

OCCUPIED BANDWIDTH



XMM 2022.02.07.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Cal. Due |
|------------------------------|--------------------|--------|-----|------------|------------|
| Generator - Signal | Agilent | N5173B | TIW | 2020-07-17 | 2023-07-17 |
| Block - DC | Fairview Microwave | SD3379 | AMT | 2021-09-14 | 2022-09-14 |
| Analyzer - Spectrum Analyzer | Keysight | N9010A | AFQ | 2022-01-17 | 2023-01-17 |

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The method in section 5.4 of ANSI C63.26 was used to make this measurement. The spectrum analyzer settings were as follows:

- RBW is 1% - 5% of the occupied bandwidth
- VBW is $\geq 3x$ the RBW
- Peak Detector was used
- Trace max hold was used

RF conducted emissions testing was performed only on one port. All four AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in this certification testing) and antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i, and 6.4.

The occupied bandwidth was measured with the EUT configured in the modes called out in the data sheets. FCC 24.238(b) and FCC 27.53(h)(3) defines the 26dB emission bandwidth requirement. RSS GEN Section 6.7 defines the 99% emission bandwidth requirement.

| FCC and ISED Emission Designators for Band 25 (1930MHz to 1995MHz) Single Carrier | | | | | | | | | |
|---|---------------|--------------|---------|---------------|---------|---------------|---------|----------------|---------|
| Ch BW | Radio Channel | 4G-LTE: QPSK | | 4G-LTE: 16QAM | | 4G-LTE: 64QAM | | 4G-LTE: 256QAM | |
| | | FCC | ISED | FCC | ISED | FCC | ISED | FCC | ISED |
| 1.4MHz | Low | | | | | | | 1M29F9W | 1M12F9W |
| | Mid | 1M28F9W | 1M11F9W | 1M27F9W | 1M11F9W | 1M28F9W | 1M12F9W | 1M29F9W | 1M12F9W |
| | High | | | | | | | 1M29F9W | 1M12F9W |
| 3MHz | Low | | | | | | | 2M93F9W | 2M71F9W |
| | Mid | 2M92F9W | 2M71F9W | 2M93F9W | 2M70F9W | 2M92F9W | 2M71F9W | 2M93F9W | 2M71F9W |
| | High | | | | | | | 2M92F9W | 2M71F9W |
| 5MHz | Low | | | | | | | 4M79F9W | 4M49F9W |
| | Mid | 4M86F9W | 4M51F9W | 4M78F9W | 4M51F9W | 4M84F9W | 4M50F9W | 4M84F9W | 4M50F9W |
| | High | | | | | | | 4M78F9W | 4M51F9W |
| 10MHz | Low | | | | | | | 9M67F9W | 8M97F9W |
| | Mid | 9M68F9W | 8M98F9W | 9M63F9W | 8M97F9W | 9M67F9W | 8M98F9W | 9M65F9W | 8M99F9W |
| | High | | | | | | | 9M66F9W | 8M98F9W |
| 15MHz | Low | | | | | | | 14M5F9W | 13M5F9W |
| | Mid | 14M5F9W | 13M5F9W | 14M5F9W | 13M5F9W | 14M5F9W | 13M5F9W | 14M5F9W | 13M5F9W |
| | High | | | | | | | 14M5F9W | 13M5F9W |
| 20MHz | Low | | | | | | | 19M3F9W | 17M9F9W |
| | Mid | 19M4F9W | 18M0F9W | 19M3F9W | 18M0F9W | 19M4F9W | 18M0F9W | 19M4F9W | 17M9F9W |
| | High | | | | | | | 19M3F9W | 17M9F9W |

Note: FCC emission designators are based on 26dB emission bandwidth. ISED emission designators are based on 99% emission bandwidth. The LTE1.4 and LTE3 bandwidths are limited to the 1930MHz to 1990MHz frequency range.

| FCC and ISED Emission Designators for Band 66 (2110MHz to 2200MHz) Single Carrier | | | | | | | | | |
|---|---------------|--------------|---------|---------------|---------|---------------|---------|----------------|---------|
| Ch BW | Radio Channel | 4G-LTE: QPSK | | 4G-LTE: 16QAM | | 4G-LTE: 64QAM | | 4G-LTE: 256QAM | |
| | | FCC | ISED | FCC | ISED | FCC | ISED | FCC | ISED |
| 1.4MHz | Low | | | | | | | 1M28F9W | 1M11F9W |
| | Mid | 1M27F9W | 1M11F9W | 1M25F9W | 1M11F9W | 1M28F9W | 1M11F9W | 1M28F9W | 1M11F9W |
| | High | | | | | | | 1M27F9W | 1M11F9W |
| 3MHz | Low | | | | | | | 2M93F9W | 2M71F9W |
| | Mid | 2M93F9W | 2M71F9W | 2M93F9W | 2M71F9W | 2M93F9W | 2M71F9W | 2M93F9W | 2M71F9W |
| | High | | | | | | | 2M93F9W | 2M71F9W |
| 5MHz | Low | | | | | | | 4M85F9W | 4M50F9W |
| | Mid | 4M85F9W | 4M50F9W | 4M83F9W | 4M49F9W | 4M84F9W | 4M49F9W | 4M84F9W | 4M50F9W |
| | High | | | | | | | 4M85F9W | 4M50F9W |
| 10MHz | Low | | | | | | | 9M69F9W | 9M01F9W |
| | Mid | 9M68F9W | 8M97F9W | 9M67F9W | 8M99F9W | 9M67F9W | 8M97F9W | 9M68F9W | 9M00F9W |
| | High | | | | | | | 9M68F9W | 9M00F9W |
| 15MHz | Low | | | | | | | 14M5F9W | 13M5F9W |
| | Mid | 14M5F9W | 13M4F9W | 14M5F9W | 13M5F9W | 14M5F9W | 13M5F9W | 14M5F9W | 13M5F9W |
| | High | | | | | | | 14M5F9W | 13M5F9W |
| 20MHz | Low | | | | | | | 19M4F9W | 17M9F9W |
| | Mid | 19M3F9W | 17M9F9W | 19M3F9W | 18M0F9W | 19M4F9W | 17M9F9W | 19M4F9W | 17M9F9W |
| | High | | | | | | | 19M4F9W | 17M9F9W |

Note: FCC emission designators are based on 26dB emission bandwidth. ISED emission designators are based on 99% emission bandwidth.

OCCUPIED BANDWIDTH



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| | | |
|---|------------------------------|-----------------------------|
| EUT: AHFIL Remote Radio Head | | Work Order: NOKI0037 |
| Serial Number: YK21400036 | | Date: 28-Feb-22 |
| Customer: Nokia Solutions and Networks | | Temperature: 22.6 °C |
| Attendees: David Le, John Rattanavong | | Humidity: 23.7% RH |
| Project: None | | Barometric Pres.: 1026 mbar |
| Tested by: Mark Baytan | Power: 54 VDC | Job Site: TX09 |
| TEST SPECIFICATIONS | | Test Method |
| FCC 24E:2022 | ANSI C63.26:2015 | |
| RSS-133 Issue 6:2013+A1:2018 | RSS-133 Issue 6:2013+A1:2018 | |
| COMMENTS | | |
| All measurement path losses accounted for in the reference level offset including any attenuators, filters, and DC blocks. Band 25 carriers enabled at maximum power is 80 watts/carrier. | | |
| DEVIATIONS FROM TEST STANDARD | | |
| None | | |
| Configuration # | 2 | Signature |
| | | Value Value Limit Result |
| | | 99% (MHz) 26dB (MHz) |

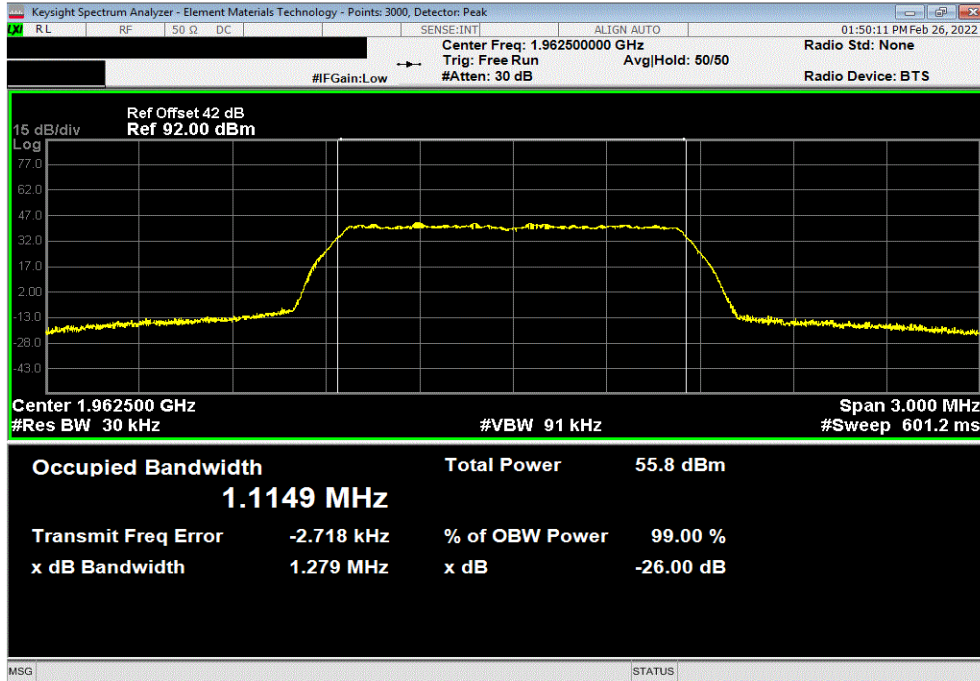
| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier | Value | Value | Limit | Result |
|--|-----------|------------|-------------|--------|
| Port 1 | 99% (MHz) | 26dB (MHz) | | |
| 1.4 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 1.12 | 1.28 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 1.12 | 1.27 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 1.12 | 1.28 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Low Channel, 1930.7 MHz | 1.12 | 1.29 | Within Band | Pass |
| Mid Channel, 1962.5 MHz | 1.12 | 1.29 | Within Band | Pass |
| High Channel, 1989.3 MHz | 1.12 | 1.29 | Within Band | Pass |
| 3 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 2.71 | 2.92 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 2.70 | 2.93 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 2.71 | 2.92 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 2.71 | 2.93 | Within Band | Pass |
| Low Channel, 1931.5 MHz | 2.71 | 2.93 | Within Band | Pass |
| High Channel, 1988.5 MHz | 2.71 | 2.92 | Within Band | Pass |
| 5 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 4.51 | 4.86 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 4.51 | 4.78 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 4.51 | 4.84 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 4.5 | 4.84 | Within Band | Pass |
| Low Channel, 1932.5 MHz | 4.49 | 4.79 | Within Band | Pass |
| High Channel, 1992.5 MHz | 4.51 | 4.78 | Within Band | Pass |
| 10 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 8.98 | 9.68 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 8.97 | 9.63 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 8.98 | 9.67 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 8.99 | 9.65 | Within Band | Pass |
| Low Channel, 1935 MHz | 8.97 | 9.67 | Within Band | Pass |
| High Channel, 1990 MHz | 8.98 | 9.66 | Within Band | Pass |
| 15 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 13.5 | 14.5 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 13.5 | 14.5 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 13.5 | 14.5 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 13.47 | 14.52 | Within Band | Pass |
| Low Channel, 1937.5 MHz | 13.46 | 14.48 | Within Band | Pass |
| High Channel, 1987.5 MHz | 13.5 | 14.5 | Within Band | Pass |
| 20 MHz Bandwidth | | | | |
| QPSK Modulation | | | | |
| Mid Channel, 1962.5 MHz | 18.0 | 19.4 | Within Band | Pass |
| 16-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 18.0 | 19.3 | Within Band | Pass |
| 64-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 18.0 | 19.4 | Within Band | Pass |
| 256-QAM Modulation | | | | |
| Mid Channel, 1962.5 MHz | 17.9 | 19.35 | Within Band | Pass |
| Low Channel, 1940 MHz | 17.9 | 19.33 | Within Band | Pass |
| High Channel, 1985 MHz | 17.9 | 19.3 | Within Band | Pass |

OCCUPIED BANDWIDTH

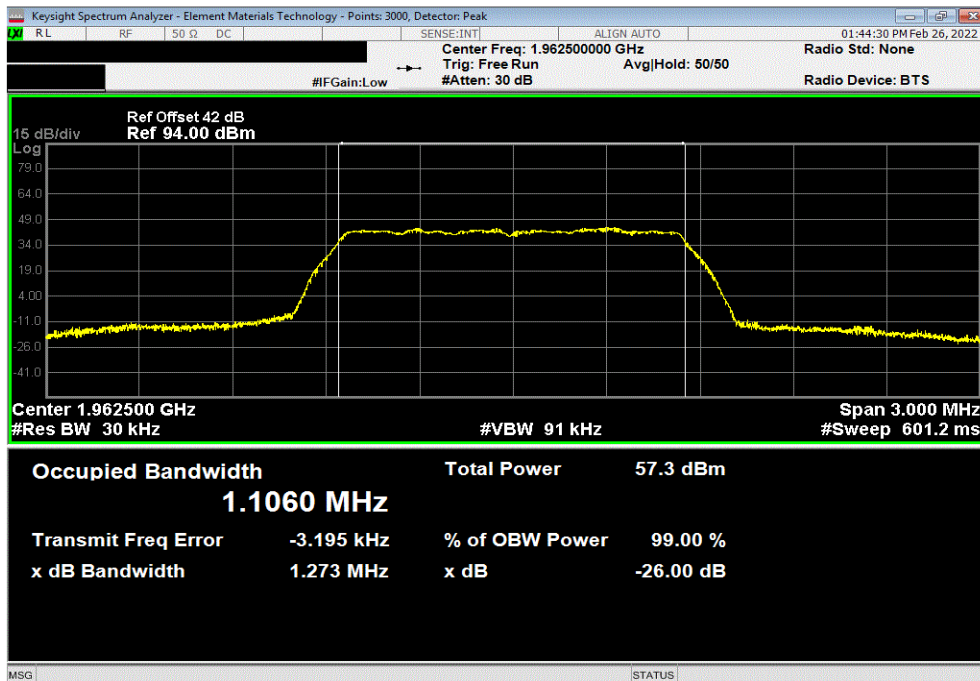


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| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 1.12 | 1.28 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 1.12 | 1.27 | Within Band | Pass | |

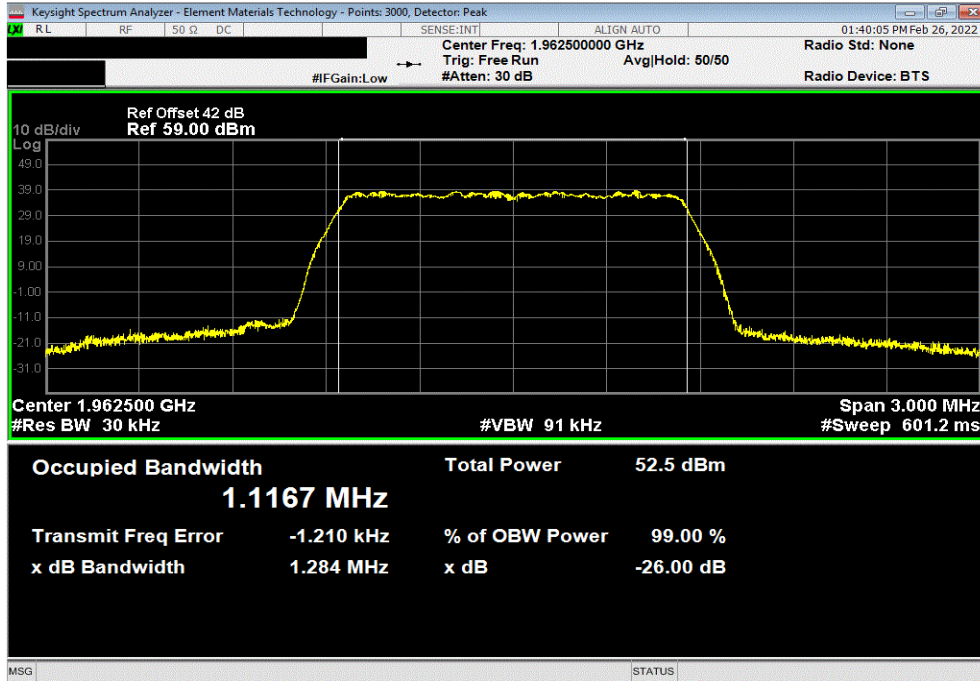


OCCUPIED BANDWIDTH

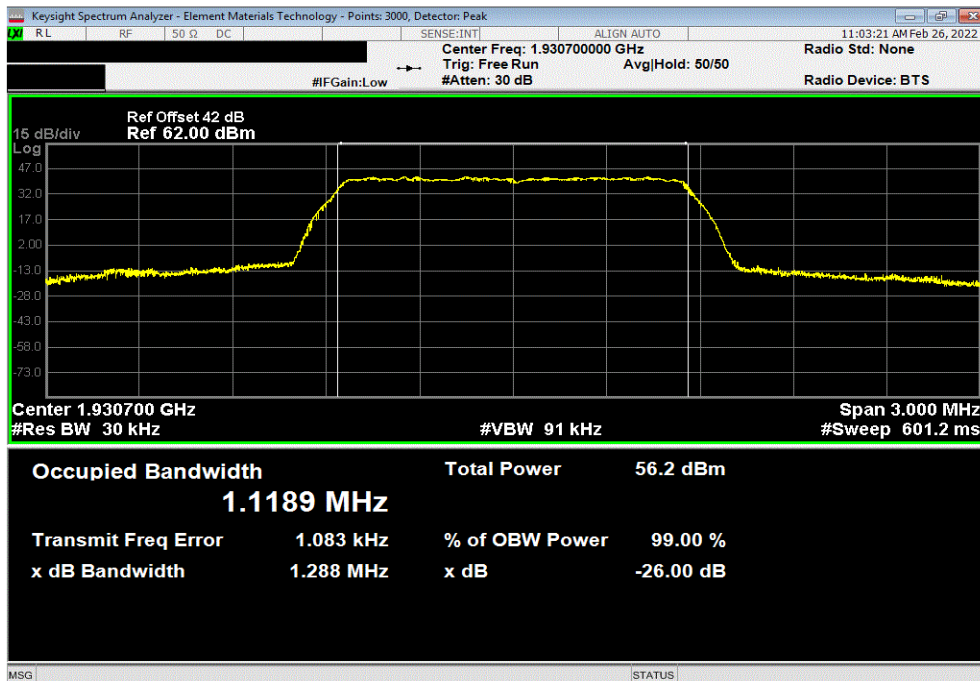


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 1.12 | 1.28 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1930.7 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 1.12 | 1.29 | Within Band | Pass | |

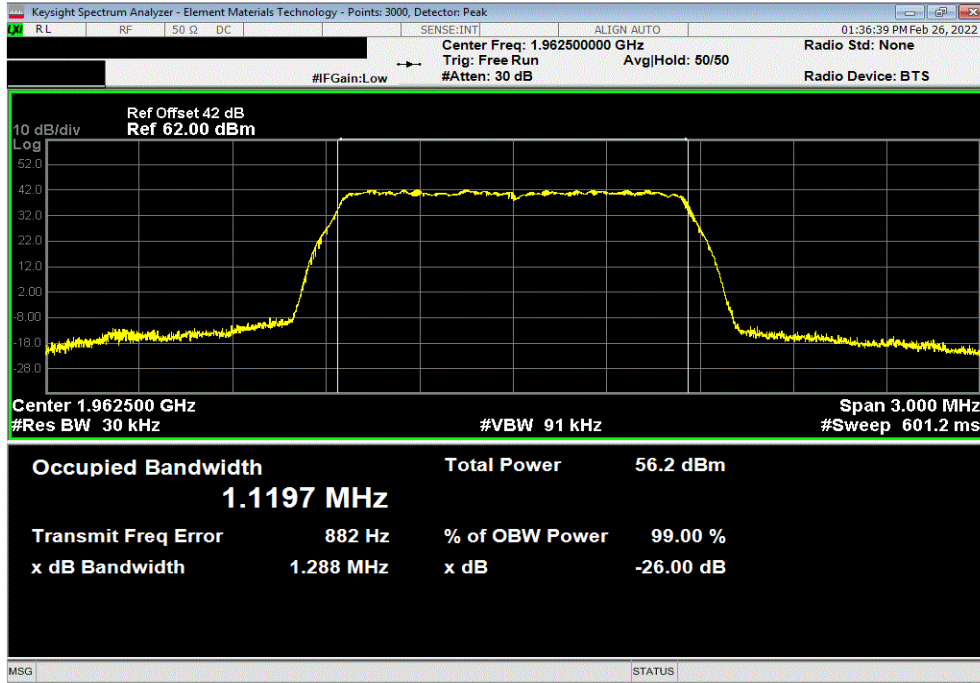


OCCUPIED BANDWIDTH

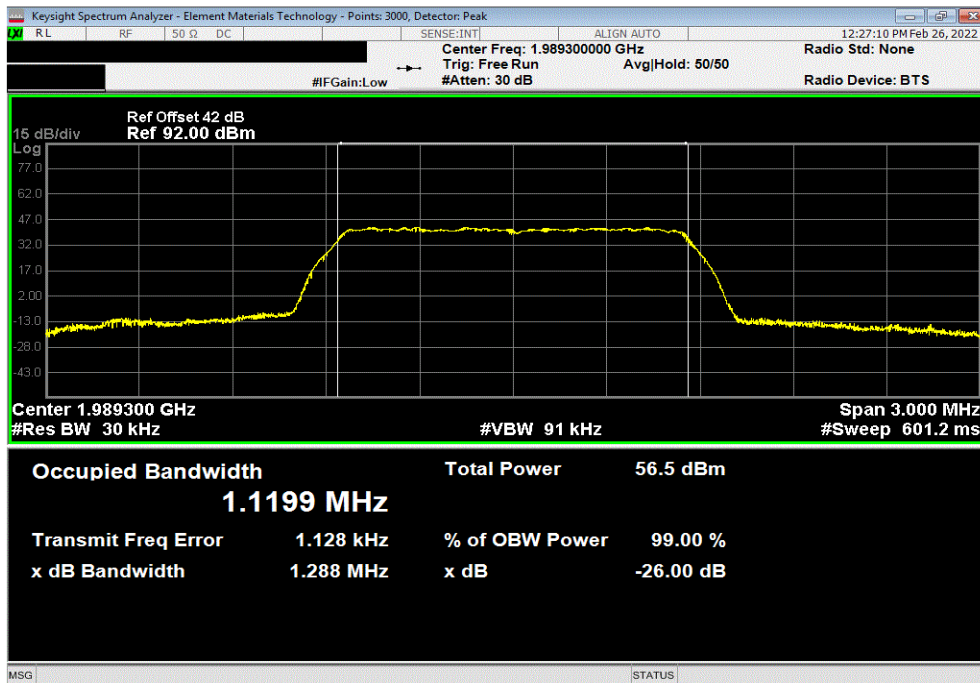


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 1.12 | 1.29 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 1.4 MHz Bandwidth, 256-QAM Modulation, High Channel, 1989.3 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 1.12 | 1.29 | Within Band | Pass | | |

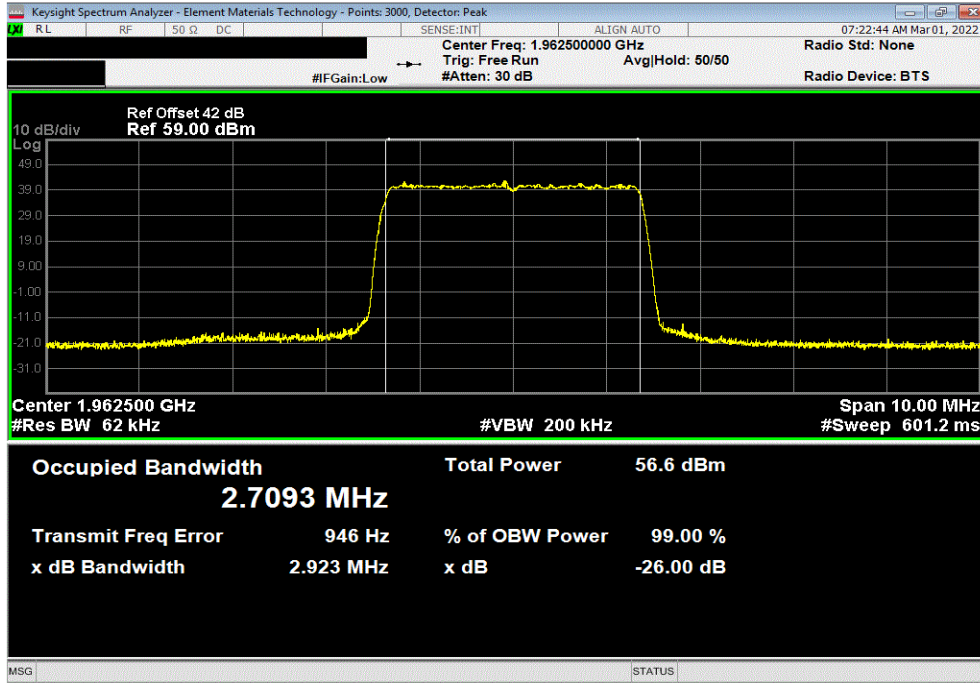


OCCUPIED BANDWIDTH

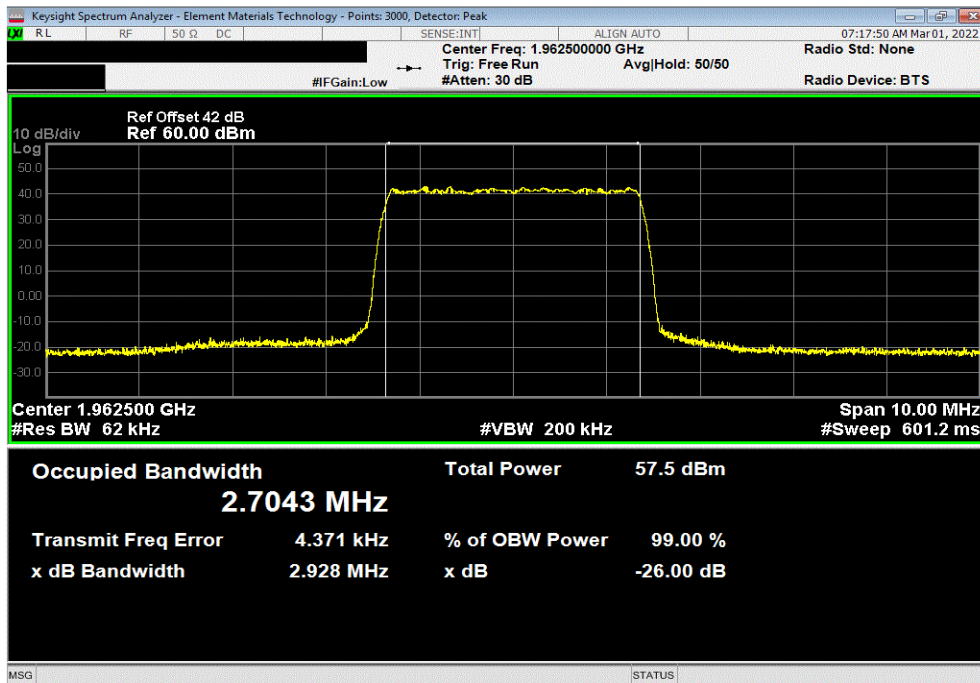


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 2.71 | 2.92 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 2.70 | 2.93 | Within Band | Pass | | |

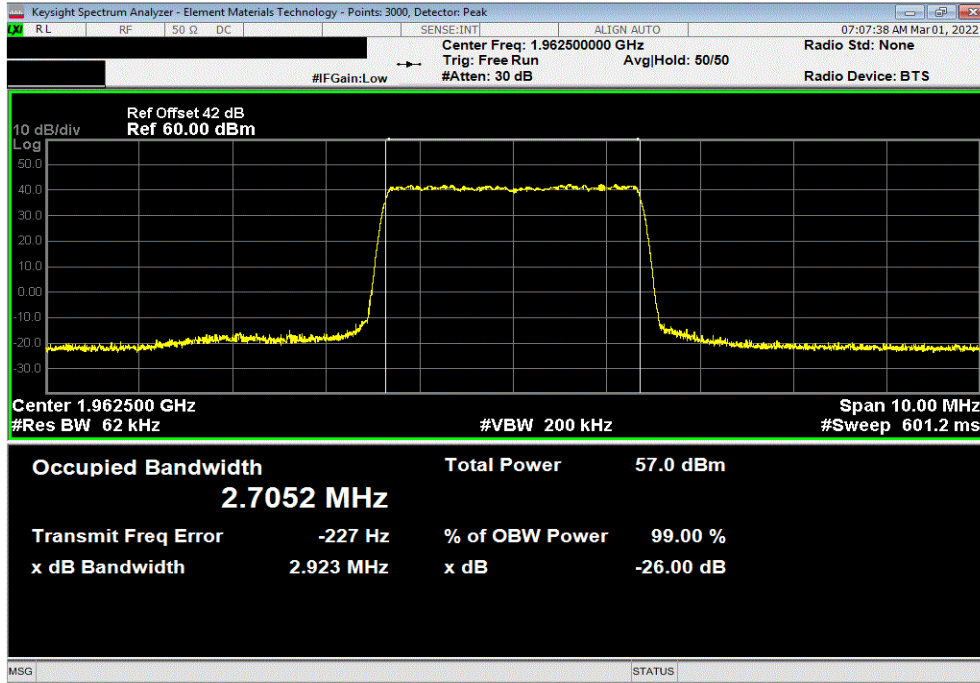


OCCUPIED BANDWIDTH

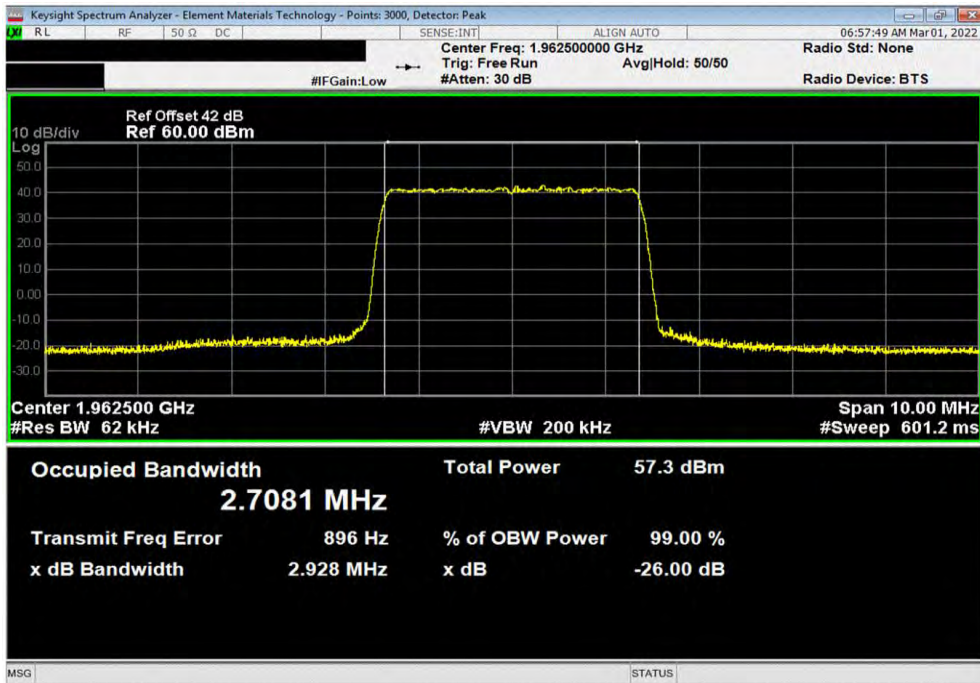


TotTx 2021.12.14.1 XMit 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 2.71 | 2.92 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 2.71 | 2.93 | Within Band | Pass | | |

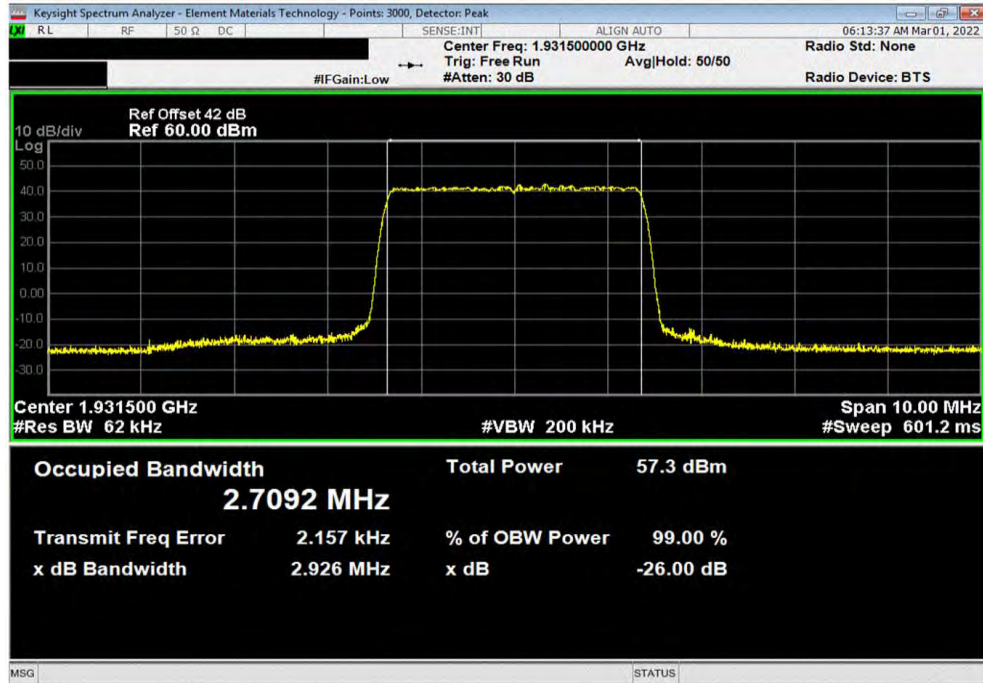


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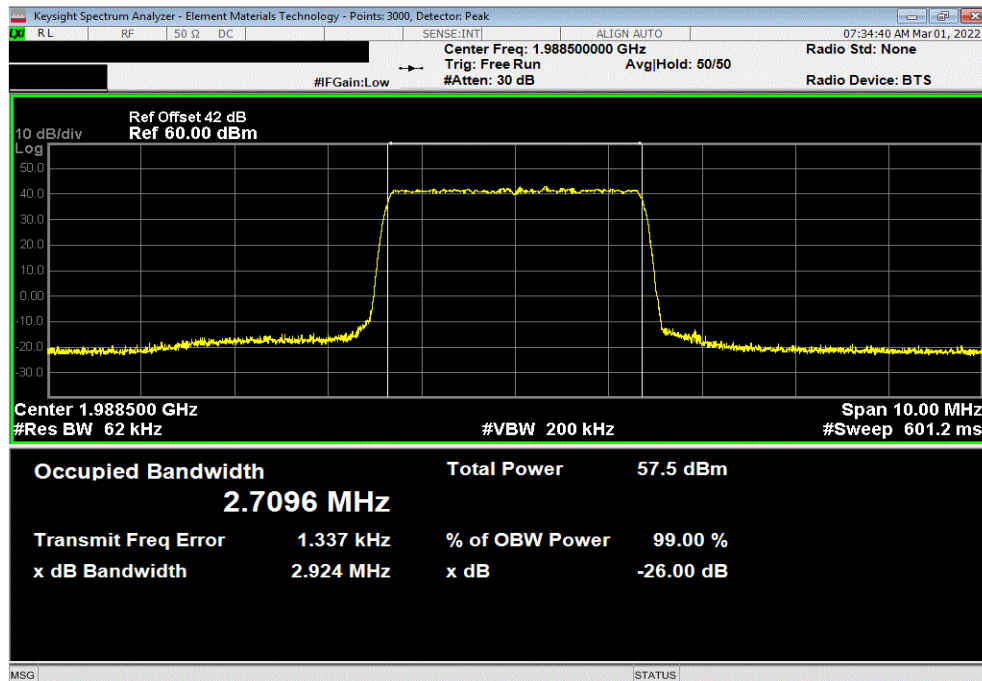


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1931.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 2.71 | 2.93 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 3 MHz Bandwidth, 256-QAM Modulation, High Channel, 1988.5 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 2.71 | 2.92 | Within Band | Pass | | |

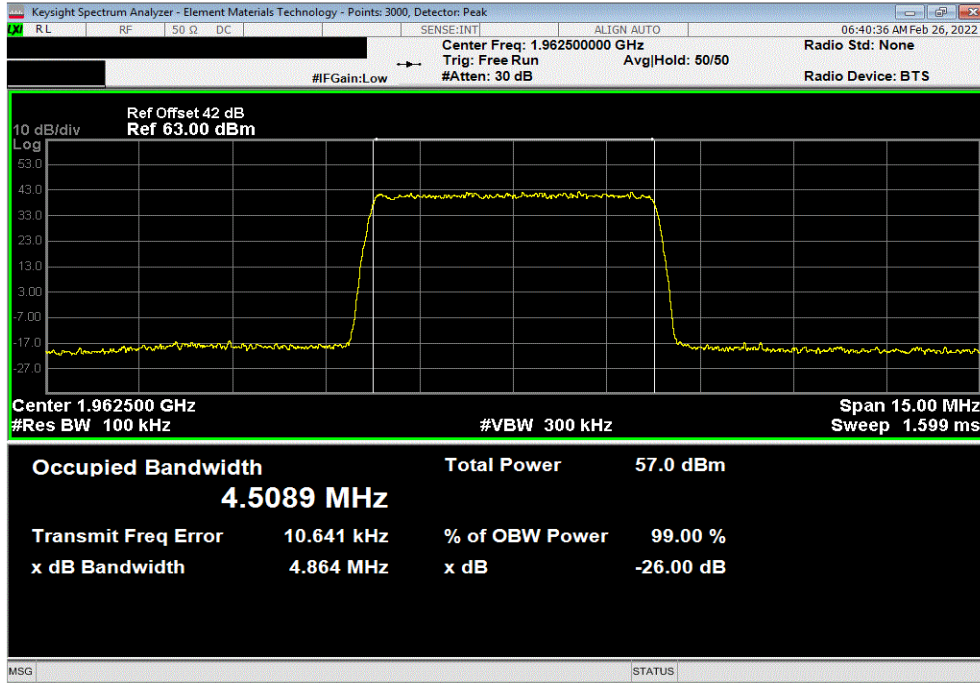


OCCUPIED BANDWIDTH

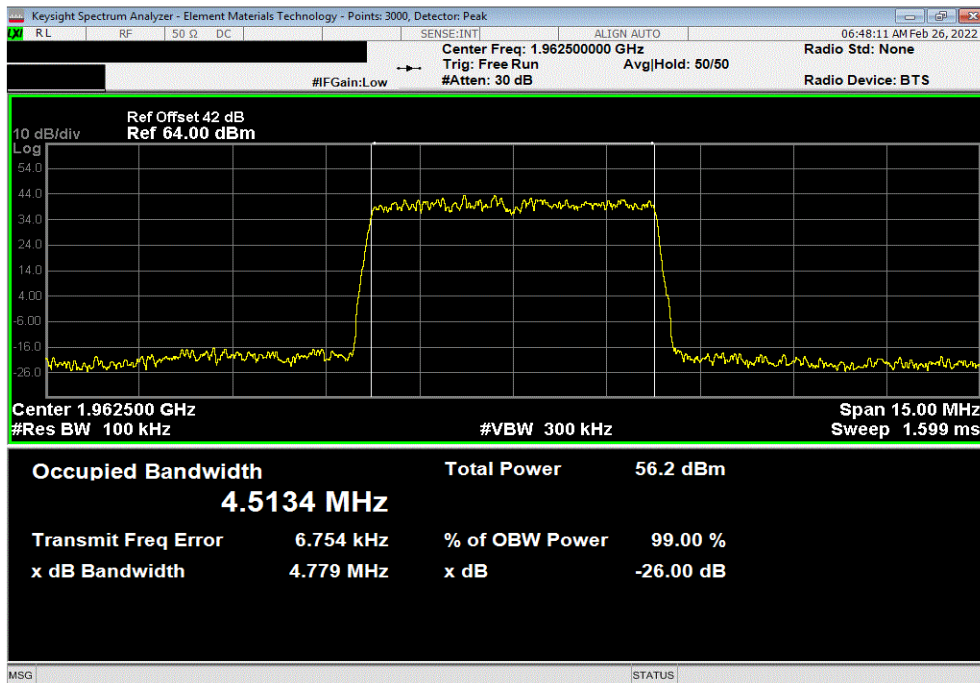


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 4.51 | 4.86 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 4.51 | 4.78 | Within Band | Pass | |

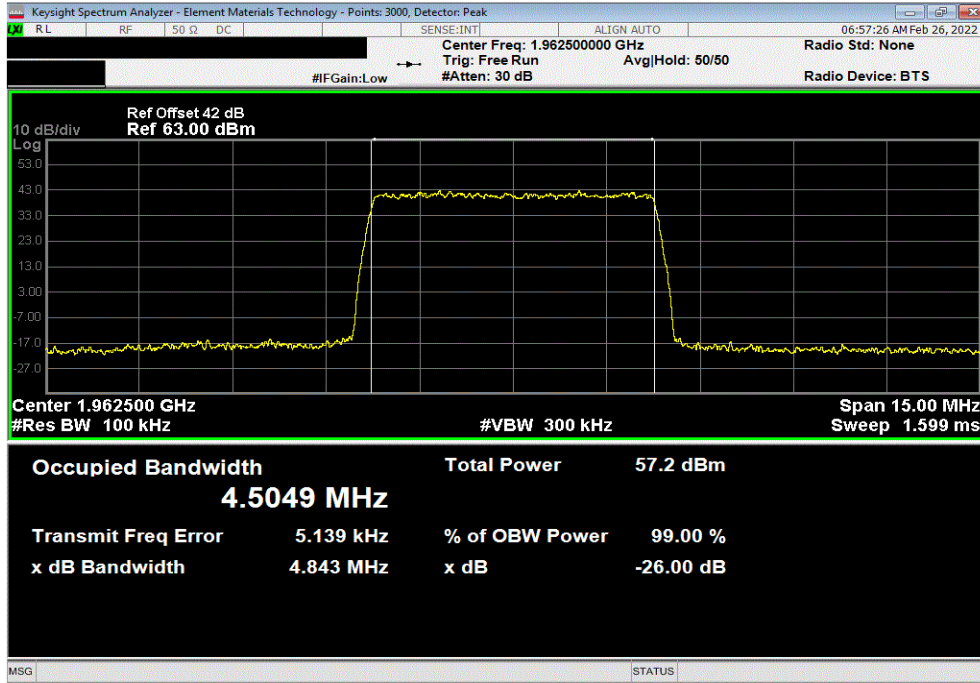


OCCUPIED BANDWIDTH

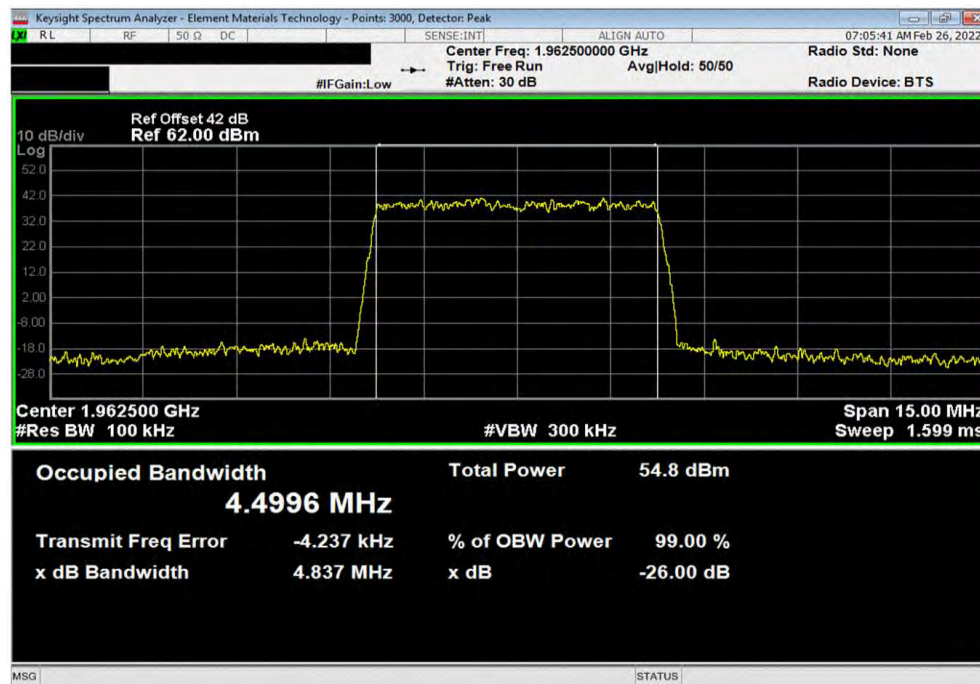


TotTx 2021.12.14.1 XMit 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 4.51 | 4.84 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 4.5 | 4.84 | Within Band | Pass | |

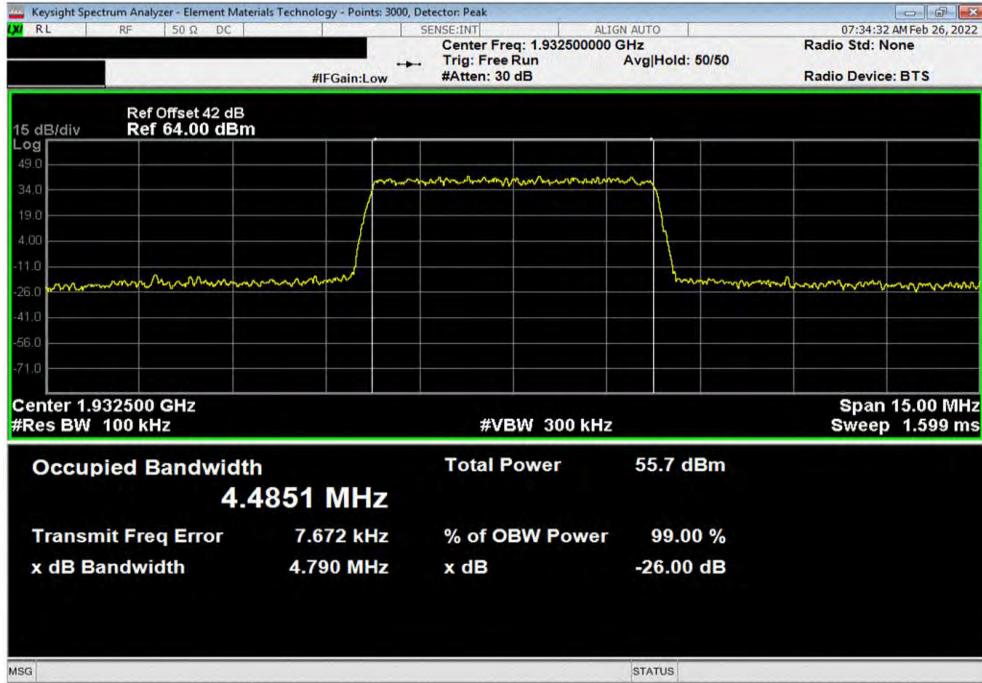


OCCUPIED BANDWIDTH

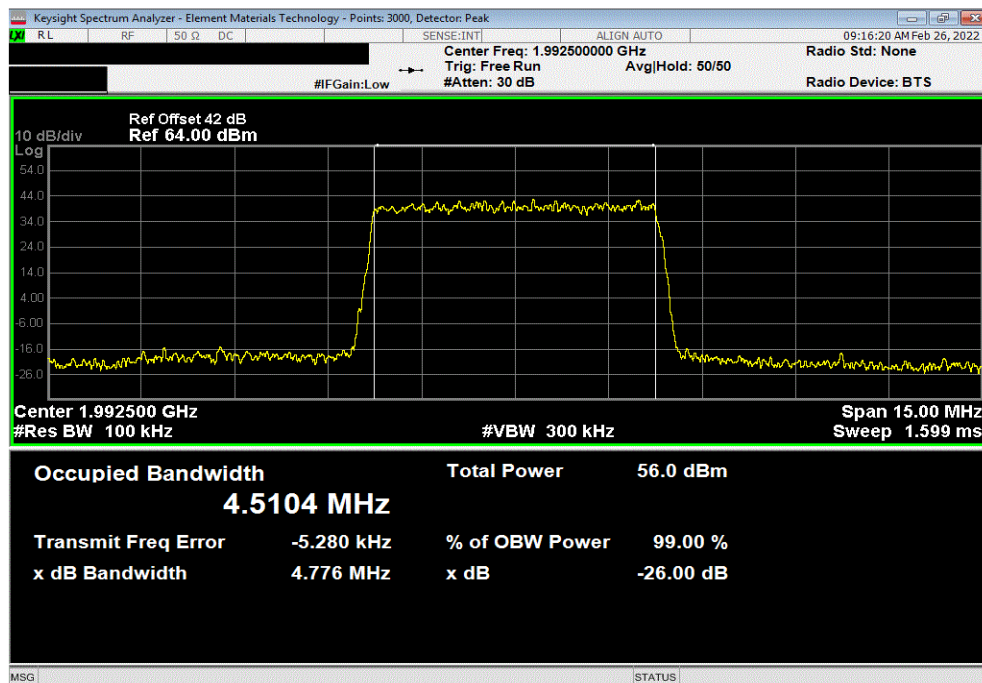


TotTx 2021.12.14.1 XMit 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1932.5 MHz | | | | | | | |
|--|--|-----------|------------|--|--|-------------|--------|
| | | Value | Value | | | Limit | Result |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 4.49 | 4.79 | | | Within Band | Pass |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 1992.5 MHz | | | | | | | |
|---|--|-----------|------------|--|--|-------------|--------|
| | | Value | Value | | | Limit | Result |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 4.51 | 4.78 | | | Within Band | Pass |

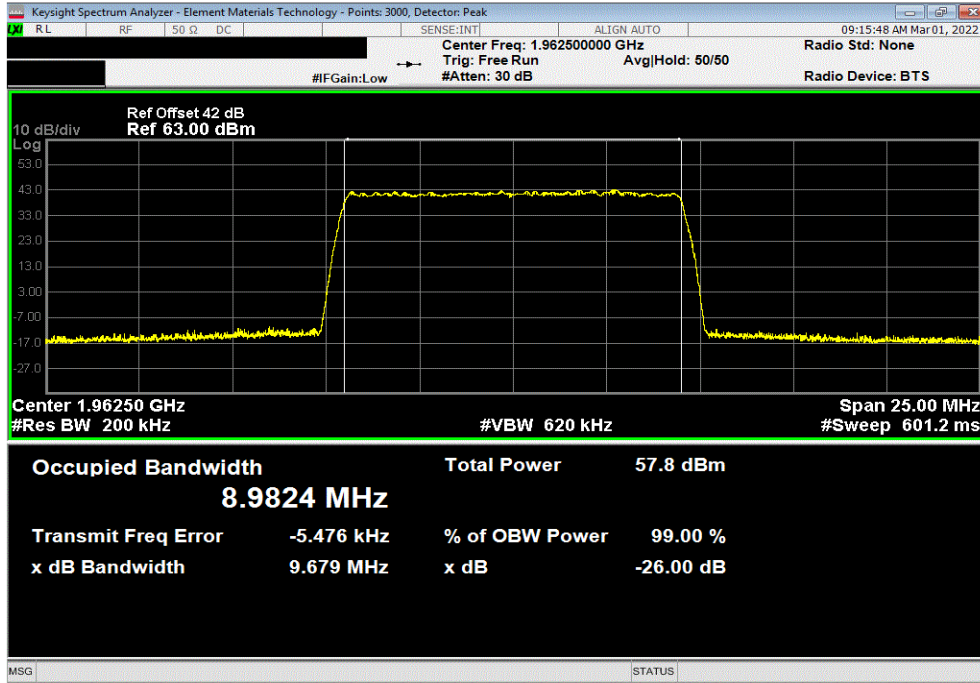


OCCUPIED BANDWIDTH

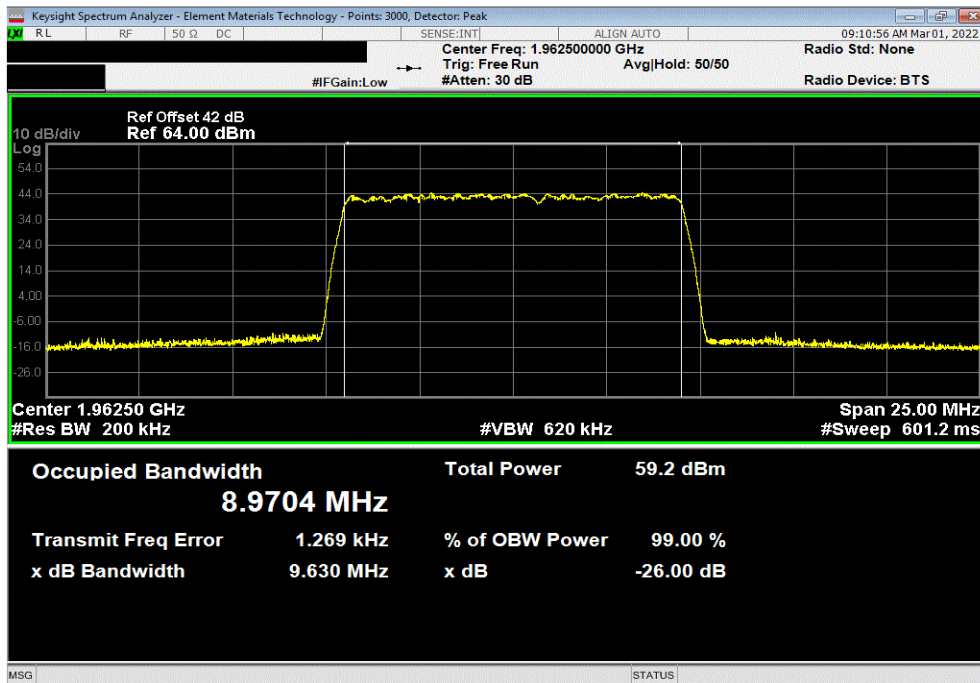


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 8.98 | 9.68 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | | | | |
| | | 99% (MHz) | 26dB (MHz) | Limit | Result | | |
| | | 8.97 | 9.63 | Within Band | Pass | | |

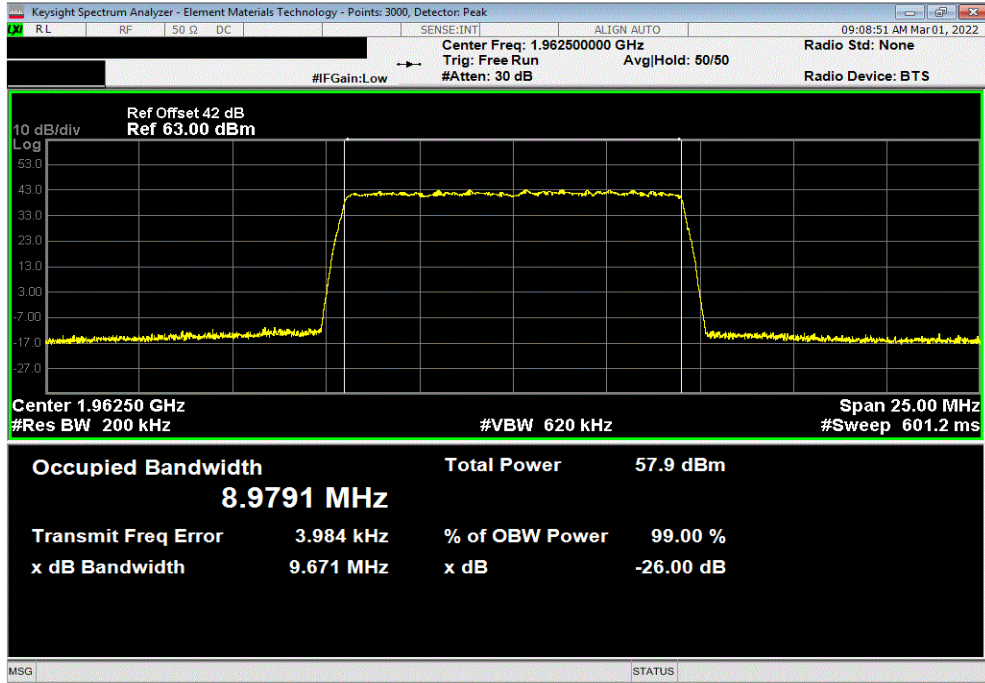


OCCUPIED BANDWIDTH

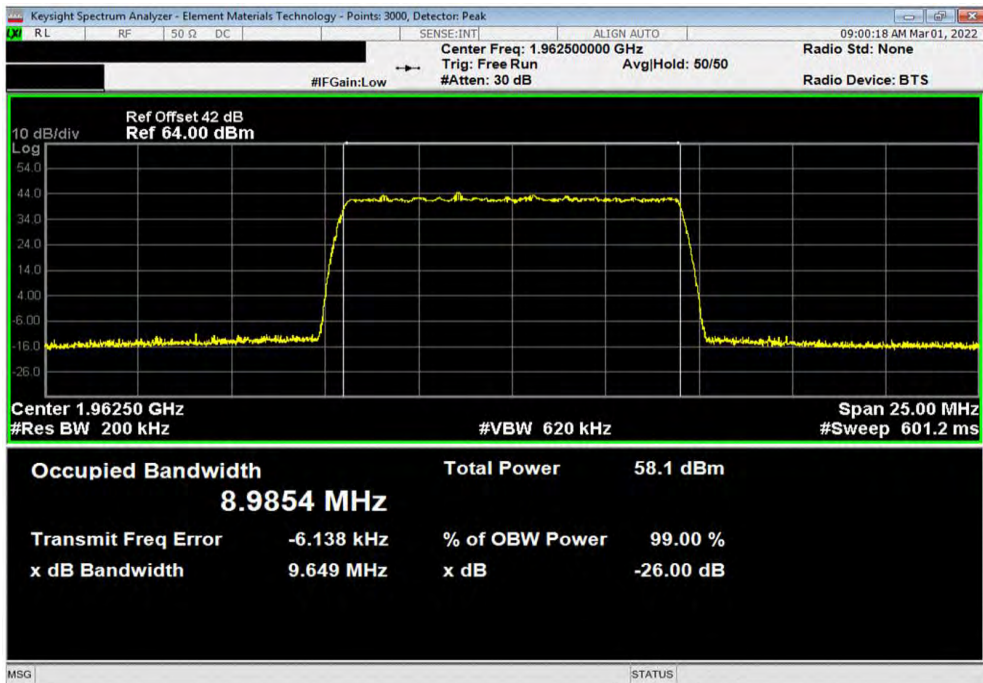


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 8.98 | 9.67 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 8.99 | 9.65 | Within Band | Pass | | |

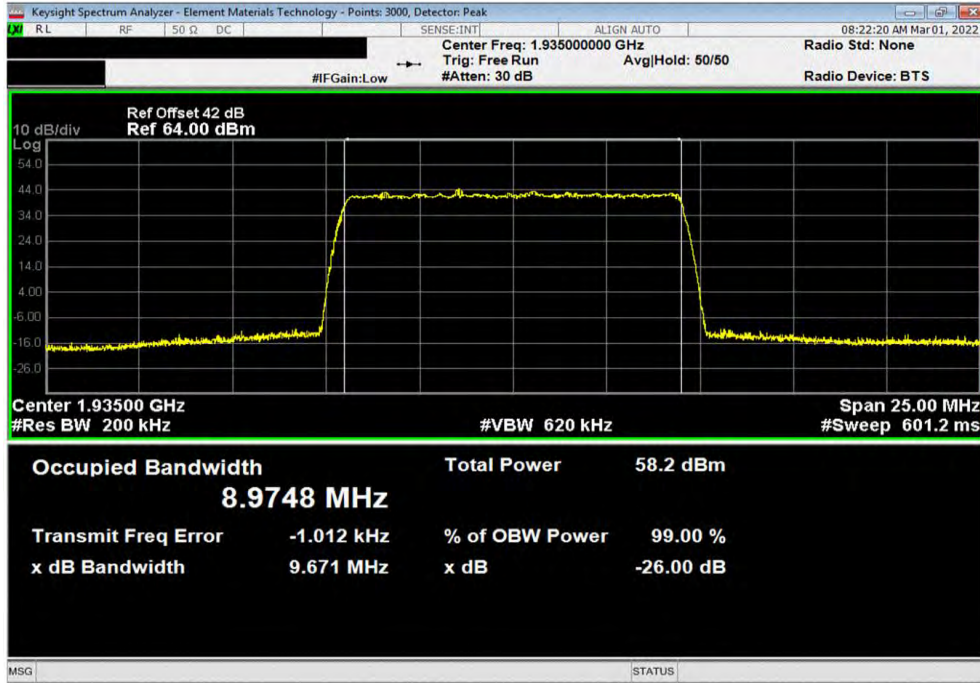


OCCUPIED BANDWIDTH

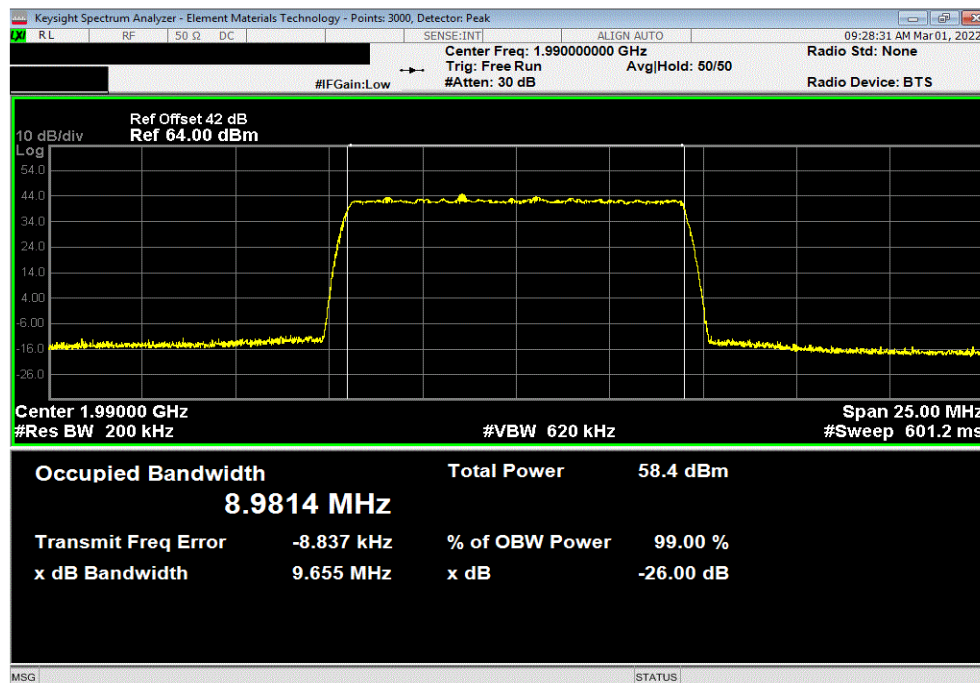


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1935 MHz | | | | | | | |
|---|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 8.97 | 9.67 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 1990 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 8.98 | 9.66 | Within Band | Pass | | |

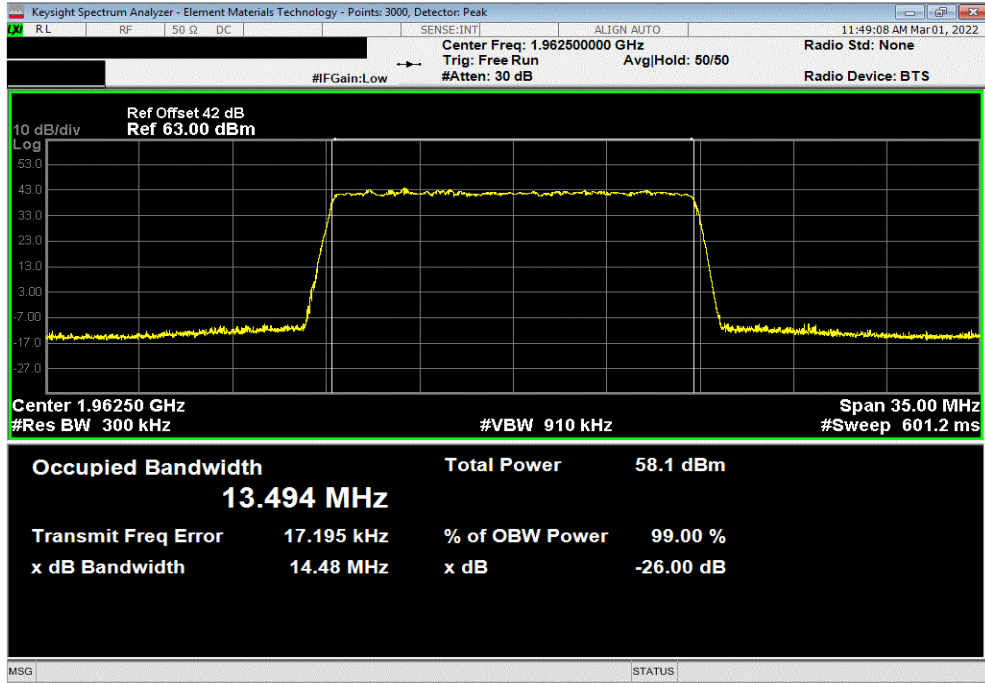


OCCUPIED BANDWIDTH

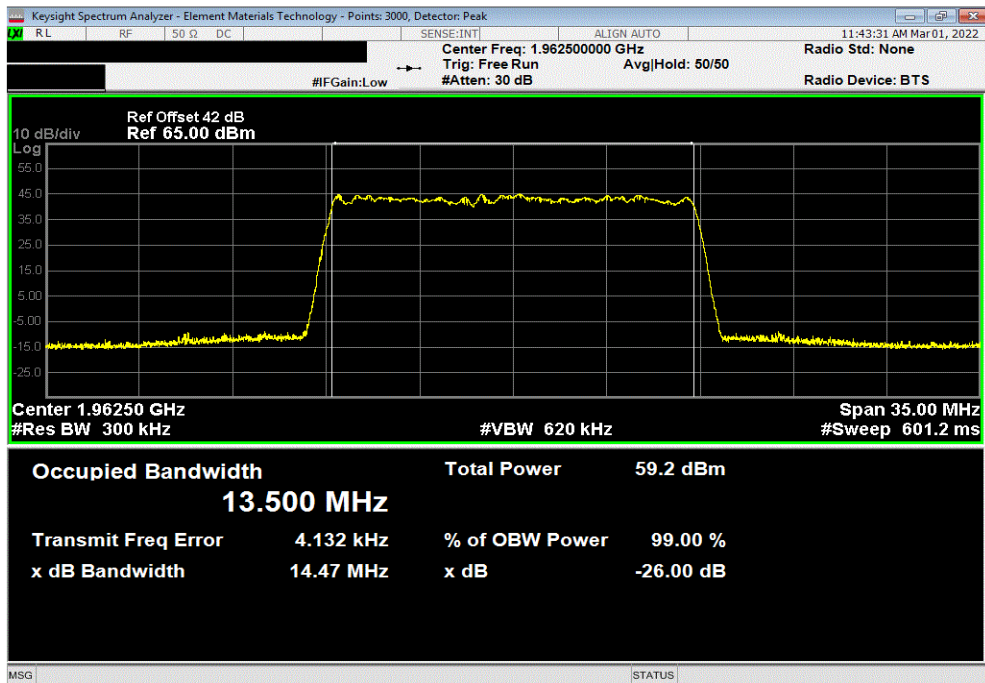


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 13.5 | 14.5 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 13.5 | 14.5 | Within Band | Pass | |

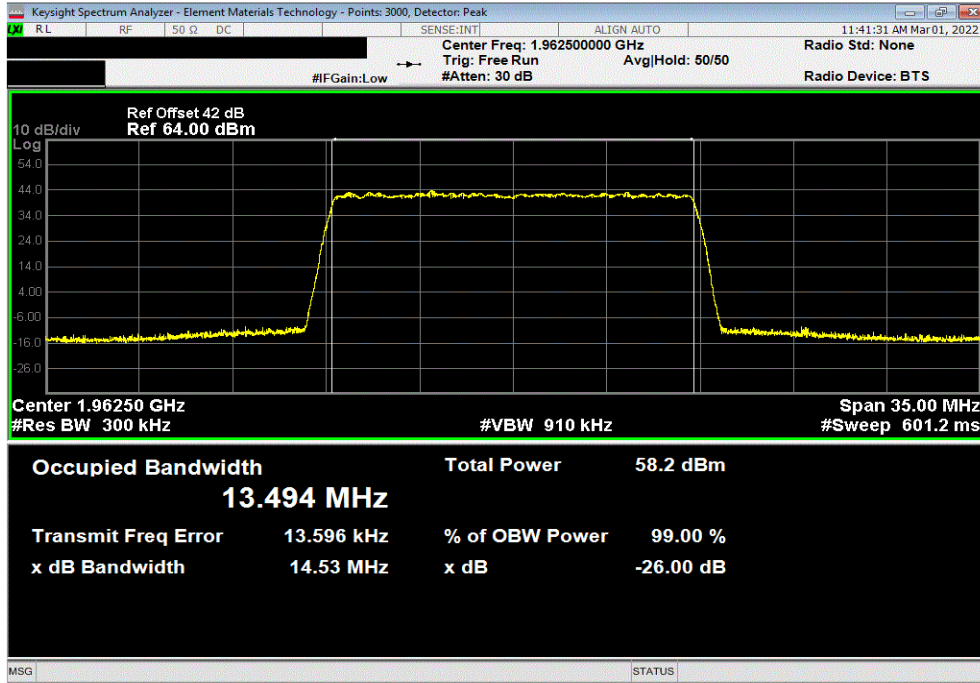


OCCUPIED BANDWIDTH

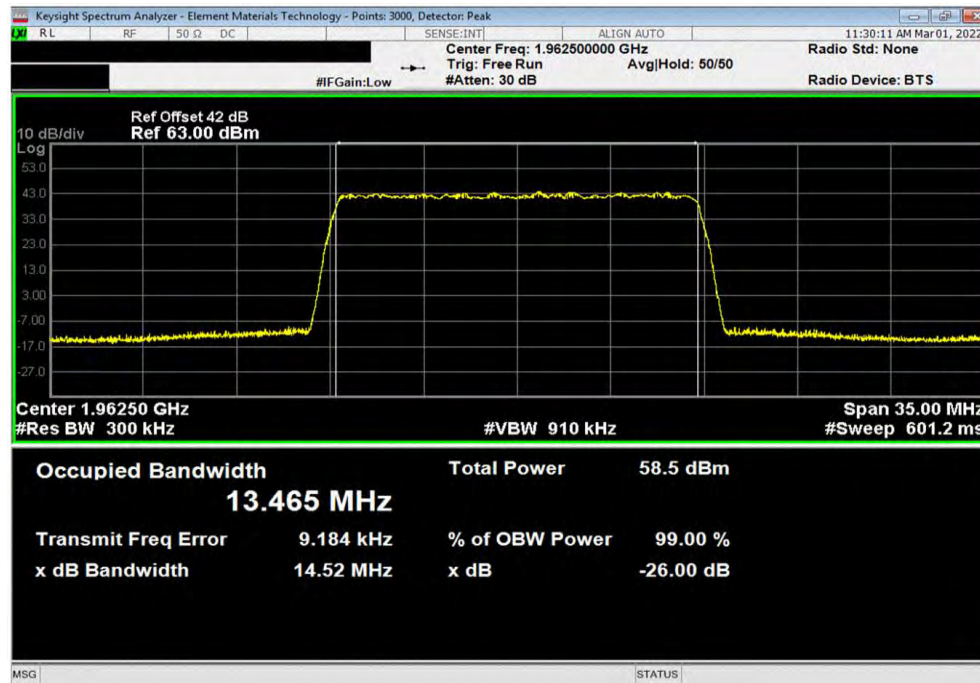


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|--|--|-------------|--------|
| | | Value | Value | | | Limit | Result |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 13.5 | 14.5 | | | Within Band | Pass |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|---|--|-----------|------------|--|--|-------------|--------|
| | | Value | Value | | | Limit | Result |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 13.47 | 14.52 | | | Within Band | Pass |

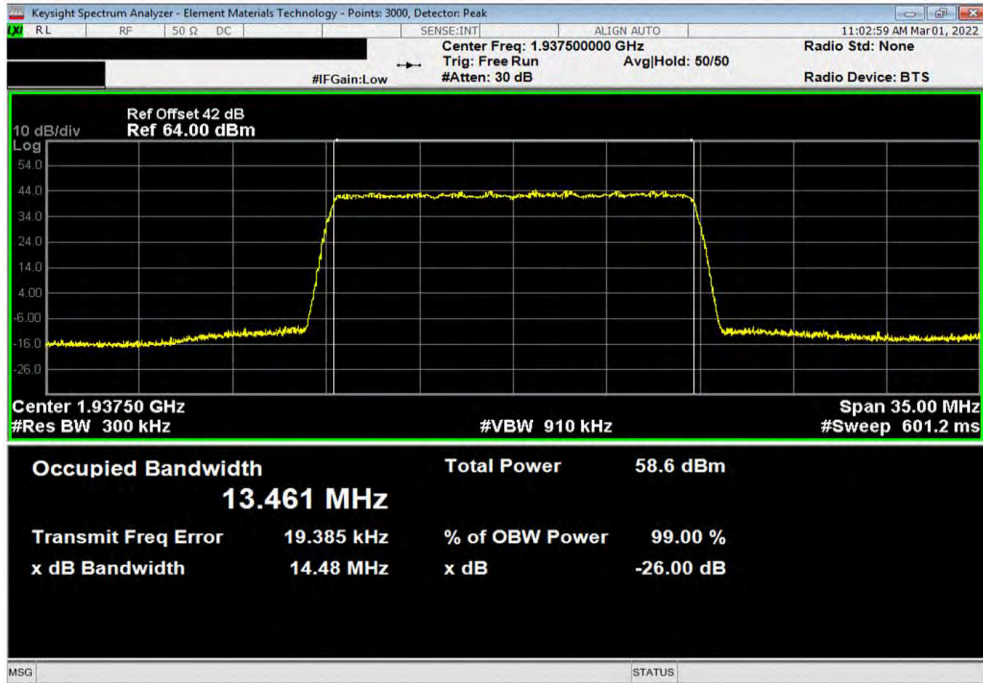


OCCUPIED BANDWIDTH

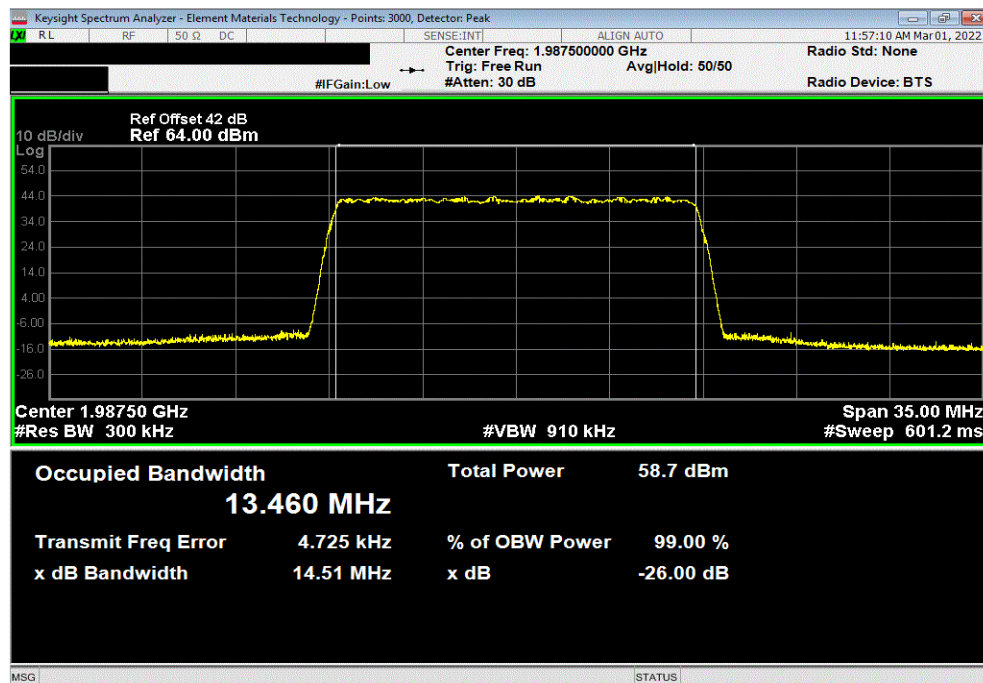


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1937.5 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--|--------|
| | | | Value | Value | | | |
| | | | 99% (MHz) | 26dB (MHz) | Limit | | Result |
| | | | 13.46 | 14.48 | Within Band | | Pass |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 1987.5 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--|--------|
| | | | Value | Value | | | |
| | | | 99% (MHz) | 26dB (MHz) | Limit | | Result |
| | | | 13.5 | 14.5 | Within Band | | Pass |

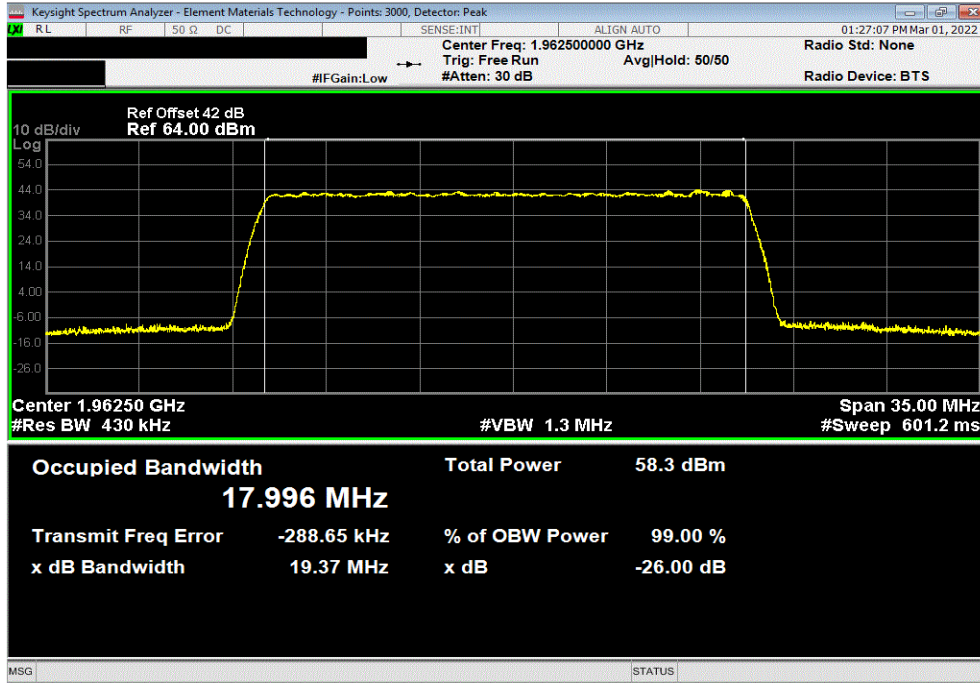


OCCUPIED BANDWIDTH

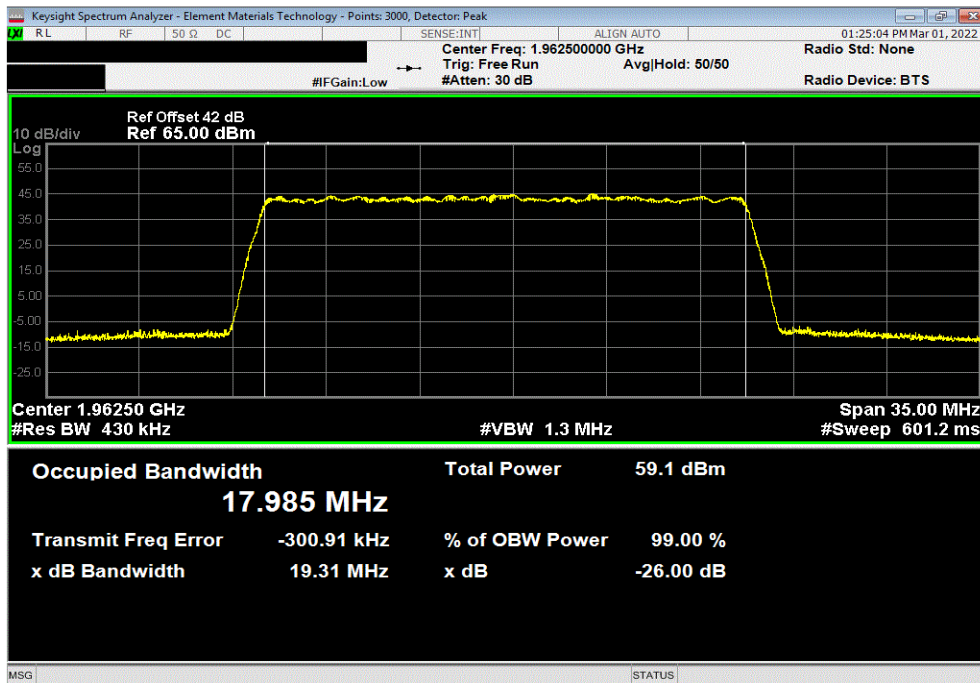


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 18.0 | 19.4 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | | |
|--|--|-----------|------------|-------------|--------|--|--|
| | | Value | Value | Limit | Result | | |
| | | 99% (MHz) | 26dB (MHz) | | | | |
| | | 18.0 | 19.3 | Within Band | Pass | | |

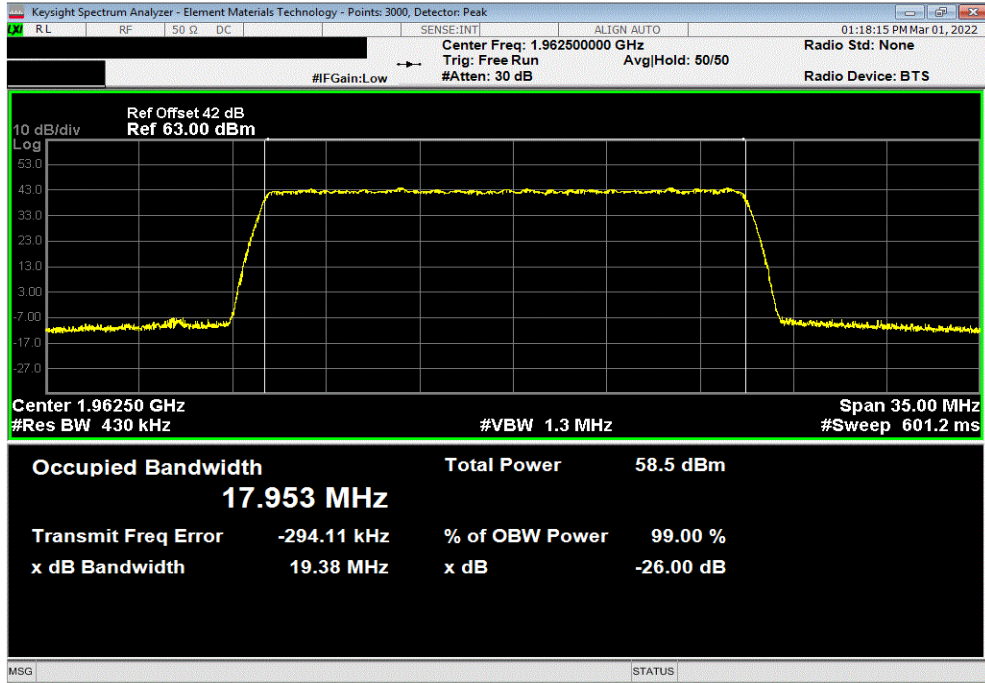


OCCUPIED BANDWIDTH

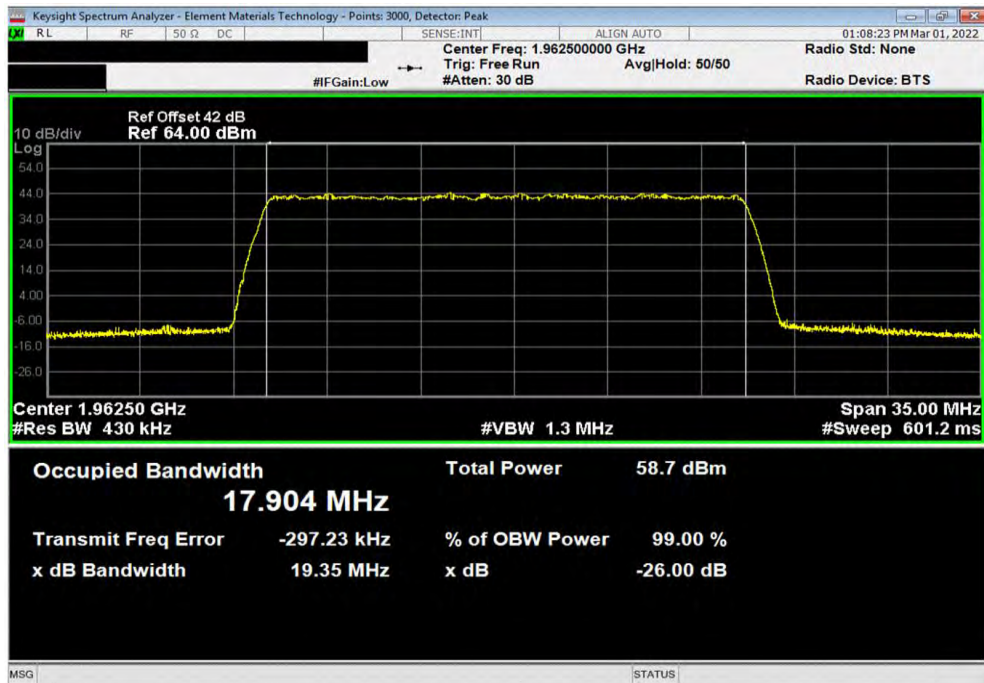


TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | |
|--|-----------|------------|-------------|--------|--|--|
| | Value | Value | Limit | Result | | |
| | 99% (MHz) | 26dB (MHz) | | | | |
| | 18.0 | 19.4 | Within Band | Pass | | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz | | | | | | |
|---|-----------|------------|-------------|--------|--|--|
| | Value | Value | Limit | Result | | |
| | 99% (MHz) | 26dB (MHz) | | | | |
| | 17.9 | 19.35 | Within Band | Pass | | |

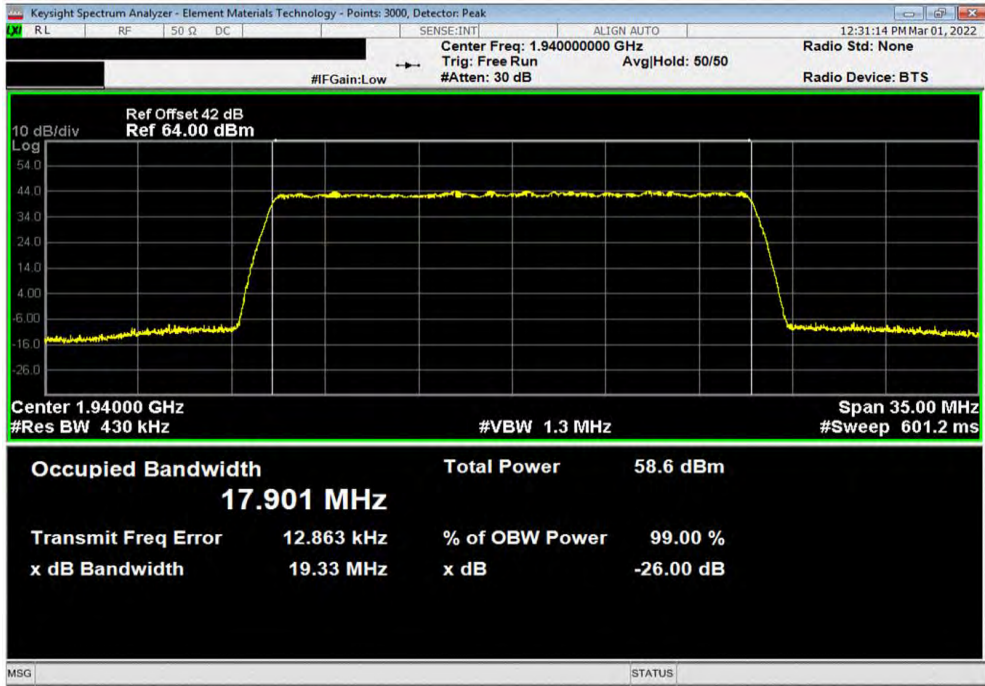


OCCUPIED BANDWIDTH



TbTx 2021.12.14.1 XMI 2022.02.07.0

| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1940 MHz | | | | | | | |
|---|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 17.9 | 19.33 | Within Band | Pass | |



| Band 25, 1930 MHz - 1995 MHz, LTE Single Carrier, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 1985 MHz | | | | | | | |
|--|--|--|-----------|------------|-------------|--------|--|
| | | | Value | Value | Limit | Result | |
| | | | 99% (MHz) | 26dB (MHz) | | | |
| | | | 17.9 | 19.3 | Within Band | Pass | |

