
FCC 15.407

DUT Information

DUT Name: LTU-LITE
SW Rev.: v2
HW Rev.: v1

Frequencies

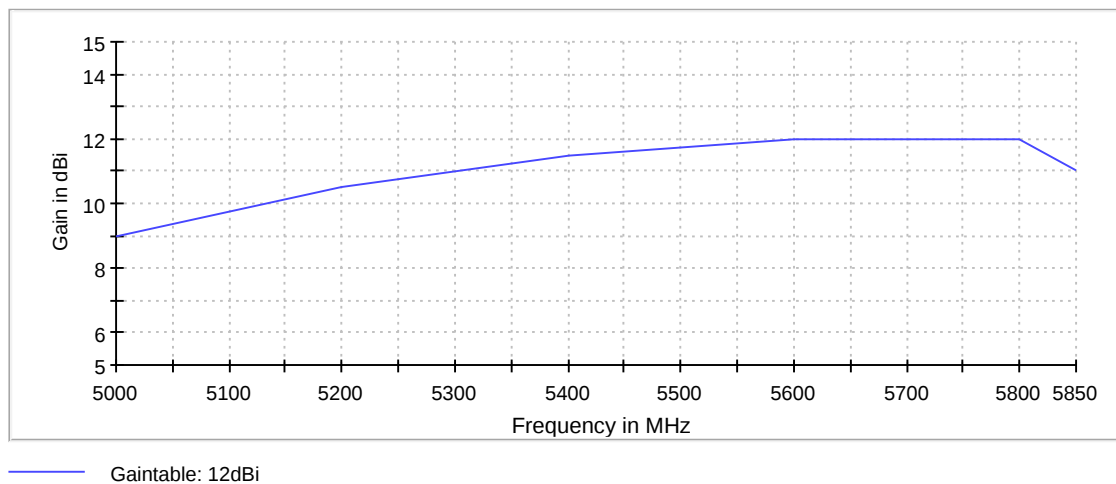
5150 MHz (5150 MHz)	5155 MHz (5155 MHz)	5160 MHz (5160 MHz)
5165 MHz (5165 MHz)	5170 MHz (5170 MHz)	5175 MHz (5175 MHz)
5180 MHz (5180 MHz)	5185 MHz (5185 MHz)	5190 MHz (5190 MHz)
5195 MHz (5195 MHz)	5200 MHz (5200 MHz)	5205 MHz (5205 MHz)
5210 MHz (5210 MHz)	5215 MHz (5215 MHz)	5220 MHz (5220 MHz)
5225 MHz (5225 MHz)	5230 MHz (5230 MHz)	5235 MHz (5235 MHz)
5240 MHz (5240 MHz)	5245 MHz (5245 MHz)	5250 MHz (5250 MHz)
5255 MHz (5255 MHz)	5260 MHz (5260 MHz)	5265 MHz (5265 MHz)
5270 MHz (5270 MHz)	5275 MHz (5275 MHz)	5280 MHz (5280 MHz)
5285 MHz (5285 MHz)	5290 MHz (5290 MHz)	5295 MHz (5295 MHz)
5300 MHz (5300 MHz)	5305 MHz (5305 MHz)	5310 MHz (5310 MHz)
5315 MHz (5315 MHz)	5320 MHz (5320 MHz)	5325 MHz (5325 MHz)
5330 MHz (5330 MHz)	5335 MHz (5335 MHz)	5340 MHz (5340 MHz)
5345 MHz (5345 MHz)	5350 MHz (5350 MHz)	5470 MHz (5470 MHz)
5475 MHz (5475 MHz)	5480 MHz (5480 MHz)	5485 MHz (5485 MHz)
5490 MHz (5490 MHz)	5495 MHz (5495 MHz)	5500 MHz (5500 MHz)
5505 MHz (5505 MHz)	5510 MHz (5510 MHz)	5515 MHz (5515 MHz)
5520 MHz (5520 MHz)	5525 MHz (5525 MHz)	5530 MHz (5530 MHz)
5535 MHz (5535 MHz)	5540 MHz (5540 MHz)	5545 MHz (5545 MHz)
5550 MHz (5550 MHz)	5555 MHz (5555 MHz)	5560 MHz (5560 MHz)
5565 MHz (5565 MHz)	5570 MHz (5570 MHz)	5575 MHz (5575 MHz)
5580 MHz (5580 MHz)	5585 MHz (5585 MHz)	5590 MHz (5590 MHz)
5595 MHz (5595 MHz)	5600 MHz (5600 MHz)	5605 MHz (5605 MHz)
5610 MHz (5610 MHz)	5615 MHz (5615 MHz)	5620 MHz (5620 MHz)
5625 MHz (5625 MHz)	5630 MHz (5630 MHz)	5635 MHz (5635 MHz)
5640 MHz (5640 MHz)	5645 MHz (5645 MHz)	5650 MHz (5650 MHz)
5655 MHz (5655 MHz)	5660 MHz (5660 MHz)	5665 MHz (5665 MHz)
5670 MHz (5670 MHz)	5675 MHz (5675 MHz)	5680 MHz (5680 MHz)
5685 MHz (5685 MHz)	5690 MHz (5690 MHz)	5695 MHz (5695 MHz)
5700 MHz (5700 MHz)	5705 MHz (5705 MHz)	5710 MHz (5710 MHz)
5715 MHz (5715 MHz)	5720 MHz (5720 MHz)	5725 MHz (5725 MHz)
5730 MHz (5730 MHz)	5735 MHz (5735 MHz)	5740 MHz (5740 MHz)
5745 MHz (5745 MHz)	5750 MHz (5750 MHz)	5755 MHz (5755 MHz)
5760 MHz (5760 MHz)	5765 MHz (5765 MHz)	5770 MHz (5770 MHz)
5775 MHz (5775 MHz)	5780 MHz (5780 MHz)	5785 MHz (5785 MHz)
5790 MHz (5790 MHz)	5795 MHz (5795 MHz)	5800 MHz (5800 MHz)
5805 MHz (5805 MHz)	5810 MHz (5810 MHz)	5815 MHz (5815 MHz)
5820 MHz (5820 MHz)	5825 MHz (5825 MHz)	

Bandwidths

10 MHz (10 MHz)	20 MHz (20 MHz)	40 MHz (40 MHz)
30 MHz (30 MHz)	50 MHz (50 MHz)	

Beamforming Gain	12dBi;
Gain Tables	Port 1: 12dBi; Port 2: 12dBi;

DUT Settings	
No. of transmission chains	2
Equipment Type	Client



Hardware Setup: WMS Measurements\TS8997 Hardware Setup

Spectrum Analyzer:	SA FSV 40 (SA FSV 40) @ VISA (ADR TCPIP::192.168.48.100::inst0::instr), SN 1321.3008K40/101752, FW 3.50
Vector Generator:	VG SMBV100A (VG SMBV100A) @ VISA (ADR TCPIP::192.168.48.120::inst0::instr), SN 262184, FW 3.1.19.15- 3.50.082.47
Generator:	SMB100A (SMB100A) @ VISA (ADR TCPIP::192.168.48.110::inst0::instr), SN 180599, 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 1.24.0.10

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5160.000	20.0	10.000000	PASS
RF output power	5160.000	20.0	10.000000	PASS
Power Spectral Density	5160.000	20.0	10.000000	PASS
Occupied Channel Bandwidth 99%	5160.000	20.0	10.000000	PASS
Frequency stability	5160.000	20.0	10.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	10.000000	PASS
RF output power	5200.000	20.0	10.000000	PASS
Power Spectral Density	5200.000	20.0	10.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	10.000000	PASS
Emission Bandwidth 26 dB	5245.000	20.0	10.000000	PASS
RF output power	5245.000	20.0	10.000000	PASS
Power Spectral Density	5245.000	20.0	10.000000	PASS
Occupied Channel Bandwidth 99%	5245.000	20.0	10.000000	PASS
Frequency stability	5245.000	20.0	10.000000	PASS
Emission Bandwidth 26 dB	5165.000	20.0	20.000000	PASS
RF output power	5165.000	20.0	20.000000	PASS
Power Spectral Density	5165.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5165.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	20.000000	PASS
RF output power	5200.000	20.0	20.000000	PASS
Power Spectral Density	5200.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5240.000	20.0	20.000000	PASS
RF output power	5240.000	20.0	20.000000	PASS
Power Spectral Density	5240.000	20.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5240.000	20.0	20.000000	PASS
Emission Bandwidth 26 dB	5170.000	20.0	30.000000	PASS
RF output power	5170.000	20.0	30.000000	PASS
Power Spectral Density	5170.000	20.0	30.000000	PASS
Occupied Channel Bandwidth 99%	5170.000	20.0	30.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	30.000000	PASS
RF output power	5200.000	20.0	30.000000	PASS
Power Spectral Density	5200.000	20.0	30.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	30.000000	PASS
Emission Bandwidth 26 dB	5235.000	20.0	30.000000	PASS
RF output power	5235.000	20.0	30.000000	PASS
Power Spectral Density	5235.000	20.0	30.000000	PASS
Occupied Channel Bandwidth 99%	5235.000	20.0	30.000000	PASS
Emission Bandwidth 26 dB	5175.000	20.0	40.000000	PASS
RF output power	5175.000	20.0	40.000000	PASS
Power Spectral Density	5175.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5175.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	40.000000	PASS
RF output power	5200.000	20.0	40.000000	PASS
Power Spectral Density	5200.000	20.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	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
Occupied Channel Bandwidth 99%	5230.000	20.0	40.000000	PASS
Emission Bandwidth 26 dB	5180.000	20.0	50.000000	PASS
RF output power	5180.000	20.0	50.000000	PASS
Power Spectral Density	5180.000	20.0	50.000000	PASS
Occupied Channel Bandwidth 99%	5180.000	20.0	50.000000	PASS
Emission Bandwidth 26 dB	5200.000	20.0	50.000000	PASS
RF output power	5200.000	20.0	50.000000	PASS
Power Spectral Density	5200.000	20.0	50.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	20.0	50.000000	PASS
Emission Bandwidth 26 dB	5225.000	20.0	50.000000	PASS
RF output power	5225.000	20.0	50.000000	PASS
Power Spectral Density	5225.000	20.0	50.000000	PASS

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Occupied Channel Bandwidth 99%	5225.000	20.0	50.000000	PASS

Emission Bandwidth 26 dB (5160 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

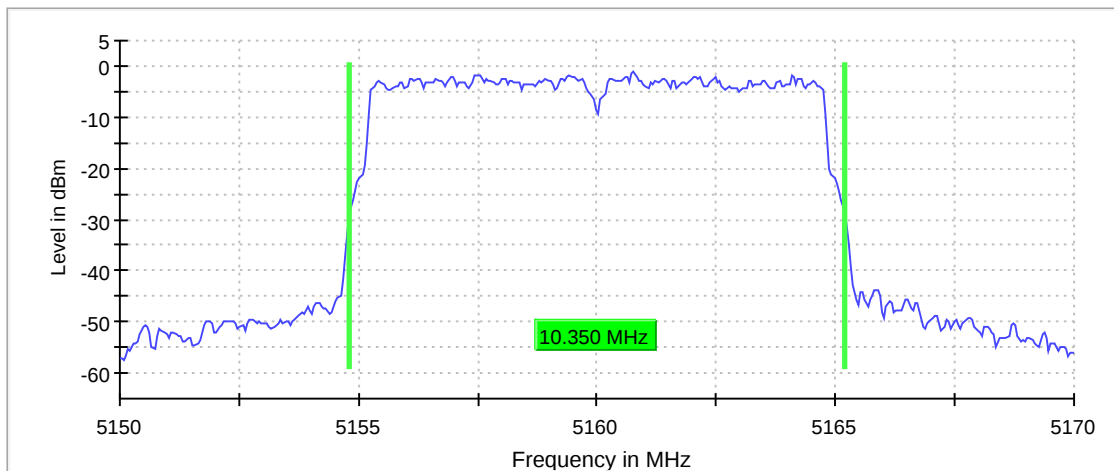
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

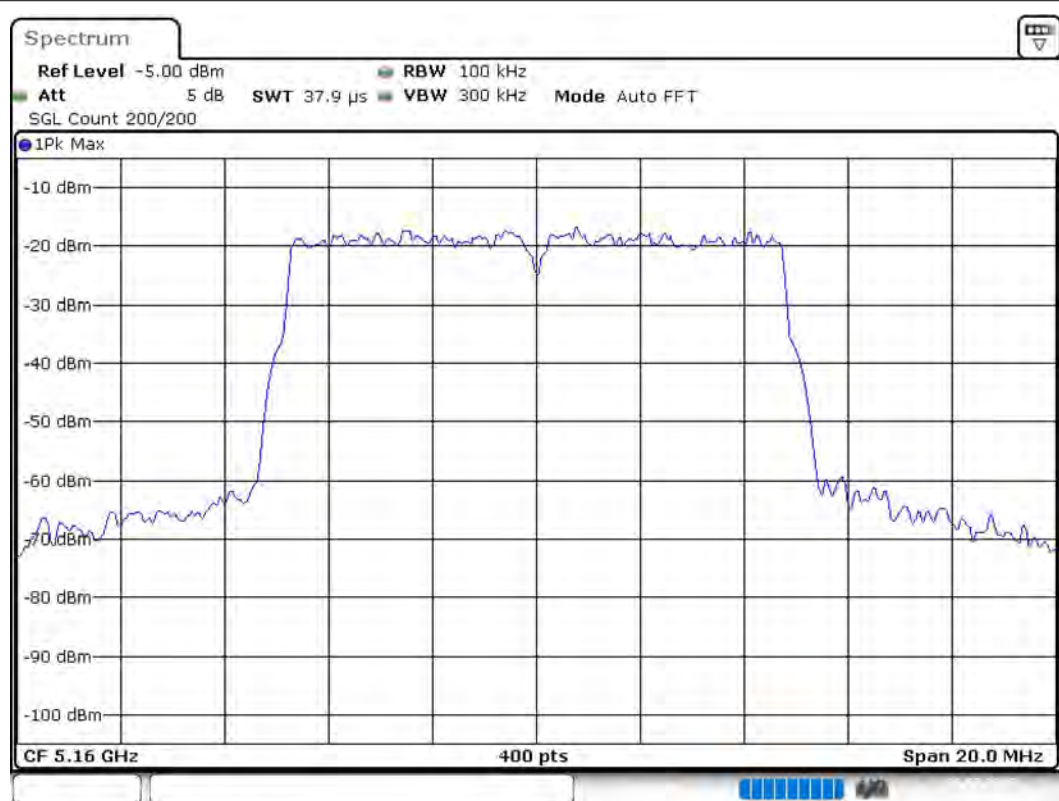
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5160.000000	10.350000	---	---	5154.825000	5165.175000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5160.000000	-1.1	PASS



Bandwidth



Date: 26.JUL.2019 19:58:29

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.17000 GHz	5.17000 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	400	~ 400
Sweeptime	37.891 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5160 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

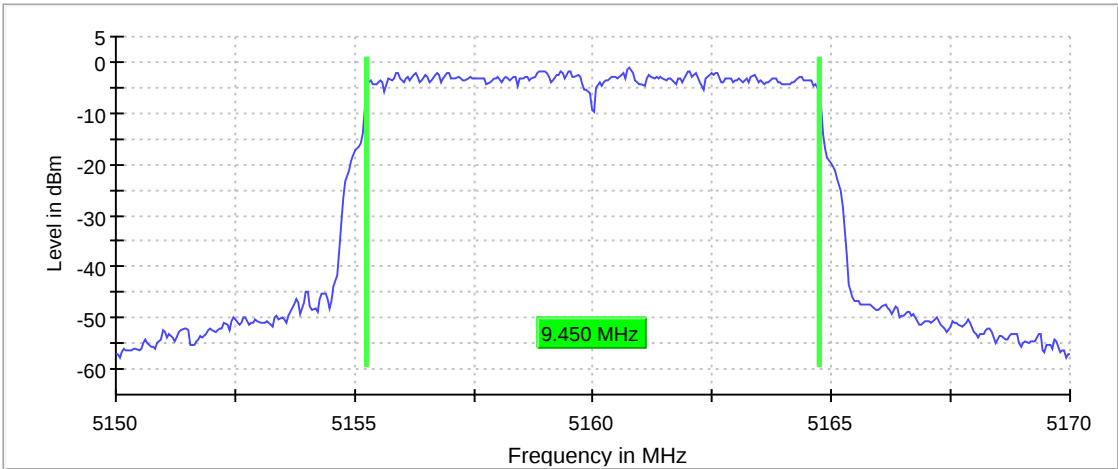
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

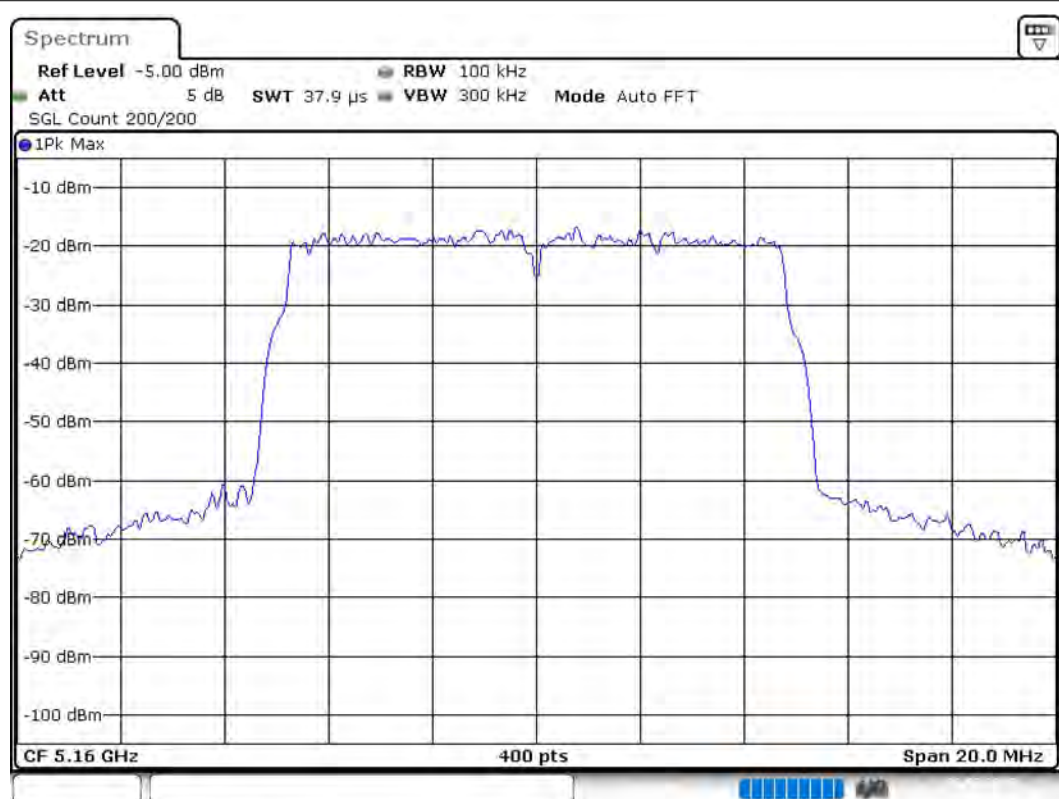
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5160.000000	9.450000	---	---	5155.275000	5164.725000

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

DUT Frequency (MHz)	Result
5160.000000	PASS



Bandwidth



Date: 26 JUL 2019 19:59:22

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15000 GHz	5.15000 GHz
Stop Frequency	5.17000 GHz	5.17000 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	$\geq$ 100.000 kHz
VBW	300.000 kHz	$\geq$ 300.000 kHz
SweepPoints	400	$\sim$ 400
SweepTime	37.891 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

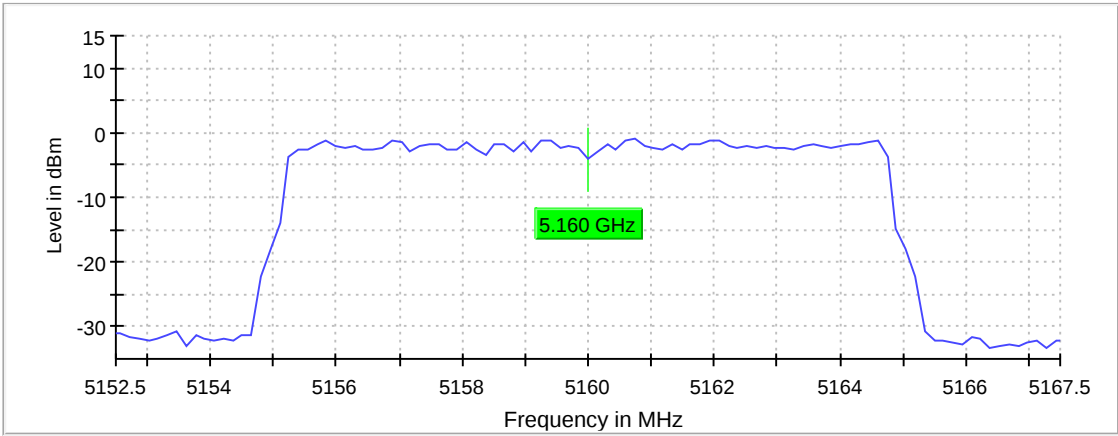
Frequency stability (5160 MHz; 10 MHz)

Test according to FCC title 47 part 15 §15.407(g), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 A.3 and ANSI C63.10-2013

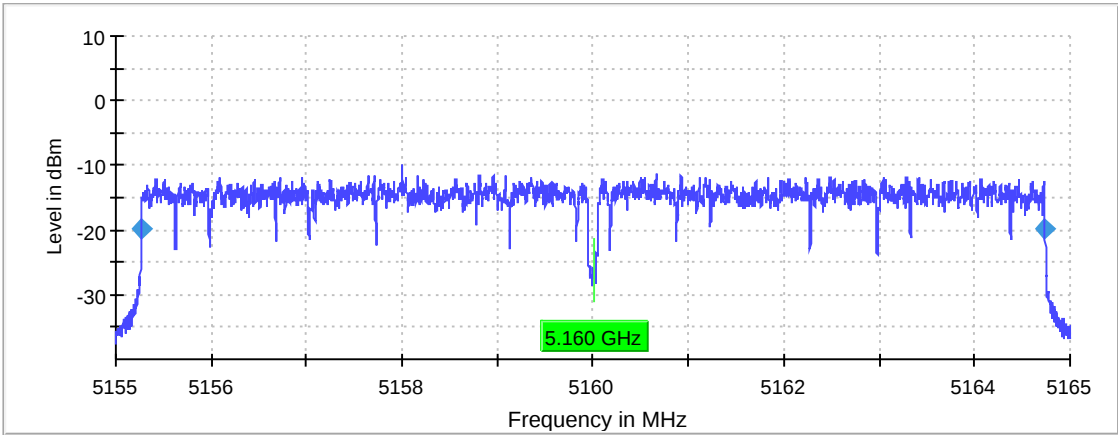
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 5ppm

Result

DUT Frequency (MHz)	Frequency (MHz)	Difference (ppm)	Frequency Difference (kHz)	Limit Min (MHz)	Limit Max (MHz)	Result
5160.000000	5160.002000	0.388	2.000000	---	---	PASS



Center frequency Max Hold



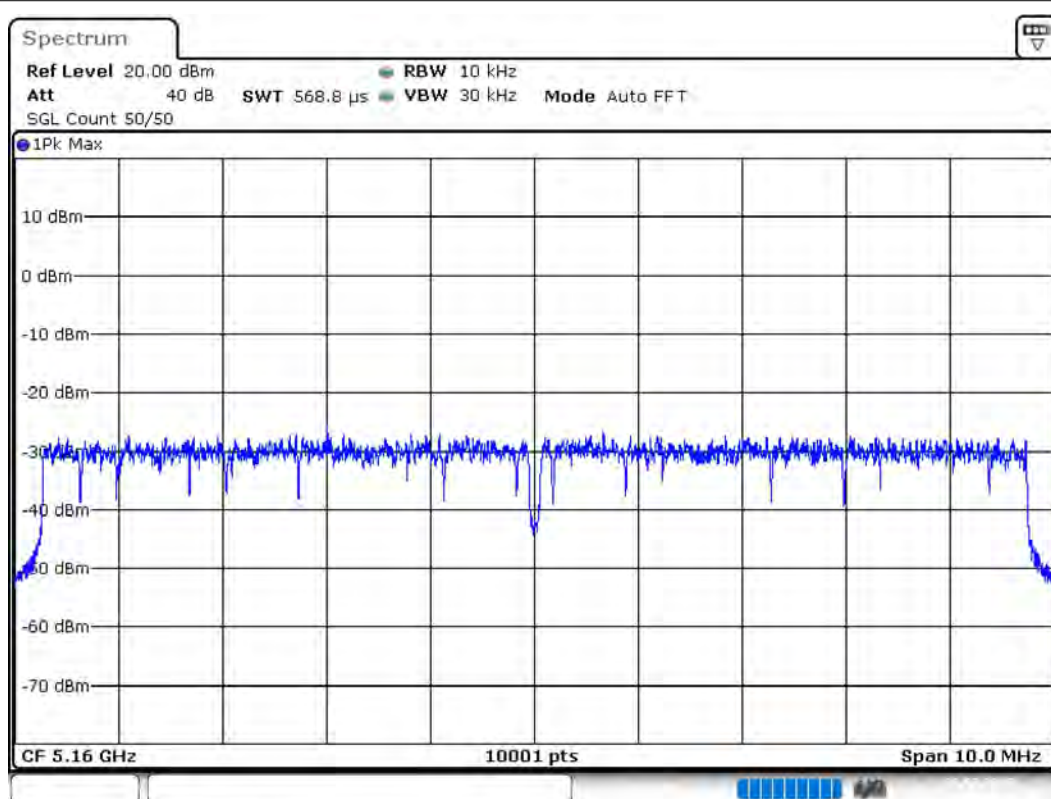
Edge points Max Hold Center frequency

Frequency stability Pre



Date: 26.JUL.2019 19:59:34

Frequency stability



Date: 26.JUL.2019 19:59:50

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.16500 GHz	5.16500 GHz
Span	10.000 MHz	10.000 MHz
RBW	10.000 kHz	≤ 10.000 kHz
VBW	30.000 kHz	≥ 30.000 kHz
SweepPoints	10001	~ 10001
SweepTime	568.782 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	50	50
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	1.00 dB	1.00 dB
Run	8 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.90 dB	1.00 dB

Emission Bandwidth 26 dB (5200 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

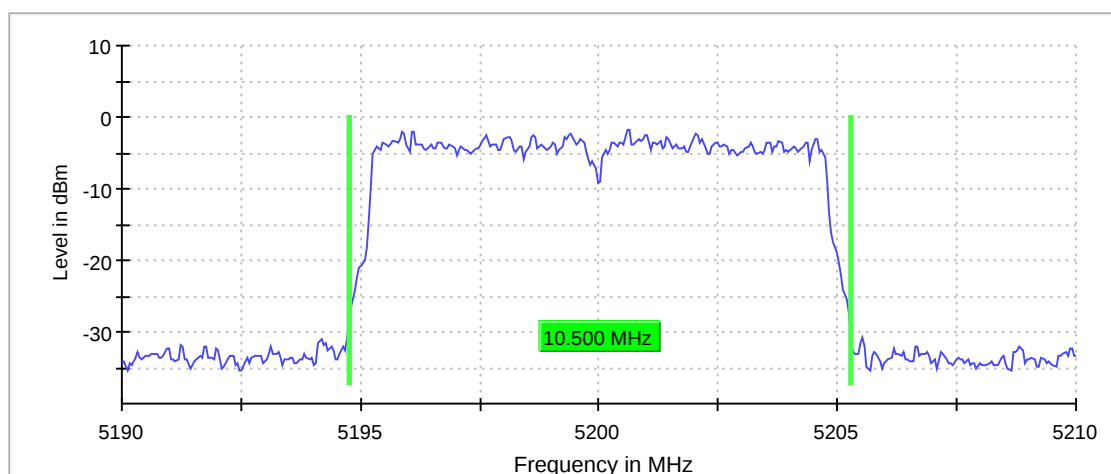
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

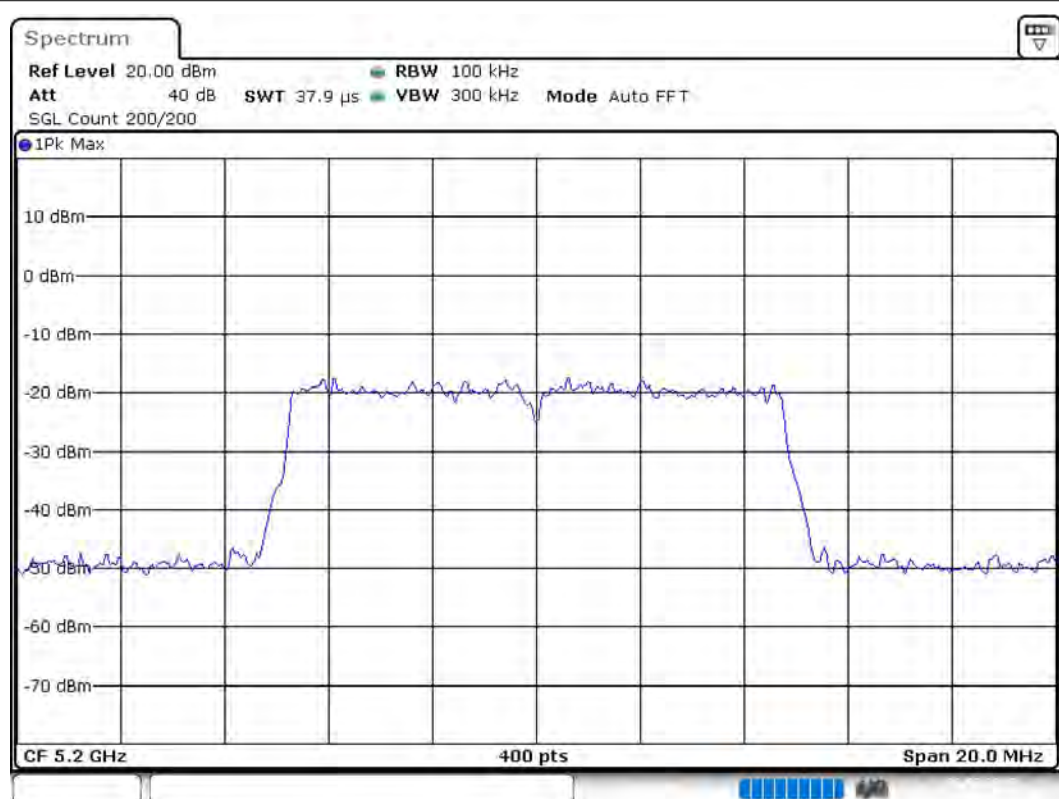
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	10.500000	---	---	5194.775000	5205.275000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-1.8	PASS



Bandwidth



Date: 26 JUL 2019 20:01:10

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	400	~ 400
SweepTime	37.891 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 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

Occupied Channel Bandwidth 99% (5200 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

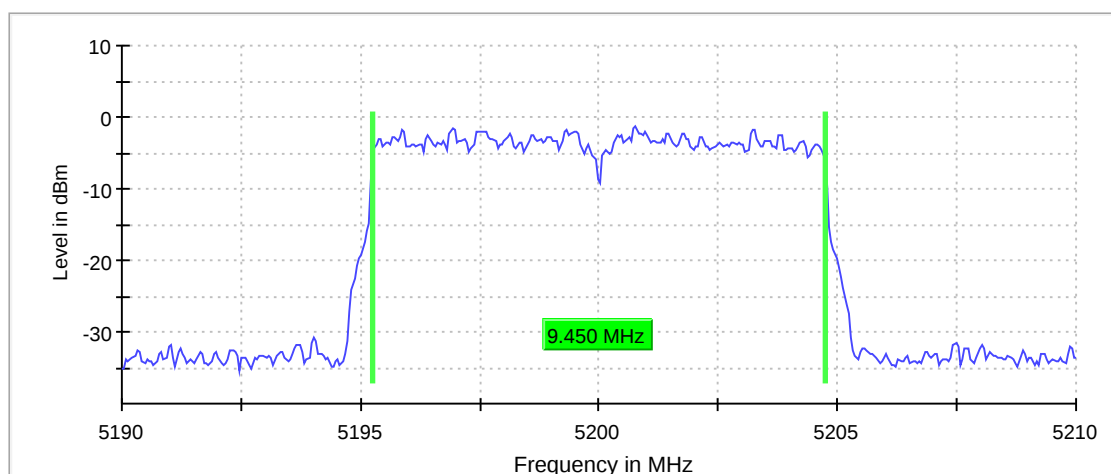
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

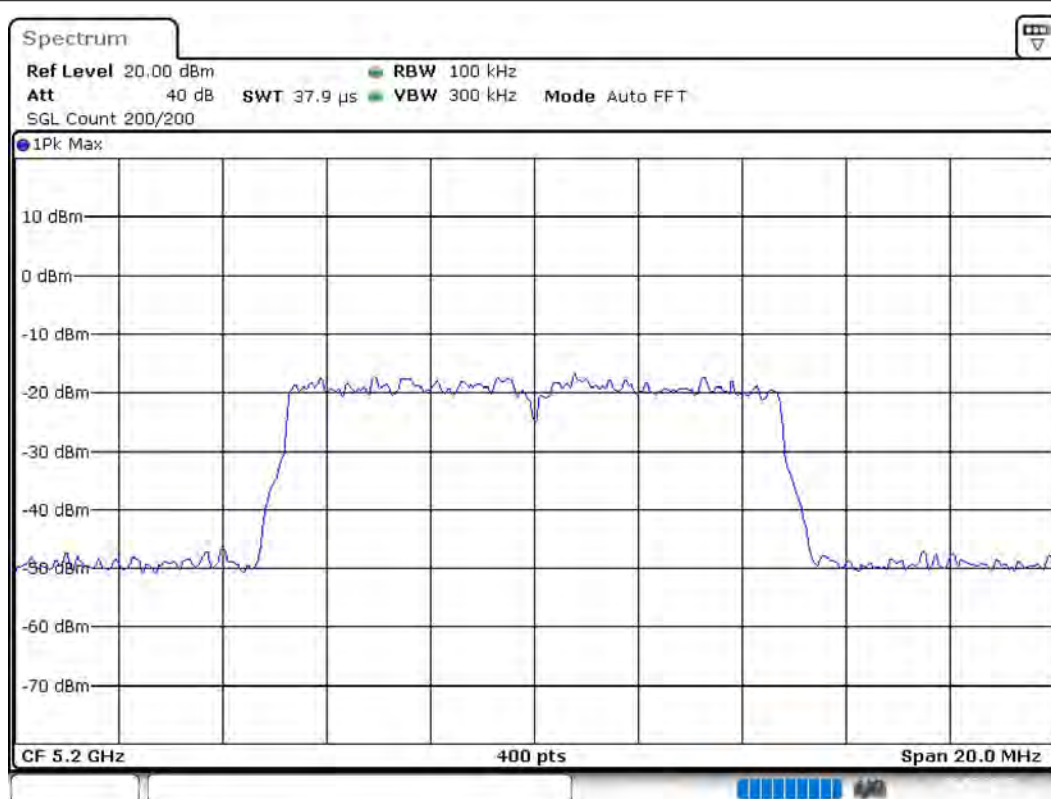
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	9.450000	---	---	5195.275000	5204.725000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:02:03

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	$\geq$ 100.000 kHz
VBW	300.000 kHz	$\geq$ 300.000 kHz
SweepPoints	400	$\sim$ 400
SweepTime	37.891 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 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

Emission Bandwidth 26 dB (5245 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

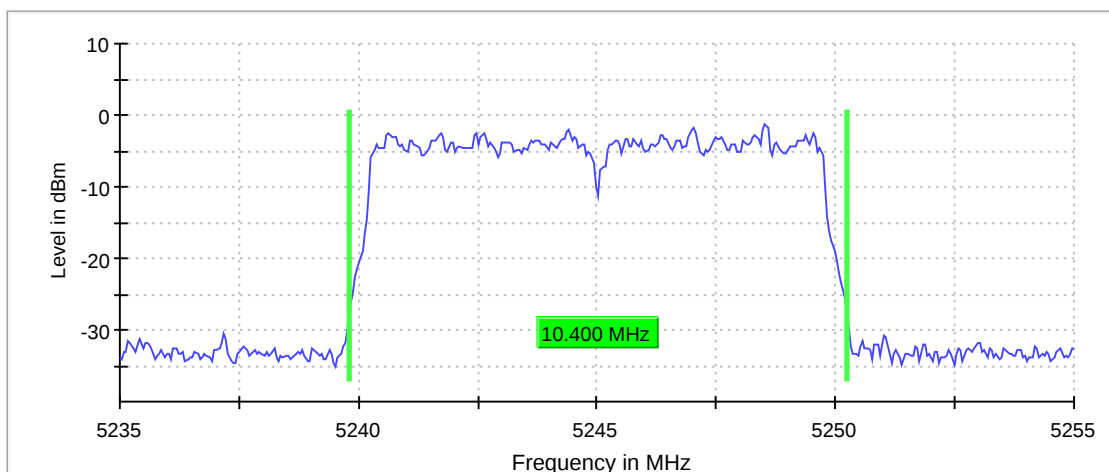
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

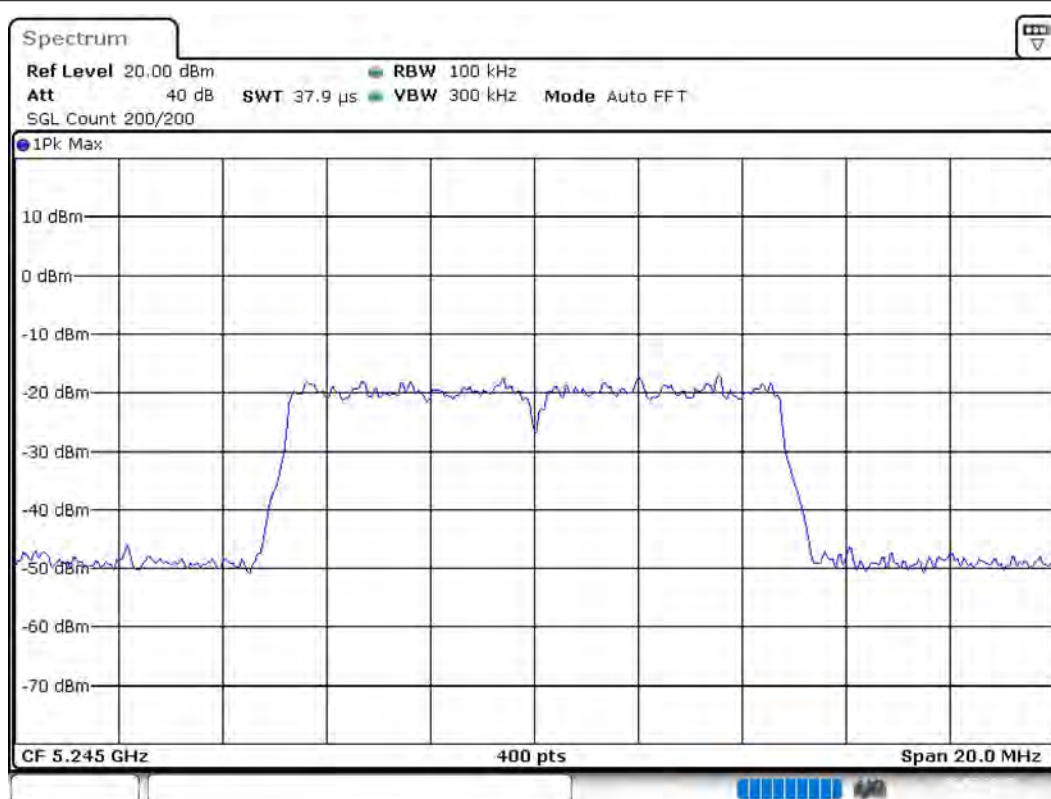
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5245.000000	10.400000	---	---	5239.825000	5250.225000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5245.000000	-1.3	PASS



Bandwidth



Date: 26 JUL 2019 20:03:09

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23500 GHz	5.23500 GHz
Stop Frequency	5.25500 GHz	5.25500 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	400	~ 400
SweepTime	37.891 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5245 MHz; 10 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

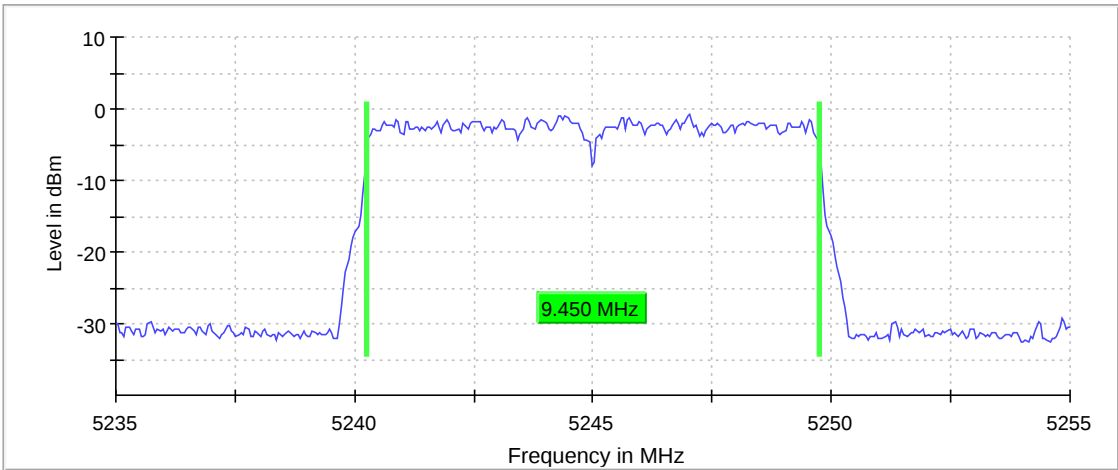
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

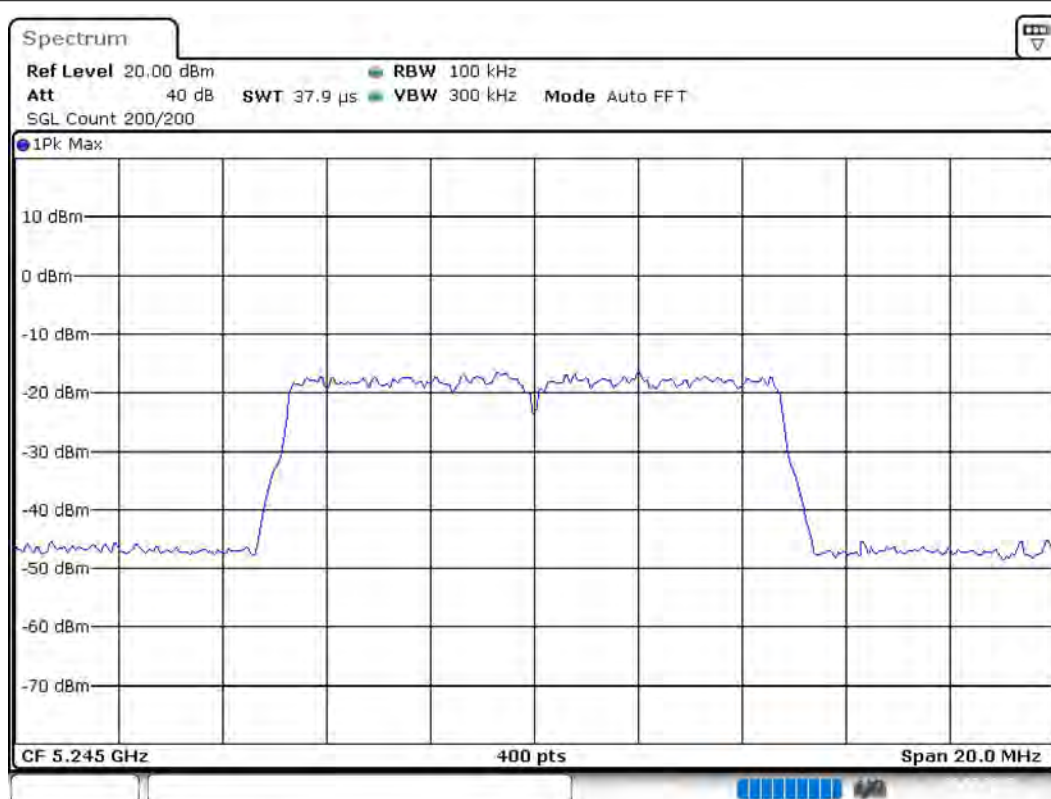
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5245.000000	9.450000	---	---	5240.275000	5249.725000

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

DUT Frequency (MHz)	Result
5245.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:04:35

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23500 GHz	5.23500 GHz
Stop Frequency	5.25500 GHz	5.25500 GHz
Span	20.000 MHz	20.000 MHz
RBW	100.000 kHz	≥ 100.000 kHz
VBW	300.000 kHz	≥ 300.000 kHz
SweepPoints	400	~ 400
SweepTime	37.891 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	34 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.04 dB	0.30 dB

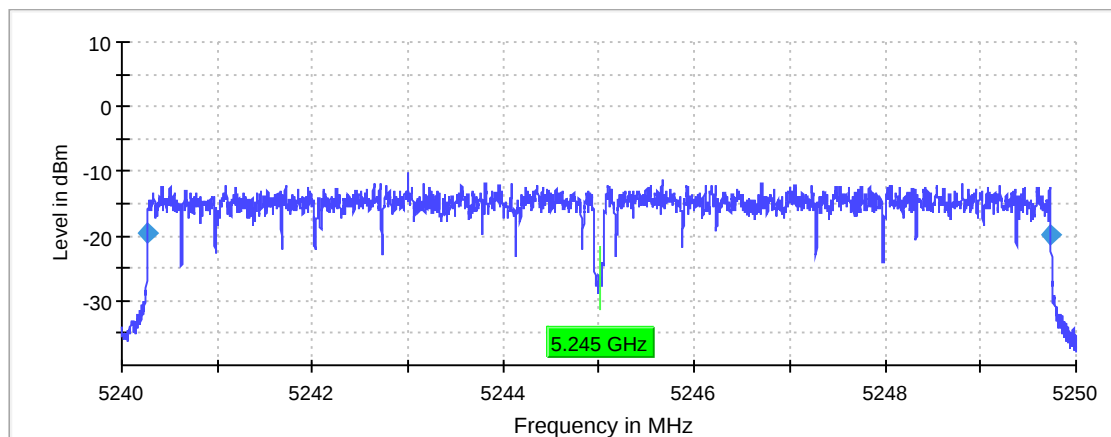
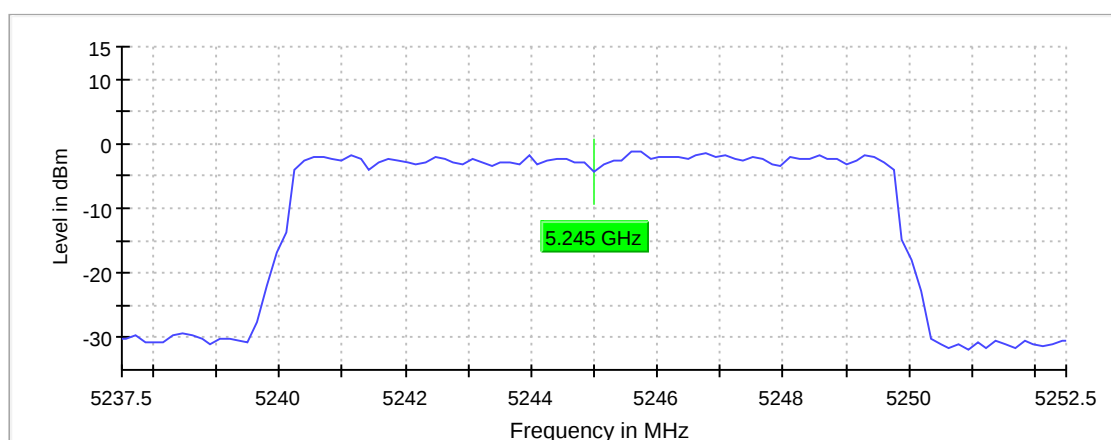
Frequency stability (5245 MHz; 10 MHz)

Test according to FCC title 47 part 15 §15.407(g), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 A.3 and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 5ppm

Result

DUT Frequency (MHz)	Frequency (MHz)	Difference (ppm)	Frequency Difference (kHz)	Limit Min (MHz)	Limit Max (MHz)	Result
5245.000000	5245.001500	0.286	1.500000	---	---	PASS

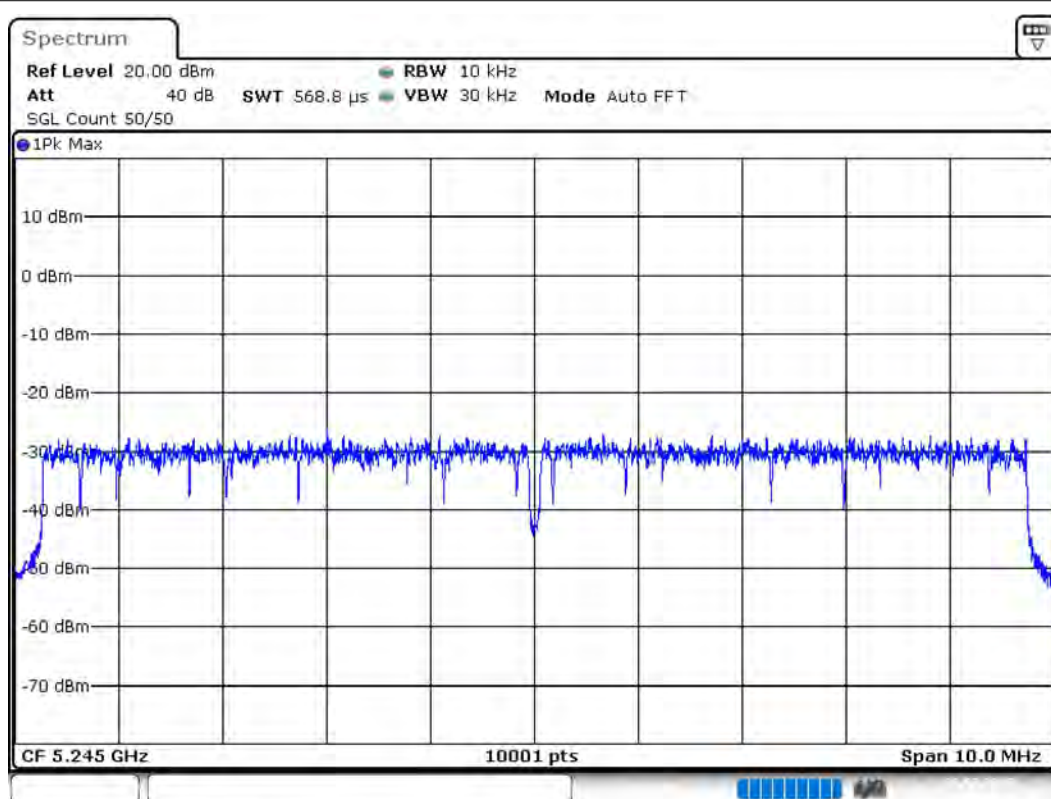


Frequency stability Pre



Date: 26 JUL 2019 20:04:45

Frequency stability



Date: 26.JUL.2019 20:05:02

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.24000 GHz	5.24000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	10.000 MHz	10.000 MHz
RBW	10.000 kHz	≤ 10.000 kHz
VBW	30.000 kHz	≥ 30.000 kHz
SweepPoints	10001	~ 10001
Sweeptime	568.782 μ s	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 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	1.00 dB	1.00 dB
Run	10 / max. 150	max. 150
Stable	1 / 1	1
Max Stable Difference	0.85 dB	1.00 dB

Emission Bandwidth 26 dB (5165 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

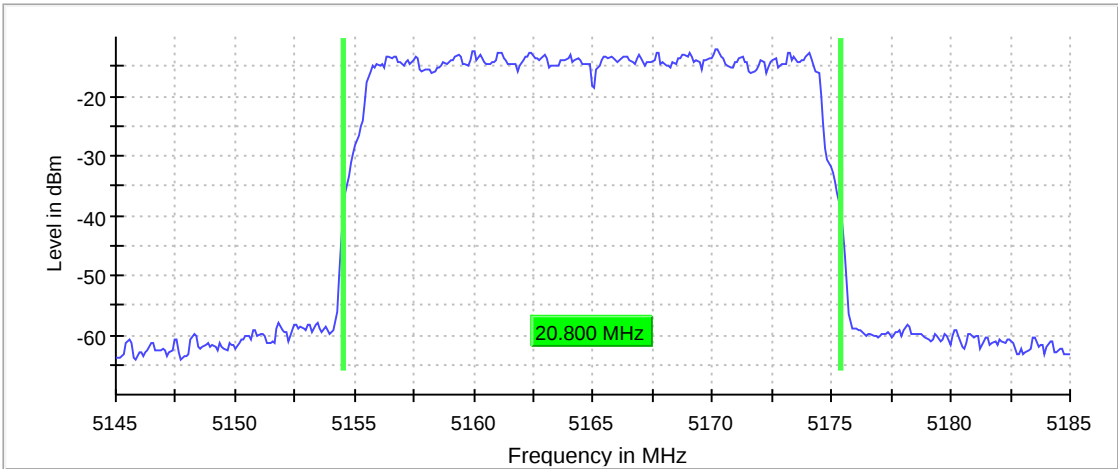
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

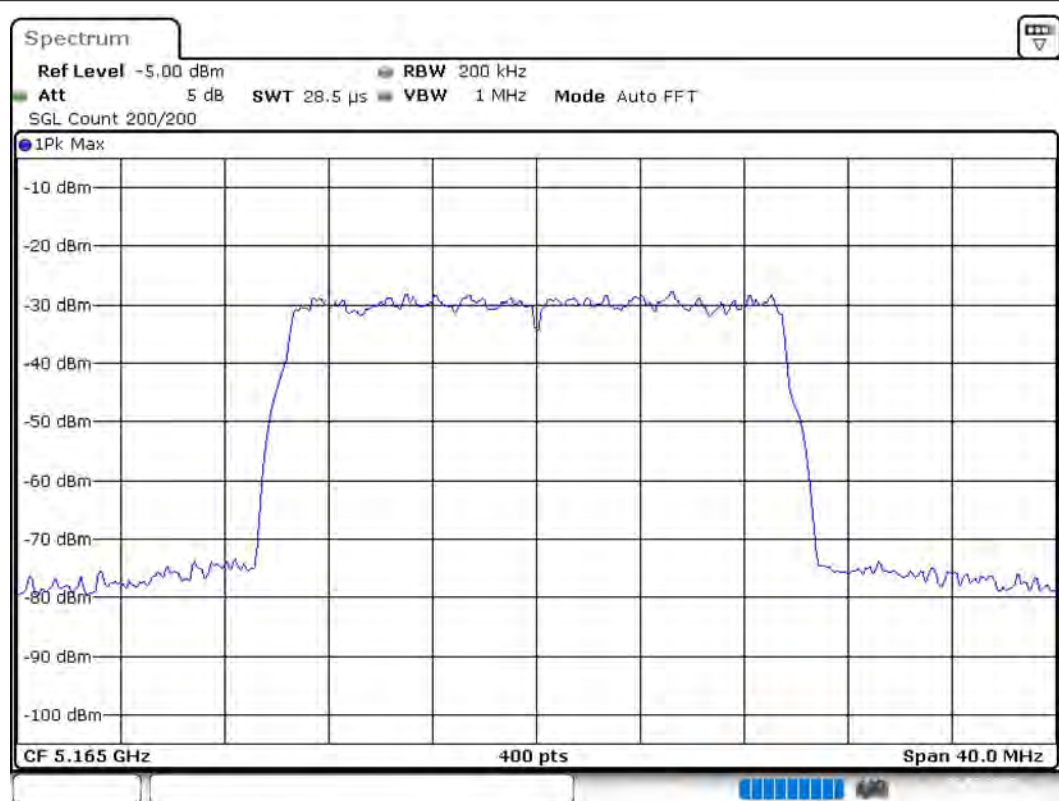
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5165.000000	20.800000	---	---	5154.550000	5175.350000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5165.000000	-12.2	PASS



Bandwidth



Date: 26 JUL 2019 20:05:45

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.14500 GHz	5.14500 GHz
Stop Frequency	5.18500 GHz	5.18500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	28.477 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

RF output power (5165 MHz; 20 MHz)

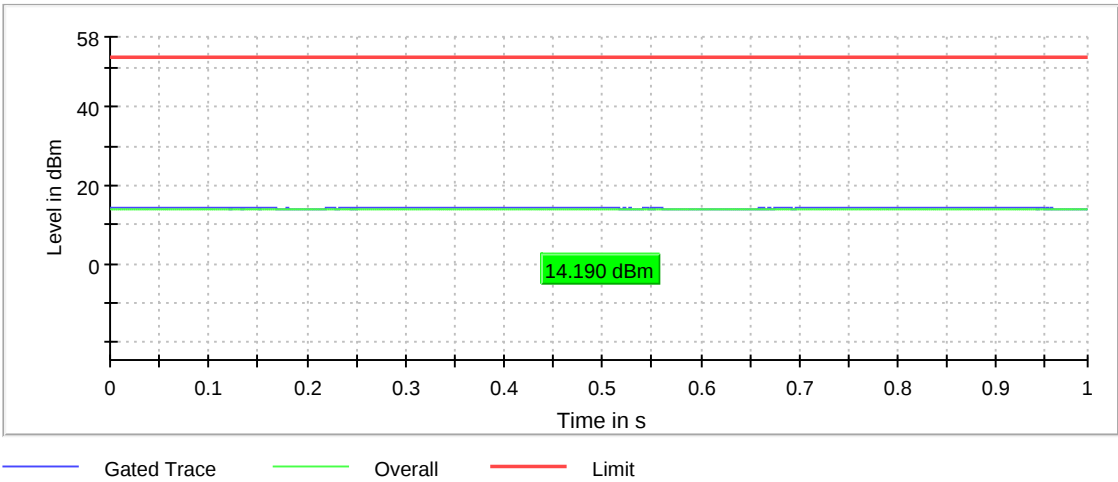
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5165.000000	14.2	53.0	14.2	99.435	PASS



Power Spectral Density (5165 MHz; 20 MHz)

Customized settings.

Max level of analyzer (-9.9 dBm) more than 28.0 dB below the nominal power level.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

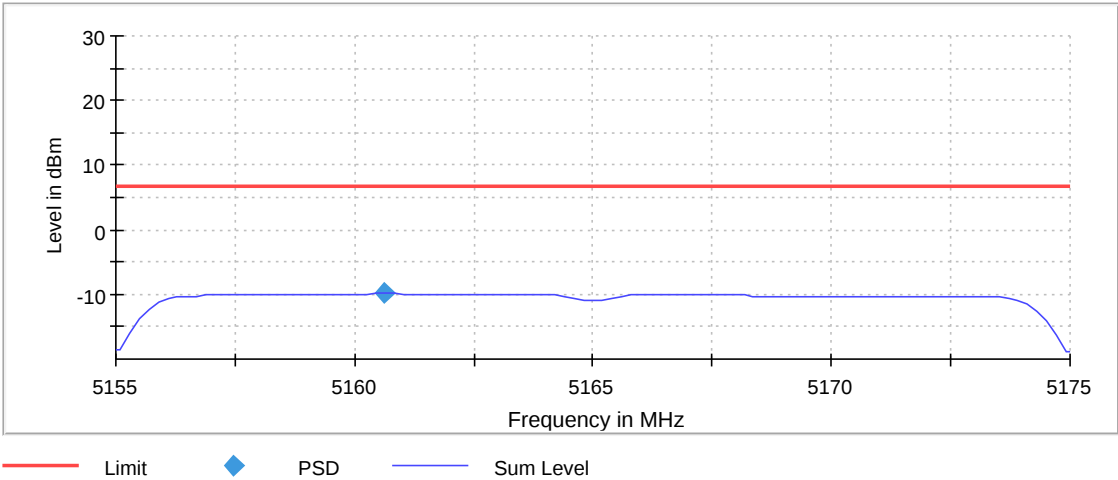
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

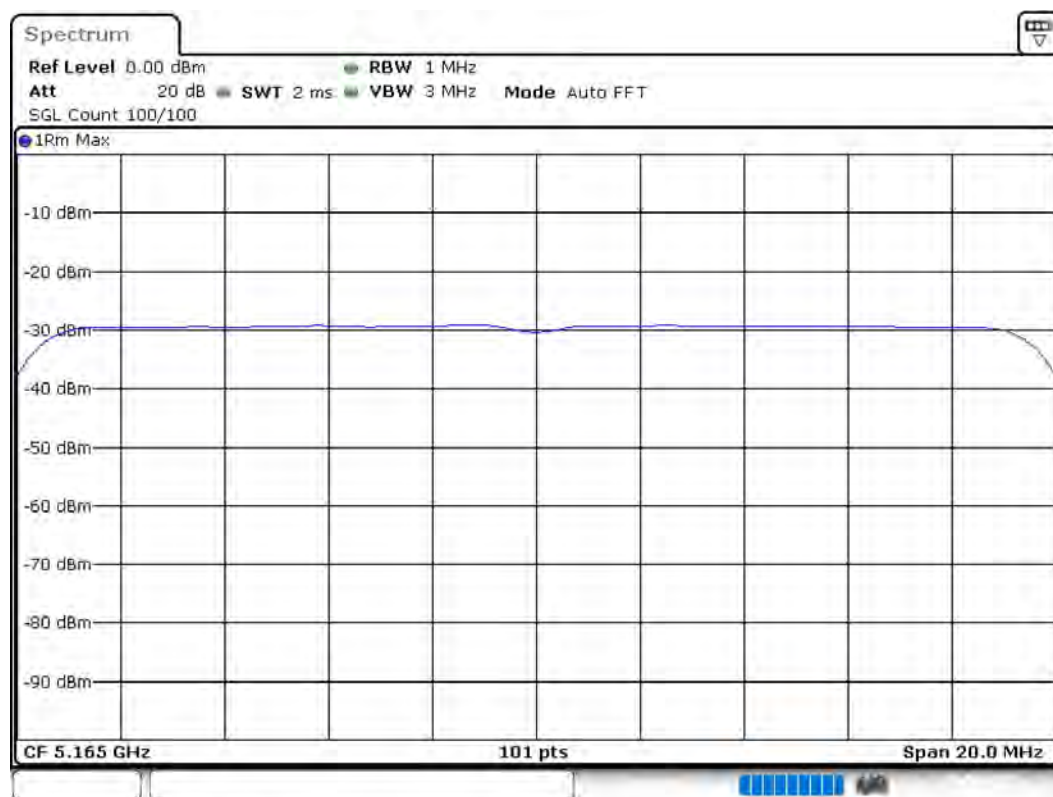
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5165.000000	5160.643564	-9.860	6.8	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

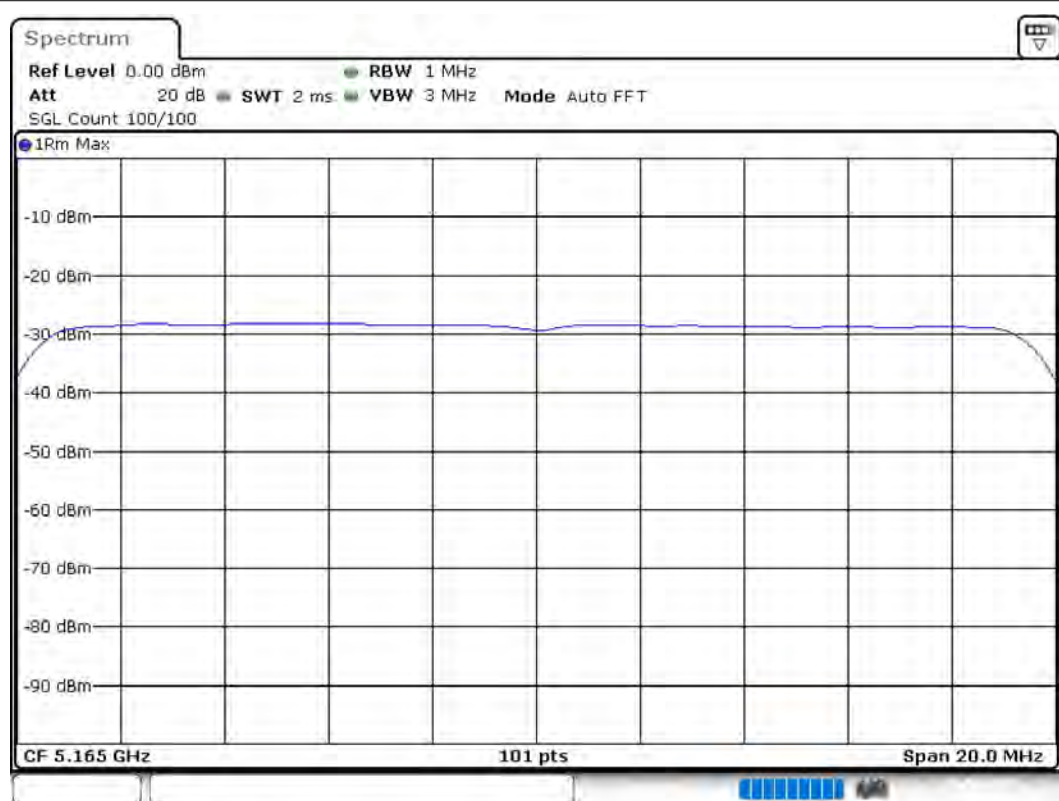


PSD Connector 1



Date: 26 JUL 2019 20:06:25

PSD Connector 2



Date: 26 JUL 2019 20:06:31

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.17500 GHz	5.17500 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 ms	2.020 ms
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5165 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

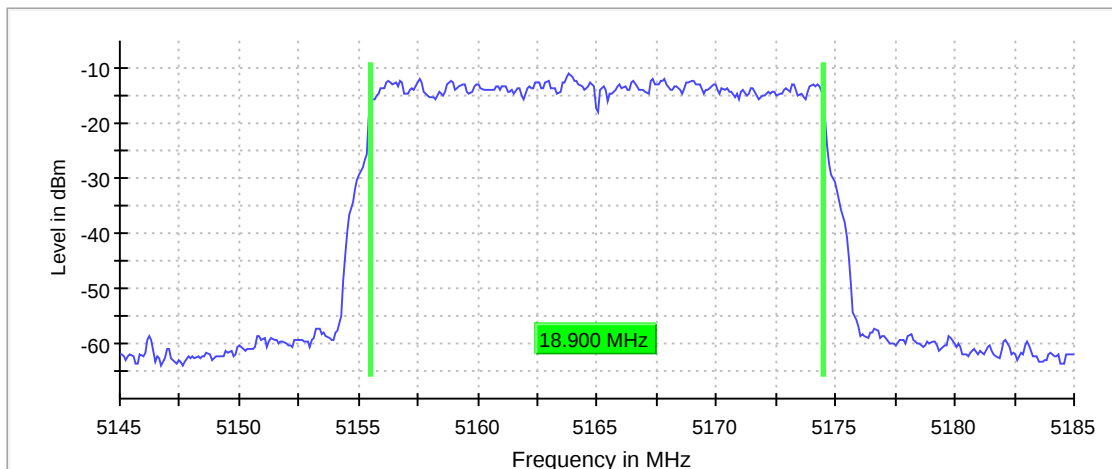
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

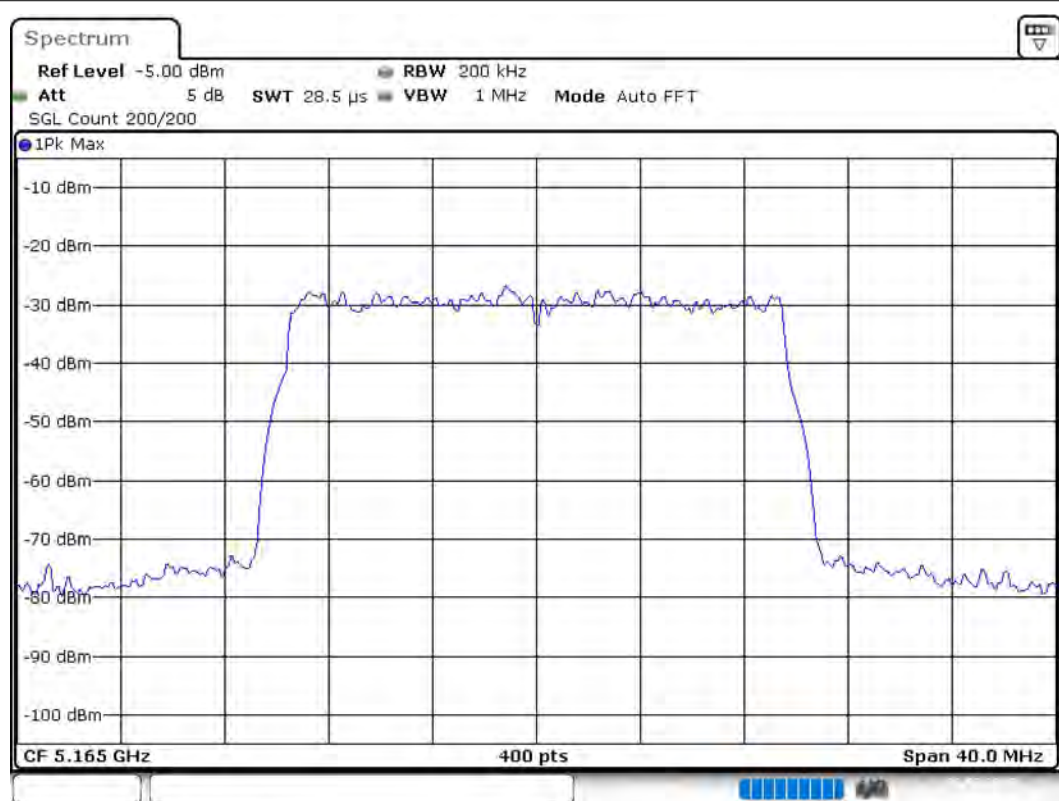
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5165.000000	18.900000	---	---	5155.550000	5174.450000

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

DUT Frequency (MHz)	Result
5165.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:06:52

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.14500 GHz	5.14500 GHz
Stop Frequency	5.18500 GHz	5.18500 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	$\geq$ 200.000 kHz
VBW	1.000 MHz	$\geq$ 600.000 kHz
SweepPoints	400	$\sim$ 400
SweepTime	28.477 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

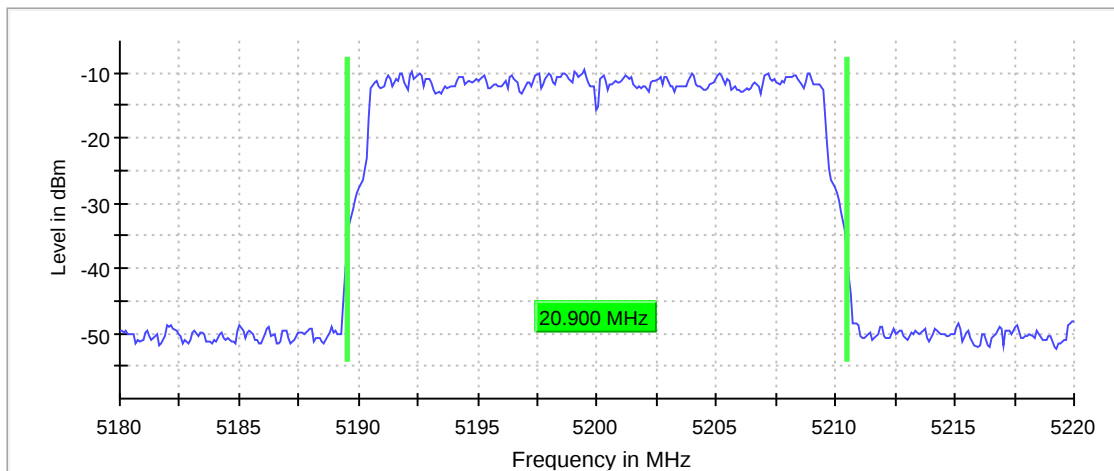
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	20.900000	---	---	5189.550000	5210.450000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-9.6	PASS



Bandwidth



Date: 26 JUL 2019 20:07:53

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	28.477 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

RF output power (5200 MHz; 20 MHz)

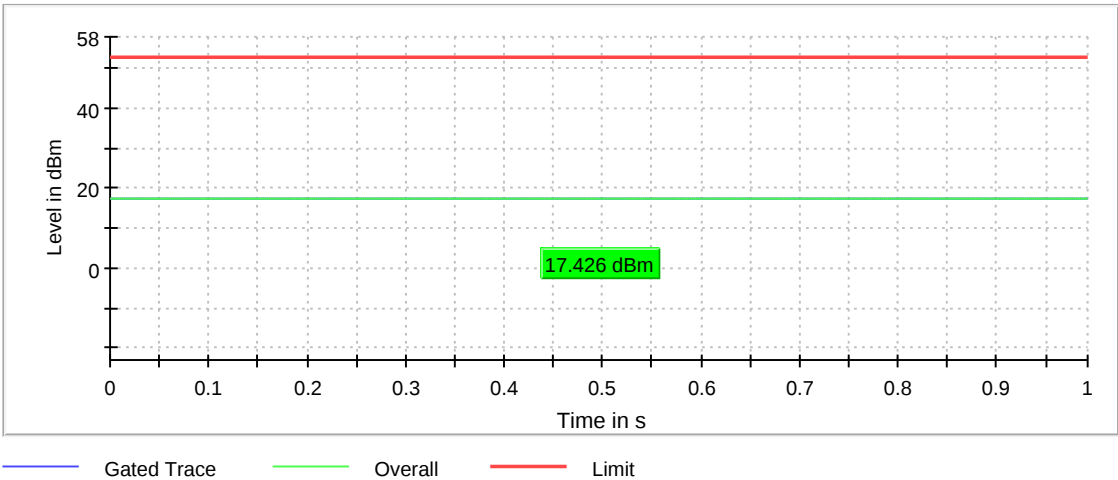
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	17.4	53.0	17.4	99.426	PASS



Power Spectral Density (5200 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

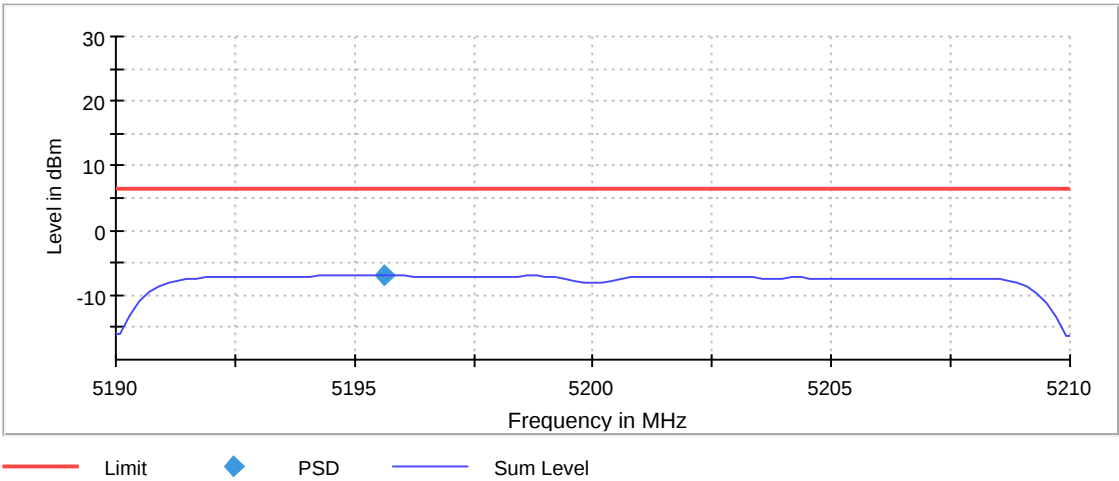
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5195.643564	-6.959	6.5	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

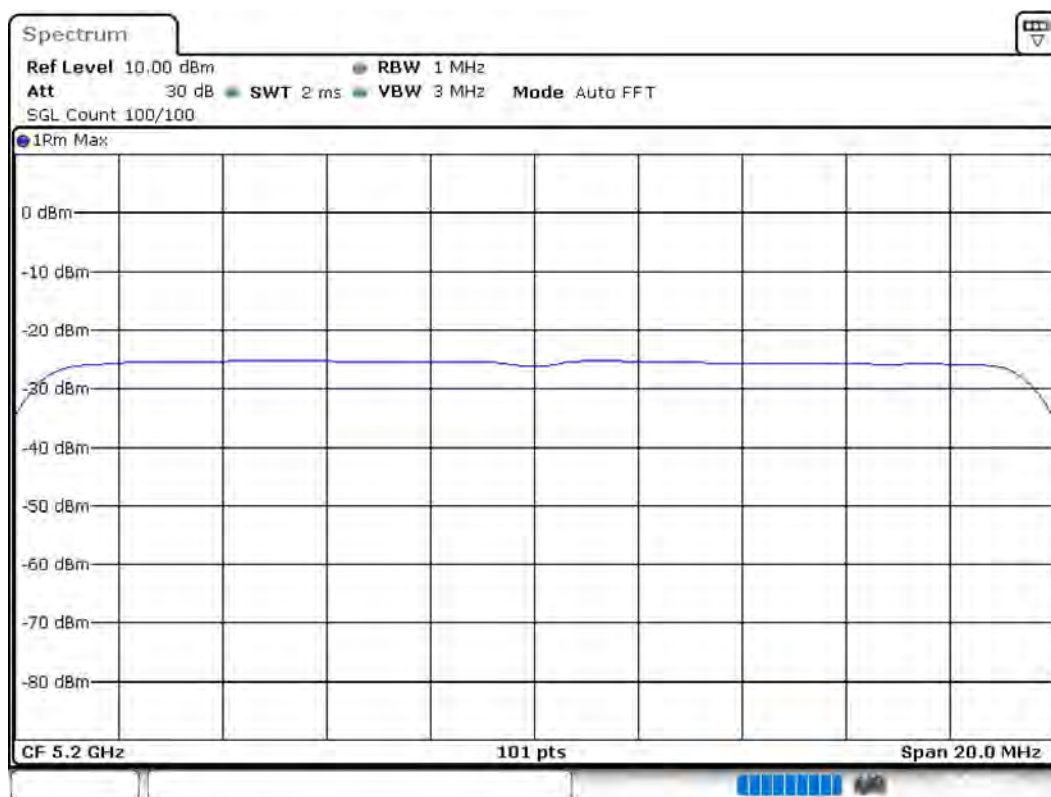


PSD Connector 1



Date: 26 JUL 2019 20:08:32

PSD Connector 2



Date: 26 JUL 2019 20:08:38

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19000 GHz	5.19000 GHz
Stop Frequency	5.21000 GHz	5.21000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

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

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

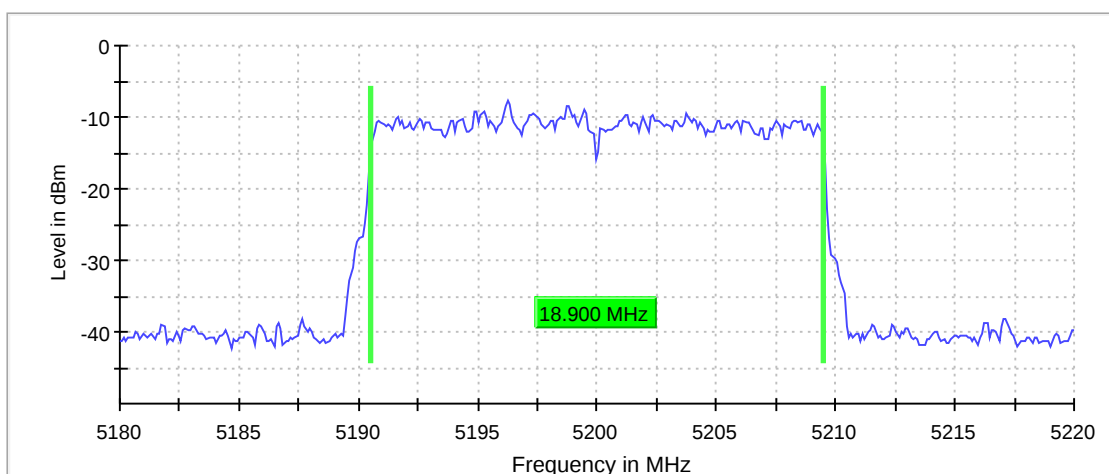
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	18.900000	---	---	5190.550000	5209.450000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:08:46

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	≥ 200.000 kHz
VBW	1.000 MHz	≥ 600.000 kHz
SweepPoints	400	~ 400
SweepTime	28.477 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

Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

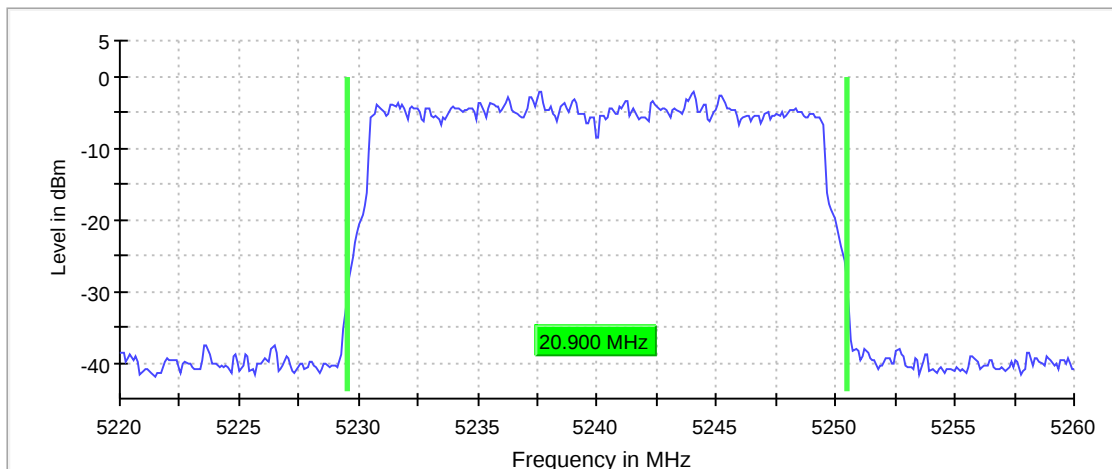
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	20.900000	---	---	5229.550000	5250.450000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-2.1	PASS



Bandwidth



Date: 26 JUL 2019 20:09:33

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	28.477 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

RF output power (5240 MHz; 20 MHz)

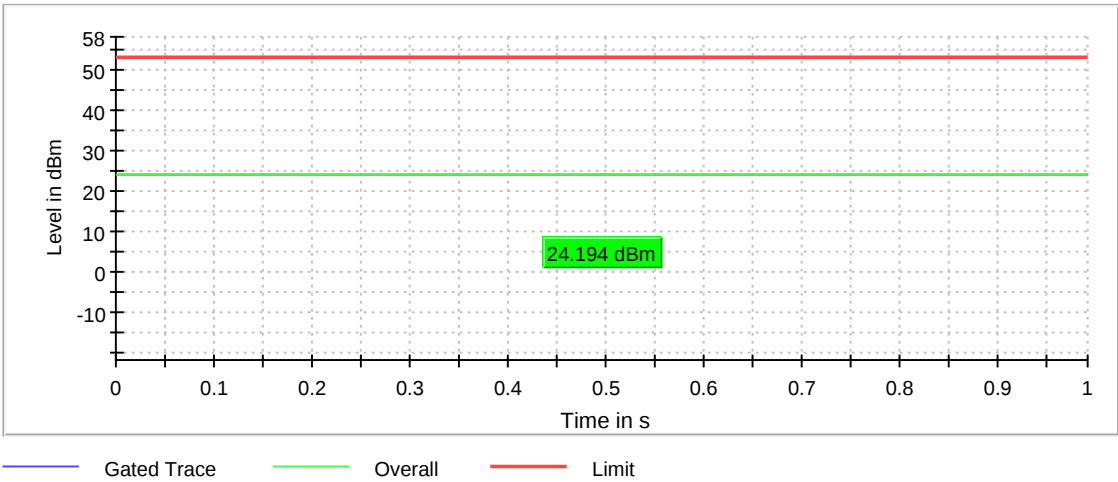
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5240.000000	24.2	53.0	24.2	99.414	PASS



Power Spectral Density (5240 MHz; 20 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

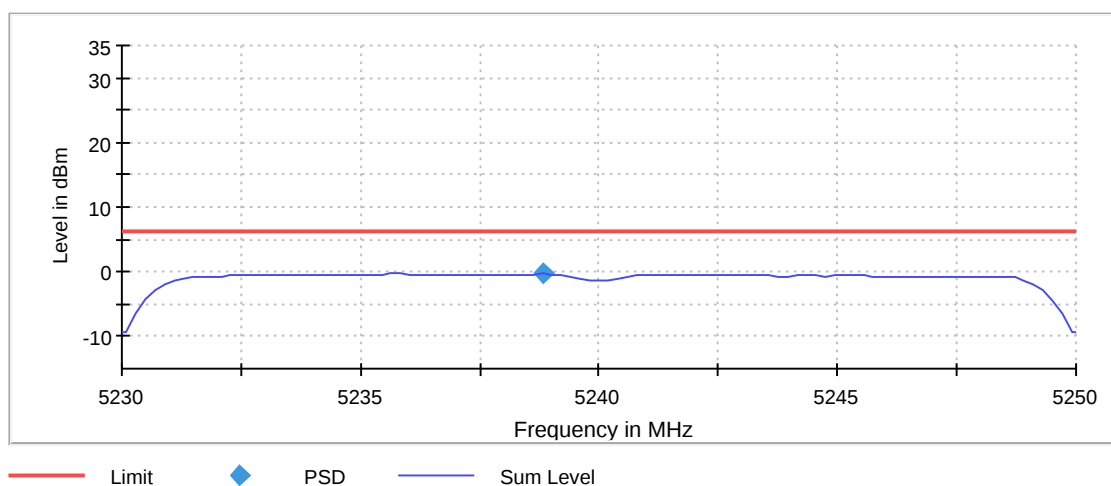
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5238.811881	-0.356	6.3	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

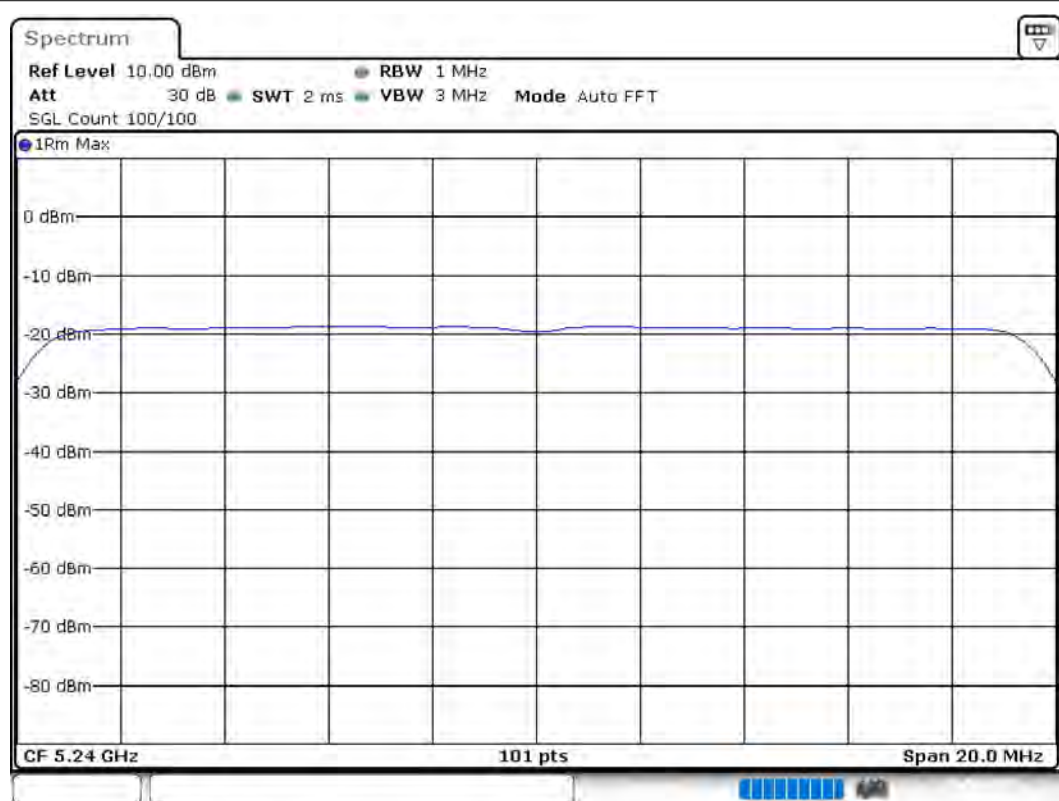


PSD Connector 1



Date: 26 JUL 2019 20:10:12

PSD Connector 2



Date: 26 JUL 2019 20:10:18

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.23000 GHz	5.23000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	20.000 MHz	20.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 40
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

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

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

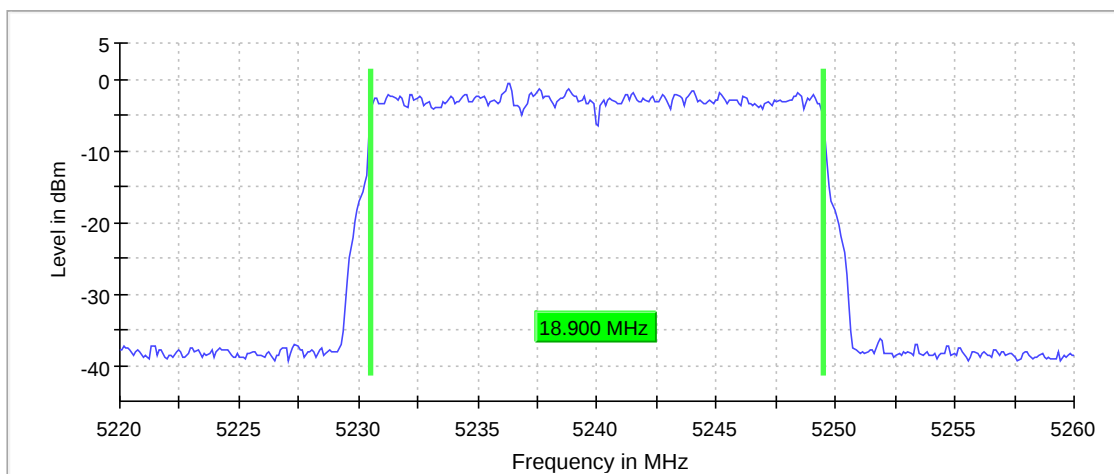
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	18.900000	---	---	5230.550000	5249.450000

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

DUT Frequency (MHz)	Result
5240.000000	PASS



Bandwidth



Date: 26.JUL.2019 20:11:11

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.26000 GHz	5.26000 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	≥ 200.000 kHz
VBW	1.000 MHz	≥ 600.000 kHz
SweepPoints	400	~ 400
SweepTime	28.477 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	38 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.13 dB	0.30 dB

Emission Bandwidth 26 dB (5170 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

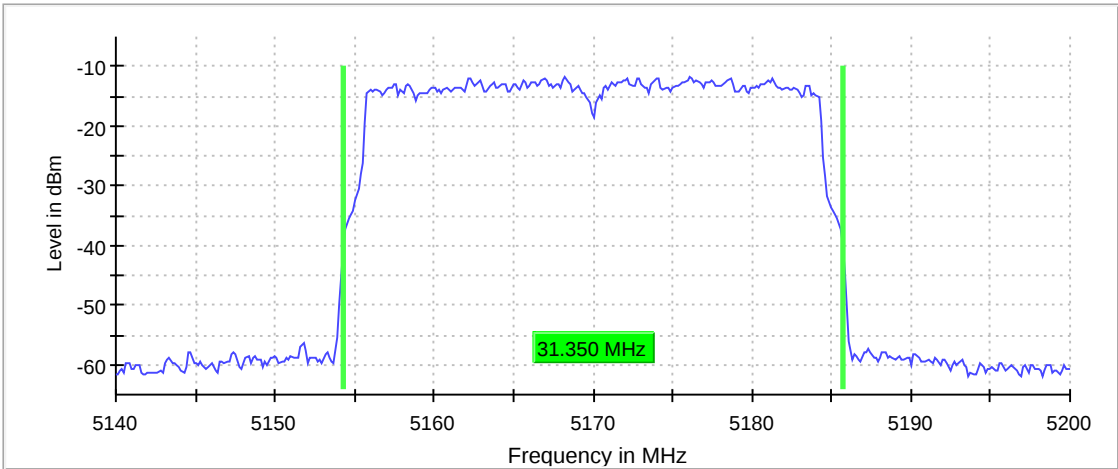
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

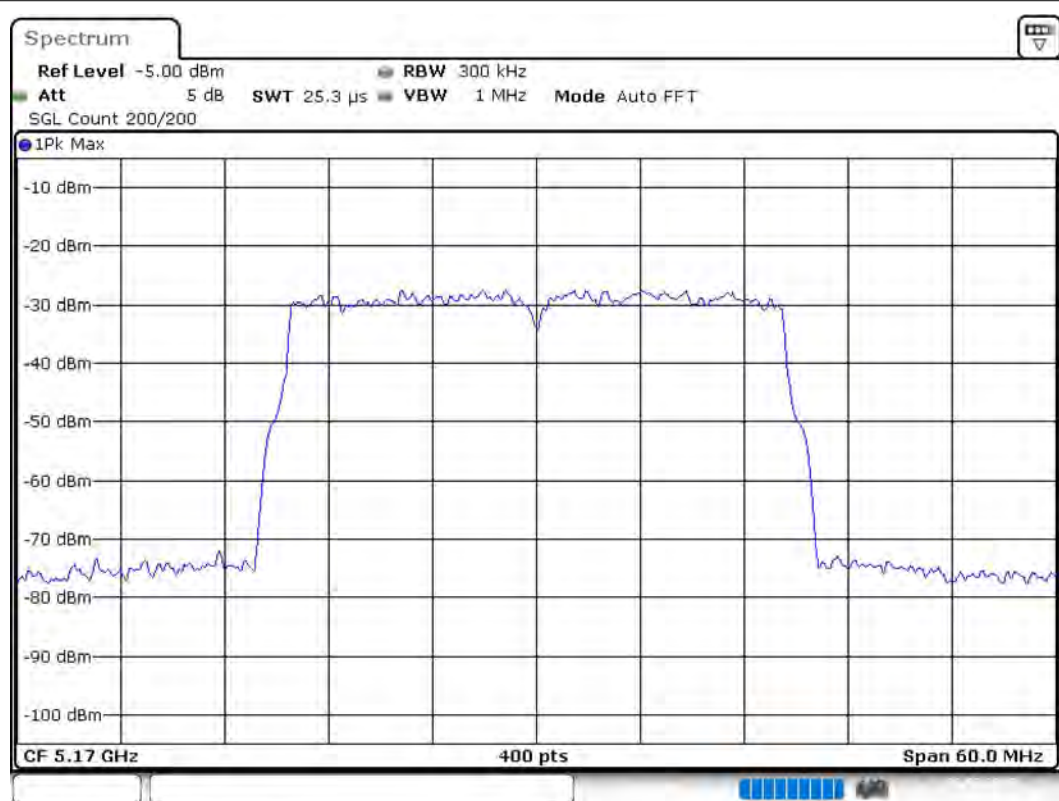
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5170.000000	31.350000	---	---	5154.325000	5185.675000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5170.000000	-11.9	PASS



Bandwidth



Date: 26.JUL.2019 20:12:01

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.14000 GHz	5.14000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	400	~ 400
SweepTime	25.313 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

RF output power (5170 MHz; 30 MHz)

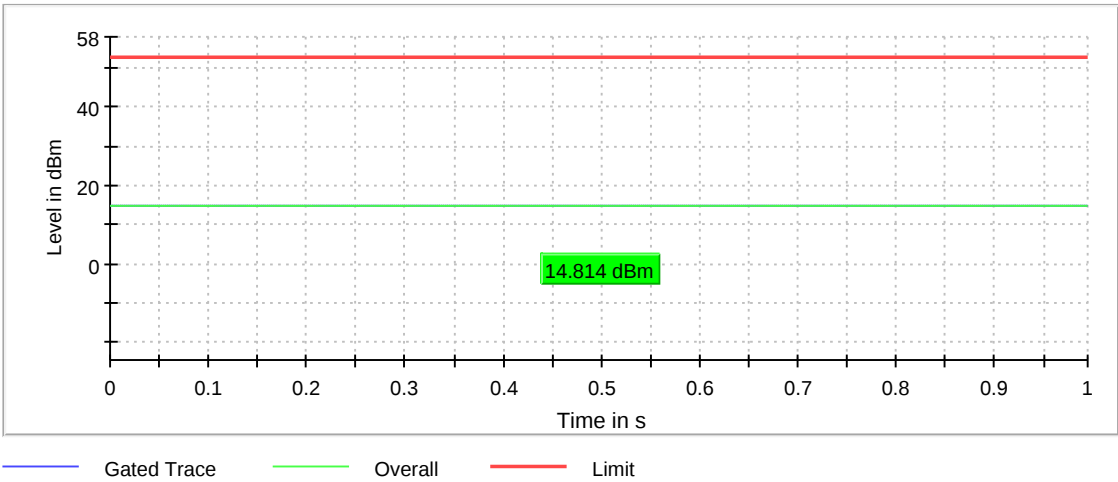
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5170.000000	14.8	53.0	14.8	99.619	PASS



Power Spectral Density (5170 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

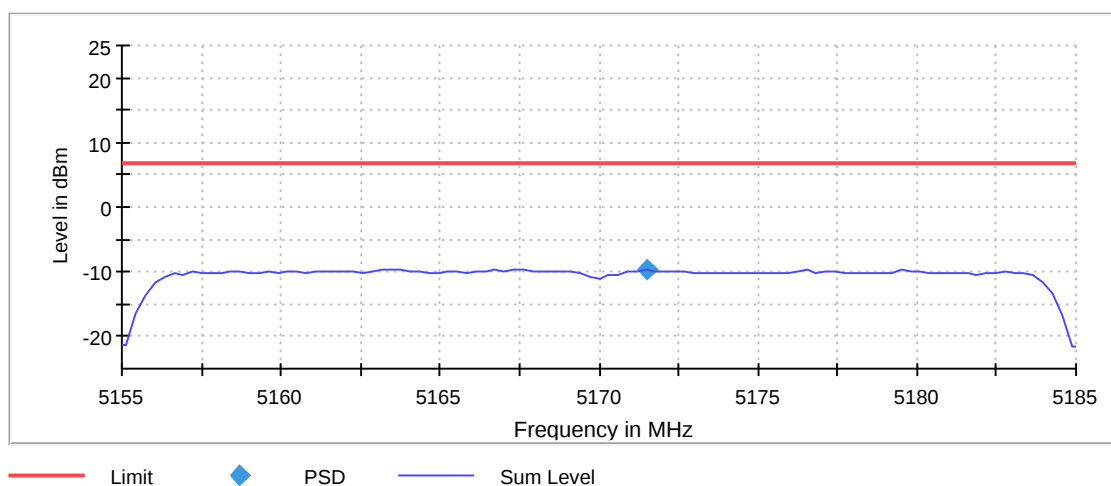
Expanded Uncertainty (K=2) < 1.3 dB

Result

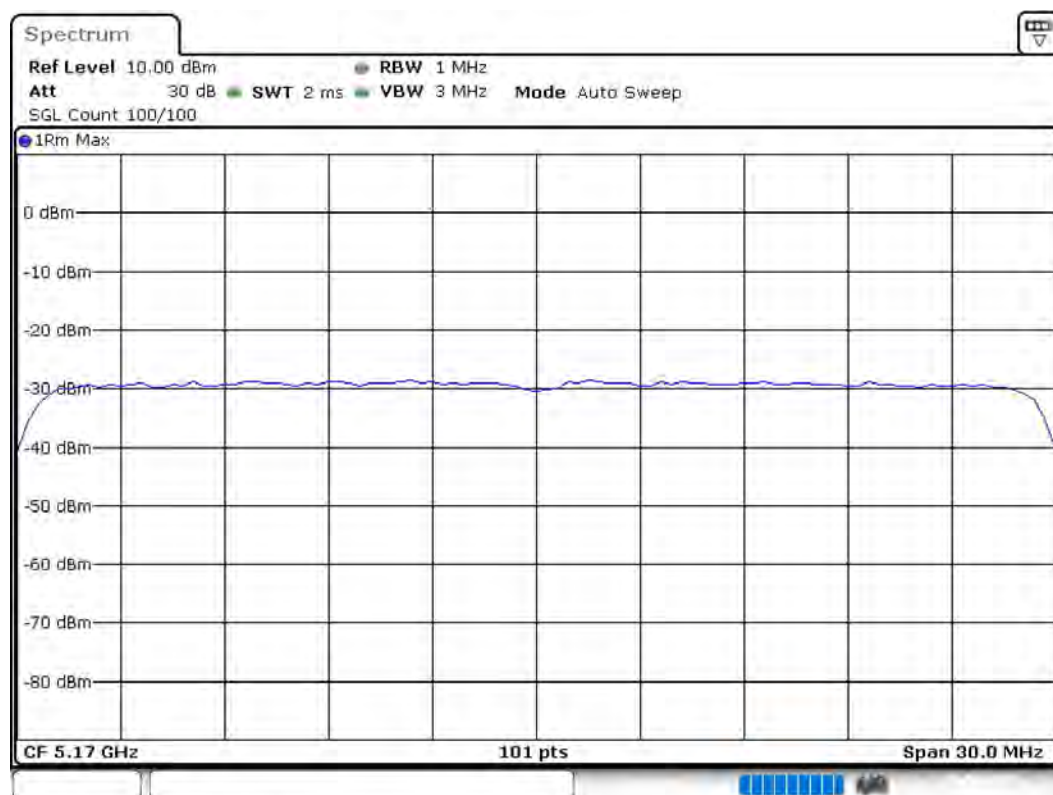
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5170.000000	5171.485149	-9.706	6.7	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

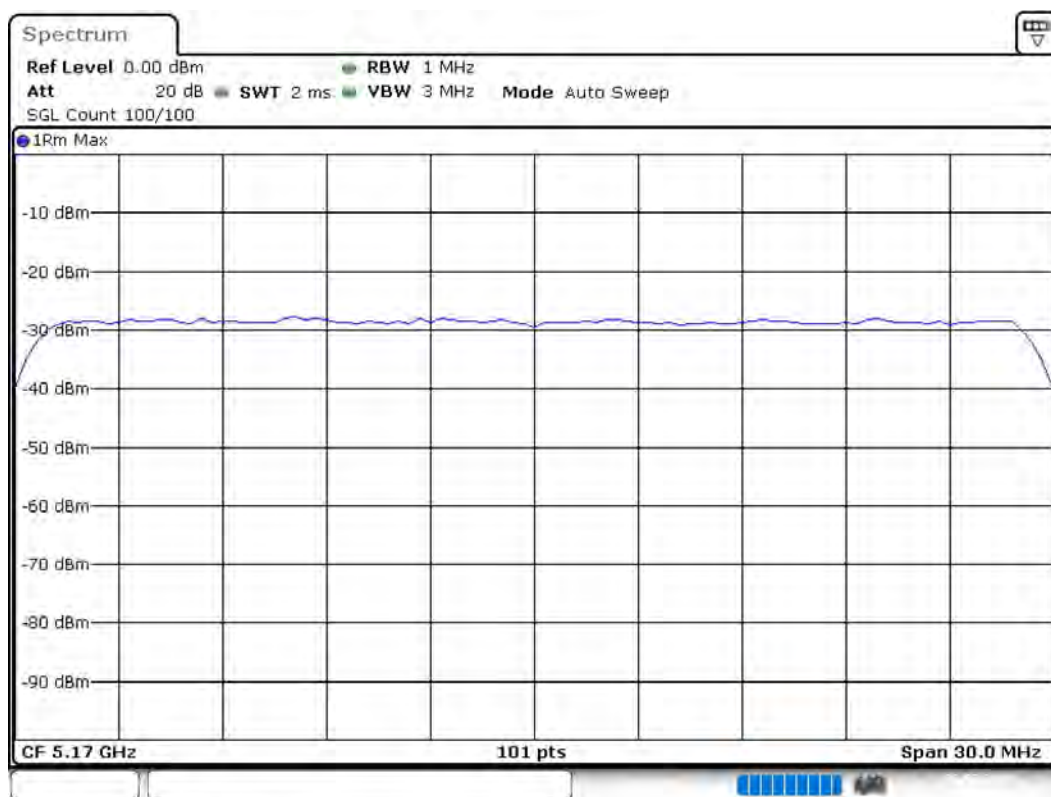


PSD Connector 1



Date: 26 JUL 2019 20:12:40

PSD Connector 2



Date: 26 JUL 2019 20:12:46

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.18500 GHz	5.18500 GHz
Span	30.000 MHz	30.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 60
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5170 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

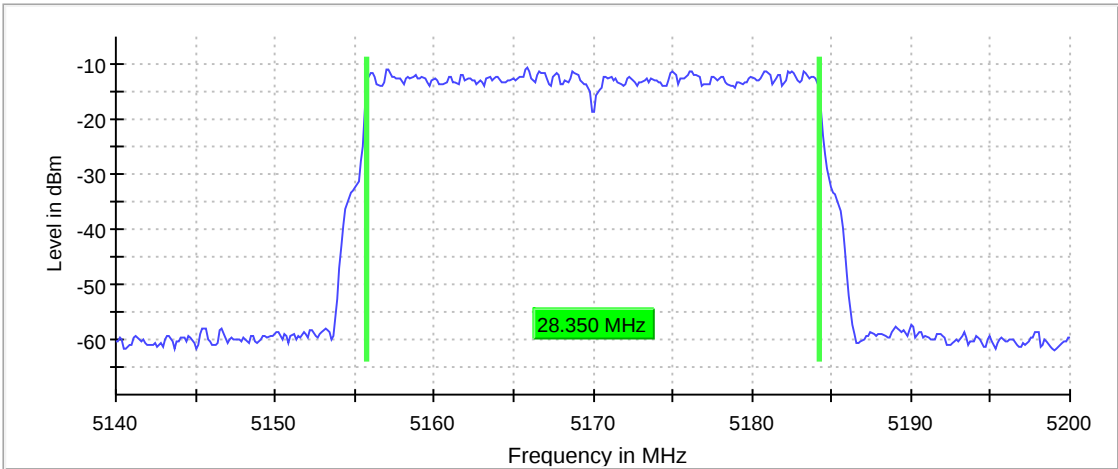
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

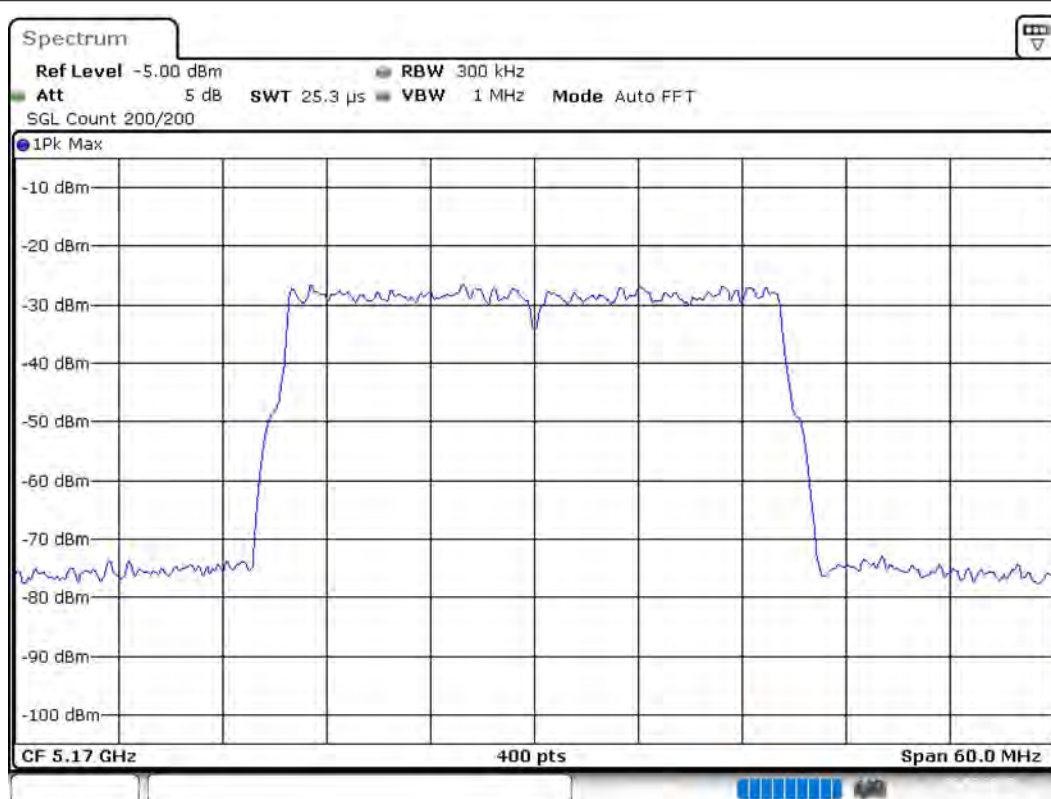
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5170.000000	28.350000	---	---	5155.825000	5184.175000

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

DUT Frequency (MHz)	Result
5170.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:12:53

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.14000 GHz	5.14000 GHz
Stop Frequency	5.20000 GHz	5.20000 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	$\geq$ 300.000 kHz
VBW	1.000 MHz	$\geq$ 900.000 kHz
SweepPoints	400	$\sim$ 400
Sweeptime	25.313 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Emission Bandwidth 26 dB (5200 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

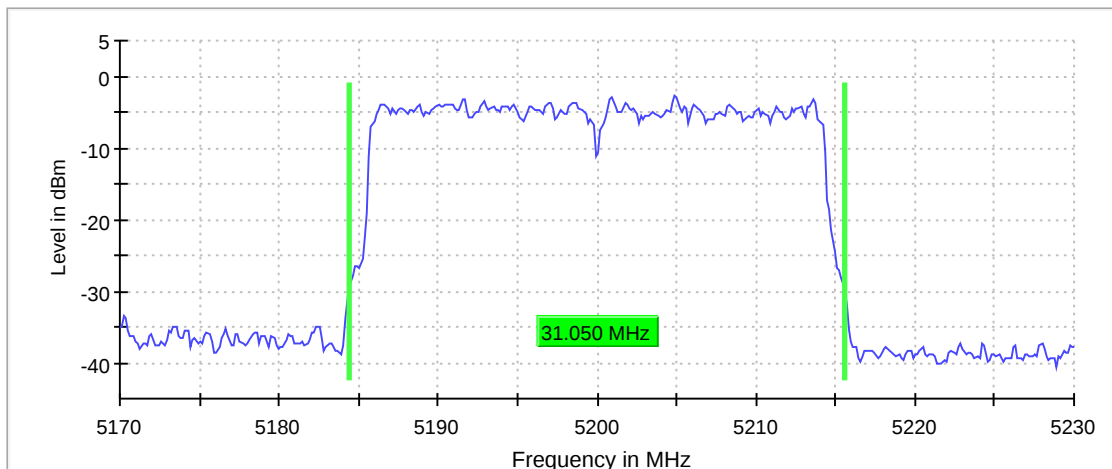
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	31.050000	---	---	5184.475000	5215.525000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-2.8	PASS



Bandwidth



Date: 26 JUL 2019 20:13:42

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17000 GHz	5.17000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	400	~ 400
SweepTime	25.313 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

RF output power (5200 MHz; 30 MHz)

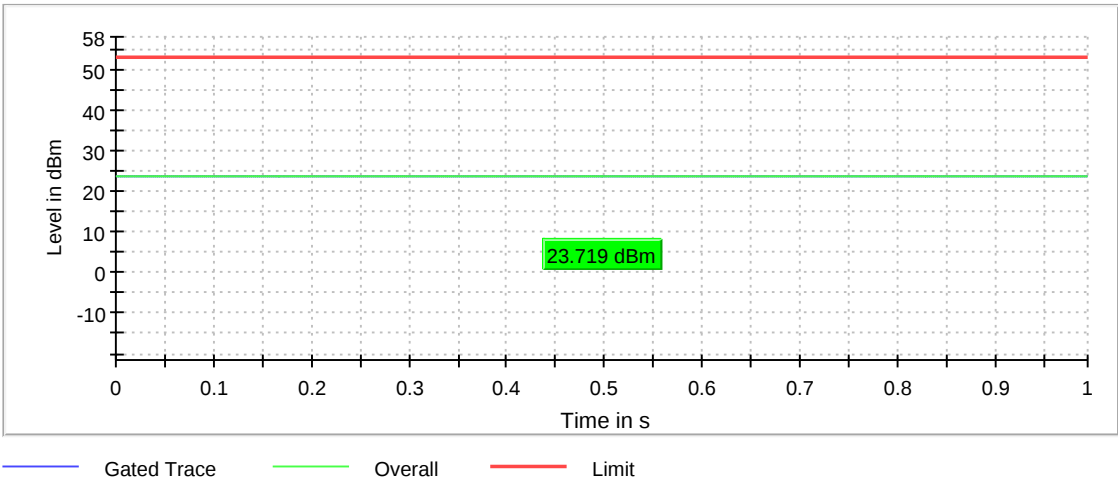
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	23.7	53.0	23.7	99.603	PASS



Power Spectral Density (5200 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

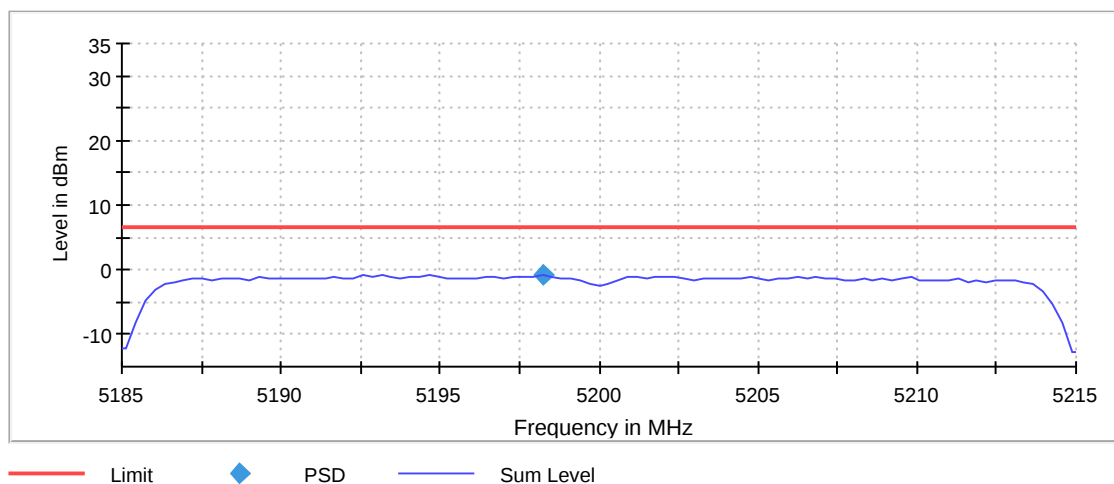
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

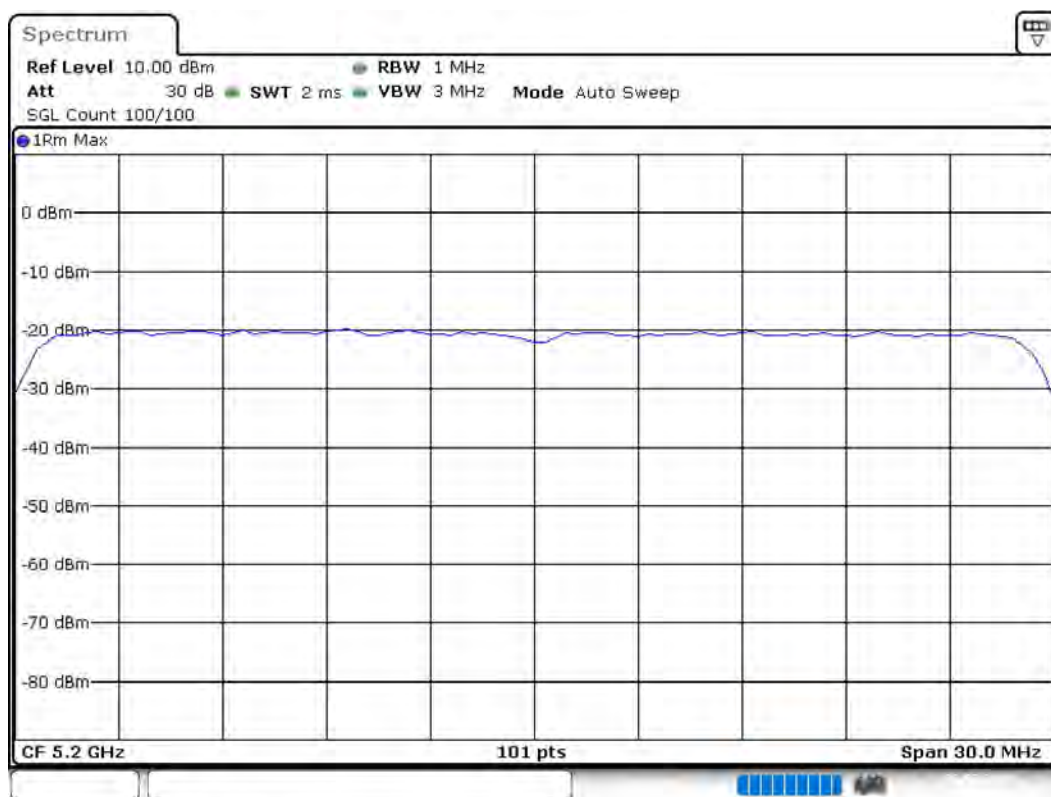
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5198.217822	-0.879	6.5	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



PSD Connector 1



Date: 26.JUL.2019 20:14:21

PSD Connector 2



Date: 26 JUL 2019 20:14:26

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18500 GHz	5.18500 GHz
Stop Frequency	5.21500 GHz	5.21500 GHz
Span	30.000 MHz	30.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 60
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5200 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

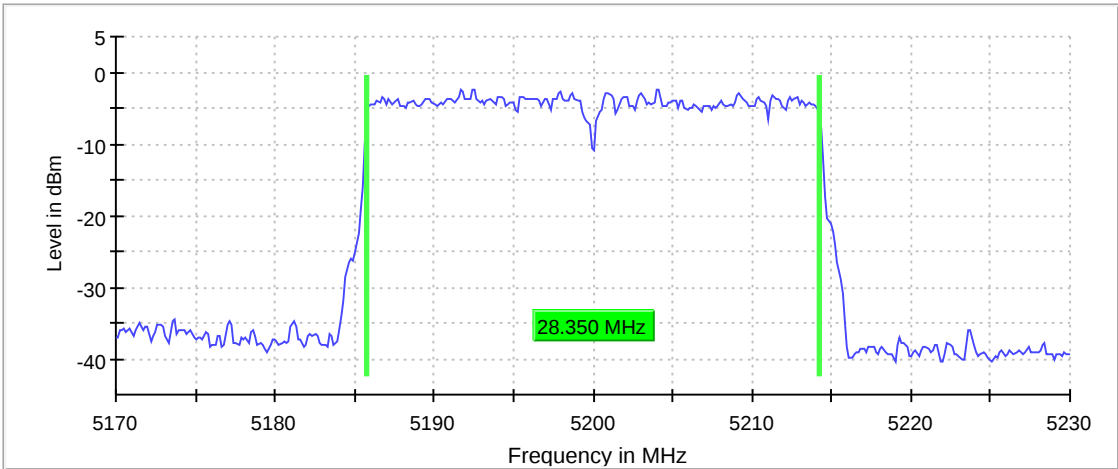
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

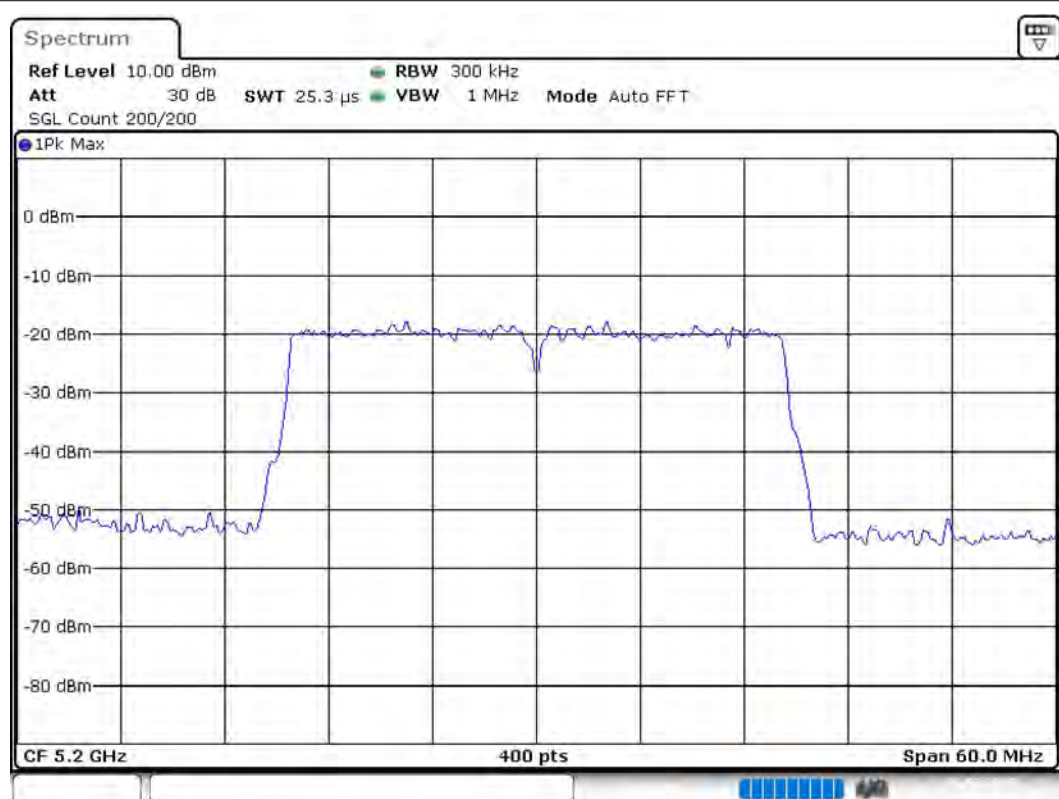
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	28.350000	---	---	5185.825000	5214.175000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 26.JUL.2019 20:14:34

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17000 GHz	5.17000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	$\geq$ 300.000 kHz
VBW	1.000 MHz	$\geq$ 900.000 kHz
SweepPoints	400	$\sim$ 400
SweepTime	25.313 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

Emission Bandwidth 26 dB (5235 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

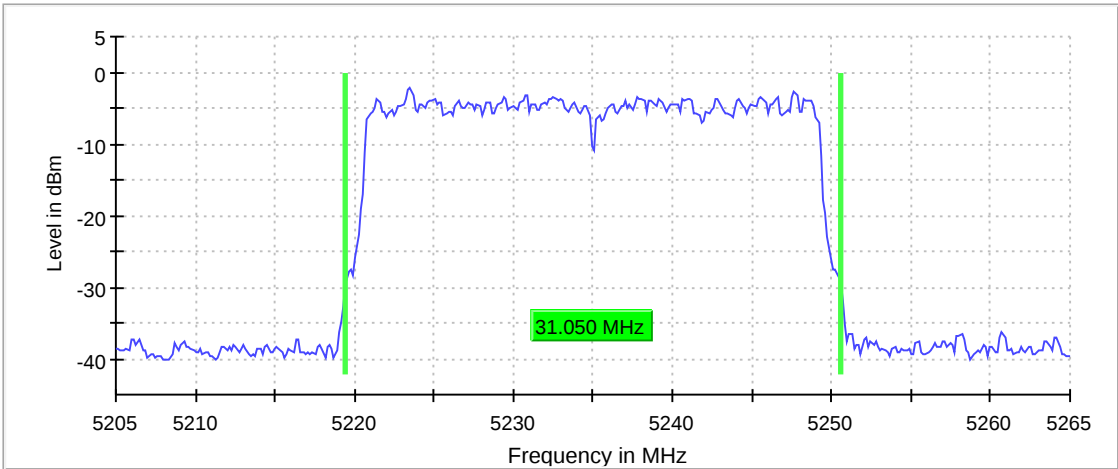
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5235.000000	31.050000	---	---	5219.475000	5250.525000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5235.000000	-2.2	PASS



Bandwidth



Date: 26.JUL.2019 20:15:18

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.20500 GHz	5.20500 GHz
Stop Frequency	5.26500 GHz	5.26500 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	~ 300.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	400	~ 400
SweepTime	25.313 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

RF output power (5235 MHz; 30 MHz)

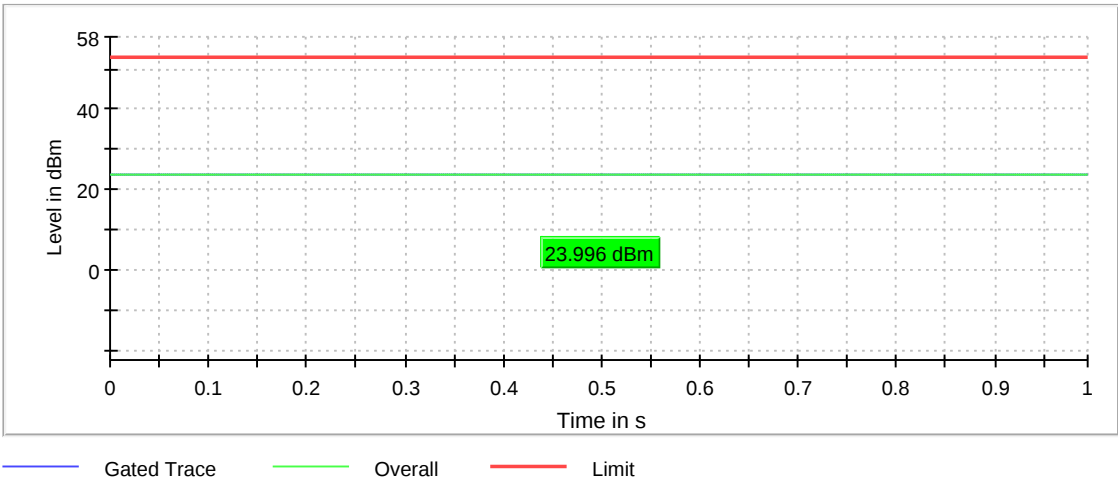
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5235.000000	24.0	53.0	24.0	99.602	PASS



Power Spectral Density (5235 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

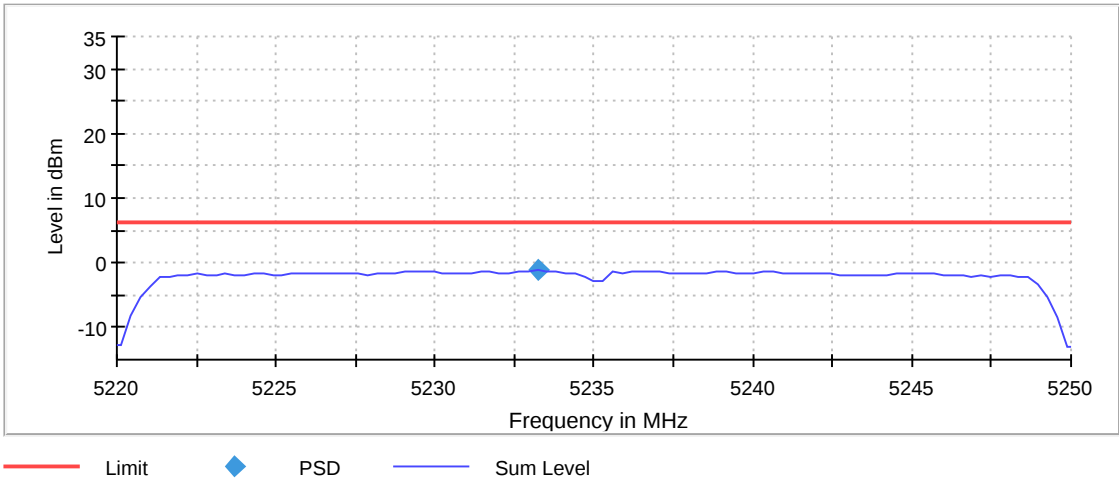
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

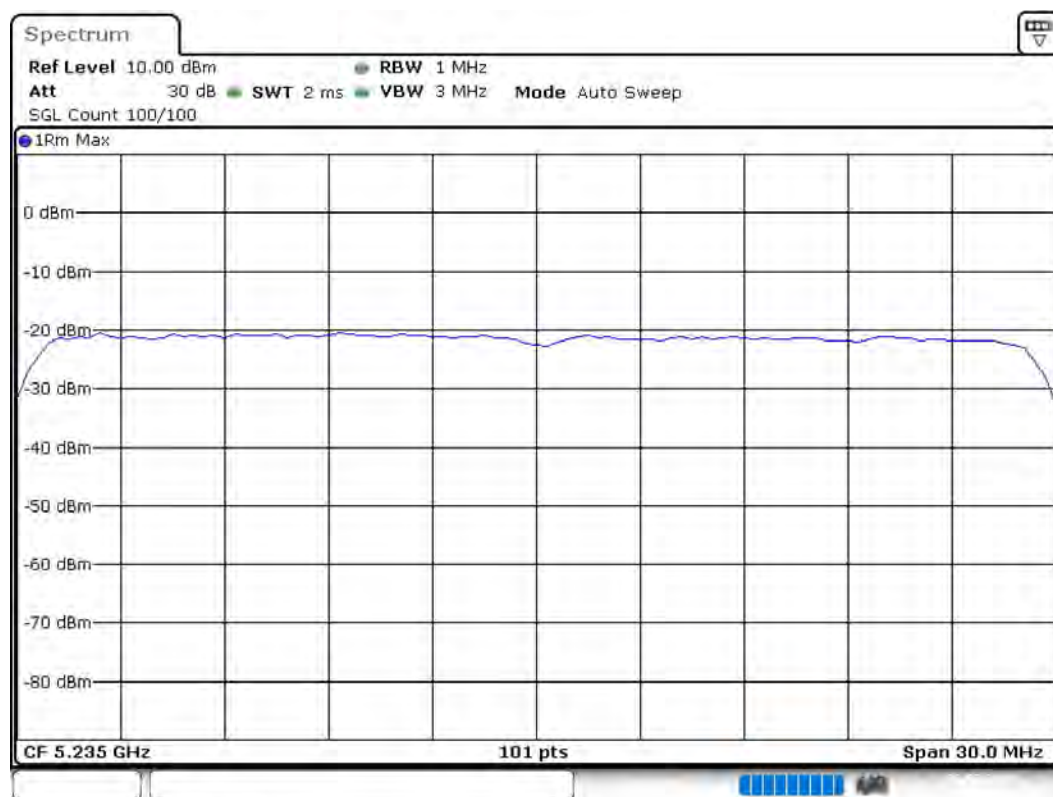
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5235.000000	5233.217822	-1.131	6.3	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



PSD Connector 1



Date: 26 JUL 2019 20:15:57

PSD Connector 2



Date: 26 JUL 2019 20:16:02

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.22000 GHz	5.22000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	30.000 MHz	30.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 60
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5235 MHz; 30 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

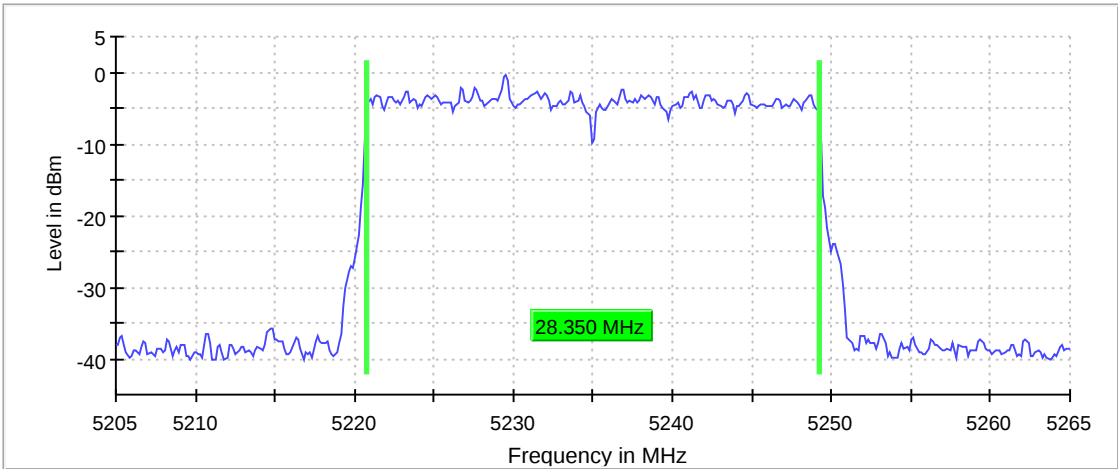
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

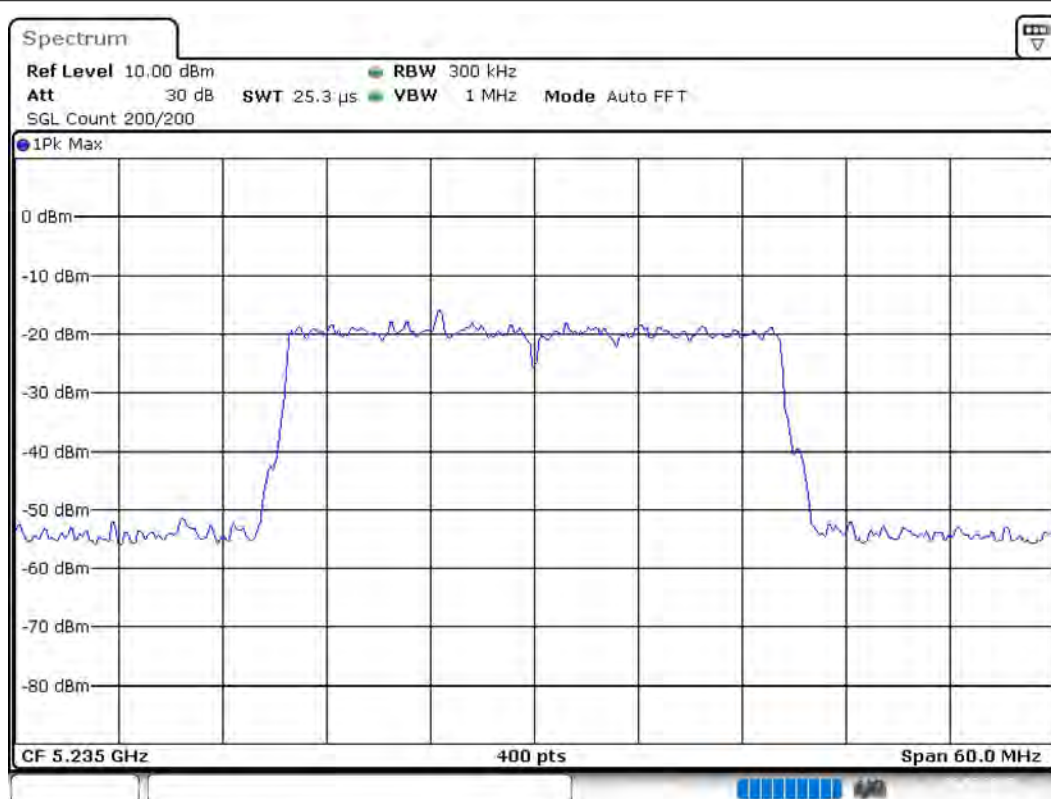
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5235.000000	28.350000	---	---	5220.825000	5249.175000

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

DUT Frequency (MHz)	Result
5235.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:16:10

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.20500 GHz	5.20500 GHz
Stop Frequency	5.26500 GHz	5.26500 GHz
Span	60.000 MHz	60.000 MHz
RBW	300.000 kHz	$\geq$ 300.000 kHz
VBW	1.000 MHz	$\geq$ 900.000 kHz
SweepPoints	400	$\sim$ 400
SweepTime	25.313 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

Emission Bandwidth 26 dB (5175 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

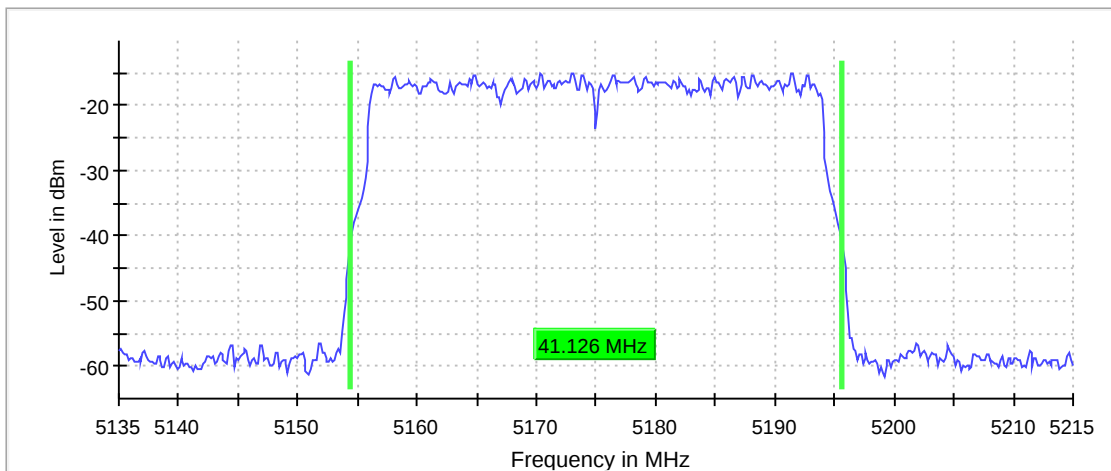
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

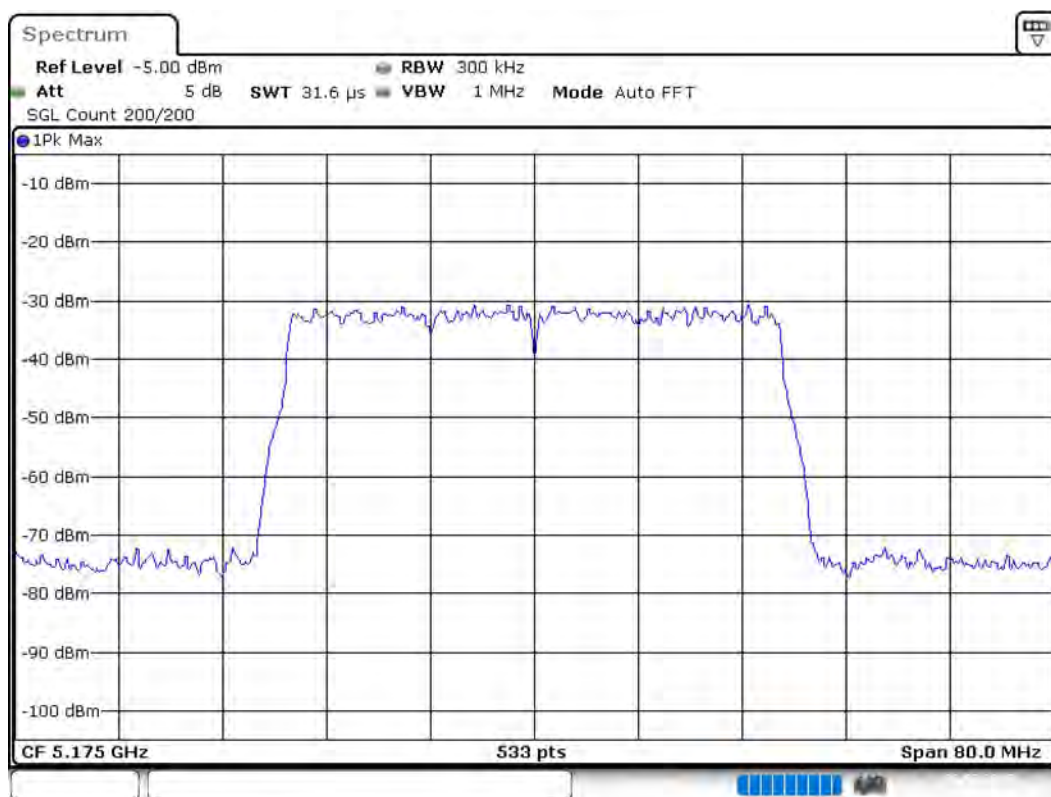
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5175.000000	41.125704	---	---	5154.437148	5195.562852

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5175.000000	-15.0	PASS



Bandwidth



Date: 26 JUL 2019 20:18:24

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.13500 GHz	5.13500 GHz
Stop Frequency	5.21500 GHz	5.21500 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	533	~ 533
Sweeptime	31.621 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

RF output power (5175 MHz; 40 MHz)

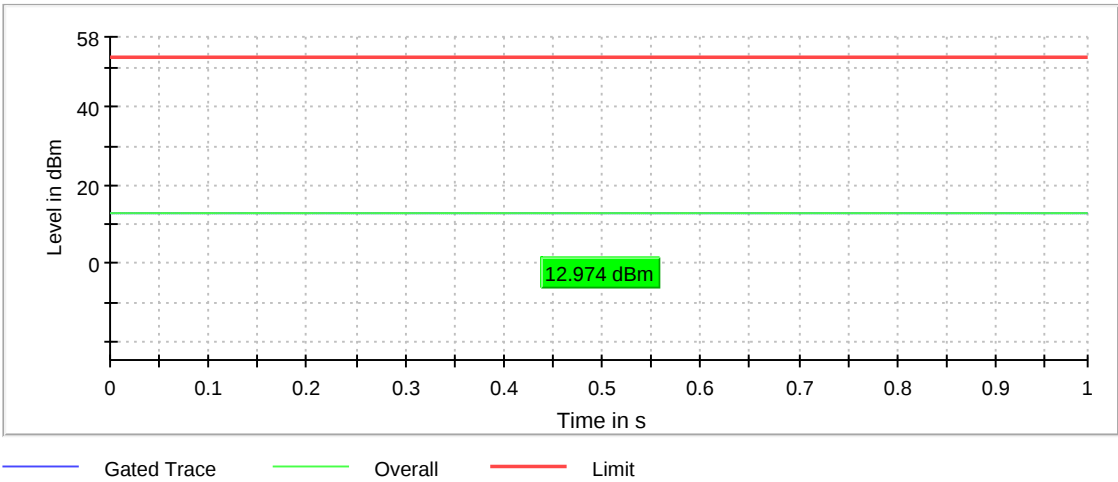
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5175.000000	13.0	53.0	13.0	99.516	PASS



Power Spectral Density (5175 MHz; 40 MHz)

Customized settings.

Max level of analyzer (-12.8 dBm) more than 31.0 dB below the nominal power level.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

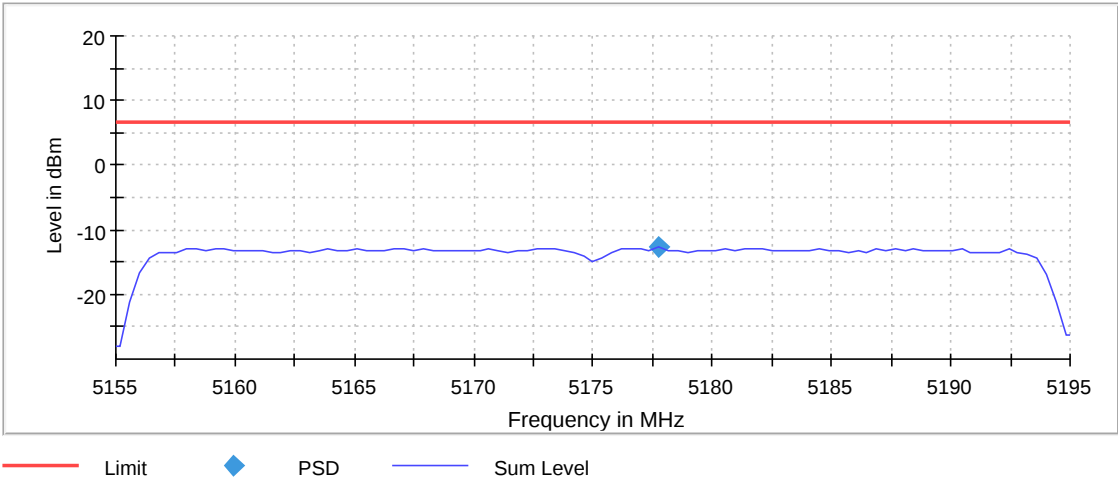
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

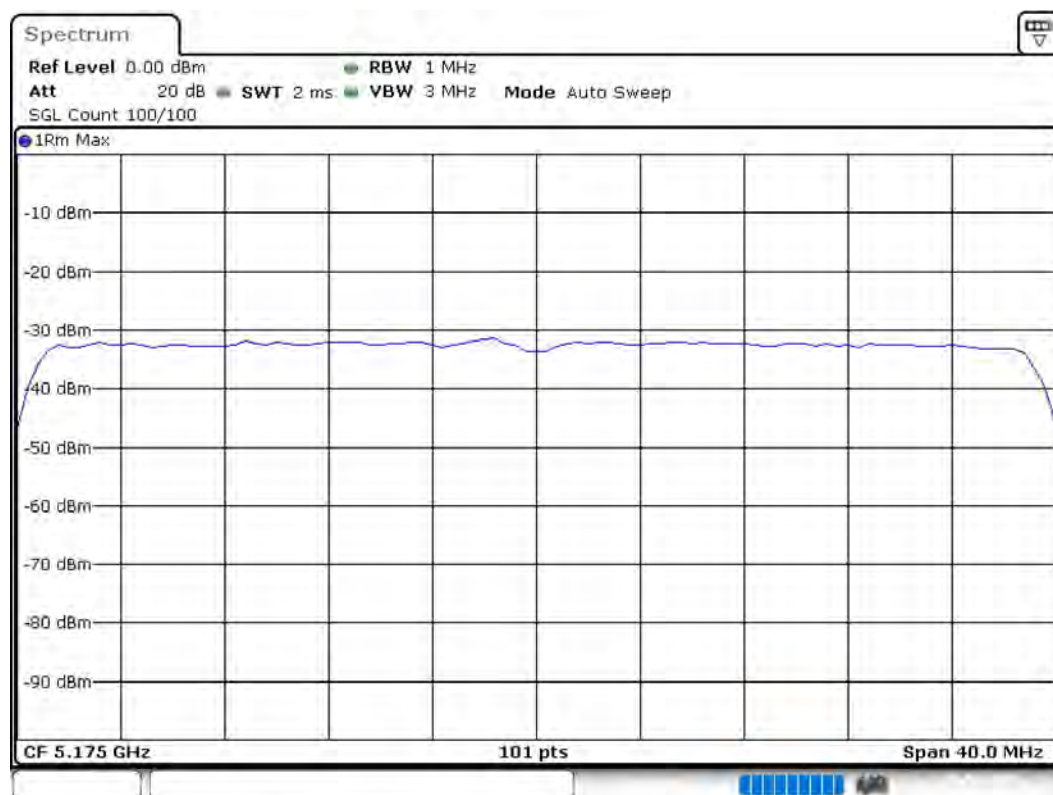
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5175.000000	5177.772277	-12.809	6.7	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

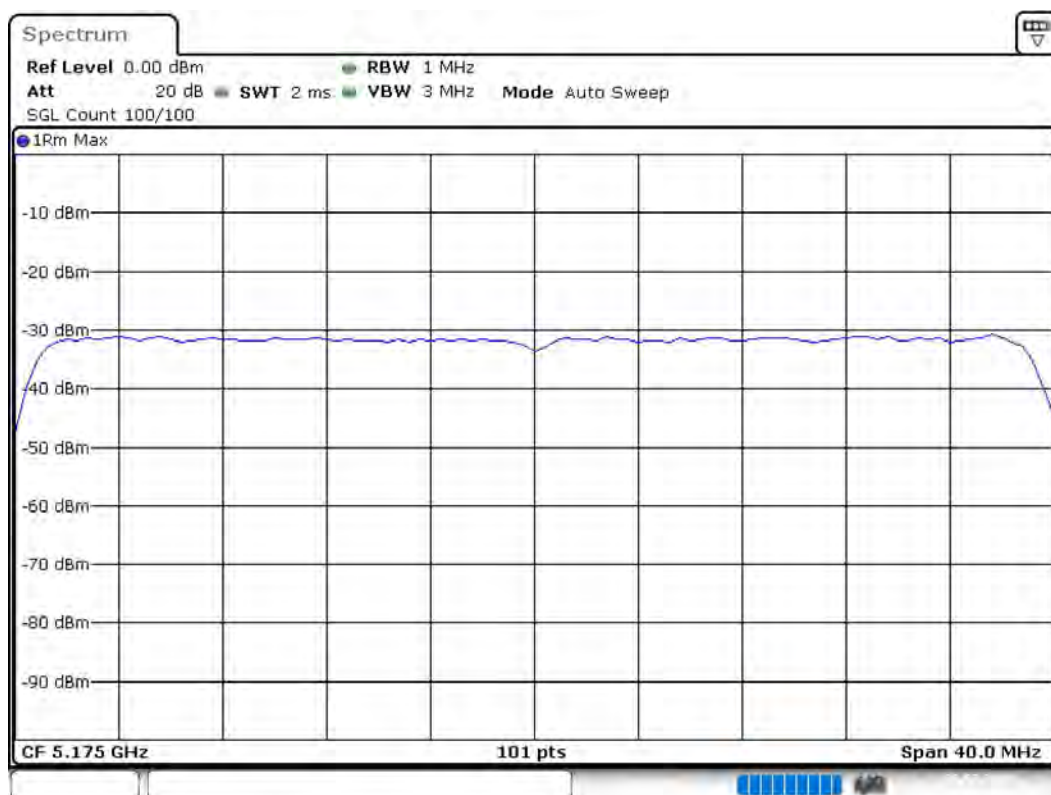


PSD Connector 1



Date: 26 JUL 2019 20:19:42

PSD Connector 2



Date: 26 JUL 2019 20:19:46

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.19500 GHz	5.19500 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 ms	2.020 ms
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5175 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

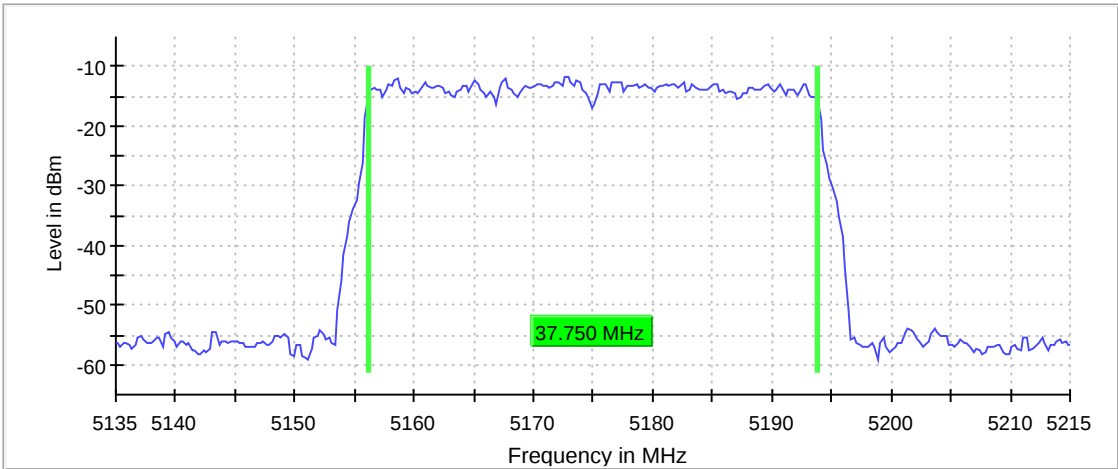
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

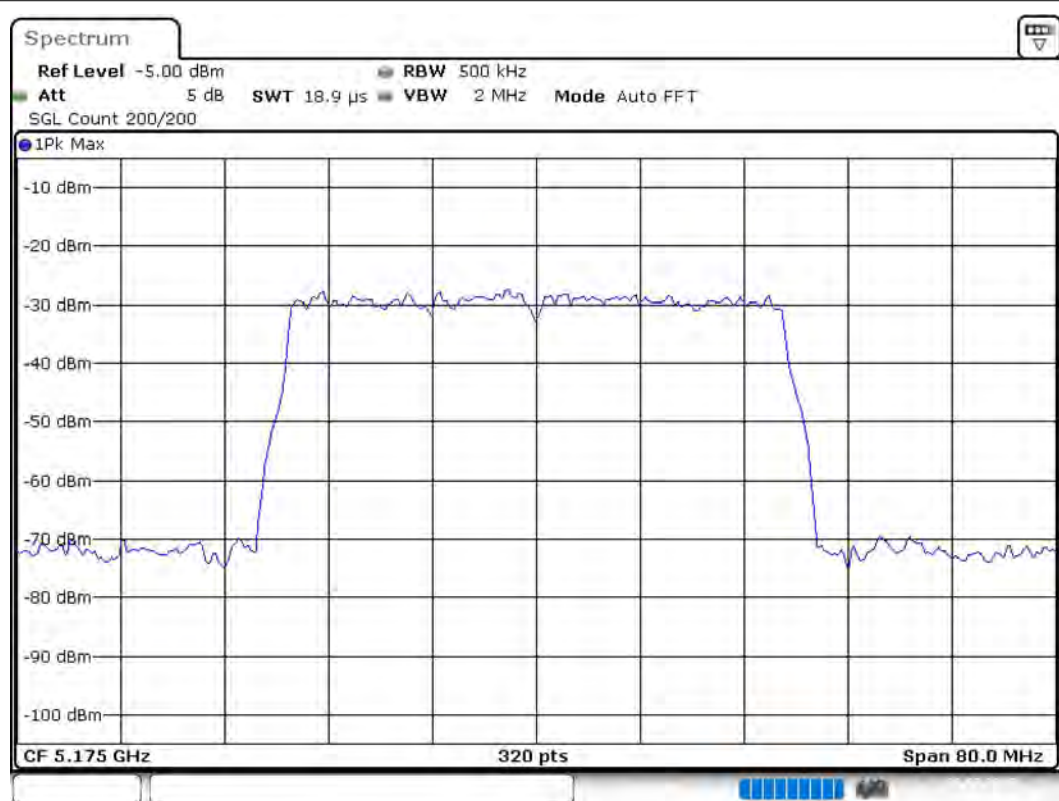
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5175.000000	37.750000	---	---	5156.125000	5193.875000

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

DUT Frequency (MHz)	Result
5175.000000	PASS



Bandwidth



Date: 26.JUL.2019 20:20:16

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.13500 GHz	5.13500 GHz
Stop Frequency	5.21500 GHz	5.21500 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	$\geq$ 400.000 kHz
VBW	2.000 MHz	$\geq$ 1.500 MHz
SweepPoints	320	$\sim$ 320
Sweeptime	18.906 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

Emission Bandwidth 26 dB (5200 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

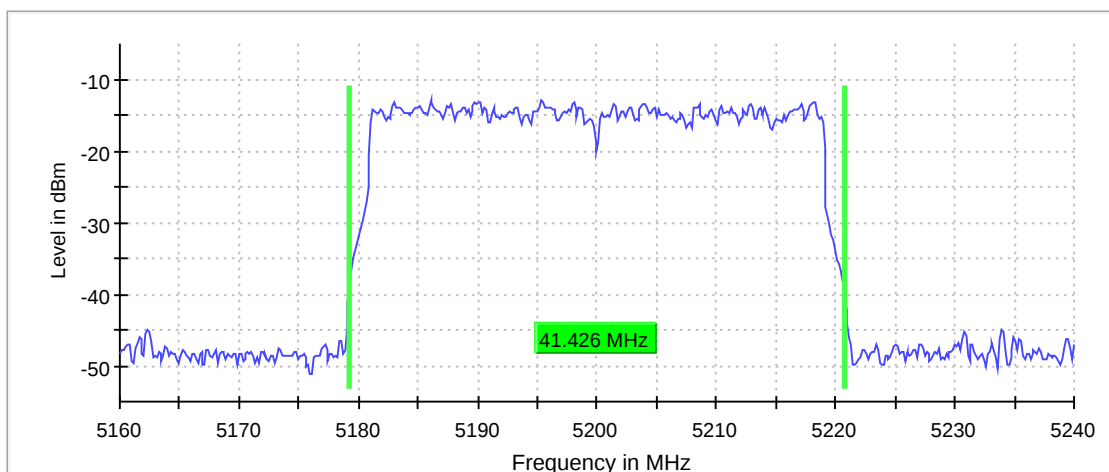
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	41.425892	---	---	5179.287054	5220.712946

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-12.9	PASS



Bandwidth



Date: 26 JUL 2019 20:21:02

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.24000 GHz	5.24000 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	~ 400.000 kHz
VBW	1.000 MHz	>= 900.000 kHz
SweepPoints	533	~ 533
SweepTime	31.621 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

RF output power (5200 MHz; 40 MHz)

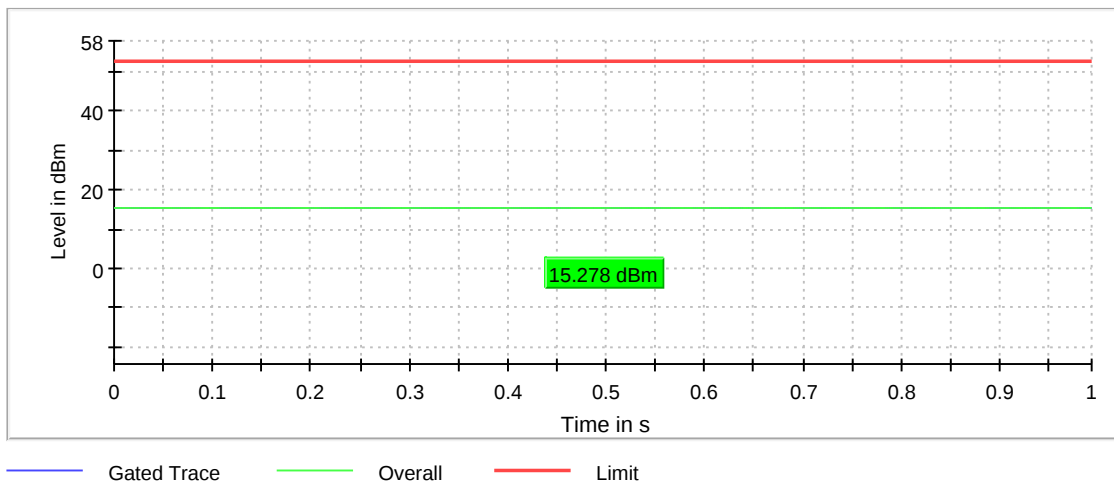
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	15.3	53.0	15.3	99.507	PASS



Power Spectral Density (5200 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

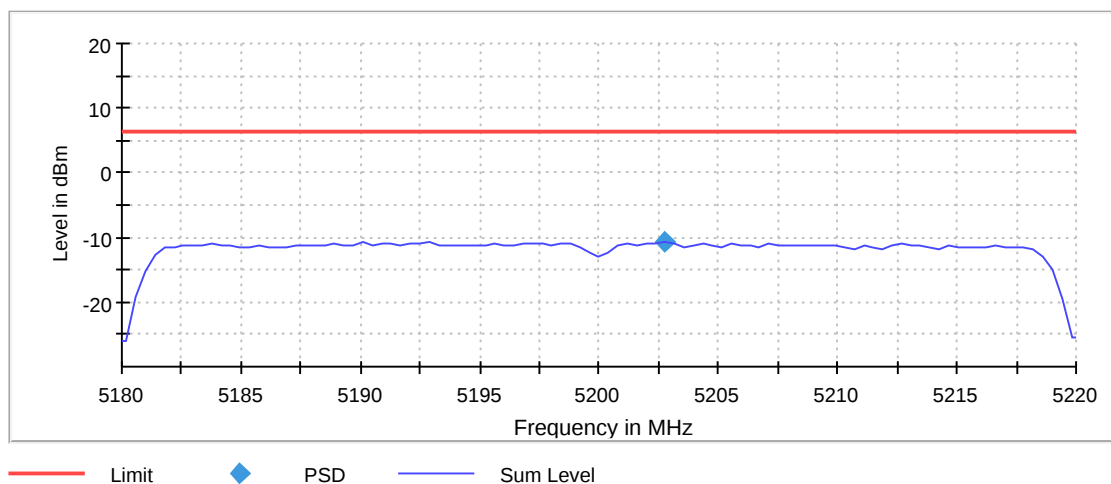
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

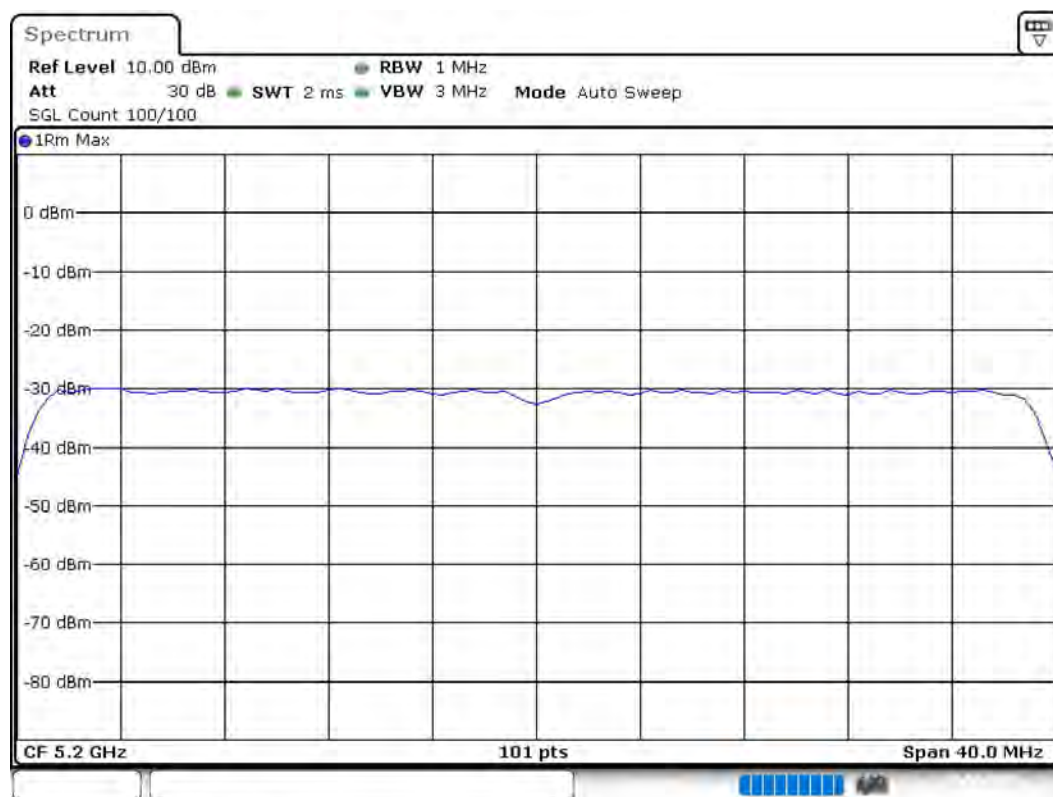
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5202.772277	-10.675	6.5	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

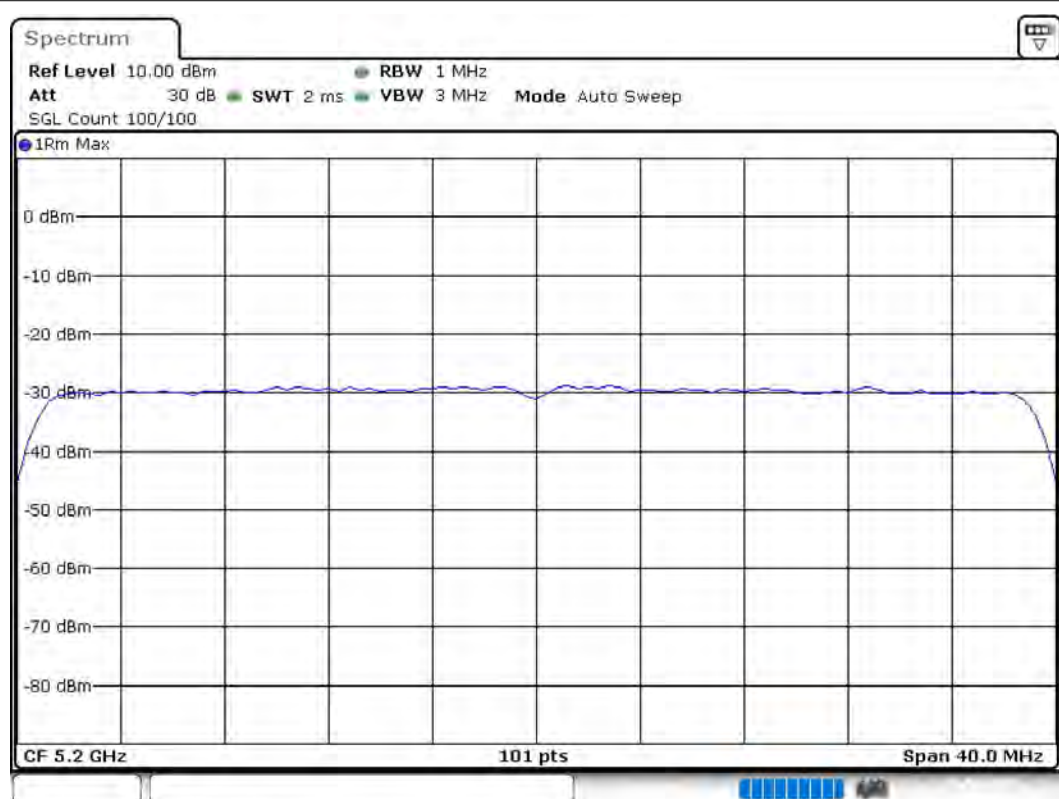


PSD Connector 1



Date: 26.JUL.2019 20:21:41

PSD Connector 2



Date: 26 JUL 2019 20:21:46

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.18000 GHz	5.18000 GHz
Stop Frequency	5.22000 GHz	5.22000 GHz
Span	40.000 MHz	40.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 80
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5200 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

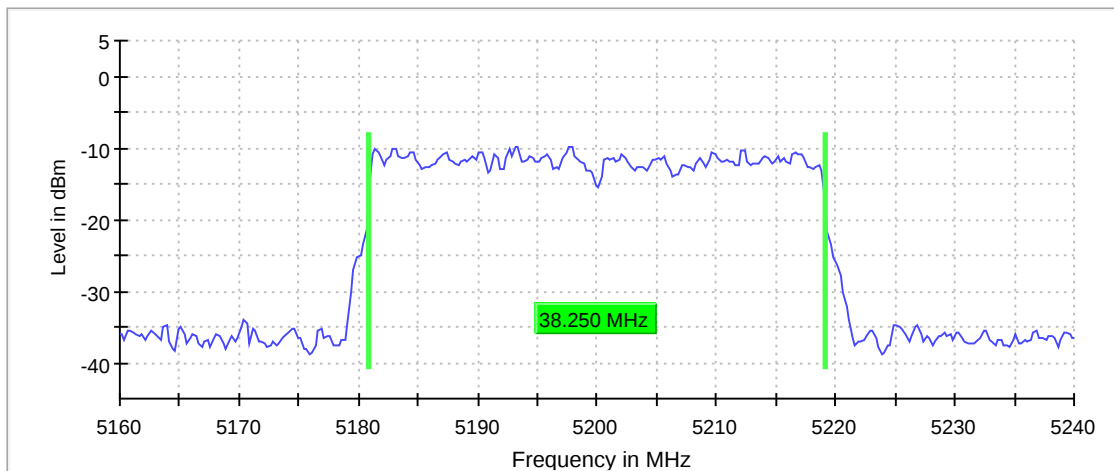
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	38.250000	---	---	5180.875000	5219.125000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 26.JUL.2019 20:21:54

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.24000 GHz	5.24000 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	>= 400.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	320	~ 320
SweepTime	18.906 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

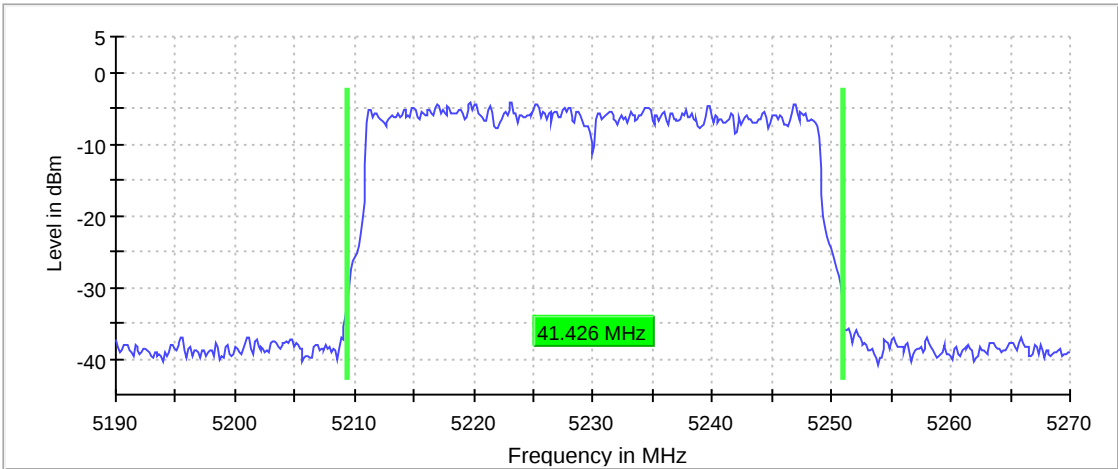
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

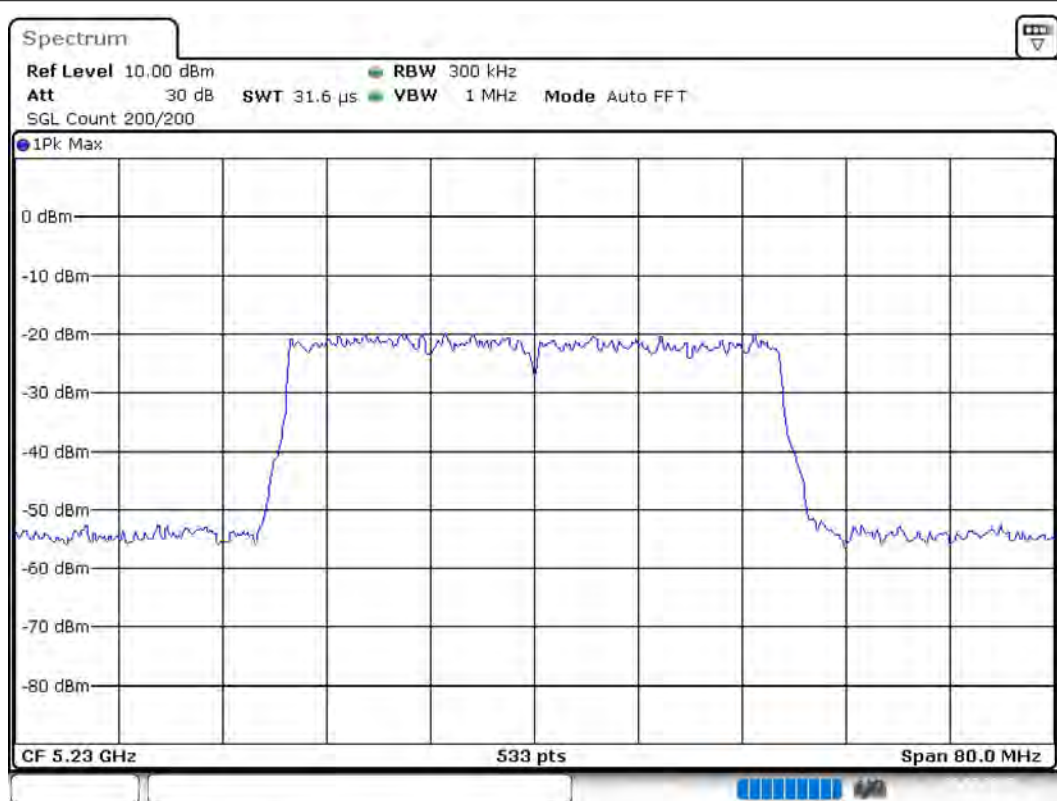
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	41.425891	---	---	5209.437148	5250.863039

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5230.000000	-4.2	PASS



Bandwidth



Date: 26 JUL 2019 20:22:59

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	533	~ 533
SweepTime	31.621 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

RF output power (5230 MHz; 40 MHz)

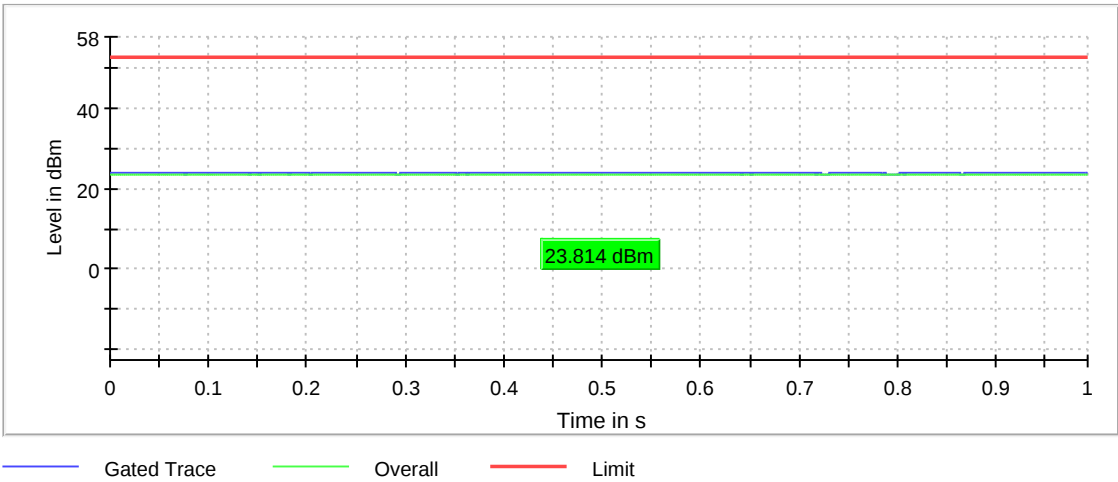
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5230.000000	23.8	53.0	23.8	99.490	PASS



Power Spectral Density (5230 MHz; 40 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

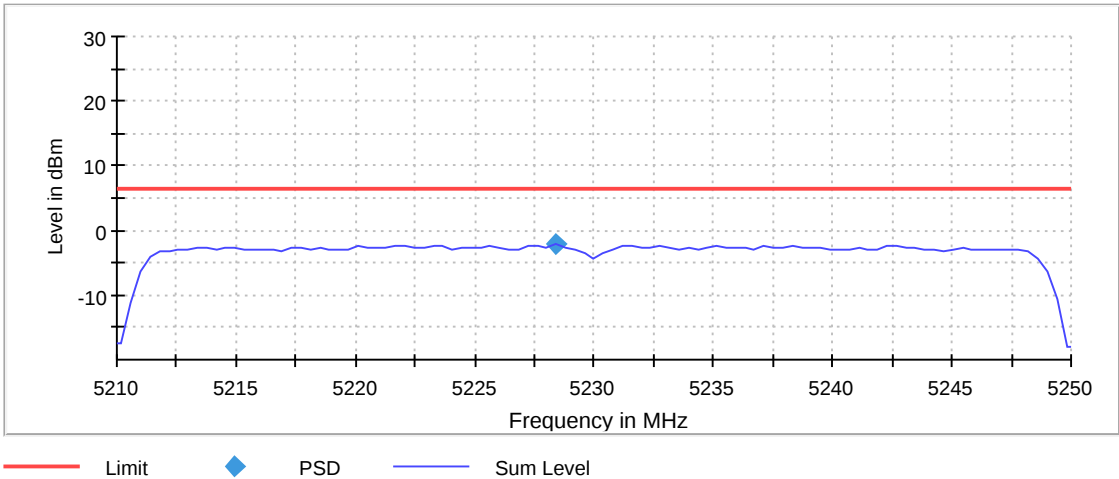
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

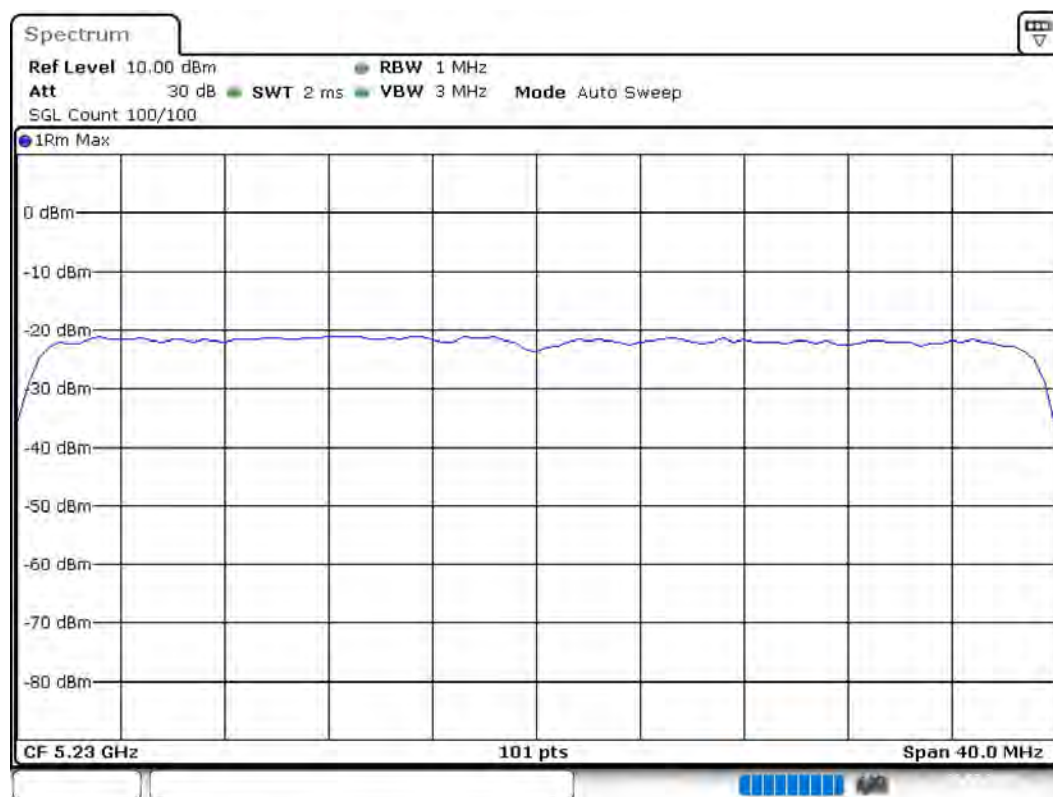
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5228.415842	-2.221	6.4	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

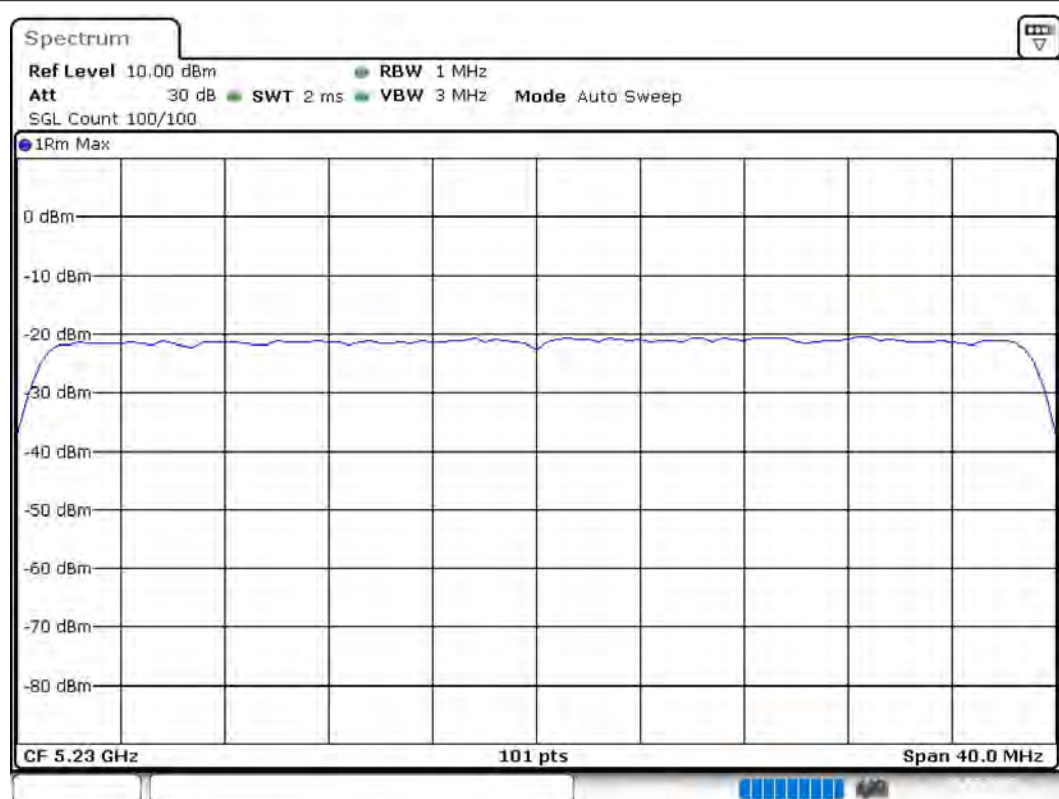


PSD Connector 1



Date: 26 JUL 2019 20:23:38

PSD Connector 2



Date: 26 JUL 2019 20:23:43

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
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

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

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

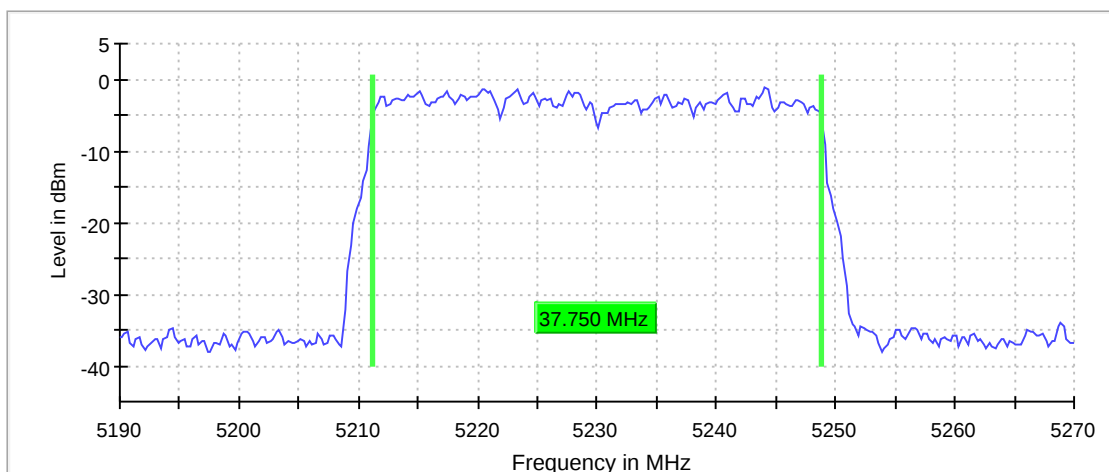
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	37.750000	---	---	5211.125000	5248.875000

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

DUT Frequency (MHz)	Result
5230.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:23:51

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	500.000 kHz	≥ 400.000 kHz
VBW	2.000 MHz	≥ 1.500 MHz
SweepPoints	320	~ 320
SweepTime	18.906 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

Emission Bandwidth 26 dB (5180 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

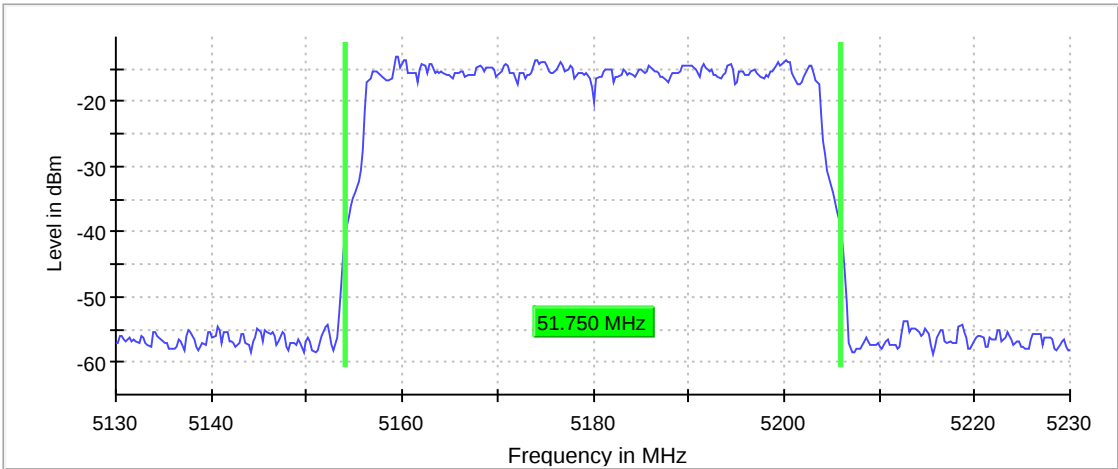
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

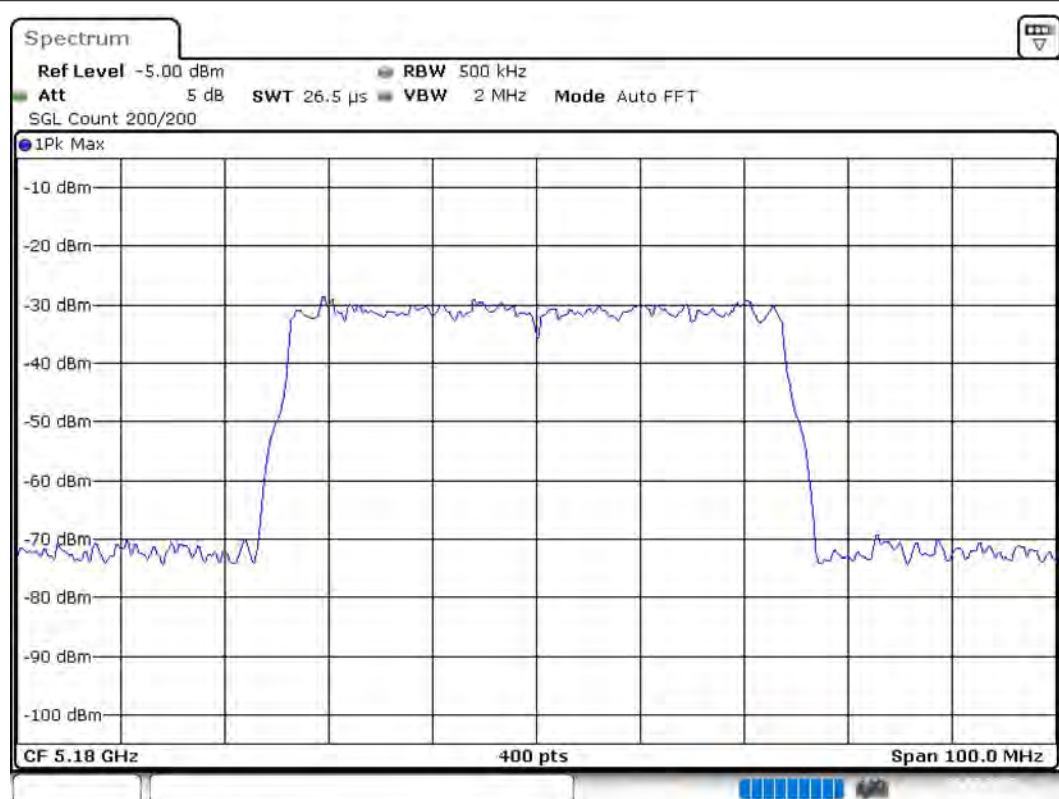
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	51.750000	---	---	5154.125000	5205.875000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5180.000000	-13.0	PASS



Bandwidth



Date: 26 JUL 2019 20:25:02

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.13000 GHz	5.13000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	100.000 MHz	100.000 MHz
RBW	500.000 kHz	~ 500.000 kHz
VBW	2.000 MHz	≥ 1.500 MHz
SweepPoints	400	~ 400
Sweeptime	26.469 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off

RF output power (5180 MHz; 50 MHz)

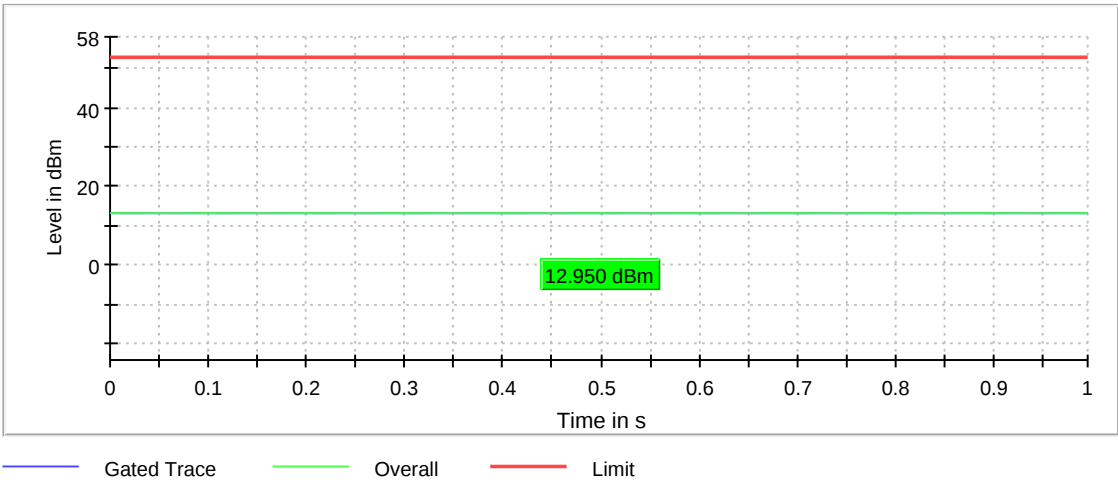
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5180.000000	13.0	53.0	13.0	99.736	PASS



Power Spectral Density (5180 MHz; 50 MHz)

Customized settings.

Max level of analyzer (-13.9 dBm) more than 32.0 dB below the nominal power level.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

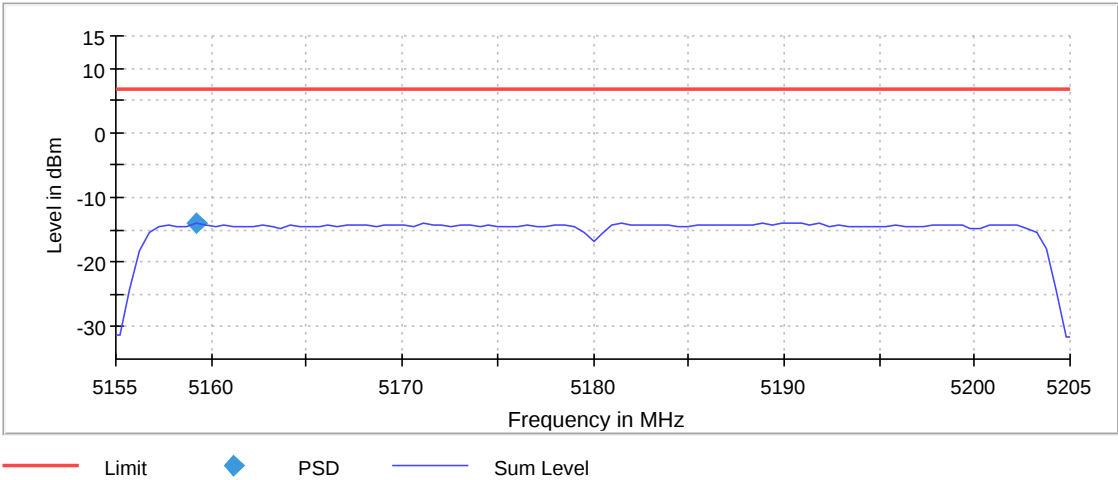
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

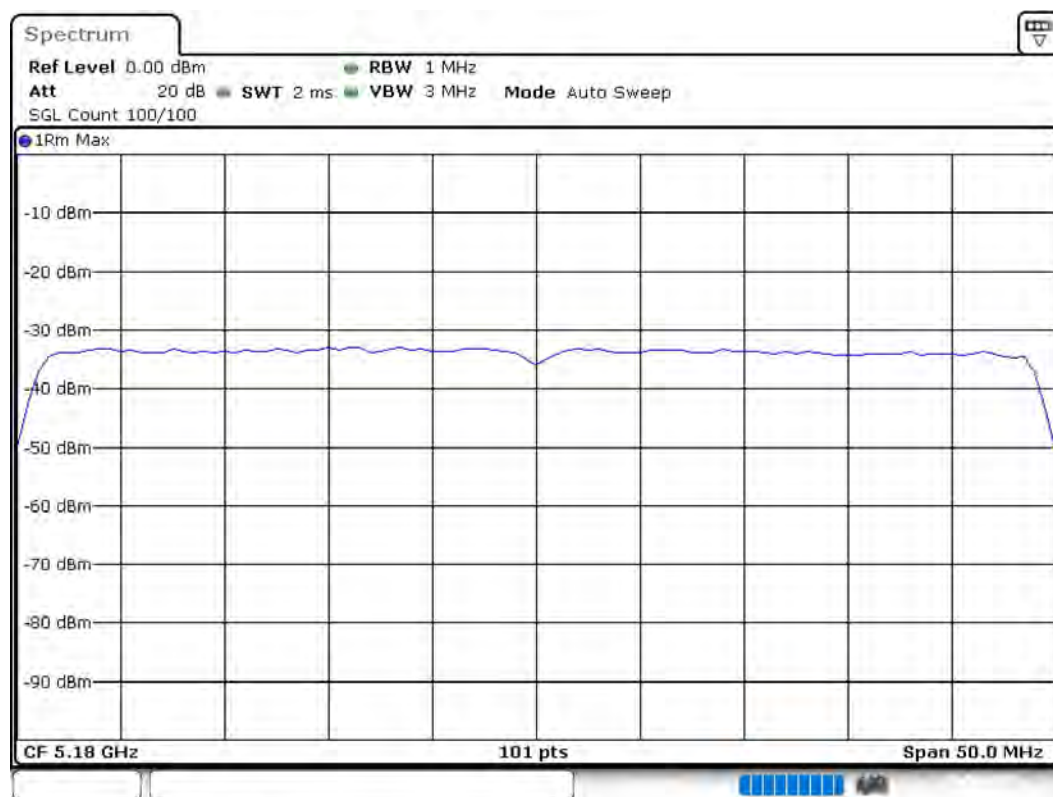
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5159.207921	-13.928	6.7	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

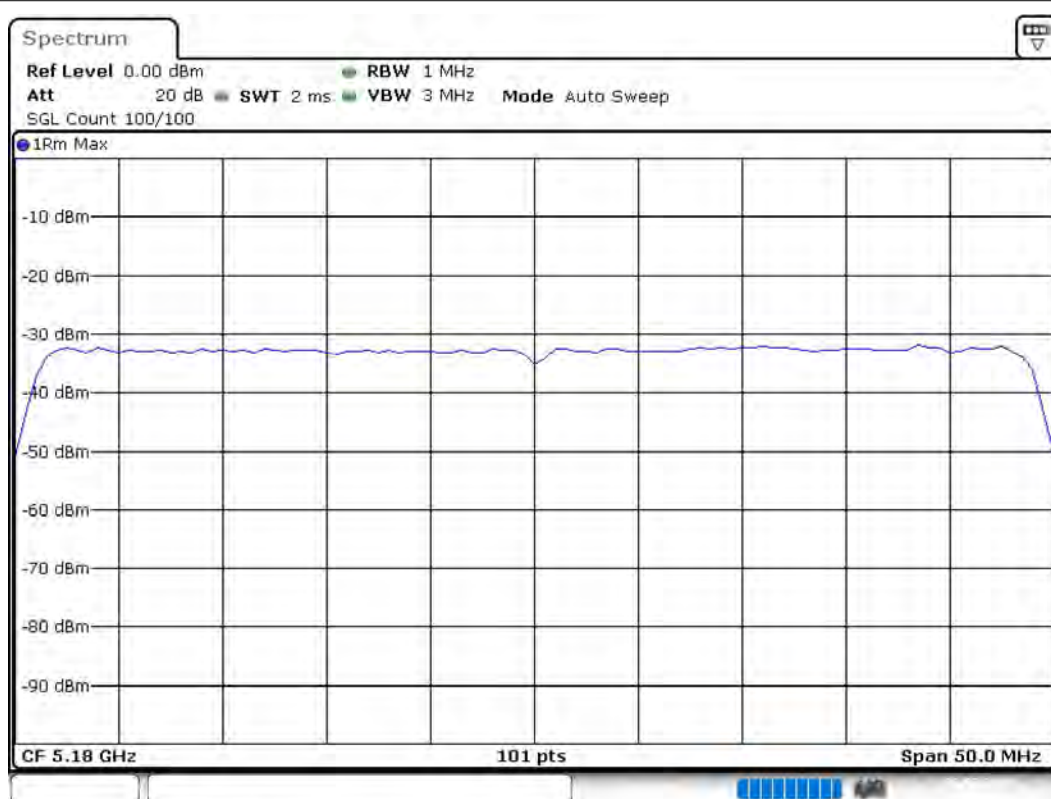


PSD Connector 1



Date: 26 JUL 2019 20:25:41

PSD Connector 2



Date: 26 JUL 2019 20:25:47

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.20500 GHz	5.20500 GHz
Span	50.000 MHz	50.000 MHz
RBW	1.000 MHz	≤ 1.000 MHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	101	~ 100
SweepTime	2.020 ms	2.020 ms
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5180 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

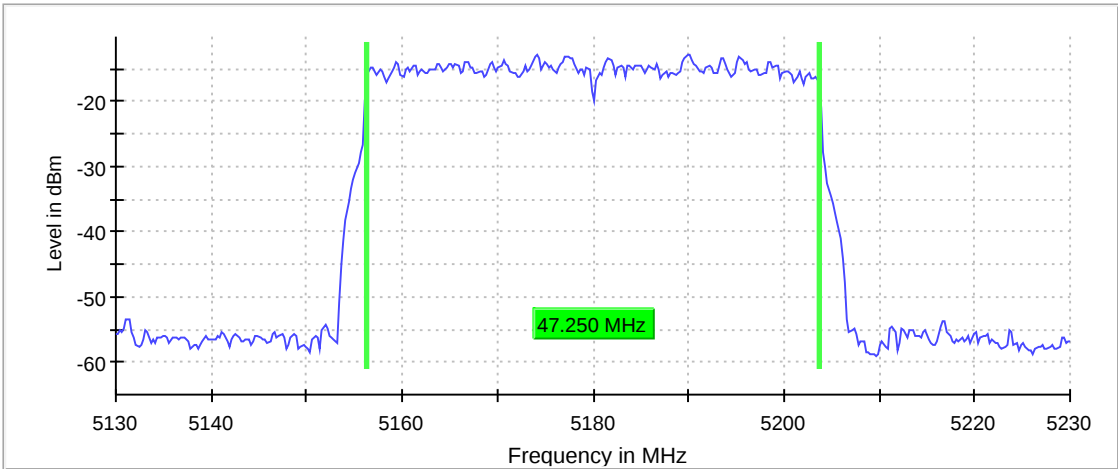
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

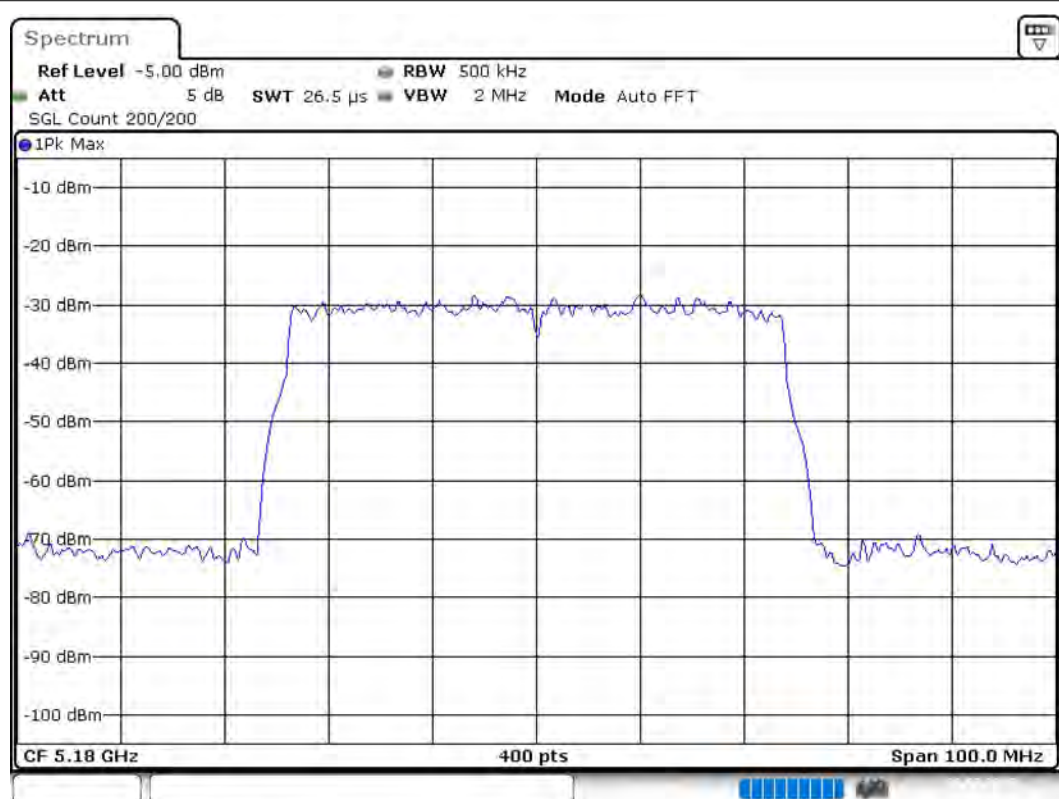
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5180.000000	47.250000	---	---	5156.375000	5203.625000

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

DUT Frequency (MHz)	Result
5180.000000	PASS



Bandwidth



Date: 26.JUL.2019 20:25:58

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.13000 GHz	5.13000 GHz
Stop Frequency	5.23000 GHz	5.23000 GHz
Span	100.000 MHz	100.000 MHz
RBW	500.000 kHz	$\geq$ 500.000 kHz
VBW	2.000 MHz	$\geq$ 1.500 MHz
SweepPoints	400	~ 400
SweepTime	26.469 μ s	AUTO
Reference Level	-5.000 dBm	-5.000 dBm
Attenuation	5.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off

Emission Bandwidth 26 dB (5200 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

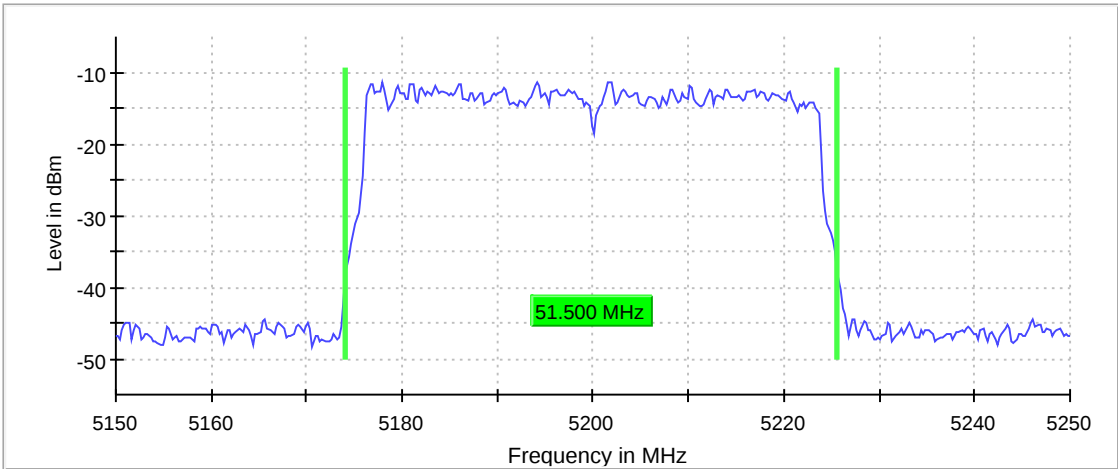
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

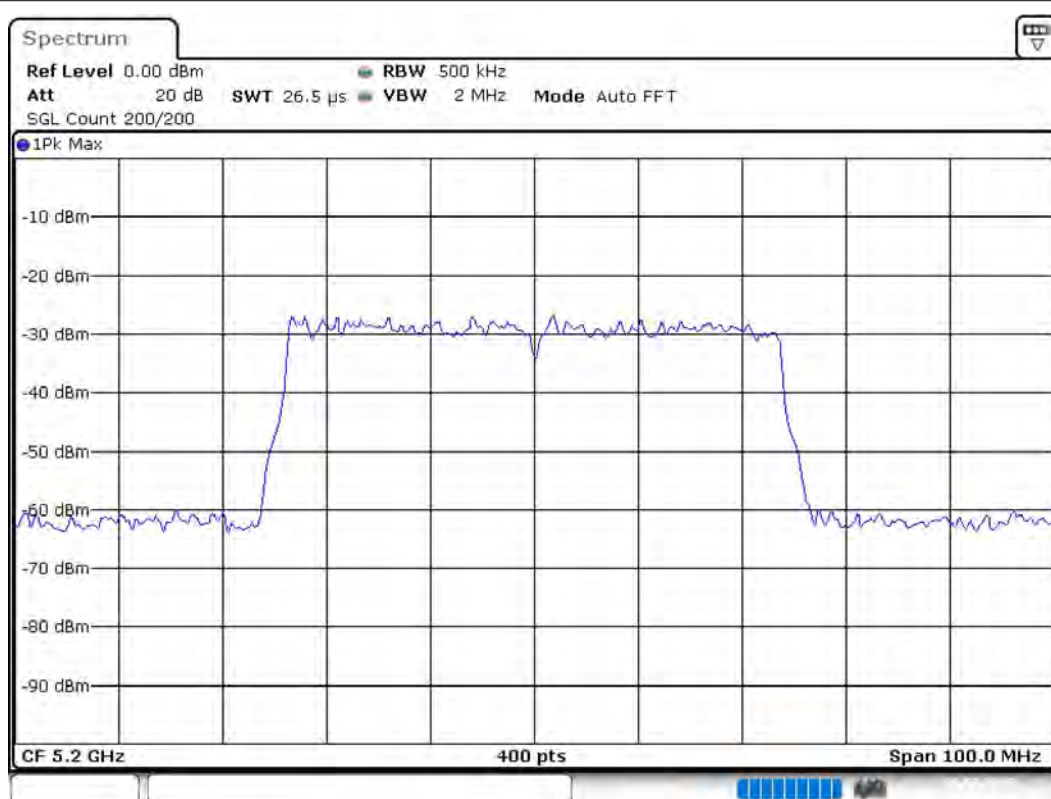
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	51.500000	---	---	5174.125000	5225.625000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-11.3	PASS



Bandwidth



Date: 26 JUL 2019 20:26:50

Measurement

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	500.000 kHz	~ 500.000 kHz
VBW	2.000 MHz	≥ 1.500 MHz
SweepPoints	400	~ 400
SweepTime	26.469 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

RF output power (5200 MHz; 50 MHz)

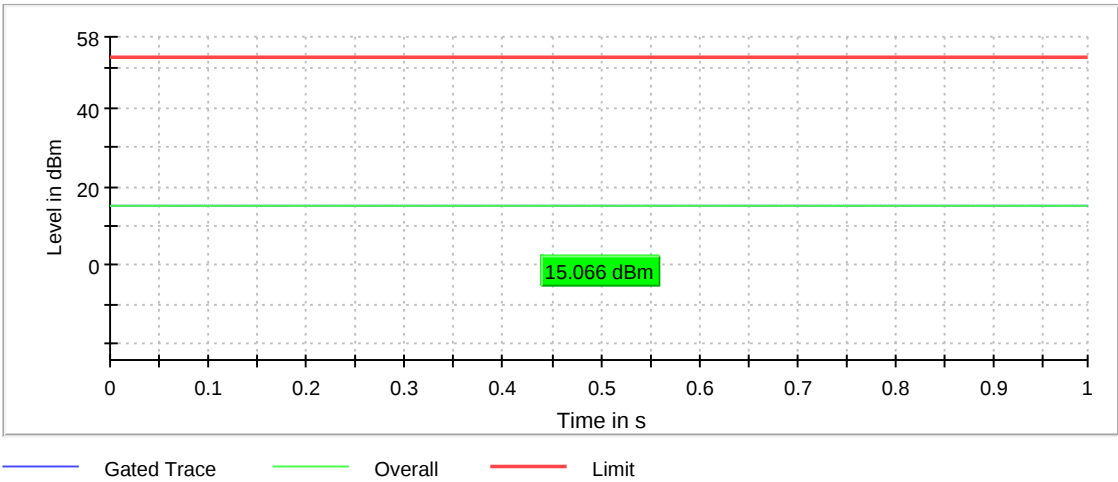
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	15.1	53.0	15.1	99.727	PASS



Power Spectral Density (5200 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

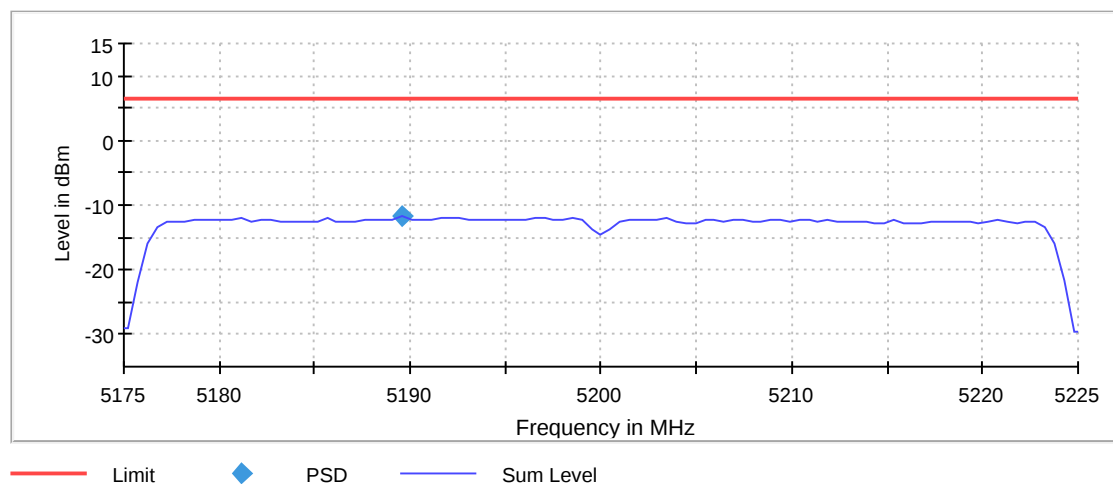
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

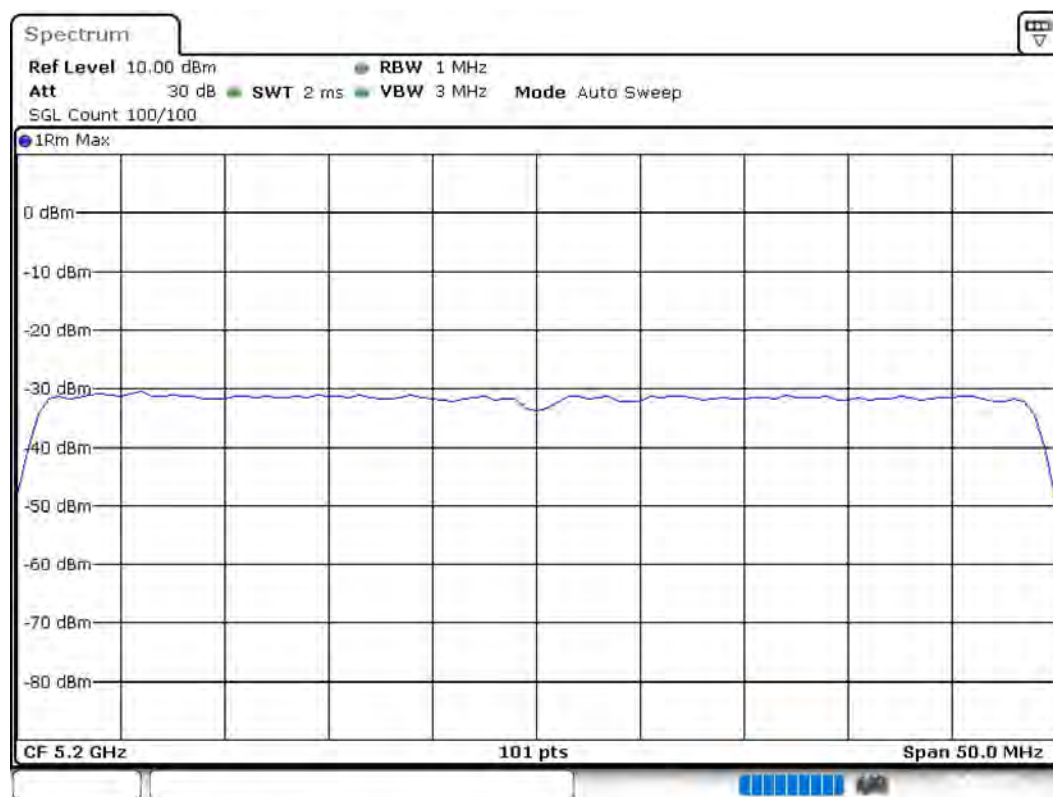
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5189.603960	-11.765	6.5	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

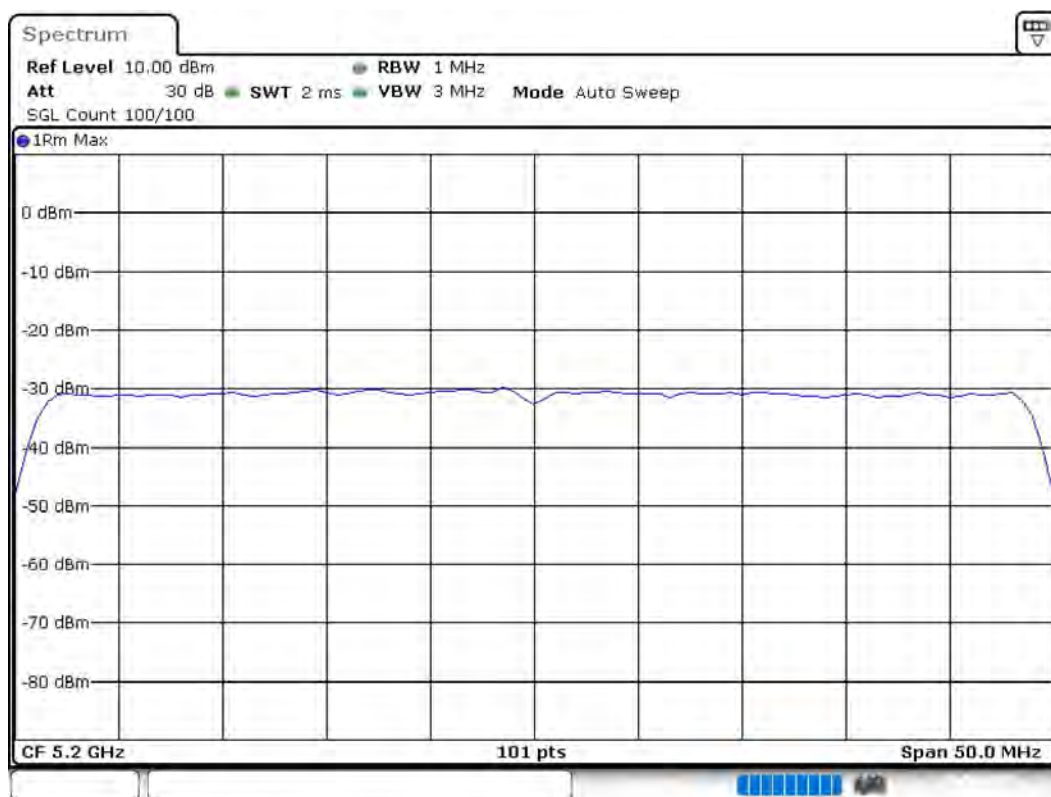


PSD Connector 1



Date: 26.JUL.2019 20:27:29

PSD Connector 2



Date: 26 JUL 2019 20:27:35

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17500 GHz	5.17500 GHz
Stop Frequency	5.22500 GHz	5.22500 GHz
Span	50.000 MHz	50.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 100
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5200 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures
New Rules v02r01 D and ANSI C63.10-2013

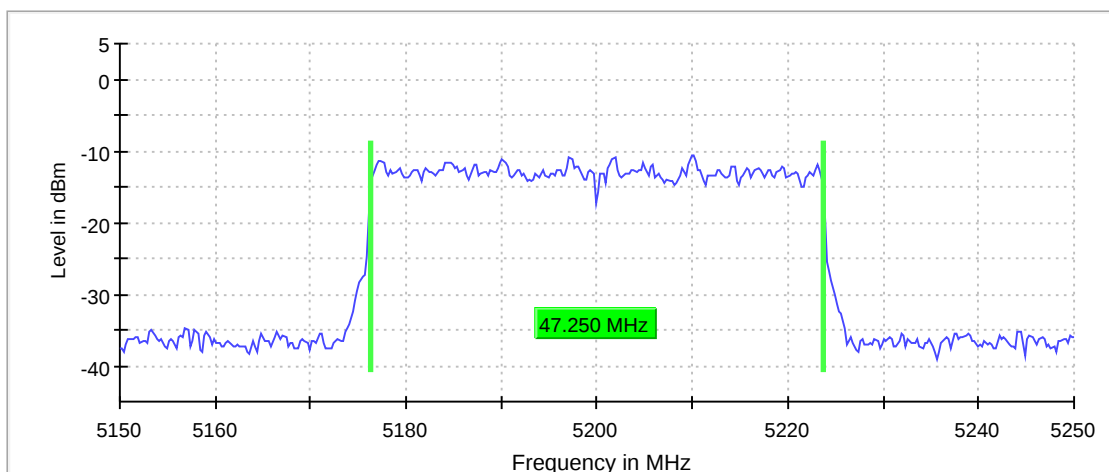
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

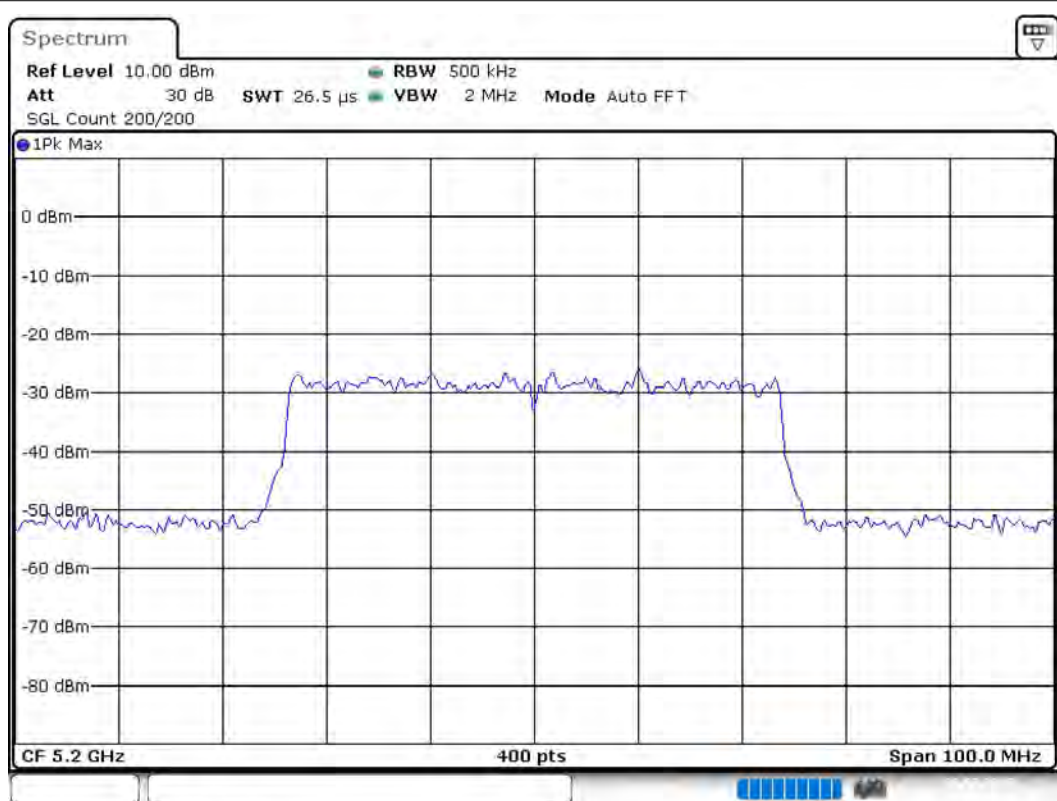
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	47.250000	---	---	5176.375000	5223.625000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 26 JUL 2019 20:27:43

Measurement

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	500.000 kHz	$\geq$ 500.000 kHz
VBW	2.000 MHz	$\geq$ 1.500 MHz
SweepPoints	400	$\sim$ 400
SweepTime	26.469 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

Emission Bandwidth 26 dB (5225 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

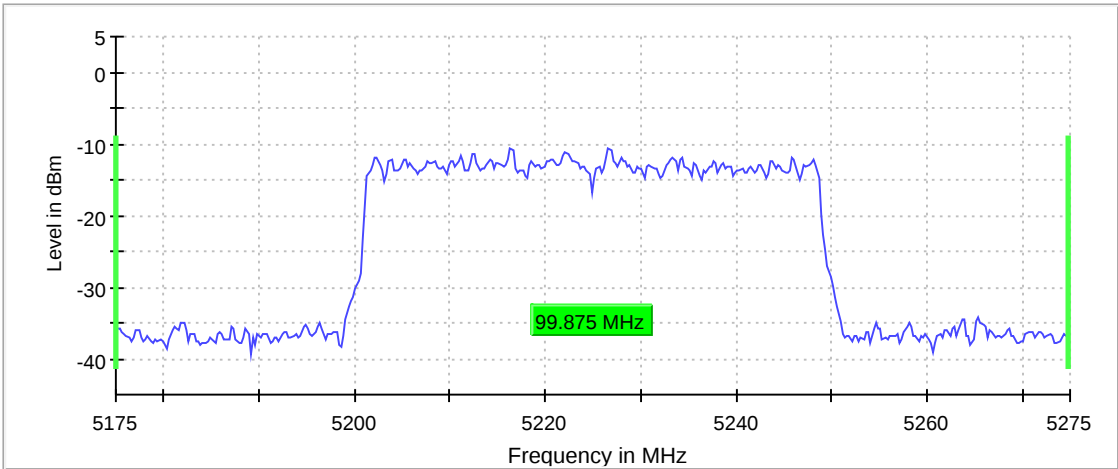
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

26 dB Bandwidth

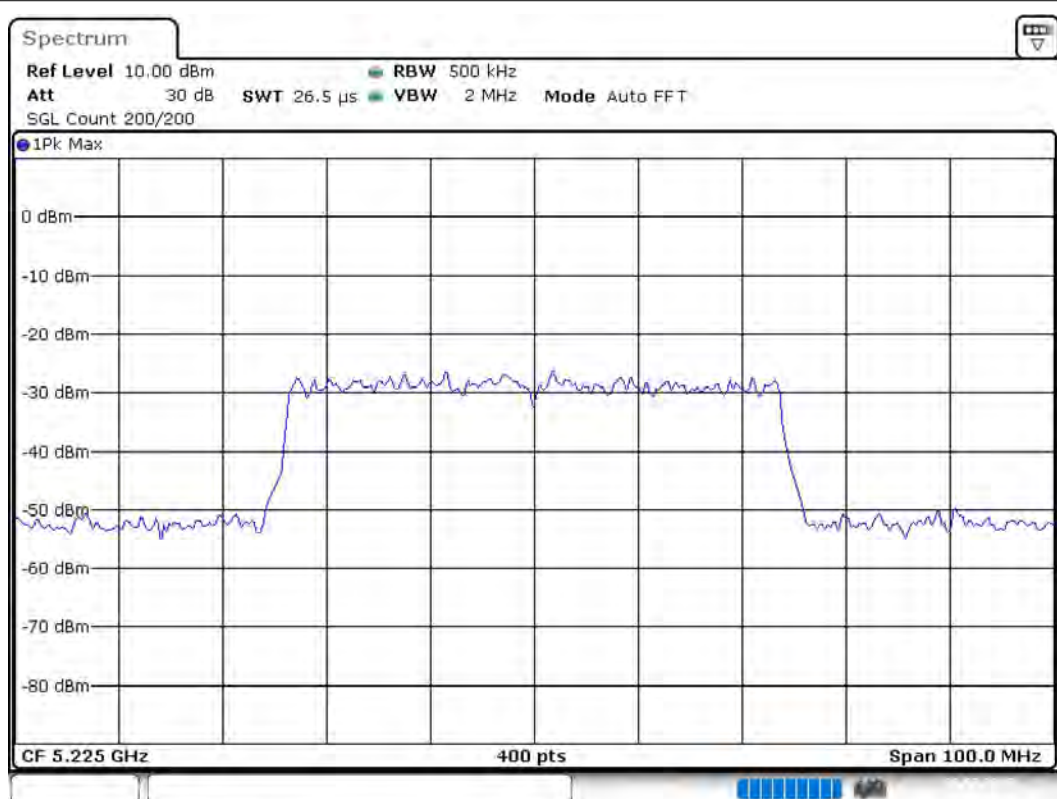
DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5225.000000	99.875000	---	---	5175.000000	5274.875000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
5225.000000	-10.7	PASS



Bandwidth



Date: 26 JUL 2019 20:28:29

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17500 GHz	5.17500 GHz
Stop Frequency	5.27500 GHz	5.27500 GHz
Span	100.000 MHz	100.000 MHz
RBW	500.000 kHz	~ 500.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	400	~ 400
SweepTime	26.469 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

RF output power (5225 MHz; 50 MHz)

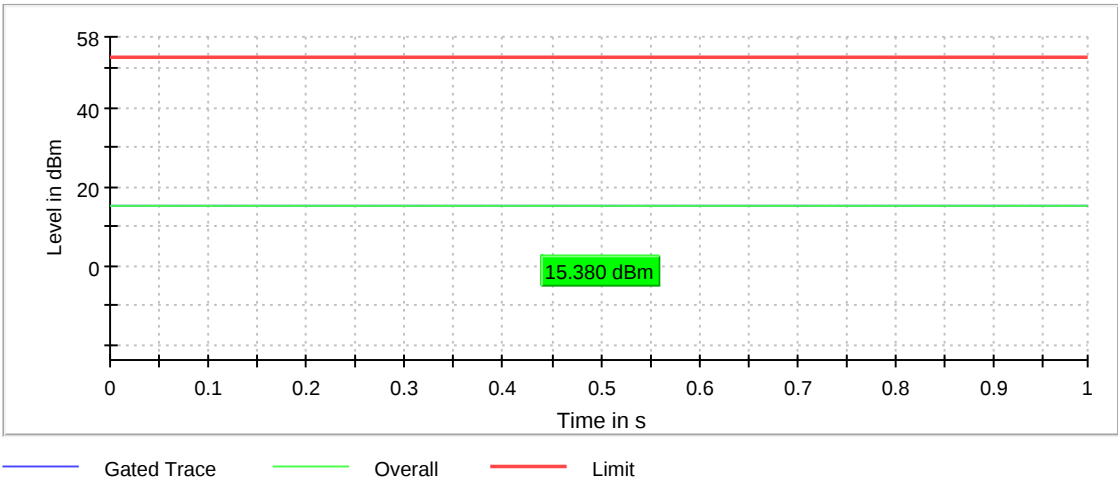
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5225.000000	15.4	53.0	15.4	99.726	PASS



Power Spectral Density (5225 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

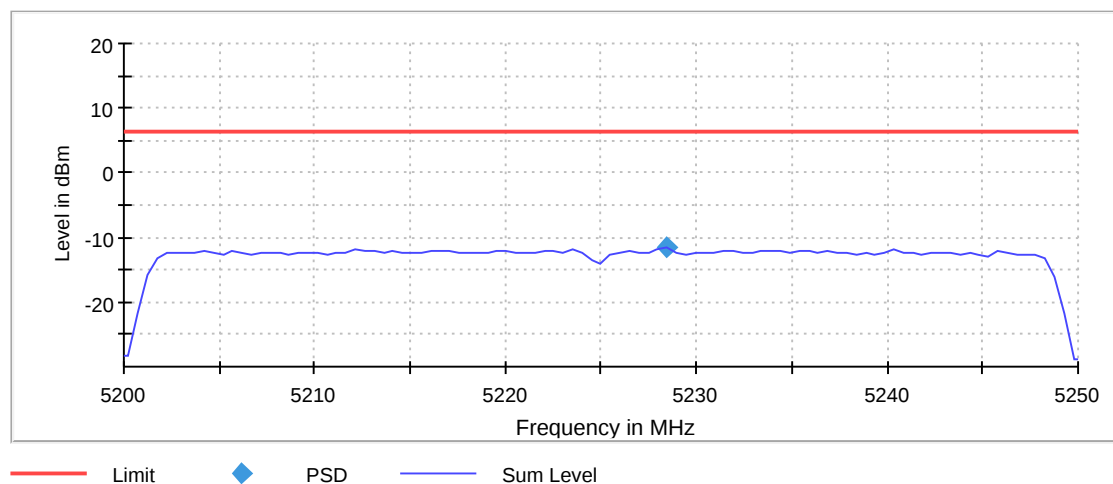
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

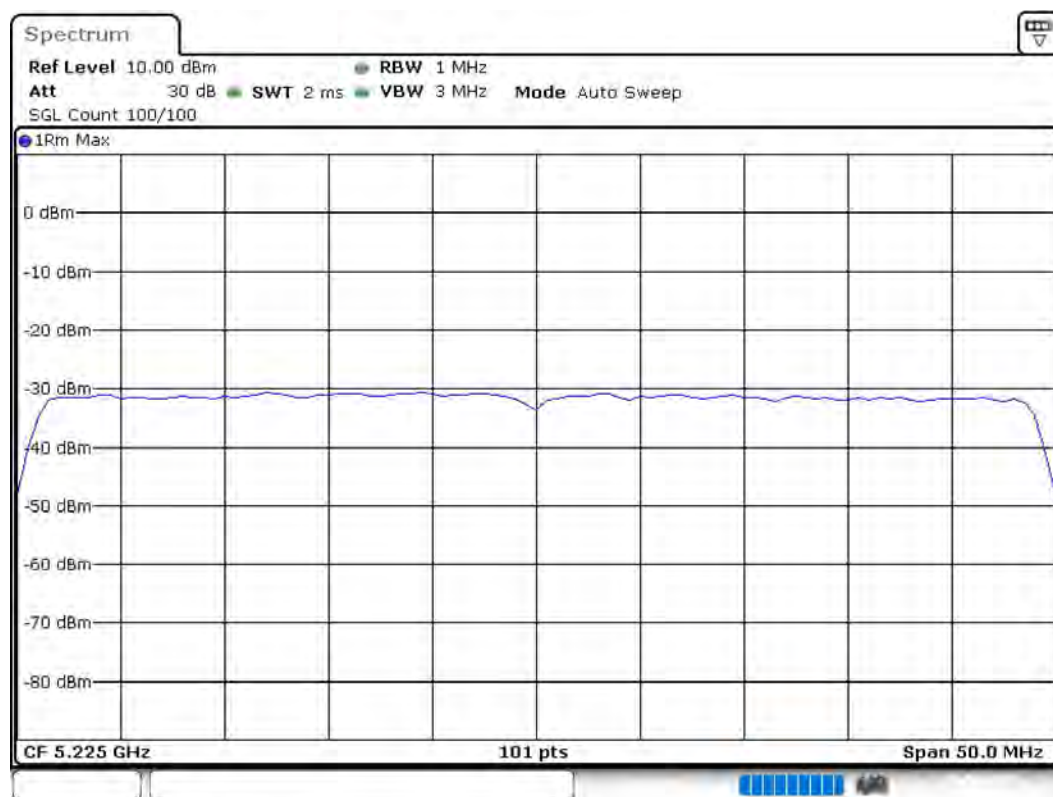
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5225.000000	5228.465347	-11.654	6.4	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000

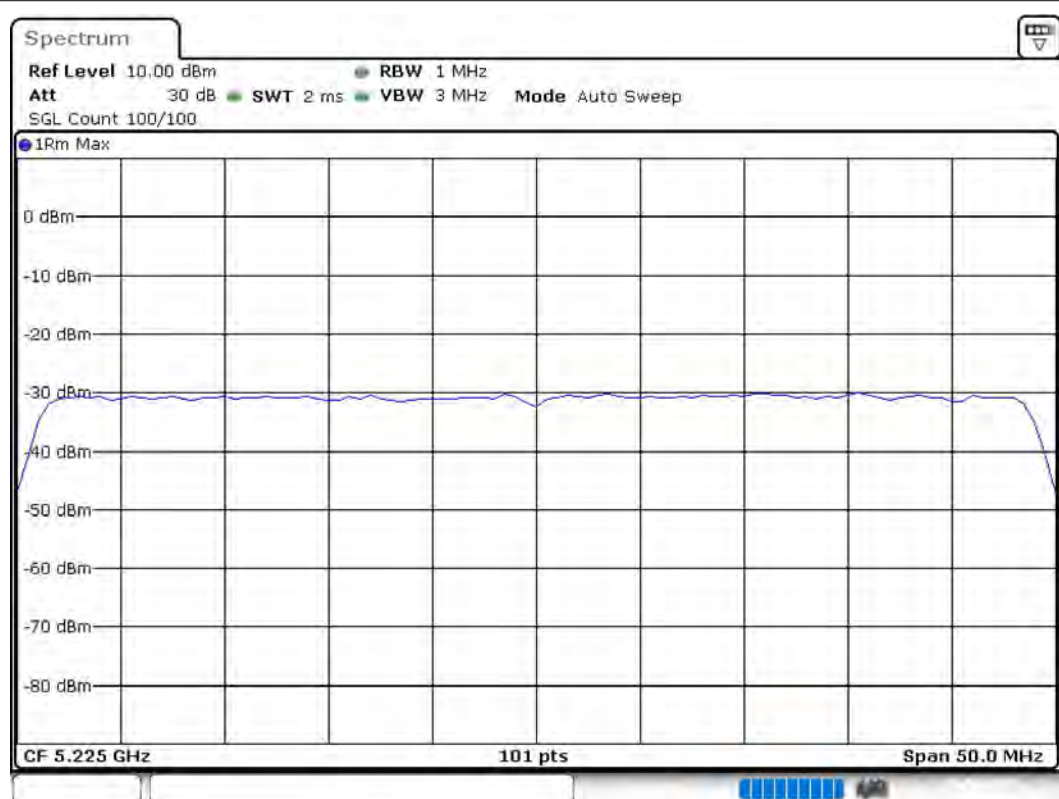


PSD Connector 1



Date: 26 JUL 2019 20:29:08

PSD Connector 2



Date: 26 JUL 2019 20:29:13

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.20000 GHz	5.20000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	50.000 MHz	50.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 100
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off

Occupied Channel Bandwidth 99% (5225 MHz; 50 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 D and ANSI C63.10-2013

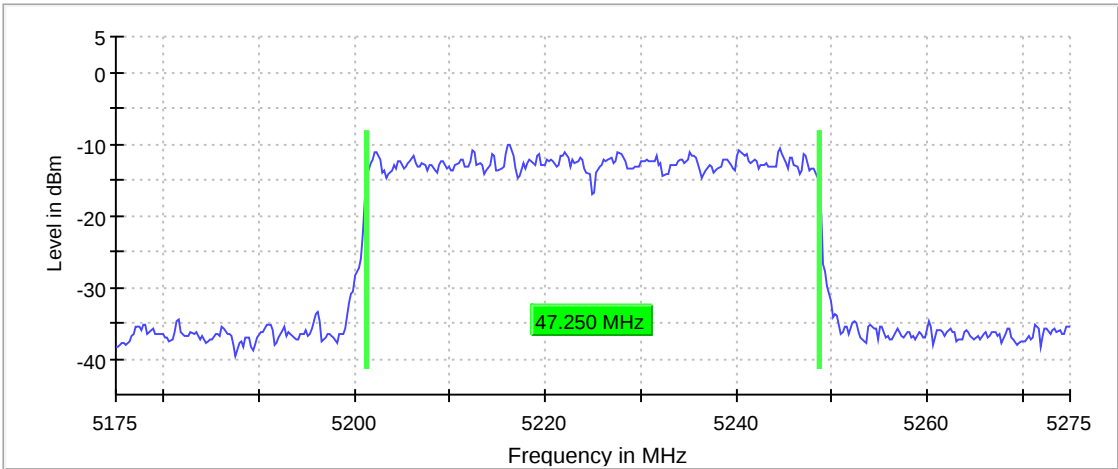
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 2%

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5225.000000	47.250000	---	---	5201.375000	5248.625000

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

DUT Frequency (MHz)	Result
5225.000000	PASS



Bandwidth



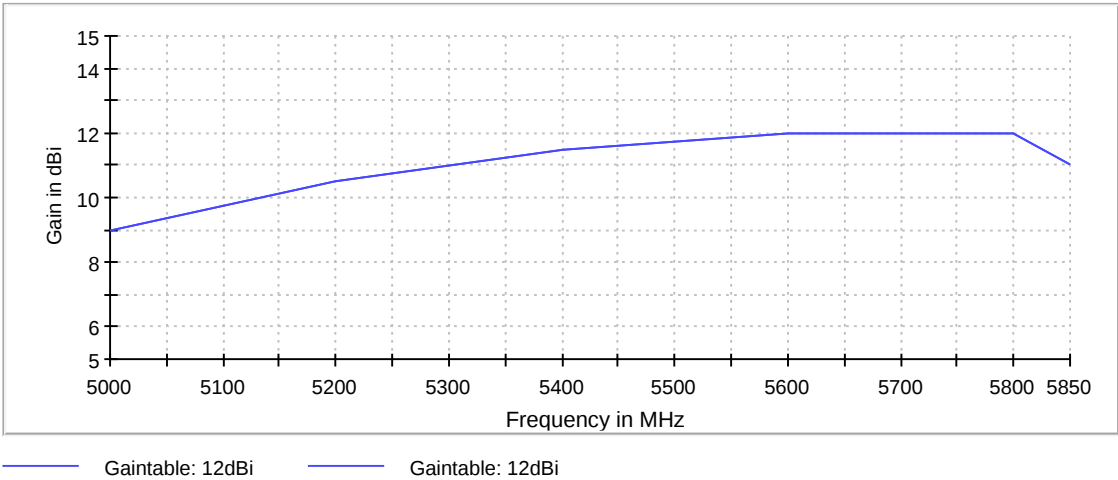
Date: 26 JUL 2019 20:29:22

Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.17500 GHz	5.17500 GHz
Stop Frequency	5.27500 GHz	5.27500 GHz
Span	100.000 MHz	100.000 MHz
RBW	500.000 kHz	$\geq$ 500.000 kHz
VBW	2.000 MHz	$\geq$ 1.500 MHz
SweepPoints	400	~ 400
SweepTime	26.469 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

Beamforming Gain 12dBi;
Gain Tables Port 1: 12dBi; Port 2: 12dBi;

No. of transmission chains 2
Equipment Type Client



Hardware Setup: WMS Measurements\TS8997 Hardware Setup

Spectrum Analyzer: SA FSV 40 (SA FSV 40) @ VISA (ADR
TCPIP::192.168.48.100::inst0::instr), SN 1321.3008K40/101752,
FW 3.50

Vector Generator: VG SMBV100A (VG SMBV100A) @ VISA (ADR
TCPIP::192.168.48.120::inst0::instr), SN 262184, FW 3.1.19.15-
3.50.082.47

Generator: SMB100A (SMB100A) @ VISA (ADR
TCPIP::192.168.48.110::inst0::instr), SN 180599, 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
1.24.0.10

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	5160.000	20.0	10.000000	PASS
Power Spectral Density	5200.000	20.0	10.000000	PASS
Power Spectral Density	5160.000	20.0	10.000000	PASS
RF output power	5200.000	20.0	10.000000	PASS
RF output power	5245.000	20.0	10.000000	PASS
Power Spectral Density	5245.000	20.0	10.000000	PASS
Power Spectral Density	5165.000	20.0	10.000000	PASS
Power Spectral Density	5170.000	20.0	10.000000	PASS
RF output power	5165.000	20.0	10.000000	PASS
RF output power	5170.000	20.0	10.000000	PASS

RF output power (5160 MHz; 10 MHz)

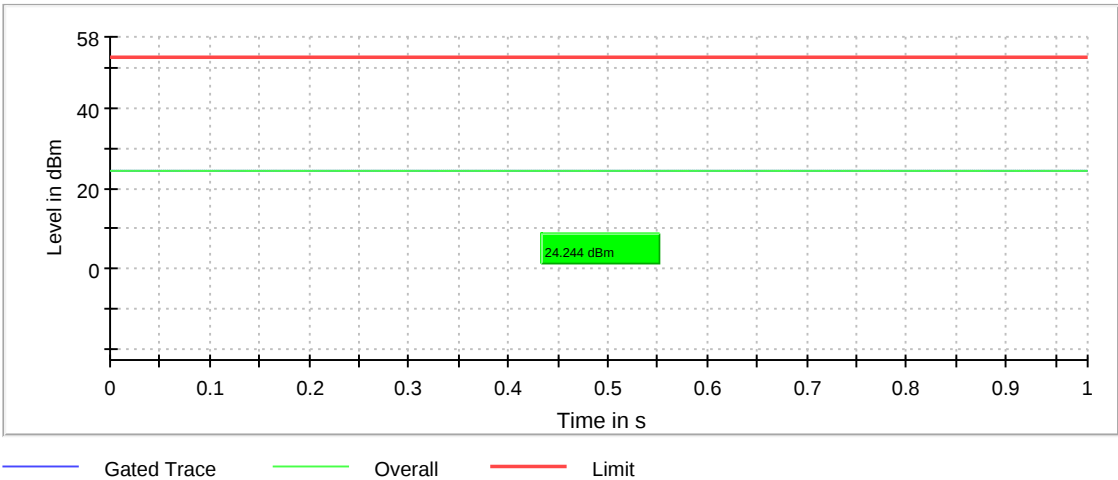
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5160.000000	24.2	53.0	24.2	98.356	PASS



Power Spectral Density (5200 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

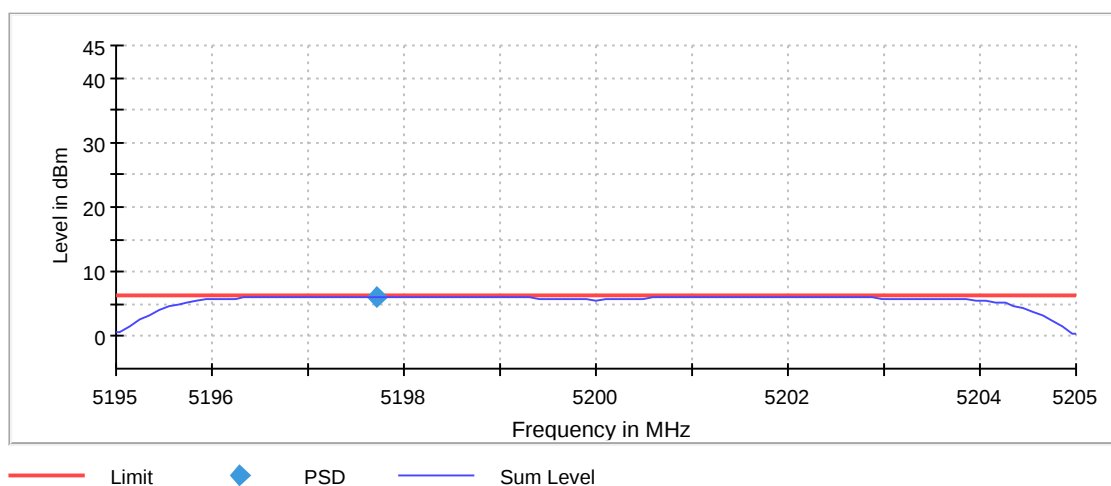
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5197.722772	6.144	6.5	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.19500 GHz	5.19500 GHz
Stop Frequency	5.20500 GHz	5.20500 GHz
Span	10.000 MHz	10.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 20
SweepTime	2.020 ms	2.020 ms
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB

Setting	Instrument Value	Target Value
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	AUTO
Preamp	off	off

Power Spectral Density (5160 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

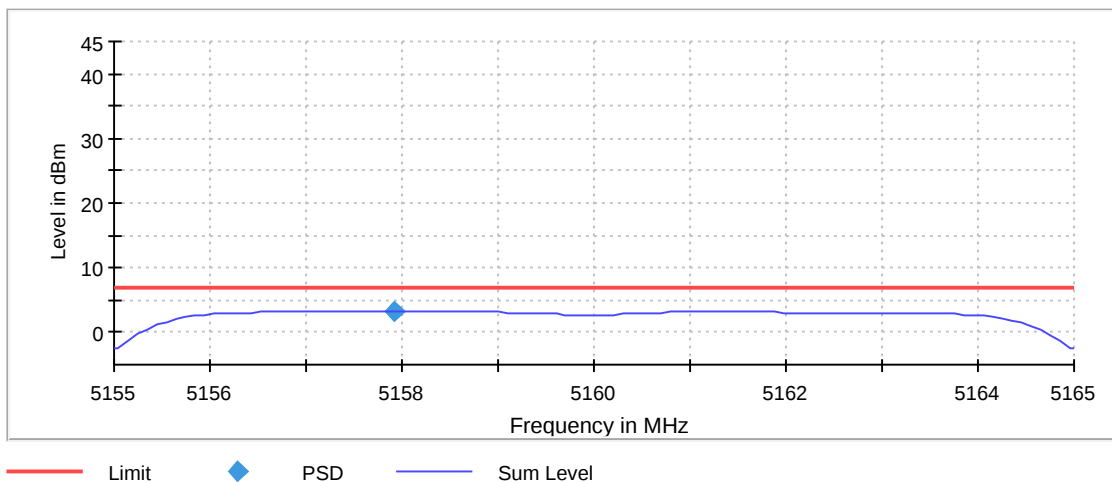
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5160.000000	5157.920792	3.235	6.8	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.15500 GHz	5.15500 GHz
Stop Frequency	5.16500 GHz	5.16500 GHz
Span	10.000 MHz	10.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 20
SweepTime	2.020 ms	2.020 ms
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB

Setting	Instrument Value	Target Value
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	AUTO
Preamplifier	off	off

RF output power (5200 MHz; 10 MHz)

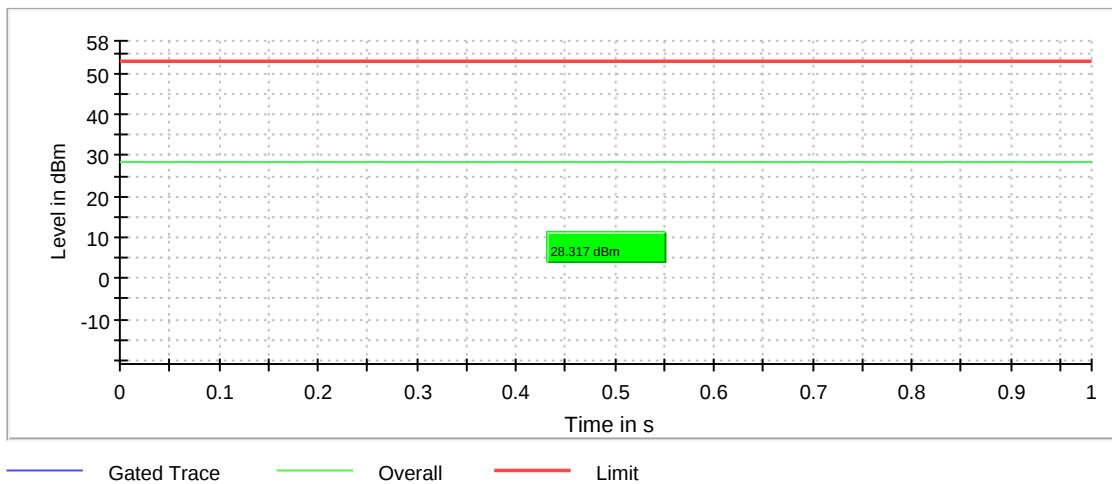
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5200.000000	28.3	53.0	28.3	98.354	PASS



RF output power (5245 MHz; 10 MHz)

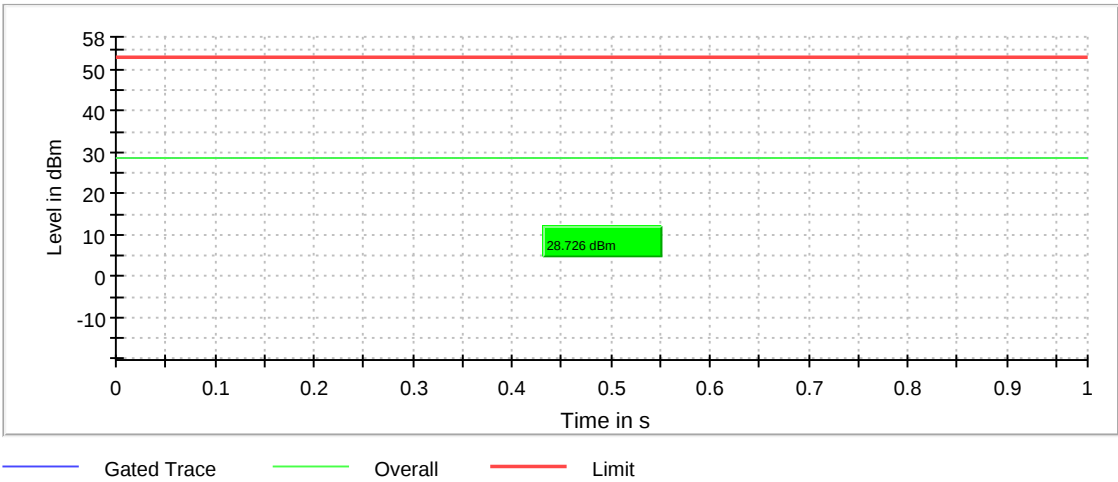
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5245.000000	28.7	53.0	28.7	98.353	PASS



Power Spectral Density (5245 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.

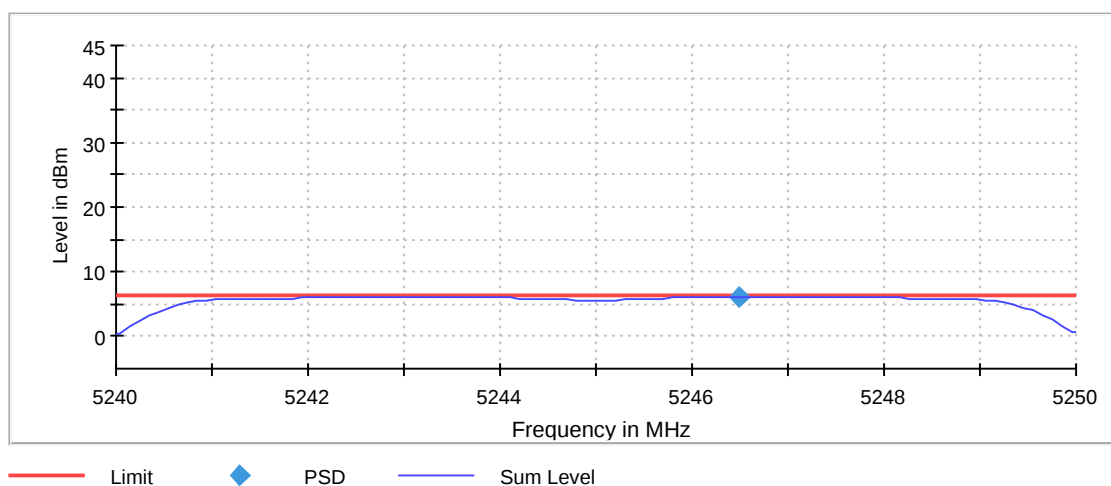
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5245.000000	5246.485149	6.105	6.3	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.24000 GHz	5.24000 GHz
Stop Frequency	5.25000 GHz	5.25000 GHz
Span	10.000 MHz	10.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 20
SweepTime	2.020 ms	2.020 ms
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB

Setting	Instrument Value	Target Value
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	AUTO
Preamp	off	off

Power Spectral Density (5165 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

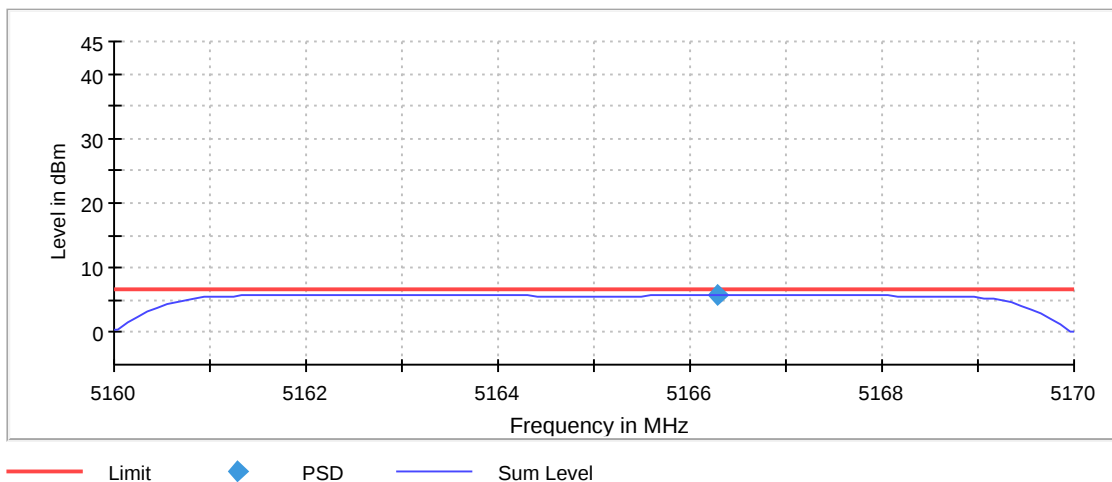
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5165.000000	5166.287129	5.867	6.8	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16000 GHz	5.16000 GHz
Stop Frequency	5.17000 GHz	5.17000 GHz
Span	10.000 MHz	10.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 20
SweepTime	2.020 ms	2.020 ms
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB

Setting	Instrument Value	Target Value
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	AUTO
Preamplifier	off	off

Power Spectral Density (5170 MHz; 10 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.F and ANSI C63.10-2013

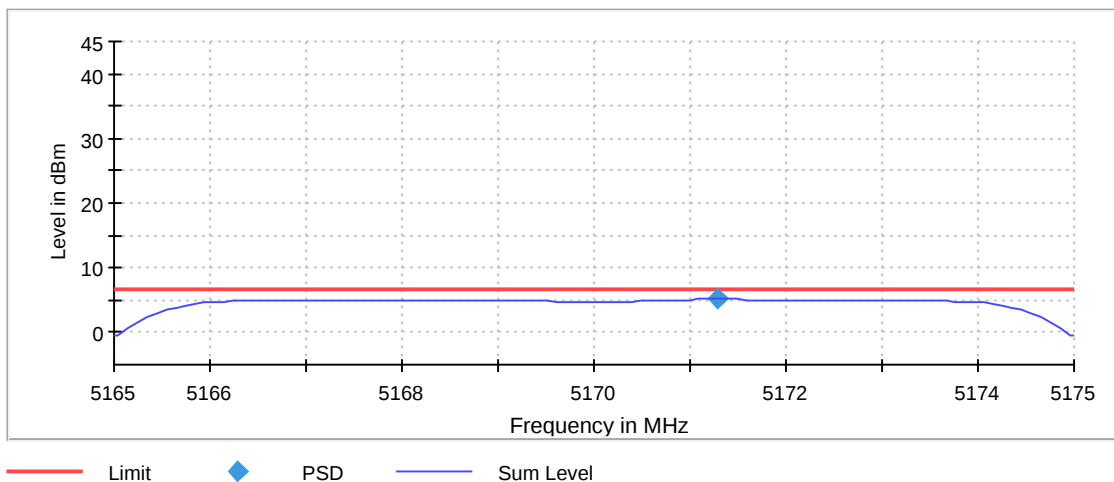
Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Uncertainty (K=2) < 1.3 dB

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5170.000000	5171.287129	5.113	6.7	PASS

Ports

Port	Duty Cycle (%)
1	0.000
2	0.000



Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.16500 GHz	5.16500 GHz
Stop Frequency	5.17500 GHz	5.17500 GHz
Span	10.000 MHz	10.000 MHz
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 20
SweepTime	2.020 ms	2.020 ms
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	RMS	RMS
SweepCount	100	100
Filter	3 dB	3 dB

Setting	Instrument Value	Target Value
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	AUTO
Preamplifier	off	off

RF output power (5165 MHz; 10 MHz)

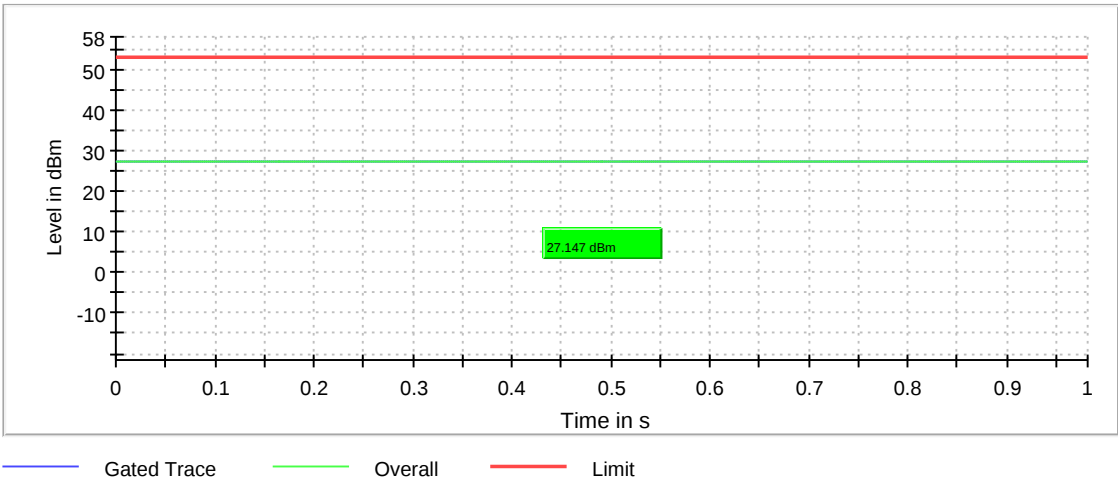
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5165.000000	27.1	53.0	27.1	98.354	PASS



RF output power (5170 MHz; 10 MHz)

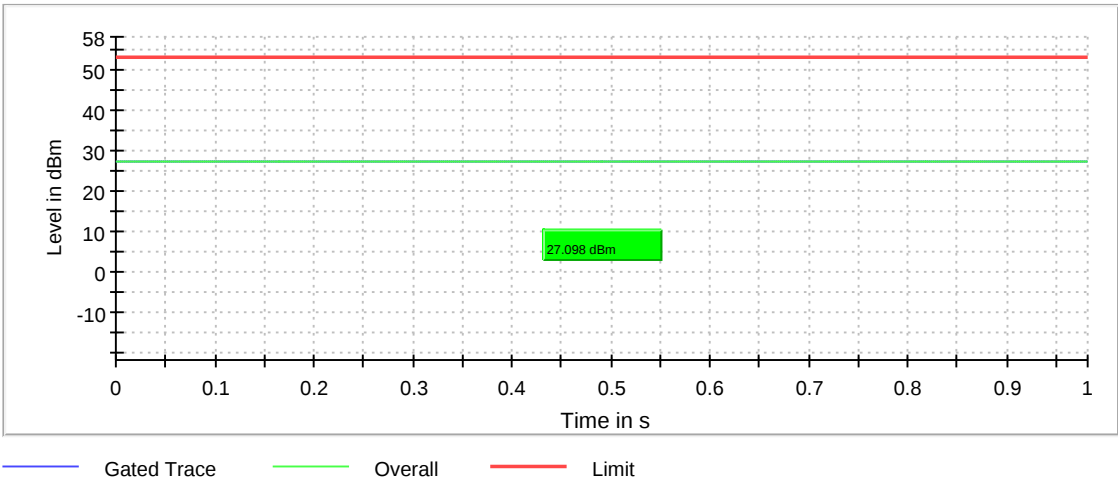
Customized settings.

Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 II.E and ANSI C63.10-2013

Measurement uncertainty calculated in accordance with ETSI TR 100 028-1.
Expanded Combined Uncertainty of absolute Level Measurement (K=2) < 1 dB

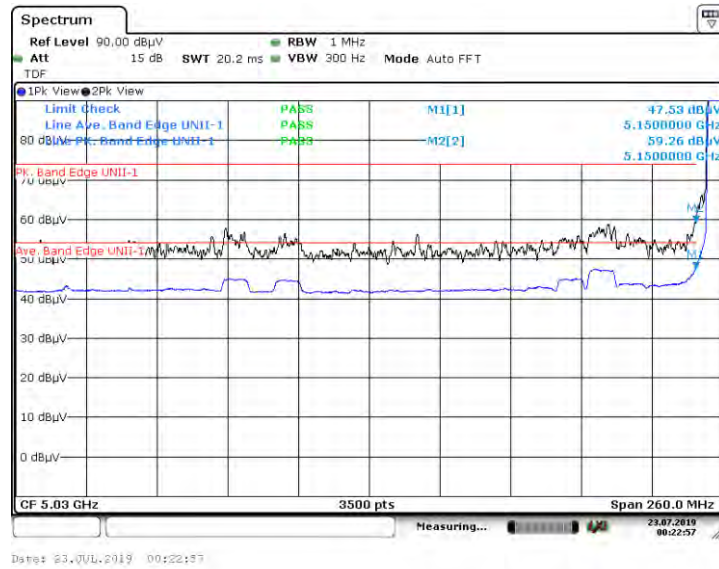
Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5170.000000	27.1	53.0	27.1	98.354	PASS

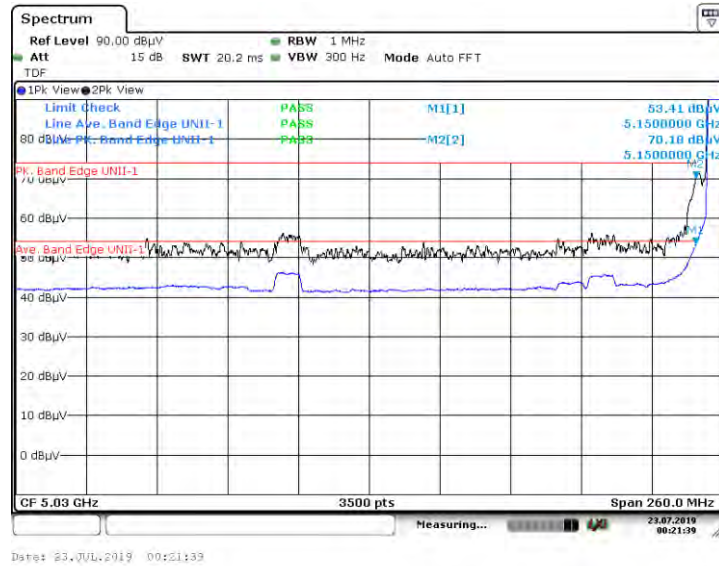


15.205 Restricted Band
Conducted Measurements
Unii-1

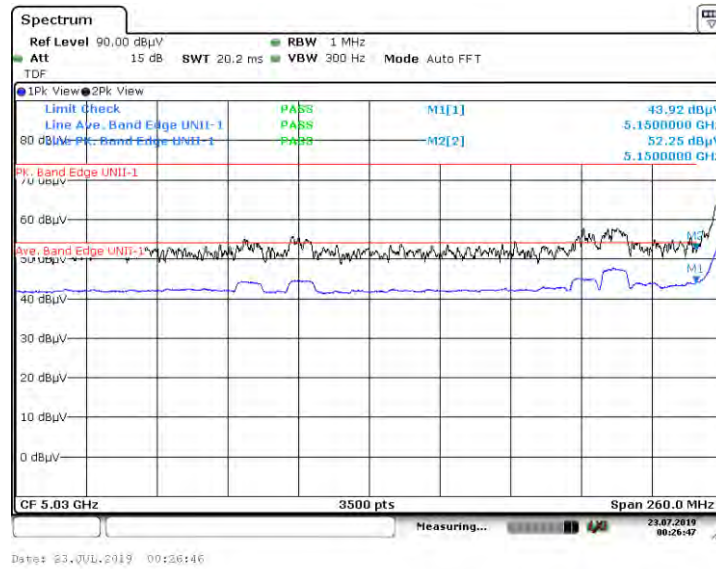
5160 Mhz_10 MHz BW_J2



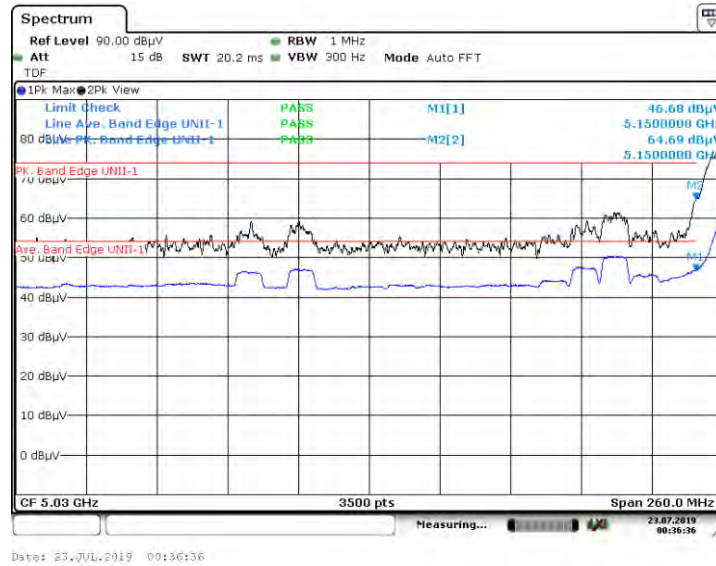
5160 Mhz_10 MHz BW_J3



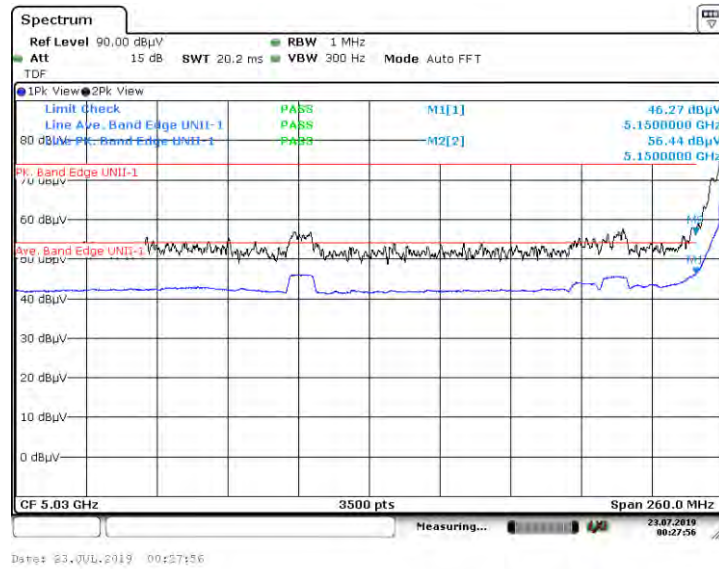
5165 Mhz_10 MHz BW_J2



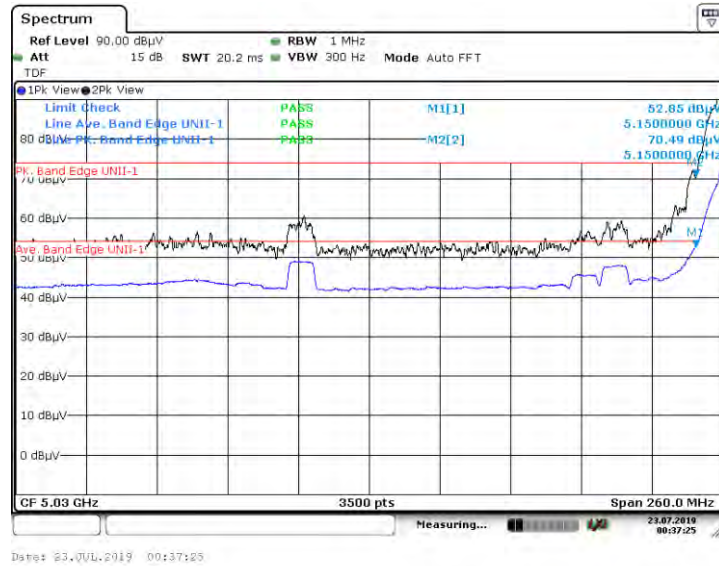
5165 Mhz_10 MHz BW_J2_MAX



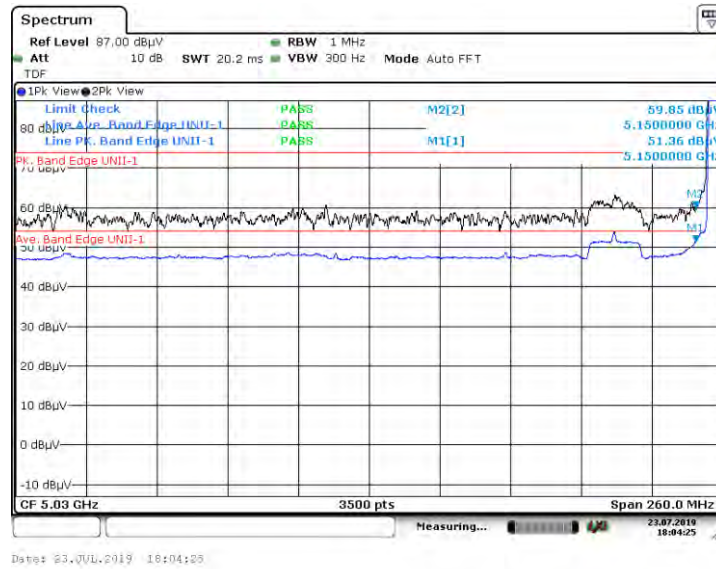
5165 Mhz_10 MHz BW_J3



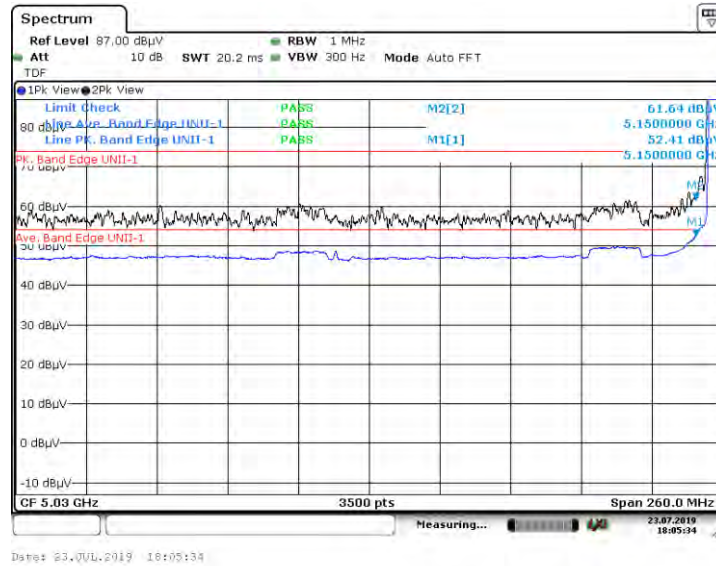
5165 Mhz_10 MHz BW_J3_MAX



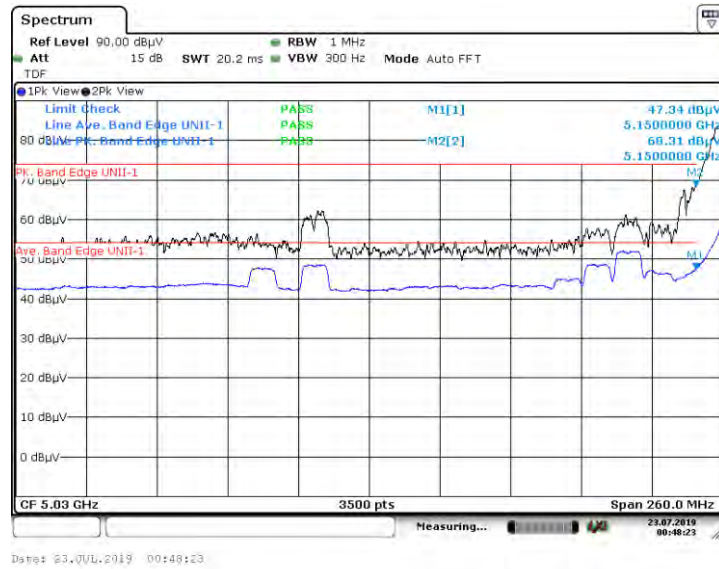
5165 Mhz_20 MHz BW_J2



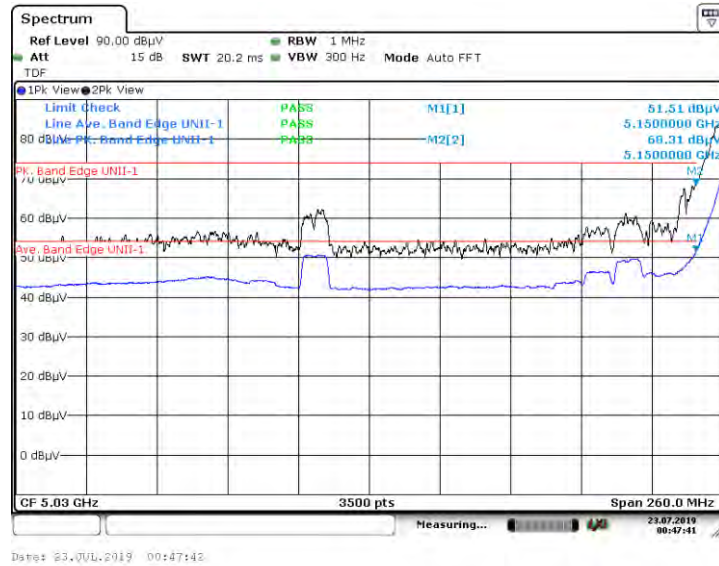
5165 Mhz_20 MHz BW_J3



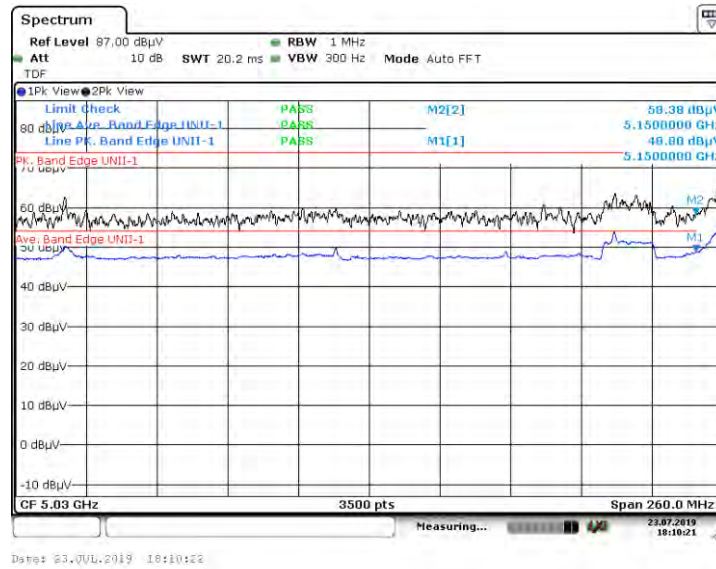
5170 Mhz_10 MHz BW_J2_MAX



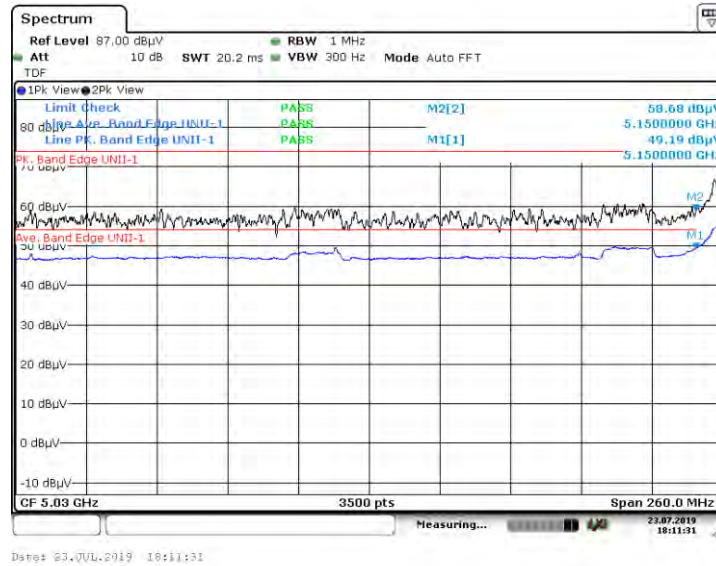
5170 Mhz_10 MHz BW_J3_MAX



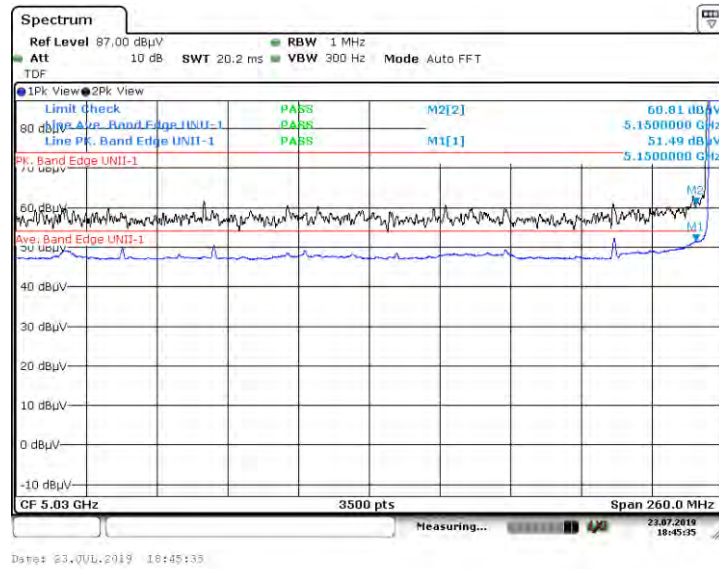
5170 Mhz_20 MHz BW_J2



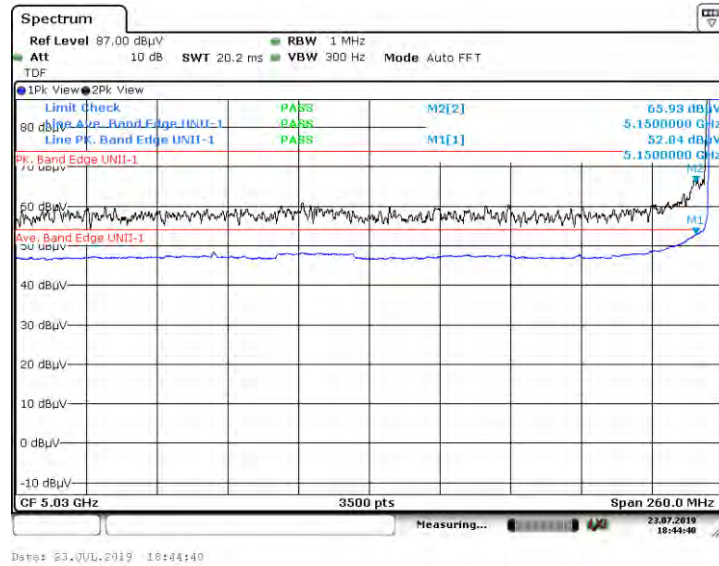
5170 Mhz_20 MHz BW_J3



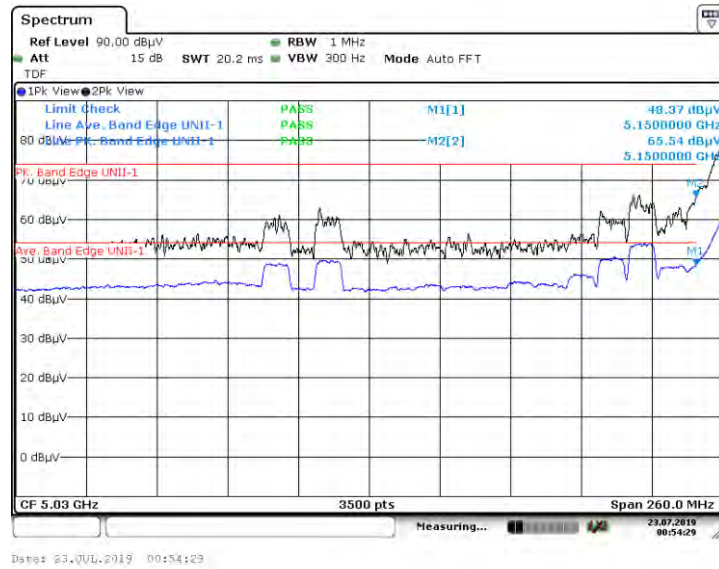
5170 Mhz_30 MHz BW_J2



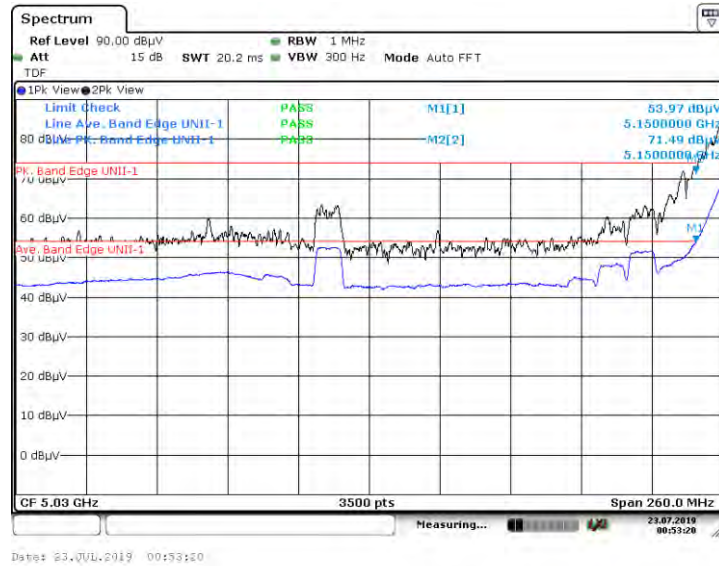
5170 Mhz_30 MHz BW_J3



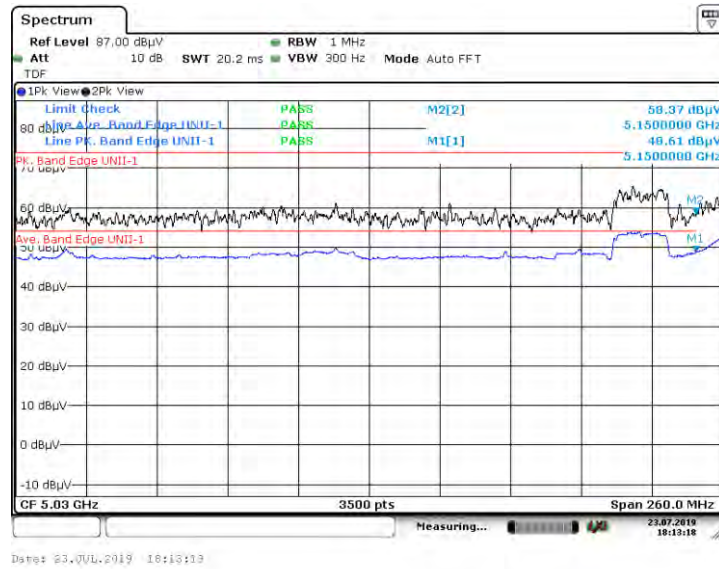
5175 Mhz_10 MHz BW_J2_MAX



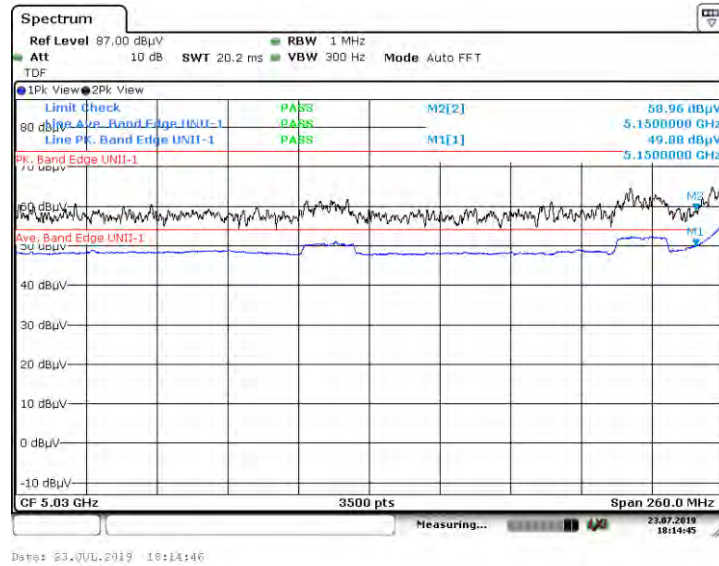
5175 Mhz_10 MHz BW_J3_MAX



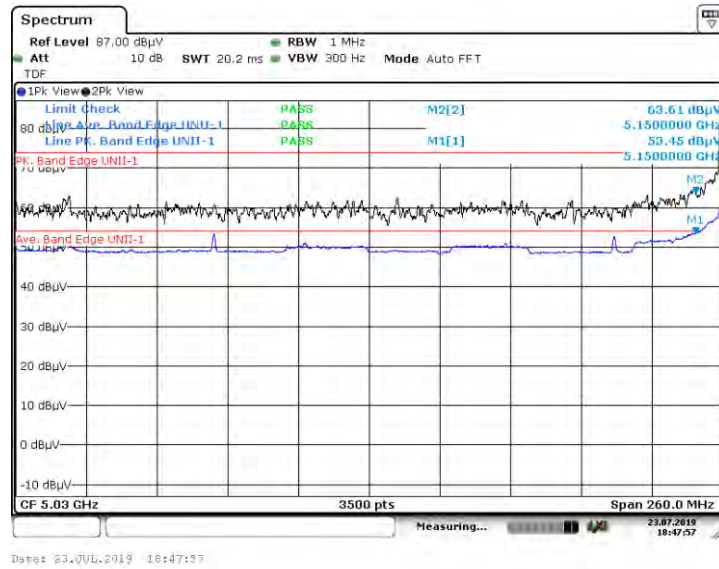
5175 MHz_20 MHz_J2



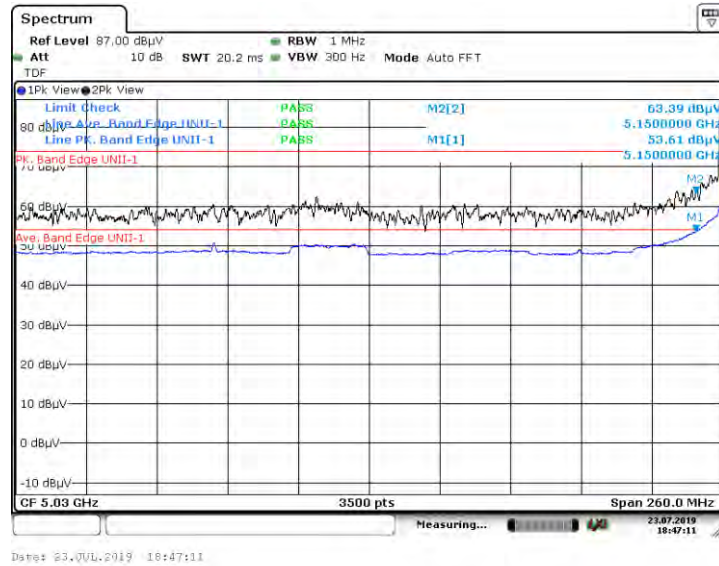
5175 MHz_20 MHz_J3



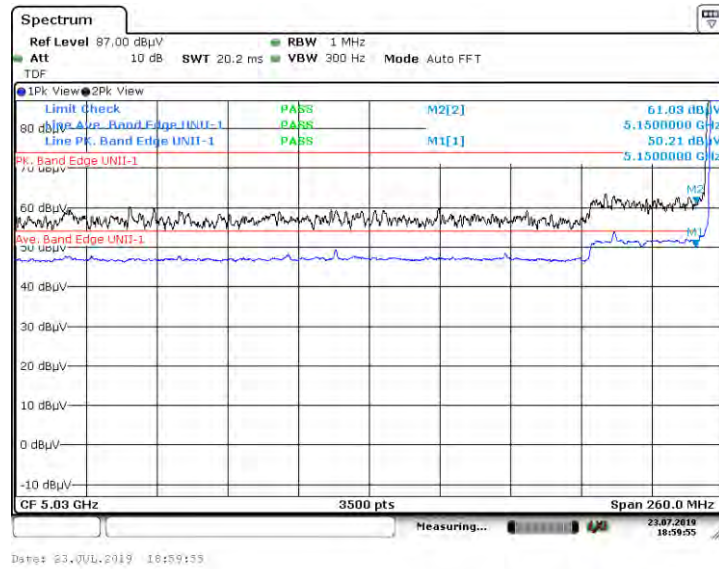
5175 MHz_30 MHz_J2



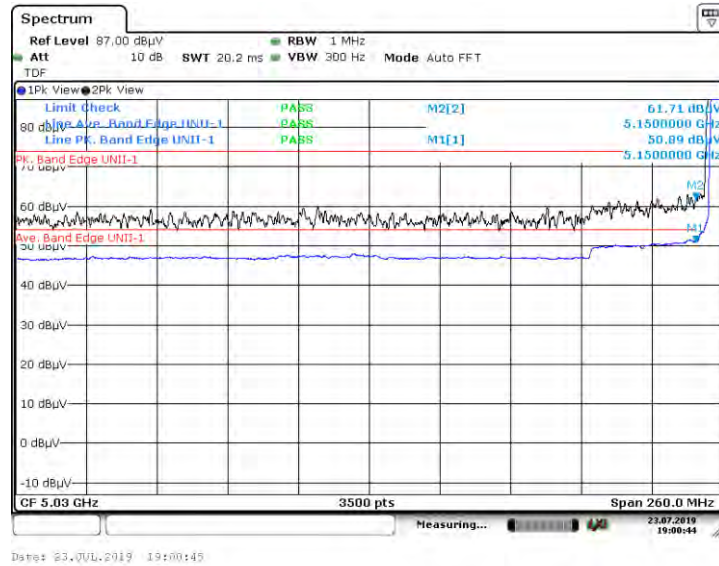
5175 MHz_30 MHz_J3



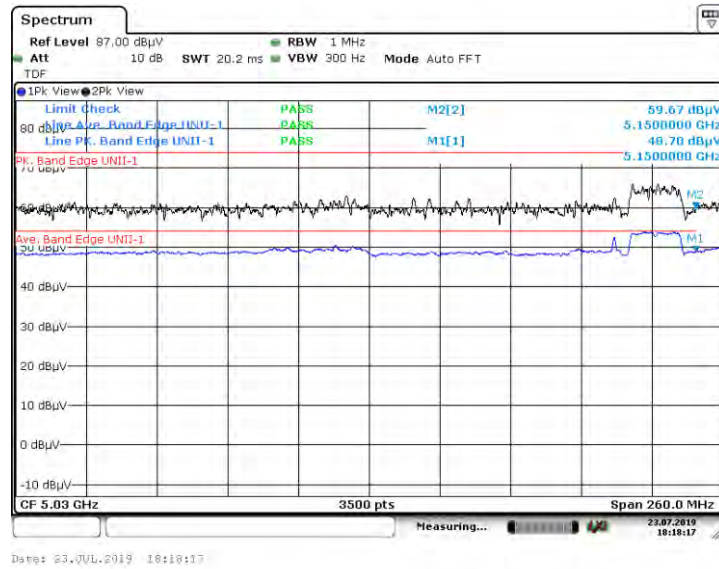
5175 MHz_40 MHz_J2



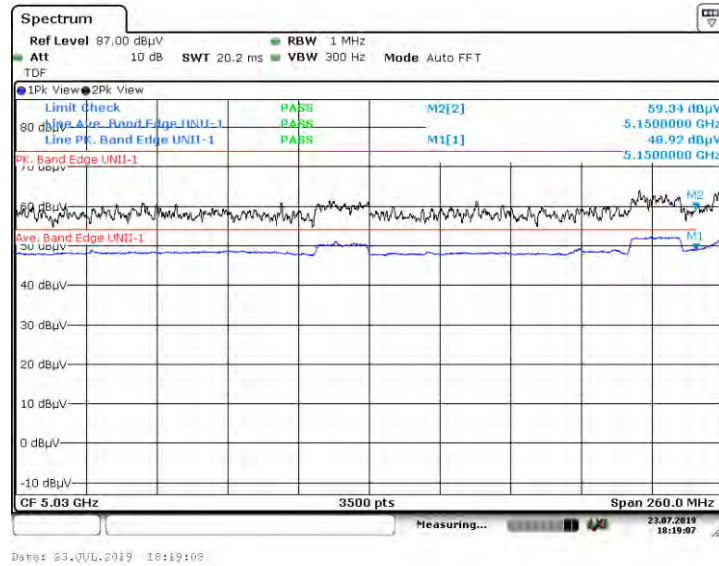
5175 MHz_40 MHz_J3



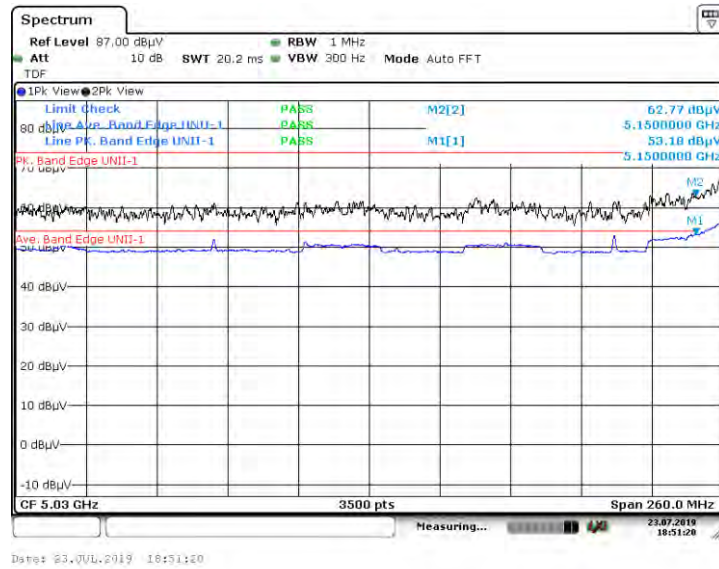
5180 MHz_20 MHz_J2



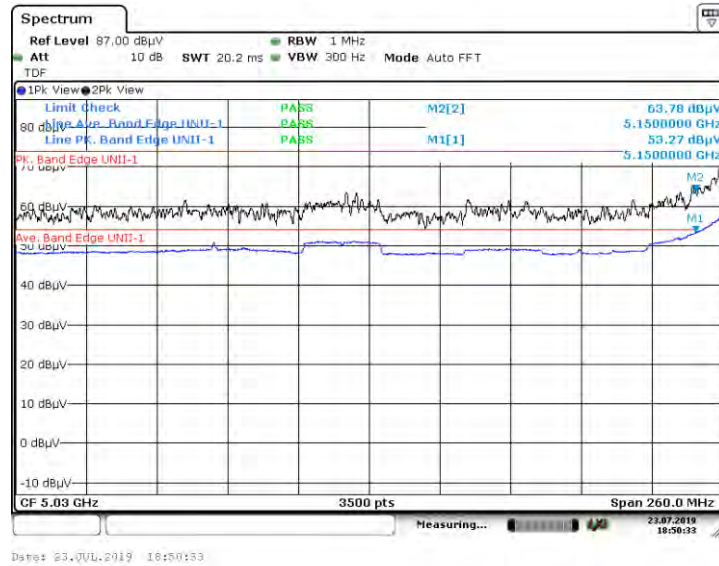
5180 MHz_20 MHz_J3



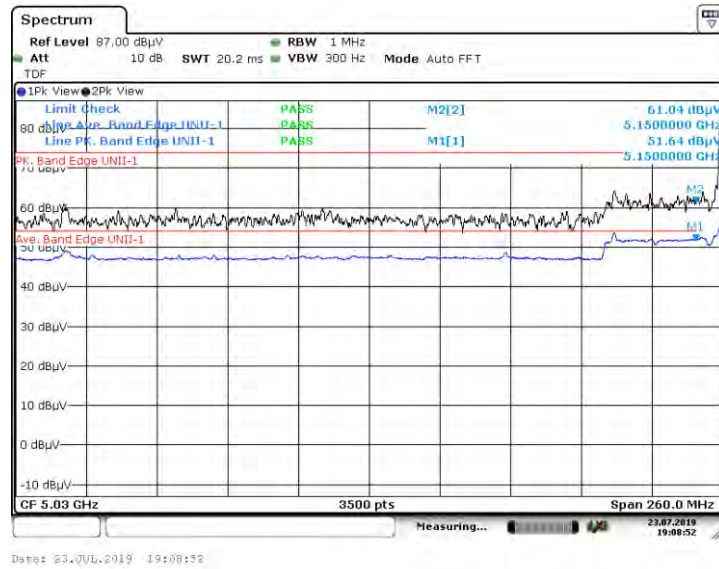
5180 MHz_30 MHz_J2



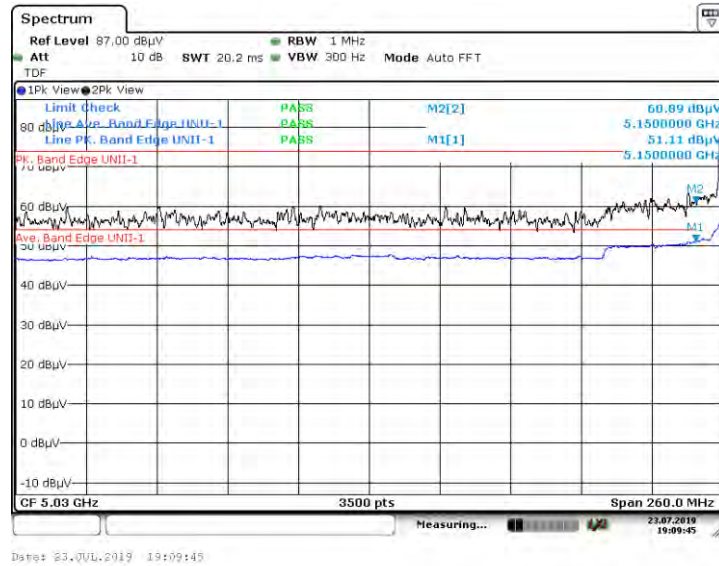
5180 MHz_30 MHz_J3



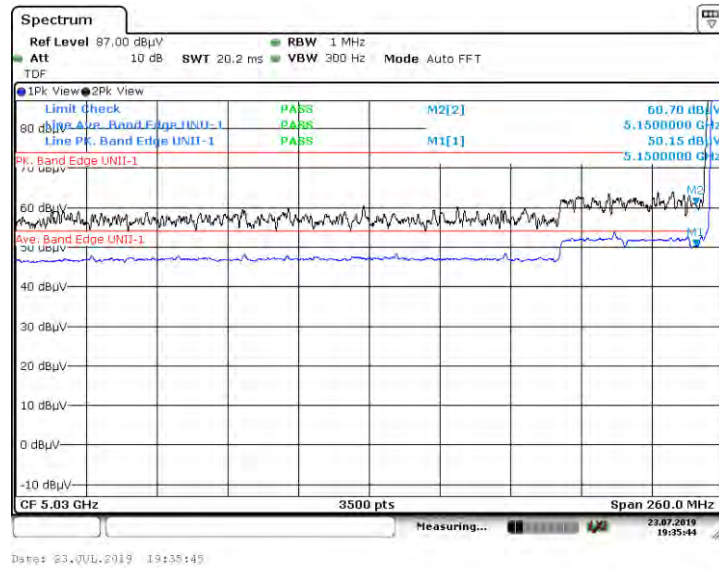
5180 MHz_40 MHz_J2



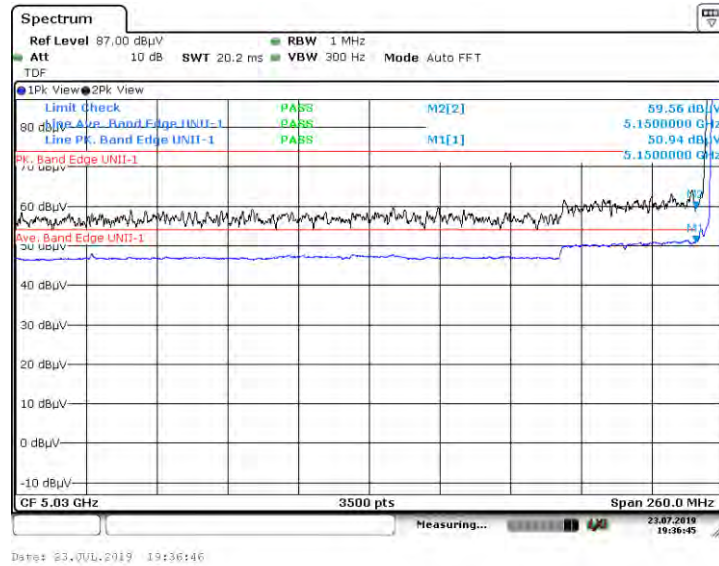
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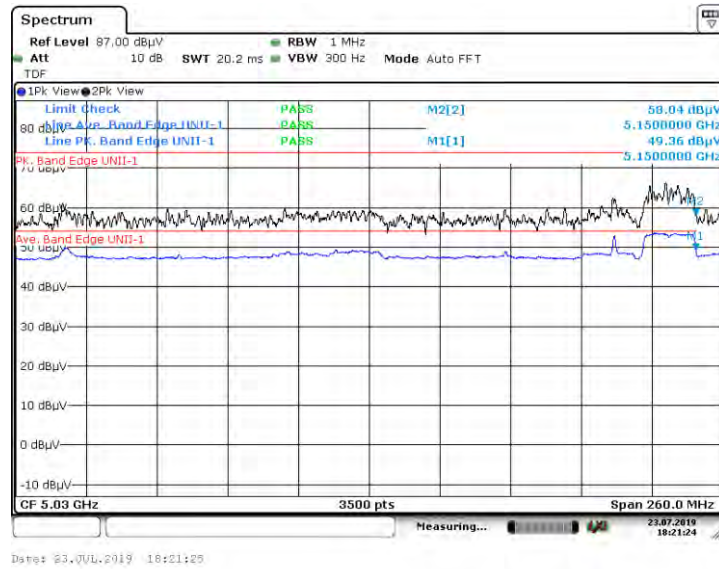
5180 MHz_50 MHz_J2



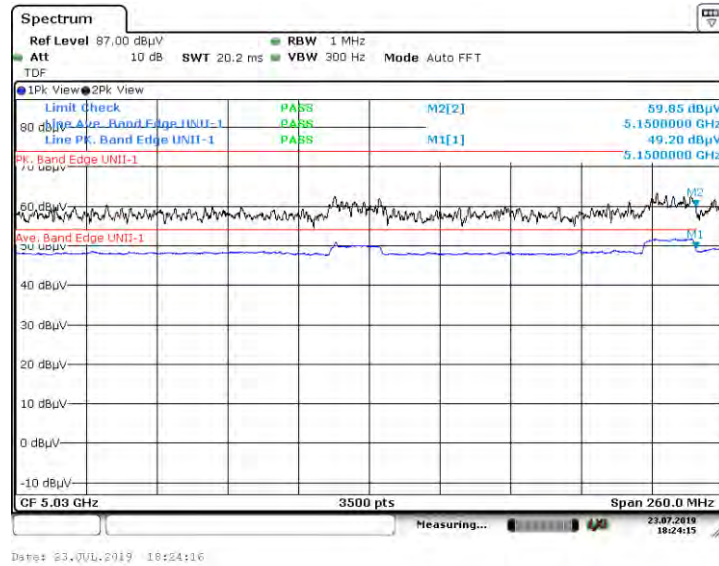
5180 MHz_50 MHz_J3



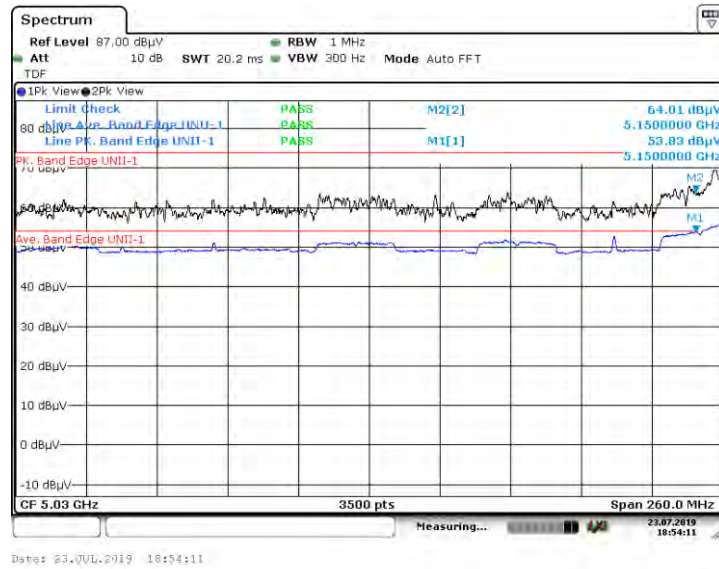
5185 MHz_20 MHz_J2



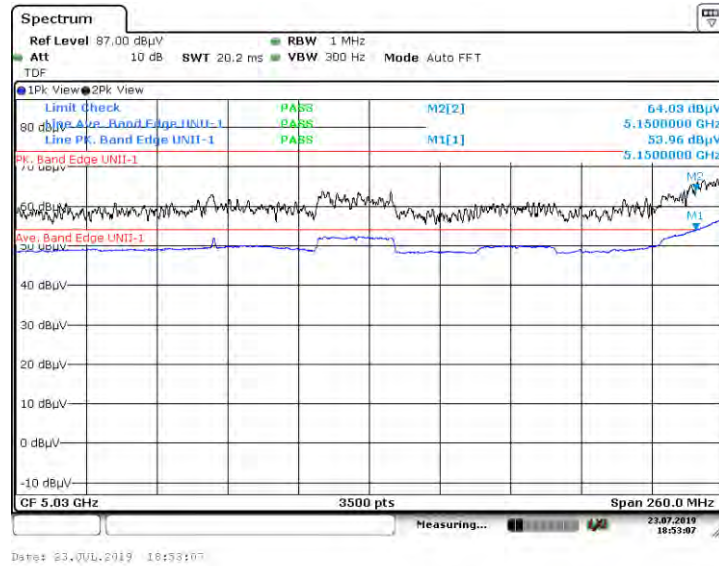
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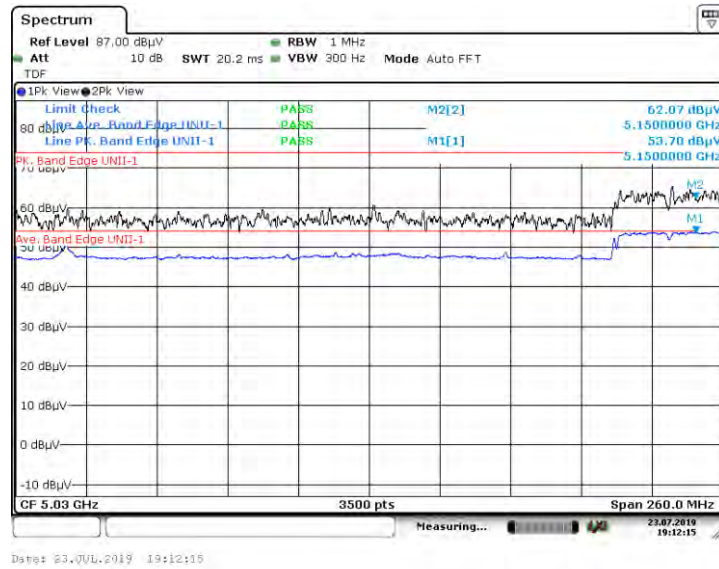
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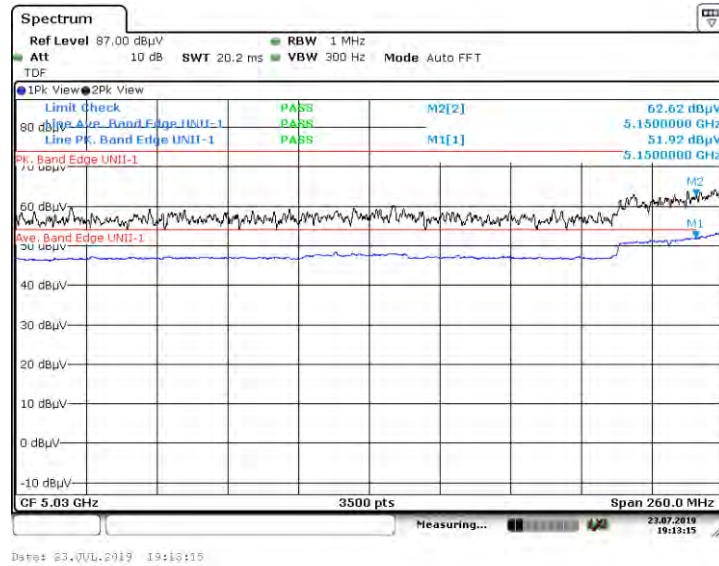
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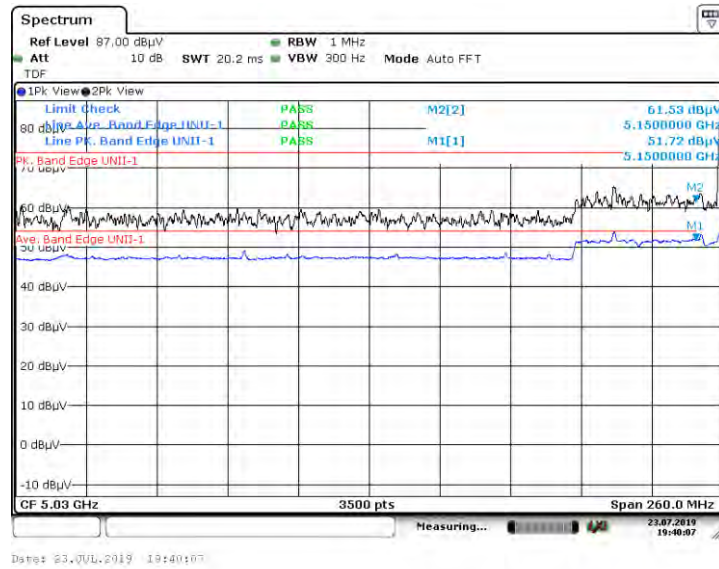
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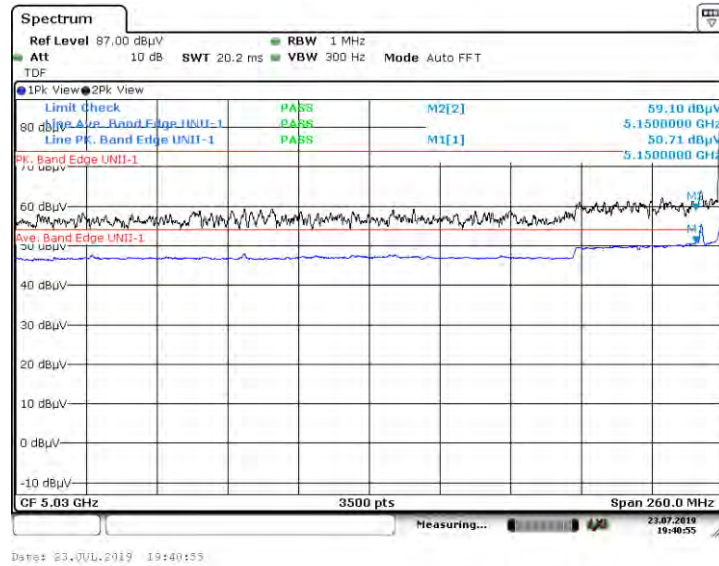
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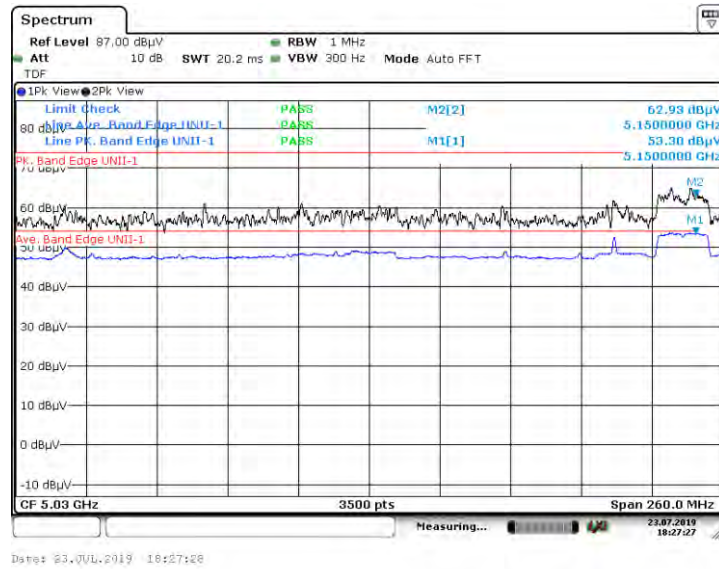
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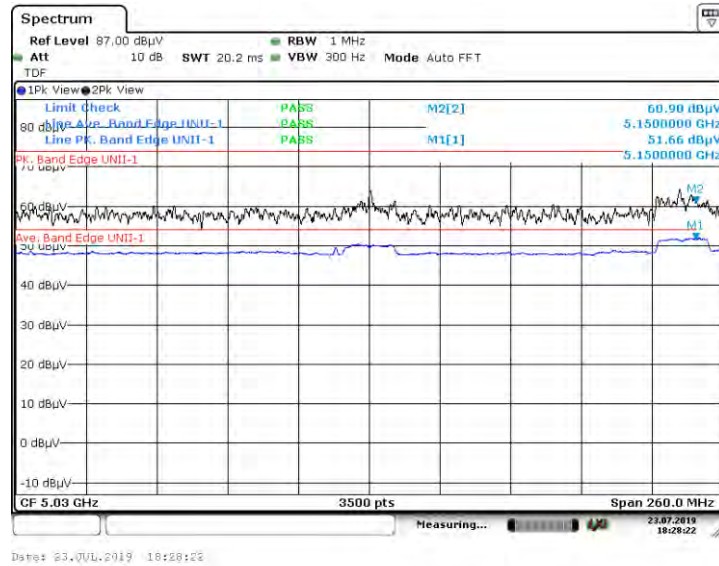
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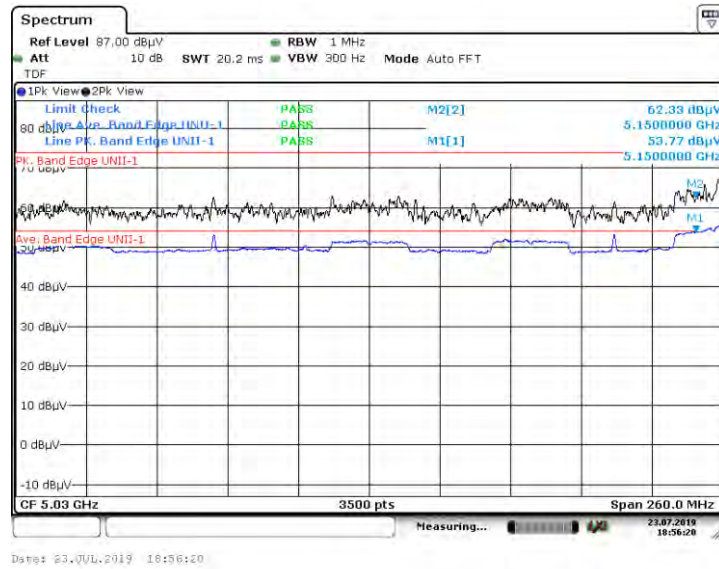
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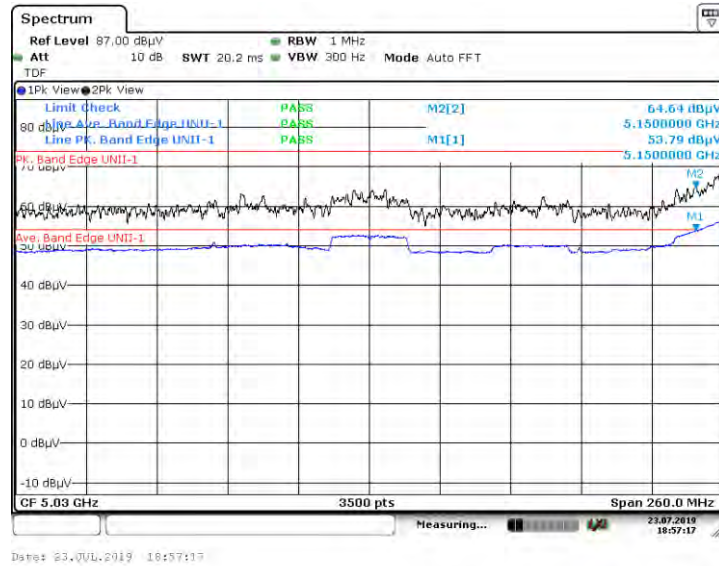
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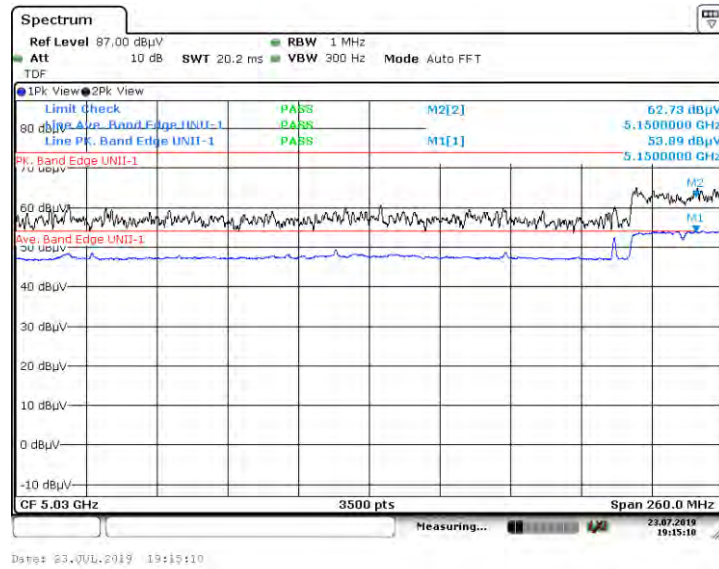
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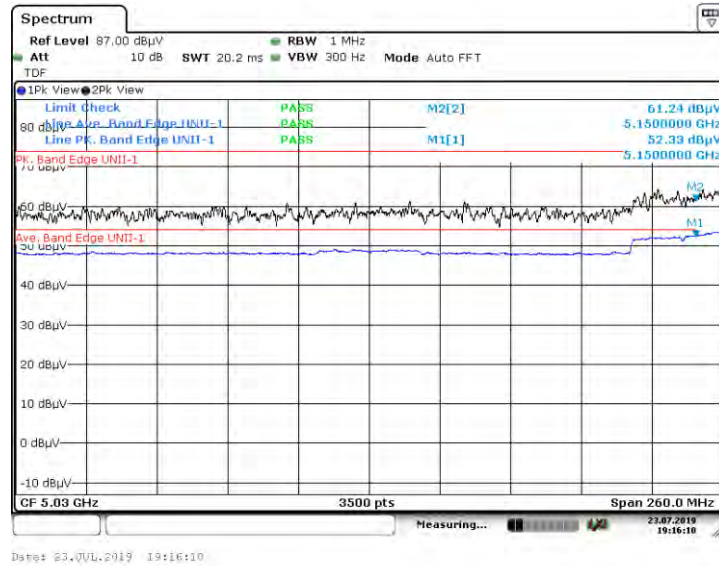
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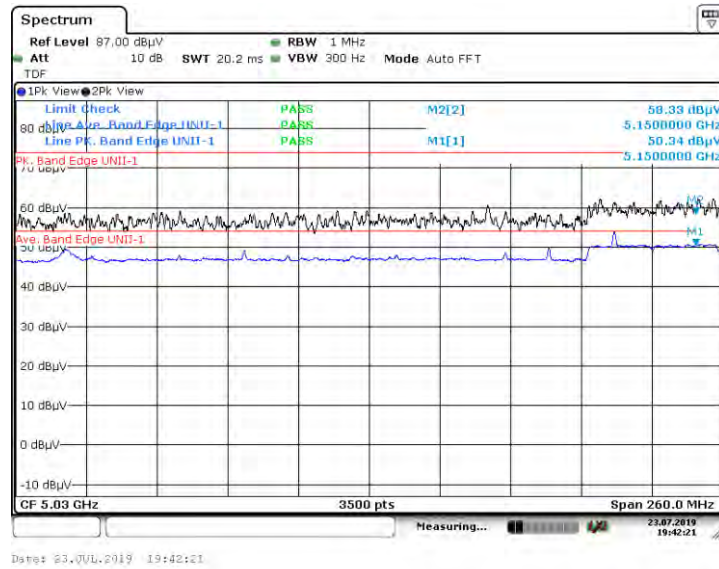
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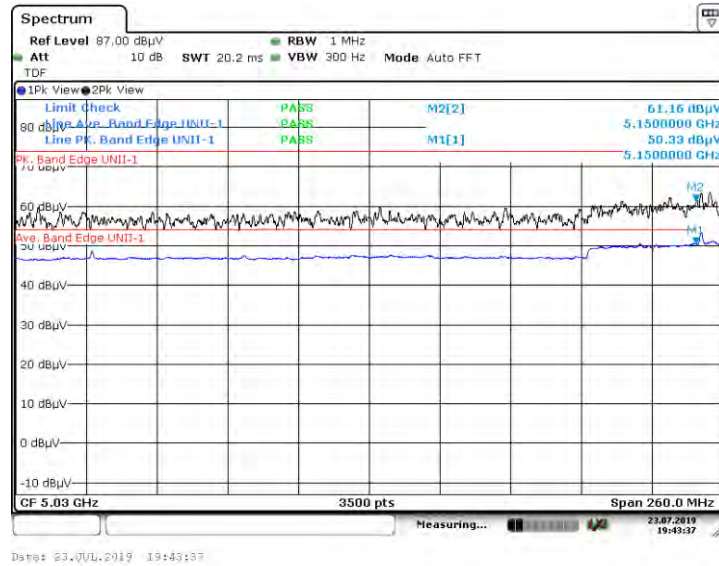
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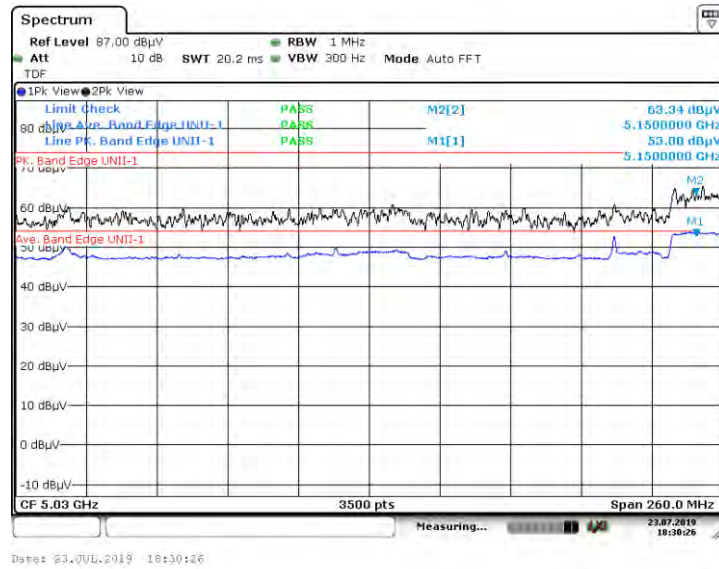
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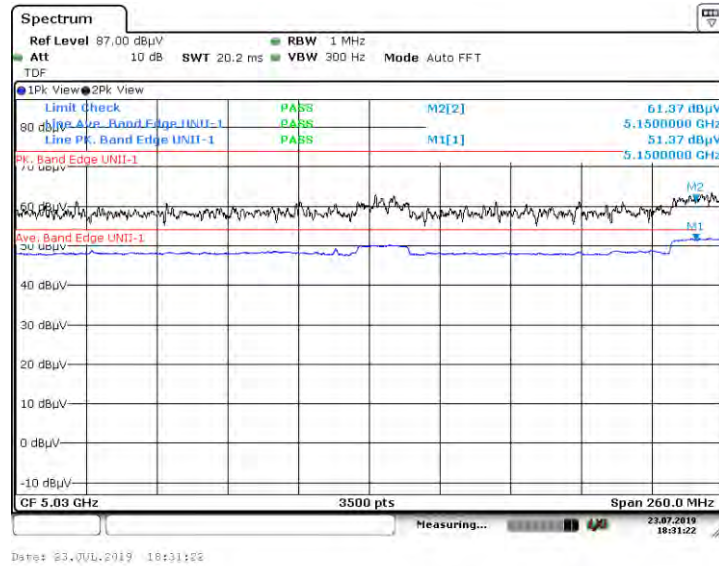
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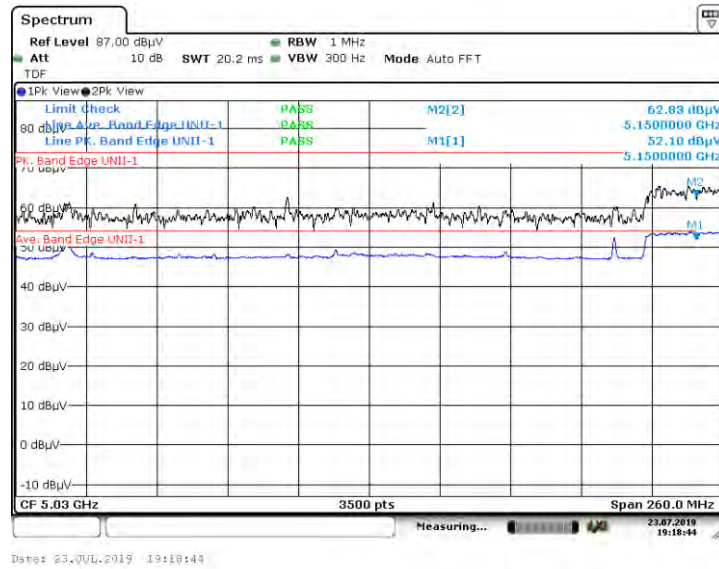
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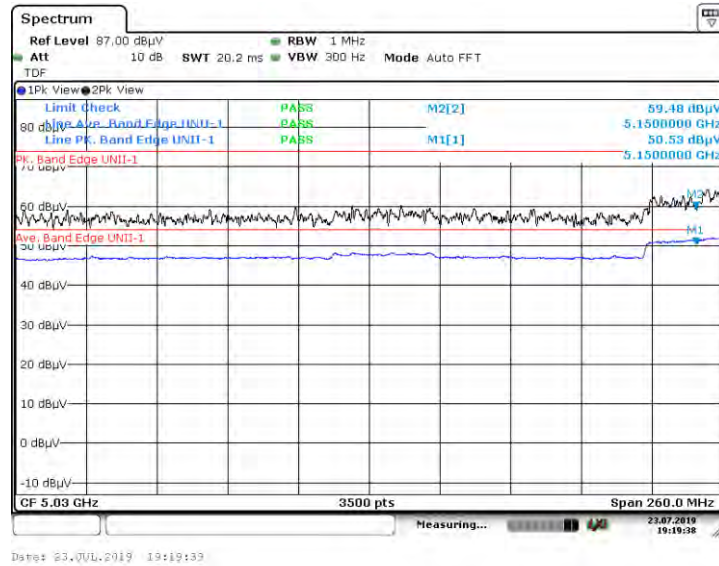
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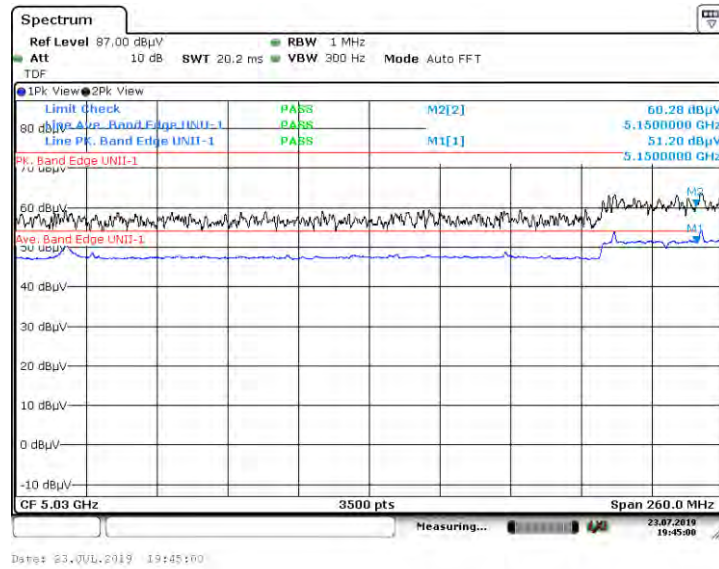
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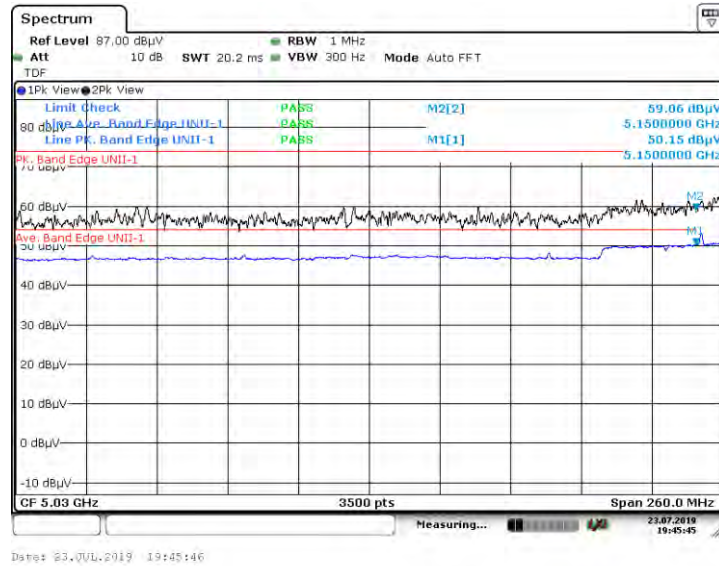
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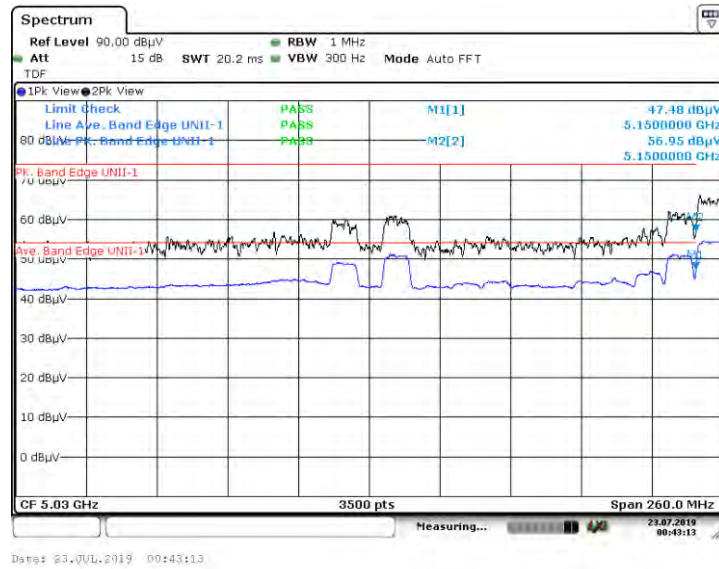
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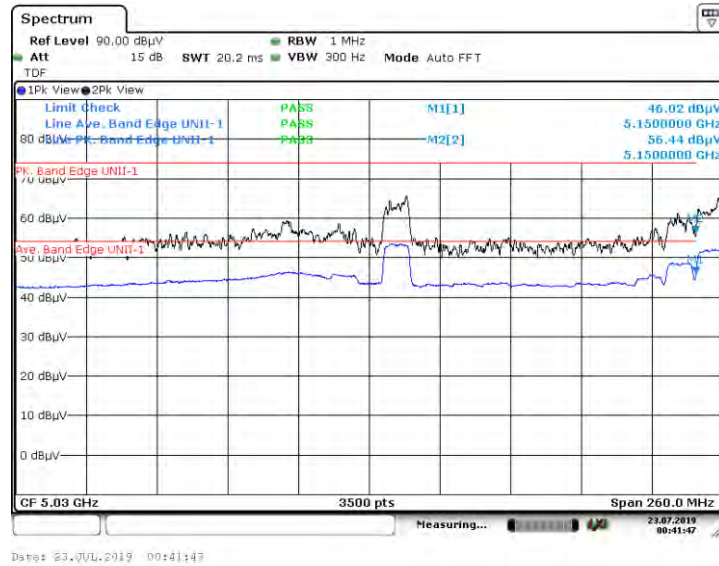
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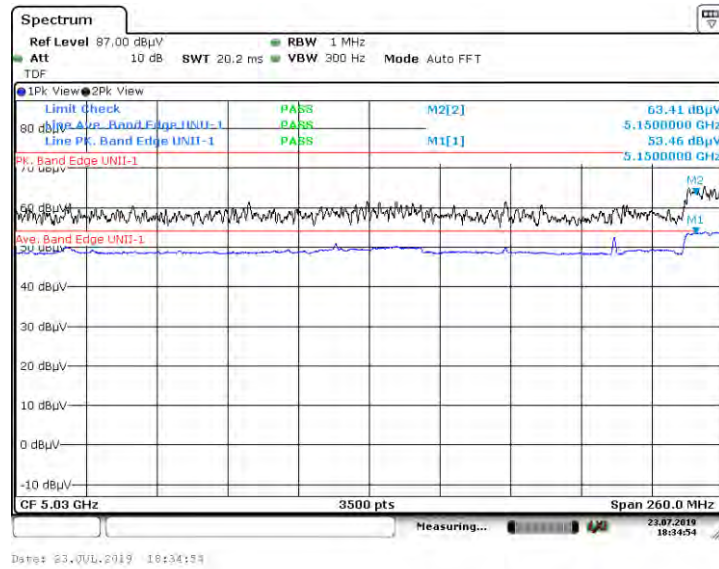
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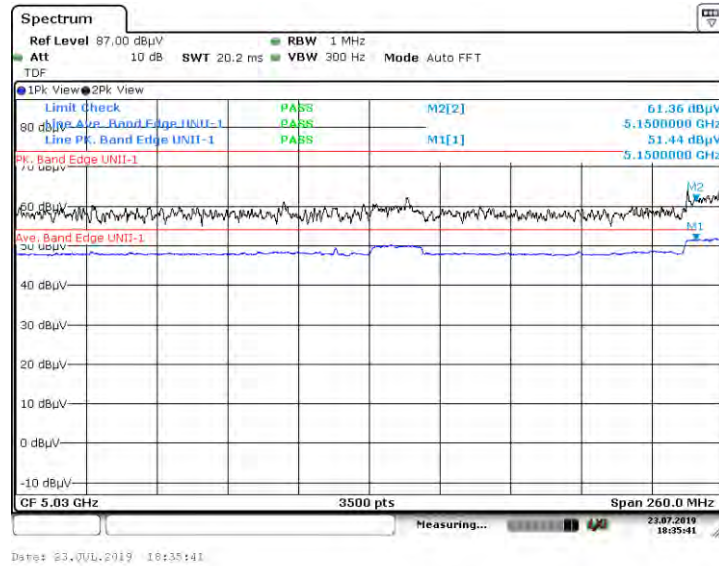
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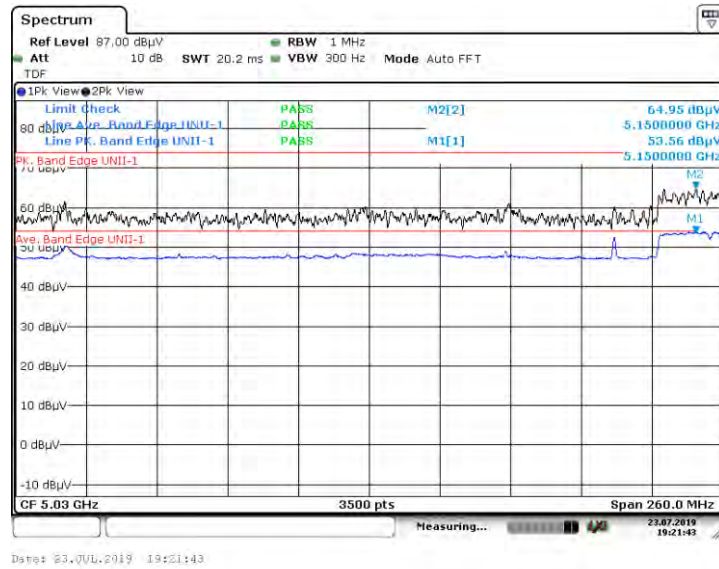
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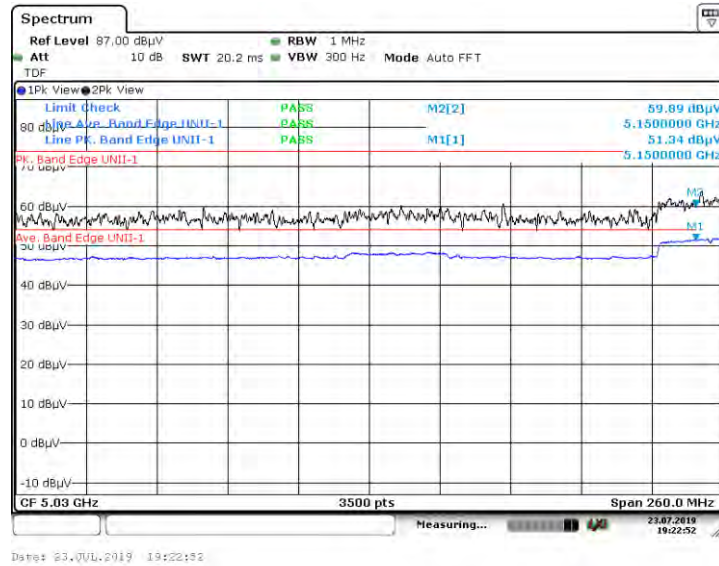
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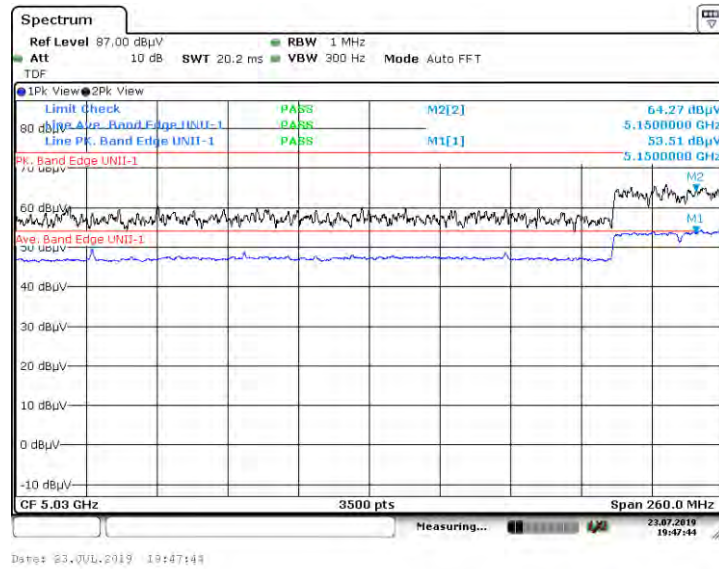
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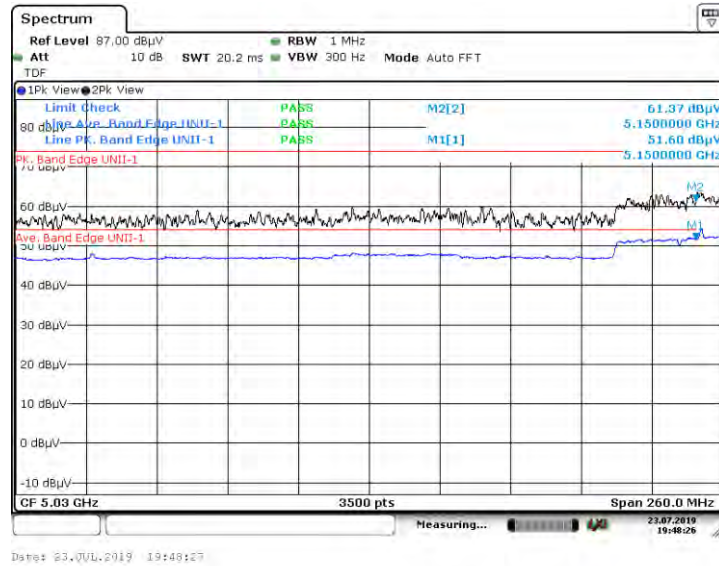
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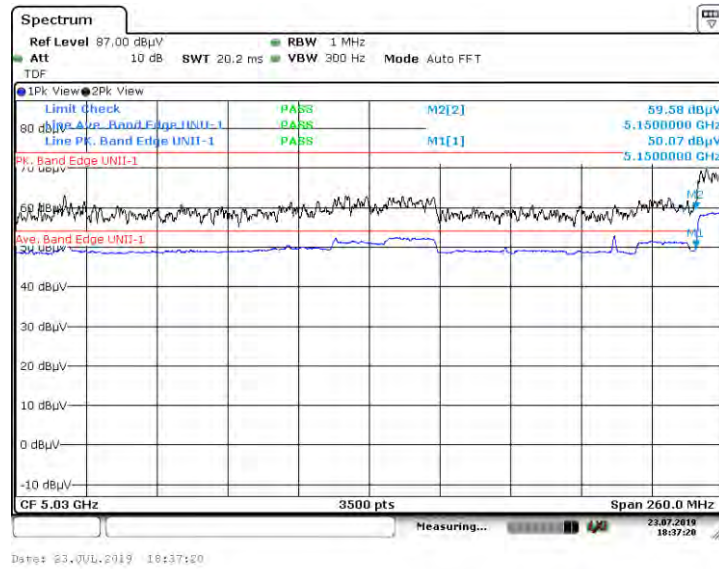
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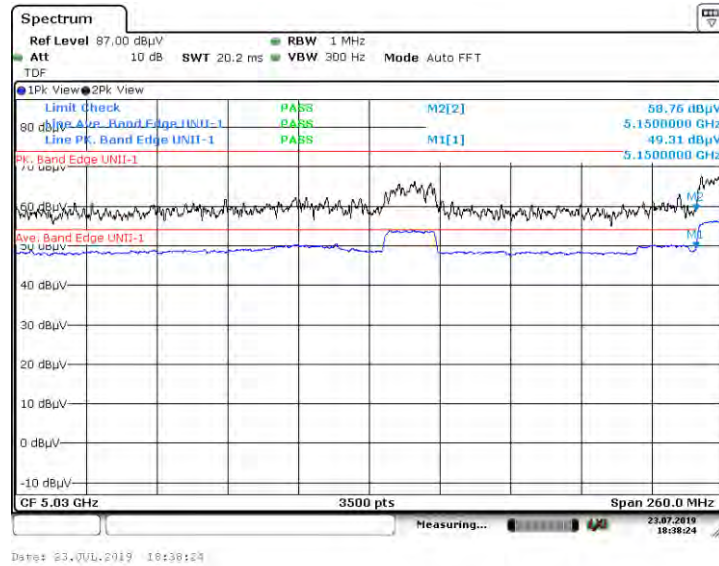
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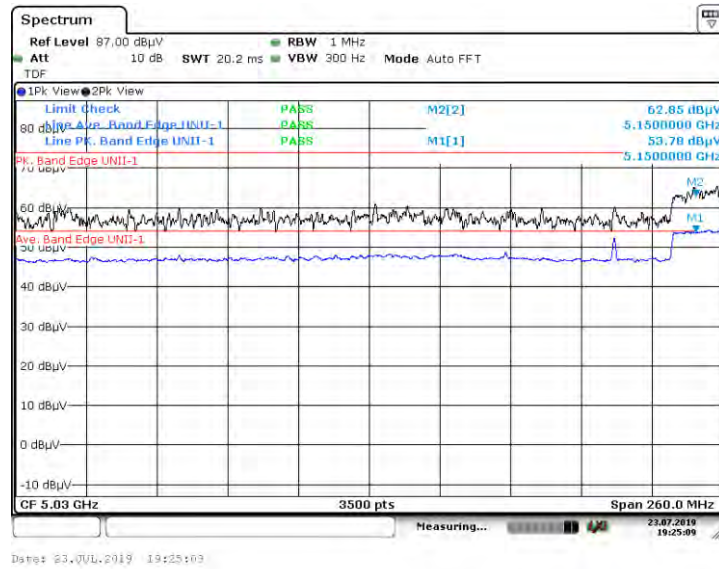
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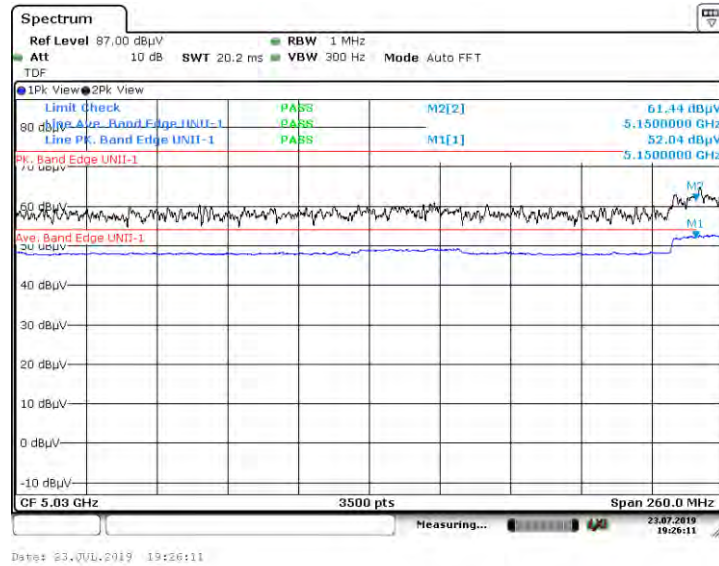
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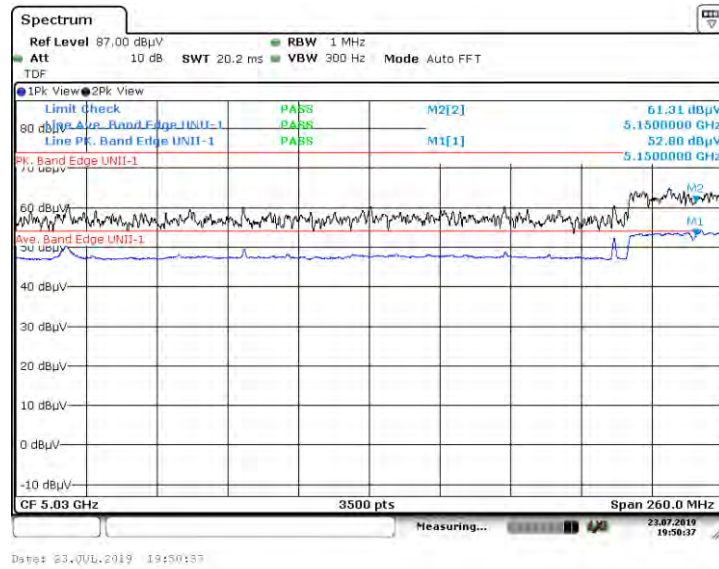
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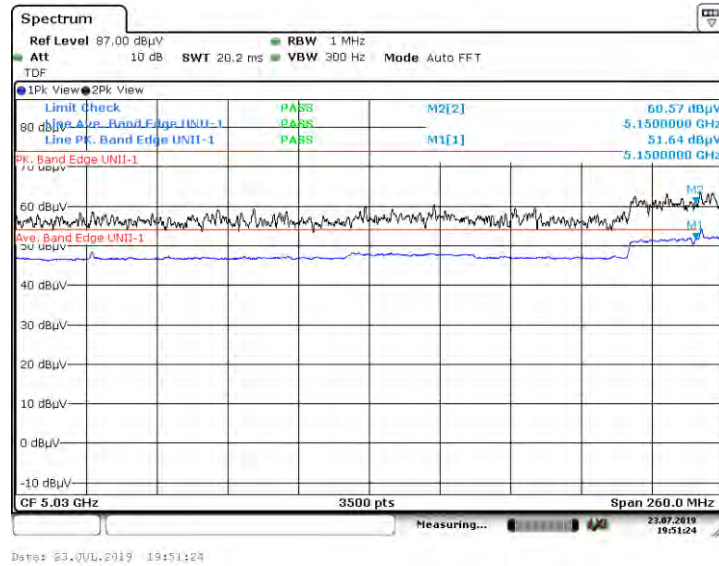
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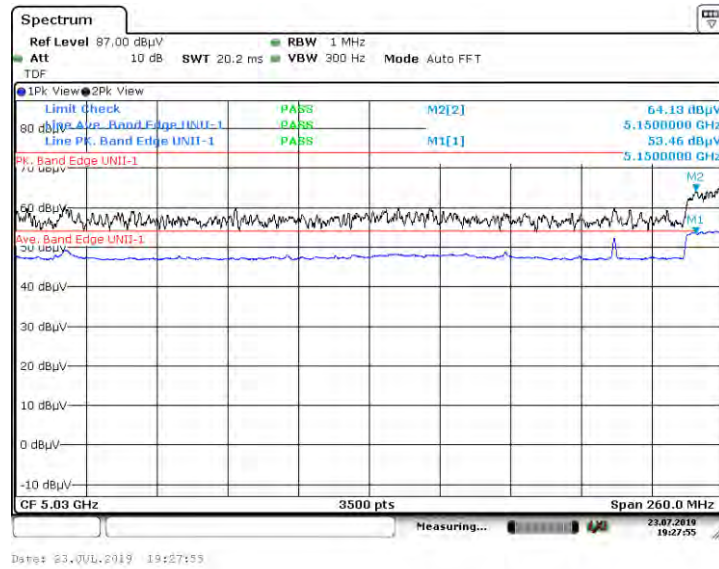
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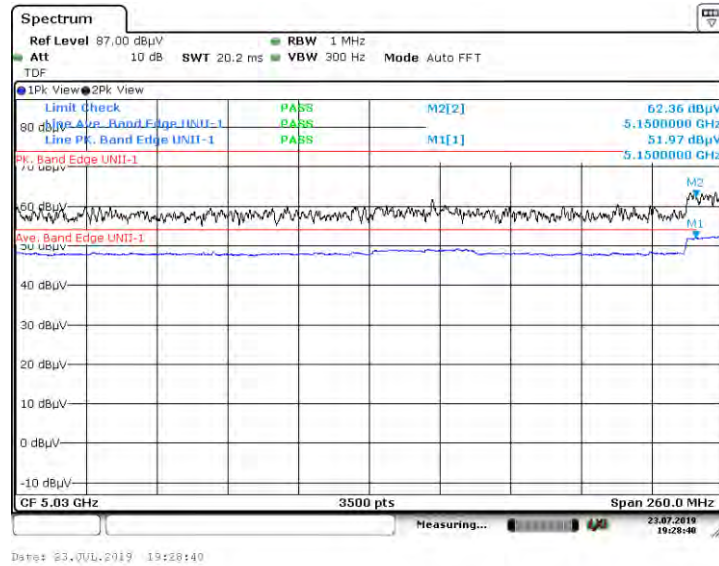
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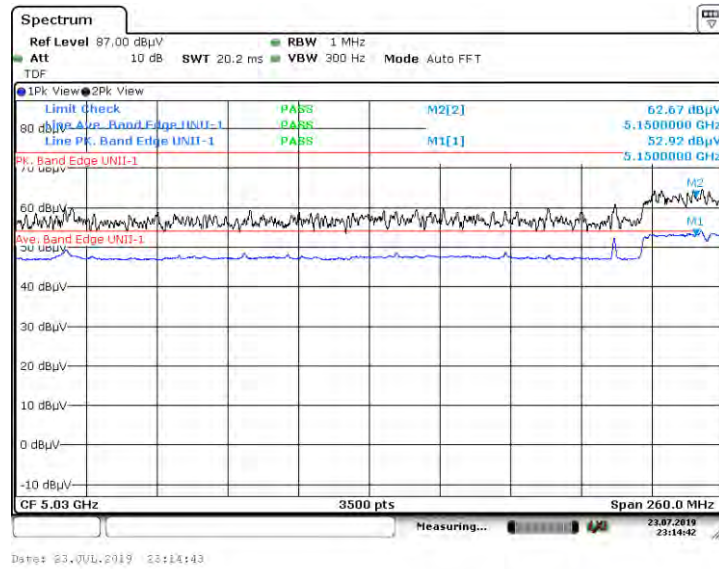
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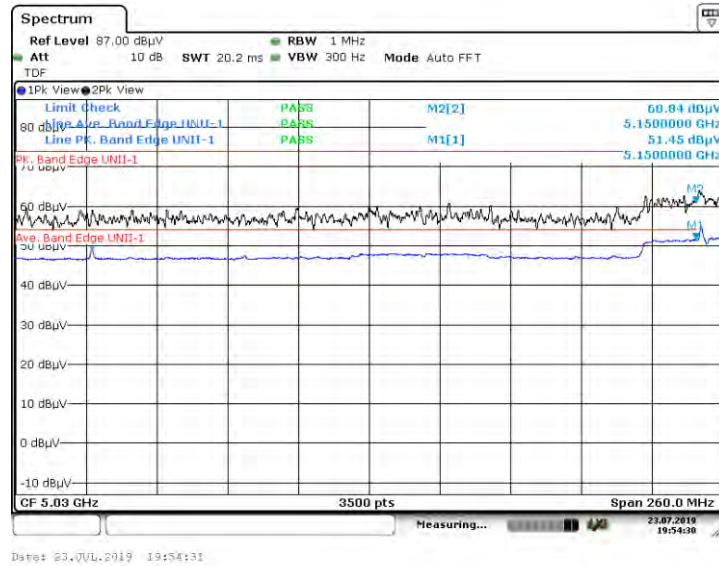
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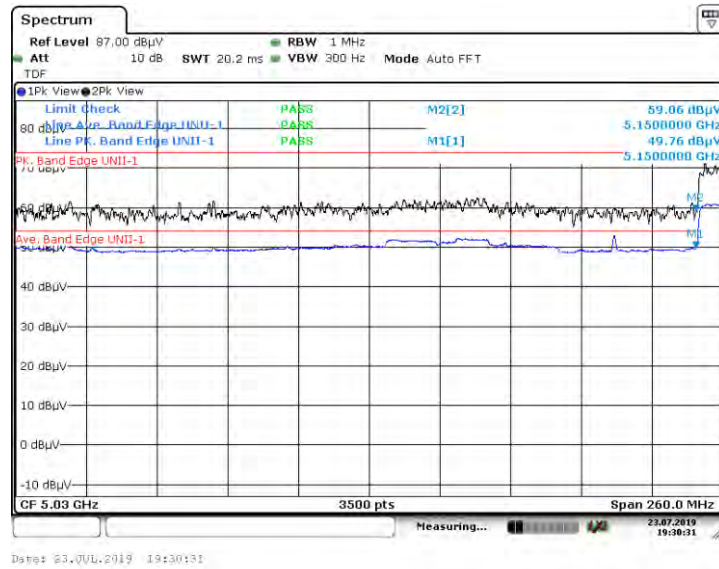
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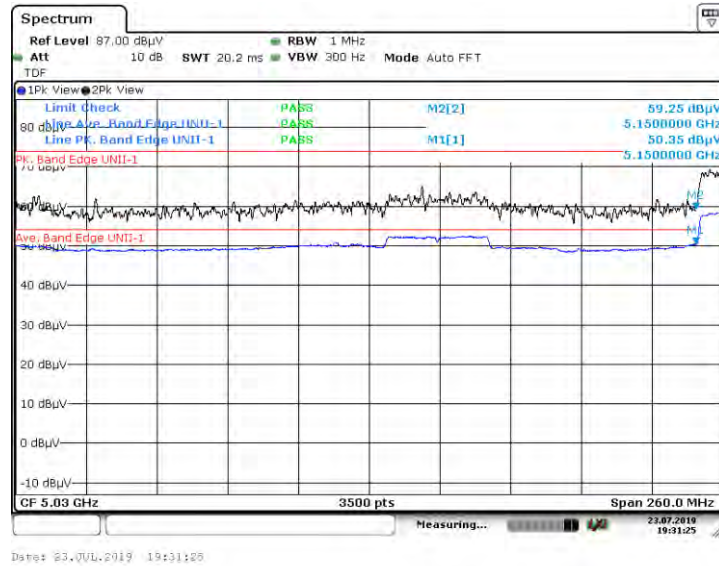
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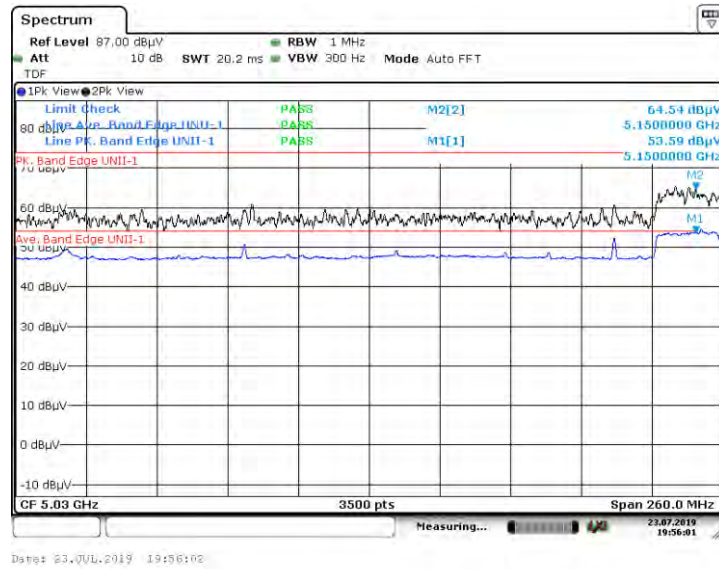
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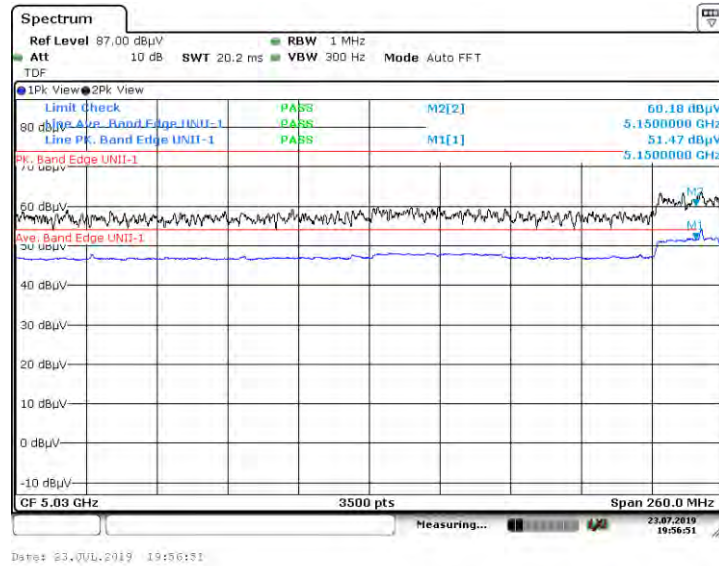
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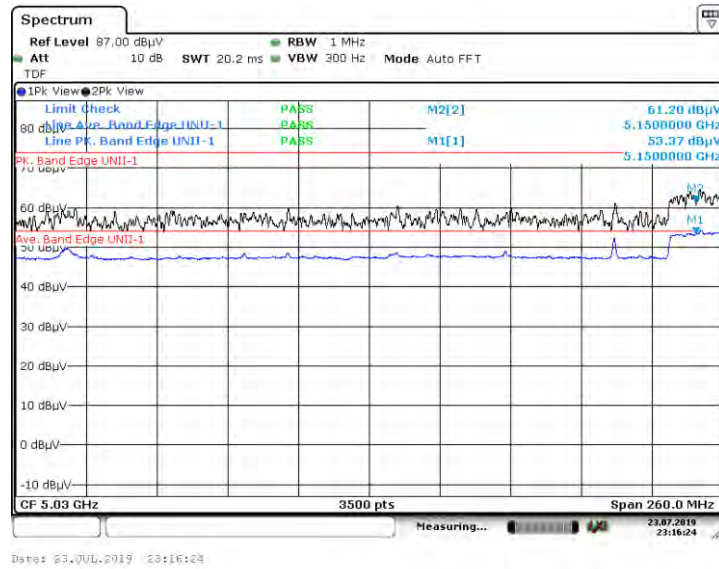
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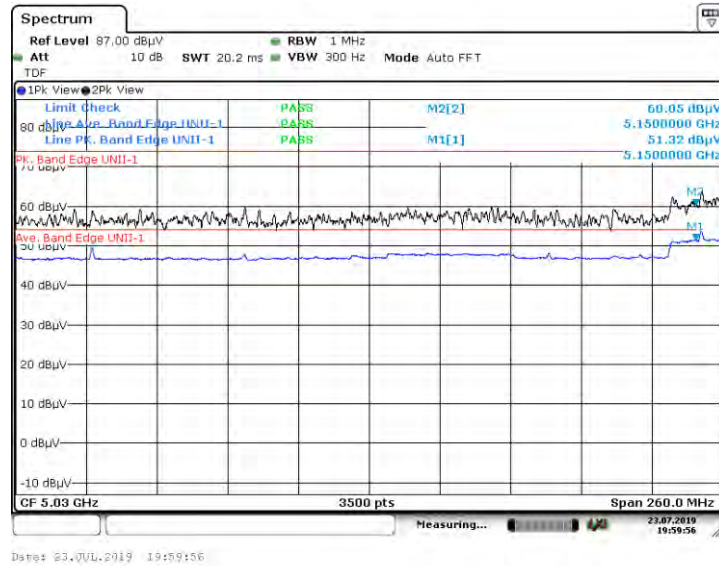
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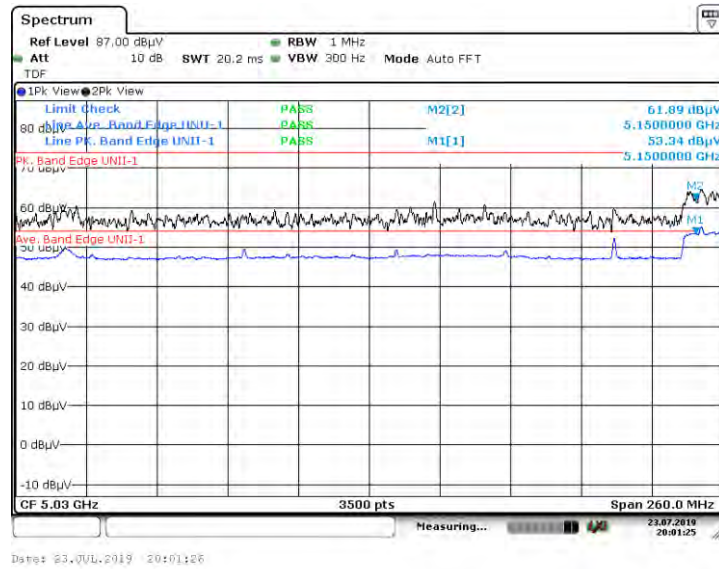
5220 MHz_50 MHz_J2



5220 MHz_50 MHz_J3



5225 MHz_50 MHz_J2



5225 MHz_50 MHz_J3

