

# PEAK TO AVERAGE POWER (PAPR) CCDF

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  |
|------------------------------|--------------------|------------|-----|-----------|-----------|
| Analyzer - Spectrum Analyzer | Agilent            | N9010A     | AFL | 27-Feb-20 | 27-Feb-21 |
| Generator - Signal           | Keysight           | N5171B-506 | TEW | 2-May-18  | 2-May-21  |
| Block - DC                   | Fairview Microwave | SD3464     | ANA | 25-Sep-20 | 25-Sep-21 |

## TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

Because the conducted Output Power was measured using a RMS Average detector, the Peak to Average Power Ratio (PAPR) was measured to show that the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed the rule part defined limit.

The PAPR measurement method is described in ANSI C63.26 section 5.2.3.4.  
The PAPR was measured using the CCDF function of the spectrum analyzer.

Per 27.50(d)(2), RSS-139 section 6.5, and RSS-170 section 5.3.1, the PAPR limit shall not exceed 13 dB for more than the ANSI described 0.1% of the time.

RF conducted emissions testing was performed on one port. The FRIJ antenna ports are essentially electrically identical (the RF power variation between antenna ports is small) and port 4 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.

.

# PEAK TO AVERAGE (PAPR) CCDF



TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

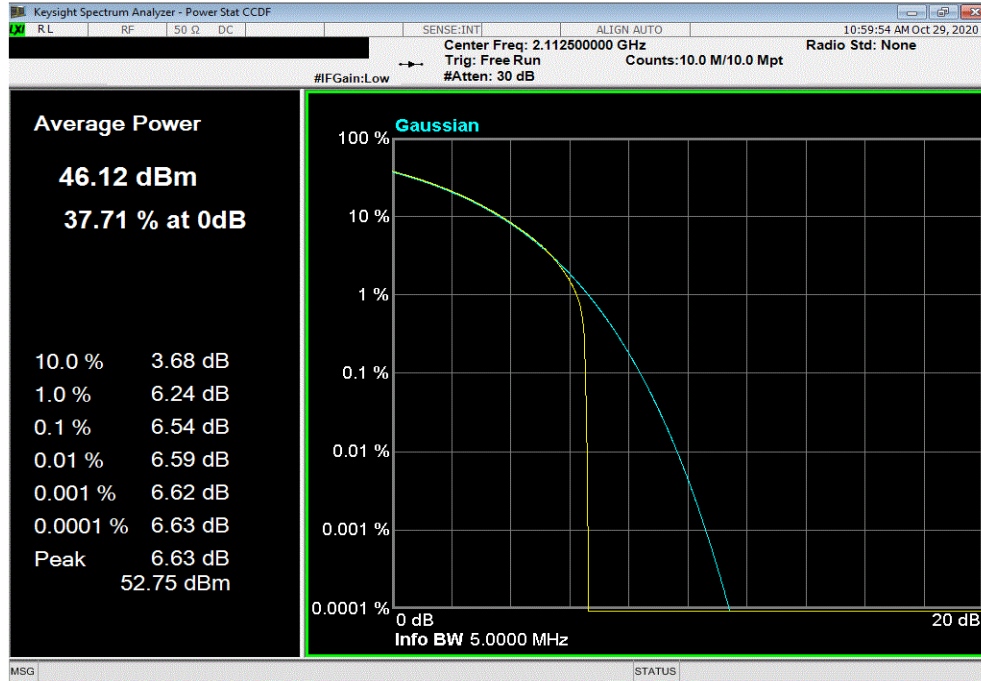
|                                                                                                                                                                                                   |               |                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------|
| EUT: FRIJ                                                                                                                                                                                         |               | Work Order: NOKI0019                    |
| Serial Number: YK160800020                                                                                                                                                                        |               | Date: 2-Nov-20                          |
| Customer: Nokia Solutions and Networks                                                                                                                                                            |               | Temperature: 22.8 °C                    |
| Attendees: Mitchell Hill, John Rattanavong                                                                                                                                                        |               | Humidity: 34.9% RH                      |
| Project: None                                                                                                                                                                                     |               | Barometric Pres.: 1037 mbar             |
| Tested by: Brandon Hobbs                                                                                                                                                                          | Power: 54 VDC | Job Site: TX05                          |
| TEST SPECIFICATIONS                                                                                                                                                                               |               |                                         |
| FCC 27:2020                                                                                                                                                                                       |               | Test Method                             |
| RSS-139:2015, RSS-170:2015                                                                                                                                                                        |               | ANSI C63.26:2015                        |
| RSS-139:2015, RSS-170:2015                                                                                                                                                                        |               | RSS-139:2015, RSS-170:2015              |
| COMMENTS                                                                                                                                                                                          |               |                                         |
| All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. Band n66 carriers are enabled at maximum power (40 watts/carrier). |               |                                         |
| DEVIATIONS FROM TEST STANDARD                                                                                                                                                                     |               |                                         |
| None                                                                                                                                                                                              |               |                                         |
| Configuration #                                                                                                                                                                                   | 2             | Signature                               |
|                                                                                                                                                                                                   |               | PAPR Value (dB) PAPR Limit (dB) Results |
| Port 4, Band n66, 2110 MHz - 2200 MHz                                                                                                                                                             |               |                                         |
| 5 MHz Bandwidth                                                                                                                                                                                   |               |                                         |
| QPSK Modulation                                                                                                                                                                                   |               |                                         |
| Low Channel 2112.5 MHz                                                                                                                                                                            |               | 6.54 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.54 13 Pass                            |
| High Channel 2197.5 MHz                                                                                                                                                                           |               | 6.54 13 Pass                            |
| 16-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2112.5 MHz                                                                                                                                                                            |               | 6.69 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.68 13 Pass                            |
| High Channel 2197.5 MHz                                                                                                                                                                           |               | 6.69 13 Pass                            |
| 64-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2112.5 MHz                                                                                                                                                                            |               | 6.50 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.50 13 Pass                            |
| High Channel 2197.5 MHz                                                                                                                                                                           |               | 6.51 13 Pass                            |
| 256-QAM Modulation                                                                                                                                                                                |               |                                         |
| Low Channel 2112.5 MHz                                                                                                                                                                            |               | 6.60 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.60 13 Pass                            |
| High Channel 2197.5 MHz                                                                                                                                                                           |               | 6.60 13 Pass                            |
| 10 MHz Bandwidth                                                                                                                                                                                  |               |                                         |
| QPSK Modulation                                                                                                                                                                                   |               |                                         |
| Low Channel 2115 MHz                                                                                                                                                                              |               | 6.56 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.52 13 Pass                            |
| High Channel 2195 MHz                                                                                                                                                                             |               | 6.56 13 Pass                            |
| 16-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2115 MHz                                                                                                                                                                              |               | 6.69 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.66 13 Pass                            |
| High Channel 2195 MHz                                                                                                                                                                             |               | 6.70 13 Pass                            |
| 64-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2115 MHz                                                                                                                                                                              |               | 6.55 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.52 13 Pass                            |
| High Channel 2195 MHz                                                                                                                                                                             |               | 6.56 13 Pass                            |
| 256-QAM Modulation                                                                                                                                                                                |               |                                         |
| Low Channel 2115 MHz                                                                                                                                                                              |               | 6.62 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.60 13 Pass                            |
| High Channel 2195 MHz                                                                                                                                                                             |               | 6.64 13 Pass                            |
| 15 MHz Bandwidth                                                                                                                                                                                  |               |                                         |
| QPSK Modulation                                                                                                                                                                                   |               |                                         |
| Low Channel 2117.5 MHz                                                                                                                                                                            |               | 6.59 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.51 13 Pass                            |
| High Channel 2192.5 MHz                                                                                                                                                                           |               | 6.60 13 Pass                            |
| 16-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2117.5 MHz                                                                                                                                                                            |               | 6.65 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.59 13 Pass                            |
| High Channel 2192.5 MHz                                                                                                                                                                           |               | 6.68 13 Pass                            |
| 64-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2117.5 MHz                                                                                                                                                                            |               | 6.54 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.50 13 Pass                            |
| High Channel 2192.5 MHz                                                                                                                                                                           |               | 6.59 13 Pass                            |
| 256-QAM Modulation                                                                                                                                                                                |               |                                         |
| Low Channel 2117.5 MHz                                                                                                                                                                            |               | 6.56 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.51 13 Pass                            |
| High Channel 2192.5 MHz                                                                                                                                                                           |               | 6.62 13 Pass                            |
| 20 MHz Bandwidth                                                                                                                                                                                  |               |                                         |
| QPSK Modulation                                                                                                                                                                                   |               |                                         |
| Low Channel 2120 MHz                                                                                                                                                                              |               | 6.55 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.46 13 Pass                            |
| High Channel 2190 MHz                                                                                                                                                                             |               | 6.62 13 Pass                            |
| 16-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2120 MHz                                                                                                                                                                              |               | 6.61 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.53 13 Pass                            |
| High Channel 2190 MHz                                                                                                                                                                             |               | 6.67 13 Pass                            |
| 64-QAM Modulation                                                                                                                                                                                 |               |                                         |
| Low Channel 2120 MHz                                                                                                                                                                              |               | 6.56 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.47 13 Pass                            |
| High Channel 2190 MHz                                                                                                                                                                             |               | 6.62 13 Pass                            |
| 256-QAM Modulation                                                                                                                                                                                |               |                                         |
| Low Channel 2120 MHz                                                                                                                                                                              |               | 6.54 13 Pass                            |
| Mid Channel 2155 MHz                                                                                                                                                                              |               | 6.47 13 Pass                            |
| High Channel 2190 MHz                                                                                                                                                                             |               | 6.62 13 Pass                            |

# PEAK TO AVERAGE (PAPR) CCDF

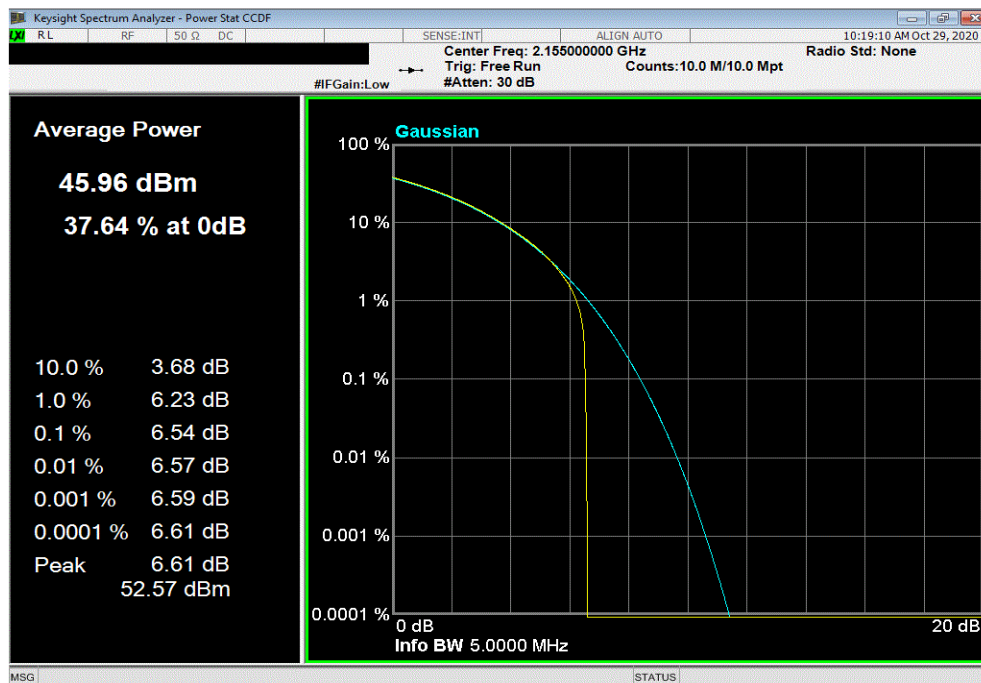


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, Low Channel 2112.5 MHz |                 |                 |         |  |  |  |
|-------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                 | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                 | 6.54            | 13              | Pass    |  |  |  |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, Mid Channel 2155 MHz |                 |                 |         |  |  |  |
|-----------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                               | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                               | 6.54            | 13              | Pass    |  |  |  |

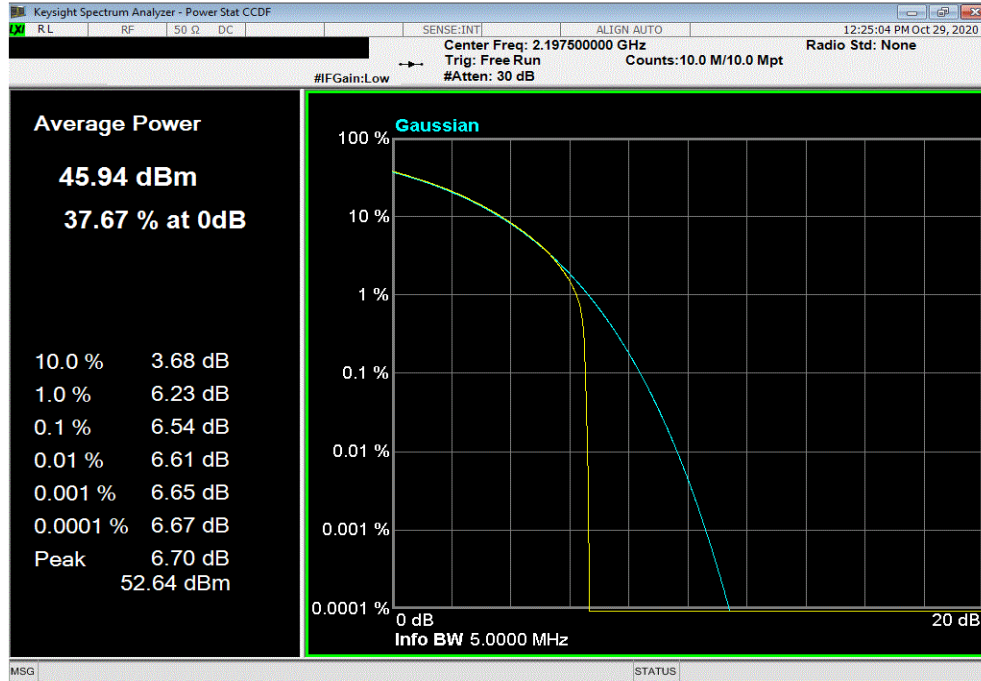


# PEAK TO AVERAGE (PAPR) CCDF

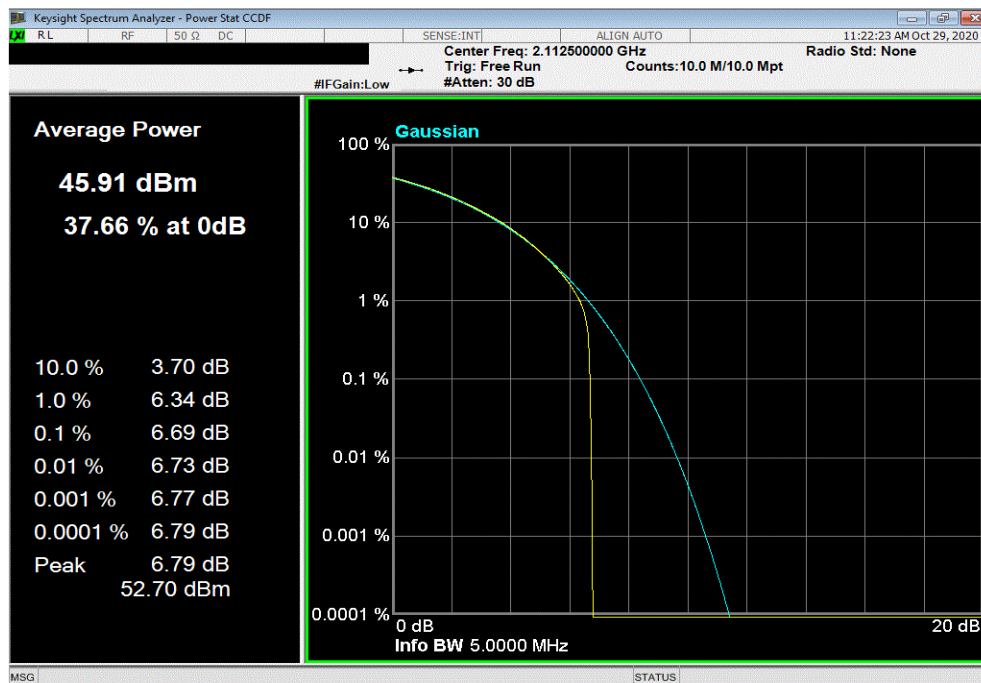


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, High Channel 2197.5 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.54            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel 2112.5 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.69            | 13              | Pass    |

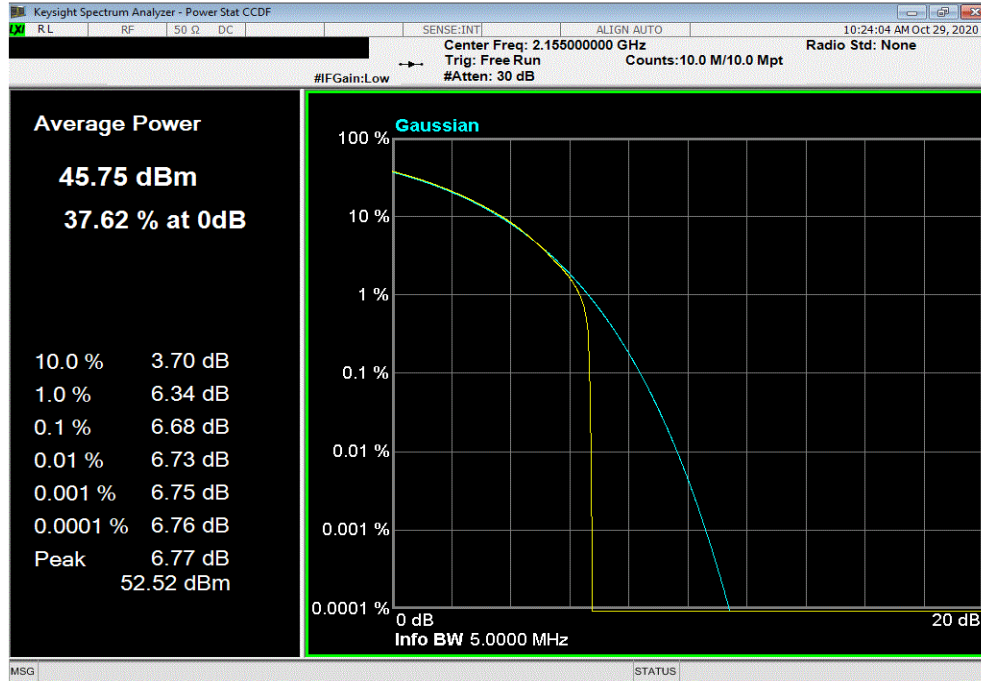


# PEAK TO AVERAGE (PAPR) CCDF

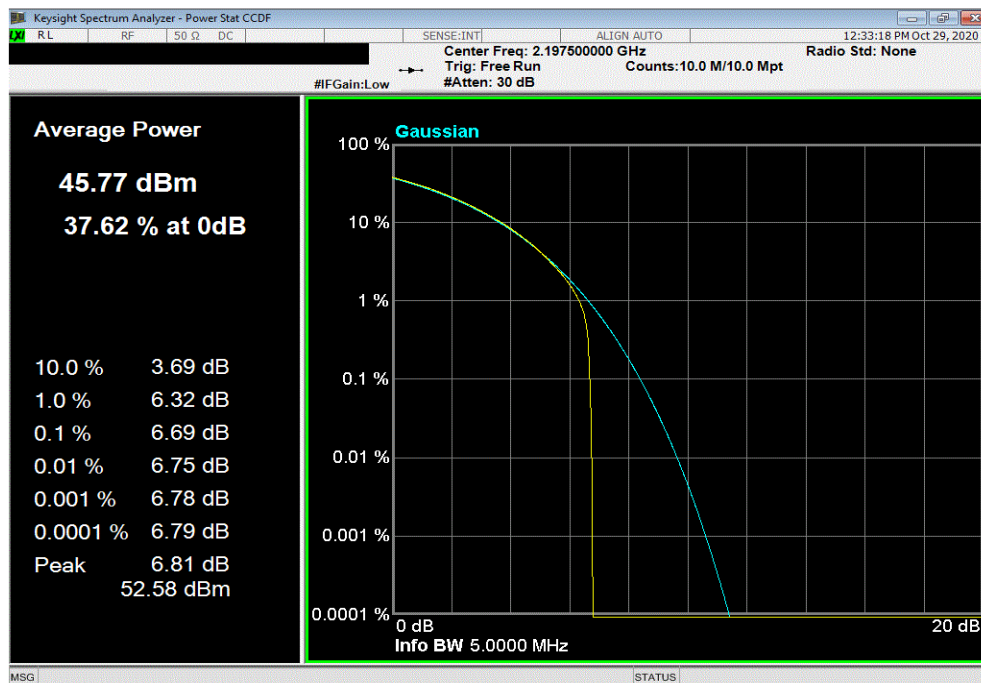


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|-------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                 |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                 |  |  |  | 6.68            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, High Channel 2197.5 MHz |  |  |  |                 |                 |         |
|----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                    |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                    |  |  |  | 6.69            | 13              | Pass    |

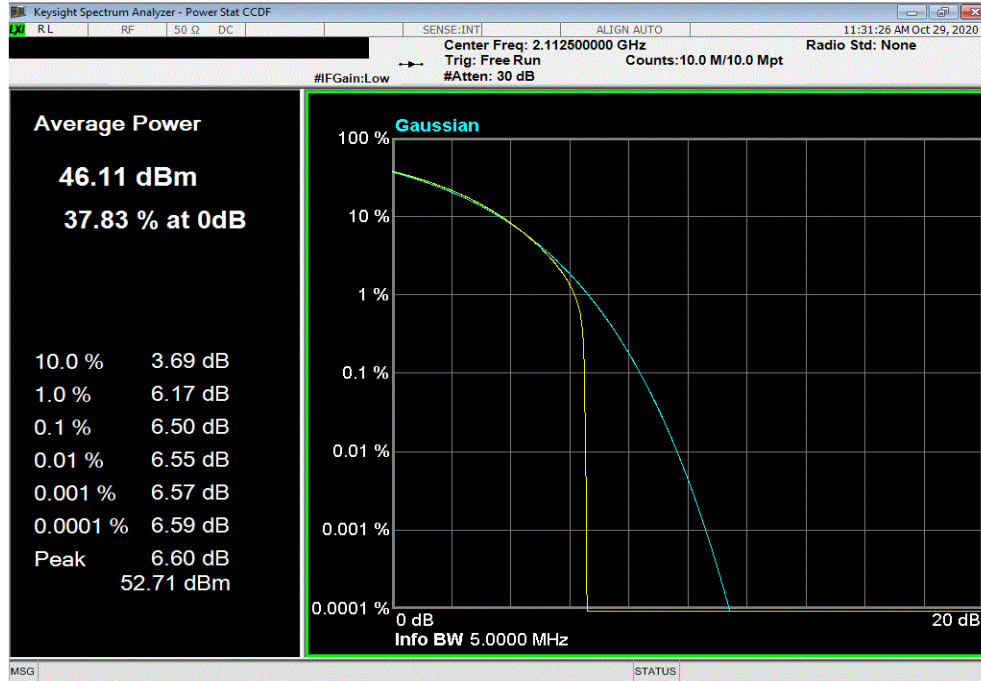


# PEAK TO AVERAGE (PAPR) CCDF

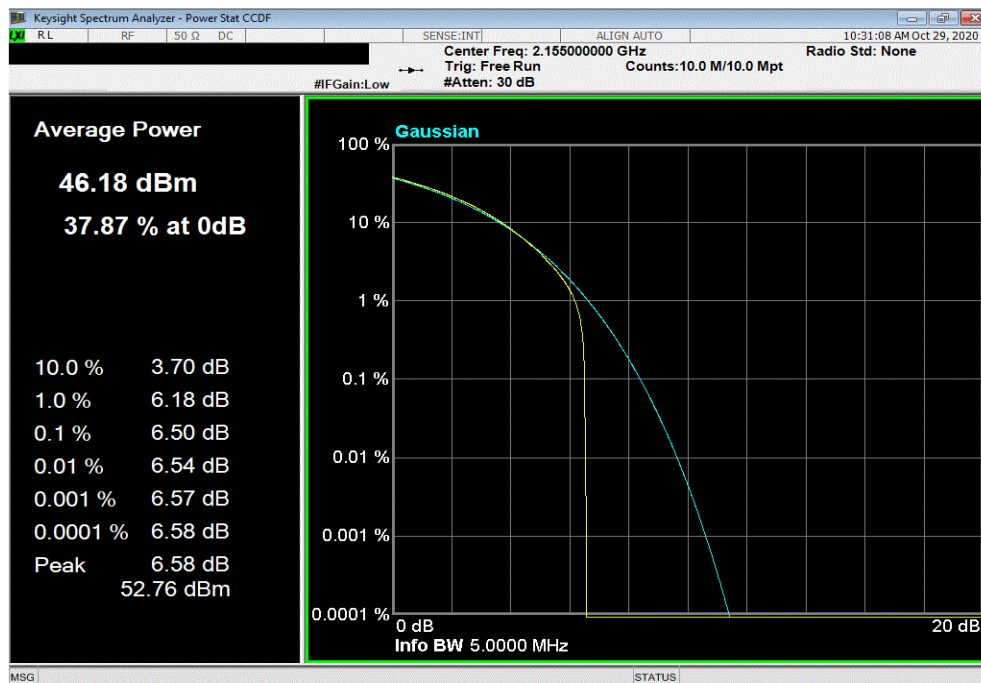


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 64-QAM Modulation, Low Channel 2112.5 MHz |                 |                 |         |  |  |  |
|----------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                    | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                    | 6.5             | 13              | Pass    |  |  |  |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 64-QAM Modulation, Mid Channel 2155 MHz |                 |                 |         |  |  |  |
|--------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                  | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                  | 6.5             | 13              | Pass    |  |  |  |



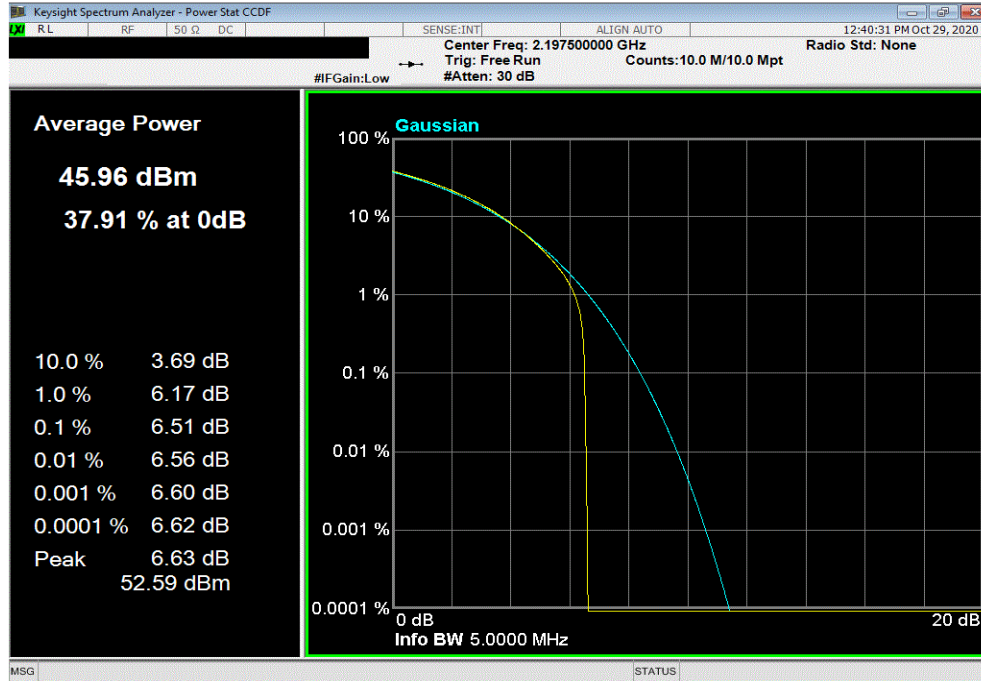


# PEAK TO AVERAGE (PAPR) CCDF

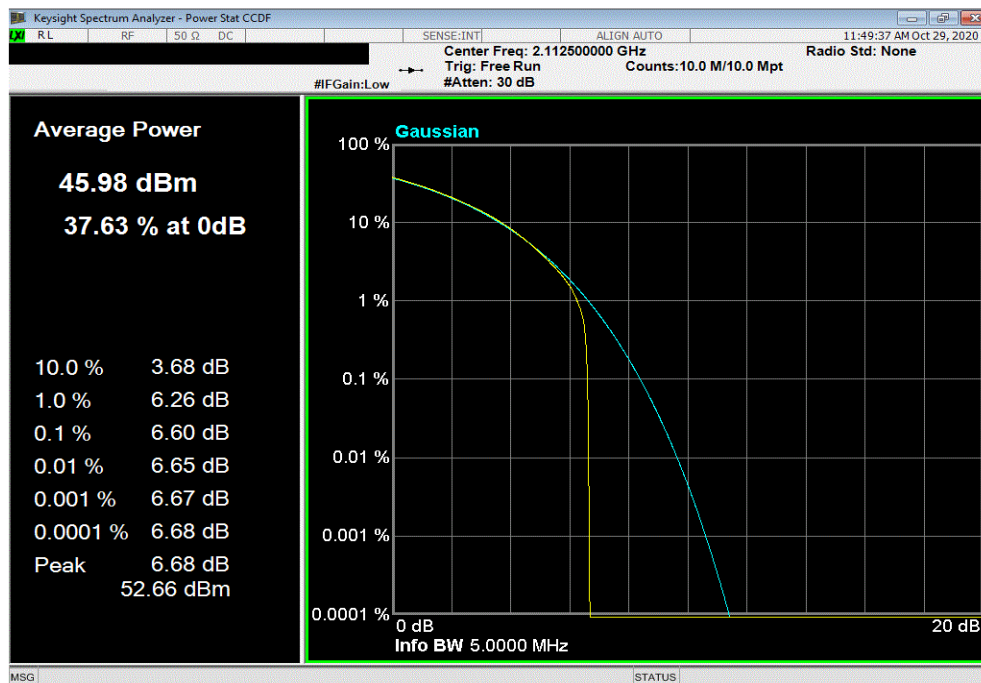


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 64-QAM Modulation, High Channel 2197.5 MHz |                 |                 |         |  |  |  |
|-----------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                     | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                     | 6.51            | 13              | Pass    |  |  |  |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 256-QAM Modulation, Low Channel 2112.5 MHz |                 |                 |         |  |  |  |
|-----------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                     | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                     | 6.6             | 13              | Pass    |  |  |  |

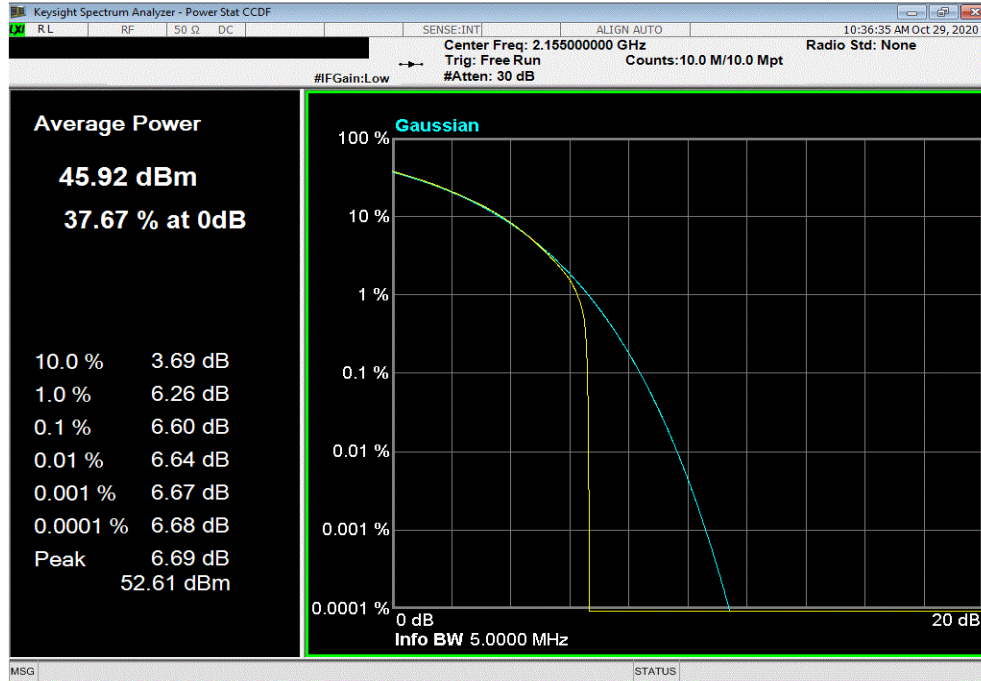


# PEAK TO AVERAGE (PAPR) CCDF

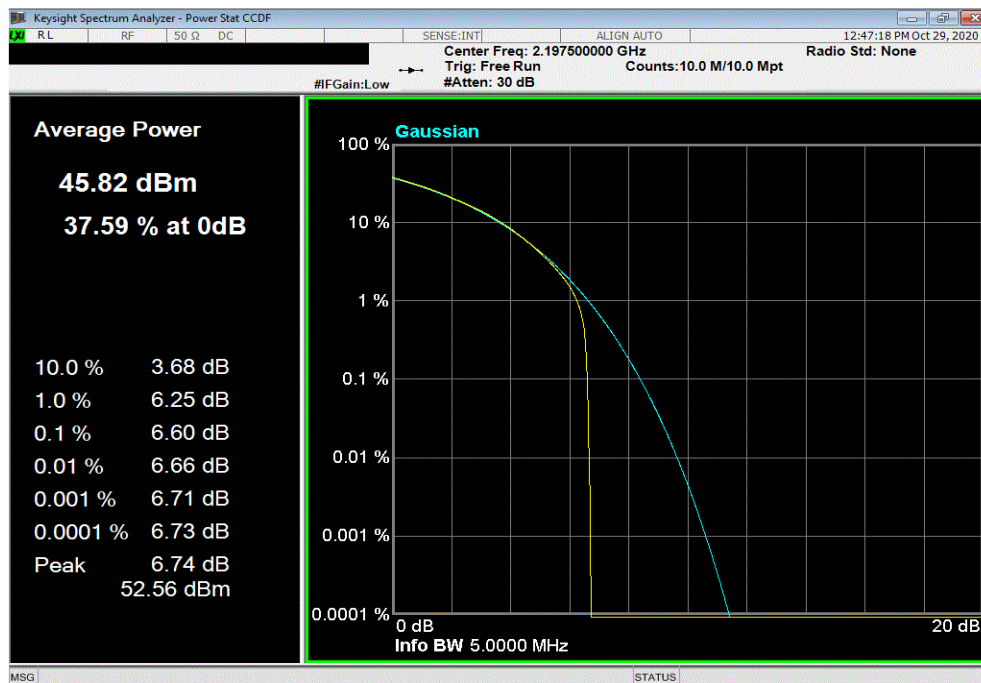


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 256-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.6             | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 256-QAM Modulation, High Channel 2197.5 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                      |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                      |  |  |  | 6.6             | 13              | Pass    |



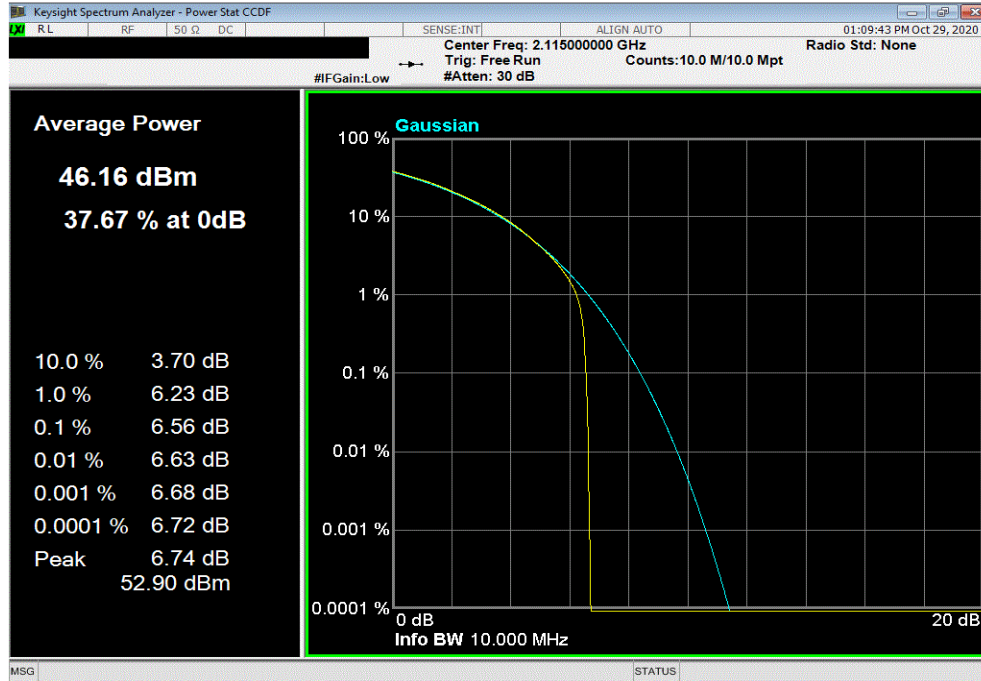


# PEAK TO AVERAGE (PAPR) CCDF

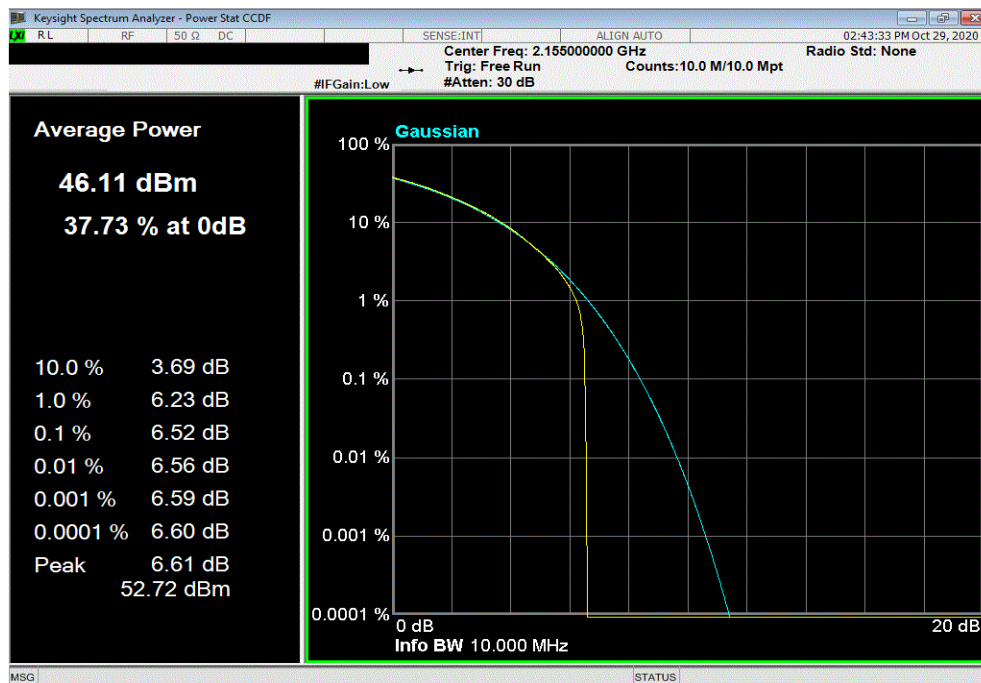


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , QPSK Modulation, Low Channel 2115 MHz |  |  |  |                 |                 |         |
|-------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                 |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                 |  |  |  | 6.56            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , QPSK Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|-------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                 |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                 |  |  |  | 6.52            | 13              | Pass    |

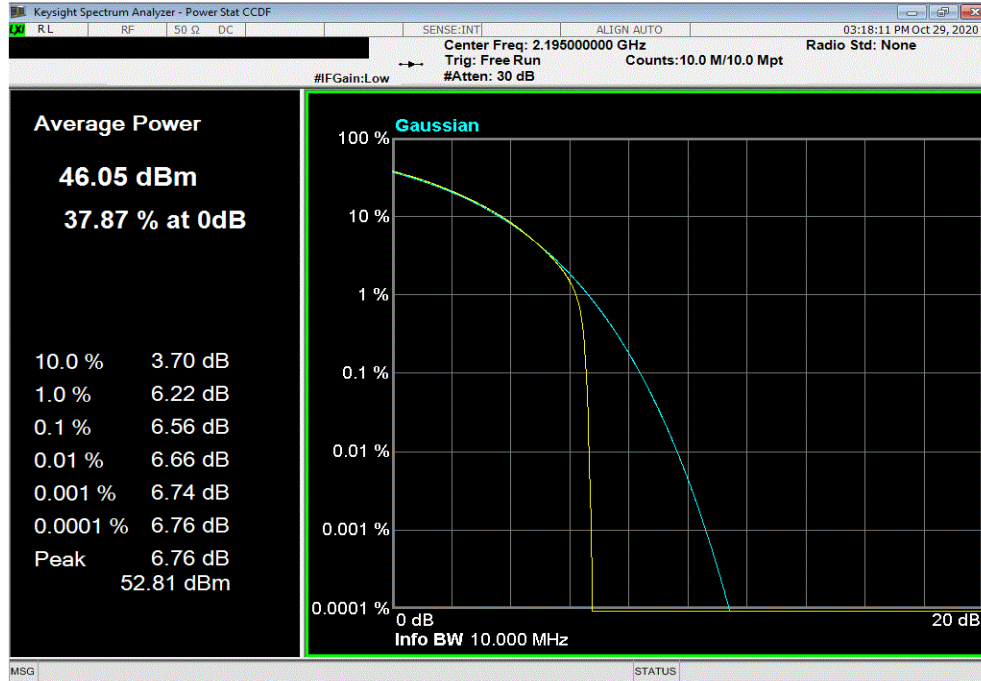


# PEAK TO AVERAGE (PAPR) CCDF

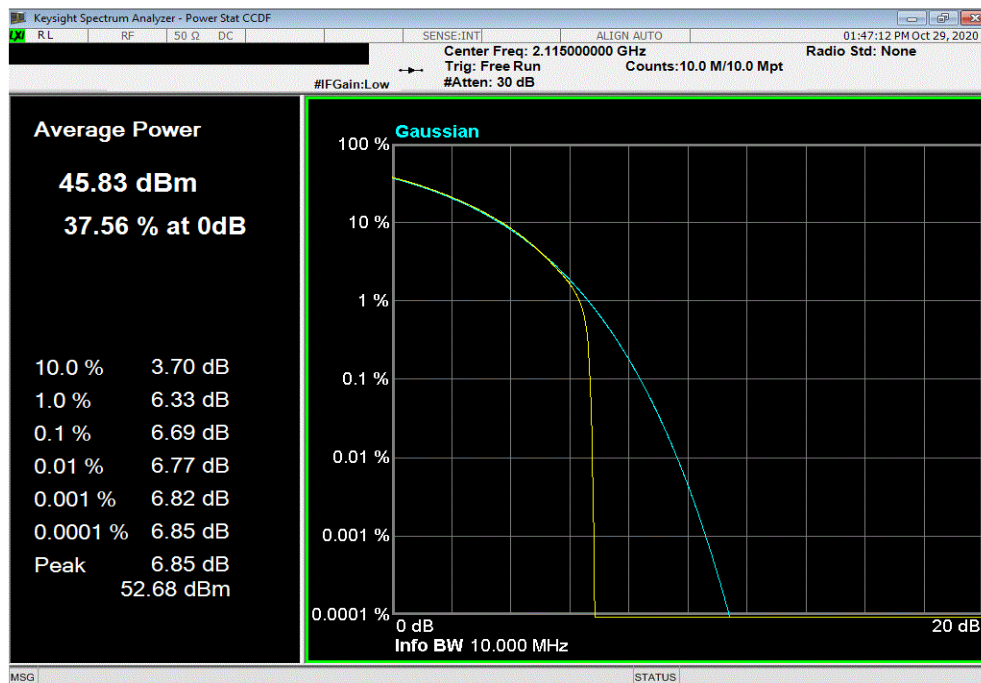


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , QPSK Modulation, High Channel 2195 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.56            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 16-QAM Modulation, Low Channel 2115 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.69            | 13              | Pass    |

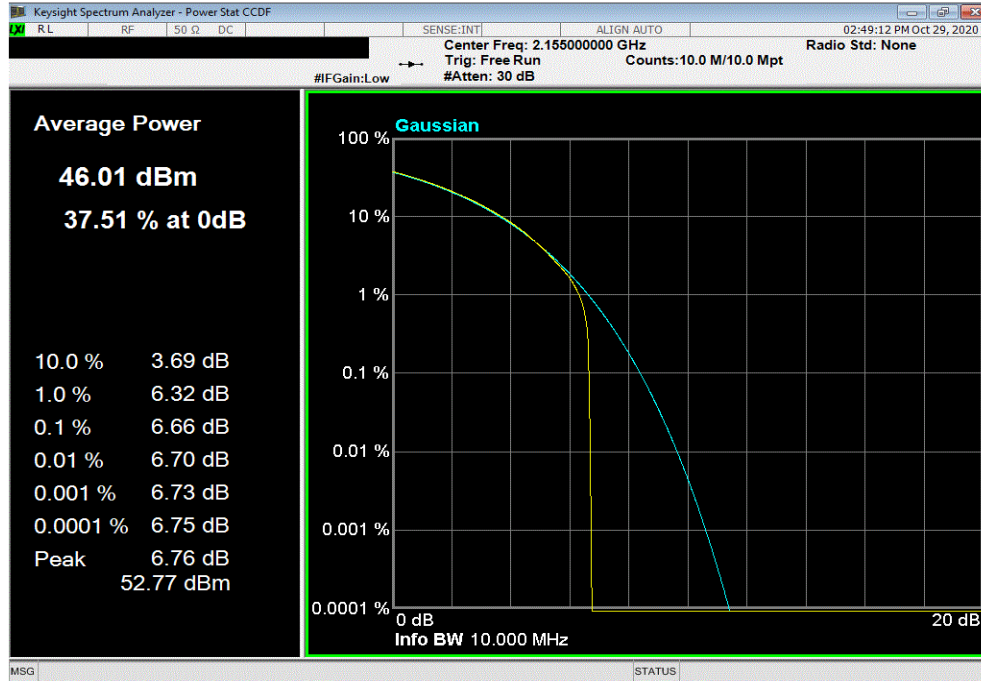


# PEAK TO AVERAGE (PAPR) CCDF

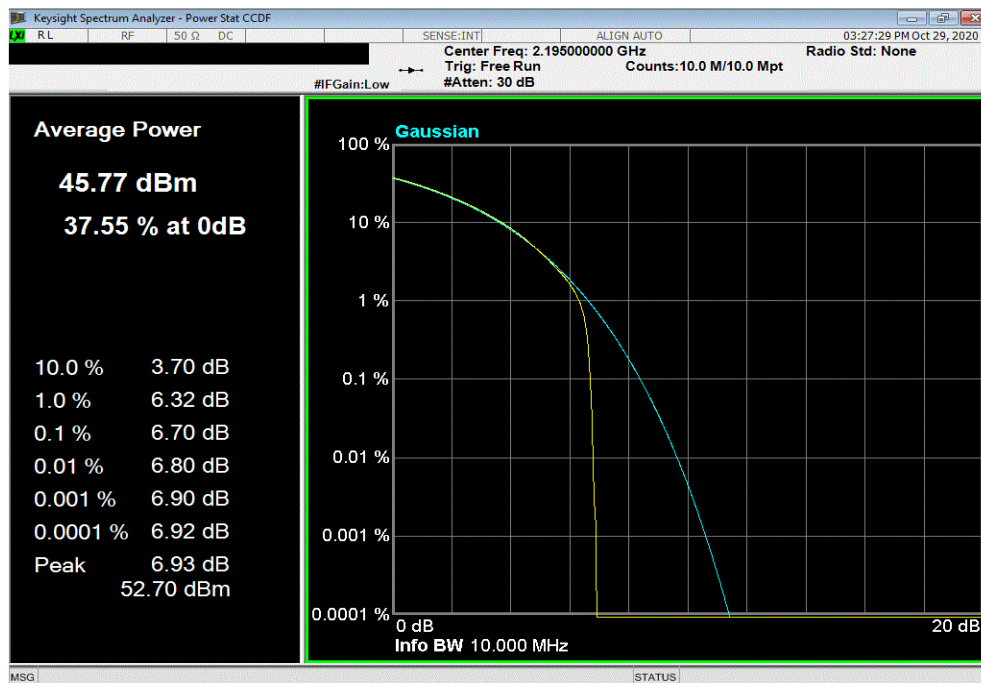


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 16-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.66            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 16-QAM Modulation, High Channel 2195 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.7             | 13              | Pass    |

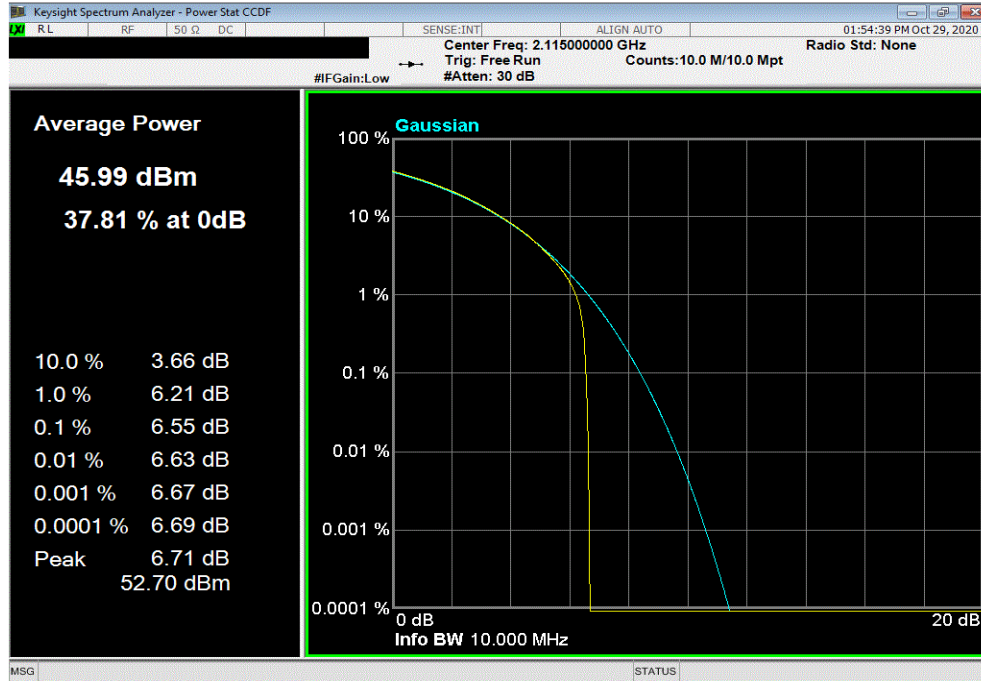


# PEAK TO AVERAGE (PAPR) CCDF

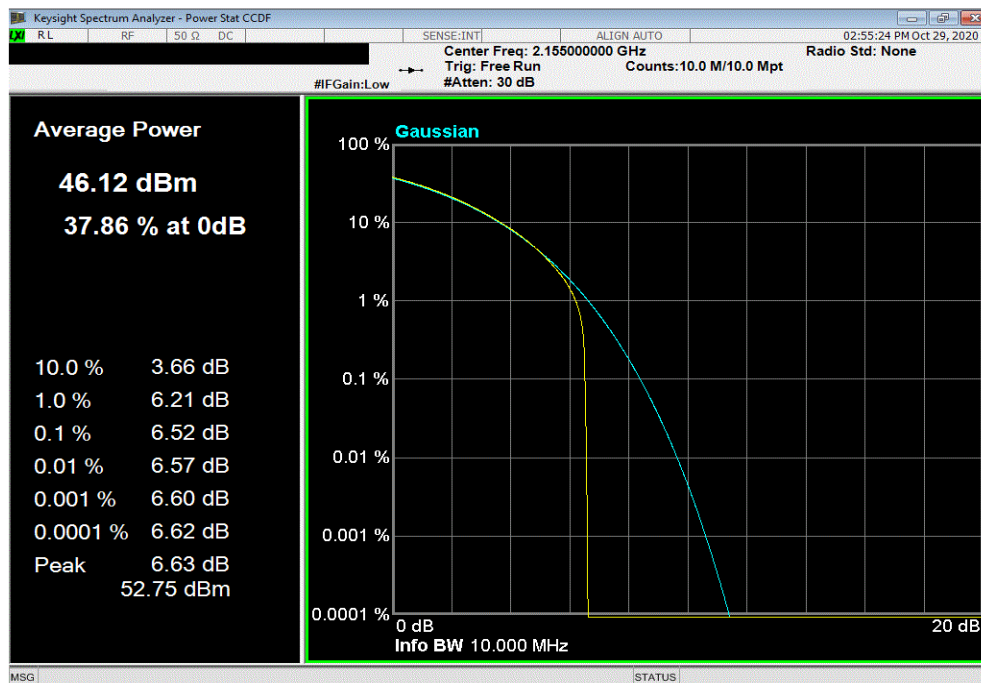


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel 2115 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.55            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.52            | 13              | Pass    |



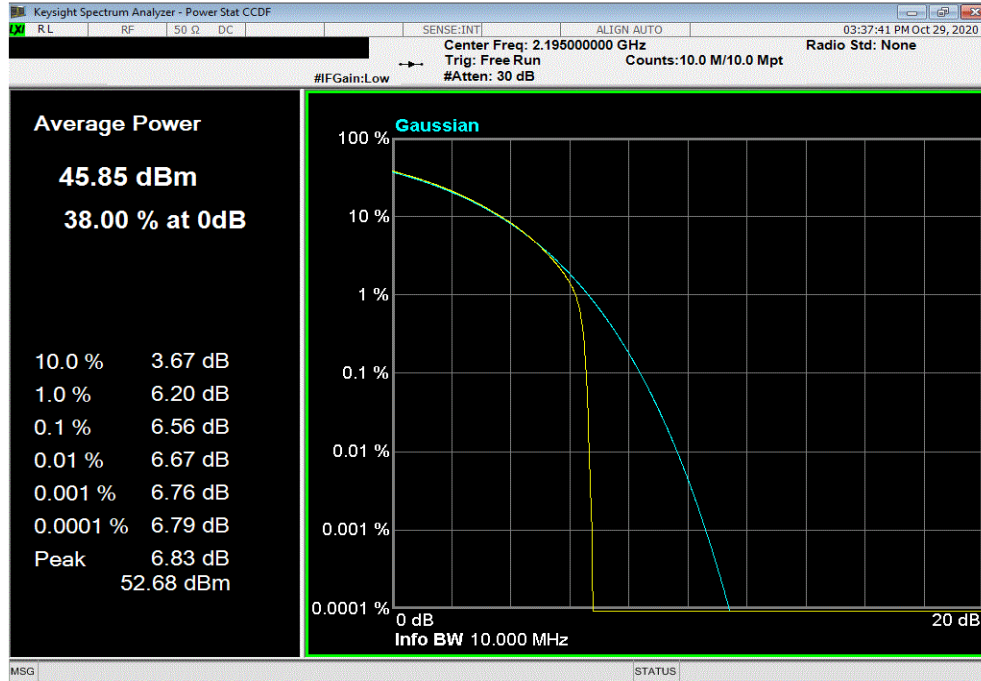


# PEAK TO AVERAGE (PAPR) CCDF

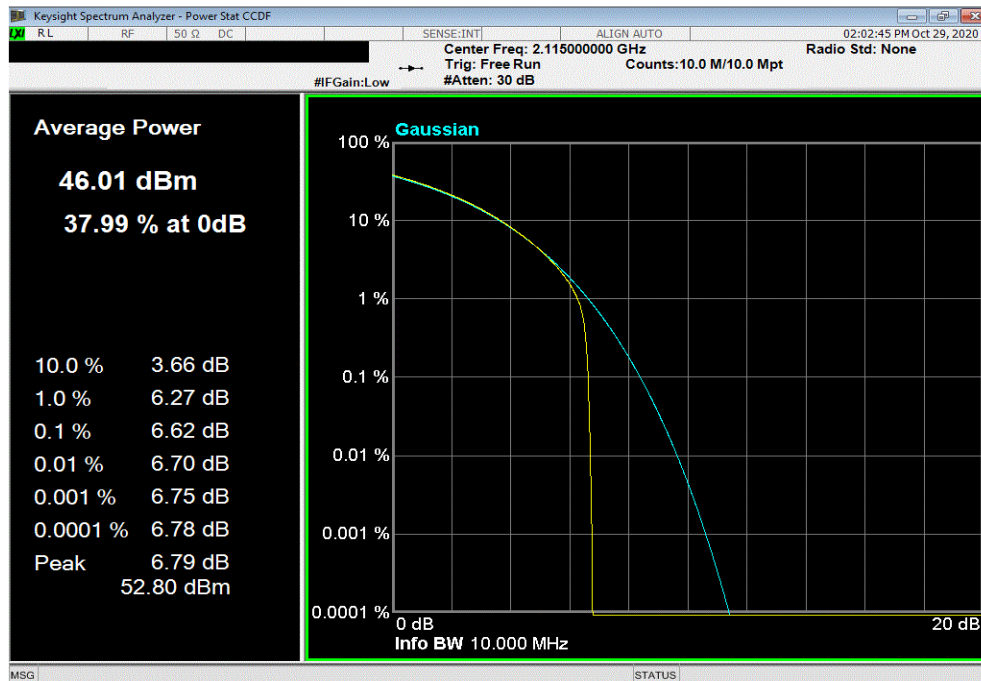


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 64-QAM Modulation, High Channel 2195 MHz |  |  |  |                 |                 |         |
|----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                    |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                    |  |  |  | 6.56            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 256-QAM Modulation, Low Channel 2115 MHz |  |  |  |                 |                 |         |
|----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                    |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                    |  |  |  | 6.62            | 13              | Pass    |



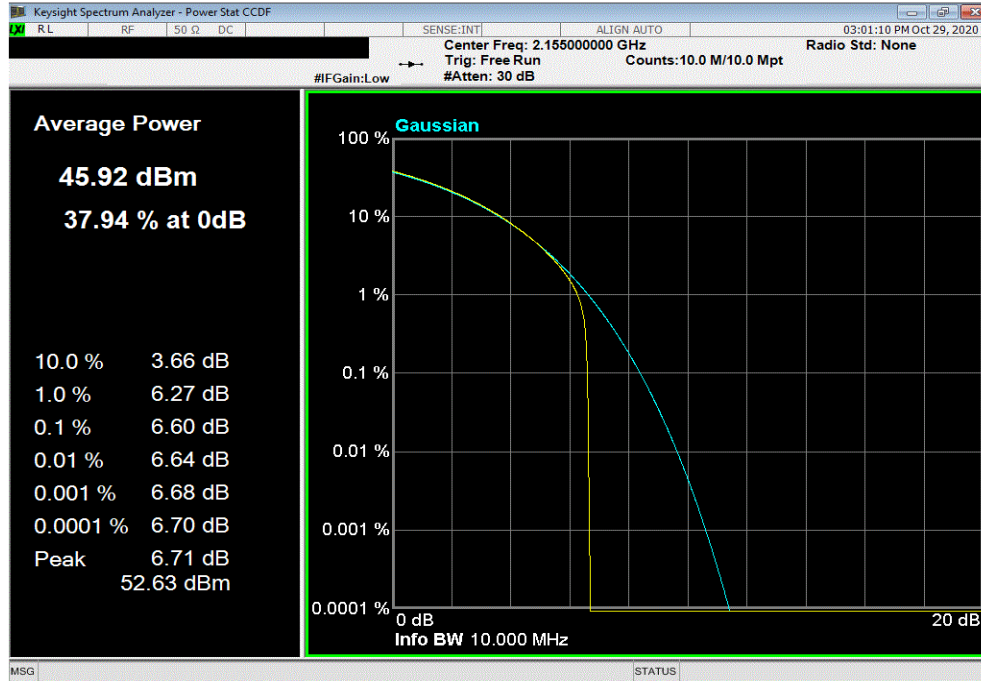


# PEAK TO AVERAGE (PAPR) CCDF

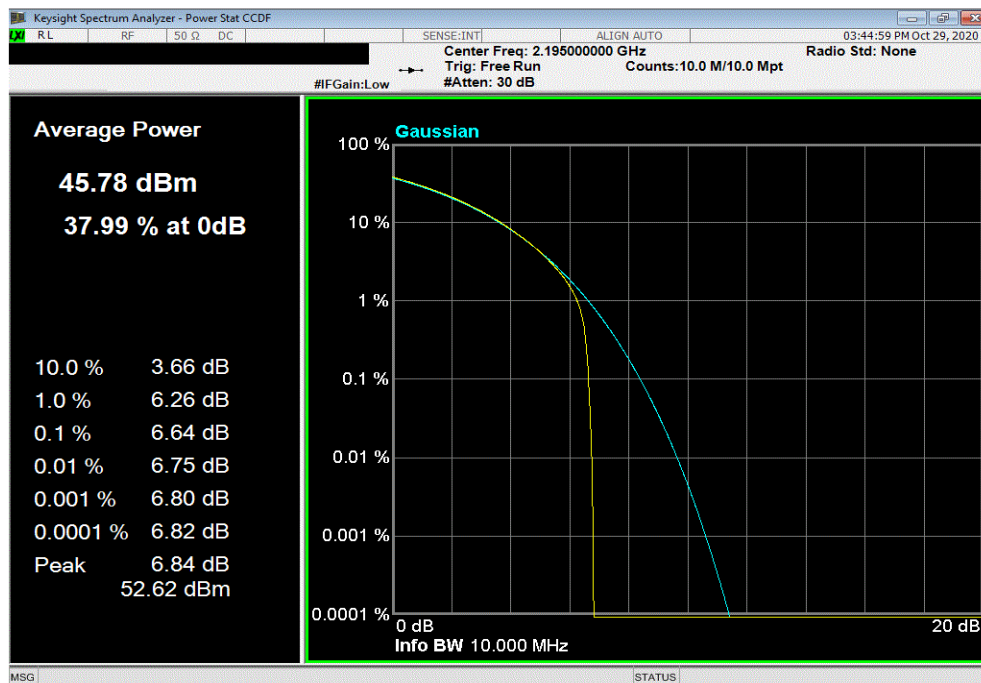


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.6             | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, High Channel 2195 MHz |  |  |  |                 |                 |         |
|----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                    |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                    |  |  |  | 6.64            | 13              | Pass    |

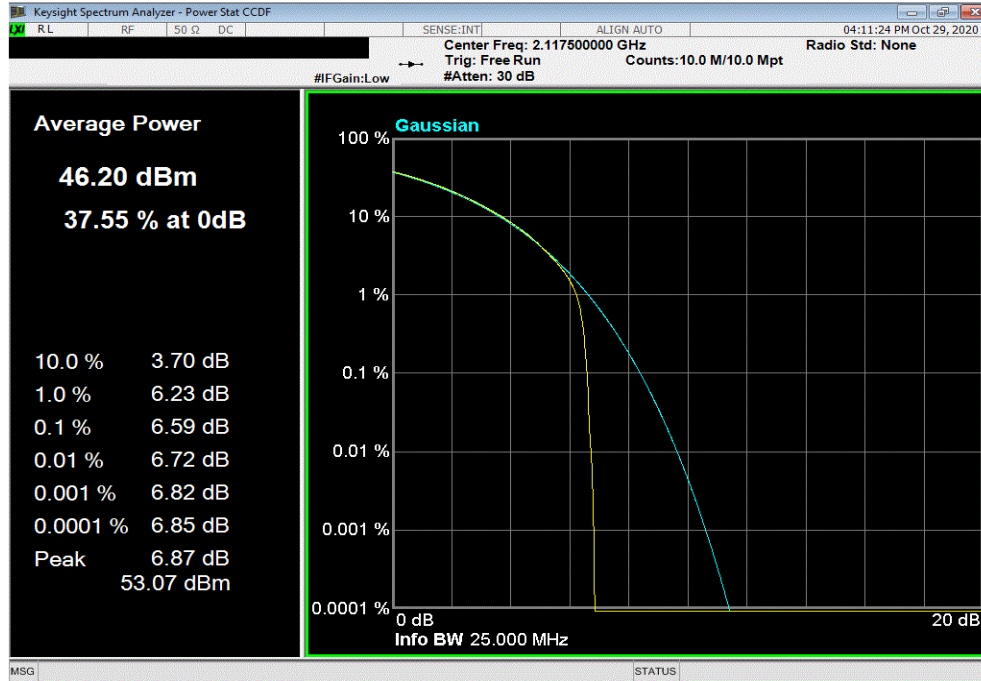


# PEAK TO AVERAGE (PAPR) CCDF

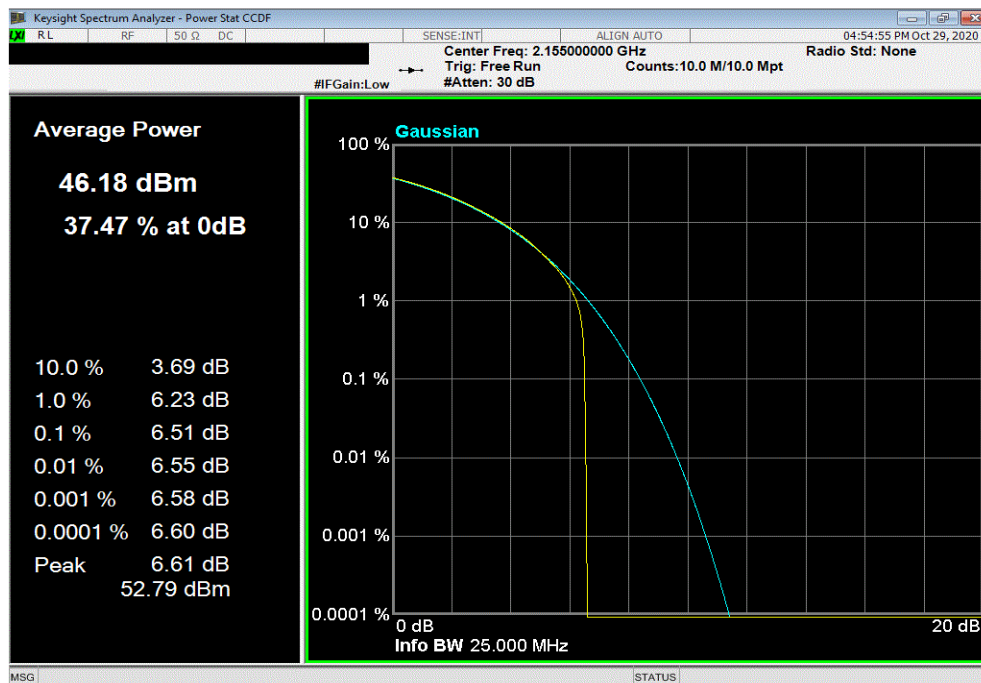


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, QPSK Modulation, Low Channel 2117.5 MHz |                 |                 |         |  |  |  |
|--------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                  | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                  | 6.59            | 13              | Pass    |  |  |  |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, QPSK Modulation, Mid Channel 2155 MHz |                 |                 |         |  |  |  |
|------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                | 6.51            | 13              | Pass    |  |  |  |

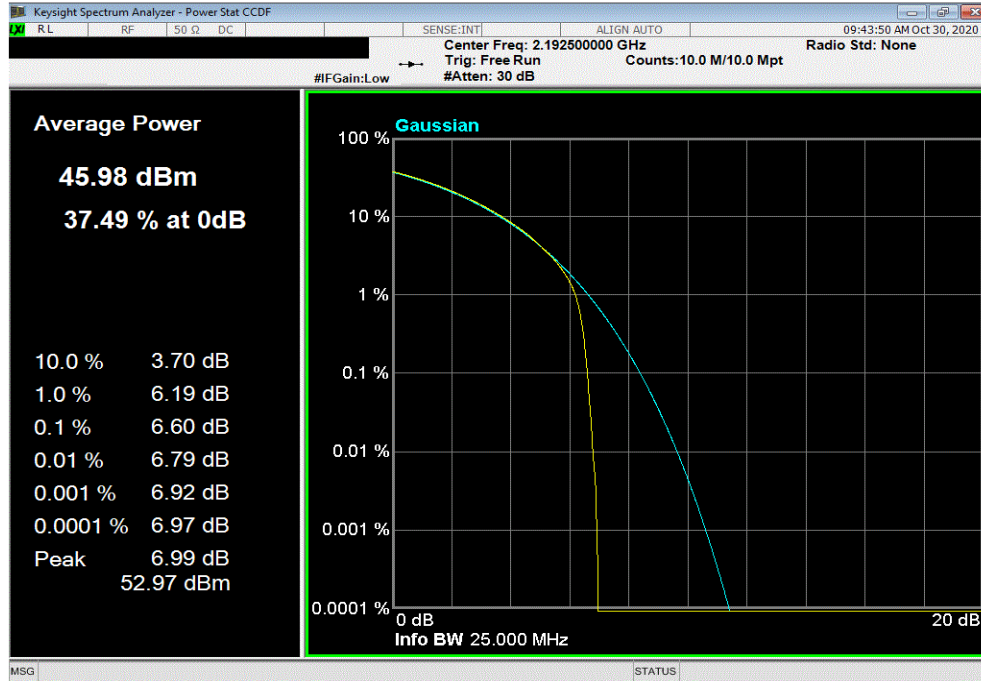


# PEAK TO AVERAGE (PAPR) CCDF

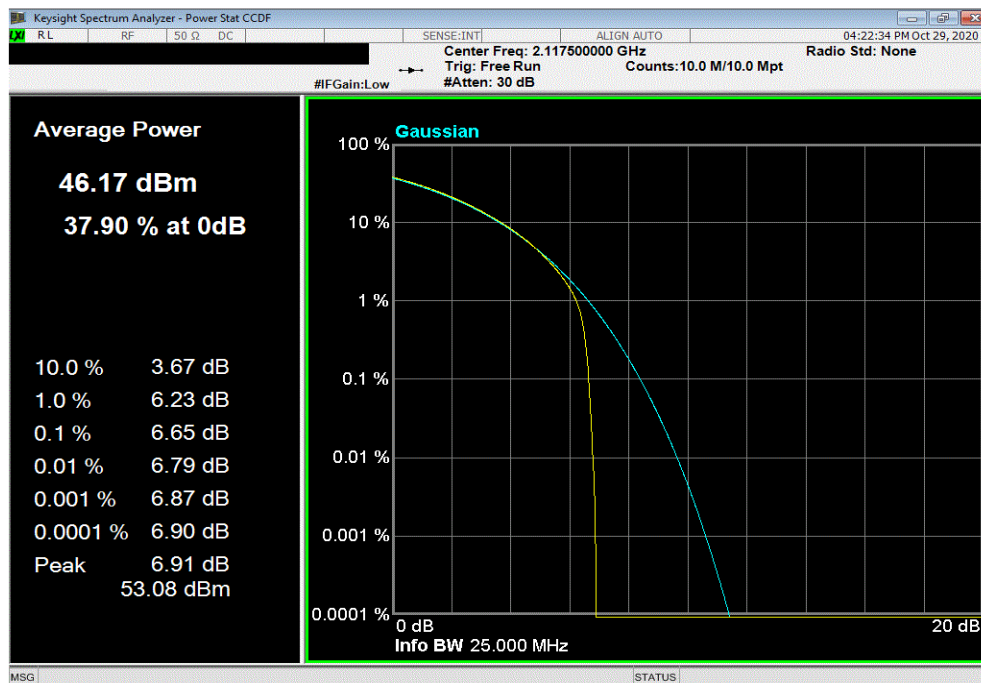


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , QPSK Modulation, High Channel 2192.5 MHz |                 |                 |         |  |  |  |
|----------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                    | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                    | 6.6             | 13              | Pass    |  |  |  |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 16-QAM Modulation, Low Channel 2117.5 MHz |                 |                 |         |  |  |  |
|-----------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|--|--|--|
|                                                                                                     | PAPR Value (dB) | PAPR Limit (dB) | Results |  |  |  |
|                                                                                                     | 6.65            | 13              | Pass    |  |  |  |

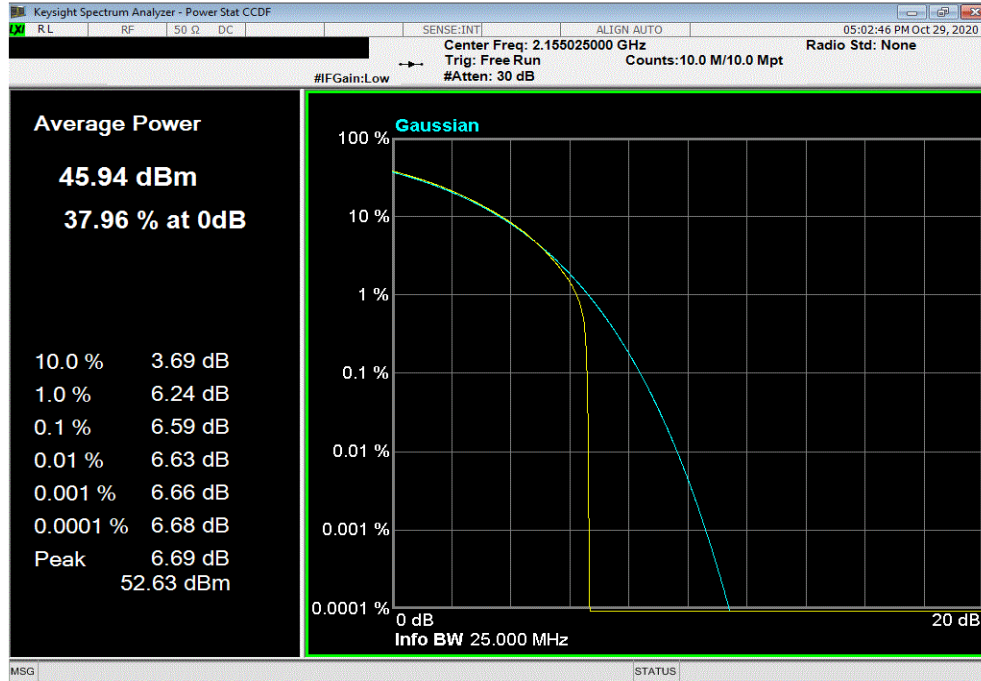


# PEAK TO AVERAGE (PAPR) CCDF

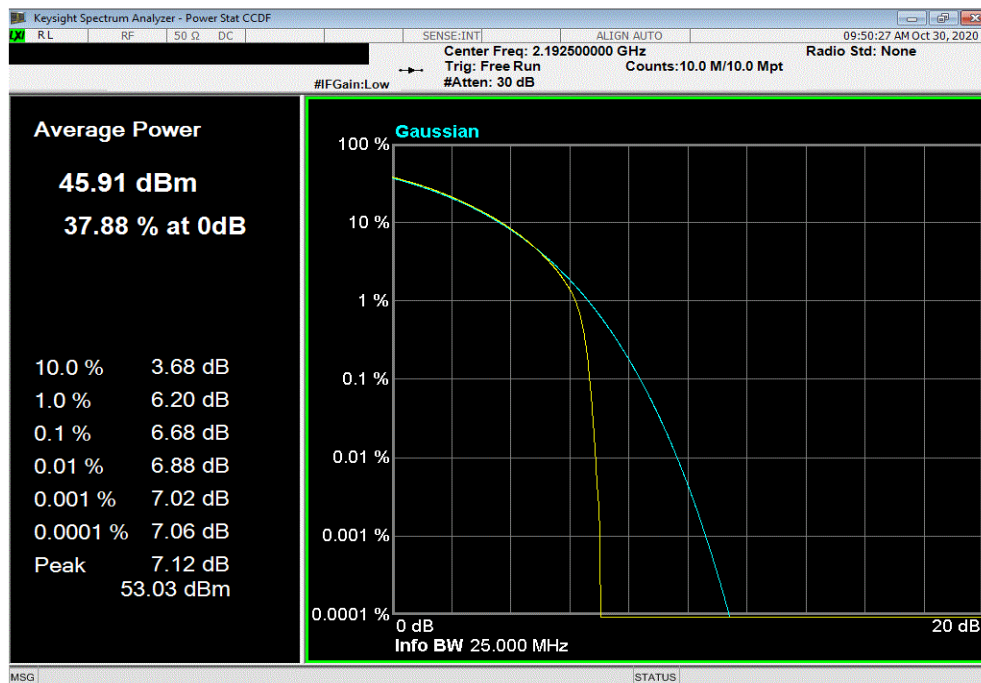


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, 16-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.59            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, 16-QAM Modulation, High Channel 2192.5 MHz |  |  |  |                 |                 |         |
|-----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                     |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                     |  |  |  | 6.68            | 13              | Pass    |



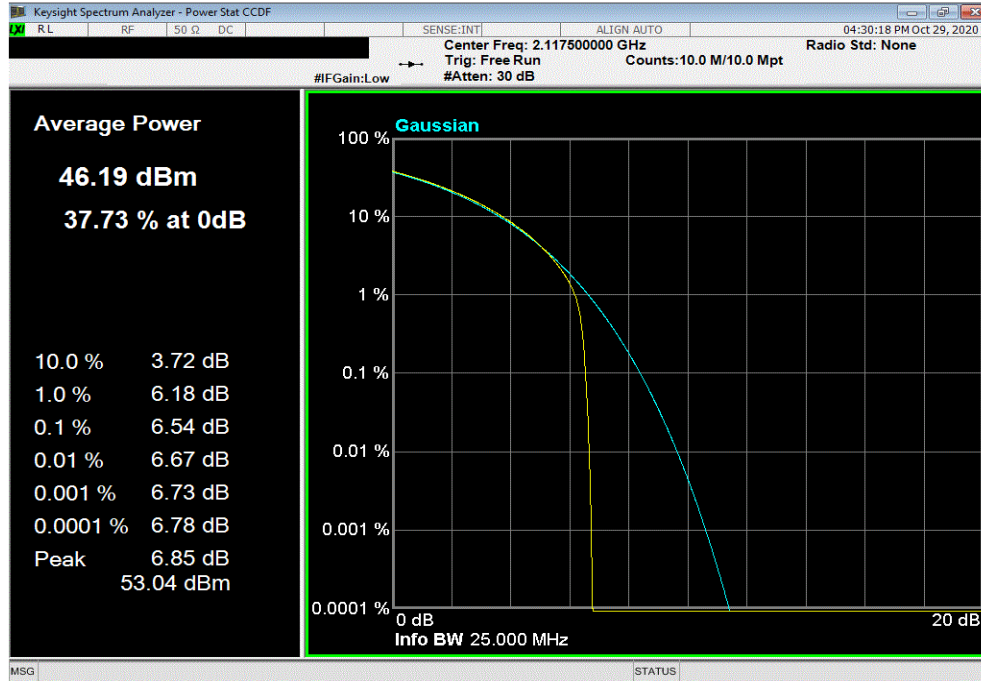


# PEAK TO AVERAGE (PAPR) CCDF

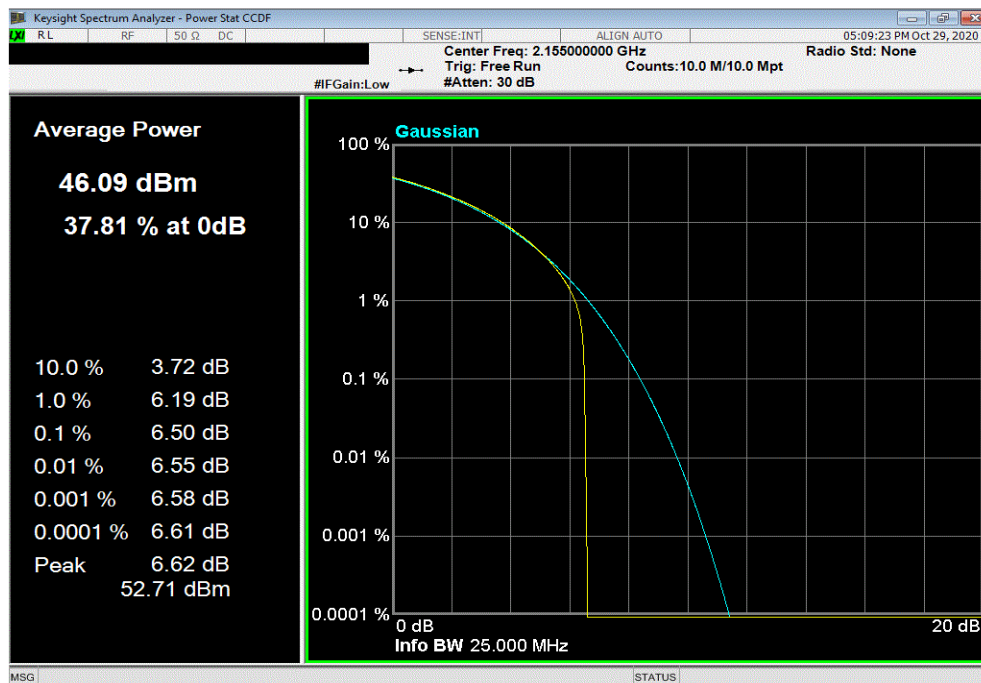


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 64-QAM Modulation, Low Channel 2117.5 MHz |  |  |  |                 |                 |         |
|-----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                     |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                     |  |  |  | 6.54            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 64-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.5             | 13              | Pass    |



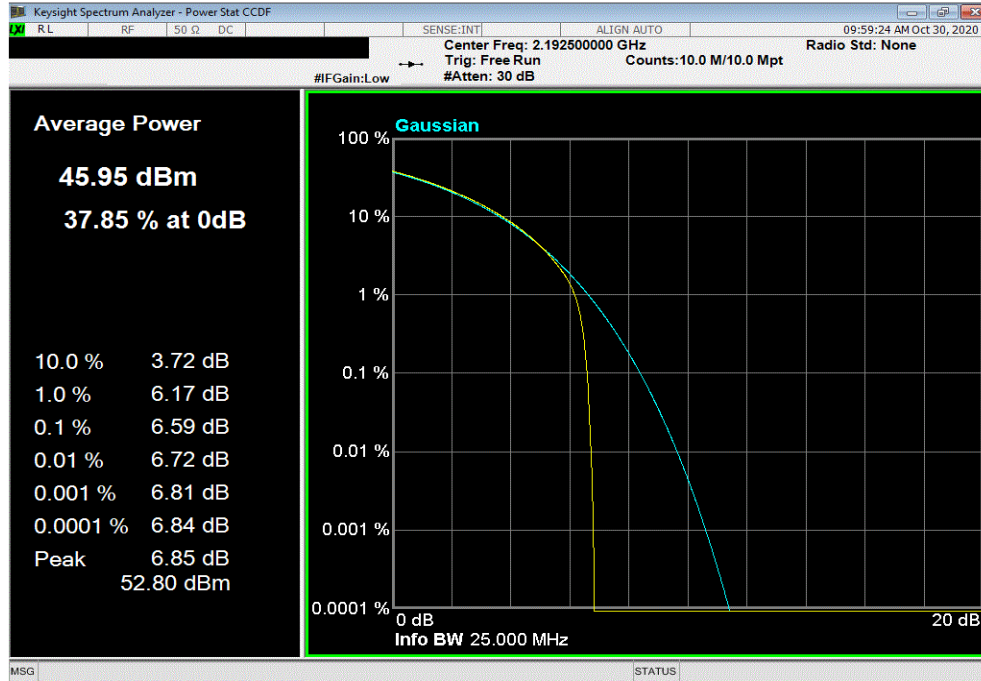


# PEAK TO AVERAGE (PAPR) CCDF

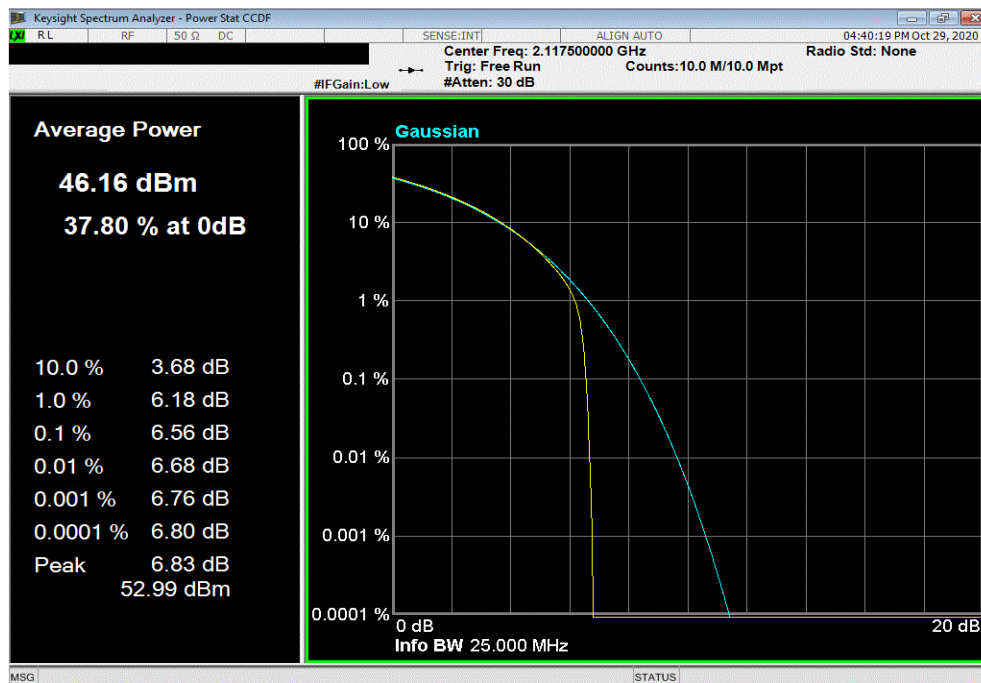


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 64-QAM Modulation, High Channel 2192.5 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                      |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                      |  |  |  | 6.59            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Low Channel 2117.5 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                      |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                      |  |  |  | 6.56            | 13              | Pass    |

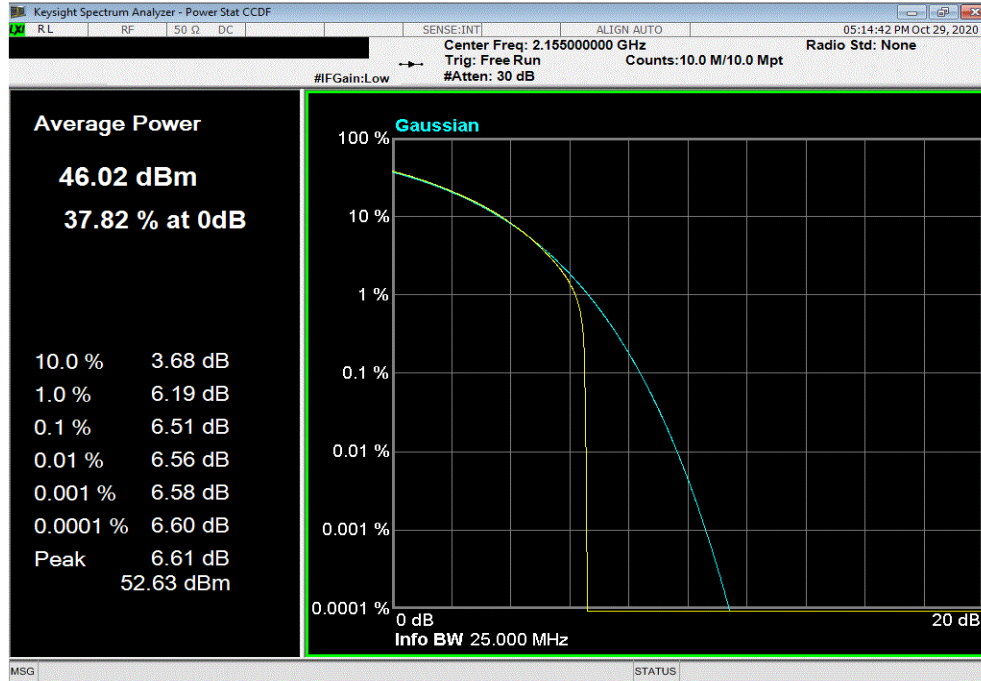


# PEAK TO AVERAGE (PAPR) CCDF

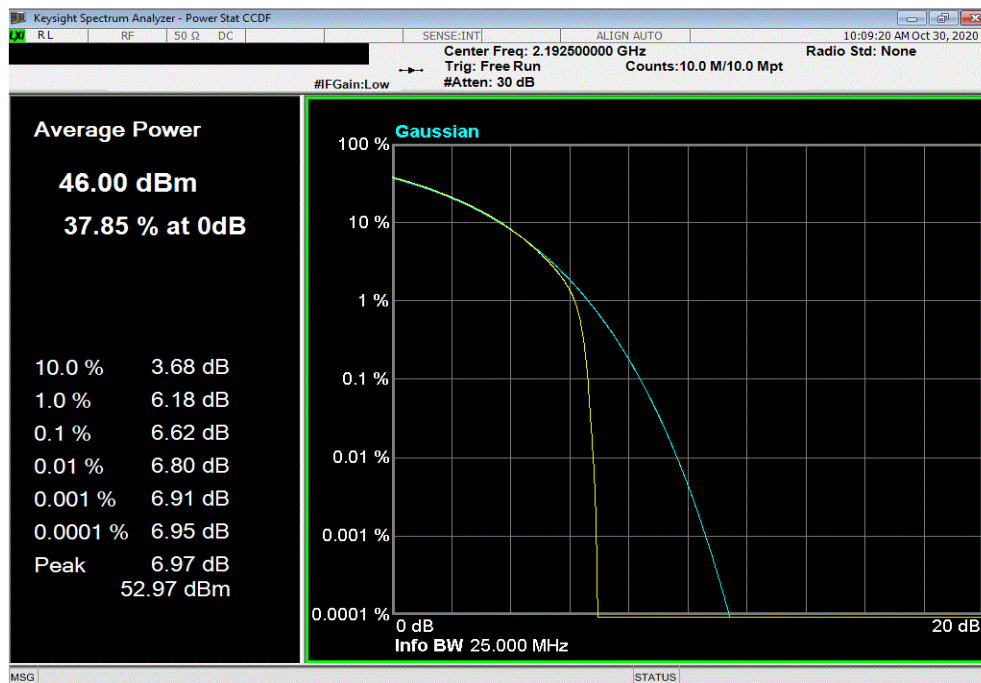


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.51            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, 256-QAM Modulation, High Channel 2192.5 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                      |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                      |  |  |  | 6.62            | 13              | Pass    |

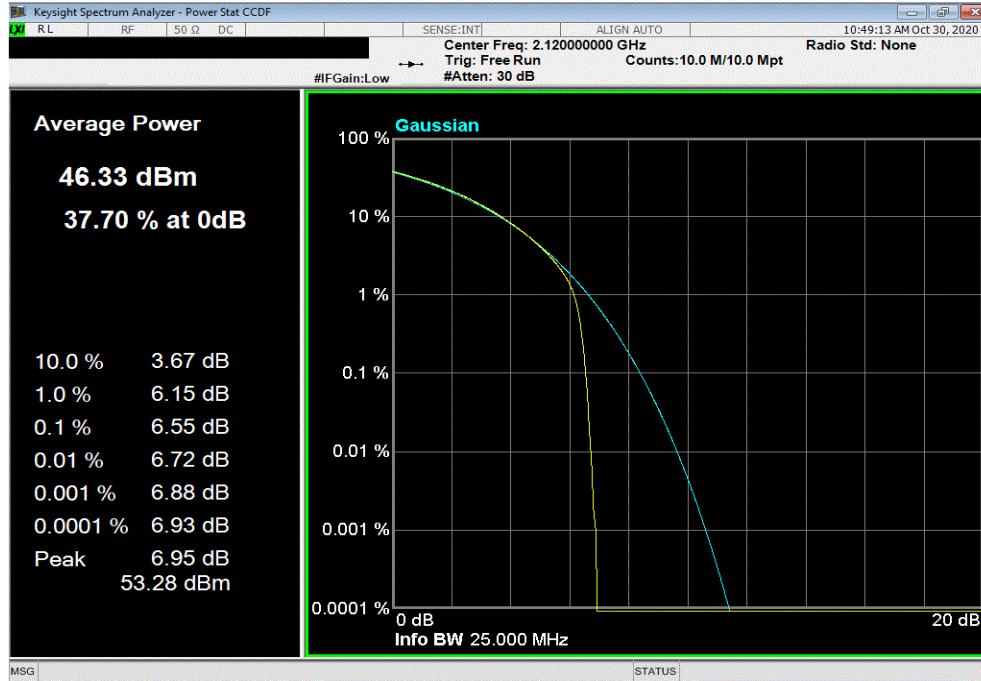


# PEAK TO AVERAGE (PAPR) CCDF

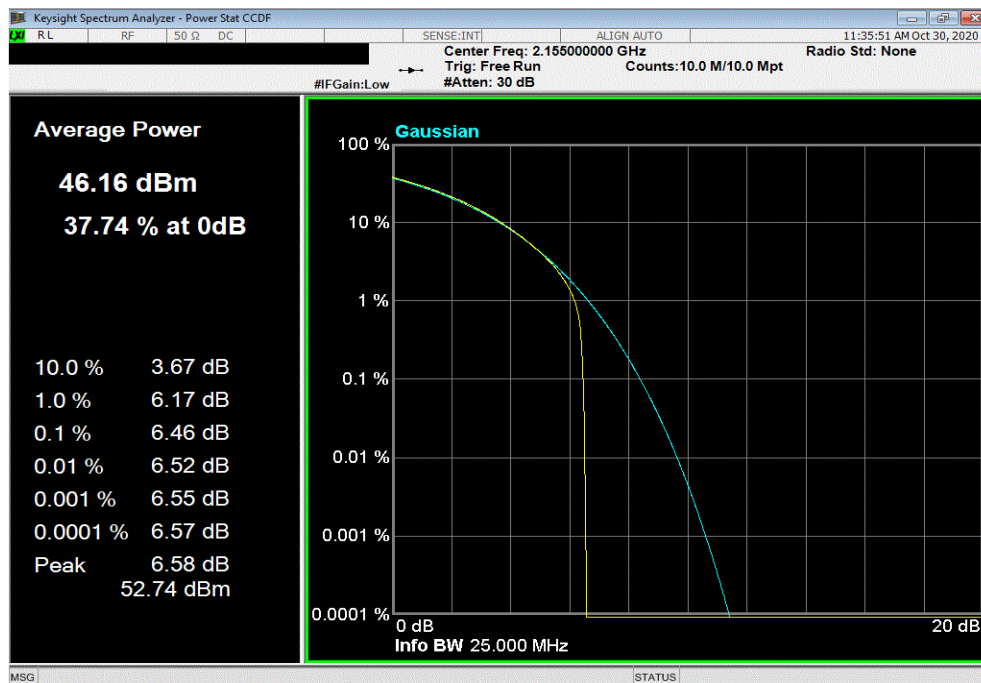


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel 2120 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                |  |  |  | 6.55            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                |  |  |  | 6.46            | 13              | Pass    |

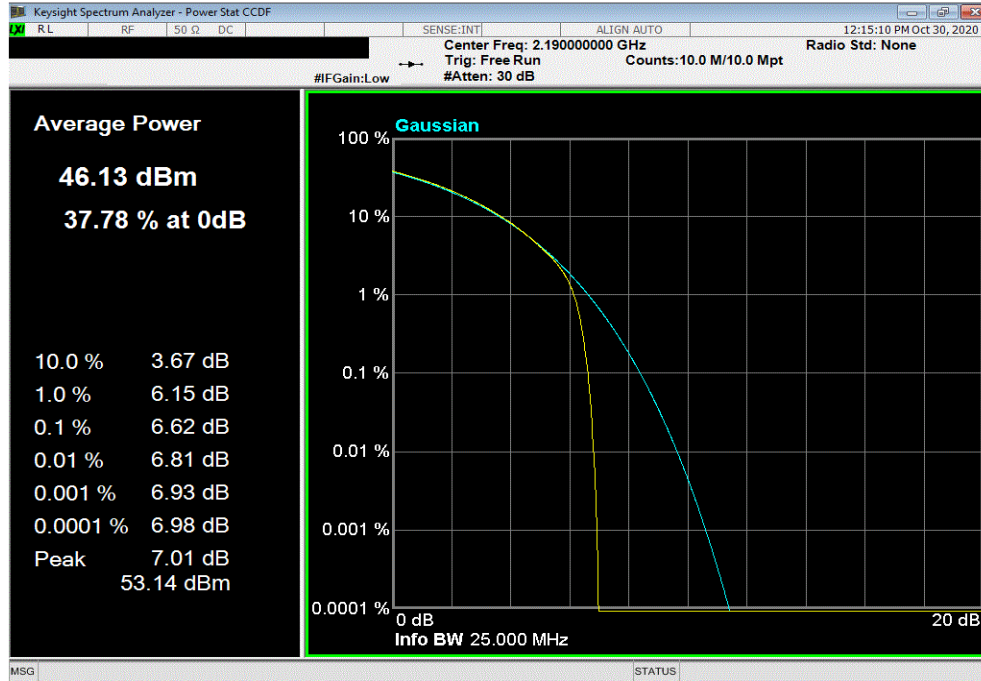


# PEAK TO AVERAGE (PAPR) CCDF

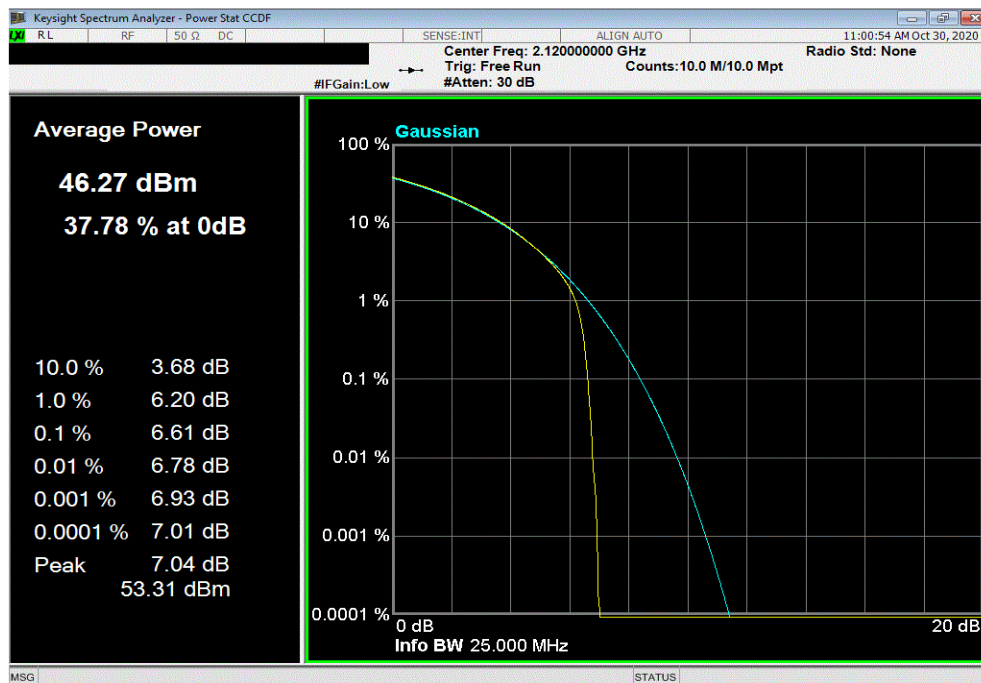


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel 2190 MHz |  |  |  |                 |                 |         |
|-------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                 |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                 |  |  |  | 6.62            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel 2120 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.61            | 13              | Pass    |



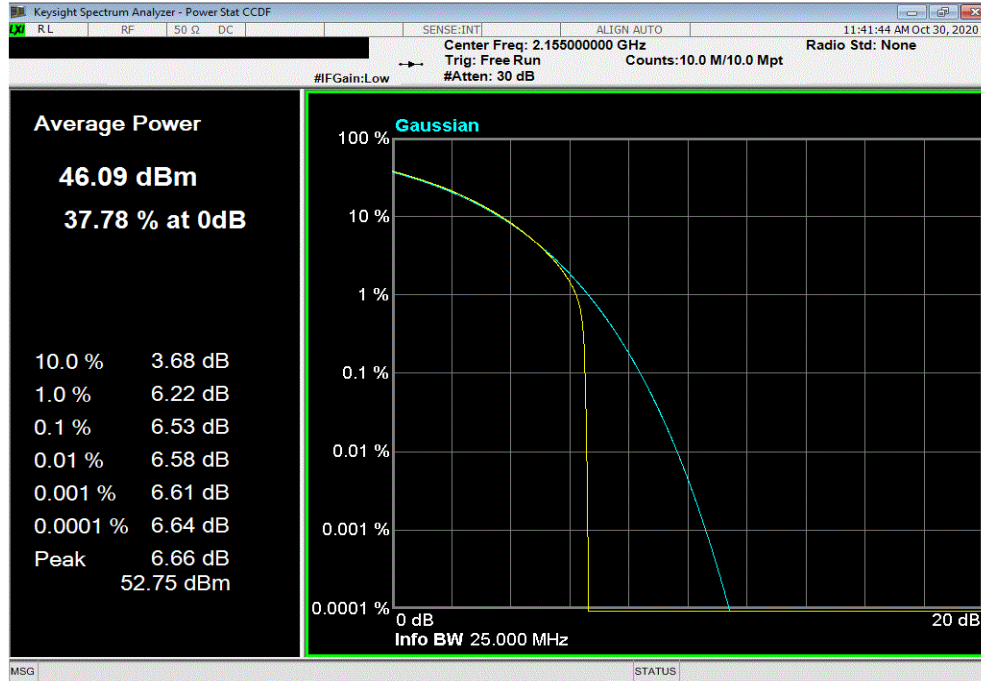


# PEAK TO AVERAGE (PAPR) CCDF

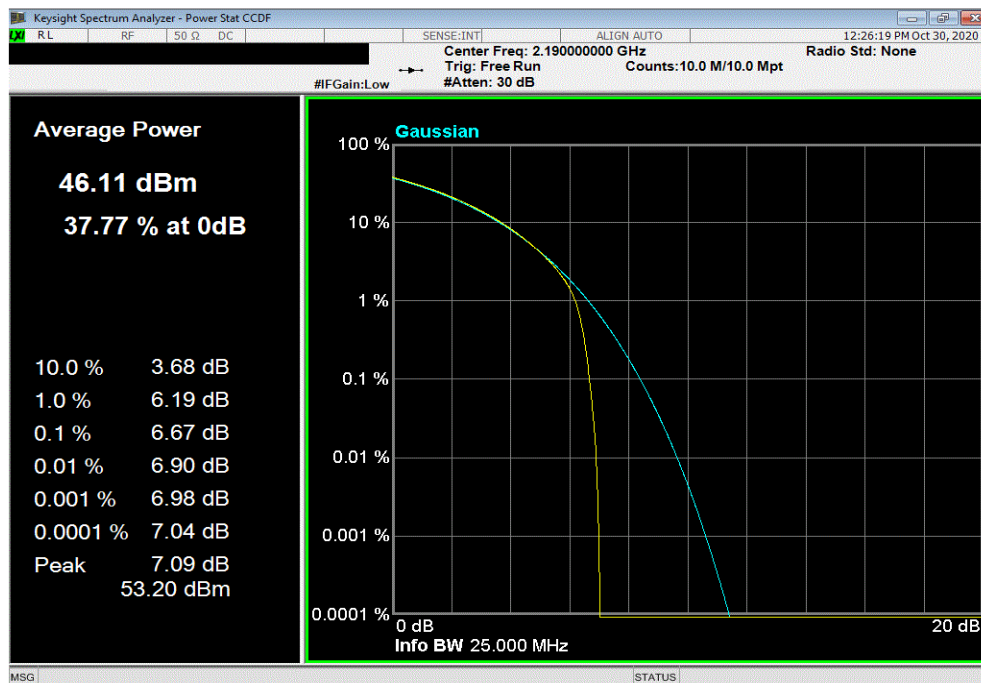


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.53            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel 2190 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.67            | 13              | Pass    |



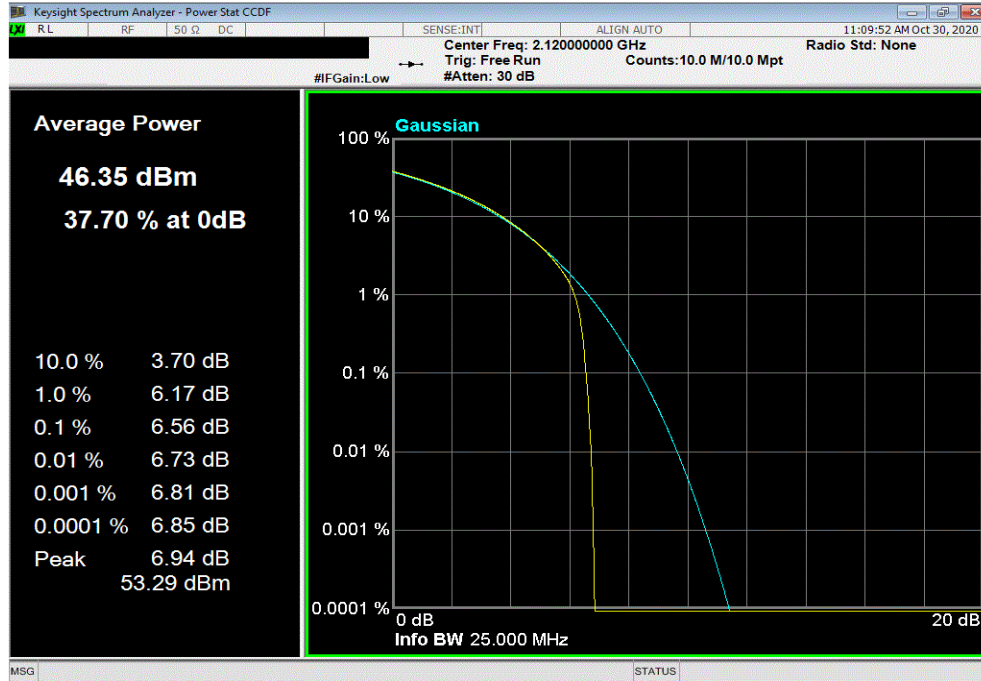


# PEAK TO AVERAGE (PAPR) CCDF

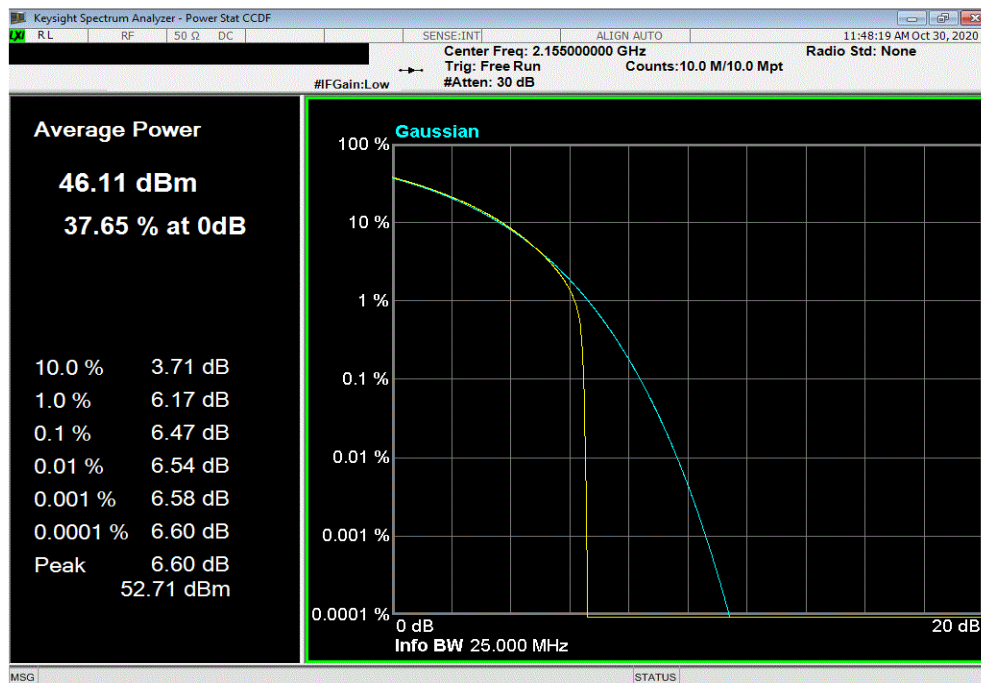


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel 2120 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.56            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|--------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                  |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                  |  |  |  | 6.47            | 13              | Pass    |

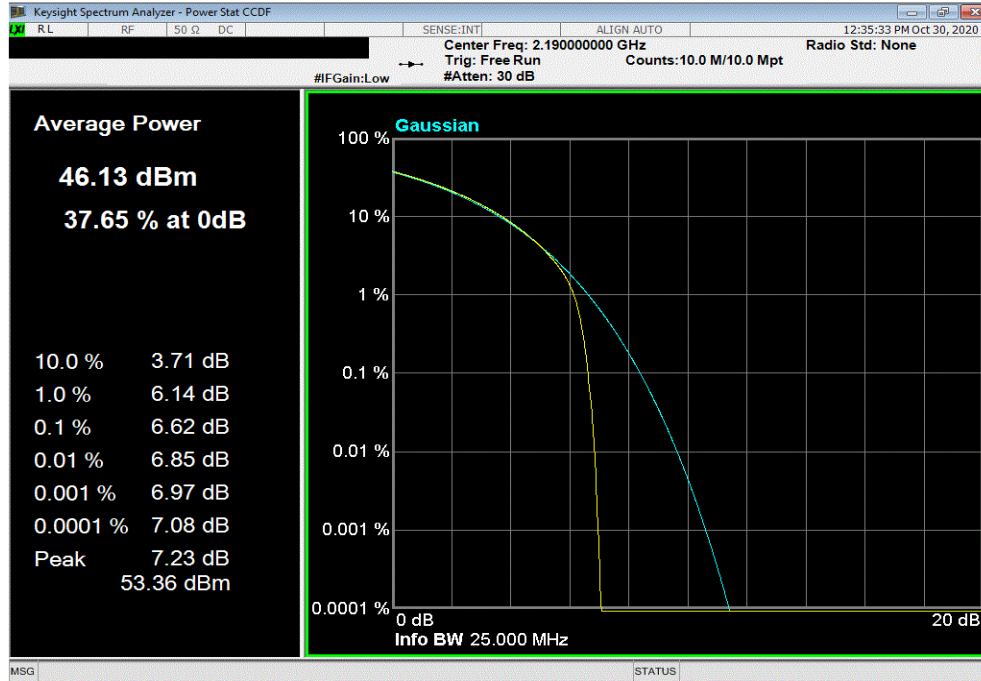


# PEAK TO AVERAGE (PAPR) CCDF

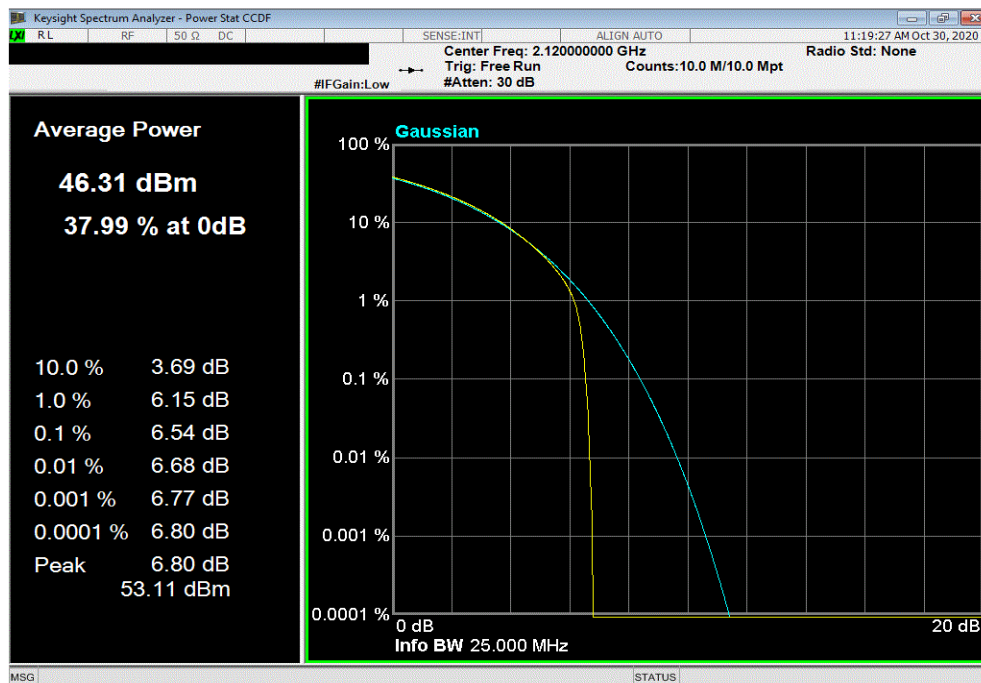


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, High Channel 2190 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.62            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel 2120 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.54            | 13              | Pass    |

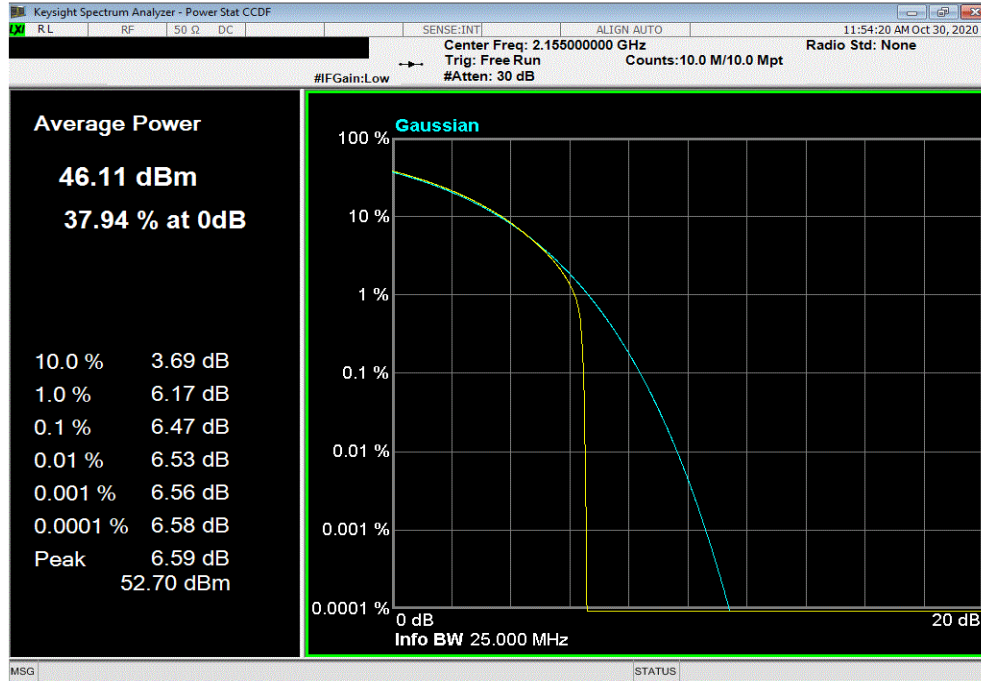


# PEAK TO AVERAGE (PAPR) CCDF



TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel 2155 MHz |  |  |  |                 |                 |         |
|---------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                   |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                   |  |  |  | 6.47            | 13              | Pass    |



| Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel 2190 MHz |  |  |  |                 |                 |         |
|----------------------------------------------------------------------------------------------------|--|--|--|-----------------|-----------------|---------|
|                                                                                                    |  |  |  | PAPR Value (dB) | PAPR Limit (dB) | Results |
|                                                                                                    |  |  |  | 6.62            | 13              | Pass    |

