

Conducted test results

No.23-1-0061401T004a-A6e

August 03, 2023

Test Standard(s) FCC 15.407

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Authorized

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Message with SA scan ~

References

TC start	26.07.2023 13:25:04
Ambit temp [°C] humidity [rel%]	25.6 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 13:25:05
Message	set WLAN5Gx to n_HT40_U_NII_1, Frequency [MHz] 5190 ,

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 n-HT40 mode U-NII-1

References

TC start	26.07.2023 13:25:16
Ambit temp [°C] humidity [rel%]	25.6 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 n-HT40 mode U-NII-1
Information	PS50

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
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 5190 MHz

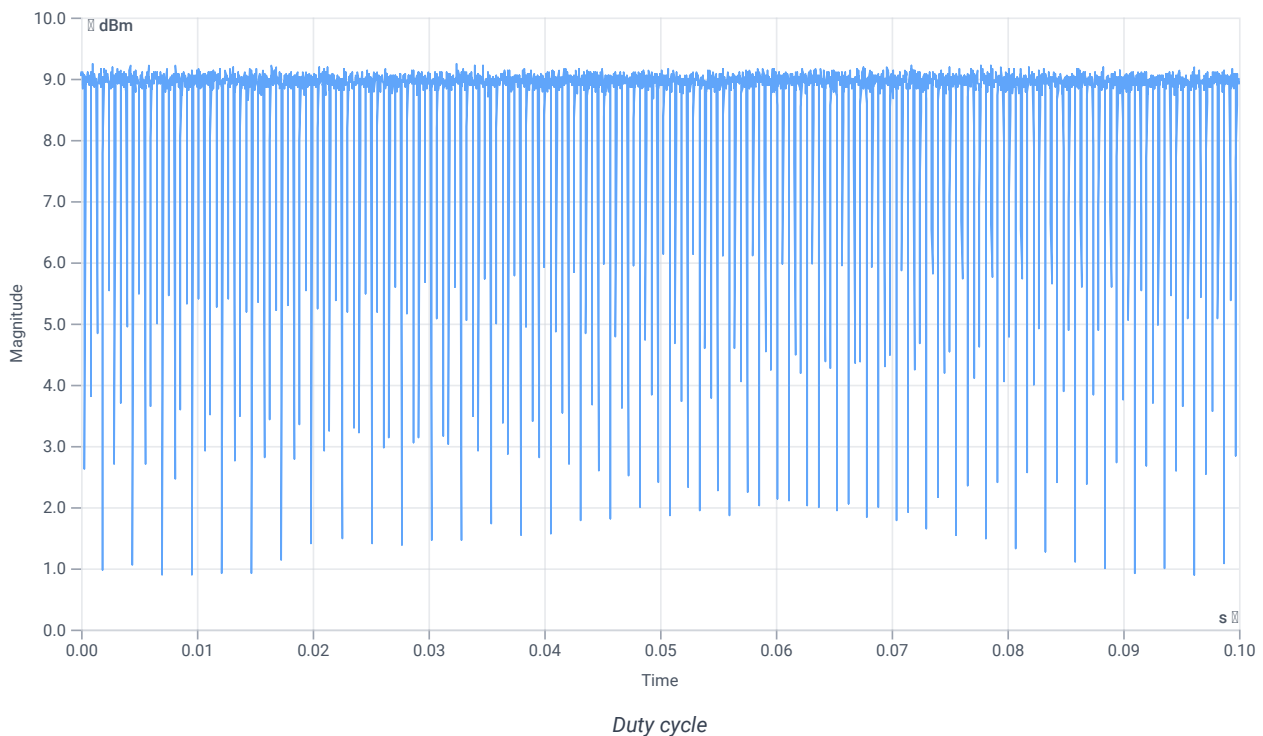
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	7.64	dBm	INFO
Ref. Frequency	--	--	5187.800	MHz	INFO

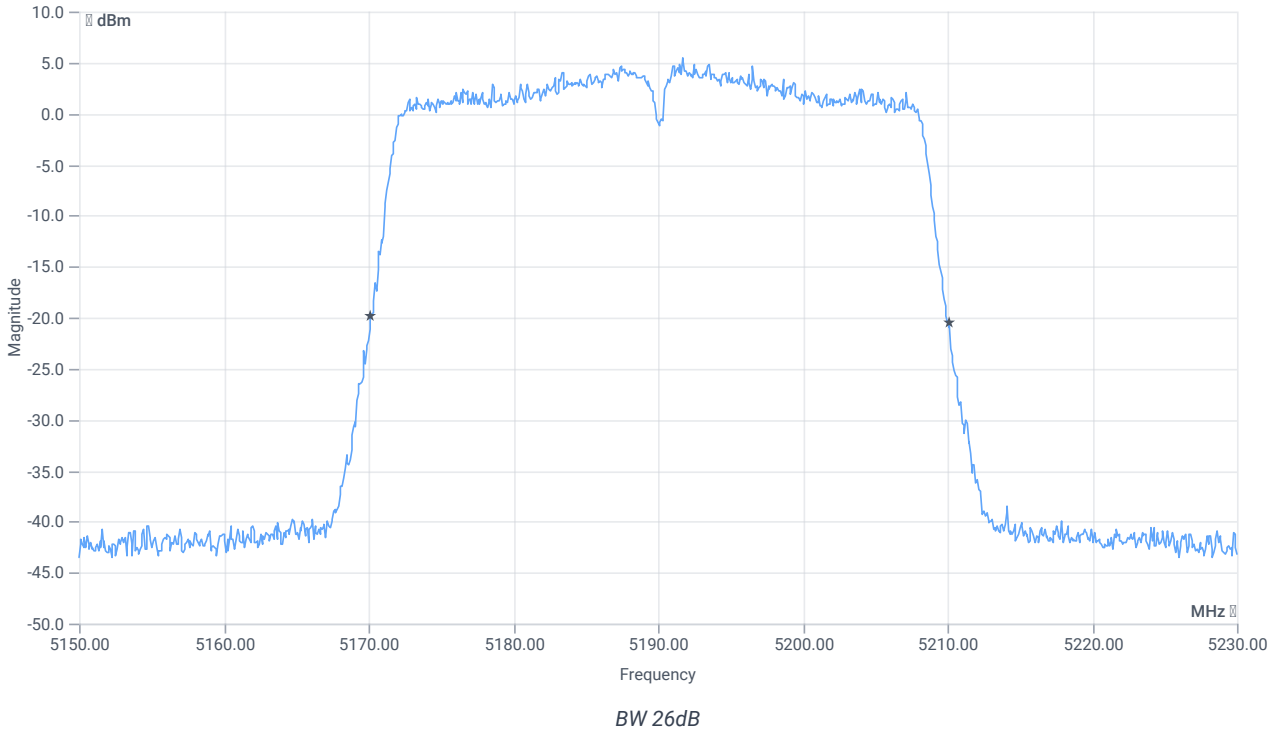
Evaluation max. Duty Cycle

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



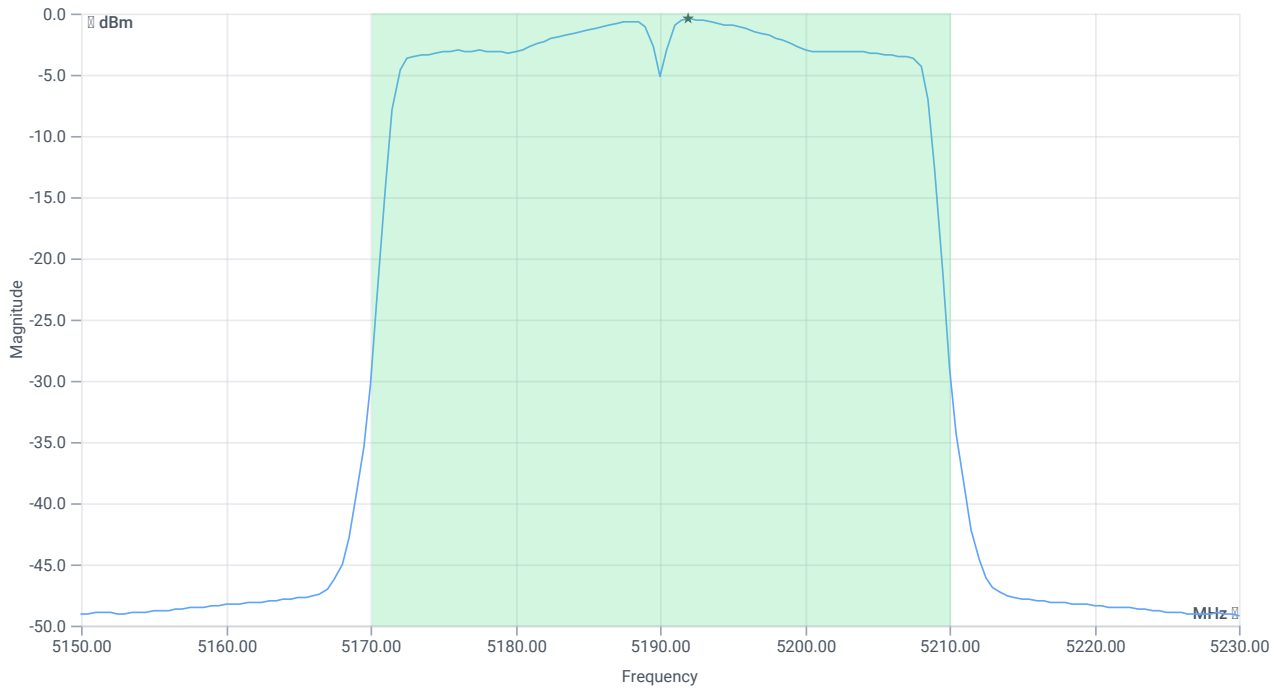
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5170.1600	MHz	INFO
T2 26dB	---	---	5210.1600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.64 16.35 20
Start [MHz] Stop [MHz]	5150.000 5230.000
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	--	--	13.14	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	13.14	dBm	PASS
Limit: 11 dBm + 10 log 40					
Max Output Power DC corrected	--	27.02	13.14	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	-0.47	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	-0.47	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 13:26:47
Ambit temp [°C] humidity [rel%]	25.6 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 n-HT40 mode U-NII-1
Information	PS50

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
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

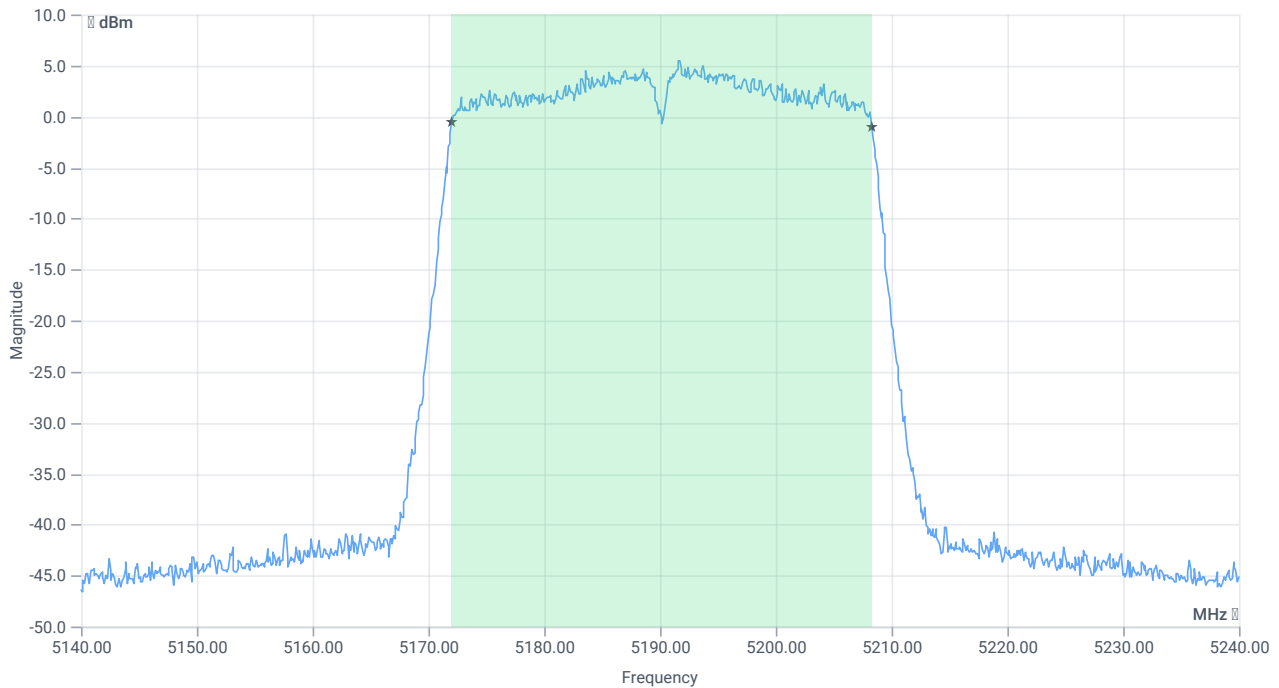
Test at TX 5190 MHz

RESULT: Reference Power cond.

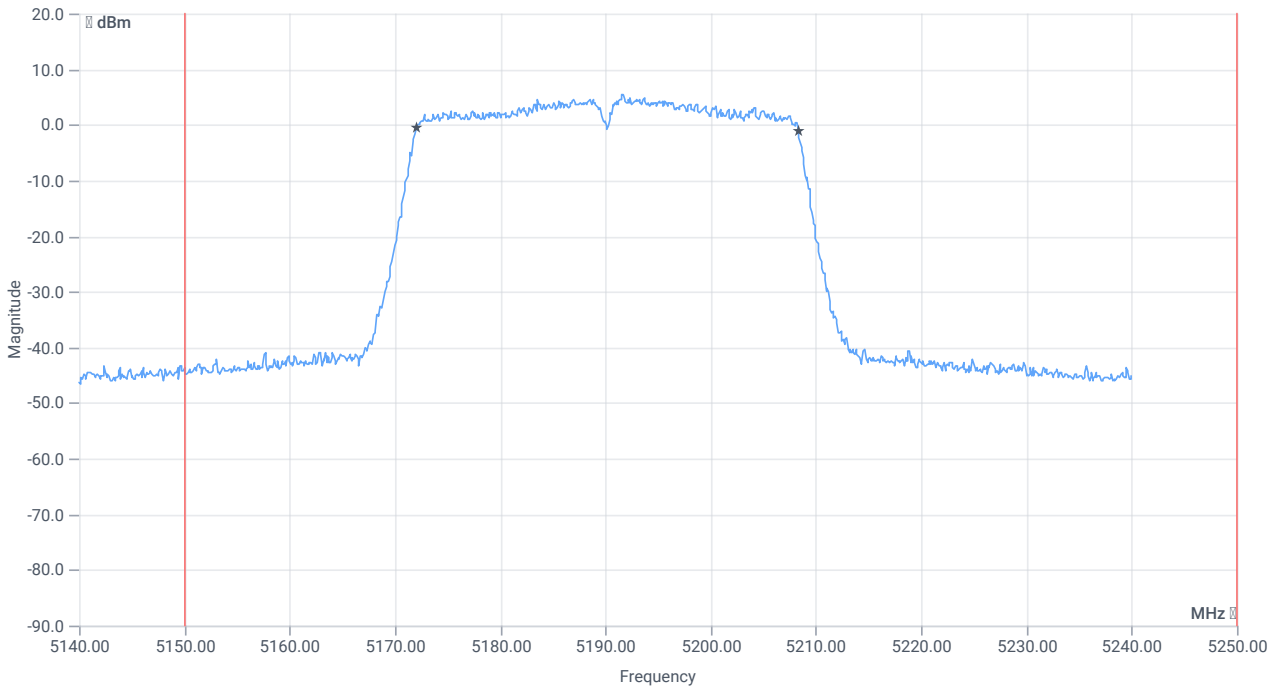
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.08	dBm	INFO
Ref. Frequency	--	--	5191.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.08 16.35 15
Start [MHz] Stop [MHz]	5140.000 5240.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



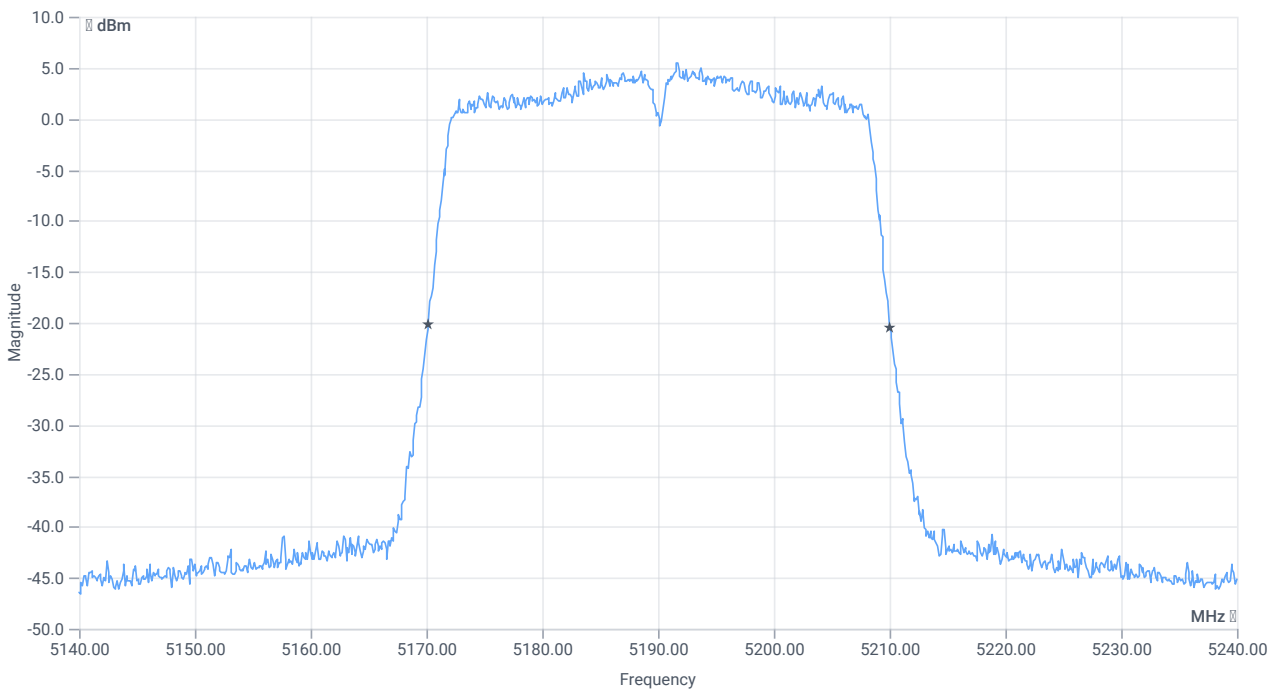
BW 99PCT



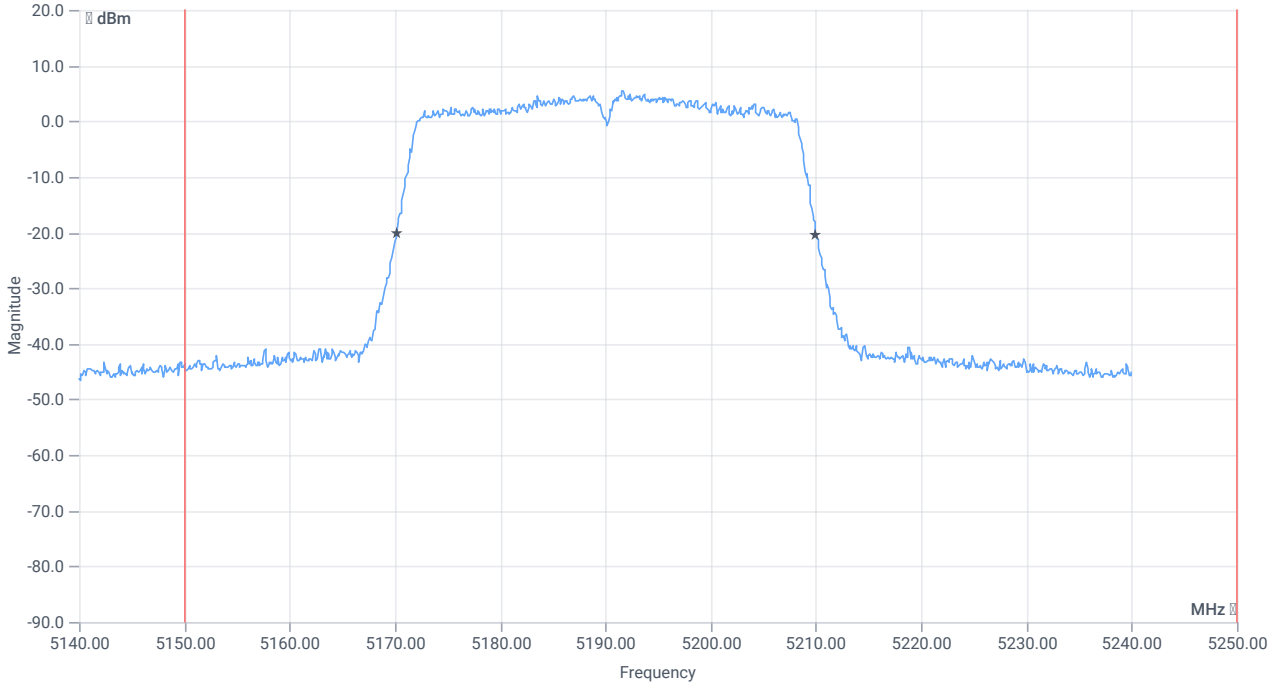
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.264	MHz	INFO
T1 99%	5150.000000	--	5172.0180	MHz	PASS
T2 99%	--	5250.000000	5208.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.8	MHz	INFO
T1 26dB	5150.000000	---	5170.2000	MHz	PASS
T2 26dB	---	5250.000000	5210.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 13:27:24
Ambit temp [°C] humidity [rel%]	25.6 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 n-HT40 mode U-NII-1
Information	PS50

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
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 5190 MHz

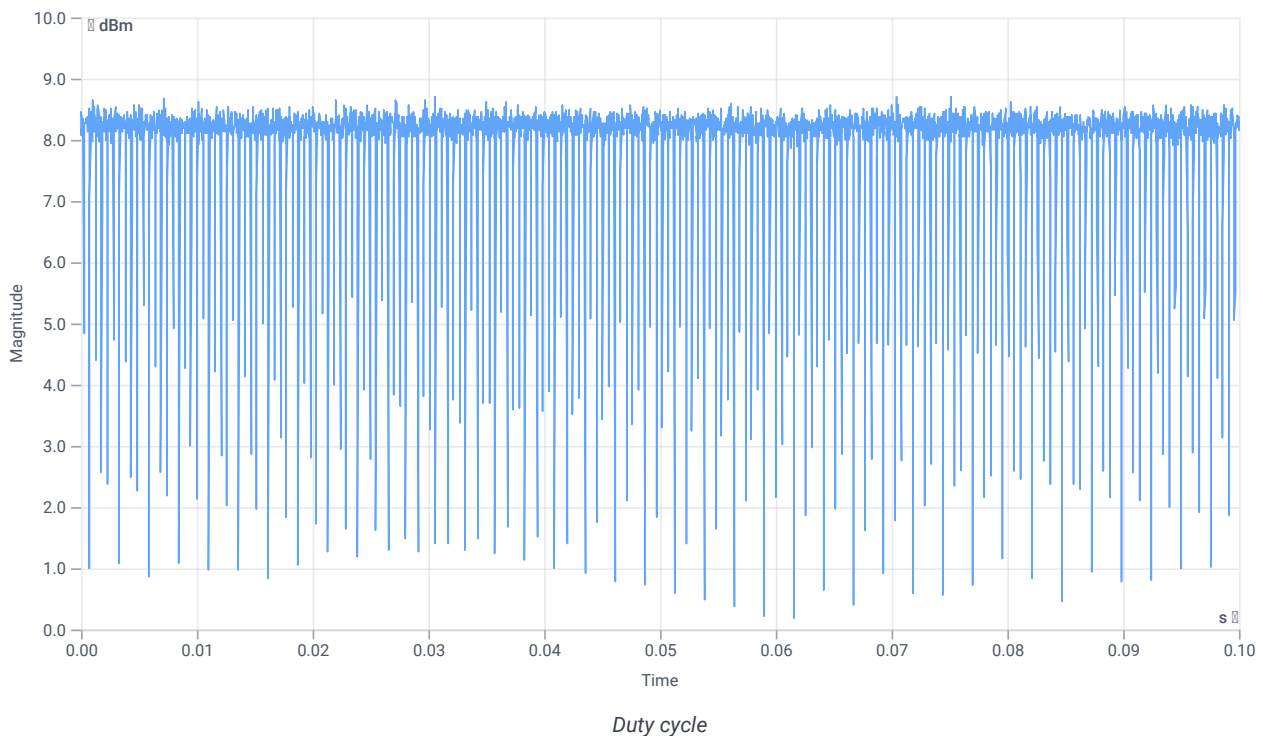
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	6.95	dBm	INFO
Ref. Frequency	--	--	5197.390	MHz	INFO

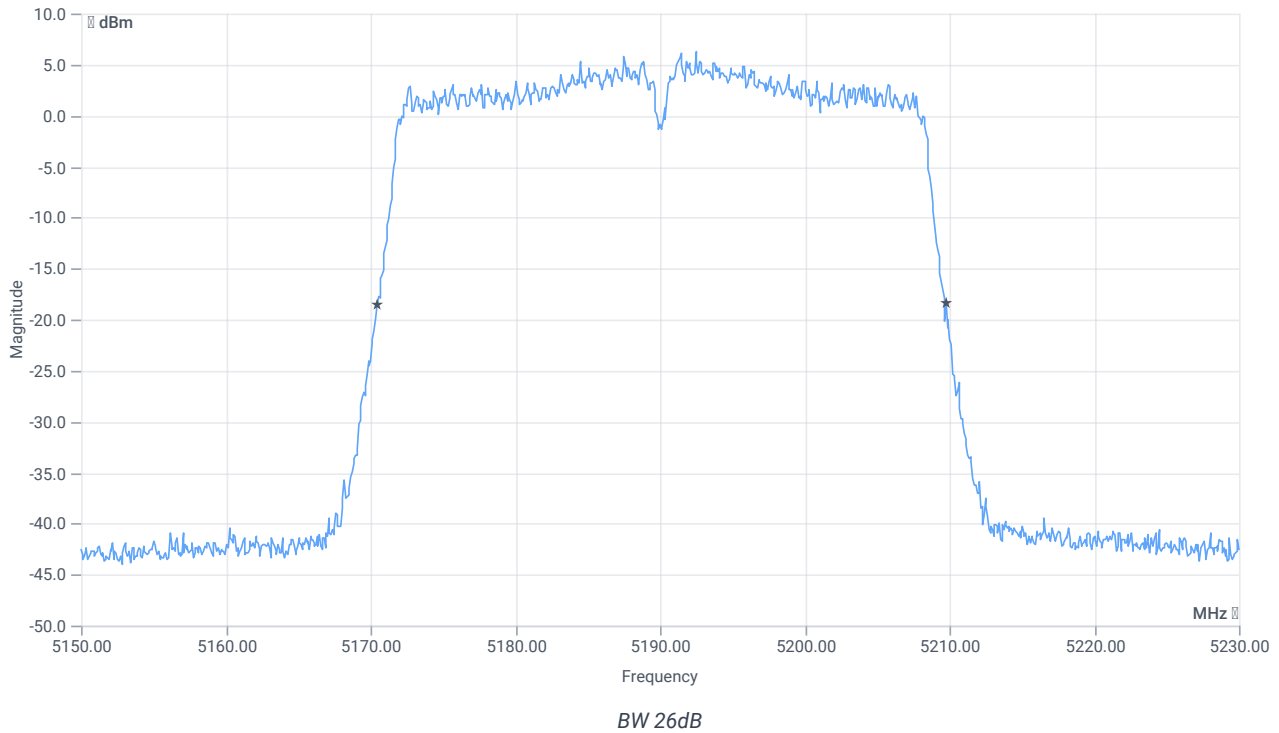
Evaluation max. Duty Cycle

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



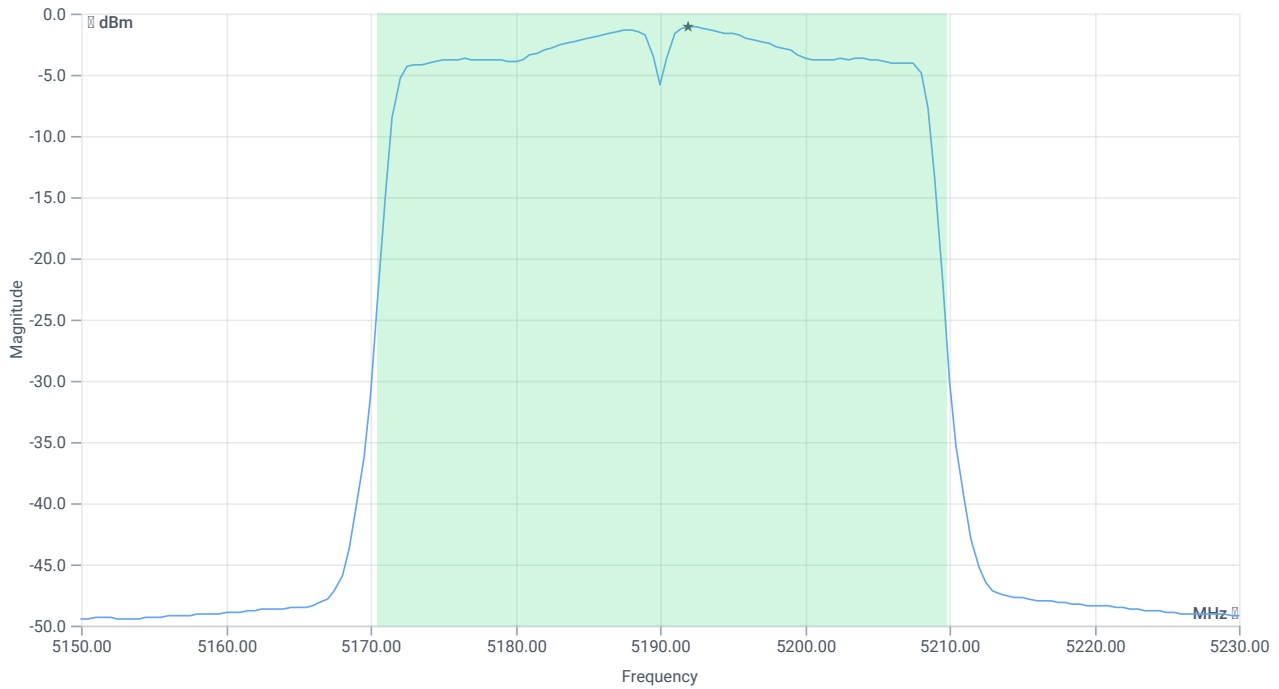
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.28	MHz	INFO
T1 26dB	---	---	5170.4800	MHz	INFO
T2 26dB	---	---	5209.7600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.95 16.35 20
Start [MHz] Stop [MHz]	5150.000 5230.000
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	--	--	12.47	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	12.47	dBm	PASS
Limit: 11 dBm + 10 log 39.28					
Max Output Power DC corrected	--	26.94	12.47	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	-1.13	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	-1.13	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 13:28:55
Ambit temp [°C] humidity [rel%]	25.6 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 n-HT40 mode U-NII-1
Information	PS50

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
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

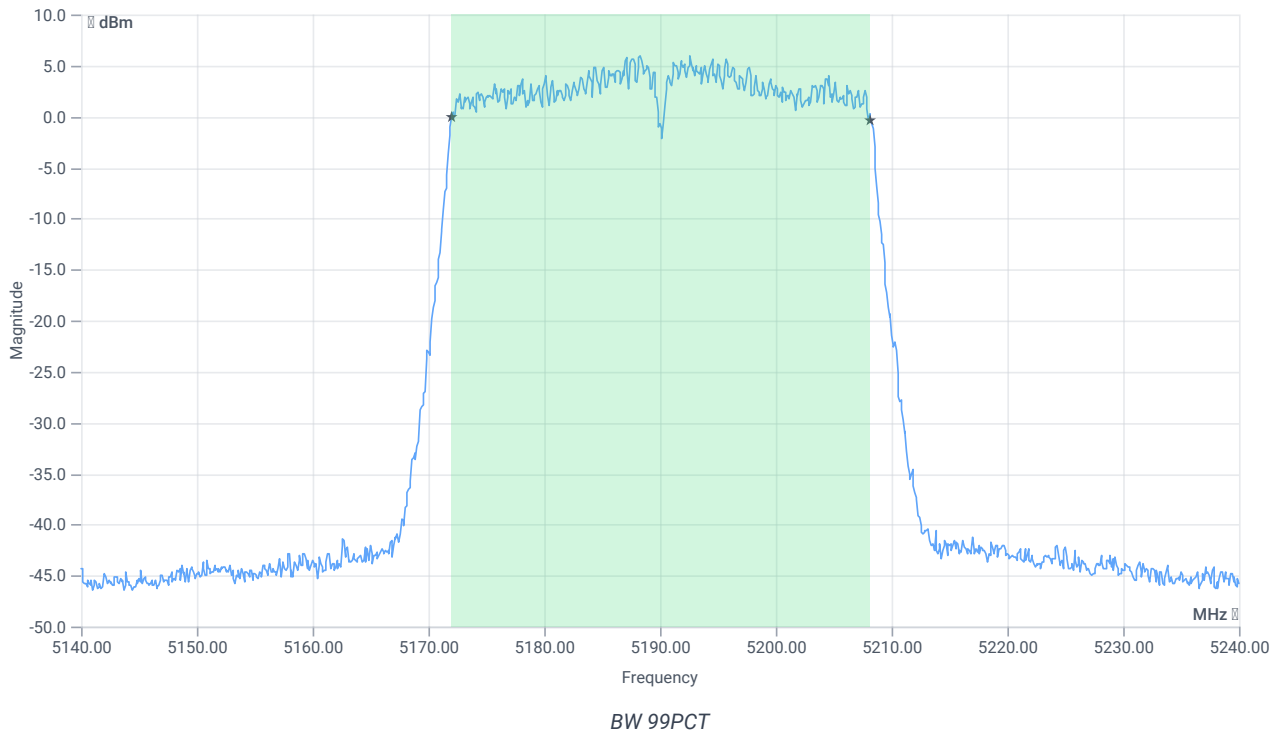
Test at TX 5190 MHz

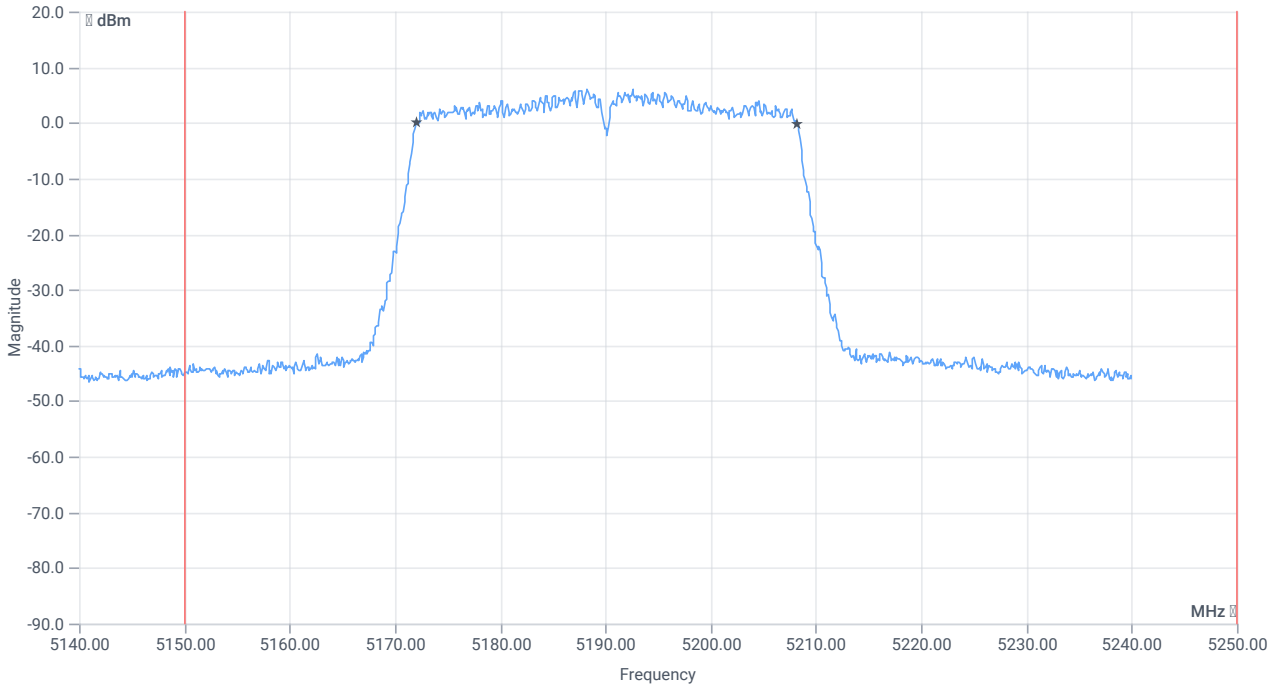
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	7.00	dBm	INFO
Ref. Frequency	--	--	5192.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.00 16.35 15
Start [MHz] Stop [MHz]	5140.000 5240.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

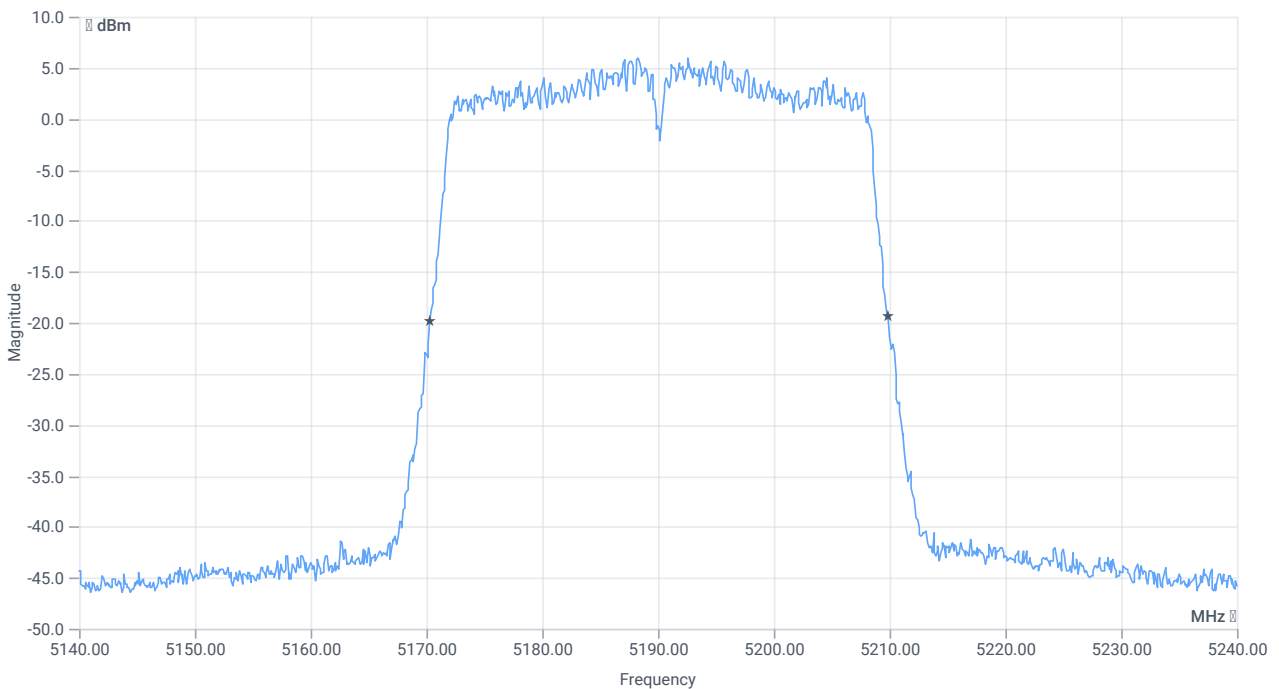




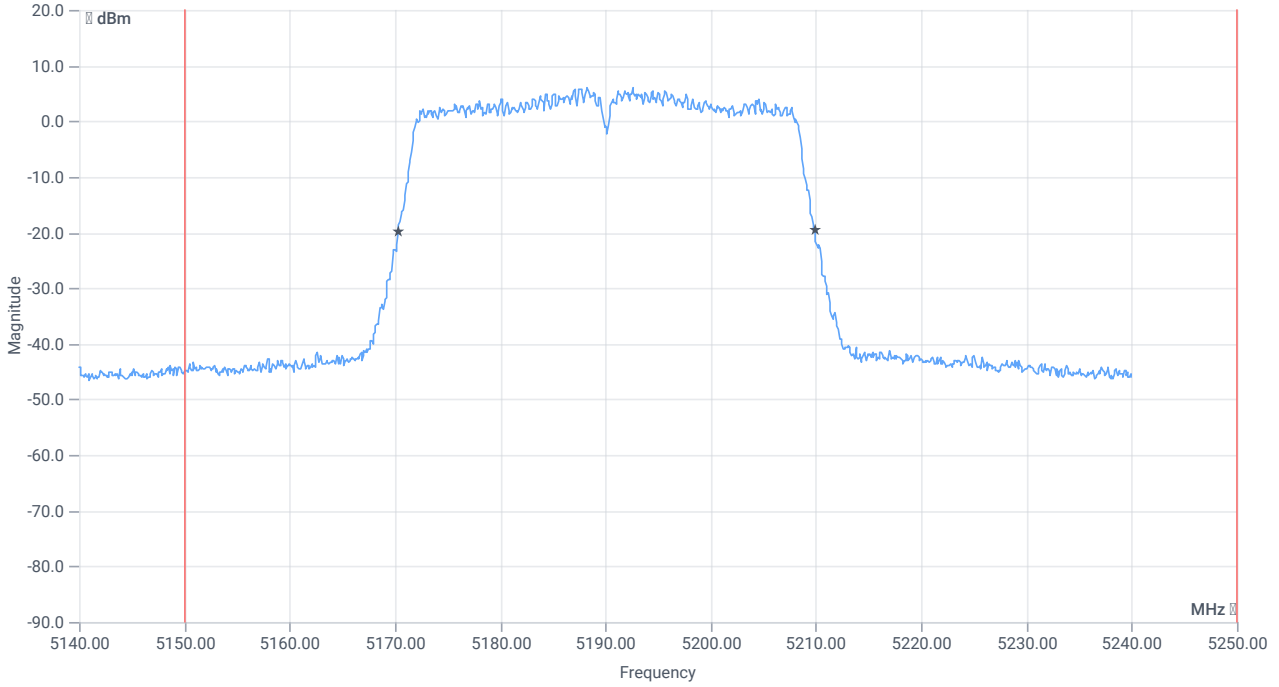
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.164	MHz	INFO
T1 99%	5150.000000	--	5172.0180	MHz	PASS
T2 99%	--	5250.000000	5208.1818	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.6	MHz	INFO
T1 26dB	5150.000000	---	5170.3000	MHz	PASS
T2 26dB	---	5250.000000	5209.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 13:42:22
Ambit temp [°C] humidity [rel%]	25.6 45
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5190 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	13.14	dBm	INFO
Ant:1 BW 26dB	--	--	40.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	12.47	dBm	INFO
Ant:2 BW 26dB	--	--	39.280	MHz	INFO
Σ Limit absolute	--	24	15.83	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.28	--	26.94	15.83	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	-0.47	dBm/1MHz	INFO
Ant:2 PSD	--	--	-1.13	dBm/1MHz	INFO
Σ	--	11	2.22	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 14:08:03
Ambit temp [°C] humidity [rel%]	25.4 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_1
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 14:08:03
Message	set WLAN5Gx to n_HT40_U_NII_1, Frequency [MHz] 5230

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 n-HT40 mode U-NII-1

References

TC start	26.07.2023 14:08:11
Ambit temp [°C] humidity [rel%]	25.4 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 n-HT40 mode U-NII-1
Information	PS79

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
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 5230 MHz

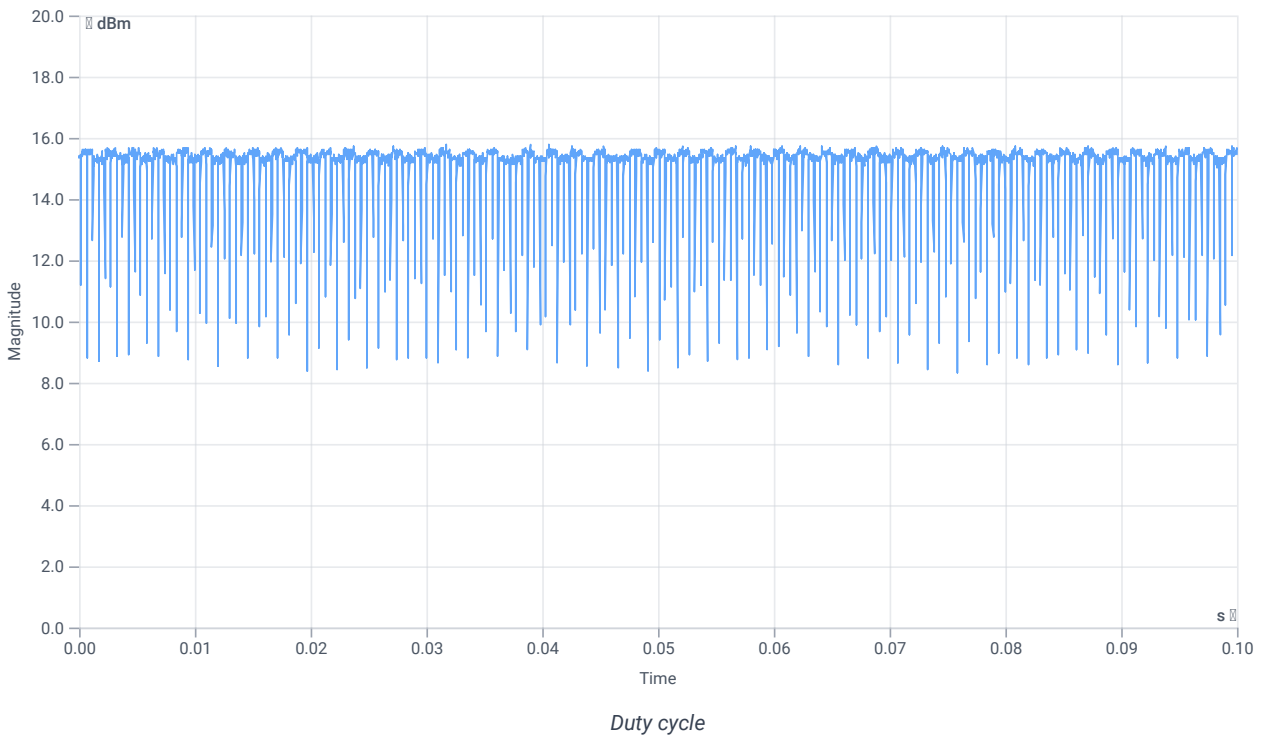
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.64	dBm	INFO
Ref. Frequency	--	--	5226.400	MHz	INFO

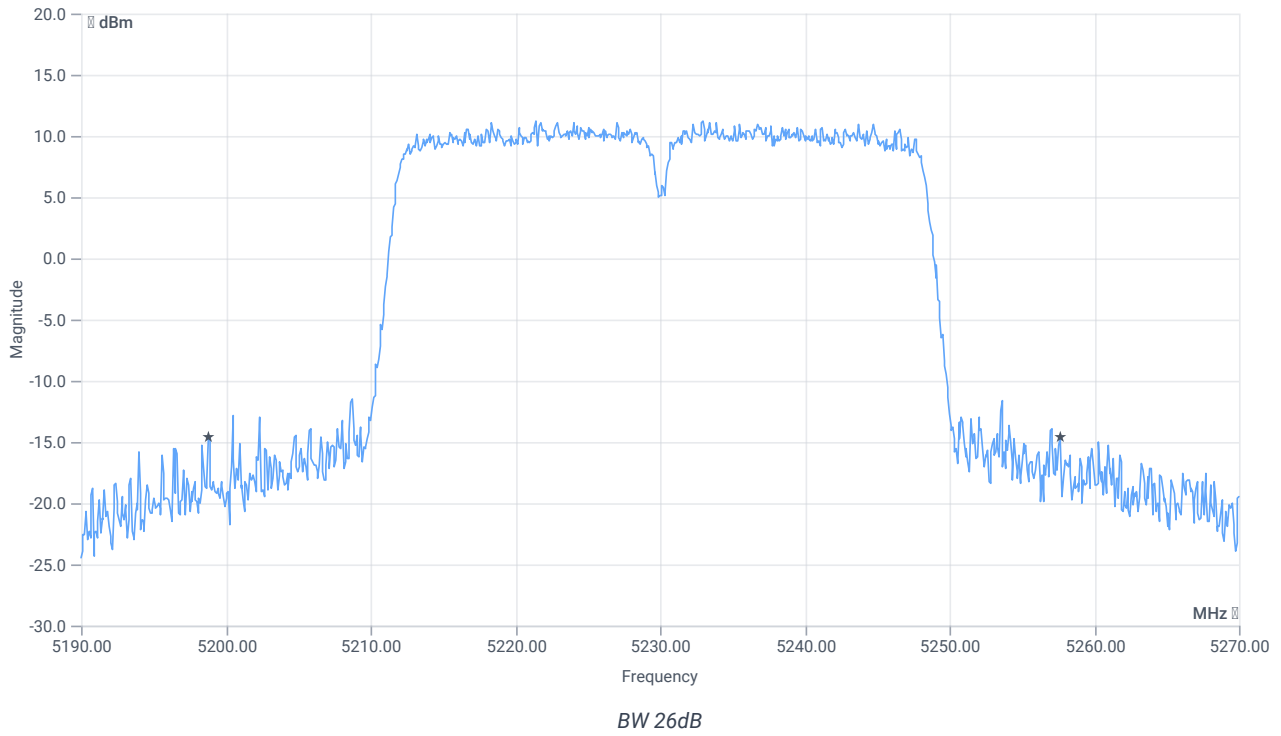
Evaluation max. Duty Cycle

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



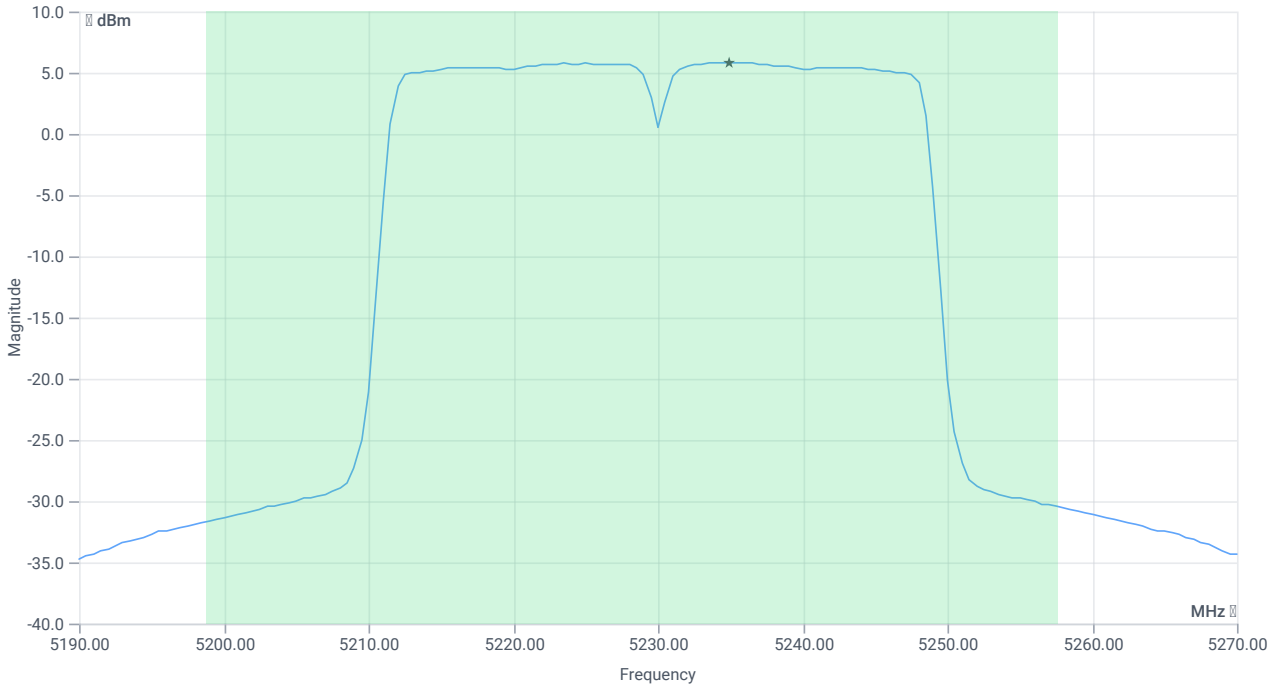
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	58.8	MHz	INFO
T1 26dB	---	---	5198.8000	MHz	INFO
T2 26dB	---	---	5257.6000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.64 16.34 25
Start [MHz] Stop [MHz]	5190.000 5270.000
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	--	--	20.7	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.7	dBm	PASS
Limit: 11 dBm + 10 log 58.8					
Max Output Power DC corrected	--	28.69	20.7	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.81	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.81	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 14:09:42
Ambit temp [°C] humidity [rel%]	25.3 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 n-HT40 mode U-NII-1
Information	PS79

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
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

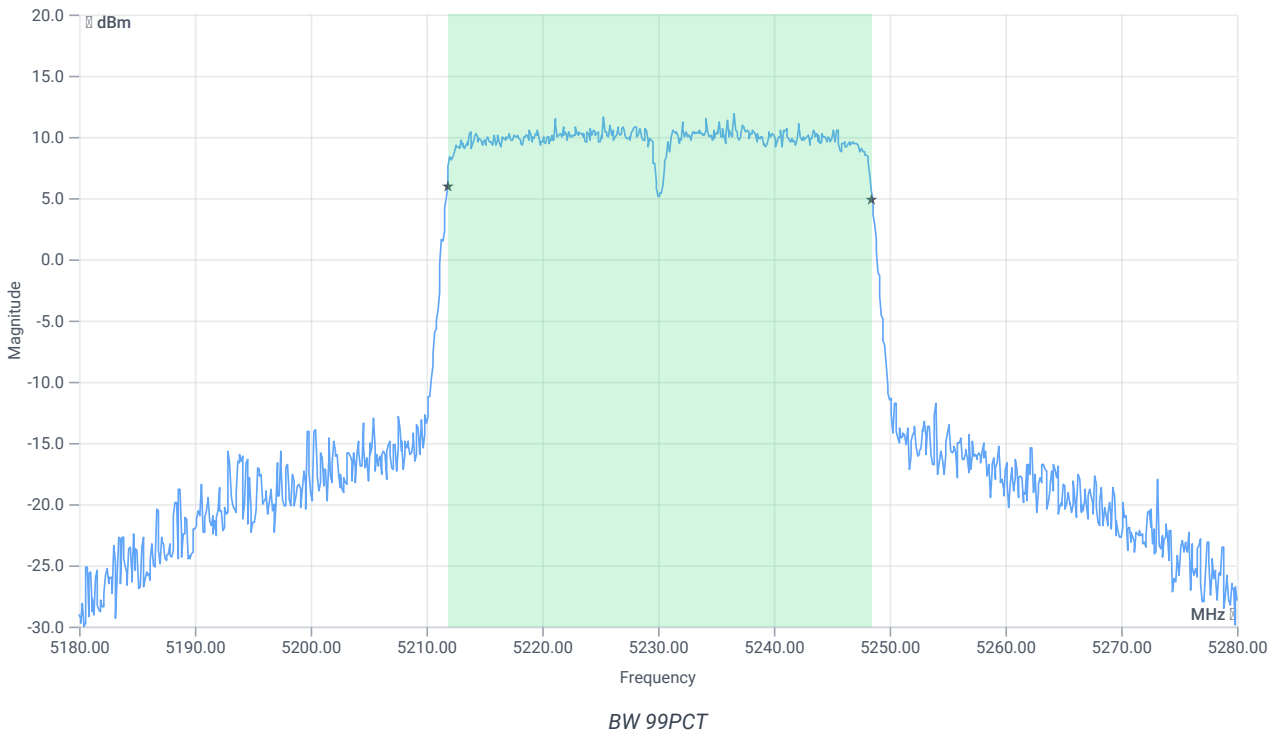
Test at TX 5230 MHz

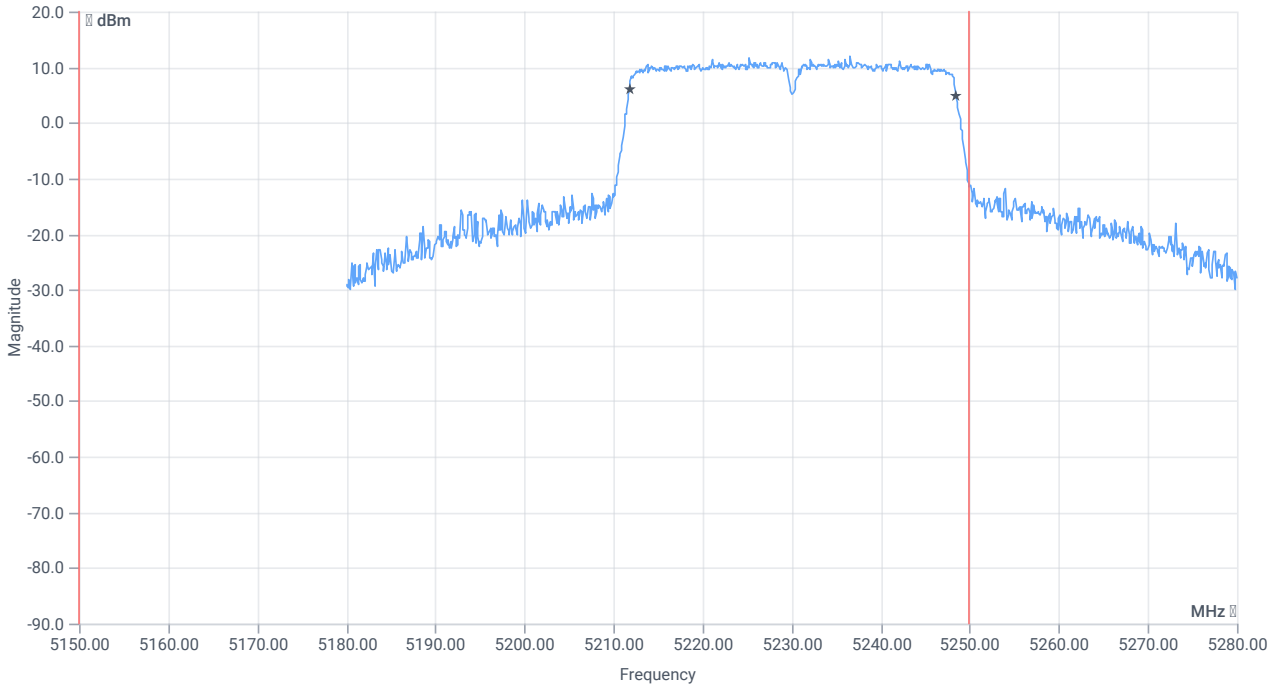
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.08	dBm	INFO
Ref. Frequency	--	--	5234.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.08 16.34 25
Start [MHz] Stop [MHz]	5180.000 5280.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

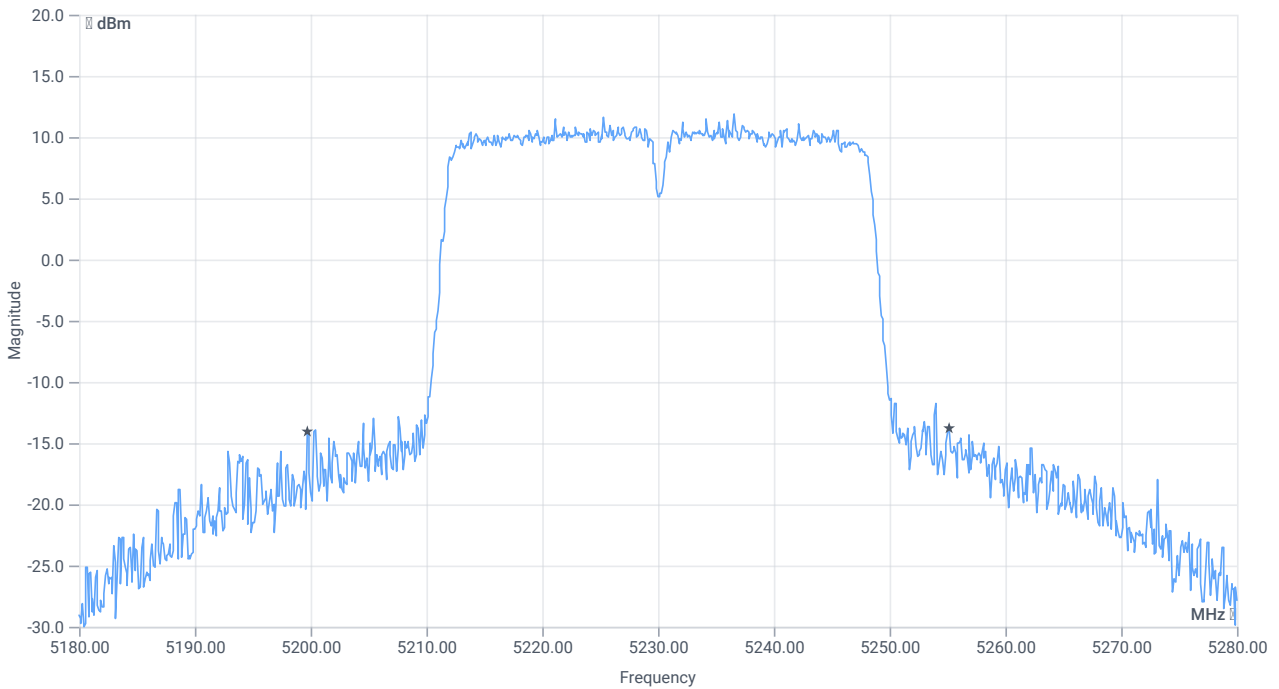




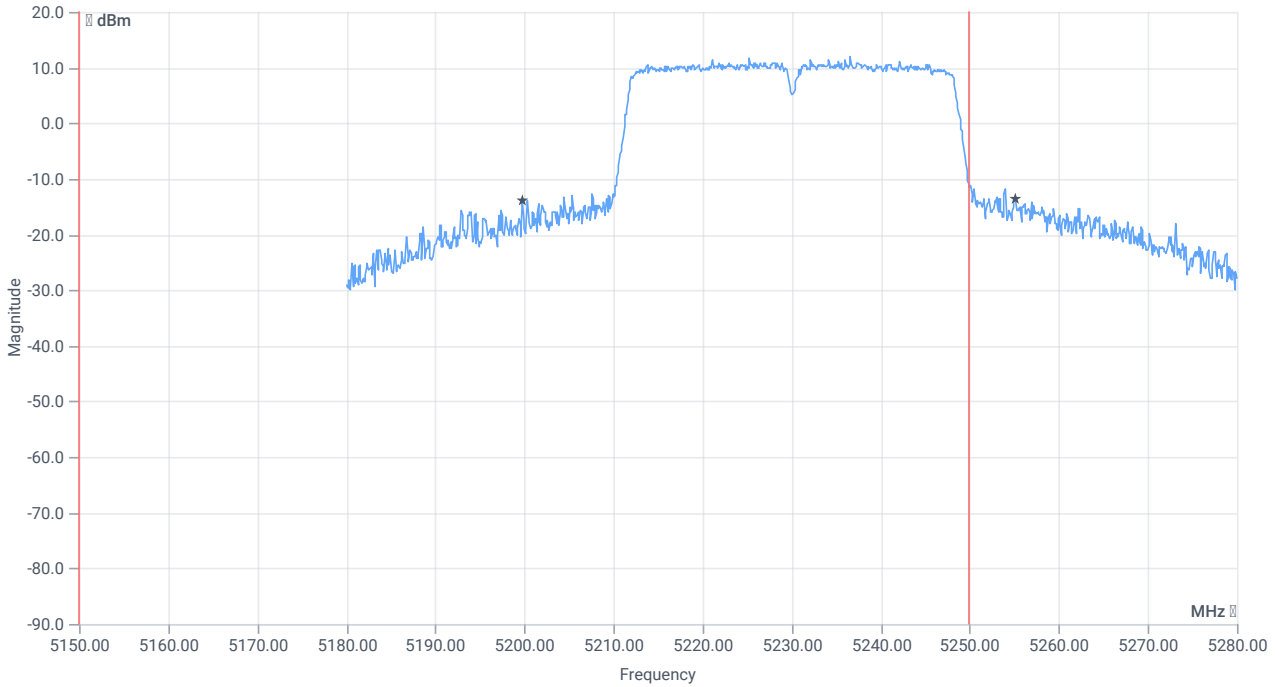
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5150.000000	--	5211.8182	MHz	PASS
T2 99%	--	5250.000000	5248.4815	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	55.5	MHz	INFO
T1 26dB	5150.000000	---	5199.7000	MHz	PASS
T2 26dB	---	5250.000000	5255.2000	MHz	DFS required

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 14:10:19
Ambit temp [°C] humidity [rel%]	25.3 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 n-HT40 mode U-NII-1
Information	PS79

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
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 5230 MHz

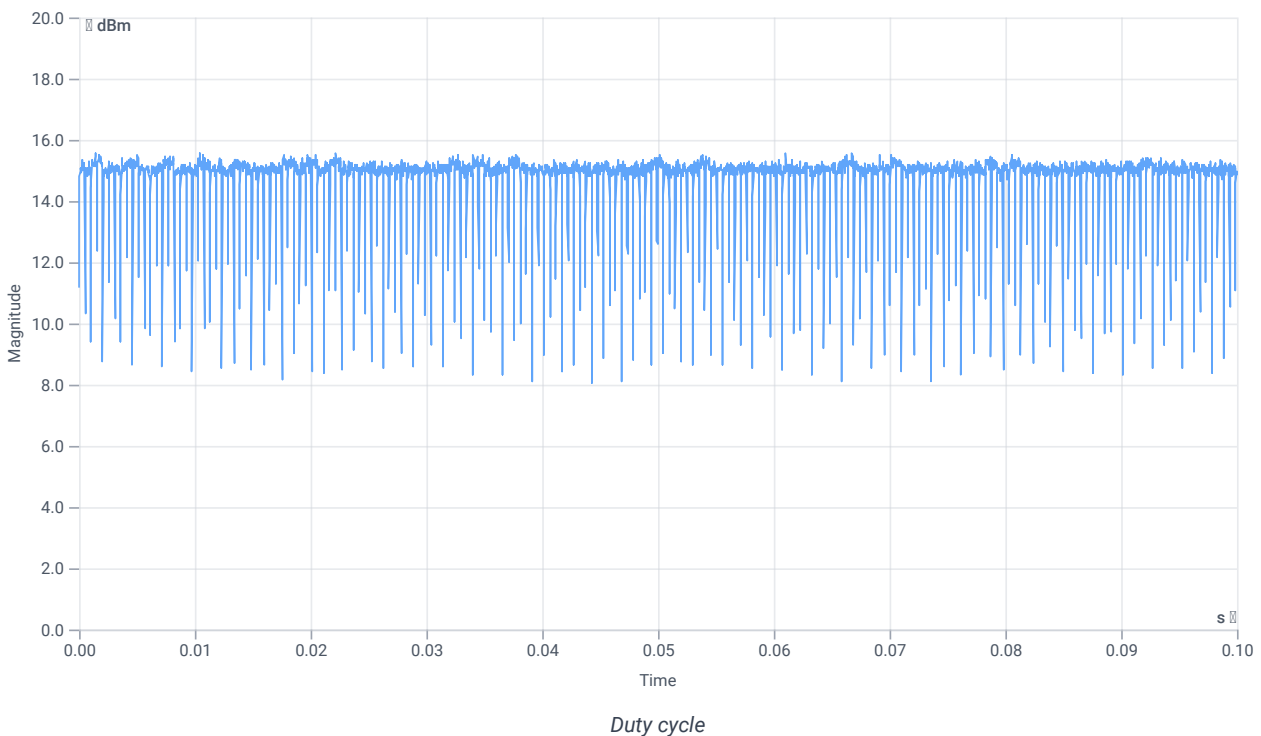
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.38	dBm	INFO
Ref. Frequency	--	--	5238.190	MHz	INFO

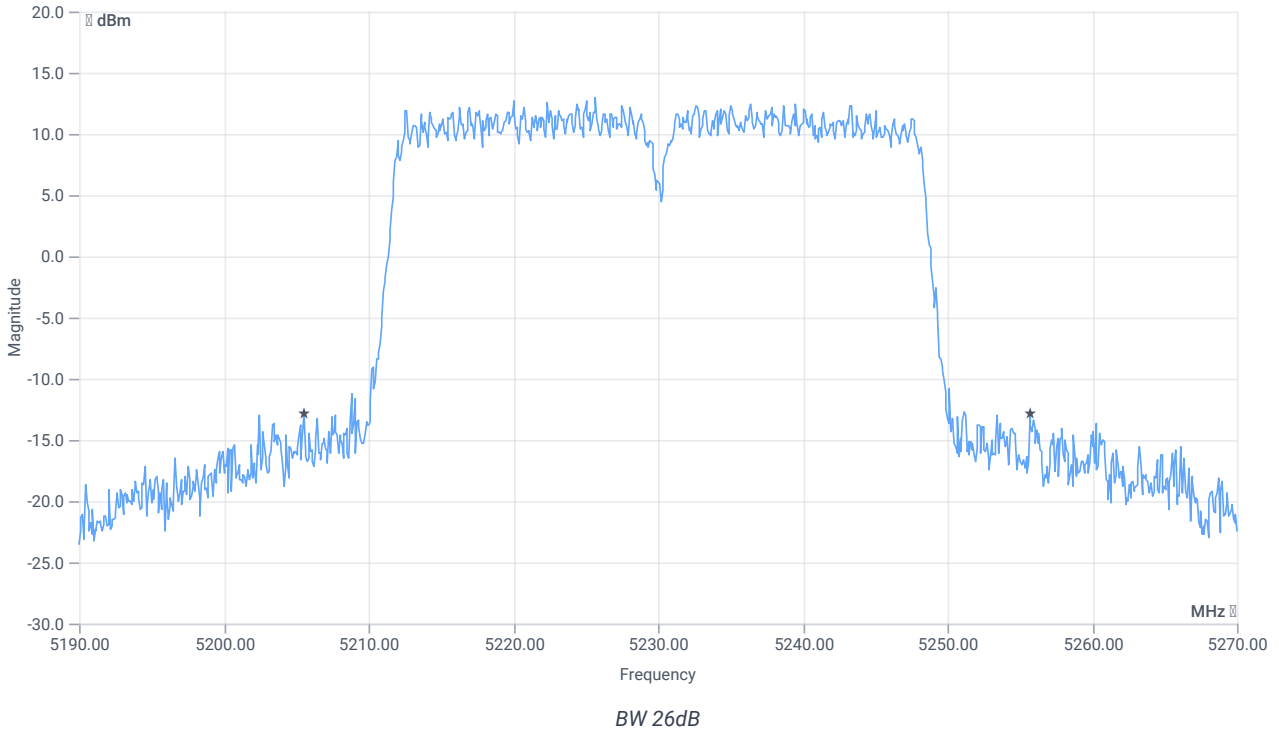
Evaluation max. Duty Cycle

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



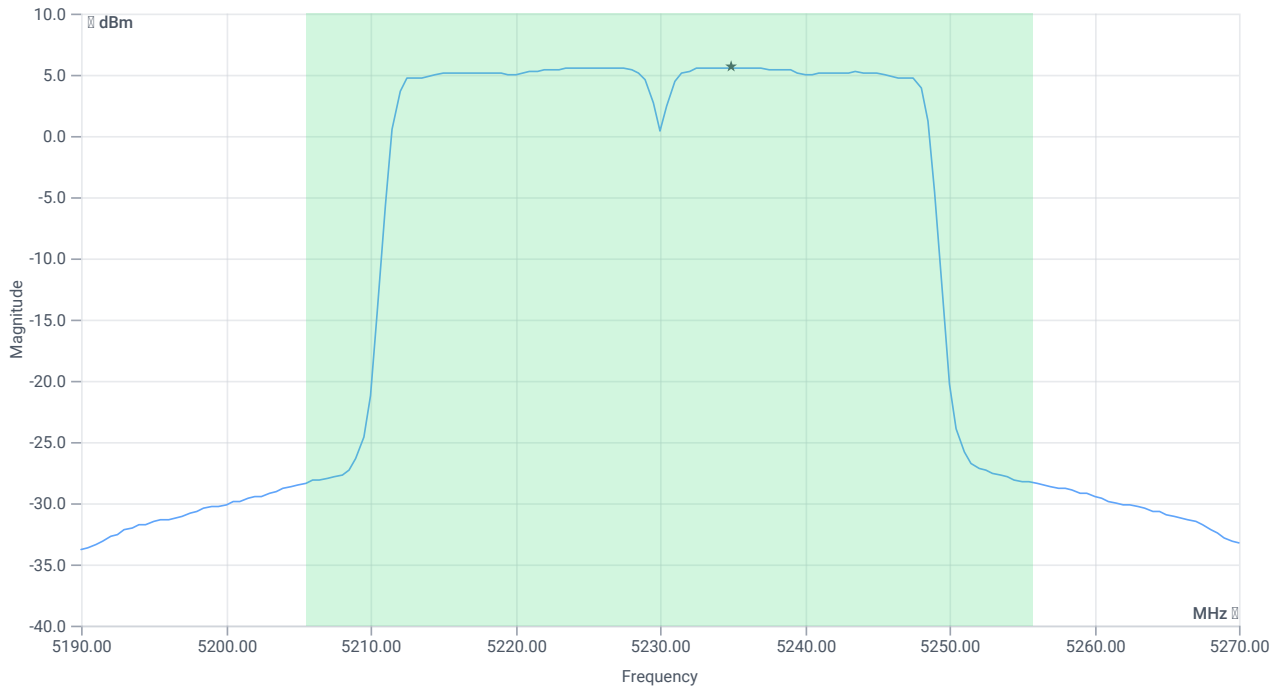
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	50.16	MHz	INFO
T1 26dB	---	---	5205.5200	MHz	INFO
T2 26dB	---	---	5255.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.38 16.34 25
Start [MHz] Stop [MHz]	5190.000 5270.000
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	--	--	20.48	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.48	dBm	PASS
Limit: 11 dBm + 10 log 50.16					
Max Output Power DC corrected	--	28	20.48	dBm	na

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.61	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.61	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 14:11:51
Ambit temp [°C] humidity [rel%]	25.3 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 n-HT40 mode U-NII-1
Information	PS79

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
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 5230 MHz

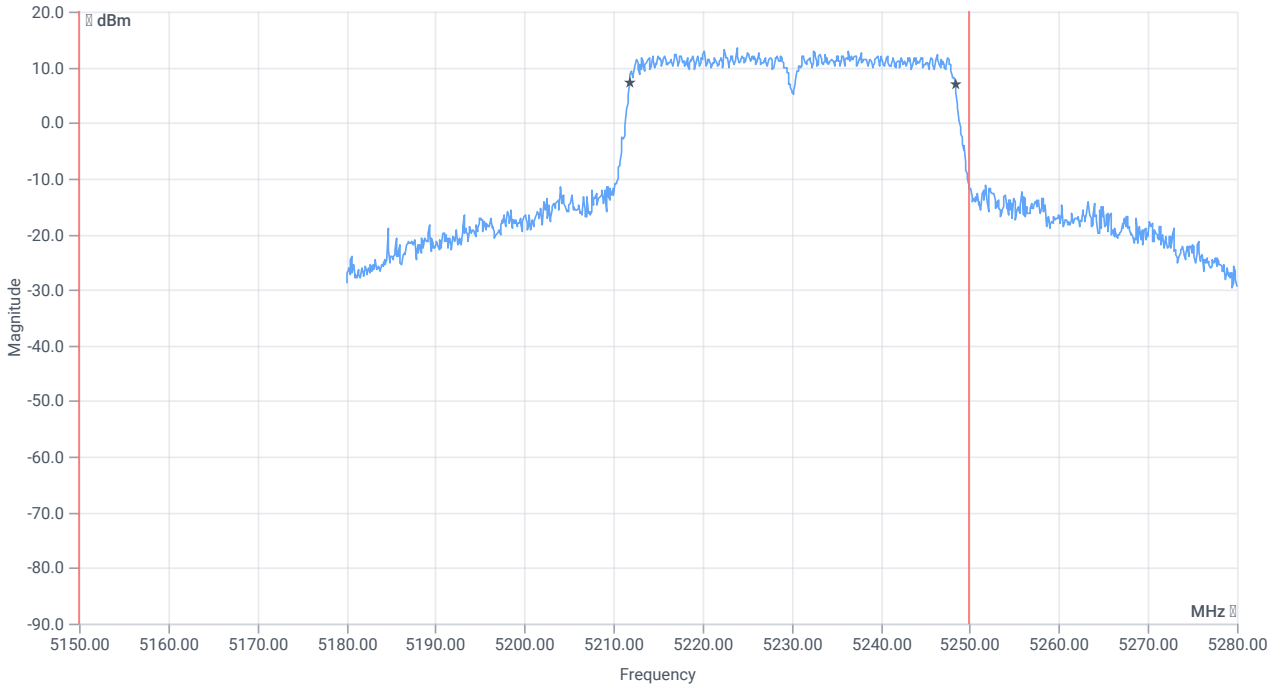
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.31	dBm	INFO
Ref. Frequency	--	--	5243.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.31 16.34 25
Start [MHz] Stop [MHz]	5180.000 5280.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

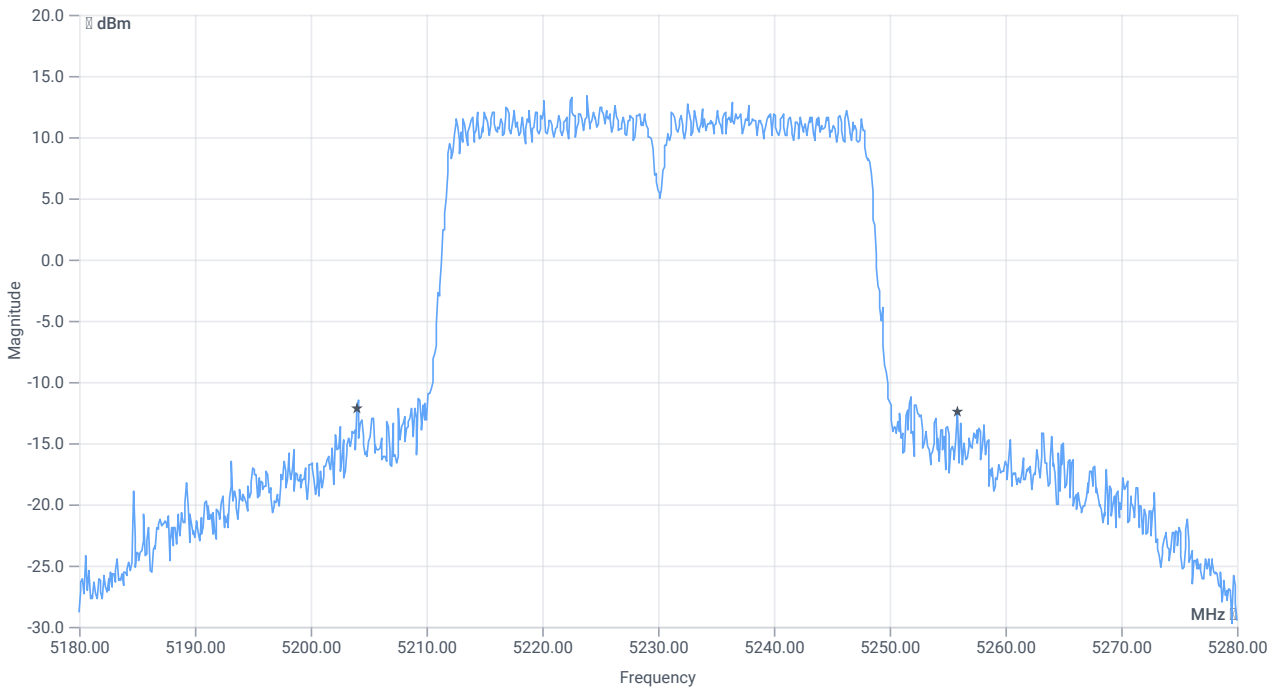




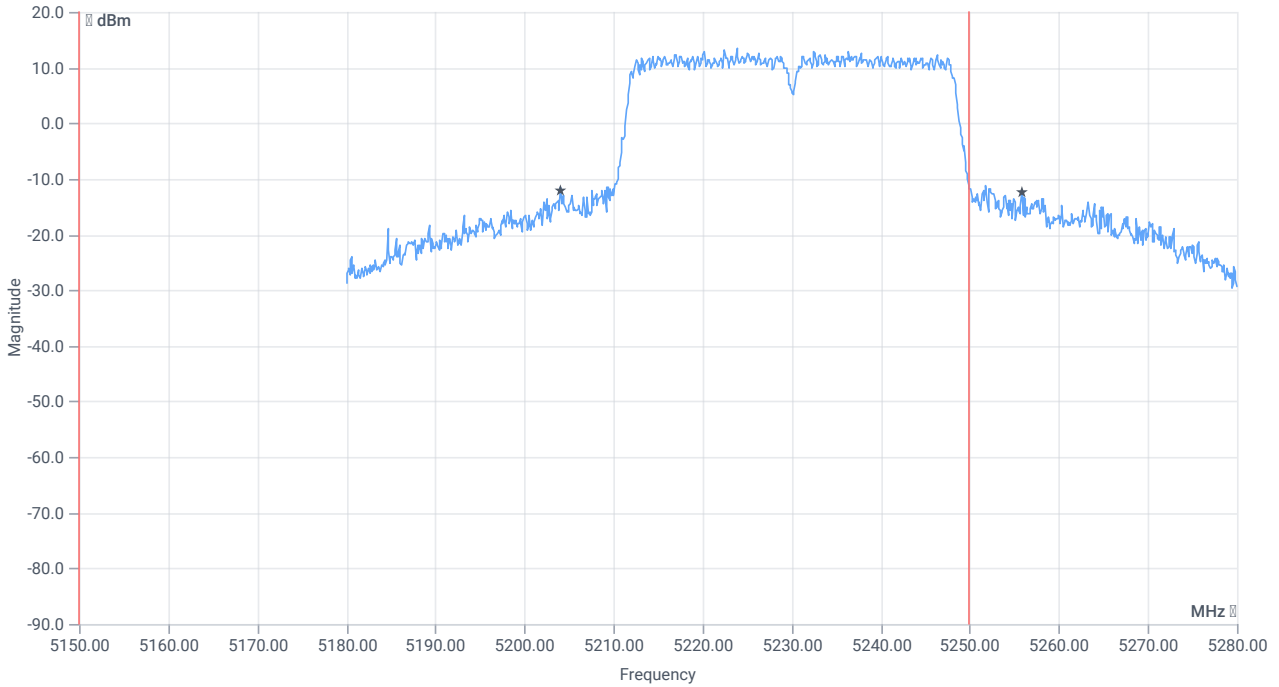
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.563	MHz	INFO
T1 99%	5150.000000	--	5211.8182	MHz	PASS
T2 99%	--	5250.000000	5248.3816	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	51.9	MHz	INFO
T1 26dB	5150.000000	---	5204.0000	MHz	PASS
T2 26dB	---	5250.000000	5255.9000	MHz	DFS required

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

References

TC start	26.07.2023 14:14:19
Ambit temp [°C] humidity [rel%]	25.2 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-1
Information	PS79

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5190
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5230
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5230 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.7	dBm	INFO
Ant:1 BW 26dB	--	--	58.800	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.48	dBm	INFO
Ant:2 BW 26dB	--	--	50.160	MHz	INFO
Σ Limit absolute	--	24	23.6	dBm	PASS
Σ Limit: 11 dBm + 10 log 50.16	--	28	23.6	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	5.81	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.61	dBm/1MHz	INFO
Σ	--	11	8.72	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 14:25:55
Ambit temp [°C] humidity [rel%]	25.1 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 14:25:55
Message	set WLAN5Gx to n_HT40_U_NII_2A, Frequency [MHz] 5270 ,

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 n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:26:04
Ambit temp [°C] humidity [rel%]	25.1 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 n-HT40 mode U-NII-2A
Information	PS52

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
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 5270 MHz

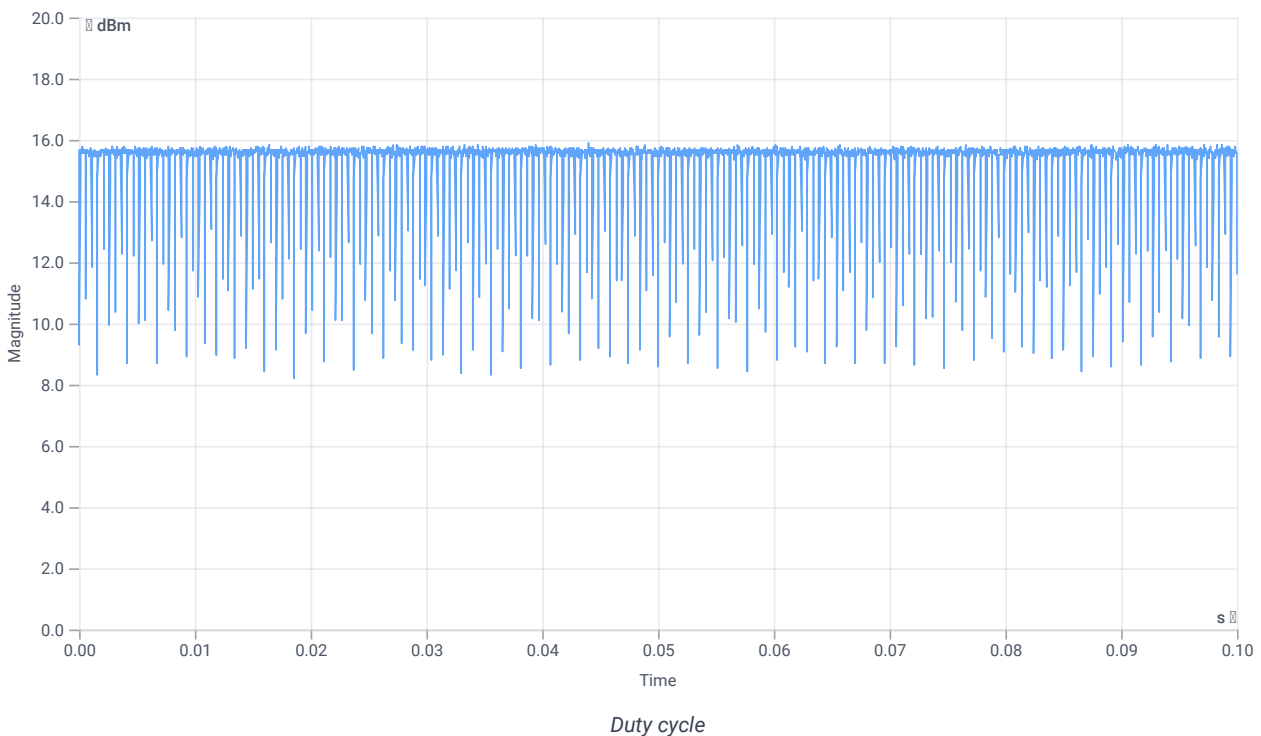
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.93	dBm	INFO
Ref. Frequency	--	--	5275.790	MHz	INFO

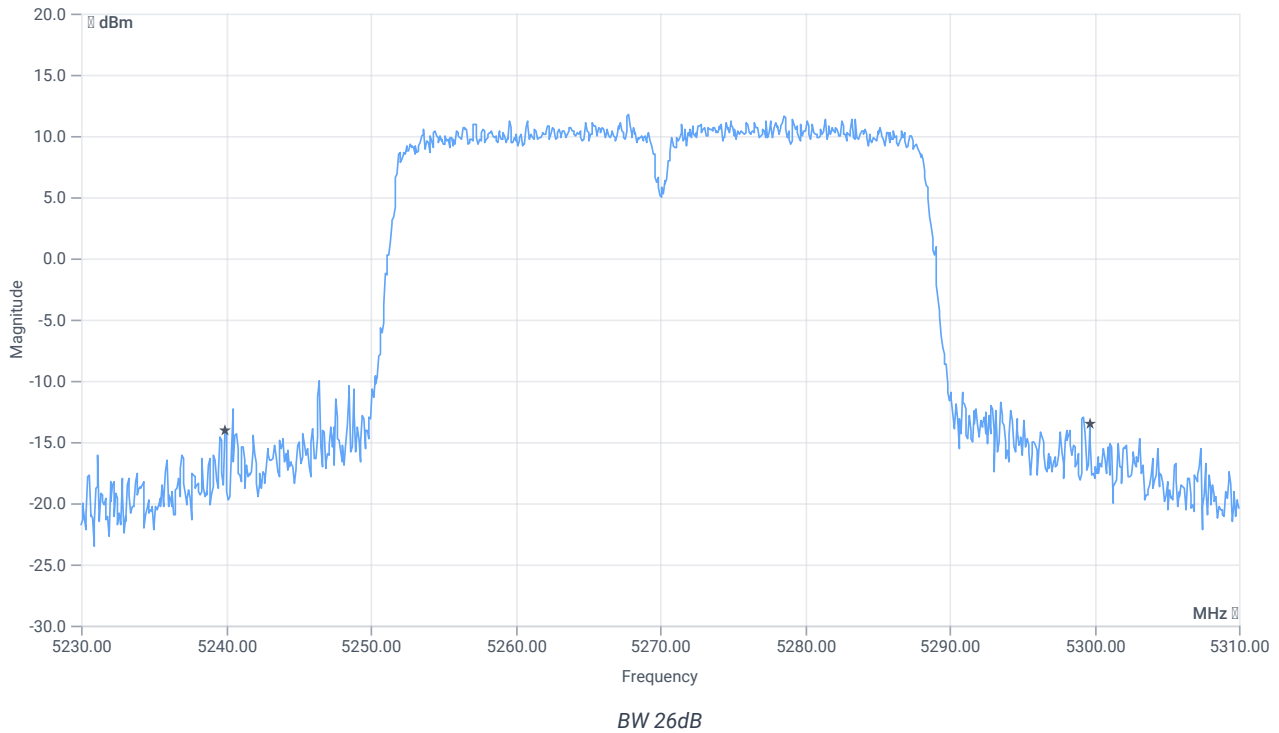
Evaluation max. Duty Cycle

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



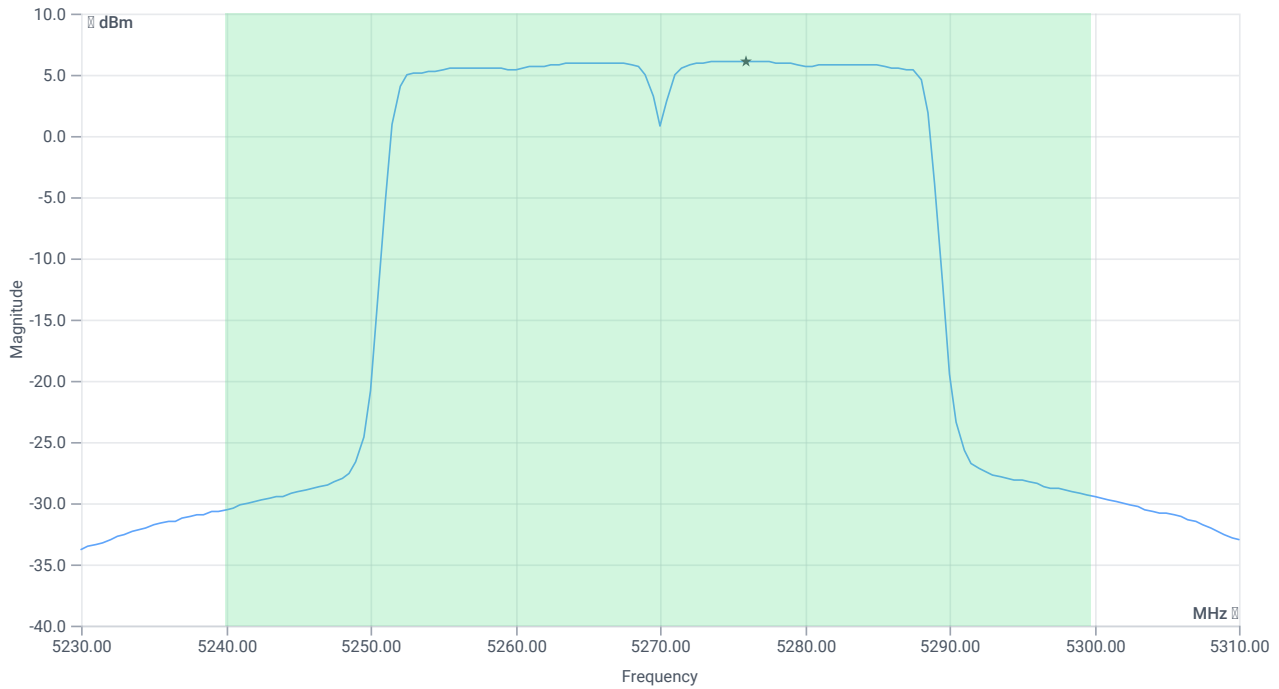
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	59.76	MHz	INFO
T1 26dB	---	---	5239.9200	MHz	INFO
T2 26dB	---	---	5299.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.93 16.22 25
Start [MHz] Stop [MHz]	5230.000 5310.000
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	--	--	20.97	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.97	dBm	PASS
Limit: 11 dBm + 10 log 59.76					
Max Output Power DC corrected	--	28.76	20.97	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.13	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.13	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:27:34
Ambit temp [°C] humidity [rel%]	25.1 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 n-HT40 mode U-NII-2A
Information	PS52

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
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

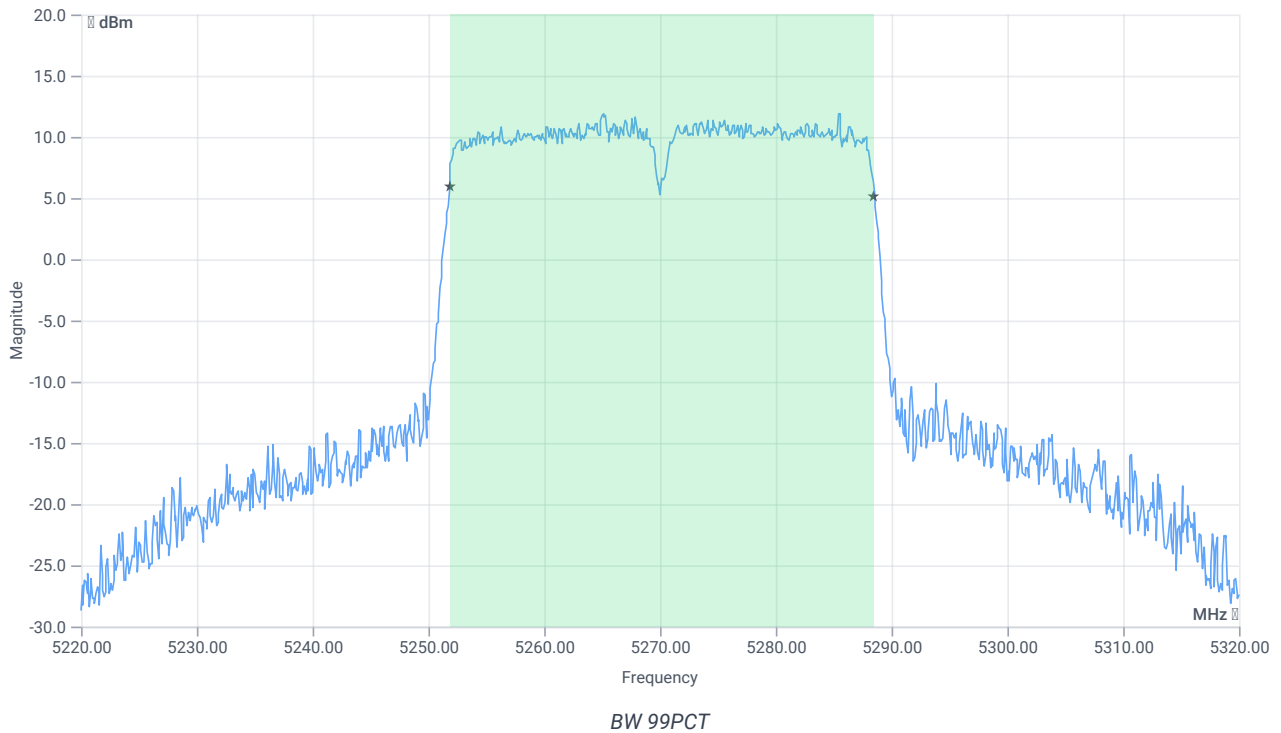
Test at TX 5270 MHz

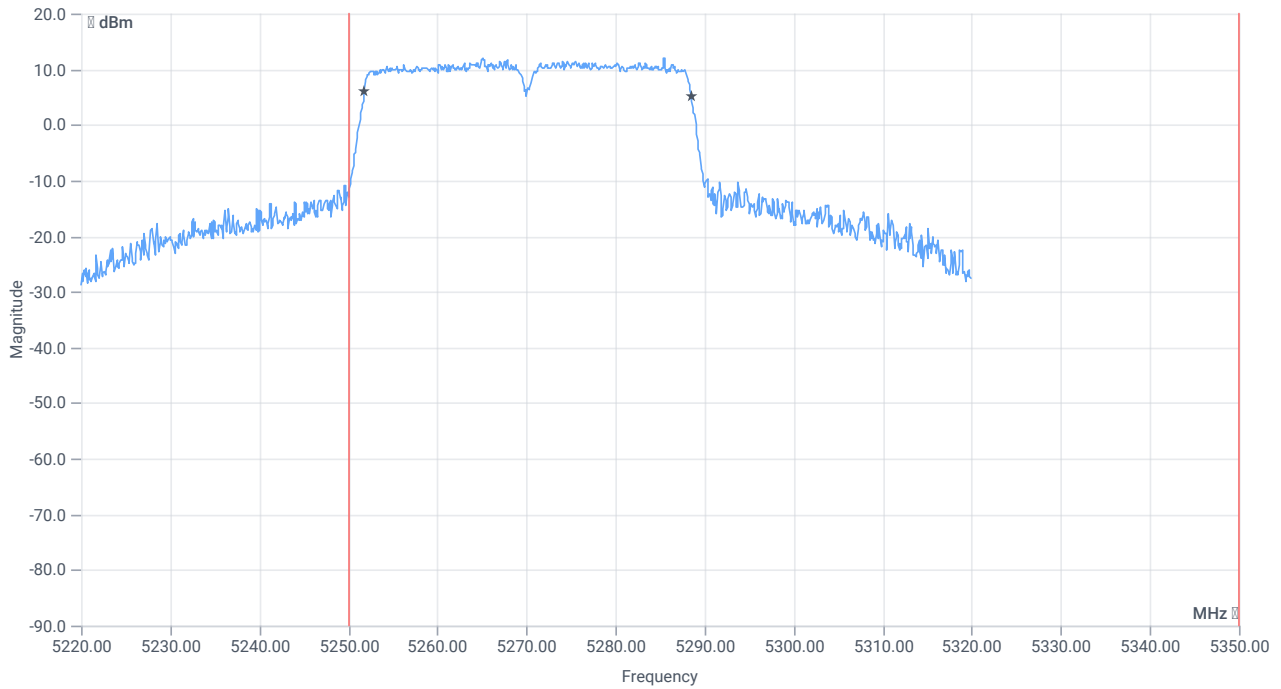
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.84	dBm	INFO
Ref. Frequency	--	--	5283.790	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.84 16.22 25
Start [MHz] Stop [MHz]	5220.000 5320.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

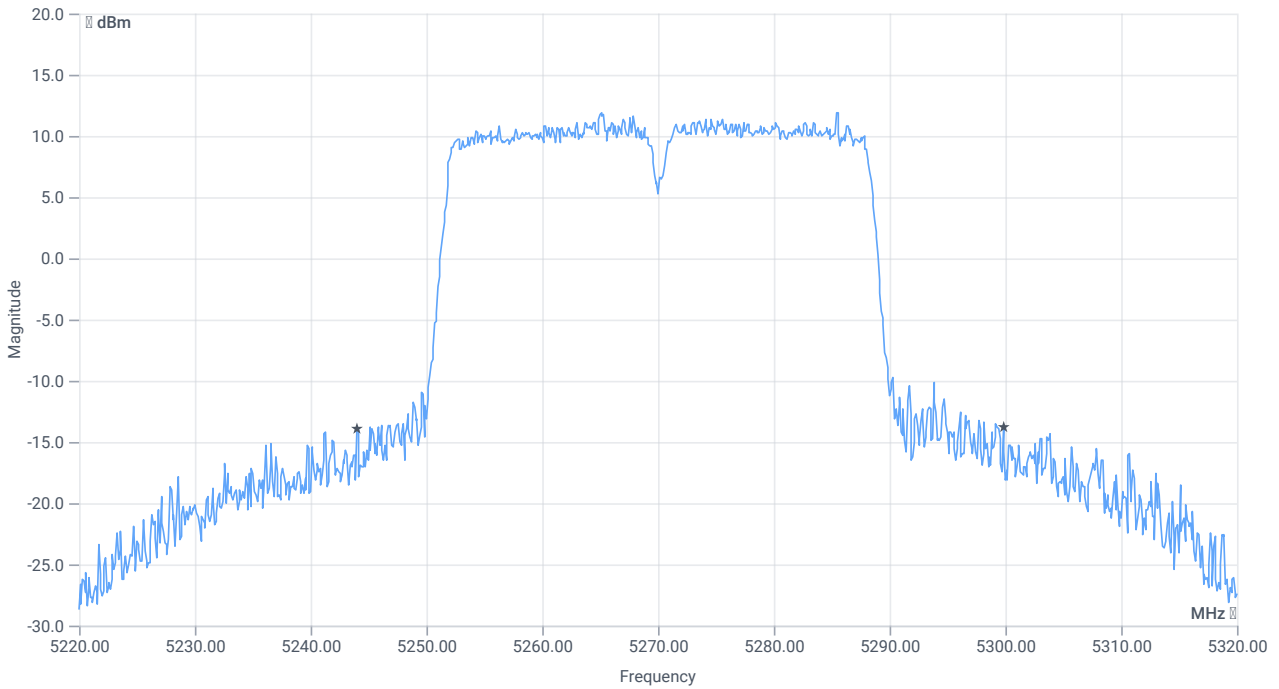




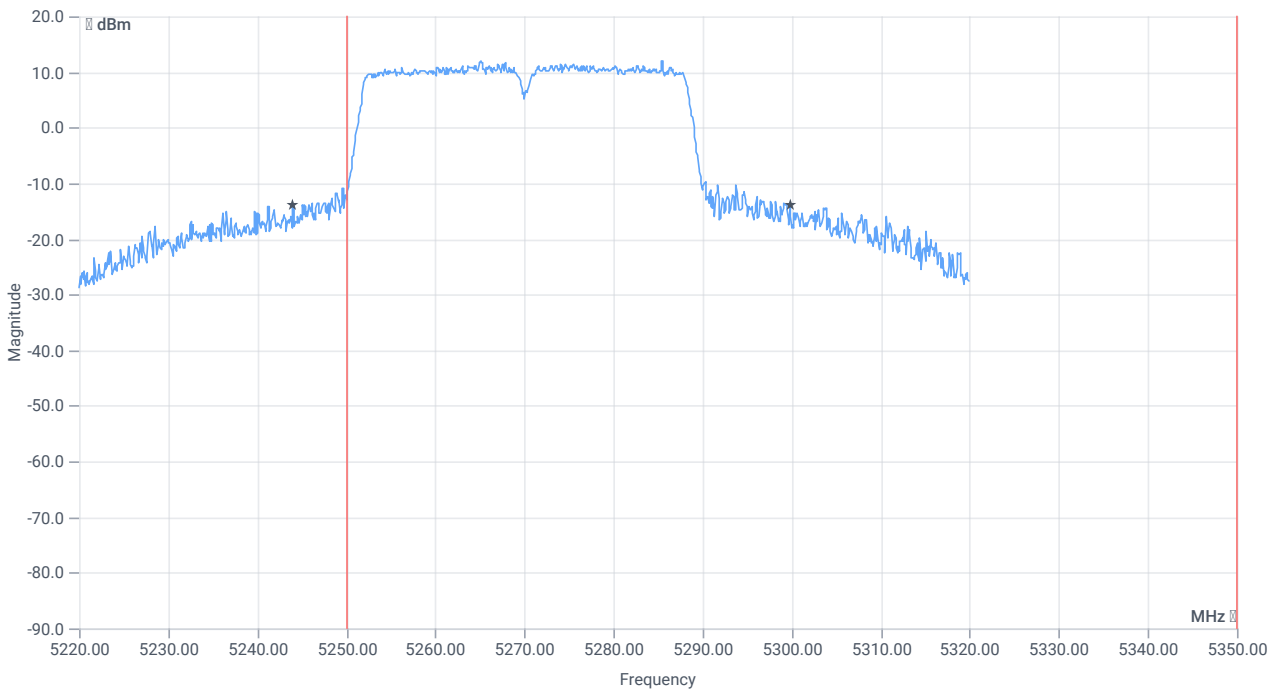
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5250.000000	--	5251.8182	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5288.4815	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	55.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5244.0000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5299.8000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:28:11
Ambit temp [°C] humidity [rel%]	25.1 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 n-HT40 mode U-NII-2A
Information	PS52

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
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 5270 MHz

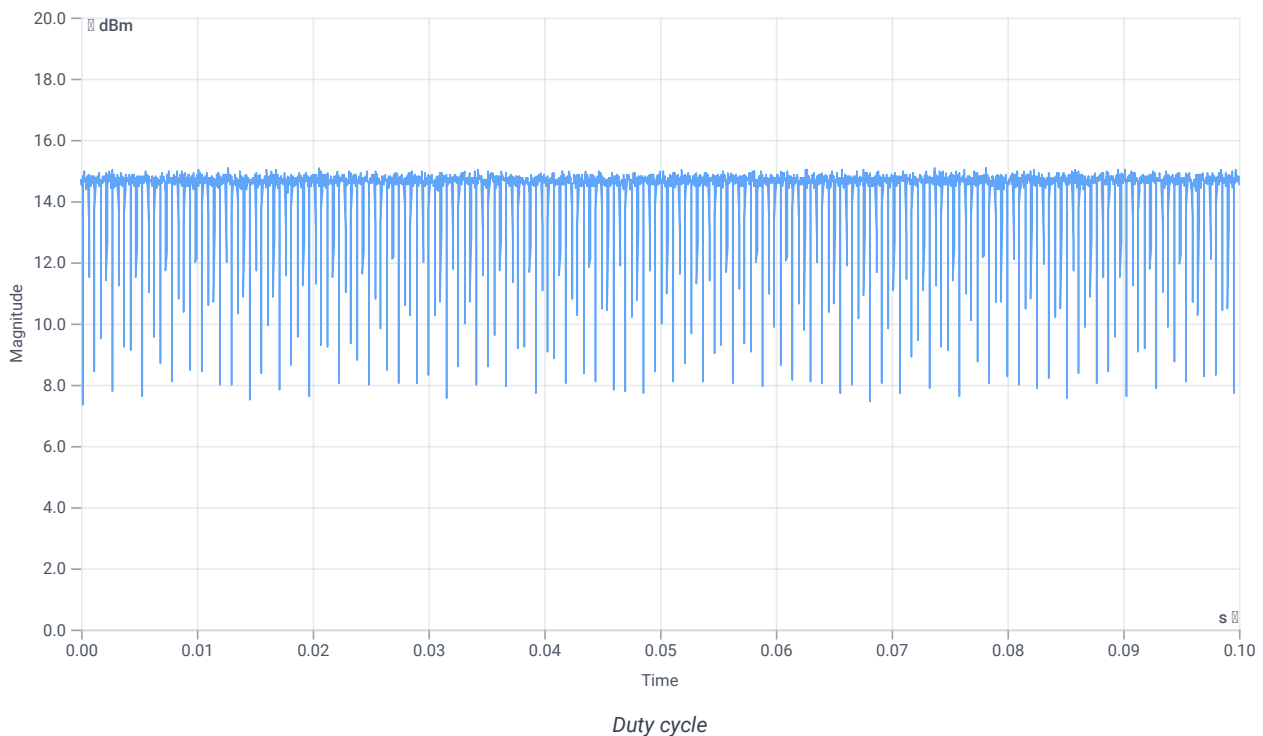
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.47	dBm	INFO
Ref. Frequency	--	--	5280.390	MHz	INFO

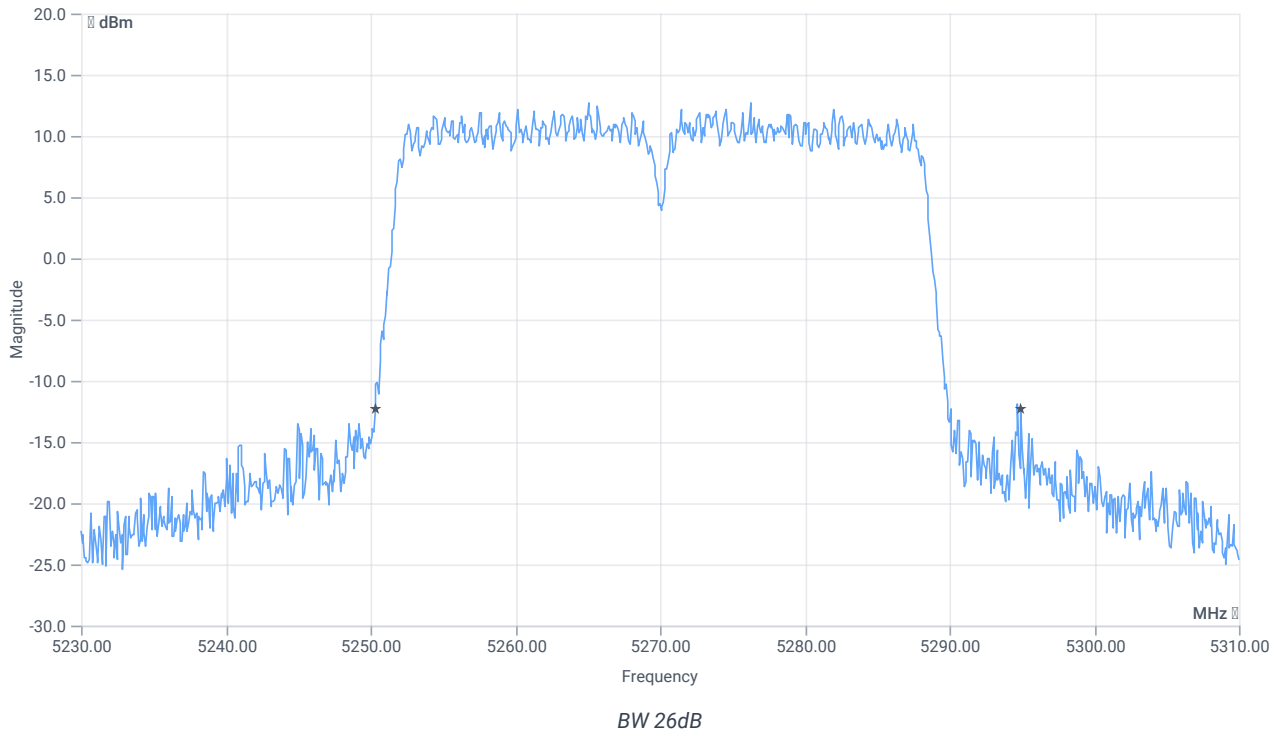
Evaluation max. Duty Cycle

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



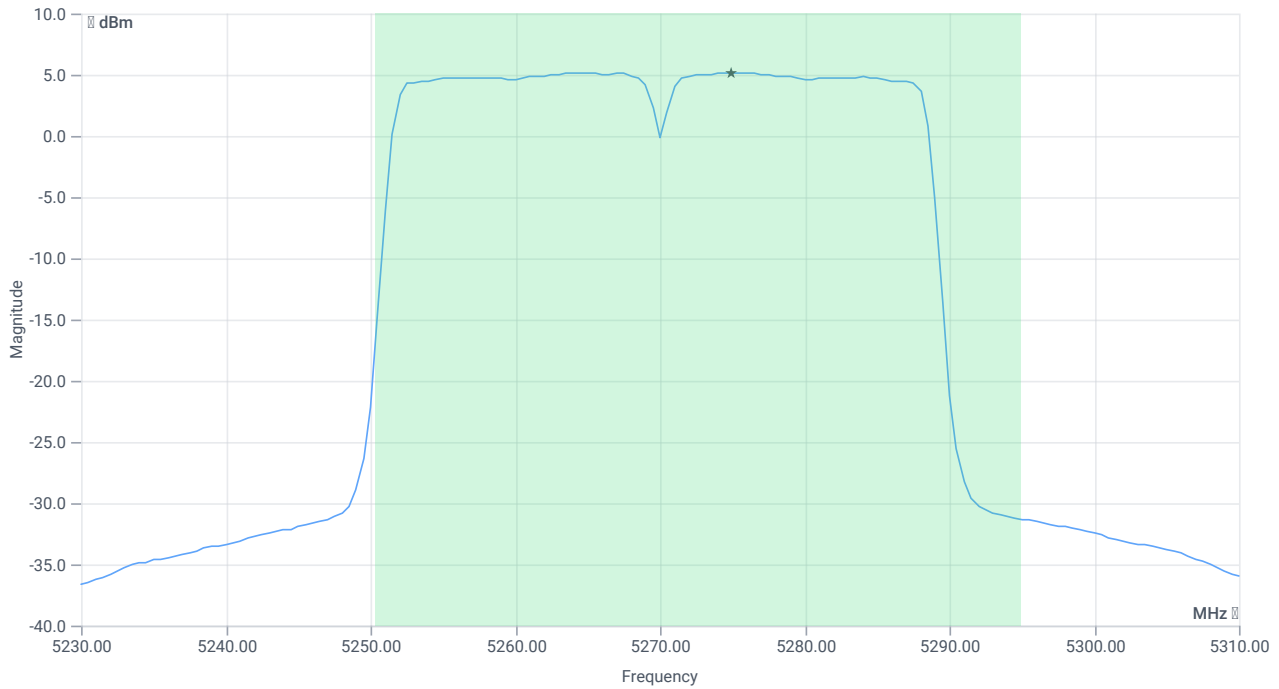
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	44.64	MHz	INFO
T1 26dB	---	---	5250.3200	MHz	INFO
T2 26dB	---	---	5294.9600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.47 16.22 25
Start [MHz] Stop [MHz]	5230.000 5310.000
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	--	--	20.05	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.05	dBm	PASS
Limit: 11 dBm + 10 log 44.64					
Max Output Power DC corrected	--	27.5	20.05	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.16	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.16	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:29:42
Ambit temp [°C] humidity [rel%]	25.0 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 n-HT40 mode U-NII-2A
Information	PS52

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
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

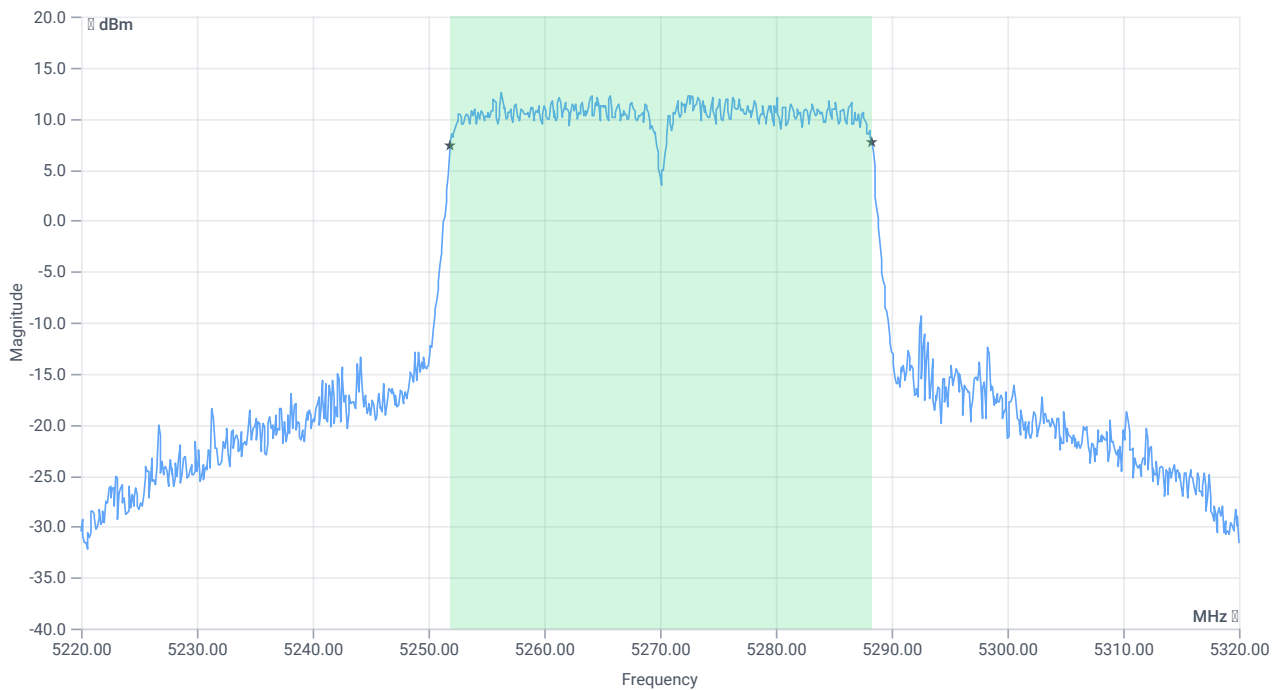
Test at TX 5270 MHz

RESULT: Reference Power cond.

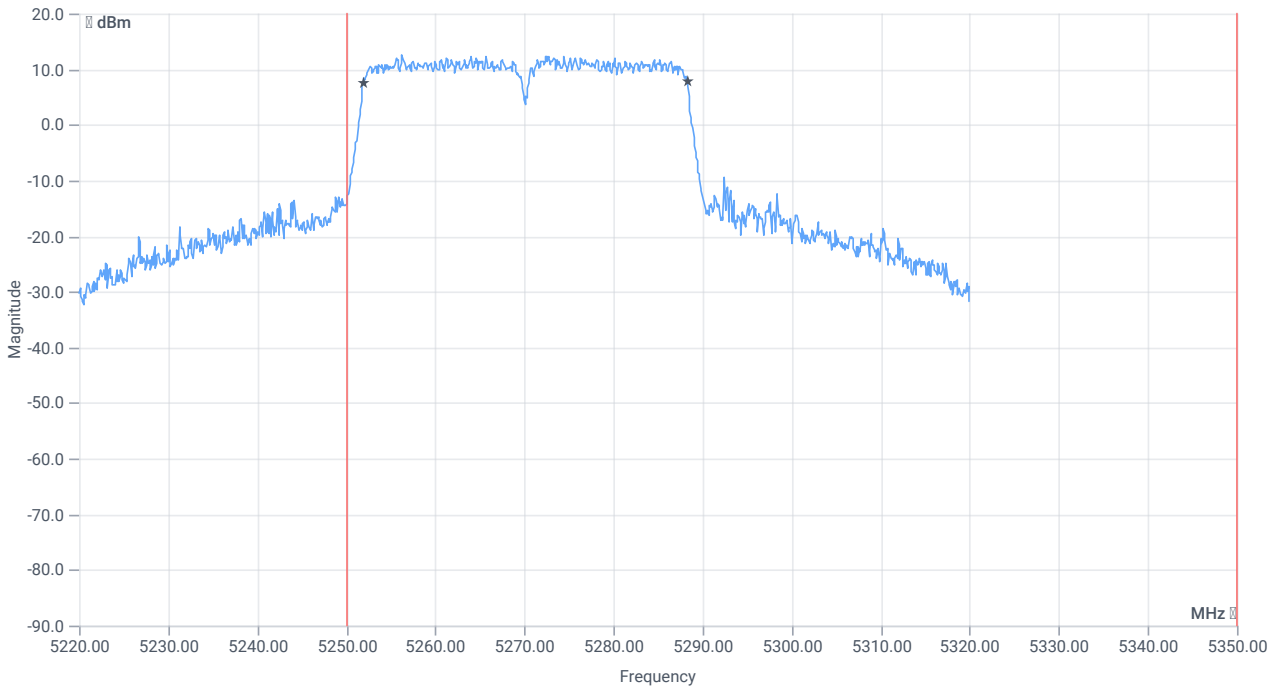
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.77	dBm	INFO
Ref. Frequency	--	--	5274.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.77 16.22 25
Start [MHz] Stop [MHz]	5220.000 5320.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



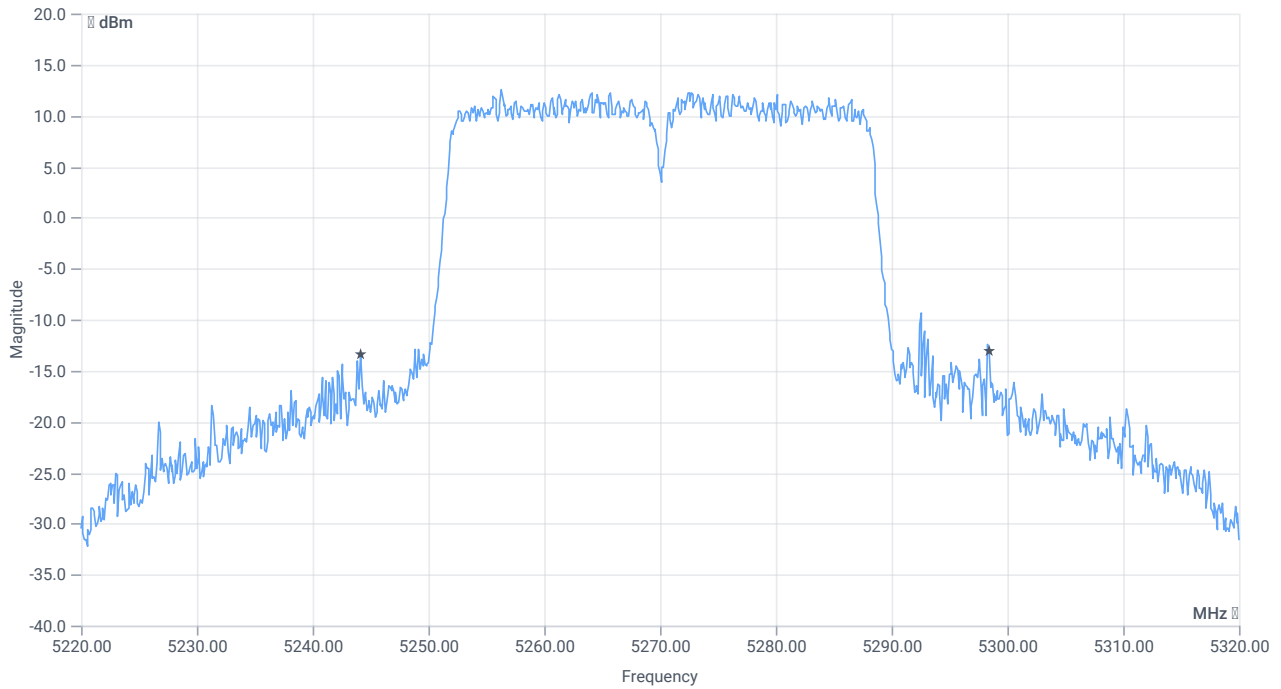
BW 99PCT



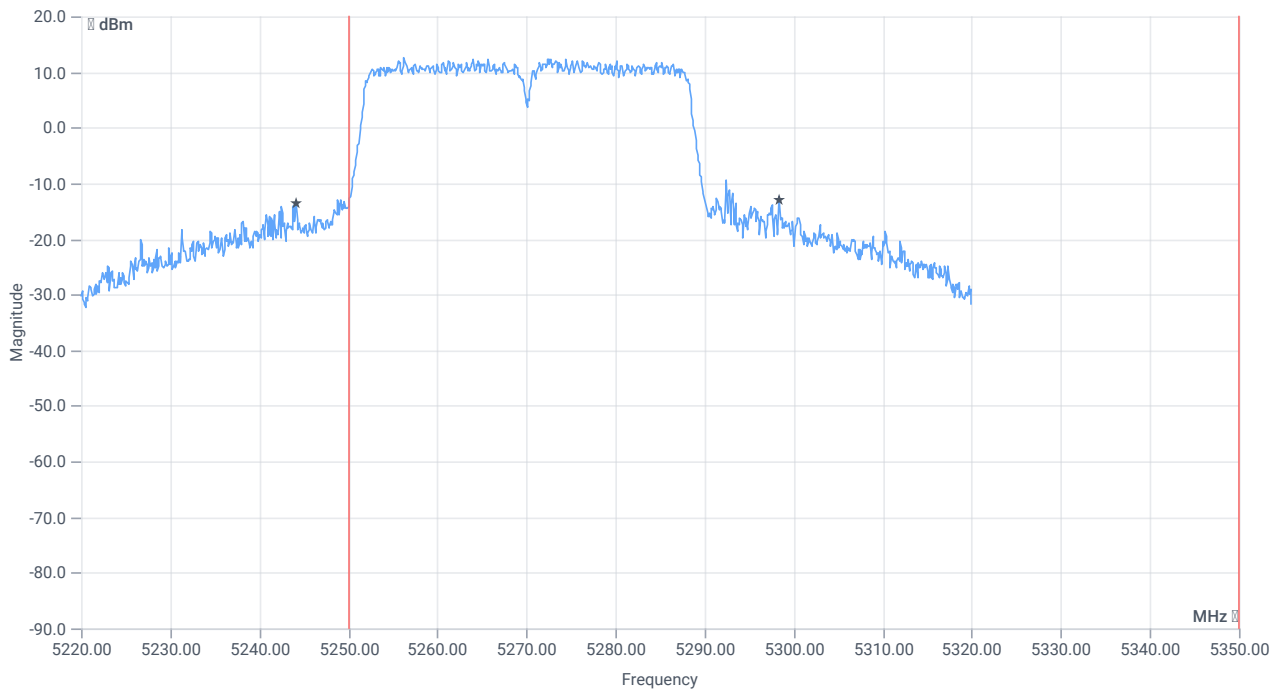
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5250.000000	--	5251.9181	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5288.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	54.3	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5244.1000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5298.4000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:31:22
Ambit temp [°C] humidity [rel%]	25.1 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-2A
Information	PS82

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5270 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.97	dBm	INFO
Ant:1 BW 26dB	--	--	59.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.05	dBm	INFO
Ant:2 BW 26dB	--	--	44.640	MHz	INFO
Σ Limit absolute	--	24	23.54	dBm	PASS
Σ Limit: 11 dBm + 10 log 44.64	--	27.5	23.54	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.13	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.16	dBm/1MHz	INFO
Σ	--	11	8.68	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 14:32:36
Ambit temp [°C] humidity [rel%]	25.1 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_2A
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 14:32:36
Message	set WLAN5Gx to n_HT40_U_NII_2A, Frequency [MHz] 5310

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 n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:32:45
Ambit temp [°C] humidity [rel%]	25.1 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 n-HT40 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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
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 5310 MHz

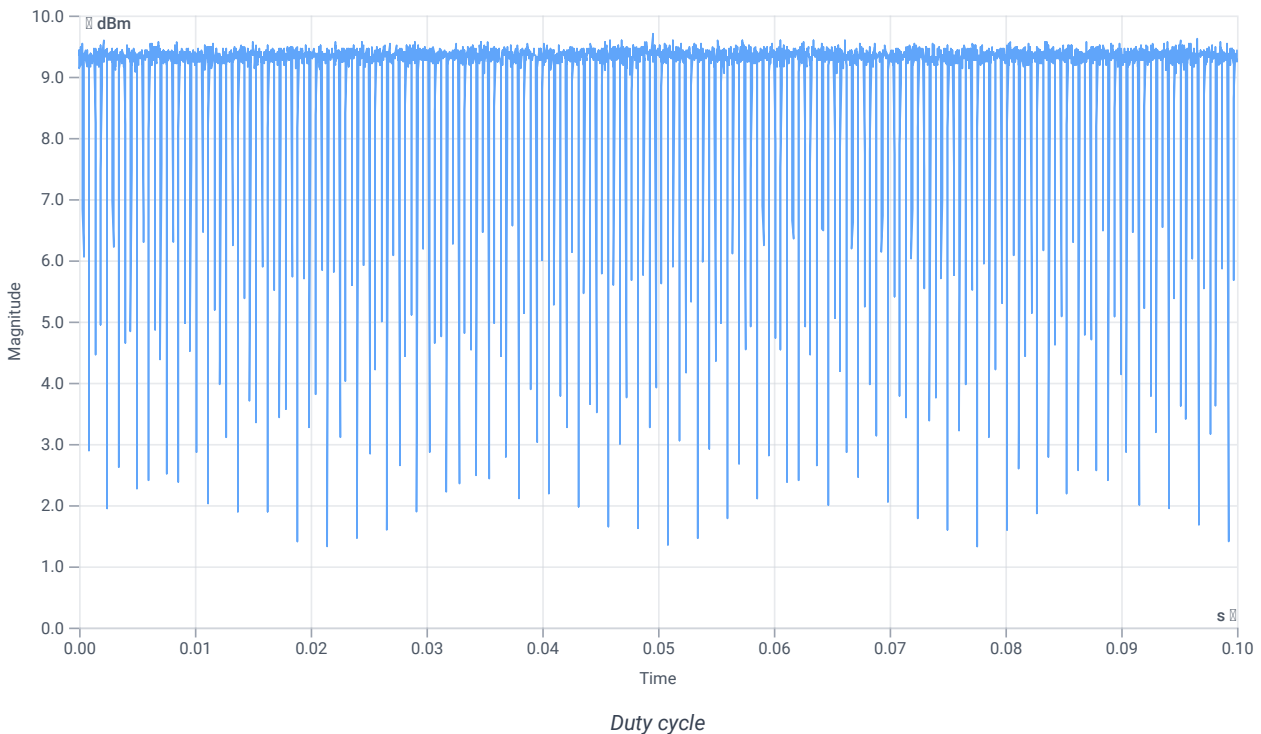
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.72	dBm	INFO
Ref. Frequency	--	--	5314.000	MHz	INFO

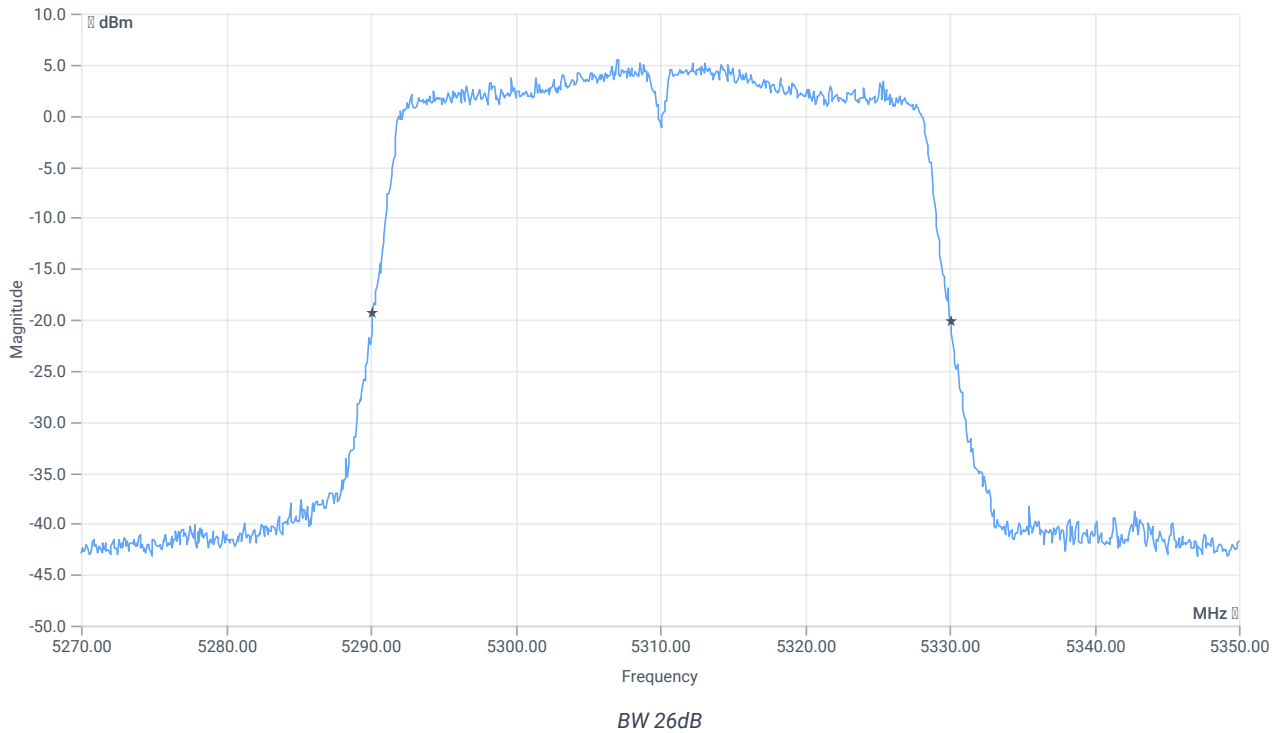
Evaluation max. Duty Cycle

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



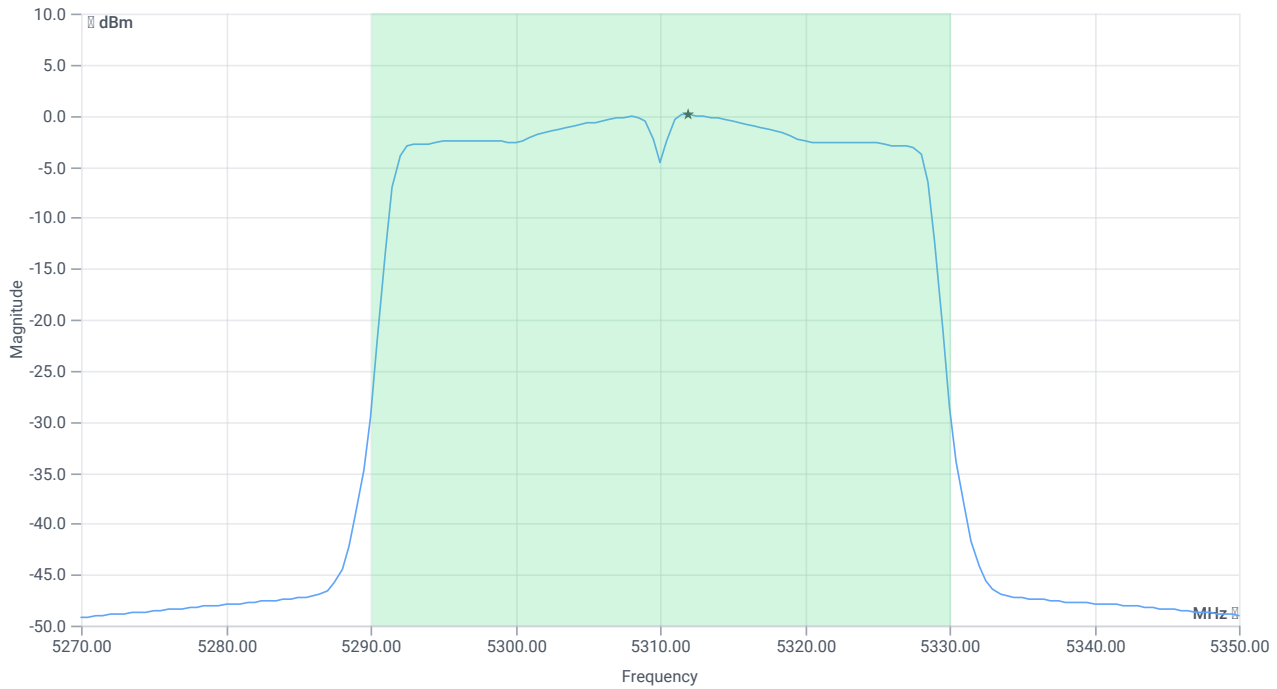
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.92	MHz	INFO
T1 26dB	---	---	5290.1600	MHz	INFO
T2 26dB	---	---	5330.0800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.72 16.12 20
Start [MHz] Stop [MHz]	5270.000 5350.000
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	--	--	13.67	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	13.67	dBm	PASS
Limit: 11 dBm + 10 log 39.92					
Max Output Power DC corrected	--	27.01	13.67	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	0.06	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	0.06	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:34:16
Ambit temp [°C] humidity [rel%]	25.0 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 n-HT40 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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
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

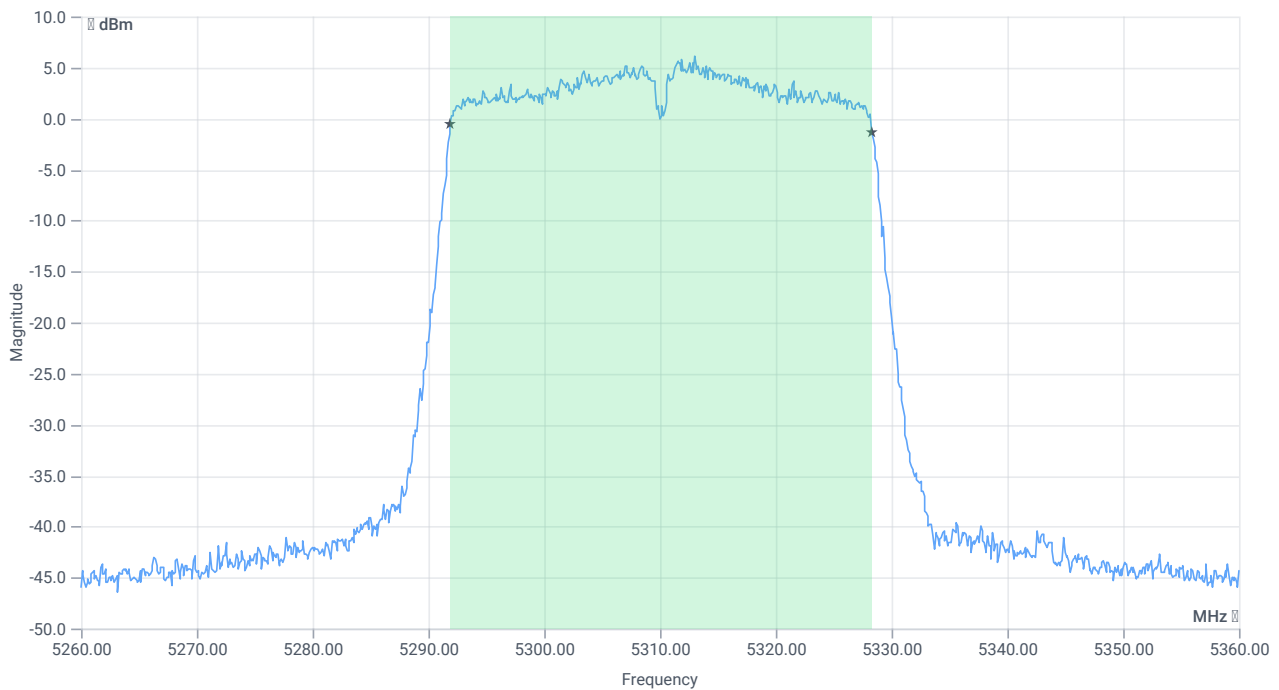
Test at TX 5310 MHz

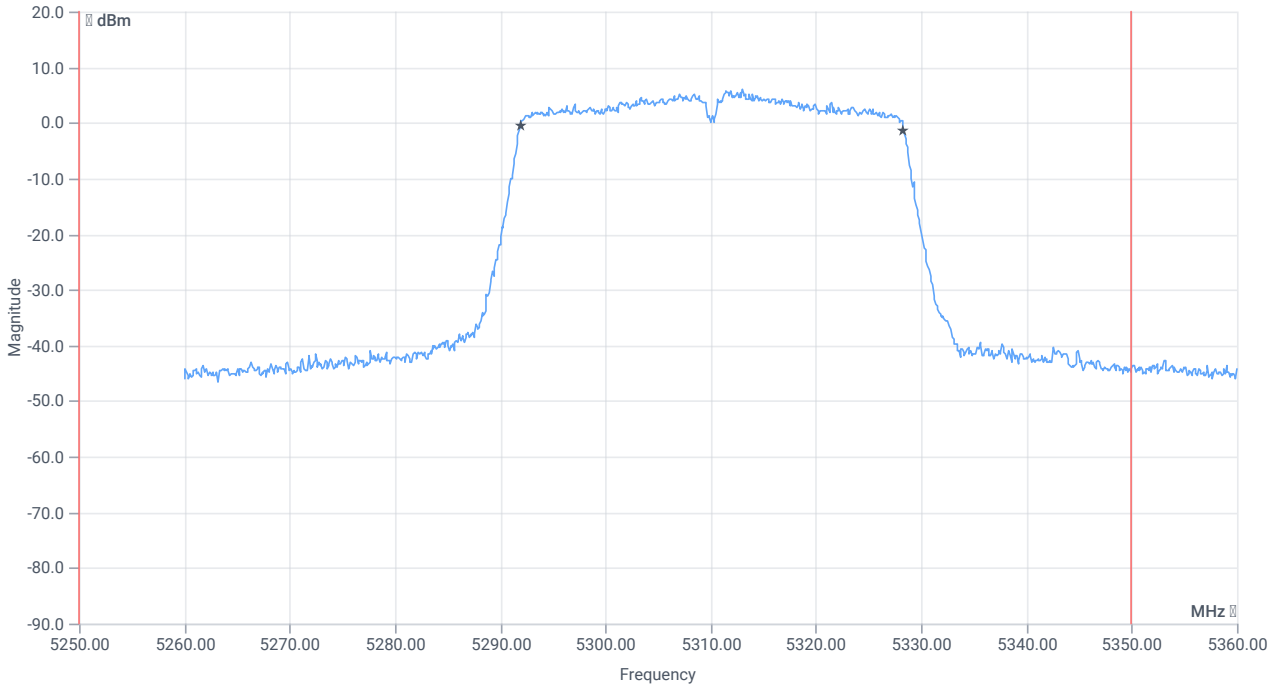
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.11	dBm	INFO
Ref. Frequency	--	--	5306.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.11 16.12 15
Start [MHz] Stop [MHz]	5260.000 5360.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

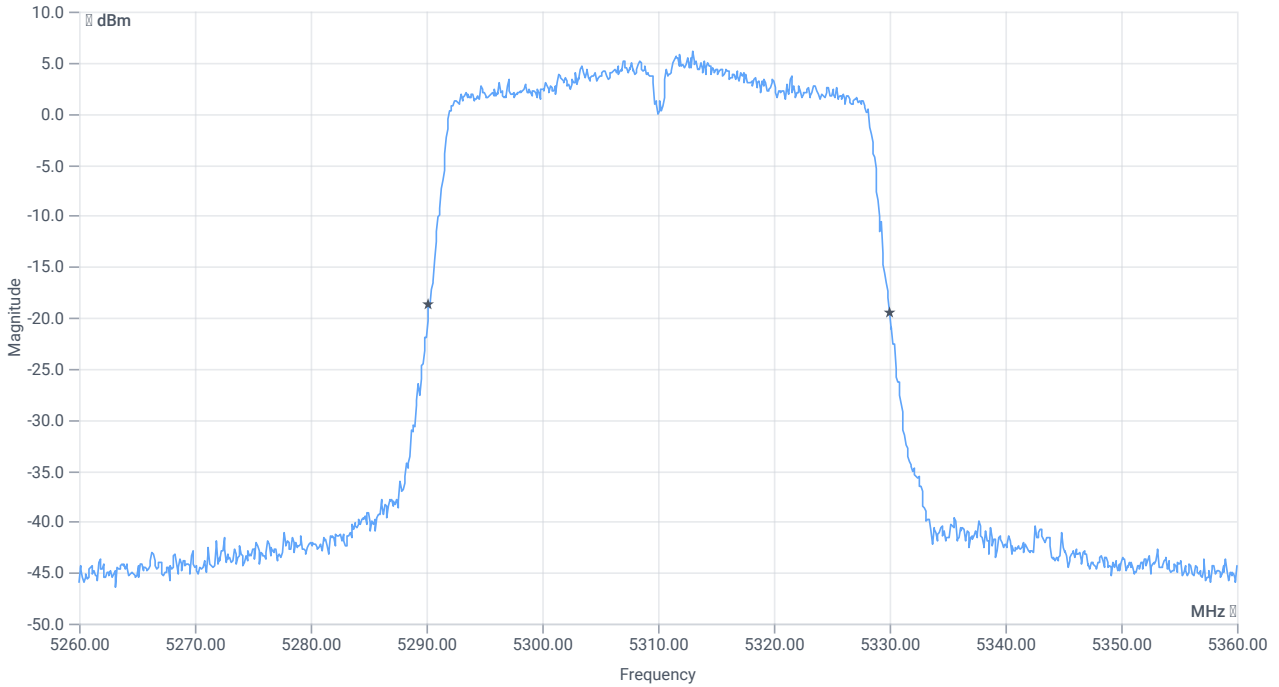




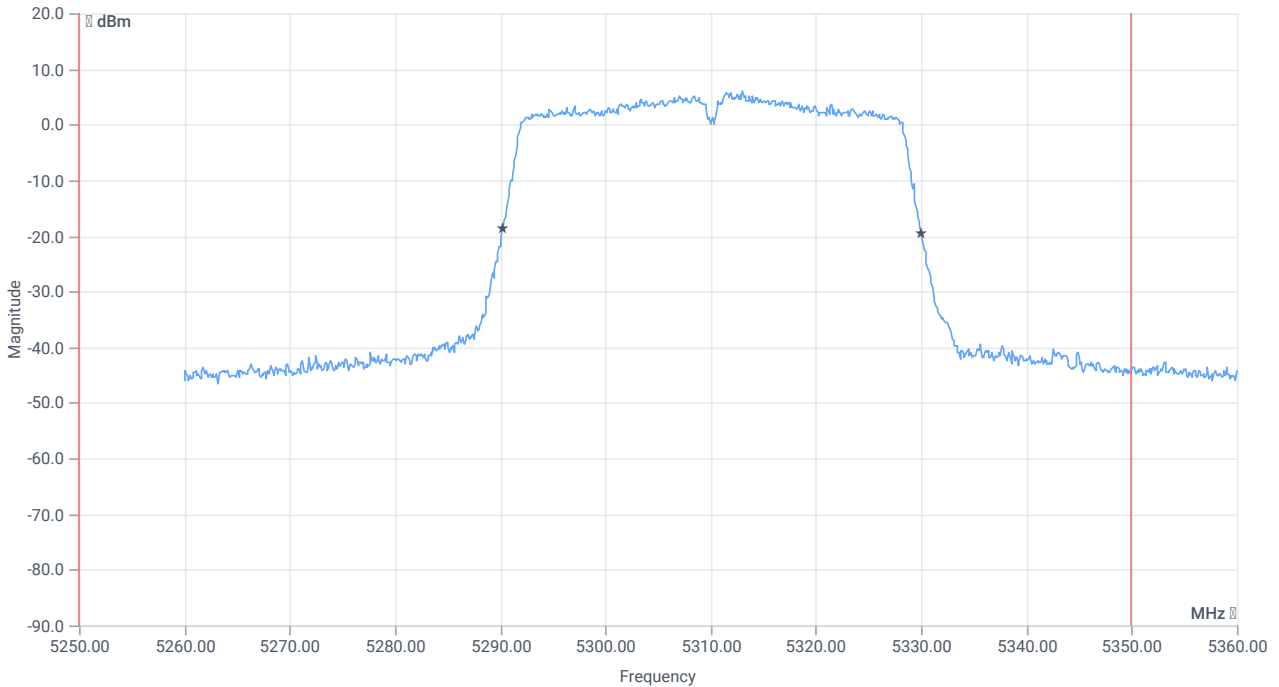
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5250.000000	--	5291.9181	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5328.2817	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.8	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5290.2000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5330.0000	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:34:52
Ambit temp [°C] humidity [rel%]	25.1 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 n-HT40 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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
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 5310 MHz

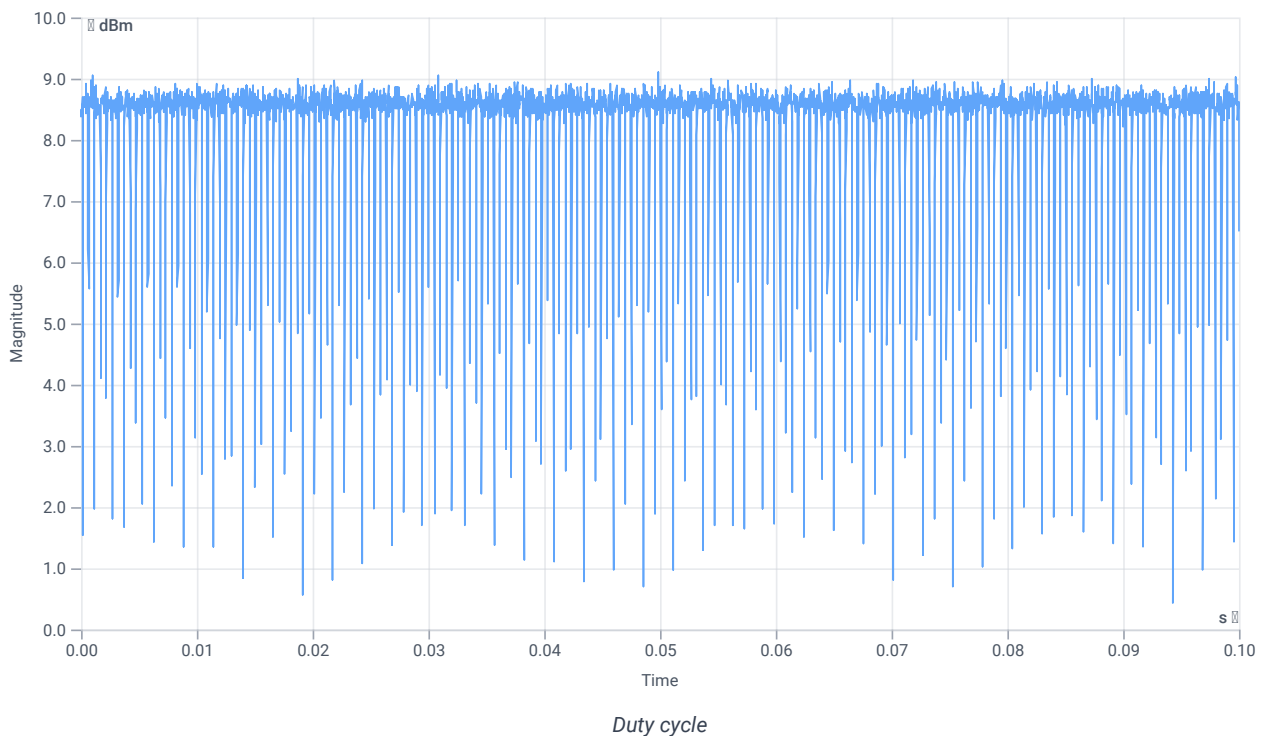
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.10	dBm	INFO
Ref. Frequency	--	--	5311.600	MHz	INFO

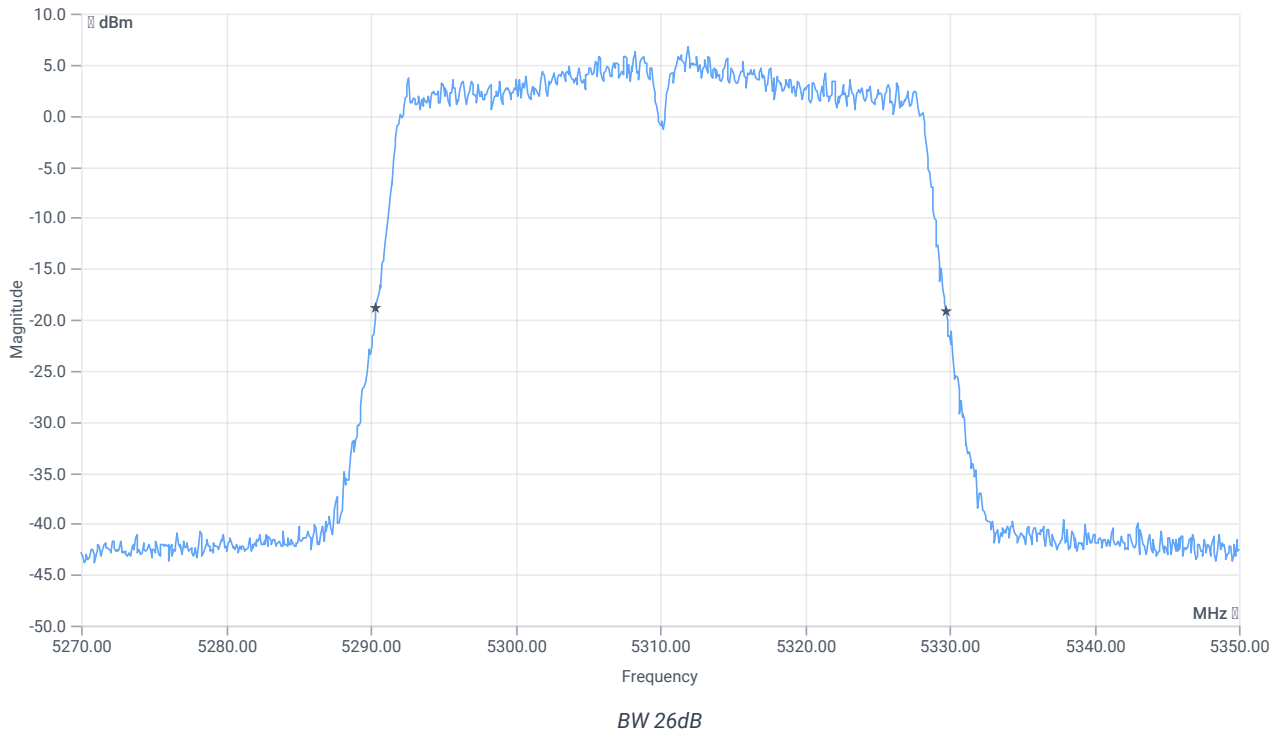
Evaluation max. Duty Cycle

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



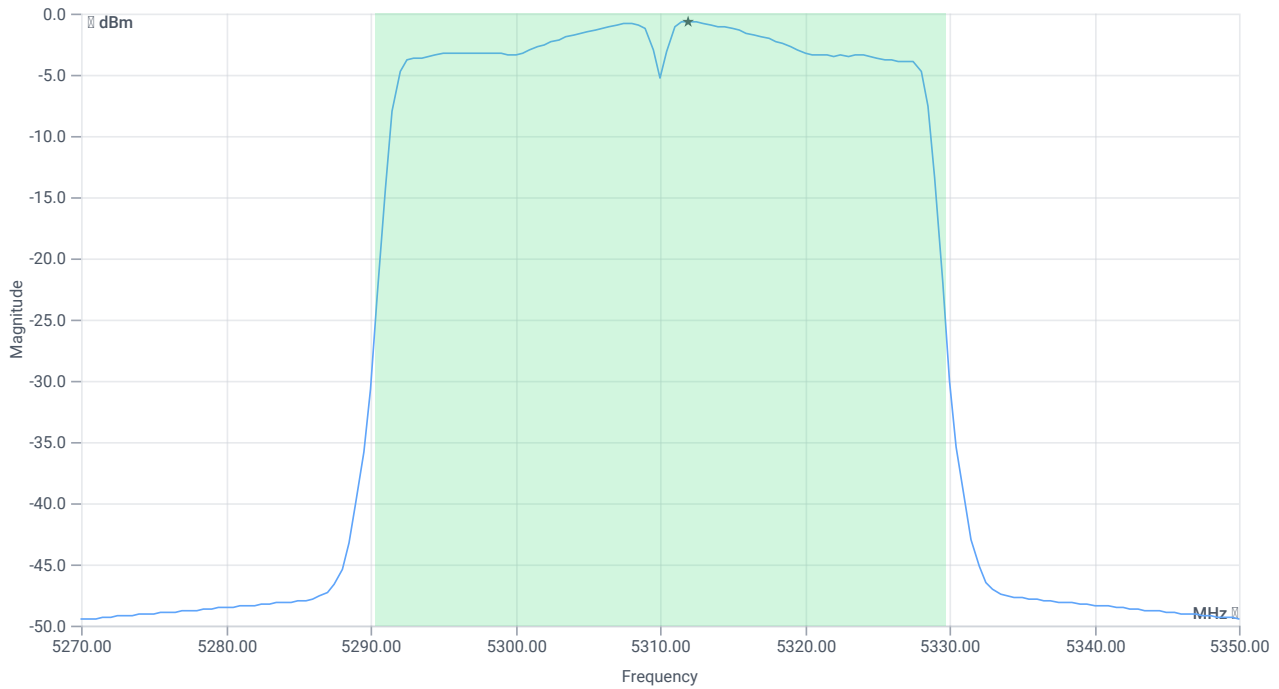
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.36	MHz	INFO
T1 26dB	---	---	5290.4000	MHz	INFO
T2 26dB	---	---	5329.7600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.10 16.12 20
Start [MHz] Stop [MHz]	5270.000 5350.000
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	--	--	12.91	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	12.91	dBm	PASS
Limit: 11 dBm + 10 log 39.36					
Max Output Power DC corrected	--	26.95	12.91	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	-0.65	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	-0.65	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:36:23
Ambit temp [°C] humidity [rel%]	25.0 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 n-HT40 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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
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

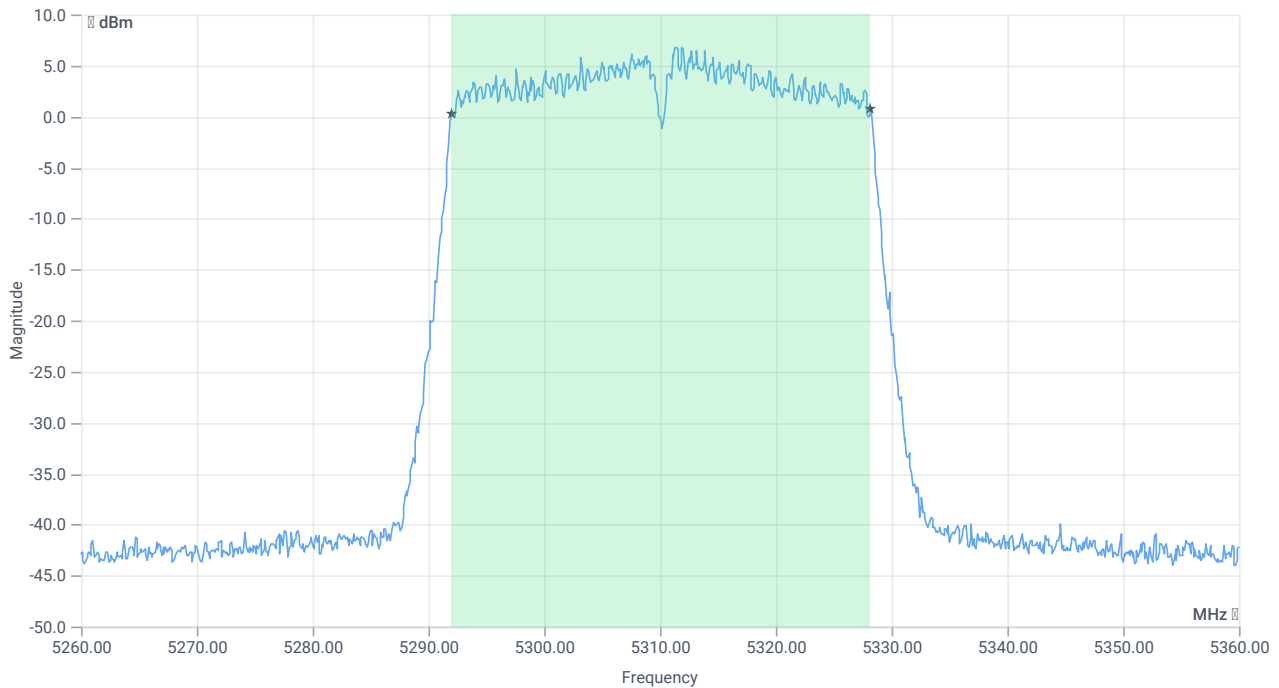
Test at TX 5310 MHz

RESULT: Reference Power cond.

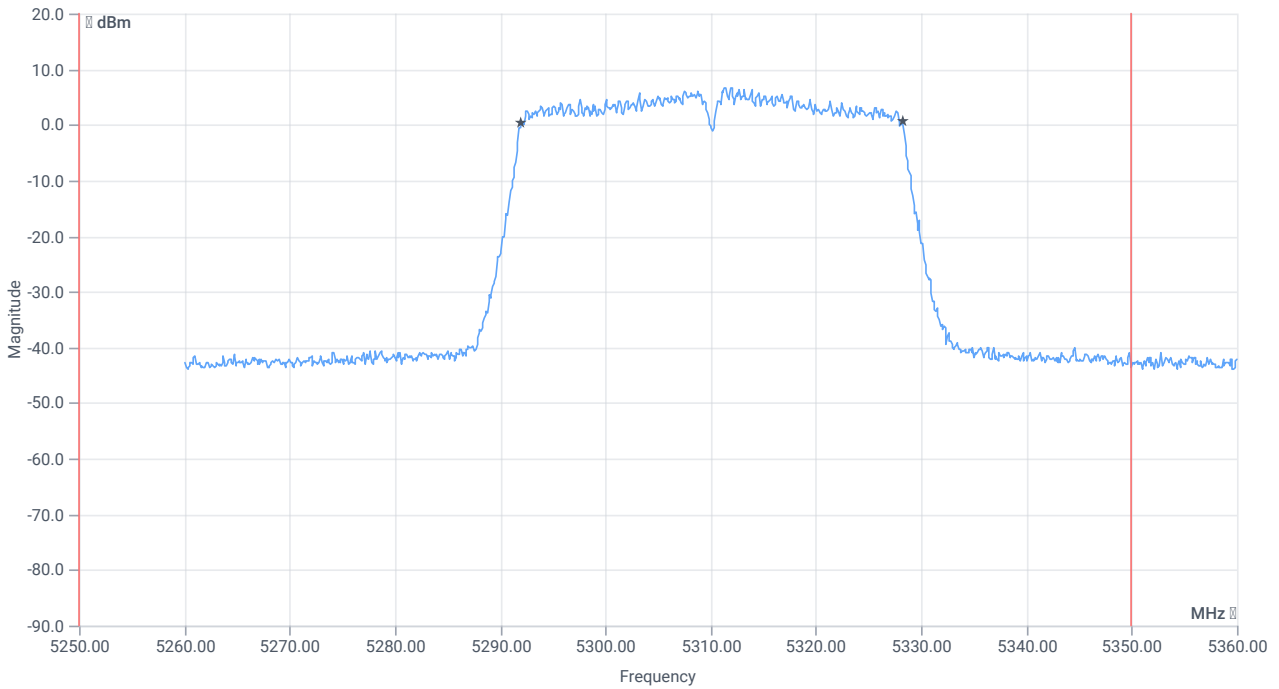
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.20	dBm	INFO
Ref. Frequency	--	--	5308.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.20 16.12 20
Start [MHz] Stop [MHz]	5260.000 5360.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



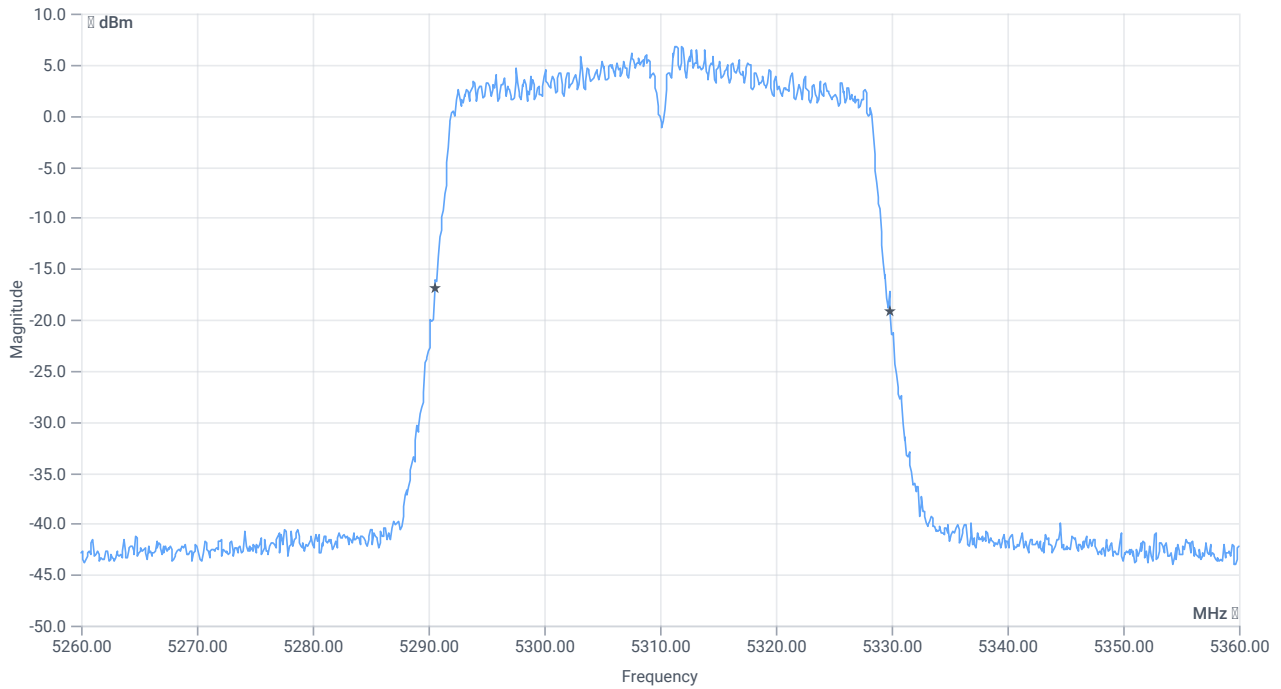
BW 99PCT



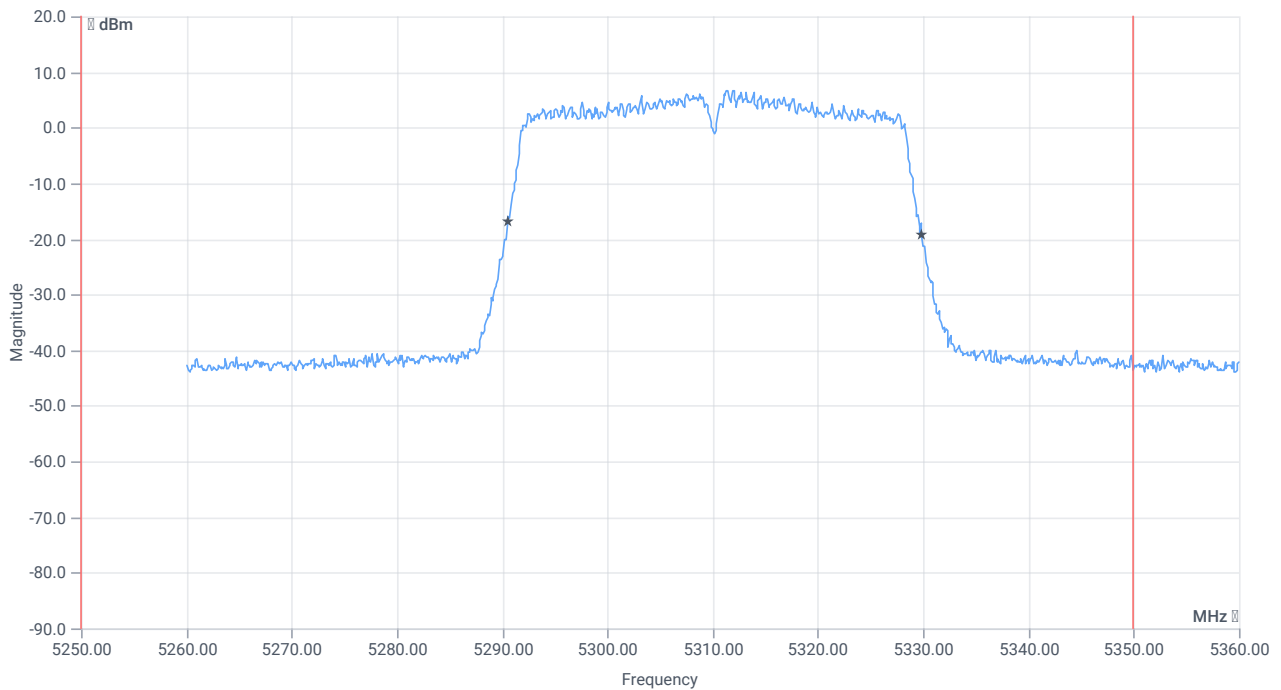
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.164	MHz	INFO
T1 99%	5250.000000	--	5292.0180	MHz	PASS since U-NII-1 is supported
T2 99%	--	5350.000000	5328.1818	MHz	PASS



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.4	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5250.000000	--	5290.5000	MHz	PASS since U-NII-1 is supported
T2 26dB	--	5350.000000	5329.9000	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2A

References

TC start	26.07.2023 14:47:27
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-2A
Information	PS52

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5270
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5310
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5310 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	13.67	dBm	INFO
Ant:1 BW 26dB	--	--	39.920	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	12.91	dBm	INFO
Ant:2 BW 26dB	--	--	39.360	MHz	INFO
Σ Limit absolute	--	24	16.32	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.36	--	26.95	16.32	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	0.06	dBm/1MHz	INFO
Ant:2 PSD	--	--	-0.65	dBm/1MHz	INFO
Σ	--	11	2.73	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 14:49:06
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 14:49:06
Message	set WLAN5Gx to n_HT40_U_NII_2C, Frequency [MHz] 5510 ,

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 n-HT40 mode U-NII-2C

References

TC start	26.07.2023 14:49:24
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS62

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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 5510 MHz

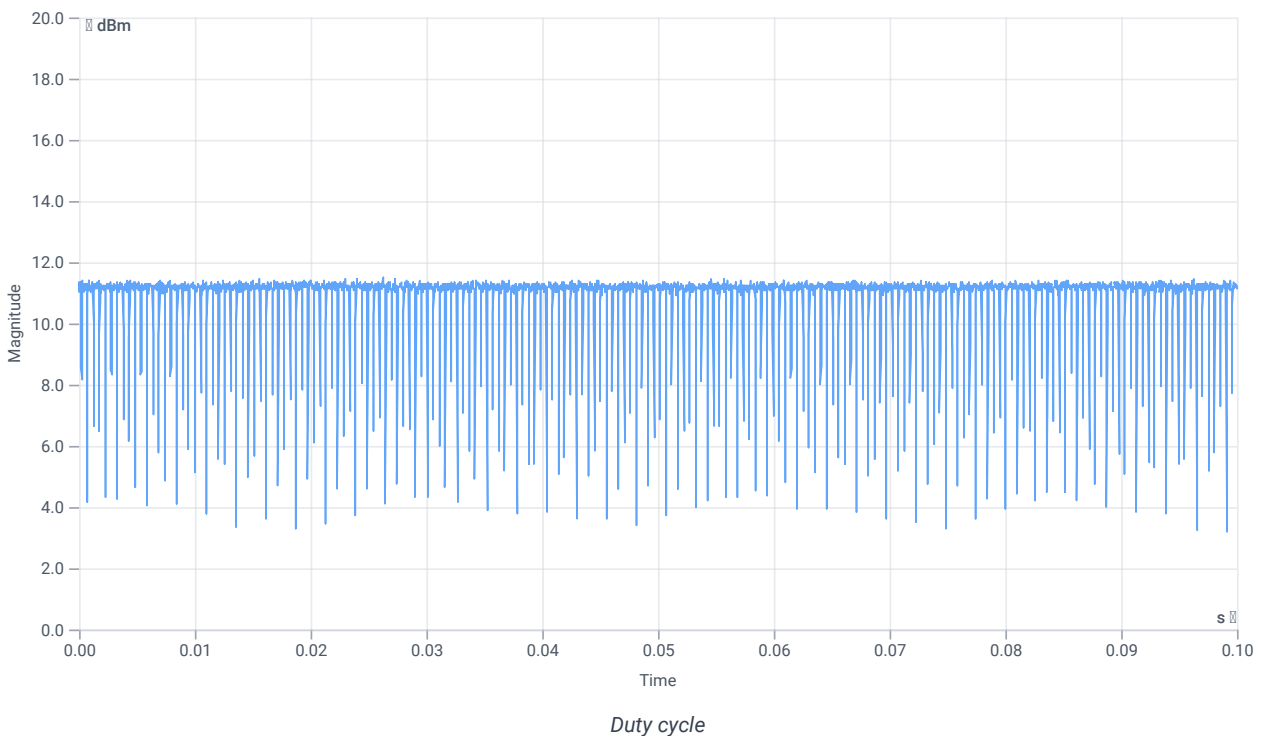
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	10.09	dBm	INFO
Ref. Frequency	--	--	5512.400	MHz	INFO

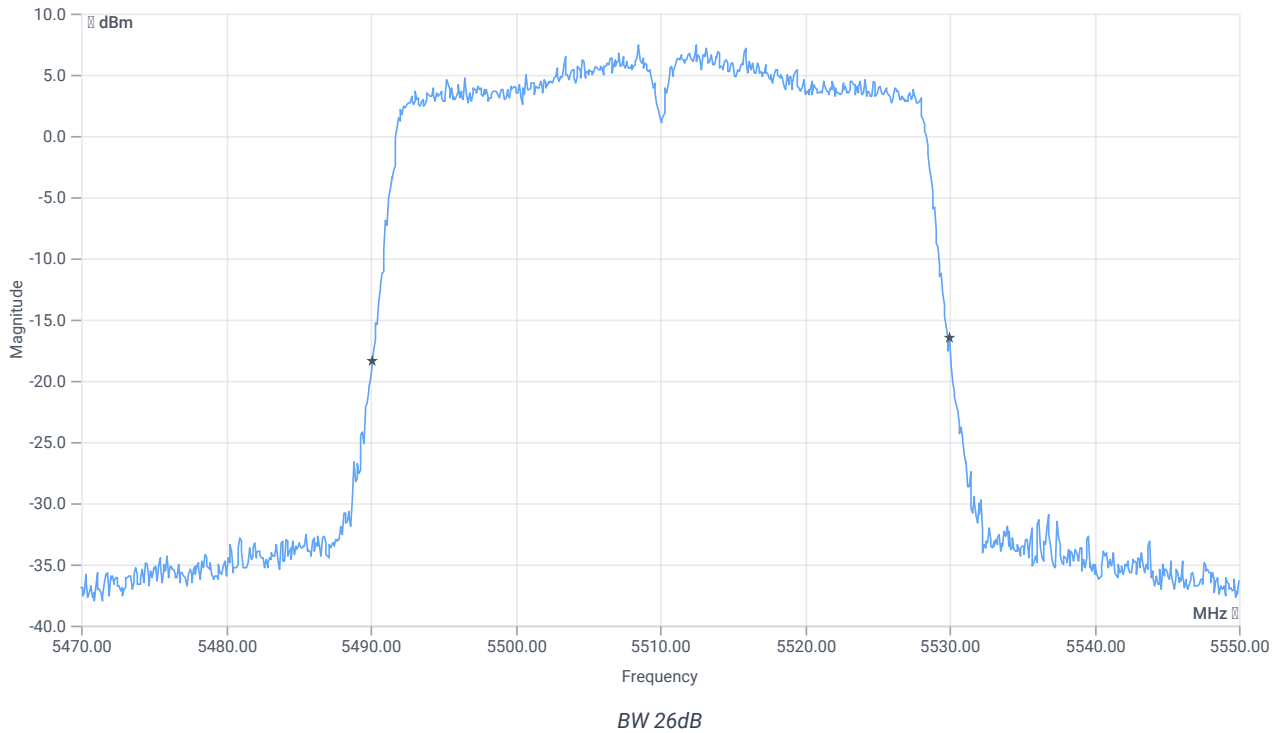
Evaluation max. Duty Cycle

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



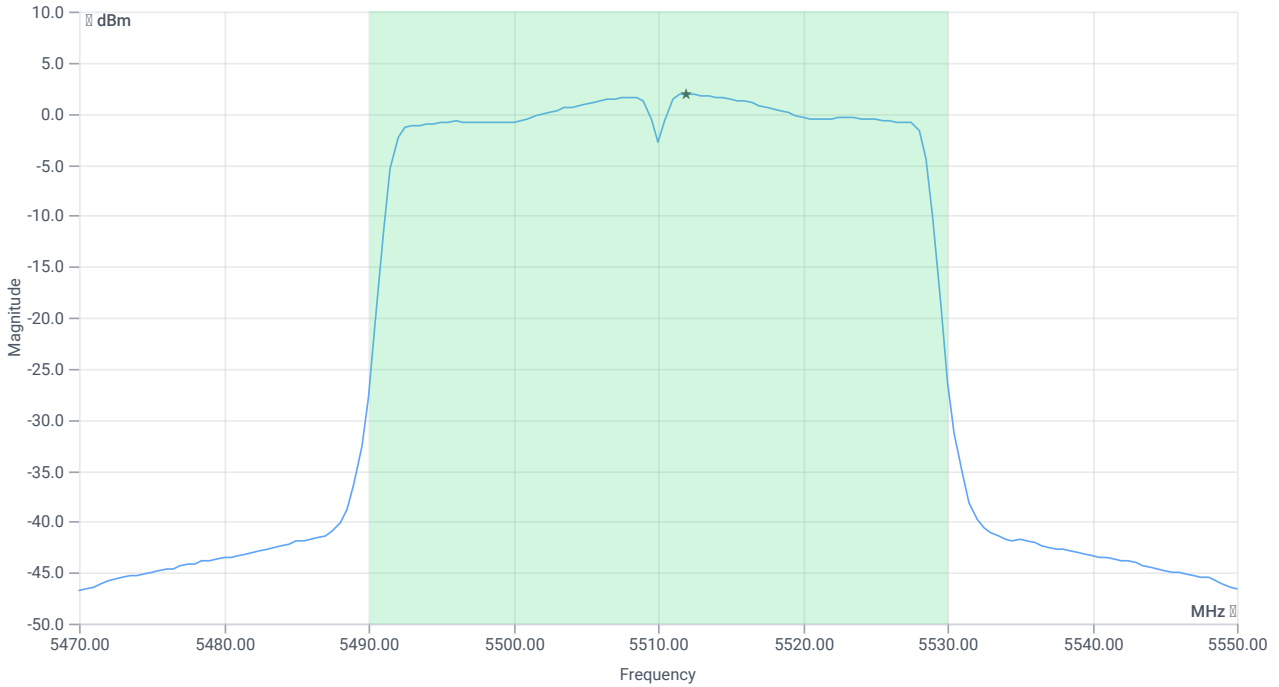
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.84	MHz	INFO
T1 26dB	---	---	5490.1600	MHz	INFO
T2 26dB	---	---	5530.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.09 16.59 20
Start [MHz] Stop [MHz]	5470.000 5550.000
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	--	--	15.54	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	15.54	dBm	PASS
Limit: 11 dBm + 10 log 39.84					
Max Output Power DC corrected	--	27	15.54	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	1.91	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	1.91	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 14:50:50
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS62

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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

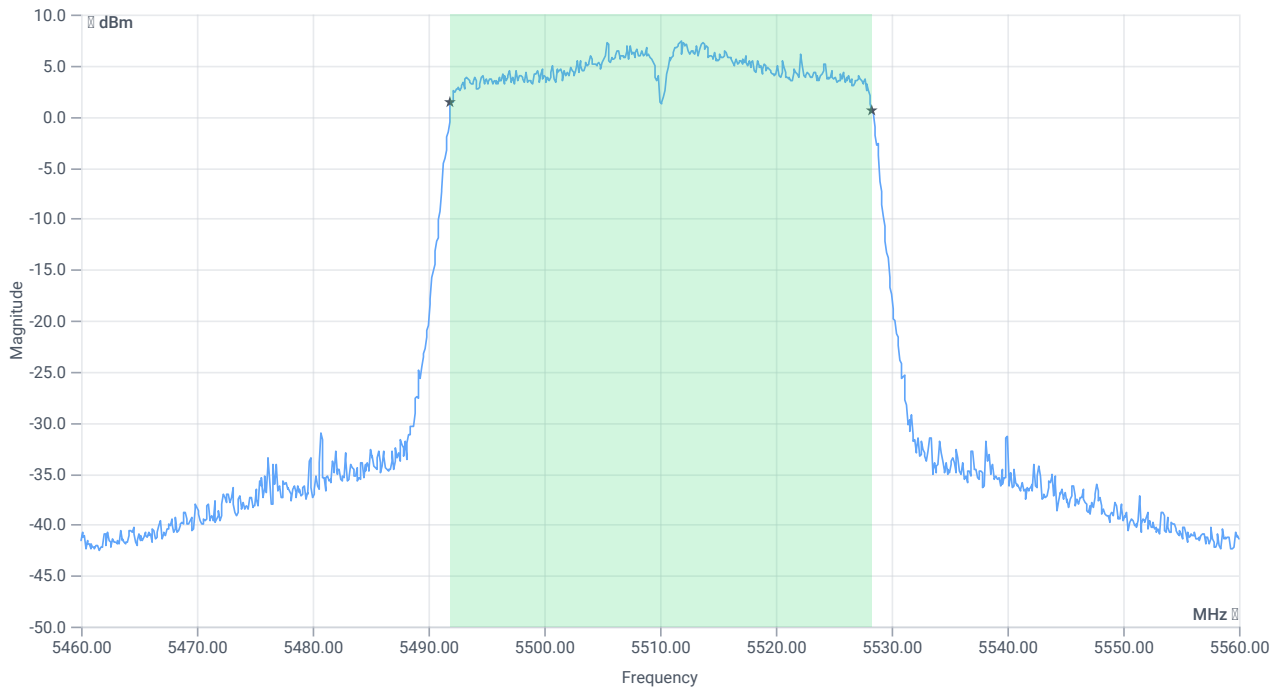
Test at TX 5510 MHz

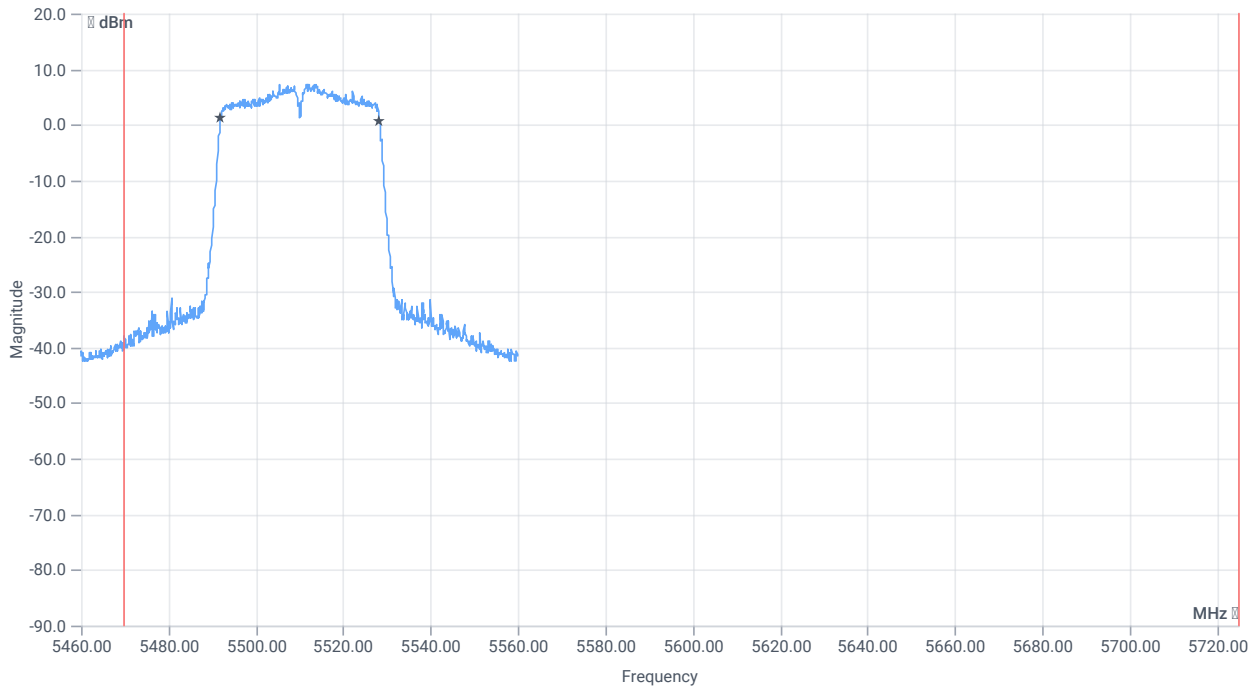
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	9.79	dBm	INFO
Ref. Frequency	--	--	5514.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	17.79 16.59 20
Start [MHz] Stop [MHz]	5460.000 5560.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

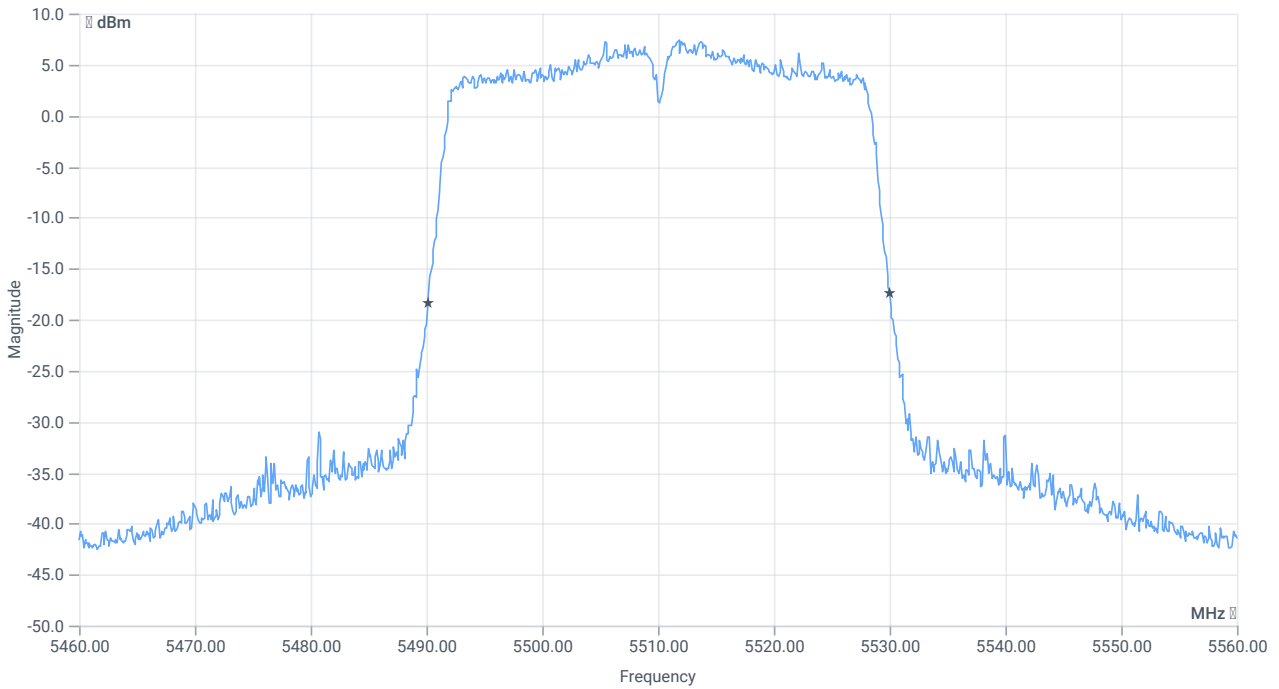




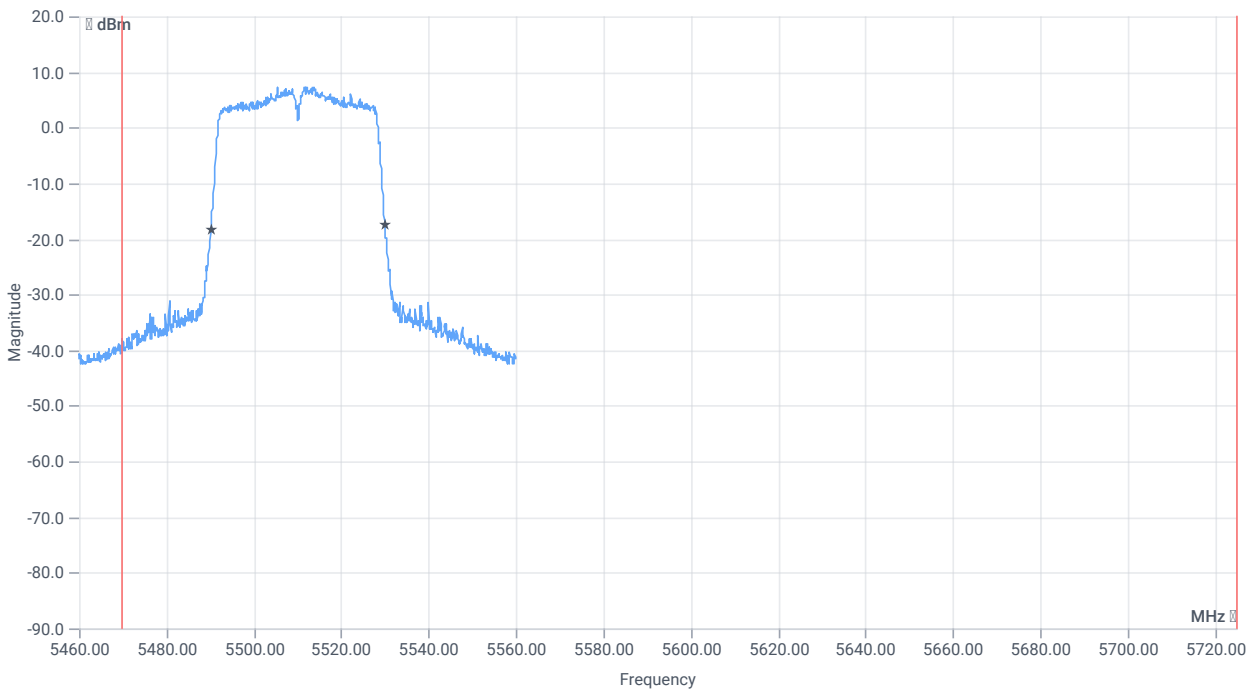
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5491.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5528.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.9	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5490.1000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5530.0000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 14:51:21
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS62

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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 5510 MHz

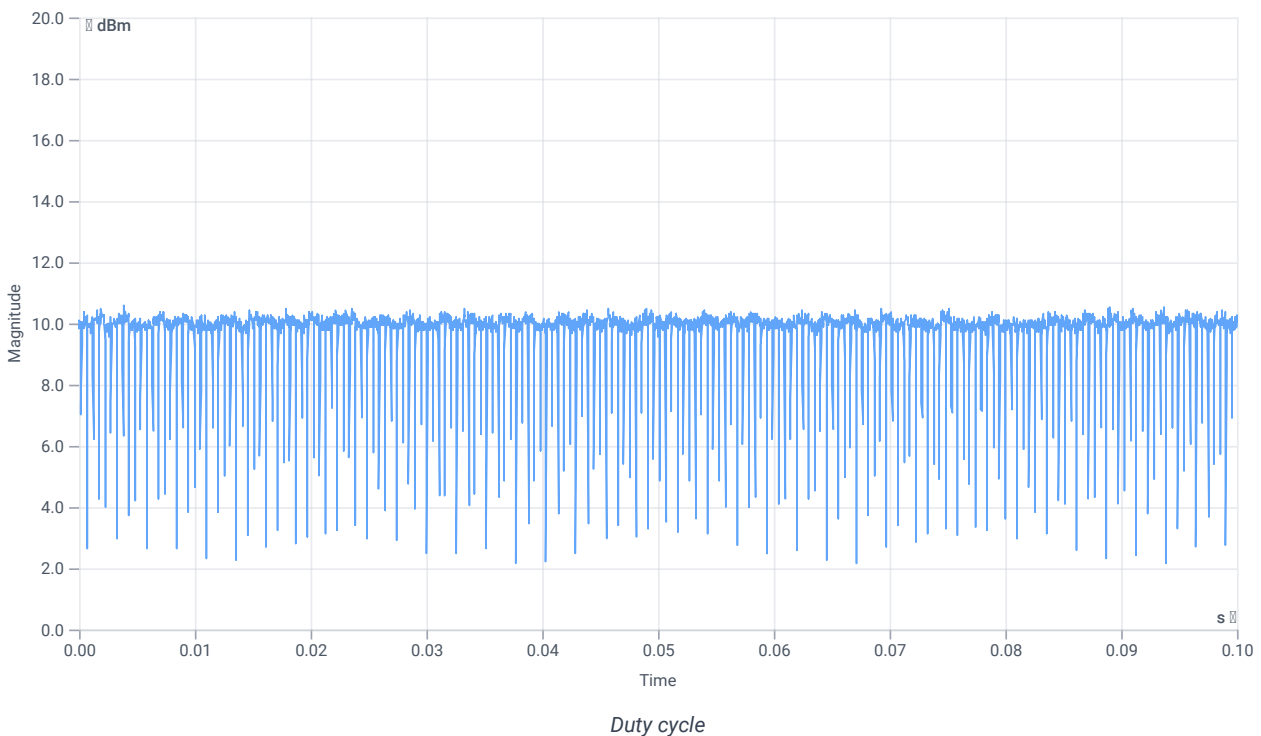
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	10.32	dBm	INFO
Ref. Frequency	--	--	5508.400	MHz	INFO

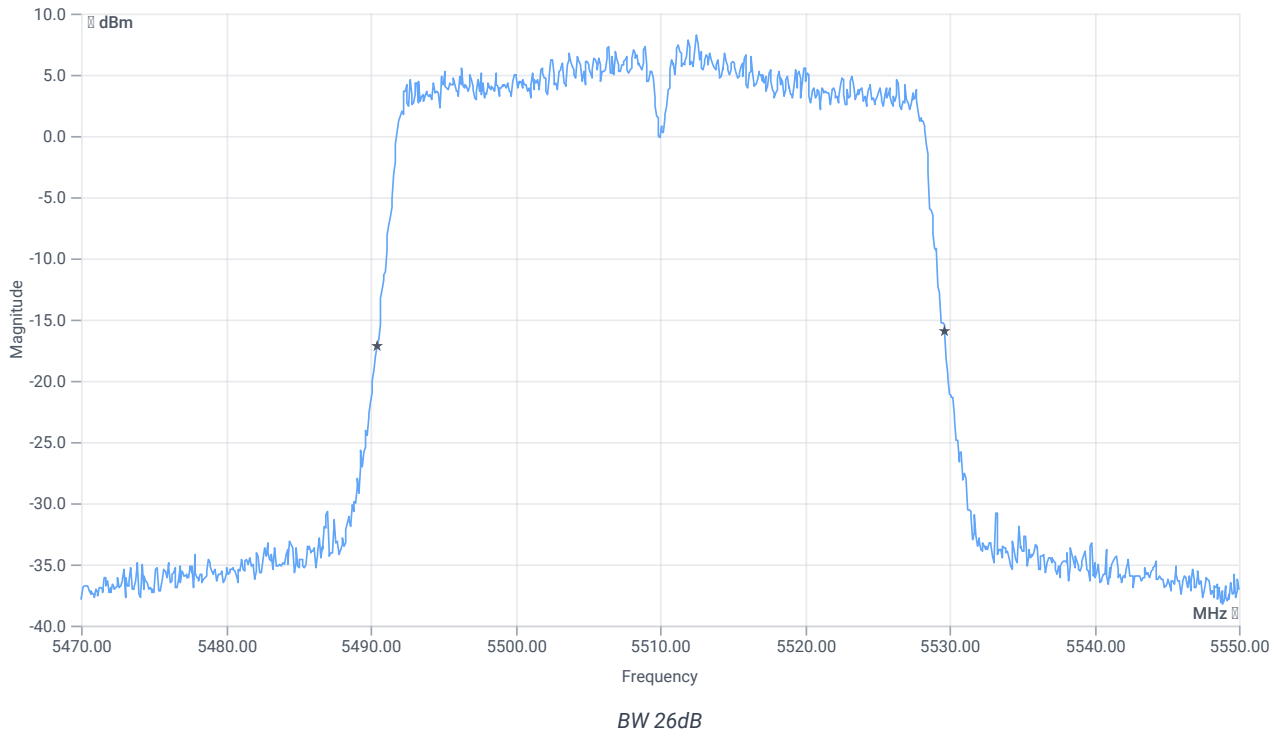
Evaluation max. Duty Cycle

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



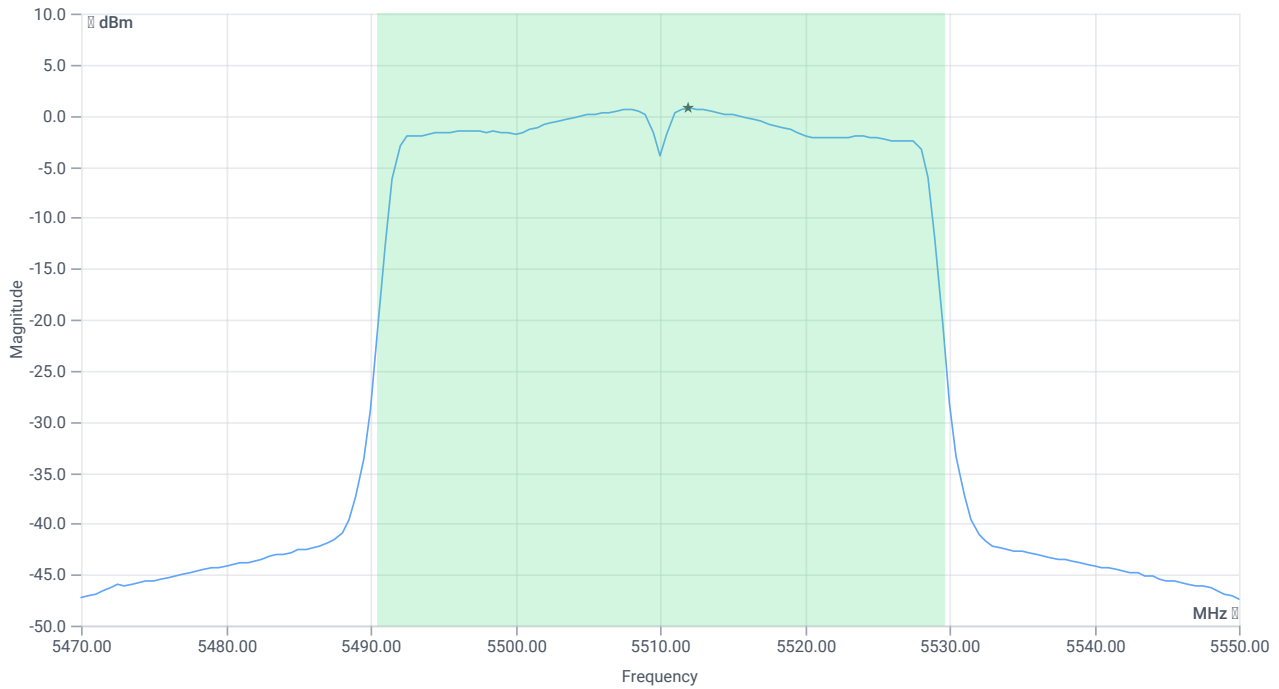
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.2	MHz	INFO
T1 26dB	---	---	5490.4800	MHz	INFO
T2 26dB	---	---	5529.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.32 16.59 20
Start [MHz] Stop [MHz]	5470.000 5550.000
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	--	--	14.36	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	14.36	dBm	PASS
Limit: 11 dBm + 10 log 39.2					
Max Output Power DC corrected	--	26.93	14.36	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	0.7	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	0.7	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 14:52:47
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS62

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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

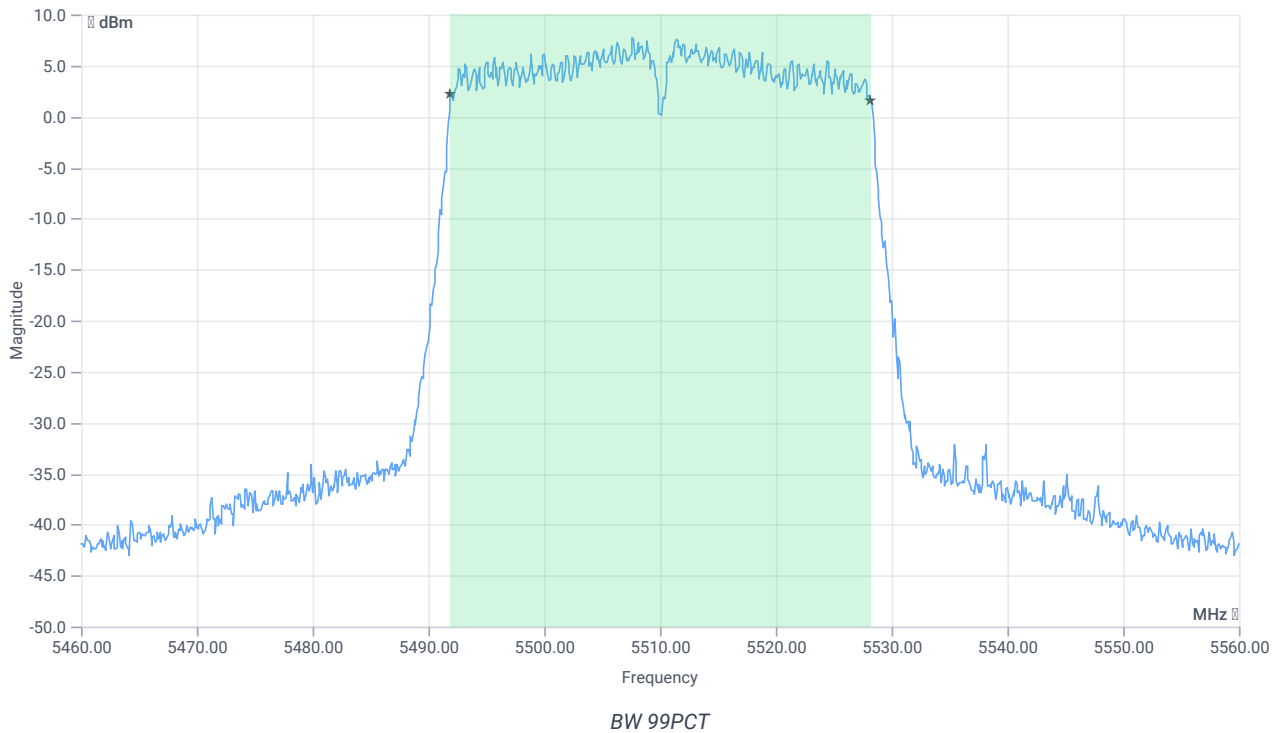
Test at TX 5510 MHz

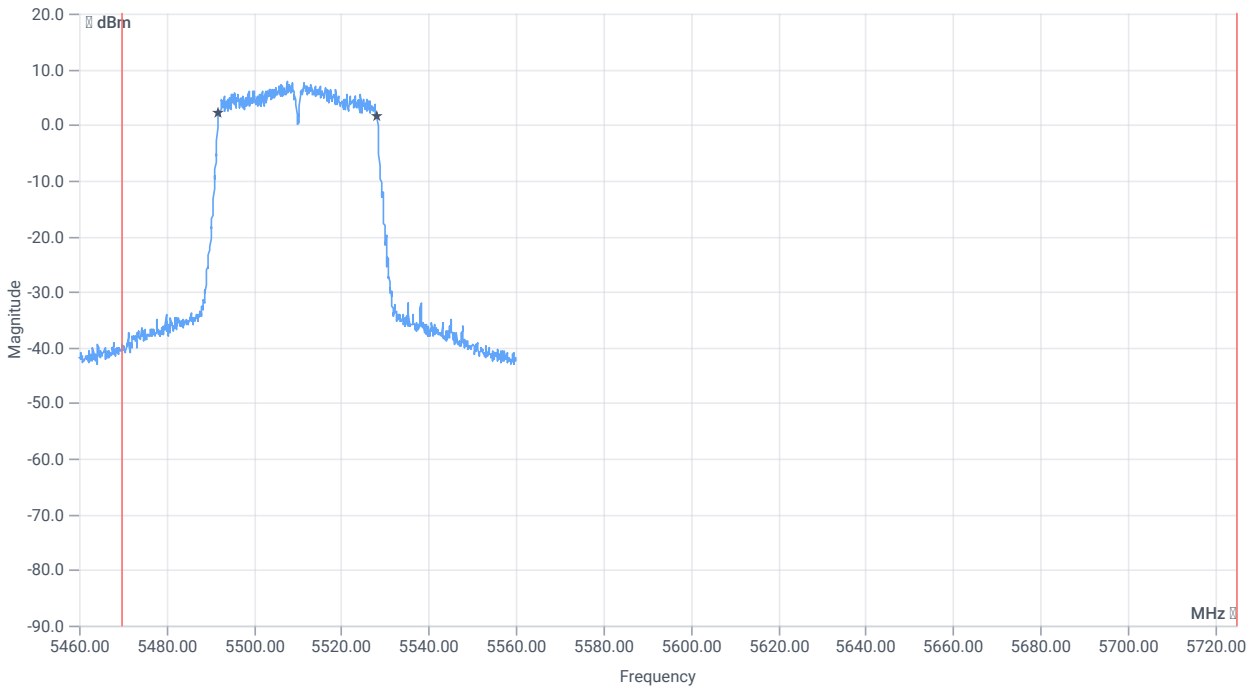
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	8.88	dBm	INFO
Ref. Frequency	--	--	5504.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	16.88 16.59 20
Start [MHz] Stop [MHz]	5460.000 5560.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

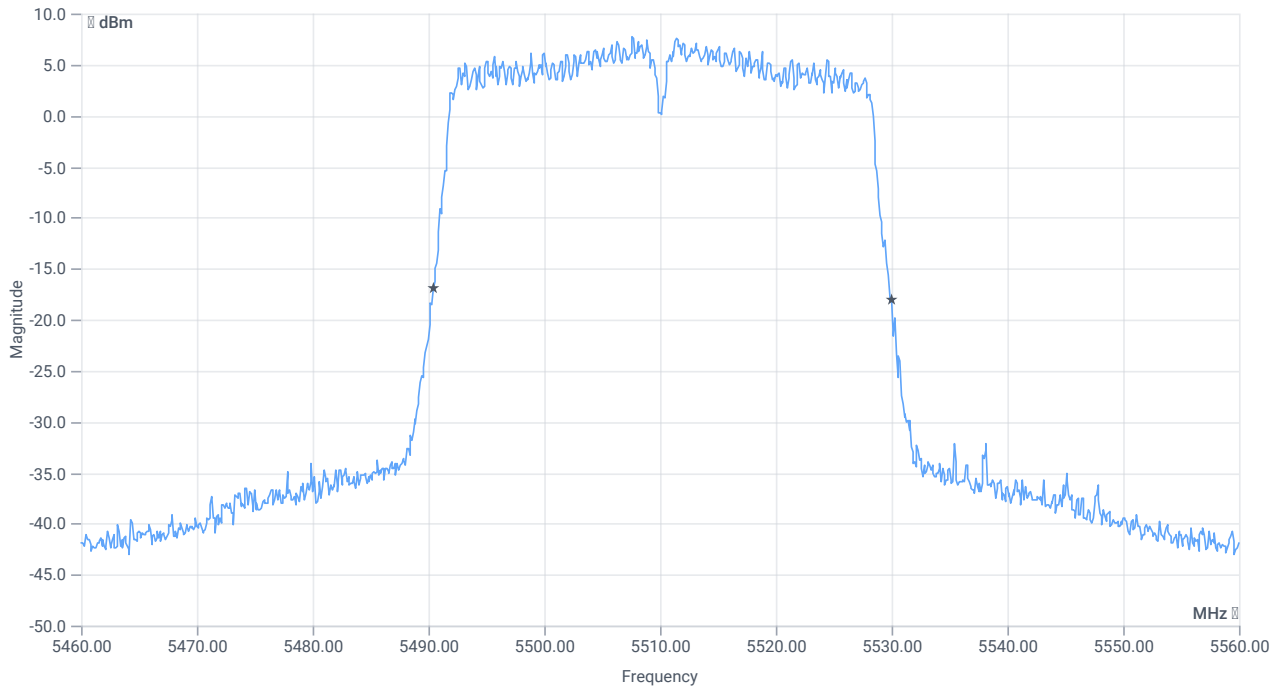




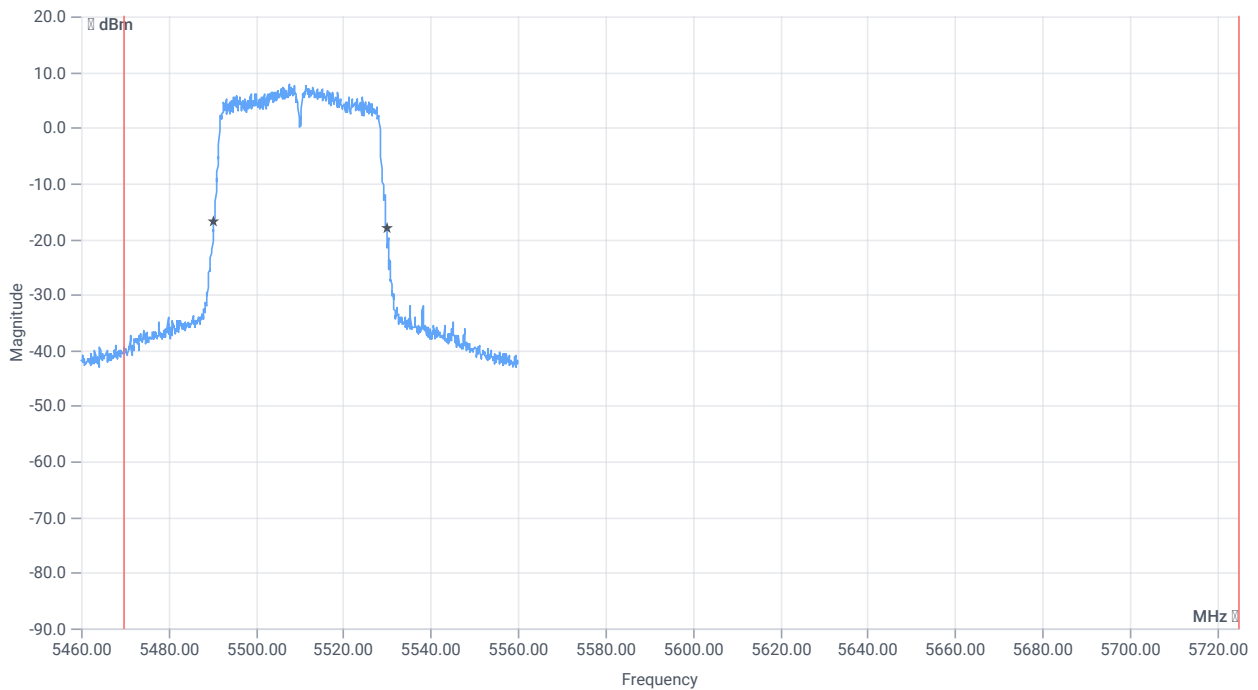
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.264	MHz	INFO
T1 99%	5470.000000	--	5491.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5528.1818	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5490.4000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5530.0000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:12:26
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-2C
Information	PS62

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5510 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	15.54	dBm	INFO
Ant:1 BW 26dB	--	--	39.840	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	14.36	dBm	INFO
Ant:2 BW 26dB	--	--	39.200	MHz	INFO
Σ Limit absolute	--	24	18	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.2	--	26.93	18	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	1.91	dBm/1MHz	INFO
Ant:2 PSD	--	--	0.7	dBm/1MHz	INFO
Σ	--	11	4.36	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 15:20:52
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 15:20:53
Message	set WLAN5Gx to n_HT40_U_NII_2C, Frequency [MHz] 5590 ,

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 n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:21:01
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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 5590 MHz

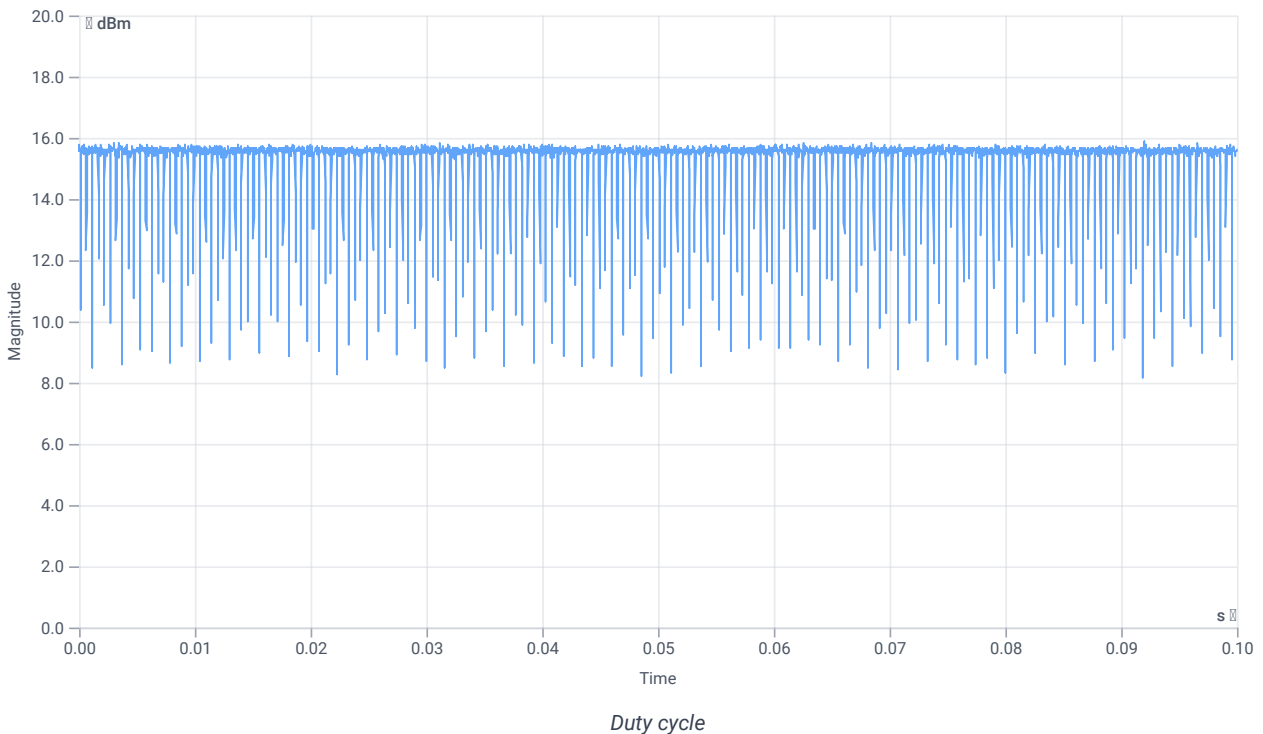
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.99	dBm	INFO
Ref. Frequency	--	--	5588.200	MHz	INFO

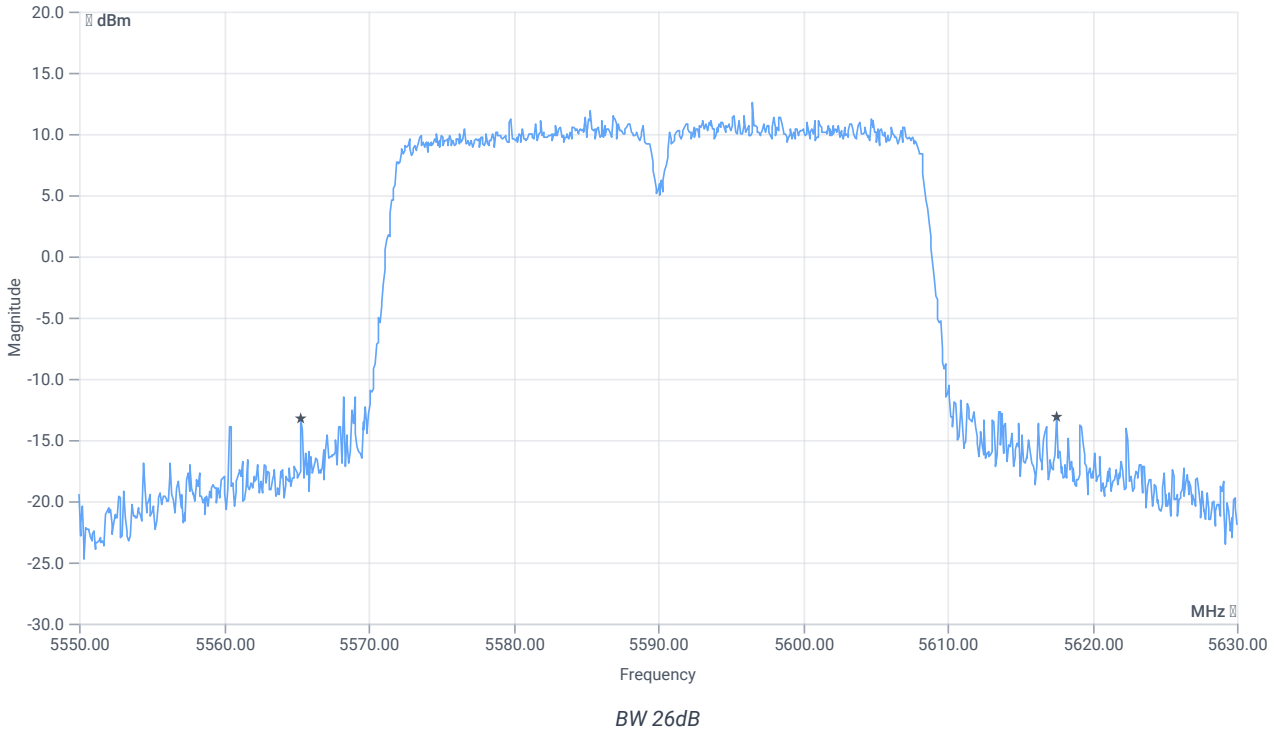
Evaluation max. Duty Cycle

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



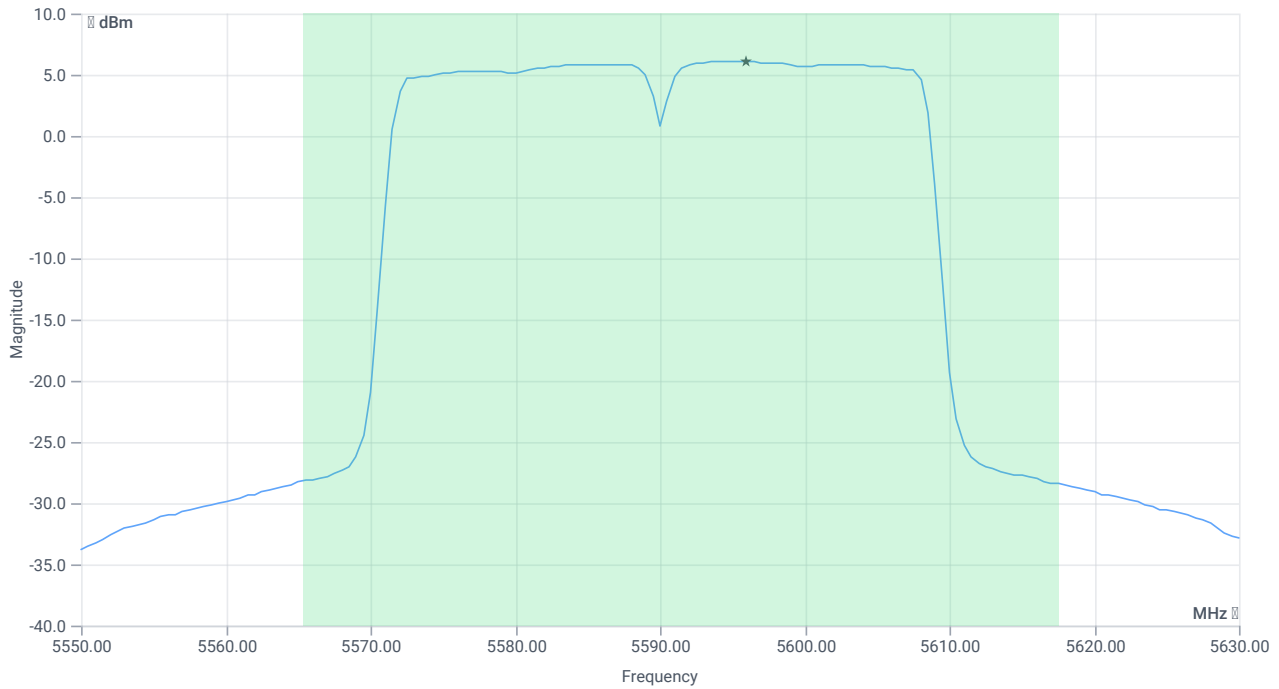
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	52.16	MHz	INFO
T1 26dB	---	---	5565.3600	MHz	INFO
T2 26dB	---	---	5617.5200	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.99 16.72 25
Start [MHz] Stop [MHz]	5550.000 5630.000
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	--	--	20.86	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.86	dBm	PASS
Limit: 11 dBm + 10 log 52.16					
Max Output Power DC corrected	--	28.17	20.86	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.12	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.12	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:22:26
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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

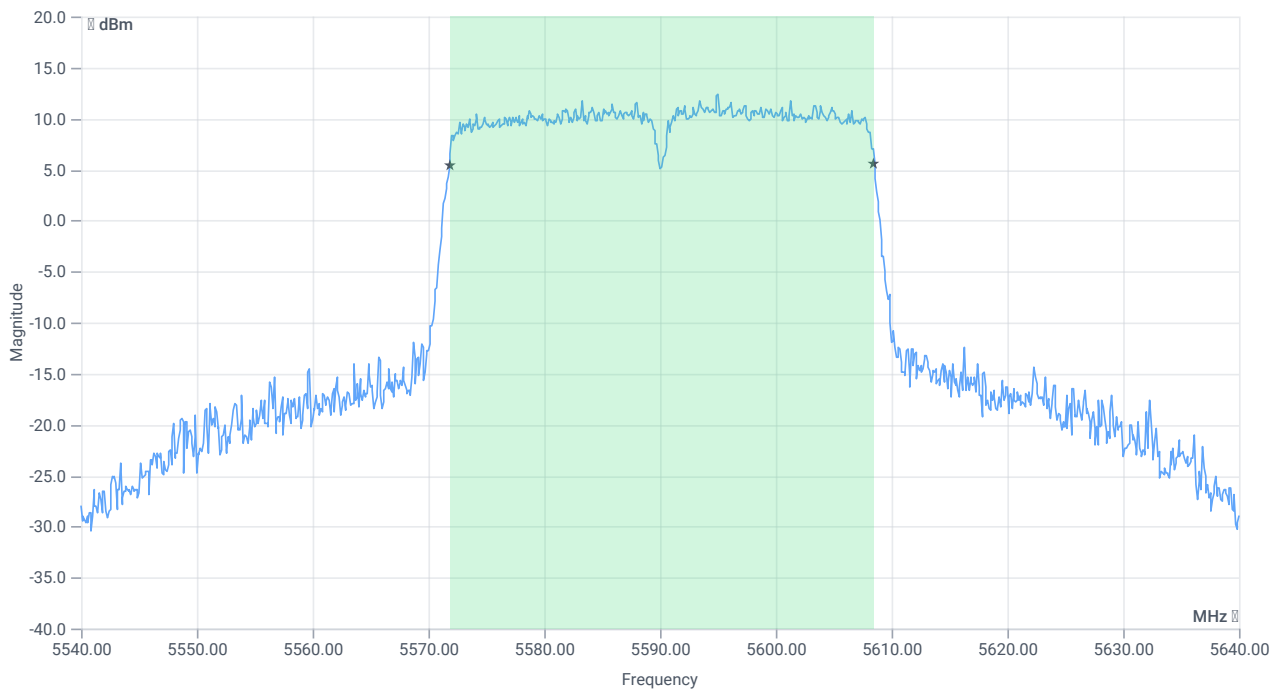
Test at TX 5590 MHz

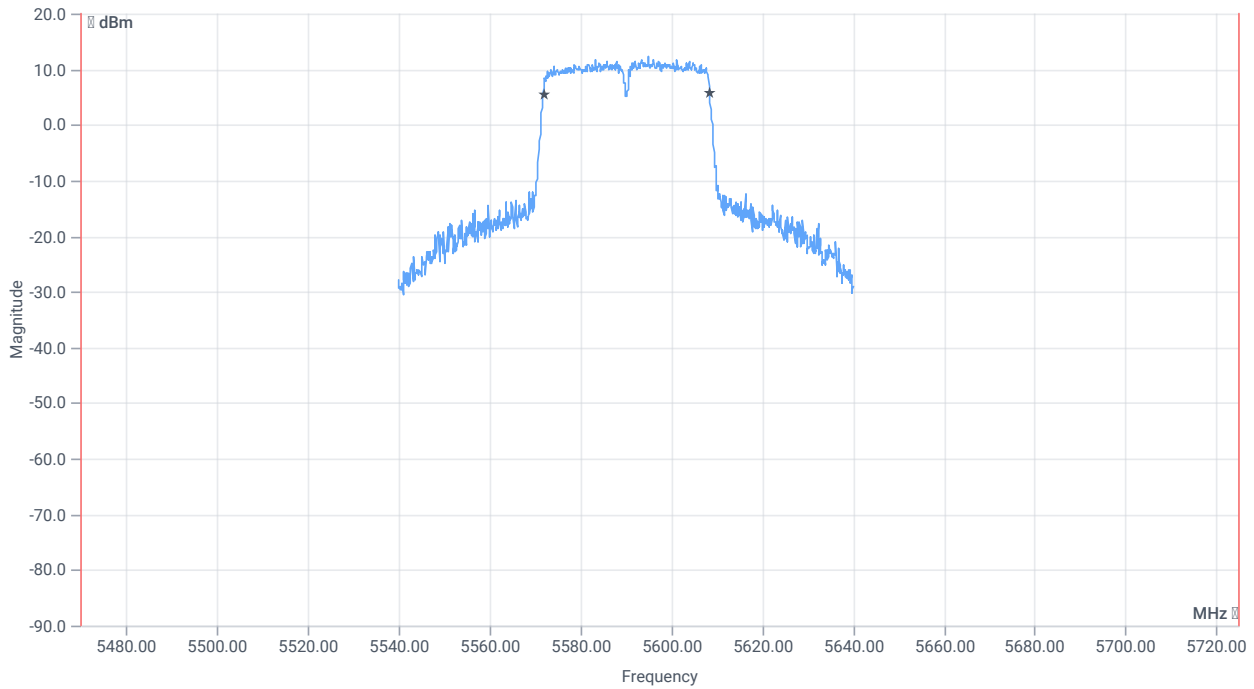
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.11	dBm	INFO
Ref. Frequency	--	--	5602.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.11 16.72 25
Start [MHz] Stop [MHz]	5540.000 5640.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

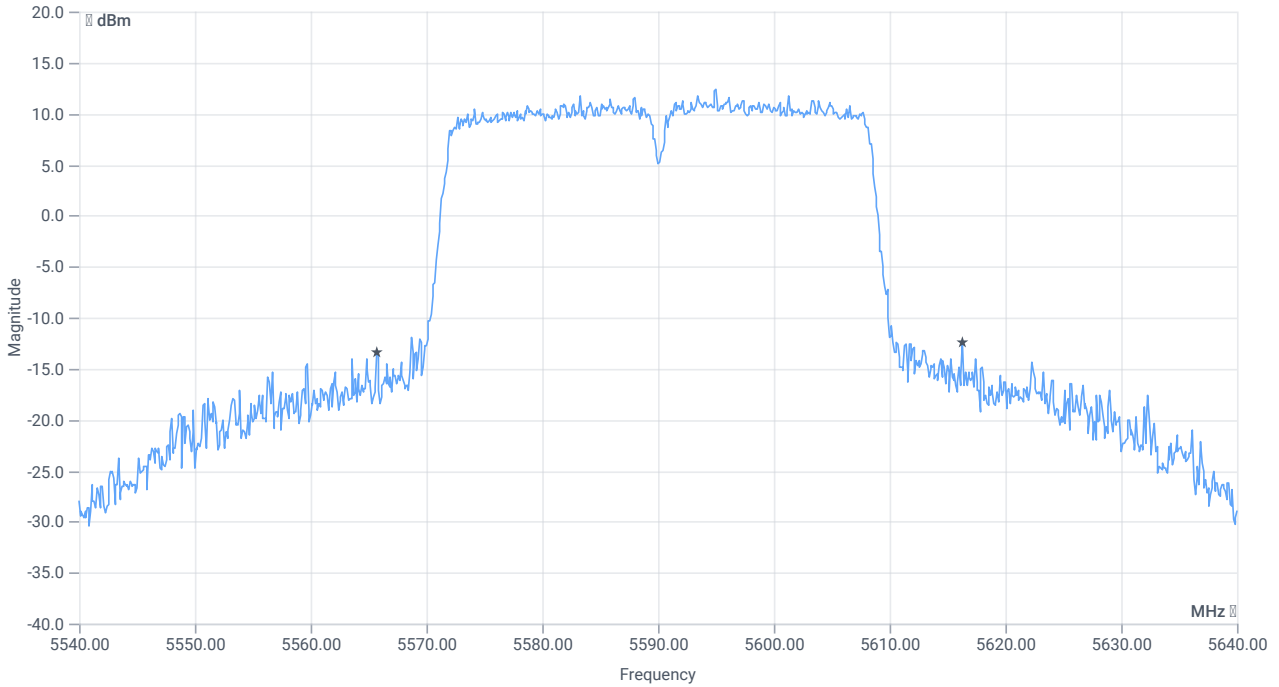




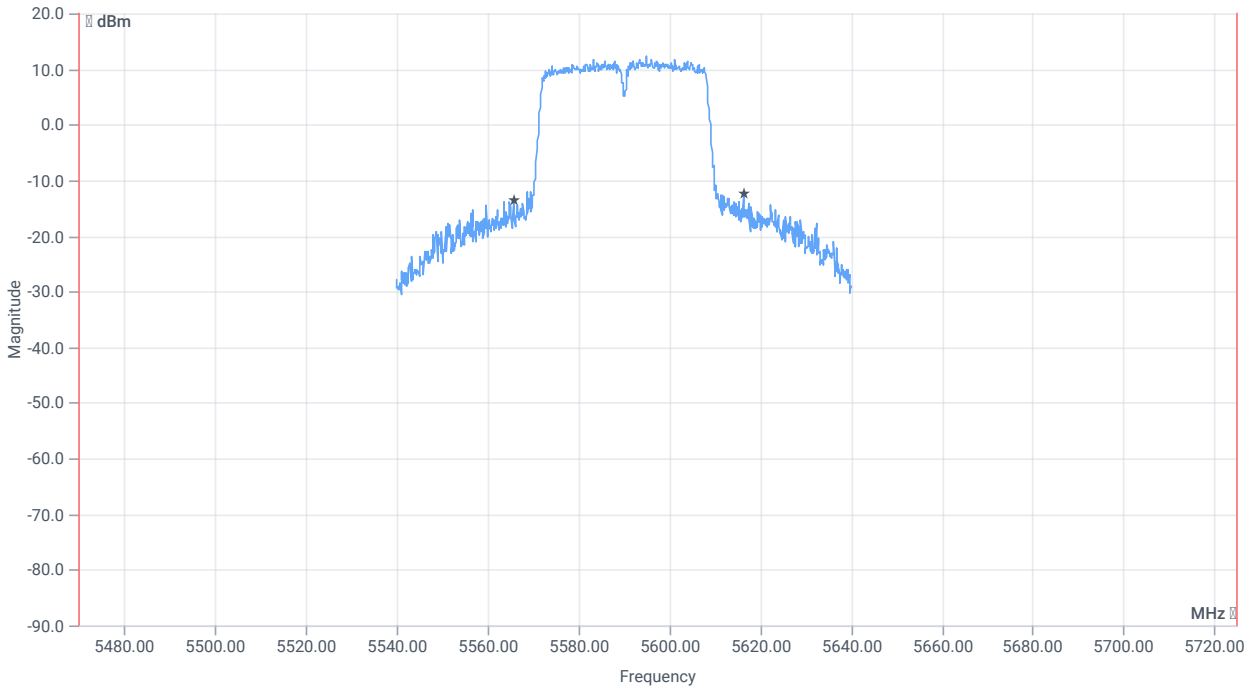
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5470.000000	--	5571.8182	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5608.4815	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	50.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5565.7000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5616.3000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:22:57
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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 5590 MHz

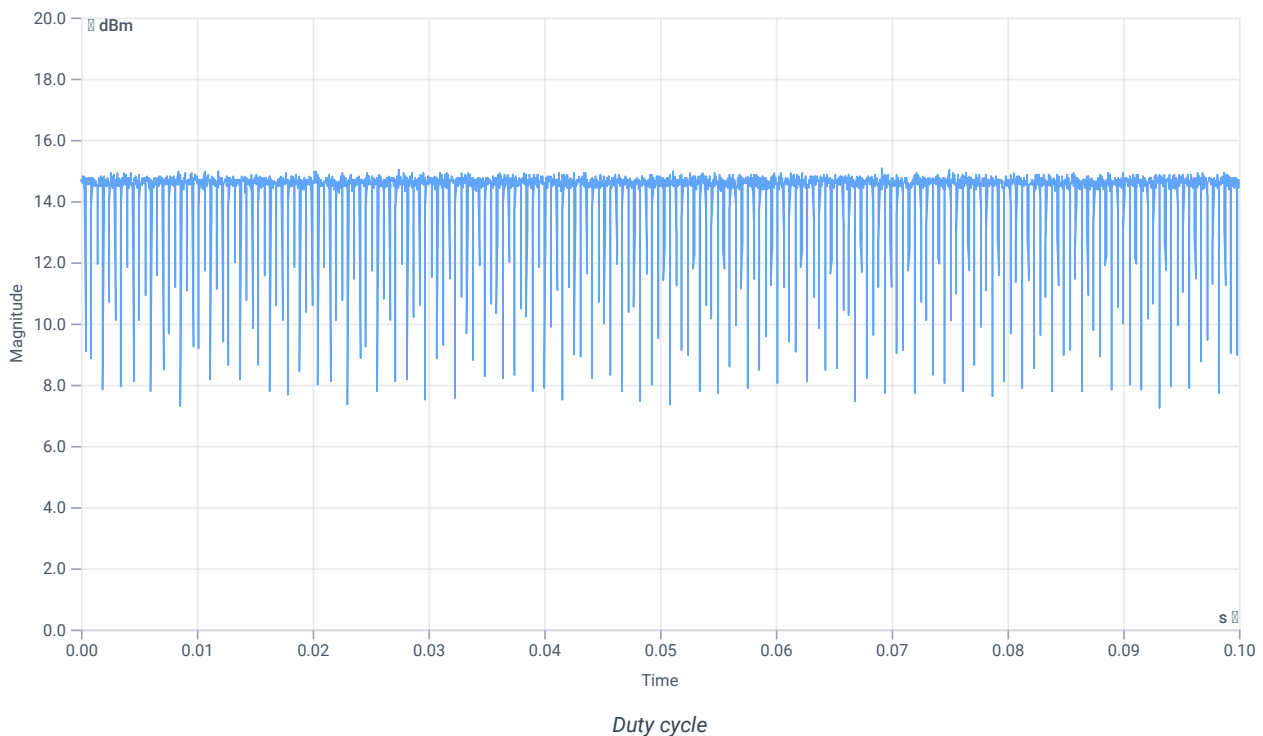
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	13.86	dBm	INFO
Ref. Frequency	--	--	5587.800	MHz	INFO

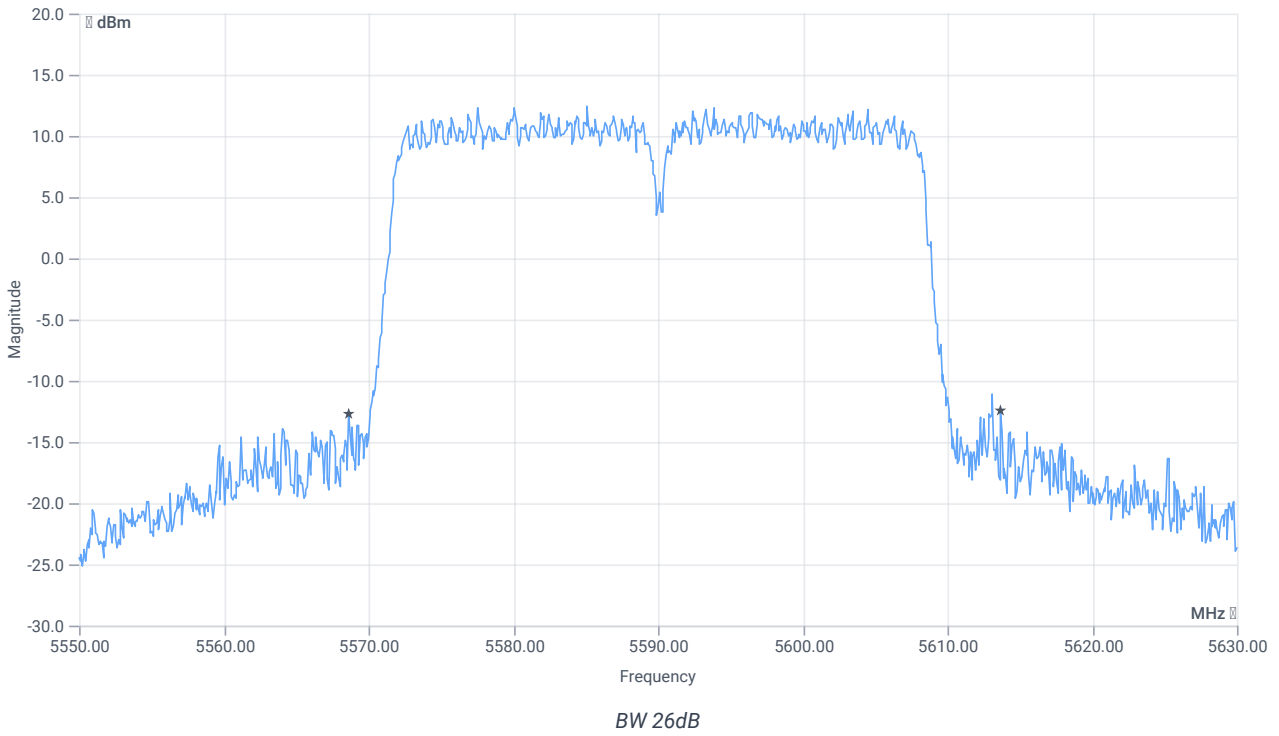
Evaluation max. Duty Cycle

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



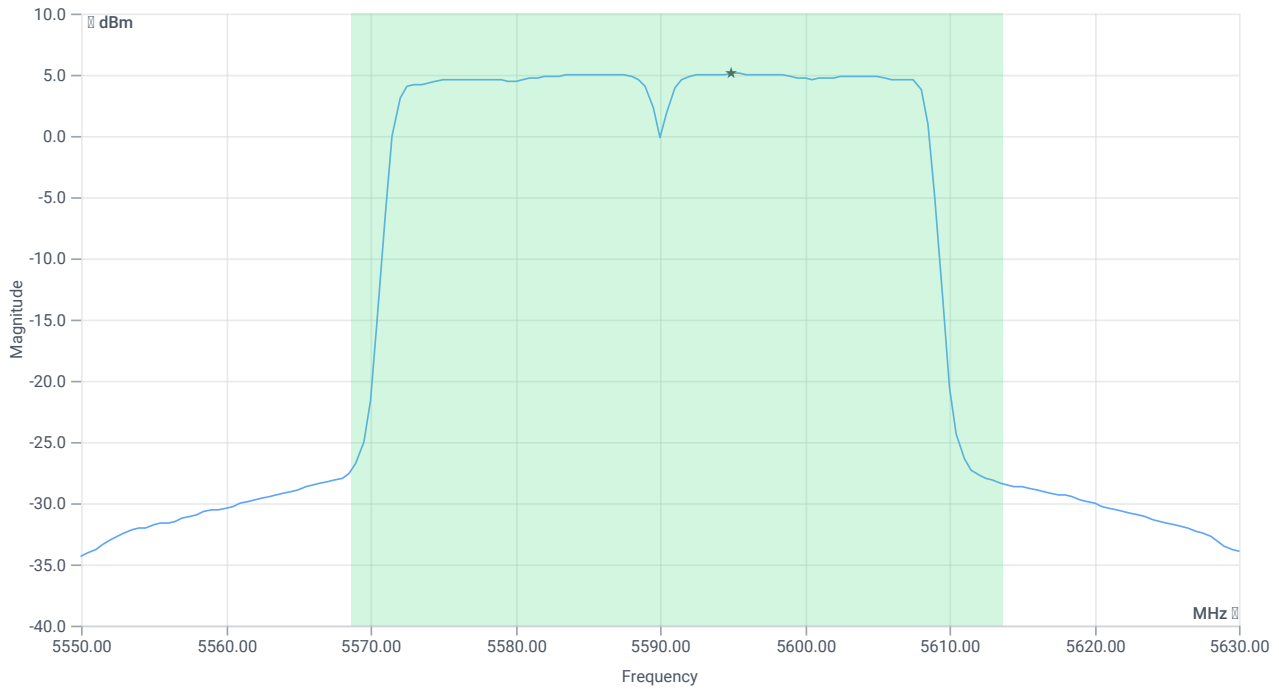
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	45.04	MHz	INFO
T1 26dB	---	---	5568.6400	MHz	INFO
T2 26dB	---	---	5613.6800	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.86 16.72 25
Start [MHz] Stop [MHz]	5550.000 5630.000
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	--	--	20.01	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.01	dBm	PASS
Limit: 11 dBm + 10 log 45.04					
Max Output Power DC corrected	--	27.54	20.01	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.12	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.12	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:24:23
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
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

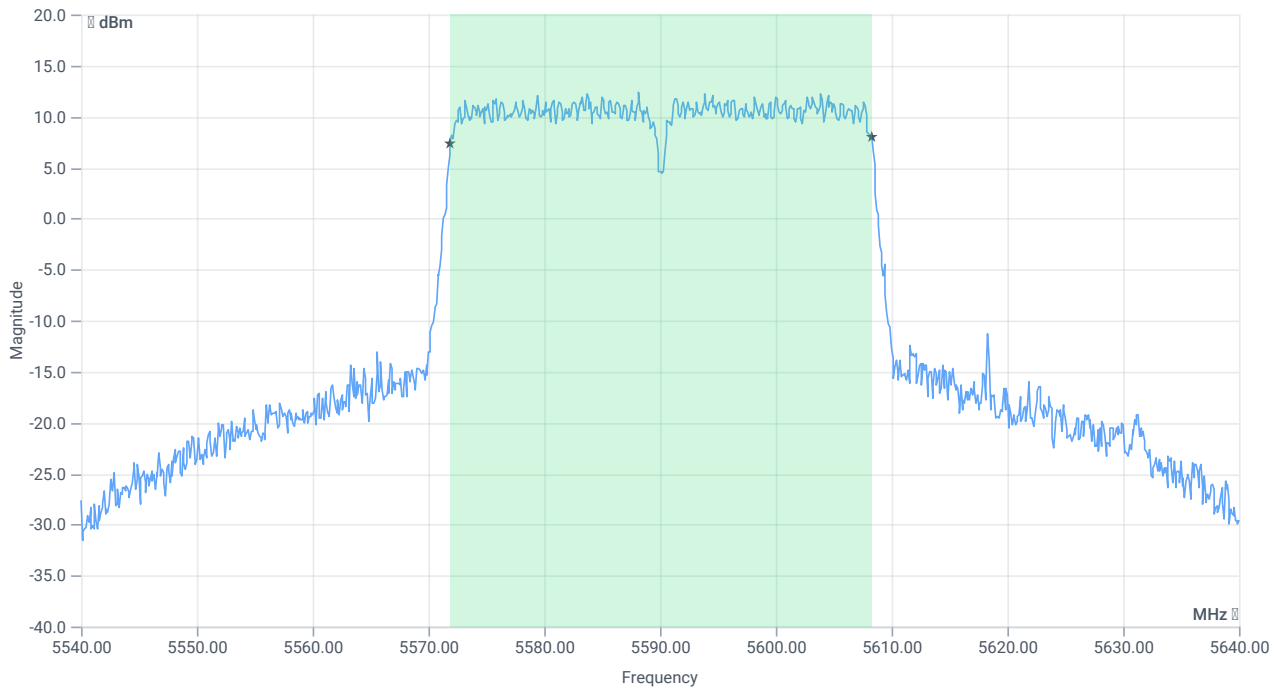
Test at TX 5590 MHz

RESULT: Reference Power cond.

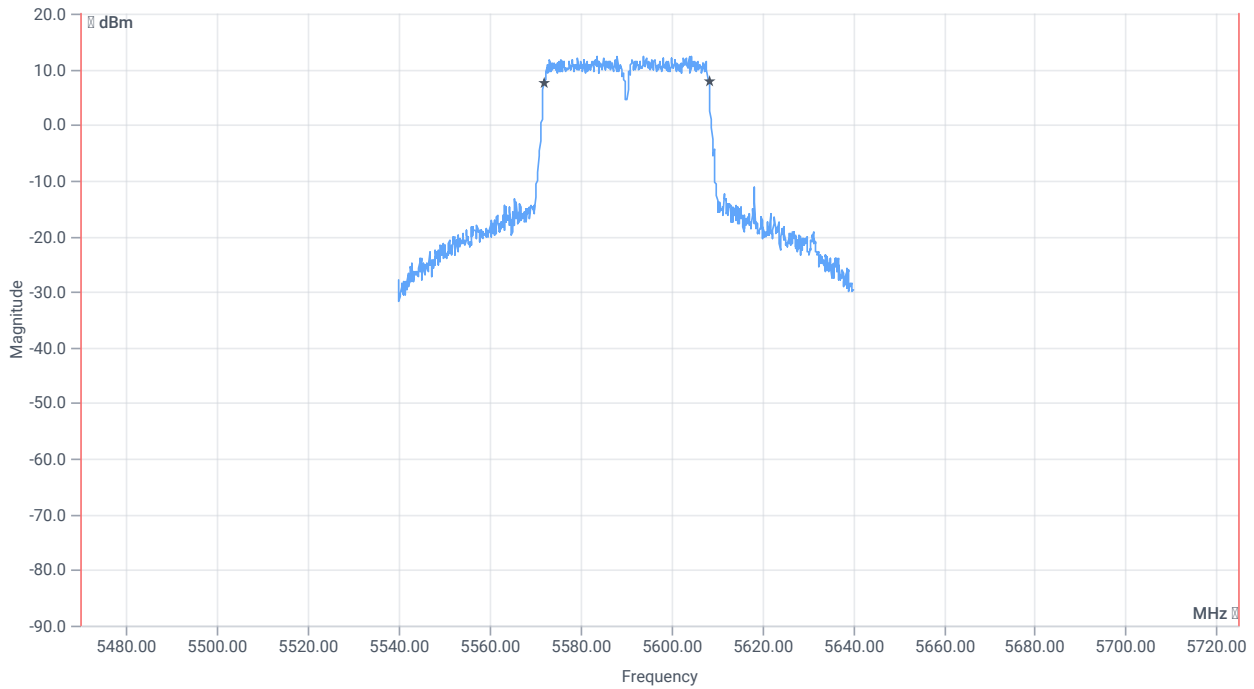
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.33	dBm	INFO
Ref. Frequency	--	--	5592.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.33 16.72 25
Start [MHz] Stop [MHz]	5540.000 5640.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE



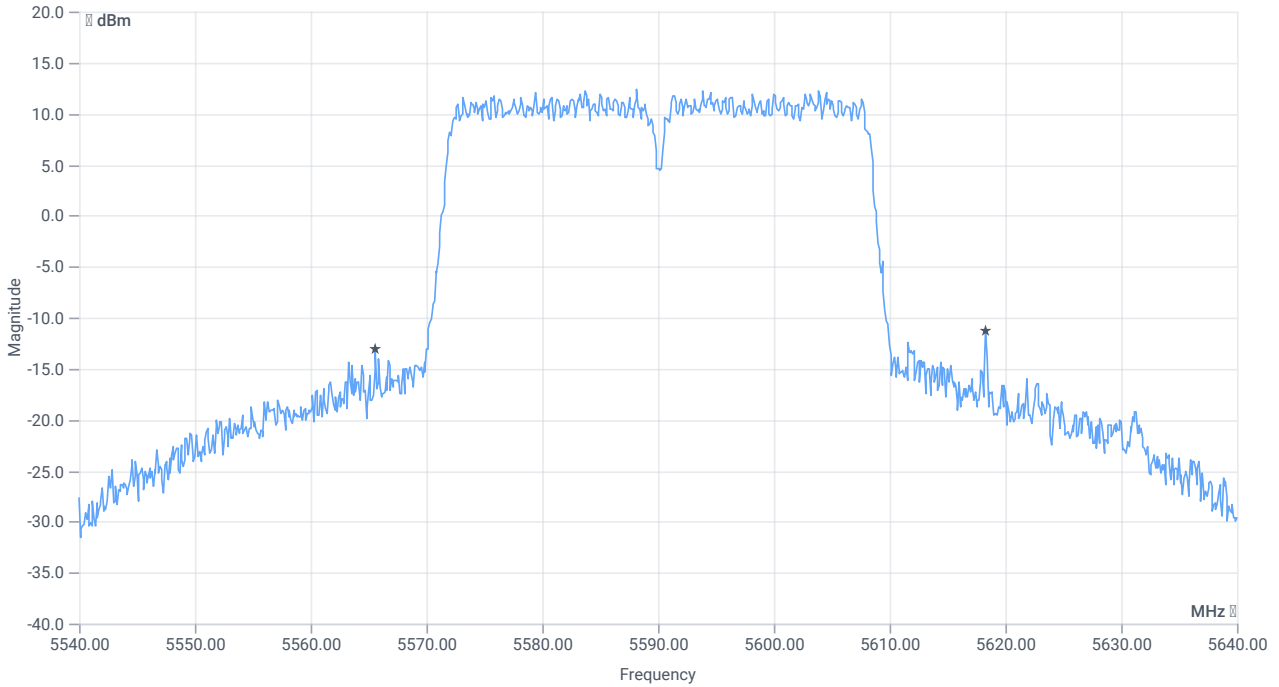
BW 99PCT



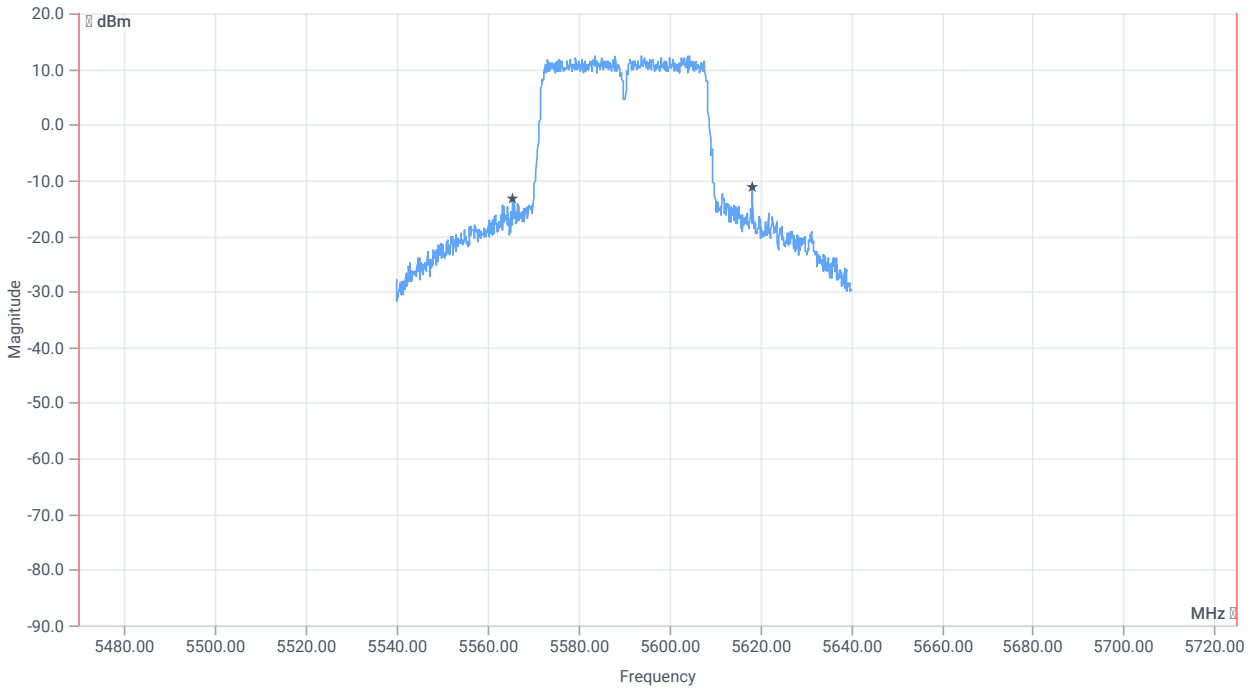
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5571.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5608.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	52.7	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5565.6000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5618.3000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:32:39
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	True Freq [MHz] 5590
Frequency high to test	False Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5590 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	20.86	dBm	INFO
Ant:1 BW 26dB	--	--	52.160	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.01	dBm	INFO
Ant:2 BW 26dB	--	--	45.040	MHz	INFO
Σ Limit absolute	--	24	23.47	dBm	PASS
Σ Limit: 11 dBm + 10 log 45.04	--	27.54	23.47	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.12	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.12	dBm/1MHz	INFO
Σ	--	11	8.66	dBm/1MHz	PASS

Verdict

PASS

Message with SA scan ~

References

TC start	26.07.2023 15:34:49
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	-
Method	
Description	Message with SA Scan n_HT40_U_NII_2C
Information	

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	26.07.2023 15:34:50
Message	set WLAN5Gx to n_HT40_U_NII_2C, Frequency [MHz] 5670

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 n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:34:59
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
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 5670 MHz

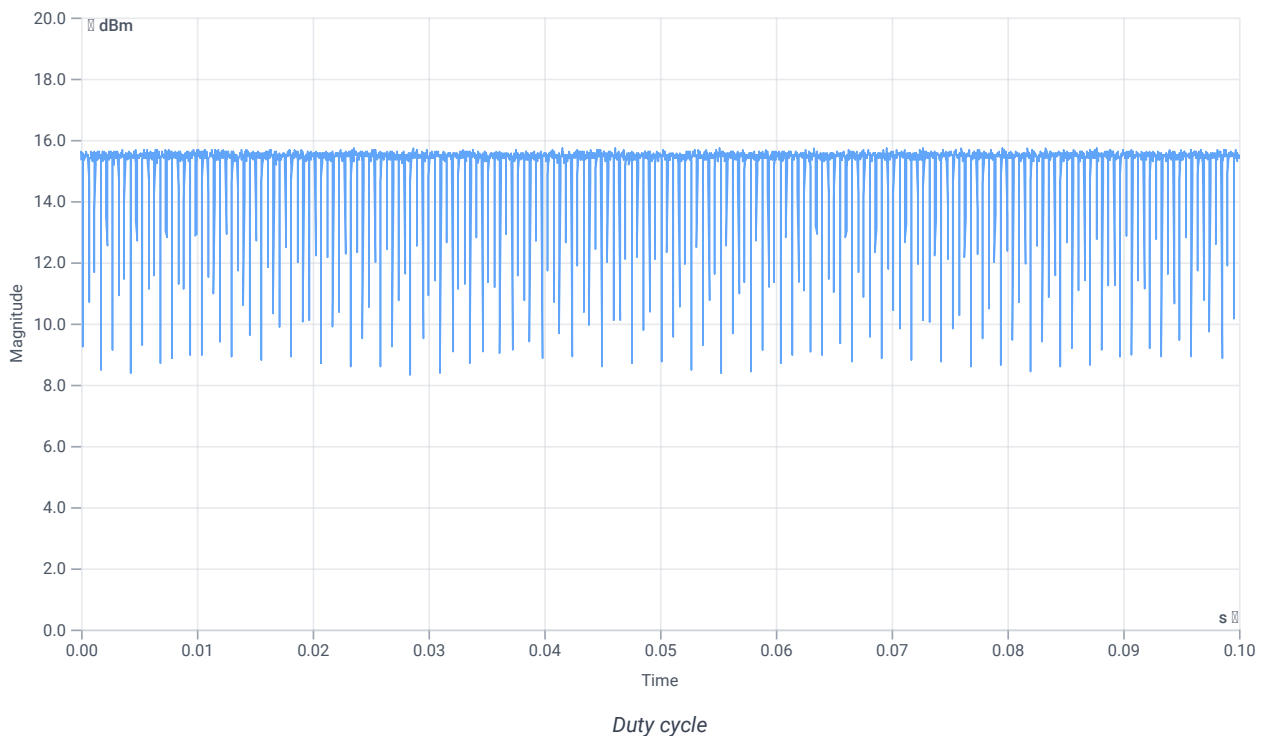
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.77	dBm	INFO
Ref. Frequency	--	--	5679.990	MHz	INFO

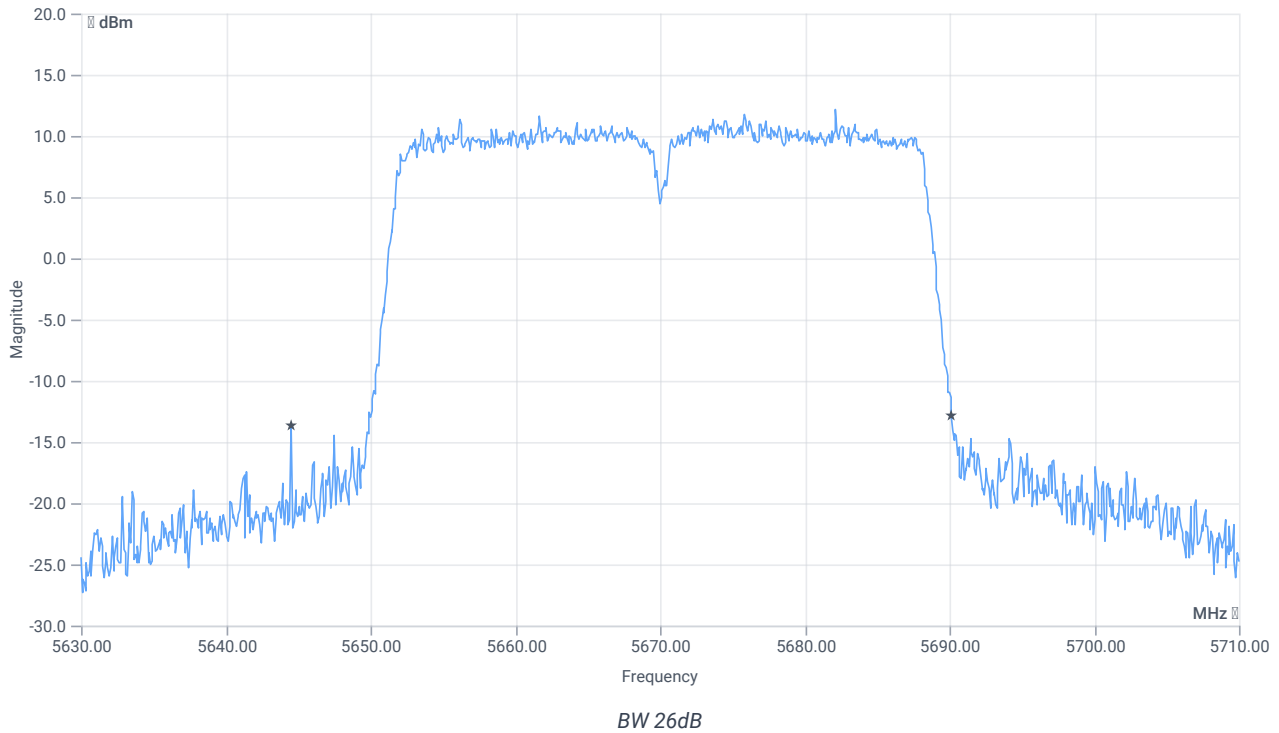
Evaluation max. Duty Cycle

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



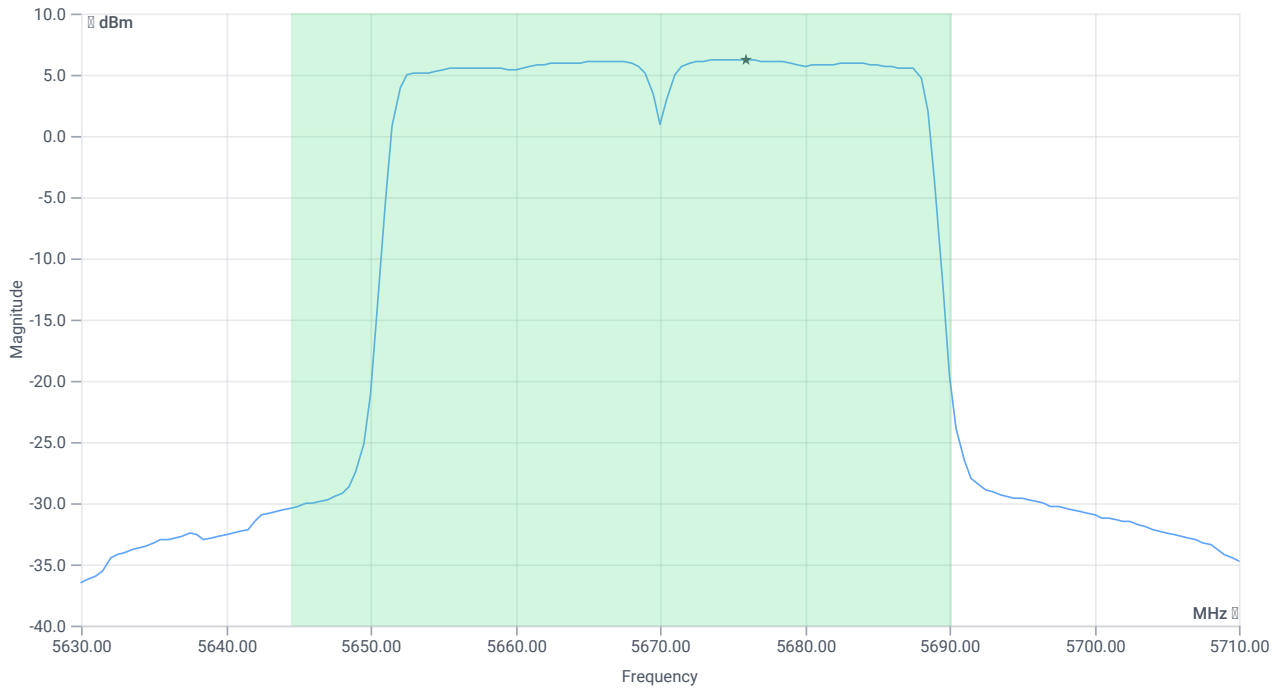
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	45.68	MHz	INFO
T1 26dB	---	---	5644.4800	MHz	INFO
T2 26dB	---	---	5690.1600	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.77 16.68 25
Start [MHz] Stop [MHz]	5630.000 5710.000
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	--	--	21.04	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	21.04	dBm	PASS
Limit: 11 dBm + 10 log 45.68					
Max Output Power DC corrected	--	27.6	21.04	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	6.22	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	6.22	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:36:25
Ambit temp [°C] humidity [rel%]	25.0 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 n-HT40 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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
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

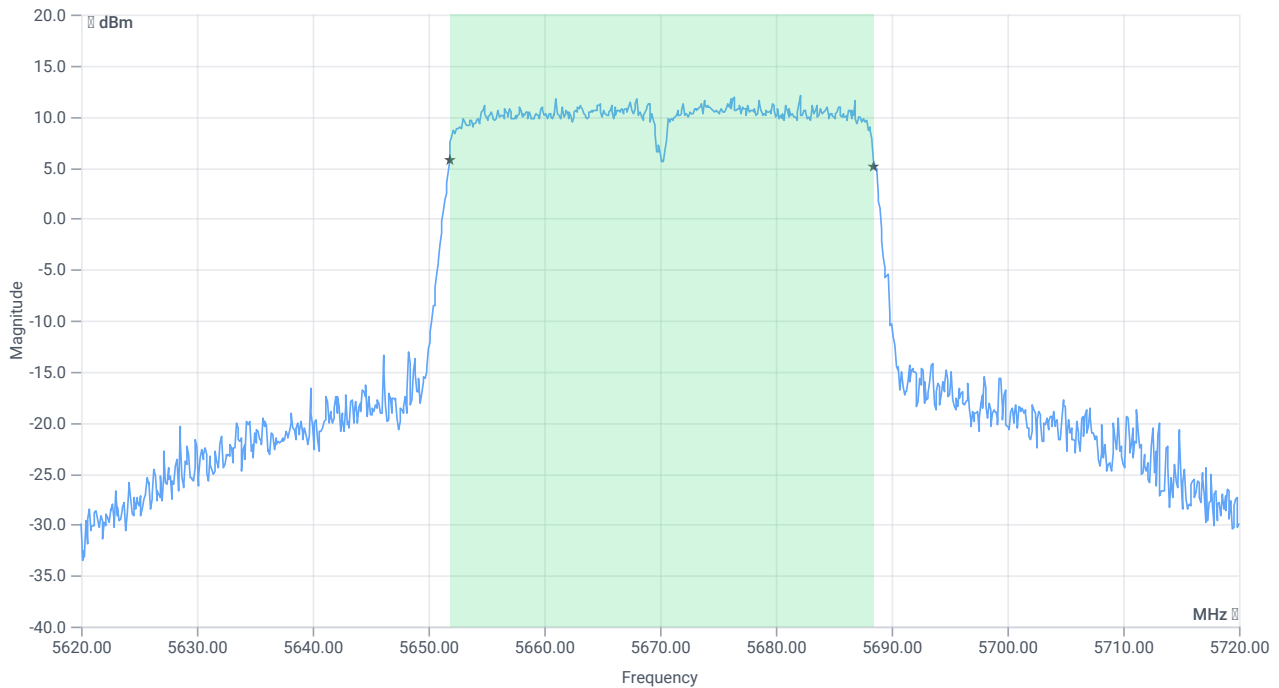
Test at TX 5670 MHz

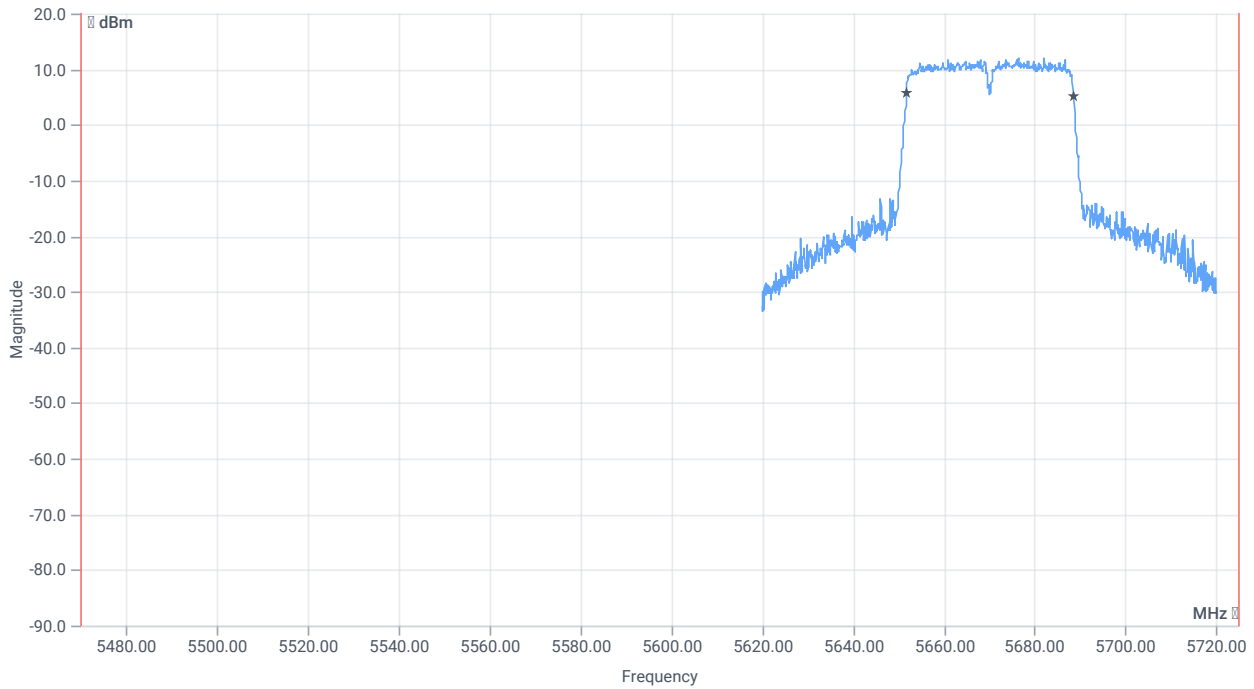
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.55	dBm	INFO
Ref. Frequency	--	--	5671.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.55 16.68 25
Start [MHz] Stop [MHz]	5620.000 5720.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

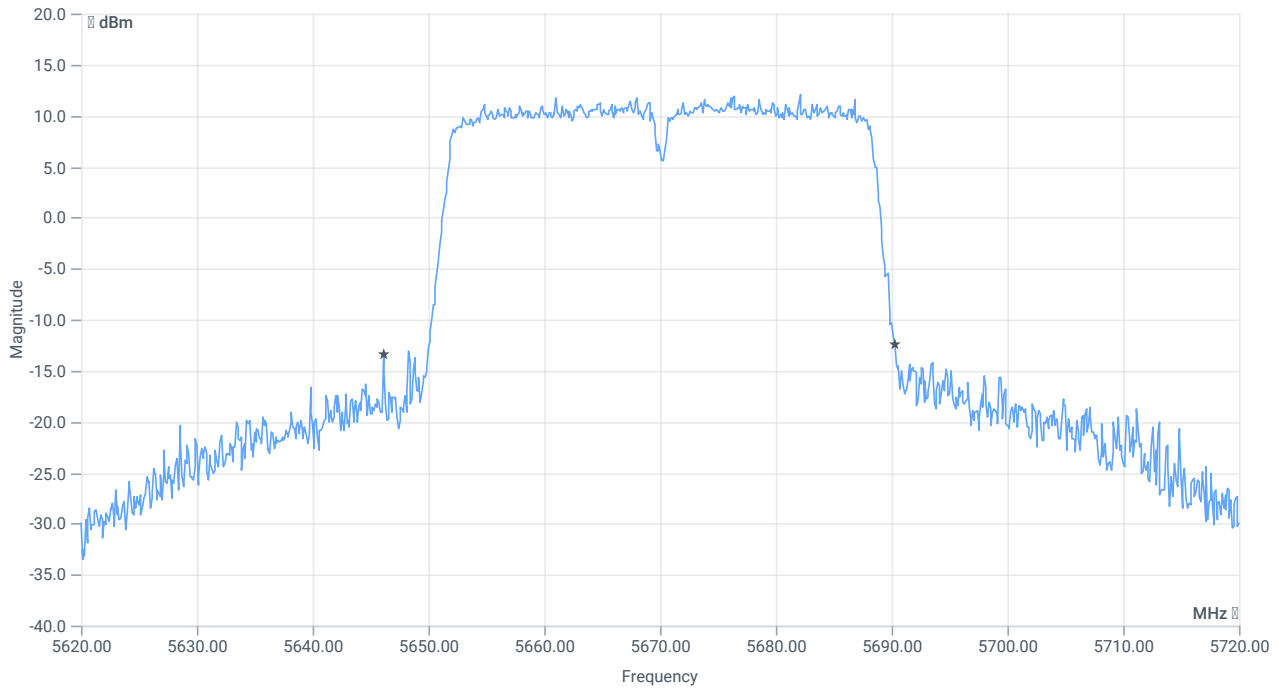




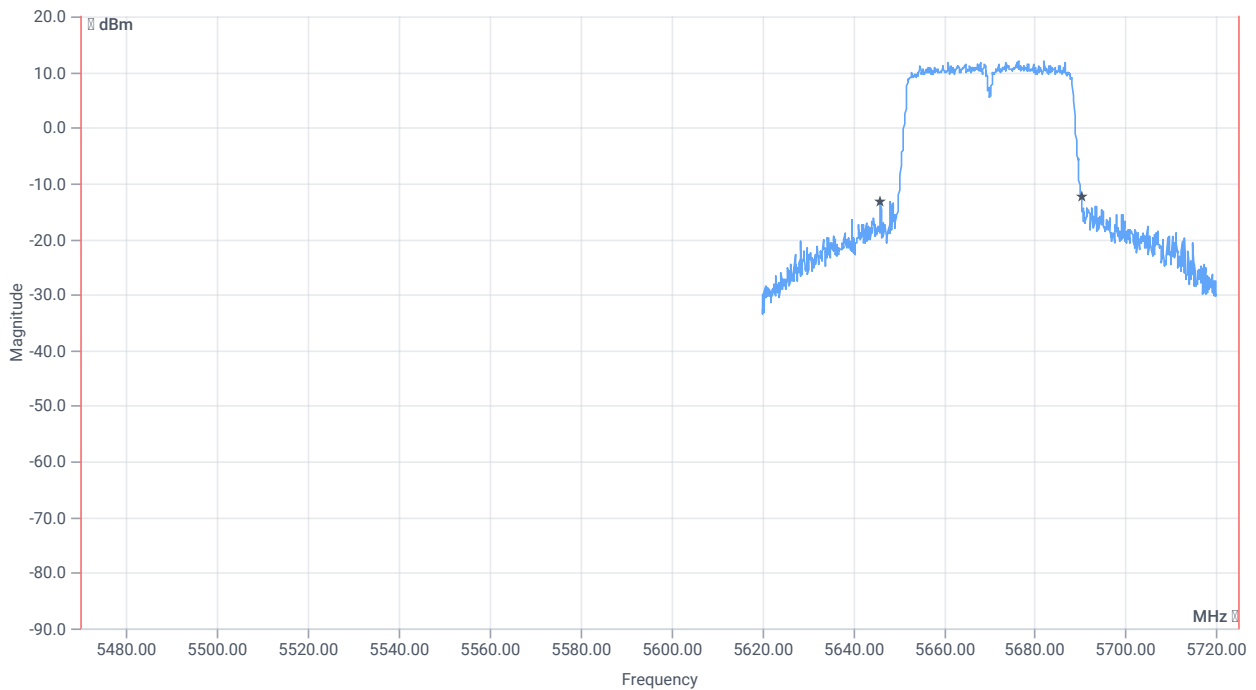
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.663	MHz	INFO
T1 99%	5470.000000	--	5651.8182	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5688.4815	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	44.2	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5646.1000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5690.3000	MHz	

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:36:55
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
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 5670 MHz

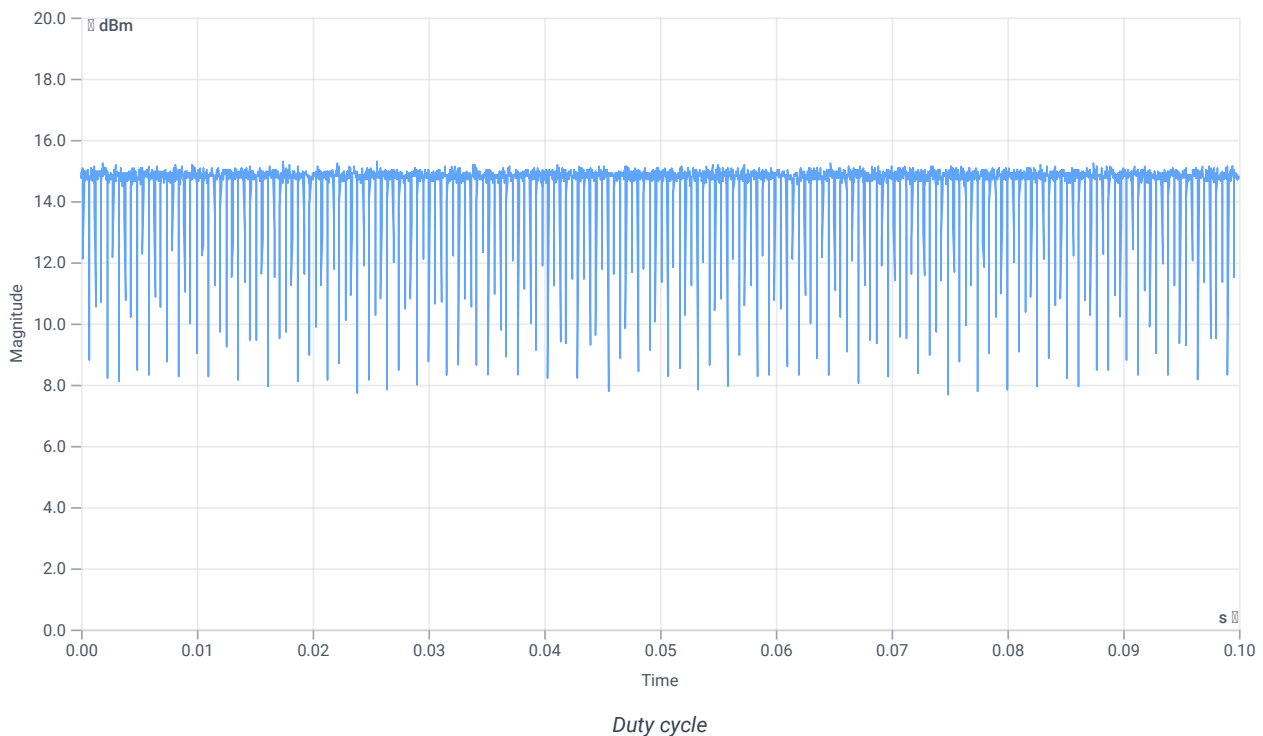
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.49	dBm	INFO
Ref. Frequency	--	--	5664.610	MHz	INFO

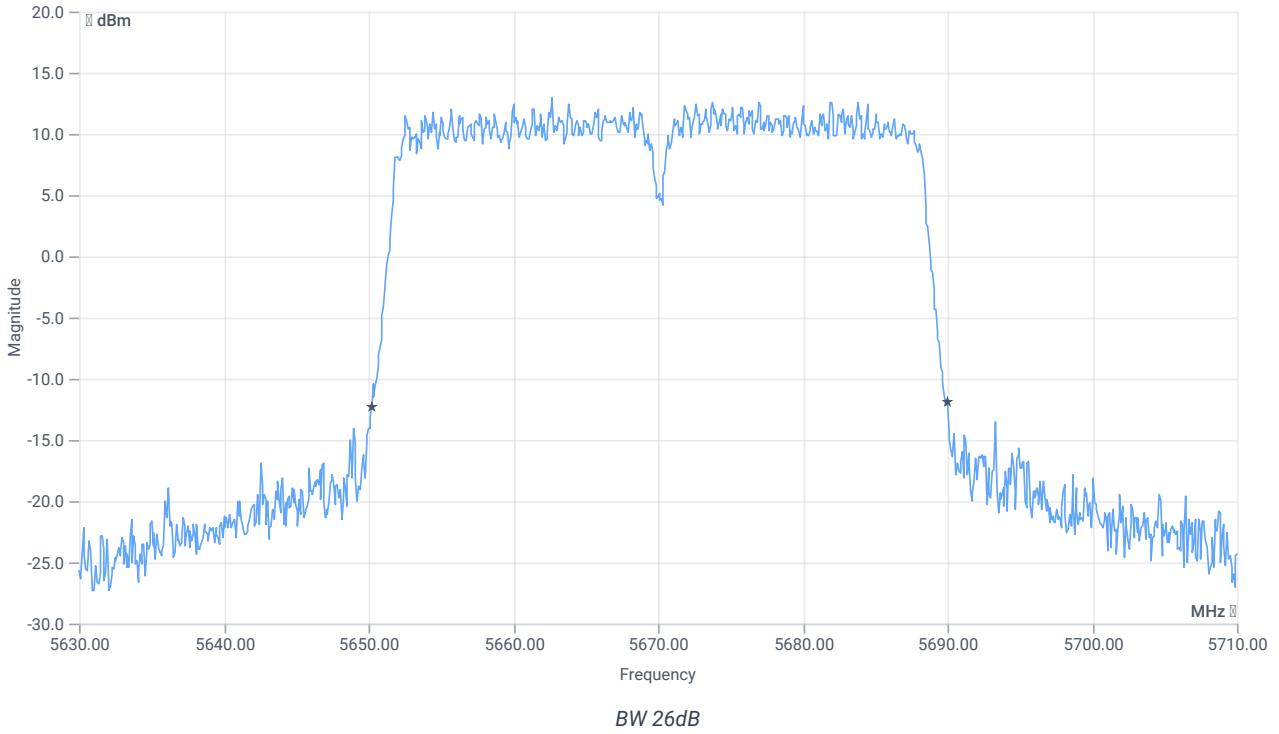
Evaluation max. Duty Cycle

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



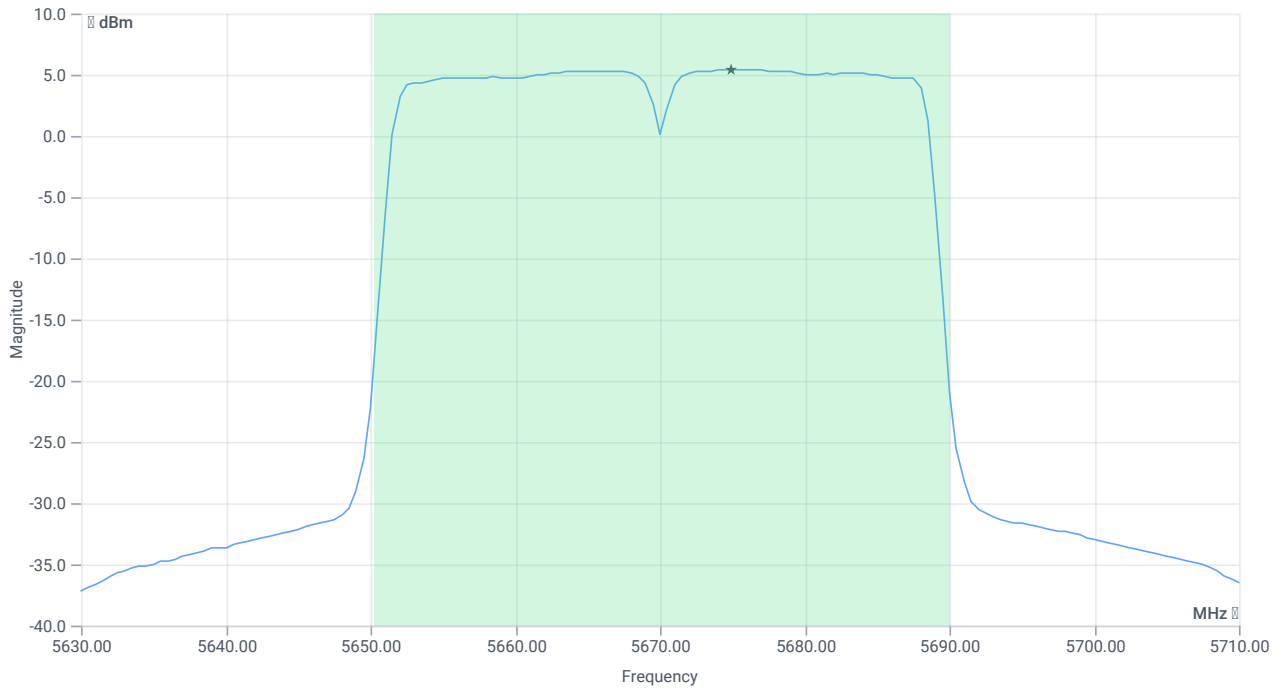
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.76	MHz	INFO
T1 26dB	---	---	5650.2400	MHz	INFO
T2 26dB	---	---	5690.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.49 16.68 25
Start [MHz] Stop [MHz]	5630.000 5710.000
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	--	--	20.25	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	20.25	dBm	PASS
Limit: 11 dBm + 10 log 39.76					
Max Output Power DC corrected	--	26.99	20.25	dBm	PASS

Power Spectral Density

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Power Spectral Density	--	--	5.45	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	5.45	dBm/1MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:38:21
Ambit temp [°C] humidity [rel%]	24.9 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 n-HT40 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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
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

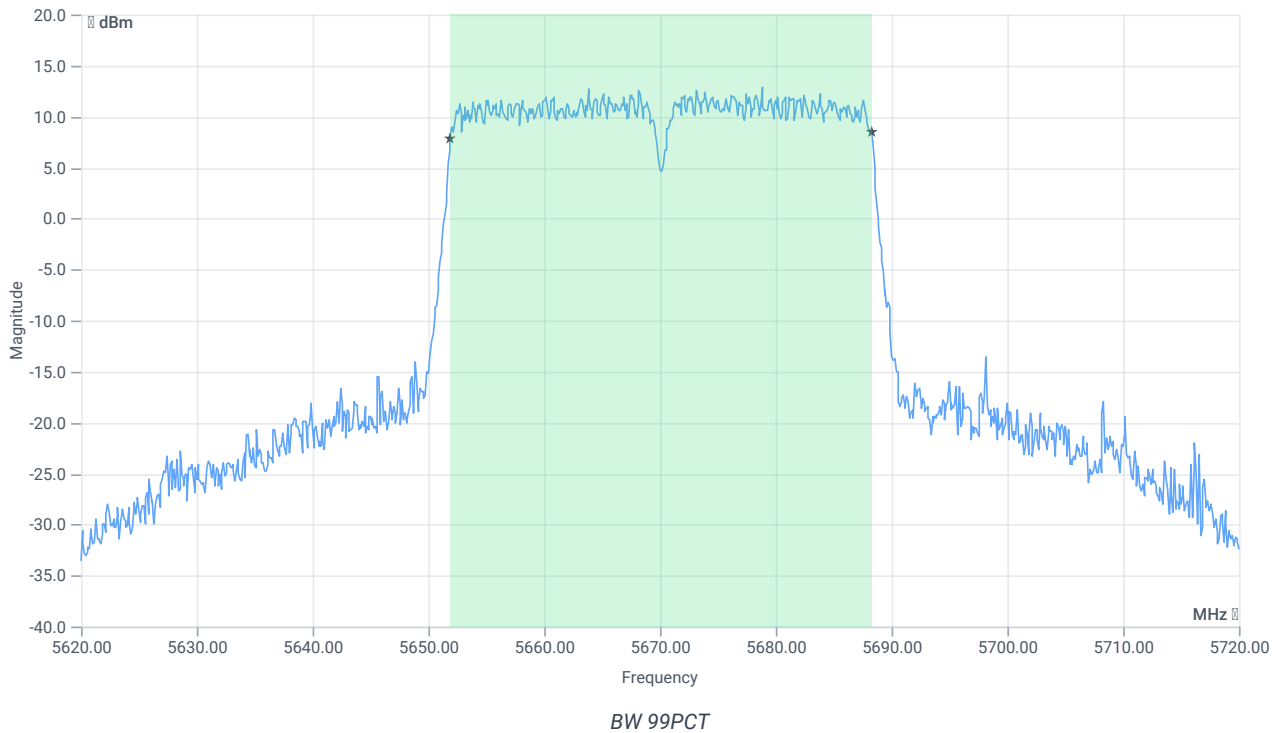
Test at TX 5670 MHz

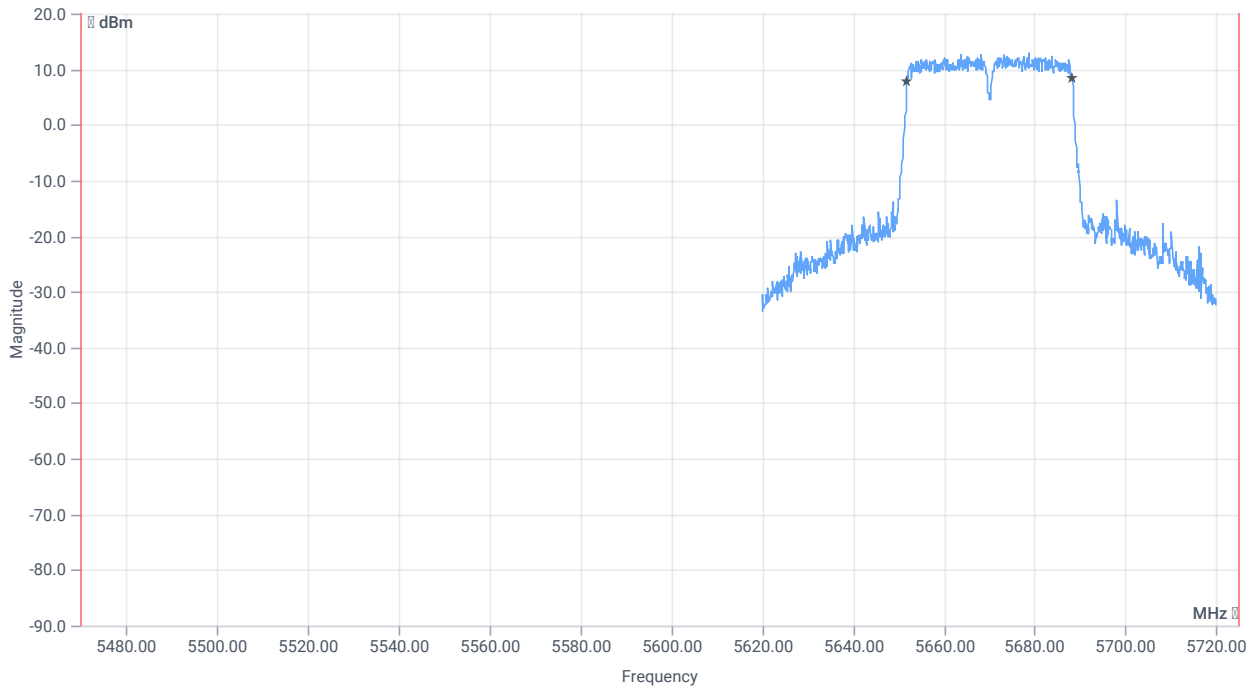
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	14.08	dBm	INFO
Ref. Frequency	--	--	5673.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	22.08 16.68 25
Start [MHz] Stop [MHz]	5620.000 5720.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

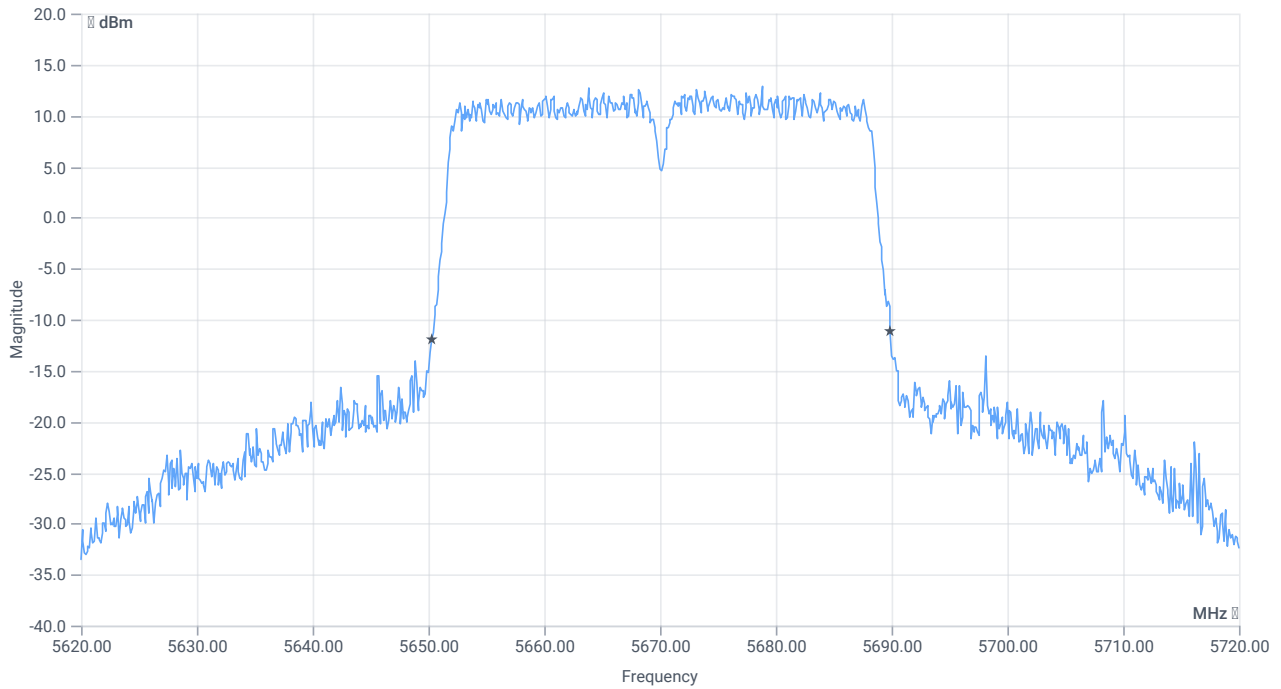




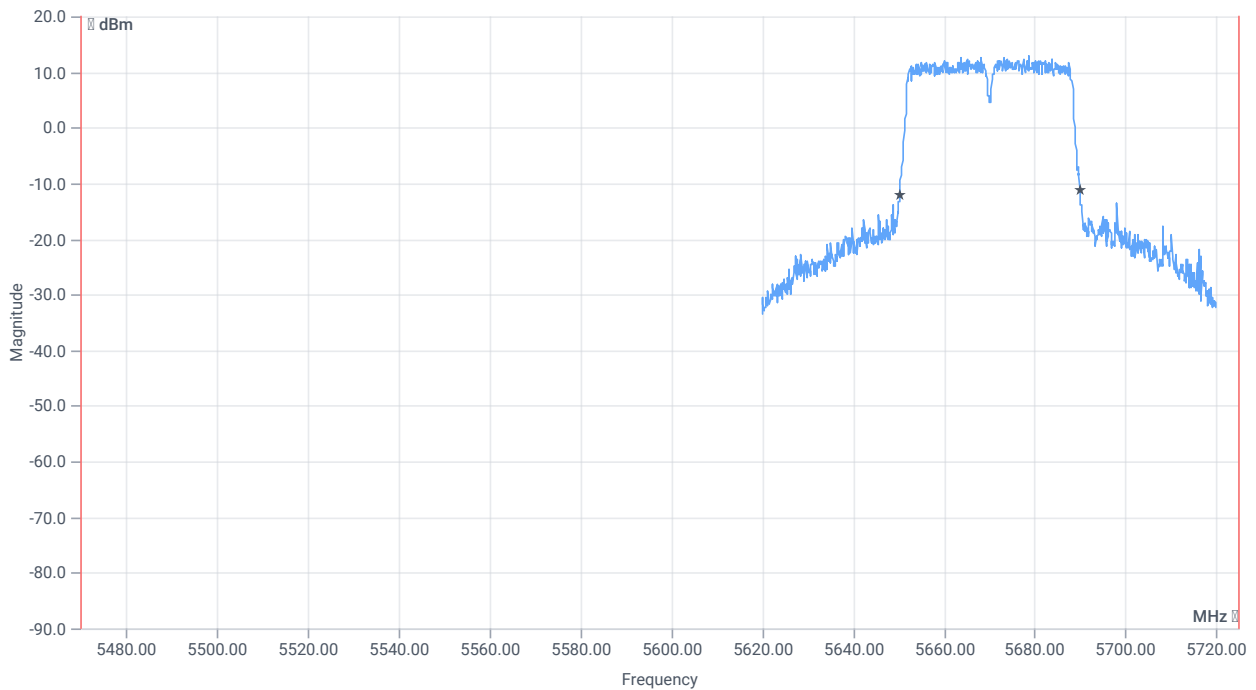
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	36.364	MHz	INFO
T1 99%	5470.000000	--	5651.9181	MHz	PASS since U-NII-3 is supported
T2 99%	--	5725.000000	5688.2817	MHz	



BW 26dB



BW within Band 26dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	39.6	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
T1 26dB	5470.000000	--	5650.3000	MHz	PASS since U-NII-3 is supported
T2 26dB	--	5725.000000	5689.9000	MHz	

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-2C

References

TC start	26.07.2023 15:44:30
Ambit temp [°C] humidity [rel%]	24.9 46
System version	4.6.0.0
Specification	FCC 15.407 -
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 mode U-NII-2C
Information	PS80

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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5510
Frequency mid to test	False Freq [MHz] 5590
Frequency high to test	True Freq [MHz] 5670
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5670 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	21.04	dBm	INFO
Ant:1 BW 26dB	--	--	45.680	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	20.25	dBm	INFO
Ant:2 BW 26dB	--	--	39.760	MHz	INFO
Σ Limit absolute	--	24	23.67	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.76	--	26.99	23.67	dBm	PASS

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.22	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.45	dBm/1MHz	INFO
Σ	--	11	8.86	dBm/1MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 10:05:46
Ambit temp [°C] humidity [rel%]	25.4 51
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan n_HT40_U_NII_3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 10:05:46
Message	set WLAN5Gx to n_HT40_U_NII_3, Frequency [MHz] 5755 , Information: PS96

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 n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:06:17
Ambit temp [°C] humidity [rel%]	25.4 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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 5755 MHz

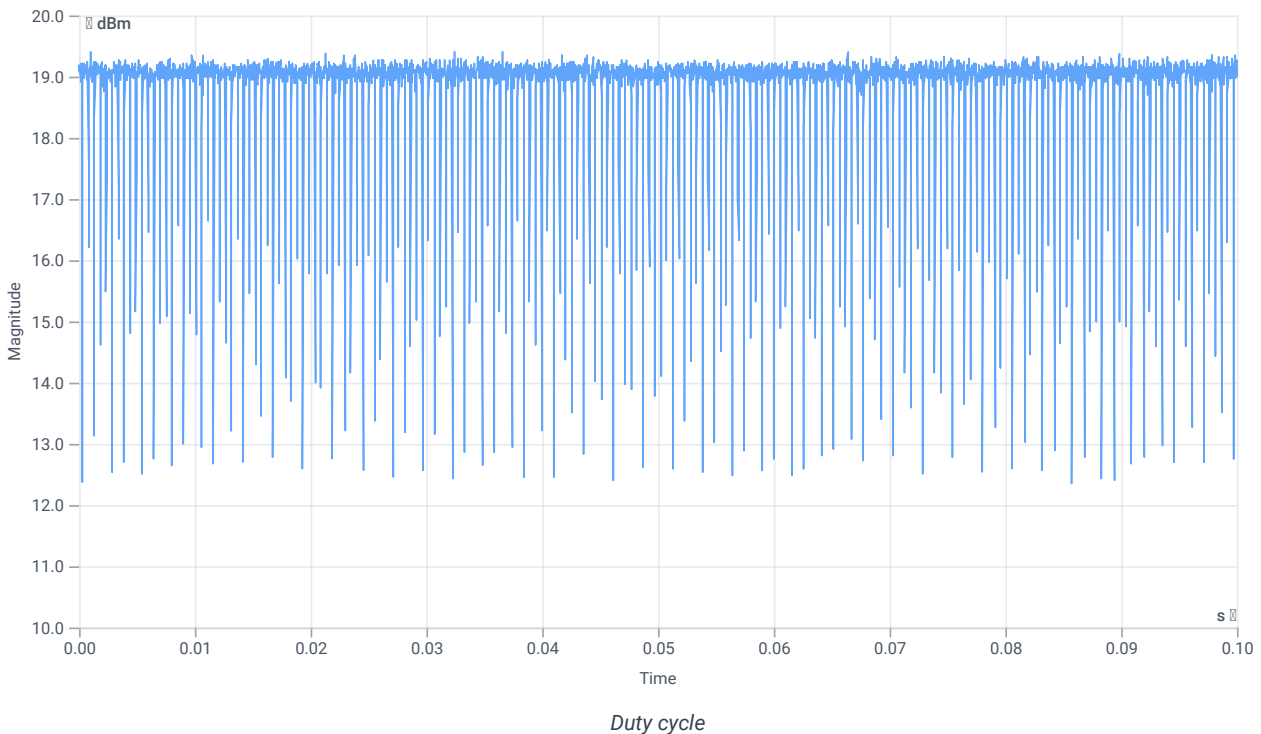
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.76	dBm	INFO
Ref. Frequency	--	--	5751.000	MHz	INFO

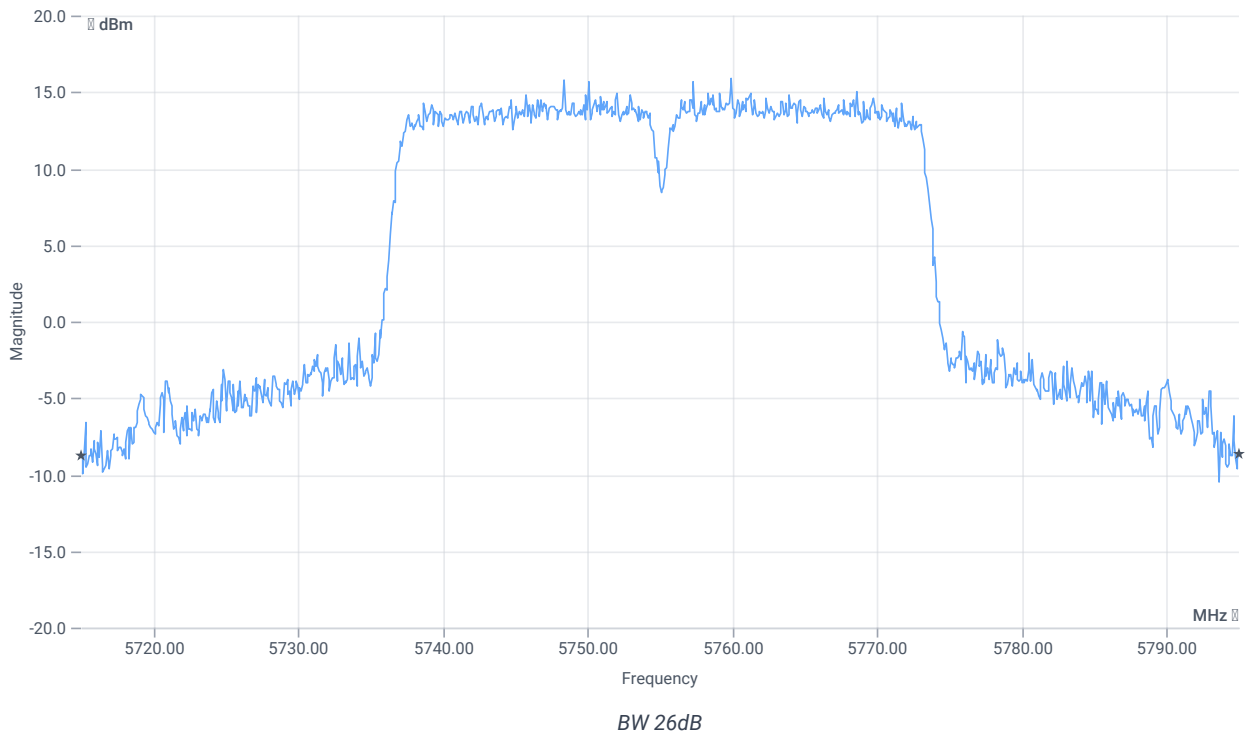
Evaluation max. Duty Cycle

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



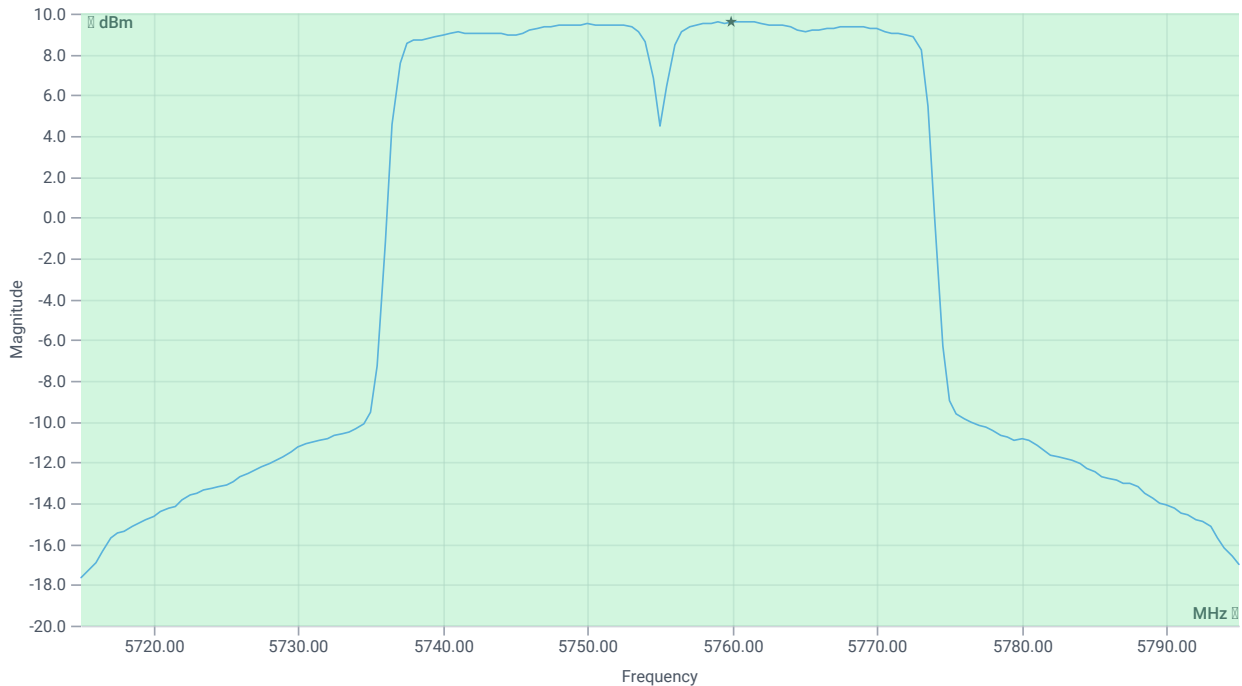
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5715.0000	MHz	INFO
T2 26dB	---	---	5795.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.76 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
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

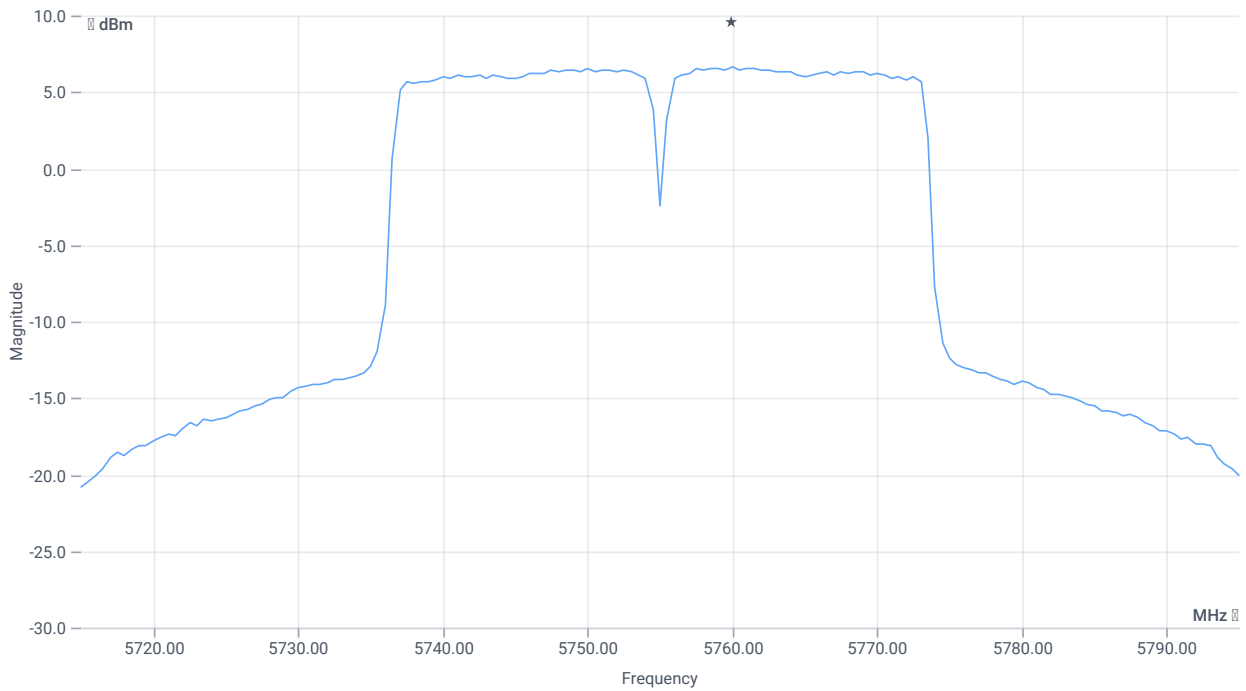
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.53	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.53	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.53	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.76 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
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	--	--	6.61	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.61	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:08:43
Ambit temp [°C] humidity [rel%]	25.4 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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

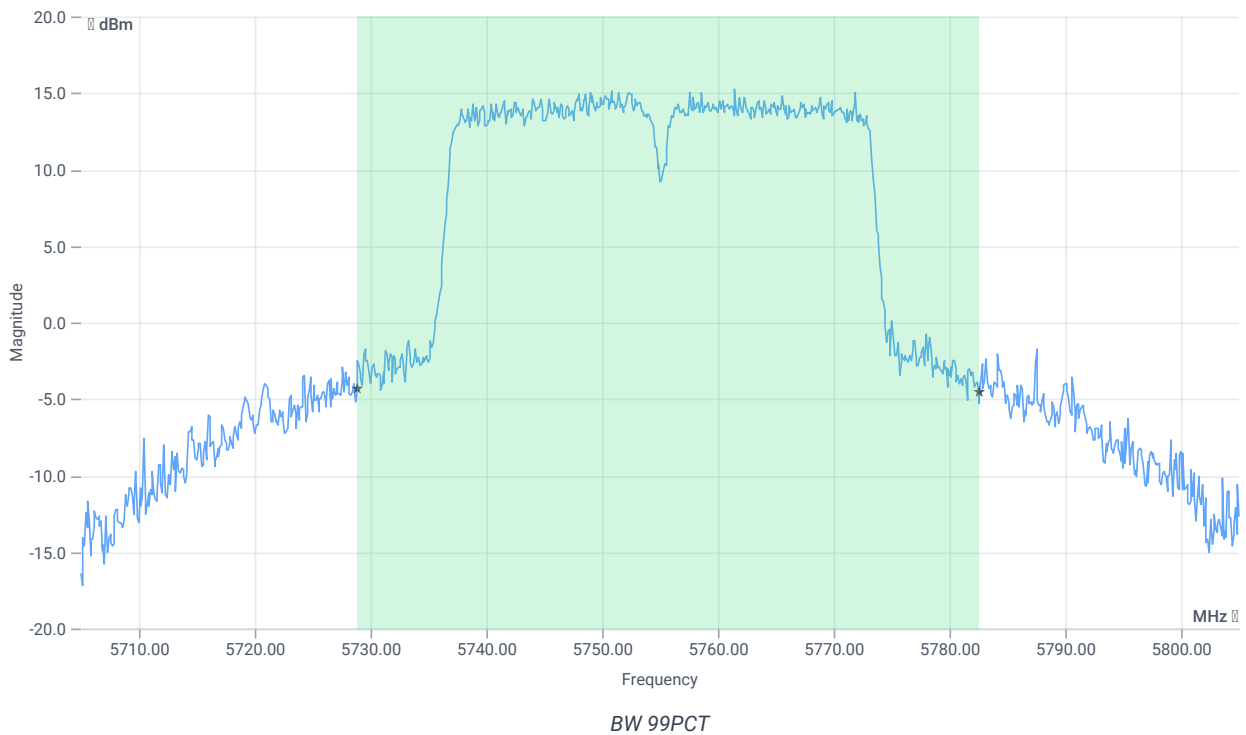
Test at TX 5755 MHz

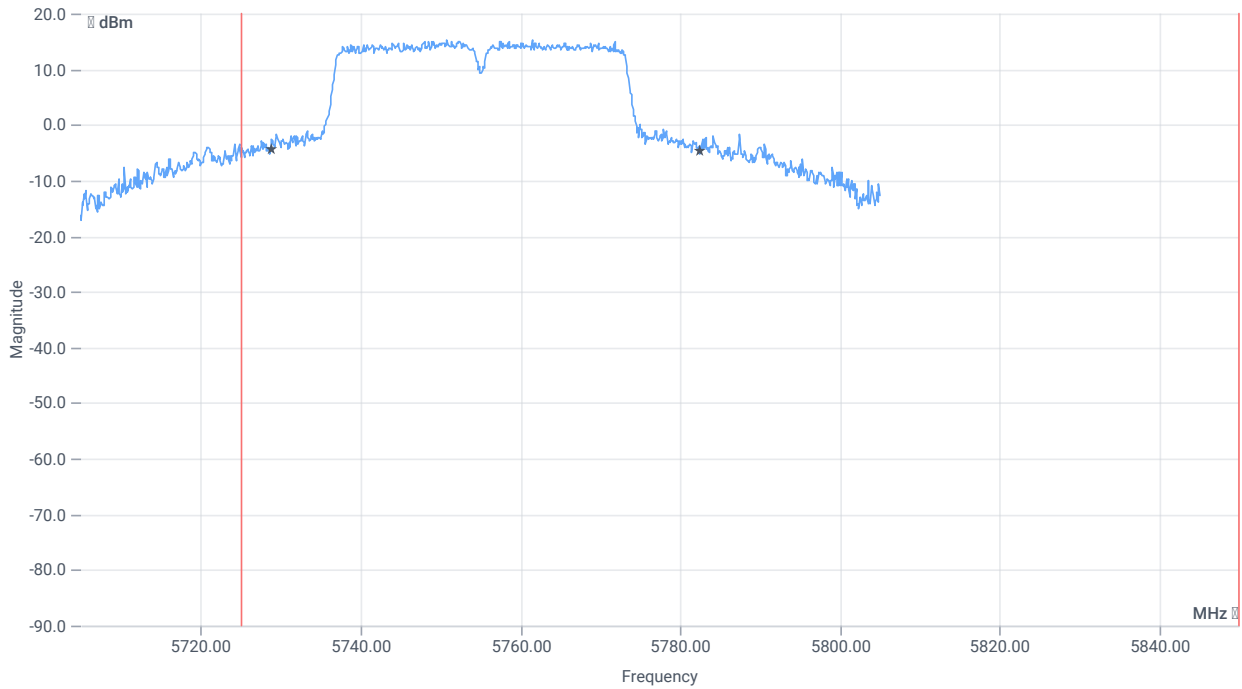
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.96	dBm	INFO
Ref. Frequency	--	--	5756.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.96 16.77 25
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

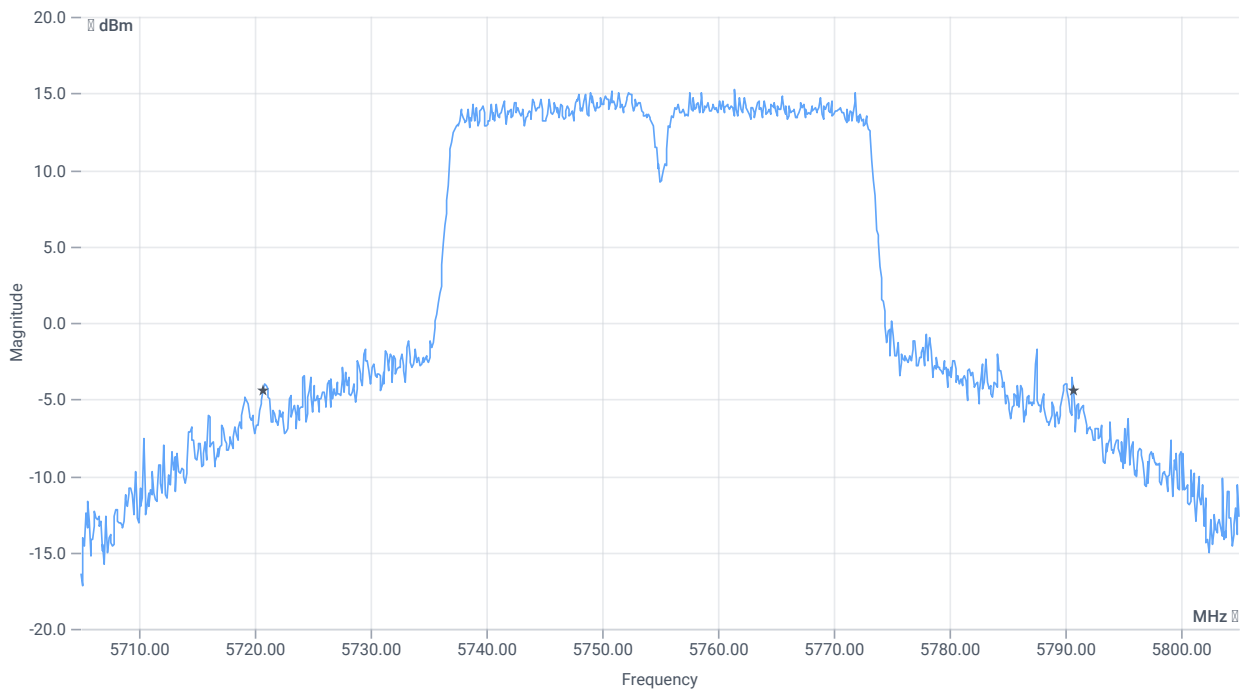




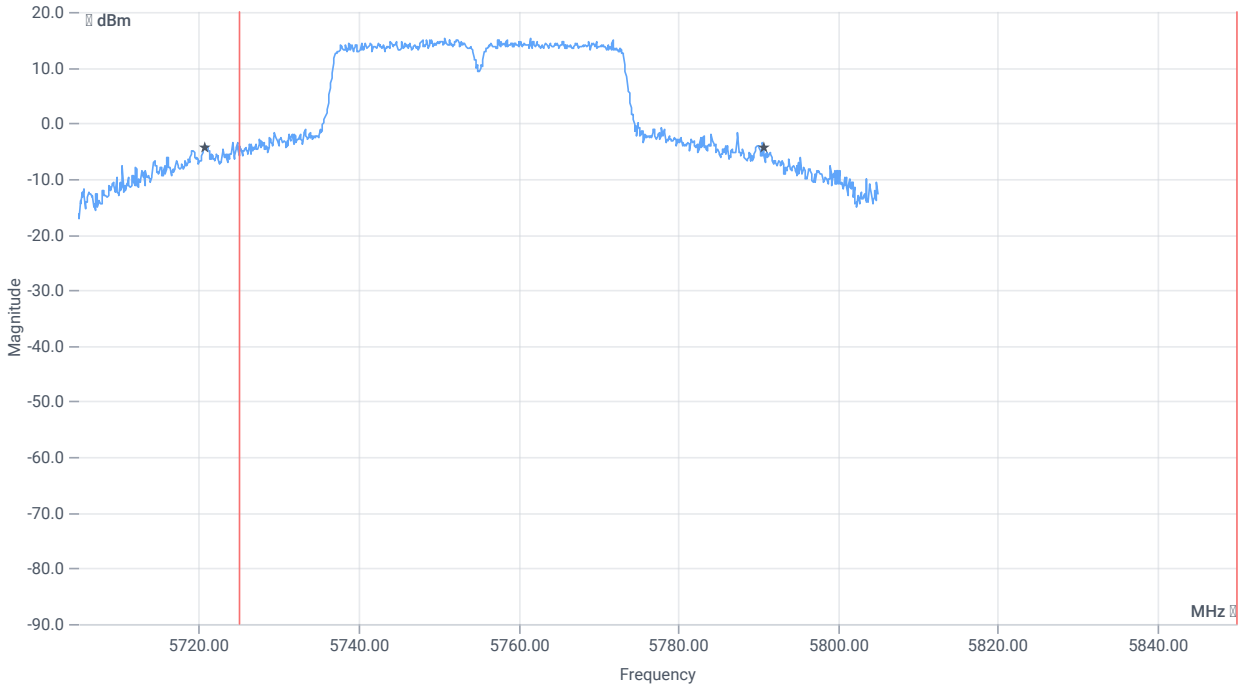
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	53.746	MHz	INFO
T1 99%	5725.000000	--	5728.8262	MHz	PASS
T2 99%	--	5850.000000	5782.5724	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	70	MHz	INFO
T1 20dB	5725.000000	--	5720.7000	MHz	DFS required
T2 20dB	--	5850.000000	5790.7000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:09:15
Ambit temp [°C] humidity [rel%]	25.4 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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

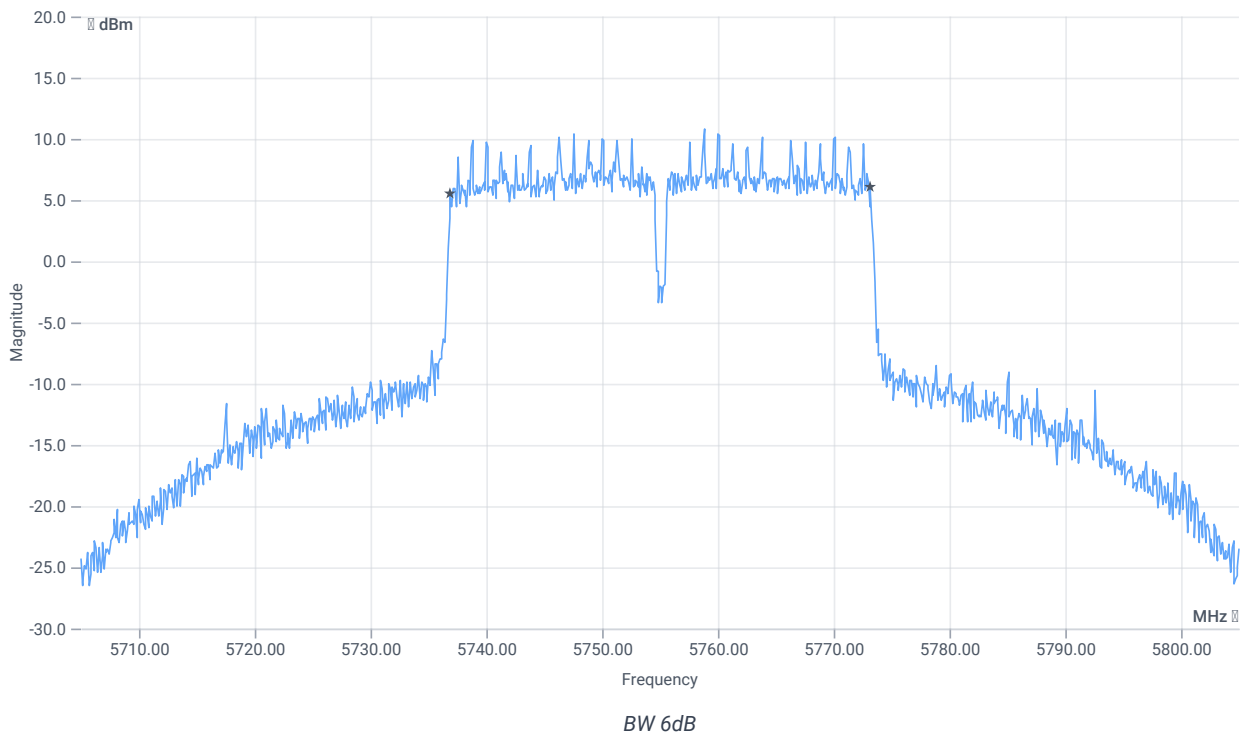
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.08	dBm	INFO
Ref. Frequency	--	--	5756.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.08 16.77 30
Start [MHz] Stop [MHz]	5705.000 5805.000
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	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:09:40
Ambit temp [°C] humidity [rel%]	25.4 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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 5755 MHz

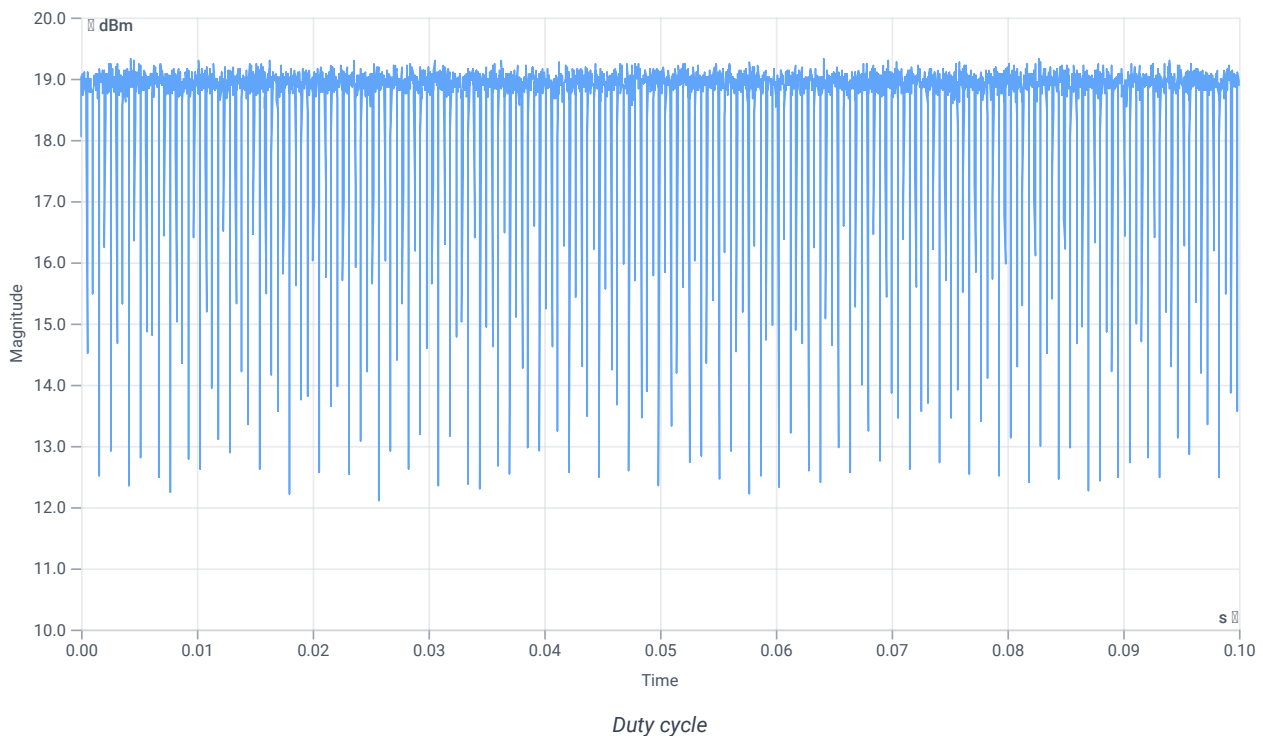
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.79	dBm	INFO
Ref. Frequency	--	--	5764.990	MHz	INFO

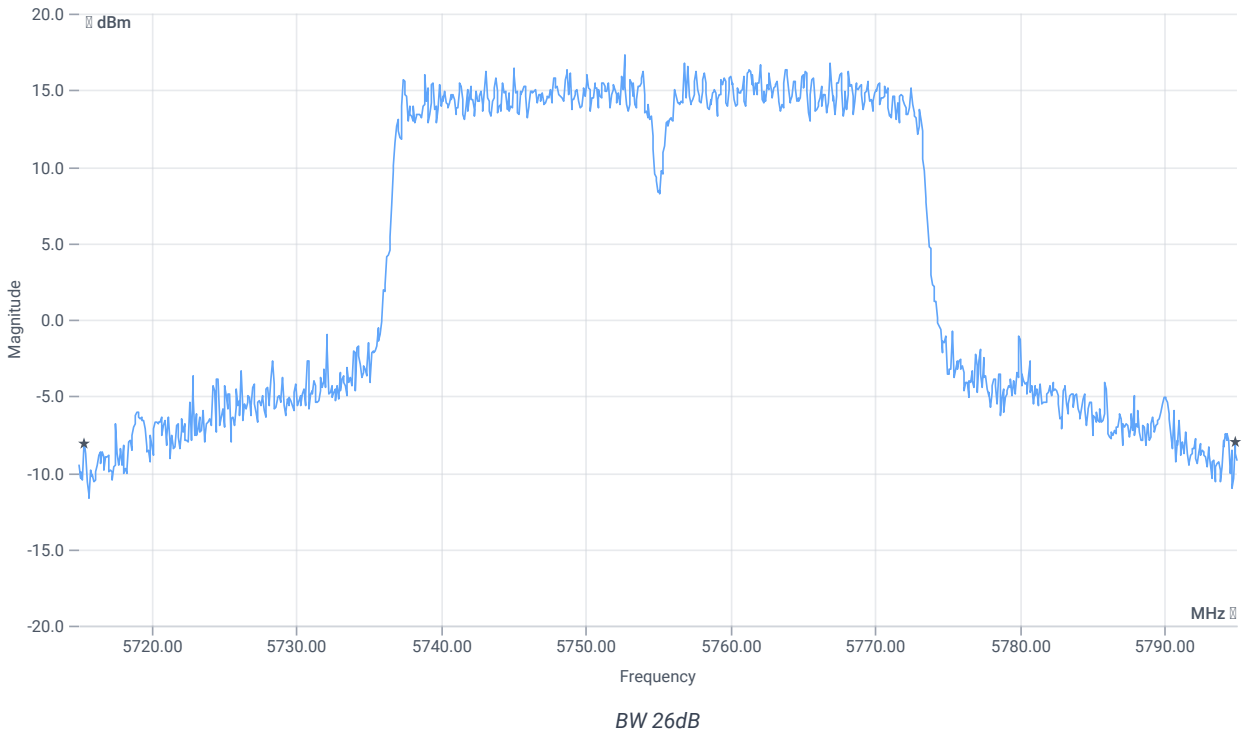
Evaluation max. Duty Cycle

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



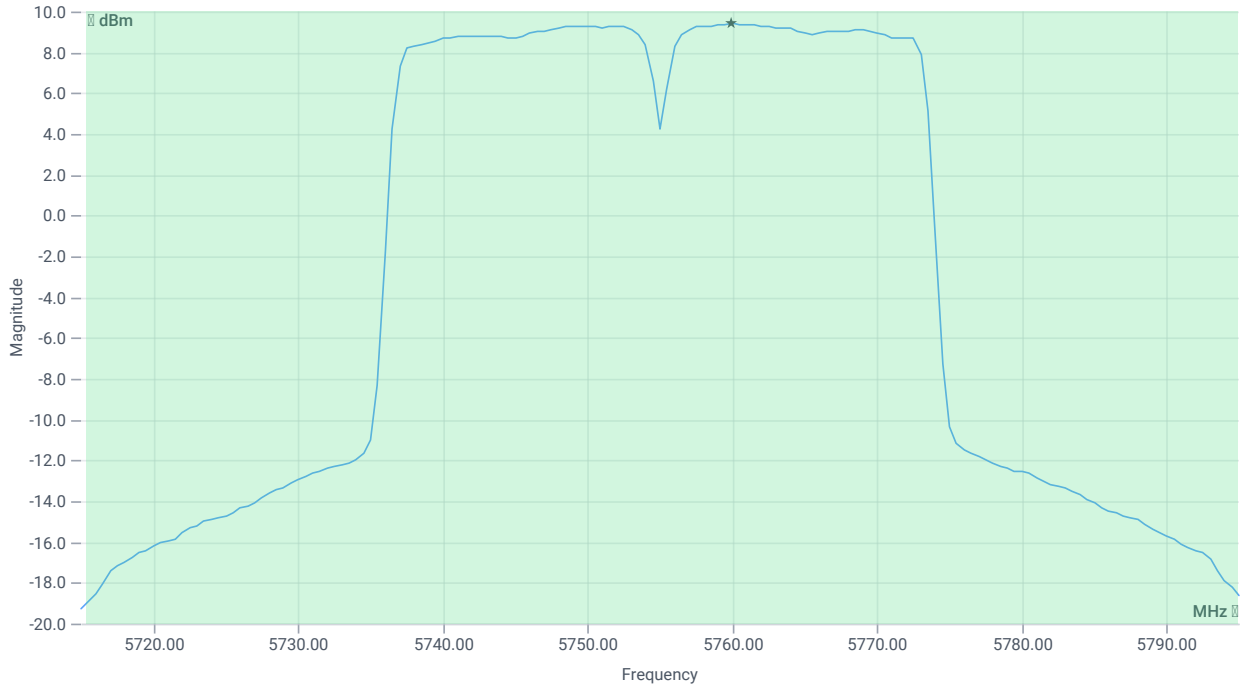
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	79.52	MHz	INFO
T1 26dB	---	---	5715.3200	MHz	INFO
T2 26dB	---	---	5794.8400	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.79 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
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

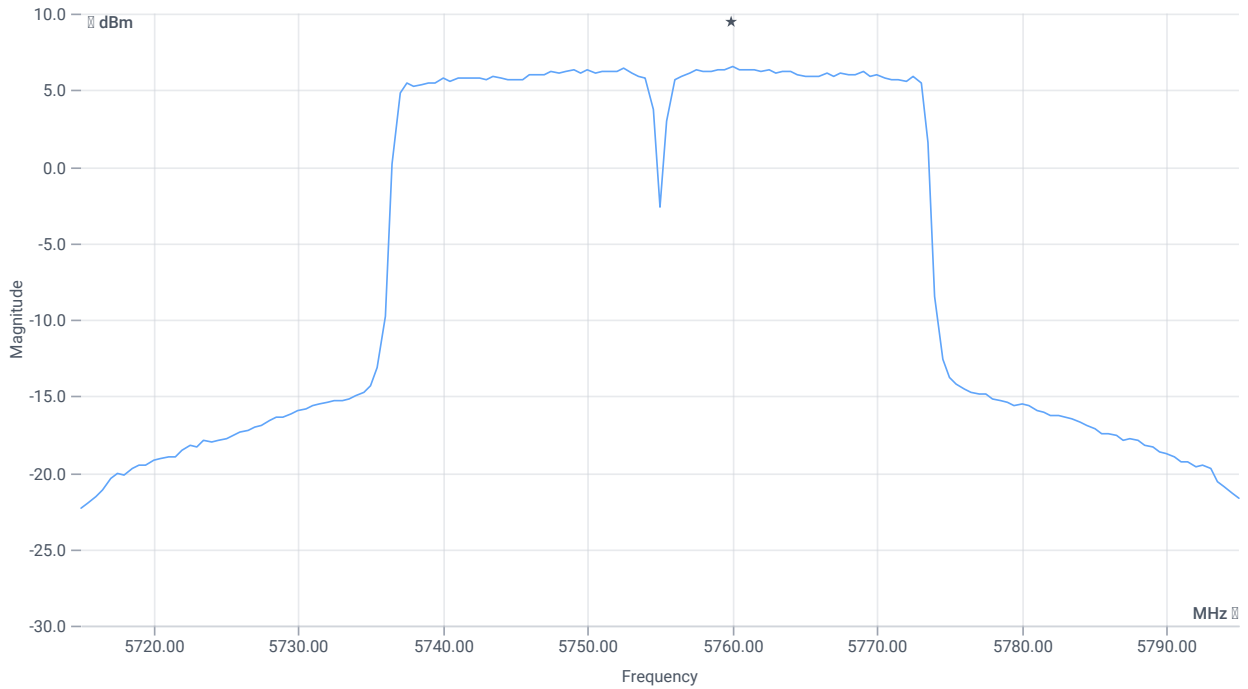
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.26	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.26	dBm	PASS
Limit: 11 dBm + 10 log 79.52					
Max Output Power DC corrected	--	30	24.26	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.79 16.77 30
Start [MHz] Stop [MHz]	5715.000 5795.000
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	--	--	6.49	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.49	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:12:07
Ambit temp [°C] humidity [rel%]	25.4 52
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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

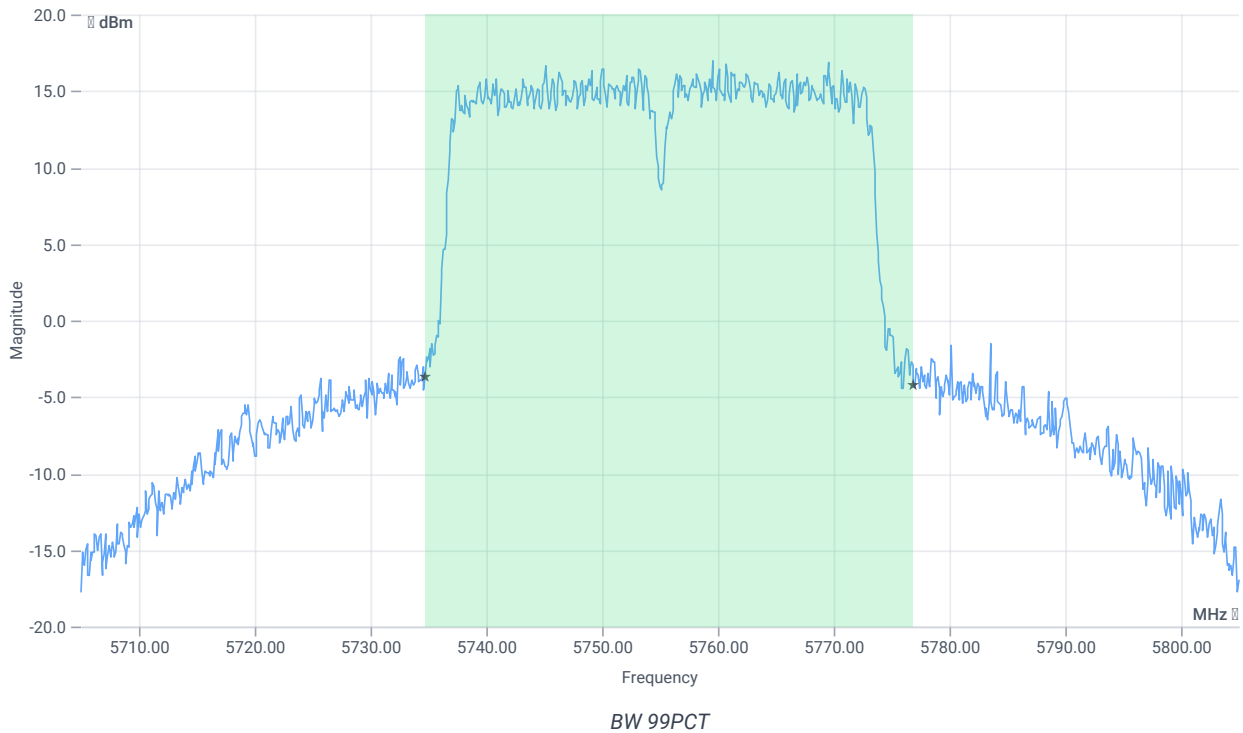
Test at TX 5755 MHz

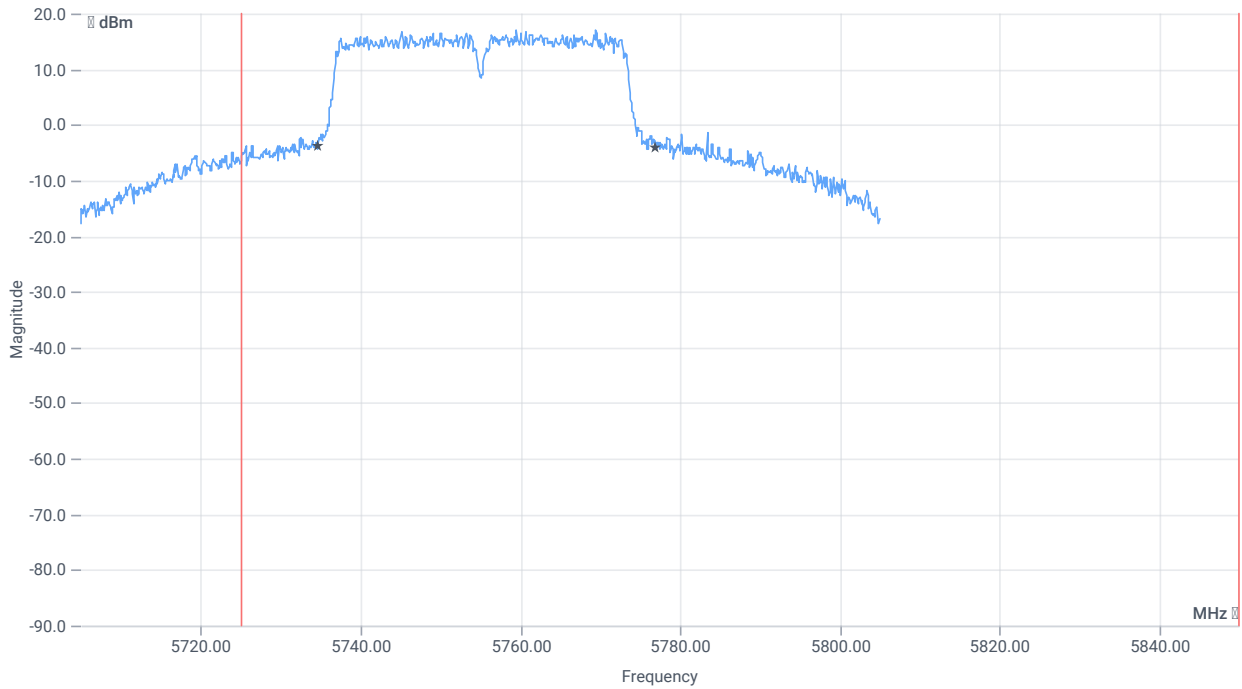
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.25	dBm	INFO
Ref. Frequency	--	--	5757.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.25 16.77 25
Start [MHz] Stop [MHz]	5705.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

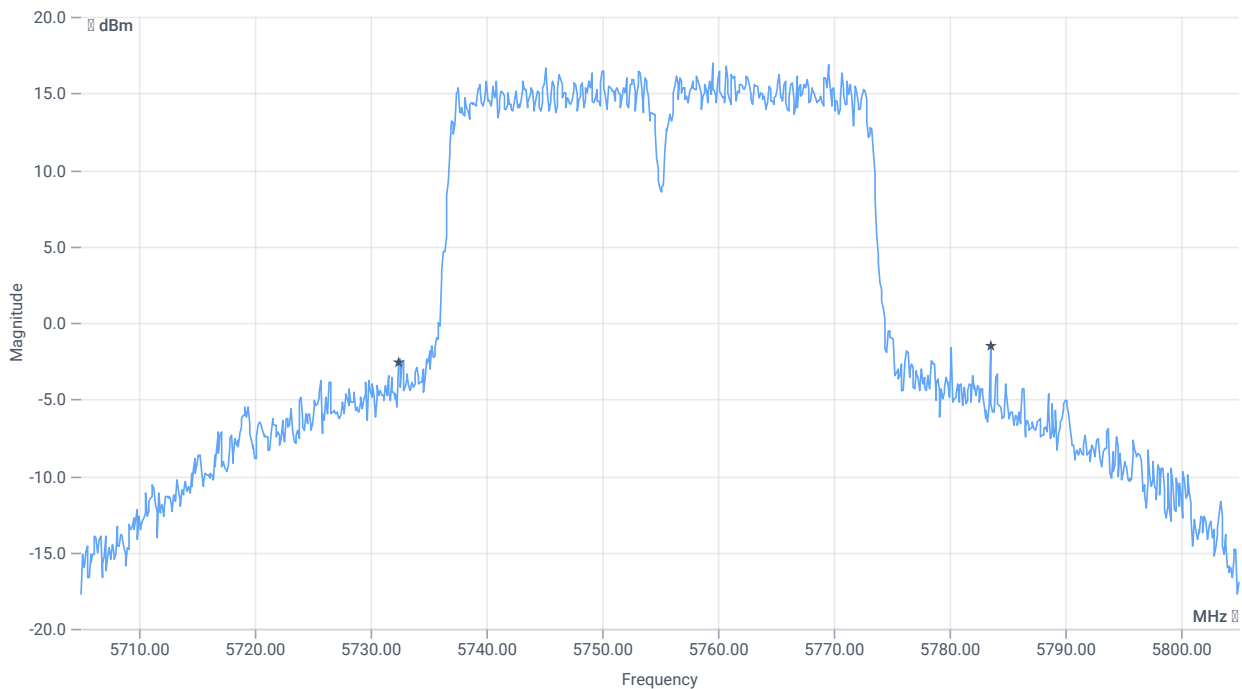




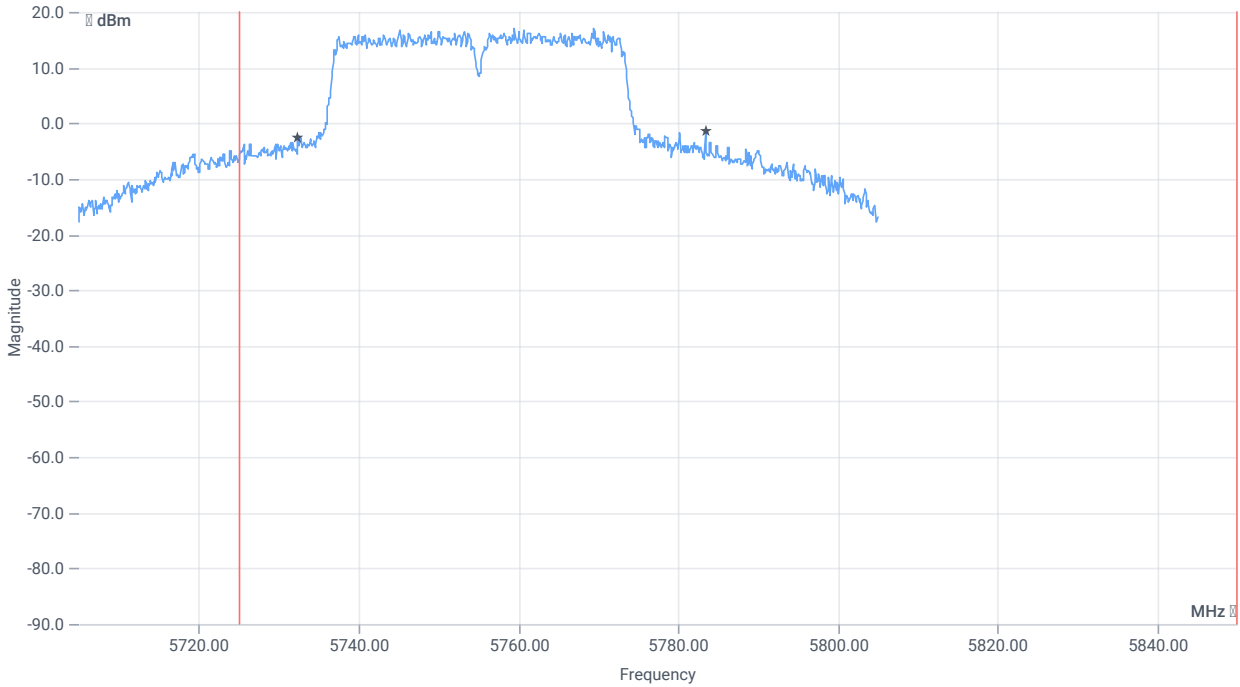
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	42.158	MHz	INFO
T1 99%	5725.000000	--	5734.7203	MHz	PASS
T2 99%	--	5850.000000	5776.8781	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	51.1	MHz	INFO
T1 20dB	5725.000000	---	5732.4000	MHz	PASS
T2 20dB	---	5850.000000	5783.5000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:12:39
Ambit temp [°C] humidity [rel%]	25.4 52
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
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

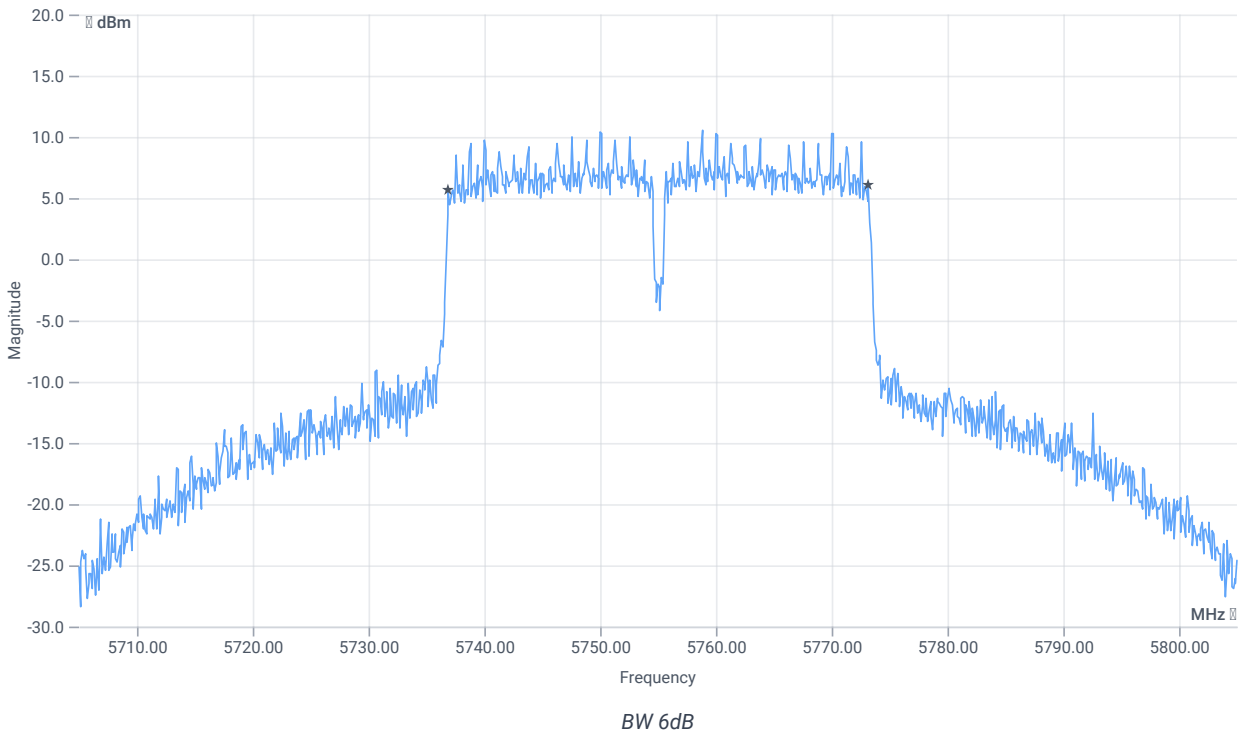
Test at TX 5755 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.68	dBm	INFO
Ref. Frequency	--	--	5750.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.68 16.77 30
Start [MHz] Stop [MHz]	5705.000 5805.000
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	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:13:06
Ambit temp [°C] humidity [rel%]	25.4 52
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	False Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5755 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.53	dBm	INFO
Ant:1 BW 26dB	--	--	80.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	24.26	dBm	INFO
Ant:2 BW 26dB	--	--	79.520	MHz	INFO
Σ Limit absolute	--	30	27.41	dBm	PASS
Σ Limit: 11 dBm + 10 log 79.52	--	30	27.41	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.61	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	6.49	dBm/0.5MHz	INFO
Σ	--	30	9.56	dBm/0.5MHz	PASS

Verdict

PASS

NA # Message with SA scan ~

References

TC start	02.08.2023 10:27:58
Ambit temp [°C] humidity [rel%]	25.4 52
System version	4.6.0.3
Standard Version	NA NI
Method	
Description	Message with SA Scan n_HT40_U_NII_3
Information	PS96

Test Parameter

Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Message start	02.08.2023 10:27:58
Message	set WLAN5Gx to n_HT40_U_NII_3, Frequency [MHz] 5795 Information: PS96

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 n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:28:34
Ambit temp [°C] humidity [rel%]	25.4 52
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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 5795 MHz

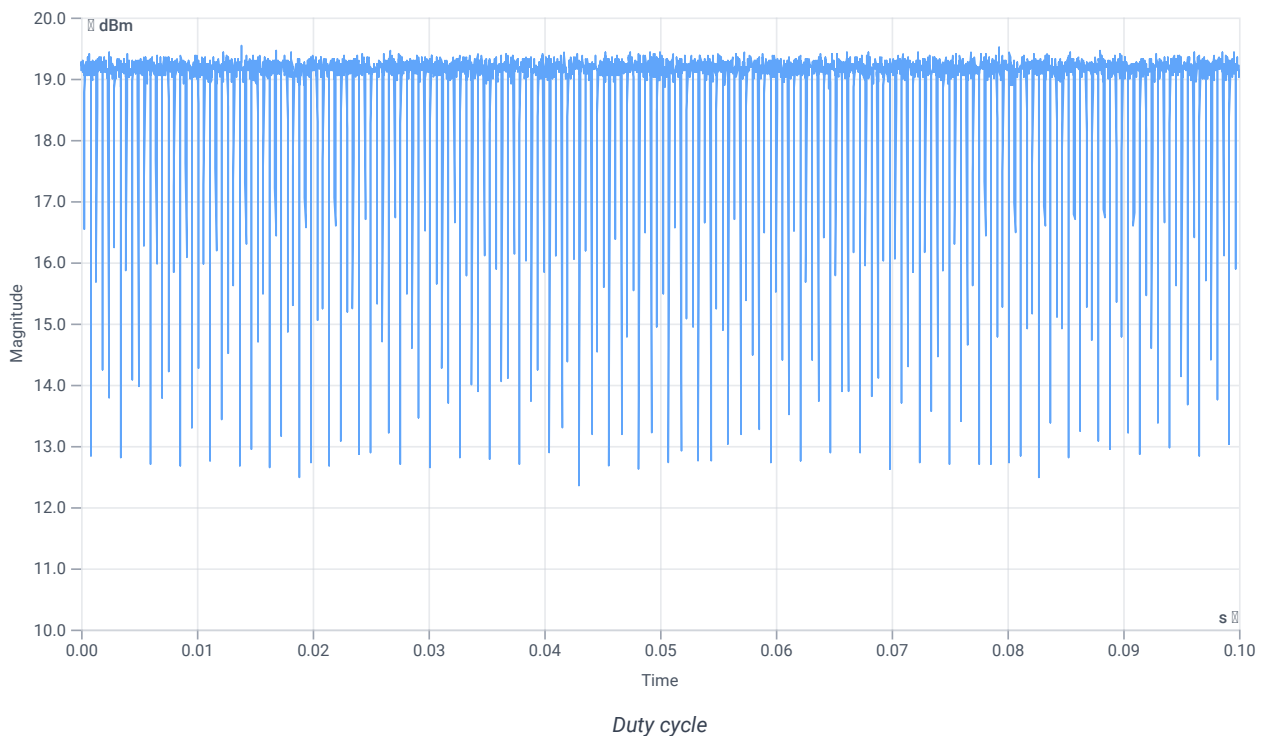
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.02	dBm	INFO
Ref. Frequency	--	--	5803.790	MHz	INFO

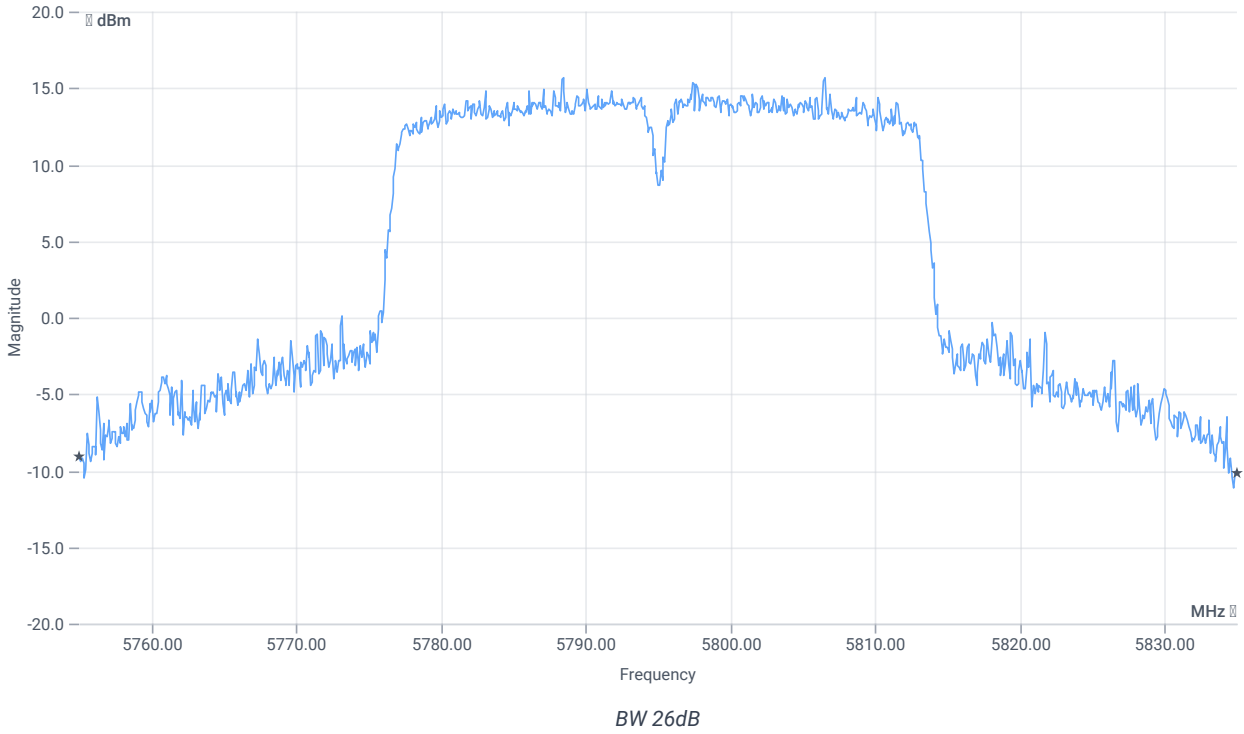
Evaluation max. Duty Cycle

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



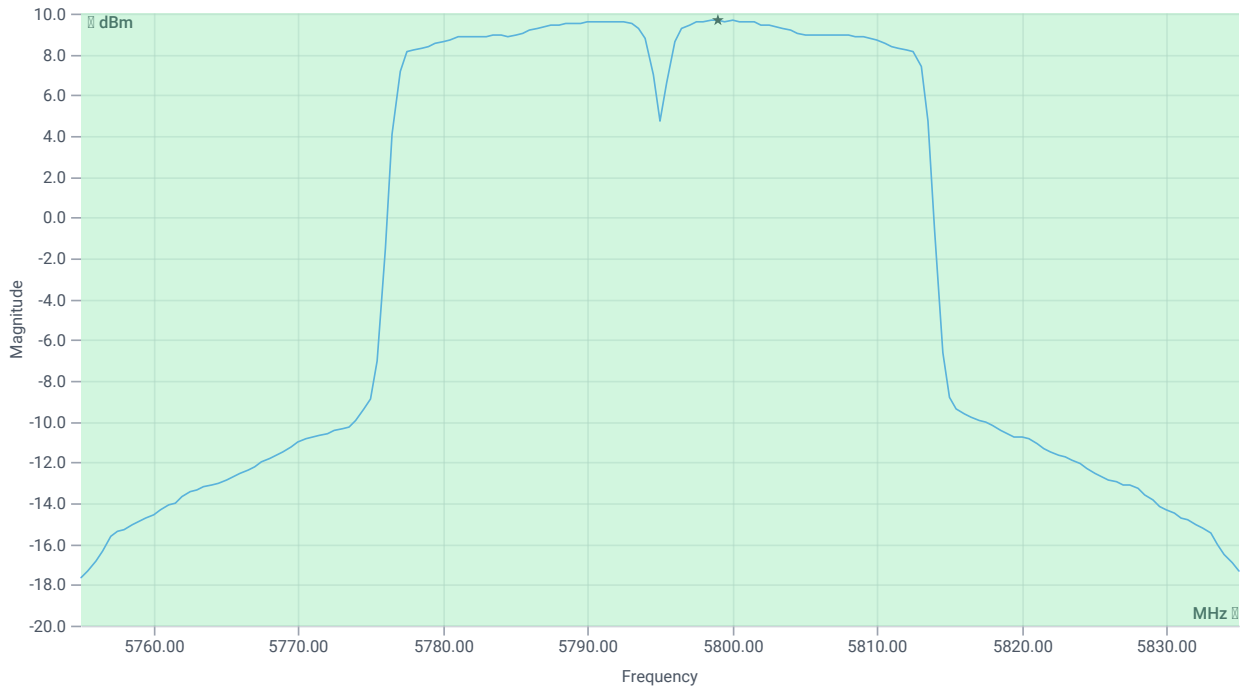
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5755.0000	MHz	INFO
T2 26dB	---	---	5835.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.02 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
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

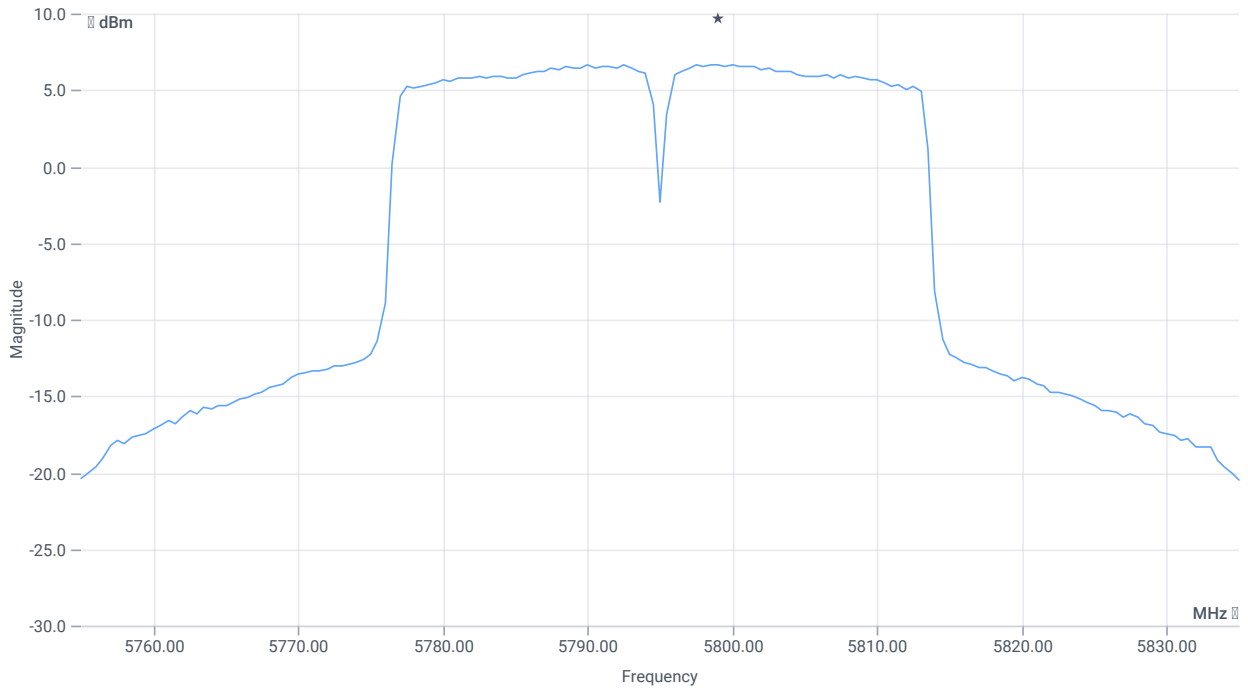
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	24.4	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	24.4	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	24.4	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.02 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
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	--	--	6.65	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.65	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:31:01
Ambit temp [°C] humidity [rel%]	25.5 52
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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

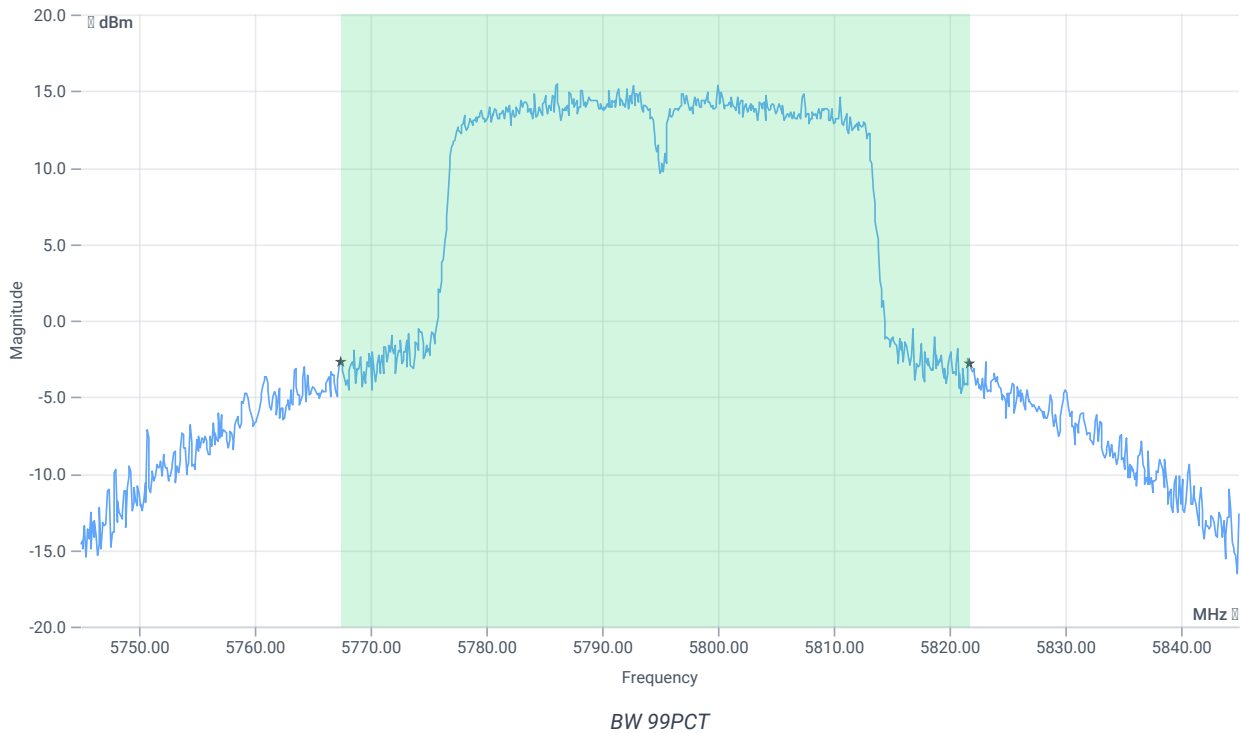
Test at TX 5795 MHz

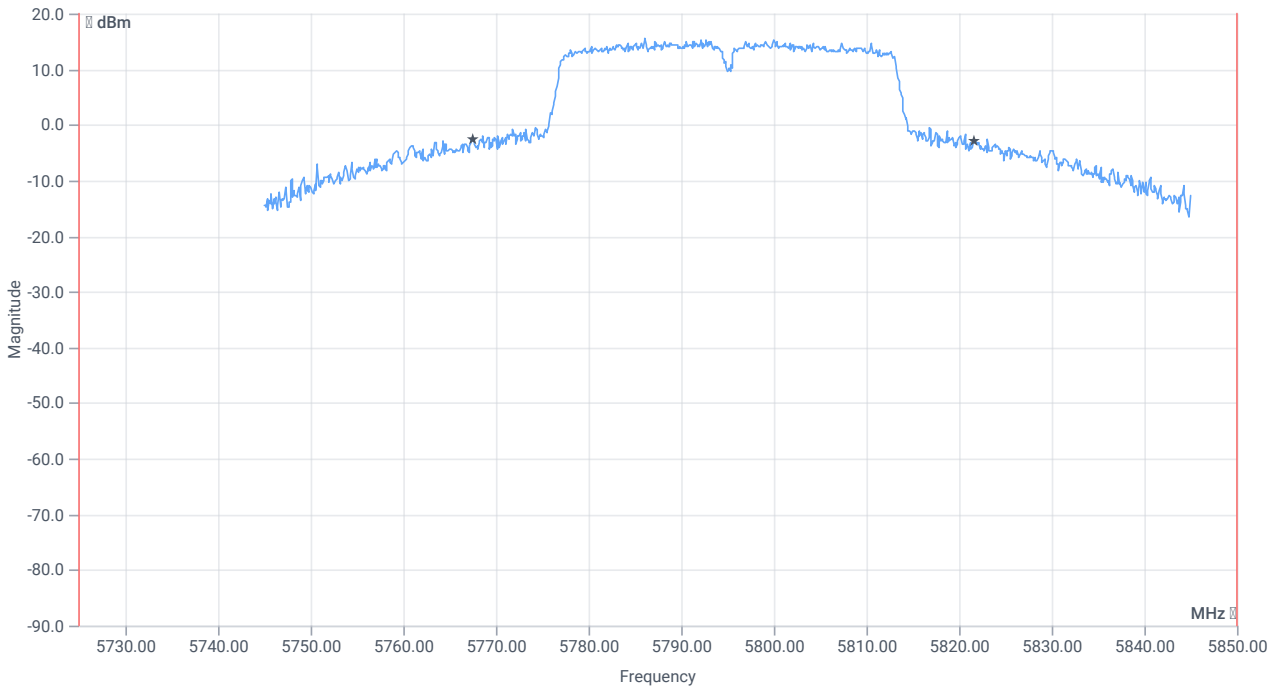
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.32	dBm	INFO
Ref. Frequency	--	--	5797.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.32 16.67 25
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

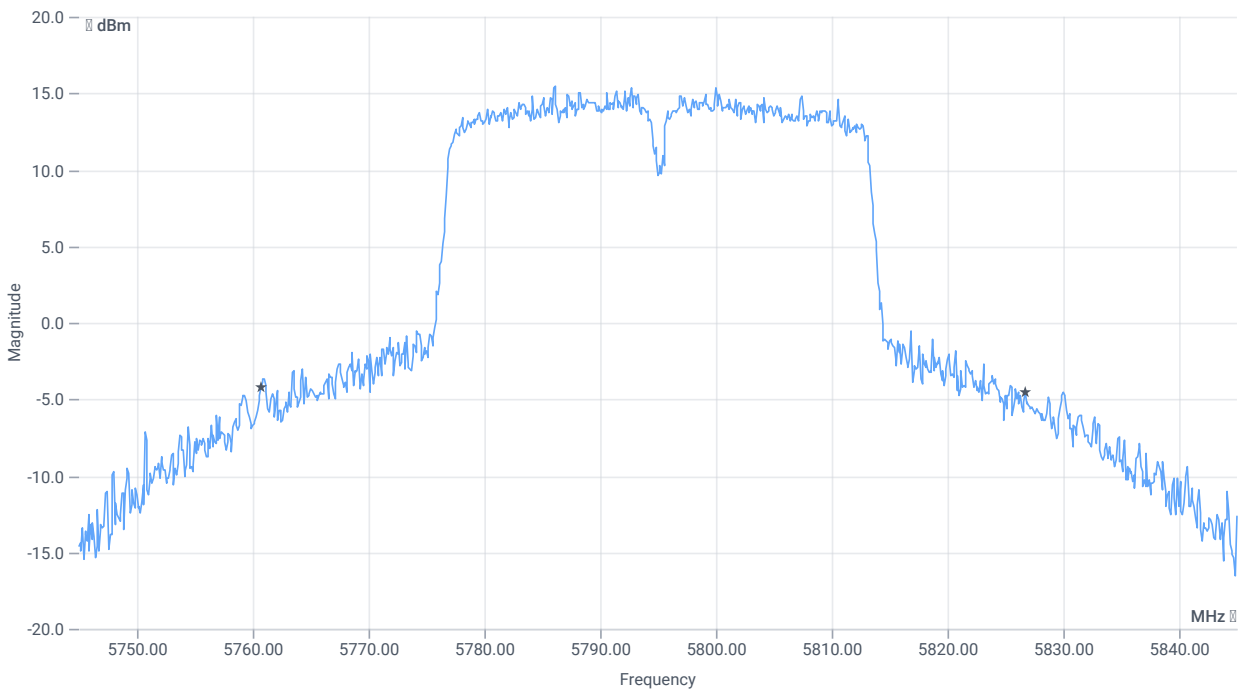




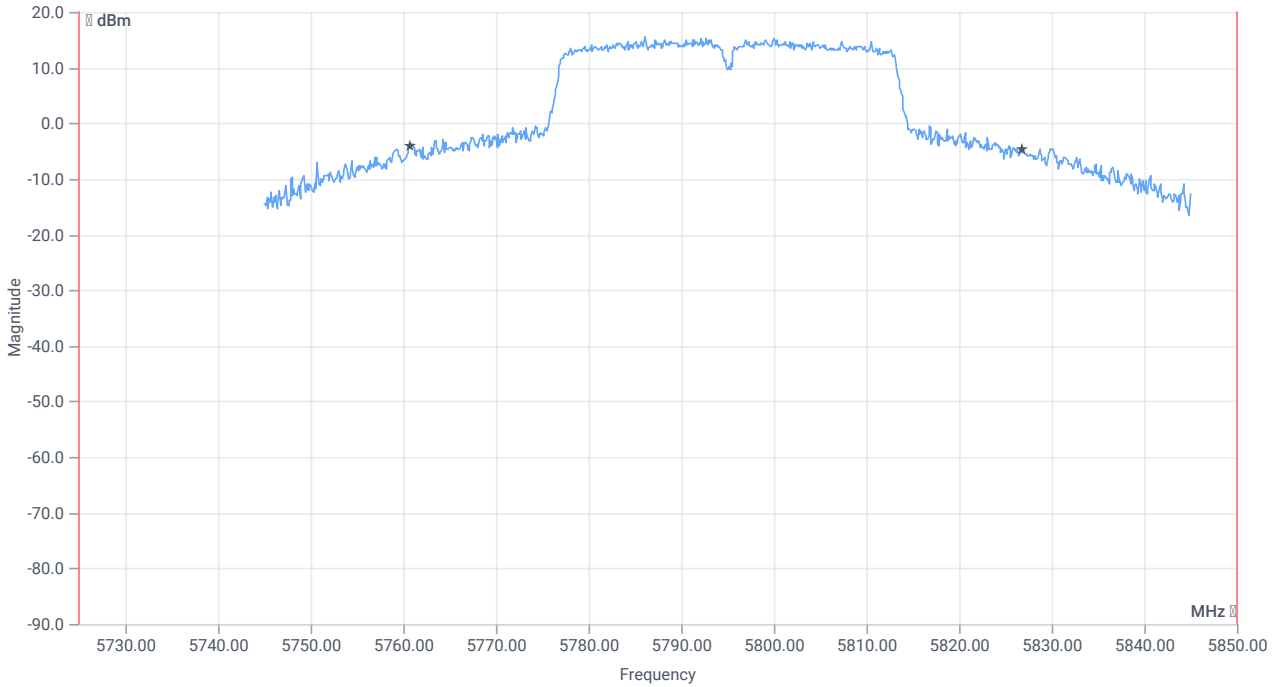
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	54.246	MHz	INFO
T1 99%	5725.000000	--	5767.4276	MHz	PASS
T2 99%	--	5850.000000	5821.6733	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	66	MHz	INFO
T1 20dB	5725.000000	--	5760.7000	MHz	PASS
T2 20dB	--	5850.000000	5826.7000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:31:32
Ambit temp [°C] humidity [rel%]	25.5 52
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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

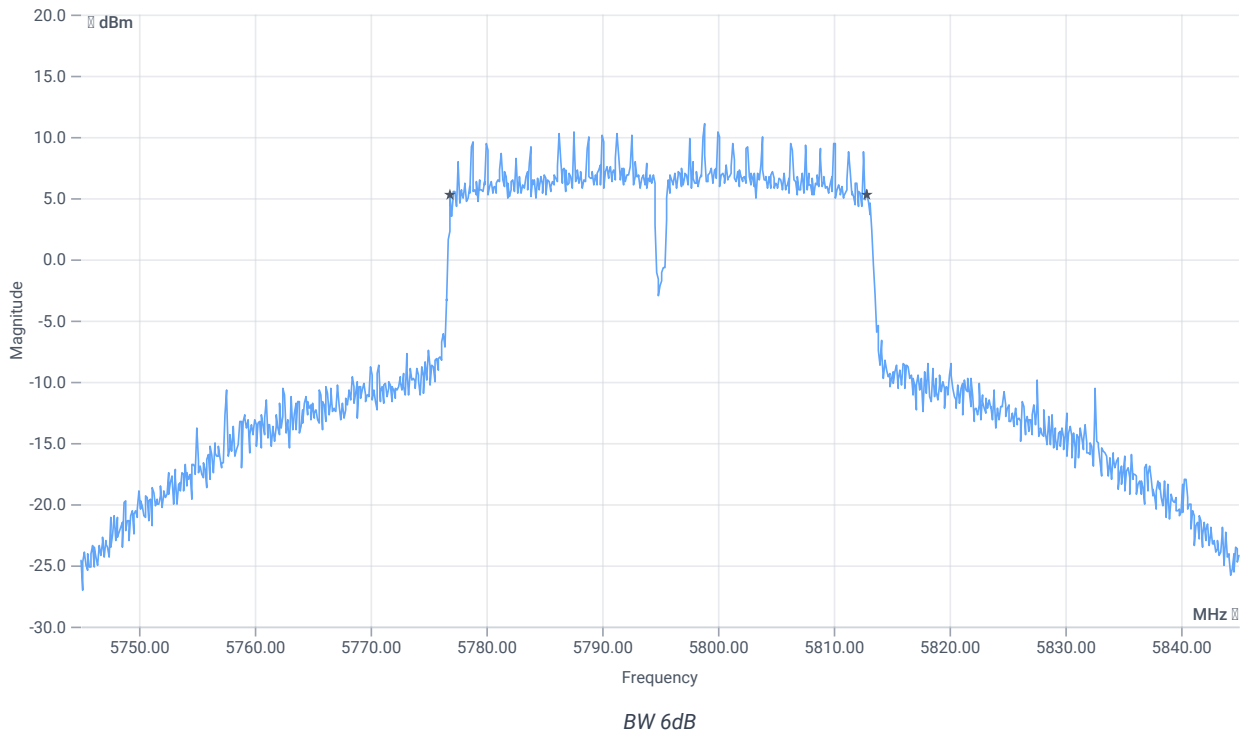
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.91	dBm	INFO
Ref. Frequency	--	--	5802.990	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.91 16.67 30
Start [MHz] Stop [MHz]	5745.000 5845.000
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	--	36	MHz	PASS

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:31:58
Ambit temp [°C] humidity [rel%]	25.5 52
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	KDB789033 D02, F, E.2.e.
Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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 5795 MHz

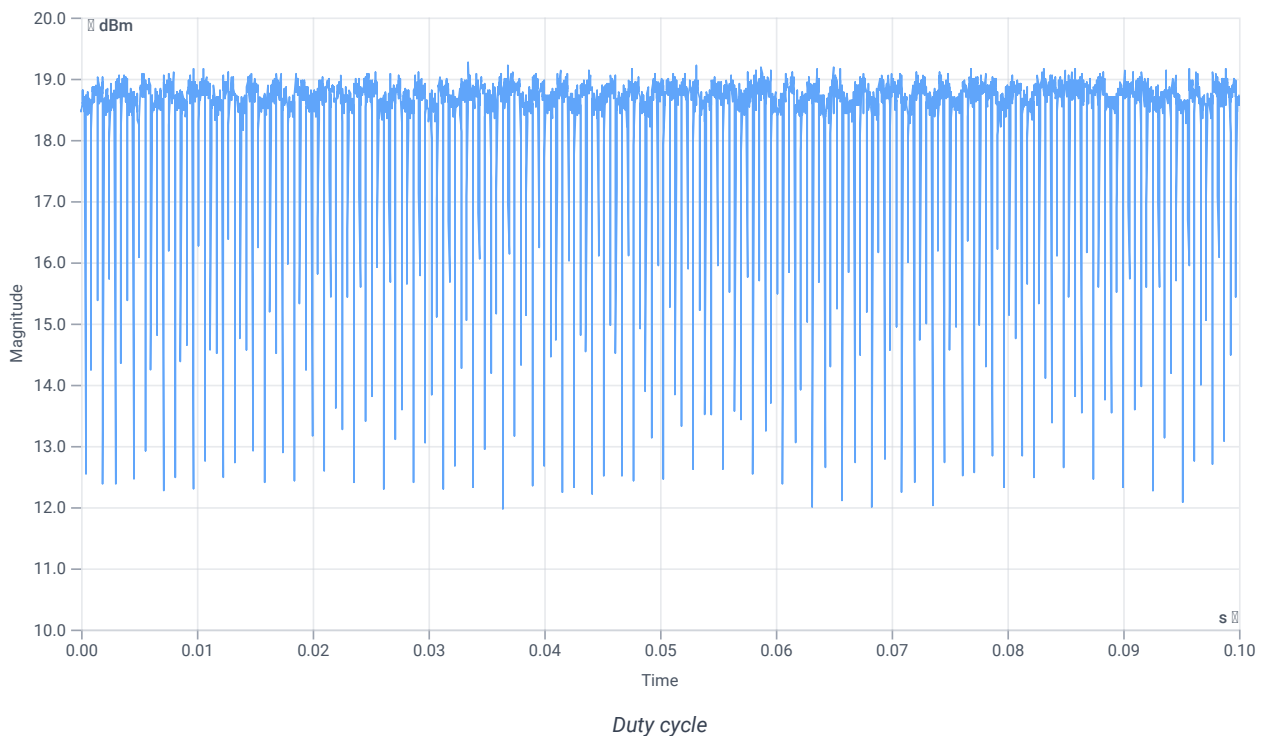
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.24	dBm	INFO
Ref. Frequency	--	--	5787.810	MHz	INFO

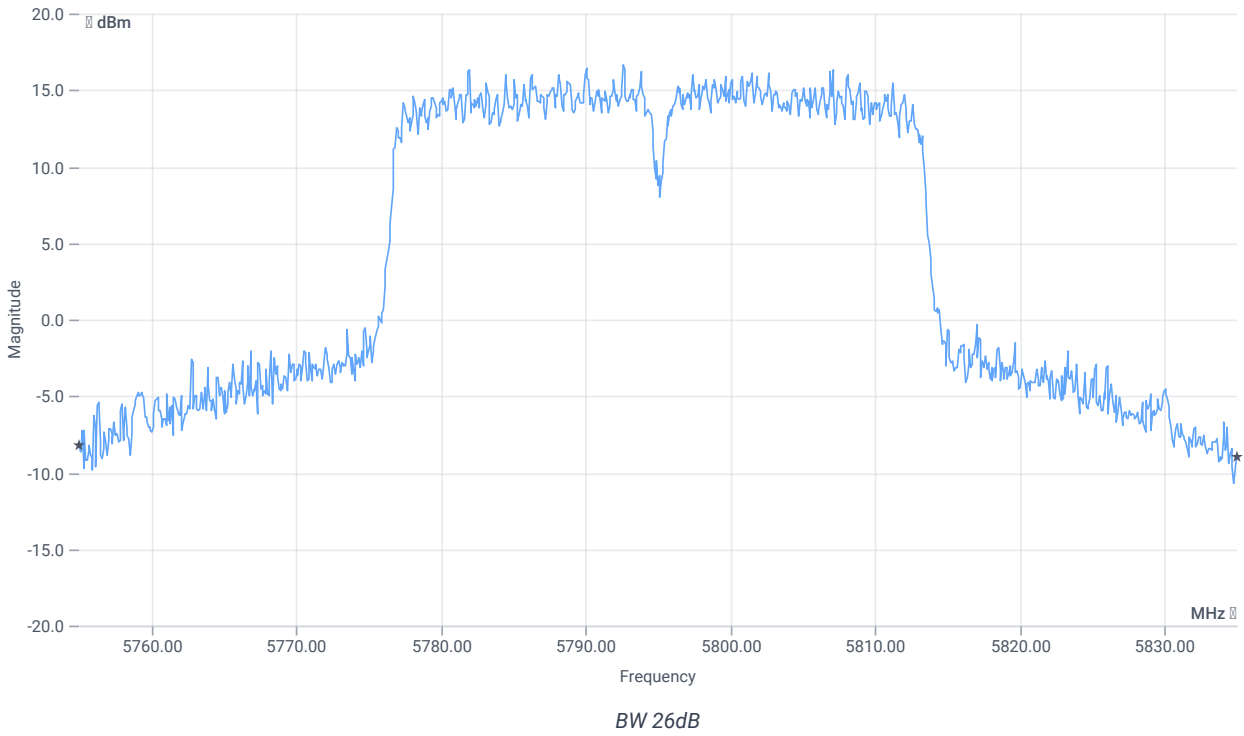
Evaluation max. Duty Cycle

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



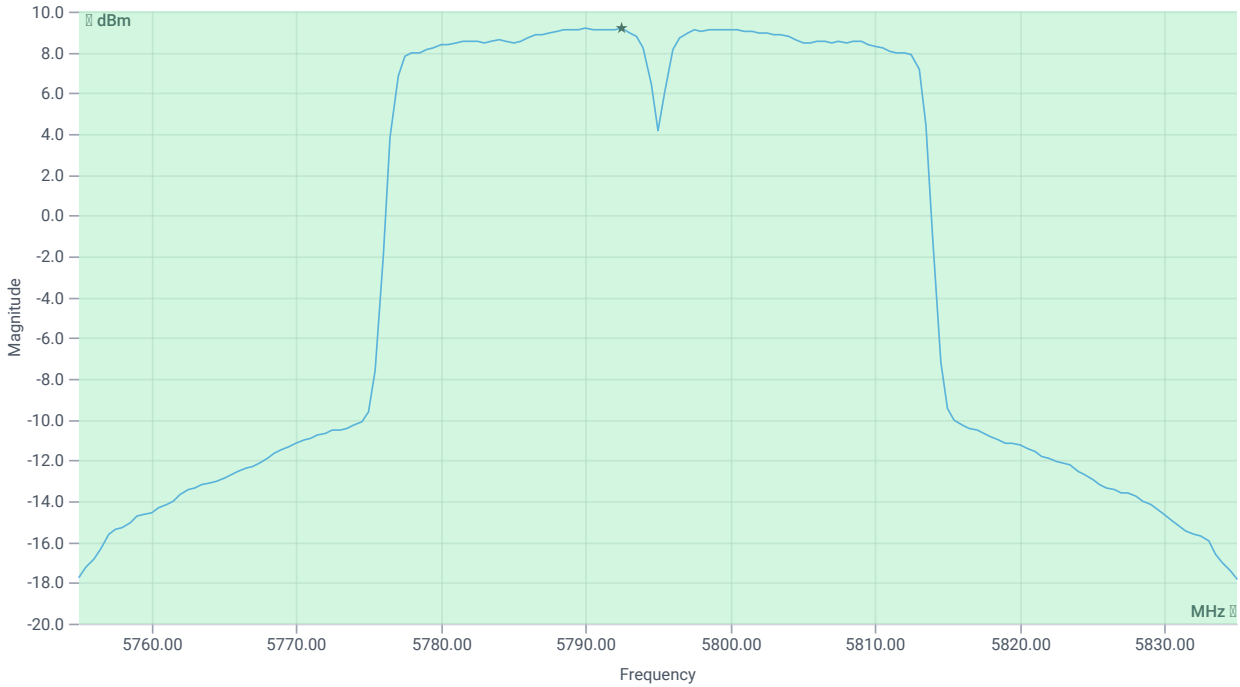
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 26dB	---	---	80	MHz	INFO
T1 26dB	---	---	5755.0000	MHz	INFO
T2 26dB	---	---	5835.0000	MHz	INFO

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.24 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
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

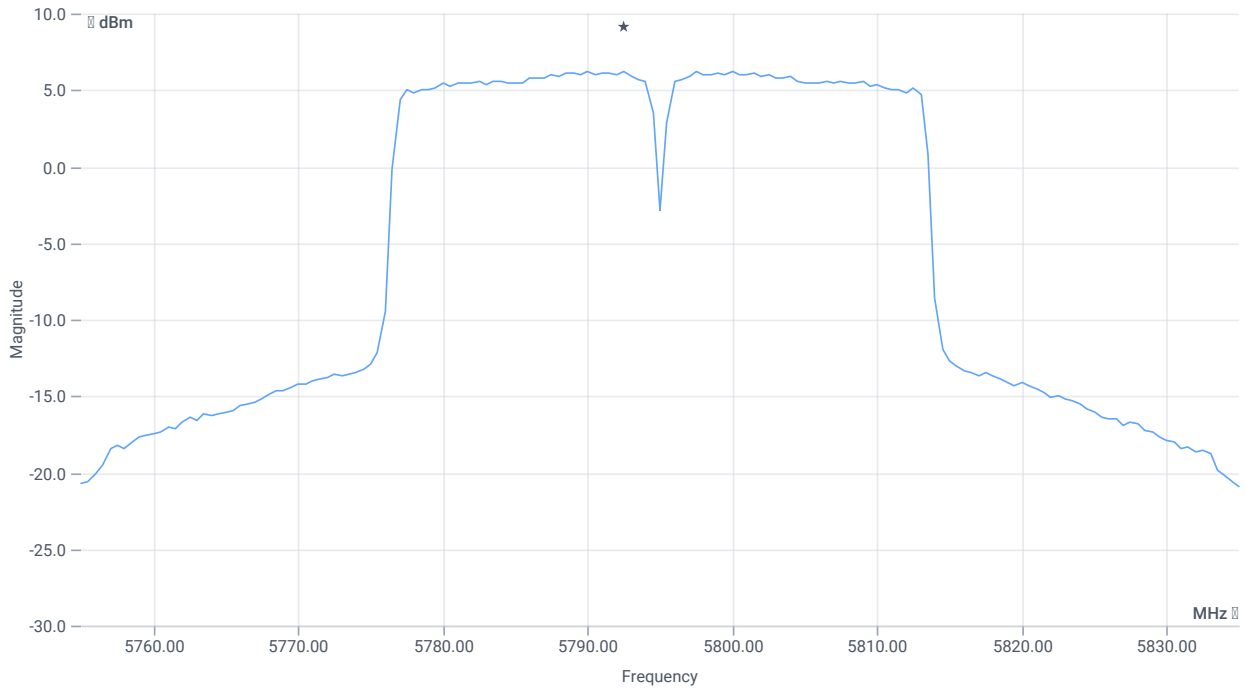
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max Output Power	--	--	23.97	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	23.97	dBm	PASS
Limit: 11 dBm + 10 log 80					
Max Output Power DC corrected	--	30.03	23.97	dBm	na

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.24 16.67 30
Start [MHz] Stop [MHz]	5755.000 5835.000
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	--	--	6.24	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	6.24	dBm/0.5MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 20dB ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:34:26
Ambit temp [°C] humidity [rel%]	25.5 52
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
Description	FCC 15.407 Bandwidths - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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

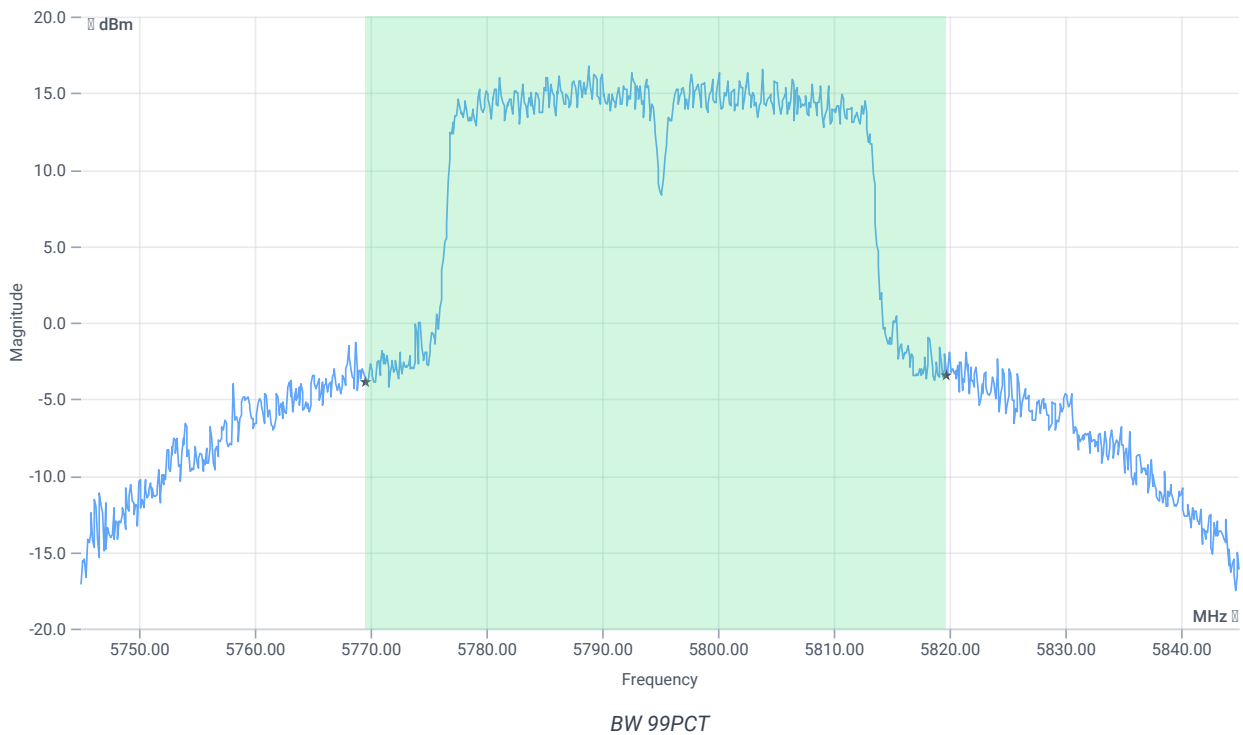
Test at TX 5795 MHz

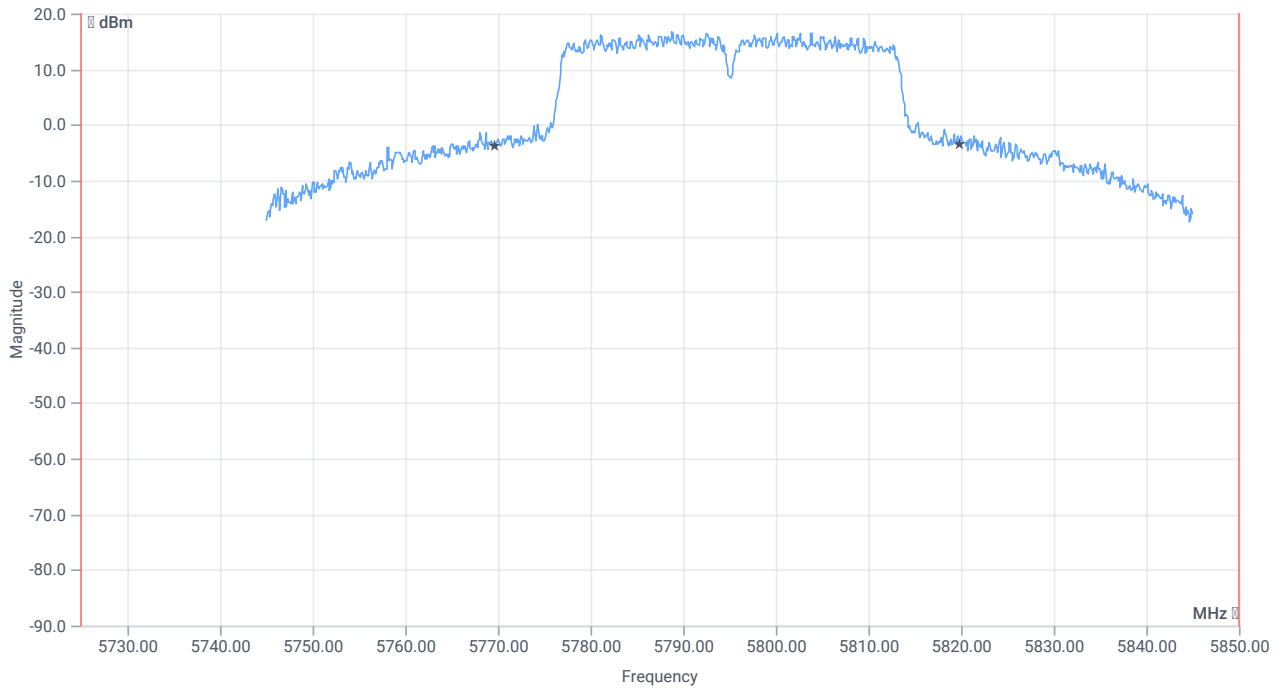
RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	17.41	dBm	INFO
Ref. Frequency	--	--	5796.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.41 16.67 25
Start [MHz] Stop [MHz]	5745.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1 2500 1001 SWE

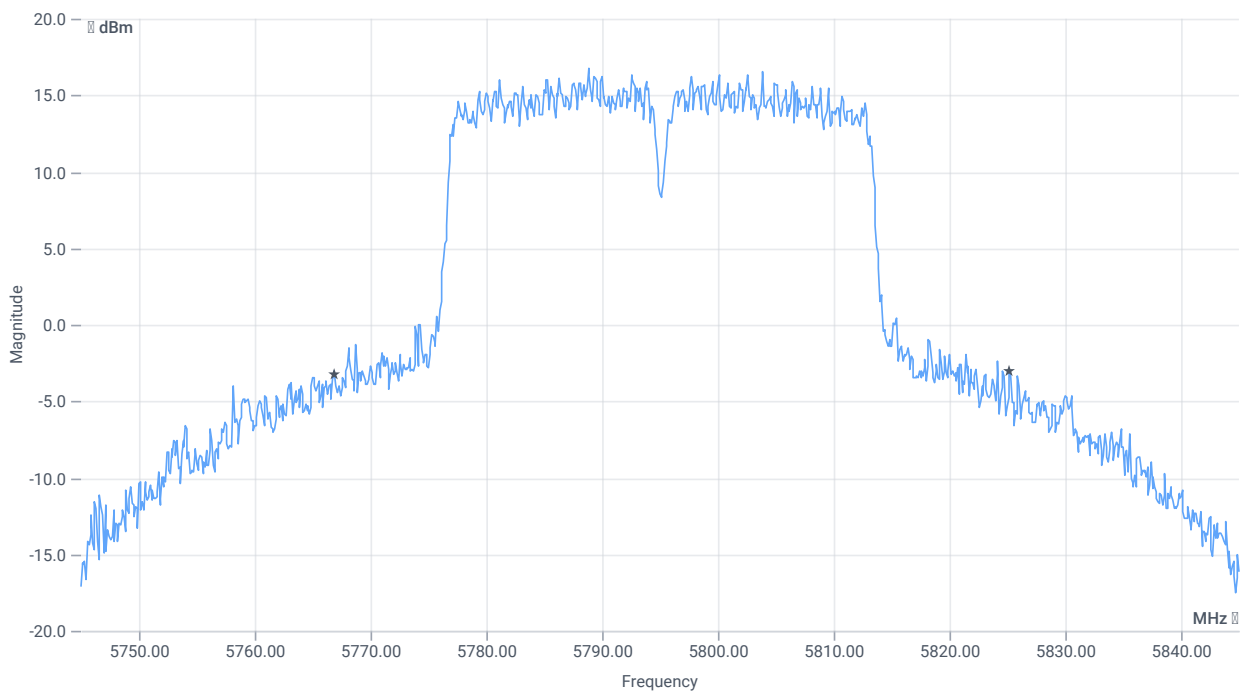




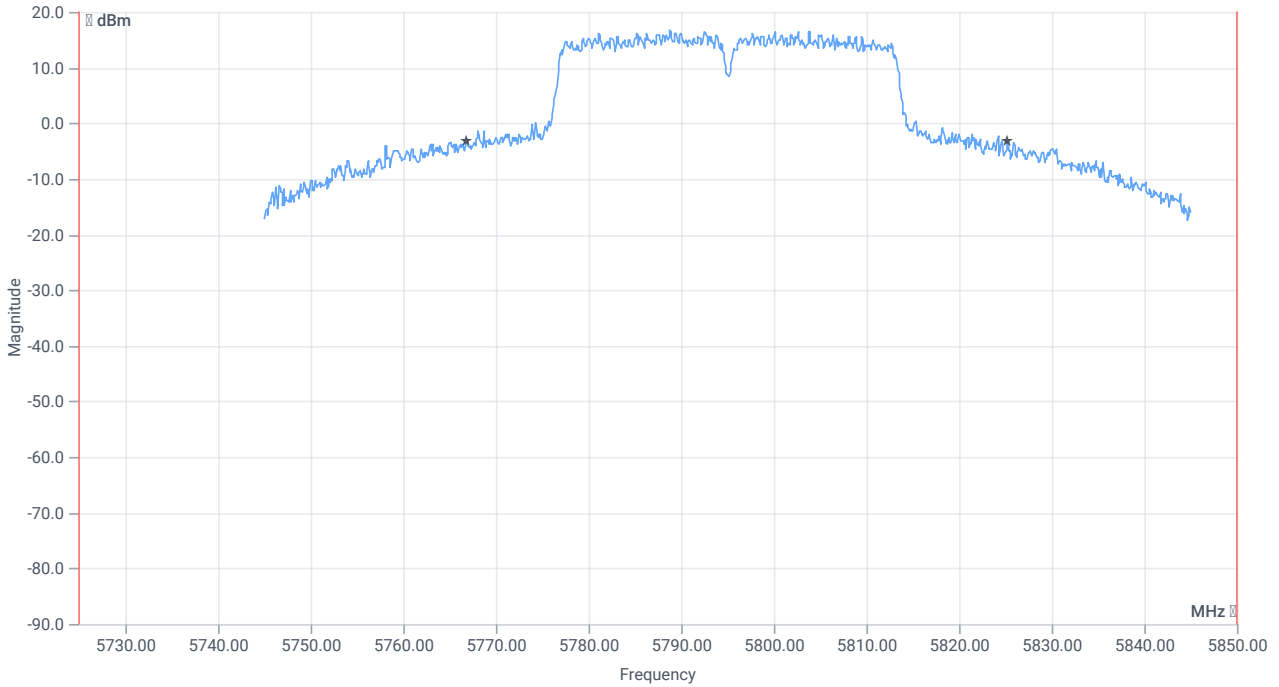
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	--	--	50.15	MHz	INFO
T1 99%	5725.000000	--	5769.6254	MHz	PASS
T2 99%	--	5850.000000	5819.7752	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	--	--	58.4	MHz	INFO
T1 20dB	5725.000000	--	5766.8000	MHz	PASS
T2 20dB	--	5850.000000	5825.2000	MHz	PASS

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:34:57
Ambit temp [°C] humidity [rel%]	25.5 51
System version	4.6.0.3
Standard Version	FCC 15.407, ISED RSS247 NI
Method	KDB789033 D02, C.2.
Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT40 mode U-NII-3
Information	PS96

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 n-HT40 mode
Antenna port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
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

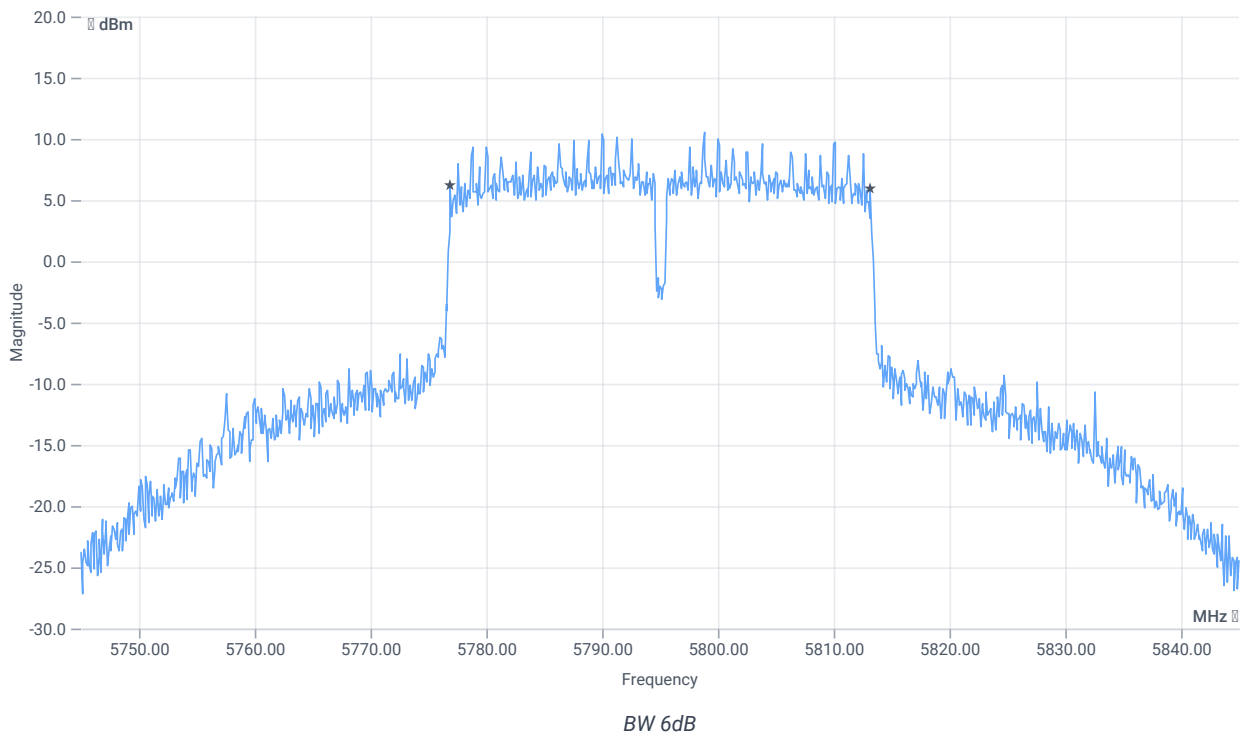
Test at TX 5795 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	--	--	18.40	dBm	INFO
Ref. Frequency	--	--	5799.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.40 16.67 30
Start [MHz] Stop [MHz]	5745.000 5845.000
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	--	36.3	MHz	PASS

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-3

References

TC start	02.08.2023 10:35:21
Ambit temp [°C] humidity [rel%]	25.5 51
System version	4.6.0.3
Standard Version	FCC 15.407 NI
Method	
Description	MIMO Σ FCC Power & psd - WLAN5Gx n-HT40 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 n-HT40 mode
Antenna port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5755
Frequency mid to test	False Freq [MHz] 0
Frequency high to test	True Freq [MHz] 5795
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	1.3
Switched path	None

Equipment

Test at TX 5795 MHz

RESULT Power

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 Max Output Power DC corrected	--	--	24.4	dBm	INFO
Ant:1 BW 26dB	--	--	80.000	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	23.97	dBm	INFO
Ant:2 BW 26dB	--	--	80.000	MHz	INFO
Σ Limit absolute	--	30	27.2	dBm	PASS
Σ Limit: 11 dBm + 10 log 80	--	30.03	27.2	dBm	na

RESULT PSD

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ant:1 PSD	--	--	6.65	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	6.24	dBm/0.5MHz	INFO
Σ	--	30	9.46	dBm/0.5MHz	PASS

Verdict

PASS

- END OF DOCUMENT -