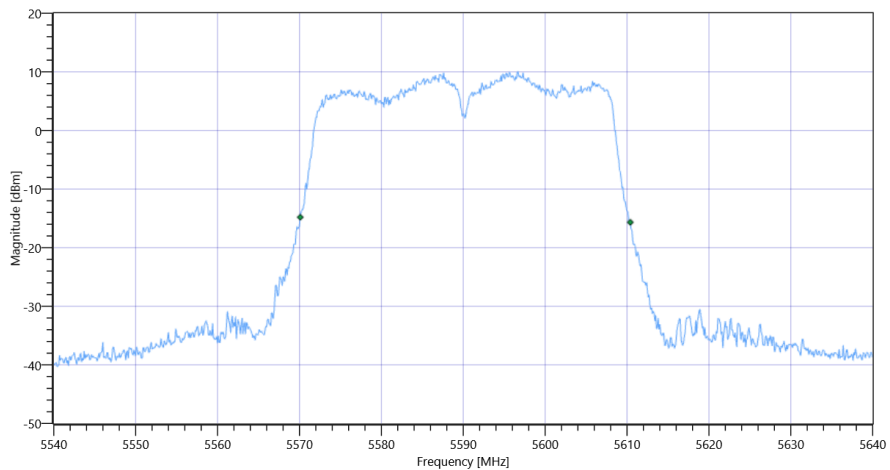


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

RESULT

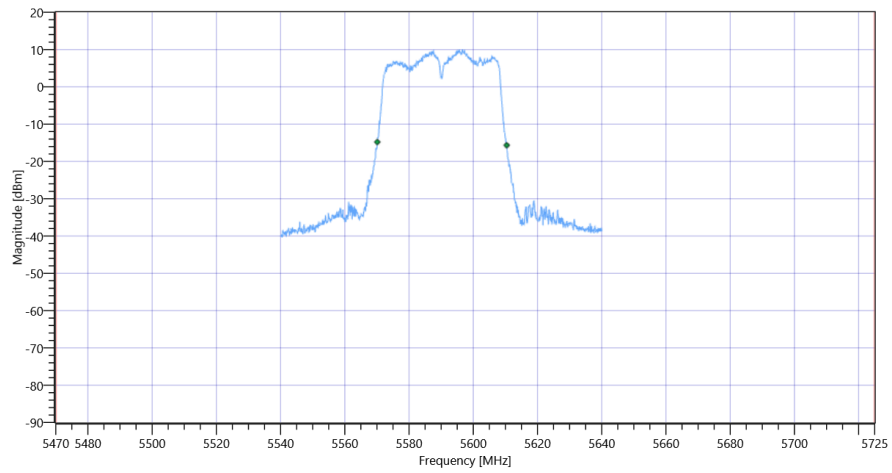
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.3	MHz	INFO
T1 26dB	5470.000000	---	5570.1000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5610.4000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:39:23
Ambit Temp [°C] Humidity [rel%]	25.1 19
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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 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] 5710
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 5590 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.16	dBm	INFO
Ref. Frequency	---	---	5587.000	MHz	INFO

Evaluation max. Duty Cycle

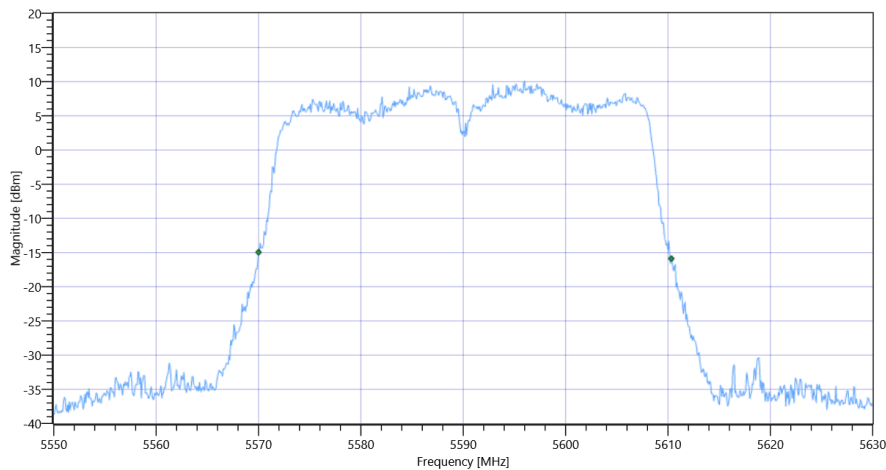
Duty Cycle evaluation

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	---	---	40.32	MHz	INFO
T1 26dB	---	---	5570.0000	MHz	INFO
T2 26dB	---	---	5610.3200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C_BW

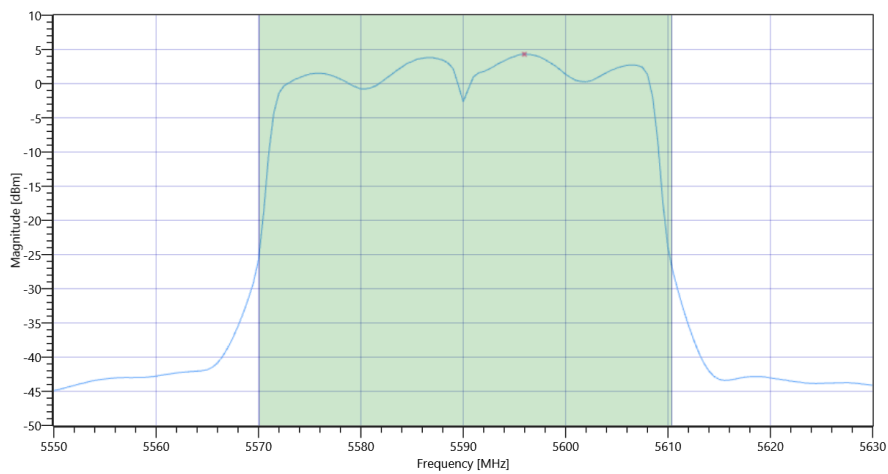
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.16 5.42 35
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	17.34	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.34	dBm	PASS
Limit: 11 dBm + 10 log 40.32					
Max Output Power DC corrected	--	27.06	17.34	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	4.31	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	4.31	dBm/1MHz	PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 09:03:12
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-2C
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 ac-VHT40 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] 5710
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	None

Test Equipment

Test at TX 5710 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	17.12	dBm	INFO
Ant:1 BW 26dB	--	--	39.840	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	17.82	dBm	INFO
Ant:2 BW 26dB	--	--	39.920	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	17.37	dBm	INFO
Ant:3 BW 26dB	--	--	40.720	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	16.99	dBm	INFO
Ant:4 BW 26dB	--	--	39.840	MHz	INFO
Σ Limit absolute	--	24	23.36	dBm	PASS
Σ Limit: 11 dBm + 10 log 39.84	--	27	23.36	dBm	PASS

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	3.91	dBm/1MHz	INFO
Ant:2 PSD	--	--	5.11	dBm/1MHz	INFO
Ant:3 PSD	--	--	3.74	dBm/1MHz	INFO
Ant:4 PSD	--	--	3.78	dBm/1MHz	INFO
Σ	--	11	10.19	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 09:02:20
Ambit Temp [°C] Humidity [rel%]	25.1 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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 mode
Antenna Port used	4
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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.85	dBm	INFO
Ref. Frequency	---	---	5712.600	MHz	INFO

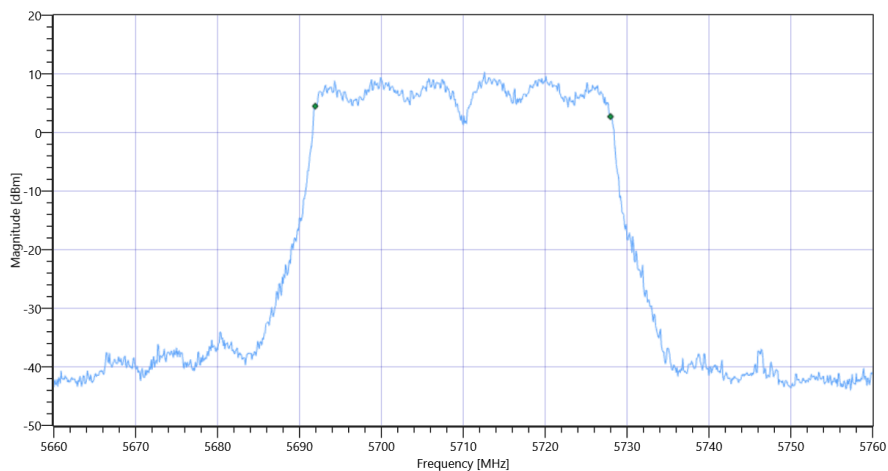
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.85 5.21 30
Start [MHz] Stop [MHz]	5660.000 5760.000
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

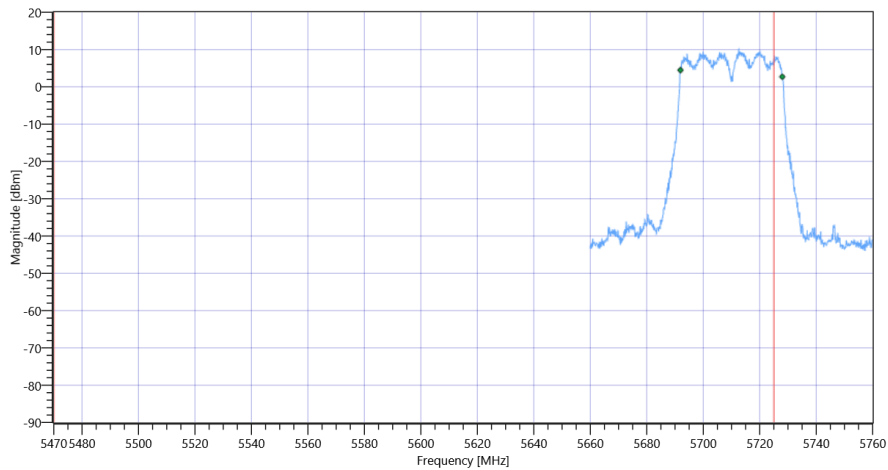
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.064	MHz	INFO
T1 99%	5470.000000	---	5691.9181	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5727.9820	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 99PCT

Plot: Bandwidth within Band

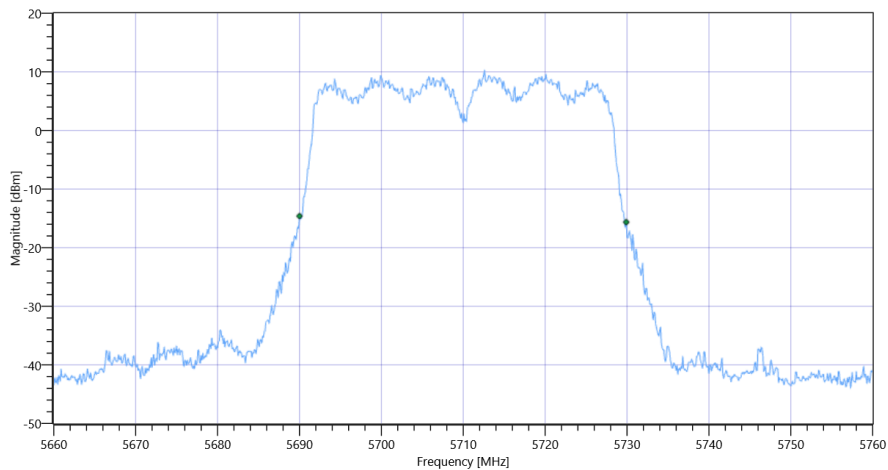


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

RESULT

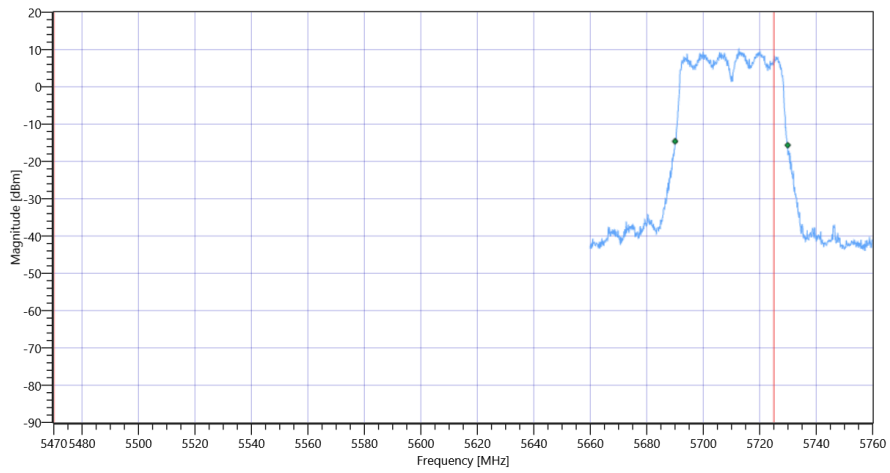
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	39.9	MHz	INFO
T1 26dB	5470.000000	---	5690.0000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5729.9000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 09:00:44
Ambit Temp [°C] Humidity [rel%]	25.1 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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 mode
Antenna Port used	4
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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.30	dBm	INFO
Ref. Frequency	---	---	5712.800	MHz	INFO

Evaluation max. Duty Cycle

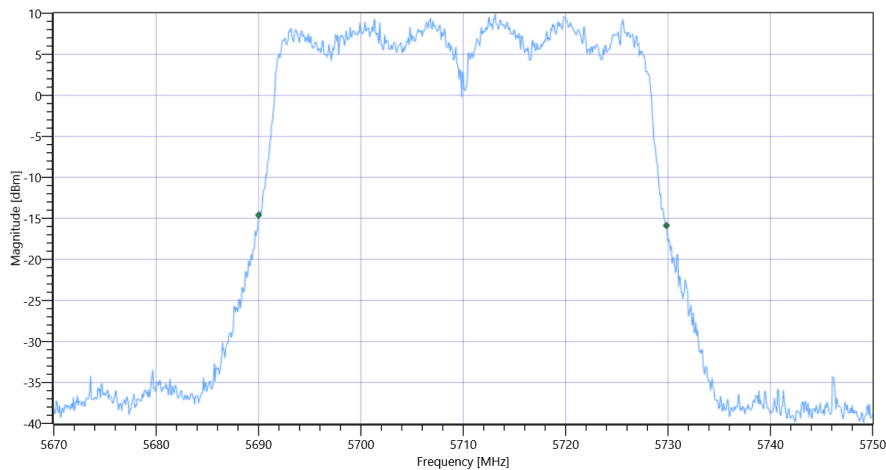
Duty Cycle evaluation

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	---	---	39.84	MHz	INFO
T1 26dB	---	---	5690.0000	MHz	INFO
T2 26dB	---	---	5729.8400	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C_BW

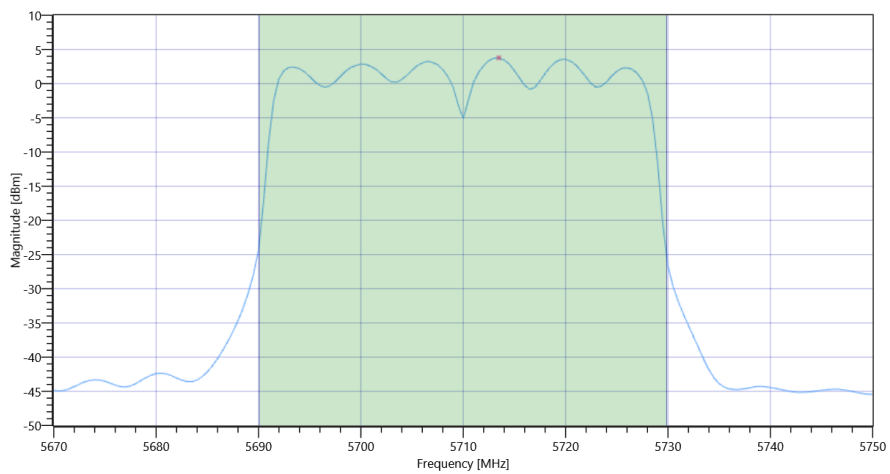
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.30 5.21 35
Start [MHz] Stop [MHz]	5670.000 5750.000
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	---	---	16.99	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.99	dBm	PASS
Limit: 11 dBm + 10 log 39.84					
Max Output Power DC corrected	---	27	16.99	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	3.78	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	3.78	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:59:52
Ambit Temp [°C] Humidity [rel%]	25.1 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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 mode
Antenna Port used	3
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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.38	dBm	INFO
Ref. Frequency	---	---	5708.400	MHz	INFO

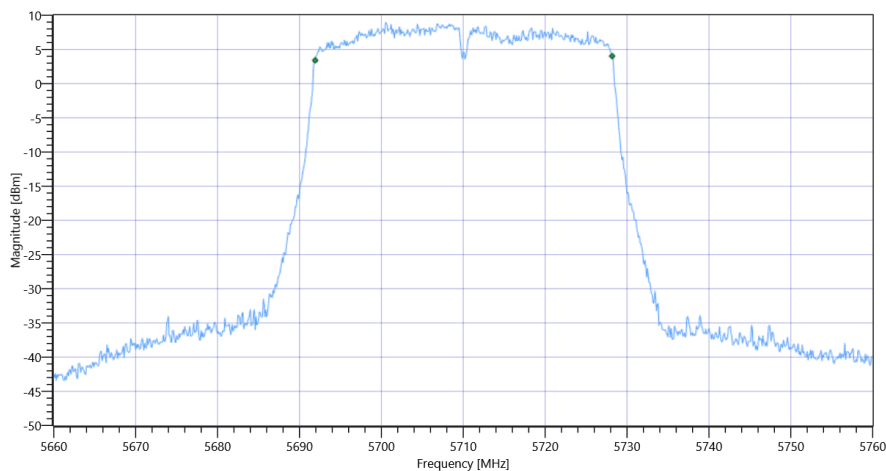
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.38 5.21 30
Start [MHz] Stop [MHz]	5660.000 5760.000
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

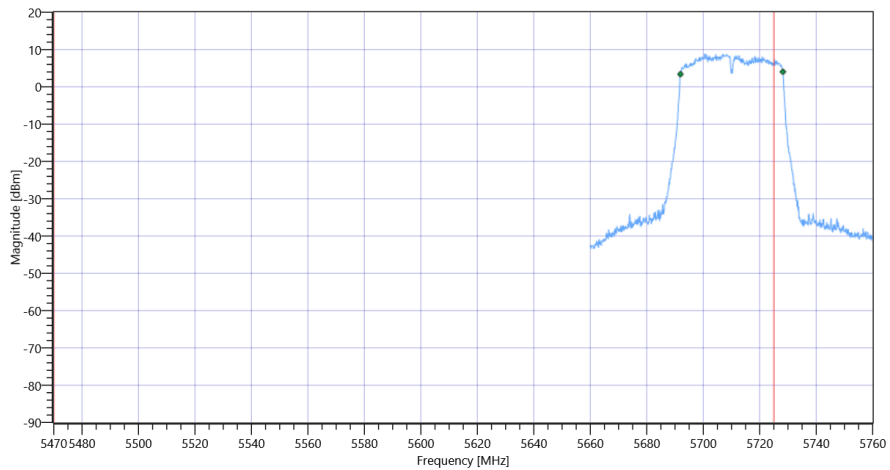
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.264	MHz	INFO
T1 99%	5470.000000	---	5691.9181	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5728.1818	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 99PCT

Plot: Bandwidth within Band

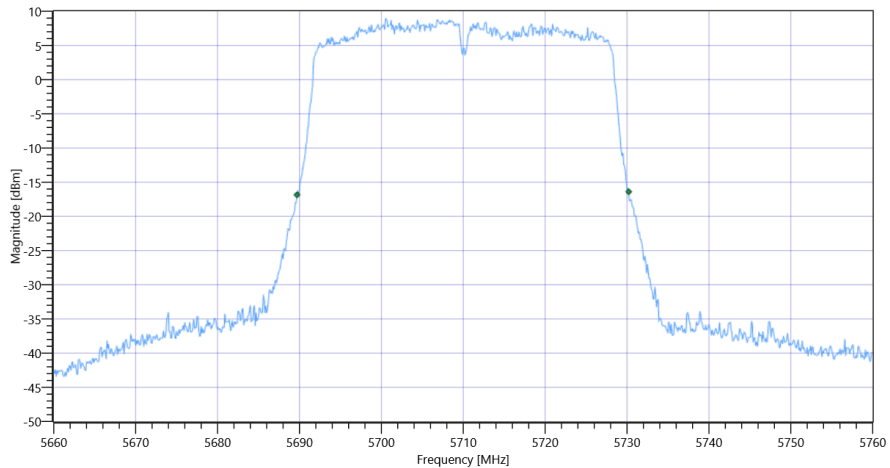


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

RESULT

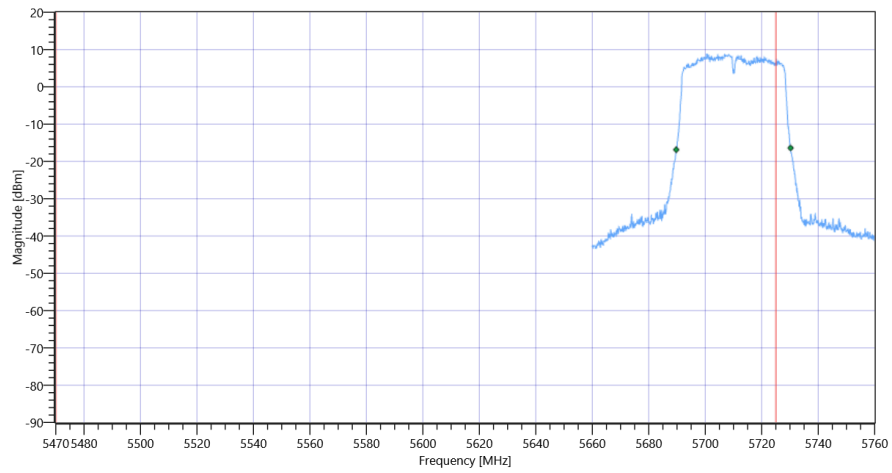
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.5	MHz	INFO
T1 26dB	5470.000000	---	5689.7000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5730.2000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:58:16
Ambit Temp [°C] Humidity [rel%]	25.2 19
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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 mode
Antenna Port used	3
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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	11.36	dBm	INFO
Ref. Frequency	--	--	5711.600	MHz	INFO

Evaluation max. Duty Cycle

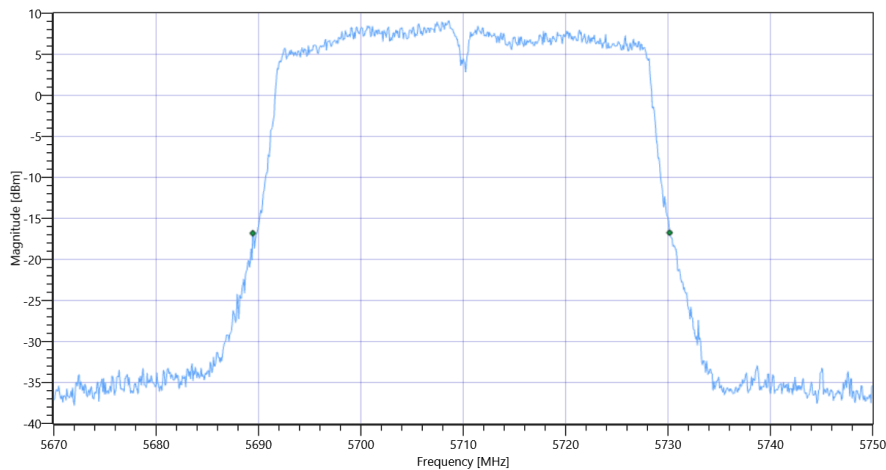
Duty Cycle evaluation

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	--	--	40.72	MHz	INFO
T1 26dB	--	--	5689.4400	MHz	INFO
T2 26dB	--	--	5730.1600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C_BW

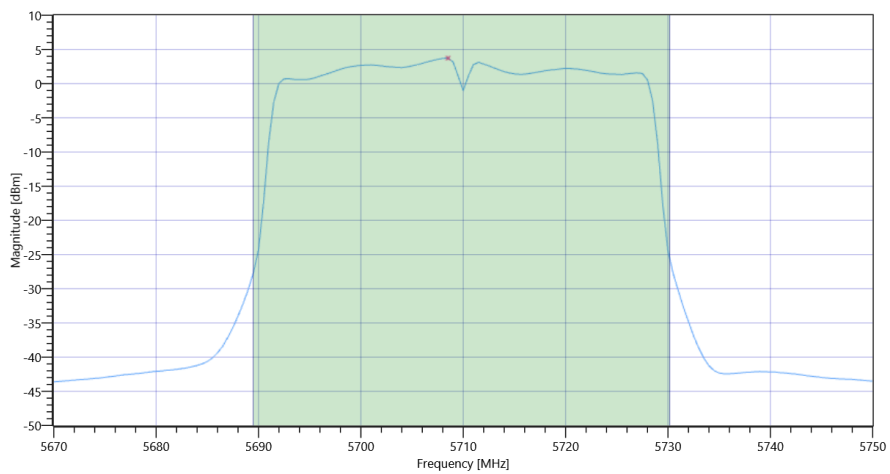
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.36 5.21 35
Start [MHz] Stop [MHz]	5670.000 5750.000
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	--	--	17.37	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.37	dBm	PASS
Limit: 11 dBm + 10 log 40.72					
Max Output Power DC corrected	--	27.1	17.37	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.74	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	3.74	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:57:24
Ambit Temp [°C] Humidity [rel%]	25.1 19
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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.04	dBm	INFO
Ref. Frequency	---	---	5695.410	MHz	INFO

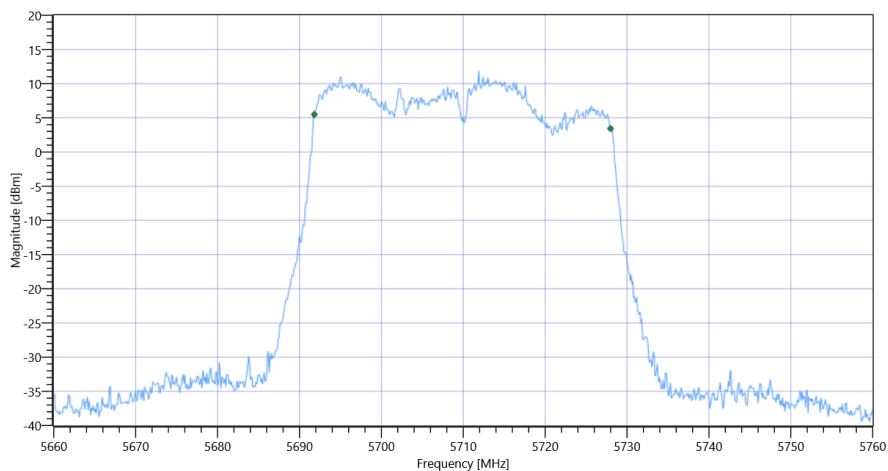
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.04 5.21 35
Start [MHz] Stop [MHz]	5660.000 5760.000
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

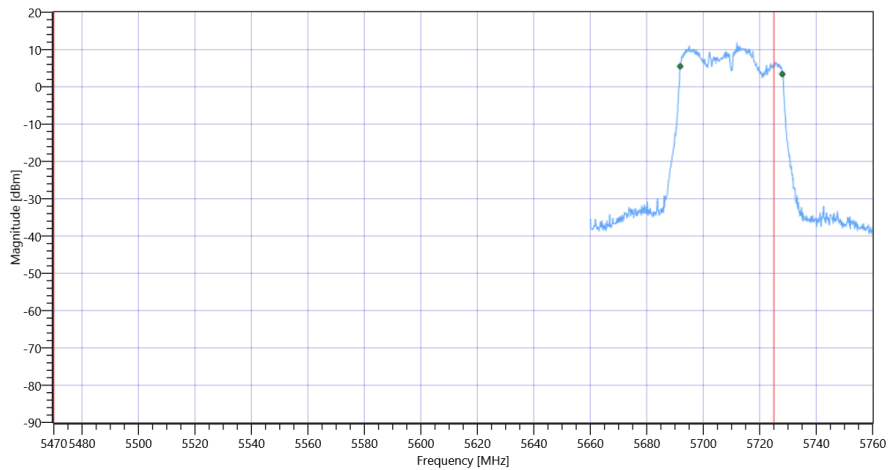
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.164	MHz	INFO
T1 99%	5470.000000	---	5691.8182	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5727.9820	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 99PCT

Plot: Bandwidth within Band

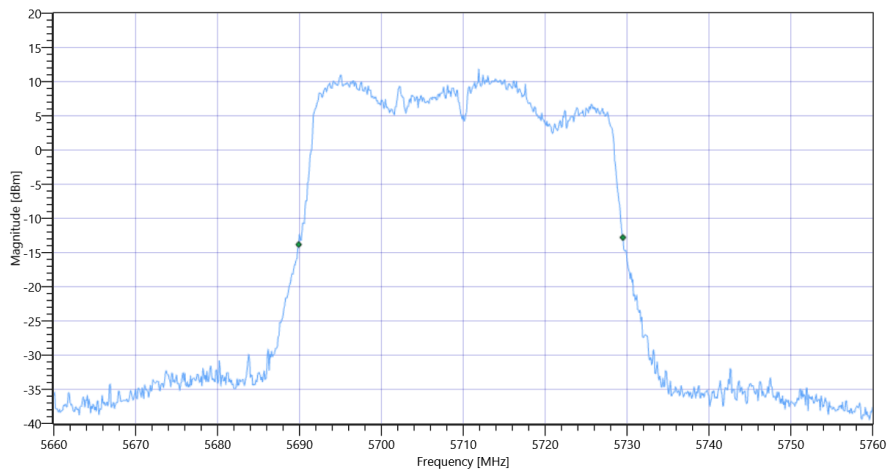


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

RESULT

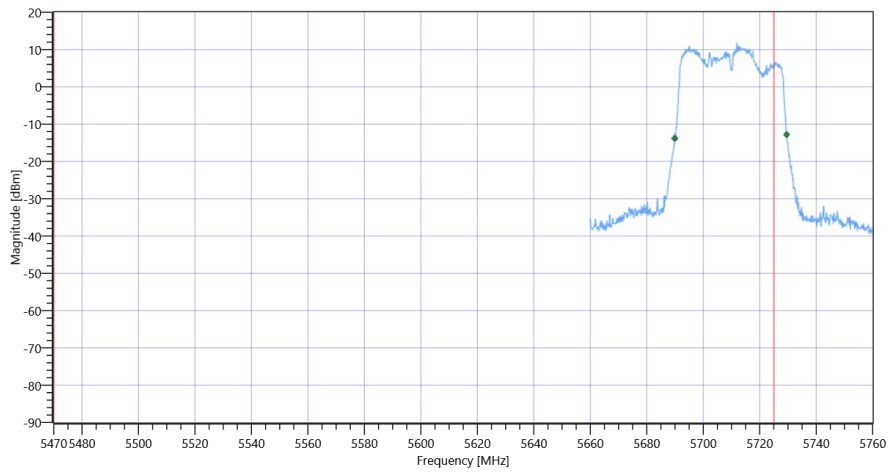
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	39.6	MHz	INFO
T1 26dB	5470.000000	---	5689.9000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5729.5000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:55:48
Ambit Temp [°C] Humidity [rel%]	25.1 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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.92	dBm	INFO
Ref. Frequency	---	---	5714.200	MHz	INFO

Evaluation max. Duty Cycle

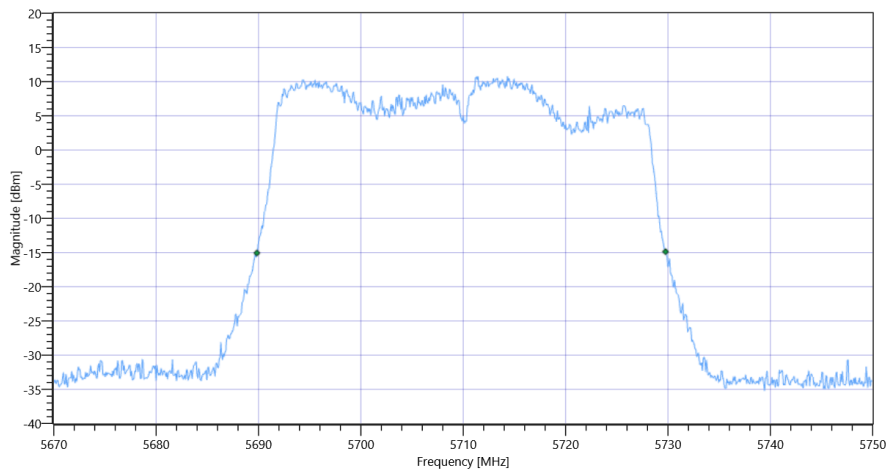
Duty Cycle evaluation

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	---	---	39.92	MHz	INFO
T1 26dB	---	---	5689.8400	MHz	INFO
T2 26dB	---	---	5729.7600	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C_BW

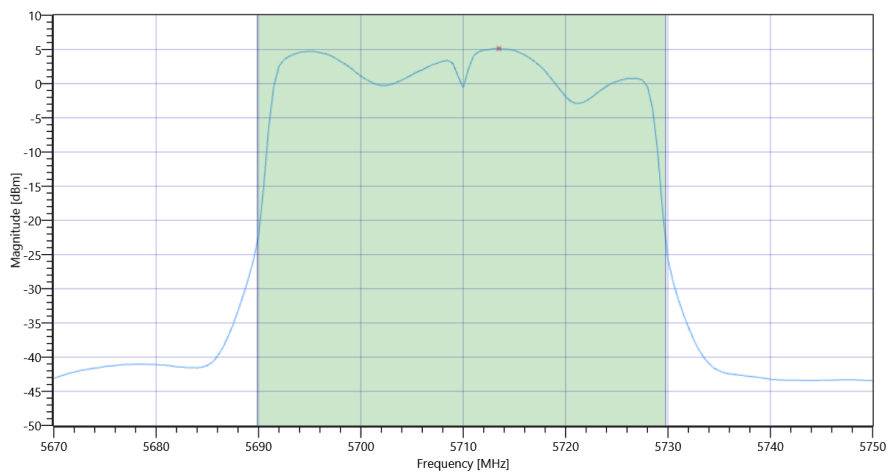
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.92 5.21 35
Start [MHz] Stop [MHz]	5670.000 5750.000
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	---	---	17.82	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	17.82	dBm	PASS
Limit: 11 dBm + 10 log 39.92					
Max Output Power DC corrected	---	27.01	17.82	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	5.11	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	11	5.11	dBm/1MHz	PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:54:56
Ambit Temp [°C] Humidity [rel%]	25.1 19
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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.55	dBm	INFO
Ref. Frequency	---	---	5719.390	MHz	INFO

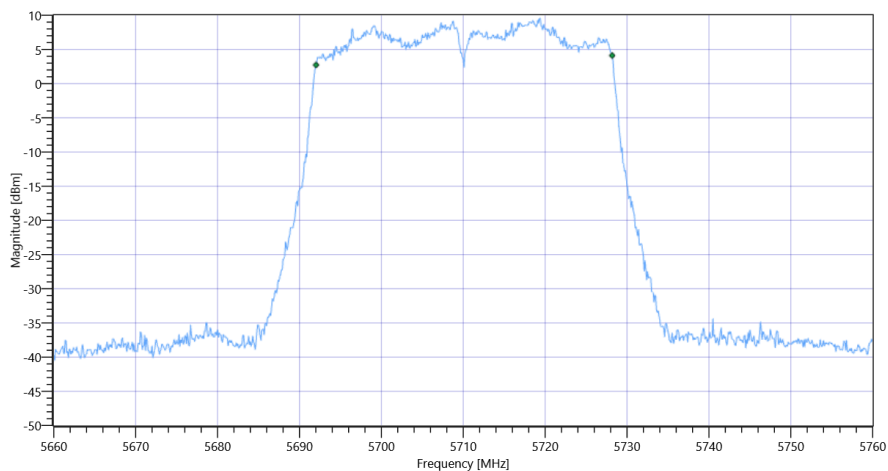
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.55 5.21 35
Start [MHz] Stop [MHz]	5660.000 5760.000
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

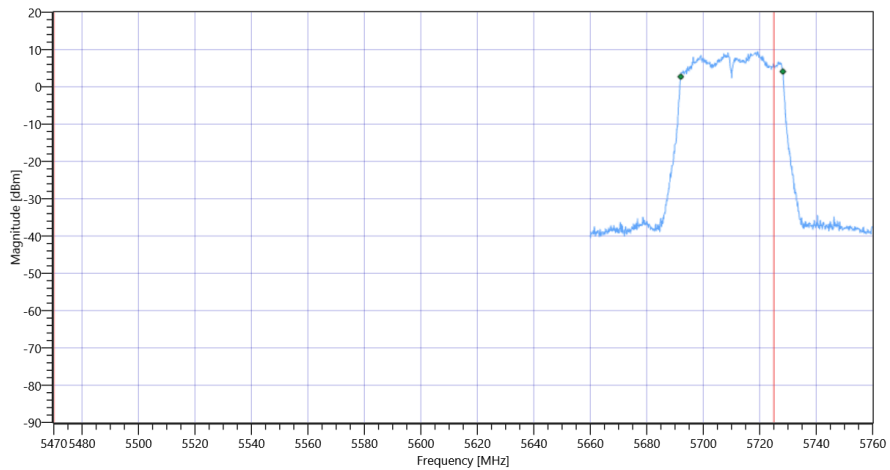
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.164	MHz	INFO
T1 99%	5470.000000	---	5692.0180	MHz	PASS since U-NII-3 is supported
T2 99%	---	5725.000000	5728.1818	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 99PCT

Plot: Bandwidth within Band

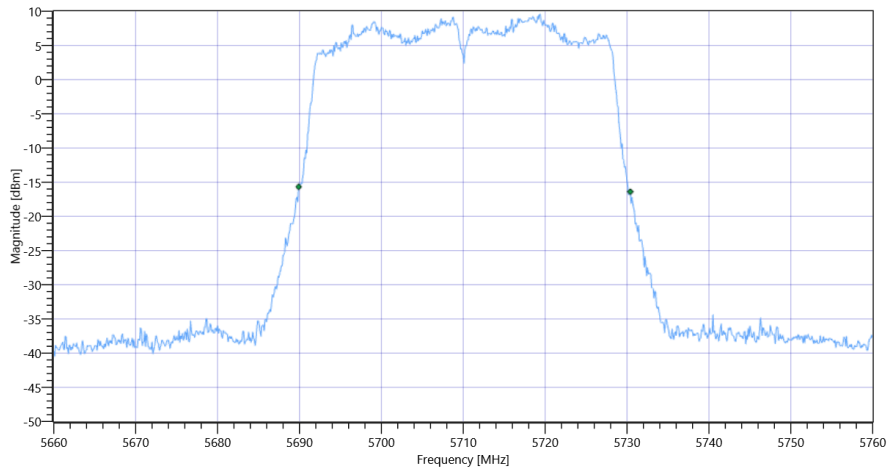


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

RESULT

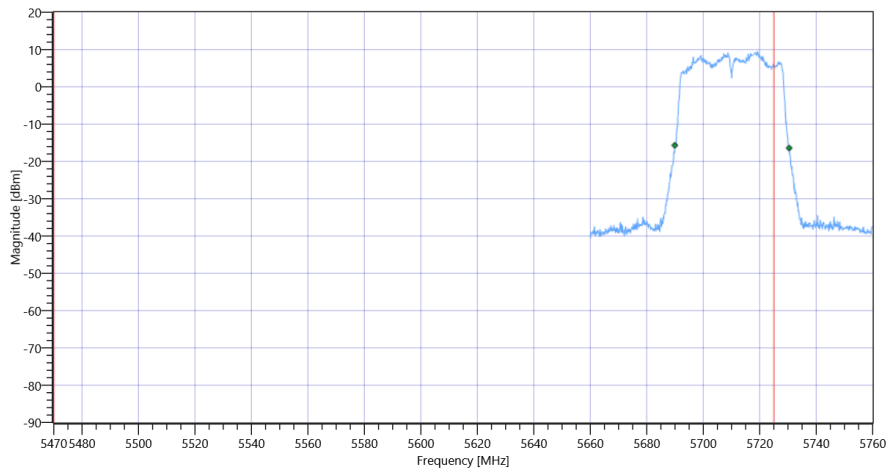
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40.5	MHz	INFO
T1 26dB	5470.000000	---	5689.9000	MHz	PASS since U-NII-3 is supported
T2 26dB	---	5725.000000	5730.4000	MHz	

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-2C

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C

Test References

TC Start	14.12.2022 08:53:21
Ambit Temp [°C] Humidity [rel%]	25.1 19
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 ac-VHT40 mode U-NII-2C
Add. Information	PS17

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 ac-VHT40 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] 5710
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 5710 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.00	dBm	INFO
Ref. Frequency	---	---	5719.790	MHz	INFO

Evaluation max. Duty Cycle

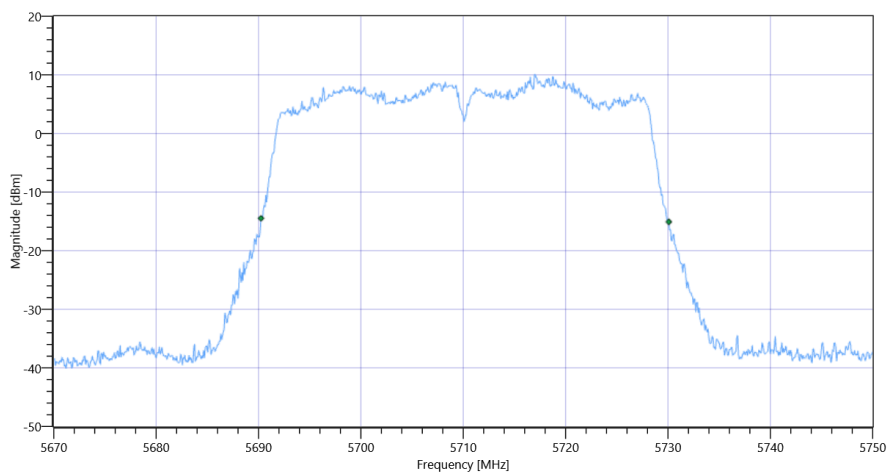
Duty Cycle evaluation

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	---	---	39.84	MHz	INFO
T1 26dB	---	---	5690.2400	MHz	INFO
T2 26dB	---	---	5730.0800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C_BW

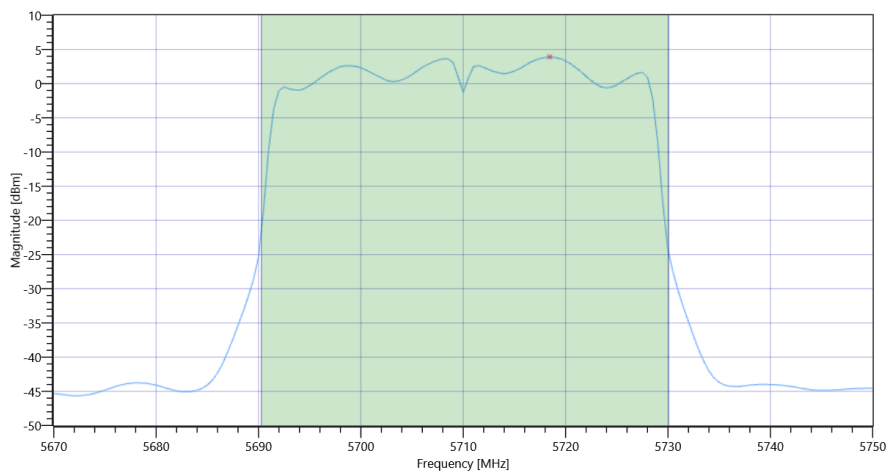
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.00 5.21 35
Start [MHz] Stop [MHz]	5670.000 5750.000
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	--	--	17.12	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	24	17.12	dBm	PASS
Limit: 11 dBm + 10 log 39.84					
Max Output Power DC corrected	--	27	17.12	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-2C Max OP and PSD

Power Spectral Density

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	3.91	dBm/1MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	11	3.91	dBm/1MHz	PASS

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:22:59
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
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 ac-VHT40 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]	-10
Switched Path	None

Test Equipment

Test at TX 5755 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	23.04	dBm	INFO
Ant:1 BW 26dB	--	--	73.600	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	23.53	dBm	INFO
Ant:2 BW 26dB	--	--	66.640	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	23.89	dBm	INFO
Ant:3 BW 26dB	--	--	74.000	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	22.96	dBm	INFO
Ant:4 BW 26dB	--	--	42.960	MHz	INFO
Σ Limit absolute	--	30	29.39	dBm	PASS
Σ Limit: 11 dBm + 10 log 42.96	--	27.33	29.39	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	6.65	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	7.15	dBm/0.5MHz	INFO
Ant:3 PSD	--	--	6.78	dBm/0.5MHz	INFO
Ant:4 PSD	--	--	7.43	dBm/0.5MHz	INFO
Σ	--	30	13.03	dBm/0.5MHz	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:22:29
Ambit Temp [°C] Humidity [rel%]	25.3 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5755 MHz

RESULT: Reference Power cond.

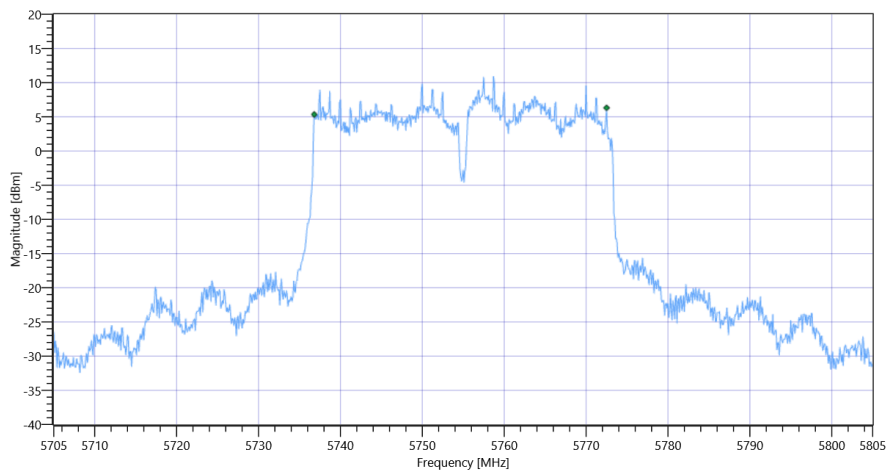
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.23	dBm	INFO
Ref. Frequency	---	---	5757.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.23 5.47 45
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	35.7	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:21:37
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.95	dBm	INFO
Ref. Frequency	---	---	5758.000	MHz	INFO

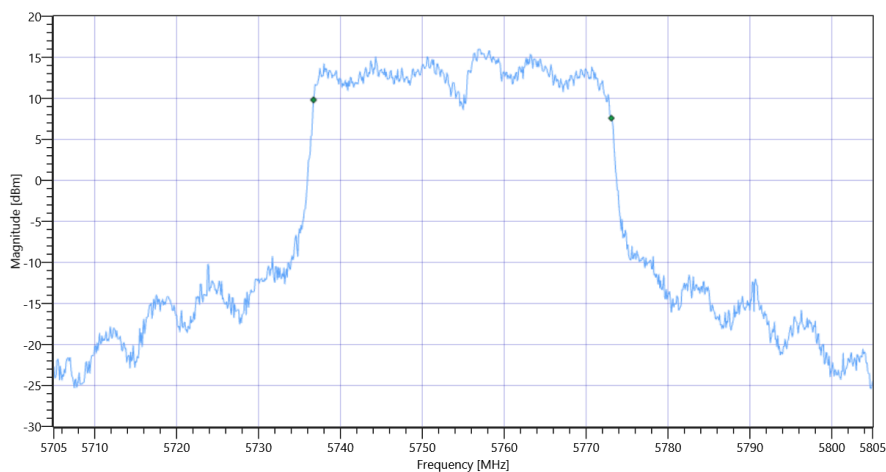
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.95 5.47 40
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

RESULT

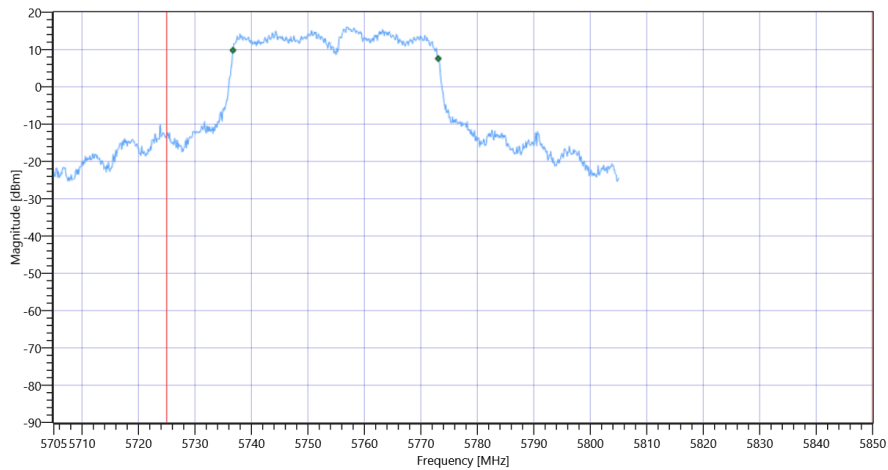
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.364	MHz	INFO
T1 99%	5725.000000	---	5736.7183	MHz	PASS
T2 99%	---	5850.000000	5773.0819	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band

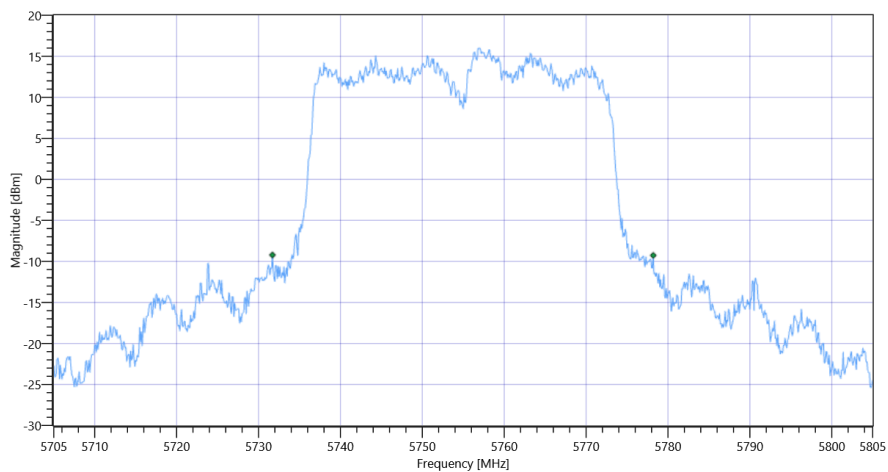


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

RESULT

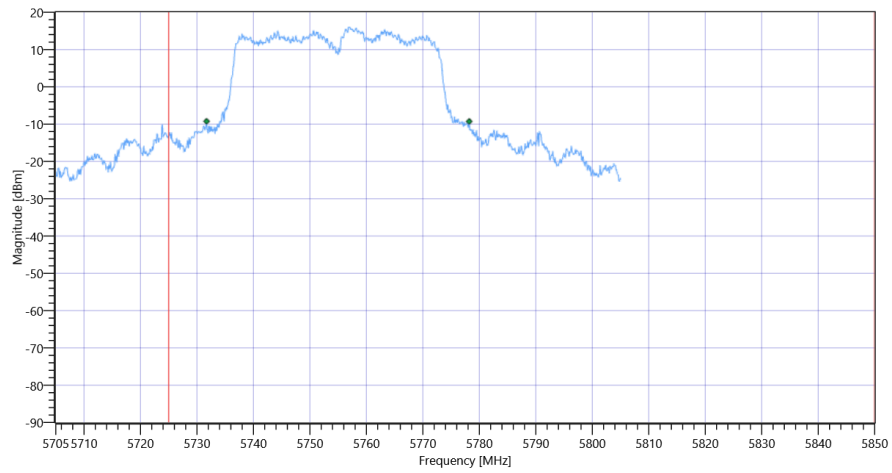
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	46.5	MHz	INFO
T1 26dB	5725.000000	---	5731.7000	MHz	PASS
T2 26dB	---	5850.000000	5778.2000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:18:58
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.65	dBm	INFO
Ref. Frequency	---	---	5757.600	MHz	INFO

Evaluation max. Duty Cycle

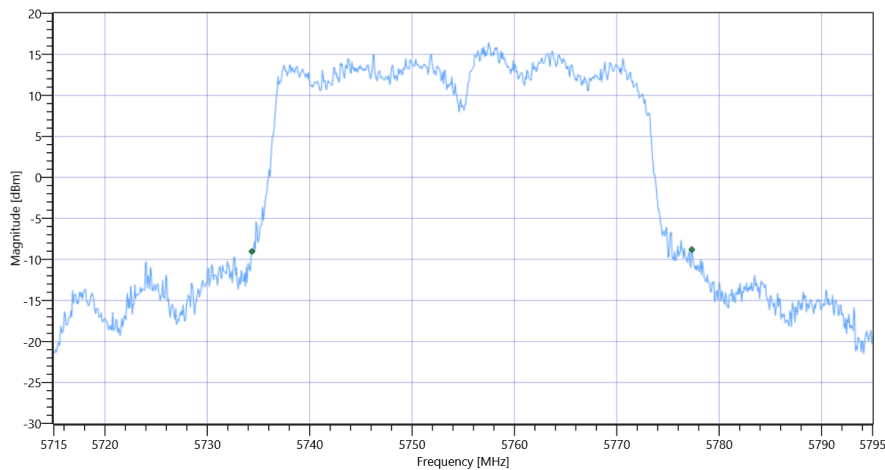
Duty Cycle evaluation

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	---	---	42.96	MHz	INFO
T1 26dB	---	---	5734.3600	MHz	INFO
T2 26dB	---	---	5777.3200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3_BW

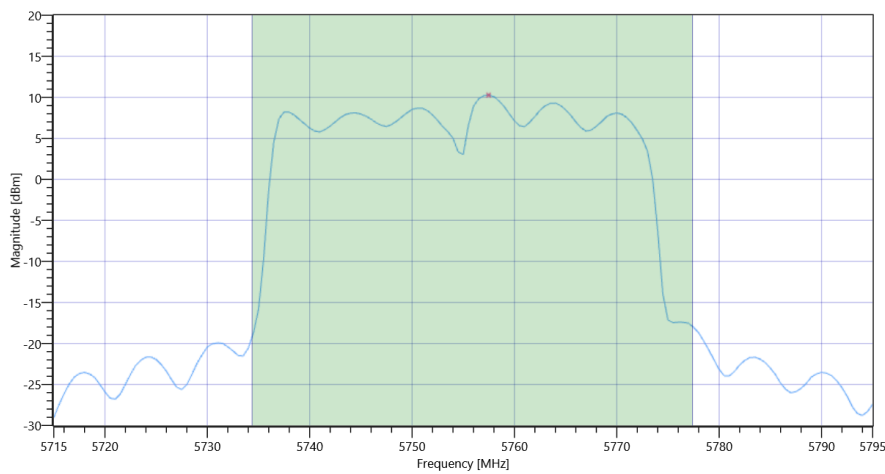
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.65 5.47 40
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

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 42.96					
Max Output Power DC corrected	---	27.33	22.96	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

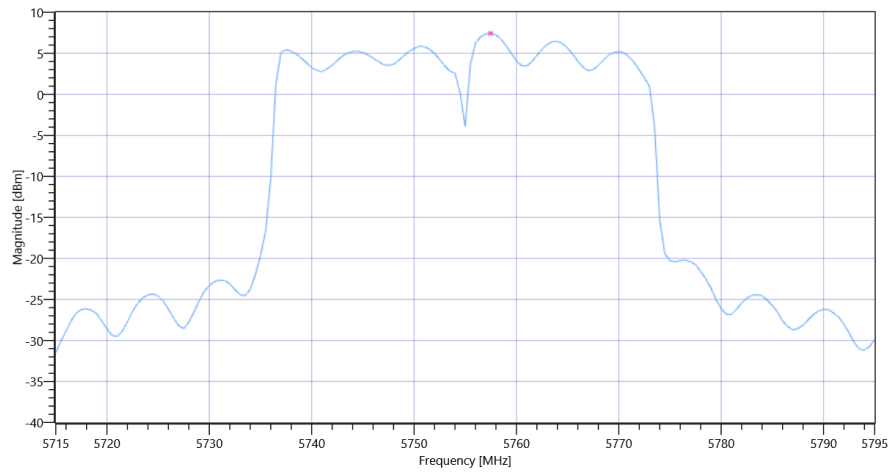
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.65 5.47 45
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.43	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.43	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:18:28
Ambit Temp [°C] Humidity [rel%]	25.2 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	3
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]	-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 5755 MHz

RESULT: Reference Power cond.

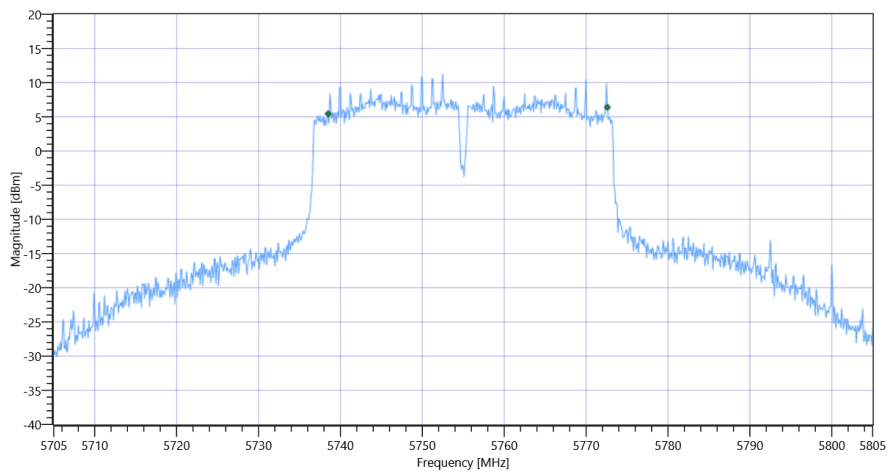
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.44	dBm	INFO
Ref. Frequency	---	---	5744.010	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.44 5.47 40
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	34.1	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:17:36
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	3
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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.10	dBm	INFO
Ref. Frequency	---	---	5762.390	MHz	INFO

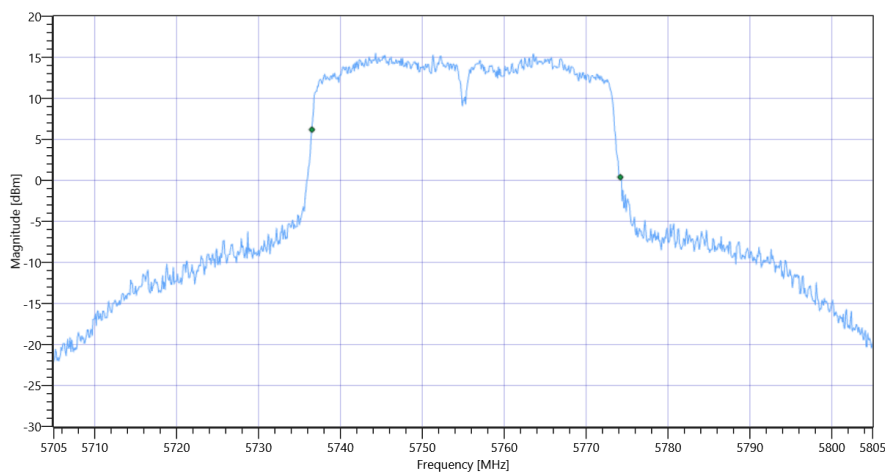
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.10 5.47 40
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

RESULT

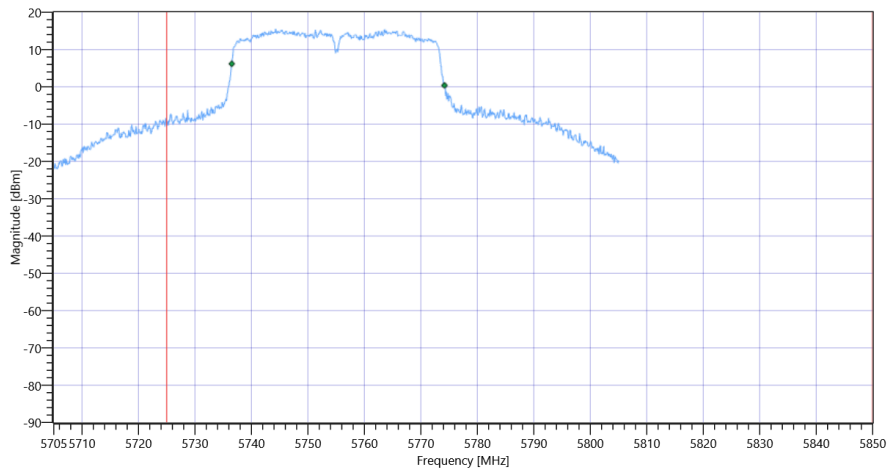
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.662	MHz	INFO
T1 99%	5725.000000	---	5736.5185	MHz	PASS
T2 99%	---	5850.000000	5774.1808	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band

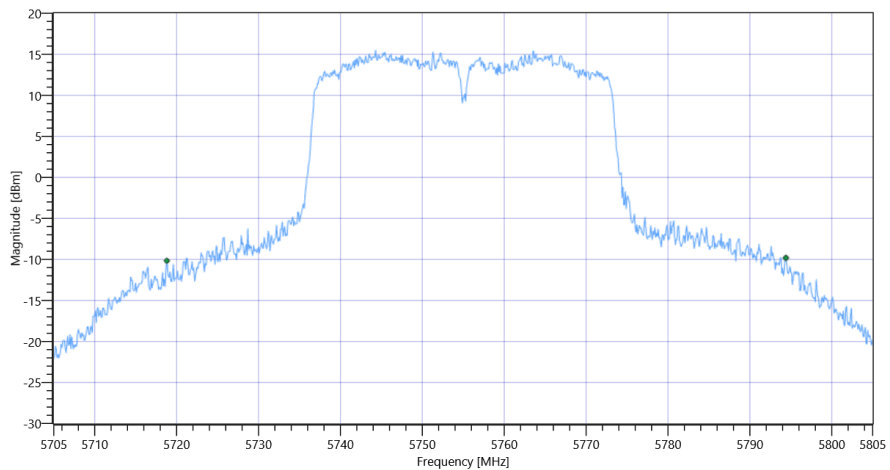


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

RESULT

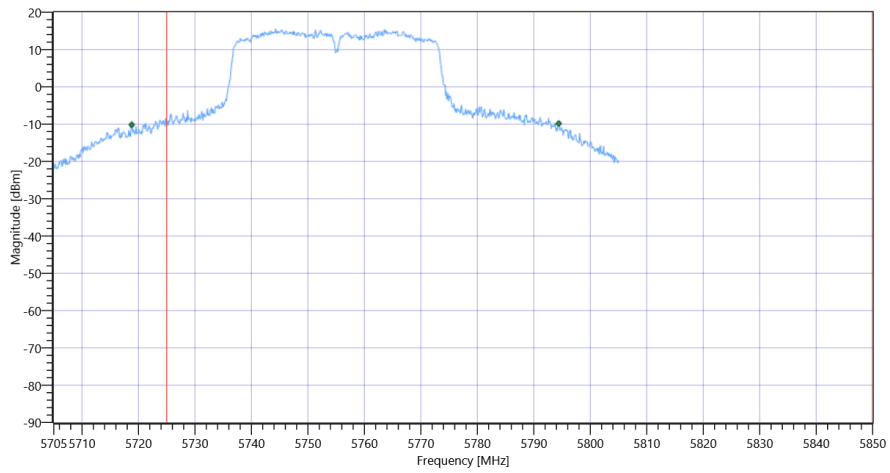
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	75.6	MHz	INFO
T1 26dB	5725.000000	---	5718.8000	MHz	DFS required
T2 26dB	---	5850.000000	5794.4000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:14:58
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	3
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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.47	dBm	INFO
Ref. Frequency	---	---	5746.810	MHz	INFO

Evaluation max. Duty Cycle

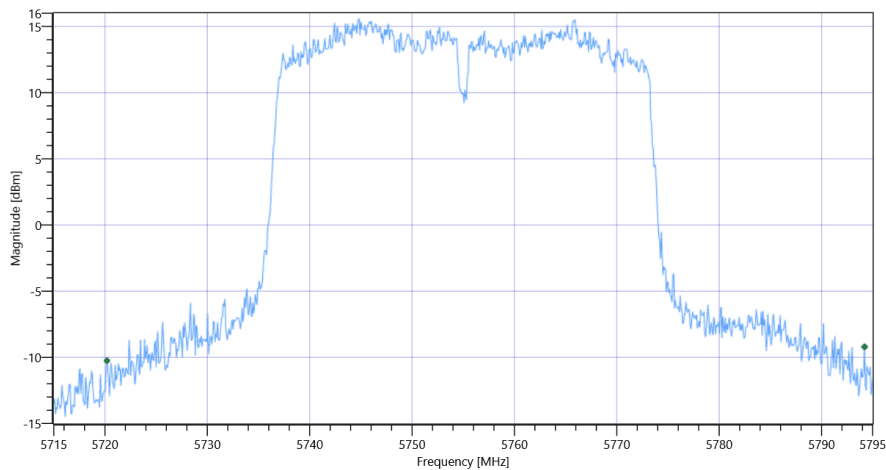
Duty Cycle evaluation

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	---	---	74	MHz	INFO
T1 26dB	---	---	5720.2000	MHz	INFO
T2 26dB	---	---	5794.2000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3_BW

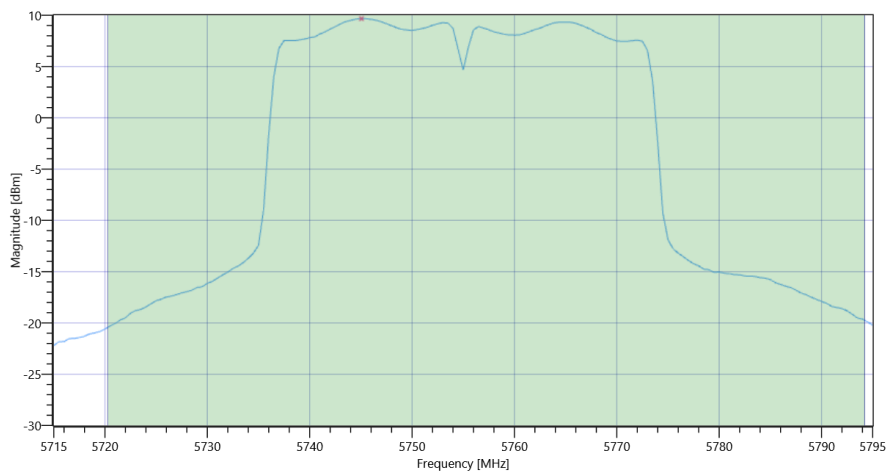
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.47 5.47 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.89	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.89	dBm	PASS
Limit: 11 dBm + 10 log 74					
Max Output Power DC corrected	---	29.69	23.89	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

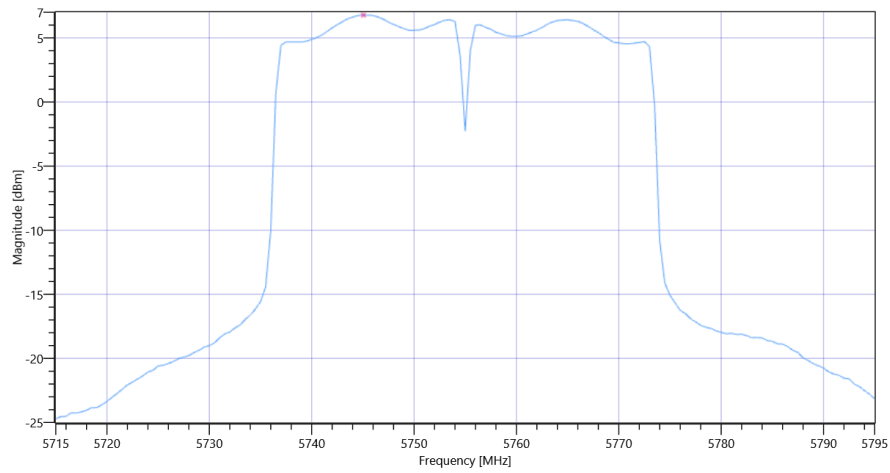
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.47 5.47 45
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.78	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	6.78	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:14:29
Ambit Temp [°C] Humidity [rel%]	25.2 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

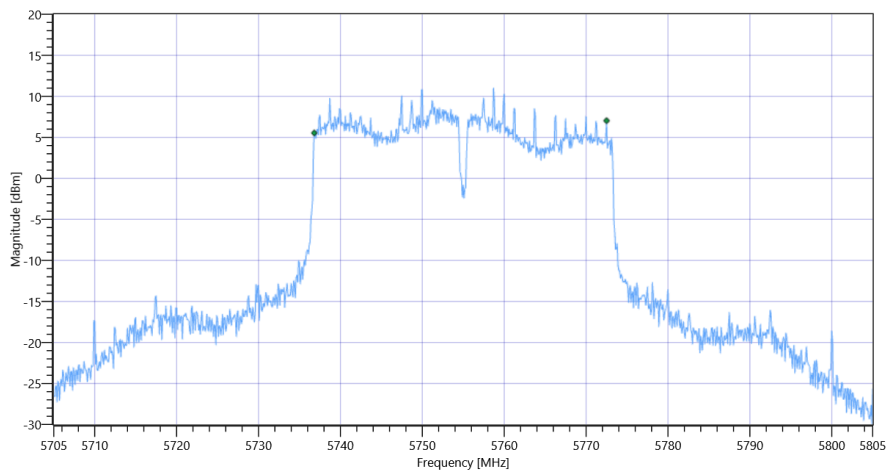
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.67	dBm	INFO
Ref. Frequency	---	---	5753.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.67 5.47 45
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	35.7	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:13:36
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.13	dBm	INFO
Ref. Frequency	---	---	5752.800	MHz	INFO

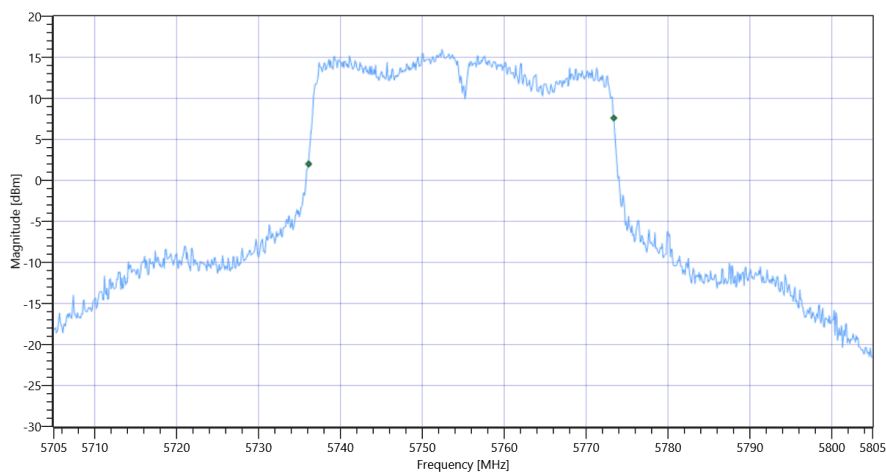
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.13 5.47 40
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

RESULT

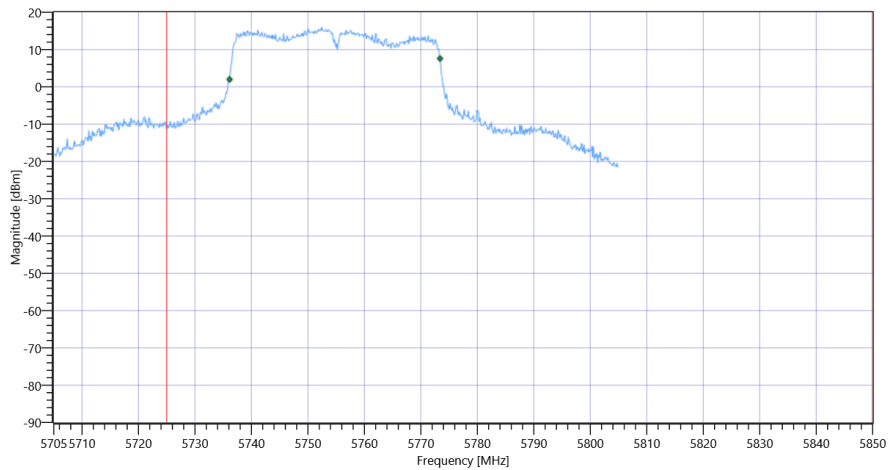
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37.263	MHz	INFO
T1 99%	5725.000000	---	5736.1189	MHz	PASS
T2 99%	---	5850.000000	5773.3816	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band

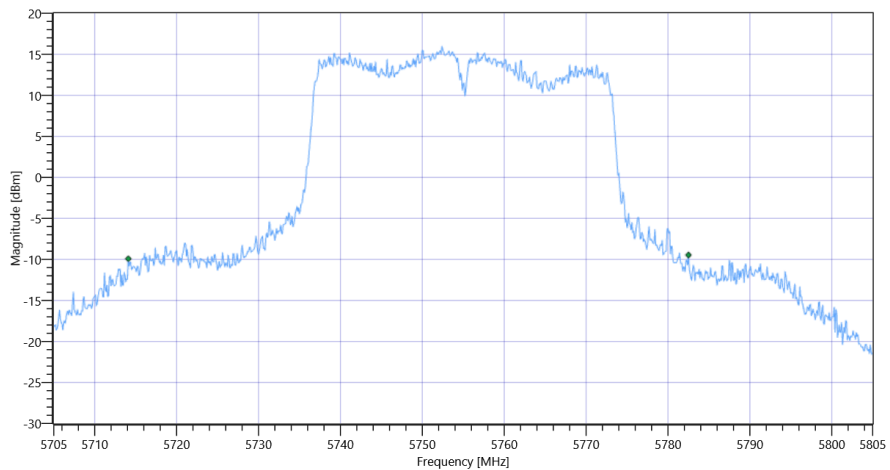


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

RESULT

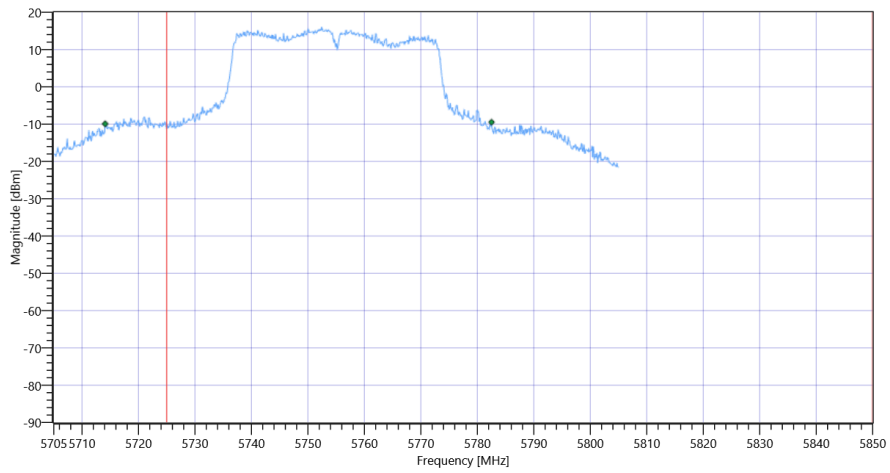
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	68.4	MHz	INFO
T1 26dB	5725.000000	---	5714.1000	MHz	DFS required
T2 26dB	---	5850.000000	5782.5000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:10:58
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.76	dBm	INFO
Ref. Frequency	---	---	5752.600	MHz	INFO

Evaluation max. Duty Cycle

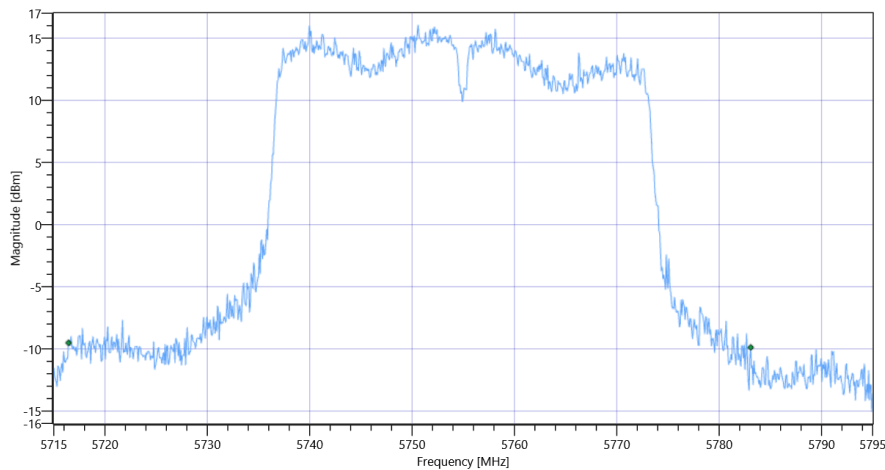
Duty Cycle evaluation

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	---	---	66.64	MHz	INFO
T1 26dB	---	---	5716.4400	MHz	INFO
T2 26dB	---	---	5783.0800	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3_BW

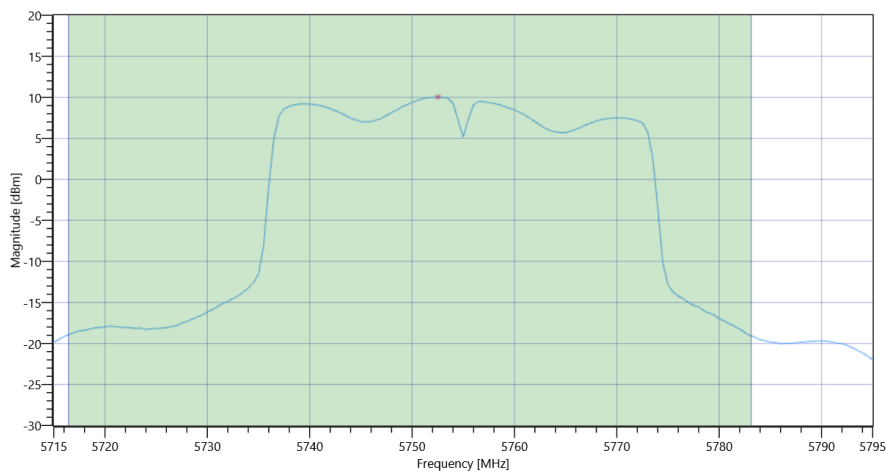
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.76 5.47 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.53	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.53	dBm	PASS
Limit: 11 dBm + 10 log 66.64					
Max Output Power DC corrected	---	29.24	23.53	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

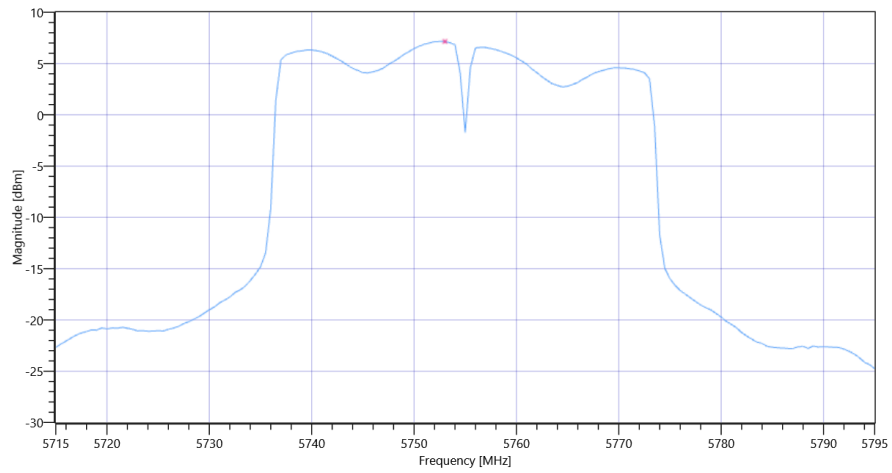
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.76 5.47 45
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.15	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.15	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:10:29
Ambit Temp [°C] Humidity [rel%]	25.2 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

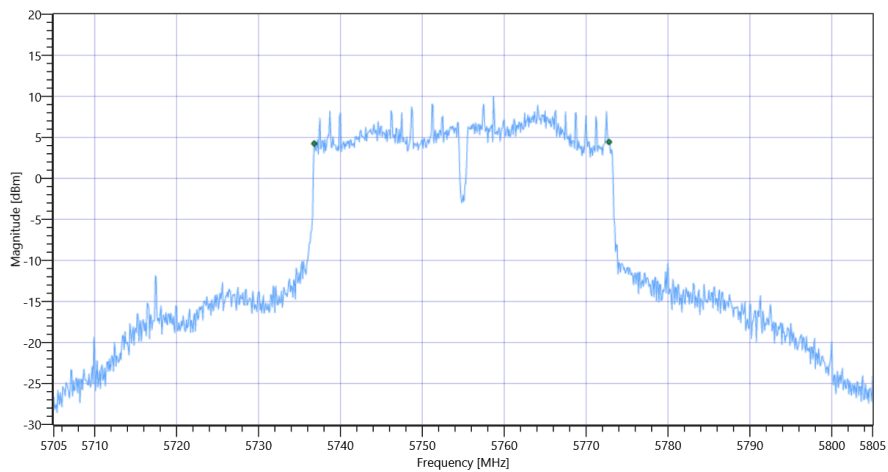
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.86	dBm	INFO
Ref. Frequency	---	---	5763.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.86 5.47 40
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	36	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:09:36
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.21	dBm	INFO
Ref. Frequency	---	---	5763.790	MHz	INFO

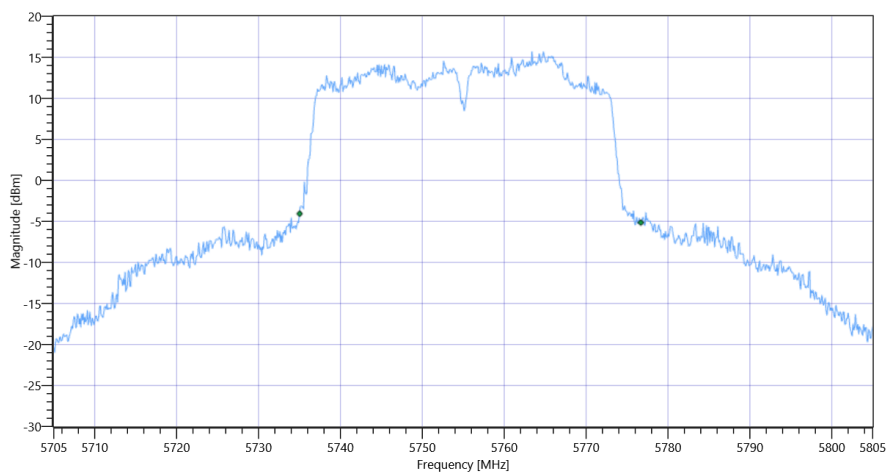
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.21 5.47 40
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

RESULT

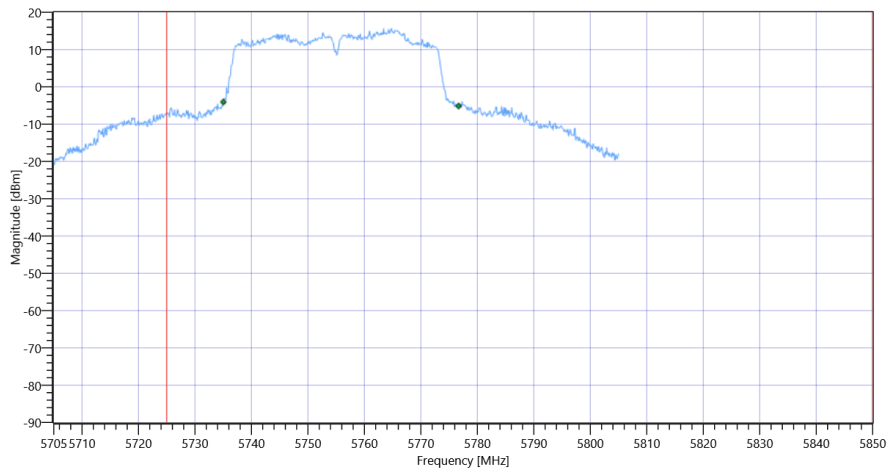
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	41.658	MHz	INFO
T1 99%	5725.000000	---	5735.0200	MHz	PASS
T2 99%	---	5850.000000	5776.6783	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band

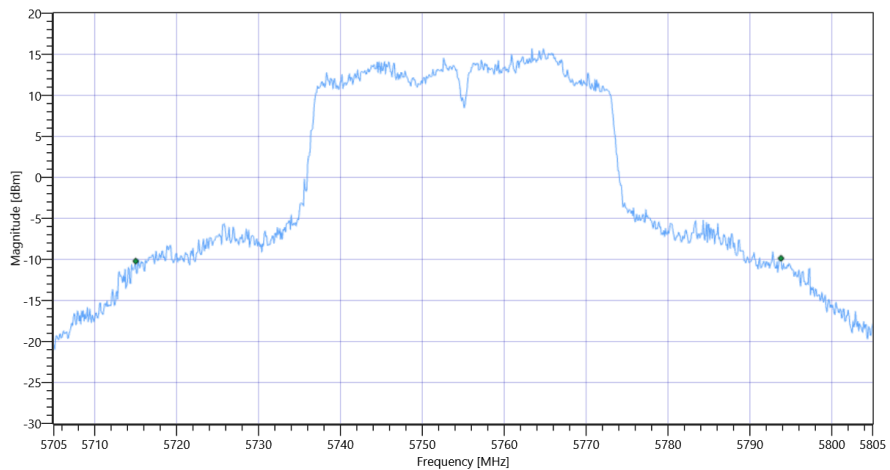


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

RESULT

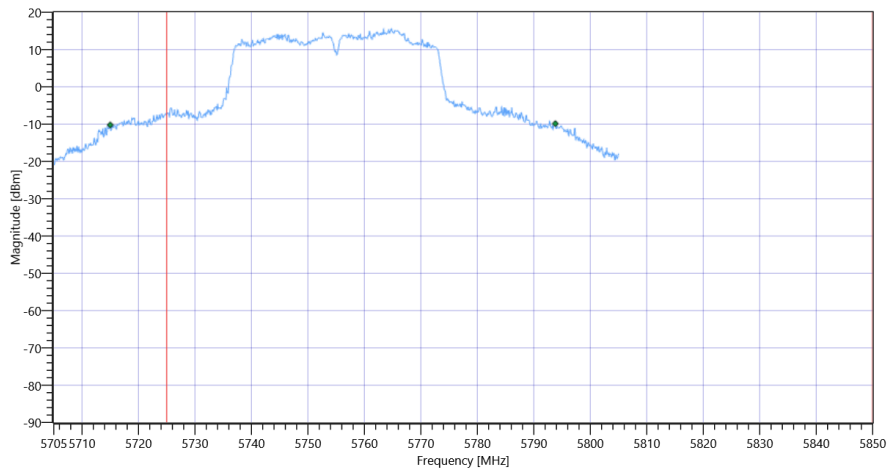
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	78.8	MHz	INFO
T1 26dB	5725.000000	---	5715.0000	MHz	DFS required
T2 26dB	---	5850.000000	5793.8000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:06:58
Ambit Temp [°C] Humidity [rel%]	25.2 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 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]	-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 5755 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.03	dBm	INFO
Ref. Frequency	---	---	5764.590	MHz	INFO

Evaluation max. Duty Cycle

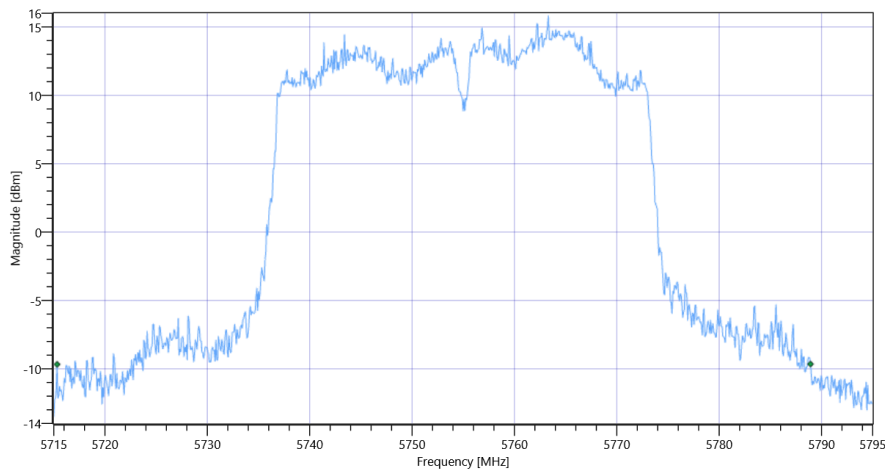
Duty Cycle evaluation

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	---	---	73.6	MHz	INFO
T1 26dB	---	---	5715.3200	MHz	INFO
T2 26dB	---	---	5788.9200	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3_BW

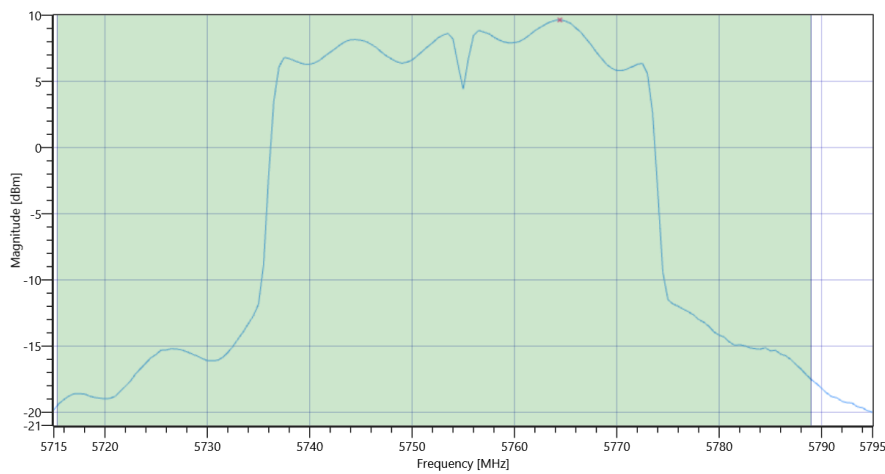
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.03 5.47 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.04	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.04	dBm	PASS
Limit: 11 dBm + 10 log 73.6					
Max Output Power DC corrected	---	29.67	23.04	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

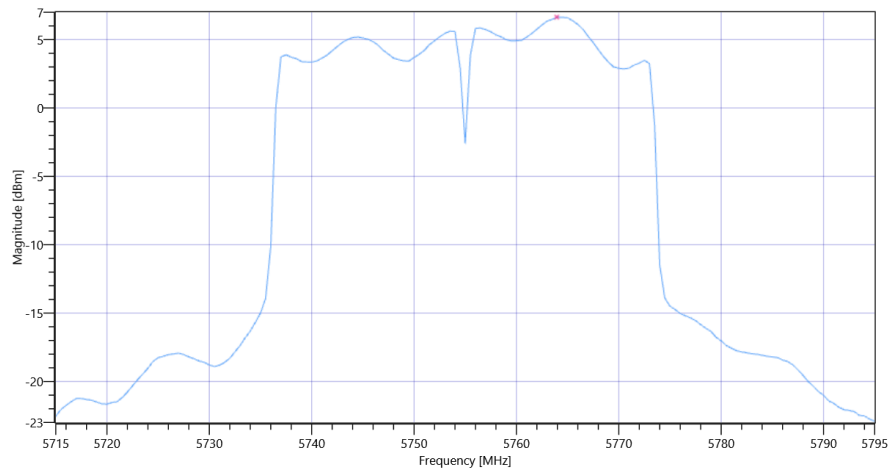
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.03 5.47 40
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

RESULT

Test 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



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

FCC 15.247 # MIMO Power PSD Calculator ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:40:51
Ambit Temp [°C] Humidity [rel%]	25.3 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 ac-VHT40 mode U-NII-3
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 ac-VHT40 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]	-10
Switched Path	None

Test Equipment

Test at TX 5795 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	22.75	dBm	INFO
Ant:1 BW 26dB	--	--	76.560	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	23.09	dBm	INFO
Ant:2 BW 26dB	--	--	68.400	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	24.1	dBm	INFO
Ant:3 BW 26dB	--	--	74.720	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	22.82	dBm	INFO
Ant:4 BW 26dB	--	--	43.520	MHz	INFO
Σ Limit absolute	--	30	29.25	dBm	PASS
Σ Limit: 11 dBm + 10 log 43.52	--	27.39	29.25	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	5.9	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	6.21	dBm/0.5MHz	INFO
Ant:3 PSD	--	--	6.87	dBm/0.5MHz	INFO
Ant:4 PSD	--	--	6.86	dBm/0.5MHz	INFO
Σ	--	30	12.5	dBm/0.5MHz	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:40:21
Ambit Temp [°C] Humidity [rel%]	25.3 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5795 MHz

RESULT: Reference Power cond.

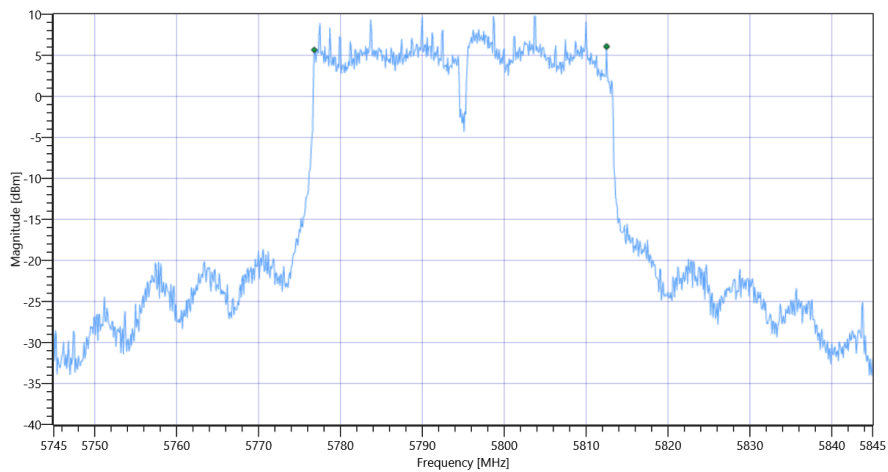
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.32	dBm	INFO
Ref. Frequency	---	---	5797.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.32 5.37 40
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	35.7	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:39:29
Ambit Temp [°C] Humidity [rel%]	25.3 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5795 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.71	dBm	INFO
Ref. Frequency	---	---	5797.200	MHz	INFO

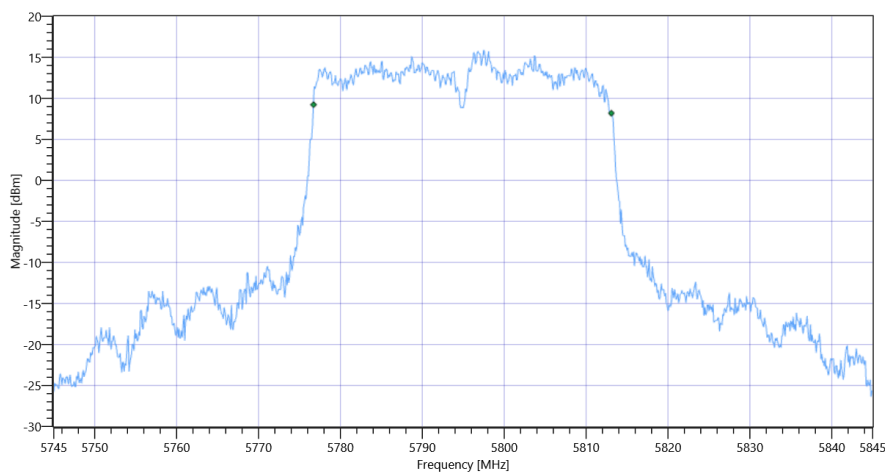
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.71 5.37 40
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

RESULT

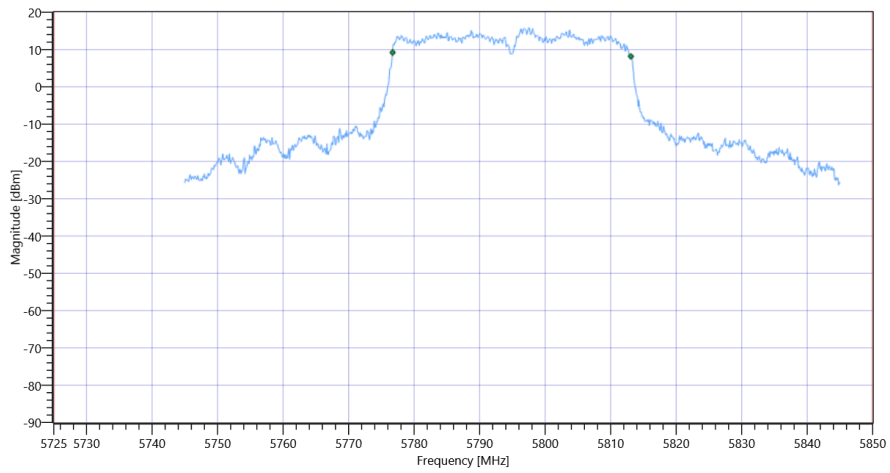
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.364	MHz	INFO
T1 99%	5725.000000	---	5776.7183	MHz	PASS
T2 99%	---	5850.000000	5813.0819	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band

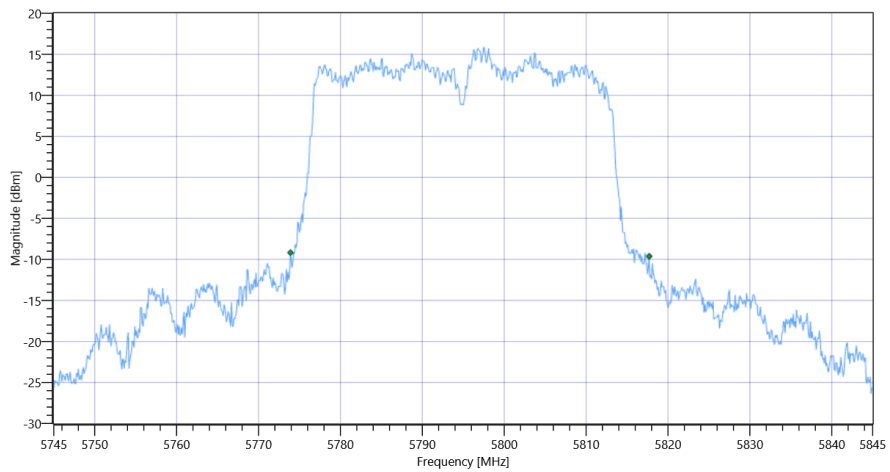


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

RESULT

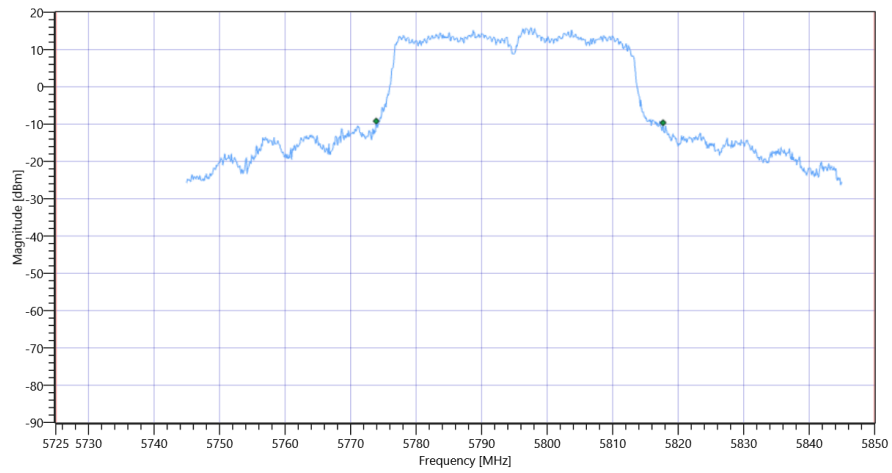
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	43.8	MHz	INFO
T1 26dB	5725.000000	---	5773.9000	MHz	PASS
T2 26dB	---	5850.000000	5817.7000	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:36:51
Ambit Temp [°C] Humidity [rel%]	25.3 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	4
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]	-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 5795 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	17.31	dBm	INFO
Ref. Frequency	---	---	5796.400	MHz	INFO

Evaluation max. Duty Cycle

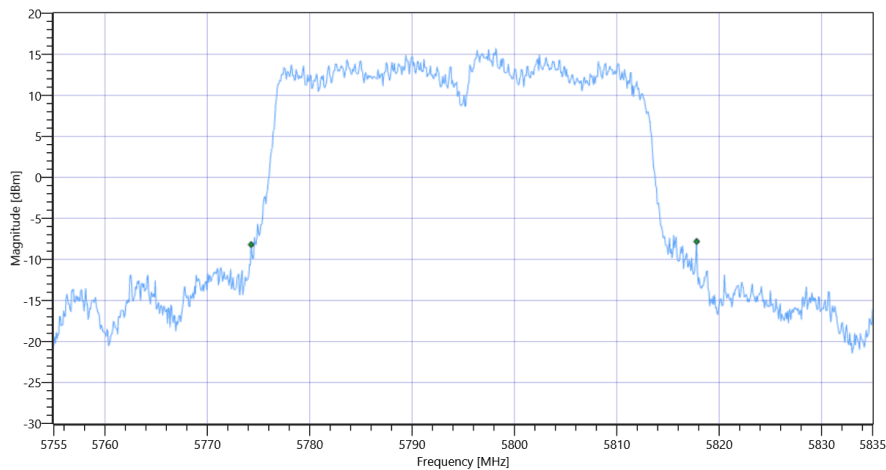
Duty Cycle evaluation

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	---	---	43.52	MHz	INFO
T1 26dB	---	---	5774.2800	MHz	INFO
T2 26dB	---	---	5817.8000	MHz	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3_BW

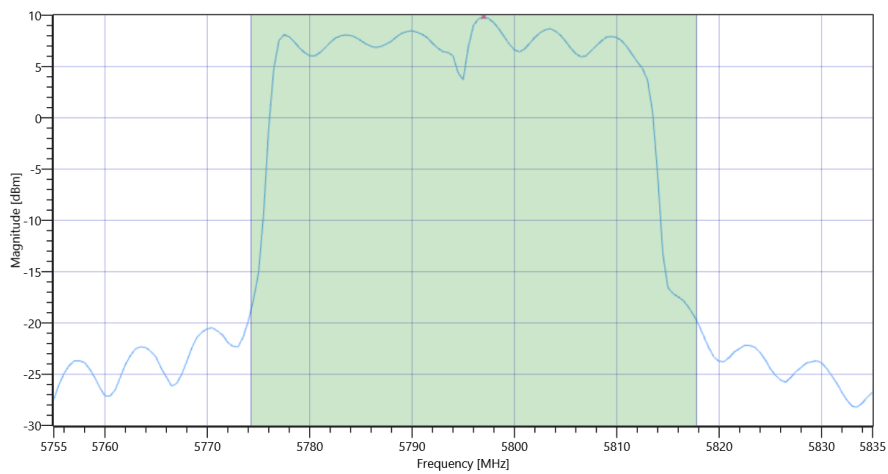
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.31 5.37 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.82	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.82	dBm	PASS
Limit: 11 dBm + 10 log 43.52					
Max Output Power DC corrected	---	27.39	22.82	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

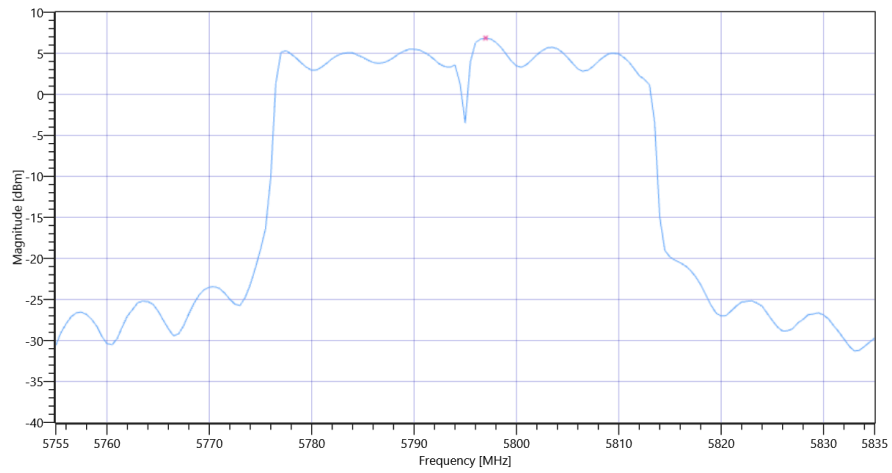
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.31 5.37 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.86	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	6.86	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:36:22
Ambit Temp [°C] Humidity [rel%]	25.3 20
System Version	3.3.3.0
Test Specification	FCC 15.407, ISED RSS247 -
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	3
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]	-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 5795 MHz

RESULT: Reference Power cond.

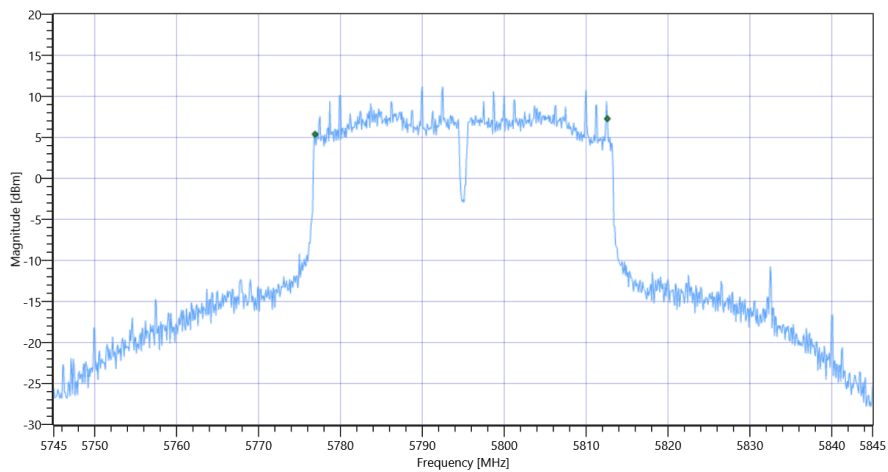
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.54	dBm	INFO
Ref. Frequency	---	---	5787.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.54 5.37 45
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	35.7	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ac-VHT40 mode U-NII-3

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References

TC Start	14.12.2022 09:35:30
Ambit Temp [°C] Humidity [rel%]	25.3 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 ac-VHT40 mode U-NII-3
Add. Information	PS24

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 ac-VHT40 mode
Antenna Port used	3
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]	-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 5795 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.51	dBm	INFO
Ref. Frequency	---	---	5803.590	MHz	INFO

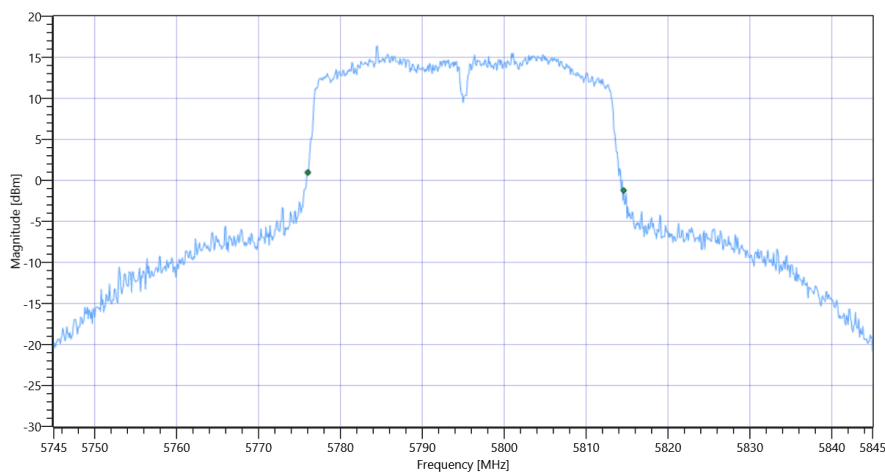
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.51 5.37 40
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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	38.561	MHz	INFO
T1 99%	5725.000000	---	5776.0190	MHz	PASS
T2 99%	---	5850.000000	5814.5804	MHz	PASS

Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

Plot: Bandwidth within Band