Measurement Results

No.1-2339/21-01-58_Annex_MR_A1

Test logging

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2021.07.22 10:54:15 +02'00'

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EUT Information

EUT DEFINITION	
Manufacturer	Robert Bosch GmbH
Type	PSA AIO
Serial Number	815RB0306M0003084
Setup Number	1.0
Version SW	014D
Version FW	NI
Version HW	C2 HW05
Comment 1	
Comment 2	
Temperature [°C] Min	-30
Temperature [°C] Nom	20
Temperature [°C] Max	70
Voltage [V] Min	9
Voltage [V] Nom	13.5
Voltage [V] Max	16

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3

Test References	
TC Start	09.06.2021 14:40:27
Ambit Temp [°C] | Humidity [rel%]	27.1 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx n-HT20 mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

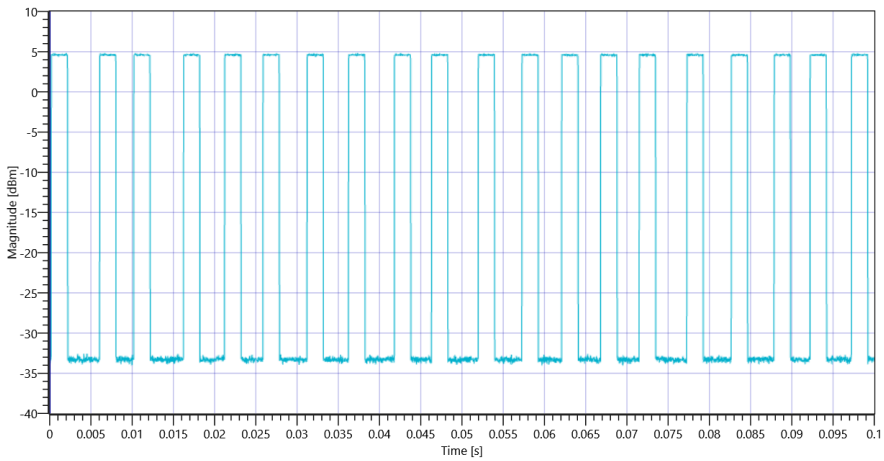
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	2.94	dBm	INFO
Ref. Frequency	---	---	5743.000	MHz	INFO

Evaluation max. Duty Cycle

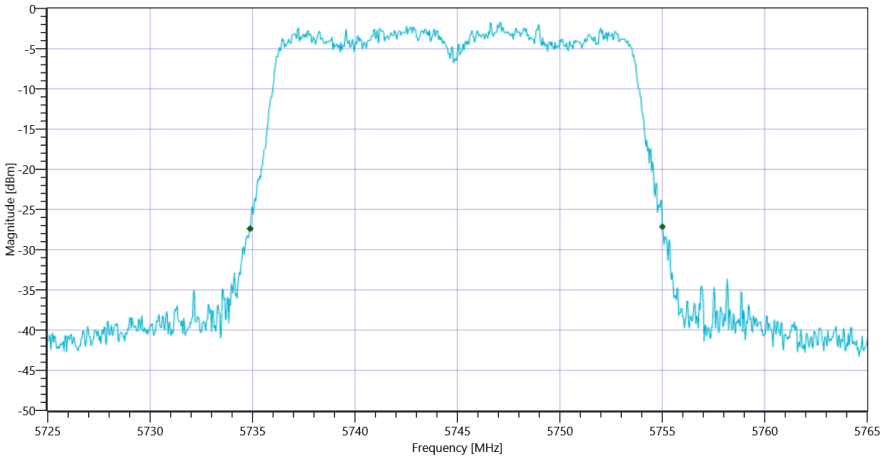
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.467	---	INFO
Duty Cycle max	---	---	3.307	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.322	---	INFO
Duty Cycle min	---	---	4.921	dB	INFO
Max TX Burst Length	---	---	1.95	ms	INFO
Min Gap Length	---	---	2.2	ms	INFO
Max Gap Length	---	---	4.1	ms	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	20.12	MHz	INFO
T1 26dB	---	---	5734.8800	MHz	INFO
T2 26dB	---	---	5755.0000	MHz	INFO

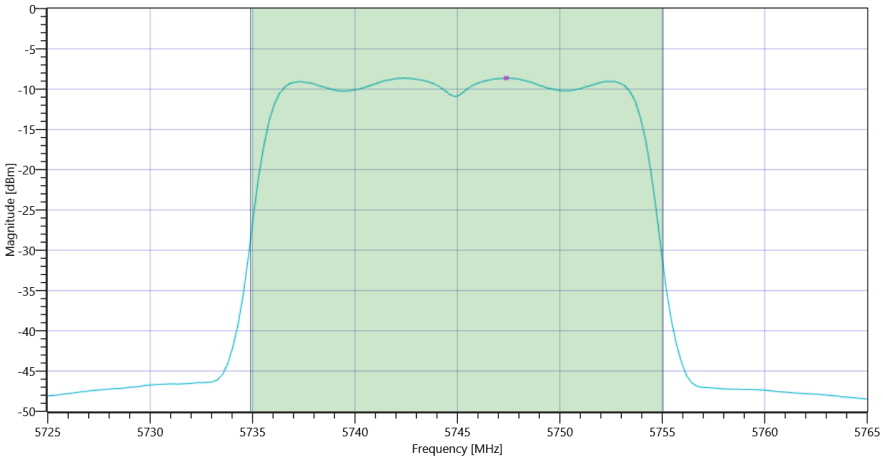


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.94 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	2.8	dBm	INFO
Duty Cycle Correction	---	---	4.92	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	7.72	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	24.04	7.72	dBm	not applicable

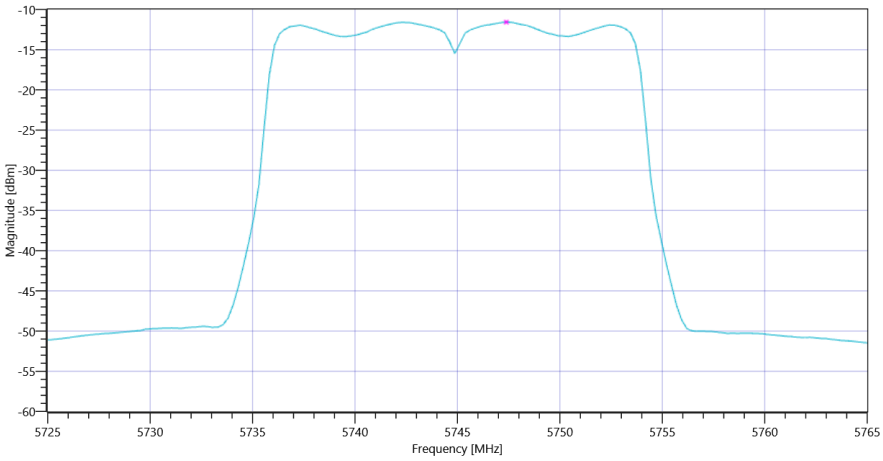


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.94 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-11.56	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	4.92	dB	INFO
Power Spectral Density DC corrected	---	30	-6.64	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

General verdict	PASS

ISED Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3

Test References	
TC Start	09.06.2021 14:43:10
Ambit Temp [°C] | Humidity [rel%]	27.1 | 43
System Version	3.0.1.2
Test Specification	ISED
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx n-HT20 mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

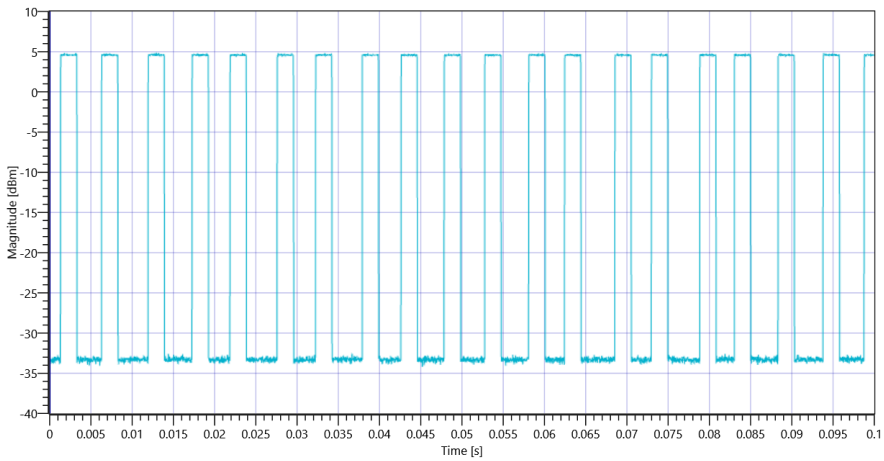
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	2.90	dBm	INFO
Ref. Frequency	---	---	5752.390	MHz	INFO

Evaluation max. Duty Cycle

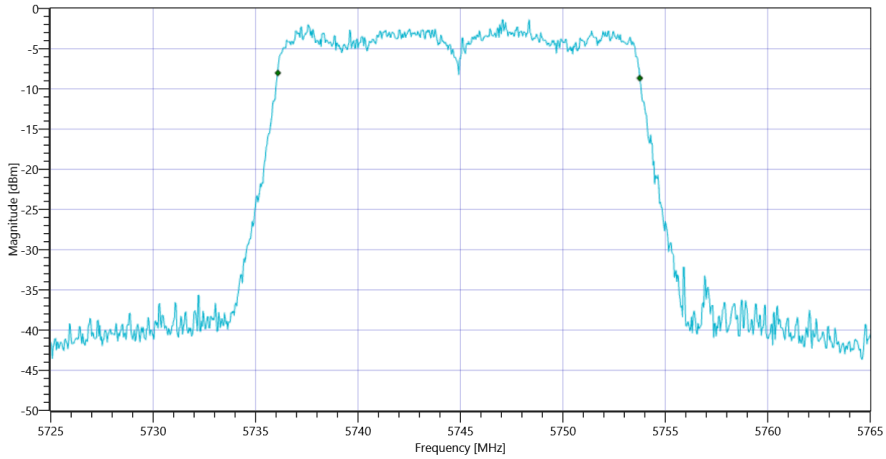
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.458	---	INFO
Duty Cycle max	---	---	3.391	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.316	---	INFO
Duty Cycle min	---	---	5.003	dB	INFO
Max TX Burst Length	---	---	1.95	ms	INFO
Min Gap Length	---	---	2.275	ms	INFO
Max Gap Length	---	---	4.175	ms	INFO



ISED Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.662	MHz	INFO
T1 99%	---	---	5736.0889	MHz	INFO
T2 99%	---	---	5753.7512	MHz	INFO

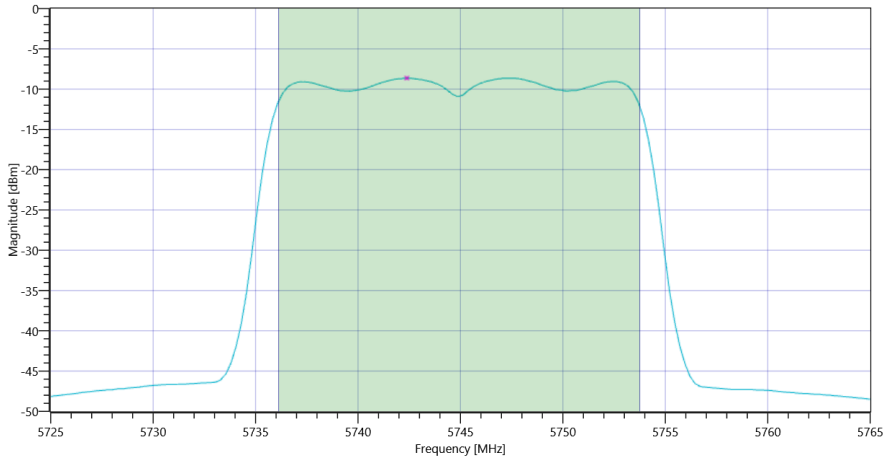


ISED Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.90 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	2.69	dBm	INFO
Duty Cycle Correction	---	---	5	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	7.69	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.47	7.69	dBm	not applicable

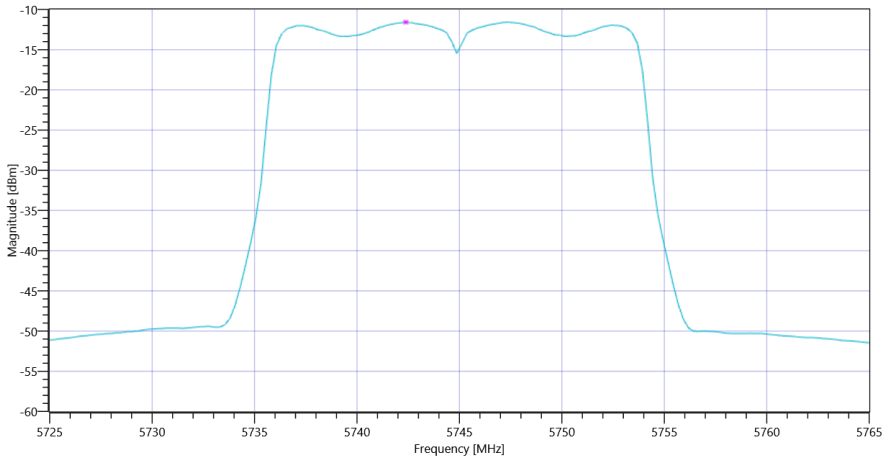


ISED Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.90 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-11.57	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	5	dB	INFO
Power Spectral Density DC corrected	---	30	-6.57	dBm/0.5MHz	PASS



ISED Max Output Power and PSD ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx n-HT20 mode U-NII-3

Test References	
TC Start	09.06.2021 14:45:54
Ambit Temp [°C] | Humidity [rel%]	27.1 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx n-HT20 mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

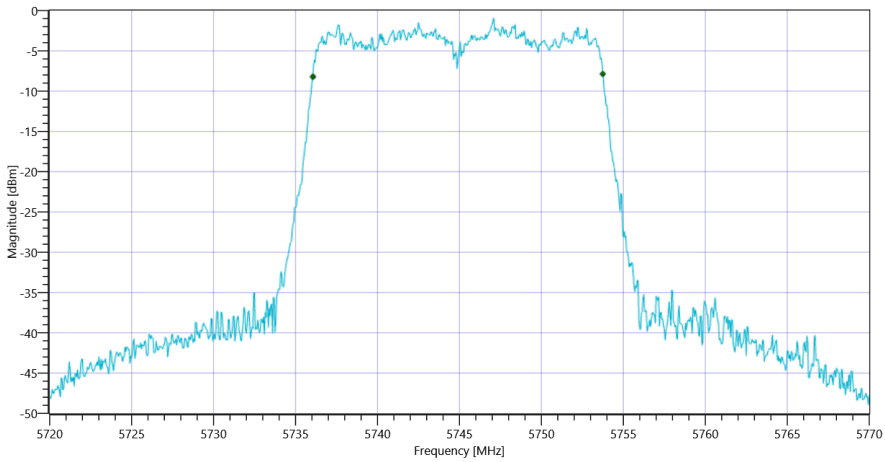
Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	3.41	dBm	INFO
Ref. Frequency	---	---	5748.000	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	11.41 | 17.38 | 10
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

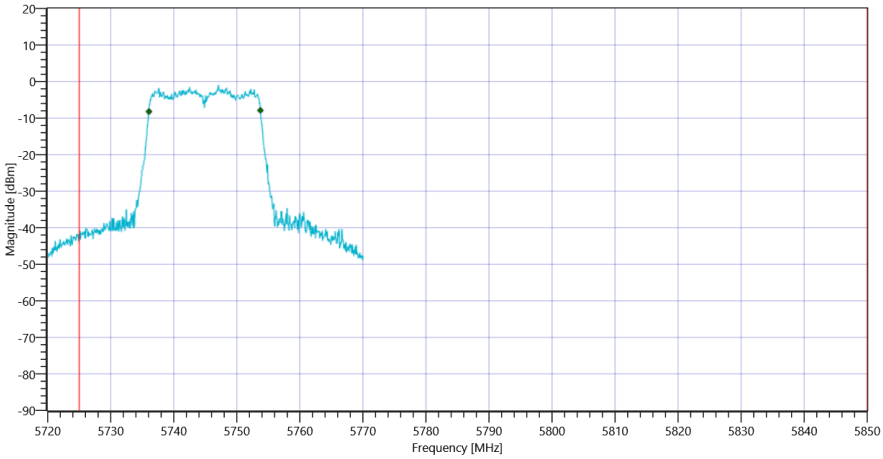
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17.682	MHz	INFO
T1 99%	5725.000000	---	5736.0589	MHz	PASS
T2 99%	---	5850.000000	5753.7413	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx n-HT20 mode U-NII-3 99PCT

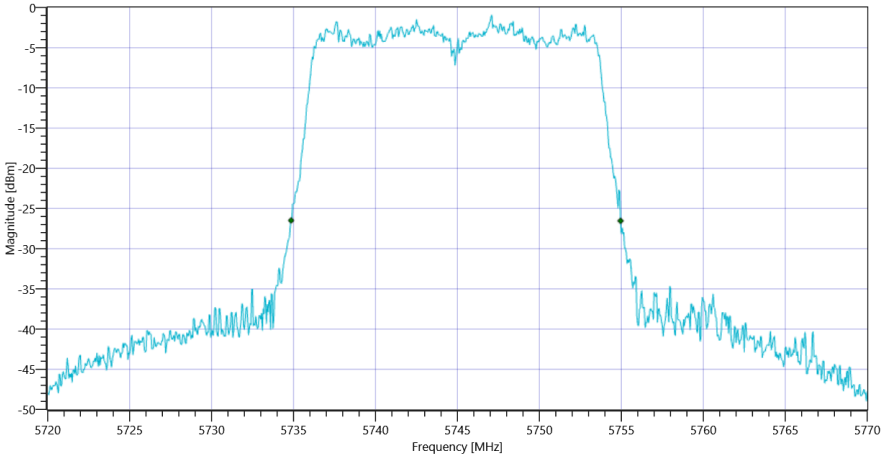
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx n-HT20 mode U-NII-3

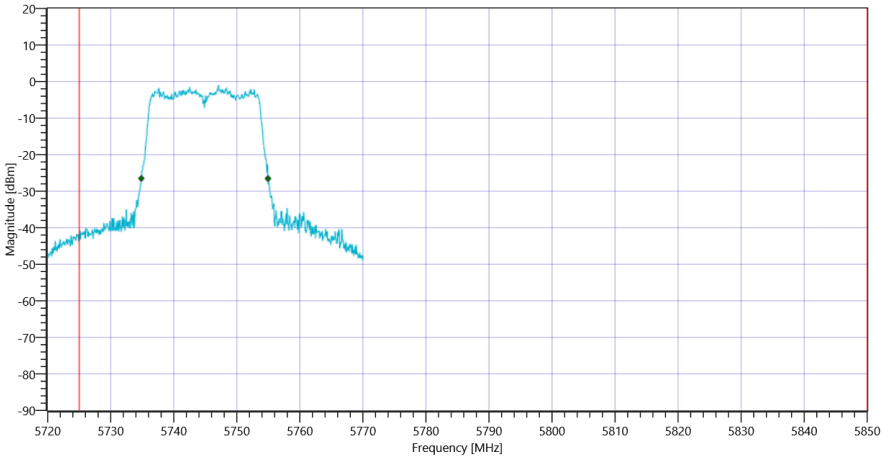
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20.1	MHz	INFO
T1 26dB	5725.000000	---	5734.8500	MHz	PASS
T2 26dB	---	5850.000000	5754.9500	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx n-HT20 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx n-HT20 mode U-NII-3

General verdict	PASS

ISED Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	09.06.2021 14:05:05
Ambit Temp [°C] | Humidity [rel%]	26.9 | 43
System Version	3.0.1.2
Test Specification	ISED
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx a mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx a mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

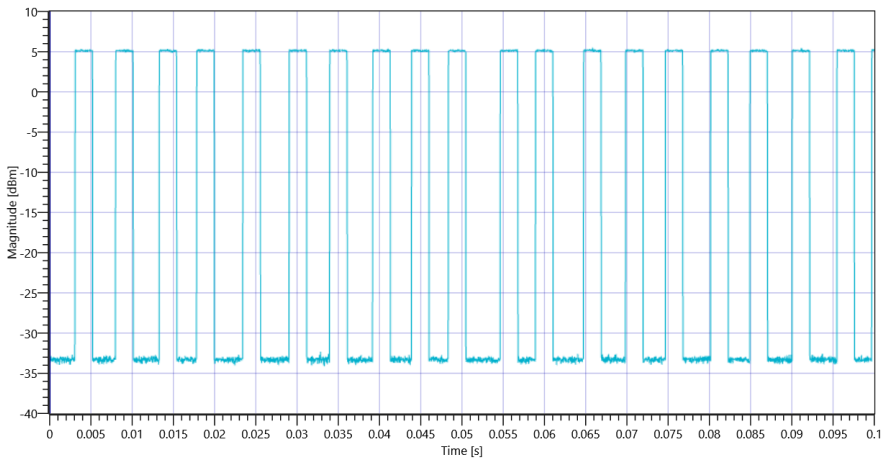
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	3.35	dBm	INFO
Ref. Frequency	---	---	5746.200	MHz	INFO

Evaluation max. Duty Cycle

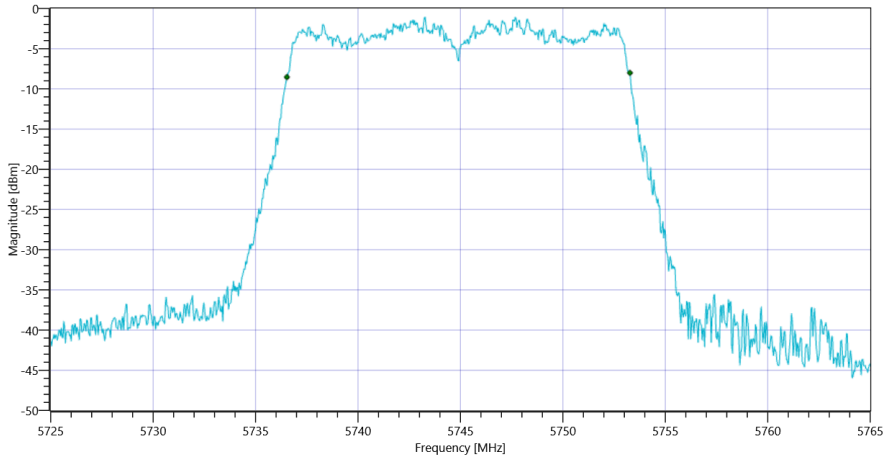
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.485	---	INFO
Duty Cycle max	---	---	3.143	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.329	---	INFO
Duty Cycle min	---	---	4.828	dB	INFO
Max TX Burst Length	---	---	2.1	ms	INFO
Min Gap Length	---	---	2.2	ms	INFO
Max Gap Length	---	---	4.225	ms	INFO



ISED Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.743	MHz	INFO
T1 99%	---	---	5736.5285	MHz	INFO
T2 99%	---	---	5753.2717	MHz	INFO

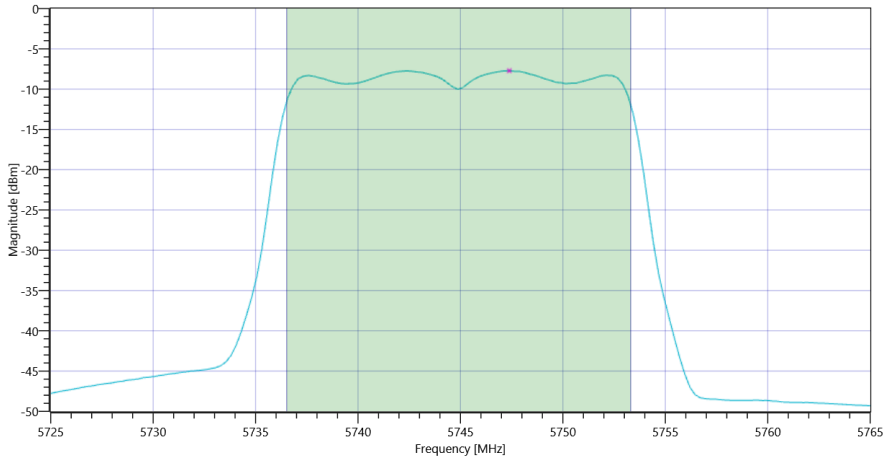


ISED Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.35 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	3.33	dBm	INFO
Duty Cycle Correction	---	---	4.83	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	8.16	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.24	8.16	dBm	not applicable

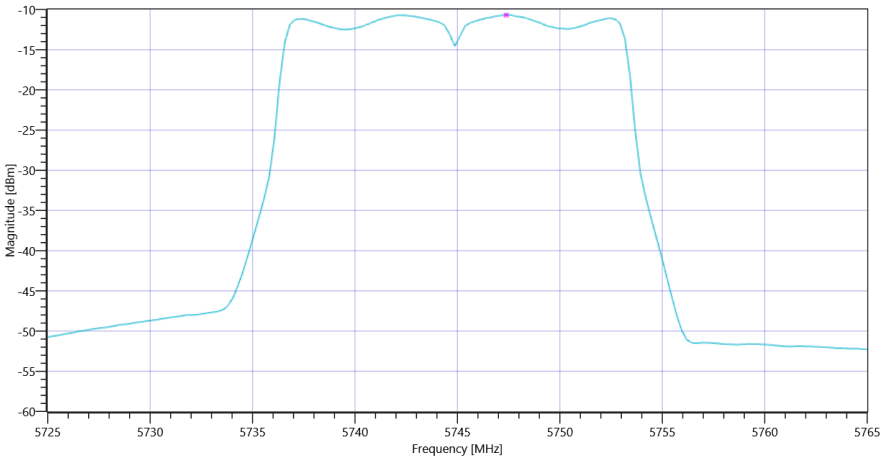


ISED Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.35 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-10.68	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	4.83	dB	INFO
Power Spectral Density DC corrected	---	30	-5.85	dBm/0.5MHz	PASS



ISED Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	09.06.2021 14:02:22
Ambit Temp [°C] | Humidity [rel%]	26.9 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx a mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx a mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

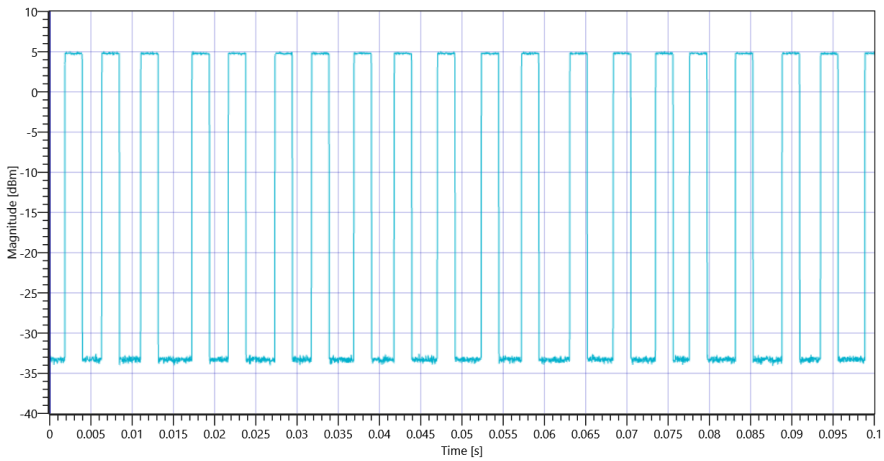
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	3.61	dBm	INFO
Ref. Frequency	---	---	5743.000	MHz	INFO

Evaluation max. Duty Cycle

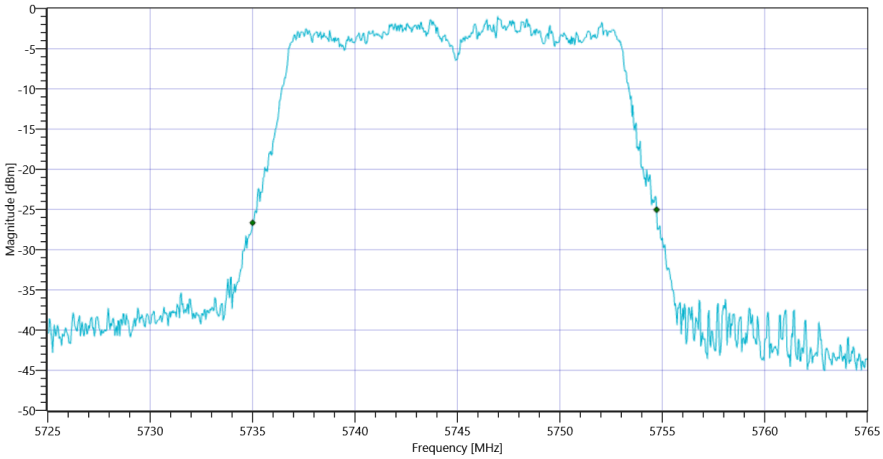
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.509	---	INFO
Duty Cycle max	---	---	2.933	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.335	---	INFO
Duty Cycle min	---	---	4.75	dB	INFO
Max TX Burst Length	---	---	2.1	ms	INFO
Min Gap Length	---	---	2.025	ms	INFO
Max Gap Length	---	---	4.125	ms	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	19.72	MHz	INFO
T1 26dB	---	---	5735.0000	MHz	INFO
T2 26dB	---	---	5754.7200	MHz	INFO

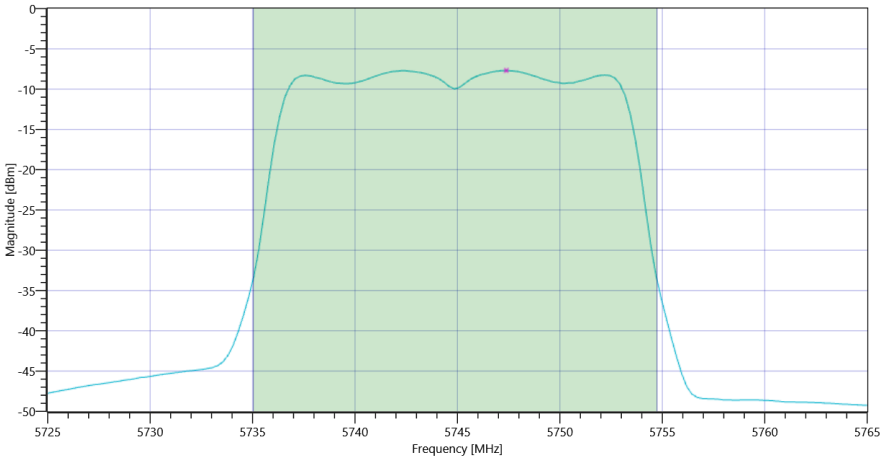


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.61 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	3.44	dBm	INFO
Duty Cycle Correction	---	---	4.75	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	8.19	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	23.95	8.19	dBm	not applicable

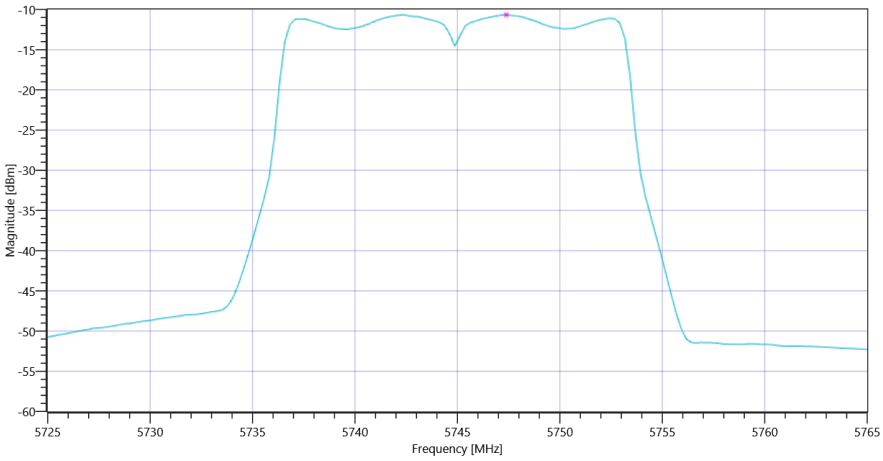


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.61 | 17.38 | 15
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	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-10.66	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	4.75	dB	INFO
Power Spectral Density DC corrected	---	30	-5.91	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx a mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	09.06.2021 14:07:48
Ambit Temp [°C] | Humidity [rel%]	26.9 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx a mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx a mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

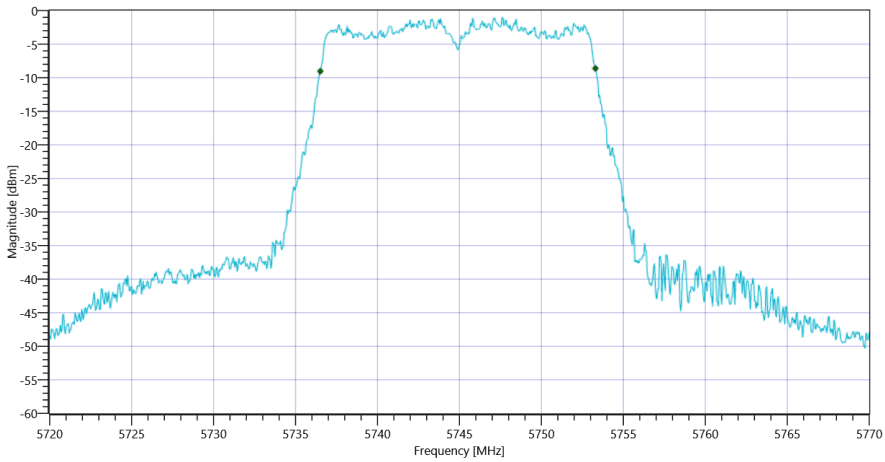
Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	2.88	dBm	INFO
Ref. Frequency	---	---	5741.600	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	10.88 | 17.38 | 10
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

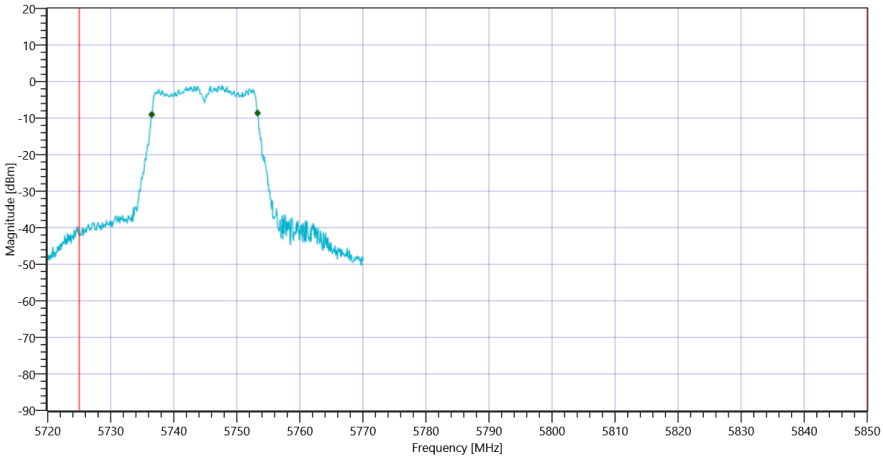
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	16.783	MHz	INFO
T1 99%	5725.000000	---	5736.5085	MHz	PASS
T2 99%	---	5850.000000	5753.2917	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3 99PCT

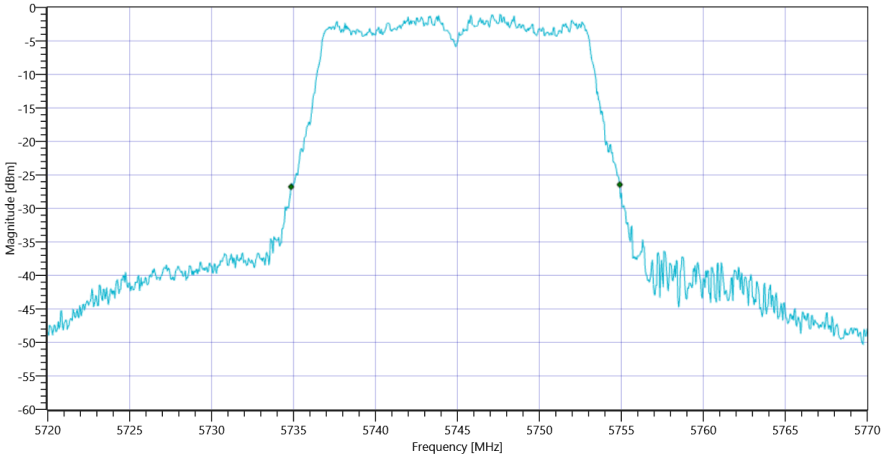
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

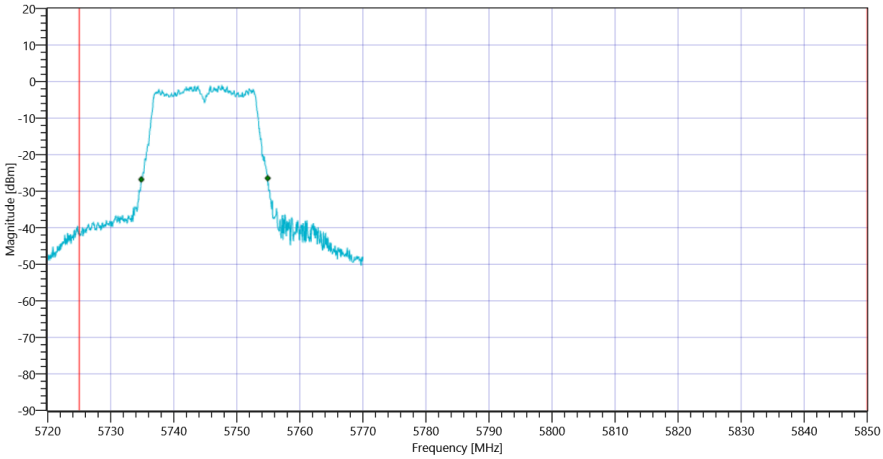
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	20.05	MHz	INFO
T1 26dB	5725.000000	---	5734.8500	MHz	PASS
T2 26dB	---	5850.000000	5754.9000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx a mode U-NII-3

General verdict	PASS

FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx a mode U-NII-3

Test References	
TC Start	09.06.2021 14:08:40
Ambit Temp [°C] | Humidity [rel%]	26.9 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx a mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx a mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

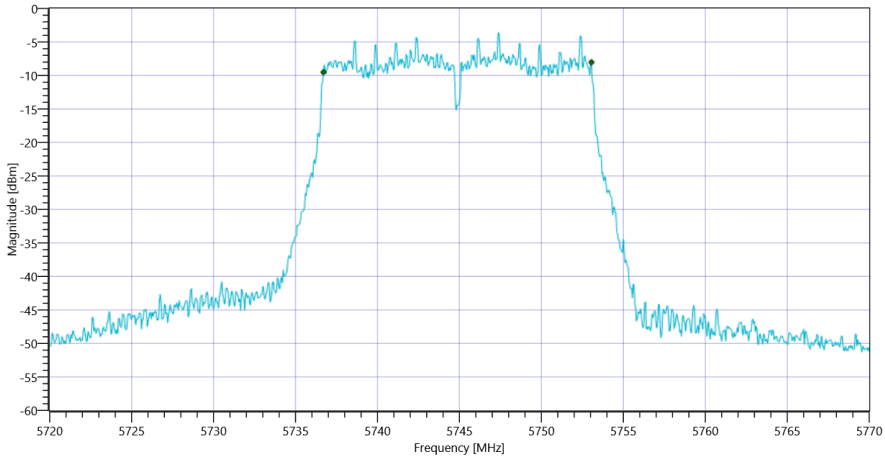
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5745 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	3.60	dBm	INFO
Ref. Frequency	---	---	5747.400	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.60 | 17.38 | 15
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	---	16.35	MHz	PASS



FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx a mode U-NII-3

General verdict	PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References	
TC Start	10.06.2021 07:25:25
Ambit Temp [°C] | Humidity [rel%]	26.7 | 45
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT40 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5755
Frequency mid to test	False | Freq [MHz] 0
Frequency high to test	False | Freq [MHz] 5795
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

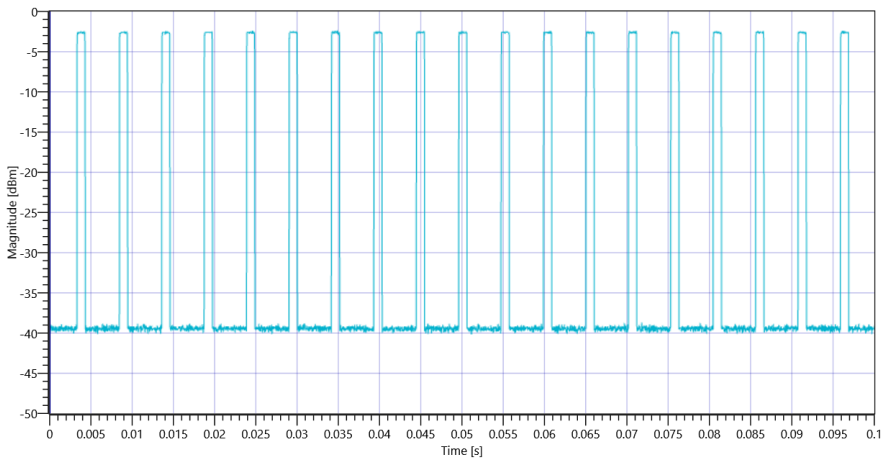
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5755 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-4.63	dBm	INFO
Ref. Frequency	---	---	5749.810	MHz	INFO

Evaluation max. Duty Cycle

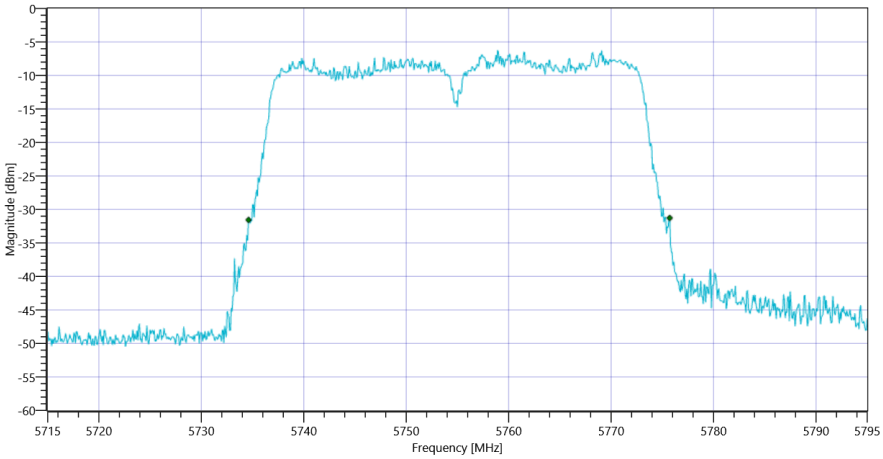
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:17					
Duty Cycle (Burst Ratio) max	---	---	0.185	---	INFO
Duty Cycle max	---	---	7.328	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.18	---	INFO
Duty Cycle min	---	---	7.447	dB	INFO
Max TX Burst Length	---	---	0.95	ms	INFO
Min Gap Length	---	---	4.175	ms	INFO
Max Gap Length	---	---	4.2	ms	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 5755 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	41.12	MHz	INFO
T1 26dB	---	---	5734.6000	MHz	INFO
T2 26dB	---	---	5775.7200	MHz	INFO

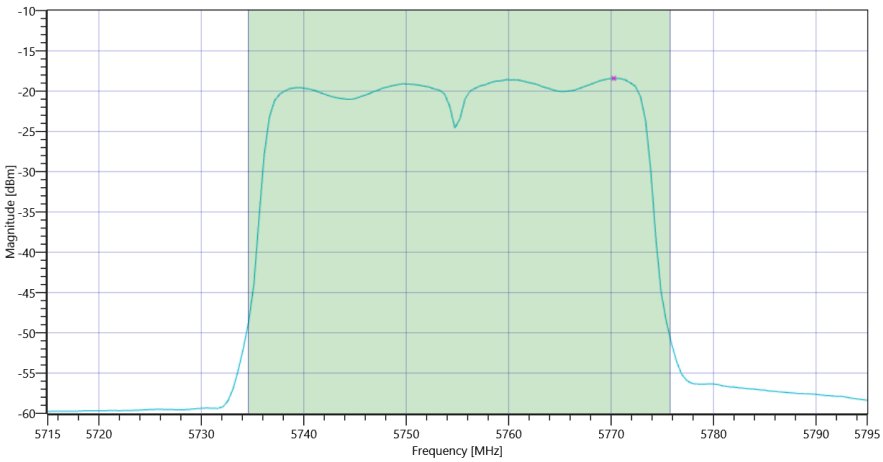


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.37 | 17.37 | 5
Start [MHz] | Stop [MHz]	5715.000 | 5795.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	-4.3	dBm	INFO
Duty Cycle Correction	---	---	7.45	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	3.15	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	27.14	3.15	dBm	not applicable

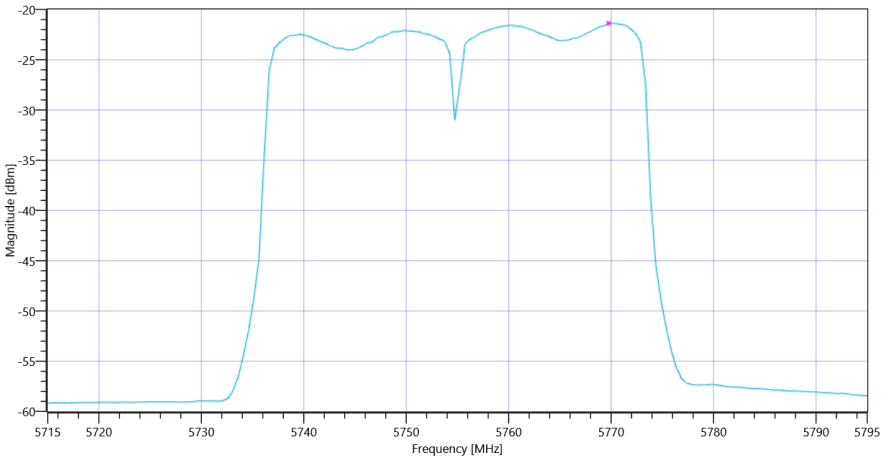


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.37 | 17.37 | 10
Start [MHz] | Stop [MHz]	5715.000 | 5795.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-21.37	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	7.45	dB	INFO
Power Spectral Density DC corrected	---	30	-13.92	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

General verdict	PASS

ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References	
TC Start	10.06.2021 07:28:08
Ambit Temp [°C] | Humidity [rel%]	26.7 | 45
System Version	3.0.1.2
Test Specification	ISED
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT40 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5755
Frequency mid to test	False | Freq [MHz] 0
Frequency high to test	False | Freq [MHz] 5795
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

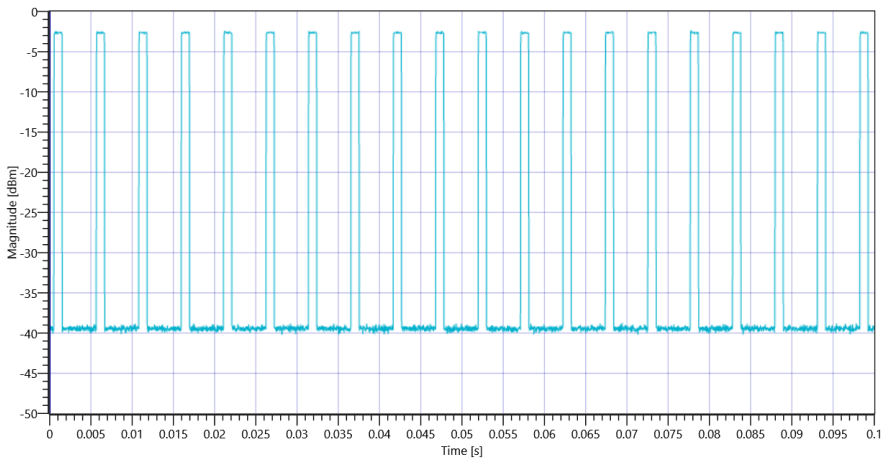
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5755 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-4.05	dBm	INFO
Ref. Frequency	---	---	5758.600	MHz	INFO

Evaluation max. Duty Cycle

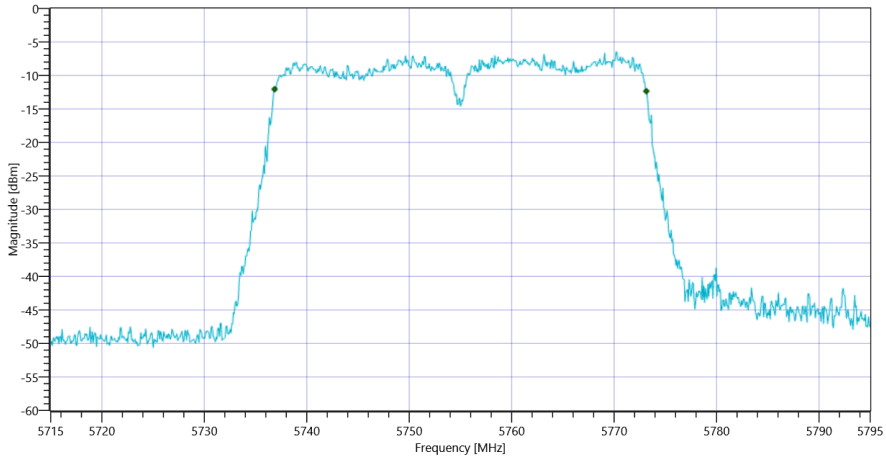
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.184	---	INFO
Duty Cycle max	---	---	7.352	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.18	---	INFO
Duty Cycle min	---	---	7.447	dB	INFO
Max TX Burst Length	---	---	0.95	ms	INFO
Min Gap Length	---	---	4.2	ms	INFO
Max Gap Length	---	---	4.2	ms	INFO



ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 5755 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.284	MHz	INFO
T1 99%	---	---	5736.8581	MHz	INFO
T2 99%	---	---	5773.1419	MHz	INFO

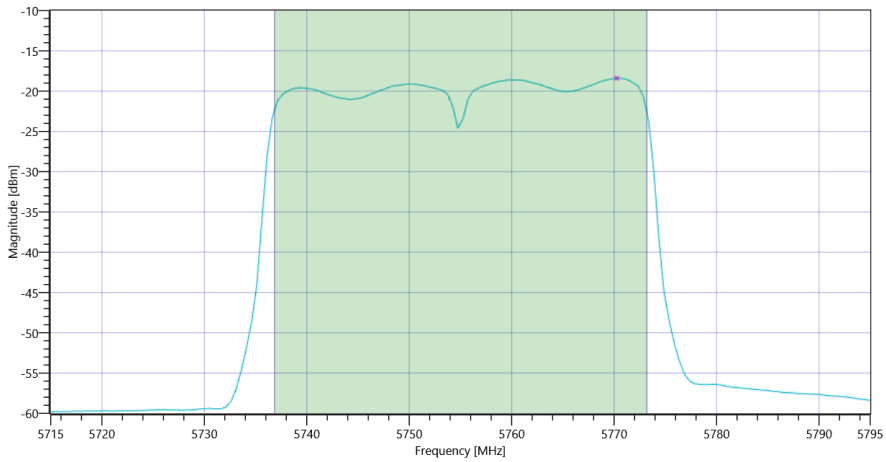


ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.95 | 17.37 | 5
Start [MHz] | Stop [MHz]	5715.000 | 5795.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	-4.37	dBm	INFO
Duty Cycle Correction	---	---	7.45	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	3.08	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	26.6	3.08	dBm	not applicable

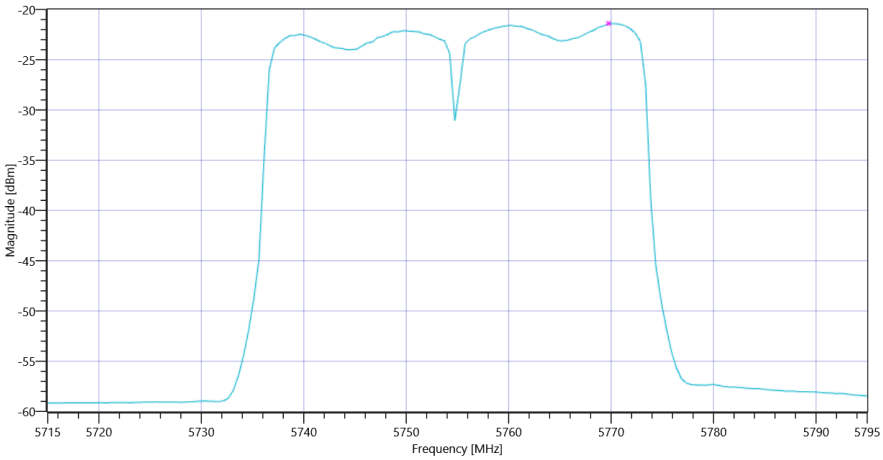


ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.95 | 17.37 | 10
Start [MHz] | Stop [MHz]	5715.000 | 5795.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	53400 | 1 | 160 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-21.39	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	7.45	dB	INFO
Power Spectral Density DC corrected	---	30	-13.94	dBm/0.5MHz	PASS



ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT40 mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References	
TC Start	10.06.2021 07:30:51
Ambit Temp [°C] | Humidity [rel%]	26.7 | 45
System Version	3.0.1.2
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT40 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5755
Frequency mid to test	False | Freq [MHz] 0
Frequency high to test	False | Freq [MHz] 5795
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

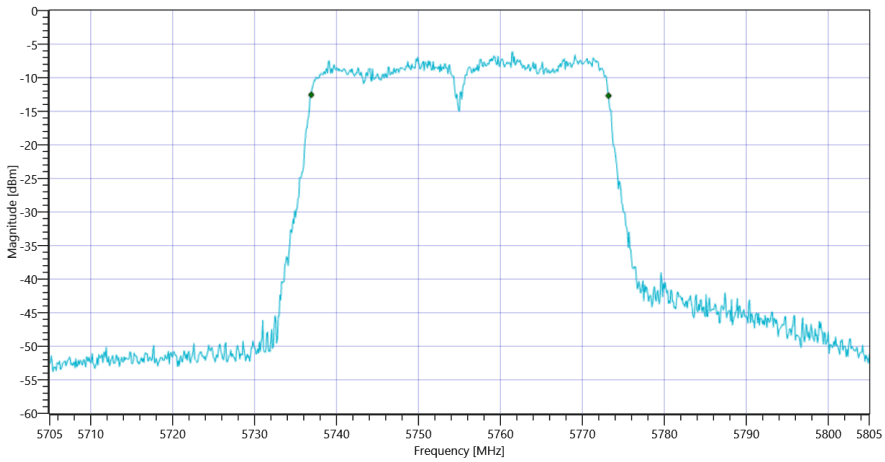
Test at TX 5755 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-3.66	dBm	INFO
Ref. Frequency	---	---	5757.200	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.34 | 17.37 | 5
Start [MHz] | Stop [MHz]	5705.000 | 5805.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE

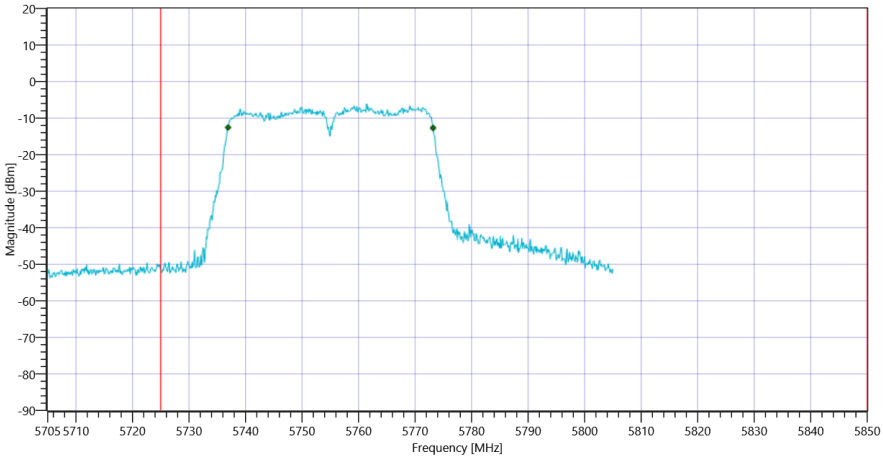
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	36.264	MHz	INFO
T1 99%	5725.000000	---	5736.9181	MHz	PASS
T2 99%	---	5850.000000	5773.1818	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT40 mode U-NII-3 99PCT

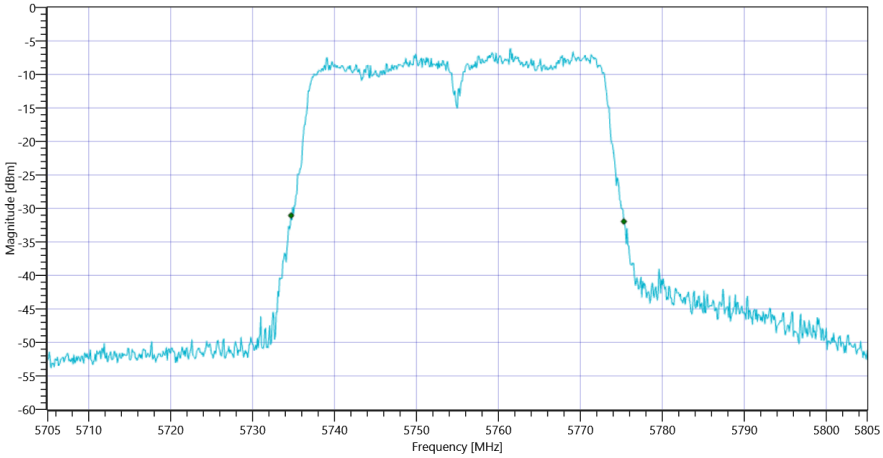
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT40 mode U-NII-3

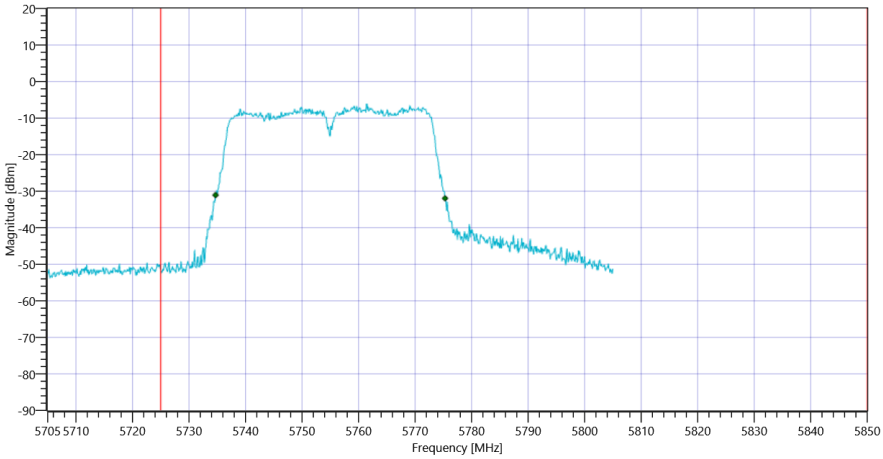
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40.6	MHz	INFO
T1 26dB	5725.000000	---	5734.7000	MHz	PASS
T2 26dB	---	5850.000000	5775.3000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT40 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT40 mode U-NII-3

General verdict	PASS

FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx ac-VHT40 mode U-NII-3

Test References	
TC Start	10.06.2021 07:31:43
Ambit Temp [°C] | Humidity [rel%]	26.7 | 45
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT40 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT40 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 5755
Frequency mid to test	False | Freq [MHz] 0
Frequency high to test	False | Freq [MHz] 5795
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

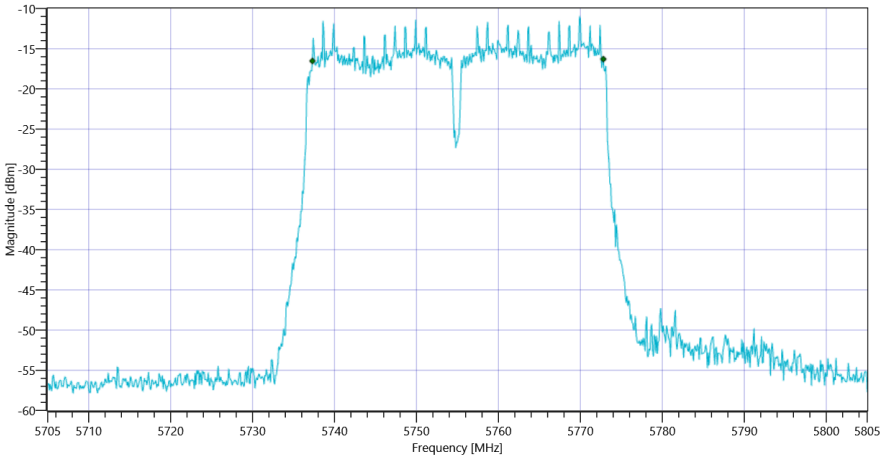
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5755 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-3.48	dBm	INFO
Ref. Frequency	---	---	5771.580	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	8.52 | 17.37 | 10
Start [MHz] | Stop [MHz]	5705.000 | 5805.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	2 | 1500 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth (6dB)	0.500	---	35.5	MHz	PASS



FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx ac-VHT40 mode U-NII-3

General verdict	PASS

FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx ac-VHT80 mode U-NII-3

Test References	
TC Start	10.06.2021 08:04:02
Ambit Temp [°C] | Humidity [rel%]	26.8 | 46
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx ac-VHT80 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT80 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

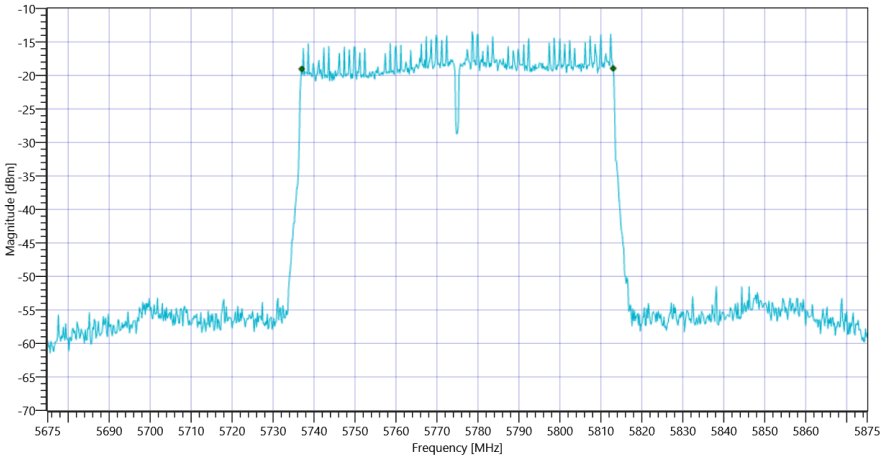
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5775 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-7.49	dBm	INFO
Ref. Frequency	---	---	5785.590	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.51 | 17.52 | 5
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
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	---	76	MHz	PASS



FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx ac-VHT80 mode U-NII-3

General verdict	PASS

FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT80 mode U-NII-3

Test References	
TC Start	10.06.2021 08:03:05
Ambit Temp [°C] | Humidity [rel%]	26.8 | 46
System Version	3.0.1.2
Test Specification	FCC Part 15.407 & ISET RSS-GEN
Test Method	26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN
TC Version	0.0.1
My Description	FCC 15.407 Bandwidths - WLAN5Gx ac-VHT80 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT80 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

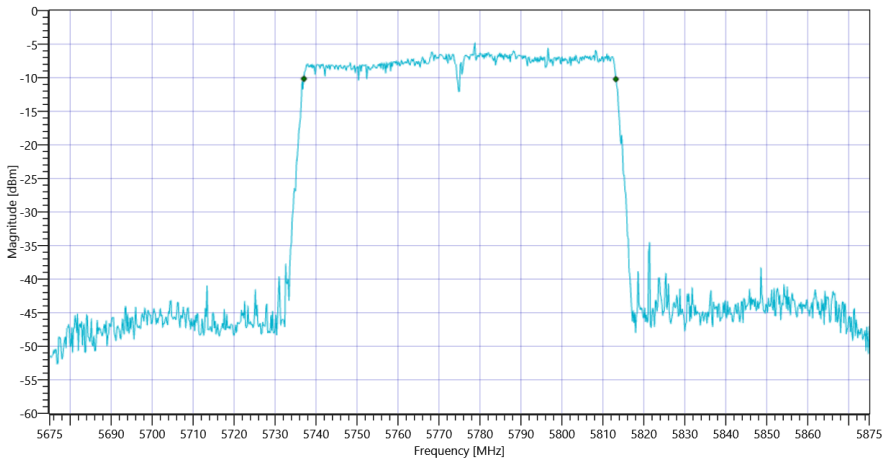
Test at TX 5775 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-6.17	dBm	INFO
Ref. Frequency	---	---	5779.000	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	1.83 | 17.52 | 0
Start [MHz] | Stop [MHz]	5675.000 | 5875.000
RBW [MHz] | VBW [MHz]	1.000000 | 5.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1 | 2500 | 1001 | SWE

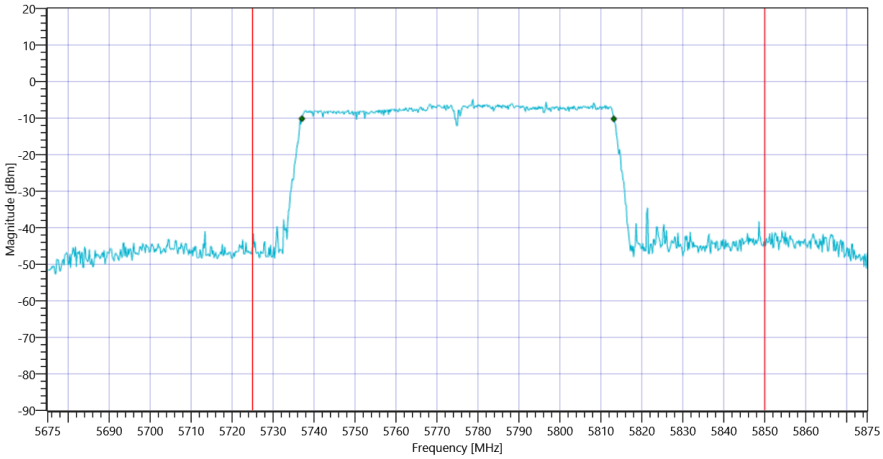
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	76.124	MHz	INFO
T1 99%	5725.000000	---	5737.0380	MHz	PASS
T2 99%	---	5850.000000	5813.1618	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT80 mode U-NII-3 99PCT

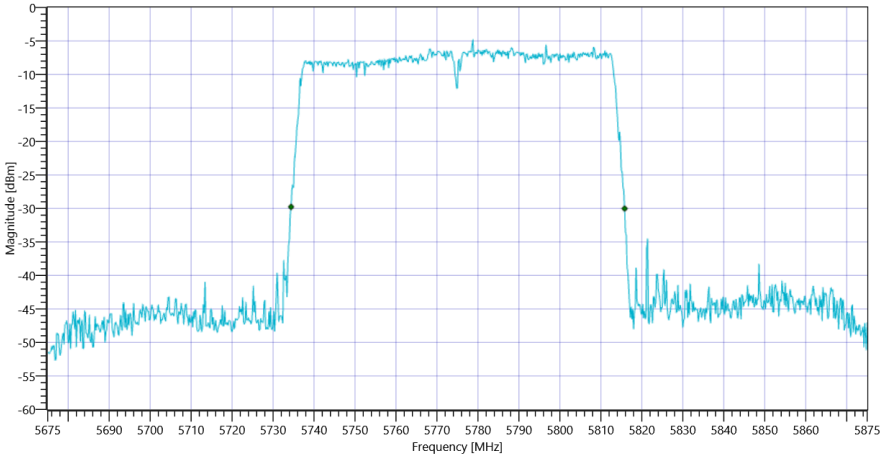
Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT80 mode U-NII-3

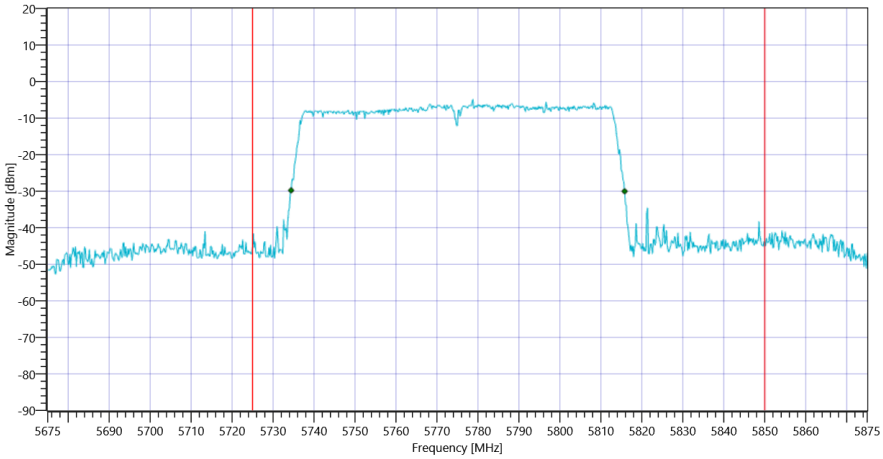
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	81.4	MHz	INFO
T1 26dB	5725.000000	---	5734.4000	MHz	PASS
T2 26dB	---	5850.000000	5815.8000	MHz	PASS

Plot: Bandwidth only



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT80 mode U-NII-3 26dB

Plot: Bandwidth within Band



FCC Part 15.407 & ISED Bandwidths ~ WLAN5Gx ac-VHT80 mode U-NII-3

General verdict	PASS

ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3

Test References	
TC Start	10.06.2021 07:58:25
Ambit Temp [°C] | Humidity [rel%]	26.8 | 45
System Version	3.0.1.2
Test Specification	ISED
Test Method	
TC Version	0.0.1
My Description	ISED Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT80 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

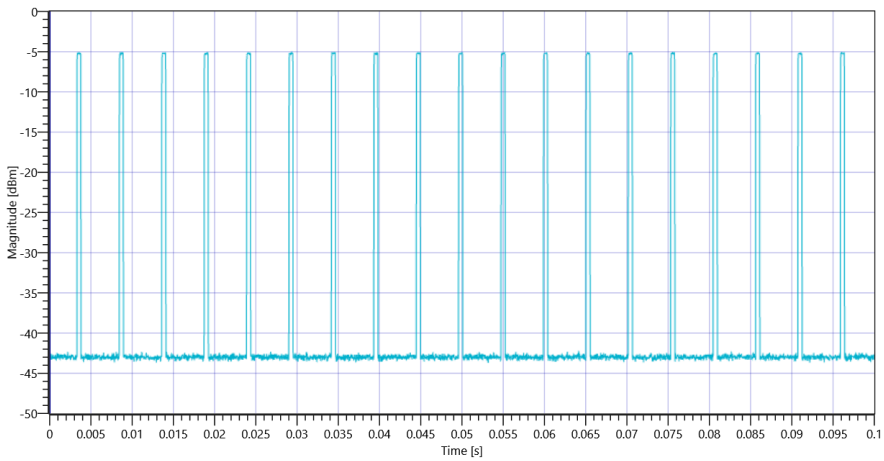
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5775 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-7.42	dBm	INFO
Ref. Frequency	---	---	5784.390	MHz	INFO

Evaluation max. Duty Cycle

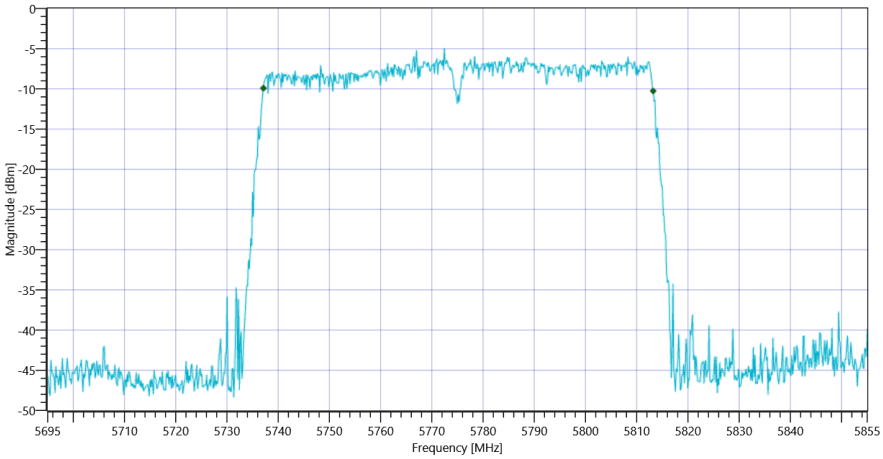
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:17					
Duty Cycle (Burst Ratio) max	---	---	0.087	---	INFO
Duty Cycle max	---	---	10.605	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.083	---	INFO
Duty Cycle min	---	---	10.809	dB	INFO
Max TX Burst Length	---	---	0.45	ms	INFO
Min Gap Length	---	---	4.7	ms	INFO
Max Gap Length	---	---	4.725	ms	INFO



ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 5775 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	76.084	MHz	INFO
T1 99%	---	---	5737.1179	MHz	INFO
T2 99%	---	---	5813.2018	MHz	INFO

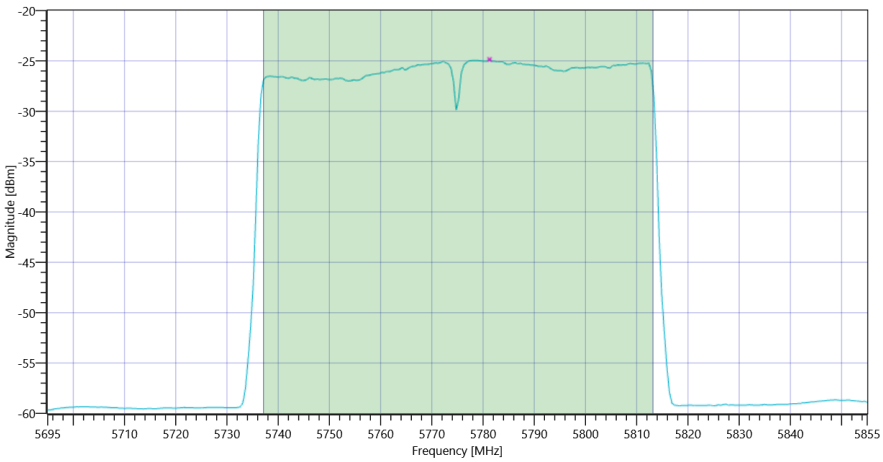


ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.58 | 17.52 | 5
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	107000 | 1 | 320 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	-7.32	dBm	INFO
Duty Cycle Correction	---	---	10.81	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	3.49	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	29.81	3.49	dBm	not applicable

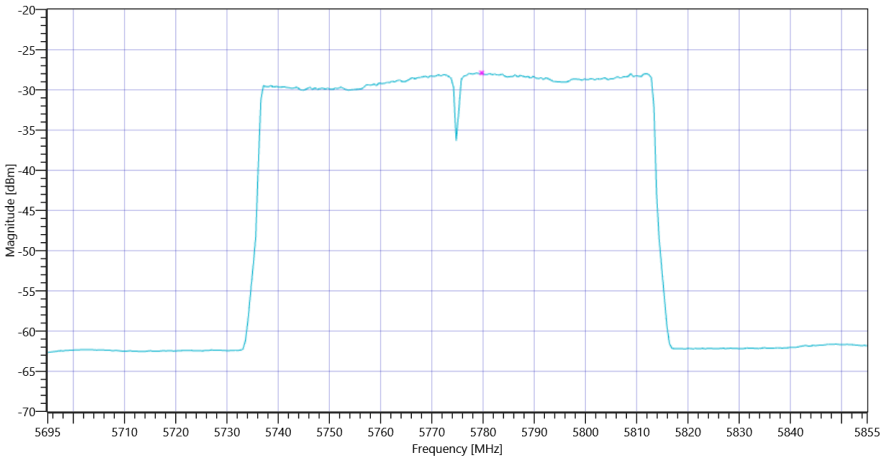


ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.58 | 17.52 | 5
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	107000 | 1 | 320 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-27.9	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	10.81	dB	INFO
Power Spectral Density DC corrected	---	30	-17.09	dBm/0.5MHz	PASS



ISED Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3

Test References	
TC Start	10.06.2021 07:53:47
Ambit Temp [°C] | Humidity [rel%]	26.8 | 46
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, F., E.2.e.
TC Version	0.0.1
My Description	FCC 15.407 Max Output Power & PSD - WLAN5Gx ac-VHT80 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx ac-VHT80 mode U-NII-3
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 0
Frequency mid to test	True | Freq [MHz] 5775
Frequency high to test	False | Freq [MHz] 0
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

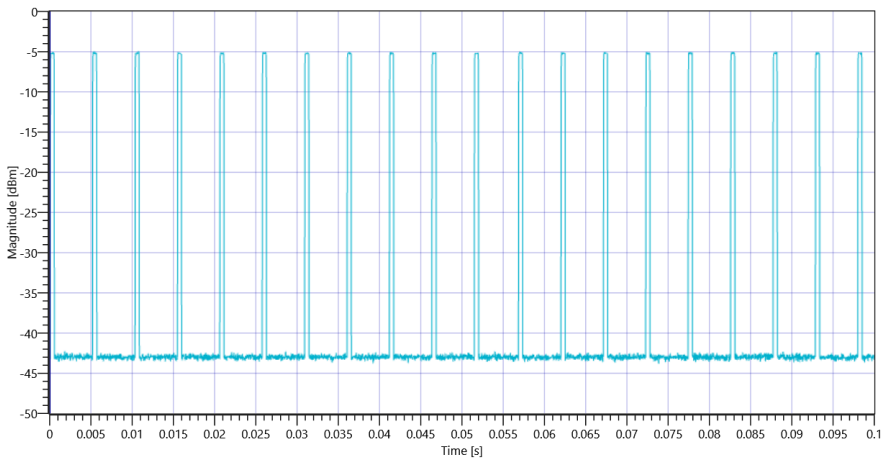
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5775 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	-6.63	dBm	INFO
Ref. Frequency	---	---	5785.590	MHz	INFO

Evaluation max. Duty Cycle

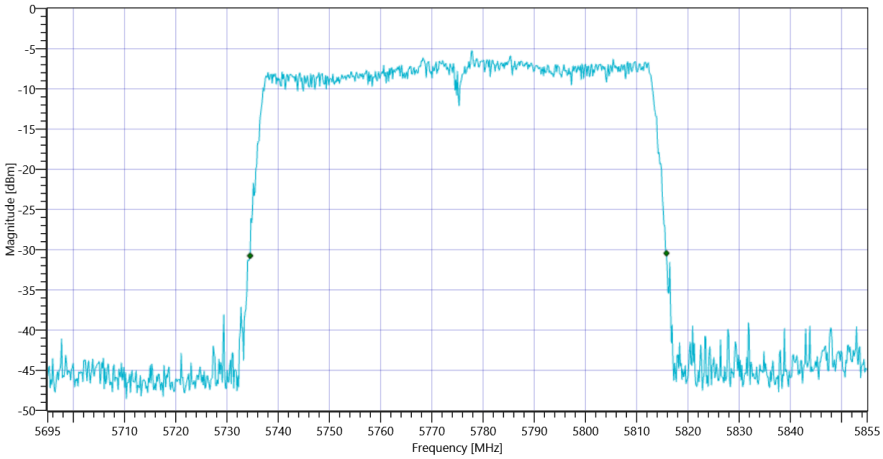
Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Summary					
Number of detected Bursts:18					
Duty Cycle (Burst Ratio) max	---	---	0.087	---	INFO
Duty Cycle max	---	---	10.605	dB	INFO
Duty Cycle (Burst Ratio) min	---	---	0.083	---	INFO
Duty Cycle min	---	---	10.809	dB	INFO
Max TX Burst Length	---	---	0.45	ms	INFO
Min Gap Length	---	---	4.7	ms	INFO
Max Gap Length	---	---	4.9	ms	INFO



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 5775 MHz - DutyCycle

Evaluation Bandwidth

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	81.28	MHz	INFO
T1 26dB	---	---	5734.5200	MHz	INFO
T2 26dB	---	---	5815.8000	MHz	INFO

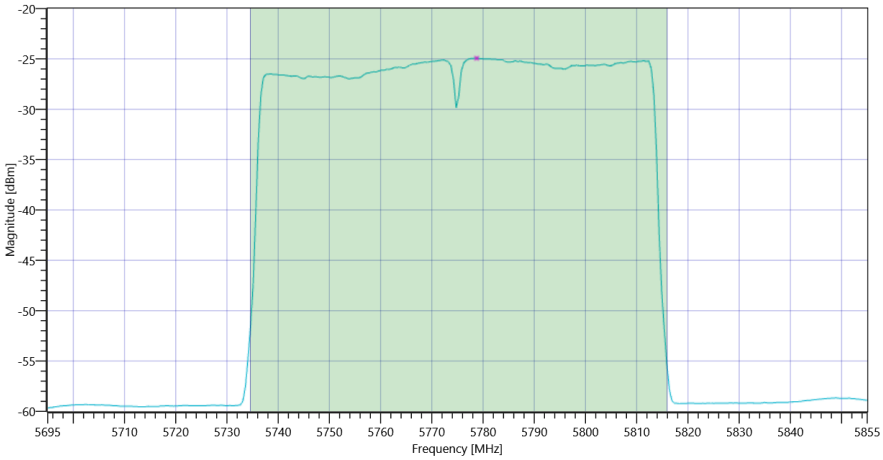


FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 20dB

Maximum Output Power

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	5.37 | 17.52 | 5
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	1.000000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	107000 | 1 | 320 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Output Power	---	---	-7.27	dBm	INFO
Duty Cycle Correction	---	---	10.81	dB	INFO
Limit absolute					
Max Output Power DC corrected	---	30	3.54	dBm	PASS
Limit by: 11 dBm + 10 log Bandwidth					
Max Output Power DC corrected	---	30.1	3.54	dBm	not applicable



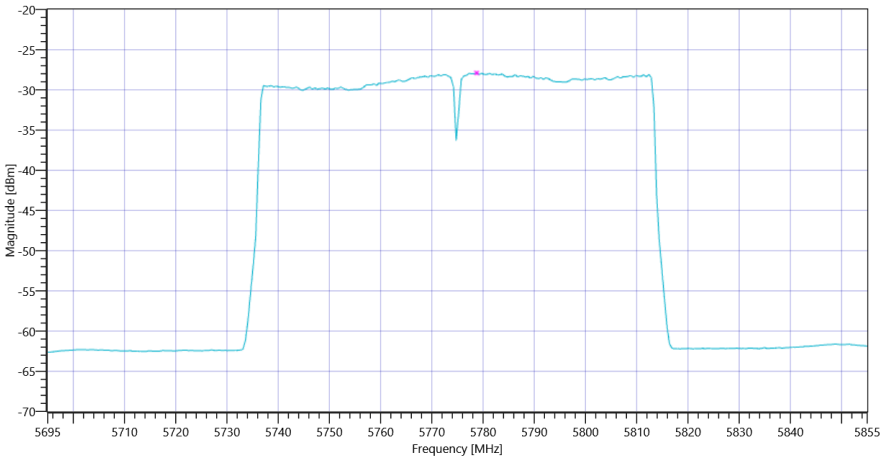
FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 Max OP and PSD

Power Spectral Density U-NII-3

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	5.37 | 17.52 | 5
Start [MHz] | Stop [MHz]	5695.000 | 5855.000
RBW [MHz] | VBW [MHz]	0.500000 | 3.000000
Detector | TraceMode	RMS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	107000 | 1 | 320 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Power Spectral Density	---	---	-27.9	dBm/0.5MHz	INFO
Duty Cycle Correction	---	---	10.81	dB	INFO
Power Spectral Density DC corrected	---	30	-17.09	dBm/0.5MHz	PASS



FCC Part 15.407 Max Output Power and PSD ~ WLAN5Gx ac-VHT80 mode U-NII-3 PSD UNII-3

General verdict	PASS

FCC Part 15.407 & ISED Minimum Emission BW ~ WLAN5Gx n-HT20 mode U-NII-3

Test References	
TC Start	09.06.2021 15:06:41
Ambit Temp [°C] | Humidity [rel%]	27.2 | 43
System Version	3.0.1.2
Test Specification	FCC Part 15.407
Test Method	KDB789033 D02, C.2.
TC Version	0.0.1
My Description	FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT20 mode U-NII-3
Add. Information	

EUT Common Settings WLAN5Gx	
Number of Antenna Ports	1
User Interaction	No

Test Parameter	
Technology to test	WLAN5Gx n-HT20 mode U-NII-3
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]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

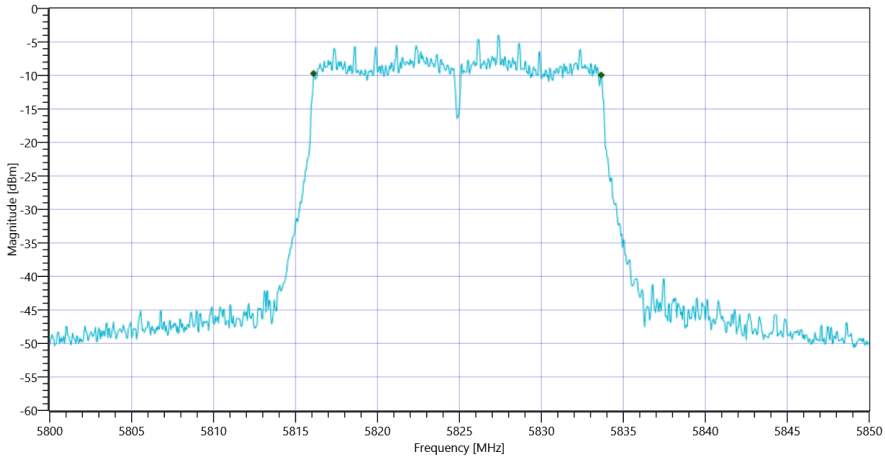
Test Equipment
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 5825 MHz

RESULT: Reference Power cond.					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	3.80	dBm	INFO
Ref. Frequency	---	---	5826.800	MHz	INFO

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	15.80 | 17.82 | 15
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



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General verdict	PASS

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