

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
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Power

20.000 dBm (20 dBm)

Beamforming Gain

20.000 dBm (20 dBm)	0 dB
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Gain Tables

20.000 dBm (20 dBm)	Port 1: 0dBi;
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DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5180.000	20.0	20.000000	PASS
RF output power	5180.000	20.0	20.000000	PASS
Power Spectral Density	5180.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5180.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5180.000	20.0	20.000000	PASS
Band Edge low	5180.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	20.000000	PASS
RF output power	5200.000	20.0	20.000000	PASS
Power Spectral Density	5200.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5200.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5240.000	20.0	20.000000	PASS
RF output power	5240.000	20.0	20.000000	PASS
Power Spectral Density	5240.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5240.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5240.000	20.0	20.000000	PASS
Band Edge high	5240.000	20.0	20.000000	PASS

Emission Bandwidth 26 dB (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

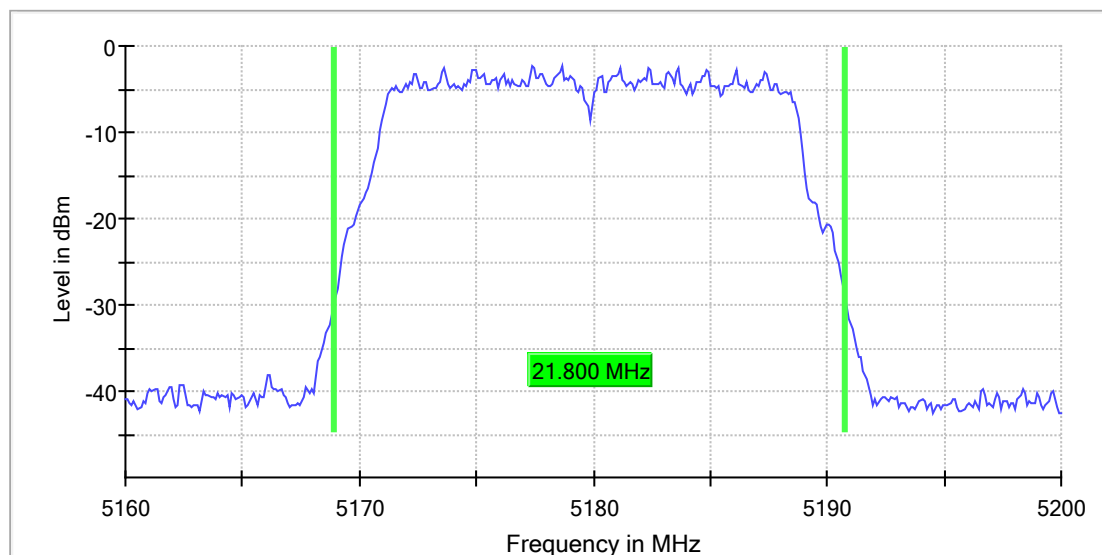
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

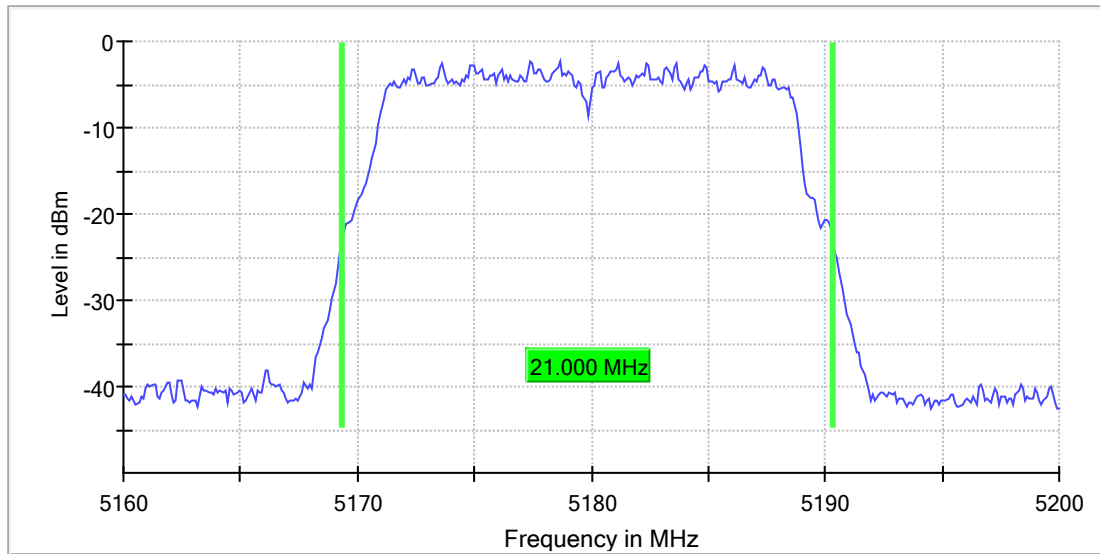
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	21.800000	---	---	5168.950000	5190.750000

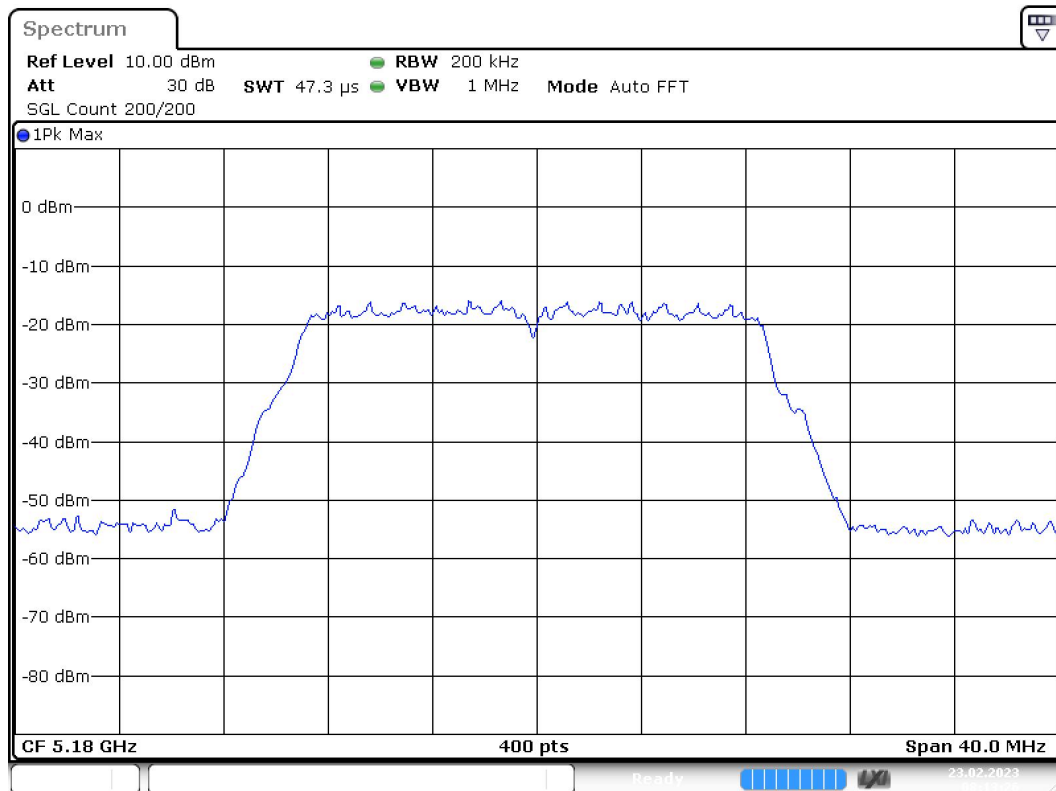
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5180.000000	-2.4	PASS





Bandwidth



Date: 23.FEB.2023 08:13:27

Measurement

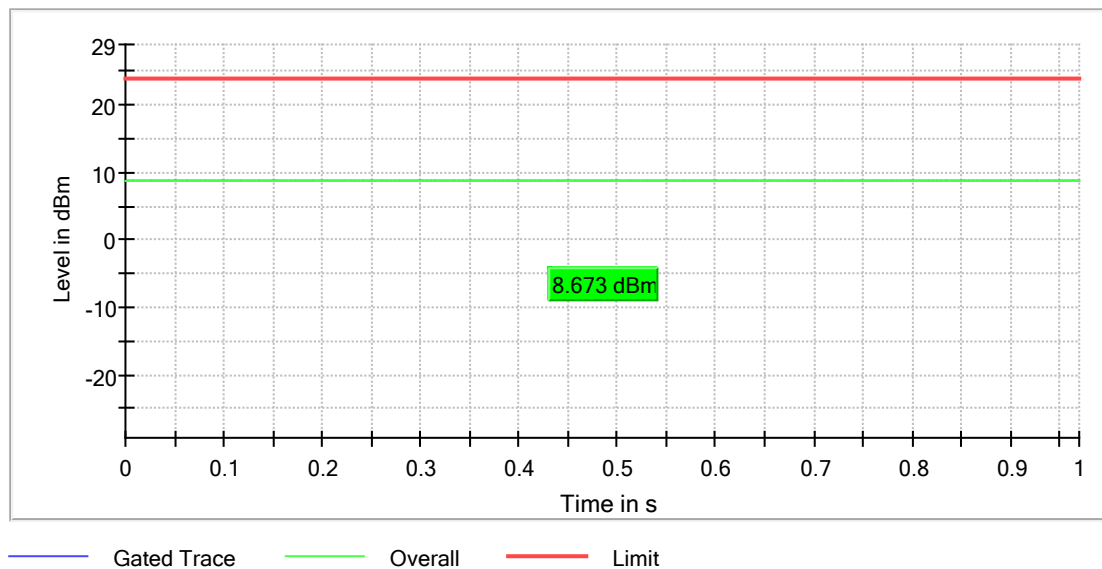
Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 μ s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	6 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.54 dB	1.00 dB

RF output power (5180 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5180.000000	8.7	24.0	8.7	97.210	PASS



Power Spectral Density (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

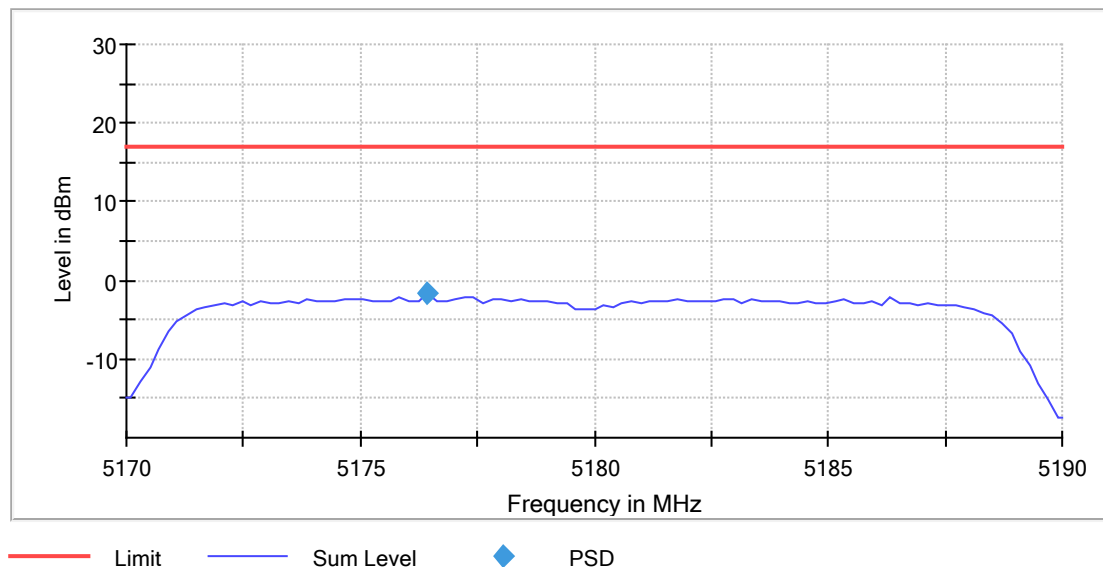
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5176.435644	-1.643	17.0	PASS

Ports

Port	Duty Cycle (%)
1	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17000 GHz	5.17000 GHz
Stop Frequency	5.19000 GHz	5.19000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	1.000 ms	10.100 μ s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	9 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.10 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

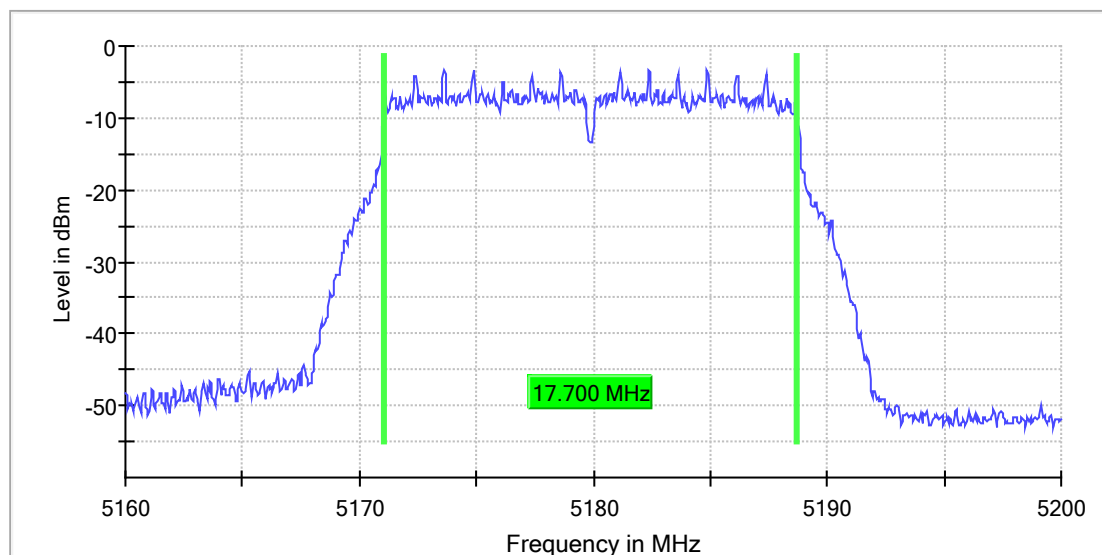
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	17.700000	---	---	5171.025000	5188.725000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5180.000000	-3.3	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.27 dB	0.30 dB

Occupied Channel Bandwidth 99% (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

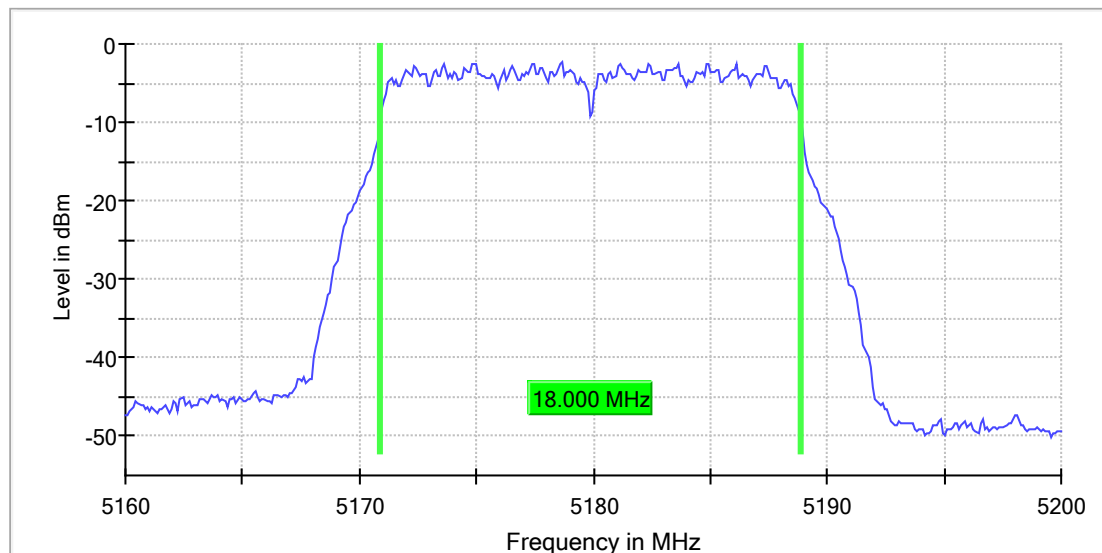
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	18.000000	---	---	5170.850000	5188.850000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5180.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	18 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.23 dB	0.30 dB

Band Edge low (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

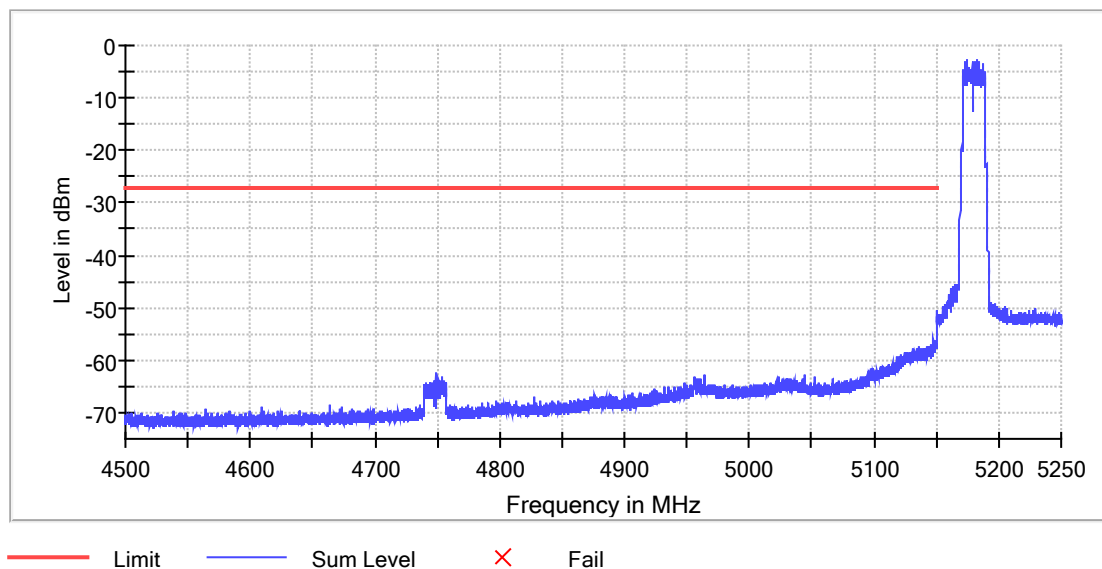
DUT Frequency (MHz)	Result
5180.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5174.875000	-2.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5147.975000	-55.9	28.9	-27.0	PASS
5149.525000	-56.4	29.4	-27.0	PASS
5148.625000	-56.5	29.5	-27.0	PASS
5149.625000	-56.5	29.5	-27.0	PASS
5148.325000	-56.6	29.6	-27.0	PASS
5149.475000	-56.6	29.6	-27.0	PASS
5149.575000	-56.7	29.7	-27.0	PASS
5147.725000	-56.9	29.9	-27.0	PASS
5149.875000	-56.9	29.9	-27.0	PASS
5148.275000	-56.9	29.9	-27.0	PASS
5147.775000	-57.0	30.0	-27.0	PASS
5149.275000	-57.0	30.0	-27.0	PASS
5146.775000	-57.1	30.1	-27.0	PASS
5149.675000	-57.1	30.1	-27.0	PASS
5147.075000	-57.2	30.2	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	100.000 MHz	100.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2000	~ 2000
Sweeptime	2.000 s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	1 / max. 1	max. 1
Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	4.50000 GHz	4.50000 GHz
Stop Frequency	5.15000 GHz	5.15000 GHz
Span	650.000 MHz	650.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	13000	~ 13000
Sweeptime	13.000 s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	1 / max. 1	max. 1
Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

Emission Bandwidth 26 dB (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

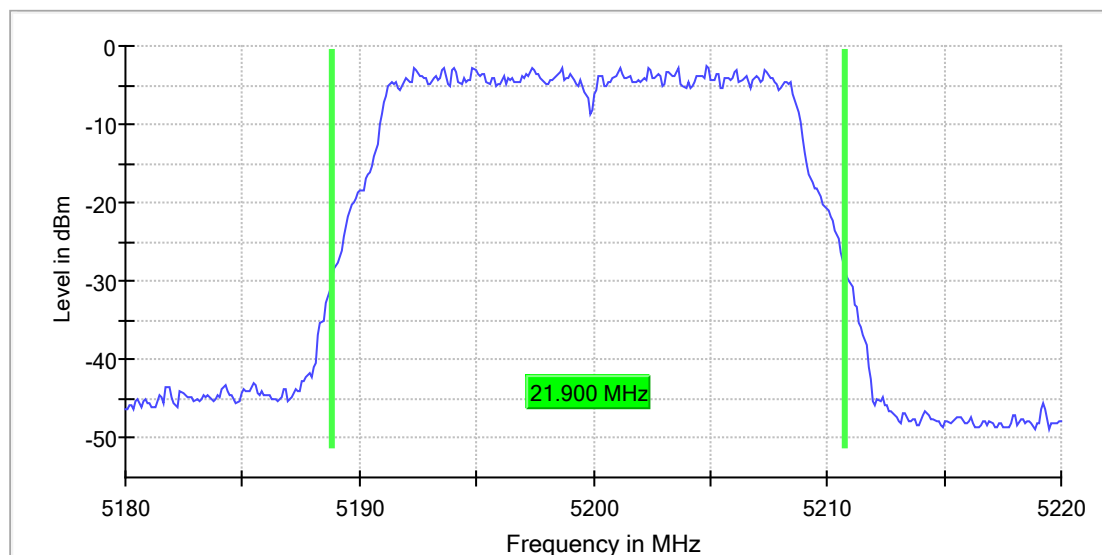
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

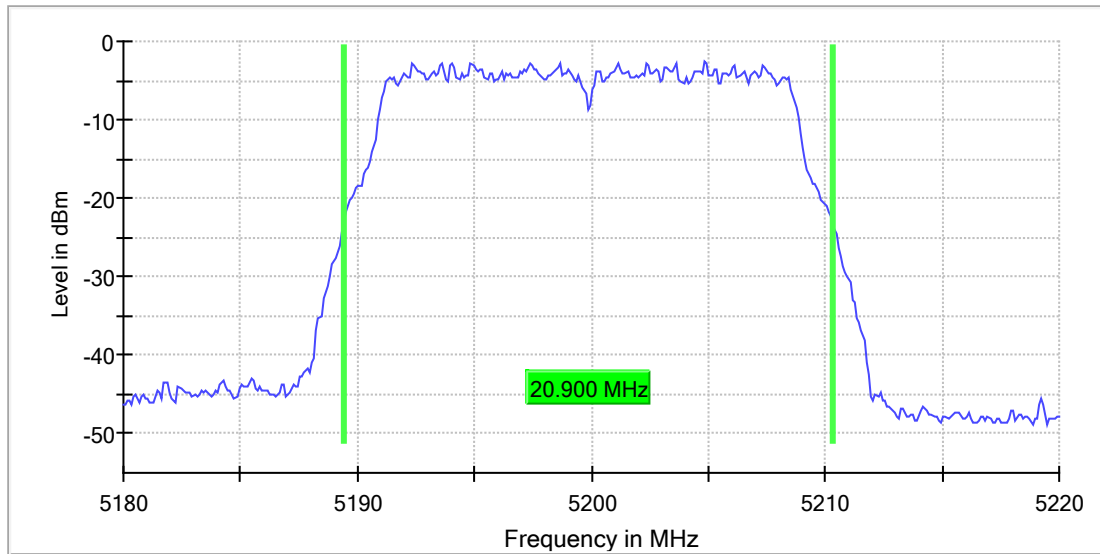
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	21.900000	---	---	5188.850000	5210.750000

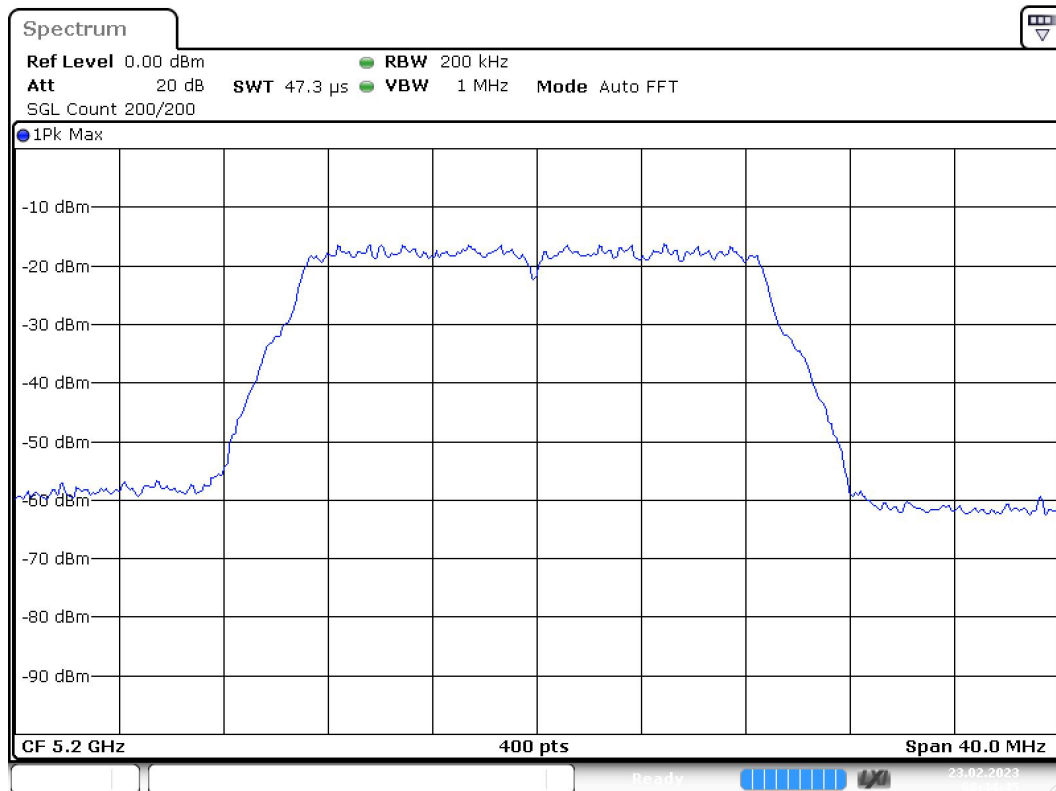
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-2.6	PASS





Bandwidth



Date: 23.FEB.2023 08:44:45

Measurement

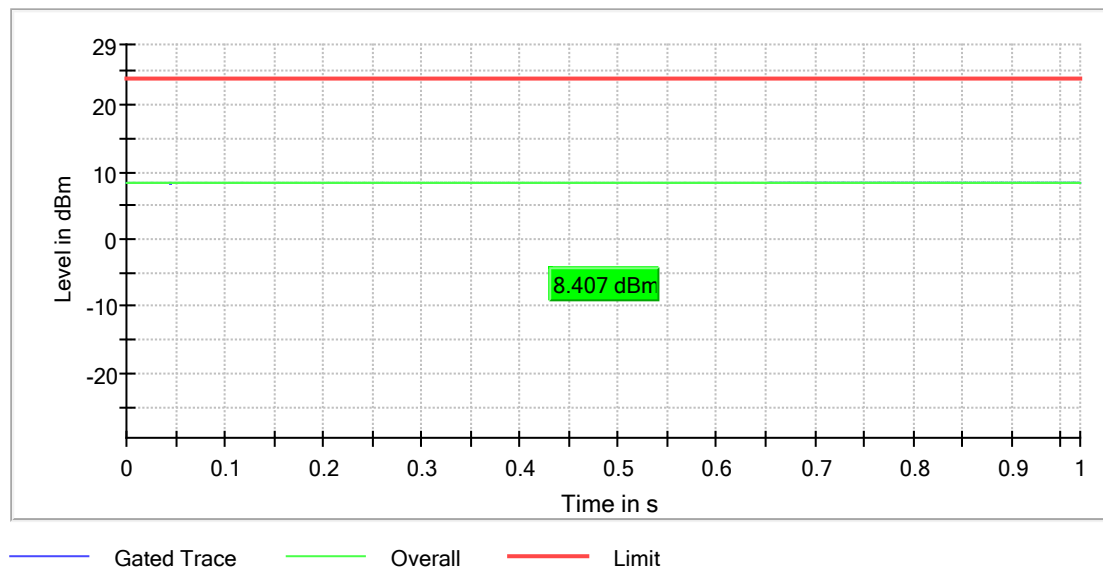
Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	18 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.21 dB	0.30 dB

RF output power (5200 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	8.4	24.0	8.4	97.205	PASS



Power Spectral Density (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

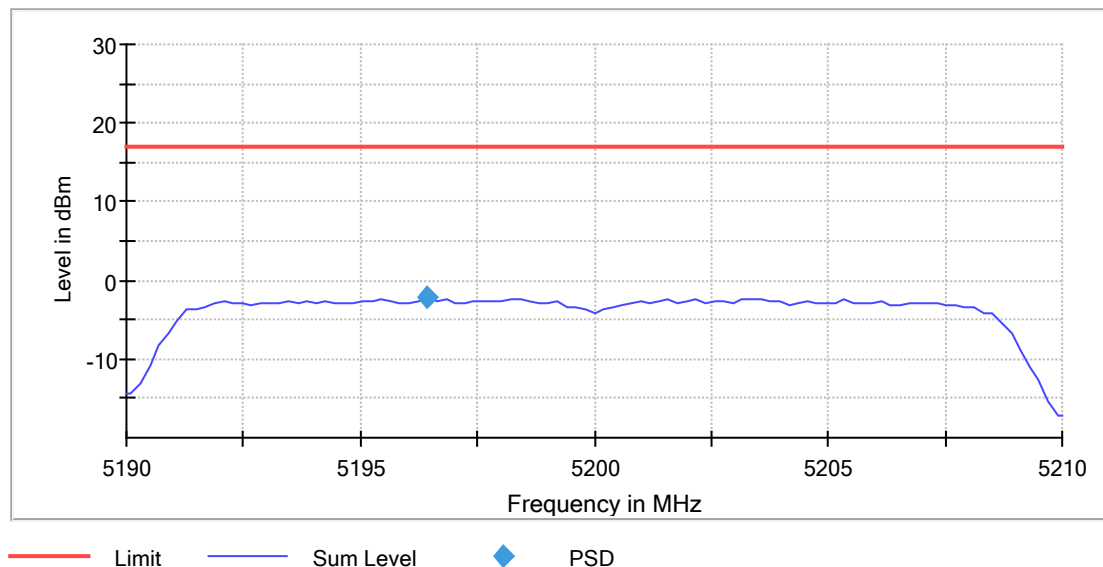
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5196.435644	-2.242	17.0	PASS

Ports

Port	Duty Cycle (%)
1	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	1.000 ms	10.100 μ s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	5 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

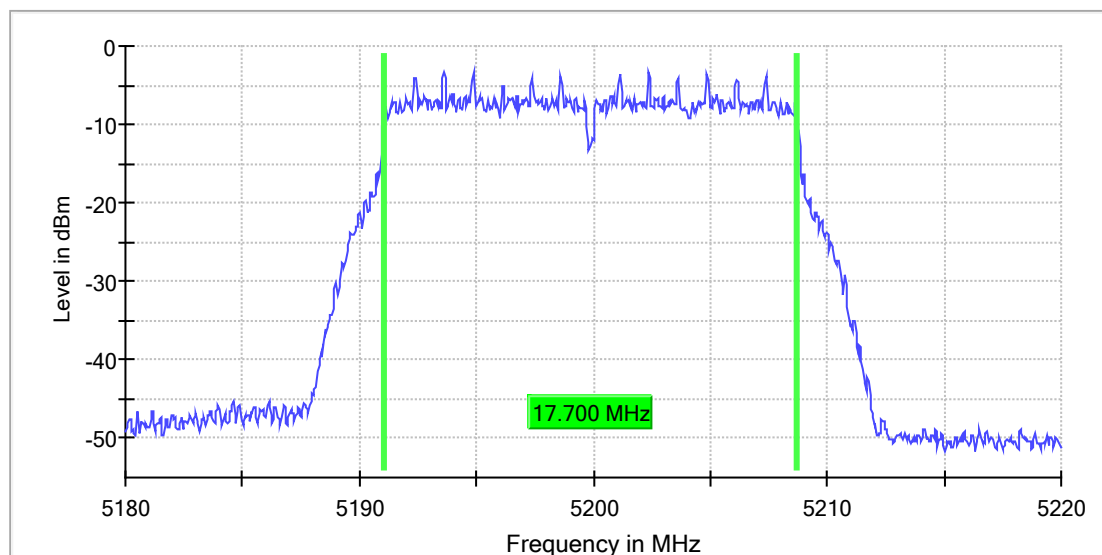
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	17.700000	---	---	5191.025000	5208.725000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-3.3	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	32 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.30 dB	0.30 dB

Occupied Channel Bandwidth 99% (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

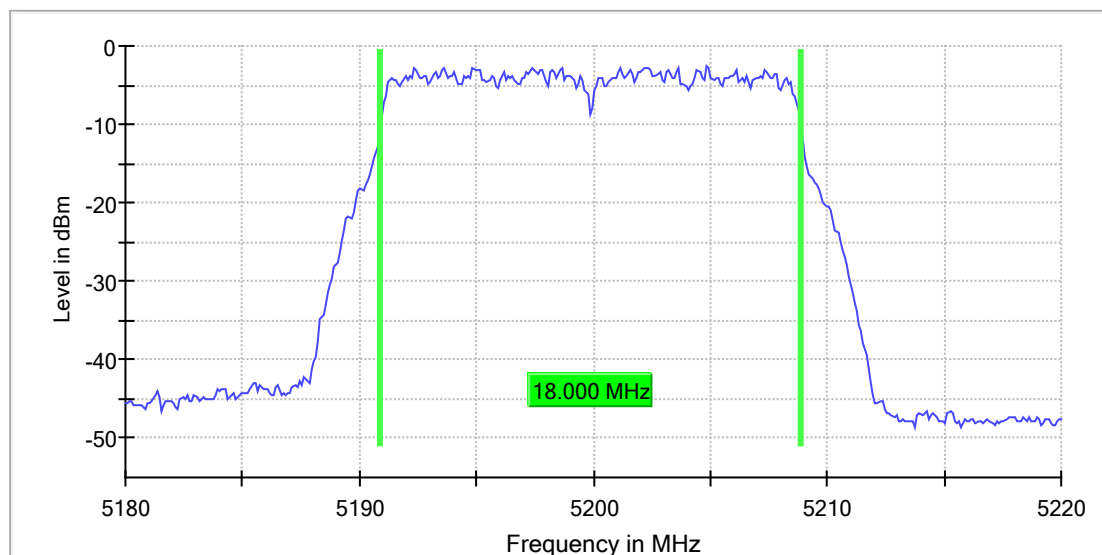
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	18.000000	---	---	5190.850000	5208.850000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5200.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	26 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.27 dB	0.30 dB

Emission Bandwidth 26 dB (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

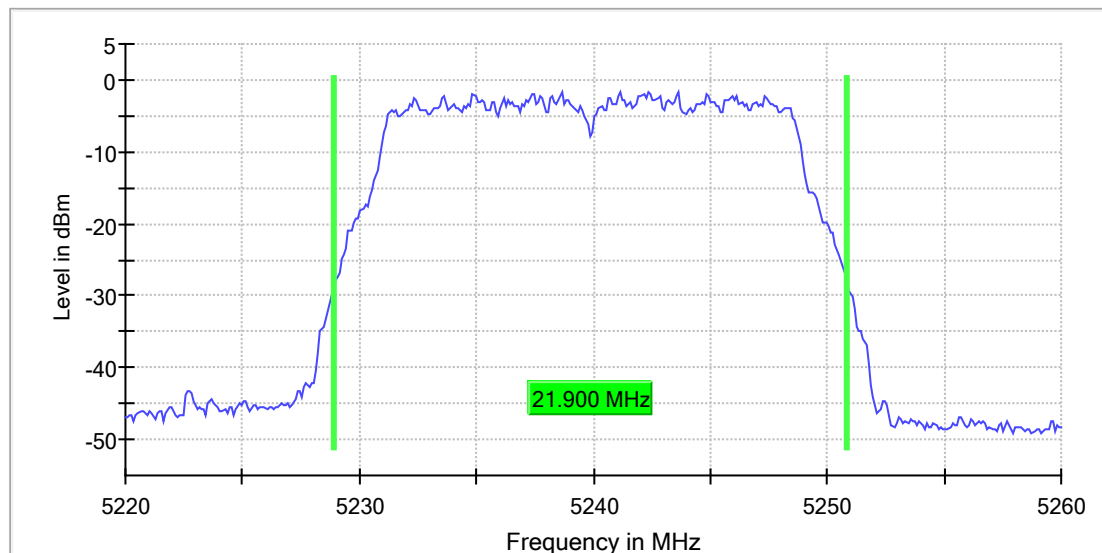
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

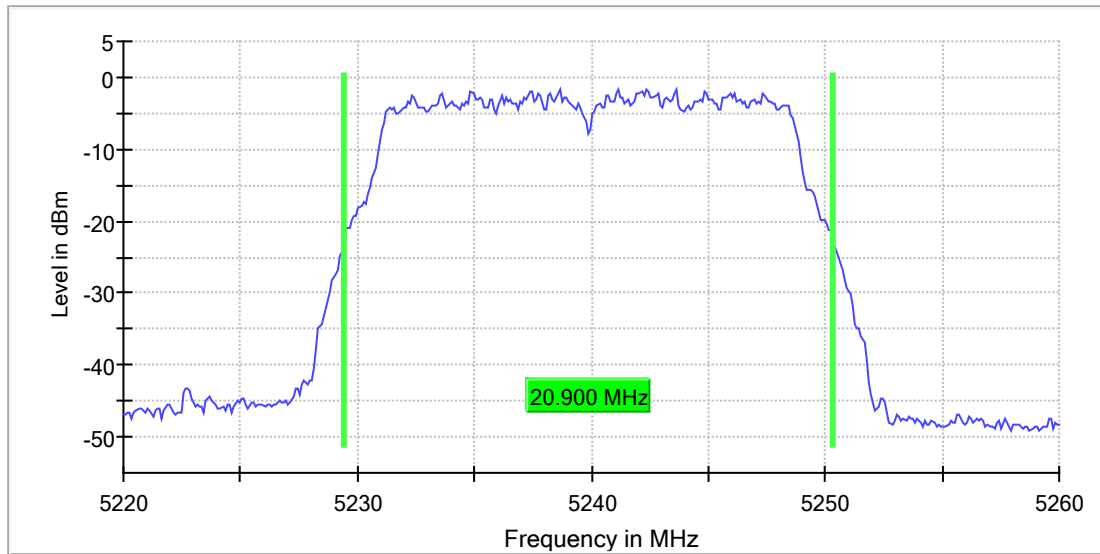
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	21.900000	---	---	5228.950000	5250.850000

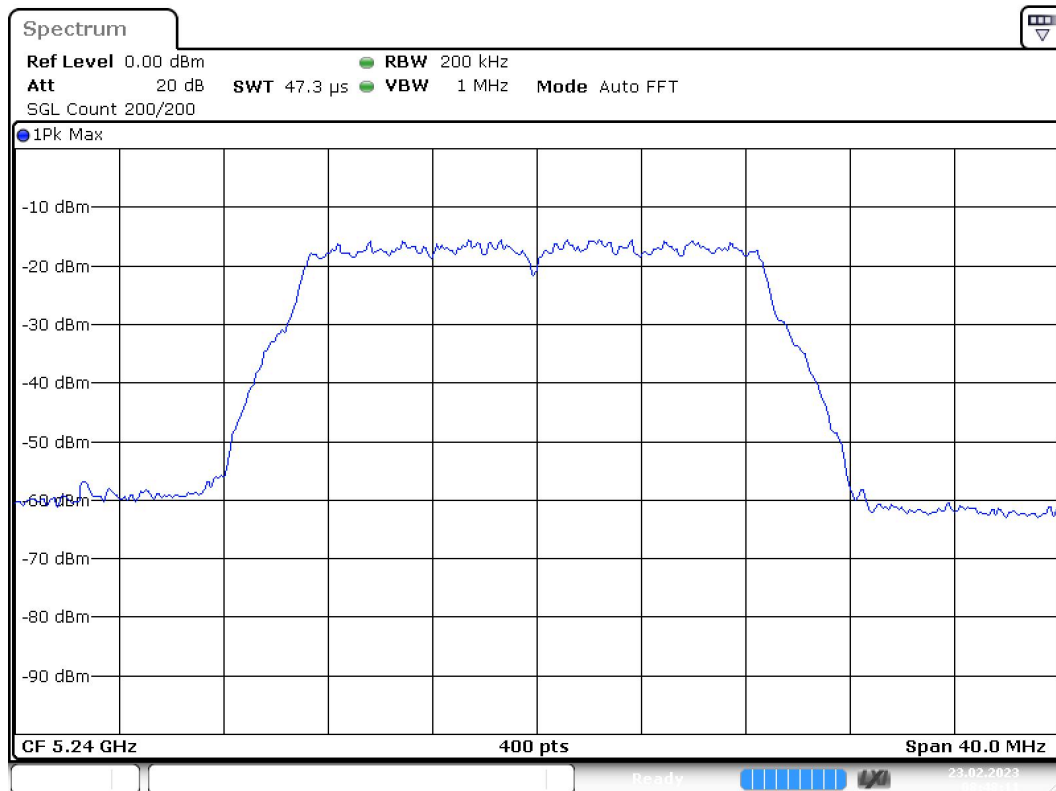
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-1.8	PASS





Bandwidth



Date: 23.FEB.2023 08:48:11

Measurement

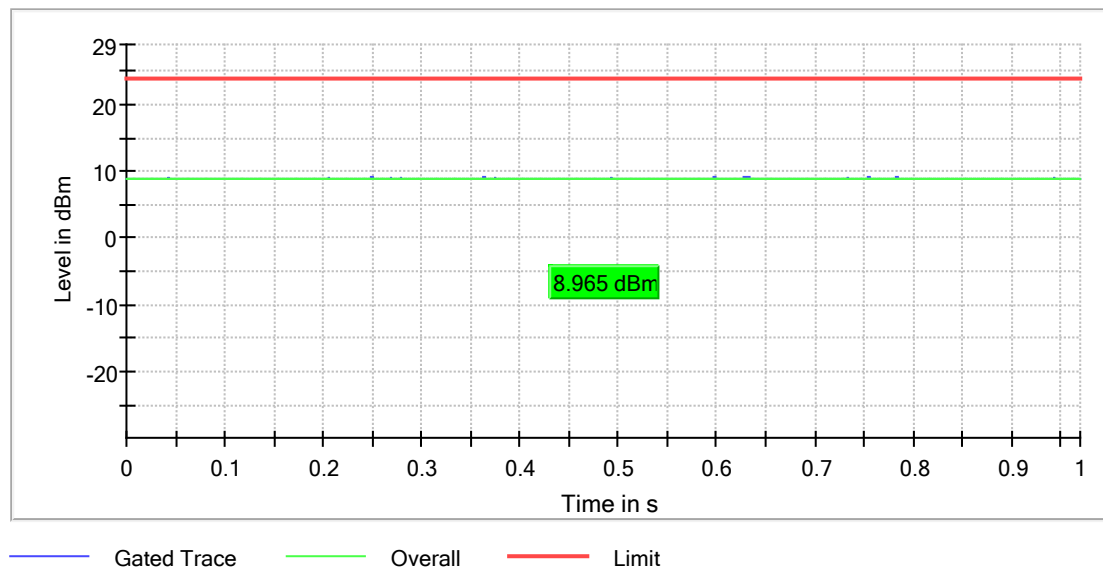
Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.28 dB	0.30 dB

RF output power (5240 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5240.000000	9.0	24.0	9.0	97.206	PASS



Power Spectral Density (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

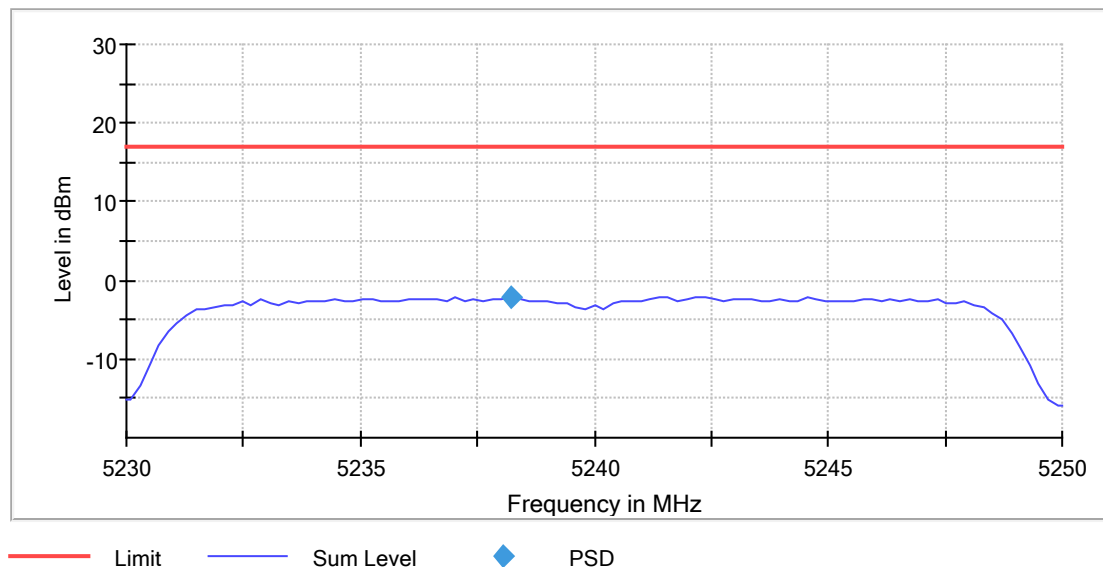
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5238.217822	-2.115	17.0	PASS

Ports

Port	Duty Cycle (%)
1	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	1.000 ms	10.100 μ s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

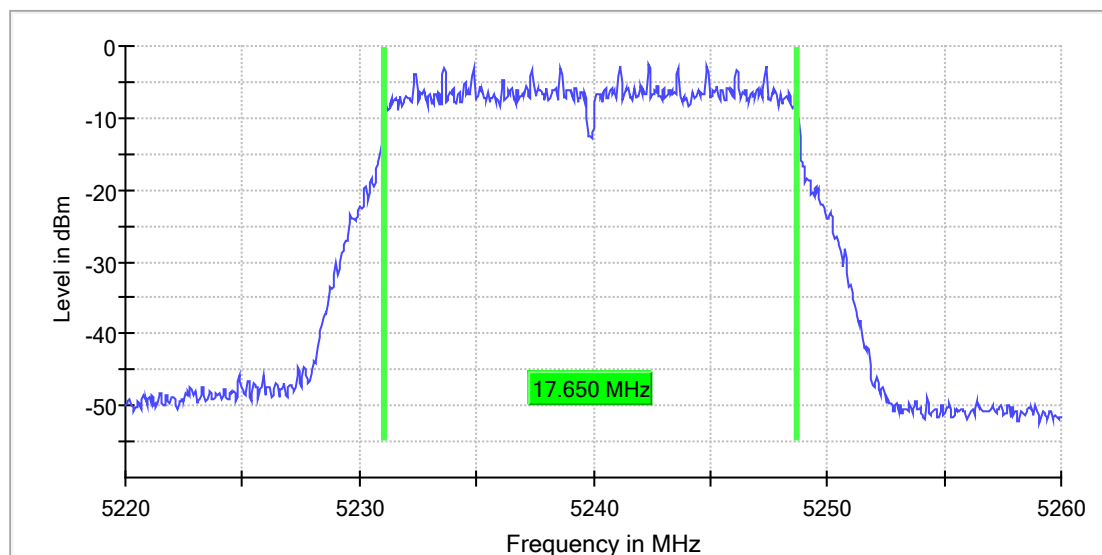
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	17.650000	---	---	5231.075000	5248.725000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-2.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	38 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.13 dB	0.30 dB

Occupied Channel Bandwidth 99% (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

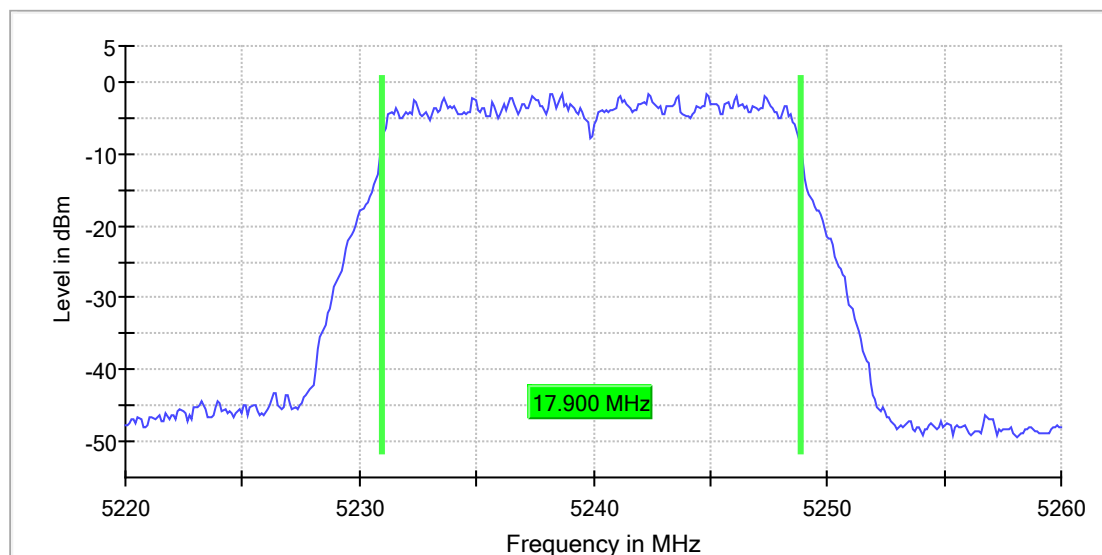
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	17.900000	---	---	5230.950000	5248.850000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5240.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweptime	47.266 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	12 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.21 dB	0.30 dB

Band Edge high (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

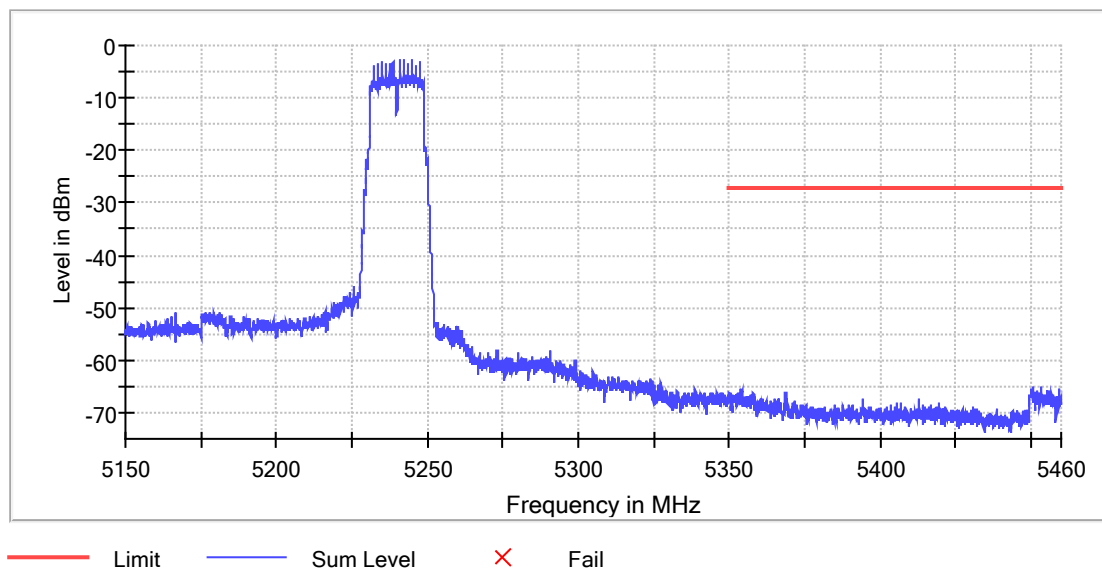
DUT Frequency (MHz)	Result
5240.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5242.375000	-2.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5453.175000	-65.1	38.1	-27.0	PASS
5453.225000	-65.2	38.2	-27.0	PASS
5450.725000	-65.2	38.2	-27.0	PASS
5450.675000	-65.3	38.3	-27.0	PASS
5459.475000	-65.4	38.4	-27.0	PASS
5354.025000	-65.5	38.5	-27.0	PASS
5353.975000	-65.5	38.5	-27.0	PASS
5449.825000	-65.5	38.5	-27.0	PASS
5449.875000	-65.6	38.6	-27.0	PASS
5455.075000	-65.7	38.7	-27.0	PASS
5455.225000	-65.8	38.8	-27.0	PASS
5456.275000	-65.8	38.8	-27.0	PASS
5354.125000	-65.8	38.8	-27.0	PASS
5354.175000	-65.8	38.8	-27.0	PASS
5455.125000	-65.8	38.8	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	100.000 MHz	100.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2000	~ 2000
SweepTime	227.813 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	27 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.26 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.46000 GHz	5.46000 GHz
Span	210.000 MHz	210.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	4200	~ 4200
SweepTime	474.609 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
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Power

20.000 dBm (20 dBm)

Beamforming Gain

Powerstep name (value)	Beamforming gain table names
20.000 dBm (20 dBm)	BFG_'20.000 dBm'_0.000dB;

Gain Tables

Powerstep name (value)	Gain table names
20.000 dBm (20 dBm)	Port 1: 0dBi;

DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Tx Spurious Emission	5180.000	20.0	20.000000	PASS
Tx Spurious Emission	5200.000	20.0	20.000000	PASS
Tx Spurious Emission	5240.000	20.0	20.000000	PASS

Tx Spurious Emission (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5180.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

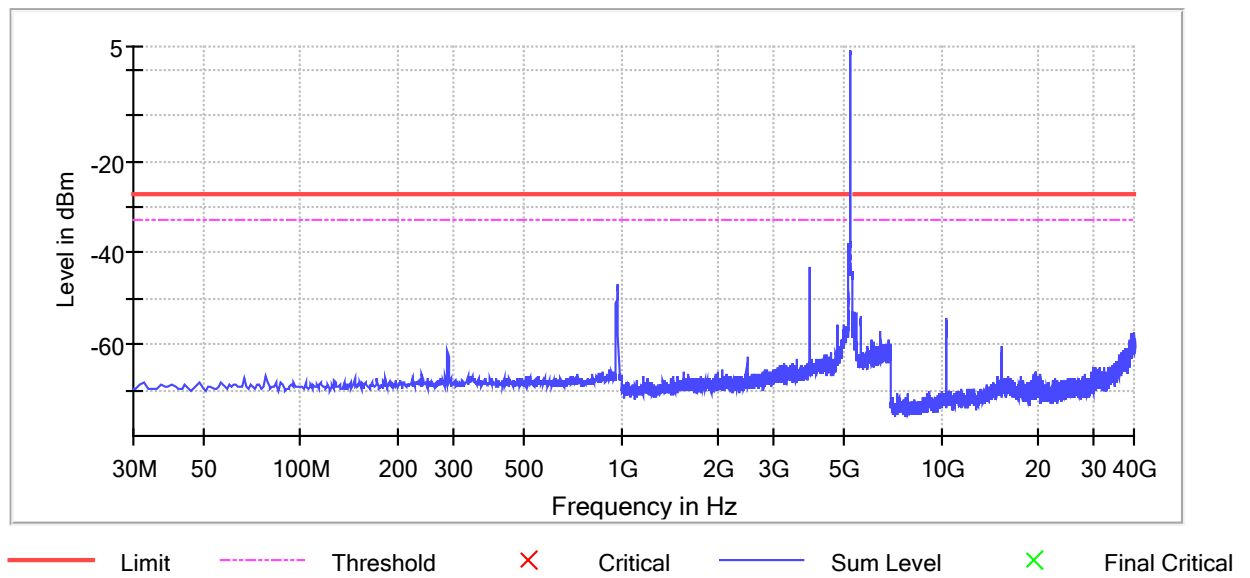
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3885.500000	-43.2	16.2	-27.0
3886.500000	-46.4	19.4	-27.0
3884.500000	-46.7	19.7	-27.0
974.500000	-46.8	19.8	-27.0
975.500000	-47.0	20.0	-27.0
973.500000	-47.3	20.3	-27.0
971.500000	-47.4	20.4	-27.0
977.500000	-47.5	20.5	-27.0
972.500000	-47.9	20.9	-27.0
5149.500000	-48.2	21.2	-27.0
978.500000	-48.2	21.2	-27.0
5147.500000	-48.2	21.2	-27.0
976.500000	-48.3	21.3	-27.0
5136.500000	-48.7	21.7	-27.0
5148.500000	-49.1	22.1	-27.0

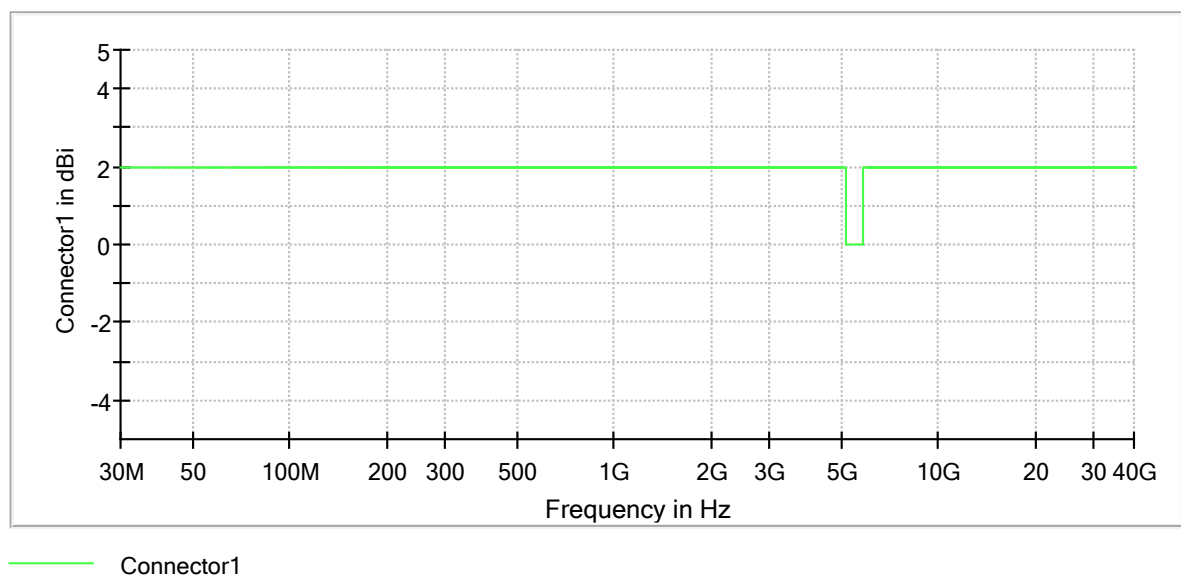
Measurement Settings

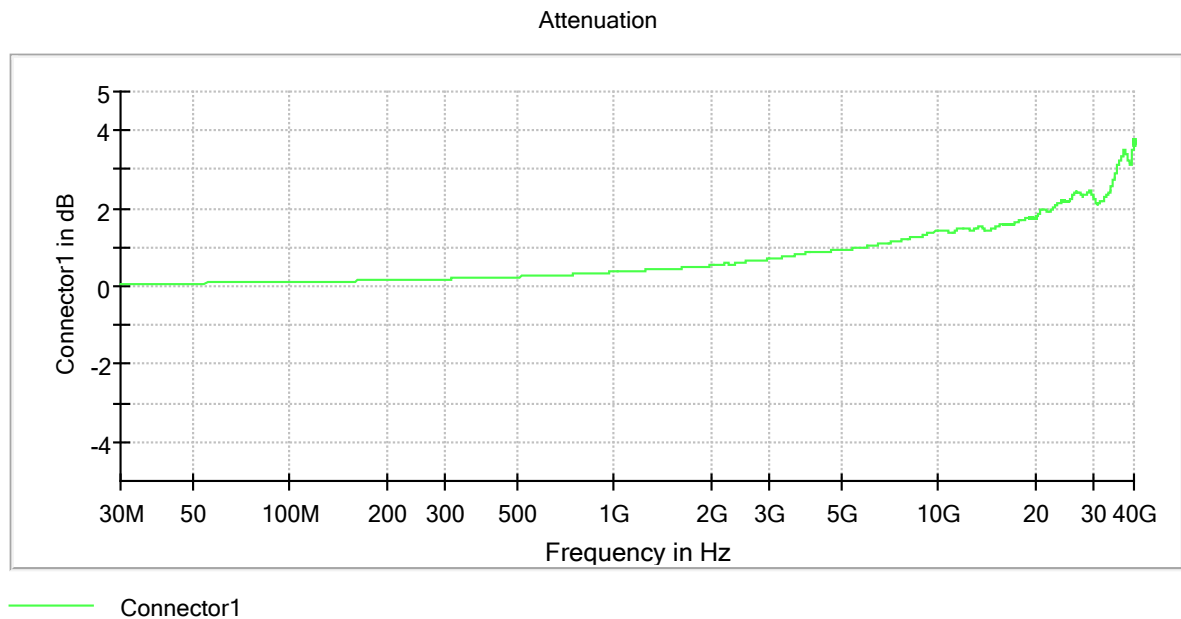
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.42 dB	0.50 dB

Tx Spurious Emission (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5200.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

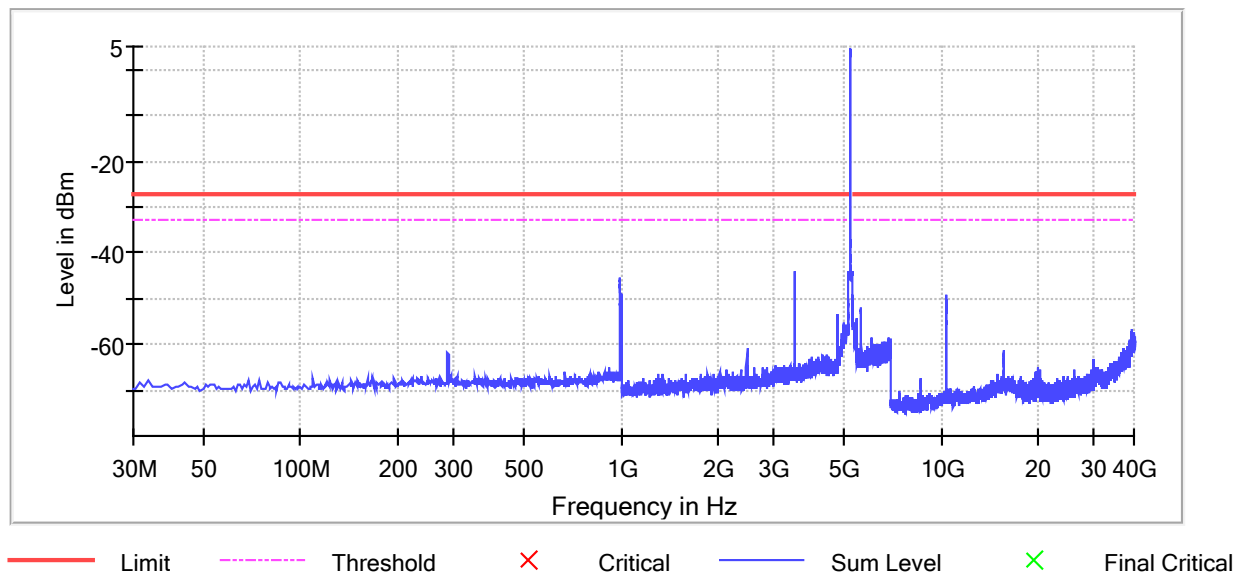
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3467.500000	-43.9	16.9	-27.0
995.500000	-45.6	18.6	-27.0
3466.500000	-45.7	18.7	-27.0
993.500000	-46.1	19.1	-27.0
994.500000	-46.5	19.5	-27.0
996.500000	-46.8	19.8	-27.0
991.500000	-46.9	19.9	-27.0
997.500000	-47.5	20.5	-27.0
992.500000	-48.0	21.0	-27.0
990.500000	-48.5	21.5	-27.0
998.500000	-48.6	21.6	-27.0
1000.000000	-49.0	22.0	-27.0
999.500000	-49.0	22.0	-27.0
10400.500000	-49.3	22.3	-27.0
989.500000	-49.3	22.3	-27.0

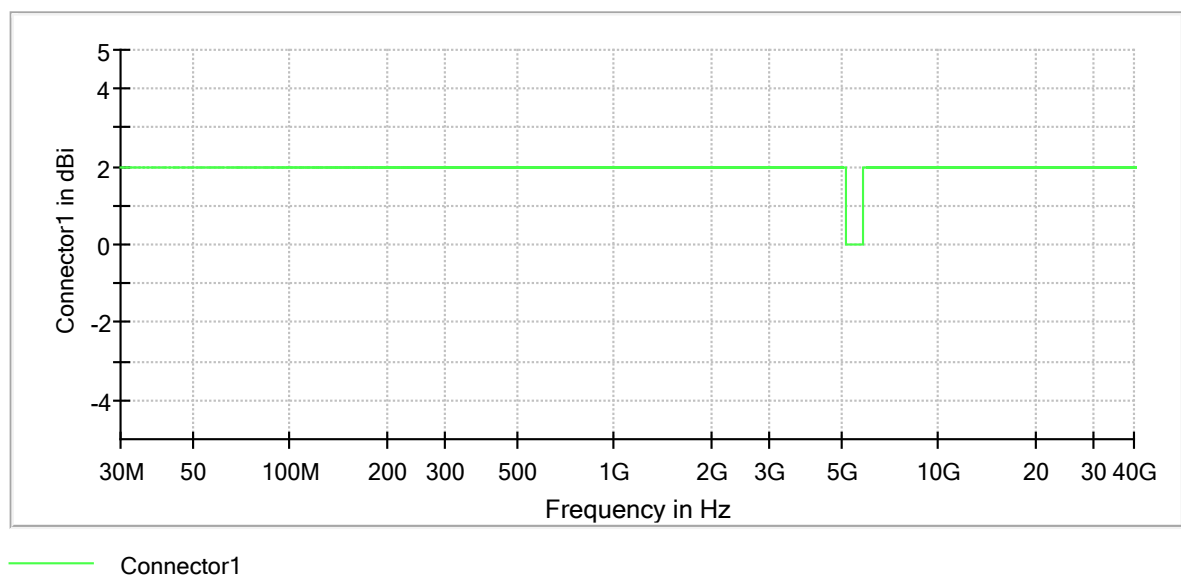
Measurement Settings

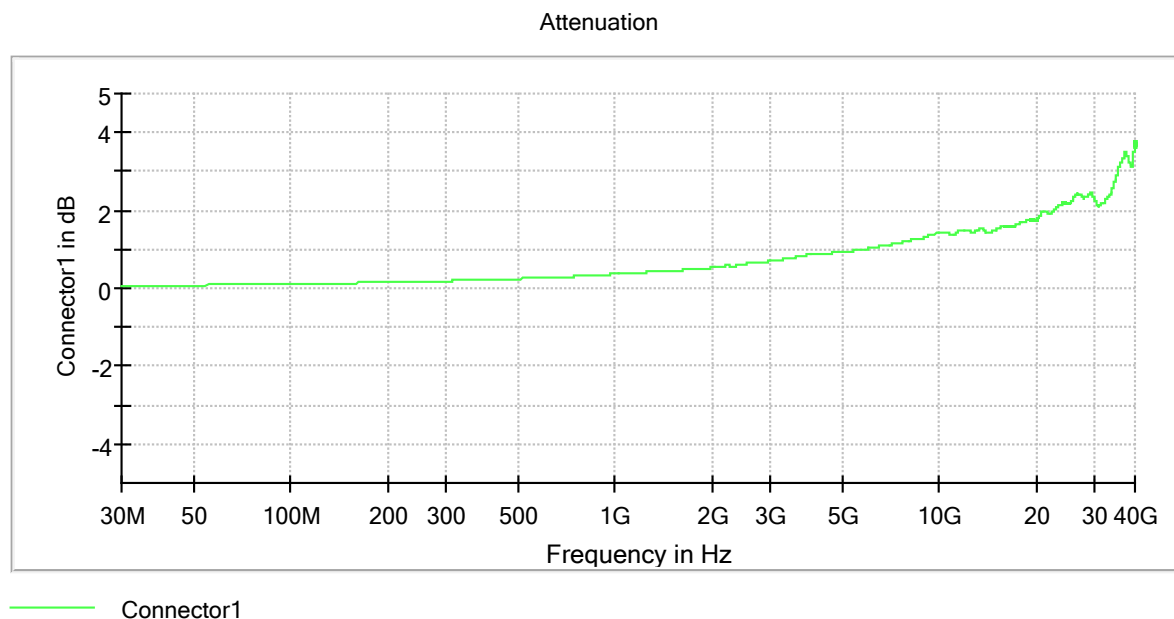
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.04 dB	0.50 dB

Tx Spurious Emission (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5240.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

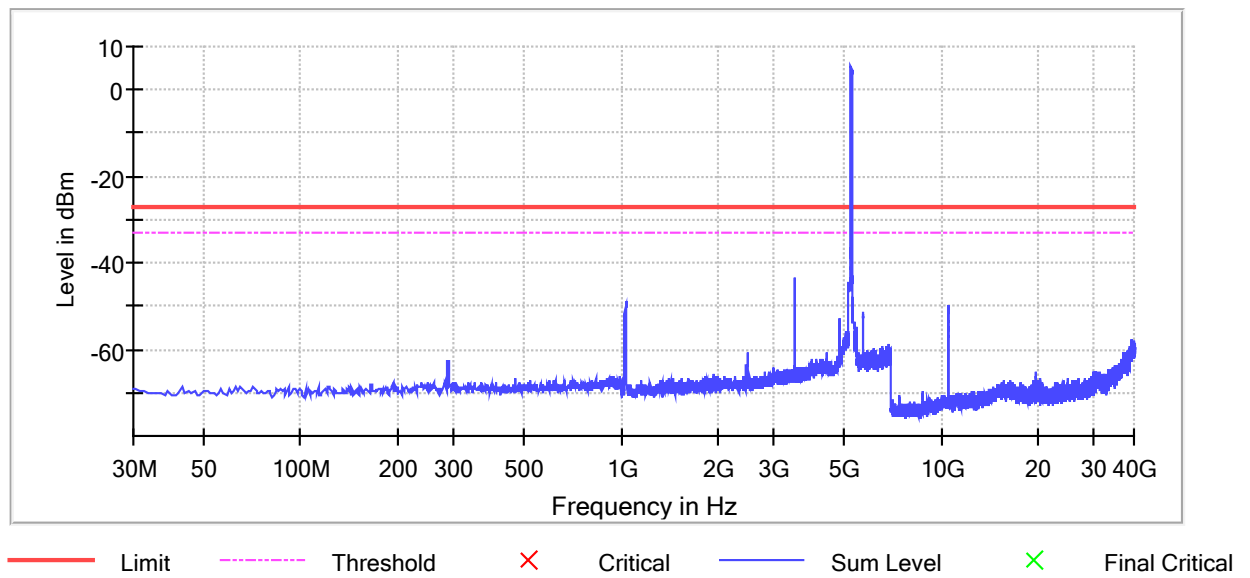
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3493.500000	-43.5	16.5	-27.0
3494.500000	-43.5	16.5	-27.0
1037.500000	-48.7	21.7	-27.0
1040.500000	-48.8	21.8	-27.0
1036.500000	-49.2	22.2	-27.0
1038.500000	-49.2	22.2	-27.0
1030.500000	-49.6	22.6	-27.0
1035.500000	-49.8	22.8	-27.0
1034.500000	-49.9	22.9	-27.0
1033.500000	-49.9	22.9	-27.0
1031.500000	-50.0	23.0	-27.0
10481.500000	-50.0	23.0	-27.0
10478.500000	-50.1	23.1	-27.0
1032.500000	-50.1	23.1	-27.0
10484.500000	-50.1	23.1	-27.0

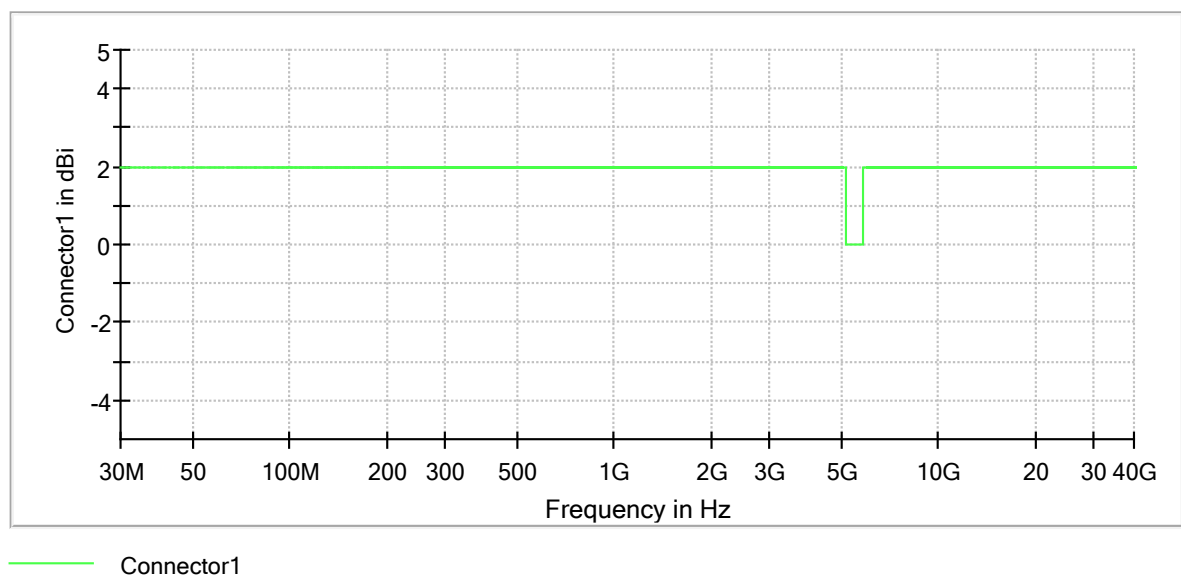
Measurement Settings

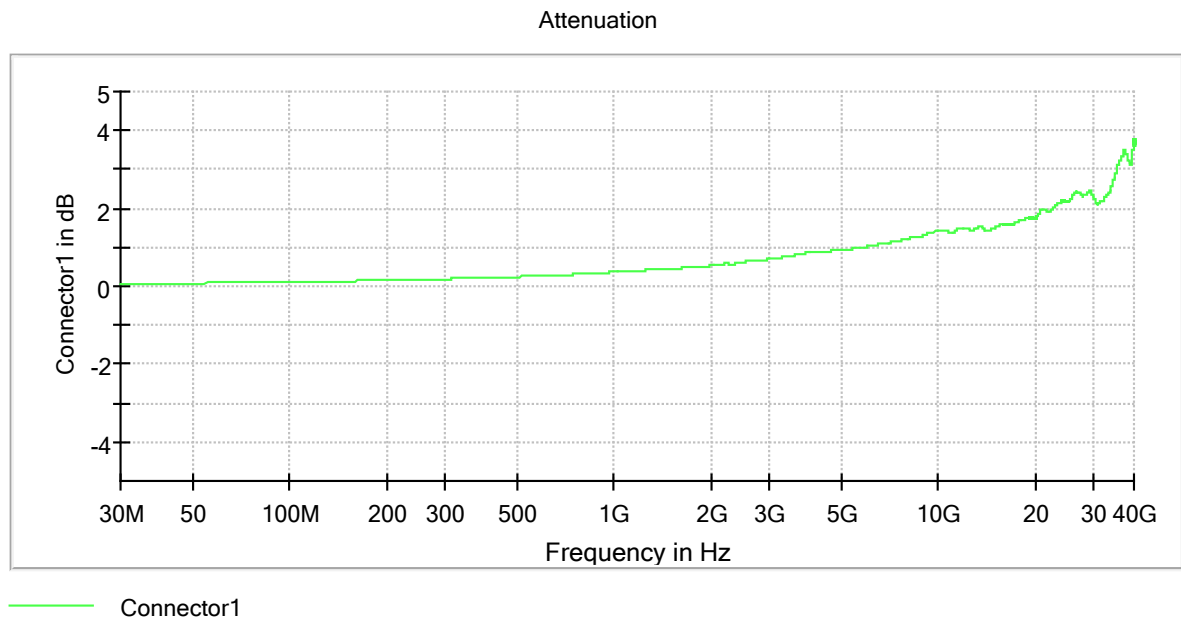
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.02 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
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Power

20.000 dBm (20 dBm)

Beamforming Gain

20.000 dBm (20 dBm)	0 dB
---------------------	------

Gain Tables

20.000 dBm (20 dBm)	Port 1: 0dBi;
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DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5745.000	20.0	20.000000	PASS
RF output power	5745.000	20.0	20.000000	PASS
Power Spectral Density	5745.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5745.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5745.000	20.0	20.000000	PASS
Band Edge low	5745.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5785.000	20.0	20.000000	PASS
RF output power	5785.000	20.0	20.000000	PASS
Power Spectral Density	5785.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5785.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5785.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5825.000	20.0	20.000000	PASS
RF output power	5825.000	20.0	20.000000	PASS
Power Spectral Density	5825.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5825.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5825.000	20.0	20.000000	PASS
Band Edge high	5825.000	20.0	20.000000	PASS

Emission Bandwidth 26 dB (5745 MHz; 20.000 dBm; 20 MHz)

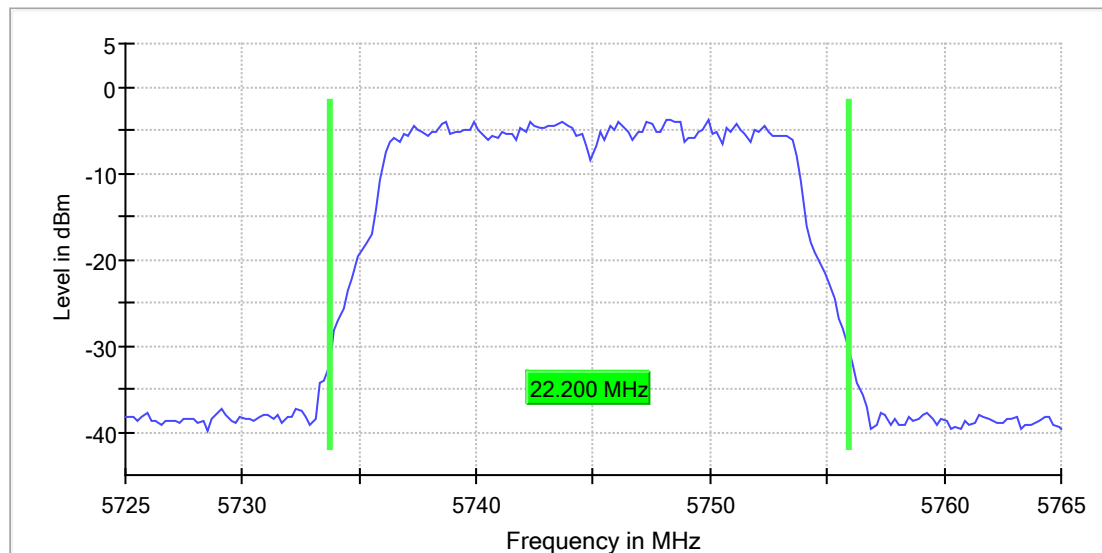
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

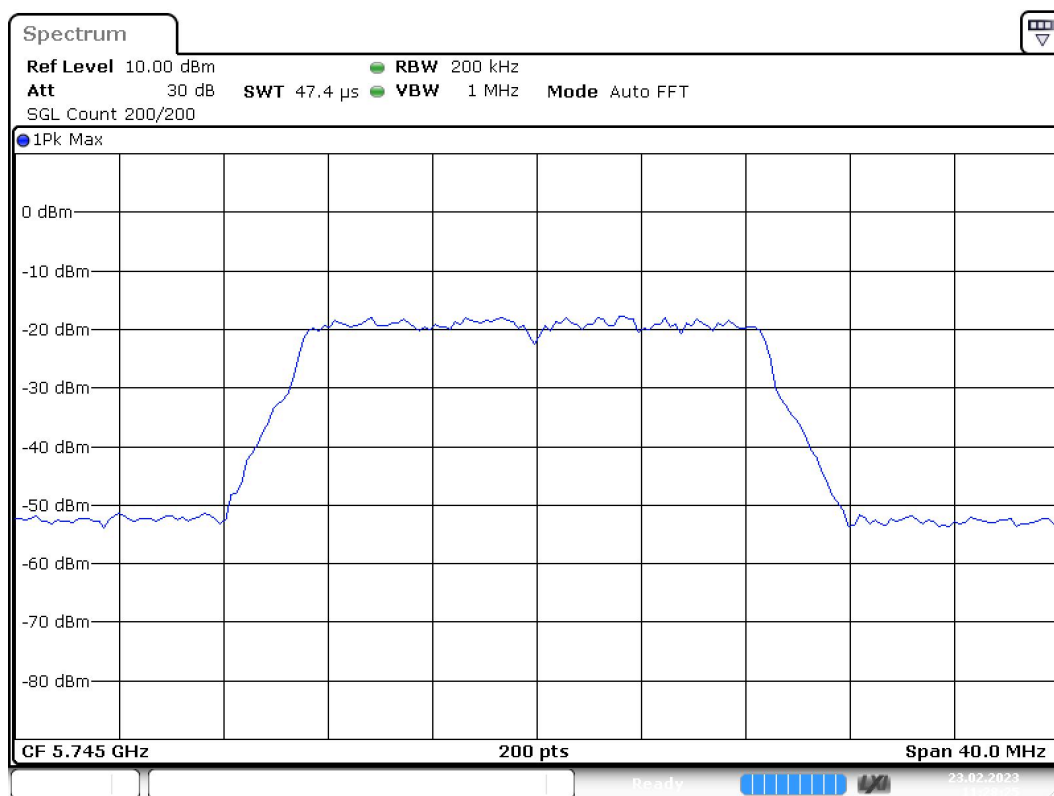
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	22.200000	---	---	5733.700000	5755.900000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	-3.8	PASS



Bandwidth



Date: 23.FEB.2023 11:28:25

Measurement

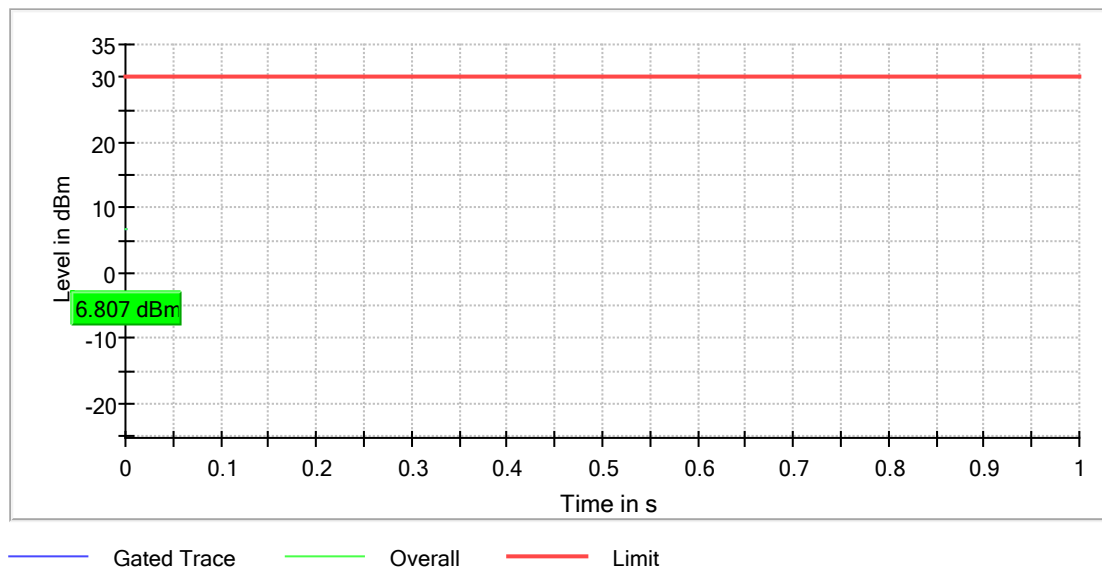
Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	37 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.19 dB	0.30 dB

RF output power (5745 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5745.000000	6.8	30.0	6.8	0.000	PASS



Power Spectral Density (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

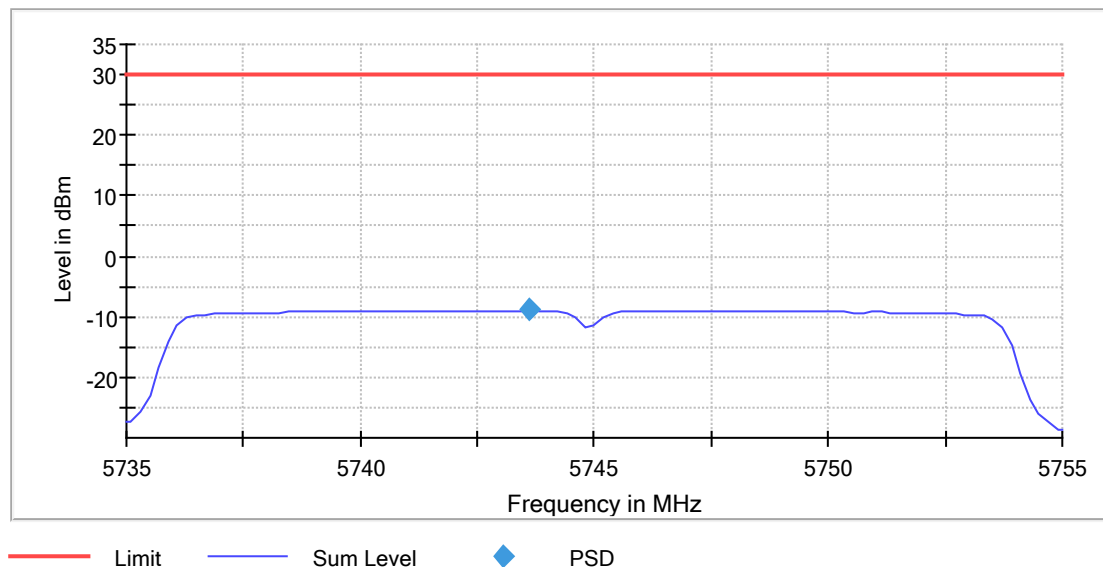
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5743.613861	-8.912	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.182



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.73500 GHz	5.73500 GHz
Stop Frequency	5.75500 GHz	5.75500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.01 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

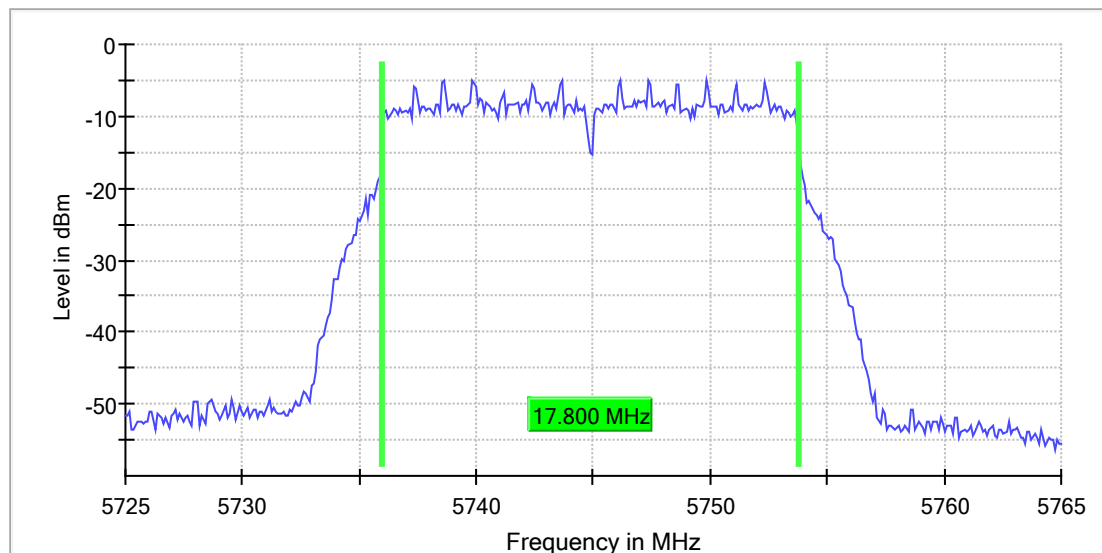
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	17.800000	0.500000	---	5735.950000	5753.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	-4.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
SweepTime	94.810 μ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	13 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.27 dB	0.30 dB

Occupied Channel Bandwidth 99% (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

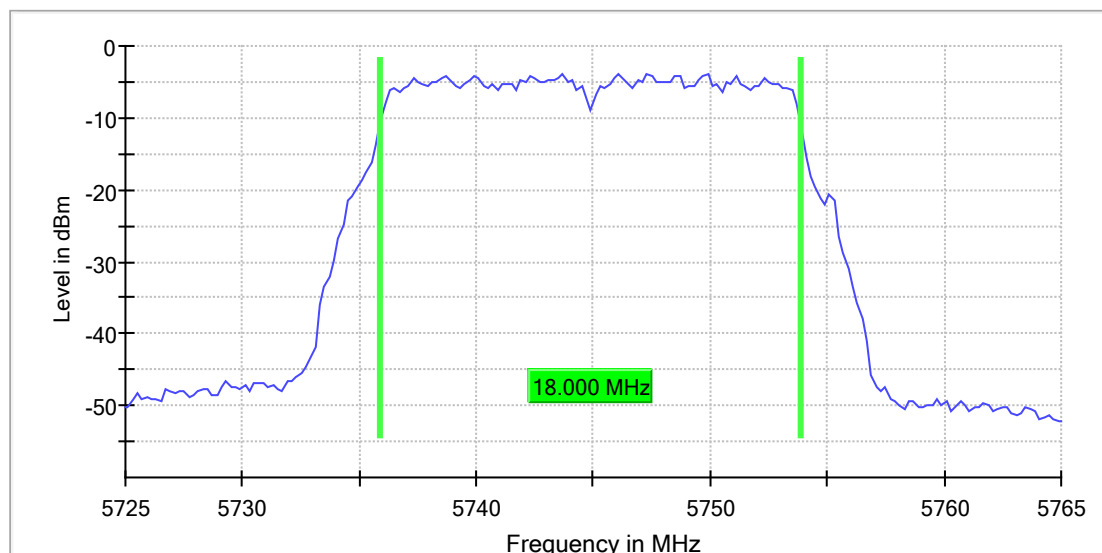
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	18.000000	---	---	5735.900000	5753.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5745.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	21 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Band Edge low (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

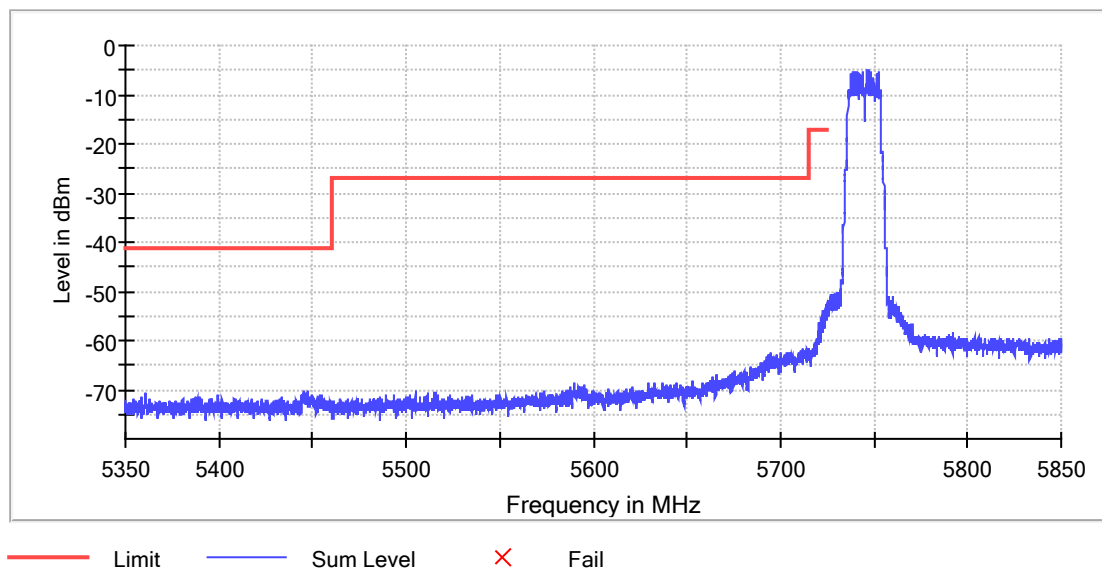
DUT Frequency (MHz)	Result
5745.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5747.375000	-4.9

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5447.525000	-70.3	29.1	-41.2	PASS
5445.575000	-70.4	29.2	-41.2	PASS
5445.625000	-70.5	29.2	-41.2	PASS
5360.625000	-70.5	29.3	-41.2	PASS
5445.025000	-70.7	29.5	-41.2	PASS
5446.375000	-70.7	29.5	-41.2	PASS
5360.575000	-70.8	29.5	-41.2	PASS
5447.575000	-70.8	29.5	-41.2	PASS
5445.375000	-70.8	29.6	-41.2	PASS
5444.975000	-70.8	29.6	-41.2	PASS
5454.225000	-70.9	29.7	-41.2	PASS
5444.275000	-71.0	29.8	-41.2	PASS
5447.475000	-71.0	29.8	-41.2	PASS
5399.575000	-71.1	29.8	-41.2	PASS
5454.175000	-71.1	29.8	-41.2	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.85000 GHz	5.85000 GHz
Span	125.000 MHz	125.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2500	~ 2500
SweepTime	284.766 μ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.22 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.35000 GHz	5.35000 GHz
Stop Frequency	5.72500 GHz	5.72500 GHz
Span	375.000 MHz	375.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	7500	~ 7500
SweepTime	835.313 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

Emission Bandwidth 26 dB (5785 MHz; 20.000 dBm; 20 MHz)

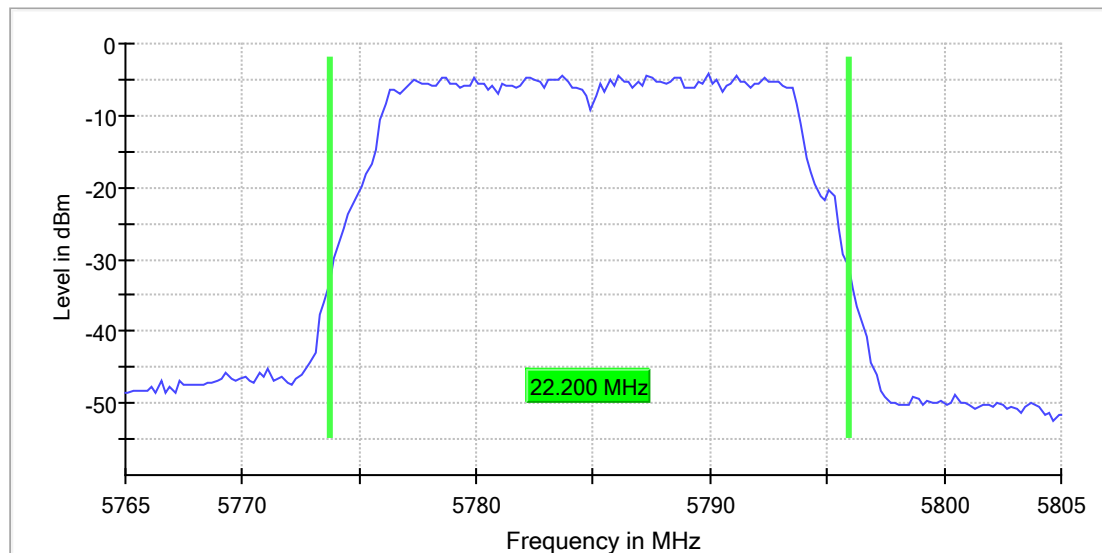
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

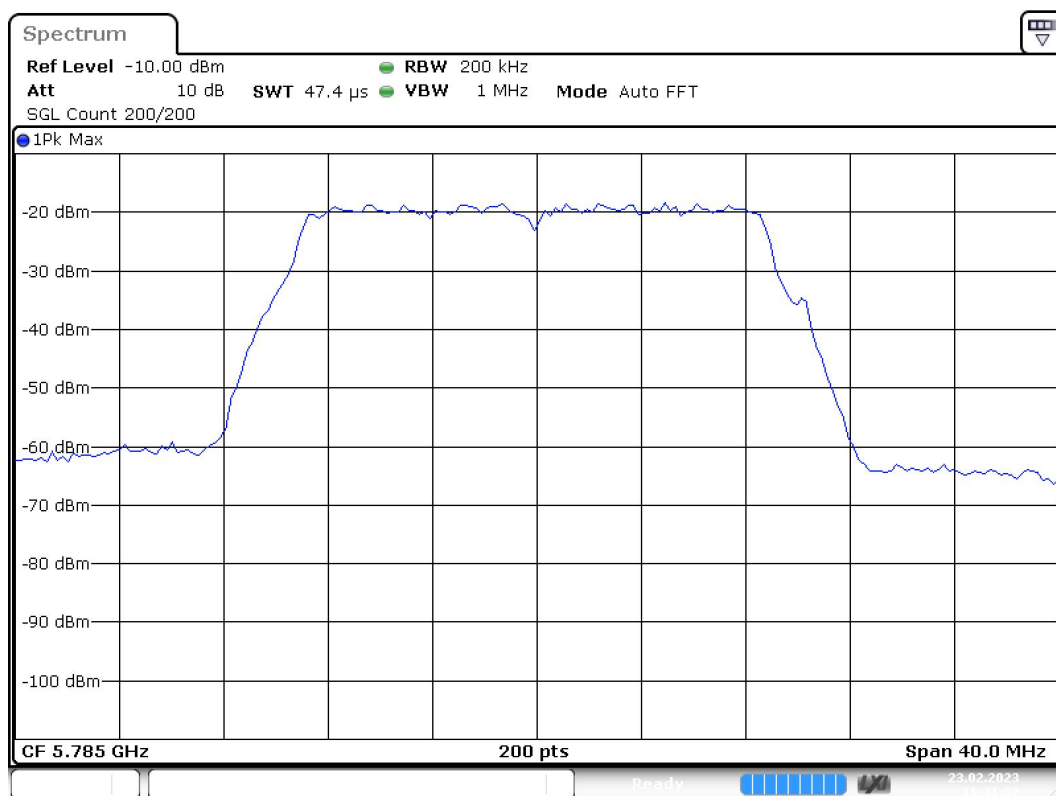
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	22.200000	---	---	5773.700000	5795.900000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	-4.3	PASS



Bandwidth



Date: 23.FEB.2023 11:41:53

Measurement

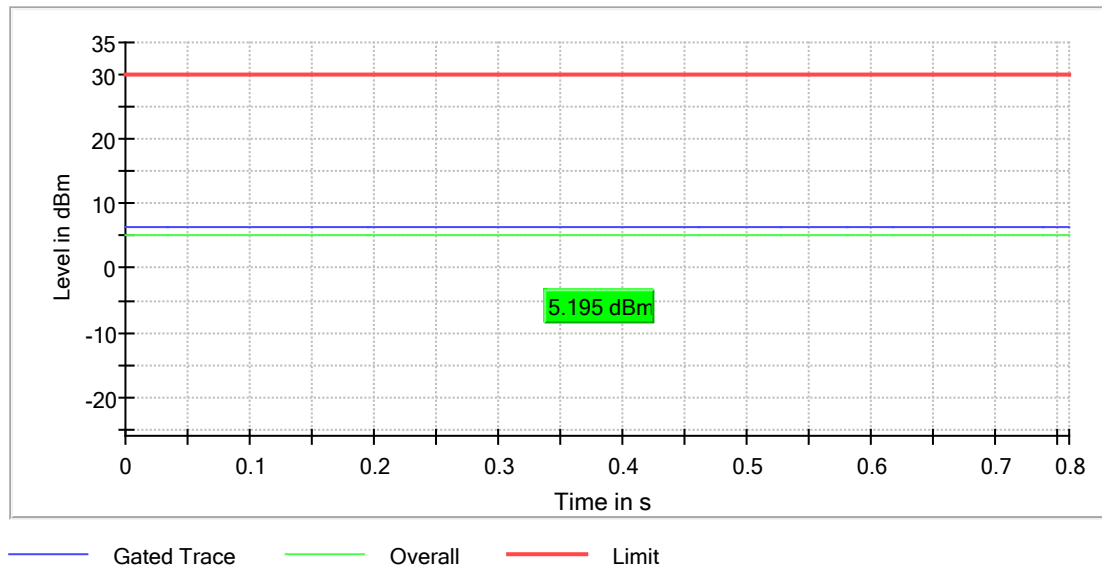
Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	39 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.04 dB	0.30 dB

RF output power (5785 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5785.000000	5.2	30.0	5.2	100.000	PASS



Power Spectral Density (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

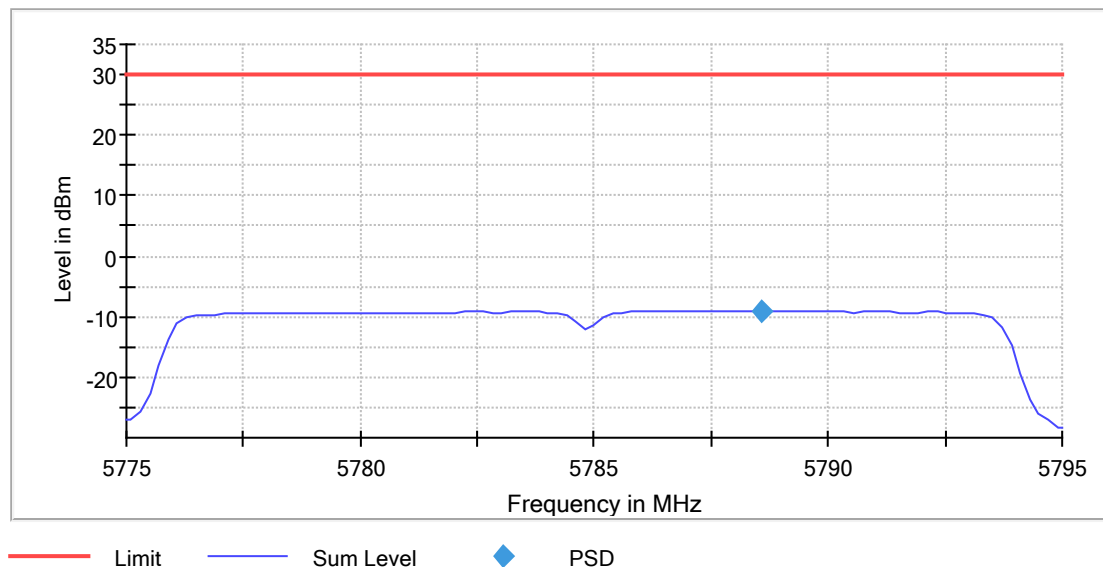
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5788.564356	-9.140	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.185



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.77500 GHz	5.77500 GHz
Stop Frequency	5.79500 GHz	5.79500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.03 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

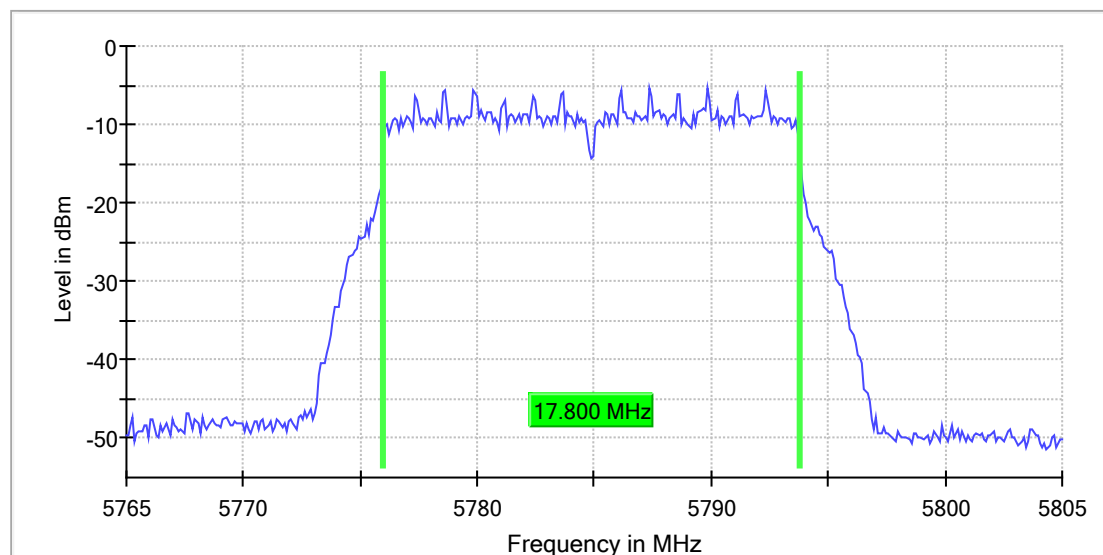
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	17.800000	0.500000	---	5775.950000	5793.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	-5.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
SweepTime	94.810 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	25 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.14 dB	0.30 dB

Occupied Channel Bandwidth 99% (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

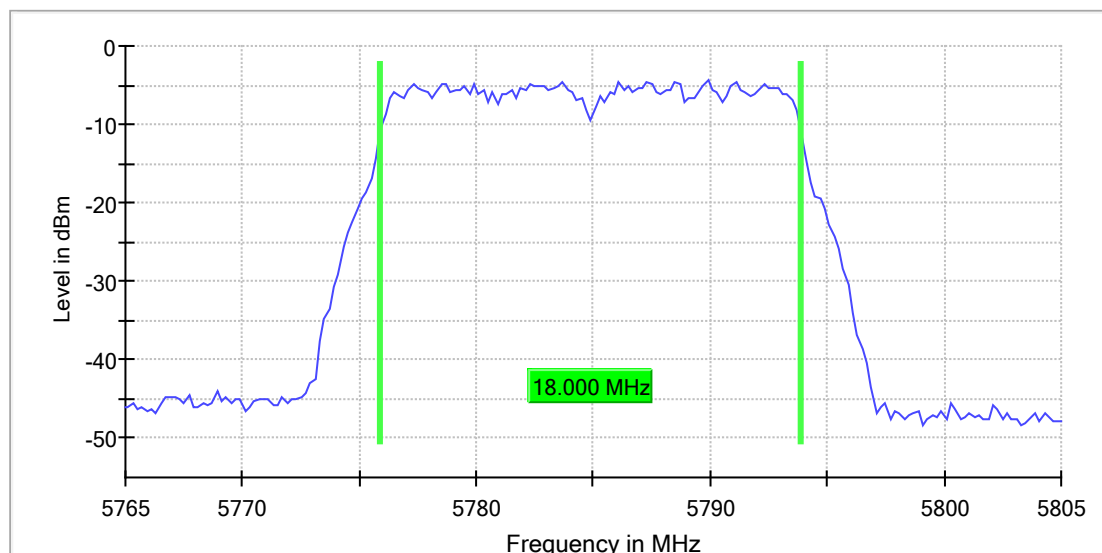
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	18.000000	---	---	5775.900000	5793.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5785.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	15 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.27 dB	0.30 dB

Emission Bandwidth 26 dB (5825 MHz; 20.000 dBm; 20 MHz)

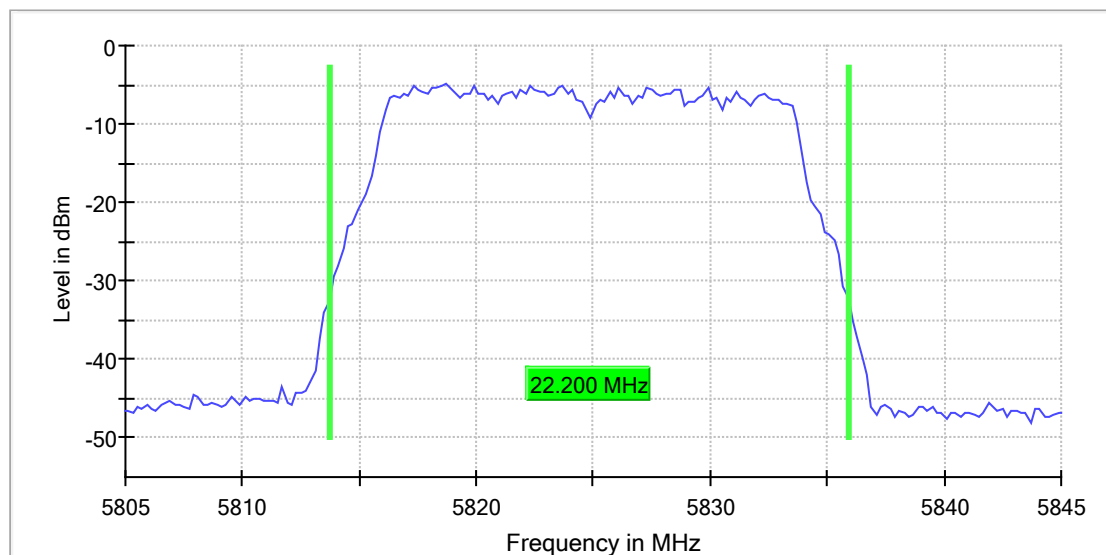
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

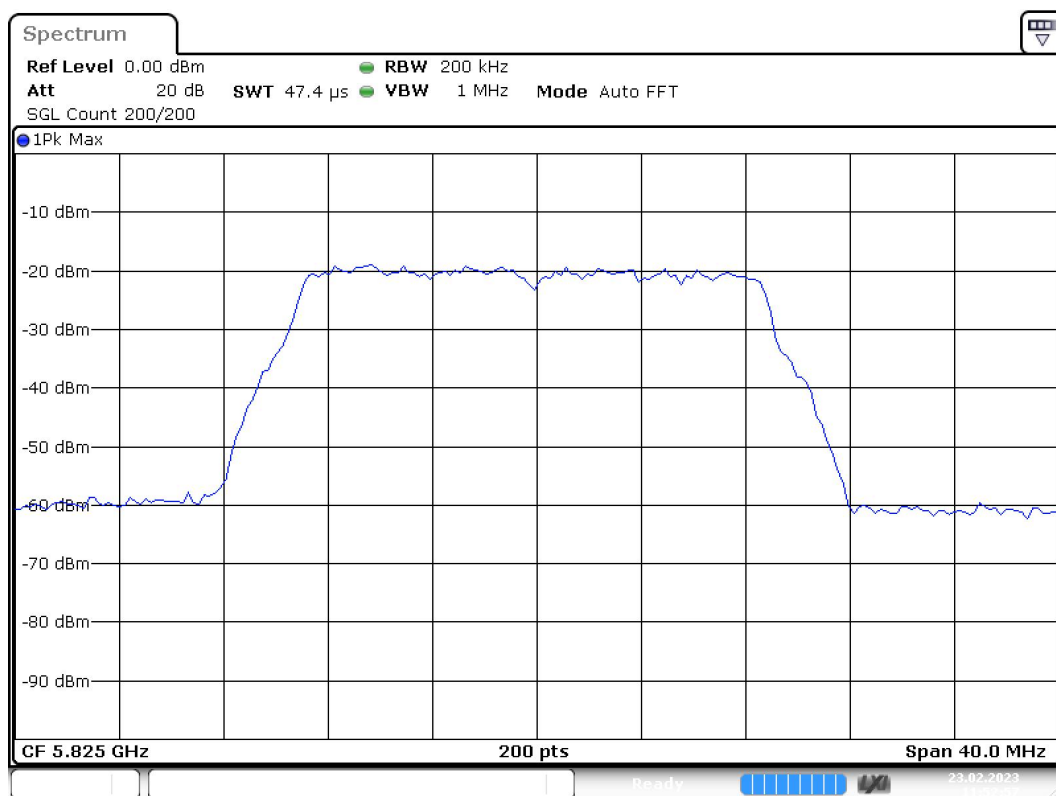
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	22.200000	---	---	5813.700000	5835.900000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-4.9	PASS



Bandwidth



Date: 23.FEB.2023 11:52:57

Measurement

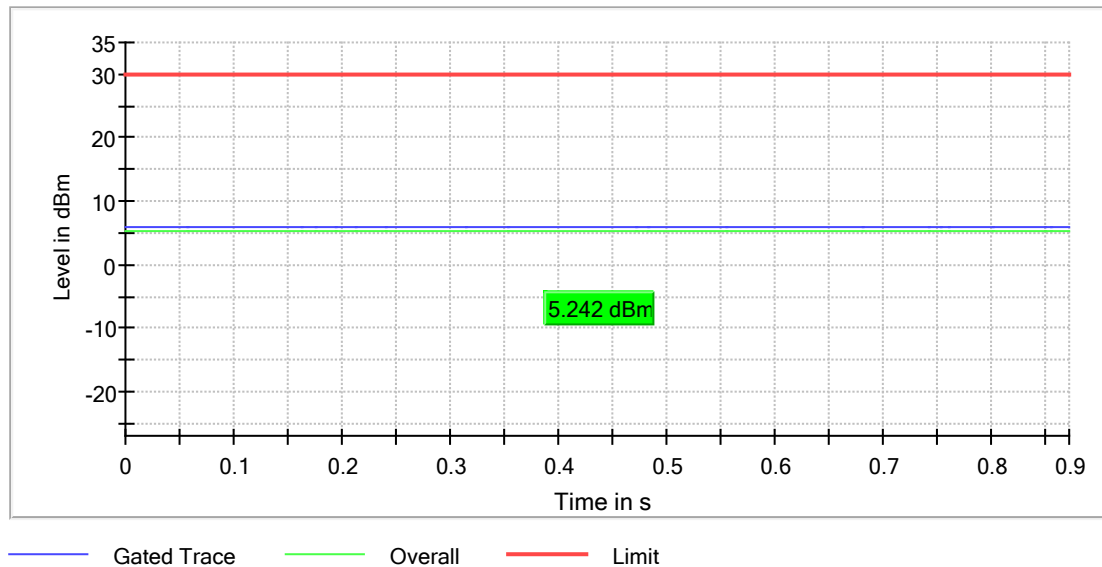
Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	42 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.28 dB	0.30 dB

RF output power (5825 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5825.000000	5.2	30.0	5.2	100.000	PASS



Power Spectral Density (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

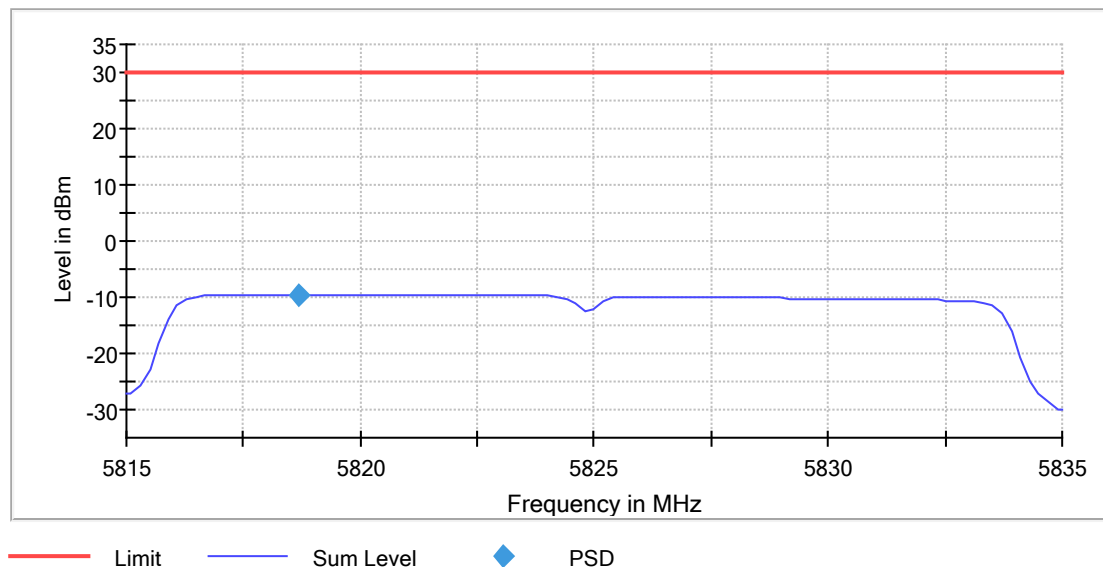
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5818.663366	-9.555	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.182



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.81500 GHz	5.81500 GHz
Stop Frequency	5.83500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.02 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

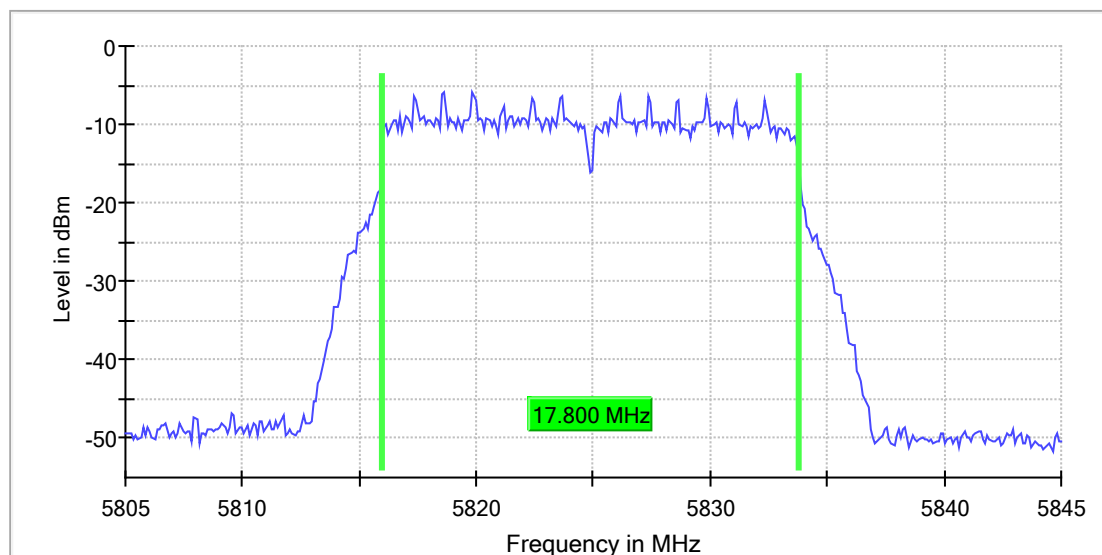
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	17.800000	0.500000	---	5815.950000	5833.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-5.8	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.810 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	17 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.19 dB	0.30 dB

Occupied Channel Bandwidth 99% (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

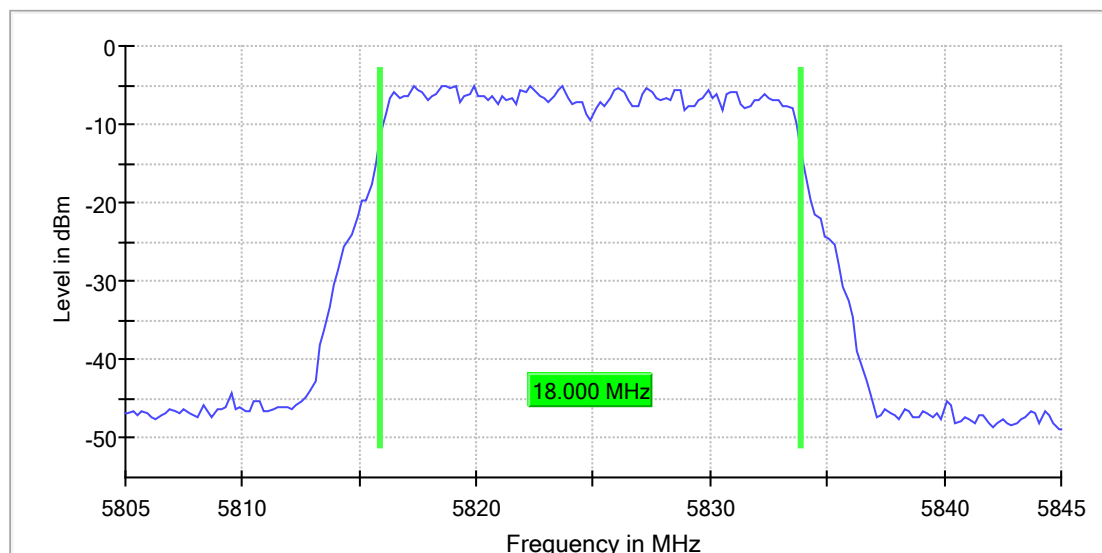
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	18.000000	---	---	5815.900000	5833.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5825.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
Sweeptime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.05 dB	0.30 dB

Band Edge high (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

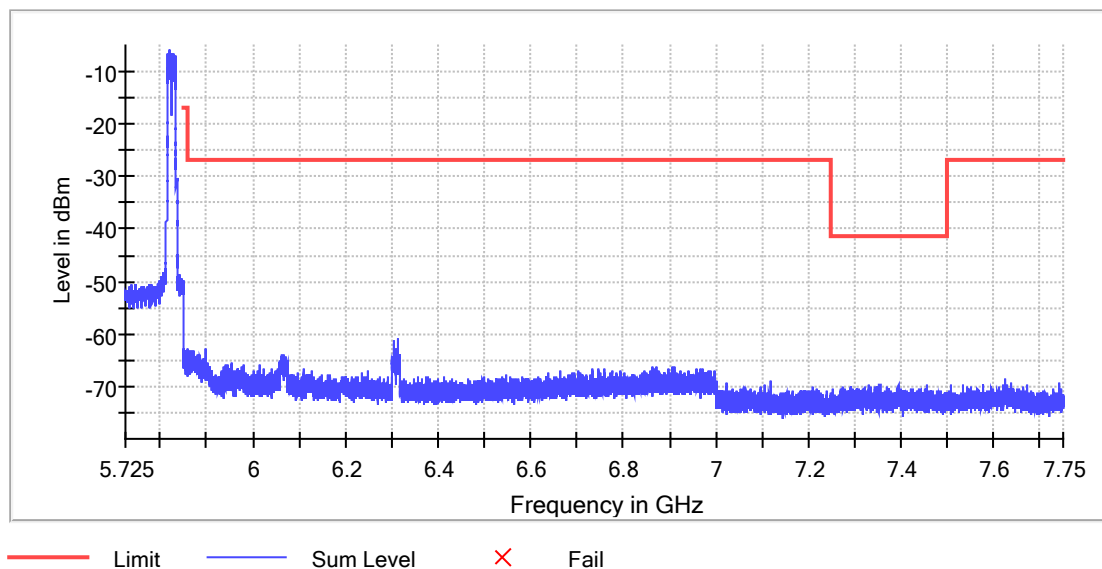
DUT Frequency (MHz)	Result
5825.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5818.625000	-5.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
7354.075000	-69.7	28.5	-41.2	PASS
7331.875000	-69.7	28.5	-41.2	PASS
7457.475000	-69.7	28.5	-41.2	PASS
7393.075000	-69.8	28.6	-41.2	PASS
7457.425000	-69.8	28.6	-41.2	PASS
7354.125000	-69.9	28.6	-41.2	PASS
7322.525000	-69.9	28.7	-41.2	PASS
7347.625000	-69.9	28.7	-41.2	PASS
7333.475000	-69.9	28.7	-41.2	PASS
7348.175000	-69.9	28.7	-41.2	PASS
7292.275000	-70.0	28.8	-41.2	PASS
7291.325000	-70.1	28.9	-41.2	PASS
7348.225000	-70.1	28.9	-41.2	PASS
7292.325000	-70.2	29.0	-41.2	PASS
7396.325000	-70.2	29.0	-41.2	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.85000 GHz	5.85000 GHz
Span	125.000 MHz	125.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2500	~ 2500
SweepTime	284.766 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.32 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.85000 GHz	5.85000 GHz
Stop Frequency	6.40000 GHz	6.40000 GHz
Span	550.000 MHz	550.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	11000	~ 11000
SweepTime	11.000 ms	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
-----------------	-----------------	-----------------

Power

20.000 dBm (20 dBm)

Beamforming Gain

Powerstep name (value)	Beamforming gain table names
20.000 dBm (20 dBm)	BFG_'20.000 dBm'_0.000dB;

Gain Tables

Powerstep name (value)	Gain table names
20.000 dBm (20 dBm)	Port 1: 0dBi;

DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Tx Spurious Emission	5745.000	20.0	20.000000	PASS
Tx Spurious Emission	5785.000	20.0	20.000000	PASS
Tx Spurious Emission	5825.000	20.0	20.000000	PASS

Tx Spurious Emission (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5745.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

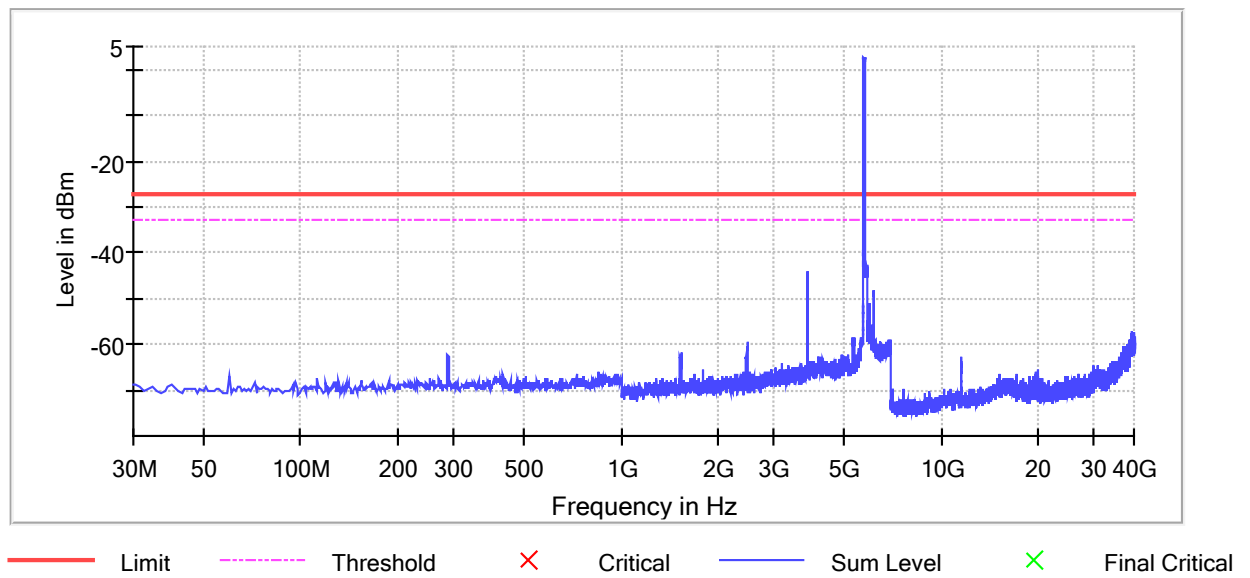
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
5723.500000	-41.7	14.7	-27.0
5722.500000	-42.2	15.2	-27.0
5724.500000	-43.3	16.3	-27.0
3830.500000	-44.1	17.1	-27.0
5721.500000	-44.6	17.6	-27.0
3829.500000	-45.8	18.8	-27.0
5720.500000	-46.4	19.4	-27.0
6172.500000	-48.3	21.3	-27.0
3831.500000	-48.3	21.3	-27.0
6168.500000	-48.4	21.4	-27.0
6175.500000	-48.6	21.6	-27.0
6178.500000	-48.8	21.8	-27.0
5719.500000	-48.8	21.8	-27.0
6173.500000	-48.8	21.8	-27.0
6163.500000	-48.8	21.8	-27.0

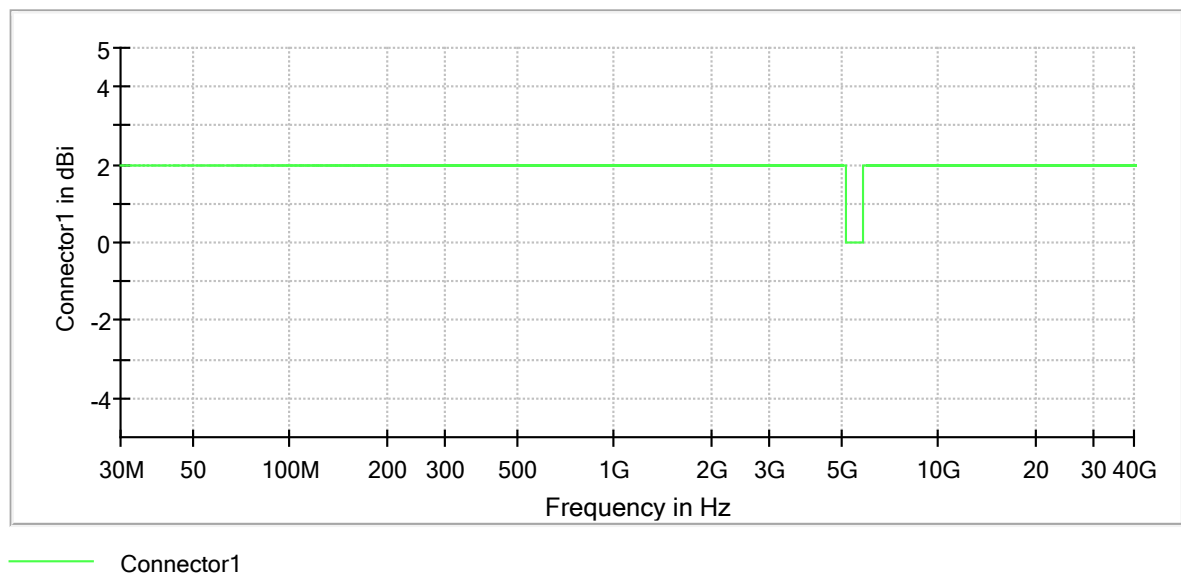
Measurement Settings

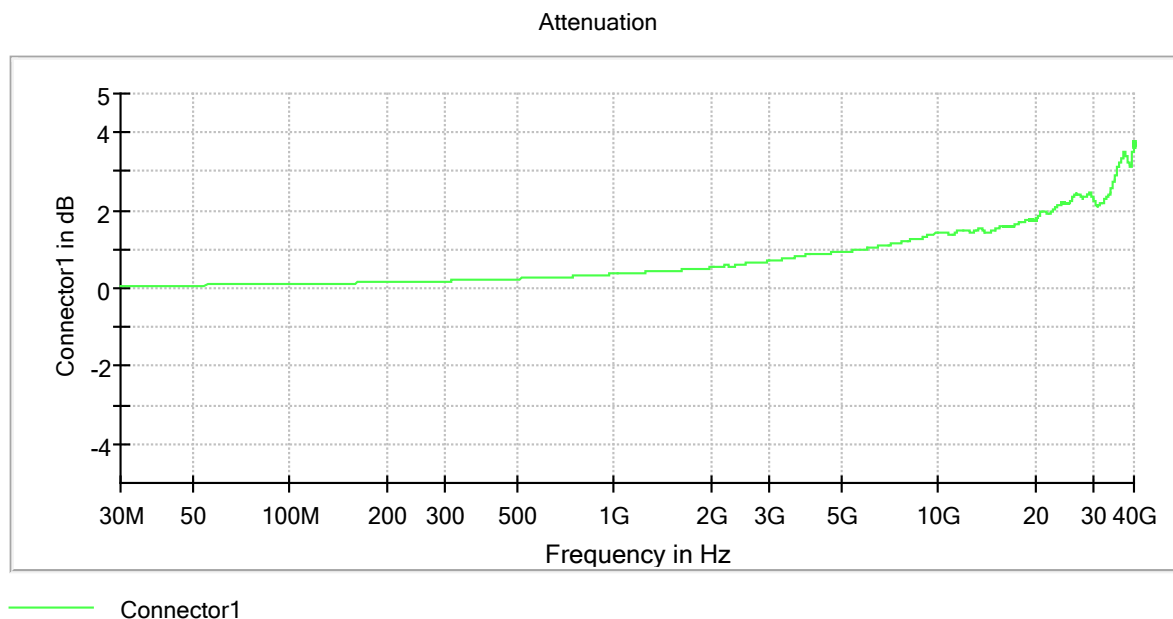
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Tx Spurious Emission (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5785.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

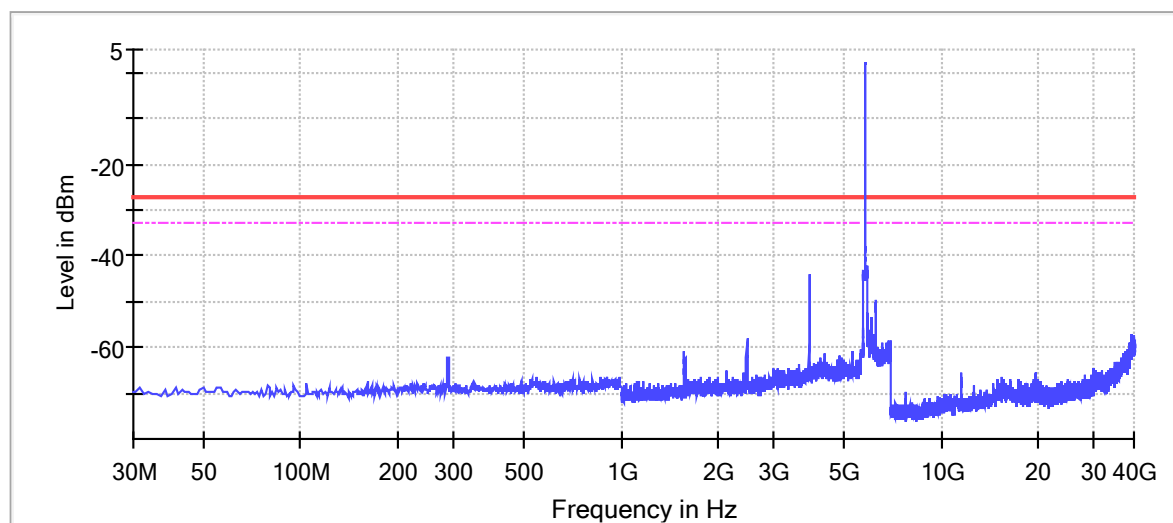
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3857.500000	-43.8	16.8	-27.0
3856.500000	-44.3	17.3	-27.0
6262.500000	-49.5	22.5	-27.0
6265.500000	-50.3	23.3	-27.0
6263.500000	-50.7	23.7	-27.0
6275.500000	-50.9	23.9	-27.0
6261.500000	-51.1	24.1	-27.0
6267.500000	-51.2	24.2	-27.0
6274.500000	-51.3	24.3	-27.0
6270.500000	-51.4	24.4	-27.0
6268.500000	-51.4	24.4	-27.0
6260.500000	-51.4	24.4	-27.0
6271.500000	-51.4	24.4	-27.0
6273.500000	-51.5	24.5	-27.0
6266.500000	-51.5	24.5	-27.0

Measurement Settings

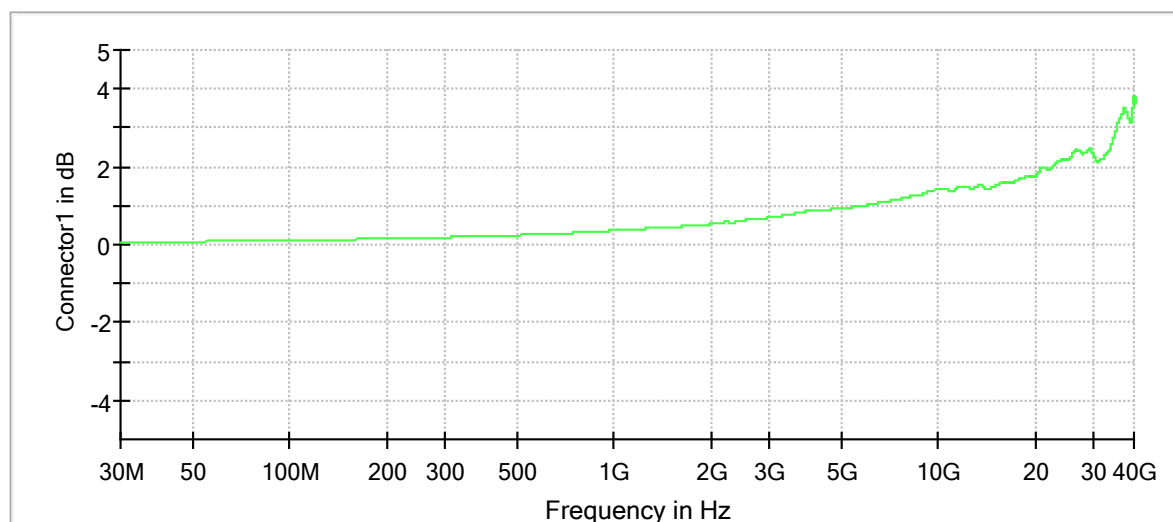
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



— Limit - - - Threshold × Critical — Sum Level × Final Critical

Attenuation



— Connector1

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3

Max Stable Difference	0.00 dB	0.50 dB
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Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Tx Spurious Emission (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5825.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

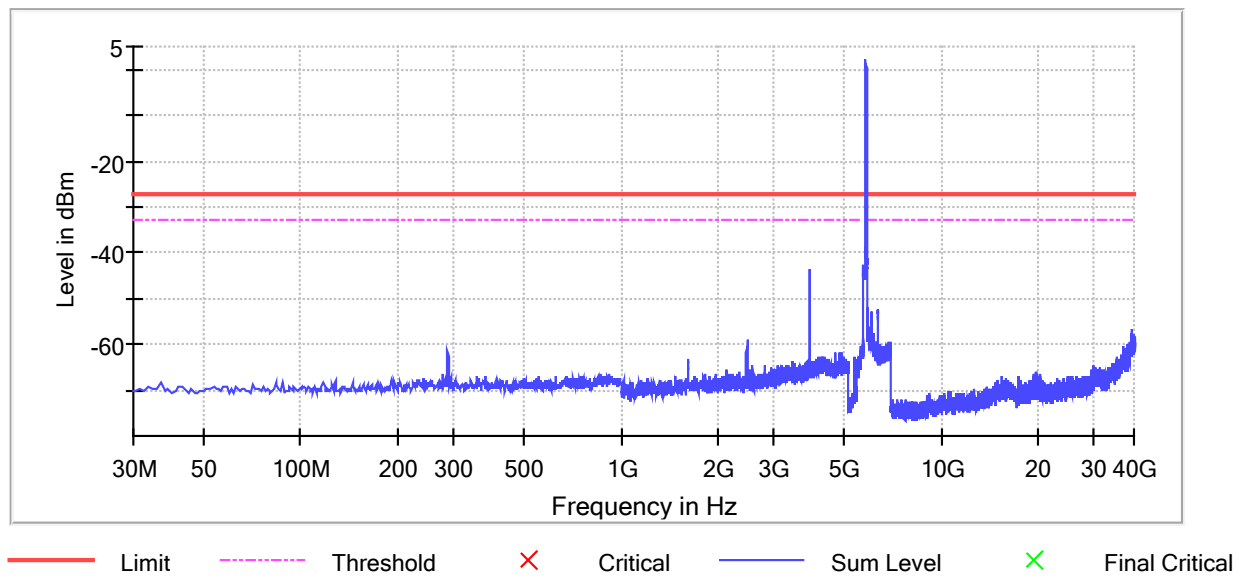
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3883.500000	-43.4	16.4	-27.0
3884.500000	-43.5	16.5	-27.0
5850.500000	-51.1	24.1	-27.0
5858.500000	-51.8	24.8	-27.0
5862.500000	-51.9	24.9	-27.0
5863.500000	-52.3	25.3	-27.0
5856.500000	-52.3	25.3	-27.0
5859.500000	-52.4	25.4	-27.0
6313.500000	-52.4	25.4	-27.0
6311.500000	-52.5	25.5	-27.0
6308.500000	-52.5	25.5	-27.0
6305.500000	-52.6	25.6	-27.0
6306.500000	-52.6	25.6	-27.0
5868.500000	-52.7	25.7	-27.0
6302.500000	-52.7	25.7	-27.0

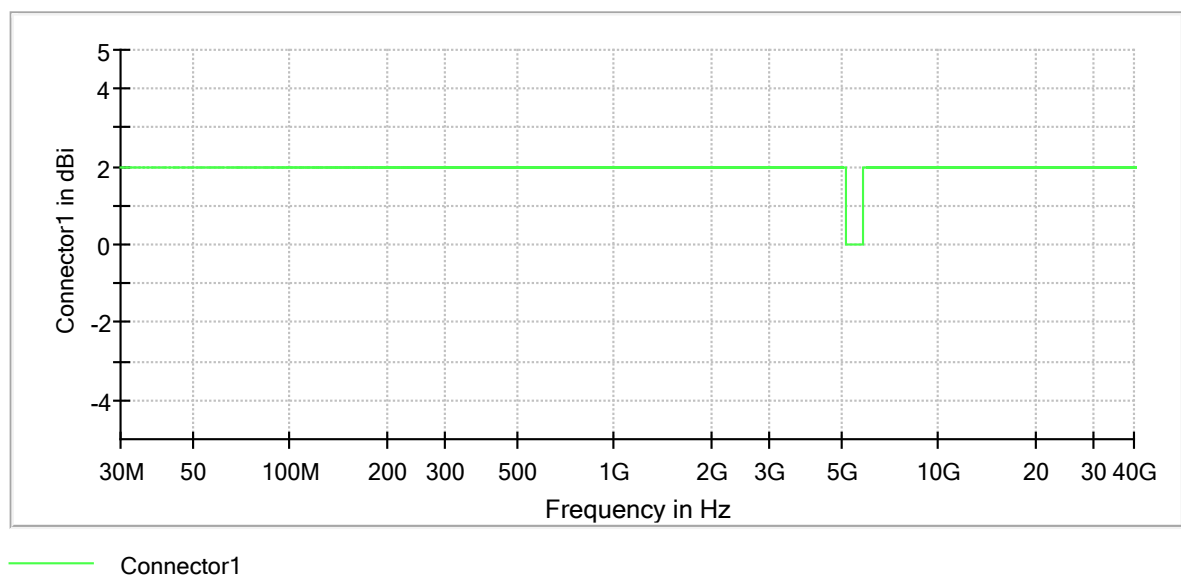
Measurement Settings

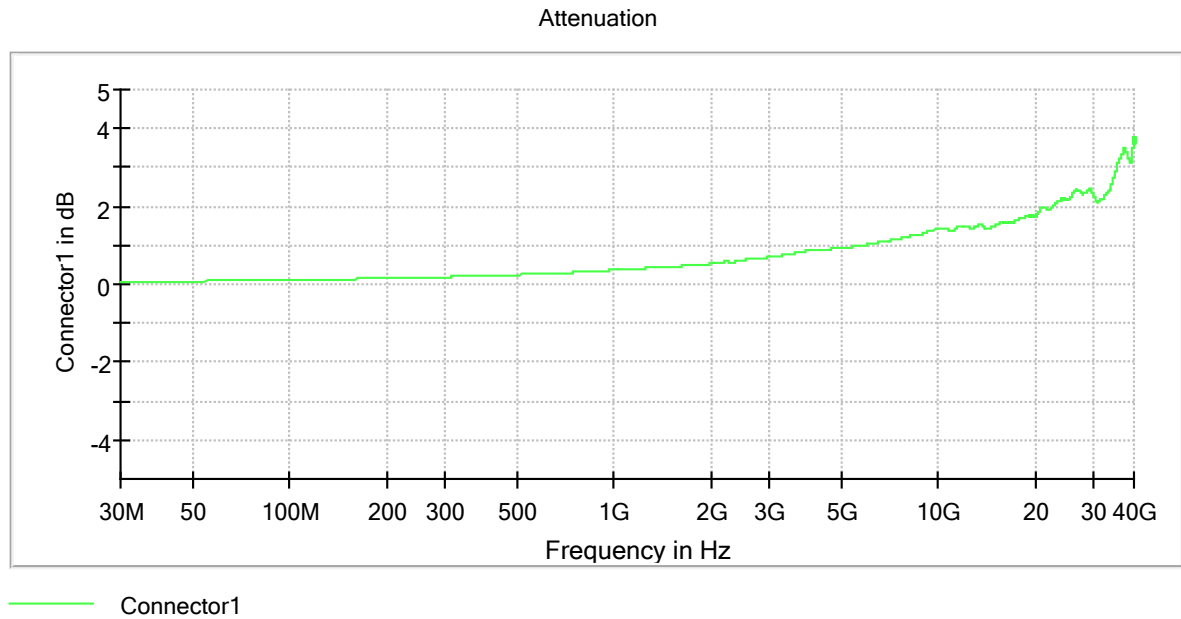
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
-----------------	-----------------	-----------------

Power

20.000 dBm (20 dBm)

Beamforming Gain

20.000 dBm (20 dBm)	0 dB
---------------------	------

Gain Tables

20.000 dBm (20 dBm)	Port 1: 0dBi;
---------------------	---------------

DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5180.000	20.0	20.000000	PASS
RF output power	5180.000	20.0	20.000000	PASS
Power Spectral Density	5180.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5180.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5180.000	20.0	20.000000	PASS
Band Edge low	5180.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	20.000000	PASS
RF output power	5200.000	20.0	20.000000	PASS
Power Spectral Density	5200.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5200.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5240.000	20.0	20.000000	PASS
RF output power	5240.000	20.0	20.000000	PASS
Power Spectral Density	5240.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5240.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5240.000	20.0	20.000000	PASS
Band Edge high	5240.000	20.0	20.000000	PASS

Emission Bandwidth 26 dB (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

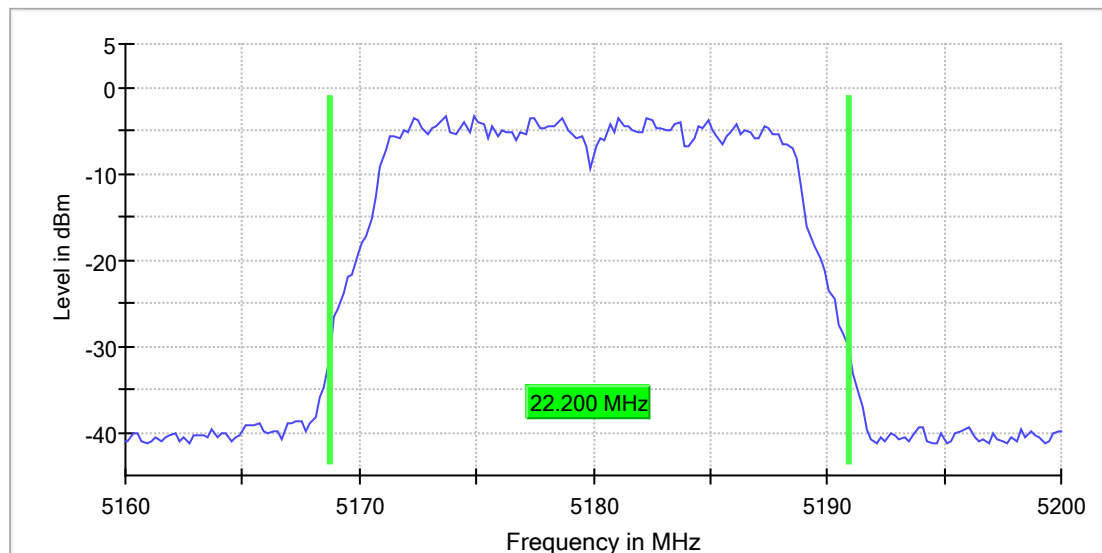
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

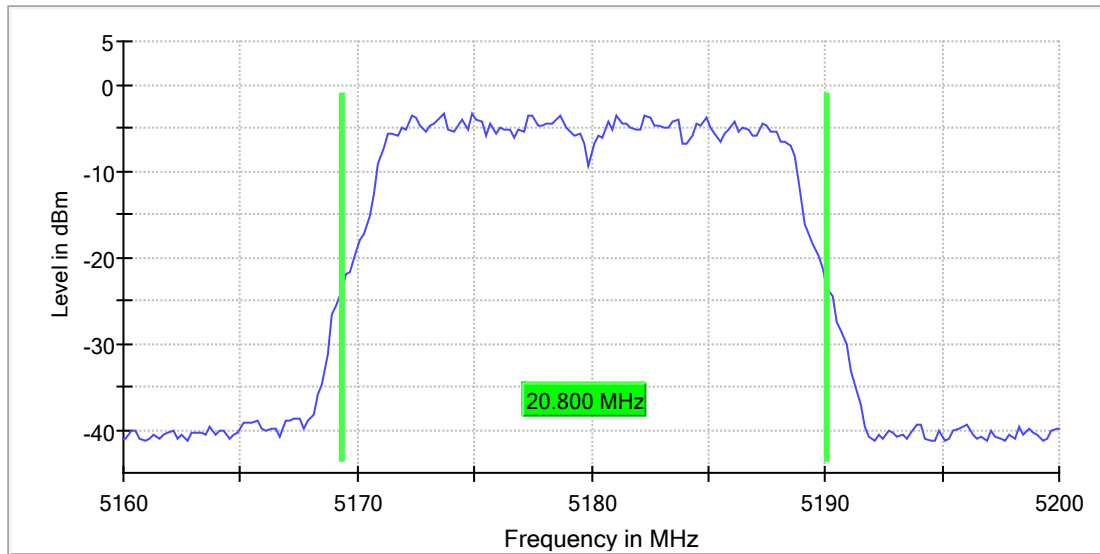
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	22.200000	---	---	5168.700000	5190.900000

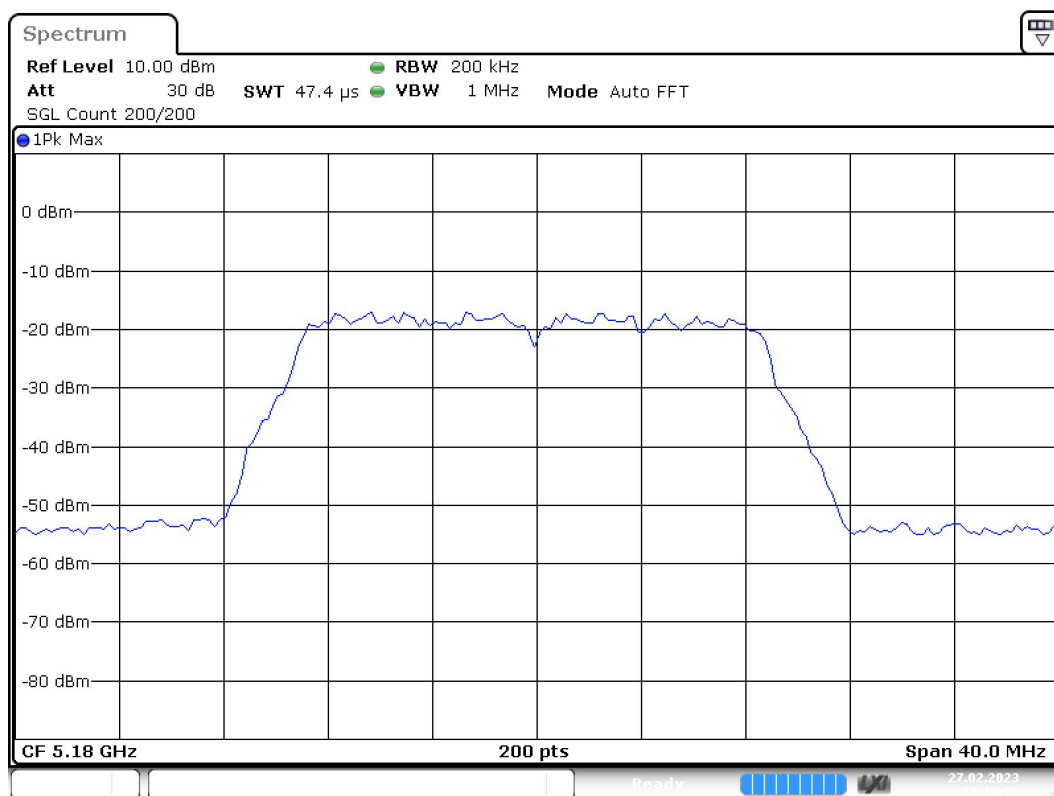
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5180.000000	-3.4	PASS





Bandwidth



Date: 27.FEB.2023 11:10:36

Measurement

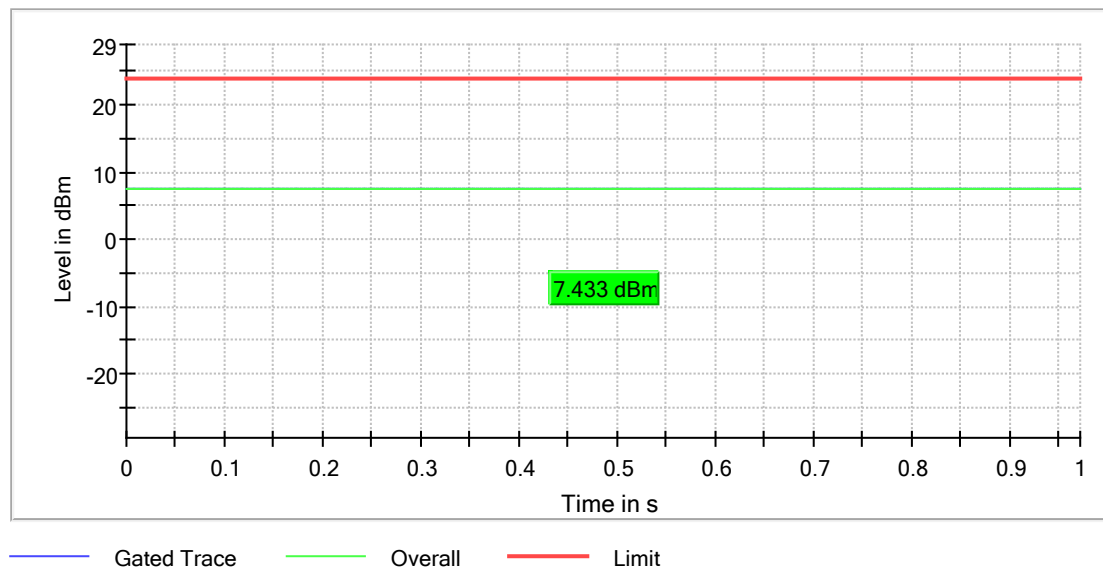
Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
Sweeptime	47.405 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	8 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.96 dB	1.00 dB

RF output power (5180 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5180.000000	7.4	24.0	7.4	97.296	PASS



Power Spectral Density (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

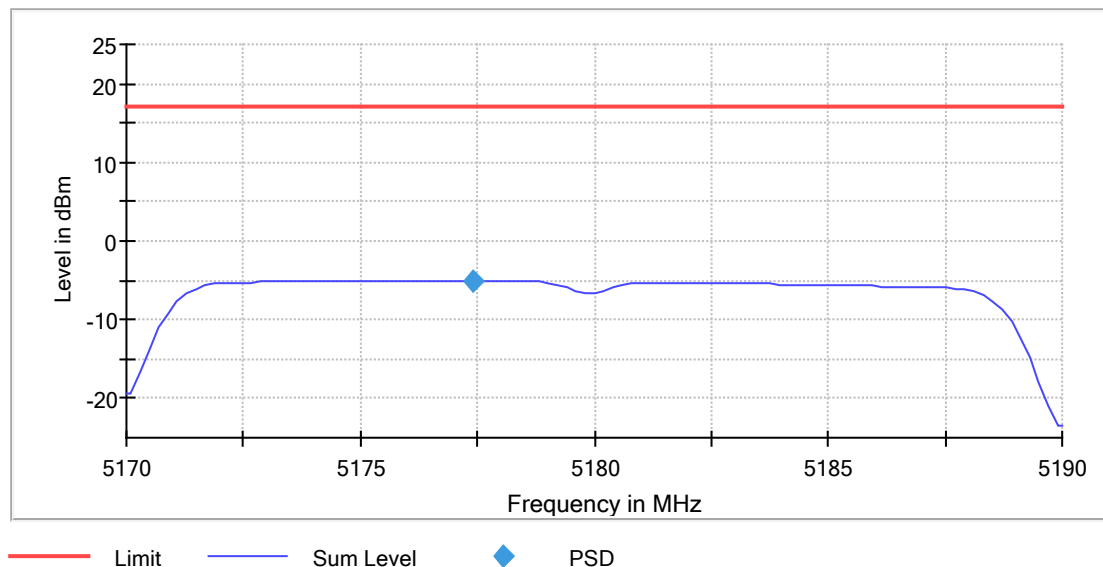
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5177.425743	-5.082	17.0	PASS

Ports

Port	Duty Cycle (%)
1	97.180



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17000 GHz	5.17000 GHz
Stop Frequency	5.19000 GHz	5.19000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.02 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

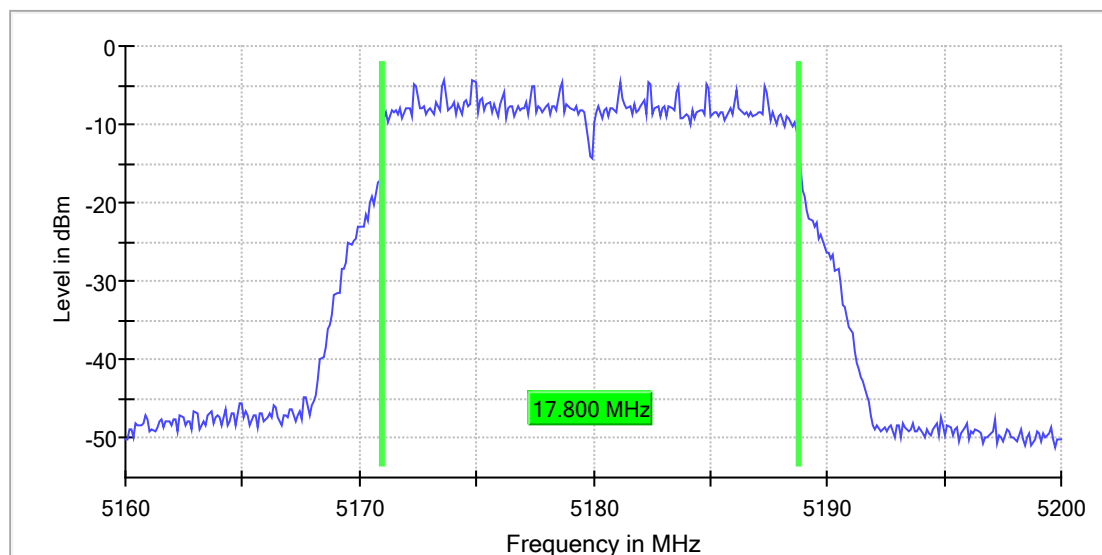
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	17.800000	---	---	5170.950000	5188.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5180.000000	-4.2	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.810 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	27 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.21 dB	0.30 dB

Occupied Channel Bandwidth 99% (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

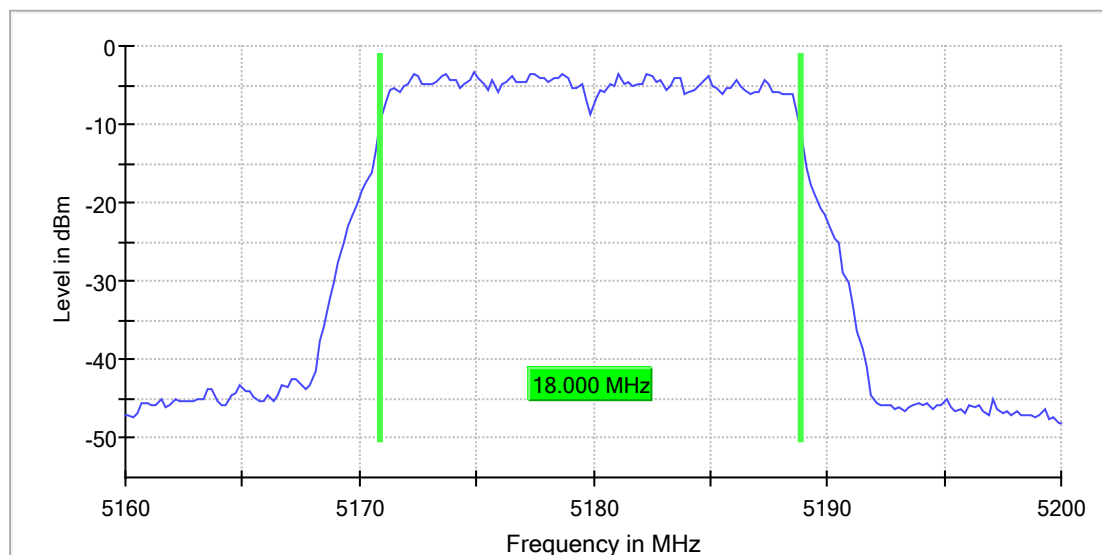
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	18.000000	---	---	5170.900000	5188.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5180.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	15 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.21 dB	0.30 dB

Band Edge low (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

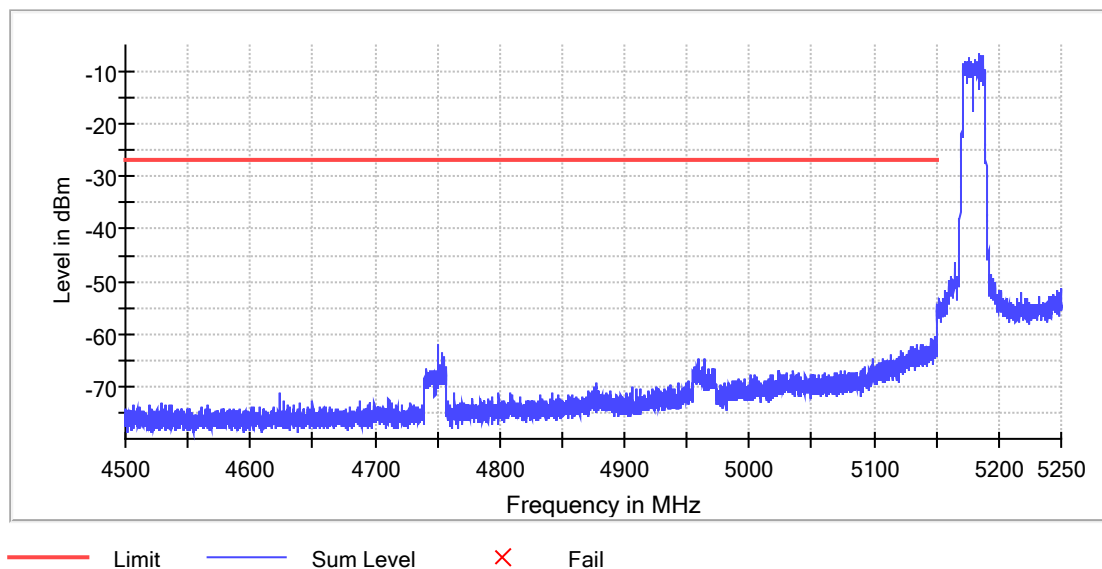
DUT Frequency (MHz)	Result
5180.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5184.875000	-6.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5148.725000	-60.4	33.4	-27.0	PASS
5144.875000	-61.0	34.0	-27.0	PASS
5144.925000	-61.1	34.1	-27.0	PASS
5148.775000	-61.2	34.2	-27.0	PASS
5147.925000	-61.3	34.3	-27.0	PASS
5147.975000	-61.3	34.3	-27.0	PASS
5149.325000	-61.5	34.5	-27.0	PASS
5148.275000	-61.6	34.6	-27.0	PASS
5148.075000	-61.7	34.7	-27.0	PASS
5148.025000	-61.7	34.7	-27.0	PASS
5145.325000	-61.8	34.8	-27.0	PASS
5146.325000	-61.8	34.8	-27.0	PASS
5147.075000	-61.8	34.8	-27.0	PASS
5147.125000	-61.8	34.8	-27.0	PASS
5145.925000	-61.8	34.8	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	100.000 MHz	100.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2000	~ 2000
SweepTime	227.813 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	1 / max. 1	max. 1
Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	4.50000 GHz	4.50000 GHz
Stop Frequency	5.15000 GHz	5.15000 GHz
Span	650.000 MHz	650.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	13000	~ 13000
SweepTime	13.000 ms	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	1 / max. 1	max. 1
Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

Emission Bandwidth 26 dB (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

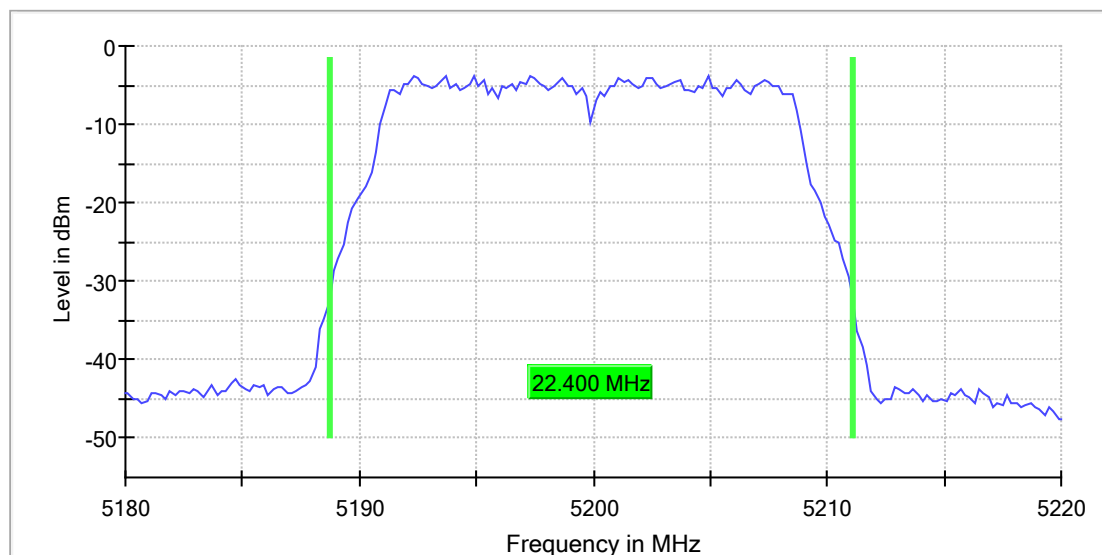
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

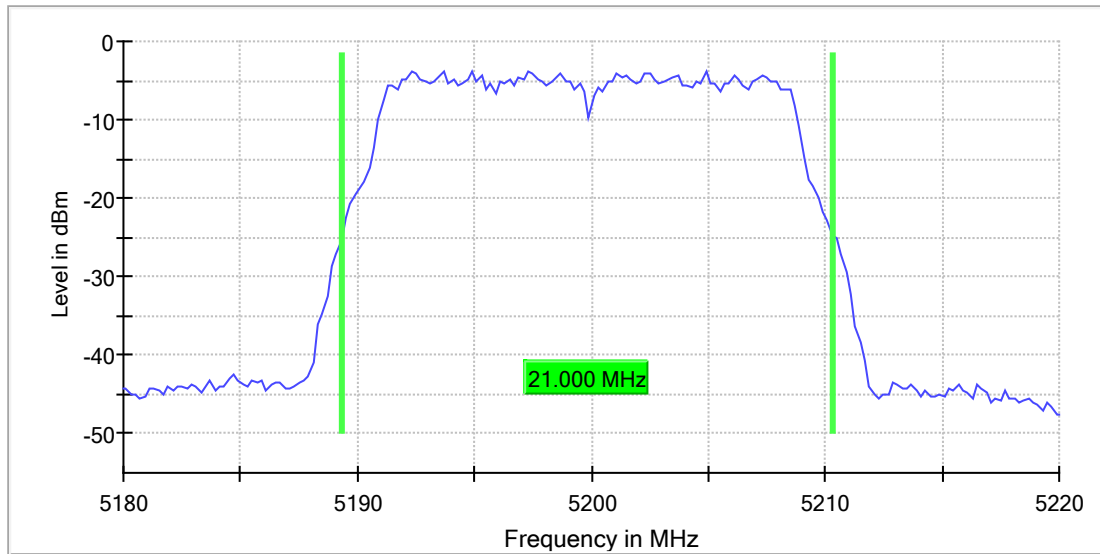
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	22.400000	---	---	5188.700000	5211.100000

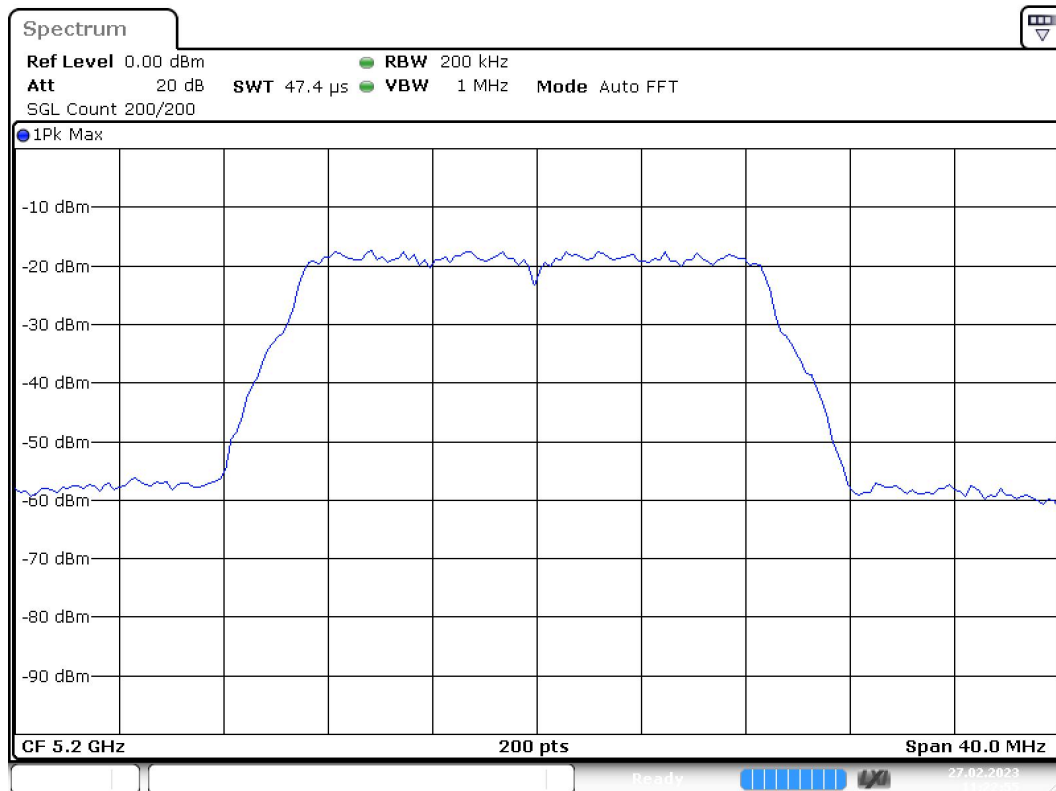
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-3.8	PASS





Bandwidth



Date: 27.FEB.2023 11:22:55

Measurement

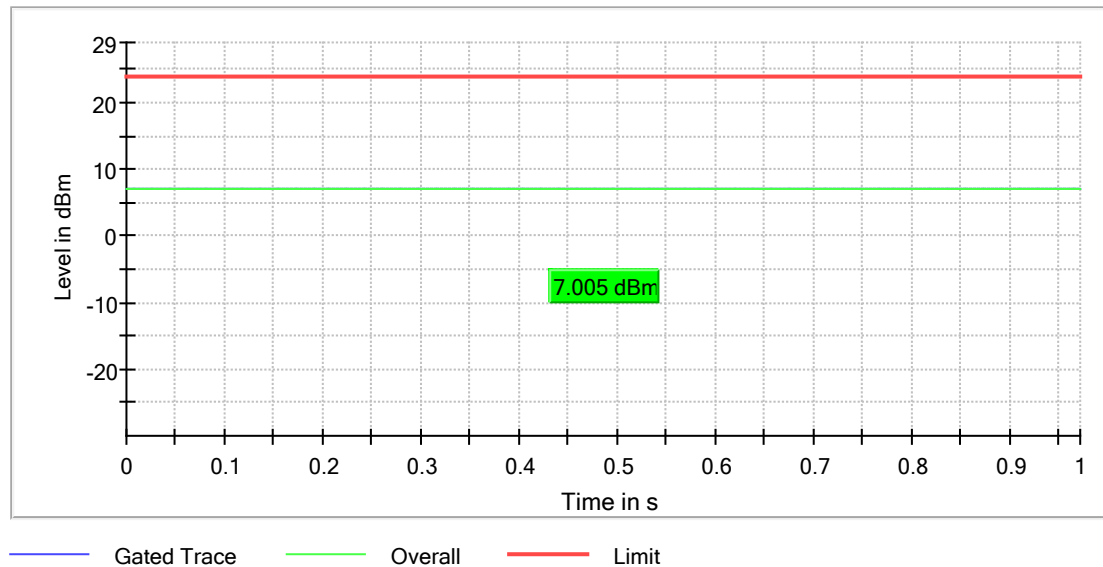
Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	21 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.21 dB	0.30 dB

RF output power (5200 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	7.0	24.0	7.0	97.296	PASS



Power Spectral Density (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

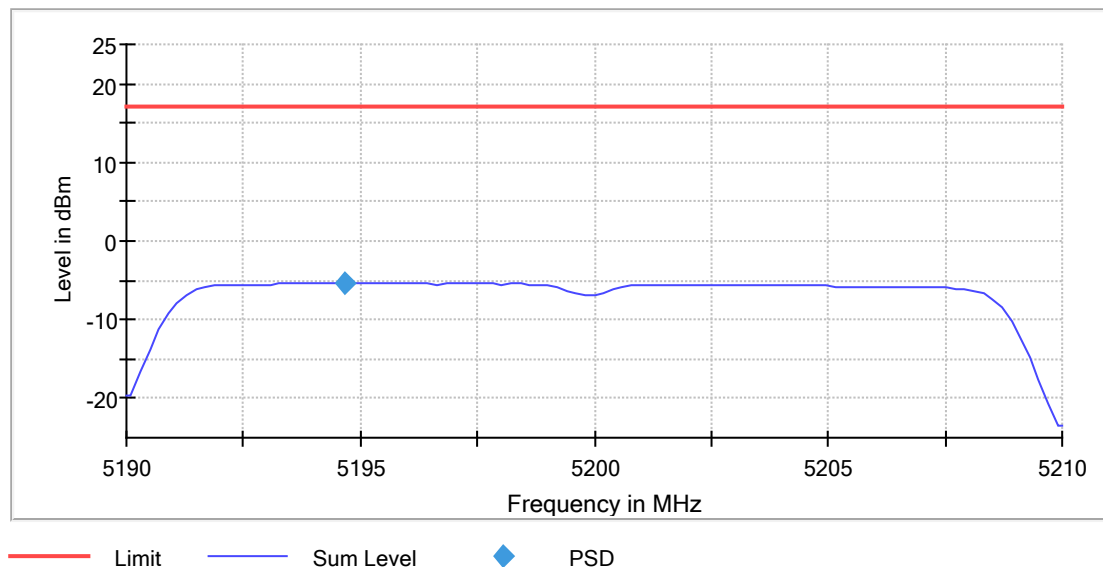
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5194.653465	-5.451	17.0	PASS

Ports

Port	Duty Cycle (%)
1	97.176



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.02 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

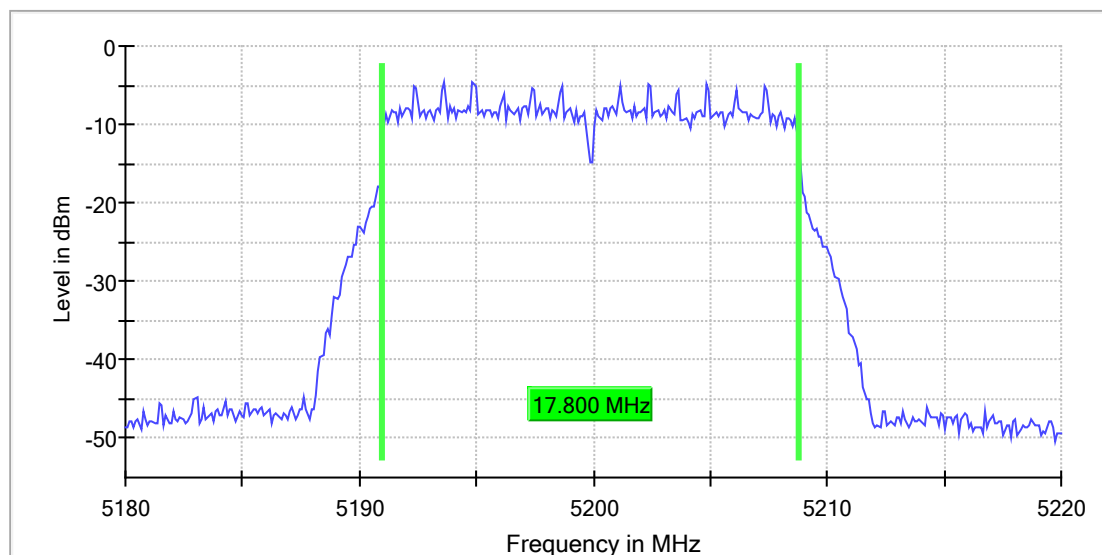
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	17.800000	---	---	5190.950000	5208.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-4.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
SweepTime	94.810 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	19 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.29 dB	0.30 dB

Occupied Channel Bandwidth 99% (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

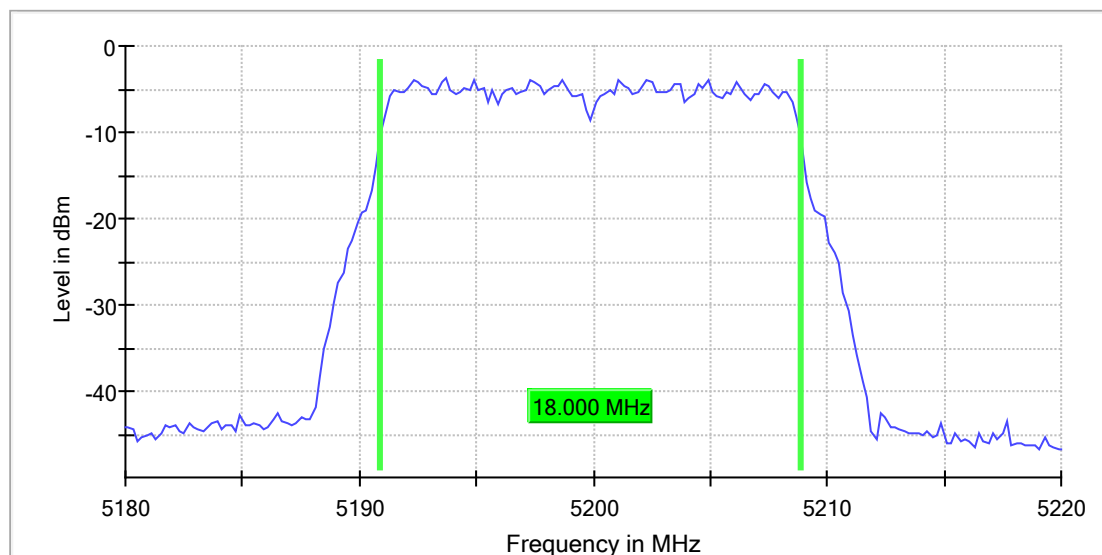
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	18.000000	---	---	5190.900000	5208.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5200.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	14 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.08 dB	0.30 dB

Emission Bandwidth 26 dB (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

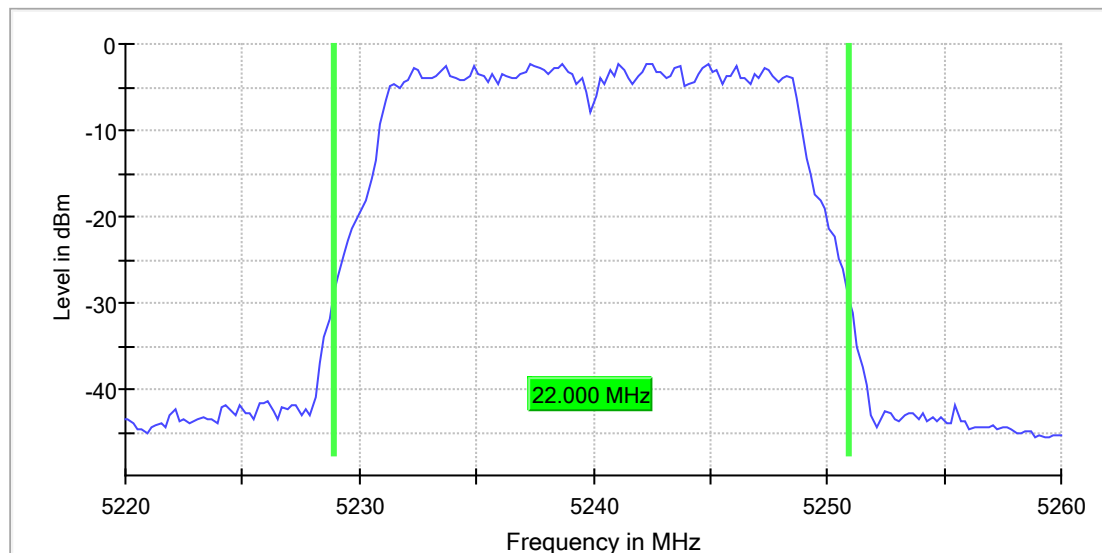
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

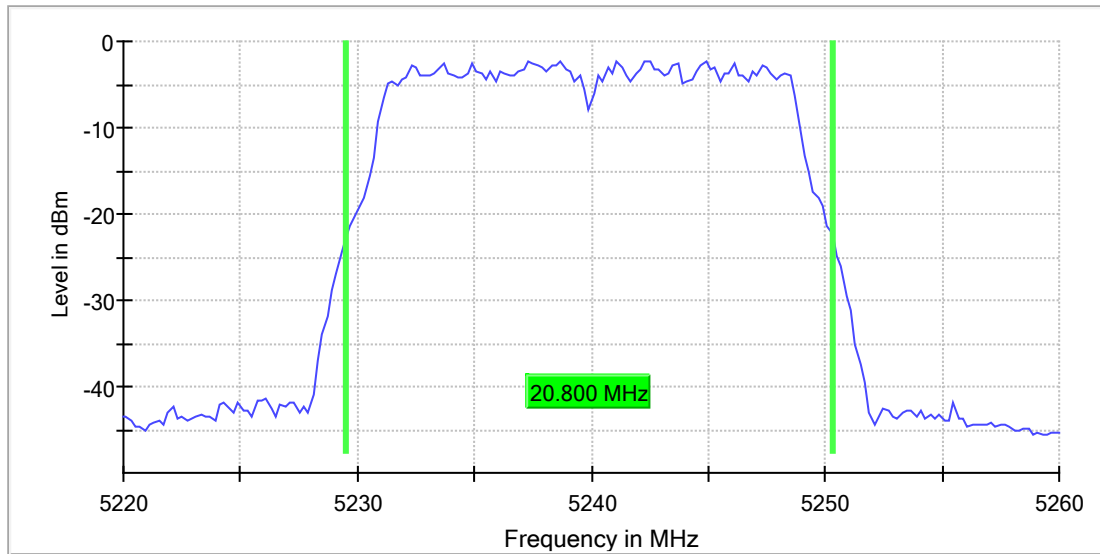
26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	22.000000	---	---	5228.900000	5250.900000

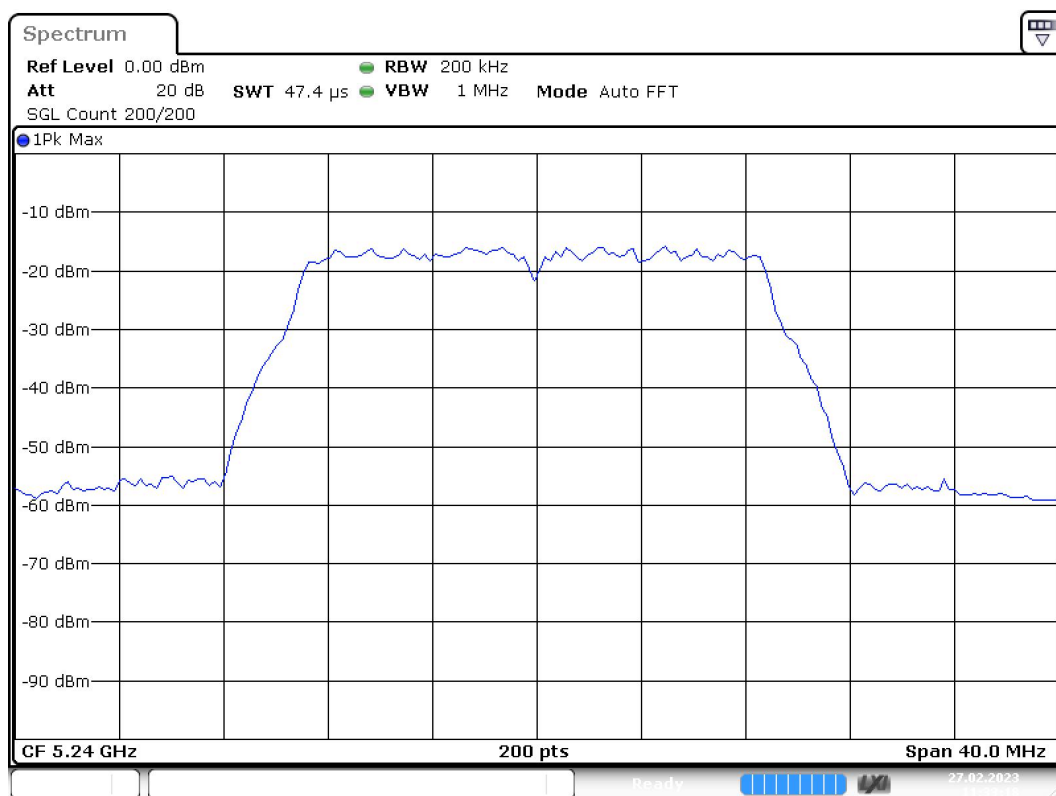
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-2.2	PASS





Bandwidth



Date: 27.FEB.2023 11:33:18

Measurement

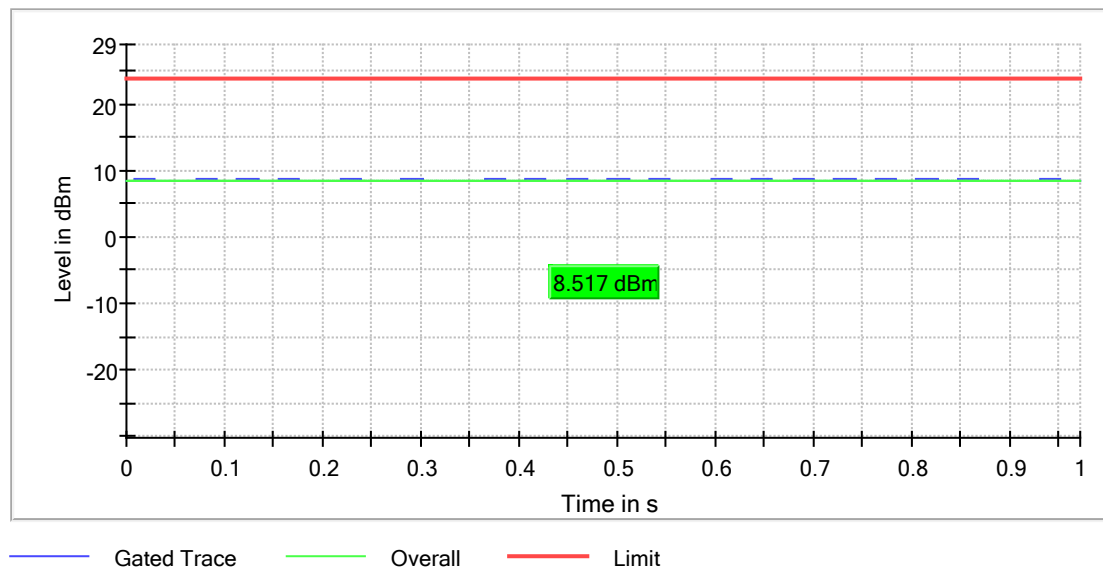
Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	22 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.19 dB	0.30 dB

RF output power (5240 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5240.000000	8.5	24.0	8.5	97.279	PASS



Power Spectral Density (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

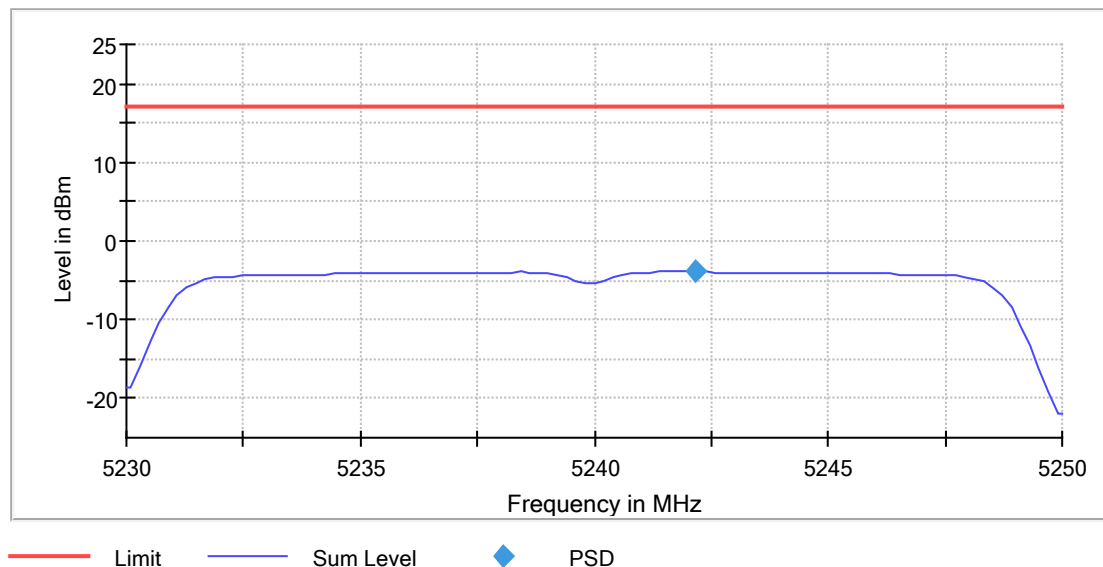
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5242.178218	-3.936	17.0	PASS

Ports

Port	Duty Cycle (%)
1	97.174



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.02 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

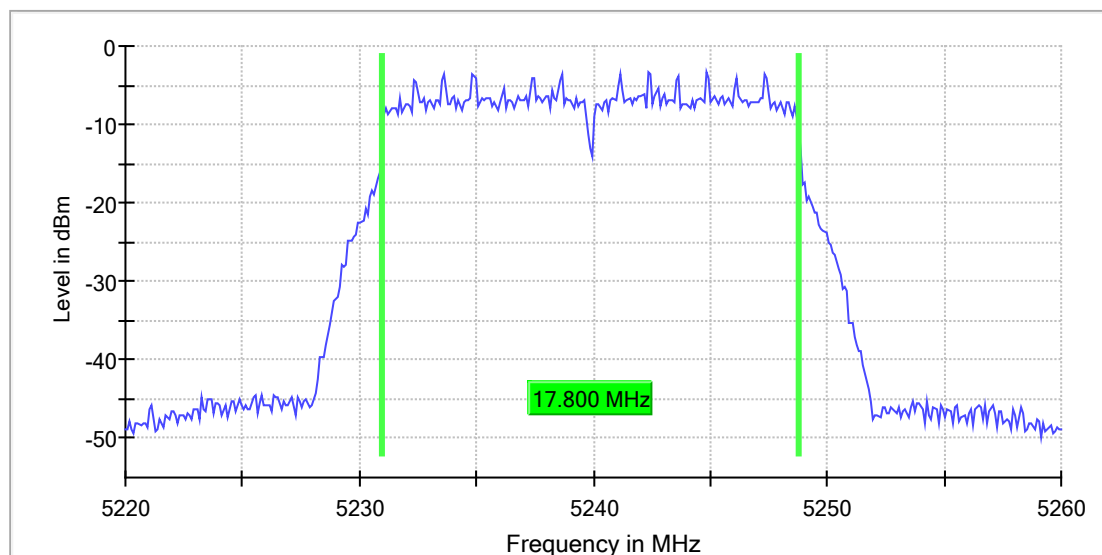
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	17.800000	---	---	5230.950000	5248.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-3.3	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.810 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	17 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.11 dB	0.30 dB

Occupied Channel Bandwidth 99% (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

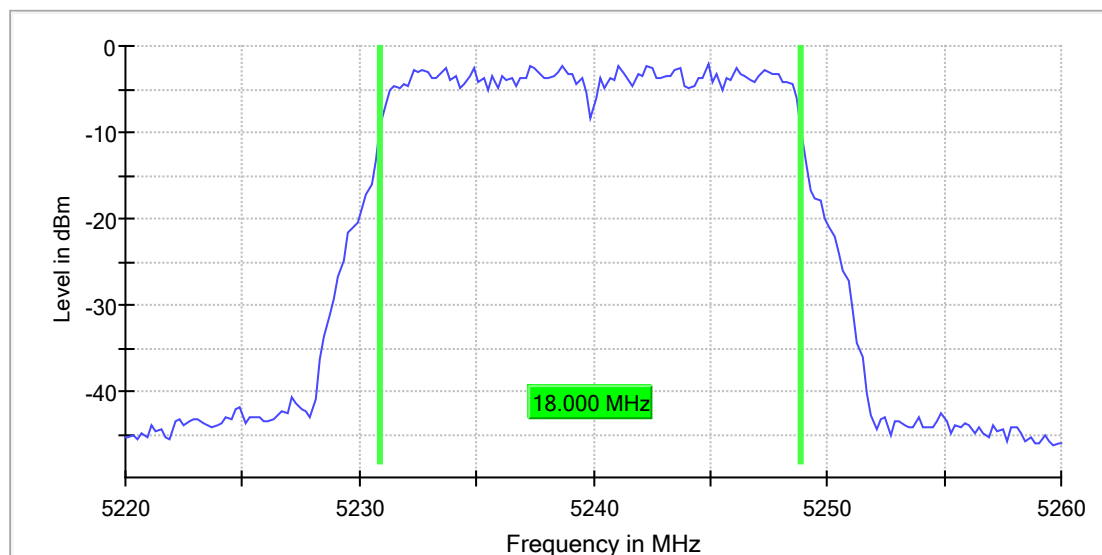
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	18.000000	---	---	5230.900000	5248.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5240.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
Sweptime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	13 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.13 dB	0.30 dB

Band Edge high (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

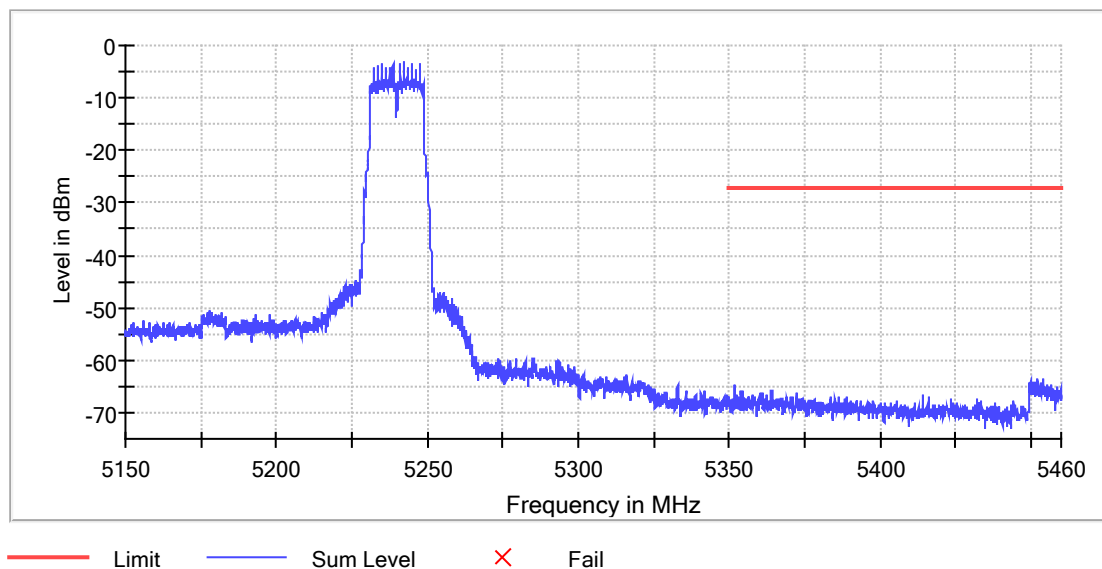
DUT Frequency (MHz)	Result
5240.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5242.375000	-3.2

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5454.075000	-63.5	36.5	-27.0	PASS
5454.125000	-63.6	36.6	-27.0	PASS
5451.925000	-63.6	36.6	-27.0	PASS
5451.975000	-63.7	36.7	-27.0	PASS
5449.725000	-63.8	36.8	-27.0	PASS
5449.775000	-64.0	37.0	-27.0	PASS
5451.075000	-64.1	37.1	-27.0	PASS
5453.175000	-64.2	37.2	-27.0	PASS
5453.225000	-64.2	37.2	-27.0	PASS
5450.425000	-64.3	37.3	-27.0	PASS
5450.475000	-64.3	37.3	-27.0	PASS
5450.725000	-64.3	37.3	-27.0	PASS
5449.475000	-64.4	37.4	-27.0	PASS
5451.025000	-64.4	37.4	-27.0	PASS
5449.425000	-64.4	37.4	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	100.000 MHz	100.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2000	~ 2000
SweepTime	227.813 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.47 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.46000 GHz	5.46000 GHz
Span	210.000 MHz	210.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	4200	~ 4200
SweepTime	474.609 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.11 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
-----------------	-----------------	-----------------

Power

20.000 dBm (20 dBm)

Beamforming Gain

Powerstep name (value)	Beamforming gain table names
20.000 dBm (20 dBm)	BFG_'20.000 dBm'_0.000dB;

Gain Tables

Powerstep name (value)	Gain table names
20.000 dBm (20 dBm)	Port 1: 0dBi;

DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Tx Spurious Emission	5180.000	20.0	20.000000	PASS
Tx Spurious Emission	5200.000	20.0	20.000000	PASS
Tx Spurious Emission	5240.000	20.0	20.000000	PASS

Tx Spurious Emission (5180 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5180.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

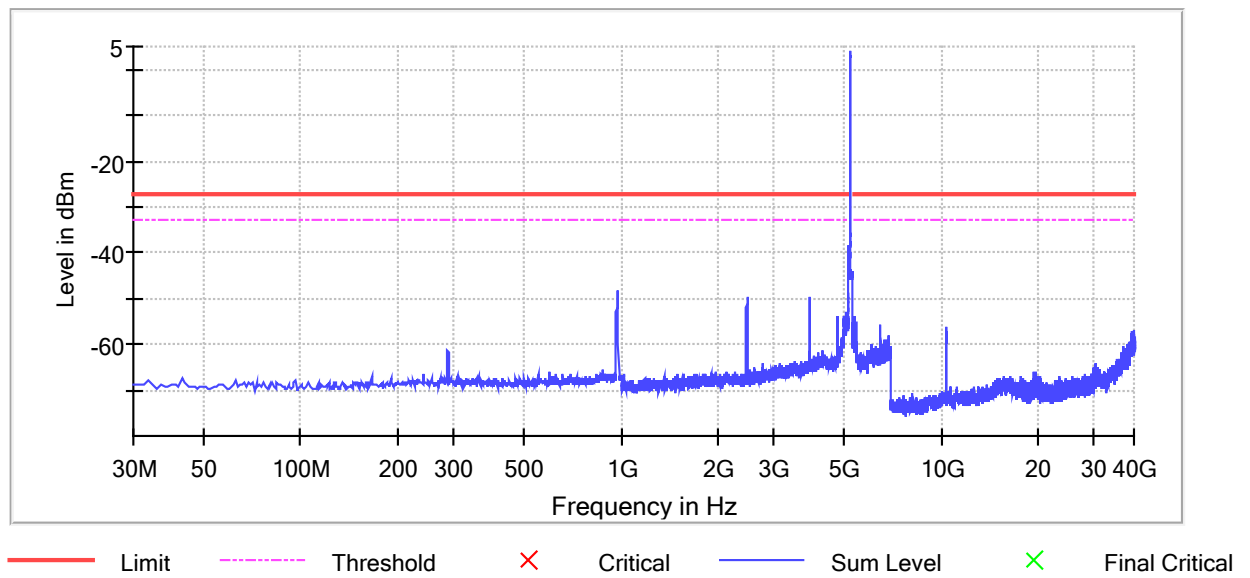
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
5149.500000	-47.8	20.8	-27.0
974.500000	-48.1	21.1	-27.0
5148.500000	-48.2	21.2	-27.0
973.500000	-48.5	21.5	-27.0
5143.500000	-48.9	21.9	-27.0
5145.500000	-49.0	22.0	-27.0
975.500000	-49.0	22.0	-27.0
5142.500000	-49.2	22.2	-27.0
5144.500000	-49.3	22.3	-27.0
5135.500000	-49.6	22.6	-27.0
972.500000	-49.7	22.7	-27.0
2472.500000	-49.7	22.7	-27.0
5147.500000	-49.7	22.7	-27.0
976.500000	-49.7	22.7	-27.0
5141.500000	-49.7	22.7	-27.0

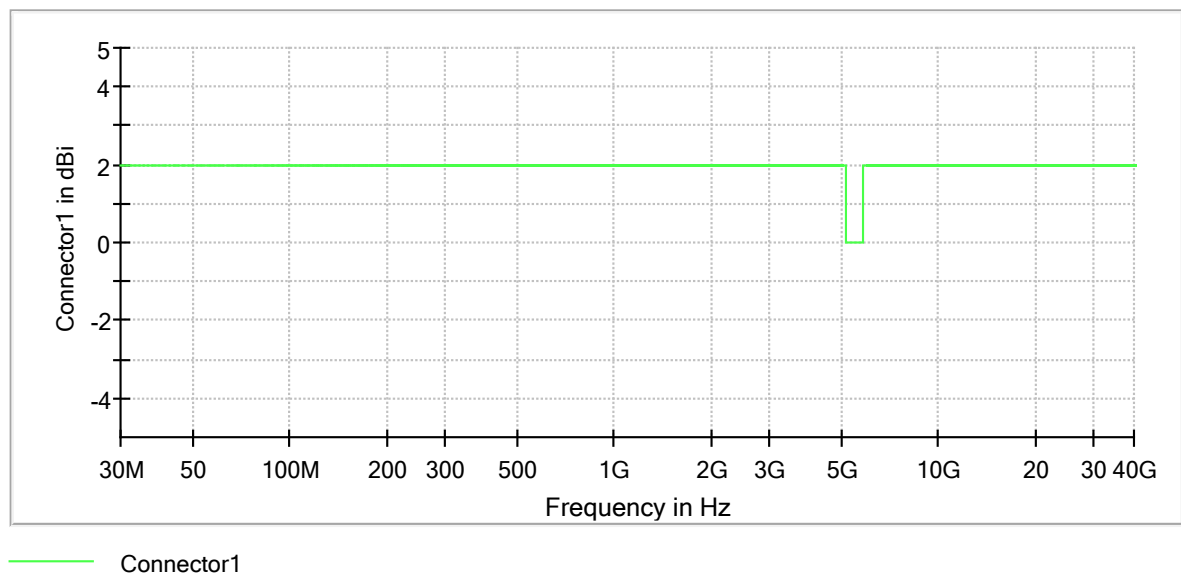
Measurement Settings

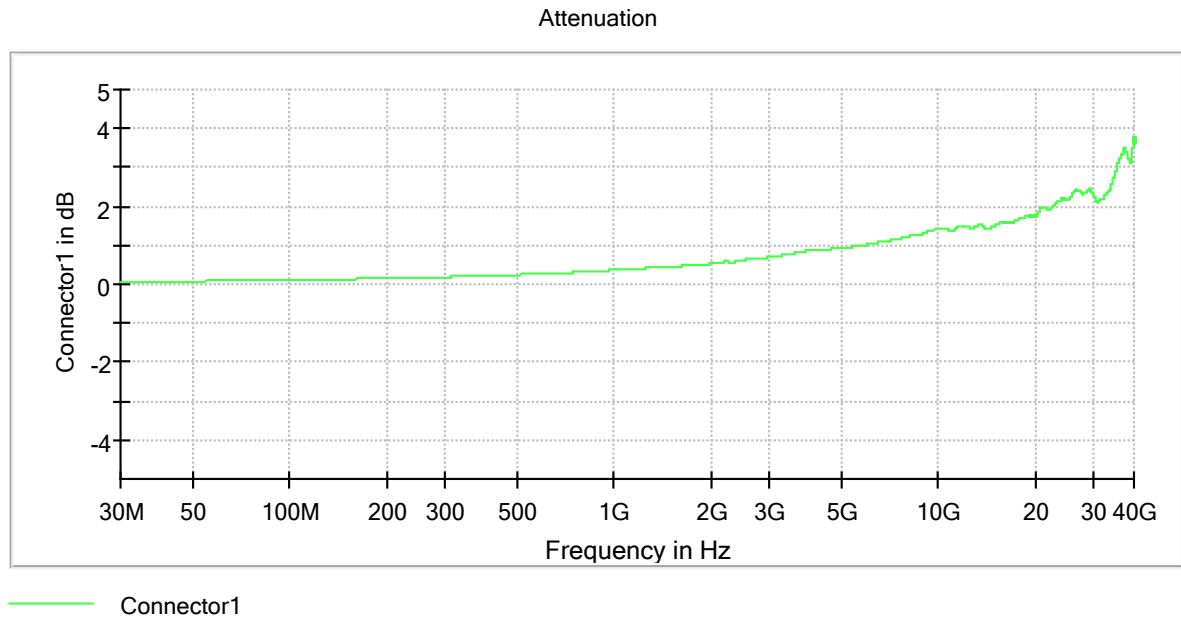
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	21 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Tx Spurious Emission (5200 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5200.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

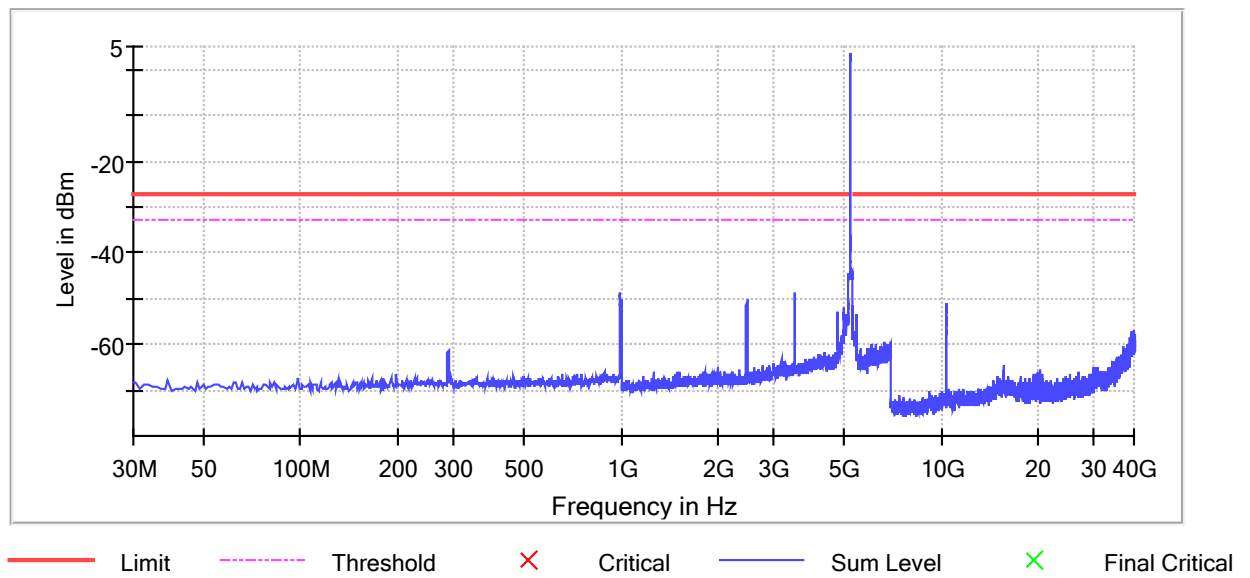
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
994.500000	-48.5	21.5	-27.0
3467.500000	-48.5	21.5	-27.0
995.500000	-48.7	21.7	-27.0
992.500000	-49.2	22.2	-27.0
991.500000	-49.4	22.4	-27.0
993.500000	-49.5	22.5	-27.0
5149.500000	-49.5	22.5	-27.0
997.500000	-49.7	22.7	-27.0
996.500000	-49.8	22.8	-27.0
5148.500000	-49.9	22.9	-27.0
5146.500000	-49.9	22.9	-27.0
3466.500000	-49.9	22.9	-27.0
998.500000	-50.1	23.1	-27.0
1000.500000	-50.2	23.2	-27.0
1000.000000	-50.2	23.2	-27.0

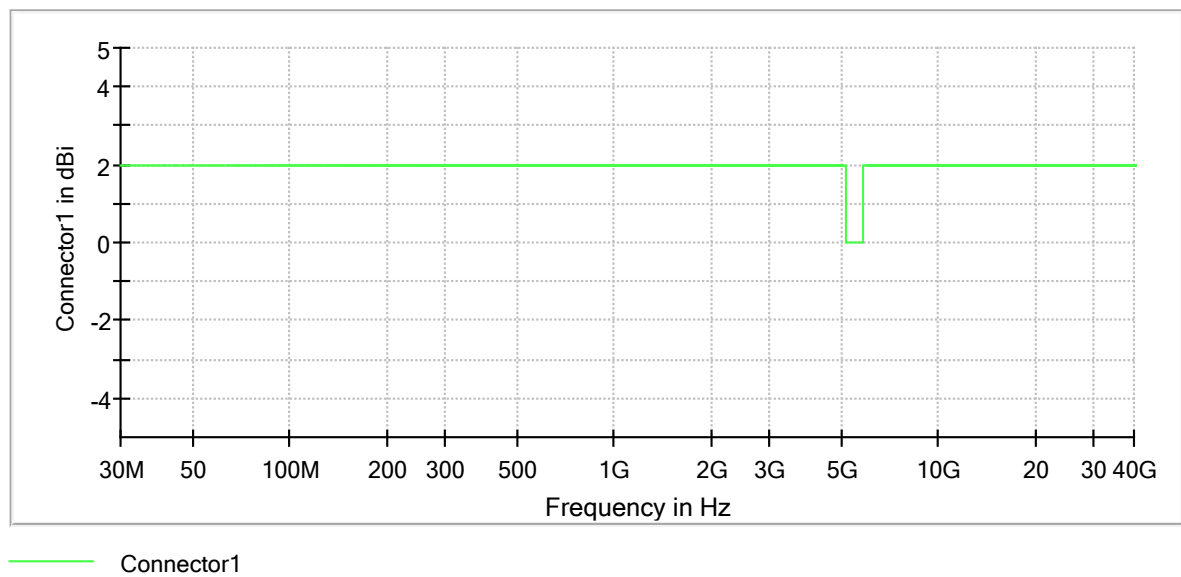
Measurement Settings

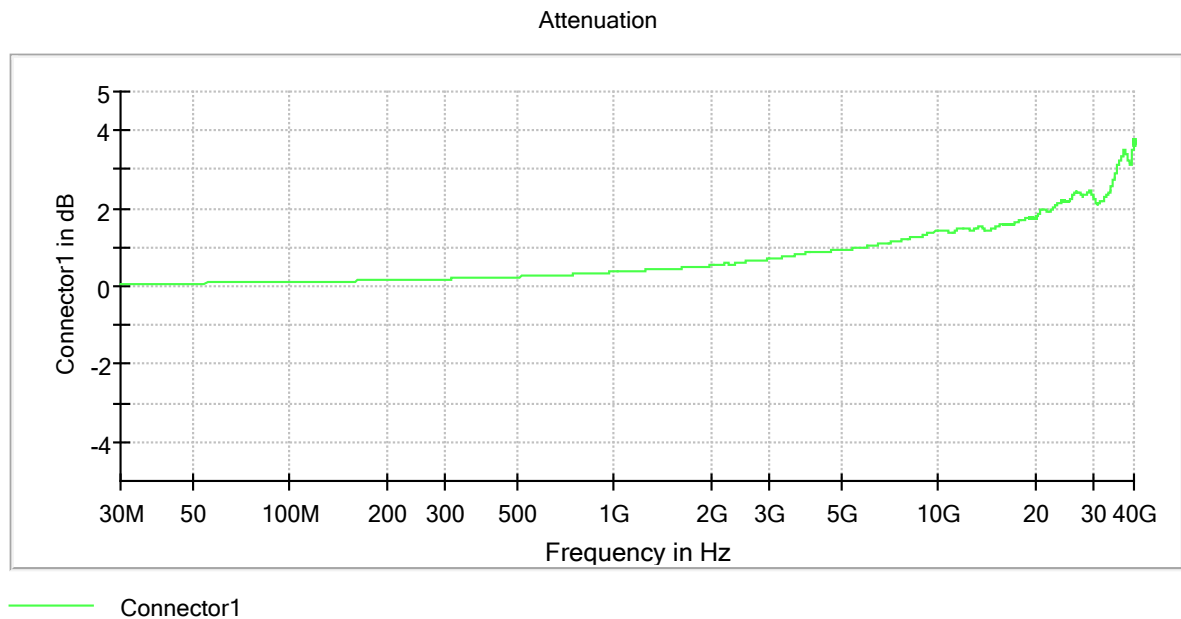
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	28 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.13 dB	0.50 dB

Tx Spurious Emission (5240 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5240.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

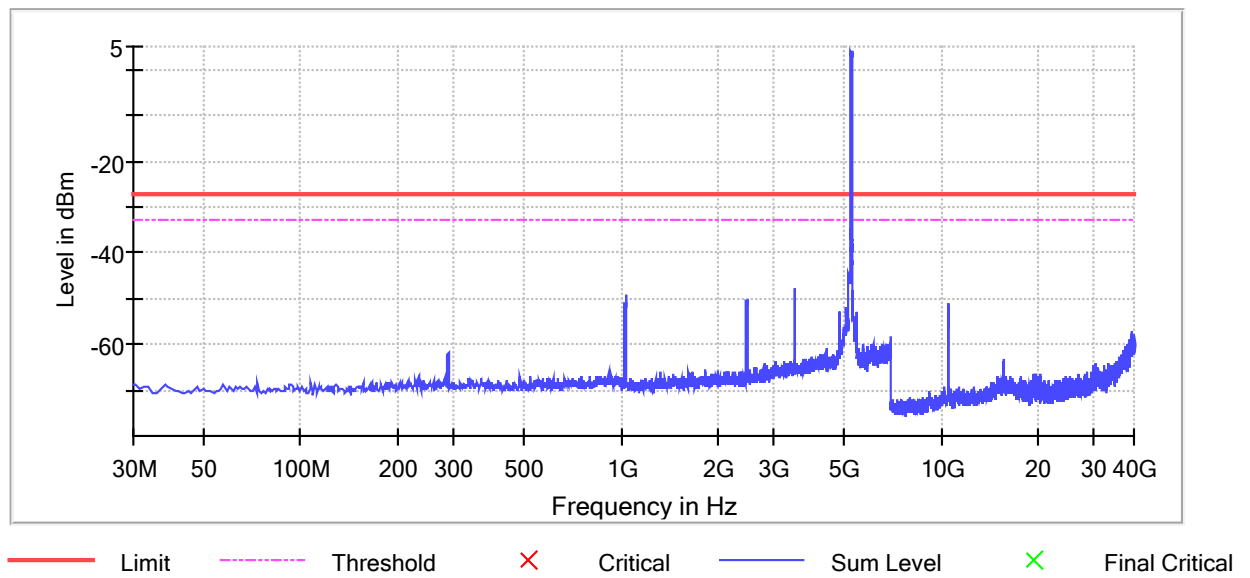
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3493.500000	-47.6	20.6	-27.0
3494.500000	-47.6	20.6	-27.0
1035.500000	-49.0	22.0	-27.0
1036.500000	-49.0	22.0	-27.0
1034.500000	-49.7	22.7	-27.0
2472.500000	-50.0	23.0	-27.0
2471.500000	-50.0	23.0	-27.0
1033.500000	-50.1	23.1	-27.0
1037.500000	-50.3	23.3	-27.0
2473.500000	-50.7	23.7	-27.0
2469.500000	-50.7	23.7	-27.0
1032.500000	-50.7	23.7	-27.0
2470.500000	-50.9	23.9	-27.0
10479.500000	-51.1	24.1	-27.0
1030.500000	-51.2	24.2	-27.0

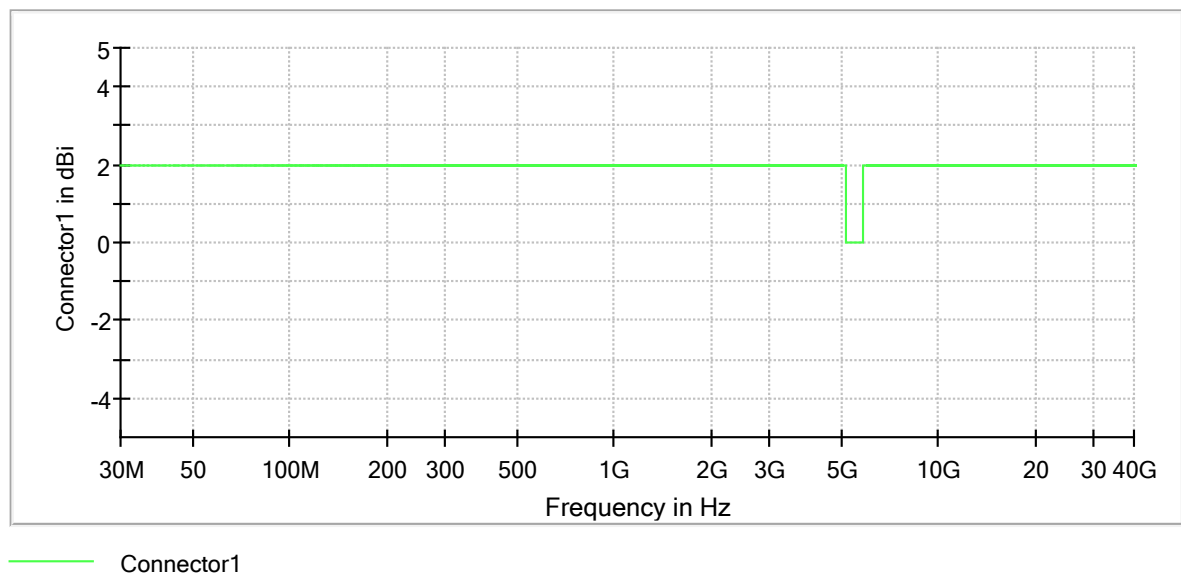
Measurement Settings

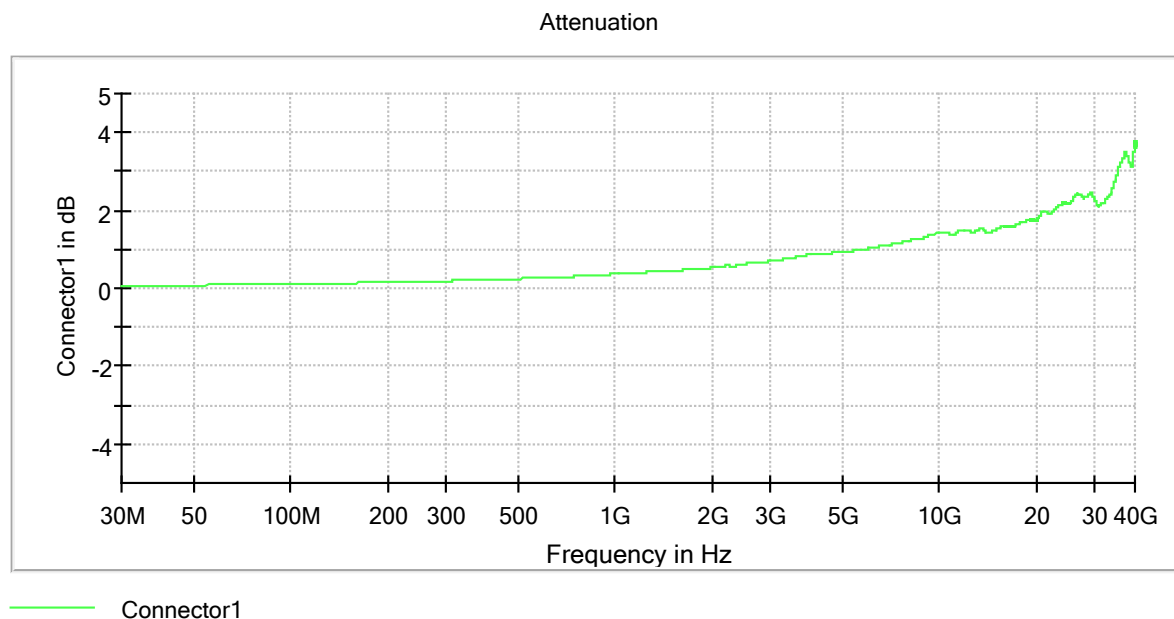
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	27 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.21 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
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Power

20.000 dBm (20 dBm)

Beamforming Gain

20.000 dBm (20 dBm)	0 dB
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Gain Tables

20.000 dBm (20 dBm)	Port 1: 0dBi;
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DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5745.000	20.0	20.000000	PASS
RF output power	5745.000	20.0	20.000000	PASS
Power Spectral Density	5745.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5745.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5745.000	20.0	20.000000	PASS
Band Edge low	5745.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5785.000	20.0	20.000000	PASS
RF output power	5785.000	20.0	20.000000	PASS
Power Spectral Density	5785.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5785.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5785.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5825.000	20.0	20.000000	PASS
RF output power	5825.000	20.0	20.000000	PASS
Power Spectral Density	5825.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5825.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5825.000	20.0	20.000000	PASS
Band Edge high	5825.000	20.0	20.000000	PASS

Emission Bandwidth 26 dB (5745 MHz; 20.000 dBm; 20 MHz)

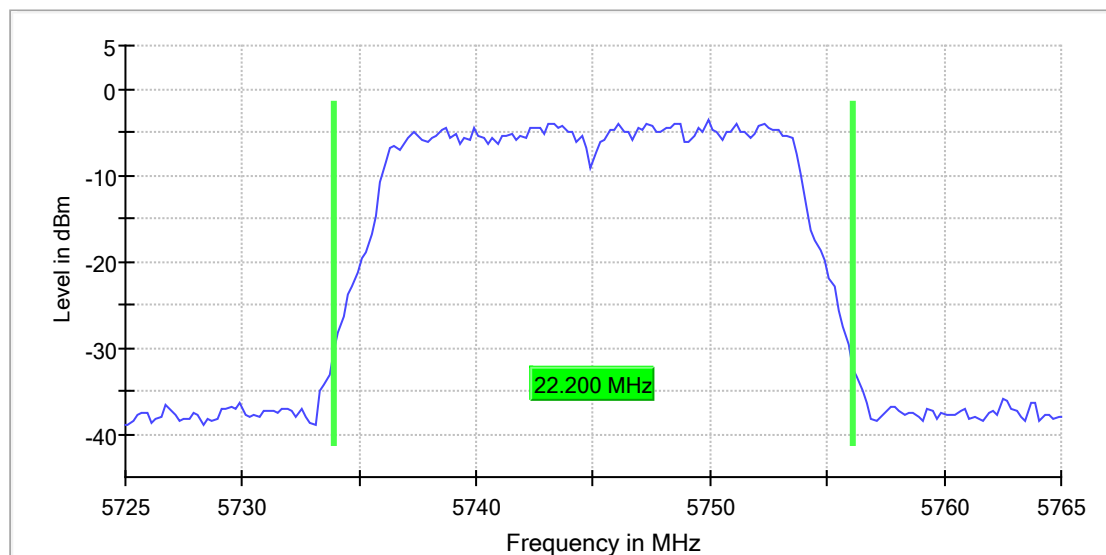
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

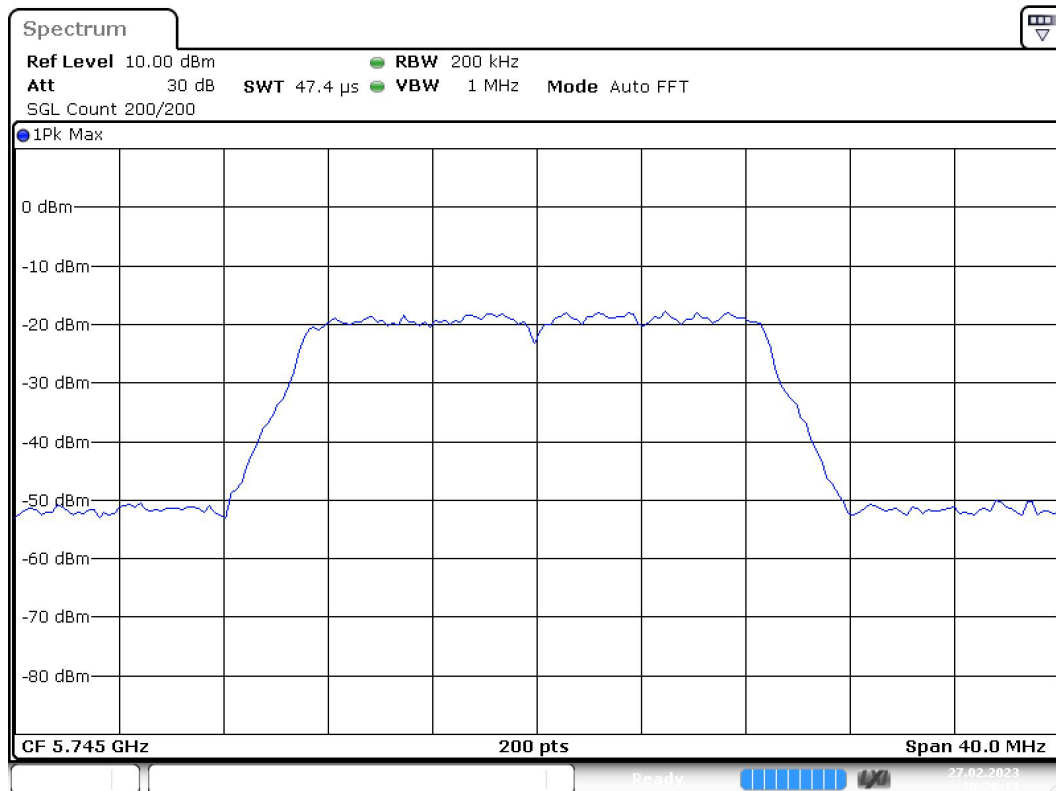
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	22.200000	---	---	5733.900000	5756.100000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	-3.7	PASS



Bandwidth



Date: 27.FEB.2023 10:28:15

Measurement

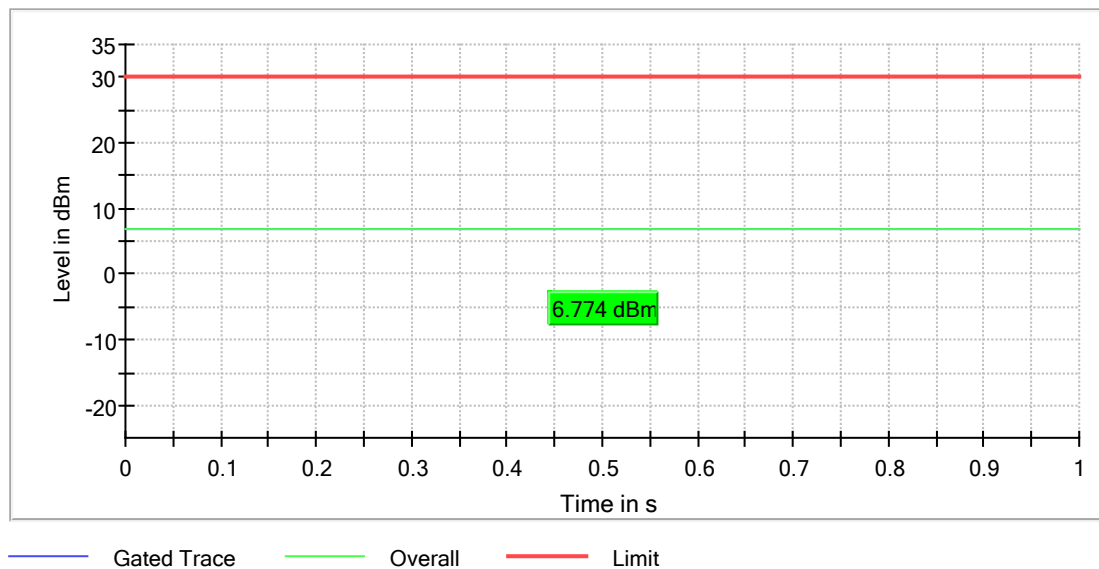
Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	47 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5745 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5745.000000	6.8	30.0	6.8	100.000	PASS



Power Spectral Density (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

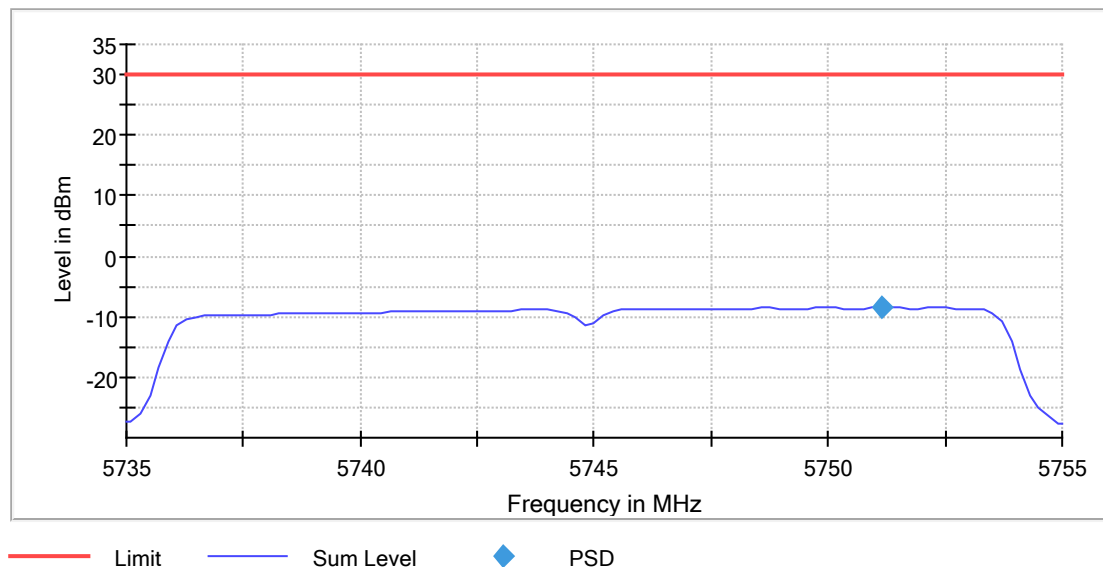
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5751.138614	-8.527	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.178



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.73500 GHz	5.73500 GHz
Stop Frequency	5.75500 GHz	5.75500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.01 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

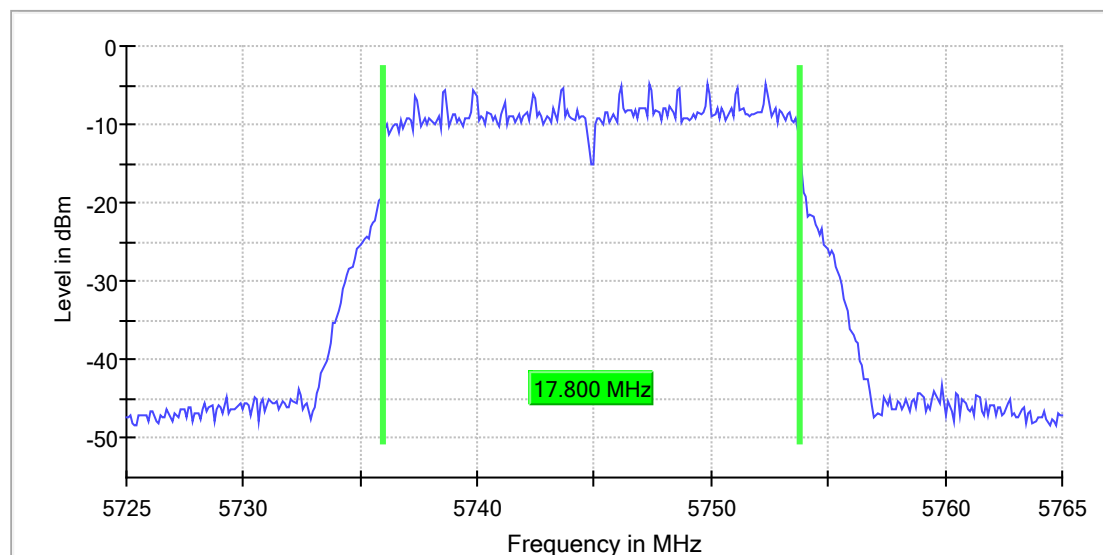
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	17.800000	0.500000	---	5735.950000	5753.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	-4.8	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.810 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	15 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.30 dB	0.30 dB

Occupied Channel Bandwidth 99% (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

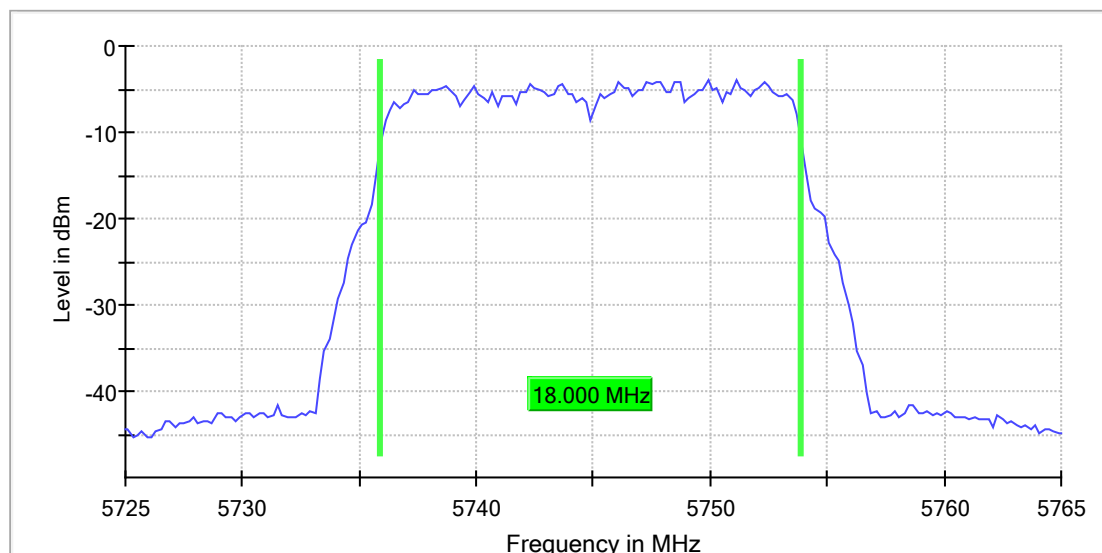
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	18.000000	---	---	5735.900000	5753.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5745.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.26 dB	0.30 dB

Band Edge low (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

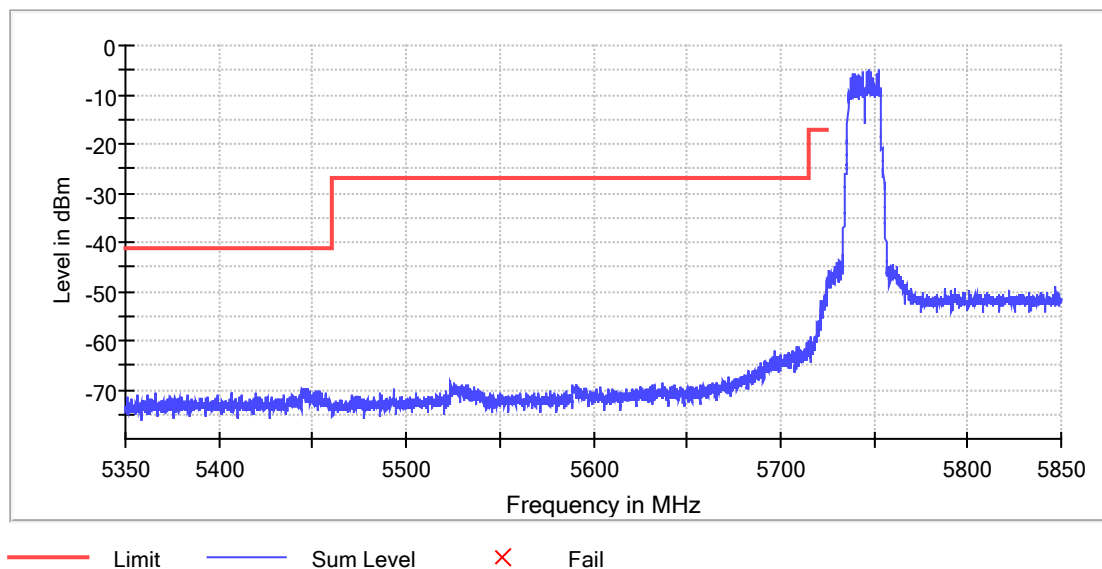
DUT Frequency (MHz)	Result
5745.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5747.375000	-5.0

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5447.525000	-69.6	28.4	-41.2	PASS
5446.575000	-69.7	28.5	-41.2	PASS
5446.625000	-69.7	28.5	-41.2	PASS
5444.425000	-69.8	28.5	-41.2	PASS
5446.275000	-69.8	28.6	-41.2	PASS
5445.475000	-69.9	28.7	-41.2	PASS
5445.075000	-69.9	28.7	-41.2	PASS
5444.725000	-69.9	28.7	-41.2	PASS
5447.825000	-69.9	28.7	-41.2	PASS
5445.525000	-70.0	28.8	-41.2	PASS
5444.775000	-70.0	28.8	-41.2	PASS
5445.025000	-70.1	28.8	-41.2	PASS
5444.375000	-70.1	28.9	-41.2	PASS
5447.575000	-70.2	28.9	-41.2	PASS
5452.675000	-70.2	29.0	-41.2	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.85000 GHz	5.85000 GHz
Span	125.000 MHz	125.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2500	~ 2500
SweepTime	284.766 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.48 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.35000 GHz	5.35000 GHz
Stop Frequency	5.72500 GHz	5.72500 GHz
Span	375.000 MHz	375.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	7500	~ 7500
SweepTime	835.313 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.24 dB	0.50 dB

Emission Bandwidth 26 dB (5785 MHz; 20.000 dBm; 20 MHz)

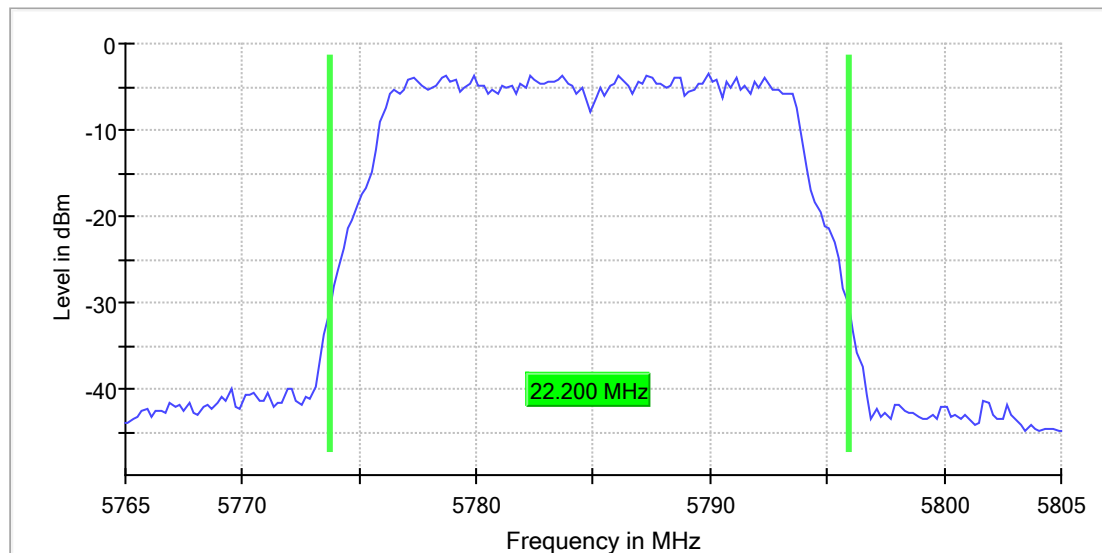
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

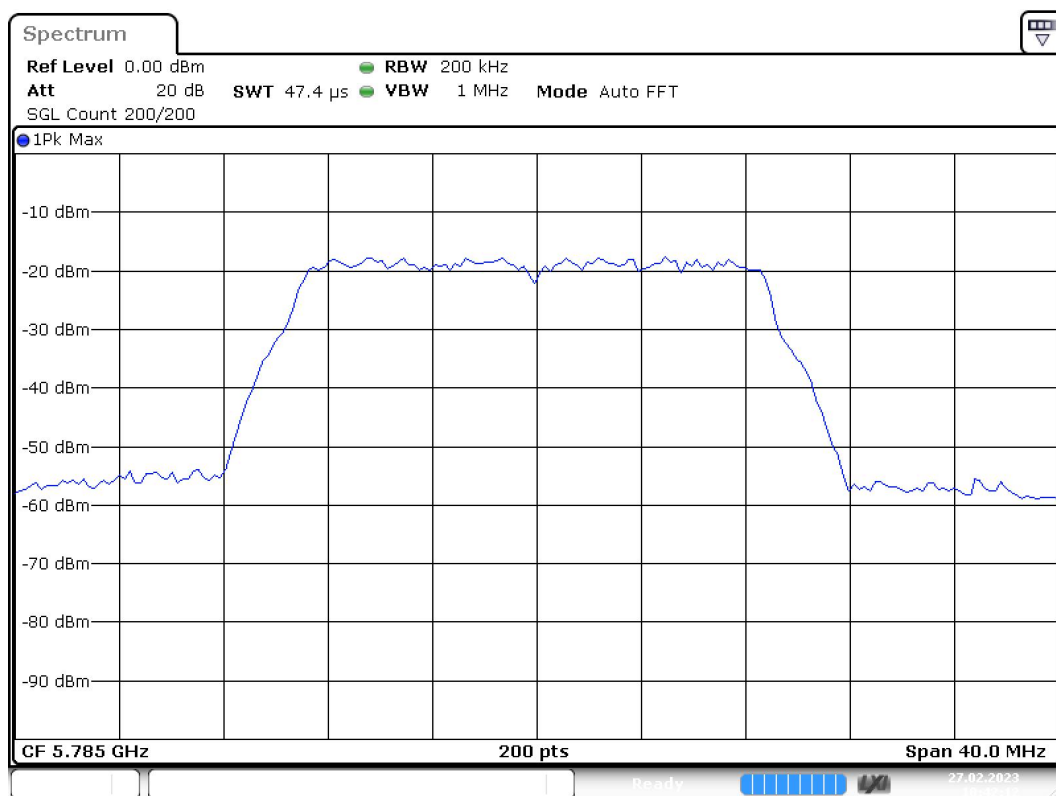
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	22.200000	---	---	5773.700000	5795.900000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	-3.6	PASS



Bandwidth



Date: 27.FEB.2023 10:42:13

Measurement

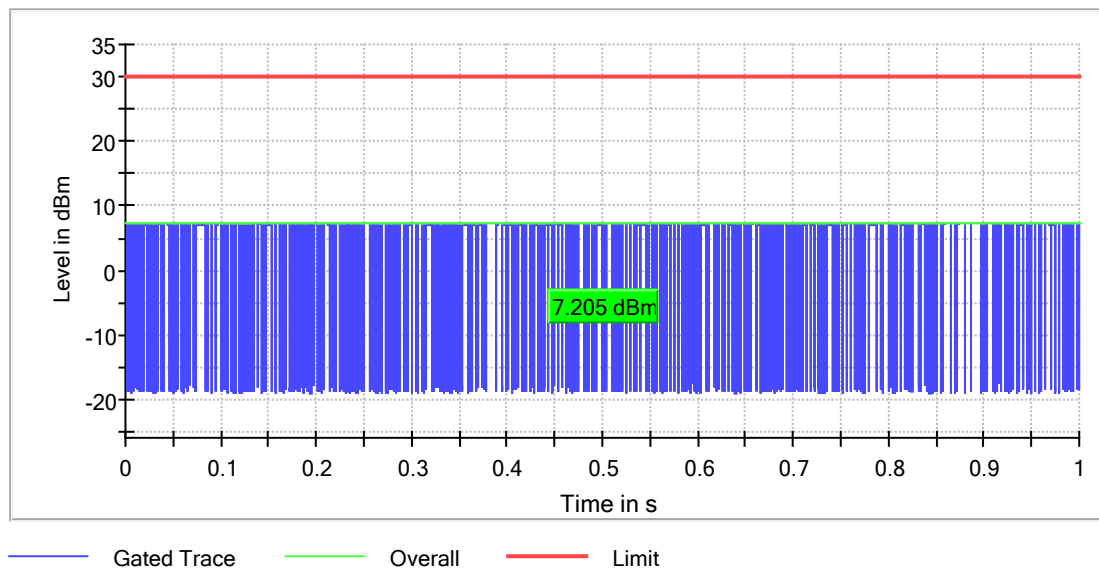
Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	34 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.17 dB	0.30 dB

RF output power (5785 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5785.000000	7.2	30.0	7.2	99.994	PASS



Power Spectral Density (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

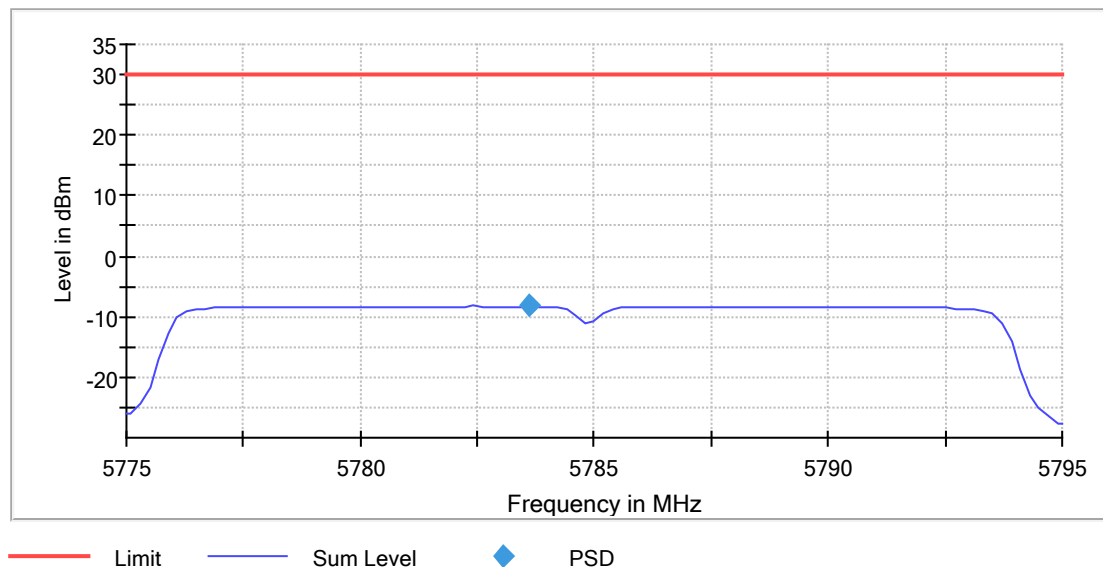
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5783.613861	-8.248	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.182



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.77500 GHz	5.77500 GHz
Stop Frequency	5.79500 GHz	5.79500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.03 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

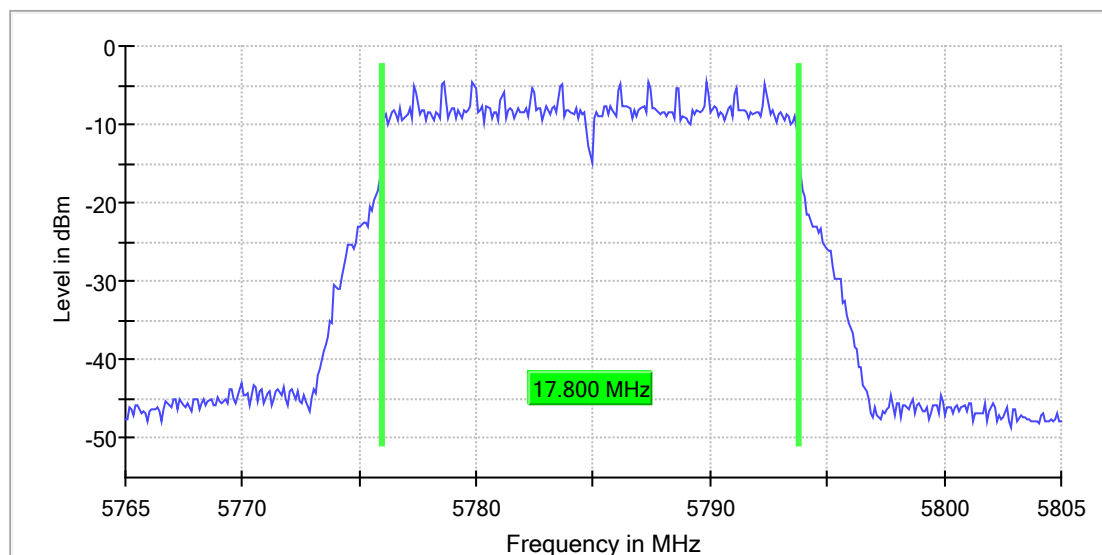
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	17.800000	0.500000	---	5775.950000	5793.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	-4.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.810 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	15 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.30 dB	0.30 dB

Occupied Channel Bandwidth 99% (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

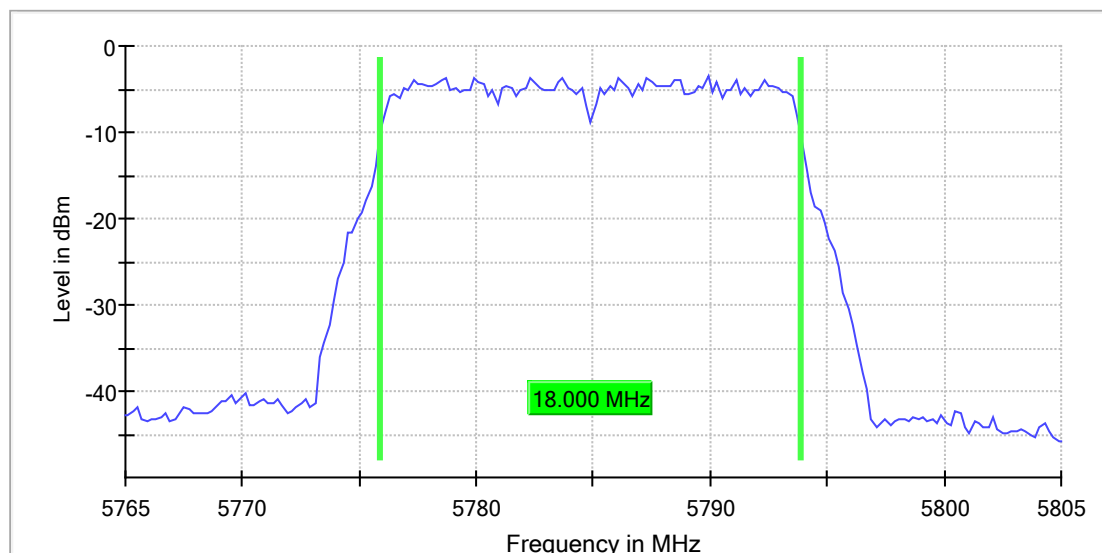
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	18.000000	---	---	5775.900000	5793.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5785.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
Sweptime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	16 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.19 dB	0.30 dB

Emission Bandwidth 26 dB (5825 MHz; 20.000 dBm; 20 MHz)

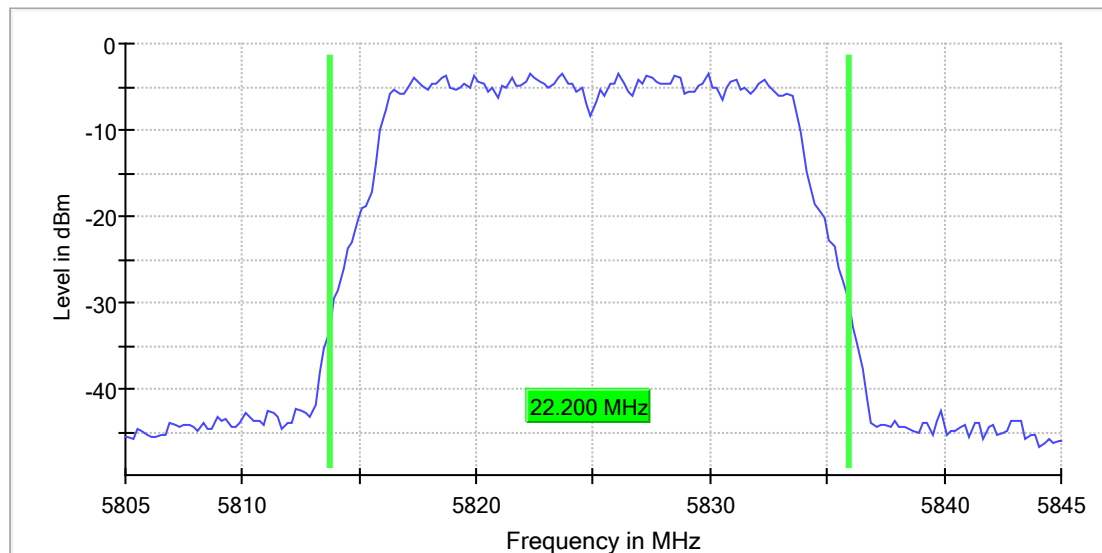
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

26 dB Bandwidth

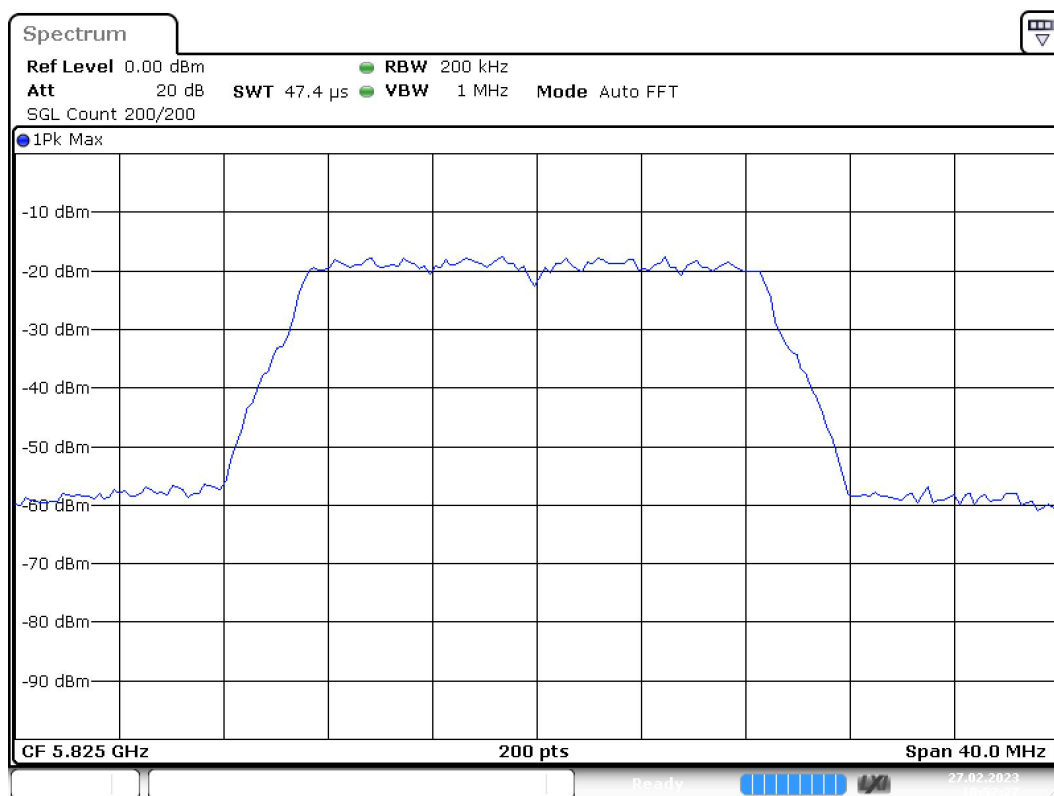
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	22.200000	---	---	5813.700000	5835.900000

(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-3.6	PASS



Bandwidth



Date: 27.FEB.2023 10:52:27

Measurement

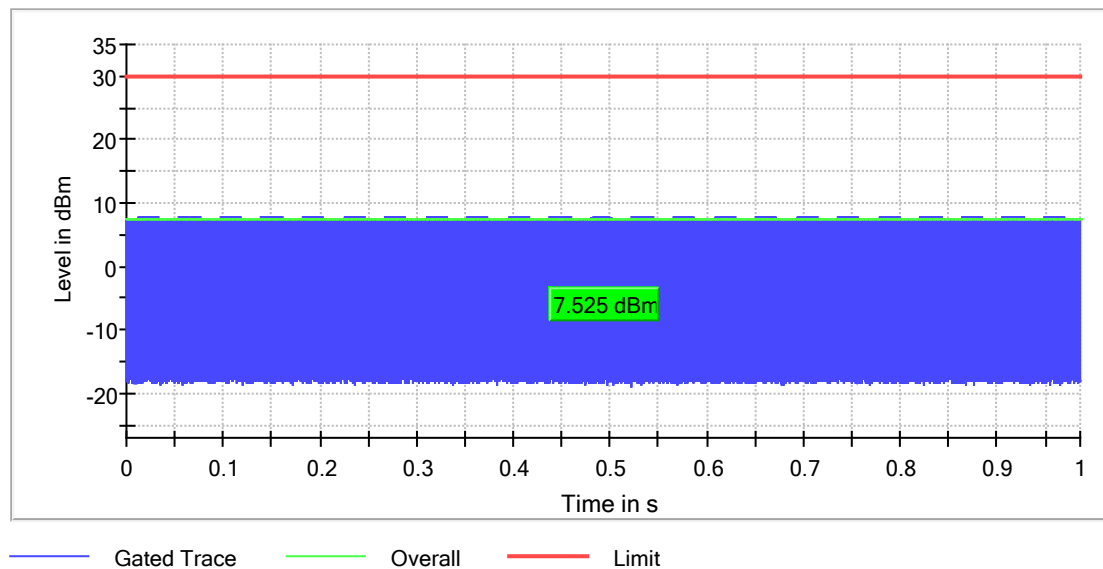
Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	24 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5825 MHz; 20.000 dBm; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5825.000000	7.5	30.0	7.5	98.282	PASS



Power Spectral Density (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

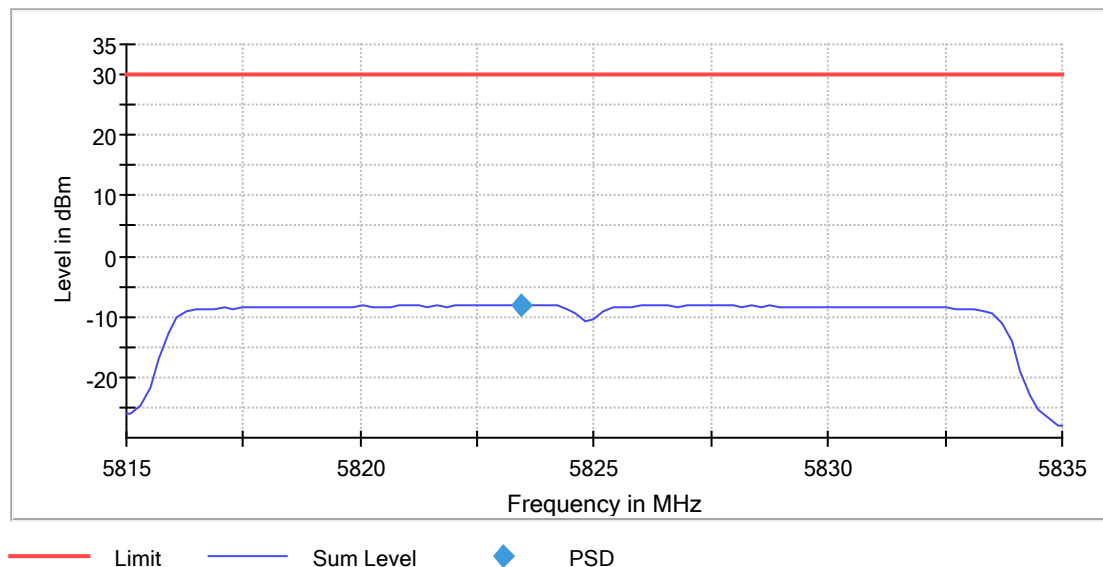
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5823.415842	-8.113	30.0	PASS

Ports

Port	Duty Cycle (%)
1	97.183



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.81500 GHz	5.81500 GHz
Stop Frequency	5.83500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz
RBW	500.000 kHz	<= 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	101	~ 80
SweepTime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	2 / max. 15	max. 15
Stable	1 / 1	1
Max Stable Difference	0.28 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

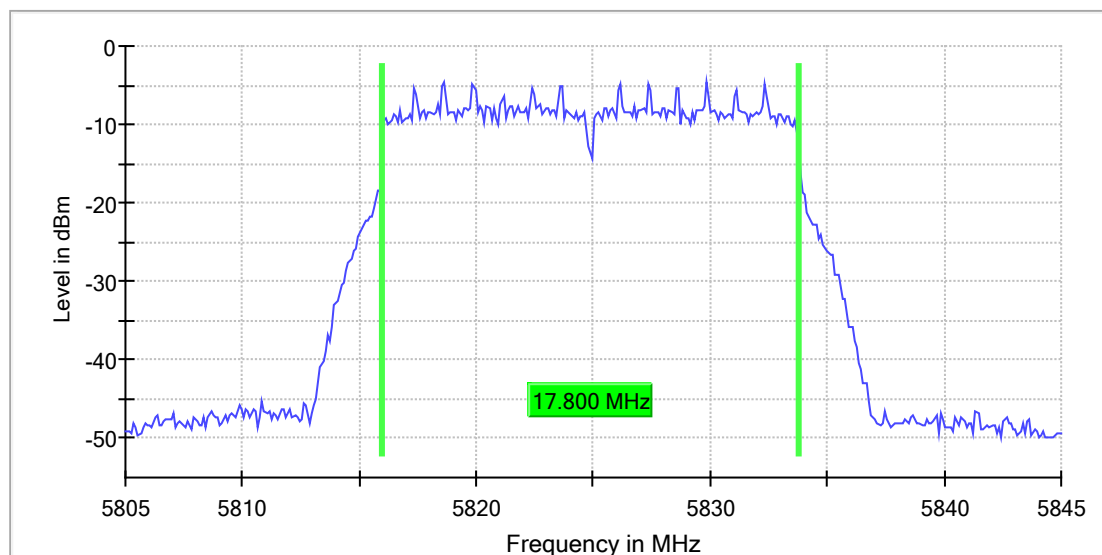
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	17.800000	0.500000	---	5815.950000	5833.750000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-4.7	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	400	~ 400
SweepTime	94.810 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace

Stablevalue	0.30 dB	0.30 dB
Run	16 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.29 dB	0.30 dB

Occupied Channel Bandwidth 99% (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

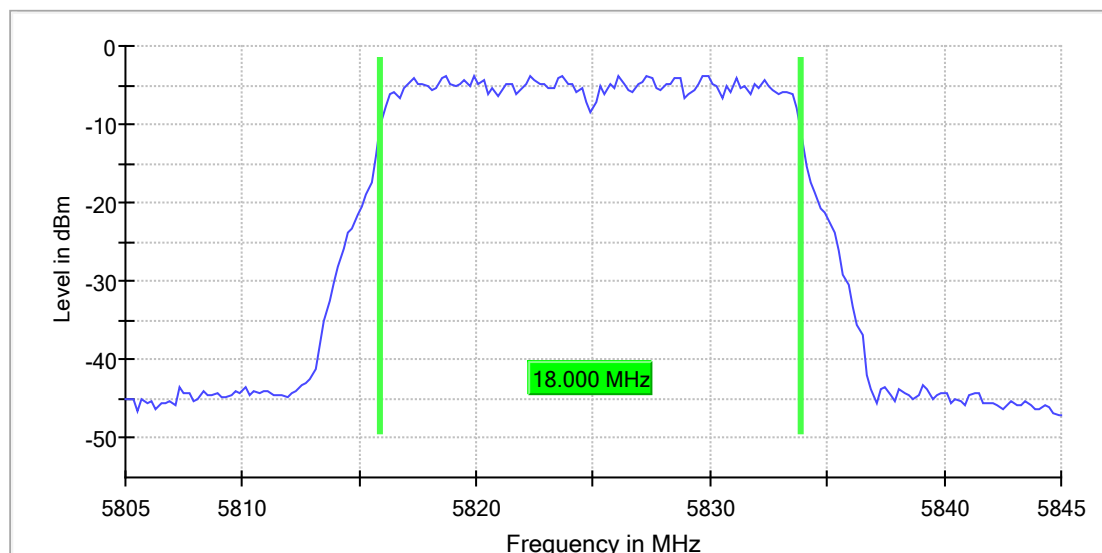
Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	18.000000	---	---	5815.900000	5833.900000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5825.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	<= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
Sweeptime	47.405 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	16 / max. 150	max. 150

Stable	1 / 1	1
Max Stable Difference	0.04 dB	0.30 dB

Band Edge high (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10

Result

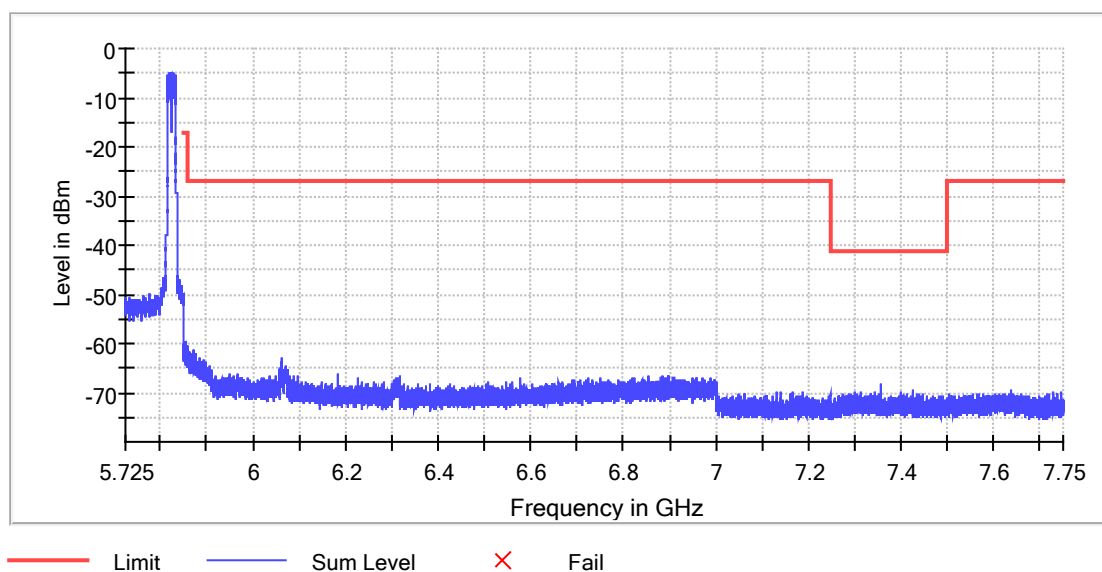
DUT Frequency (MHz)	Result
5825.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5818.625000	-4.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
7355.975000	-68.4	27.1	-41.2	PASS
7355.925000	-68.7	27.4	-41.2	PASS
7356.025000	-68.8	27.6	-41.2	PASS
7427.275000	-69.2	28.0	-41.2	PASS
7427.225000	-69.3	28.1	-41.2	PASS
7399.825000	-69.8	28.6	-41.2	PASS
7312.375000	-69.9	28.7	-41.2	PASS
7301.575000	-70.0	28.7	-41.2	PASS
7344.925000	-70.0	28.8	-41.2	PASS
7304.725000	-70.0	28.8	-41.2	PASS
7446.075000	-70.1	28.8	-41.2	PASS
7286.075000	-70.1	28.9	-41.2	PASS
7312.325000	-70.1	28.9	-41.2	PASS
7435.725000	-70.1	28.9	-41.2	PASS
7293.225000	-70.1	28.9	-41.2	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.85000 GHz	5.85000 GHz
Span	125.000 MHz	125.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2500	~ 2500
SweepTime	284.766 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.42 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	5.85000 GHz	5.85000 GHz
Stop Frequency	6.40000 GHz	6.40000 GHz
Span	550.000 MHz	550.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	11000	~ 11000
SweepTime	11.000 ms	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)	WLAN CH 40 (5200 MHz)	WLAN CH 48 (5240 MHz)
WLAN CH 149 (5745 MHz)	WLAN CH 157 (5785 MHz)	WLAN CH 165 (5825 MHz)
WLAN CH 52 (5260 MHz)	WLAN CH 56 (5280 MHz)	WLAN CH 64 (5320 MHz)
WLAN CH 100 (5500 MHz)	WLAN CH 120 (5600 MHz)	WLAN CH 140 (5700 MHz)
WLAN CH 116 (5580 MHz)	WLAN CH 151 (5755 MHz)	WLAN CH 159 (5795 MHz)
WLAN CH 155 (5775 MHz)		

Bandwidths

20 MHz (20 MHz)	40 MHz (40 MHz)	80 MHz (80 MHz)
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Power

20.000 dBm (20 dBm)

Beamforming Gain

Powerstep name (value)	Beamforming gain table names
20.000 dBm (20 dBm)	BFG_'20.000 dBm'_0.000dB;

Gain Tables

Powerstep name (value)	Gain table names
20.000 dBm (20 dBm)	Port 1: 0dBi;

DUT Settings

No. of transmission chains	1
DFS capability	Yes
DFS Mode	Master
Equipment Type	Portable
TPC	No

Hardware Setup: WMS Measurements\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100B (VG SMBV100B) @ VISA (ADR TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33
Generator:	SMB100Aa (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev 2.21.0, 07/2016, CVI 2015
OSP:	OSP-B157W (OSP-B157W) @ VISA (ADR TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW 1.23.0.2

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Tx Spurious Emission	5745.000	20.0	20.000000	PASS
Tx Spurious Emission	5785.000	20.0	20.000000	PASS
Tx Spurious Emission	5825.000	20.0	20.000000	PASS

Tx Spurious Emission (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5745.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
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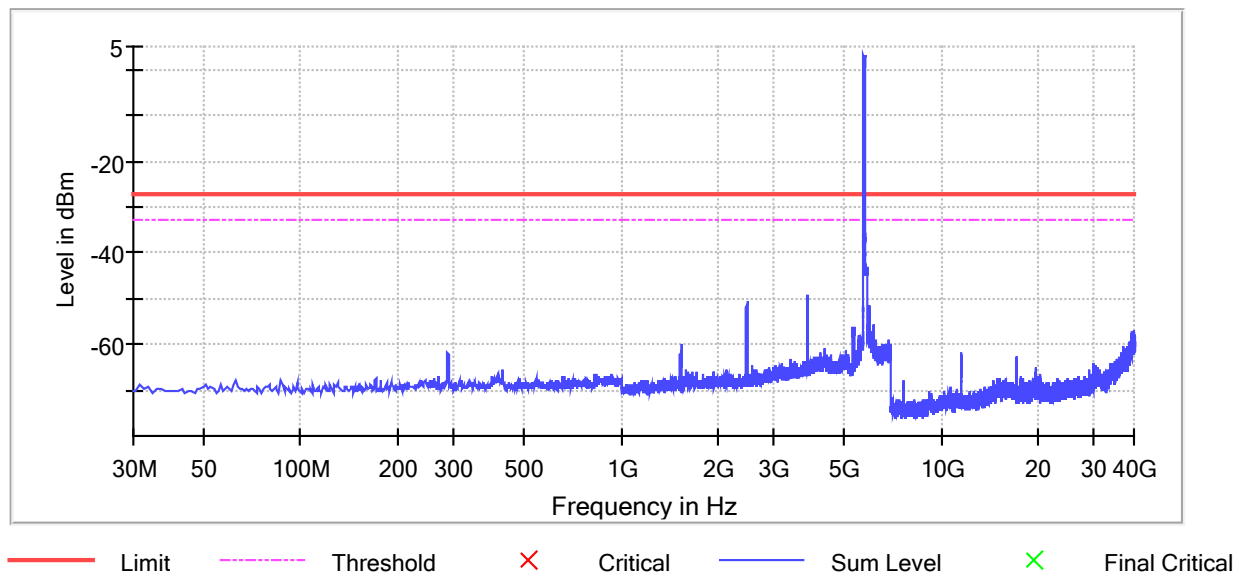
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
5723.500000	-38.4	11.4	-27.0
5724.500000	-38.8	11.8	-27.0
5722.500000	-41.3	14.3	-27.0
5721.500000	-42.3	15.3	-27.0
5720.500000	-45.1	18.1	-27.0
5719.500000	-47.5	20.5	-27.0
3830.500000	-49.0	22.0	-27.0
5718.500000	-50.0	23.0	-27.0
5715.500000	-50.1	23.1	-27.0
5716.500000	-50.2	23.2	-27.0
5717.500000	-50.3	23.3	-27.0
2472.500000	-50.5	23.5	-27.0
3829.500000	-50.6	23.6	-27.0
2471.500000	-50.8	23.8	-27.0
2470.500000	-50.9	23.9	-27.0

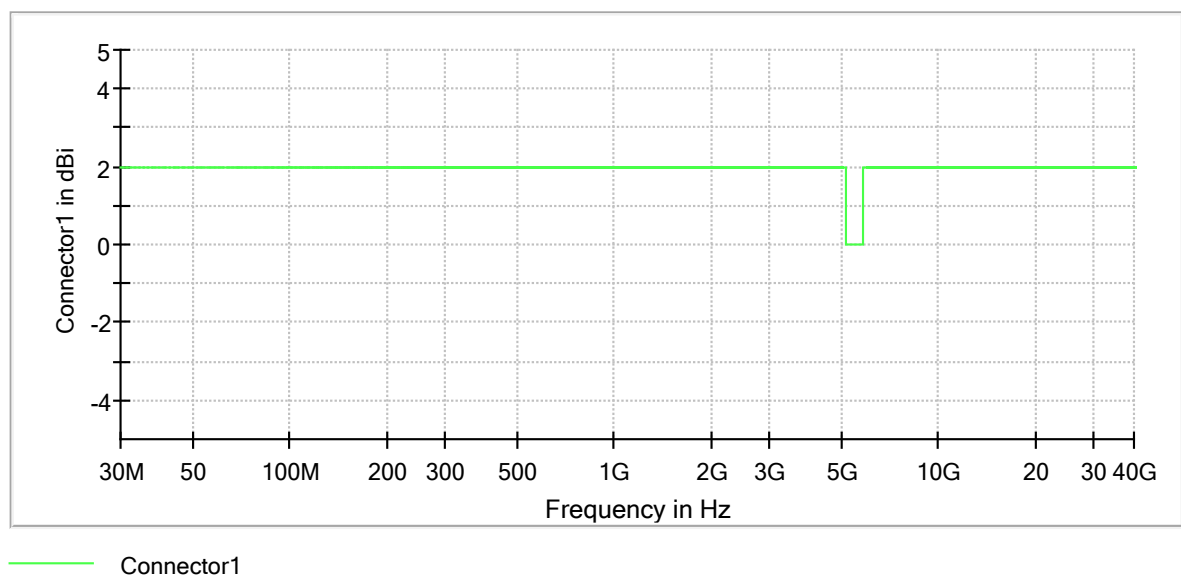
Measurement Settings

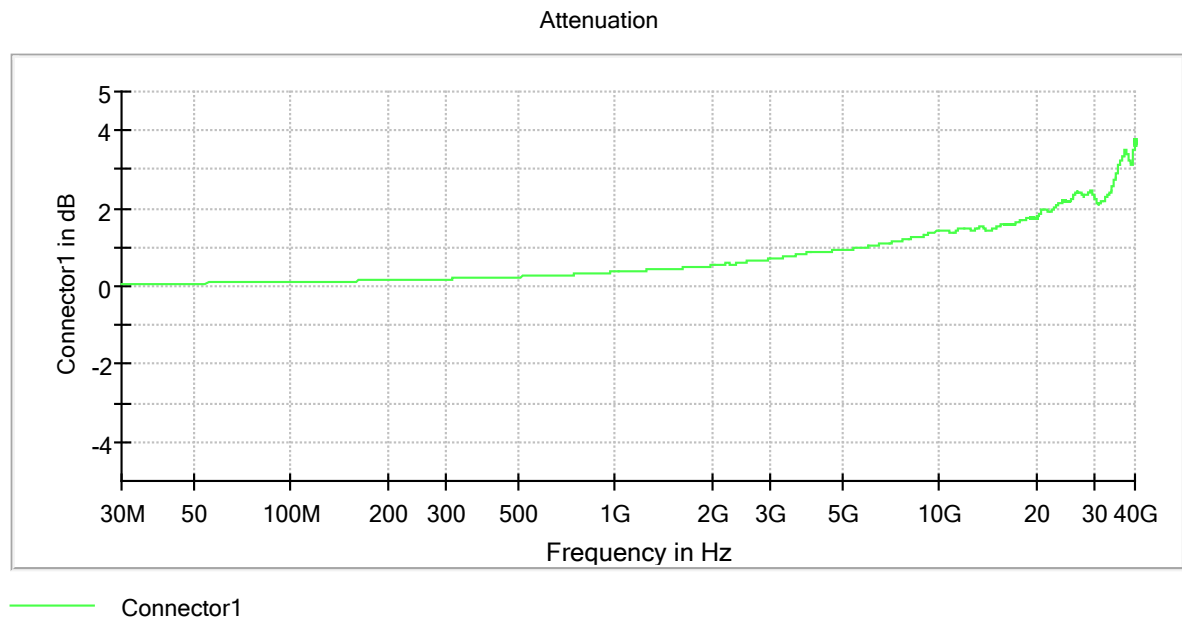
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Tx Spurious Emission (5785 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5785.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
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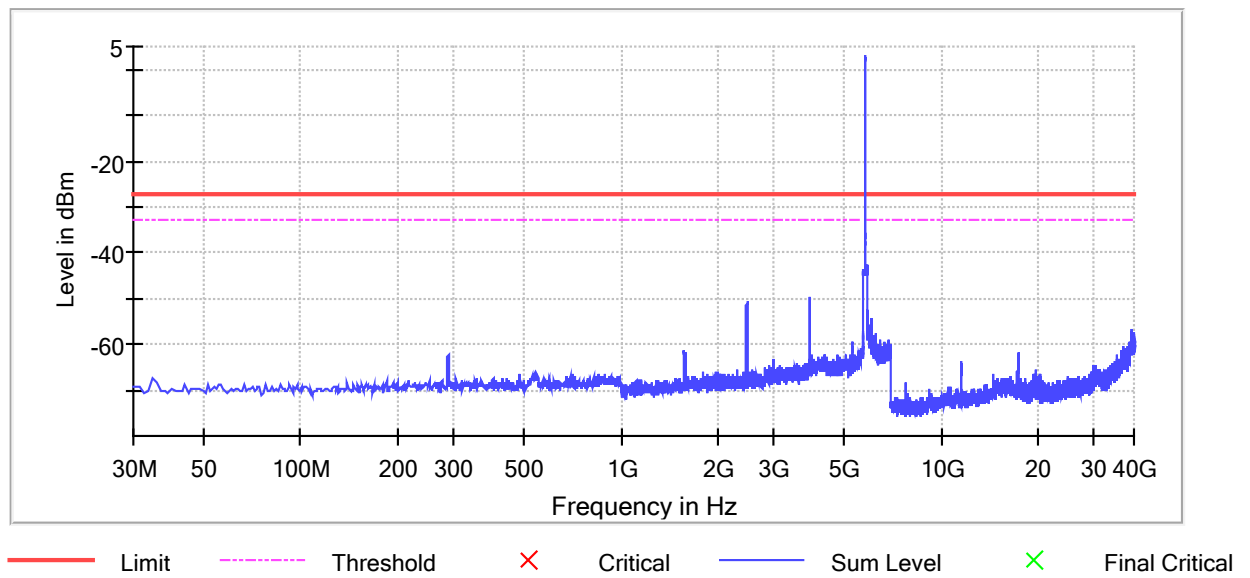
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
3857.500000	-49.7	22.7	-27.0
3856.500000	-50.2	23.2	-27.0
2471.500000	-50.4	23.4	-27.0
2472.500000	-50.7	23.7	-27.0
2470.500000	-51.0	24.0	-27.0
2473.500000	-51.5	24.5	-27.0
2469.500000	-51.6	24.6	-27.0
2474.500000	-51.6	24.6	-27.0
2468.500000	-52.4	25.4	-27.0
5859.500000	-52.7	25.7	-27.0
5857.500000	-53.2	26.2	-27.0
2475.500000	-53.6	26.6	-27.0
5858.500000	-53.9	26.9	-27.0
5856.500000	-54.1	27.1	-27.0
5861.500000	-54.3	27.3	-27.0

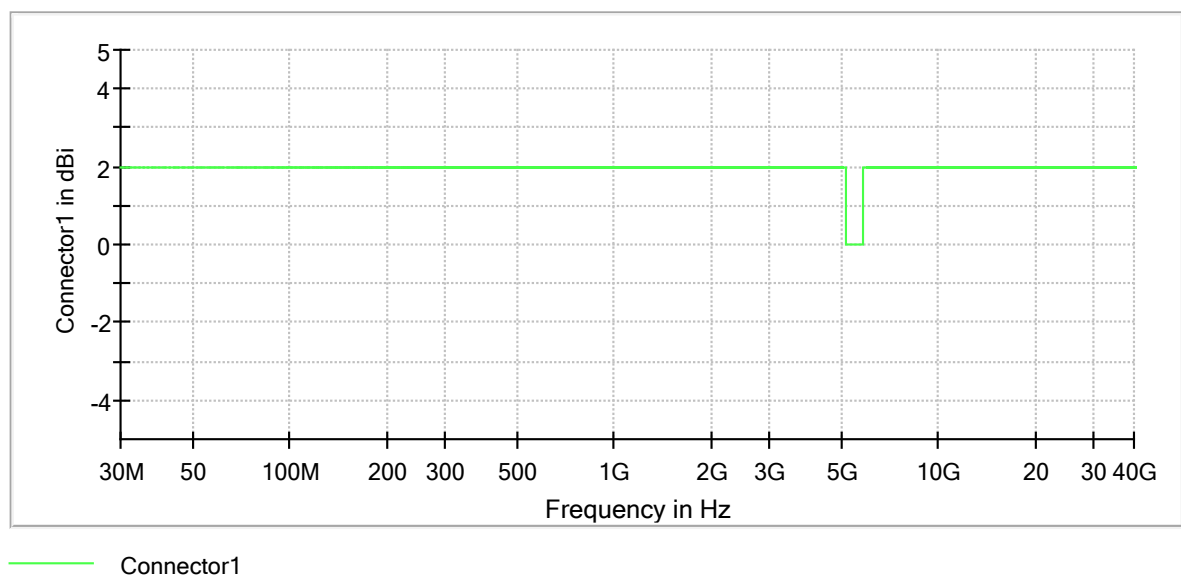
Measurement Settings

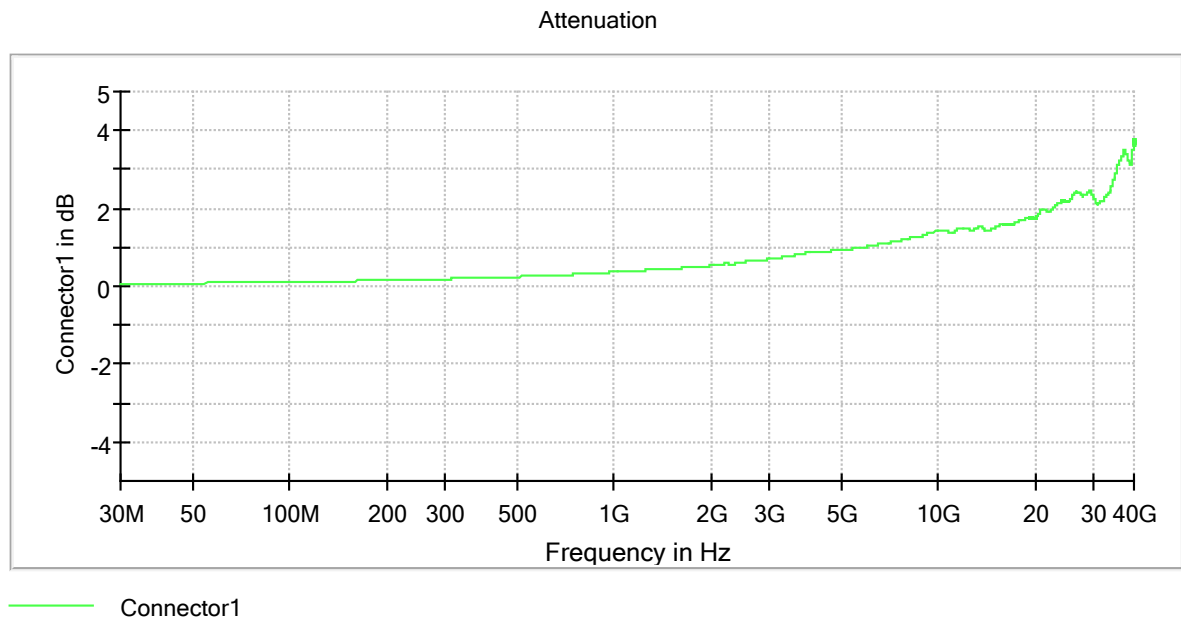
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.10 dB	0.50 dB

Tx Spurious Emission (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r03 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
5825.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
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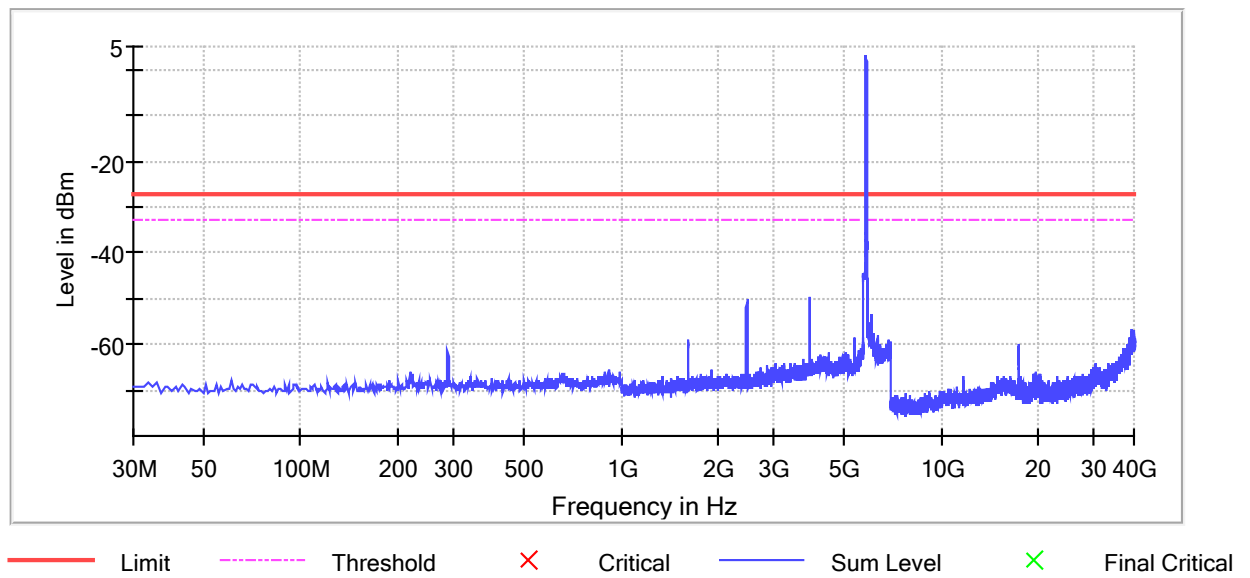
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
5857.500000	-45.4	18.4	-27.0
5856.500000	-45.6	18.6	-27.0
5855.500000	-47.7	20.7	-27.0
5850.500000	-47.9	20.9	-27.0
5858.500000	-48.8	21.8	-27.0
5859.500000	-48.9	21.9	-27.0
5854.500000	-49.0	22.0	-27.0
5860.500000	-49.5	22.5	-27.0
5861.500000	-49.5	22.5	-27.0
5852.500000	-49.5	22.5	-27.0
3883.500000	-49.6	22.6	-27.0
3884.500000	-49.8	22.8	-27.0
5853.500000	-49.8	22.8	-27.0
2472.500000	-50.1	23.1	-27.0
2471.500000	-50.4	23.4	-27.0

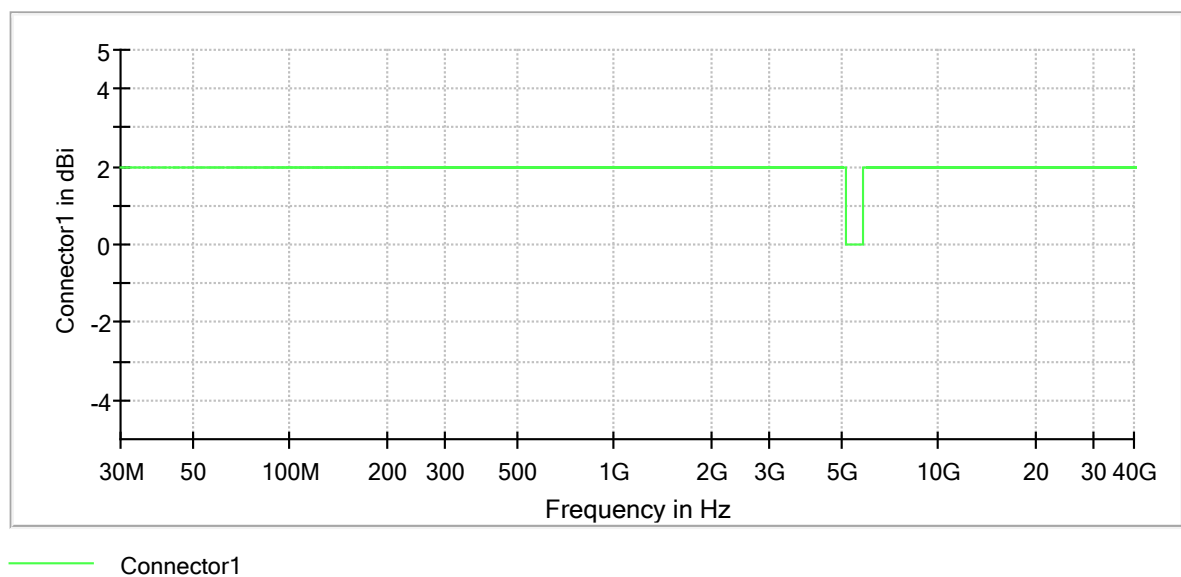
Measurement Settings

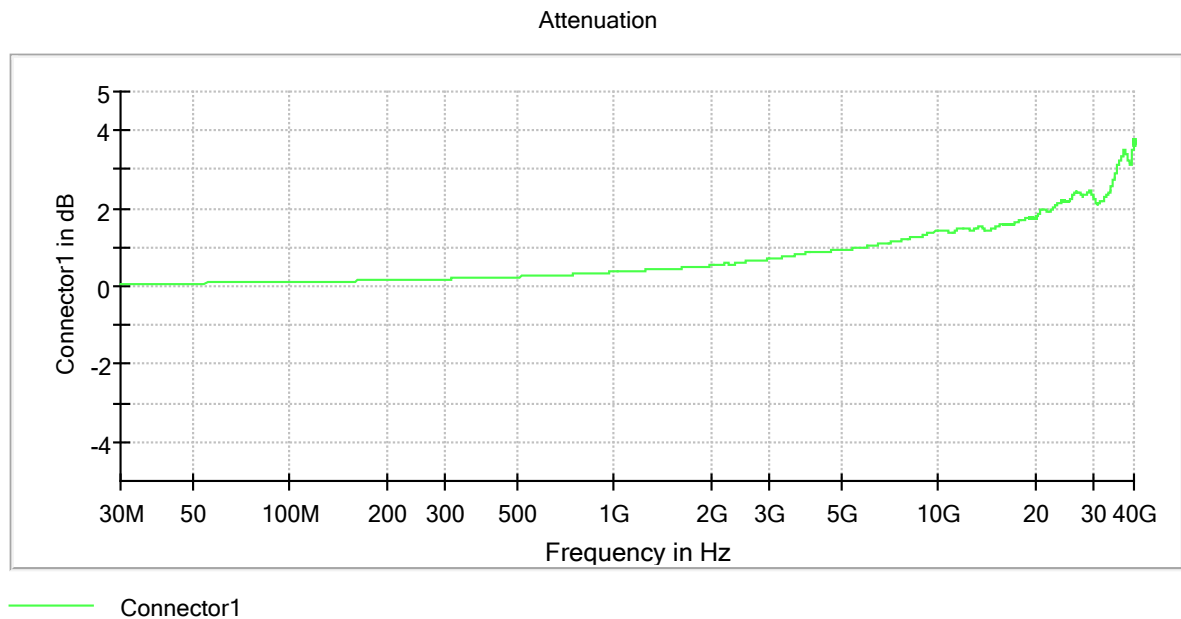
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	5150.000000	2	2
5150.000000	5250.000000	2	2
5250.000000	5350.000000	2	2
5350.000000	5470.000000	2	2
5470.000000	5725.000000	2	2
5725.000000	5850.000000	2	2
5850.000000	7000.000000	2	2
7000.000000	18000.000000	2	2
18000.000000	26000.000000	2	2
26000.000000	40000.000000	2	2

Spurious



Gain





Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	970	~ 970
SweepTime	194.000 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	QuasiPeak
SweepCount	3	3
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	4150	~ 4150
SweepTime	4.150 ms	AUTO
Reference Level	-20.000 dBm	-30.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.29 dB	0.50 dB