

Measurement Results

No.1-3977/22-03-04_Annex_MR_A9

Test logging

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Document authorized:

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Table of Content

EUT Information	5
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-1	6
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	8
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	12
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	15
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	19
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	22
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	26
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	29
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	33
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-1	36
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	38
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	42
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	45
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	49
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	52
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	56
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1	59
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1	63
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2A	66
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	68
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	72
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	75
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	79
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	82
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	86
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	89
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	93
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	96
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	100
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	104
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A	108
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	112
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	116
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	120
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	124
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2C	128
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	130
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	134
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	137
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	141

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	144
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	148
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	151
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	155
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2C	158
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	160
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	164
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	167
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	171
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	174
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	178
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C	181
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	185
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-3	188
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	190
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	192
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	196
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	200
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	202
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	206
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	210
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	212
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	216
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	220
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	222
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	226
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-3	230
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	232
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	234
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	238
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	242
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	244
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	248
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	252
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	254
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	258
FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3	262
FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3	264
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3	268
FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2C	272
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	274
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	277
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	280
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C	283

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2A	286
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	288
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	291
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	294
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A	297

EUT Information

EUT DEFINITION

Manufacturer	SAGEMCOM BROADBAND SAS
Type	F5688W
Serial Number	QS2212959002927
Setup Number	1.0
Version SW	NI
Version FW	NI
Version HW	NI
Comment 1	
Comment 2	
Temperature [°C] Min	0
Temperature [°C] Nom	20
Temperature [°C] Max	50
Voltage [V] Min	120
Voltage [V] Nom	120
Voltage [V] Max	120

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:48:58
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	None

Test Equipment

Test at TX 5190 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	17.95	dBm	INFO
Ant:1 BW 26dB	--	--	40.560	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	18.2	dBm	INFO
Ant:2 BW 26dB	--	--	41.280	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	18.43	dBm	INFO
Ant:3 BW 26dB	--	--	41.200	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	18.14	dBm	INFO
Ant:4 BW 26dB	--	--	40.800	MHz	INFO
Σ Limit absolute	--	30	24.2	dBm	PASS
Σ Limit: 11 dBm + 10 log 40.56	--	27.08	24.2	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	3.66	dBm/1MHz	INFO
Ant:2 PSD	--	--	3.75	dBm/1MHz	INFO
Ant:3 PSD	--	--	3.68	dBm/1MHz	INFO
Ant:4 PSD	--	--	3.77	dBm/1MHz	INFO
Σ	--	17	9.74	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:48:00
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.61	dBm	INFO
Ref. Frequency	---	---	5192.600	MHz	INFO

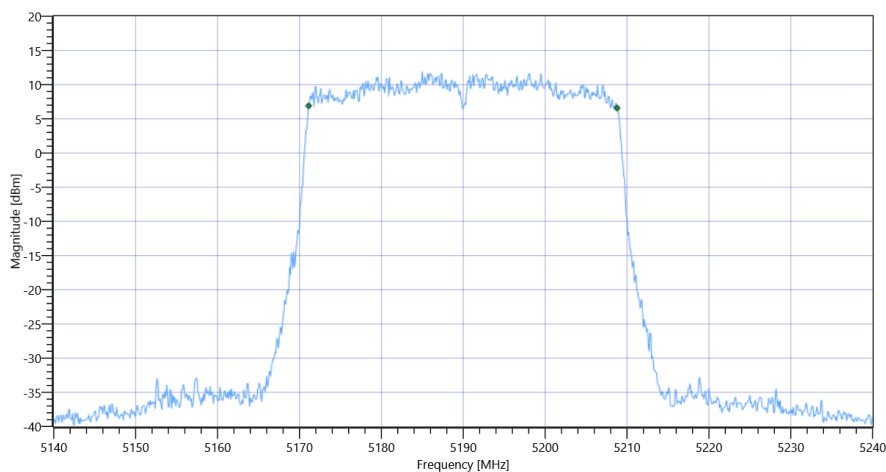
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.61 5.05 35
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

RESULT

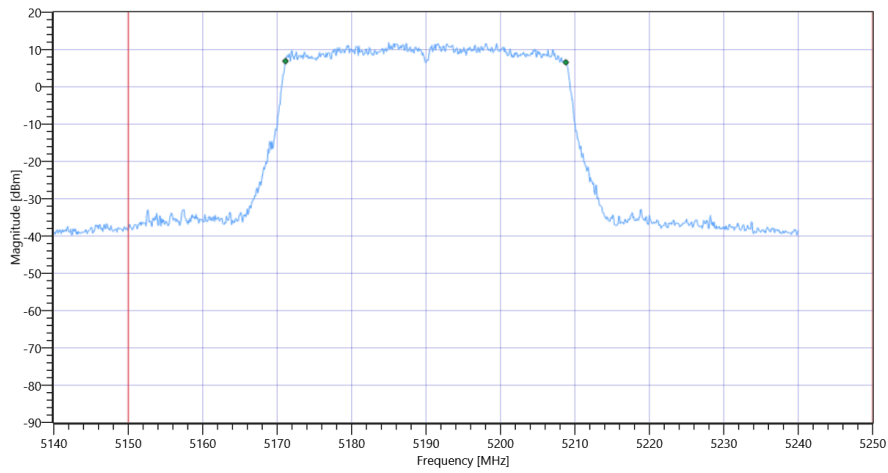
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5150.000000	---	5171.1189	MHz	PASS
T2 99%	---	5250.000000	5208.7812	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

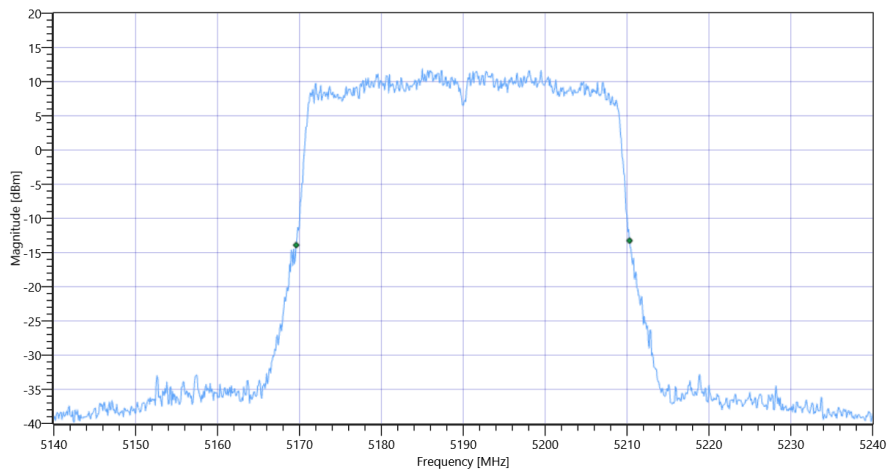


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

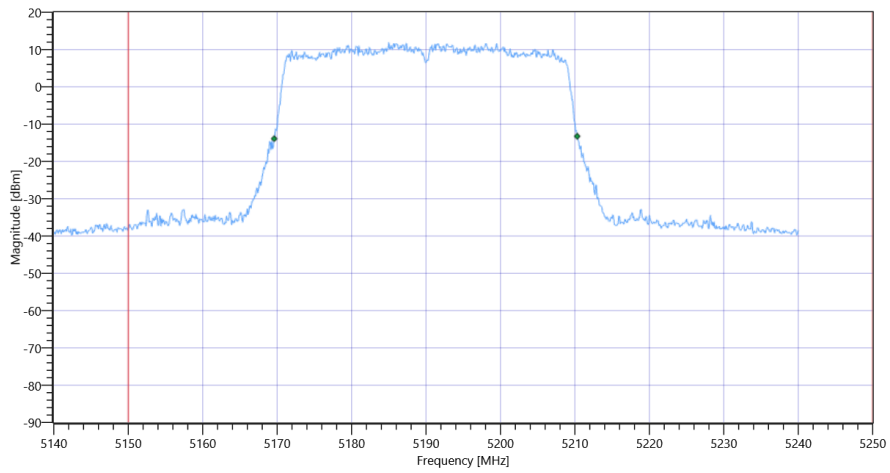
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.7	MHz	INFO
T1 26dB	5150.000000	---	5169.6000	MHz	PASS
T2 26dB	---	5250.000000	5210.3000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:46:20
Ambit Temp [°C] Humidity [rel%]	26.0 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.38	dBm	INFO
Ref. Frequency	---	---	5184.610	MHz	INFO

Evaluation max. Duty Cycle

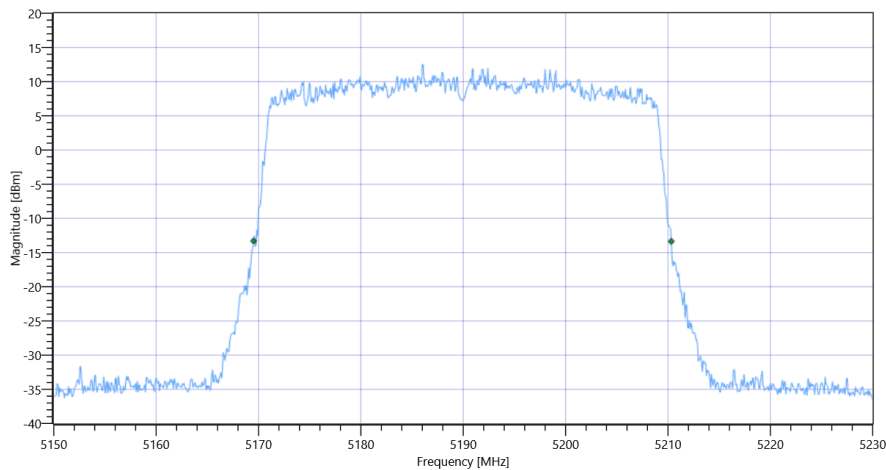
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.8	MHz	INFO
T1 26dB	---	---	5169.5200	MHz	INFO
T2 26dB	---	---	5210.3200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

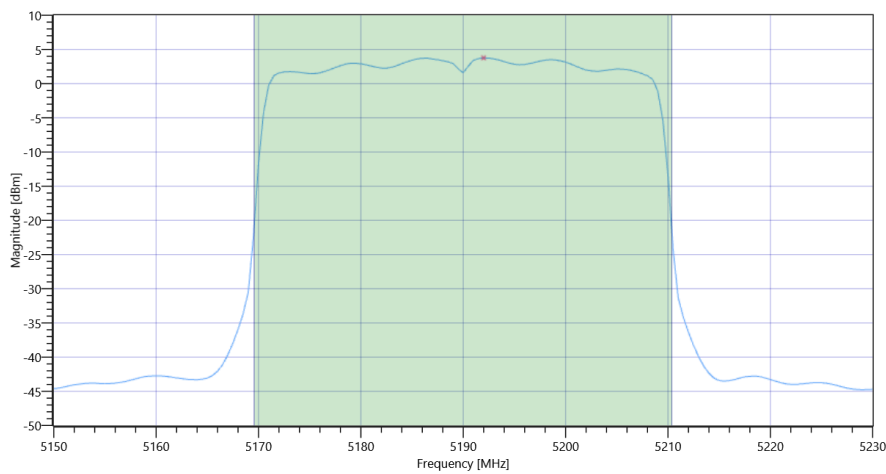
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.38 5.05 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	18.14	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.14	dBm	PASS
Limit: 11 dBm + 10 log 40.8					
Max Output Power DC corrected	--	27.11	18.14	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.77	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	3.77	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:45:21
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.07	dBm	INFO
Ref. Frequency	---	---	5173.020	MHz	INFO

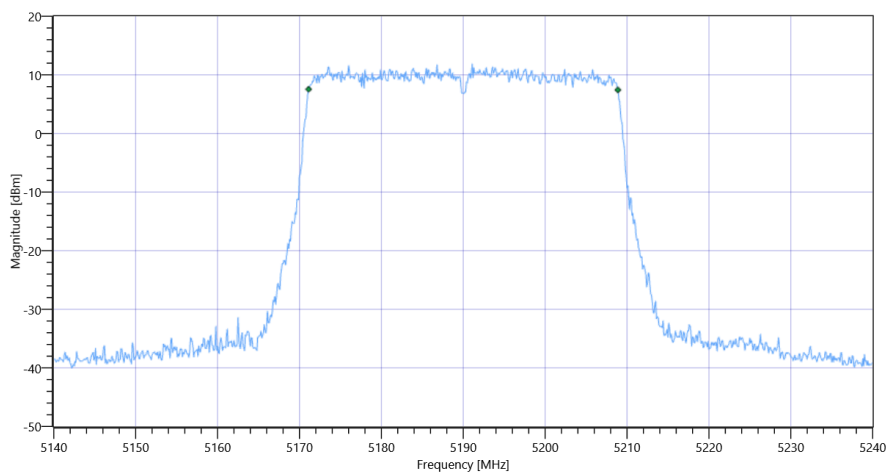
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.07 5.05 35
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

RESULT

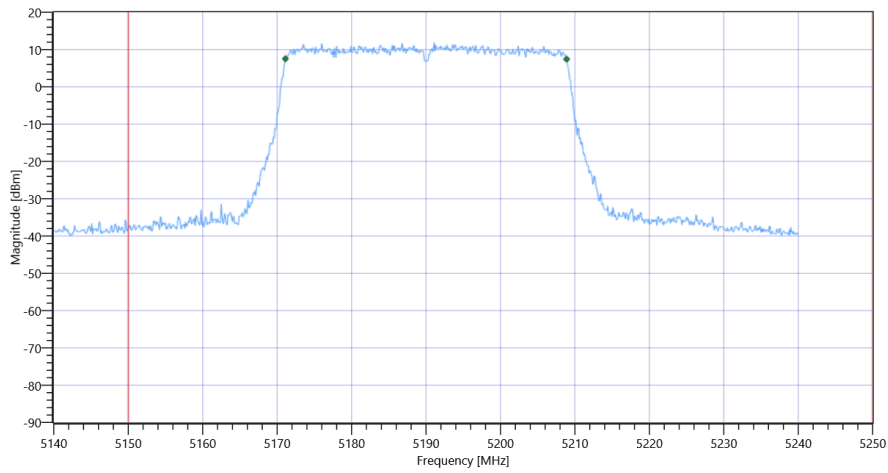
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5150.000000	---	5171.1189	MHz	PASS
T2 99%	---	5250.000000	5208.8811	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

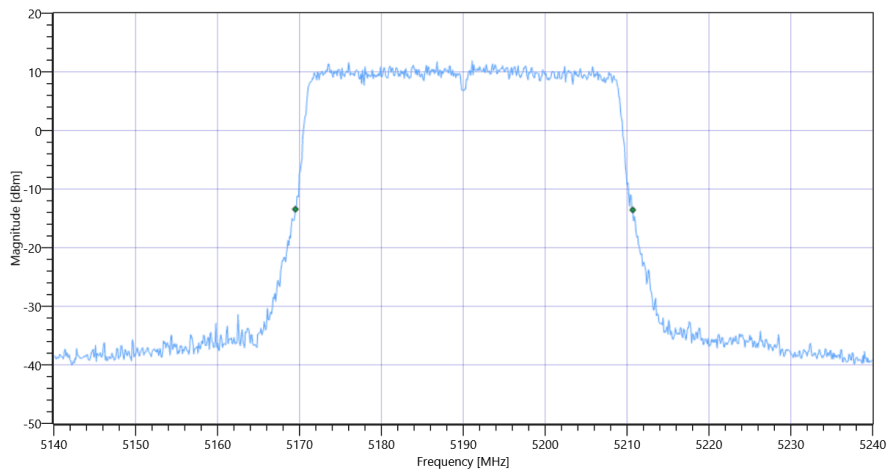


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

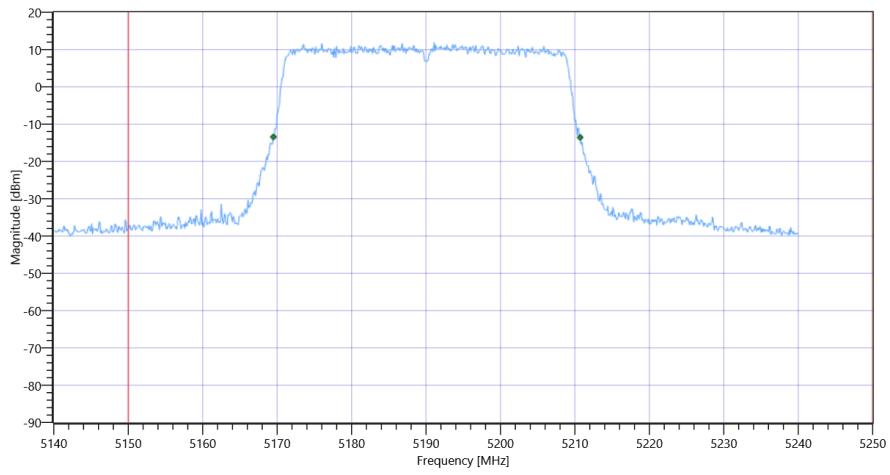
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.2	MHz	INFO
T1 26dB	5150.000000	---	5169.5000	MHz	PASS
T2 26dB	---	5250.000000	5210.7000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:43:41
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.38	dBm	INFO
Ref. Frequency	---	---	5195.000	MHz	INFO

Evaluation max. Duty Cycle

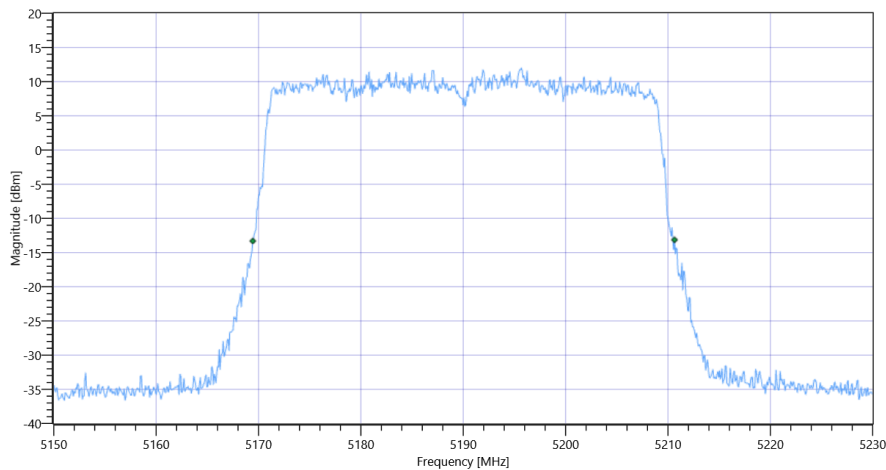
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.2	MHz	INFO
T1 26dB	---	---	5169.4400	MHz	INFO
T2 26dB	---	---	5210.6400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

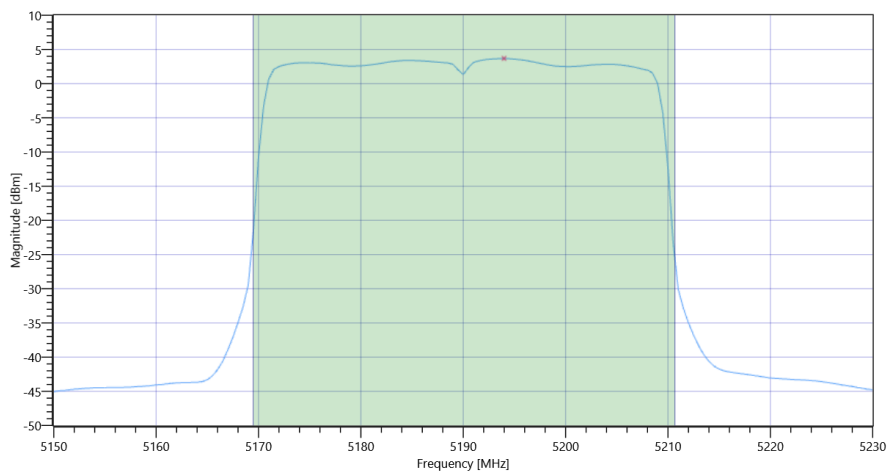
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.38 5.05 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	18.43	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.43	dBm	PASS
Limit: 11 dBm + 10 log 41.2					
Max Output Power DC corrected	--	27.15	18.43	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.68	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	3.68	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:42:42
Ambit Temp [°C] Humidity [rel%]	26.0 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.20	dBm	INFO
Ref. Frequency	---	---	5192.200	MHz	INFO

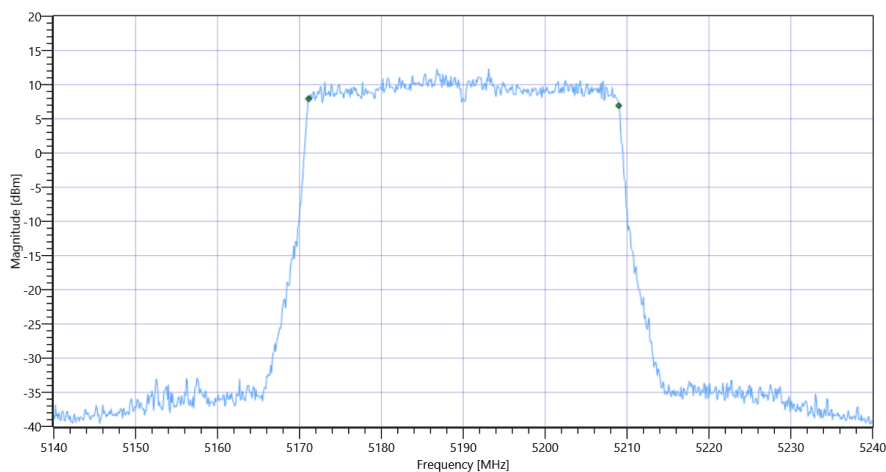
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.20 5.05 35
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

RESULT

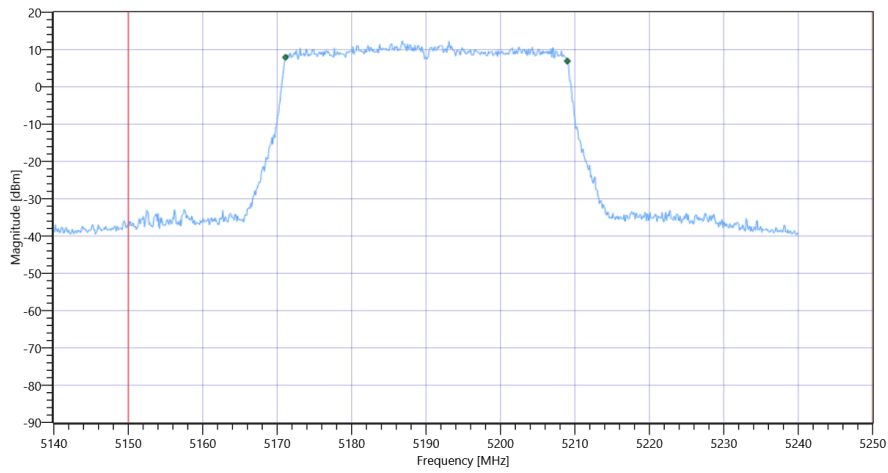
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.862	MHz	INFO
T1 99%	5150.000000	---	5171.1189	MHz	PASS
T2 99%	---	5250.000000	5208.9810	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

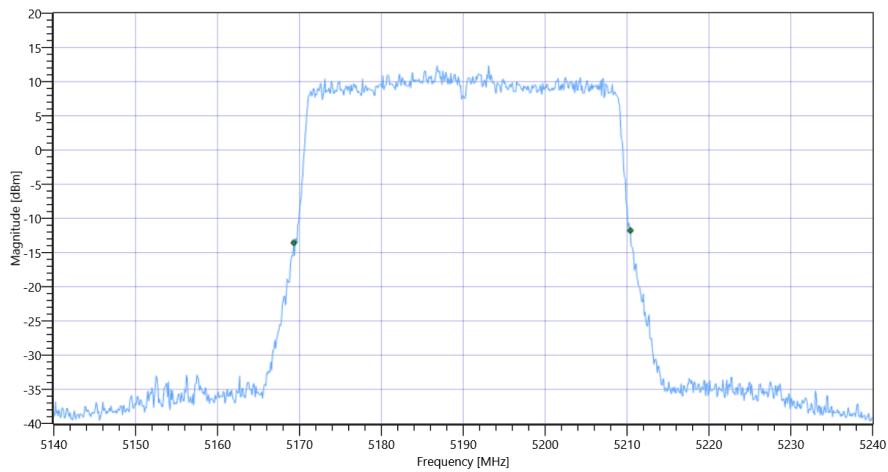


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

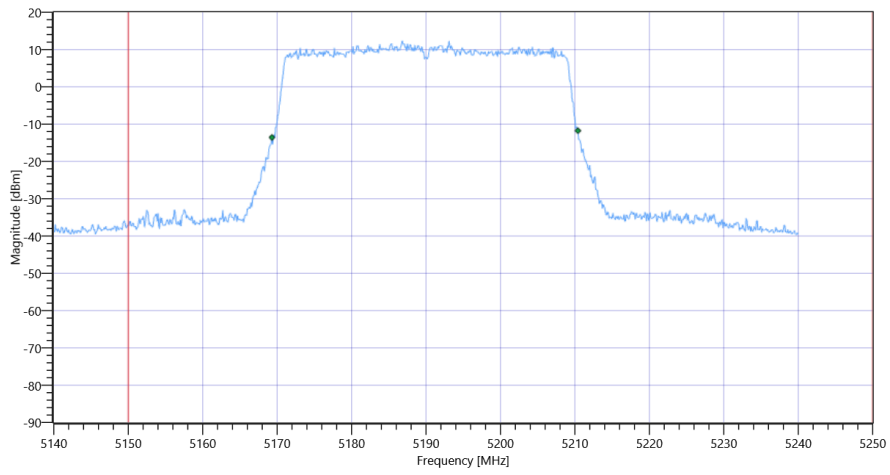
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.1	MHz	INFO
T1 26dB	5150.000000	---	5169.3000	MHz	PASS
T2 26dB	---	5250.000000	5210.4000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:41:01
Ambit Temp [°C] Humidity [rel%]	26.0 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	14.79	dBm	INFO
Ref. Frequency	---	---	5188.600	MHz	INFO

Evaluation max. Duty Cycle

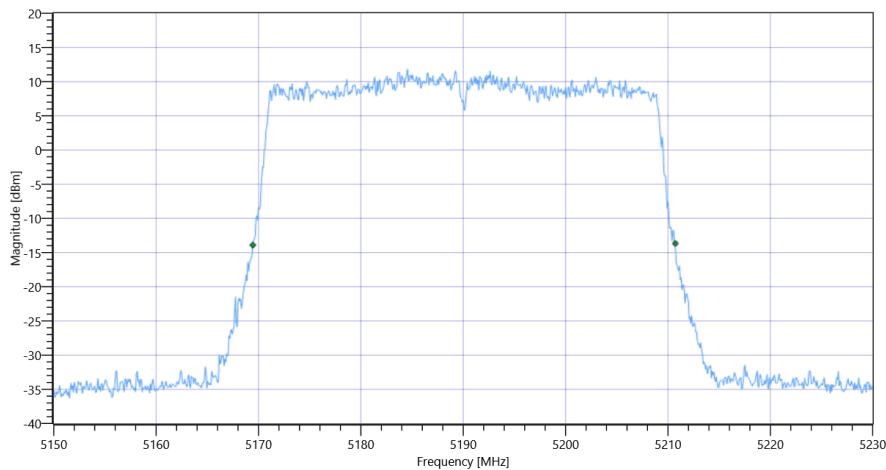
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.28	MHz	INFO
T1 26dB	---	---	5169.4400	MHz	INFO
T2 26dB	---	---	5210.7200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

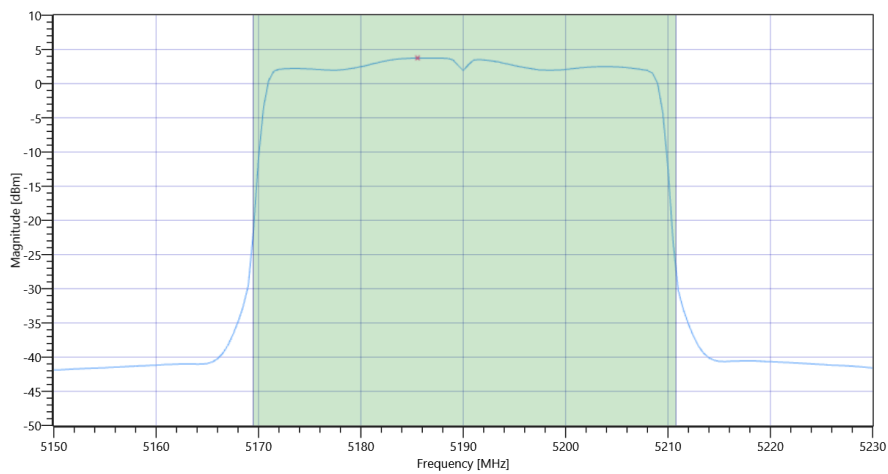
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.79 5.05 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	18.2	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	18.2	dBm	PASS
Limit: 11 dBm + 10 log 41.28					
Max Output Power DC corrected	--	27.16	18.2	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.75	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	3.75	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:40:03
Ambit Temp [°C] Humidity [rel%]	26.0 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.72	dBm	INFO
Ref. Frequency	---	---	5192.400	MHz	INFO

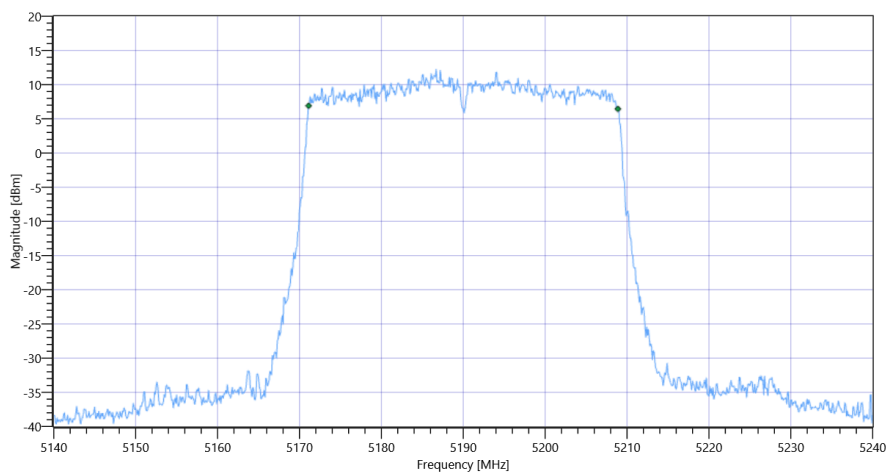
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.72 5.05 35
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

RESULT

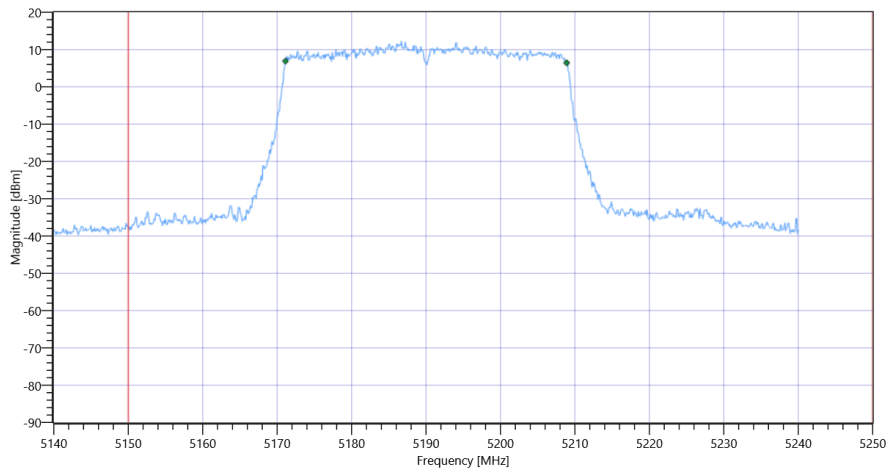
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5150.000000	---	5171.1189	MHz	PASS
T2 99%	---	5250.000000	5208.8811	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

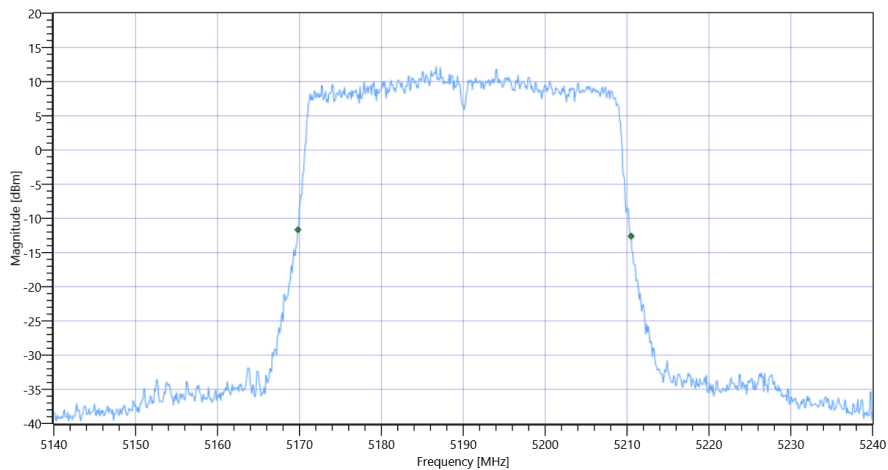


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

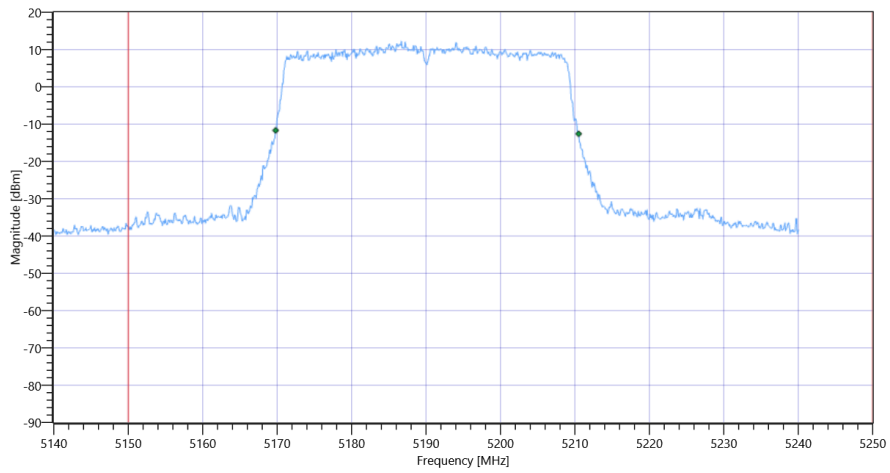
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.7	MHz	INFO
T1 26dB	5150.000000	---	5169.8000	MHz	PASS
T2 26dB	---	5250.000000	5210.5000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:38:22
Ambit Temp [°C] Humidity [rel%]	26.0 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5190 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	12.82	dBm	INFO
Ref. Frequency	--	--	5193.800	MHz	INFO

Evaluation max. Duty Cycle

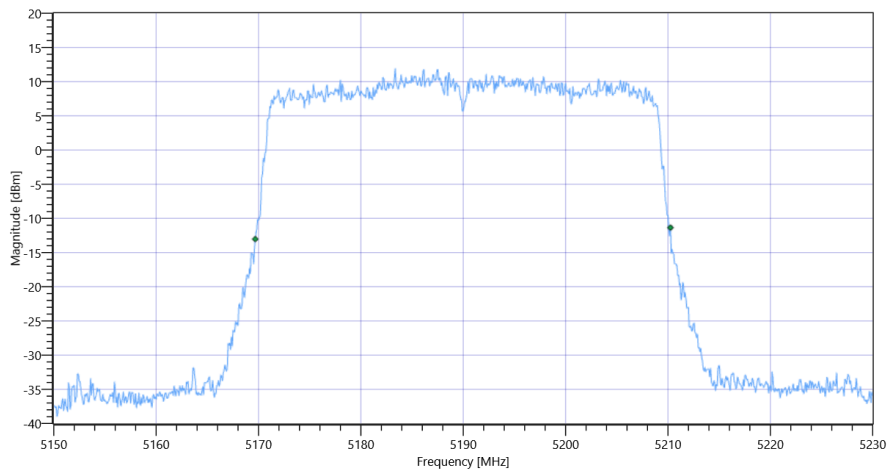
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	--	--	40.56	MHz	INFO
T1 26dB	--	--	5169.6800	MHz	INFO
T2 26dB	--	--	5210.2400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

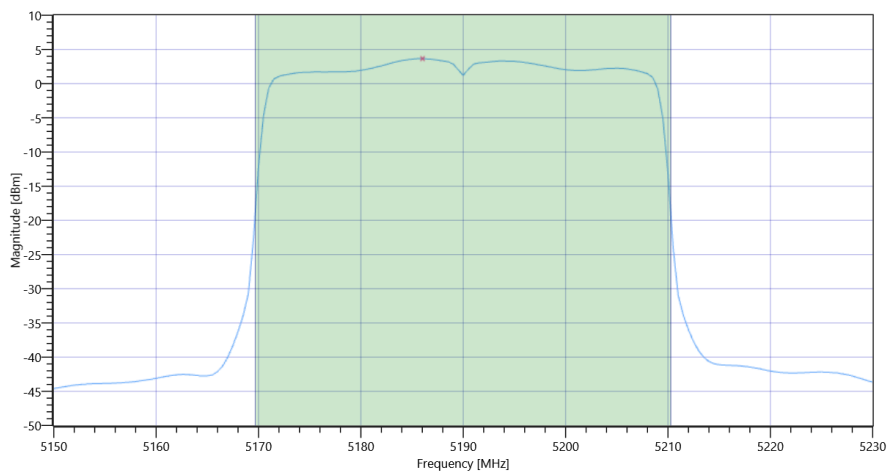
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.82 5.05 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	17.95	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	17.95	dBm	PASS
Limit: 11 dBm + 10 log 40.56					
Max Output Power DC corrected	--	27.08	17.95	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.66	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	3.66	dBm/1MHz	PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 15:03:25
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	None

Test Equipment

Test at TX 5230 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:2 Max Output Power DC corrected	--	--	23.52	dBm	INFO
Ant:2 BW 26dB	--	--	47.520	MHz	INFO
Ant:1 Max Output Power DC corrected	--	--	22.7	dBm	INFO
Ant:1 BW 26dB	--	--	53.120	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	22.96	dBm	INFO
Ant:3 BW 26dB	--	--	45.520	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	22.62	dBm	INFO
Ant:4 BW 26dB	--	--	41.440	MHz	INFO
Σ Limit absolute	--	30	28.99	dBm	PASS
Σ Limit: 11 dBm + 10 log 41.44	--	27.17	28.99	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:2 PSD	--	--	9.41	dBm/1MHz	INFO
Ant:1 PSD	--	--	8.42	dBm/1MHz	INFO
Ant:3 PSD	--	--	8.17	dBm/1MHz	INFO
Ant:4 PSD	--	--	8.45	dBm/1MHz	INFO
Σ	--	17	14.66	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 15:02:26
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.75	dBm	INFO
Ref. Frequency	---	---	5239.590	MHz	INFO

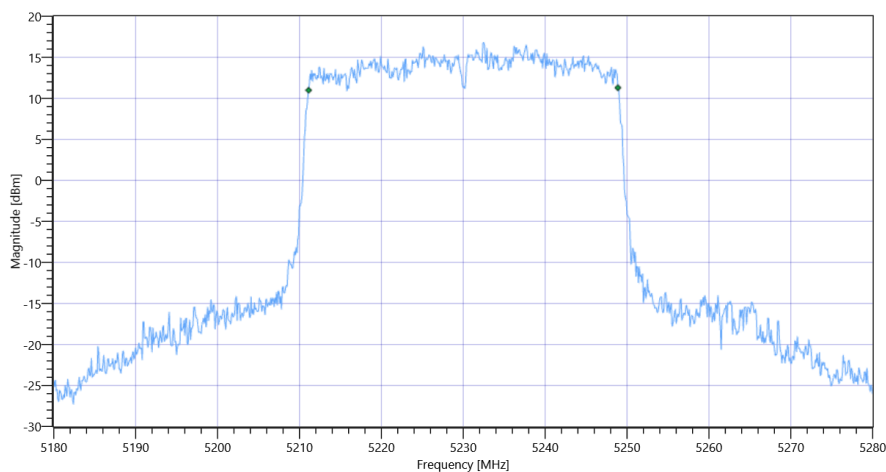
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.75 5.05 35
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

RESULT

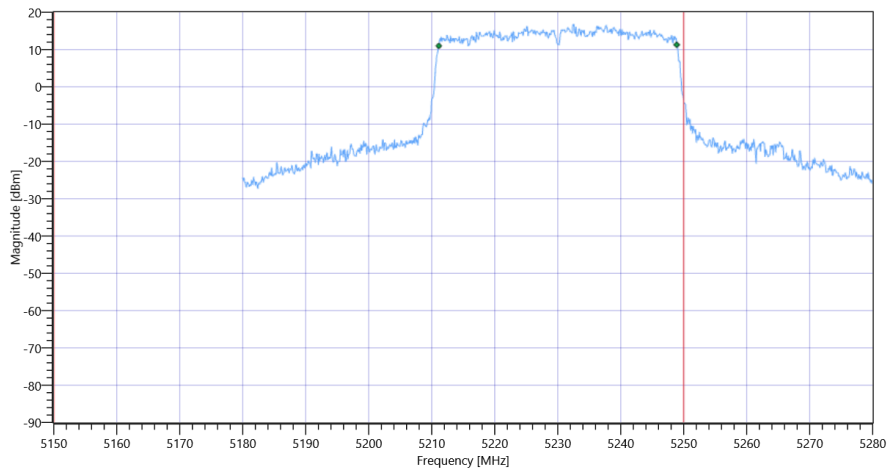
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5150.000000	---	5211.1189	MHz	PASS
T2 99%	---	5250.000000	5248.8811	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

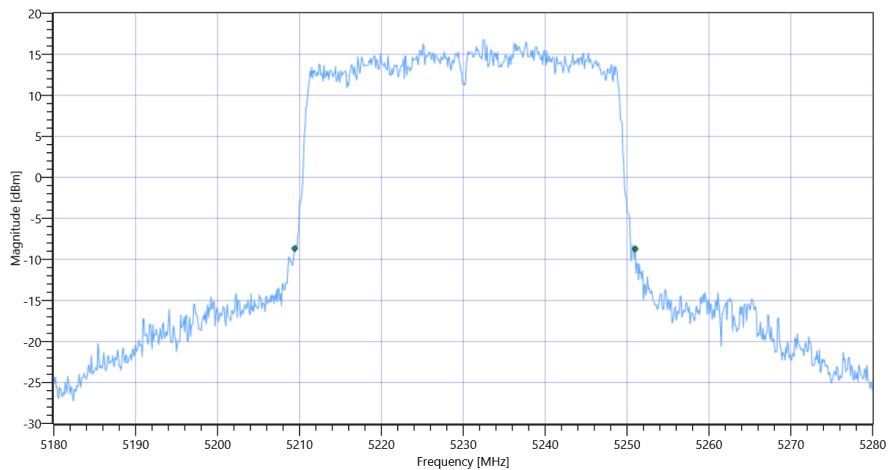


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

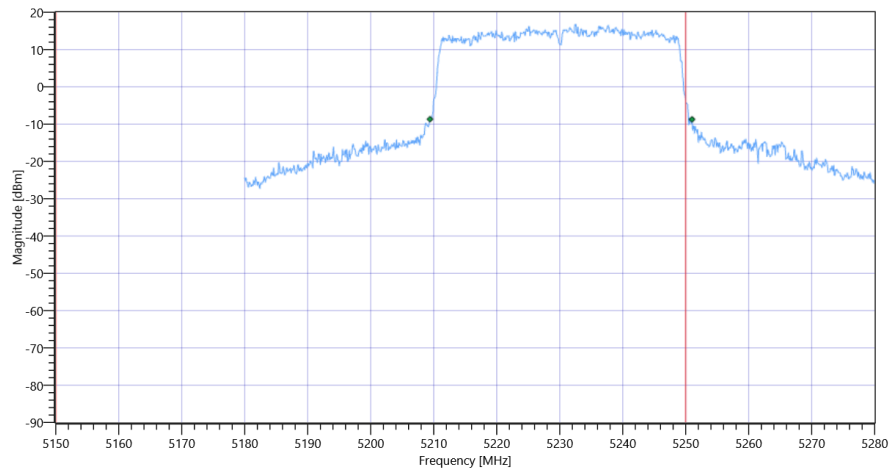
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.6	MHz	INFO
T1 26dB	5150.000000	---	5209.4000	MHz	PASS
T2 26dB	---	5250.000000	5251.0000	MHz	DFS required

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 15:00:44
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.92	dBm	INFO
Ref. Frequency	---	---	5245.980	MHz	INFO

Evaluation max. Duty Cycle

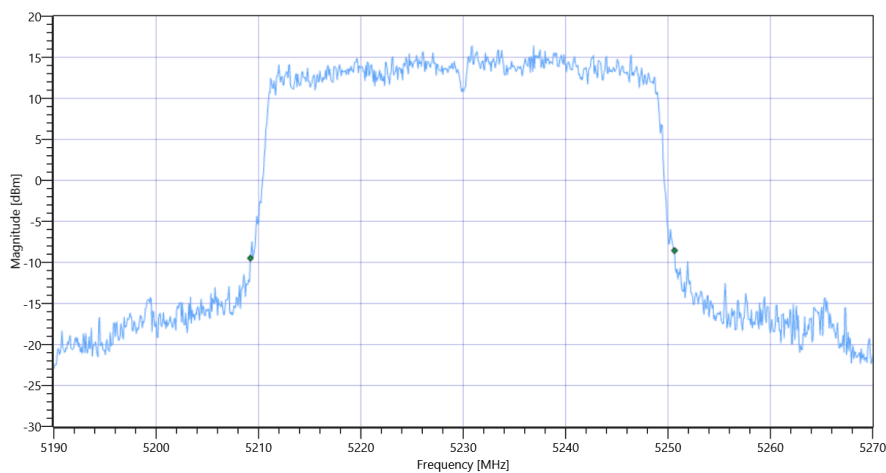
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.44	MHz	INFO
T1 26dB	---	---	5209.2000	MHz	INFO
T2 26dB	---	---	5250.6400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

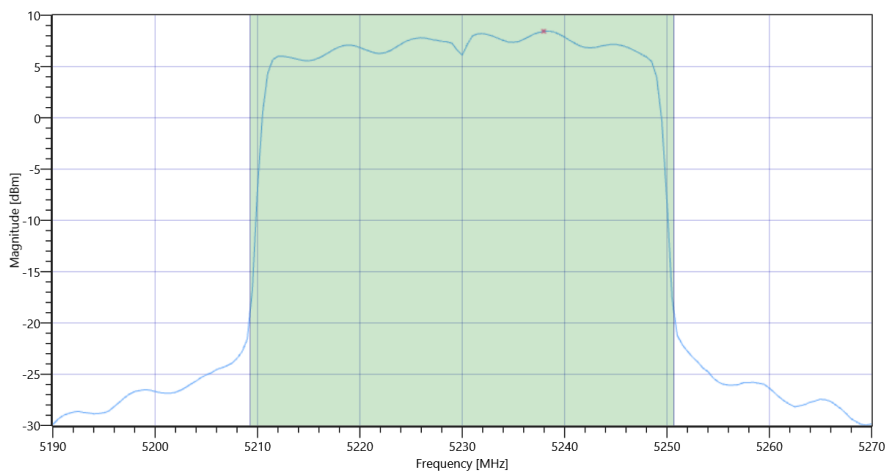
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.92 5.05 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	22.62	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	22.62	dBm	PASS
Limit: 11 dBm + 10 log 41.44					
Max Output Power DC corrected	--	27.17	22.62	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	8.45	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	17	8.45	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:59:46
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.51	dBm	INFO
Ref. Frequency	---	---	5221.610	MHz	INFO

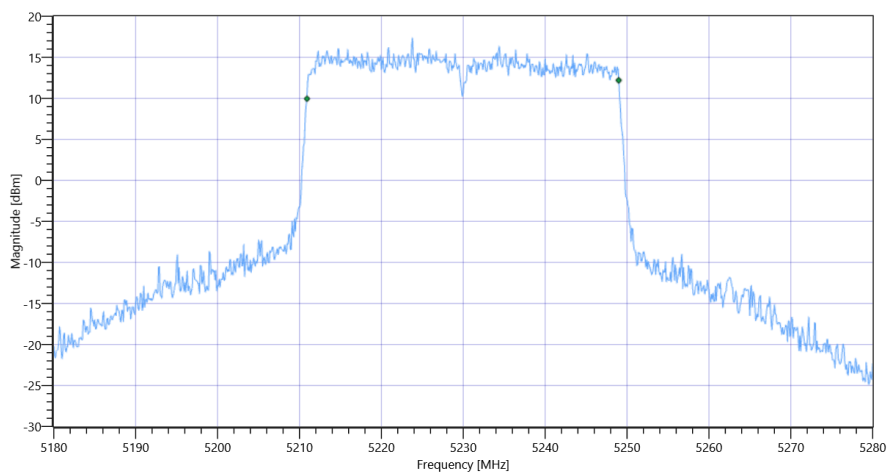
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.51 5.05 40
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

RESULT

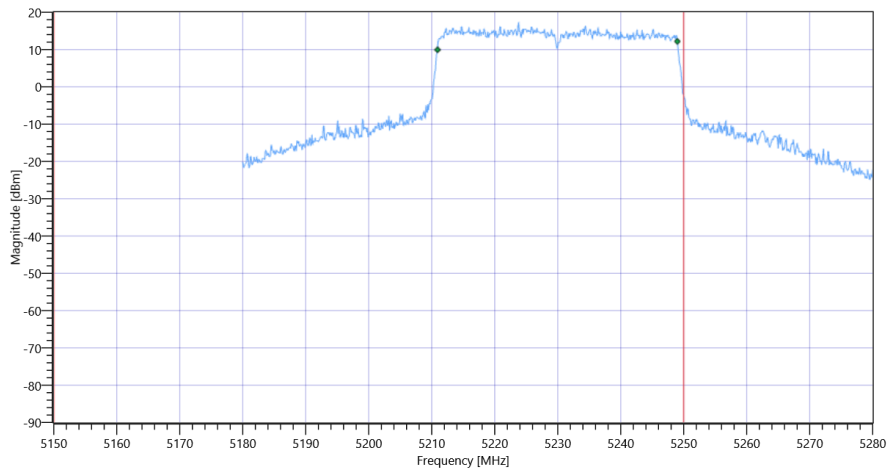
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	38.062	MHz	INFO
T1 99%	5150.000000	---	5210.9191	MHz	PASS
T2 99%	---	5250.000000	5248.9810	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

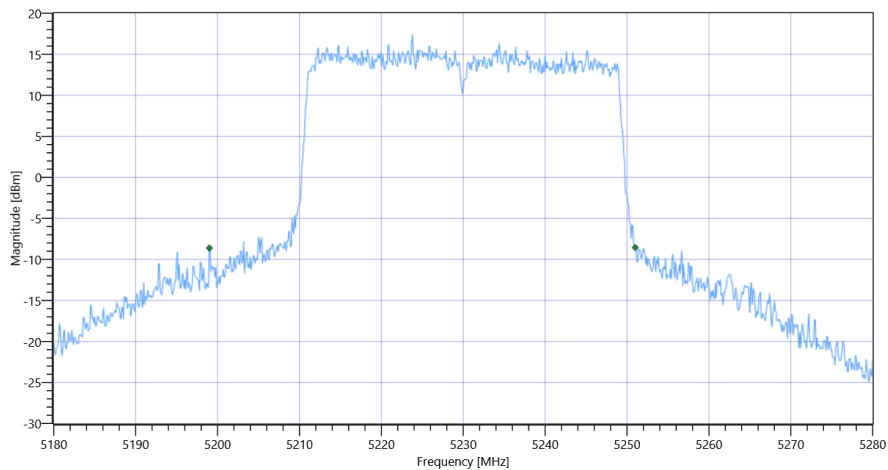


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

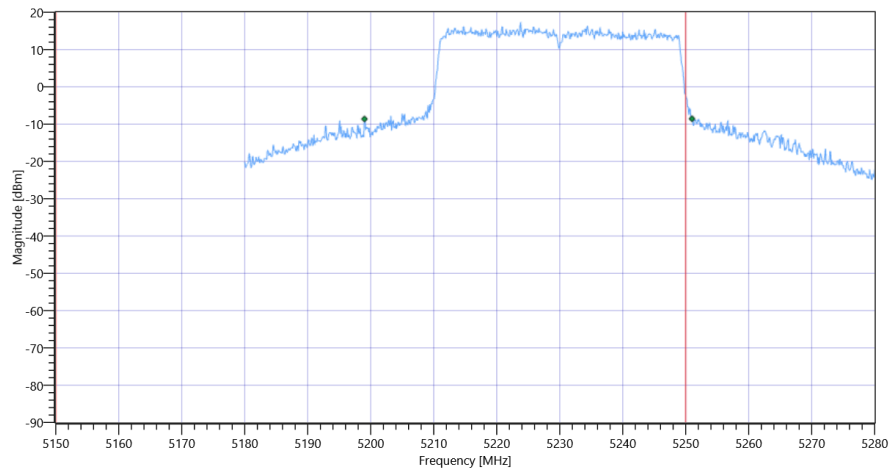
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	52	MHz	INFO
T1 26dB	5150.000000	---	5199.0000	MHz	PASS
T2 26dB	---	5250.000000	5251.0000	MHz	DFS required

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:58:05
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.10	dBm	INFO
Ref. Frequency	---	---	5222.410	MHz	INFO

Evaluation max. Duty Cycle

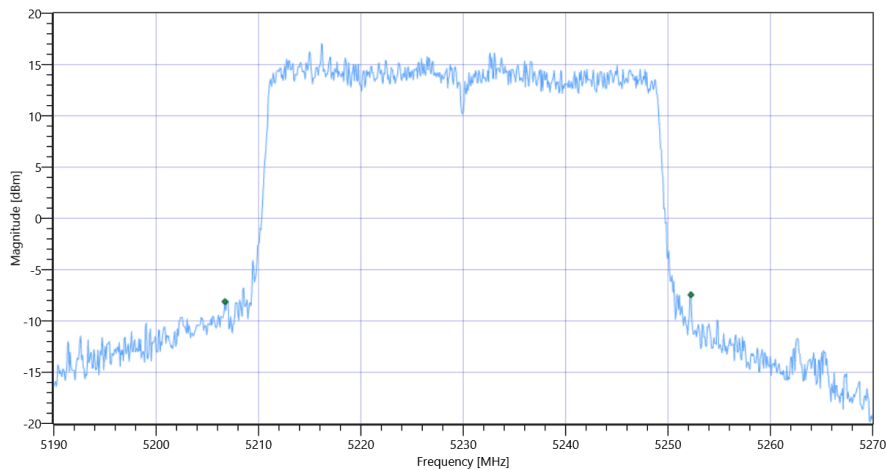
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	45.52	MHz	INFO
T1 26dB	---	---	5206.7200	MHz	INFO
T2 26dB	---	---	5252.2400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

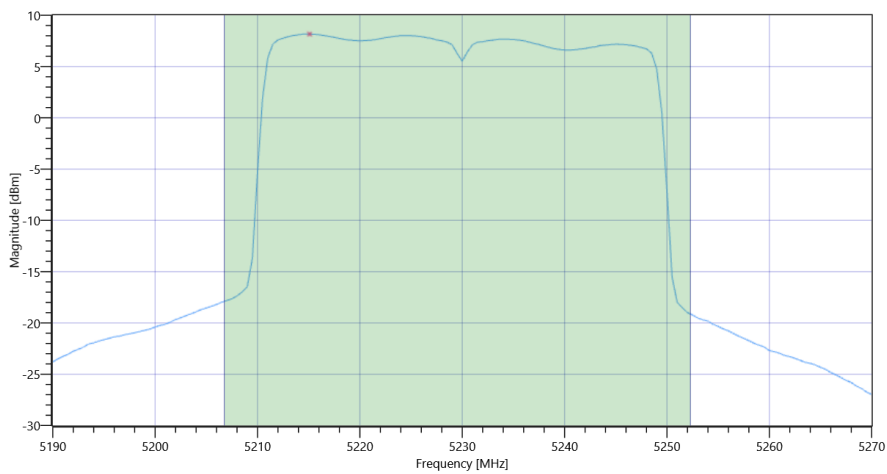
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.10 5.05 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.96	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.96	dBm	PASS
Limit: 11 dBm + 10 log 45.52					
Max Output Power DC corrected	---	27.58	22.96	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.17	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	8.17	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:57:07
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.02	dBm	INFO
Ref. Frequency	---	---	5227.600	MHz	INFO

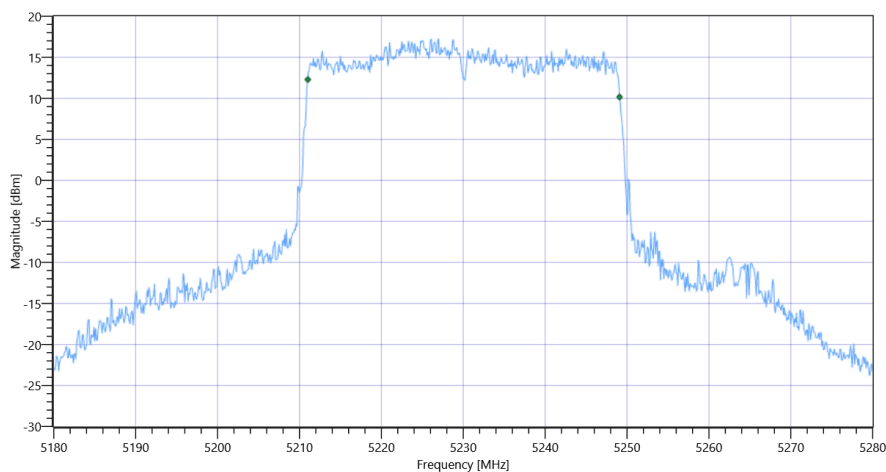
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.02 5.05 40
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

RESULT

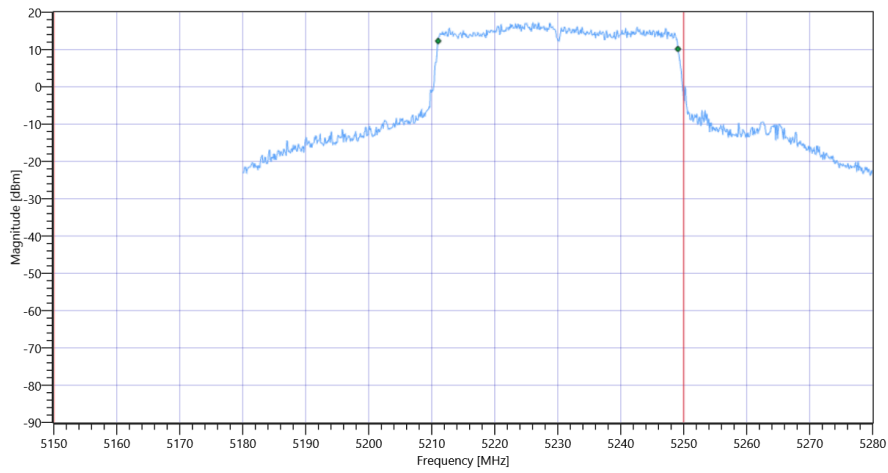
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	38.062	MHz	INFO
T1 99%	5150.000000	---	5211.0190	MHz	PASS
T2 99%	---	5250.000000	5249.0809	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

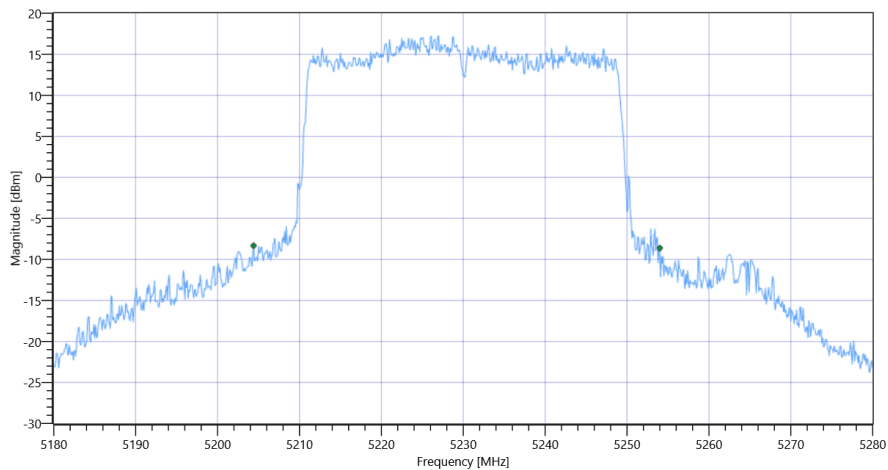


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

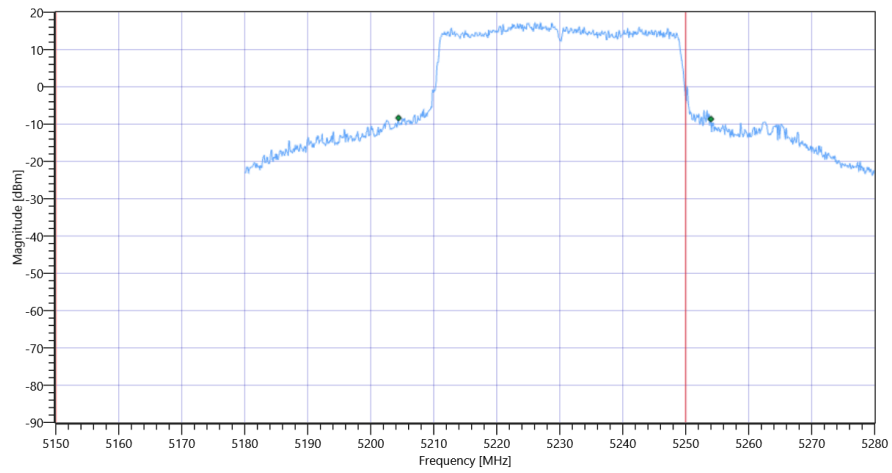
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	49.6	MHz	INFO
T1 26dB	5150.000000	---	5204.4000	MHz	PASS
T2 26dB	---	5250.000000	5254.0000	MHz	DFS required

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:55:26
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.49	dBm	INFO
Ref. Frequency	---	---	5224.010	MHz	INFO

Evaluation max. Duty Cycle

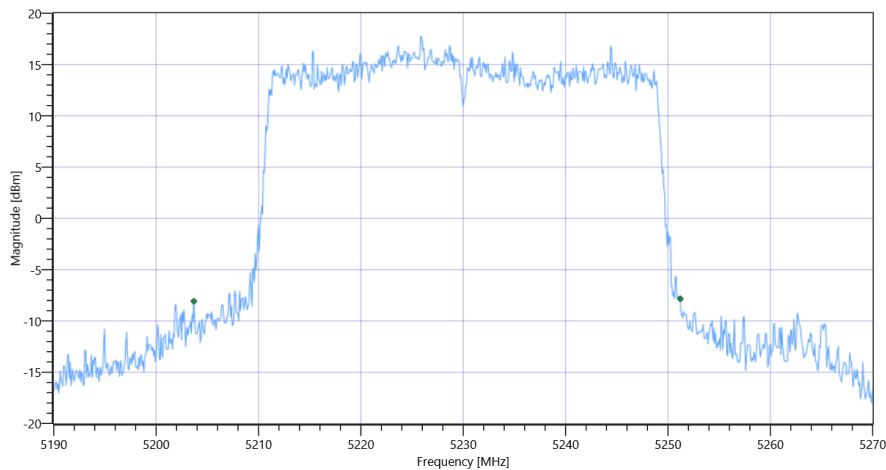
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	47.52	MHz	INFO
T1 26dB	---	---	5203.6800	MHz	INFO
T2 26dB	---	---	5251.2000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

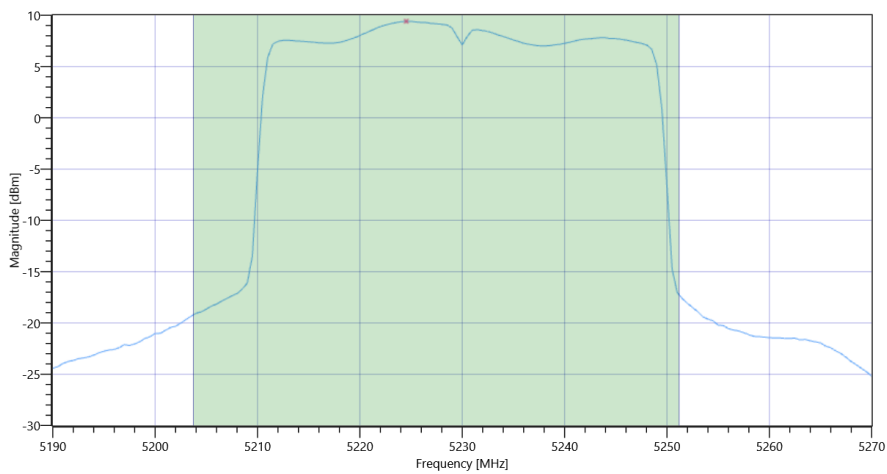
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.49 5.05 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.52	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.52	dBm	PASS
Limit: 11 dBm + 10 log 47.52					
Max Output Power DC corrected	---	27.77	23.52	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	9.41	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	9.41	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:54:27
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.49	dBm	INFO
Ref. Frequency	---	---	5226.600	MHz	INFO

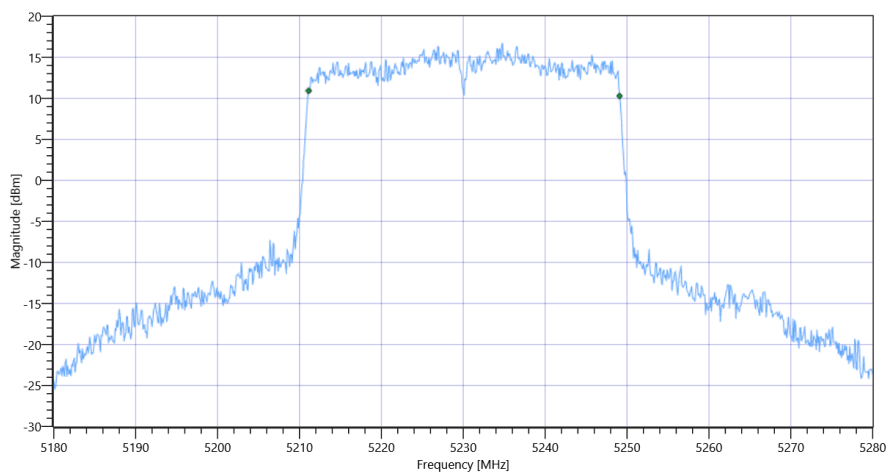
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.49 5.05 40
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

RESULT

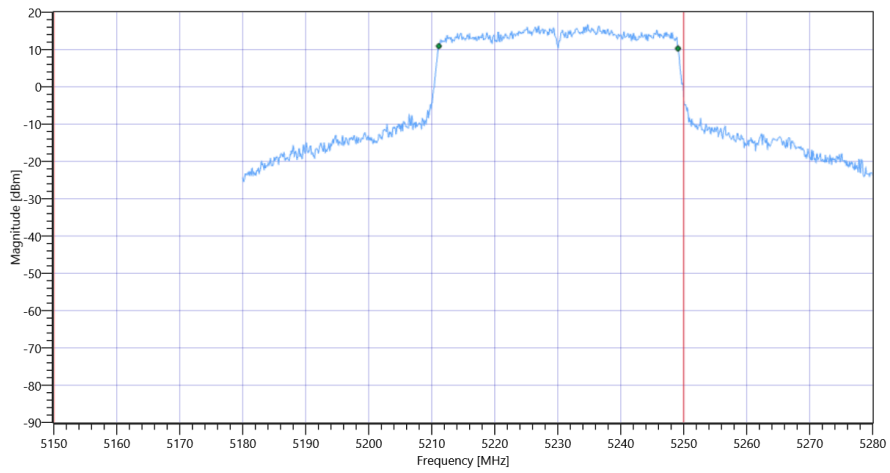
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.962	MHz	INFO
T1 99%	5150.000000	---	5211.1189	MHz	PASS
T2 99%	---	5250.000000	5249.0809	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 99PCT

Plot: Bandwidth within Band

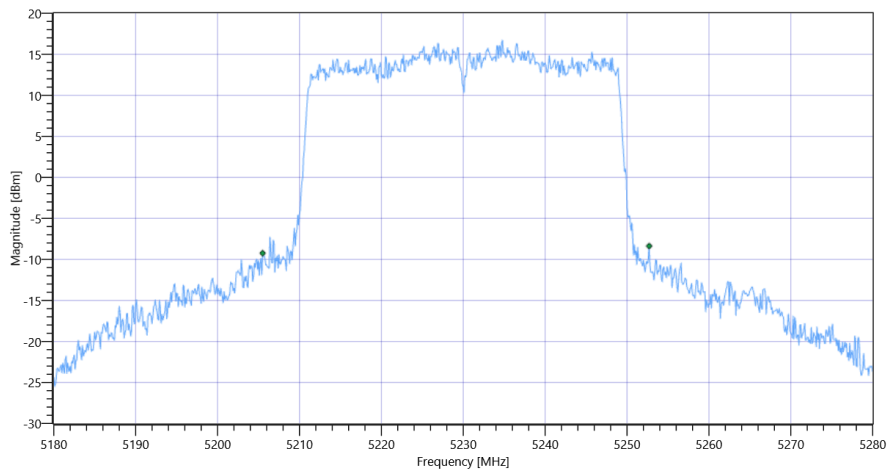


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

RESULT

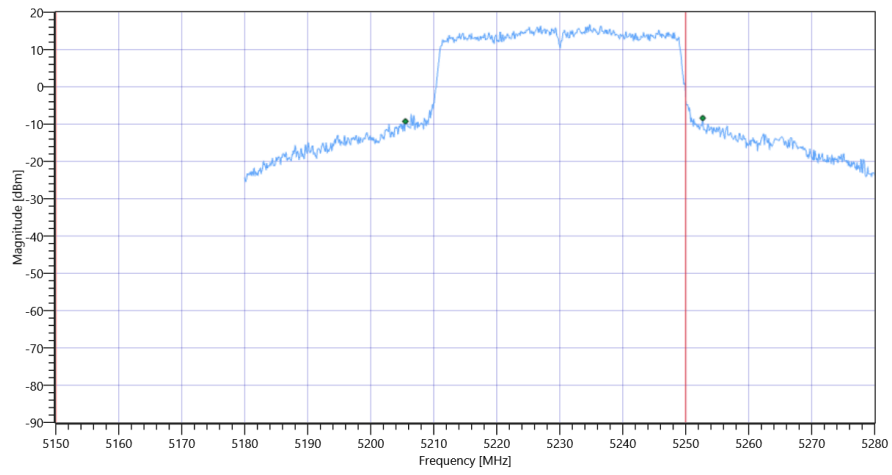
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	47.2	MHz	INFO
T1 26dB	5150.000000	---	5205.5000	MHz	PASS
T2 26dB	---	5250.000000	5252.7000	MHz	DFS required

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

Test References

TC Start	14.12.2022 14:52:46
Ambit Temp [°C] Humidity [rel%]	26.1 20
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5230 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.91	dBm	INFO
Ref. Frequency	---	---	5226.000	MHz	INFO

Evaluation max. Duty Cycle

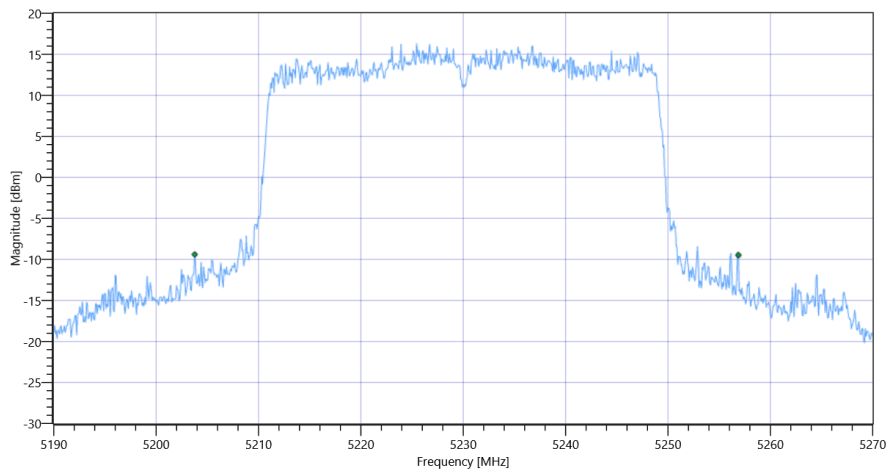
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	53.12	MHz	INFO
T1 26dB	---	---	5203.7600	MHz	INFO
T2 26dB	---	---	5256.8800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1_BW

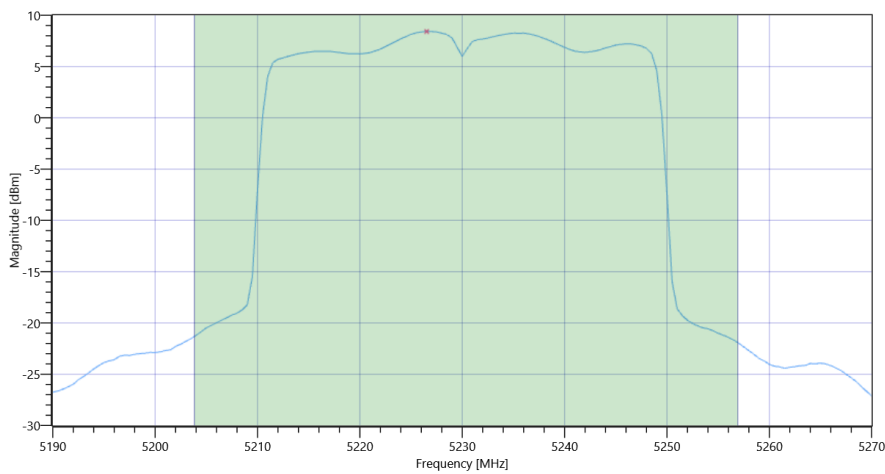
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.91 5.05 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.7	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.7	dBm	PASS
Limit: 11 dBm + 10 log 53.12					
Max Output Power DC corrected	---	28.25	22.7	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.42	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	17	8.42	dBm/1MHz	PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:29:31
Ambit Temp [°C] Humidity [rel%]	25.6 21
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC MIMO_Power_PSD_Calculator - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	None

Test Equipment

Test at TX 5270 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	17.43	dBm	INFO
Ant:1 BW 26dB	--	--	40.960	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	18.32	dBm	INFO
Ant:2 BW 26dB	--	--	40.720	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	17.67	dBm	INFO
Ant:3 BW 26dB	--	--	41.040	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	16.73	dBm	INFO
Ant:4 BW 26dB	--	--	41.040	MHz	INFO
Σ Limit absolute	--	24	23.6	dBm	PASS
Σ Limit: 11 dBm + 10 log 40.72	--	27.1	23.6	dBm	PASS

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	3.29	dBm/1MHz	INFO
Ant:2 PSD	--	--	4.39	dBm/1MHz	INFO
Ant:3 PSD	--	--	2.83	dBm/1MHz	INFO
Ant:4 PSD	--	--	2.79	dBm/1MHz	INFO
Σ	--	11	9.4	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:28:33
Ambit Temp [°C] Humidity [rel%]	25.6 21
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.66	dBm	INFO
Ref. Frequency	---	---	5264.810	MHz	INFO

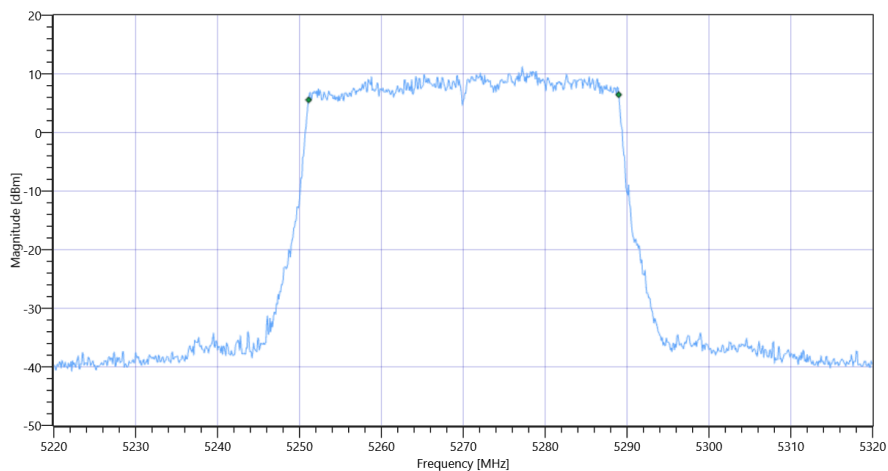
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.66 4.92 35
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

RESULT

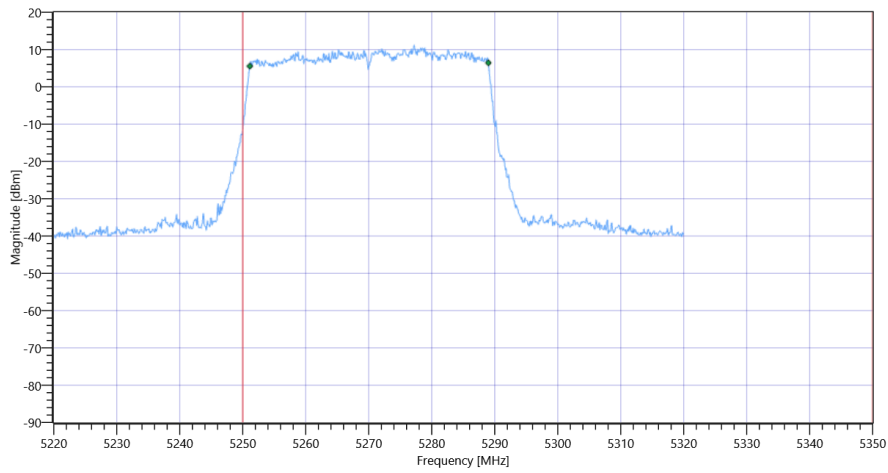
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.862	MHz	INFO
T1 99%	5250.000000	---	5251.1189	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.9810	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 99PCT

Plot: Bandwidth within Band

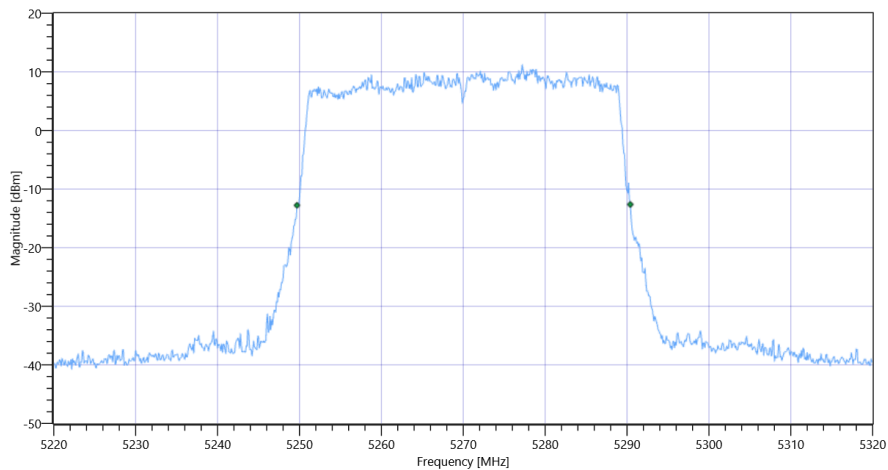


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

RESULT

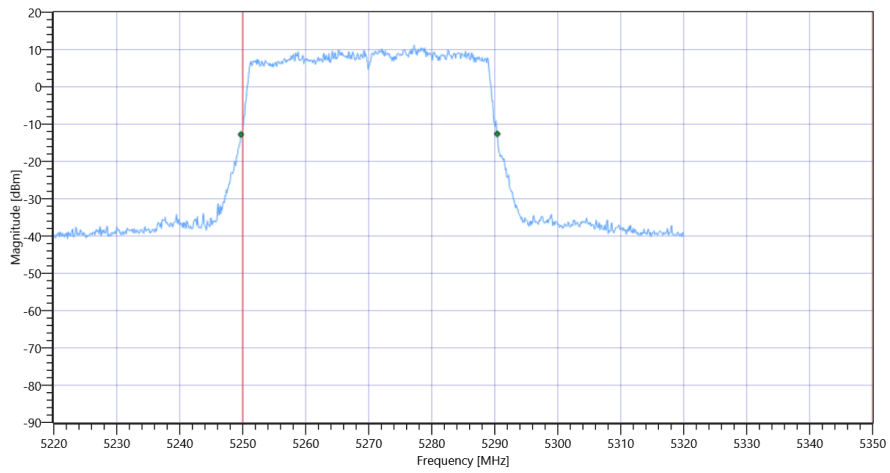
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.7	MHz	INFO
T1 26dB	5250.000000	---	5249.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.4000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:26:52
Ambit Temp [°C] Humidity [rel%]	25.7 21
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	4
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.30	dBm	INFO
Ref. Frequency	---	---	5270.600	MHz	INFO

Evaluation max. Duty Cycle

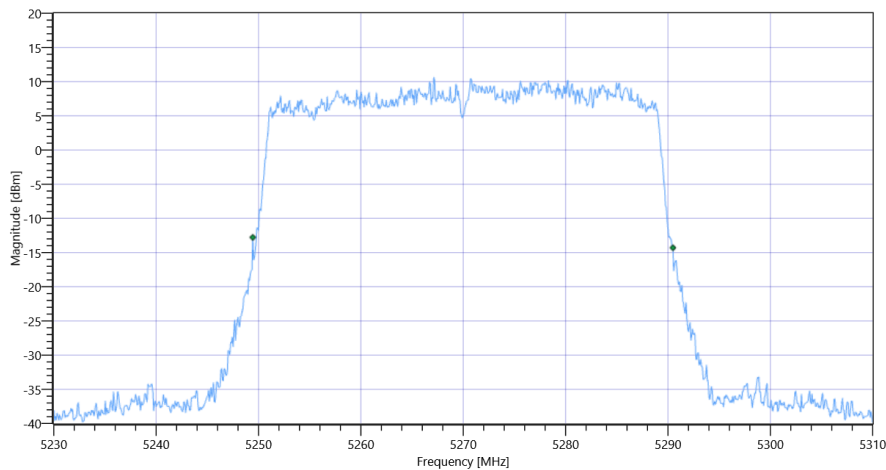
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.04	MHz	INFO
T1 26dB	---	---	5249.4400	MHz	INFO
T2 26dB	---	---	5290.4800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A_BW

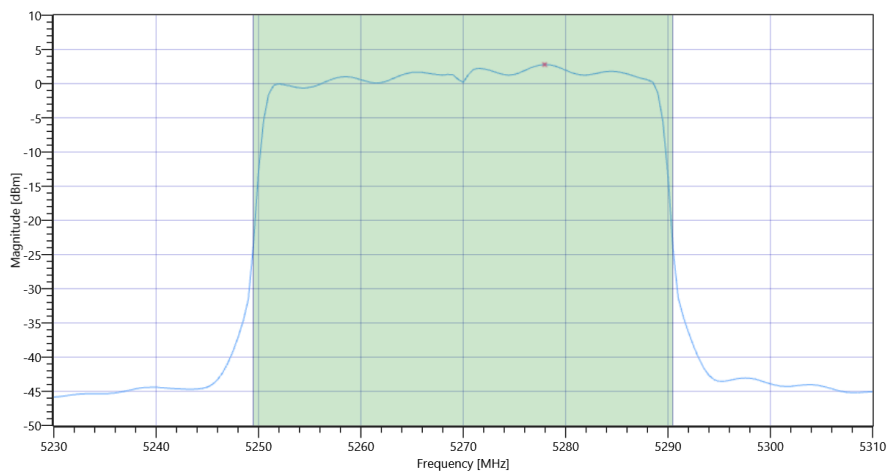
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.30 4.92 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	16.73	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	16.73	dBm	PASS
Limit: 11 dBm + 10 log 41.04					
Max Output Power DC corrected	--	27.13	16.73	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	2.79	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	2.79	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:25:54
Ambit Temp [°C] Humidity [rel%]	25.7 21
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.40	dBm	INFO
Ref. Frequency	---	---	5252.620	MHz	INFO

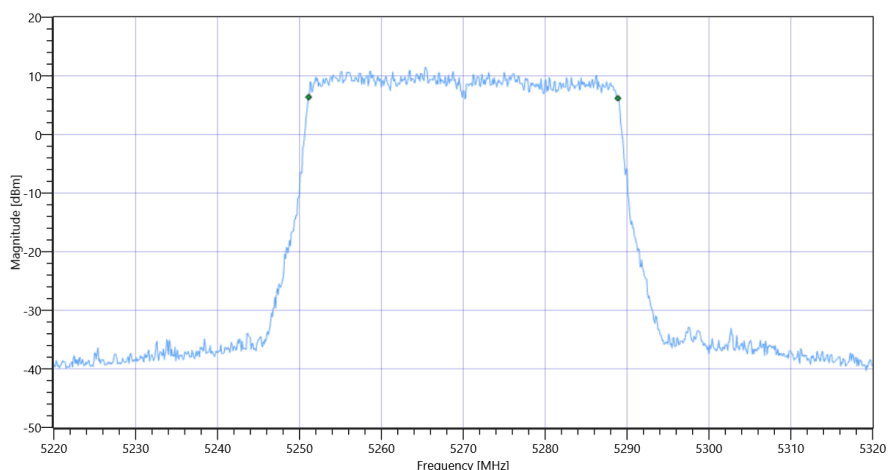
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.40 4.92 35
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

RESULT

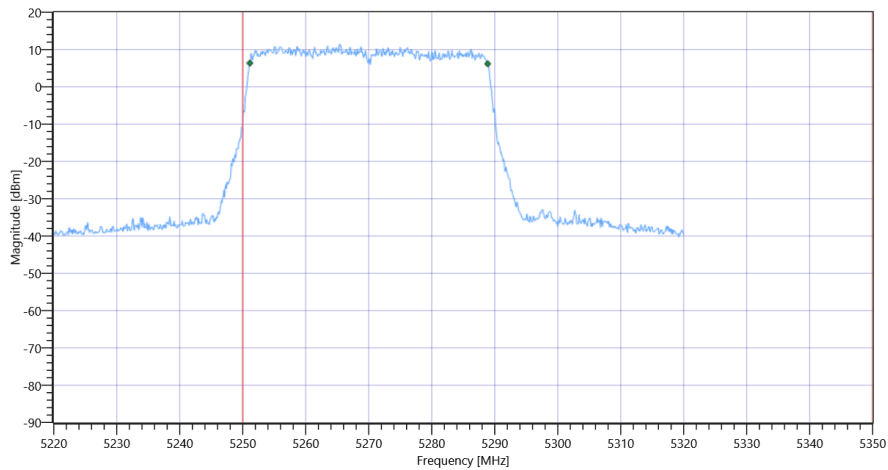
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5250.000000	---	5251.1189	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.8811	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 99PCT

Plot: Bandwidth within Band

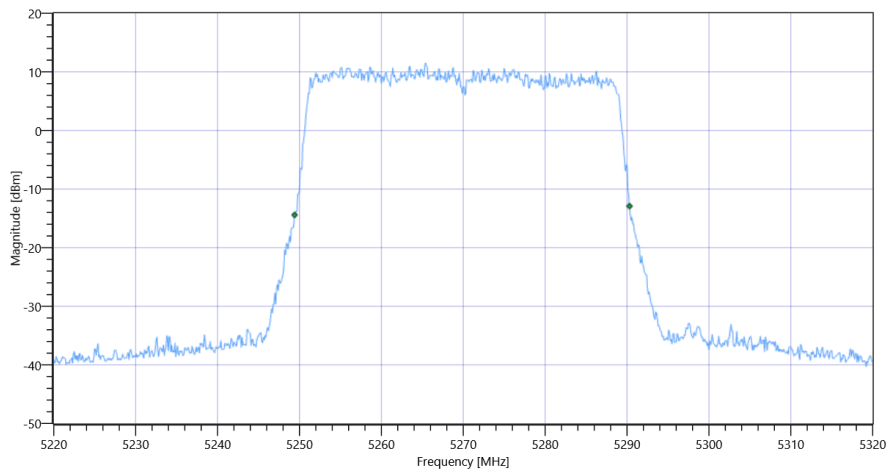


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

RESULT

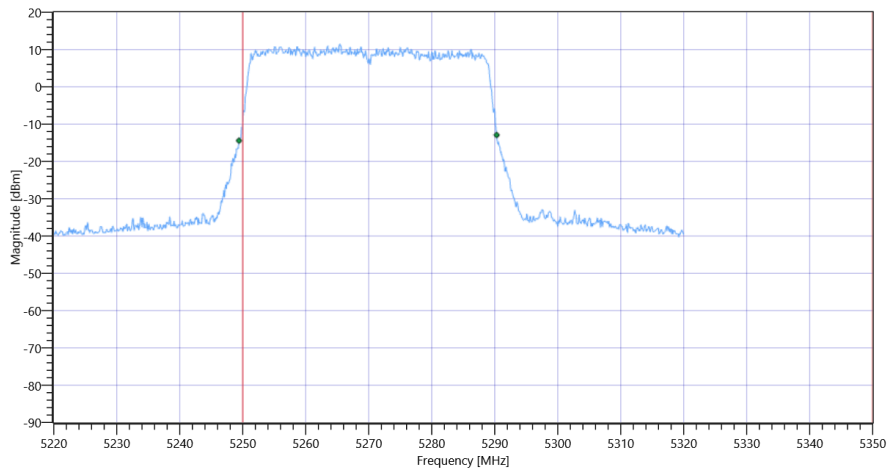
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.9	MHz	INFO
T1 26dB	5250.000000	---	5249.4000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.3000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:24:13
Ambit Temp [°C] Humidity [rel%]	25.8 21
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
Antenna Port used	3
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.18	dBm	INFO
Ref. Frequency	---	---	5265.000	MHz	INFO

Evaluation max. Duty Cycle

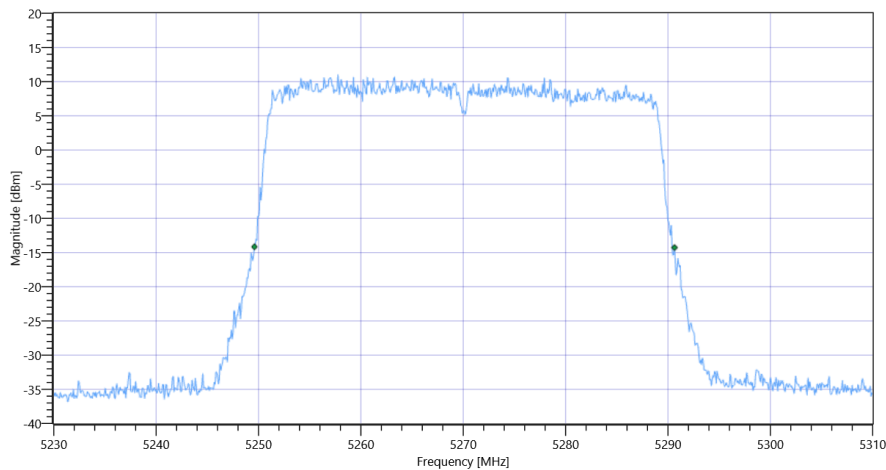
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.04	MHz	INFO
T1 26dB	---	---	5249.6000	MHz	INFO
T2 26dB	---	---	5290.6400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A_BW

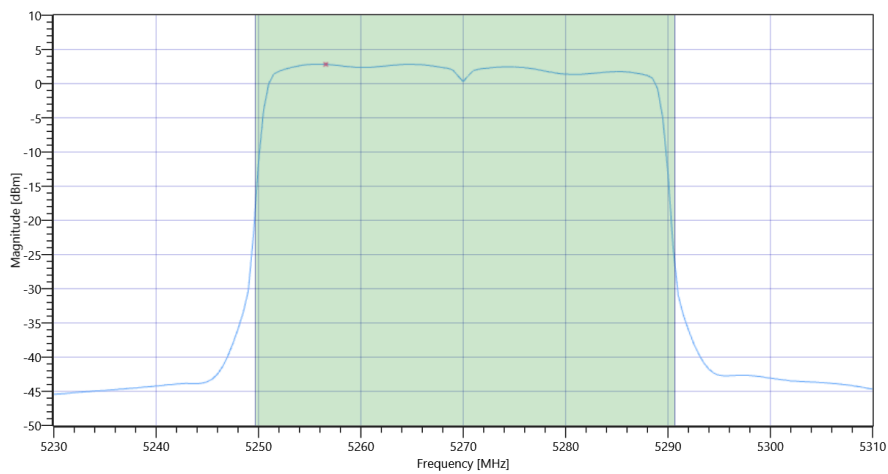
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.18 4.92 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	17.67	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.67	dBm	PASS
Limit: 11 dBm + 10 log 41.04					
Max Output Power DC corrected	--	27.13	17.67	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	2.83	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	2.83	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:23:15
Ambit Temp [°C] Humidity [rel%]	25.8 21
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.71	dBm	INFO
Ref. Frequency	---	---	5266.200	MHz	INFO

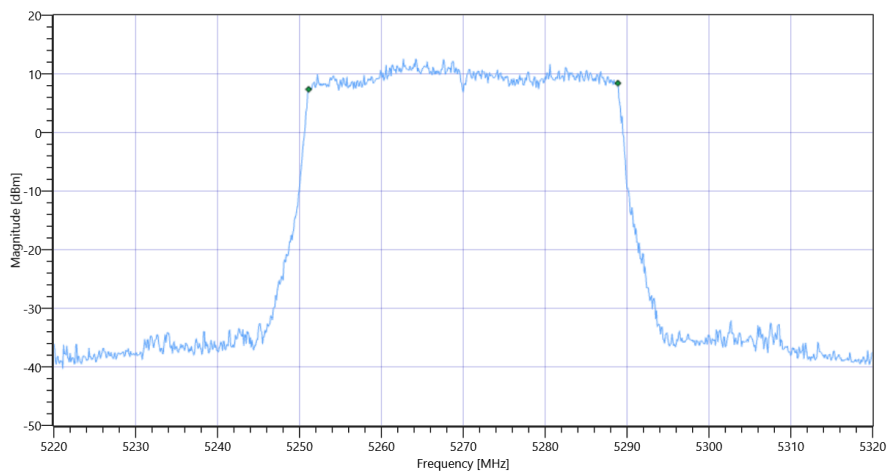
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.71 4.92 35
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

RESULT

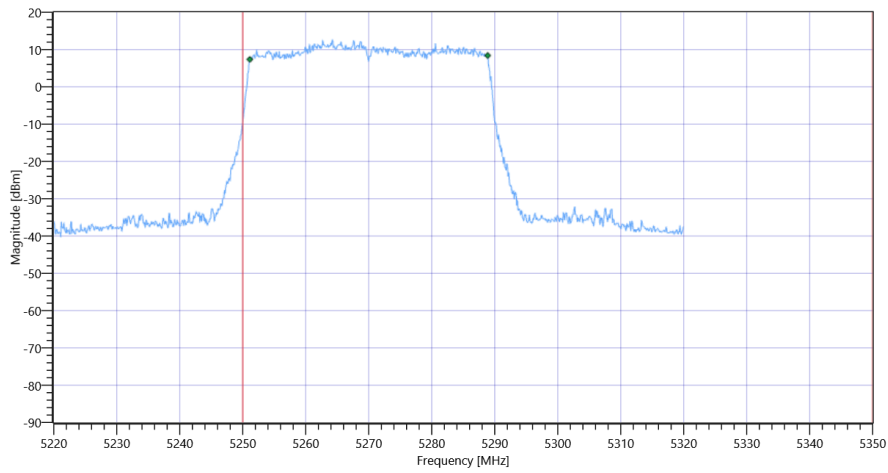
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.762	MHz	INFO
T1 99%	5250.000000	---	5251.1189	MHz	PASS since U-NII-1 is supported
T2 99%	---	5350.000000	5288.8811	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 99PCT

Plot: Bandwidth within Band

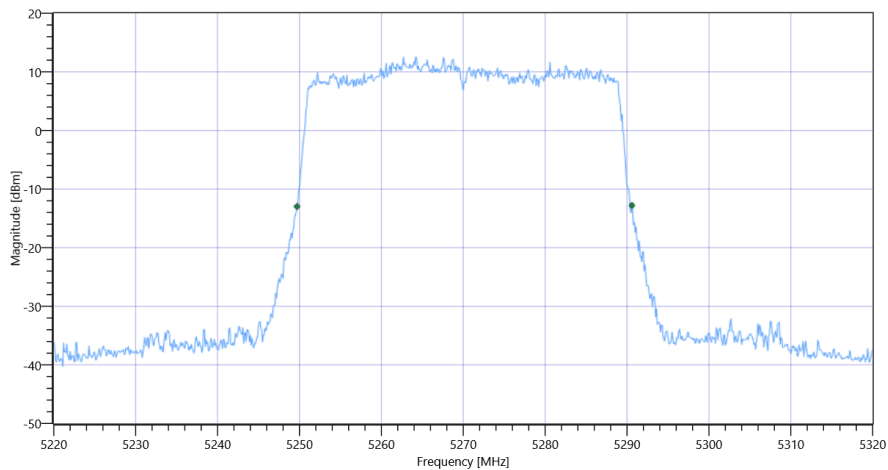


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

RESULT

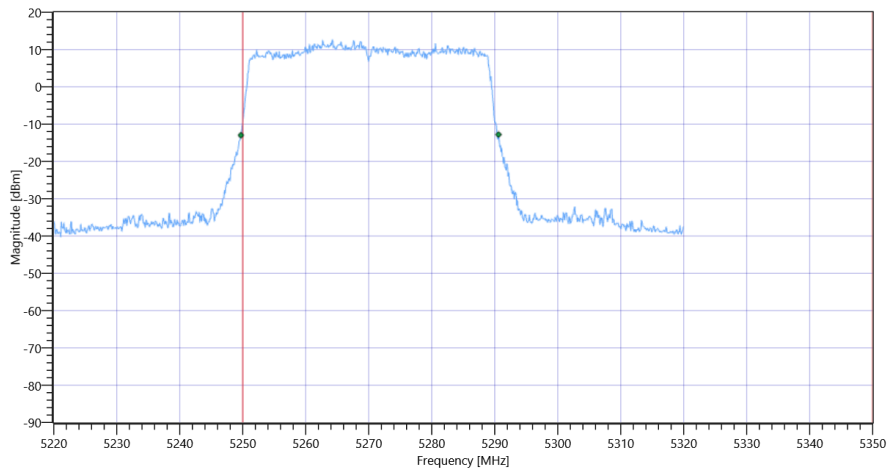
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.9	MHz	INFO
T1 26dB	5250.000000	---	5249.7000	MHz	PASS since U-NII-1 is supported
T2 26dB	---	5350.000000	5290.6000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

Test References

TC Start	14.12.2022 15:21:34
Ambit Temp [°C] Humidity [rel%]	25.8 21
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F, E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx

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

Test Parameter

Technology to test	WLAN5Gx ax-HE40
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]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

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

Test at TX 5270 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	15.01	dBm	INFO
Ref. Frequency	---	---	5265.200	MHz	INFO

Evaluation max. Duty Cycle

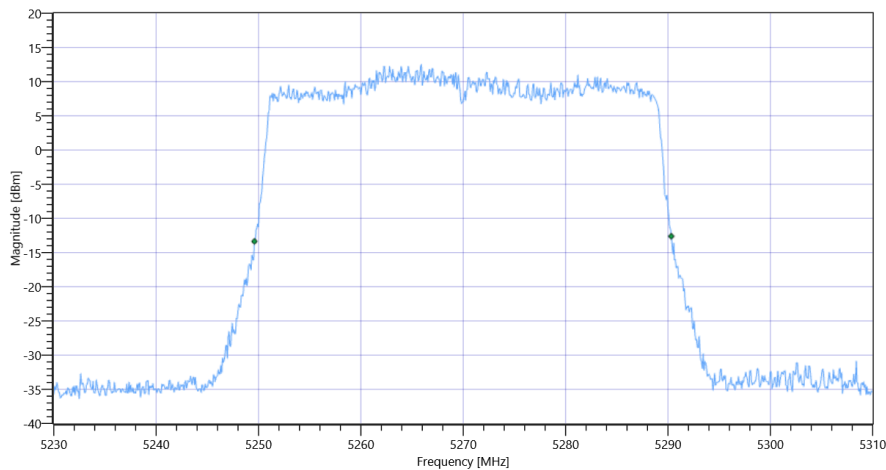
Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	---	---	0	dB	DC > 98% defined

Evaluation Bandwidth

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.72	MHz	INFO
T1 26dB	---	---	5249.6000	MHz	INFO
T2 26dB	---	---	5290.3200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A_BW

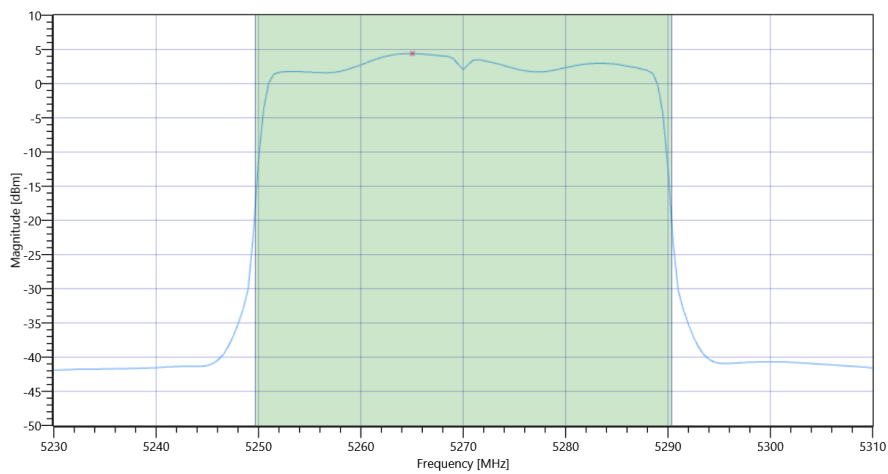
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.01 4.92 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	18.32	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	18.32	dBm	PASS
Limit: 11 dBm + 10 log 40.72					
Max Output Power DC corrected	--	27.1	18.32	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	4.39	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.39	dBm/1MHz	PASS