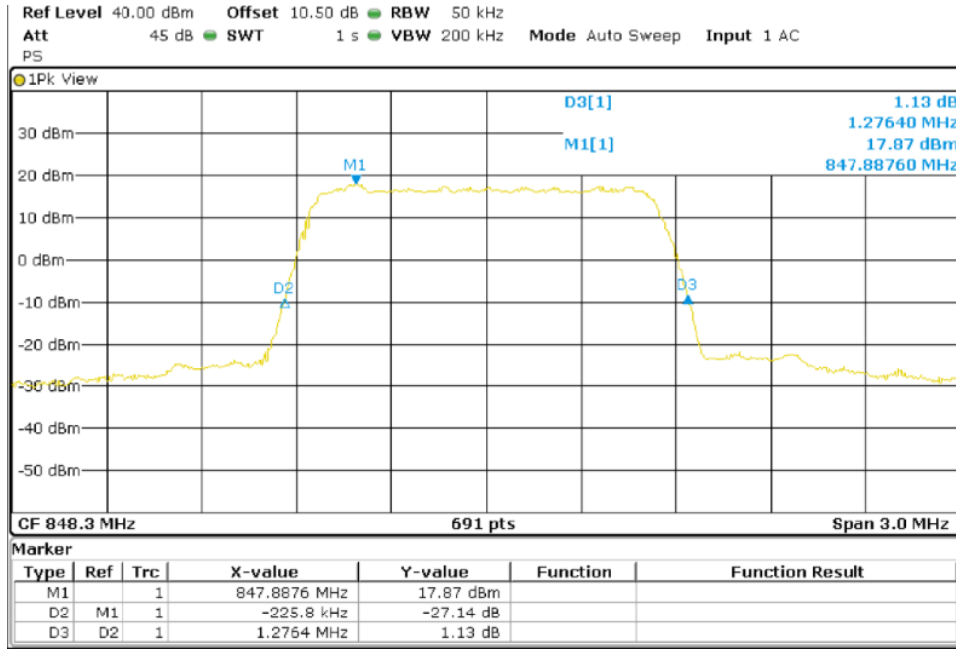


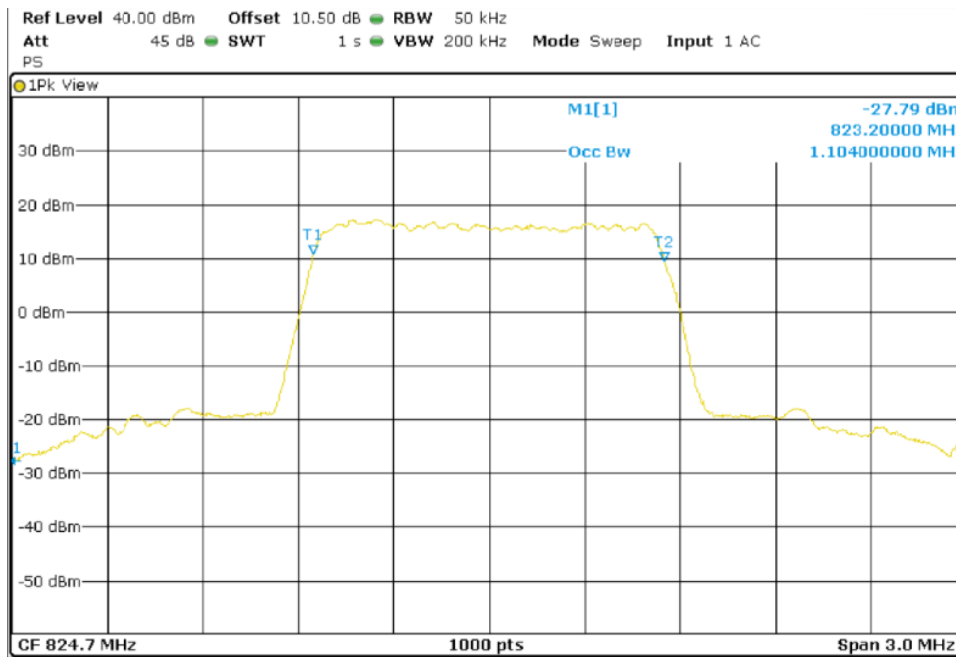
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



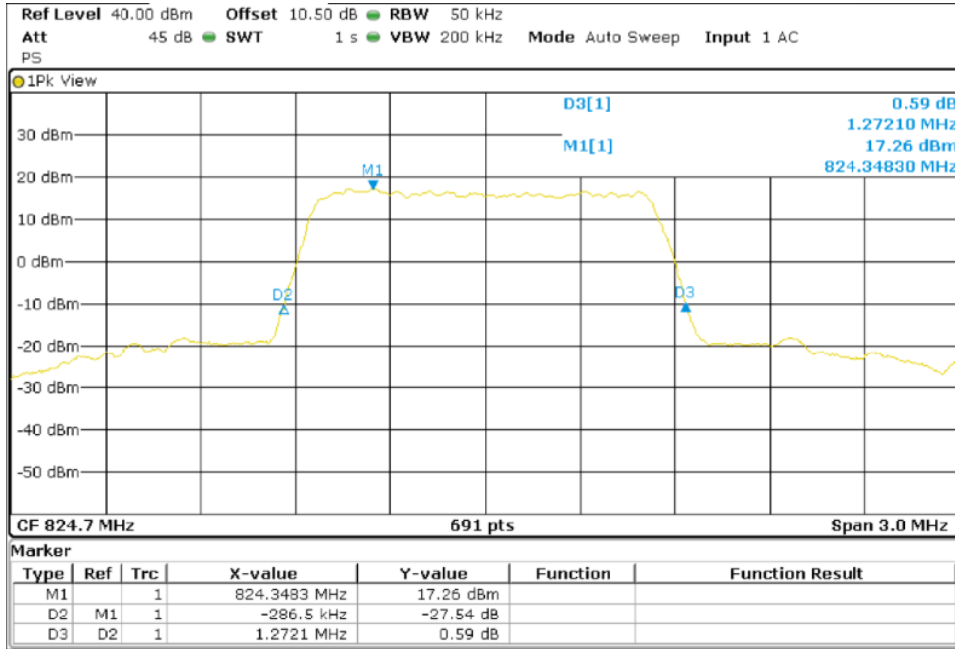
LTE 16QAM MODULATION. BW = 1.4 MHz

Lowest Channel 99% Occupied Bandwidth

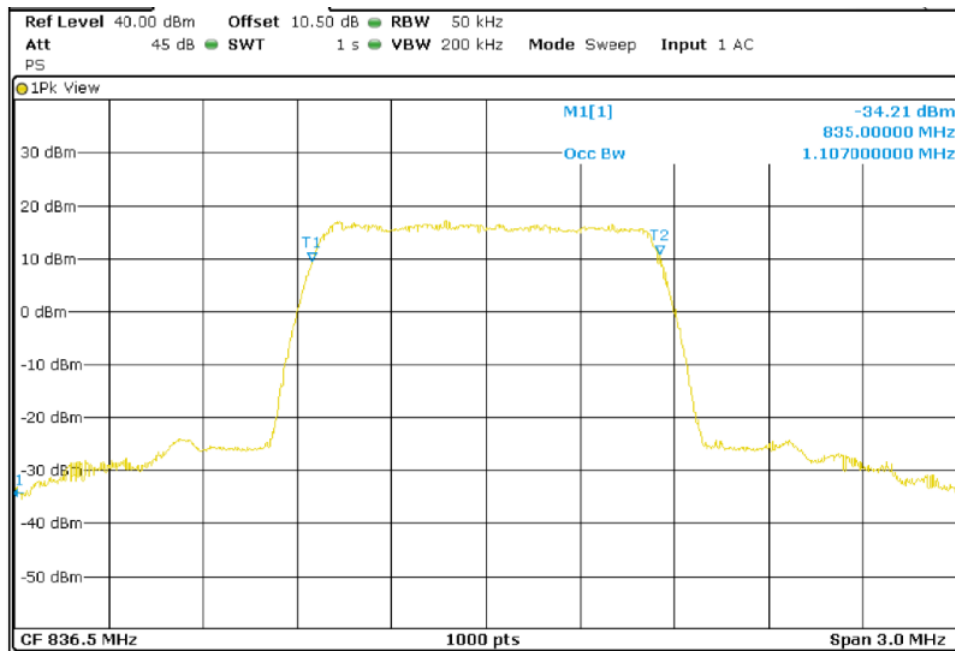


TEST RESULTS (Cont):

Lowest Channel -26dBc Bandwidth kHz

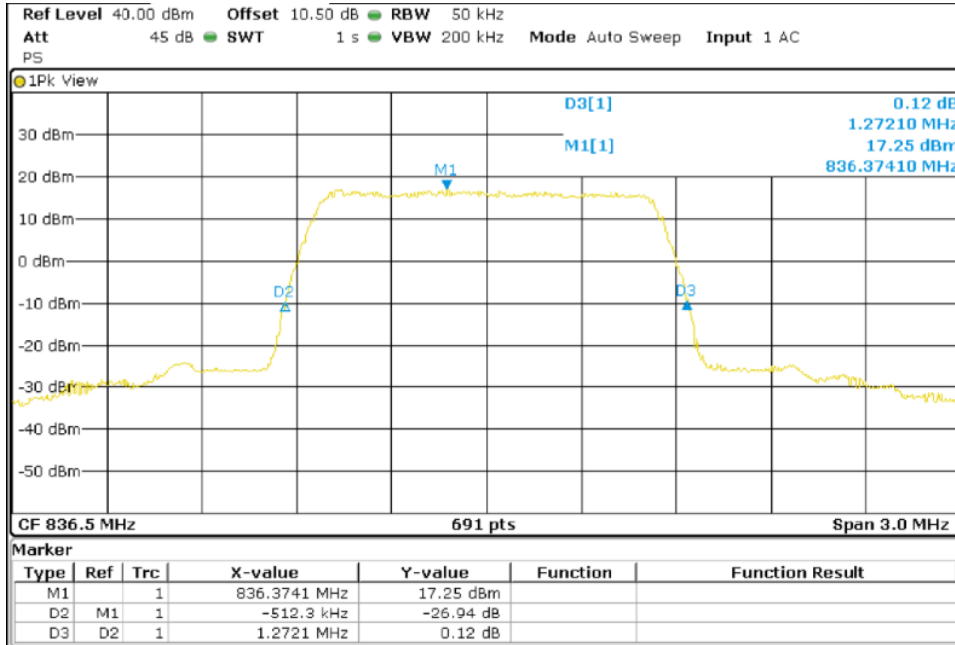


Middle Channel 99% Occupied Bandwidth

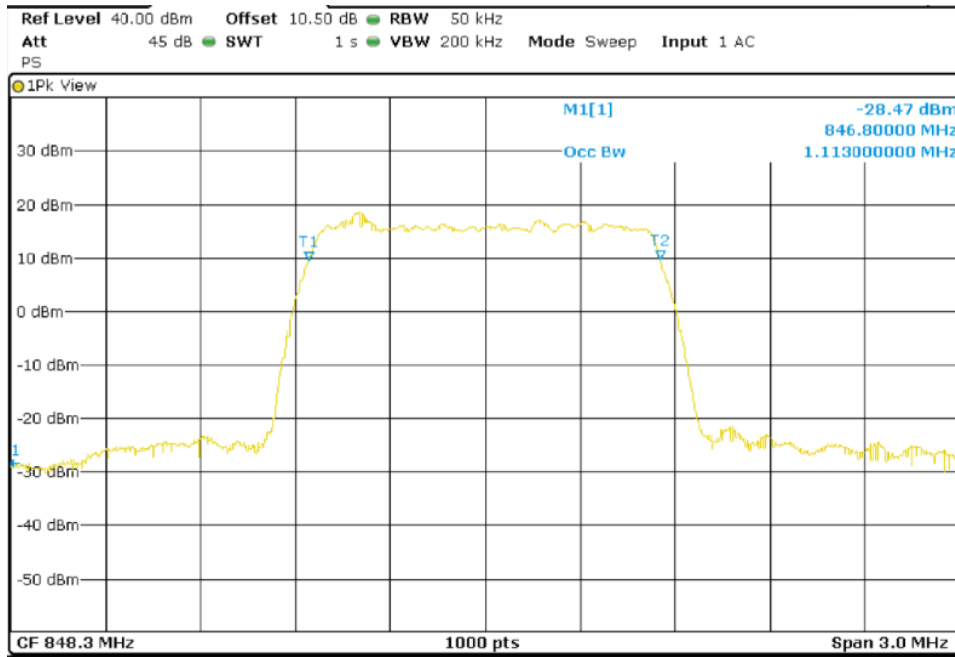


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

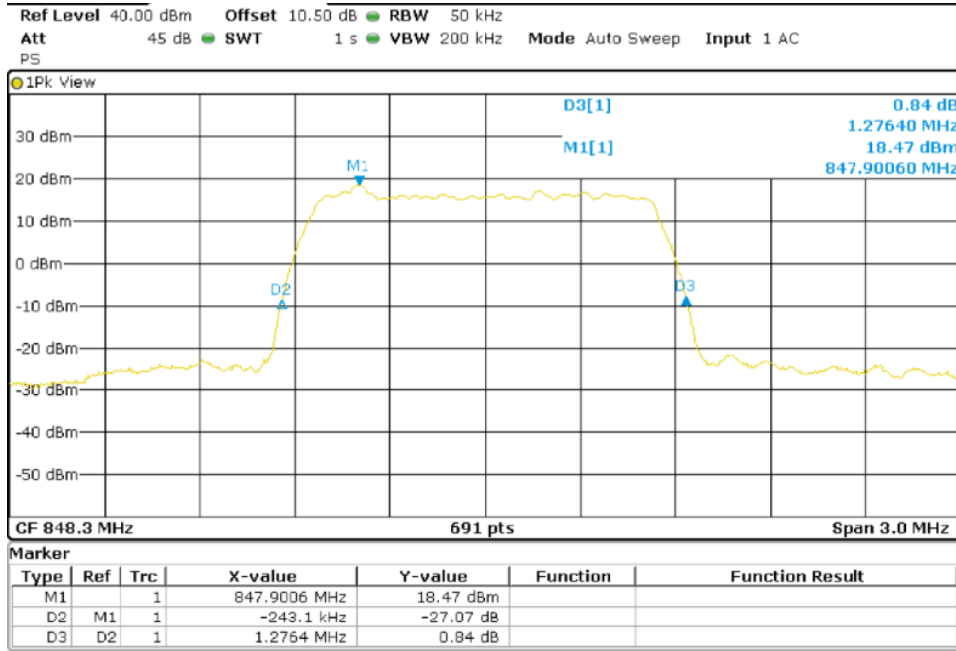


Highest Channel 99% Occupied Bandwidth



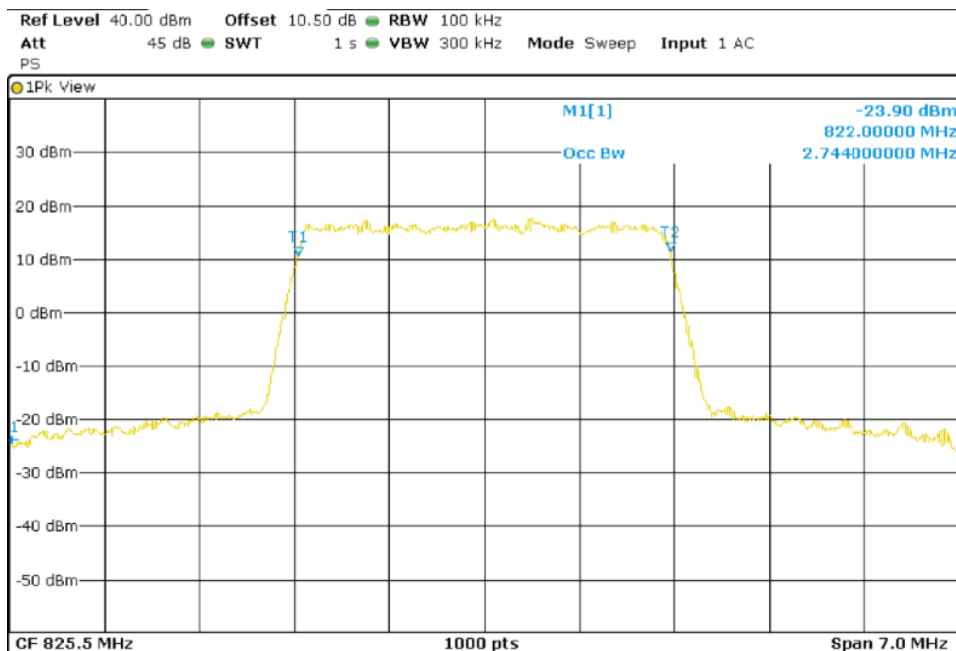
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



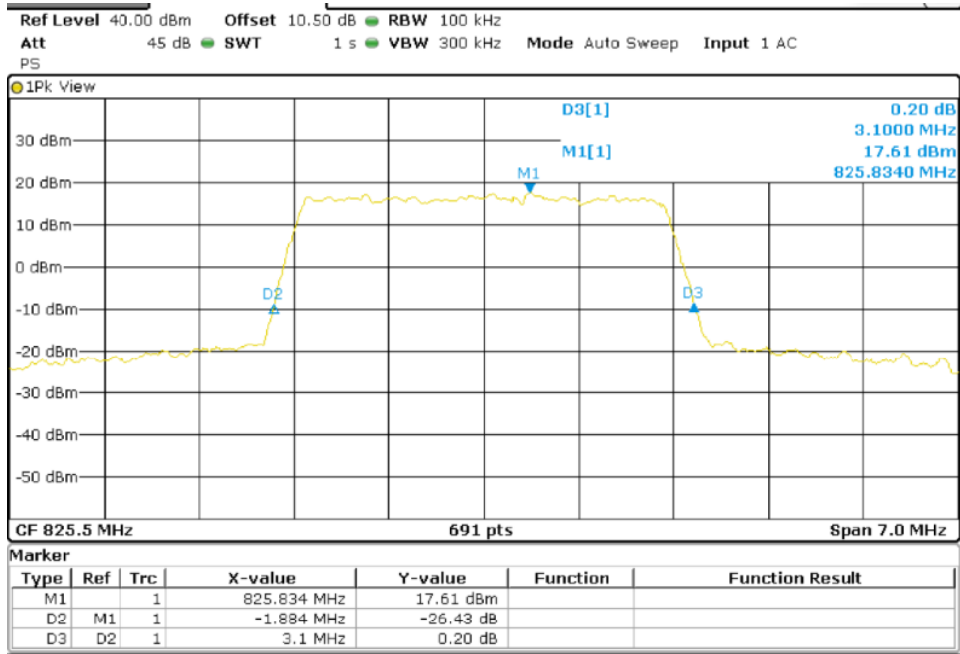
LTE QPSK MODULATION. BW = 3 MHz

Lowest Channel 99% Occupied Bandwidth

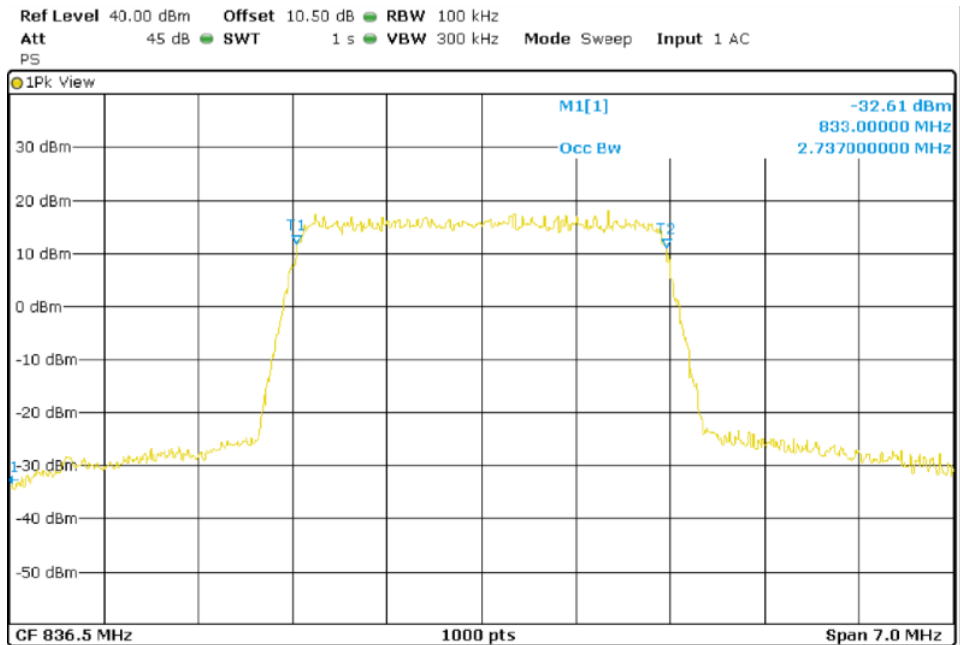


TEST RESULTS (Cont):

Lowest Channel -26dBc Bandwidth kHz

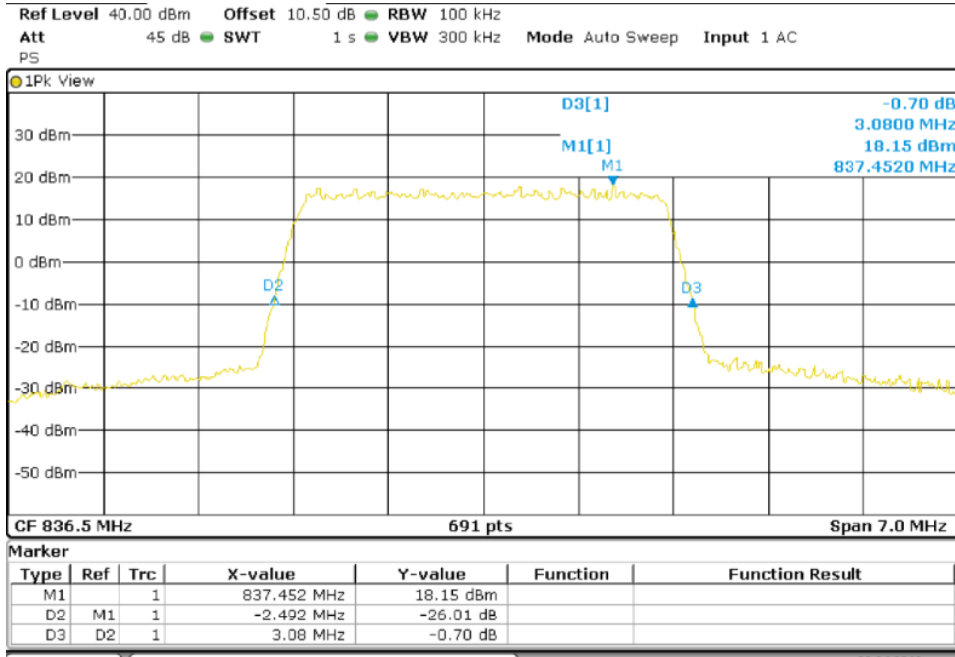


Middle Channel 99% Occupied Bandwidth

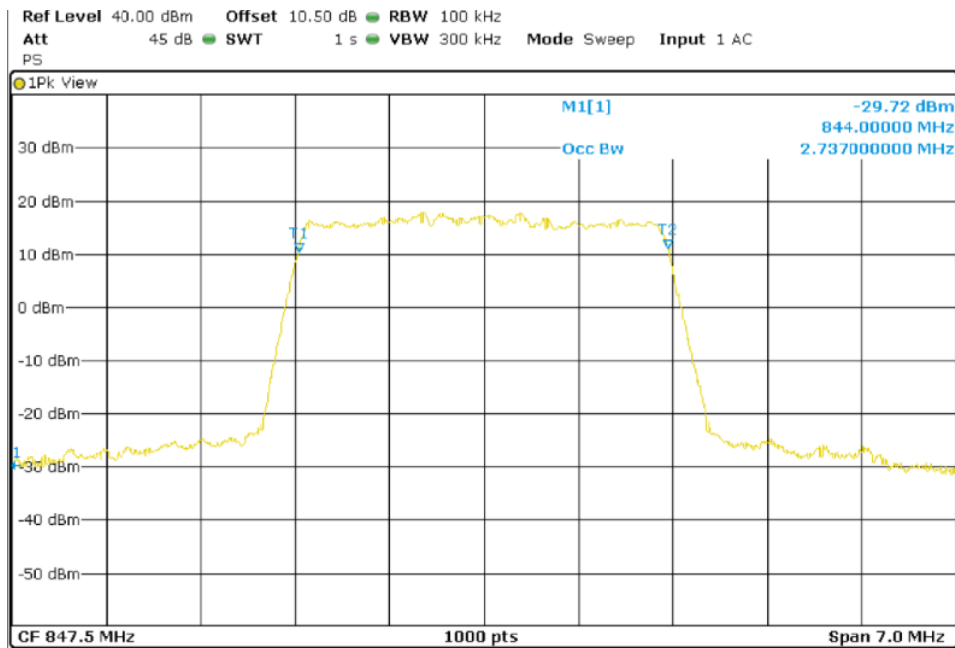


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

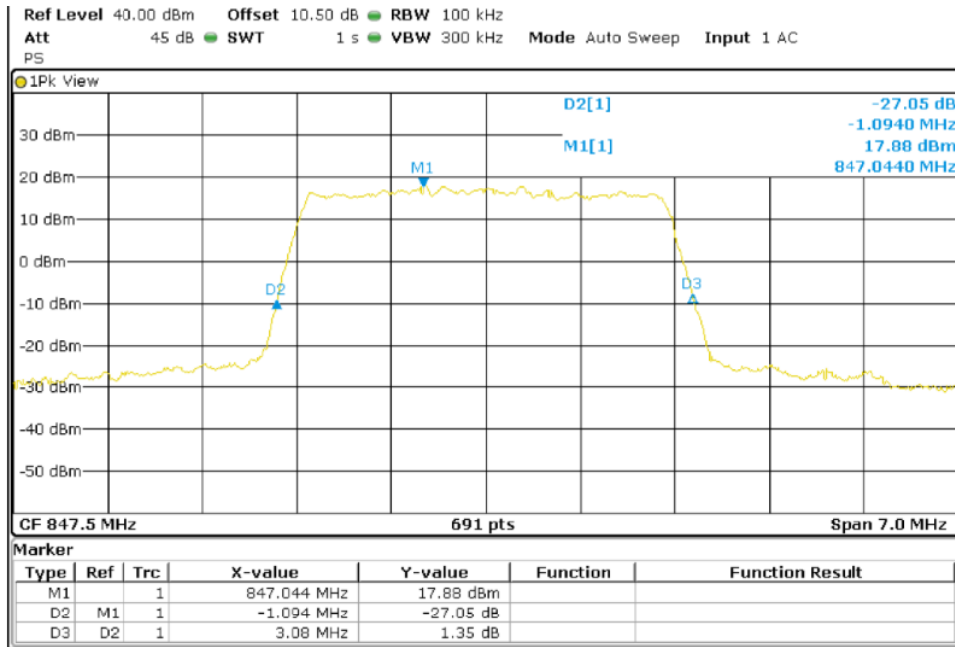


Highest Channel 99% Occupied Bandwidth



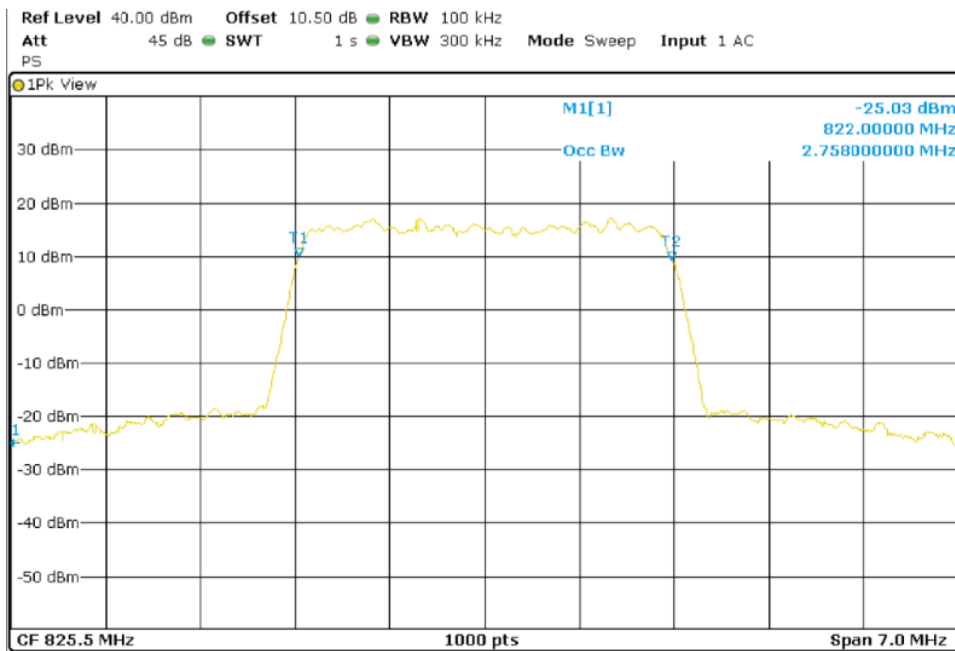
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



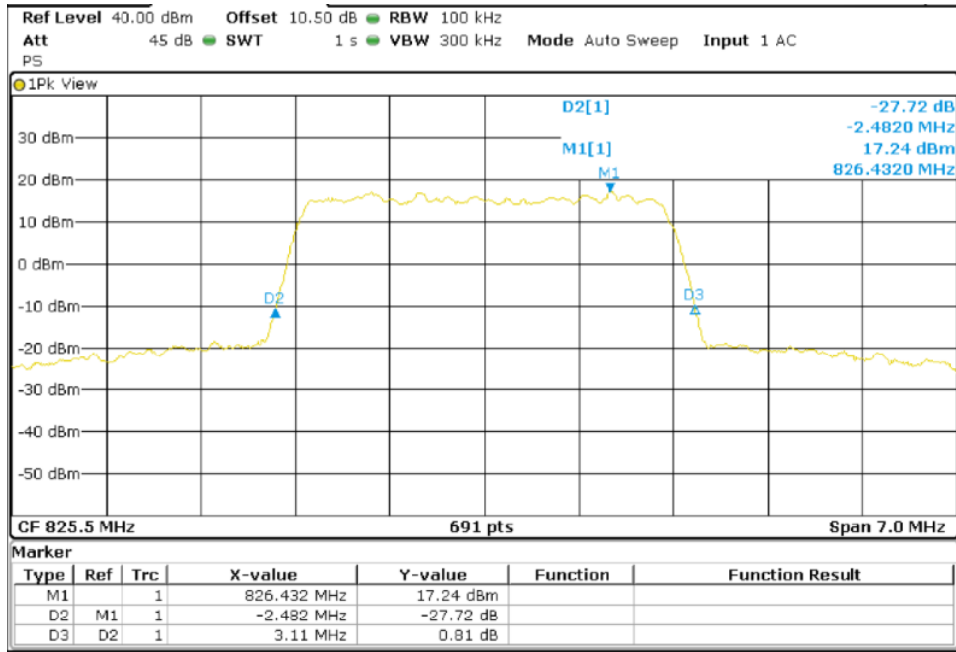
LTE 16QAM MODULATION. BW = 3 MHz

Lowest Channel 99% Occupied Bandwidth

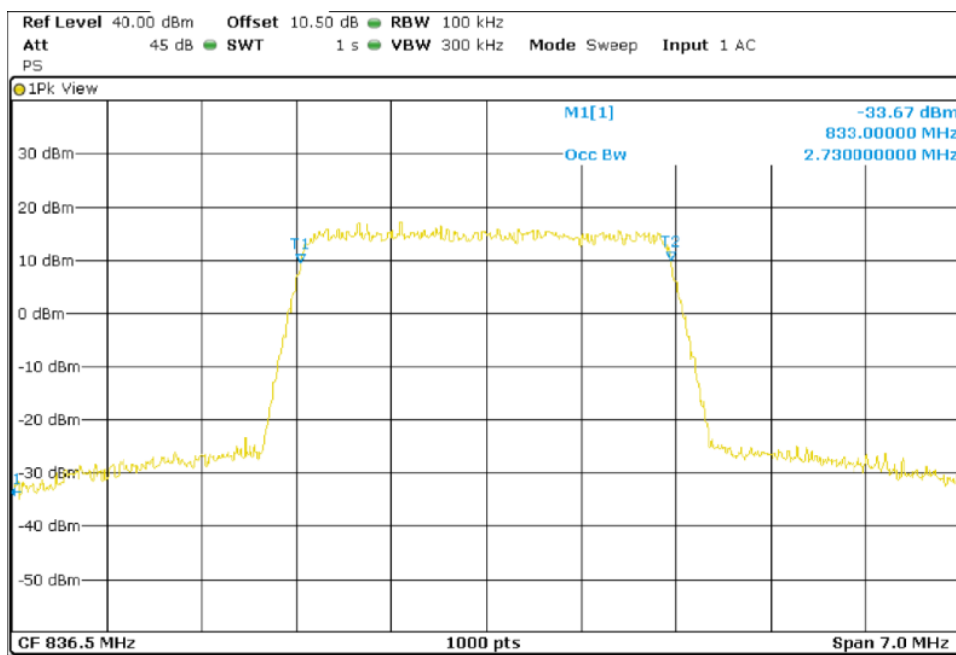


TEST RESULTS (Cont):

Lowest Channel 26dBc Bandwidth kHz

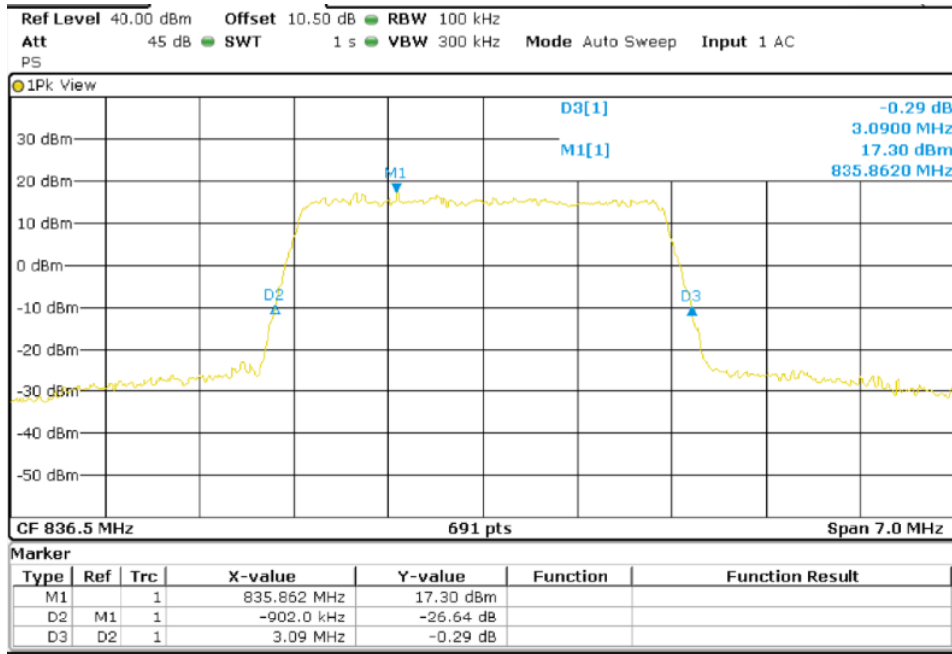


Middle Channel 99% Occupied Bandwidth

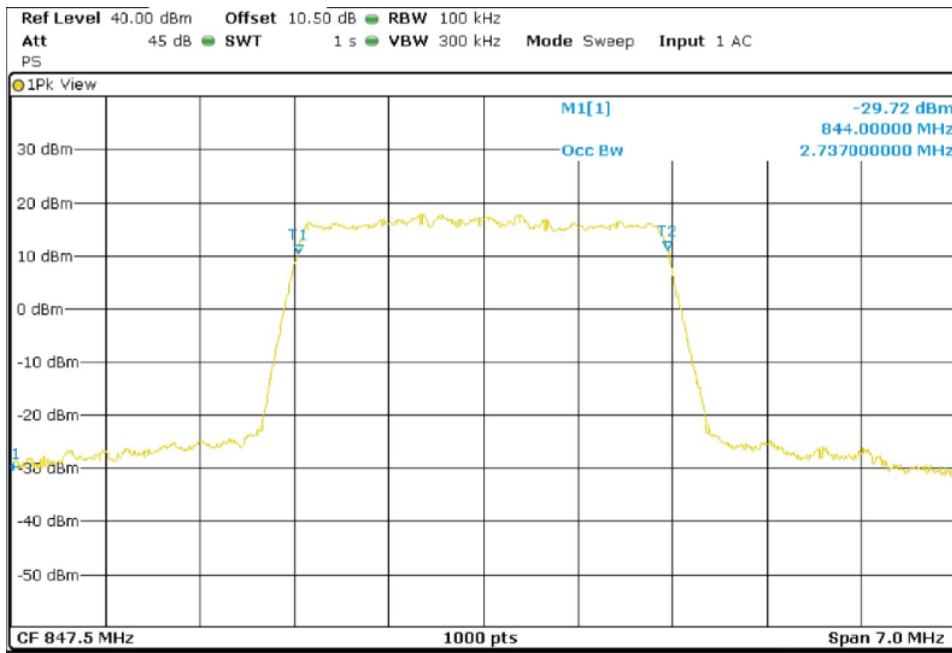


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

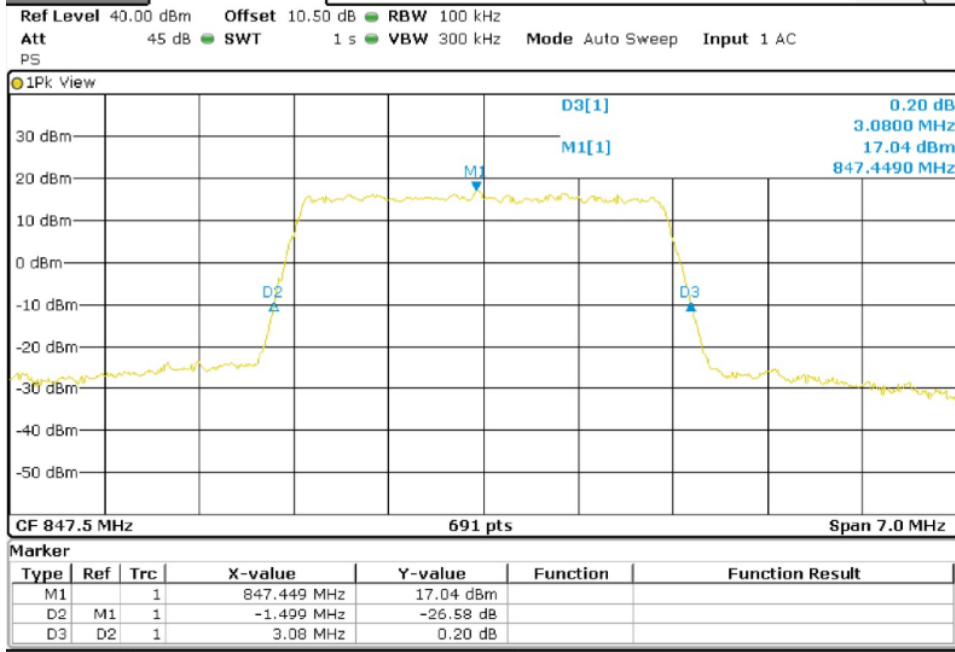


Highest Channel 99% Occupied Bandwidth



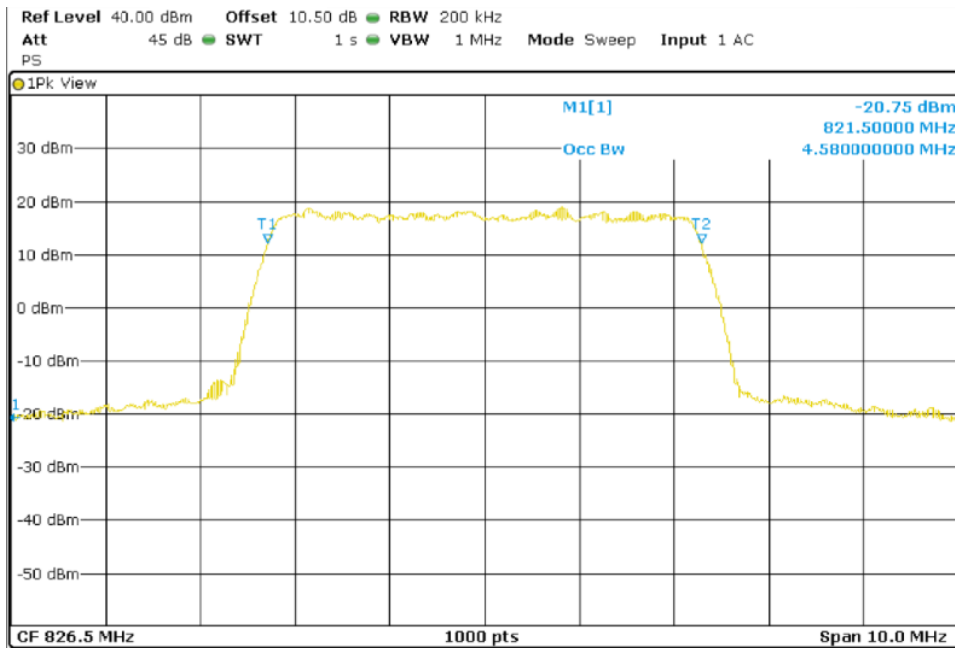
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



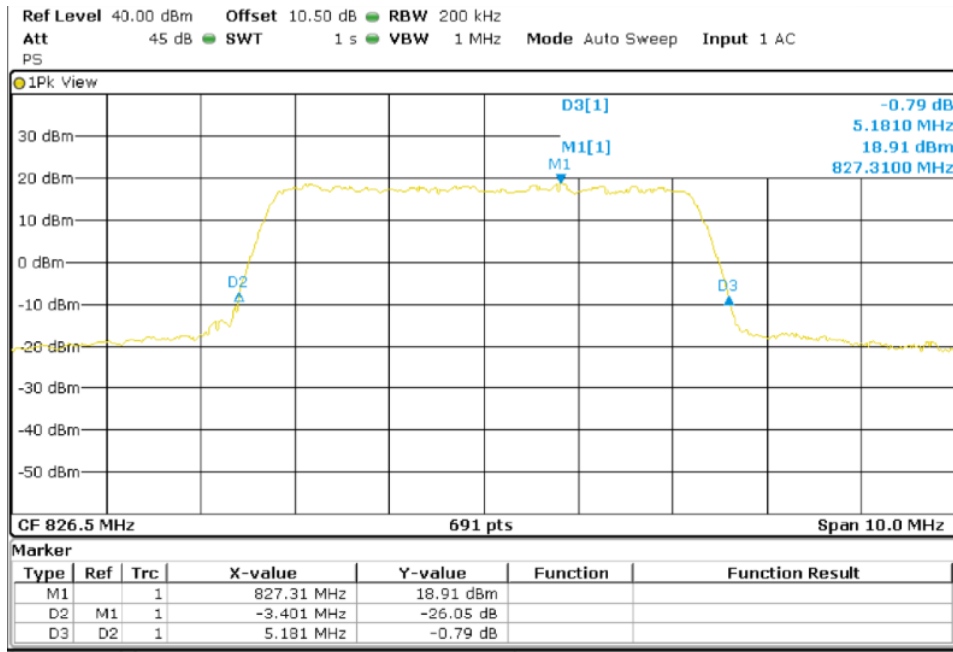
LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel 99% Occupied Bandwidth

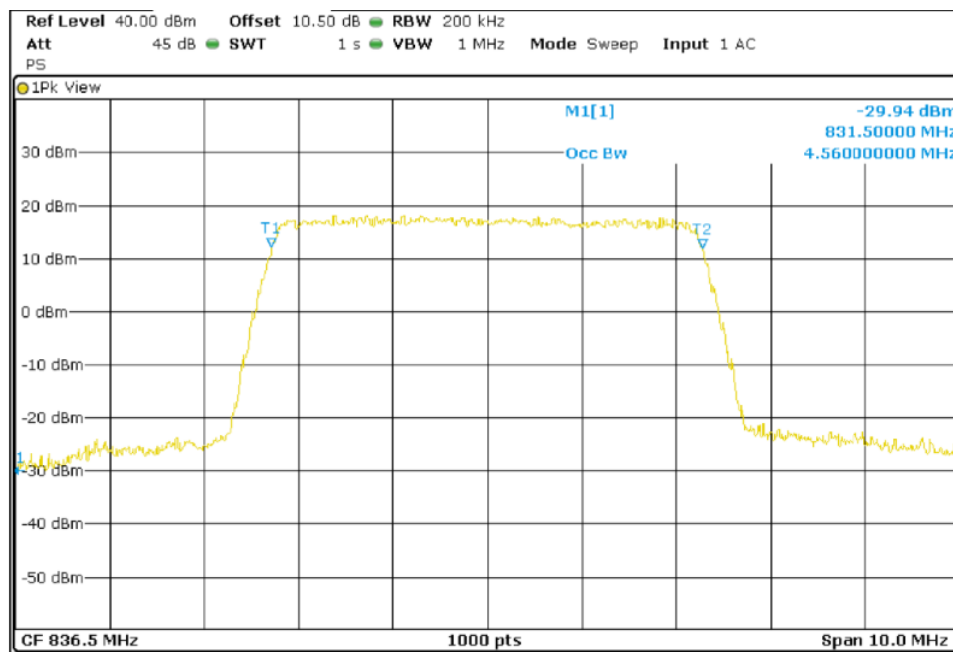


TEST RESULTS (Cont):

Lowest Channel 26dBc Bandwidth kHz

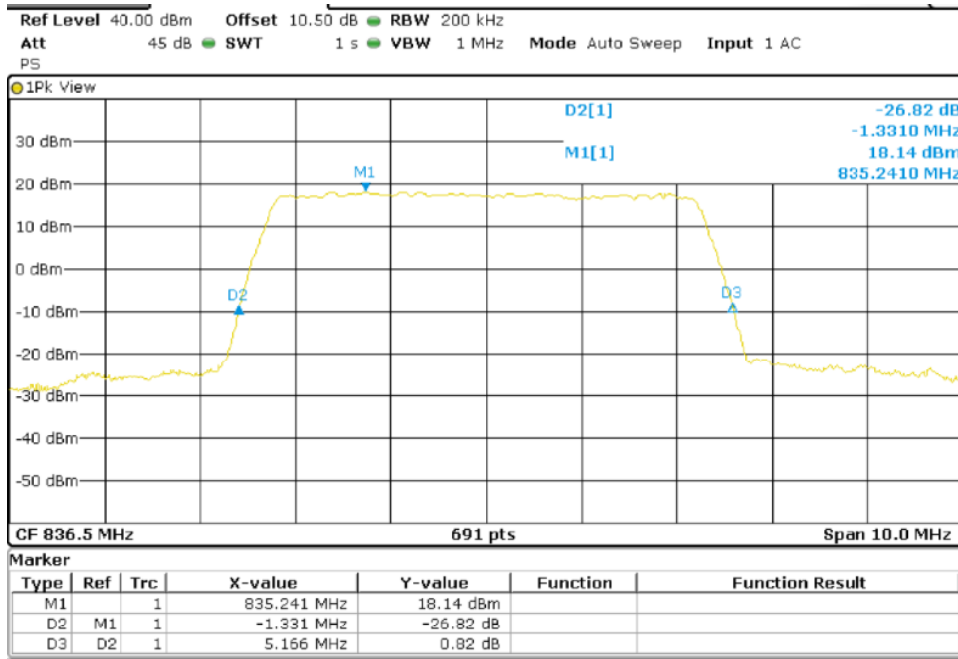


Middle Channel 99% Occupied Bandwidth

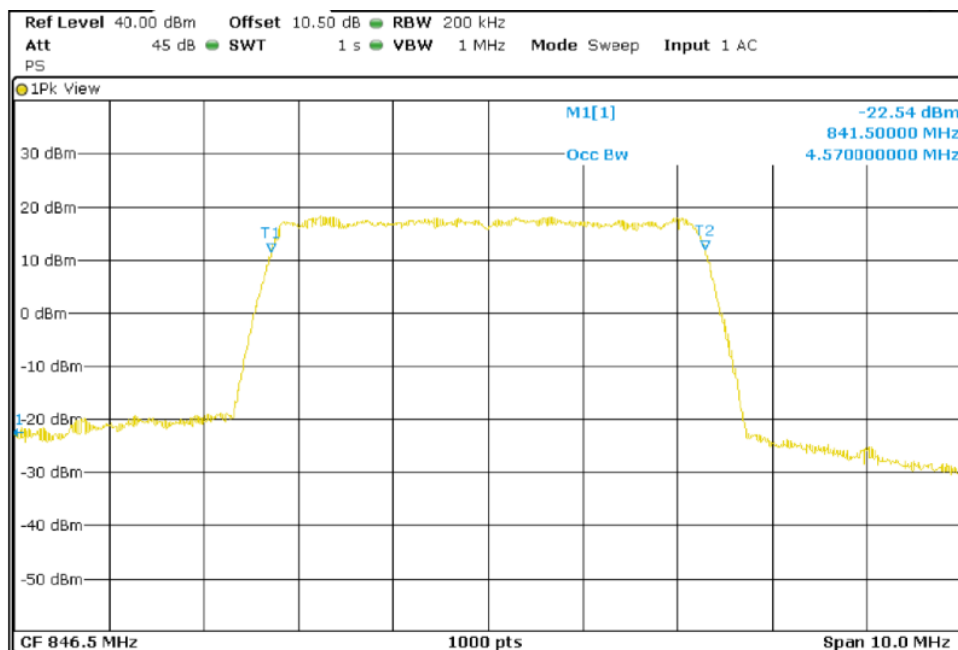


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

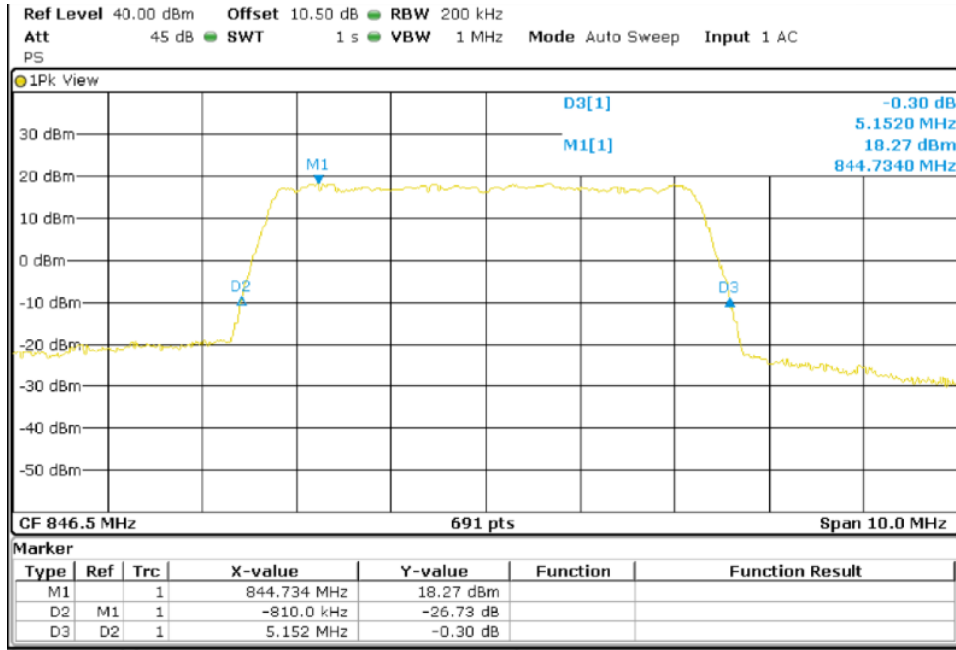


Highest Channel 99% Occupied Bandwidth



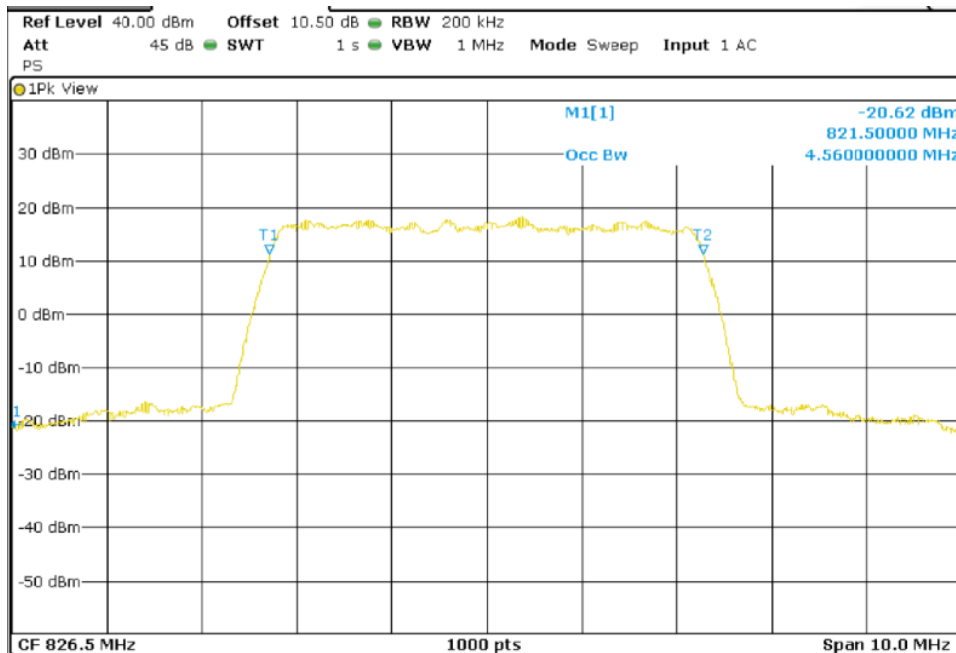
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



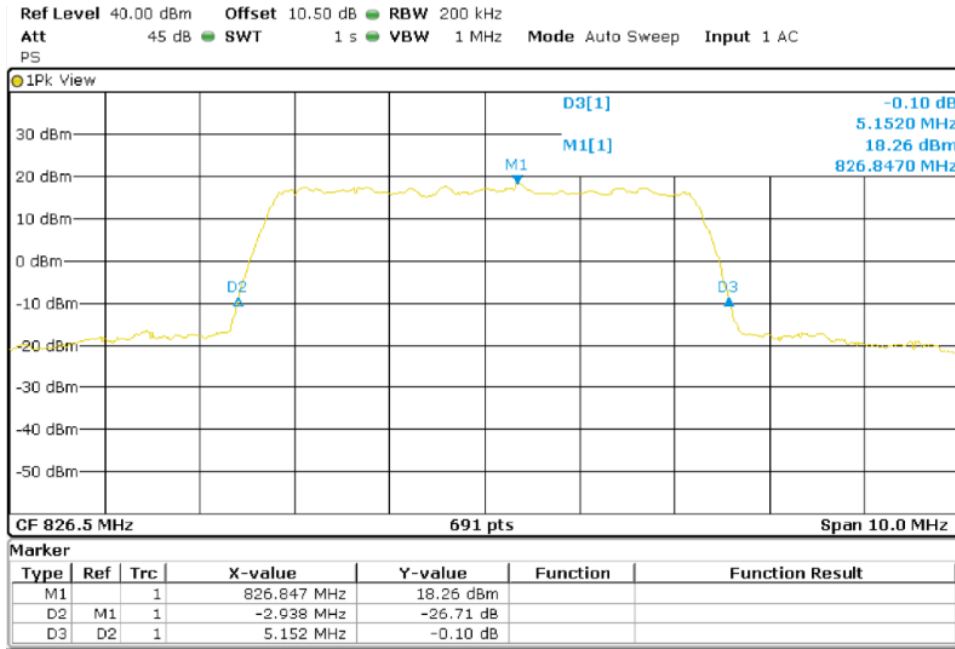
LTE 16QAM MODULATION. BW = 5 MHz

Lowest Channel 99% Occupied Bandwidth

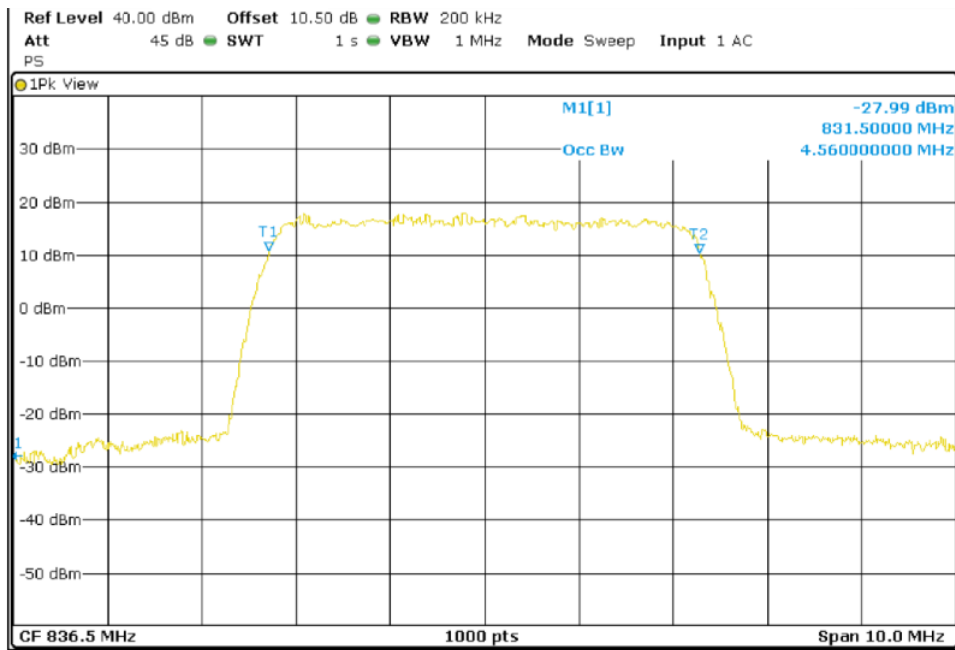


TEST RESULTS (Cont):

Lowest Channel 26dBc Bandwidth kHz

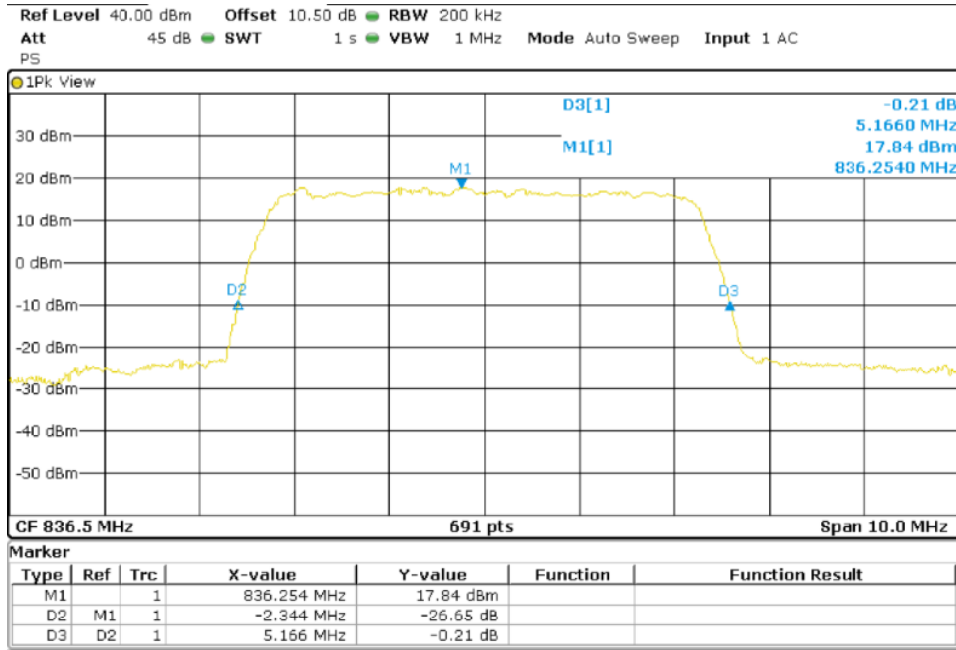


Middle Channel 99% Occupied Bandwidth

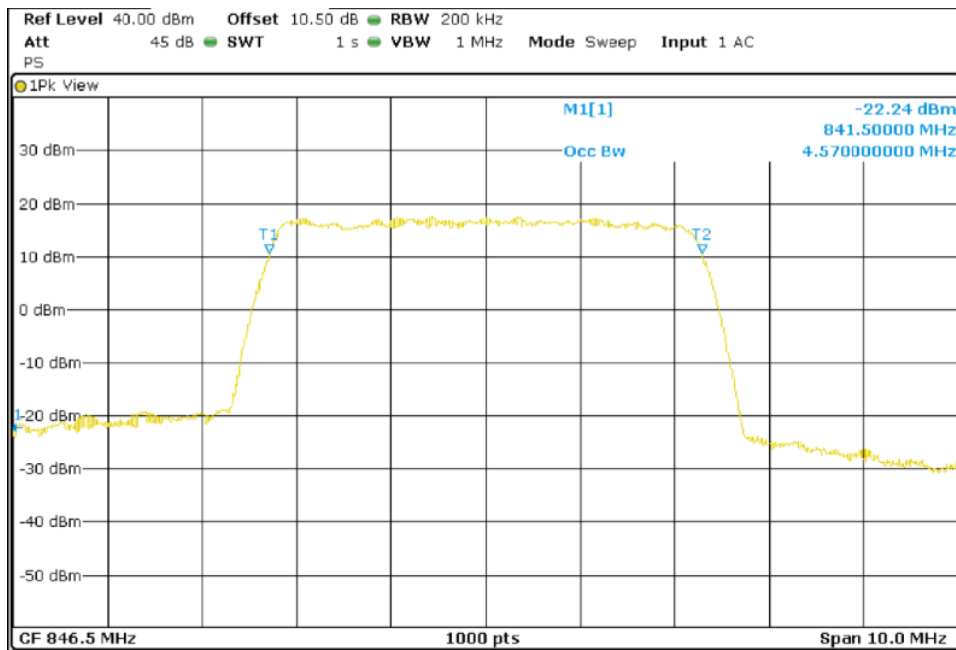


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

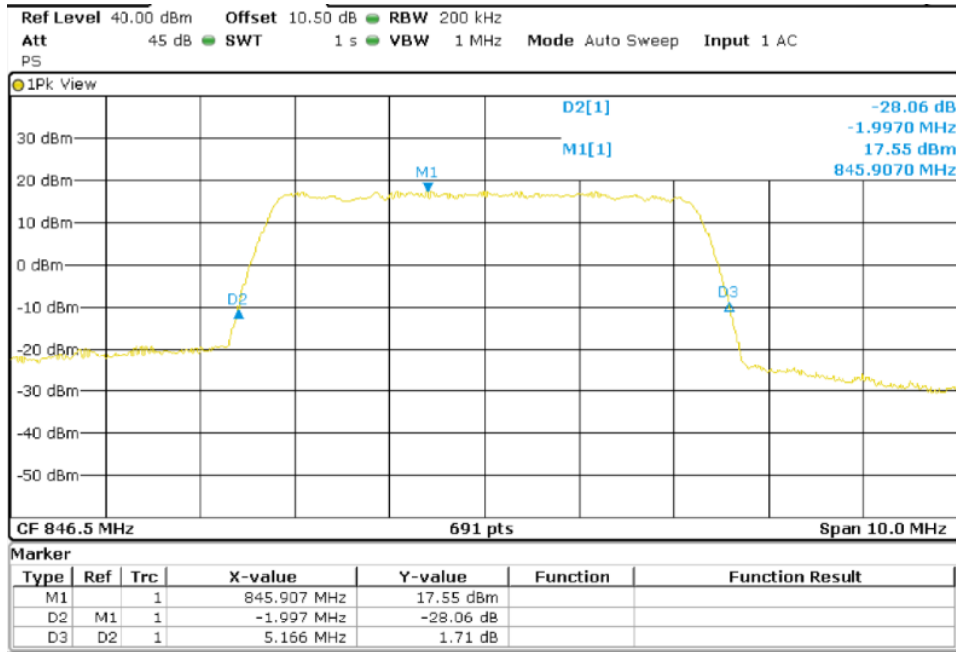


Highest Channel 99% Occupied Bandwidth



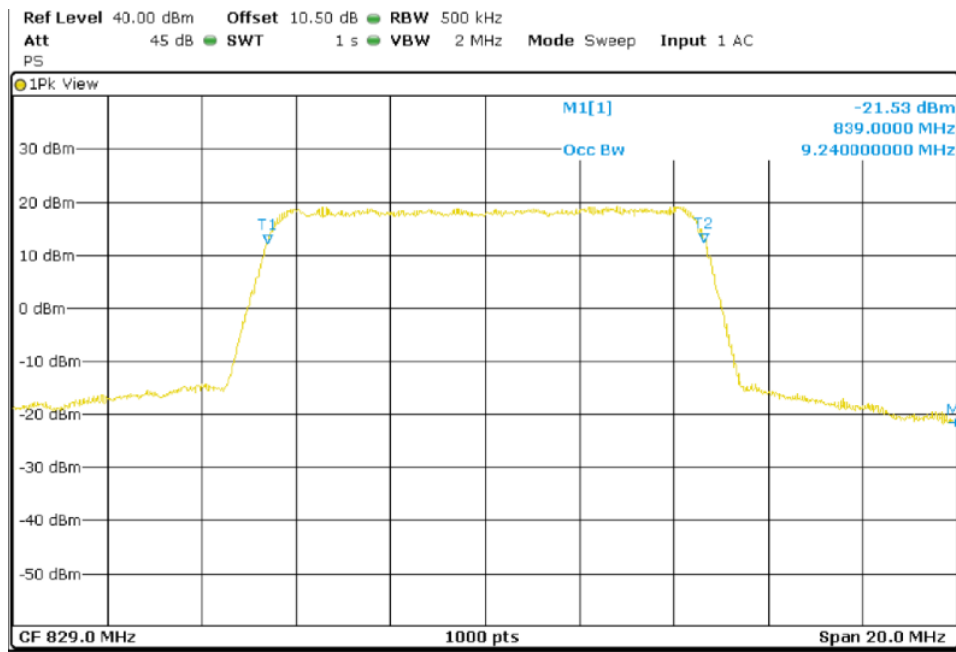
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



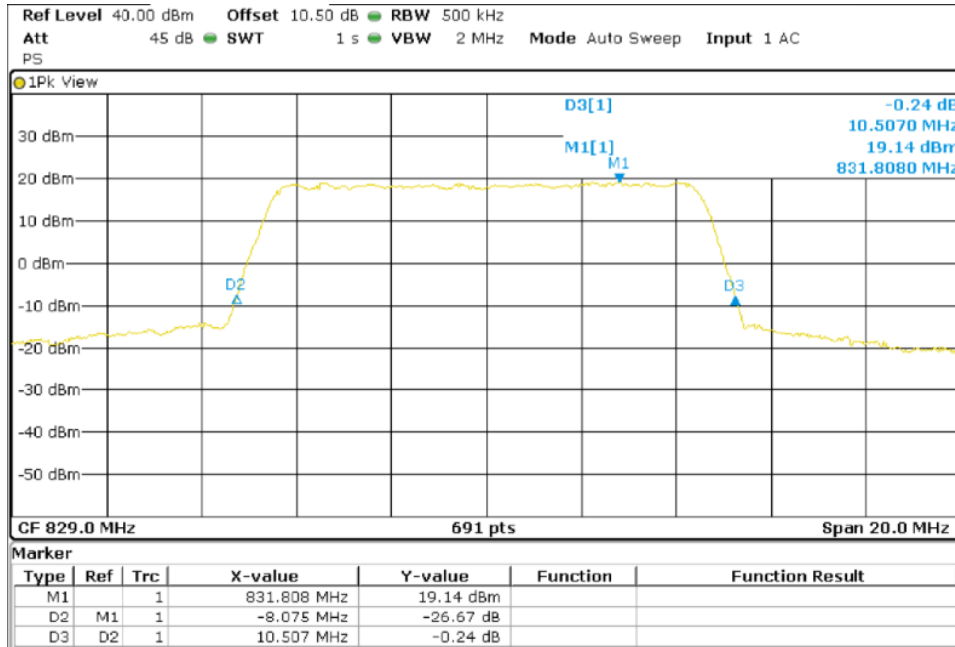
LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel 99% Occupied Bandwidth

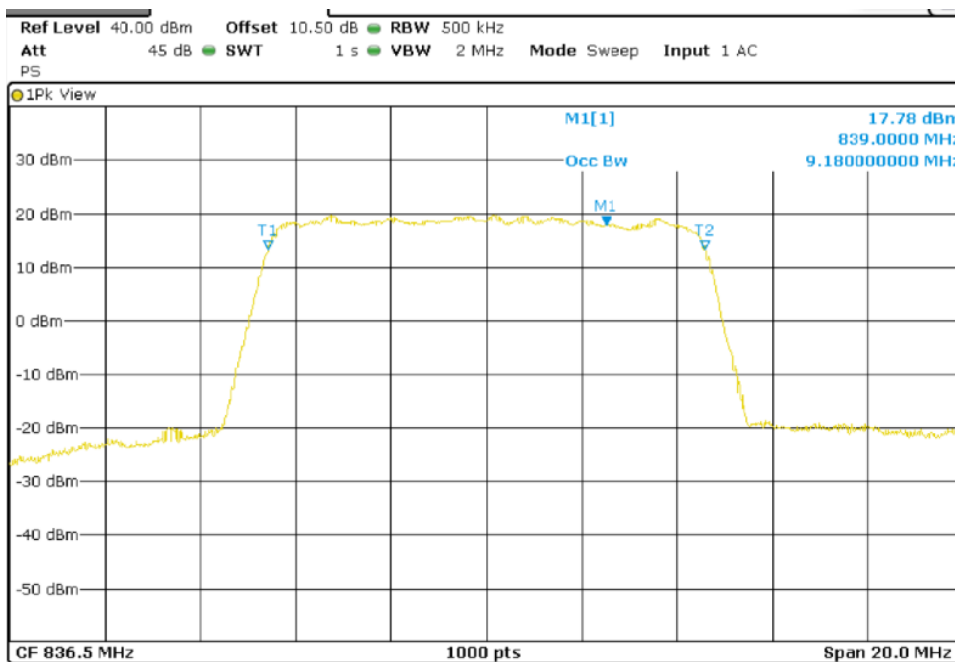


TEST RESULTS (Cont):

Lowest Channel 26dBc Bandwidth kHz

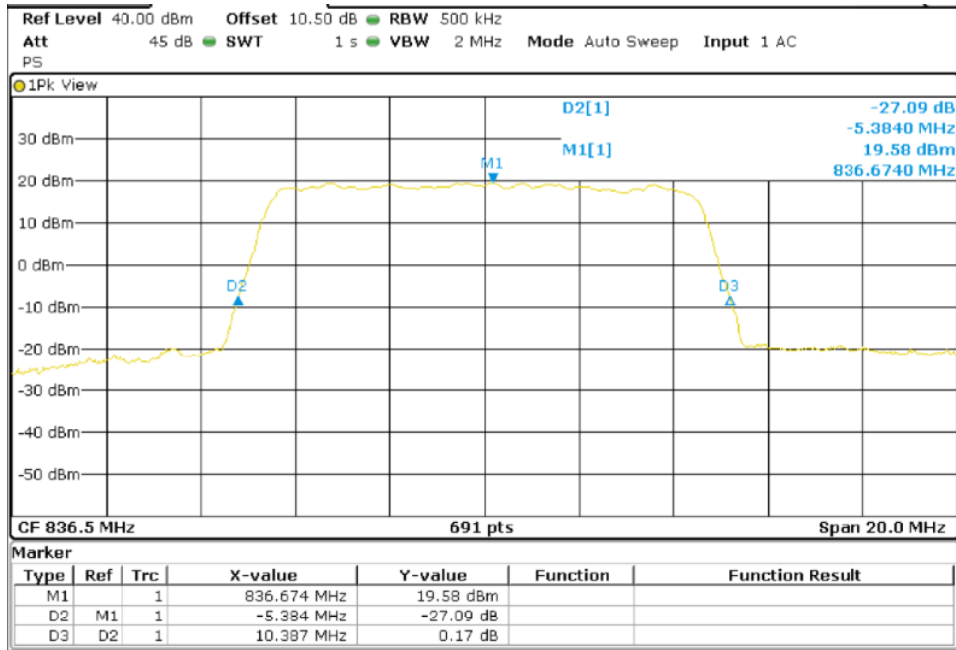


Middle Channel 99% Occupied Bandwidth

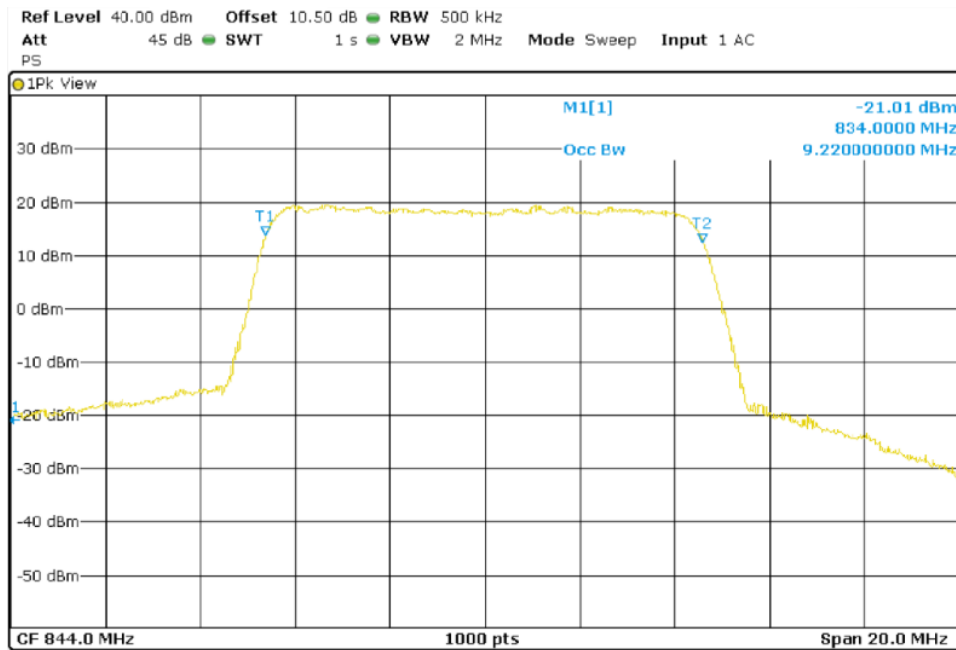


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

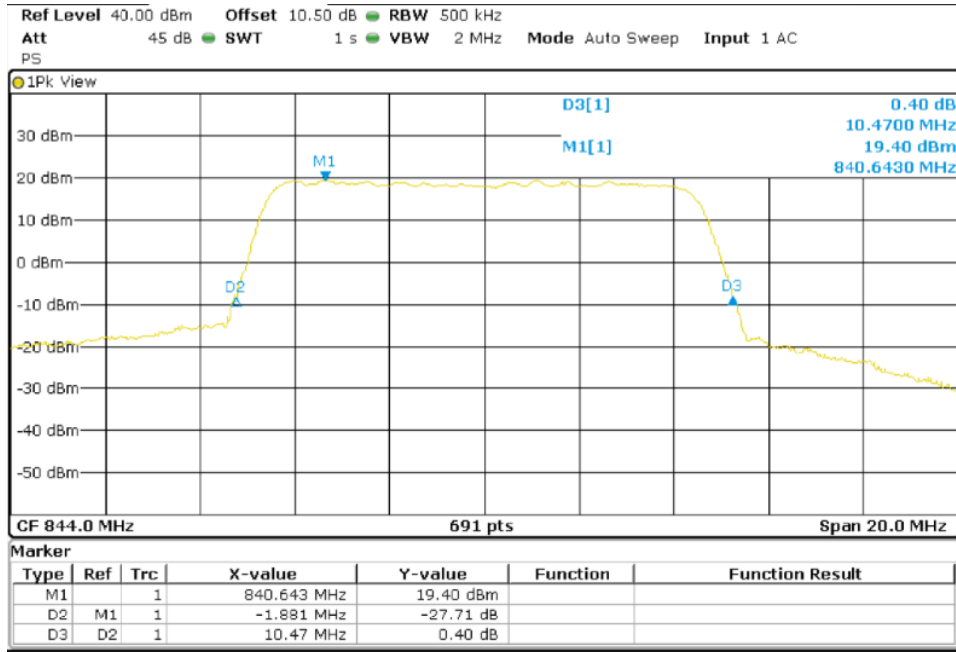


Highest Channel 99% Occupied Bandwidth



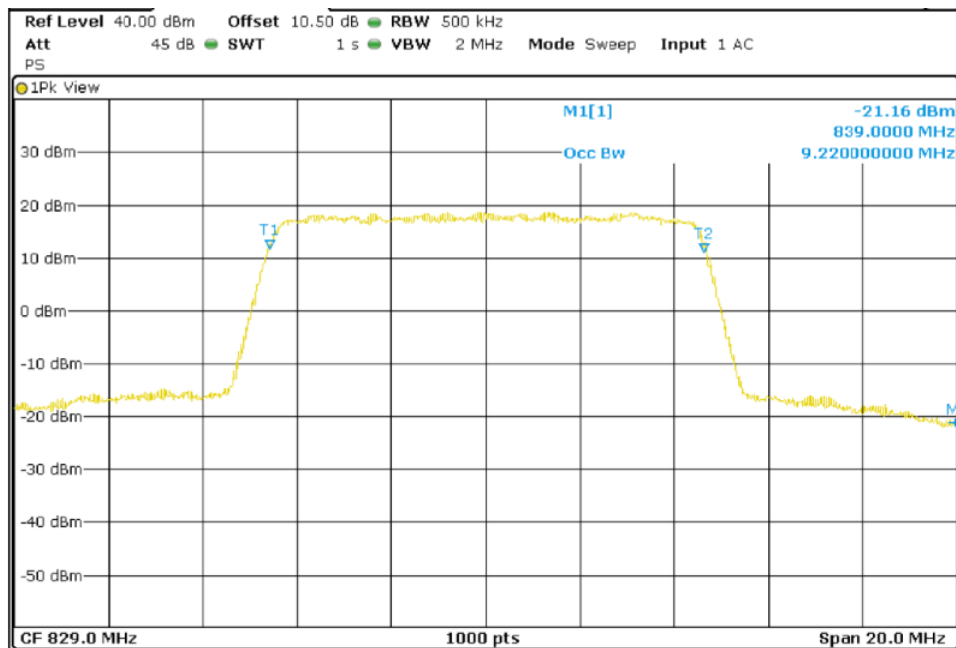
TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



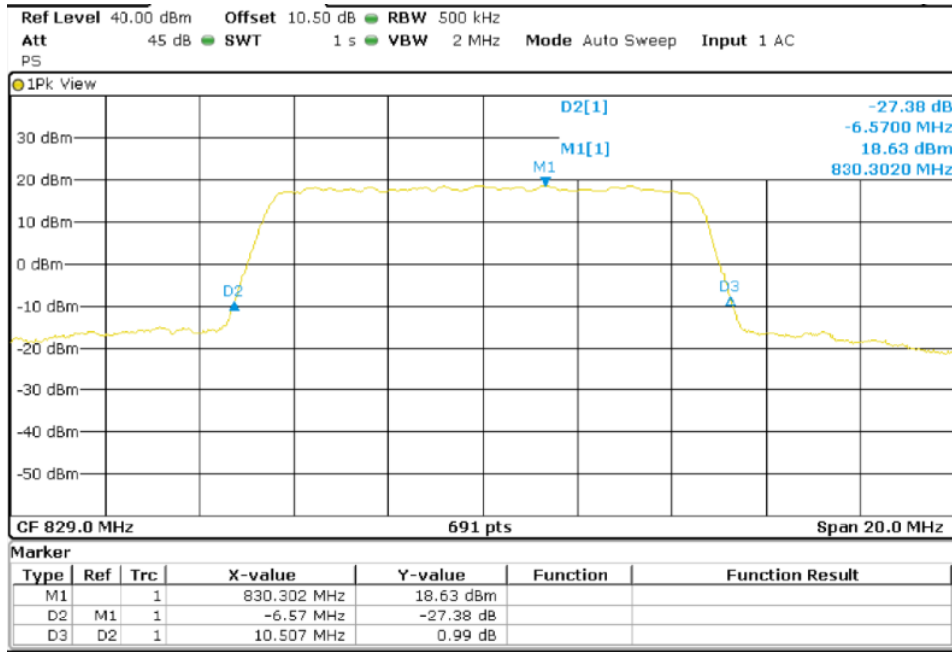
LTE 16QAM MODULATION. BW = 10 MHz

Lowest Channel 99% Occupied Bandwidth

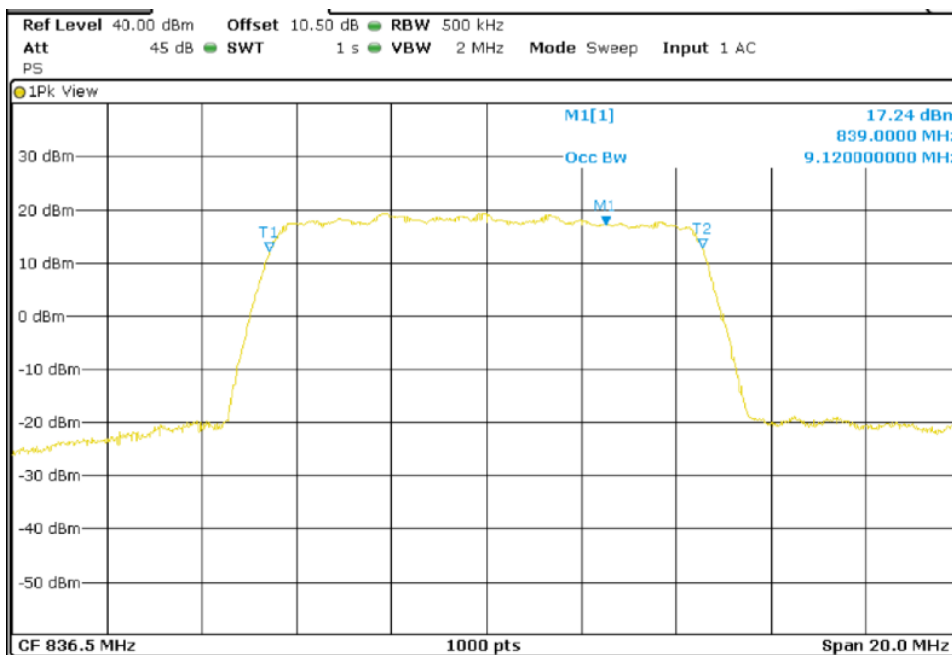


TEST RESULTS (Cont):

Lowest Channel 26dBc Bandwidth kHz

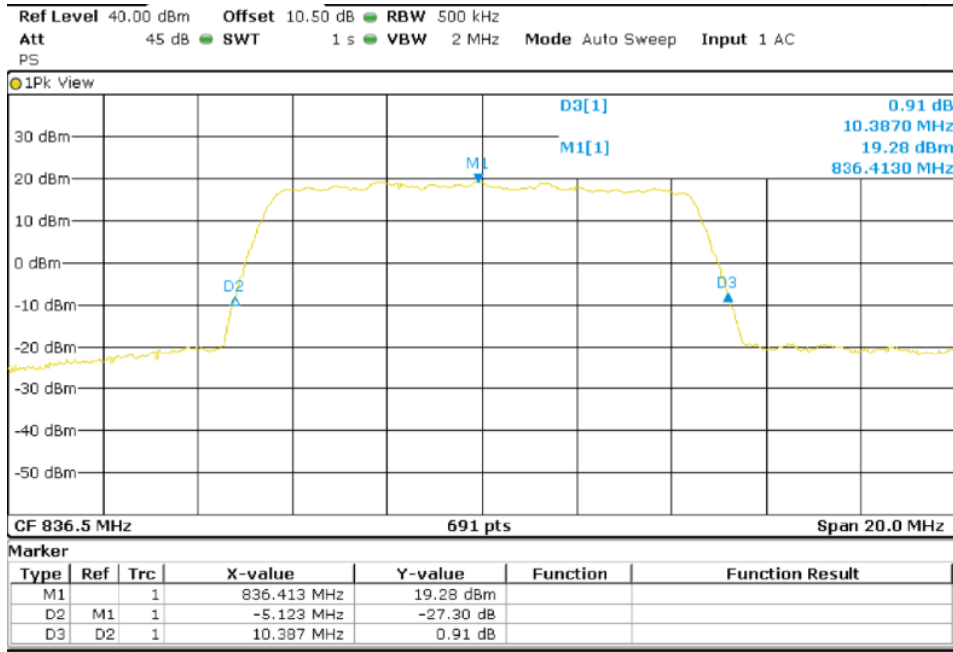


Middle Channel 99% Occupied Bandwidth

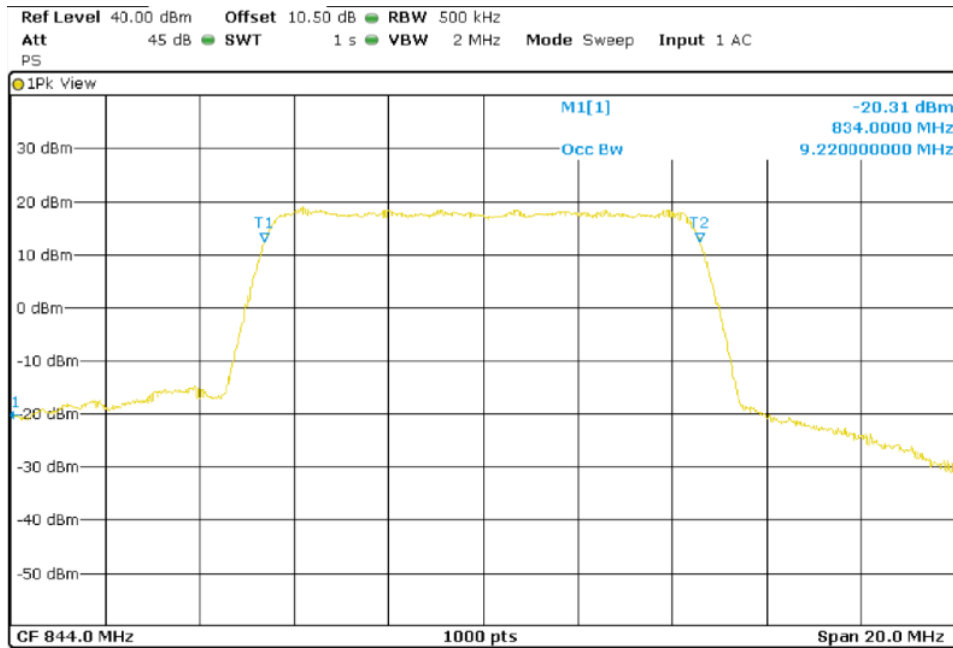


TEST RESULTS (Cont):

Middle Channel 26dBc Bandwidth kHz

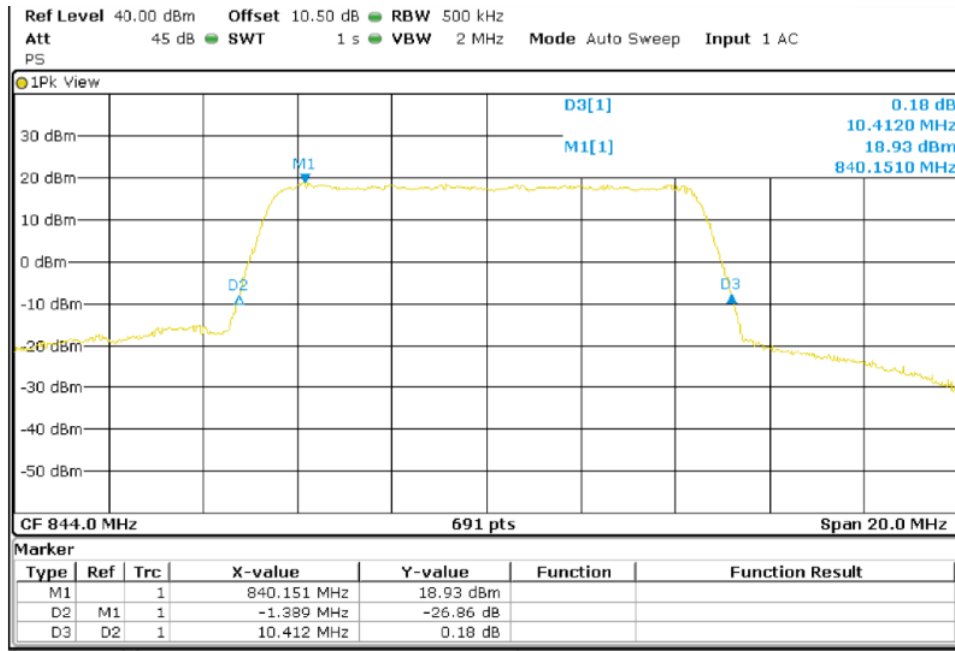


Highest Channel 99% Occupied Bandwidth



TEST RESULTS (Cont):

Highest Channel 26dBc Bandwidth kHz



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#02 |
| TEST RESULTS: | PASS |

GPRS MODULATION.

| Channel | Lowest | Middle | Highest |
|------------------------------|--------|--------|---------|
| 99% Occupied bandwidth (kHz) | 245.00 | 243.33 | 245.00 |
| -26 dBc bandwidth (kHz) | 321.30 | 322.70 | 322.70 |

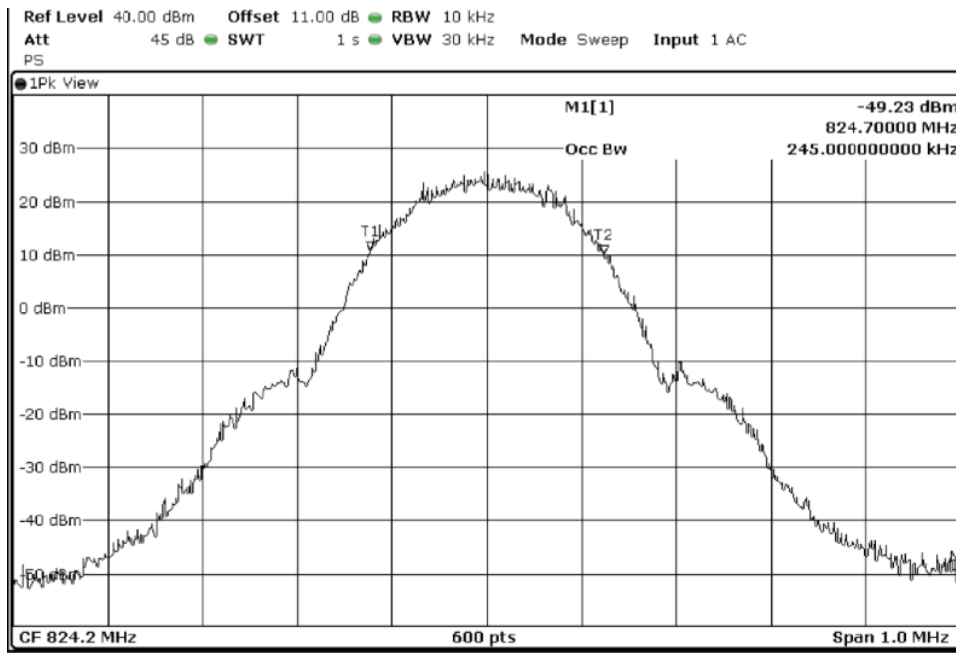
EDGE MODULATION.

| Channel | Lowest | Middle | Highest |
|------------------------------|--------|--------|---------|
| 99% Occupied bandwidth (kHz) | 246.67 | 245.00 | 245.00 |
| -26 dBc bandwidth (kHz) | 324.20 | 325.60 | 322.70 |

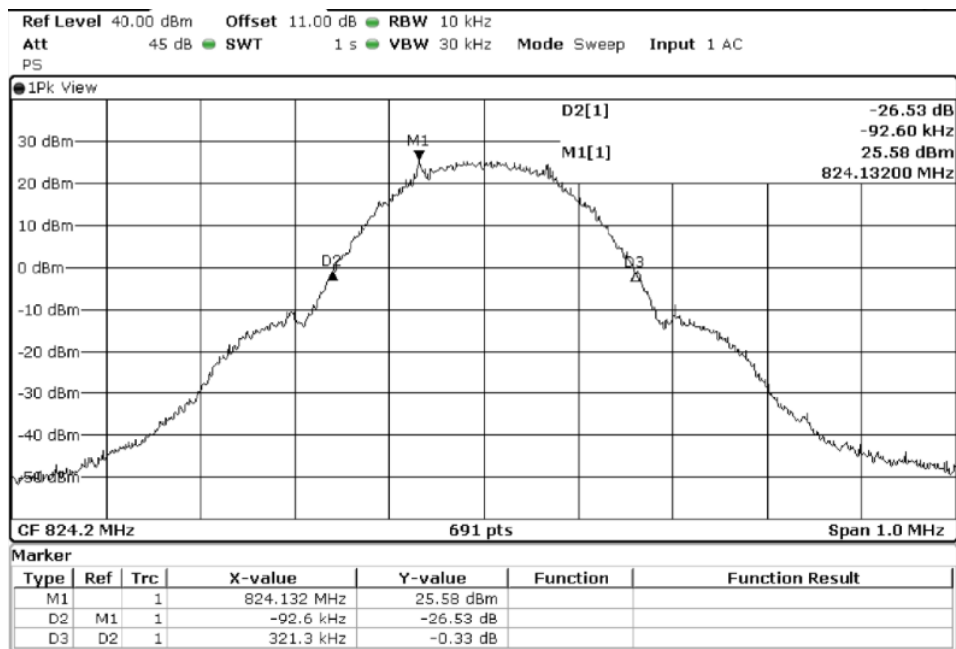
TEST RESULTS (Cont):

GPRS MODULATION.

Lowest Channel 99% Occupied Bandwidth

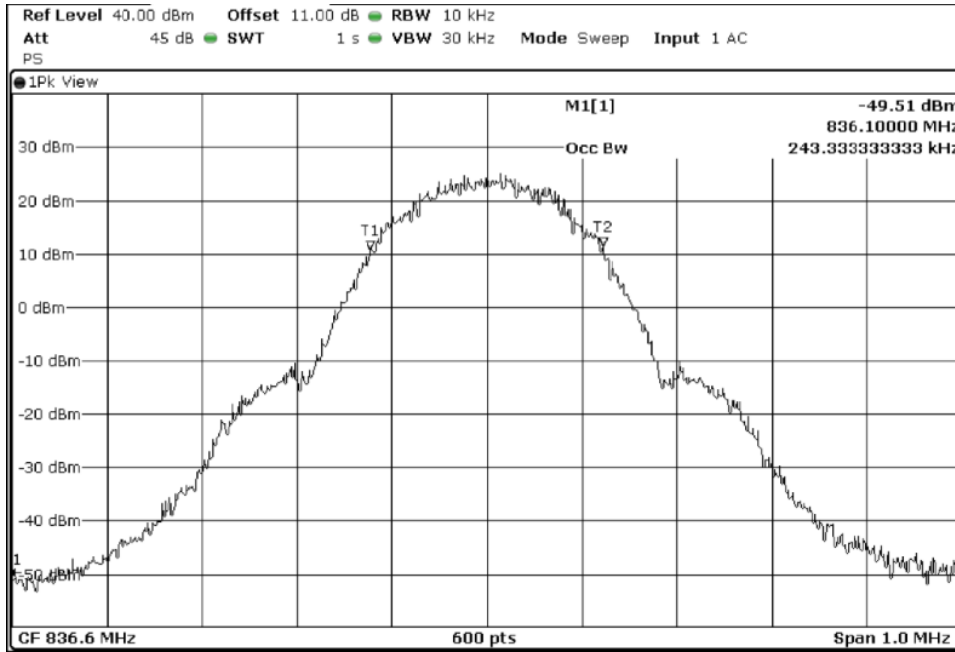


Lowest Channel 26dBc Bandwidth kHz

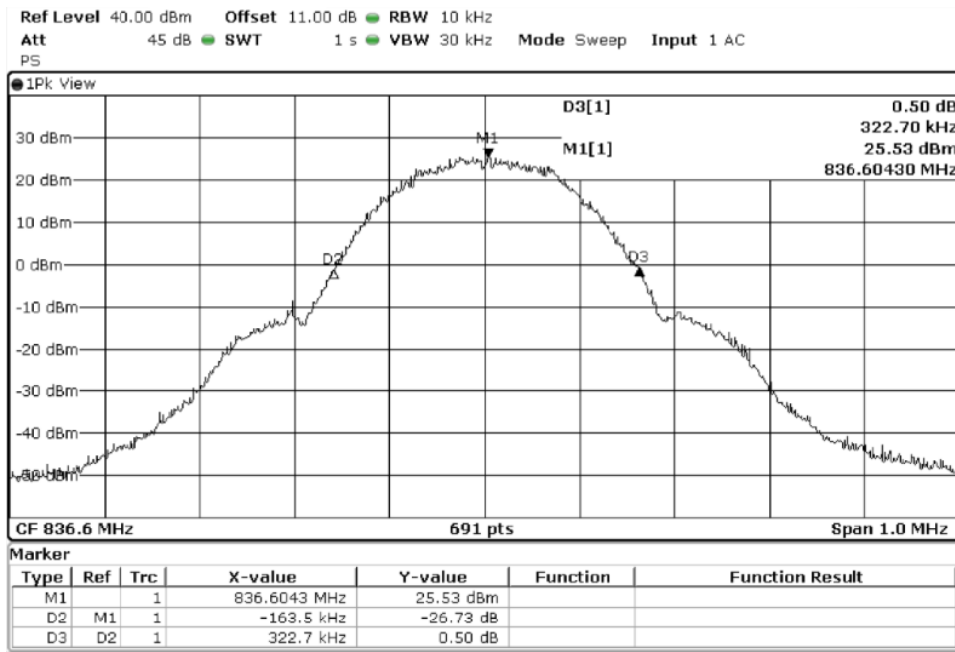


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

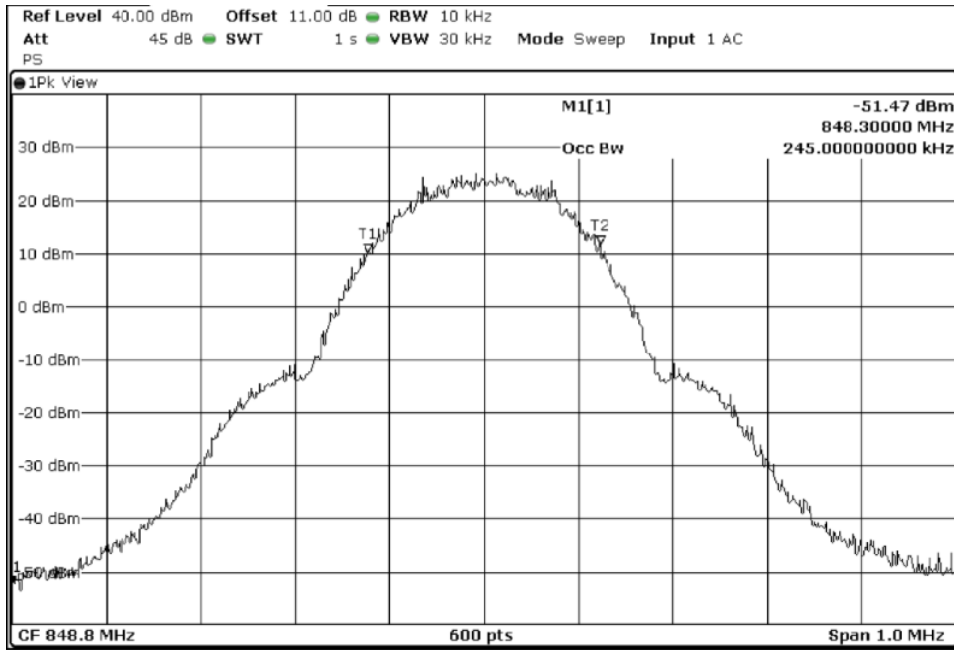


Middle Channel 26dBc Bandwidth kHz

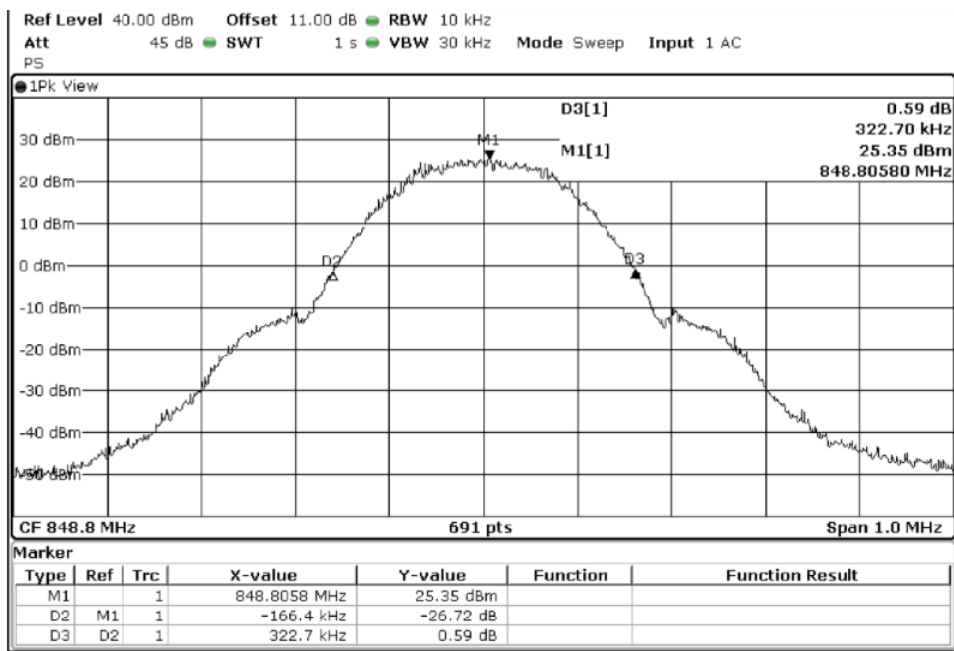


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



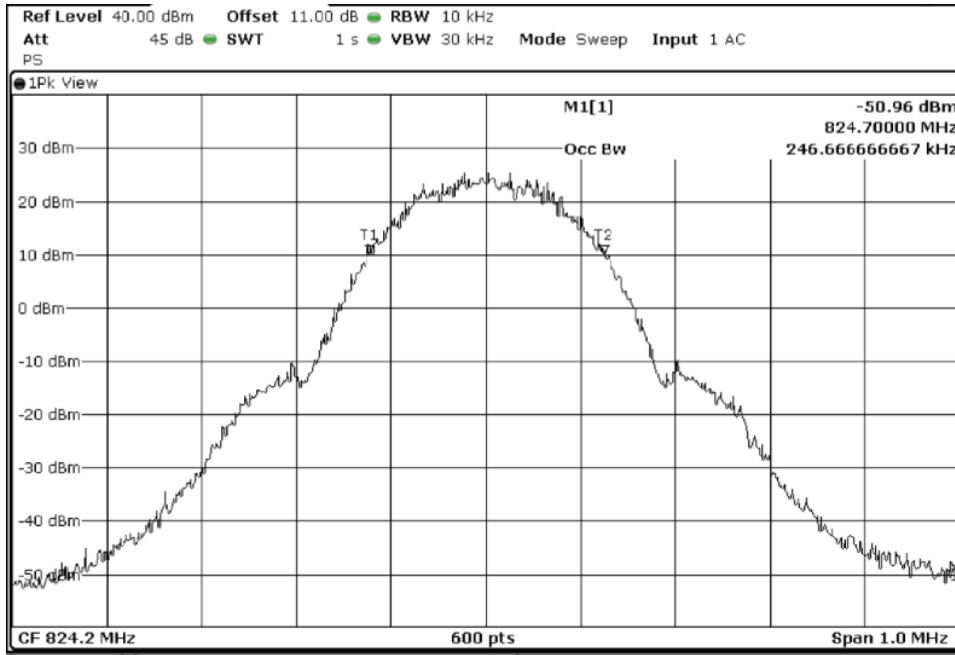
Highest Channel 26dBc Bandwidth kHz



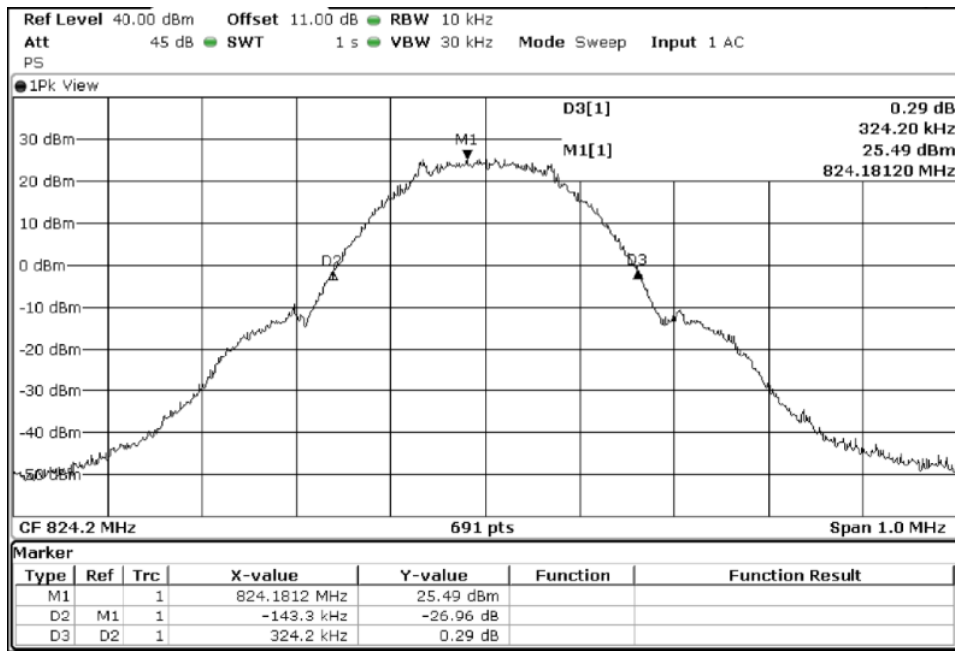
TEST RESULTS (Cont):

EDGE MODULATION.

Lowest Channel 99% Occupied Bandwidth

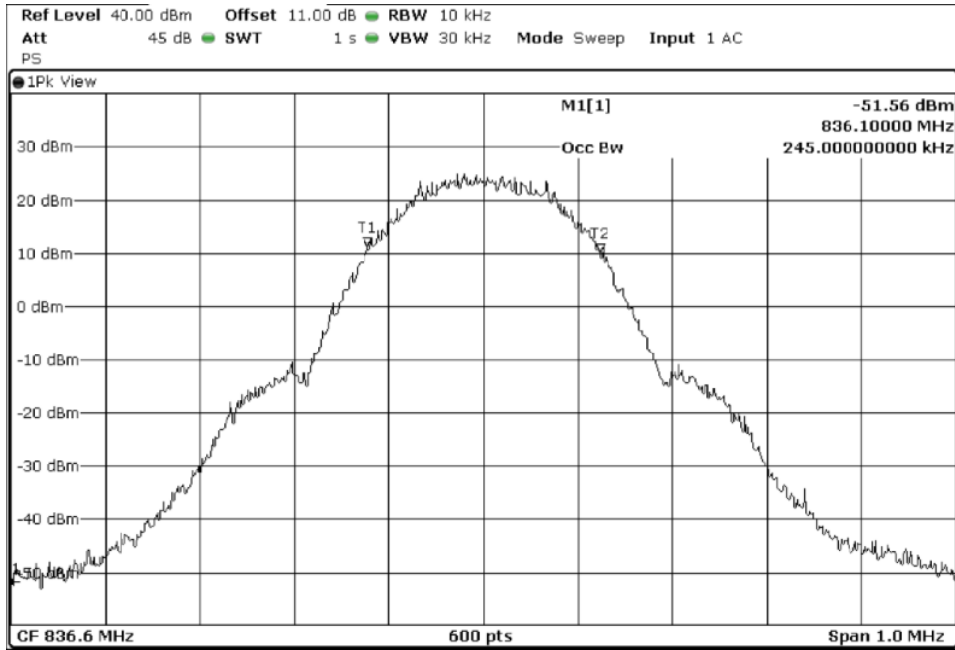


Lowest Channel 26dBc Bandwidth kHz

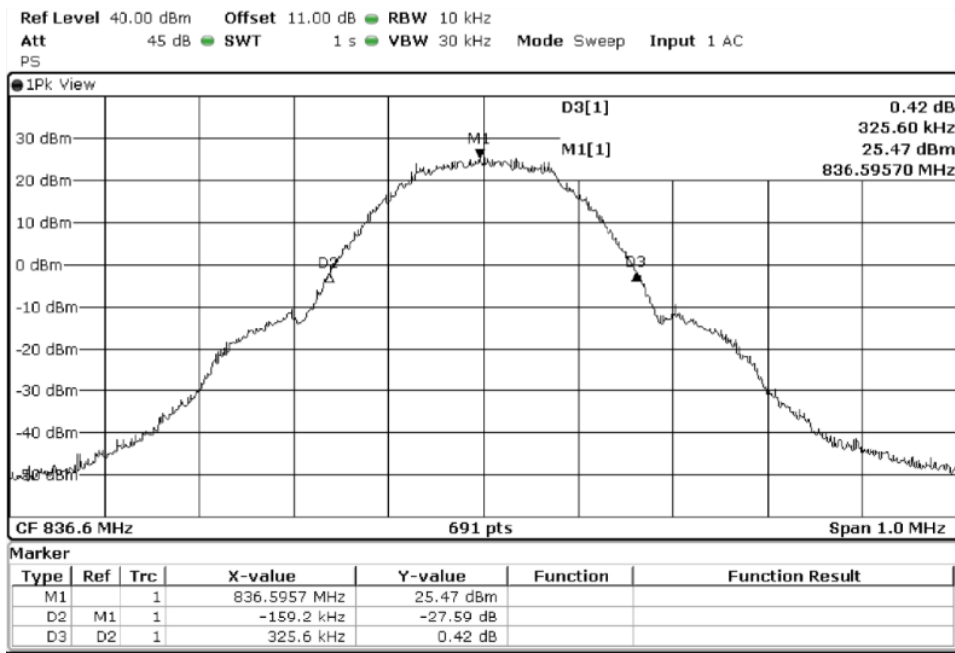


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

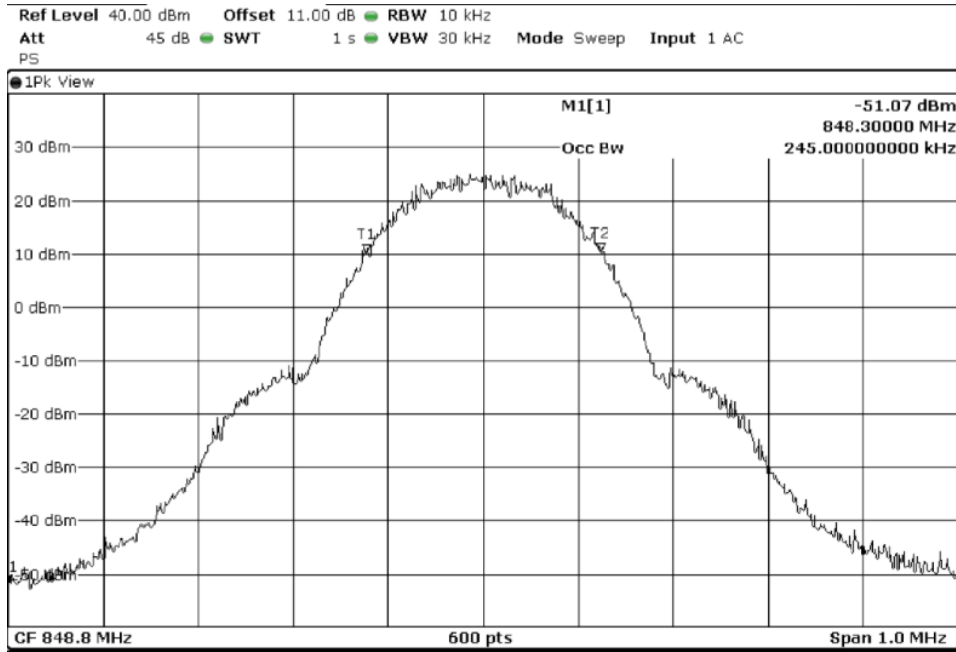


Middle Channel 26dBc Bandwidth kHz

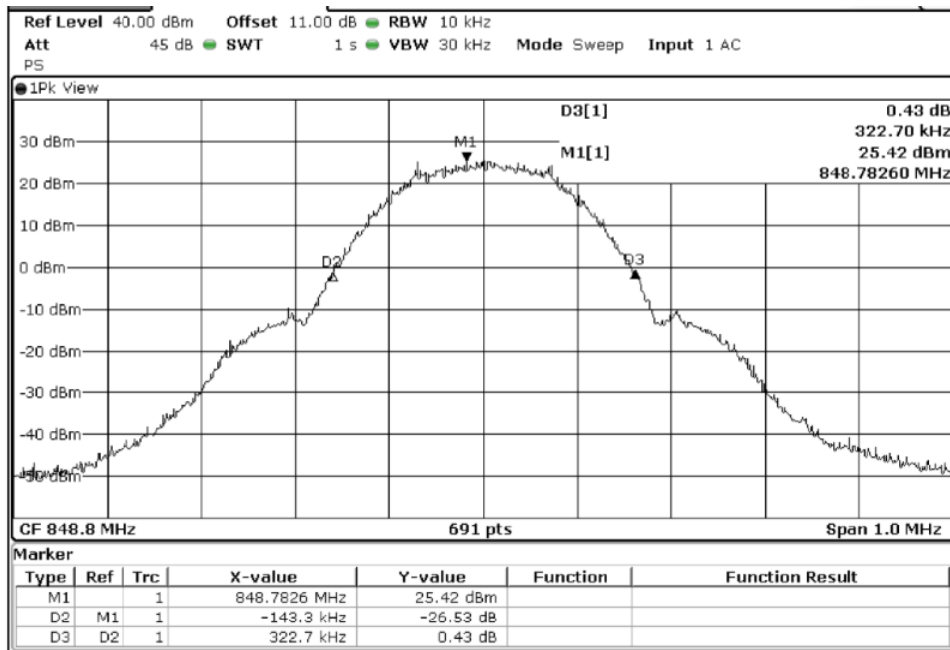


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



Highest Channel 26dBc Bandwidth kHz



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#03 |
| TEST RESULTS: | PASS |

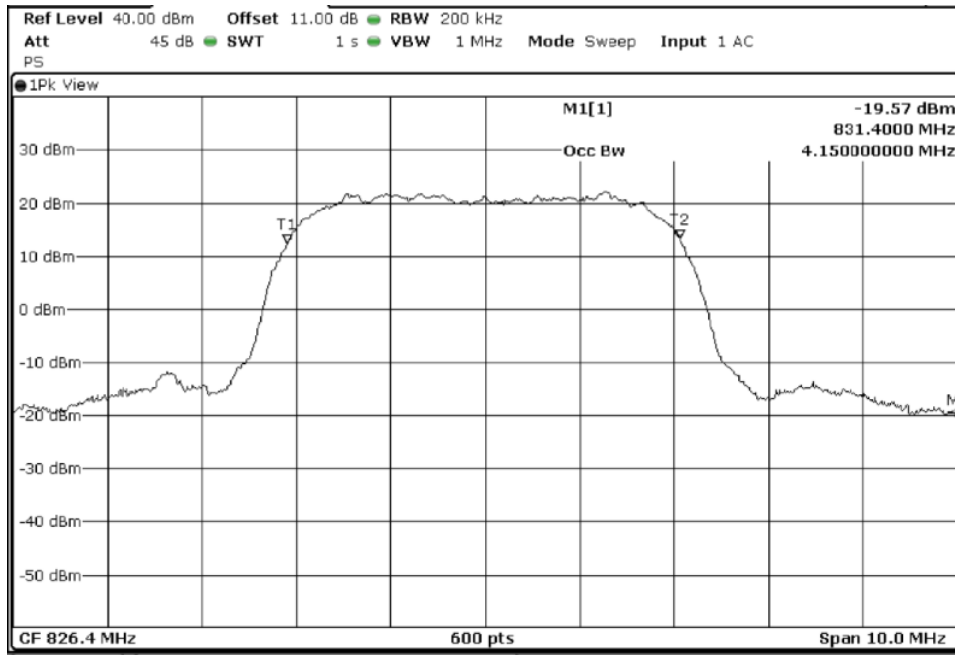
WCDMA MODULATION.

| Channel | Lowest | Middle | Highest |
|------------------------------|--------|--------|---------|
| 99% Occupied bandwidth (MHz) | 4.15 | 4.13 | 4.13 |
| -26 dBc bandwidth (MHz) | 4.71 | 4.70 | 4.70 |

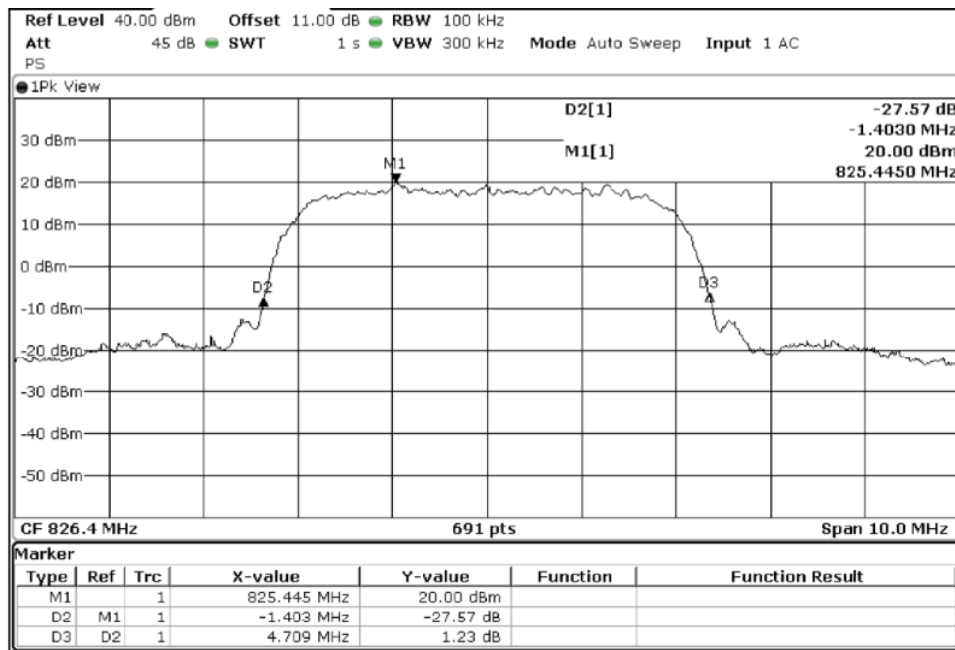
TEST RESULTS (Cont):

WCDMA Modulation

Low Channel 99% Occupied Bandwidth

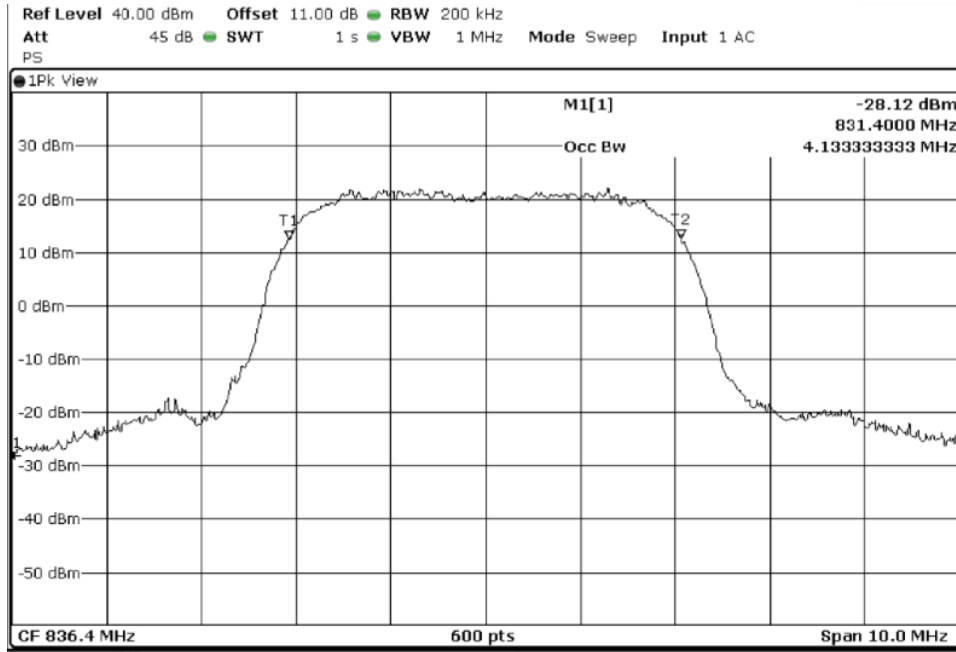


Low Channel 26dBc Bandwidth kHz

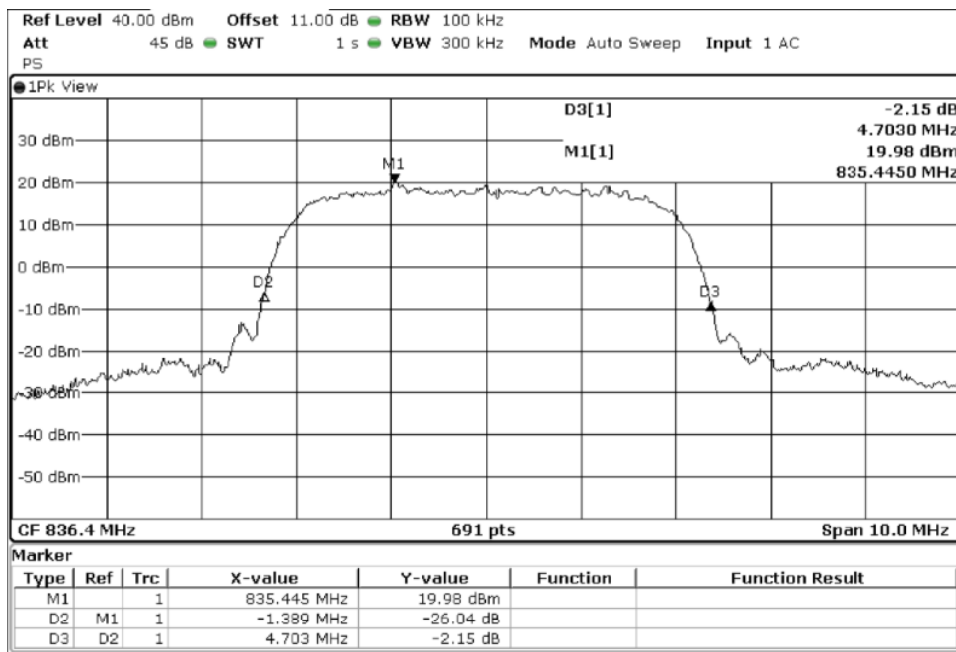


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

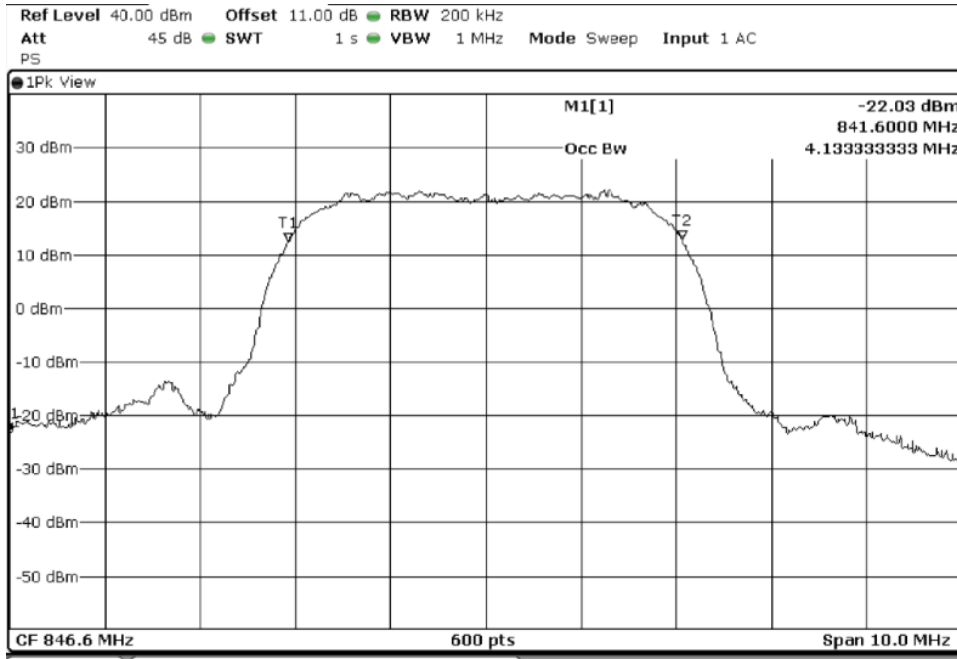


Middle Channel 26dBc Bandwidth kHz

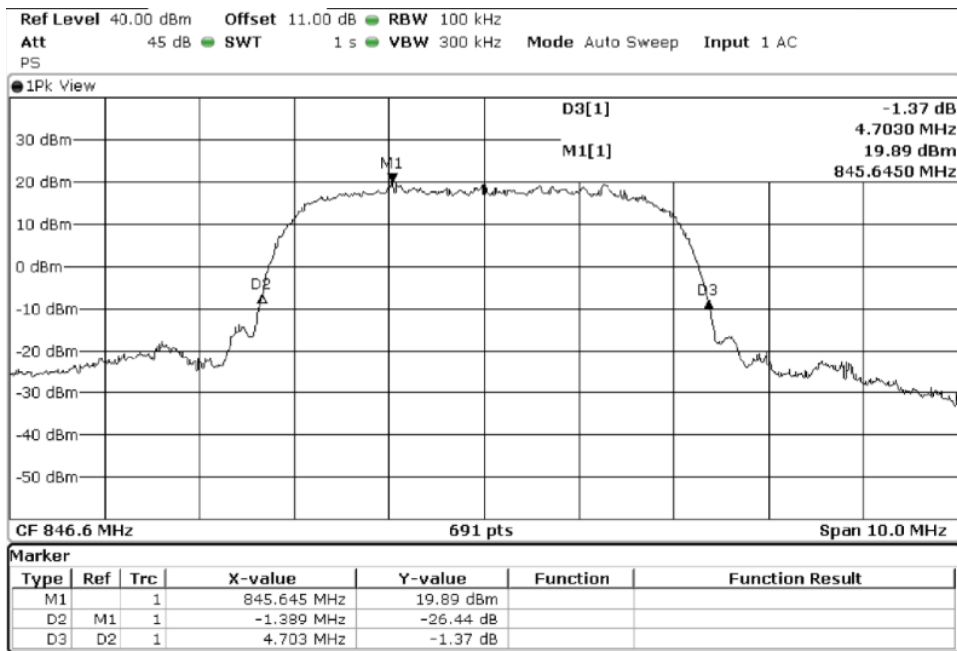


TEST RESULTS (Cont):

High Channel 99% Occupied Bandwidth



High Channel 26dBc Bandwidth kHz



TEST A.5: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

| | | |
|----------------|-------------------|---|
| LIMITS: | Product standard: | FCC Part 22 / IC RSS-132 |
| | Test standard: | FCC §2.1051 and § 22.917 / RSS-132 Clause 5.5 |

LIMITS

According to specification, the power of emissions shall be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. P in watts.

At P_o transmitting power of 2 watts (33 dBm), the specified minimum attenuation becomes $43+10\log (P_o)$. and the level in dBm relative to P_o becomes:

$$P_o \text{ (dBm)} - [43 + 10 \log (P_o \text{ in watts})] = -13 \text{ dBm}$$

TEST SETUP

The EUT RF output connector was connected to a spectrum analyzer and to the Universal Radio Communication Tester R&S CMW500 (selecting maximum transmission power of the EUT and different modes of modulation) using a 50-ohm attenuator and a power splitter.

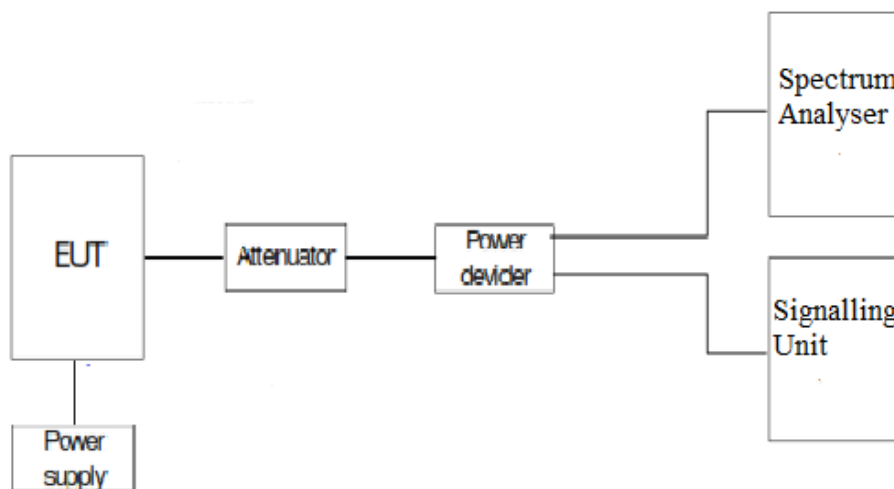
The spectrum was investigated from 9 kHz to 18 GHz for LTE Band V.

The spectrum was investigated from 9 kHz to 18 GHz for 2G GPRS Band 850.

The spectrum was investigated from 9 kHz to 18 GHz for WCDMA and HSUPA Band V.

The reading of the spectrum analyzer is corrected with the attenuation loss of connection between output terminal of EUT and input of the spectrum analyzer.

For LTE mode the configuration of Resource Blocks and modulation which is the worst case for conducted power was used.



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#01 |
| TEST RESULTS: | PASS |

Frequency range 9 kHz – 18 GHz

LTE QPSK MODULATION. BW = 1.4 MHz

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

LTE QPSK MODULATION. BW = 3 MHz

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

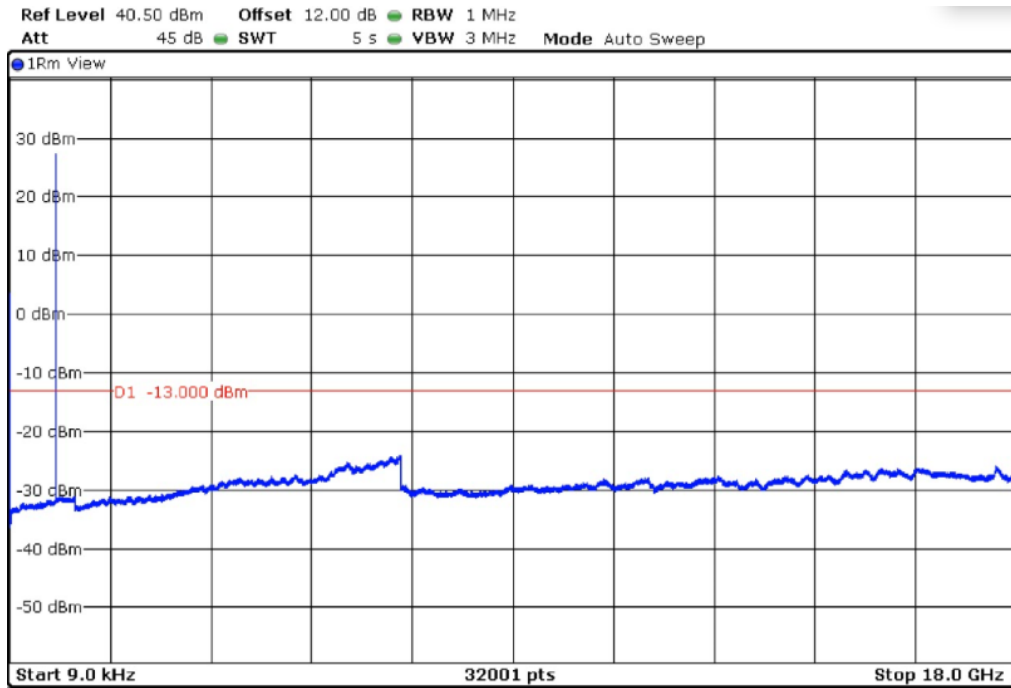
Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

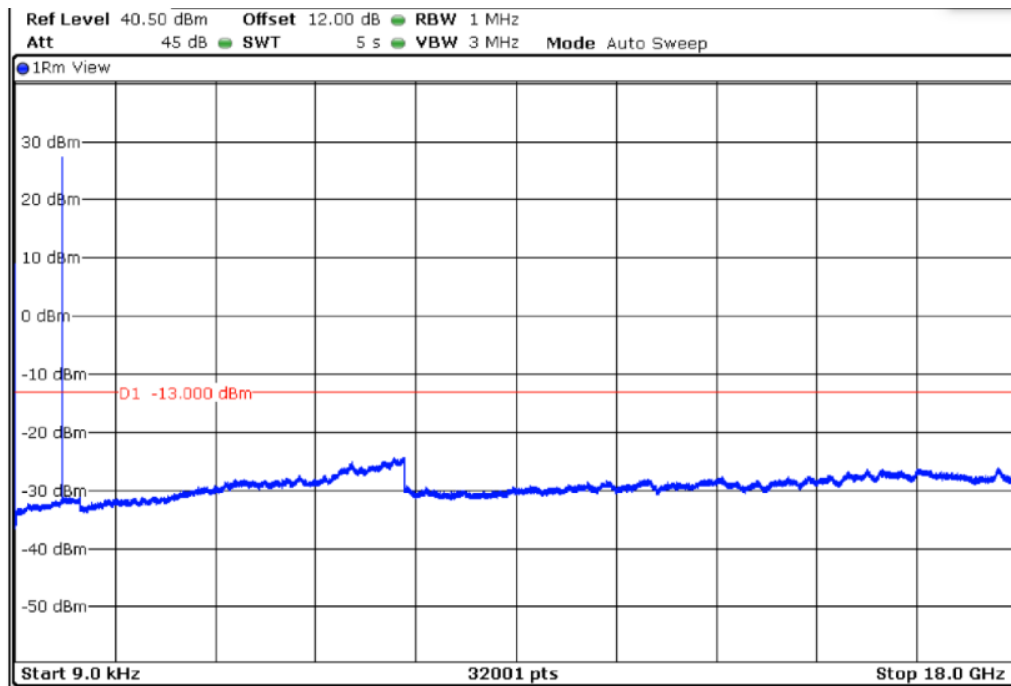
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 1.4MHz

Lowest Channel

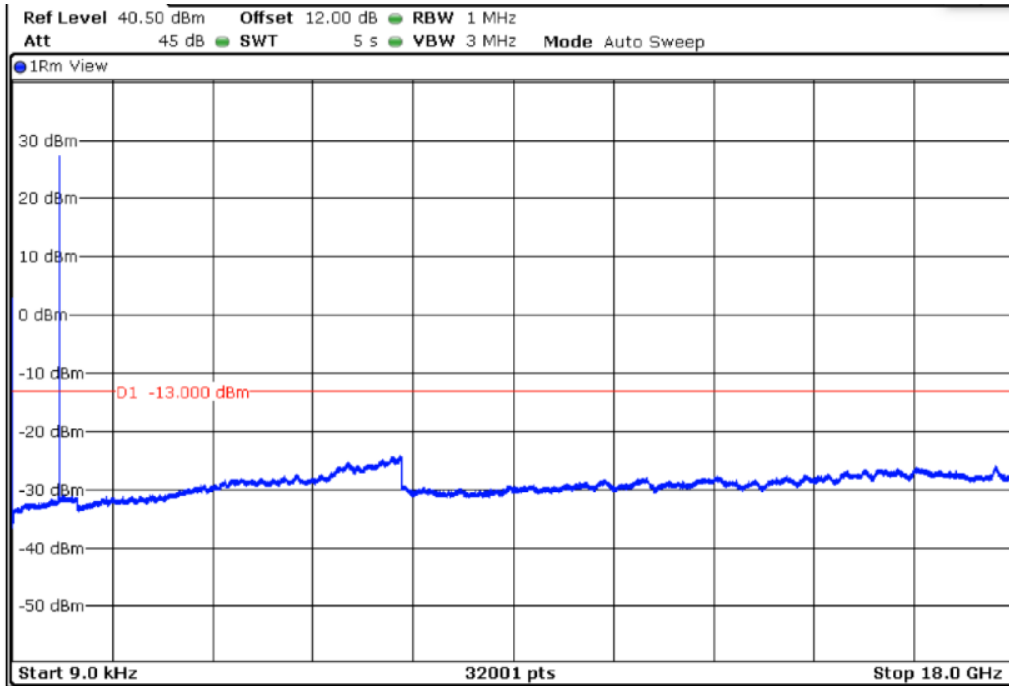


Middle Channel



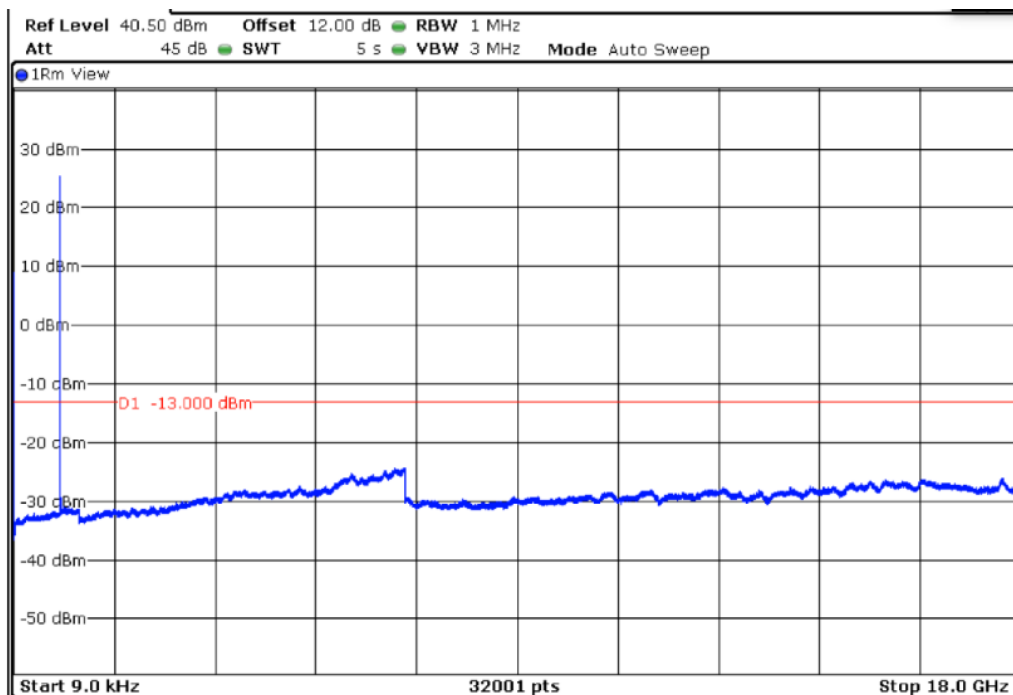
TEST RESULTS (Cont):

Highest Channel



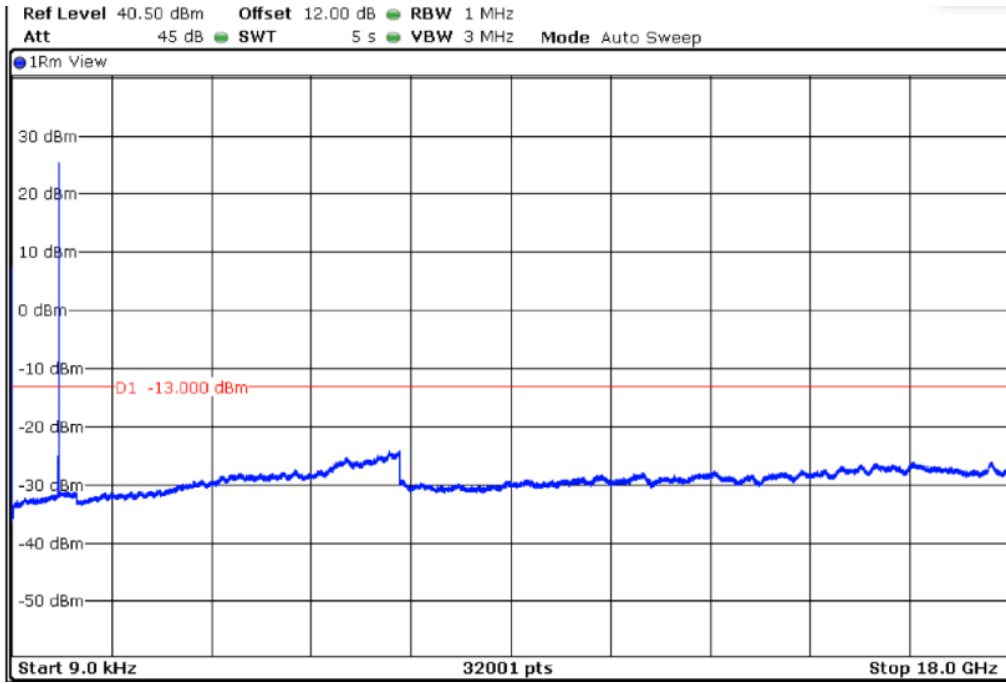
LTE QPSK MODULATION. BW = 3 MHz

Lowest Channel

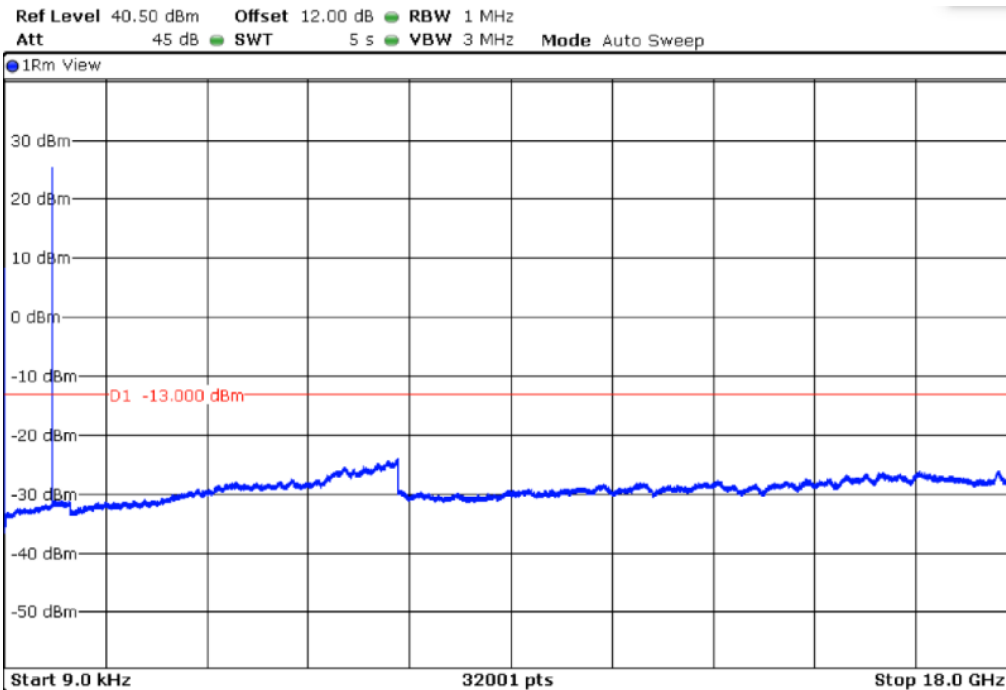


TEST RESULTS (Cont):

Middle Channel



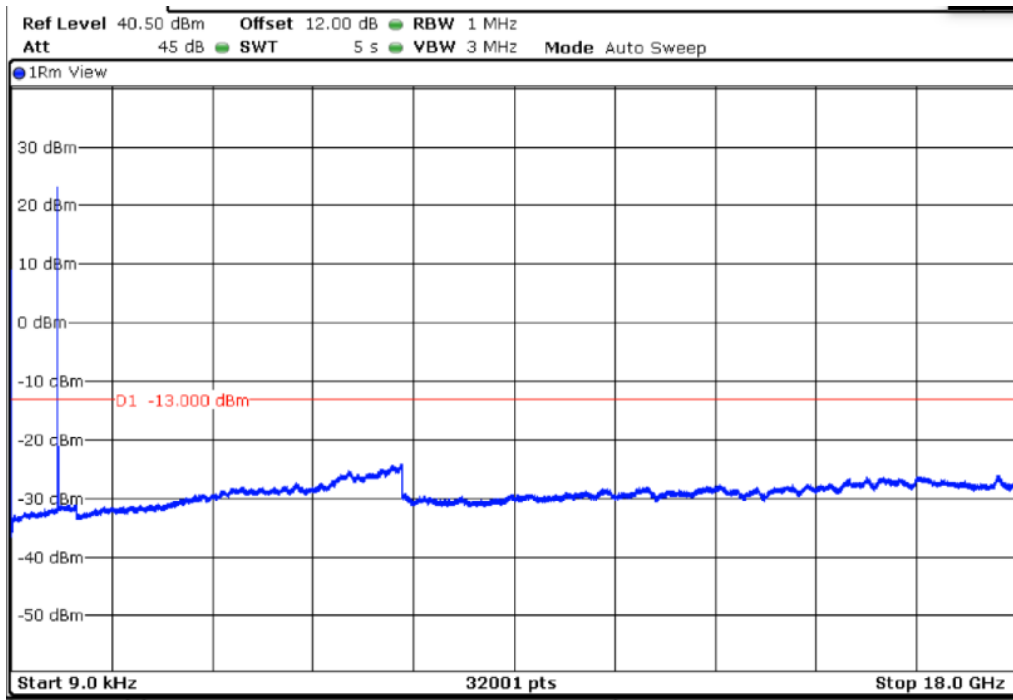
Highest Channel



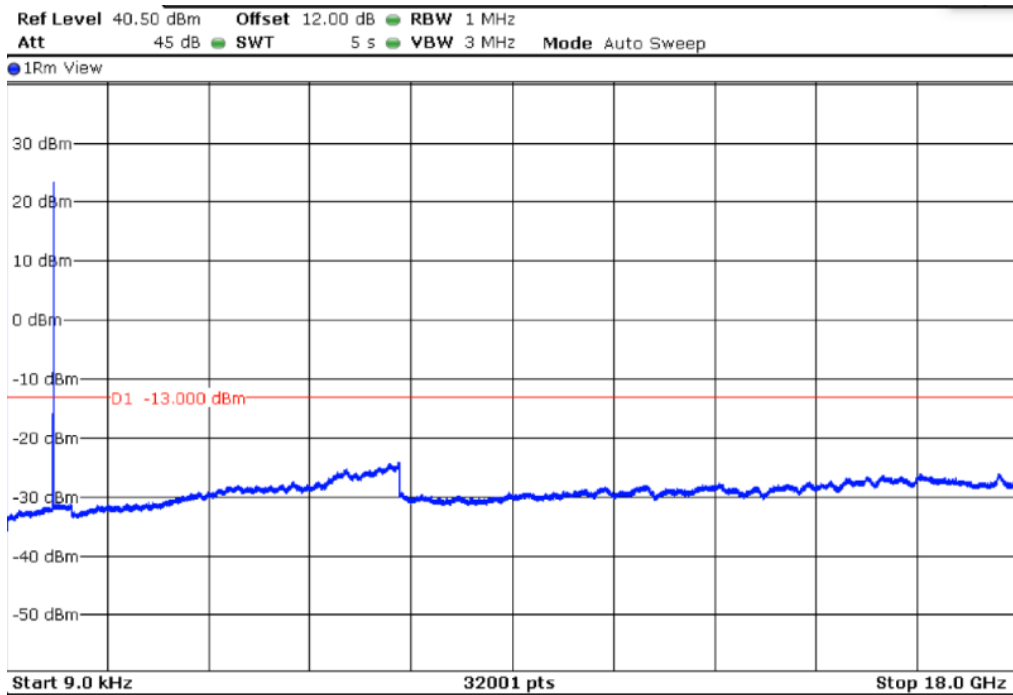
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel

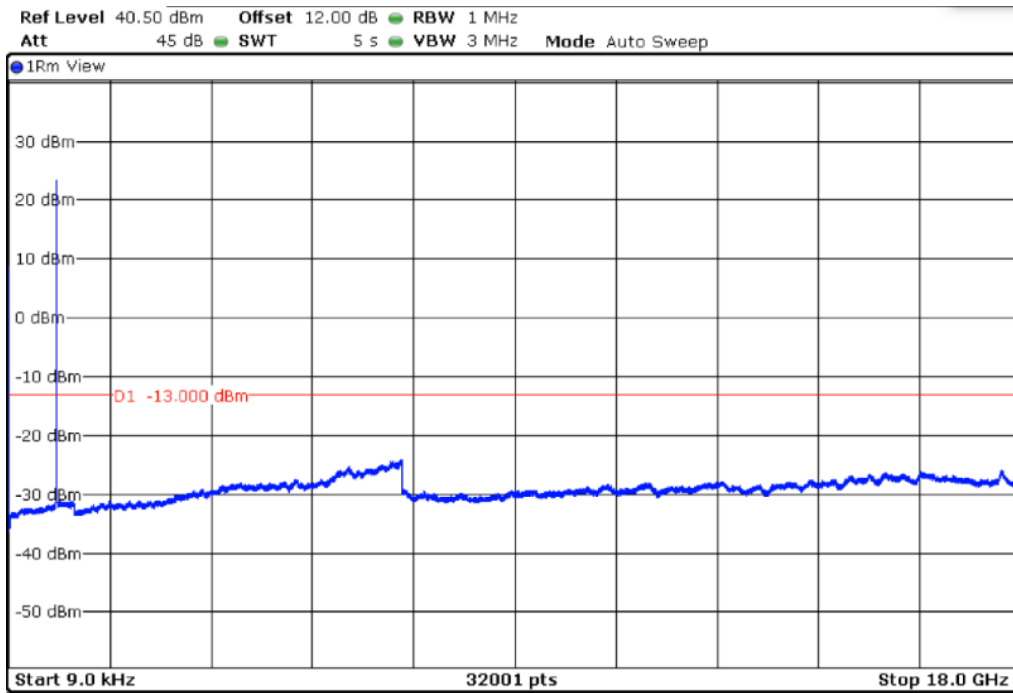


Middle Channel



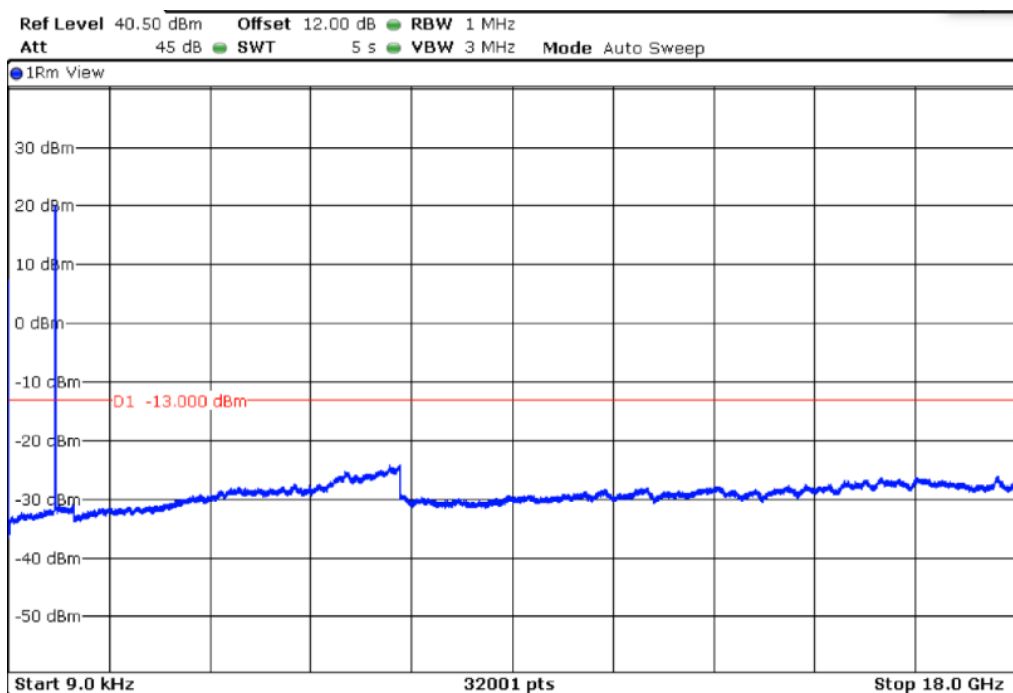
TEST RESULTS (Cont):

Highest Channel



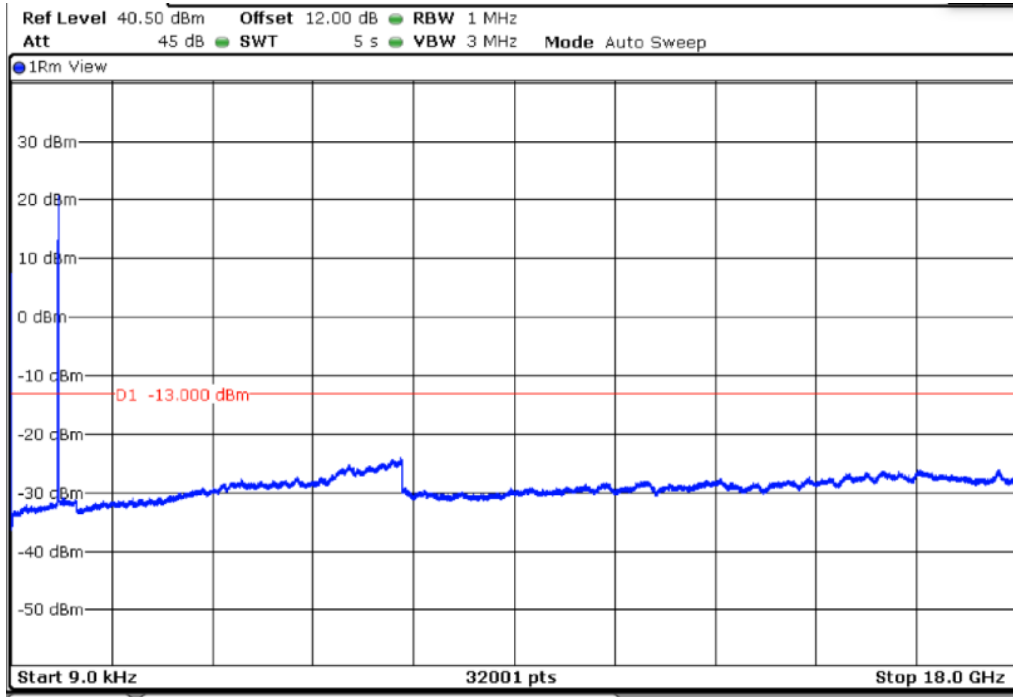
LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel

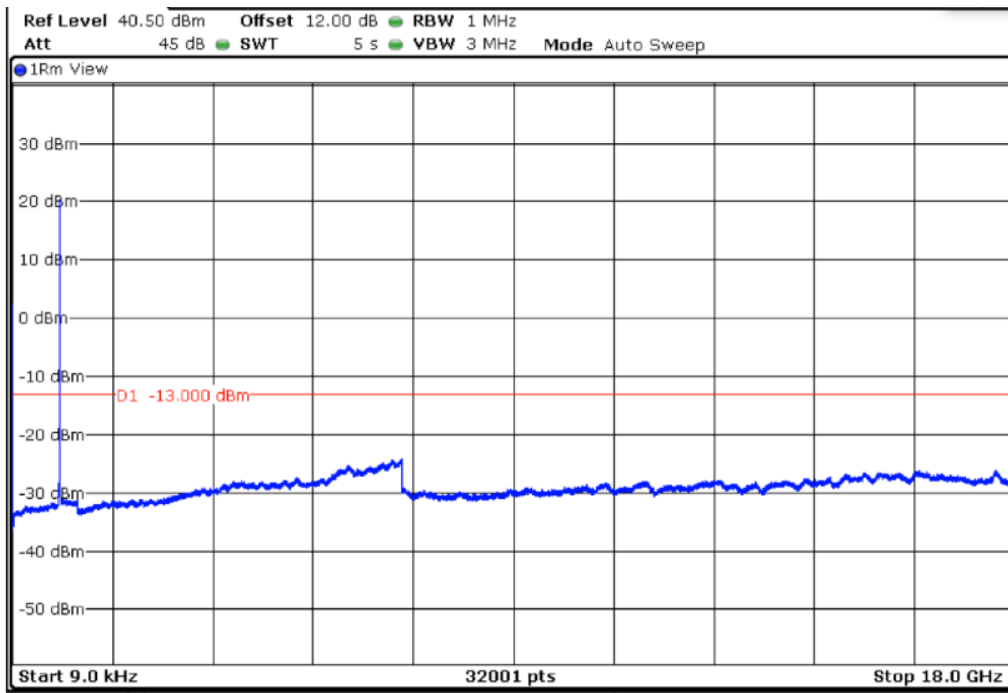


TEST RESULTS (Cont):

Middle Channel



Highest Channel



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#02 |
| TEST RESULTS: | PASS |

Frequency range 9 kHz – 18 GHz

GPRS MODULATION.

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

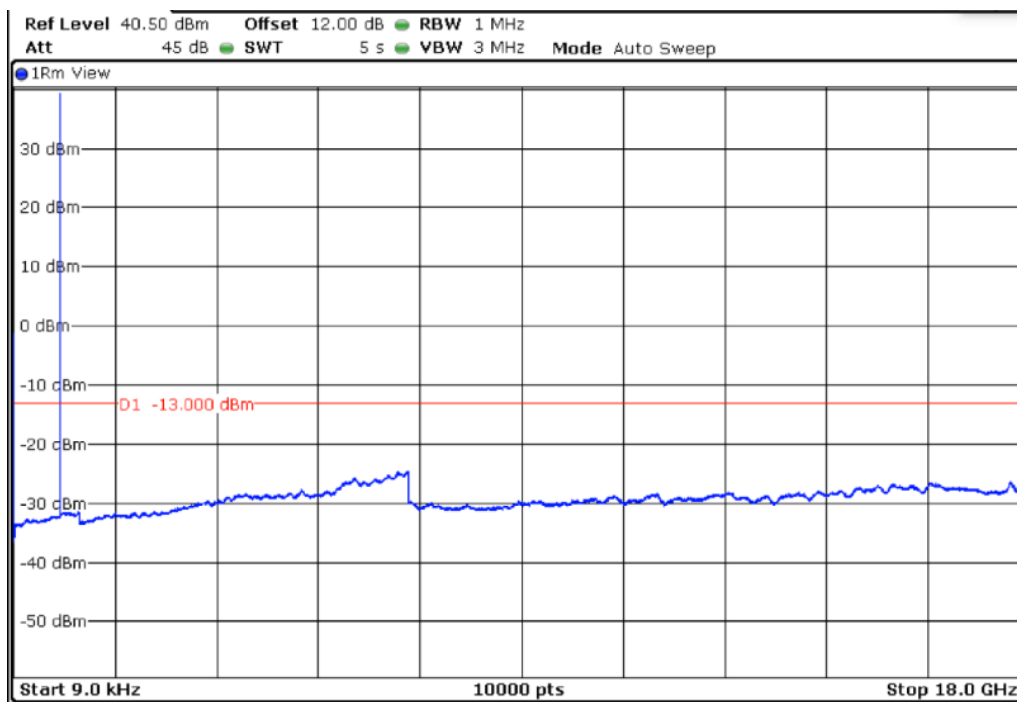
No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

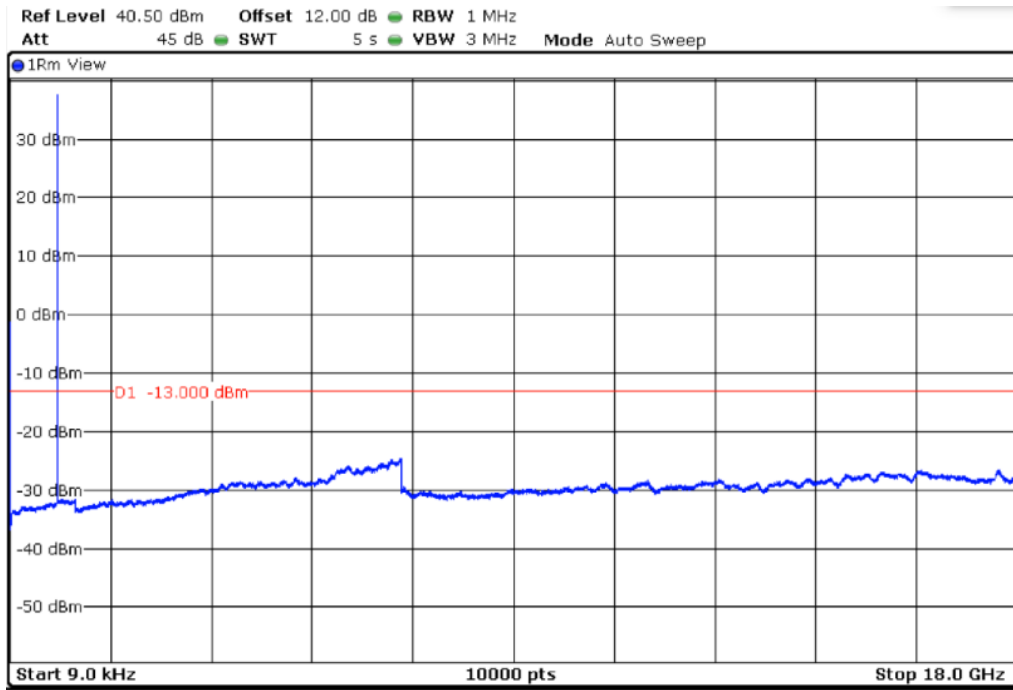
GPRS MODULATION.

Lowest Channel

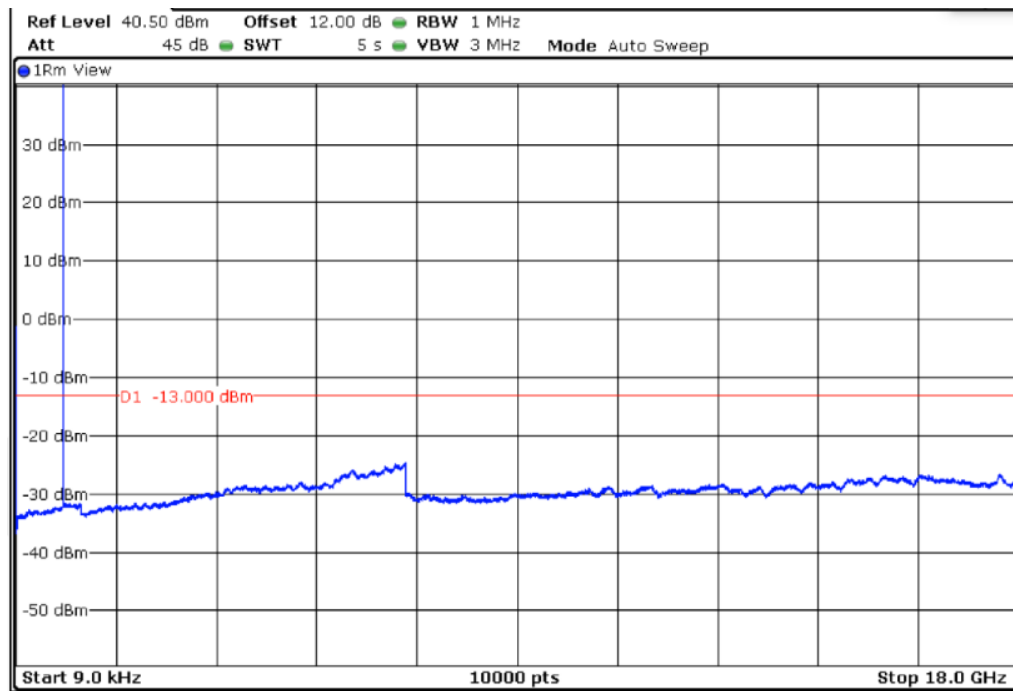


TEST RESULTS (Cont):

Middle Channel



Highest Channel



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#03 |
| TEST RESULTS: | PASS |

Frequency range 9 kHz – 18 GHz

WCDMA MODULATION.

Lowest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Middle Channel

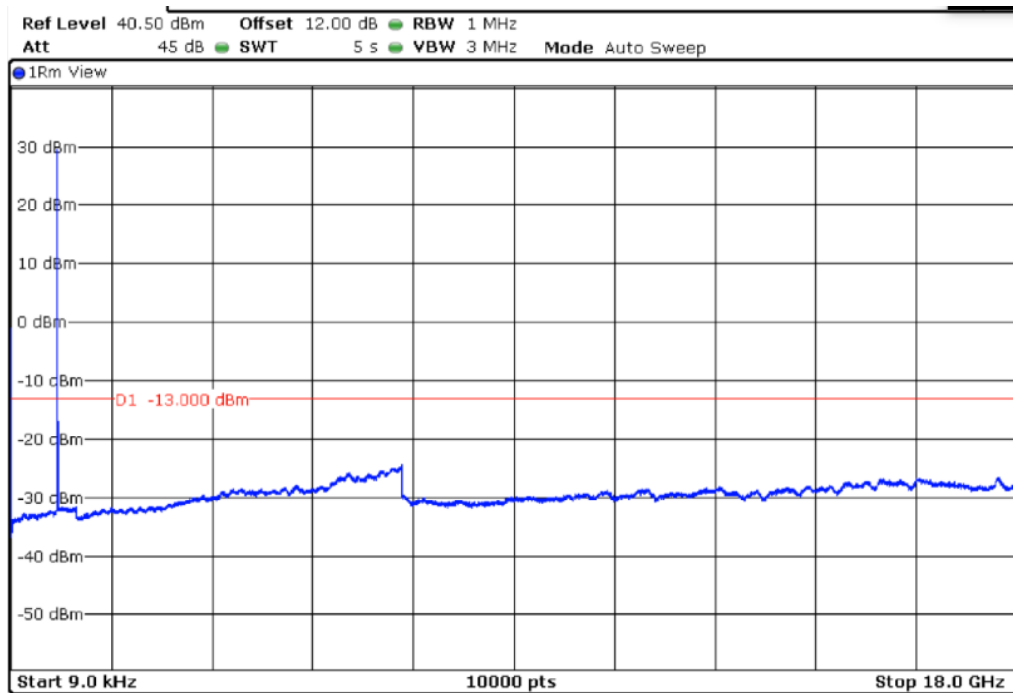
No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

Highest Channel

No spurious signal was found at less than 10 dB respect to the limit in the frequency range.

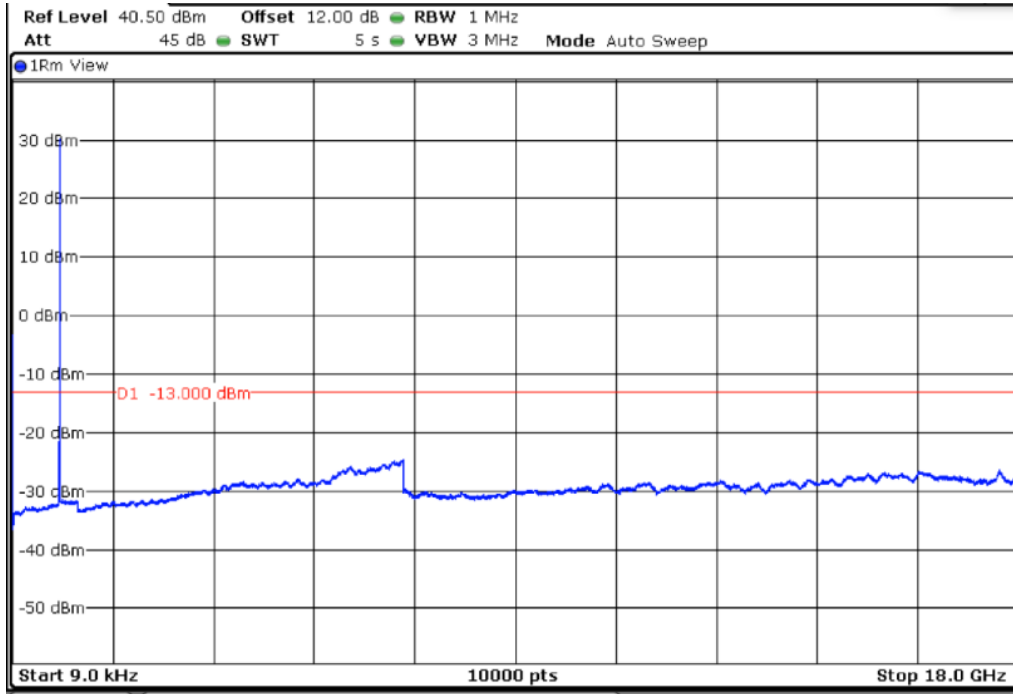
WCDMA MODULATION.

Lowest Channel

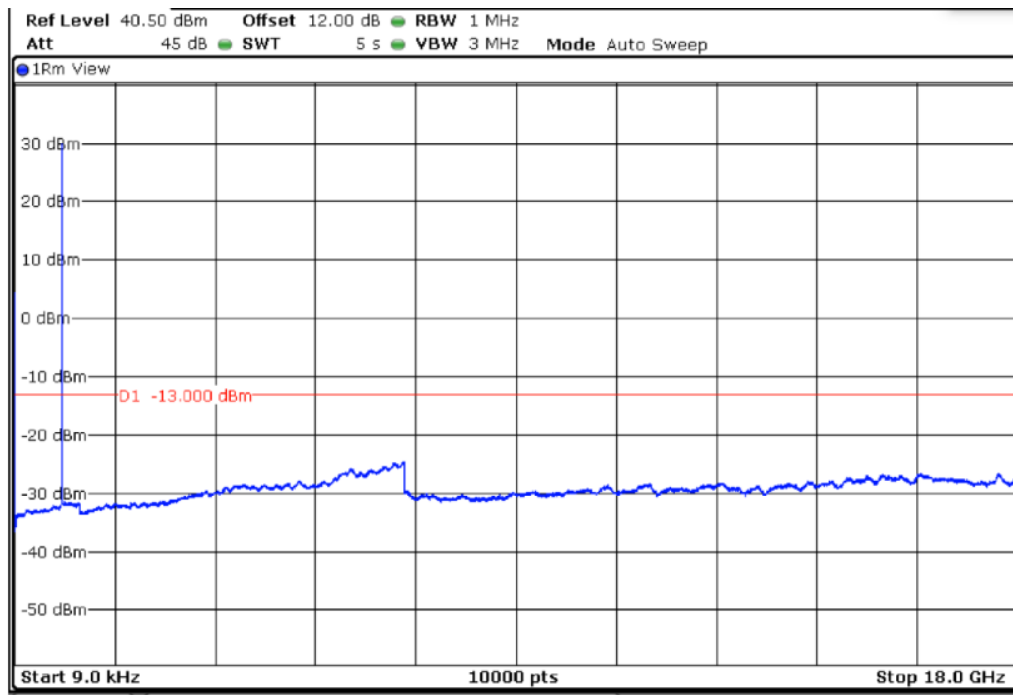


TEST RESULTS (Cont):

Middle Channel



Highest Channel



TEST A.6: SPURIOUS EMISSIONS AT ANTENNA TERMINALS AT BLOCK EDGES

| | | |
|----------------|-------------------|---|
| LIMITS: | Product standard: | FCC Part 22 / IC RSS-132 |
| | Test standard: | FCC §2.1051 and 22.917 / RSS- Clause 5.5. |

LIMITS

According to specification, the power of emissions shall be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. P in watts.

At P_o transmitting power of 2 watts (33 dBm), the specified minimum attenuation becomes $43+10\log (P_o)$. and the level in dBm relative to P_o becomes:

$$P_o \text{ (dBm)} - [43 + 10 \log (P_o \text{ in watts})] = -13 \text{ dBm}$$

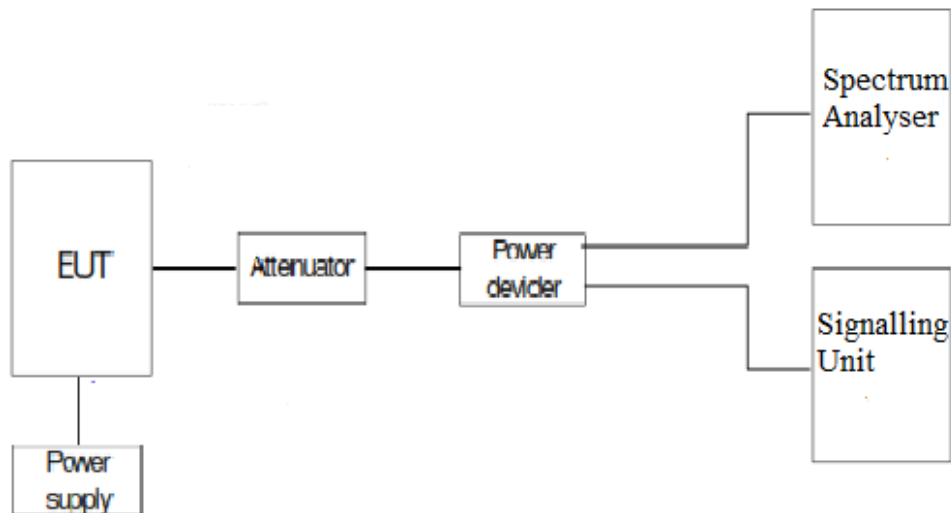
TEST SETUP

The EUT RF output connector was connected to a spectrum analyzer and to the Universal Radio Communication Tester R&S CMW500 (selecting maximum transmission power of the EUT and different modes of modulation) using a 50-ohm attenuator and a power splitter.

The reading of the spectrum analyzer is corrected with the attenuation loss of connection between output terminal of EUT and input of the spectrum analyzer.

For LTE mode the configuration of modulation which is the worst case for conducted power was used.

As indicated in FCC part 22, in the 1 MHz bands immediately outside and adjacent to the licensee's frequency block or band, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.



| | |
|---------------------------------|-------|
| TESTED SAMPLES: | S/01 |
| TESTED CONDITIONS MODES: | TC#01 |
| TEST RESULTS: | PASS |

| LTE QPSK MODULATION | RB=1 Offset =0 BW = 1.4 MHz | RB=1 Offset =0 BW = 3 MHz | RB=1. Offset =0 BW = 5 MHz | RB=1 Offset =0 BW = 10 MHz |
|---|-----------------------------------|---------------------------------|----------------------------------|----------------------------------|
| Maximum measured level at lowest Block Edge at antenna port (dBm) | -31.52 | -22.06 | -24.26 | -33.75 |

| LTE QPSK MODULATION | RB=6 Offset =0 BW = 1.4 MHz | RB=15 Offset =0 BW = 3 MHz | RB=25 Offset =0 BW = 5 MHz | RB=50 Offset =0 BW = 10 MHz |
|---|-----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| Maximum measured level at lowest Block Edge at antenna port (dBm) | -27.02 | -27.24 | -29.21 | -29.94 |

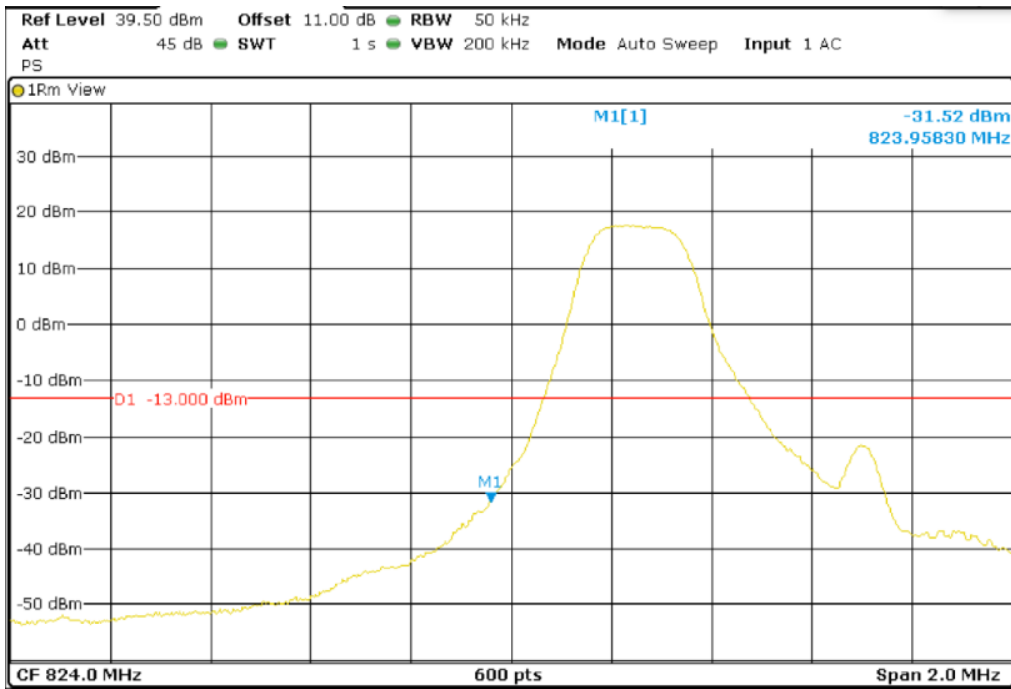
| LTE QPSK MODULATION | RB=1 Offset =5 BW = 1.4 MHz | RB=1 Offset =14 BW = 3 MHz | RB=1 Offset =24 BW = 5 MHz | RB=1 Offset =49 BW = 10 MHz |
|--|-----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| Maximum measured level at Highest Block Edge at antenna port (dBm) | -35.53 | -22.43 | -26.58 | -34.89 |

| LTE QPSK MODULATION | RB=6 Offset =0 BW = 1.4 MHz | RB=15 Offset =0 BW = 3 MHz | RB=25 Offset =0 BW = 5 MHz | RB=50 Offset =0 BW = 10 MHz |
|--|-----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| Maximum measured level at Highest Block Edge at antenna port (dBm) | -32.94 | -29.52 | -31.67 | -32.64 |

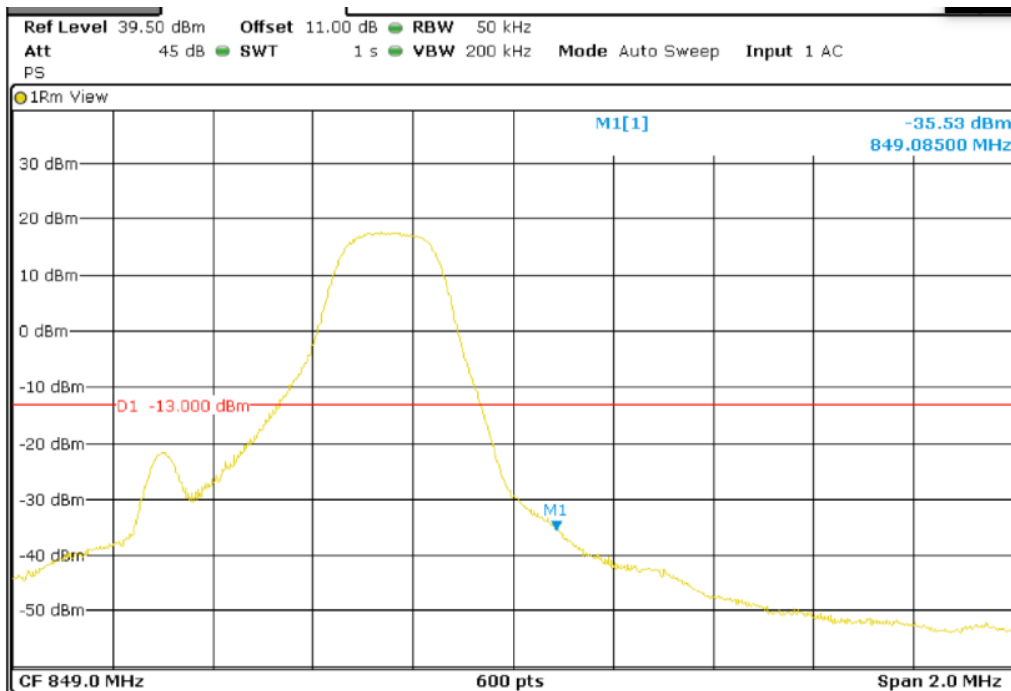
TEST RESULTS (Cont):

LTE QPSK MODULATION. RB = 1. Offset = 0. BW = 1.4 MHz

Lowest Channel



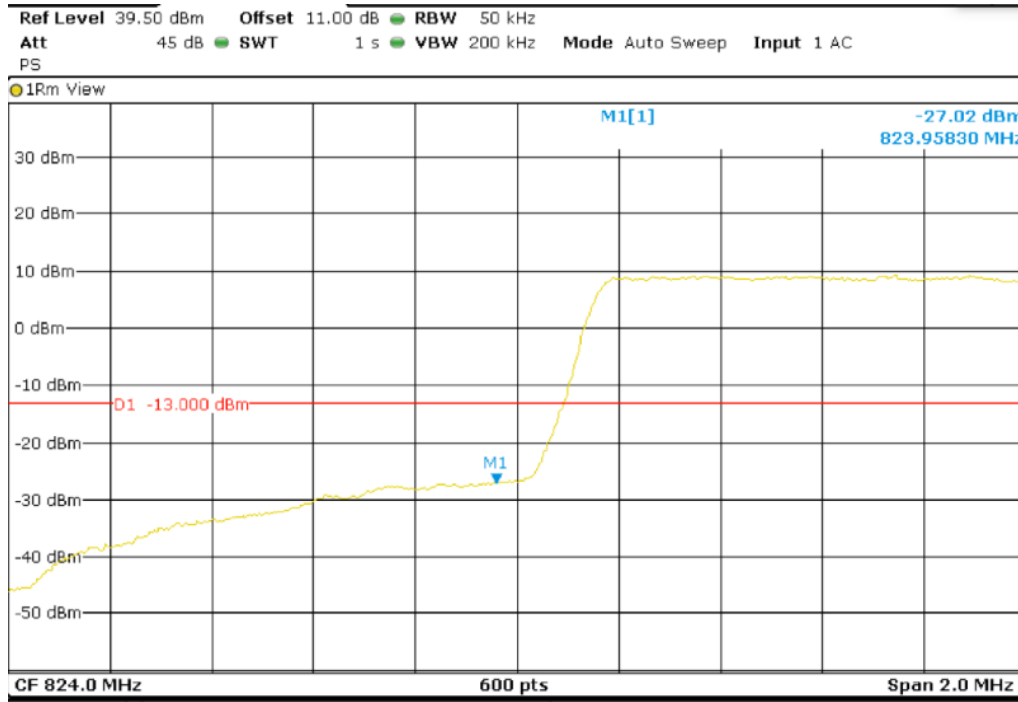
Highest Channel



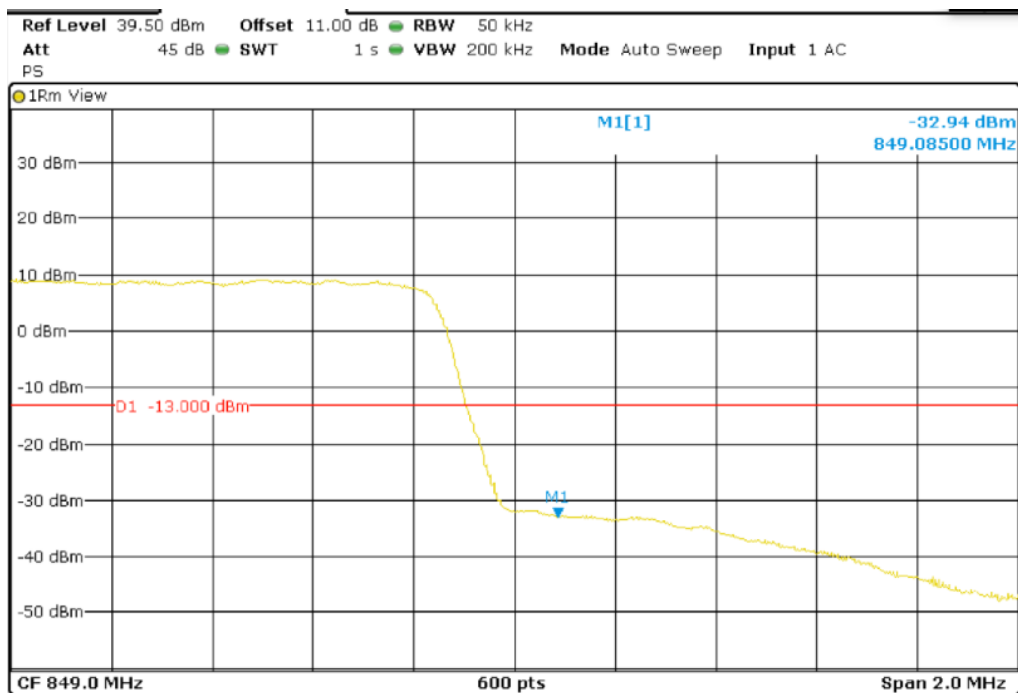
TEST RESULTS (Cont):

LTE QPSK MODULATION. RB = 6. Offset = 0. BW = 1.4 MHz

Lowest Channel



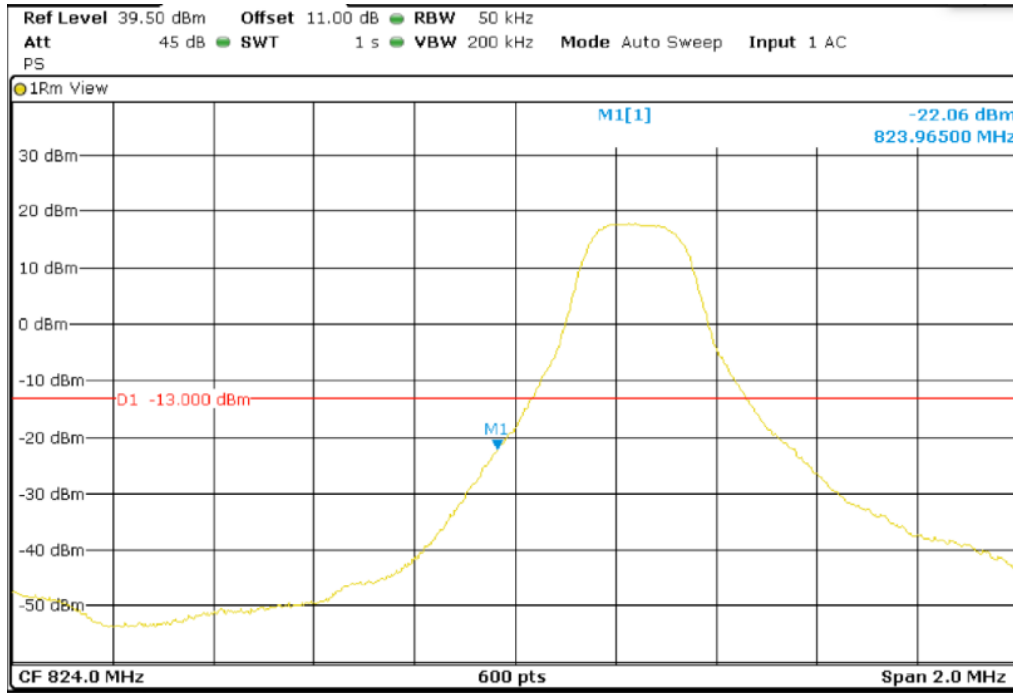
Highest Channel



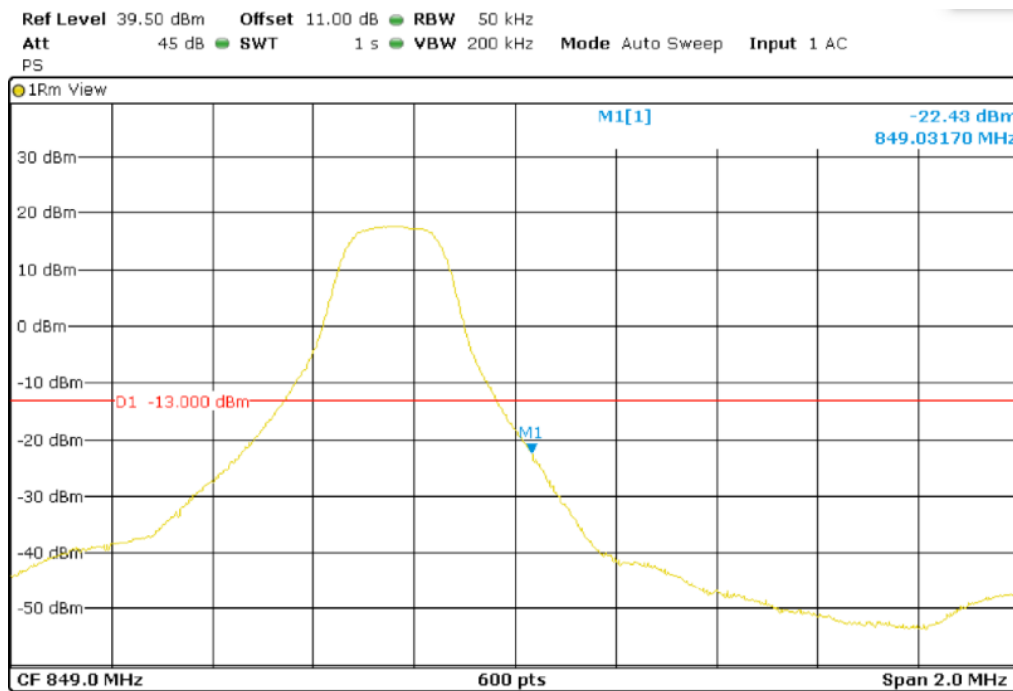
TEST RESULTS (Cont):

LTE QPSK MODULATION. RB = 1. Offset = 0. BW = 3 MHz

Lowest Channel



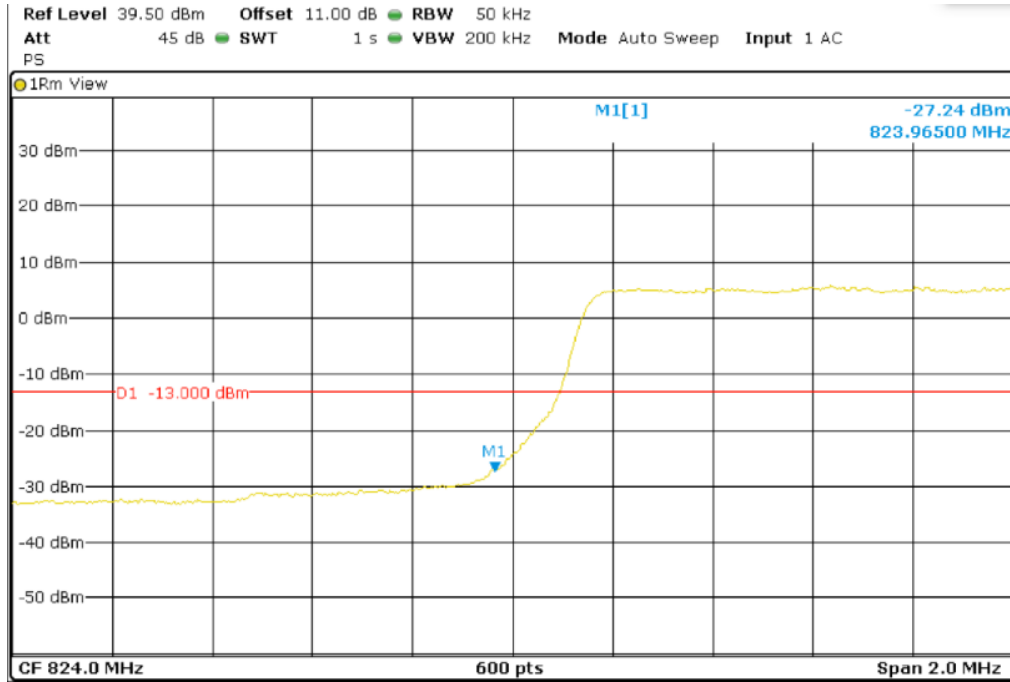
Highest Channel



TEST RESULTS (Cont):

LTE QPSK MODULATION. RB = 15. Offset = 0. BW = 3 MHz

Lowest Channel



Highest Channel

