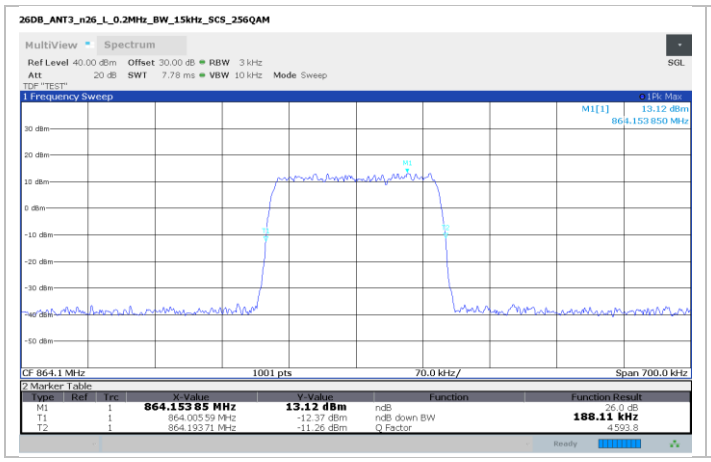
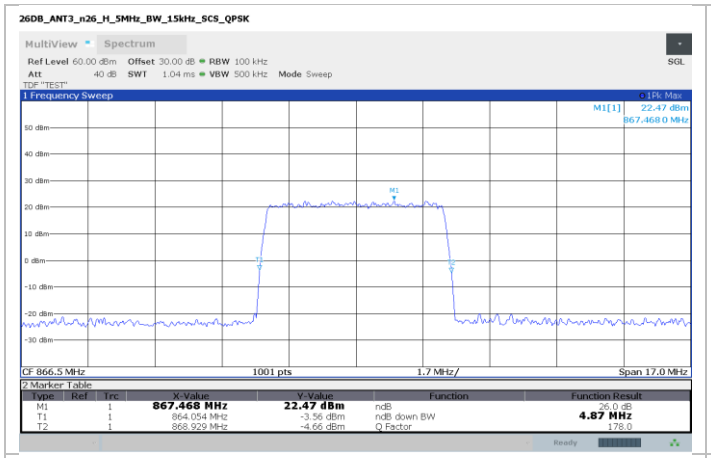
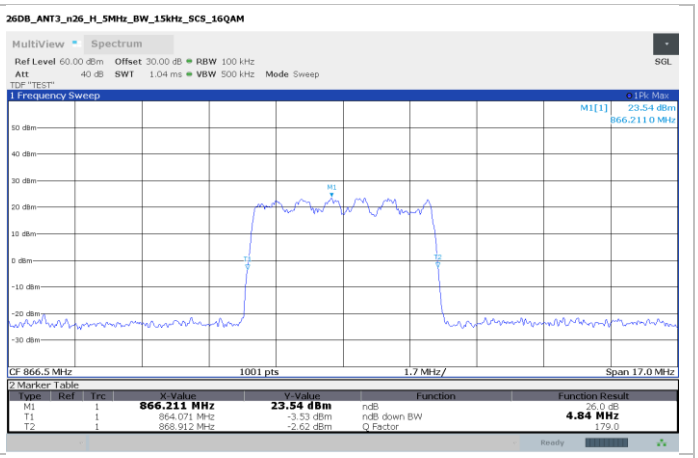
## Band n26 (NB-IoT) – 0.2 MHz



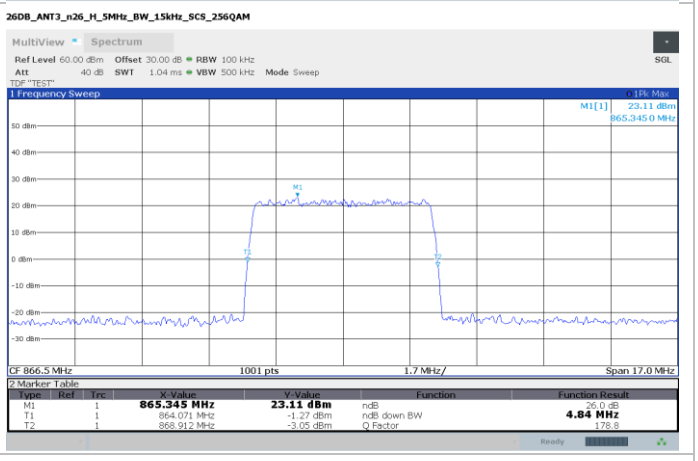


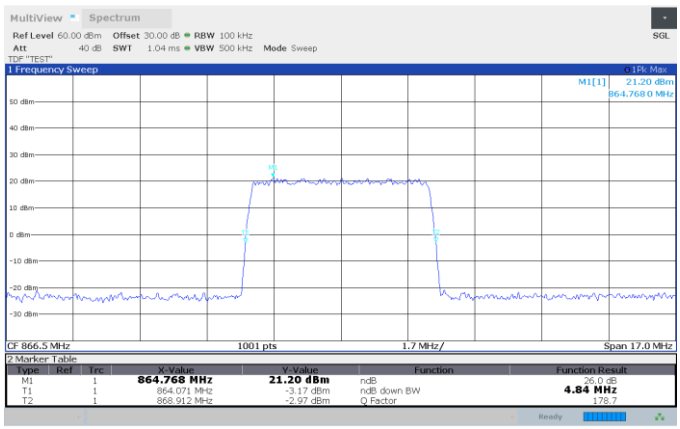
## Band n26 – 5 MHz










**Band n29:**

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n29 | 5 MHz | C | 720.5 | 4.84 |
| n29 | 5 MHz | C | 723 | 4.857 |
| n29 | 5 MHz | C | 725.5 | 4.84 |

***Table 8.3-8**: 26 dB Occupied bandwidth, QPSK Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 5 MHz | C | 720.5 | 4.84 |
| n29 | 5 MHz | C | 723 | 4.874 |
| n29 | 5 MHz | C | 725.5 | 4.823 |

***Table 8.3-9**: 26 dB Occupied bandwidth, 16QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 5 MHz | C | 720.5 | 4.84 |
| n29 | 5 MHz | C | 723 | 4.857 |
| n29 | 5 MHz | C | 725.5 | 4.806 |

***Table 8.3-10**: 26 dB Occupied bandwidth, 64QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 5 MHz | C | 720.5 | 4.823 |
| n29 | 5 MHz | C | 723 | 4.857 |
| n29 | 5 MHz | C | 725.5 | 4.84 |

***Table 8.3-11**: 26 dB Occupied bandwidth, 256QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 5 MHz | C | 720.5 | 4.84 |
| n29 | 5 MHz | C | 723 | 4.857 |
| n29 | 5 MHz | C | 725.5 | 4.84 |

***Table 8.3-12**: 26 dB Occupied bandwidth, 1024QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n29 | 10 MHz | C | 723 | 9.956 |

***Table 8.3-13**: 26 dB Occupied bandwidth, QPSK Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 10 MHz | C | 723 | 9.89 |

***Table 8.3-14**: 26 dB Occupied bandwidth, 16QAM Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 10 MHz | C | 723 | 9.89 |

***Table 8.3-15**: 26 dB Occupied bandwidth, 64QAM Modulation, 10 MHz*

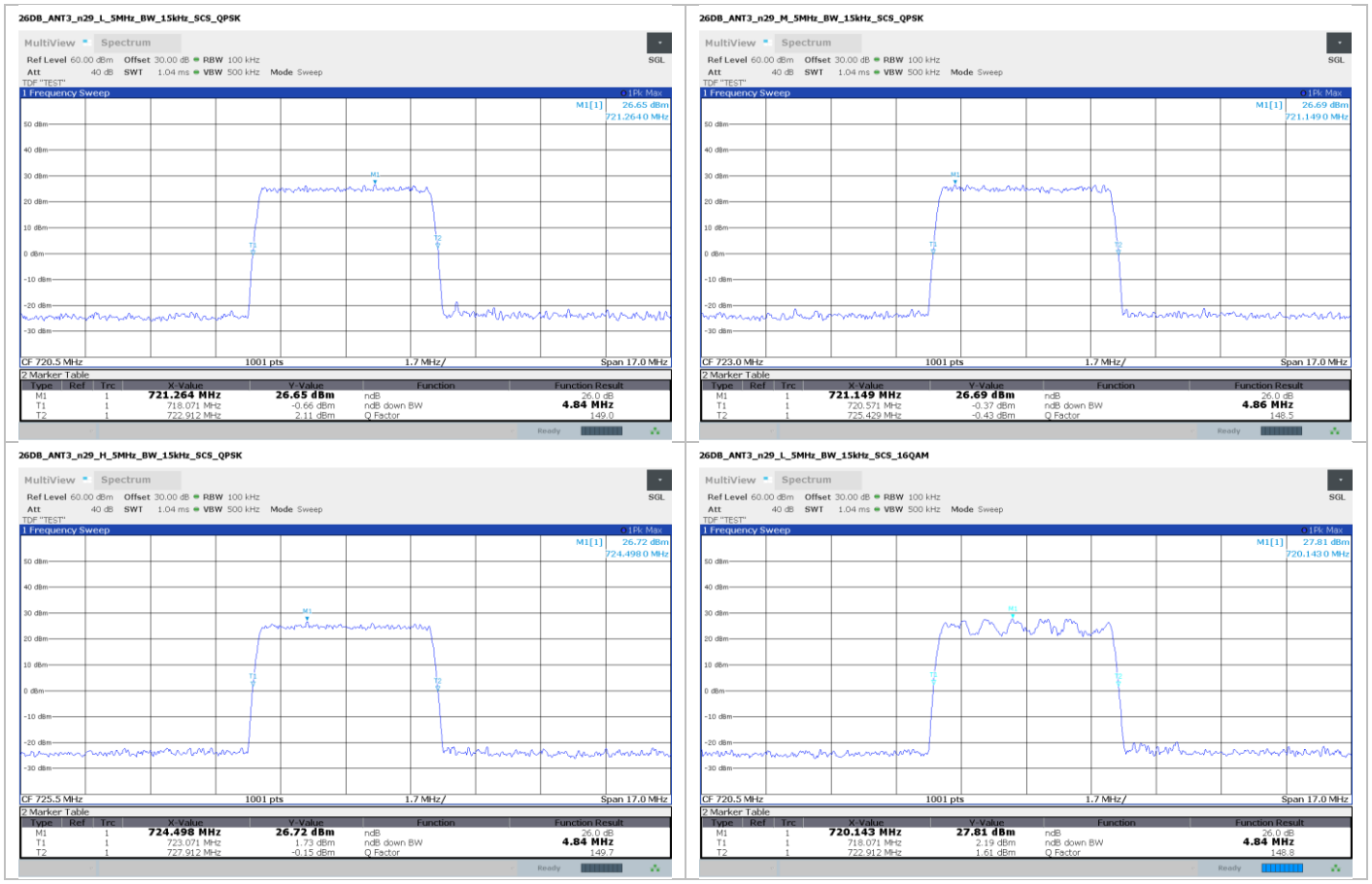
| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 10 MHz | C | 723 | 9.857 |

***Table 8.3-16**: 26 dB Occupied bandwidth, 256QAM Modulation, 10 MHz*

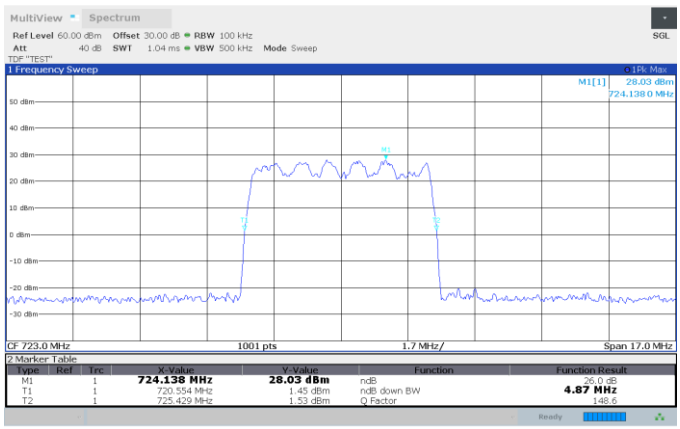
| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n29 | 10 MHz | C | 723 | 9.923 |

***Table 8.3-17**: 26 dB Occupied bandwidth, 1024QAM Modulation, 10 MHz*

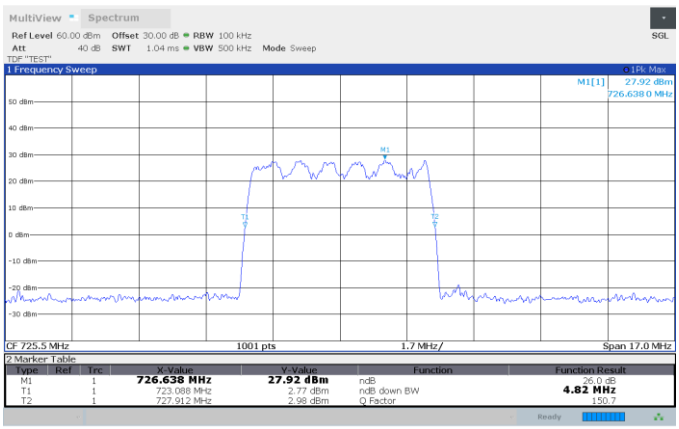
**Band n29 – 5 MHz**



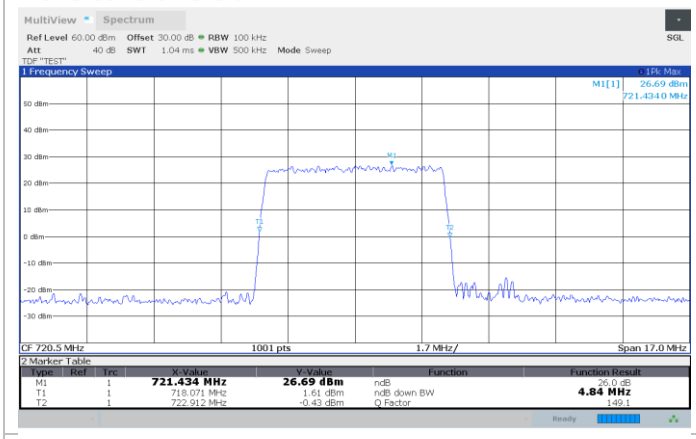
26DB_ANT3_n29_M_5MHz_BW_15kHz_SCS_16QAM



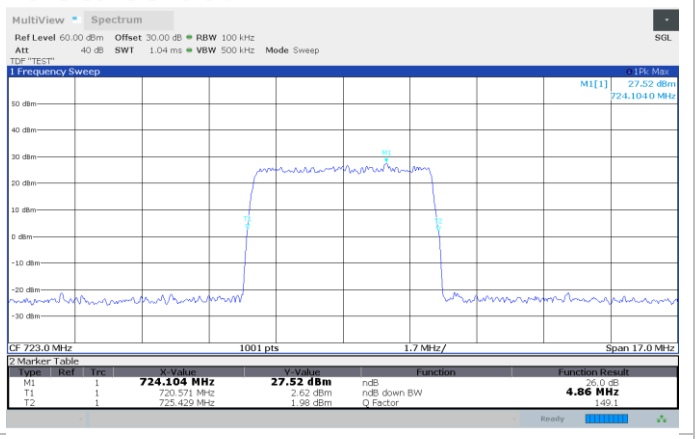

26DB_ANT3_n29_H_5MHz_BW_15kHz_SCS_16QAM



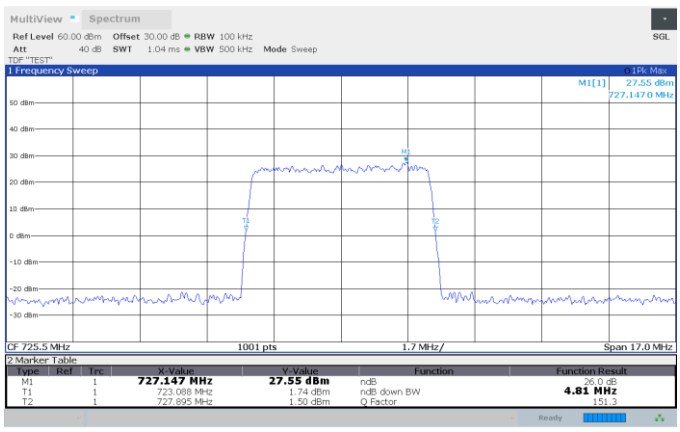

26DB_ANT3_n29_L_5MHz_BW_15kHz_SCS_64QAM



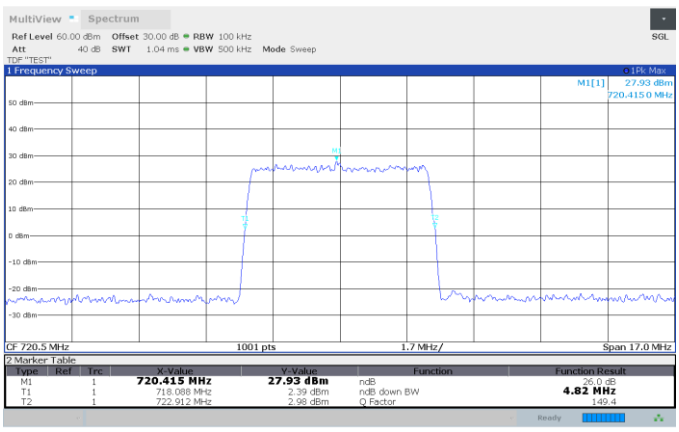

26DB_ANT3_n29_M_5MHz_BW_15kHz_SCS_64QAM



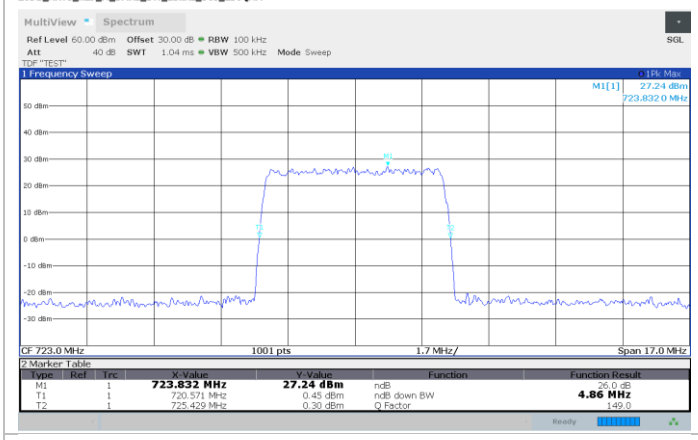

26DB_ANT3_n29_H_5MHz_BW_15kHz_SCS_64QAM



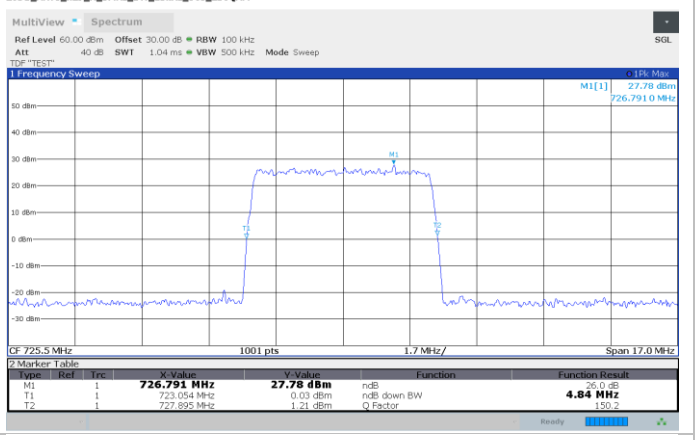

26DB_ANT3_n29_L_5MHz_BW_15kHz_SCS_256QAM



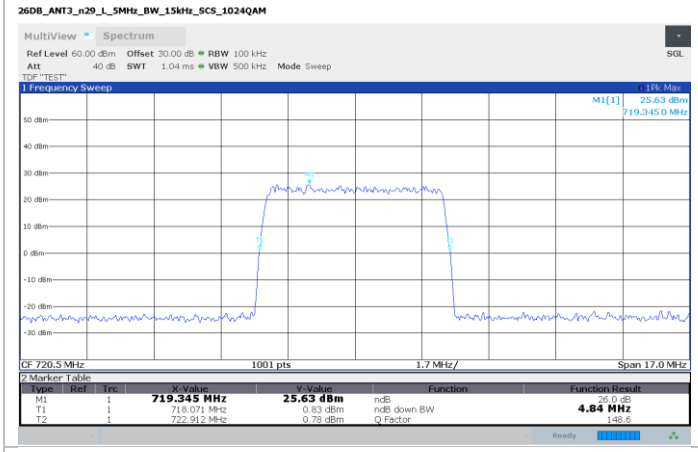
26DB_ANT3_n29_M_5MHz_BW_15kHz_SCS_256QAM



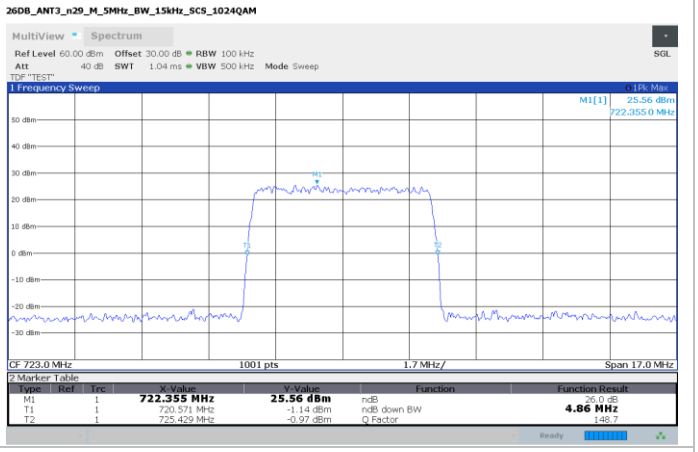

26DB_ANT3_n29_H_5MHz_BW_15kHz_SCS_256QAM




26DB_ANT3_n29_L_5MHz_BW_15kHz_SCS_1024QAM



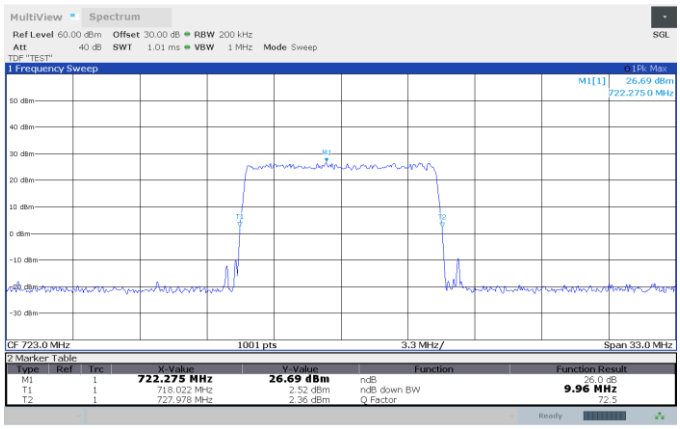

26DB_ANT3_n29_M_5MHz_BW_15kHz_SCS_1024QAM



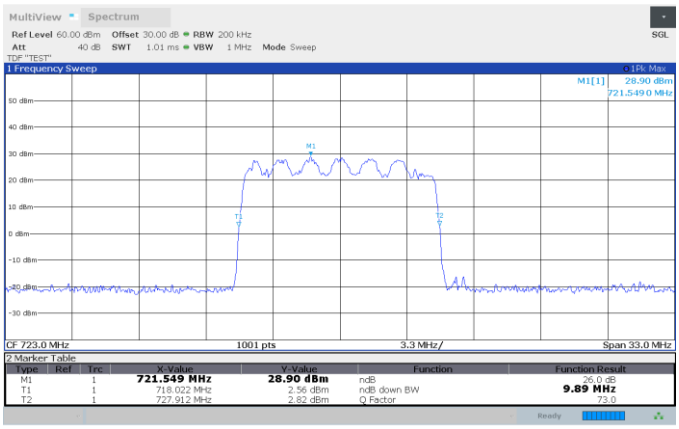

26DB_ANT3_n29_H_5MHz_BW_15kHz_SCS_1024QAM

**Band n29 – 10 MHz**

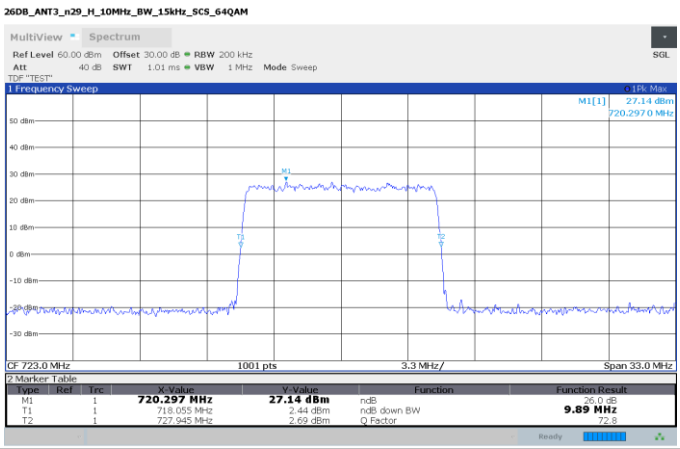
26DB_ANT3_n29_H_10MHz_BW_15kHz_SCS_QPSK



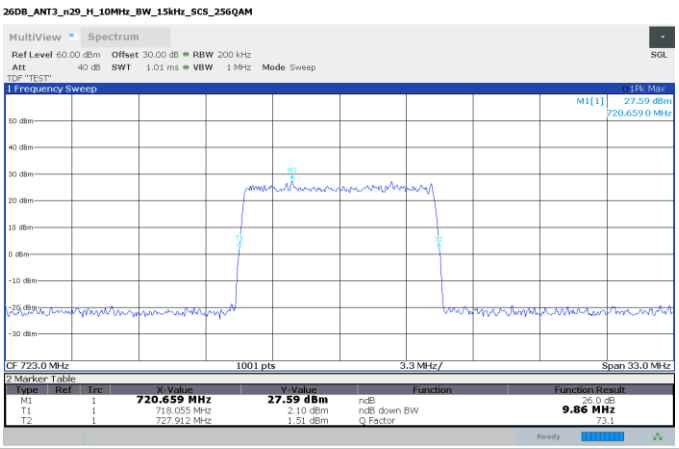

26DB_ANT3_n29_H_10MHz_BW_15kHz_SCS_16QAM



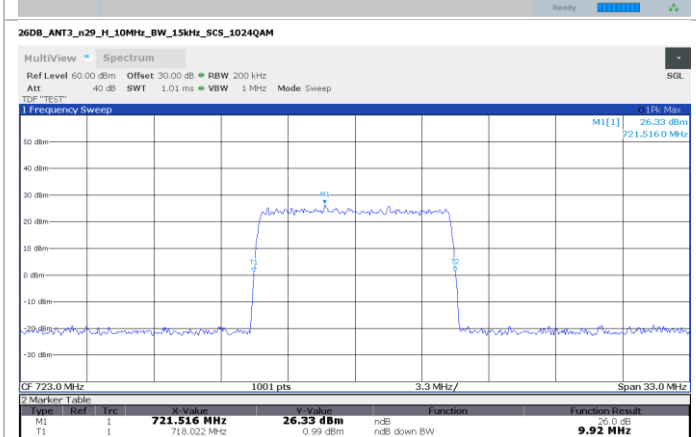

26DB_ANT3_n29_H_10MHz_BW_15kHz_SCS_64QAM




26DB_ANT3_n29_H_10MHz_BW_15kHz_SCS_256QAM




26DB_ANT3_n29_H_10MHz_BW_15kHz_SCS_1024QAM



**Band n71:**

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n71 (NB-IoT) | 0.2 MHz | C | 617.307 | 0.188 |
| n71 (NB-IoT) | 0.2 MHz | C | 636.4925 | 0.189 |
| n71 (NB-IoT) | 0.2 MHz | C | 651.692 | 0.189 |

***Table 8.3-18**: 26 dB Occupied bandwidth, QPSK Modulation, NB-IoT mode*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n71 | 5 MHz | C | 619.5 | 4.84 |
| n71 | 5 MHz | C | 634.5 | 4.84 |
| n71 | 5 MHz | C | 649.5 | 4.857 |

***Table 8.3-19**: 26 dB Occupied bandwidth, QPSK Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 5 MHz | C | 619.5 | 4.857 |
| n71 | 5 MHz | C | 634.5 | 4.823 |
| n71 | 5 MHz | C | 649.5 | 4.84 |

***Table 8.3-20**: 26 dB Occupied bandwidth, 16QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 5 MHz | C | 619.5 | 4.84 |
| n71 | 5 MHz | C | 634.5 | 4.857 |
| n71 | 5 MHz | C | 649.5 | 4.823 |

***Table 8.3-21**: 26 dB Occupied bandwidth, 64QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 5 MHz | C | 619.5 | 4.823 |
| n71 | 5 MHz | C | 634.5 | 4.823 |
| n71 | 5 MHz | C | 649.5 | 4.84 |

***Table 8.3-22**: 26 dB Occupied bandwidth, 256QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 5 MHz | C | 619.5 | 4.84 |
| n71 | 5 MHz | C | 634.5 | 4.857 |
| n71 | 5 MHz | C | 649.5 | 4.857 |

***Table 8.3-23**: 26 dB Occupied bandwidth, 1024QAM Modulation, 5 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n71 | 10 MHz | C | 622 | 9.923 |
| n71 | 10 MHz | C | 634.5 | 9.956 |
| n71 | 10 MHz | C | 647 | 9.956 |

***Table 8.3-24**: 26 dB Occupied bandwidth, QPSK Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 10 MHz | C | 622 | 9.824 |
| n71 | 10 MHz | C | 634.5 | 9.89 |
| n71 | 10 MHz | C | 647 | 9.857 |

***Table 8.3-25**: 26 dB Occupied bandwidth, 16QAM Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 10 MHz | C | 622 | 9.956 |
| n71 | 10 MHz | C | 634.5 | 9.923 |
| n71 | 10 MHz | C | 647 | 9.956 |

***Table 8.3-26**: 26 dB Occupied bandwidth, 64QAM Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 10 MHz | C | 622 | 9.956 |
| n71 | 10 MHz | C | 634.5 | 9.956 |
| n71 | 10 MHz | C | 647 | 9.956 |

***Table 8.3-27**: 26 dB Occupied bandwidth, 256QAM Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 10 MHz | C | 622 | 9.956 |
| n71 | 10 MHz | C | 634.5 | 9.989 |
| n71 | 10 MHz | C | 647 | 9.923 |

***Table 8.3-28**: 26 dB Occupied bandwidth, 1024QAM Modulation, 10 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n71 | 15 MHz | C | 624.5 | 14.783 |
| n71 | 15 MHz | C | 634.5 | 14.881 |
| n71 | 15 MHz | C | 644.5 | 14.832 |

***Table 8.3-29**: 26 dB Occupied bandwidth, QPSK Modulation, 15 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 15 MHz | C | 624.5 | 14.832 |
| n71 | 15 MHz | C | 634.5 | 14.881 |
| n71 | 15 MHz | C | 644.5 | 14.881 |

***Table 8.3-30**: 26 dB Occupied bandwidth, 16QAM Modulation, 15 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 15 MHz | C | 624.5 | 14.881 |
| n71 | 15 MHz | C | 634.5 | 14.832 |
| n71 | 15 MHz | C | 644.5 | 14.881 |

***Table 8.3-31**: 26 dB Occupied bandwidth, 64QAM Modulation, 15 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 15 MHz | C | 624.5 | 14.832 |
| n71 | 15 MHz | C | 634.5 | 14.881 |
| n71 | 15 MHz | C | 644.5 | 14.881 |

***Table 8.3-32**: 26 dB Occupied bandwidth, 256QAM Modulation, 15 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 15 MHz | C | 624.5 | 14.832 |
| n71 | 15 MHz | C | 634.5 | 14.93 |
| n71 | 15 MHz | C | 644.5 | 14.881 |

***Table 8.3-33**: 26 dB Occupied bandwidth, 1024QAM Modulation, 15 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW (MHz) |
|---|---|---|---|---|
| n71 | 20 MHz | C | 627 | 19.87 |
| n71 | 20 MHz | C | 634.5 | 19.935 |
| n71 | 20 MHz | C | 642 | 19.935 |

***Table 8.3-34**: 26 dB Occupied bandwidth, QPSK Modulation, 20 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 20 MHz | C | 627 | 19.935 |
| n71 | 20 MHz | C | 634.5 | 19.935 |
| n71 | 20 MHz | C | 642 | 19.935 |

***Table 8.3-35**: 26 dB Occupied bandwidth, 16QAM Modulation, 20 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 20 MHz | C | 627 | 19.935 |
| n71 | 20 MHz | C | 634.5 | 19.935 |
| n71 | 20 MHz | C | 642 | 19.87 |

***Table 8.3-36**: 26 dB Occupied bandwidth, 64QAM Modulation, 20 MHz*

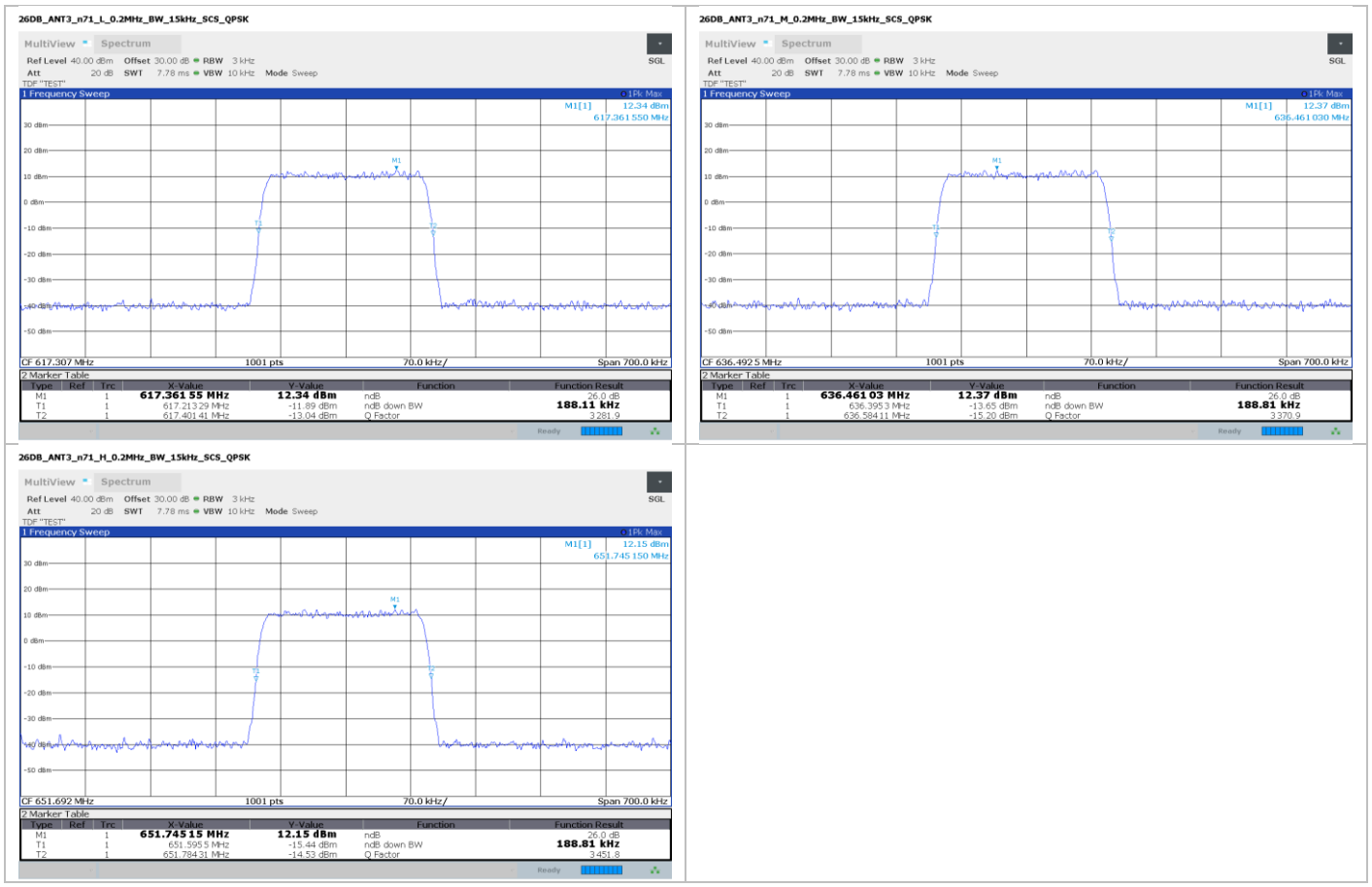
| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 20 MHz | C | 627 | 19.87 |
| n71 | 20 MHz | C | 634.5 | 19.935 |
| n71 | 20 MHz | C | 642 | 19.935 |

***Table 8.3-37**: 26 dB Occupied bandwidth, 256QAM Modulation, 20 MHz*

| Band | OBW Declared | Port | Channel (MHz) | 26 dB OBW |
|---|---|---|---|---|
| n71 | 20 MHz | C | 627 | 19.87 |
| n71 | 20 MHz | C | 634.5 | 19.87 |
| n71 | 20 MHz | C | 642 | 19.935 |

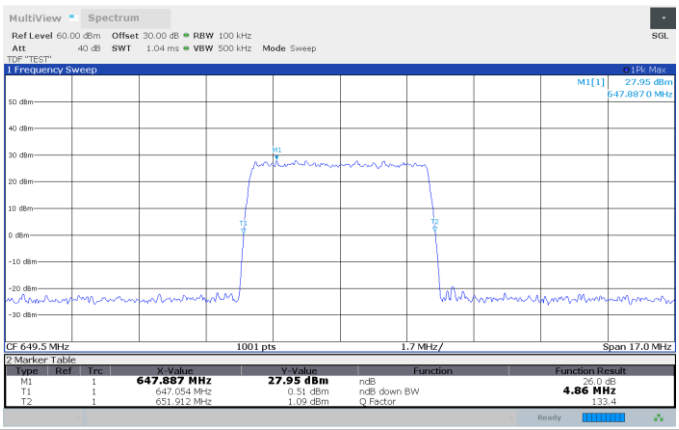
***Table 8.3-38**: 26 dB Occupied bandwidth, 1024QAM Modulation, 20 MHz*

## Band n71 (NB-IoT) – 0.2 MHz

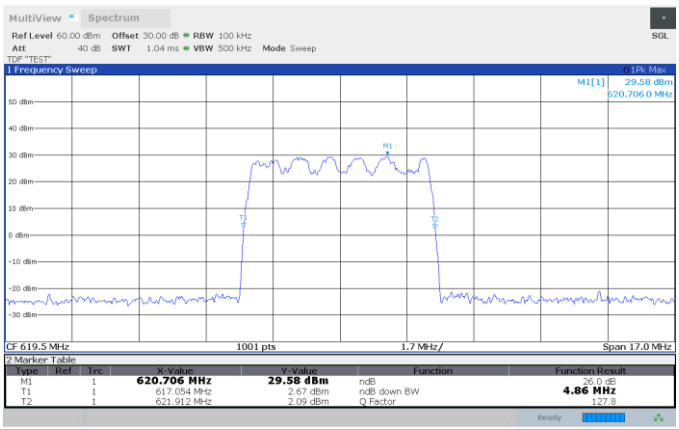



## Band n71 – 5 MHz

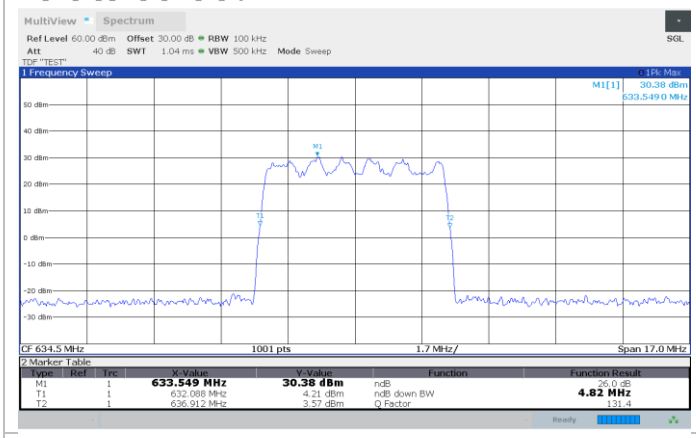
26DB_ANT3_n71_H_5MHz_BW_15kHz_SCS_QPSK



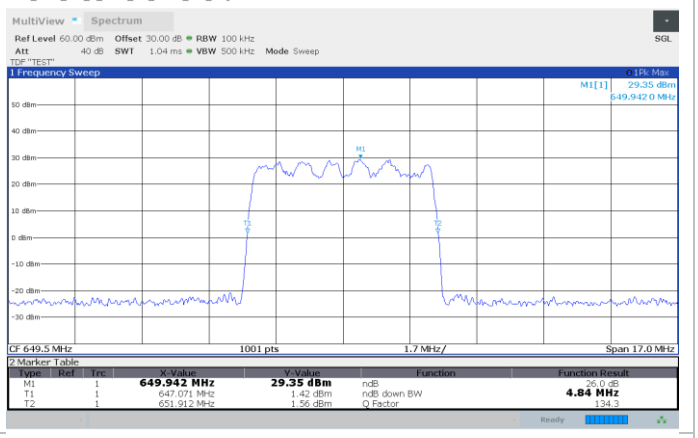

26DB_ANT3_n71_L_5MHz_BW_15kHz_SCS_16QAM



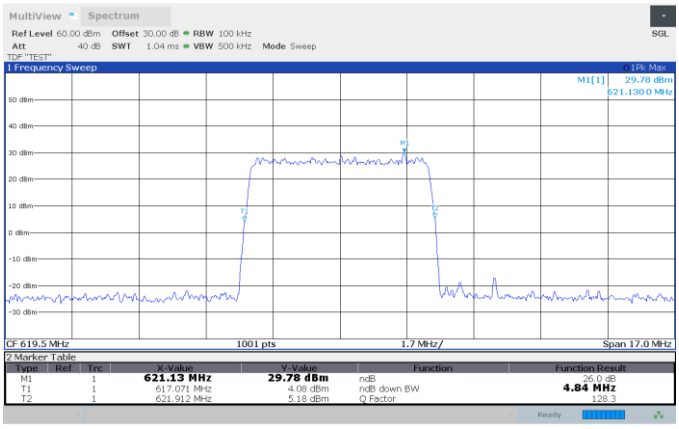

26DB_ANT3_n71_M_5MHz_BW_15kHz_SCS_16QAM



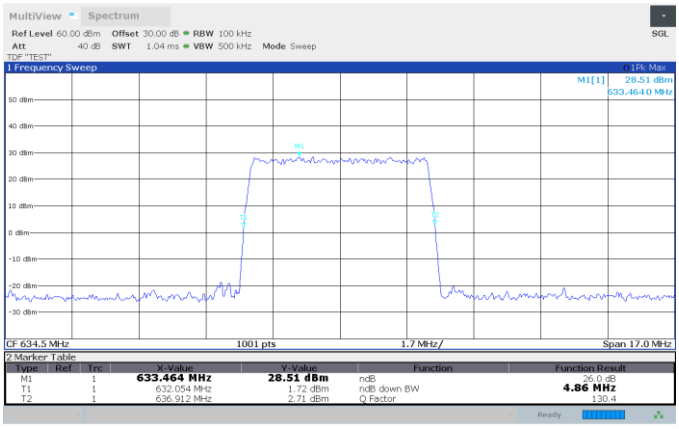

26DB_ANT3_n71_H_5MHz_BW_15kHz_SCS_16QAM



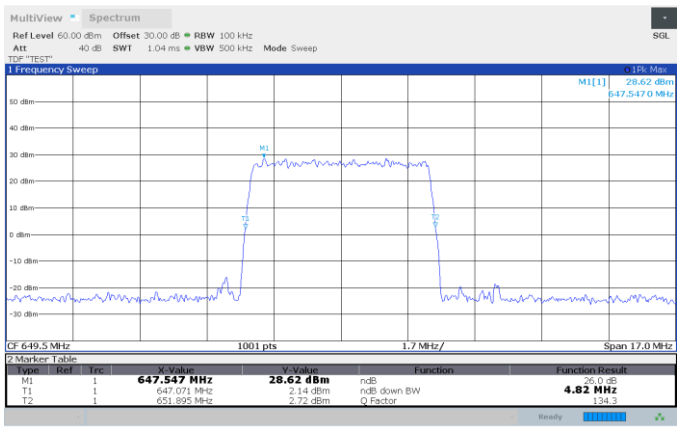

26DB_ANT3_n71_L_5MHz_BW_15kHz_SCS_64QAM



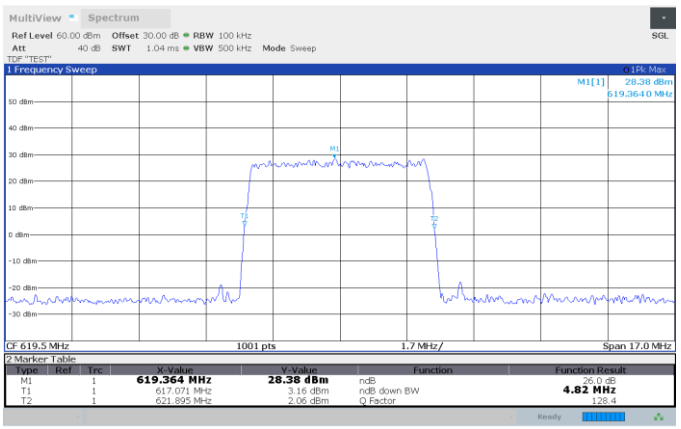

26DB_ANT3_n71_M_5MHz_BW_15kHz_SCS_64QAM



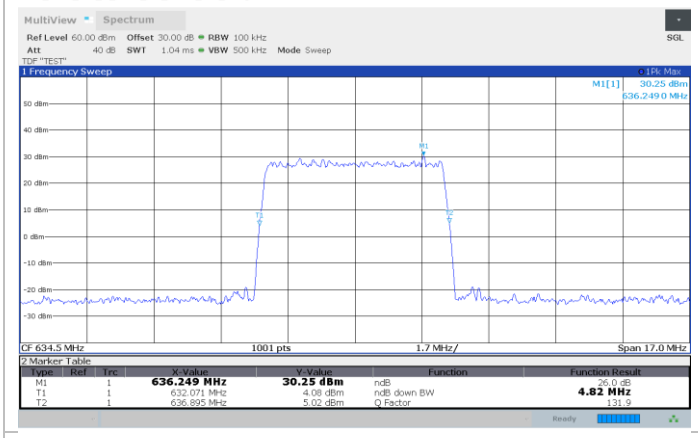
26DB_ANT3_n71_H_5MHz_BW_15kHz_SCS_64QAM



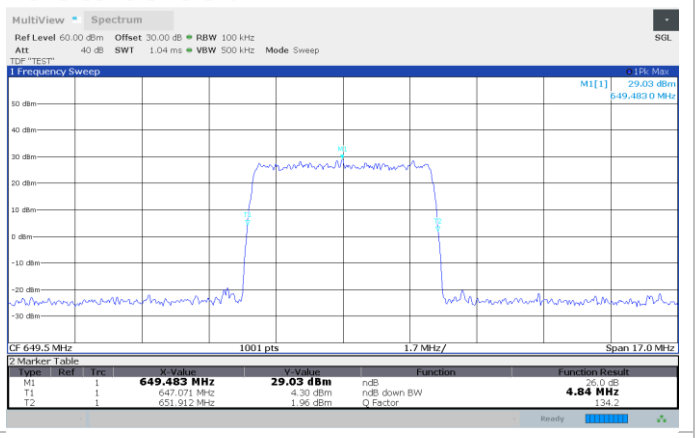

26DB_ANT3_n71_L_5MHz_BW_15kHz_SCS_256QAM



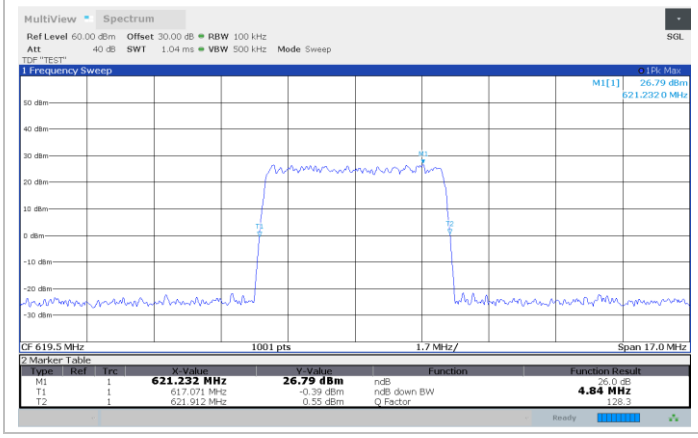

26DB_ANT3_n71_M_5MHz_BW_15kHz_SCS_256QAM




26DB_ANT3_n71_H_5MHz_BW_15kHz_SCS_256QAM

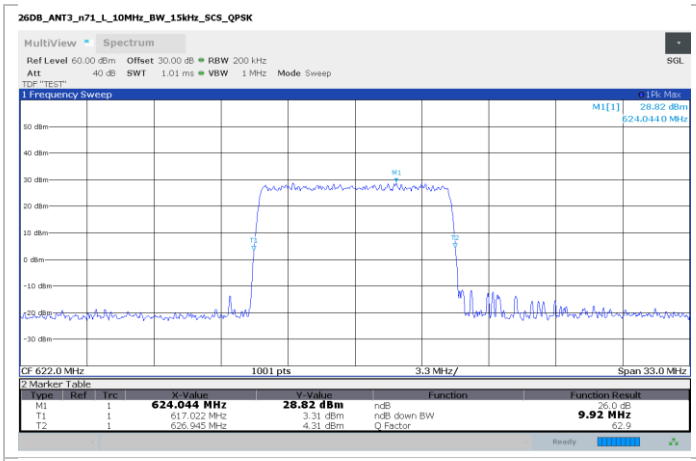



26DB_ANT3_n71_L_5MHz_BW_15kHz_SCS_1024QAM

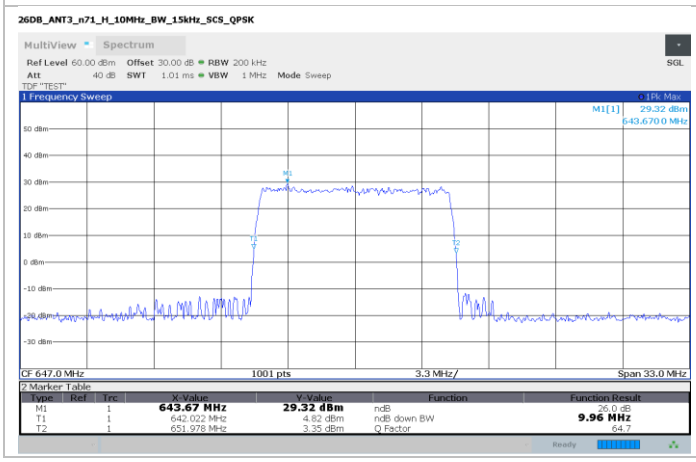



26DB_ANT3_n71_M_5MHz_BW_15kHz_SCS_1024QAM

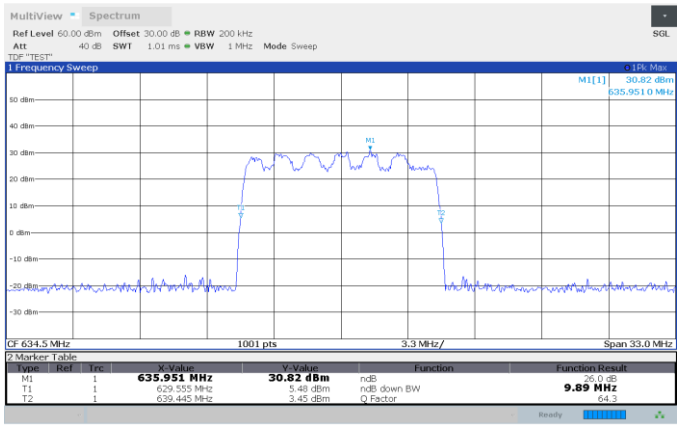

**Band n71 – 10 MHz**



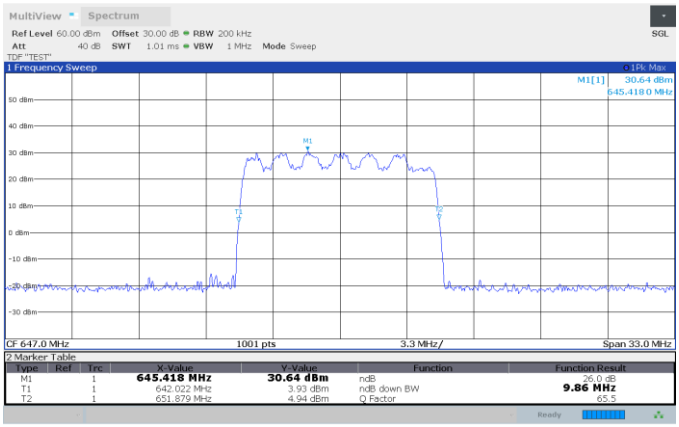




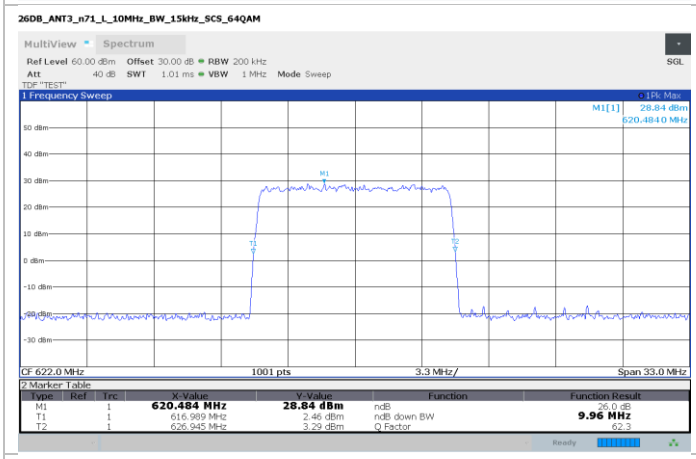

26DB_ANT3_n71_M_10MHz_BW_15kHz_SCS_16QAM



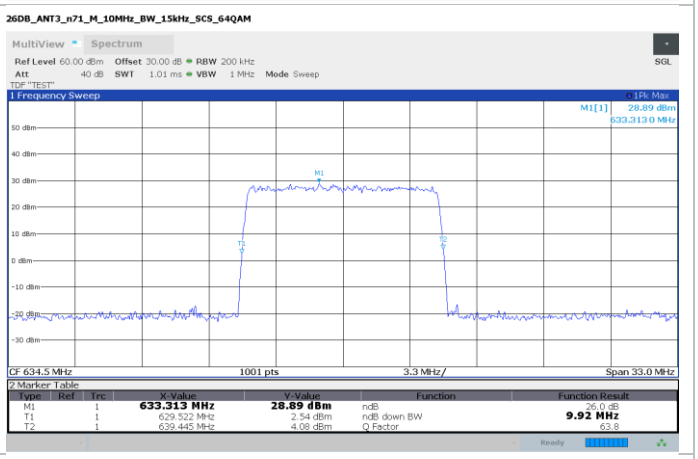

26DB_ANT3_n71_H_10MHz_BW_15kHz_SCS_16QAM



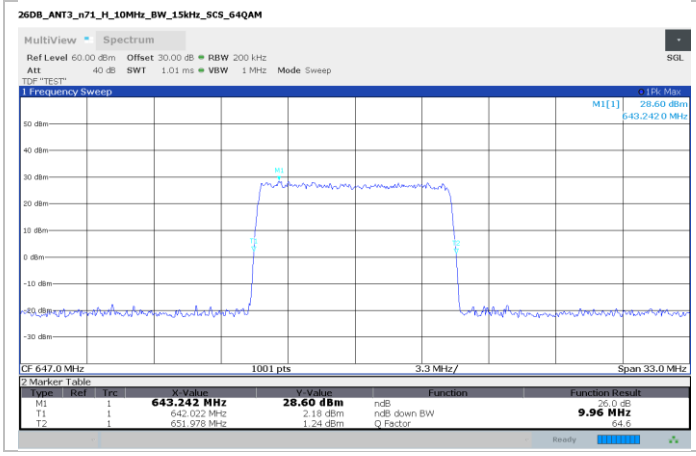

26DB_ANT3_n71_L_10MHz_BW_15kHz_SCS_64QAM



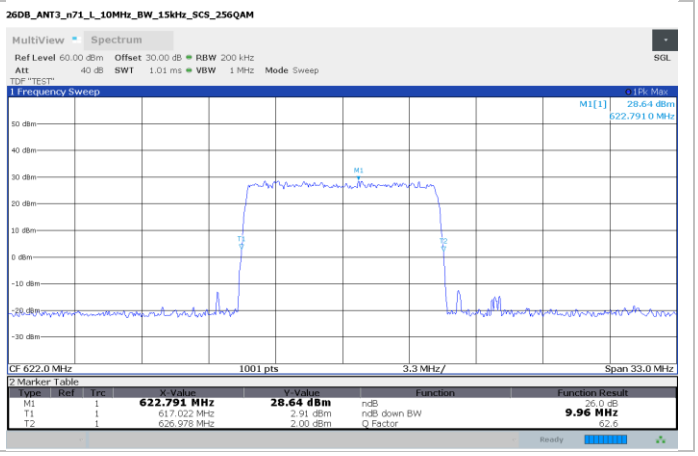

26DB_ANT3_n71_M_10MHz_BW_15kHz_SCS_64QAM



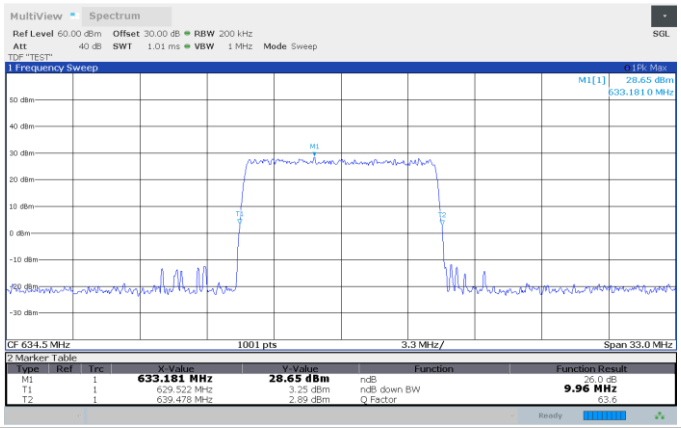

26DB_ANT3_n71_H_10MHz_BW_15kHz_SCS_64QAM



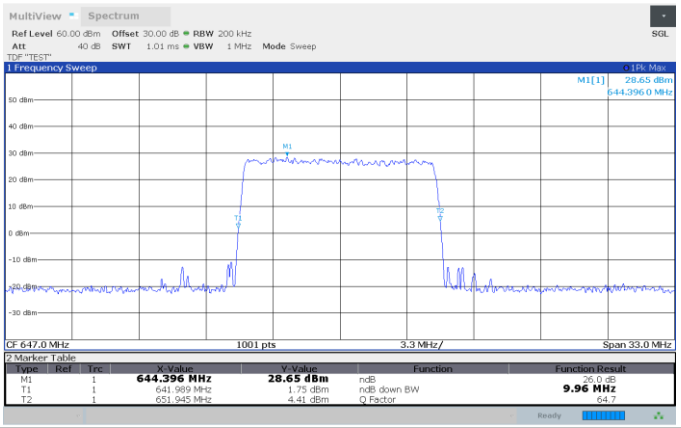

26DB_ANT3_n71_L_10MHz_BW_15kHz_SCS_256QAM



26DB_ANT3_n71_M_10MHz_BW_15kHz_SCS_256QAM

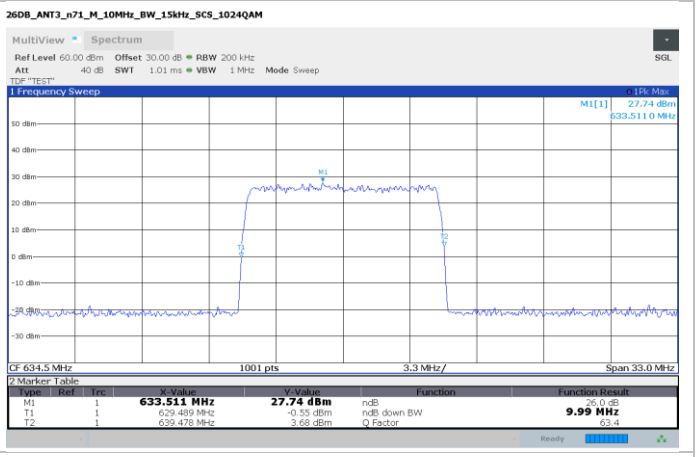



26DB_ANT3_n71_H_10MHz_BW_15kHz_SCS_256QAM

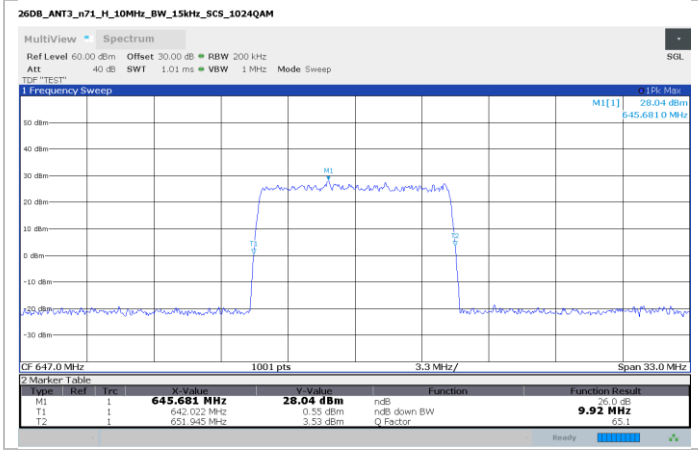



26DB_ANT3_n71_L_10MHz_BW_15kHz_SCS_1024QAM

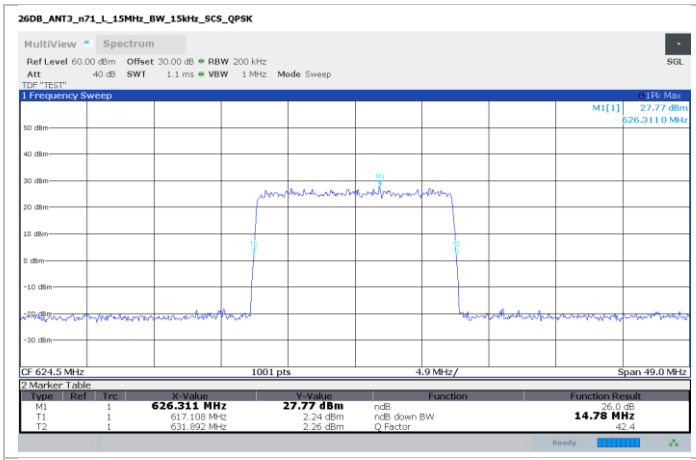

26DB_ANT3_n71_M_10MHz_BW_15kHz_SCS_1024QAM

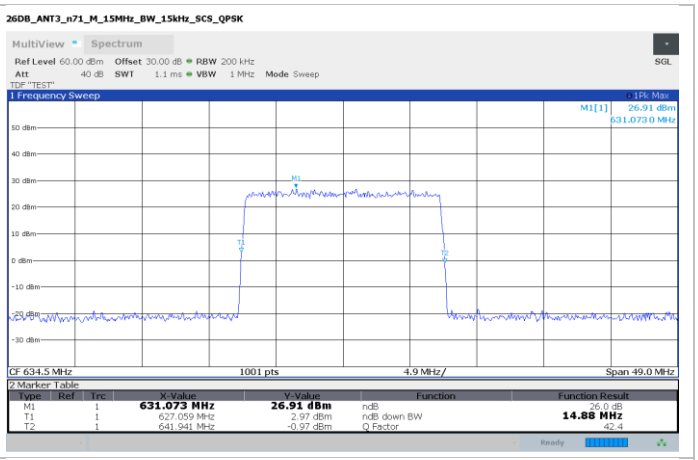


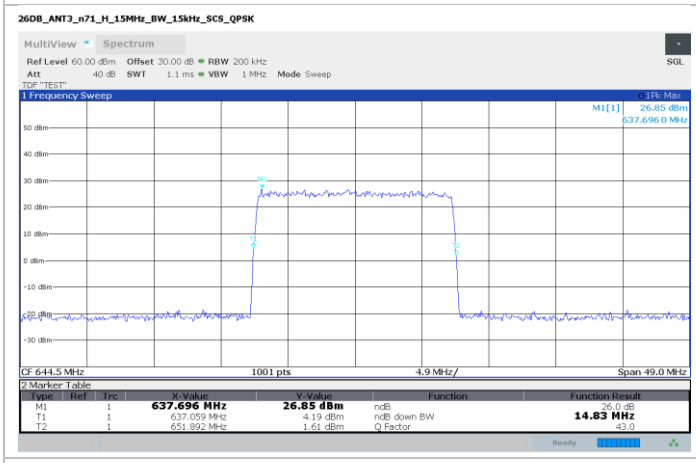

26DB_ANT3_n71_H_10MHz_BW_15kHz_SCS_1024QAM

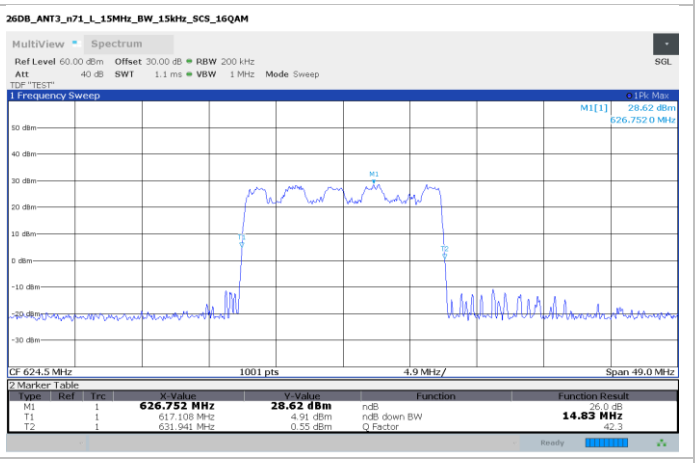


**Band n71 – 15 MHz**



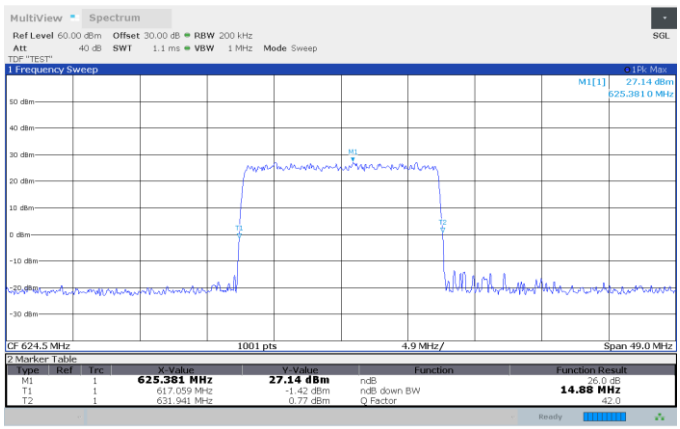



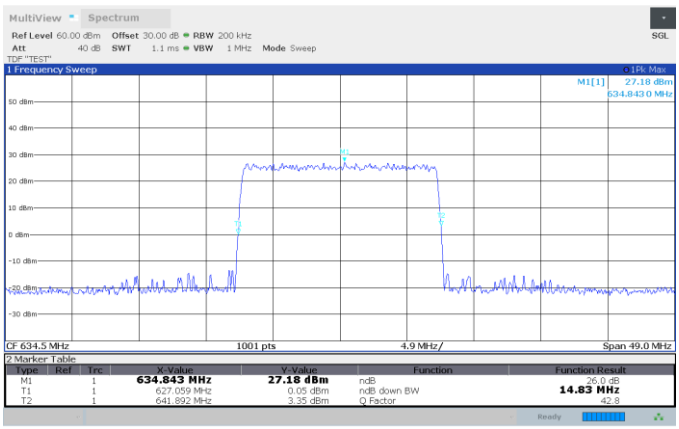





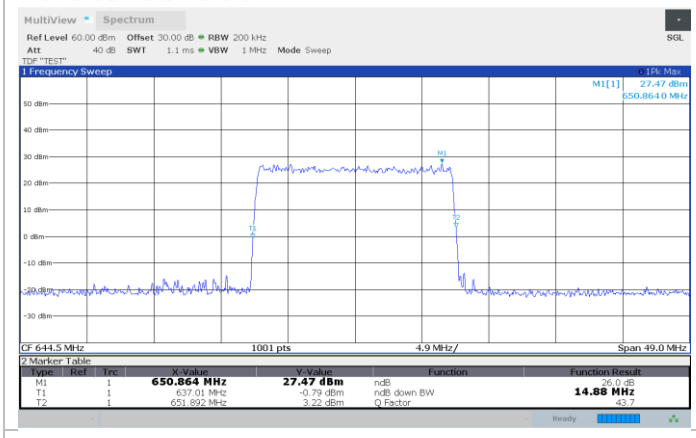
26DB_ANT3_n71_L_15MHz_BW_15kHz_SCS_64QAM



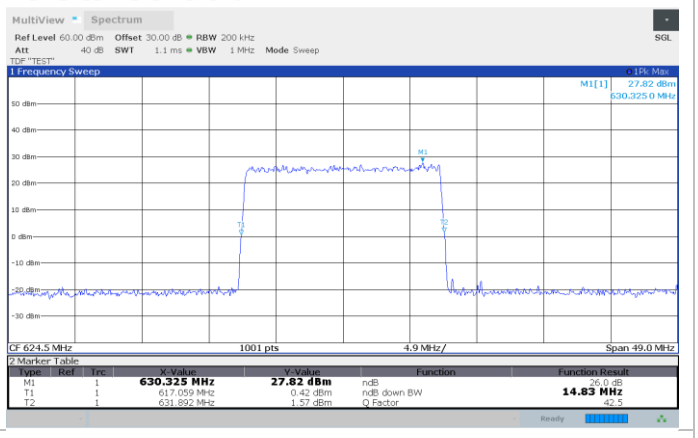

26DB_ANT3_n71_M_15MHz_BW_15kHz_SCS_64QAM



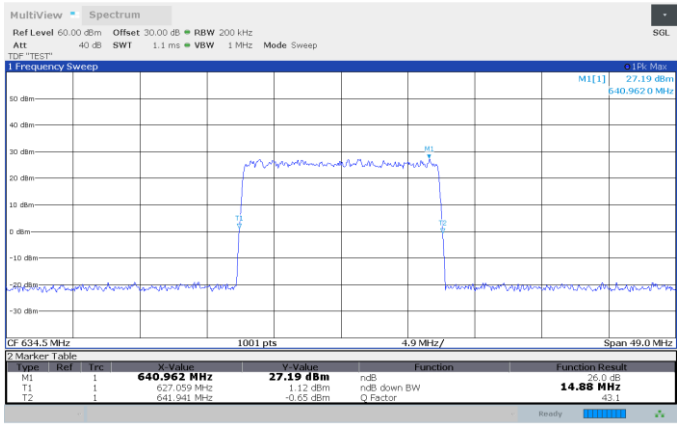

26DB_ANT3_n71_H_15MHz_BW_15kHz_SCS_64QAM



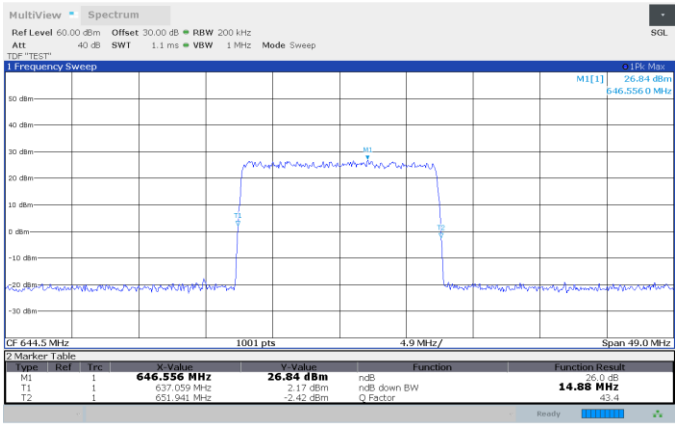

26DB_ANT3_n71_L_15MHz_BW_15kHz_SCS_256QAM

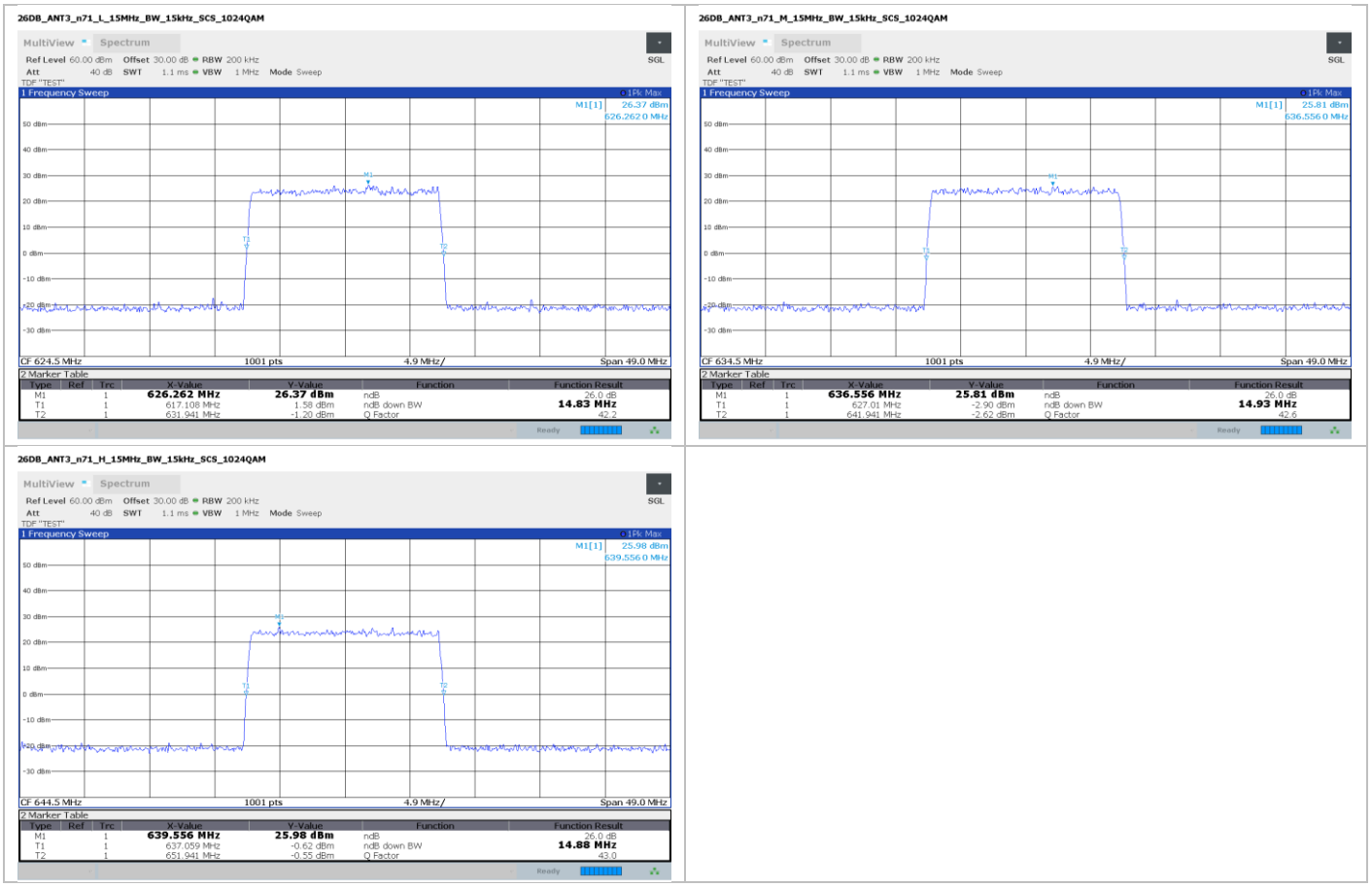



26DB_ANT3_n71_M_15MHz_BW_15kHz_SCS_256QAM

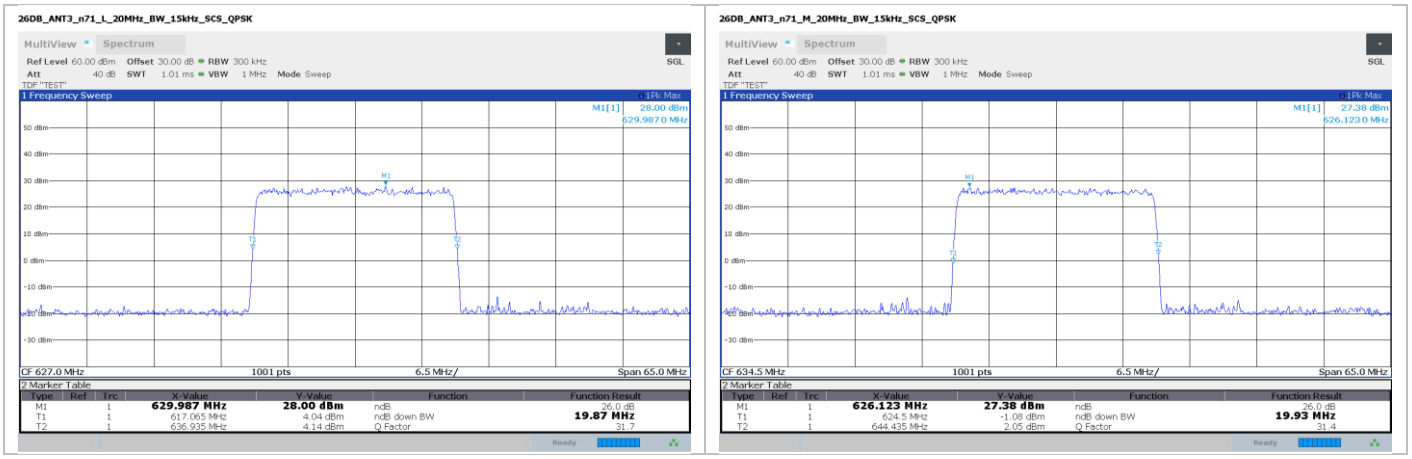



26DB_ANT3_n71_H_15MHz_BW_15kHz_SCS_256QAM

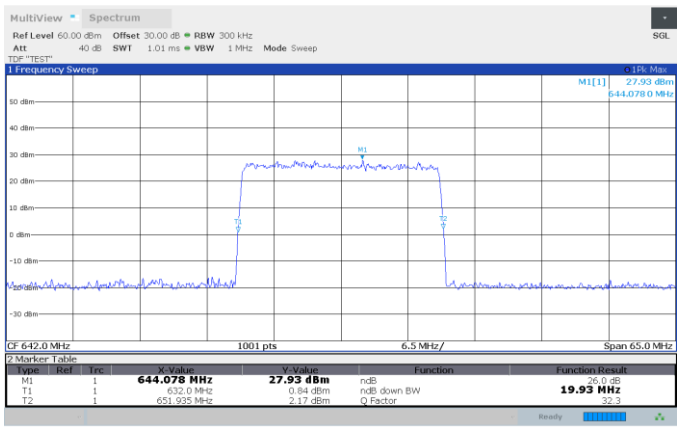




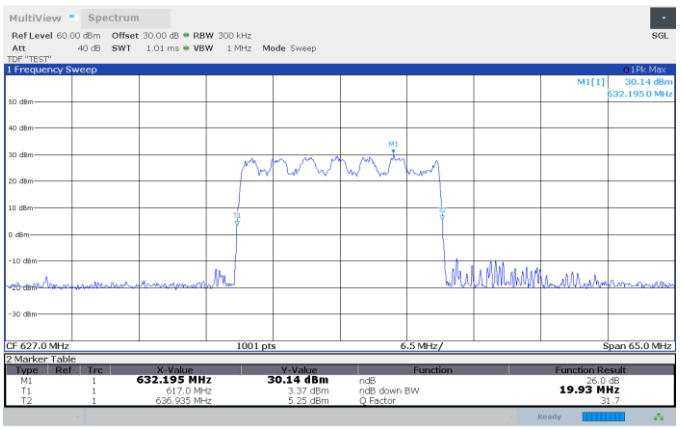

**Band n71 – 20 MHz**



26DB_ANT3_n71_H_20MHz_BW_15kHz_SCS_QPSK

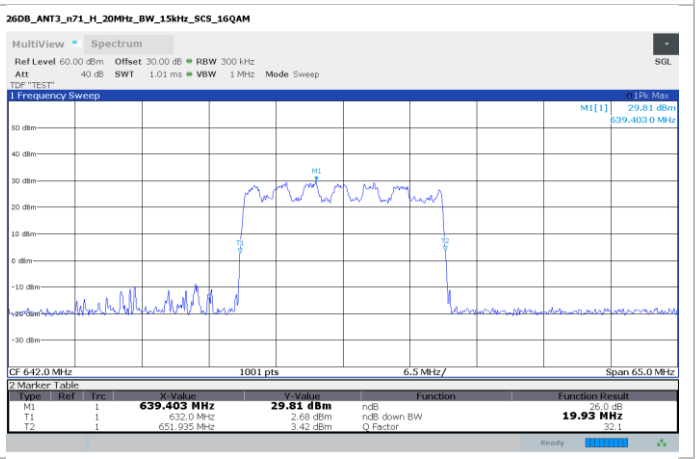



26DB_ANT3_n71_L_20MHz_BW_15kHz_SCS_16QAM

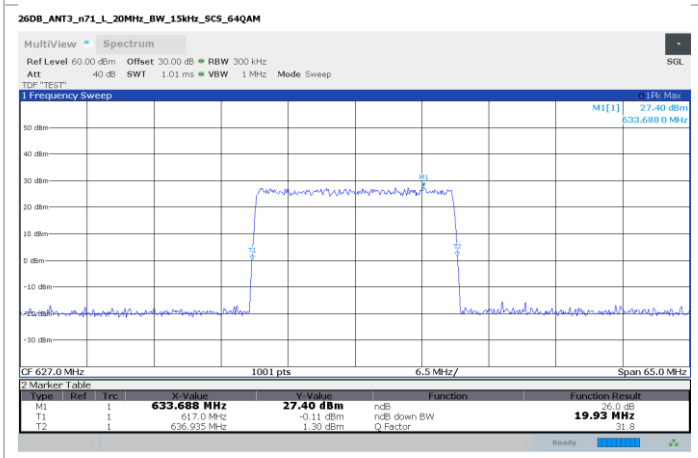



26DB_ANT3_n71_M_20MHz_BW_15kHz_SCS_16QAM

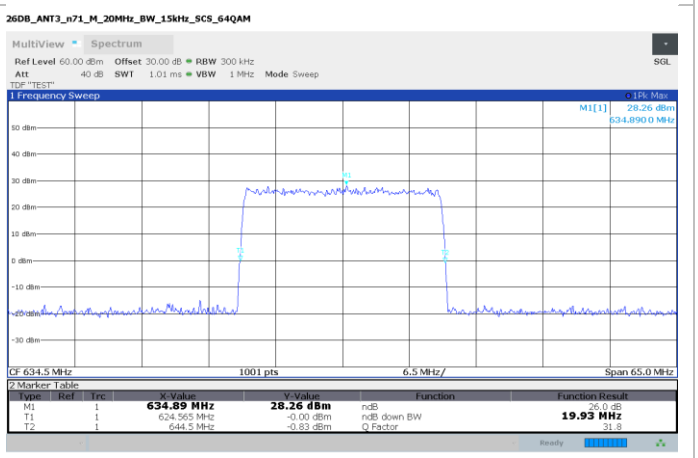

26DB_ANT3_n71_H_20MHz_BW_15kHz_SCS_16QAM

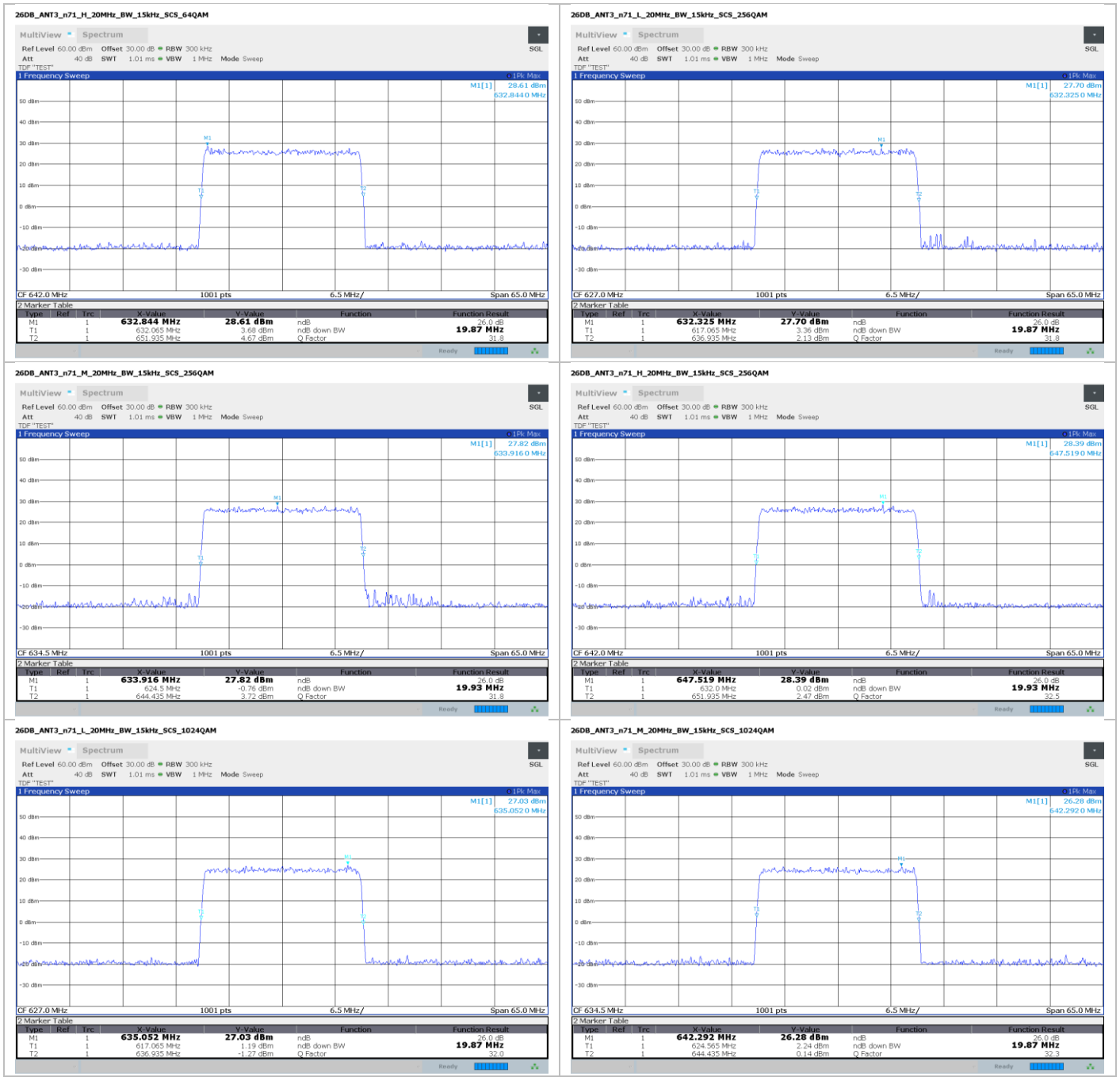


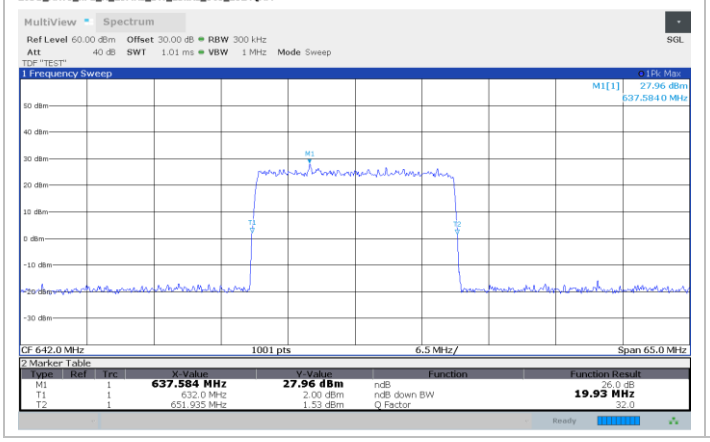

26DB_ANT3_n71_L_20MHz_BW_15kHz_SCS_64QAM




26DB_ANT3_n71_M_20MHz_BW_15kHz_SCS_64QAM




26DB_ANT3_n71_H_20MHz_BW_15kHz_SCS_64QAM
CF 642.0 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 632.844 MHz 28.61 dBm
T1 632.065 MHz 3.68 dBm
T2 651.935 MHz 4.67 dBm
ndB 26.0 dB
ndB down BW 19.87 MHz
Q Factor 31.8
26DB_ANT3_n71_L_20MHz_BW_15kHz_SCS_256QAM
CF 627.0 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 632.325 MHz 27.70 dBm
T1 617.065 MHz 3.36 dBm
T2 636.935 MHz 2.13 dBm
ndB 26.0 dB
ndB down BW 19.87 MHz
Q Factor 31.8
26DB_ANT3_n71_M_20MHz_BW_15kHz_SCS_256QAM
CF 634.5 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 633.916 MHz 27.82 dBm
T1 624.5 MHz -0.76 dBm
T2 644.435 MHz 3.72 dBm
ndB 26.0 dB
ndB down BW 19.93 MHz
Q Factor 31.8
26DB_ANT3_n71_H_20MHz_BW_15kHz_SCS_256QAM
CF 642.0 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 647.519 MHz 28.39 dBm
T1 632.0 MHz 0.02 dBm
T2 651.935 MHz 2.47 dBm
ndB 26.0 dB
ndB down BW 19.93 MHz
Q Factor 32.5
26DB_ANT3_n71_L_20MHz_BW_15kHz_SCS_1024QAM
CF 627.0 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 635.052 MHz 27.03 dBm
T1 617.065 MHz 1.19 dBm
T2 636.935 MHz -1.27 dBm
ndB 26.0 dB
ndB down BW 19.87 MHz
Q Factor 32.0
26DB_ANT3_n71_M_20MHz_BW_15kHz_SCS_1024QAM
CF 634.5 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
M1 642.292 MHz 26.28 dBm
T1 624.565 MHz 2.24 dBm
T2 644.435 MHz 0.14 dBm
ndB 26.0 dB
ndB down BW 19.87 MHz
Q Factor 32.3


26DB_ANT3_n71_H_20MHz_BW_15kHz_SCS_1024QAM
MultiView
Spectrum
Ref Level 60.00 dBm Offset 30.00 dB RBW 300 kHz
Att 40 dB SWT 1.01 ms VBW 1 MHz Mode Sweep
SGL
TDF "TEST"
1 Frequency Sweep
1Pk Max
M1[1] 27.96 dBm
637.5840 MHz
CF 642.0 MHz
1001 pts
6.5 MHz/
Span 65.0 MHz
2 Marker Table
Type Ref Trc X-Value Y-Value Function Function Result
M1 1 637.584 MHz 27.96 dBm ndB 26.0 dB
T1 1 632.0 MHz 2.00 dBm ndB down BW 19.93 MHz
T2 1 651.935 MHz 1.53 dBm Q Factor 32.0
Ready

## 8.4 FCC §27.50(c)(3)(ii) and §90.205 / §90.635 Output power

### 8.4.1 Definitions and limits

FCC §27.50(c)(3)(ii) (Band n29, Band n71)
(c) The following power and antenna height requirements apply to stations transmitting in the 600 MHz band and the 698-746 MHz band:

(3) Fixed and base stations transmitting a signal with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP in accordance with Table 3 of this section;

FCC §90.205(j) (Band n26)
806-824 MHz, 851-869 MHz, 896-901 MHz and 935-940 MHz. Power and height limitations for frequencies in the 806-824 MHz and 851-869 MHz bands and for narrowband operations in the 896-901/935-940 MHz band are specified in § 90.635.
FCC §90.635
The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBW) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

### 8.4.2 Test summary

| | | | |
|---|---|---|---|
| Test date | July 12, 2022 | Temperature | 21 °C |
| Test engineer | Lan Sayasane, EMC Test Engineer | Air pressure | 1005 mbar |
| Verdict | Pass | Relative humidity | 65% |

### 8.4.3 Observations, settings and special notes

Spectrum analyzer settings:

| | |
|---|---|
| Resolution bandwidth | 1 MHz |
| Video bandwidth | 3 MHz |
| Frequency span | >= 1.5* OBW |
| Detector mode | Peak |
| Trace mode | Max Hold |

This test was made across the conducted port and using a sensor power. An offset of 30 dB was added to the measurement to compensate the loss of the external 30 dB attenuator. Interconnecting cable losses were included as a transducer factor in the spectrum analyzer.
The EUT has four ports which can transmit at the same time in a correlated way. This correlation permit to make the measurement in one port getting as a result the total power from the four ports adding a factor calculated from the next equation:

$$Correlation\ factor = 10Log\ (N)$$

Where N is the number of ports. In this specific case, N = 4,

$$Correlation\ factor = 10Log\ (4)\ = 6.02\ dB$$

To select the measurement port, a quick power test was done. The four ports are similar, however, the port with maximum power was chosen to make all the remaining tests.

| Band | Modulation | OBW | Channel | Power Port A | Power Port B | Power Port C | Power Port D |
|---|---|---|---|---|---|---|---|
| n26 | QPSK | 5 MHz | 866.5 MHz | 33.37 | 33.32 | **33.37** | 33.32 |

Note: *Port C was selected in the band, and it will be used to evaluate all the tests of this document.*

| Band | Modulation | OBW | Channel | Power Port A | Power Port B | Power Port C | Power Port D |
|---|---|---|---|---|---|---|---|
| n29 | QPSK | 5 MHz | 725.5 MHz | 37.41 | 37.41 | **37.53** | 37.41 |

Note: *Port C was selected in the band, and it will be used to evaluate all the tests of this document.*

| Band | Modulation | OBW | Channel | Power Port A | Power Port B | Power Port C | Power Port D |
|---|---|---|---|---|---|---|---|
| n71 | QPSK | 5 MHz | 634.5 MHz | 39.2 | 39.25 | **39.79** | 39.02 |

Note: *Port C was selected in the band, and it will be used to evaluate all the tests of this document.*

EUT can transmit three bands: band n26, n29, and band n71, unit transmitted the selected signal at full power.

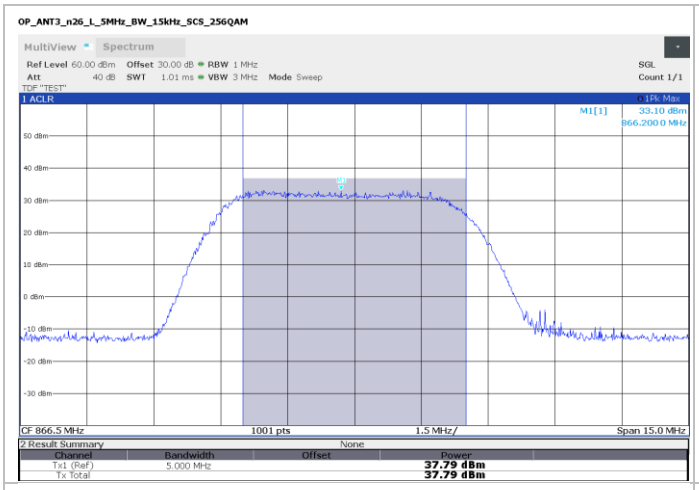
### 8.4.4 Test data

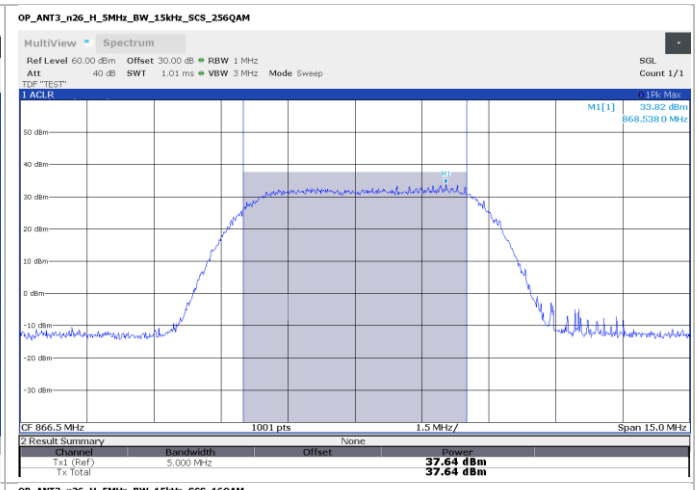
**Band n26:**

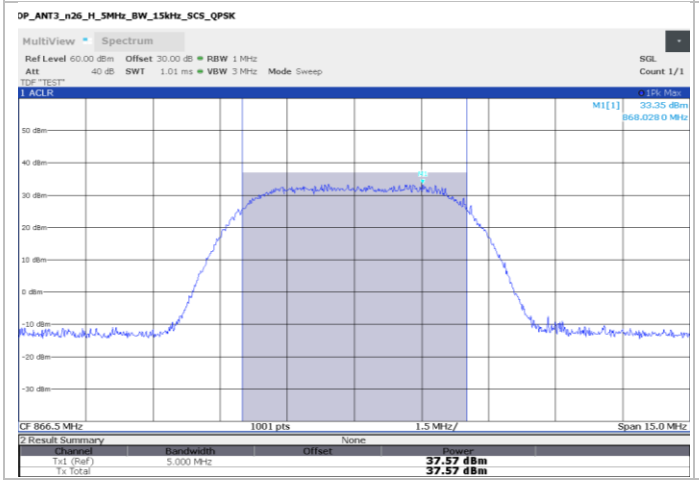
| Band | Modulation | OBW (MHz) | Port | Frequency (MHz) | Power (dBm) | Correlation factor (dB) | Total power across all ports (dBm) |
|---|---|---|---|---|---|---|---|
| n26 (NB-IoT) | 256QAM | 0.2 + 5 | C | 866.5 | 37.79 | 6.02 | 43.81 |
| n26 (NB-IoT) | 256QAM | 0.2 + 5 | C | 866.5 | 37.64 | 6.02 | 43.66 |
| | | | | | | | |
| n26 | QPSK | 5 | C | 866.5 | 37.57 | 6.02 | 43.59 |
| n26 | 16QAM | 5 | C | 866.5 | 37.50 | 6.02 | 43.52 |
| **n26** | **64QAM** | **5** | **C** | **866.5** | **38.70** | **6.02** | **44.72** |
| n26 | 256QAM | 5 | C | 866.5 | 37.73 | 6.02 | 43.75 |
| n26 | 1024QAM | 5 | C | 866.5 | 37.11 | 6.02 | 43.13 |

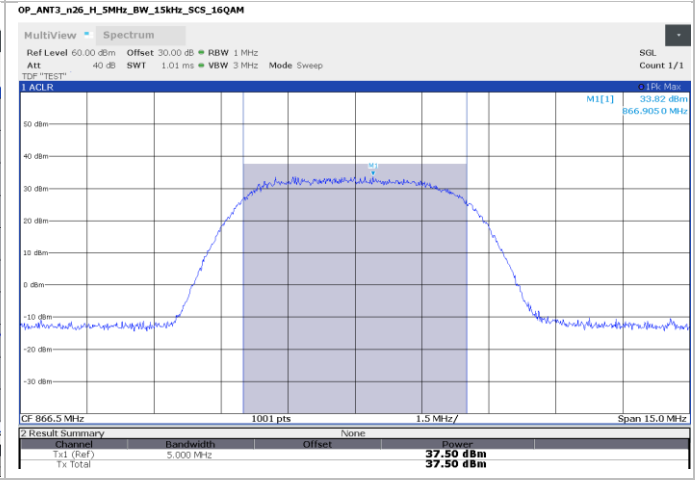
***Table 8.4-1:*** *Conducted output power, band n26, 0,2 and 5 MHz OBW*

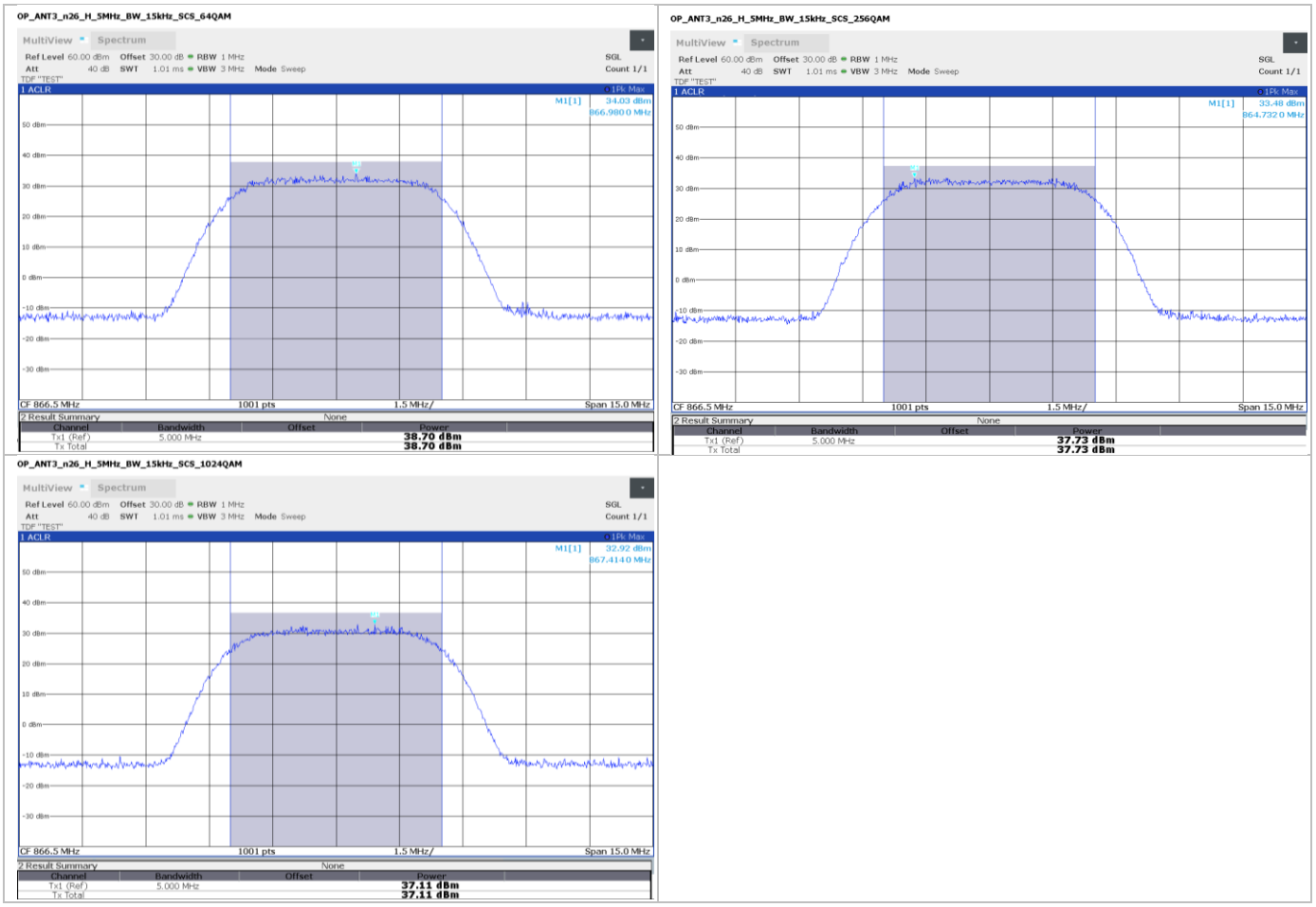
***Band n26***






**Band n29:**

| Band | Modulation | OBW (MHz) | Port | Frequency (MHz) | Power Density (dBm/1 MHz) | Correlation factor (dB) | Total power density across all ports (dBm / 1 MHz) |
|---|---|---|---|---|---|---|---|
| n29 | QPSK | 5 | C | 720.5 | 37.27 | 6.02 | 43.29 |
| n29 | QPSK | 5 | C | 723 | 37.48 | 6.02 | 43.5 |
| n29 | QPSK | 5 | C | 725.5 | 37.53 | 6.02 | 43.55 |
| n29 | 16QAM | 5 | C | 720.5 | 37.57 | 6.02 | 43.59 |
| n29 | 16QAM | 5 | C | 723 | 37.62 | 6.02 | 43.64 |
| n29 | 16QAM | 5 | C | 725.5 | 37.97 | 6.02 | 43.99 |
| n29 | 64QAM | 5 | C | 720.5 | 38.13 | 6.02 | 44.15 |
| n29 | 64QAM | 5 | C | 723 | 38.14 | 6.02 | 44.16 |
| n29 | 64QAM | 5 | C | 725.5 | 38.02 | 6.02 | 44.04 |
| n29 | 256QAM | 5 | C | 720.5 | 37.33 | 6.02 | 43.35 |
| n29 | 256QAM | 5 | C | 723 | 37.79 | 6.02 | 43.81 |
| n29 | 256QAM | 5 | C | 725.5 | 37.9 | 6.02 | 43.92 |
| n29 | 1024QAM | 5 | C | 720.5 | 36.85 | 6.02 | 42.87 |
| n29 | 1024QAM | 5 | C | 723 | 37.0 | 6.02 | 43.02 |
| n29 | 1024QAM | 5 | C | 725.5 | 36.97 | 6.02 | 42.99 |

***Table 8.4-2:*** *Conducted output power density, band n29, 5 MHz OBW*

| Band | Modulation | OBW (MHz) | Port | Frequency (MHz) | Power Density (dBm/1 MHz) | Correlation factor (dB) | Total power density across all ports (dBm / 1 MHz) |
|---|---|---|---|---|---|---|---|
| n29 | QPSK | 10 | C | 723 | 34.58 | 6.02 | 40.6 |
| n29 | 16QAM | 10 | C | 723 | 35.46 | 6.02 | 41.48 |
| n29 | 64QAM | 10 | C | 723 | 34.51 | 6.02 | 40.53 |
| n29 | 256QAM | 10 | C | 723 | 35.72 | 6.02 | 41.74 |
| n29 | 1024QAM | 10 | C | 723 | 33.39 | 6.02 | 38.41 |

***Table 8.4-3:*** *Conducted output power density, band n29, 10 MHz OBW*

For informational purposes, the table below documents the peak total channel power. Measured data obtained from the PAPR measurements documented in section 8.5 of this report.

| Band | Modulation | OBW (MHz) | Port | Frequency (MHz) | Total channel power (dBm) | Correlation factor (dB) | Total channel power across all ports (dBm) |
|---|---|---|---|---|---|---|---|
| n29 | QPSK | 5 | C | 720.5 | 42.17 | 6.02 | 48.19 |
| n29 | QPSK | 5 | C | 723 | 41.41 | 6.02 | 47.43 |
| n29 | QPSK | 5 | C | 725.5 | 41.34 | 6.02 | 47.36 |
| n29 | 16QAM | 5 | C | 720.5 | 41.78 | 6.02 | 47.80 |
| n29 | 16QAM | 5 | C | 723 | 41.35 | 6.02 | 47.37 |
| n29 | 16QAM | 5 | C | 725.5 | 41.34 | 6.02 | 47.36 |
| n29 | 64QAM | 5 | C | 720.5 | 41.80 | 6.02 | 47.82 |
| n29 | 64QAM | 5 | C | 723 | 41.38 | 6.02 | 47.40 |
| n29 | 64QAM | 5 | C | 725.5 | 41.37 | 6.02 | 47.39 |
| n29 | 256QAM | 5 | C | 720.5 | 41.89 | 6.02 | 47.91 |
| n29 | 256QAM | 5 | C | 723 | 41.42 | 6.02 | 47.44 |
| n29 | 256QAM | 5 | C | 725.5 | 41.33 | 6.02 | 47.35 |
| n29 | 1024QAM | 5 | C | 720.5 | 41.85 | 6.02 | 47.87 |
| n29 | 1024QAM | 5 | C | 723 | 41.30 | 6.02 | 47.32 |
| n29 | 1024QAM | 5 | C | 725.5 | 41.31 | 6.02 | 47.33 |
| **n29** | **QPSK** | **10** | **C** | **723** | **42.87** | **6.02** | **48.89** |
| n29 | 16QAM | 10 | C | 723 | 42.46 | 6.02 | 48.48 |
| n29 | 64QAM | 10 | C | 723 | 42.69 | 6.02 | 48.71 |
| n29 | 256QAM | 10 | C | 723 | 42.66 | 6.02 | 48.68 |
| n29 | 1024QAM | 10 | C | 723 | 42.17 | 6.02 | 48.19 |

***Table 8.4-3:*** *Conducted total channel power, band n29*

***Band n29***