

Test at TX 5745 MHz

RESULT: Reference Power cond.

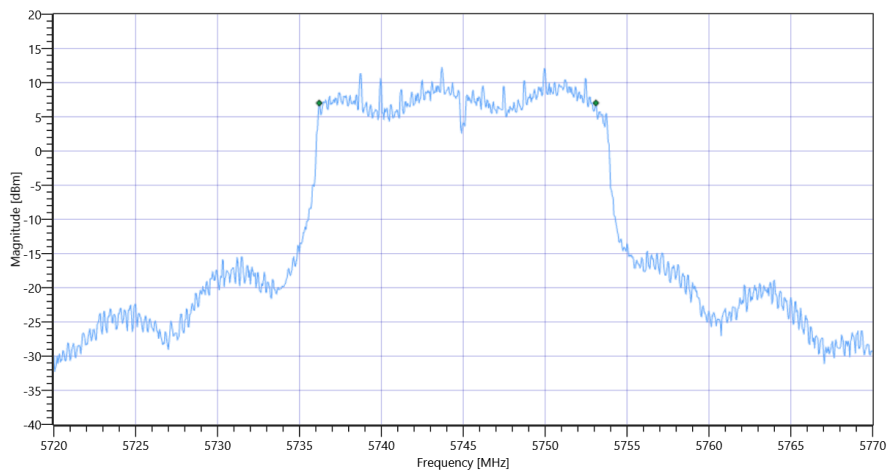
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.19	dBm	INFO
Ref. Frequency	---	---	5750.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.19 5.42 45
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	16.9	MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:07:16
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.94	dBm	INFO
Ref. Frequency	---	---	5741.800	MHz	INFO

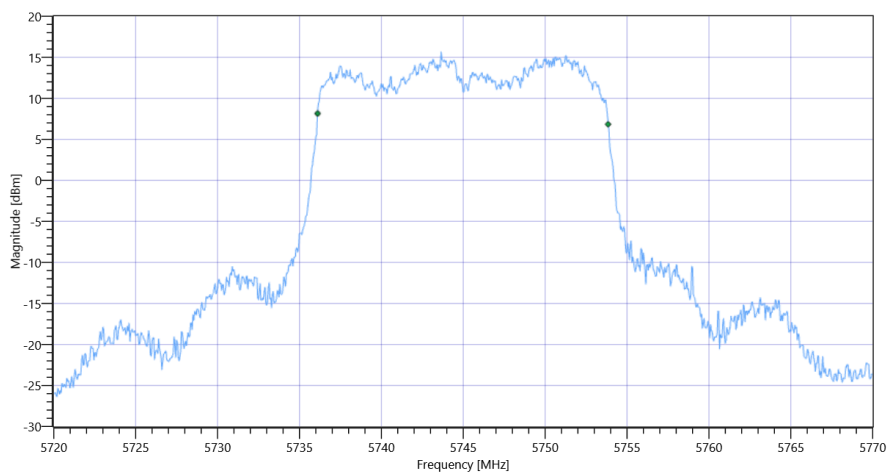
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.94 5.42 40
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

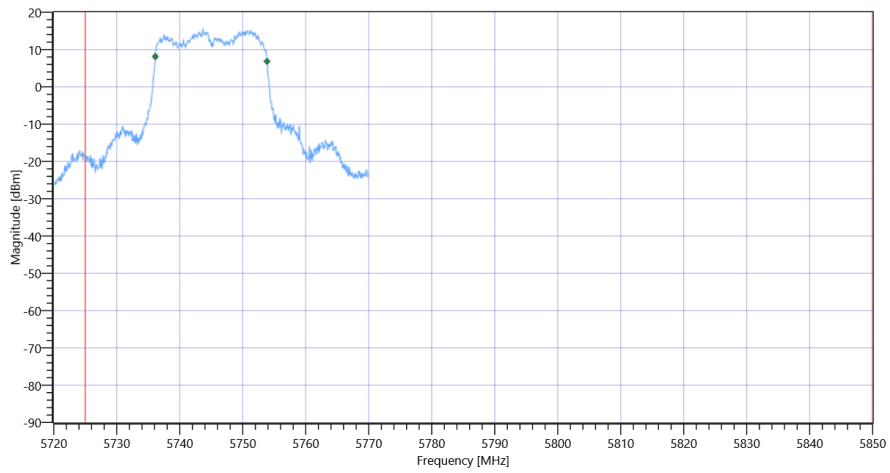
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.732	MHz	INFO
T1 99%	5725.000000	---	5736.1089	MHz	PASS
T2 99%	---	5850.000000	5753.8412	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

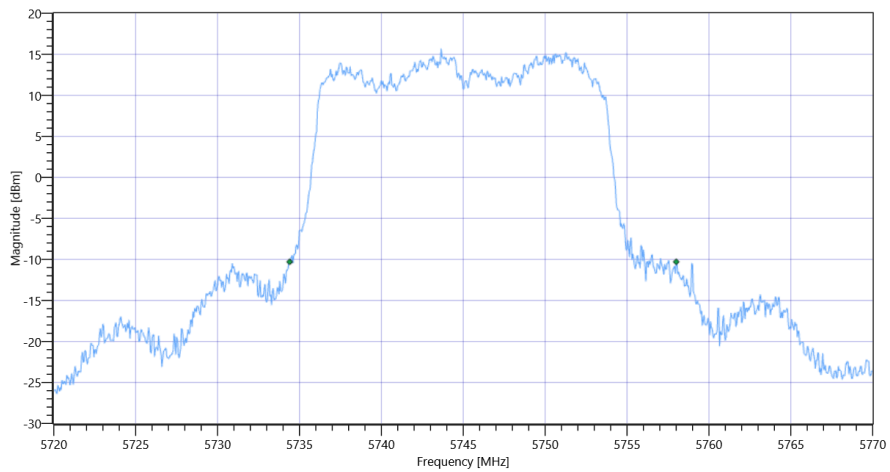


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

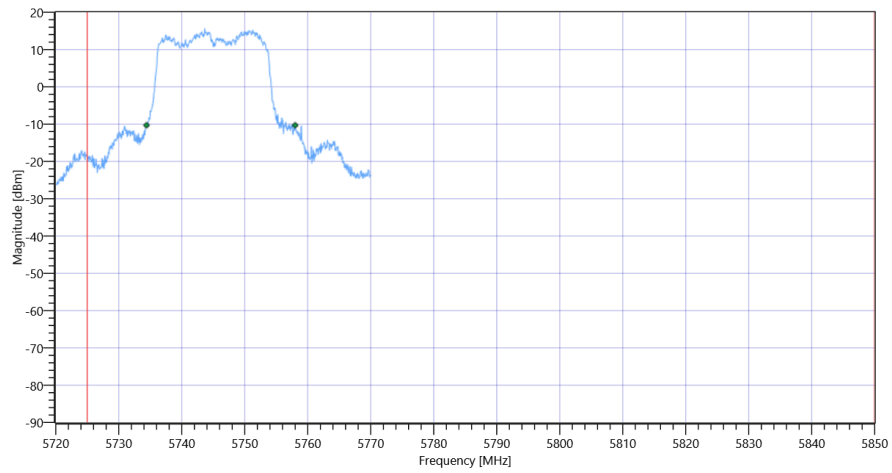
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	23.6	MHz	INFO
T1 26dB	5725.000000	---	5734.4000	MHz	PASS
T2 26dB	---	5850.000000	5758.0000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:04:36
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.29	dBm	INFO
Ref. Frequency	---	---	5743.600	MHz	INFO

Evaluation max. Duty Cycle

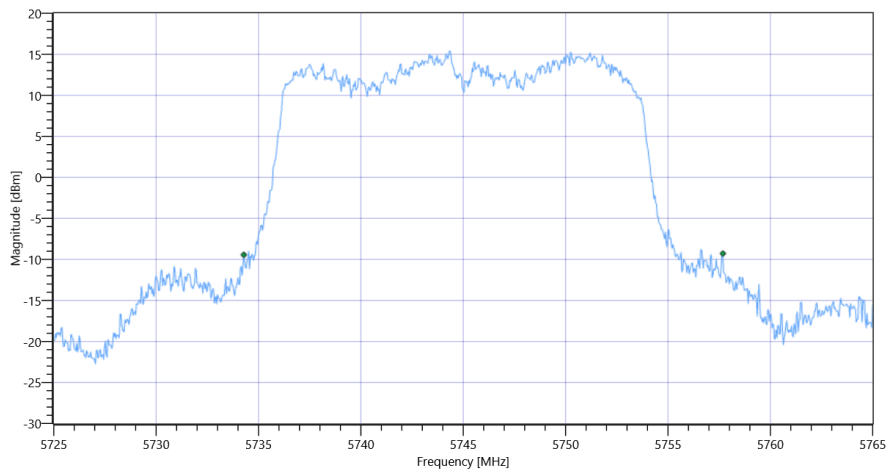
Duty Cycle evaluation

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	---	---	23.4	MHz	INFO
T1 26dB	---	---	5734.2800	MHz	INFO
T2 26dB	---	---	5757.6800	MHz	INFO



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

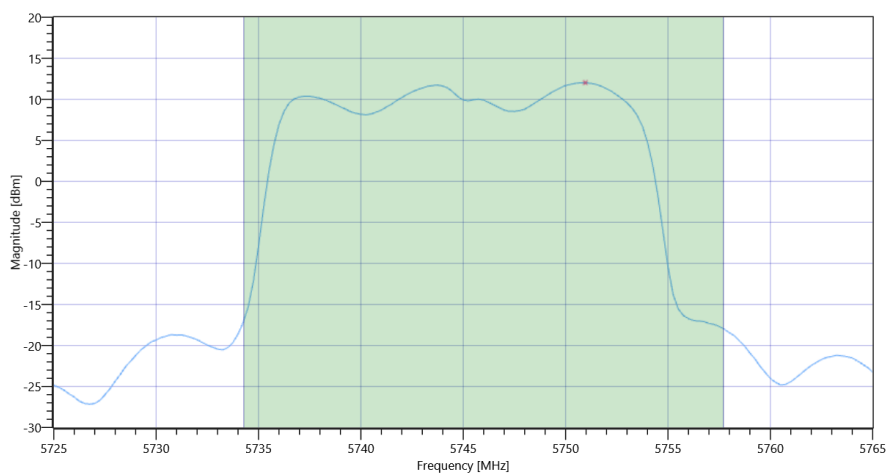
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.29 5.42 40
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.45	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.45	dBm	PASS
Limit: 11 dBm + 10 log 23.4					
Max Output Power DC corrected	---	24.69	22.45	dBm	na



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

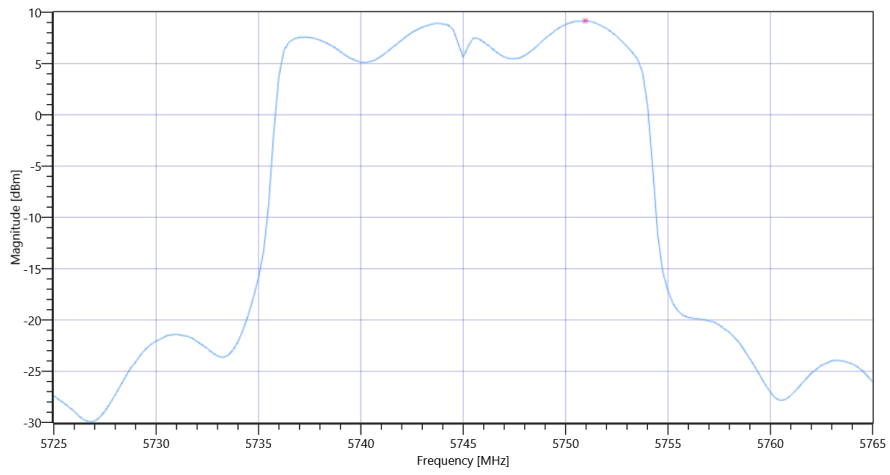
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.29 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	9.17	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	9.17	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:03:49
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

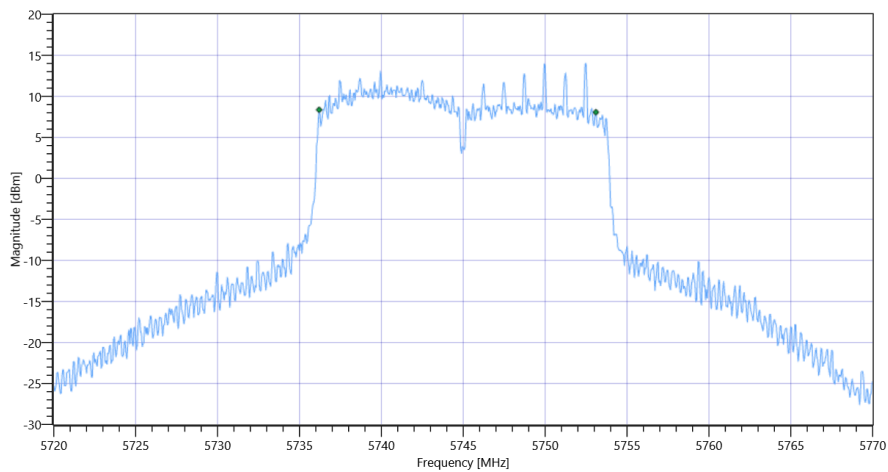
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.82	dBm	INFO
Ref. Frequency	---	---	5739.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.82 5.42 45
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	16.9	MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:02:58
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.55	dBm	INFO
Ref. Frequency	---	---	5740.000	MHz	INFO

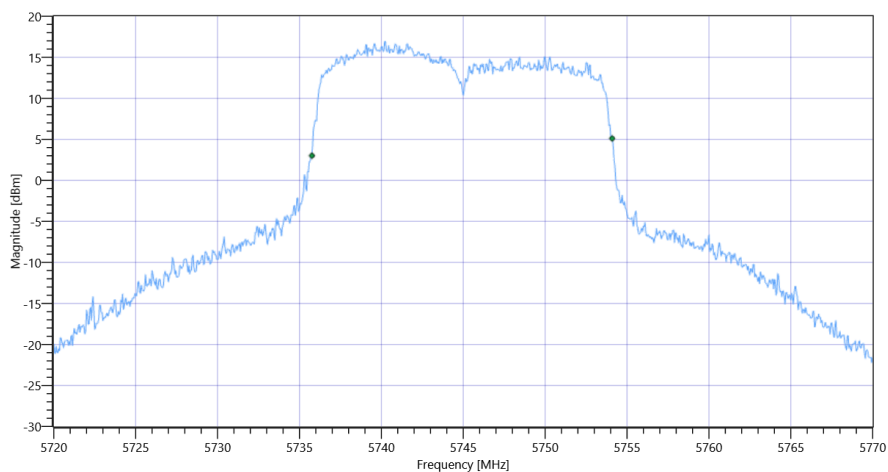
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	29.55 5.42 40
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

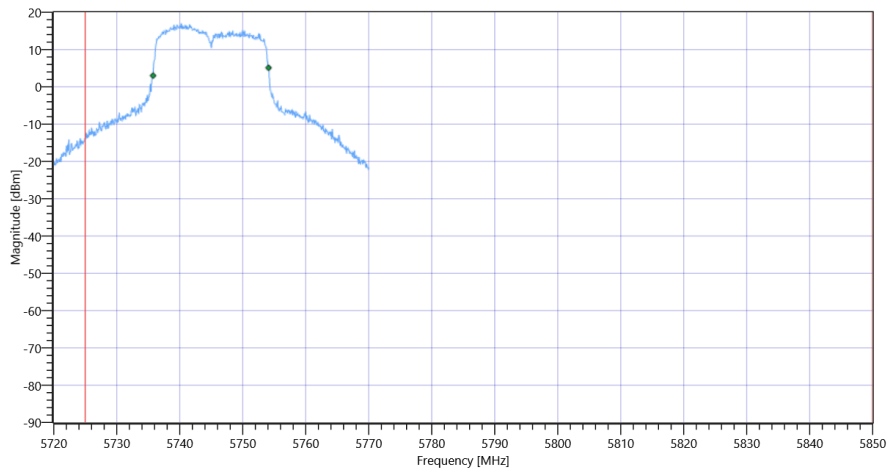
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.332	MHz	INFO
T1 99%	5725.000000	---	5735.7592	MHz	PASS
T2 99%	---	5850.000000	5754.0909	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

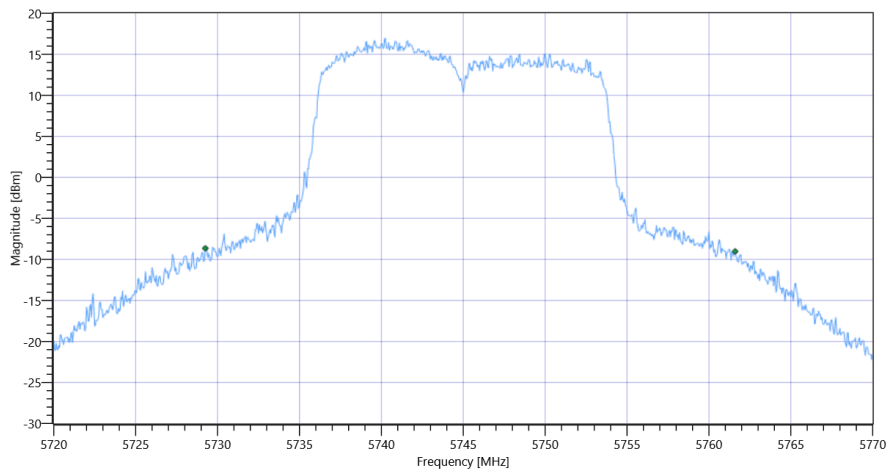


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

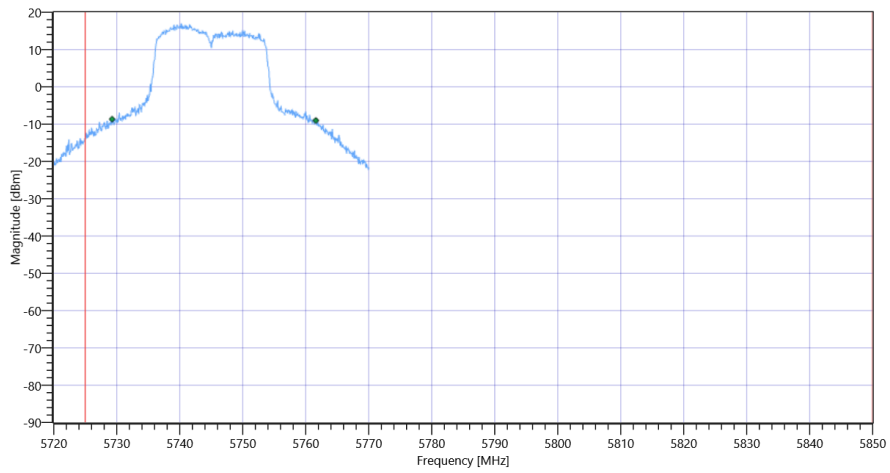
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	32.35	MHz	INFO
T1 26dB	5725.000000	---	5729.2500	MHz	PASS
T2 26dB	---	5850.000000	5761.6000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:00:19
Ambit Temp [°C] Humidity [rel%]	25.3 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.06	dBm	INFO
Ref. Frequency	---	---	5742.000	MHz	INFO

Evaluation max. Duty Cycle

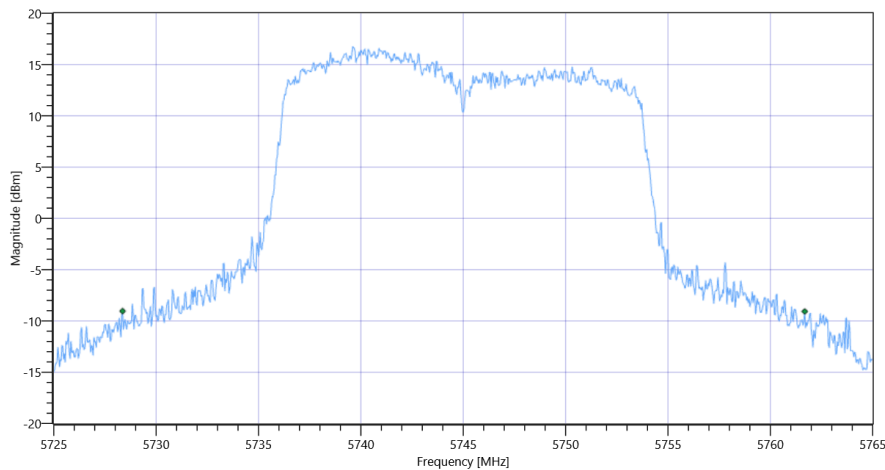
Duty Cycle evaluation

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	---	---	33.32	MHz	INFO
T1 26dB	---	---	5728.3600	MHz	INFO
T2 26dB	---	---	5761.6800	MHz	INFO



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

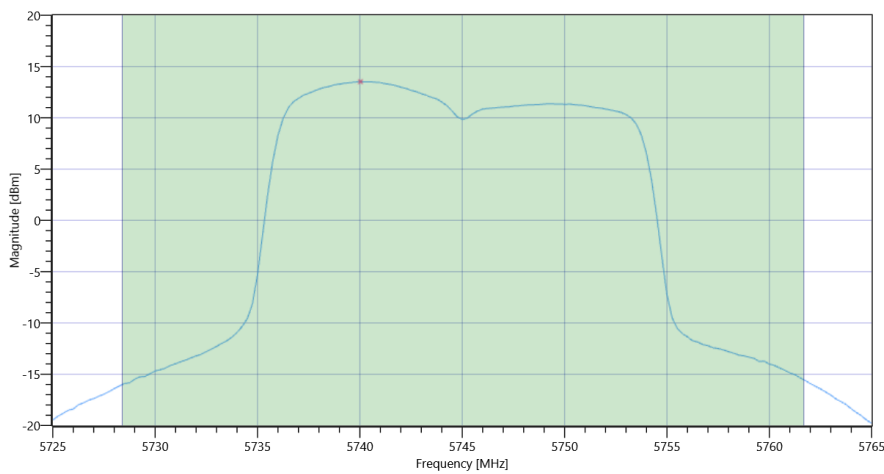
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	34.06 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	24.09	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	24.09	dBm	PASS
Limit: 11 dBm + 10 log 33.32					
Max Output Power DC corrected	---	26.23	24.09	dBm	na



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

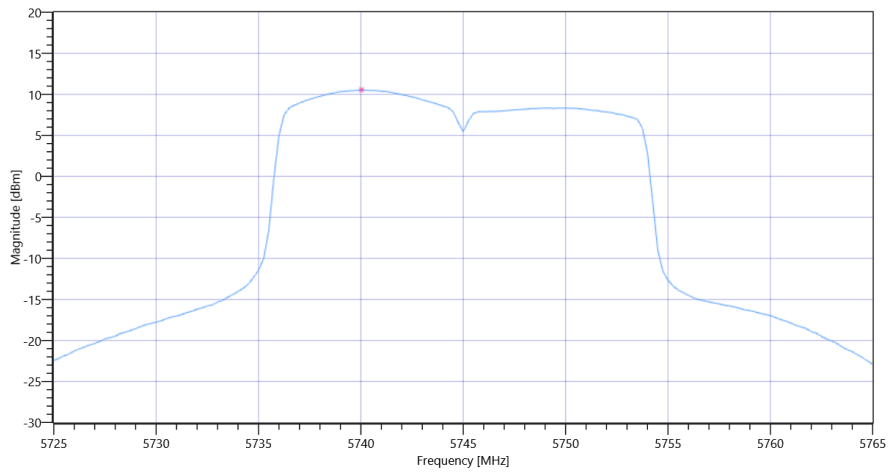
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	34.06 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	10.54	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	10.54	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 15:59:32
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

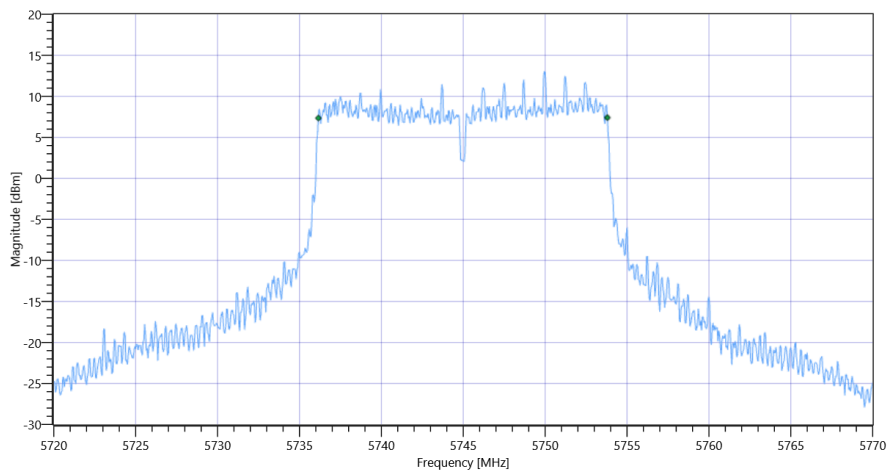
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.73	dBm	INFO
Ref. Frequency	---	---	5752.390	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.74 5.42 45
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	17.65	MHz	PASS



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

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

Test References

TC Start	13.12.2022 15:58:40
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.28	dBm	INFO
Ref. Frequency	---	---	5752.790	MHz	INFO

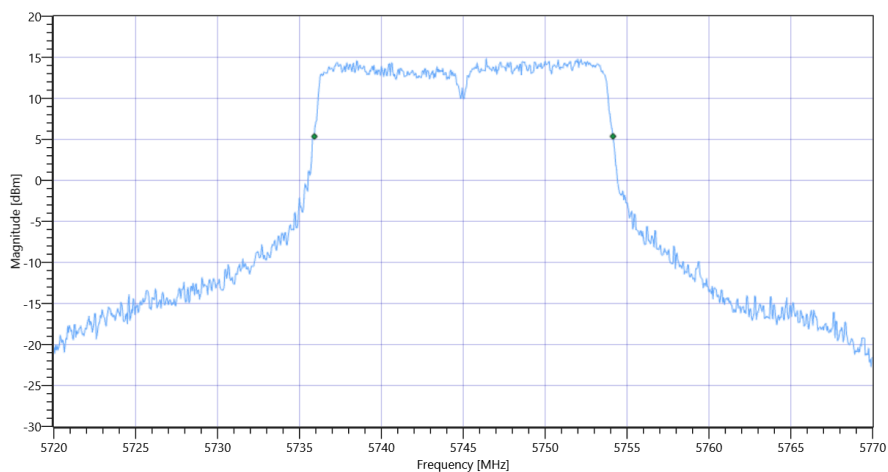
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.28 5.42 40
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

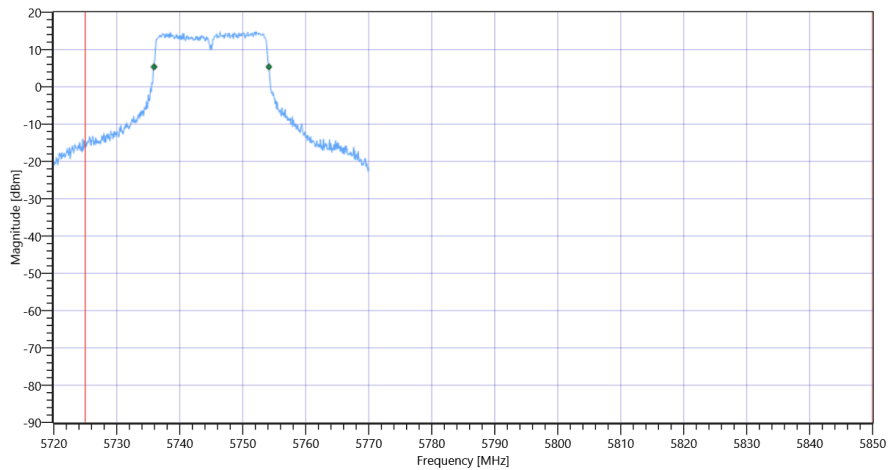
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.232	MHz	INFO
T1 99%	5725.000000	---	5735.9091	MHz	PASS
T2 99%	---	5850.000000	5754.1409	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

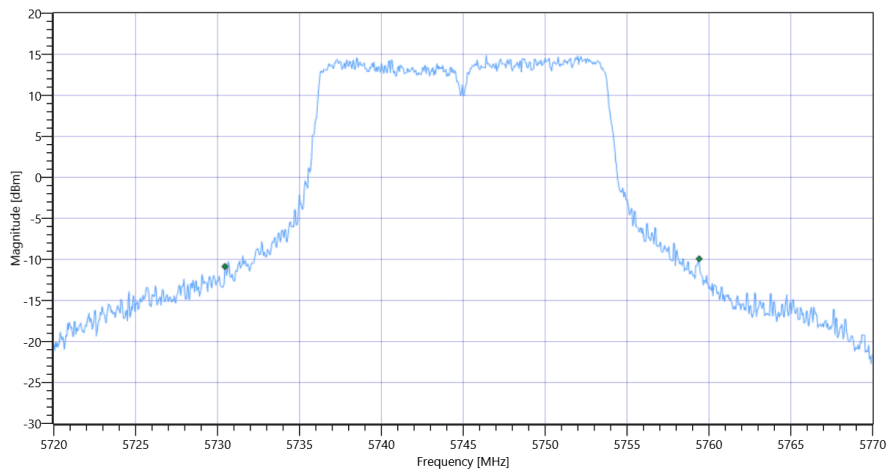


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

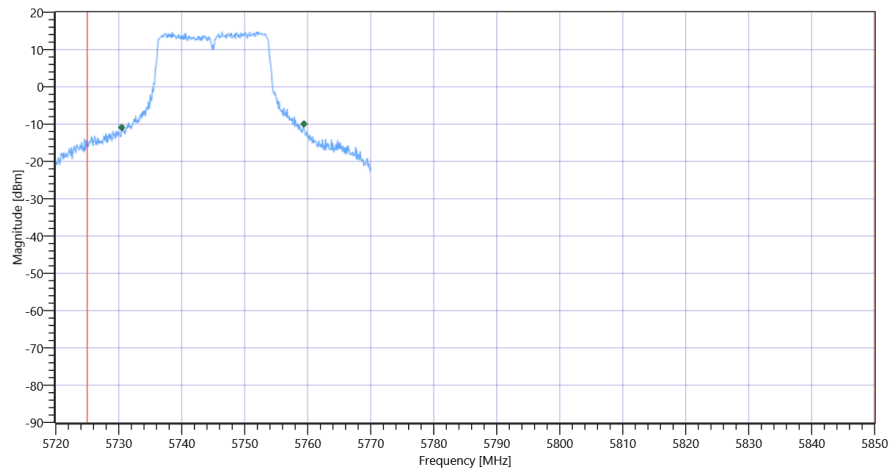
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	28.95	MHz	INFO
T1 26dB	5725.000000	---	5730.4500	MHz	PASS
T2 26dB	---	5850.000000	5759.4000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 15:56:02
Ambit Temp [°C] Humidity [rel%]	25.3 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.84	dBm	INFO
Ref. Frequency	---	---	5752.790	MHz	INFO

Evaluation max. Duty Cycle

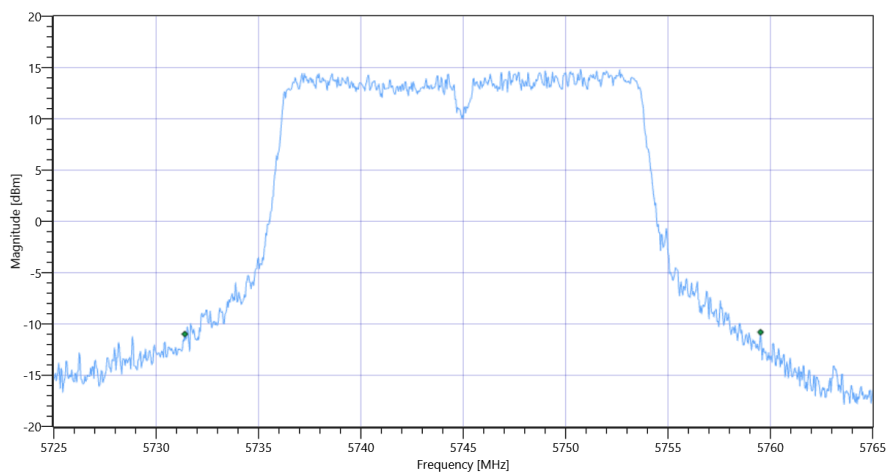
Duty Cycle evaluation

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	---	---	28.12	MHz	INFO
T1 26dB	---	---	5731.4000	MHz	INFO
T2 26dB	---	---	5759.5200	MHz	INFO



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

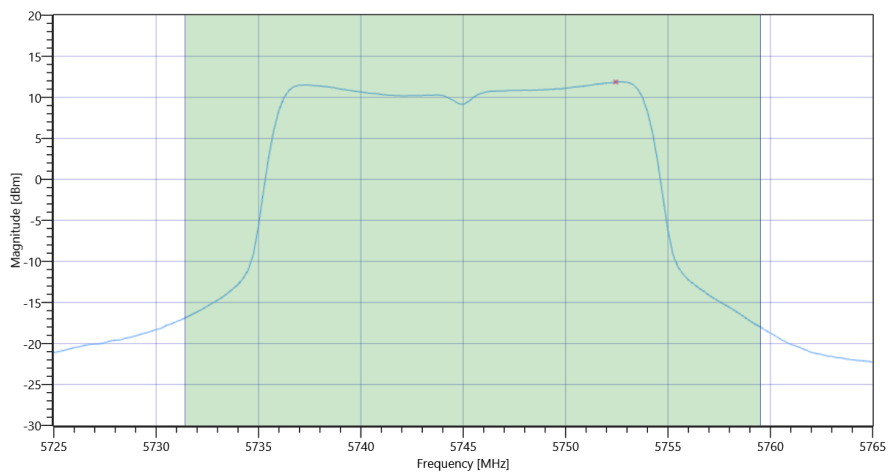
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.84 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.16	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.16	dBm	PASS
Limit: 11 dBm + 10 log 28.12					
Max Output Power DC corrected	---	25.49	23.16	dBm	na



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

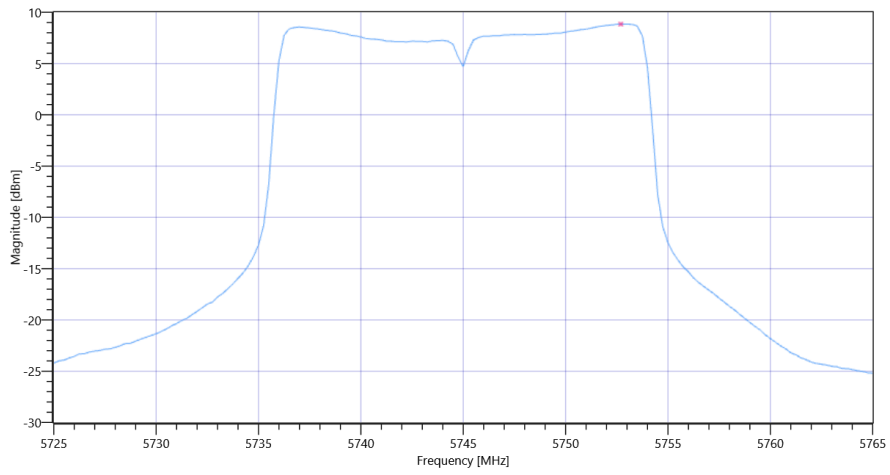
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.84 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.85	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.85	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 15:55:15
Ambit Temp [°C] Humidity [rel%]	25.3 19
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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

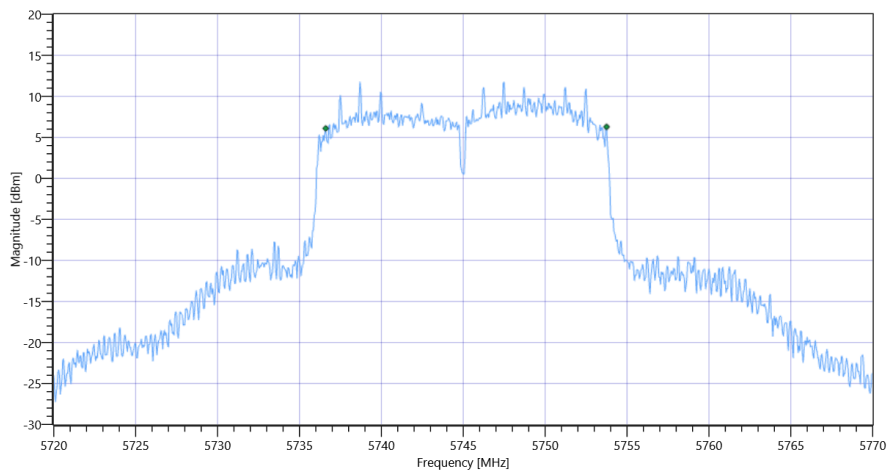
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.25	dBm	INFO
Ref. Frequency	---	---	5747.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.25 5.42 45
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	17.15	MHz	PASS



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

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

Test References

TC Start	13.12.2022 15:54:23
Ambit Temp [°C] Humidity [rel%]	25.3 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.25	dBm	INFO
Ref. Frequency	---	---	5749.600	MHz	INFO

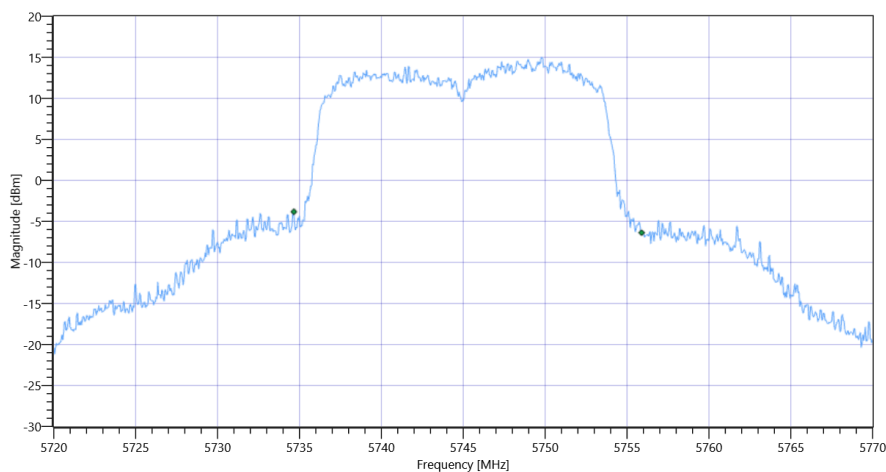
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.25 5.42 40
Start [MHz] Stop [MHz]	5720.000 5770.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

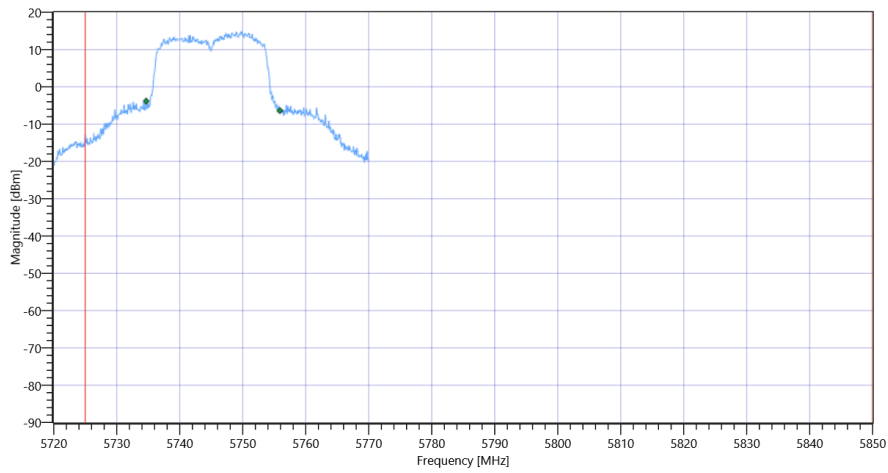
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	21.229	MHz	INFO
T1 99%	5725.000000	---	5734.6603	MHz	PASS
T2 99%	---	5850.000000	5755.8891	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

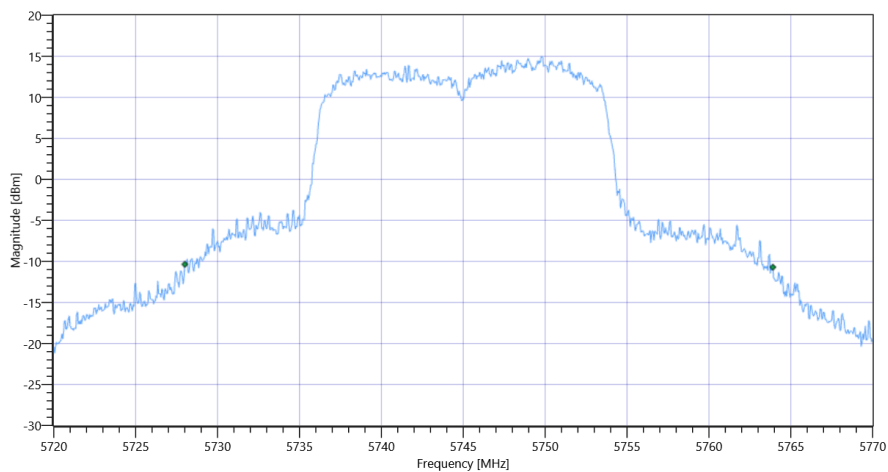


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

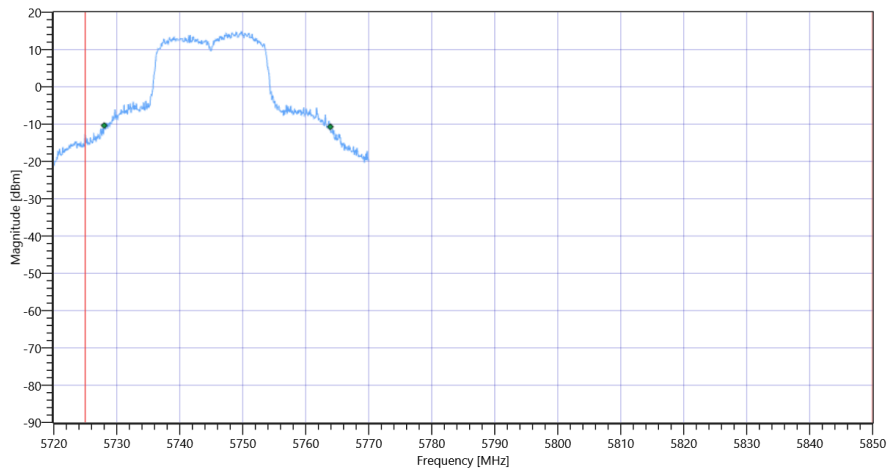
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	35.9	MHz	INFO
T1 26dB	5725.000000	---	5728.0000	MHz	PASS
T2 26dB	---	5850.000000	5763.9000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 15:51:45
Ambit Temp [°C] Humidity [rel%]	25.3 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5745 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.30	dBm	INFO
Ref. Frequency	---	---	5747.400	MHz	INFO

Evaluation max. Duty Cycle

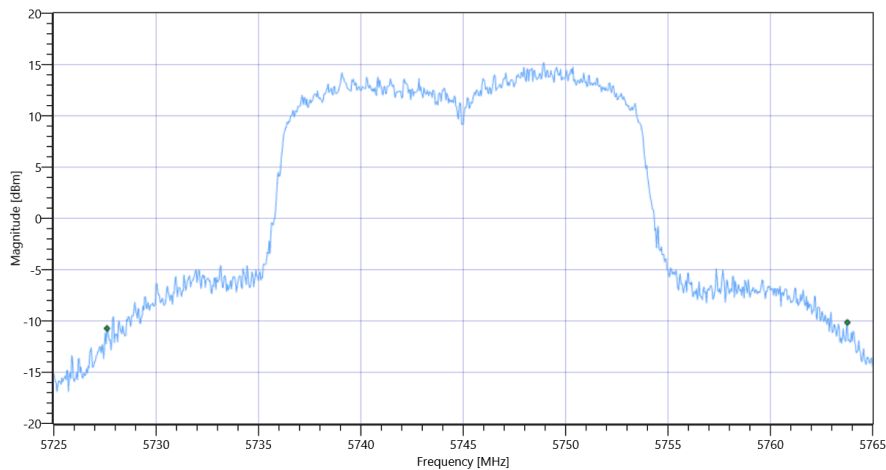
Duty Cycle evaluation

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	---	---	36.16	MHz	INFO
T1 26dB	---	---	5727.6000	MHz	INFO
T2 26dB	---	---	5763.7600	MHz	INFO



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

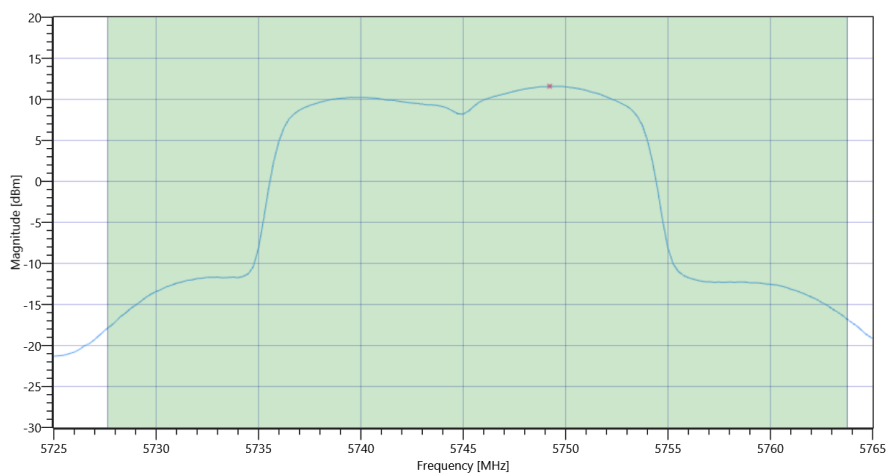
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.30 5.42 40
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.32	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.32	dBm	PASS
Limit: 11 dBm + 10 log 36.16					
Max Output Power DC corrected	---	26.58	22.32	dBm	na



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

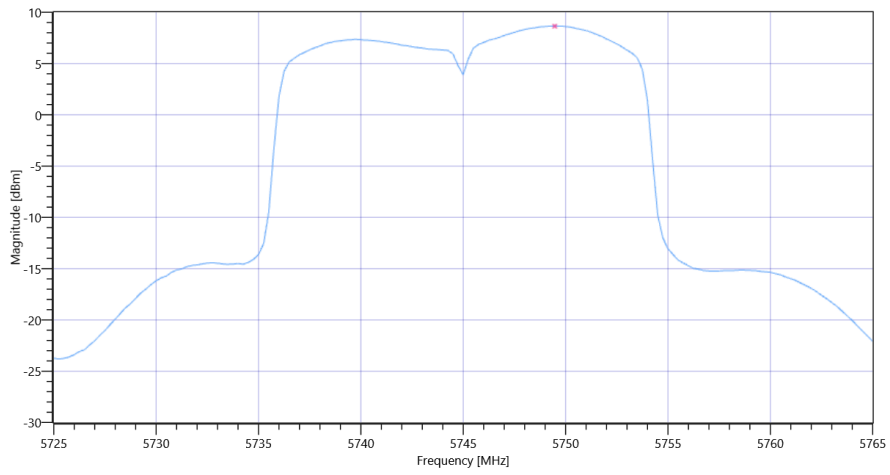
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.30 5.42 45
Start [MHz] Stop [MHz]	5725.000 5765.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.65	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.65	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:27:53
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	None

Test Equipment

Test at TX 5785 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	22.24	dBm	INFO
Ant:1 BW 26dB	--	--	33.760	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	22.77	dBm	INFO
Ant:2 BW 26dB	--	--	27.880	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	23.01	dBm	INFO
Ant:3 BW 26dB	--	--	26.440	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	22.8	dBm	INFO
Ant:4 BW 26dB	--	--	23.160	MHz	INFO
Σ Limit absolute	--	30	28.73	dBm	PASS
Σ Limit: 11 dBm + 10 log 23.16	--	24.65	28.73	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	8.36	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	7.94	dBm/0.5MHz	INFO
Ant:3 PSD	--	--	8.71	dBm/0.5MHz	INFO
Ant:4 PSD	--	--	9.25	dBm/0.5MHz	INFO
Σ	--	30	14.61	dBm/0.5MHz	PASS

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

Test References

TC Start	13.12.2022 16:27:01
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

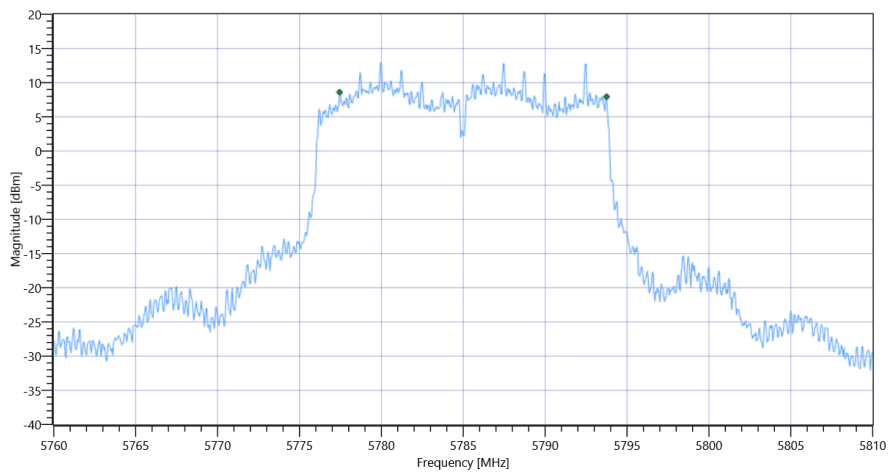
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.17	dBm	INFO
Ref. Frequency	---	---	5779.610	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.17 5.4 45
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	16.3	MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:26:08
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.61	dBm	INFO
Ref. Frequency	---	---	5781.000	MHz	INFO

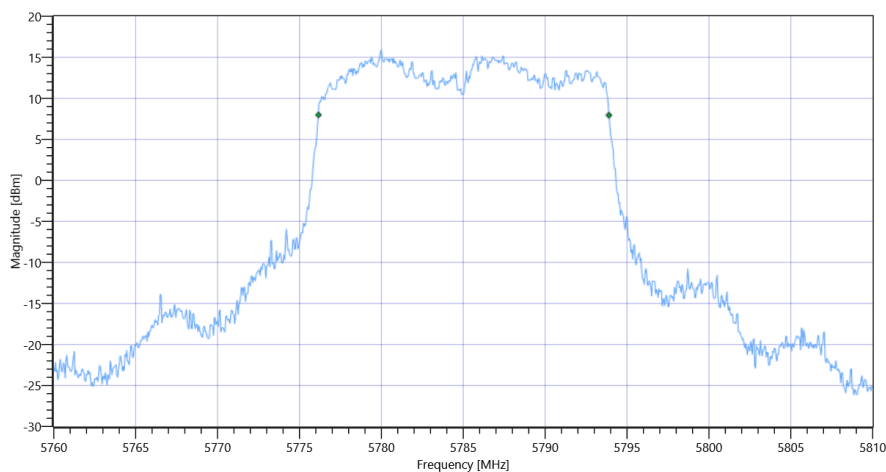
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.61 5.4 40
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

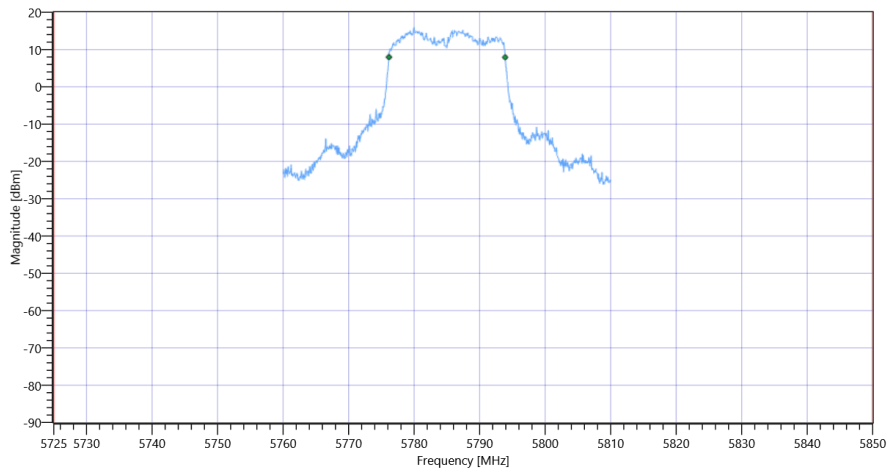
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.732	MHz	INFO
T1 99%	5725.000000	---	5776.1588	MHz	PASS
T2 99%	---	5850.000000	5793.8911	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

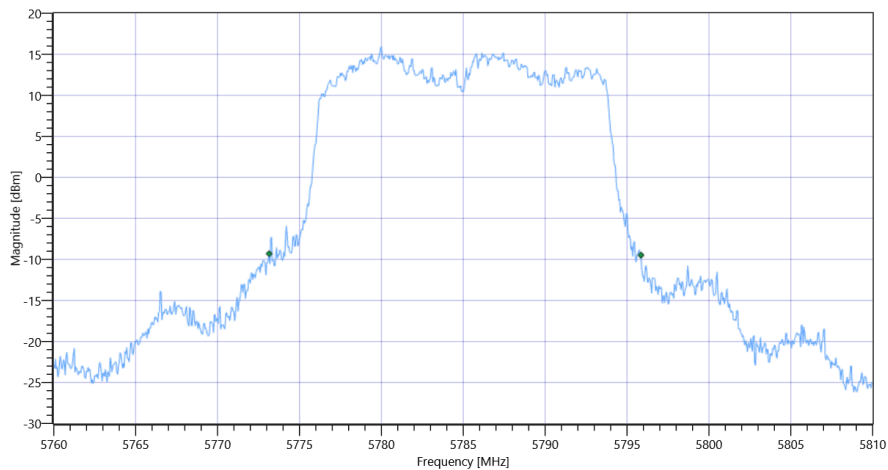


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

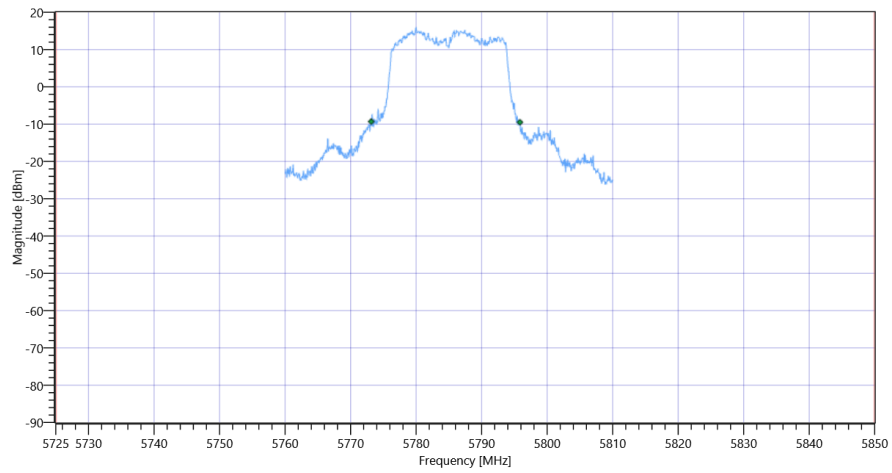
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	22.7	MHz	INFO
T1 26dB	5725.000000	---	5773.1500	MHz	PASS
T2 26dB	---	5850.000000	5795.8500	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:23:30
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.95	dBm	INFO
Ref. Frequency	---	---	5780.000	MHz	INFO

Evaluation max. Duty Cycle

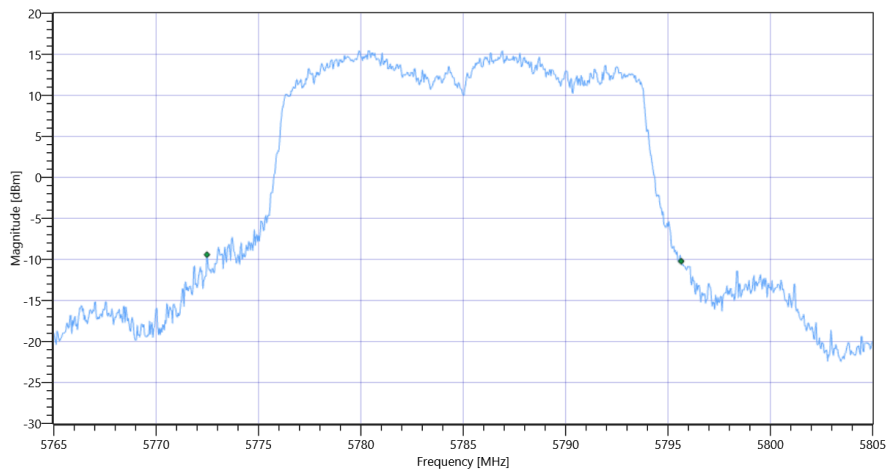
Duty Cycle evaluation

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	---	---	23.16	MHz	INFO
T1 26dB	---	---	5772.4800	MHz	INFO
T2 26dB	---	---	5795.6400	MHz	INFO



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

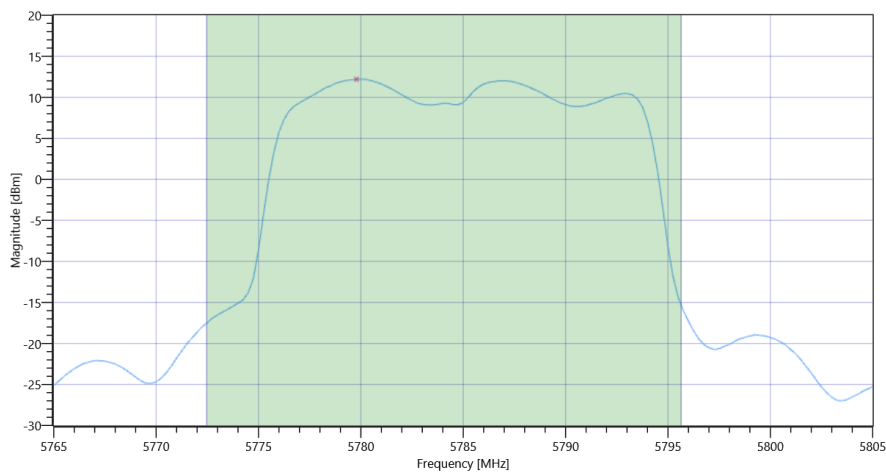
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.95 5.4 45
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.8	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.8	dBm	PASS
Limit: 11 dBm + 10 log 23.16					
Max Output Power DC corrected	---	24.65	22.8	dBm	na



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

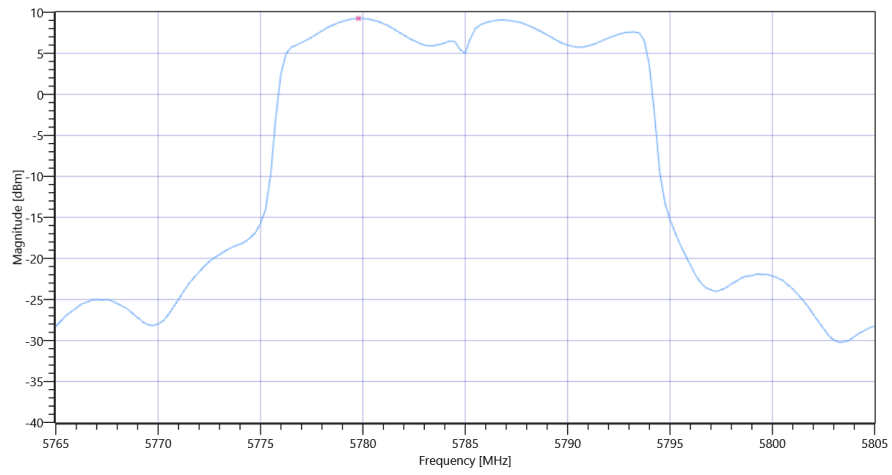
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.95 5.4 45
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	9.25	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	9.25	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:22:38
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

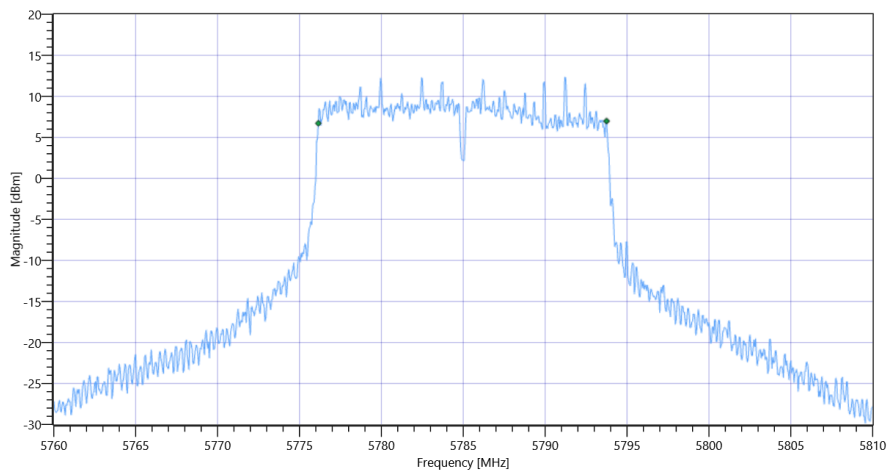
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.31	dBm	INFO
Ref. Frequency	---	---	5782.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.31 5.4 45
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

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



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

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

Test References

TC Start	13.12.2022 16:21:46
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.87	dBm	INFO
Ref. Frequency	---	---	5786.600	MHz	INFO

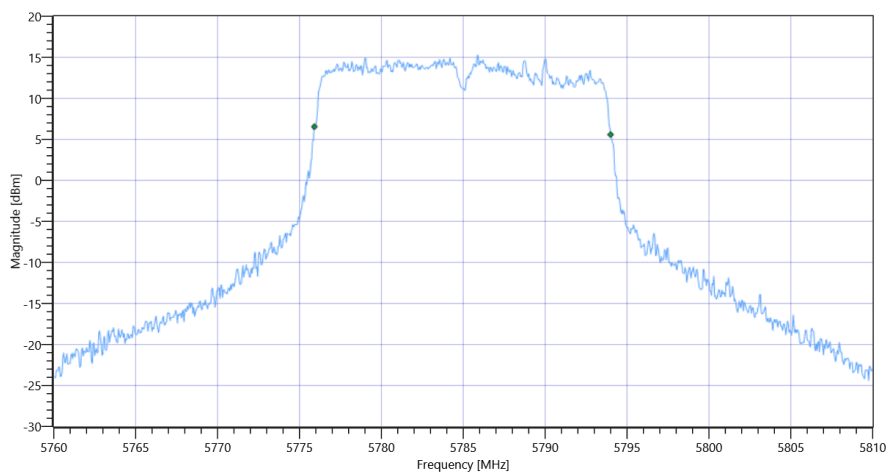
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.87 5.4 40
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

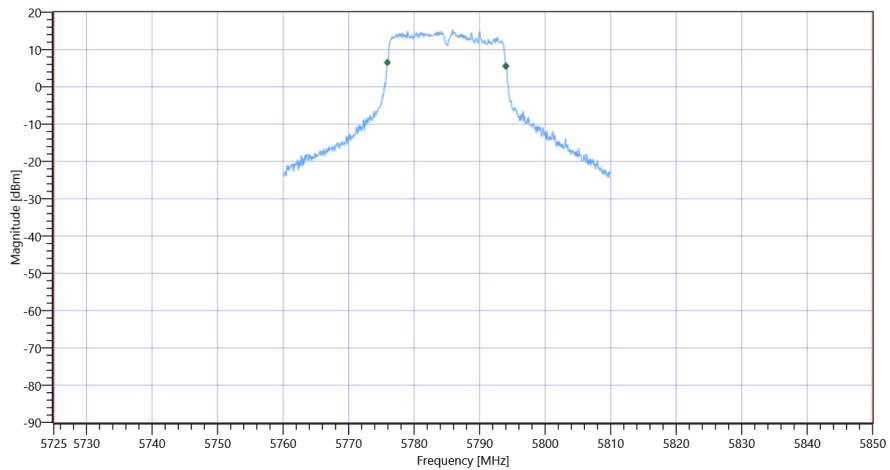
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.082	MHz	INFO
T1 99%	5725.000000	---	5775.9091	MHz	PASS
T2 99%	---	5850.000000	5793.9910	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

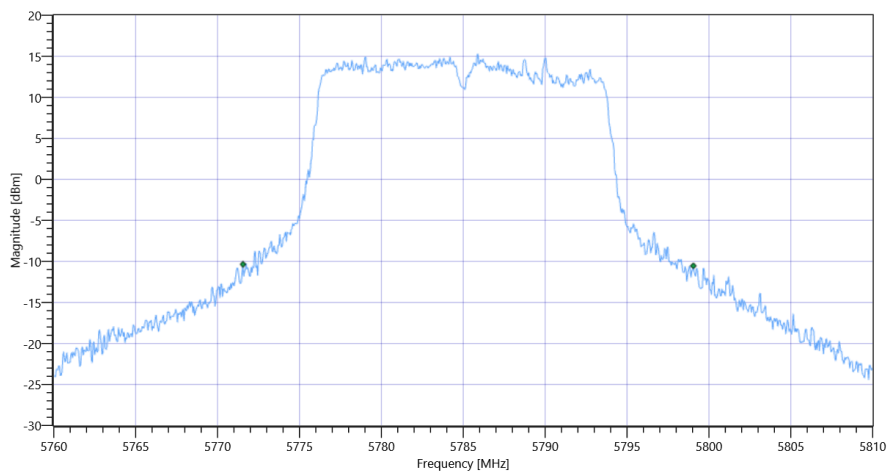


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

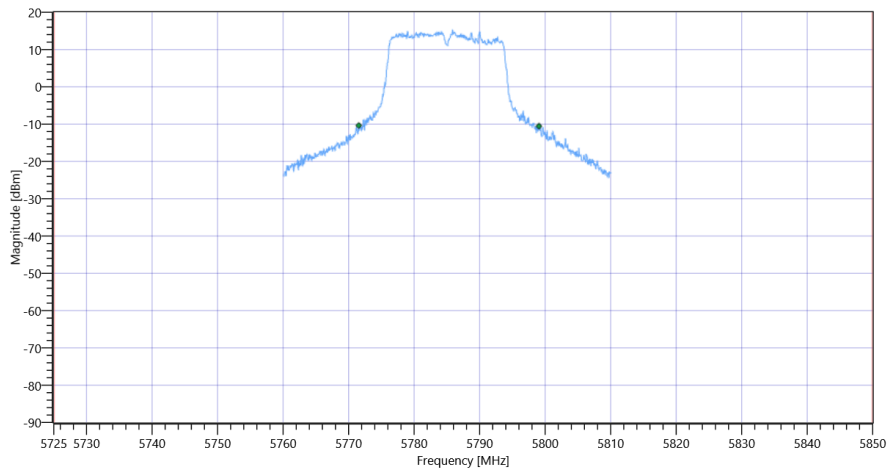
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	27.5	MHz	INFO
T1 26dB	5725.000000	---	5771.5500	MHz	PASS
T2 26dB	---	5850.000000	5799.0500	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:19:07
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.14	dBm	INFO
Ref. Frequency	---	---	5779.010	MHz	INFO

Evaluation max. Duty Cycle

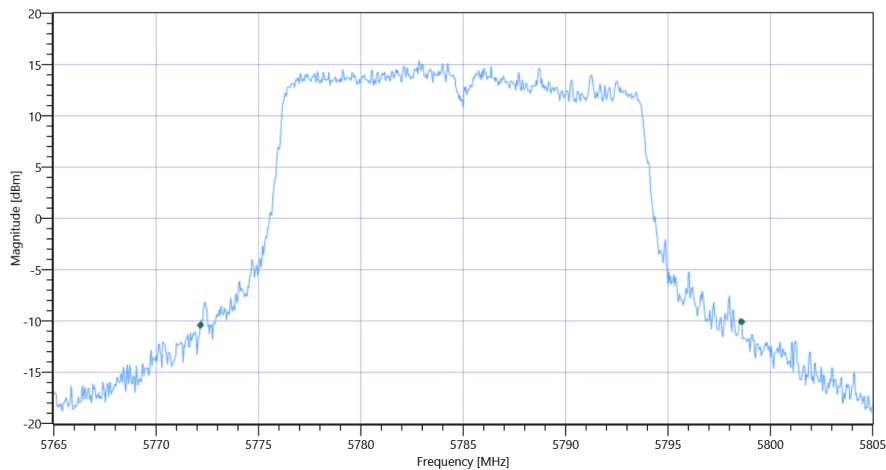
Duty Cycle evaluation

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	---	---	26.44	MHz	INFO
T1 26dB	---	---	5772.1600	MHz	INFO
T2 26dB	---	---	5798.6000	MHz	INFO



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

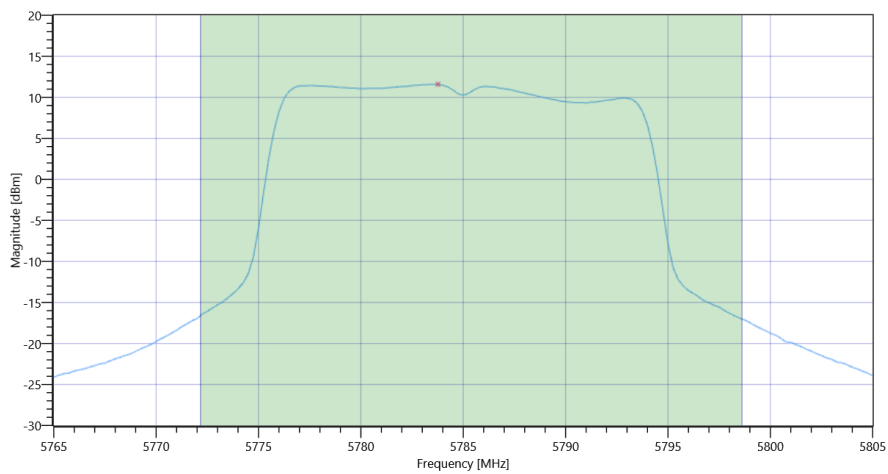
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.14 5.4 40
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.01	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.01	dBm	PASS
Limit: 11 dBm + 10 log 26.44					
Max Output Power DC corrected	---	25.22	23.01	dBm	na



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

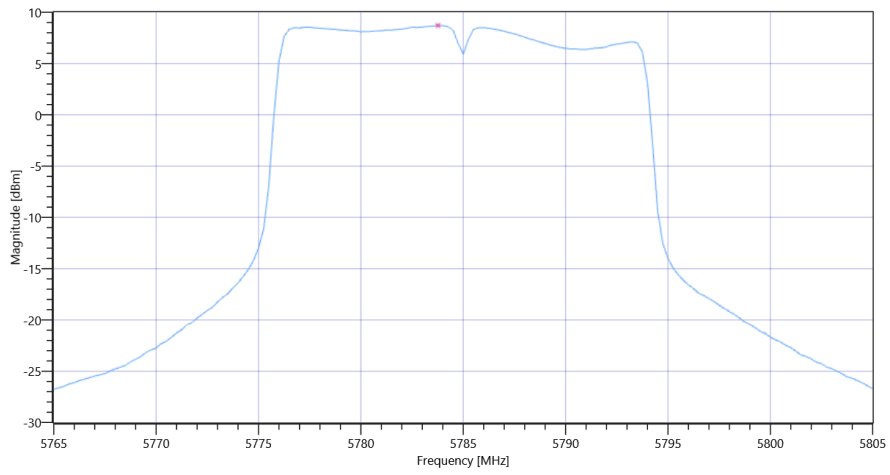
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.14 5.4 45
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.71	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.71	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:18:15
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

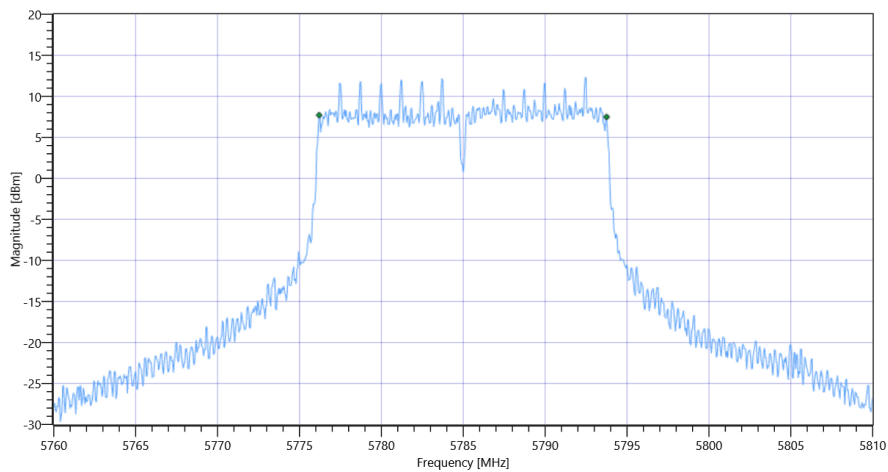
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.13	dBm	INFO
Ref. Frequency	---	---	5788.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.13 5.4 45
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	17.55	MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:17:23
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.20	dBm	INFO
Ref. Frequency	---	---	5782.200	MHz	INFO

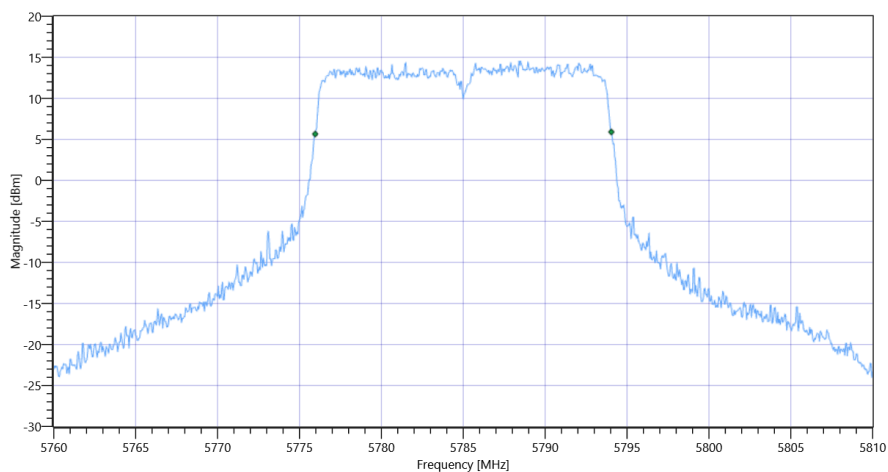
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.20 5.4 40
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

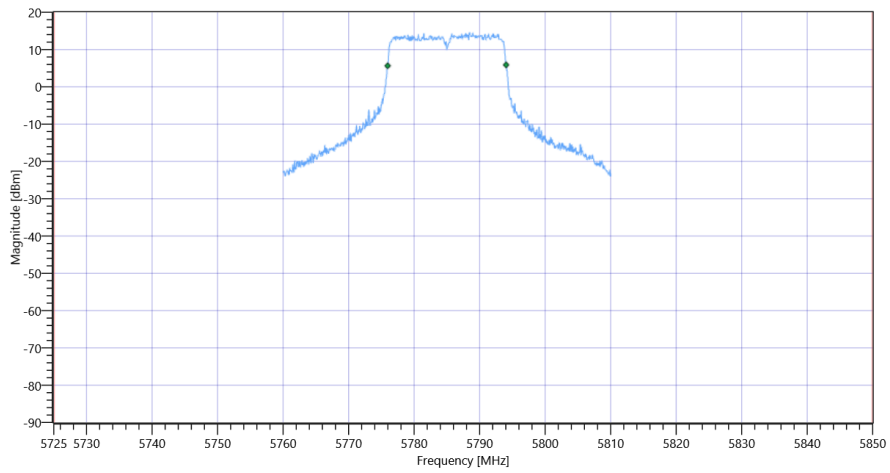
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.082	MHz	INFO
T1 99%	5725.000000	---	5775.9590	MHz	PASS
T2 99%	---	5850.000000	5794.0410	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

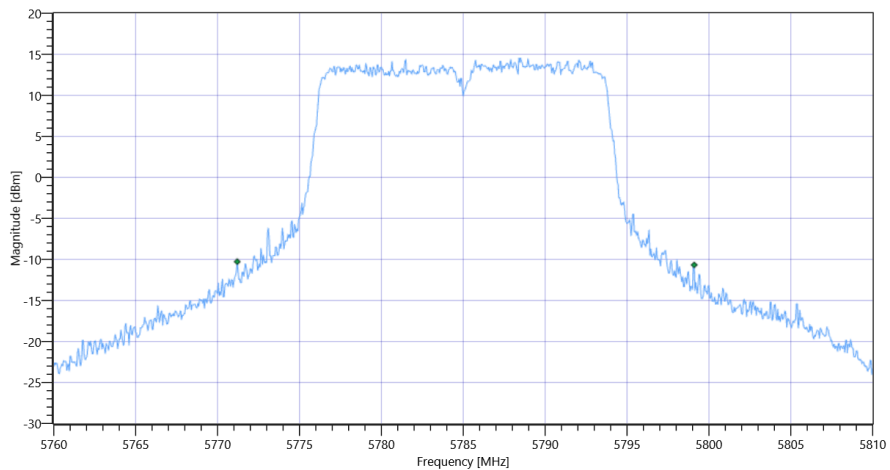


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

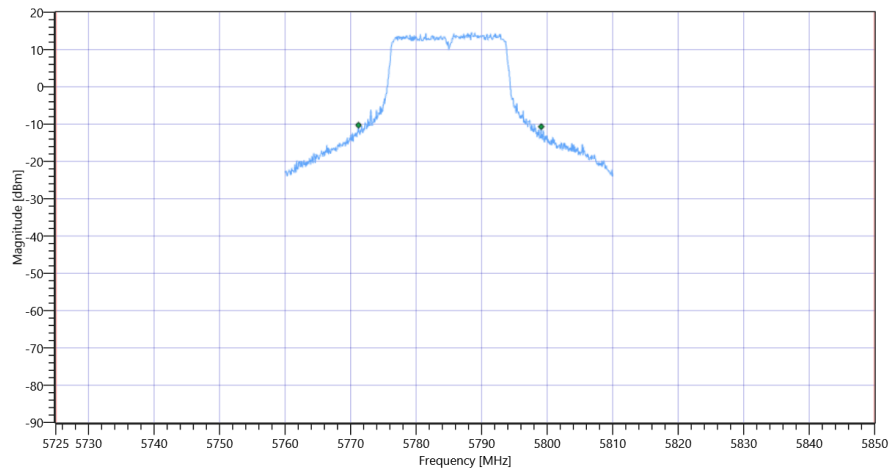
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	27.9	MHz	INFO
T1 26dB	5725.000000	---	5771.2000	MHz	PASS
T2 26dB	---	5850.000000	5799.1000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:14:44
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.29	dBm	INFO
Ref. Frequency	---	---	5789.200	MHz	INFO

Evaluation max. Duty Cycle

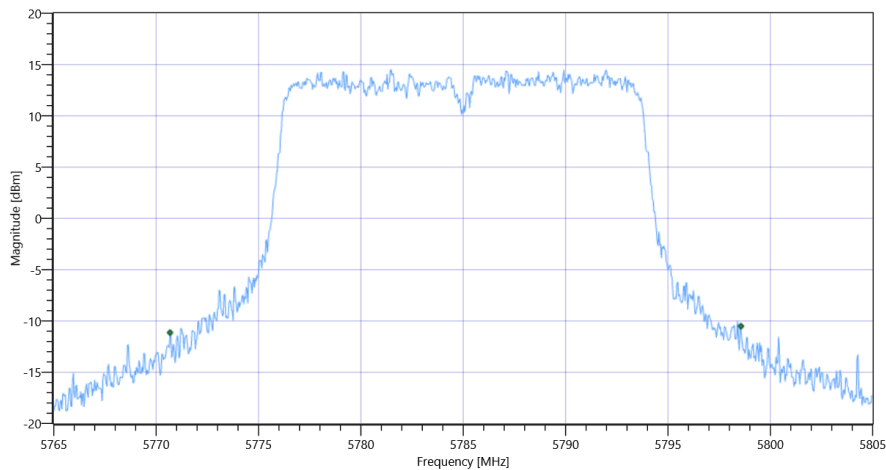
Duty Cycle evaluation

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	---	---	27.88	MHz	INFO
T1 26dB	---	---	5770.6800	MHz	INFO
T2 26dB	---	---	5798.5600	MHz	INFO



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

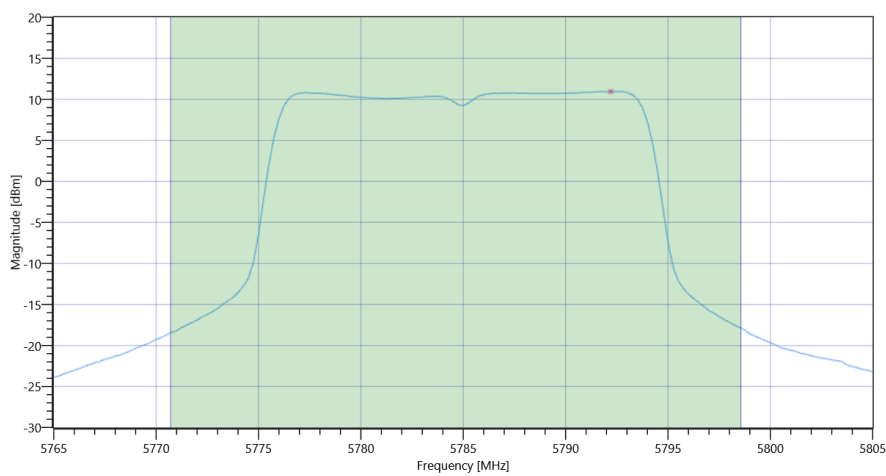
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.29 5.4 40
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.77	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.77	dBm	PASS
Limit: 11 dBm + 10 log 27.88					
Max Output Power DC corrected	---	25.45	22.77	dBm	na



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

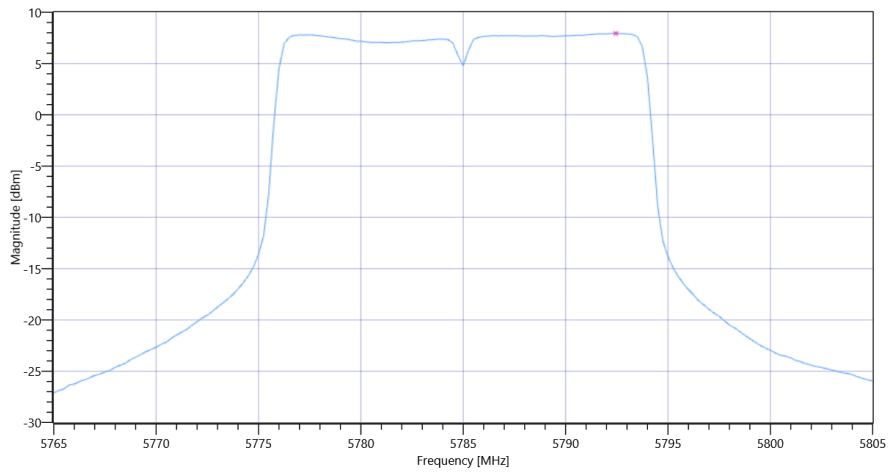
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.29 5.4 45
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.94	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	7.94	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:13:52
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

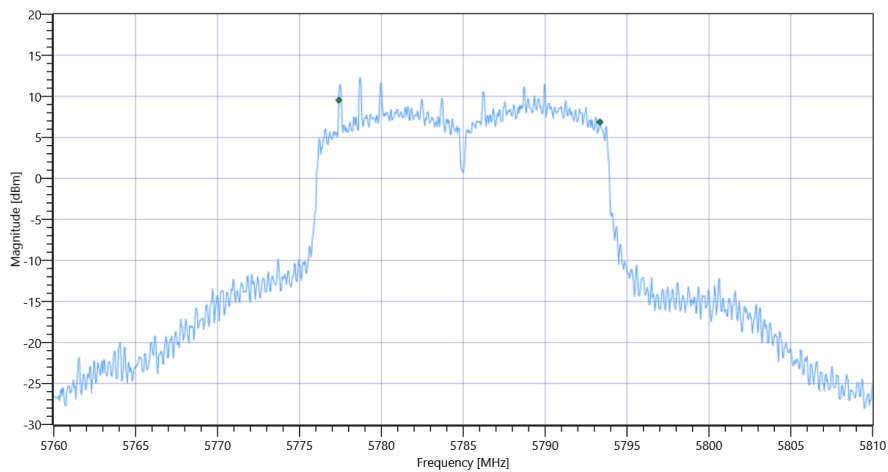
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.37	dBm	INFO
Ref. Frequency	---	---	5781.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.37 5.4 45
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	15.95	MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:13:01
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.97	dBm	INFO
Ref. Frequency	---	---	5790.790	MHz	INFO

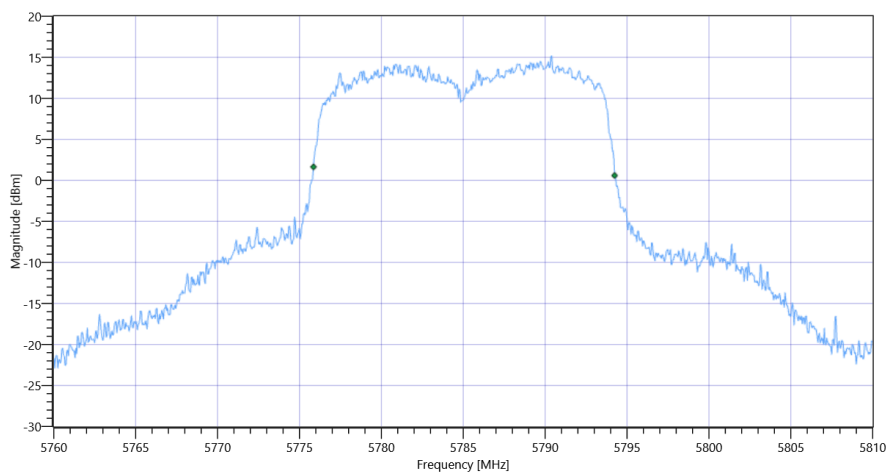
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.97 5.4 40
Start [MHz] Stop [MHz]	5760.000 5810.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

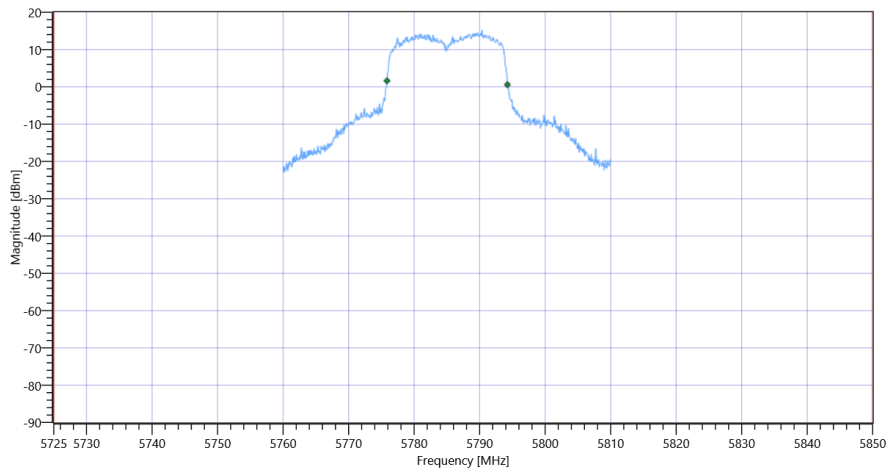
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	18.382	MHz	INFO
T1 99%	5725.000000	---	5775.8591	MHz	PASS
T2 99%	---	5850.000000	5794.2408	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band

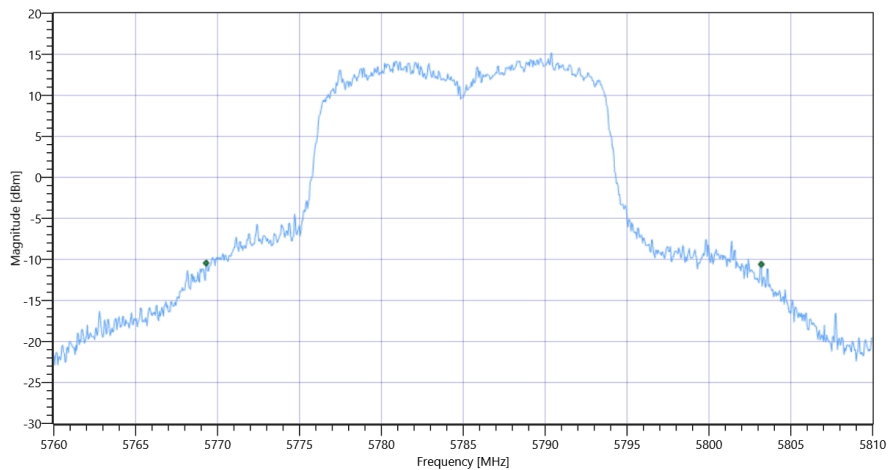


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ac-VHT20 mode U-NII-3

RESULT

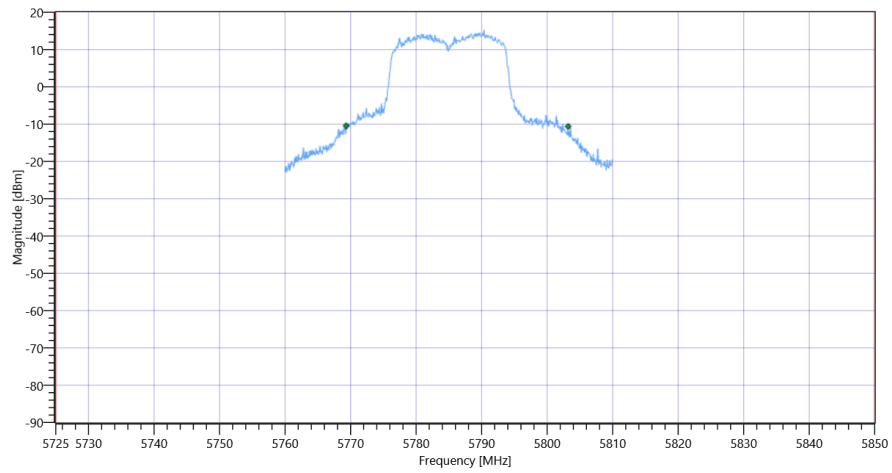
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	33.9	MHz	INFO
T1 26dB	5725.000000	---	5769.3000	MHz	PASS
T2 26dB	---	5850.000000	5803.2000	MHz	PASS

Plot: Bandwidth only



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

Plot: Bandwidth within Band



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

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

Test References

TC Start	13.12.2022 16:10:22
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	True Freq [MHz] 5785
Frequency high to test	False Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5785 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.55	dBm	INFO
Ref. Frequency	---	---	5789.600	MHz	INFO

Evaluation max. Duty Cycle

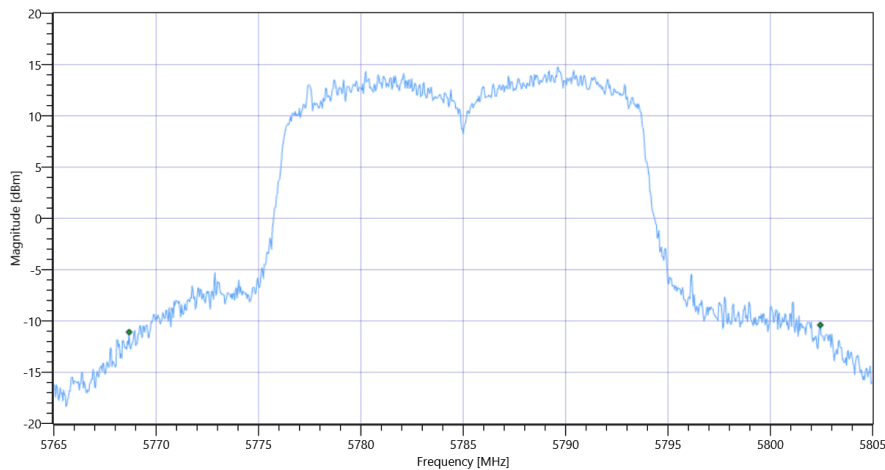
Duty Cycle evaluation

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	---	---	33.76	MHz	INFO
T1 26dB	---	---	5768.6800	MHz	INFO
T2 26dB	---	---	5802.4400	MHz	INFO



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

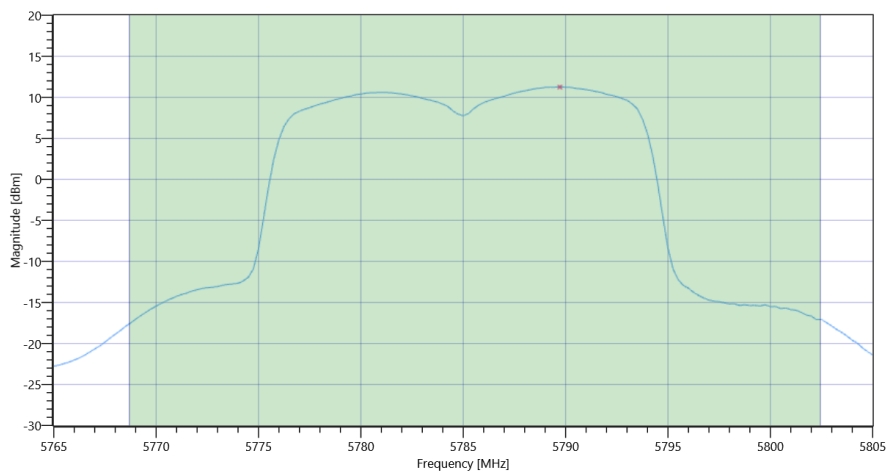
Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.55 5.4 40
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	22.24	dBm	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	22.24	dBm	PASS
Limit: 11 dBm + 10 log 33.76					
Max Output Power DC corrected	---	26.28	22.24	dBm	na



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

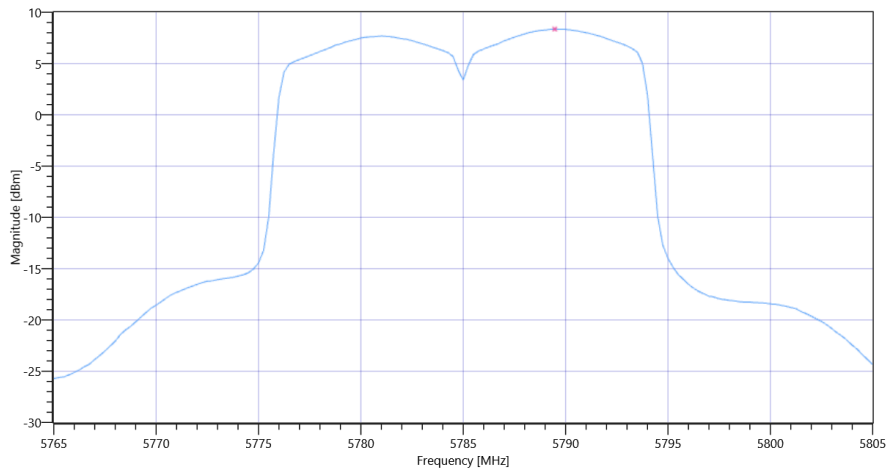
Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	30.55 5.4 45
Start [MHz] Stop [MHz]	5765.000 5805.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.36	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0	dB	INFO
Power Spectral Density DC corrected	---	30	8.36	dBm/0.5MHz	PASS



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

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

Test References

TC Start	13.12.2022 16:46:35
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	several
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	None

Test Equipment

Test at TX 5825 MHz

RESULT Power

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 Max Output Power DC corrected	--	--	22.61	dBm	INFO
Ant:1 BW 26dB	--	--	33.200	MHz	INFO
Ant:2 Max Output Power DC corrected	--	--	22.02	dBm	INFO
Ant:2 BW 26dB	--	--	25.800	MHz	INFO
Ant:3 Max Output Power DC corrected	--	--	22.97	dBm	INFO
Ant:3 BW 26dB	--	--	31.680	MHz	INFO
Ant:4 Max Output Power DC corrected	--	--	23.35	dBm	INFO
Ant:4 BW 26dB	--	--	28.440	MHz	INFO
Σ Limit absolute	--	30	28.79	dBm	PASS
Σ Limit: 11 dBm + 10 log 25.8	--	25.12	28.79	dBm	na

RESULT PSD

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ant:1 PSD	--	--	8.29	dBm/0.5MHz	INFO
Ant:2 PSD	--	--	8.31	dBm/0.5MHz	INFO
Ant:3 PSD	--	--	8.74	dBm/0.5MHz	INFO
Ant:4 PSD	--	--	9.8	dBm/0.5MHz	INFO
Σ	--	30	14.85	dBm/0.5MHz	PASS

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

Test References

TC Start	13.12.2022 16:45:55
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	21.58	dBm	INFO
Ref. Frequency	--	--	5827.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	33.58 5.38 45
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	--	16.95	MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:44:57
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.66	dBm	INFO
Ref. Frequency	--	--	5826.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.66 5.38 40
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	17.882	MHz	INFO
T1 99%	5725.000000	--	5816.1089	MHz	PASS
T2 99%	--	5850.000000	5833.9910	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	28.1	MHz	INFO
T1 26dB	5725.000000	---	5811.5500	MHz	PASS
T2 26dB	---	5850.000000	5839.6500	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

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

Test References

TC Start	13.12.2022 16:42:19
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.60	dBm	INFO
Ref. Frequency	--	--	5826.800	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	--	--	28.44	MHz	INFO
T1 26dB	--	--	5811.2800	MHz	INFO
T2 26dB	--	--	5839.7200	MHz	INFO

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

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.60 5.38 45
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	23.35	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	23.35	dBm	PASS
Limit: 11 dBm + 10 log 28.44					
Max Output Power DC corrected	--	25.54	23.35	dBm	na

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

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.60 5.38 45
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	9.8	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	9.8	dBm/0.5MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:41:39
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.44	dBm	INFO
Ref. Frequency	--	--	5827.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.44 5.38 45
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	--	17.55	MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:40:42
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.69	dBm	INFO
Ref. Frequency	--	--	5827.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.69 5.38 40
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	18.232	MHz	INFO
T1 99%	5725.000000	--	5815.9091	MHz	PASS
T2 99%	--	5850.000000	5834.1409	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	30.45	MHz	INFO
T1 26dB	5725.000000	---	5809.9500	MHz	PASS
T2 26dB	---	5850.000000	5840.4000	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

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

Test References

TC Start	13.12.2022 16:38:04
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.41	dBm	INFO
Ref. Frequency	--	--	5830.590	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	--	--	31.68	MHz	INFO
T1 26dB	--	--	5809.4400	MHz	INFO
T2 26dB	--	--	5841.1200	MHz	INFO

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

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.41 5.38 45
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	22.97	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	22.97	dBm	PASS
Limit: 11 dBm + 10 log 31.68					
Max Output Power DC corrected	--	26.01	22.97	dBm	na

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

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	32.41 5.38 45
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	8.74	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.74	dBm/0.5MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:37:24
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.23	dBm	INFO
Ref. Frequency	--	--	5821.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.23 5.38 45
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	--	16.35	MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:36:27
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.38	dBm	INFO
Ref. Frequency	--	--	5820.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.38 5.38 40
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	17.782	MHz	INFO
T1 99%	5725.000000	--	5816.0589	MHz	PASS
T2 99%	--	5850.000000	5833.8412	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	24.85	MHz	INFO
T1 26dB	5725.000000	---	5812.2500	MHz	PASS
T2 26dB	---	5850.000000	5837.1000	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

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

Test References

TC Start	13.12.2022 16:33:49
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.36	dBm	INFO
Ref. Frequency	--	--	5820.800	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	--	--	25.8	MHz	INFO
T1 26dB	--	--	5812.3600	MHz	INFO
T2 26dB	--	--	5838.1600	MHz	INFO

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

Maximum Output Power

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.36 5.38 40
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	--	--	22.02	dBm	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Limit absolute					
Max Output Power DC corrected	--	30	22.02	dBm	PASS
Limit: 11 dBm + 10 log 25.8					
Max Output Power DC corrected	--	25.12	22.02	dBm	na

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

Power Spectral Density U-NII-3

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.36 5.38 45
Start [MHz] Stop [MHz]	5805.000 5845.000
RBW [MHz] VBW [MHz]	0.500000 3.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	53700 1 161 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	--	--	8.31	dBm/0.5MHz	INFO
Duty Cycle Correction	--	--	0	dB	INFO
Power Spectral Density DC corrected	--	30	8.31	dBm/0.5MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:33:09
Ambit Temp [°C] Humidity [rel%]	25.4 19
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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.14	dBm	INFO
Ref. Frequency	--	--	5827.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	31.14 5.38 45
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	--	17.3	MHz	PASS

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

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

Test References

TC Start	13.12.2022 16:32:11
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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 5825 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	18.86	dBm	INFO
Ref. Frequency	--	--	5829.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.86 5.38 40
Start [MHz] Stop [MHz]	5800.000 5850.000
RBW [MHz] VBW [MHz]	0.300000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 2500 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	--	--	18.432	MHz	INFO
T1 99%	5725.000000	--	5815.7093	MHz	PASS
T2 99%	--	5850.000000	5834.1409	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	32.65	MHz	INFO
T1 26dB	5725.000000	---	5807.7000	MHz	PASS
T2 26dB	---	5850.000000	5840.3500	MHz	PASS

Plot: Bandwidth only

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

Plot: Bandwidth within Band

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

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

Test References

TC Start	13.12.2022 16:29:33
Ambit Temp [°C] Humidity [rel%]	25.4 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-VHT20 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-VHT20 mode
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 5745
Frequency mid to test	False Freq [MHz] 5785
Frequency high to test	True Freq [MHz] 5825
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-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