

## Occupied Bandwidth Measurement Results

| Channel<br>Frequency<br>(MHz) | Nominal<br>Channel<br>BW<br>(MHz) | EARFCN | Resource<br>Blocks | RB<br>Offset | Modulation | Measured<br>Occupied<br>Bandwidth<br>(MHz) | Emission<br>Designator |
|-------------------------------|-----------------------------------|--------|--------------------|--------------|------------|--------------------------------------------|------------------------|
| 1880                          | 1.4                               | 18900  | 6                  | 0            | QPSK       | 1.08                                       | 1M08G7D                |
| 1880                          | 1.4                               | 18900  | 6                  | 0            | 16QAM      | 1.09                                       | 1M09W7D                |
| 1880                          | 1.4                               | 18900  | 6                  | 0            | 64QAM      | 1.08                                       | 1M08W7D                |
| 1880                          | 3                                 | 18900  | 15                 | 0            | QPSK       | 2.67                                       | 2M67G7D                |
| 1880                          | 3                                 | 18900  | 15                 | 0            | 16QAM      | 2.68                                       | 2M68W7D                |
| 1880                          | 3                                 | 18900  | 15                 | 0            | 64QAM      | 2.68                                       | 2M68W7D                |
| 1880                          | 5                                 | 18900  | 25                 | 0            | QPSK       | 4.48                                       | 4M48G7D                |
| 1880                          | 5                                 | 18900  | 25                 | 0            | 16QAM      | 4.48                                       | 4M48W7D                |
| 1880                          | 5                                 | 18900  | 25                 | 0            | 64QAM      | 4.50                                       | 4M50W7D                |
| 1880                          | 10                                | 18900  | 50                 | 0            | QPSK       | 8.94                                       | 8M94G7D                |
| 1880                          | 10                                | 18900  | 50                 | 0            | 16QAM      | 8.94                                       | 8M94W7D                |
| 1880                          | 10                                | 18900  | 50                 | 0            | 64QAM      | 8.94                                       | 8M94W7D                |
| 1880                          | 15                                | 18900  | 75                 | 0            | QPSK       | 13.36                                      | 13M3G7D                |
| 1880                          | 15                                | 18900  | 75                 | 0            | 16QAM      | 13.36                                      | 13M3W7D                |
| 1880                          | 15                                | 18900  | 75                 | 0            | 64QAM      | 13.36                                      | 13M3W7D                |
| 1880                          | 20                                | 18900  | 100                | 0            | QPSK       | 17.80                                      | 17M8G7D                |
| 1880                          | 20                                | 18900  | 100                | 0            | 16QAM      | 17.80                                      | 17M8W7D                |
| 1880                          | 20                                | 18900  | 100                | 0            | 64QAM      | 17.80                                      | 17M8W7D                |
|                               |                                   |        |                    |              |            |                                            | Complies               |

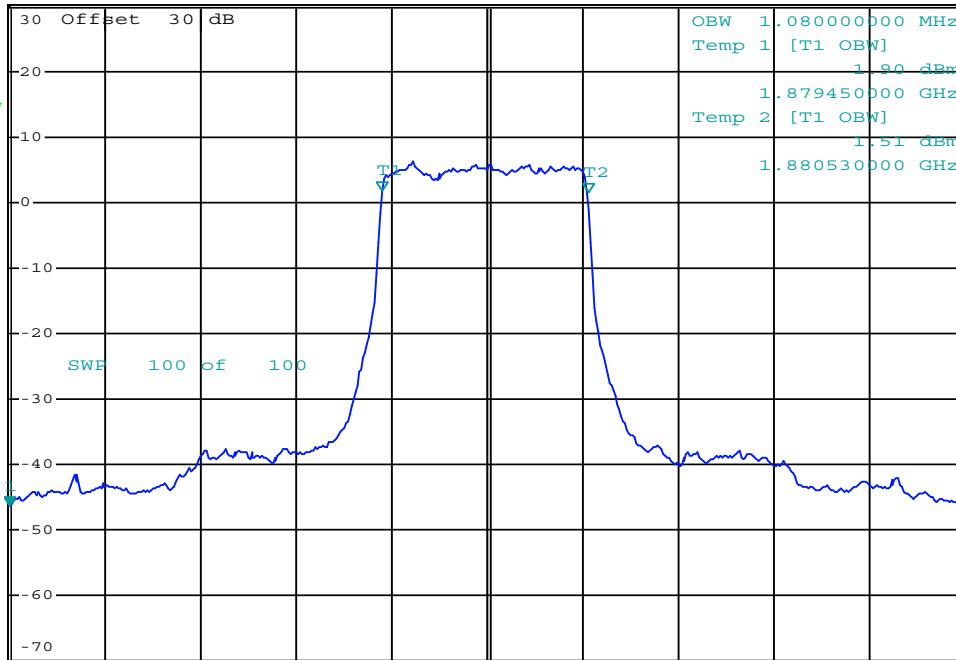
## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz Marker 1 [T1]  
 VBW 300 kHz -46.28 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.877500000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 11:30:23

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **1.4**

EARFCN: **18900**

Resource Blocks (RB): **6**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **1.08**

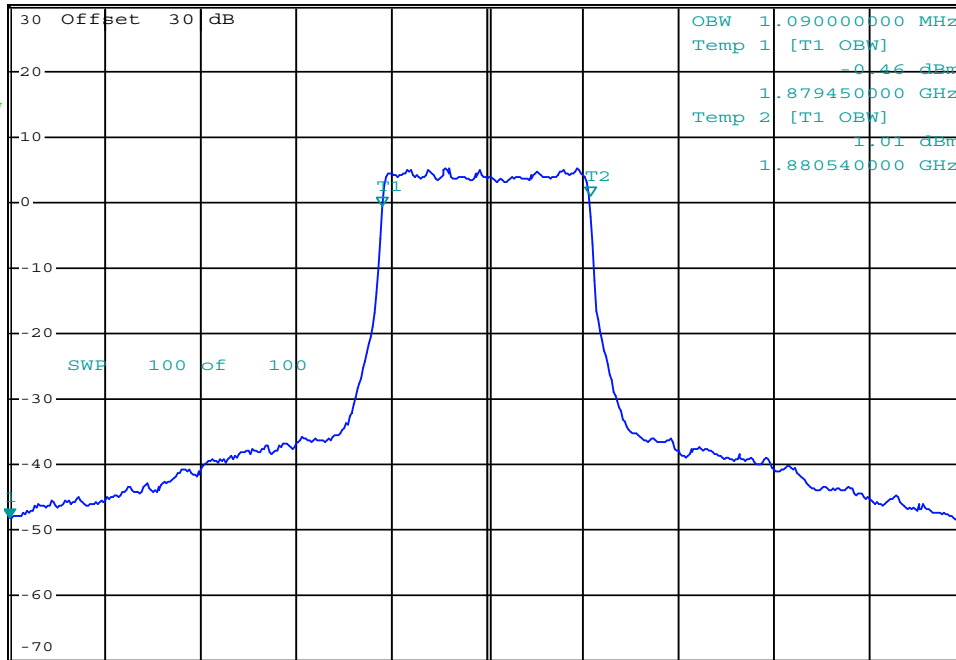
## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz    Marker 1 [T1]  
 VBW 300 kHz    -48.11 dBm  
 \*Att 10 dB    \*SWT 50 ms    1.877500000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz    500 kHz/    Span 5 MHz

Date: 21.APR.2021 11:32:36

|                          |               |                          |              |
|--------------------------|---------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>1880.0</b> | Channel Bandwidth (MHz): | <b>1.4</b>   |
| EARFCN:                  | <b>18900</b>  | Resource Blocks (RB):    | <b>6</b>     |
| RB Offset:               | <b>0</b>      | Modulation:              | <b>16QAM</b> |

Occupied Bandwidth (MHz): **1.09**

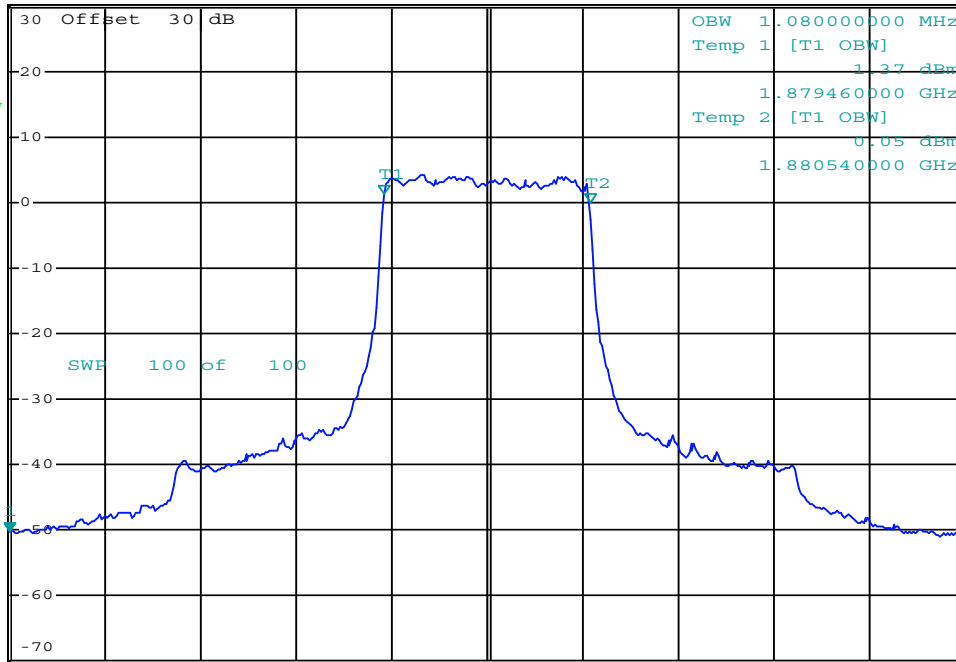
## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz Marker 1 [T1]  
 VBW 300 kHz -50.23 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.877500000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 11:46:11

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **1.4**

EARFCN: **18900**

Resource Blocks (RB): **6**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **1.08**

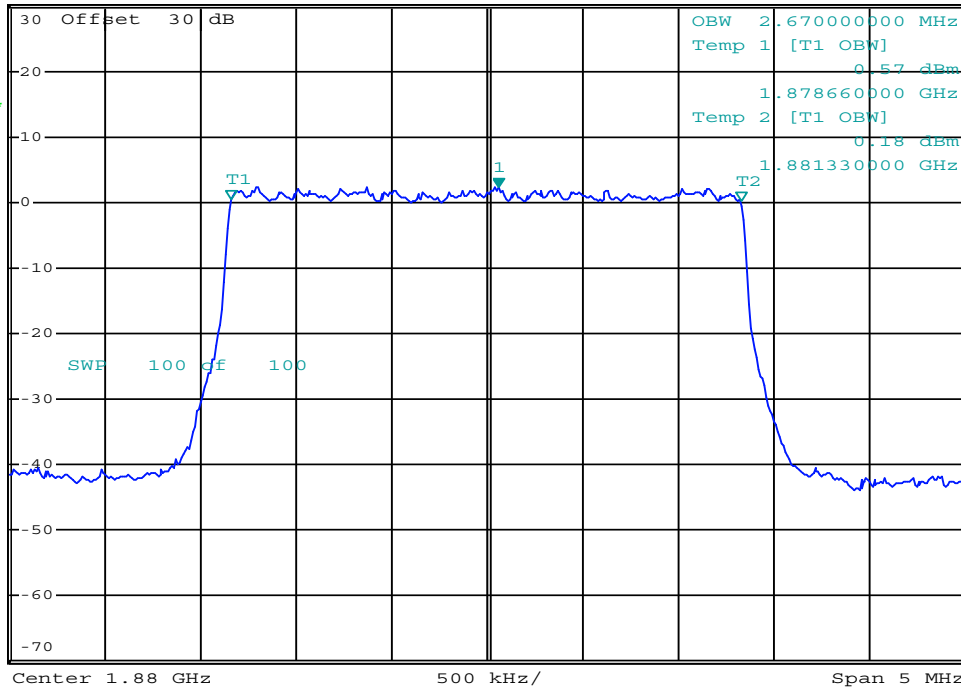
## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz    Marker 1 [T1]  
 VBW 300 kHz    2.30 dBm  
 \*Att 10 dB    1.880060000 GHz  
 \*SWT 50 ms

Ref 30 dBm

1 RM  
 VIEW



Date: 21.APR.2021 12:01:24

|                          |        |                          |      |                           |      |
|--------------------------|--------|--------------------------|------|---------------------------|------|
| Channel Frequency (MHz): | 1880.0 | Channel Bandwidth (MHz): | 3.0  | Occupied Bandwidth (MHz): | 2.67 |
| EARFCN:                  | 18900  | Resource Blocks (RB):    | 15   |                           |      |
| RB Offset:               | 0      | Modulation:              | QPSK |                           |      |

## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz Marker 1 [T1 ]  
 VBW 300 kHz 0.10 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.880060000 GHz

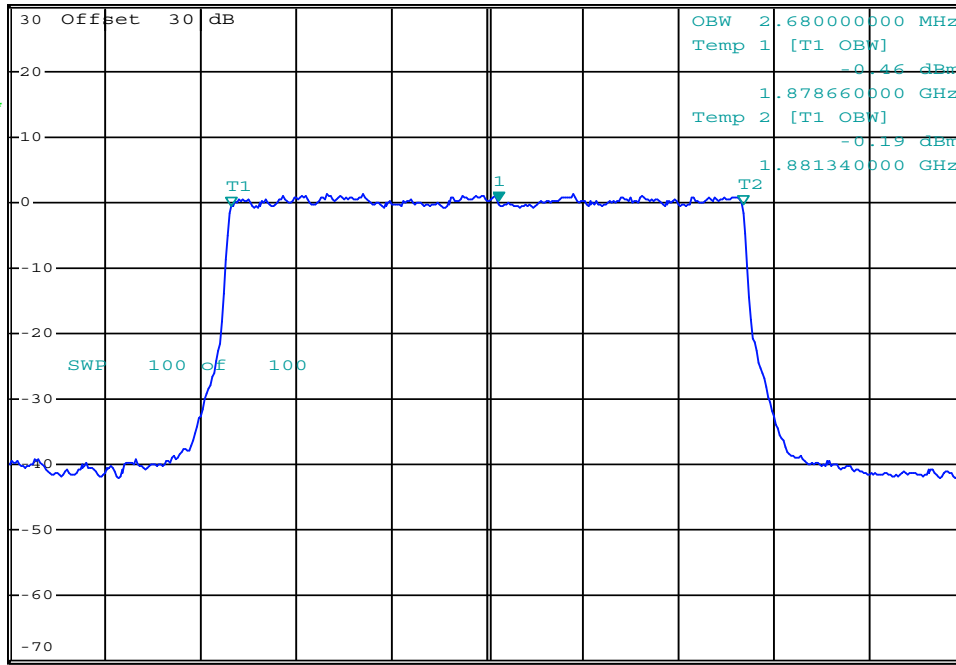
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

1.880060000 GHz

1 RM  
 VIEW



Date: 21.APR.2021 12:02:42

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **3.0**

EARFCN: **18900**

Resource Blocks (RB): **15**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **2.68**

## Occupied Bandwidth: LTE Band 2



\*RBW 30 kHz Marker 1 [T1 ]  
 VBW 300 kHz 0.24 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.879350000 GHz

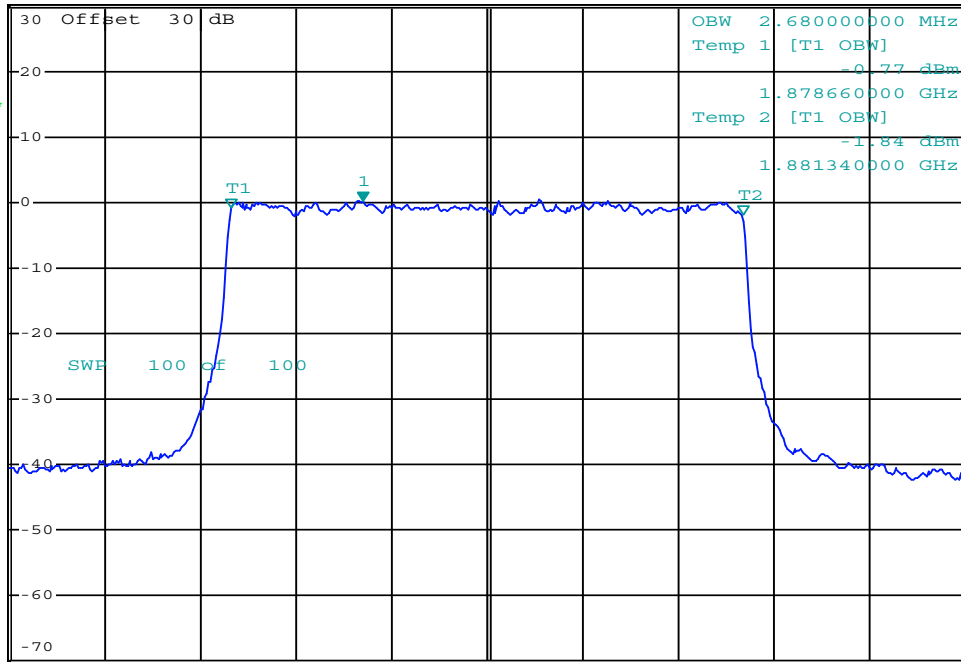
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

1.879350000 GHz

1 RM  
 VIEW



Center 1.88 GHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 12:04:50

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **3.0**

EARFCN: **18900**

Resource Blocks (RB): **15**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **2.68**

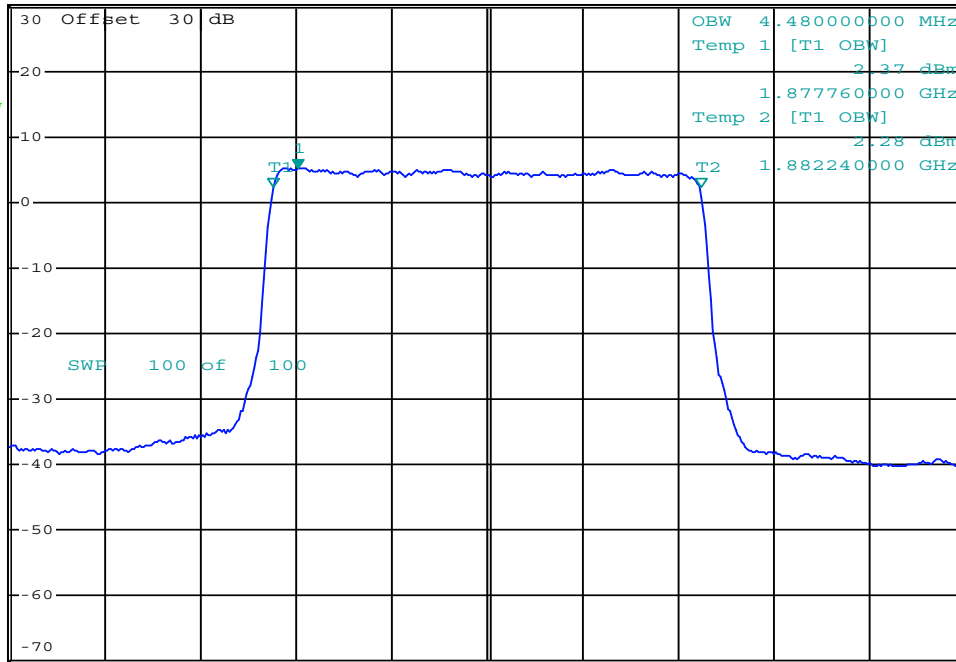
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 5.20 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.878020000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 12:43:33

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **5.0**

EARFCN: **18900**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **4.48**

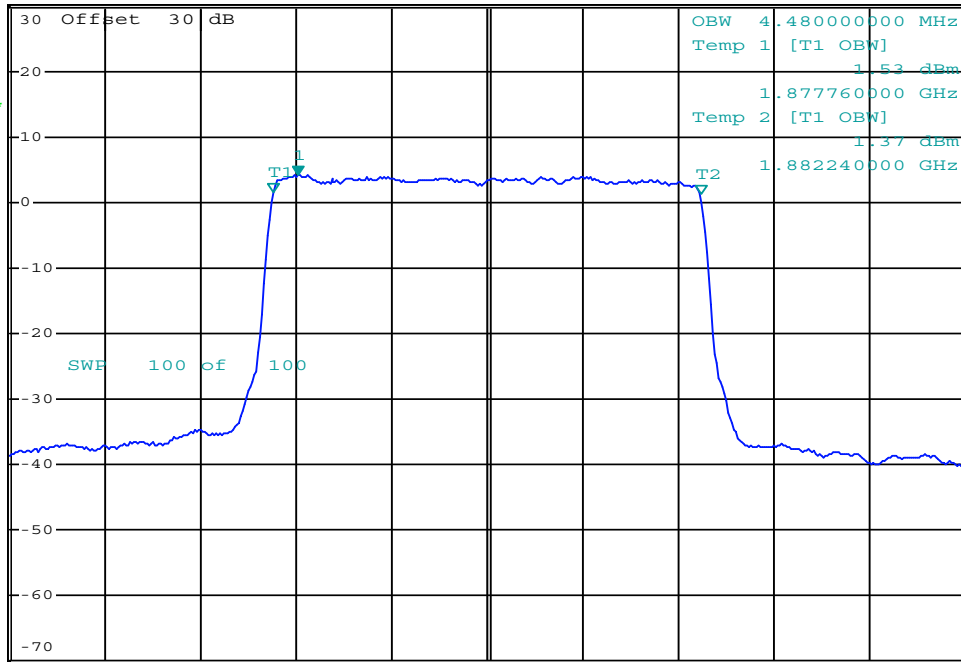
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz 4.15 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.878020000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 12:42:37

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **5.0**

EARFCN: **18900**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **4.48**

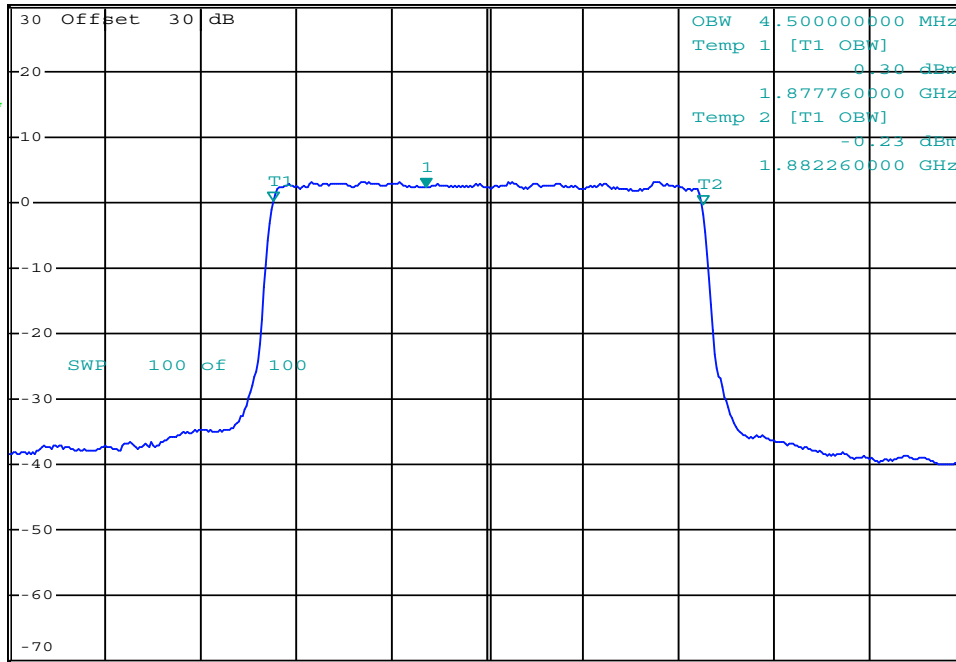
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 2.26 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.879350000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 12:39:59

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **5.0**

EARFCN: **18900**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **4.5**

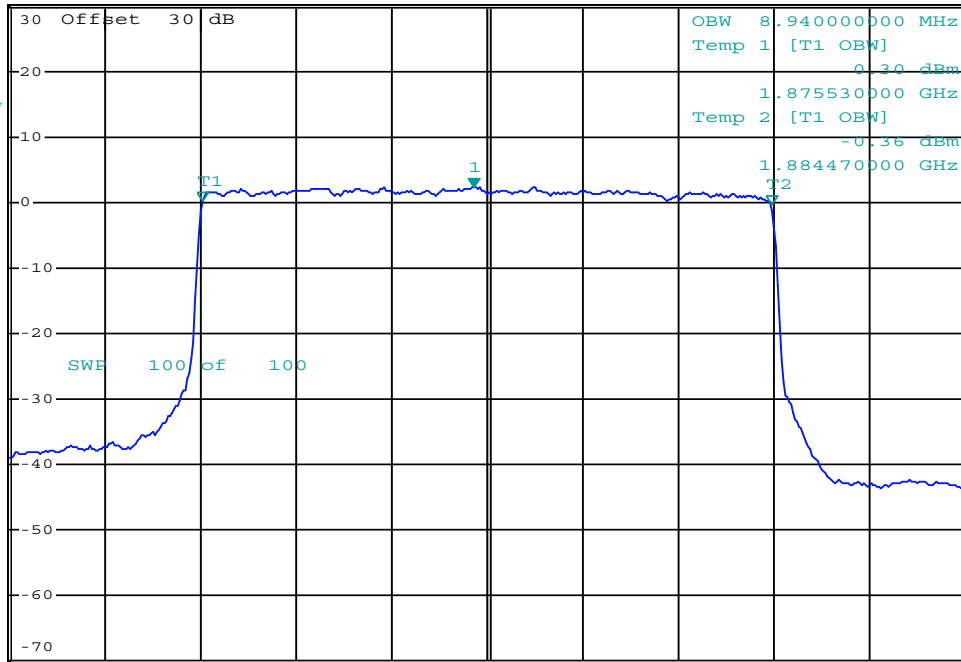
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 2.44 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.879790000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

1.5 MHz/

Span 15 MHz

Date: 21.APR.2021 12:47:59

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **10.0**

EARFCN: **18900**

Resource Blocks (RB): **50**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **8.94**

# Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 0.54 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.879790000 GHz

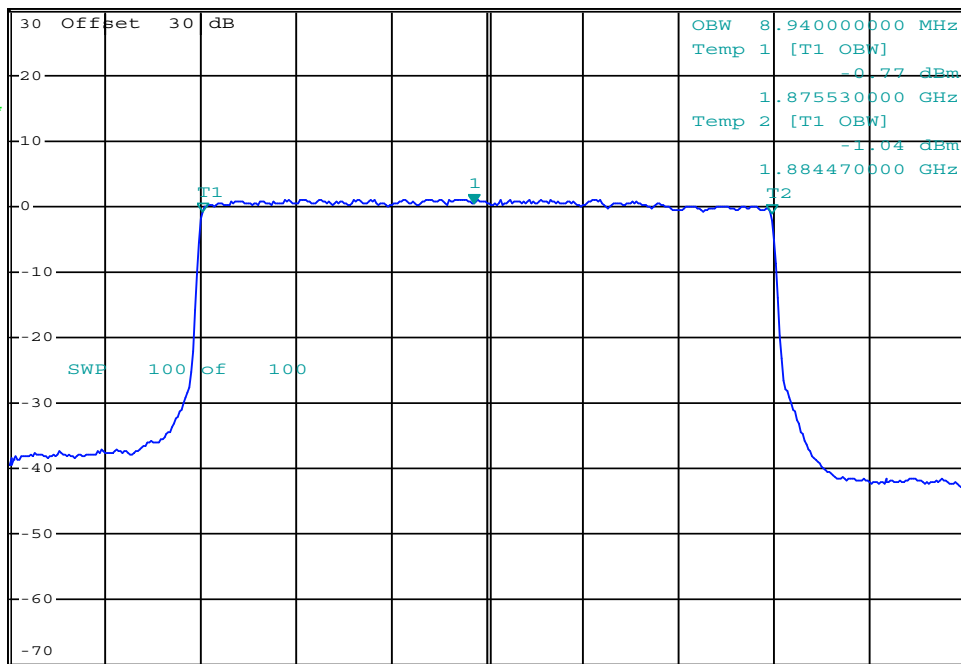
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

1.879790000 GHz

1 RM  
 VIEW



Center 1.88 GHz

1.5 MHz/

Span 15 MHz

Date: 21.APR.2021 12:49:06

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **10.0**

EARFCN: **18900**

Resource Blocks (RB): **50**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **8.94**

## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 0.41 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.878170000 GHz

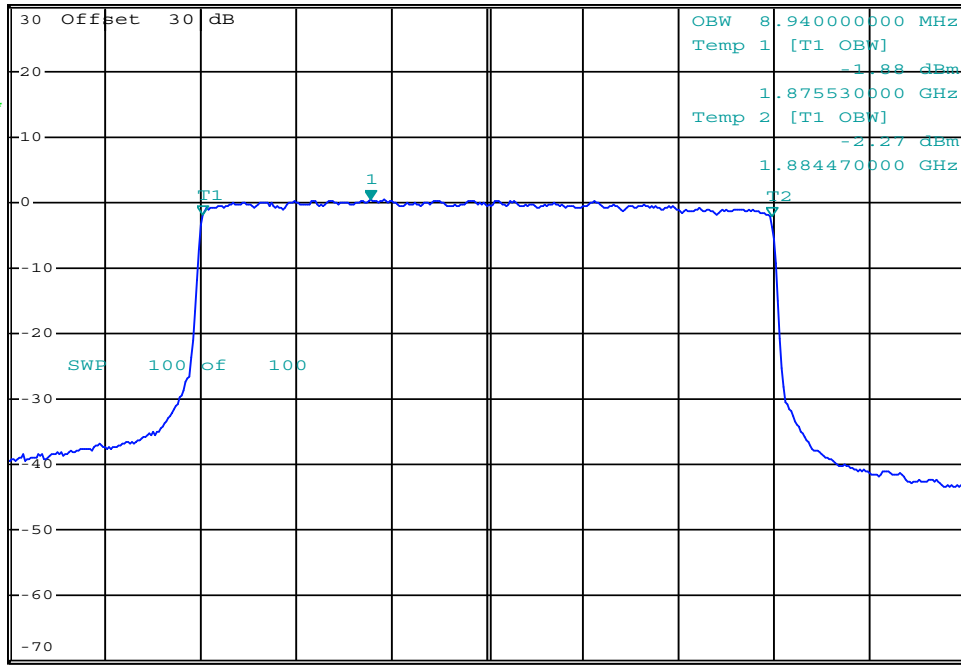
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

1.878170000 GHz

1 RM  
 VIEW



★  
 A

LVL

3DB

Date: 21.APR.2021 12:51:02

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **10.0**

EARFCN: **18900**

Resource Blocks (RB): **50**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **8.94**

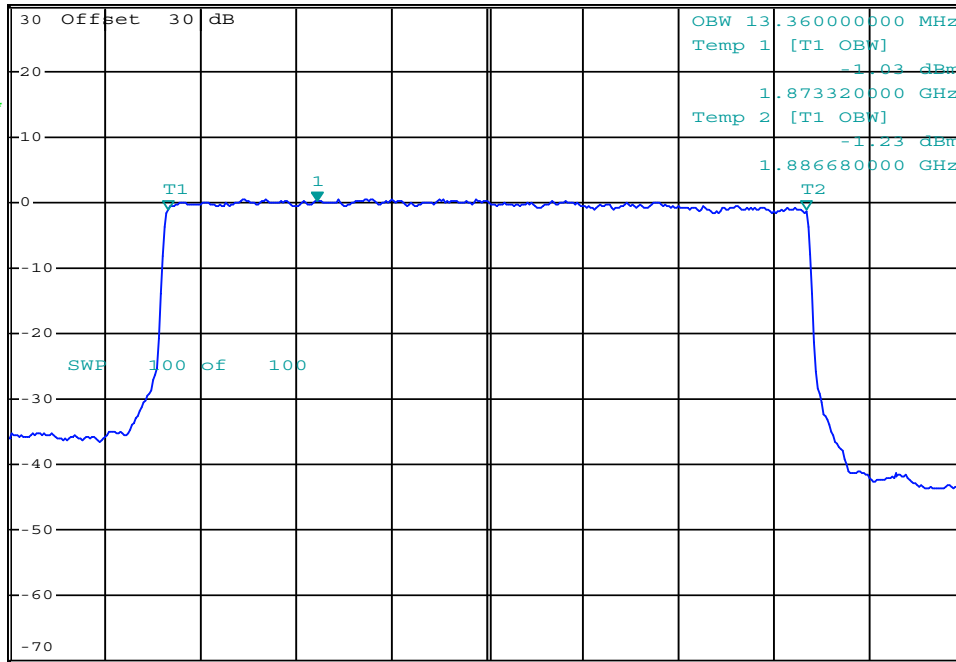
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 0.28 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.876440000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

2 MHz/

Span 20 MHz

Date: 21.APR.2021 12:56:55

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **15.0**

EARFCN: **18900**

Resource Blocks (RB): **75**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **13.36**

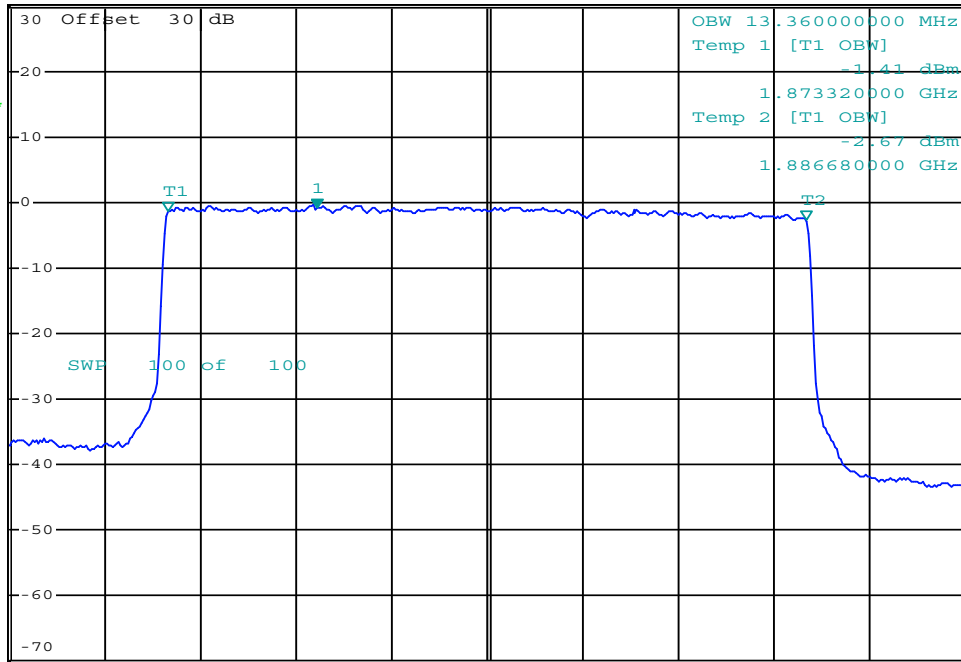
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz -0.84 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.876440000 GHz

Ref 30 dBm

1 RM  
 VIEW



Date: 21.APR.2021 12:56:00

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **15.0**

EARFCN: **18900**

Resource Blocks (RB): **75**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **13.36**

## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz -2.05 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.878170000 GHz

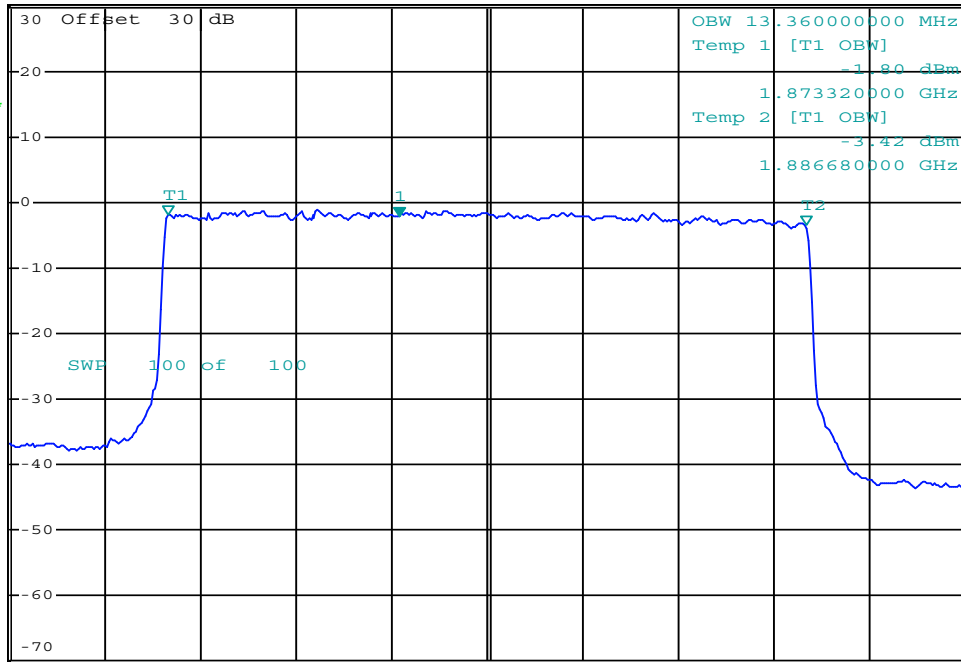
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

1.878170000 GHz

1 RM  
 VIEW



Center 1.88 GHz

2 MHz/

Span 20 MHz

Date: 21.APR.2021 12:54:16

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **15.0**

EARFCN: **18900**

Resource Blocks (RB): **75**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **13.36**

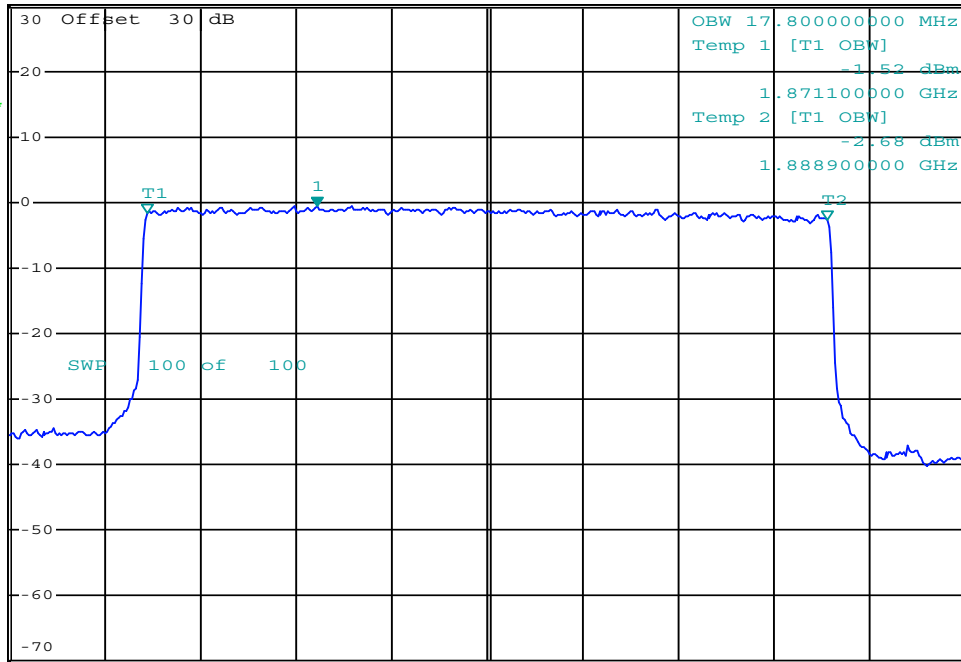
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz -0.65 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.875550000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

2.5 MHz/

Span 25 MHz

Date: 21.APR.2021 13:00:52

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **20.0**

EARFCN: **18900**

Resource Blocks (RB): **100**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **17.8**

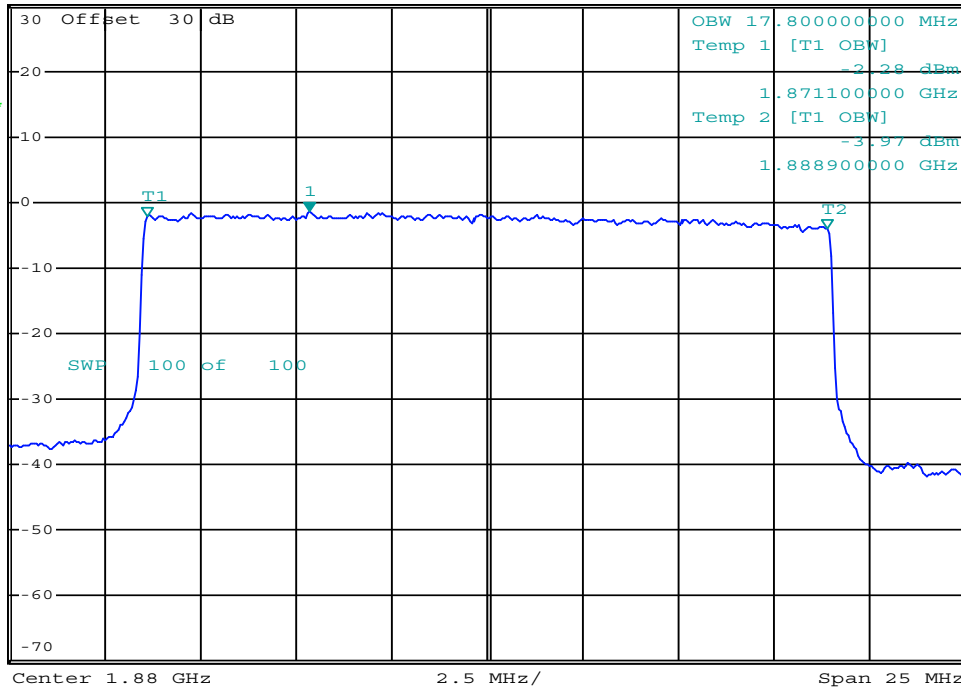
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz -1.42 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.875350000 GHz

Ref 30 dBm

1 RM  
 VIEW



★  
 A  
 LVL  
 3DB

Date: 21.APR.2021 13:05:15

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **20.0**

EARFCN: **18900**

Resource Blocks (RB): **100**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **17.8**

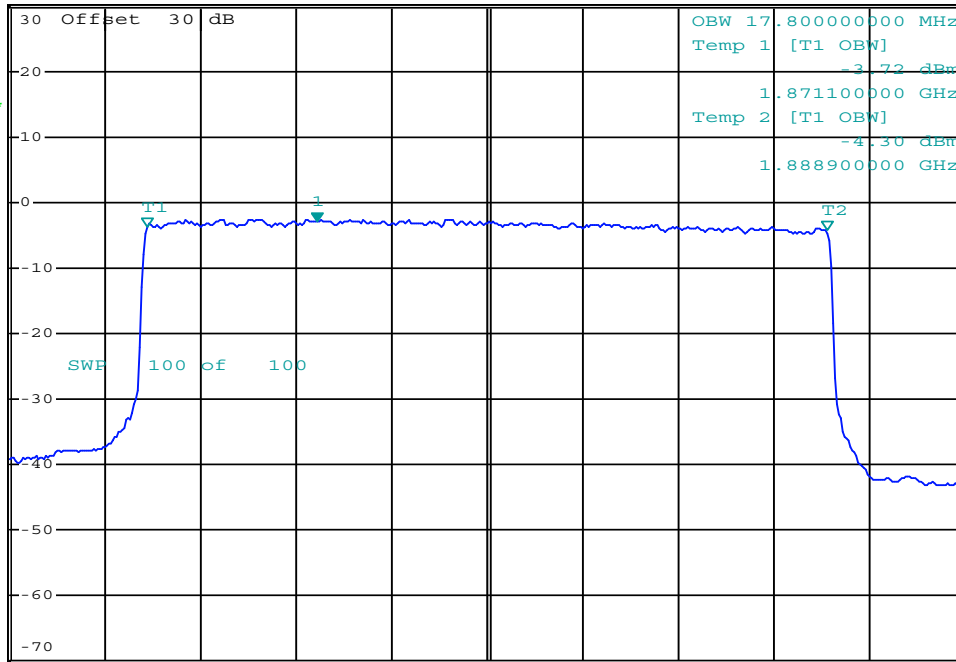
## Occupied Bandwidth: LTE Band 2



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz -2.94 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 1.875550000 GHz

Ref 30 dBm

1 RM  
 VIEW



Center 1.88 GHz

2.5 MHz/

Span 25 MHz

Date: 21.APR.2021 13:01:49

Channel Frequency (MHz): **1880.0**

Channel Bandwidth (MHz): **20.0**

EARFCN: **18900**

Resource Blocks (RB): **100**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **17.8**

## Occupied Bandwidth Measurement Results

| Channel<br>Frequency<br>(MHz) | Nominal<br>Channel<br>BW<br>(MHz) | EARFCN | Resource<br>Blocks | RB<br>Offset | Modulation | Measured<br>Occupied<br>Bandwidth<br>(MHz) | Emission<br>Designator |
|-------------------------------|-----------------------------------|--------|--------------------|--------------|------------|--------------------------------------------|------------------------|
| 836.5                         | 1.4                               | 20525  | 6                  | 0            | QPSK       | 1.15                                       | 1M15G7D                |
| 836.5                         | 1.4                               | 20525  | 6                  | 0            | 16QAM      | 1.15                                       | 1M15W7D                |
| 836.5                         | 1.4                               | 20525  | 6                  | 0            | 64QAM      | 1.14                                       | 1M14W7D                |
| 836.5                         | 3                                 | 20525  | 15                 | 0            | QPSK       | 2.73                                       | 2M73G7D                |
| 836.5                         | 3                                 | 20525  | 15                 | 0            | 16QAM      | 2.72                                       | 2M72W7D                |
| 836.5                         | 3                                 | 20525  | 15                 | 0            | 64QAM      | 2.72                                       | 2M72W7D                |
| 836.5                         | 5                                 | 20525  | 25                 | 0            | QPSK       | 4.48                                       | 4M48G7D                |
| 836.5                         | 5                                 | 20525  | 25                 | 0            | 16QAM      | 4.50                                       | 4M50W7D                |
| 836.5                         | 5                                 | 20525  | 25                 | 0            | 64QAM      | 4.50                                       | 4M50W7D                |
| 836.5                         | 10                                | 20525  | 50                 | 0            | QPSK       | 8.94                                       | 8M94G7D                |
| 836.5                         | 10                                | 20525  | 50                 | 0            | 16QAM      | 8.94                                       | 8M94W7D                |
| 836.5                         | 10                                | 20525  | 50                 | 0            | 64QAM      | 8.94                                       | 8M94W7D                |
|                               |                                   |        |                    |              |            |                                            | Complies               |

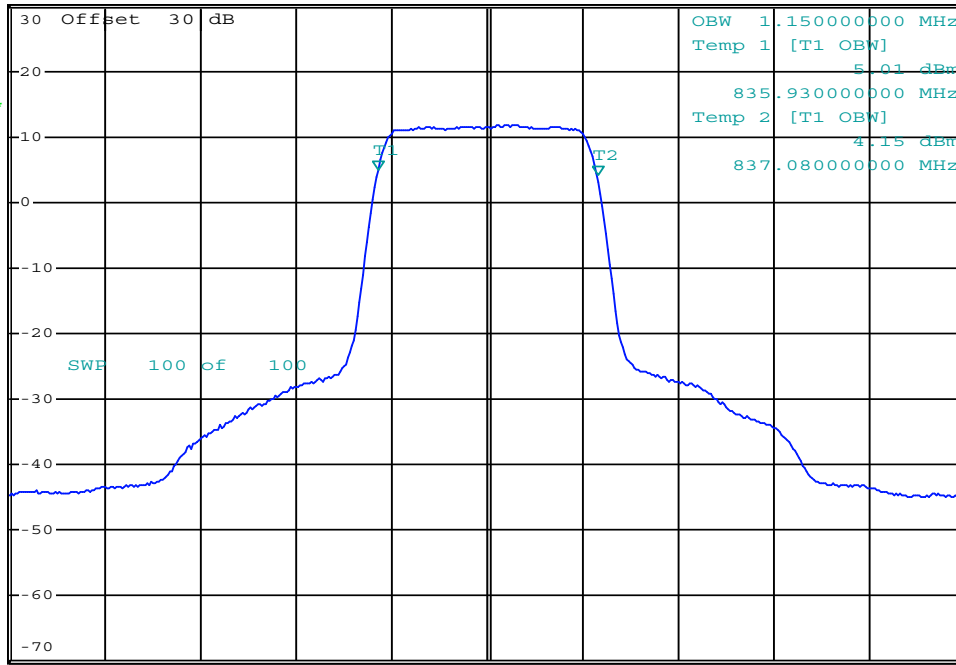
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz    Marker 1 [T1 ]  
 VBW 1 MHz    -45.00 dBm  
 \*Att 10 dB    \*SWT 50 ms    839.000000000 MHz

Ref 30 dBm

1 RM  
 VIEW



A

LVL

3DB

Date: 21.APR.2021 13:20:47

|                          |              |                          |             |
|--------------------------|--------------|--------------------------|-------------|
| Channel Frequency (MHz): | <b>836.5</b> | Channel Bandwidth (MHz): | <b>1.4</b>  |
| EARFCN:                  | <b>20525</b> | Resource Blocks (RB):    | <b>6</b>    |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>QPSK</b> |

Occupied Bandwidth (MHz): **1.15**

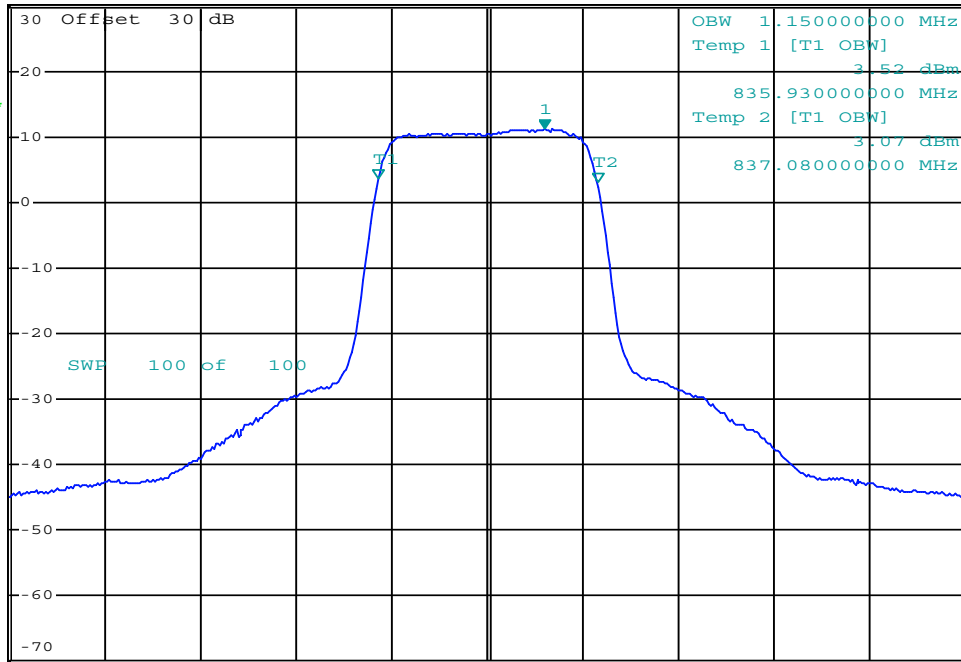
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 11.20 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.800000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz 500 kHz/ Span 5 MHz

Date: 21.APR.2021 13:38:12

|                          |       |                          |       |
|--------------------------|-------|--------------------------|-------|
| Channel Frequency (MHz): | 836.5 | Channel Bandwidth (MHz): | 1.4   |
| EARFCN:                  | 20525 | Resource Blocks (RB):    | 6     |
| RB Offset:               | 0     | Modulation:              | 16QAM |

Occupied Bandwidth (MHz): 1.15

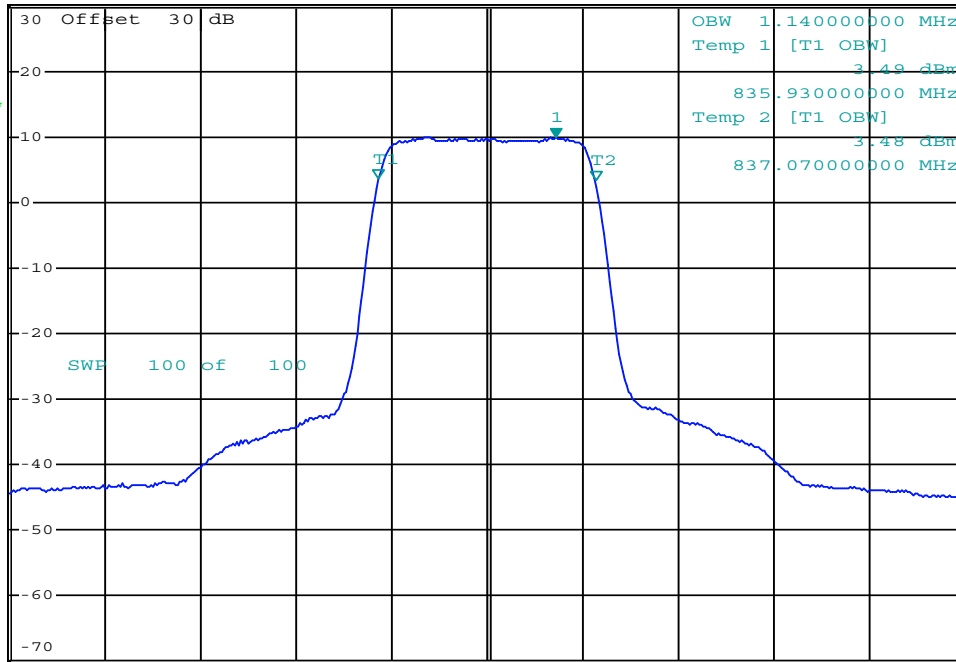
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 9.92 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.860000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 13:39:07

|                          |       |                          |       |
|--------------------------|-------|--------------------------|-------|
| Channel Frequency (MHz): | 836.5 | Channel Bandwidth (MHz): | 1.4   |
| EARFCN:                  | 20525 | Resource Blocks (RB):    | 6     |
| RB Offset:               | 0     | Modulation:              | 64QAM |

Occupied Bandwidth (MHz): 1.14

# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 7.38 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.890000000 MHz

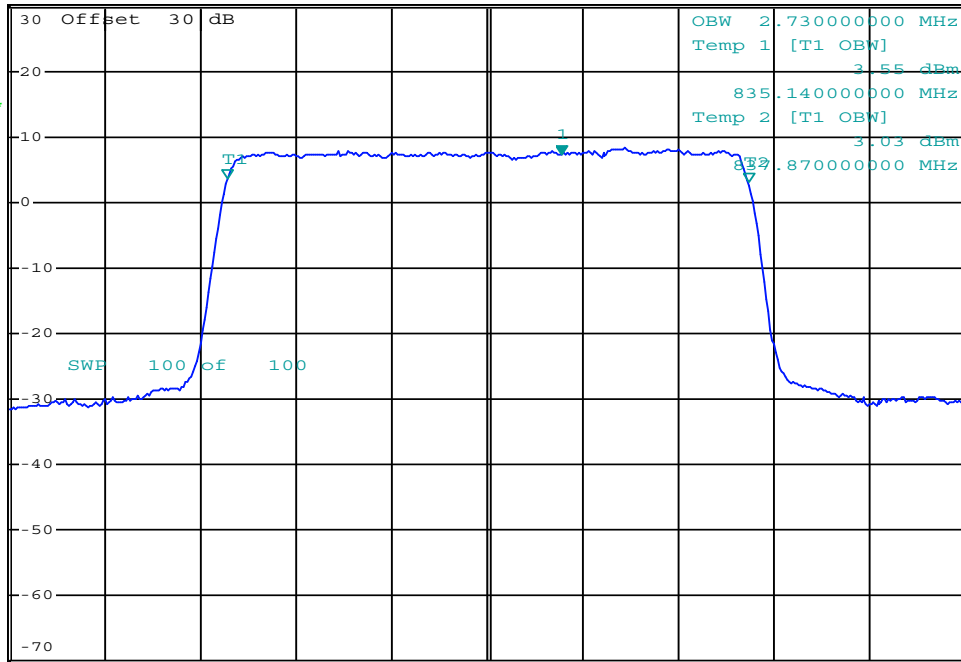
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

836.890000000 MHz

1 RM  
 VIEW



LVL

3DB

Date: 21.APR.2021 13:48:50

Channel Frequency (MHz): **836.5**

Channel Bandwidth (MHz): **3.0**

EARFCN: **20525**

Resource Blocks (RB): **15**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **2.73**

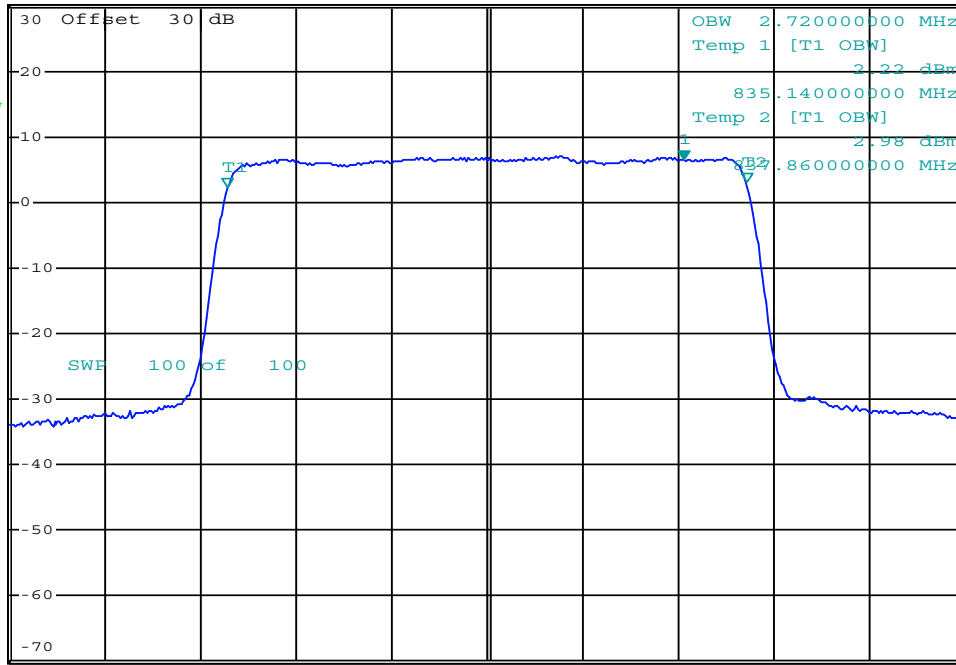
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz    Marker 1 [T1 ]  
 VBW 1 MHz    6.39 dBm  
 \*Att 10 dB    \*SWT 50 ms    837.530000000 MHz

Ref 30 dBm

1 RM\*  
 VIEW



Center 836.5 MHz    500 kHz/    Span 5 MHz

Date: 21.APR.2021 13:46:55

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>836.5</b> | Channel Bandwidth (MHz): | <b>3.0</b>   |
| EARFCN:                  | <b>20525</b> | Resource Blocks (RB):    | <b>15</b>    |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>16QAM</b> |

Occupied Bandwidth (MHz): **2.72**

# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 6.16 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 837.530000000 MHz

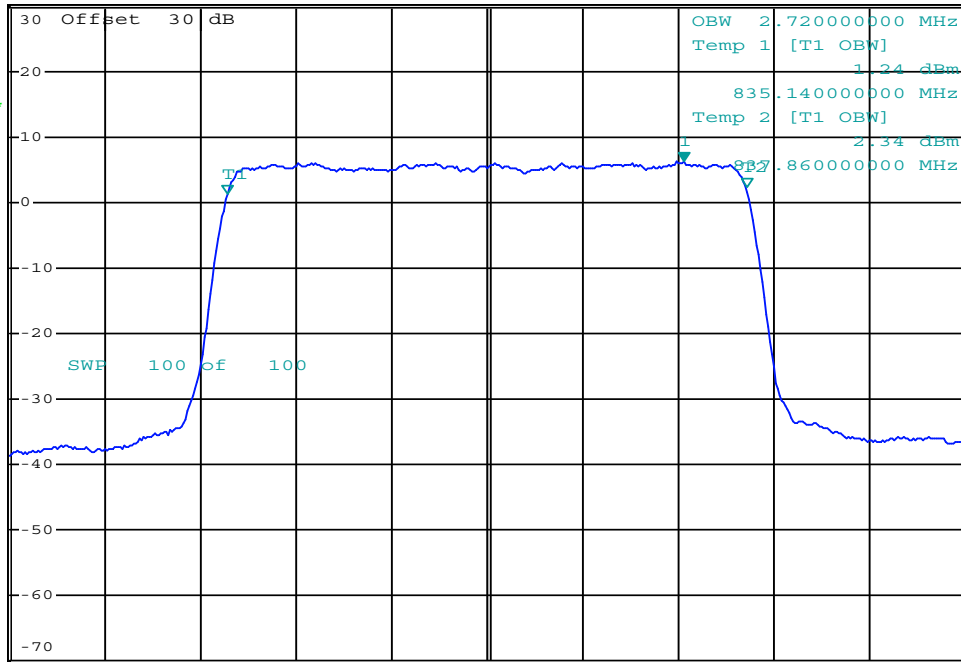
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

837.530000000 MHz

1 RM  
 VIEW



★  
 A

LVL

3DB

Date: 21.APR.2021 13:45:46

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>836.5</b> | Channel Bandwidth (MHz): | <b>3.0</b>   |
| EARFCN:                  | <b>20525</b> | Resource Blocks (RB):    | <b>15</b>    |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>64QAM</b> |

Occupied Bandwidth (MHz): **2.72**

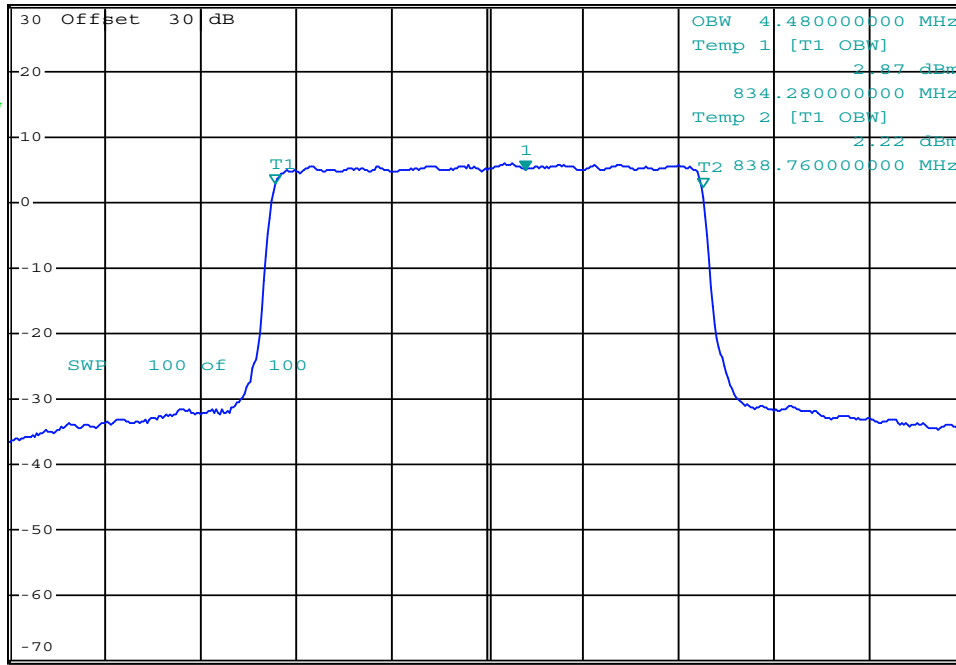
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 4.88 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.890000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 13:51:34

Channel Frequency (MHz): **836.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **20525**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **4.48**

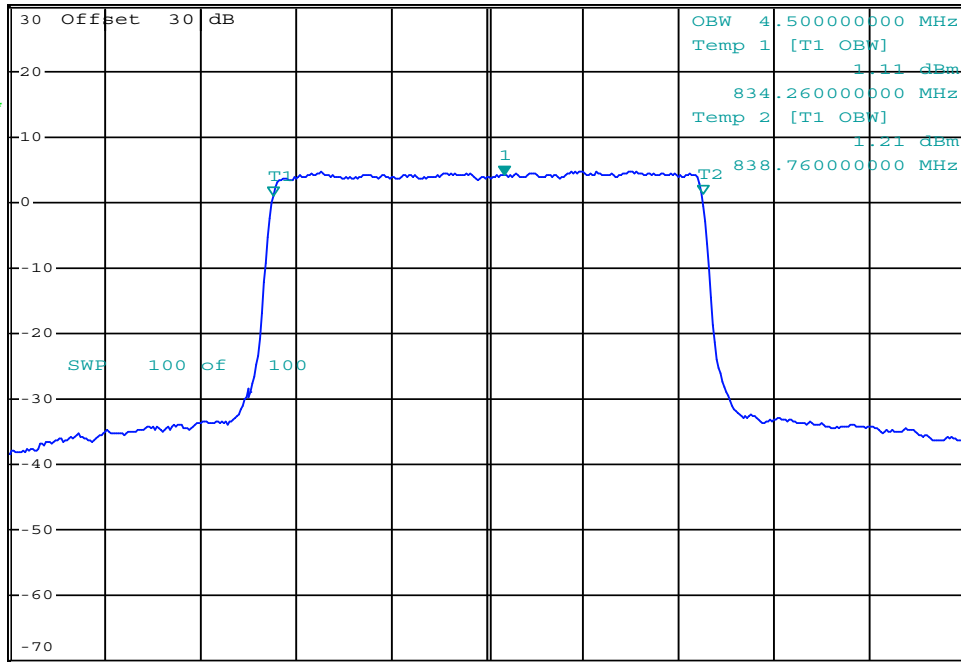
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 4.16 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.680000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 13:53:44

Channel Frequency (MHz): **836.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **20525**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **4.5**

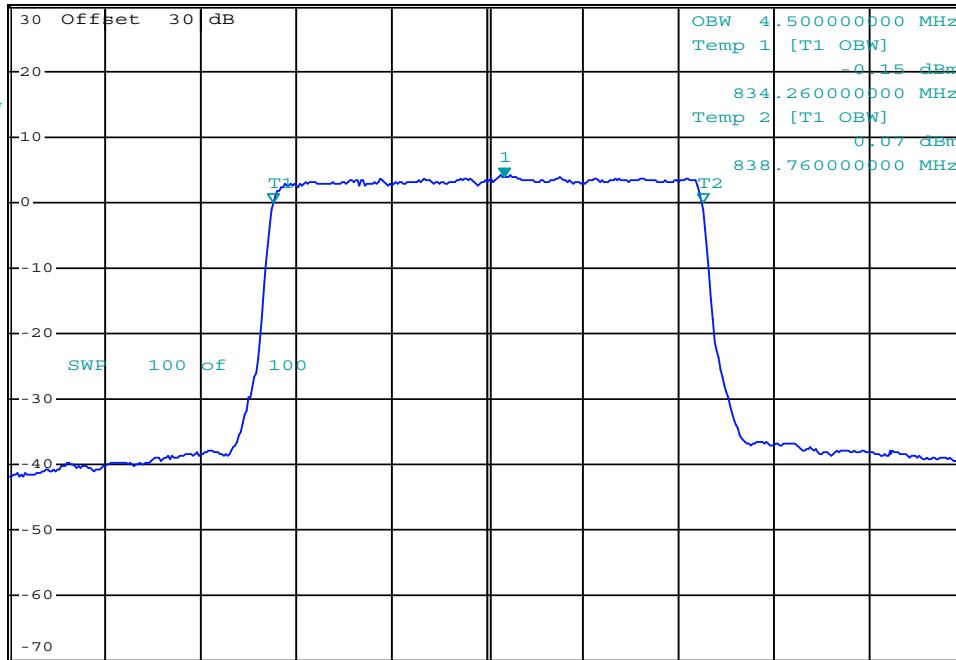
## Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz 3.80 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 836.68000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 13:54:43

Channel Frequency (MHz): **836.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **20525**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **4.5**

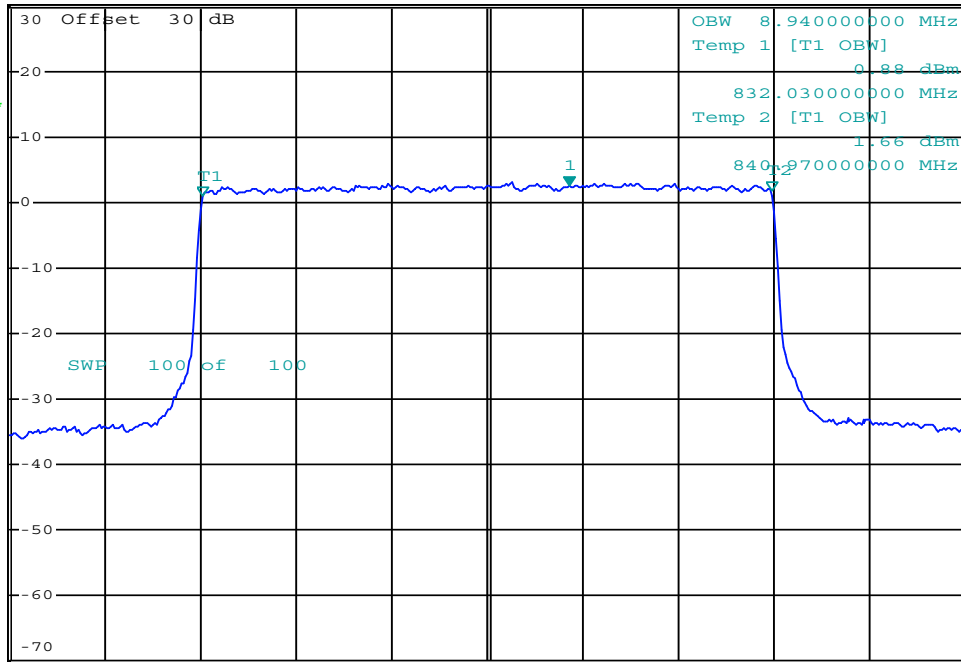
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 2.49 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 837.790000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Date: 21.APR.2021 14:01:09

|                                       |                                      |                                       |
|---------------------------------------|--------------------------------------|---------------------------------------|
| Channel Frequency (MHz): <b>836.5</b> | Channel Bandwidth (MHz): <b>10.0</b> | Occupied Bandwidth (MHz): <b>8.94</b> |
| EARFCN: <b>20525</b>                  | Resource Blocks (RB): <b>50</b>      |                                       |
| RB Offset: <b>0</b>                   | Modulation: <b>QPSK</b>              |                                       |

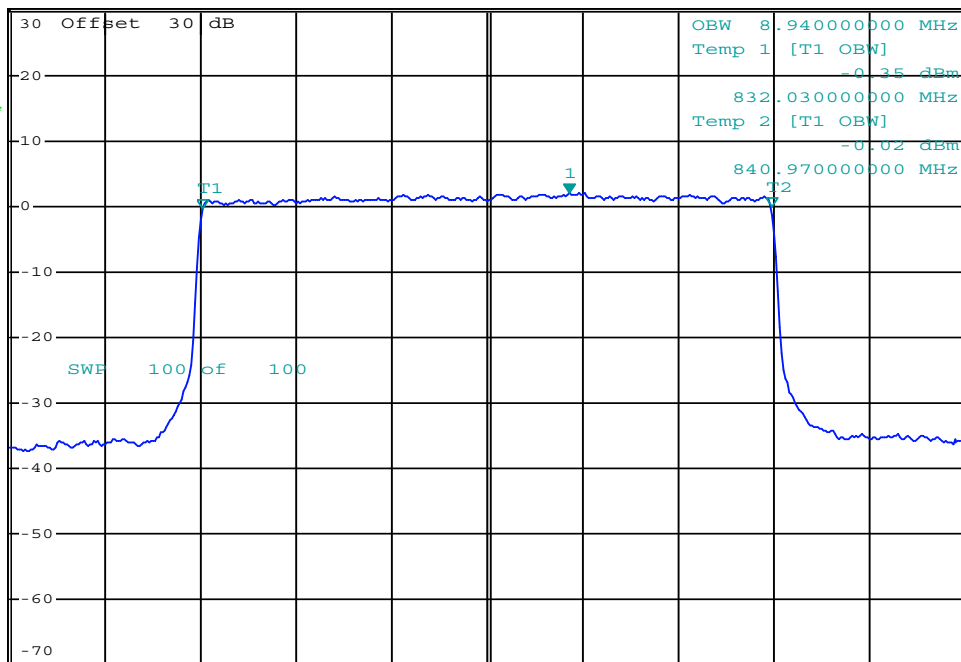
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 2.00 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 837.790000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 836.5 MHz

1.5 MHz/

Span 15 MHz

Date: 21.APR.2021 13:59:21

Channel Frequency (MHz): **836.5**

Channel Bandwidth (MHz): **10.0**

EARFCN: **20525**

Resource Blocks (RB): **50**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **8.94**

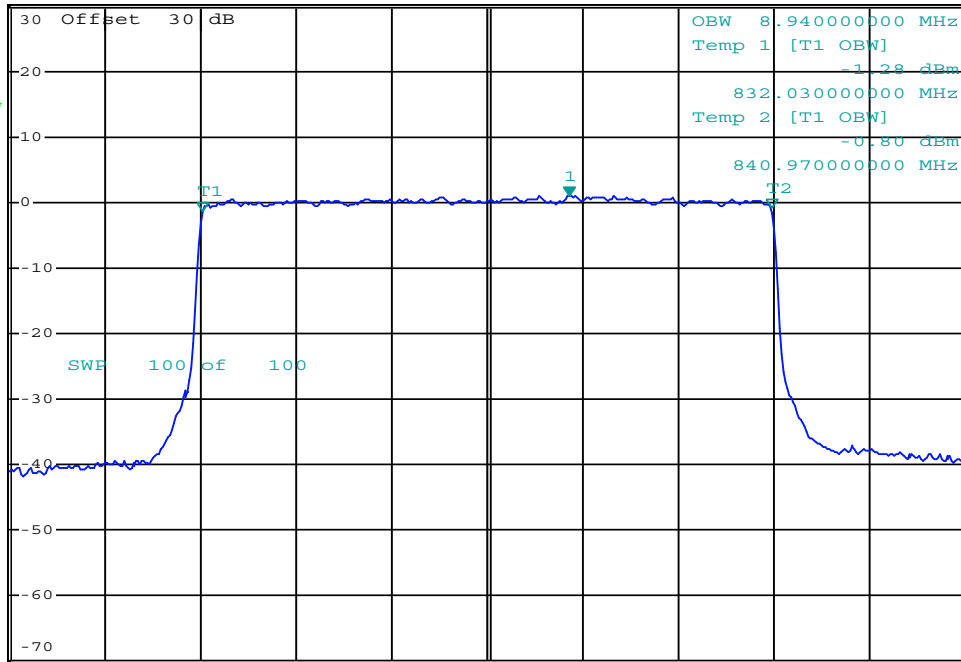
# Occupied Bandwidth: LTE Band 5



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 1.06 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 837.790000000 MHz

Ref 30 dBm

1 RM\*  
 VIEW



Center 836.5 MHz 1.5 MHz/ Span 15 MHz

Date: 21.APR.2021 13:58:18

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>836.5</b> | Channel Bandwidth (MHz): | <b>10.0</b>  |
| EARFCN:                  | <b>20525</b> | Resource Blocks (RB):    | <b>50</b>    |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>64QAM</b> |

Occupied Bandwidth (MHz): **8.94**

## Occupied Bandwidth Measurement Results

| Channel<br>Frequency<br>(MHz) | Nominal<br>Channel<br>BW<br>(MHz) | EARFCN | Resource<br>Blocks | RB<br>Offset | Modulation | Measured<br>Occupied<br>Bandwidth<br>(MHz) | Emission<br>Designator |
|-------------------------------|-----------------------------------|--------|--------------------|--------------|------------|--------------------------------------------|------------------------|
| 707.5                         | 1.4                               | 23095  | 6                  | 0            | QPSK       | 1.15                                       | 1M15G7D                |
| 707.5                         | 1.4                               | 23095  | 6                  | 0            | 16QAM      | 1.15                                       | 1M15W7D                |
| 707.5                         | 1.4                               | 23095  | 6                  | 0            | 64QAM      | 1.16                                       | 1M16W7D                |
| 707.5                         | 3                                 | 23095  | 15                 | 0            | QPSK       | 2.72                                       | 2M72G7D                |
| 707.5                         | 3                                 | 23095  | 15                 | 0            | 16QAM      | 2.72                                       | 2M72W7D                |
| 707.5                         | 3                                 | 23095  | 15                 | 0            | 64QAM      | 2.72                                       | 2M72W7D                |
| 707.5                         | 5                                 | 23095  | 25                 | 0            | QPSK       | 4.50                                       | 4M50G7D                |
| 707.5                         | 5                                 | 23095  | 25                 | 0            | 16QAM      | 4.50                                       | 4M50W7D                |
| 707.5                         | 5                                 | 23095  | 25                 | 0            | 64QAM      | 4.48                                       | 4M48W7D                |
| 707.5                         | 10                                | 23095  | 50                 | 0            | QPSK       | 8.94                                       | 8M94G7D                |
| 707.5                         | 10                                | 23095  | 50                 | 0            | 16QAM      | 8.91                                       | 8M91W7D                |
| 707.5                         | 10                                | 23095  | 50                 | 0            | 64QAM      | 8.94                                       | 8M94W7D                |
|                               |                                   |        |                    |              |            |                                            | Complies               |

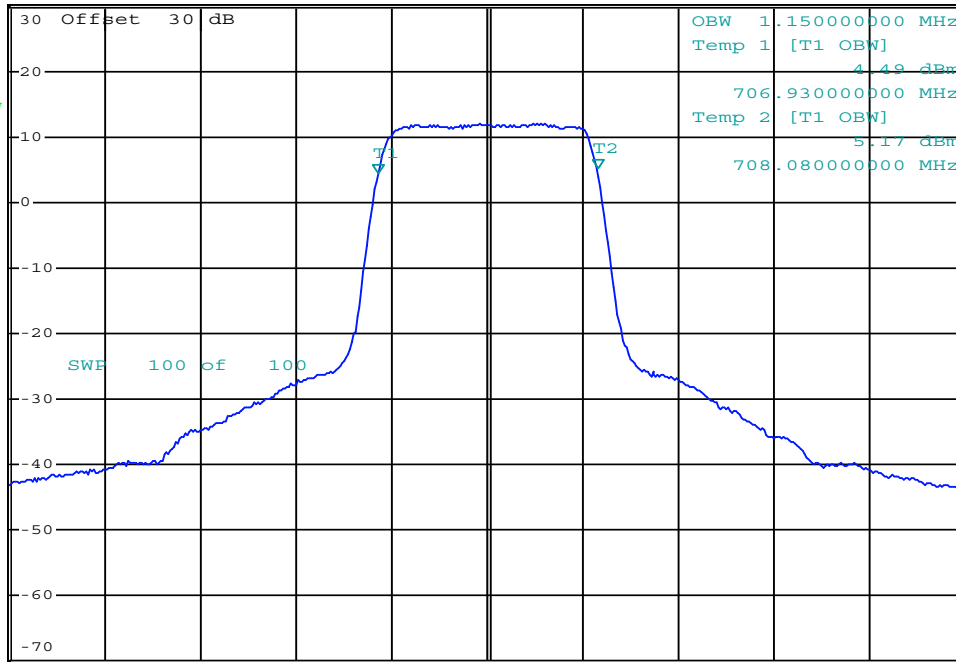
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz -43.62 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 710.00000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz 500 kHz/ Span 5 MHz

Date: 21.APR.2021 14:06:01

|                          |       |                          |      |
|--------------------------|-------|--------------------------|------|
| Channel Frequency (MHz): | 707.5 | Channel Bandwidth (MHz): | 1.4  |
| EARFCN:                  | 23095 | Resource Blocks (RB):    | 6    |
| RB Offset:               | 0     | Modulation:              | QPSK |

Occupied Bandwidth (MHz): 1.15

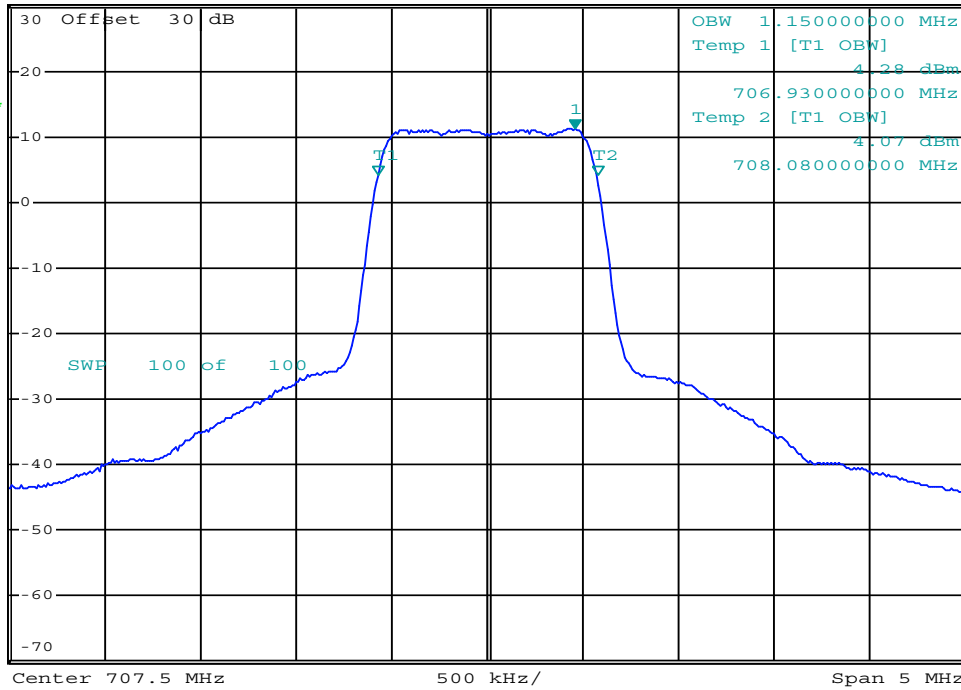
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 11.33 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 707.960000000 MHz

Ref 30 dBm

1 RM  
 VIEW



★  
 A

LVL

3DB

Date: 21.APR.2021 14:07:57

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>707.5</b> | Channel Bandwidth (MHz): | <b>1.4</b>   |
| EARFCN:                  | <b>23095</b> | Resource Blocks (RB):    | <b>6</b>     |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>16QAM</b> |

Occupied Bandwidth (MHz): **1.15**

# Occupied Bandwidth: LTE Band 12

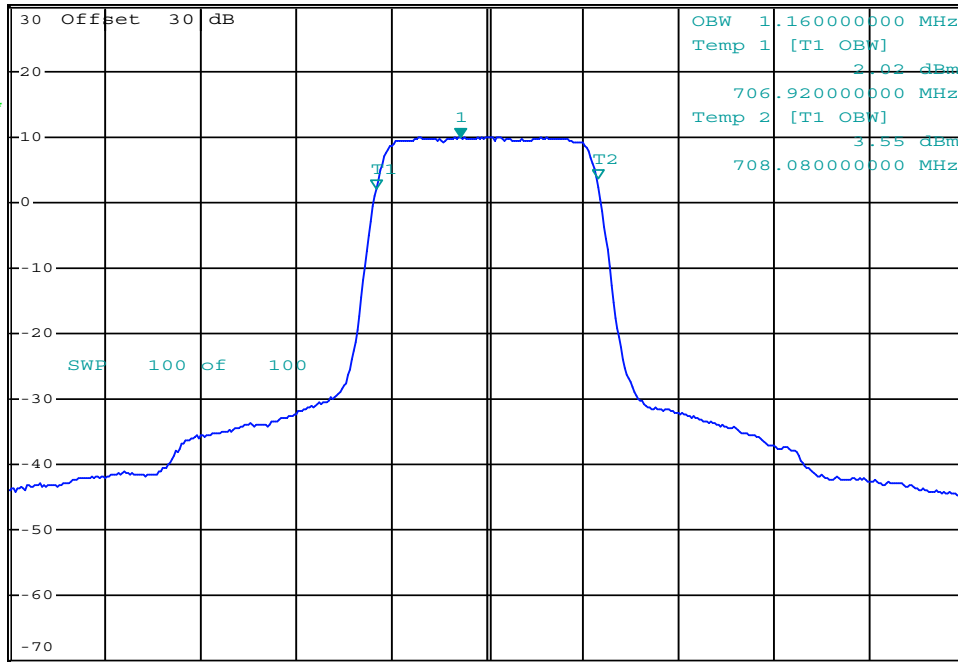


\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 9.96 dBm  
 \*SWT 50 ms 707.360000000 MHz

Ref 30 dBm

\*Att 10 dB

1 RM  
 VIEW



Center 707.5 MHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 14:11:22

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>707.5</b> | Channel Bandwidth (MHz): | <b>1.4</b>   |
| EARFCN:                  | <b>23095</b> | Resource Blocks (RB):    | <b>6</b>     |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>64QAM</b> |

Occupied Bandwidth (MHz): **1.16**

# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 8.07 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 707.180000000 MHz

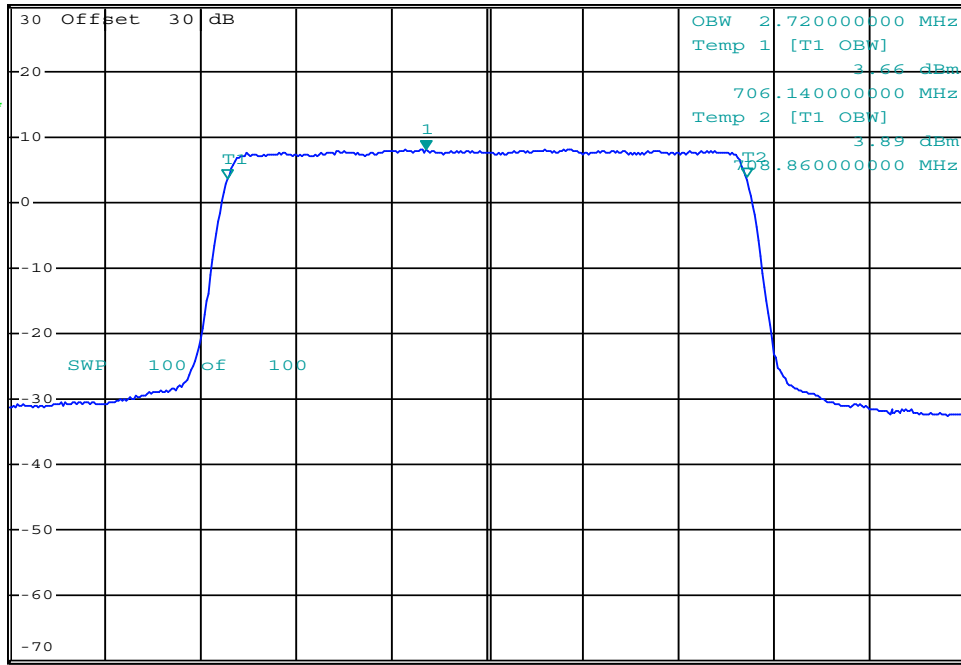
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

707.180000000 MHz

1 RM  
 VIEW



Center 707.5 MHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 14:16:37

|                          |       |                          |      |                           |      |
|--------------------------|-------|--------------------------|------|---------------------------|------|
| Channel Frequency (MHz): | 707.5 | Channel Bandwidth (MHz): | 3.0  | Occupied Bandwidth (MHz): | 2.72 |
| EARFCN:                  | 23095 | Resource Blocks (RB):    | 15   |                           |      |
| RB Offset:               | 0     | Modulation:              | QPSK |                           |      |

# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 7.06 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 707.930000000 MHz

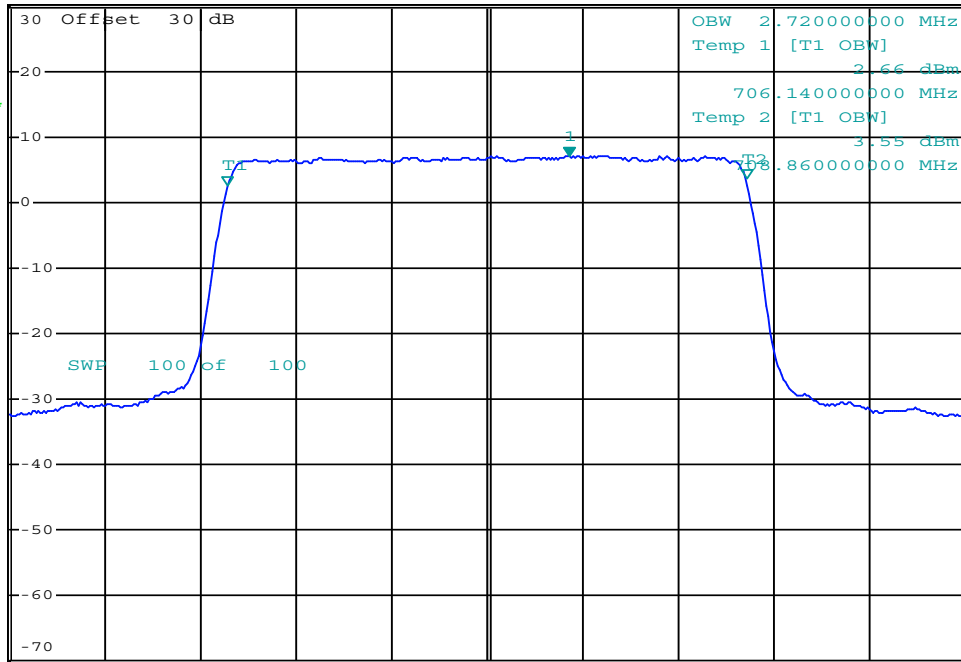
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

707.930000000 MHz

1 RM  
 VIEW



Center 707.5 MHz

500 kHz/

Span 5 MHz

Date: 21.APR.2021 14:14:34

Channel Frequency (MHz): **707.5**

Channel Bandwidth (MHz): **3.0**

EARFCN: **23095**

Resource Blocks (RB): **15**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **2.72**

# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 6.22 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 707.930000000 MHz

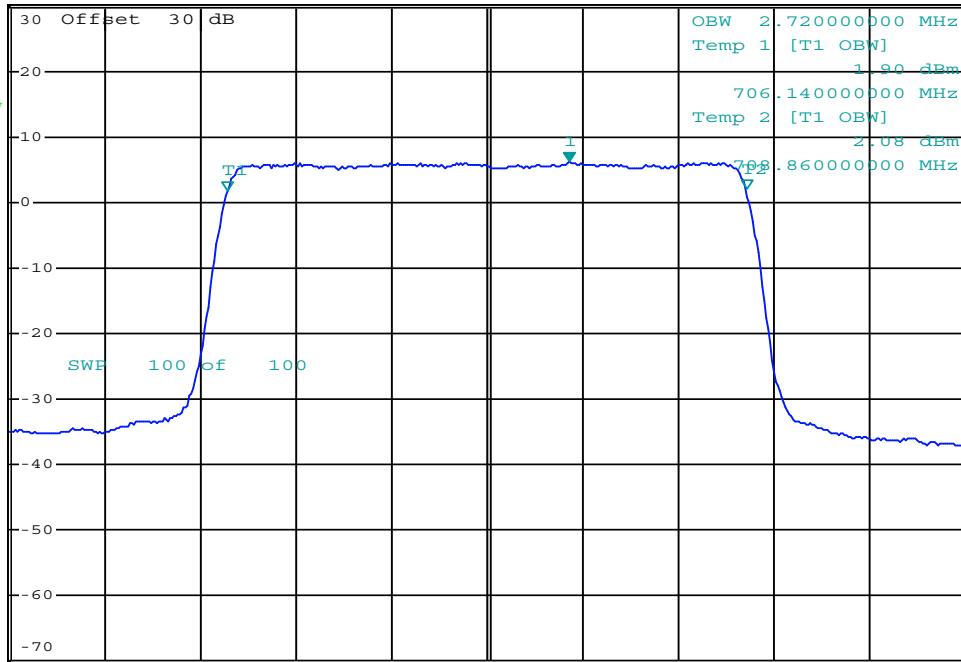
Ref 30 dBm

\*Att 10 dB

\*SWT 50 ms

707.930000000 MHz

1 RM  
 VIEW



★  
 A

LVL

3DB

Date: 21.APR.2021 14:13:38

Channel Frequency (MHz): **707.5**

Channel Bandwidth (MHz): **3.0**

EARFCN: **23095**

Resource Blocks (RB): **15**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **2.72**

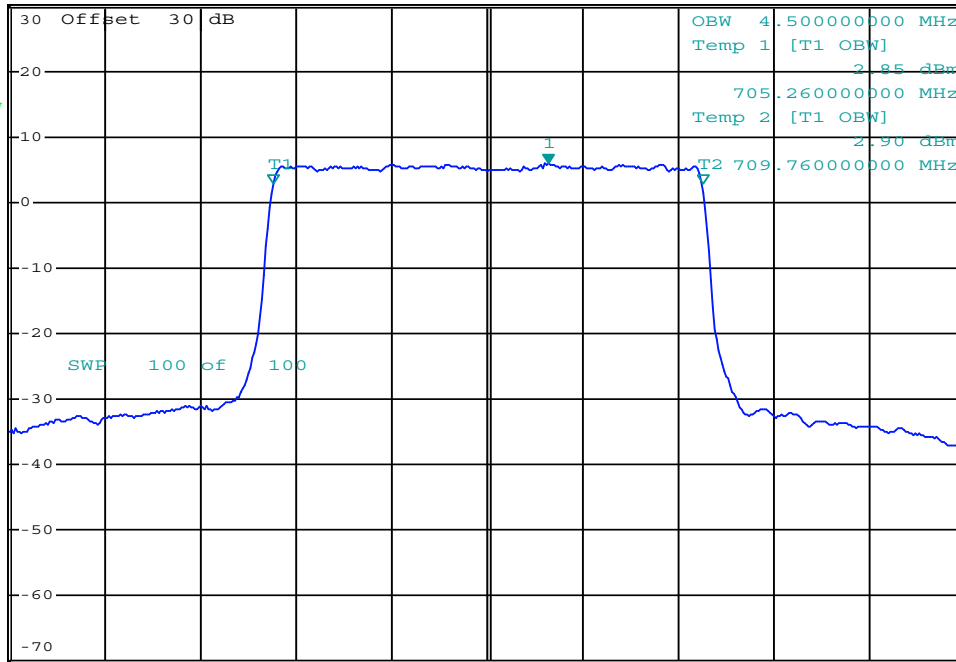
## Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1]  
 VBW 1 MHz 5.90 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 708.140000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 14:18:29

Channel Frequency (MHz): **707.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **23095**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **QPSK**

Occupied Bandwidth (MHz): **4.5**

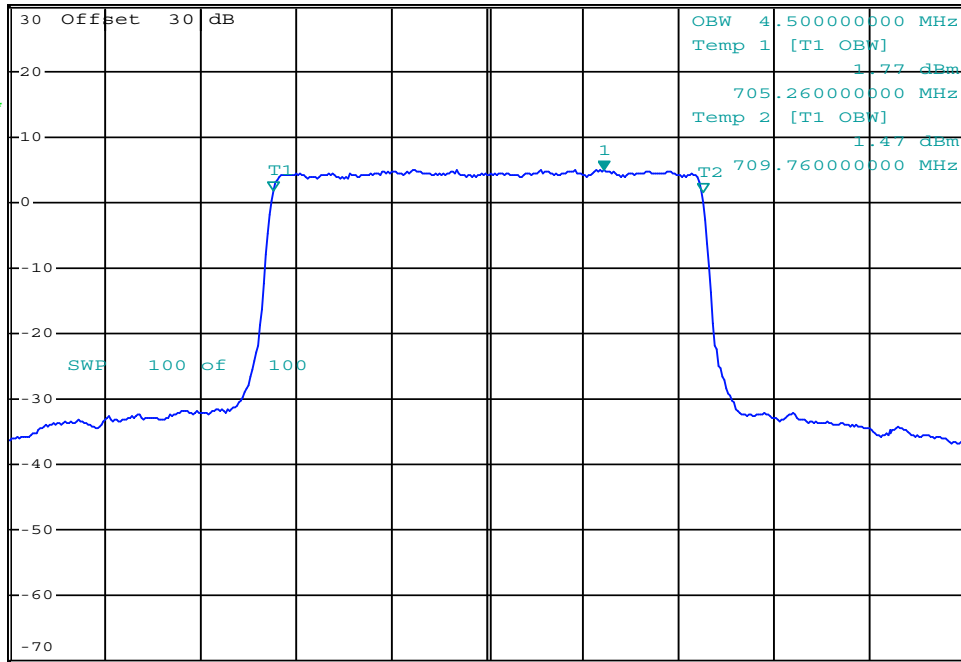
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 5.07 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 708.720000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 14:22:04

Channel Frequency (MHz): **707.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **23095**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **16QAM**

Occupied Bandwidth (MHz): **4.5**

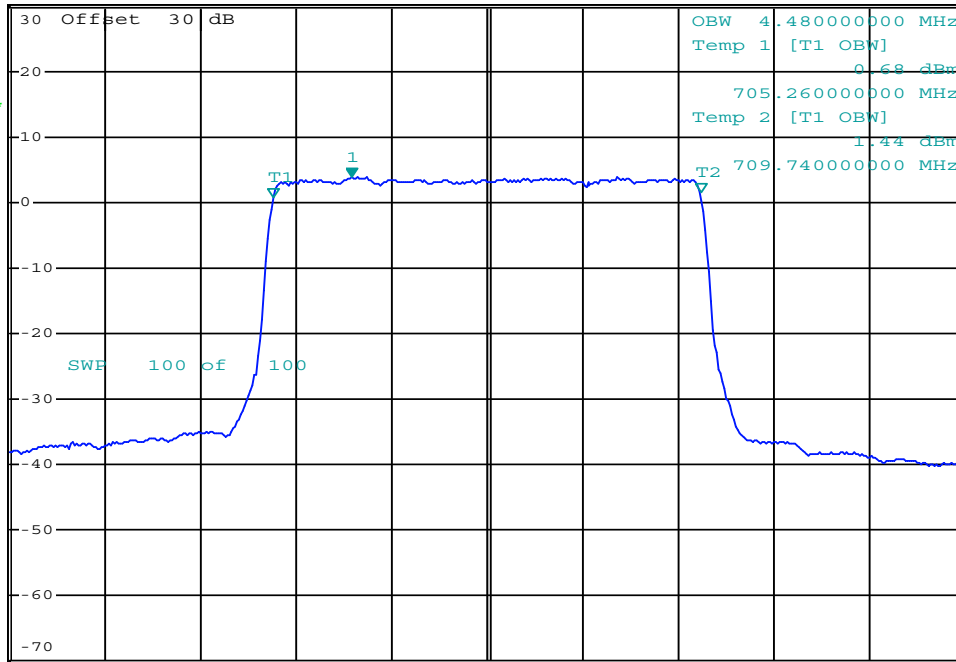
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 3.86 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 706.080000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz

1 MHz/

Span 10 MHz

Date: 21.APR.2021 14:23:35

Channel Frequency (MHz): **707.5**

Channel Bandwidth (MHz): **5.0**

EARFCN: **23095**

Resource Blocks (RB): **25**

RB Offset: **0**

Modulation: **64QAM**

Occupied Bandwidth (MHz): **4.48**

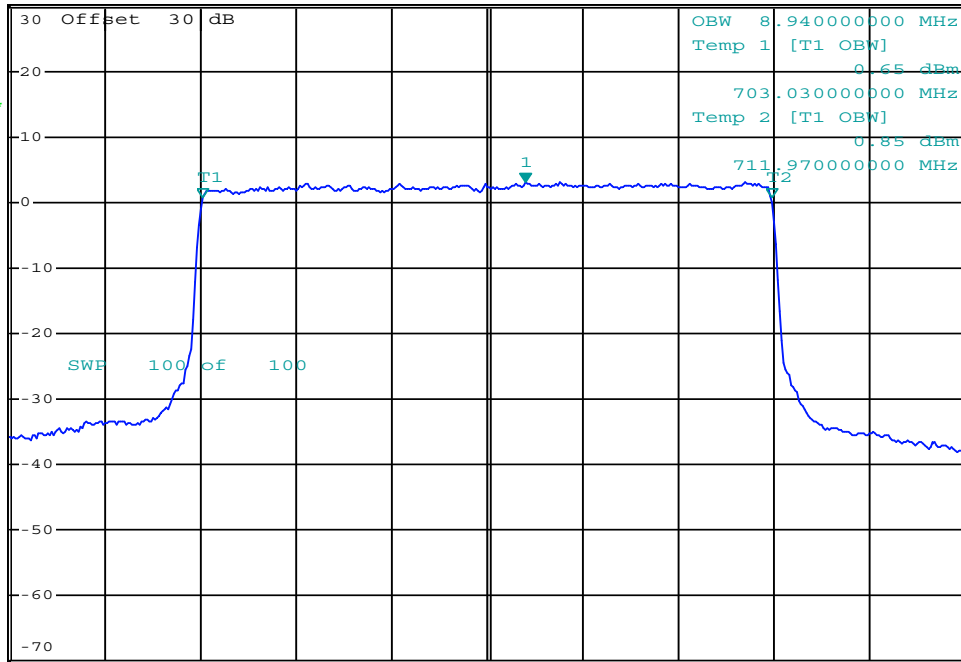
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 3.02 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 708.100000000 MHz

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz 1.5 MHz/ Span 15 MHz

Date: 21.APR.2021 14:29:36

|                          |       |                          |      |                                |
|--------------------------|-------|--------------------------|------|--------------------------------|
| Channel Frequency (MHz): | 707.5 | Channel Bandwidth (MHz): | 10.0 | Occupied Bandwidth (MHz): 8.94 |
| EARFCN:                  | 23095 | Resource Blocks (RB):    | 50   |                                |
| RB Offset:               | 0     | Modulation:              | QPSK |                                |

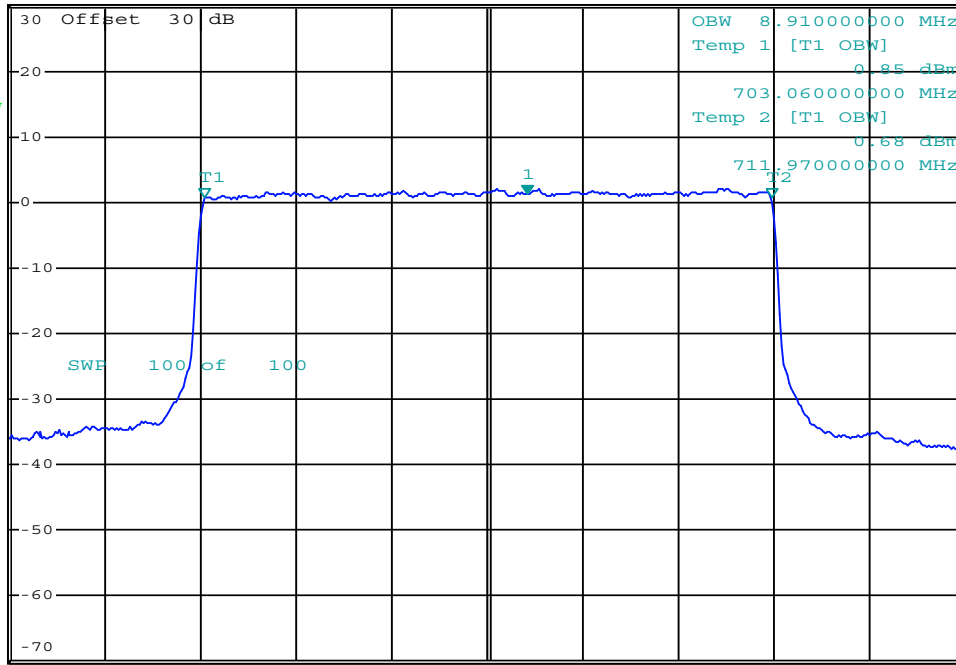
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 1.16 dBm  
 \*Att 10 dB 708.130000000 MHz  
 \*SWT 50 ms

Ref 30 dBm

1 RM  
 VIEW



Center 707.5 MHz 1.5 MHz/ Span 15 MHz

Date: 21.APR.2021 14:27:34

|                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| Channel Frequency (MHz): | <b>707.5</b> | Channel Bandwidth (MHz): | <b>10.0</b>  |
| EARFCN:                  | <b>23095</b> | Resource Blocks (RB):    | <b>50</b>    |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>16QAM</b> |

Occupied Bandwidth (MHz): **8.91**

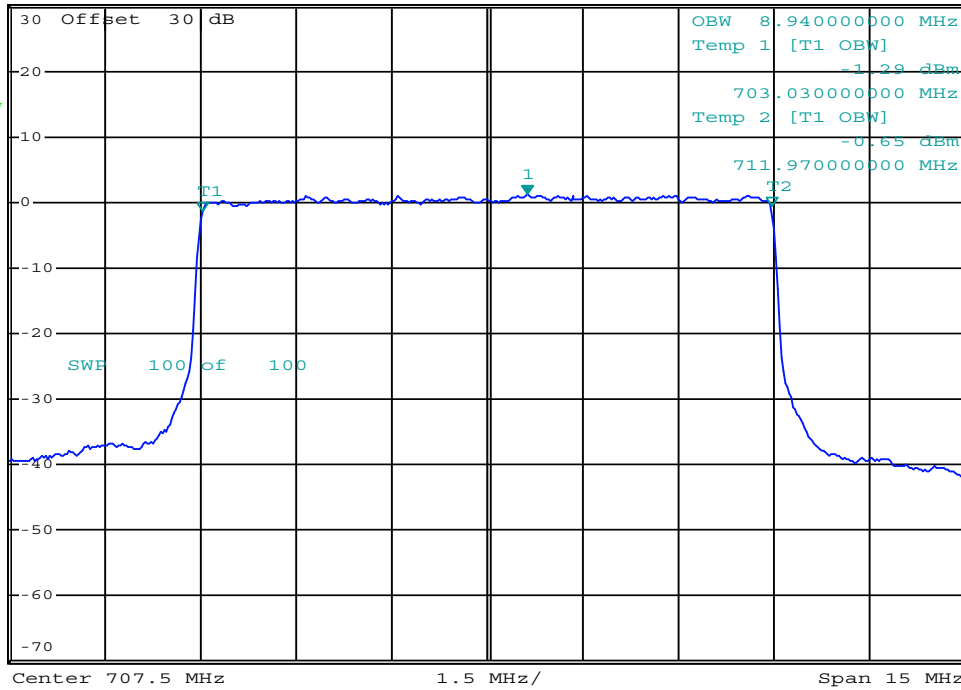
# Occupied Bandwidth: LTE Band 12



\*RBW 100 kHz Marker 1 [T1 ]  
 VBW 1 MHz 1.16 dBm  
 \*Att 10 dB  
 \*SWT 50 ms 708.130000000 MHz

Ref 30 dBm

1 RM  
 VIEW



OBW 8.940000000 MHz  
 Temp 1 [T1 OBW] -1.29 dBm  
 703.030000000 MHz  
 Temp 2 [T1 OBW] -0.65 dBm  
 711.970000000 MHz  
 LVL  
 3DB

Date: 21.APR.2021 14:26:35

|                          |              |                          |              |                           |             |
|--------------------------|--------------|--------------------------|--------------|---------------------------|-------------|
| Channel Frequency (MHz): | <b>707.5</b> | Channel Bandwidth (MHz): | <b>10.0</b>  | Occupied Bandwidth (MHz): | <b>8.94</b> |
| EARFCN:                  | <b>23095</b> | Resource Blocks (RB):    | <b>50</b>    |                           |             |
| RB Offset:               | <b>0</b>     | Modulation:              | <b>64QAM</b> |                           |             |

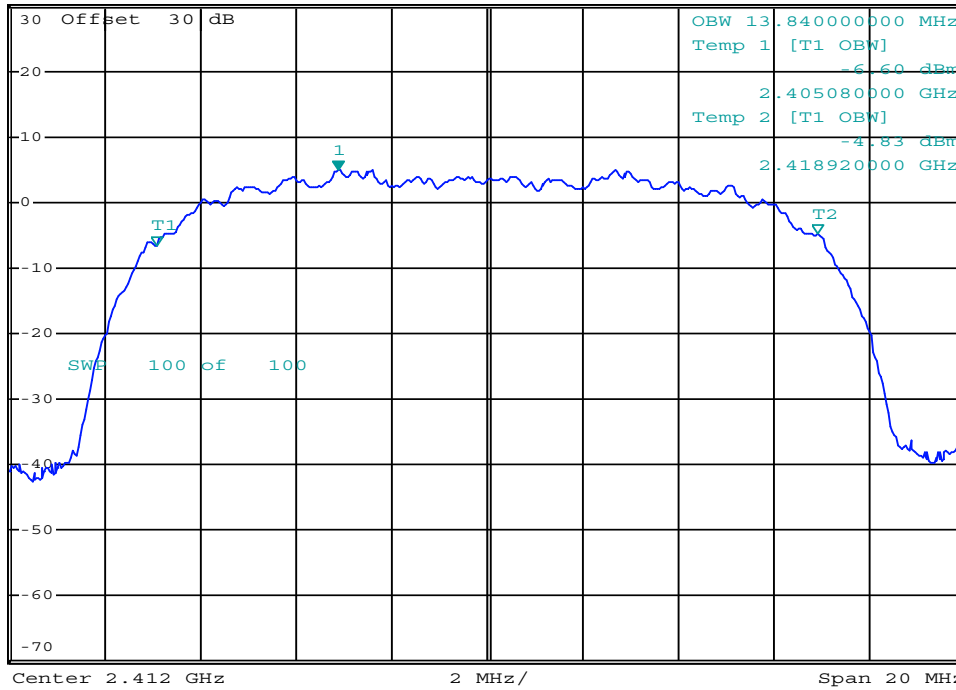
| Occupied Bandwidth Measurement Results |            |                                            |                        |
|----------------------------------------|------------|--------------------------------------------|------------------------|
| Channel<br>Frequency<br><br>(MHz)      | Modulation | Measured<br>Occupied<br>Bandwidth<br>(MHz) | Emission<br>Designator |
| 2412                                   | QPSK       | 13.84                                      | 13M8G1D                |
| 2442                                   | QPSK       | 13.84                                      | 13M8G1D                |
| 2462                                   | QPSK       | 13.88                                      | 13M9G1D                |
|                                        |            |                                            | Complies               |

# Occupied Bandwidth: WiFi



\*RBW 300 kHz Marker 1 [T1]  
 VBW 1 MHz 5.00 dBm  
 Ref 30 dBm \*Att 10 dB SWT 2.5 ms 2.408880000 GHz

1 PK  
VIEW



Date: 18.MAY.2021 10:28:48

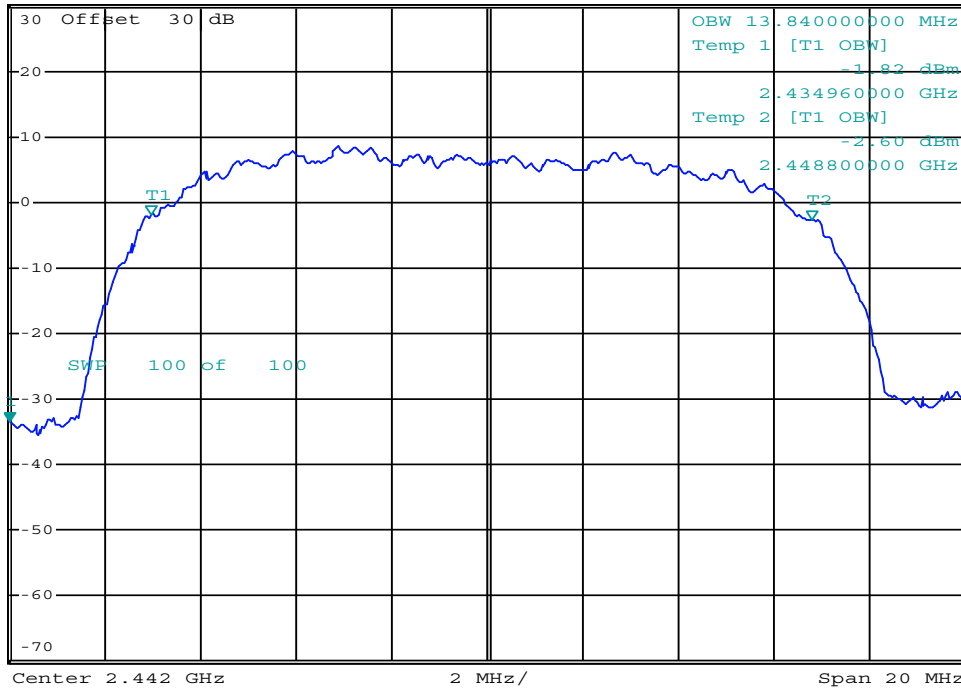
|                                        |                            |                                        |
|----------------------------------------|----------------------------|----------------------------------------|
| Channel Frequency (MHz): <b>2412.0</b> | Channel Bandwidth (MHz): - | Occupied Bandwidth (MHz): <b>13.84</b> |
| EARFCN: -                              | Resource Blocks (RB): -    |                                        |
| RB Offset: -                           | Modulation: <b>QPSK</b>    |                                        |

## Occupied Bandwidth: WiFi



\*RBW 300 kHz Marker 1 [T1 ]  
 VBW 1 MHz -33.28 dBm  
 Ref 30 dBm \*Att 10 dB SWT 2.5 ms 2.432000000 GHz

1 PK  
VIEW



Date: 18.MAY.2021 10:29:28

Channel Frequency (MHz): **2442.0**

Channel Bandwidth (MHz): -

EARFCN: -

Resource Blocks (RB): -

RB Offset: -

Modulation: **QPSK**

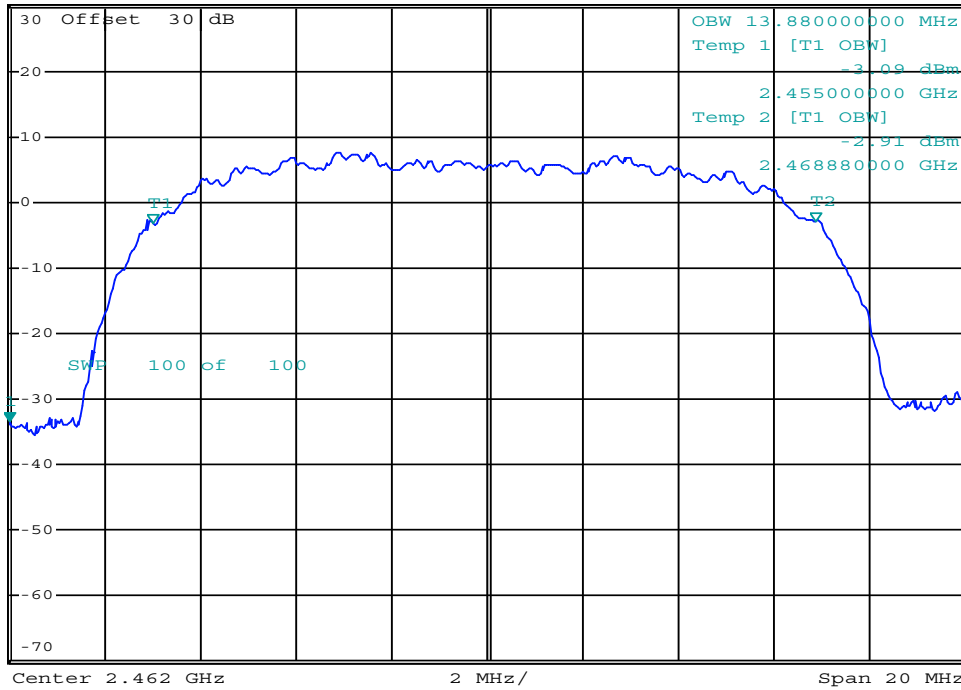
Occupied Bandwidth (MHz): **13.84**

# Occupied Bandwidth: WiFi



\*RBW 300 kHz Marker 1 [T1 ]  
 VBW 1 MHz -33.49 dBm  
 Ref 30 dBm \*Att 10 dB SWT 2.5 ms 2.452000000 GHz

1 PK  
VIEW



Date: 18.MAY.2021 10:30:02

|                                        |                            |                                        |
|----------------------------------------|----------------------------|----------------------------------------|
| Channel Frequency (MHz): <b>2462.0</b> | Channel Bandwidth (MHz): - | Occupied Bandwidth (MHz): <b>13.88</b> |
| EARFCN: -                              | Resource Blocks (RB): -    |                                        |
| RB Offset: -                           | Modulation: <b>QPSK</b>    |                                        |