**427 West 12800 South**
**Draper, UT 84020**

# Test Report Attachment

| | |
|---|---|
| **FCC ID** | SWX-UKPRO |
| **ISED ID** | 6545A-UKPRO |
| **Equipment Under Test** | U7-Outdoor |
| **Test Report Serial Number** | TR8836_01 |
| **Date of Test(s)** | 2 January and 17 – 18 April 2024 |
| **Report Issue Date** | 19 April 2024 |

## Test Personnel

| | |
|---|---|
| **Testing performed by** | Evan Hartzell |

## 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 2024. 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**

# 1 UNII-3 Band

## 1.1 Internal Antenna

### 1.1.1 Summary

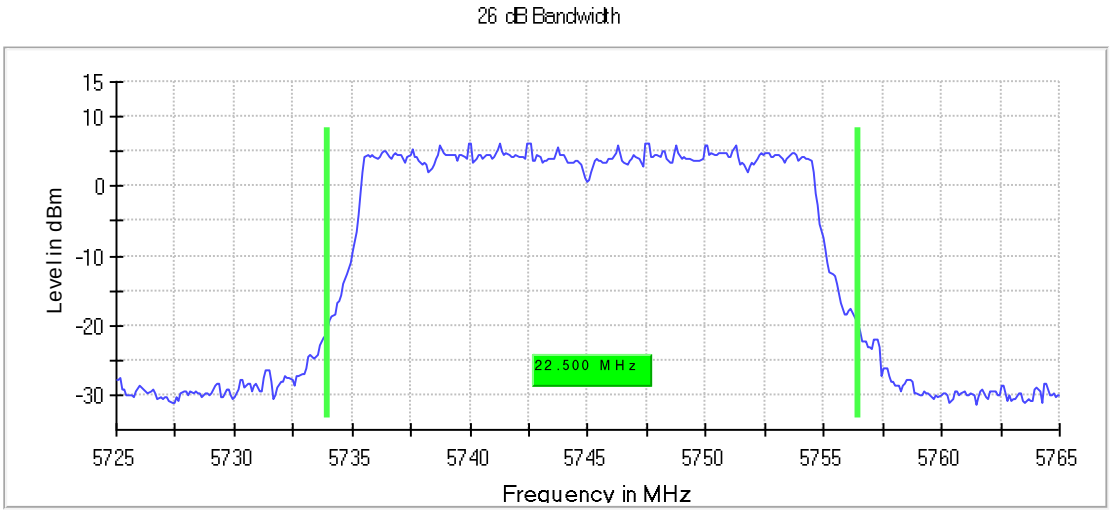
| Test | Frequency (MHz) | Nominal Power (dBm) | Nominal Bandwidth (MHz) | Result |
|---|---|---|---|---|
| Emission Bandwidth 26 dB | 5745.000 | 24.0 | 20.000000 | PASS |
| RF output power | 5745.000 | 24.0 | 20.000000 | PASS |
| Power Spectral Density | 5745.000 | 24.0 | 20.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5745.000 | 24.0 | 20.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5745.000 | 24.0 | 20.000000 | PASS |
| Tx Spurious Emission | 5745.000 | 24.0 | 20.000000 | PASS |
| Emission Bandwidth 26 dB | 5775.000 | 24.0 | 20.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5775.000 | 24.0 | 20.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5775.000 | 24.0 | 20.000000 | PASS |
| Tx Spurious Emission | 5775.000 | 24.0 | 20.000000 | PASS |
| Emission Bandwidth 26 dB | 5825.000 | 24.0 | 20.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5825.000 | 24.0 | 20.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5825.000 | 24.0 | 20.000000 | PASS |
| Tx Spurious Emission | 5825.000 | 24.0 | 20.000000 | PASS |
| Emission Bandwidth 26 dB | 5755.000 | 24.0 | 40.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5755.000 | 24.0 | 40.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5755.000 | 24.0 | 40.000000 | PASS |
| Tx Spurious Emission | 5755.000 | 24.0 | 40.000000 | PASS |
| Emission Bandwidth 26 dB | 5775.000 | 24.0 | 40.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5775.000 | 24.0 | 40.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5775.000 | 24.0 | 40.000000 | PASS |
| Tx Spurious Emission | 5775.000 | 24.0 | 40.000000 | PASS |
| Emission Bandwidth 26 dB | 5795.000 | 24.0 | 40.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5795.000 | 24.0 | 40.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5795.000 | 24.0 | 40.000000 | PASS |
| Tx Spurious Emission | 5795.000 | 24.0 | 40.000000 | PASS |
| Emission Bandwidth 26 dB | 5775.000 | 24.0 | 80.000000 | PASS |
| Minimum Emission Bandwidth 6 dB | 5775.000 | 24.0 | 80.000000 | PASS |
| Occupied Channel Bandwidth 99% | 5775.000 | 24.0 | 80.000000 | PASS |
| Tx Spurious Emission | 5775.000 | 24.0 | 80.000000 | PASS |

# Emission Bandwidth 26 dB (5745 MHz; 24.000 dBm; 20 MHz)

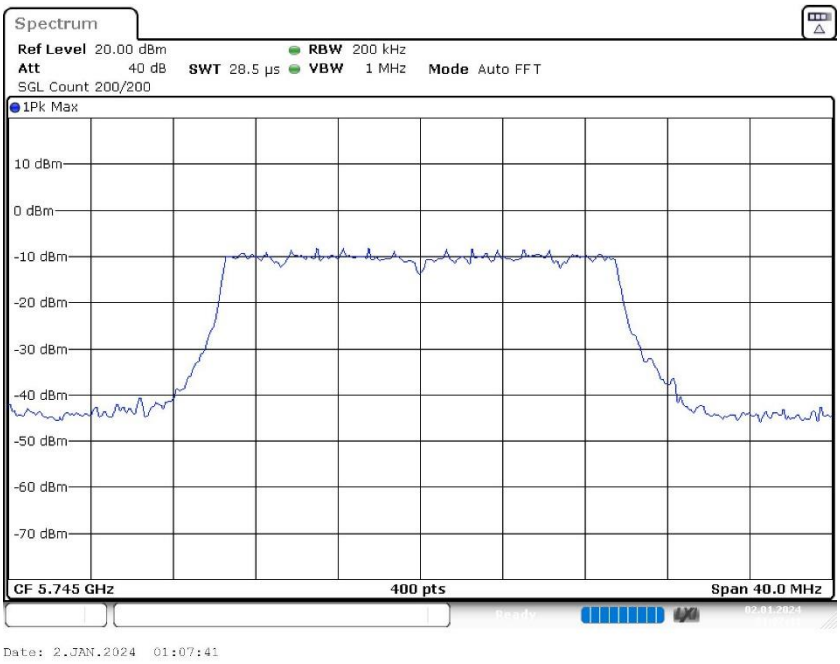
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5745.000000 | 22.500000 | --- | --- | 5733.950000 | 5756.450000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5745.000000 | 6.2 | PASS |




Bandwidth




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.72500 GHz | 5.72500 GHz |
| Stop Frequency | 5.76500 GHz | 5.76500 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 400 | ~ 400 |
| Sweeptime | 28.477 µs | 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 |

## RF output power (5745 MHz; 24.000 dBm; 20 MHz)

## Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---|---|---|---|---|---|
| 5745.000000 | 23.3 | 30.0 | 23.3 | 99.716 | PASS |

## OSP PowerMeter settings

| Setting | Instrument Value | Target Value |
|---|---|---|
| Measurement Time | 1.000 s | 1.000 s |
| Points | 1000000 | 1000000 |

| | | |
|---|---|---|
| Time resolution | 1.000 µs | 1.000 µs |

# Power Spectral Density (5745 MHz; 24.000 dBm; 20 MHz)

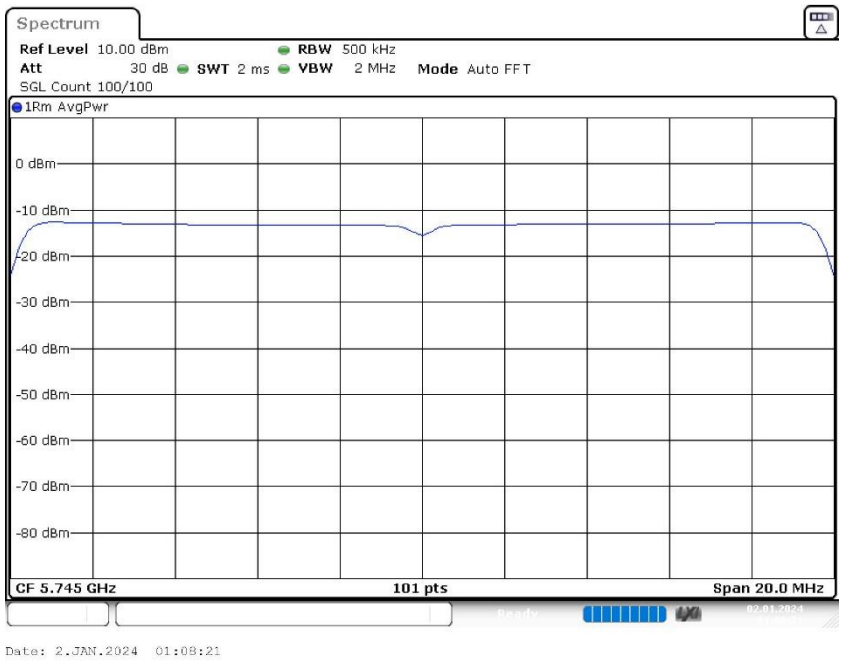
## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5745.000000 | 5753.712871 | 4.522 | 30.0 | PASS |

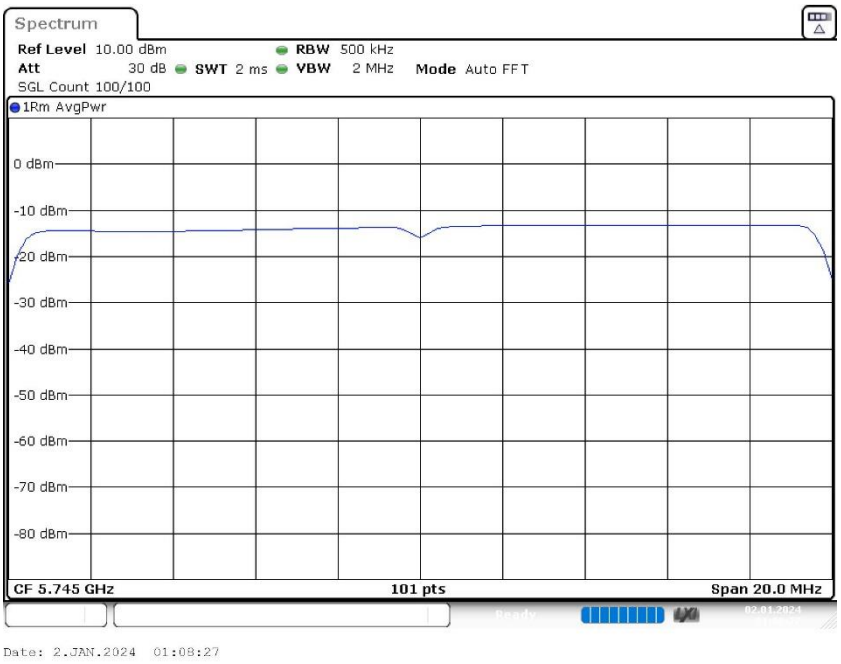
## Ports

| Port | State |
|---|---|
| 1 | used |
| 2 | used |

PSD Connector 1




PSD Connector 2




## Measurement

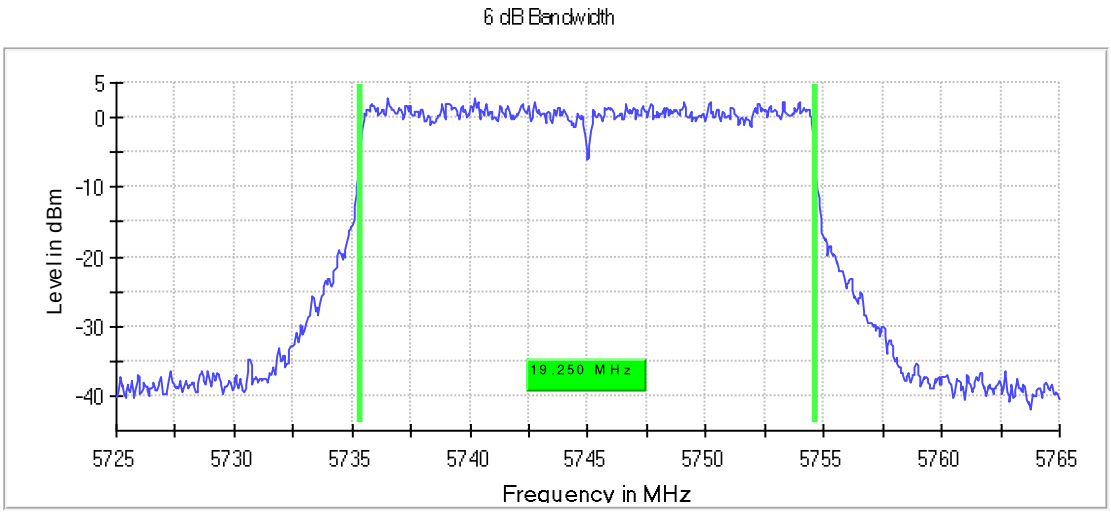
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.73500 GHz | 5.73500 GHz |
| Stop Frequency | 5.75500 GHz | 5.75500 GHz |
| Span | 20.000 MHz | 20.000 MHz |
| RBW | 500.000 kHz | <= 500.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 101 | ~ 80 |
| Sweeptime | 2.020 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 | Average Power | Average Power |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |

## Minimum Emission Bandwidth 6 dB (5745 MHz; 24.000 dBm; 20 MHz)

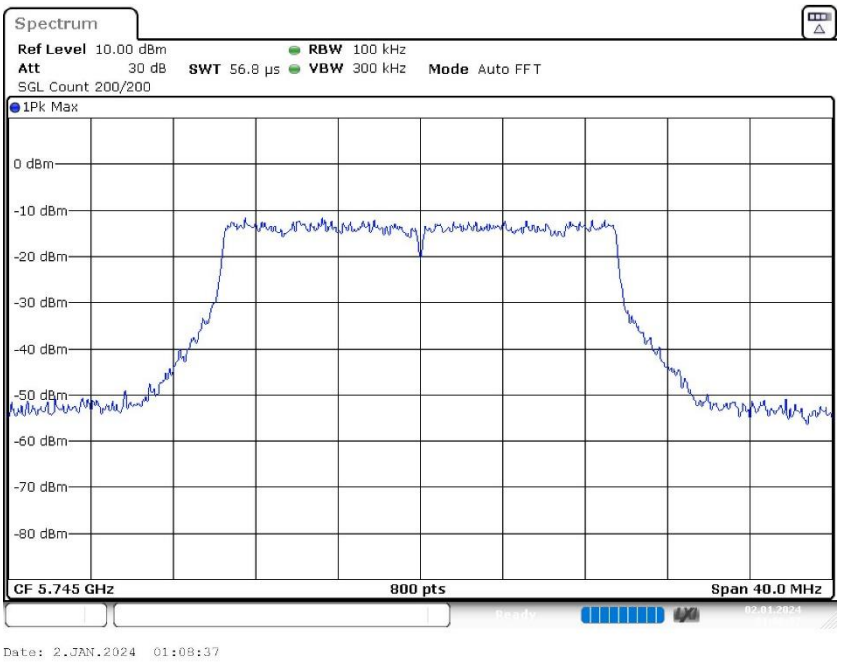
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5745.000000 | 19.250000 | 0.500000 | --- | 5735.375000 | 5754.625000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5745.000000 | 2.8 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.72500 GHz | 5.72500 GHz |
| Stop Frequency | 5.76500 GHz | 5.76500 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 100.000 kHz | ~ 100.000 kHz |
| VBW | 300.000 kHz | ~ 300.000 kHz |
| SweepPoints | 800 | ~ 800 |

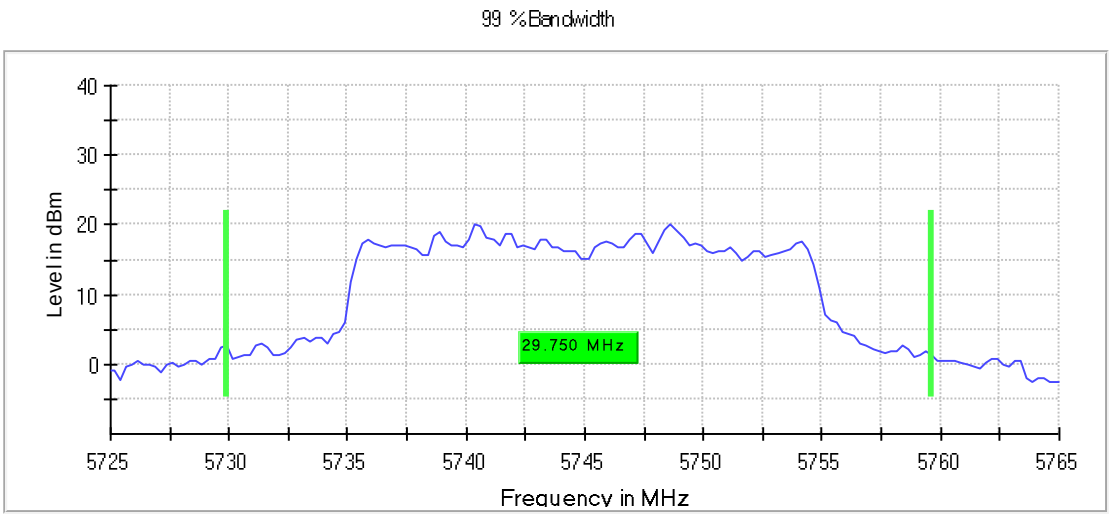
| | | |
|---|---|---|
| Sweeptime | 56.836 µs | AUTO |
| Reference Level | 10.000 dBm | 10.000 dBm |
| Attenuation | 30.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |

## Occupied Channel Bandwidth 99% (5745 MHz; 24.000 dBm; 20 MHz)

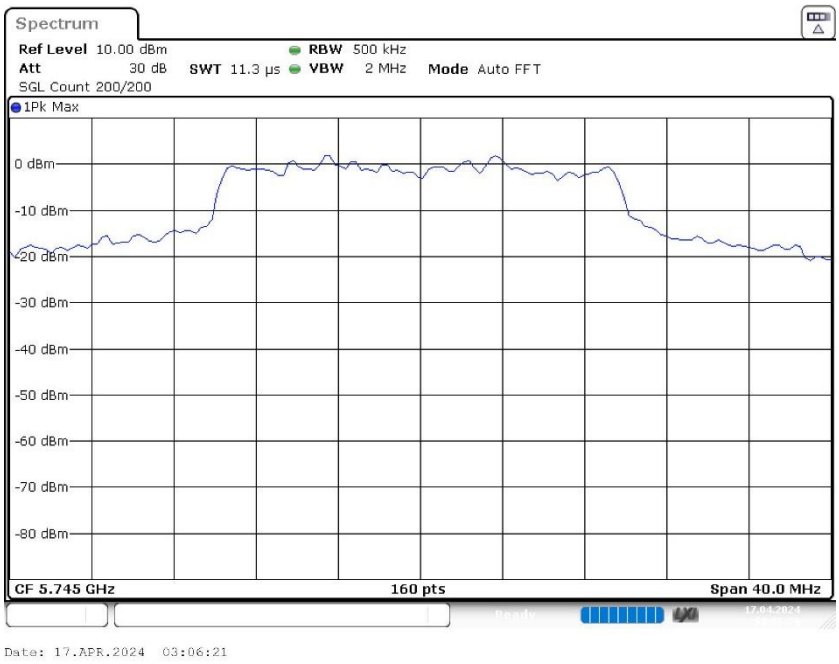
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5745.000000 | 29.750000 | --- | --- | 5729.875000 | 5759.625000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5745.000000 | PASS |




Bandwidth




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.72500 GHz | 5.72500 GHz |
| Stop Frequency | 5.76500 GHz | 5.76500 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 500.000 kHz | >= 500.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 11.344 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 |

## Tx Spurious Emission (5745 MHz; 24.000 dBm; 20 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5745.000000 | PASS |

## Final measurements

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

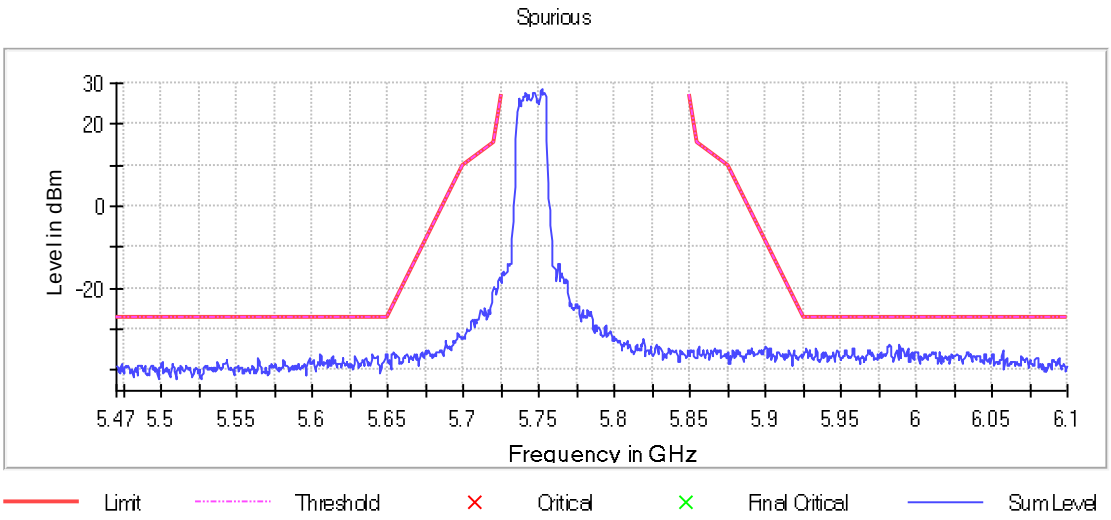
| | | | | | |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5988.750000 | -33.6 | 6.6 | -27.0 |
| 5982.250000 | -33.7 | 6.7 | -27.0 |
| 5982.750000 | -34.0 | 7.0 | -27.0 |
| 5981.750000 | -34.0 | 7.0 | -27.0 |
| 5980.750000 | -34.2 | 7.2 | -27.0 |
| 5981.250000 | -34.3 | 7.3 | -27.0 |
| 5933.750000 | -34.5 | 7.5 | -27.0 |
| 5994.250000 | -34.6 | 7.6 | -27.0 |
| 5957.750000 | -34.6 | 7.6 | -27.0 |
| 5983.250000 | -34.7 | 7.7 | -27.0 |
| 5933.250000 | -34.7 | 7.7 | -27.0 |
| 5926.750000 | -34.7 | 7.7 | -27.0 |
| 5990.750000 | -34.7 | 7.7 | -27.0 |
| 5989.250000 | -34.7 | 7.7 | -27.0 |
| 5958.250000 | -34.8 | 7.8 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |




## Pre Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1260 | ~ 1260 |
| Sweeptime | 85.781 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 20.000 dB | 20.000 dB |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 30 | 30 |
| Filter | 3 dB | 3 dB |

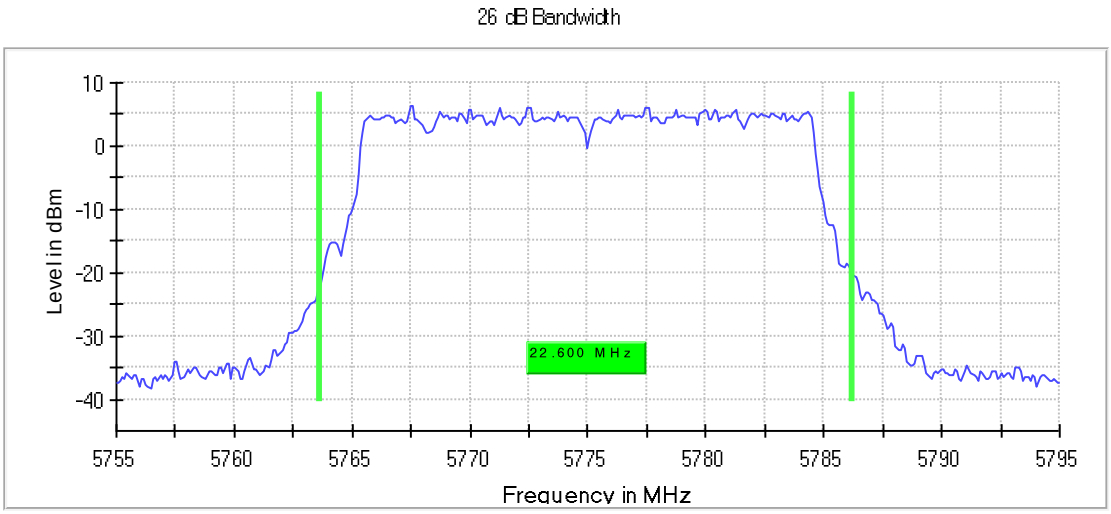
| Trace Mode | Max Hold | Max Hold |
|---|---|---|
| Sweeptype | FFT | AUTO |
| Preamp | off | off |

# Emission Bandwidth 26 dB (5775 MHz; 24.000 dBm; 20 MHz)

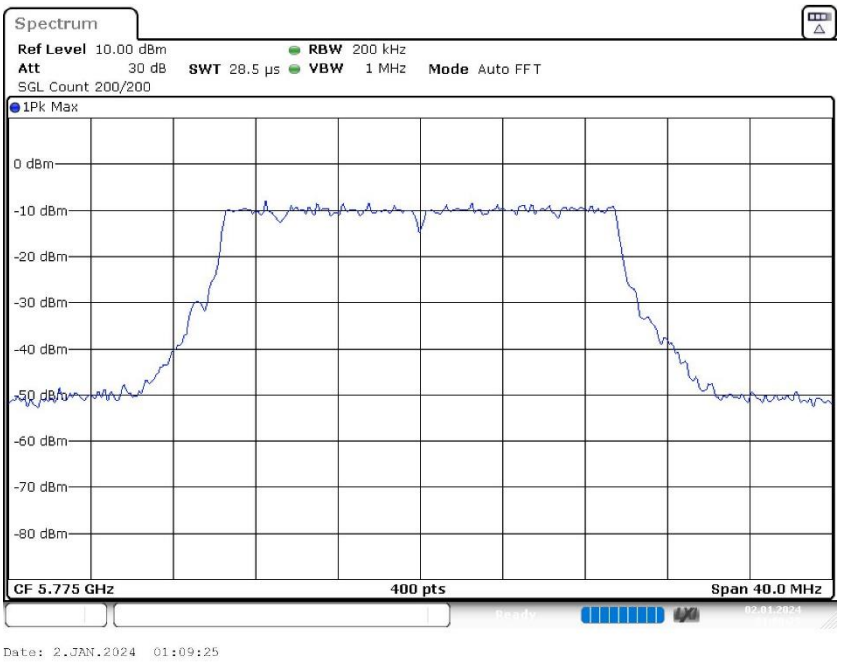
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 22.600000 | --- | --- | 5763.650000 | 5786.250000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 6.4 | PASS |




Bandwidth

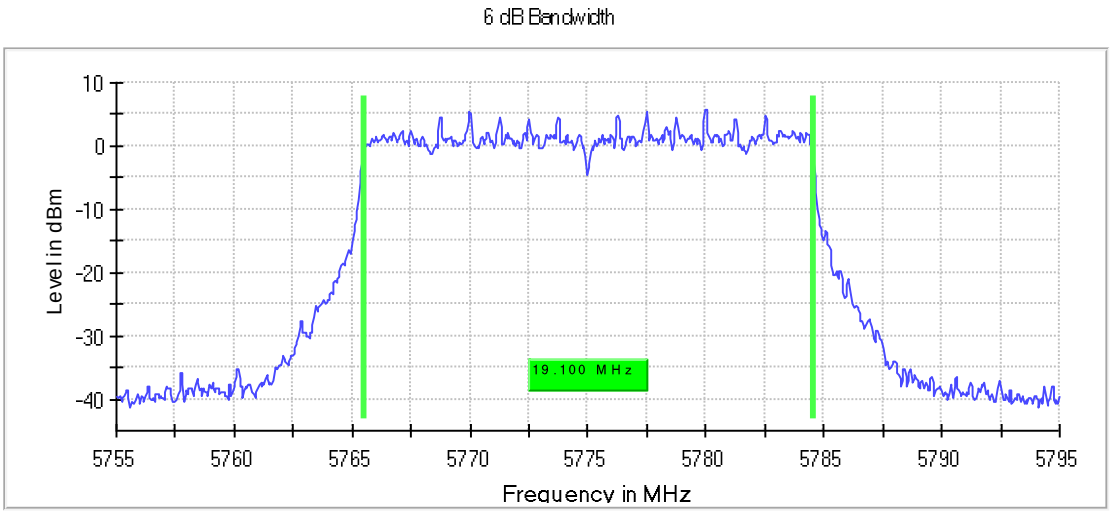



## Minimum Emission Bandwidth 6 dB (5775 MHz; 24.000 dBm; 20 MHz)

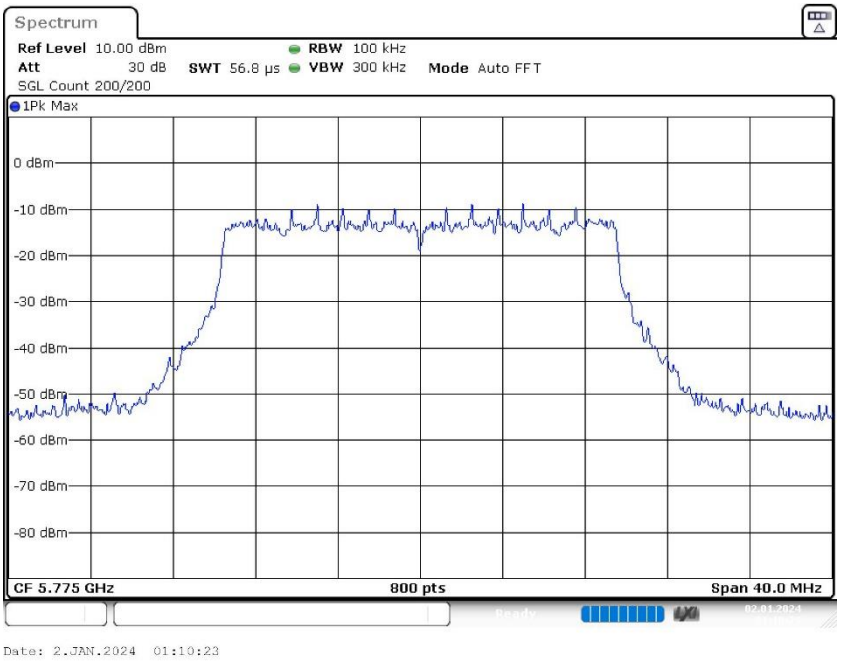
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 19.100000 | 0.500000 | --- | 5765.475000 | 5784.575000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 5.8 | PASS |




Bandwidth

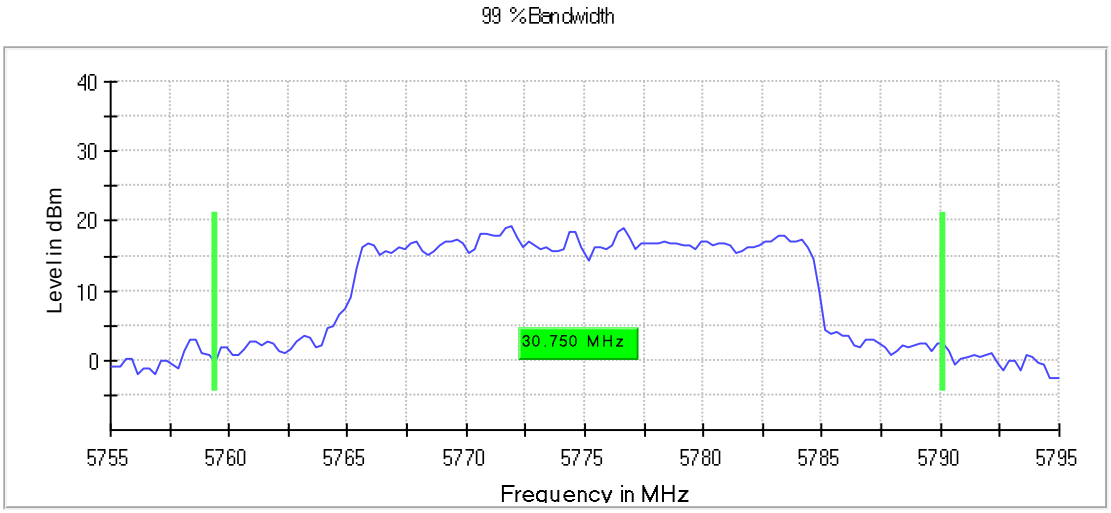



# Occupied Channel Bandwidth 99% (5775 MHz; 24.000 dBm; 20 MHz)

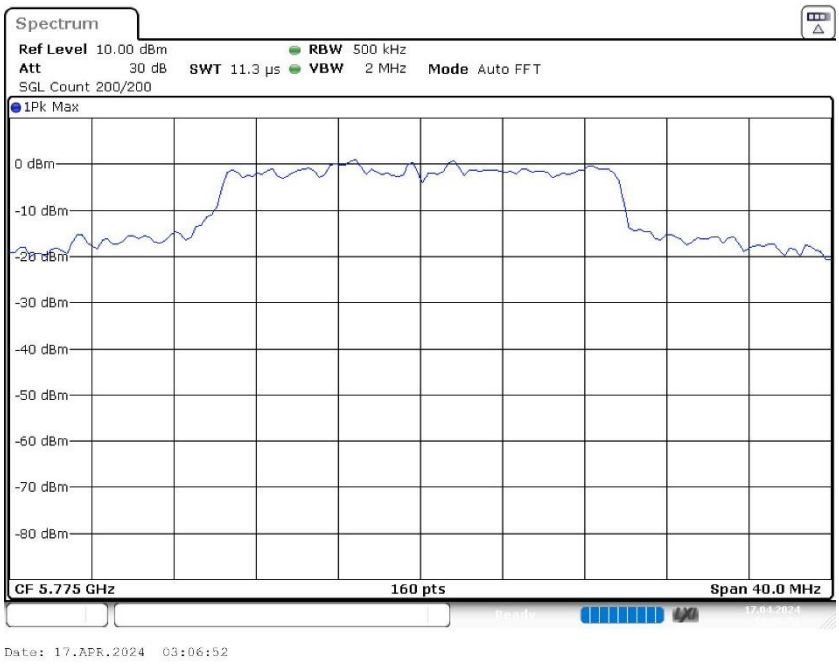
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 30.750000 | --- | --- | 5759.375000 | 5790.125000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.75500 GHz | 5.75500 GHz |
| Stop Frequency | 5.79500 GHz | 5.79500 GHz |

| | | |
|---|---|---|
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 500.000 kHz | >= 500.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 11.344 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 |

# Tx Spurious Emission (5775 MHz; 24.000 dBm; 20 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |

## Final measurements

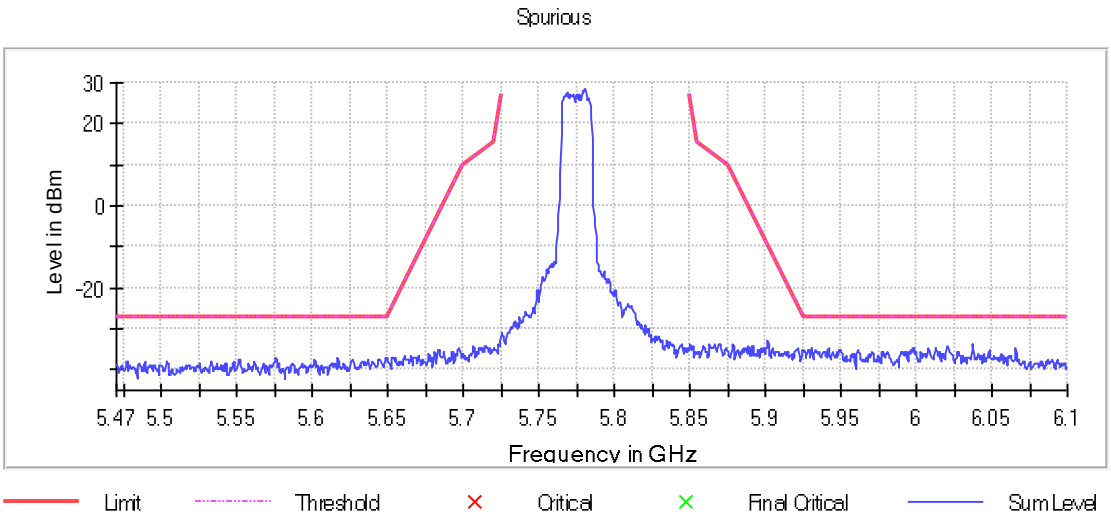
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 6037.250000 | -33.9 | 6.9 | -27.0 |
| 6037.750000 | -34.2 | 7.2 | -27.0 |
| 6020.250000 | -34.4 | 7.4 | -27.0 |
| 6020.750000 | -34.4 | 7.4 | -27.0 |
| 6012.750000 | -34.5 | 7.5 | -27.0 |
| 5930.750000 | -34.5 | 7.5 | -27.0 |
| 5941.750000 | -34.7 | 7.7 | -27.0 |
| 5997.750000 | -34.7 | 7.7 | -27.0 |
| 6007.750000 | -34.8 | 7.8 | -27.0 |
| 6065.750000 | -34.8 | 7.8 | -27.0 |
| 5998.250000 | -34.9 | 7.9 | -27.0 |
| 6008.250000 | -34.9 | 7.9 | -27.0 |
| 5928.750000 | -35.0 | 8.0 | -27.0 |
| 5933.250000 | -35.0 | 8.0 | -27.0 |
| 6012.250000 | -35.1 | 8.1 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |

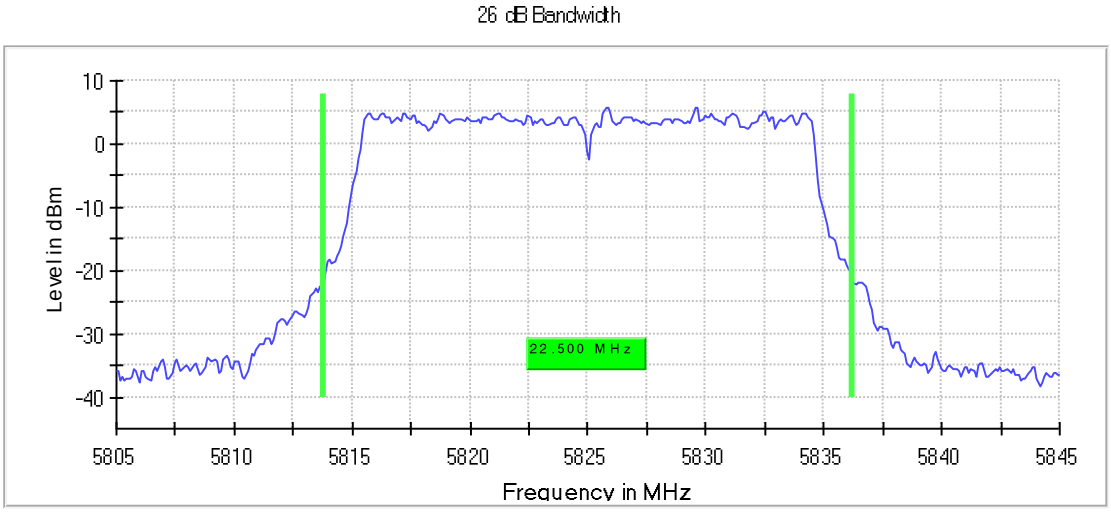



## Emission Bandwidth 26 dB (5825 MHz; 24.000 dBm; 20 MHz)

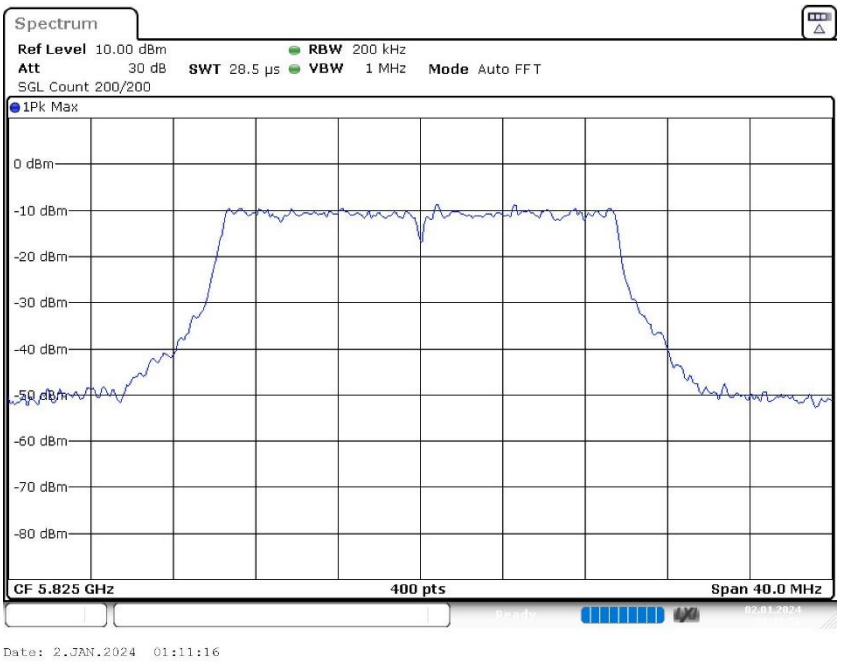
### 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5825.000000 | 22.500000 | --- | --- | 5813.750000 | 5836.250000 |

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




Bandwidth

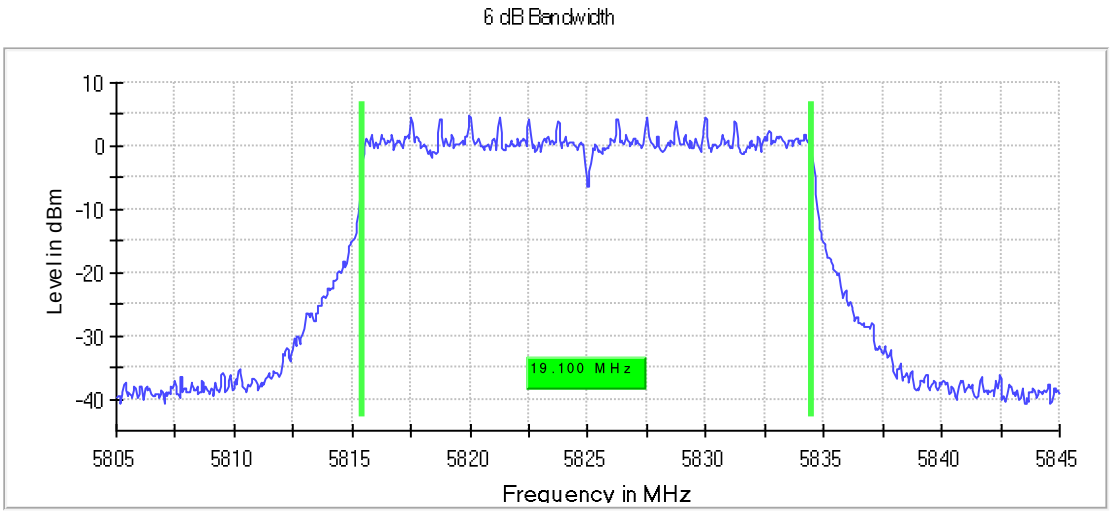



## Minimum Emission Bandwidth 6 dB (5825 MHz; 24.000 dBm; 20 MHz)

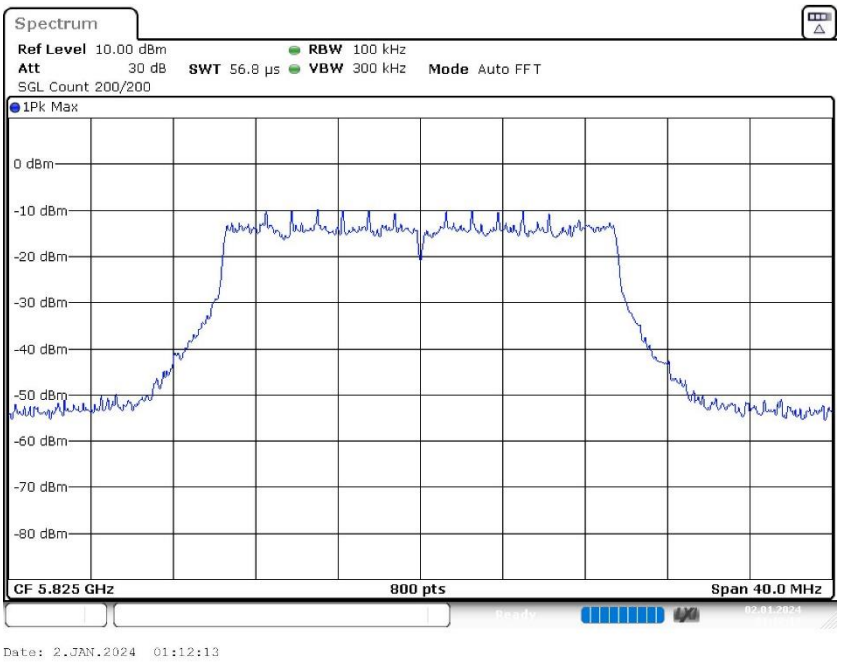
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5825.000000 | 19.100000 | 0.500000 | --- | 5815.425000 | 5834.525000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5825.000000 | 4.8 | PASS |




Bandwidth

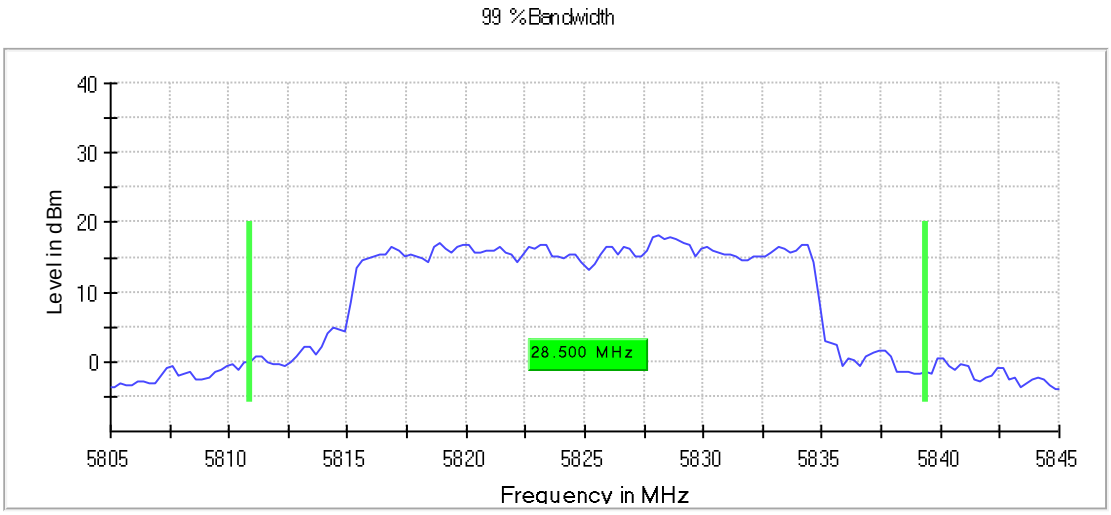



## Occupied Channel Bandwidth 99% (5825 MHz; 24.000 dBm; 20 MHz)

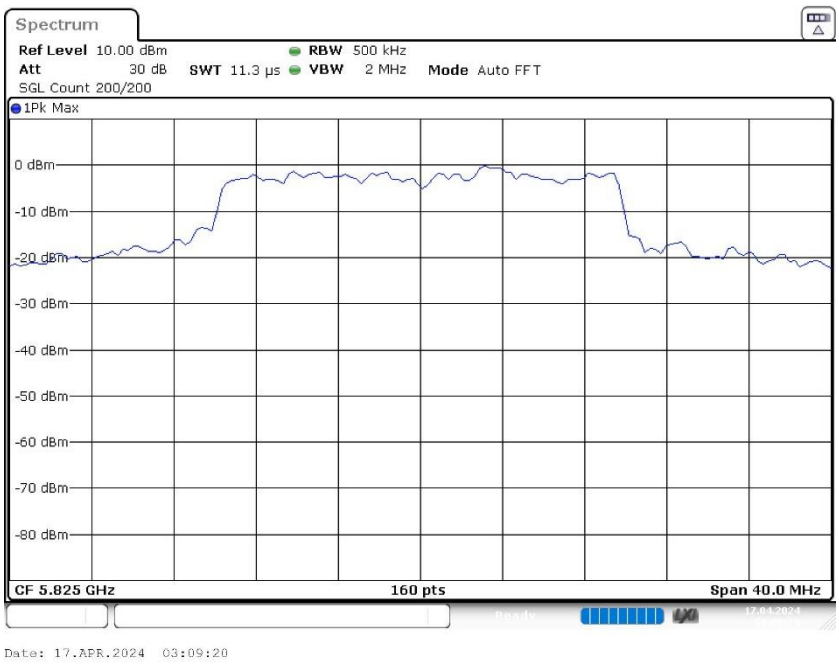
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5825.000000 | 28.500000 | --- | --- | 5810.875000 | 5839.375000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5825.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.80500 GHz | 5.80500 GHz |

| | | |
|---|---|---|
| Stop Frequency | 5.84500 GHz | 5.84500 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 500.000 kHz | >= 500.000 kHz |
| VBW | 2.000 MHz | >= 1.500 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 11.344 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 |

## Tx Spurious Emission (5825 MHz; 24.000 dBm; 20 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5825.000000 | PASS |

## Final measurements

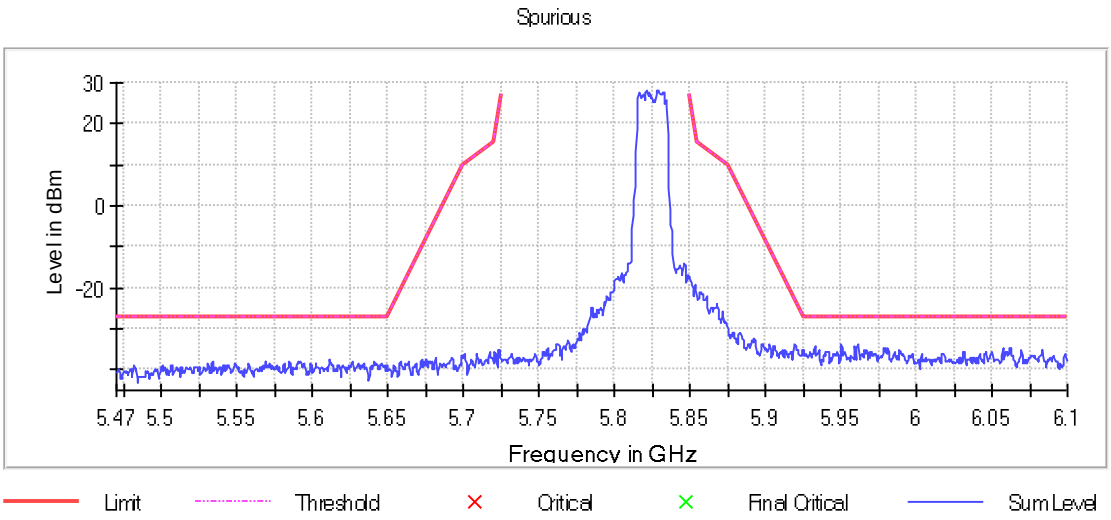
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5950.250000 | -33.6 | 6.6 | -27.0 |
| 5961.250000 | -33.9 | 6.9 | -27.0 |
| 5949.750000 | -34.0 | 7.0 | -27.0 |
| 5932.750000 | -34.3 | 7.3 | -27.0 |
| 5959.250000 | -34.3 | 7.3 | -27.0 |
| 5961.750000 | -34.4 | 7.4 | -27.0 |
| 5950.750000 | -34.5 | 7.5 | -27.0 |
| 5958.750000 | -34.7 | 7.7 | -27.0 |
| 6061.750000 | -34.7 | 7.7 | -27.0 |
| 5978.750000 | -34.8 | 7.8 | -27.0 |
| 5981.250000 | -34.8 | 7.8 | -27.0 |
| 6057.250000 | -34.8 | 7.8 | -27.0 |
| 6062.250000 | -34.8 | 7.8 | -27.0 |
| 5960.750000 | -34.8 | 7.8 | -27.0 |
| 5978.250000 | -34.9 | 7.9 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |

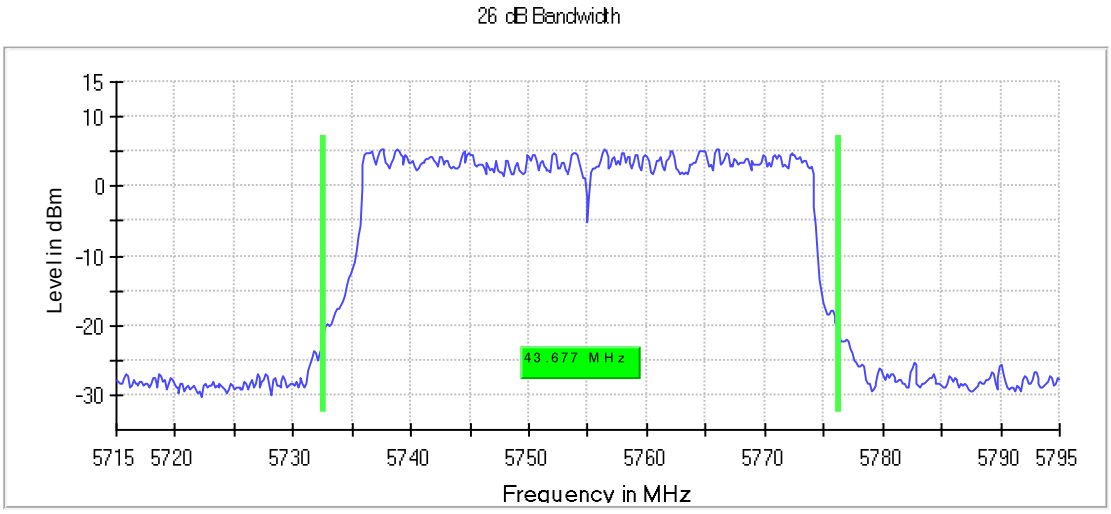



# Emission Bandwidth 26 dB (5755 MHz; 24.000 dBm; 40 MHz)

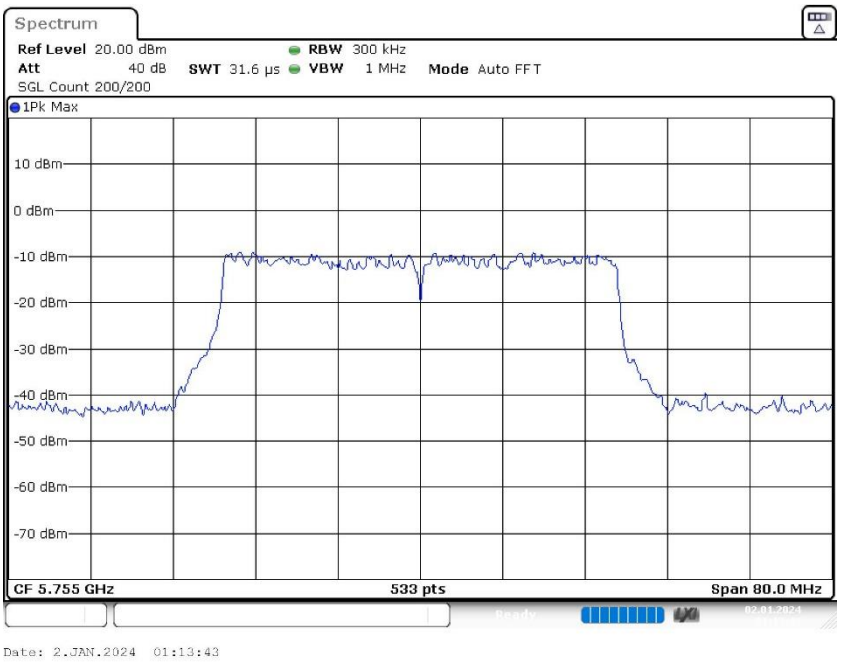
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5755.000000 | 43.677298 | --- | --- | 5732.636023 | 5776.313321 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5755.000000 | 5.4 | PASS |




Bandwidth

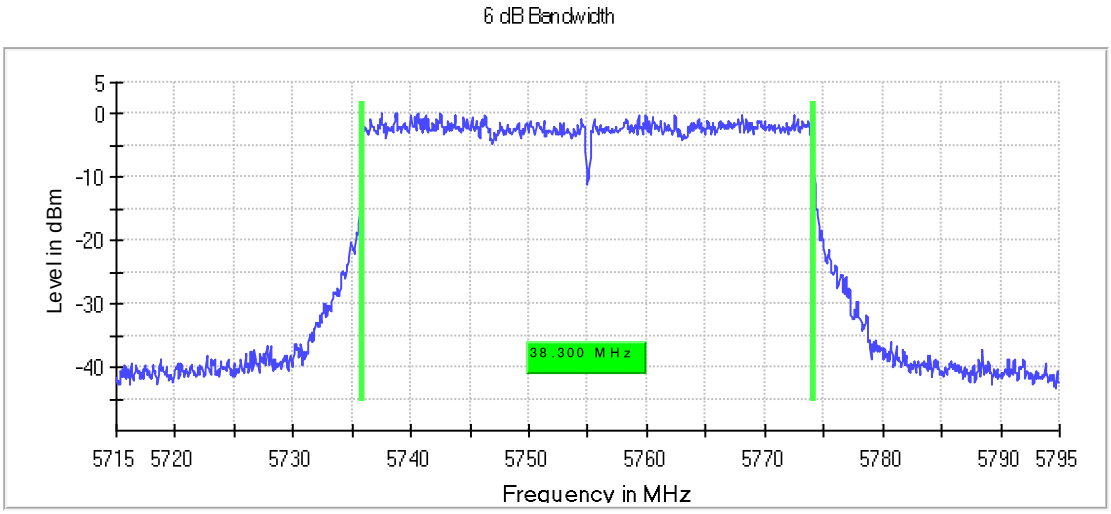



## Minimum Emission Bandwidth 6 dB (5755 MHz; 24.000 dBm; 40 MHz)

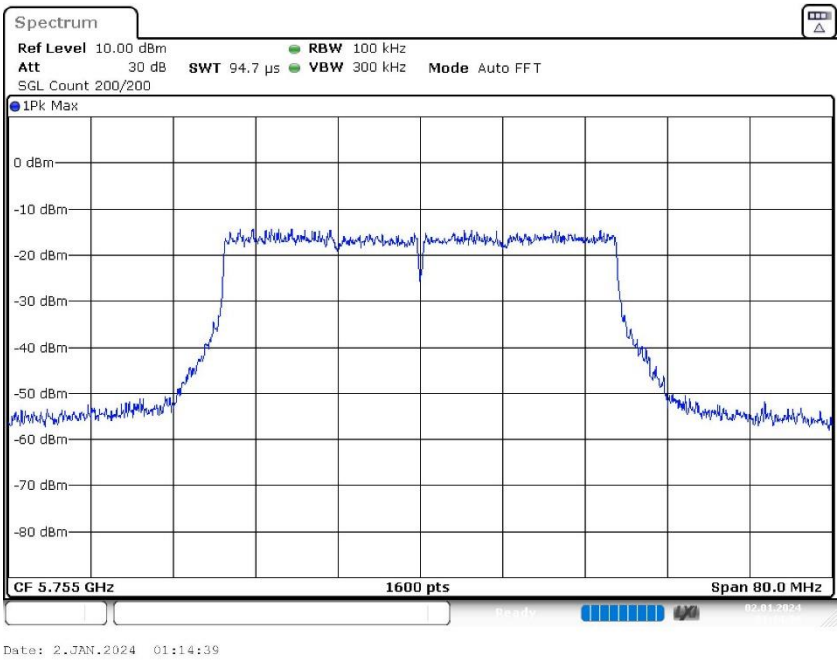
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5755.000000 | 38.300000 | 0.500000 | --- | 5735.825000 | 5774.125000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5755.000000 | 0.1 | PASS |



Bandwidth

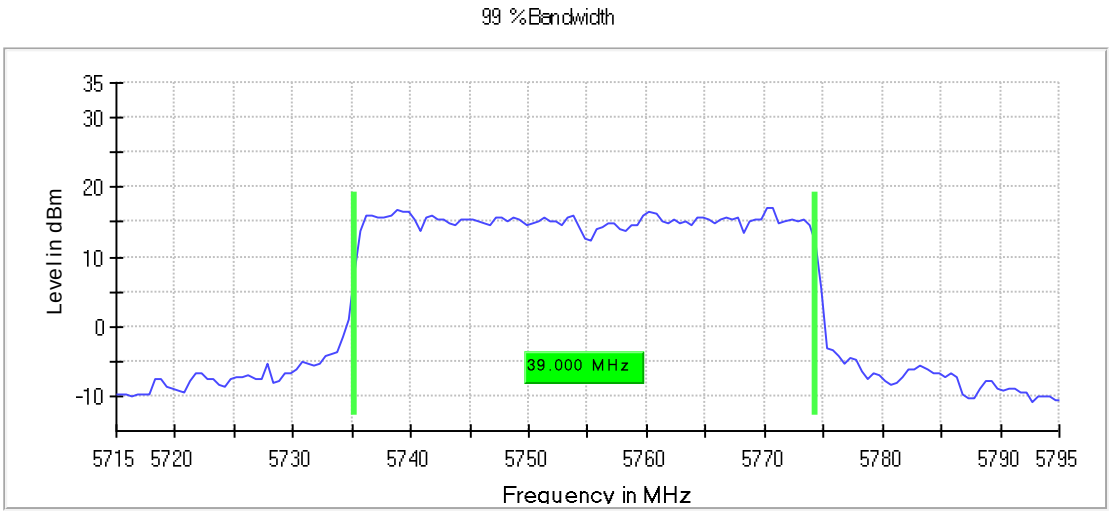



## Occupied Channel Bandwidth 99% (5755 MHz; 24.000 dBm; 40 MHz)

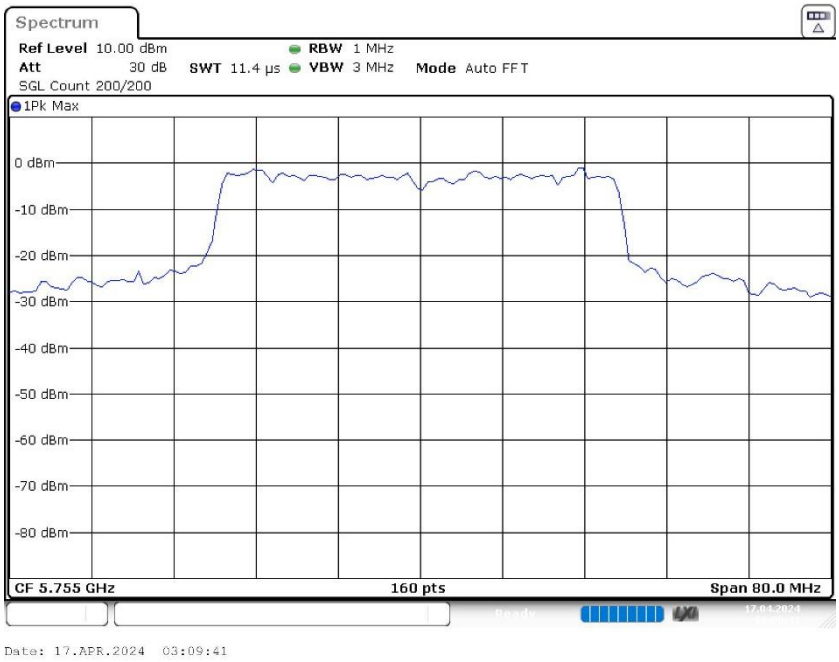
### 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5755.000000 | 39.000000 | --- | --- | 5735.250000 | 5774.250000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5755.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.71500 GHz | 5.71500 GHz |
| Stop Frequency | 5.79500 GHz | 5.79500 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 1.000 MHz | >= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |

| | | |
|---|---|---|
| Sweeptime | 11.438 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 |

## Tx Spurious Emission (5755 MHz; 24.000 dBm; 40 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5755.000000 | PASS |

## Final measurements

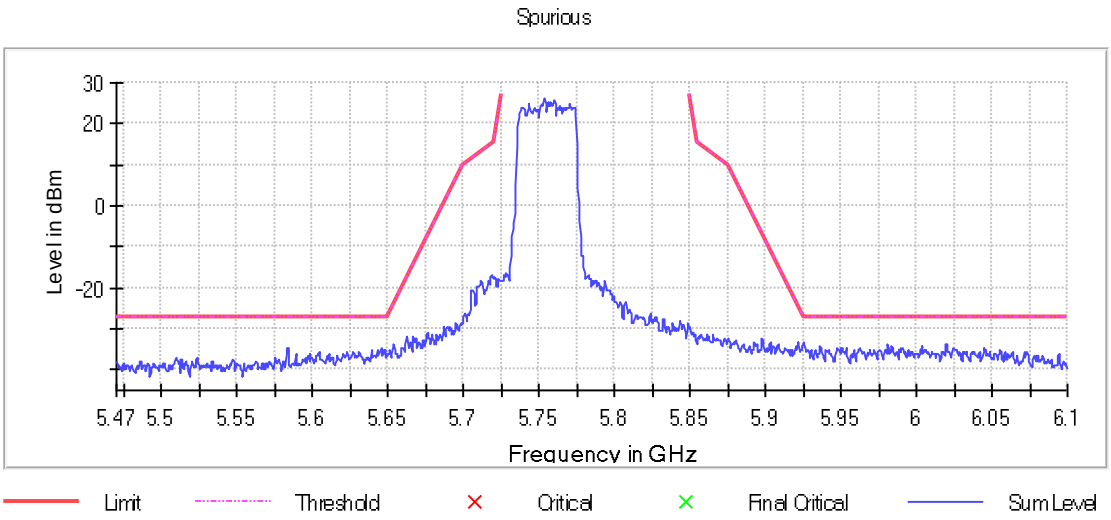
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5925.250000 | -33.5 | 6.5 | -27.0 |
| 6019.750000 | -33.8 | 6.8 | -27.0 |
| 6020.250000 | -33.8 | 6.8 | -27.0 |
| 5925.750000 | -33.9 | 6.9 | -27.0 |
| 5981.250000 | -33.9 | 6.9 | -27.0 |
| 5936.250000 | -34.1 | 7.1 | -27.0 |
| 5983.750000 | -34.2 | 7.2 | -27.0 |
| 5980.750000 | -34.3 | 7.3 | -27.0 |
| 5935.750000 | -34.3 | 7.3 | -27.0 |
| 5924.750000 | -34.2 | 7.4 | -26.8 |
| 6003.750000 | -34.4 | 7.4 | -27.0 |
| 5990.750000 | -34.5 | 7.5 | -27.0 |
| 5947.750000 | -34.5 | 7.5 | -27.0 |
| 5962.250000 | -34.5 | 7.5 | -27.0 |
| 5991.250000 | -34.5 | 7.5 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |

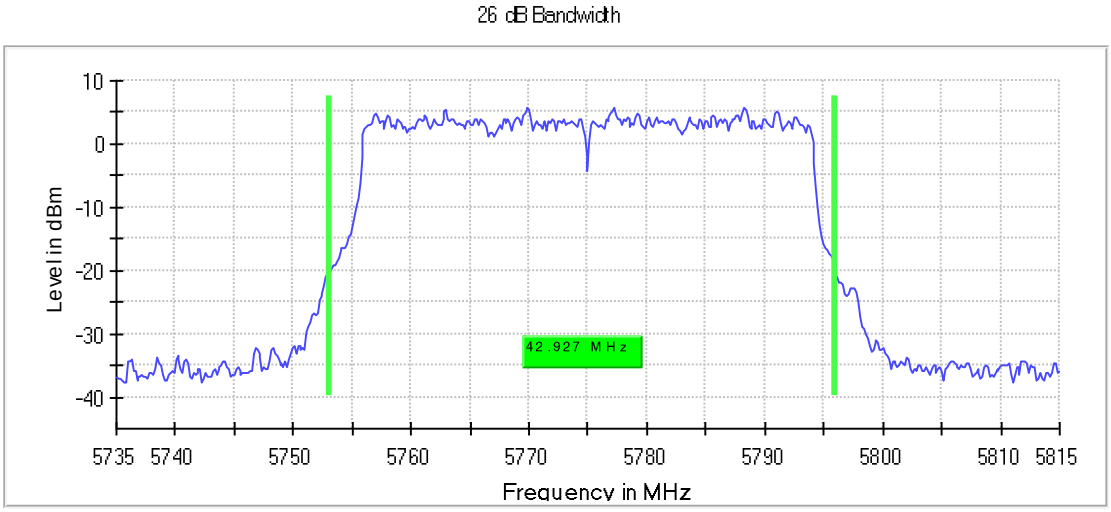



## Emission Bandwidth 26 dB (5775 MHz; 24.000 dBm; 40 MHz)

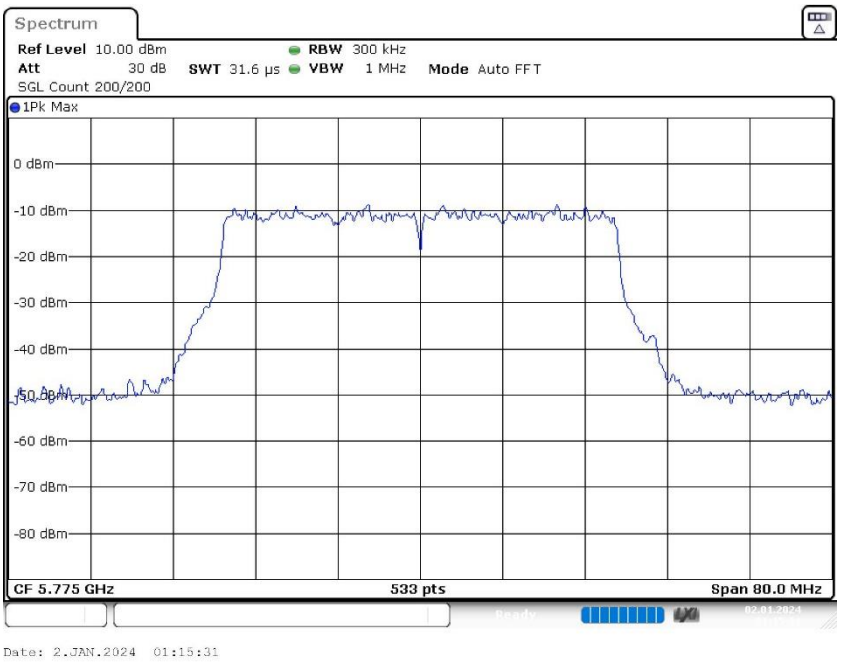
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 42.926829 | --- | --- | 5753.086304 | 5796.013133 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 5.7 | PASS |




Bandwidth

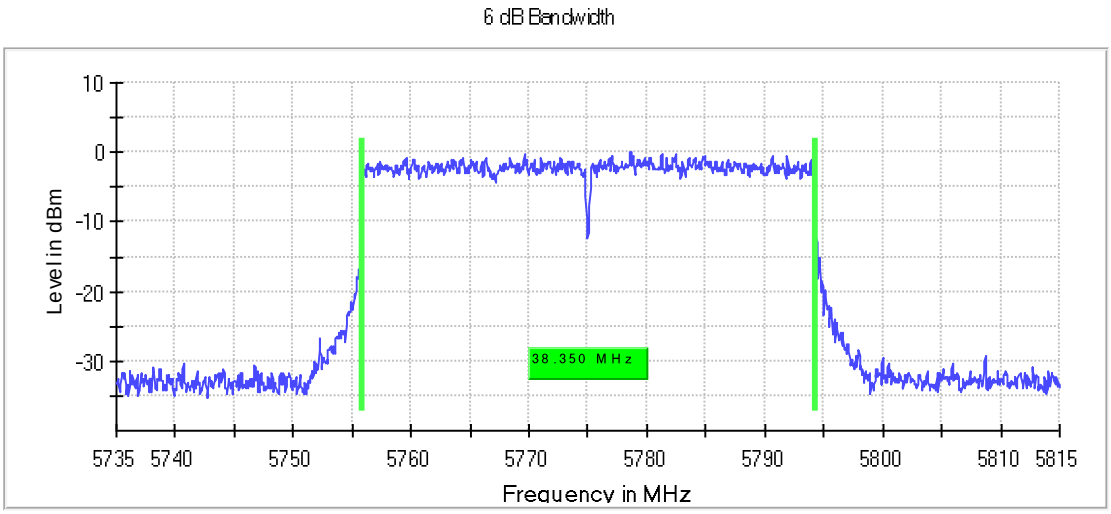



## Minimum Emission Bandwidth 6 dB (5775 MHz; 24.000 dBm; 40 MHz)

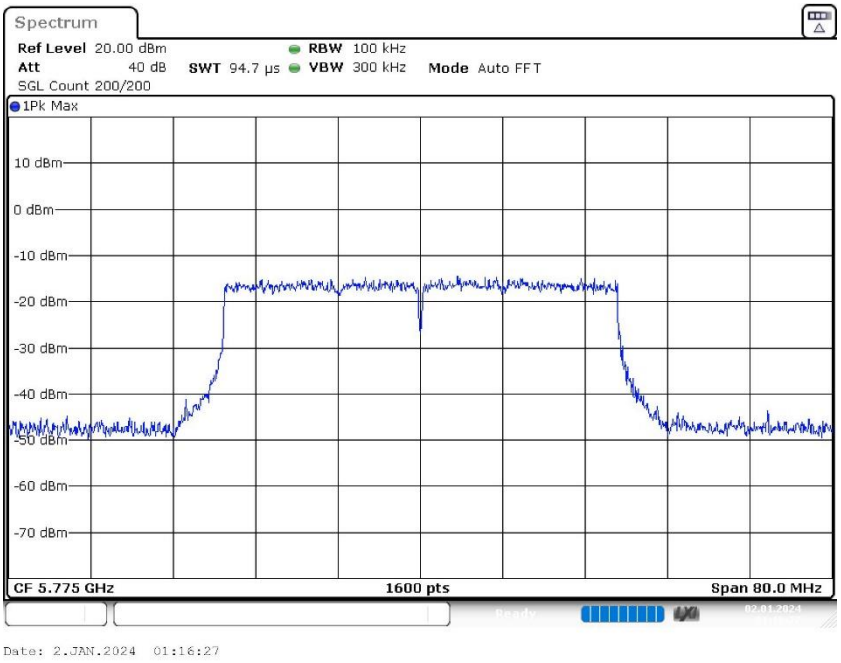
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 38.350000 | 0.500000 | --- | 5755.875000 | 5794.225000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 0.0 | PASS |




Bandwidth

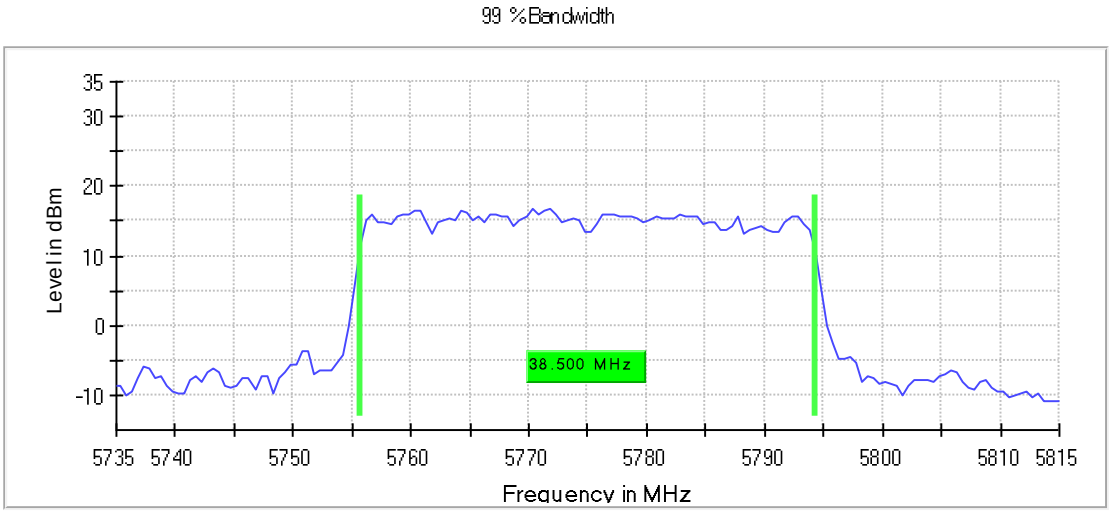



# Occupied Channel Bandwidth 99% (5775 MHz; 24.000 dBm; 40 MHz)

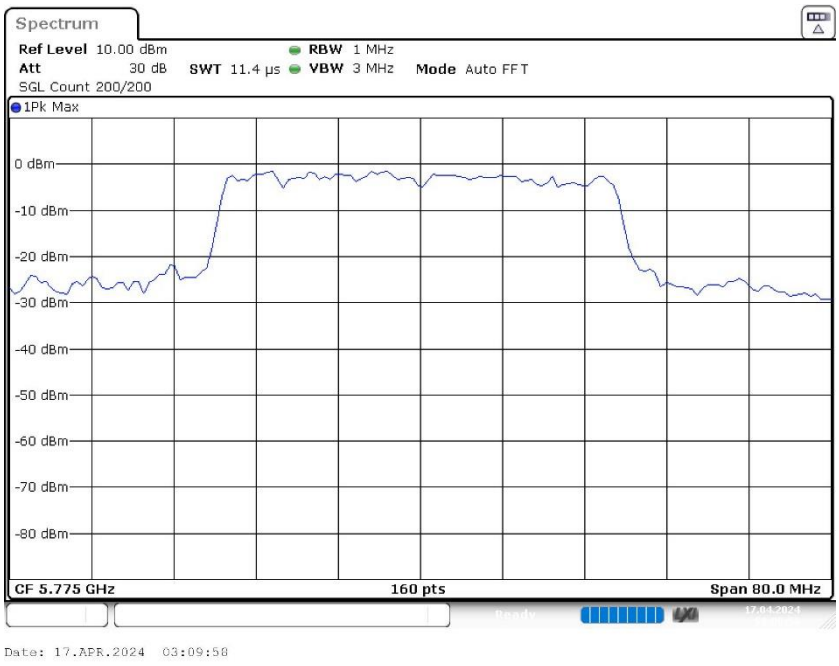
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 38.500000 | --- | --- | 5755.750000 | 5794.250000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.73500 GHz | 5.73500 GHz |
| Stop Frequency | 5.81500 GHz | 5.81500 GHz |

| | | |
|---|---|---|
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 1.000 MHz | >= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 11.438 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 |

## Tx Spurious Emission (5775 MHz; 24.000 dBm; 40 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |

## Final measurements

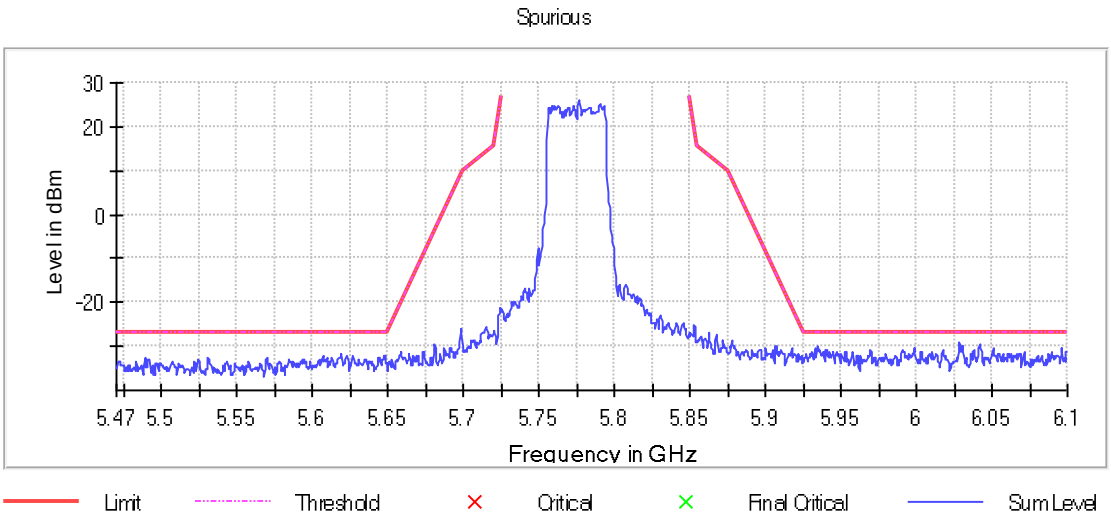
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 6028.750000 | -28.9 | 1.9 | -27.0 |
| 6028.250000 | -29.2 | 2.2 | -27.0 |
| 6041.750000 | -29.4 | 2.4 | -27.0 |
| 6042.250000 | -29.5 | 2.5 | -27.0 |
| 6030.750000 | -29.8 | 2.8 | -27.0 |
| 5934.750000 | -30.2 | 3.2 | -27.0 |
| 6029.250000 | -30.2 | 3.2 | -27.0 |
| 6041.250000 | -30.2 | 3.2 | -27.0 |
| 6030.250000 | -30.2 | 3.2 | -27.0 |
| 6042.750000 | -30.3 | 3.3 | -27.0 |
| 6050.750000 | -30.3 | 3.3 | -27.0 |
| 6051.250000 | -30.3 | 3.3 | -27.0 |
| 5932.750000 | -30.4 | 3.4 | -27.0 |
| 6096.250000 | -30.5 | 3.5 | -27.0 |
| 5934.250000 | -30.5 | 3.5 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |

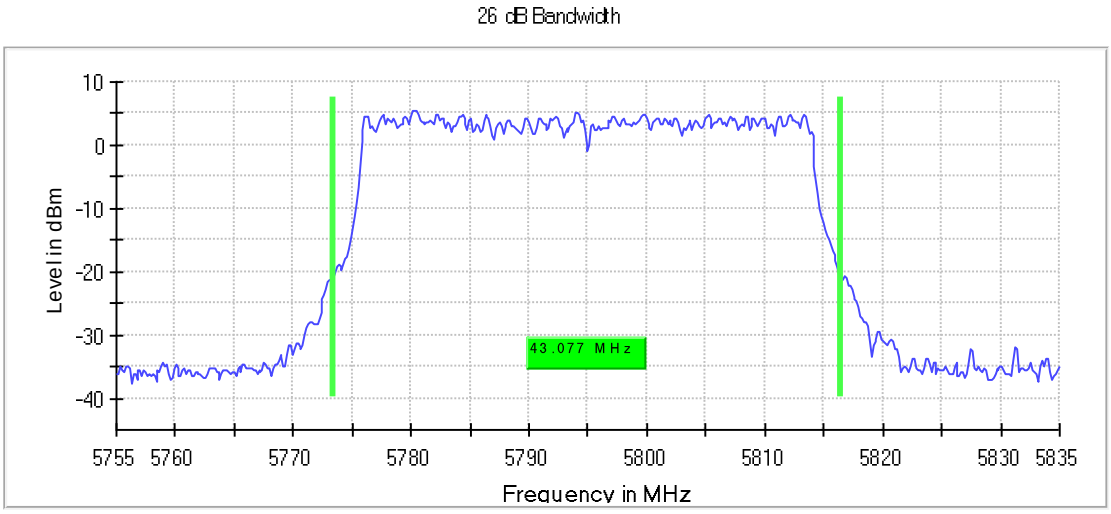



# Emission Bandwidth 26 dB (5795 MHz; 24.000 dBm; 40 MHz)

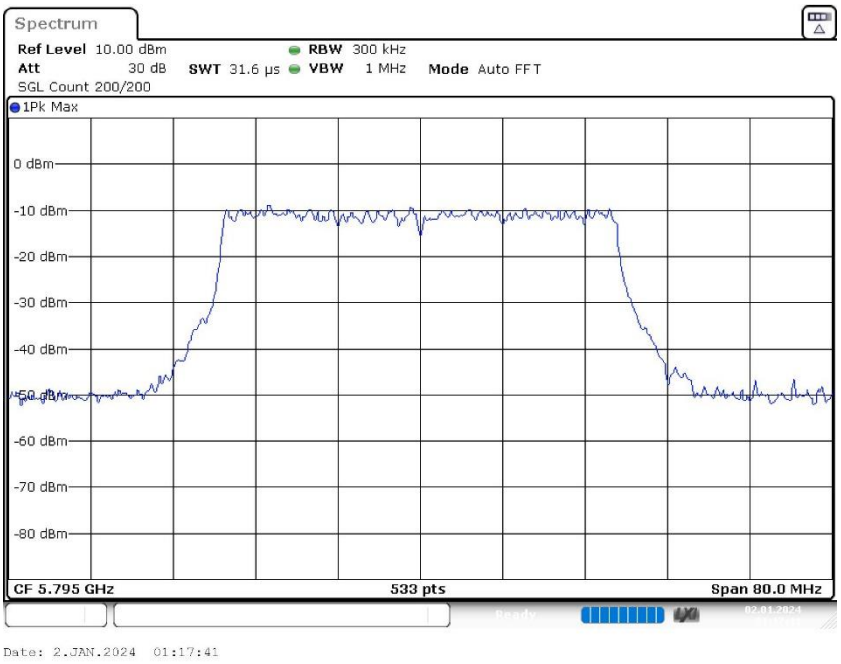
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5795.000000 | 43.076923 | --- | --- | 5773.386492 | 5816.463415 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5795.000000 | 5.5 | PASS |




Bandwidth

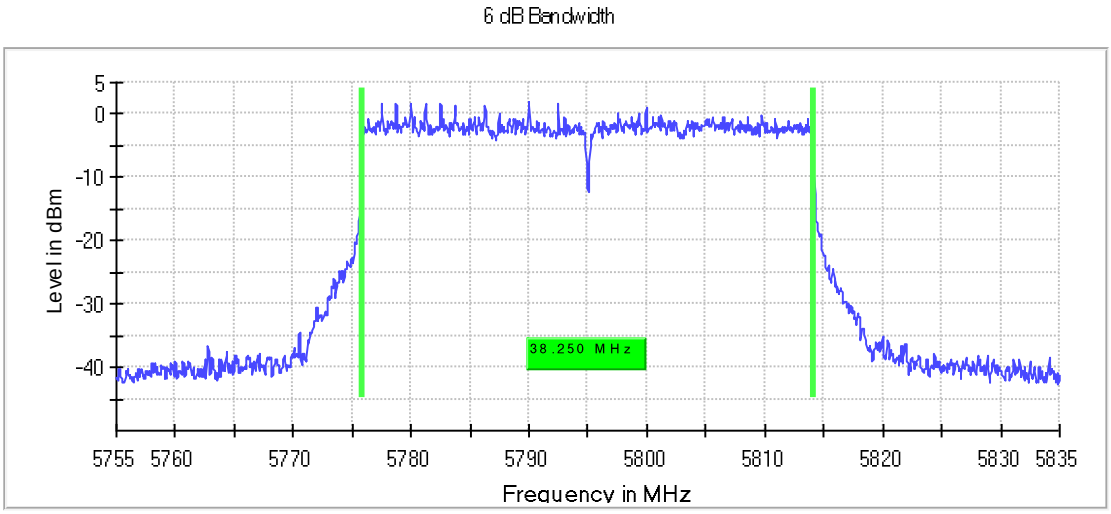



## Minimum Emission Bandwidth 6 dB (5795 MHz; 24.000 dBm; 40 MHz)

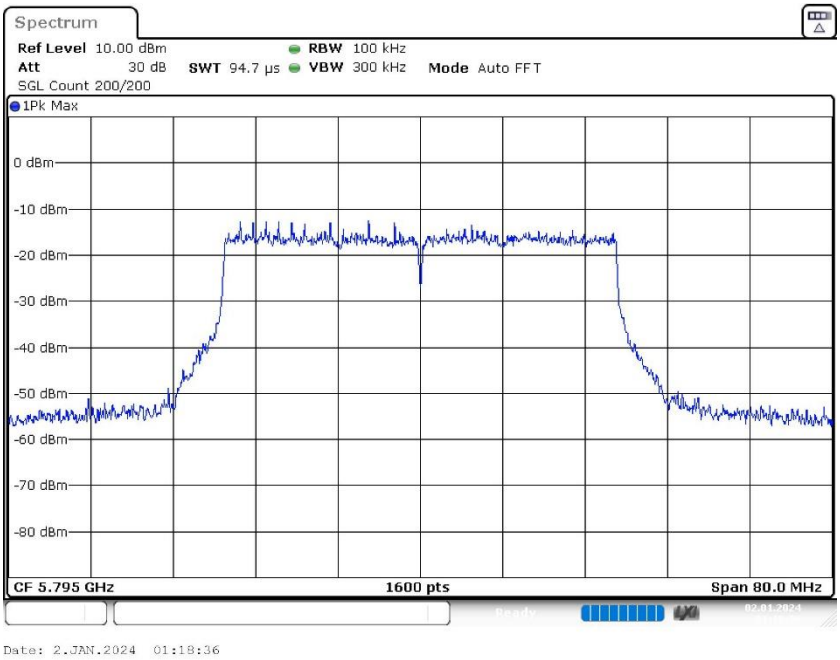
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5795.000000 | 38.250000 | 0.500000 | --- | 5775.875000 | 5814.125000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5795.000000 | 2.0 | PASS |



Bandwidth

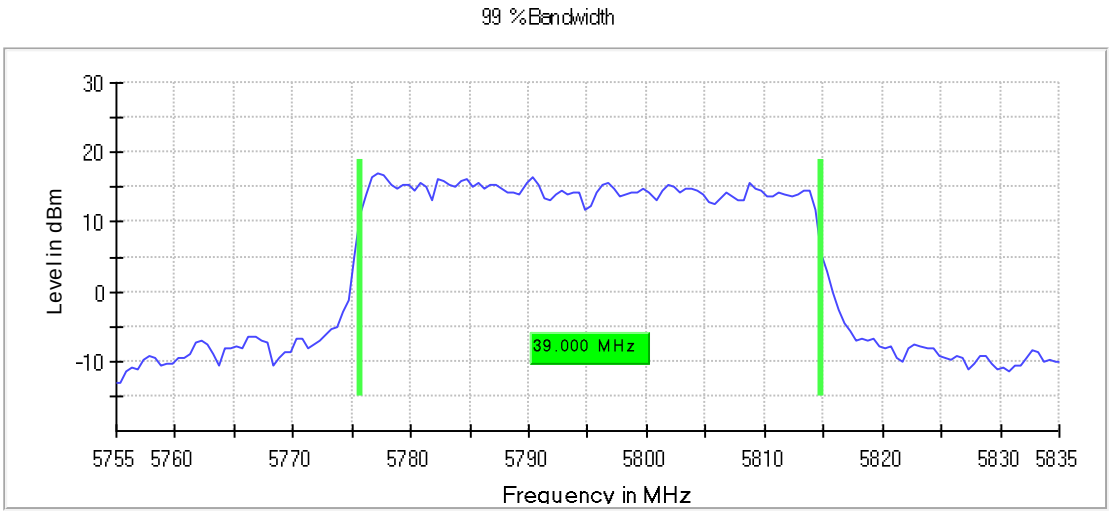



## Occupied Channel Bandwidth 99% (5795 MHz; 24.000 dBm; 40 MHz)

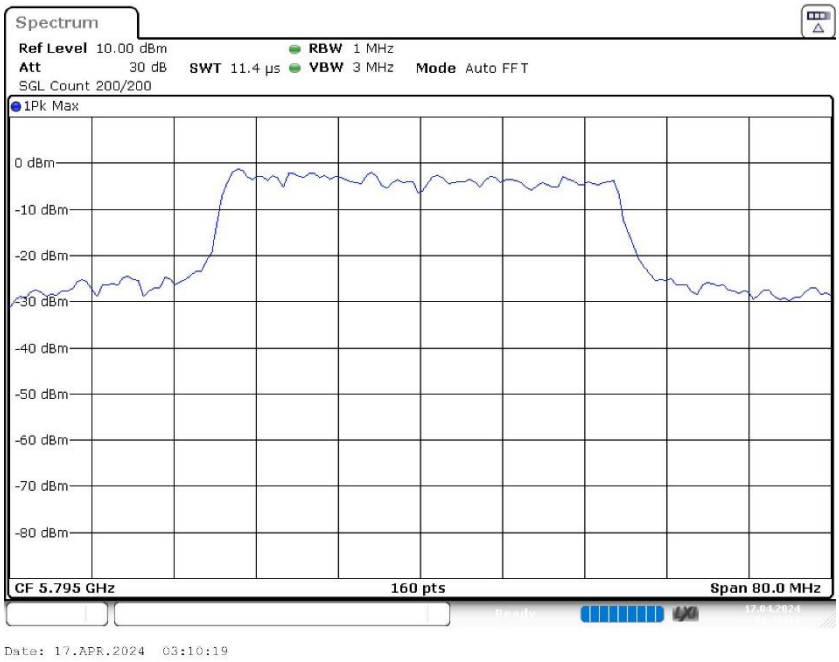
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5795.000000 | 39.000000 | --- | --- | 5775.750000 | 5814.750000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5795.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.75500 GHz | 5.75500 GHz |
| Stop Frequency | 5.83500 GHz | 5.83500 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 1.000 MHz | >= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |

| | | |
|---|---|---|
| Sweeptime | 11.438 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 |

## Tx Spurious Emission (5795 MHz; 24.000 dBm; 40 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5795.000000 | PASS |

## Final measurements

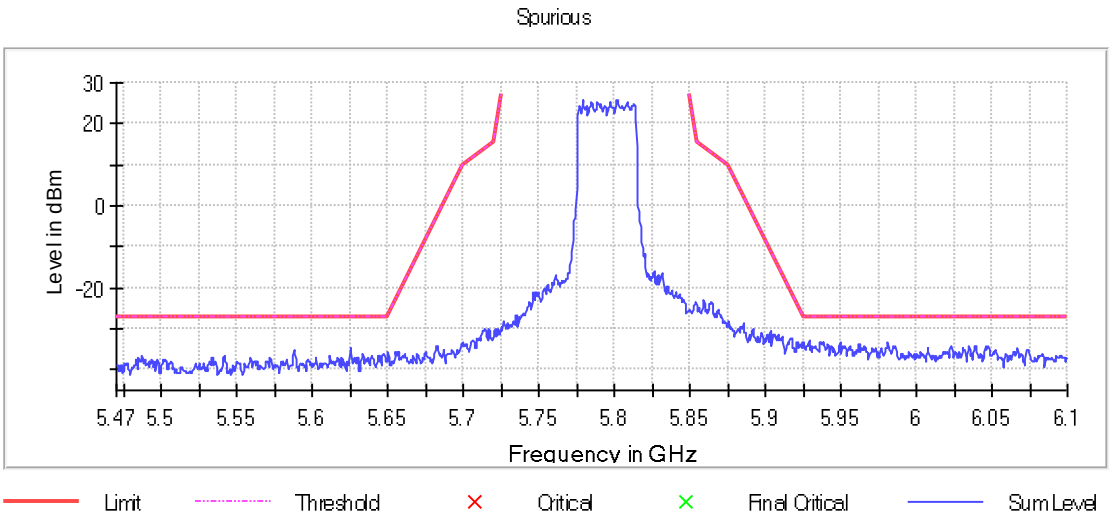
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5928.750000 | -32.7 | 5.7 | -27.0 |
| 5936.750000 | -33.1 | 6.1 | -27.0 |
| 5929.250000 | -33.2 | 6.2 | -27.0 |
| 5938.250000 | -33.2 | 6.2 | -27.0 |
| 5936.250000 | -33.4 | 6.4 | -27.0 |
| 5981.250000 | -33.4 | 6.4 | -27.0 |
| 5925.250000 | -33.4 | 6.4 | -27.0 |
| 5949.250000 | -33.5 | 6.5 | -27.0 |
| 5937.750000 | -33.7 | 6.7 | -27.0 |
| 5924.750000 | -33.5 | 6.7 | -26.8 |
| 5928.250000 | -33.8 | 6.8 | -27.0 |
| 5938.750000 | -33.8 | 6.8 | -27.0 |
| 5980.750000 | -33.8 | 6.8 | -27.0 |
| 5962.250000 | -33.8 | 6.8 | -27.0 |
| 5941.250000 | -33.9 | 6.9 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |

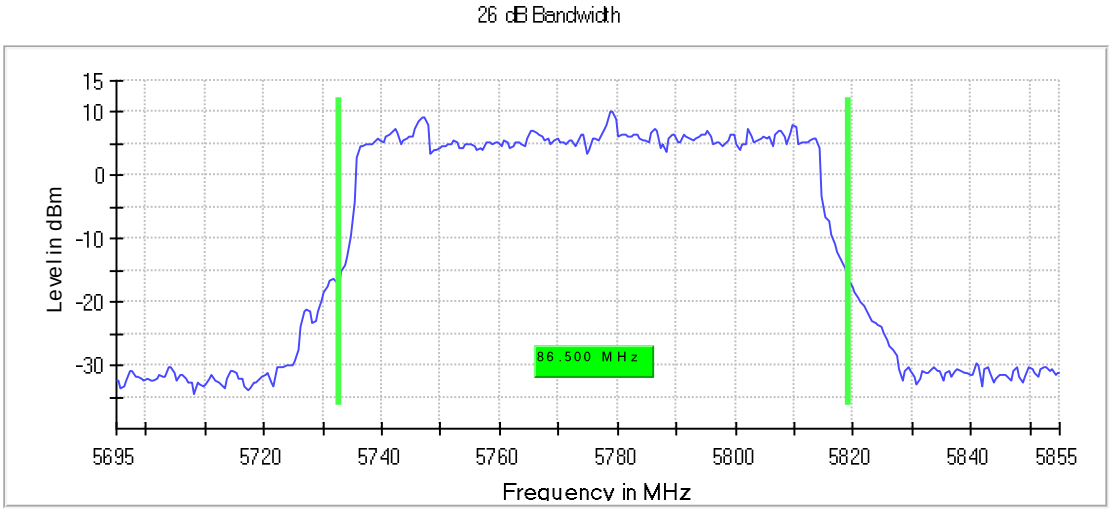



## Emission Bandwidth 26 dB (5775 MHz; 24.000 dBm; 80 MHz)

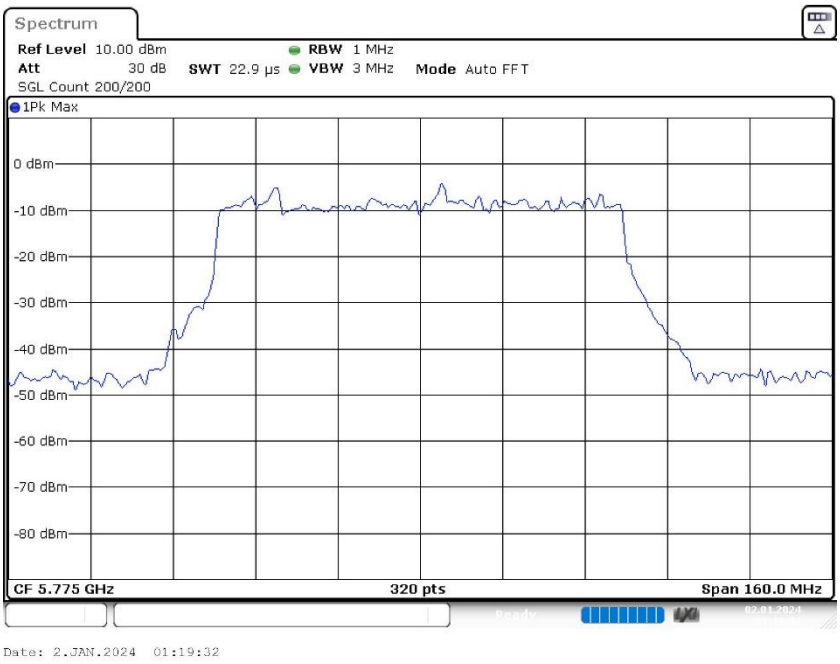
## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 86.500000 | --- | --- | 5732.750000 | 5819.250000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 10.2 | PASS |




Bandwidth

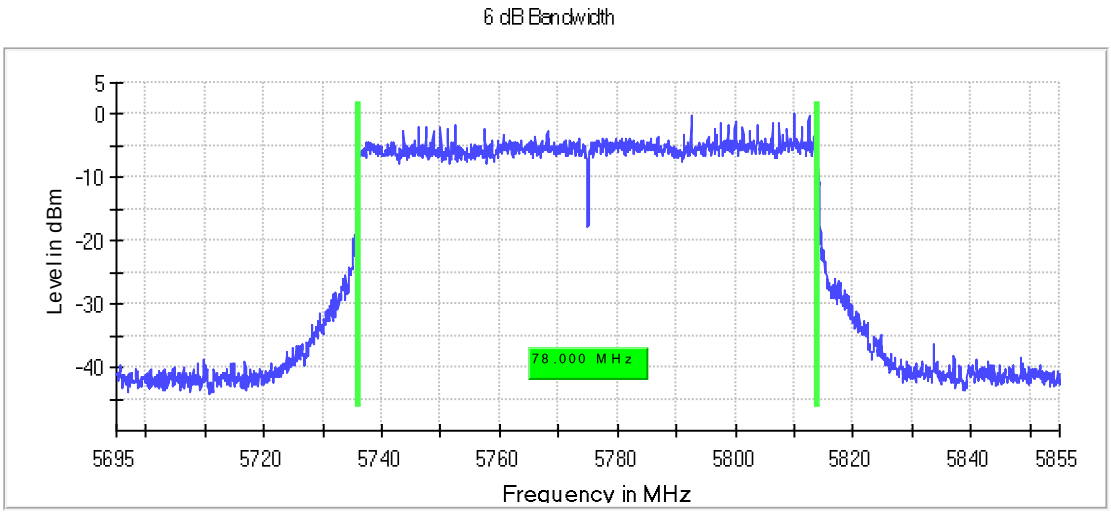



## Minimum Emission Bandwidth 6 dB (5775 MHz; 24.000 dBm; 80 MHz)

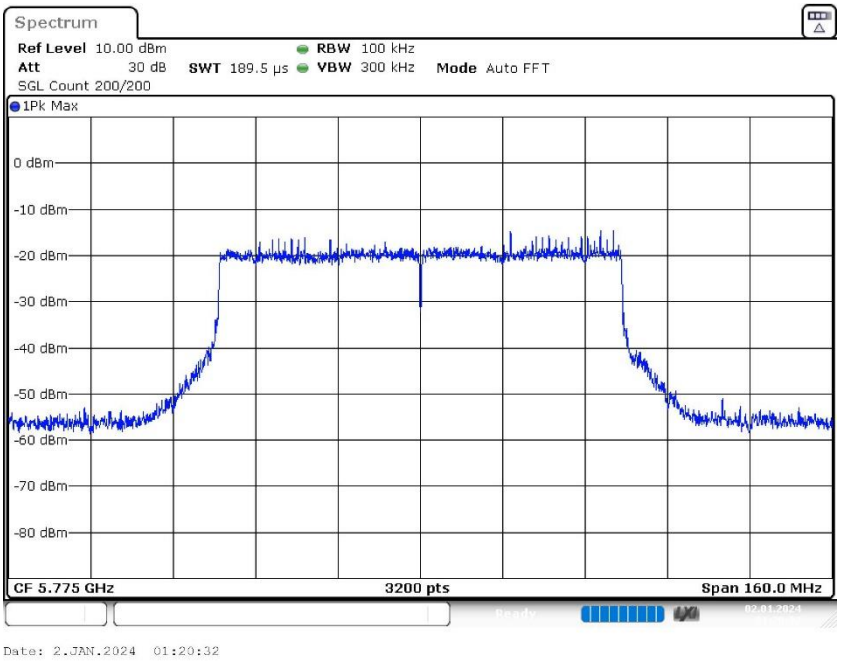
## 6 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 78.000000 | 0.500000 | --- | 5736.025000 | 5814.025000 |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---|---|---|
| 5775.000000 | 0.0 | PASS |




Bandwidth

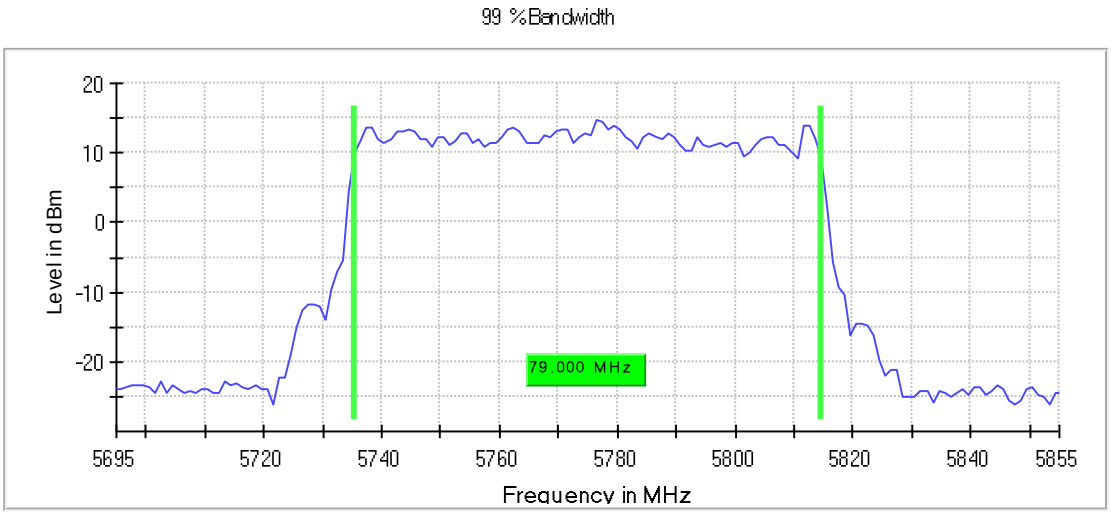



## Occupied Channel Bandwidth 99% (5775 MHz; 24.000 dBm; 80 MHz)

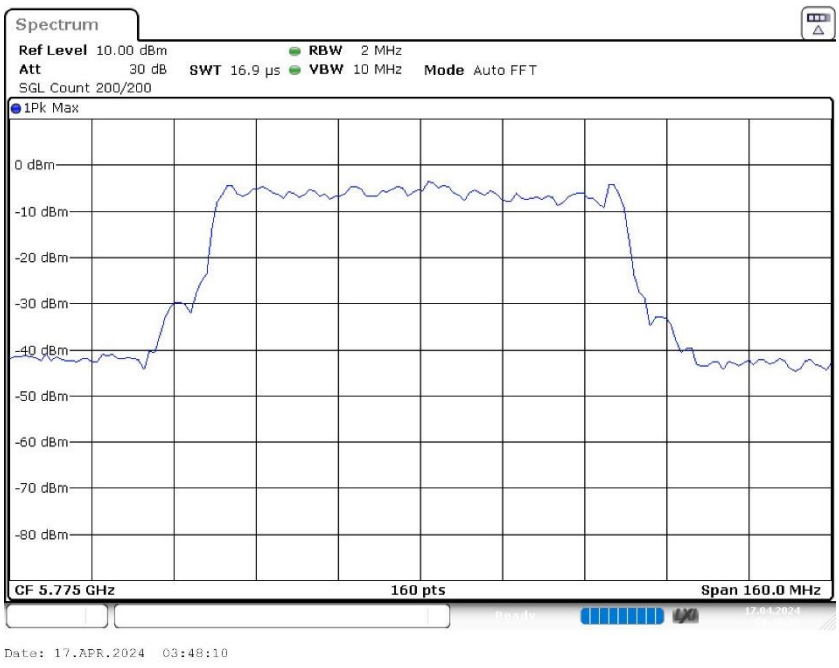
## 99 % Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---|---|---|---|---|---|
| 5775.000000 | 79.000000 | --- | --- | 5735.500000 | 5814.500000 |

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |




Bandwidth




# Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.69500 GHz | 5.69500 GHz |

| | | |
|---|---|---|
| Stop Frequency | 5.85500 GHz | 5.85500 GHz |
| Span | 160.000 MHz | 160.000 MHz |
| RBW | 2.000 MHz | >= 2.000 MHz |
| VBW | 10.000 MHz | >= 6.000 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 16.875 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 |

# Tx Spurious Emission (5775 MHz; 24.000 dBm; 80 MHz)

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5775.000000 | PASS |

## Final measurements

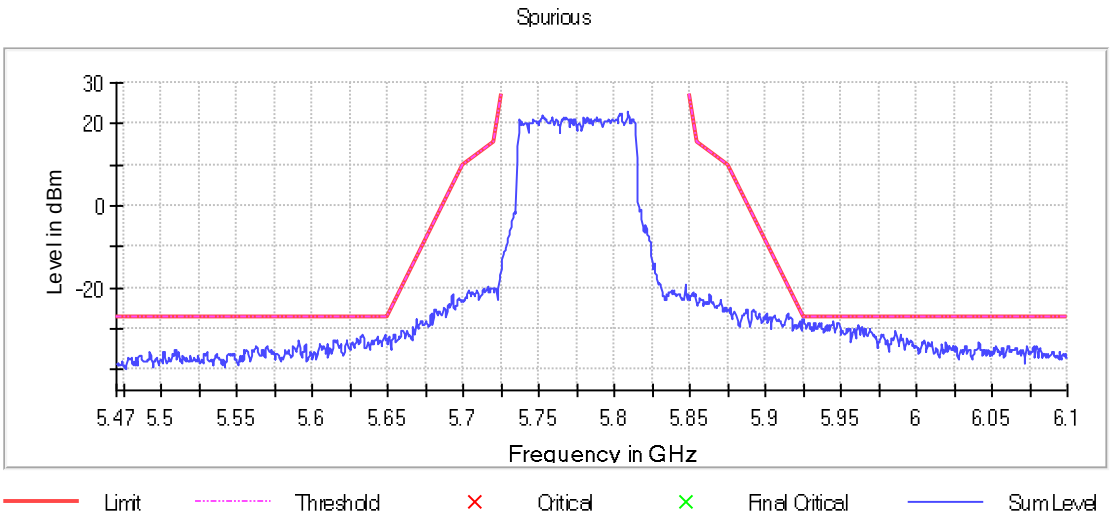
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| --- | --- | --- | --- | --- | --- |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5925.250000 | -27.8 | 0.8 | -27.0 |
| 5945.250000 | -27.9 | 0.9 | -27.0 |
| 5924.750000 | -27.8 | 1.0 | -26.8 |
| 5944.750000 | -28.0 | 1.0 | -27.0 |
| 5932.250000 | -28.4 | 1.4 | -27.0 |
| 5935.250000 | -28.4 | 1.4 | -27.0 |
| 5947.750000 | -28.4 | 1.4 | -27.0 |
| 5925.750000 | -28.5 | 1.5 | -27.0 |
| 5948.250000 | -28.6 | 1.6 | -27.0 |
| 5948.750000 | -28.6 | 1.6 | -27.0 |
| 5928.750000 | -28.6 | 1.6 | -27.0 |
| 5936.750000 | -28.6 | 1.6 | -27.0 |
| 5928.250000 | -28.7 | 1.7 | -27.0 |
| 5932.750000 | -28.7 | 1.7 | -27.0 |
| 5935.750000 | -28.8 | 1.8 | -27.0 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 5470.000000 | 6100.000000 | 2 | 2 |


Spurious
30
20
0
-20
Level in dBm
5.47 5.5 5.55 5.6 5.65 5.7 5.75 5.8 5.85 5.9 5.95 6 6.05 6.1
Frequency in GHz
Limit
Threshold
Critical
Final Critical
Sum Level

**-- End of Report –**