



427 West 12800 South  
Draper, UT 84020

## Test Report Attachment

<b>FCC ID</b>	SWX-WAVEPC
<b>Equipment Under Test</b>	Wave-Pico
<b>Test Report Serial Number</b>	TR8617_02
<b>Date of Test</b>	25 January 2024
<b>Report Issue Date</b>	25 January 2024

### Test Personnel

<b>Testing performed by</b>	Evan Hartzell
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### Test Location

Testing was performed at the Unified Compliance Laboratory located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2023. This site has also been registered with Innovations, Science and Economic Development (ISED) department as was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2024. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED and MRA US5037.



**NVLAP LAB CODE 600241-0**

## Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
Emission Bandwidth 26 dB	5165.000	24.0	20.000000	PASS
RF output power	5165.000	24.0	20.000000	PASS
Power Spectral Density	5165.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5165.000	24.0	20.000000	PASS
Emission Bandwidth 26 dB	5200.000	24.0	20.000000	PASS
Power Spectral Density	5200.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	24.0	20.000000	PASS
Emission Bandwidth 26 dB	5240.000	24.0	20.000000	PASS
Power Spectral Density	5240.000	24.0	20.000000	PASS
Occupied Channel Bandwidth 99%	5240.000	24.0	20.000000	PASS
Emission Bandwidth 26 dB	5175.000	24.0	40.000000	PASS
Power Spectral Density	5175.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5175.000	24.0	40.000000	PASS
Emission Bandwidth 26 dB	5200.000	24.0	40.000000	PASS
Power Spectral Density	5200.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	24.0	40.000000	PASS
Emission Bandwidth 26 dB	5230.000	24.0	40.000000	PASS
Power Spectral Density	5230.000	24.0	40.000000	PASS
Occupied Channel Bandwidth 99%	5230.000	24.0	40.000000	PASS
Emission Bandwidth 26 dB	5195.000	24.0	80.000000	PASS
Power Spectral Density	5195.000	24.0	80.000000	PASS
Occupied Channel Bandwidth 99%	5195.000	24.0	80.000000	PASS
Emission Bandwidth 26 dB	5200.000	24.0	80.000000	PASS
Power Spectral Density	5200.000	24.0	80.000000	PASS
Occupied Channel Bandwidth 99%	5200.000	24.0	80.000000	PASS
Emission Bandwidth 26 dB	5210.000	24.0	80.000000	PASS
Power Spectral Density	5210.000	24.0	80.000000	PASS
Occupied Channel Bandwidth 99%	5210.000	24.0	80.000000	PASS

## Emission Bandwidth 26 dB (5165 MHz; 24.000 dBm; 20 MHz)

Customized settings.

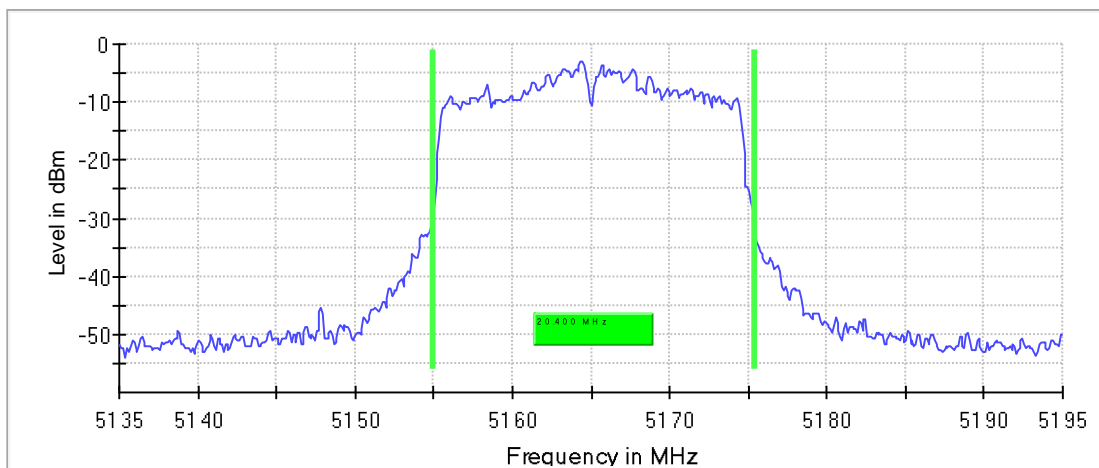
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5165.000000	20.400000	---	---	5154.950000	5175.350000

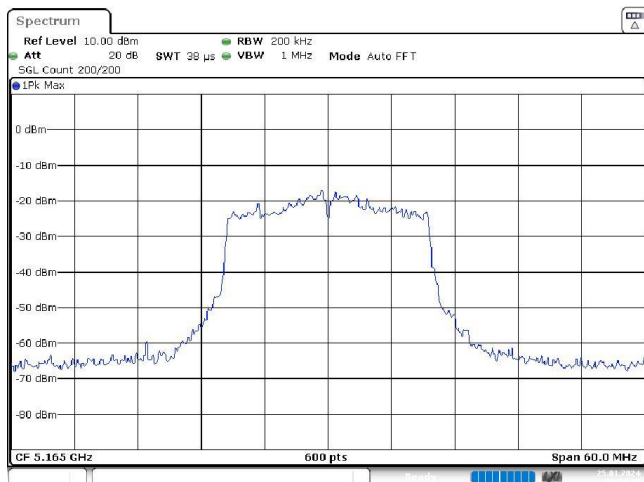
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5165.000000	-3.0	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 00:44:17

## Measurement

Setting	Instrument Value	Target Value
Start Frequency	5.13500 GHz	5.13500 GHz
Stop Frequency	5.19500 GHz	5.19500 GHz
Span	60.000 MHz	60.000 MHz
RBW	200.000 kHz	~ 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	600	~ 600
SweepTime	37.969 µs	AUTO
Reference Level	10.000 dBm	AUTO
Attenuation	20.000 dB	20.000 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; 24.000 dBm; 20 MHz)

Customized settings.

### Result

DUT Frequency (MHz)	Gated RMS (dBm)	Limit Max (dBm)	Gated EIRP (dBm)	DutyCycle (%)	Result
5165.000000	11.3	30.0	11.3	85.534	PASS

### OSP PowerMeter settings

Setting	Instrument Value	Target Value
Measurement Time	1.000 s	1.000 s
Points	1000000	1000000
Time resolution	1.000 $\mu$ s	1.000 $\mu$ s

## Power Spectral Density (5165 MHz; 24.000 dBm; 20 MHz)

Customized settings.

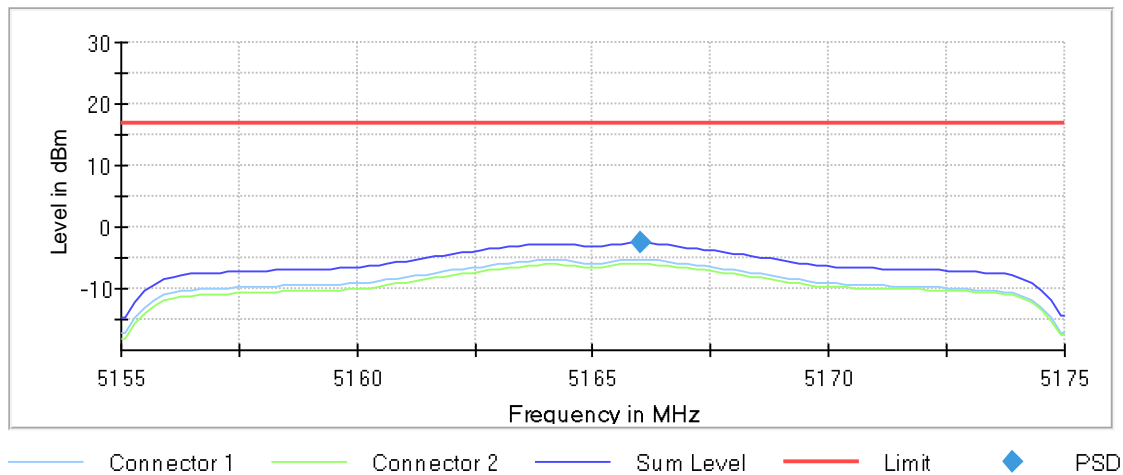
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5165.000000	5165.990099	-2.564	17.0	PASS

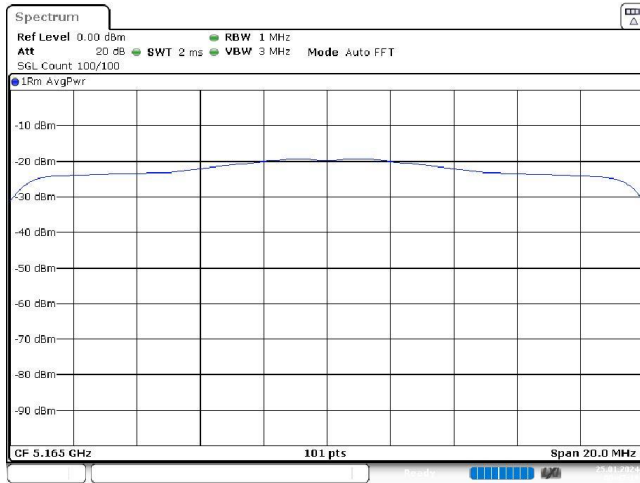
### Ports

Port	State
1	used
2	used

Power Spectral Density

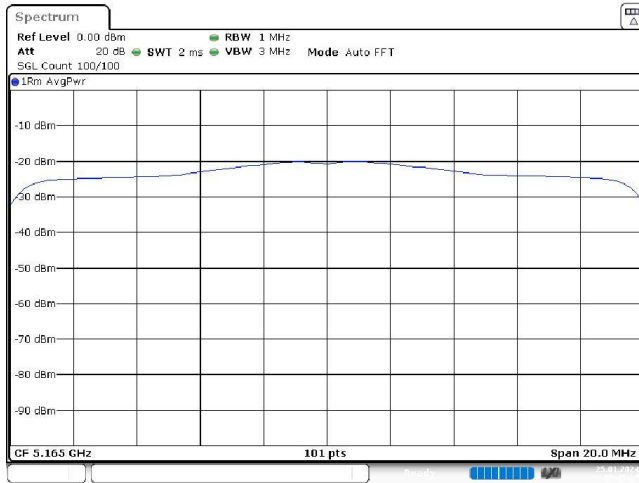


PSD Connector 1



Date: 25.JAN.2024 00:47:19

PSD Connector 2



Date: 25.JAN.2024 00:47:24

## 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	Average Power	Average Power
SweepType	FFT	AUTO
Preamp	off	off



## Occupied Channel Bandwidth 99% (5165 MHz; 24.000 dBm; 20 MHz)

Customized settings.

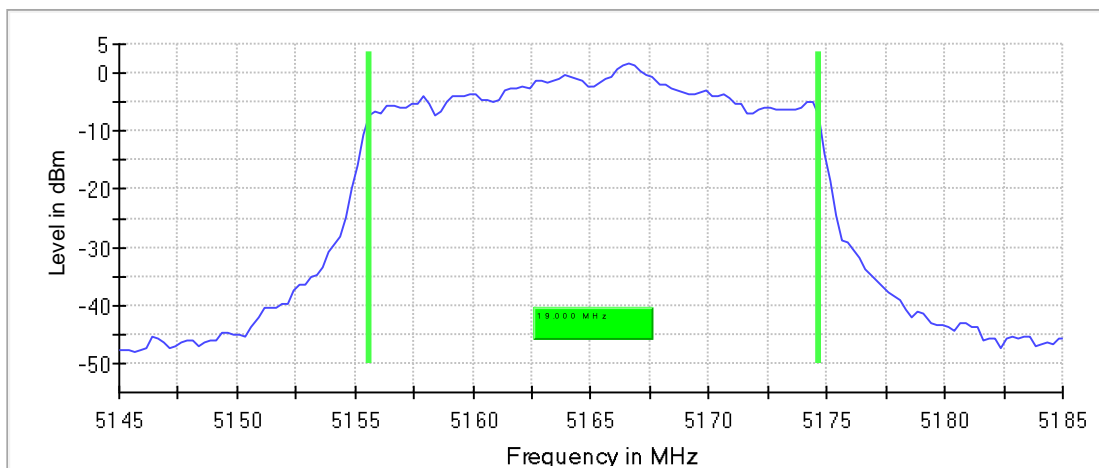
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5165.000000	19.000000	---	---	5155.625000	5174.625000

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

DUT Frequency (MHz)	Result
5165.000000	PASS

99 % Bandwidth



Bandwidth



Date: 25.JAN.2024 00:47:33

## 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	500.000 kHz	$\geq$ 400.000 kHz
VBW	2.000 MHz	$\geq$ 1.500 MHz
SweepPoints	160	~ 160
Sweeptime	11.344 $\mu$ s	AUTO
Reference Level	10.000 dBm	AUTO
Attenuation	20.000 dB	20.000 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; 24.000 dBm; 20 MHz)

Customized settings.

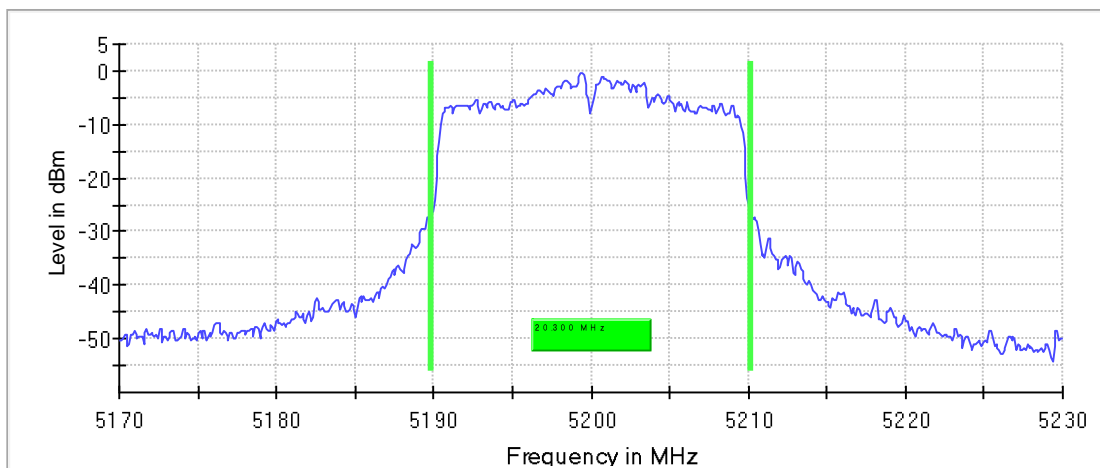
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	20.300000	---	---	5189.850000	5210.150000

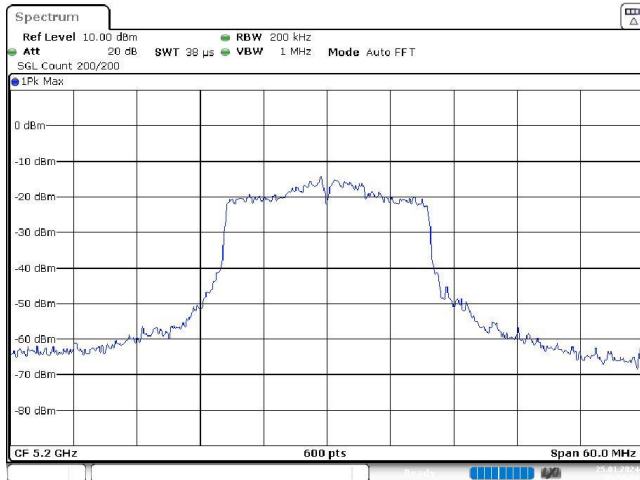
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-0.3	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 00:59:04

## Power Spectral Density (5200 MHz; 24.000 dBm; 20 MHz)

Customized settings.

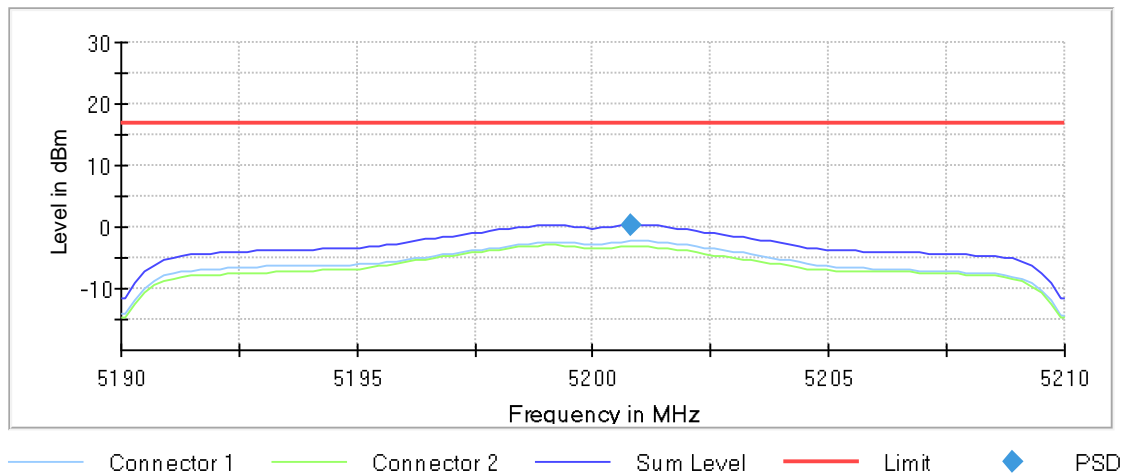
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5200.792079	0.385	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5200 MHz; 24.000 dBm; 20 MHz)

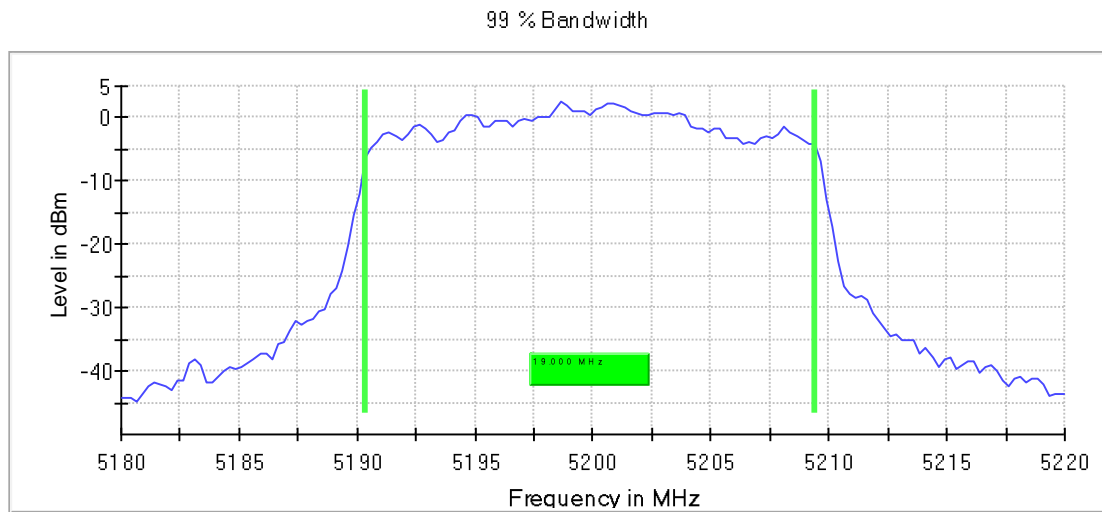
Customized settings.

### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	19.000000	---	---	5190.375000	5209.375000

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

DUT Frequency (MHz)	Result
5200.000000	PASS



Bandwidth



Date: 25.JAN.2024 00:59:58

## Emission Bandwidth 26 dB (5240 MHz; 24.000 dBm; 20 MHz)

Customized settings.

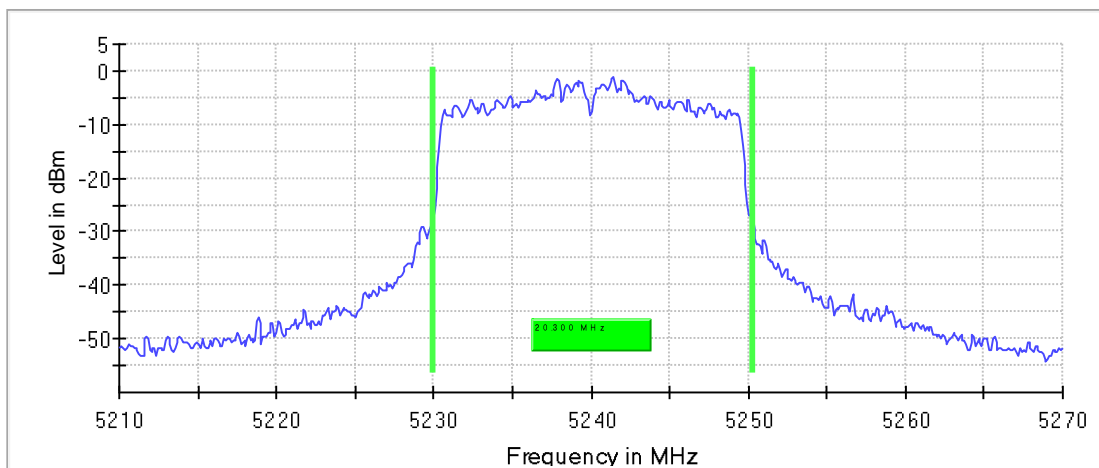
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	20.300000	---	---	5229.950000	5250.250000

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

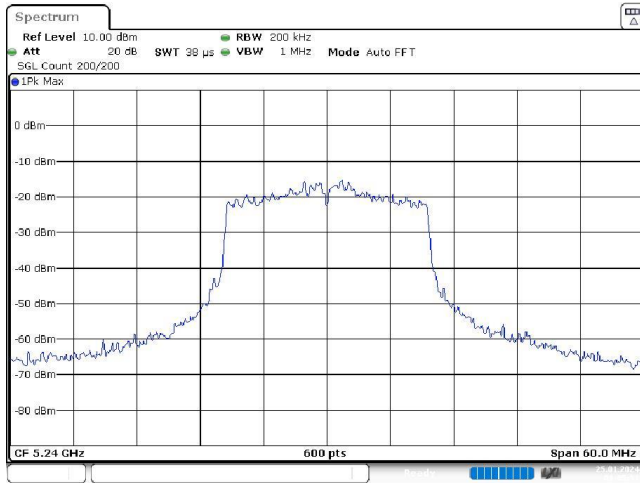
DUT Frequency (MHz)	Max Level (dBm)	Result
5240.000000	-1.2	PASS

26 dB Bandwidth



Bandwidth





Date: 25.JAN.2024 01:05:33

## Power Spectral Density (5240 MHz; 24.000 dBm; 20 MHz)

Customized settings.

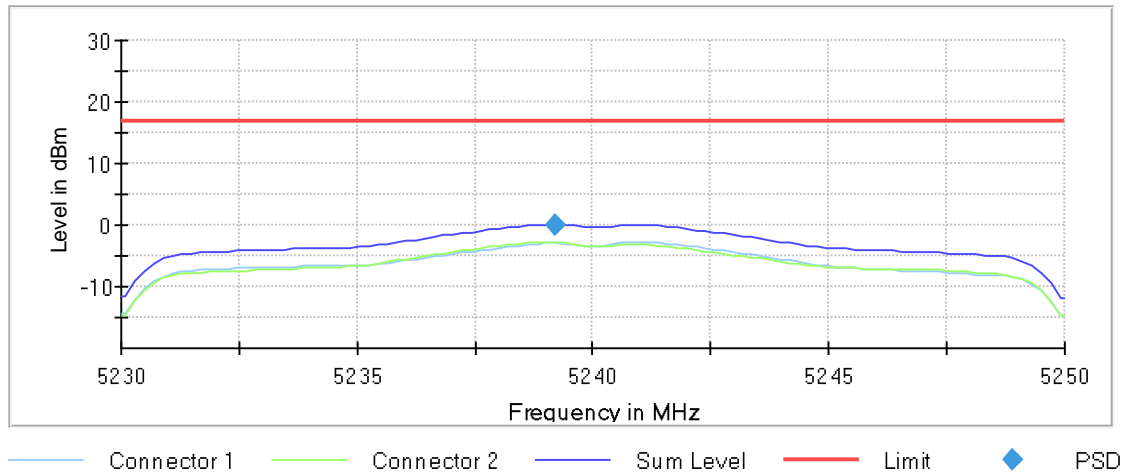
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5239.207921	0.154	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5240 MHz; 24.000 dBm; 20 MHz)

Customized settings.

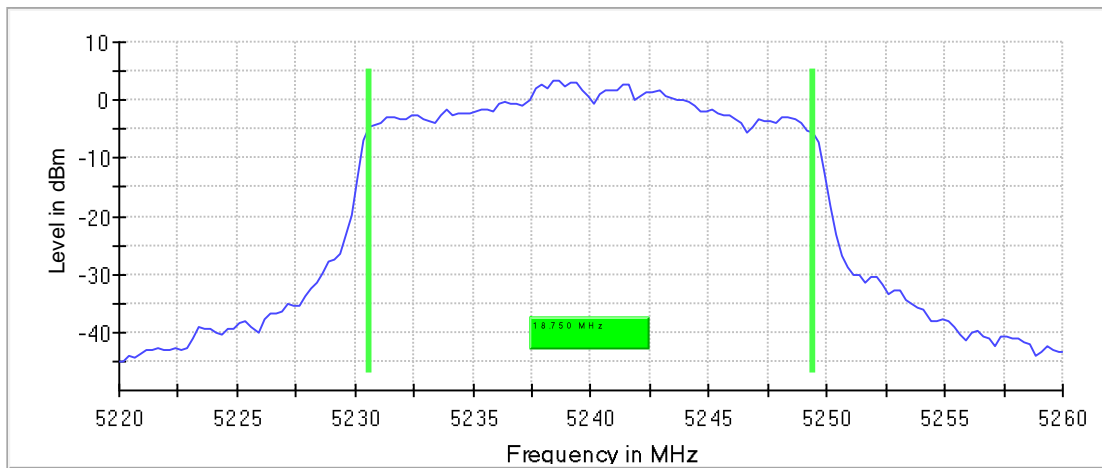
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5240.000000	18.750000	---	---	5230.625000	5249.375000

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

DUT Frequency (MHz)	Result
5240.000000	PASS

99 % Bandwidth



Bandwidth



Date: 25.JAN.2024 01:06:30

## Emission Bandwidth 26 dB (5175 MHz; 24.000 dBm; 40 MHz)

Customized settings.

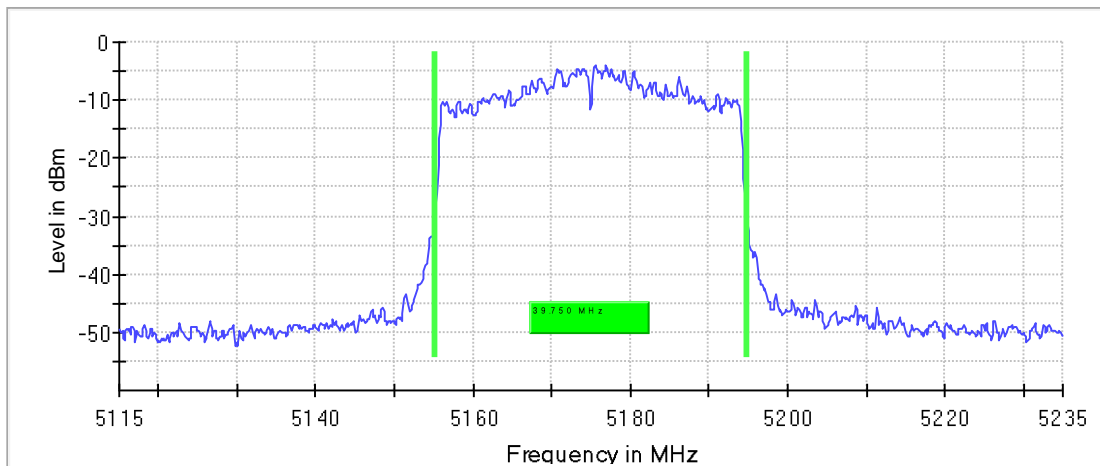
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5175.000000	39.750000	---	---	5155.125000	5194.875000

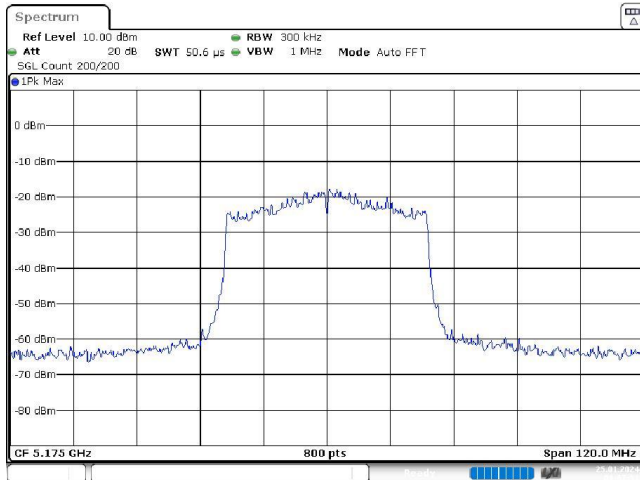
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5175.000000	-3.8	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 01:07:31

## Power Spectral Density (5175 MHz; 24.000 dBm; 40 MHz)

Customized settings.

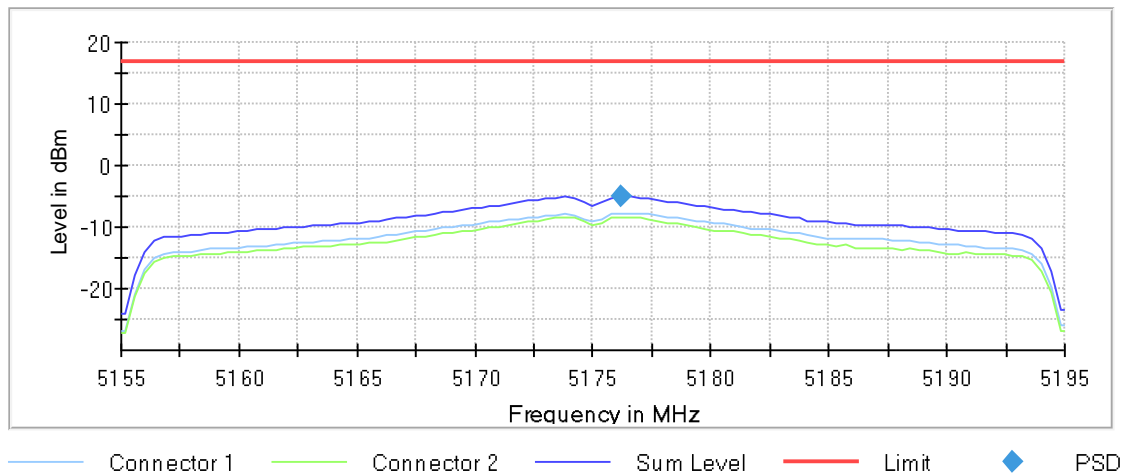
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5175.000000	5176.188119	-5.004	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5175 MHz; 24.000 dBm; 40 MHz)

Customized settings.

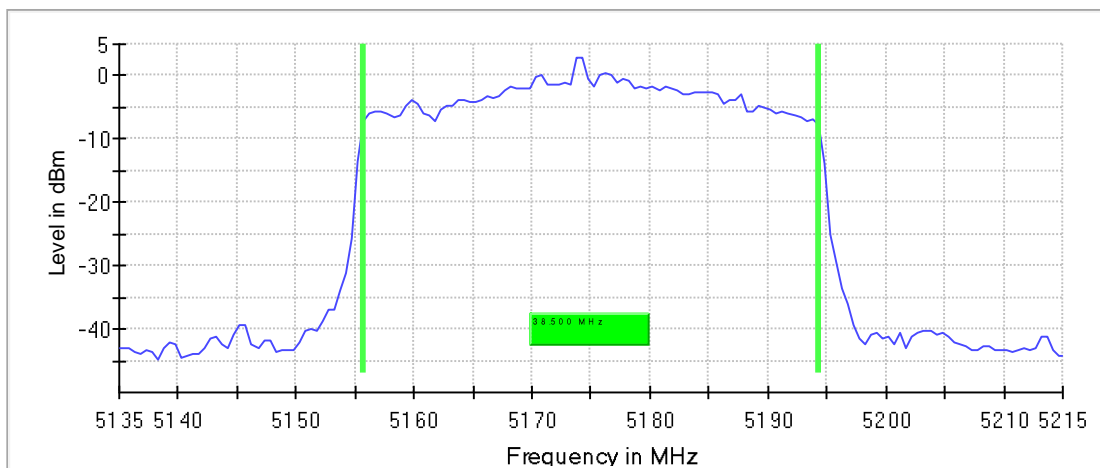
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5175.000000	38.500000	---	---	5155.750000	5194.250000

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

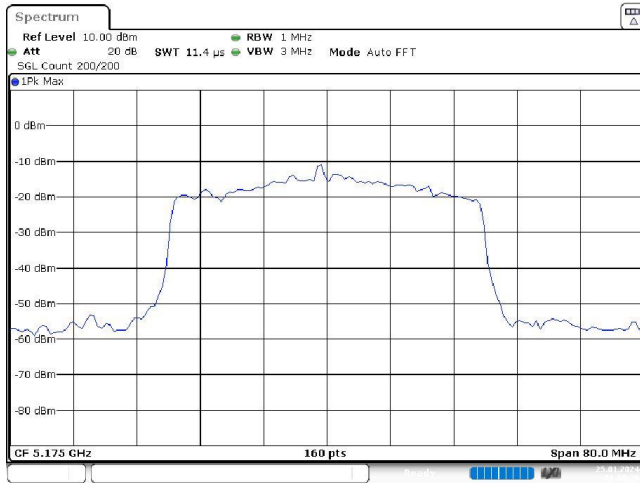
DUT Frequency (MHz)	Result
5175.000000	PASS

99 % Bandwidth



Bandwidth





Date: 25.JAN.2024 01:08:26

## Emission Bandwidth 26 dB (5200 MHz; 24.000 dBm; 40 MHz)

Customized settings.

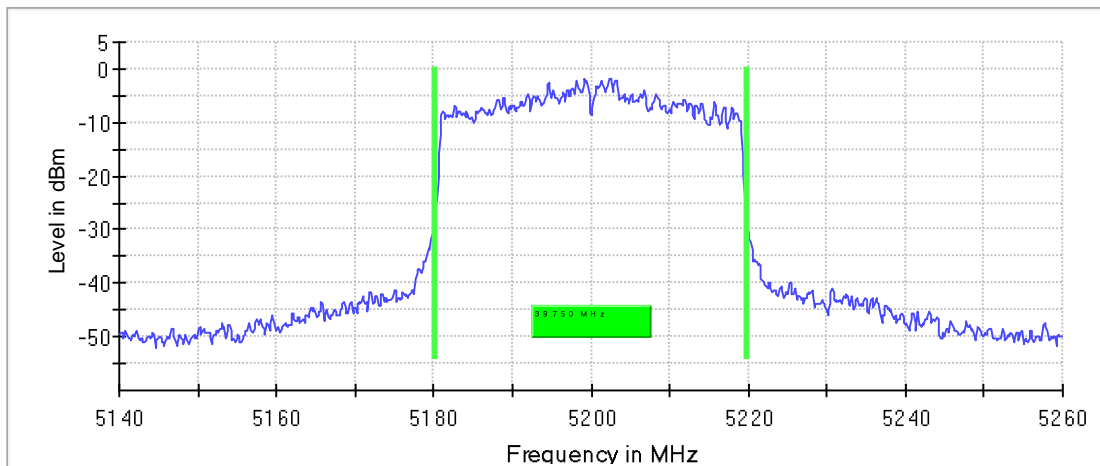
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	39.750000	---	---	5180.125000	5219.875000

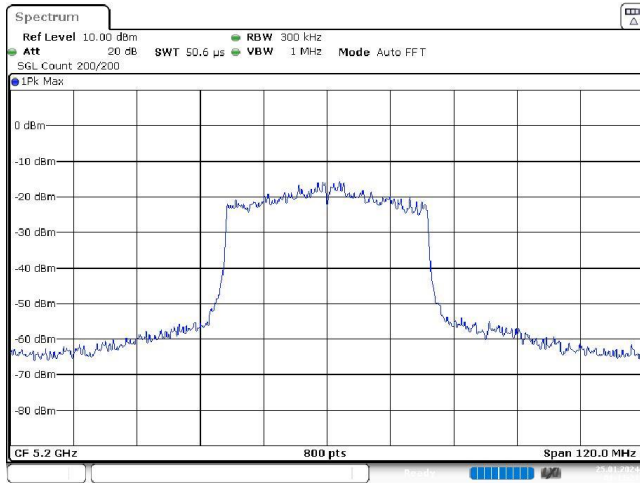
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	-1.7	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 01:11:23

## Power Spectral Density (5200 MHz; 24.000 dBm; 40 MHz)

Customized settings.

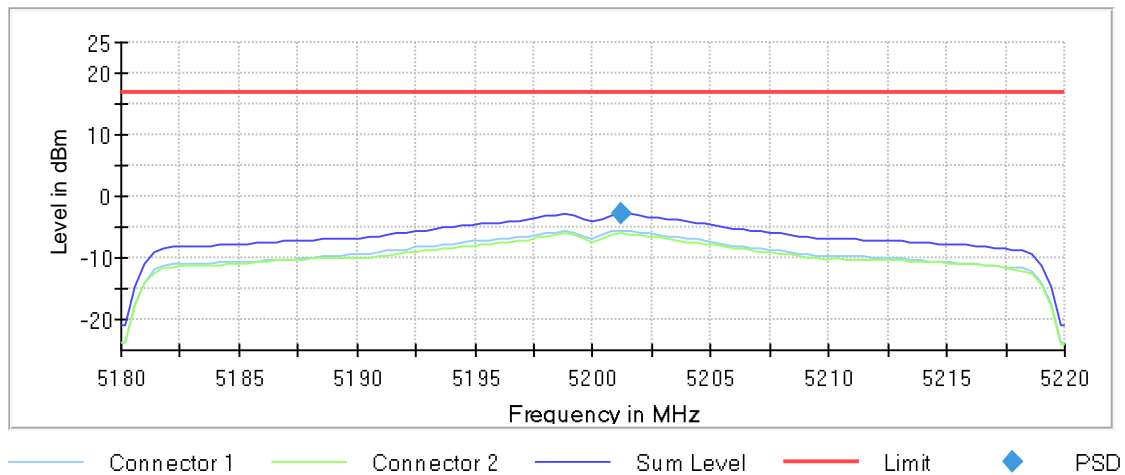
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5201.188119	-2.741	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5200 MHz; 24.000 dBm; 40 MHz)

Customized settings.

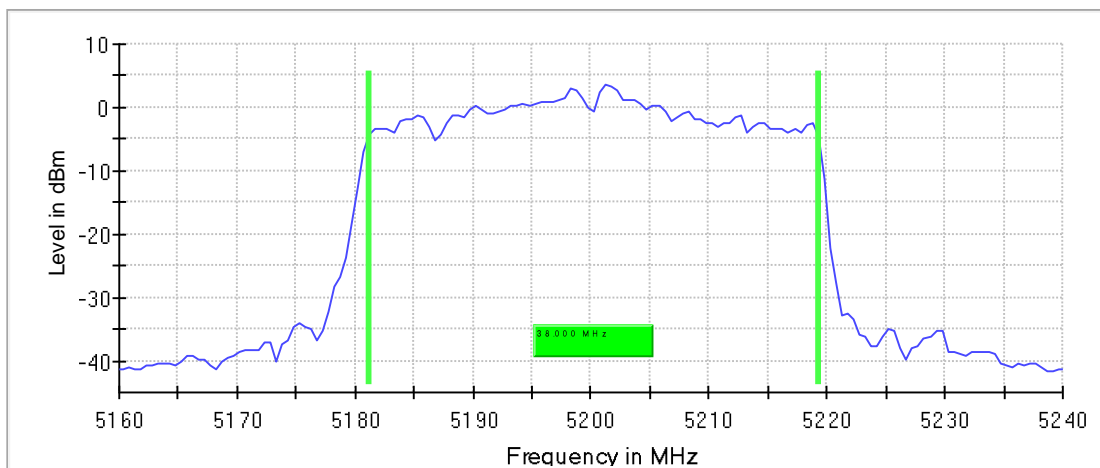
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	38.000000	---	---	5181.250000	5219.250000

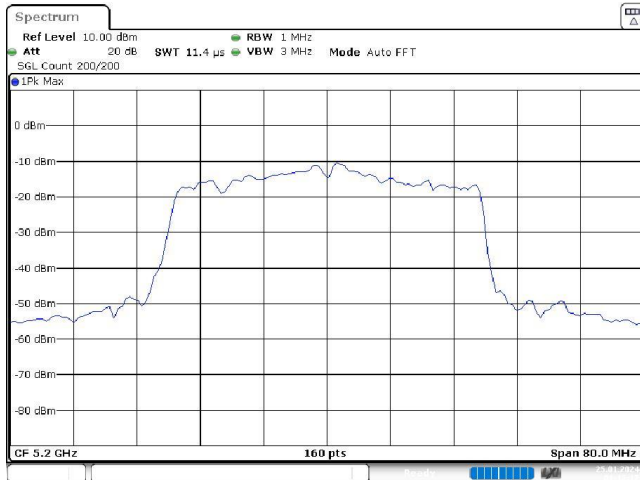
(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5200.000000	PASS

99 % Bandwidth



Bandwidth



Date: 25.JAN.2024 01:12:16

## Emission Bandwidth 26 dB (5230 MHz; 24.000 dBm; 40 MHz)

Customized settings.

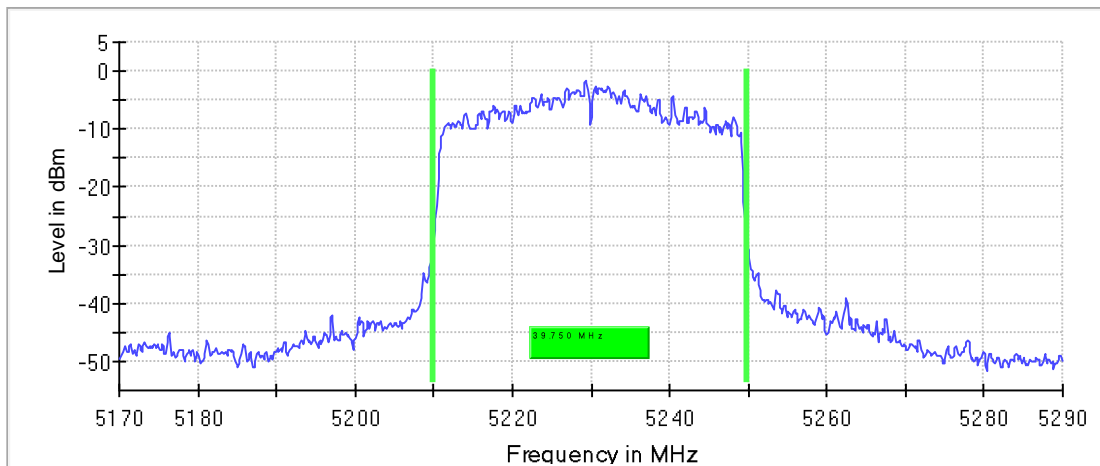
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	39.750000	---	---	5209.975000	5249.725000

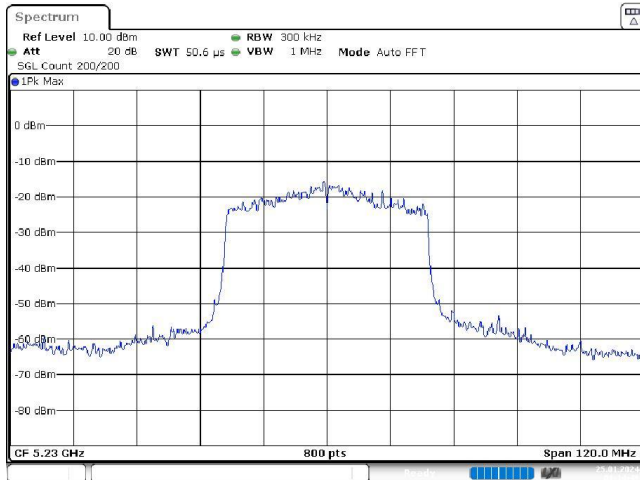
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5230.000000	-1.7	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 01:14:49



## Power Spectral Density (5230 MHz; 24.000 dBm; 40 MHz)

Customized settings.

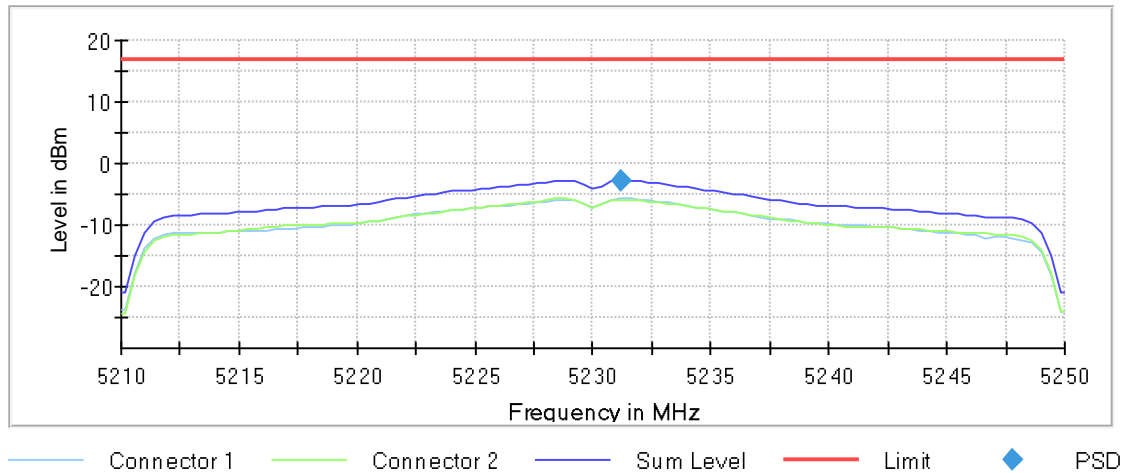
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5231.188119	-2.712	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5230 MHz; 24.000 dBm; 40 MHz)

Customized settings.

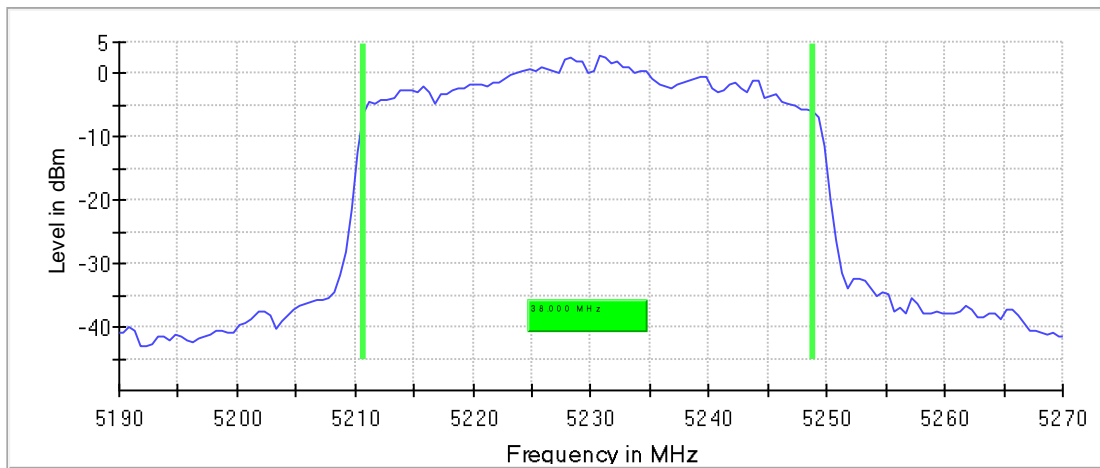
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5230.000000	38.000000	---	---	5210.750000	5248.750000

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

DUT Frequency (MHz)	Result
5230.000000	PASS

99 % Bandwidth



Bandwidth



Date: 25.JAN.2024 01:15:42

## Emission Bandwidth 26 dB (5195 MHz; 24.000 dBm; 80 MHz)

Customized settings.

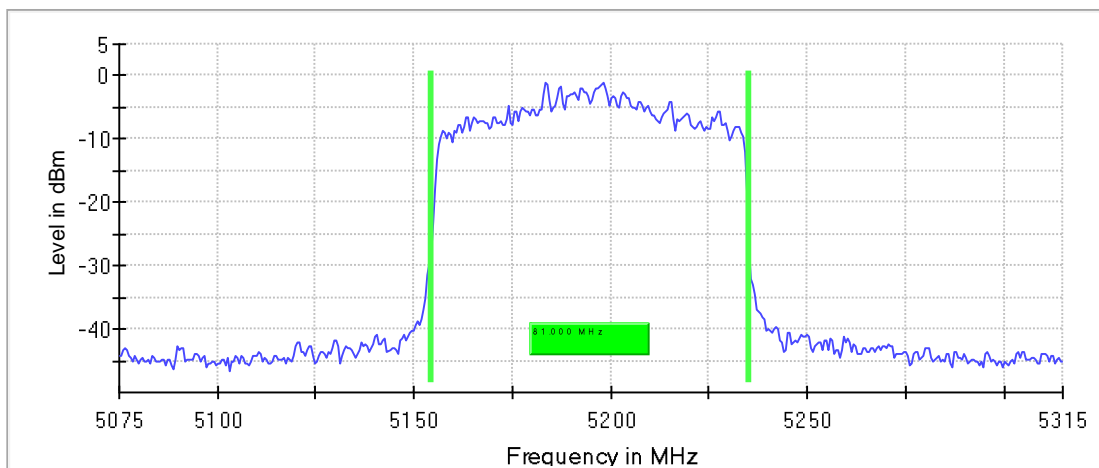
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5195.000000	81.000000	---	---	5154.250000	5235.250000

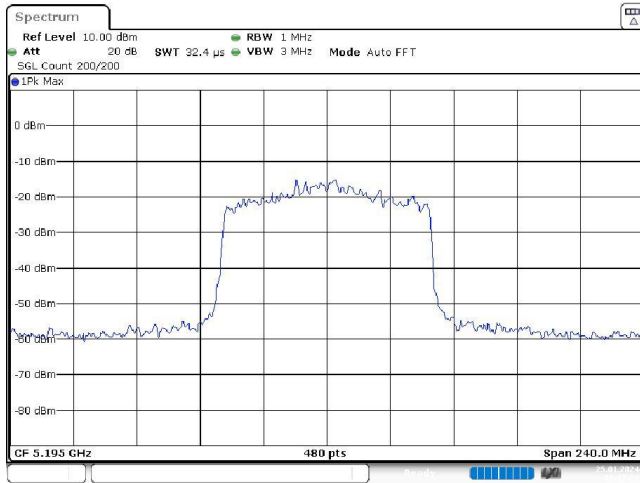
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5195.000000	-1.1	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 01:17:22

## Power Spectral Density (5195 MHz; 24.000 dBm; 80 MHz)

Customized settings.

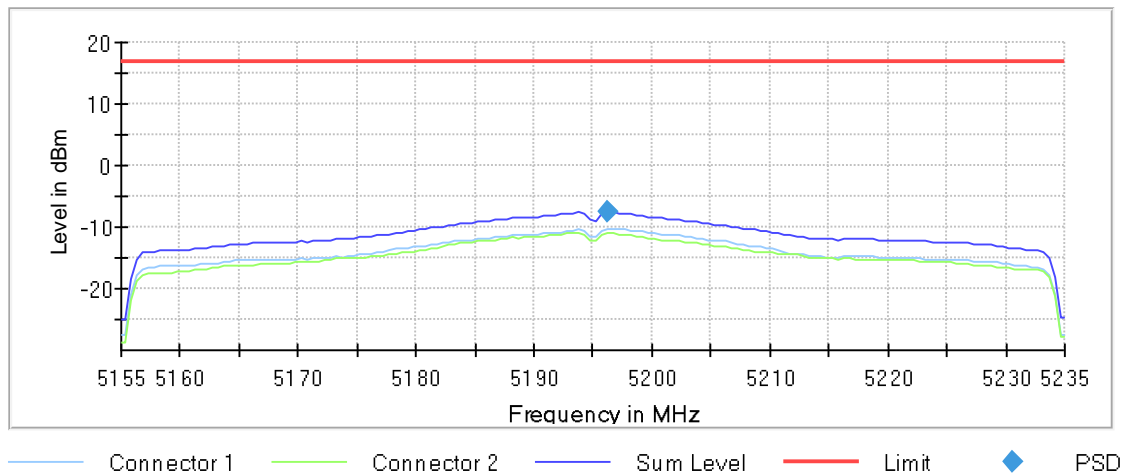
### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5195.000000	5196.250000	-7.548	17.0	PASS

### Ports

Port	State
1	used
2	used

Power Spectral Density



## Occupied Channel Bandwidth 99% (5195 MHz; 24.000 dBm; 80 MHz)

Customized settings.

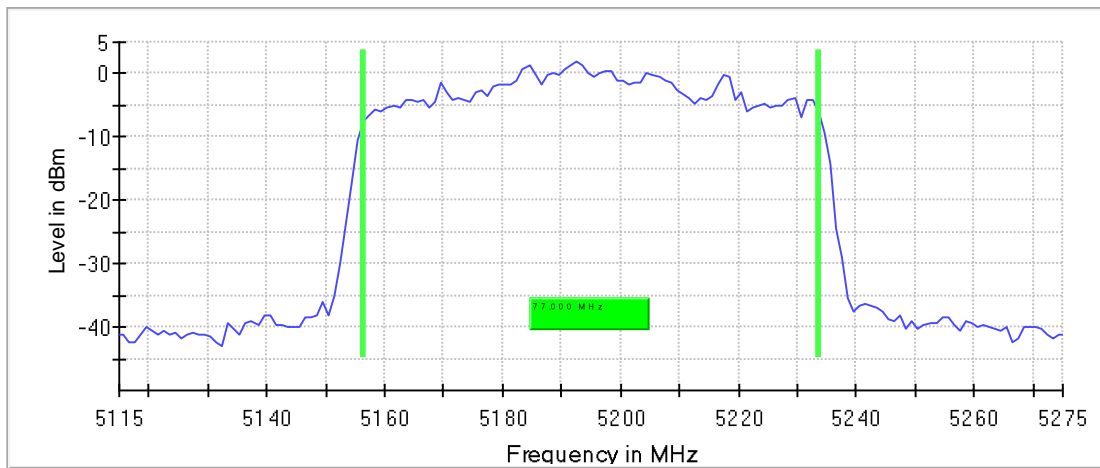
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5195.000000	77.000000	---	---	5156.500000	5233.500000

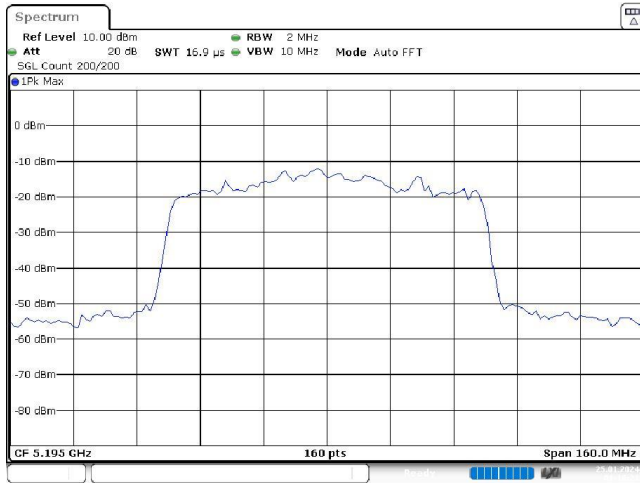
(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
5195.000000	PASS

99 % Bandwidth



Bandwidth



Date: 25.JAN.2024 01:18:21



## Emission Bandwidth 26 dB (5200 MHz; 24.000 dBm; 80 MHz)

Customized settings.

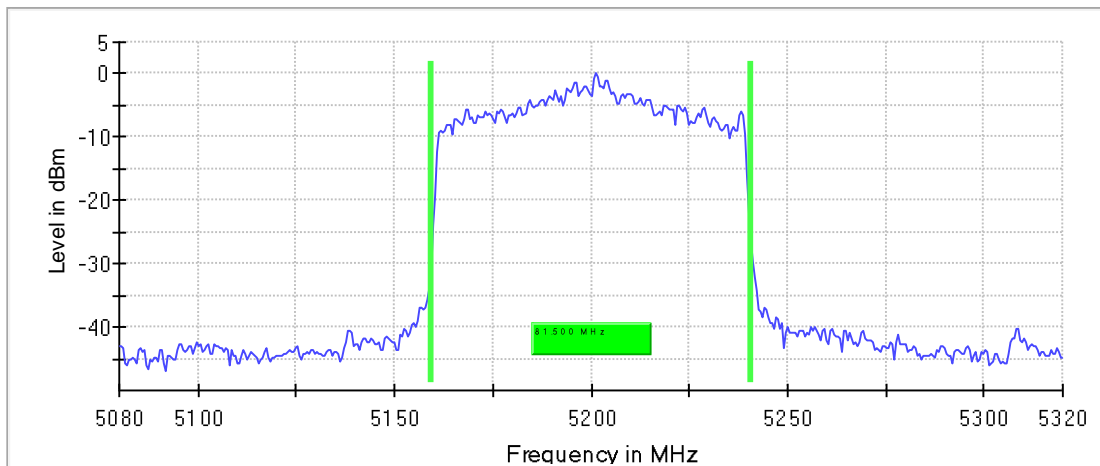
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	81.500000	---	---	5159.250000	5240.750000

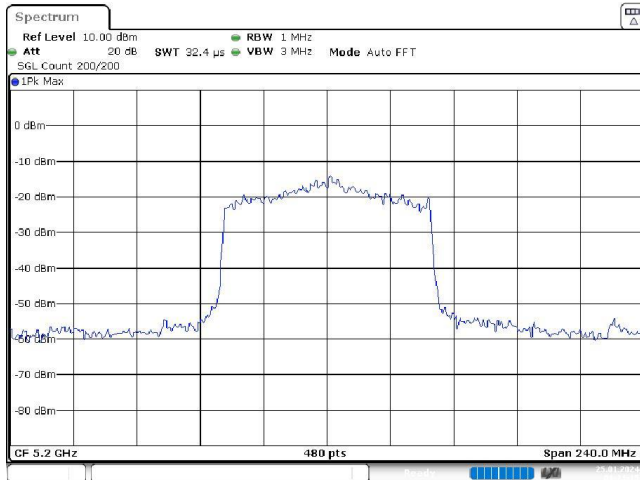
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5200.000000	0.0	PASS

26 dB Bandwidth



Bandwidth



Date: 25.JAN.2024 01:21:15

## Power Spectral Density (5200 MHz; 24.000 dBm; 80 MHz)

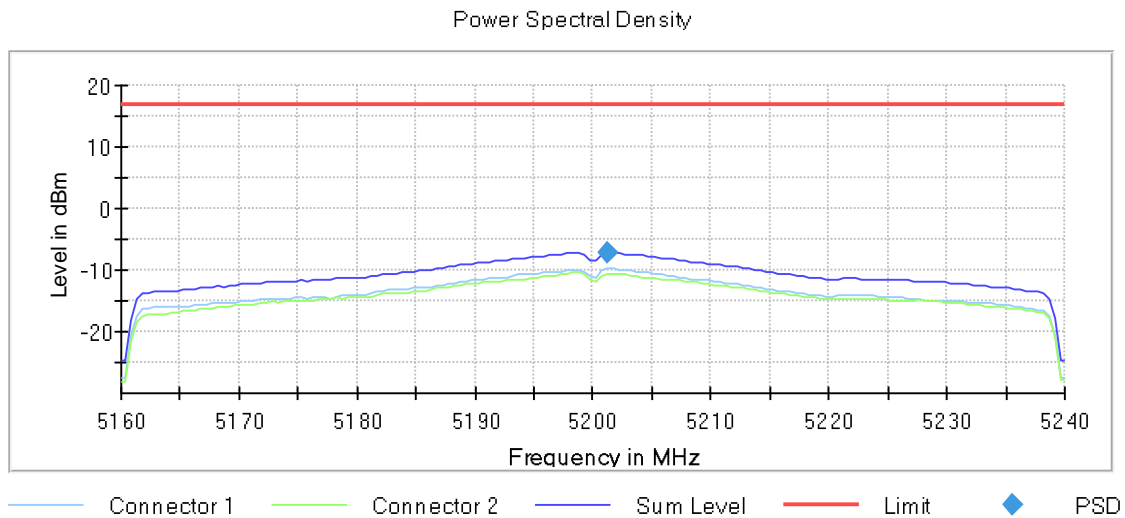
Customized settings.

### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5201.250000	-7.082	17.0	PASS

### Ports

Port	State
1	used
2	used



## Occupied Channel Bandwidth 99% (5200 MHz; 24.000 dBm; 80 MHz)

Customized settings.

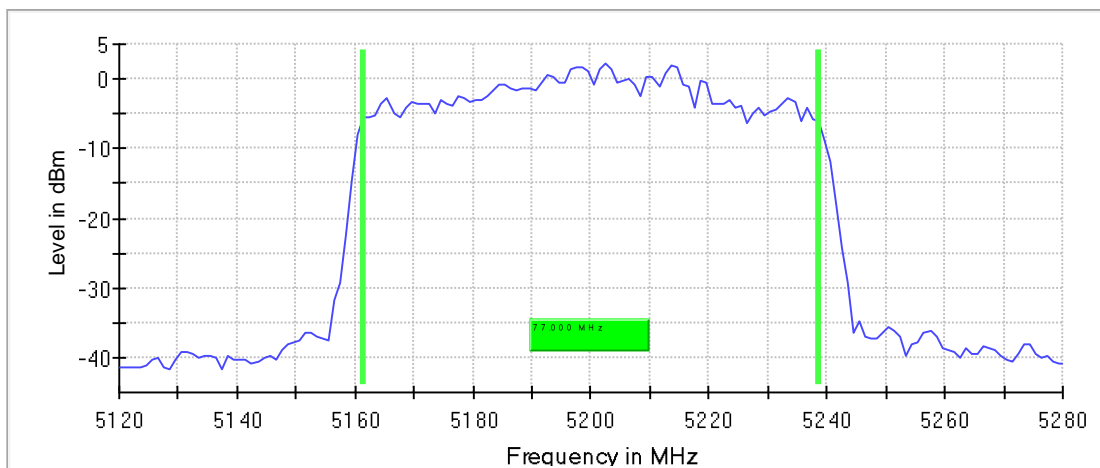
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5200.000000	77.000000	---	---	5161.500000	5238.500000

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

DUT Frequency (MHz)	Result
5200.000000	PASS

99 % Bandwidth



Bandwidth



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## Emission Bandwidth 26 dB (5210 MHz; 24.000 dBm; 80 MHz)

Customized settings.

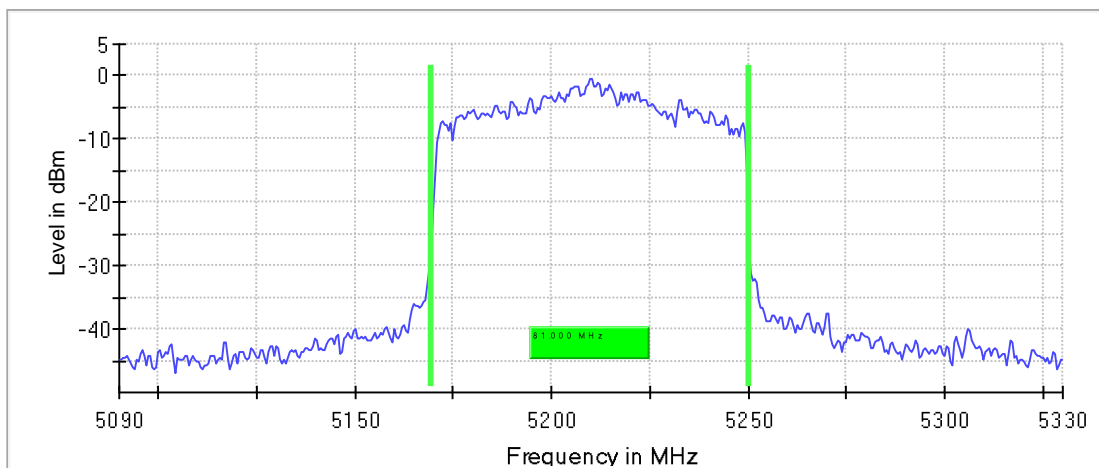
### 26 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5210.000000	81.000000	---	---	5169.250000	5250.250000

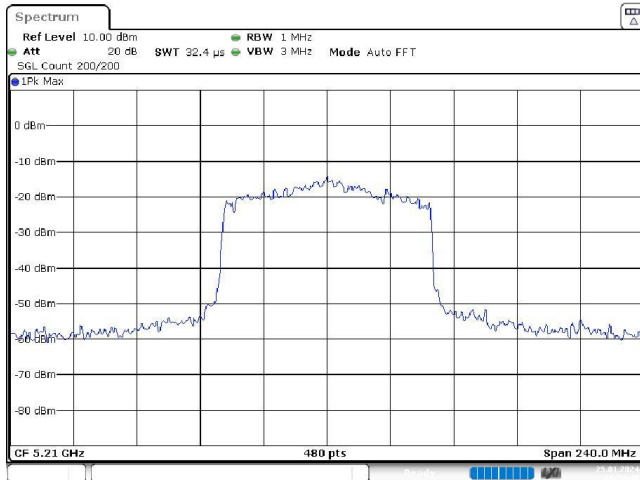
(continuation of the "26 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
5210.000000	-0.4	PASS

26 dB Bandwidth



Bandwidth



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## Power Spectral Density (5210 MHz; 24.000 dBm; 80 MHz)

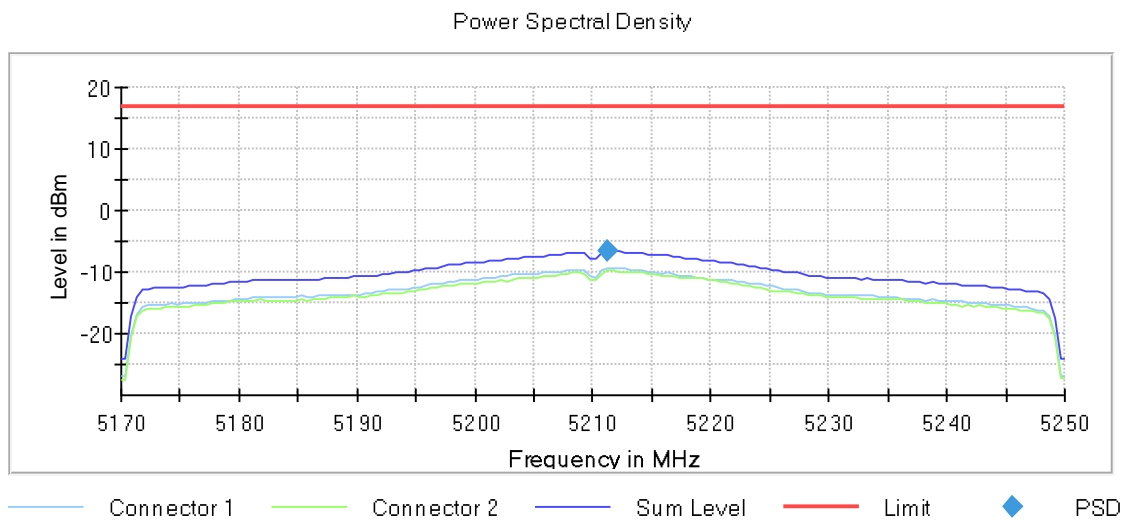
Customized settings.

### Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5210.000000	5211.250000	-6.504	17.0	PASS

### Ports

Port	State
1	used
2	used





## Occupied Channel Bandwidth 99% (5210 MHz; 24.000 dBm; 80 MHz)

Customized settings.

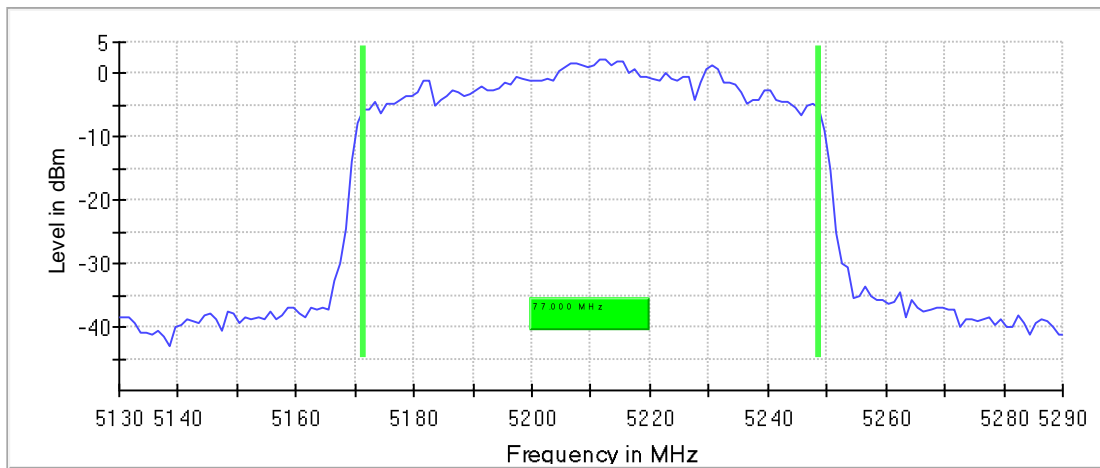
### 99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
5210.000000	77.000000	---	---	5171.500000	5248.500000

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

DUT Frequency (MHz)	Result
5210.000000	PASS

99 % Bandwidth



Bandwidth



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**-- End of Report --**