

Conducted test results

No.23-1-0068401T004a-A6

July 31, 2023

Test Standard(s)	FCC 15.407 FCC 15.407, ISED RSS247
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Authorized

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Table of Content

# Message with SA scan ~	4
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	5
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	9
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	13
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	17
# Message with SA scan ~	21
FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-2A	22
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	26
FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-2A	30
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	34
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx a mode U-NII-2A	38
# Message with SA scan ~	40
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	41
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	45
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	49
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-1	53
# Message with SA scan ~	57
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	58
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	62
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	67
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	71
# Message with SA scan ~	76
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	77
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	81
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	86
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	90
# Message with SA scan ~	95
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	96
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	100
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	105
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2A	109
# Message with SA scan ~	114
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	115
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	119
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	124
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	128
# Message with SA scan ~	133
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	134
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	138
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	143
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	147

# Message with SA scan ~	152
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	153
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	157
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	162
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-2C	166
# Message with SA scan ~	171
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	172
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	177
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	181
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	183
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	188
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	192
# Message with SA scan ~	194
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	195
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	200
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	204
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	206
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	211
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	215
# Message with SA scan ~	217
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	218
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	223
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	227
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	229
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3	234
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT20 mode U-NII-3	238
FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	240
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	244
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1	248
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A	250
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C	254
FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3	258

Message with SA scan ~

References

TC start	11.07.2023 08:10:34
Ambit temp [°C] humidity [rel%]	24.3 51
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 08:10:34
Message	set WLAN5Gx to ac_VHT20_U_NII_1, Frequency [MHz] 5180 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	11.07.2023 08:10:44
Ambit temp [°C] humidity [rel%]	24.3 51
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

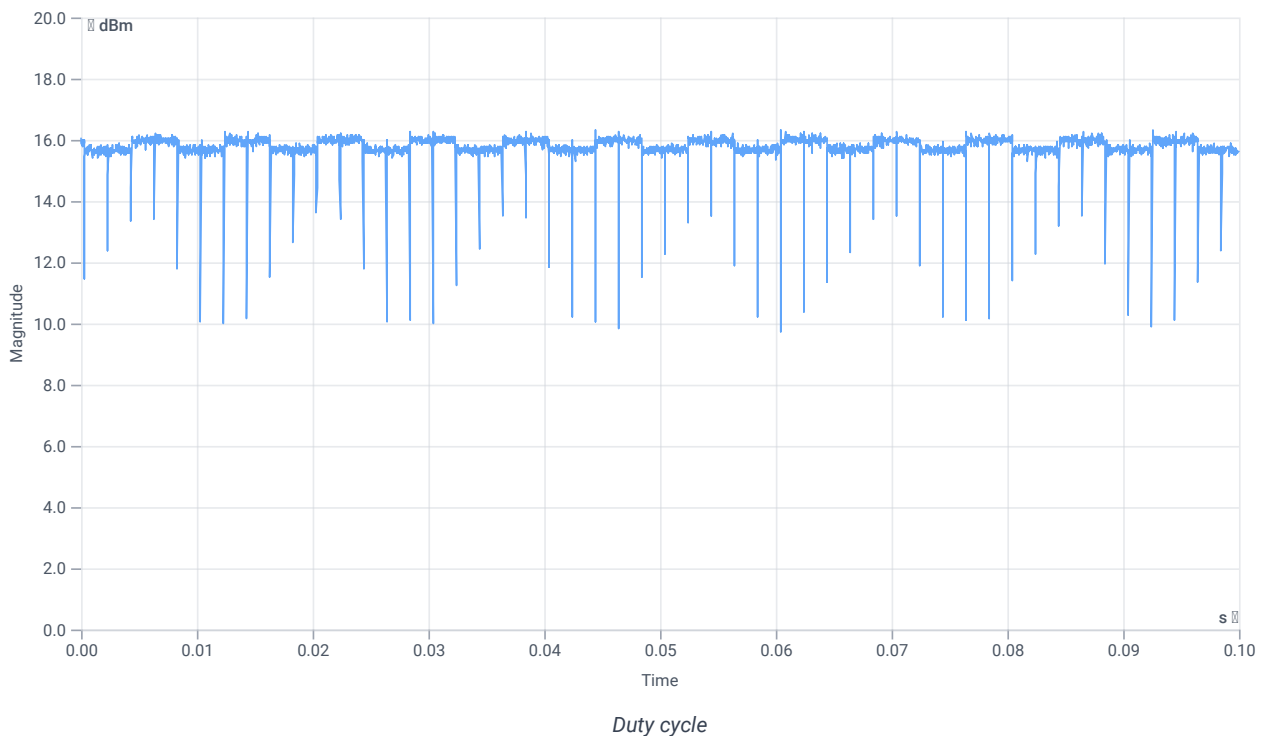
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	14.64	dBm	INFO
Ref. Frequency	---	---	5179.200	MHz	INFO

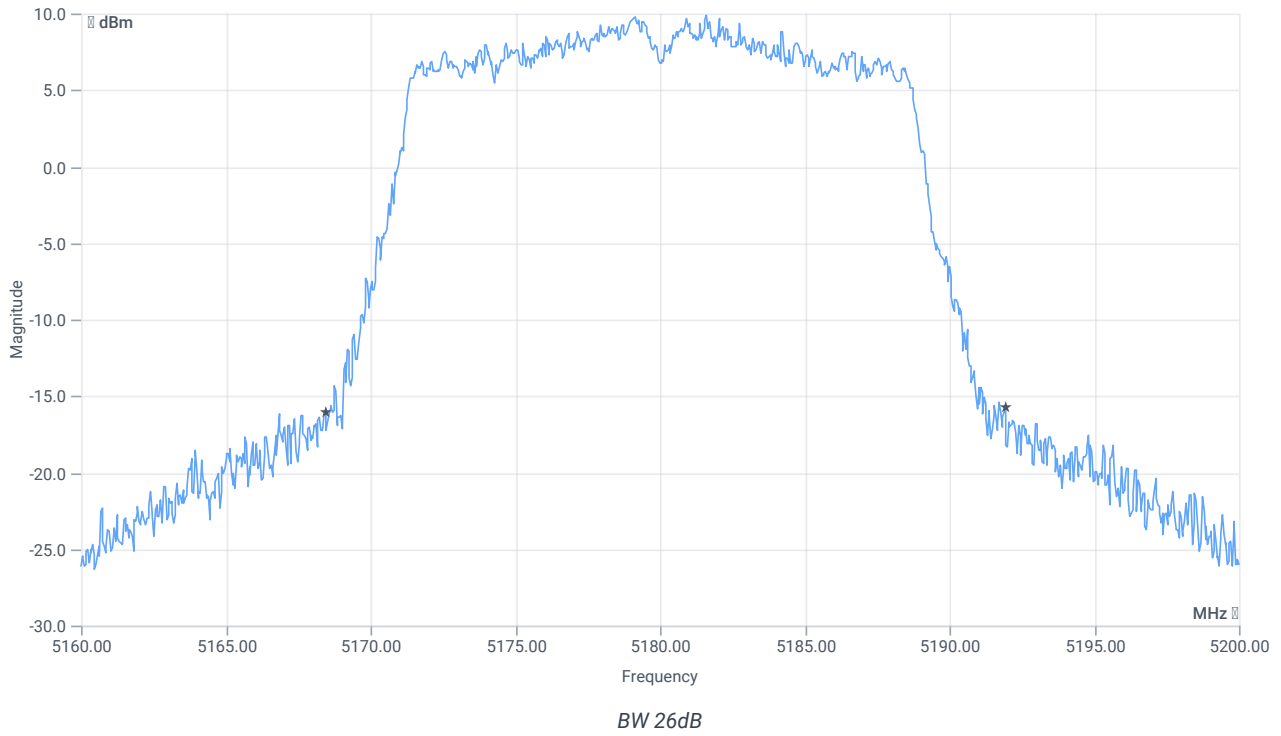
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



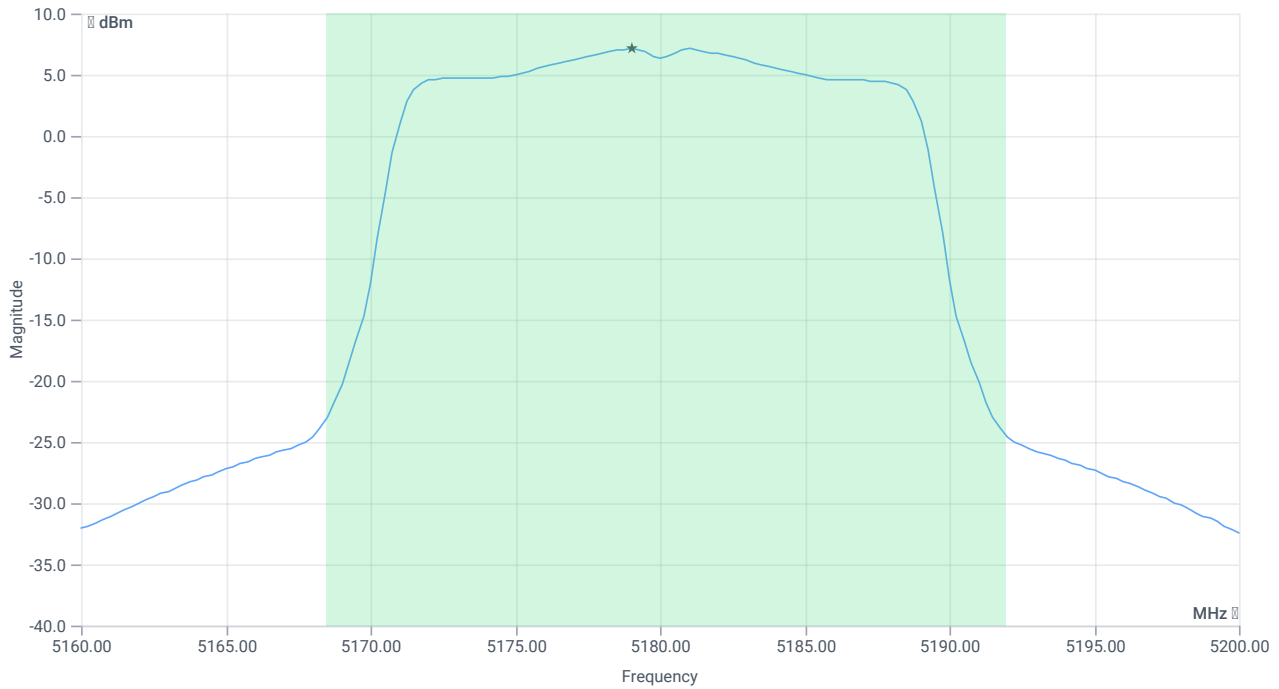
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.48	MHz	INFO
T1 26dB	---	---	5168.4400	MHz	INFO
T2 26dB	---	---	5191.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.64 16.39 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.9	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.9	dBm	PASS
Limit: 11 dBm + 10 log 23.48					
Max Output Power DC corrected	--	24.71	17.9	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.14	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.14	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:12:19
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

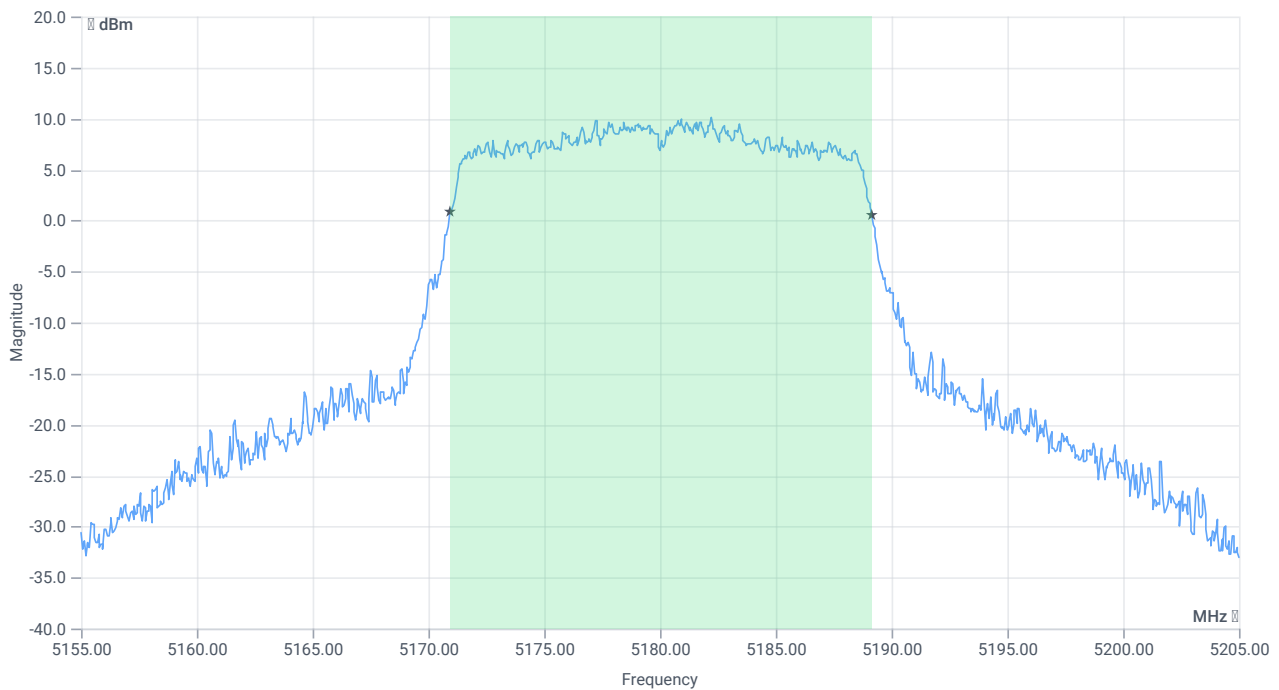
Test at TX 5180 MHz

RESULT: Reference Power cond.

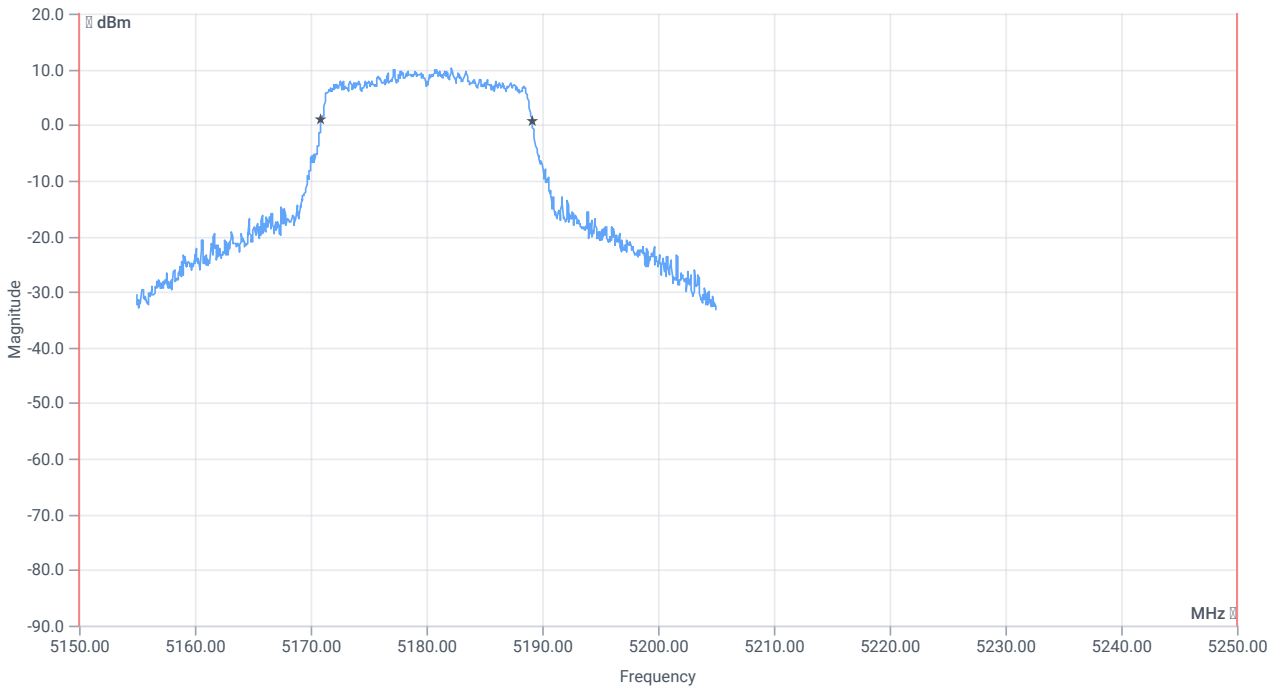
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.38	dBm	INFO
Ref. Frequency	--	--	5178.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.38 16.39 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



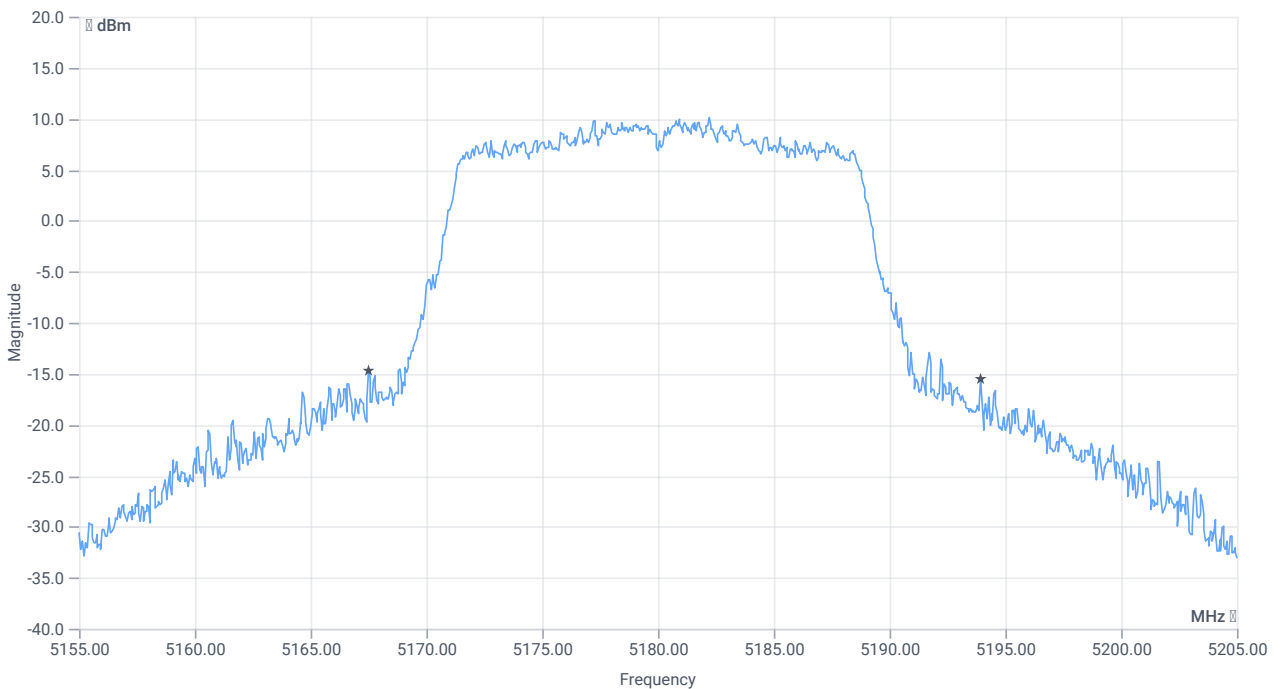
BW 99PCT



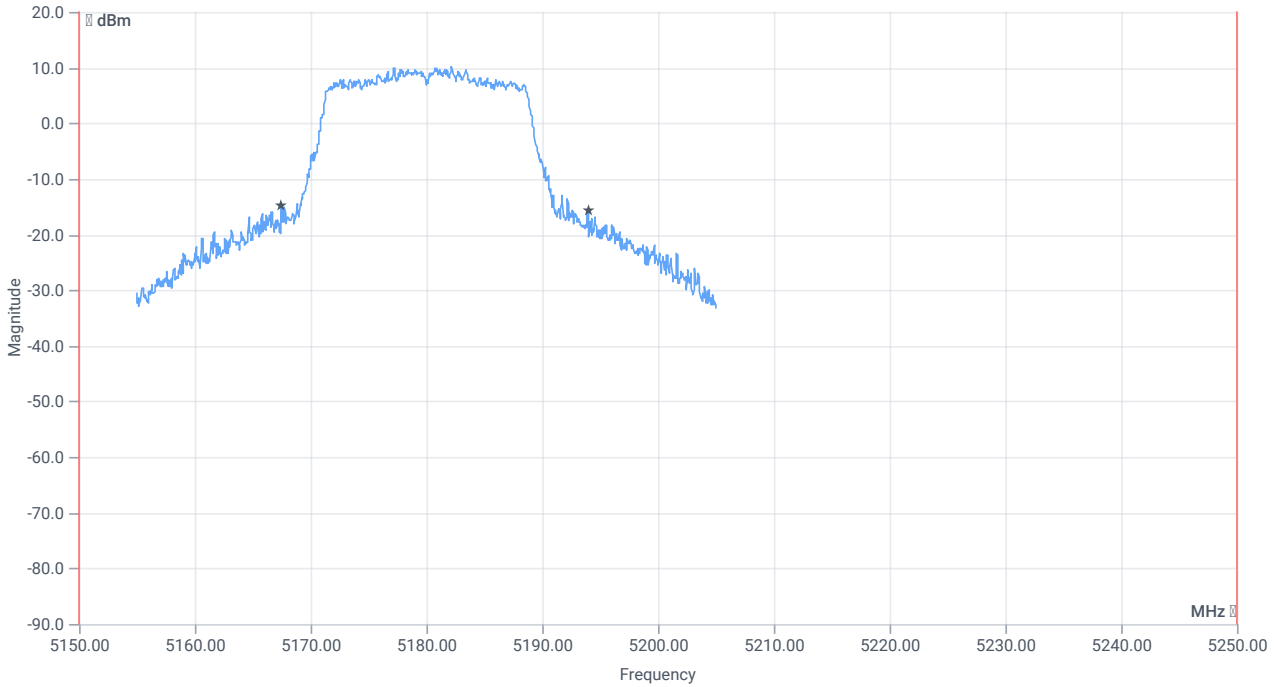
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	18.232	MHz	INFO
T1 99%	5150.000000	--	5170.9091	MHz	PASS
T2 99%	--	5250.000000	5189.1409	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	26.45	MHz	INFO
T1 26dB	5150.000000	---	5167.5000	MHz	PASS
T2 26dB	---	5250.000000	5193.9500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	11.07.2023 08:12:59
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

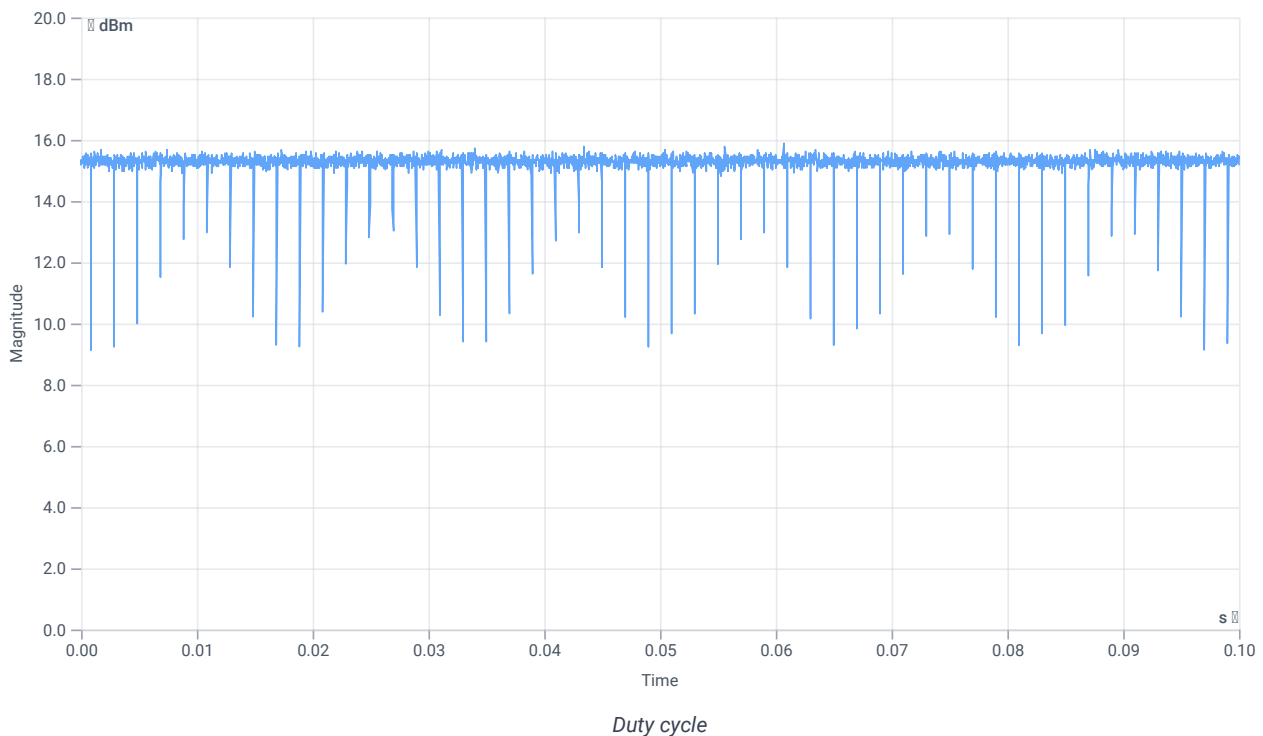
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.01	dBm	INFO
Ref. Frequency	--	--	5181.200	MHz	INFO

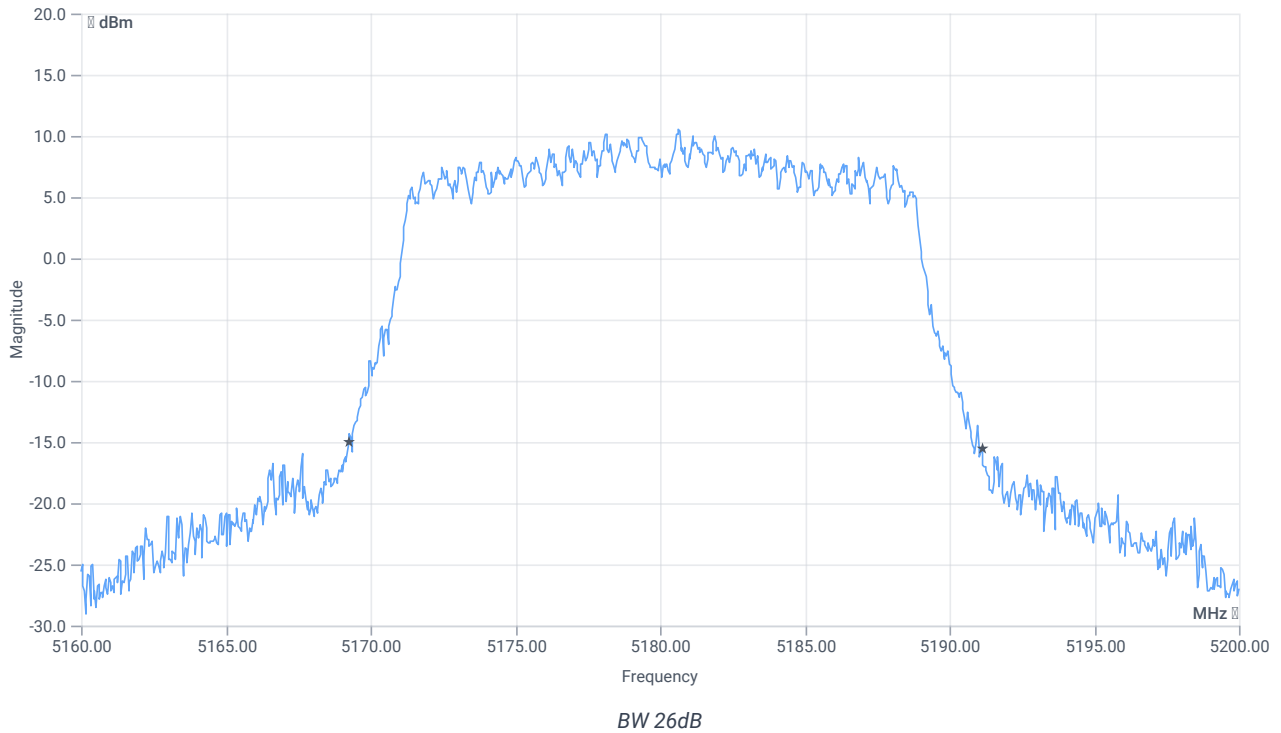
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



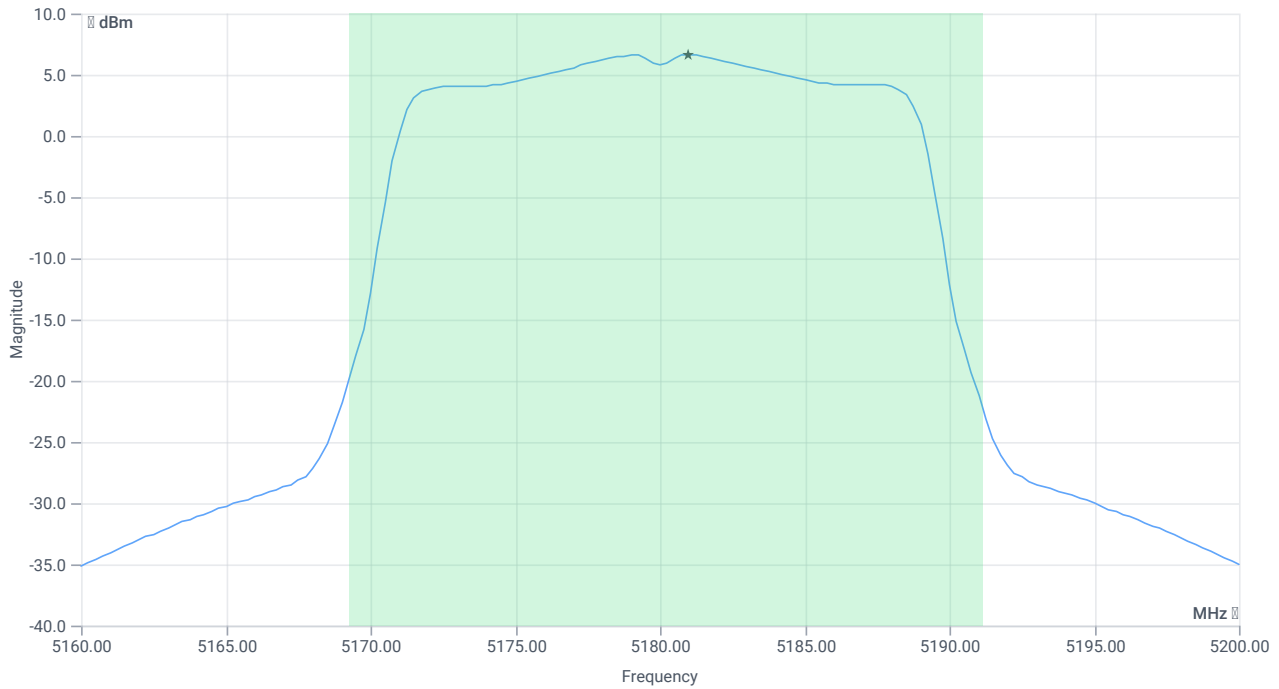
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5169.2400	MHz	INFO
T2 26dB	---	---	5191.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.01 16.39 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.38	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.38	dBm	PASS
Limit: 11 dBm + 10 log 21.88					
Max Output Power DC corrected	--	24.4	17.38	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.63	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.63	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:14:34
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

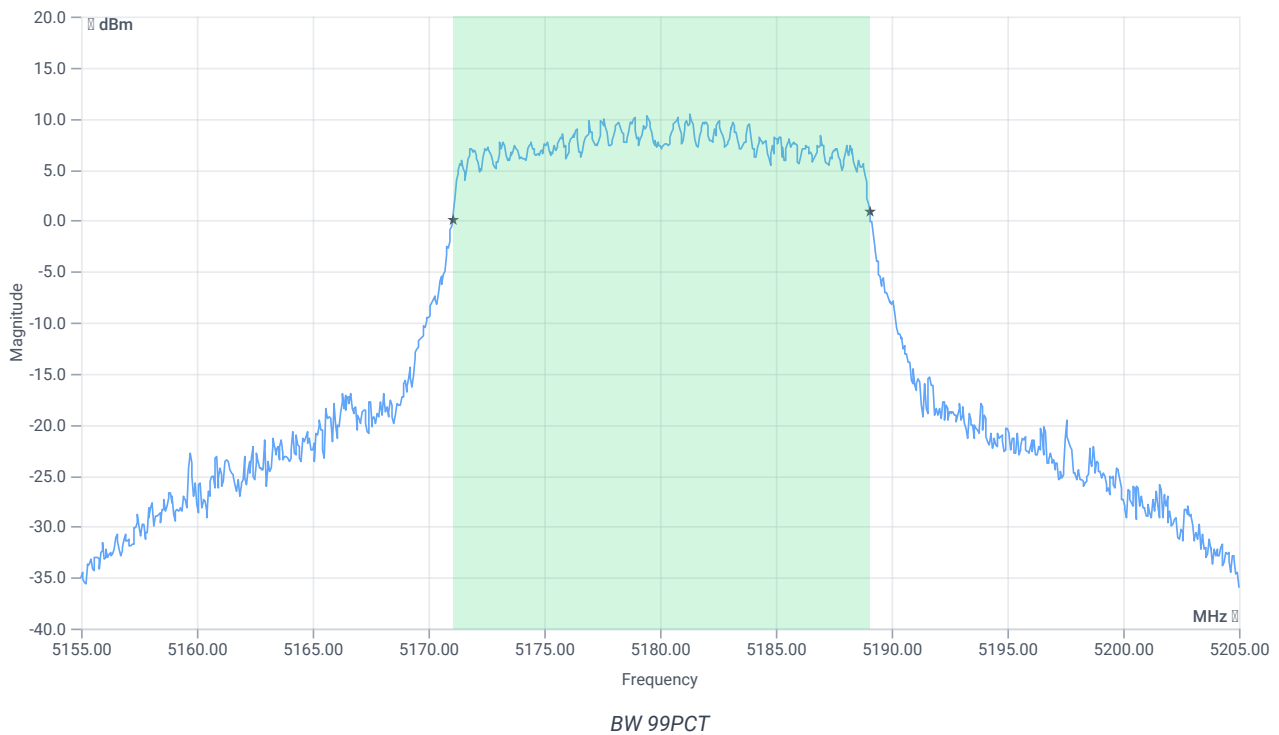
Test at TX 5180 MHz

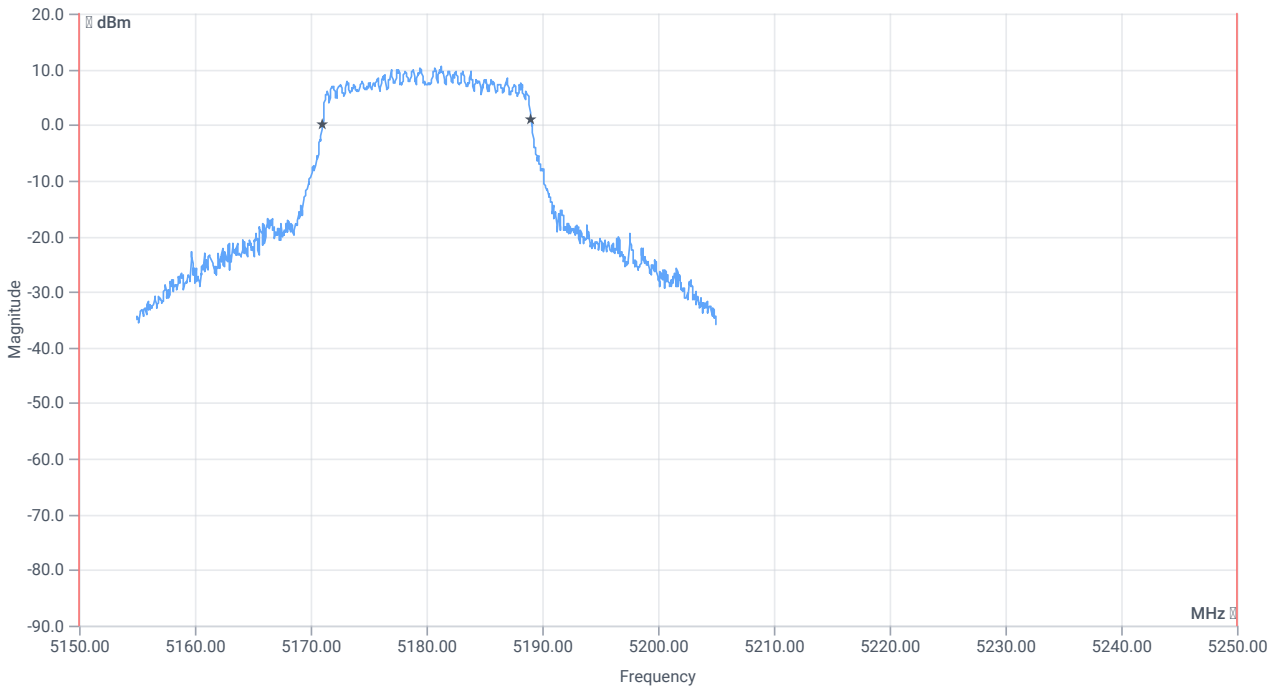
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.64	dBm	INFO
Ref. Frequency	--	--	5179.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.64 16.39 25
Start [MHz] Stop [MHz]	5155.000 5205.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

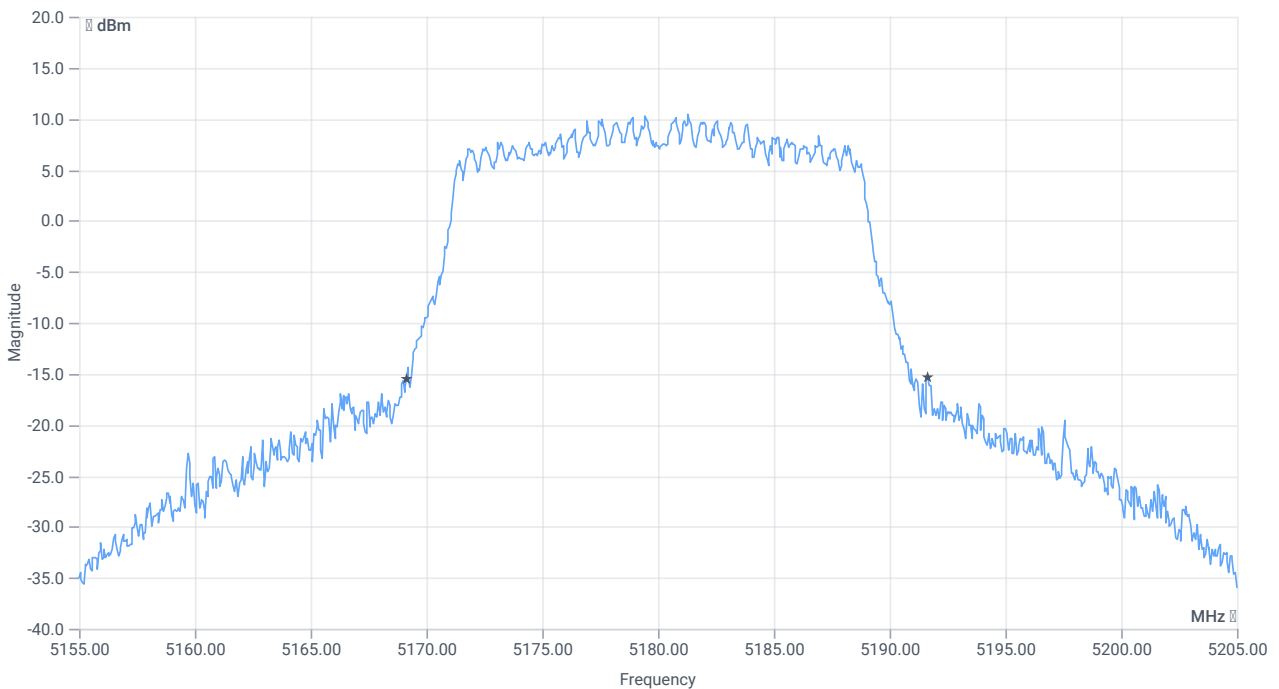




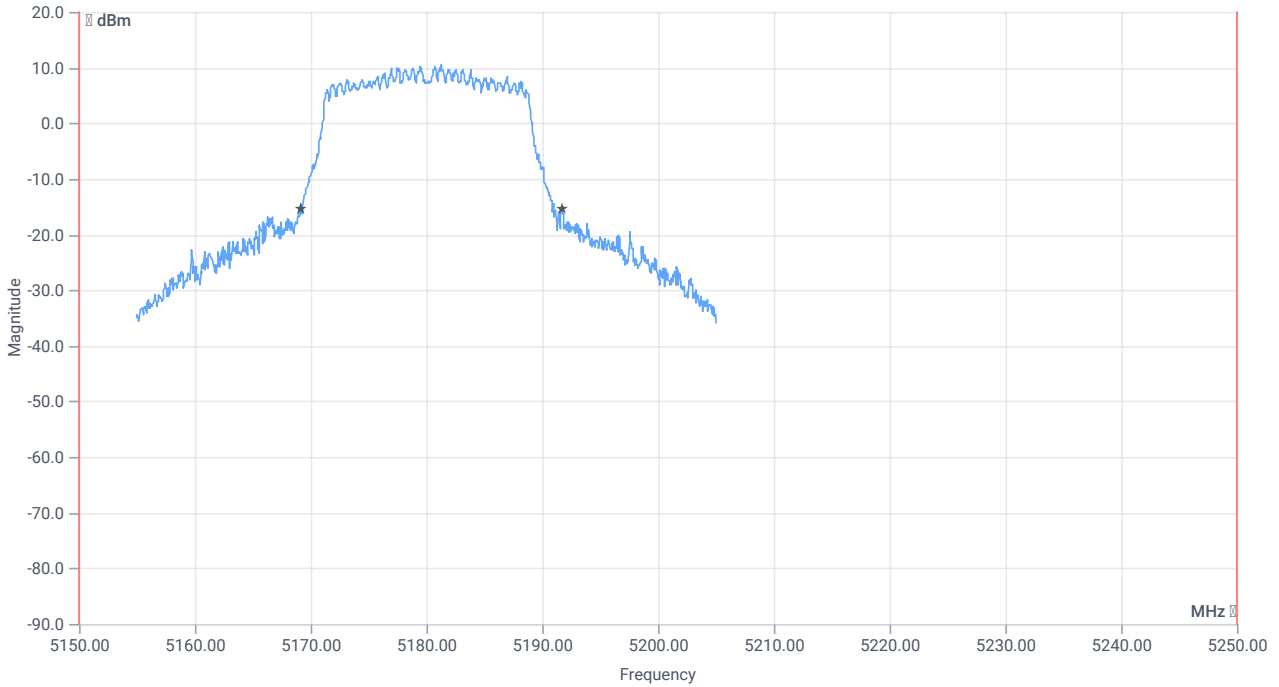
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	17.982	MHz	INFO
T1 99%	5150.000000	--	5171.0589	MHz	PASS
T2 99%	--	5250.000000	5189.0410	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	22.5	MHz	INFO
T1 26dB	5150.000000	---	5169.1500	MHz	PASS
T2 26dB	---	5250.000000	5191.6500	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 08:15:13
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 08:15:14
Message	set WLAN5Gx to ac_VHT20_U_NII_1, Frequency [MHz] 5200 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-2A

References

TC start	26.07.2023 10:20:45
Ambit temp [°C] humidity [rel%]	25.1 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx a mode U-NII-2A
Information	PS72

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

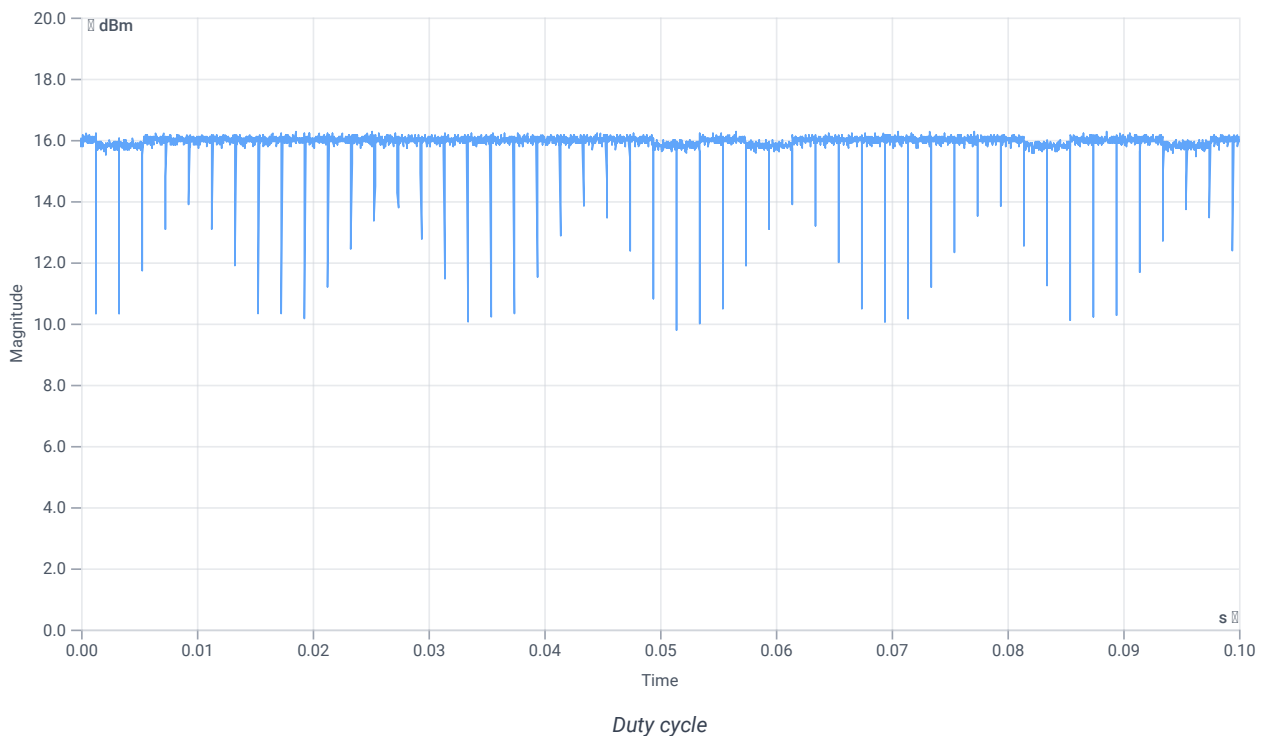
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.22	dBm	INFO
Ref. Frequency	--	--	5321.200	MHz	INFO

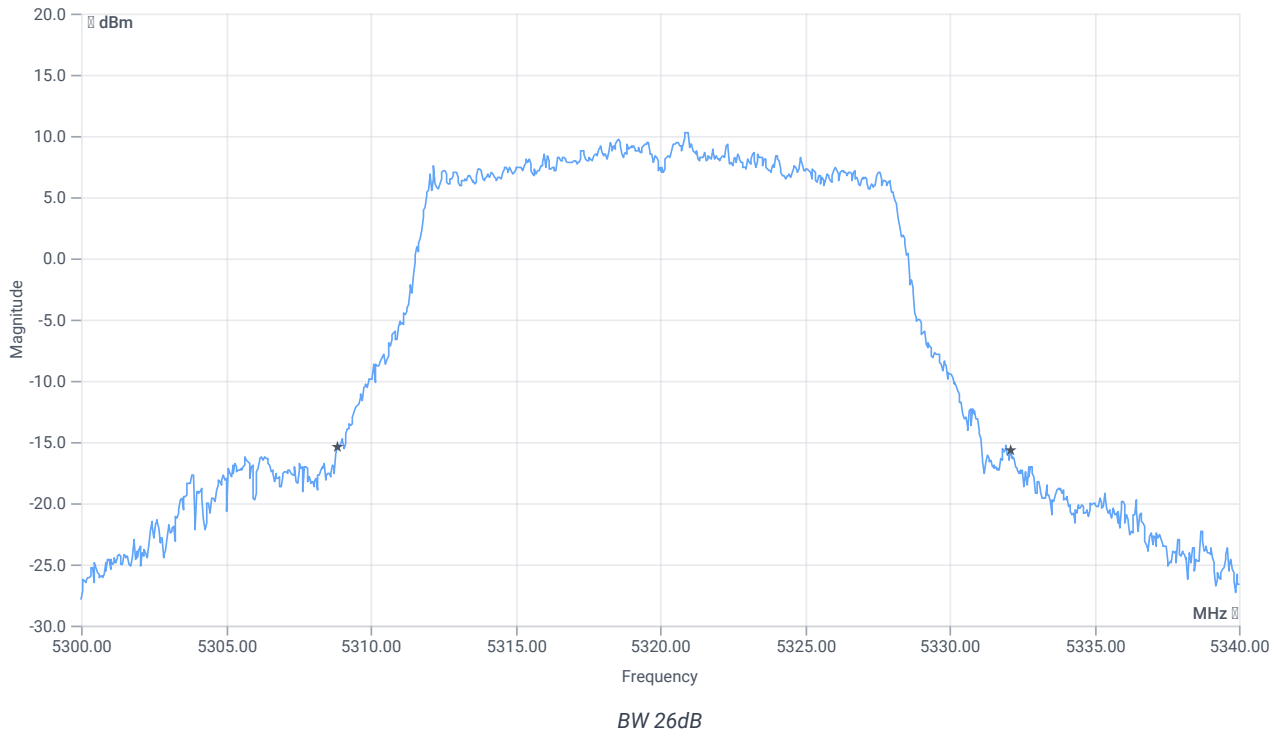
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



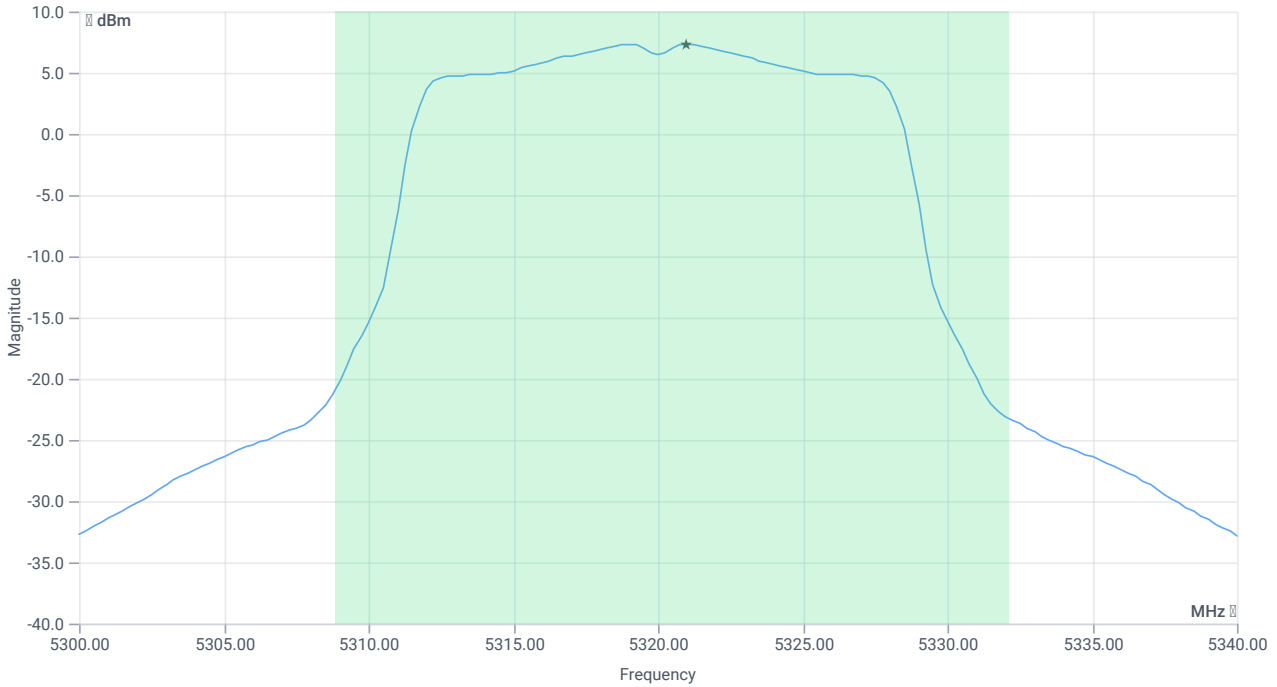
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.28	MHz	INFO
T1 26dB	---	---	5308.8400	MHz	INFO
T2 26dB	---	---	5332.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.22 16.16 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.83	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.83	dBm	PASS
Limit: 11 dBm + 10 log 23.28					
Max Output Power DC corrected	--	24.67	17.83	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.33	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.33	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:17:55
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

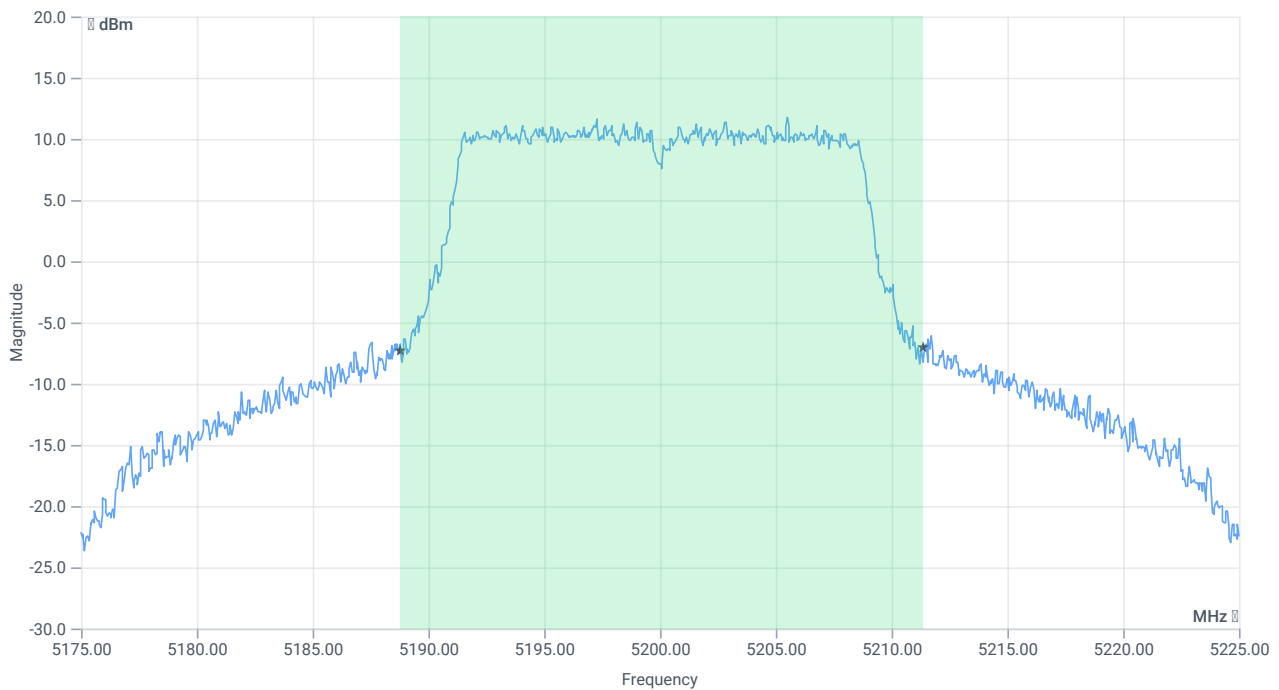
Test at TX 5200 MHz

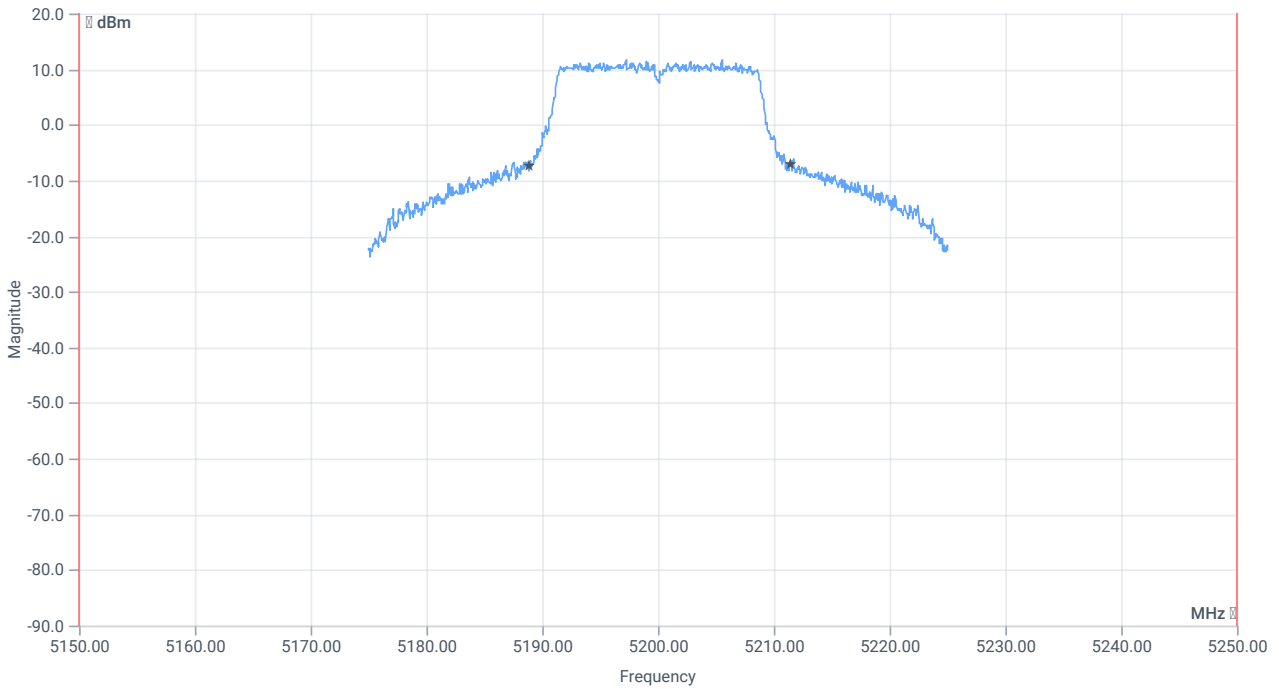
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.88	dBm	INFO
Ref. Frequency	--	--	5195.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.88 16.31 25
Start [MHz] Stop [MHz]	5175.000 5225.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

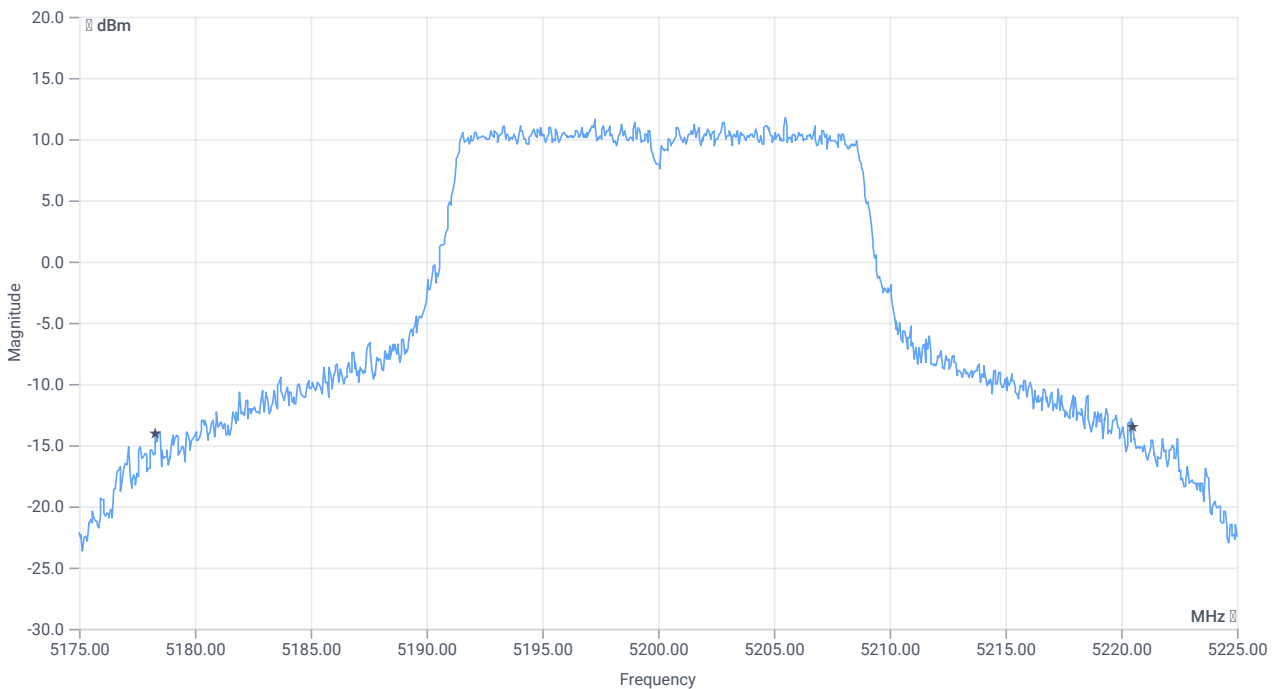




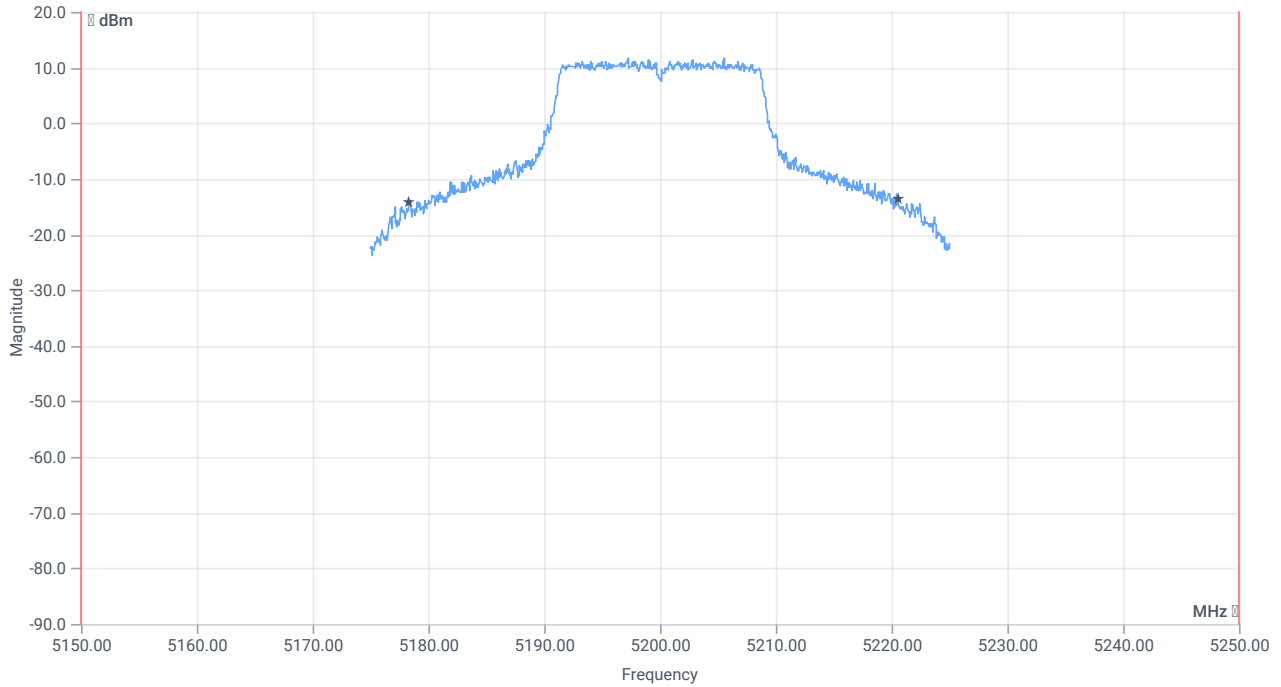
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	22.577	MHz	INFO
T1 99%	5150.000000	--	5188.8112	MHz	PASS
T2 99%	--	5250.000000	5211.3886	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	42.2	MHz	INFO
T1 26dB	5150.000000	--	5178.3000	MHz	PASS
T2 26dB	--	5250.000000	5220.5000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx a mode U-NII-2A

References

TC start	26.07.2023 10:22:12
Ambit temp [°C] humidity [rel%]	25.1 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx a mode U-NII-2A
Information	PS72

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna port used	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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

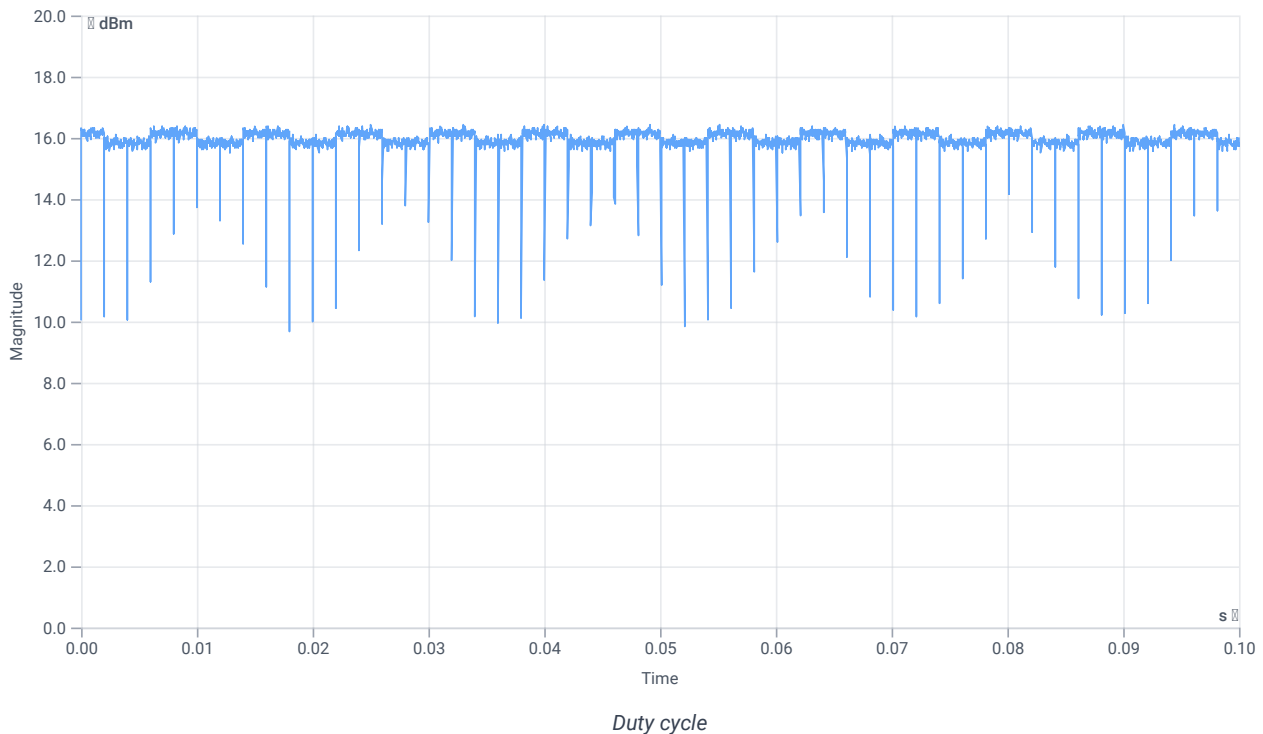
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.25	dBm	INFO
Ref. Frequency	--	--	5318.200	MHz	INFO

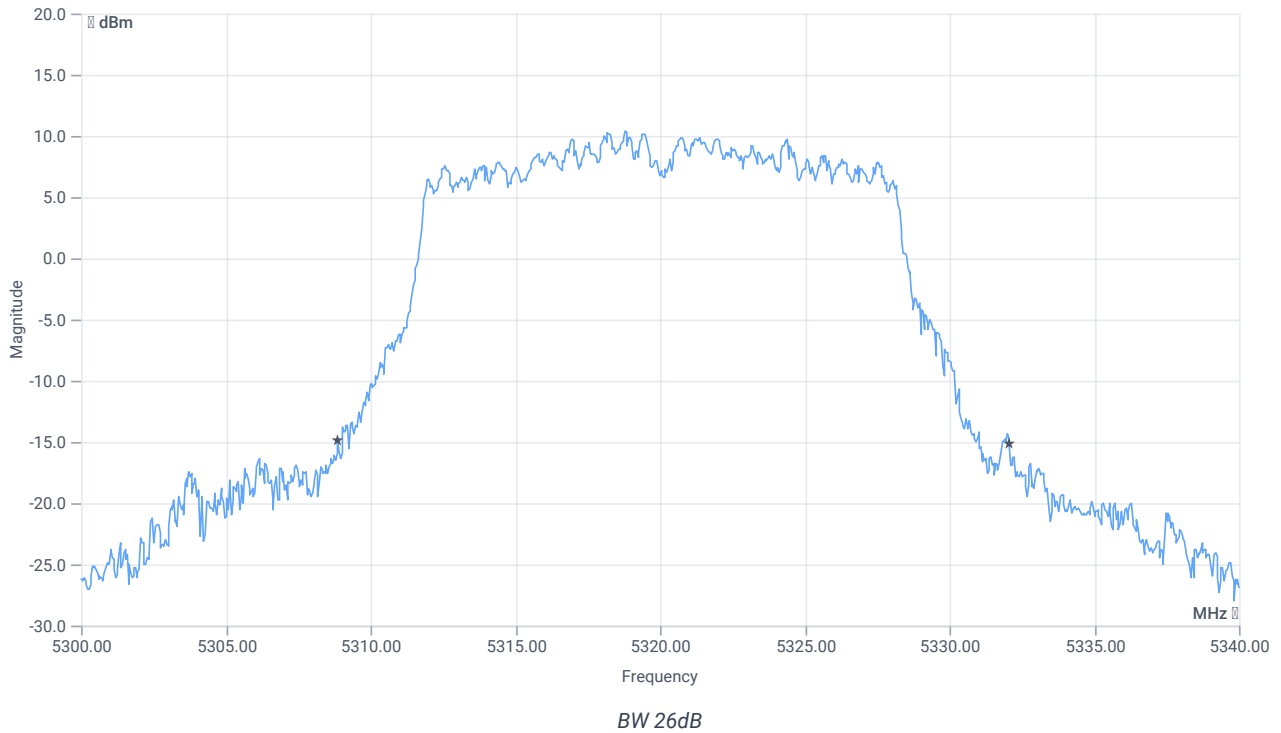
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



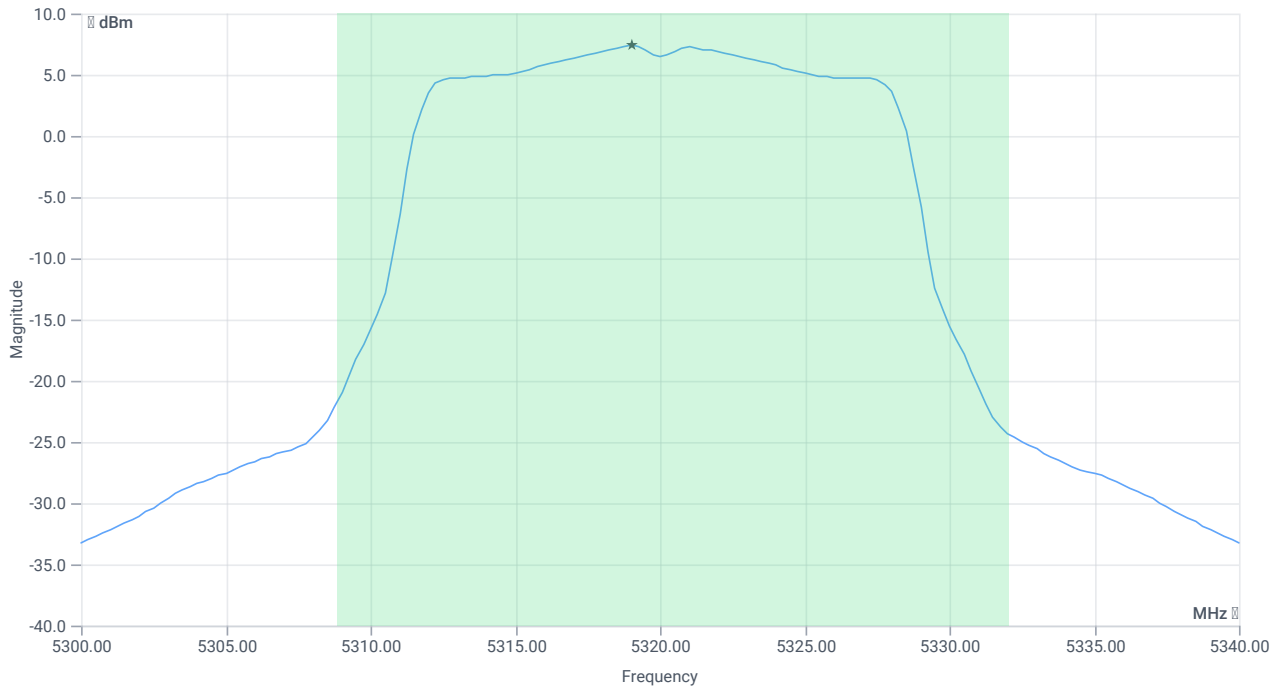
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	23.2	MHz	INFO
T1 26dB	---	---	5308.8800	MHz	INFO
T2 26dB	---	---	5332.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.25 16.16 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.83	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.83	dBm	PASS
Limit: 11 dBm + 10 log 23.2					
Max Output Power DC corrected	--	24.65	17.83	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.37	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.37	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:20:04
Ambit temp [°C] humidity [rel%]	24.4 51
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

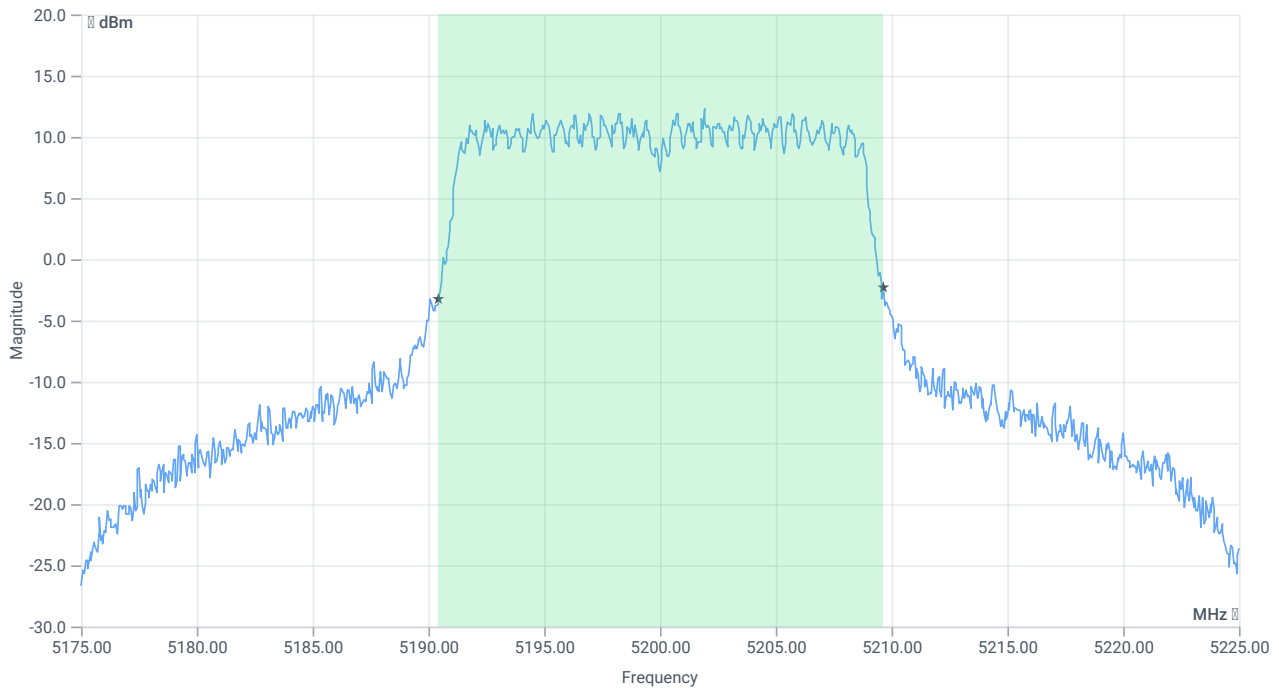
Test at TX 5200 MHz

RESULT: Reference Power cond.

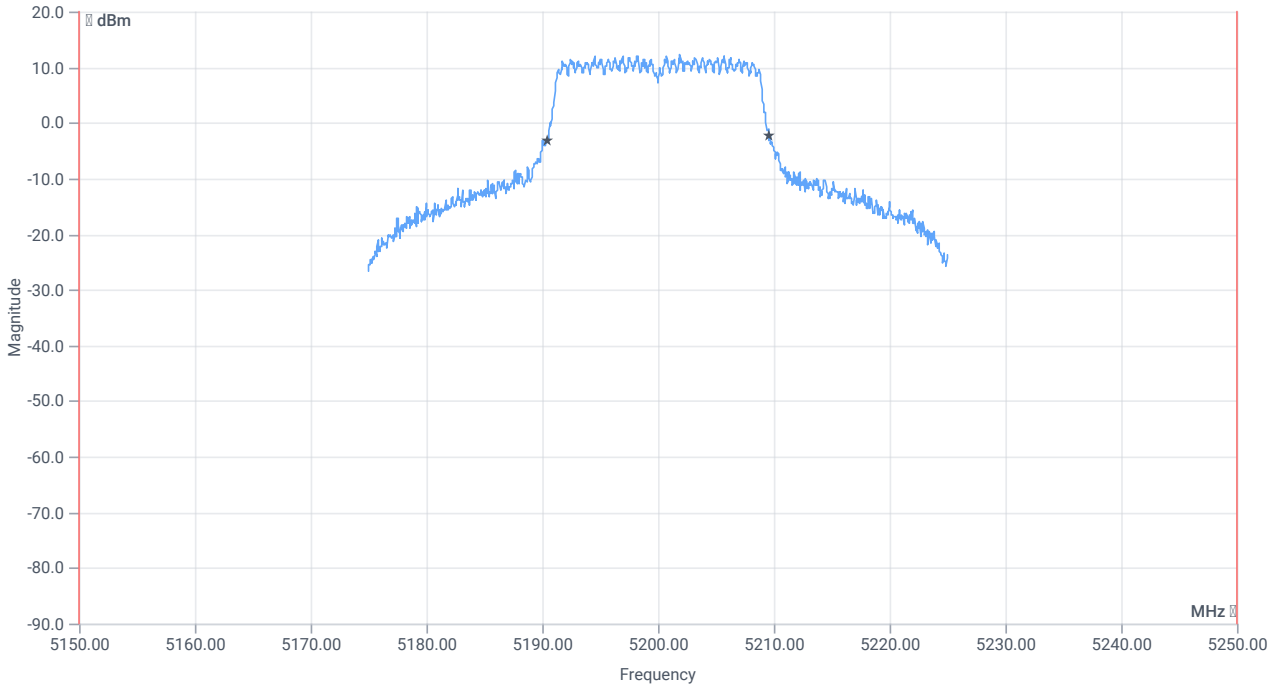
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.16	dBm	INFO
Ref. Frequency	--	--	5196.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.16 16.31 25
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



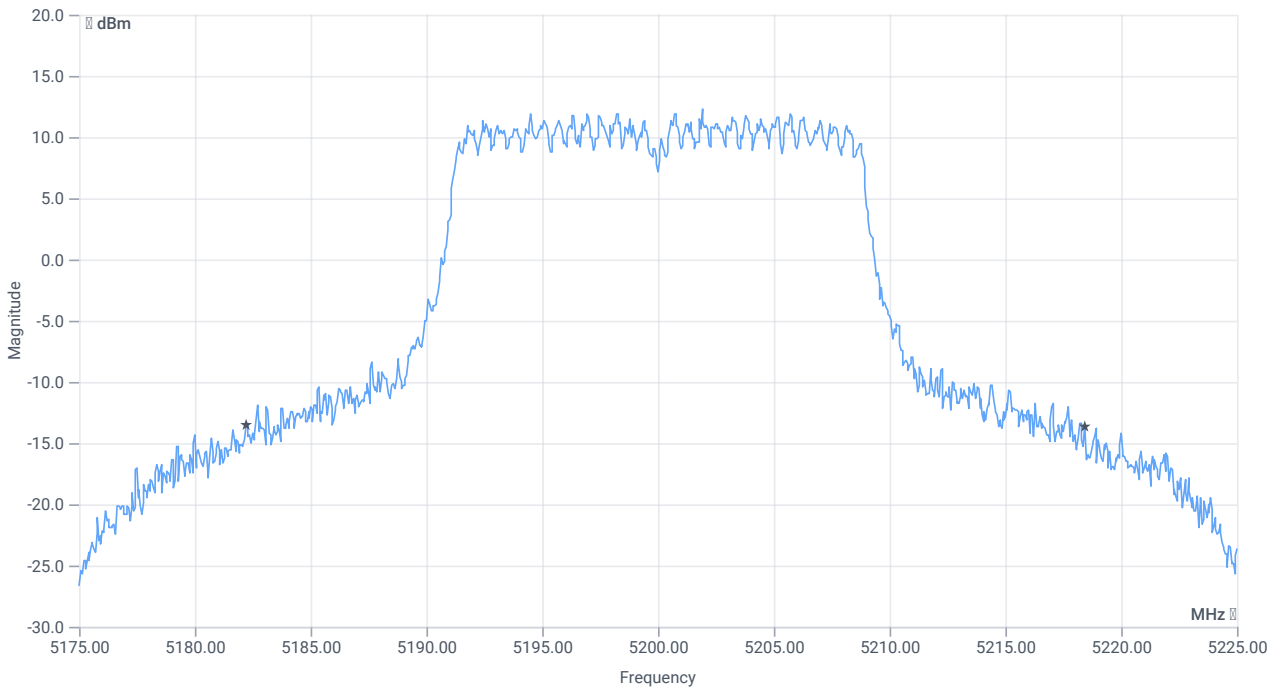
BW 99PCT



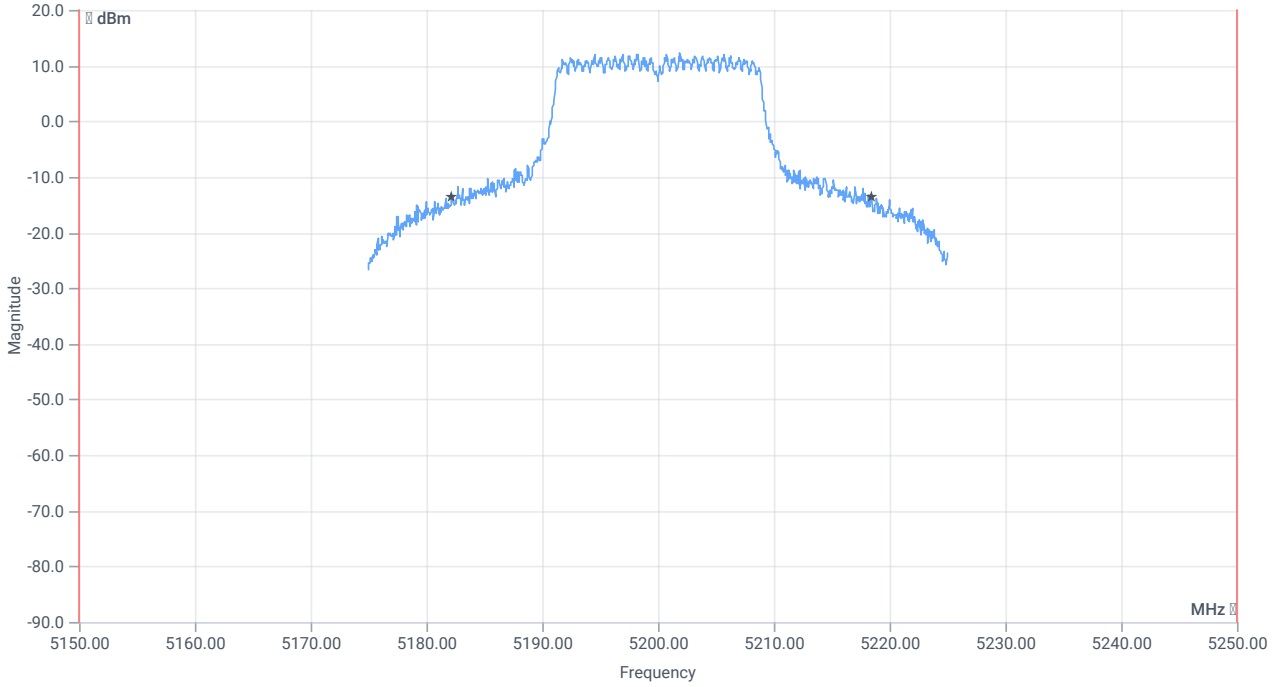
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.181	MHz	INFO
T1 99%	5150.000000	--	5190.4595	MHz	PASS
T2 99%	--	5250.000000	5209.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	36.25	MHz	INFO
T1 26dB	5150.000000	---	5182.2000	MHz	PASS
T2 26dB	---	5250.000000	5218.4500	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx a mode U-NII-2A

References

TC start	26.07.2023 10:23:41
Ambit temp [°C] humidity [rel%]	25.1 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx a mode U-NII-2A
Information	PS72

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx a mode
Antenna port used	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]	1.3
Switched path	None

Equipment

Test at TX 5320 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.83	dBm	INFO
Ant:1 BW 26dB	--	--	23.280	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.83	dBm	INFO
Ant:2 BW 26dB	--	--	23.200	MHz	INFO
Σ Limit absolute	--	24	20.84	dBm	PASS
Σ Limit: 11 dBm + 10 log 23.2	--	24.65	20.84	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.33	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.37	dBm/1MHz	INFO
Σ	--	11	10.36	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	19.07.2023 14:49:44
Ambit temp [°C] humidity [rel%]	25.3 47
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	19.07.2023 14:49:44
Message	set WLAN5Gx to ac_VHT20_U_NII_1, Frequency [MHz] 5240

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	19.07.2023 14:49:54
Ambit temp [°C] humidity [rel%]	25.3 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Information	PS74

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

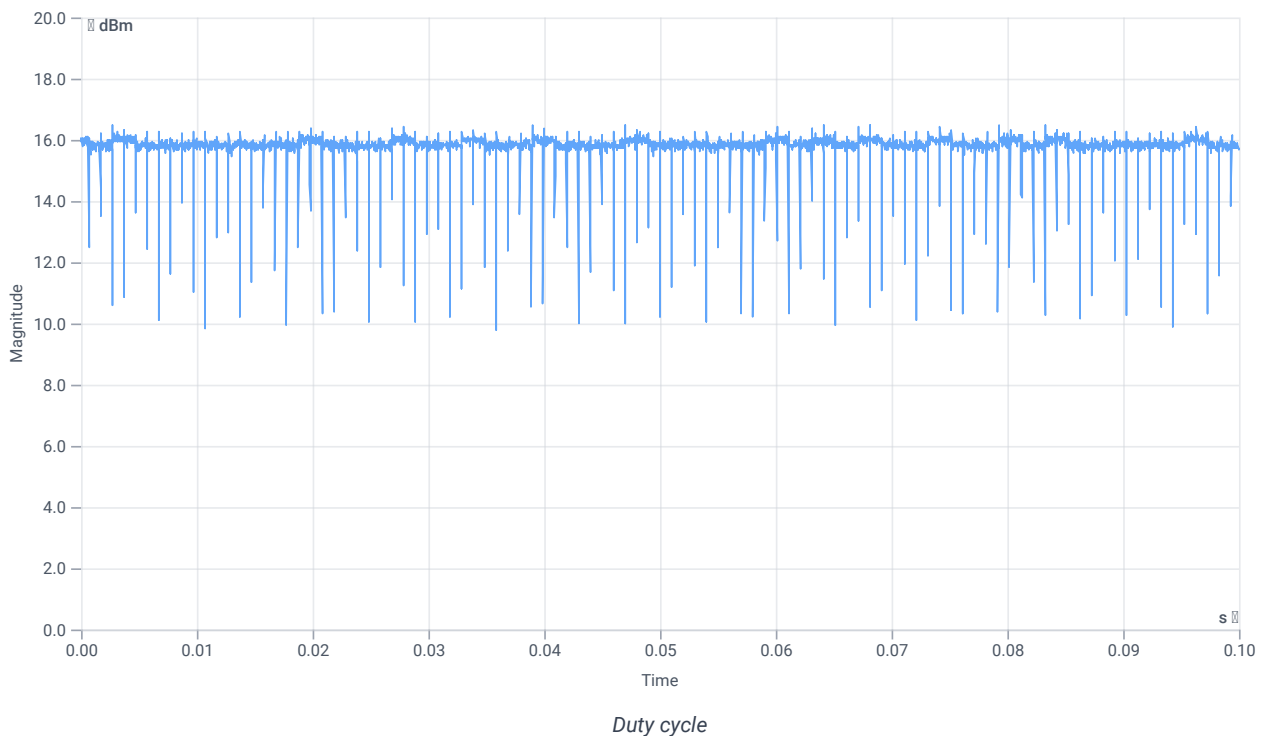
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.83	dBm	INFO
Ref. Frequency	--	--	5247.190	MHz	INFO

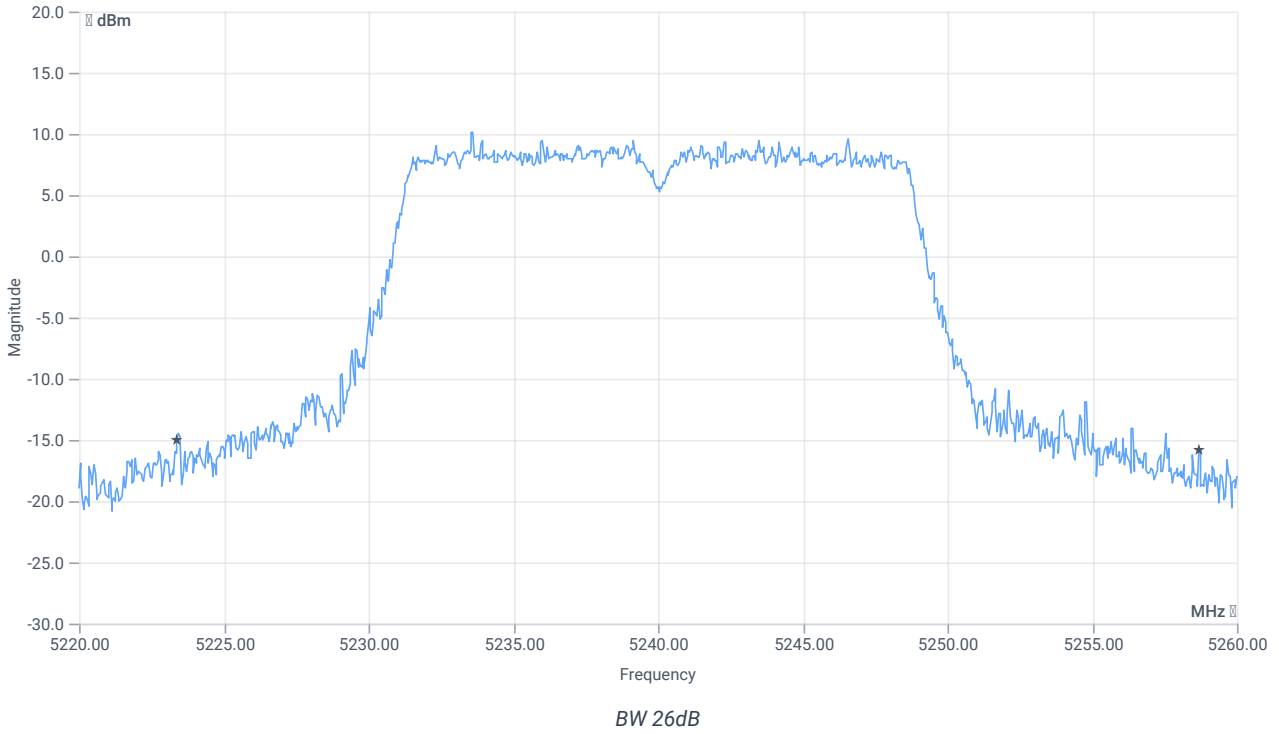
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



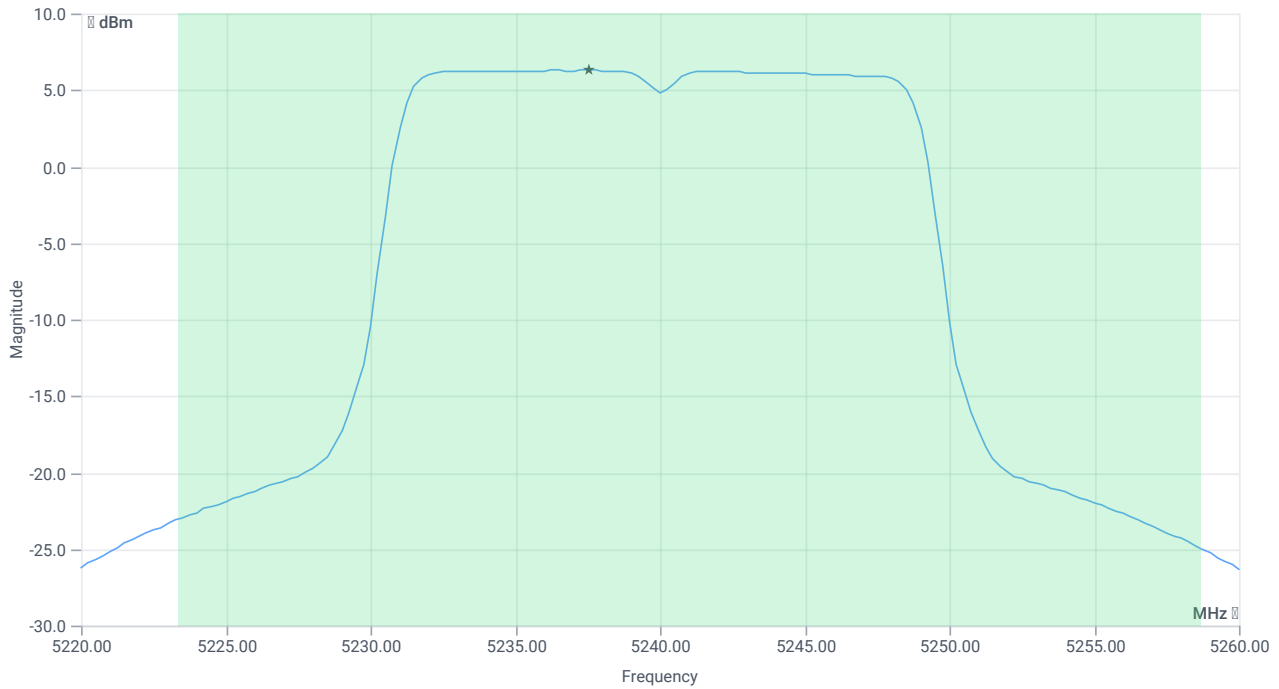
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	35.28	MHz	INFO
T1 26dB	---	---	5223.4000	MHz	INFO
T2 26dB	---	---	5258.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.83 16.37 25
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.3	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.3	dBm	PASS
Limit: 11 dBm + 10 log 35.28					
Max Output Power DC corrected	--	26.48	18.3	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.28	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.28	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	19.07.2023 14:51:26
Ambit temp [°C] humidity [rel%]	25.3 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	PS74

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

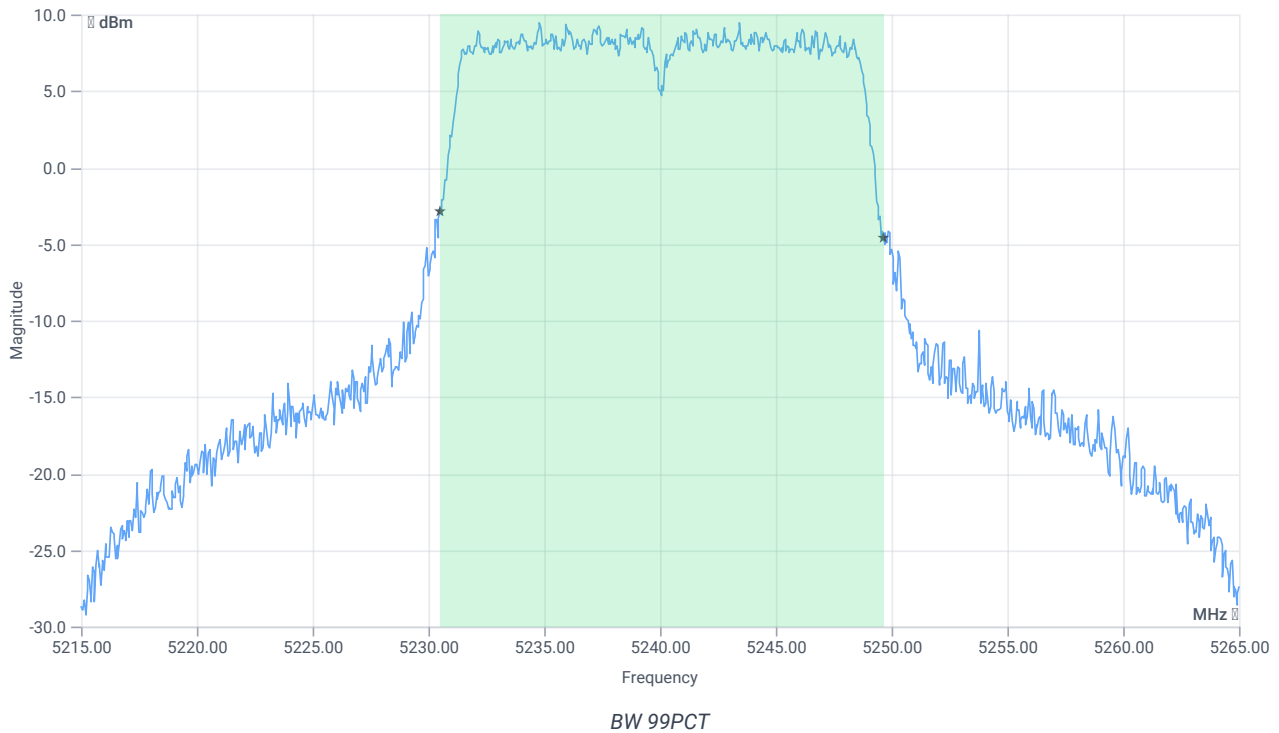
Test at TX 5240 MHz

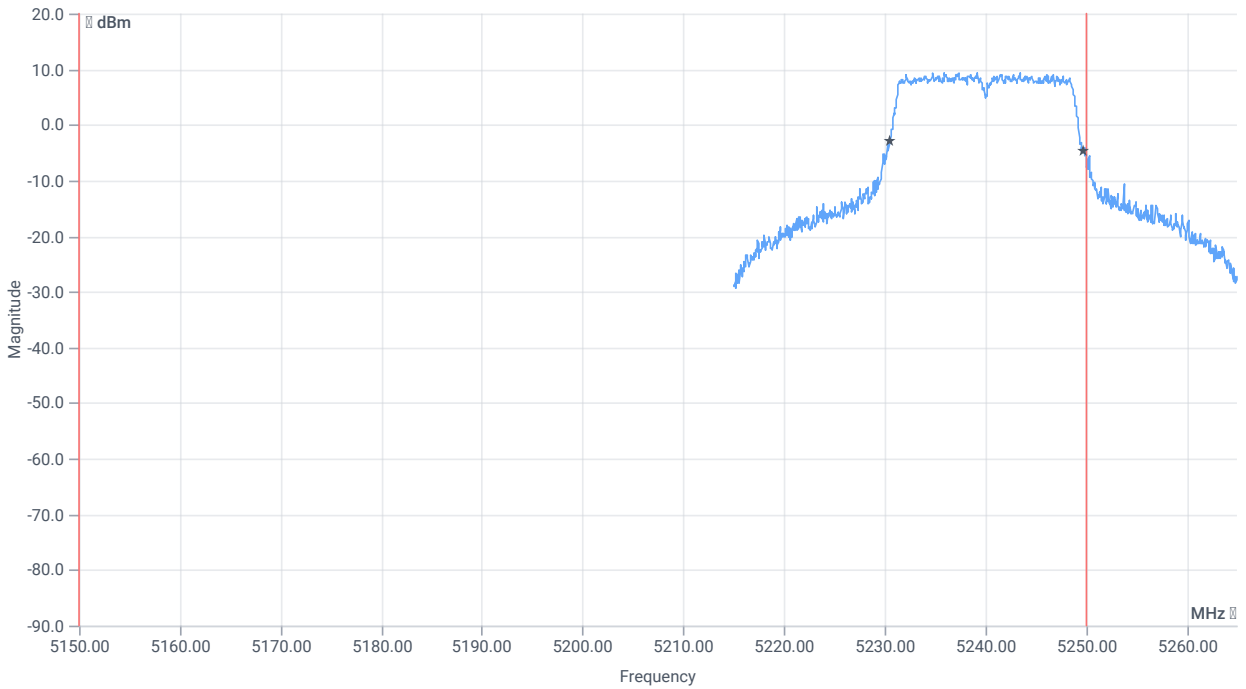
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.20	dBm	INFO
Ref. Frequency	--	--	5236.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.20 16.37 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

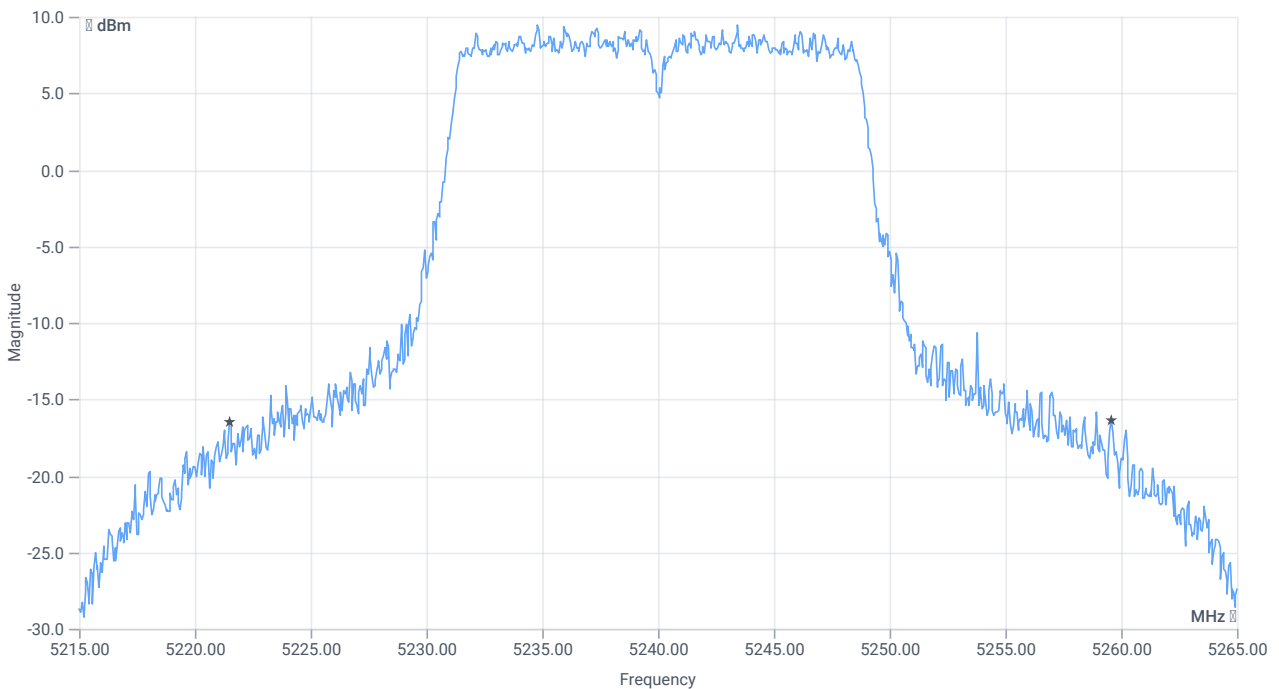




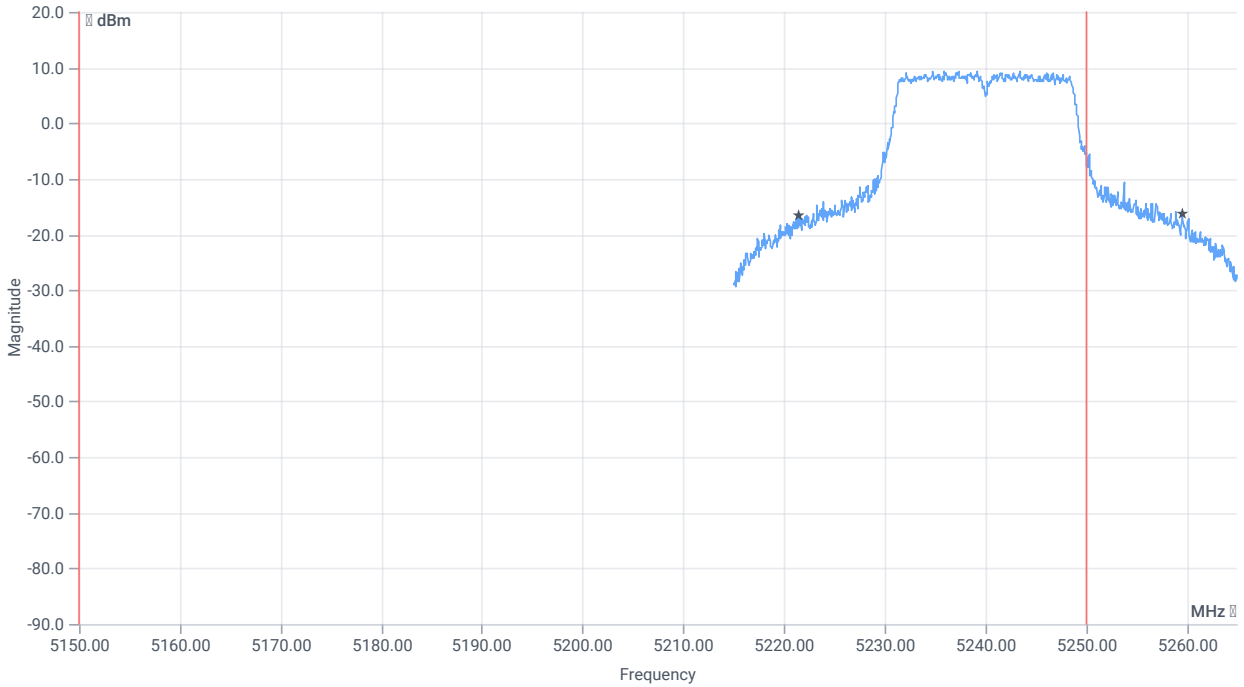
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.131	MHz	INFO
T1 99%	5150.000000	--	5230.5095	MHz	PASS
T2 99%	--	5250.000000	5249.6404	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	38.1	MHz	INFO
T1 26dB	5150.000000	---	5221.5000	MHz	PASS
T2 26dB	---	5250.000000	5259.6000	MHz	DFS required

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	19.07.2023 14:52:00
Ambit temp [°C] humidity [rel%]	25.4 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Information	PS74

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

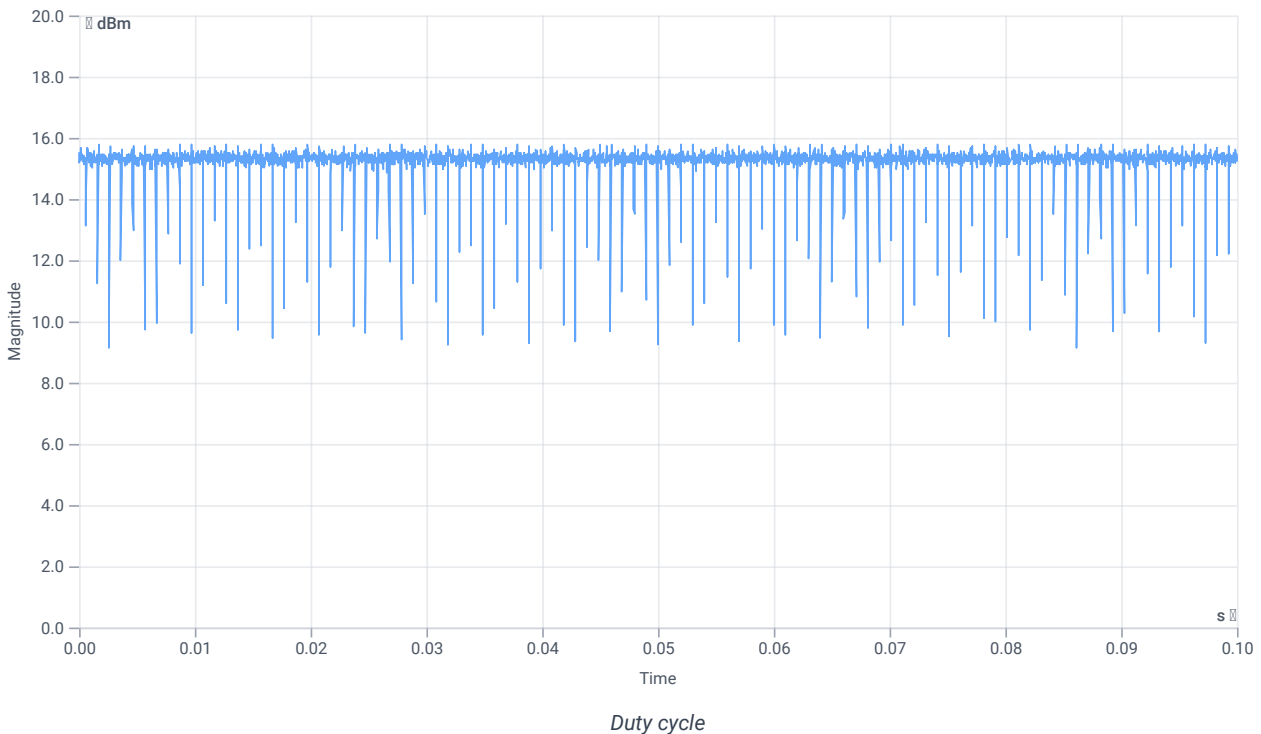
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.33	dBm	INFO
Ref. Frequency	--	--	5245.990	MHz	INFO

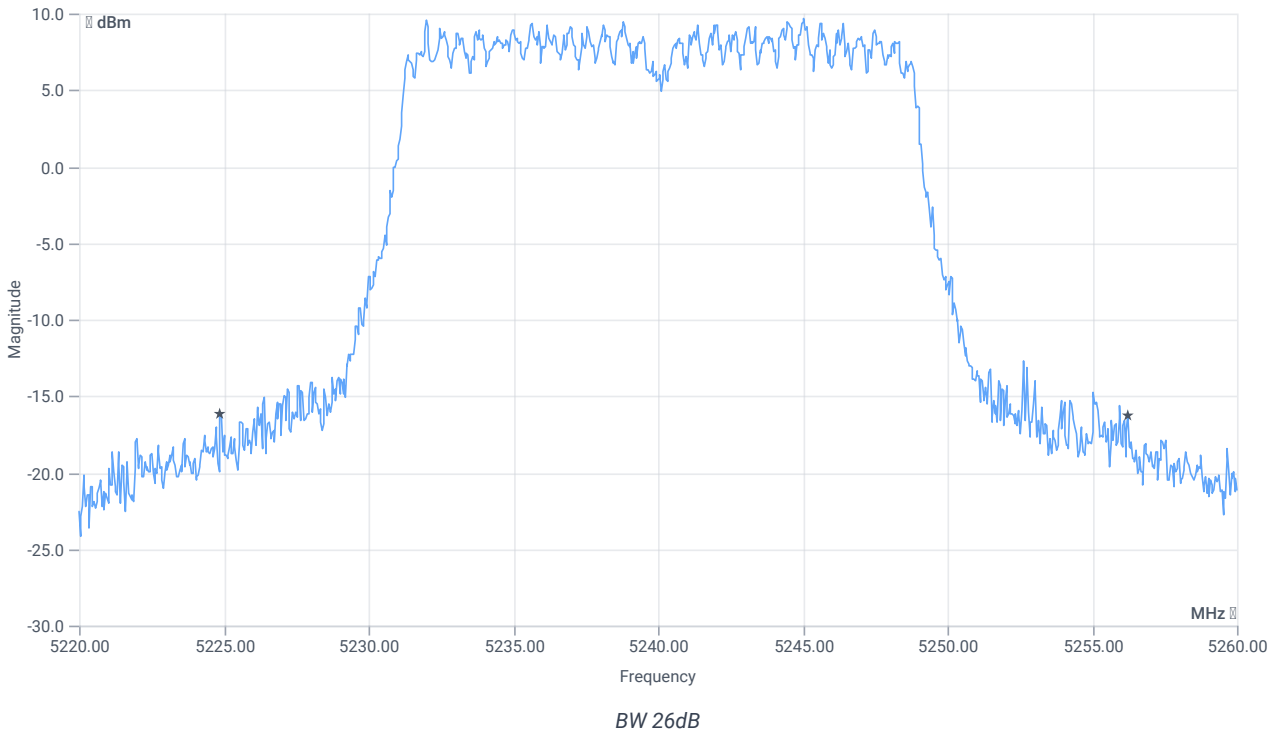
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



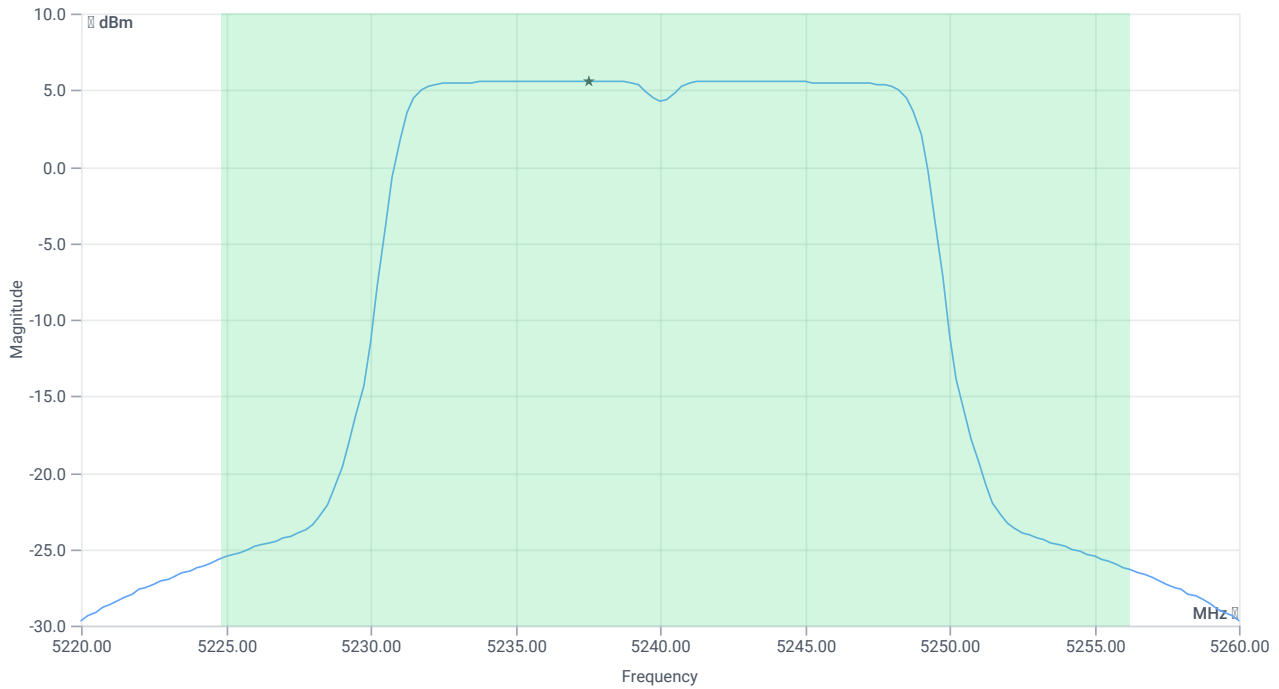
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	31.36	MHz	INFO
T1 26dB	---	---	5224.8800	MHz	INFO
T2 26dB	---	---	5256.2400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.33 16.37 25
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.68	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.68	dBm	PASS
Limit: 11 dBm + 10 log 31.36					
Max Output Power DC corrected	--	25.96	17.68	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.62	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.62	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	19.07.2023 14:53:32
Ambit temp [°C] humidity [rel%]	25.4 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-1
Information	PS74

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

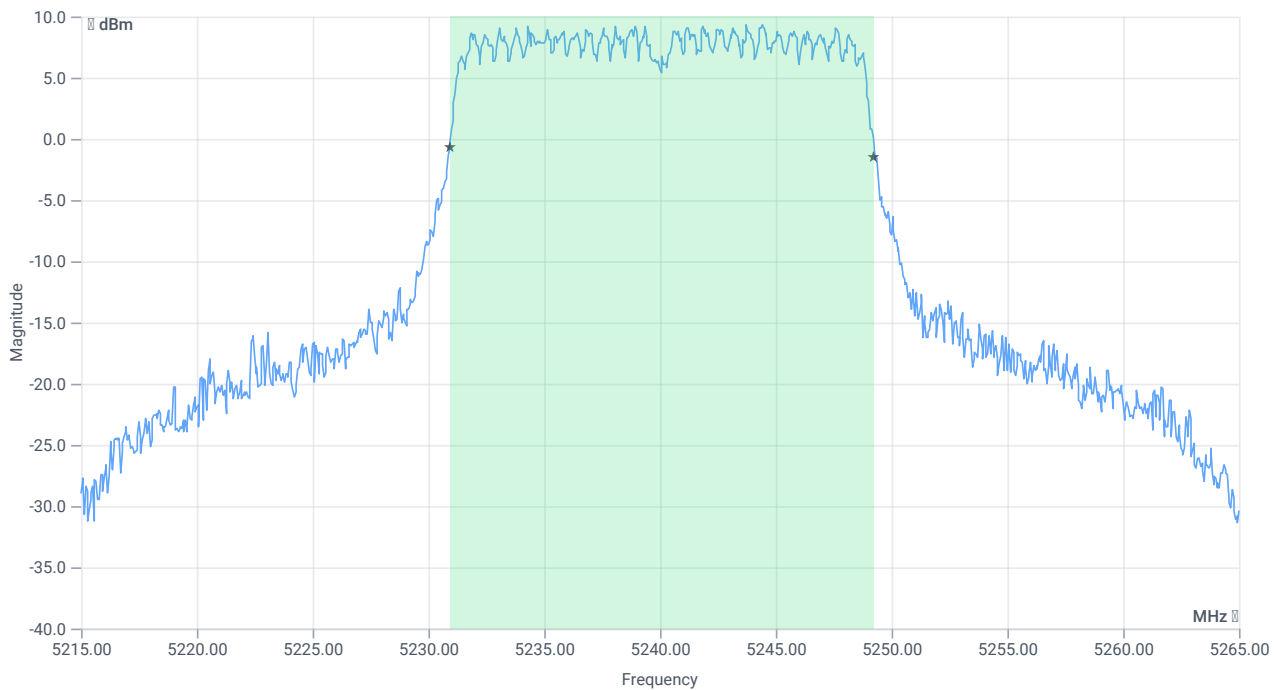
Test at TX 5240 MHz

RESULT: Reference Power cond.

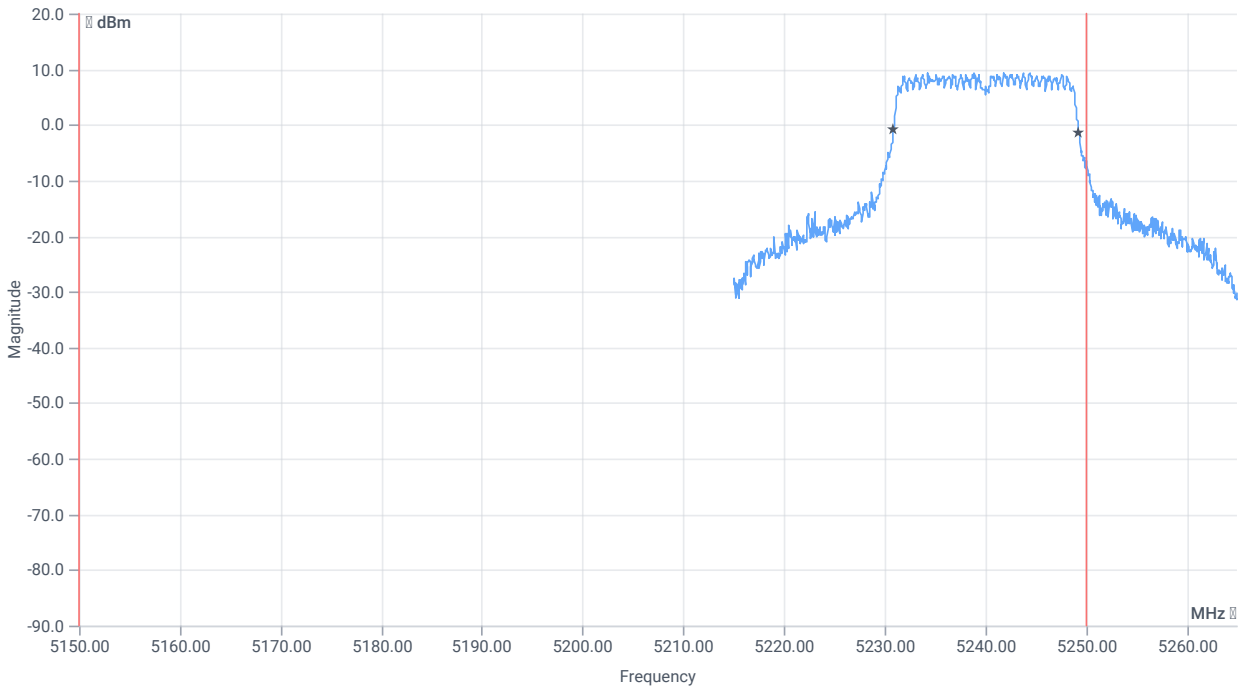
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.93	dBm	INFO
Ref. Frequency	--	--	5234.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.93 16.37 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



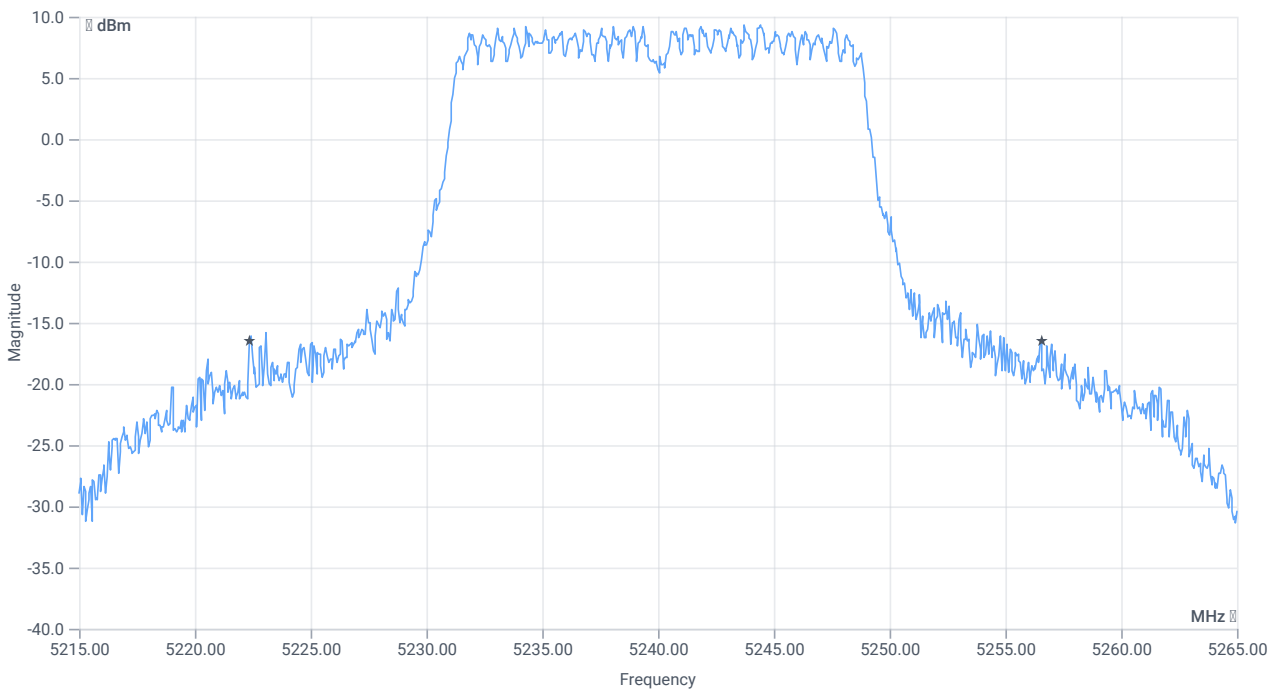
BW 99PCT



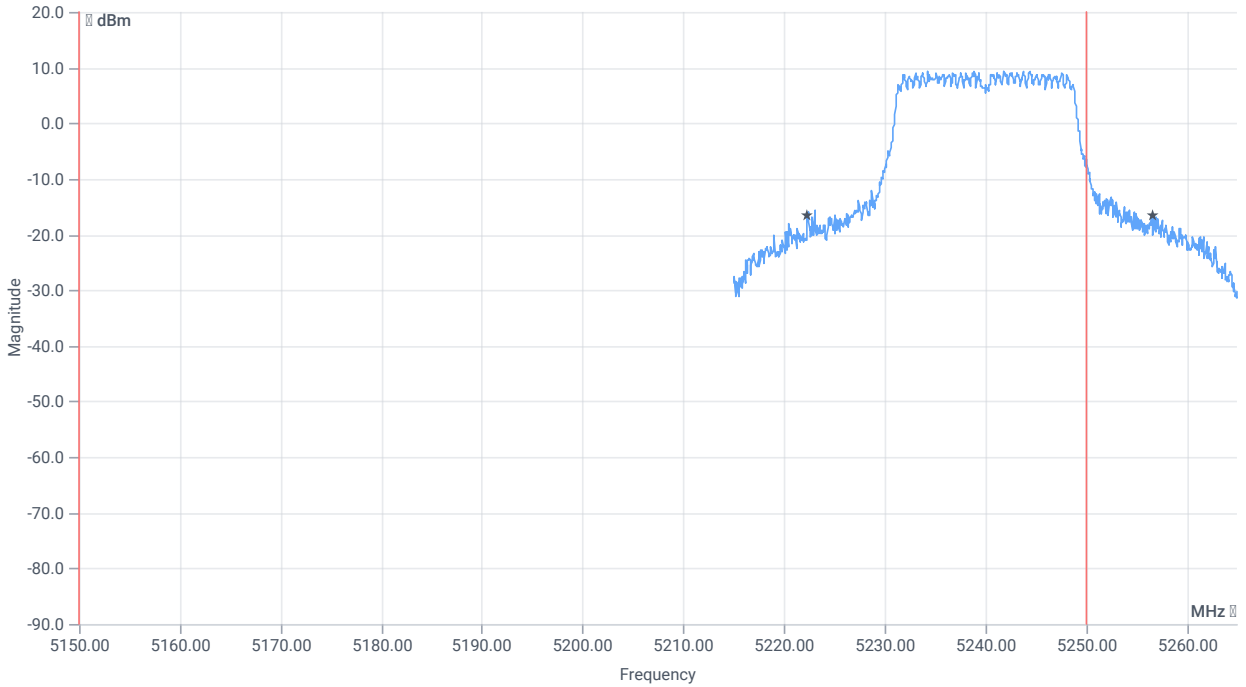
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	18.332	MHz	INFO
T1 99%	5150.000000	--	5230.9091	MHz	PASS
T2 99%	--	5250.000000	5249.2408	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	34.2	MHz	INFO
T1 26dB	5150.000000	---	5222.3500	MHz	PASS
T2 26dB	---	5250.000000	5256.5500	MHz	DFS required

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 08:31:53
Ambit temp [°C] humidity [rel%]	24.6 50
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 08:31:54
Message	set WLAN5Gx to ac_VHT20_U_NII_2A, Frequency [MHz] 5260 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 08:34:10
Ambit temp [°C] humidity [rel%]	24.6 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

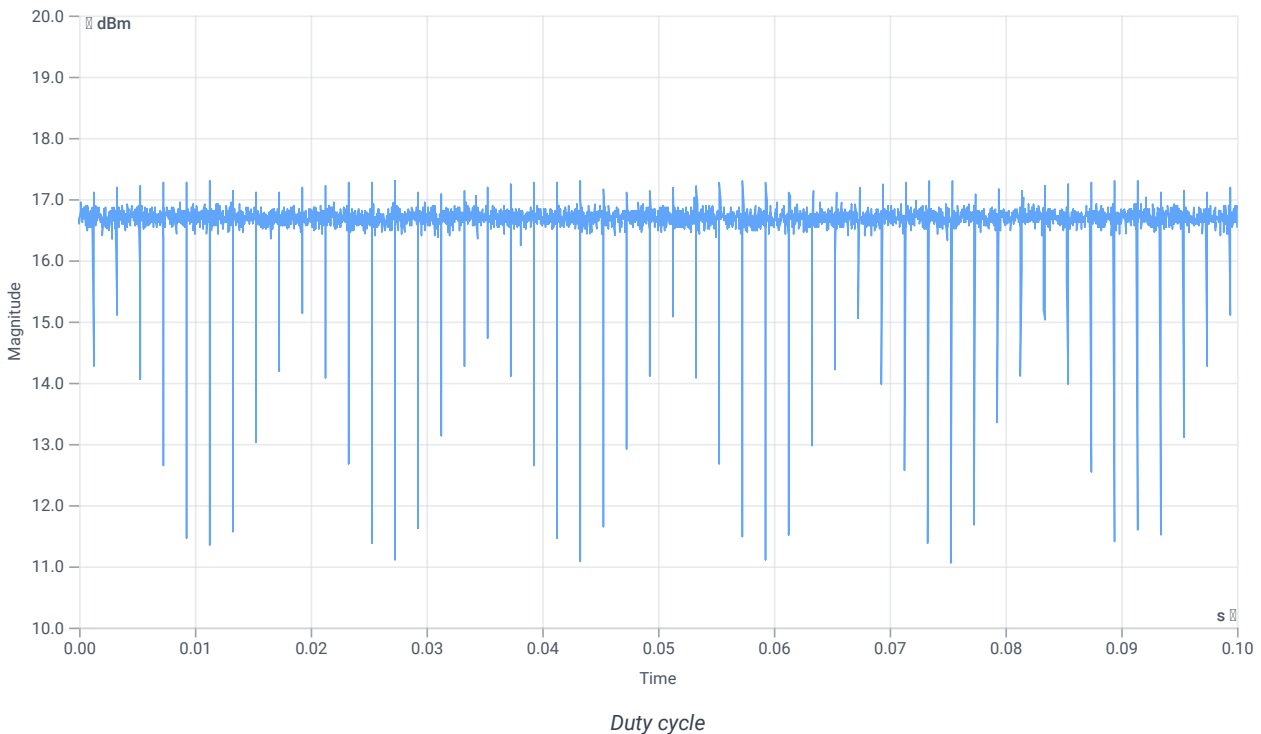
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.18	dBm	INFO
Ref. Frequency	--	--	5264.600	MHz	INFO

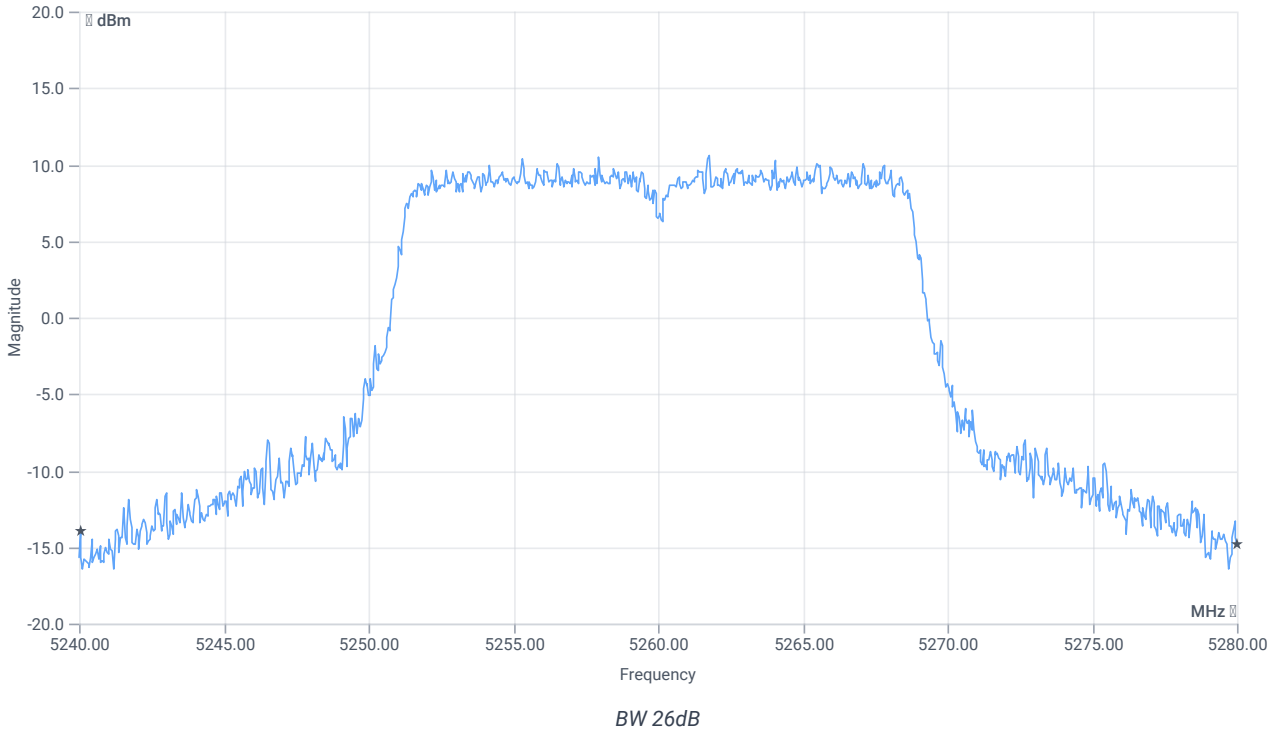
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



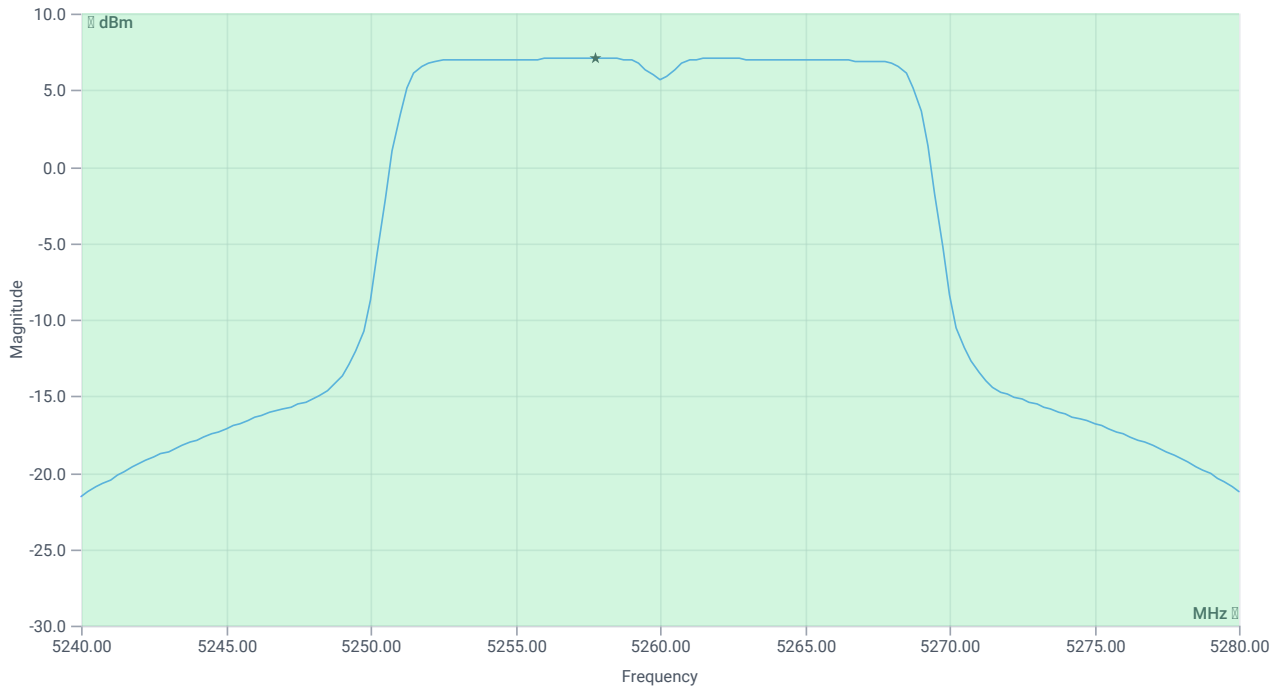
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.96	MHz	INFO
T1 26dB	---	---	5240.0400	MHz	INFO
T2 26dB	---	---	5280.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.19 16.34 25
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.18	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.18	dBm	PASS
Limit: 11 dBm + 10 log 39.96					
Max Output Power DC corrected	--	27.02	19.18	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.07	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.07	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:35:39
Ambit temp [°C] humidity [rel%]	24.6 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

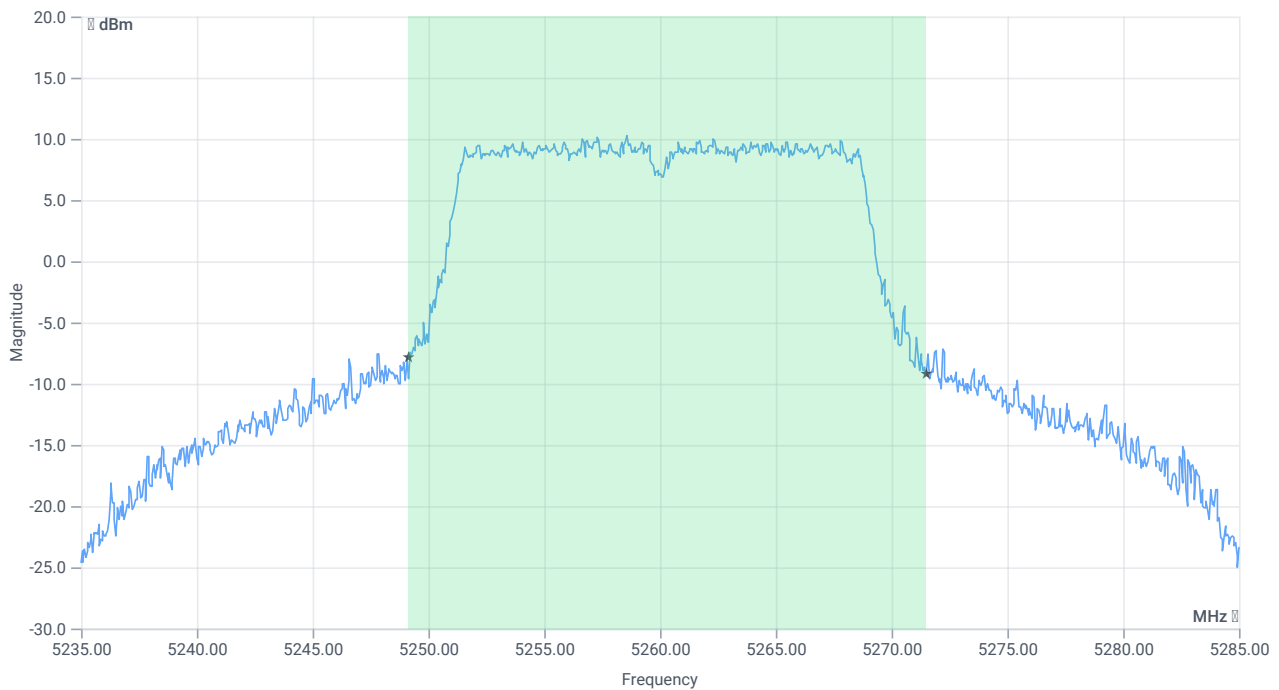
Test at TX 5260 MHz

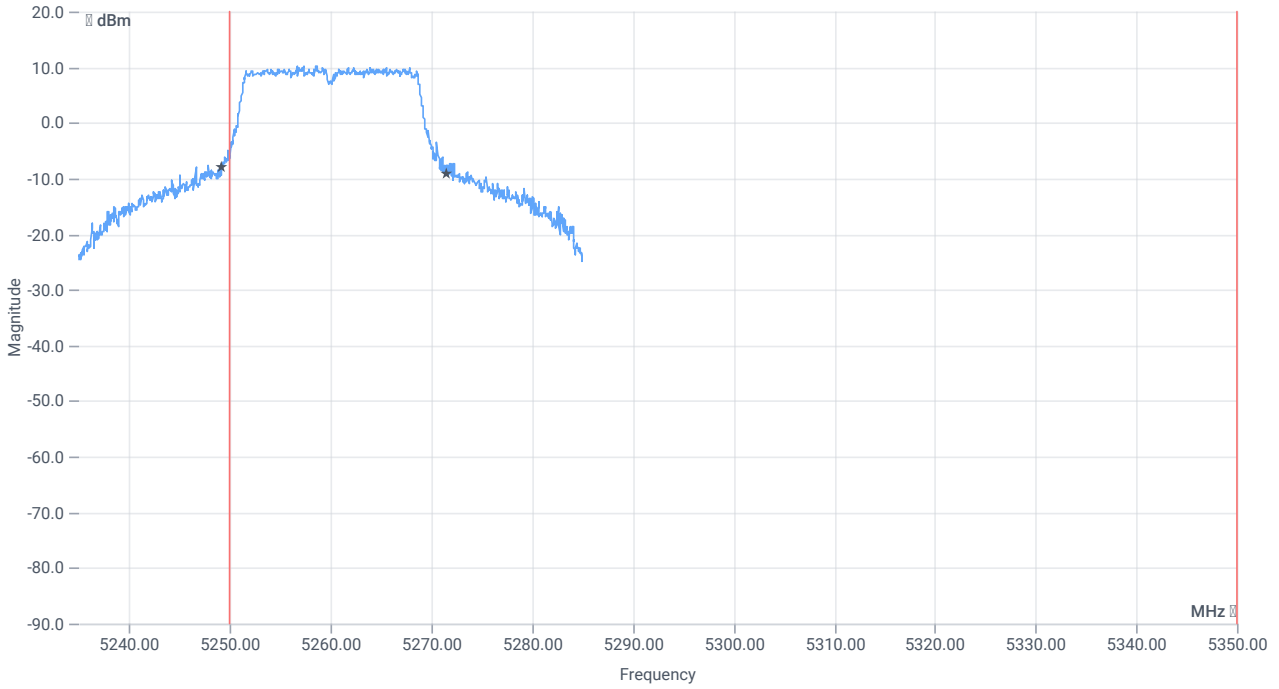
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.31	dBm	INFO
Ref. Frequency	--	--	5262.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.31 16.34 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

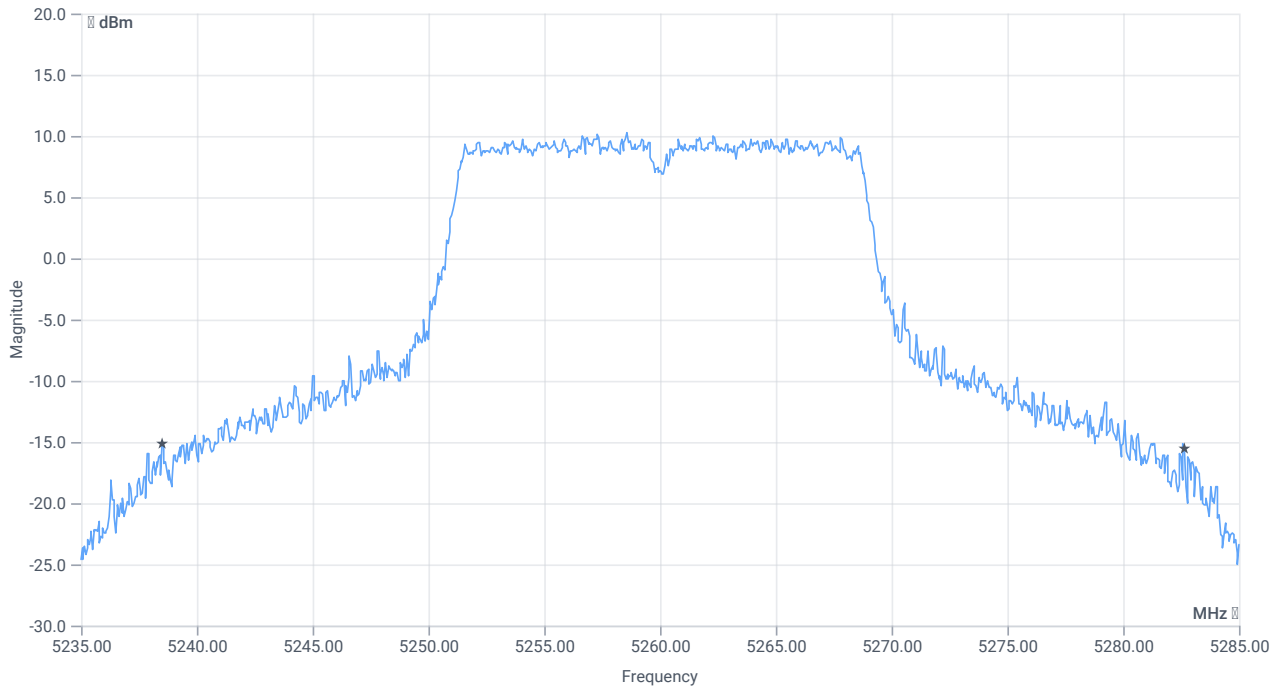




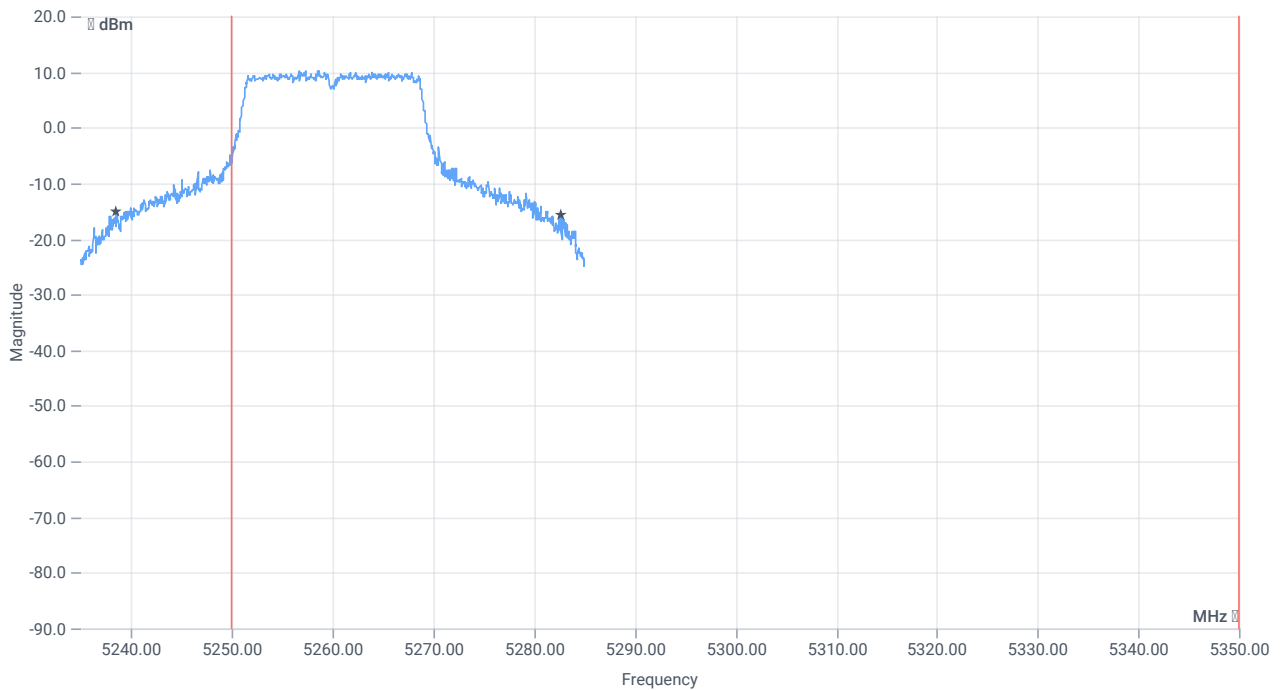
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	22.378	MHz	INFO
T1 99%	5250.000000	--	5249.1109	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5271.4885	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	44.15	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5238.5000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5282.6500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 08:36:11
Ambit temp [°C] humidity [rel%]	24.6 50
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

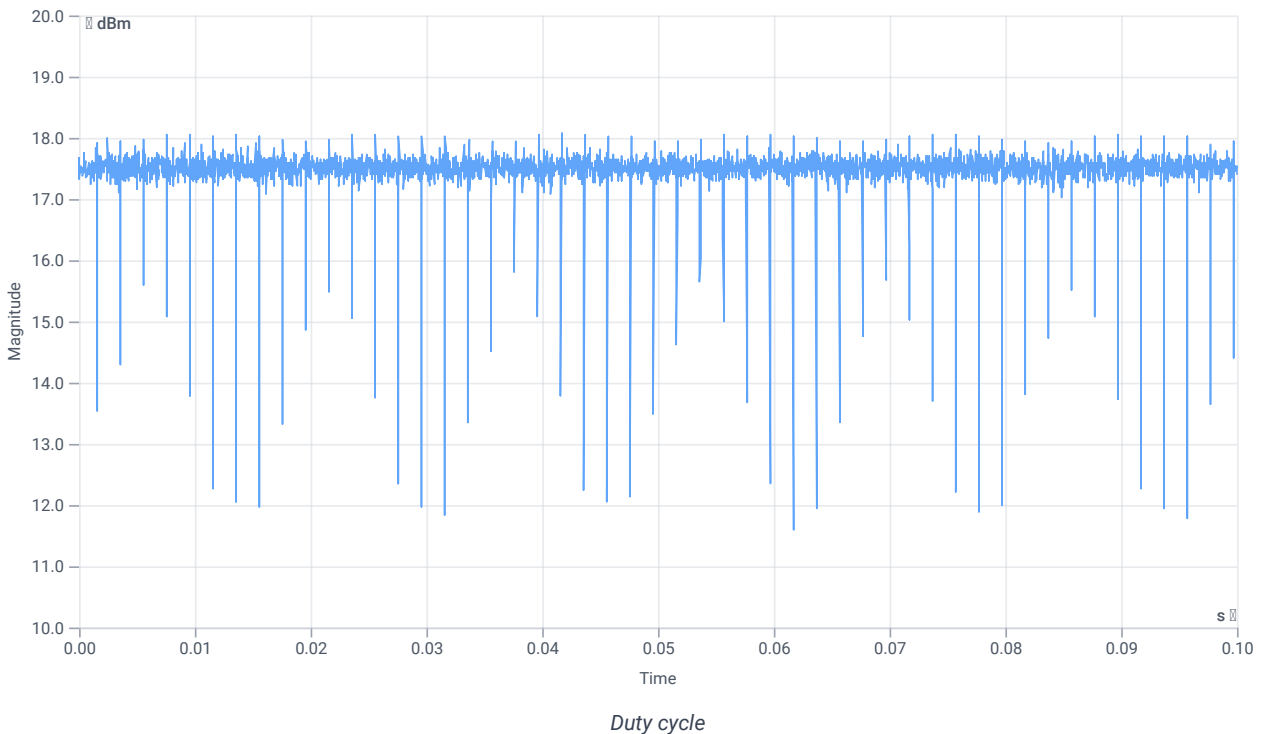
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.50	dBm	INFO
Ref. Frequency	--	--	5263.600	MHz	INFO

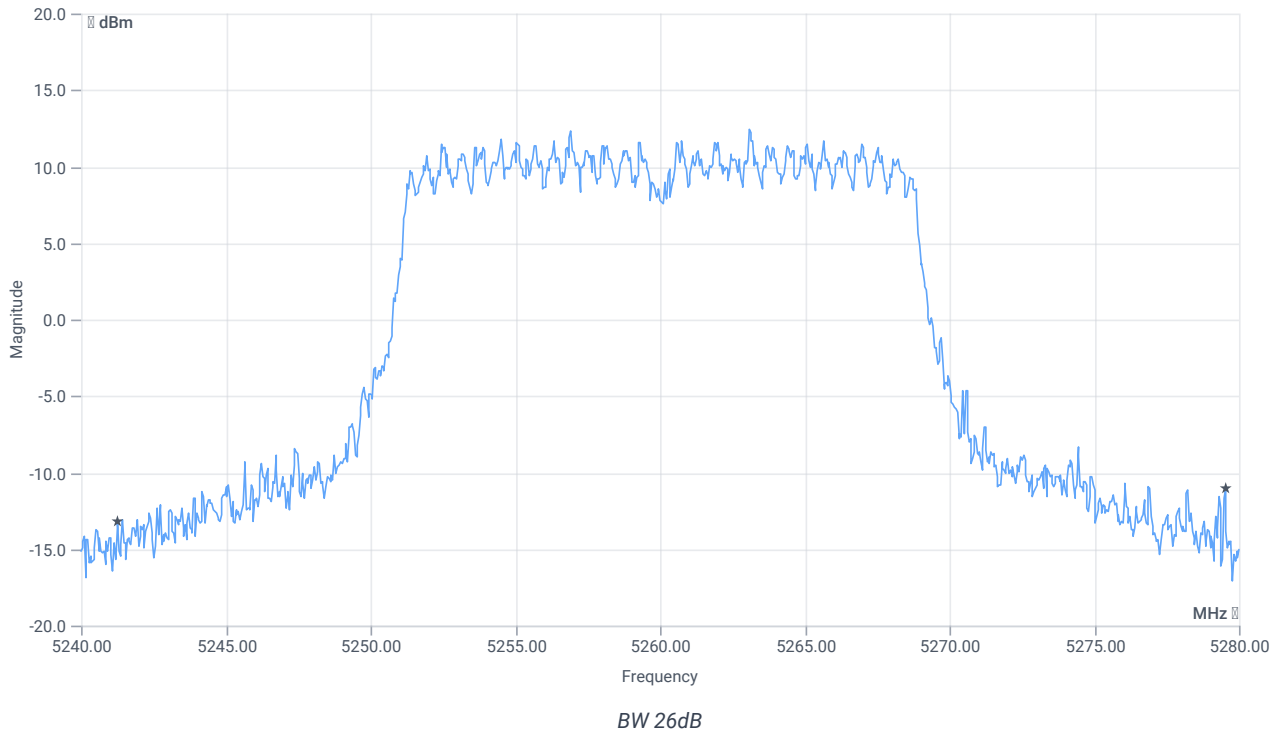
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



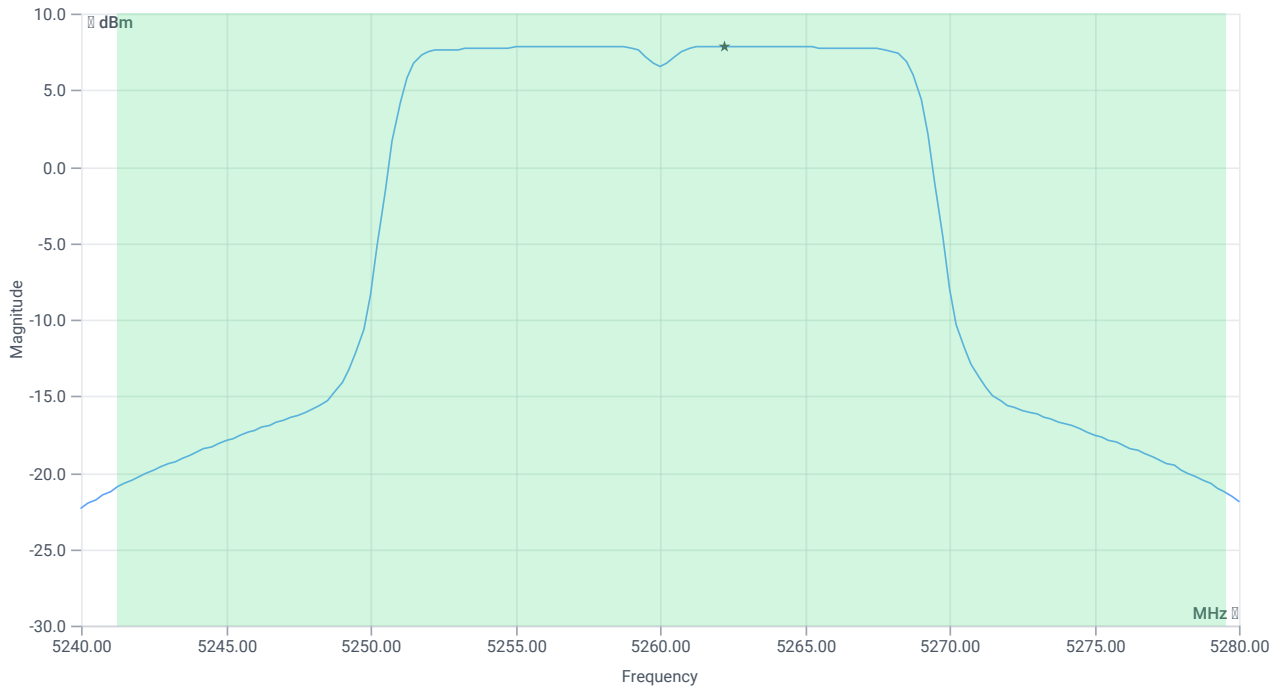
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	38.24	MHz	INFO
T1 26dB	---	---	5241.2800	MHz	INFO
T2 26dB	---	---	5279.5200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.50 16.34 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.96	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.96	dBm	PASS
Limit: 11 dBm + 10 log 38.24					
Max Output Power DC corrected	--	26.83	19.96	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.88	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.88	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 08:37:40
Ambit temp [°C] humidity [rel%]	24.7 50
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

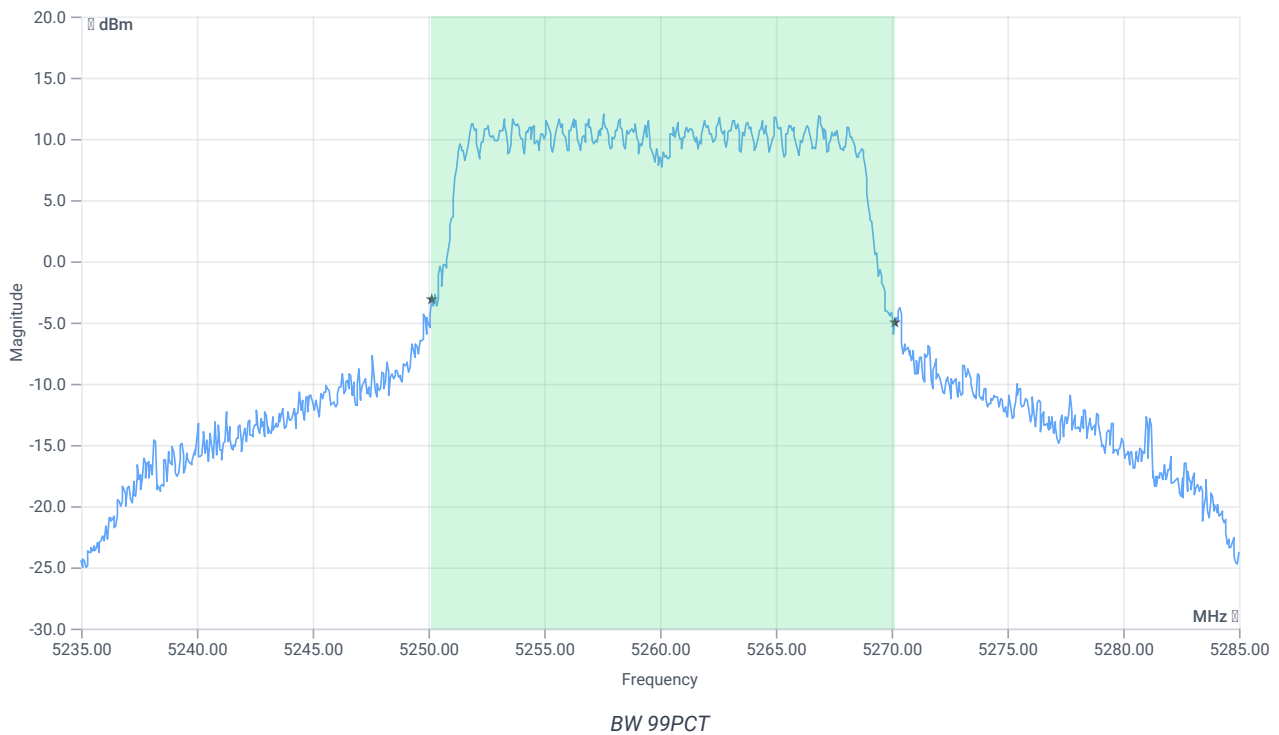
Test at TX 5260 MHz

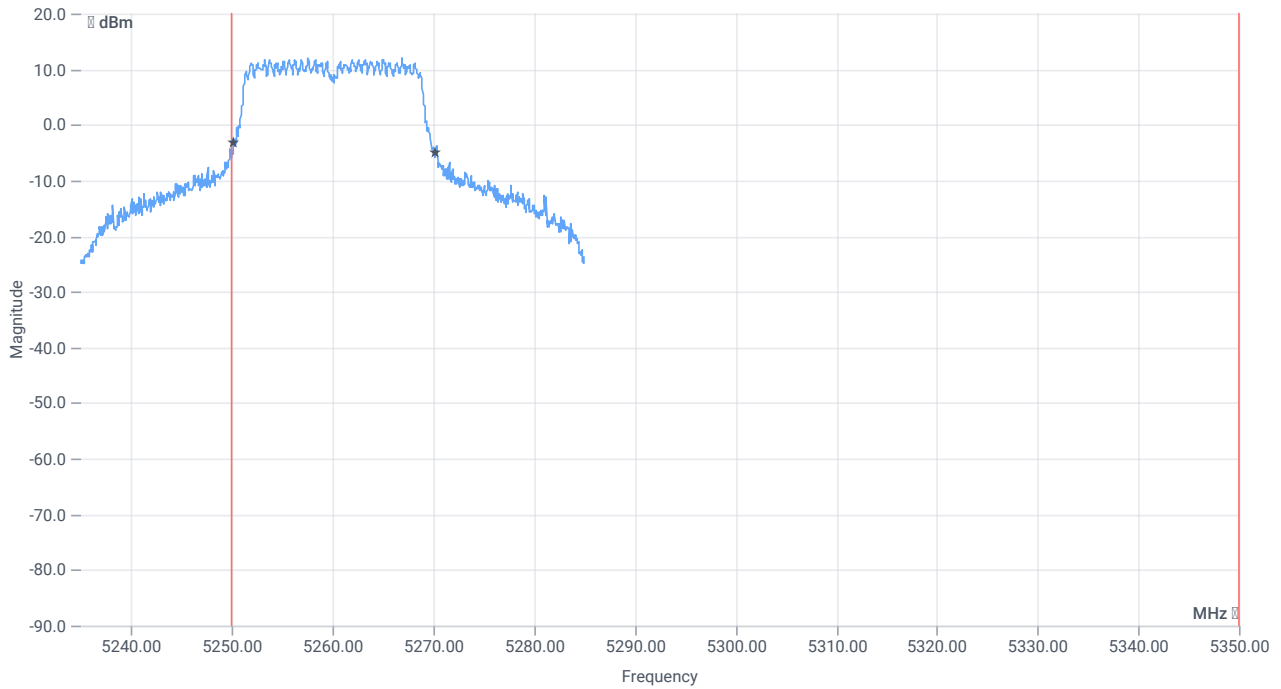
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.94	dBm	INFO
Ref. Frequency	--	--	5264.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.94 16.34 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

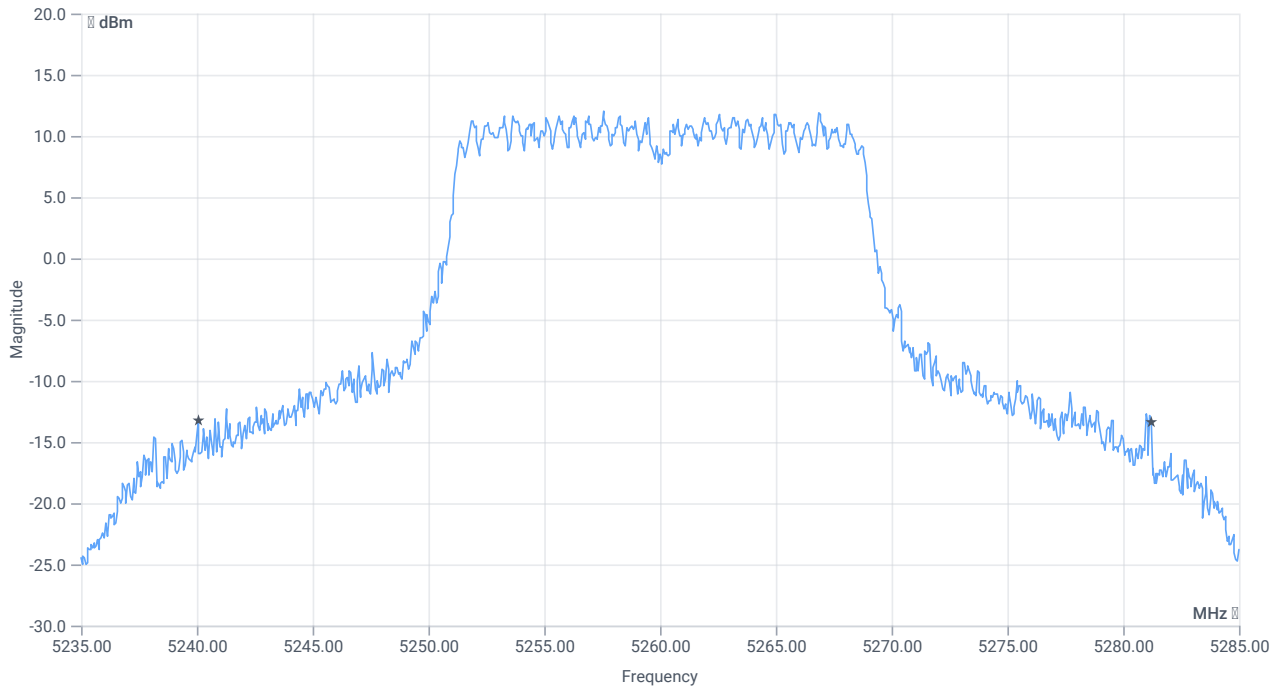




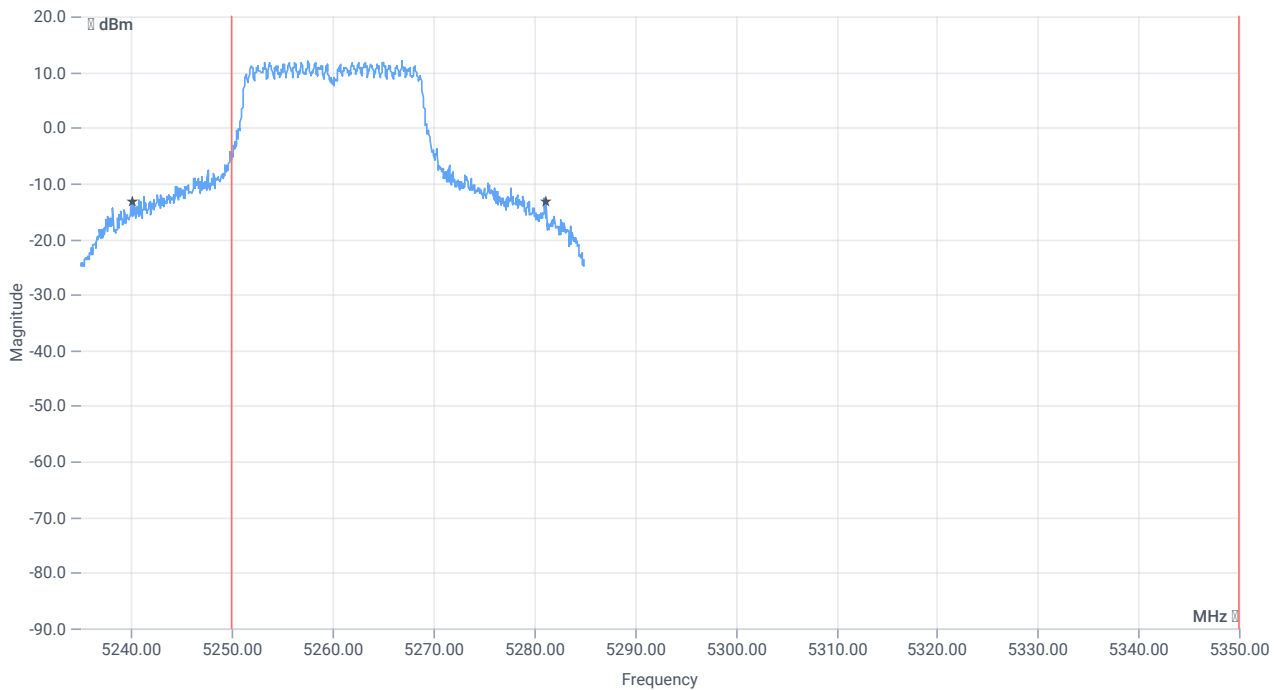
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.980	MHz	INFO
T1 99%	5250.000000	--	5250.1598	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5270.1399	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	41.15	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5240.0500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5281.2000	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 08:38:12
Ambit temp [°C] humidity [rel%]	24.7 50
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 08:38:12
Message	set WLAN5Gx to ac_VHT20_U_NII_2A, Frequency [MHz] 5280 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 09:03:06
Ambit temp [°C] humidity [rel%]	25.3 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

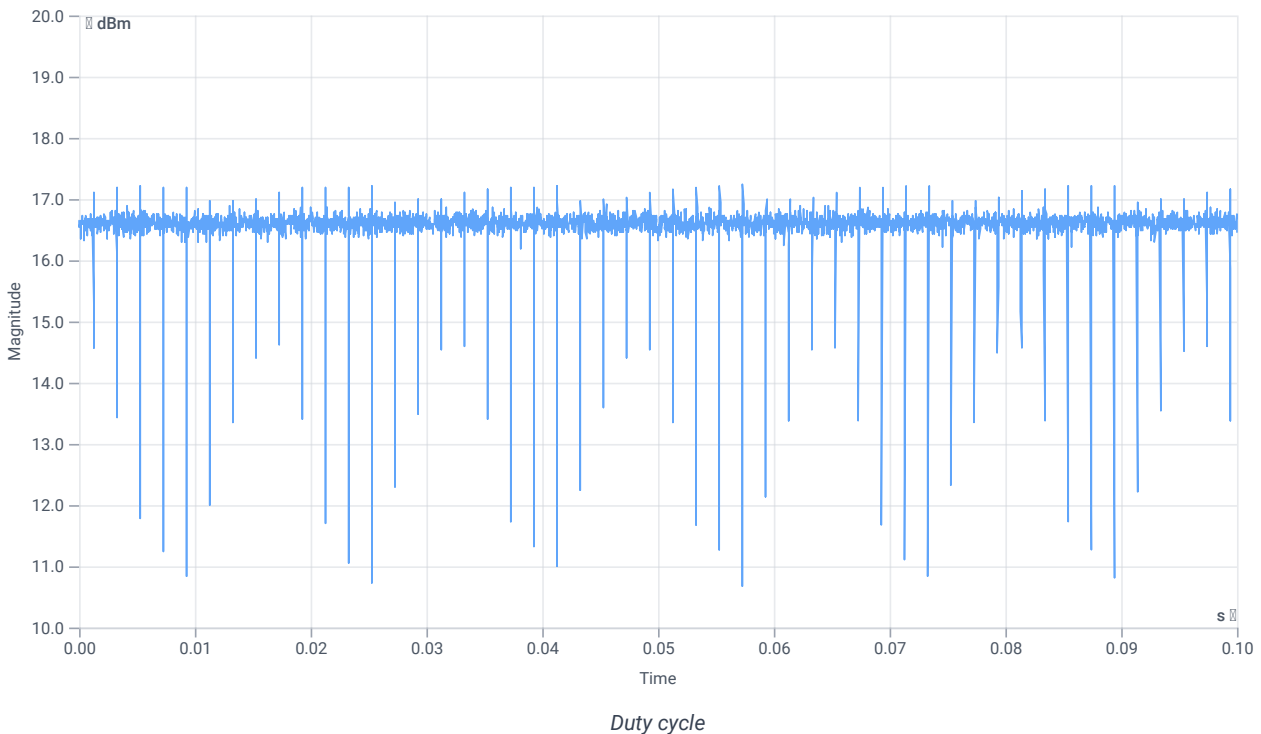
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.27	dBm	INFO
Ref. Frequency	--	--	5277.200	MHz	INFO

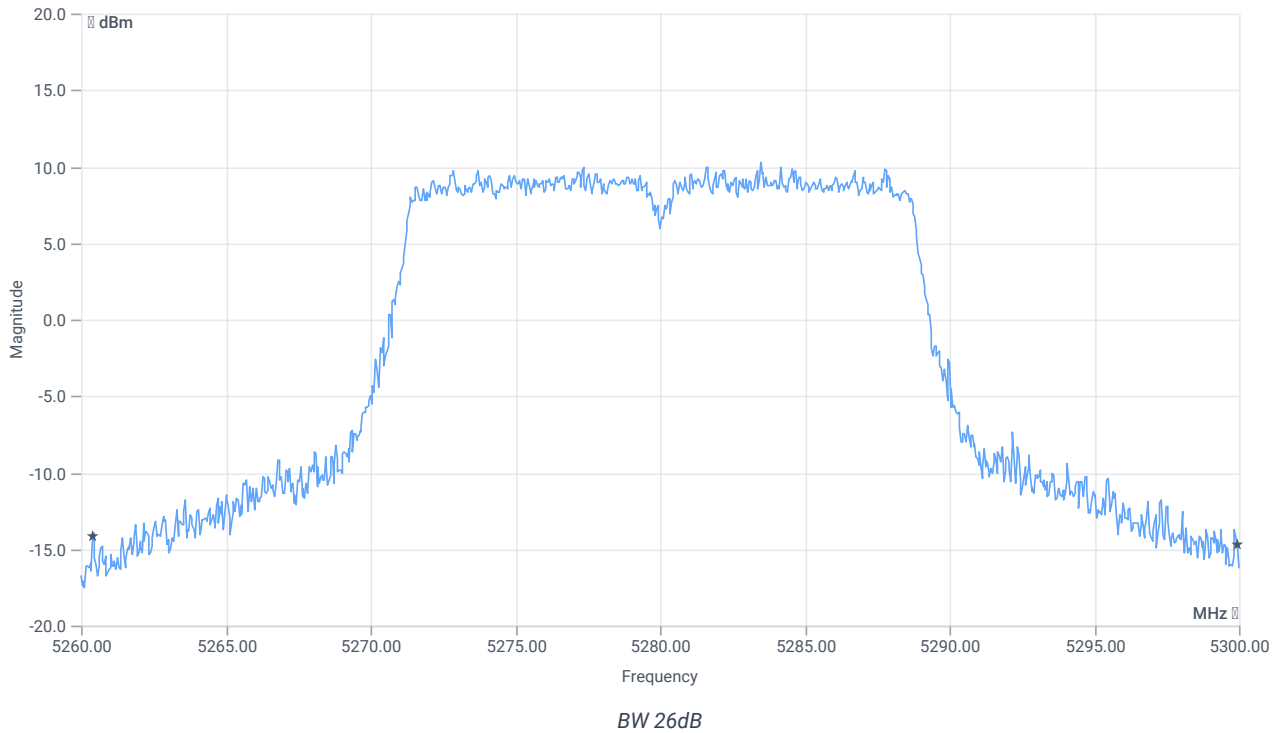
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



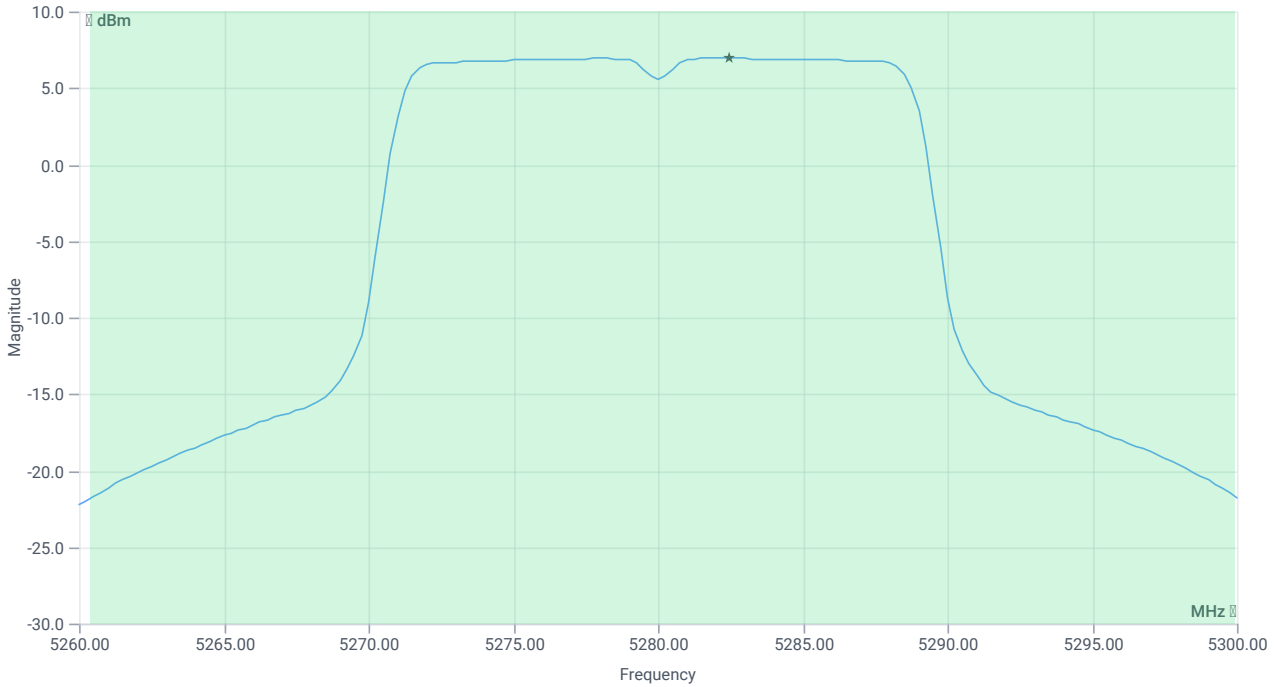
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.56	MHz	INFO
T1 26dB	---	---	5260.4000	MHz	INFO
T2 26dB	---	---	5299.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.27 16.1 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.01	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.01	dBm	PASS
Limit: 11 dBm + 10 log 39.56					
Max Output Power DC corrected	--	26.97	19.01	dBm	PASS

Power Spectral Density

RESULT

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-2A

References

TC start	11.07.2023 09:04:35
Ambit temp [°C] humidity [rel%]	25.3 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

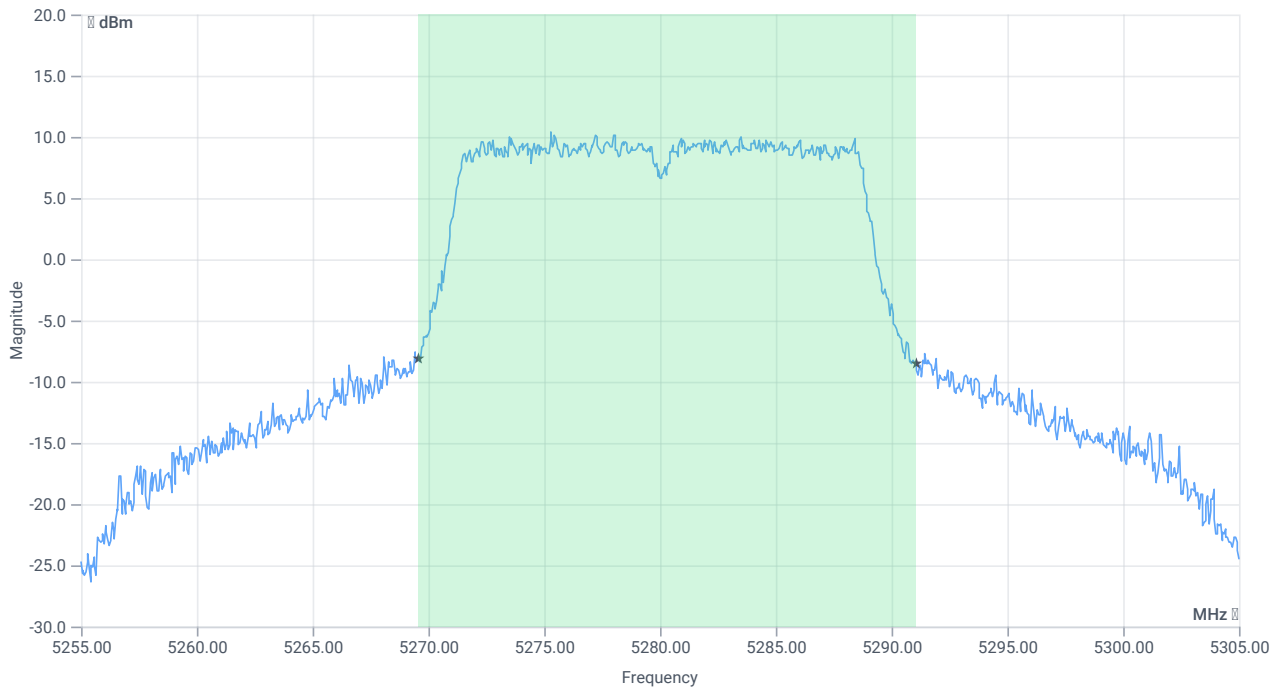
Test at TX 5280 MHz

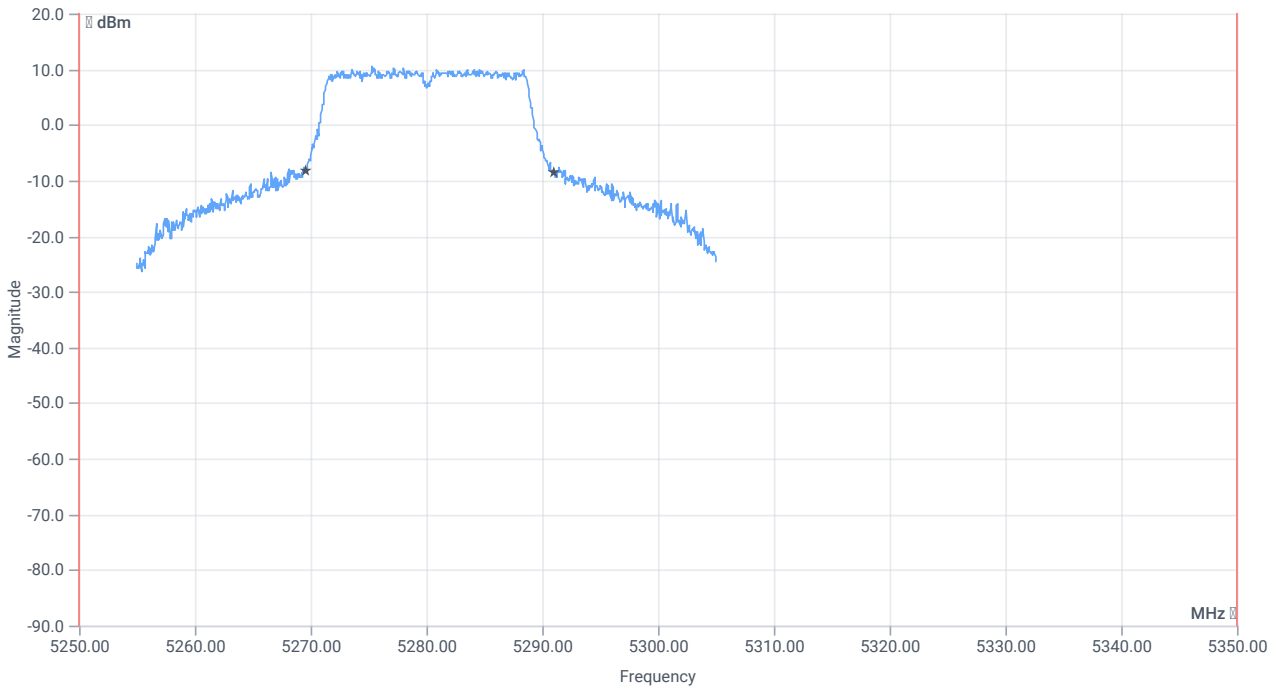
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.36	dBm	INFO
Ref. Frequency	--	--	5284.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.36 16.1 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

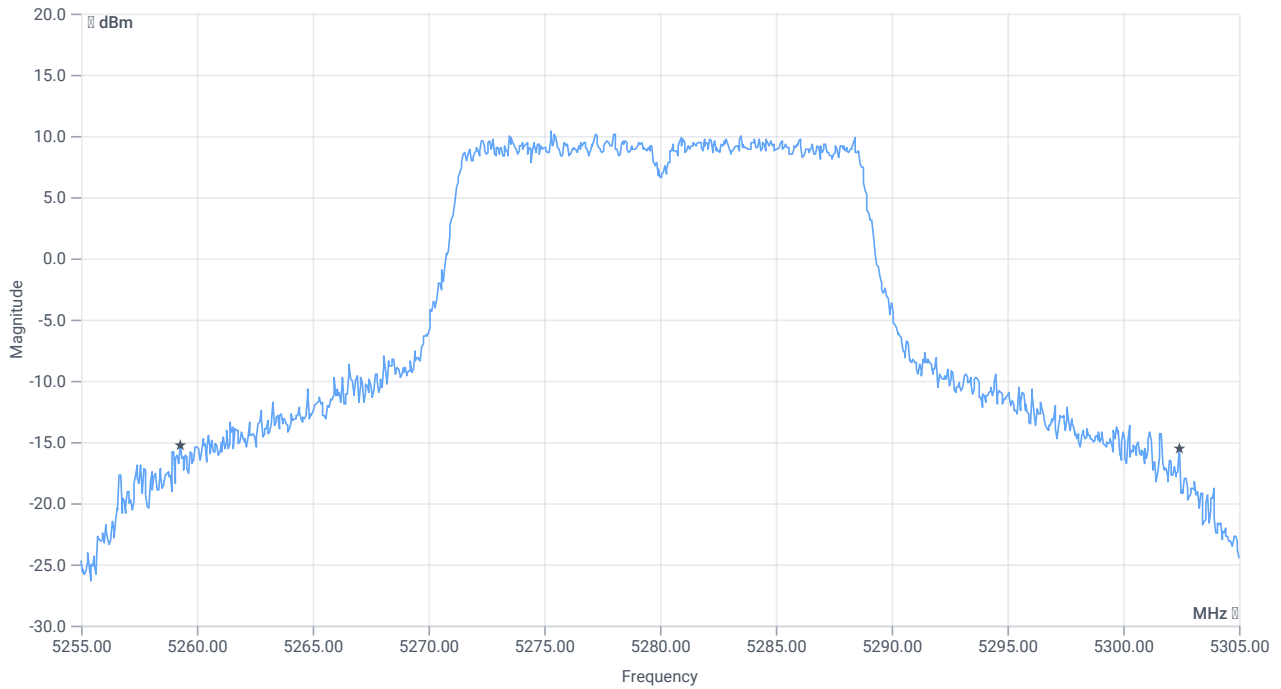




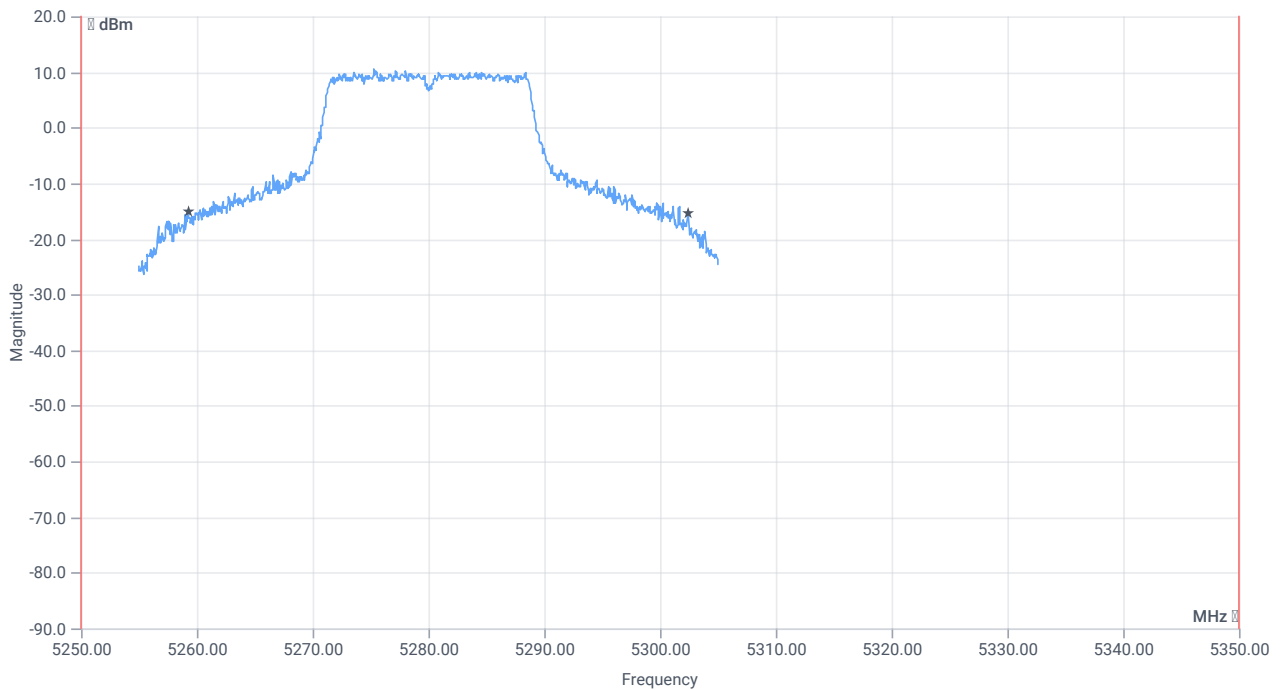
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	21.479	MHz	INFO
T1 99%	5250.000000	--	5269.5604	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5291.0390	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	43.2	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5259.2500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5302.4500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 09:05:07
Ambit temp [°C] humidity [rel%]	25.3 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

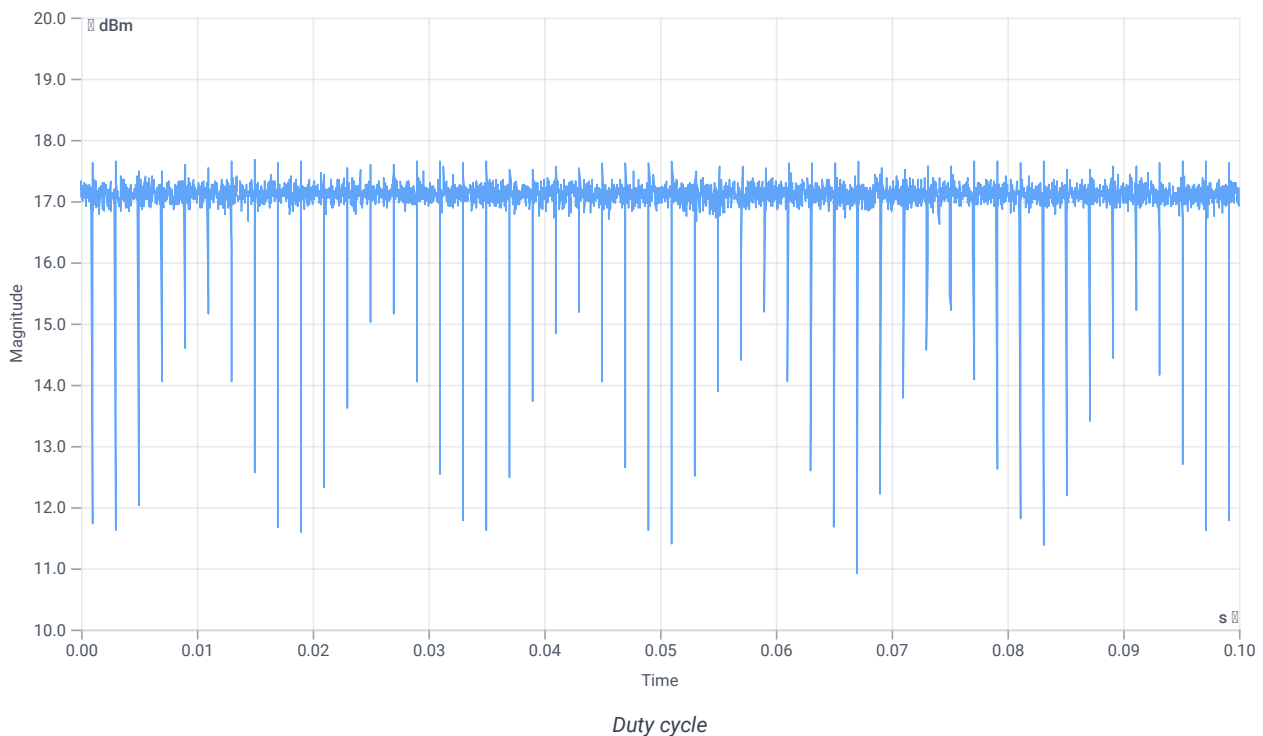
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.09	dBm	INFO
Ref. Frequency	--	--	5282.000	MHz	INFO

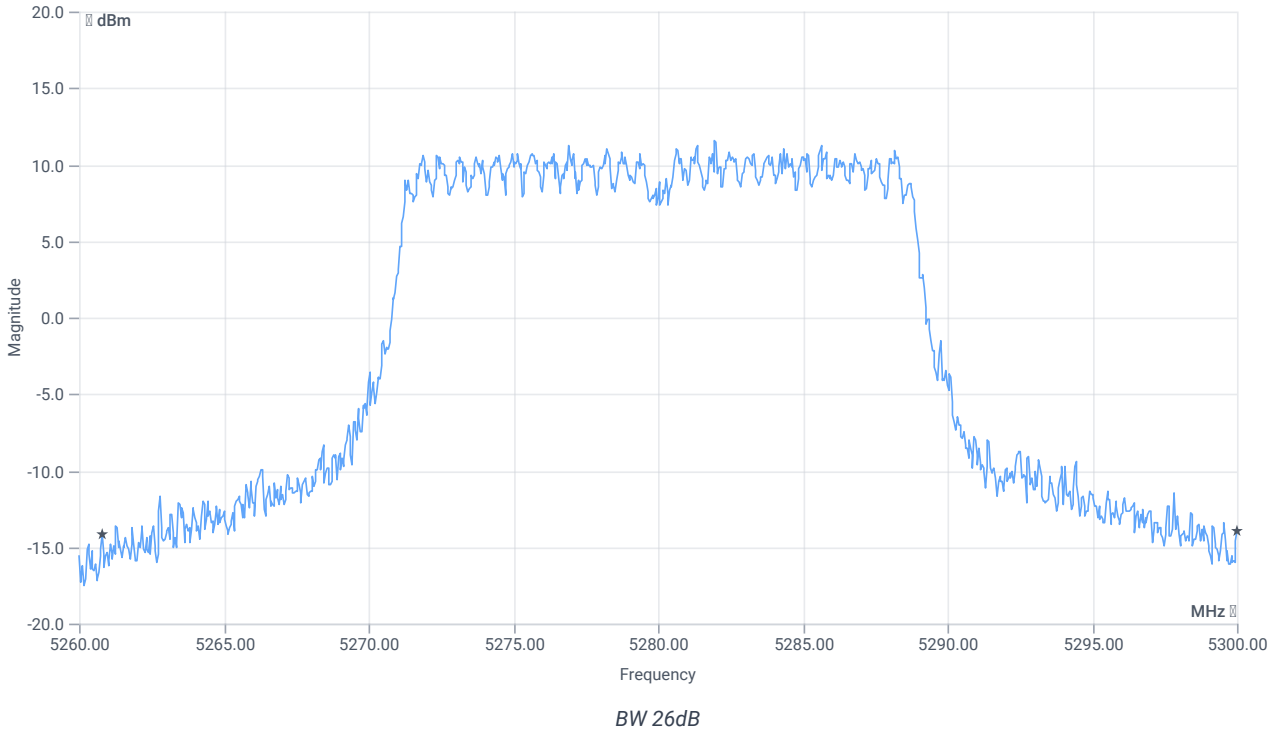
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



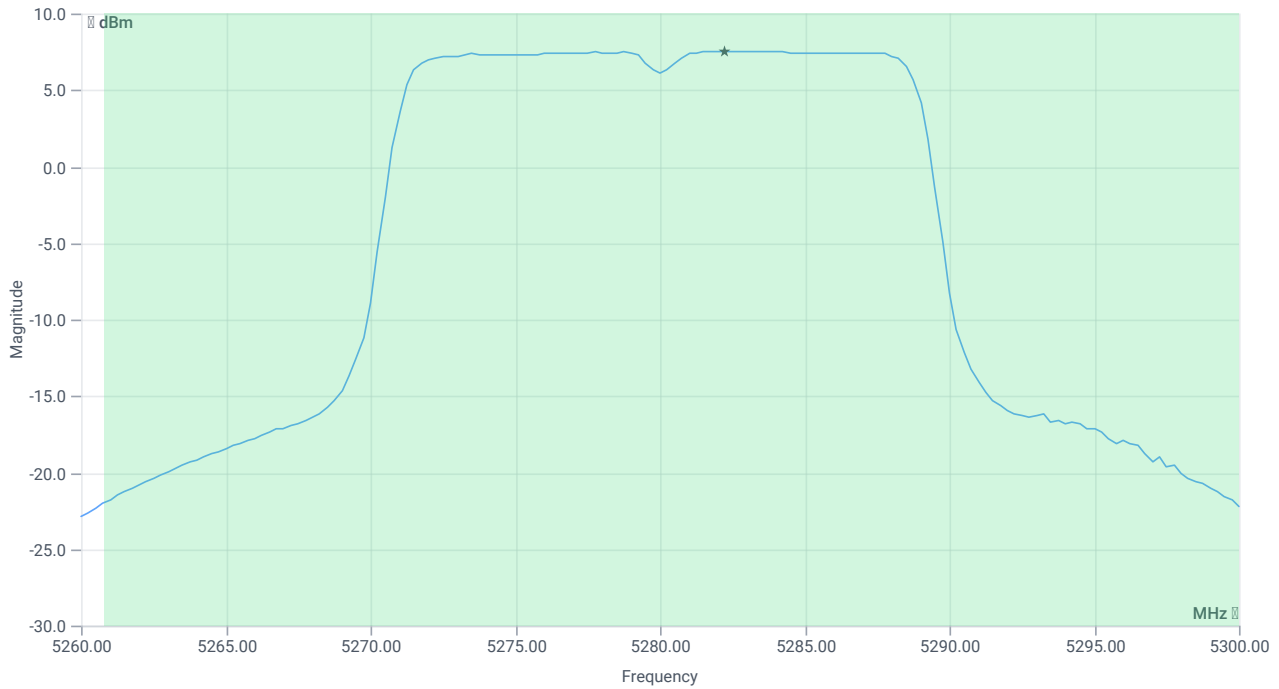
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.2	MHz	INFO
T1 26dB	---	---	5260.8000	MHz	INFO
T2 26dB	---	---	5300.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.09 16.1 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.56	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.56	dBm	PASS
Limit: 11 dBm + 10 log 39.2					
Max Output Power DC corrected	--	26.93	19.56	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.55	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.55	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:06:36
Ambit temp [°C] humidity [rel%]	25.3 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

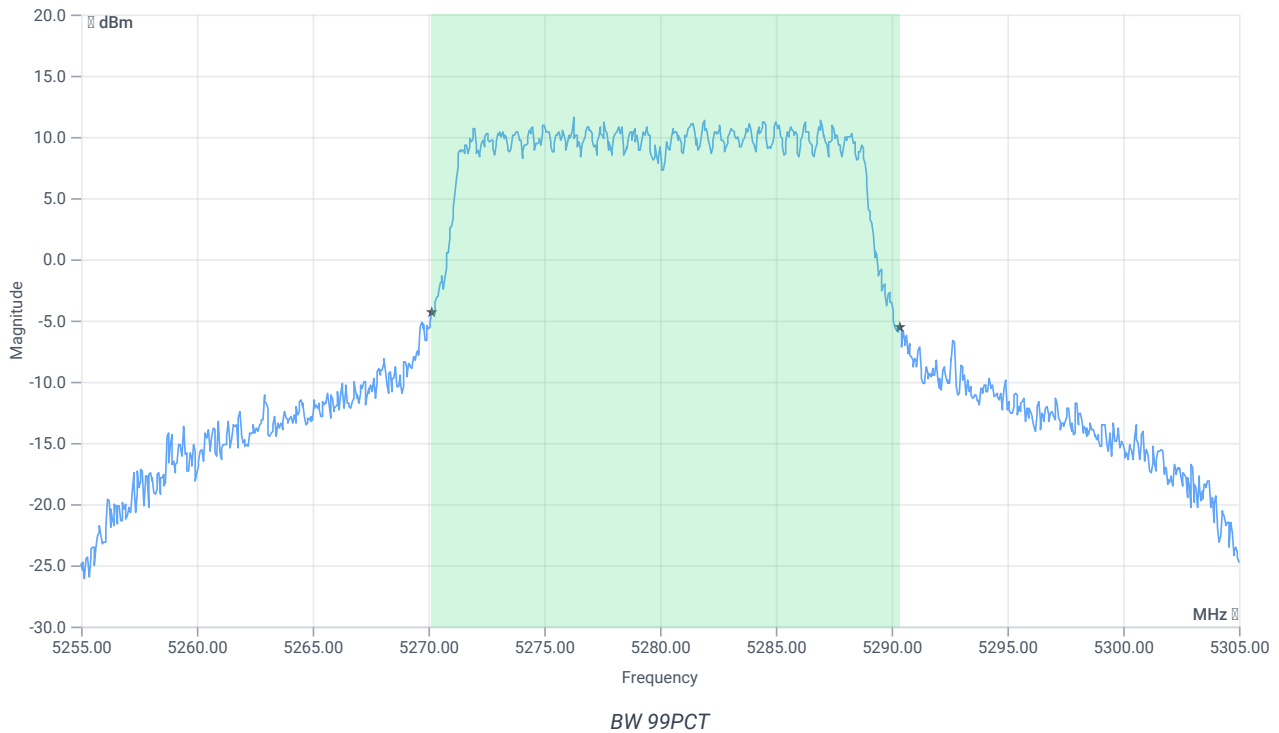
Test at TX 5280 MHz

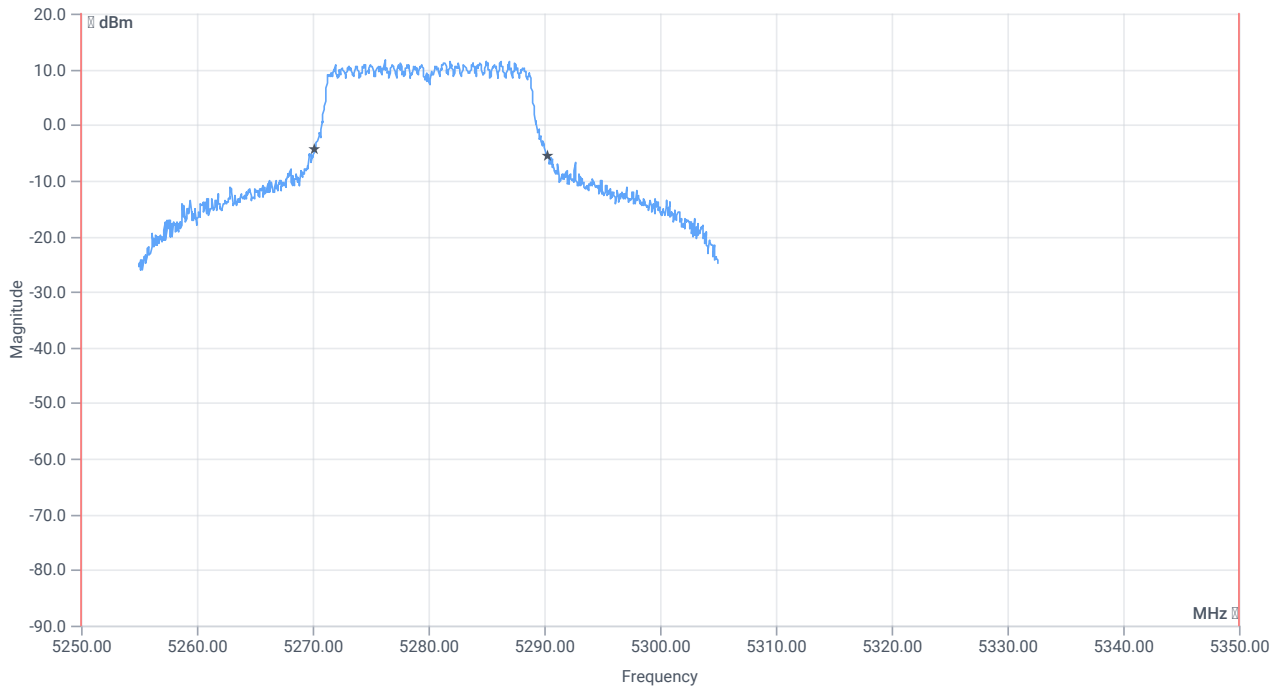
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.94	dBm	INFO
Ref. Frequency	--	--	5277.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.94 16.1 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

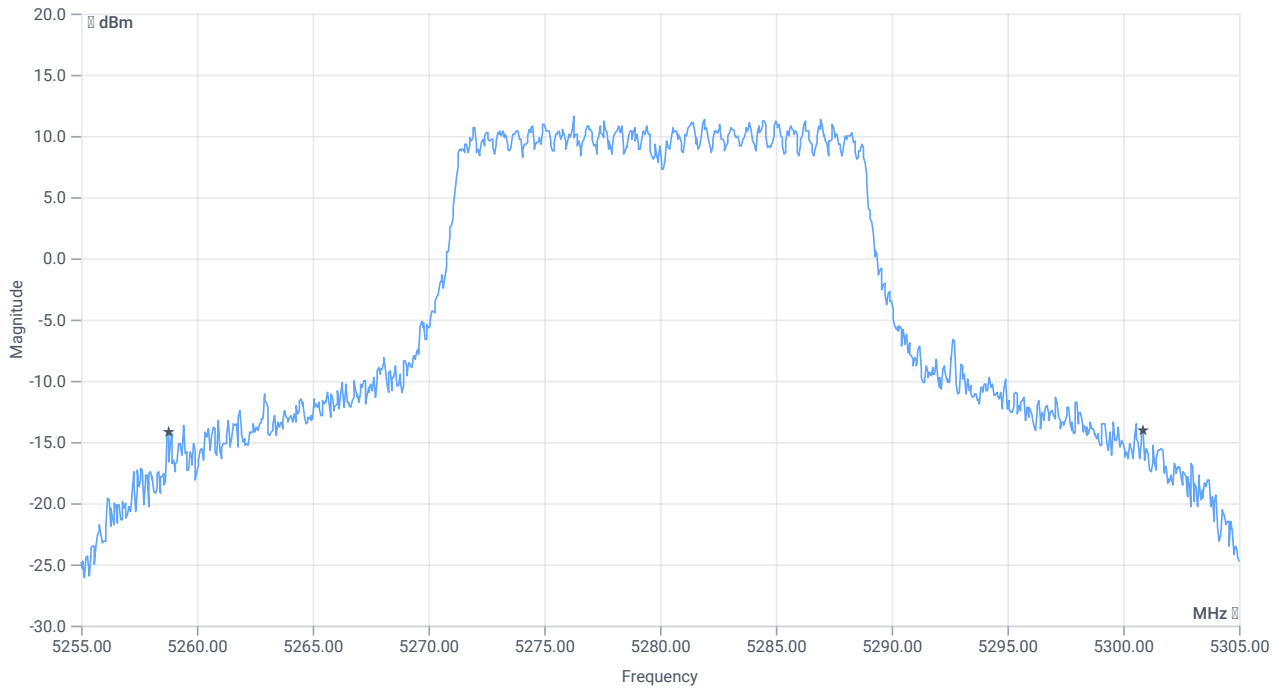




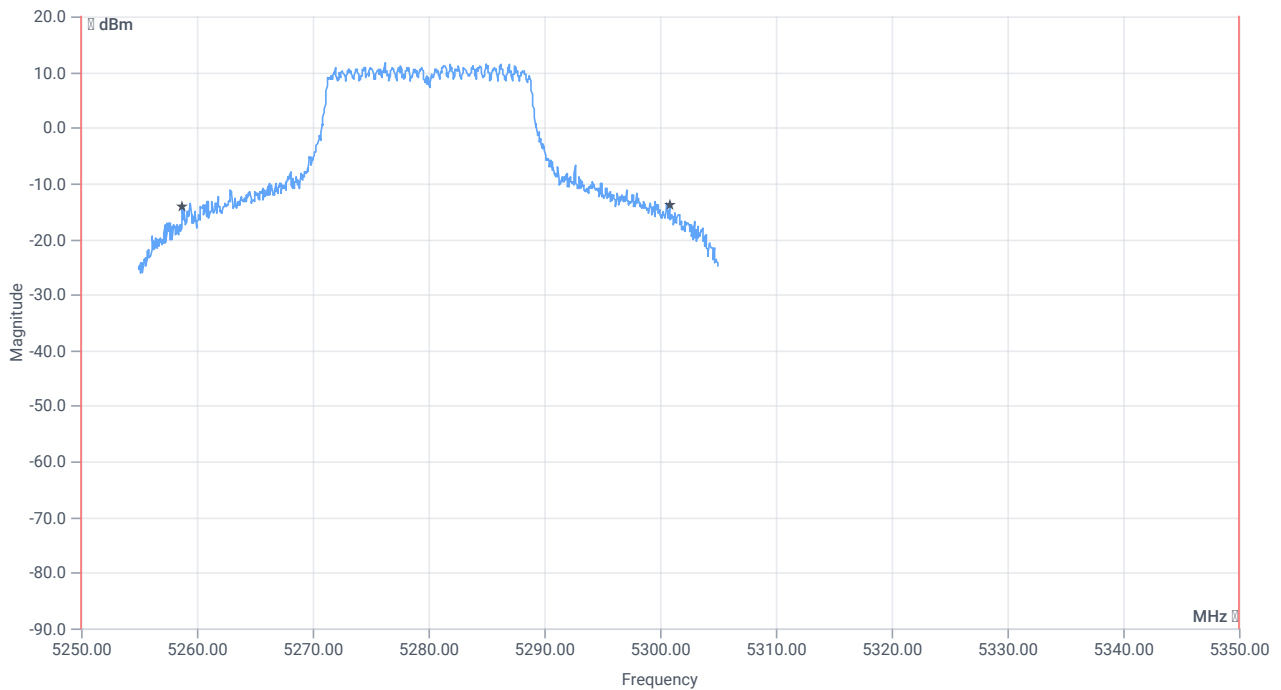
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	20.180	MHz	INFO
T1 99%	5250.000000	--	5270.1598	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5290.3397	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	42.1	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5258.7500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5300.8500	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:07:07
Ambit temp [°C] humidity [rel%]	25.4 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:07:08
Message	set WLAN5Gx to ac_VHT20_U_NII_2A, Frequency [MHz] 5320

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 09:15:50
Ambit temp [°C] humidity [rel%]	25.5 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

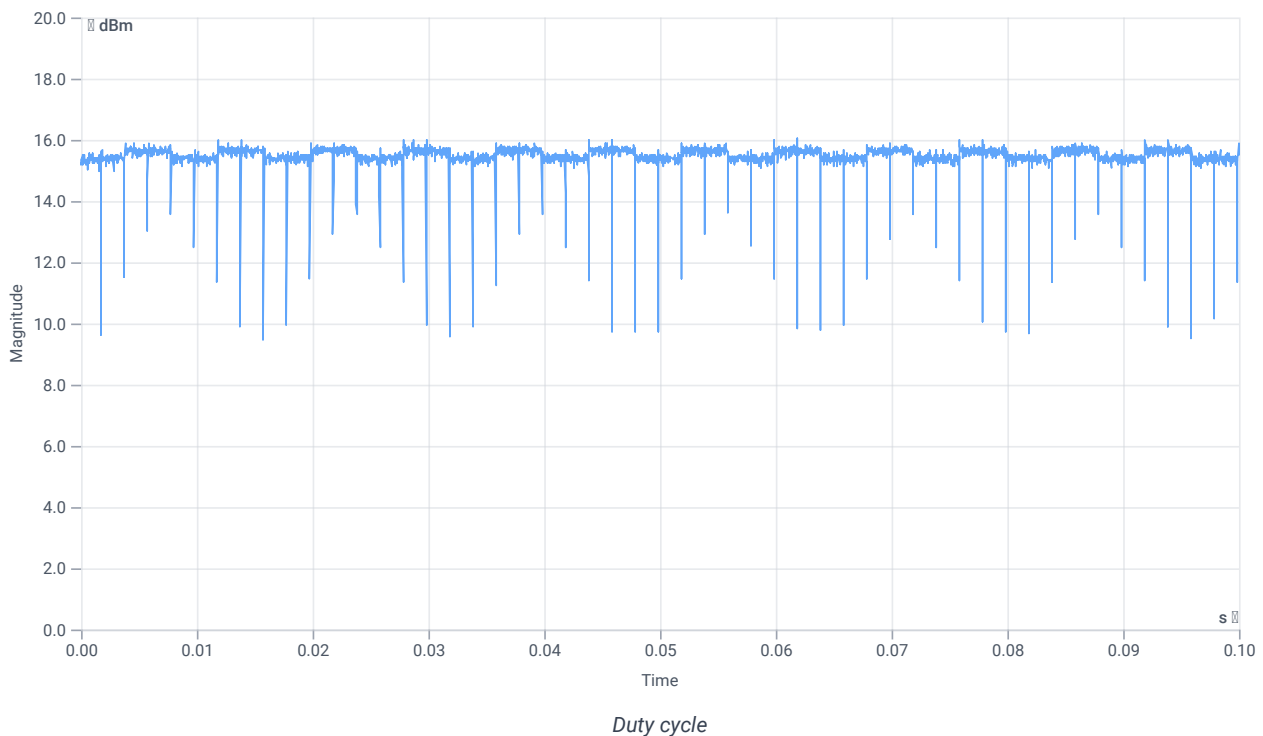
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.65	dBm	INFO
Ref. Frequency	--	--	5318.600	MHz	INFO

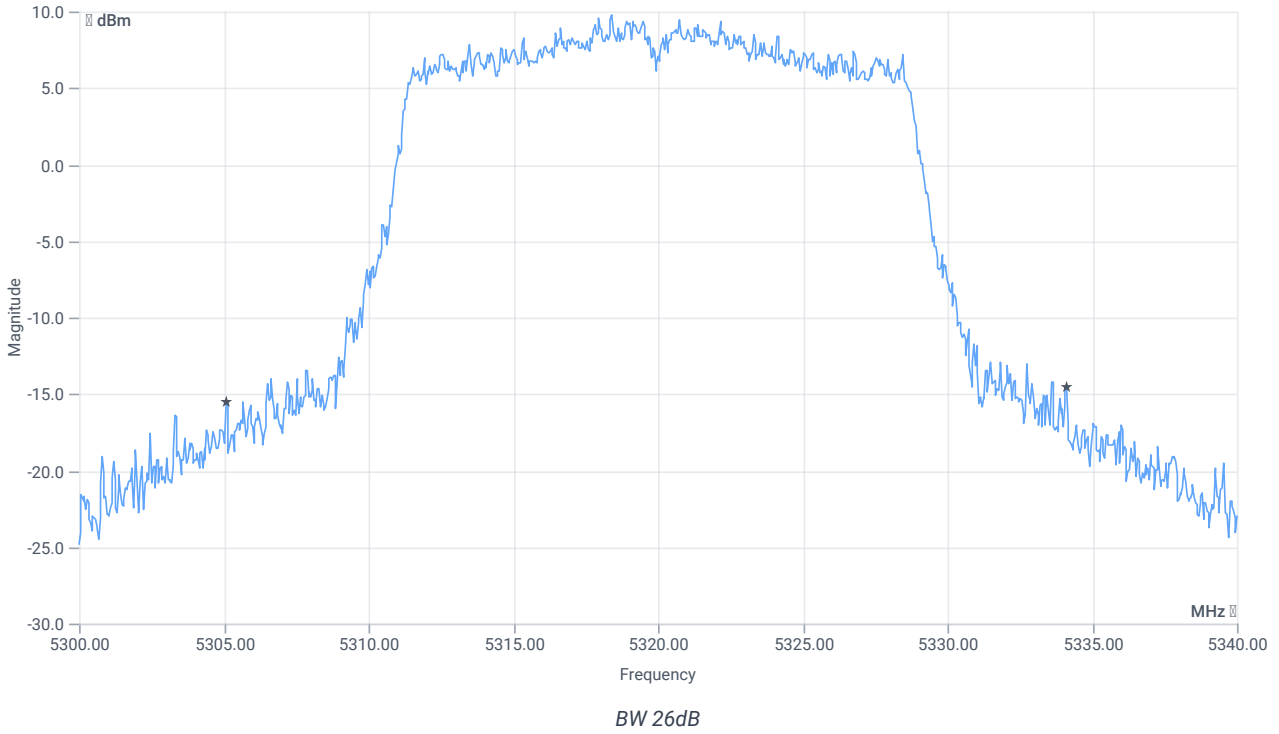
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



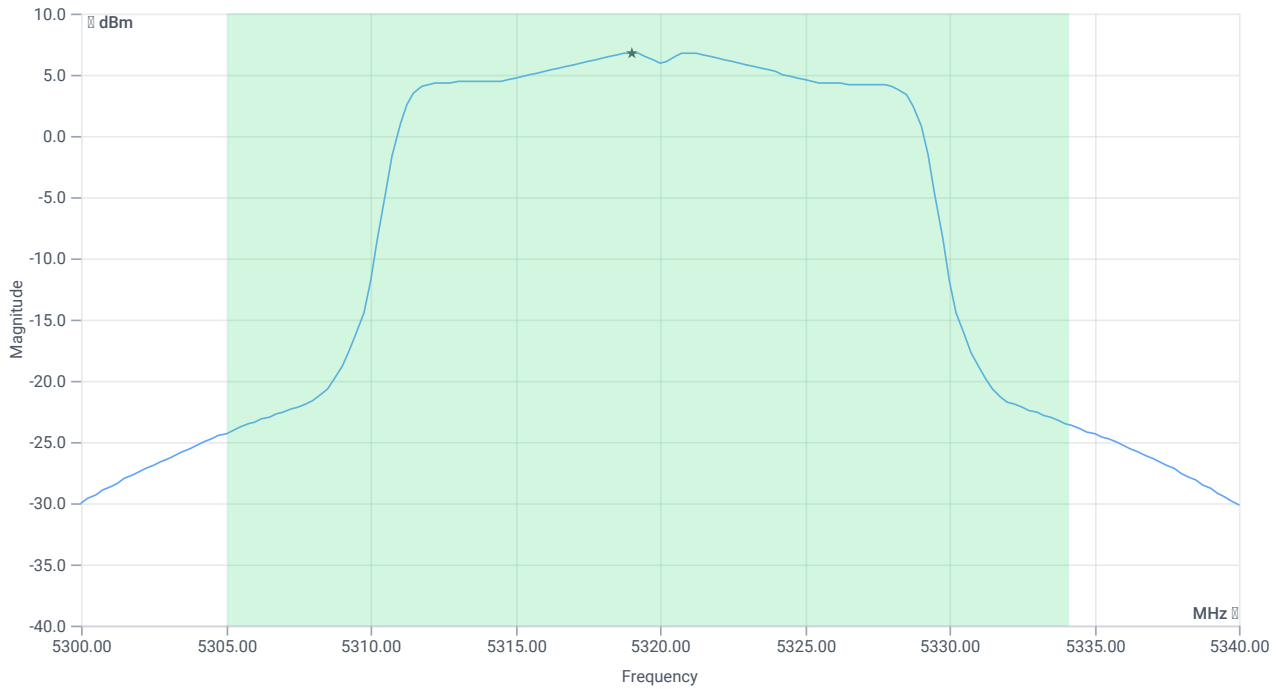
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	29.04	MHz	INFO
T1 26dB	---	---	5305.0800	MHz	INFO
T2 26dB	---	---	5334.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.65 16.16 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.56	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.56	dBm	PASS
Limit: 11 dBm + 10 log 29.04					
Max Output Power DC corrected	--	25.63	17.56	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.8	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.8	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:17:18
Ambit temp [°C] humidity [rel%]	25.6 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

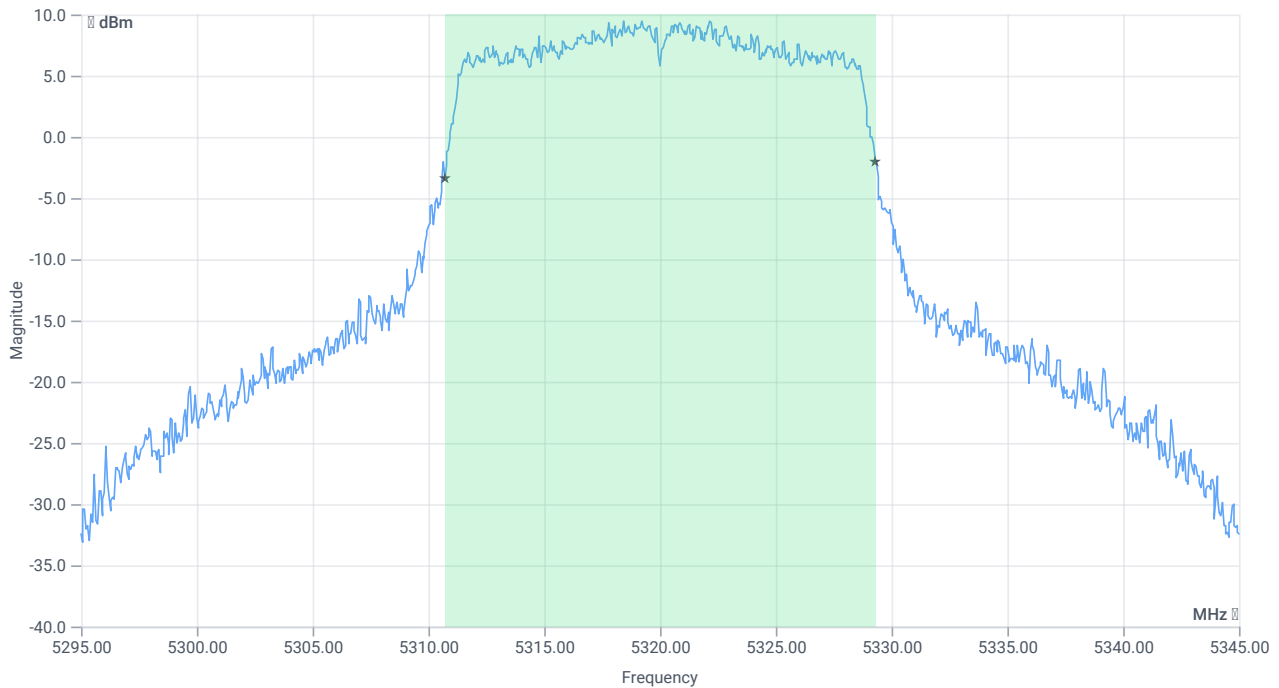
Test at TX 5320 MHz

RESULT: Reference Power cond.

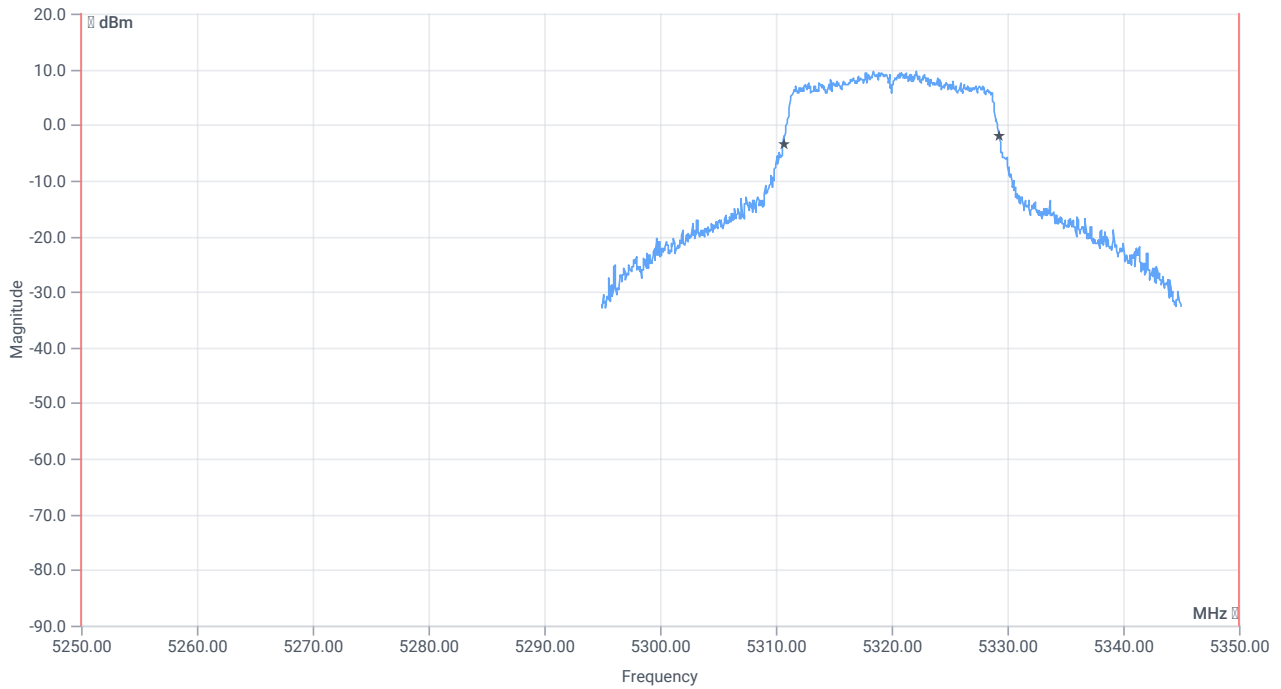
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.37	dBm	INFO
Ref. Frequency	--	--	5321.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.37 16.16 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



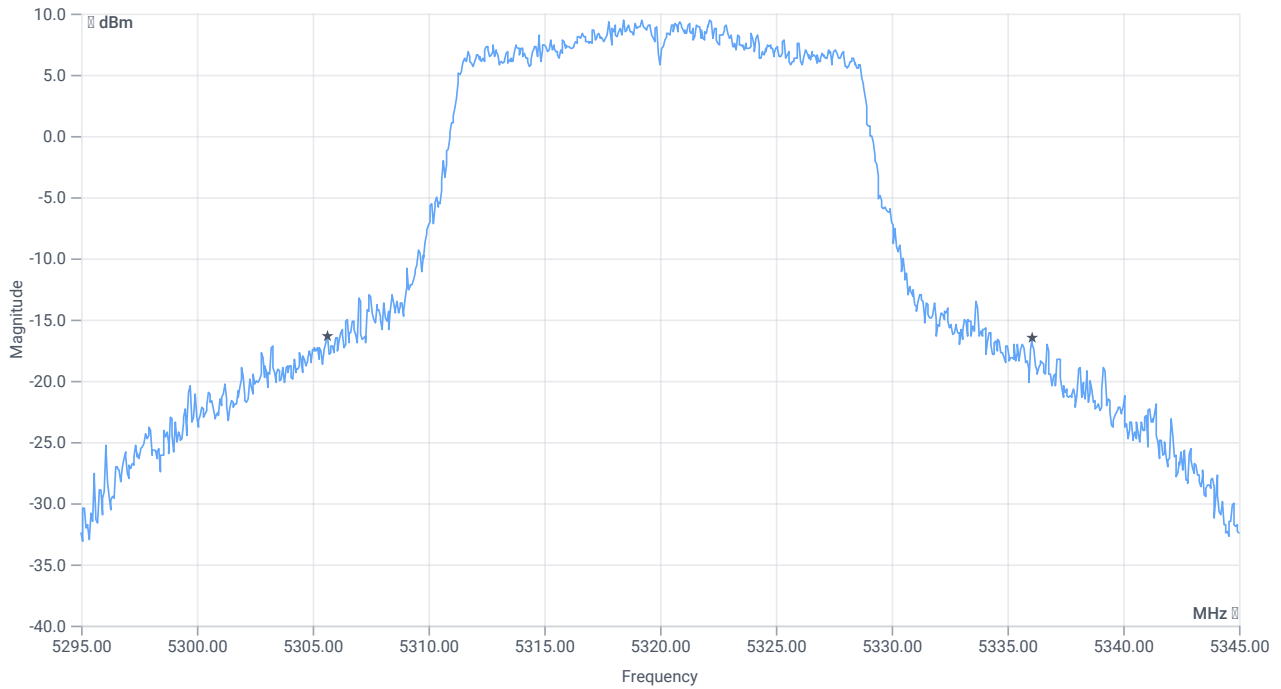
BW 99PCT



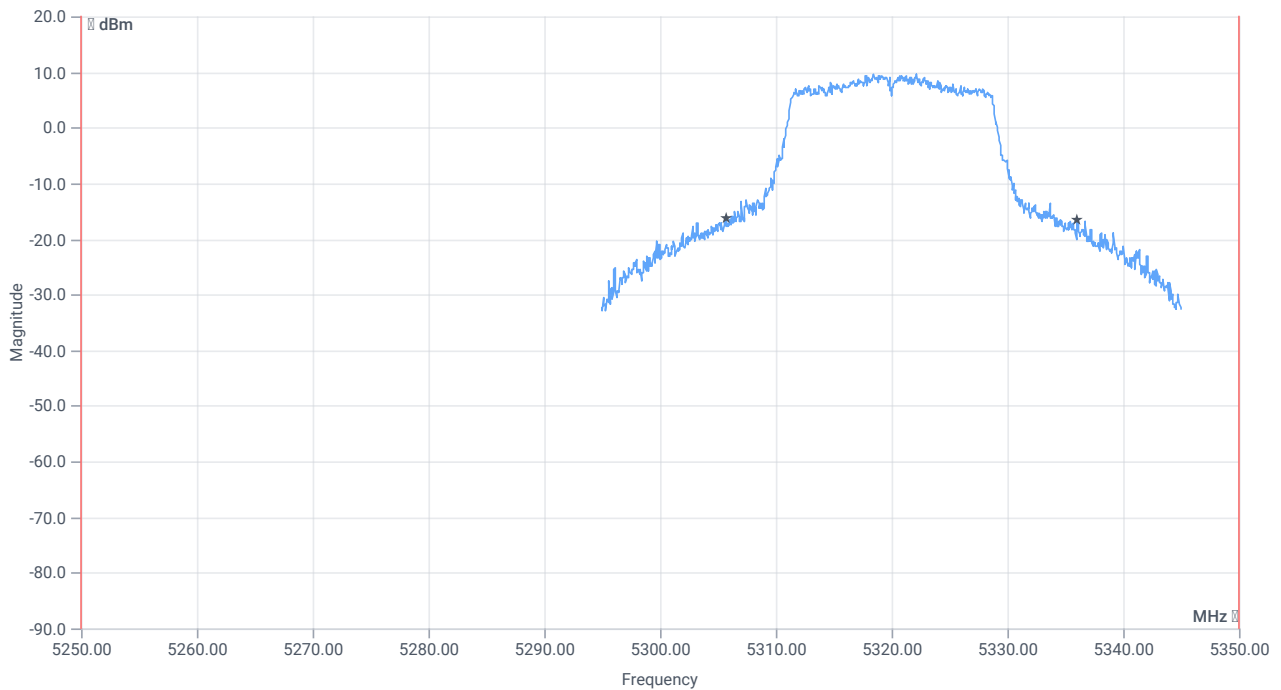
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	18.581	MHz	INFO
T1 99%	5250.000000	--	5310.7093	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5329.2907	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	30.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5305.6500	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5336.0500	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 09:17:49
Ambit temp [°C] humidity [rel%]	25.6 48
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

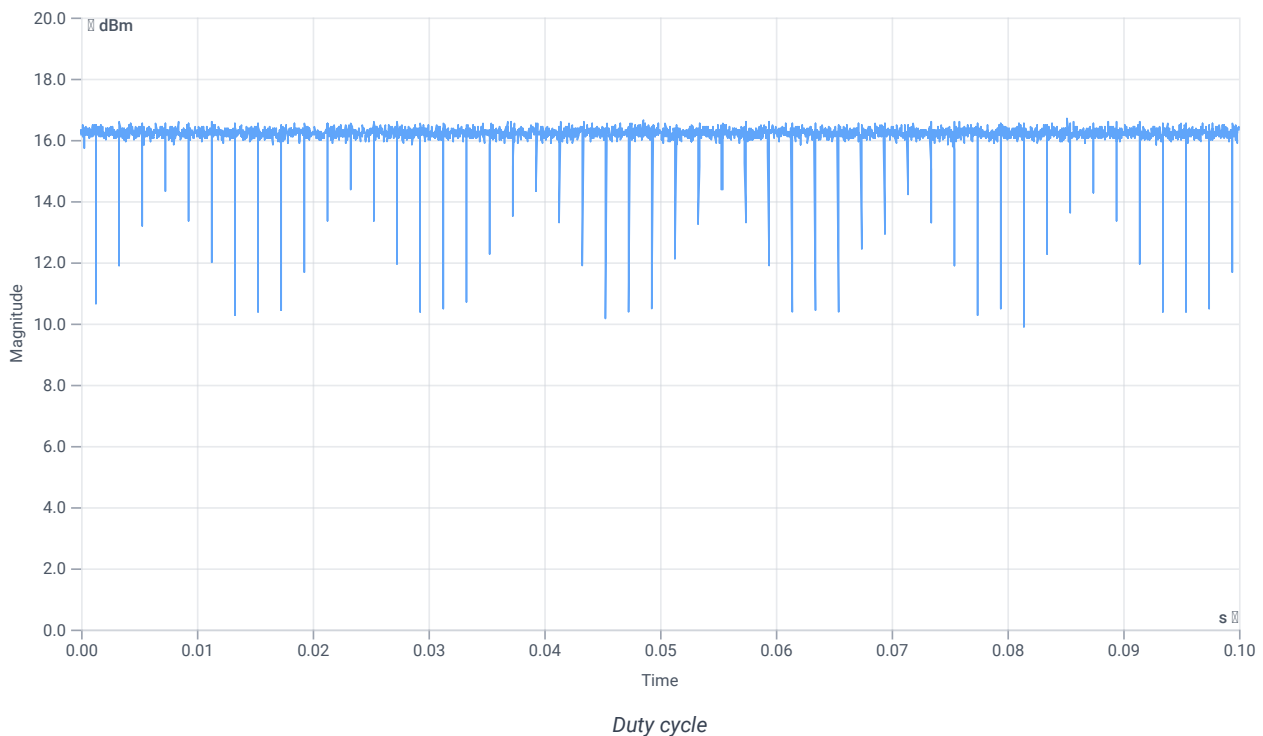
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.99	dBm	INFO
Ref. Frequency	--	--	5322.800	MHz	INFO

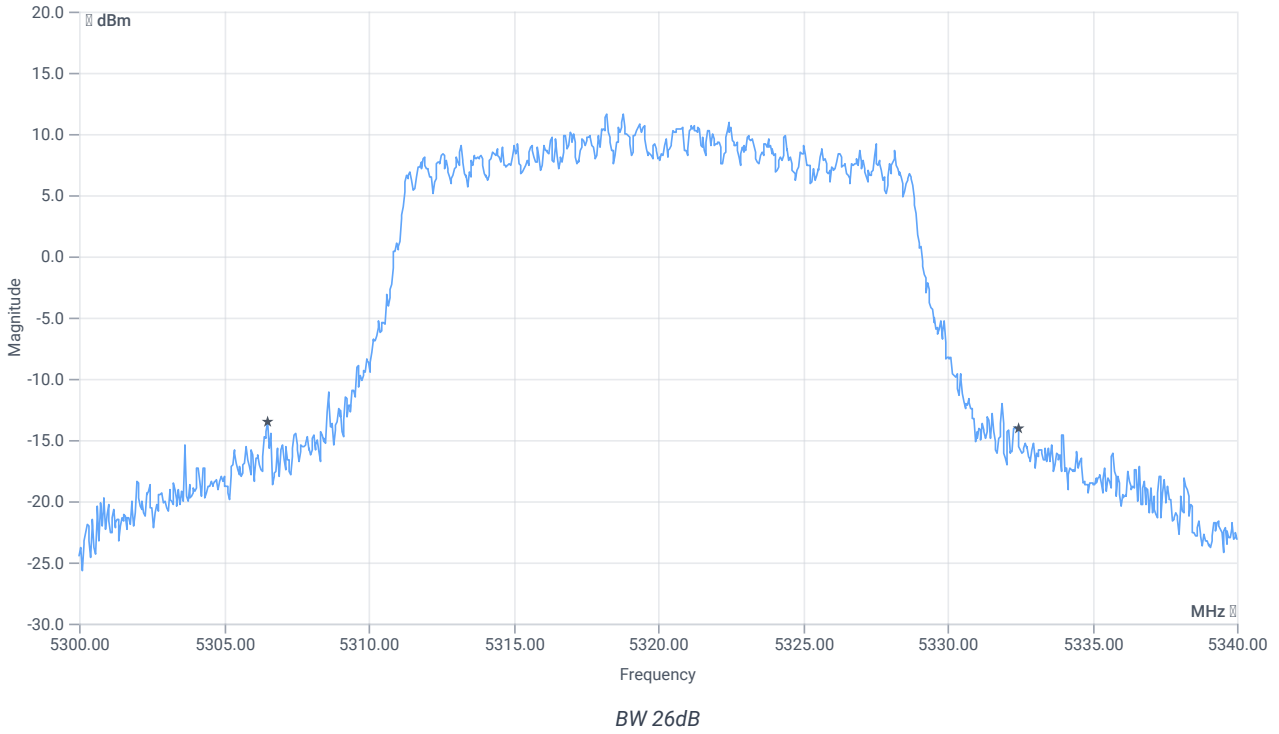
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



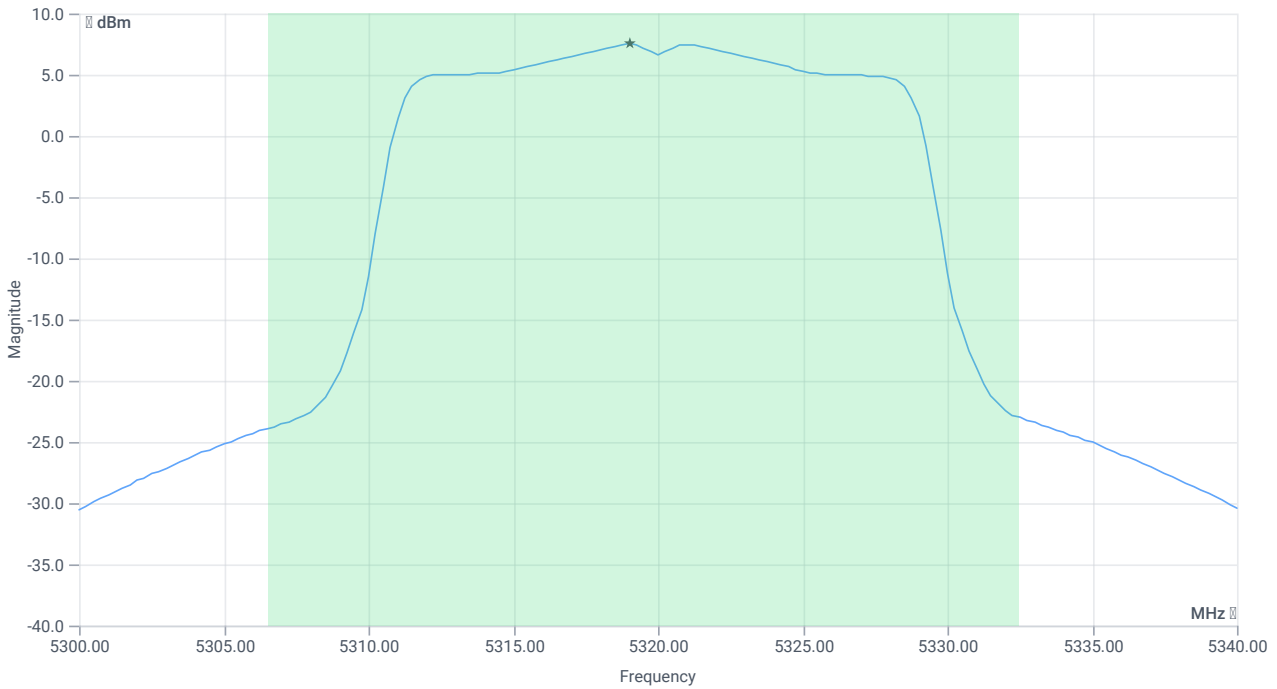
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	25.92	MHz	INFO
T1 26dB	---	---	5306.5200	MHz	INFO
T2 26dB	---	---	5332.4400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.99 16.16 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.25	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.25	dBm	PASS
Limit: 11 dBm + 10 log 25.92					
Max Output Power DC corrected	--	25.14	18.25	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.51	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.51	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:19:18
Ambit temp [°C] humidity [rel%]	25.6 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

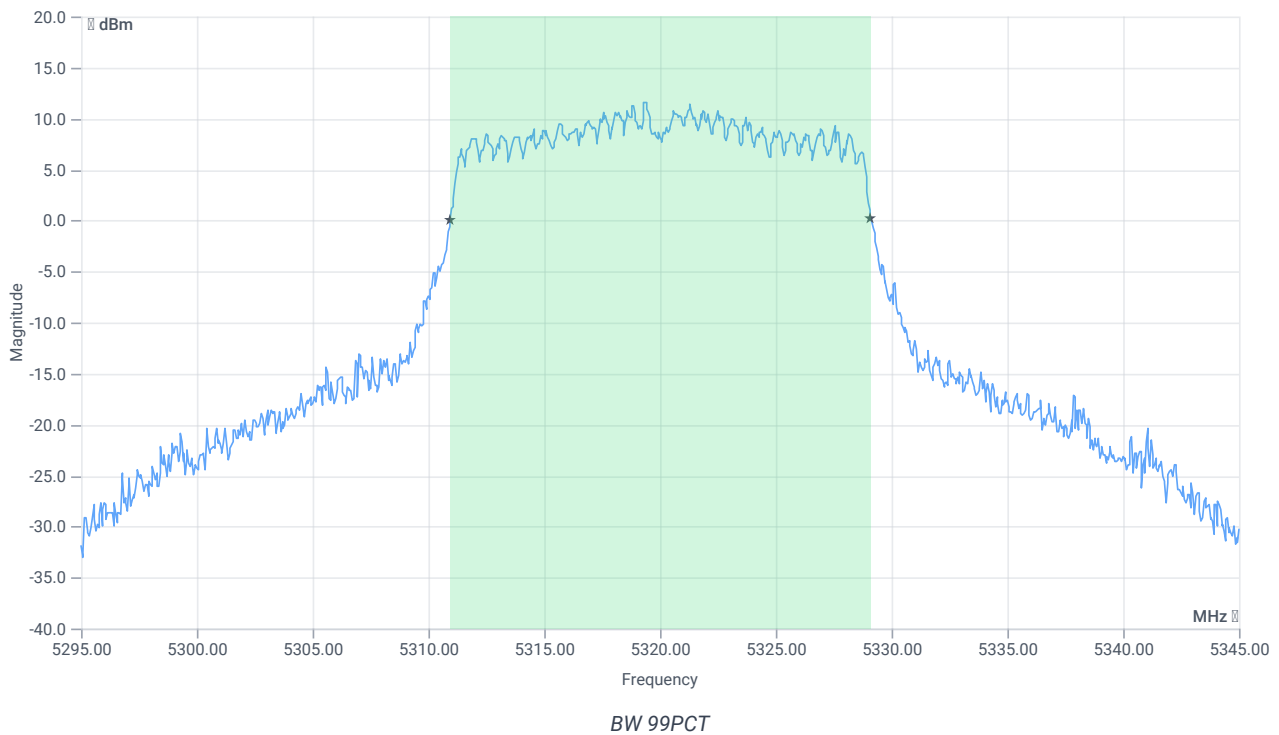
Test at TX 5320 MHz

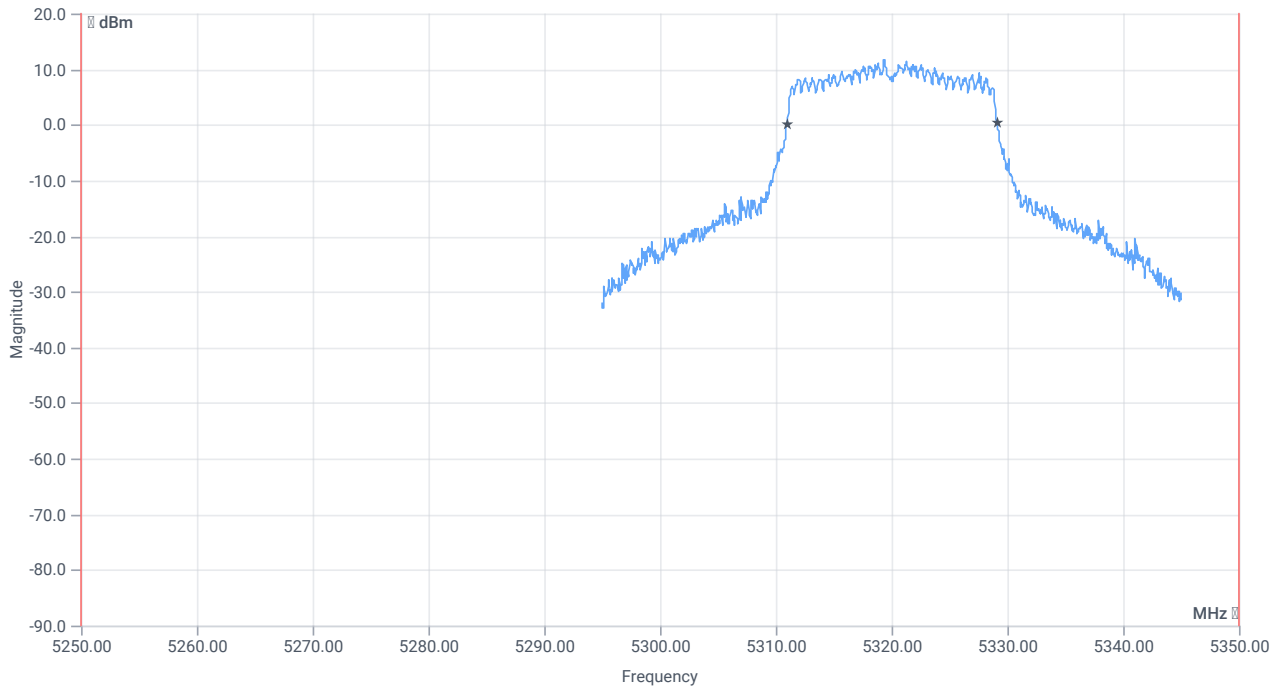
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.27	dBm	INFO
Ref. Frequency	--	--	5319.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.27 16.16 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

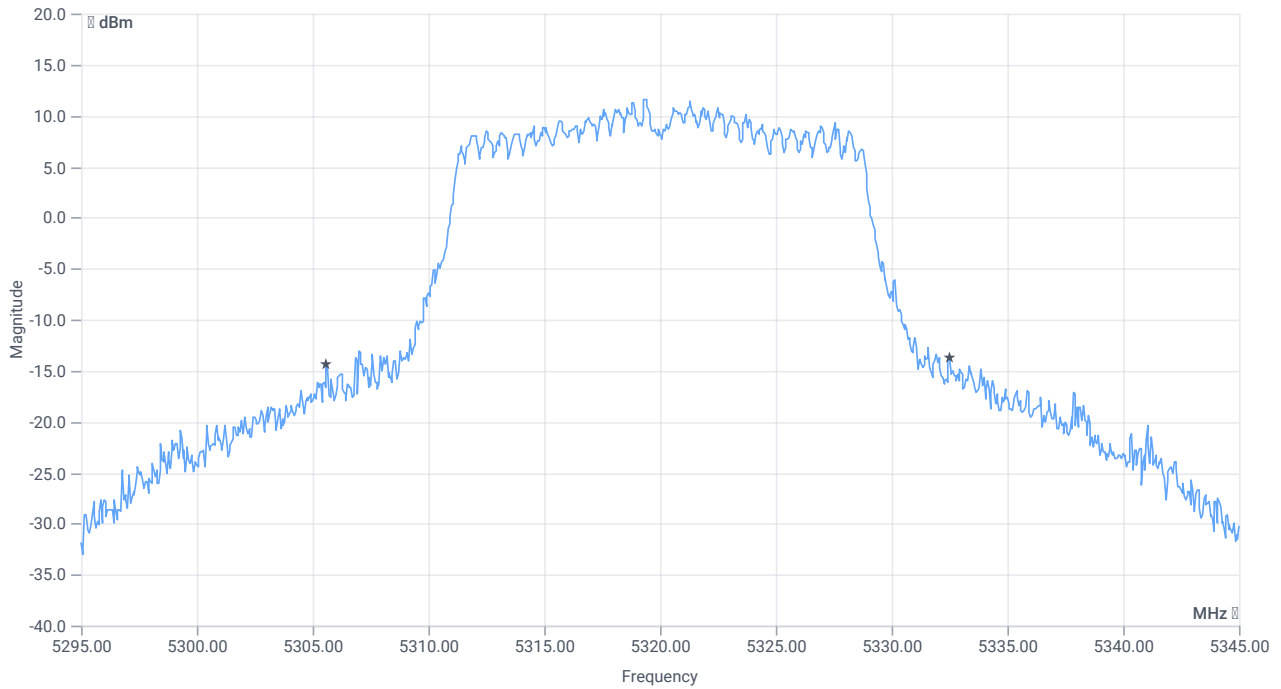




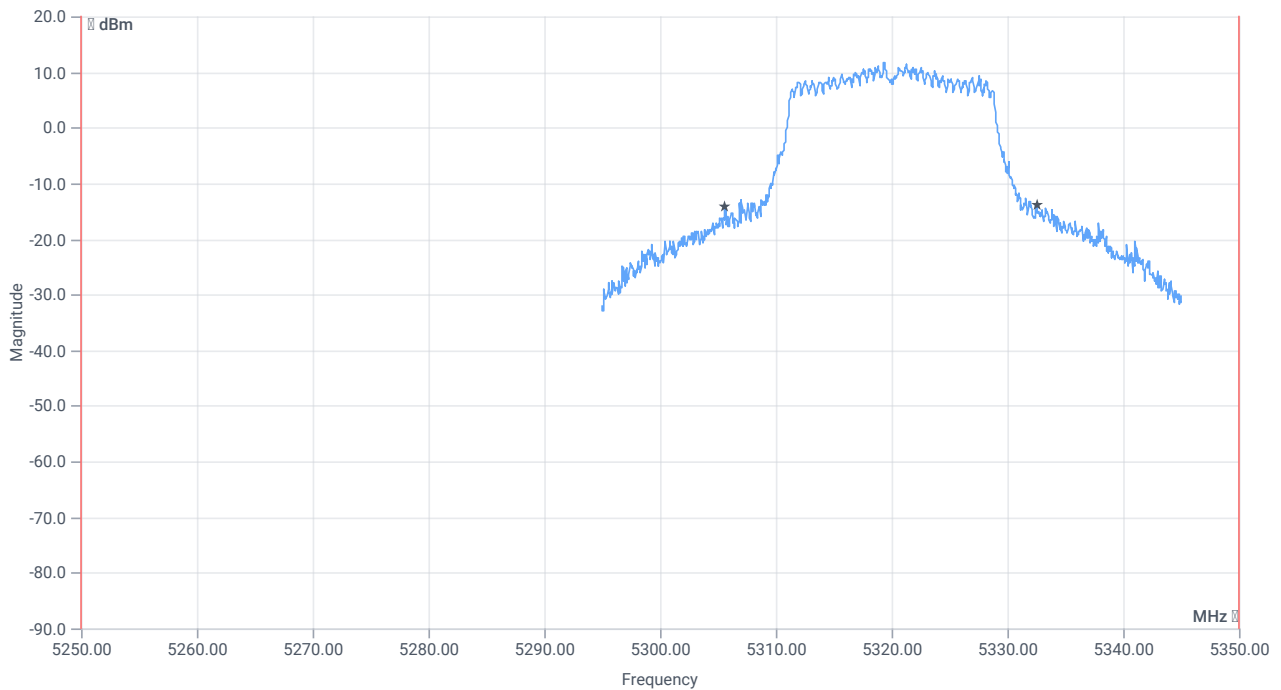
BW within Band 99PCT

RESULT

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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	26.9	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5305.6000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5332.5000	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:19:50
Ambit temp [°C] humidity [rel%]	25.6 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:19:50
Message	set WLAN5Gx to ac_VHT20_U_NII_2C, Frequency [MHz] 5500 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	13.07.2023 10:11:45
Ambit temp [°C] humidity [rel%]	23.0 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

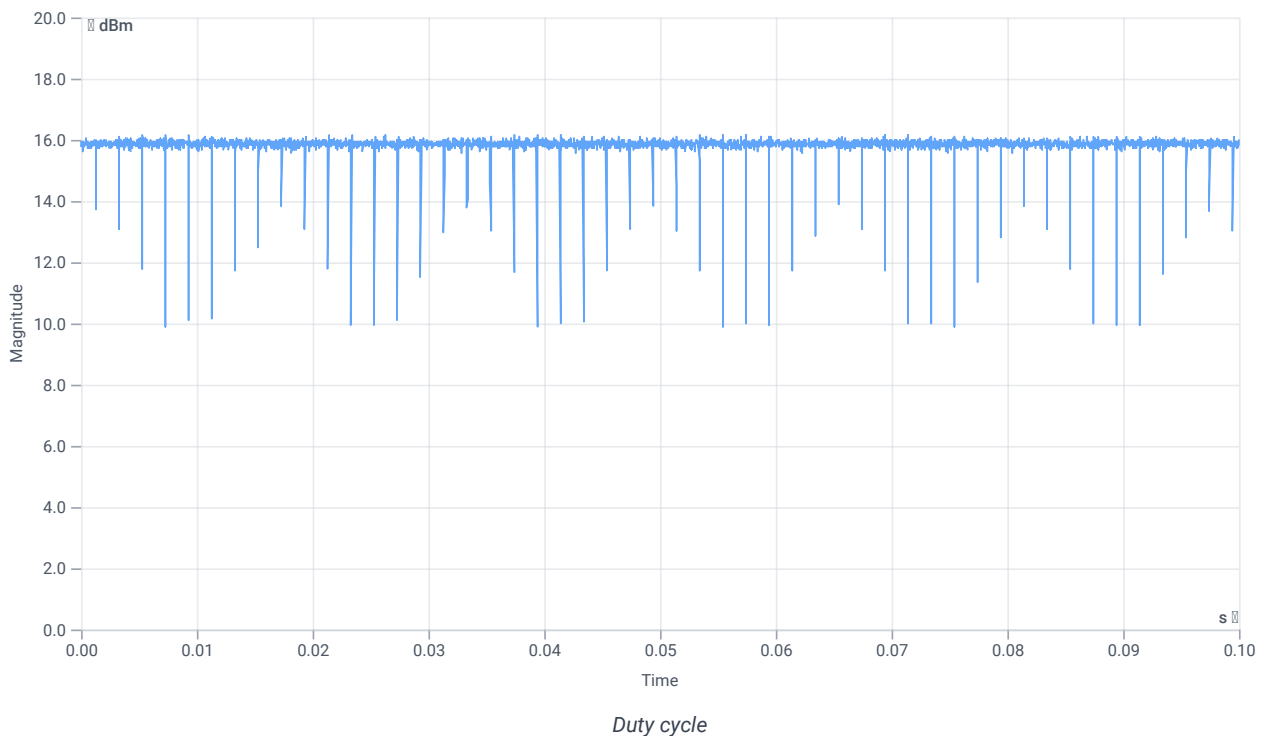
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.83	dBm	INFO
Ref. Frequency	--	--	5500.800	MHz	INFO

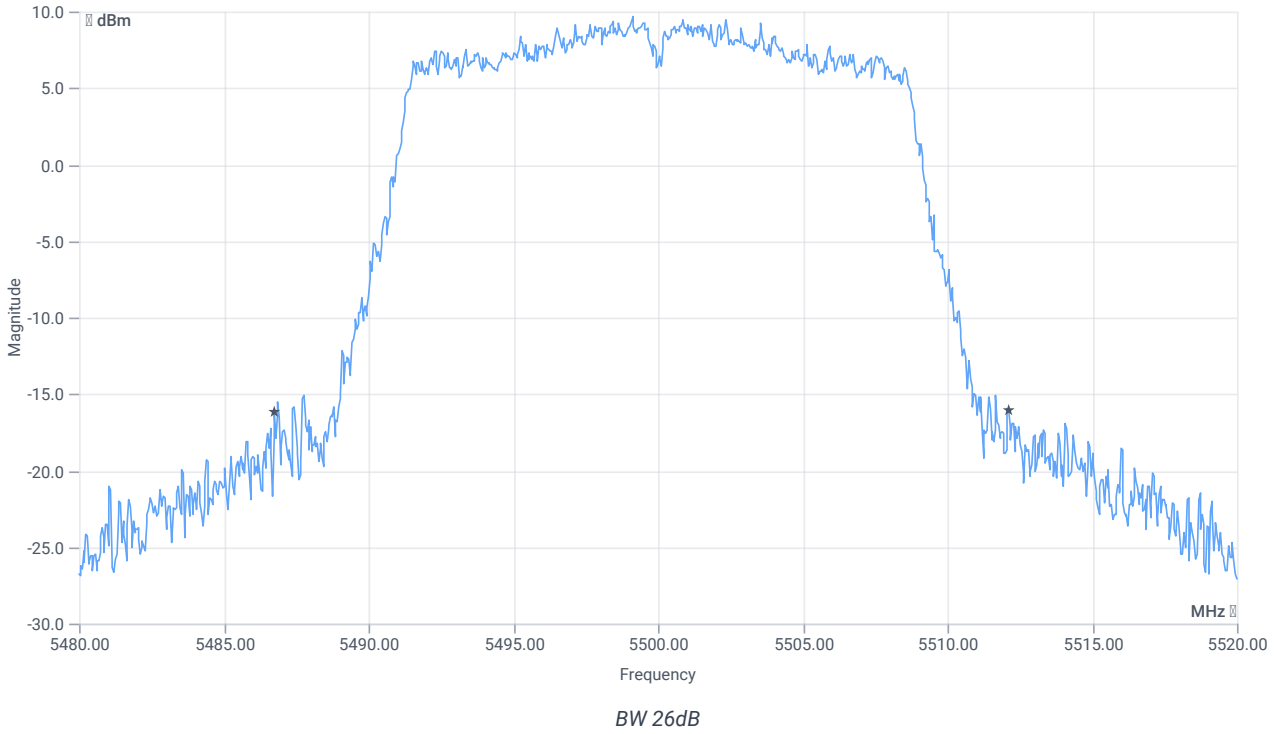
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



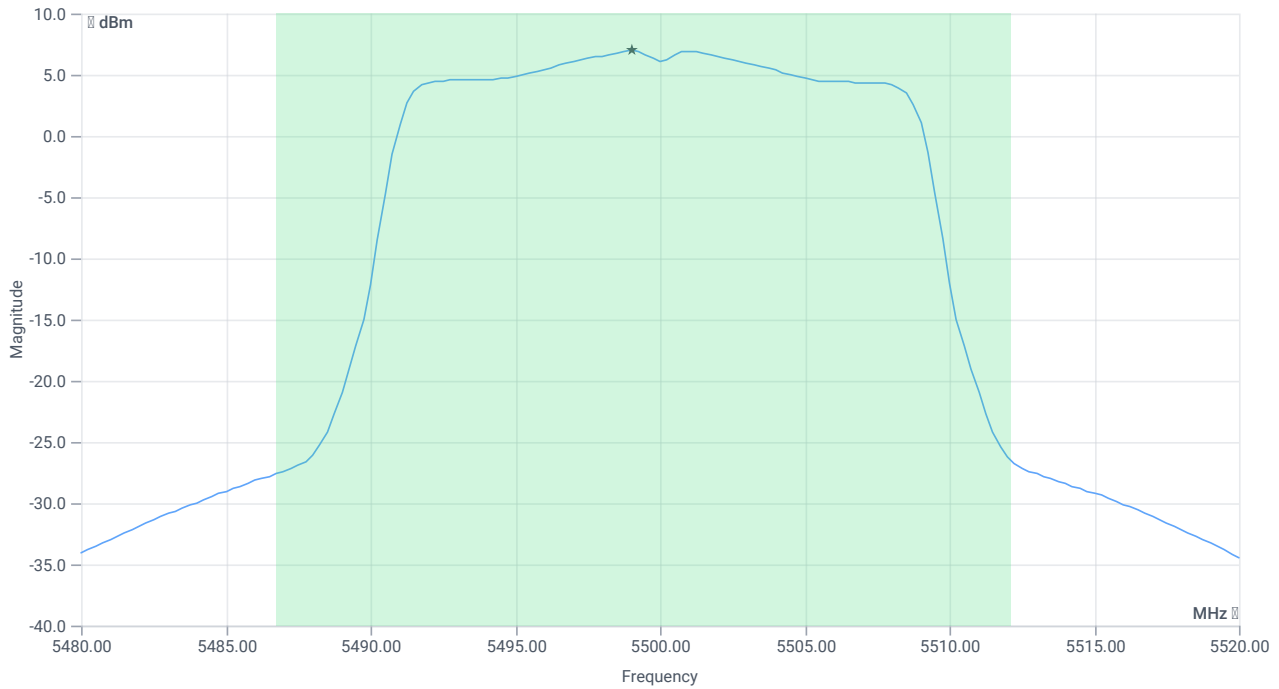
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	25.36	MHz	INFO
T1 26dB	---	---	5486.7600	MHz	INFO
T2 26dB	---	---	5512.1200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.83 16.59 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	17.71	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.71	dBm	PASS
Limit: 11 dBm + 10 log 25.36					
Max Output Power DC corrected	--	25.04	17.71	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.97	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.97	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:21:53
Ambit temp [°C] humidity [rel%]	25.7 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

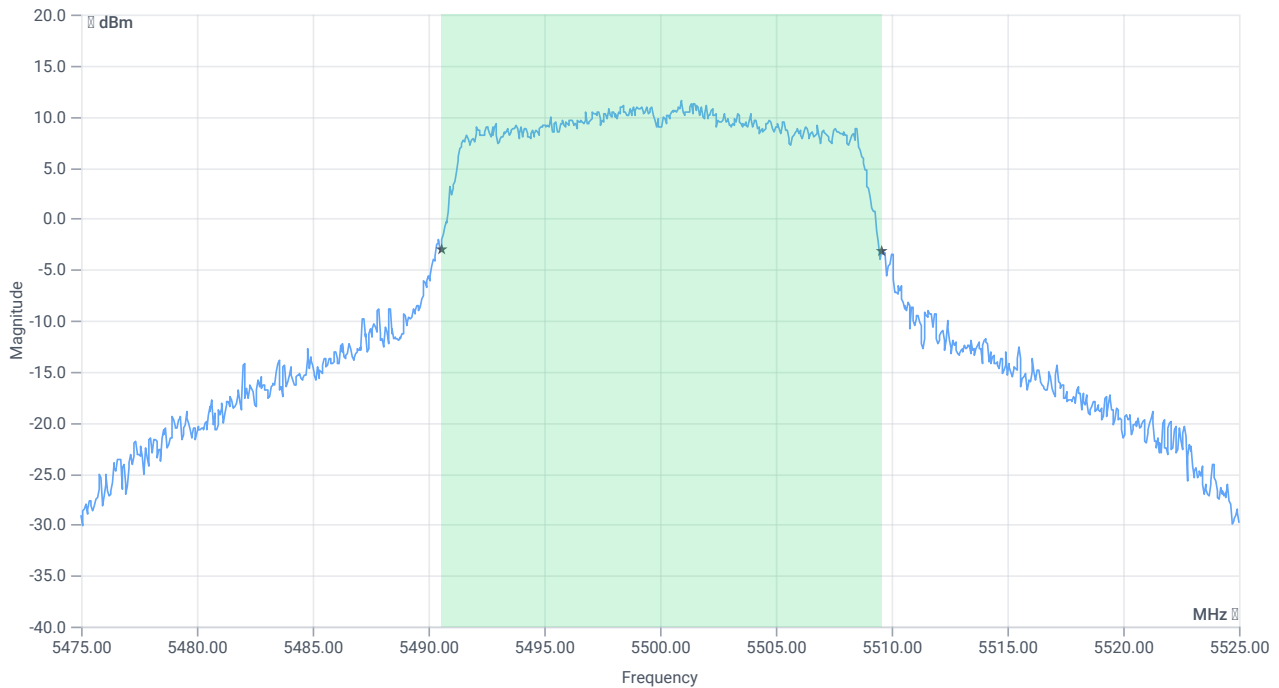
Test at TX 5500 MHz

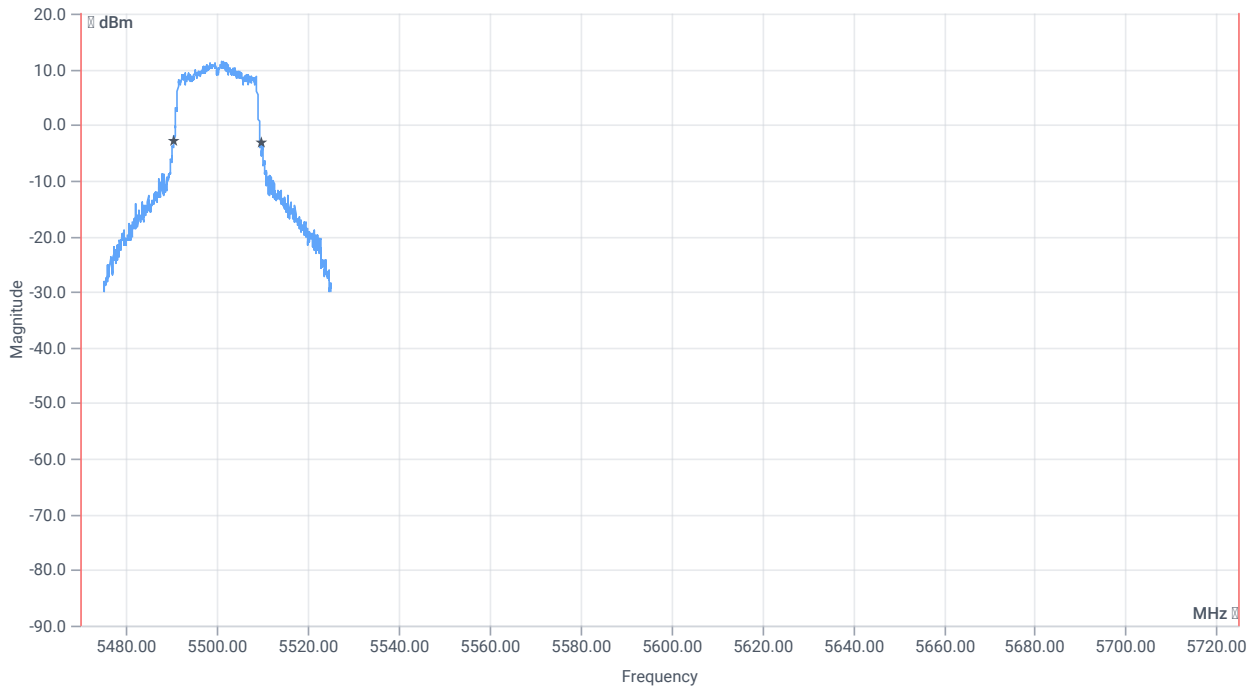
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.25	dBm	INFO
Ref. Frequency	--	--	5498.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.25 16.59 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

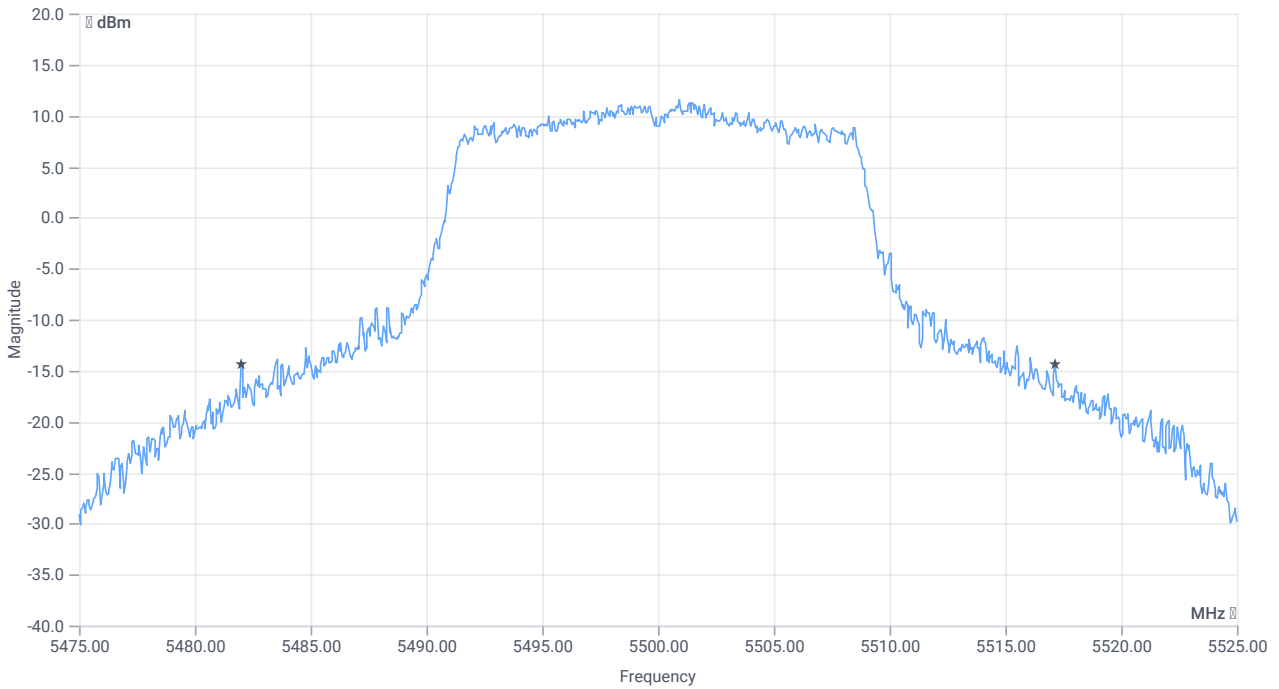




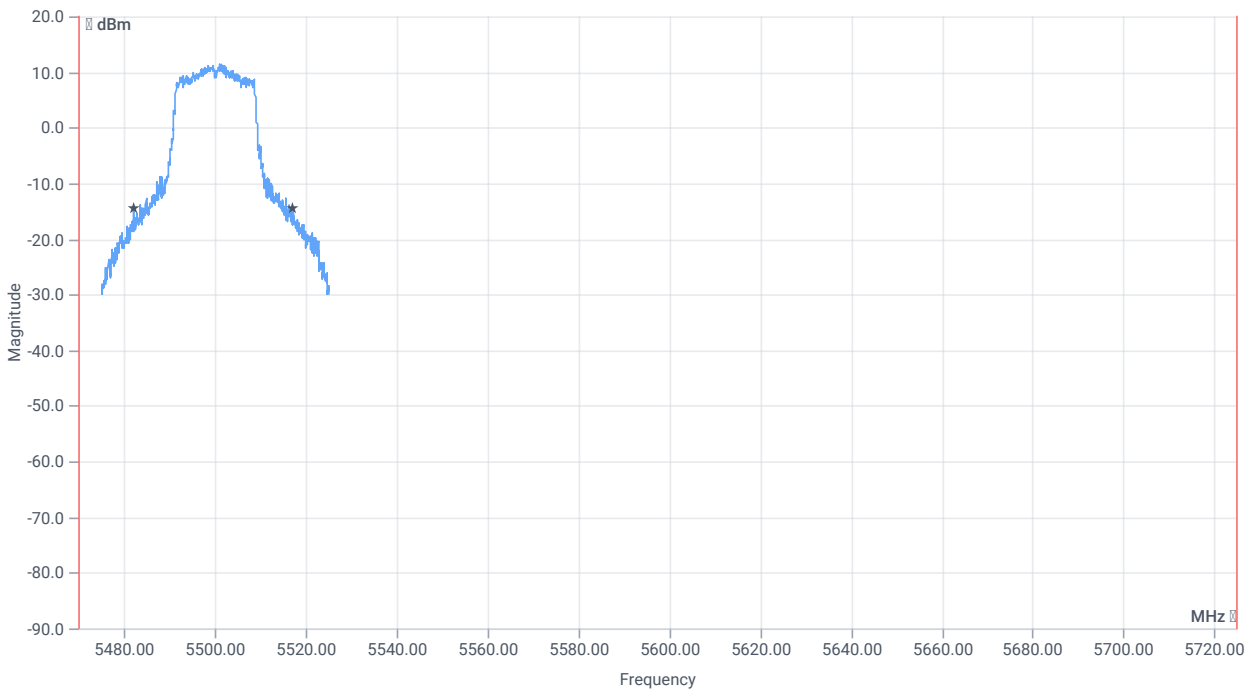
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	18.981	MHz	INFO
T1 99%	5470.000000	--	5490.5594	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5509.5405	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	35.15	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5482.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5517.1500	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	13.07.2023 10:13:12
Ambit temp [°C] humidity [rel%]	23.0 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

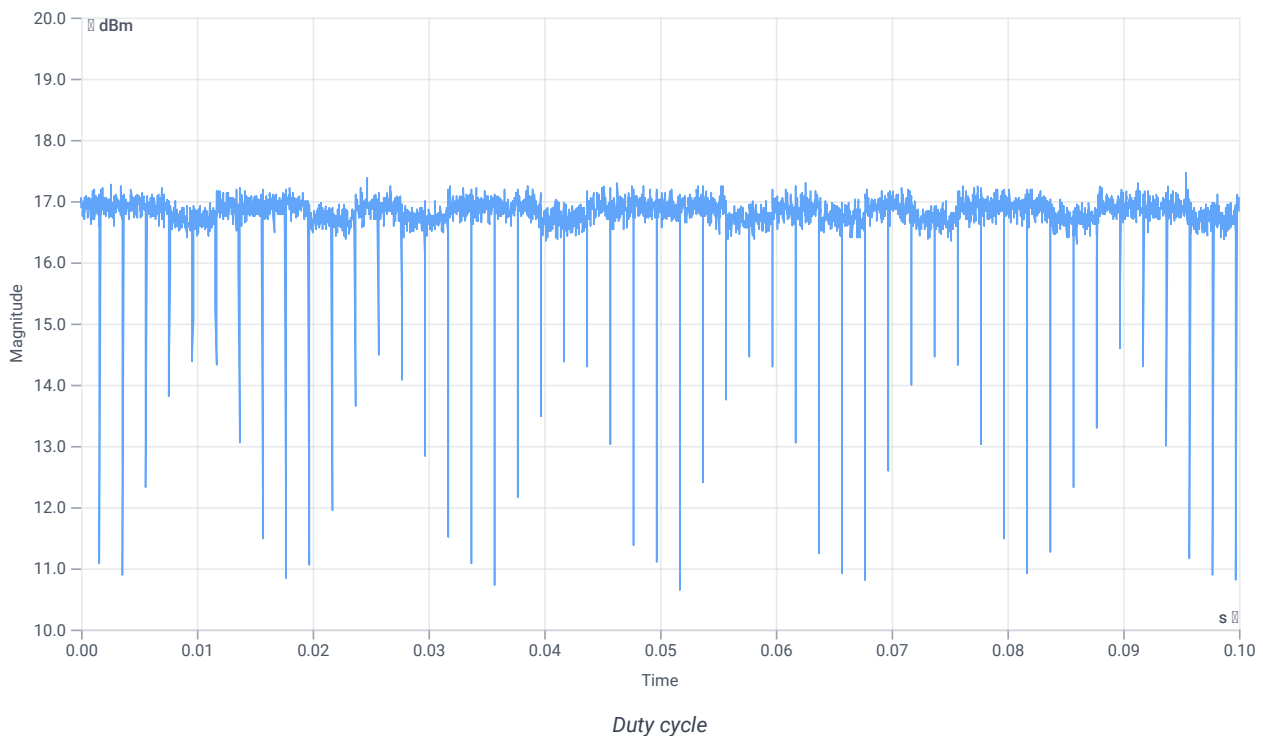
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.32	dBm	INFO
Ref. Frequency	--	--	5501.200	MHz	INFO

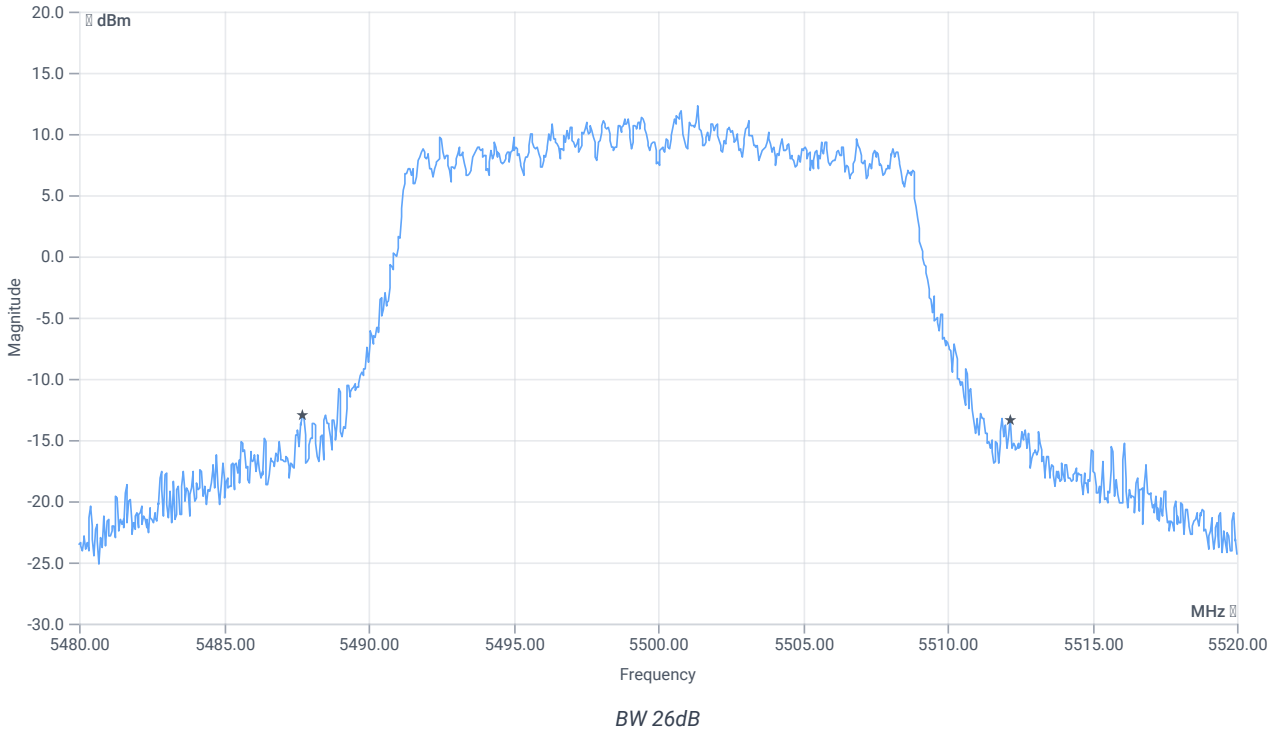
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



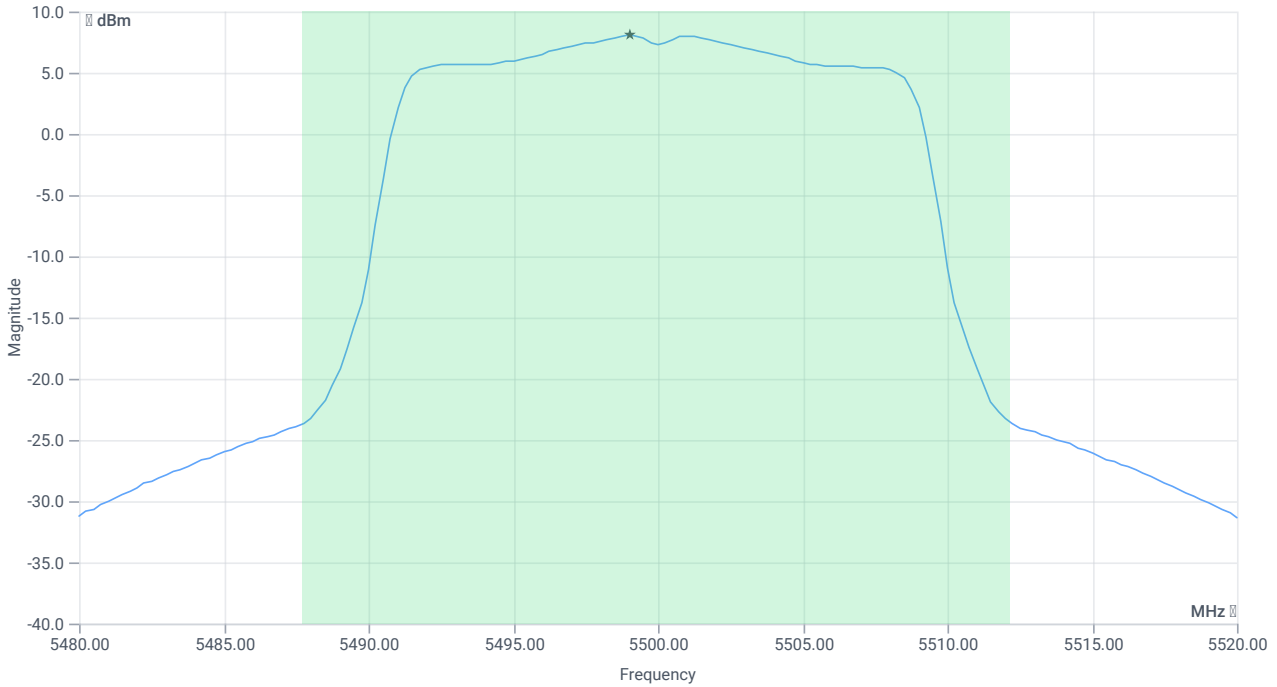
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	24.48	MHz	INFO
T1 26dB	---	---	5487.7200	MHz	INFO
T2 26dB	---	---	5512.2000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.32 16.59 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.81	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.81	dBm	PASS
Limit: 11 dBm + 10 log 24.48					
Max Output Power DC corrected	--	24.89	18.81	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	8.08	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	8.08	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:23:52
Ambit temp [°C] humidity [rel%]	25.7 48
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

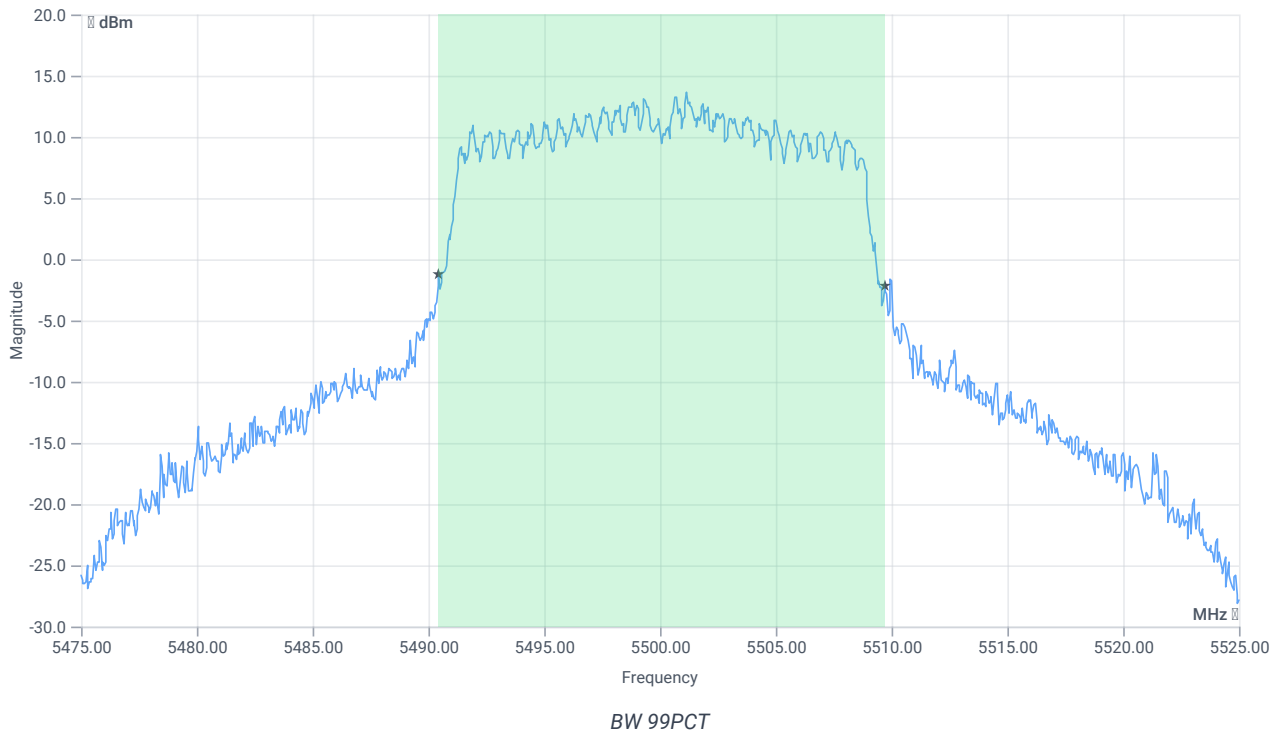
Test at TX 5500 MHz

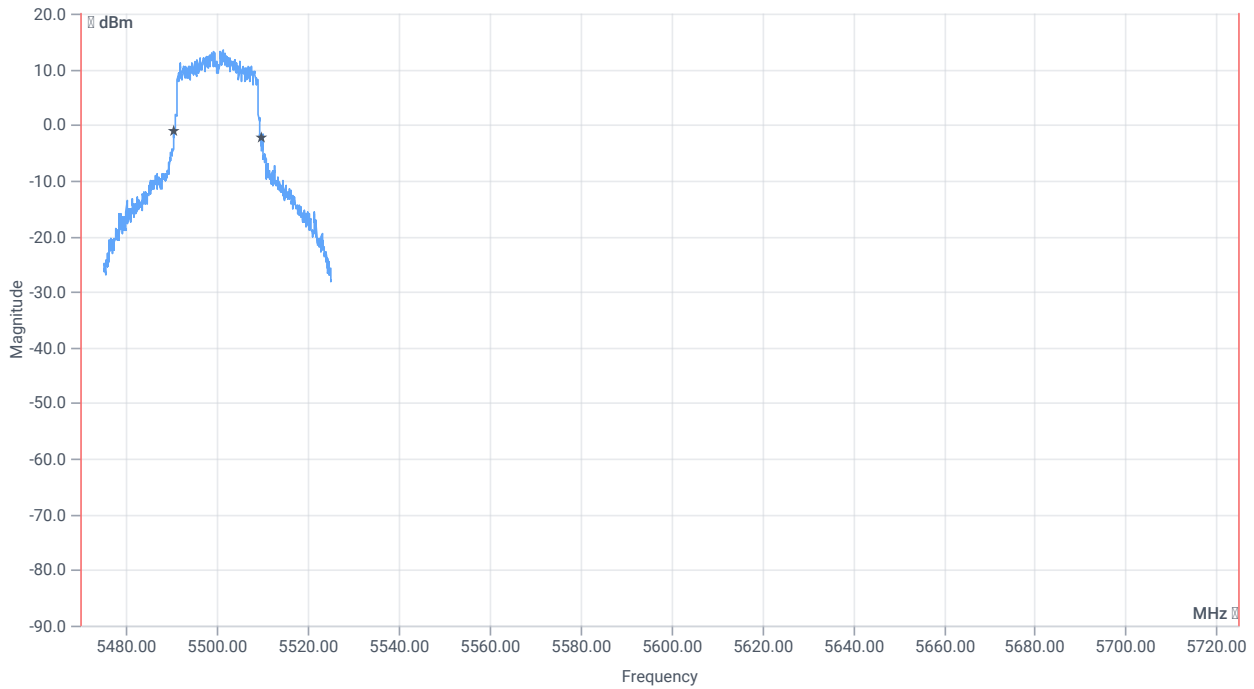
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.48	dBm	INFO
Ref. Frequency	--	--	5498.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.48 16.59 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

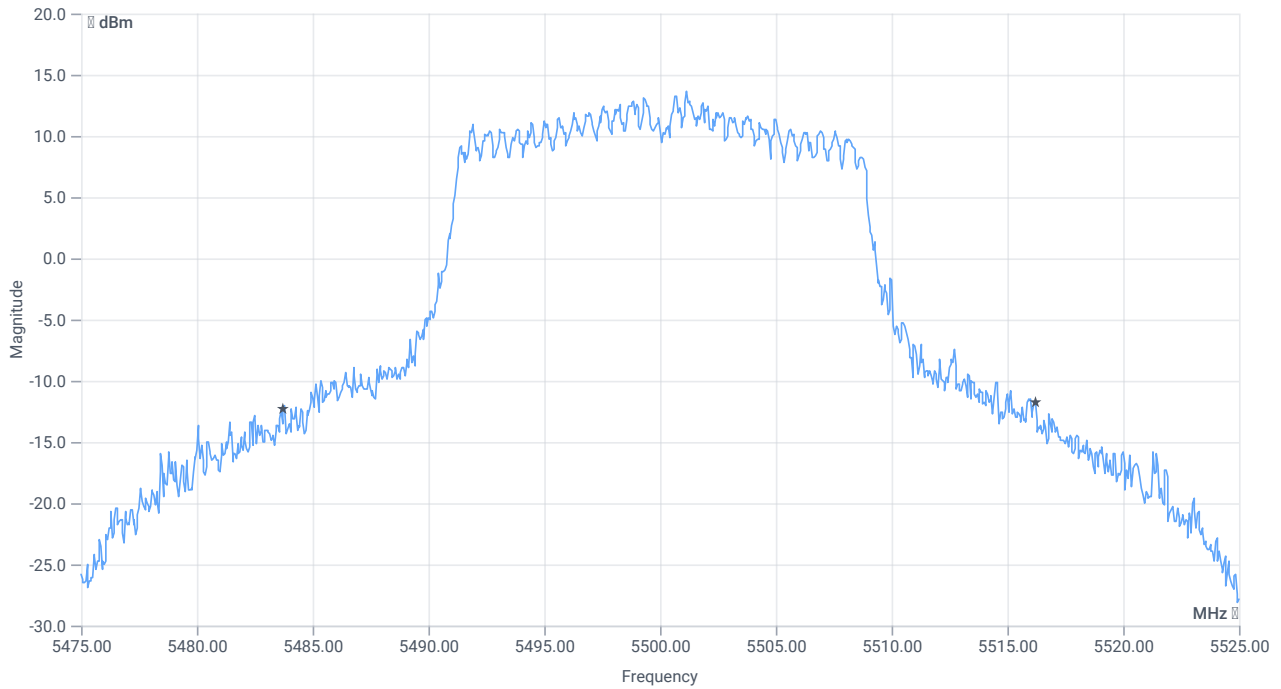




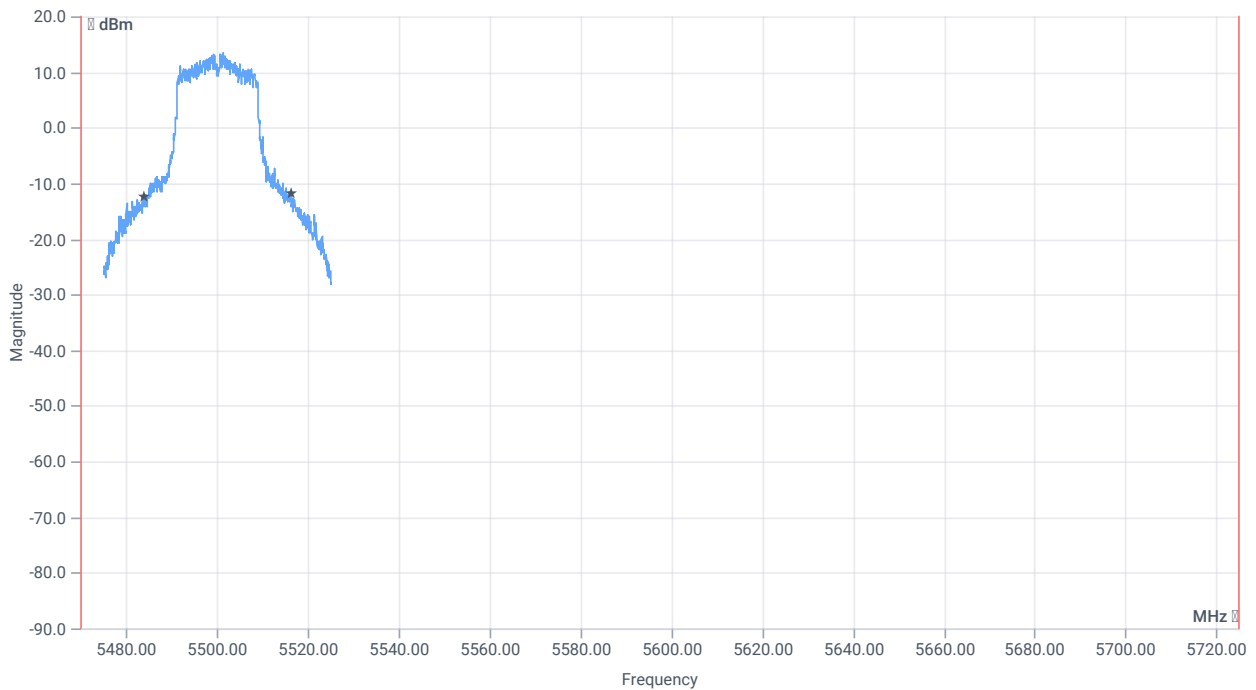
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.231	MHz	INFO
T1 99%	5470.000000	--	5490.4595	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5509.6903	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	32.45	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5483.7500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5516.2000	MHz	

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:24:23
Ambit temp [°C] humidity [rel%]	25.7 48
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:24:24
Message	set WLAN5Gx to ac_VHT20_U_NII_2C, Frequency [MHz] 5600 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	11.07.2023 09:32:39
Ambit temp [°C] humidity [rel%]	25.9 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

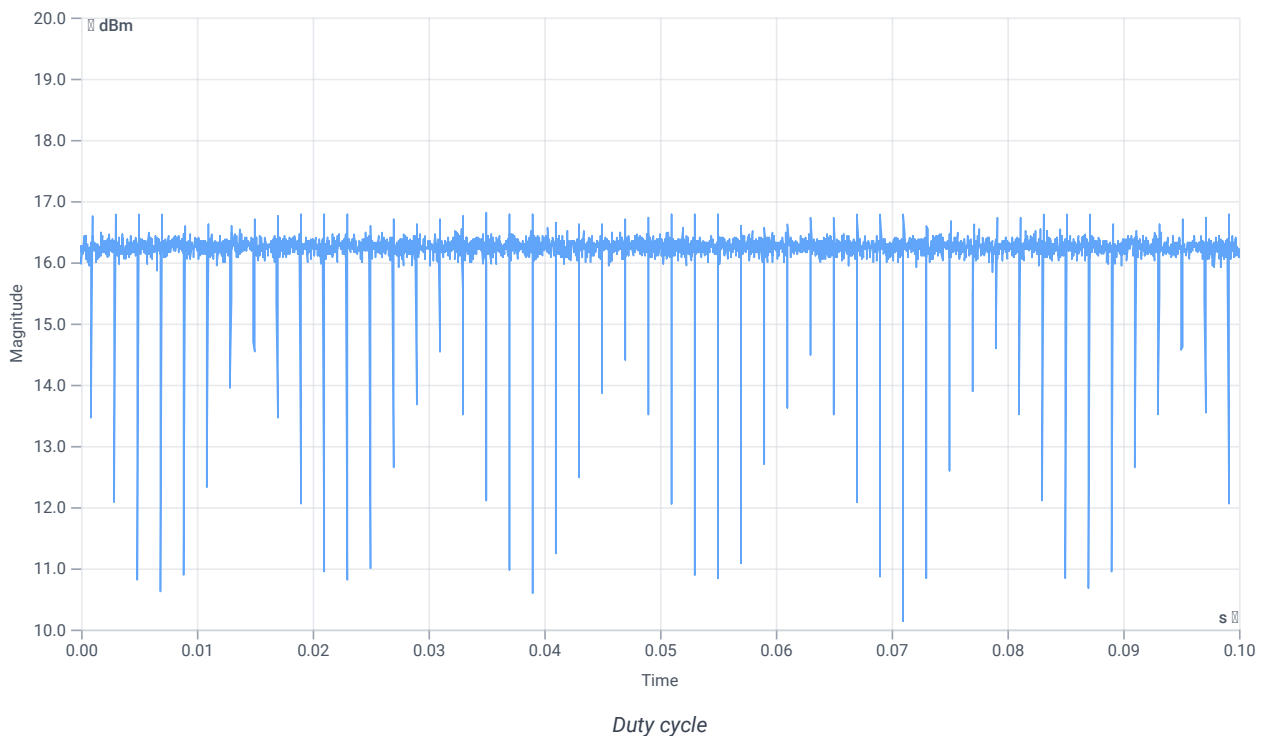
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.69	dBm	INFO
Ref. Frequency	--	--	5596.600	MHz	INFO

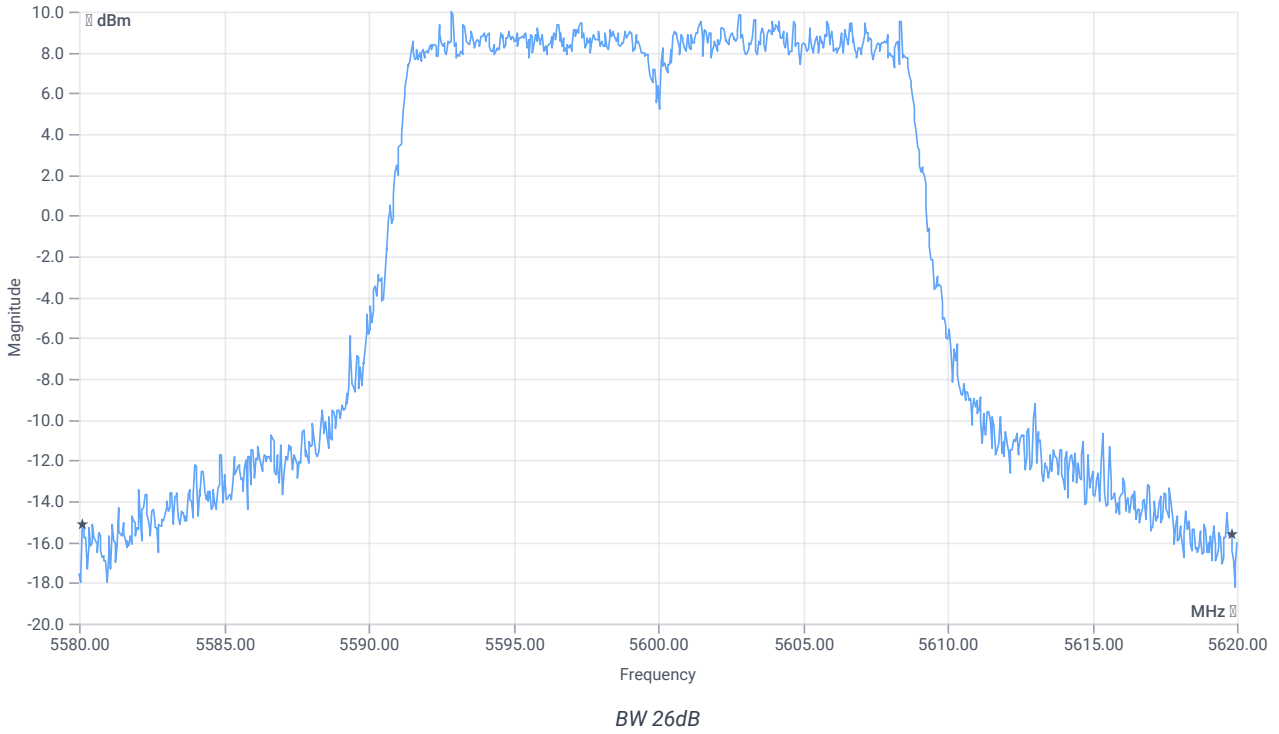
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



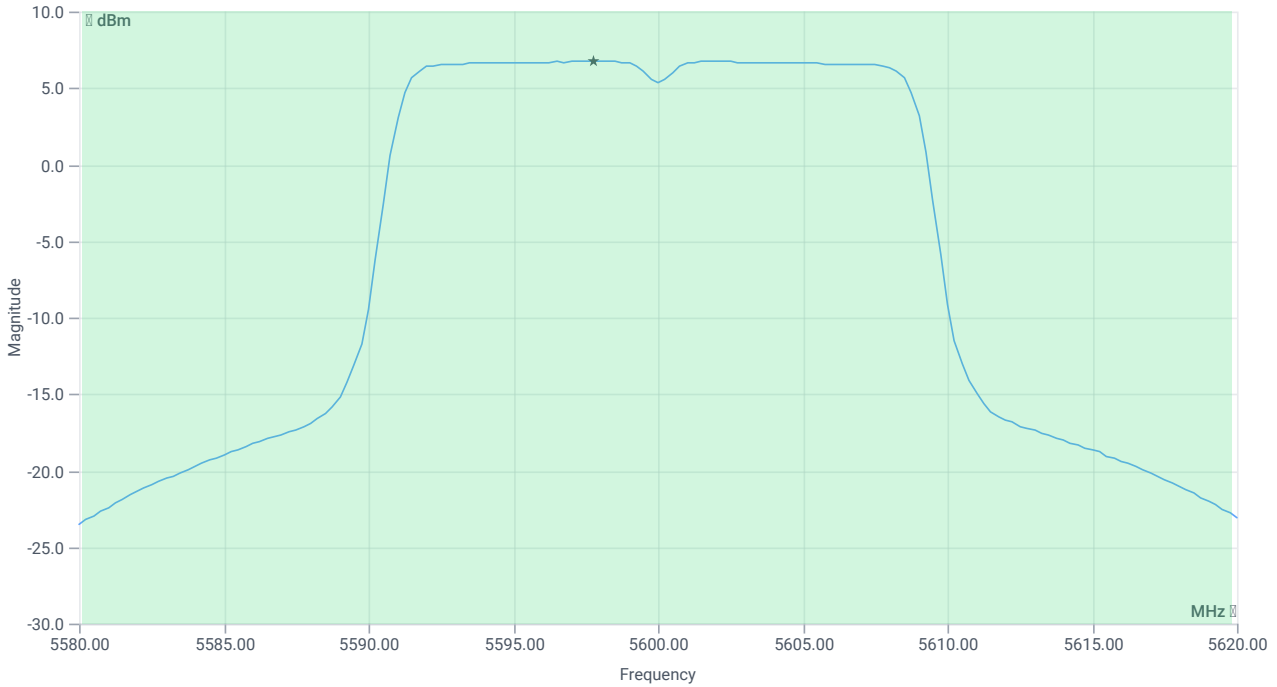
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.68	MHz	INFO
T1 26dB	---	---	5580.1200	MHz	INFO
T2 26dB	---	---	5619.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.69 16.64 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.8	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.8	dBm	PASS
Limit: 11 dBm + 10 log 39.68					
Max Output Power DC corrected	--	26.99	18.8	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.74	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.74	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:34:06
Ambit temp [°C] humidity [rel%]	25.9 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

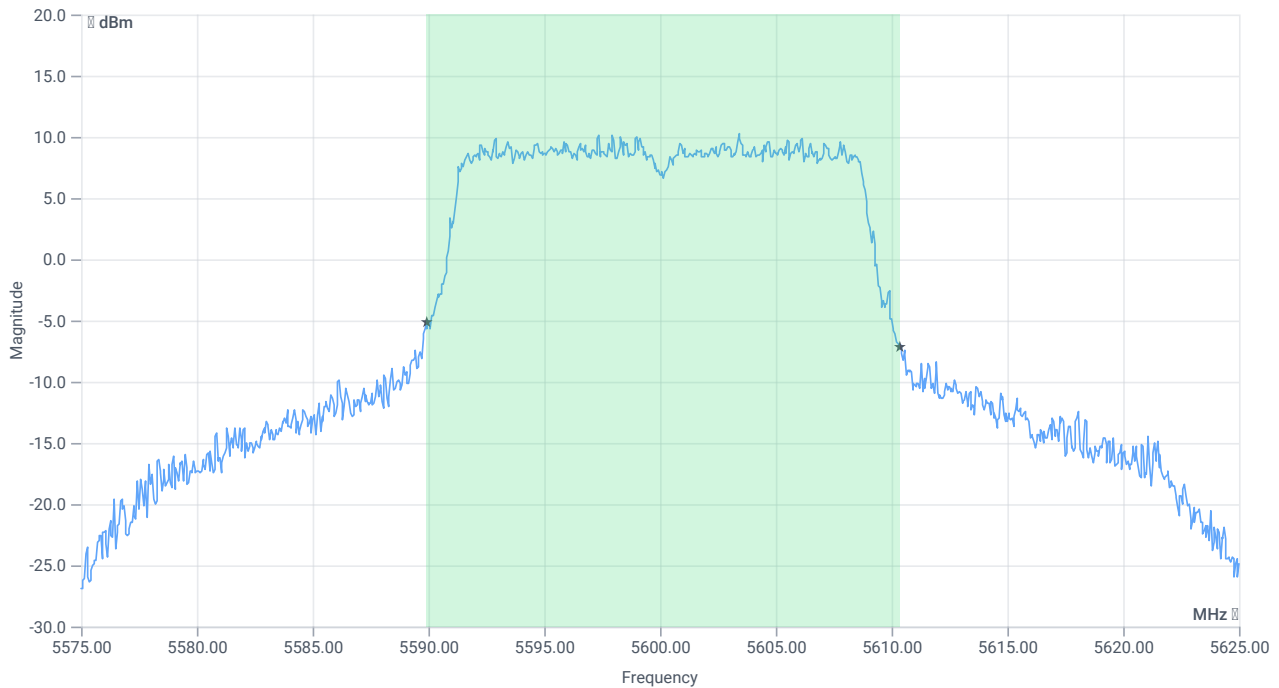
Test at TX 5600 MHz

RESULT: Reference Power cond.

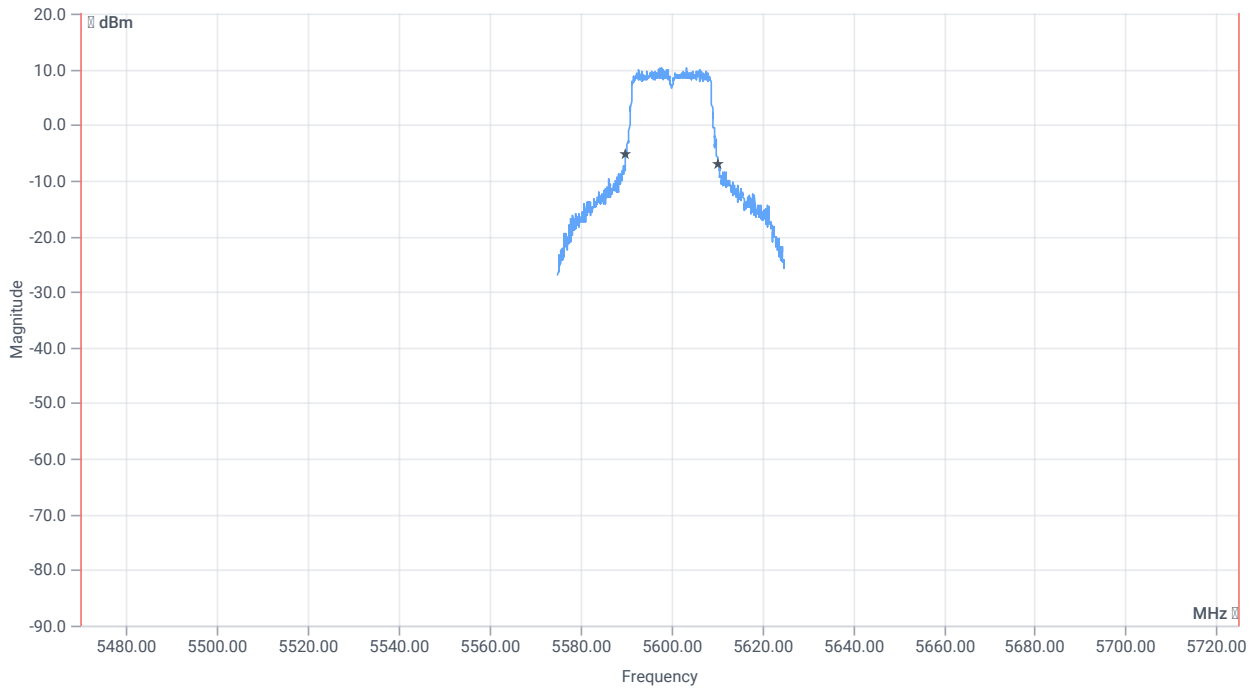
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.04	dBm	INFO
Ref. Frequency	--	--	5600.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.04 16.64 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



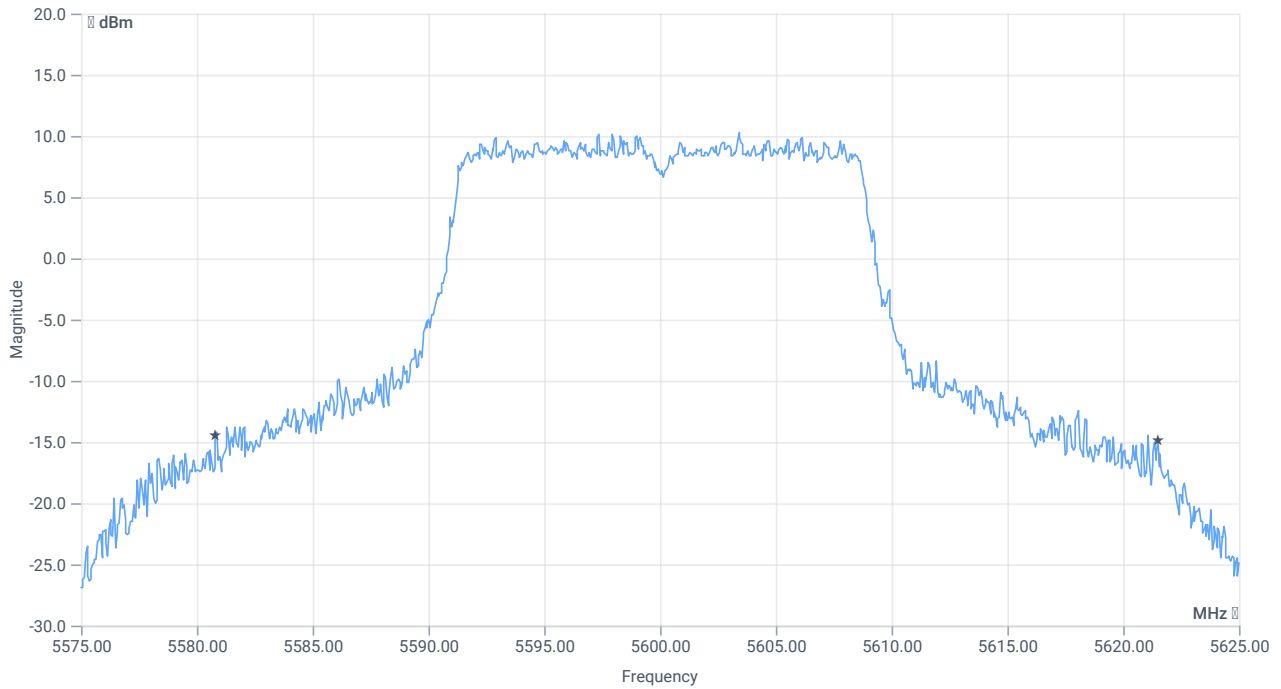
BW 99PCT



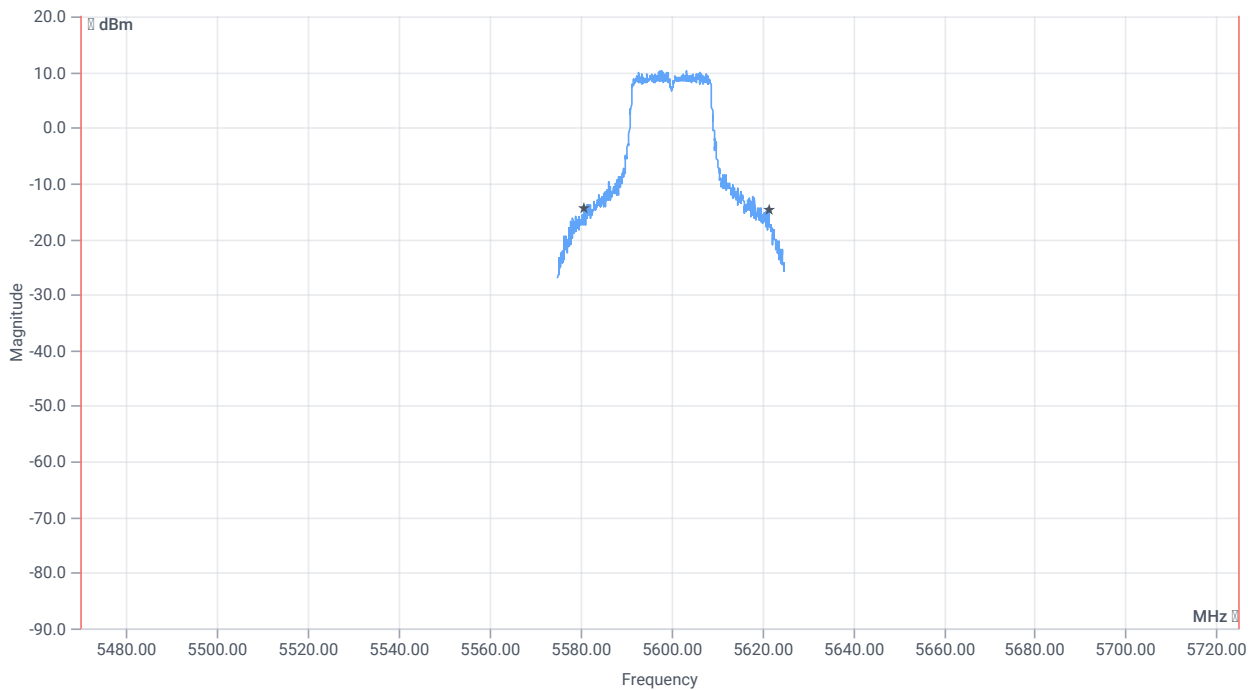
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	20.430	MHz	INFO
T1 99%	5470.000000	--	5589.9101	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5610.3397	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.7	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5580.8000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5621.5000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	11.07.2023 09:34:38
Ambit temp [°C] humidity [rel%]	25.9 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

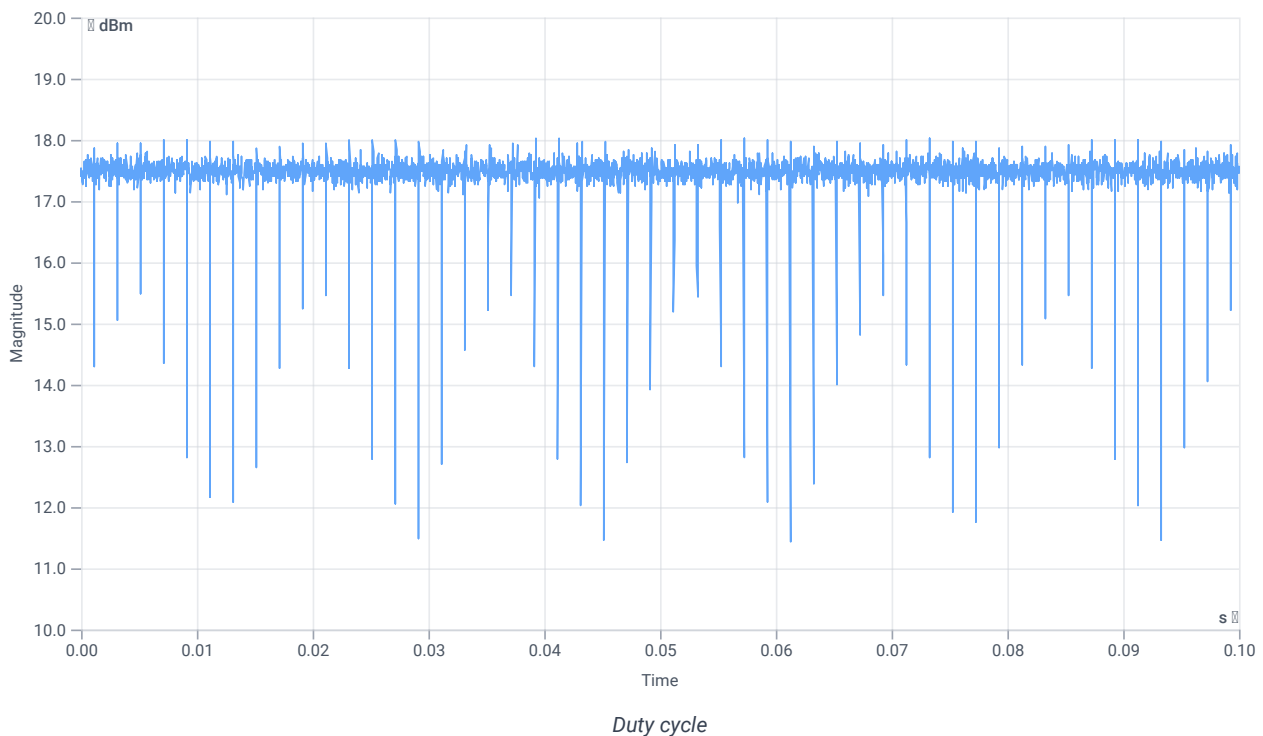
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.19	dBm	INFO
Ref. Frequency	--	--	5601.200	MHz	INFO

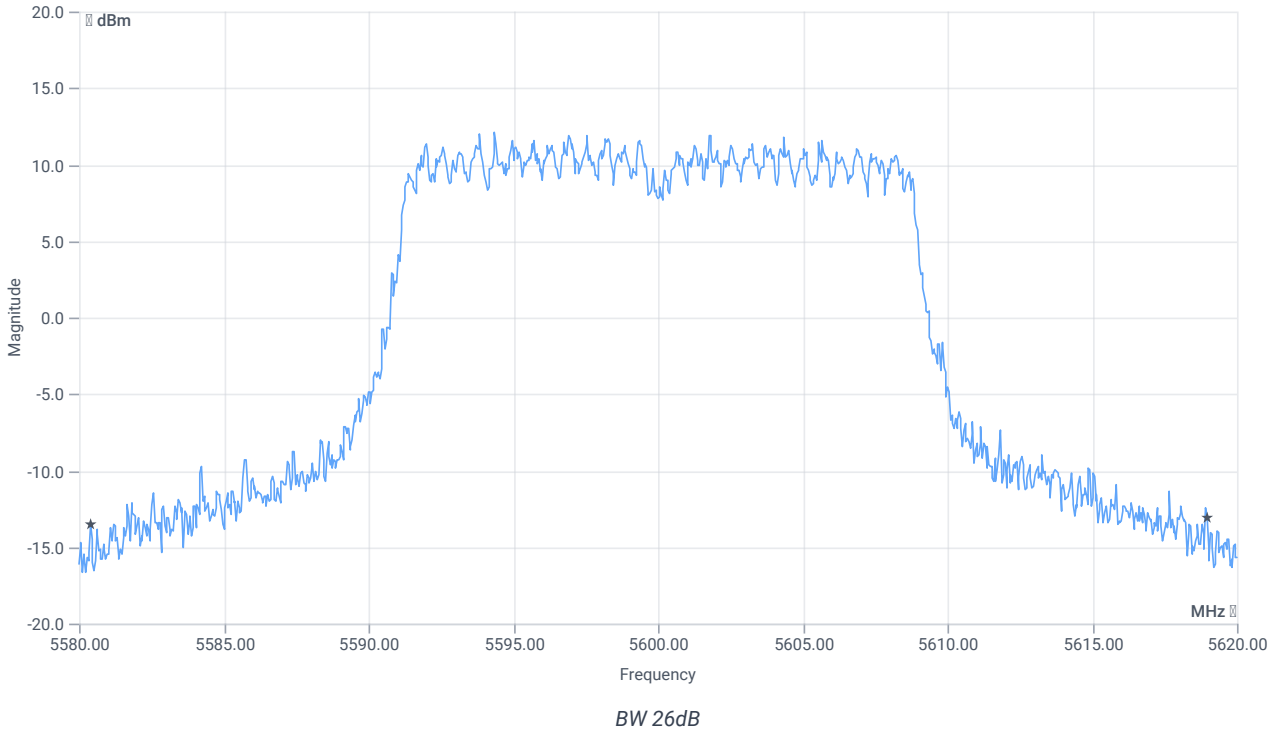
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



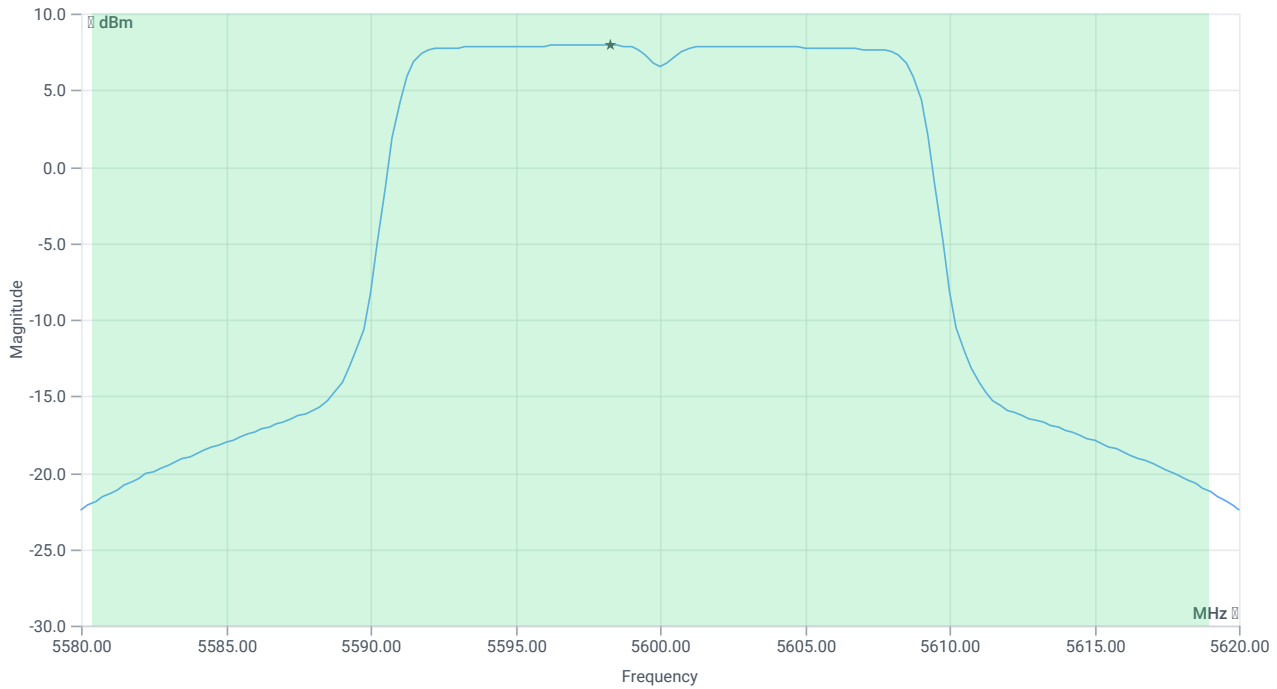
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	38.56	MHz	INFO
T1 26dB	---	---	5580.4000	MHz	INFO
T2 26dB	---	---	5618.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.19 16.64 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.98	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.98	dBm	PASS
Limit: 11 dBm + 10 log 38.56					
Max Output Power DC corrected	--	26.86	19.98	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.91	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.91	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:36:05
Ambit temp [°C] humidity [rel%]	25.9 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

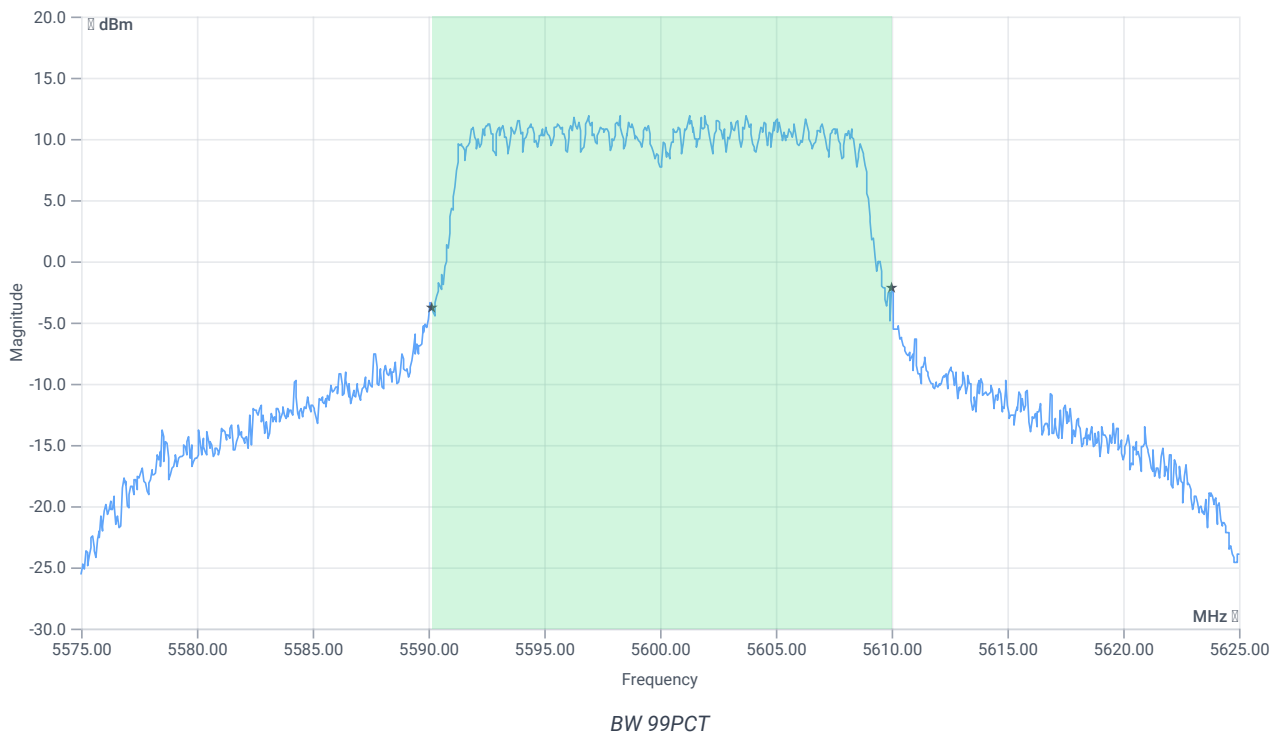
Test at TX 5600 MHz

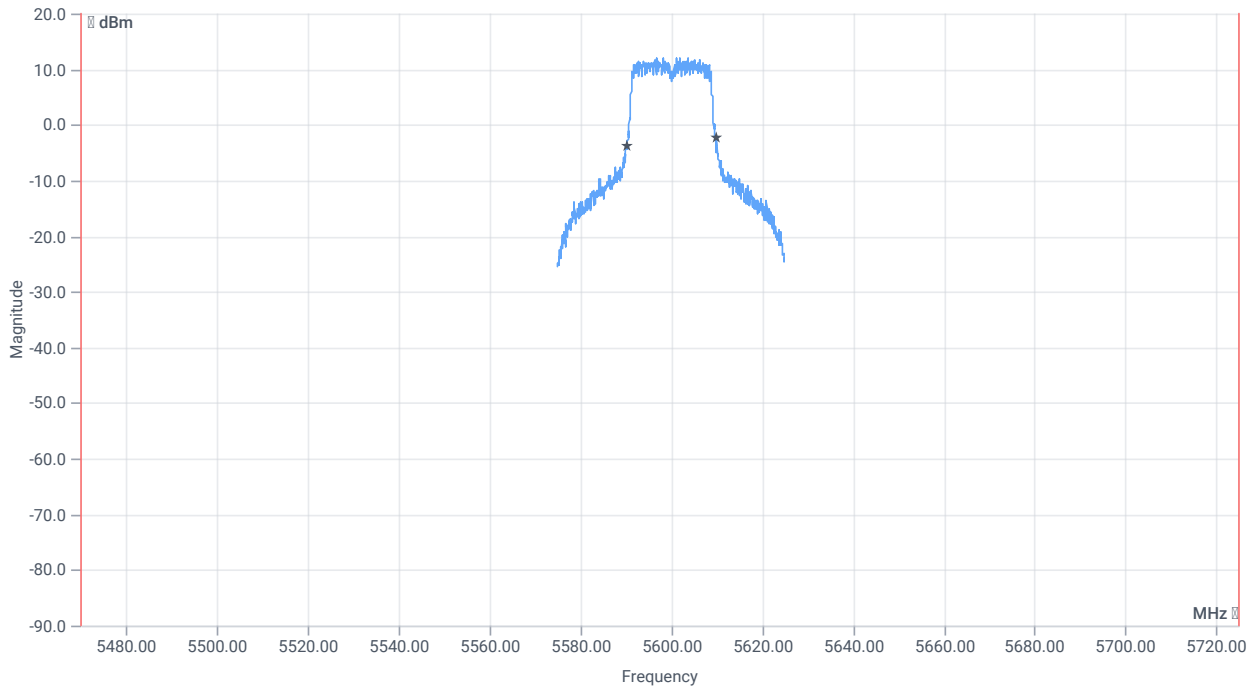
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.33	dBm	INFO
Ref. Frequency	--	--	5605.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.33 16.64 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

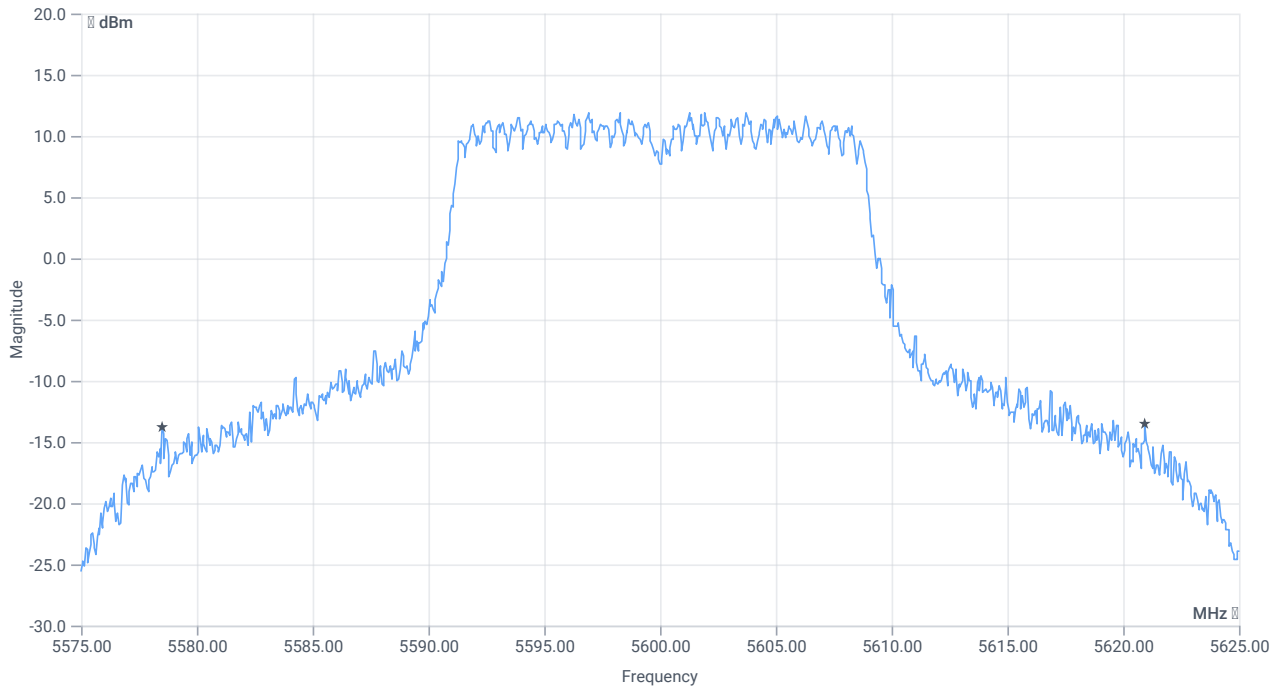




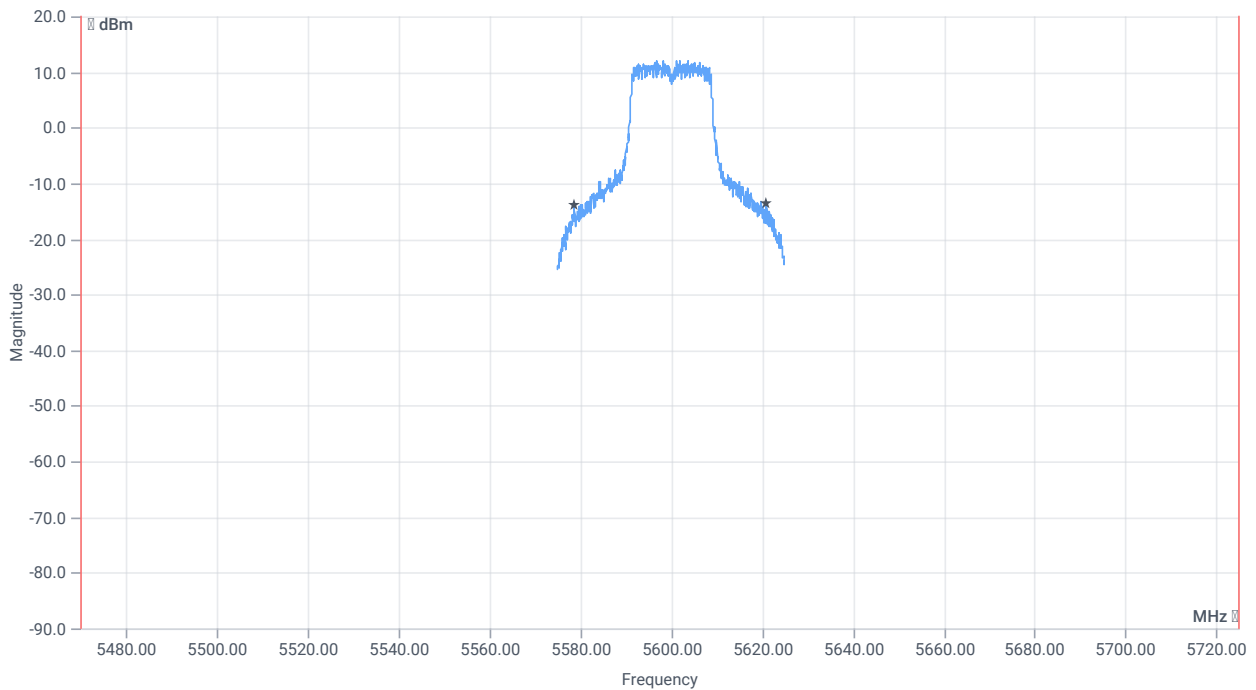
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.830	MHz	INFO
T1 99%	5470.000000	--	5590.1598	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5609.9900	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	42.45	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5578.5000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5620.9500	MHz	

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:36:36
Ambit temp [°C] humidity [rel%]	25.9 47
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:36:37
Message	set WLAN5Gx to ac_VHT20_U_NII_2C, Frequency [MHz] 5700

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	11.07.2023 09:45:12
Ambit temp [°C] humidity [rel%]	26.1 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5700 MHz

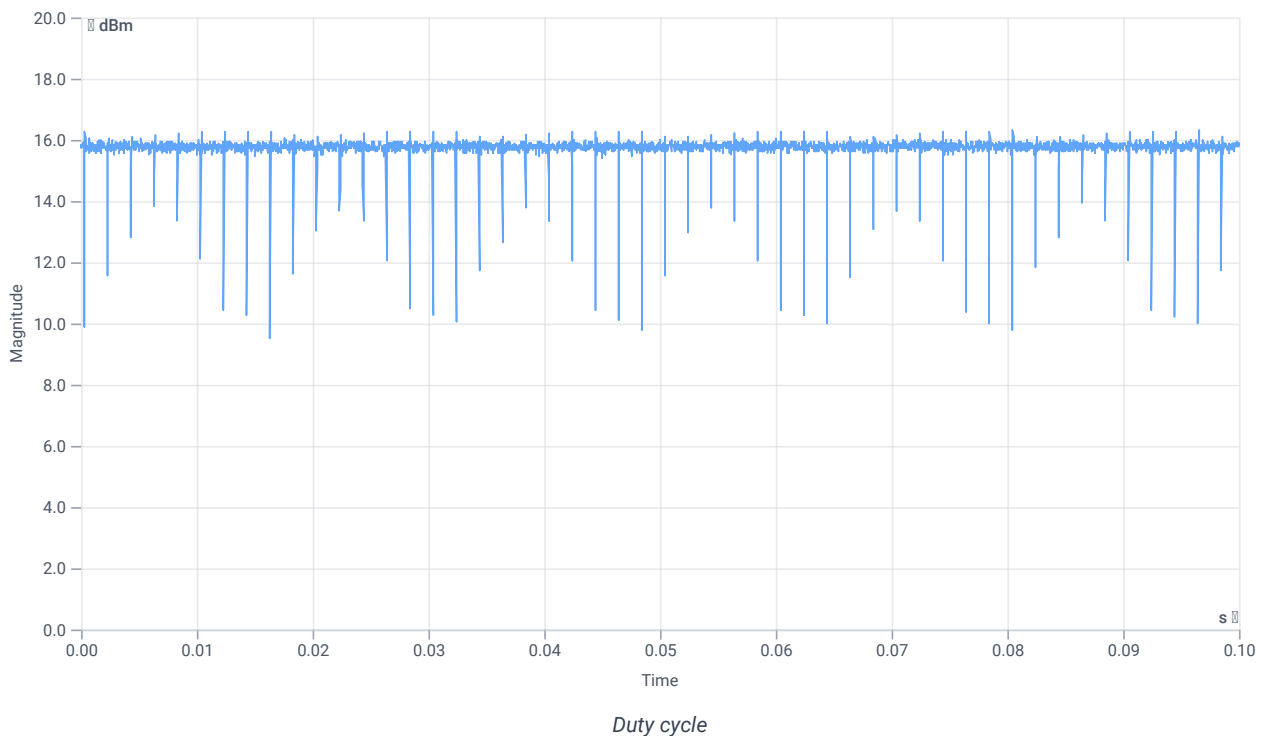
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.39	dBm	INFO
Ref. Frequency	--	--	5695.000	MHz	INFO

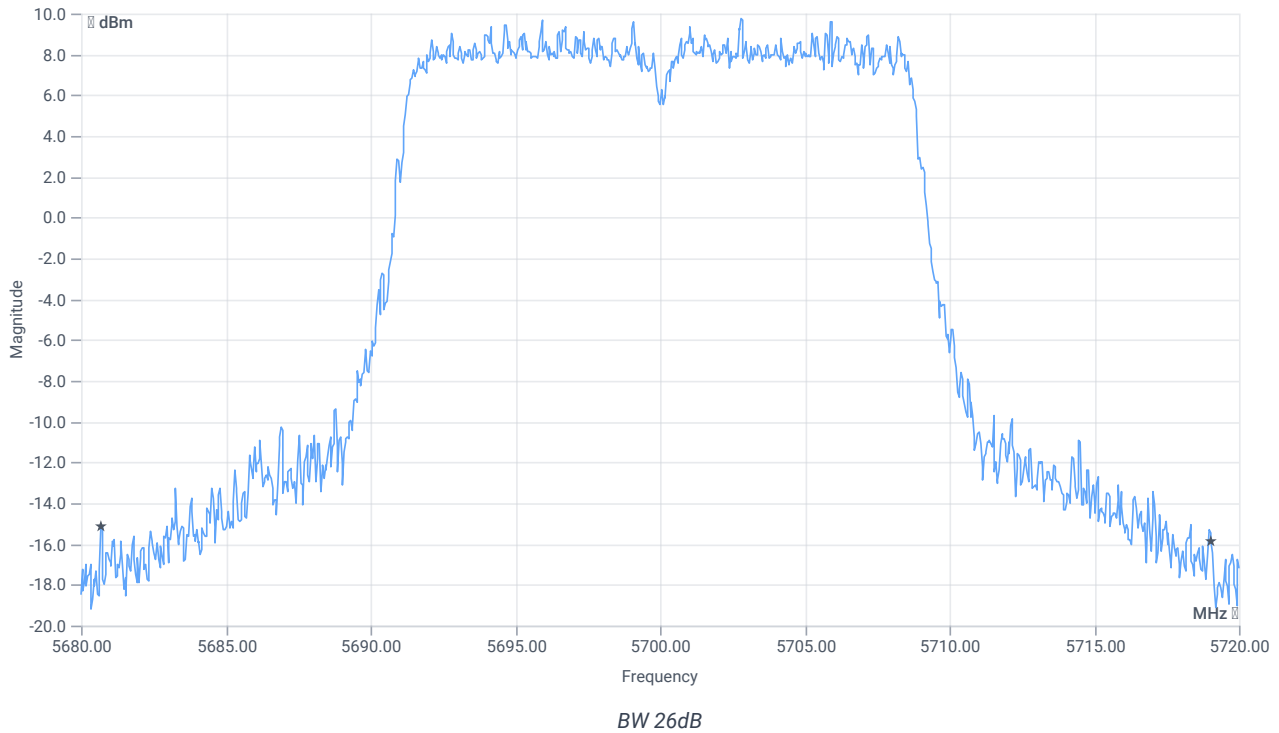
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



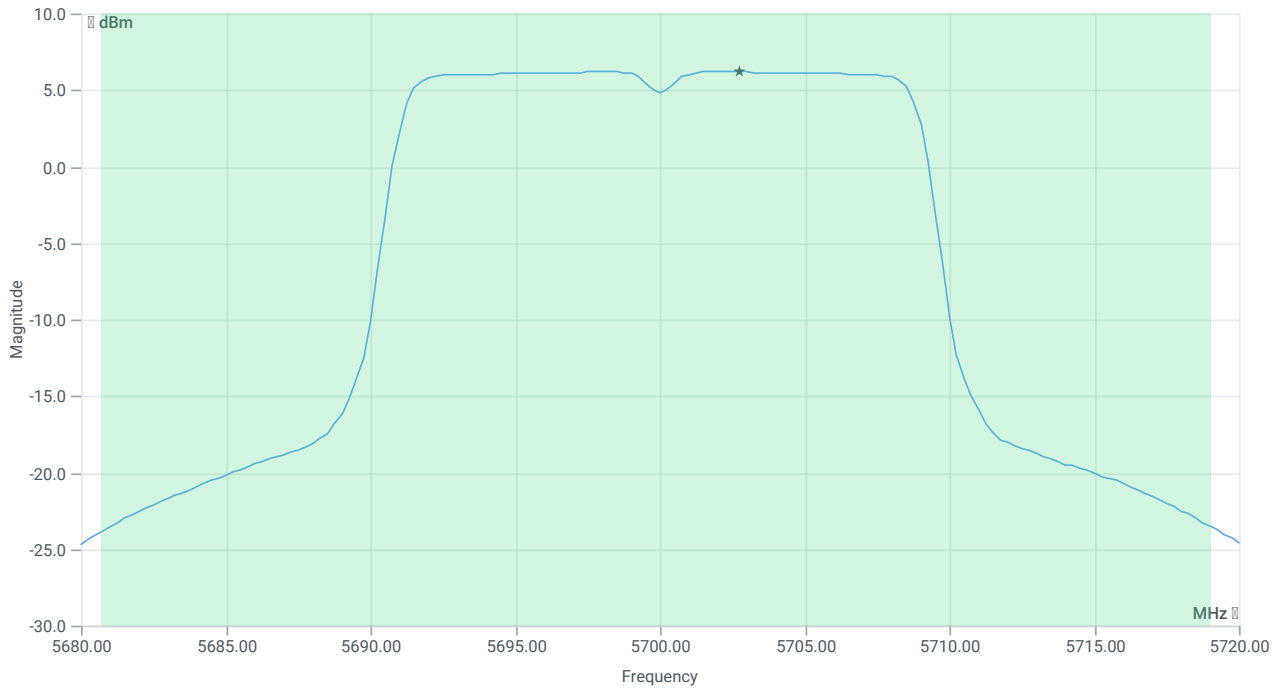
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	38.36	MHz	INFO
T1 26dB	---	---	5680.6800	MHz	INFO
T2 26dB	---	---	5719.0400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.39 16.5 25
Start [MHz] Stop [MHz]	5680.000 5720.000
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.26	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.26	dBm	PASS
Limit: 11 dBm + 10 log 38.36					
Max Output Power DC corrected	--	26.84	18.26	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.18	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.18	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:46:38
Ambit temp [°C] humidity [rel%]	26.1 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

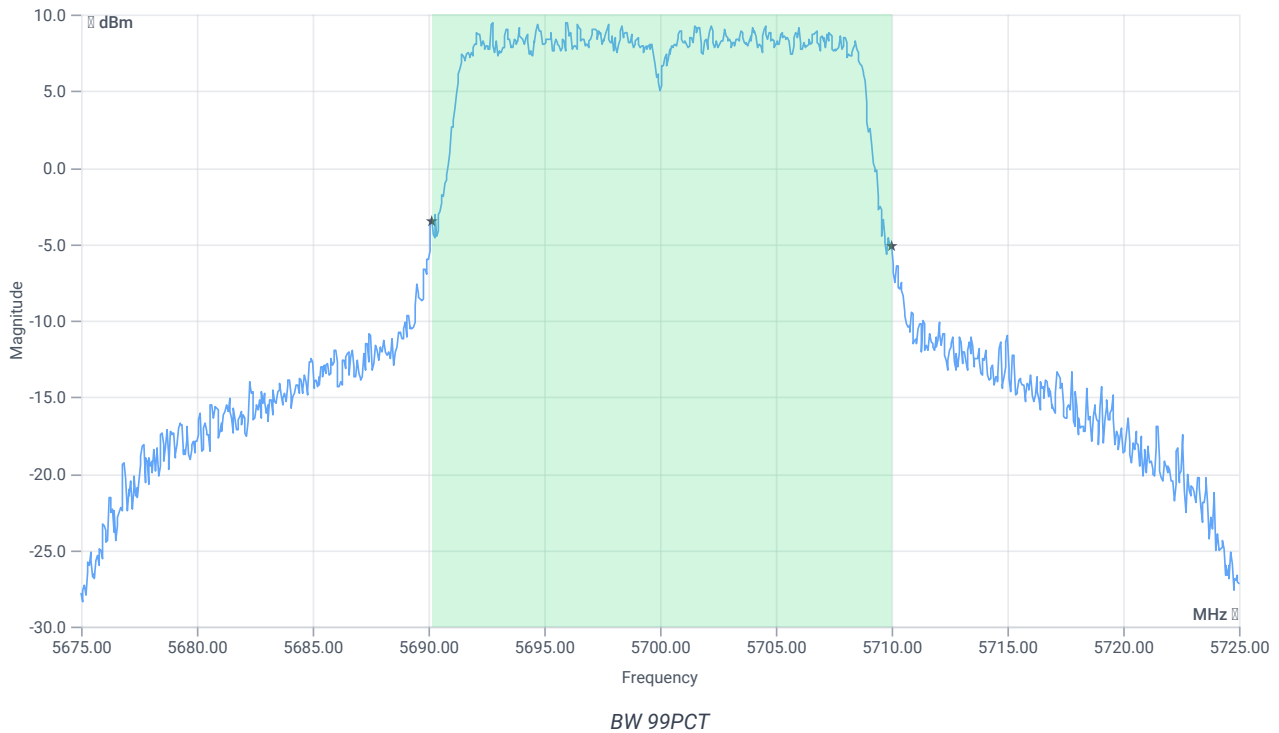
Test at TX 5700 MHz

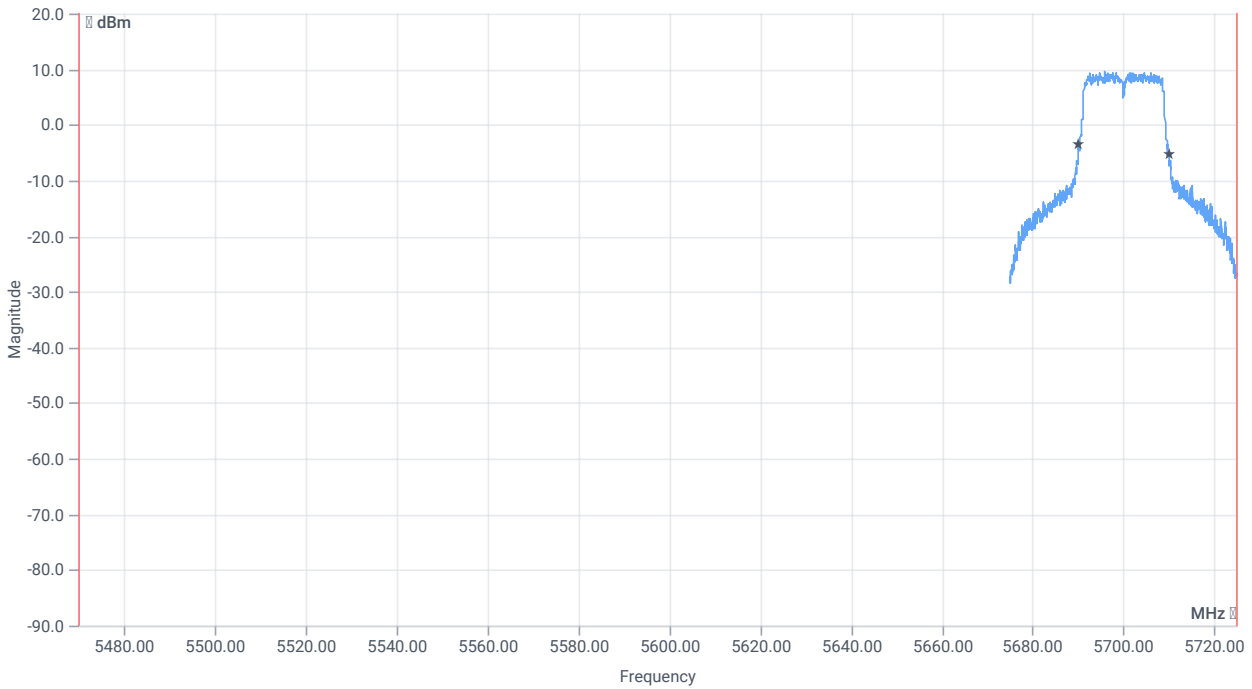
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.44	dBm	INFO
Ref. Frequency	--	--	5701.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.44 16.5 25
Start [MHz] Stop [MHz]	5675.000 5725.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

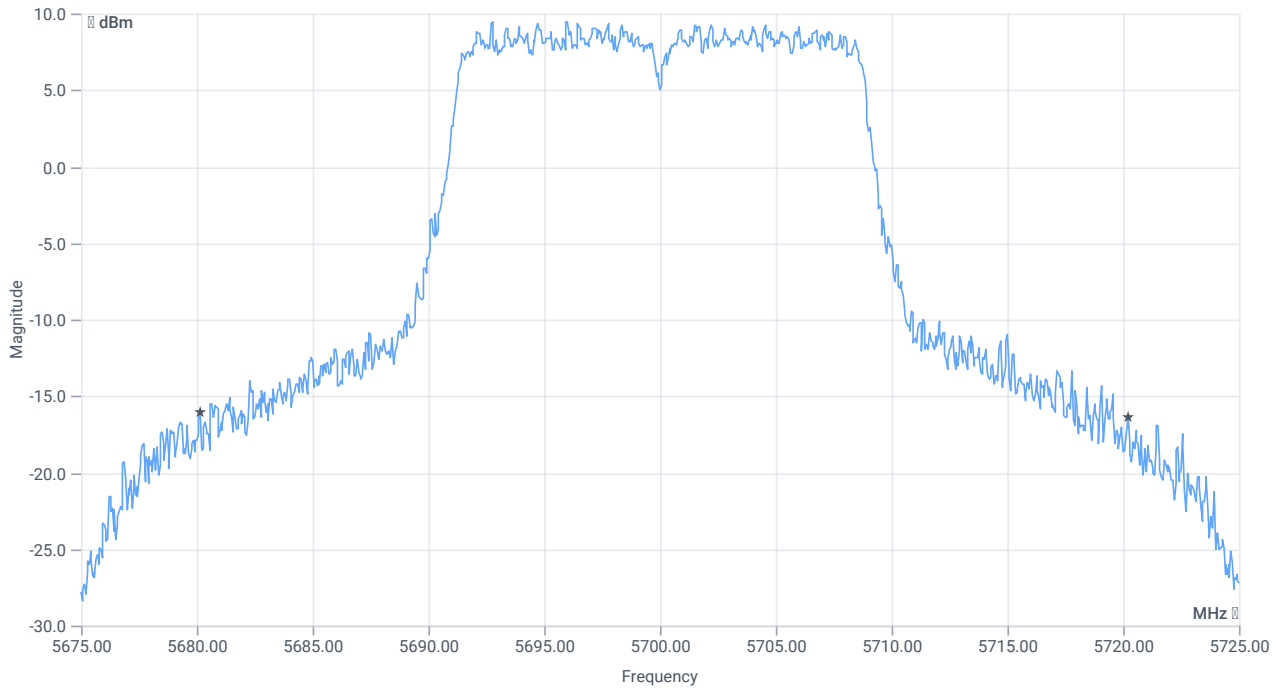




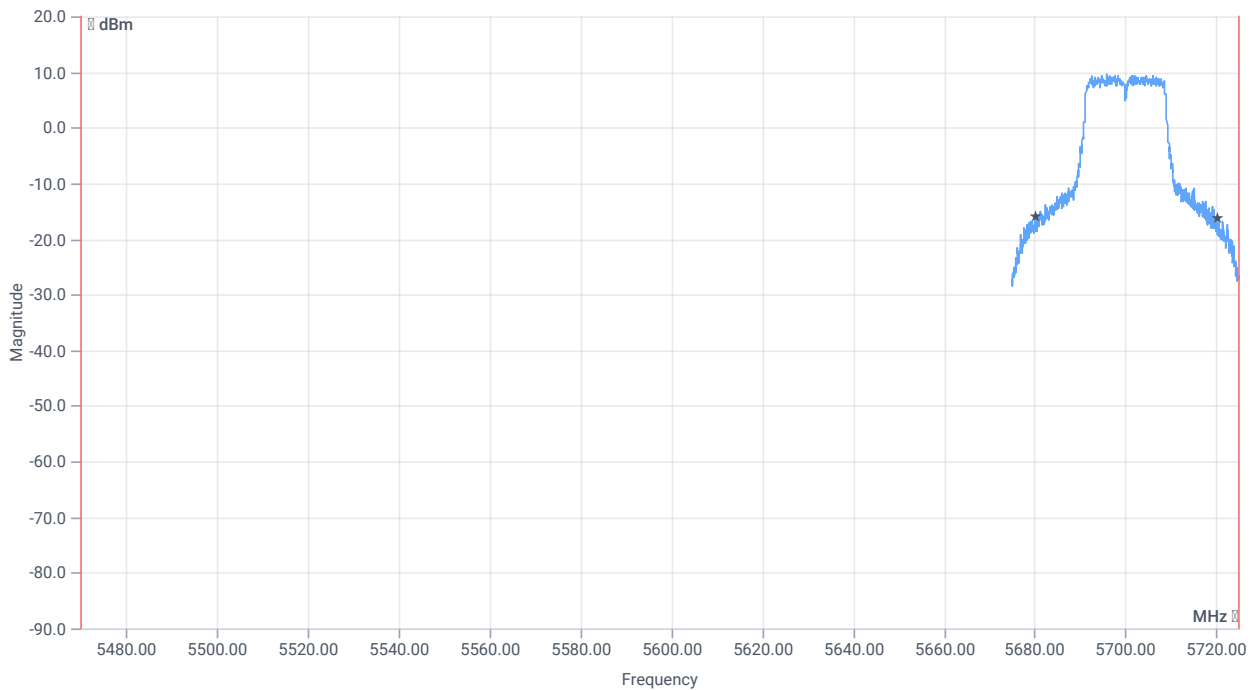
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.880	MHz	INFO
T1 99%	5470.000000	--	5690.1099	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5709.9900	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.05	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5680.1500	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5720.2000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	11.07.2023 09:47:09
Ambit temp [°C] humidity [rel%]	26.1 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

Test at TX 5700 MHz

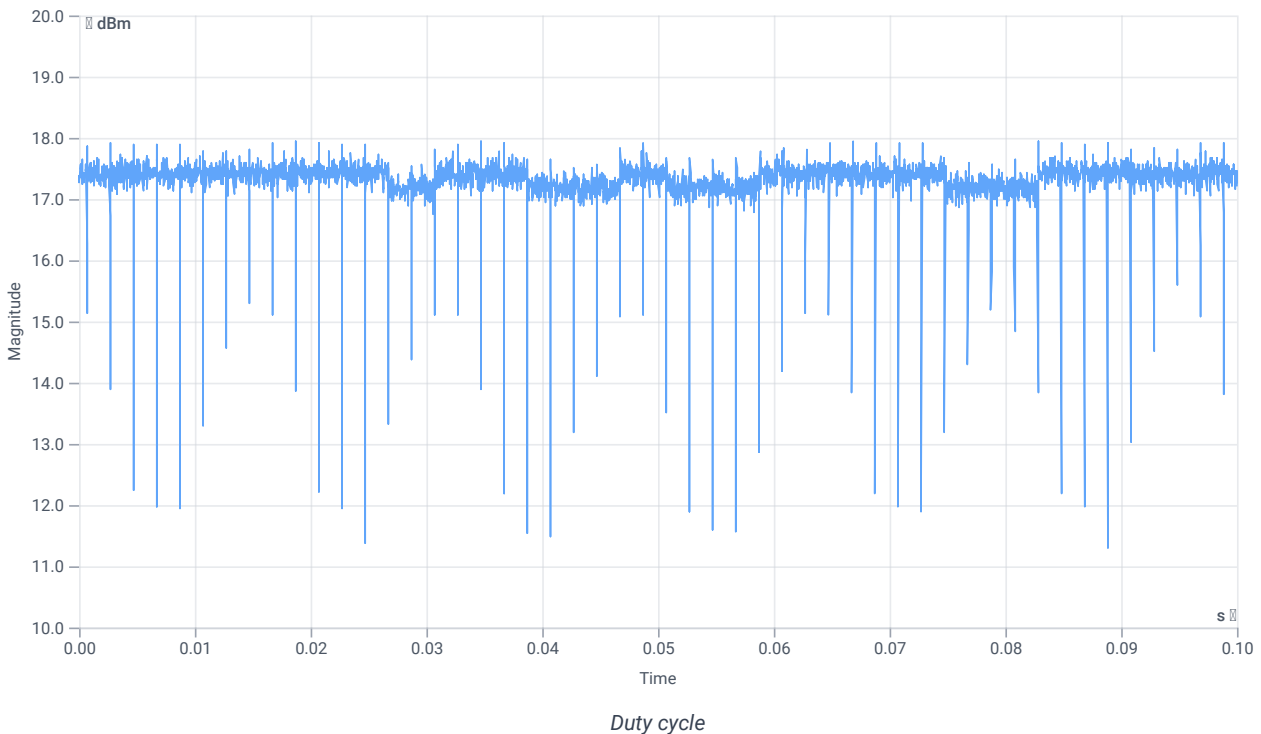
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.17	dBm	INFO
Ref. Frequency	--	--	5698.000	MHz	INFO

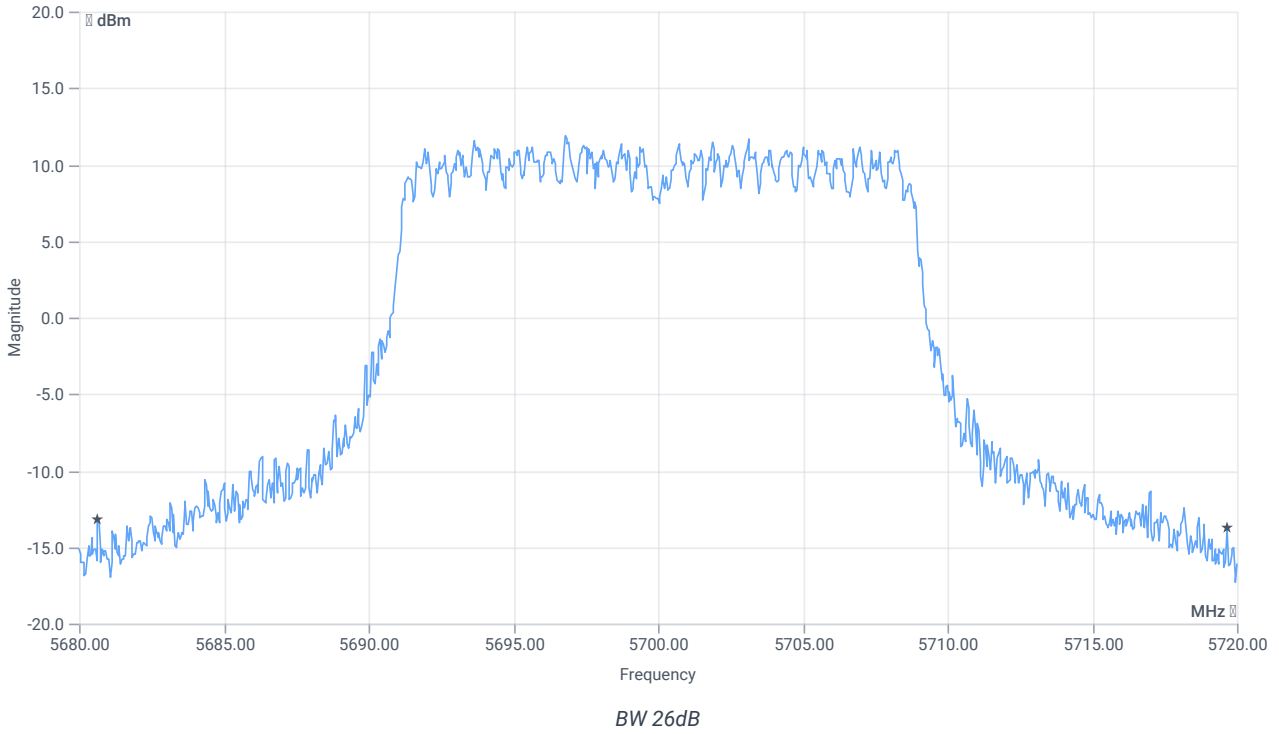
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



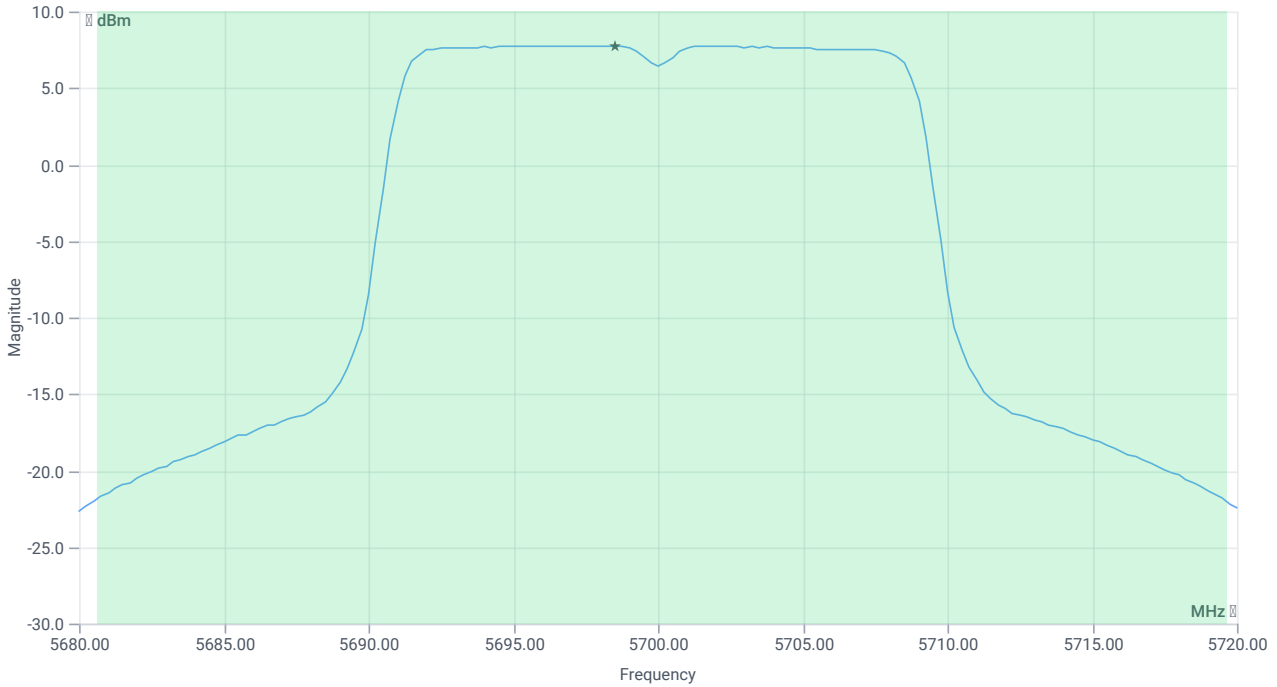
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.04	MHz	INFO
T1 26dB	---	---	5680.6400	MHz	INFO
T2 26dB	---	---	5719.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.17 16.5 30
Start [MHz] Stop [MHz]	5680.000 5720.000
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.82	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.82	dBm	PASS
Limit: 11 dBm + 10 log 39.04					
Max Output Power DC corrected	--	26.92	19.82	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.77	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.77	dBm/1MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:48:37
Ambit temp [°C] humidity [rel%]	26.1 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

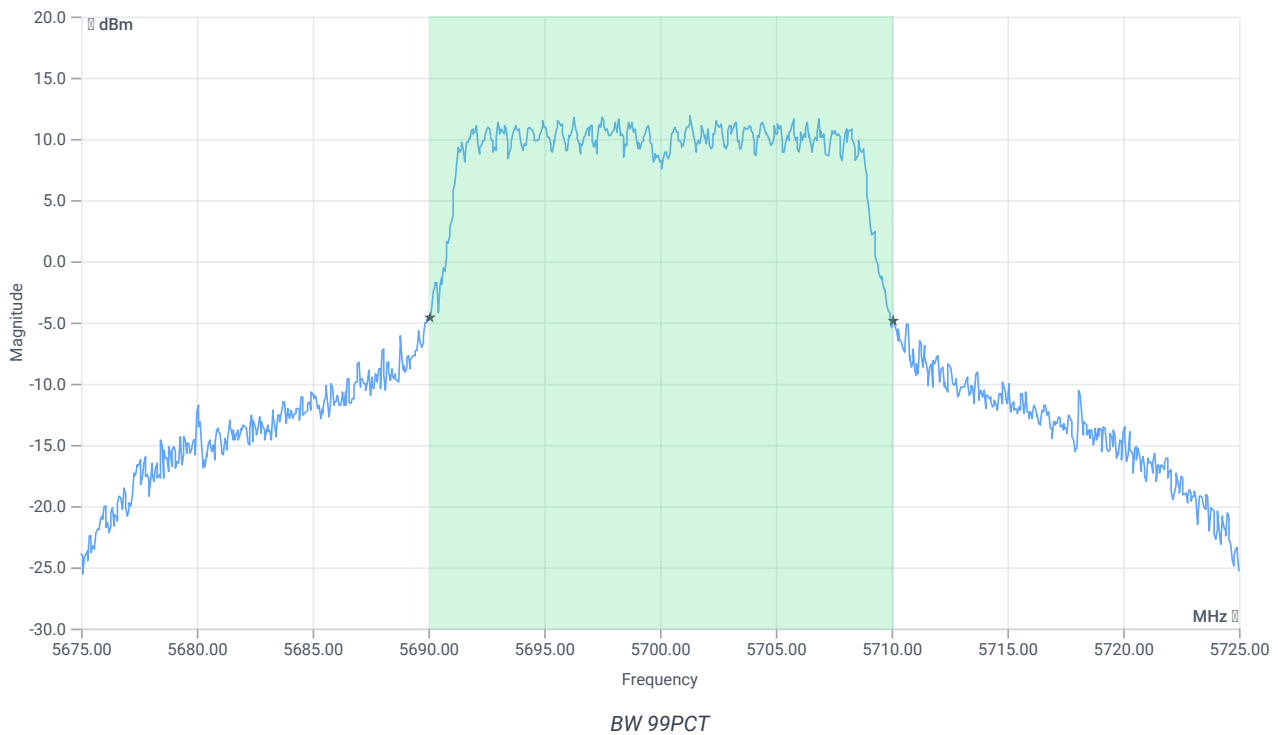
Test at TX 5700 MHz

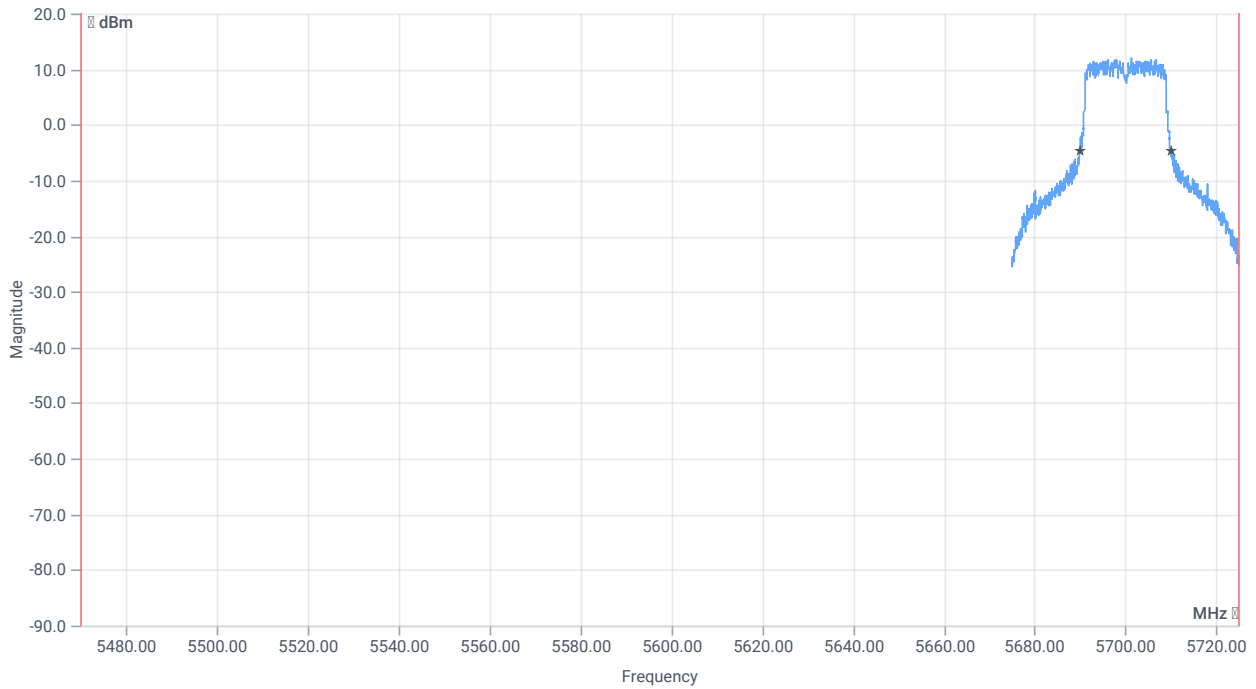
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.47	dBm	INFO
Ref. Frequency	--	--	5696.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.47 16.5 25
Start [MHz] Stop [MHz]	5675.000 5725.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

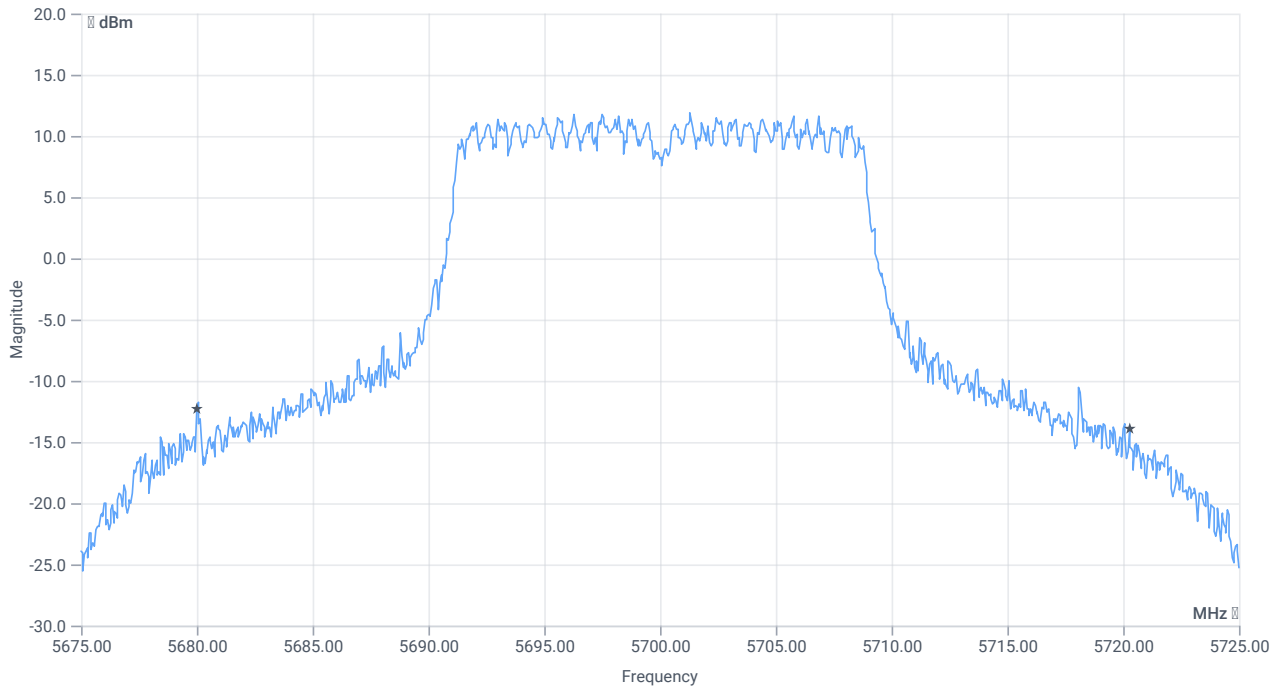




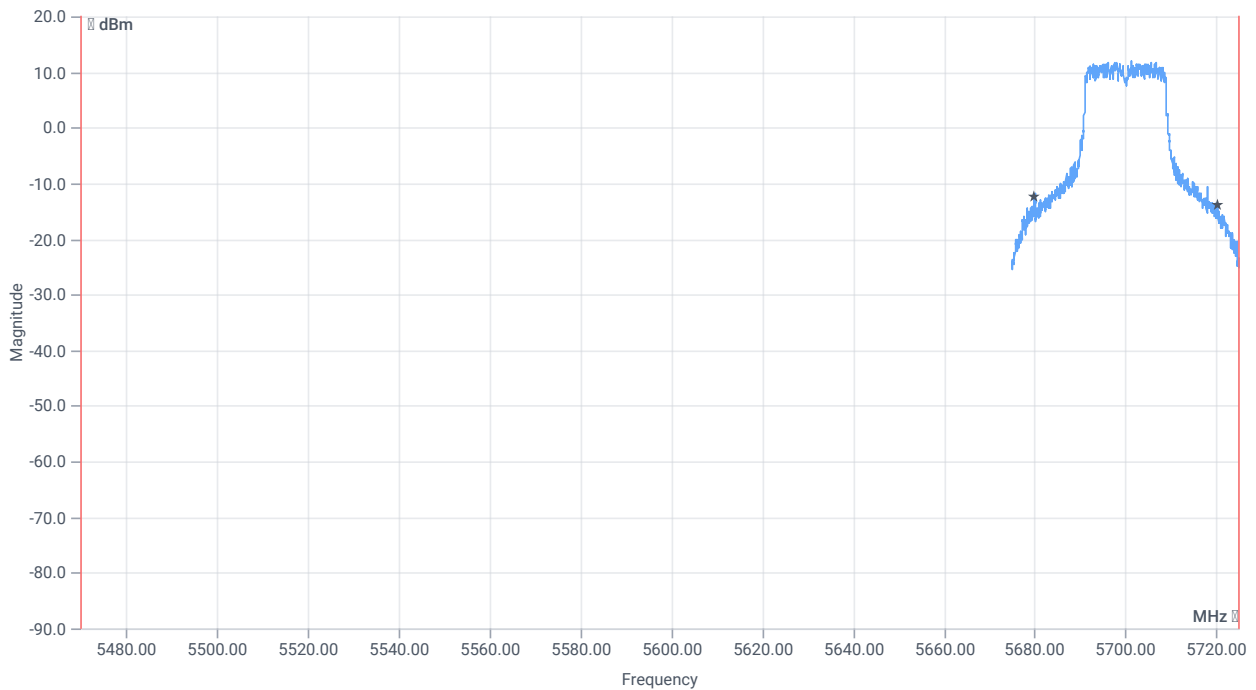
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	20.030	MHz	INFO
T1 99%	5470.000000	--	5690.0599	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5710.0899	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40.25	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5680.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5720.2500	MHz	

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:49:08
Ambit temp [°C] humidity [rel%]	26.1 47
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_3
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:49:09
Message	set WLAN5Gx to ac_VHT20_U_NII_3, Frequency [MHz] 5745 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 09:52:01
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

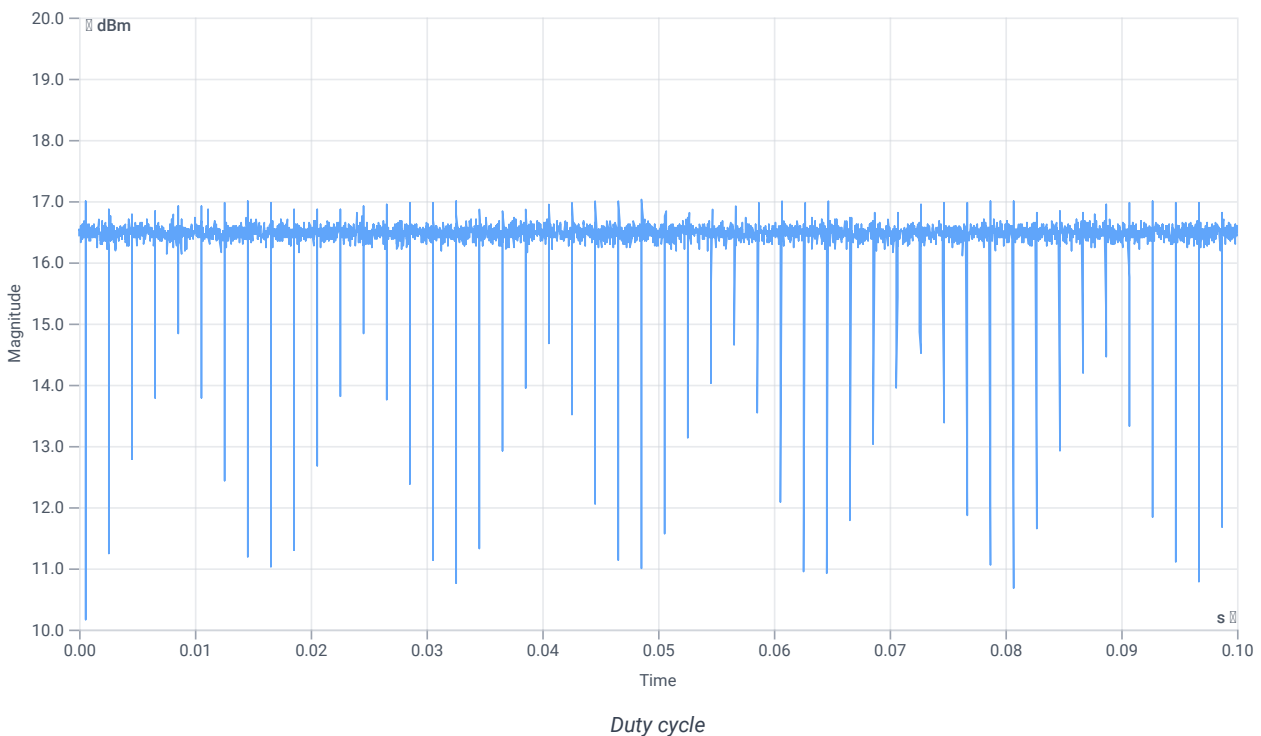
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.11	dBm	INFO
Ref. Frequency	--	--	5742.600	MHz	INFO

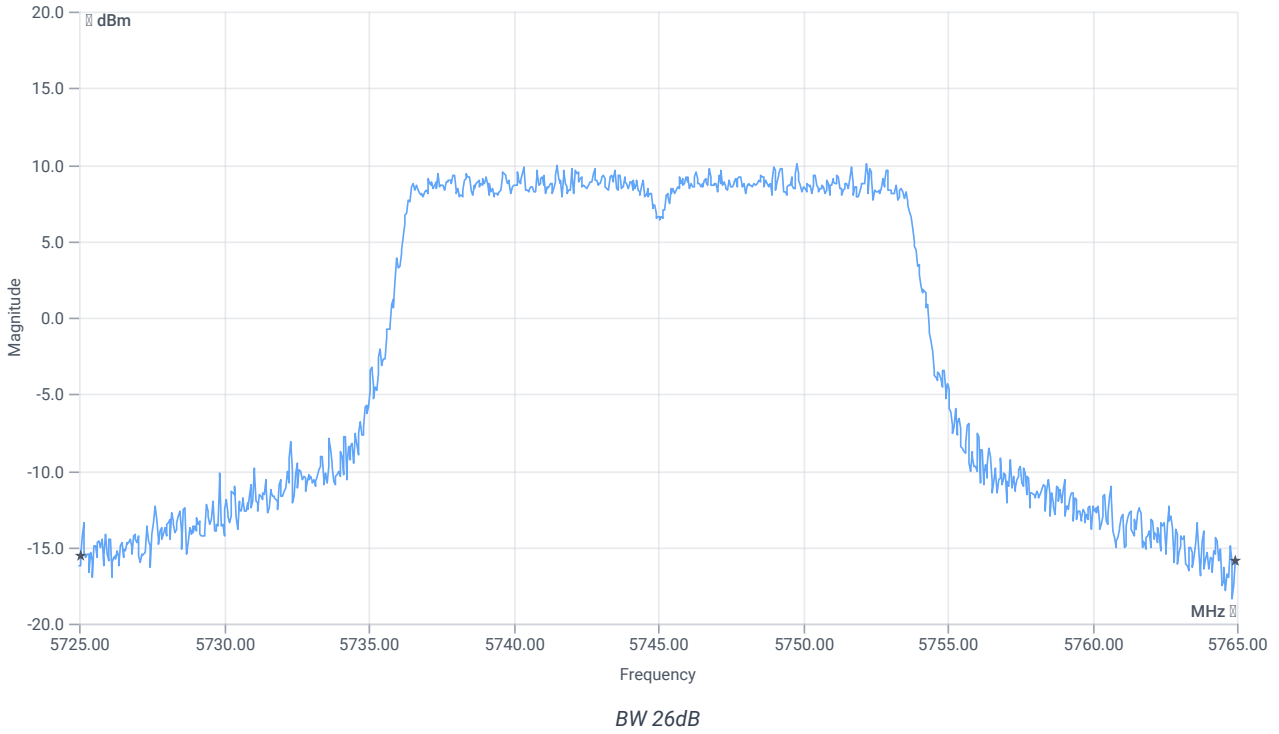
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



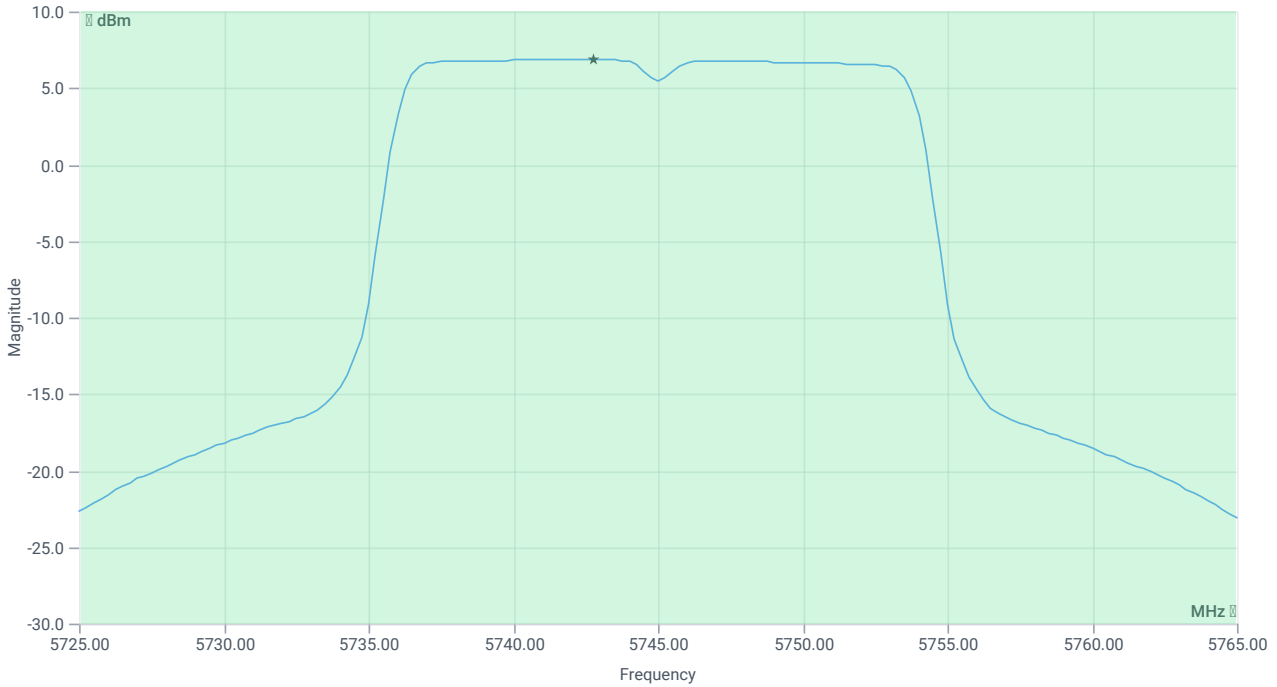
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.84	MHz	INFO
T1 26dB	---	---	5725.0800	MHz	INFO
T2 26dB	---	---	5764.9200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.11 16.72 25
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

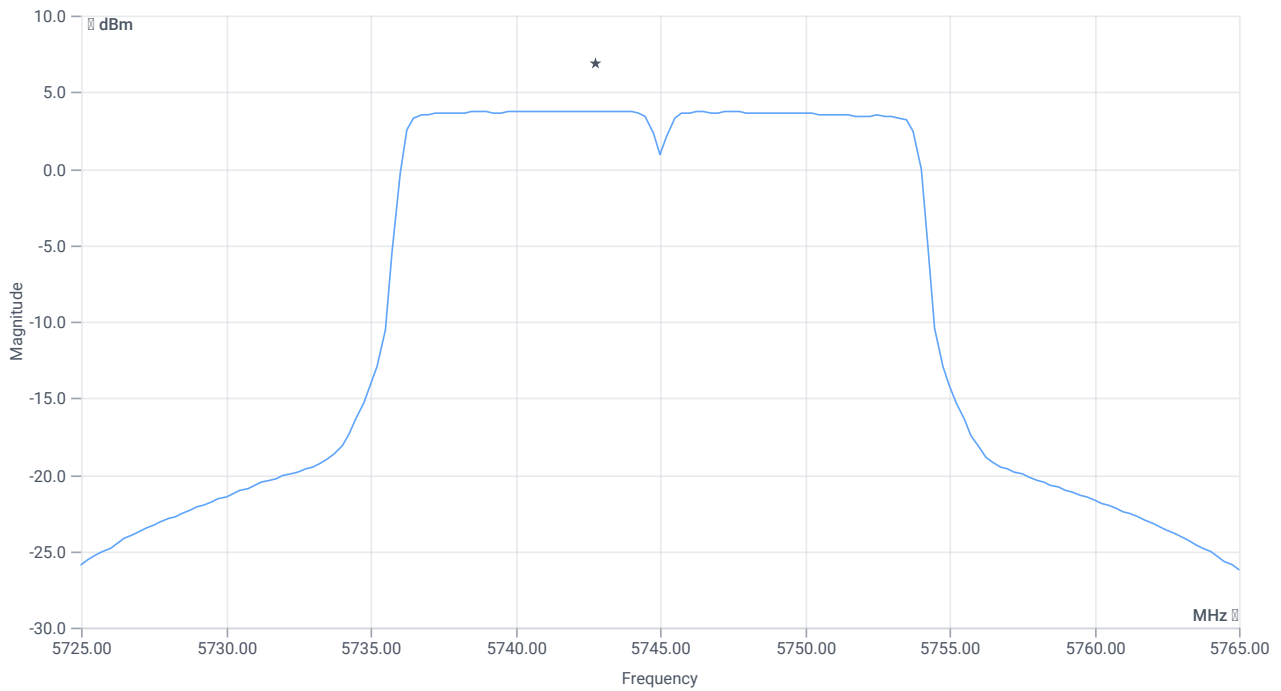
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.91	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.91	dBm	PASS
Limit: 11 dBm + 10 log 39.84					
Max Output Power DC corrected	--	27	18.91	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.11 16.72 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	3.78	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	3.78	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:54:26
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

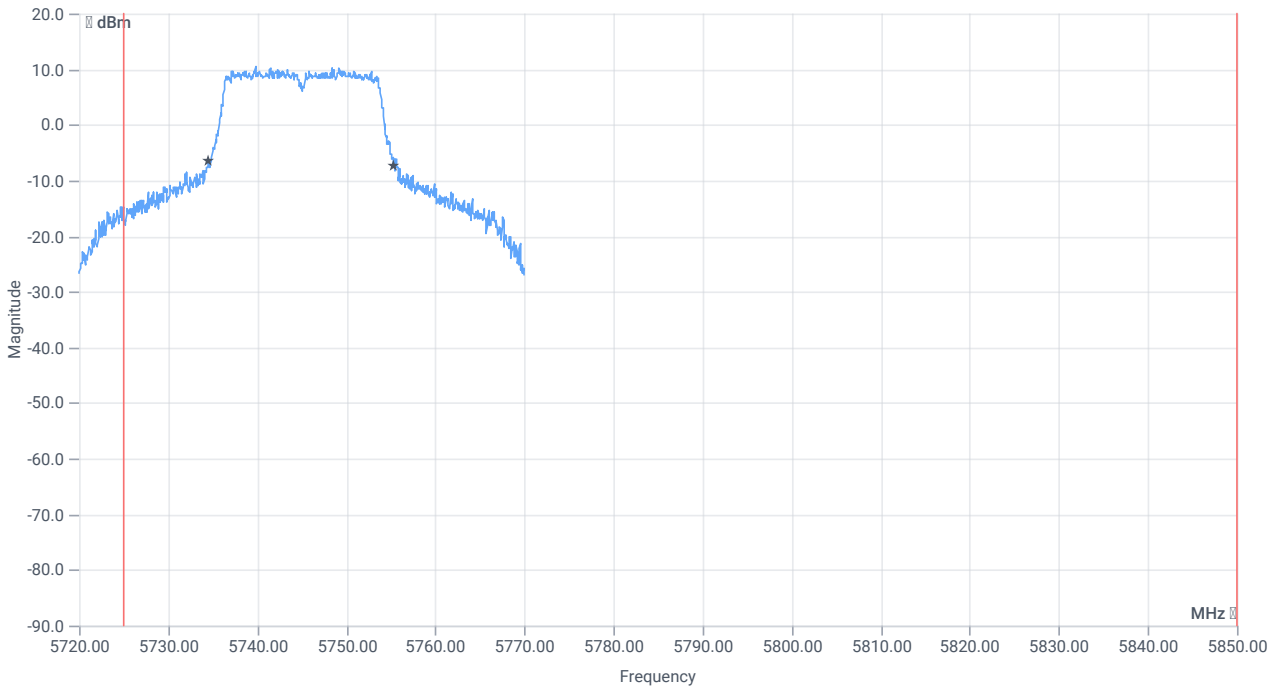
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.70	dBm	INFO
Ref. Frequency	--	--	5740.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.70 16.72 25
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

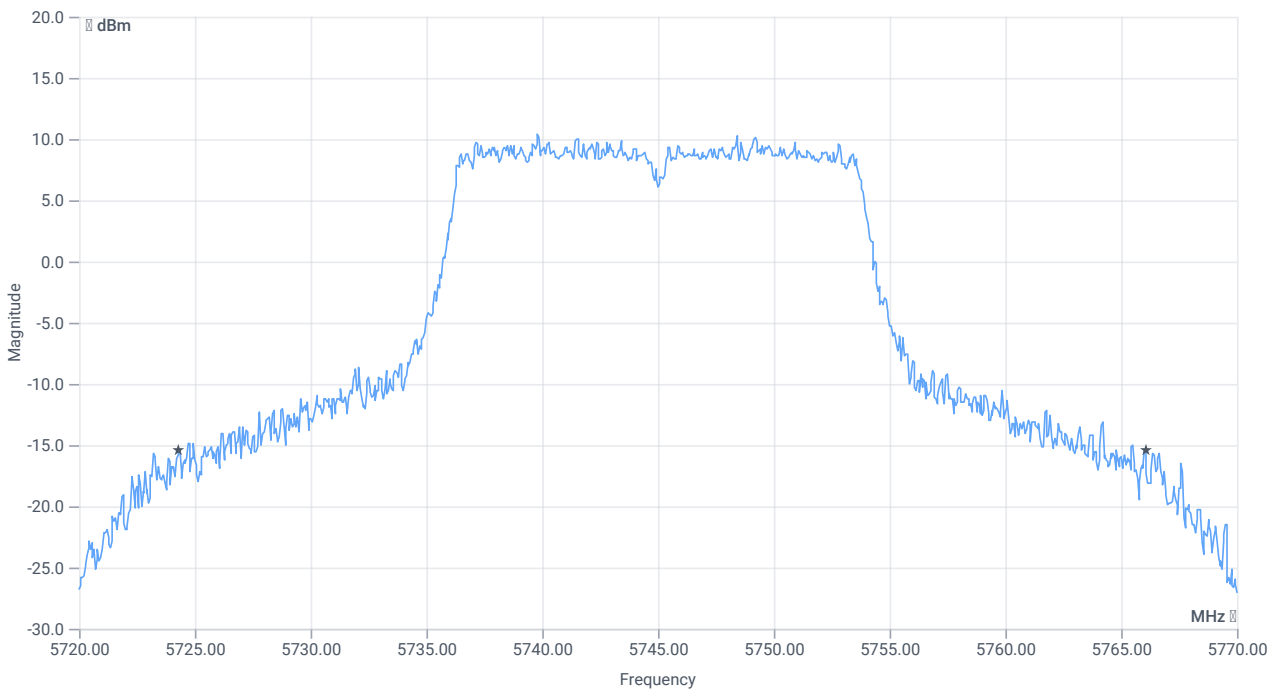




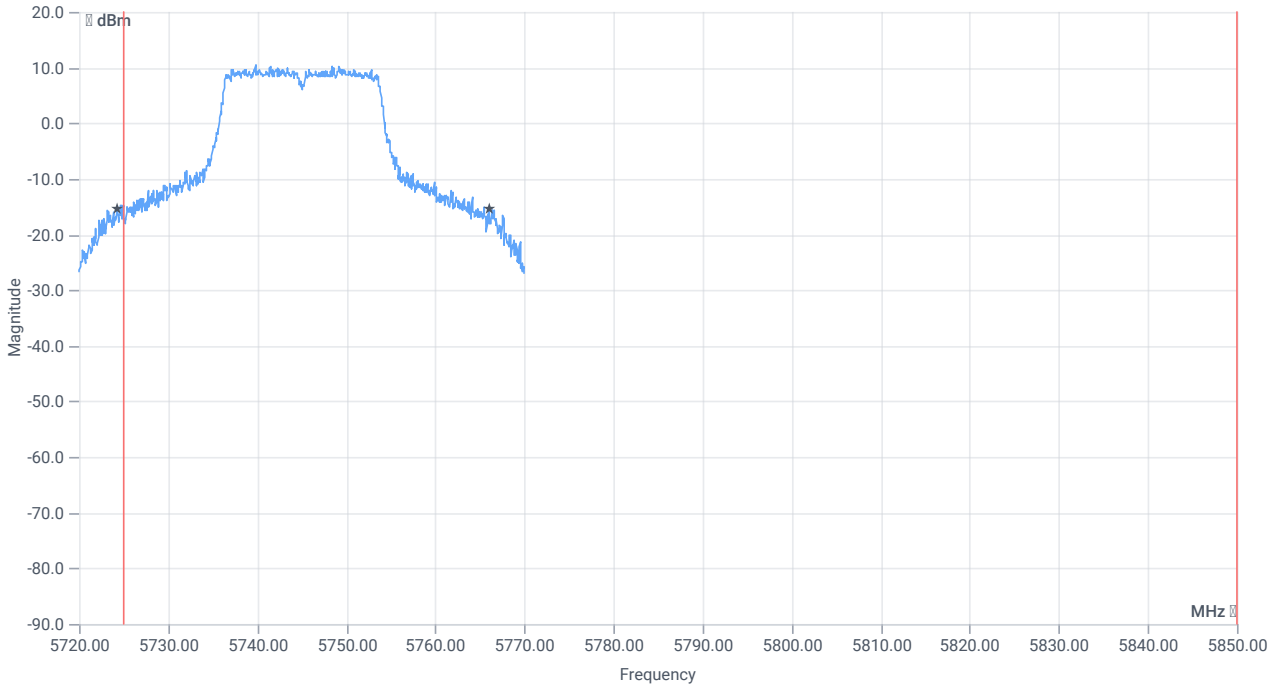
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	20.829	MHz	INFO
T1 99%	5725.000000	--	5734.5105	MHz	PASS
T2 99%	--	5850.000000	5755.3397	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	41.75	MHz	INFO
T1 26dB	5725.000000	--	5724.3000	MHz	DFS required
T2 26dB	--	5850.000000	5766.0500	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:54:56
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

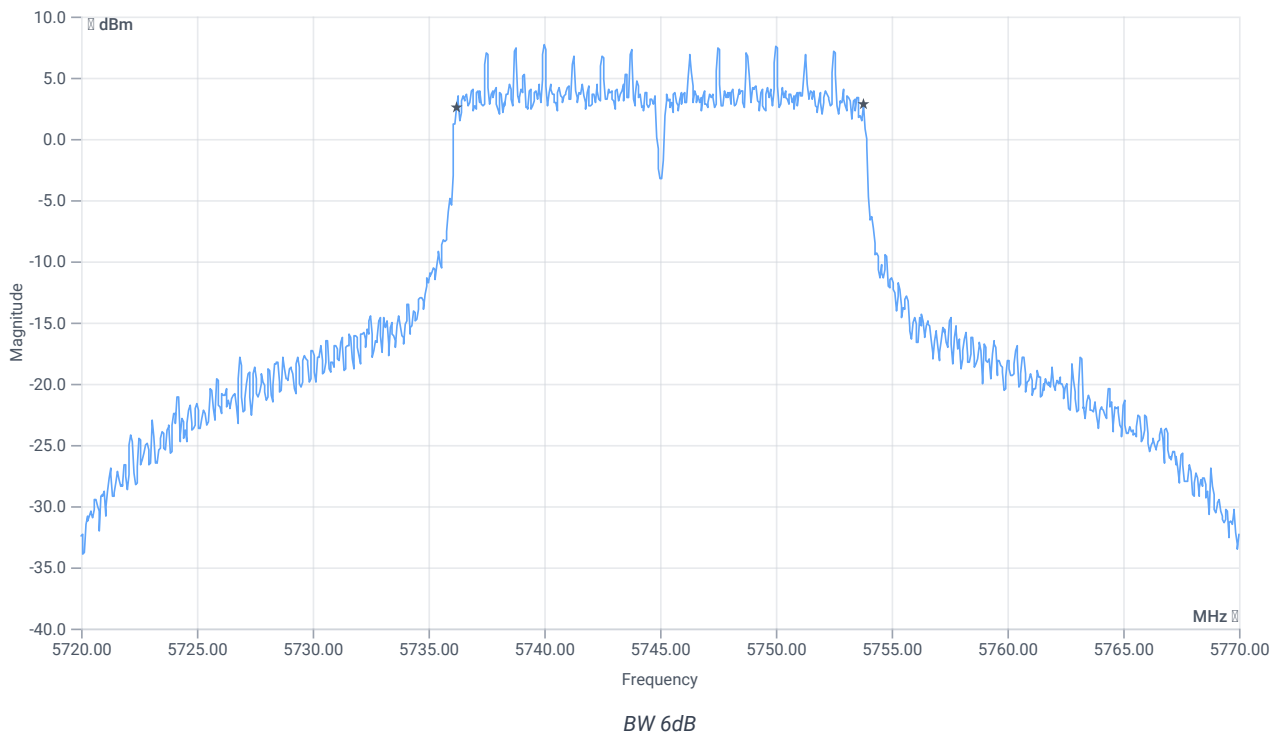
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.72	dBm	INFO
Ref. Frequency	--	--	5747.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.72 16.72 30
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 09:55:39
Ambit temp [°C] humidity [rel%]	26.2 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

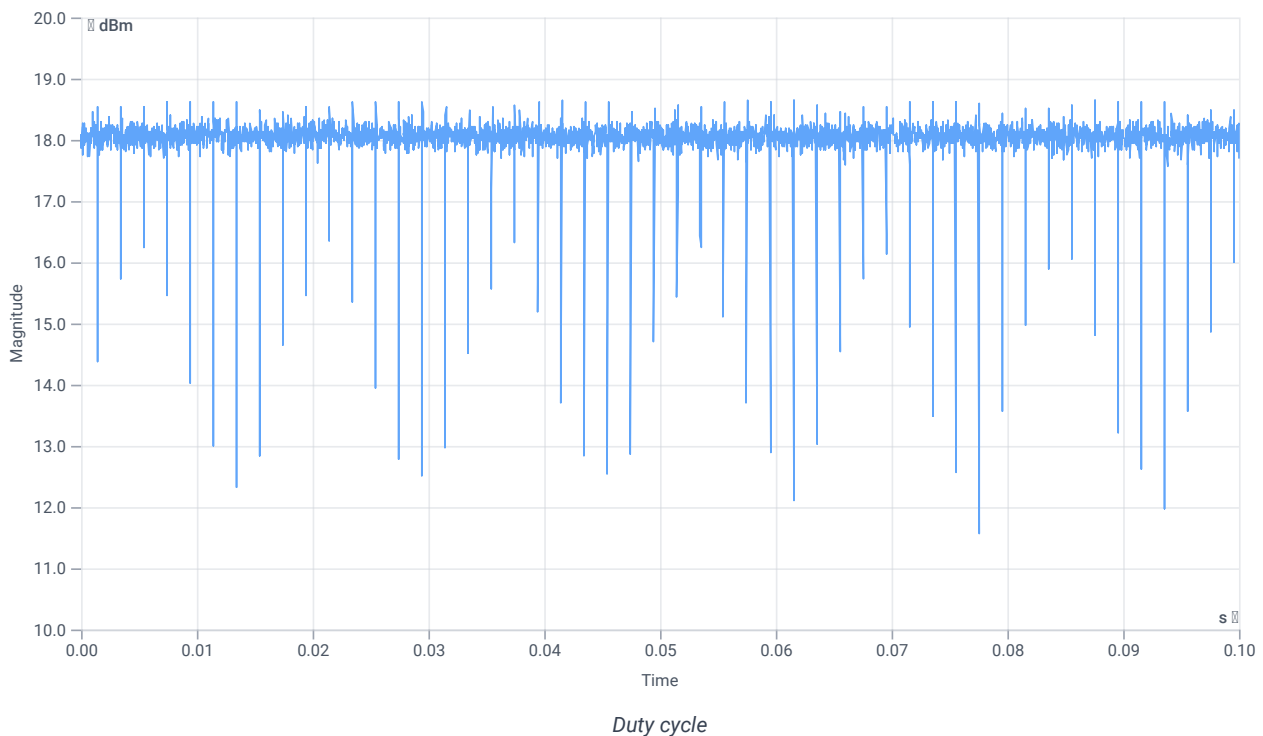
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.12	dBm	INFO
Ref. Frequency	--	--	5739.210	MHz	INFO

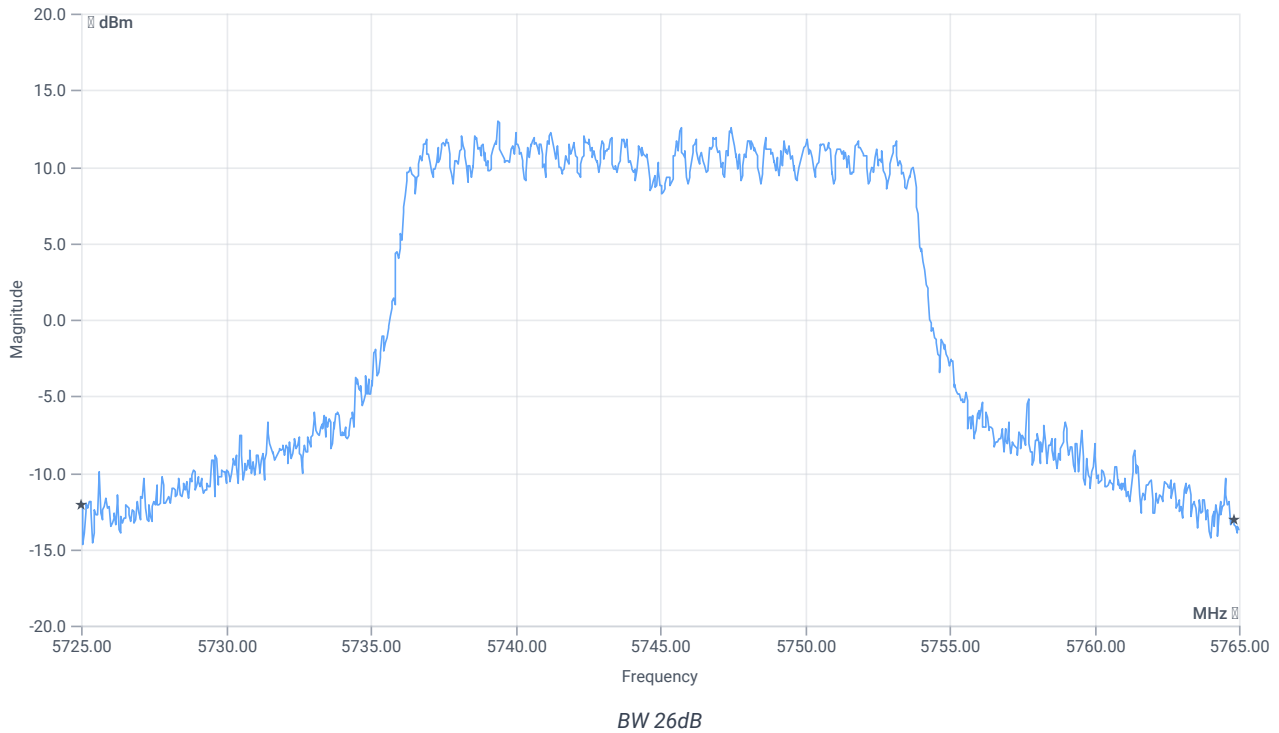
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



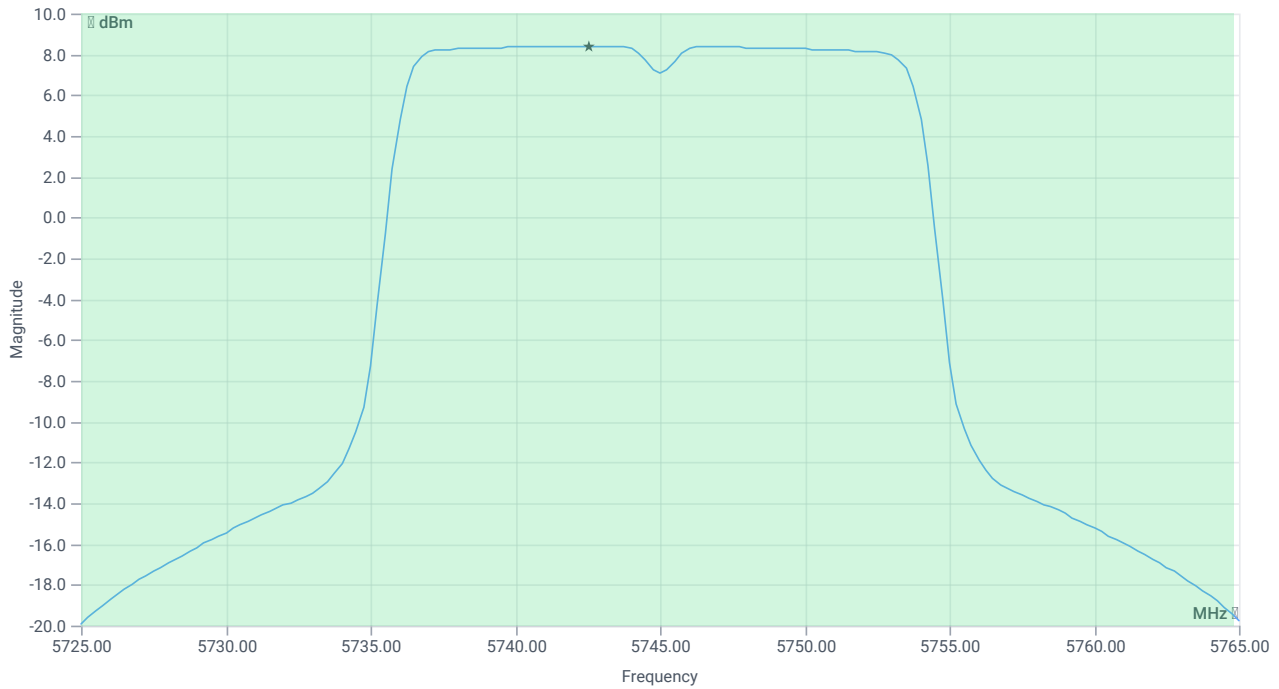
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.8	MHz	INFO
T1 26dB	---	---	5725.0000	MHz	INFO
T2 26dB	---	---	5764.8000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.12 16.72 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

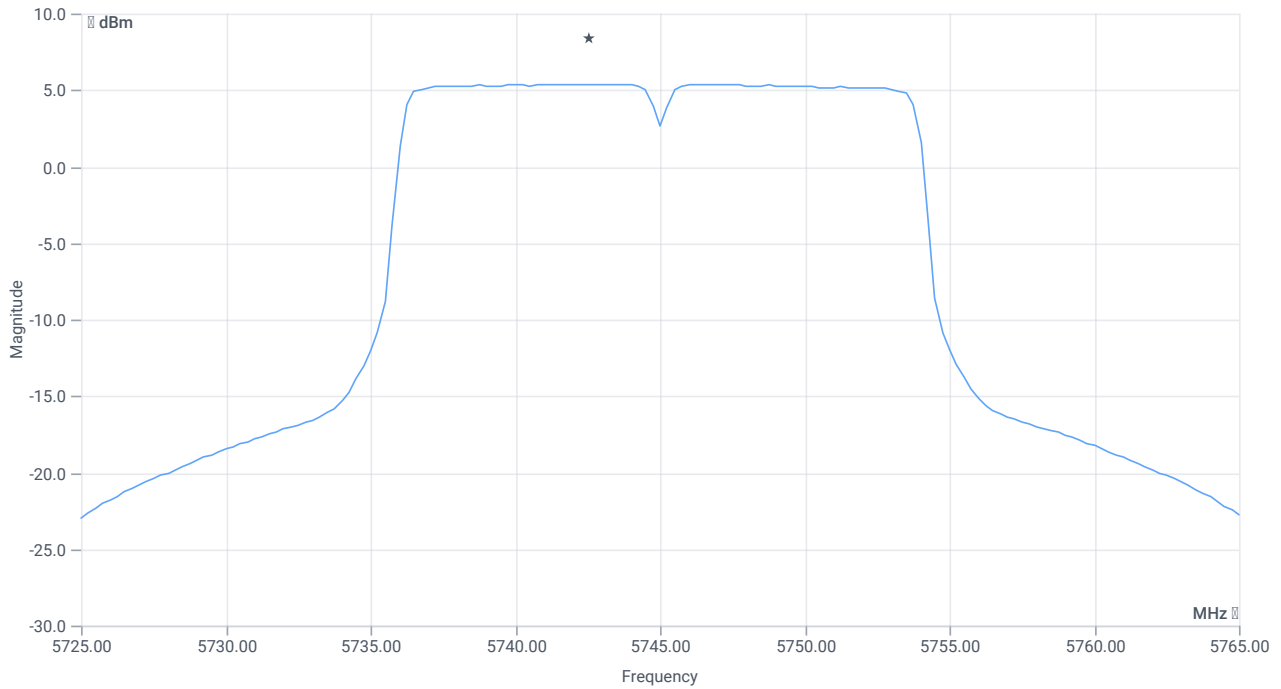
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.49	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	20.49	dBm	PASS
Limit: 11 dBm + 10 log 39.8					
Max Output Power DC corrected	--	27	20.49	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.12 16.72 30
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.39	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	5.39	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:58:04
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

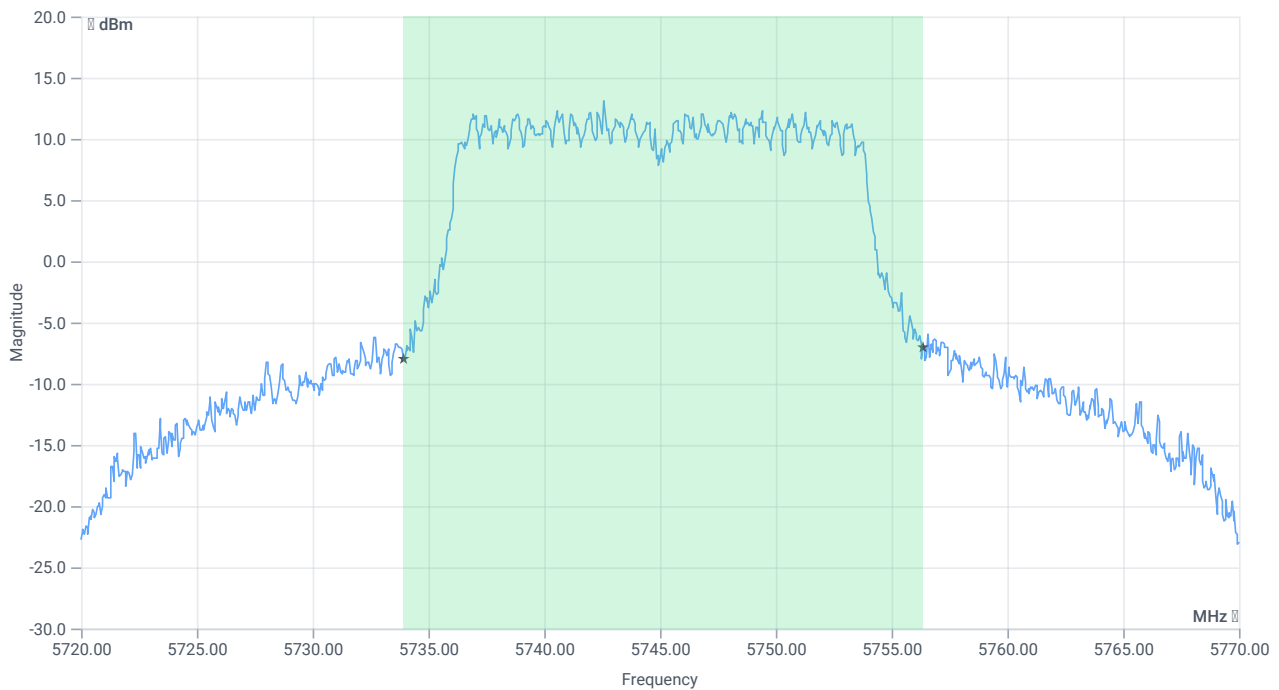
Test at TX 5745 MHz

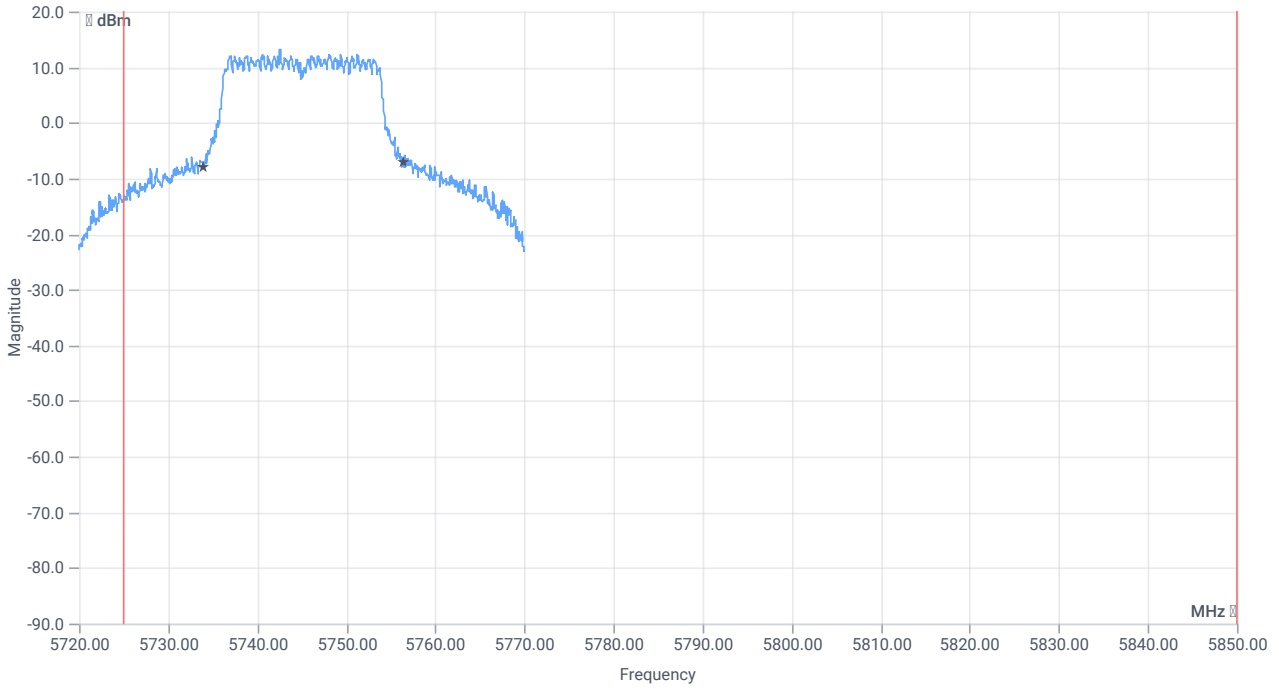
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.38	dBm	INFO
Ref. Frequency	--	--	5741.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.38 16.72 25
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

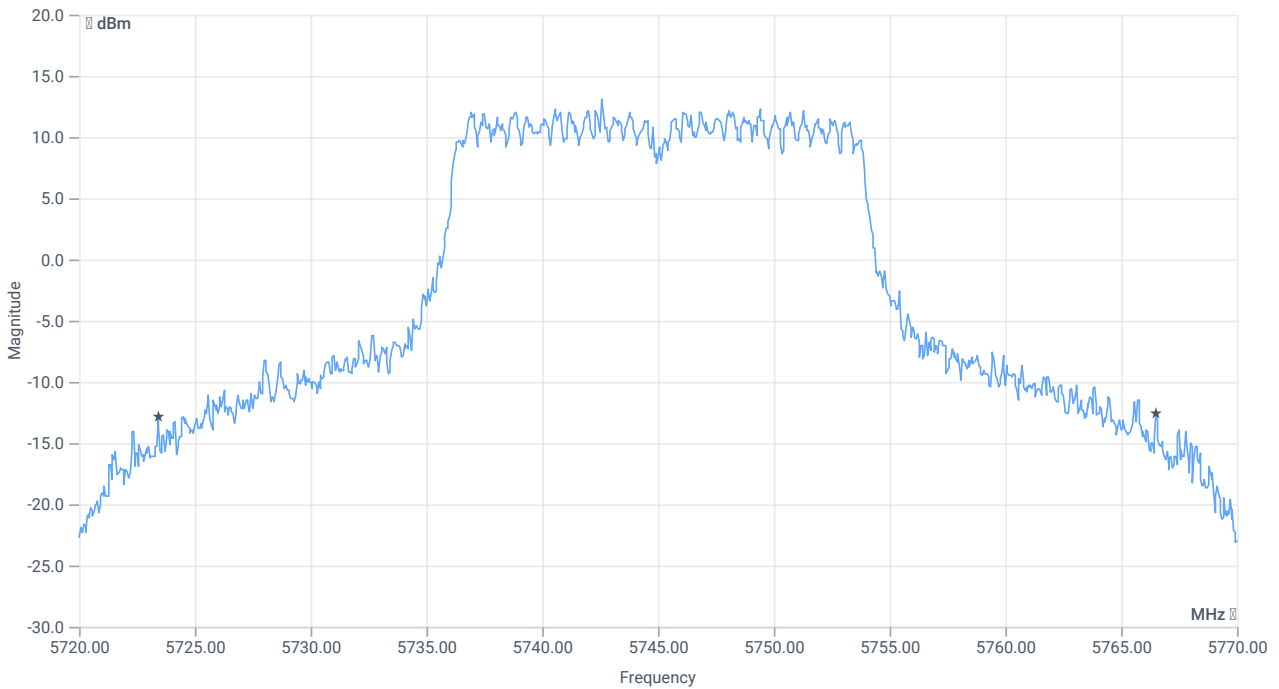




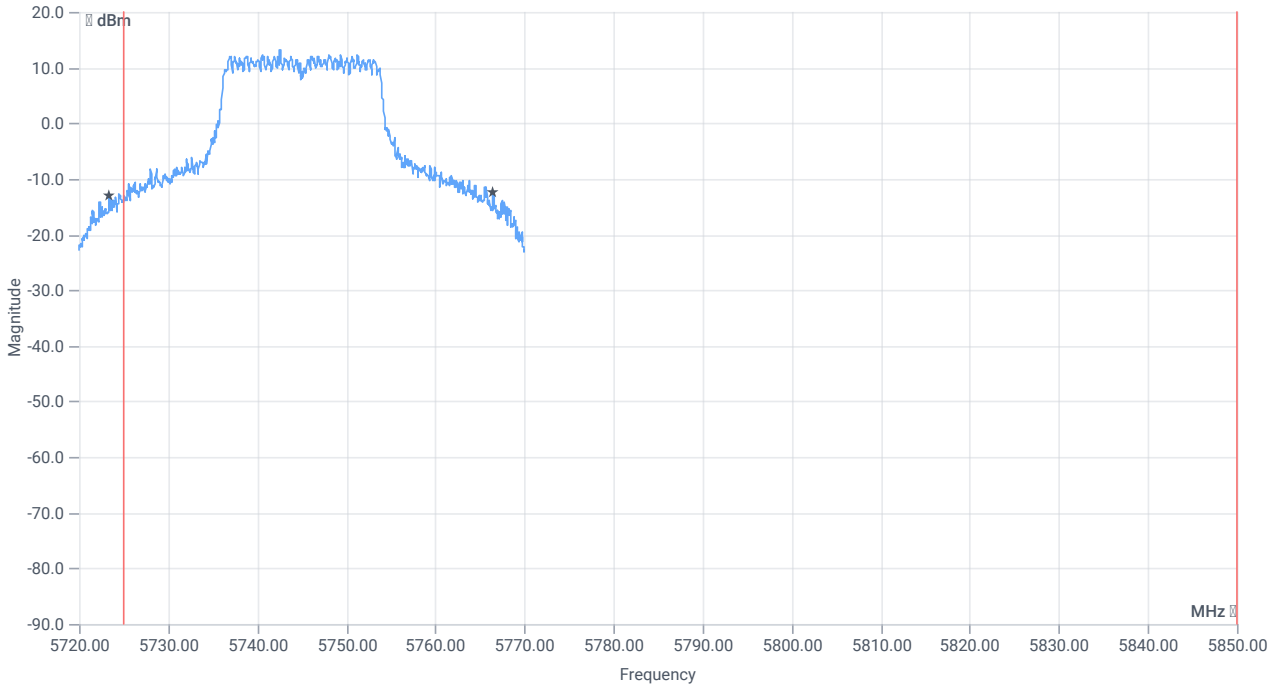
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	22.428	MHz	INFO
T1 99%	5725.000000	--	5733.9111	MHz	PASS
T2 99%	--	5850.000000	5756.3387	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	43.1	MHz	INFO
T1 26dB	5725.000000	--	5723.4000	MHz	DFS required
T2 26dB	--	5850.000000	5766.5000	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 09:58:35
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

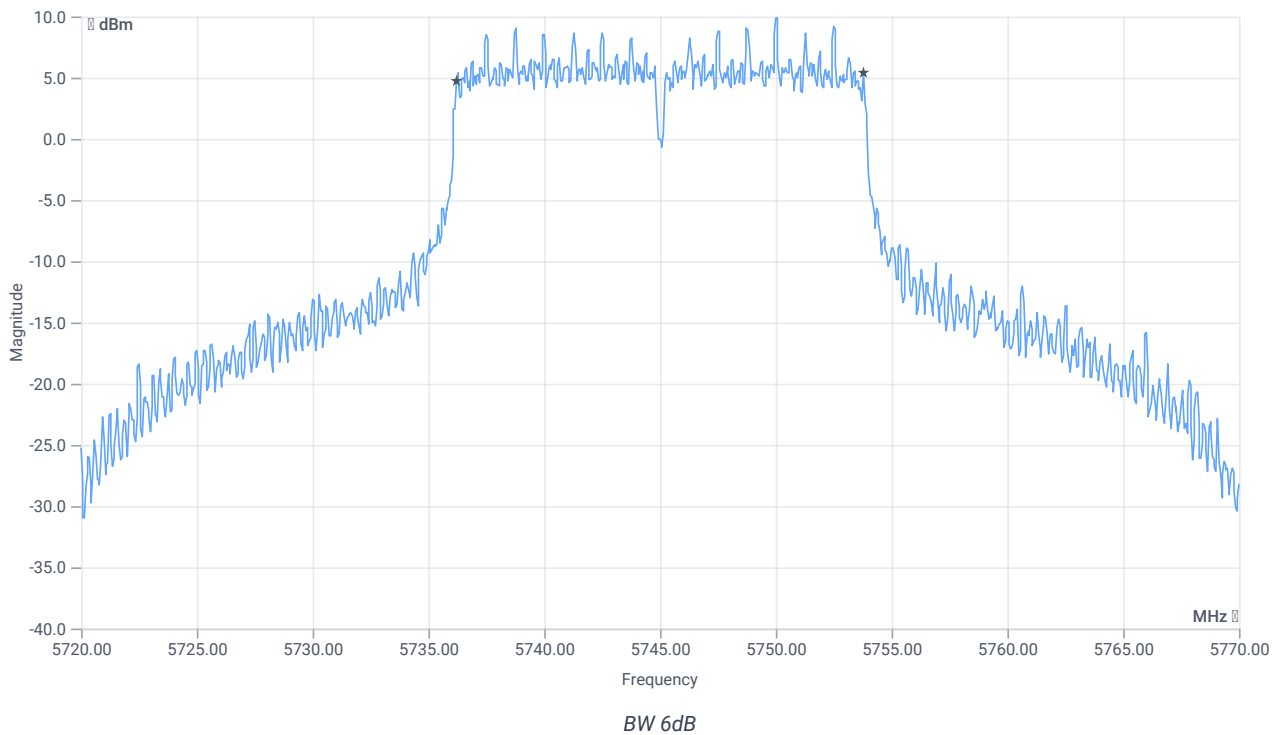
Test at TX 5745 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.60	dBm	INFO
Ref. Frequency	--	--	5748.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.60 16.72 30
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 09:59:17
Ambit temp [°C] humidity [rel%]	26.2 47
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_3
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 09:59:17
Message	set WLAN5Gx to ac_VHT20_U_NII_3, Frequency [MHz] 5785 ,

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 10:04:57
Ambit temp [°C] humidity [rel%]	26.3 47
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

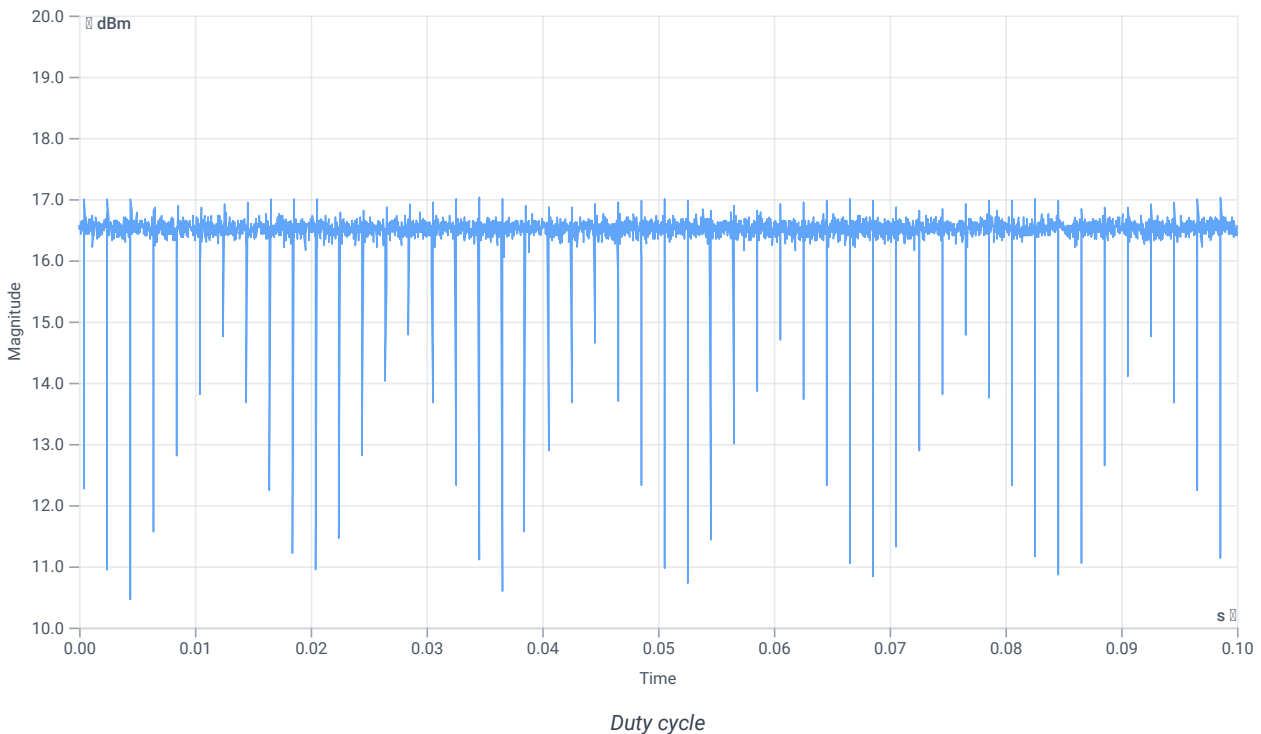
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.20	dBm	INFO
Ref. Frequency	--	--	5781.200	MHz	INFO

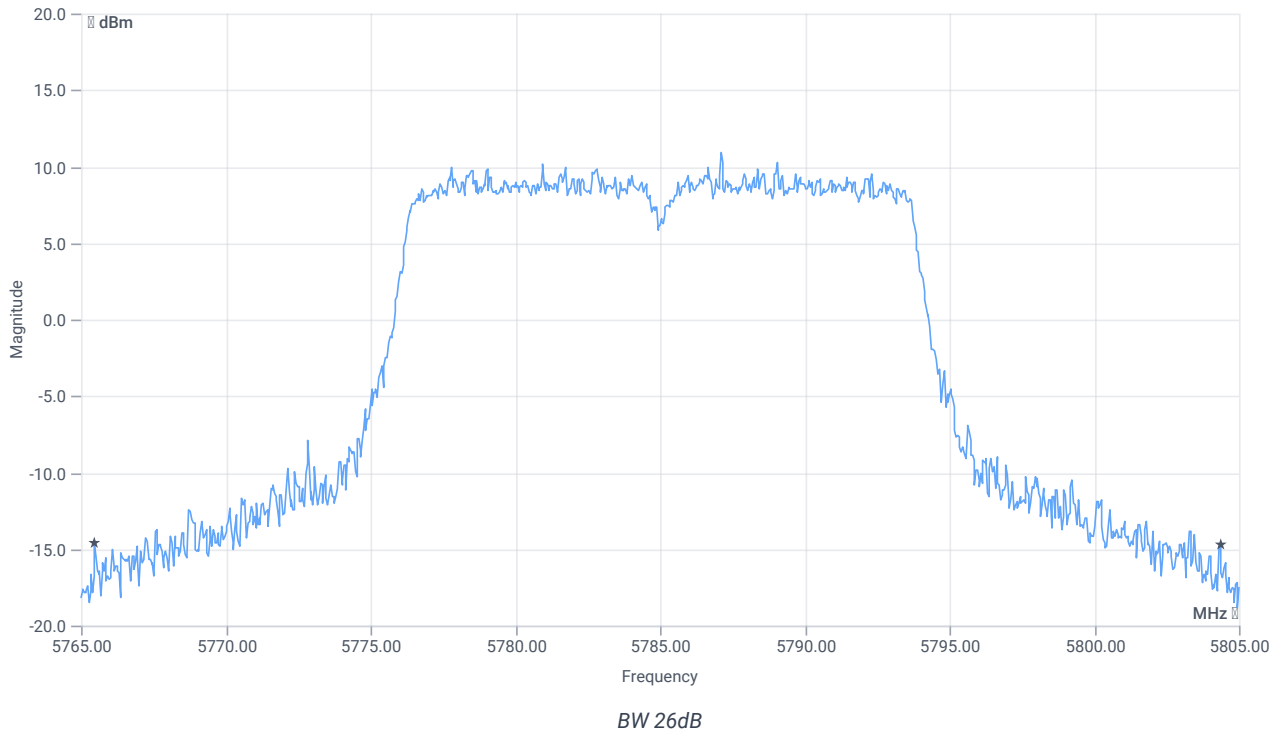
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



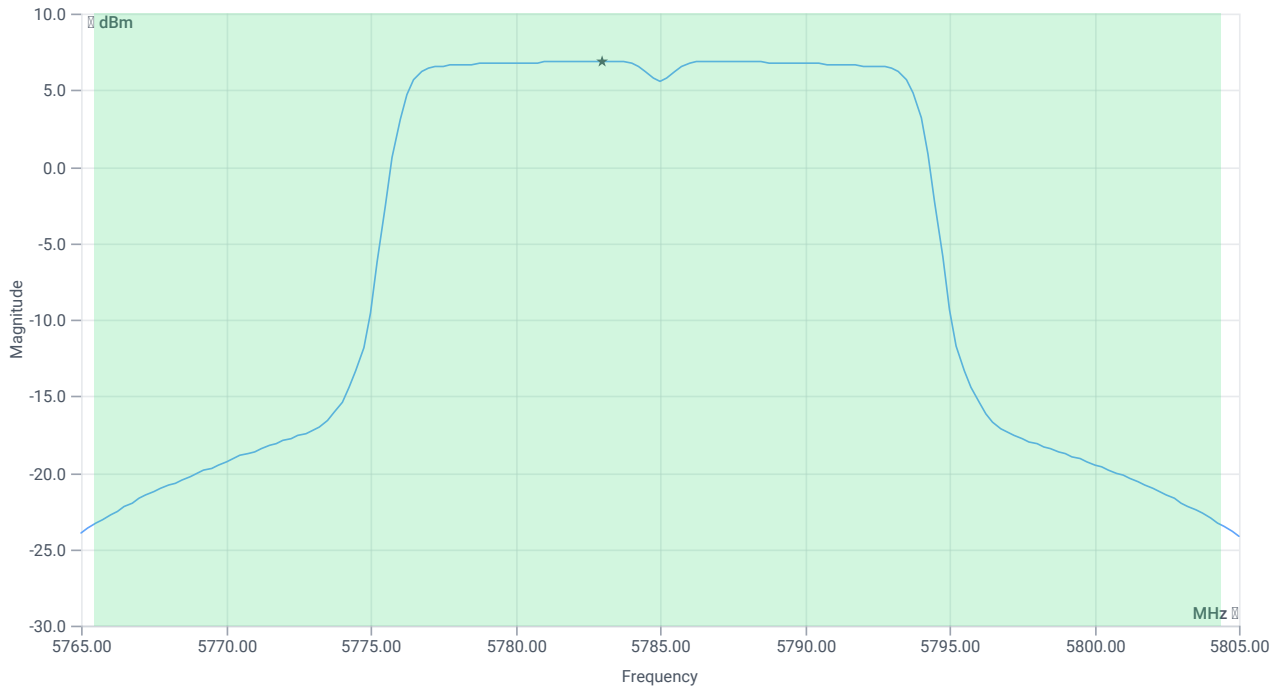
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	38.88	MHz	INFO
T1 26dB	---	---	5765.4800	MHz	INFO
T2 26dB	---	---	5804.3600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.20 16.7 25
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

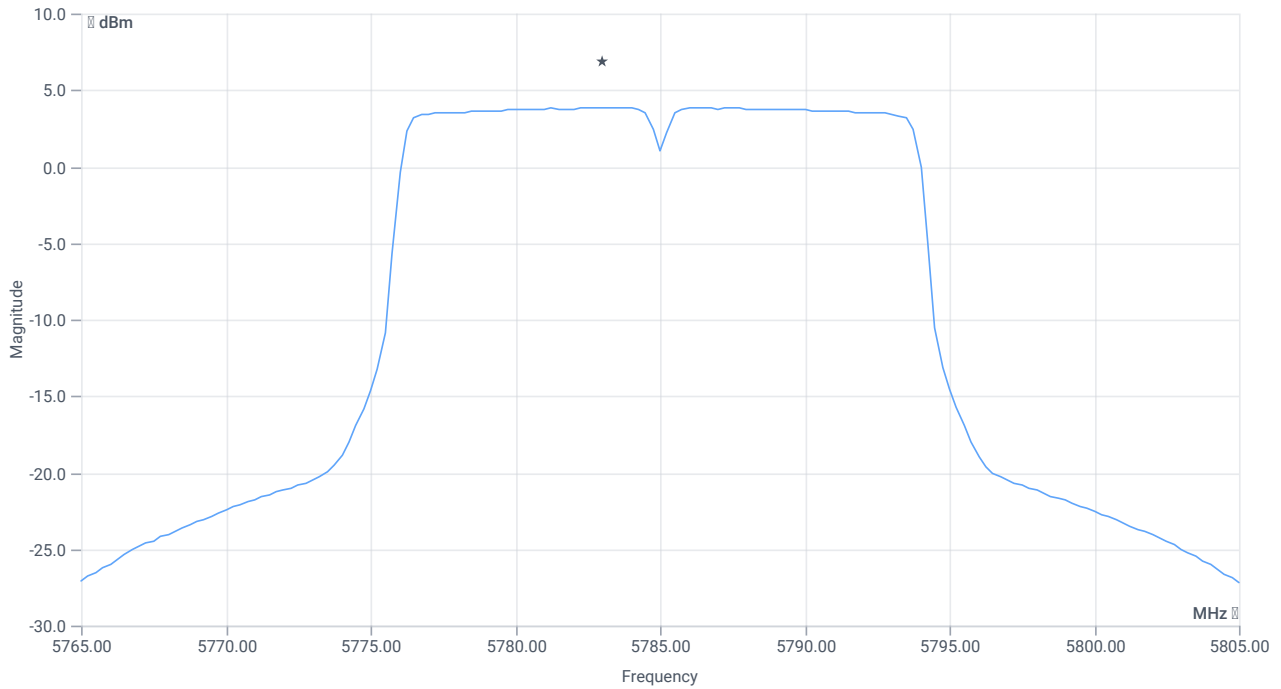
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.92	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.92	dBm	PASS
Limit: 11 dBm + 10 log 38.88					
Max Output Power DC corrected	--	26.9	18.92	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.20 16.7 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	3.85	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	3.85	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:07:21
Ambit temp [°C] humidity [rel%]	26.3 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

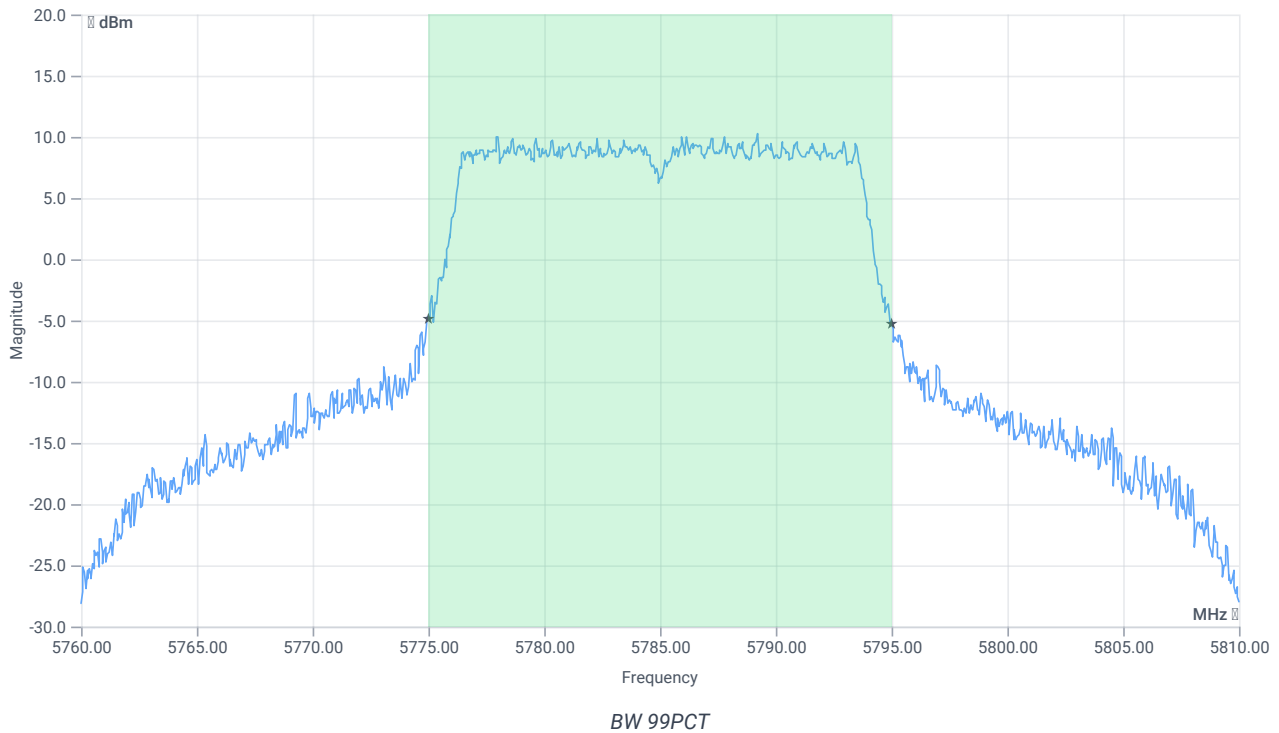
Test at TX 5785 MHz

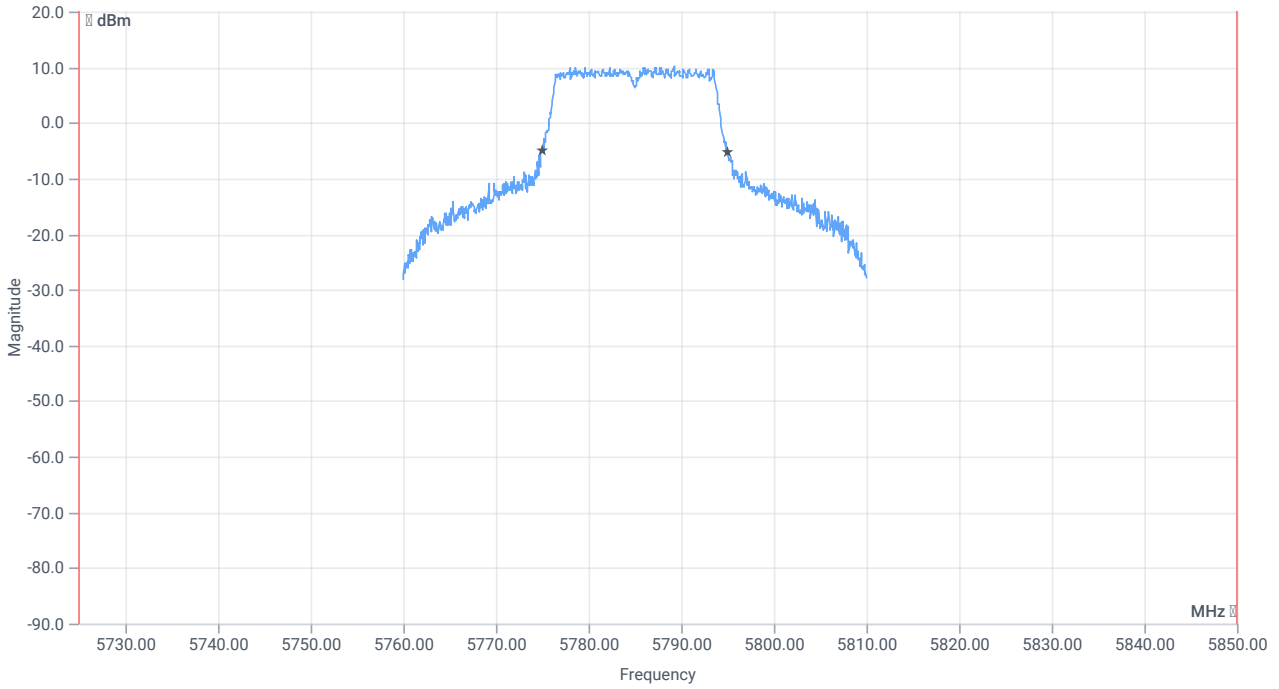
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.28	dBm	INFO
Ref. Frequency	--	--	5779.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.28 16.7 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

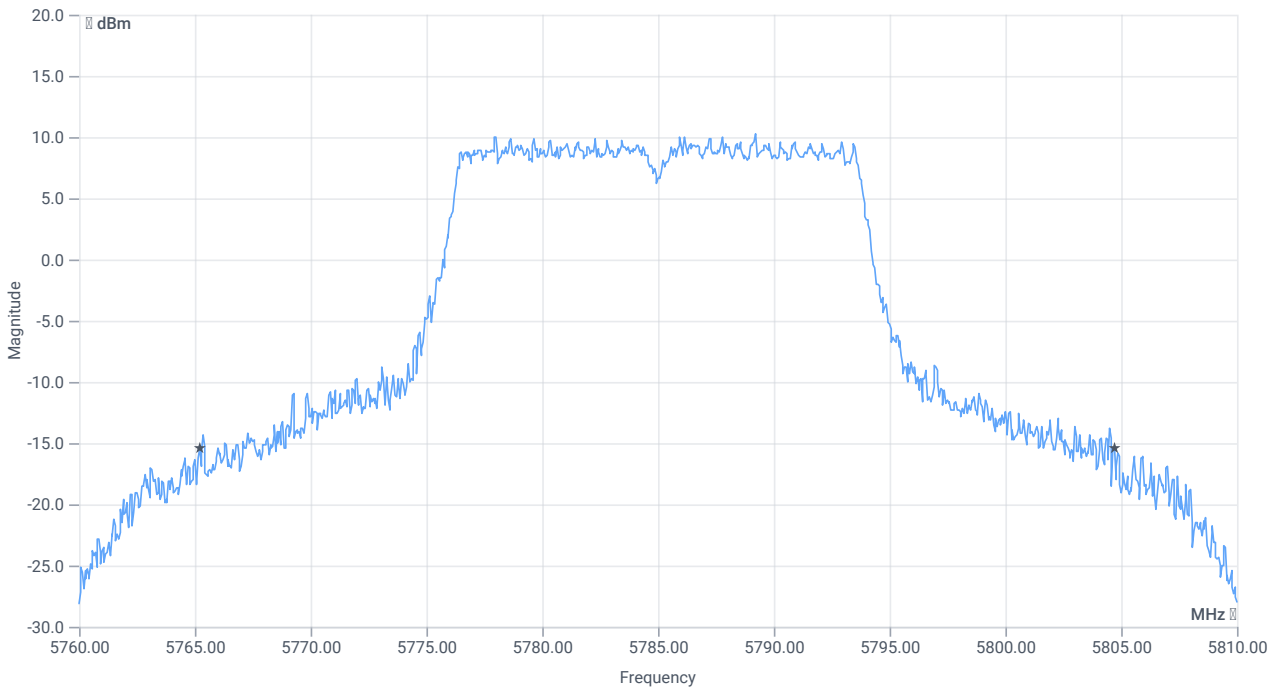




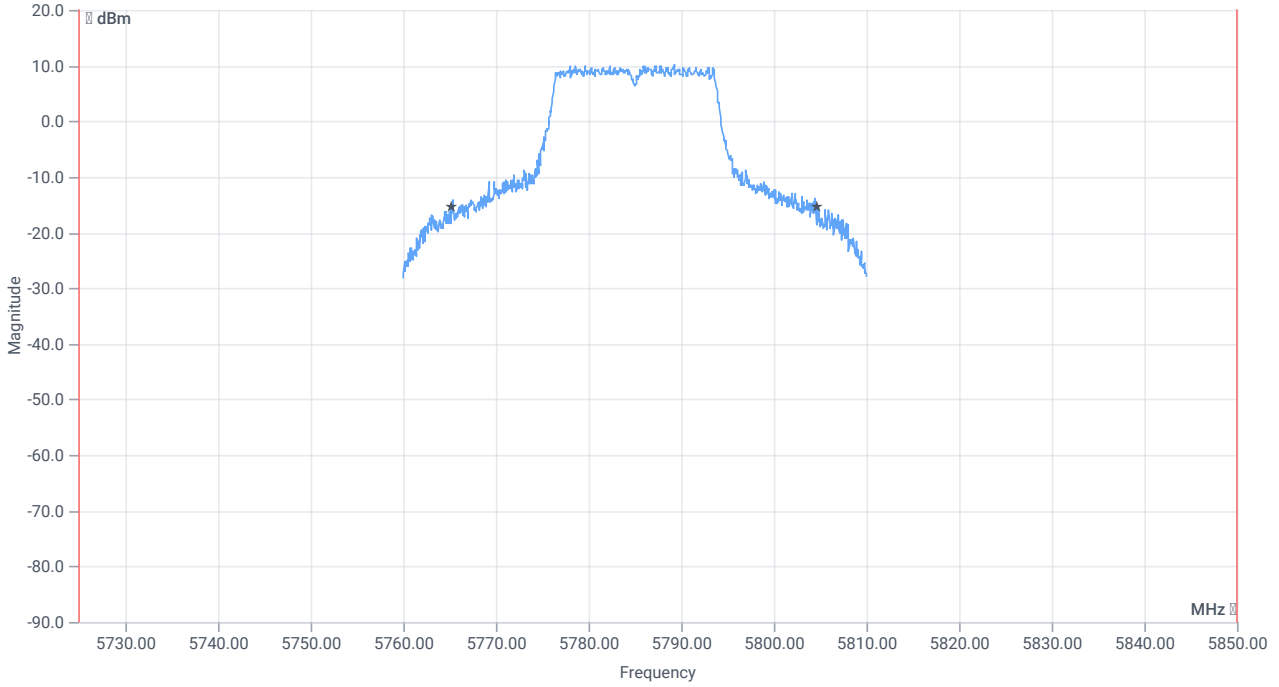
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.980	MHz	INFO
T1 99%	5725.000000	--	5775.0100	MHz	PASS
T2 99%	--	5850.000000	5794.9900	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	39.5	MHz	INFO
T1 26dB	5725.000000	--	5765.2000	MHz	PASS
T2 26dB	--	5850.000000	5804.7000	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:07:52
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

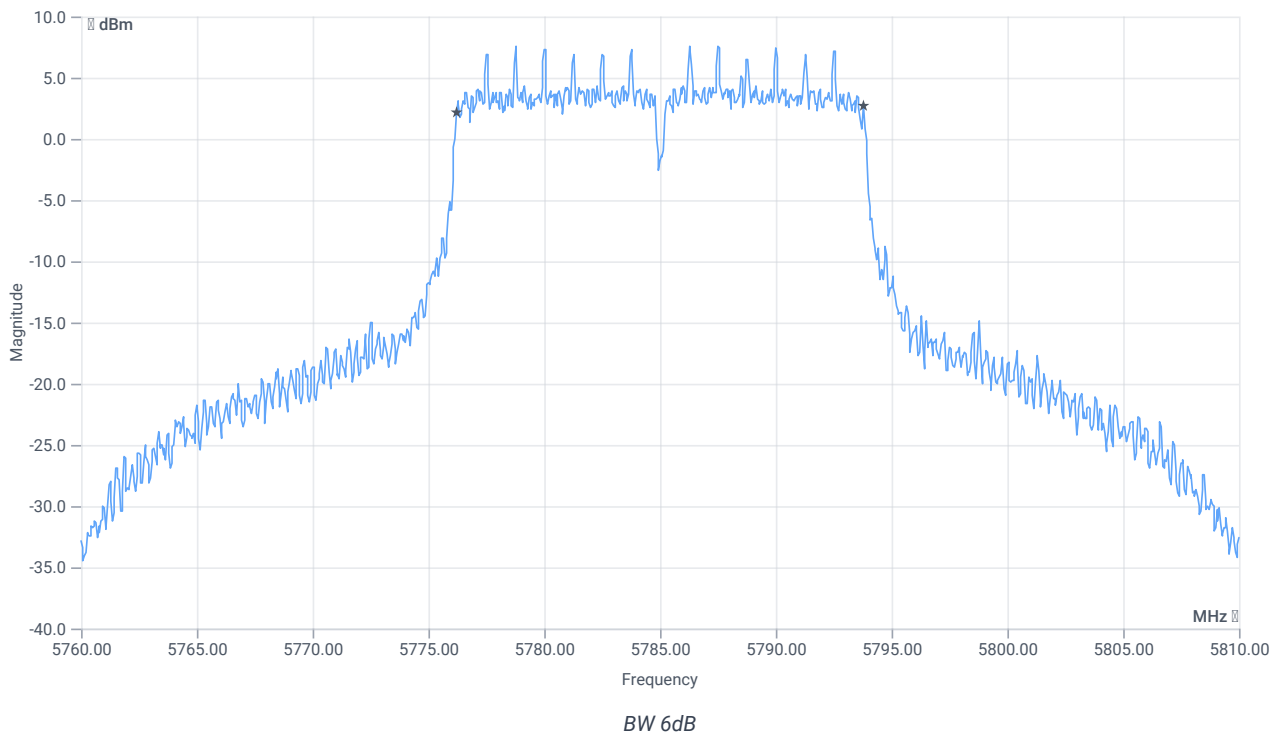
Test at TX 5785 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.81	dBm	INFO
Ref. Frequency	--	--	5790.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.81 16.7 30
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 10:08:39
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

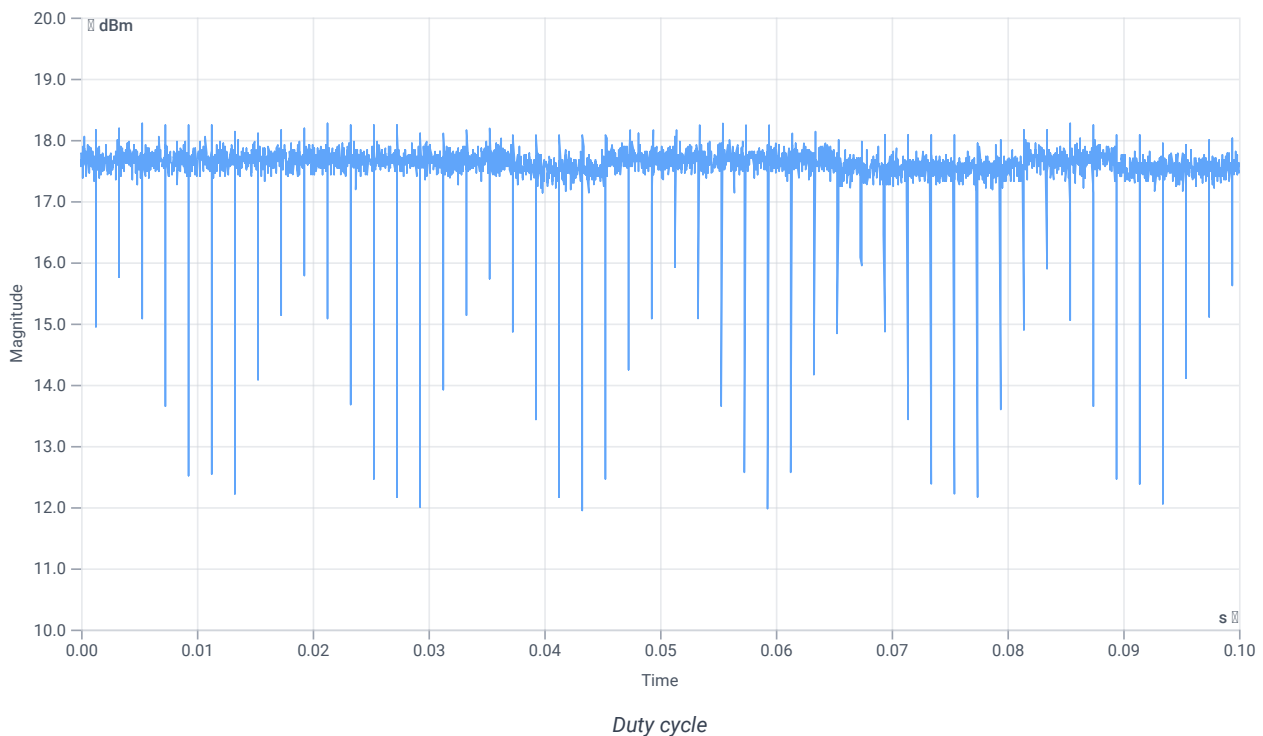
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.28	dBm	INFO
Ref. Frequency	--	--	5780.200	MHz	INFO

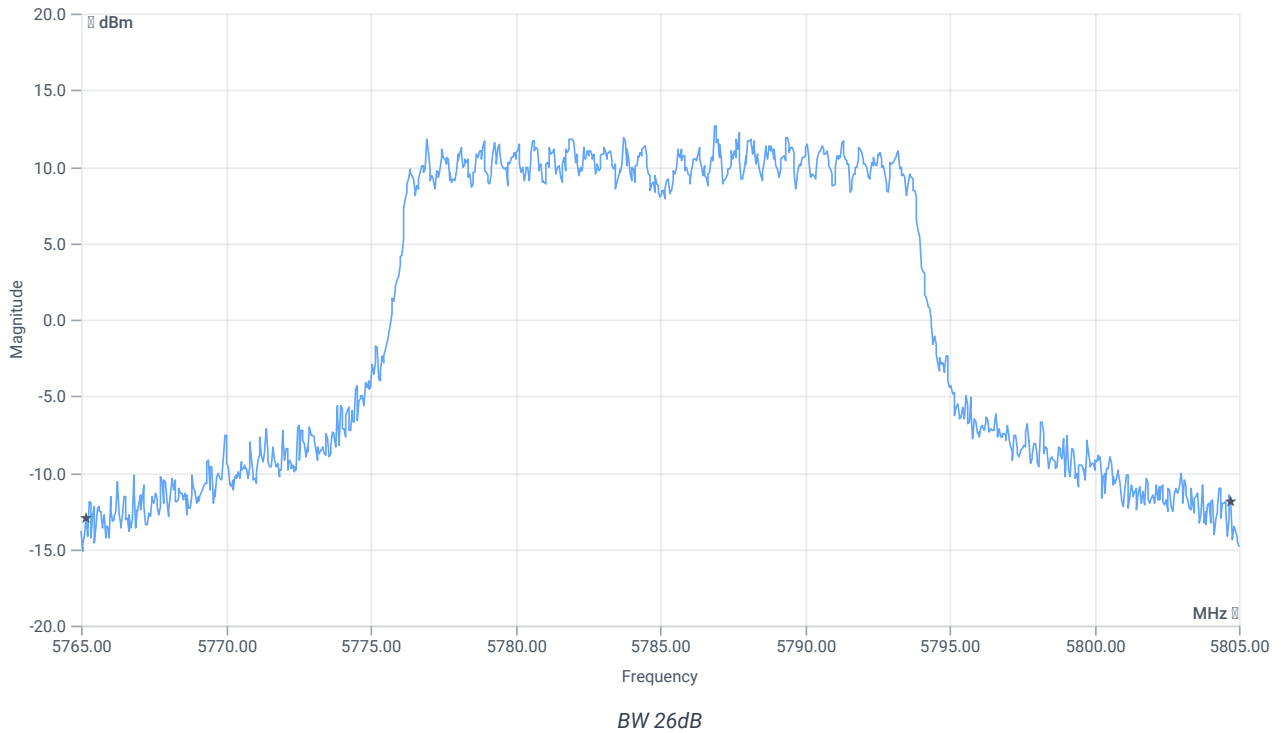
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



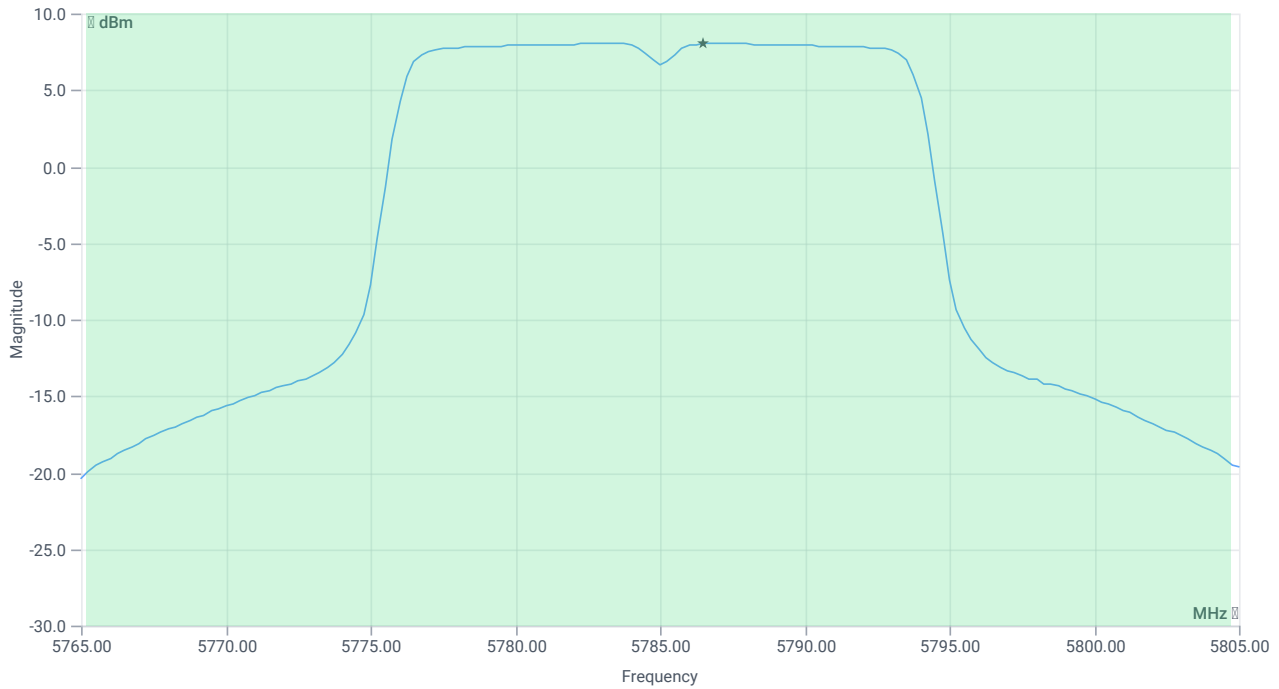
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.56	MHz	INFO
T1 26dB	---	---	5765.1600	MHz	INFO
T2 26dB	---	---	5804.7200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.28 16.7 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

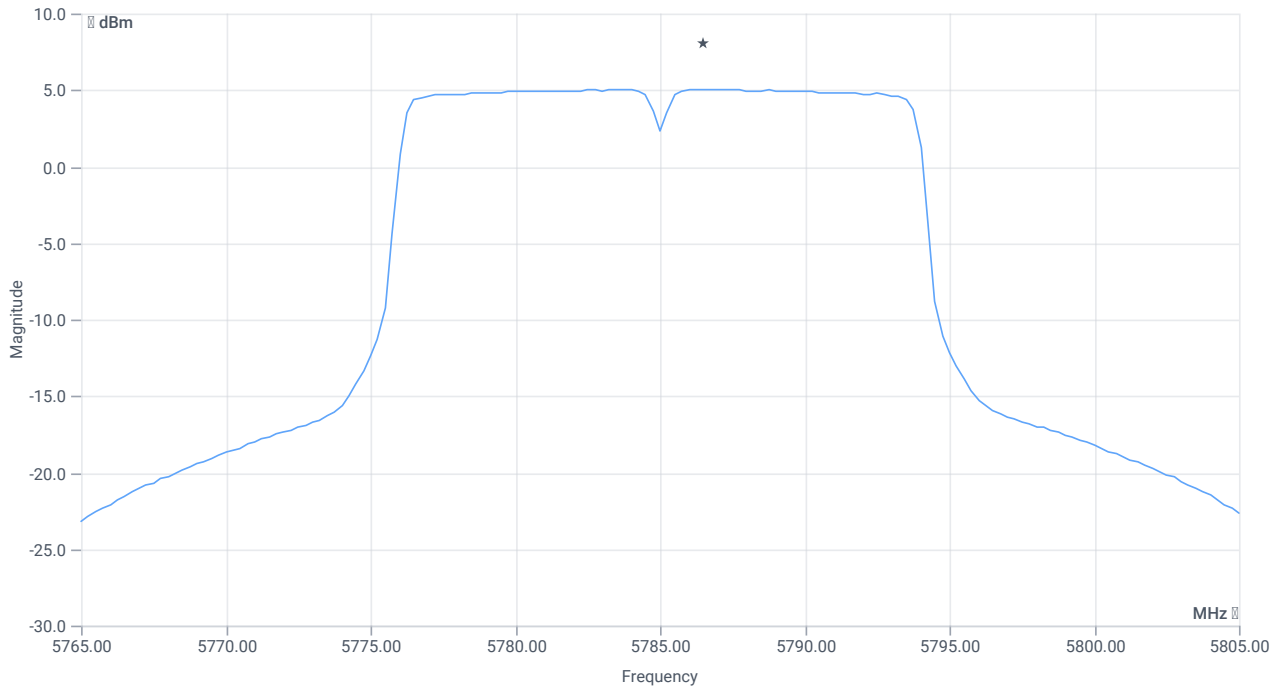
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	20.09	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	20.09	dBm	PASS
Limit: 11 dBm + 10 log 39.56					
Max Output Power DC corrected	--	26.97	20.09	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.28 16.7 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.05	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	5.05	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:11:03
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

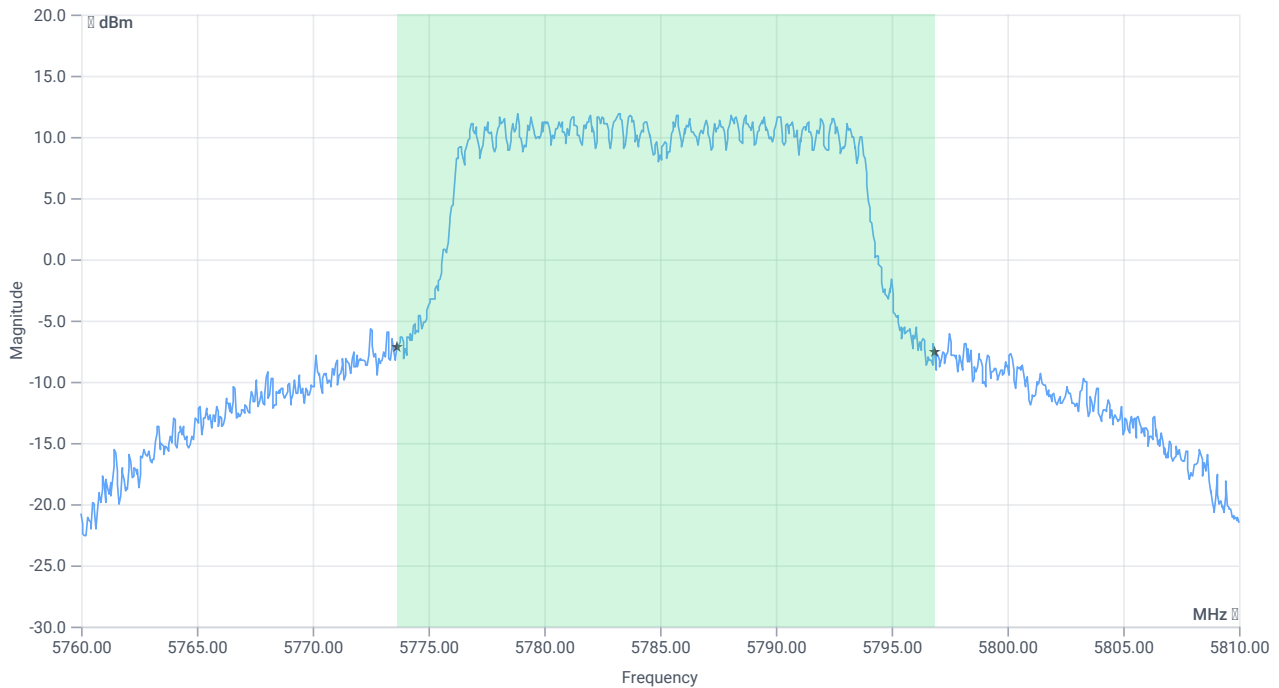
Test at TX 5785 MHz

RESULT: Reference Power cond.

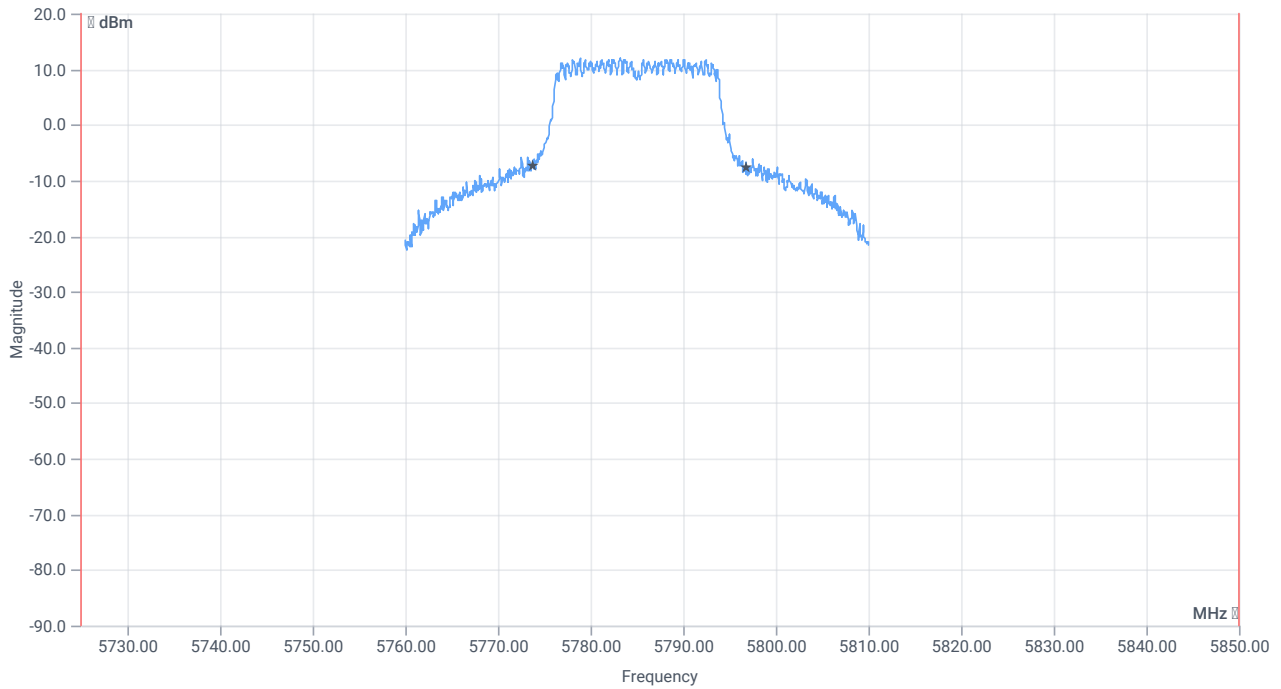
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.04	dBm	INFO
Ref. Frequency	--	--	5781.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.04 16.7 25
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



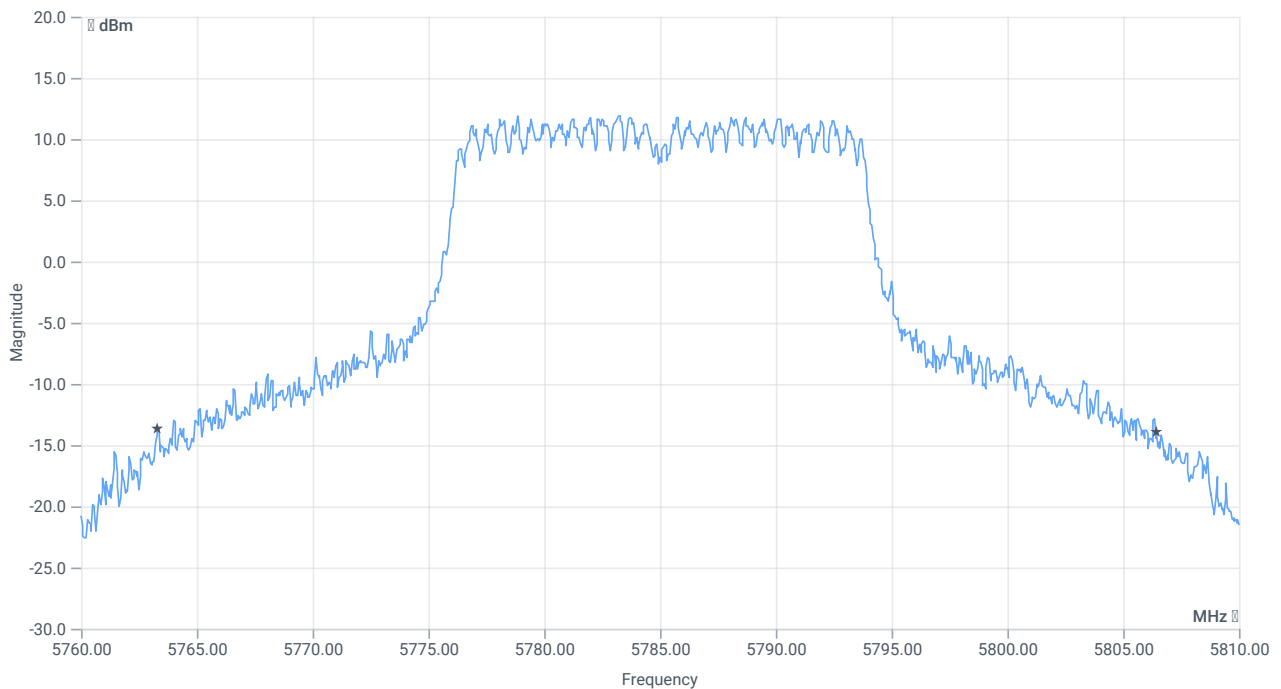
BW 99PCT



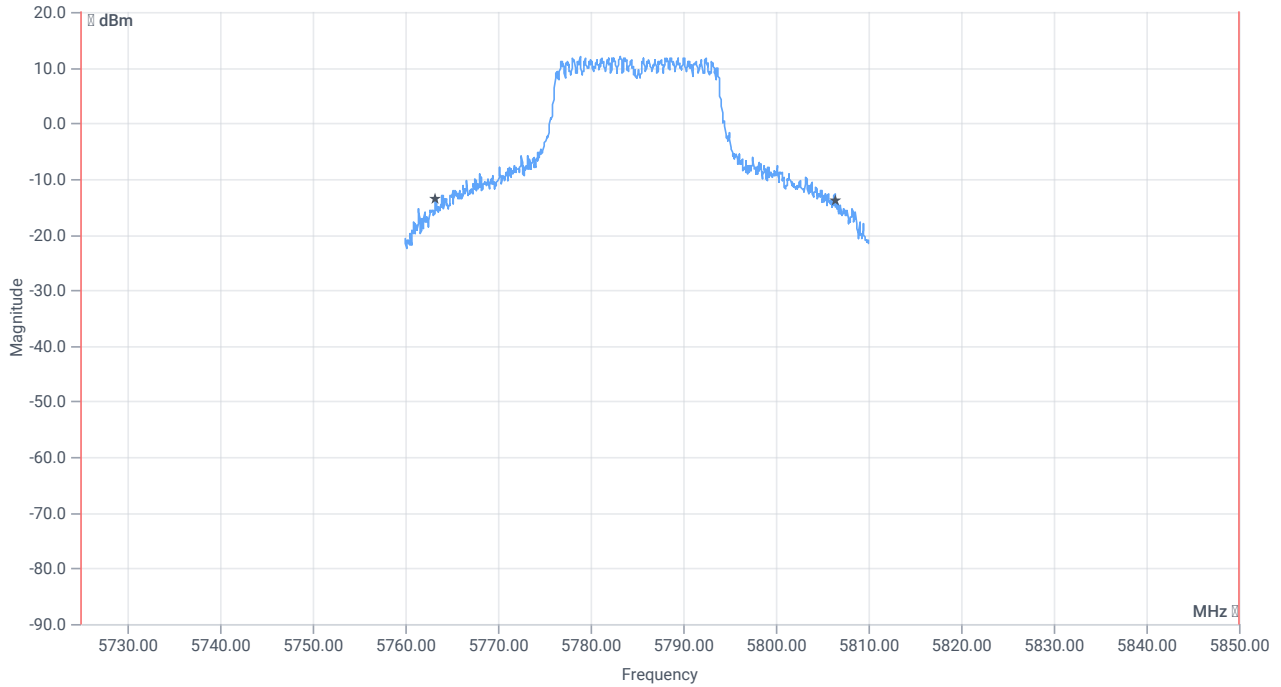
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	23.177	MHz	INFO
T1 99%	5725.000000	--	5773.6613	MHz	PASS
T2 99%	--	5850.000000	5796.8382	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	43.15	MHz	INFO
T1 26dB	5725.000000	--	5763.3000	MHz	PASS
T2 26dB	--	5850.000000	5806.4500	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:11:34
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

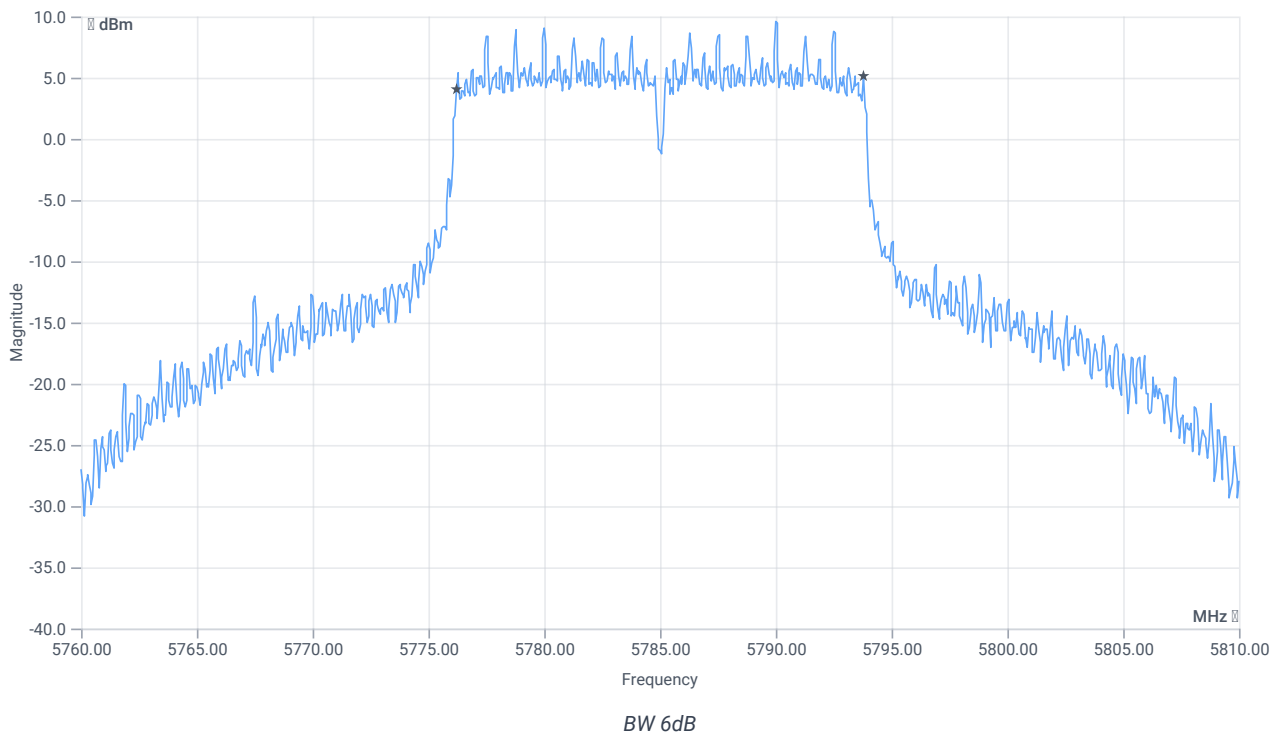
Test at TX 5785 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.73	dBm	INFO
Ref. Frequency	--	--	5781.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.73 16.7 30
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	11.07.2023 10:12:20
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan ac_VHT20_U_NII_3
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	11.07.2023 10:12:21
Message	set WLAN5Gx to ac_VHT20_U_NII_3, Frequency [MHz] 5825

Equipment

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

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 10:14:54
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F., E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

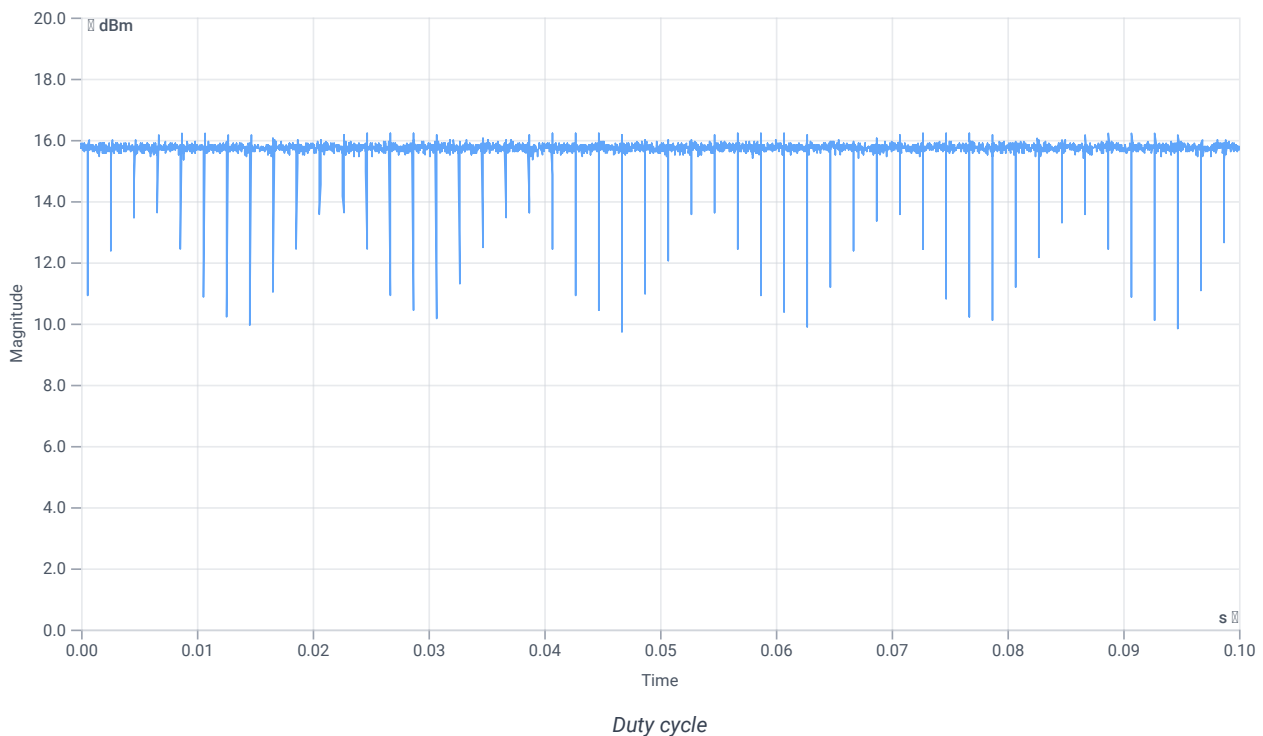
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.41	dBm	INFO
Ref. Frequency	--	--	5830.390	MHz	INFO

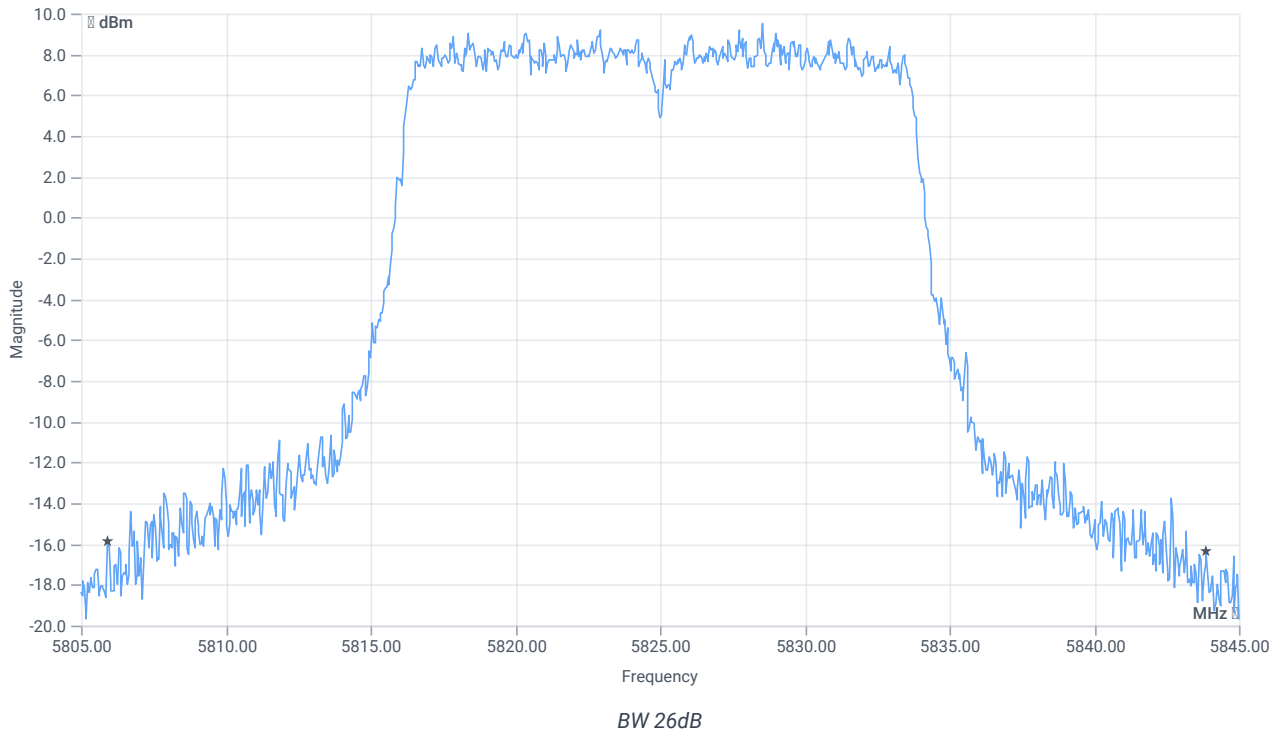
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



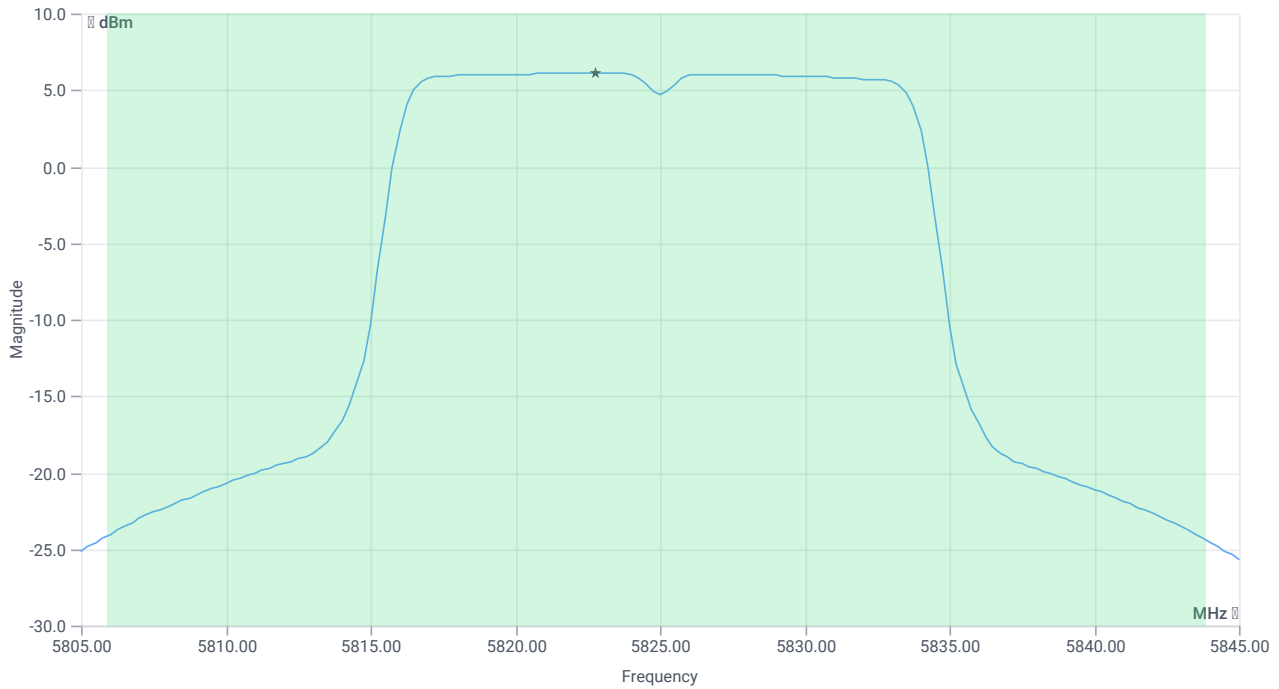
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	37.96	MHz	INFO
T1 26dB	---	---	5805.9200	MHz	INFO
T2 26dB	---	---	5843.8800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.41 16.68 25
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

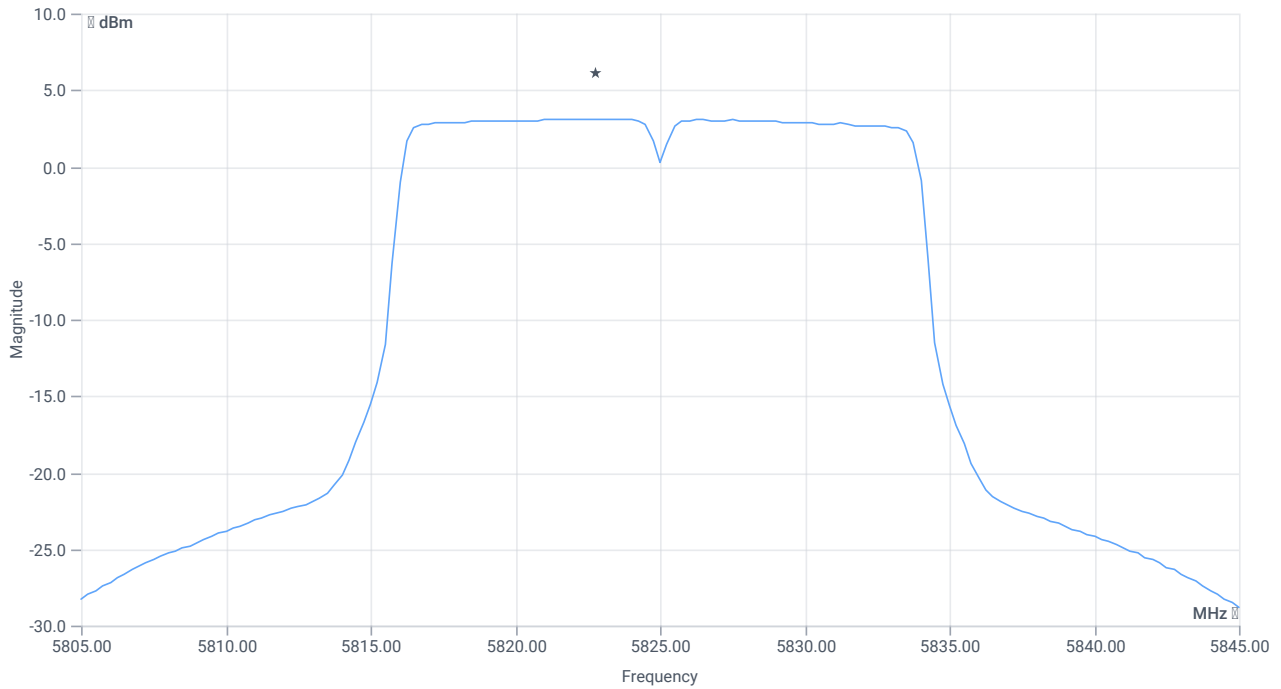
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	18.13	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.13	dBm	PASS
Limit: 11 dBm + 10 log 37.96					
Max Output Power DC corrected	--	26.79	18.13	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.41 16.68 25
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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	3.1	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	3.1	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:17:18
Ambit temp [°C] humidity [rel%]	26.4 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

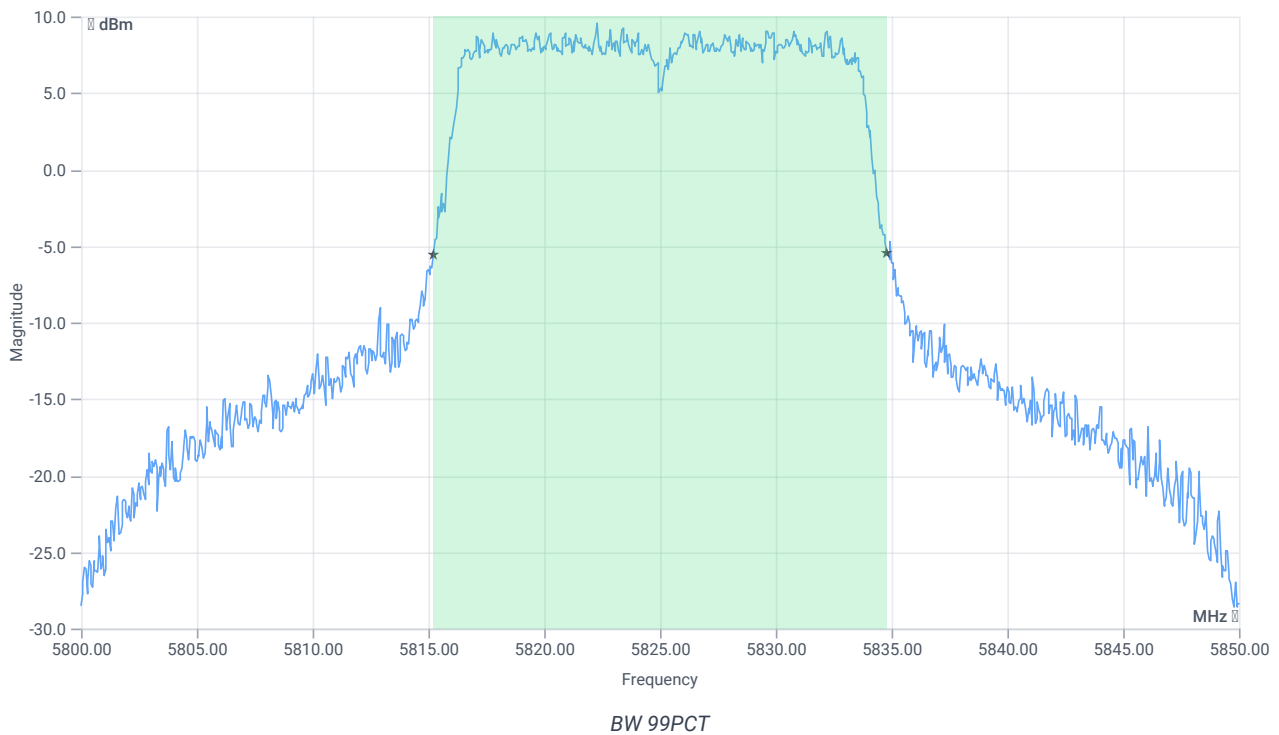
Test at TX 5825 MHz

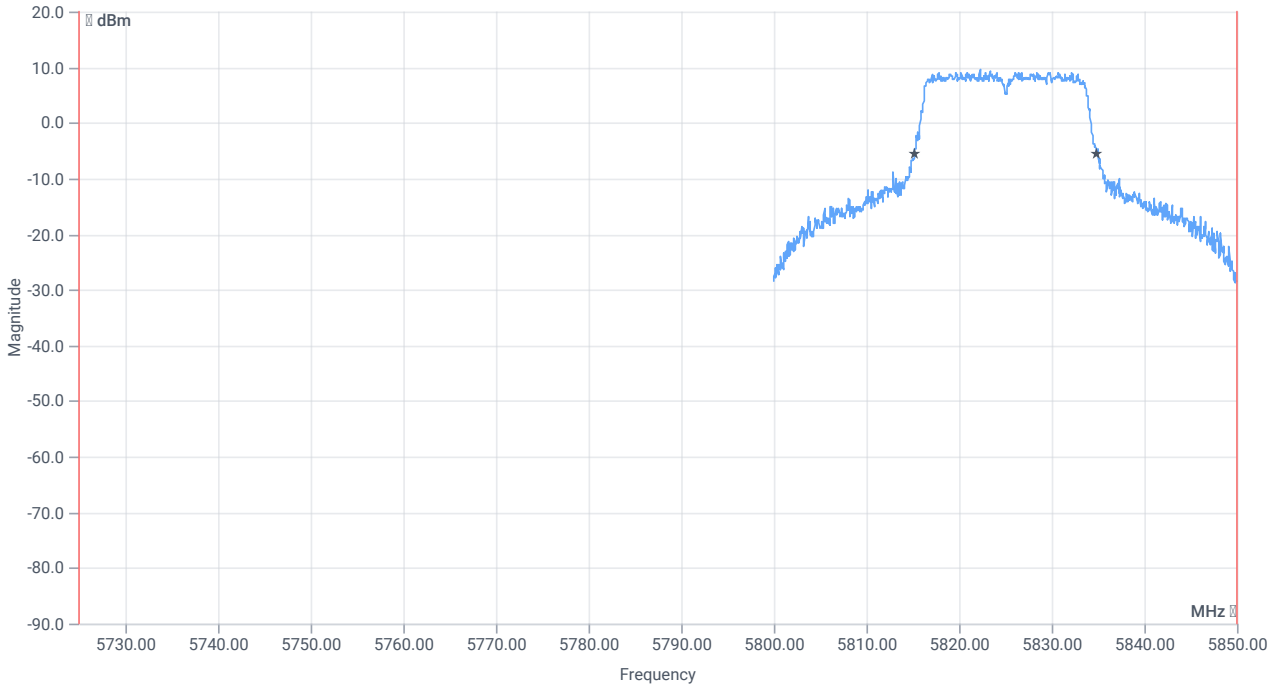
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.83	dBm	INFO
Ref. Frequency	--	--	5819.810	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.83 16.68 25
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

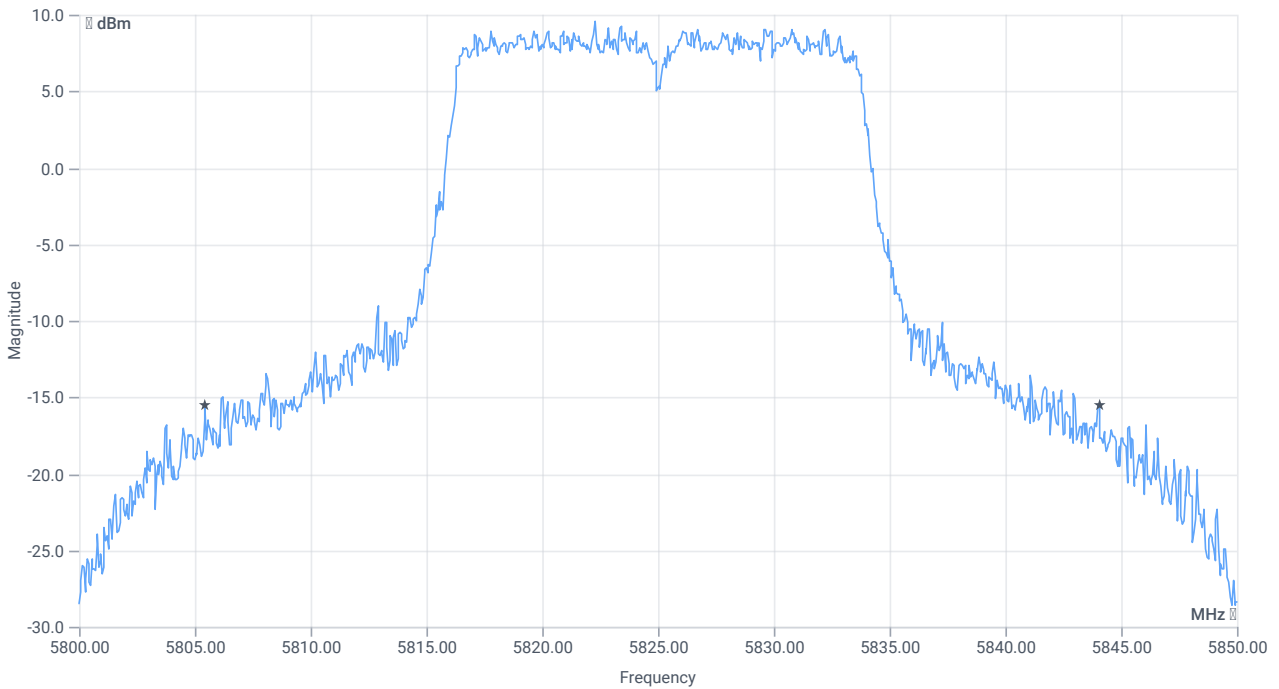




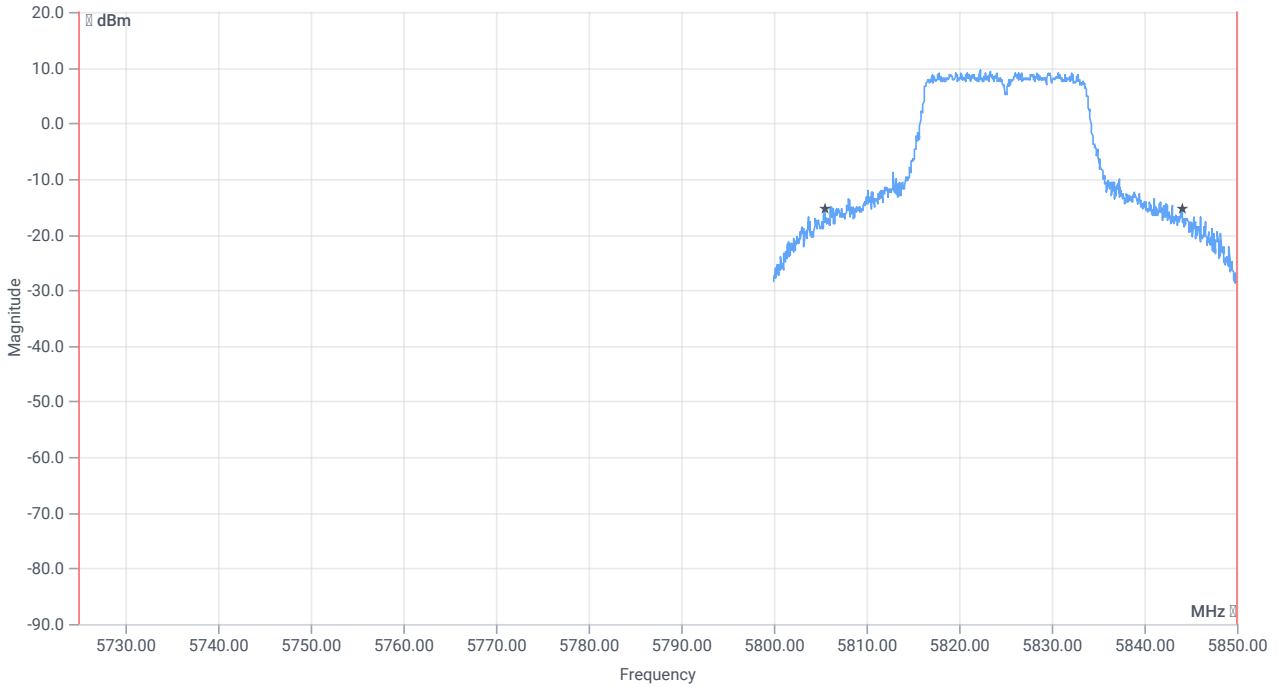
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	19.580	MHz	INFO
T1 99%	5725.000000	--	5815.2098	MHz	PASS
T2 99%	--	5850.000000	5834.7902	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	38.6	MHz	INFO
T1 26dB	5725.000000	--	5805.4500	MHz	PASS
T2 26dB	--	5850.000000	5844.0500	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:17:55
Ambit temp [°C] humidity [rel%]	26.5 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

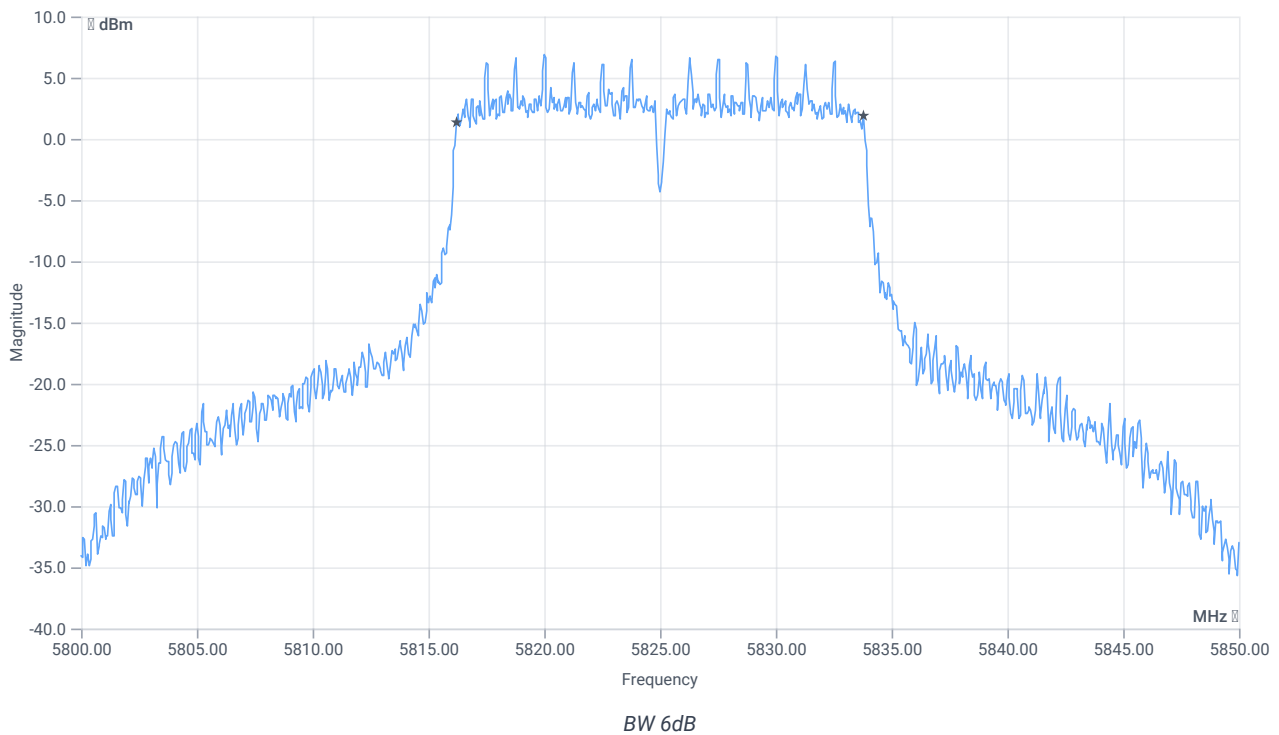
Test at TX 5825 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.14	dBm	INFO
Ref. Frequency	--	--	5828.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.14 16.68 25
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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 10:18:31
Ambit temp [°C] humidity [rel%]	26.5 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

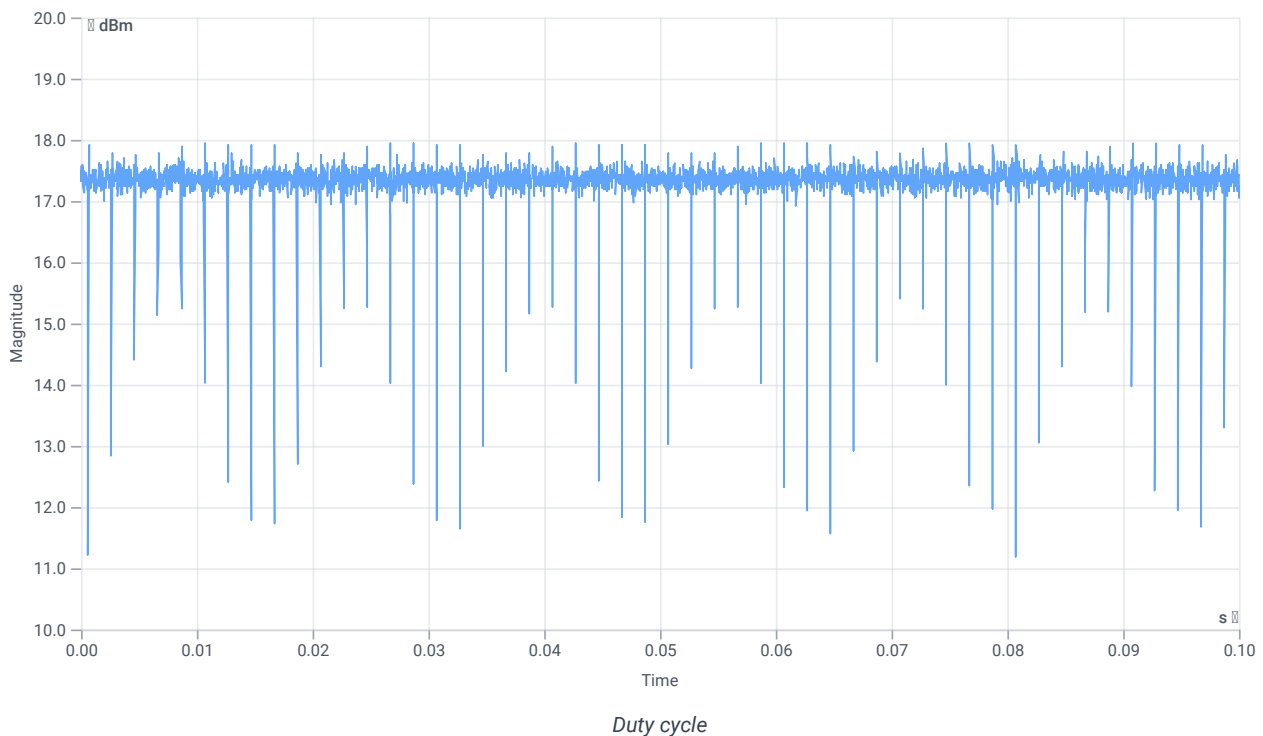
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.99	dBm	INFO
Ref. Frequency	--	--	5826.600	MHz	INFO

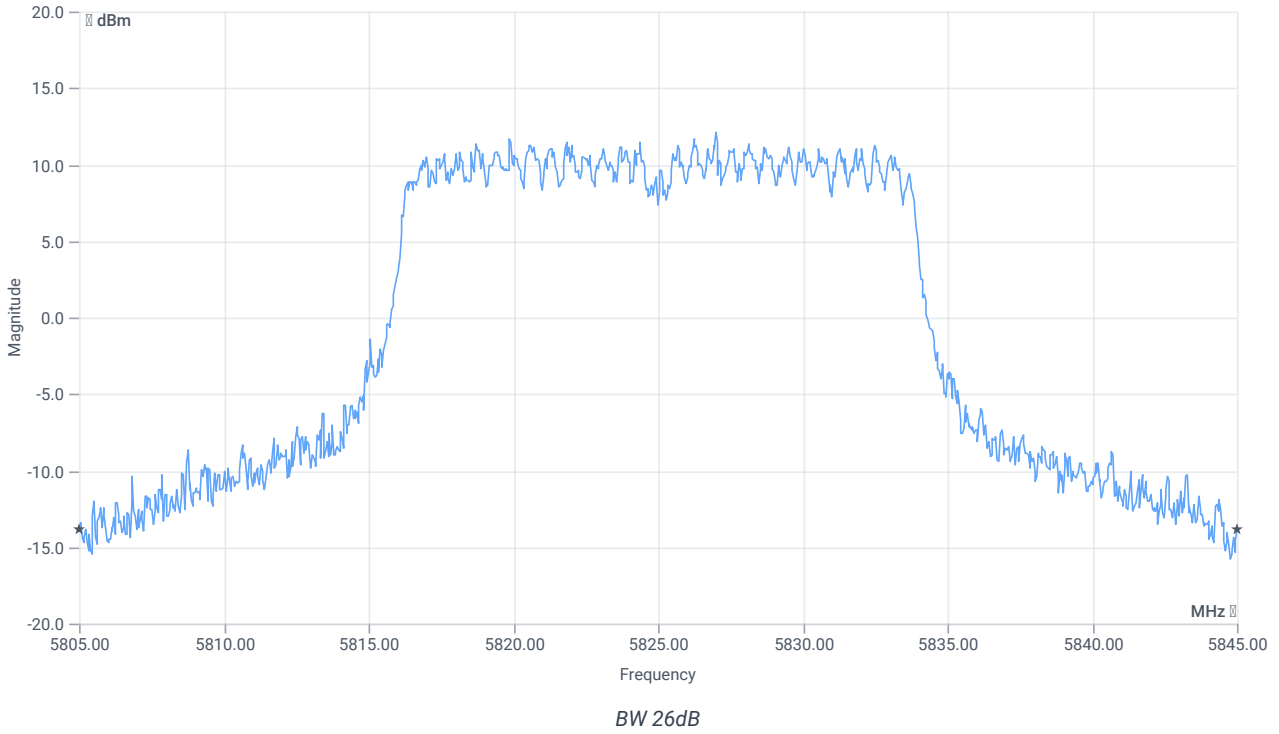
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



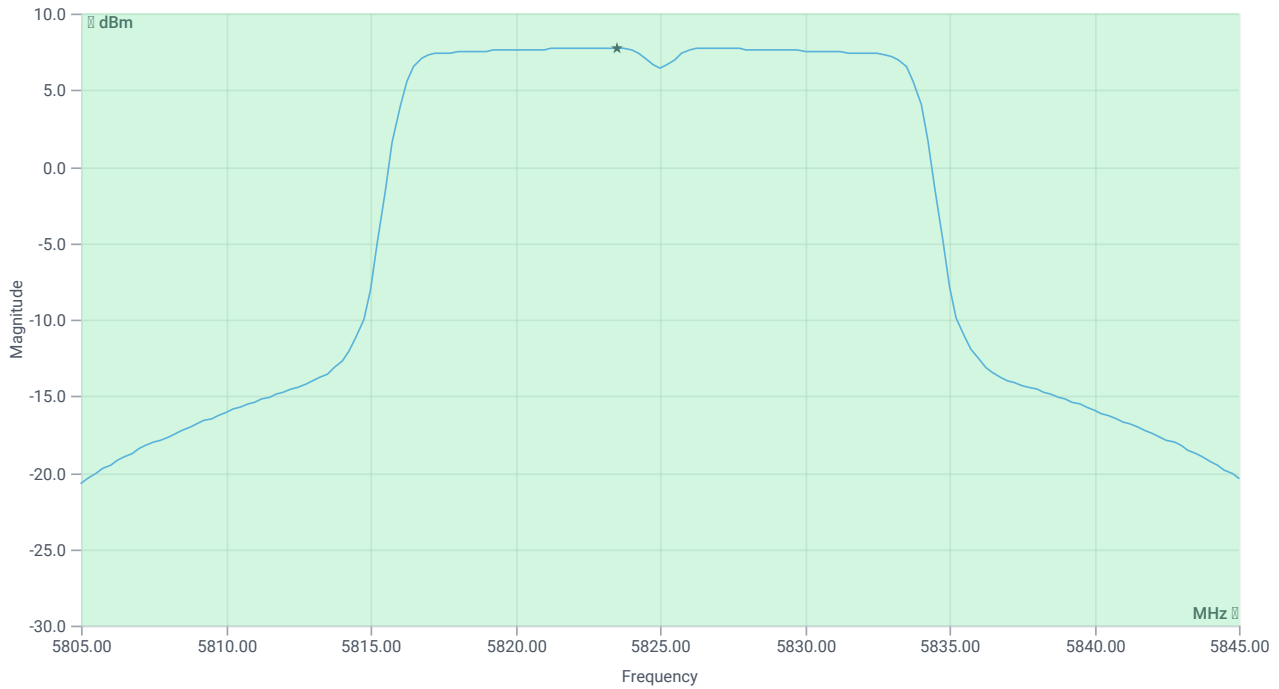
RESULT

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]	27.99 16.68 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

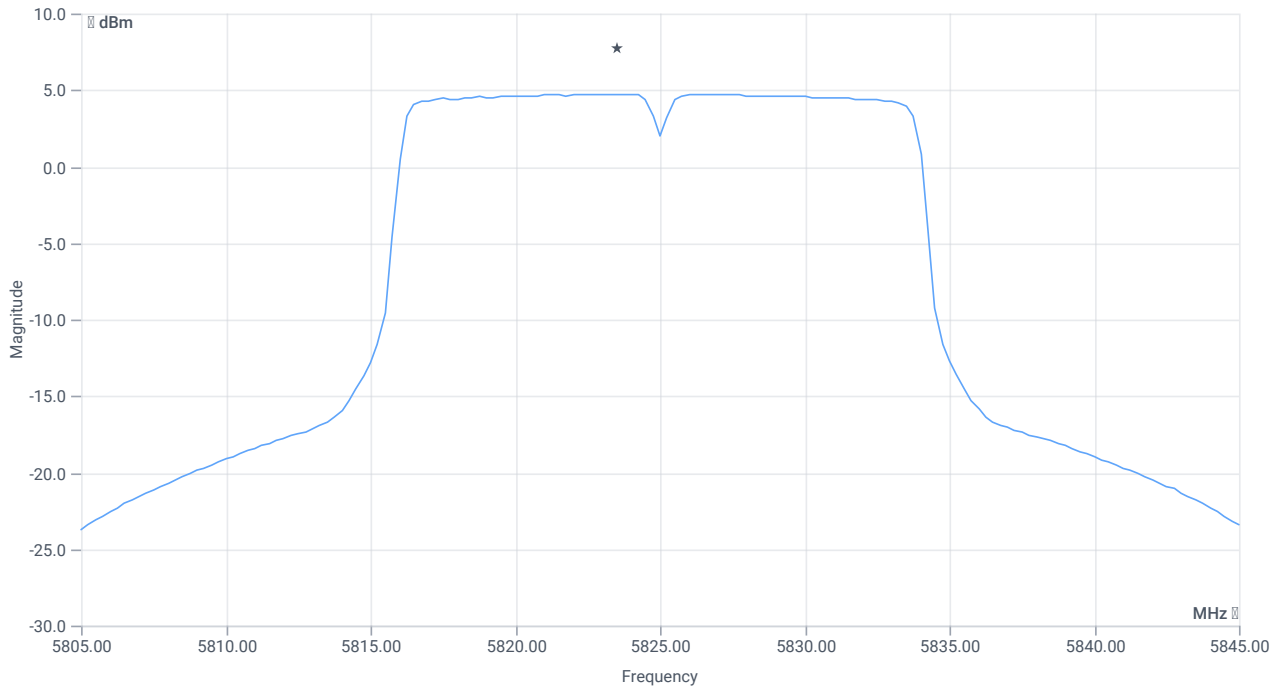
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.79	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	19.79	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	19.79	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.99 16.68 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	4.74	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	4.74	dBm/0.5MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:20:55
Ambit temp [°C] humidity [rel%]	26.5 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

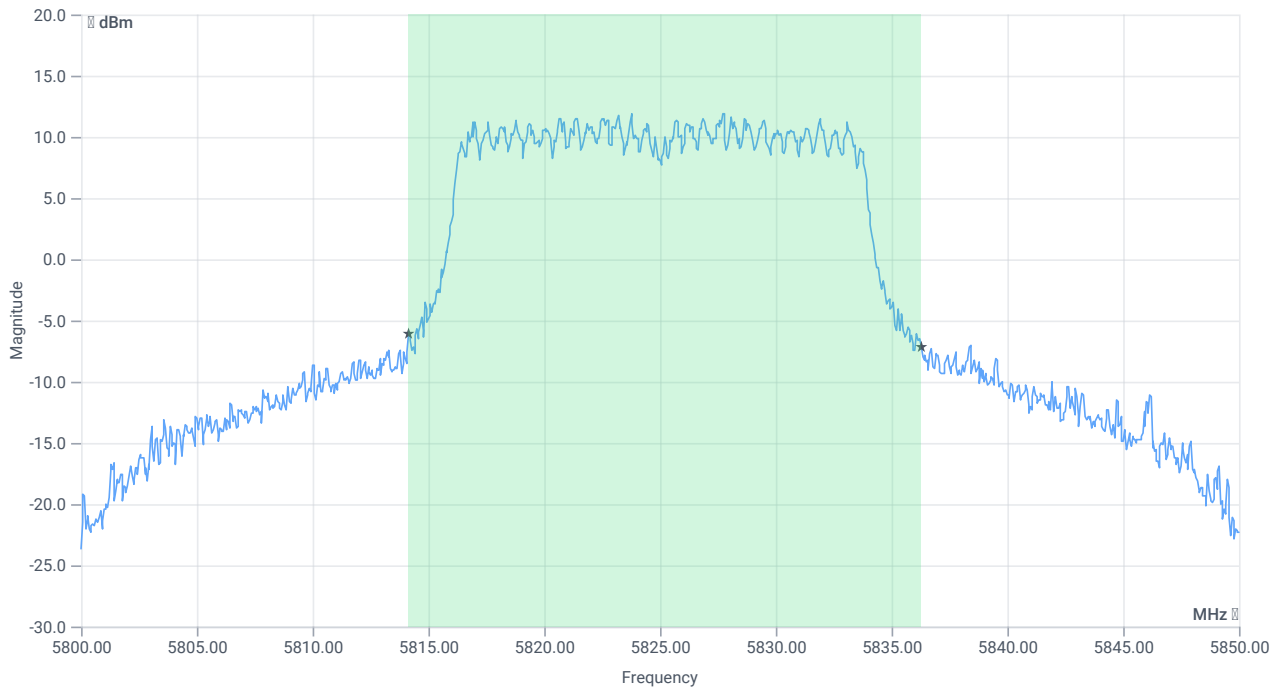
Test at TX 5825 MHz

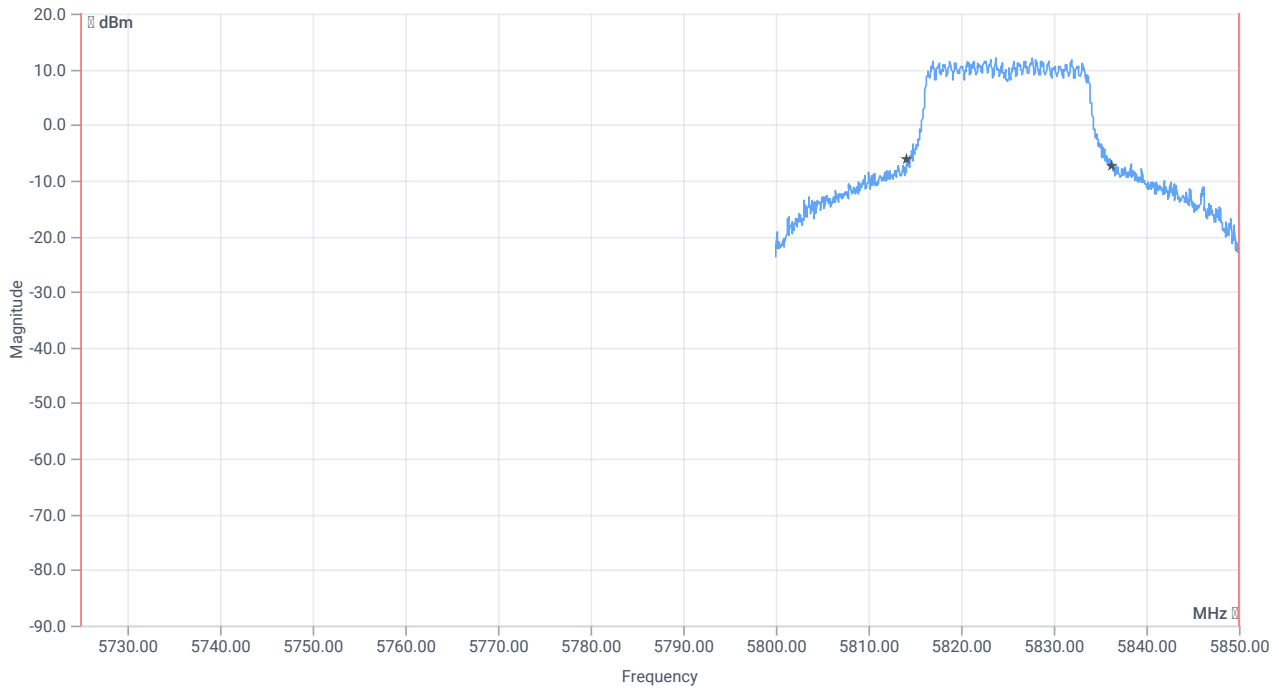
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.65	dBm	INFO
Ref. Frequency	--	--	5823.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.65 16.68 25
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

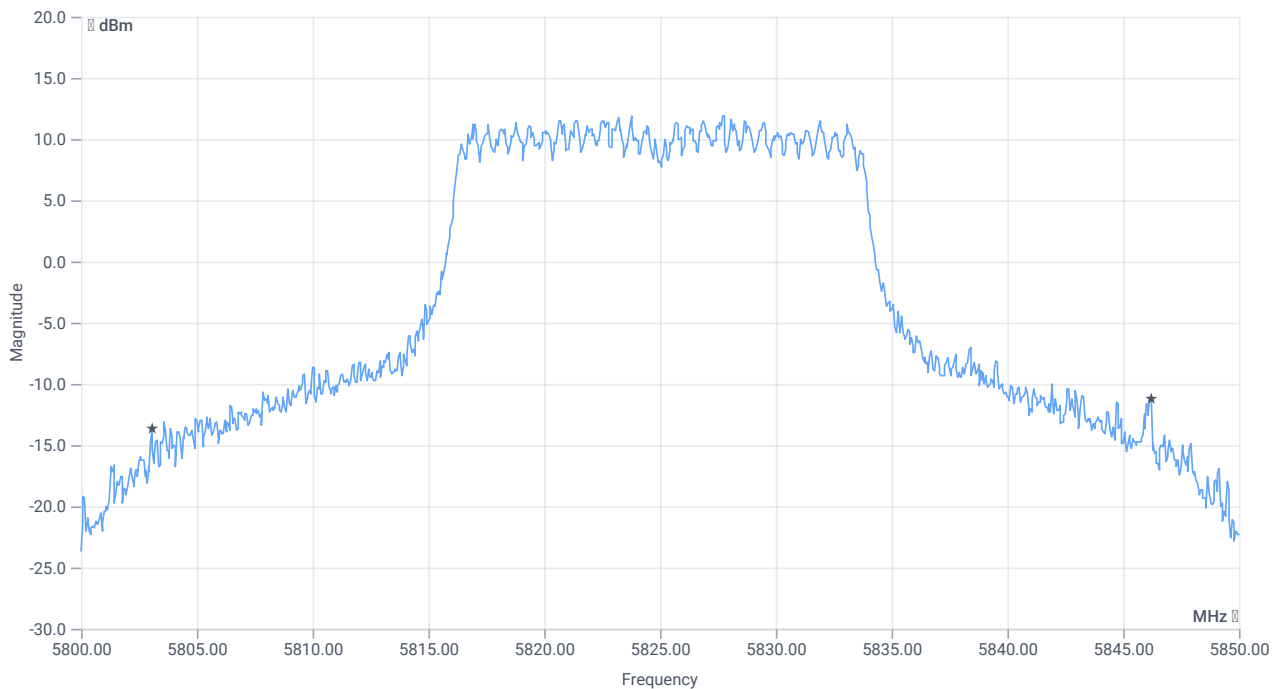




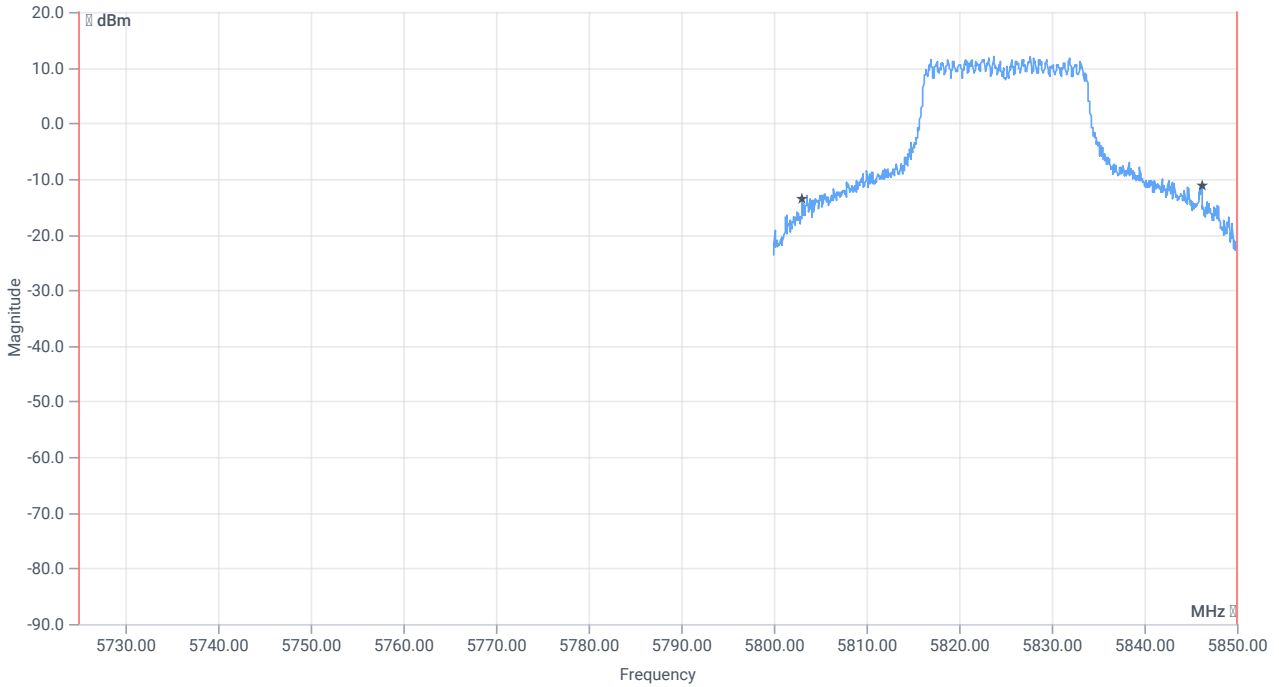
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	22.128	MHz	INFO
T1 99%	5725.000000	--	5814.1608	MHz	PASS
T2 99%	--	5850.000000	5836.2887	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	--	--	43.15	MHz	INFO
T1 26dB	5725.000000	--	5803.0500	MHz	PASS
T2 26dB	--	5850.000000	5846.2000	MHz	PASS

Verdict

PASS

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

References

TC start	11.07.2023 10:21:32
Ambit temp [°C] humidity [rel%]	26.5 46
System version	4.6.0.0
Specification	FCC 15.407, ISED RSS247 -
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

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

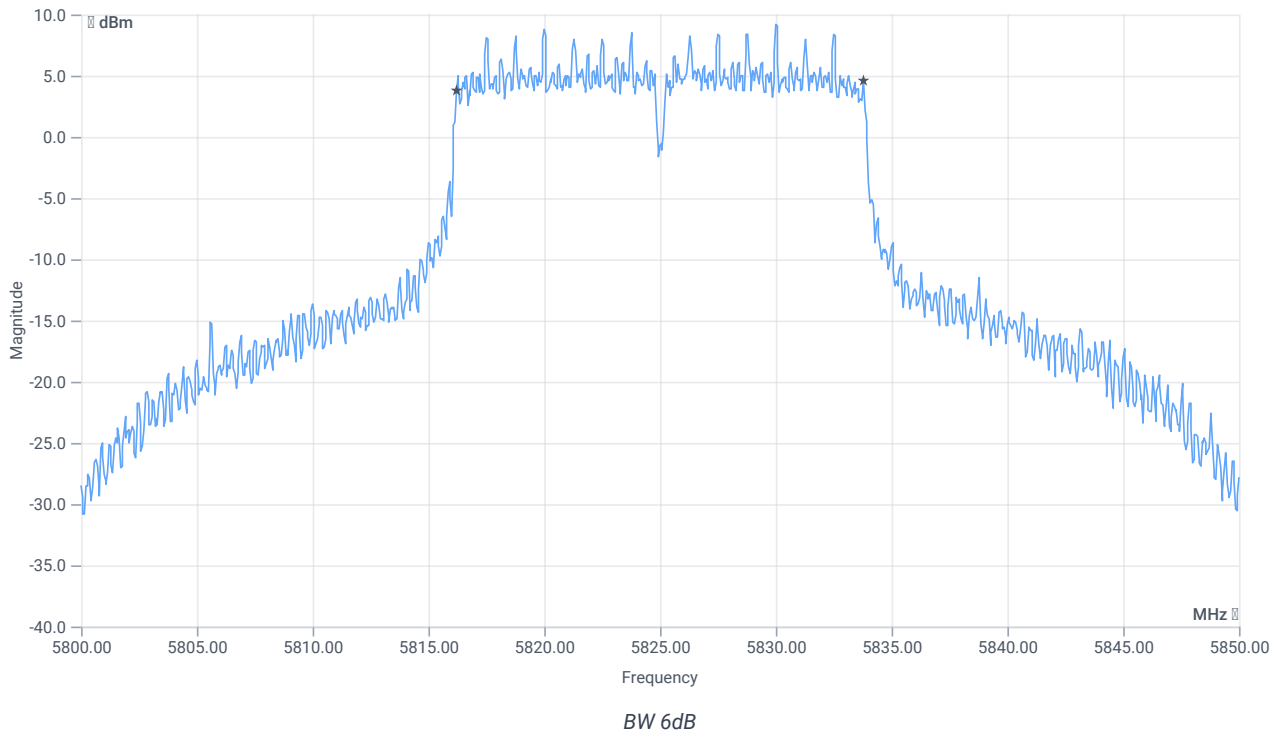
Test at TX 5825 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	16.48	dBm	INFO
Ref. Frequency	--	--	5824.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.48 16.68 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



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth (6dB)	0.500	--	17.6	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	11.07.2023 10:28:39
Ambit temp [°C] humidity [rel%]	26.6 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	EUT - SignalingUnit - SpectrumAnalyzer

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

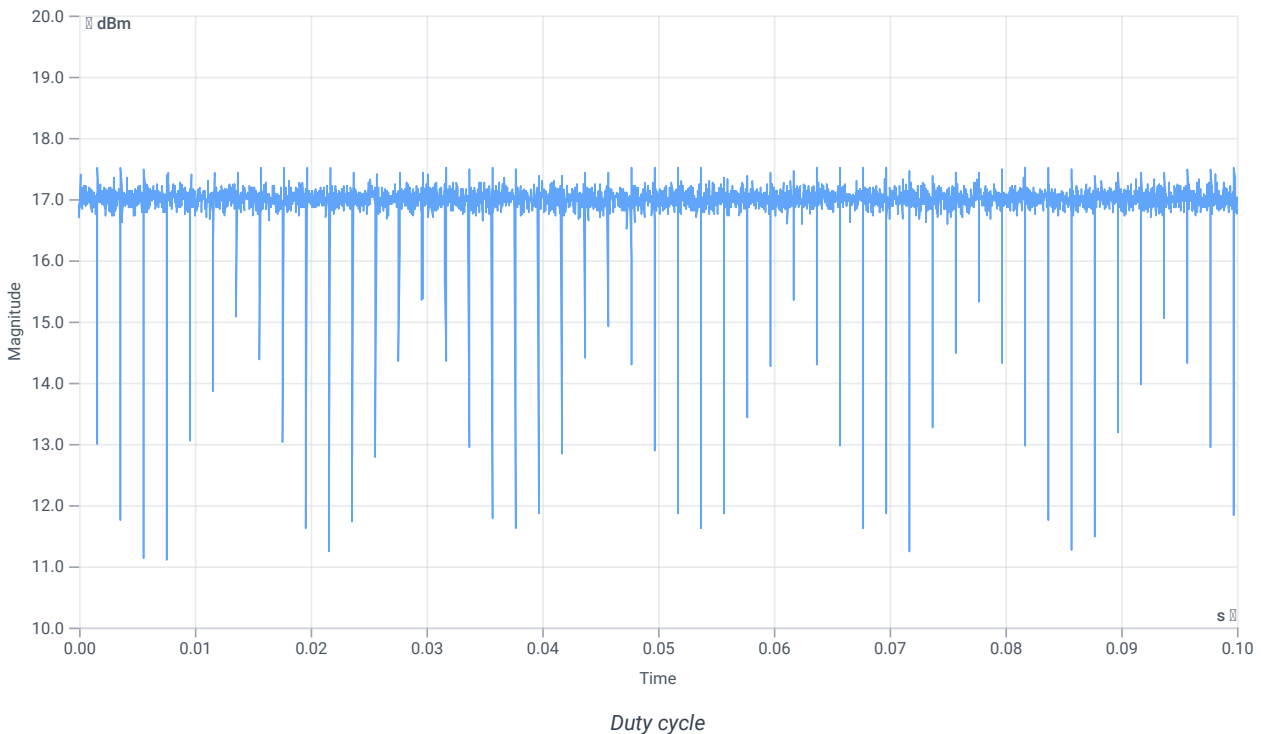
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	15.87	dBm	INFO
Ref. Frequency	--	--	5236.800	MHz	INFO

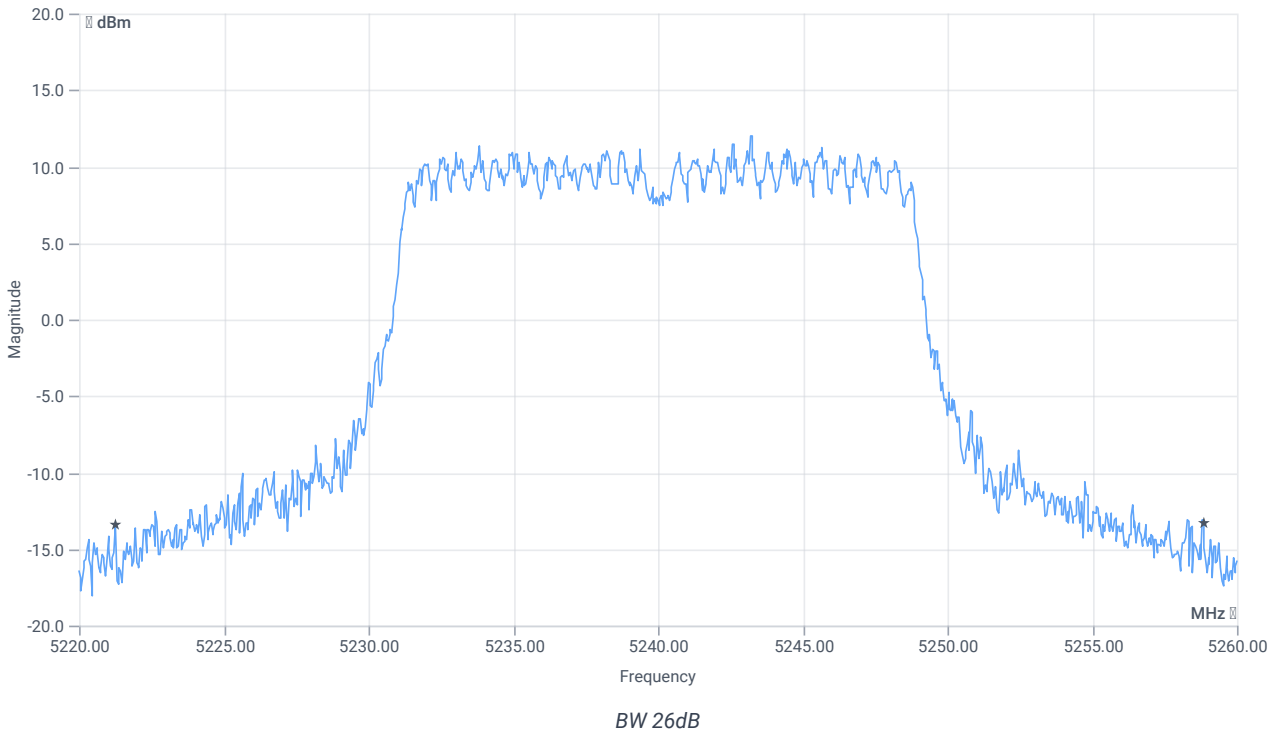
Evaluation max. Duty Cycle

Duty Cycle evaluation

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



Evaluation Bandwidth



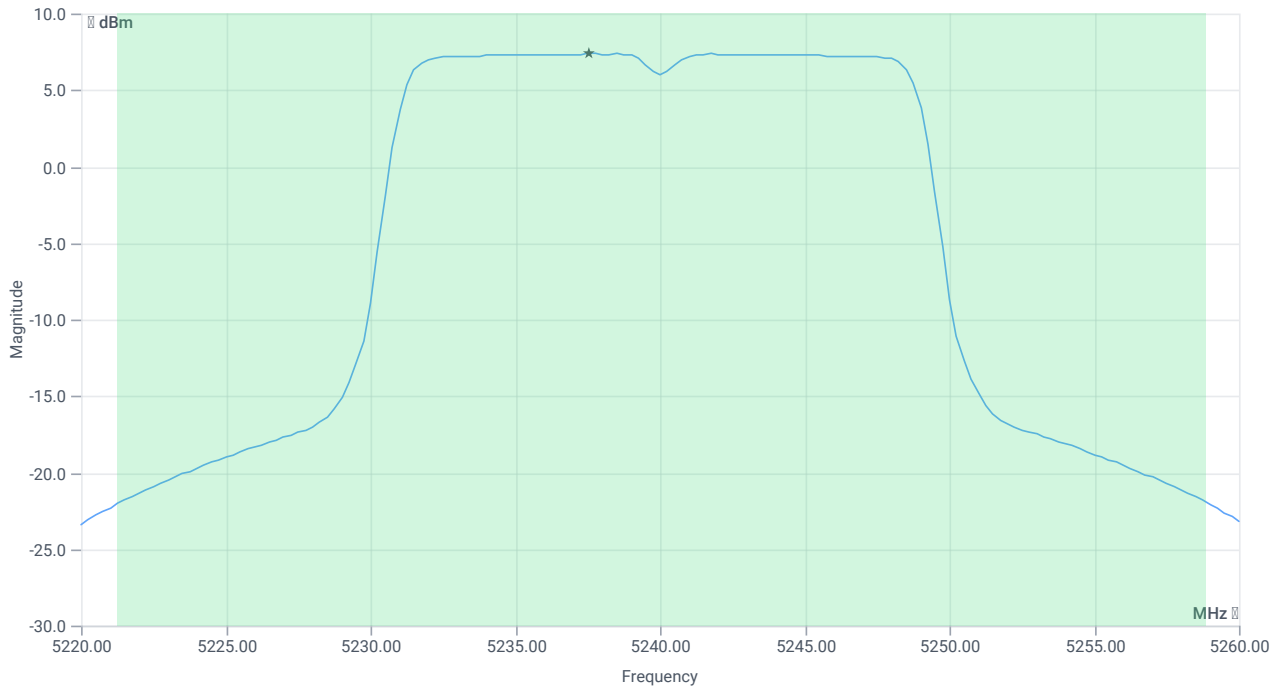
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	37.6	MHz	INFO
T1 26dB	---	---	5221.2400	MHz	INFO
T2 26dB	---	---	5258.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.87 16.37 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

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	19.45	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	19.45	dBm	PASS
Limit: 11 dBm + 10 log 37.6					
Max Output Power DC corrected	--	26.75	19.45	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	7.36	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	7.36	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	11.07.2023 10:30:14
Ambit temp [°C] humidity [rel%]	26.7 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5180
Frequency mid to test	True Freq [MHz] 5200
Frequency high to test	True Freq [MHz] 5240
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5180 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.9	dBm	INFO
Ant:1 BW 26dB	--	--	23.480	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.38	dBm	INFO
Ant:2 BW 26dB	--	--	21.880	MHz	INFO
Σ Limit absolute	--	24	20.66	dBm	PASS
Σ Limit: 11 dBm + 10 log 21.88	--	24.4	20.66	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.14	dBm/1MHz	INFO
Ant:2 PSD	--	--	6.63	dBm/1MHz	INFO
Σ	--	11	9.9	dBm/1MHz	PASS

Test at TX 5200 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.13	dBm	INFO
Ant:1 BW 26dB	--	--	39.800	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.95	dBm	INFO
Ant:2 BW 26dB	--	--	37.560	MHz	INFO
Σ Limit absolute	--	24	23.05	dBm	PASS
Σ Limit: 11 dBm + 10 log 37.56	--	26.75	23.05	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	8.09	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.88	dBm/1MHz	INFO
Σ	--	11	11	dBm/1MHz	PASS

Test at TX 5240 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	19.54	dBm	INFO
Ant:1 BW 26dB	--	--	39.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.45	dBm	INFO
Ant:2 BW 26dB	--	--	37.600	MHz	INFO
Σ Limit absolute	--	24	22.51	dBm	PASS
Σ Limit: 11 dBm + 10 log 37.6	--	26.75	22.51	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.5	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.36	dBm/1MHz	INFO
Σ	--	11	10.44	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-1

References

TC start	19.07.2023 15:14:56
Ambit temp [°C] humidity [rel%]	25.9 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT20 mode U-NII-1
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	None

Equipment

Test at TX 5240 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.3	dBm	INFO
Ant:1 BW 26dB	--	--	35.280	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.68	dBm	INFO
Ant:2 BW 26dB	--	--	31.360	MHz	INFO
Σ Limit absolute	--	24	21.01	dBm	PASS
Σ Limit: 11 dBm + 10 log 31.36	--	25.96	21.01	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.28	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.62	dBm/1MHz	INFO
Σ	--	11	8.97	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2A

References

TC start	11.07.2023 10:31:14
Ambit temp [°C] humidity [rel%]	26.7 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT20 mode U-NII-2A
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5260
Frequency mid to test	True Freq [MHz] 5280
Frequency high to test	True Freq [MHz] 5320
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5260 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	19.18	dBm	INFO
Ant:1 BW 26dB	--	--	39.960	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.96	dBm	INFO
Ant:2 BW 26dB	--	--	38.240	MHz	INFO
Σ Limit absolute	--	24	22.6	dBm	PASS
Σ Limit: 11 dBm + 10 log 38.24	--	26.83	22.6	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	7.07	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.88	dBm/1MHz	INFO
Σ	--	11	10.5	dBm/1MHz	PASS

Test at TX 5280 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	19.01	dBm	INFO
Ant:1 BW 26dB	--	--	39.560	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.56	dBm	INFO
Ant:2 BW 26dB	--	--	39.200	MHz	INFO
Σ Limit absolute	--	24	22.3	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.2	--	26.93	22.3	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.94	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.55	dBm/1MHz	INFO
Σ	--	11	10.27	dBm/1MHz	PASS

Test at TX 5320 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.56	dBm	INFO
Ant:1 BW 26dB	--	--	29.040	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	18.25	dBm	INFO
Ant:2 BW 26dB	--	--	25.920	MHz	INFO
Σ Limit absolute	--	24	20.93	dBm	PASS
Σ Limit: 11 dBm + 10 log 25.92	--	25.14	20.93	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.8	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.51	dBm/1MHz	INFO
Σ	--	11	10.18	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-2C

References

TC start	19.07.2023 15:34:06
Ambit temp [°C] humidity [rel%]	26.2 45
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT20 mode U-NII-2C
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ac-VHT20 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5500
Frequency mid to test	True Freq [MHz] 5600
Frequency high to test	True Freq [MHz] 5700
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5500 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	17.71	dBm	INFO
Ant:1 BW 26dB	--	--	25.360	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	18.81	dBm	INFO
Ant:2 BW 26dB	--	--	24.480	MHz	INFO
Σ Limit absolute	--	24	21.31	dBm	PASS
Σ Limit: 11 dBm + 10 log 24.48	--	24.89	21.31	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.97	dBm/1MHz	INFO
Ant:2 PSD	--	--	8.08	dBm/1MHz	INFO
Σ	--	11	10.57	dBm/1MHz	PASS

Test at TX 5600 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.8	dBm	INFO
Ant:1 BW 26dB	--	--	39.680	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.98	dBm	INFO
Ant:2 BW 26dB	--	--	38.560	MHz	INFO
Σ Limit absolute	--	24	22.44	dBm	PASS
Σ Limit: 11 dBm + 10 log 38.56	--	26.86	22.44	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.74	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.91	dBm/1MHz	INFO
Σ	--	11	10.37	dBm/1MHz	PASS

Test at TX 5700 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.26	dBm	INFO
Ant:1 BW 26dB	--	--	38.360	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.82	dBm	INFO
Ant:2 BW 26dB	--	--	39.040	MHz	INFO
Σ Limit absolute	--	24	22.12	dBm	PASS
Σ Limit: 11 dBm + 10 log 38.36	--	26.84	22.12	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.18	dBm/1MHz	INFO
Ant:2 PSD	--	--	7.77	dBm/1MHz	INFO
Σ	--	11	10.06	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ac-VHT20 mode U-NII-3

References

TC start	11.07.2023 10:31:57
Ambit temp [°C] humidity [rel%]	26.7 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx ac-VHT20 mode U-NII-3
Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx 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]	1.3
Switched path	None

Equipment

Test at TX 5745 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.91	dBm	INFO
Ant:1 BW 26dB	--	--	39.840	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.49	dBm	INFO
Ant:2 BW 26dB	--	--	39.800	MHz	INFO
Σ Limit absolute	--	30	22.78	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.8	--	27	22.78	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	3.78	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	5.39	dBm/0.5MHz	INFO
Σ	--	30	7.67	dBm/0.5MHz	PASS

Test at TX 5785 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.92	dBm	INFO
Ant:1 BW 26dB	--	--	38.880	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.09	dBm	INFO
Ant:2 BW 26dB	--	--	39.560	MHz	INFO
Σ Limit absolute	--	30	22.55	dBm	PASS
Σ Limit: 11 dBm + 10 log 38.88	--	26.9	22.55	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	3.85	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	5.05	dBm/0.5MHz	INFO
Σ	--	30	7.5	dBm/0.5MHz	PASS

Test at TX 5825 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	18.13	dBm	INFO
Ant:1 BW 26dB	--	--	37.960	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	19.79	dBm	INFO
Ant:2 BW 26dB	--	--	40.000	MHz	INFO
Σ Limit absolute	--	30	22.05	dBm	PASS
Σ Limit: 11 dBm + 10 log 37.96	--	26.79	22.05	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	3.1	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	4.74	dBm/0.5MHz	INFO
Σ	--	30	7.01	dBm/0.5MHz	PASS

Verdict

PASS

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