

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)		

Bandwidths

20 MHz (20 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\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.149::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100A (VG SMBV100A) @ VISA (ADR TCPIP::192.168.48.25::INST0::INSTR), SN 260451, FW 4.15.125.49
Generator:	SMB100A (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 178361, 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	5500.000	20.0	20.000000	PASS
RF output power	5500.000	20.0	20.000000	PASS
Power Spectral Density	5500.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5500.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5500.000	20.0	20.000000	PASS
Band Edge low	5500.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5600.000	20.0	20.000000	PASS
RF output power	5600.000	20.0	20.000000	PASS
Power Spectral Density	5600.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5600.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5600.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5700.000	20.0	20.000000	PASS
RF output power	5700.000	20.0	20.000000	PASS
Power Spectral Density	5700.000	20.0	20.000000	PASS
Minimum Emission Bandwidth 6 dB	5700.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5700.000	20.0	20.000000	PASS
Band Edge high	5700.000	20.0	20.000000	PASS

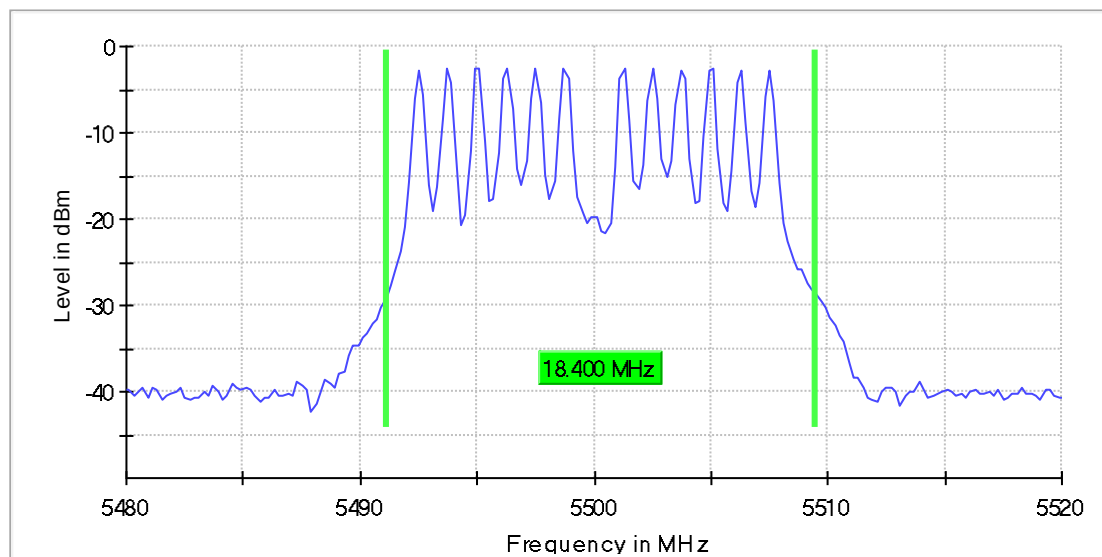
Emission Bandwidth 26 dB (5500 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

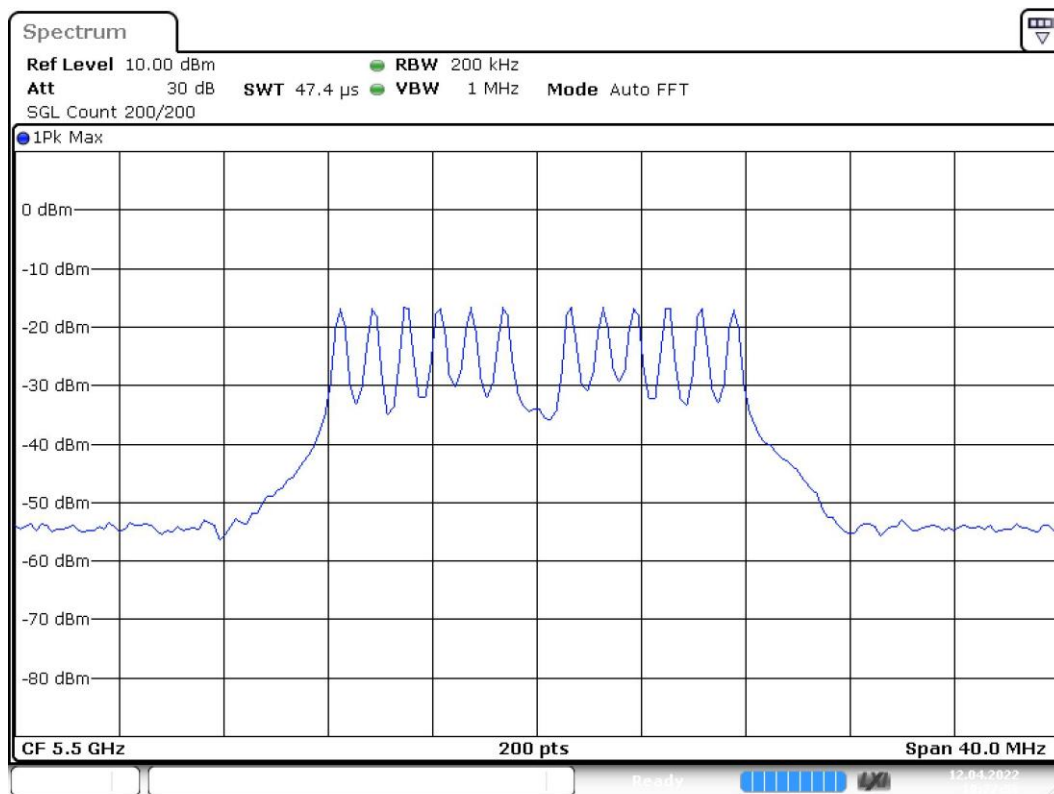
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5500.000000	18.400000	---	---	5491.100000	5509.500000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5500.000000	-2.5	PASS



Bandwidth



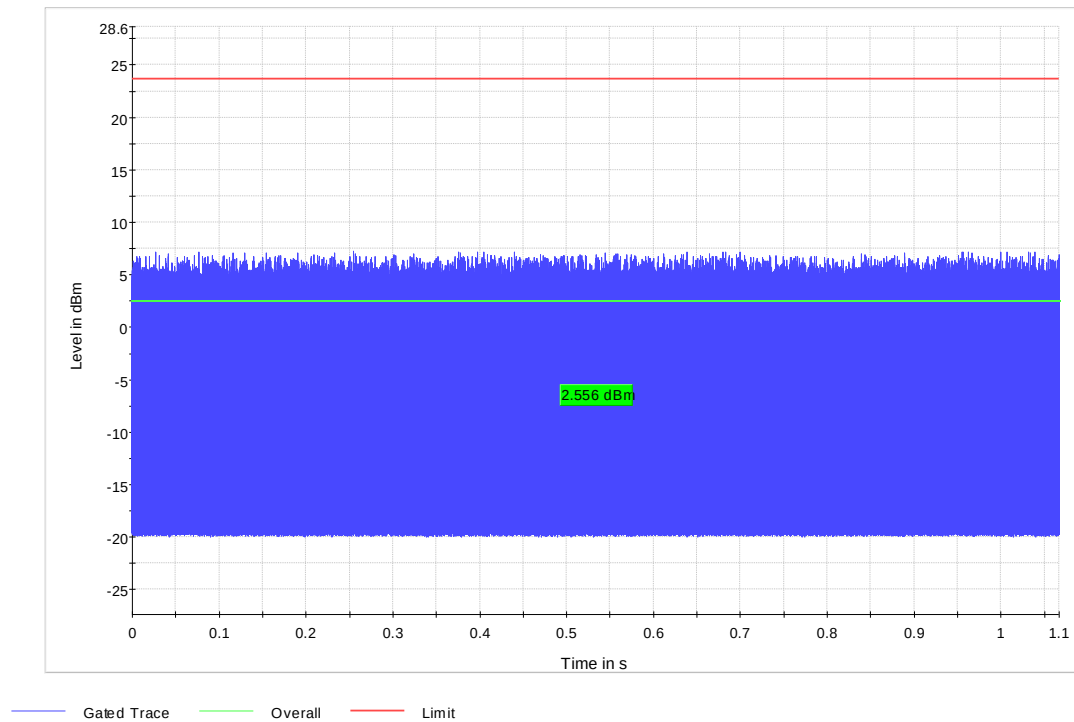
Date: 12.APR.2022 10:27:57

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.48000 GHz	5.48000 GHz
Stop Frequency	5.52000 GHz	5.52000 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	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	11 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.04 dB	0.30 dB

RF output power (5500 MHz; 20.000 dBm; 20 MHz)**Result**

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5500.000000	2.6	23.6	2.6	98.524	PASS



Power Spectral Density (5500 MHz; 20.000 dBm; 20 MHz)

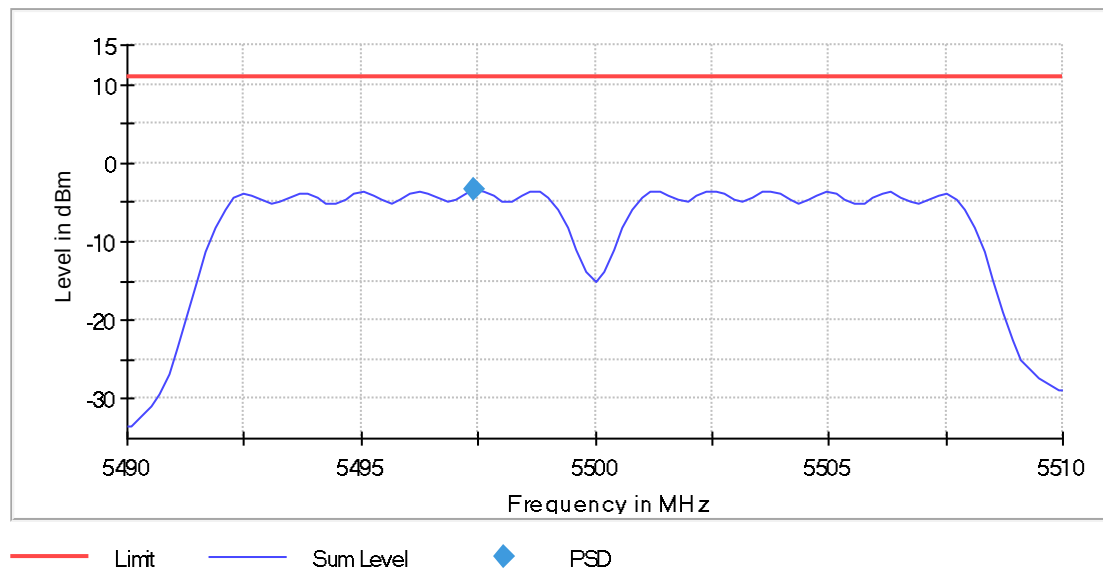
Customized settings.

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5497.425743	-3.441	11.0	PASS

Ports

Port	Duty Cycle (%)
1	29.964



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.49000 GHz	5.49000 GHz
Stop Frequency	5.51000 GHz	5.51000 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
Sweptime	2.020 s	2.020 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5500 MHz; 20.000 dBm; 20 MHz)

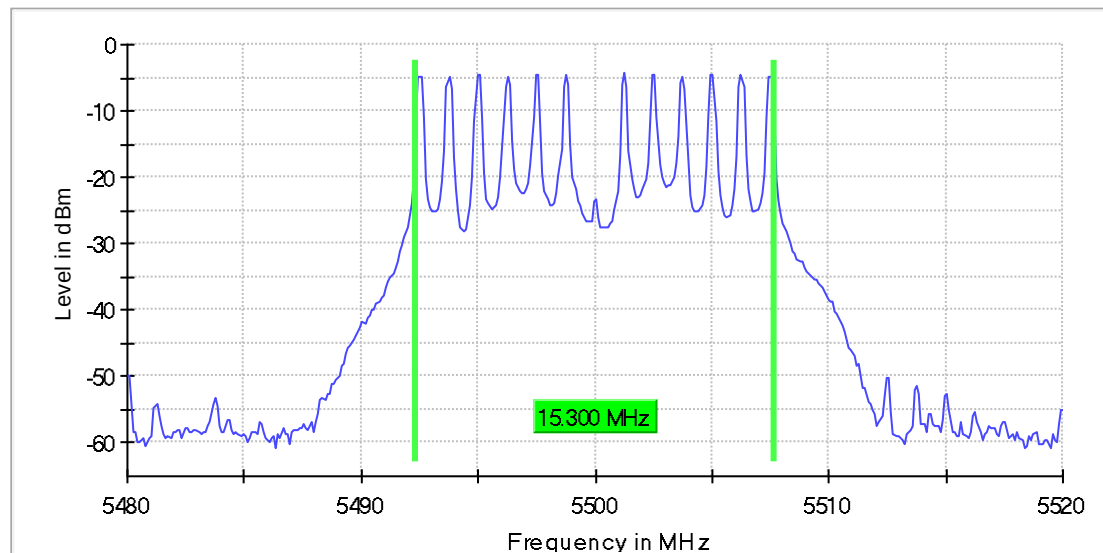
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5500.000000	15.300000	---	---	5492.350000	5507.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5500.000000	-4.3	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.48000 GHz	5.48000 GHz
Stop Frequency	5.52000 GHz	5.52000 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	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.16 dB	0.30 dB

Occupied Channel Bandwidth 99% (5500 MHz; 20.000 dBm; 20 MHz)

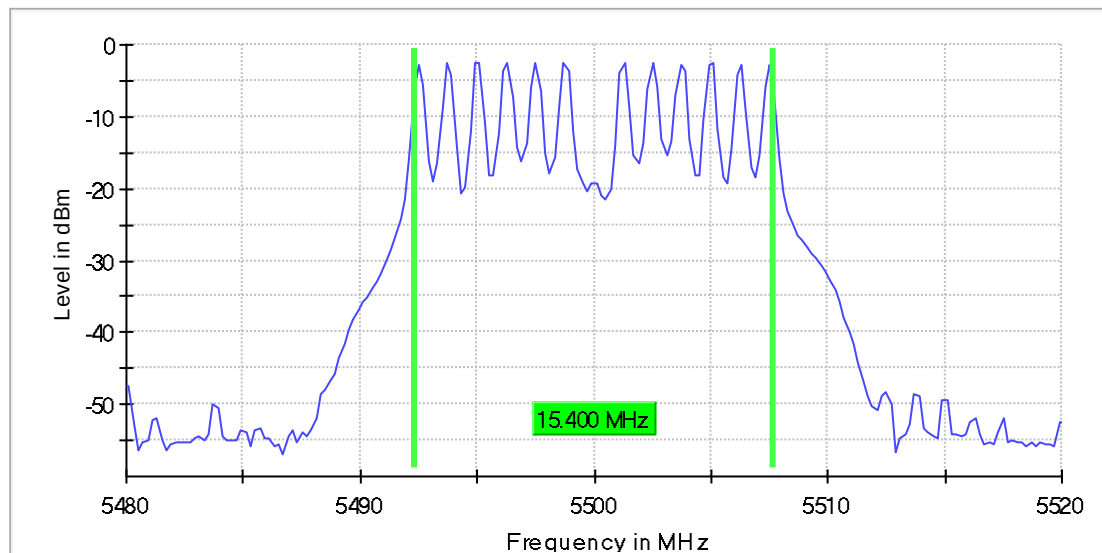
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5500.000000	15.400000	---	---	5492.300000	5507.700000

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

DUT Frequency (MHz)	Result
5500.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.48000 GHz	5.48000 GHz
Stop Frequency	5.52000 GHz	5.52000 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	2 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.20 dB	0.30 dB
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Band Edge low (5500 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

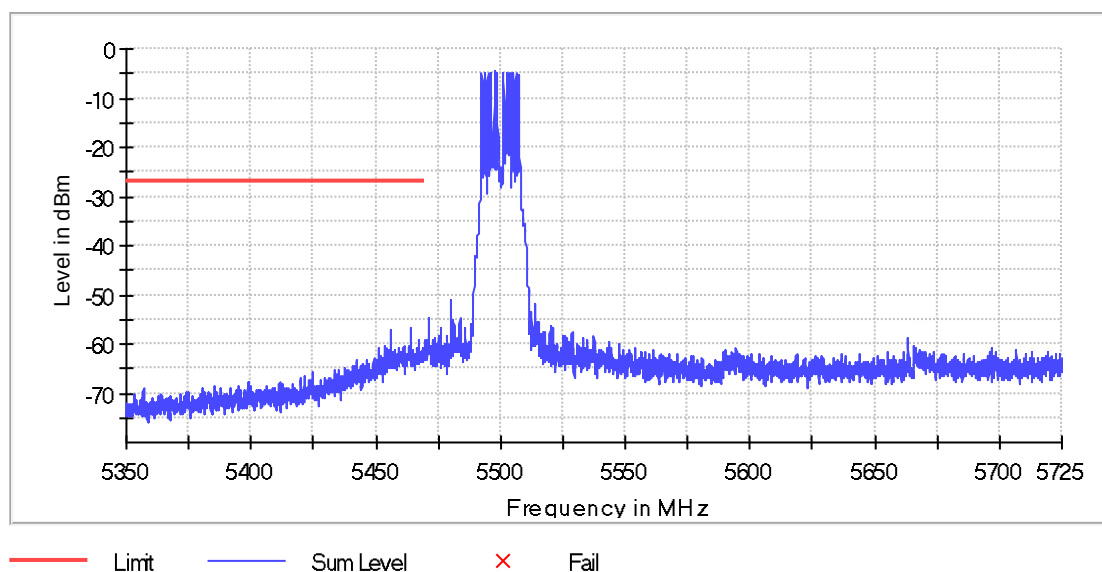
DUT Frequency (MHz)	Result
5500.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5497.475000	-4.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5463.775000	-56.7	29.7	-27.0	PASS
5463.825000	-57.0	30.0	-27.0	PASS
5456.225000	-57.3	30.3	-27.0	PASS
5456.175000	-57.4	30.4	-27.0	PASS
5463.725000	-57.4	30.4	-27.0	PASS
5456.275000	-58.5	31.5	-27.0	PASS
5463.875000	-58.6	31.6	-27.0	PASS
5467.425000	-59.0	32.0	-27.0	PASS
5467.475000	-59.2	32.2	-27.0	PASS
5469.975000	-59.3	32.3	-27.0	PASS
5463.675000	-59.7	32.7	-27.0	PASS
5469.925000	-59.8	32.8	-27.0	PASS
5456.125000	-60.0	33.0	-27.0	PASS
5463.975000	-60.2	33.2	-27.0	PASS
5461.275000	-60.3	33.3	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.72500 GHz	5.72500 GHz
Span	255.000 MHz	255.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	5100	~ 5100
SweepTime	569.531 μ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	40	40
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	5.35000 GHz	5.35000 GHz
Stop Frequency	5.47000 GHz	5.47000 GHz
Span	120.000 MHz	120.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2400	~ 2400
SweepTime	265.781 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
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	5 / max. 5	max. 5
Stable	0 / 1	1
Max Stable Difference	2.18 dB	0.50 dB

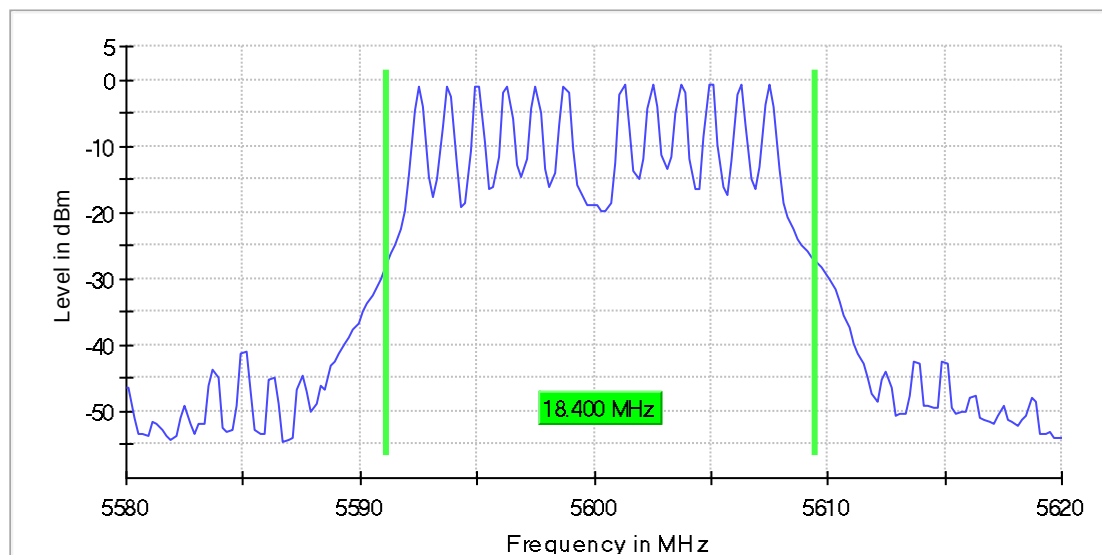
Emission Bandwidth 26 dB (5600 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

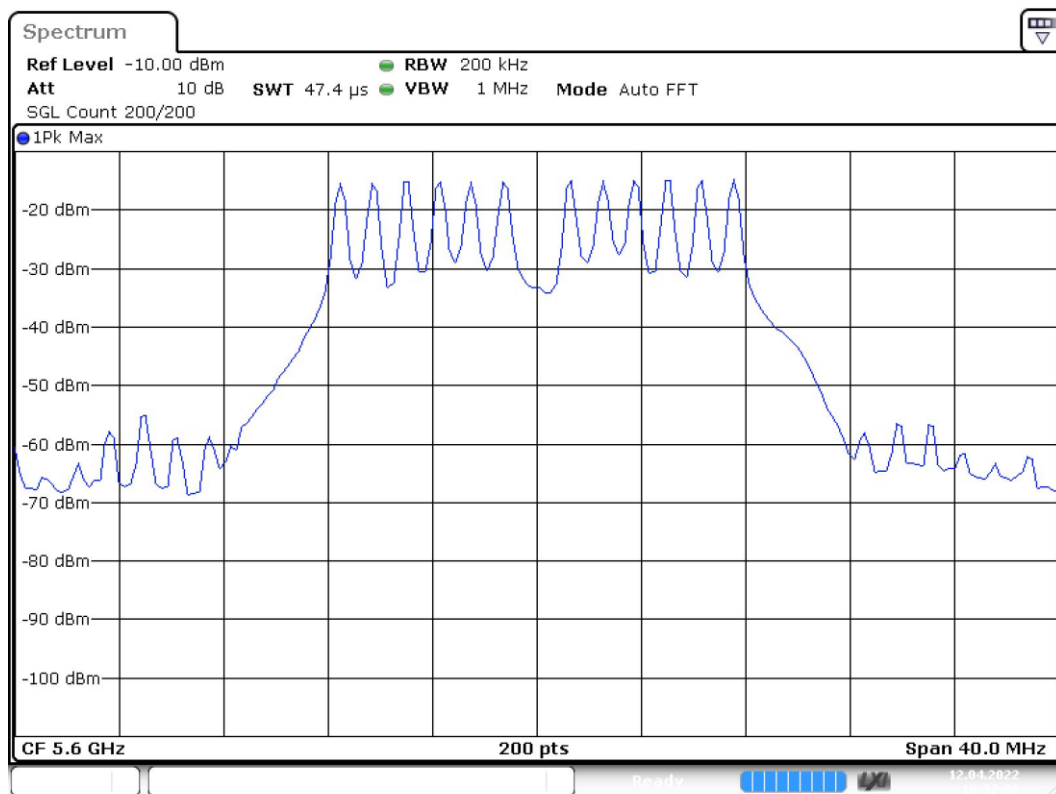
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5600.000000	18.400000	---	---	5591.100000	5609.500000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5600.000000	-0.7	PASS



Bandwidth



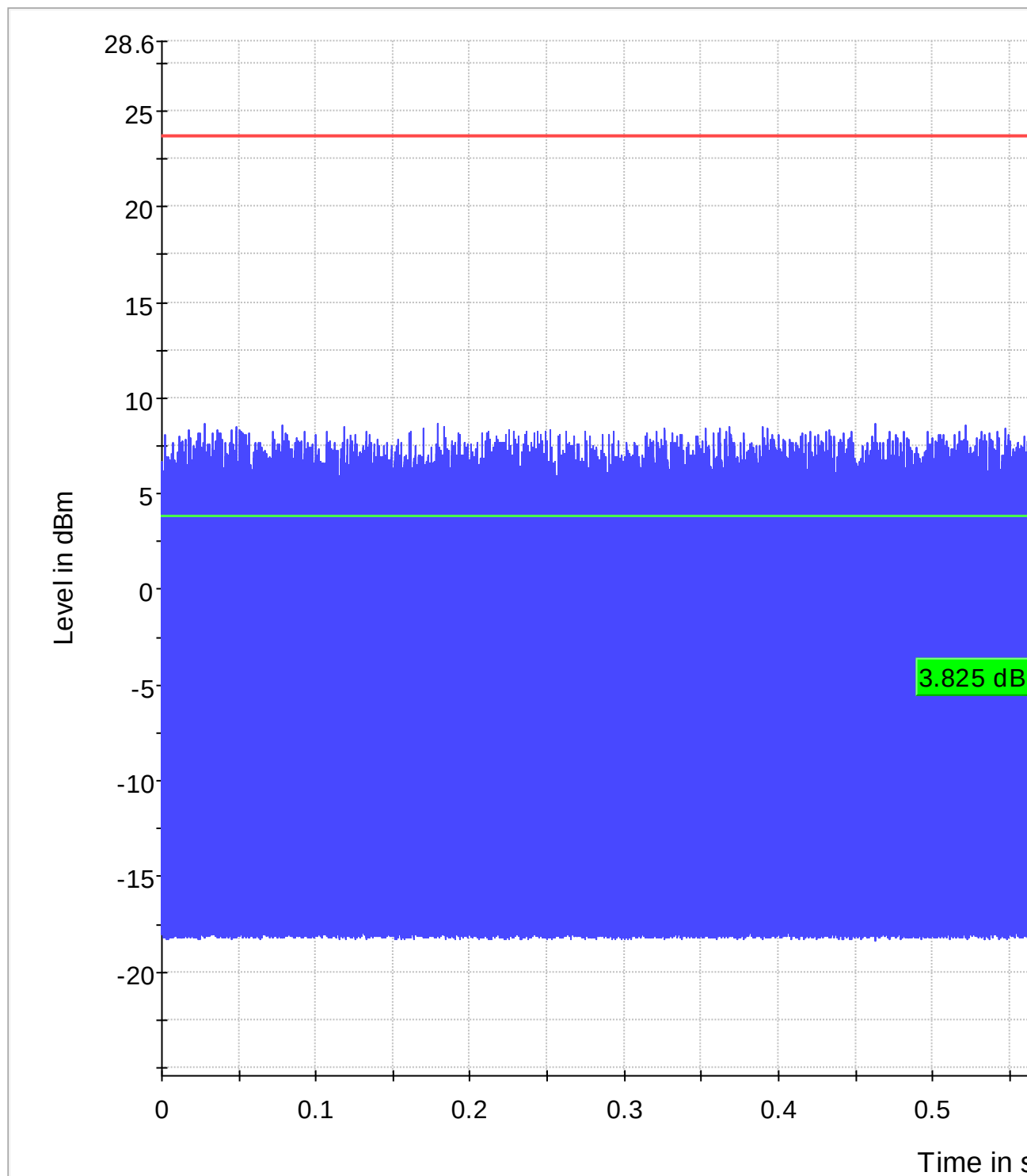
Date: 12.APR.2022 10:32:08

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.58000 GHz	5.58000 GHz
Stop Frequency	5.62000 GHz	5.62000 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	6 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.09 dB	0.30 dB

RF output power (5600 MHz; 20.000 dBm; 20 MHz)**Result**

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5600.000000	3.8	23.6	3.8	99.087	PASS



Power Spectral Density (5600 MHz; 20.000 dBm; 20 MHz)

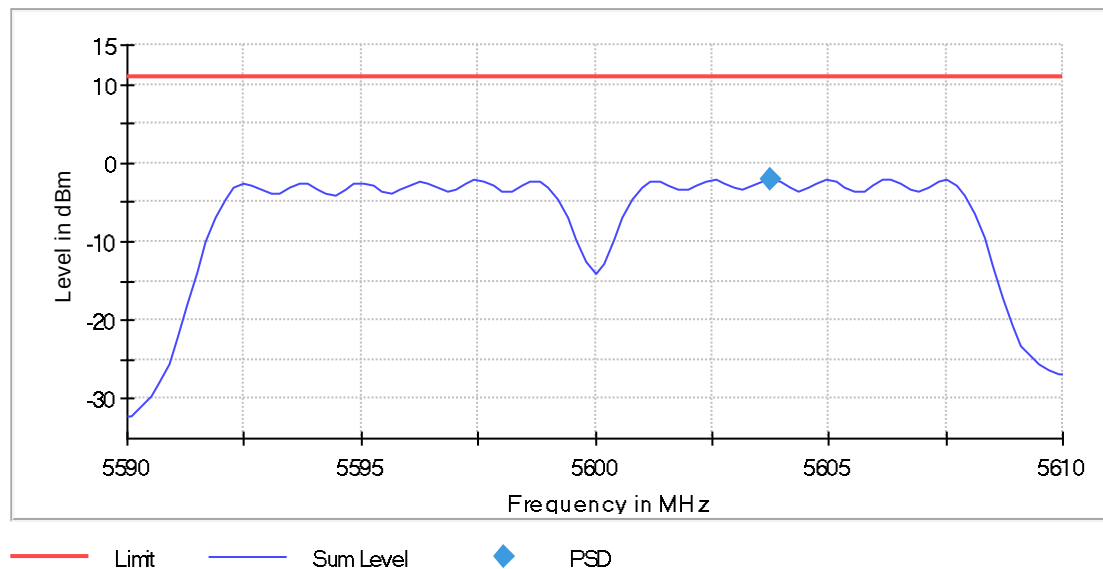
Customized settings.

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5600.000000	5603.762376	-2.092	11.0	PASS

Ports

Port	Duty Cycle (%)
1	29.789



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.59000 GHz	5.59000 GHz
Stop Frequency	5.61000 GHz	5.61000 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
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5600 MHz; 20.000 dBm; 20 MHz)

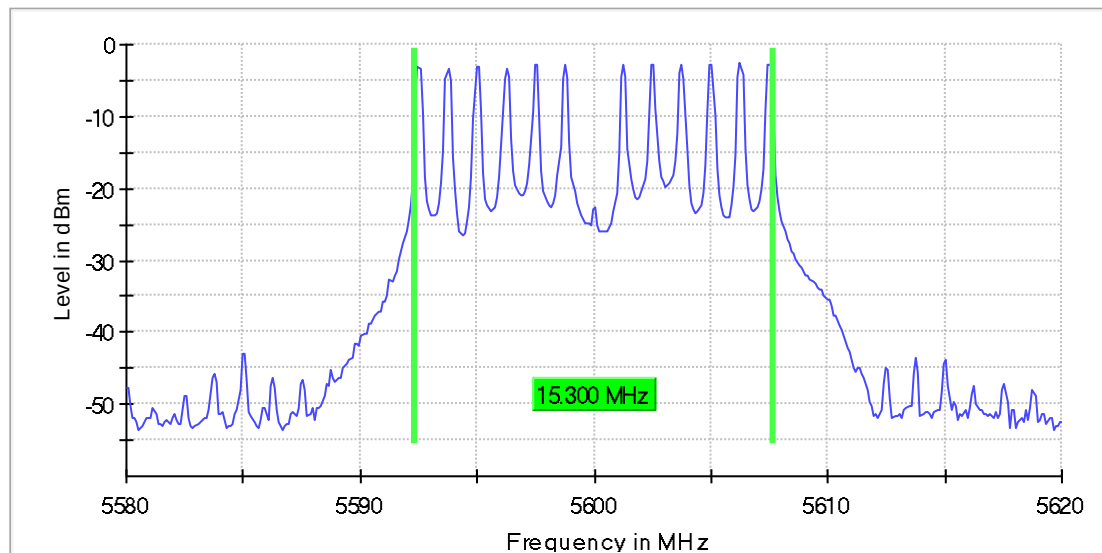
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5600.000000	15.300000	---	---	5592.350000	5607.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5600.000000	-2.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.58000 GHz	5.58000 GHz
Stop Frequency	5.62000 GHz	5.62000 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	3 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.15 dB	0.30 dB

Occupied Channel Bandwidth 99% (5600 MHz; 20.000 dBm; 20 MHz)

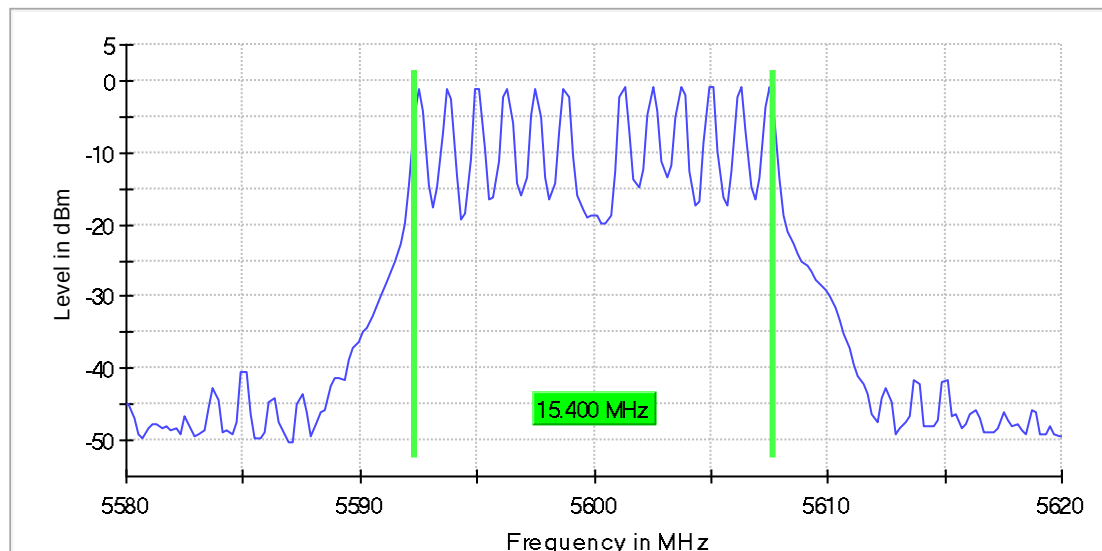
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5600.000000	15.400000	---	---	5592.300000	5607.700000

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

DUT Frequency (MHz)	Result
5600.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.58000 GHz	5.58000 GHz
Stop Frequency	5.62000 GHz	5.62000 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	3 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.08 dB	0.30 dB
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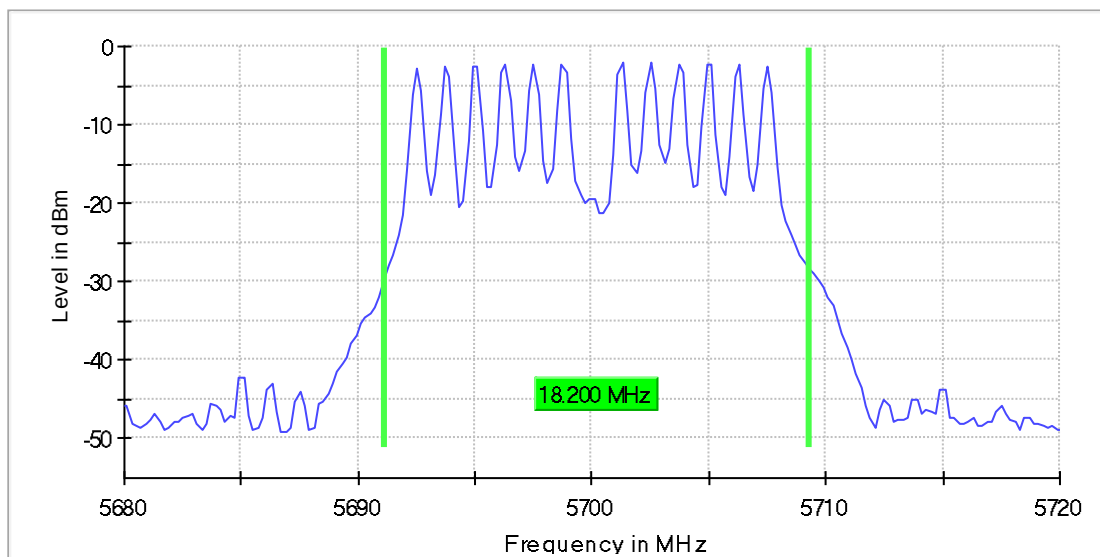
Emission Bandwidth 26 dB (5700 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

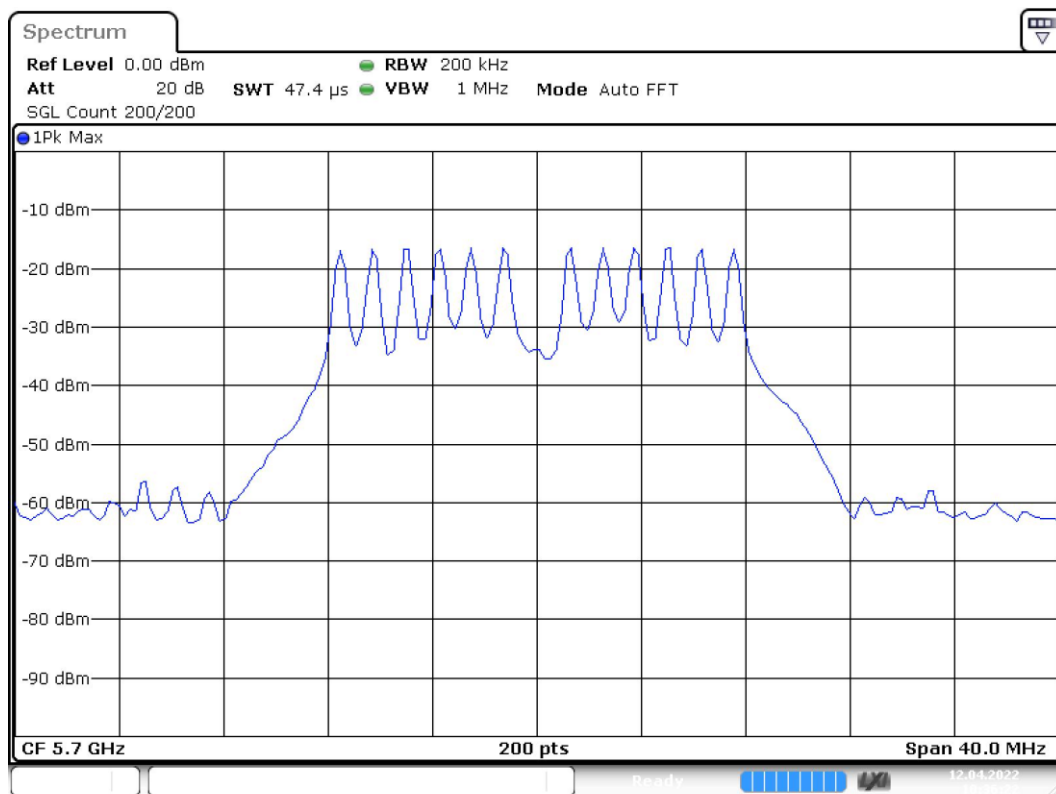
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5700.000000	18.200000	---	---	5691.100000	5709.300000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5700.000000	-2.1	PASS



Bandwidth



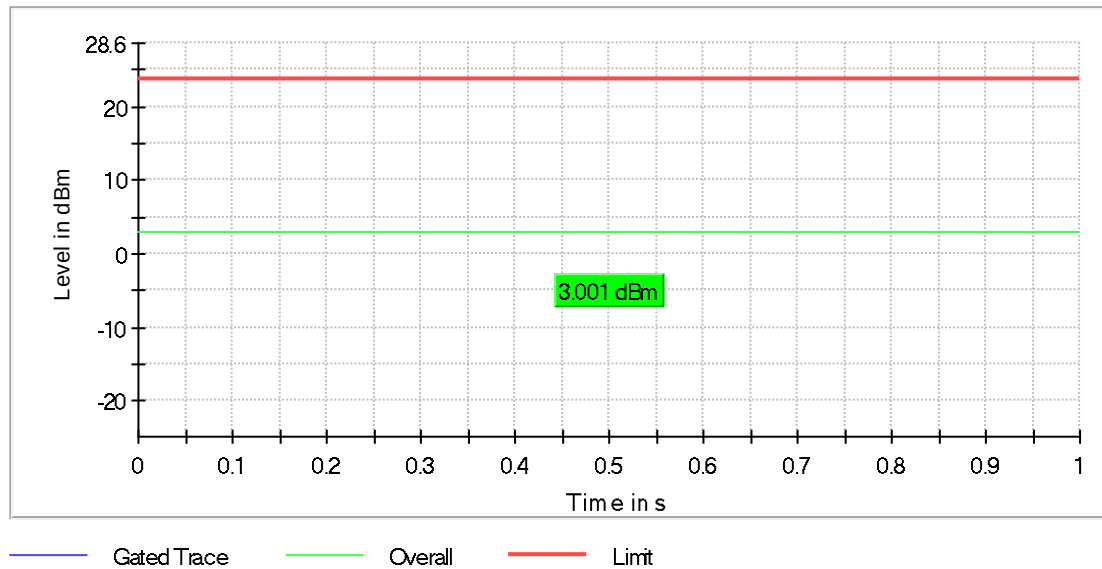
Date: 12.APR.2022 10:36:22

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.68000 GHz	5.68000 GHz
Stop Frequency	5.72000 GHz	5.72000 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	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.06 dB	0.30 dB

RF output power (5700 MHz; 20.000 dBm; 20 MHz)**Result**

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5700.000000	3.0	23.6	3.0	100.000	PASS



Power Spectral Density (5700 MHz; 20.000 dBm; 20 MHz)

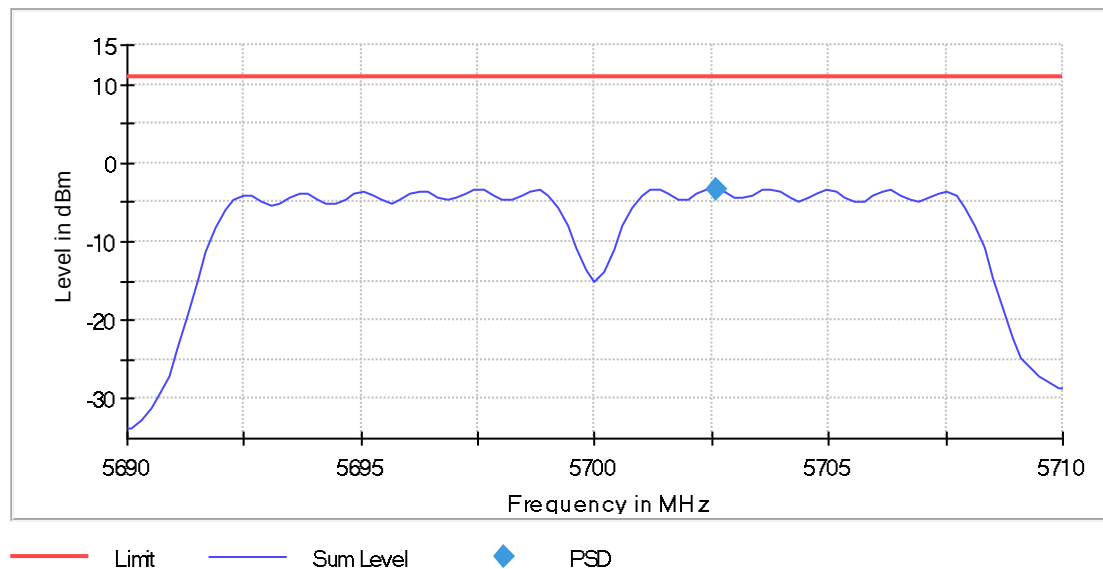
Customized settings.

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5702.574257	-3.252	11.0	PASS

Ports

Port	Duty Cycle (%)
1	30.045



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.69000 GHz	5.69000 GHz
Stop Frequency	5.71000 GHz	5.71000 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
Sweptime	2.020 s	2.020 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5700 MHz; 20.000 dBm; 20 MHz)

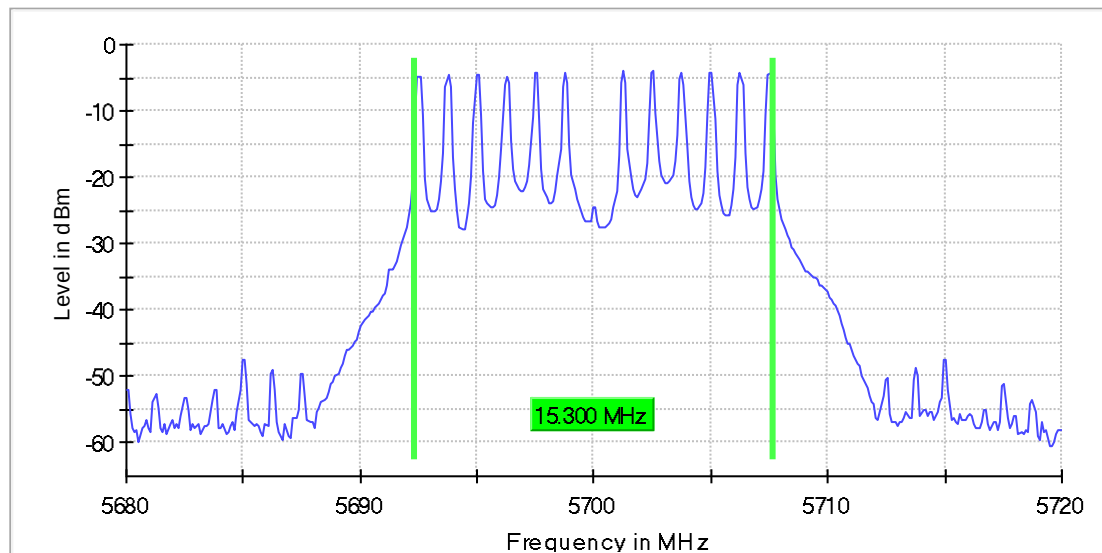
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5700.000000	15.300000	---	---	5692.350000	5707.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5700.000000	-4.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.68000 GHz	5.68000 GHz
Stop Frequency	5.72000 GHz	5.72000 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	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.30 dB	0.30 dB

Occupied Channel Bandwidth 99% (5700 MHz; 20.000 dBm; 20 MHz)

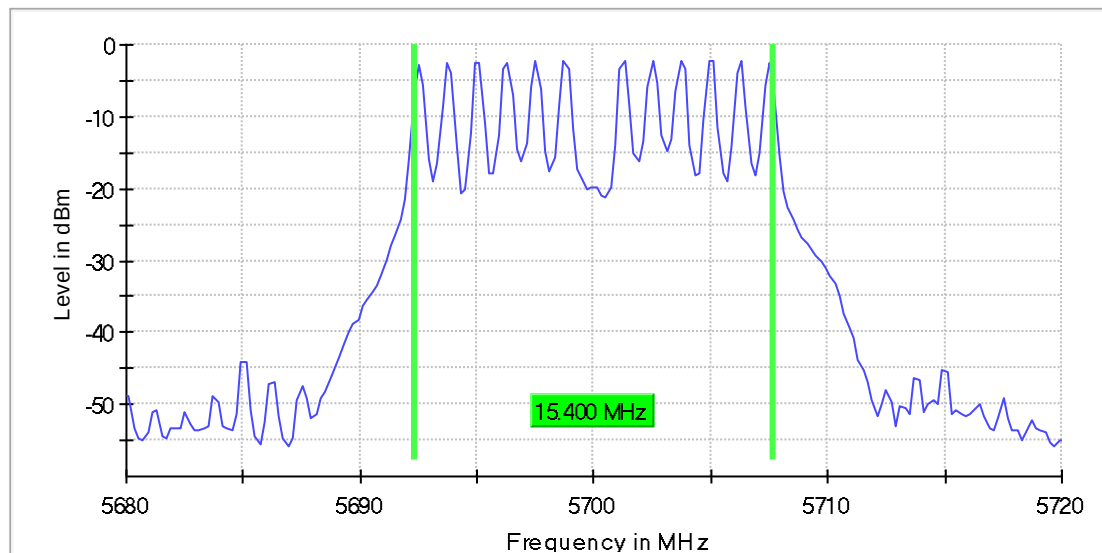
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5700.000000	15.400000	---	---	5692.300000	5707.700000

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

DUT Frequency (MHz)	Result
5700.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.68000 GHz	5.68000 GHz
Stop Frequency	5.72000 GHz	5.72000 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
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	4 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.08 dB	0.30 dB
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Band Edge high (5700 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

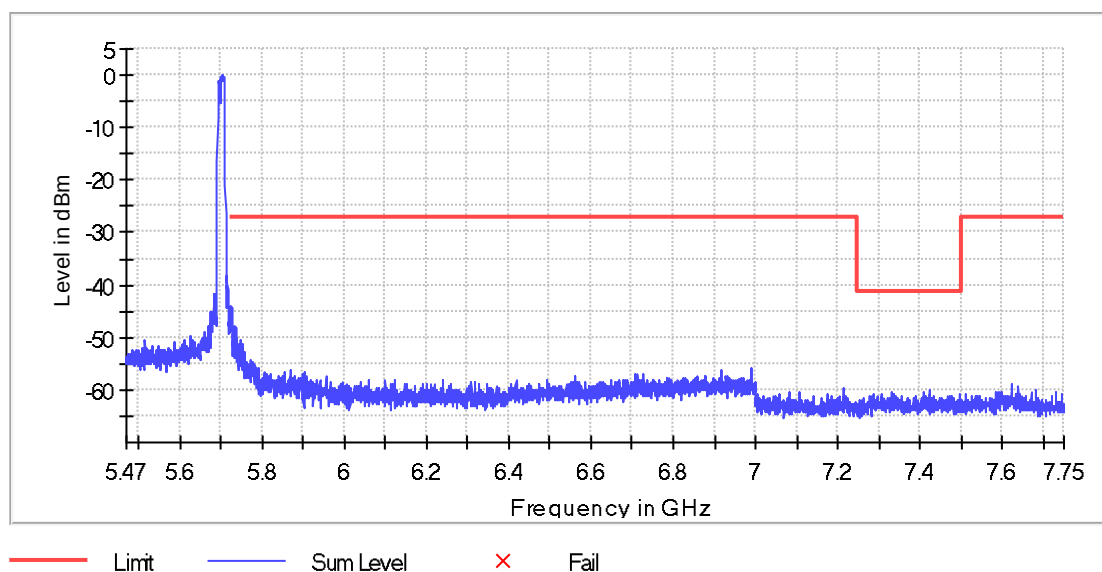
DUT Frequency (MHz)	Result
5700.000000	PASS

Inband Peak

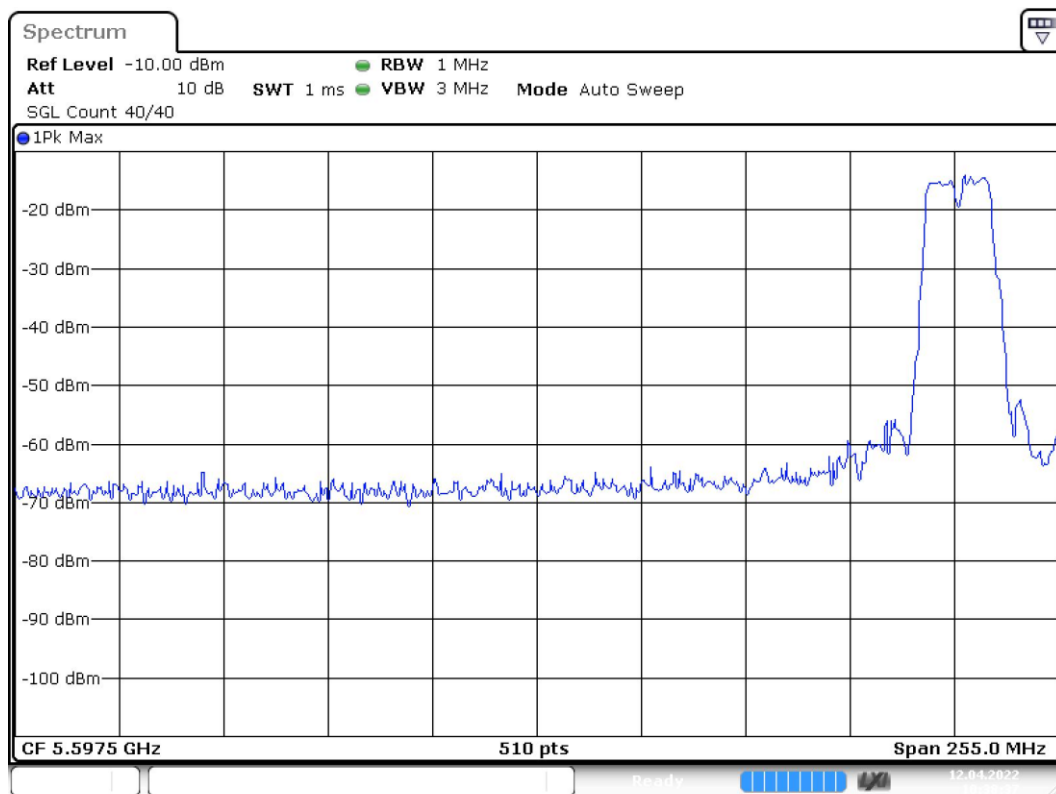
Frequency (MHz)	Level (dBm)
5701.750000	0.1

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5725.250000	-43.8	16.8	-27.0	PASS
5725.750000	-44.0	17.0	-27.0	PASS
5726.250000	-44.2	17.2	-27.0	PASS
7423.750000	-60.1	18.9	-41.2	PASS
7423.250000	-60.2	18.9	-41.2	PASS
7408.250000	-60.3	19.0	-41.2	PASS
7407.750000	-60.3	19.1	-41.2	PASS
7330.250000	-60.6	19.3	-41.2	PASS
7286.750000	-60.8	19.6	-41.2	PASS
7336.250000	-60.8	19.6	-41.2	PASS
7497.750000	-60.8	19.6	-41.2	PASS
7334.250000	-61.0	19.7	-41.2	PASS
7307.750000	-61.0	19.7	-41.2	PASS
5726.750000	-46.7	19.7	-27.0	PASS
7425.250000	-61.0	19.8	-41.2	PASS

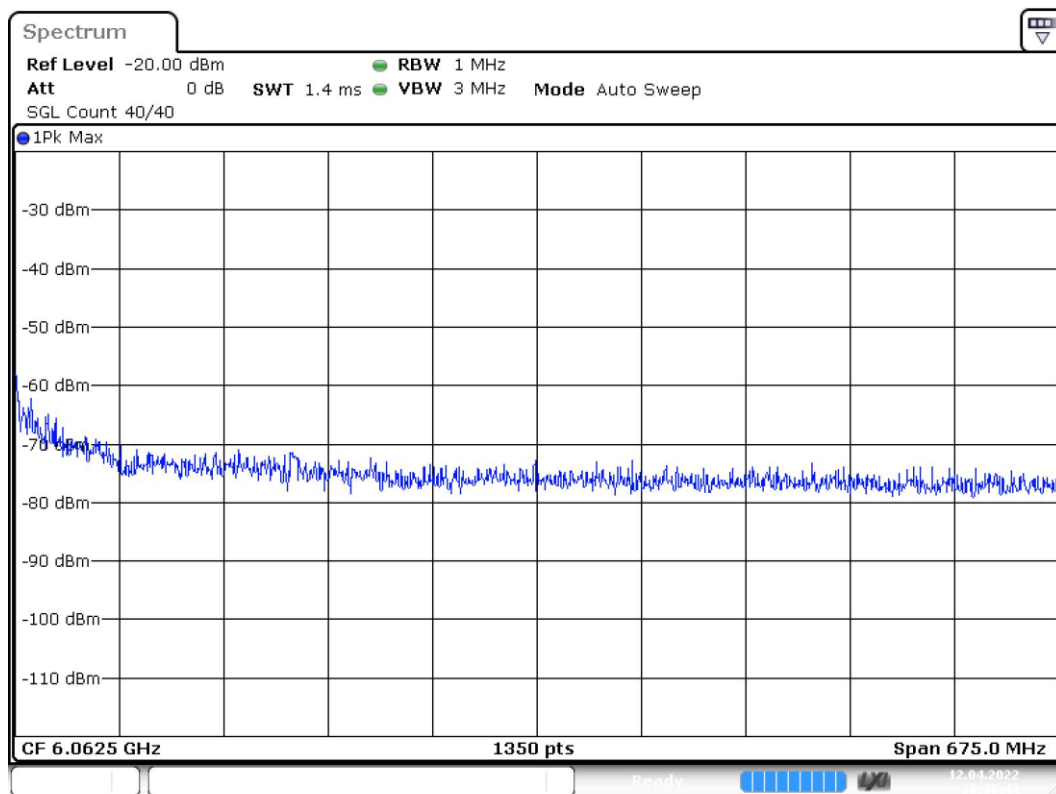


Band Edge Connector 1_0



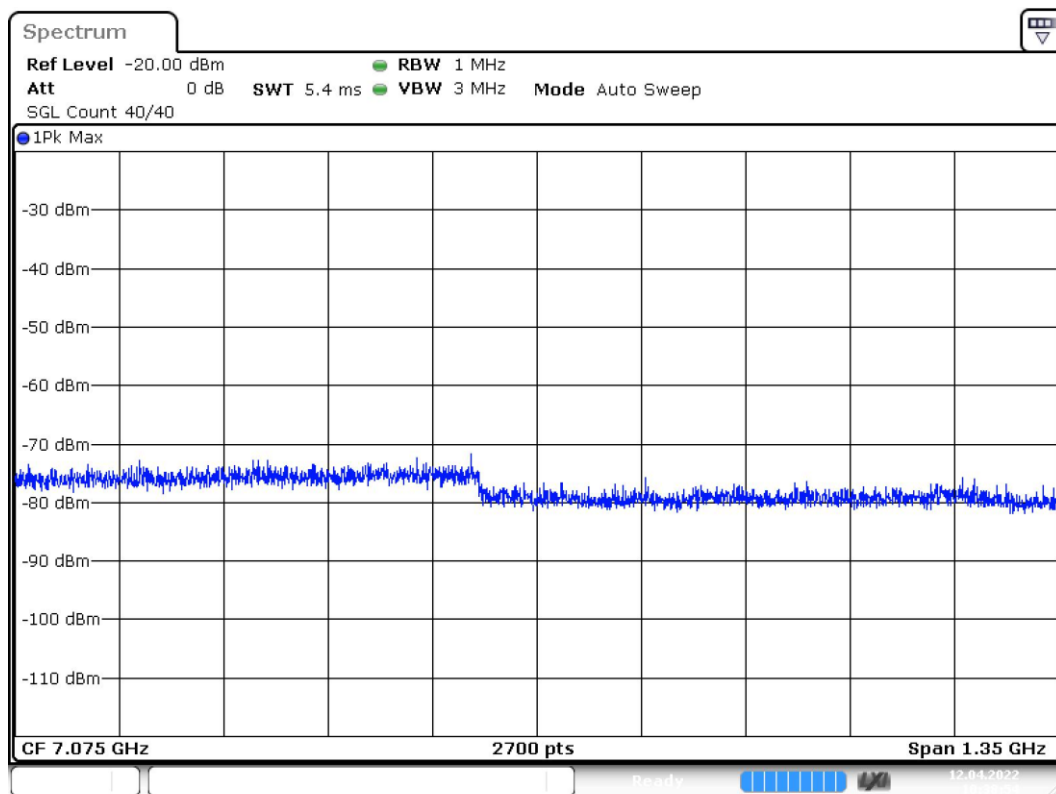
Date: 12.APR.2022 10:38:38

Band Edge Connector 1_1



Date: 12.APR.2022 10:38:45

Band Edge Connector 1_2



Date: 12.APR.2022 10:38:55

Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.72500 GHz	5.72500 GHz
Span	255.000 MHz	255.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	510	~ 510
Sweptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	40	40
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	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	5.72500 GHz	5.72500 GHz
Stop Frequency	6.40000 GHz	6.40000 GHz
Span	675.000 MHz	675.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz

SweepPoints	1350	~ 1350
SweepTime	1.350 ms	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	40	40
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

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 36 (5180 MHz)
WLAN CH 149 (5745 MHz)

WLAN CH 40 (5200 MHz)
WLAN CH 157 (5785 MHz)

WLAN CH 48 (5240 MHz)
WLAN CH 165 (5825 MHz)

Bandwidths

20 MHz (20 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\Hardware Setup

Spectrum Analyzer:

SA FSV 40 (SA FSV 40) @ VISA (ADR
TCPIP::192.168.48.149::INST0::INSTR), SN 1321.3008K39/101229,
FW 3.40

Vector Generator:

VG SMBV100A (VG SMBV100A) @ VISA (ADR
TCPIP::192.168.48.25::INST0::INSTR), SN 260451, FW 4.15.125.49

Generator:

SMB100A (SMB100A) @ VISA (ADR
TCPIP::192.168.48.30::INST0::INSTR), SN 178361, FW 3.20.390.24
/ 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

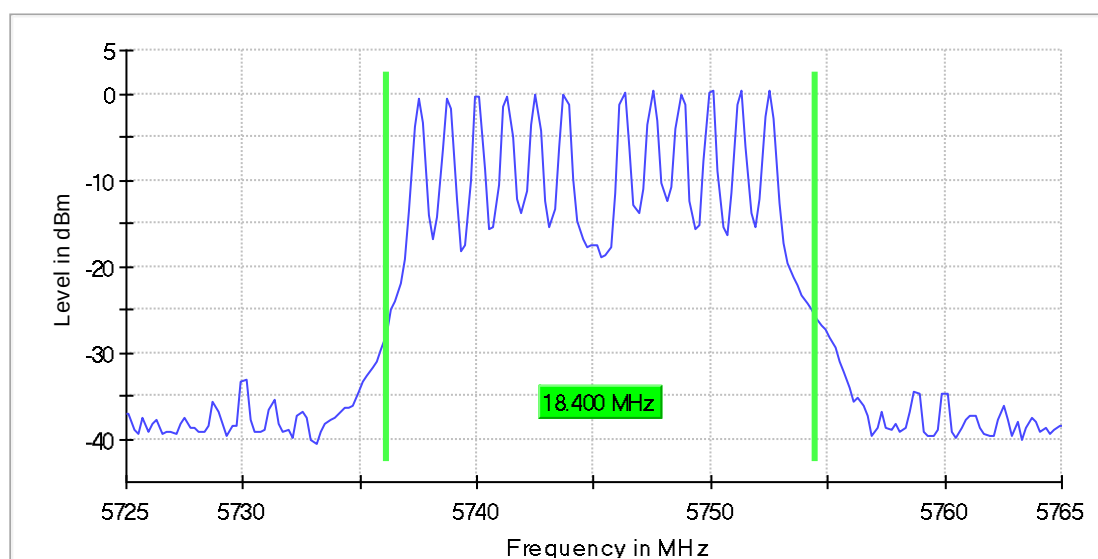
Emission Bandwidth 26 dB (5745 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

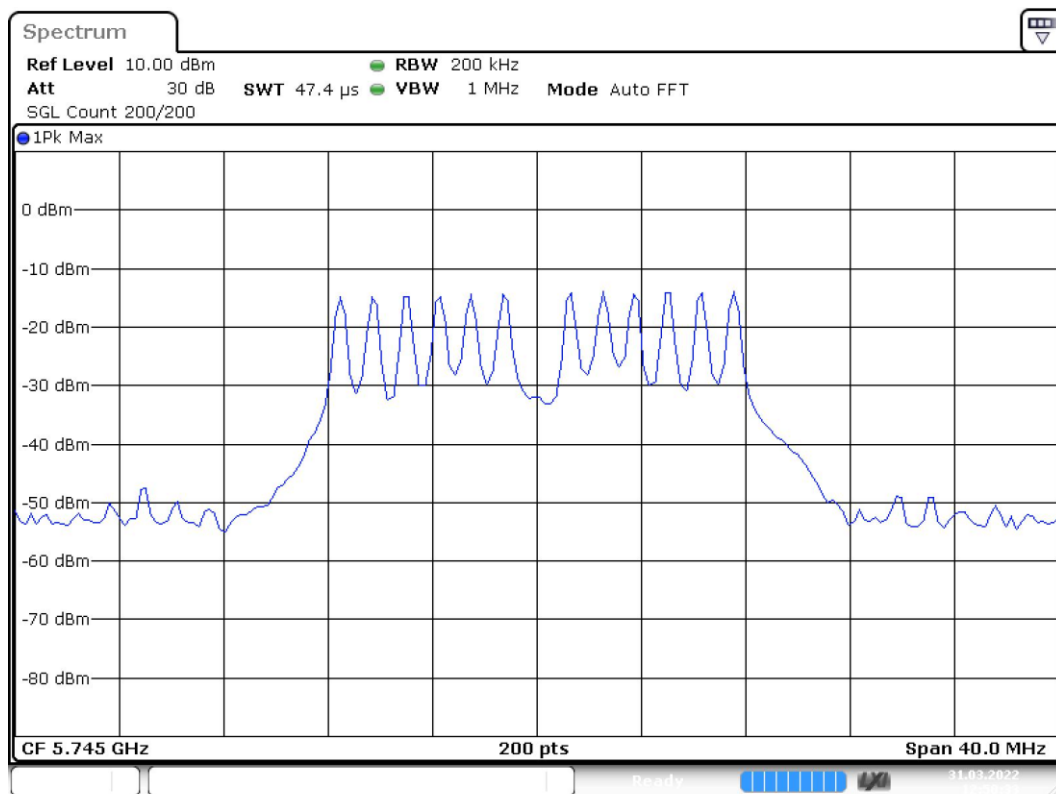
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	18.400000	---	---	5736.100000	5754.500000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	0.4	PASS



Bandwidth



Date: 31.MAR.2022 12:50:33

Measurement

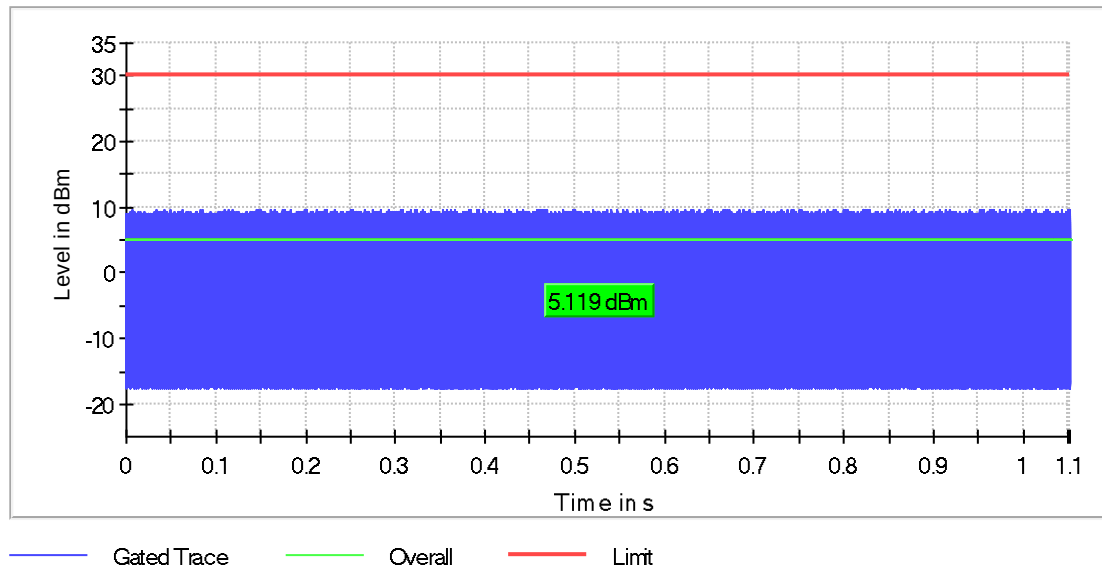
Setting	Instrument Value	Target Value
Start Frequency	5.72500 GHz	5.72500 GHz
Stop Frequency	5.76500 GHz	5.76500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	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	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.07 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),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5745.000000	5.1	30.0	5.1	89.259	PASS



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

Customized settings.

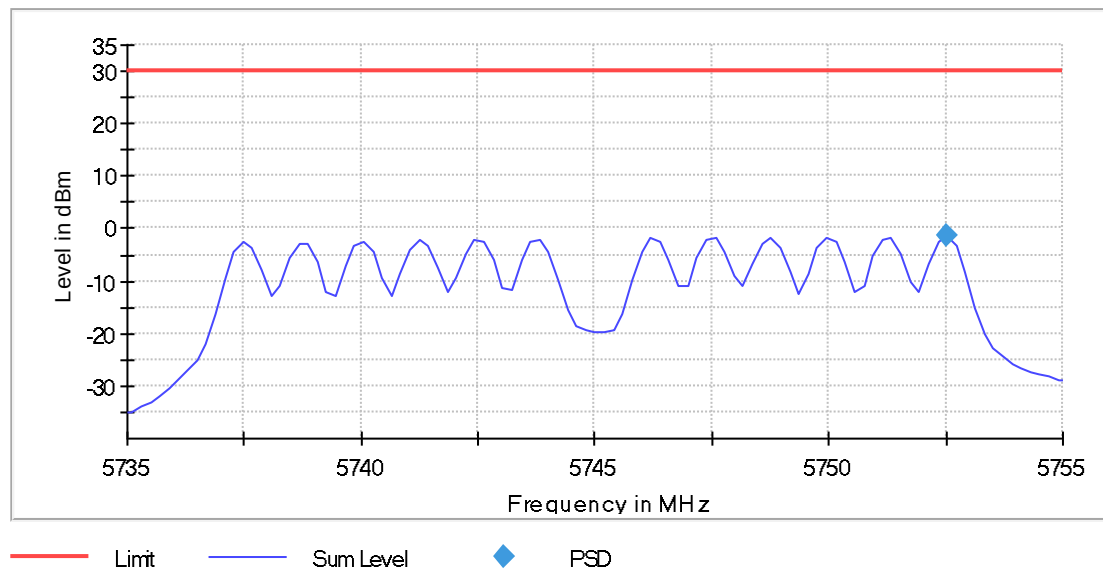
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5752.524752	-1.400	30.0	PASS

Ports

Port	Duty Cycle (%)
1	29.812



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
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

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

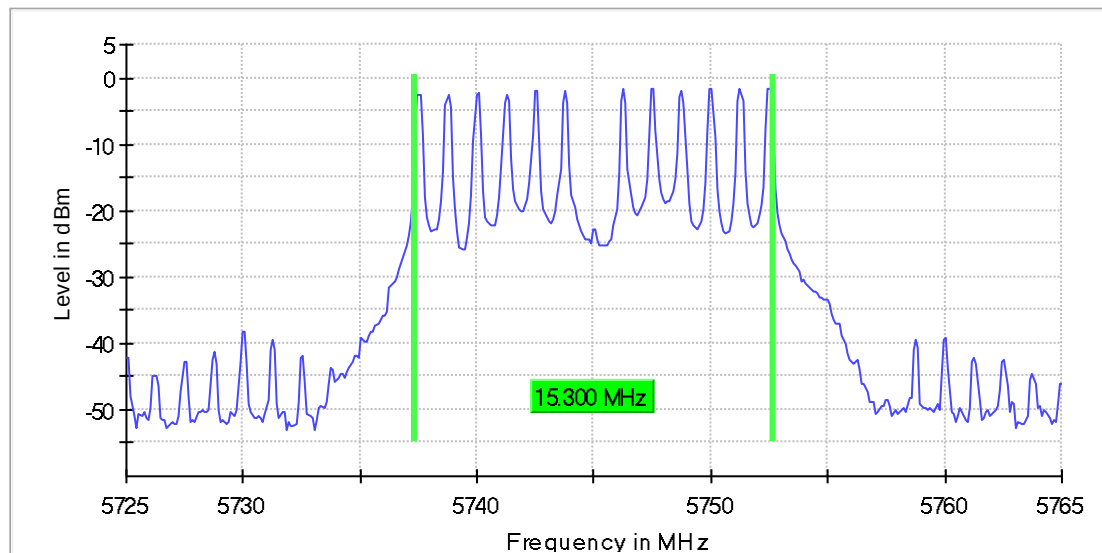
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	15.300000	0.500000	---	5737.350000	5752.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5745.000000	-1.5	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	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	3 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.08 dB	0.30 dB

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

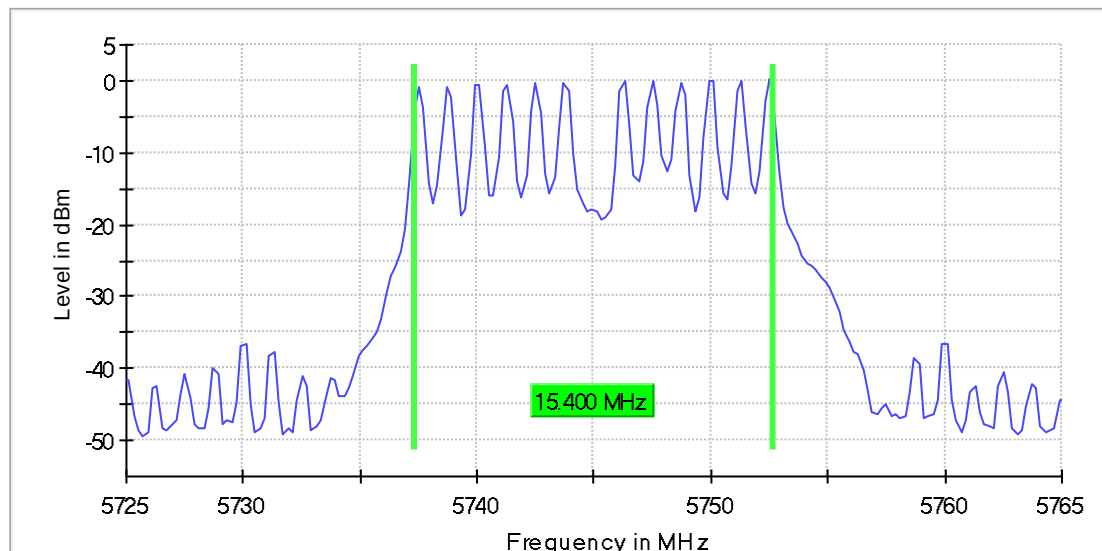
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5745.000000	15.400000	---	---	5737.300000	5752.700000

(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	2 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.19 dB	0.30 dB
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Band Edge low (5745 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

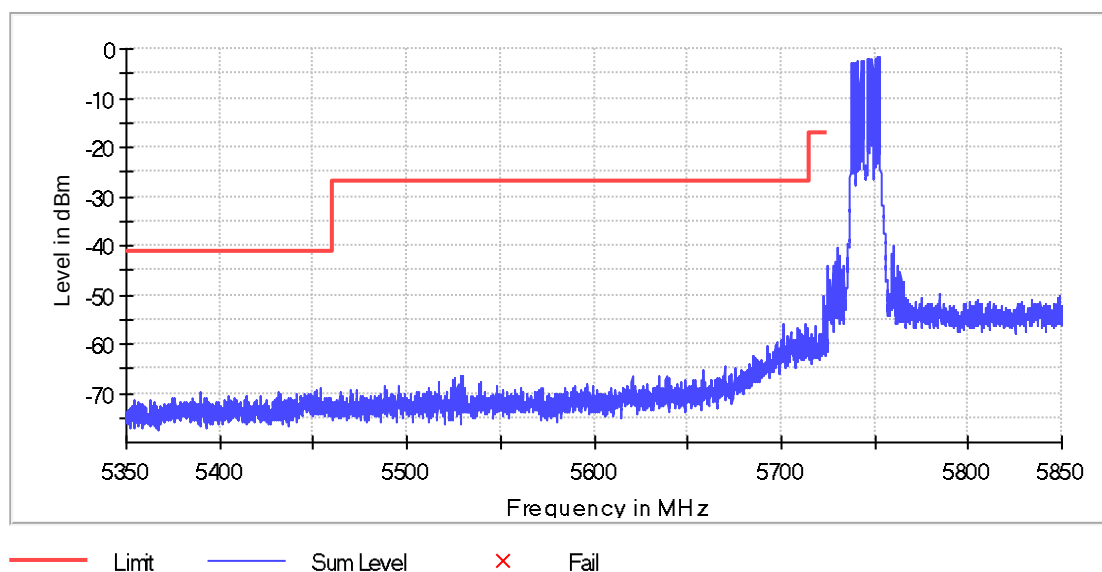
DUT Frequency (MHz)	Result
5745.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5751.225000	-1.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5724.975000	-43.9	26.9	-17.0	PASS
5454.175000	-68.8	27.6	-41.2	PASS
5454.225000	-69.0	27.7	-41.2	PASS
5724.925000	-45.2	28.2	-17.0	PASS
5454.125000	-69.5	28.3	-41.2	PASS
5451.425000	-69.5	28.3	-41.2	PASS
5451.375000	-69.6	28.4	-41.2	PASS
5450.625000	-69.7	28.5	-41.2	PASS
5450.675000	-69.8	28.5	-41.2	PASS
5431.775000	-69.9	28.7	-41.2	PASS
5389.475000	-70.0	28.7	-41.2	PASS
5701.225000	-55.8	28.8	-27.0	PASS
5450.575000	-70.1	28.8	-41.2	PASS
5447.025000	-70.1	28.8	-41.2	PASS
5431.825000	-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	40	40
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	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	50	50
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	2 / max. 3	max. 3
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB

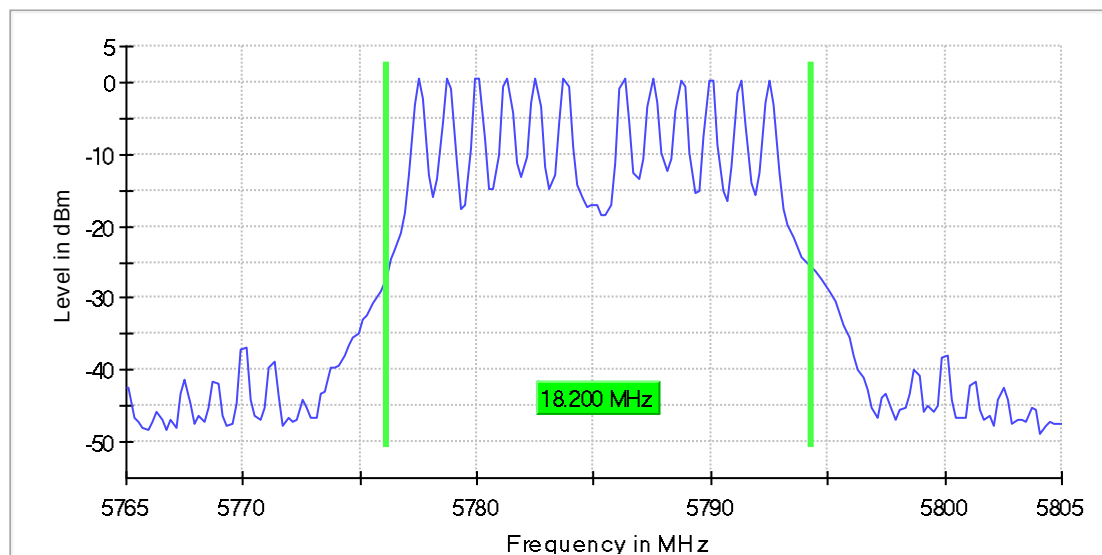
Emission Bandwidth 26 dB (5785 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

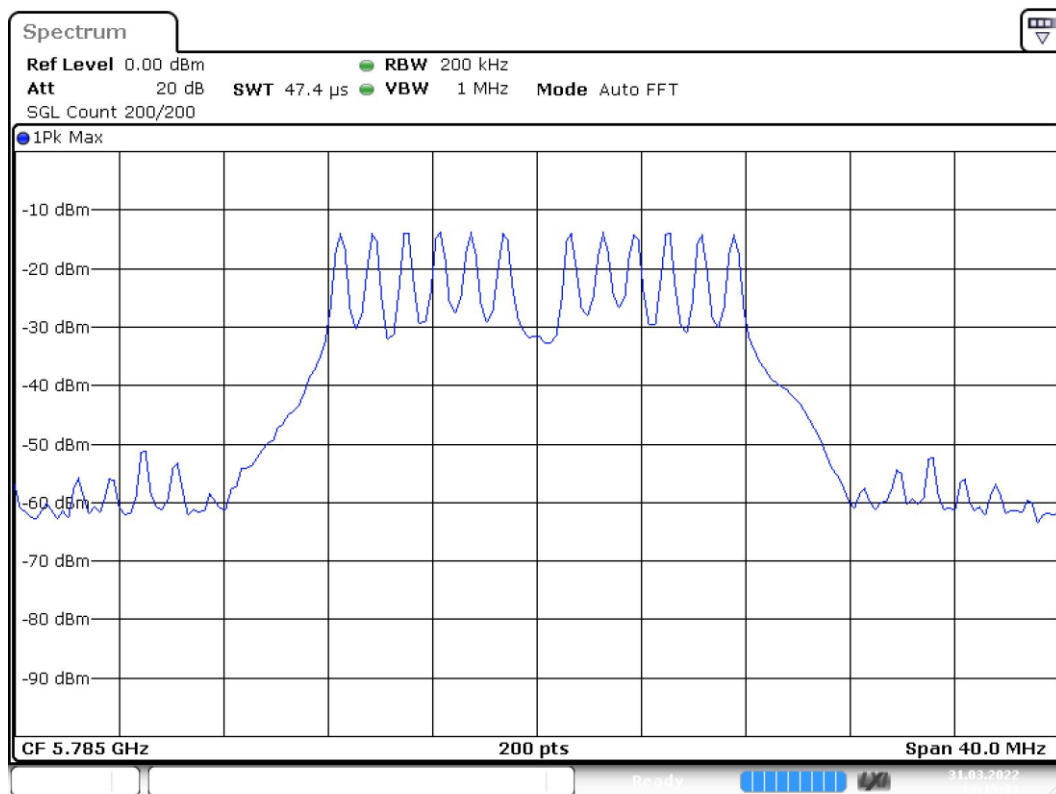
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	18.200000	---	---	5776.100000	5794.300000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	0.7	PASS



Bandwidth



Date: 31.MAR.2022 13:15:33

Measurement

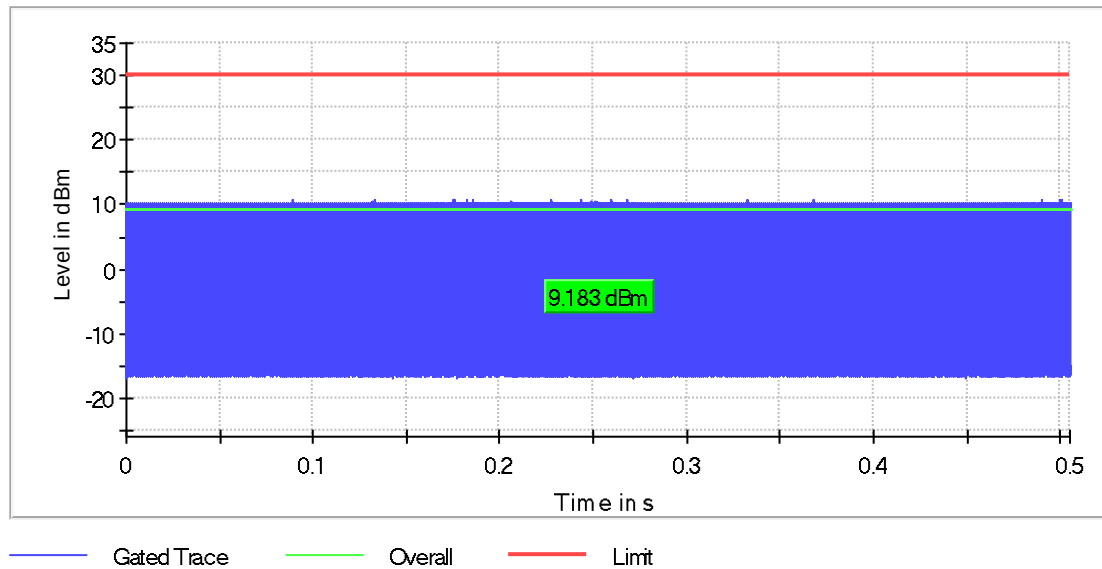
Setting	Instrument Value	Target Value
Start Frequency	5.76500 GHz	5.76500 GHz
Stop Frequency	5.80500 GHz	5.80500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 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	7 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.03 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),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5785.000000	9.2	30.0	9.2	43.451	PASS



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

Customized settings.

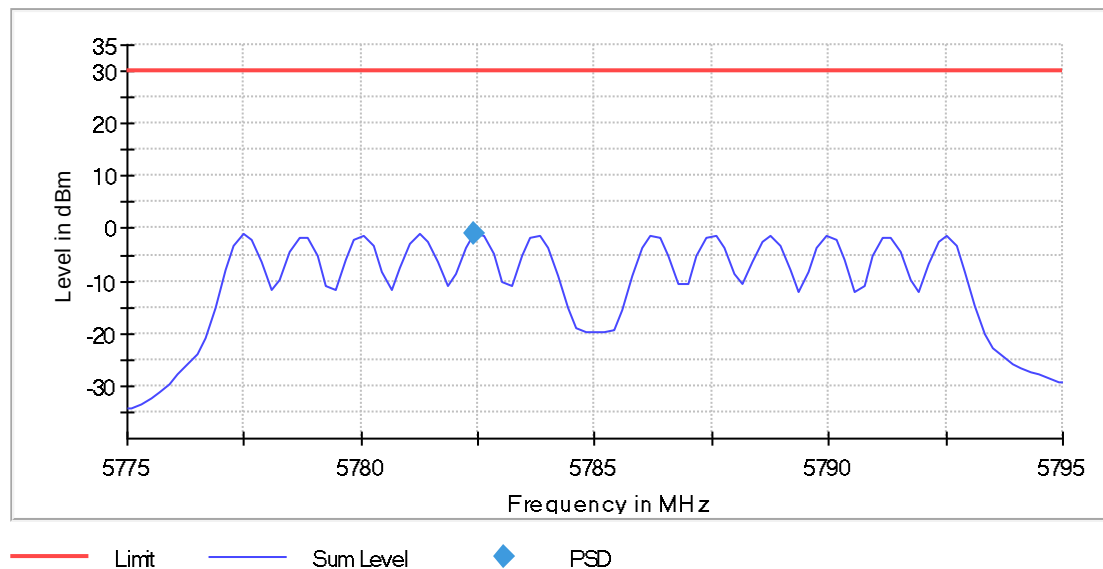
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5782.425743	-1.035	30.0	PASS

Ports

Port	Duty Cycle (%)
1	29.768



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
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

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

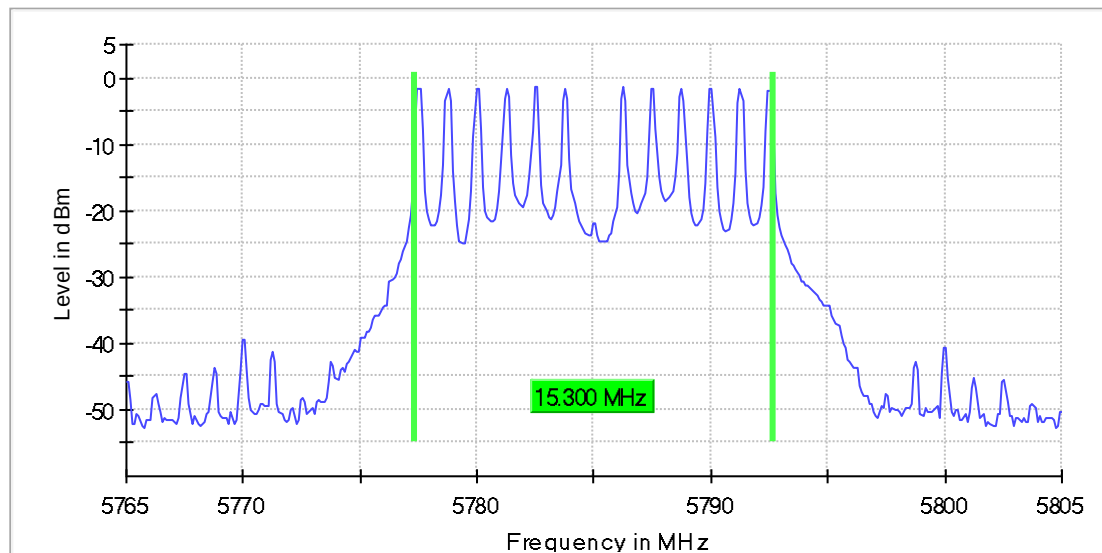
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	15.300000	0.500000	---	5777.350000	5792.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5785.000000	-1.3	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	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.10 dB	0.30 dB

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

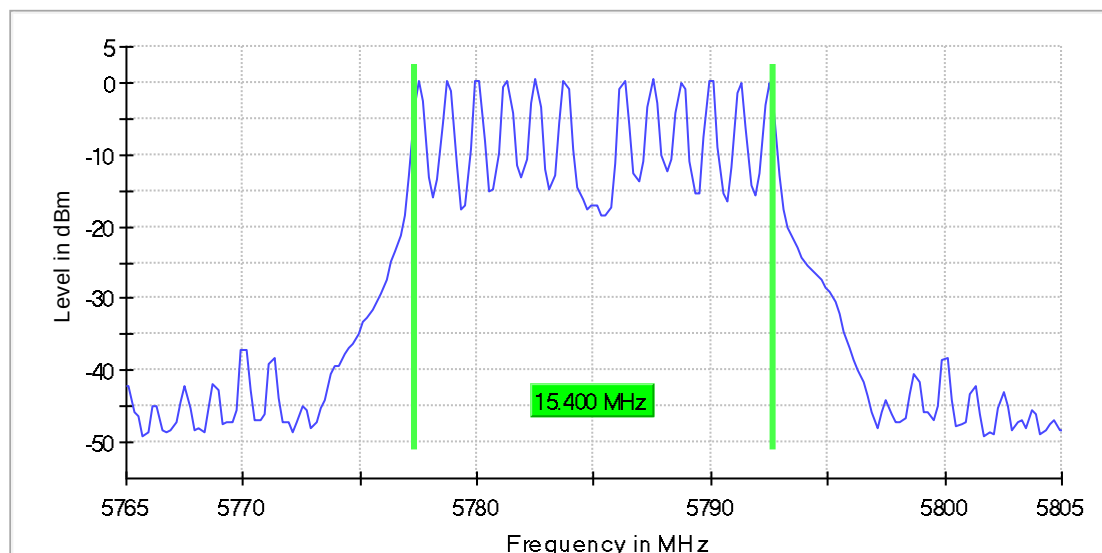
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5785.000000	15.400000	---	---	5777.300000	5792.700000

(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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	3 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.09 dB	0.30 dB
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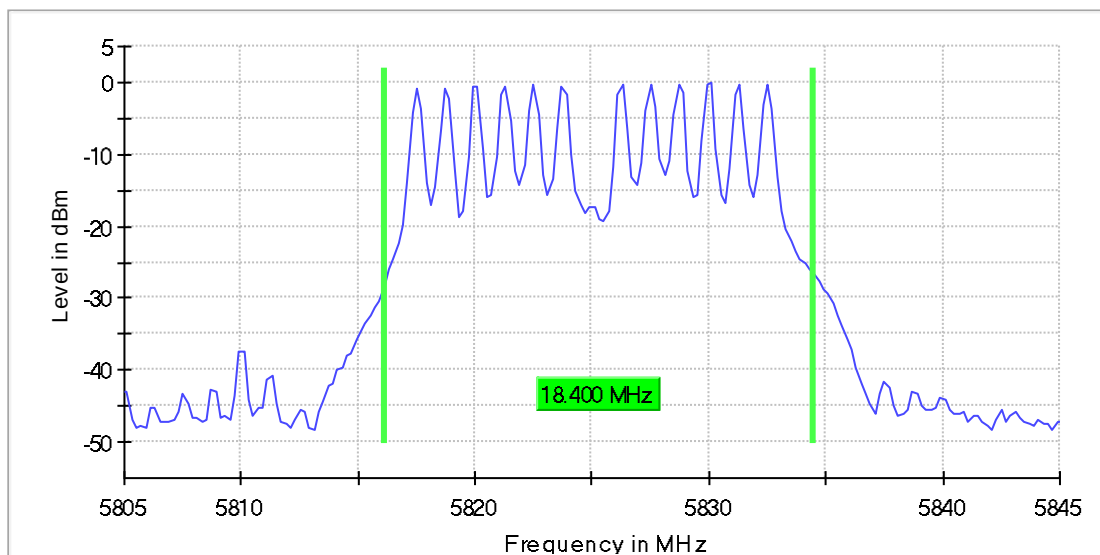
Emission Bandwidth 26 dB (5825 MHz; 20.000 dBm; 20 MHz)

26 dB Bandwidth

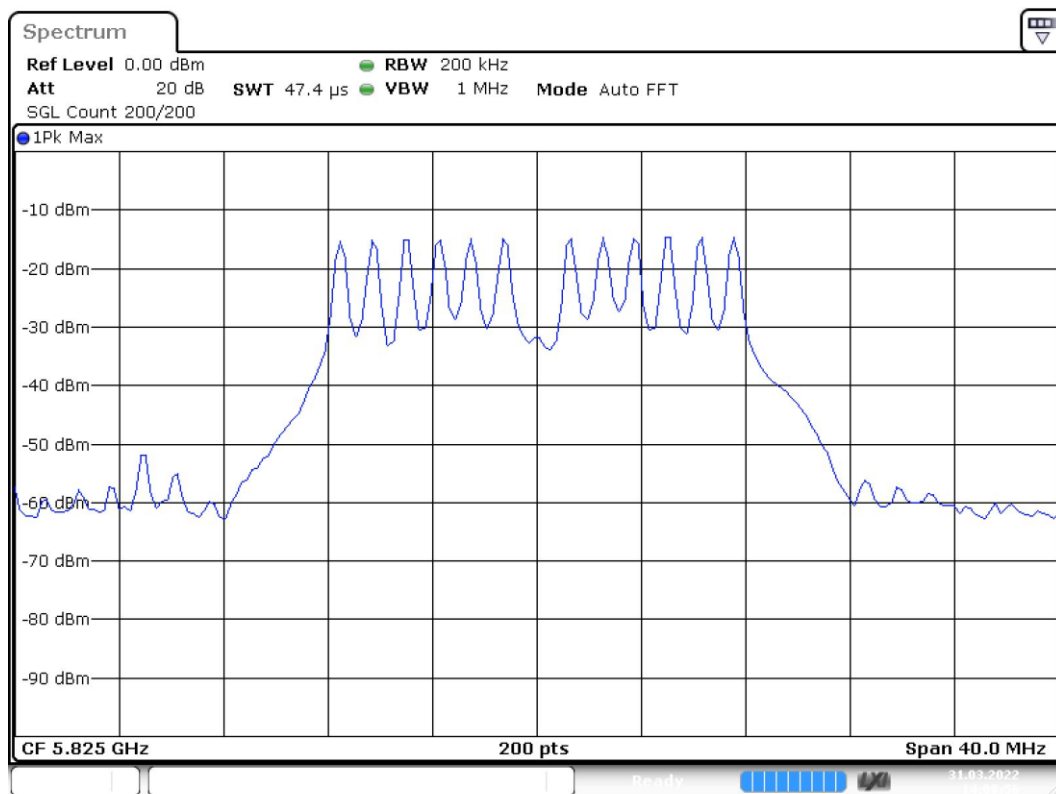
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	18.400000	---	---	5816.100000	5834.500000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-0.1	PASS



Bandwidth



Date: 31.MAR.2022 14:08:56

Measurement

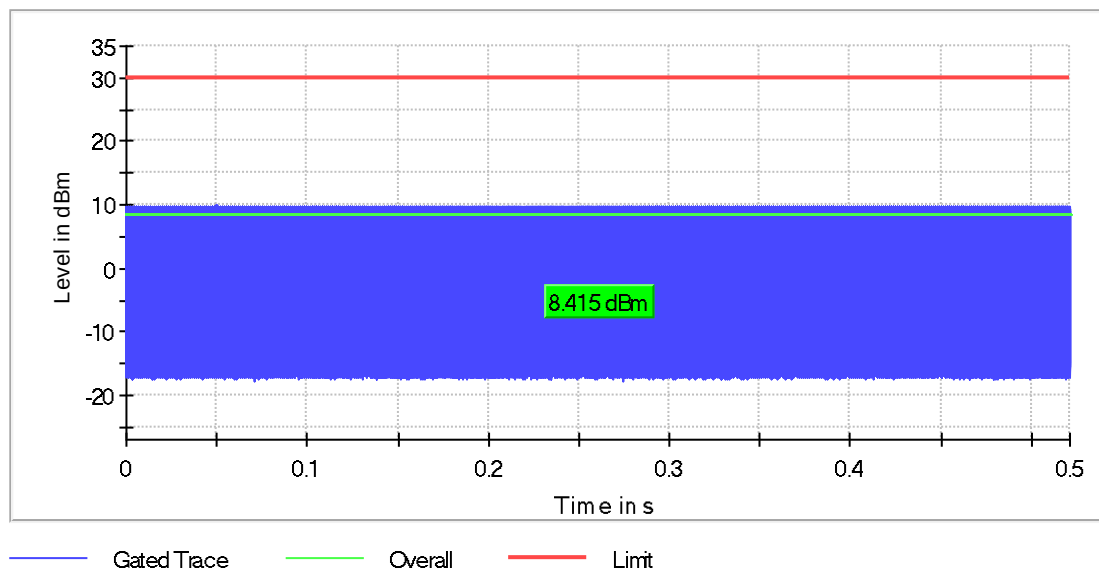
Setting	Instrument Value	Target Value
Start Frequency	5.80500 GHz	5.80500 GHz
Stop Frequency	5.84500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	200	~ 200
SweepTime	47.405 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 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	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.01 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),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5825.000000	8.4	30.0	8.4	44.909	PASS



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

Customized settings.

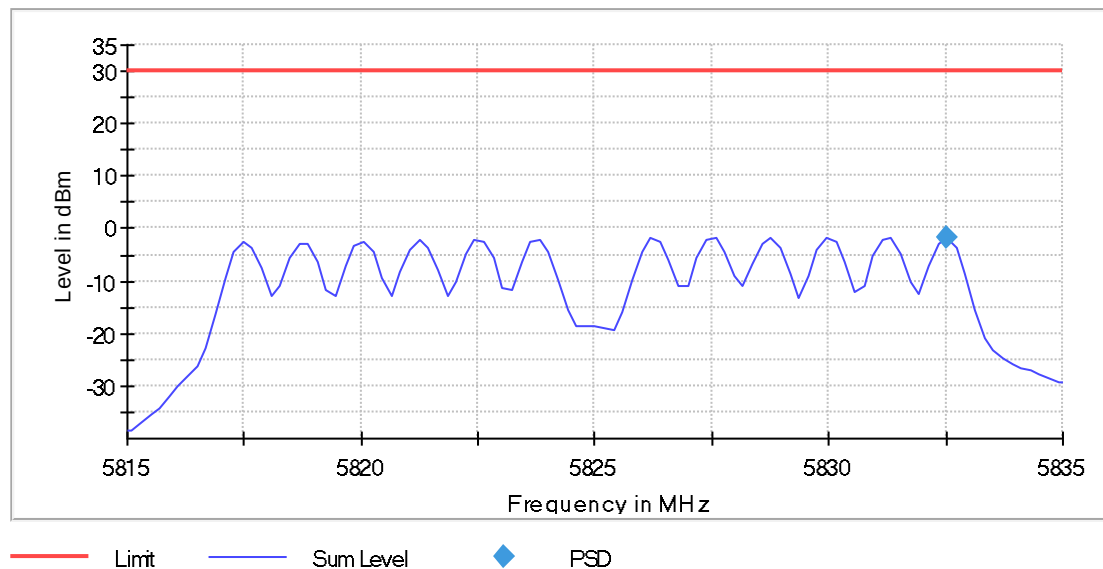
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5832.524752	-1.680	30.0	PASS

Ports

Port	Duty Cycle (%)
1	29.836



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	30	30
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	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

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

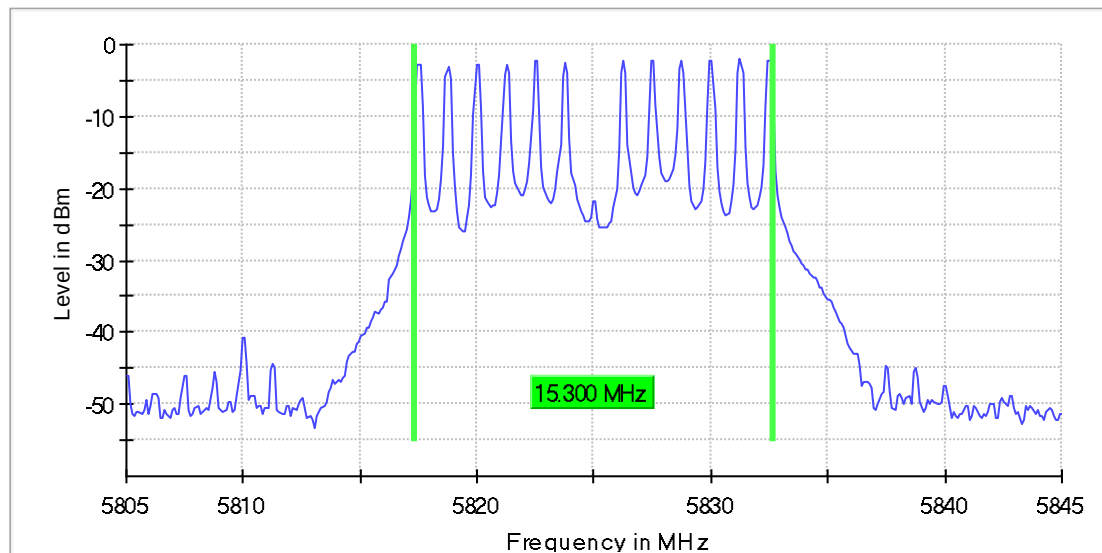
Customized settings.

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	15.300000	0.500000	---	5817.350000	5832.650000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5825.000000	-2.1	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	2 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.13 dB	0.30 dB

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

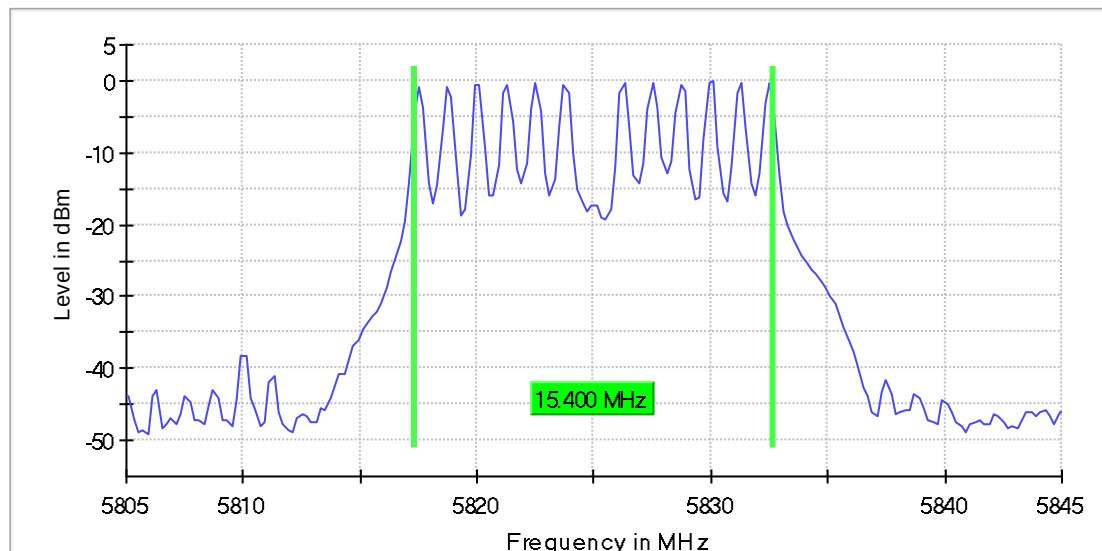
Customized settings.

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5825.000000	15.400000	---	---	5817.300000	5832.700000

(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	3 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.25 dB	0.30 dB
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Band Edge high (5825 MHz; 20.000 dBm; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

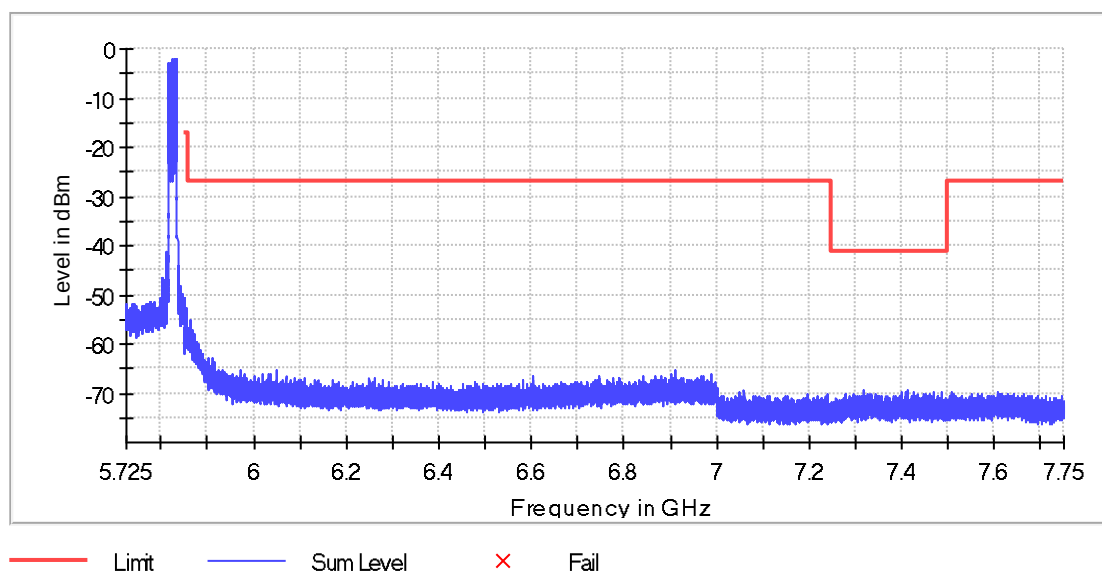
DUT Frequency (MHz)	Result
5825.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5831.225000	-2.1

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
7412.875000	-69.2	28.0	-41.2	PASS
7412.925000	-69.3	28.1	-41.2	PASS
7316.175000	-69.3	28.1	-41.2	PASS
7316.225000	-69.4	28.2	-41.2	PASS
5863.725000	-55.3	28.3	-27.0	PASS
7485.125000	-69.7	28.5	-41.2	PASS
7425.125000	-69.7	28.5	-41.2	PASS
7397.925000	-69.8	28.6	-41.2	PASS
7407.775000	-70.0	28.7	-41.2	PASS
7467.225000	-70.0	28.7	-41.2	PASS
7485.075000	-70.0	28.8	-41.2	PASS
7397.875000	-70.0	28.8	-41.2	PASS
7332.425000	-70.1	28.9	-41.2	PASS
7332.475000	-70.1	28.9	-41.2	PASS
7295.225000	-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	40	40
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	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	50	50
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	3 / max. 3	max. 3
Stable	0 / 1	1
Max Stable Difference	4.19 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 38 (5190 MHz)
WLAN CH 159 (5795 MHz)

WLAN CH 46 (5230 MHz)

WLAN CH 151 (5755 MHz)

Bandwidths

40 MHz (40 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\Hardware Setup

Spectrum Analyzer:

SA FSV 40 (SA FSV 40) @ VISA (ADR
TCPIP::192.168.48.149::INST0::INSTR), SN 1321.3008K39/101229,
FW 3.40

Vector Generator:

VG SMBV100A (VG SMBV100A) @ VISA (ADR
TCPIP::192.168.48.25::INST0::INSTR), SN 260451, FW 4.15.125.49

Generator:

SMB100A (SMB100A) @ VISA (ADR
TCPIP::192.168.48.30::INST0::INSTR), SN 178361, FW 3.20.390.24
/ 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	5190.000	20.0	40.000000	PASS
RF output power	5190.000	20.0	40.000000	PASS
Power Spectral Density	5190.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5190.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5190.000	20.0	40.000000	PASS
Band Edge low	5190.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5230.000	20.0	40.000000	PASS
RF output power	5230.000	20.0	40.000000	PASS
Power Spectral Density	5230.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5230.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5230.000	20.0	40.000000	PASS
Band Edge high	5230.000	20.0	40.000000	PASS

Emission Bandwidth 26 dB (5190 MHz; 20.000 dBm; 40 MHz)

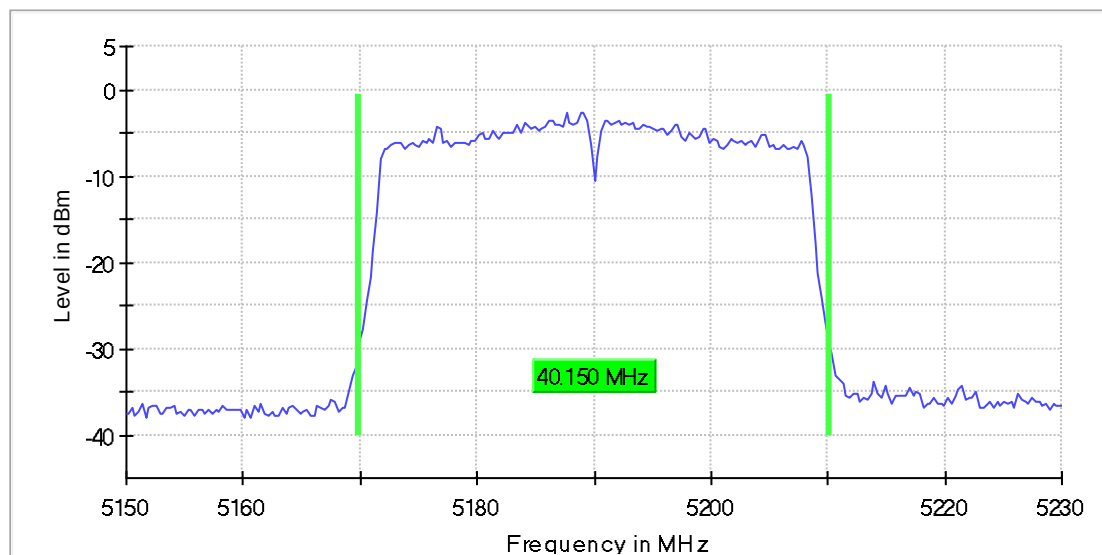
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

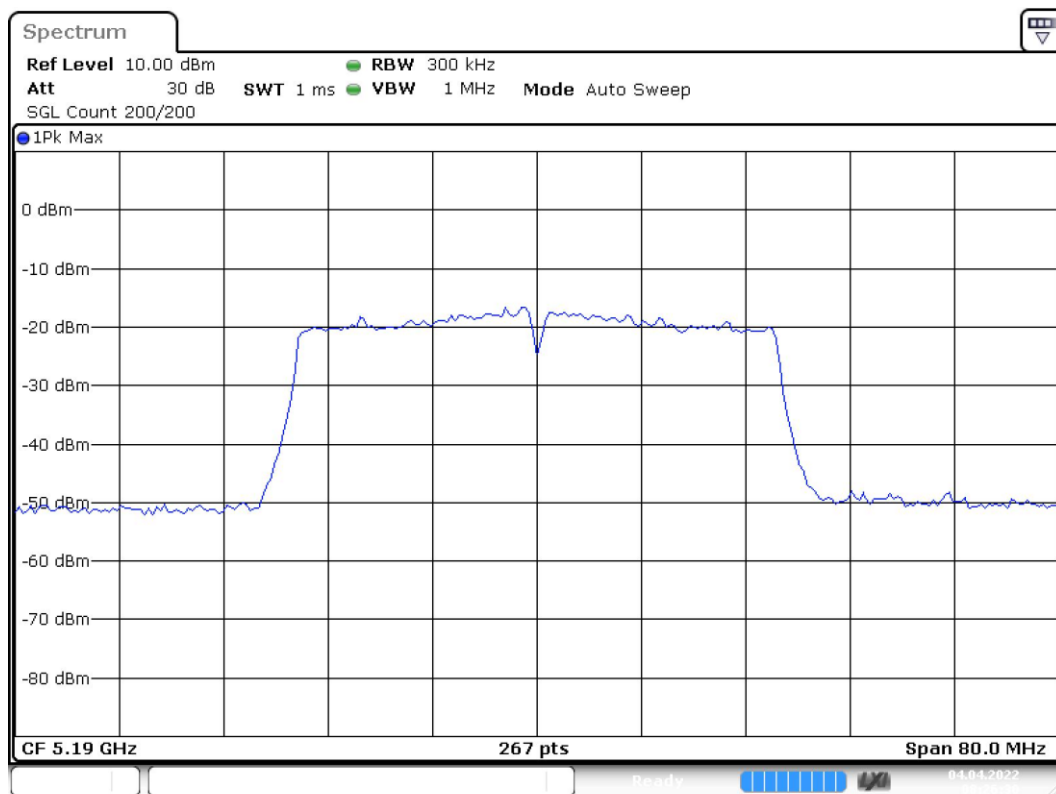
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5190.000000	40.149812	---	---	5169.925094	5210.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5190.000000	-2.6	PASS



Bandwidth



Date: 4.APR.2022 08:26:30

Measurement

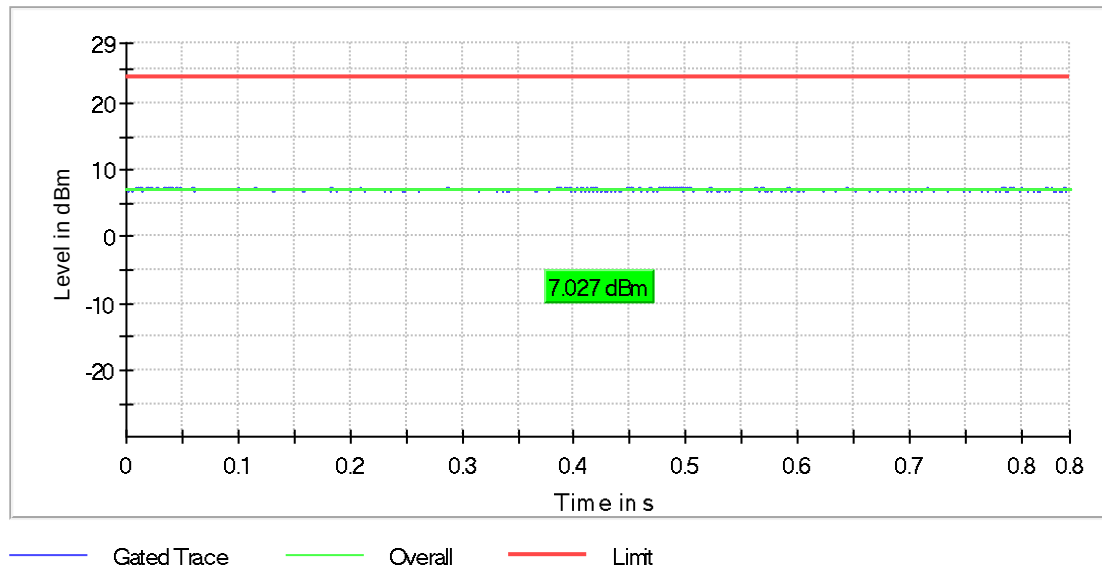
Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	63 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5190 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5190.000000	7.0	24.0	7.0	83.397	PASS



Power Spectral Density (5190 MHz; 20.000 dBm; 40 MHz)

Customized settings.

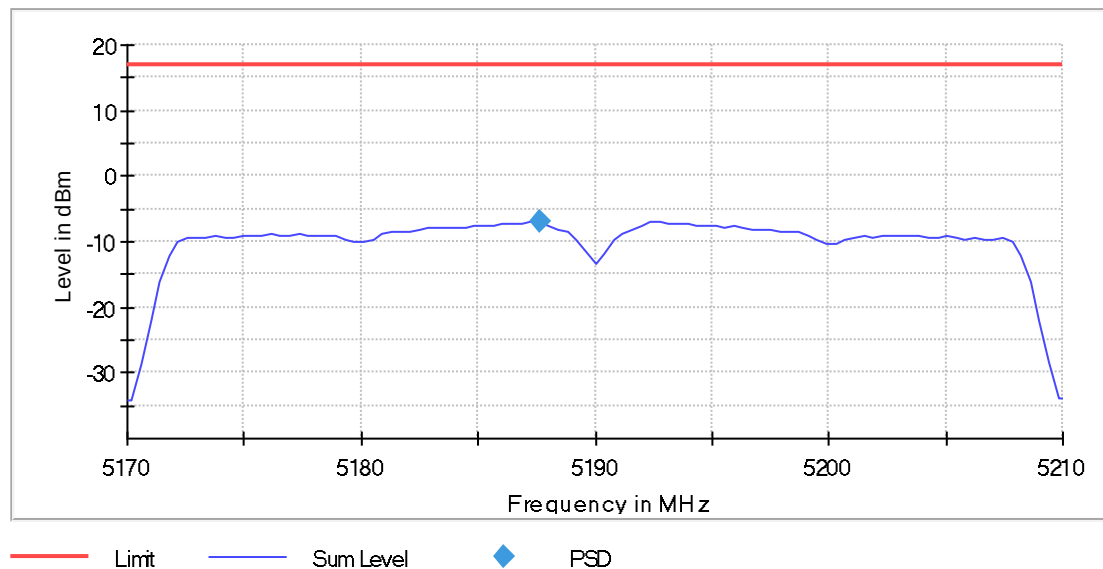
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5190.000000	5187.623762	-7.000	17.0	PASS

Ports

Port	Duty Cycle (%)
1	81.748



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17000 GHz	5.17000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5190 MHz; 20.000 dBm; 40 MHz)

Customized settings.

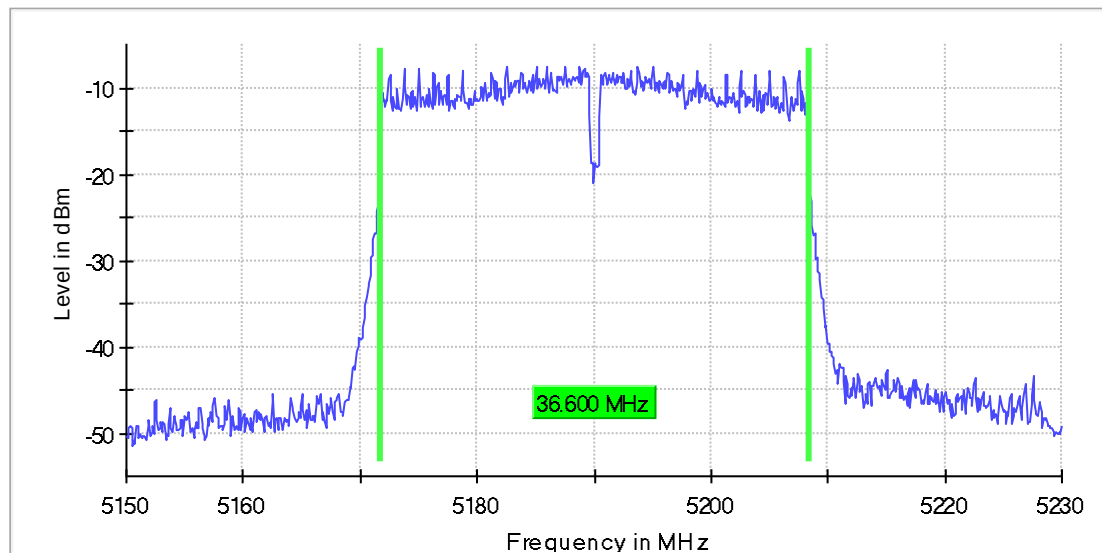
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5190.000000	36.600000	---	---	5171.750000	5208.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5190.000000	-7.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	33 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.30 dB	0.30 dB

Occupied Channel Bandwidth 99% (5190 MHz; 20.000 dBm; 40 MHz)

Customized settings.

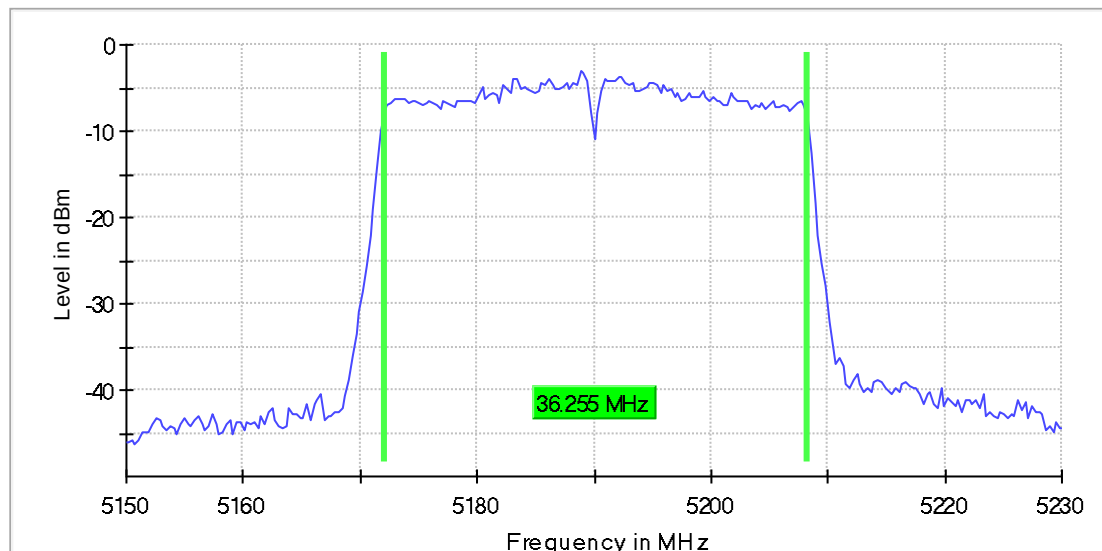
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5190.000000	36.254682	---	---	5172.022472	5208.277154

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

DUT Frequency (MHz)	Result
5190.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamplifier	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	0.29 dB	0.30 dB
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Band Edge low (5190 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

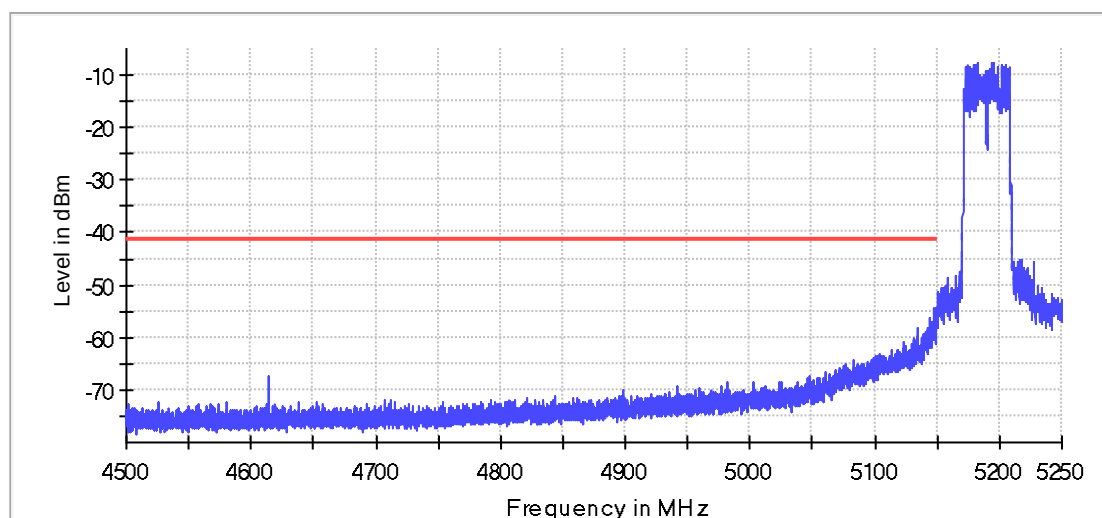
DUT Frequency (MHz)	Result
5190.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5182.525000	-7.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5147.975000	-54.2	13.0	-41.2	PASS
5148.775000	-54.5	13.3	-41.2	PASS
5148.075000	-54.6	13.4	-41.2	PASS
5147.925000	-54.7	13.4	-41.2	PASS
5147.825000	-55.0	13.8	-41.2	PASS
5148.025000	-55.0	13.8	-41.2	PASS
5147.875000	-55.1	13.9	-41.2	PASS
5148.725000	-55.1	13.9	-41.2	PASS
5148.825000	-55.3	14.1	-41.2	PASS
5149.375000	-55.3	14.1	-41.2	PASS
5149.325000	-56.0	14.7	-41.2	PASS
5149.425000	-56.1	14.9	-41.2	PASS
5144.425000	-56.1	14.9	-41.2	PASS
5148.125000	-56.1	14.9	-41.2	PASS
5148.975000	-56.3	15.0	-41.2	PASS



— Limit — Sum Level × Fail

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	40	40
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	50	50
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	3 / max. 3	max. 3
Stable	0 / 1	1
Max Stable Difference	5.06 dB	0.50 dB

Emission Bandwidth 26 dB (5230 MHz; 20.000 dBm; 40 MHz)

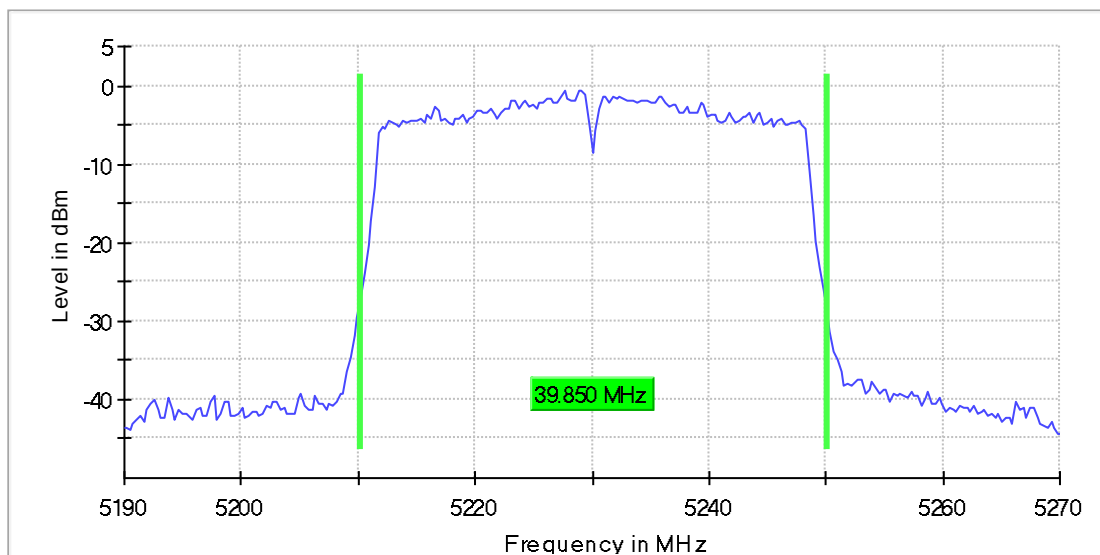
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

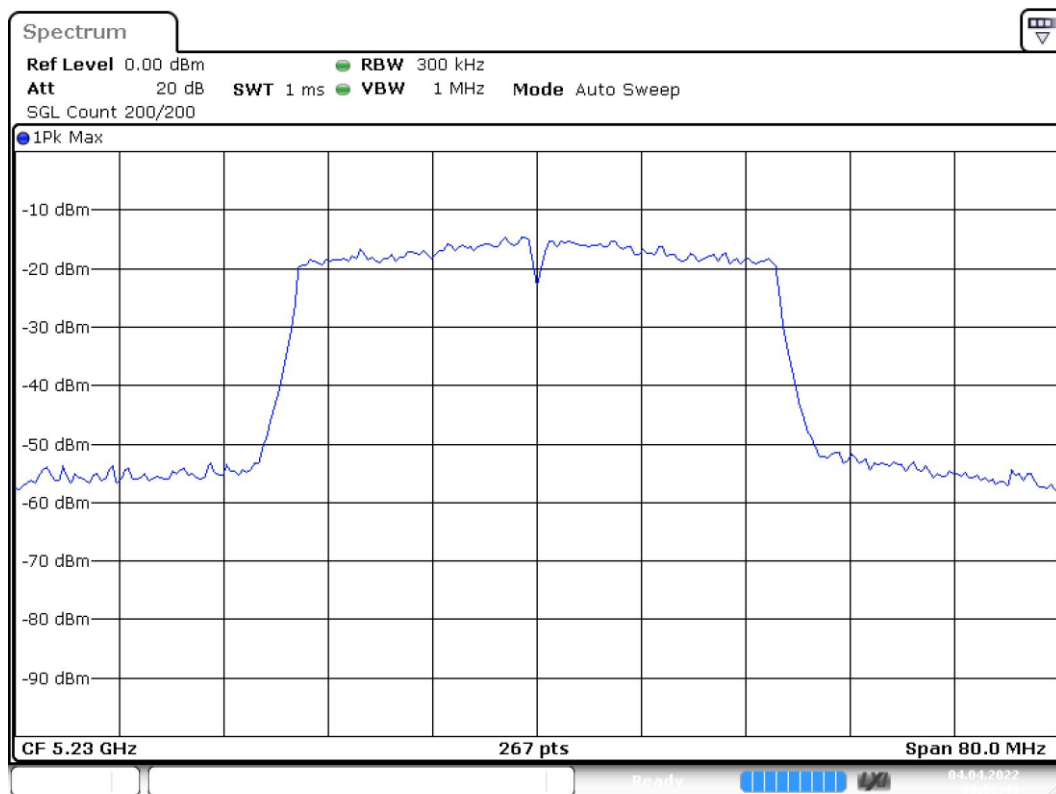
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	39.850187	---	---	5210.224719	5250.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5230.000000	-0.6	PASS



Bandwidth



Date: 4.APR.2022 09:06:44

Measurement

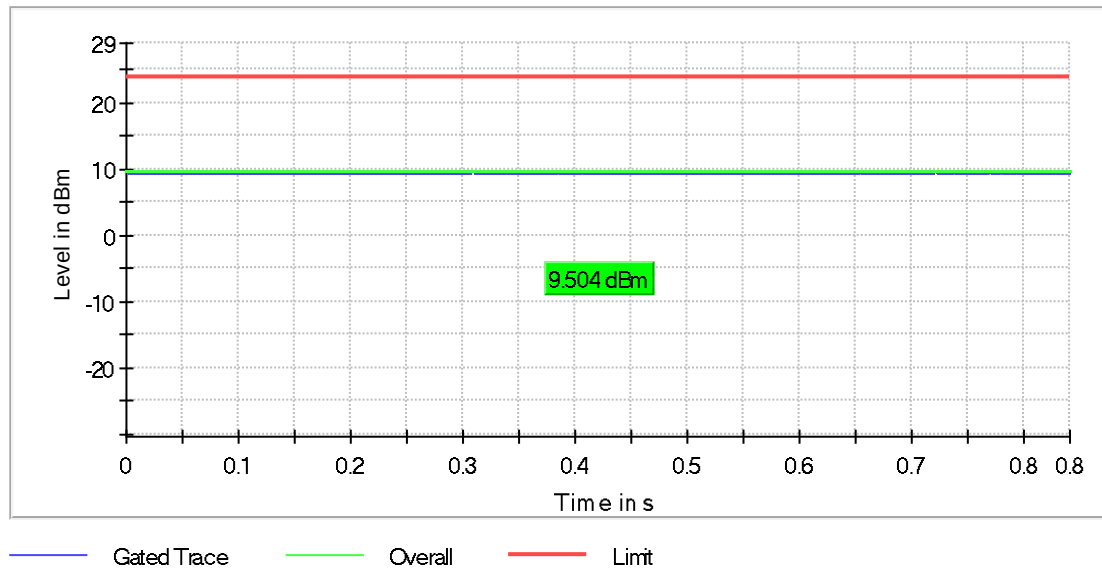
Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.27000 GHz	5.27000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	73 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5230 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5230.000000	9.5	24.0	9.5	83.232	PASS



Power Spectral Density (5230 MHz; 20.000 dBm; 40 MHz)

Customized settings.

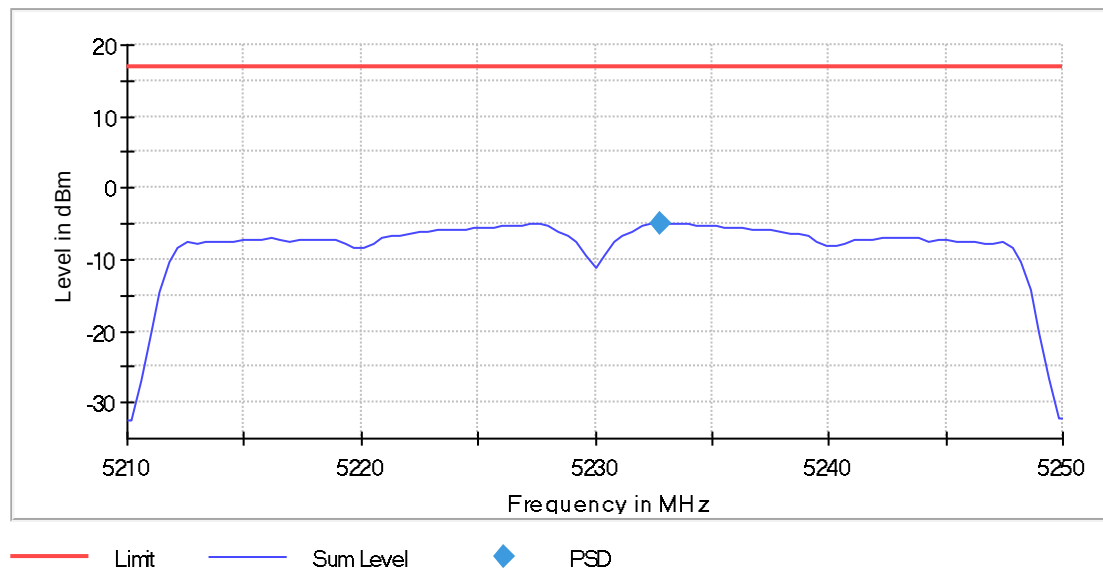
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5232.772277	-4.880	17.0	PASS

Ports

Port	Duty Cycle (%)
1	81.712



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.21000 GHz	5.21000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5230 MHz; 20.000 dBm; 40 MHz)

Customized settings.

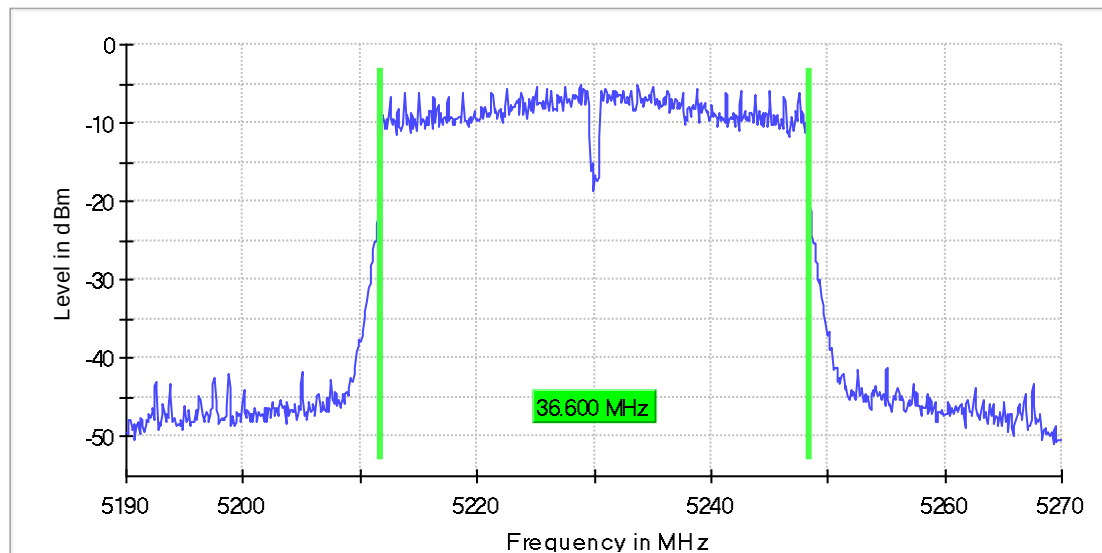
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	36.600000	---	---	5211.750000	5248.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5230.000000	-5.2	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.27000 GHz	5.27000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	29 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.23 dB	0.30 dB

Occupied Channel Bandwidth 99% (5230 MHz; 20.000 dBm; 40 MHz)

Customized settings.

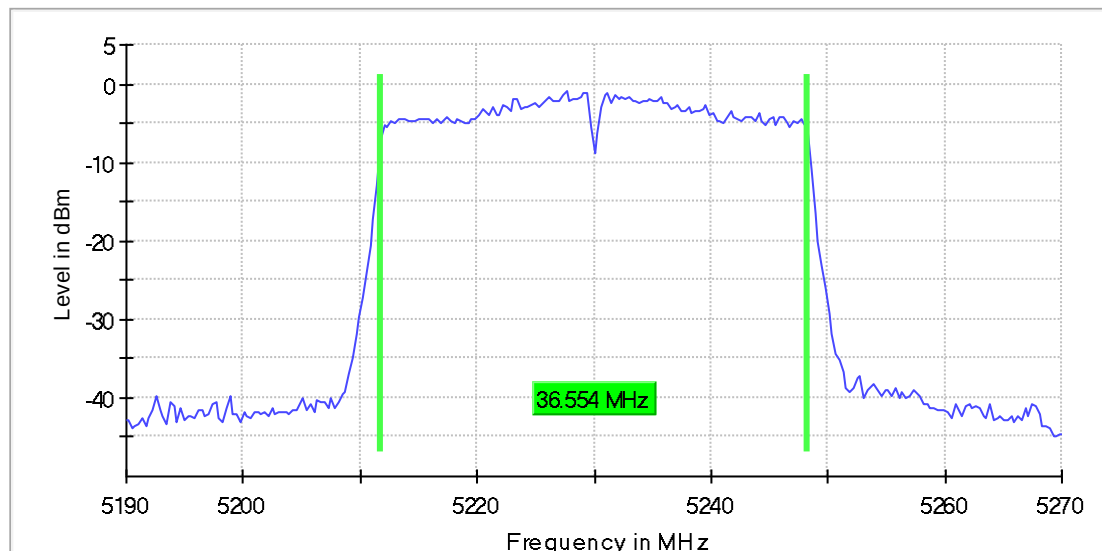
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	36.554308	---	---	5211.722846	5248.277154

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

DUT Frequency (MHz)	Result
5230.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.27000 GHz	5.27000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	30 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.10 dB	0.30 dB
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Band Edge high (5230 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

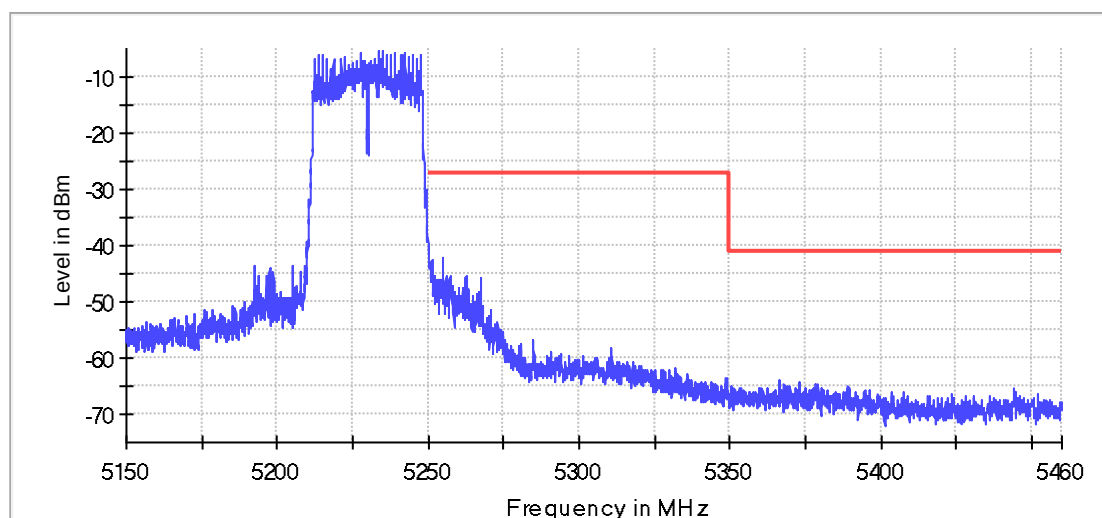
DUT Frequency (MHz)	Result
5230.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5233.775000	-5.2

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5250.025000	-40.1	13.1	-27.0	PASS
5250.275000	-40.1	13.1	-27.0	PASS
5250.225000	-40.2	13.2	-27.0	PASS
5250.075000	-40.3	13.3	-27.0	PASS
5250.175000	-40.4	13.4	-27.0	PASS
5250.325000	-40.7	13.7	-27.0	PASS
5250.125000	-41.5	14.5	-27.0	PASS
5254.975000	-42.2	15.2	-27.0	PASS
5255.025000	-42.2	15.2	-27.0	PASS
5251.275000	-42.6	15.6	-27.0	PASS
5250.375000	-42.7	15.7	-27.0	PASS
5251.225000	-42.9	15.9	-27.0	PASS
5251.175000	-43.3	16.3	-27.0	PASS
5250.425000	-43.5	16.5	-27.0	PASS
5251.125000	-43.5	16.5	-27.0	PASS



— Limit — Sum Level × Fail

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	40	40
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	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	50	50
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	3 / max. 3	max. 3
Stable	1 / 1	1
Max Stable Difference	0.12 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 38 (5190 MHz)	WLAN CH 46 (5230 MHz)	WLAN CH 151 (5755 MHz)
WLAN CH 159 (5795 MHz)	WLAN CH 54 (5270 MHz)	WLAN CH 62 (5310 MHz)
WLAN CH 102 (5510 MHz)	WLAN CH 110 (5550 MHz)	WLAN CH 118 (5590 MHz)
WLAN CH 134 (5670 MHz)		

Bandwidths

40 MHz (40 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\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.149::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100A (VG SMBV100A) @ VISA (ADR TCPIP::192.168.48.25::INST0::INSTR), SN 260451, FW 4.15.125.49
Generator:	SMB100A (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 178361, 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	5270.000	20.0	40.000000	PASS
RF output power	5270.000	20.0	40.000000	PASS
Power Spectral Density	5270.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5270.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5270.000	20.0	40.000000	PASS
Band Edge low	5270.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5310.000	20.0	40.000000	PASS
RF output power	5310.000	20.0	40.000000	PASS
Power Spectral Density	5310.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5310.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5310.000	20.0	40.000000	PASS
Band Edge high	5310.000	20.0	40.000000	PASS

Emission Bandwidth 26 dB (5270 MHz; 20.000 dBm; 40 MHz)

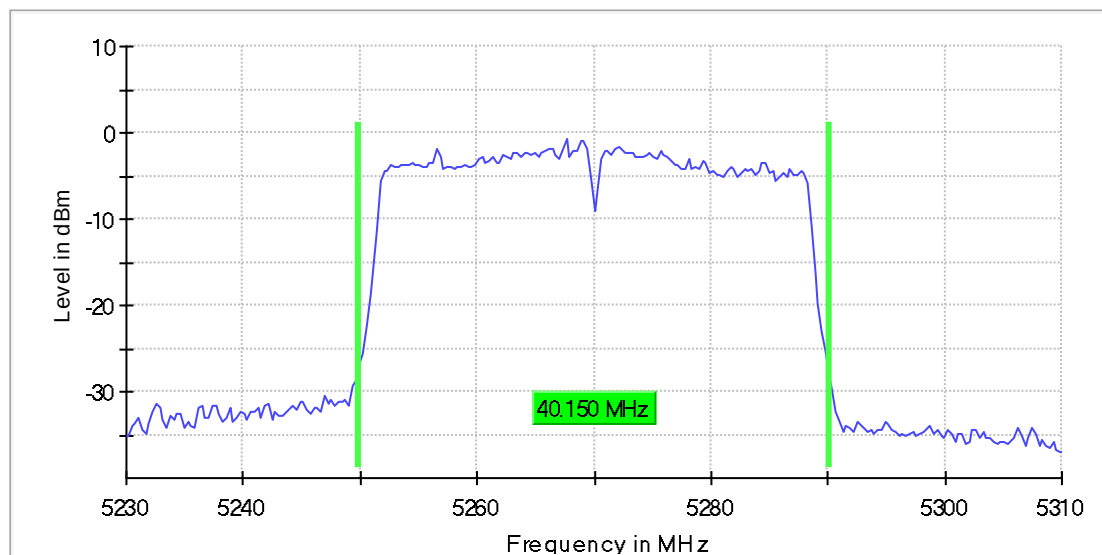
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

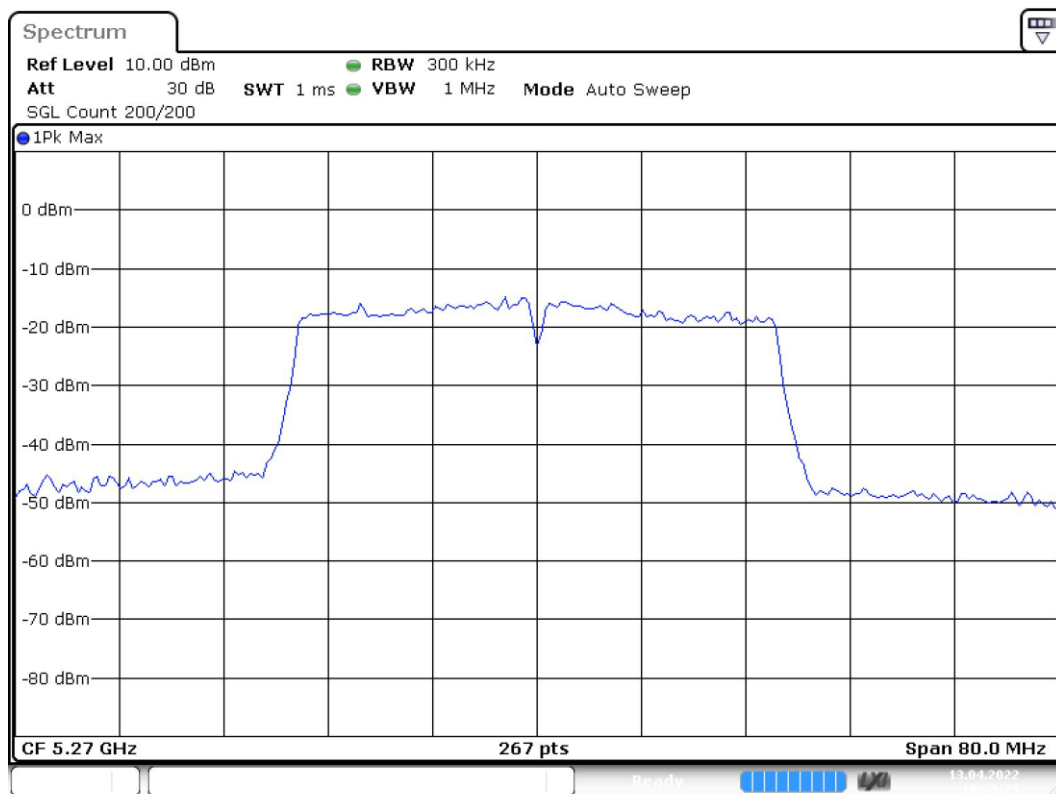
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5270.000000	40.149812	---	---	5249.925094	5290.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5270.000000	-0.7	PASS



Bandwidth



Date: 13.APR.2022 10:25:26

Measurement

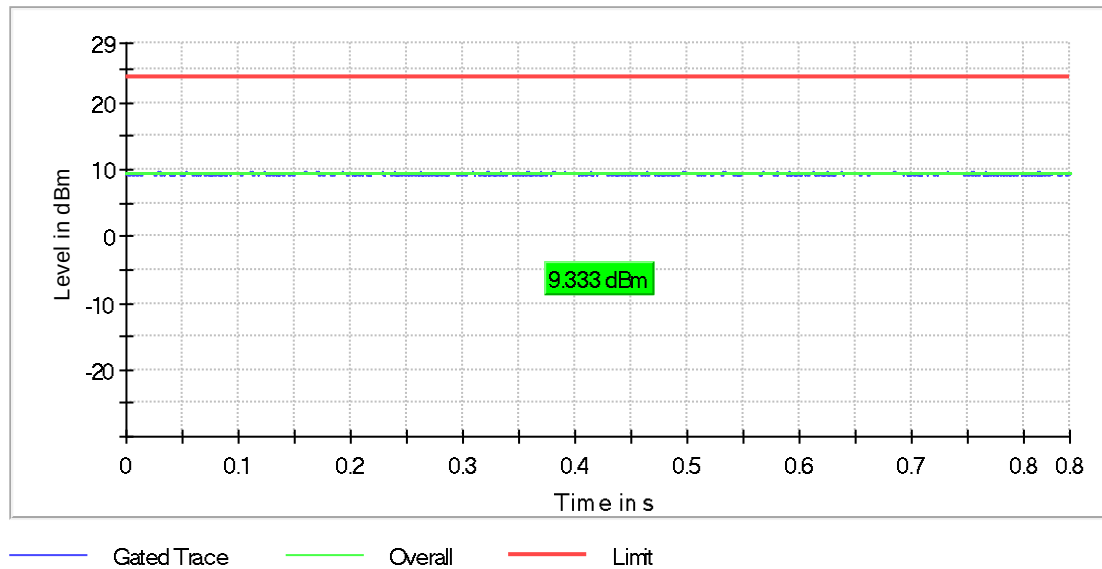
Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.31000 GHz	5.31000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	75 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5270 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5270.000000	9.3	24.0	9.3	83.236	PASS



Power Spectral Density (5270 MHz; 20.000 dBm; 40 MHz)

Customized settings.

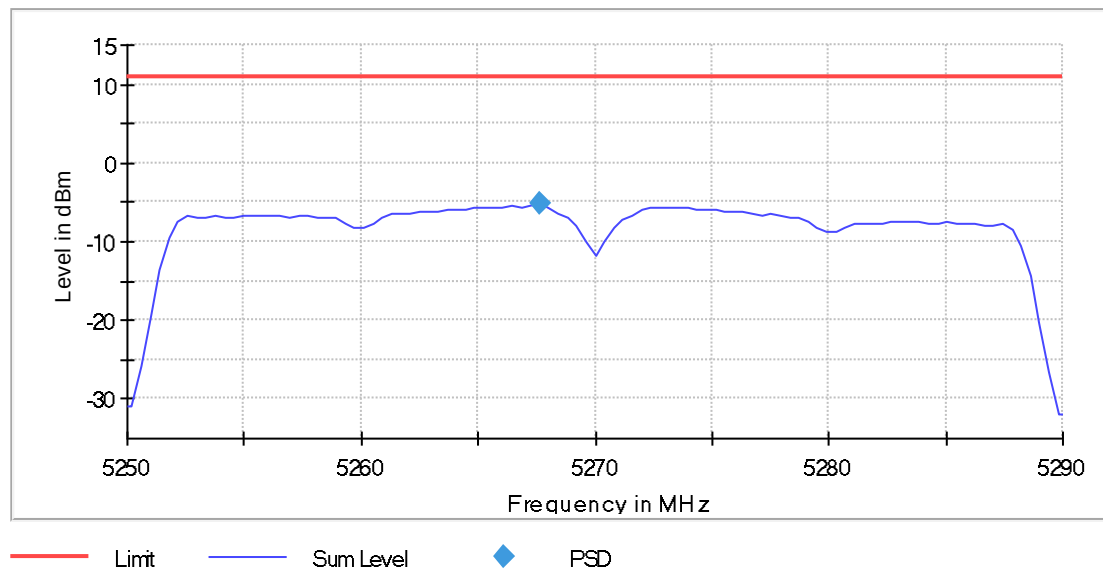
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5267.623762	-5.268	11.0	PASS

Ports

Port	Duty Cycle (%)
1	81.748



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.29000 GHz	5.29000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5270 MHz; 20.000 dBm; 40 MHz)

Customized settings.

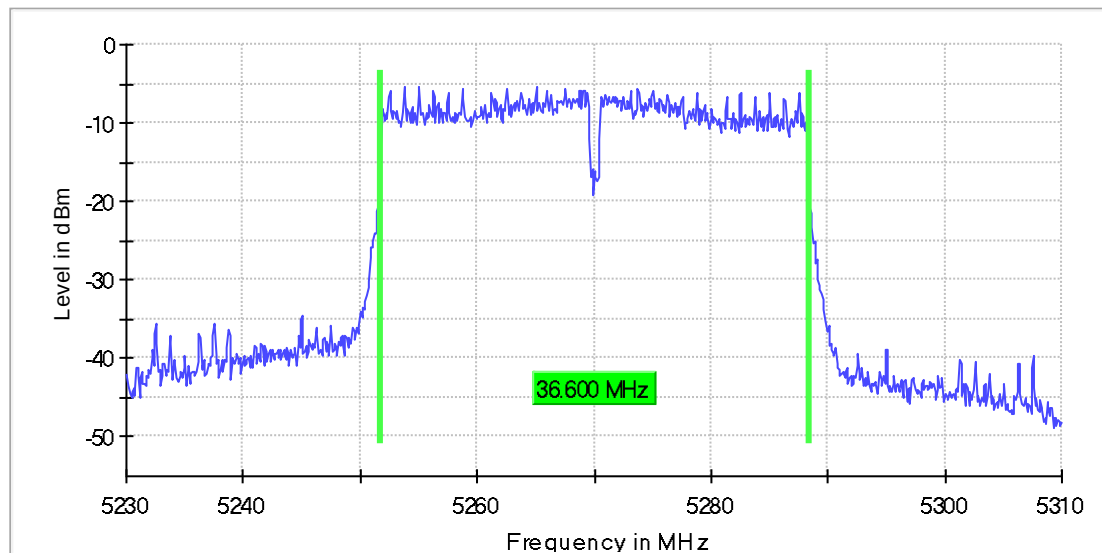
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5270.000000	36.600000	---	---	5251.750000	5288.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5270.000000	-5.4	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.31000 GHz	5.31000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	33 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.15 dB	0.30 dB

Occupied Channel Bandwidth 99% (5270 MHz; 20.000 dBm; 40 MHz)

Customized settings.

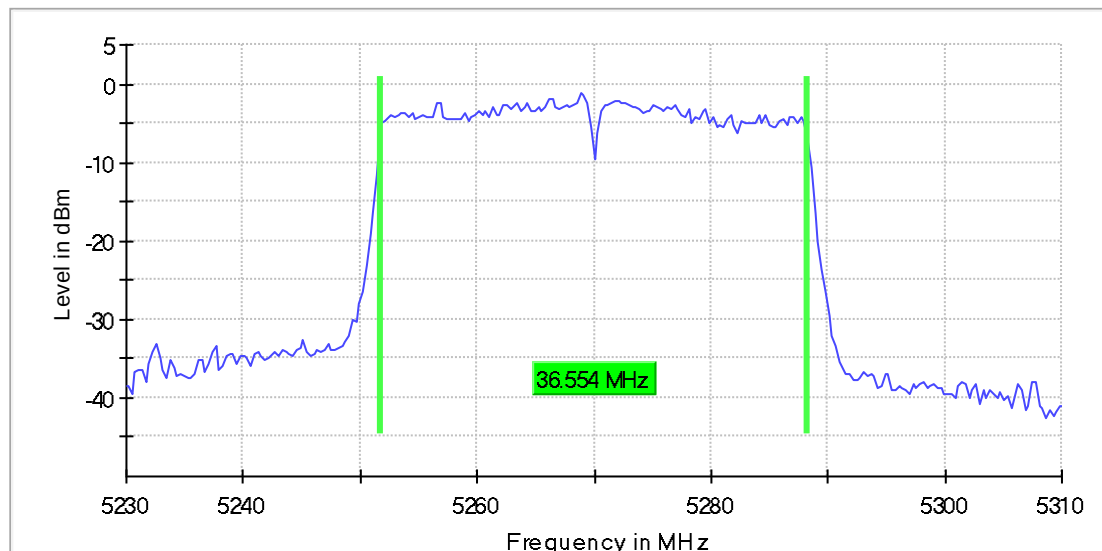
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5270.000000	36.554308	---	---	5251.722846	5288.277154

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

DUT Frequency (MHz)	Result
5270.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.31000 GHz	5.31000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	23 / max. 150	max. 150
Stable	1 / 1	1

Max Stable Difference	0.28 dB	0.30 dB
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Band Edge low (5270 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

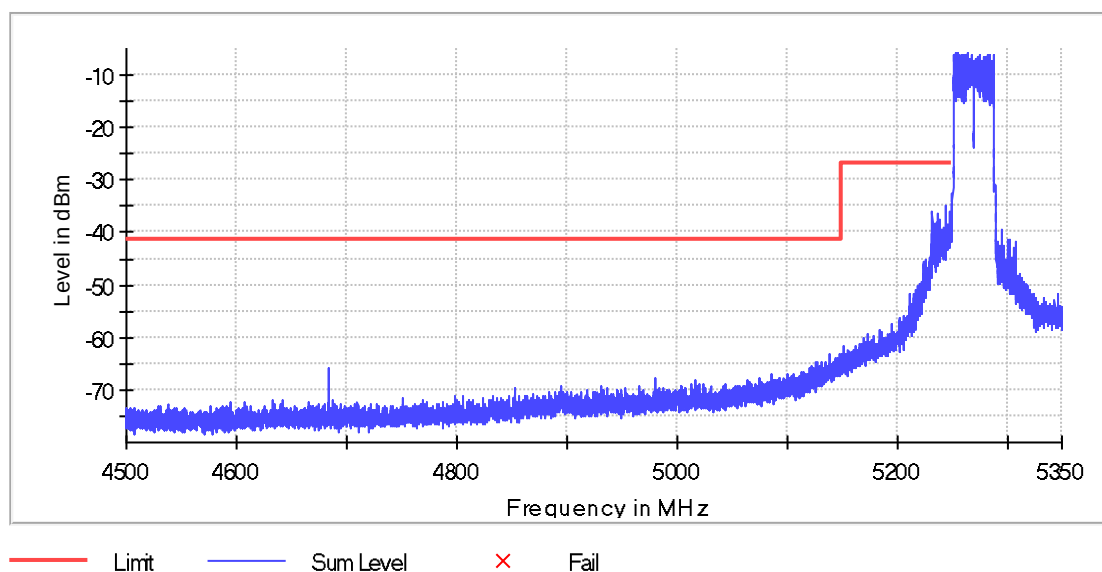
DUT Frequency (MHz)	Result
5270.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5264.975000	-5.6

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5245.025000	-34.8	7.8	-27.0	PASS
5244.975000	-35.2	8.2	-27.0	PASS
5245.075000	-35.8	8.8	-27.0	PASS
5247.525000	-36.1	9.1	-27.0	PASS
5232.525000	-36.2	9.2	-27.0	PASS
5249.925000	-36.2	9.2	-27.0	PASS
5237.525000	-36.3	9.3	-27.0	PASS
5232.575000	-36.4	9.4	-27.0	PASS
5249.975000	-36.7	9.7	-27.0	PASS
5237.475000	-36.7	9.7	-27.0	PASS
5249.875000	-37.1	10.1	-27.0	PASS
5237.575000	-37.1	10.1	-27.0	PASS
5247.475000	-37.3	10.3	-27.0	PASS
5249.375000	-37.3	10.3	-27.0	PASS
5238.775000	-37.4	10.4	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.35000 GHz	5.35000 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	40	40
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	5.25000 GHz	5.25000 GHz
Span	750.000 MHz	750.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	15000	~ 15000
SweepTime	15.000 ms	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
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	3 / max. 3	max. 3
Stable	0 / 1	1
Max Stable Difference	3.57 dB	0.50 dB

Emission Bandwidth 26 dB (5310 MHz; 20.000 dBm; 40 MHz)

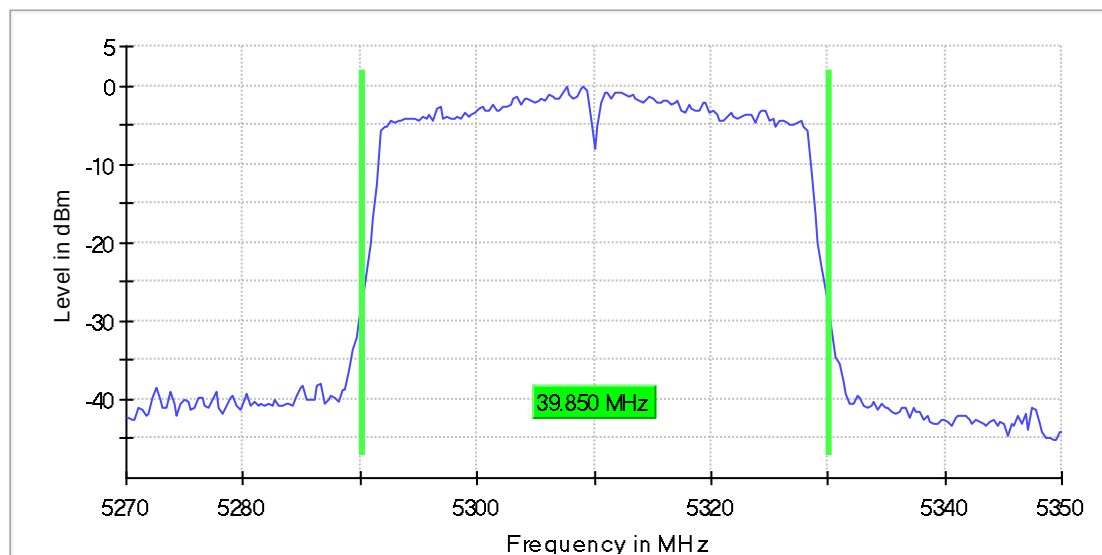
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

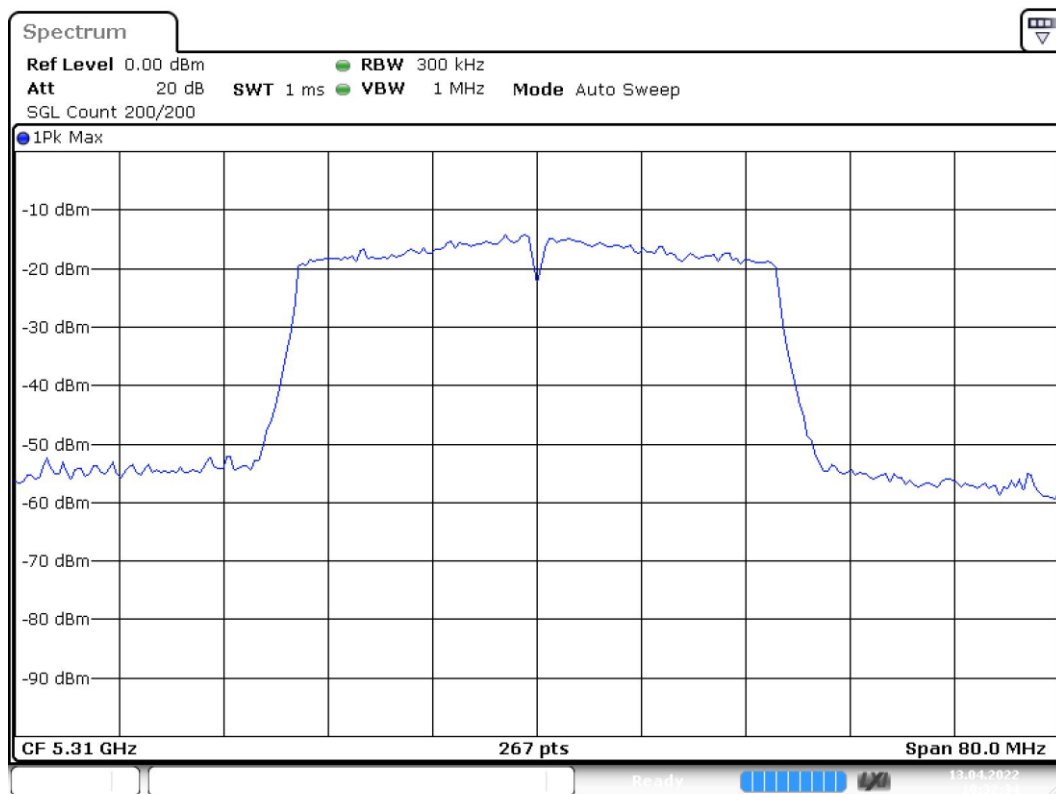
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5310.000000	39.850187	---	---	5290.224719	5330.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5310.000000	0.0	PASS



Bandwidth



Date: 13.APR.2022 10:32:35

Measurement

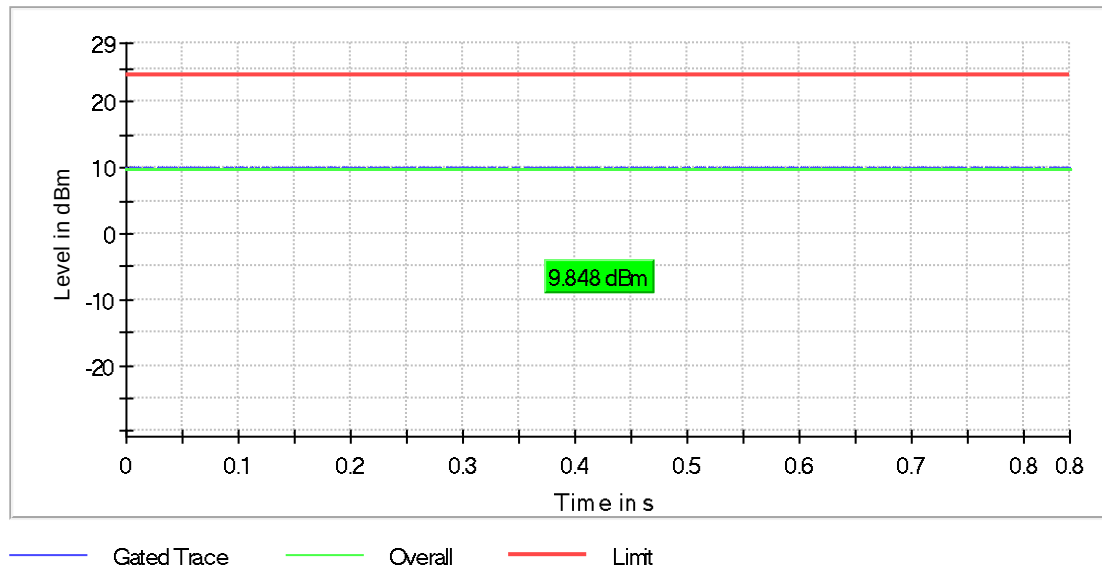
Setting	Instrument Value	Target Value
Start Frequency	5.27000 GHz	5.27000 GHz
Stop Frequency	5.35000 GHz	5.35000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	96 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5310 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5310.000000	9.8	24.0	9.8	83.181	PASS



Power Spectral Density (5310 MHz; 20.000 dBm; 40 MHz)

Customized settings.

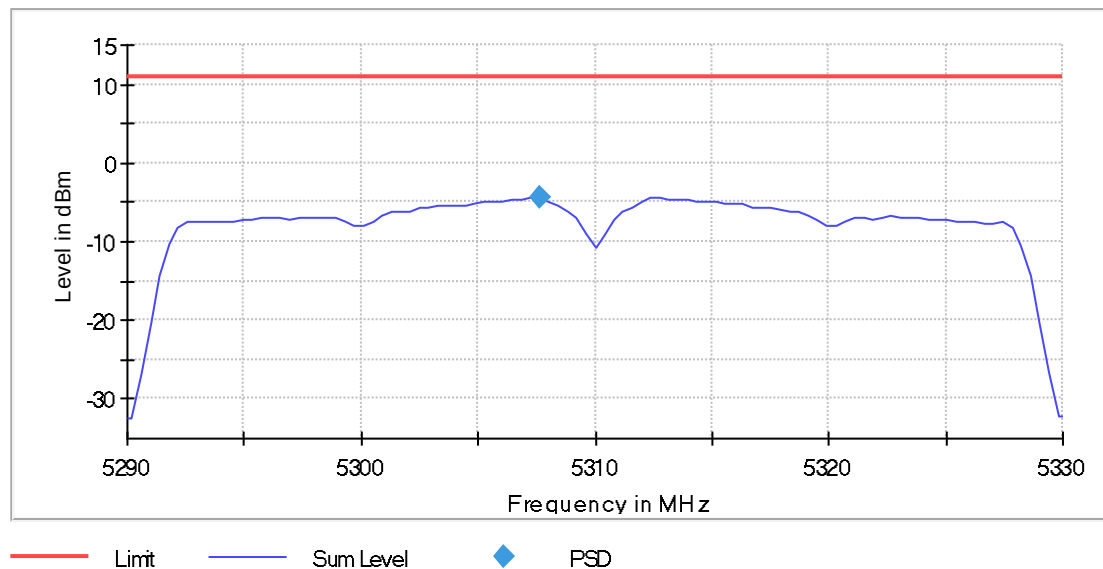
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5310.000000	5307.623762	-4.450	11.0	PASS

Ports

Port	Duty Cycle (%)
1	81.709



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.29000 GHz	5.29000 GHz
Stop Frequency	5.33000 GHz	5.33000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5310 MHz; 20.000 dBm; 40 MHz)

Customized settings.

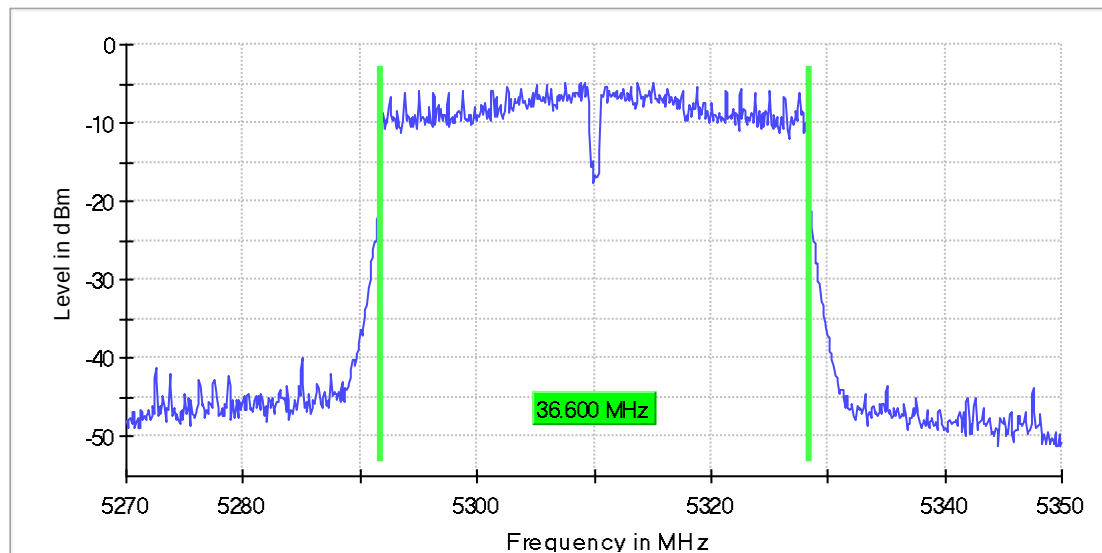
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5310.000000	36.600000	---	---	5291.750000	5328.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5310.000000	-4.8	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.27000 GHz	5.27000 GHz
Stop Frequency	5.35000 GHz	5.35000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	29 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.28 dB	0.30 dB

Occupied Channel Bandwidth 99% (5310 MHz; 20.000 dBm; 40 MHz)

Customized settings.

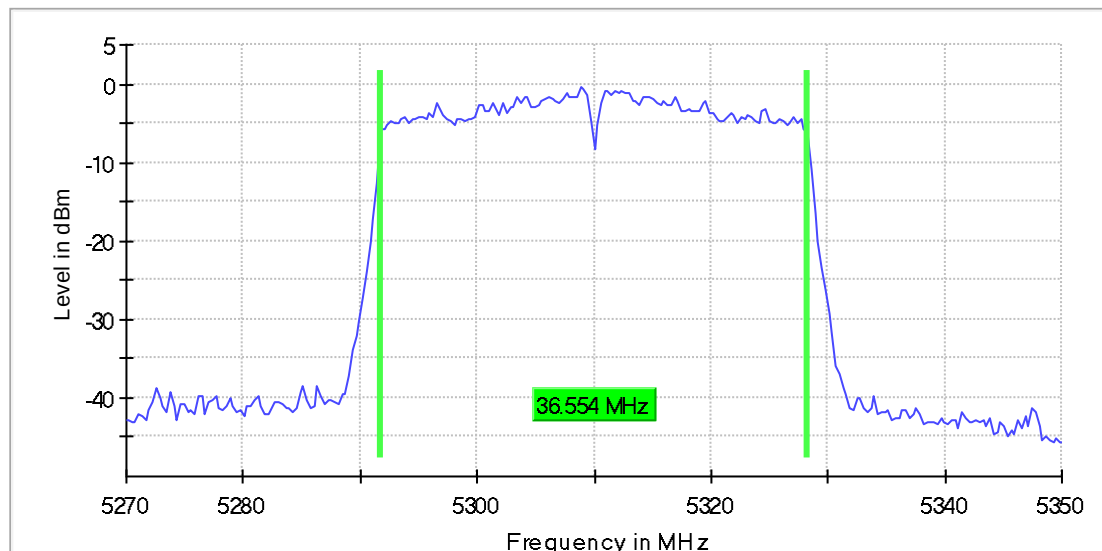
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5310.000000	36.554308	---	---	5291.722846	5328.277154

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

DUT Frequency (MHz)	Result
5310.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.27000 GHz	5.27000 GHz
Stop Frequency	5.35000 GHz	5.35000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamplifier	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
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Band Edge high (5310 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

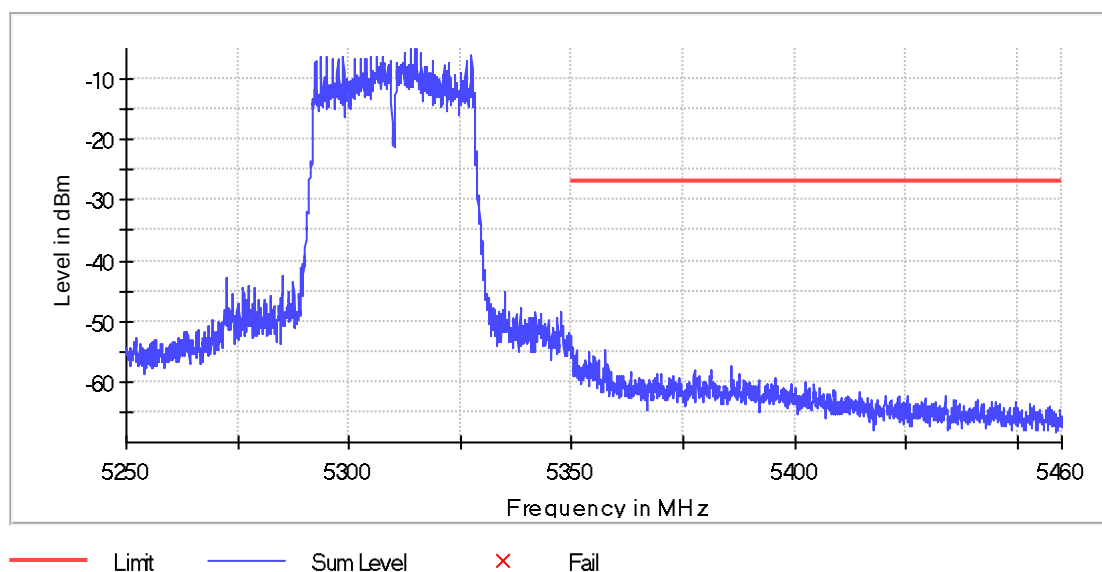
DUT Frequency (MHz)	Result
5310.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5313.725000	-5.0

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5350.025000	-54.0	27.0	-27.0	PASS
5350.075000	-54.4	27.4	-27.0	PASS
5350.975000	-54.7	27.7	-27.0	PASS
5350.125000	-54.7	27.7	-27.0	PASS
5351.025000	-54.8	27.8	-27.0	PASS
5357.475000	-54.8	27.8	-27.0	PASS
5357.525000	-54.8	27.8	-27.0	PASS
5353.725000	-55.0	28.0	-27.0	PASS
5353.775000	-55.2	28.2	-27.0	PASS
5350.625000	-55.8	28.8	-27.0	PASS
5354.975000	-55.8	28.8	-27.0	PASS
5355.025000	-55.9	28.9	-27.0	PASS
5350.575000	-56.2	29.2	-27.0	PASS
5357.425000	-56.2	29.2	-27.0	PASS
5355.925000	-56.2	29.2	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.35000 GHz	5.35000 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	40	40
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	5.35000 GHz	5.35000 GHz
Stop Frequency	5.46000 GHz	5.46000 GHz
Span	110.000 MHz	110.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2200	~ 2200
SweepTime	246.797 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
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	3 / max. 3	max. 3
Stable	0 / 1	1
Max Stable Difference	3.62 dB	0.50 dB

FCC 15.407 2015

DUT Information

Frequencies

WLAN CH 38 (5190 MHz)	WLAN CH 46 (5230 MHz)	WLAN CH 151 (5755 MHz)
WLAN CH 159 (5795 MHz)	WLAN CH 54 (5270 MHz)	WLAN CH 62 (5310 MHz)
WLAN CH 102 (5510 MHz)	WLAN CH 110 (5550 MHz)	WLAN CH 118 (5590 MHz)
WLAN CH 134 (5670 MHz)		

Bandwidths

40 MHz (40 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\Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.149::INST0::INSTR), SN 1321.3008K39/101229, FW 3.40
Vector Generator:	VG SMBV100A (VG SMBV100A) @ VISA (ADR TCPIP::192.168.48.25::INST0::INSTR), SN 260451, FW 4.15.125.49
Generator:	SMB100A (SMB100A) @ VISA (ADR TCPIP::192.168.48.30::INST0::INSTR), SN 178361, 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	5510.000	20.0	40.000000	PASS
RF output power	5510.000	20.0	40.000000	PASS
Power Spectral Density	5510.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5510.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5510.000	20.0	40.000000	PASS
Band Edge low	5510.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5590.000	20.0	40.000000	PASS
RF output power	5590.000	20.0	40.000000	PASS
Power Spectral Density	5590.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5590.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5590.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5670.000	20.0	40.000000	PASS
RF output power	5670.000	20.0	40.000000	PASS
Power Spectral Density	5670.000	20.0	40.000000	PASS
Minimum Emission Bandwidth 6 dB	5670.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5670.000	20.0	40.000000	PASS
Band Edge high	5670.000	20.0	40.000000	PASS

Emission Bandwidth 26 dB (5510 MHz; 20.000 dBm; 40 MHz)

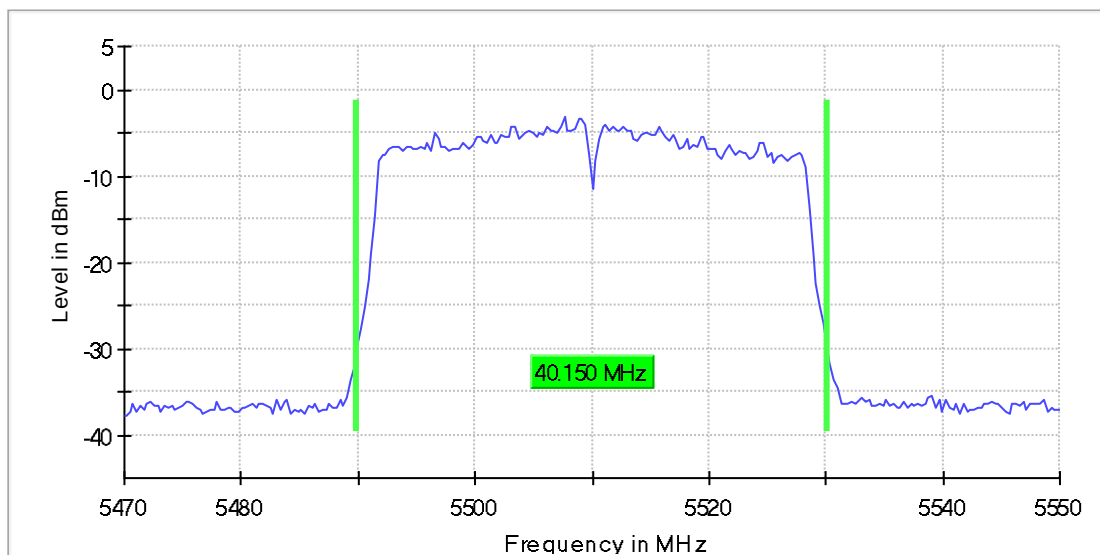
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

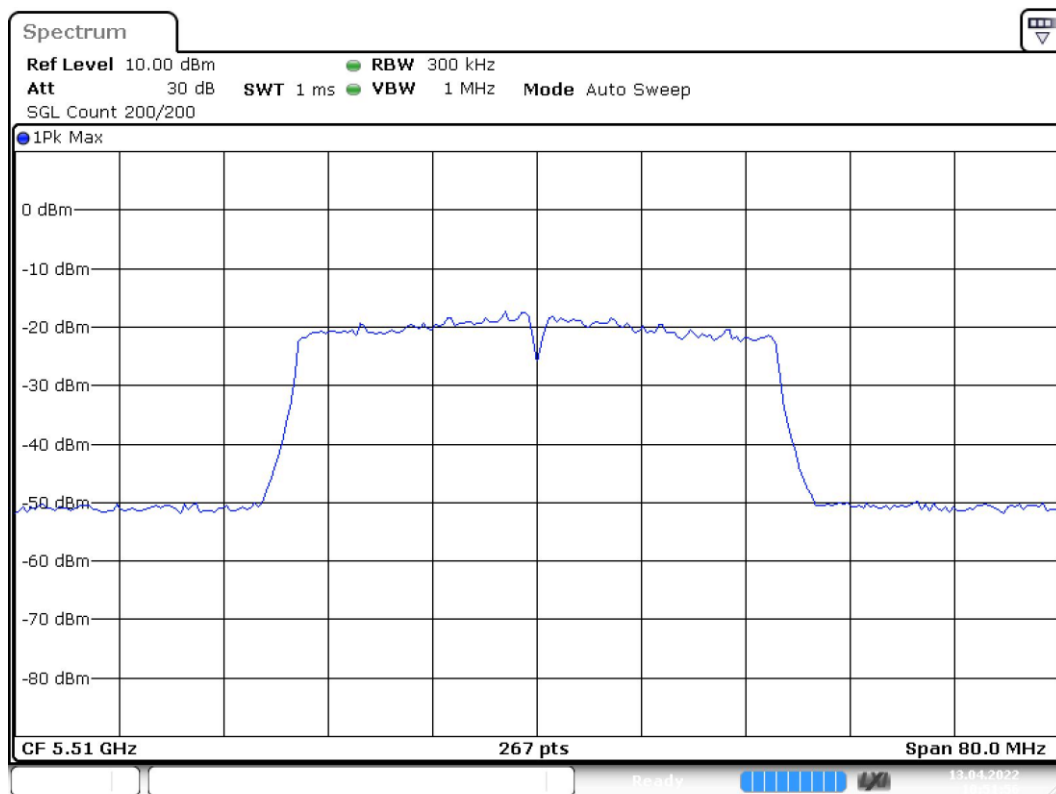
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5510.000000	40.149812	---	---	5489.925094	5530.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5510.000000	-3.2	PASS



Bandwidth



Date: 13.APR.2022 10:51:56

Measurement

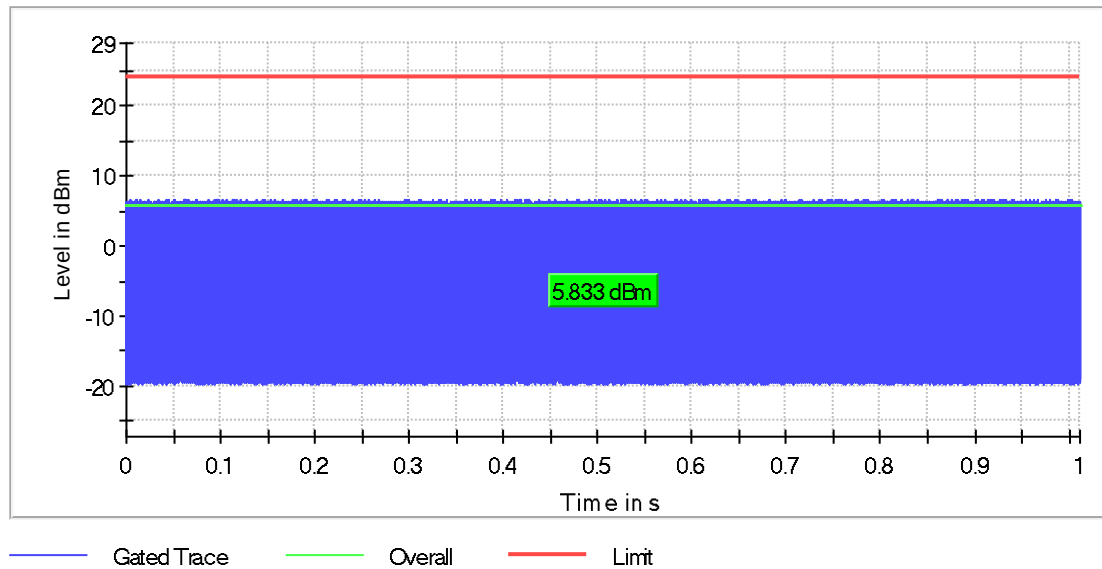
Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.55000 GHz	5.55000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	58 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.14 dB	0.30 dB

RF output power (5510 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5510.000000	5.8	24.0	5.8	99.900	PASS



Power Spectral Density (5510 MHz; 20.000 dBm; 40 MHz)

Customized settings.

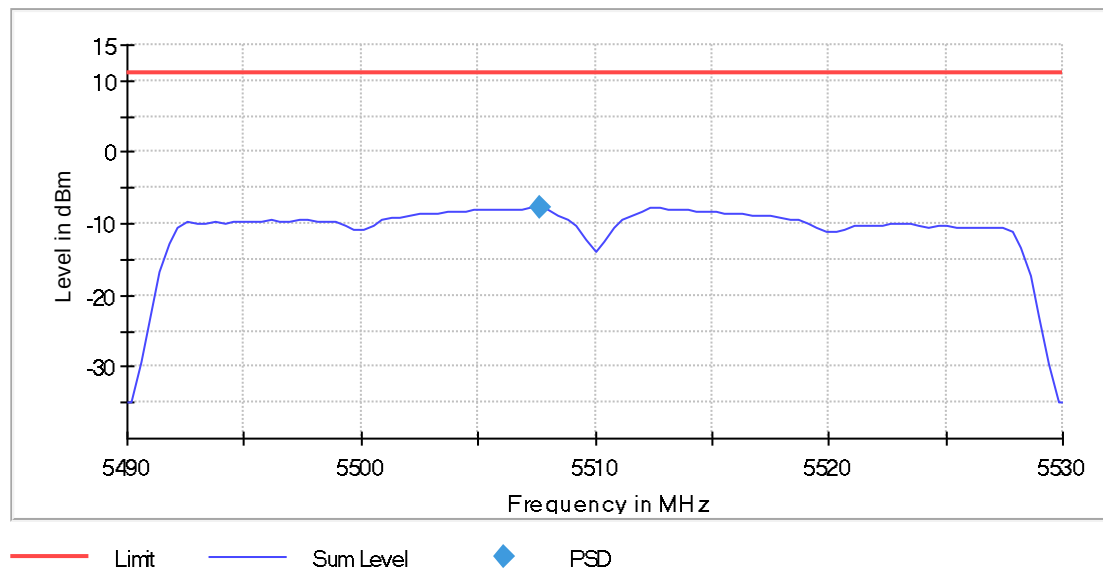
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5510.000000	5507.623762	-7.638	11.0	PASS

Ports

Port	Duty Cycle (%)
1	81.974



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.49000 GHz	5.49000 GHz
Stop Frequency	5.53000 GHz	5.53000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5510 MHz; 20.000 dBm; 40 MHz)

Customized settings.

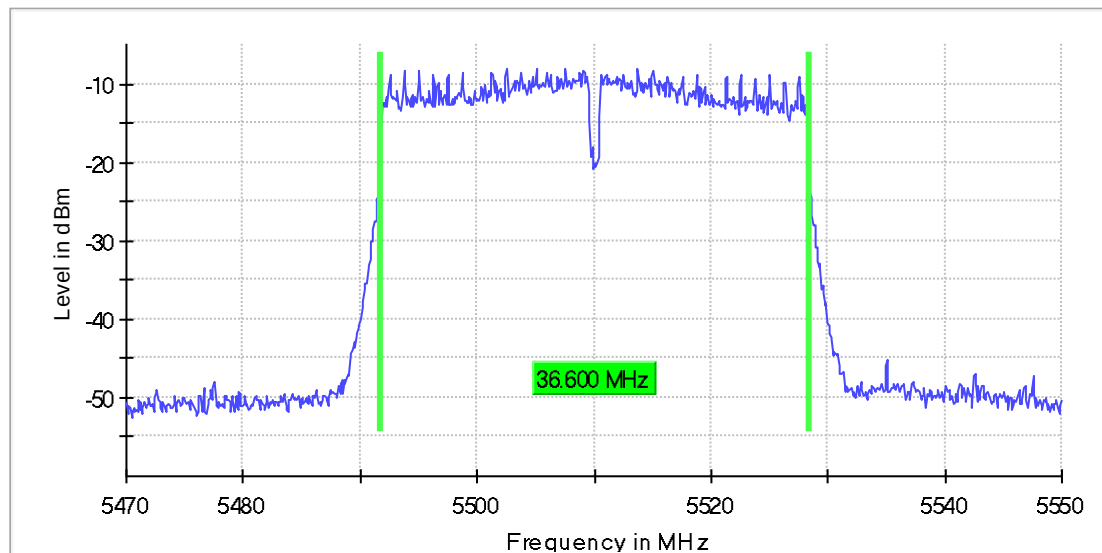
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5510.000000	36.600000	---	---	5491.750000	5528.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5510.000000	-8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.55000 GHz	5.55000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	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	0.15 dB	0.30 dB

Occupied Channel Bandwidth 99% (5510 MHz; 20.000 dBm; 40 MHz)

Customized settings.

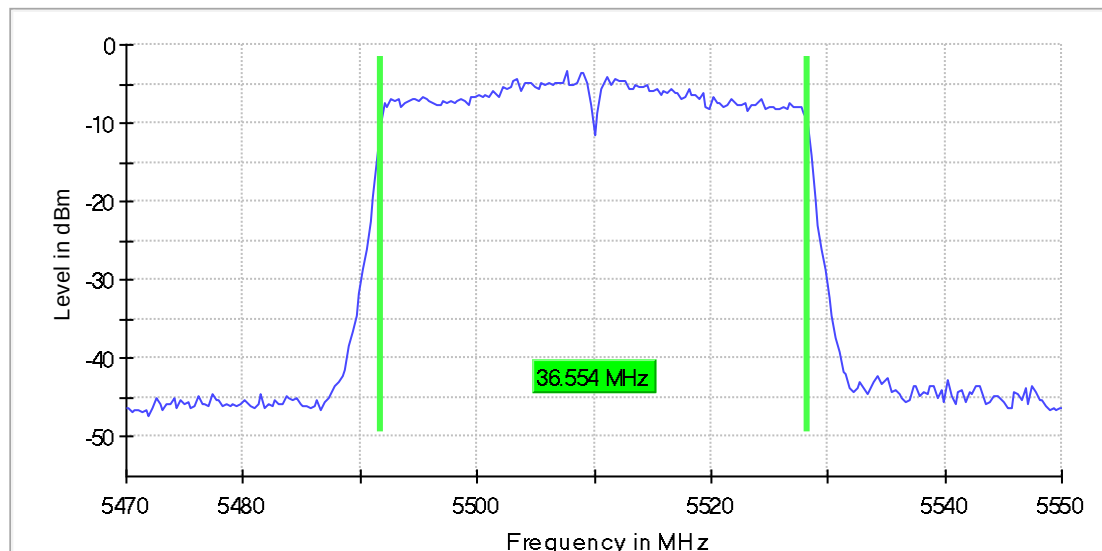
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5510.000000	36.554308	---	---	5491.722846	5528.277154

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

DUT Frequency (MHz)	Result
5510.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.55000 GHz	5.55000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	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	0.23 dB	0.30 dB
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Band Edge low (5510 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

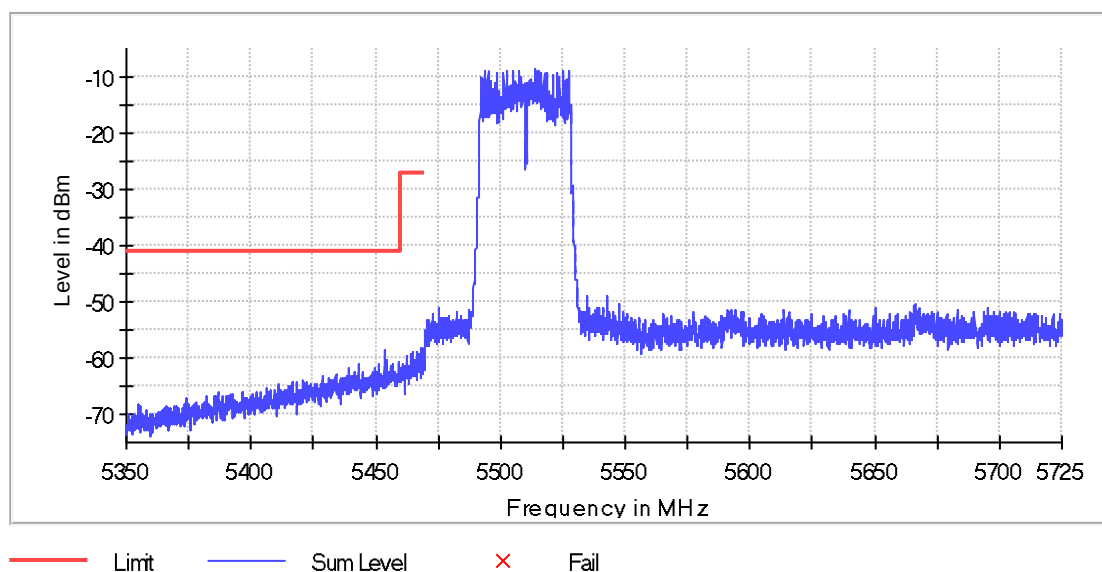
DUT Frequency (MHz)	Result
5510.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
5513.725000	-8.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5453.725000	-58.5	17.3	-41.2	PASS
5453.775000	-58.6	17.4	-41.2	PASS
5454.475000	-60.2	19.0	-41.2	PASS
5453.675000	-60.2	19.0	-41.2	PASS
5454.425000	-60.3	19.1	-41.2	PASS
5459.125000	-60.8	19.6	-41.2	PASS
5450.975000	-60.9	19.7	-41.2	PASS
5459.325000	-61.0	19.7	-41.2	PASS
5443.425000	-61.0	19.8	-41.2	PASS
5451.025000	-61.0	19.8	-41.2	PASS
5459.075000	-61.0	19.8	-41.2	PASS
5459.375000	-61.1	19.8	-41.2	PASS
5456.775000	-61.1	19.9	-41.2	PASS
5443.475000	-61.1	19.9	-41.2	PASS
5454.525000	-61.3	20.1	-41.2	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.47000 GHz	5.47000 GHz
Stop Frequency	5.72500 GHz	5.72500 GHz
Span	255.000 MHz	255.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	5100	~ 5100
SweepTime	569.531 μ s	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	40	40
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	5.35000 GHz	5.35000 GHz
Stop Frequency	5.47000 GHz	5.47000 GHz
Span	120.000 MHz	120.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2400	~ 2400
SweepTime	265.781 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
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	3 / max. 3	max. 3
Stable	0 / 1	1
Max Stable Difference	5.15 dB	0.50 dB

Emission Bandwidth 26 dB (5590 MHz; 20.000 dBm; 40 MHz)

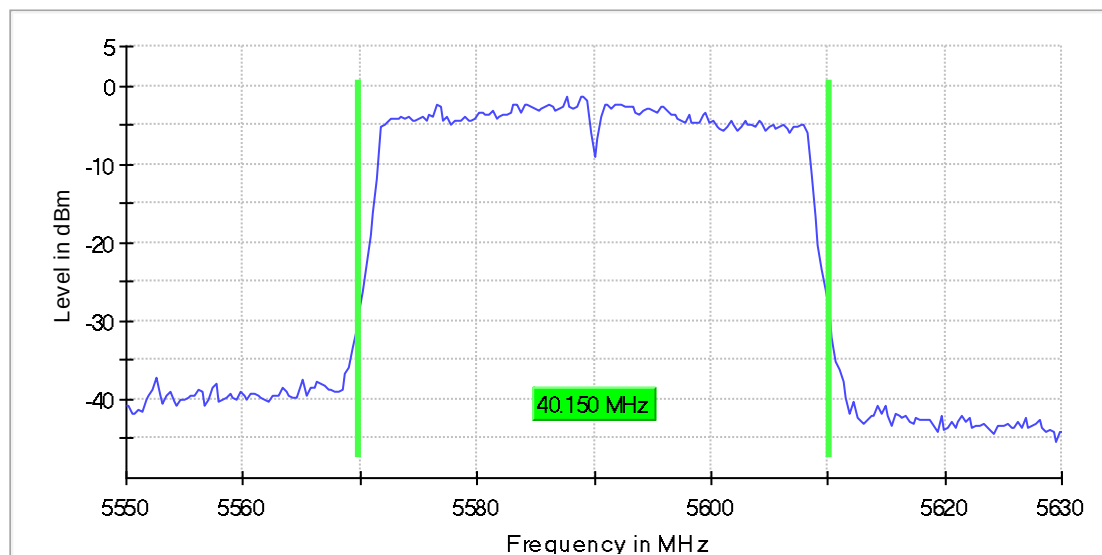
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

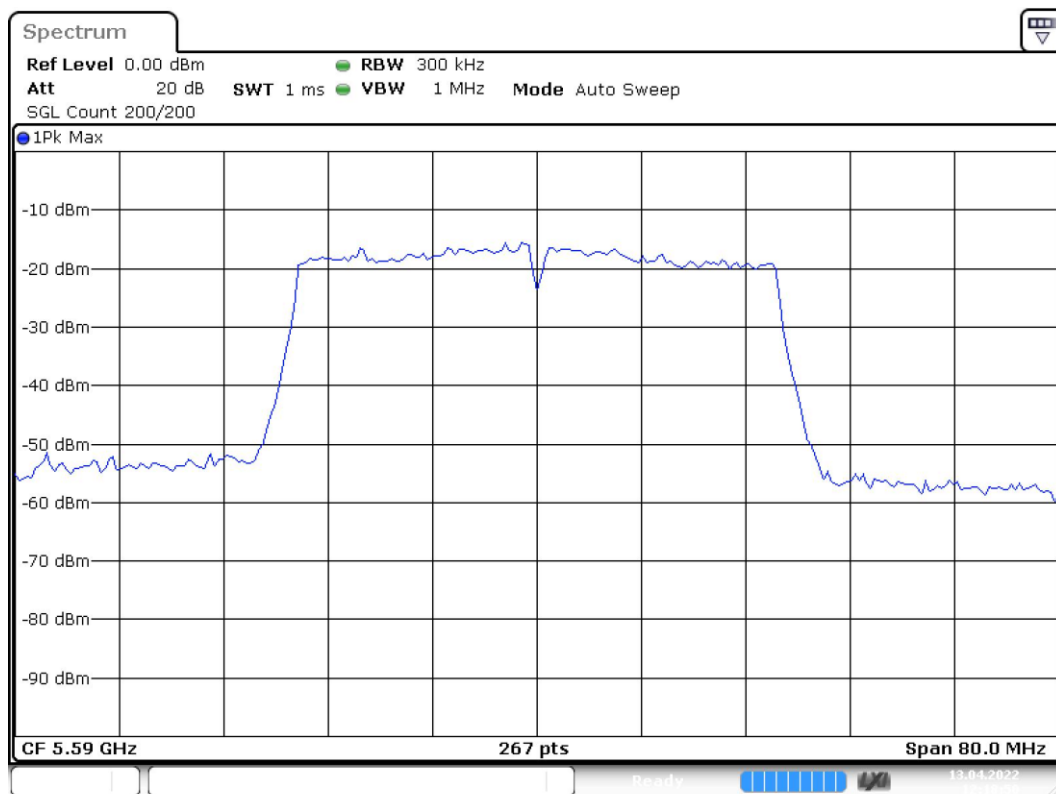
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5590.000000	40.149812	---	---	5569.925094	5610.074906

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5590.000000	-1.4	PASS



Bandwidth



Date: 13.APR.2022 12:18:51

Measurement

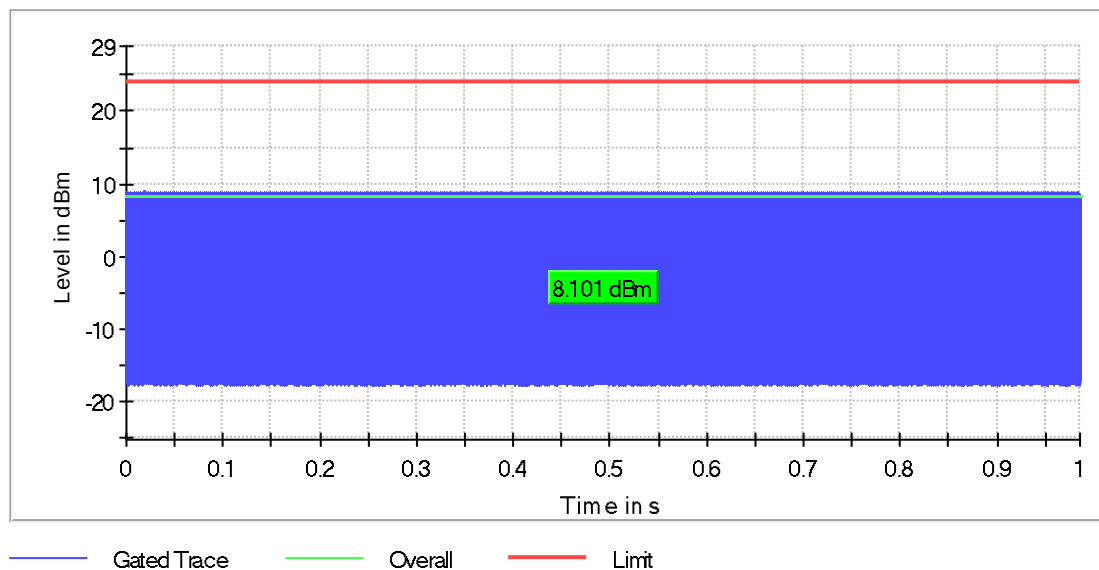
Setting	Instrument Value	Target Value
Start Frequency	5.55000 GHz	5.55000 GHz
Stop Frequency	5.63000 GHz	5.63000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	66 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.26 dB	0.30 dB

RF output power (5590 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5590.000000	8.1	24.0	8.1	94.224	PASS



Power Spectral Density (5590 MHz; 20.000 dBm; 40 MHz)

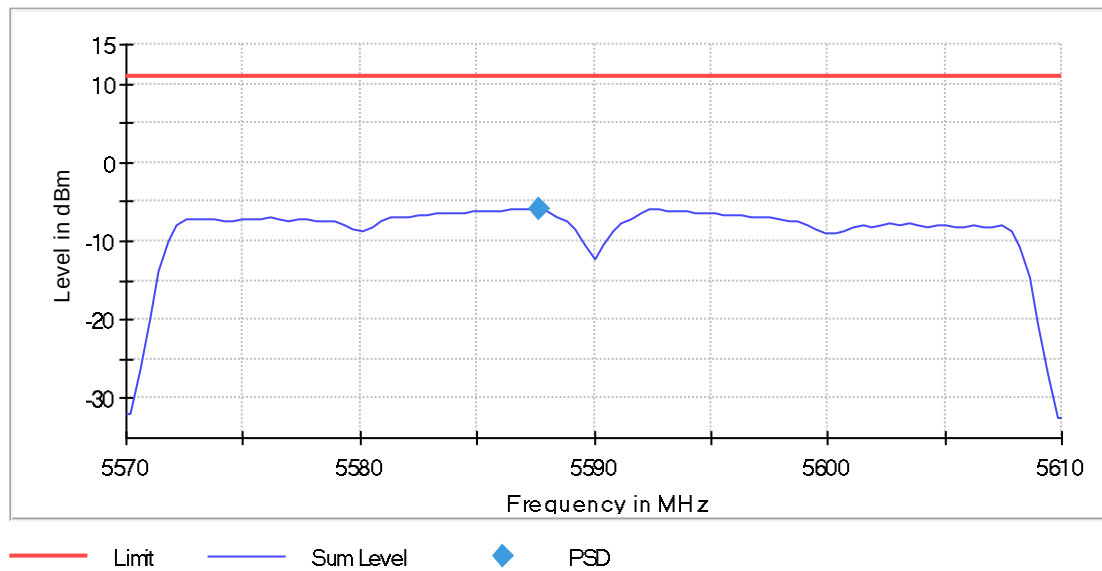
Test according to FCC title 47 part 15 §15.407(a),

Result

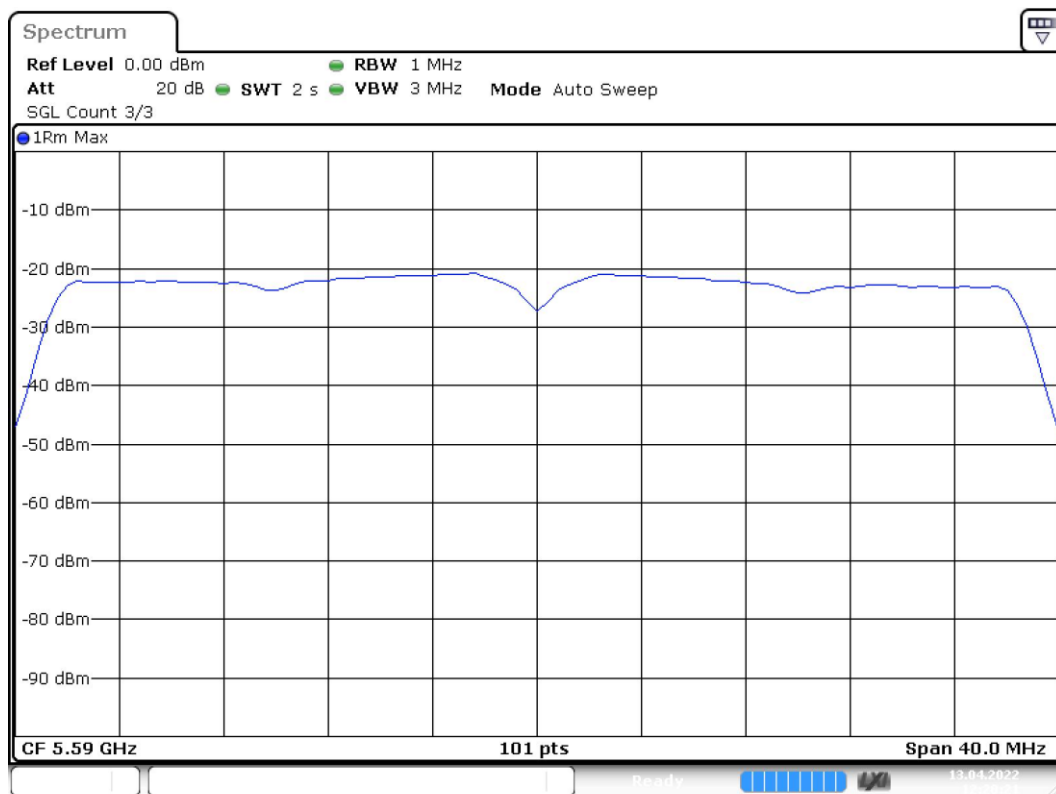
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5590.000000	5587.623762	-5.800	11.0	PASS

Ports

Port	Duty Cycle (%)
1	81.921



PSD Connector 1



Date: 13.APR.2022 12:20:21

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.57000 GHz	5.57000 GHz
Stop Frequency	5.61000 GHz	5.61000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 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	3	3
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	4 / max. 15	max. 15
Stable	3 / 3	3
Max Stable Difference	0.02 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5590 MHz; 20.000 dBm; 40 MHz)

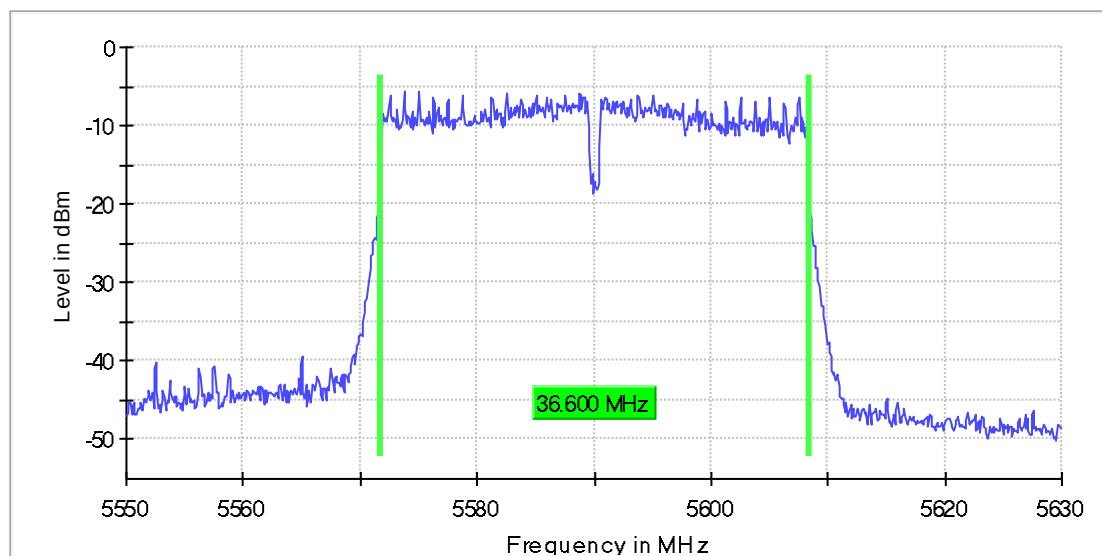
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

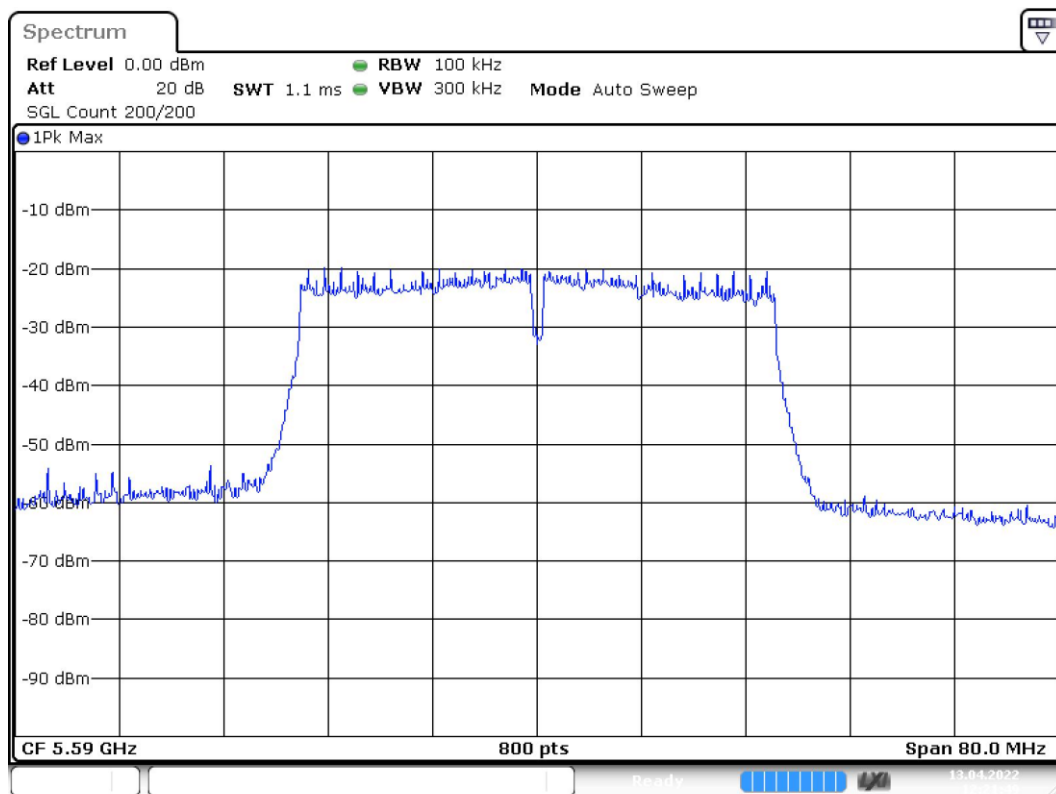
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5590.000000	36.600000	---	---	5571.750000	5608.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5590.000000	-5.7	PASS



Bandwidth



Date: 13.APR.2022 12:21:50

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.55000 GHz	5.55000 GHz
Stop Frequency	5.63000 GHz	5.63000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	95 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.26 dB	0.30 dB

Occupied Channel Bandwidth 99% (5590 MHz; 20.000 dBm; 40 MHz)

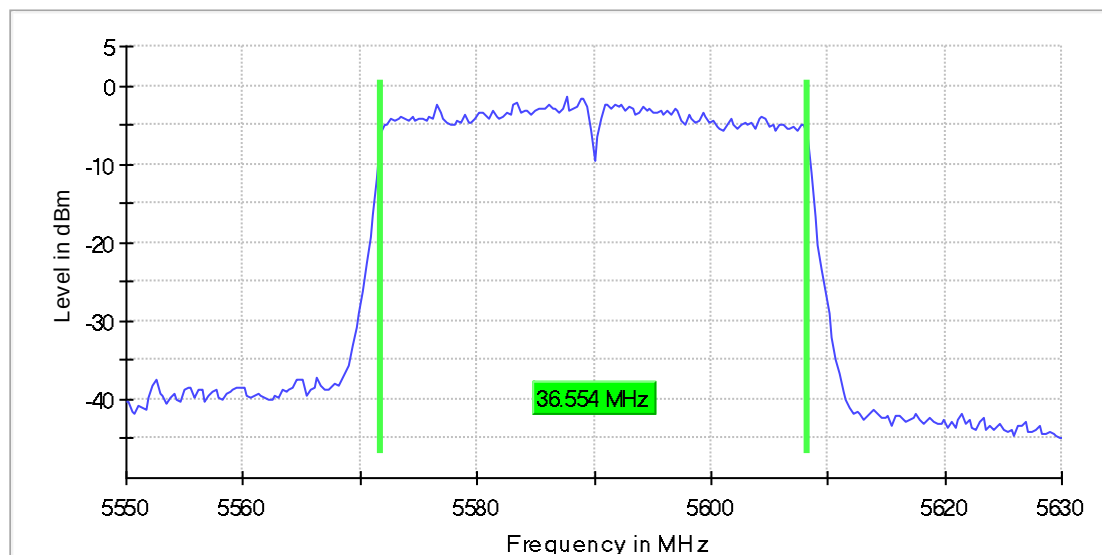
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

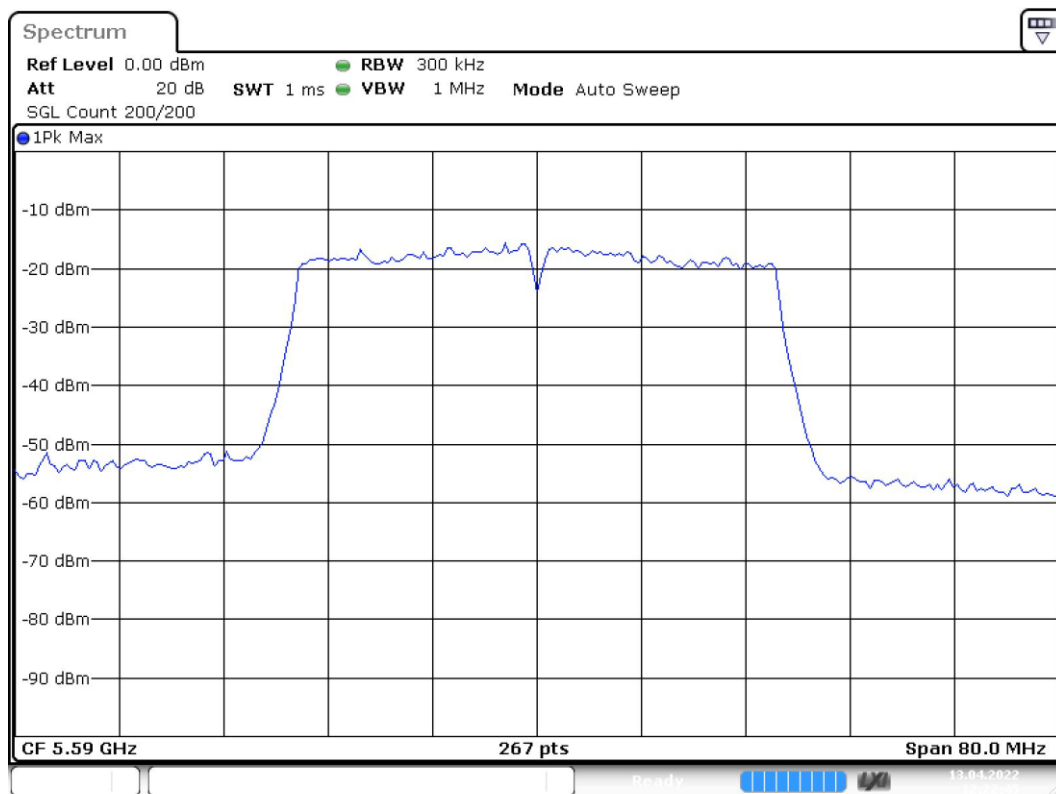
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5590.000000	36.554308	---	---	5571.722846	5608.277154

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

DUT Frequency (MHz)	Result
5590.000000	PASS



Bandwidth



Date: 13.APR.2022 12:22:46

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.55000 GHz	5.55000 GHz
Stop Frequency	5.63000 GHz	5.63000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	60 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.06 dB	0.30 dB

Emission Bandwidth 26 dB (5670 MHz; 20.000 dBm; 40 MHz)

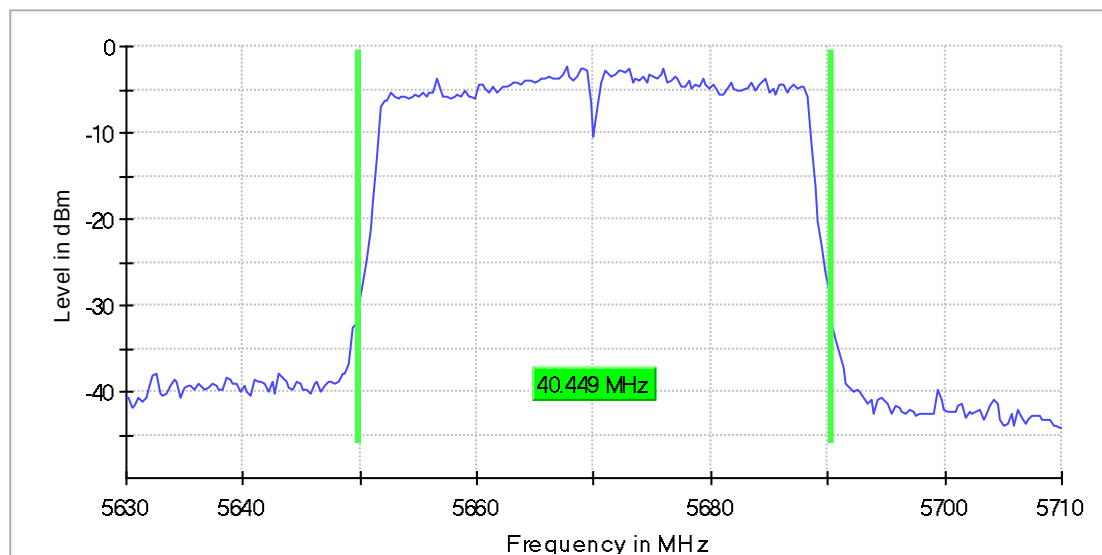
Test according to FCC title 47 part 15 §15.407(a),(e),

26 dB Bandwidth

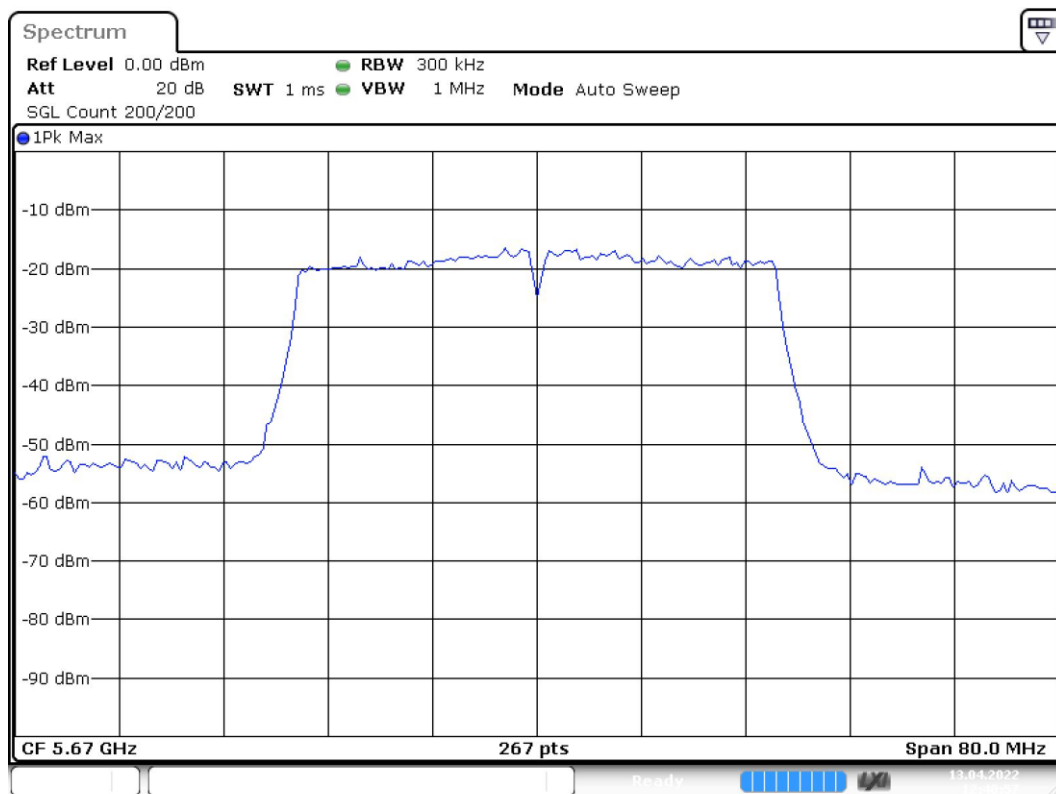
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5670.000000	40.449438	---	---	5649.925094	5690.374532

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5670.000000	-2.4	PASS



Bandwidth



Date: 13.APR.2022 12:40:58

Measurement

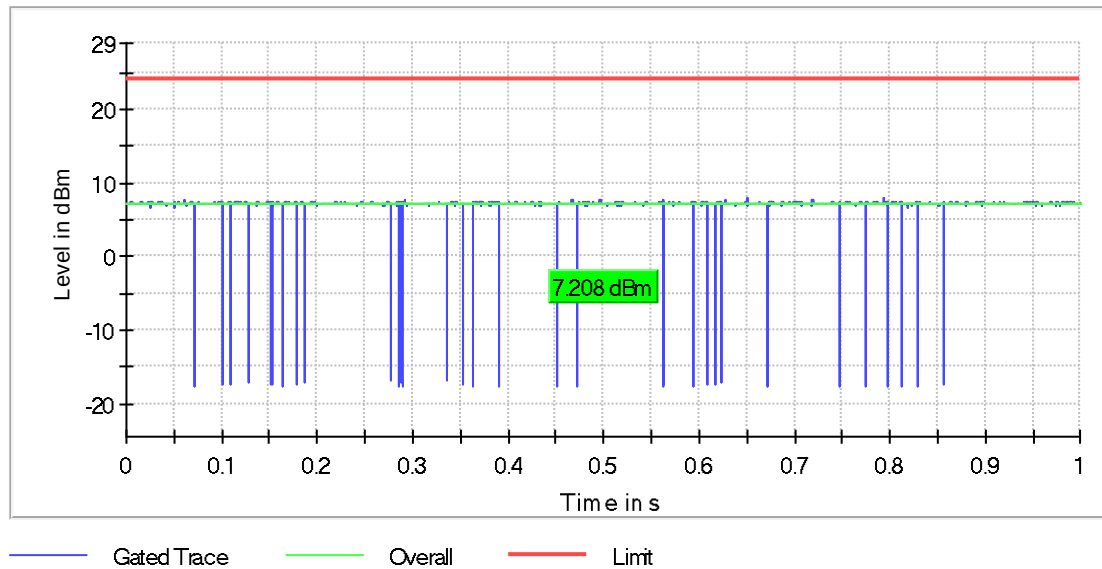
Setting	Instrument Value	Target Value
Start Frequency	5.63000 GHz	5.63000 GHz
Stop Frequency	5.71000 GHz	5.71000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	71 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.30 dB

RF output power (5670 MHz; 20.000 dBm; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5670.000000	7.2	24.0	7.2	100.000	PASS



Power Spectral Density (5670 MHz; 20.000 dBm; 40 MHz)

Customized settings.

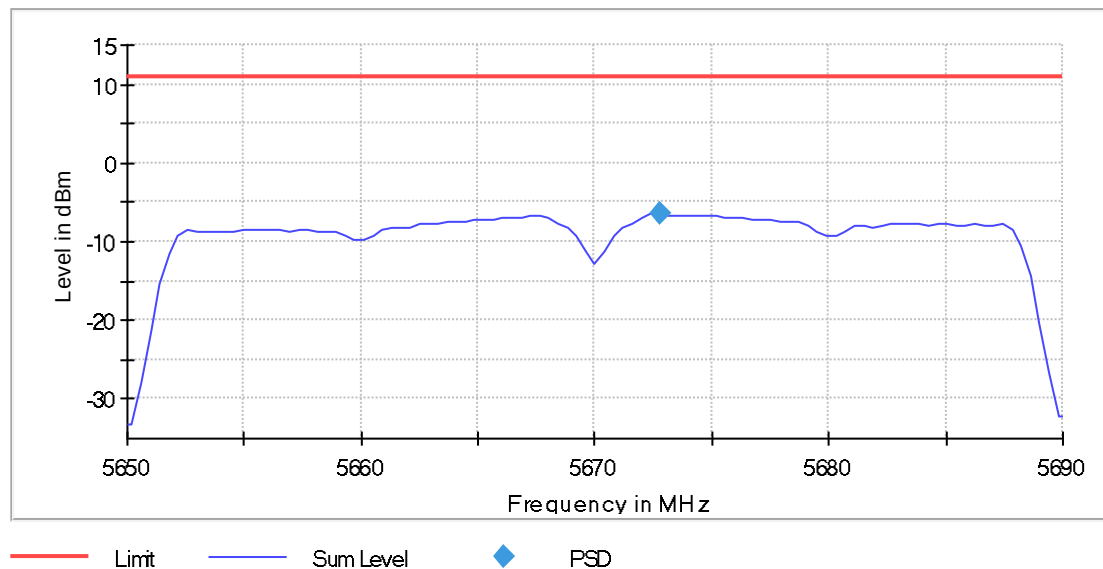
Test according to FCC title 47 part 15 §15.407(a),

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5672.772277	-6.509	11.0	PASS

Ports

Port	Duty Cycle (%)
1	81.932



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.65000 GHz	5.65000 GHz
Stop Frequency	5.69000 GHz	5.69000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 80
Sweptime	2.020 s	2.020 s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	30	30
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	1 / max. 1	max. 1

Stable	0 / 1	1
Max Stable Difference	0.00 dB	0.30 dB

Minimum Emission Bandwidth 6 dB (5670 MHz; 20.000 dBm; 40 MHz)

Customized settings.

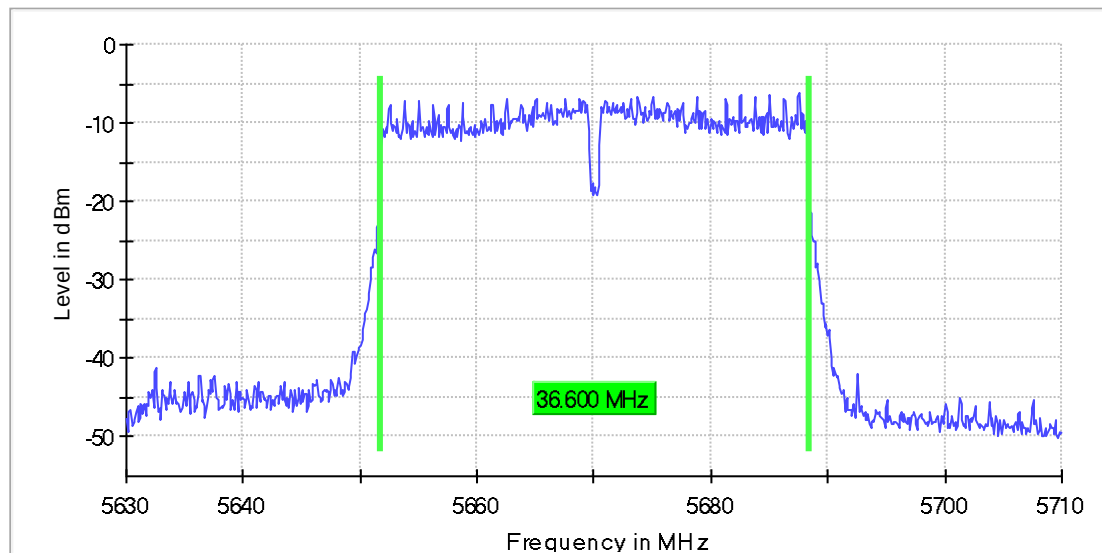
Test according to FCC title 47 part 15 §15.407(a),(e),

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5670.000000	36.600000	---	---	5651.750000	5688.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5670.000000	-6.1	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.63000 GHz	5.63000 GHz
Stop Frequency	5.71000 GHz	5.71000 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	1.070 ms	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	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB

Run	31 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.28 dB	0.30 dB

Occupied Channel Bandwidth 99% (5670 MHz; 20.000 dBm; 40 MHz)

Customized settings.

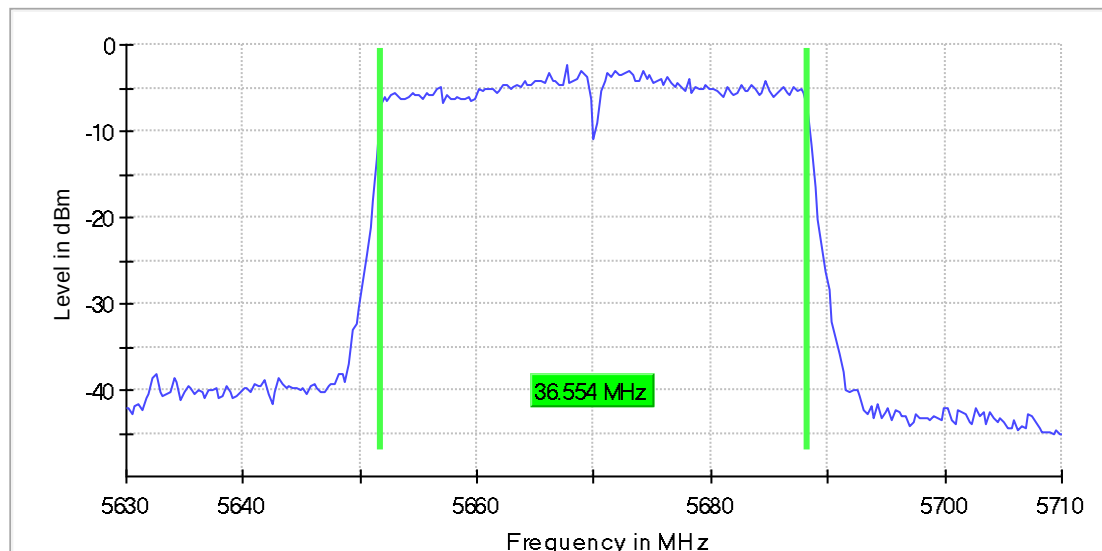
Test according to FCC title 47 part 15 §15.407(a),(e),

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5670.000000	36.554308	---	---	5651.722846	5688.277154

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

DUT Frequency (MHz)	Result
5670.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.63000 GHz	5.63000 GHz
Stop Frequency	5.71000 GHz	5.71000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	<= 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	267	~ 267
SweepTime	1.000 ms	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	Sweep	AUTO
Preamplifier	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	0.26 dB	0.30 dB
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Band Edge high (5670 MHz; 20.000 dBm; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(b),

Result

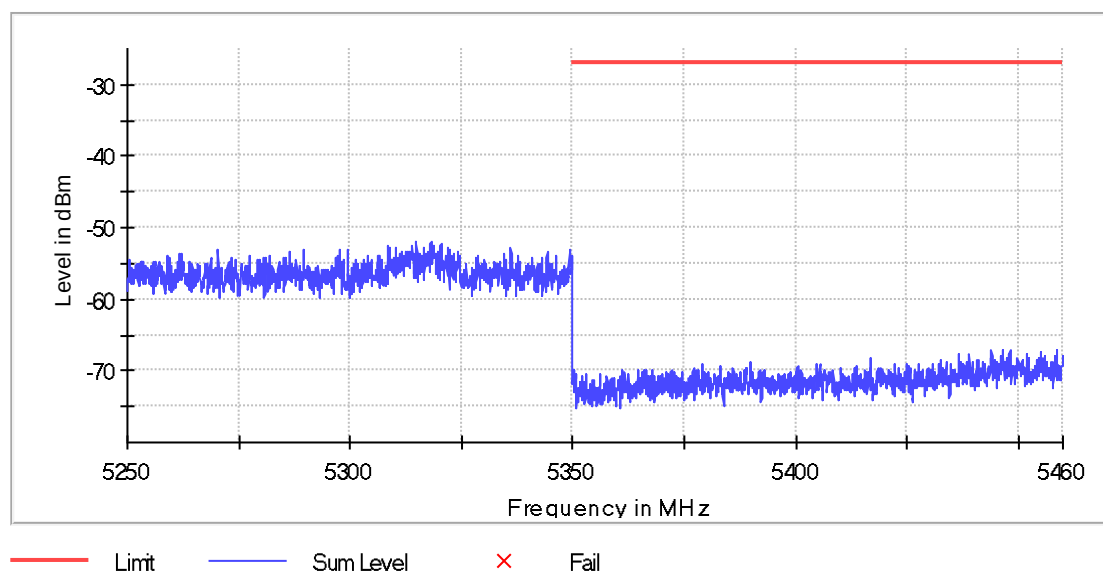
DUT Frequency (MHz)	Result
5670.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
---	-9999.0

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5448.125000	-67.0	40.0	-27.0	PASS
5446.675000	-67.0	40.0	-27.0	PASS
5458.525000	-67.1	40.1	-27.0	PASS
5444.025000	-67.2	40.2	-27.0	PASS
5443.975000	-67.3	40.3	-27.0	PASS
5448.175000	-67.4	40.4	-27.0	PASS
5455.025000	-67.4	40.4	-27.0	PASS
5454.975000	-67.5	40.5	-27.0	PASS
5448.075000	-67.6	40.6	-27.0	PASS
5447.825000	-67.7	40.7	-27.0	PASS
5458.575000	-67.7	40.7	-27.0	PASS
5446.625000	-67.7	40.7	-27.0	PASS
5436.625000	-67.7	40.7	-27.0	PASS
5439.075000	-67.8	40.8	-27.0	PASS
5452.025000	-67.8	40.8	-27.0	PASS



Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	5.25000 GHz	5.25000 GHz
Stop Frequency	5.35000 GHz	5.35000 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	40	40
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	5.35000 GHz	5.35000 GHz
Stop Frequency	5.46000 GHz	5.46000 GHz
Span	110.000 MHz	110.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2200	~ 2200
SweepTime	246.797 μ s	AUTO
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
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	2 / max. 3	max. 3
Stable	1 / 1	1
Max Stable Difference	0.00 dB	0.50 dB