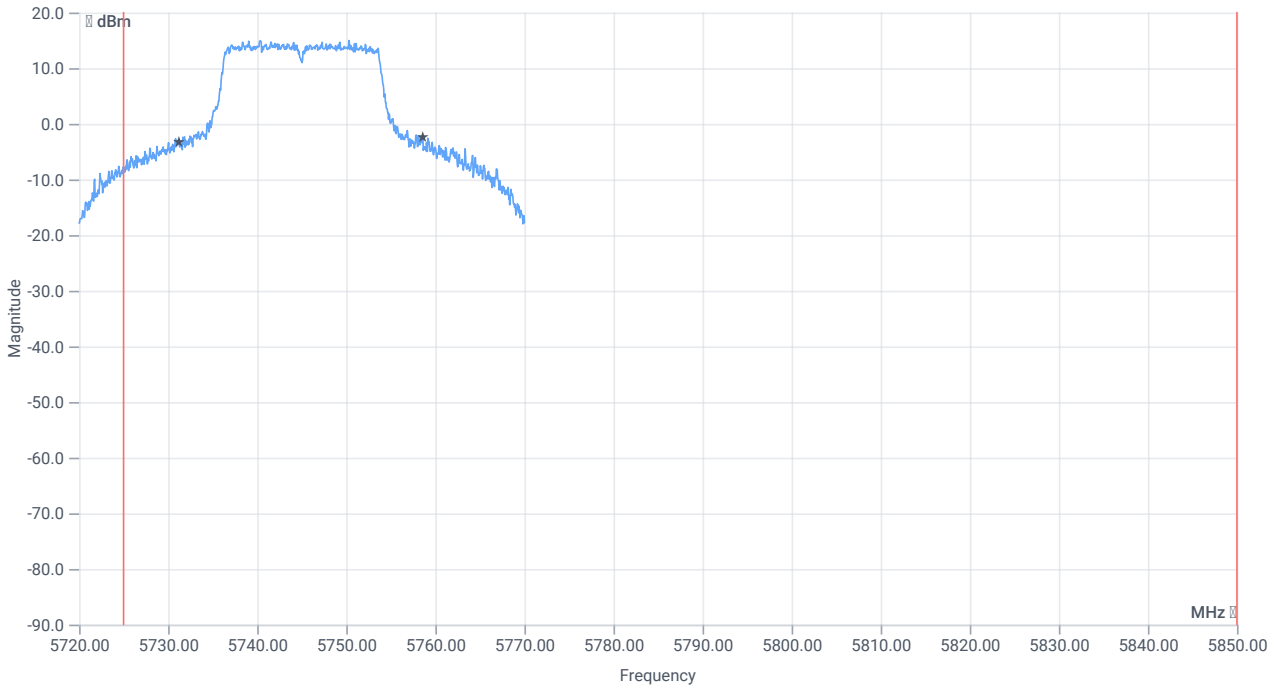
Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.30	dBm	INFO
Ref. Frequency	---	---	5742.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.30 | 16.82 | 30
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.300000 | 1.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE



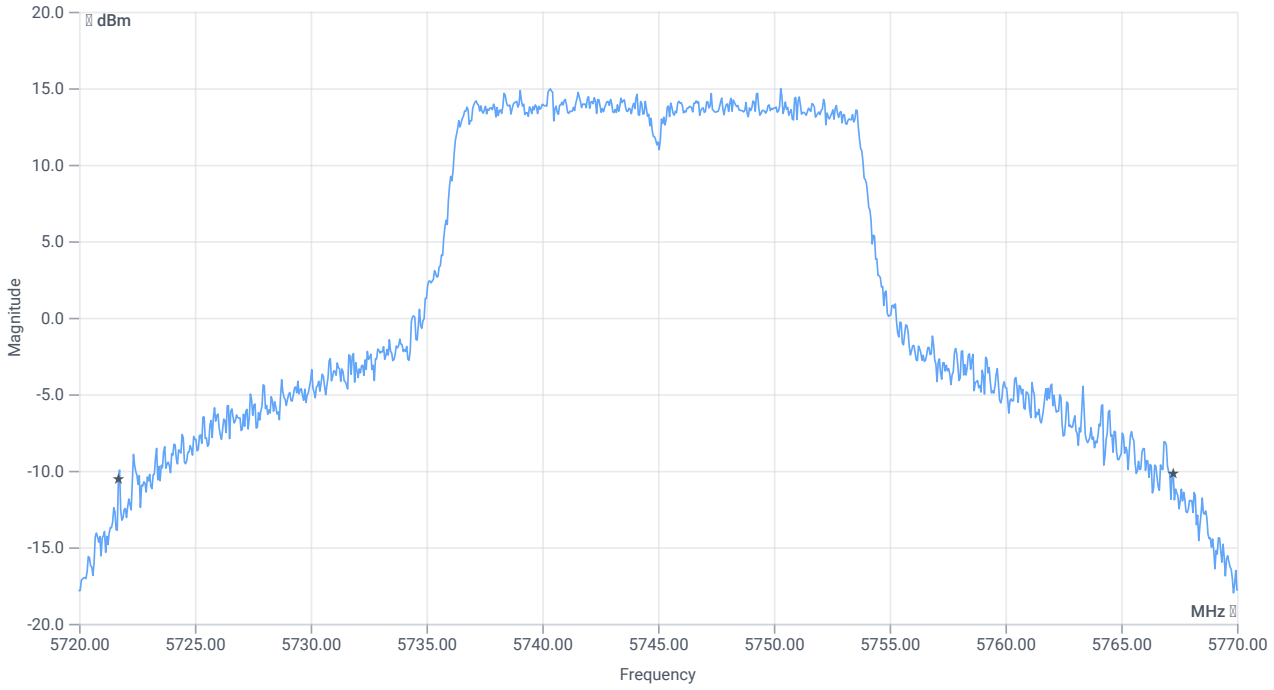
BW 99PCT



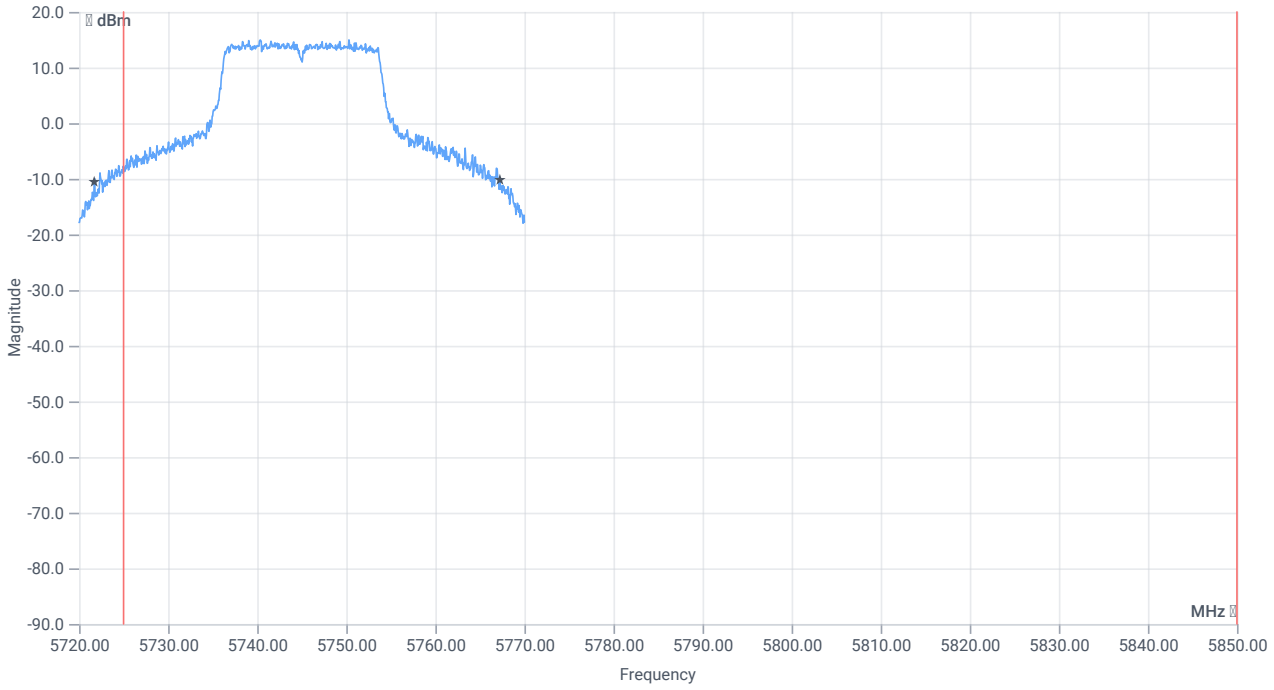
BW within Band 99PCT

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 99%	---	---	27.373	MHz	INFO
T1 99%	5725.000000	---	5731.2138	MHz	PASS
T2 99%	---	5850.000000	5758.5864	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	45.55	MHz	INFO
T1 26dB	5725.000000	---	5721.7000	MHz	DFS required
T2 26dB	---	5850.000000	5767.2500	MHz	PASS

Verdict
PASS

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

Test References

TC Start	21.02.2023 14:29:04
Ambit Temp [°C] | Humidity [rel%]	22.9 | 34
System Version	3.5.0.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx

Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client
Limit W52 Japan	Standard

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
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 5745 MHz

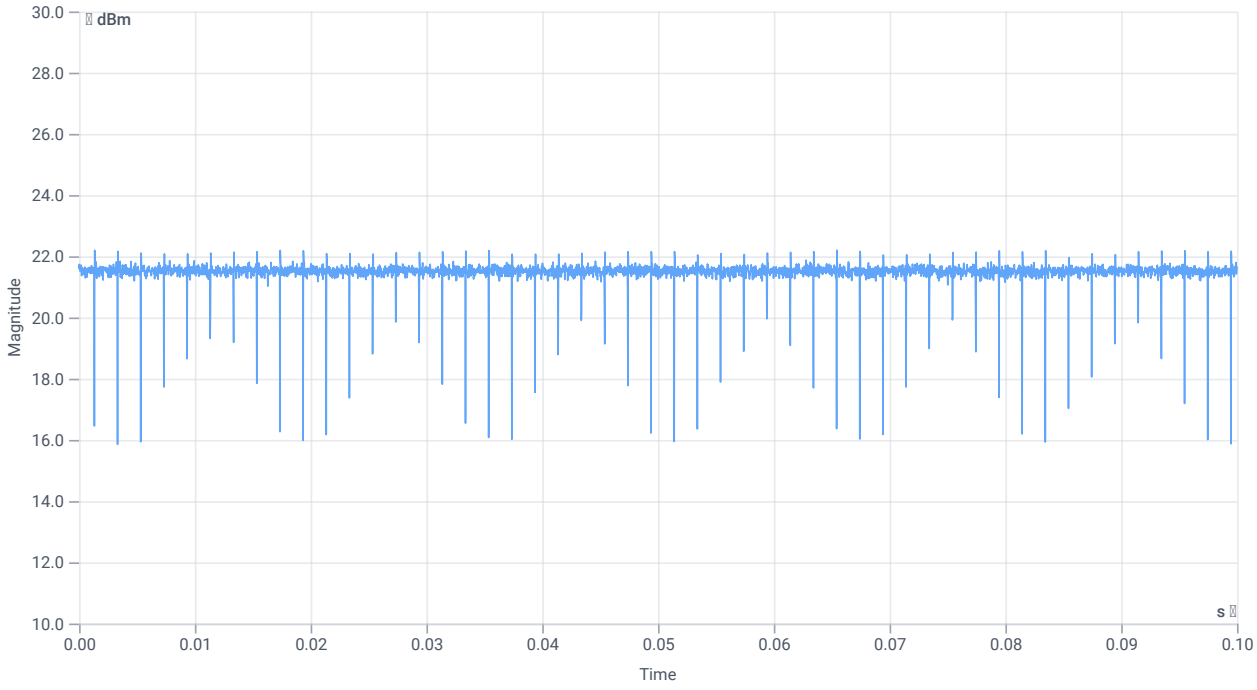
RESULT: Reference Power cond.

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Ref. Power 1MHz/1MHz cond.	---	---	20.15	dBm	INFO
Ref. Frequency	---	---	5747.400	MHz	INFO

Evaluation max. Duty Cycle

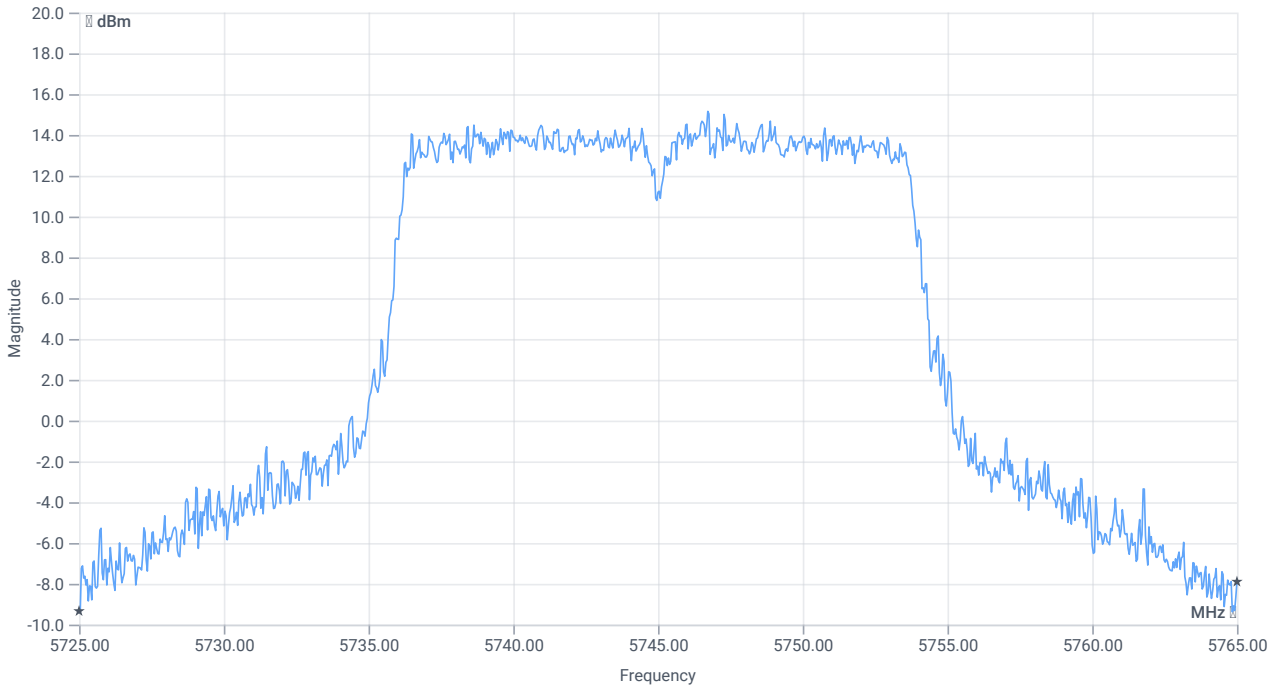
Duty Cycle evaluation

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
No enough Bursts detected, Duty Cycle Burst Ratio set to 1					
Duty Cycle (Burst Ratio) max	---	---	1	---	INFO
Duty Cycle max	---	---	0	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	1	---	INFO
Duty Cycle min	---	---	0	dB	INFO



Duty cycle

Evaluation Bandwidth



BW 26dB

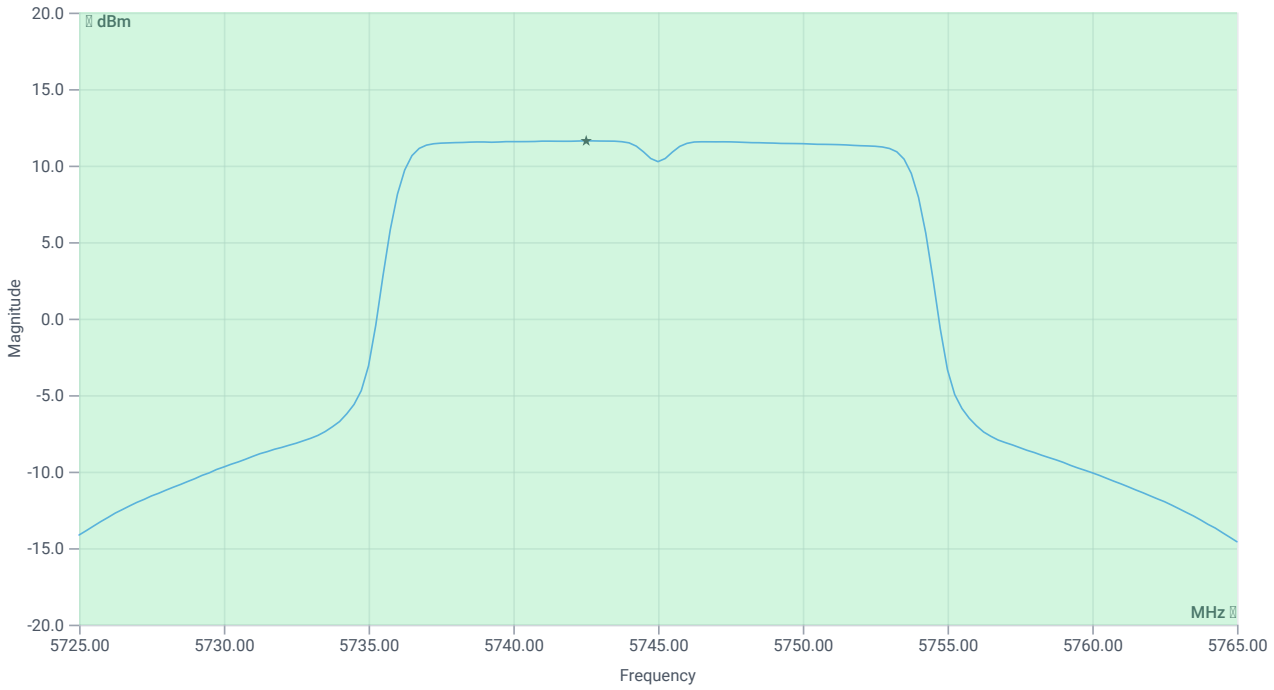
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5725.0000	MHz	INFO
T2 26dB	---	---	5765.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.15 | 16.82 | 30
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
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

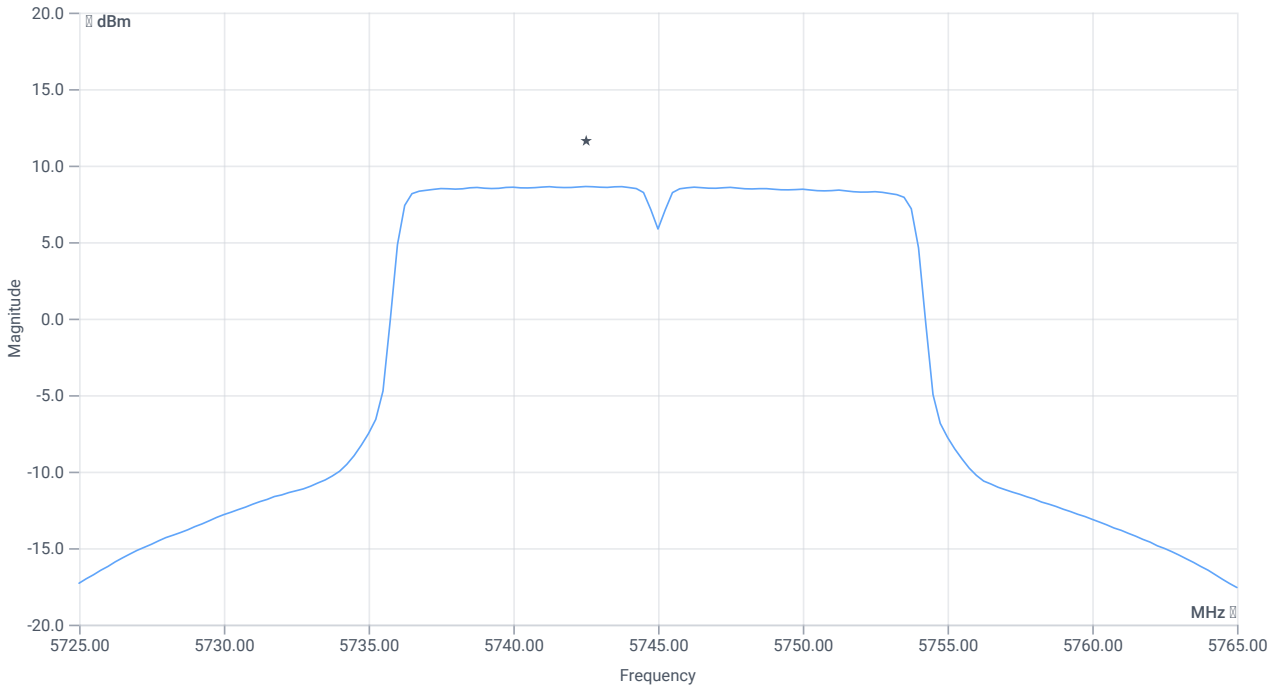
RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Max Output Power	---	---	23.71	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.71	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	---	27.02	23.71	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.15 | 16.82 | 35
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE



PSD UNII-3

RESULT

Test Description	*Lower Limit*	*Upper Limit*	*Measured*	*Unit*	*Verdict*
Power Spectral Density	---	---	8.63	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.63	dBm/0.5MHz	PASS

Verdict
PASS

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