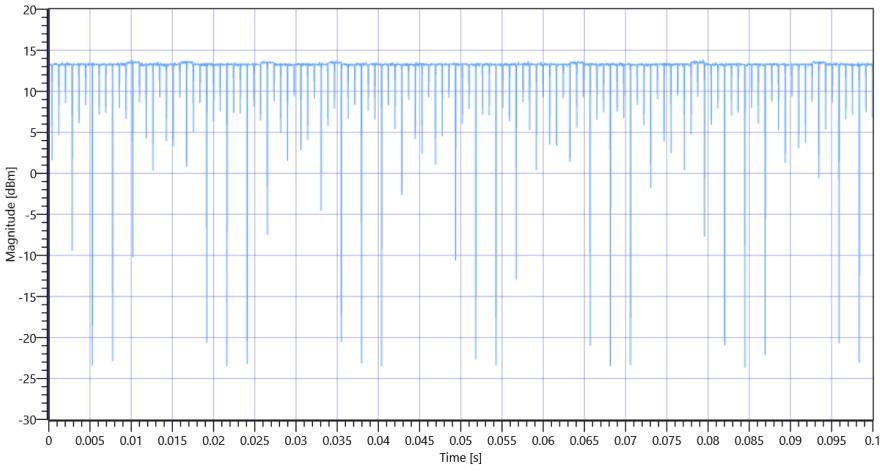
Test at TX 5280 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	14.12	dBm	INFO
Ref. Frequency	---	---	5276.400	MHz	INFO

Evaluation max. Duty Cycle

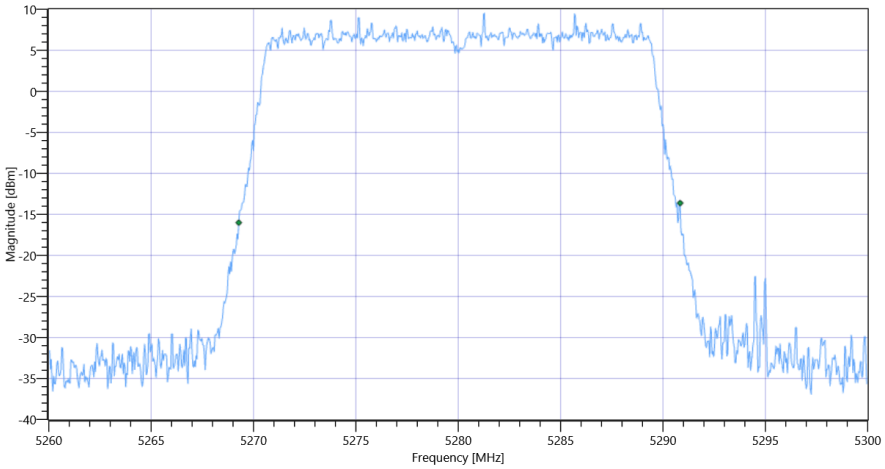
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:44					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A 5280 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.56	MHz	INFO
T1 26dB	---	---	5269.2800	MHz	INFO
T2 26dB	---	---	5290.8400	MHz	INFO

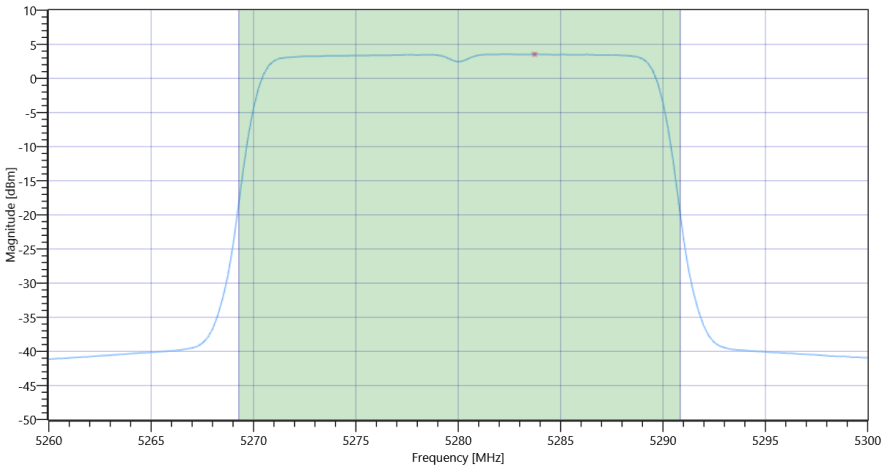


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.12 | 18.69 | 25
Start [MHz] | Stop [MHz]	5260.000 | 5300.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.87	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	16.28	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.34	16.28	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	3.54	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	11	3.95	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A

Test References	
TC Start	15.07.2022 10:37:22
Ambit Temp [°C] | Humidity [rel%]	24.1 | 41
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2A
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5260
Frequency mid to test	False | Freq [MHz] 5280
Frequency high to test	True | Freq [MHz] 5320
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

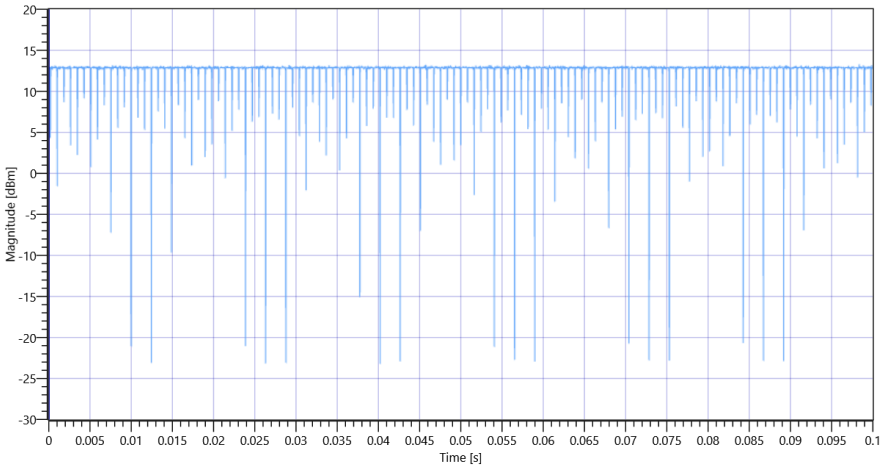
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5320 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	13.08	dBm	INFO
Ref. Frequency	---	---	5315.000	MHz	INFO

Evaluation max. Duty Cycle

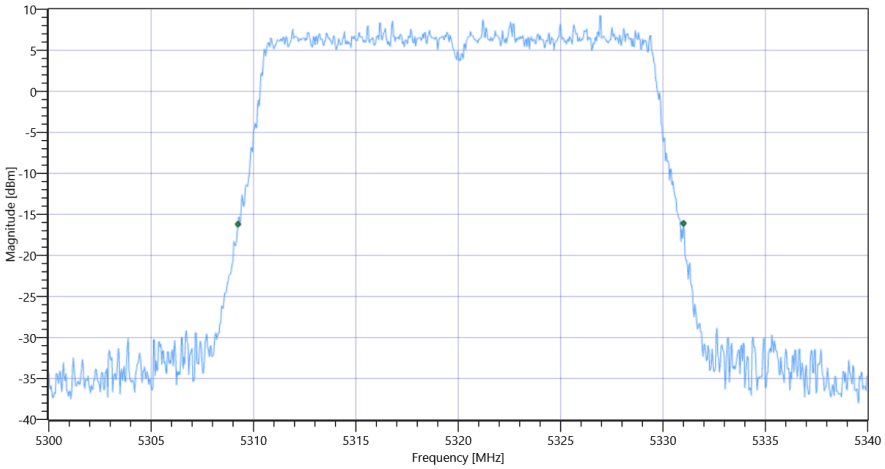
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:43					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A 5320 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5309.2400	MHz	INFO
T2 26dB	---	---	5331.0000	MHz	INFO

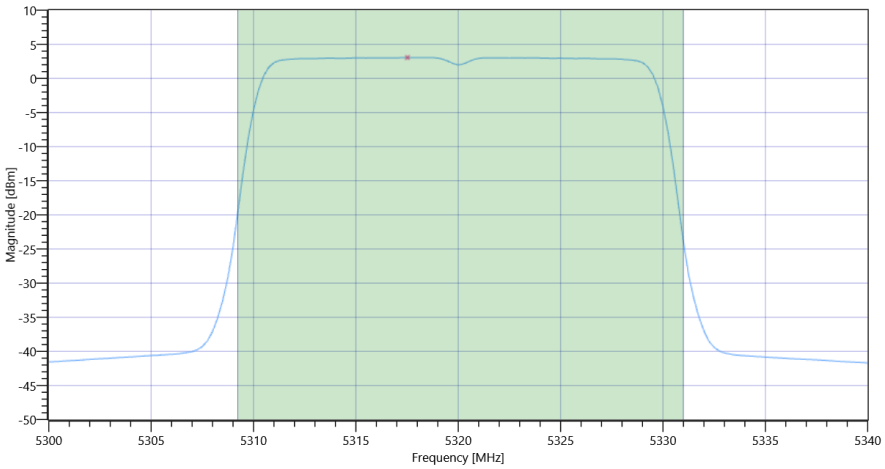


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	25.08 | 18.41 | 25
Start [MHz] | Stop [MHz]	5300.000 | 5340.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.42	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.83	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.38	15.83	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2A Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	3.06	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	11	3.47	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

Test References	
TC Start	15.07.2022 10:43:23
Ambit Temp [°C] | Humidity [rel%]	24.2 | 41
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5700
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

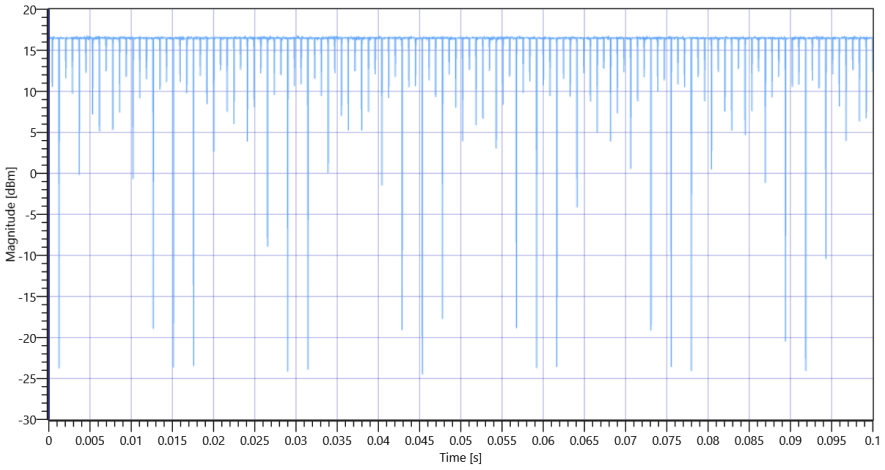
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5500 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	15.71	dBm	INFO
Ref. Frequency	---	---	5498.400	MHz	INFO

Evaluation max. Duty Cycle

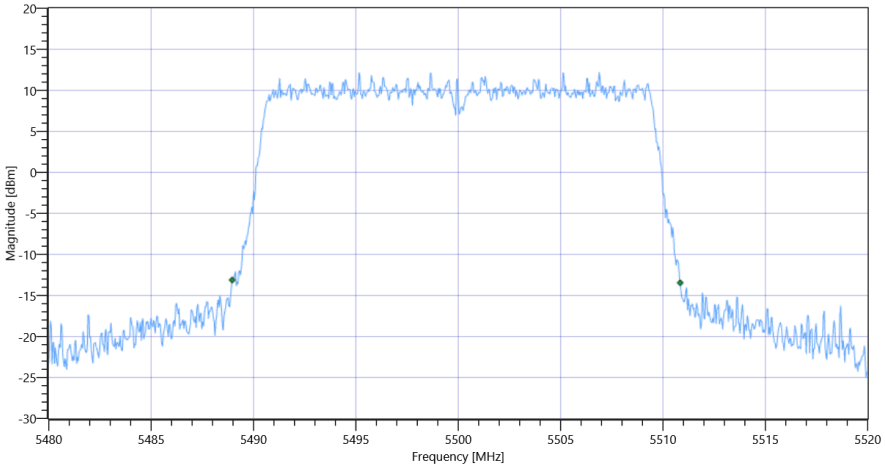
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:44					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C 5500 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.88	MHz	INFO
T1 26dB	---	---	5488.9600	MHz	INFO
T2 26dB	---	---	5510.8400	MHz	INFO

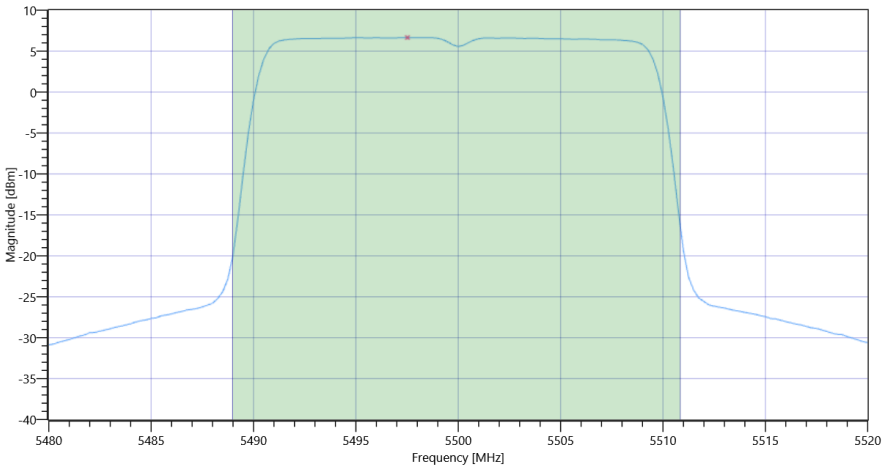


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	27.71 | 18.5 | 25
Start [MHz] | Stop [MHz]	5480.000 | 5520.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.41	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.4	19.41	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.65	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	11	7.06	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

Test References	
TC Start	15.07.2022 10:48:21
Ambit Temp [°C] | Humidity [rel%]	24.3 | 41
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	True | Freq [MHz] 5600
Frequency high to test	False | Freq [MHz] 5700
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

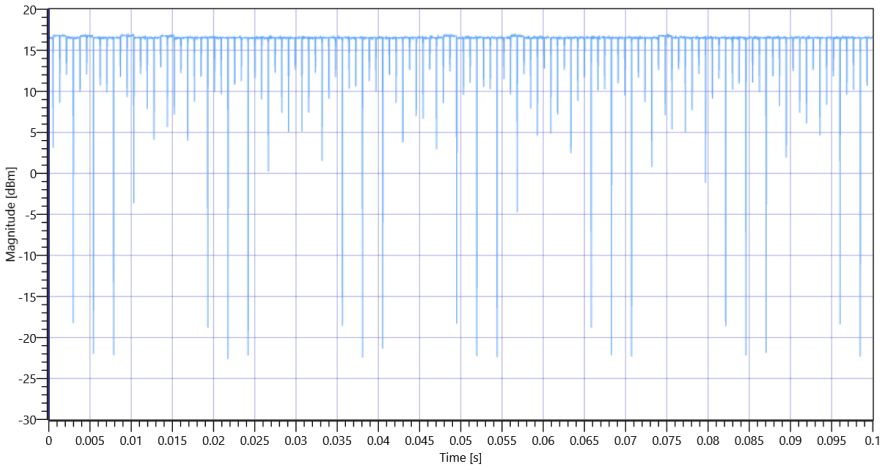
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5600 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.24	dBm	INFO
Ref. Frequency	---	---	5605.990	MHz	INFO

Evaluation max. Duty Cycle

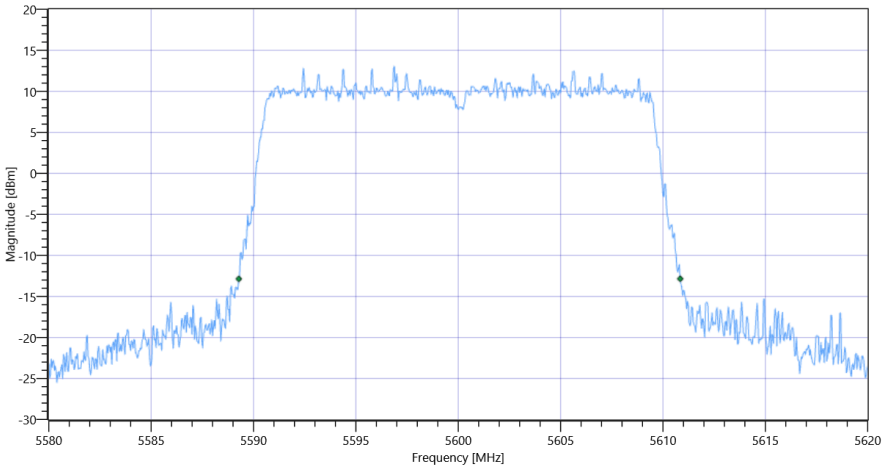
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:43					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C 5600 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.56	MHz	INFO
T1 26dB	---	---	5589.2800	MHz	INFO
T2 26dB	---	---	5610.8400	MHz	INFO

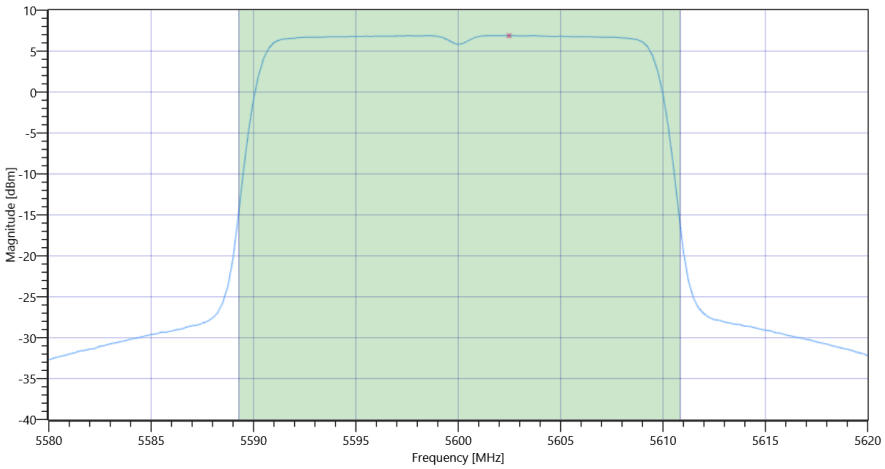


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.24 | 19.06 | 25
Start [MHz] | Stop [MHz]	5580.000 | 5620.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	19.24	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	19.65	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.34	19.65	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.89	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	11	7.3	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C

Test References	
TC Start	15.07.2022 10:53:34
Ambit Temp [°C] | Humidity [rel%]	24.3 | 41
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-2C
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5500
Frequency mid to test	False | Freq [MHz] 5600
Frequency high to test	True | Freq [MHz] 5700
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

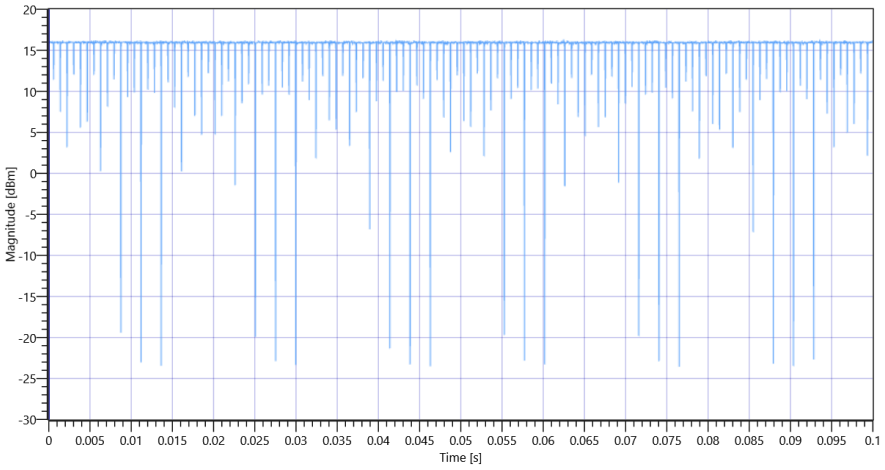
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5700 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	16.01	dBm	INFO
Ref. Frequency	---	---	5707.390	MHz	INFO

Evaluation max. Duty Cycle

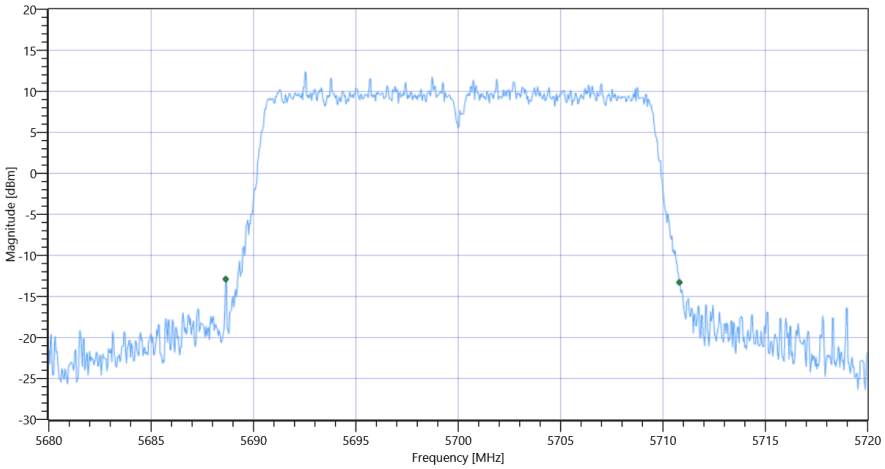
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:44					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C 5700 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	22.16	MHz	INFO
T1 26dB	---	---	5688.6400	MHz	INFO
T2 26dB	---	---	5710.8000	MHz	INFO

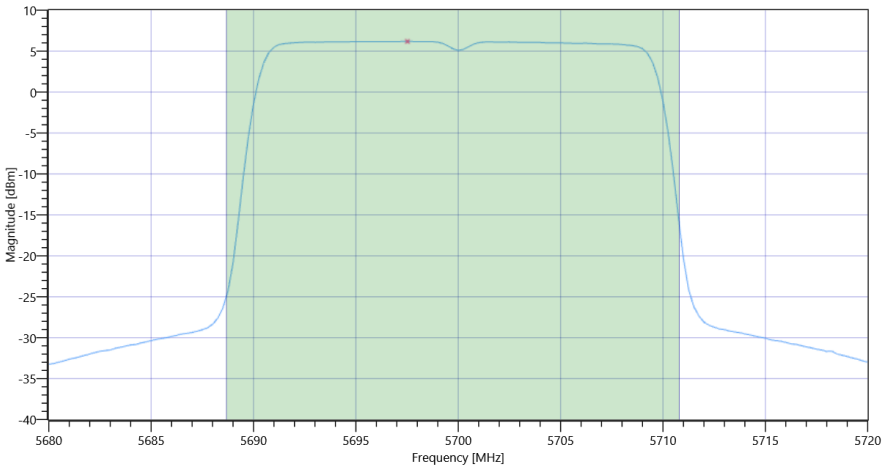


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	28.01 | 18.46 | 25
Start [MHz] | Stop [MHz]	5680.000 | 5720.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	18.52	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	18.93	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.46	18.93	dBm	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-2C Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	6.18	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	11	6.59	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 10:59:15
Ambit Temp [°C] | Humidity [rel%]	24.3 | 40
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

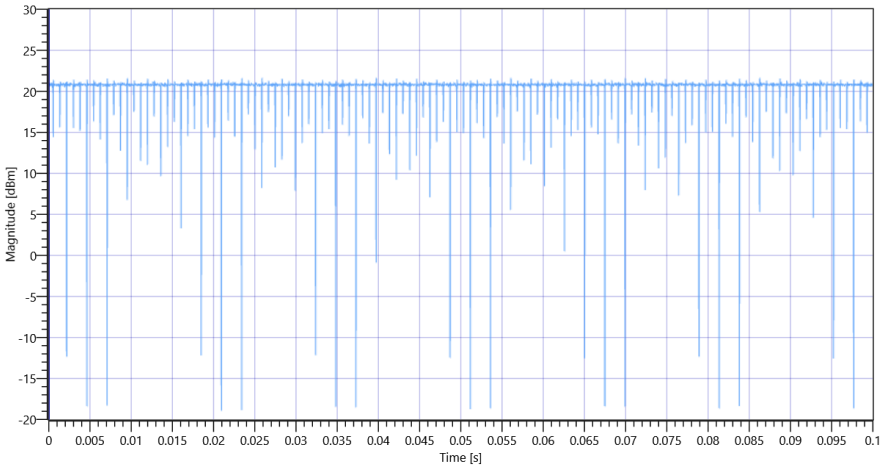
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.25	dBm	INFO
Ref. Frequency	---	---	5737.610	MHz	INFO

Evaluation max. Duty Cycle

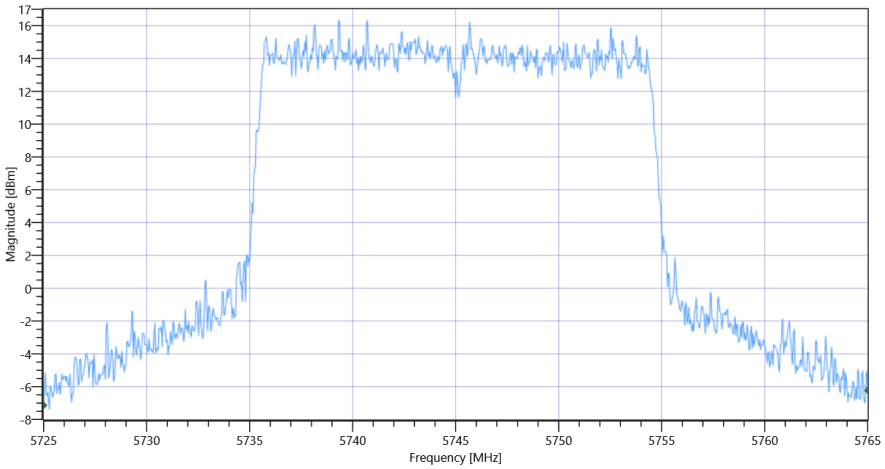
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:43					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5725.0000	MHz	INFO
T2 26dB	---	---	5765.0000	MHz	INFO

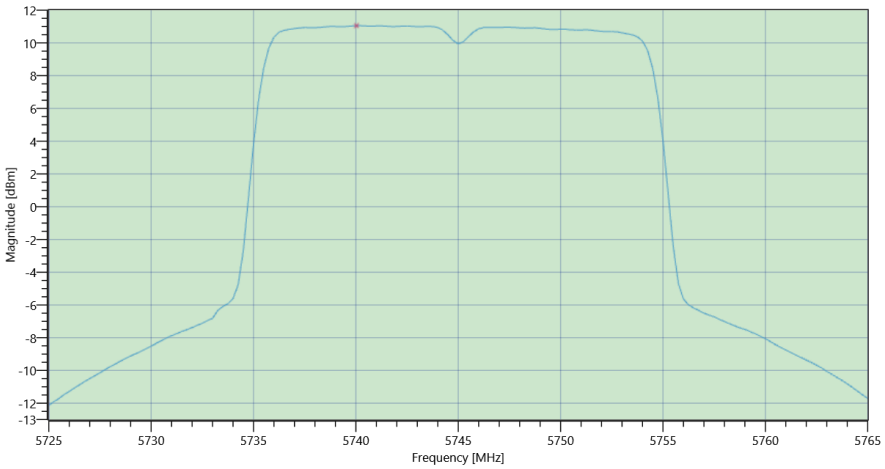


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.25 | 18.72 | 30
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.44	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.85	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	27.02	23.85	dBm	not applicable



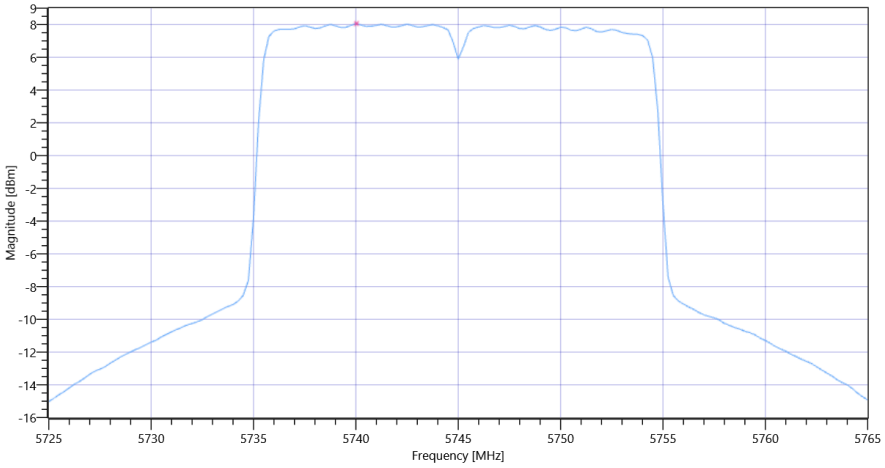
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.25 | 18.72 | 30
Start [MHz] | Stop [MHz]	5725.000 | 5765.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.06	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	30	8.47	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 PSD UNII-3

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 11:07:17
Ambit Temp [°C] | Humidity [rel%]	24.3 | 40
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	True | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

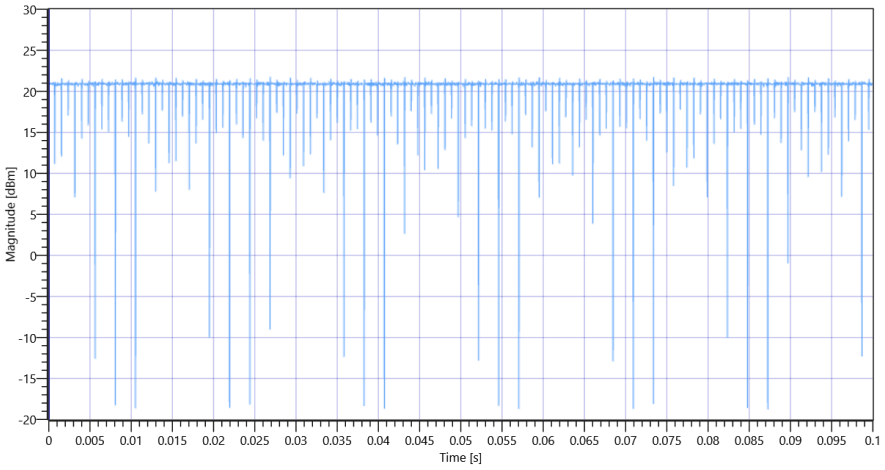
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5785 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.36	dBm	INFO
Ref. Frequency	---	---	5781.200	MHz	INFO

Evaluation max. Duty Cycle

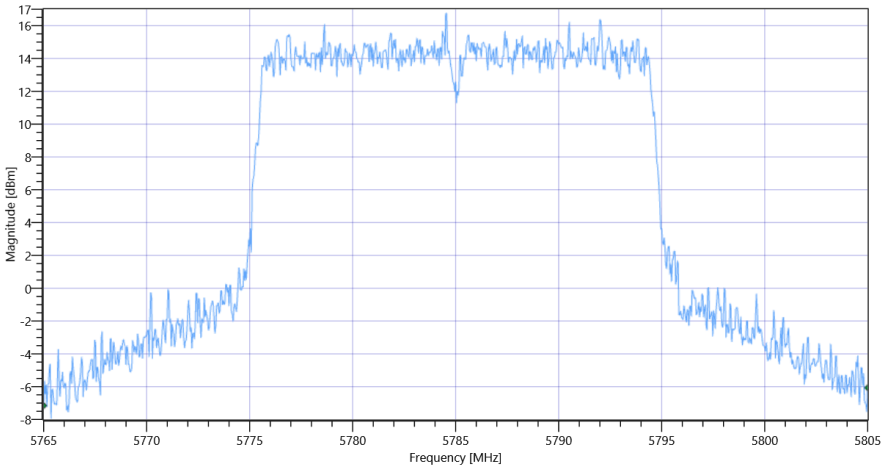
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:44					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 5785 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5765.0000	MHz	INFO
T2 26dB	---	---	5805.0000	MHz	INFO

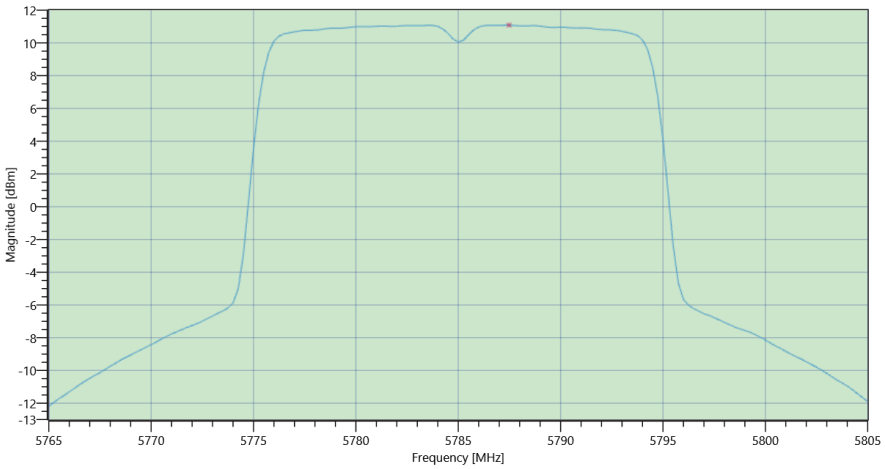


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.36 | 18.76 | 30
Start [MHz] | Stop [MHz]	5765.000 | 5805.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.47	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.88	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	27.02	23.88	dBm	not applicable



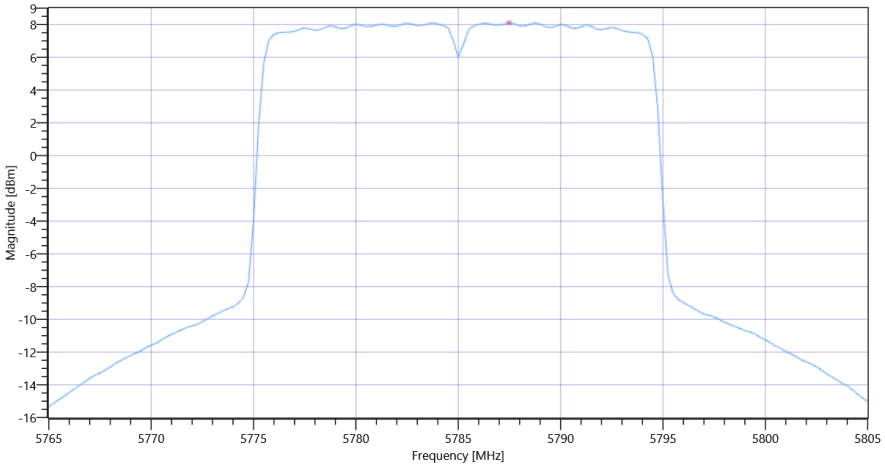
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.36 | 18.76 | 30
Start [MHz] | Stop [MHz]	5765.000 | 5805.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	8.11	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	30	8.52	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 PSD UNII-3

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 11:15:26
Ambit Temp [°C] | Humidity [rel%]	24.4 | 40
System Version	3.2.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	True | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

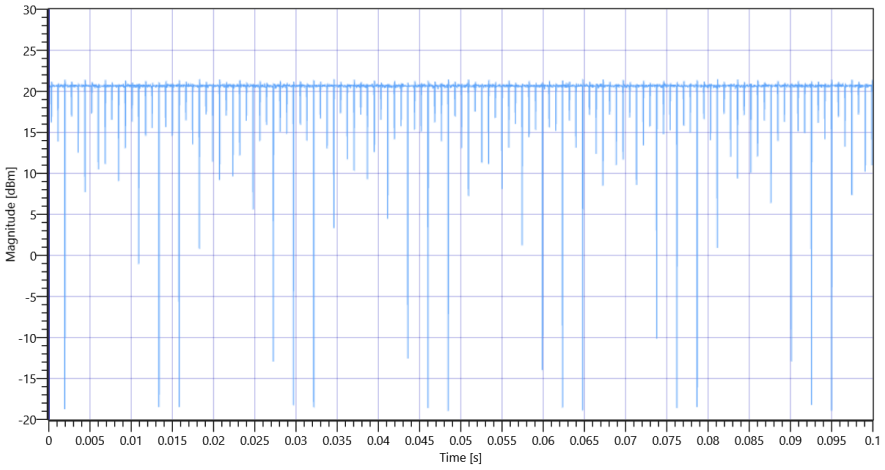
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

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	---	---	5825.800	MHz	INFO

Evaluation max. Duty Cycle

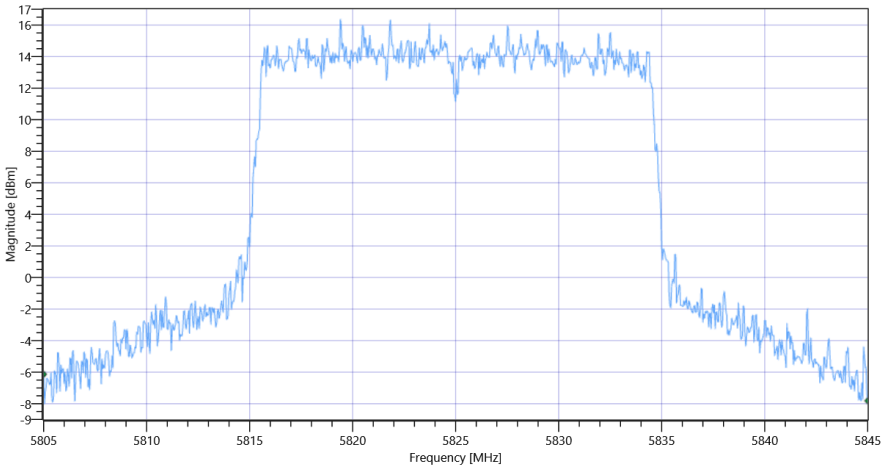
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:46					
Duty Cycle (Burst Ratio) max	---	---	0.969	---	INFO
Duty Cycle max	---	---	0.137	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.909	---	INFO
Duty Cycle min	---	---	0.414	dB	INFO
Max TX Burst Length	---	---	2.375	ms	INFO
Min Gap Length	---	---	0.075	ms	INFO
Max Gap Length	---	---	0.075	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 5825 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	40	MHz	INFO
T1 26dB	---	---	5805.0000	MHz	INFO
T2 26dB	---	---	5845.0000	MHz	INFO

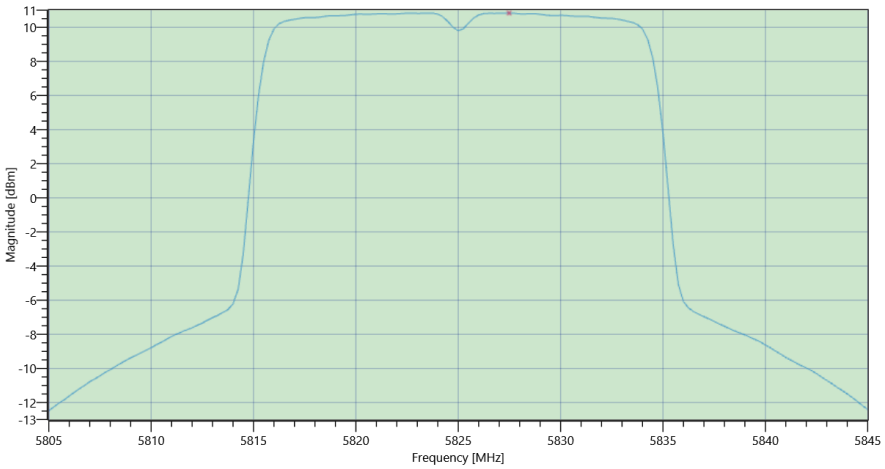


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.23 | 18.74 | 30
Start [MHz] | Stop [MHz]	5805.000 | 5845.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	23.22	dBm	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	23.63	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	27.02	23.63	dBm	not applicable



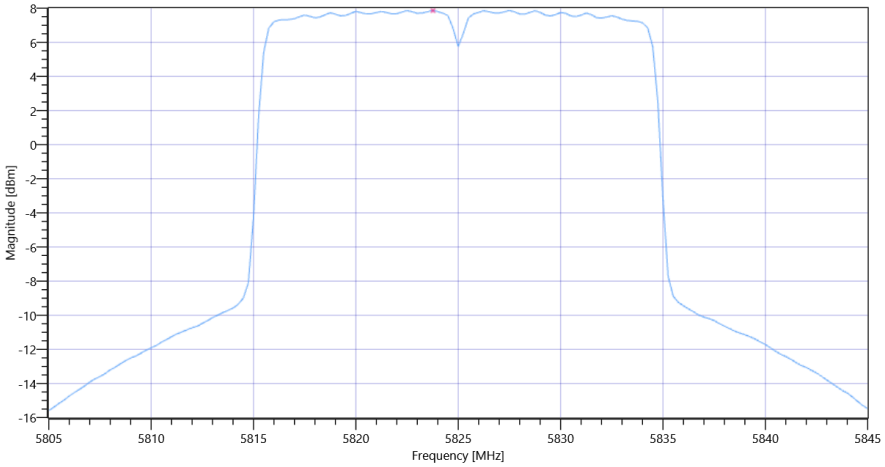
FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	31.23 | 18.74 | 30
Start [MHz] | Stop [MHz]	5805.000 | 5845.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53700 | 1 | 161 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	7.86	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	0.41	dB	INFO
Power Spectral Density DC corrected	---	30	8.27	dBm/0.5MHz	PASS



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-3 PSD UNII-3

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:13:41
Ambit Temp [°C] | Humidity [rel%]	23.1 | 52
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5180
Frequency mid to test	False | Freq [MHz] 5200
Frequency high to test	False | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

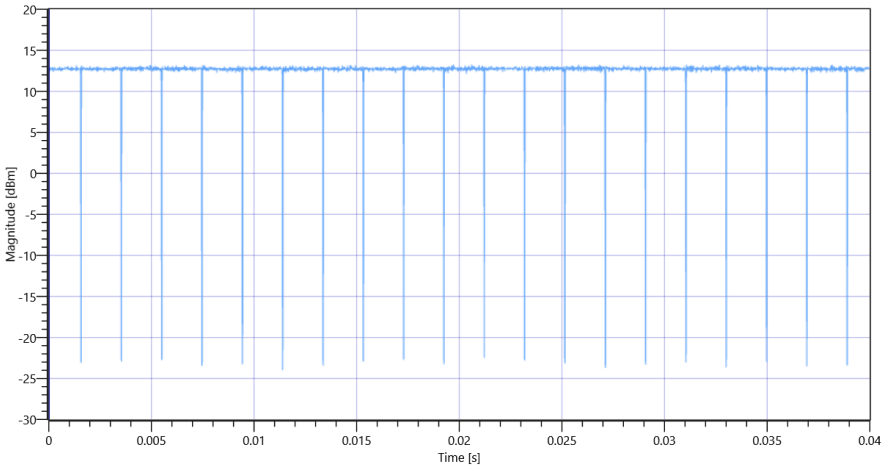
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5180 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	12.20	dBm	INFO
Ref. Frequency	---	---	5181.400	MHz	INFO

Evaluation max. Duty Cycle

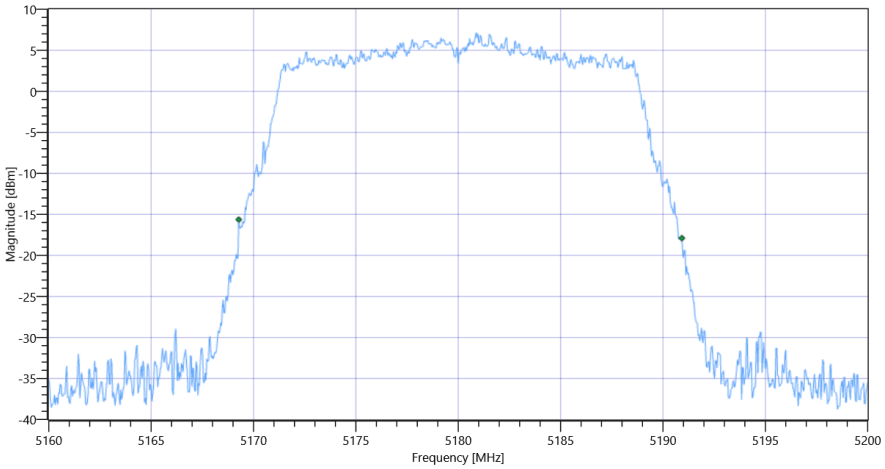
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:19					
Duty Cycle (Burst Ratio) max	---	---	0.98	---	INFO
Duty Cycle max	---	---	0.088	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.975	---	INFO
Duty Cycle min	---	---	0.11	dB	INFO
Max TX Burst Length	---	---	1.93	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5180 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.64	MHz	INFO
T1 26dB	---	---	5169.2800	MHz	INFO
T2 26dB	---	---	5190.9200	MHz	INFO

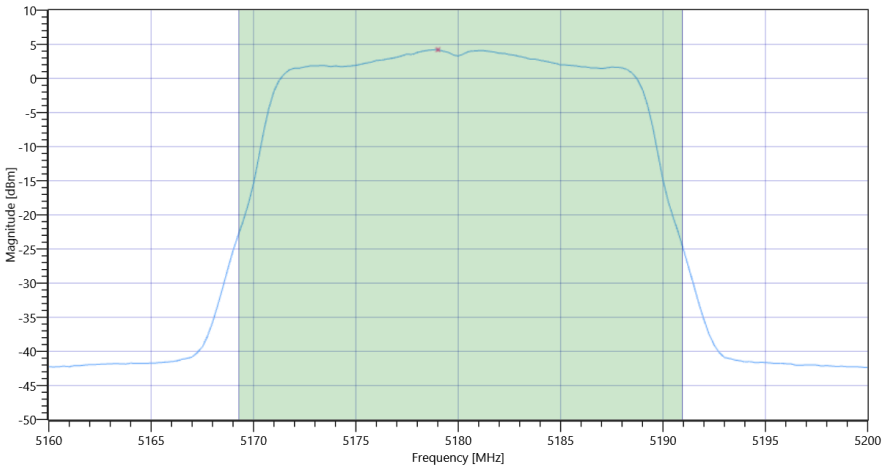


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	24.20 | 17.99 | 25
Start [MHz] | Stop [MHz]	5160.000 | 5200.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	14.91	dBm	INFO
Duty Cycle Correction	---	---	0.11	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.02	dBm	PASS
Limit: 11 dBm + 10 log 21.64					
Max Output Power DC corrected	---	24.35	15.02	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	4.21	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.11	dB	INFO
Power Spectral Density DC corrected	---	11	4.32	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:15:51
Ambit Temp [°C] | Humidity [rel%]	23.1 | 52
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5180
Frequency mid to test	False | Freq [MHz] 5200
Frequency high to test	False | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

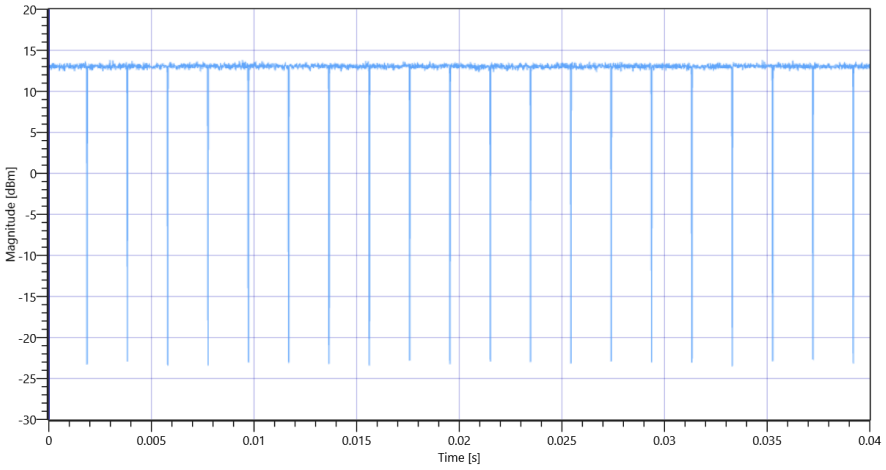
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5180 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.86	dBm	INFO
Ref. Frequency	---	---	5181.000	MHz	INFO

Evaluation max. Duty Cycle

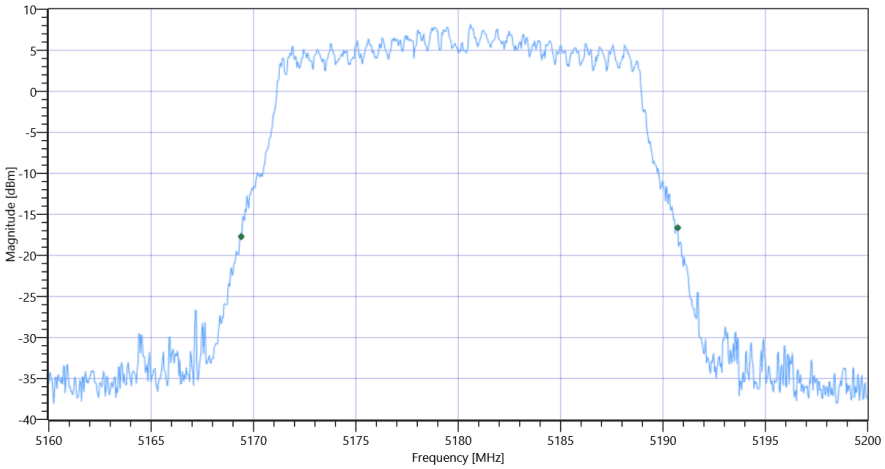
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:19					
Duty Cycle (Burst Ratio) max	---	---	0.98	---	INFO
Duty Cycle max	---	---	0.088	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.975	---	INFO
Duty Cycle min	---	---	0.11	dB	INFO
Max TX Burst Length	---	---	1.93	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5180 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.32	MHz	INFO
T1 26dB	---	---	5169.4000	MHz	INFO
T2 26dB	---	---	5190.7200	MHz	INFO

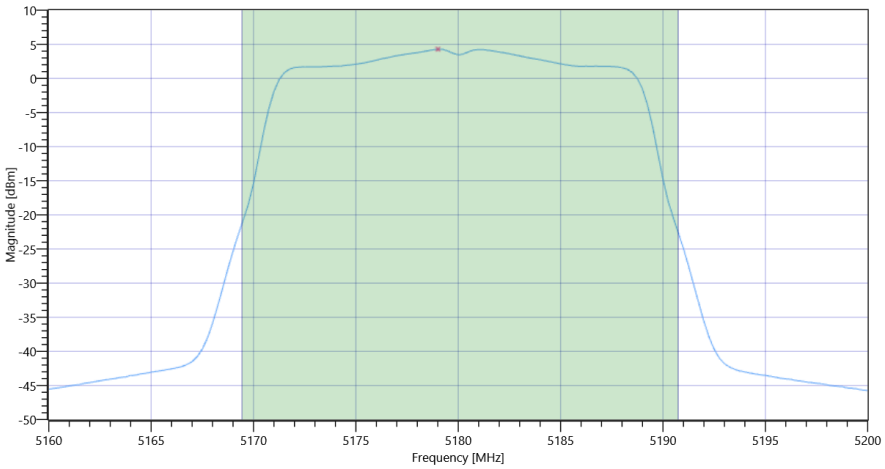


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.86 | 17.99 | 20
Start [MHz] | Stop [MHz]	5160.000 | 5200.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15	dBm	INFO
Duty Cycle Correction	---	---	0.11	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.11	dBm	PASS
Limit: 11 dBm + 10 log 21.32					
Max Output Power DC corrected	---	24.29	15.11	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	4.28	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.11	dB	INFO
Power Spectral Density DC corrected	---	11	4.39	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:21:37
Ambit Temp [°C] | Humidity [rel%]	23.2 | 52
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5180
Frequency mid to test	True | Freq [MHz] 5200
Frequency high to test	False | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

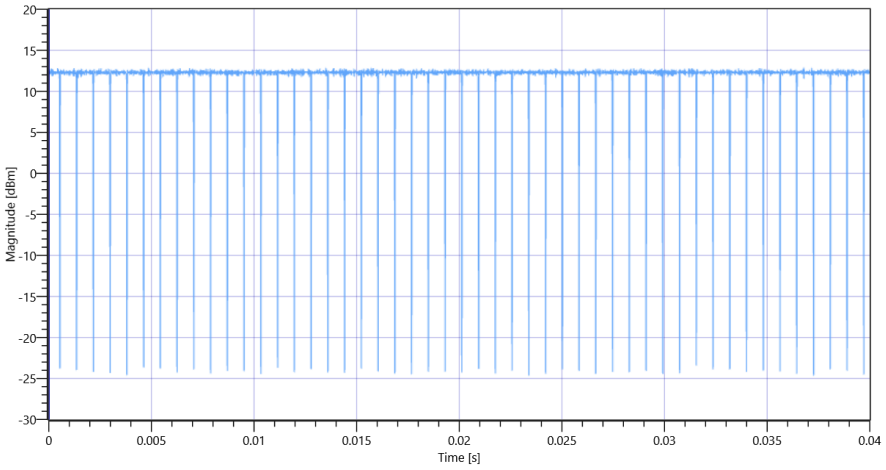
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5200 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.66	dBm	INFO
Ref. Frequency	---	---	5197.400	MHz	INFO

Evaluation max. Duty Cycle

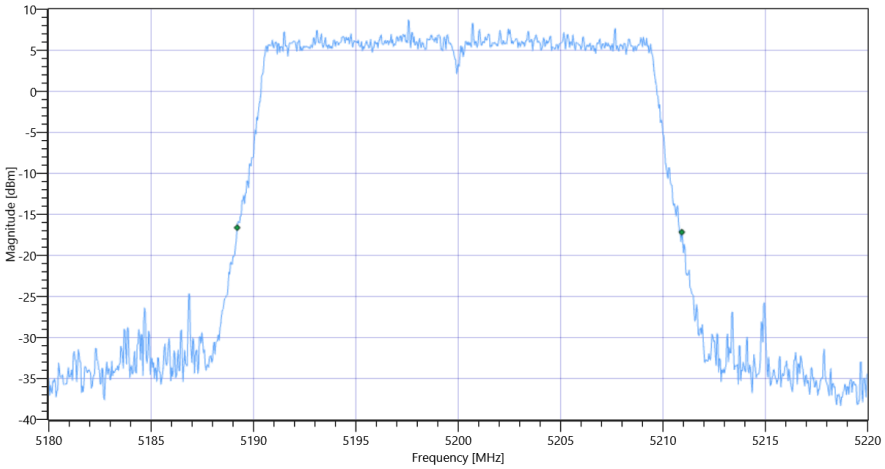
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:48					
Duty Cycle (Burst Ratio) max	---	---	0.951	---	INFO
Duty Cycle max	---	---	0.218	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.939	---	INFO
Duty Cycle min	---	---	0.273	dB	INFO
Max TX Burst Length	---	---	0.78	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5200 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.72	MHz	INFO
T1 26dB	---	---	5189.2000	MHz	INFO
T2 26dB	---	---	5210.9200	MHz	INFO

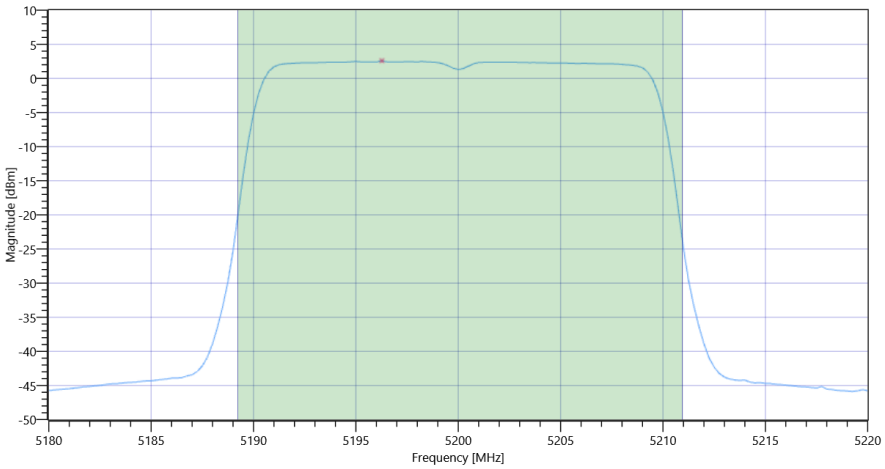


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.66 | 17.91 | 20
Start [MHz] | Stop [MHz]	5180.000 | 5220.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	14.77	dBm	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.04	dBm	PASS
Limit: 11 dBm + 10 log 21.72					
Max Output Power DC corrected	---	24.37	15.04	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	2.58	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Power Spectral Density DC corrected	---	11	2.85	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:23:45
Ambit Temp [°C] | Humidity [rel%]	23.2 | 52
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5180
Frequency mid to test	True | Freq [MHz] 5200
Frequency high to test	False | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

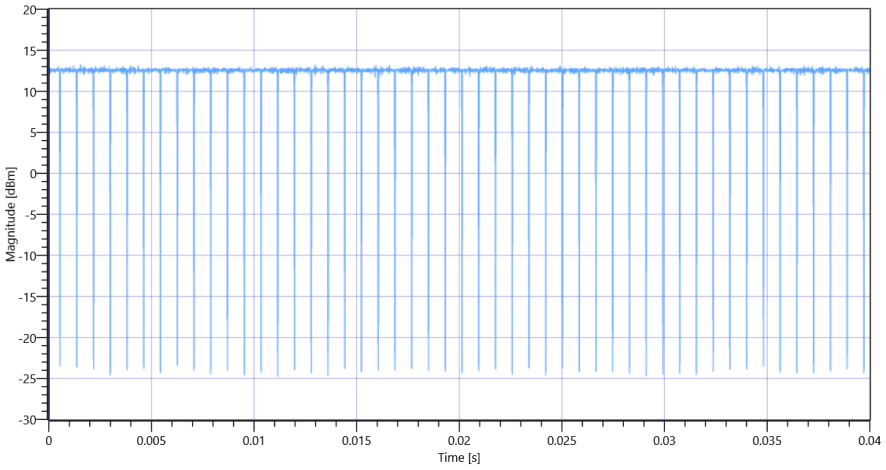
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5200 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	14.18	dBm	INFO
Ref. Frequency	---	---	5194.010	MHz	INFO

Evaluation max. Duty Cycle

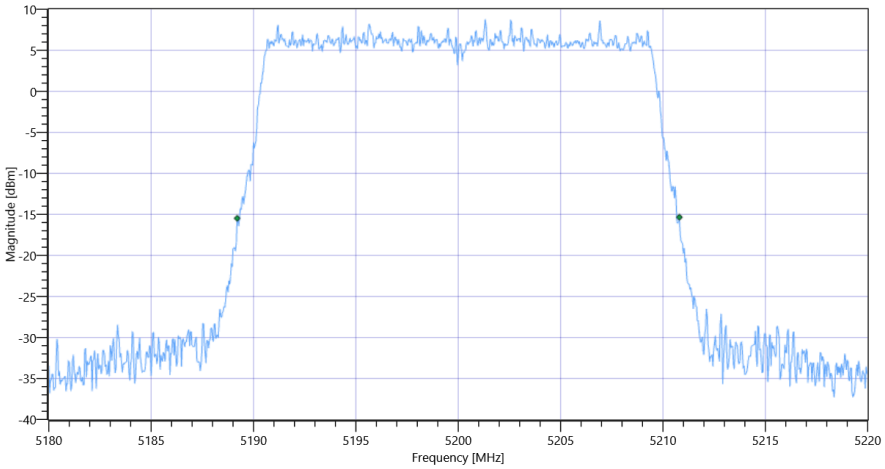
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:48					
Duty Cycle (Burst Ratio) max	---	---	0.951	---	INFO
Duty Cycle max	---	---	0.218	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.939	---	INFO
Duty Cycle min	---	---	0.273	dB	INFO
Max TX Burst Length	---	---	0.78	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5200 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.6	MHz	INFO
T1 26dB	---	---	5189.2000	MHz	INFO
T2 26dB	---	---	5210.8000	MHz	INFO

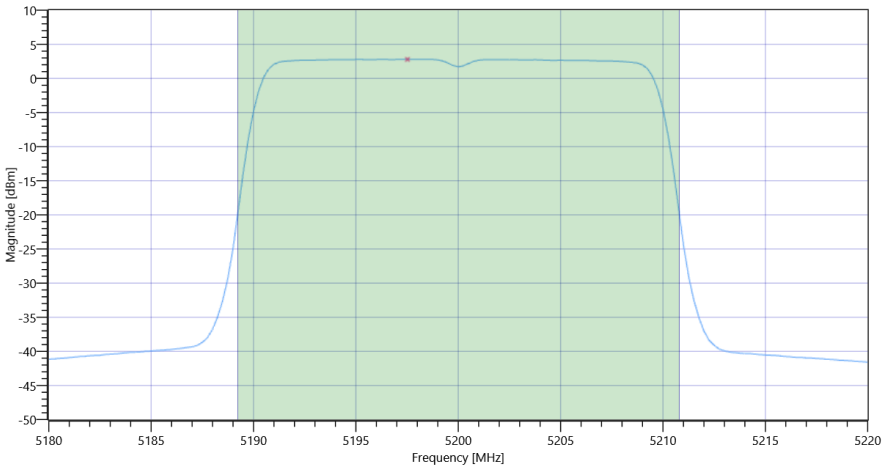


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	26.18 | 17.91 | 25
Start [MHz] | Stop [MHz]	5180.000 | 5220.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.15	dBm	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.42	dBm	PASS
Limit: 11 dBm + 10 log 21.6					
Max Output Power DC corrected	---	24.34	15.42	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	2.79	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Power Spectral Density DC corrected	---	11	3.06	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:29:23
Ambit Temp [°C] | Humidity [rel%]	23.3 | 52
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5180
Frequency mid to test	False | Freq [MHz] 5200
Frequency high to test	True | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

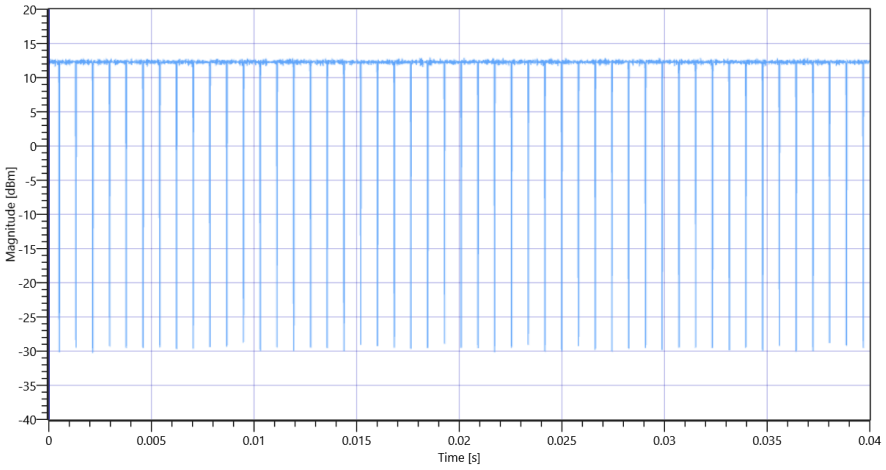
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5240 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	10.96	dBm	INFO
Ref. Frequency	---	---	5244.800	MHz	INFO

Evaluation max. Duty Cycle

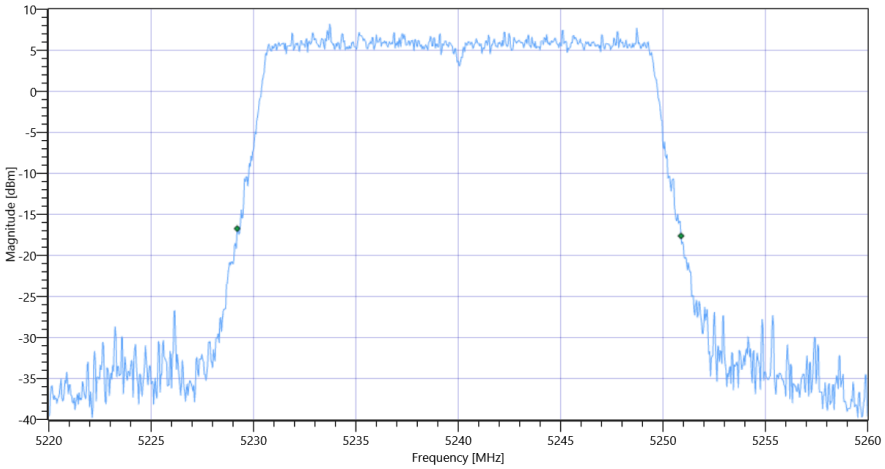
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:48					
Duty Cycle (Burst Ratio) max	---	---	0.951	---	INFO
Duty Cycle max	---	---	0.218	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.939	---	INFO
Duty Cycle min	---	---	0.273	dB	INFO
Max TX Burst Length	---	---	0.78	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5240 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.68	MHz	INFO
T1 26dB	---	---	5229.2000	MHz	INFO
T2 26dB	---	---	5250.8800	MHz	INFO

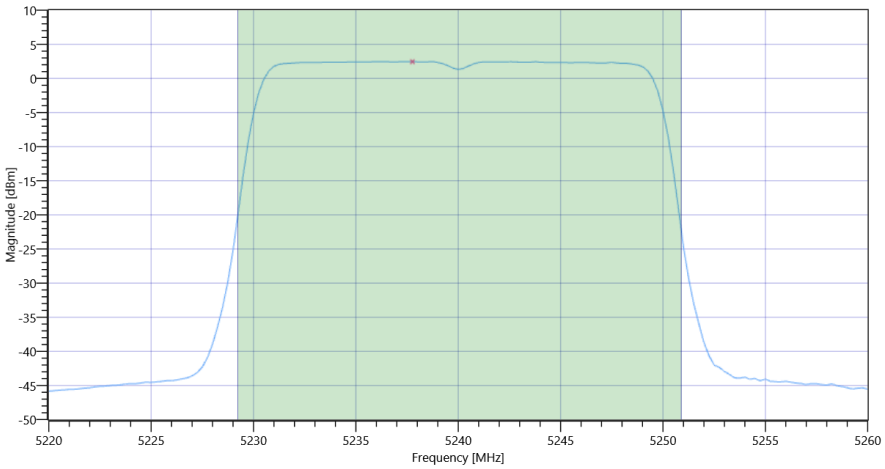


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	22.96 | 18.56 | 20
Start [MHz] | Stop [MHz]	5220.000 | 5260.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	14.82	dBm	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.09	dBm	PASS
Limit: 11 dBm + 10 log 21.68					
Max Output Power DC corrected	---	24.36	15.09	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	2.46	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Power Spectral Density DC corrected	---	11	2.73	dBm/1MHz	PASS

General verdict	PASS

FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1

Test References	
TC Start	23.08.2022 10:31:24
Ambit Temp [°C] | Humidity [rel%]	23.4 | 51
System Version	3.3.0.2
Test Specification	FCC 15.247 -
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE20 U-NII-1
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5180
Frequency mid to test	False | Freq [MHz] 5200
Frequency high to test	True | Freq [MHz] 5240
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

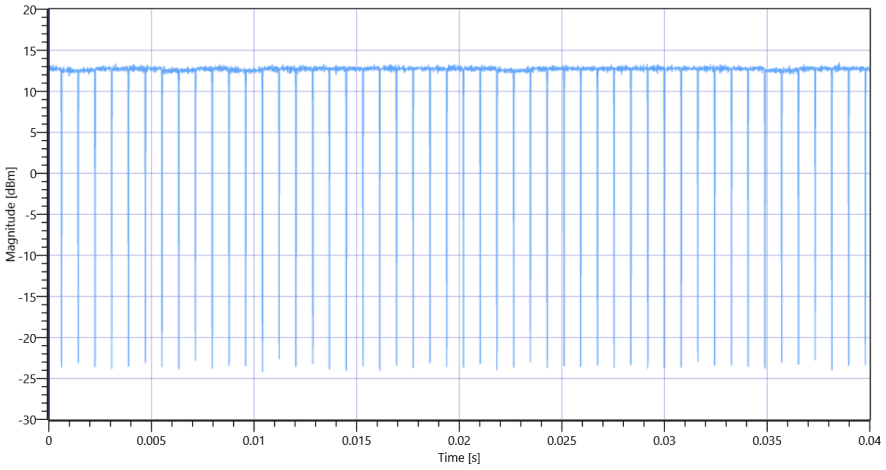
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5240 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	11.67	dBm	INFO
Ref. Frequency	---	---	5236.600	MHz	INFO

Evaluation max. Duty Cycle

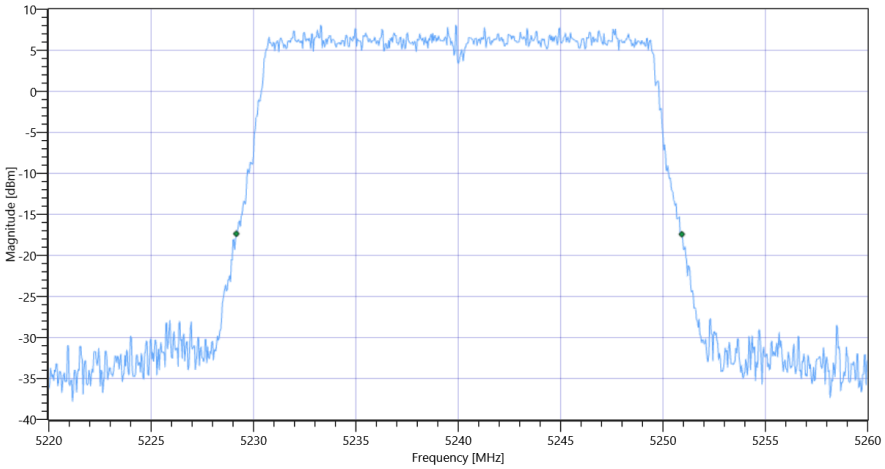
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:48					
Duty Cycle (Burst Ratio) max	---	---	0.951	---	INFO
Duty Cycle max	---	---	0.218	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.939	---	INFO
Duty Cycle min	---	---	0.273	dB	INFO
Max TX Burst Length	---	---	0.78	ms	INFO
Min Gap Length	---	---	0.04	ms	INFO
Max Gap Length	---	---	0.05	ms	INFO



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 5240 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	21.76	MHz	INFO
T1 26dB	---	---	5229.1600	MHz	INFO
T2 26dB	---	---	5250.9200	MHz	INFO

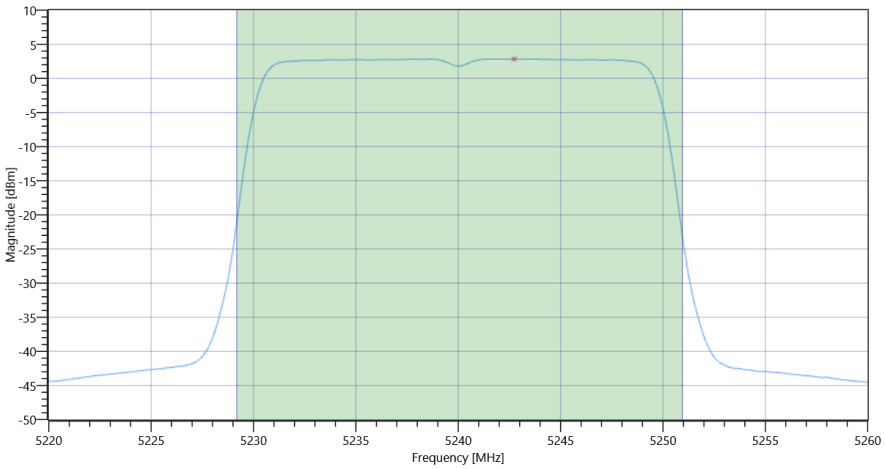


FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1_BW

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	23.67 | 18.56 | 20
Start [MHz] | Stop [MHz]	5220.000 | 5260.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	21500 | 1 | 161 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	15.2	dBm	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	24	15.47	dBm	PASS
Limit: 11 dBm + 10 log 21.76					
Max Output Power DC corrected	---	24.38	15.47	dBm	na



FCC 15.247 # Max output power and psd ~ WLAN5Gx ax-HE20 U-NII-1 Max OP and PSD

Power Spectral Density

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	2.85	dBm/1MHz	INFO
Duty Cycle Correction	---	---	0.27	dB	INFO
Power Spectral Density DC corrected	---	11	3.12	dBm/1MHz	PASS

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 09:48:42
Ambit Temp [°C] | Humidity [rel%]	23.9 | 42
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

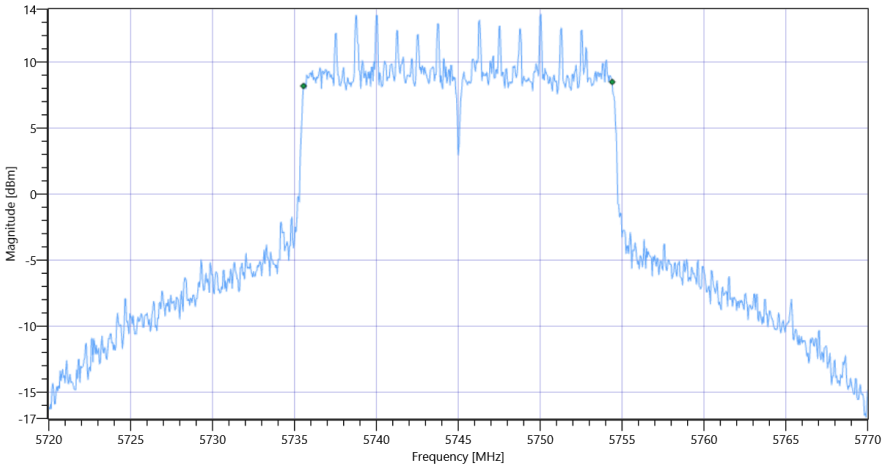
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.91	dBm	INFO
Ref. Frequency	---	---	5753.190	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.91 | 18.72 | 30
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.85	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 09:57:01
Ambit Temp [°C] | Humidity [rel%]	23.9 | 41
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	True | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

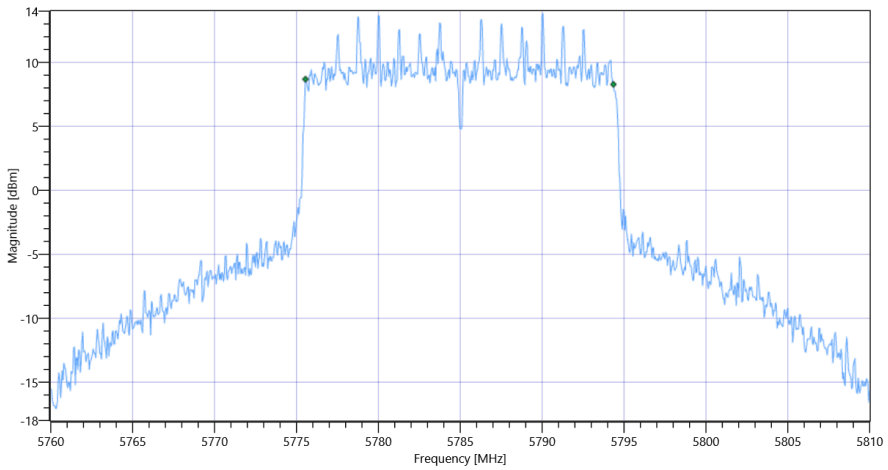
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5785 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.71	dBm	INFO
Ref. Frequency	---	---	5784.400	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.71 | 18.76 | 30
Start [MHz] | Stop [MHz]	5760.000 | 5810.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.8	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 10:05:46
Ambit Temp [°C] | Humidity [rel%]	24.0 | 41
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	True | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

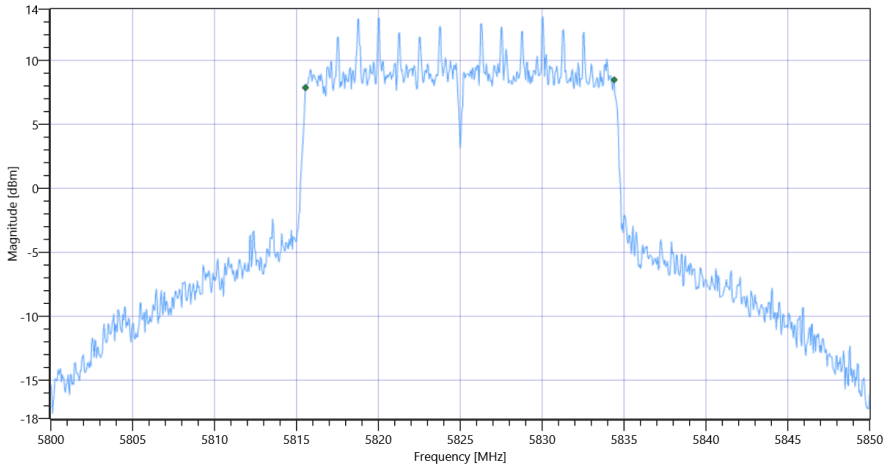
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5825 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.11	dBm	INFO
Ref. Frequency	---	---	5822.000	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.11 | 18.74 | 30
Start [MHz] | Stop [MHz]	5800.000 | 5850.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.85	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 11:05:31
Ambit Temp [°C] | Humidity [rel%]	24.4 | 40
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

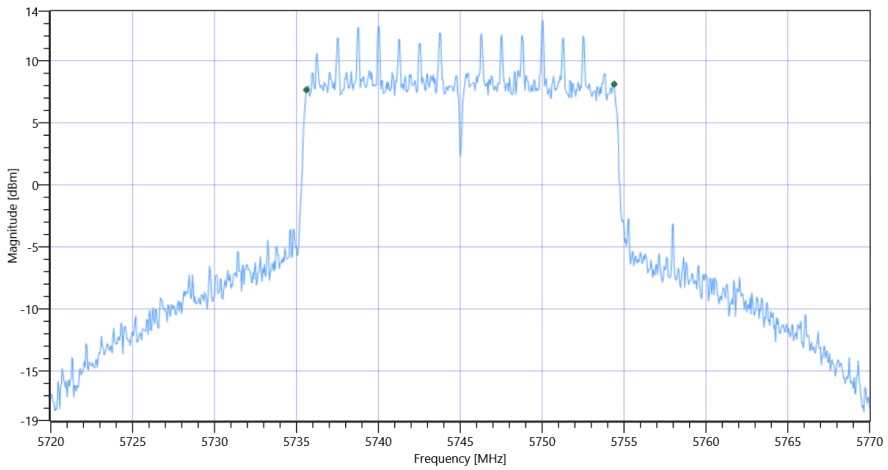
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.02	dBm	INFO
Ref. Frequency	---	---	5740.800	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.02 | 18.72 | 30
Start [MHz] | Stop [MHz]	5720.000 | 5770.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.8	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 11:13:36
Ambit Temp [°C] | Humidity [rel%]	24.4 | 40
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	True | Freq [MHz] 5785
Frequency high to test	False | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

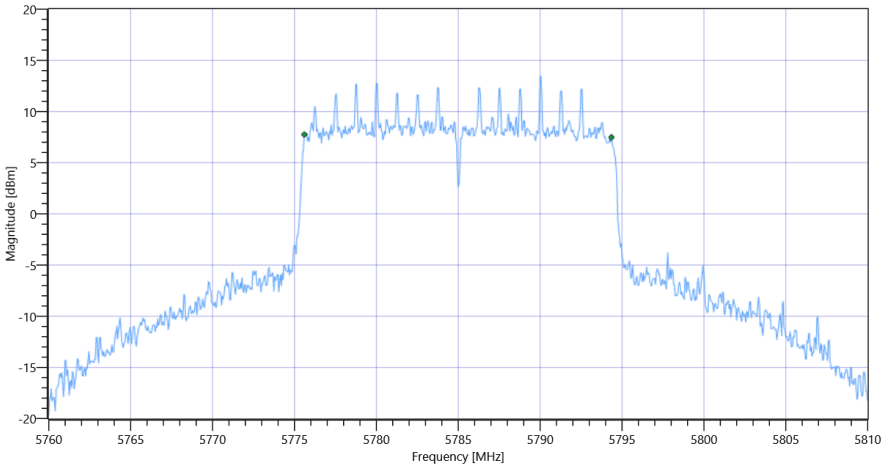
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5785 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.15	dBm	INFO
Ref. Frequency	---	---	5786.000	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.15 | 18.76 | 30
Start [MHz] | Stop [MHz]	5760.000 | 5810.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.75	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

Test References	
TC Start	15.07.2022 11:21:51
Ambit Temp [°C] | Humidity [rel%]	24.4 | 40
System Version	3.2.0.2
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 ax-HE20 U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	2
User Interaction	No
Device Class UNII_1	Client

Test Parameter	
Technology to test	WLAN5Gx ax-HE20
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 5745
Frequency mid to test	False | Freq [MHz] 5785
Frequency high to test	True | Freq [MHz] 5825
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	1.4
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

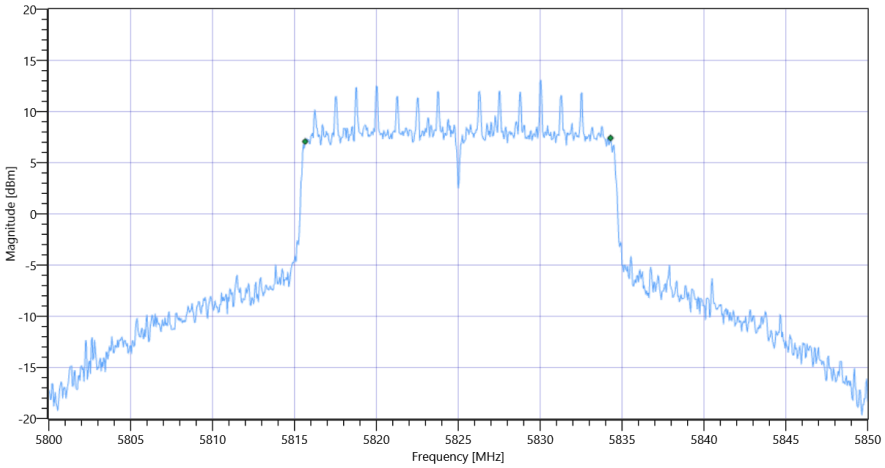
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5825 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.37	dBm	INFO
Ref. Frequency	---	---	5820.800	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	32.37 | 18.74 | 30
Start [MHz] | Stop [MHz]	5800.000 | 5850.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	18.65	MHz	PASS



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE20 U-NII-3

General verdict	PASS

- END OF DOCUMENT -