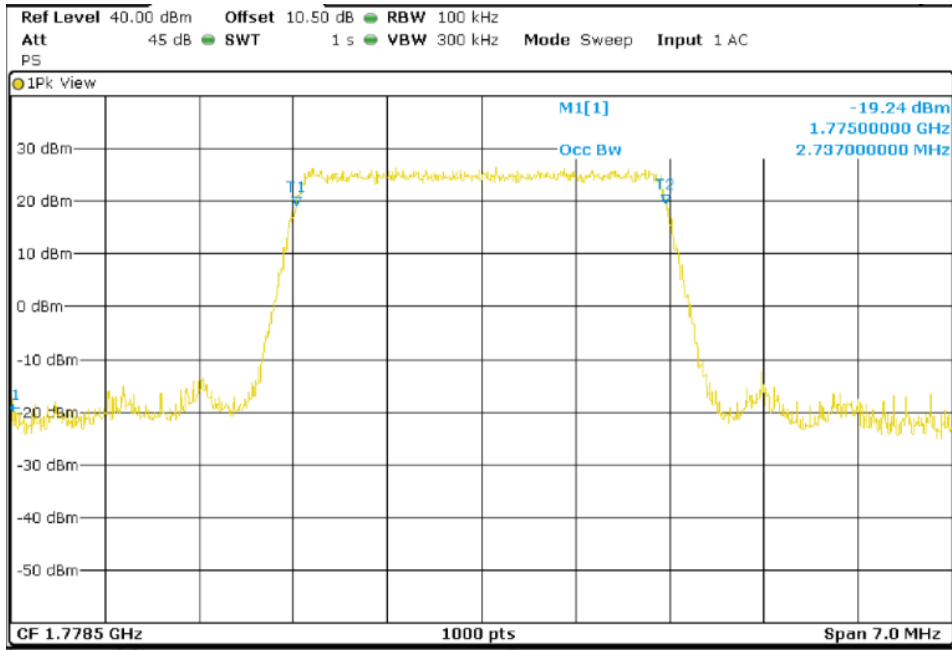
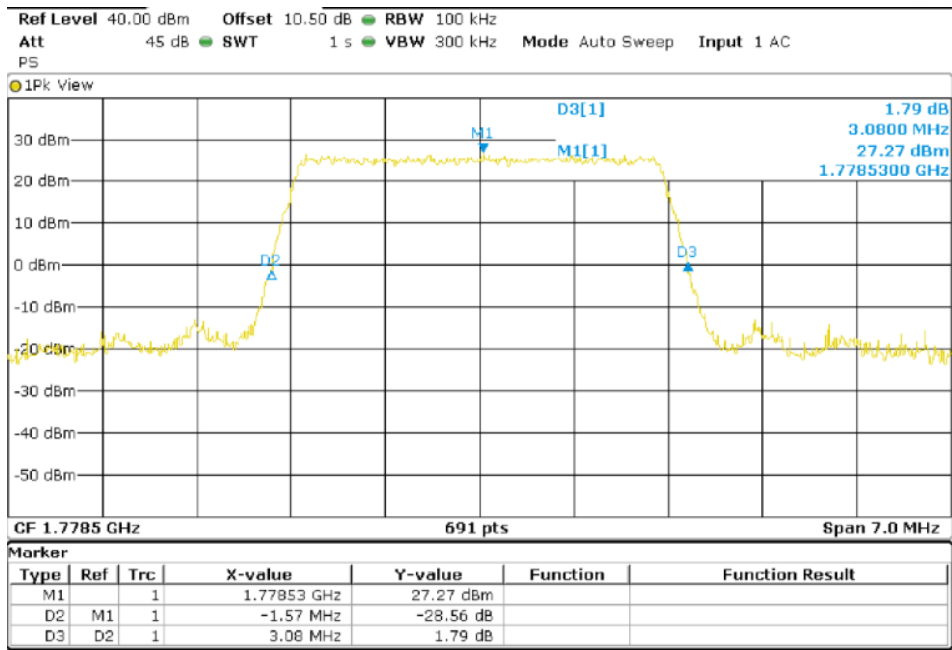


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



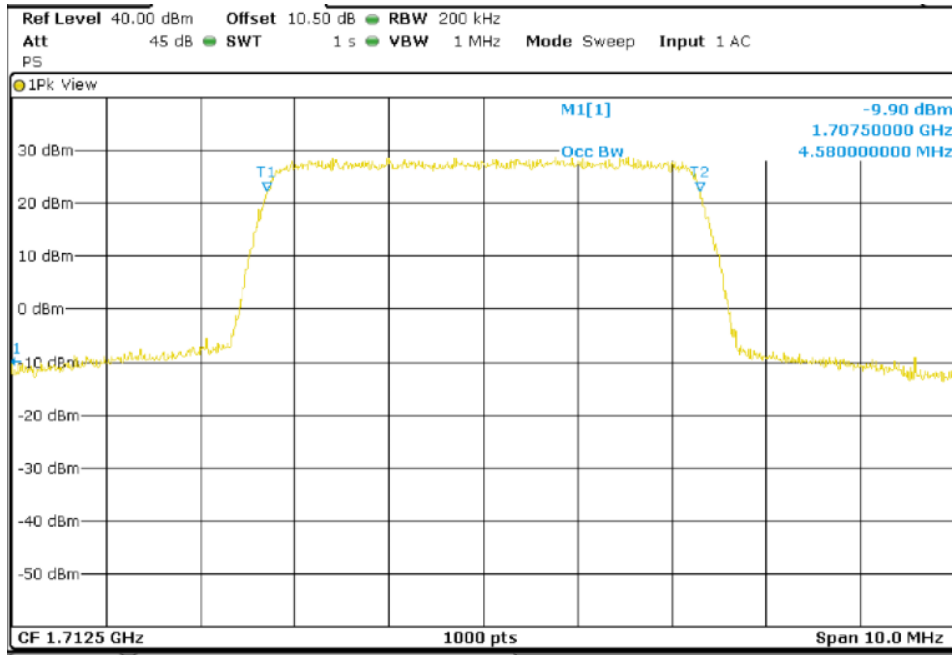
Highest Channel -26dBc Bandwidth kHz



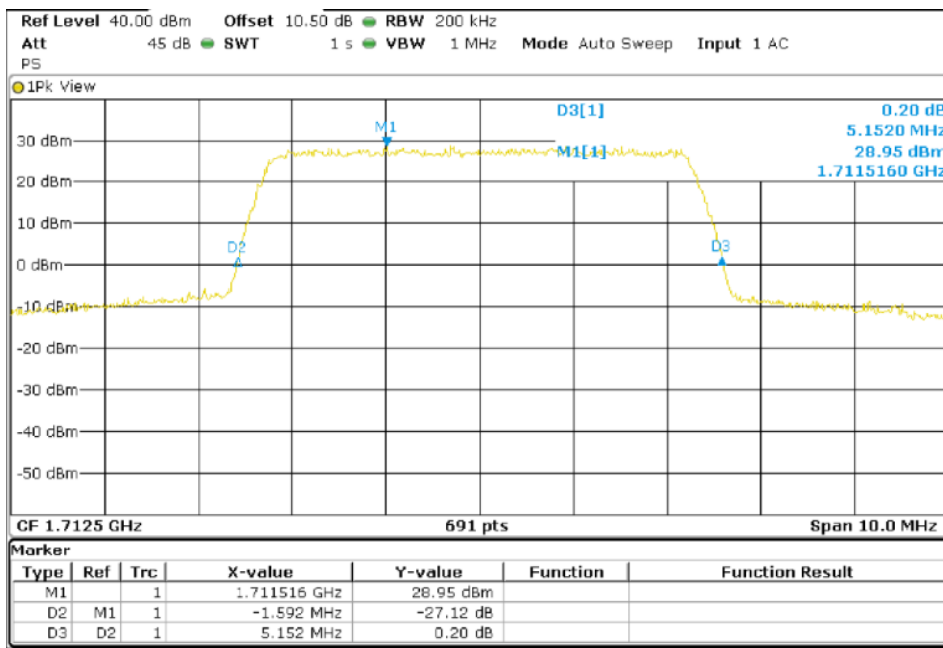
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel 99% Occupied Bandwidth

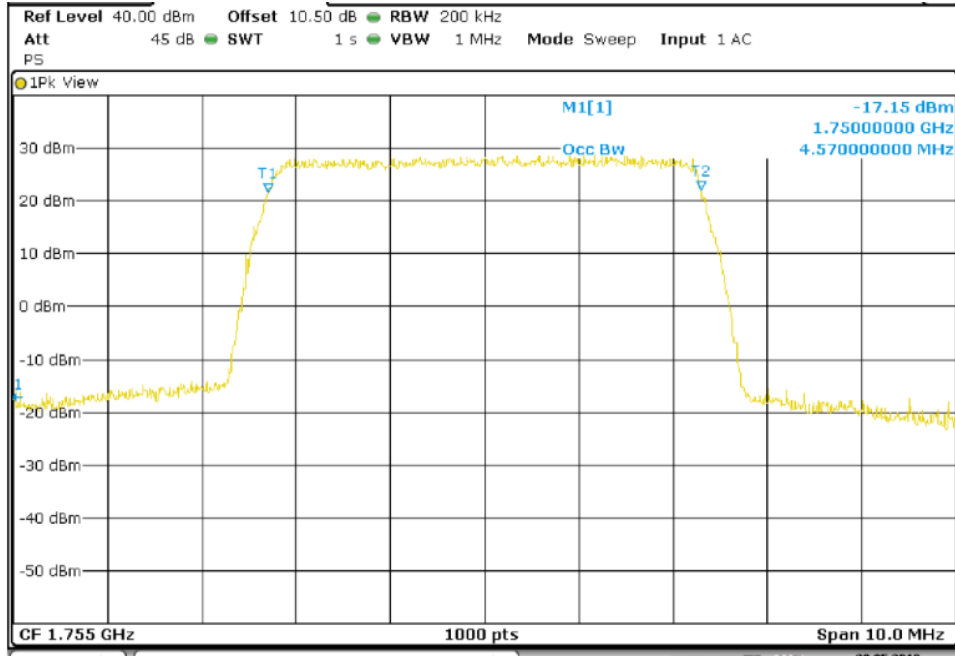


Lowest Channel -26dBc Bandwidth kHz

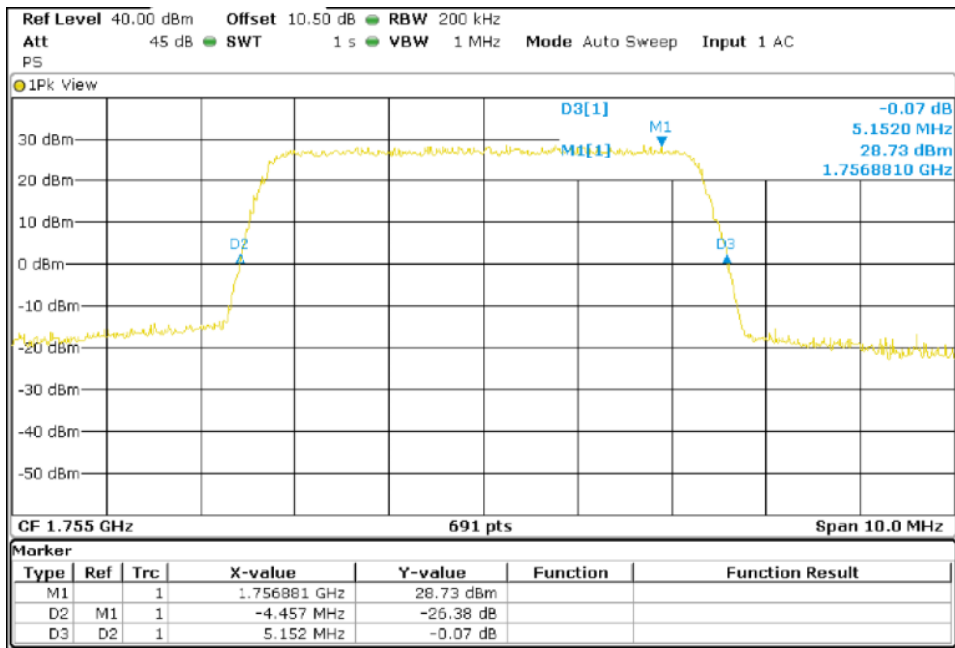


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

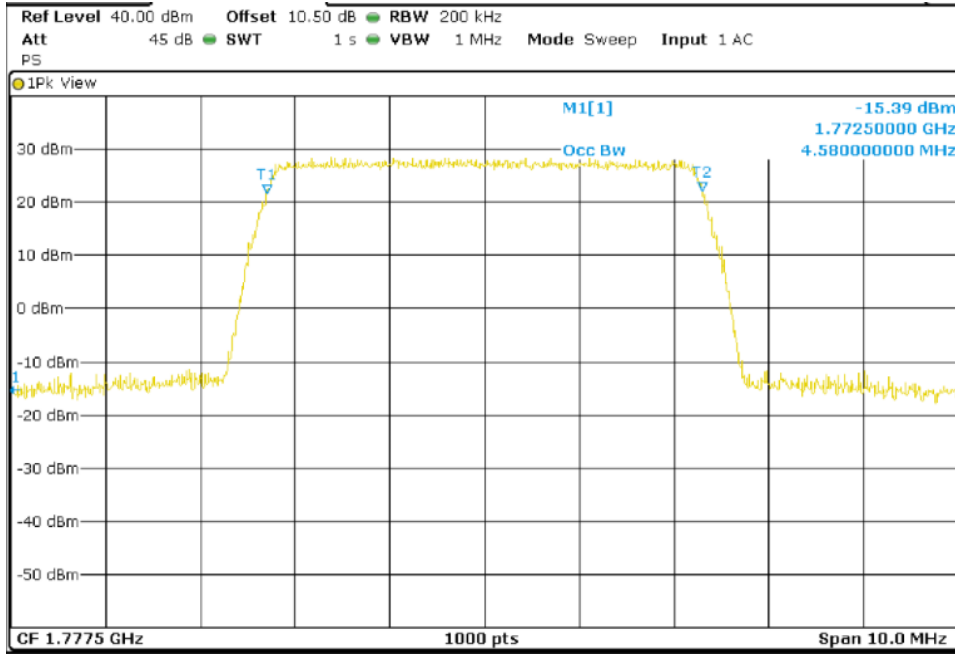


Middle Channel -26dBc Bandwidth kHz

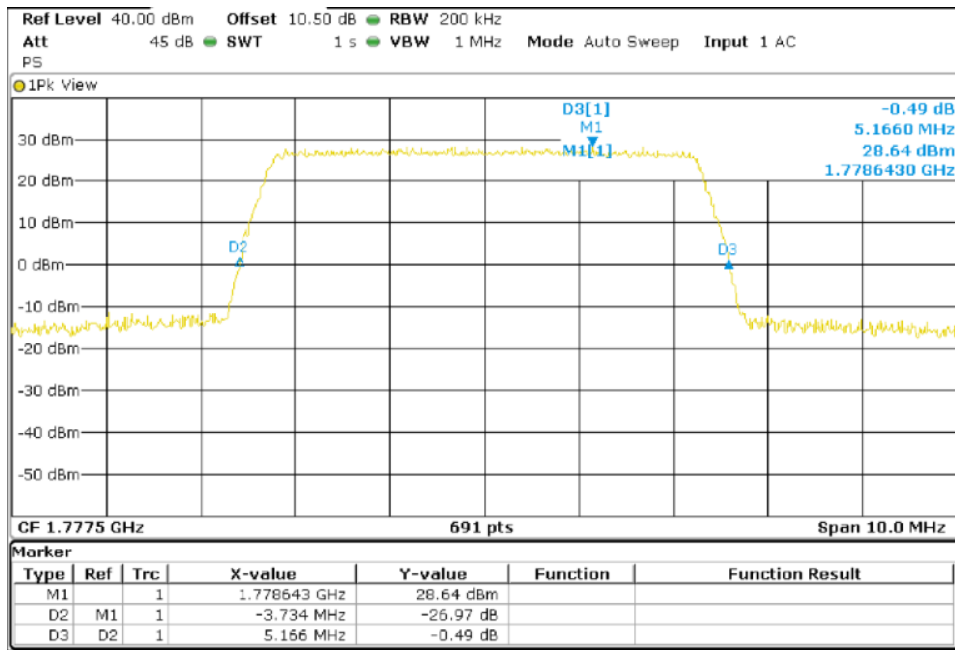


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



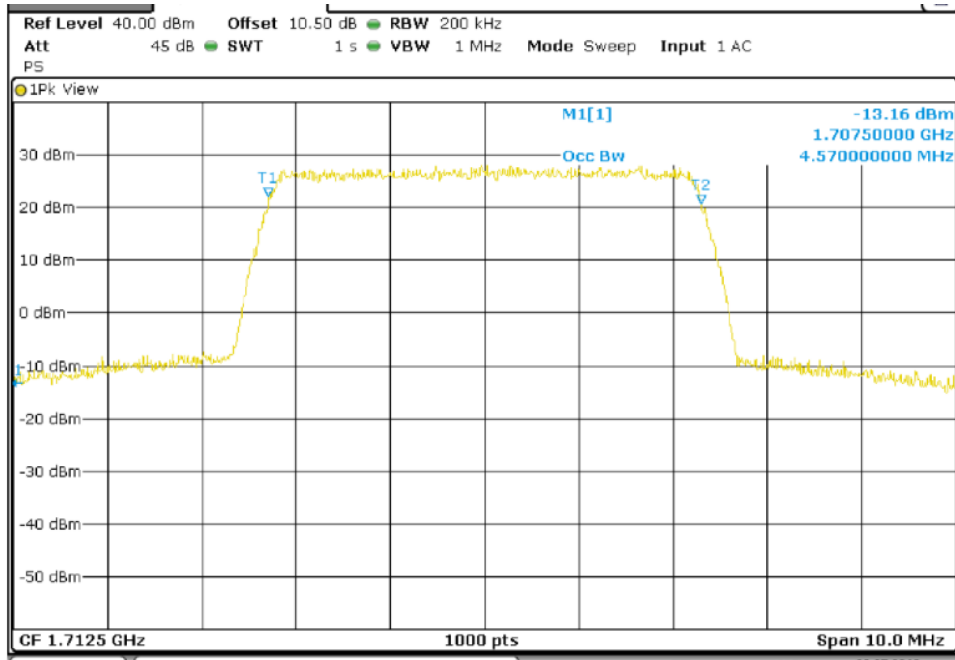
Highest Channel -26dBc Bandwidth kHz



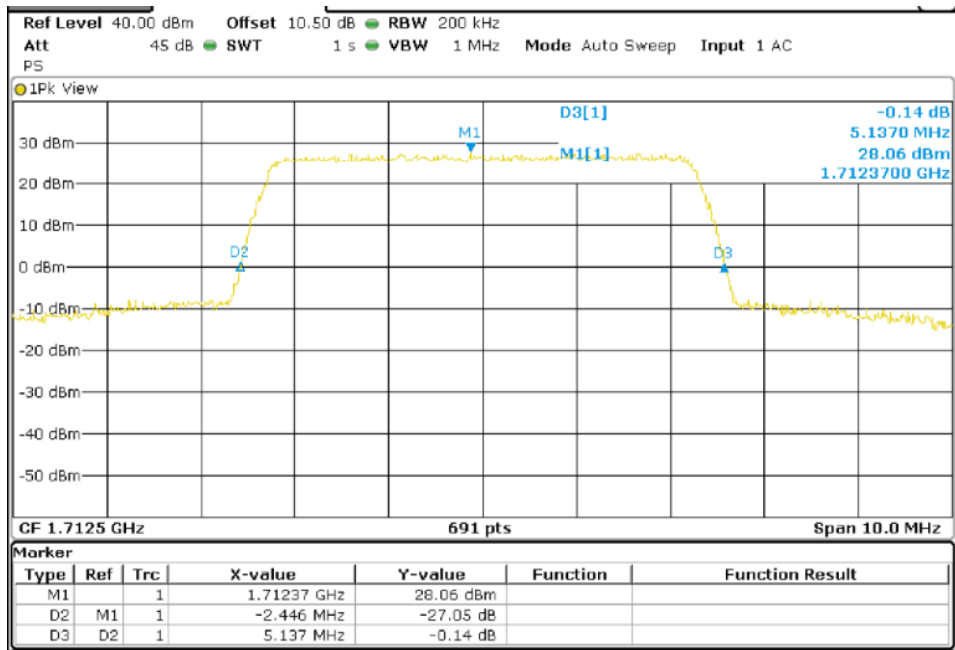
TEST RESULTS (Cont):

LTE 16QAM MODULATION. BW = 5 MHz

Lowest Channel 99% Occupied Bandwidth

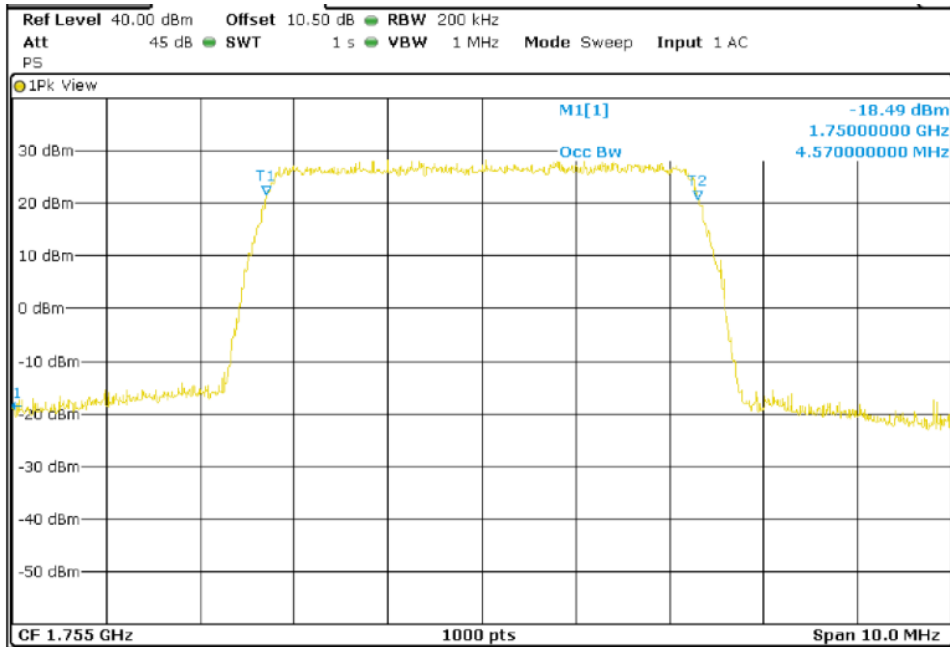


Lowest Channel -26dBc Bandwidth kHz

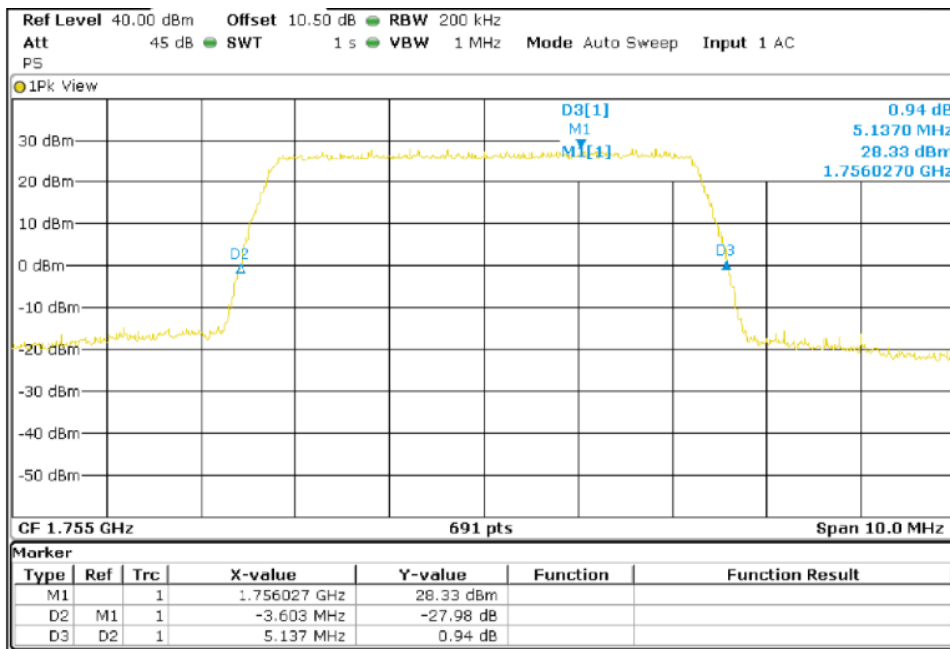


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

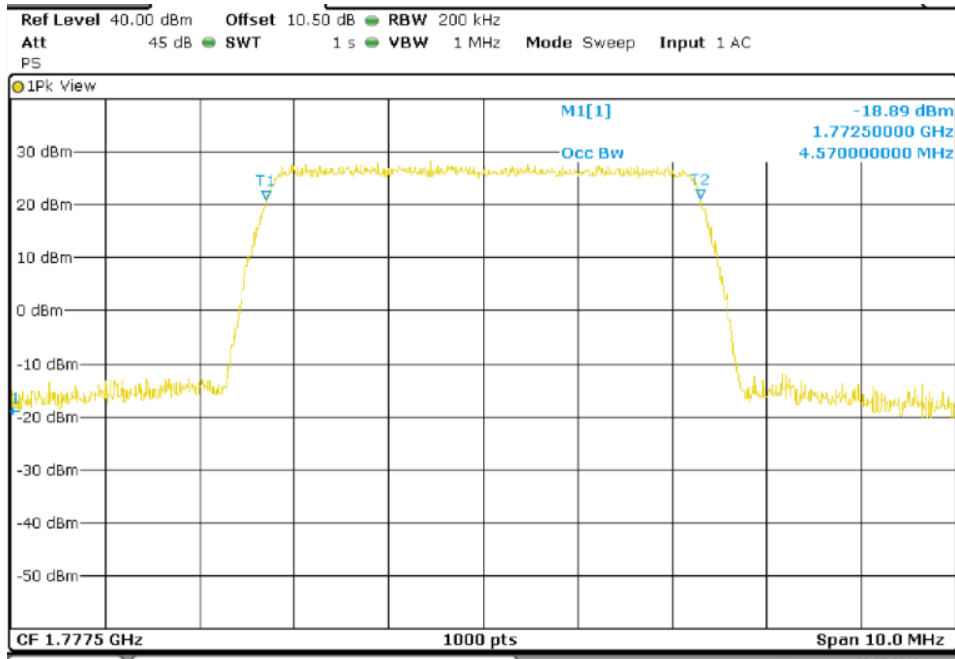


Middle Channel -26dBc Bandwidth kHz

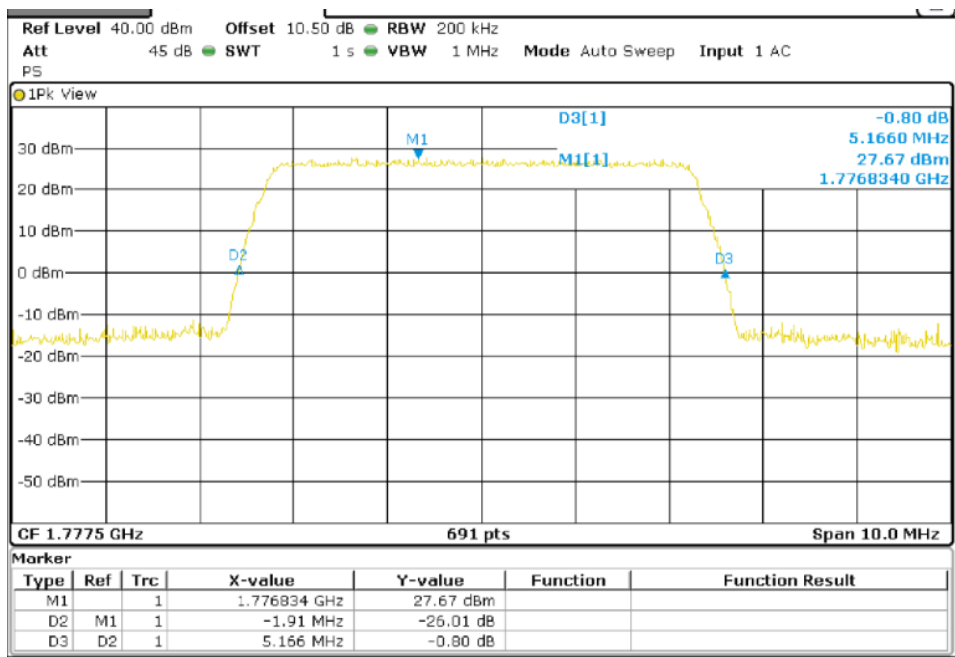


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth

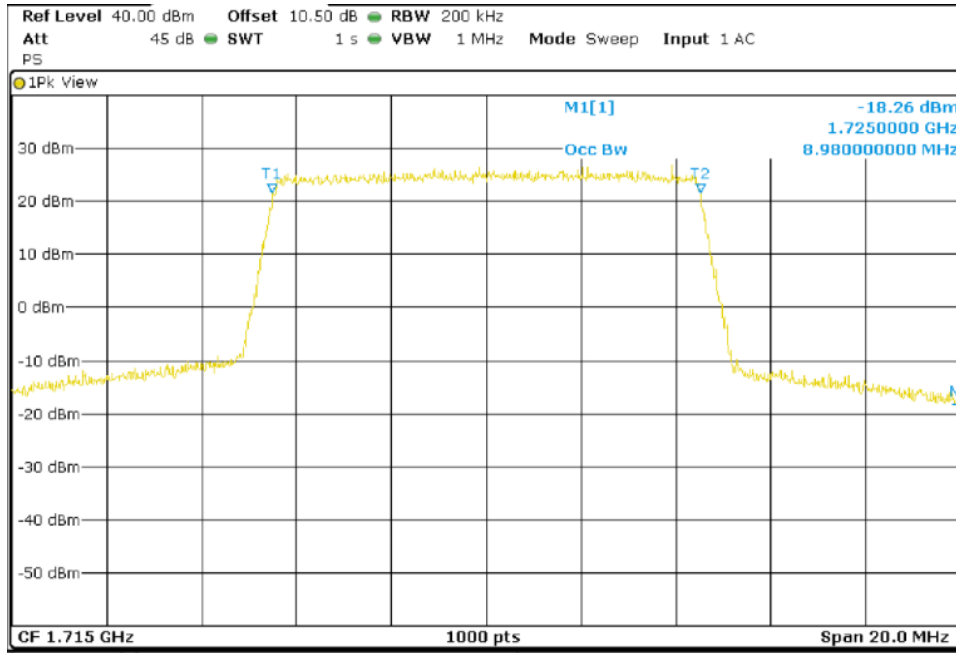


Highest Channel -26dBc Bandwidth kHz

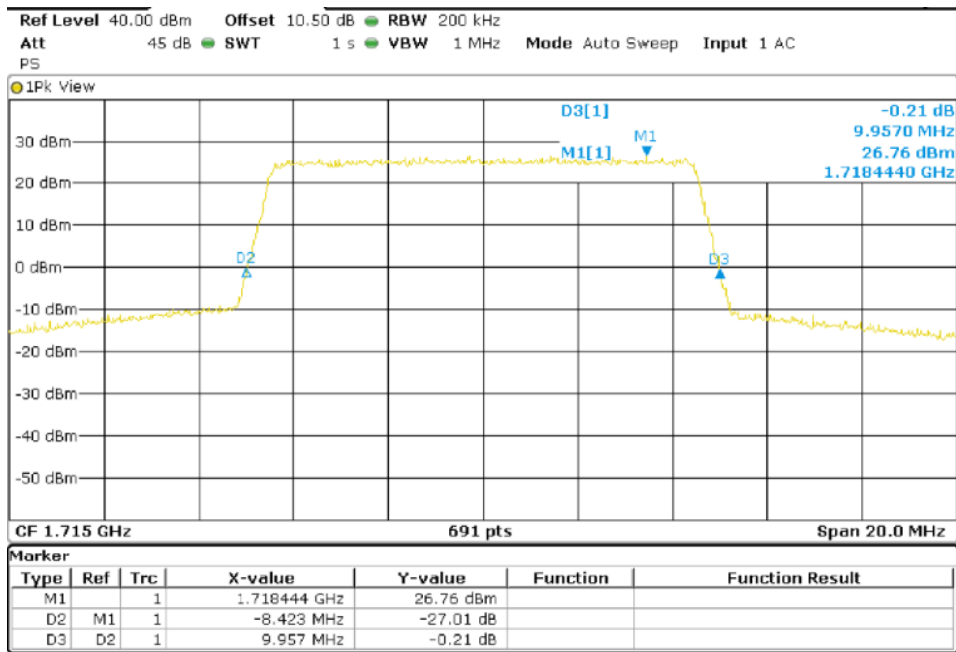


TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 10 MHz
 Lowest Channel 99% Occupied Bandwidth

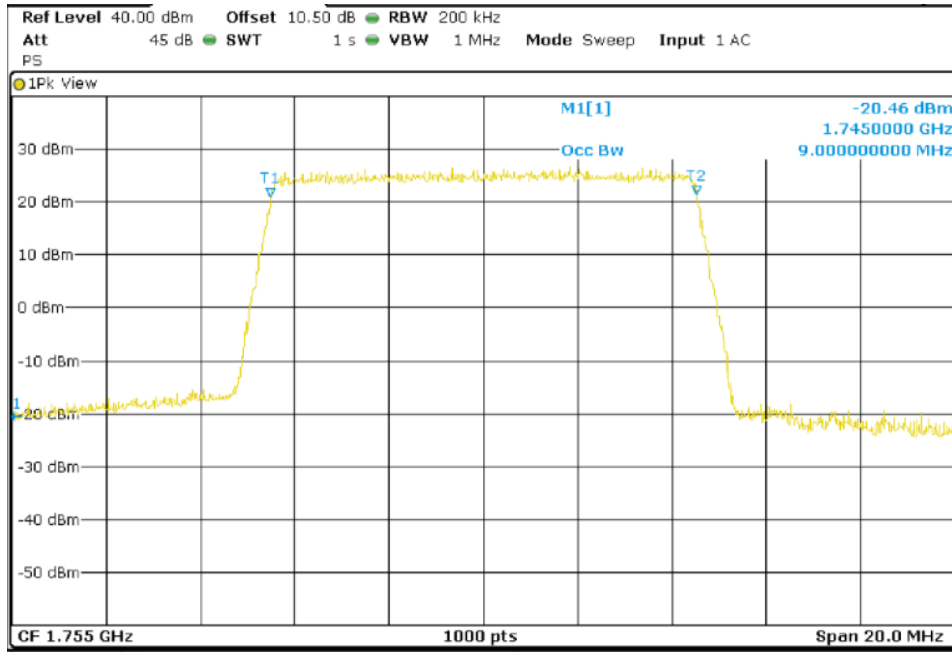


Lowest Channel -26dBc Bandwidth kHz

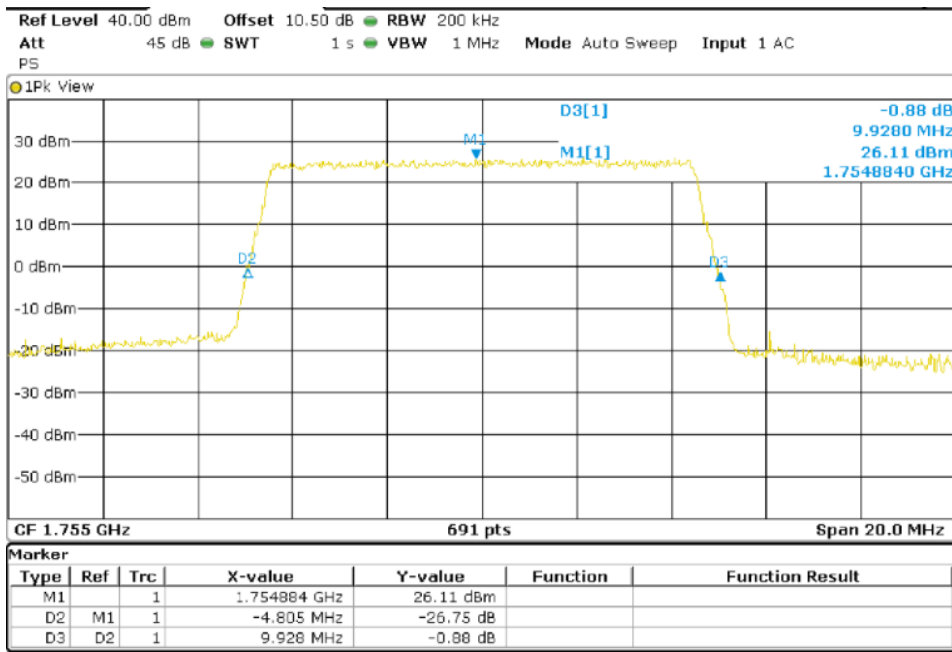


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

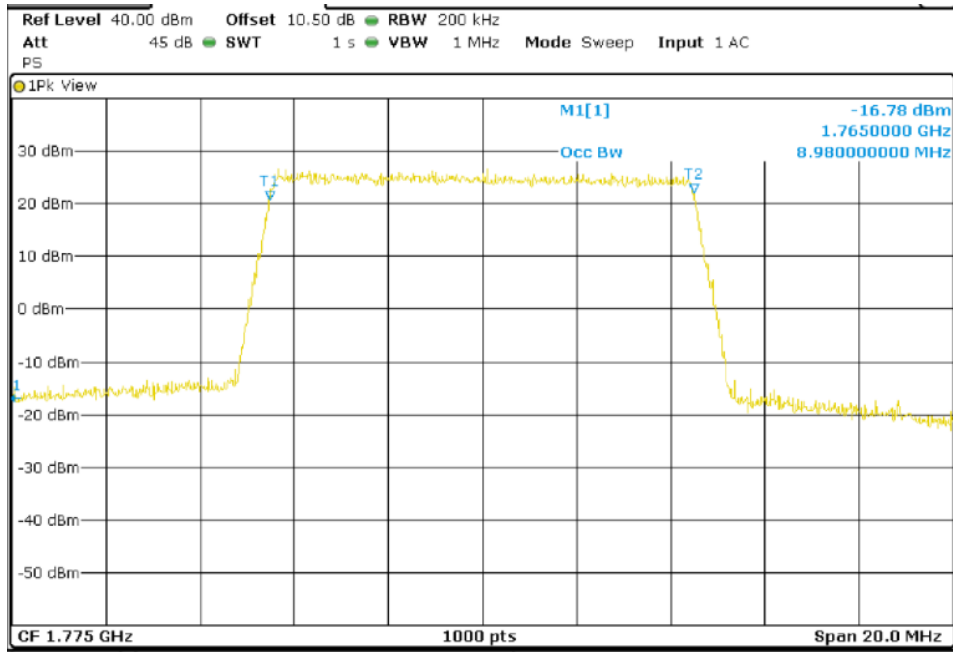


Middle Channel -26dBc Bandwidth kHz

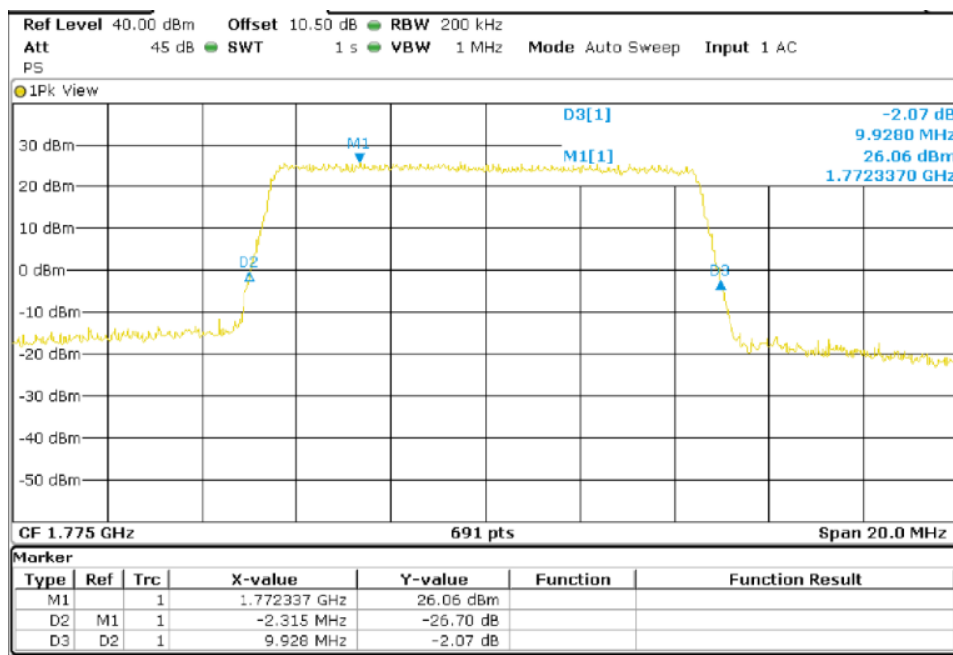


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



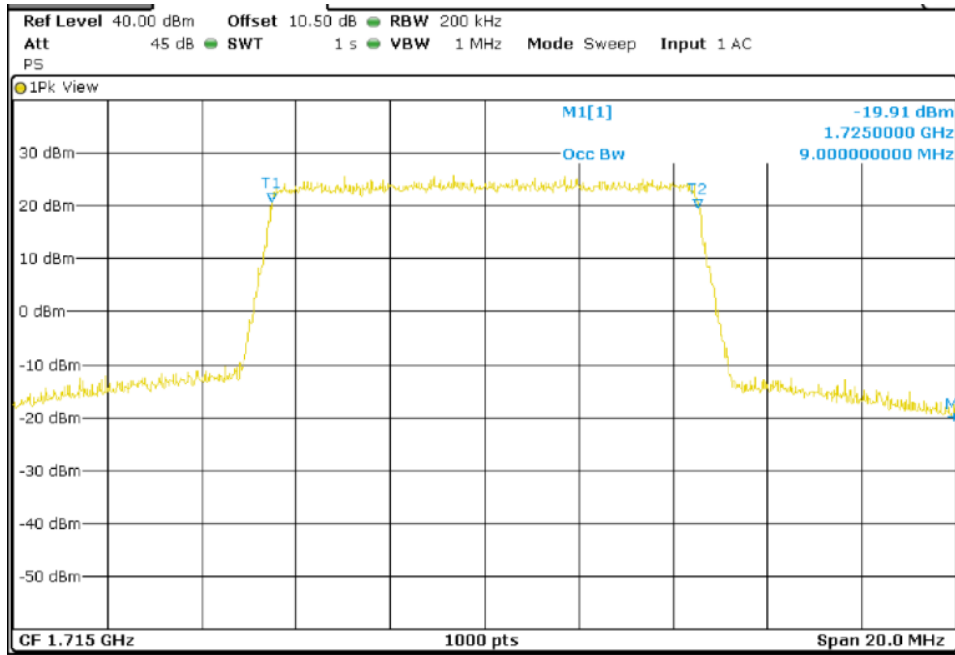
Highest Channel -26dBc Bandwidth kHz



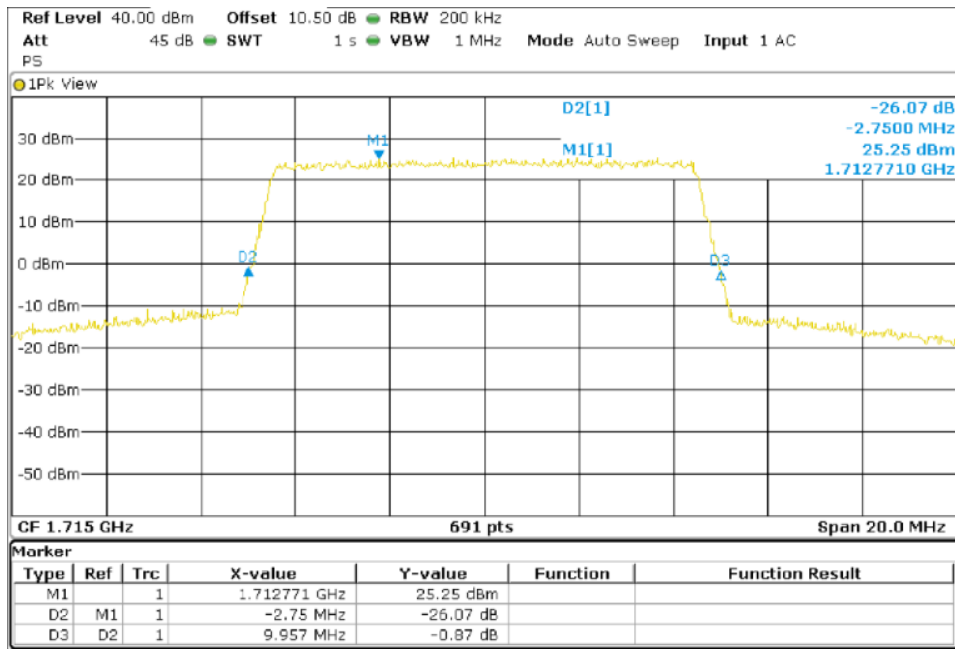
TEST RESULTS (Cont):

LTE 16QAM MODULATION. BW = 10 MHz

Lowest Channel 99% Occupied Bandwidth

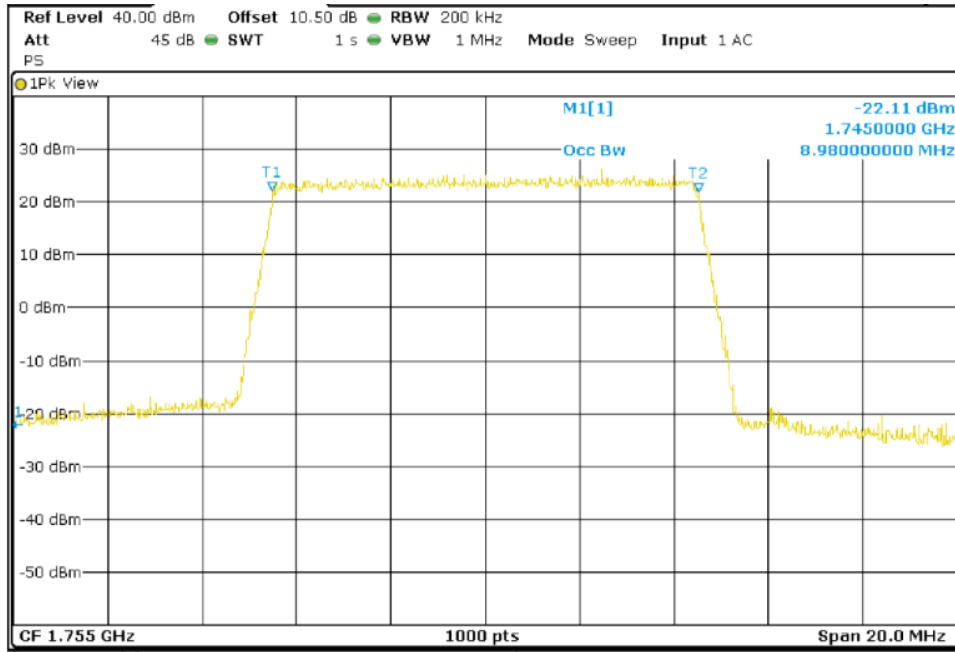


Lowest Channel -26dBc Bandwidth kHz

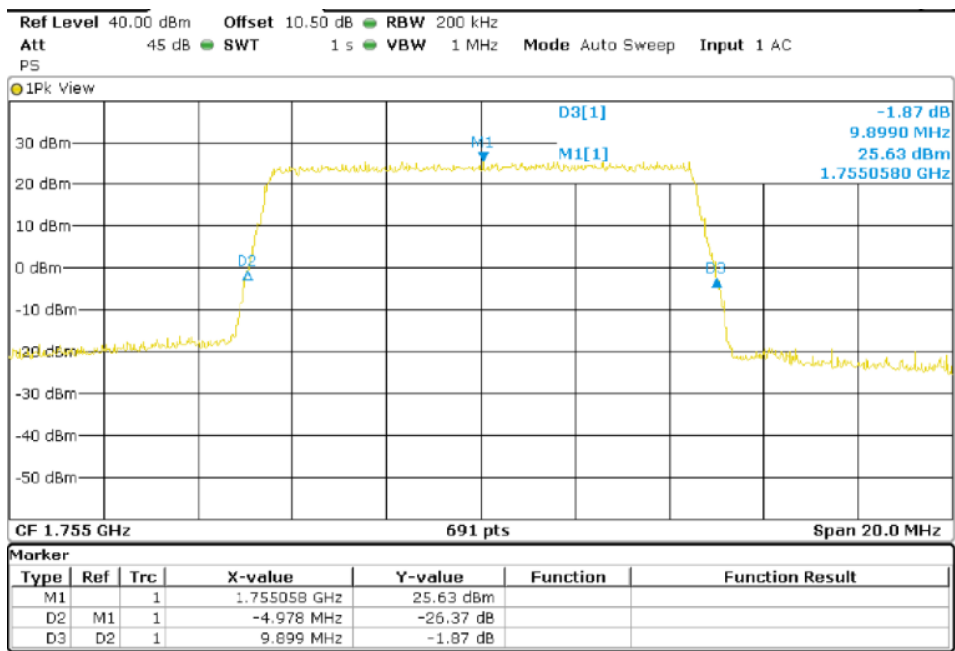


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

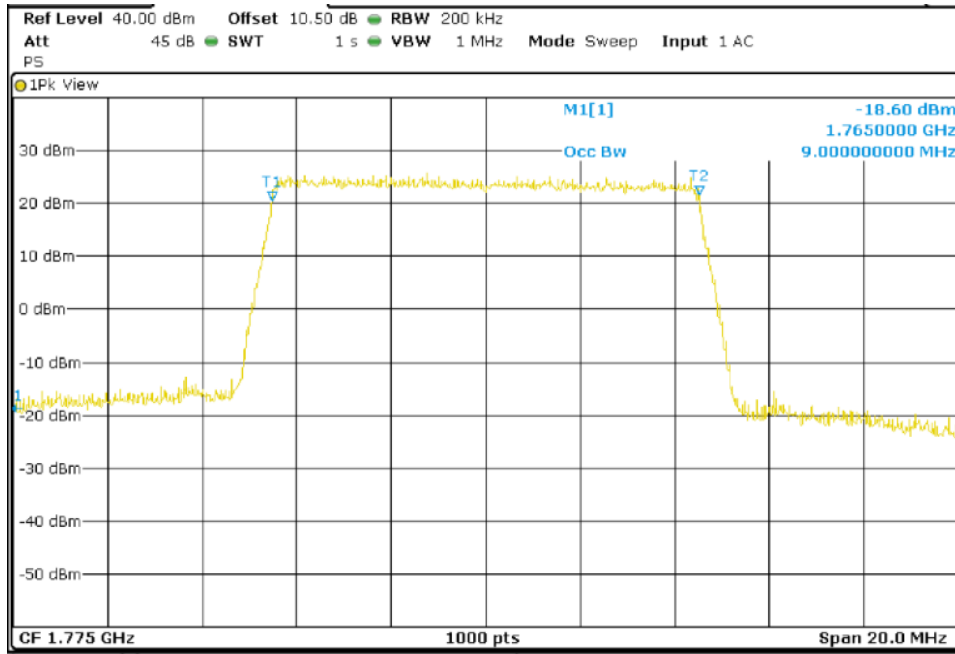


Middle Channel -26dBc Bandwidth kHz

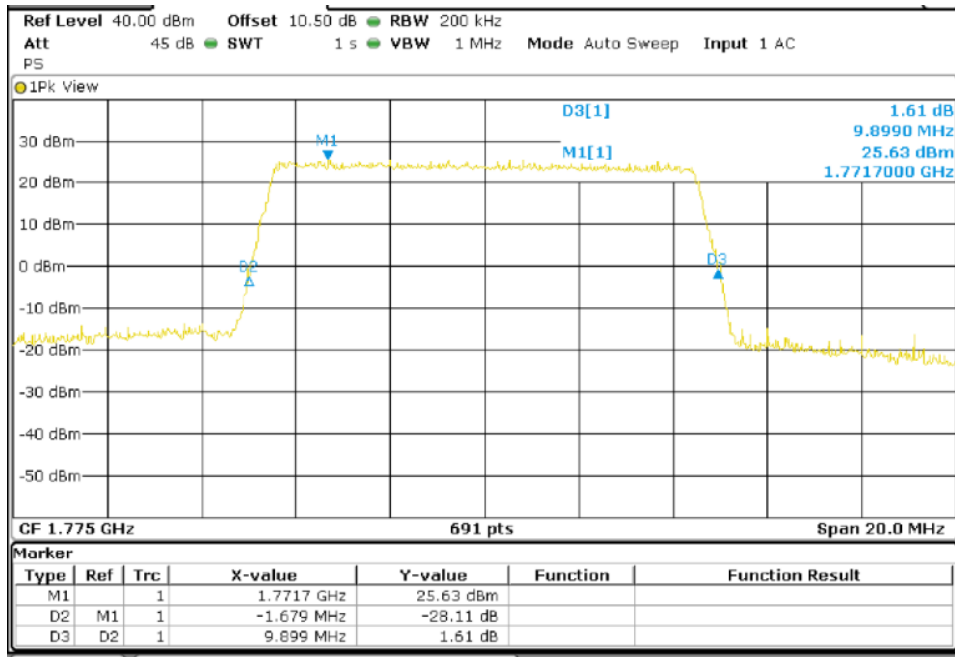


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth

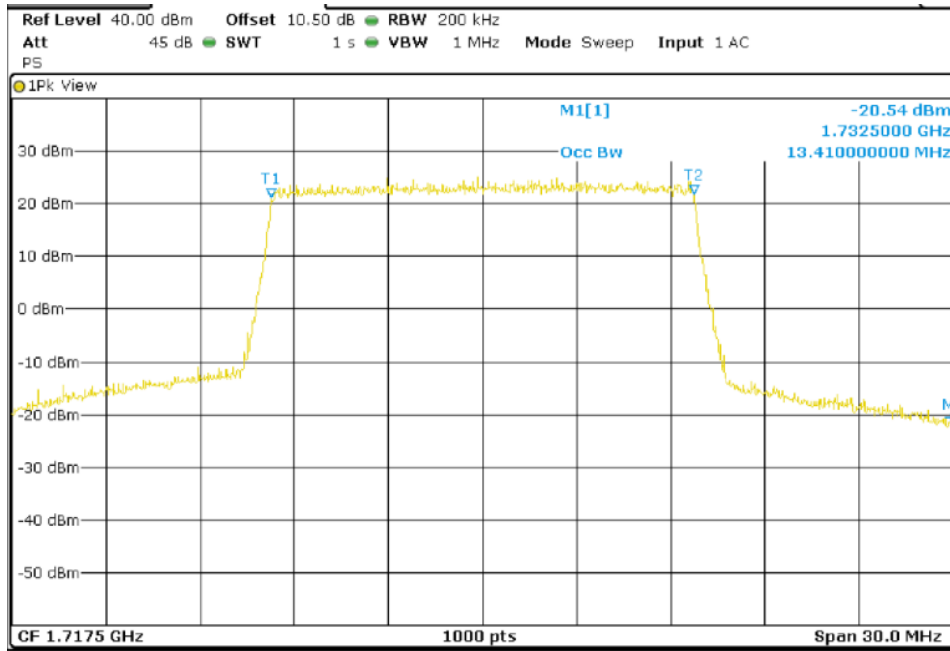


Highest Channel -26dBc Bandwidth kHz

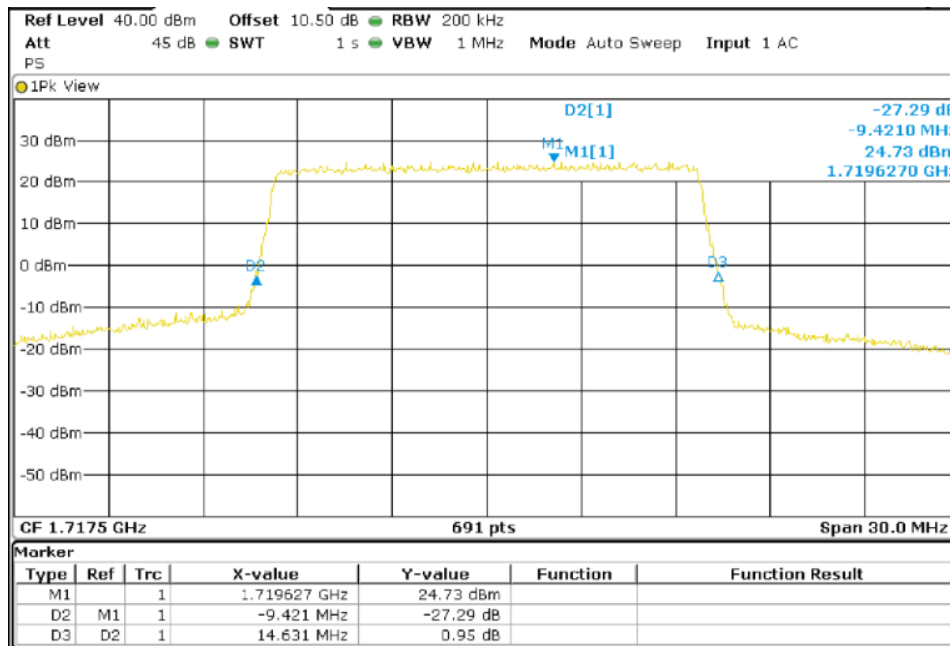


TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 15 MHz
 Lowest Channel 99% Occupied Bandwidth

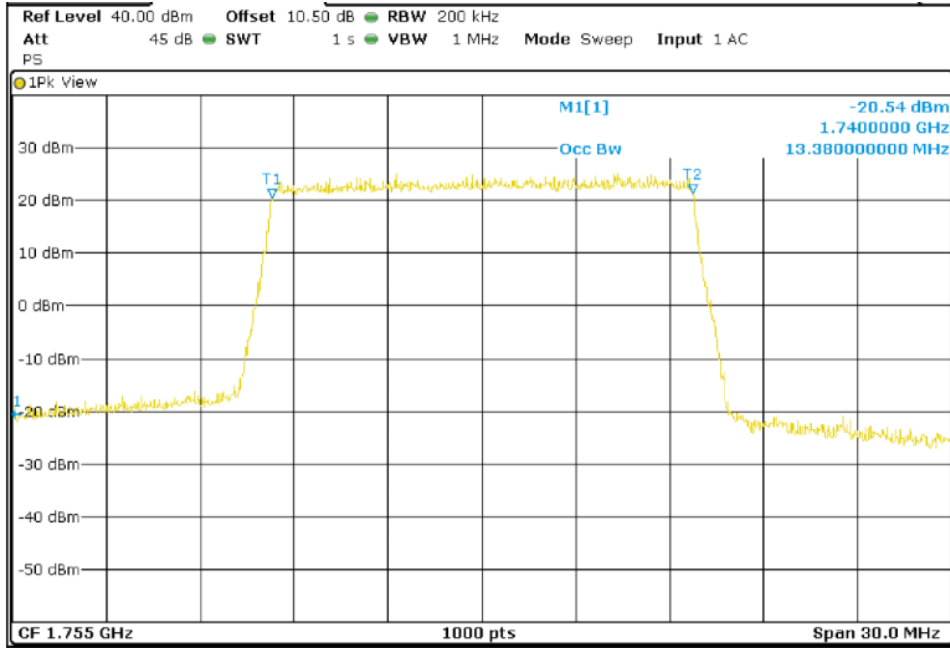


Lowest Channel -26dBc Bandwidth kHz

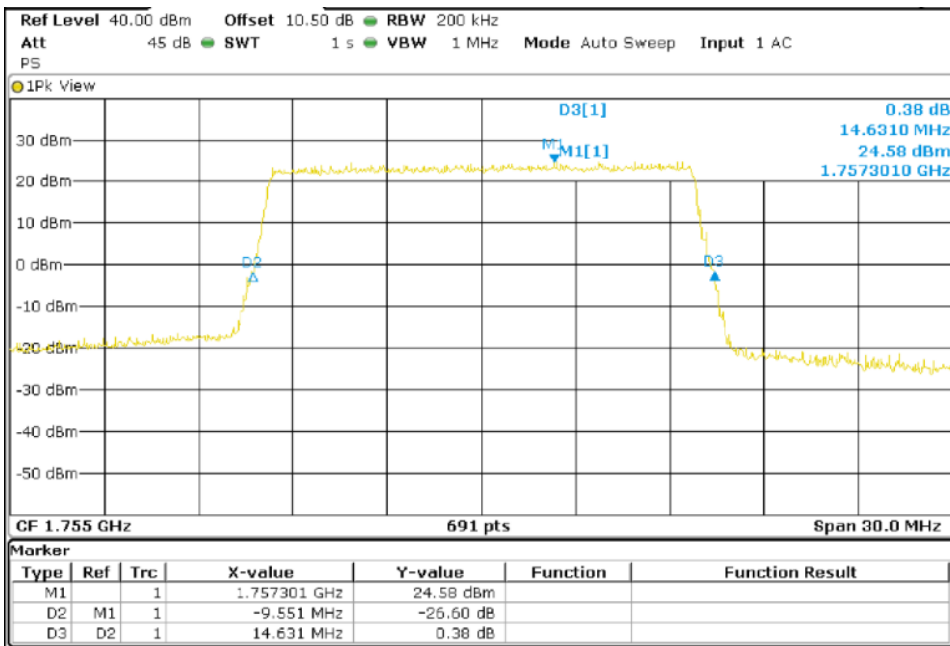


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

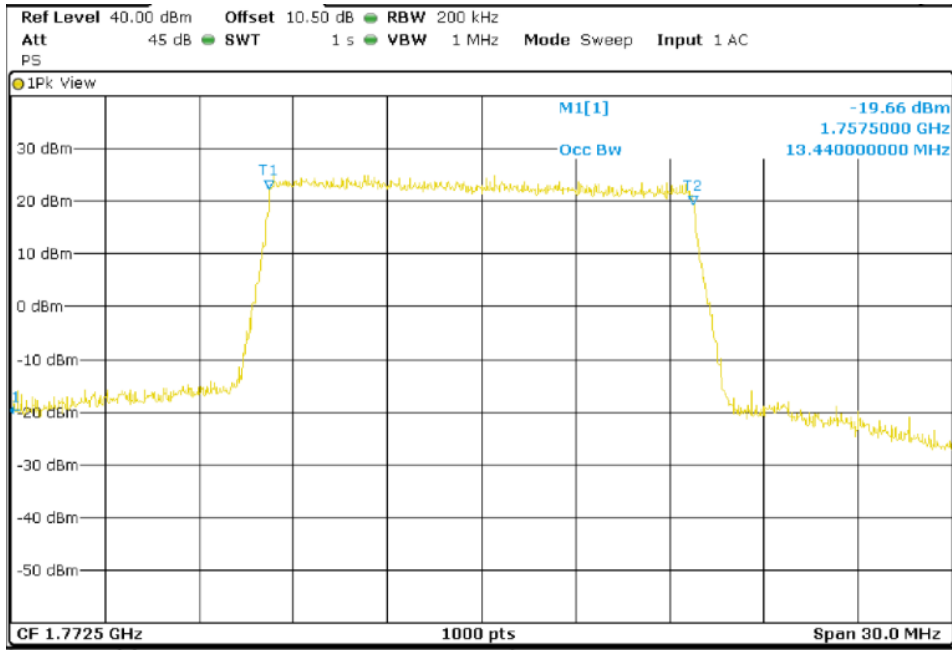


Middle Channel -26dBc Bandwidth kHz

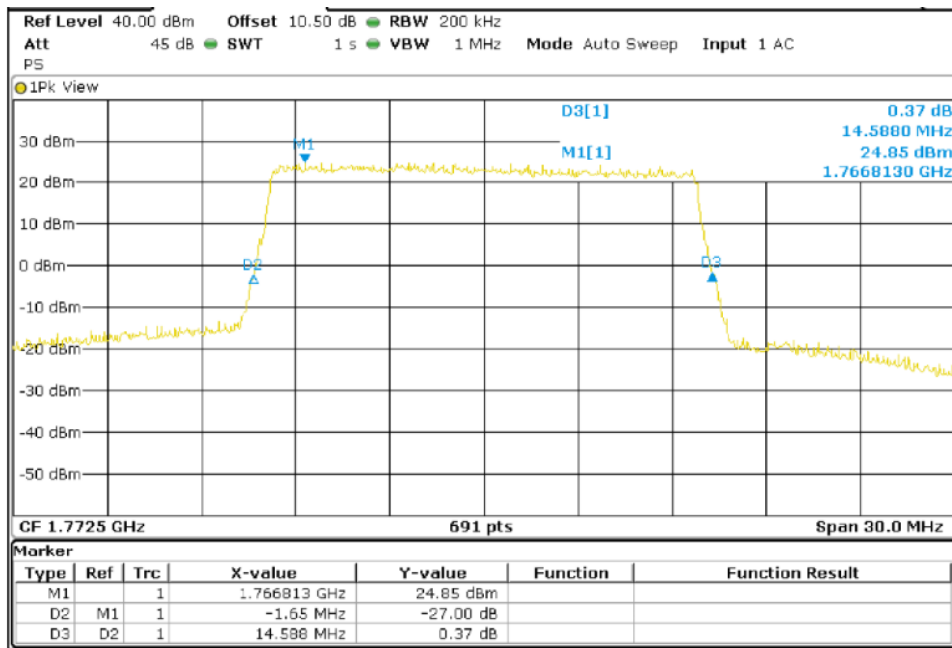


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



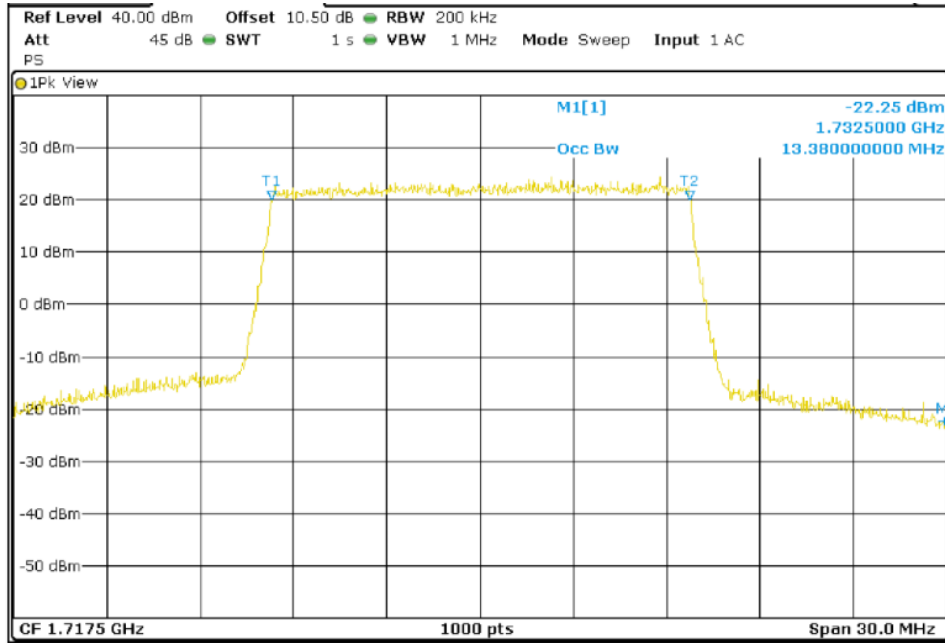
Highest Channel -26dBc Bandwidth kHz



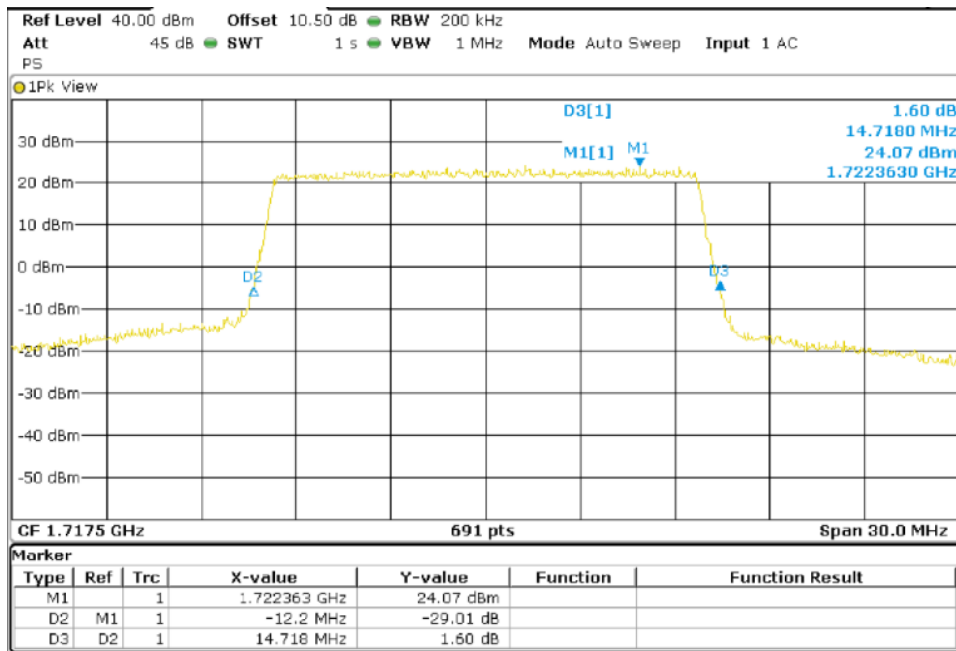
TEST RESULTS (Cont):

LTE 16QAM MODULATION. BW = 15 MHz

Lowest Channel 99% Occupied Bandwidth

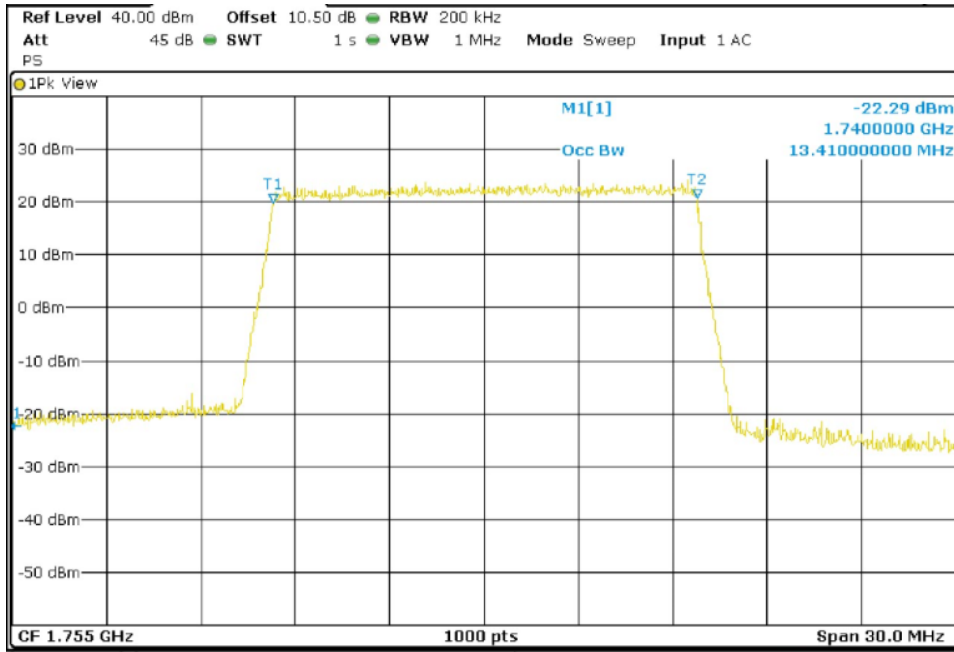


Lowest Channel -26dBc Bandwidth kHz

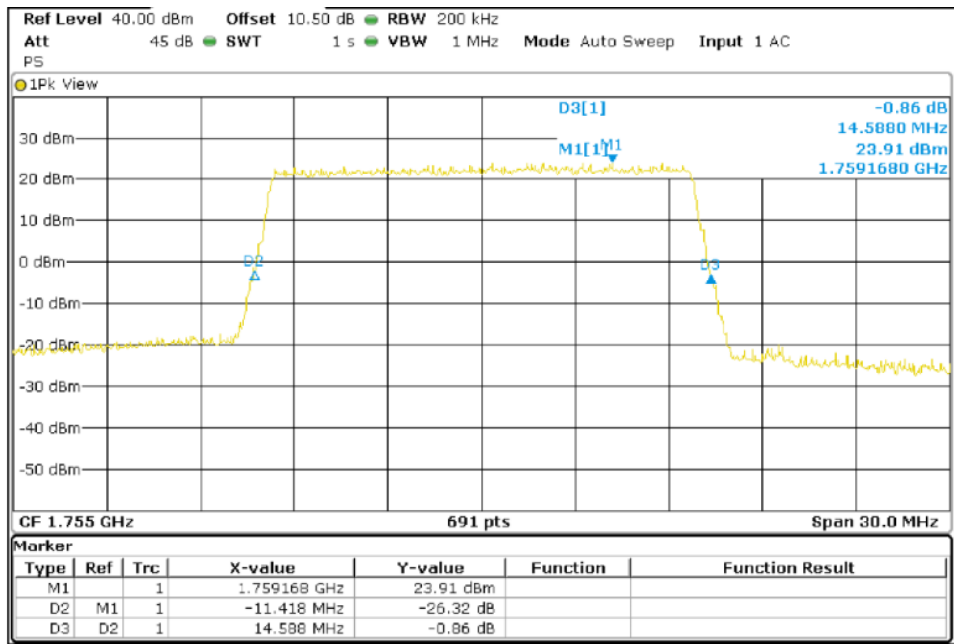


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

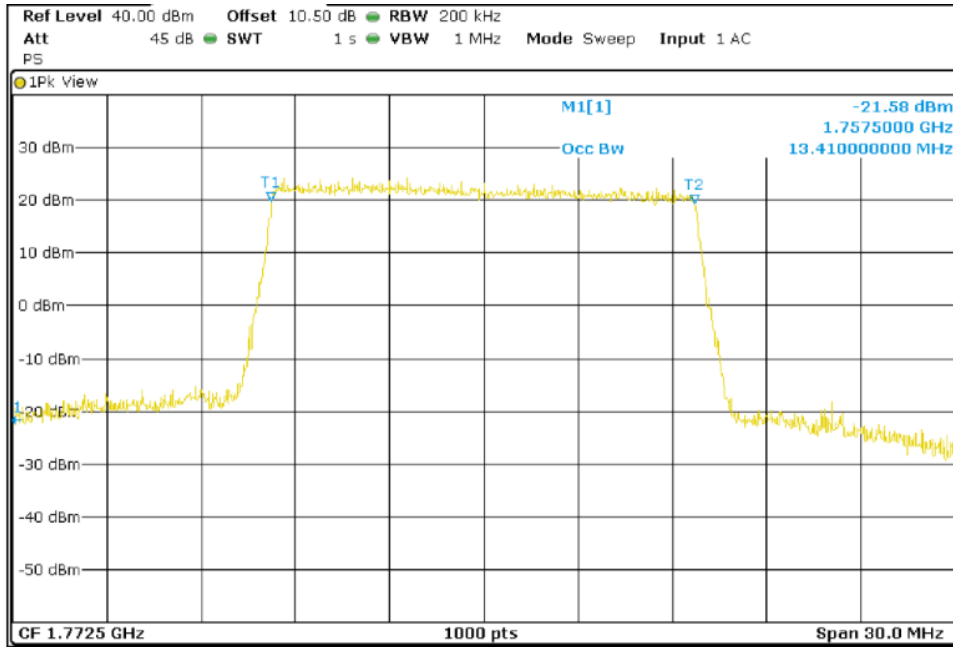


Middle Channel -26dBc Bandwidth kHz

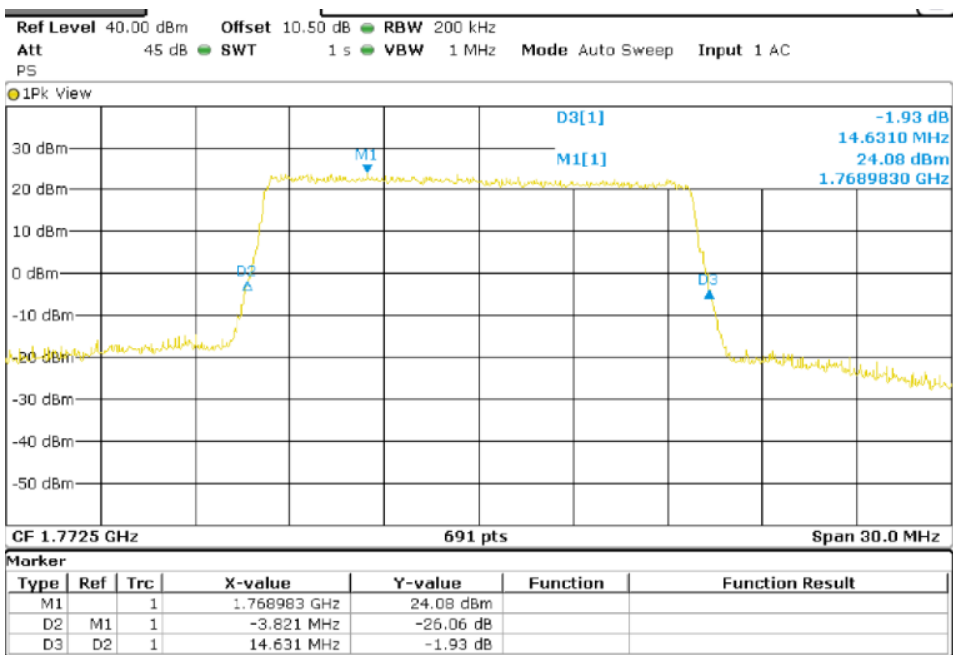


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth

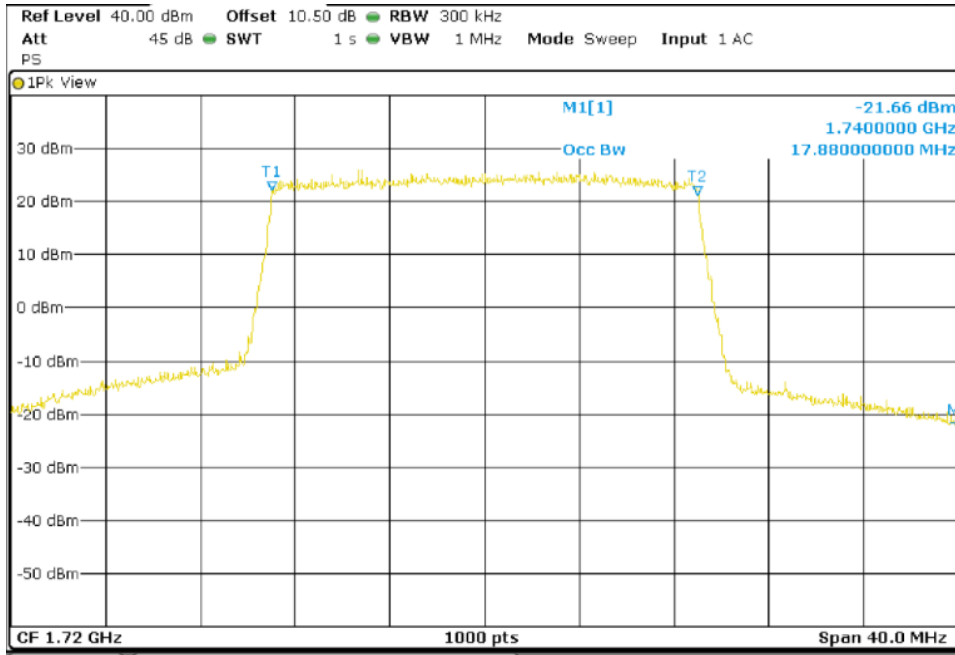


Highest Channel -26dBc Bandwidth kHz

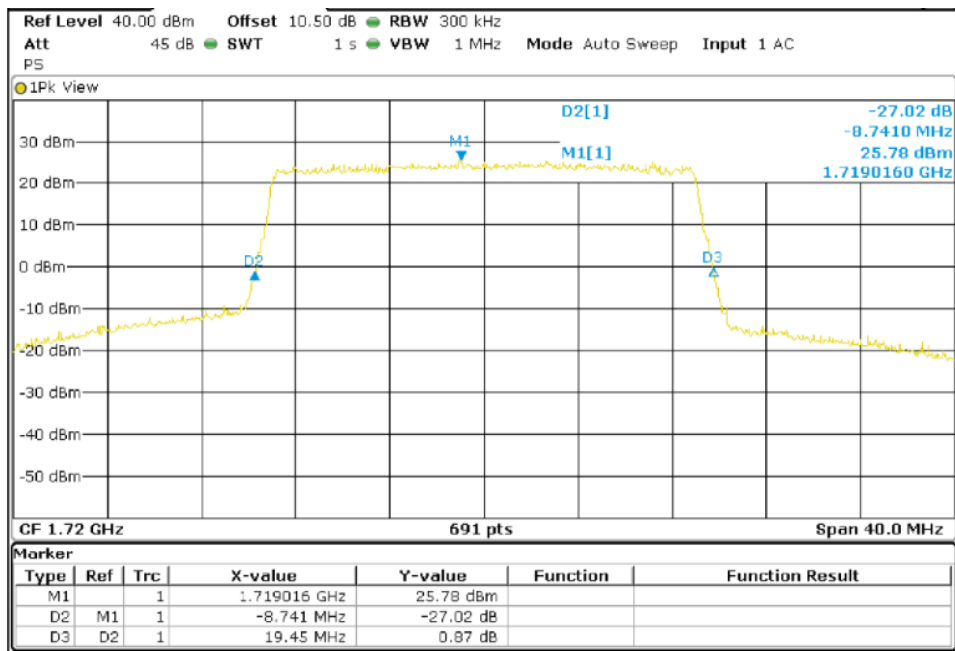


TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 20 MHz
 Lowest Channel 99% Occupied Bandwidth

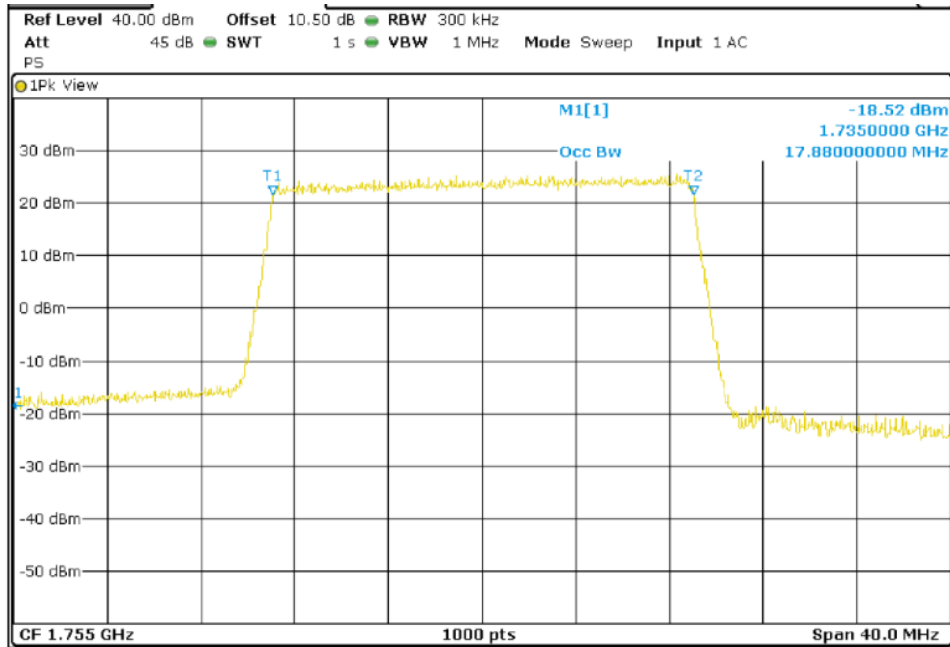


Lowest Channel -26dBc Bandwidth kHz

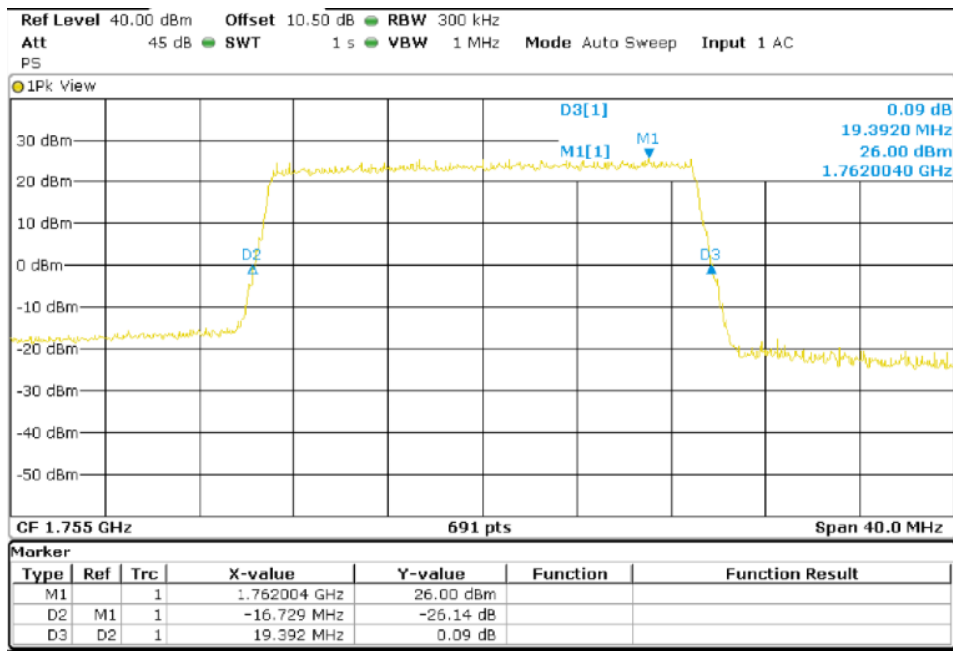


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

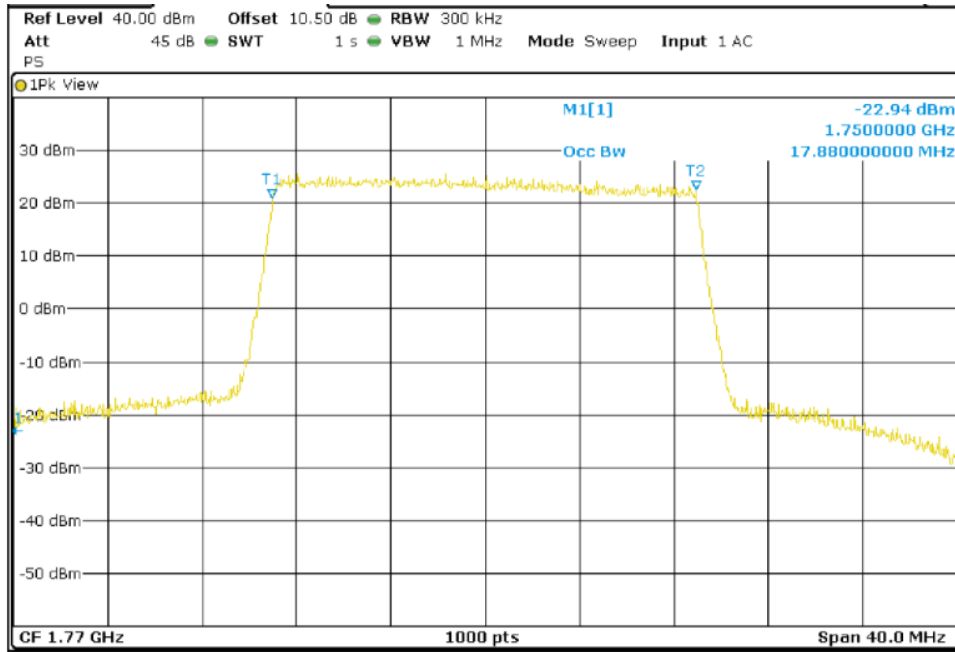


Middle Channel -26dBc Bandwidth kHz

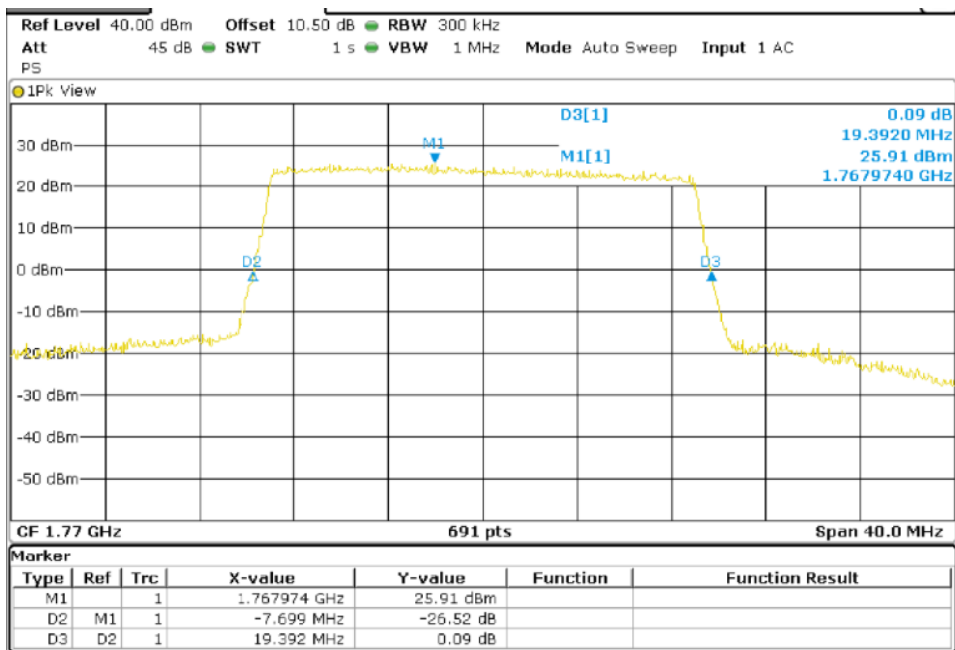


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



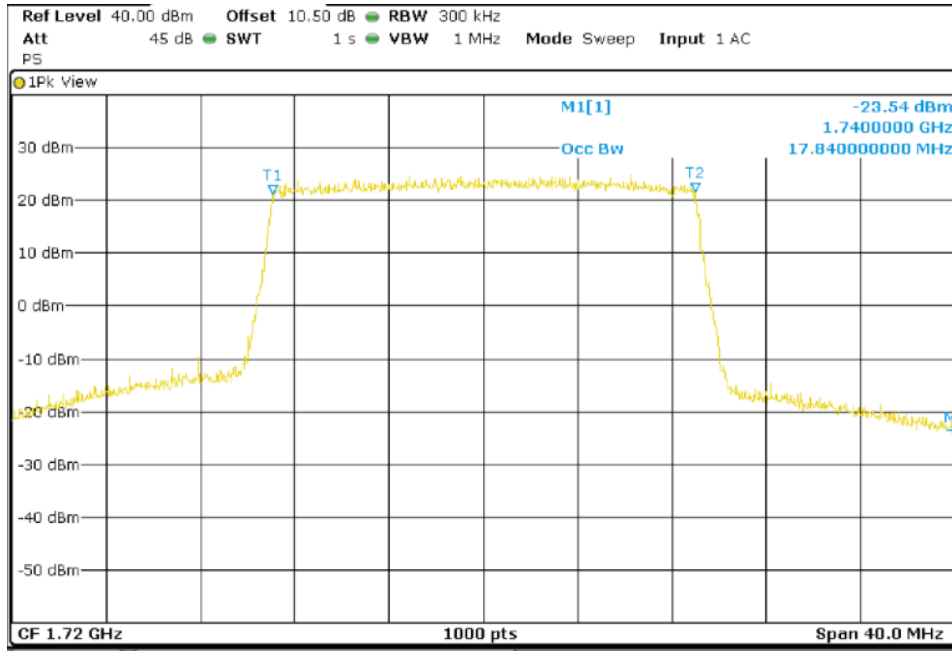
Highest Channel -26dBc Bandwidth kHz



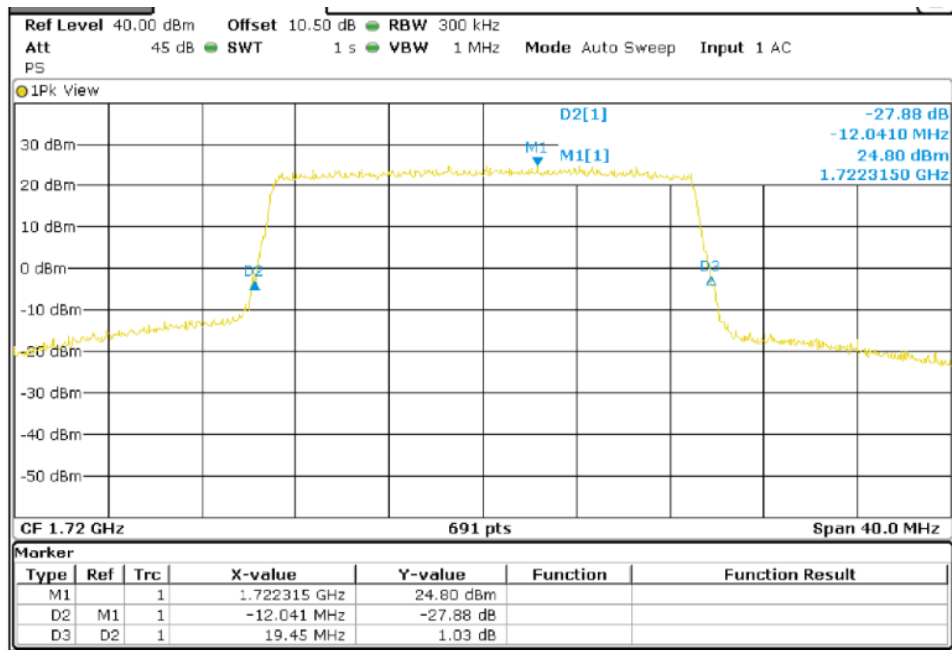
TEST RESULTS (Cont):

LTE 16QAM MODULATION. BW = 20 MHz

Lowest Channel 99% Occupied Bandwidth

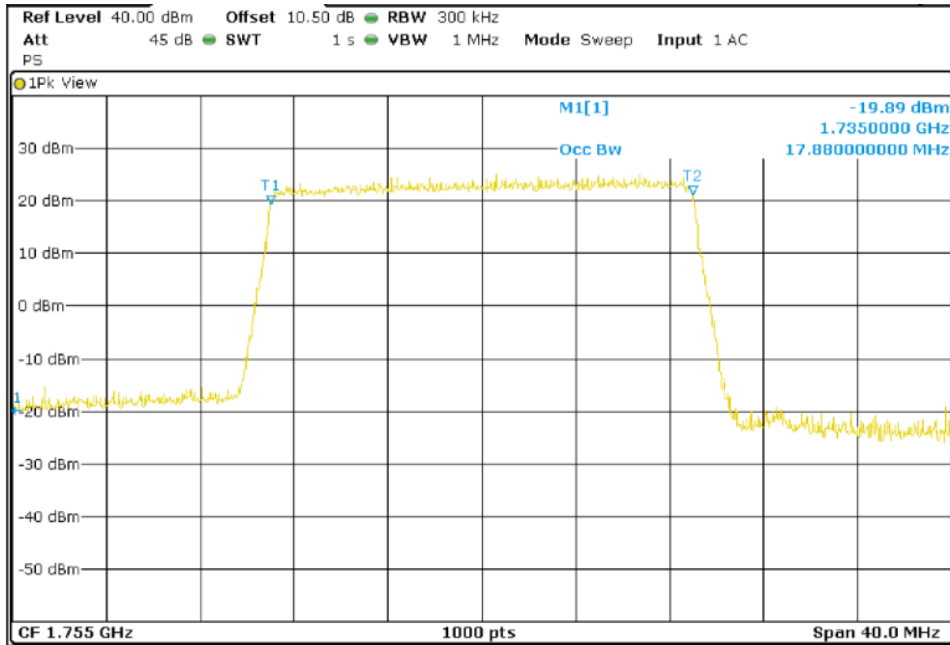


Lowest Channel -26dBc Bandwidth kHz

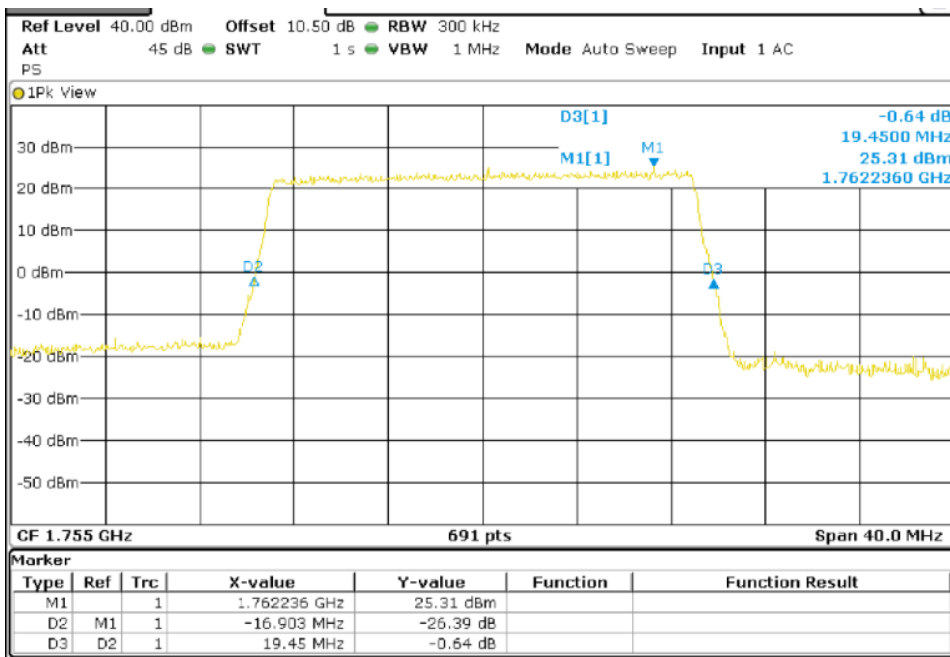


TEST RESULTS (Cont):

Middle Channel 99% Occupied Bandwidth

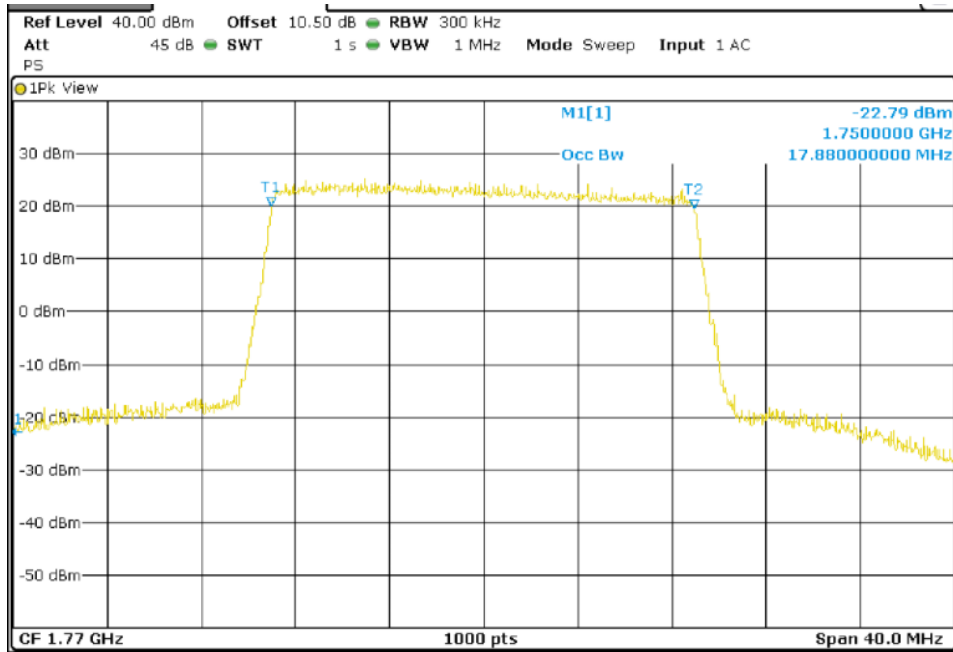


Middle Channel -26dBc Bandwidth kHz

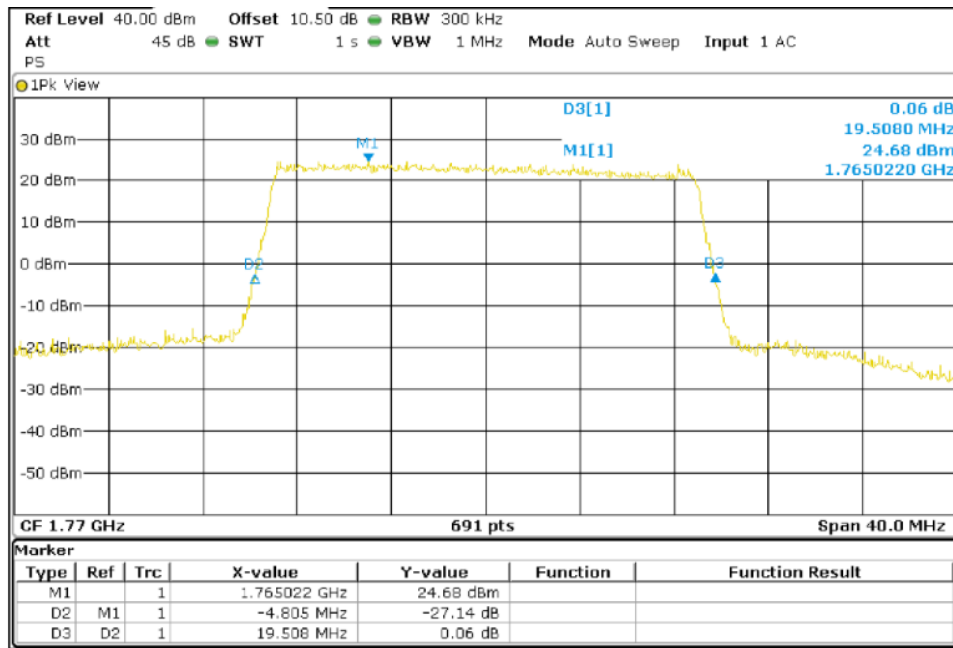


TEST RESULTS (Cont):

Highest Channel 99% Occupied Bandwidth



Highest Channel -26dBc Bandwidth kHz



TEST A.5: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

LIMITS:	Product standard:	FCC Part 27 / IC RSS-199
	Test standard:	FCC §2.1051 and § 27.53 / RSS-199 Clause 4.5

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:

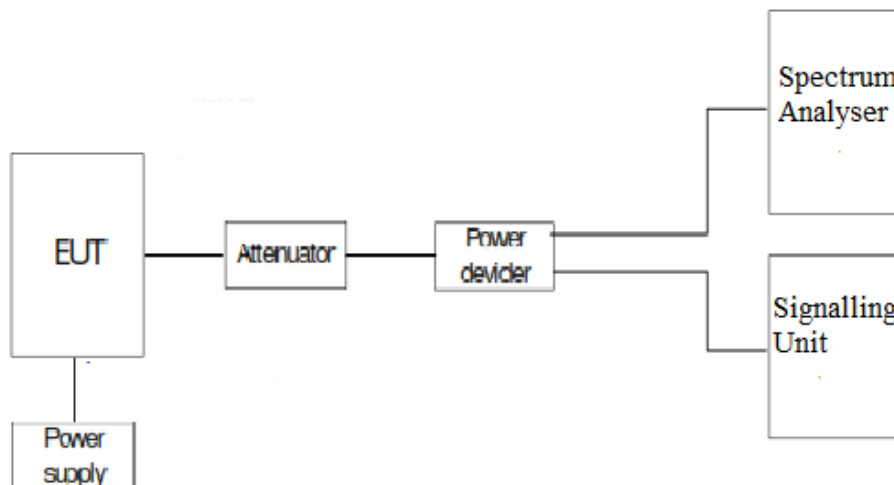
$$P_o \text{ (dBm)} - [43 + 10 \log (P_o \text{ in watts})] = -13 \text{ dBm}$$

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 Resource Blocks and modulation which is the worst case for conducted power was used.



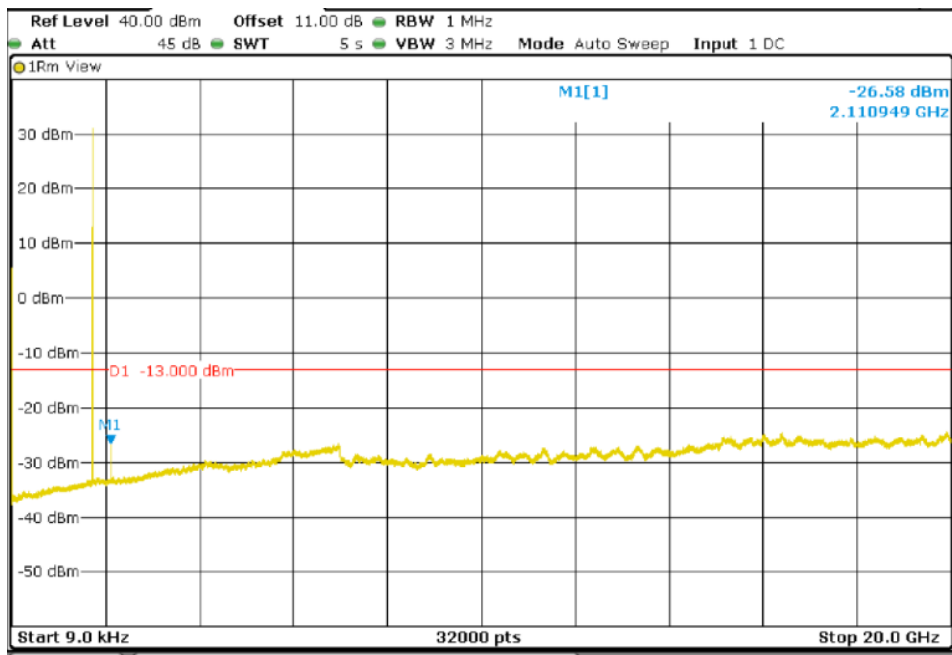
TESTED SAMPLES:	S/01																																																	
TESTED CONDITIONS MODES:	TC#01 (Band 4)																																																	
TEST RESULTS:	PASS																																																	
<p>Frequency range 9 kHz – 20 GHz</p> <p>LTE QPSK MODULATION. BW = 1.4 MHz</p> <p>Lowest Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2110.94</td> <td>-26.58</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>Middle Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2132.19</td> <td>-27.11</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>Highest Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2154.06</td> <td>-26.95</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>LTE QPSK MODULATION. BW = 3 MHz</p> <p>Lowest Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2111.56</td> <td>-25.48</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>Middle Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2132.81</td> <td>-25.66</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>Highest Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2153.44</td> <td>-25.72</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>LTE QPSK MODULATION. BW = 5 MHz</p> <p>Lowest Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2112.81</td> <td>-25.53</td> <td>< ± 1.20</td> </tr> </tbody> </table> <p>Middle Channel</p> <table border="1"> <thead> <tr> <th>Spurious frequency (MHz)</th> <th>Level (dBm)</th> <th>Measurement uncertainty (dB)</th> </tr> </thead> <tbody> <tr> <td>2133.44</td> <td>-25.33</td> <td>< ± 1.20</td> </tr> </tbody> </table>			Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2110.94	-26.58	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2132.19	-27.11	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2154.06	-26.95	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2111.56	-25.48	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2132.81	-25.66	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2153.44	-25.72	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2112.81	-25.53	< ± 1.20	Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)	2133.44	-25.33	< ± 1.20
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TEST RESULTS (Cont):		
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2151.56	-25.71	< ± 1.20
LTE QPSK MODULATION. BW = 10 MHz		
Lowest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2118.44	-25.58	< ± 1.20
Middle Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2130.94	-25.57	< ± 1.20
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2152.81	-26.08	< ± 1.20
LTE QPSK MODULATION. BW = 15 MHz		
Lowest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2121.56	-25.66	< ± 1.20
Middle Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2129.06	-25.73	< ± 1.20
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2144.06	-25.31	< ± 1.20
LTE QPSK MODULATION. BW = 20 MHz		
Lowest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2120.31	-25.55	< ± 1.20
Middle Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2130.31	-25.52	< ± 1.20
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2145.31	-25.44	< ± 1.20

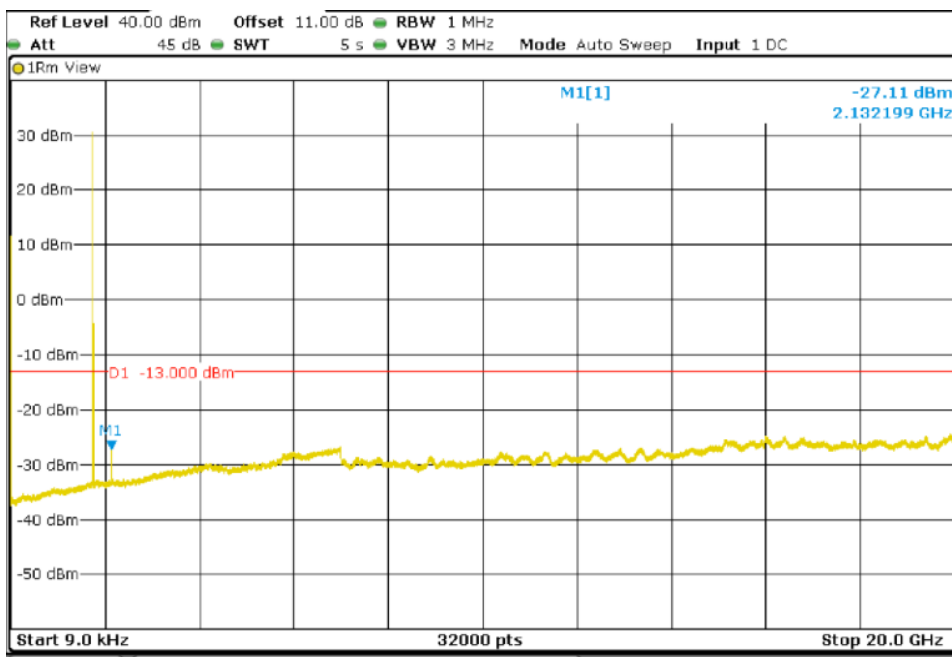
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 1.4MHz

Lowest Channel

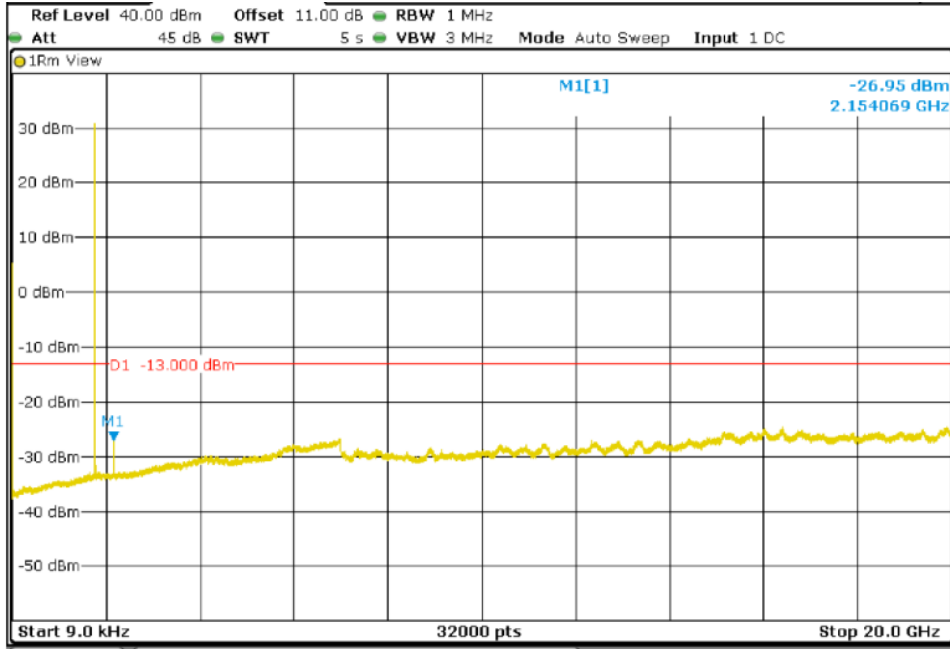


Middle Channel



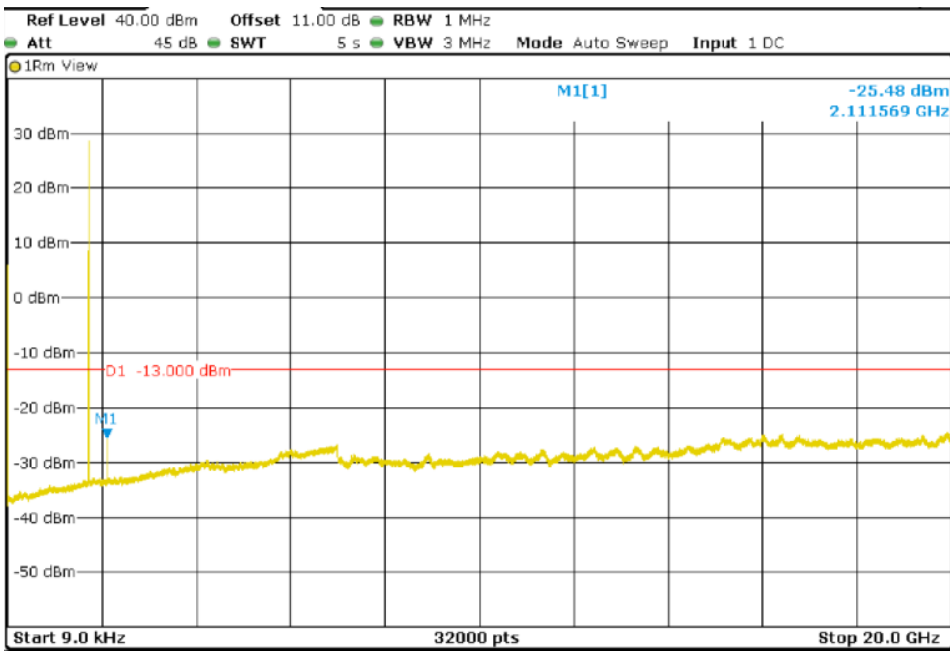
TEST RESULTS (Cont):

Highest Channel



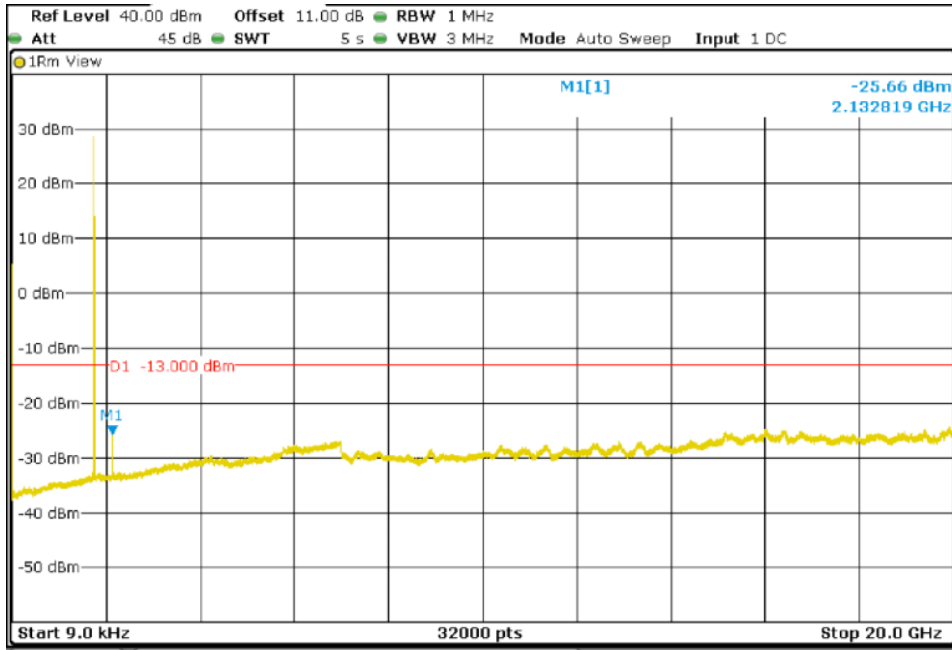
LTE QPSK MODULATION. BW = 3 MHz

Lowest Channel

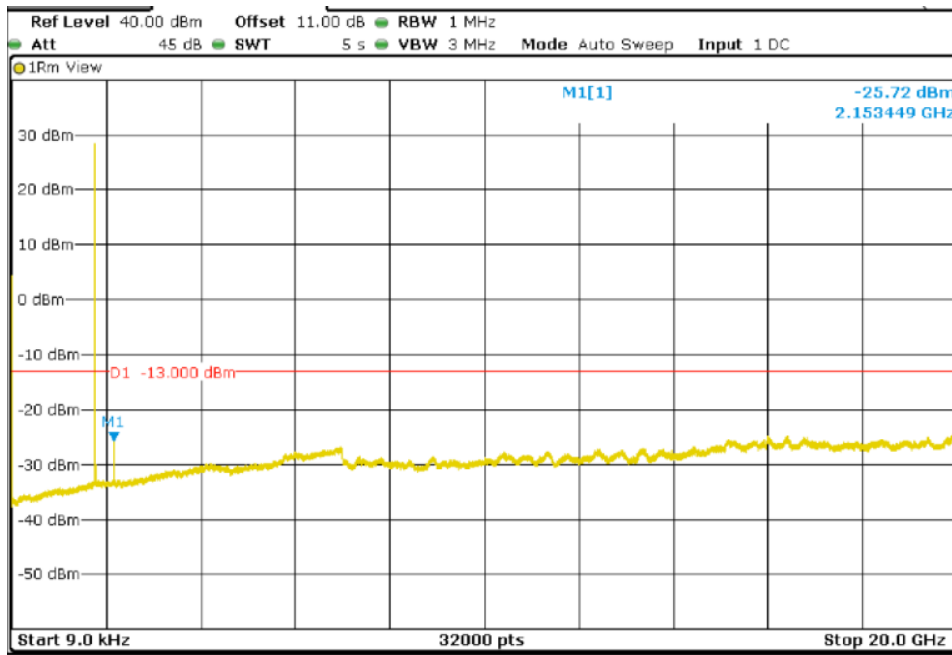


TEST RESULTS (Cont):

Middle Channel



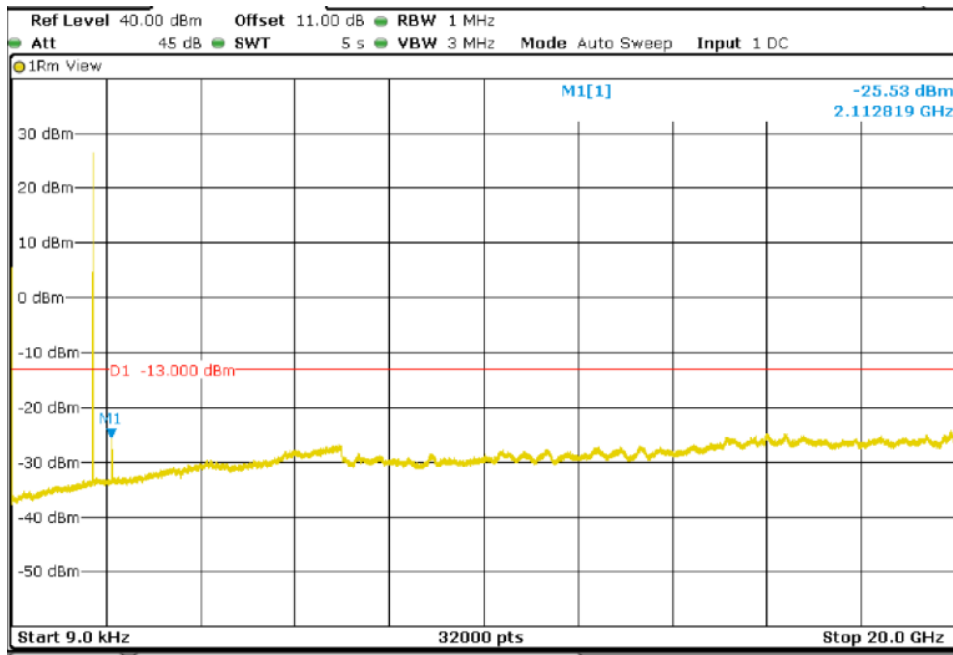
Highest Channel



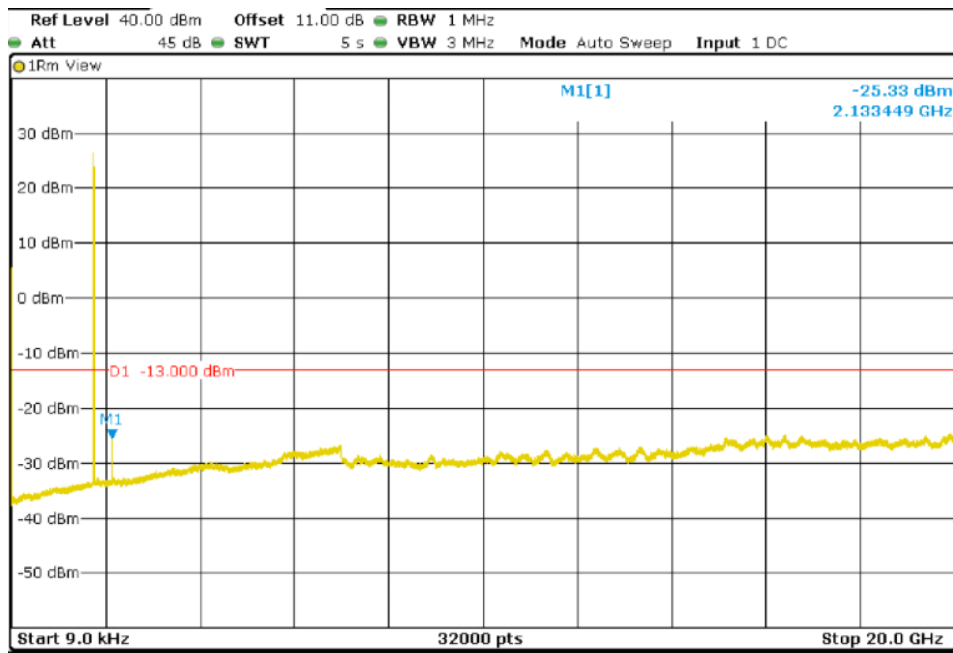
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel

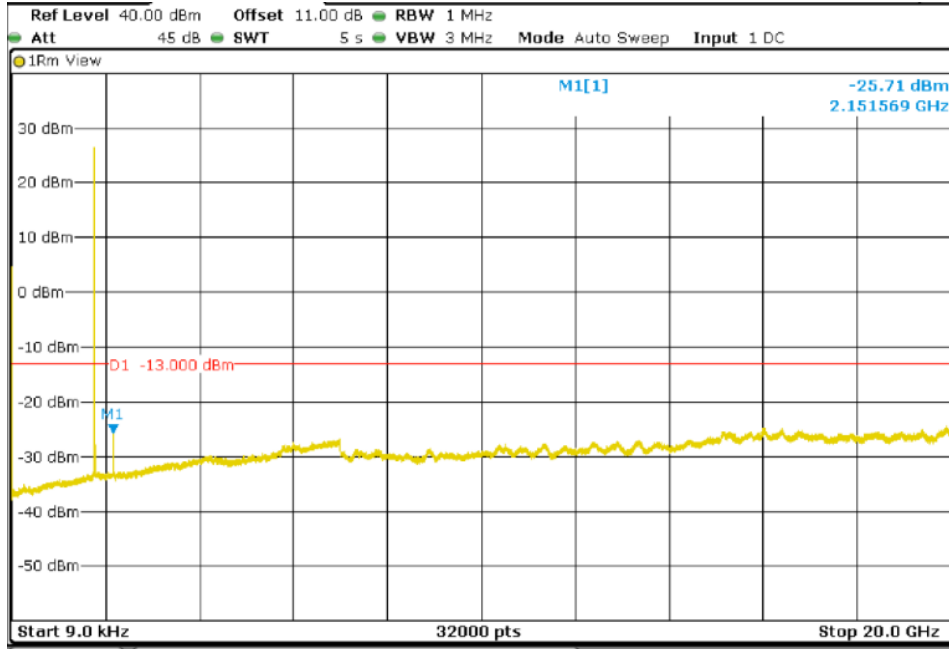


Middle Channel



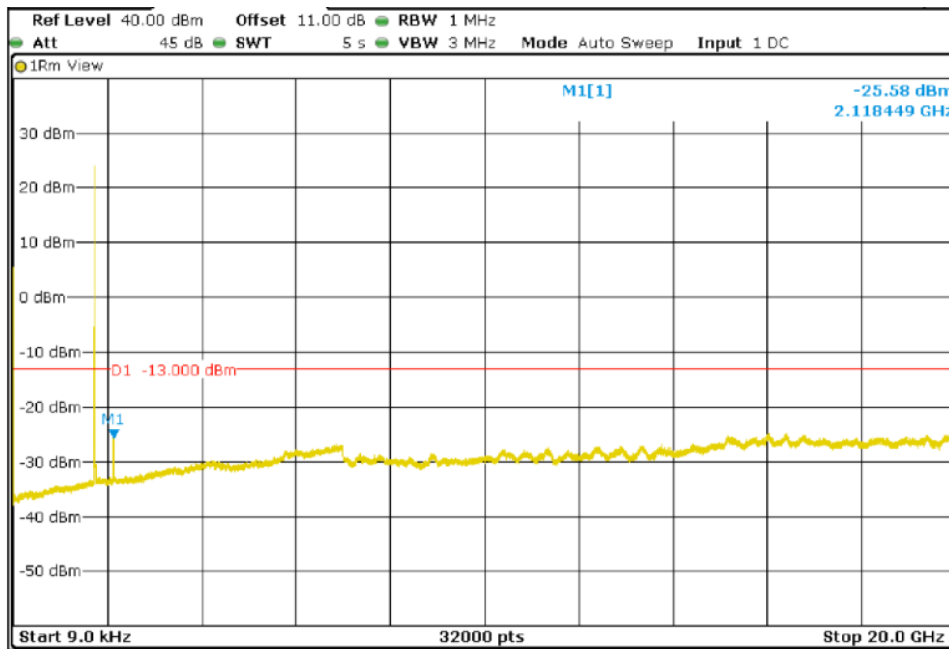
TEST RESULTS (Cont):

Highest Channel



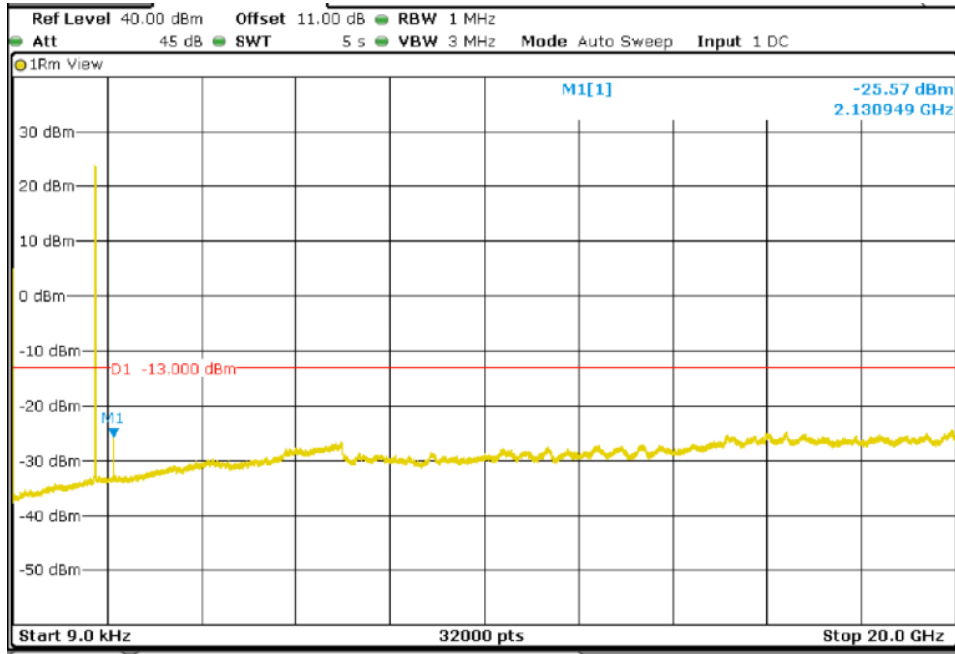
LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel

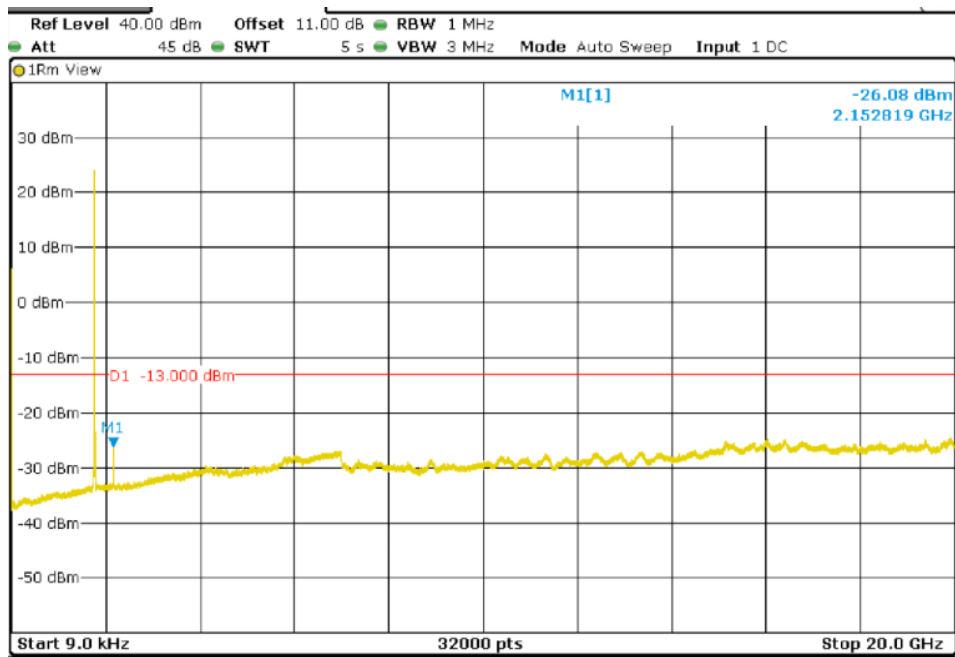


TEST RESULTS (Cont):

Middle Channel



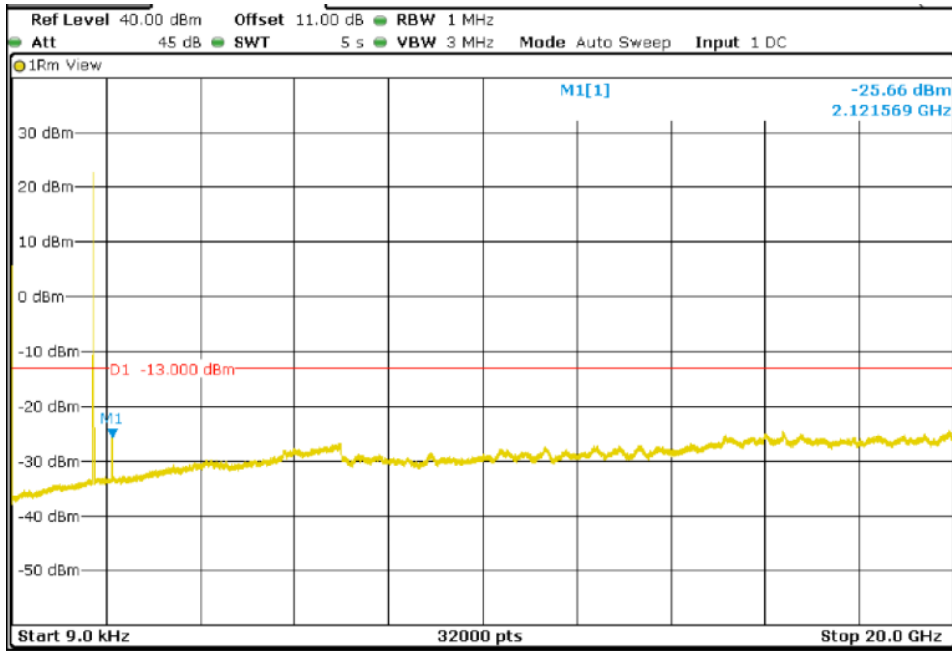
Highest Channel



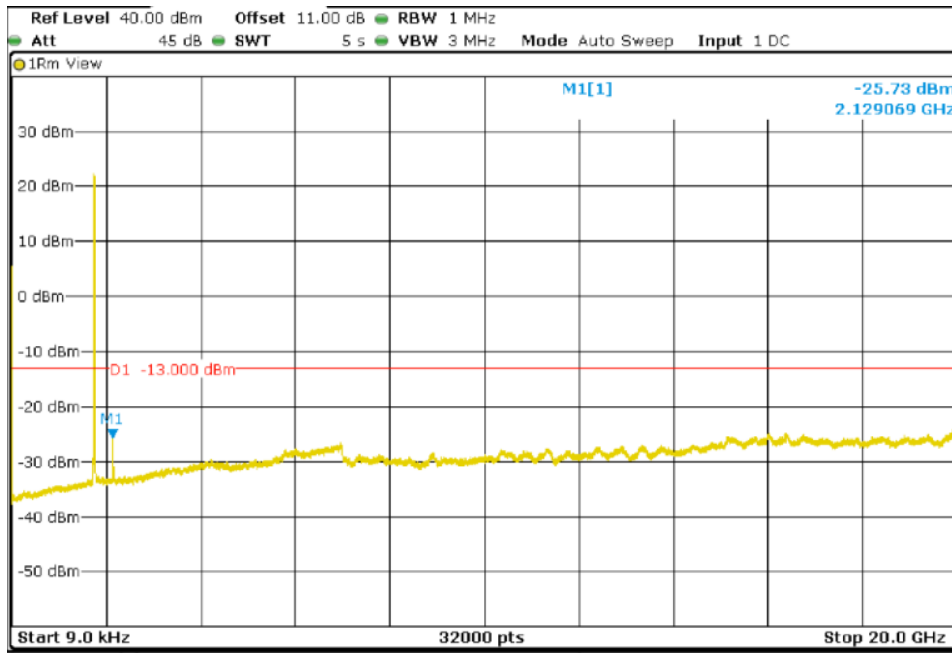
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 15 MHz

Lowest Channel

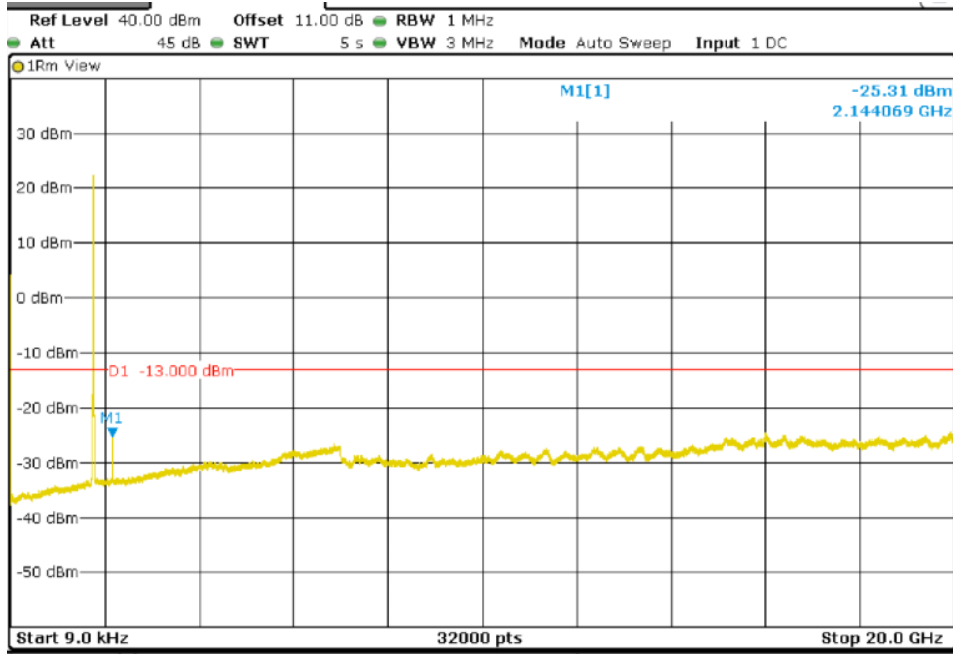


Middle Channel



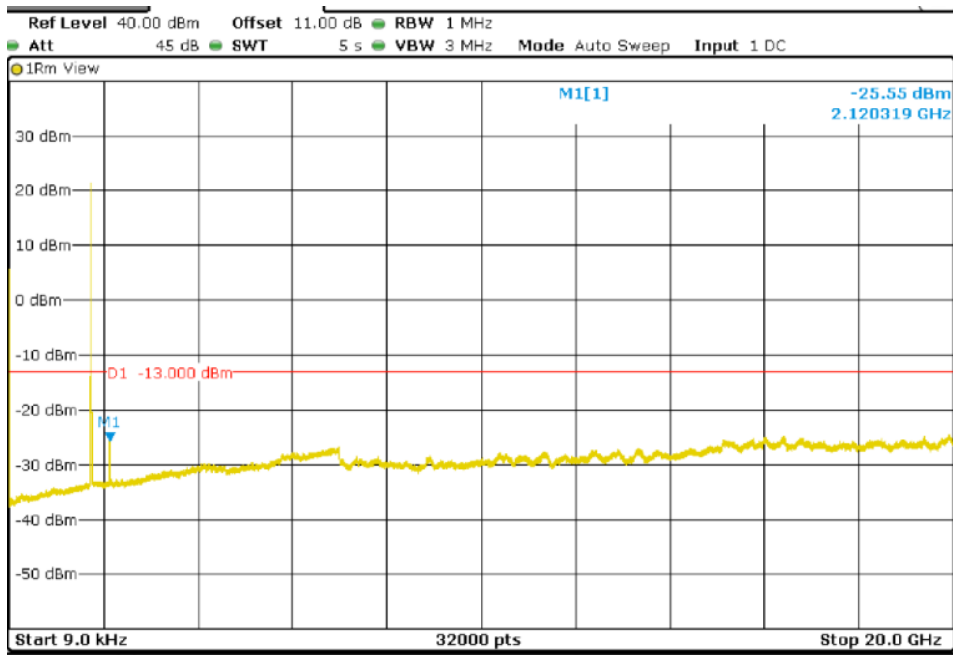
TEST RESULTS (Cont):

Highest Channel



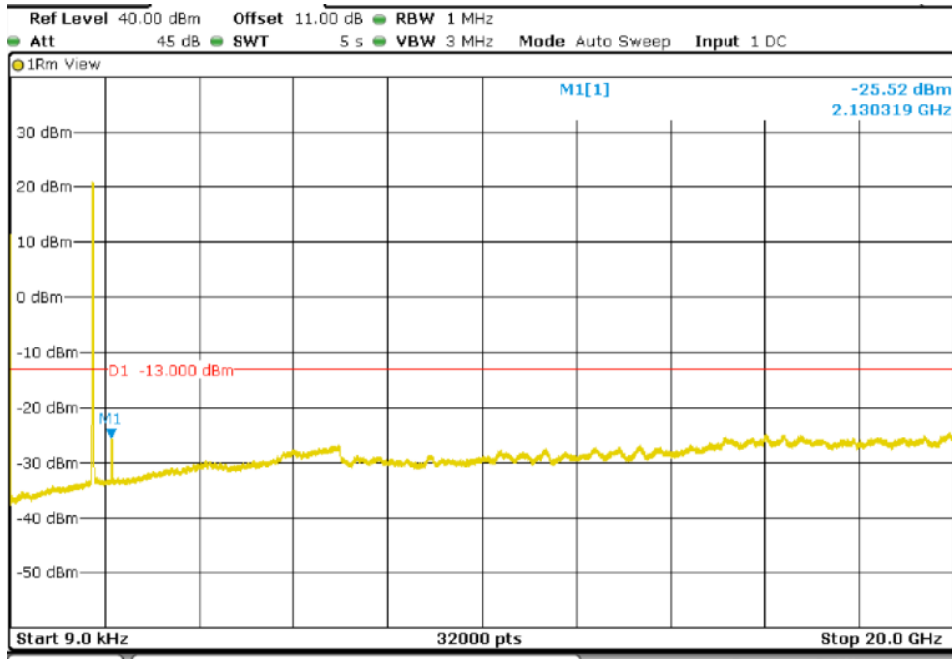
LTE QPSK MODULATION. BW = 20 MHz

Lowest Channel

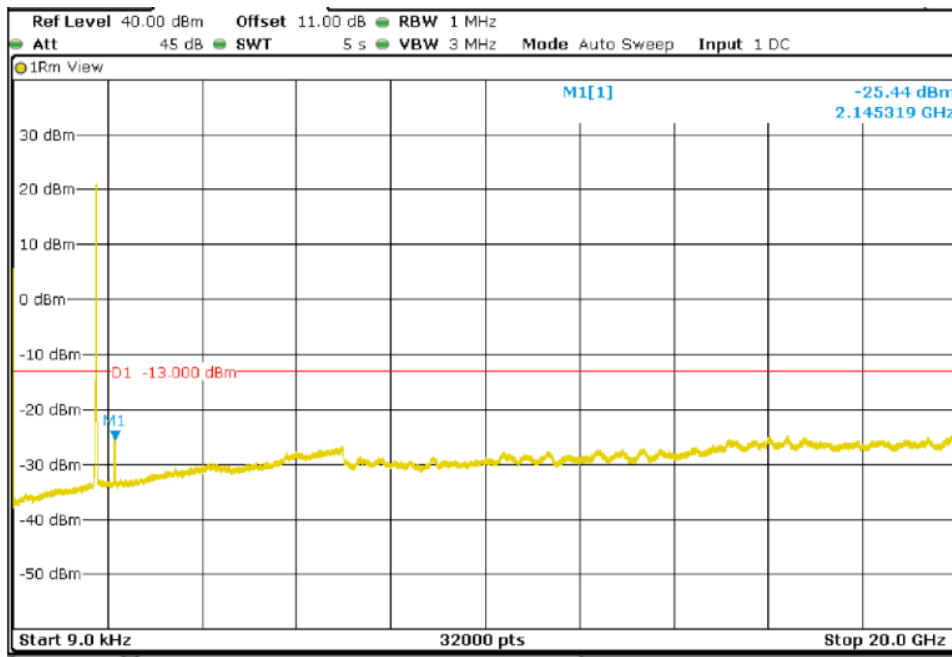


TEST RESULTS (Cont):

Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (Band 7)
TEST RESULTS:	PASS

Frequency range 9 KHz – 25 GHz

LTE QPSK MODULATION. BW = 5 MHz

Lowest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2623.75	-25.51	< ± 1.20

Middle Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2655.00	-25.74	< ± 1.20

Highest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2687.81	-25.79	< ± 1.20

LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2627.66	-25.60	< ± 1.20

Middle Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2652.66	-25.33	< ± 1.20

Highest Channel

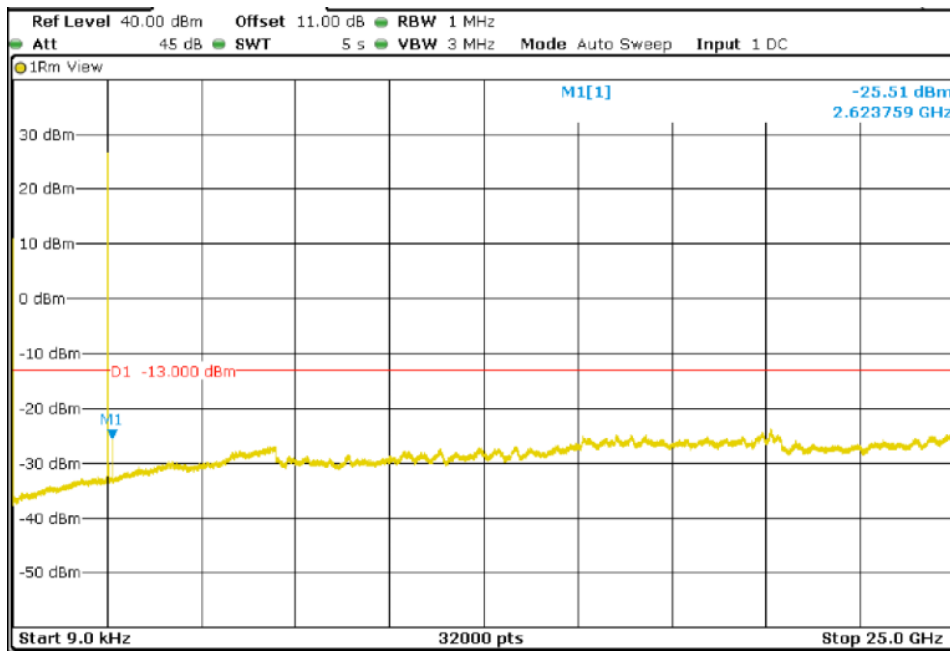
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2687.81	-25.68	< ± 1.20

TEST RESULTS (Cont.):		
LTE QPSK MODULATION. BW = 15 MHz		
Lowest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2626.87	-25.50	< ± 1.20
Middle Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2654.22	-25.75	< ± 1.20
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2680.78	-25.83	< ± 1.20
LTE QPSK MODULATION. BW = 20 MHz		
Lowest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2627.66	-25.48	< ± 1.20
Middle Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2647.97	-25.30	< ± 1.20
Highest Channel		
Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
2673.75	-25.50	< ± 1.20

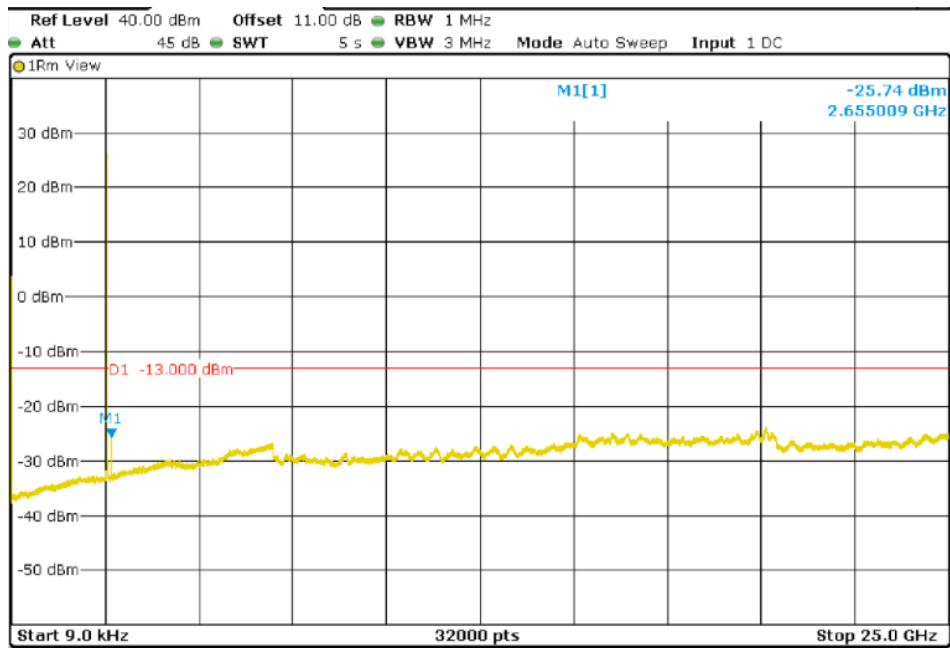
TEST RESULTS (Cont.):

LTE QPSK MODULATION. BW = 5MHz

Lowest Channel

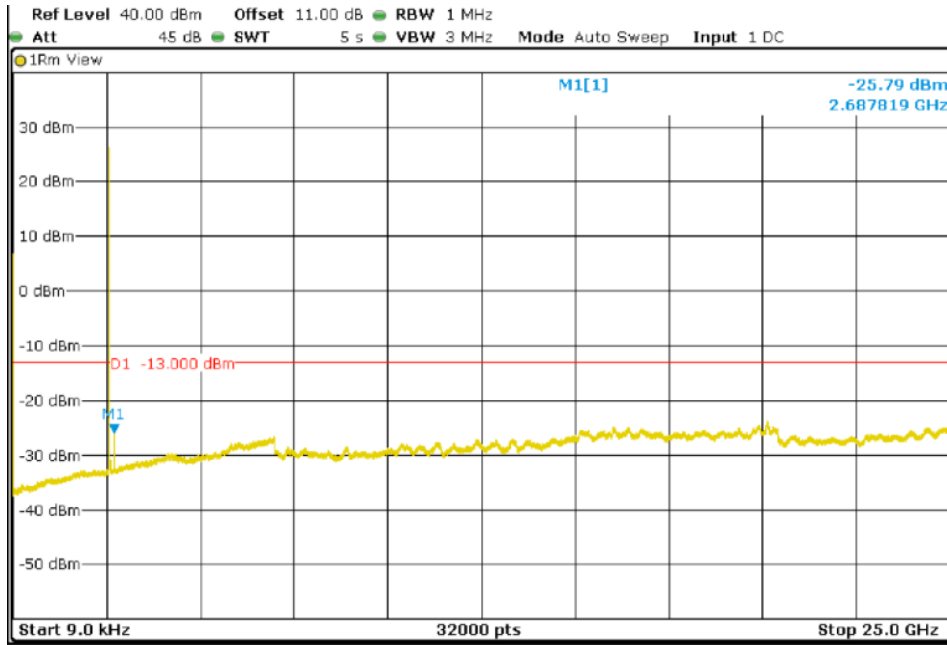


Middle Channel



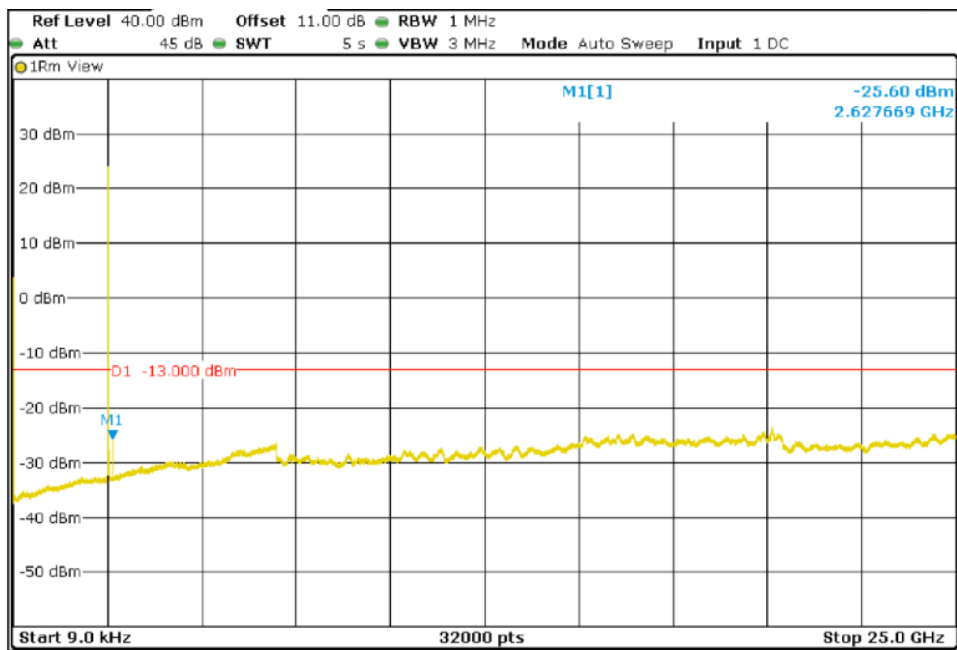
TEST RESULTS (Cont):

Highest Channel



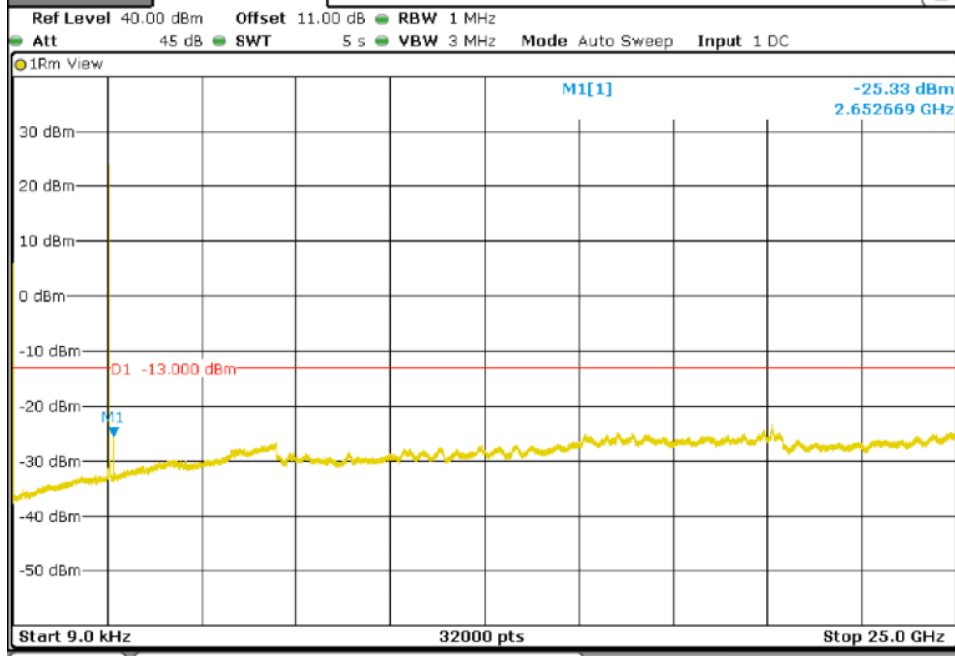
LTE QPSK MODULATION. BW = 10 MHz

Lowest Channel

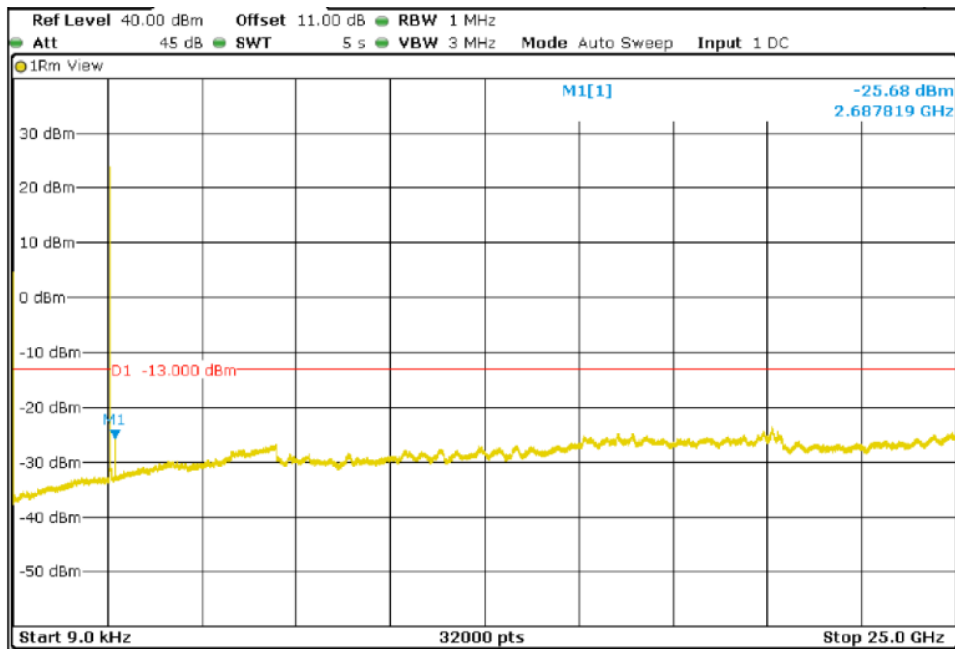


TEST RESULTS (Cont):

Middle Channel



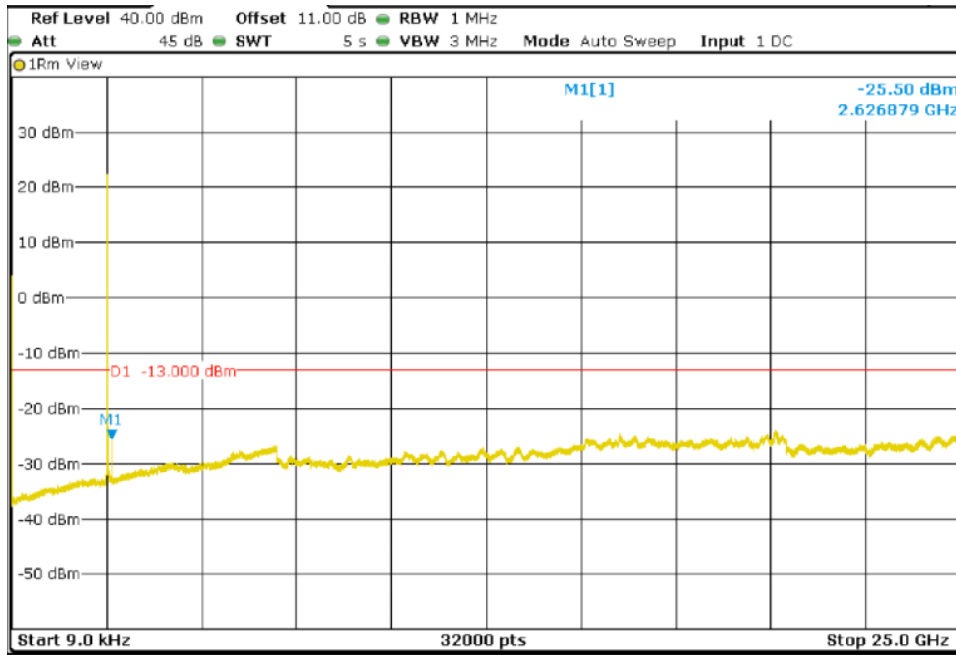
Highest Channel



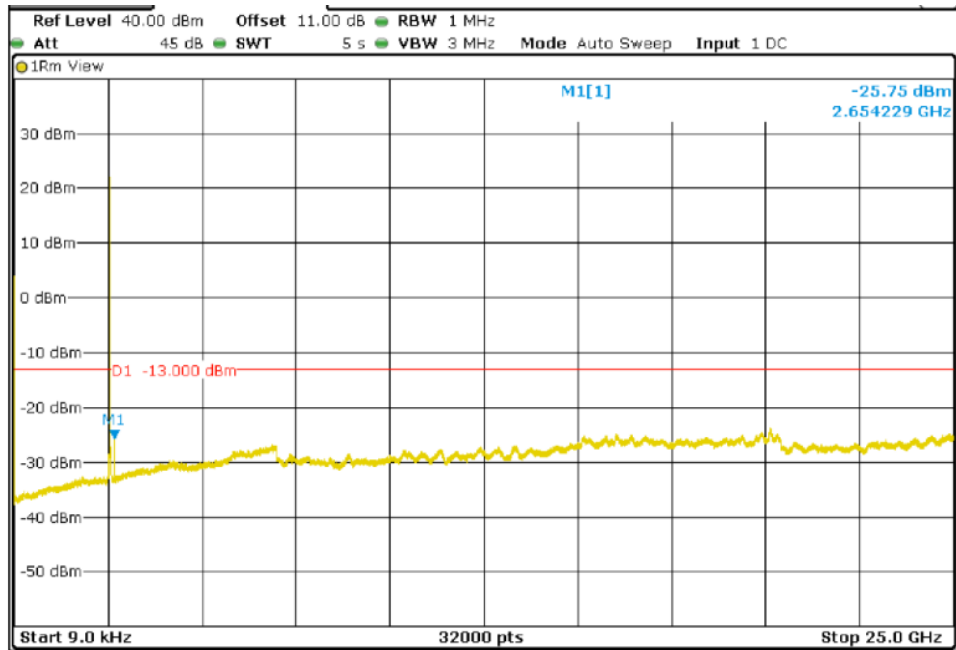
TEST RESULTS (Cont):

LTE QPSK MODULATION. BW = 15 MHz

Lowest Channel

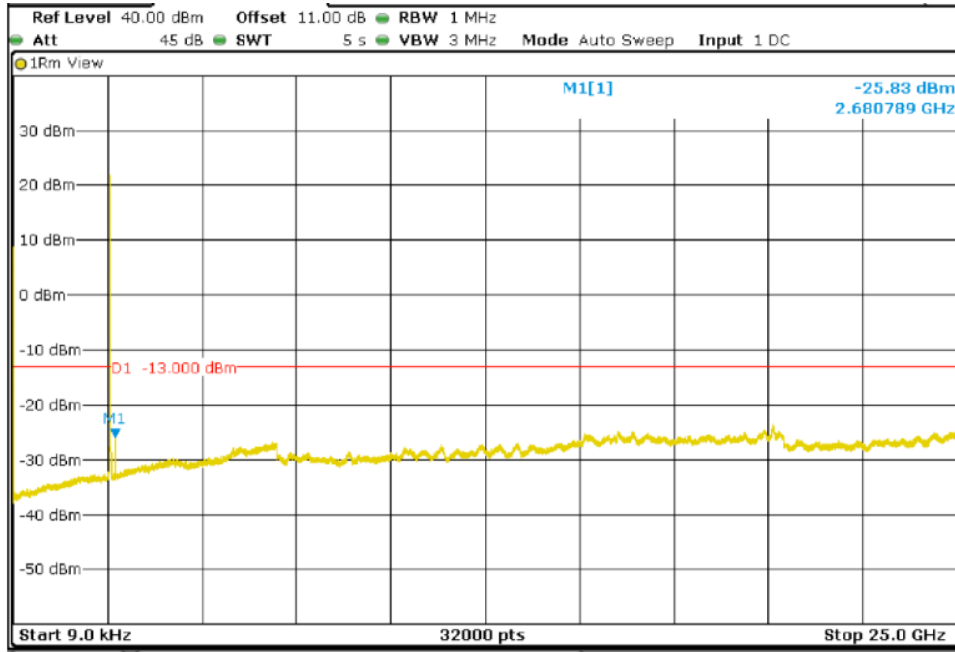


Middle Channel



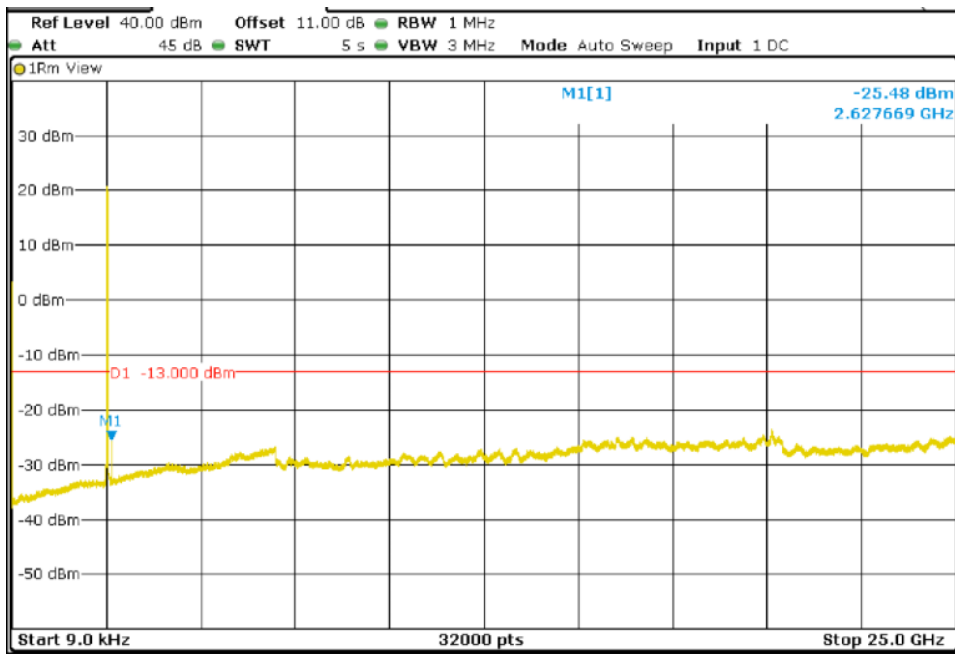
TEST RESULTS (Cont):

Highest Channel



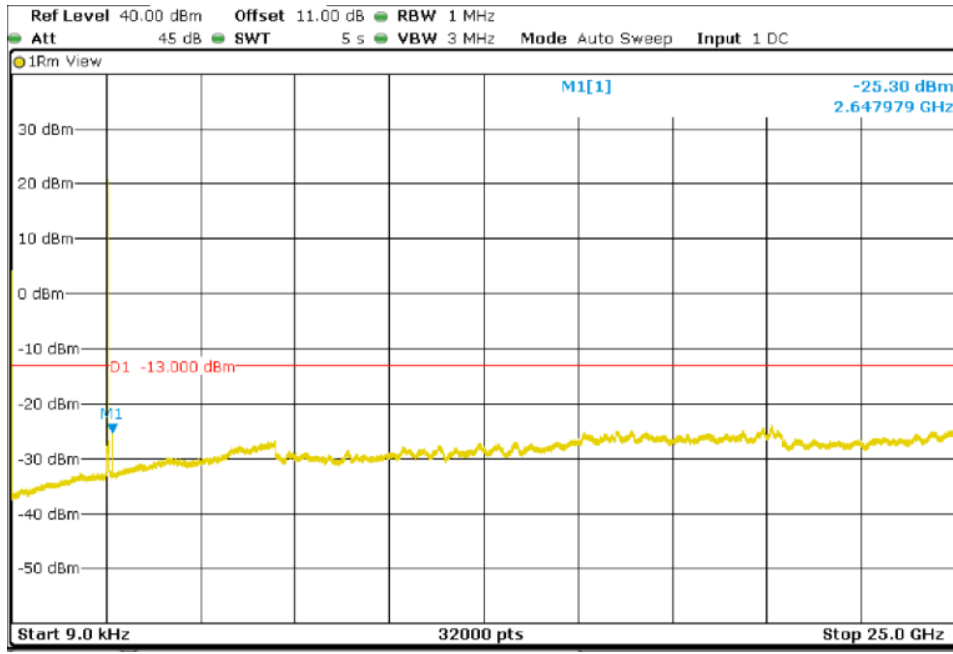
LTE QPSK MODULATION. BW = 20 MHz

Lowest Channel

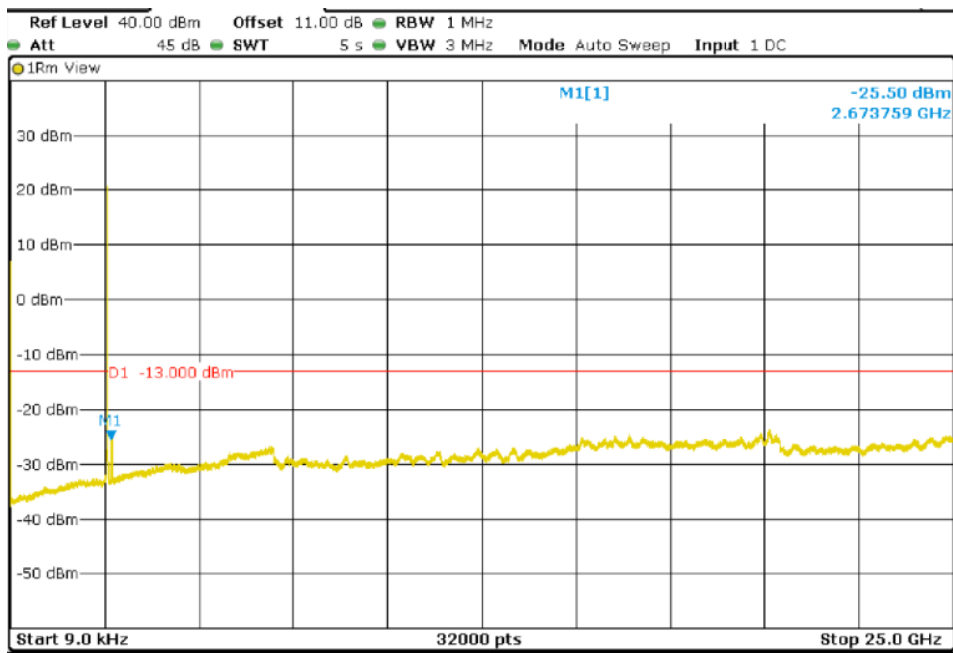


TEST RESULTS (Cont):

Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (Band 12)
TEST RESULTS:	PASS

Frequency range 9 kHz – 20 GHz

LTE QPSK MODULATION. BW = 1.4 MHz

Lowest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
729.69	-24.98	< ± 1.20

Middle Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
737.81	-25.84	< ± 1.20

Highest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
745.31	-25.07	< ± 1.20

LTE QPSK MODULATION. BW = 3 MHz

Lowest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
730.31	-24.03	< ± 1.20

Middle Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
737.81	-24.19	< ± 1.20

Highest Channel

Spurious frequency (MHz)	Level (dBm)	Measurement uncertainty (dB)
744.69	-23.71	< ± 1.20