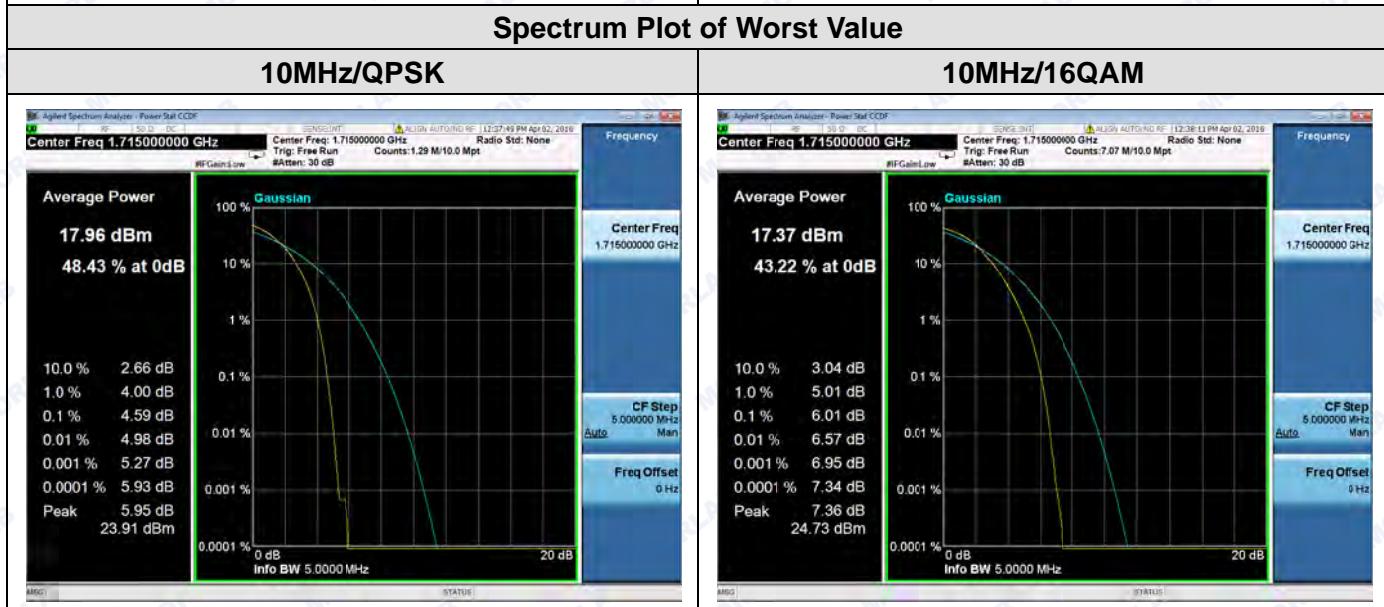
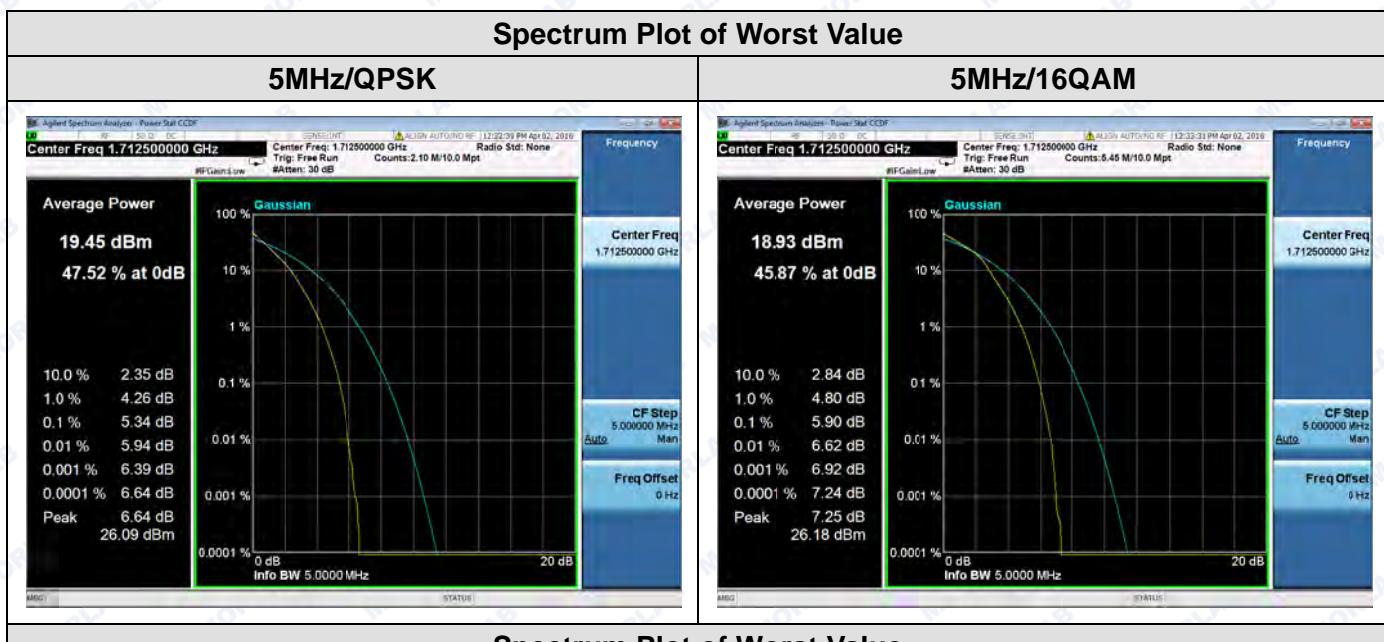




REPORT No.: SZ16030092W05

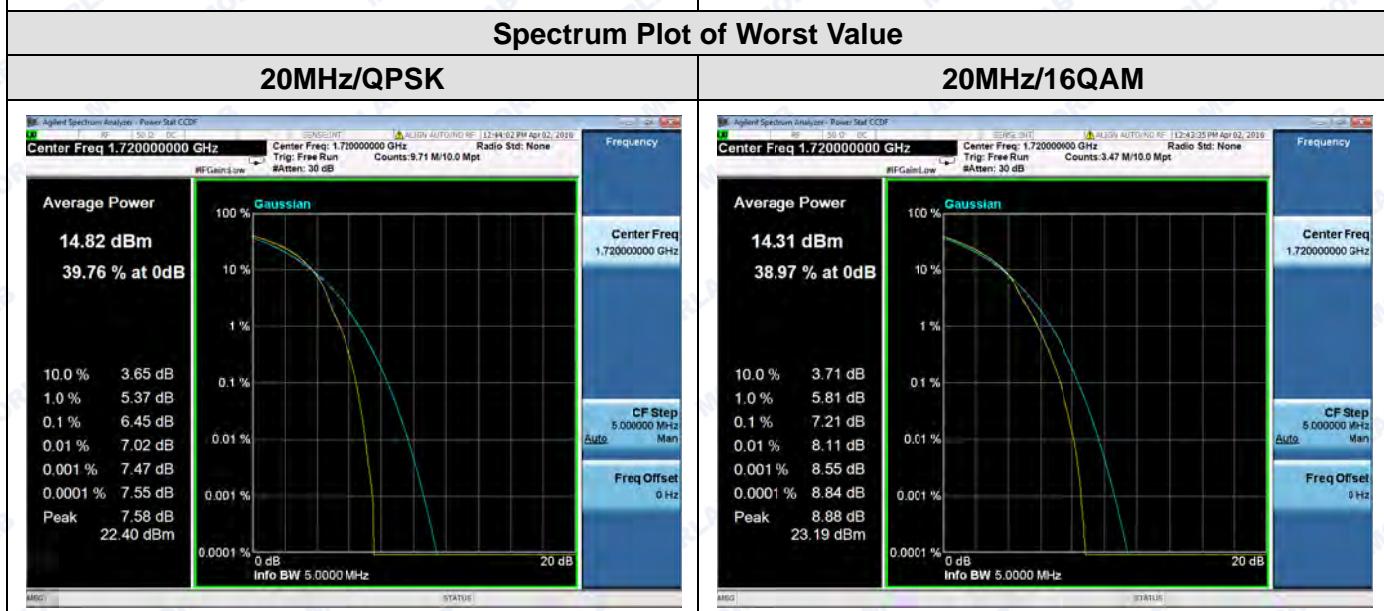
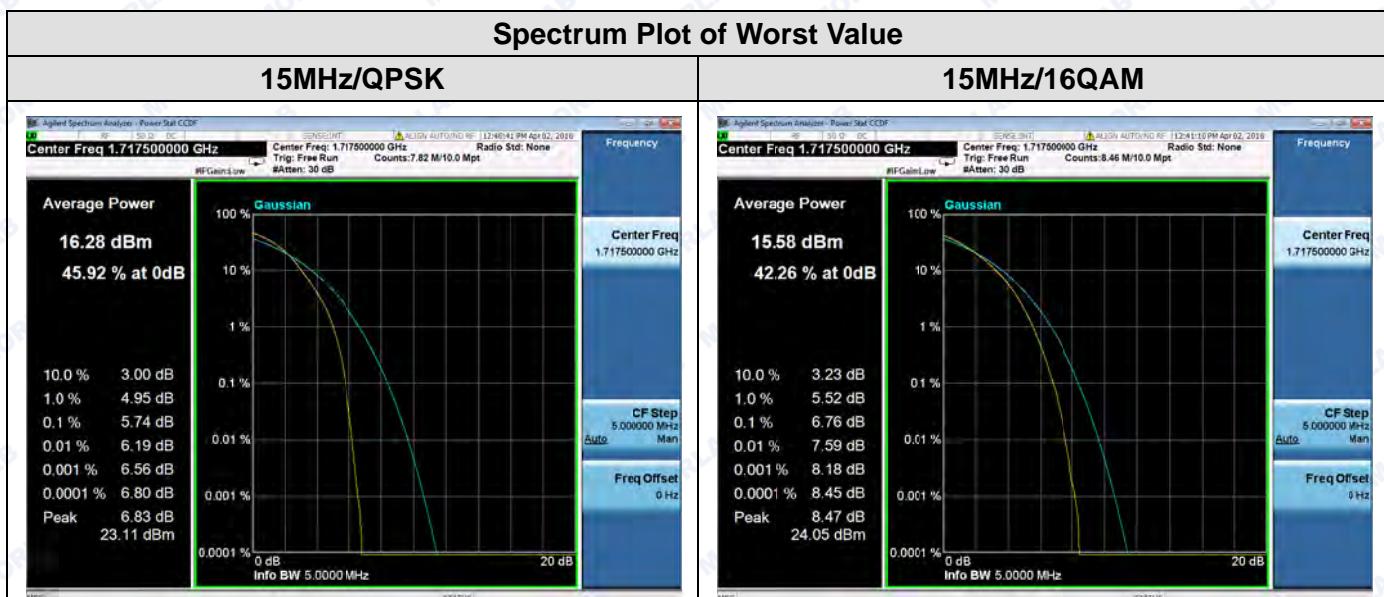
LTE Band 4 Low channel							
Channel Bandwidth: 5MHz				Channel Bandwidth: 10MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
19975	1712.5	5.34	5.90	20000	1715.0	4.59	6.01





REPORT No.: SZ16030092W05

LTE Band 4 Low channel						
Channel Bandwidth: 15MHz				Channel Bandwidth: 20MHz		
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		QPSK	16QAM			
20025	1717.5	5.74	6.76	20050	1720.0	6.45
						7.21





REPORT No.: SZ16030092W05

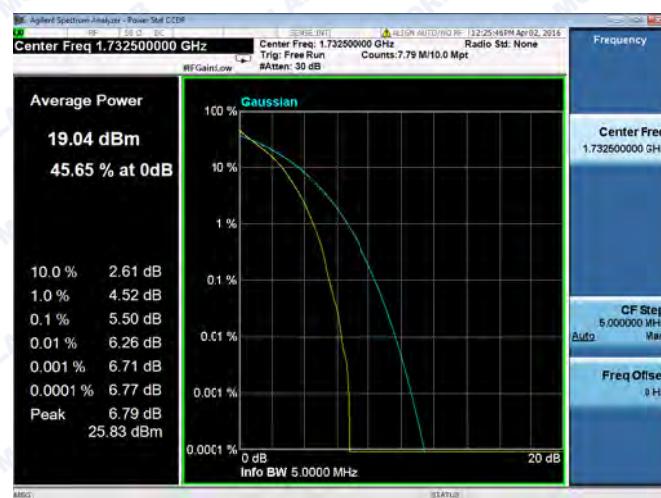
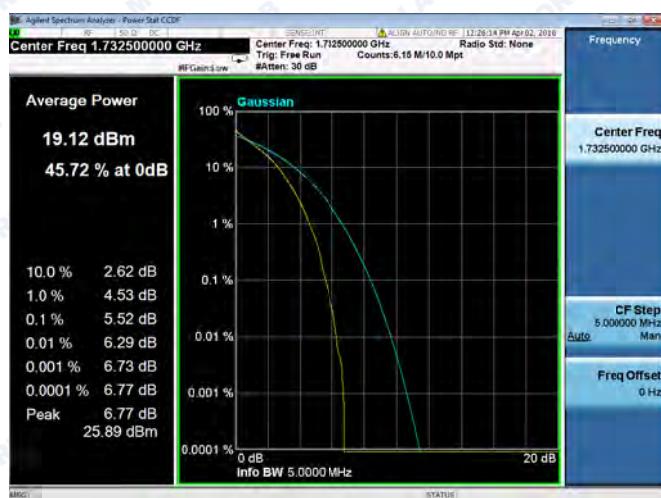
LTE Band 4 Middle channel

Channel Bandwidth: 1.4MHz			Channel Bandwidth: 3MHz		
Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		QPSK			QPSK
20175	1732.5	5.52	20175	1732.5	5.67
		5.50			6.28

Spectrum Plot of Worst Value

1.4MHz/QPSK

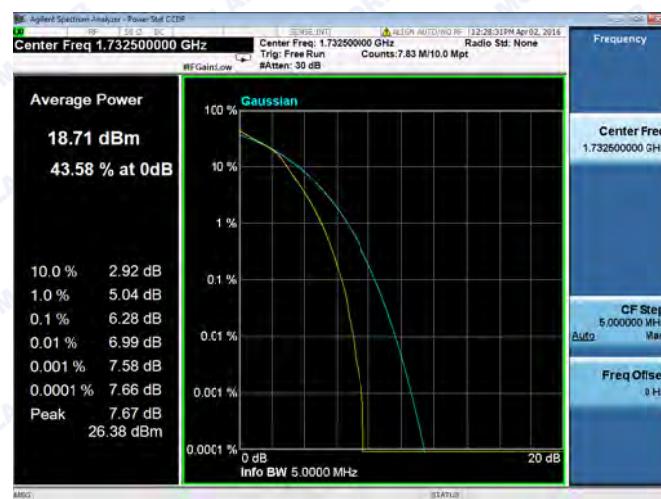
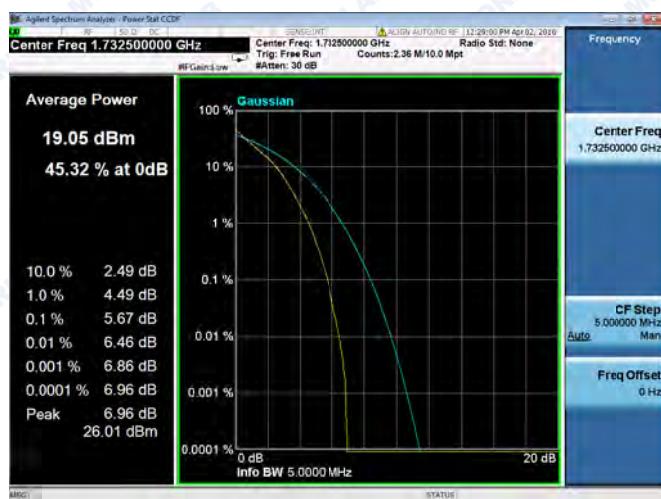
1.4MHz/16QAM



Spectrum Plot of Worst Value

3MHz/QPSK

3MHz/16QAM



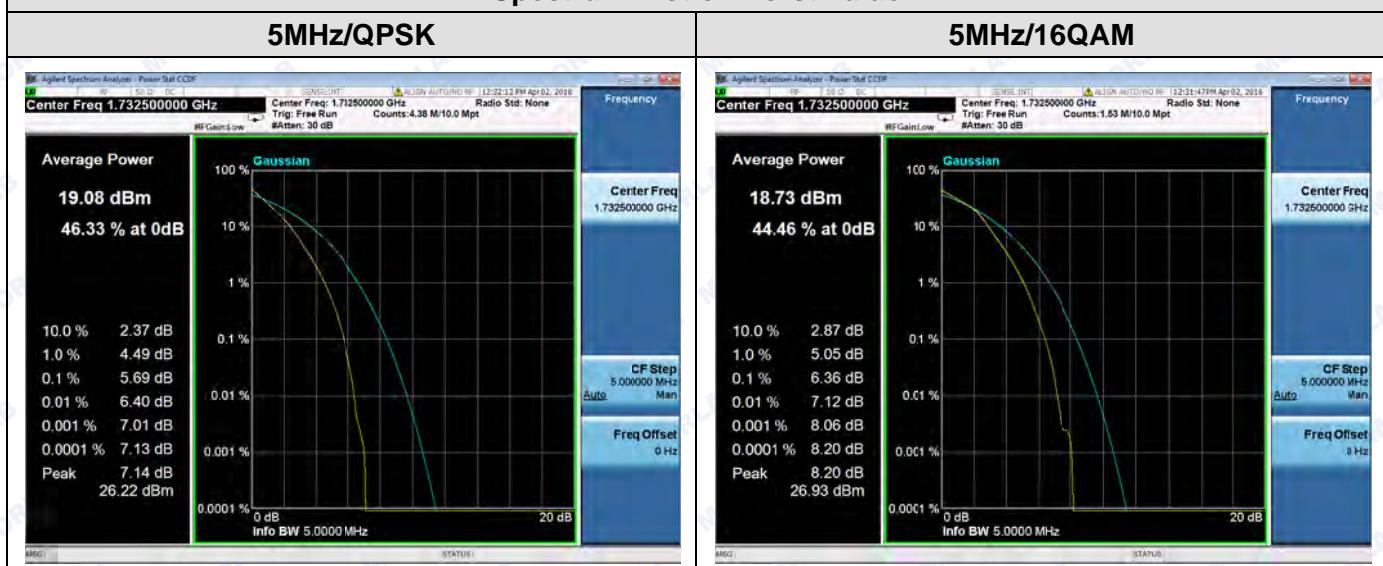


REPORT No.: SZ16030092W05

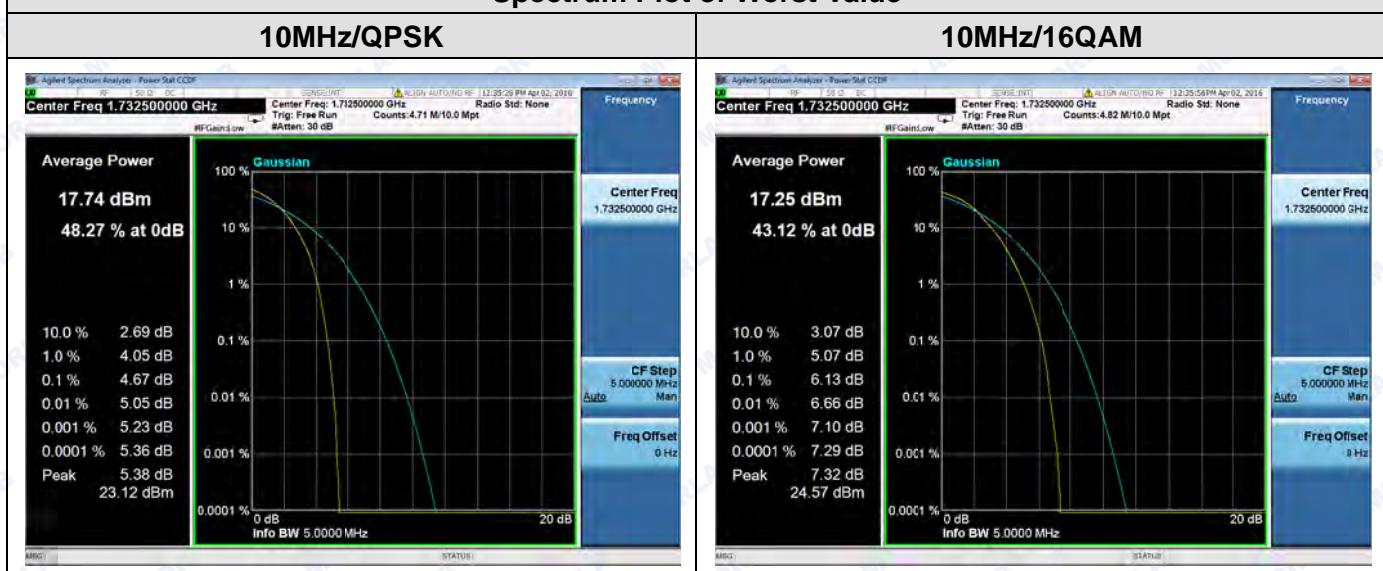
LTE Band 4 Middle channel

Channel Bandwidth: 5MHz			Channel Bandwidth: 10MHz		
Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		QPSK			QPSK
20175	1732.5	5.69	20175	1732.5	4.67
		6.36			6.13

Spectrum Plot of Worst Value



Spectrum Plot of Worst Value



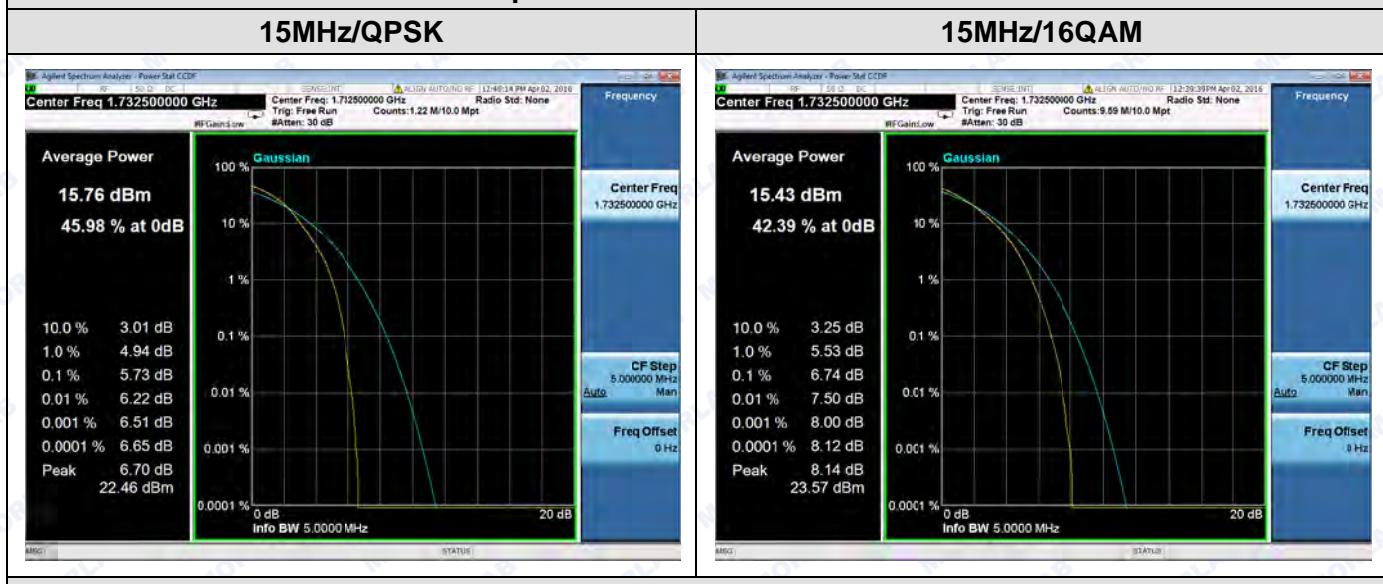


REPORT No.: SZ16030092W05

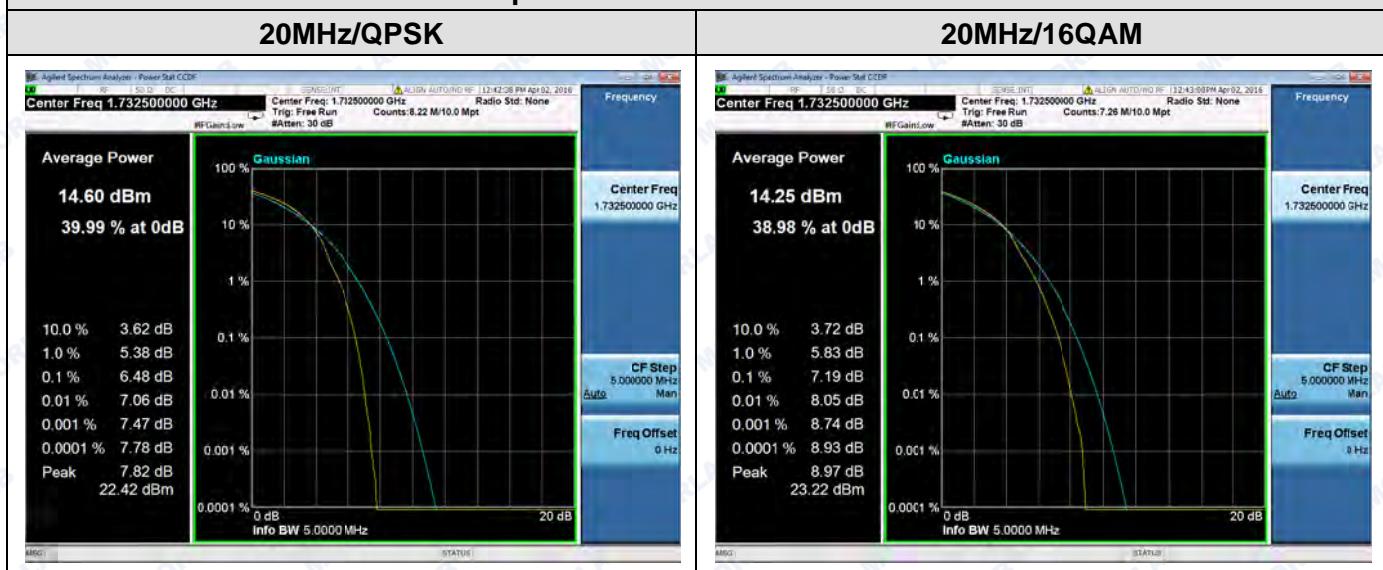
LTE Band 4 Middle channel

Channel Bandwidth: 15MHz			Channel Bandwidth: 20MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK			16QAM		
20175	1732.5	5.73	6.74	20175	1732.5	6.48	7.19

Spectrum Plot of Worst Value



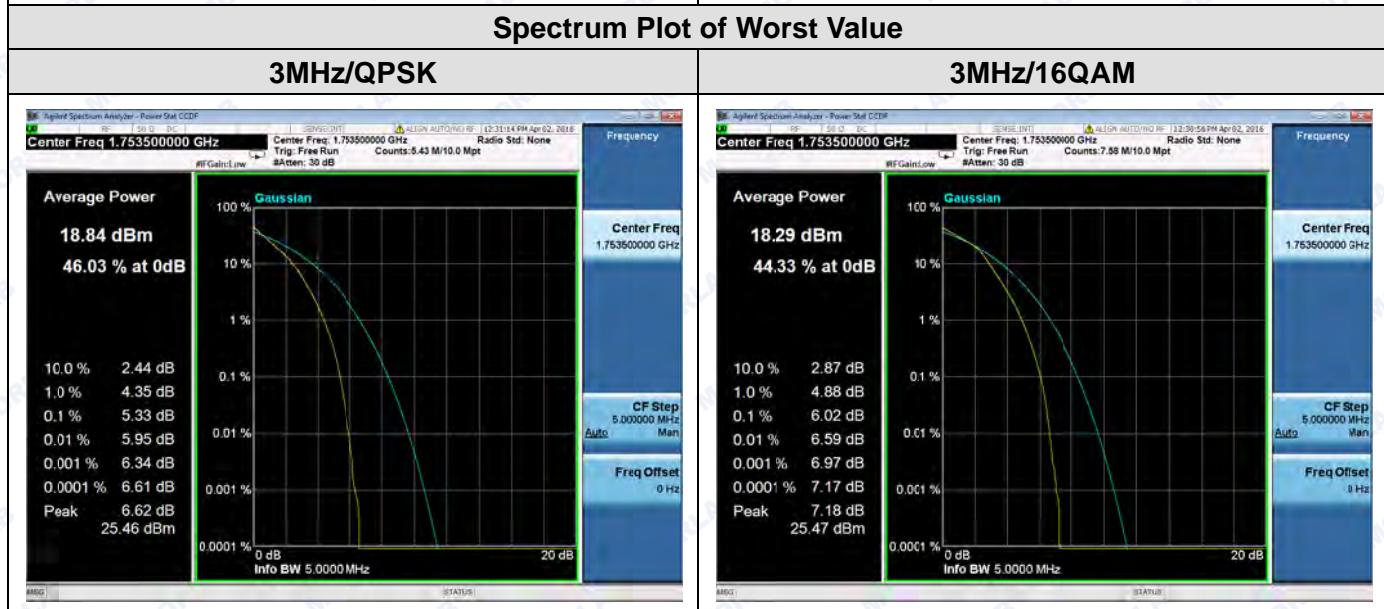
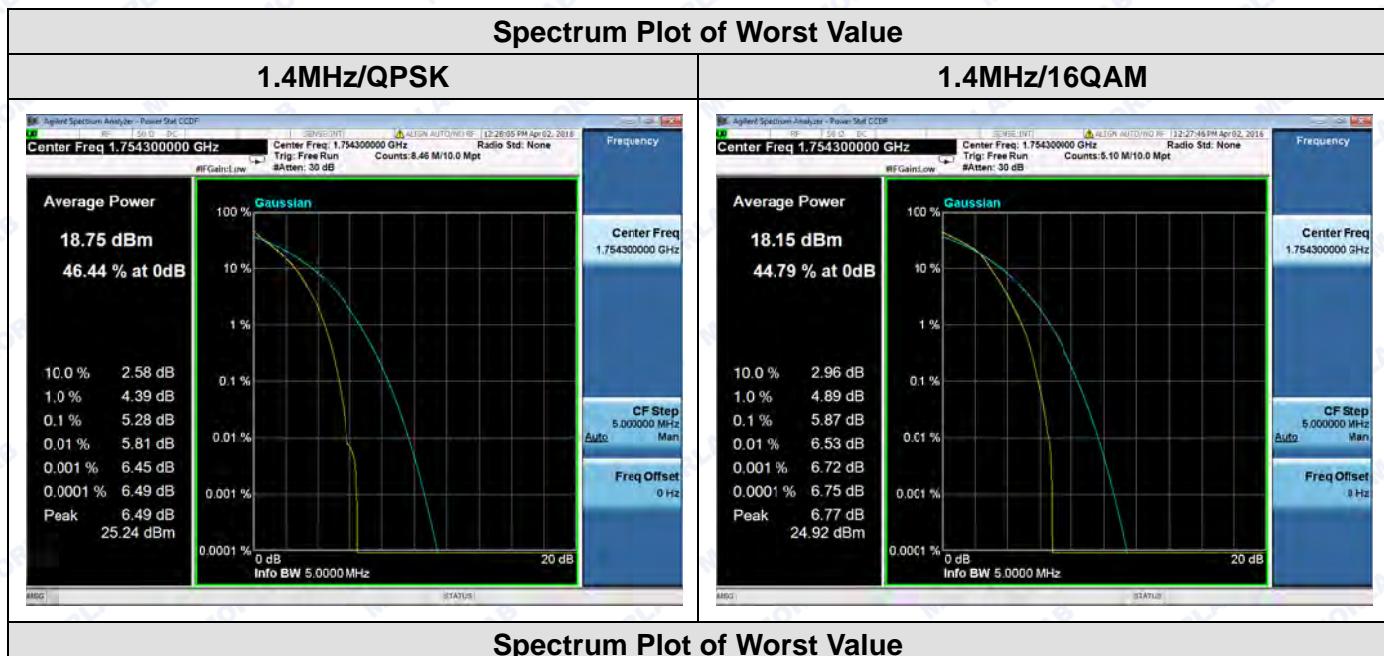
Spectrum Plot of Worst Value





REPORT No.: SZ16030092W05

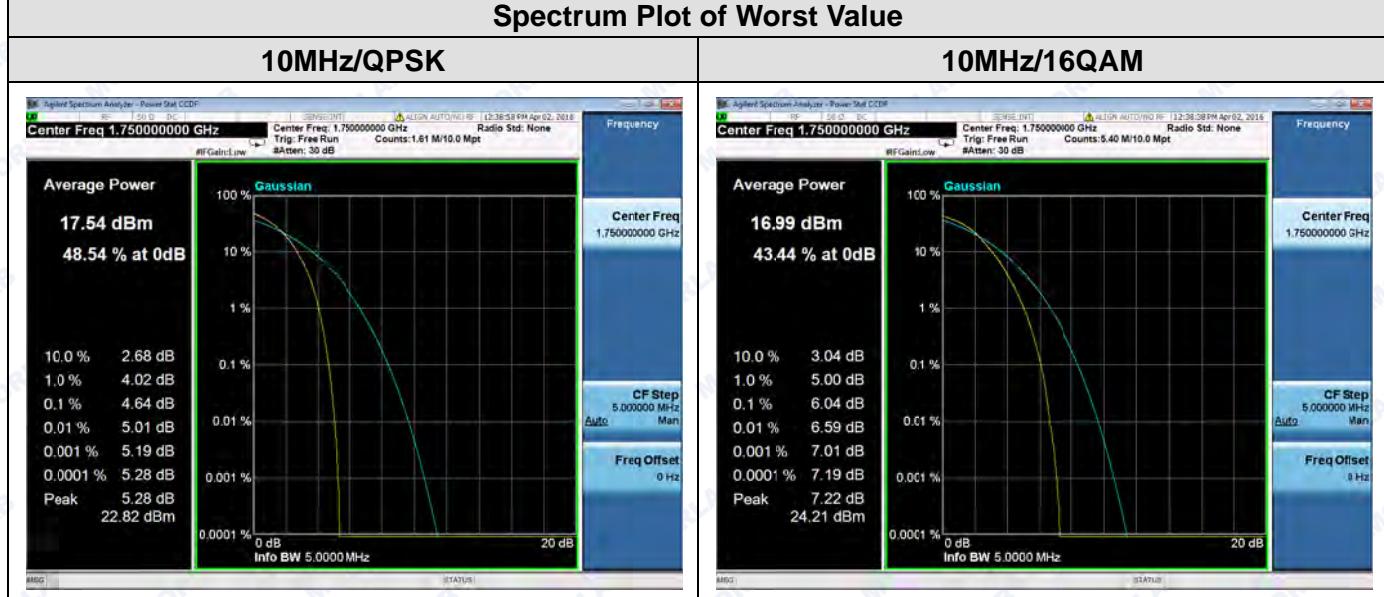
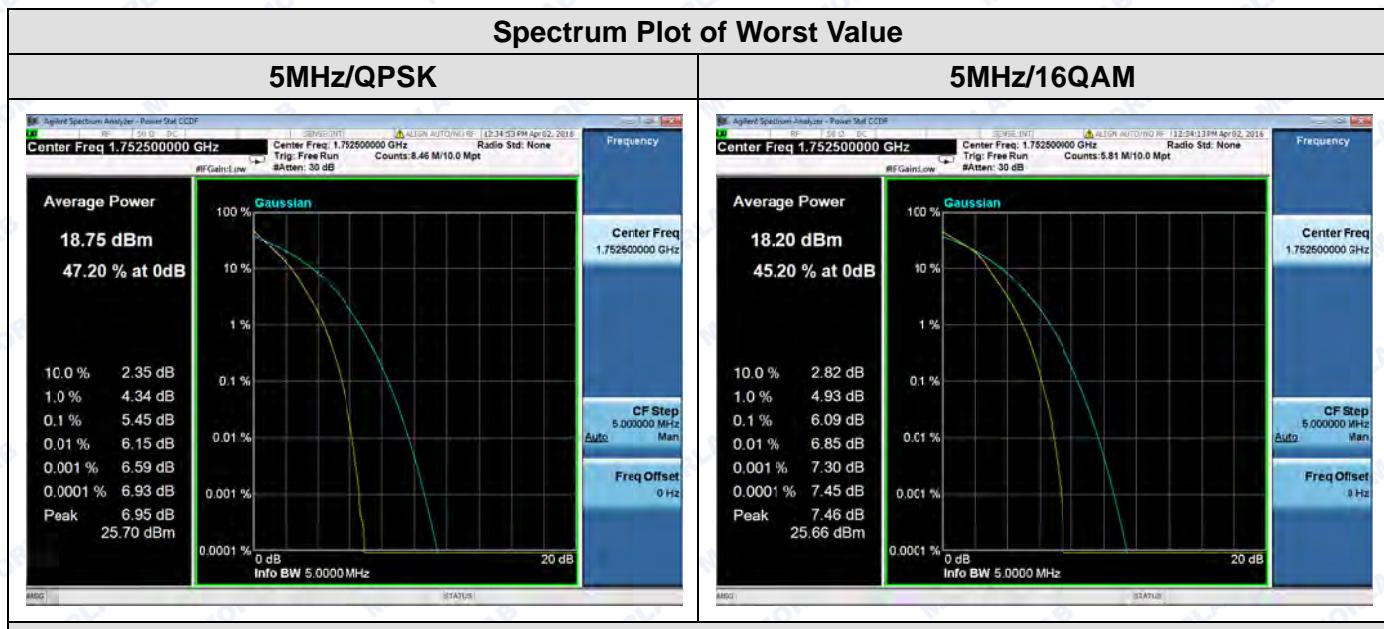
LTE Band 4 High channel							
Channel Bandwidth: 1.4MHz				Channel Bandwidth: 3MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
20393	1754.3	5.28	5.87	20385	1753.5	5.33	6.02





REPORT No.: SZ16030092W05

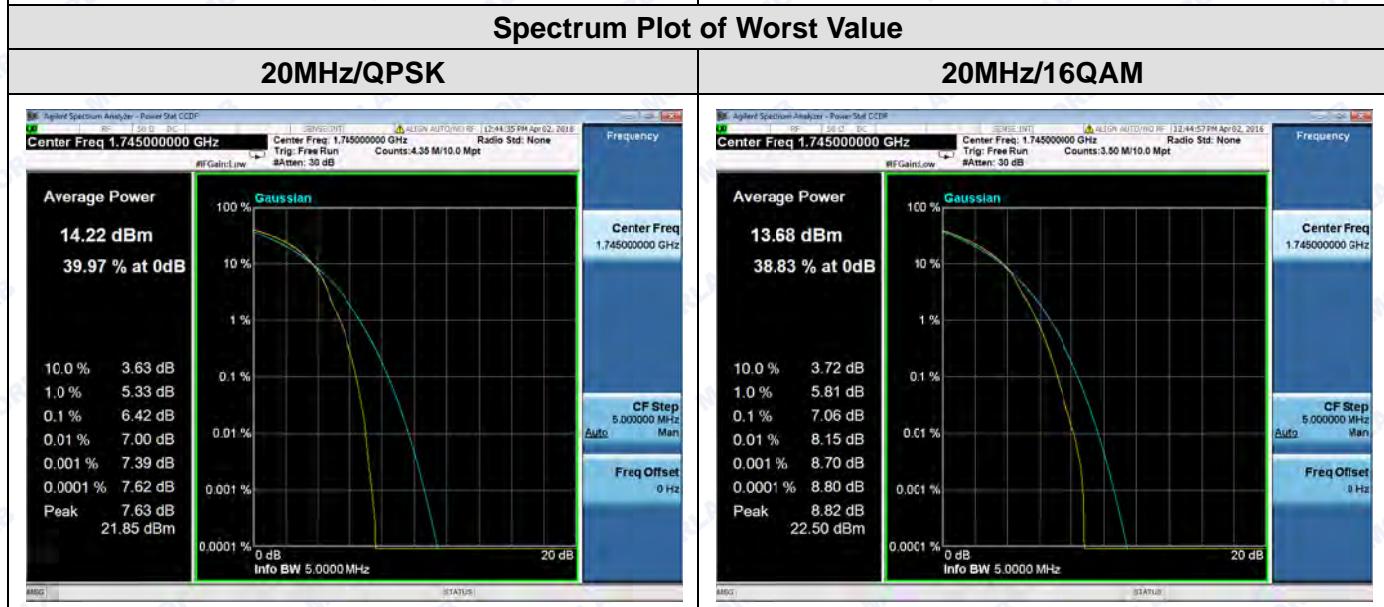
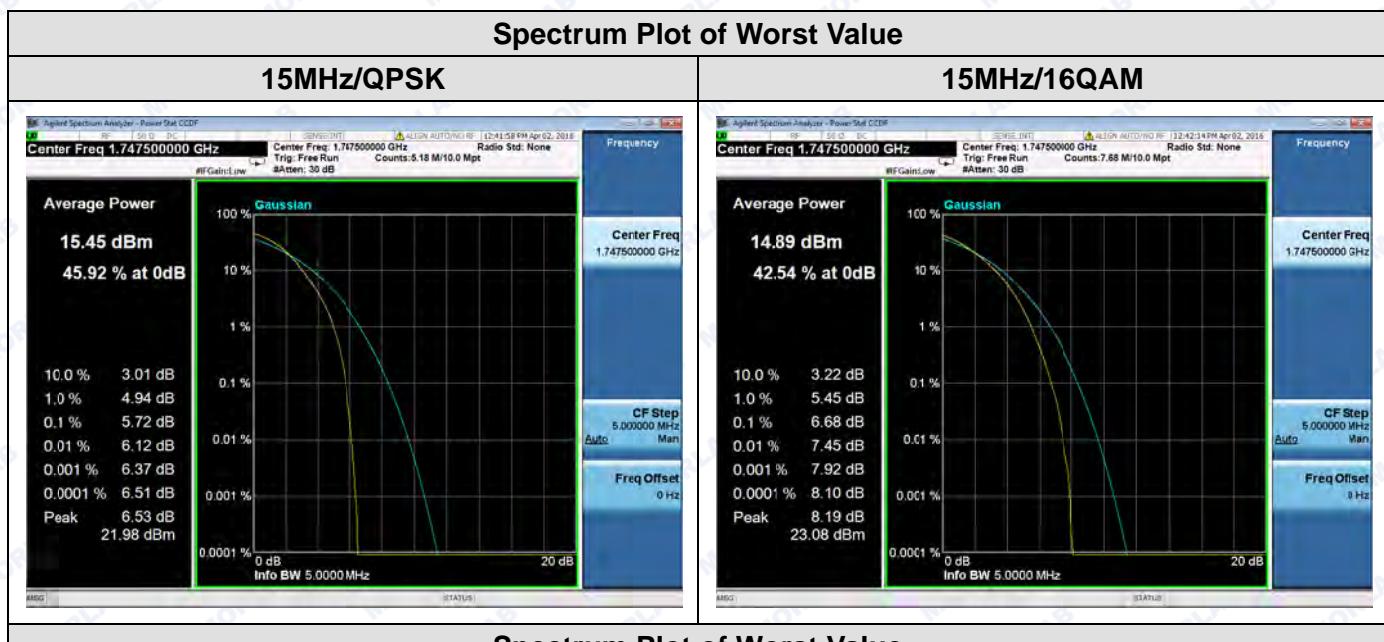
LTE Band 4 High channel						
Channel Bandwidth: 5MHz				Channel Bandwidth: 10MHz		
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		QPSK	16QAM			
20375	1752.5	5.45	6.09	20350	1750.0	4.64
						6.04





REPORT No.: SZ16030092W05

LTE Band 4 High channel						
Channel Bandwidth: 15MHz				Channel Bandwidth: 20MHz		
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		QPSK	16QAM			
20325	1747.5	5.72	6.68	20300	1745.0	6.42
						7.06





2.5 Conducted Spurious Emissions

2.5.1 Test Requirement

According to FCC section 2.1051 and 27.53(g), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10\log(P)$ dB. This calculated to be -13dBm.

2.5.2 Test Procedure

See section 2.1.2 of this report.

Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

2.5.3 Test Result

Compliant. See attached plots.





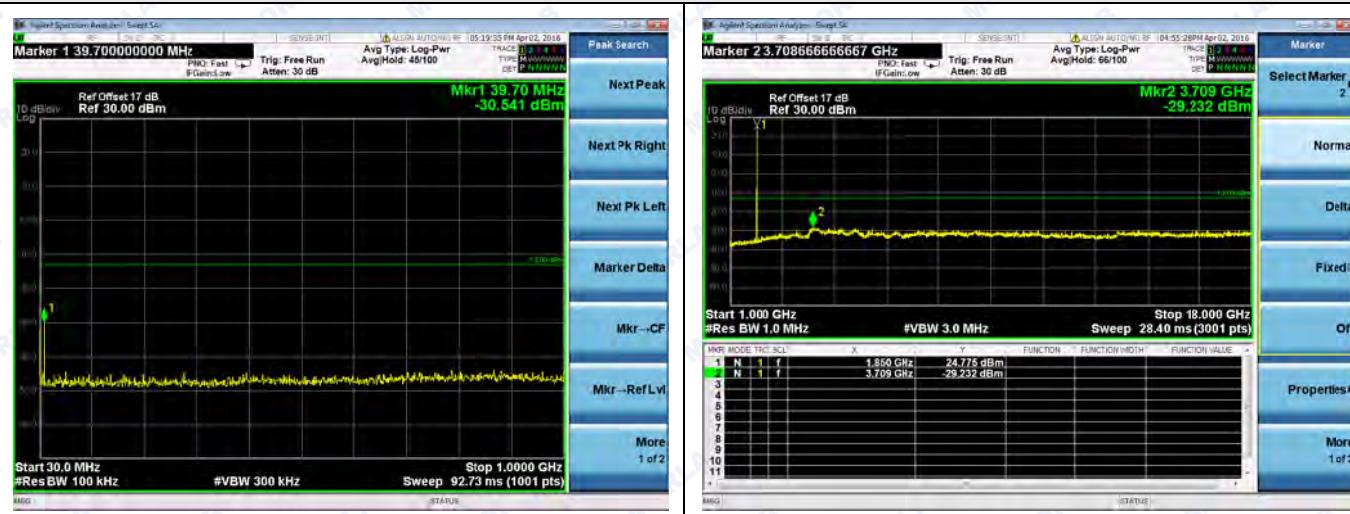
REPORT No.: SZ16030092W05

LTE Band 2 3MHz BW Low Channel

QPSK



16QAM

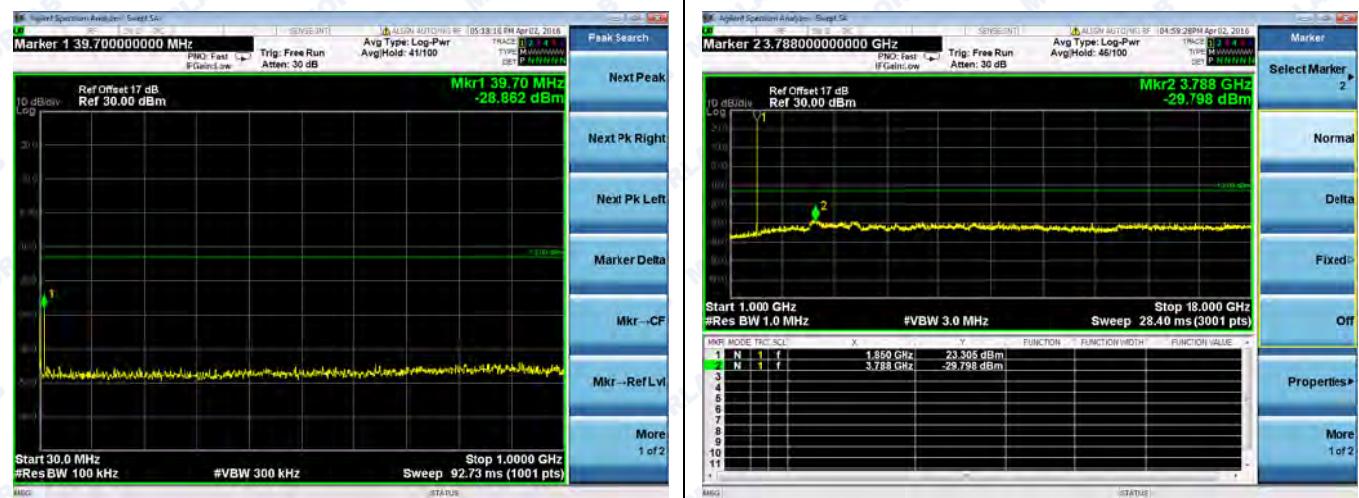




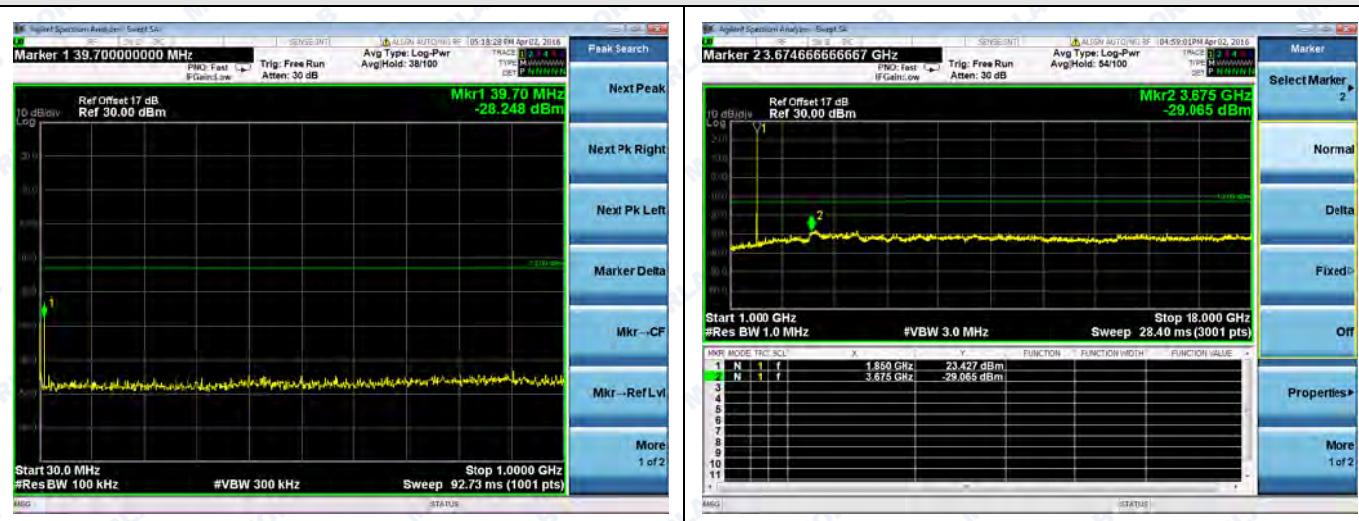
REPORT No.: SZ16030092W05

LTE Band 2 5MHz BW Low Channel

QPSK



16QAM

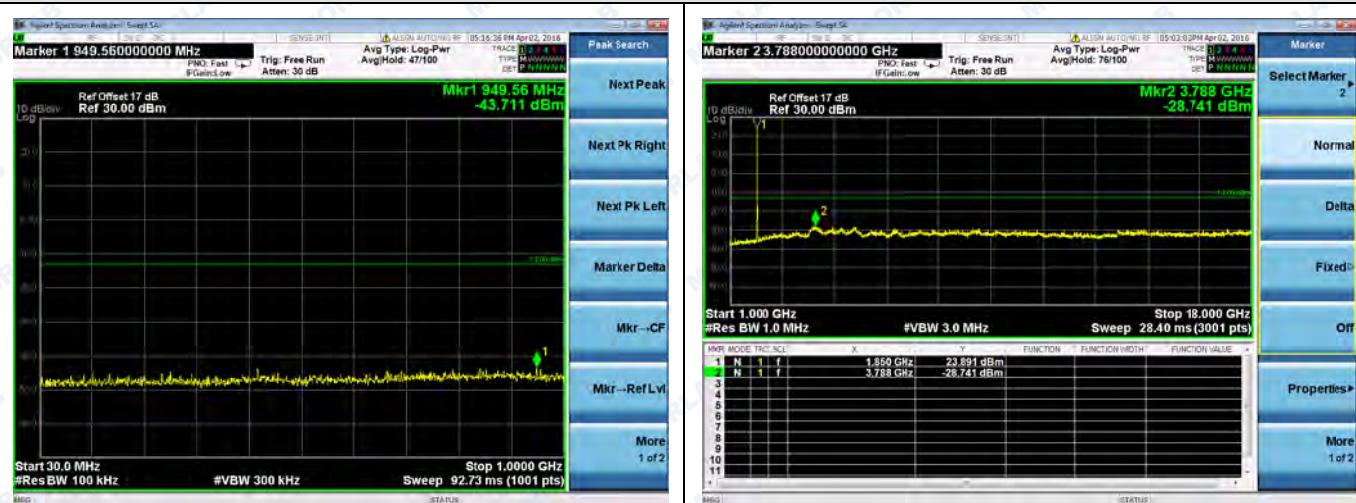




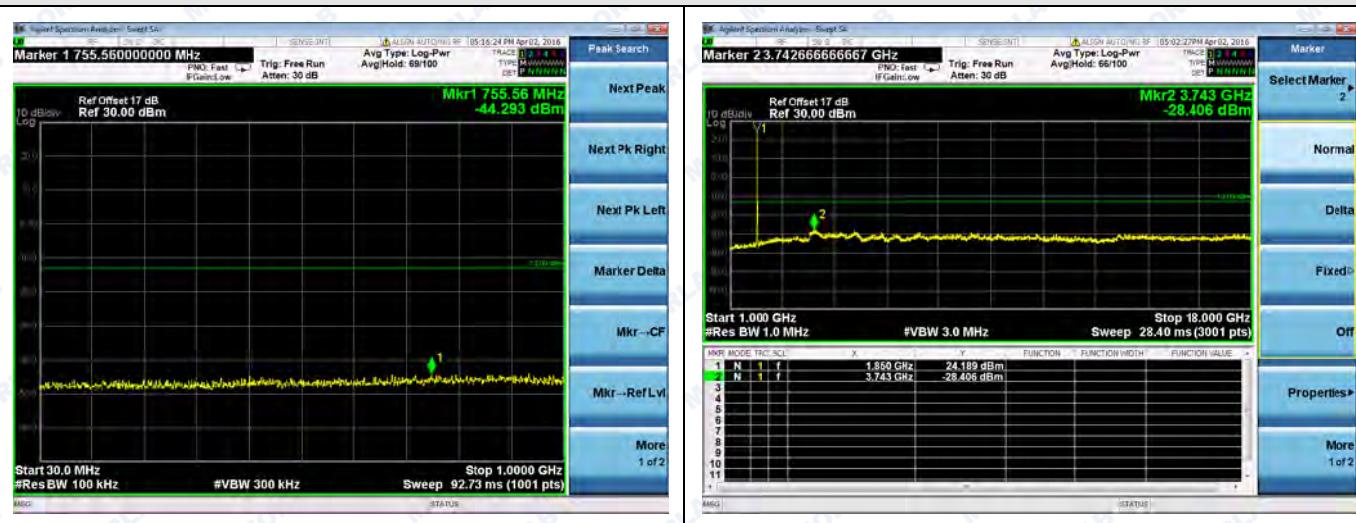
REPORT No.: SZ16030092W05

LTE Band 2 10MHz BW Low Channel

QPSK



16QAM





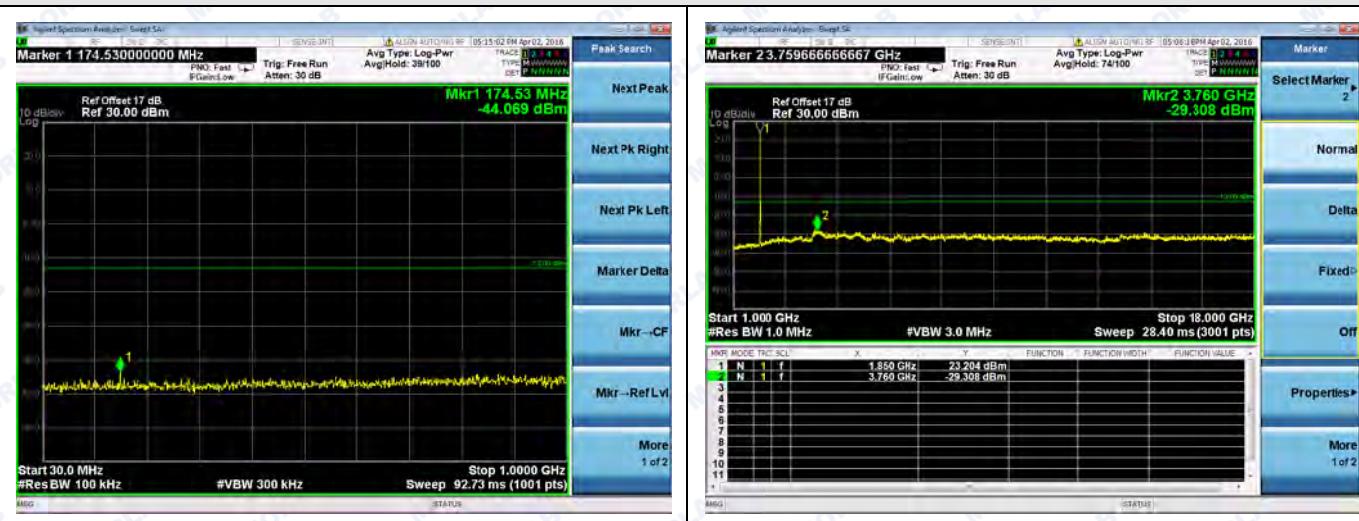
REPORT No.: SZ16030092W05

LTE Band 2 15MHz BW Low Channel

QPSK



16QAM

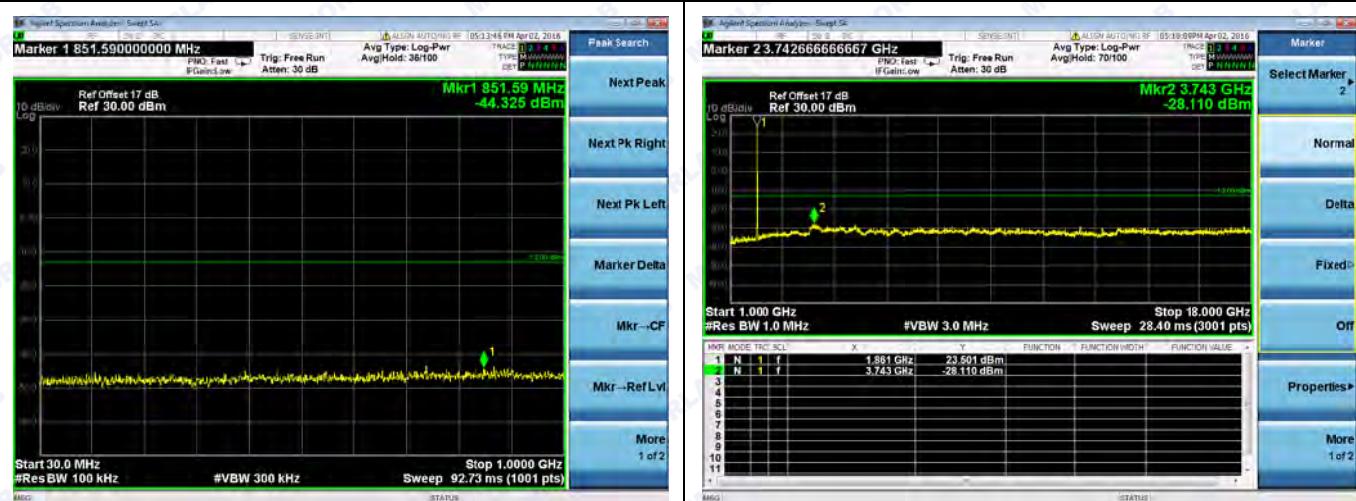




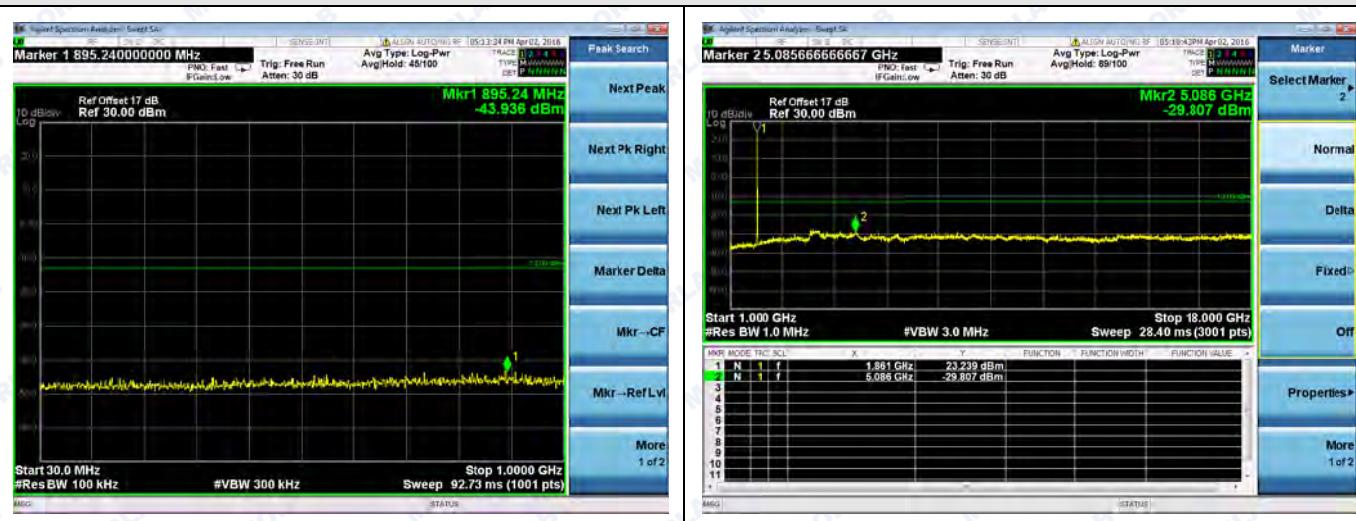
REPORT No.: SZ16030092W05

LTE Band 2 20MHz BW Low Channel

QPSK



16QAM



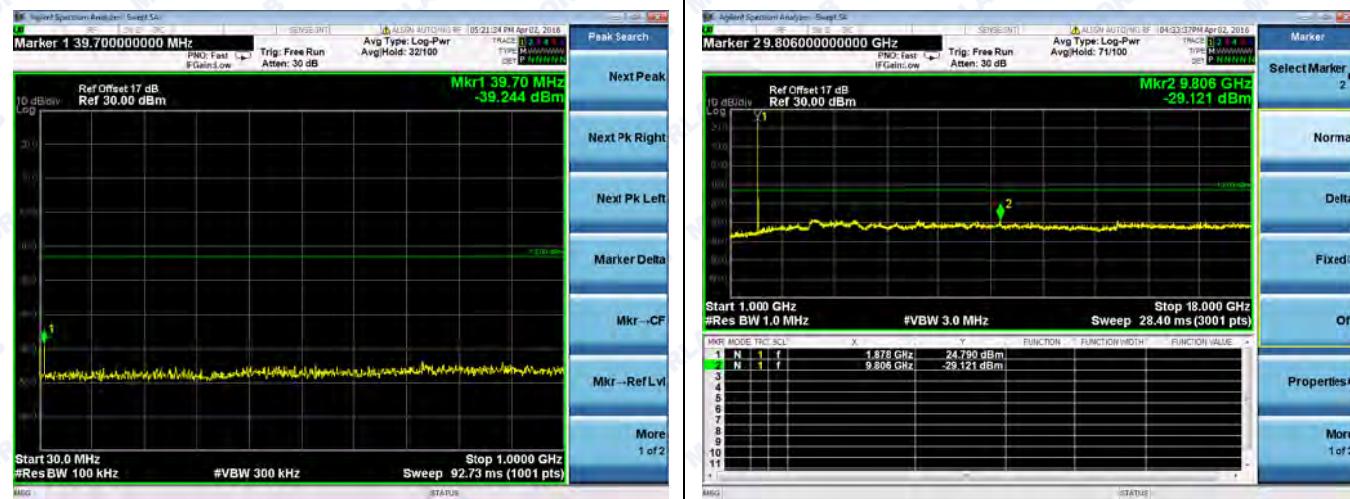


REPORT No.: SZ16030092W05

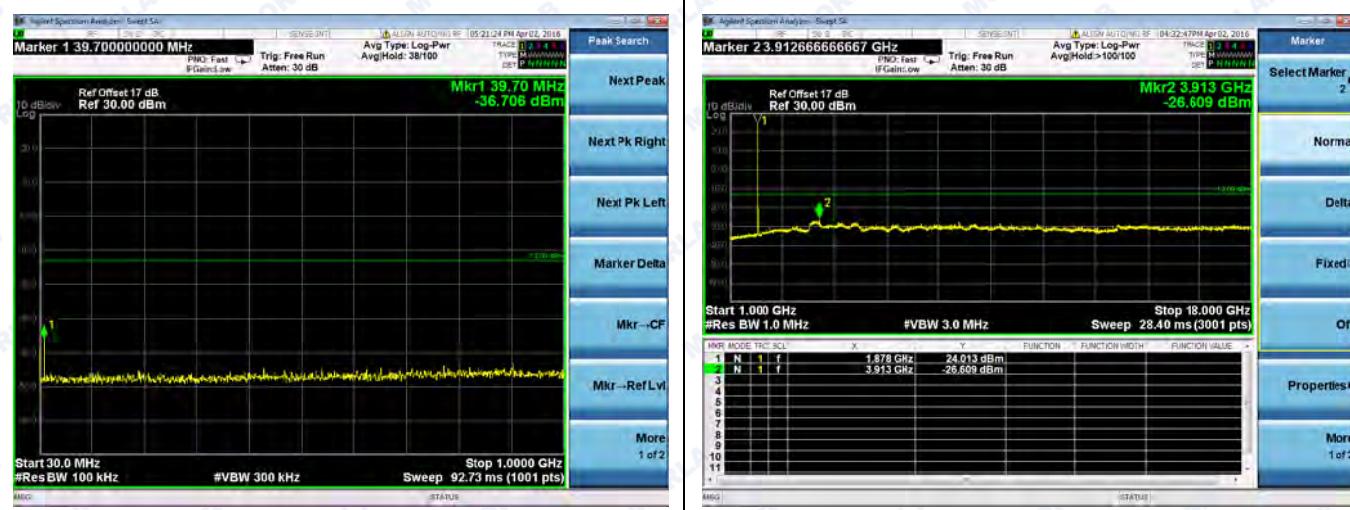
Middle channel:

LTE Band 2 1.4MHz BW Mid Channel

QPSK



16QAM

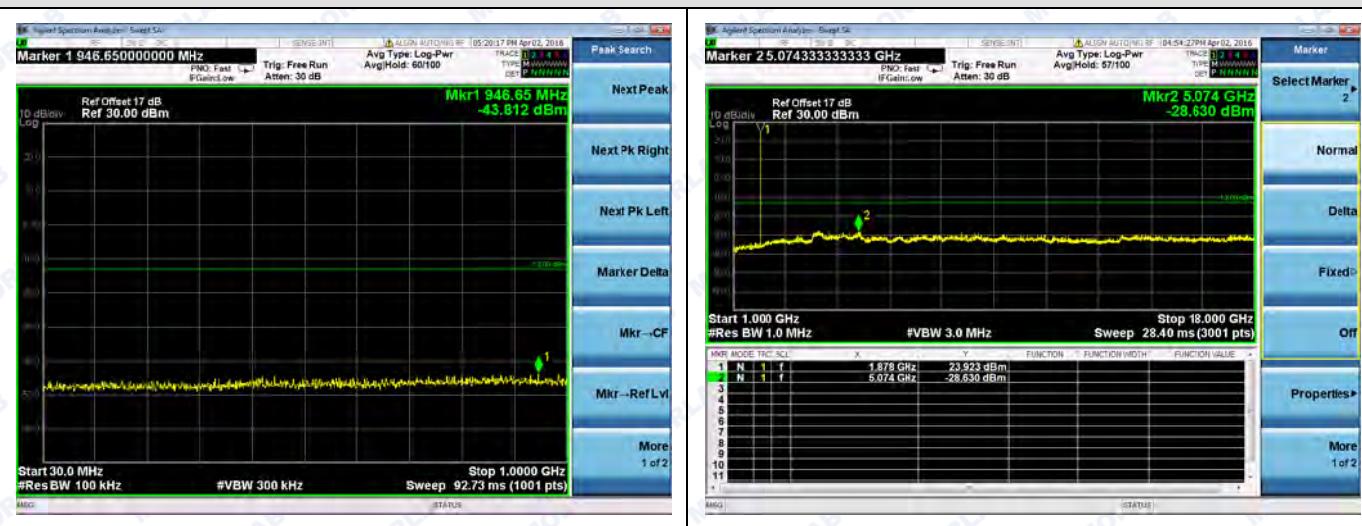




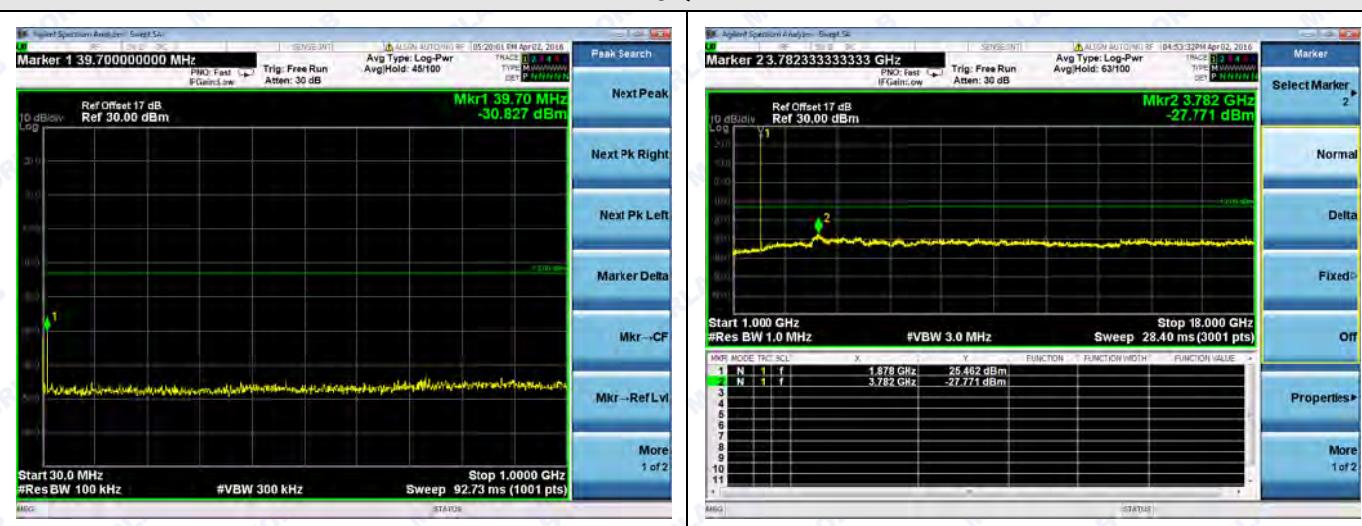
REPORT No.: SZ16030092W05

LTE Band 2 3MHz BW Mid Channel

QPSK



16QAM

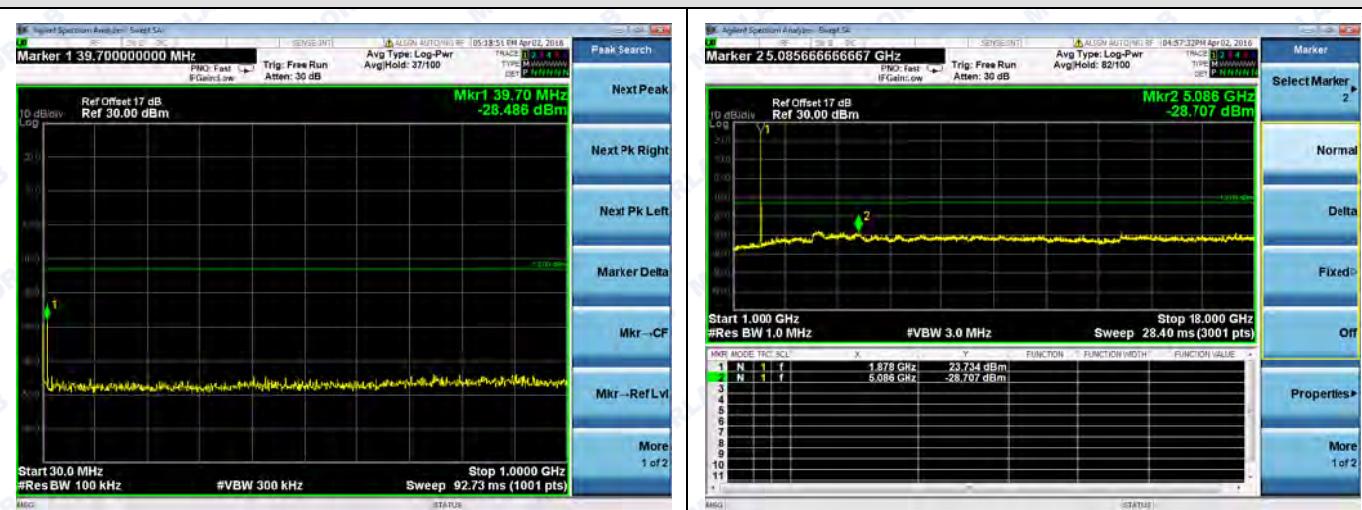




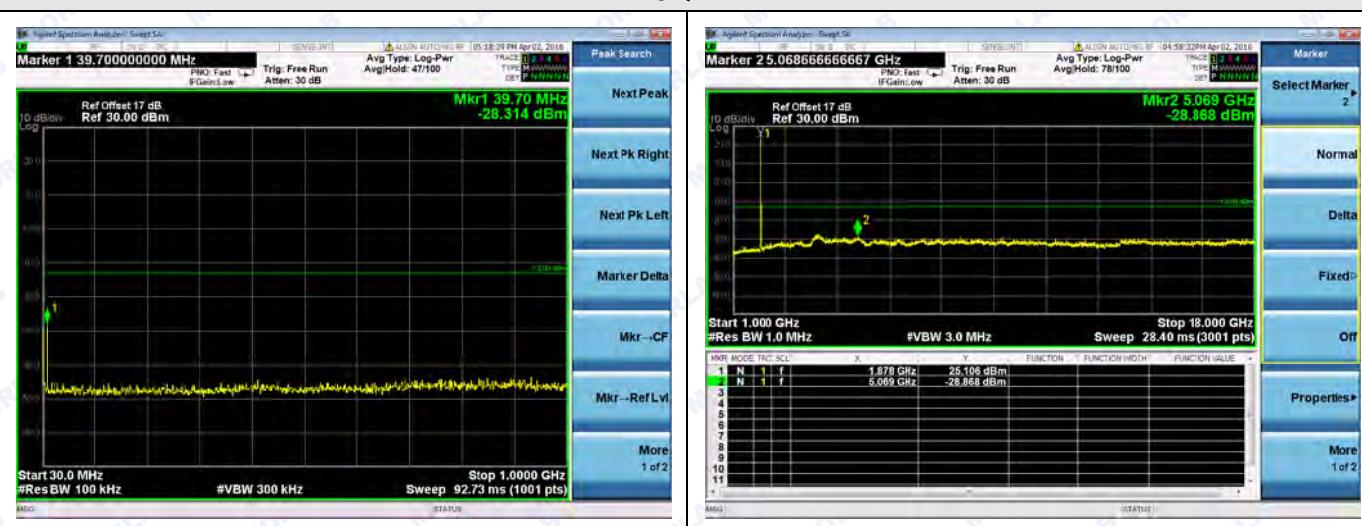
REPORT No.: SZ16030092W05

LTE Band 2 5MHz BW Mid Channel

QPSK



16QAM

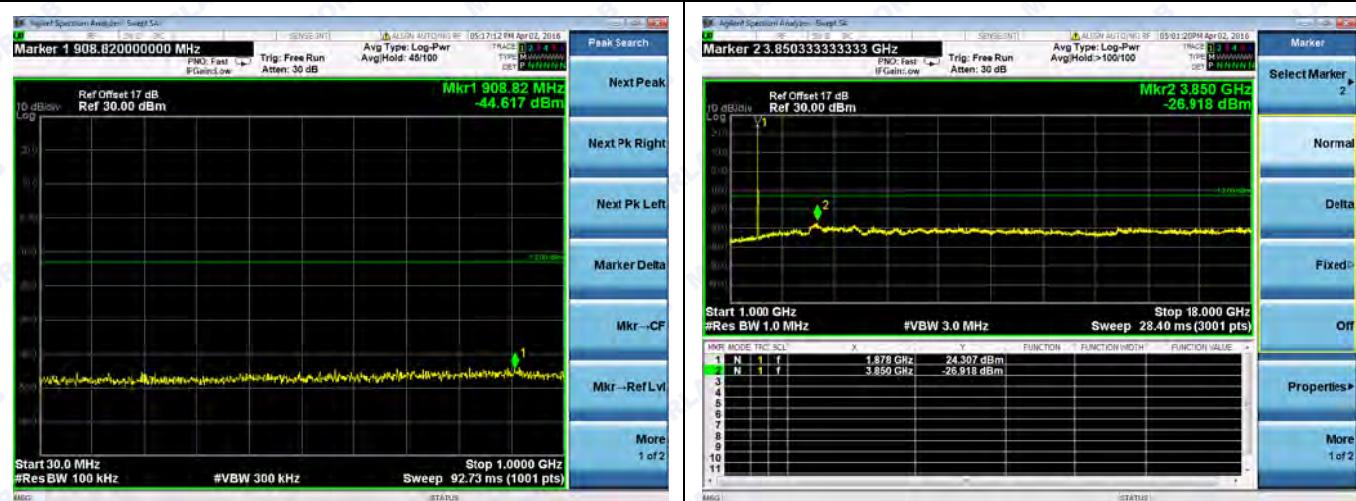




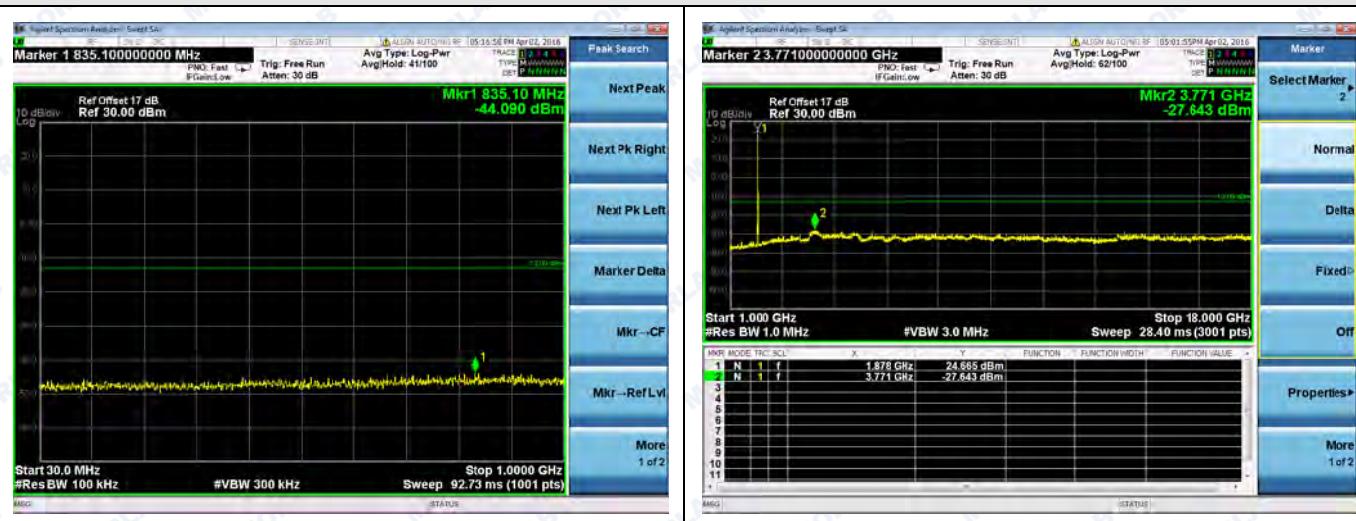
REPORT No.: SZ16030092W05

LTE Band 2 10MHz BW Mid Channel

QPSK



16QAM

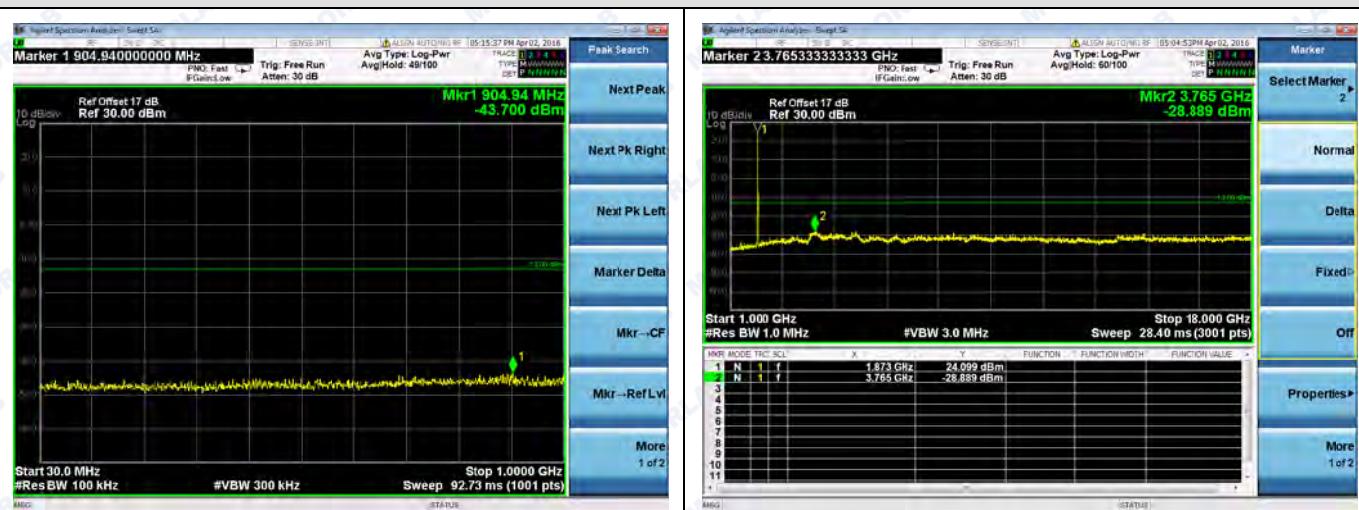




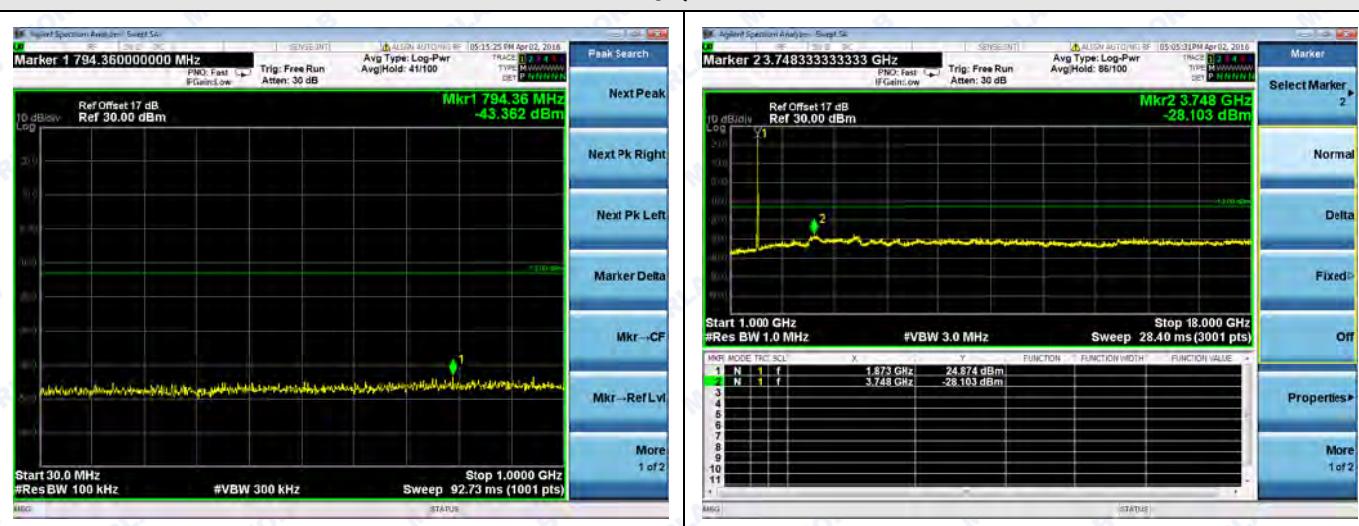
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LTE Band 2 15MHz BW Mid Channel

QPSK



16QAM

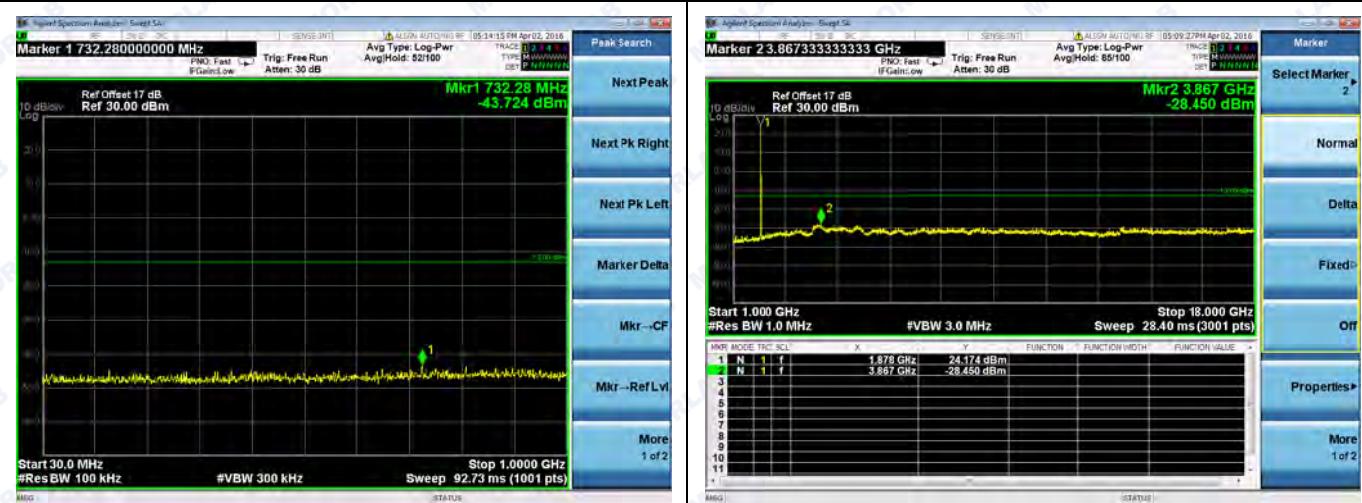




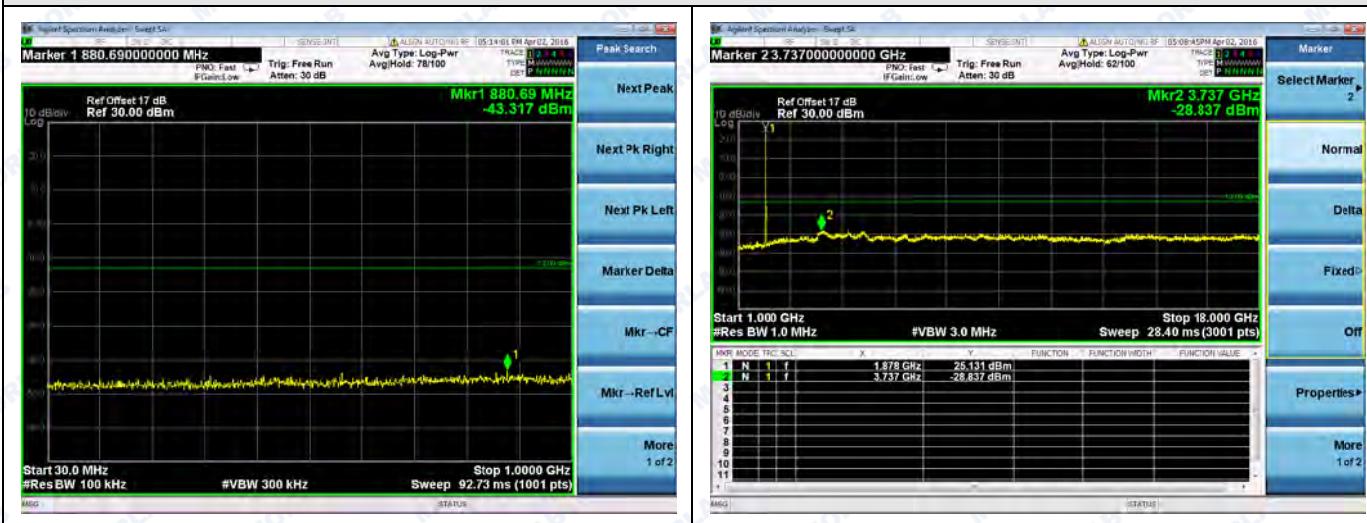
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LTE Band 2 20MHz BW Mid Channel

QPSK



16QAM

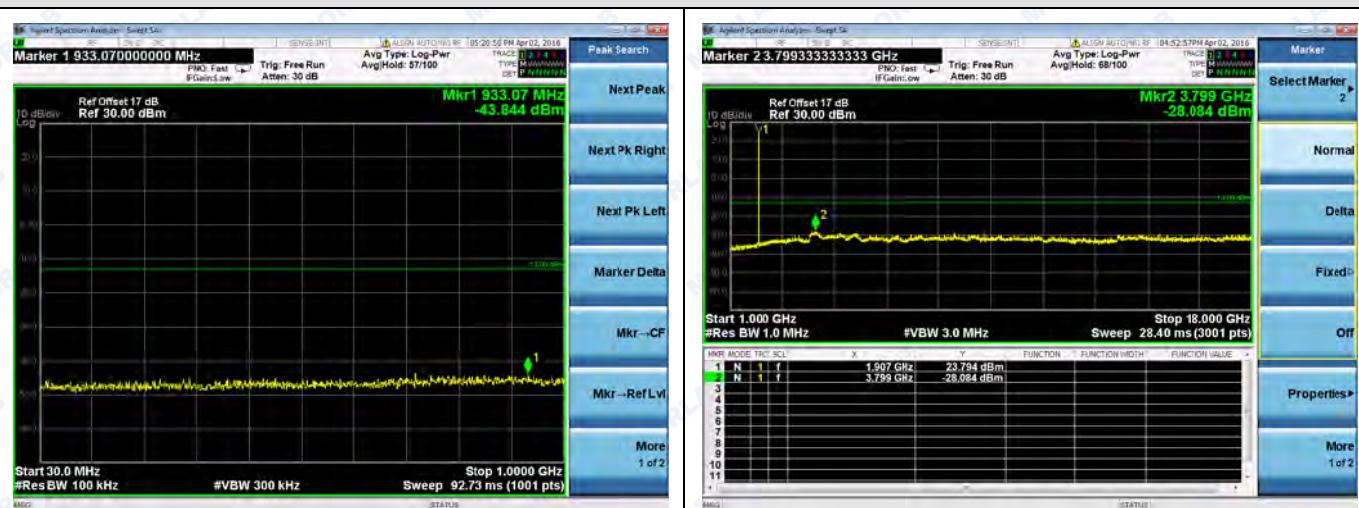




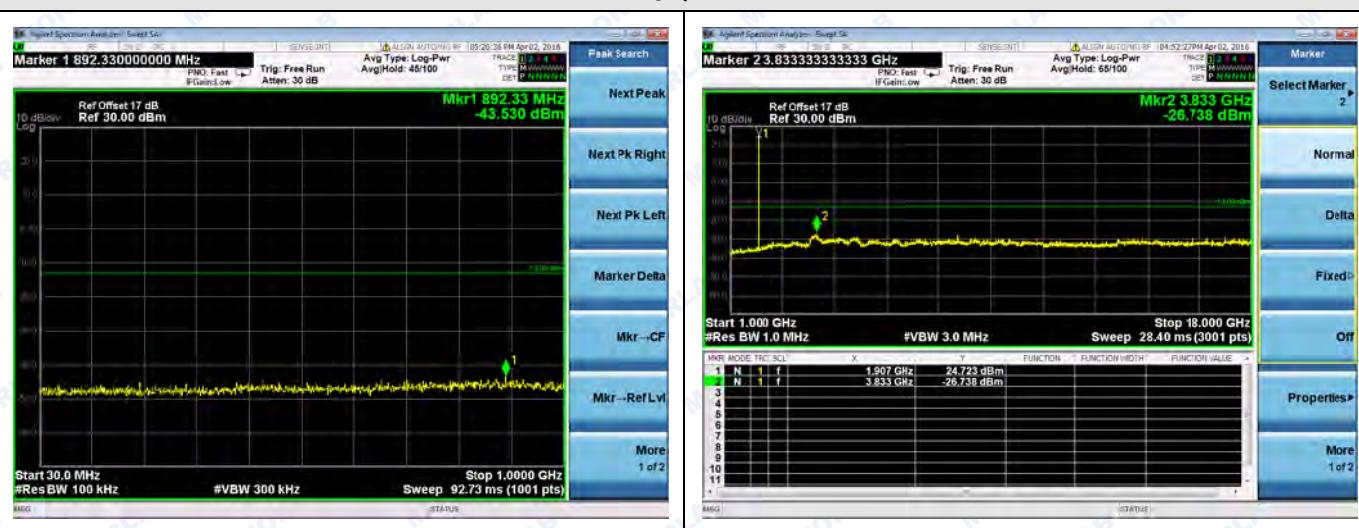
REPORT No.: SZ16030092W05

LTE Band 2 1.4MHz BW High Channel

QPSK



16QAM



MORLAB GROUP

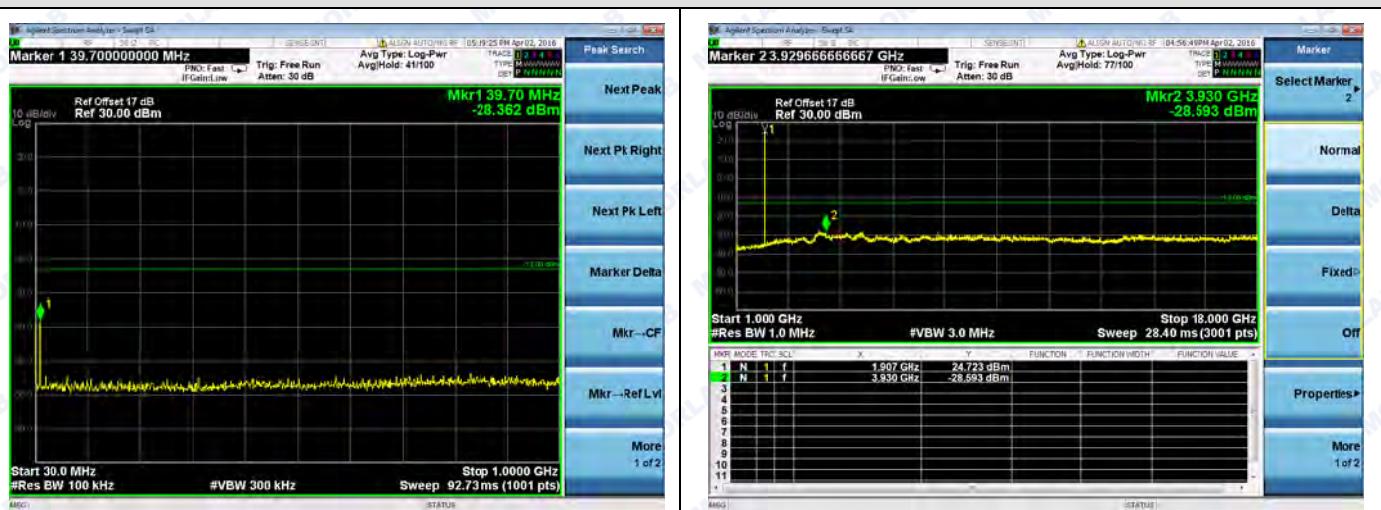
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. ChinaTel: 86-755-36698555
Http://www.morlab.comFax: 86-755-36698525
E-mail: service@morlab.cn



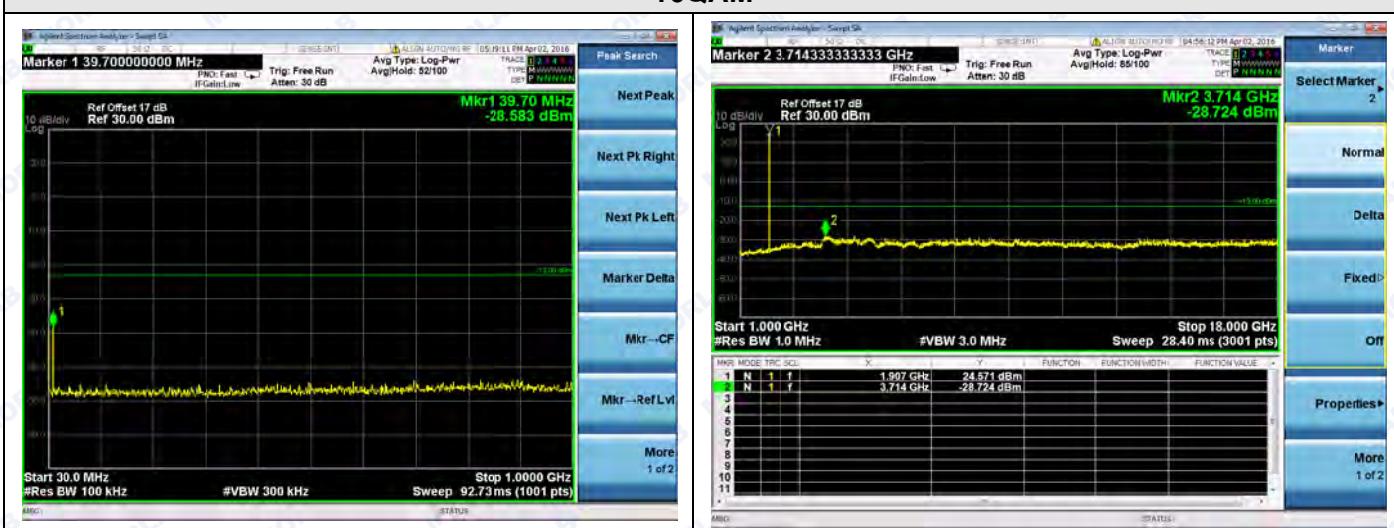
REPORT No.: SZ16030092W05

LTE Band 2 3MHz BW High Channel

QPSK



16QAM





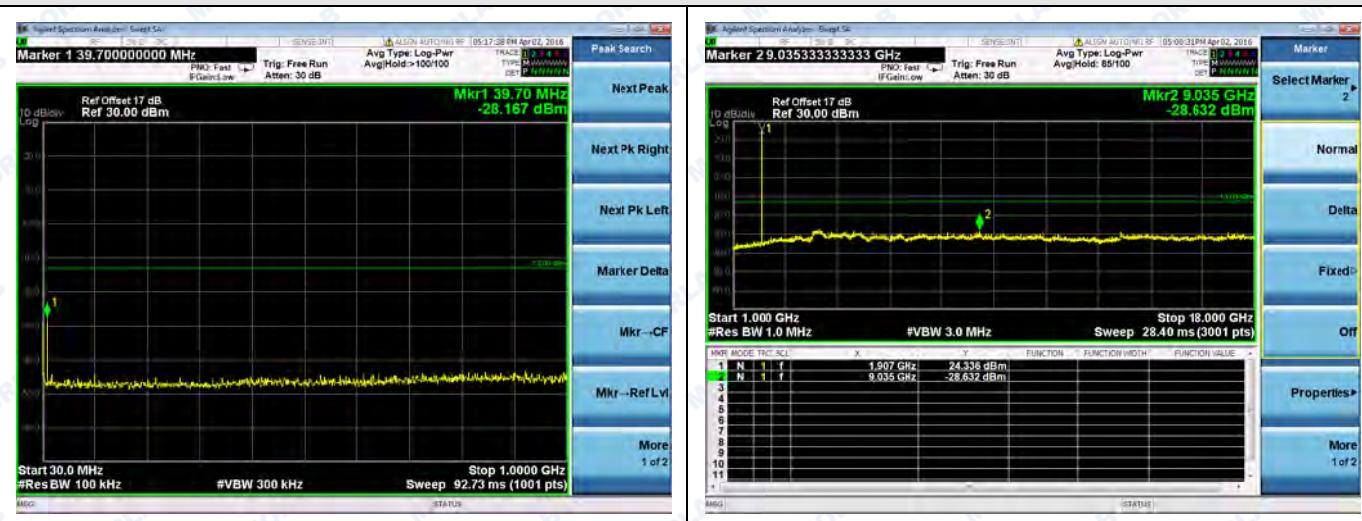
REPORT No.: SZ16030092W05

LTE Band 2 5MHz BW High Channel

QPSK



16QAM

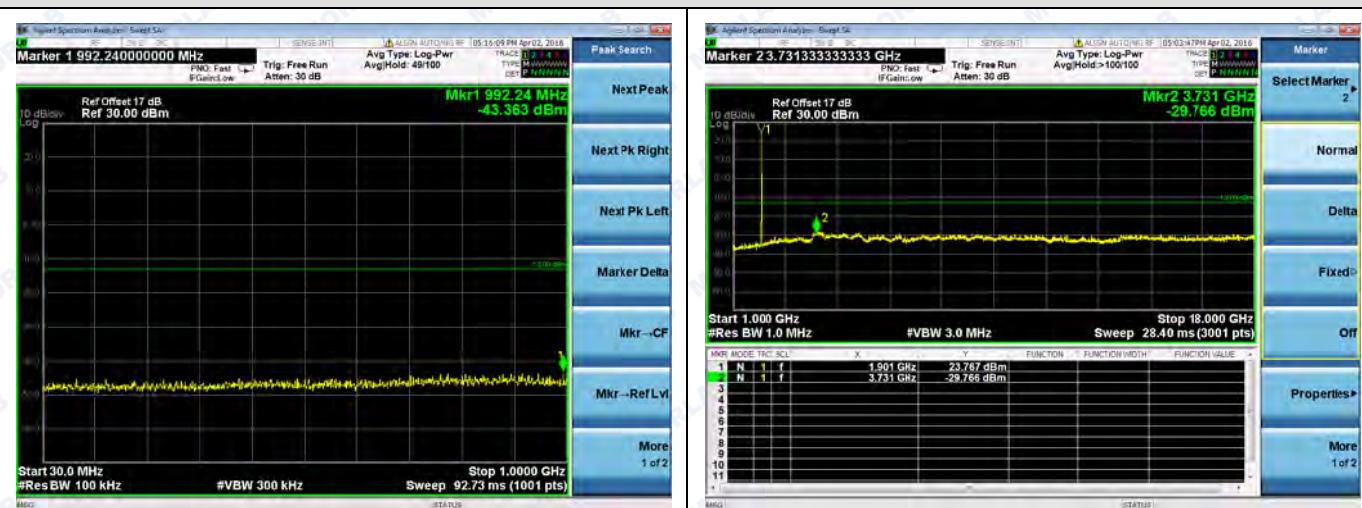




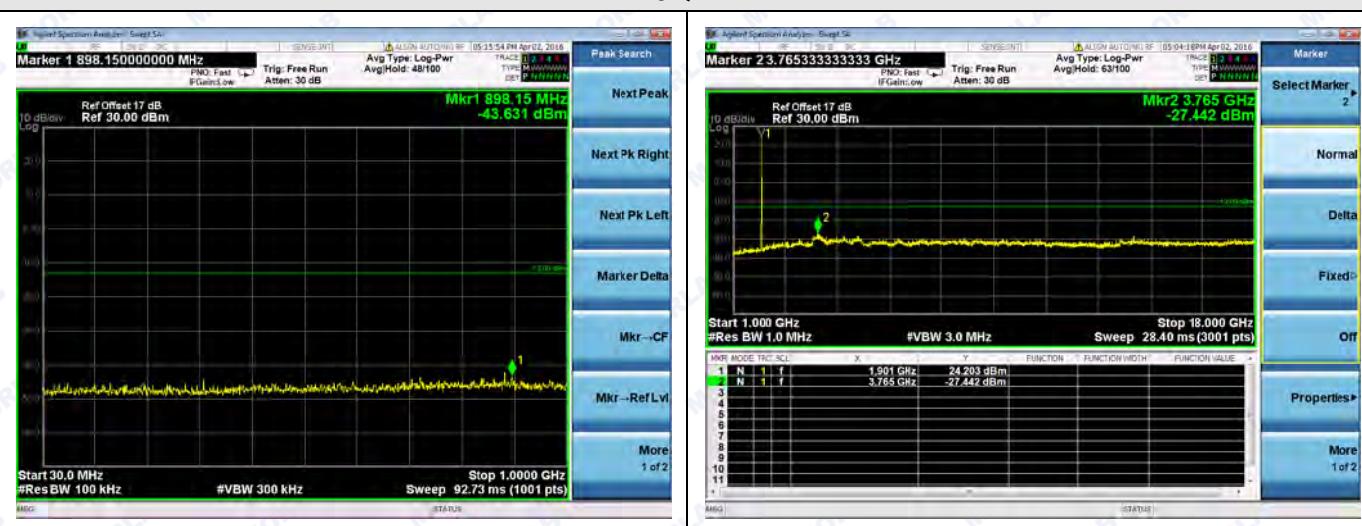
REPORT No.: SZ16030092W05

LTE Band 2 10MHz BW High Channel

QPSK



16QAM

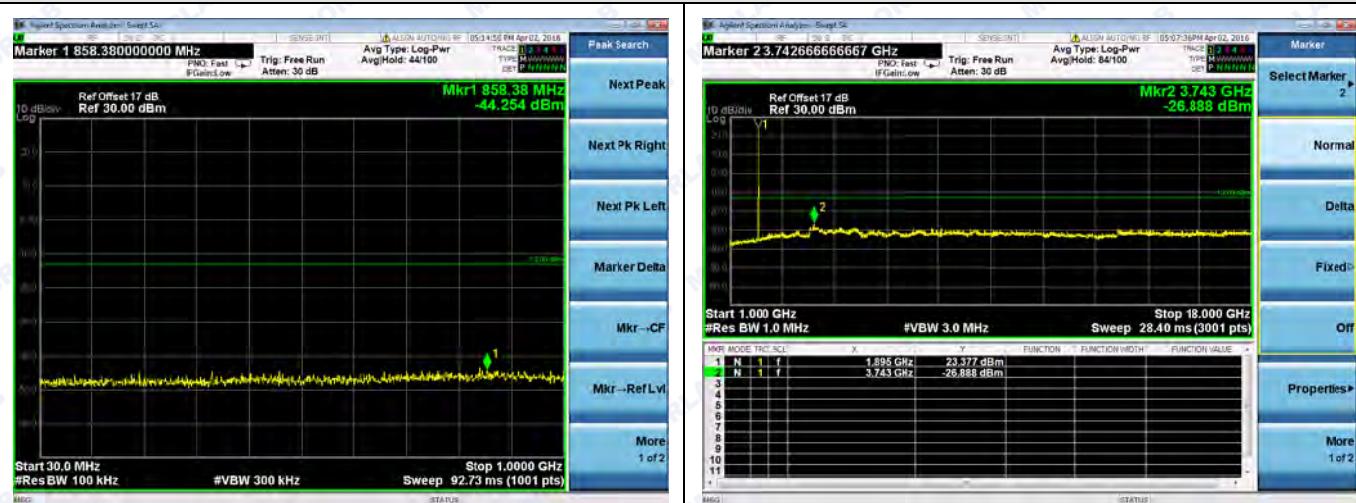




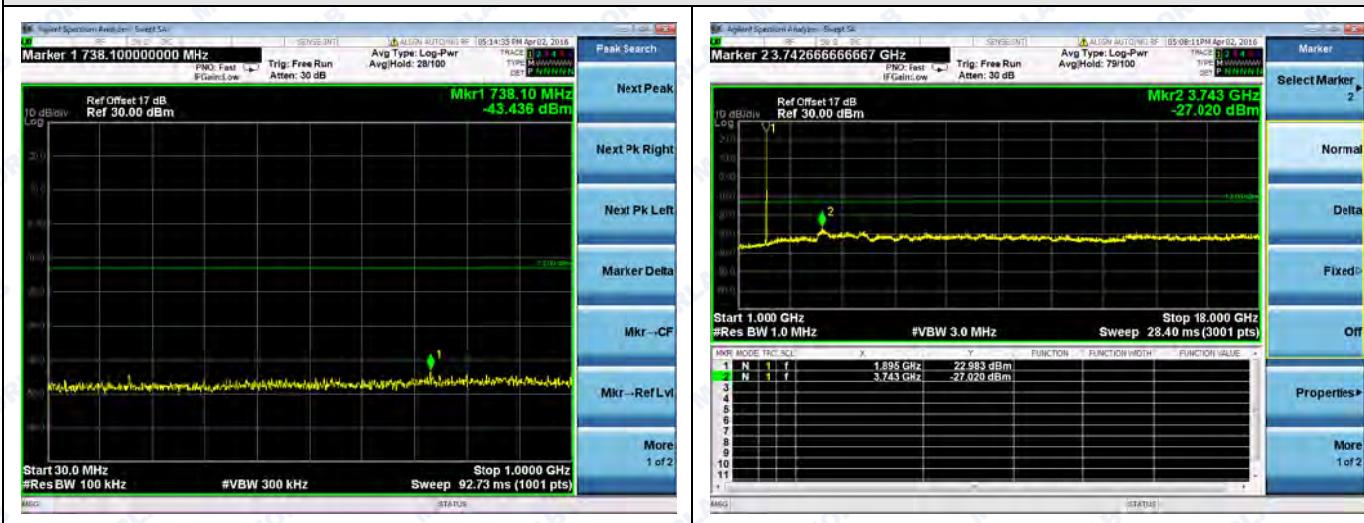
REPORT No.: SZ16030092W05

LTE Band 2 15MHz BW High Channel

QPSK



16QAM

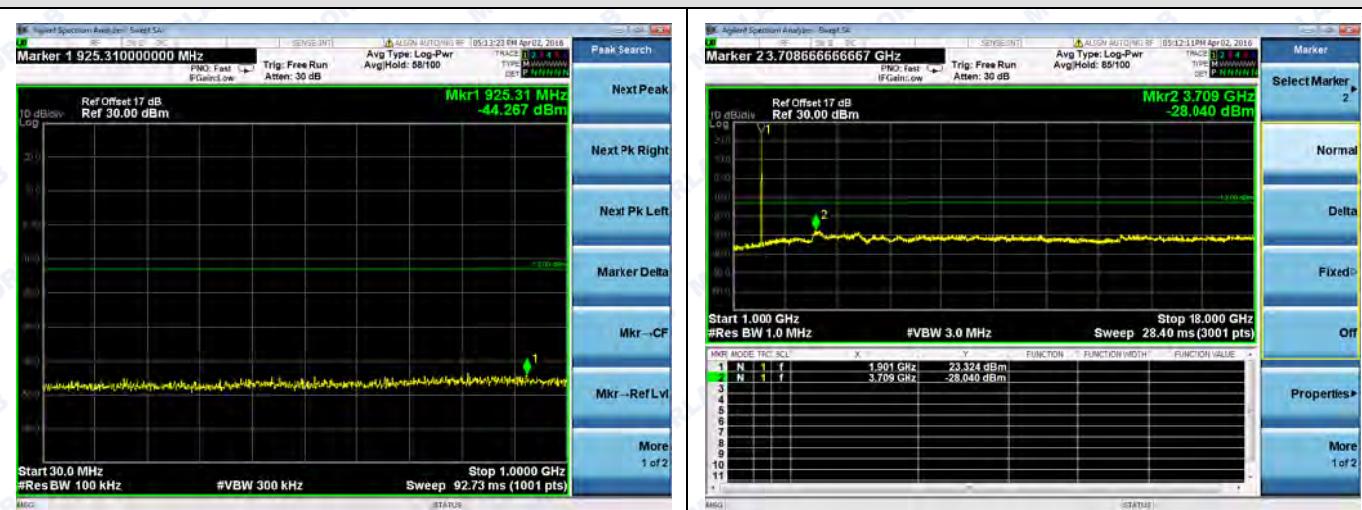




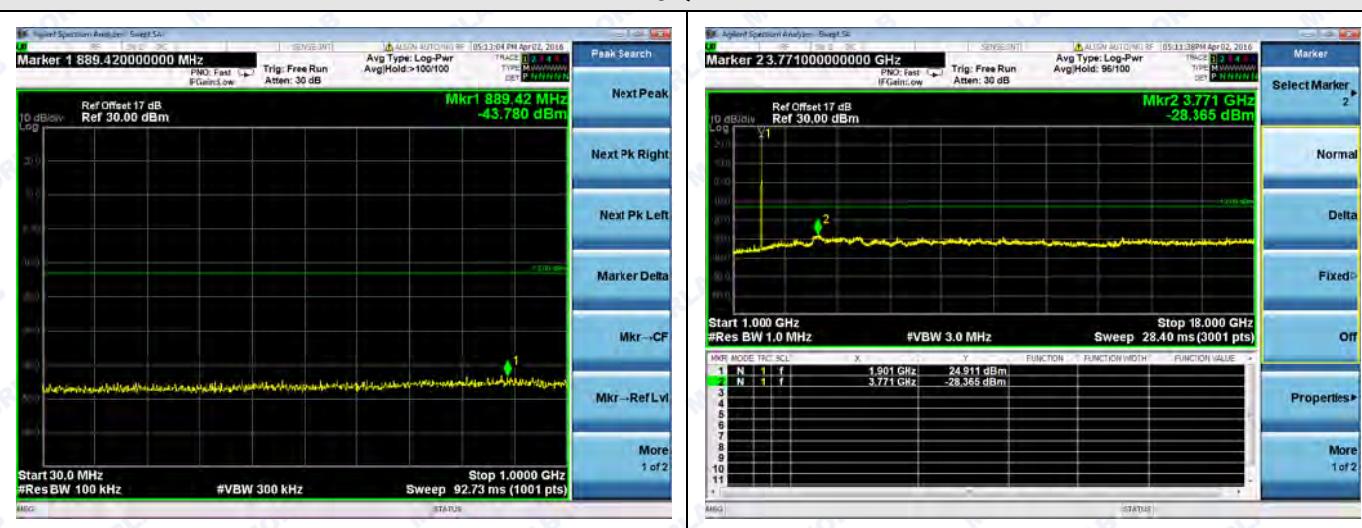
REPORT No.: SZ16030092W05

LTE Band 2 20MHz BW High Channel

QPSK



16QAM





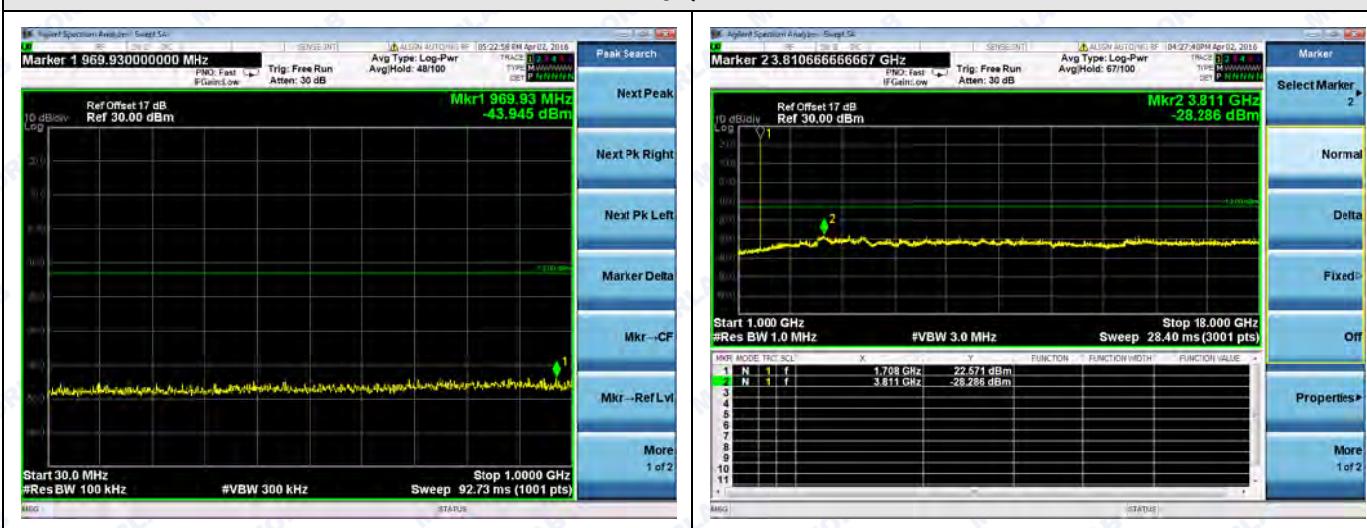
REPORT No.: SZ16030092W05

LTE Band 4 1.4MHz BW Low Channel

QPSK



16QAM

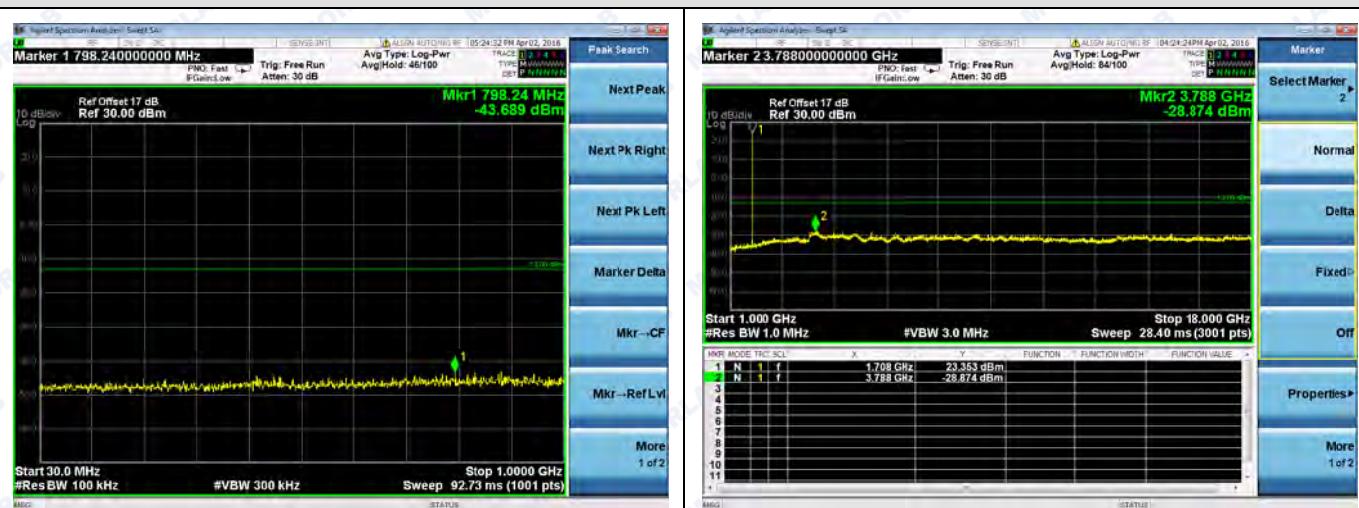




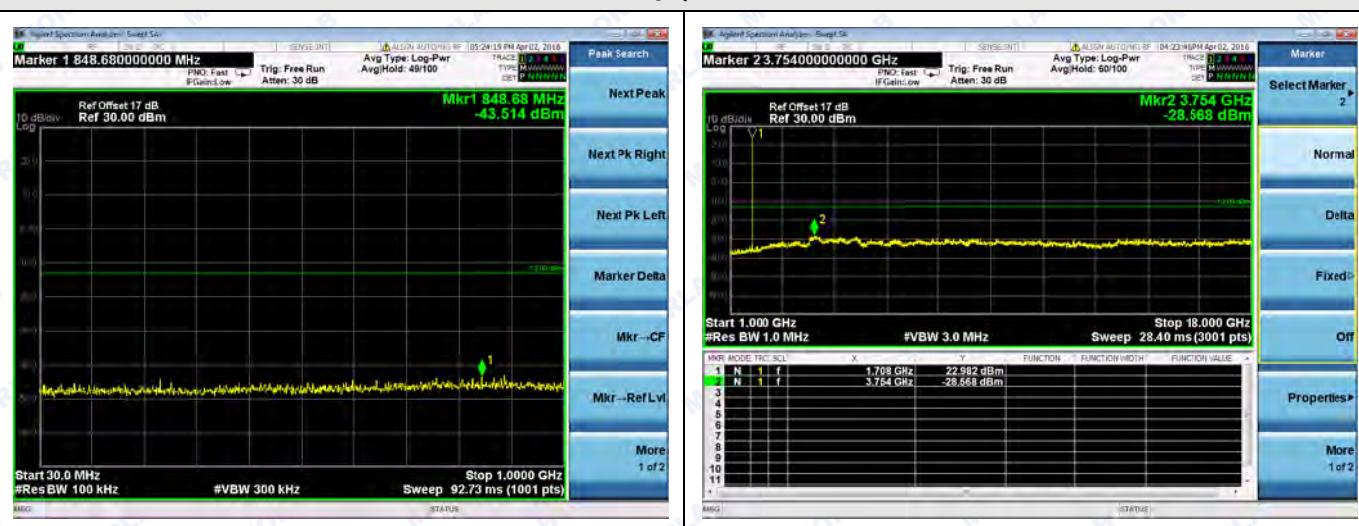
REPORT No.: SZ16030092W05

LTE Band 4 3MHz BW Low Channel

QPSK



16QAM

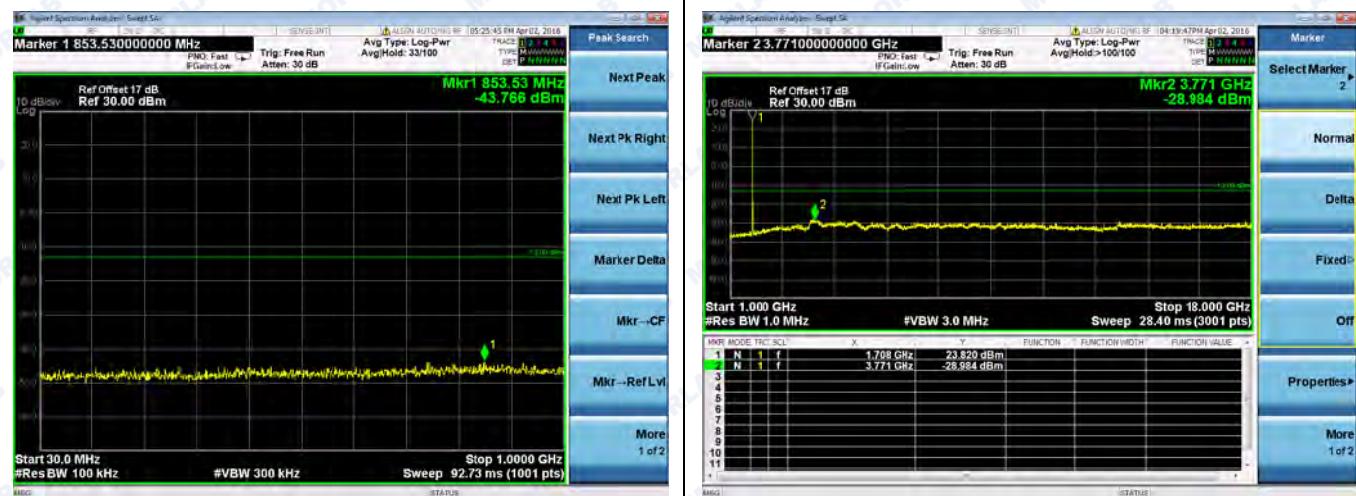




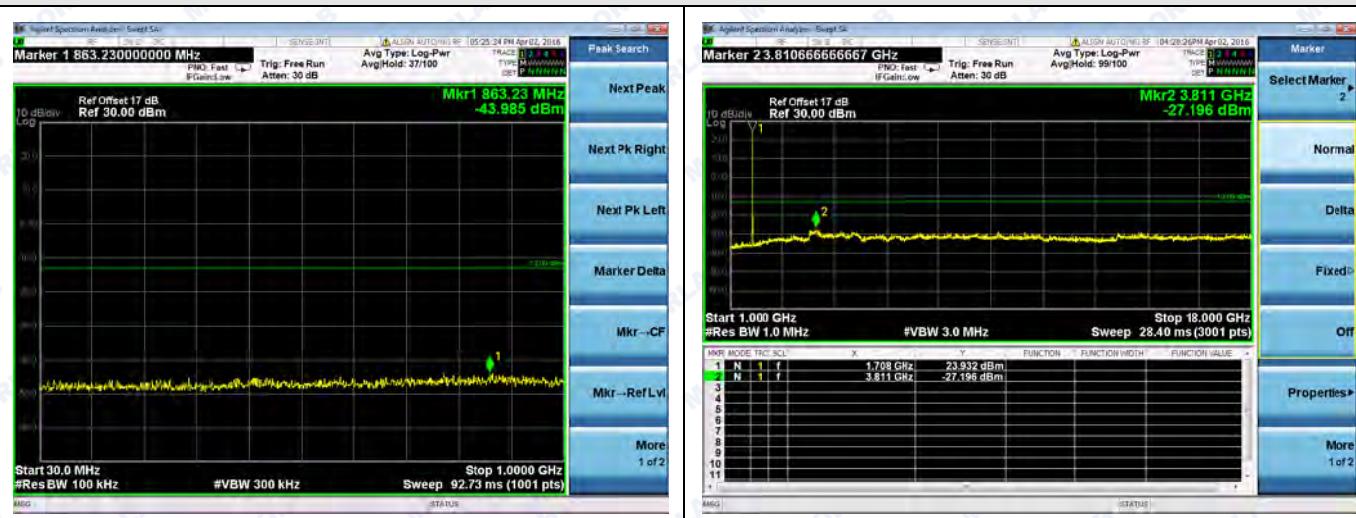
REPORT No.: SZ16030092W05

LTE Band 4 5MHz BW Low Channel

QPSK



16QAM

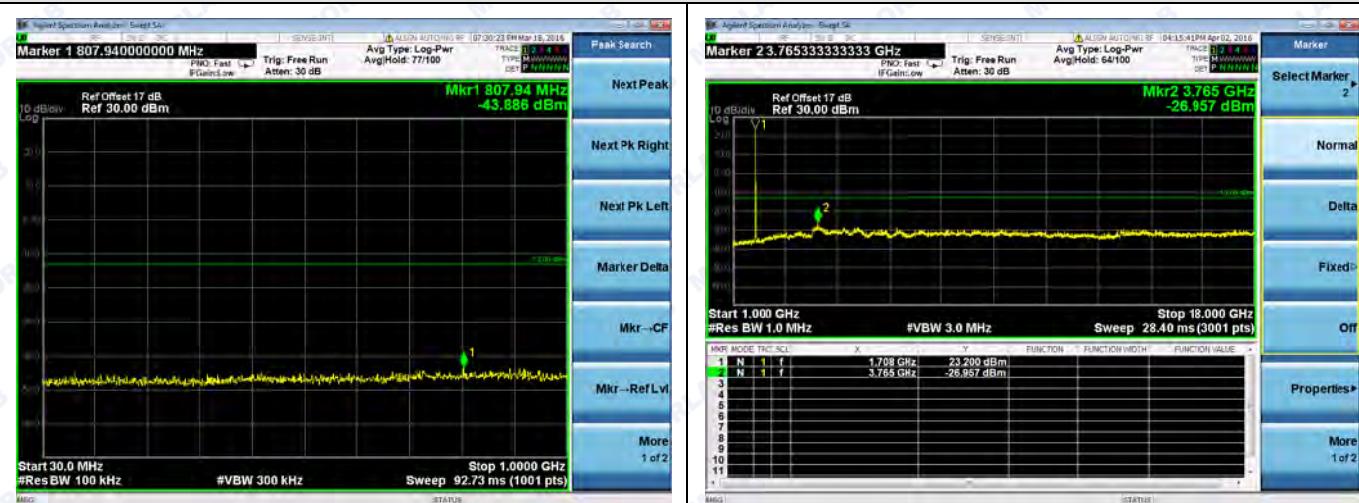




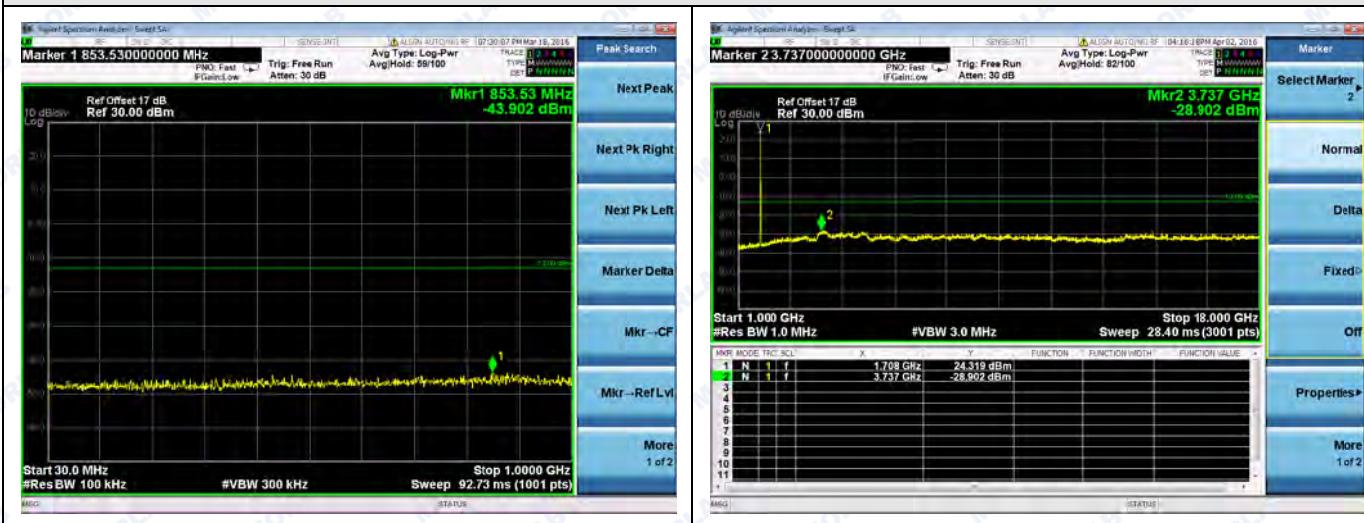
REPORT No.: SZ16030092W05

LTE Band 4 10MHz BW Low Channel

QPSK



16QAM

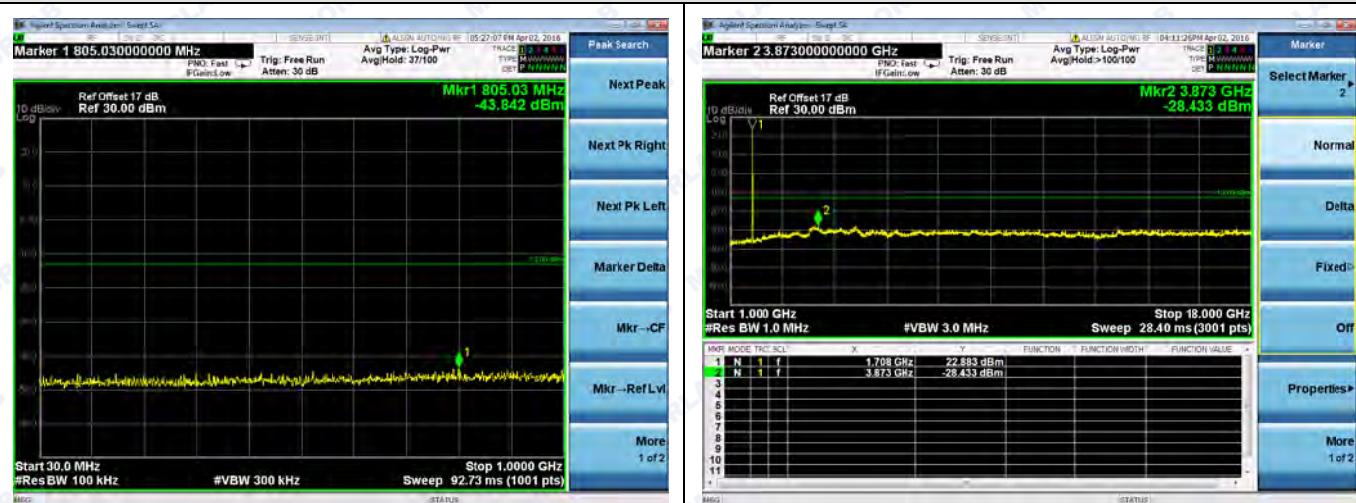




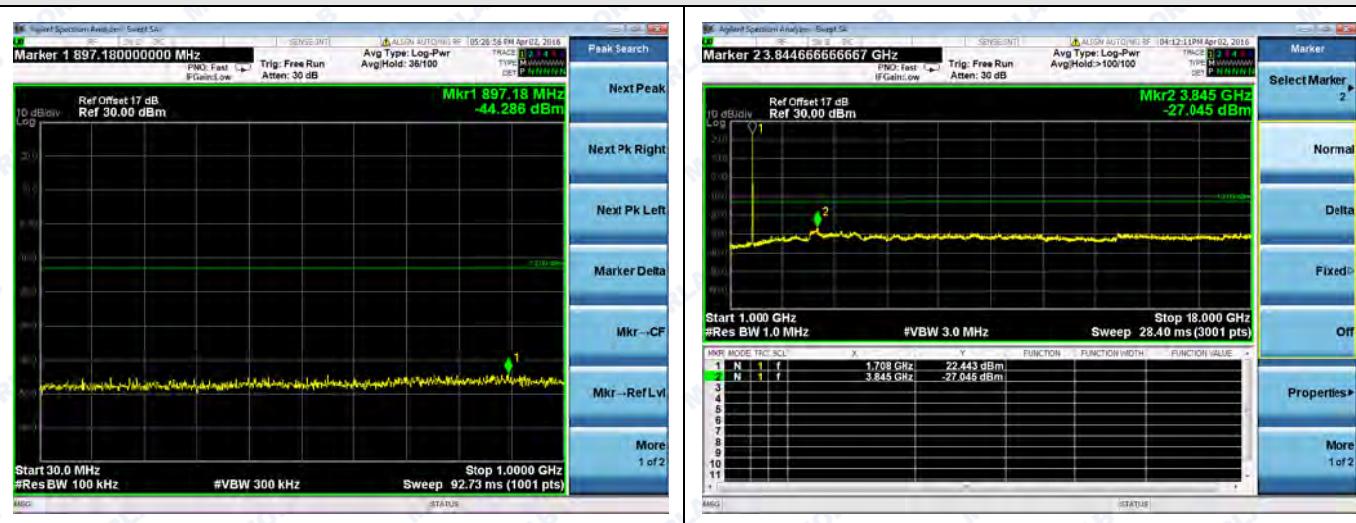
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LTE Band 4 15MHz BW Low Channel

QPSK



16QAM

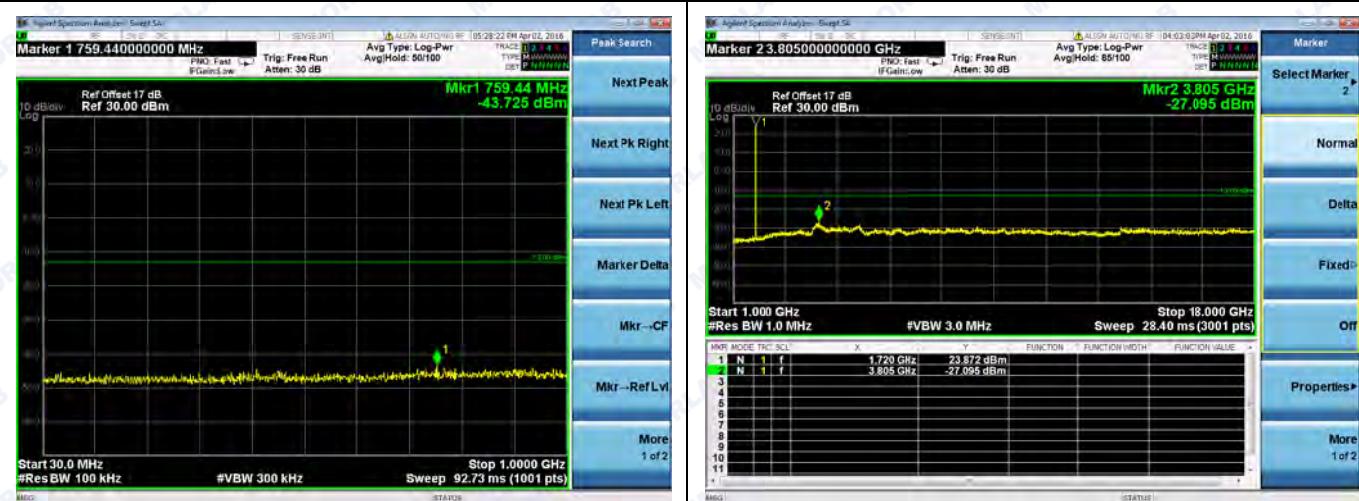




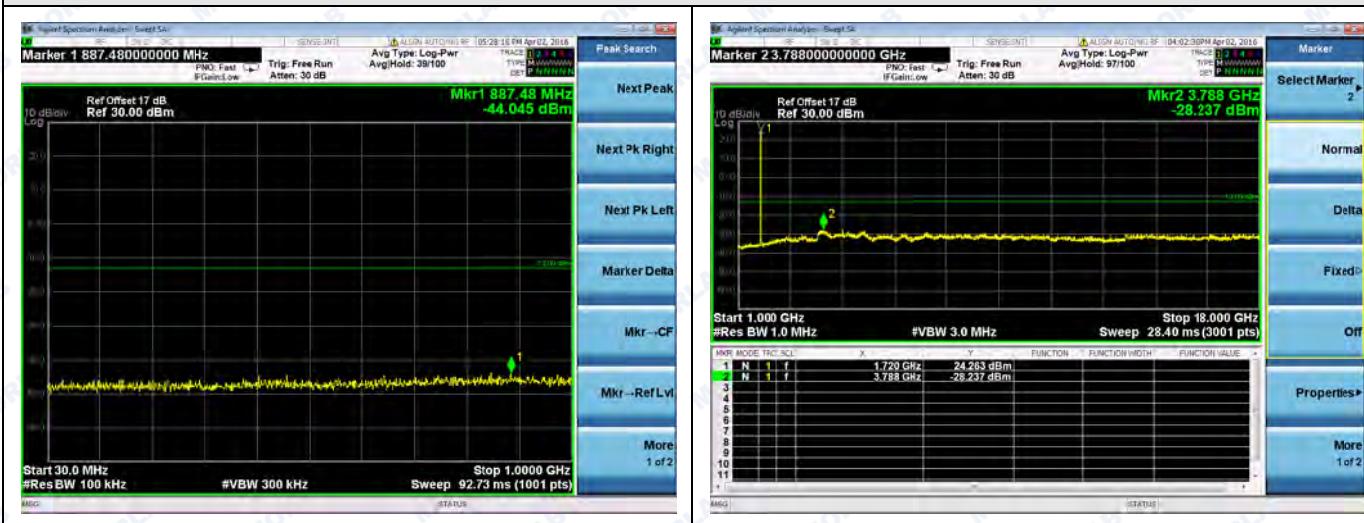
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LTE Band 4 20MHz BW Low Channel

QPSK



16QAM



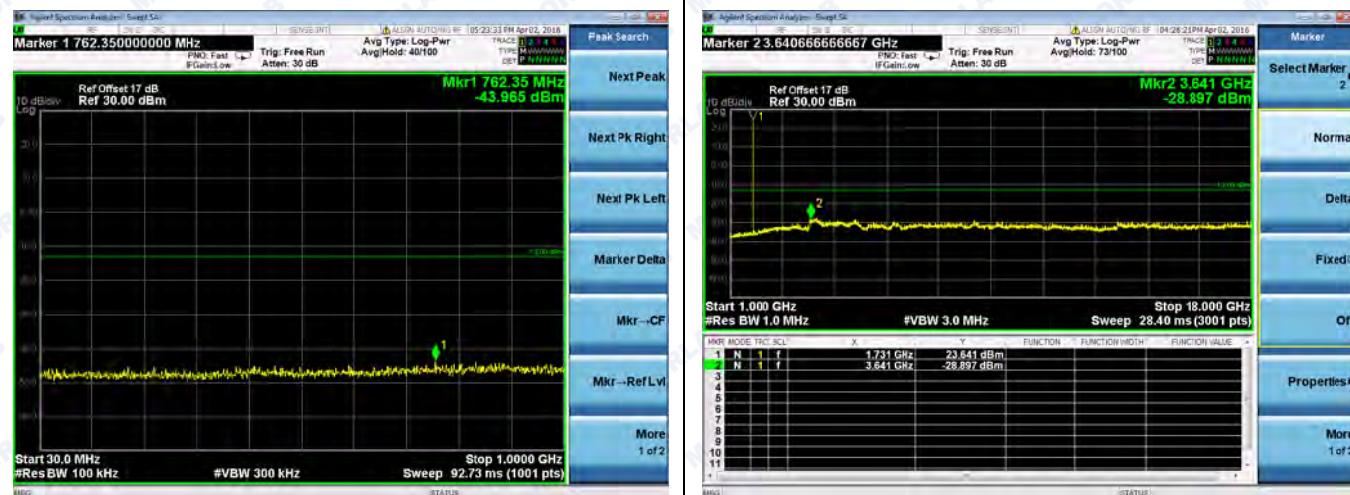


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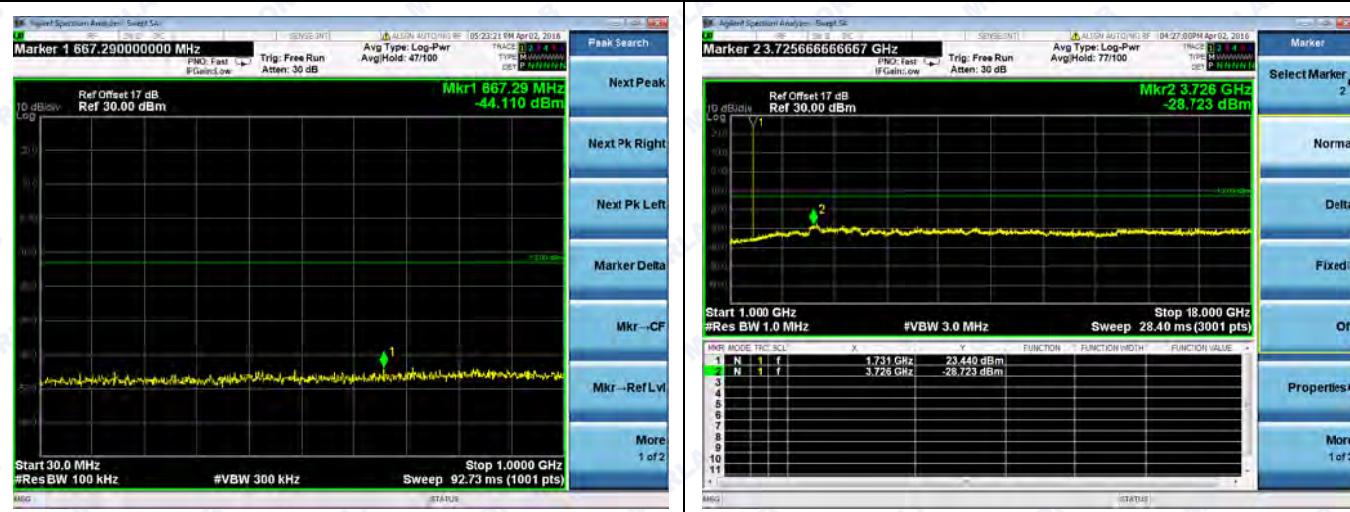
Middle channel:

LTE Band 4 1.4MHz BW Mid Channel

QPSK



16QAM

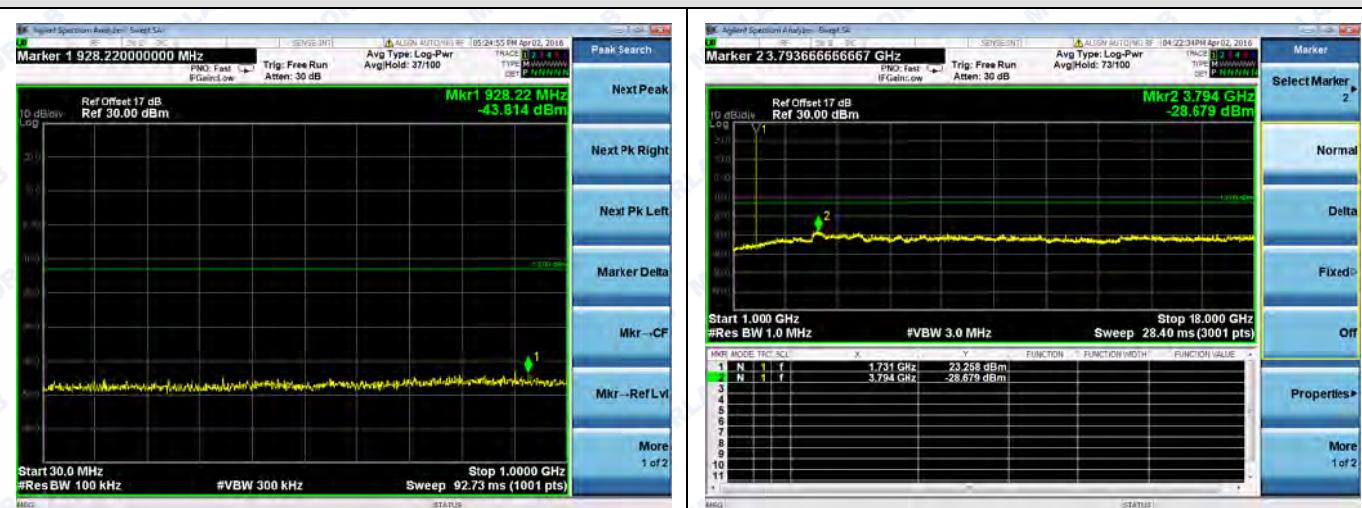




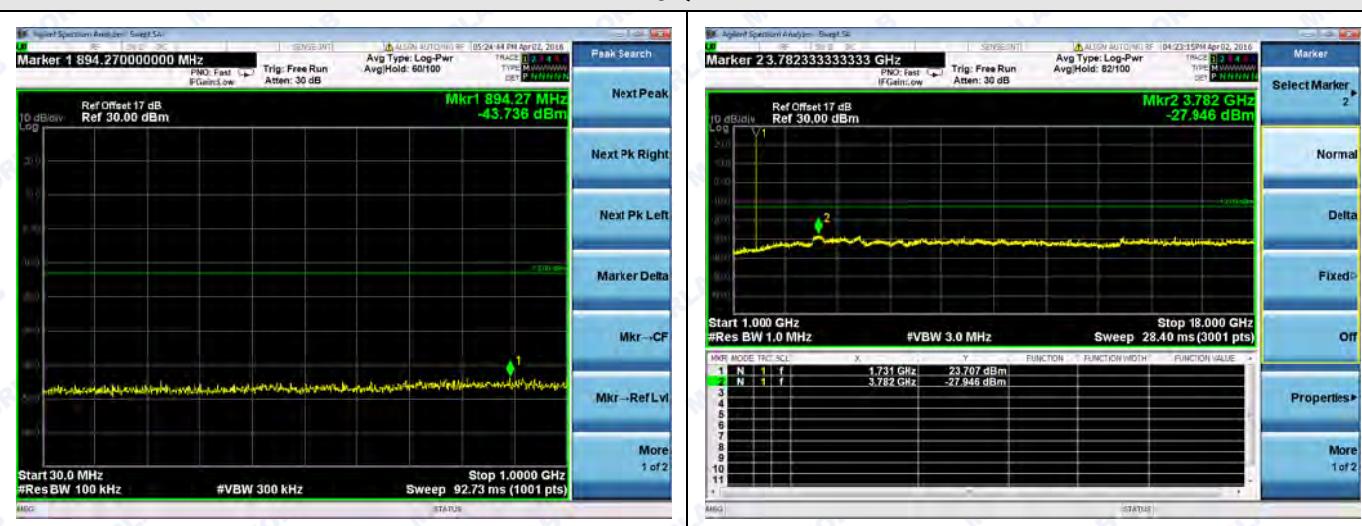
REPORT No.: SZ16030092W05

LTE Band 4 3MHz BW Mid Channel

QPSK



16QAM

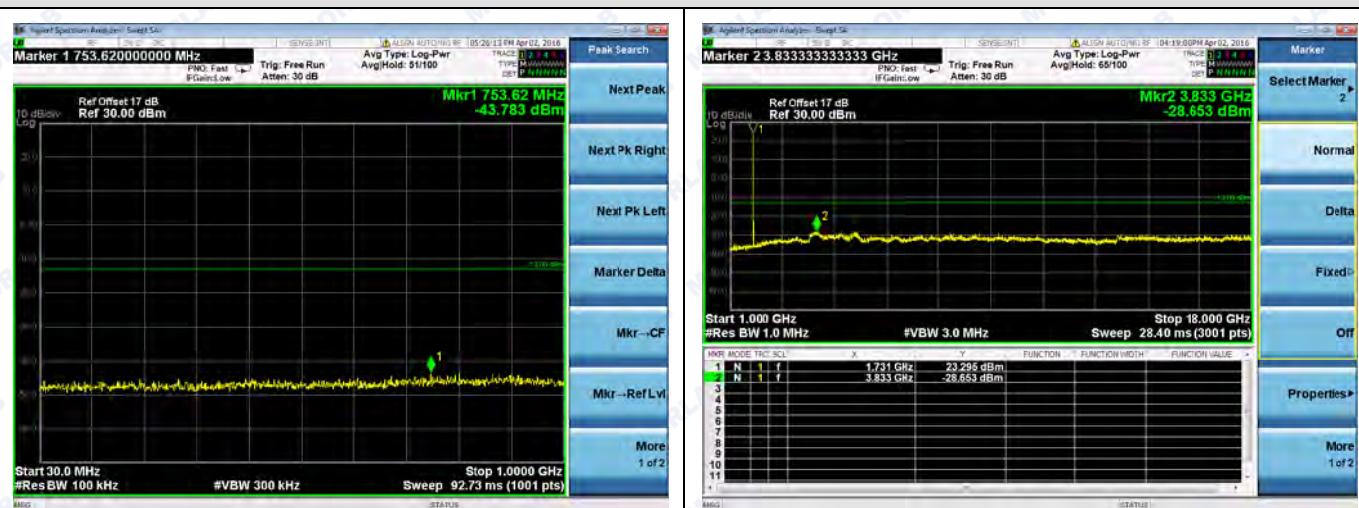




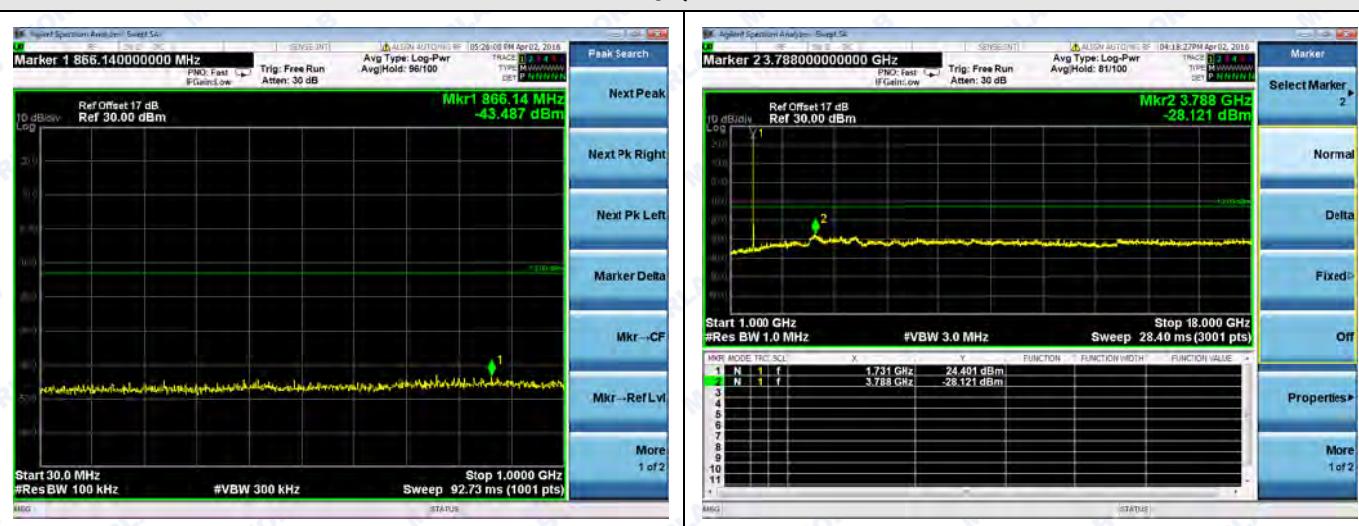
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LTE Band 4 5MHz BW Mid Channel

QPSK



16QAM

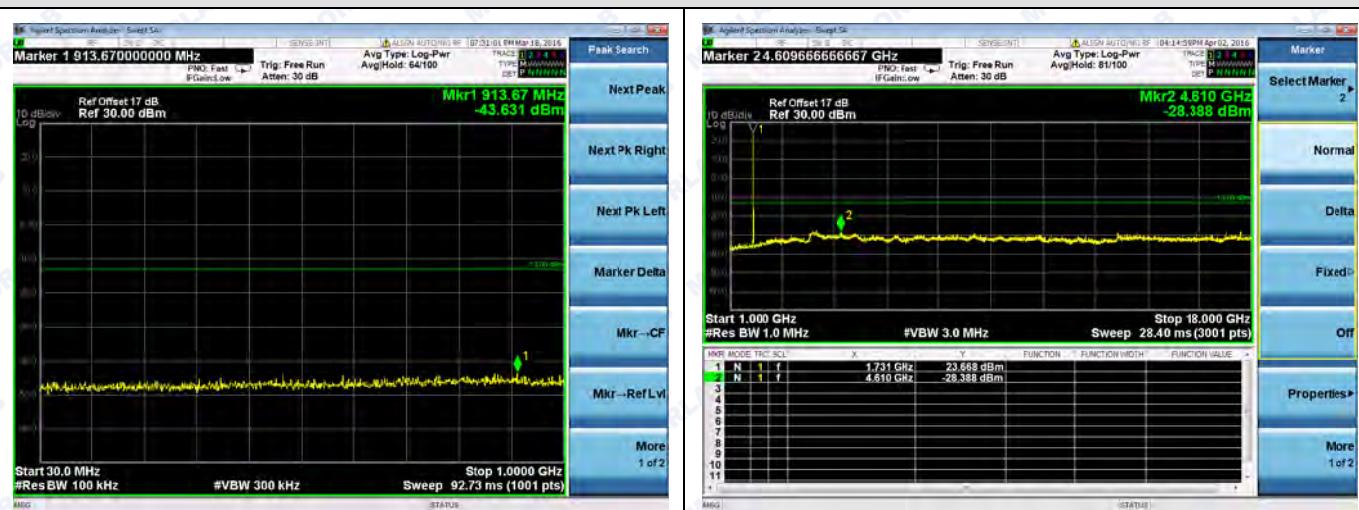




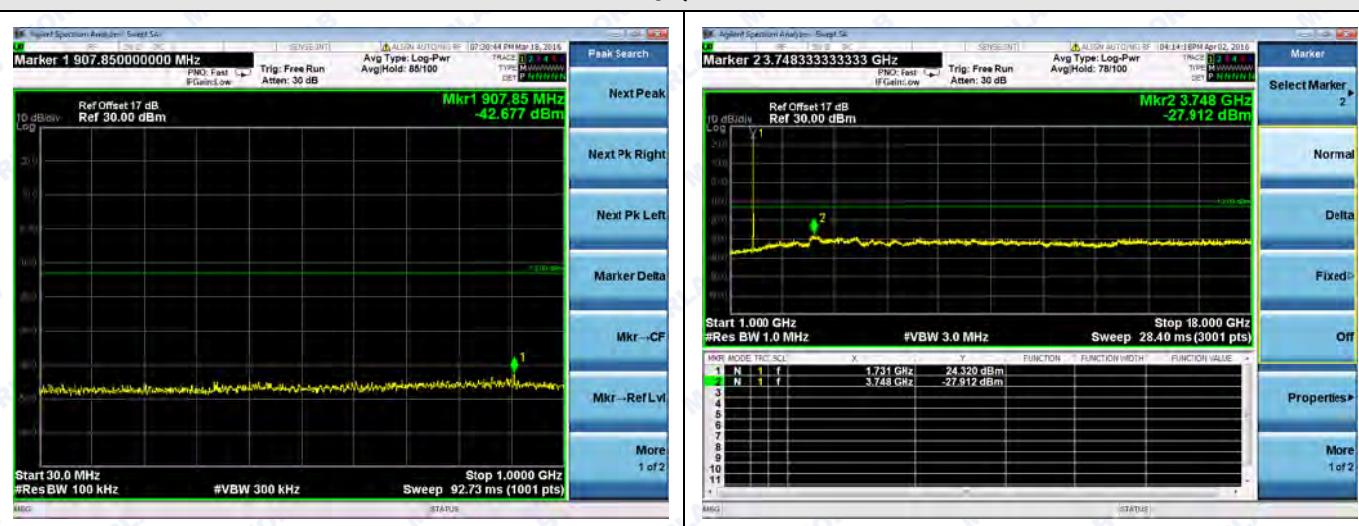
REPORT No.: SZ16030092W05

LTE Band 4 10MHz BW Mid Channel

QPSK



16QAM

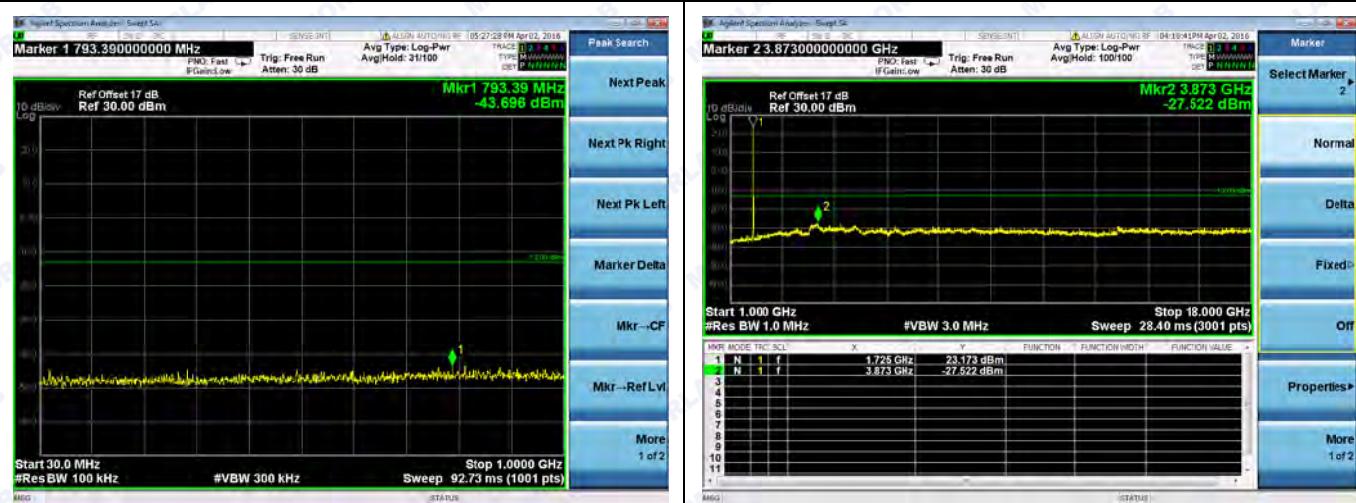




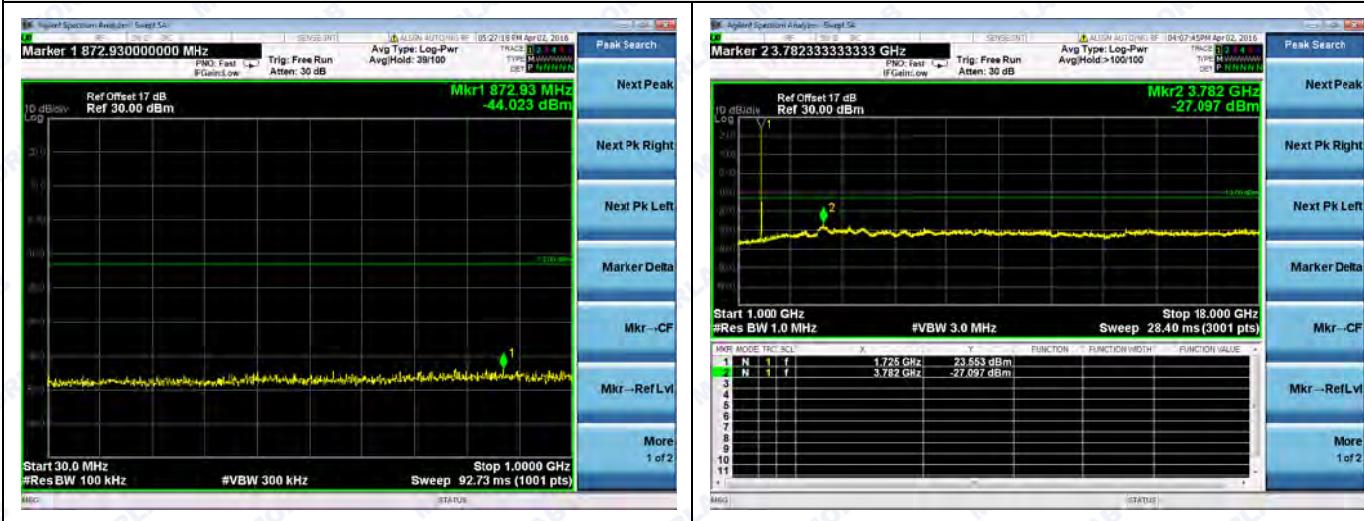
REPORT No.: SZ16030092W05

LTE Band 4 15MHz BW Mid Channel

QPSK



16QAM

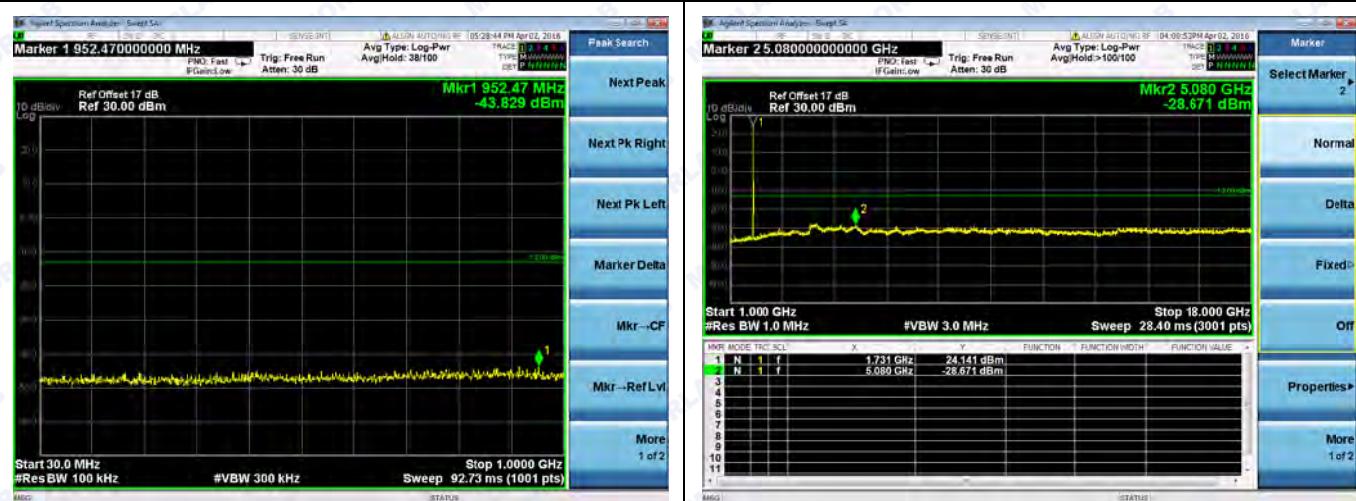




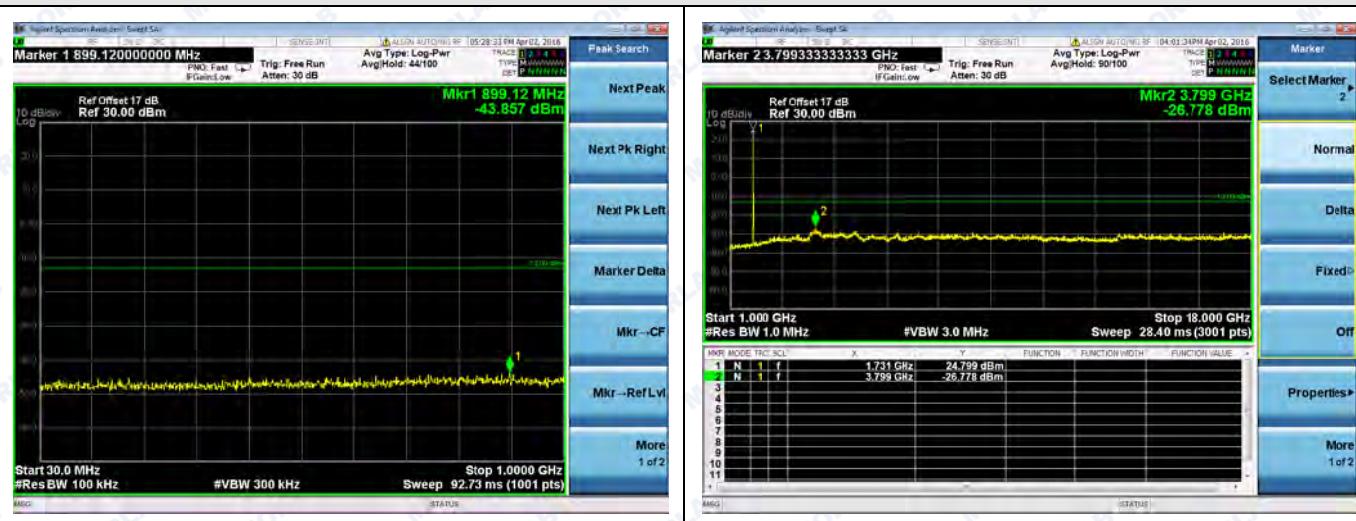
REPORT No.: SZ16030092W05

LTE Band 4 20MHz BW Mid Channel

QPSK



16QAM

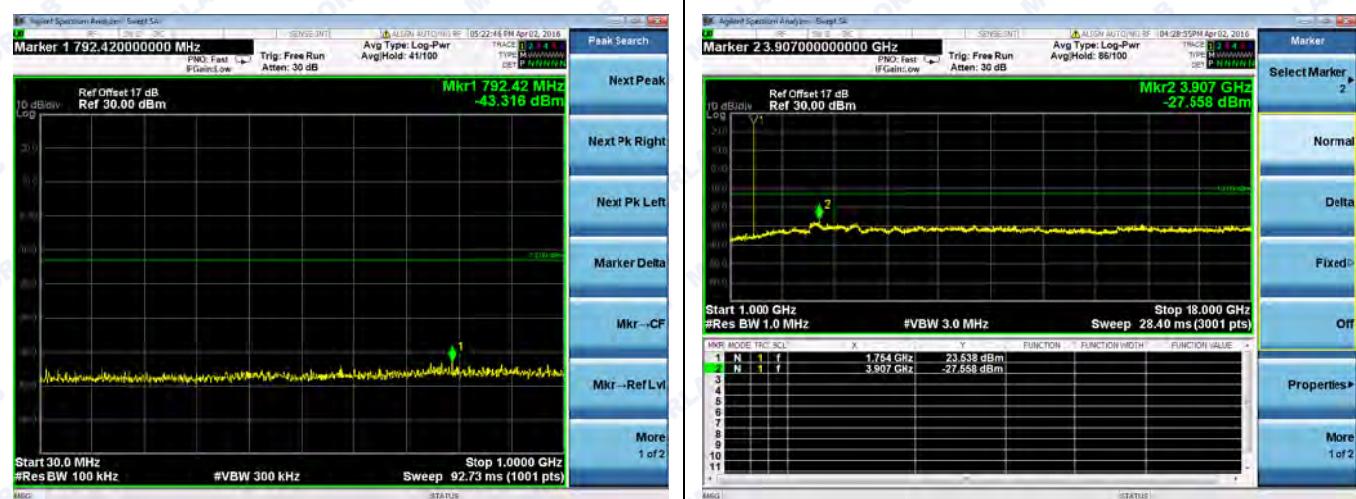




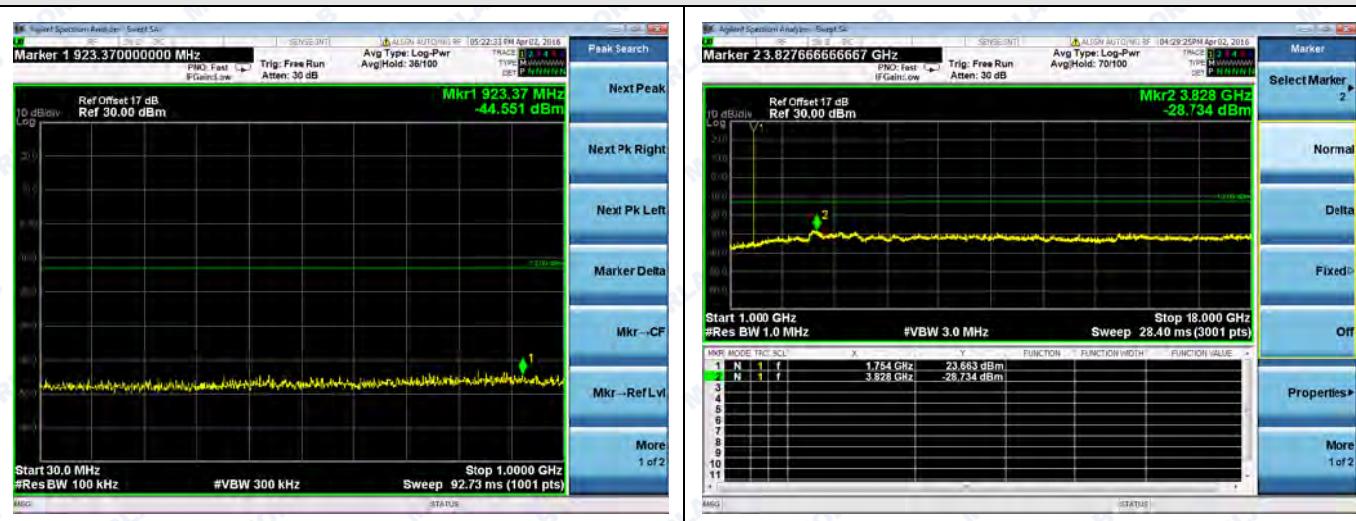
REPORT No.: SZ16030092W05

LTE Band 4 1.4MHz BW High Channel

QPSK



16QAM

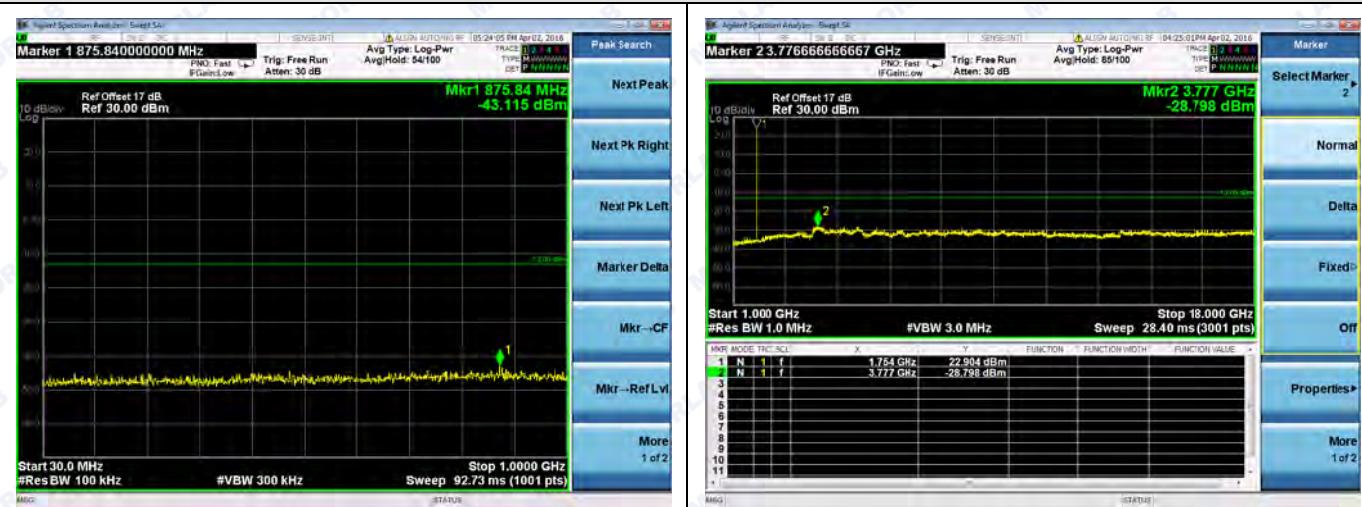




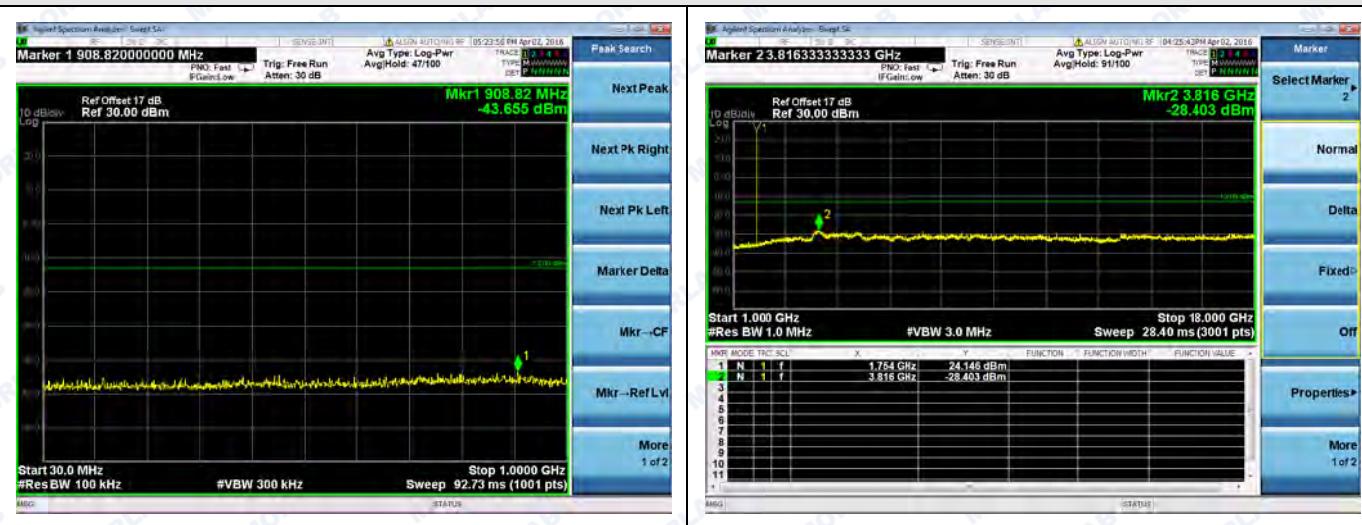
REPORT No.: SZ16030092W05

LTE Band 4 3MHz BW High Channel

QPSK



16QAM

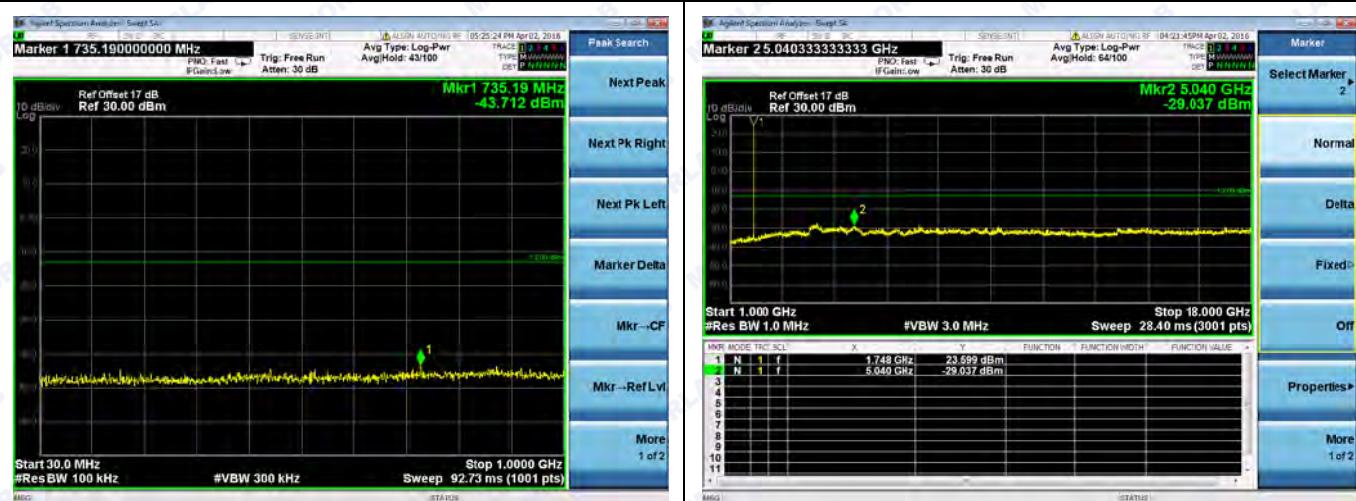




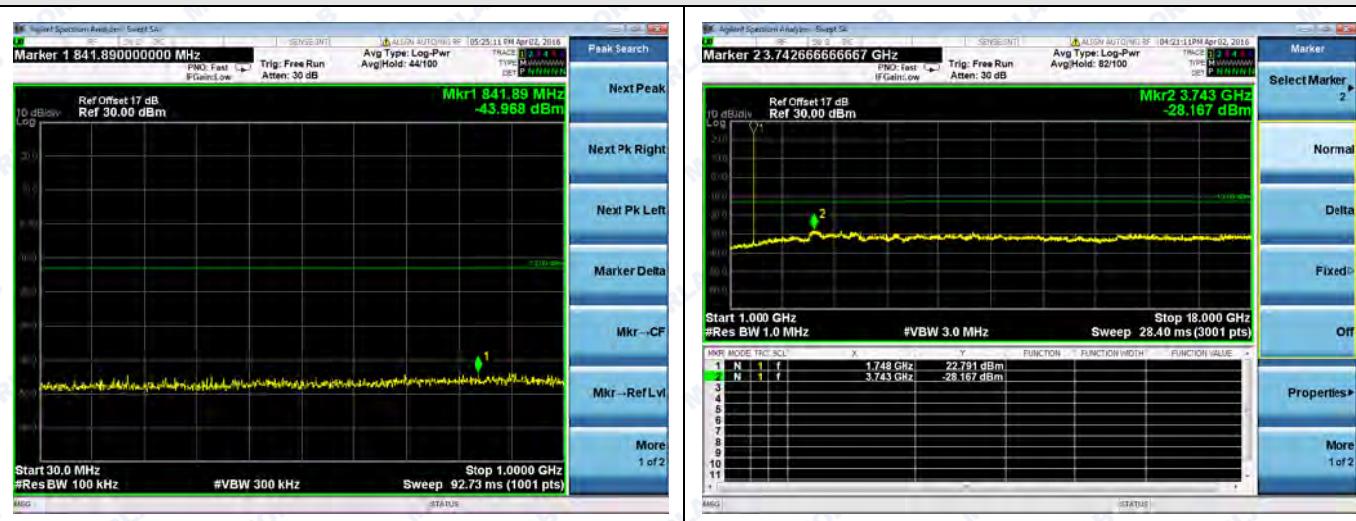
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LTE Band 4 5MHz BW High Channel

QPSK



16QAM

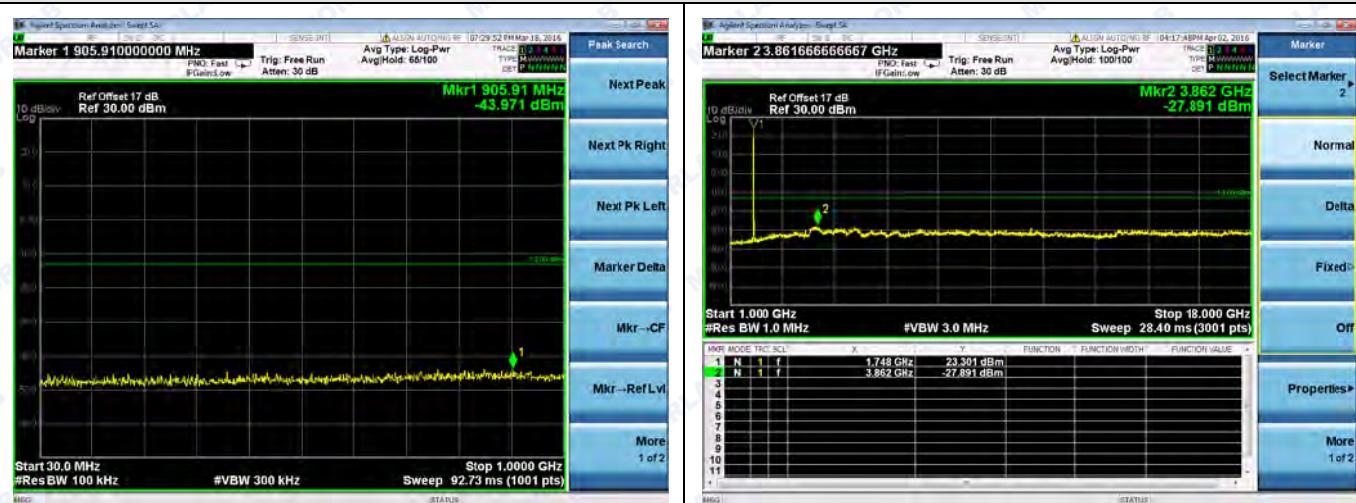




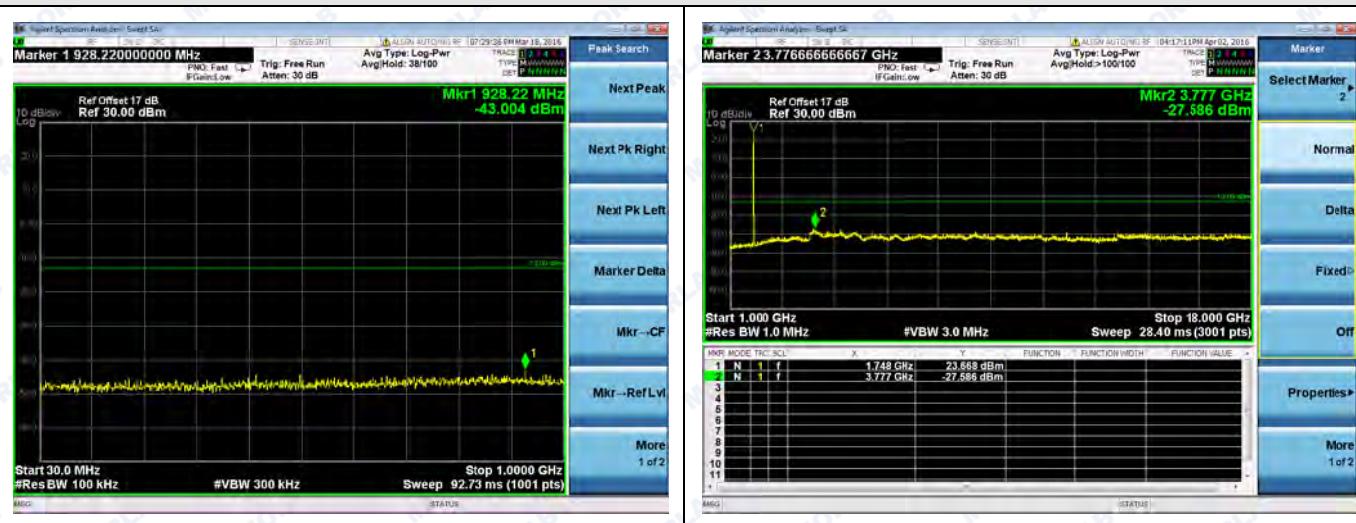
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LTE Band 4 10MHz BW High Channel

QPSK



16QAM

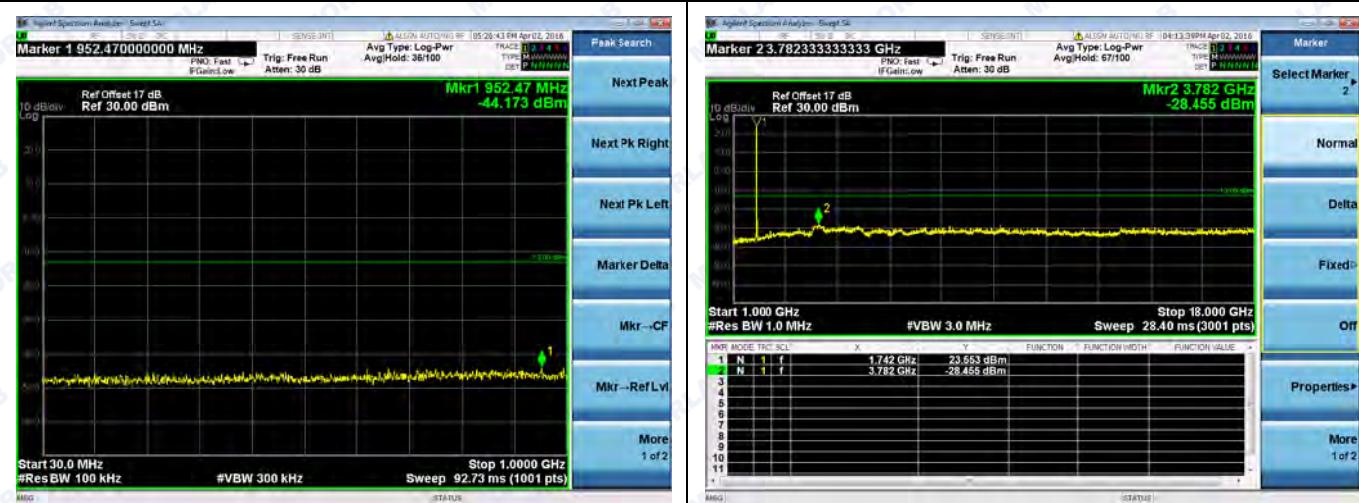




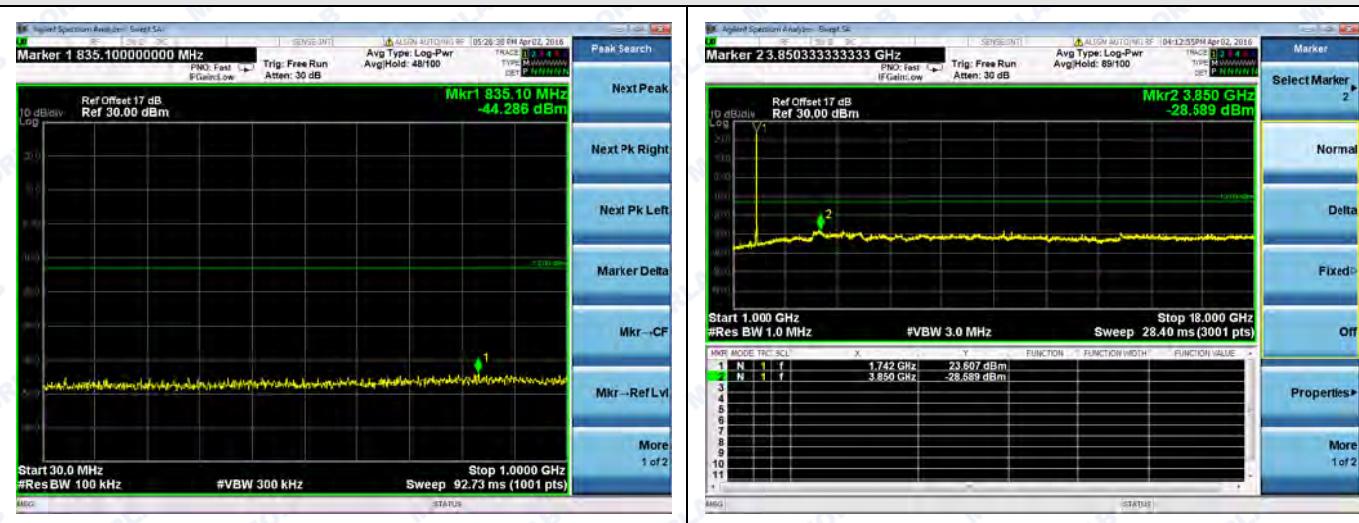
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LTE Band 4 15MHz BW High Channel

QPSK



16QAM

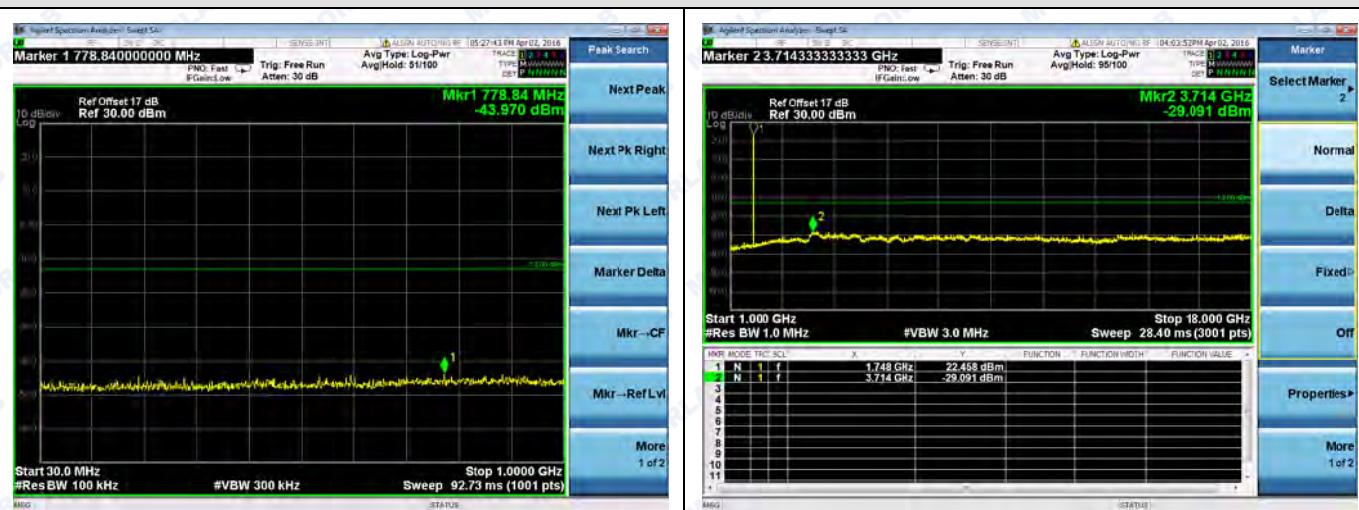




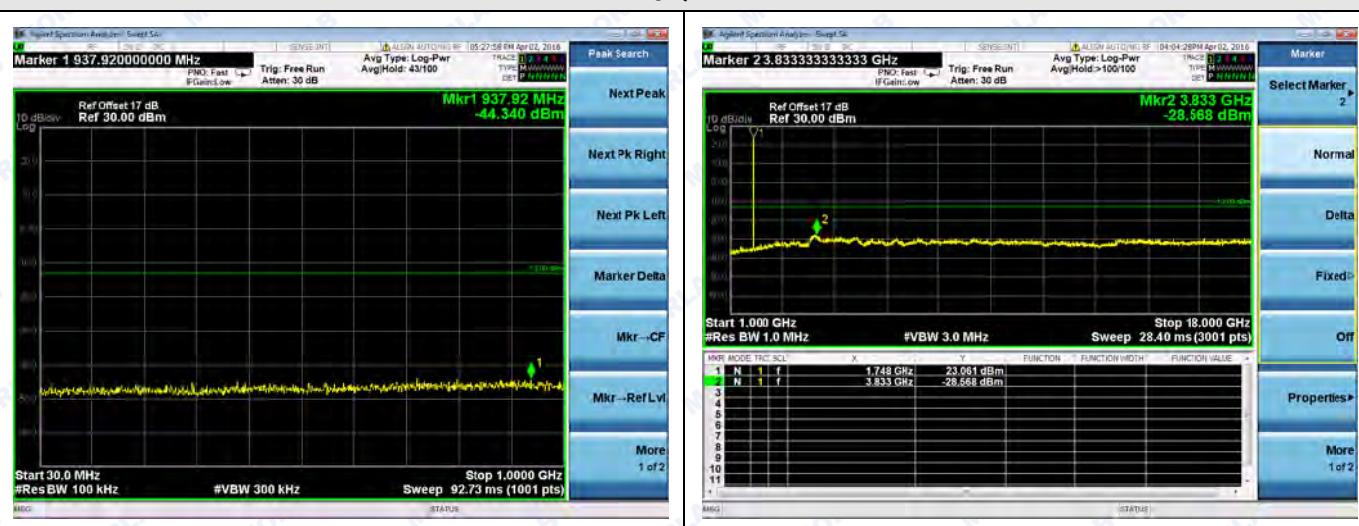
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LTE Band 4 20MHz BW High Channel

QPSK



16QAM

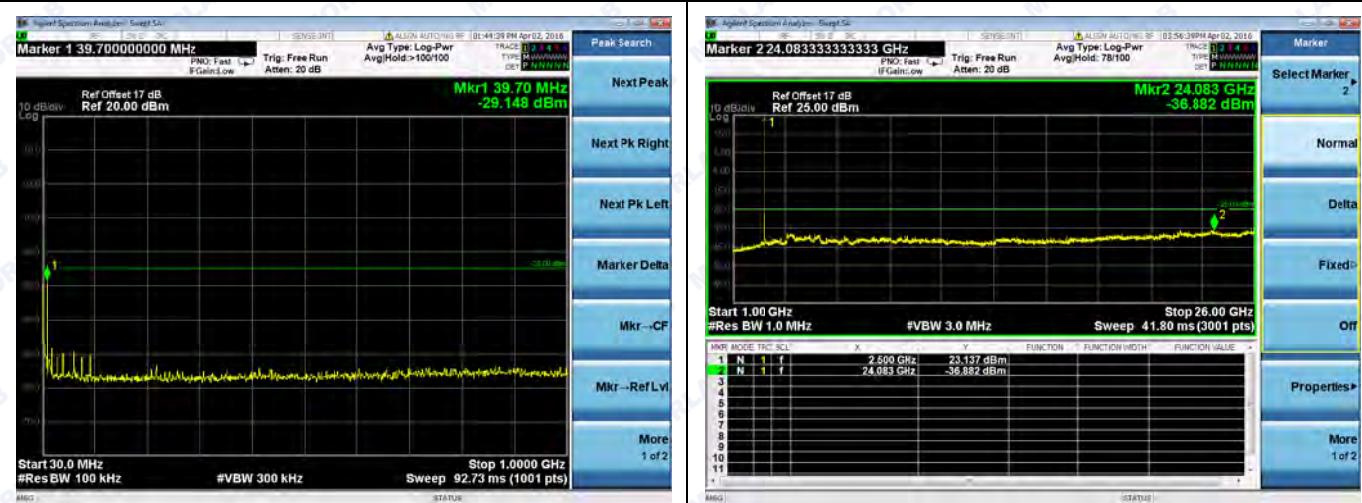




REPORT No.: SZ16030092W05

LTE Band 7 5MHz BW Low Channel

QPSK



16QAM

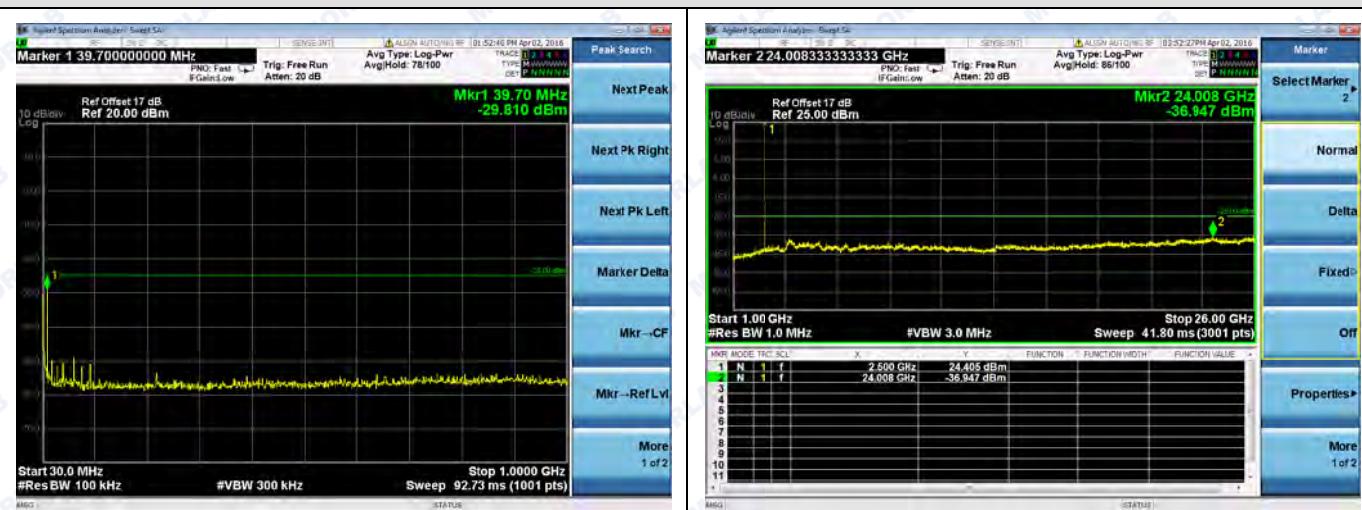




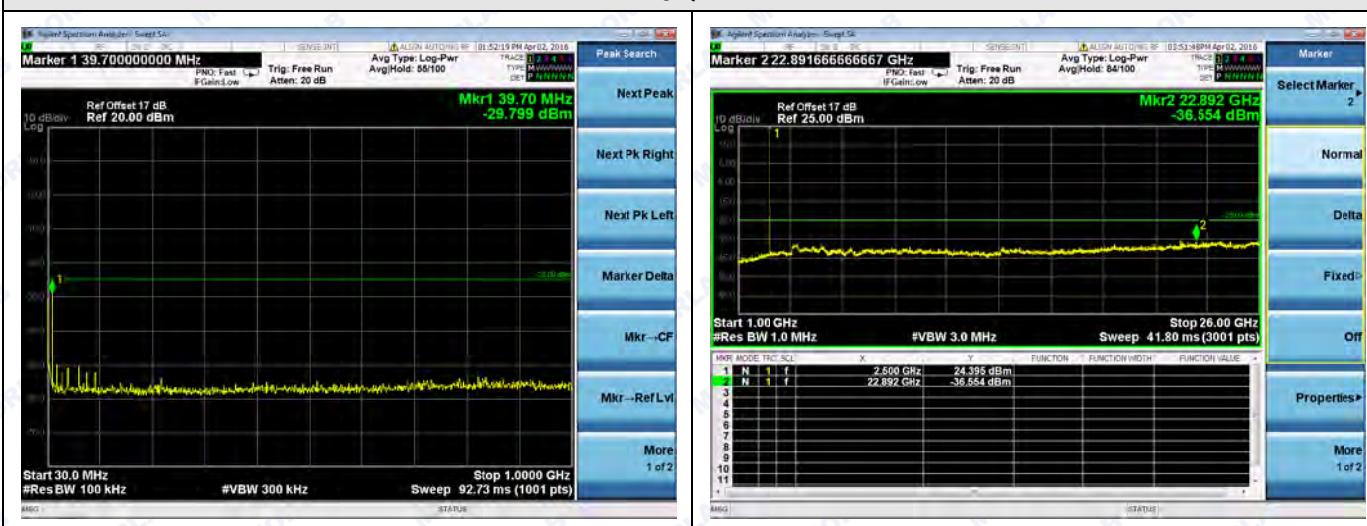
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LTE Band 7 10MHz BW Low Channel

QPSK



16QAM

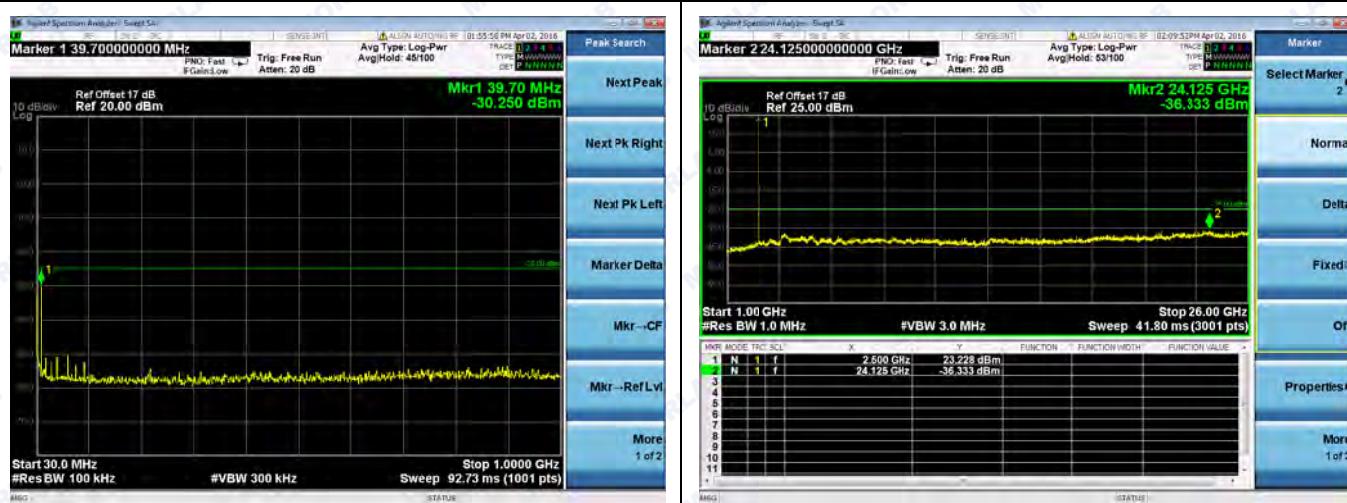




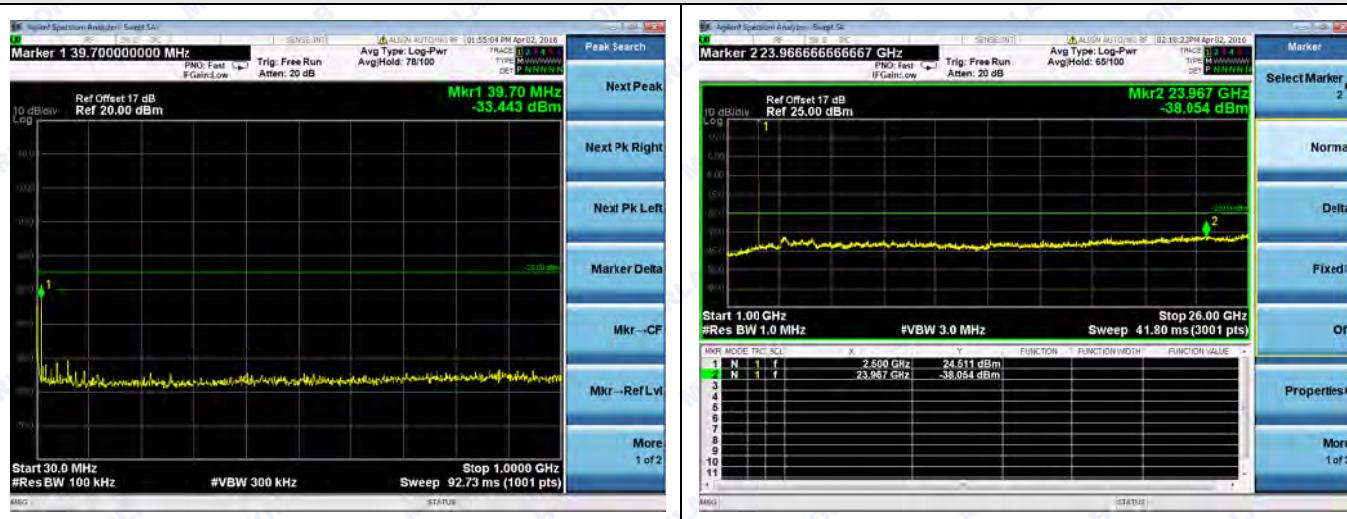
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LTE Band 7 15MHz BW Low Channel

QPSK



16QAM

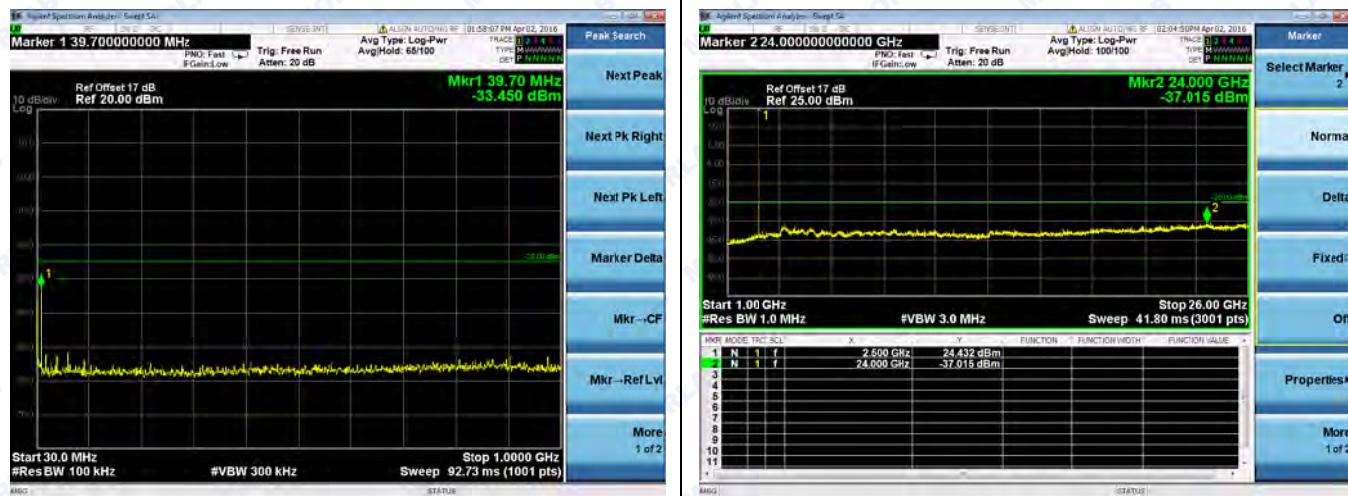




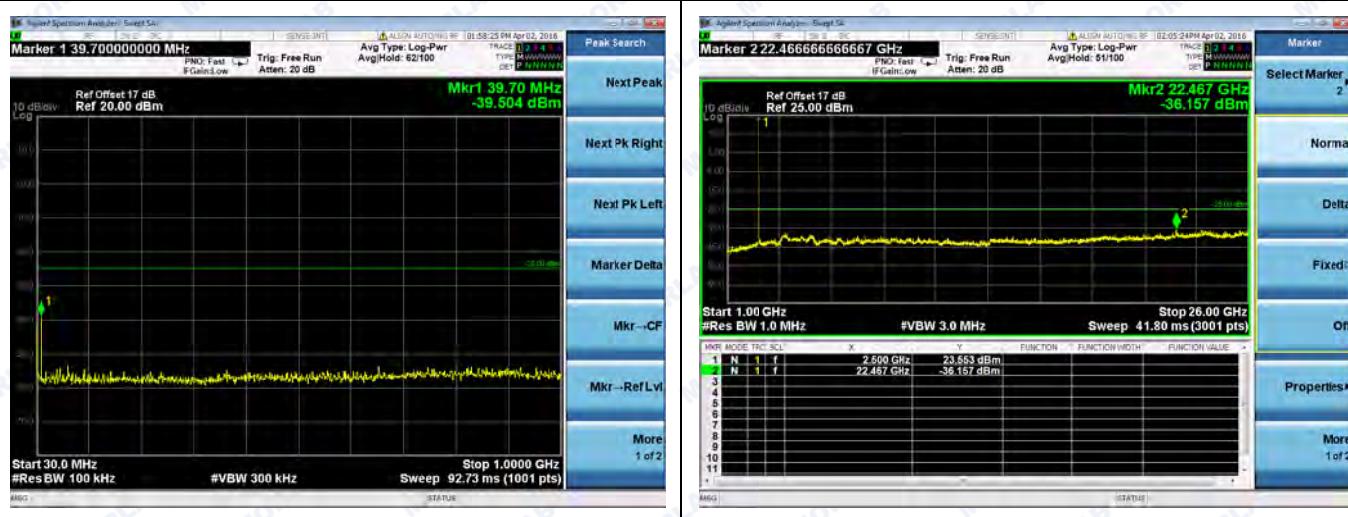
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LTE Band 7 20MHz BW Low Channel

QPSK



16QAM



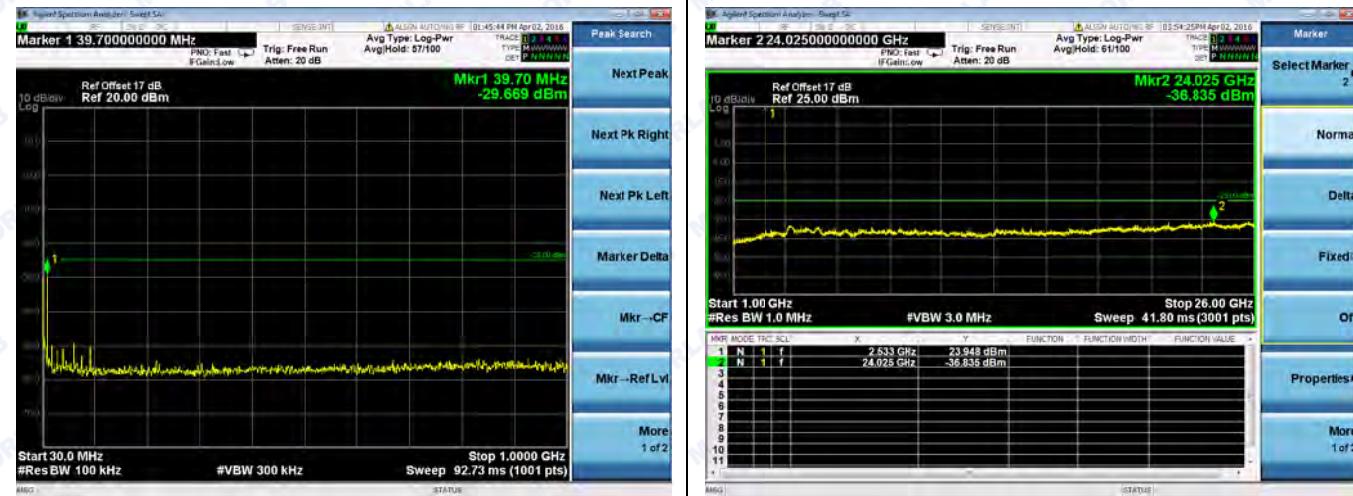


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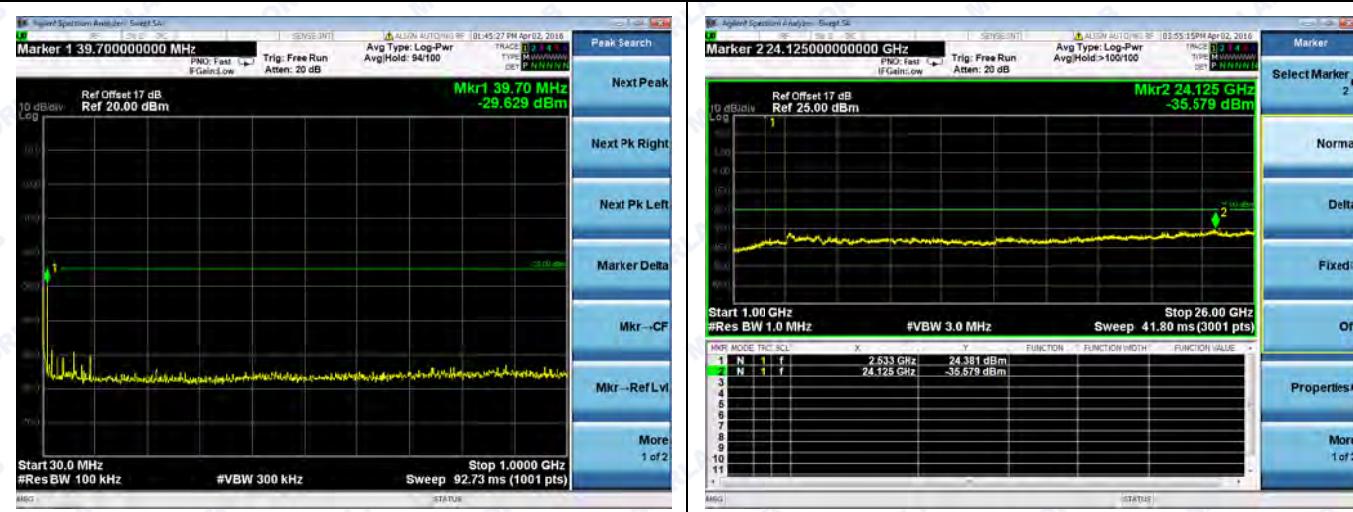
Middle channel:

LTE Band 7 5MHz BW Mid Channel

QPSK



16QAM





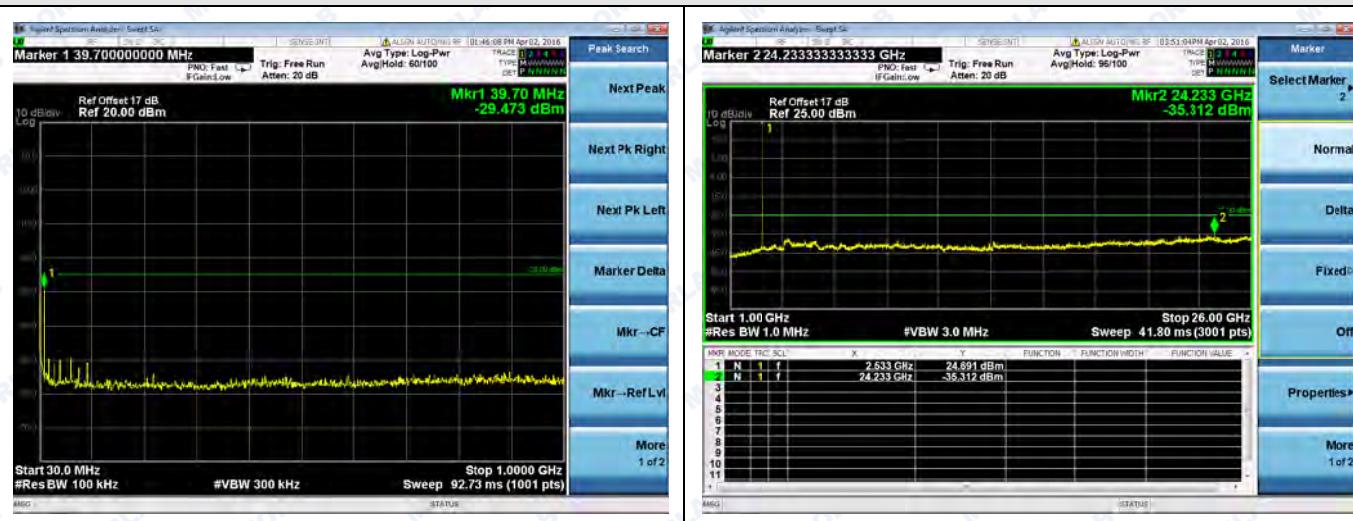
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LTE Band 7 10MHz BW Mid Channel

QPSK



16QAM

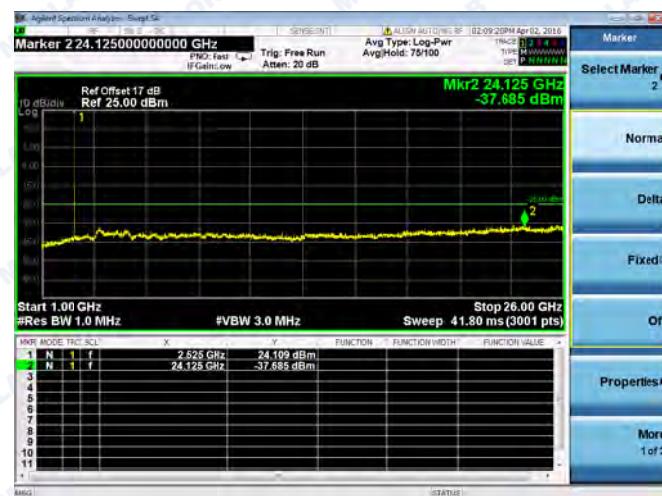
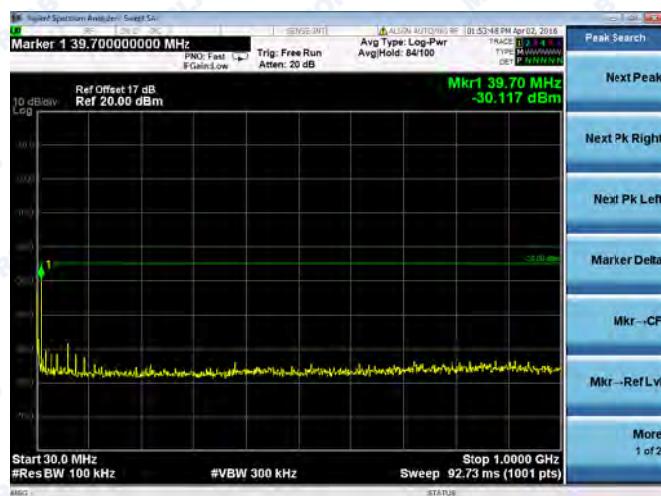




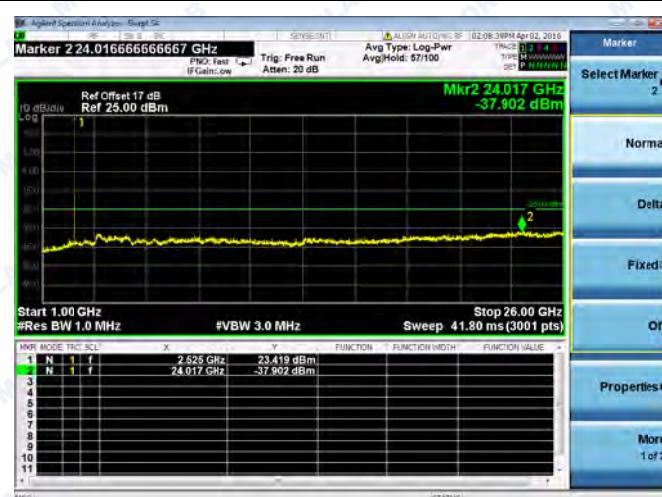
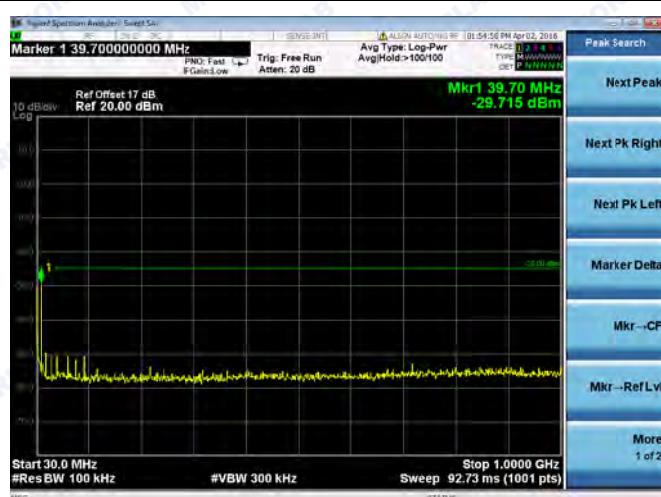
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LTE Band 7 15MHz BW Mid Channel

QPSK



16QAM

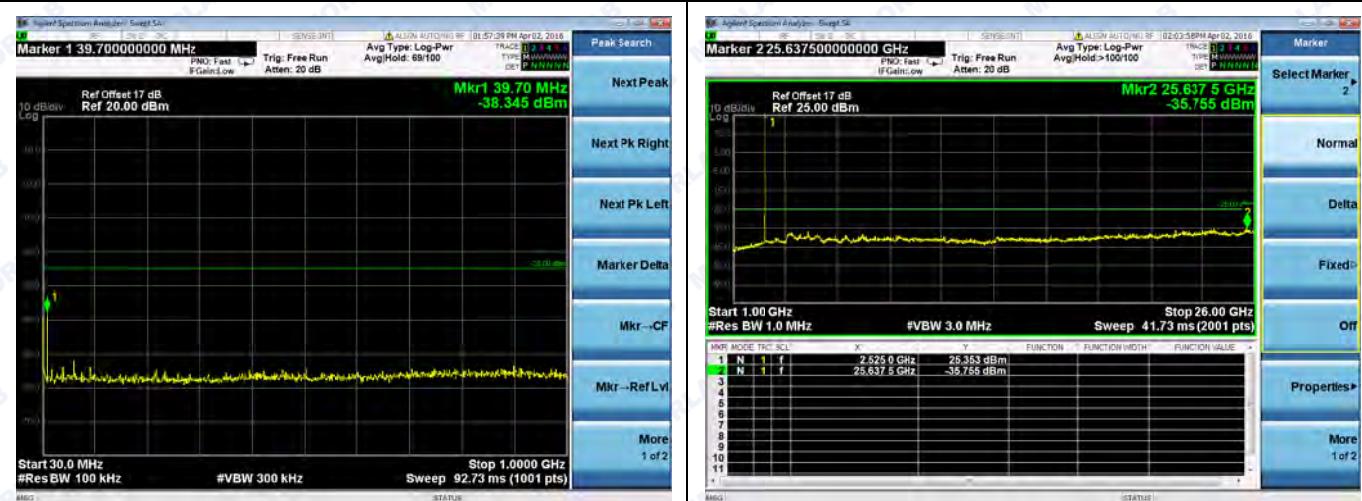




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LTE Band 7 20MHz BW Mid Channel

QPSK



16QAM

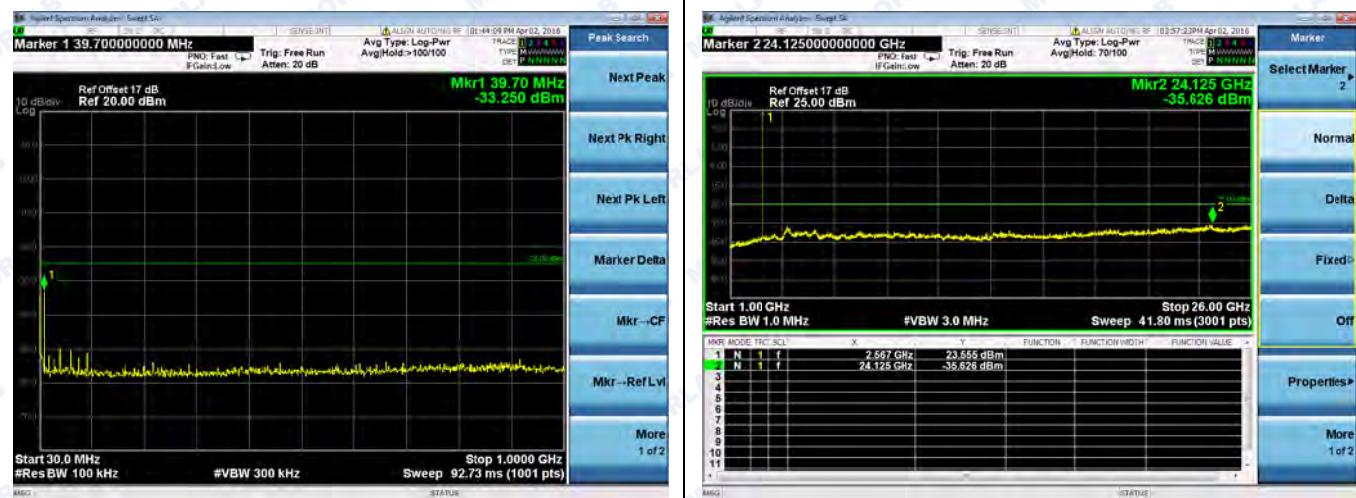




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LTE Band 7 5MHz BW High Channel

QPSK



16QAM

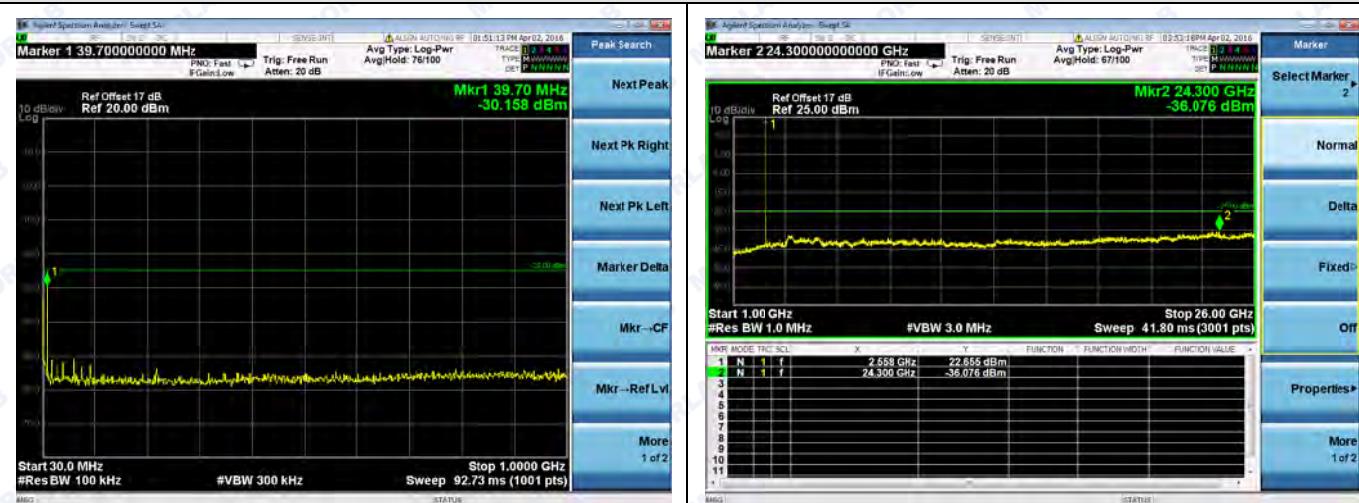




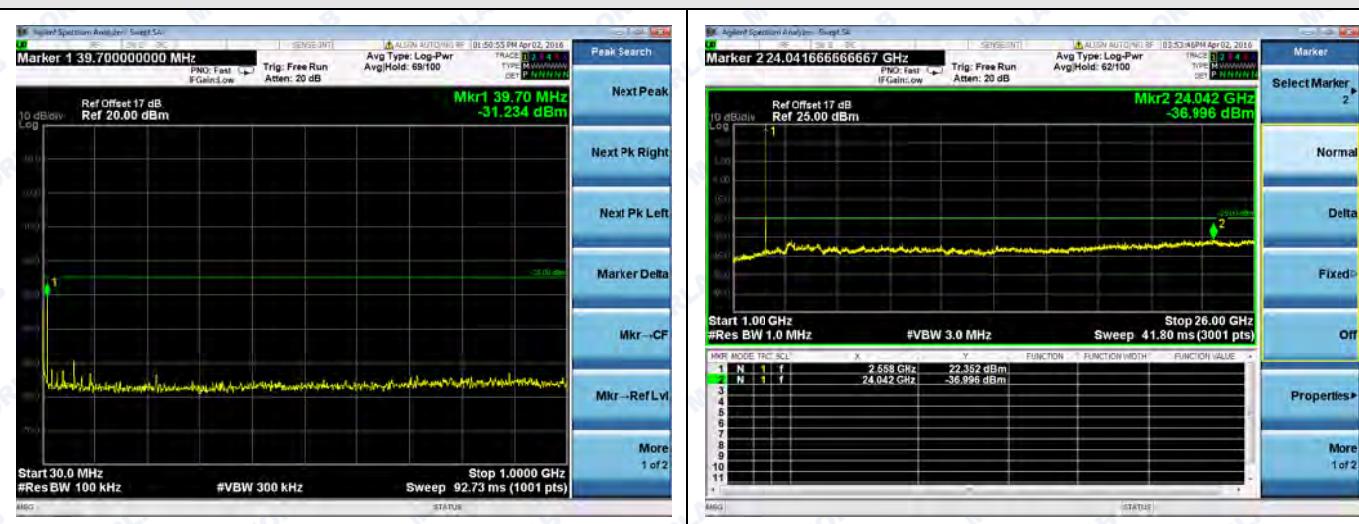
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LTE Band 7 10MHz BW High Channel

QPSK



16QAM

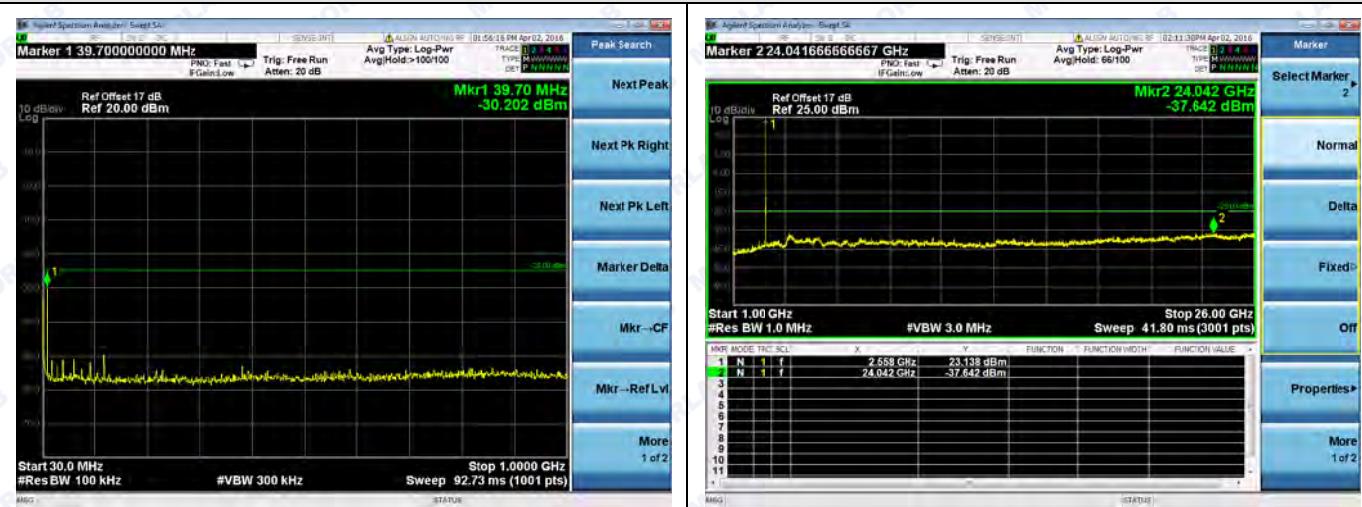




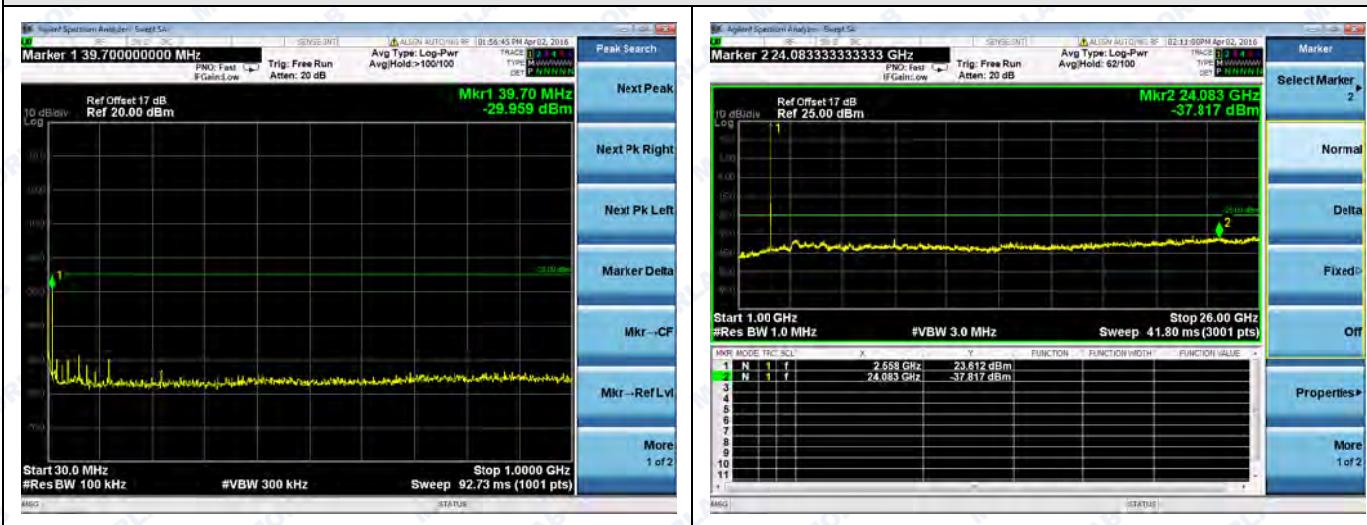
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LTE Band 7 15MHz BW High Channel

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16QAM

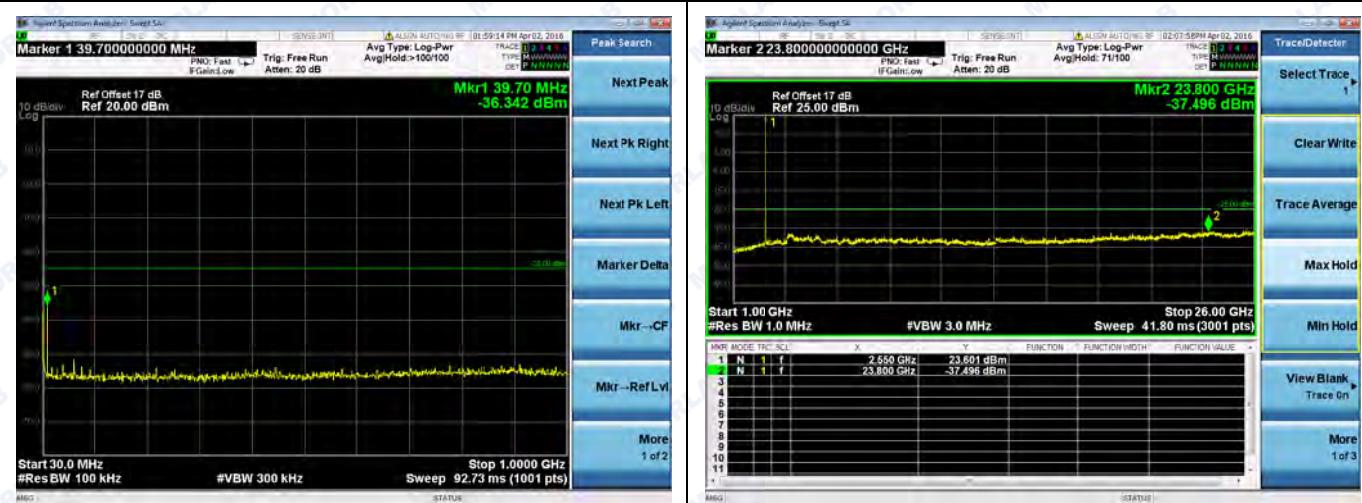




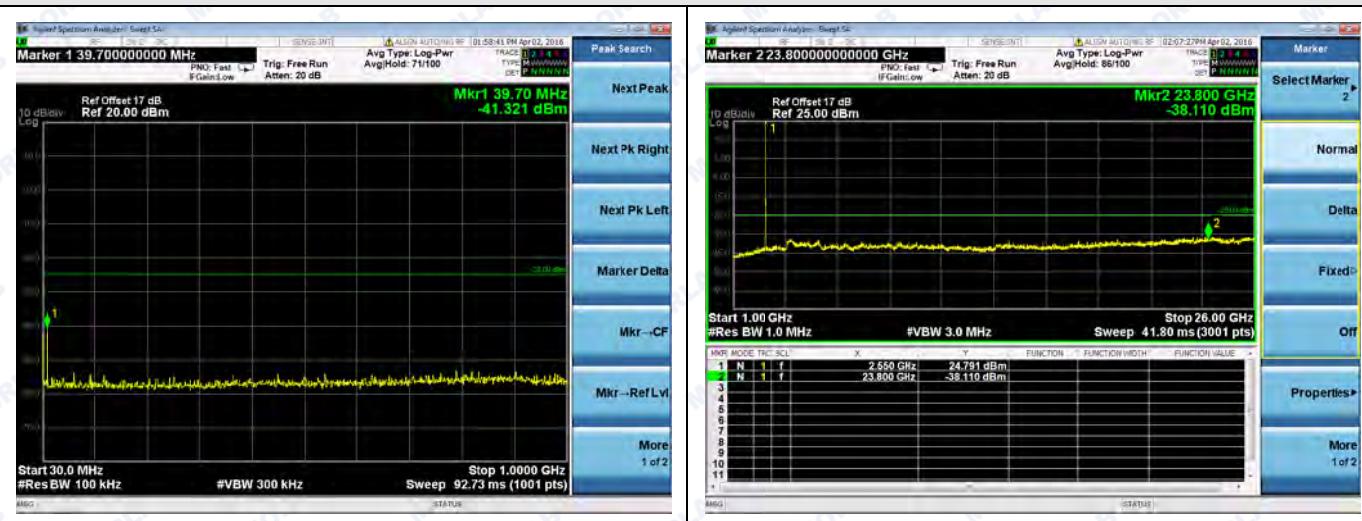
REPORT No.: SZ16030092W05

LTE Band 7 20MHz BW High Channel

QPSK



16QAM





2.6 Band Edge

2.6.1 Requirement

According to FCC section 27.53(g) (h), (g) For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(h) For operations in the 1710–1755 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB.

According to FCC section 27.53(m) (4), (m) (4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees

2.6.2 Test Description

See section 2.1.2 of this report.

2.6.3 Test Result

The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

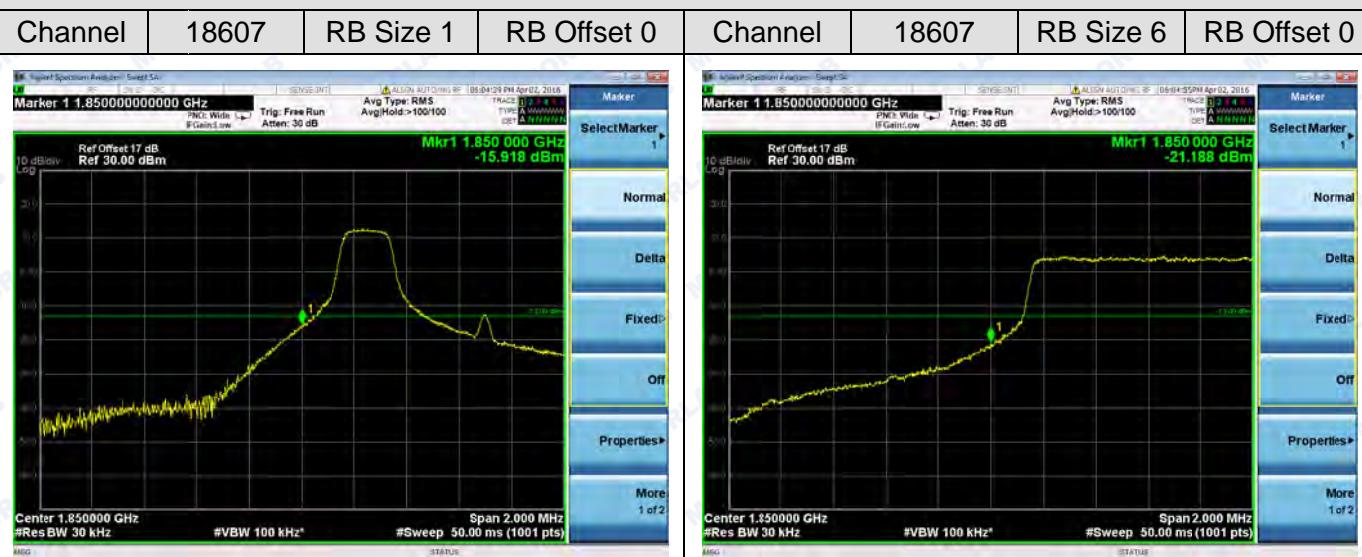
PASS. See the attached plots.



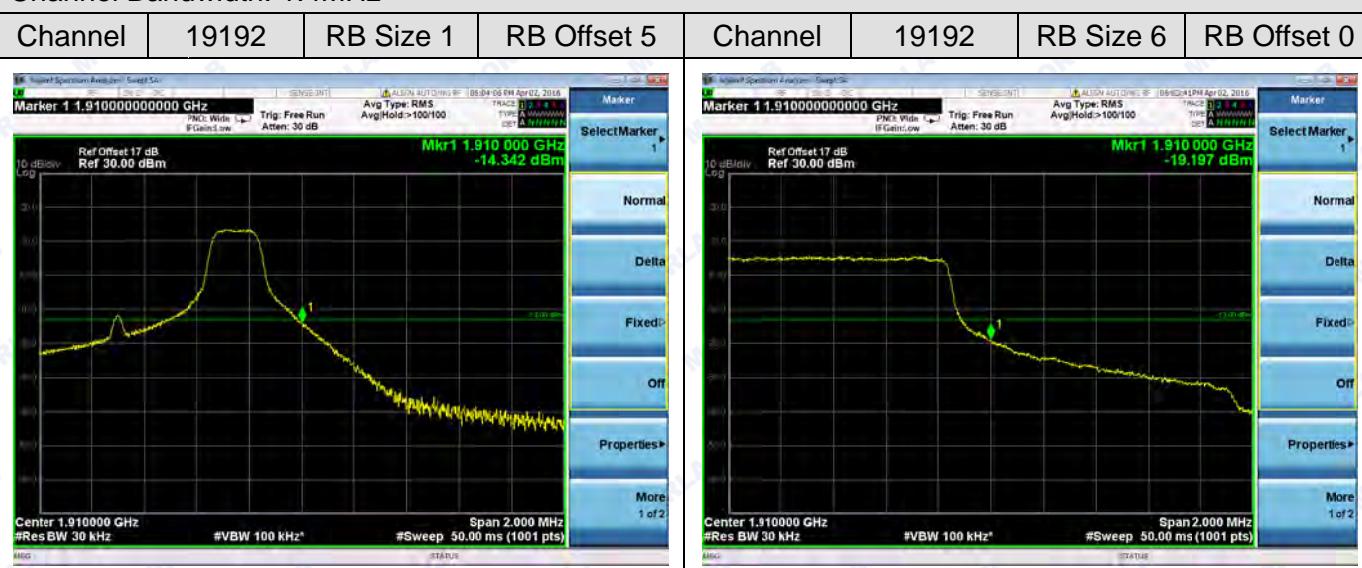
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 1.4MHz



Channel Bandwidth: 1.4MHz



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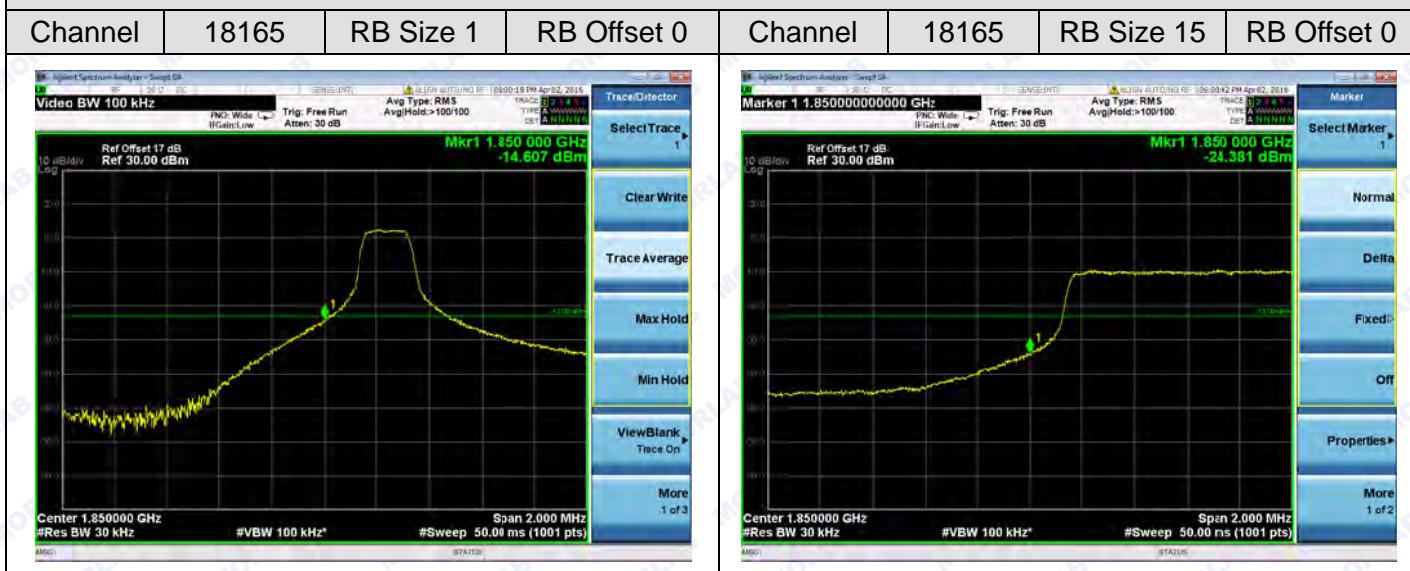
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. ChinaTel: 86-755-36698555
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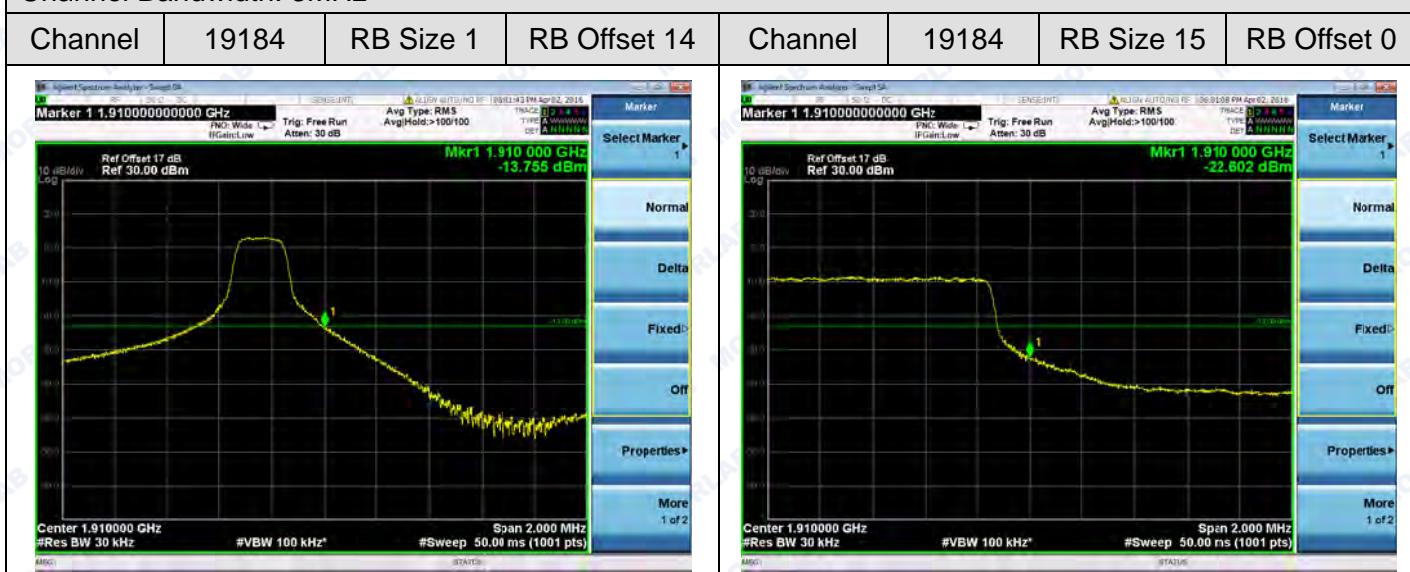
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 3MHz



Channel Bandwidth: 3MHz

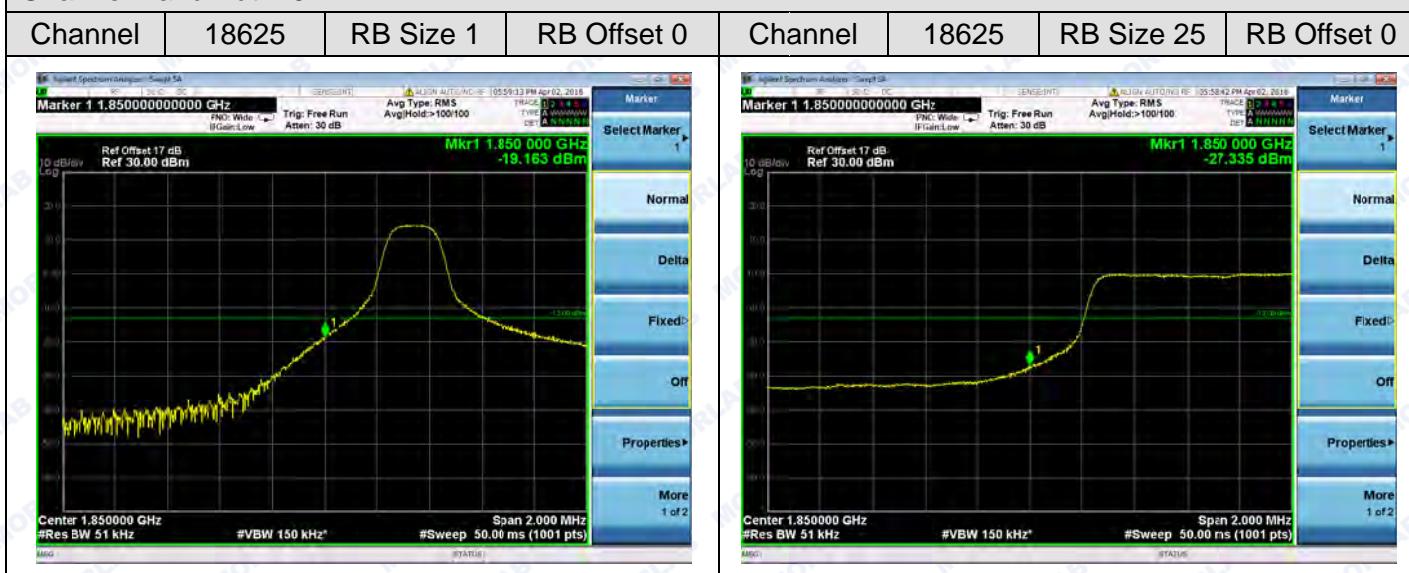




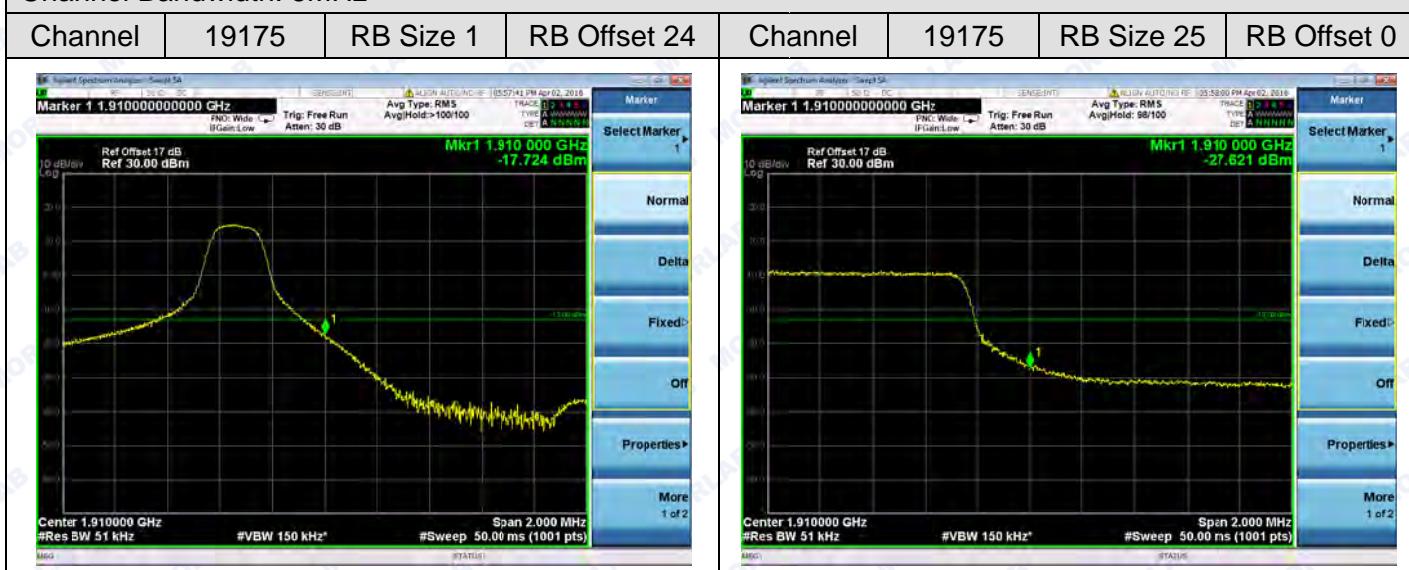
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 5MHz



Channel Bandwidth: 5MHz

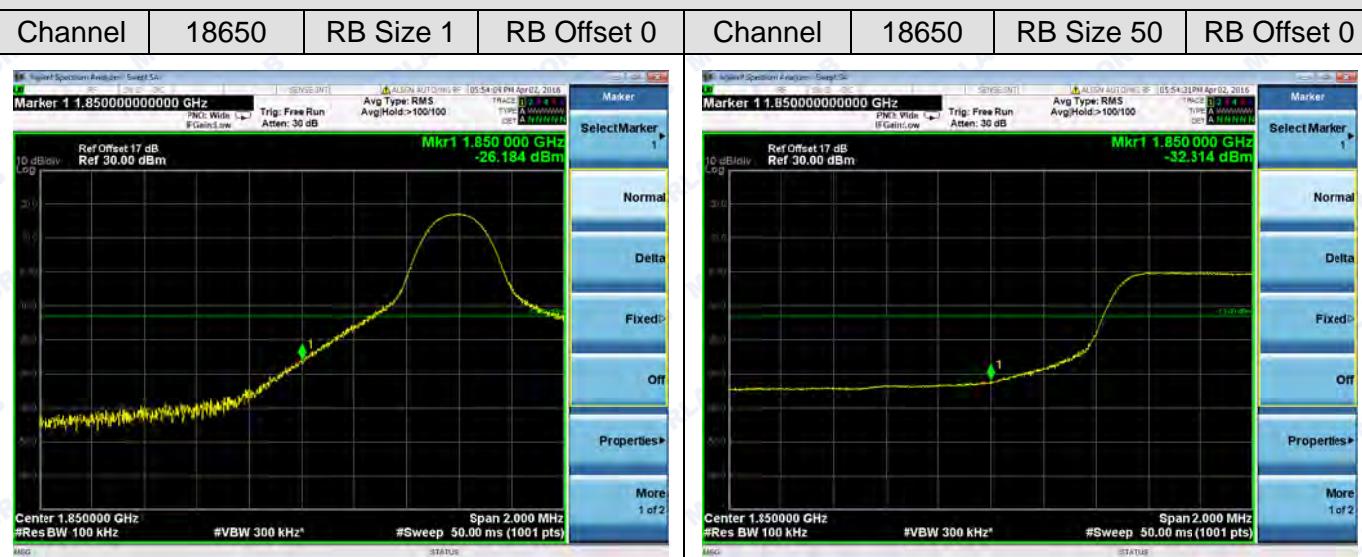




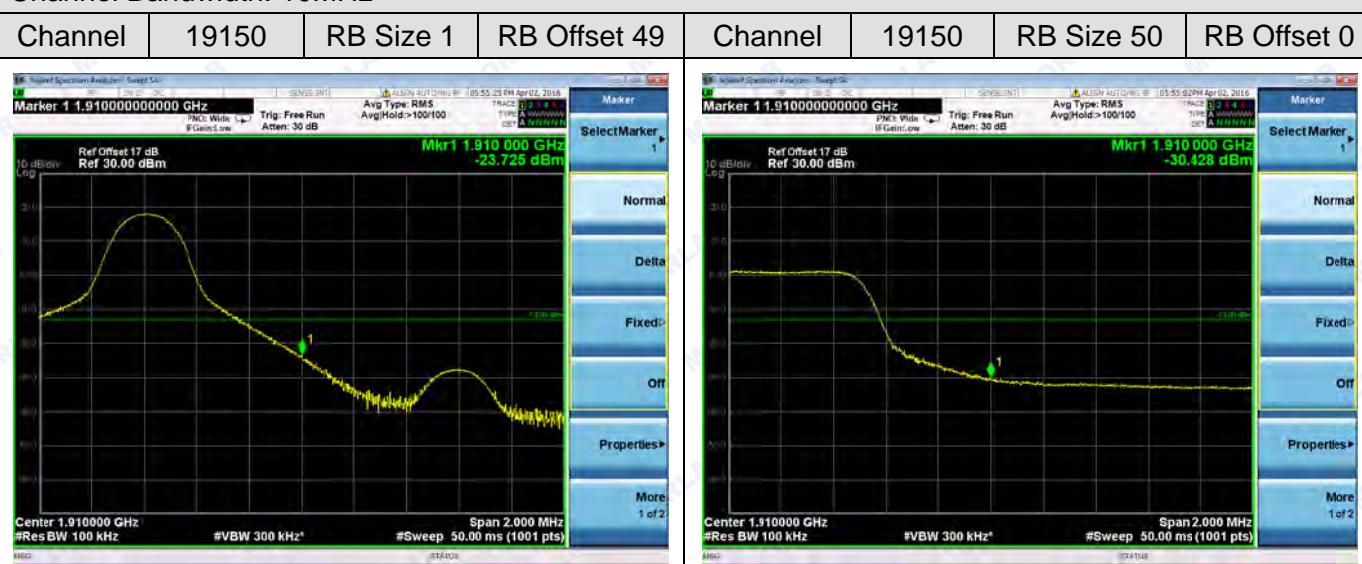
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 10MHz



Channel Bandwidth: 10MHz



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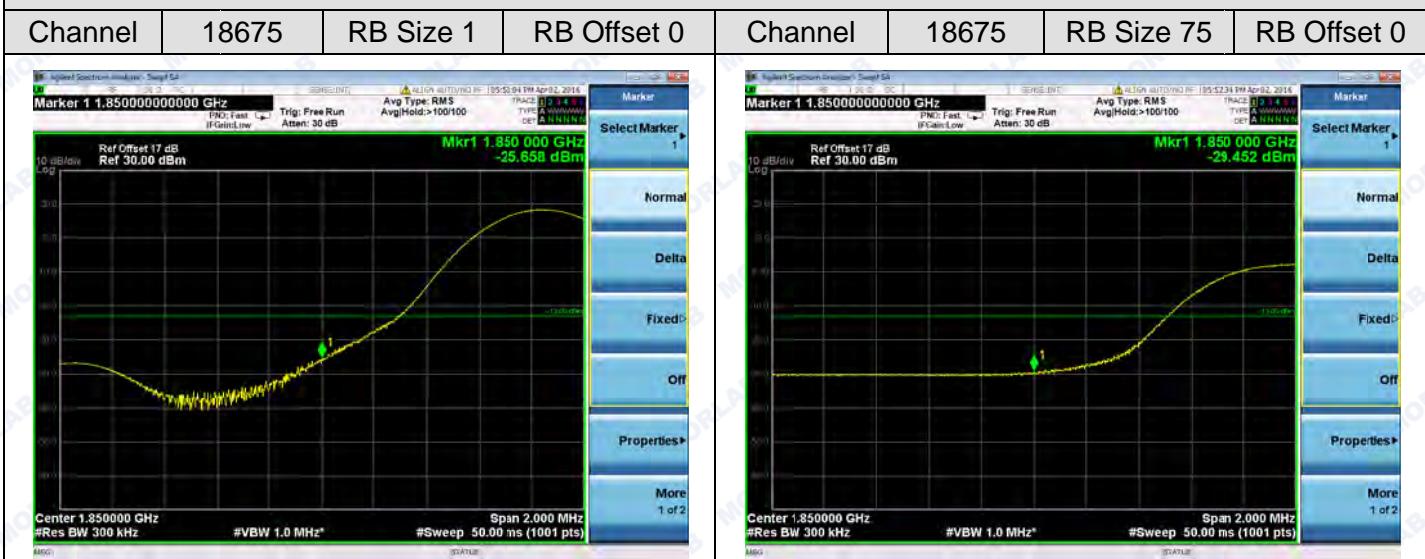
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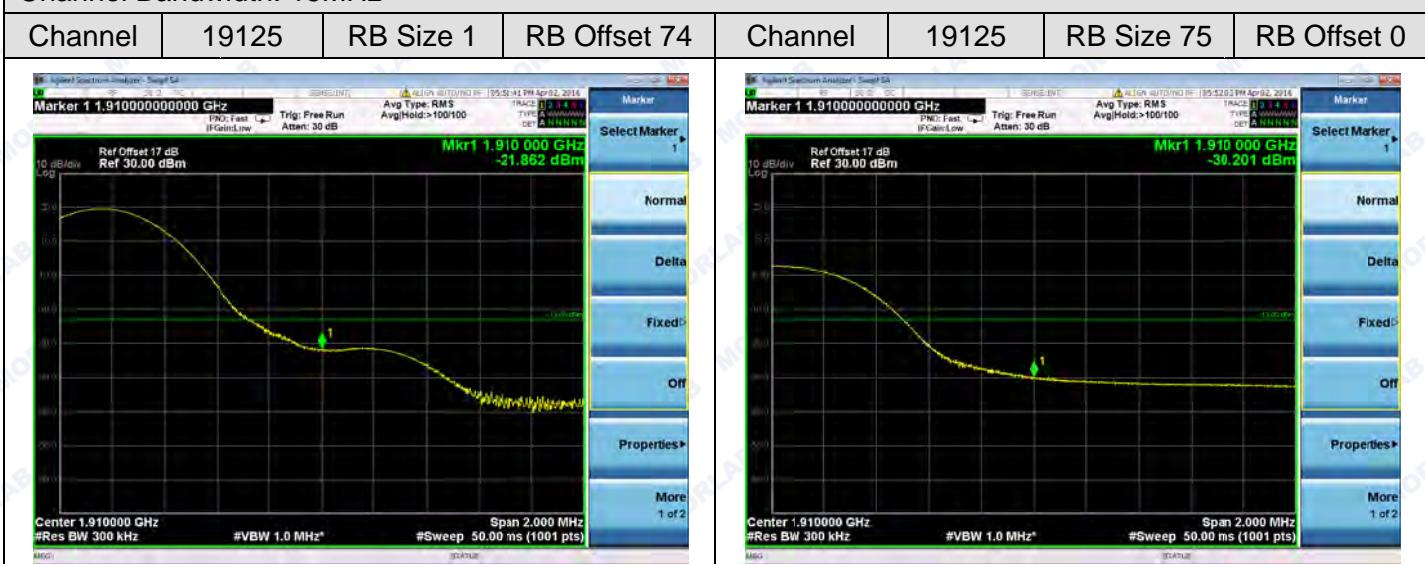
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 15MHz



Channel Bandwidth: 15MHz



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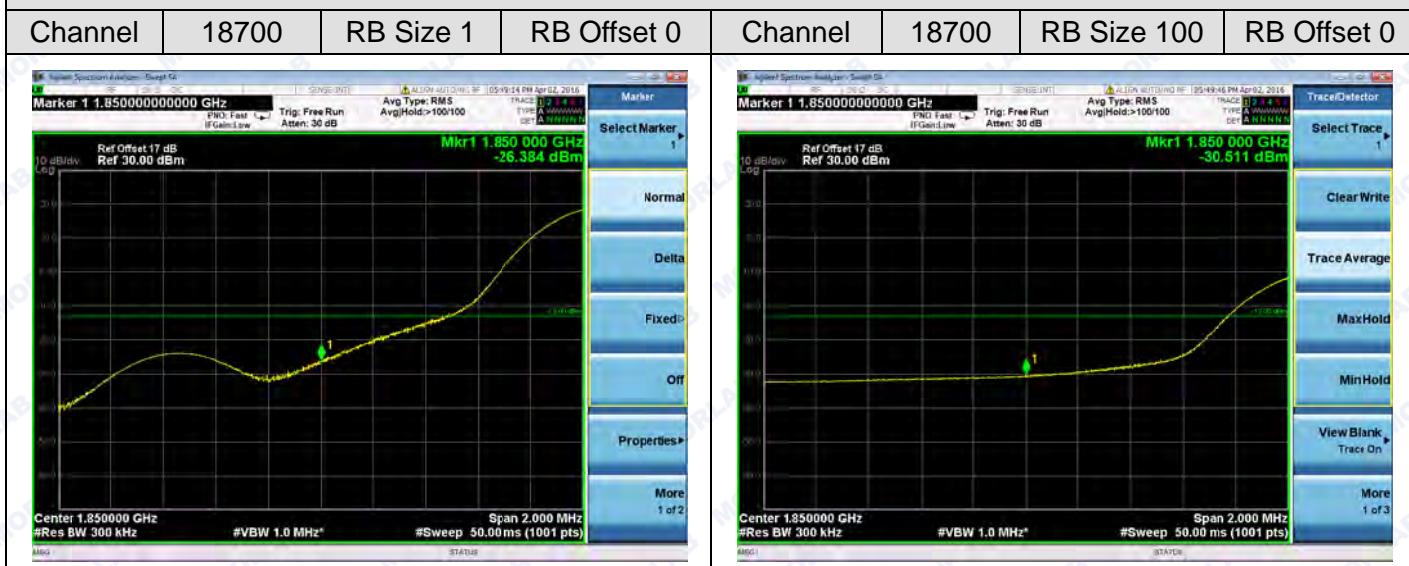
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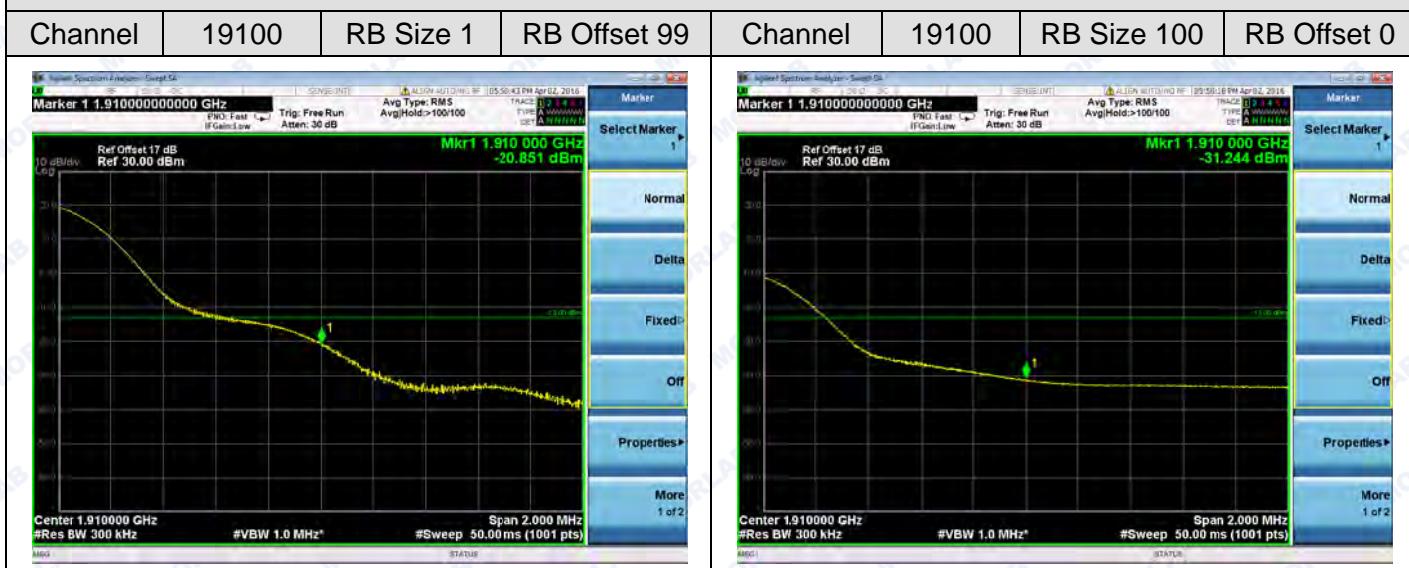
REPORT No.: SZ16030092W05

LTE Band 2

Channel Bandwidth: 20MHz



Channel Bandwidth: 20MHz



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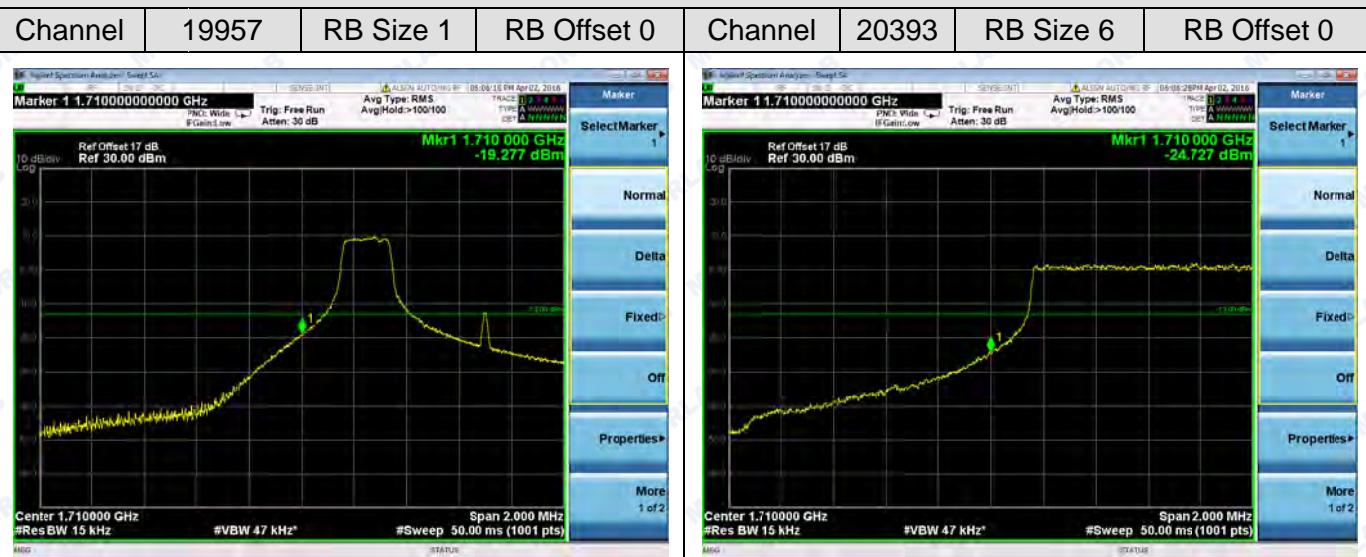
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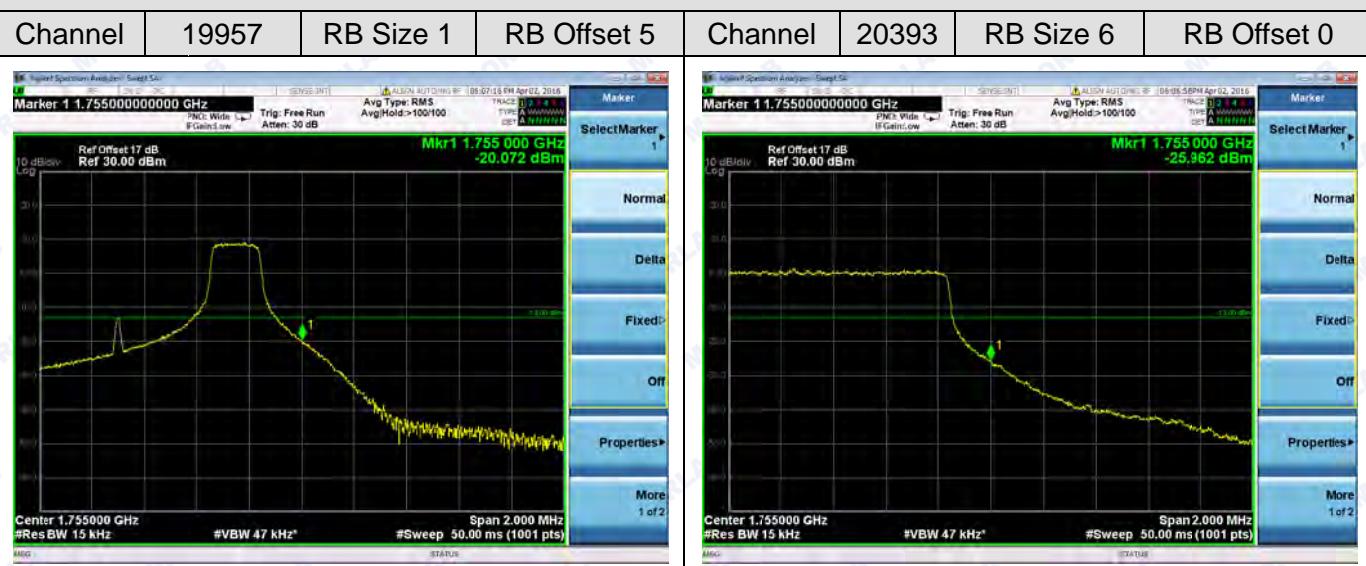
REPORT No.: SZ16030092W05

LTE Band 4

Channel Bandwidth: 1.4MHz



Channel Bandwidth: 1.4MHz



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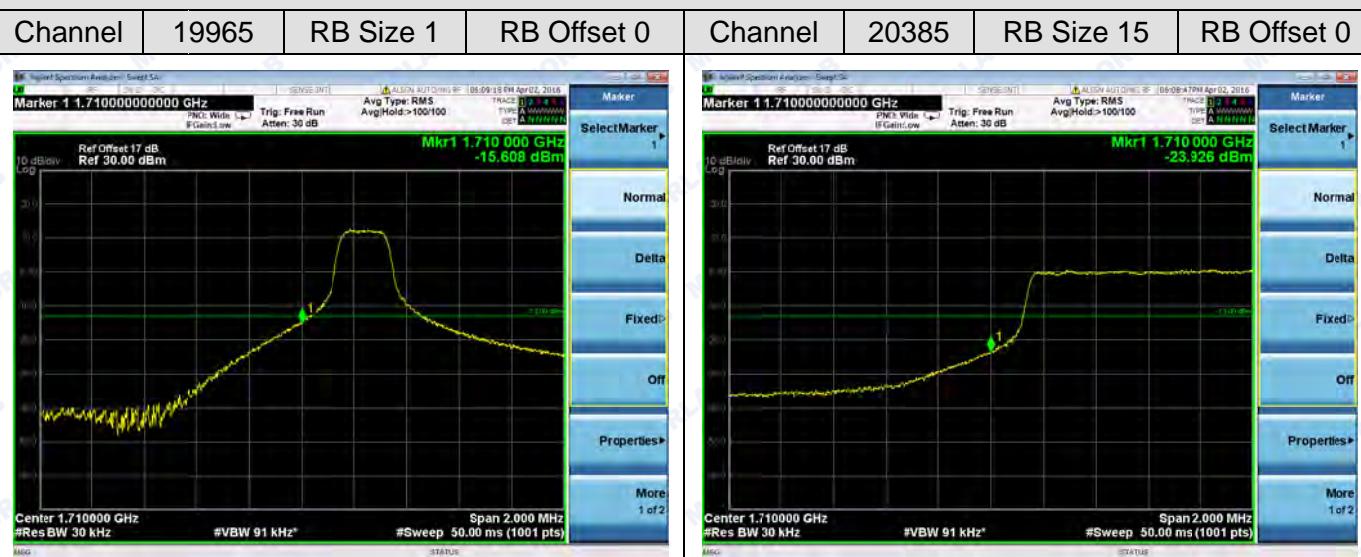
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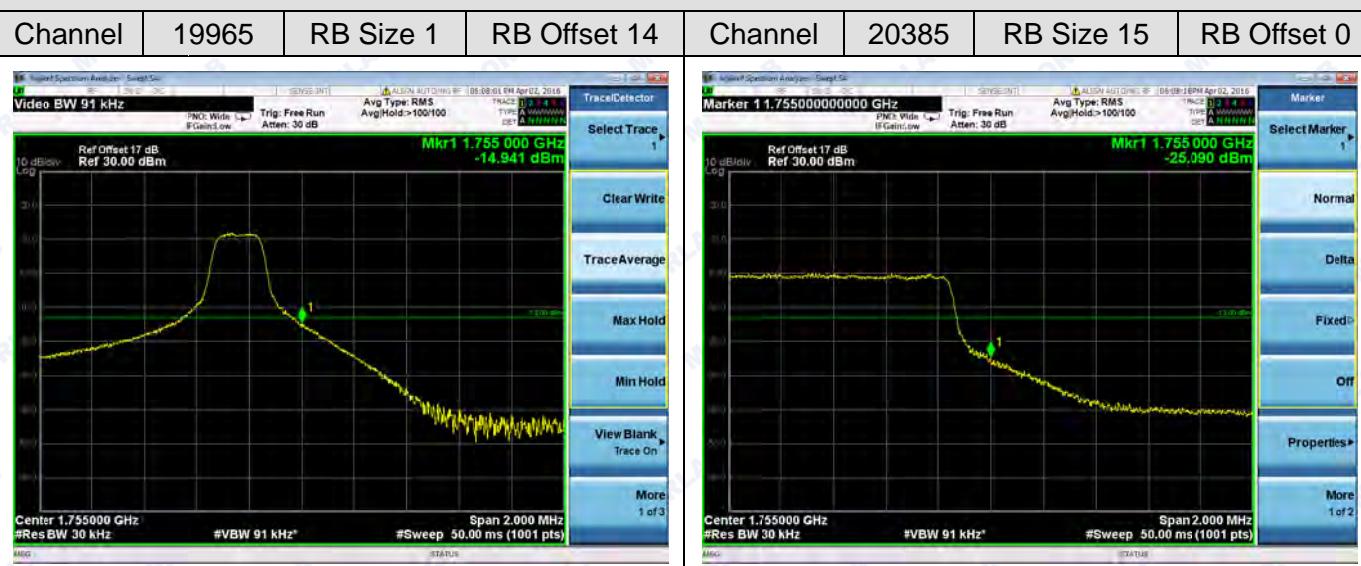
REPORT No.: SZ16030092W05

LTE Band 4

Channel Bandwidth: 3MHz



Channel Bandwidth: 3MHz



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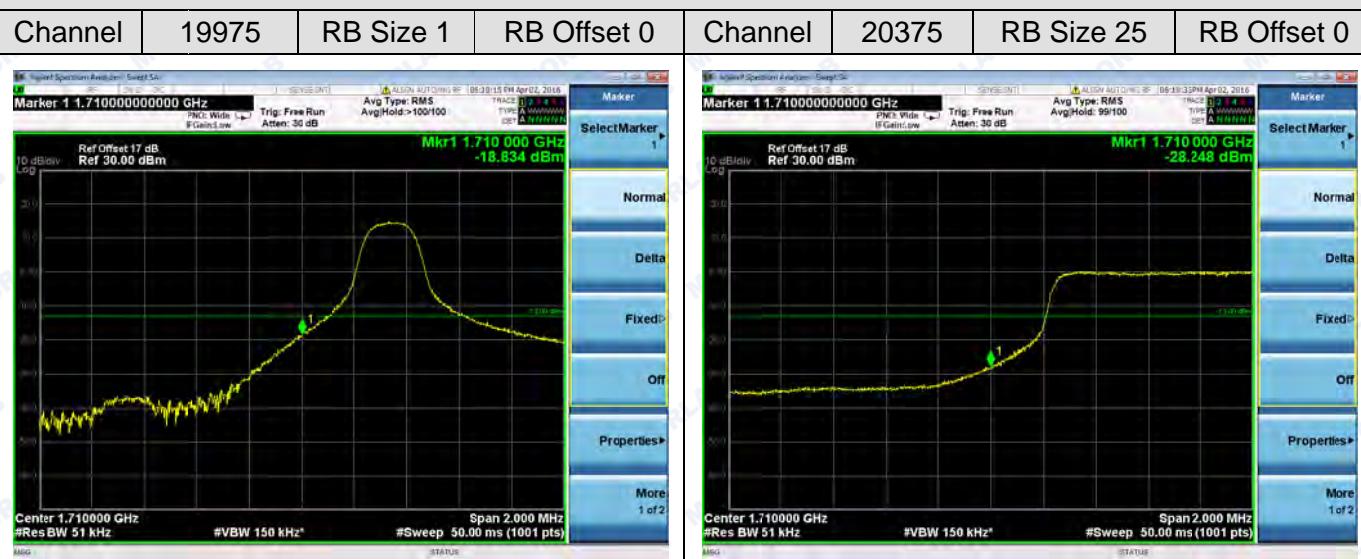
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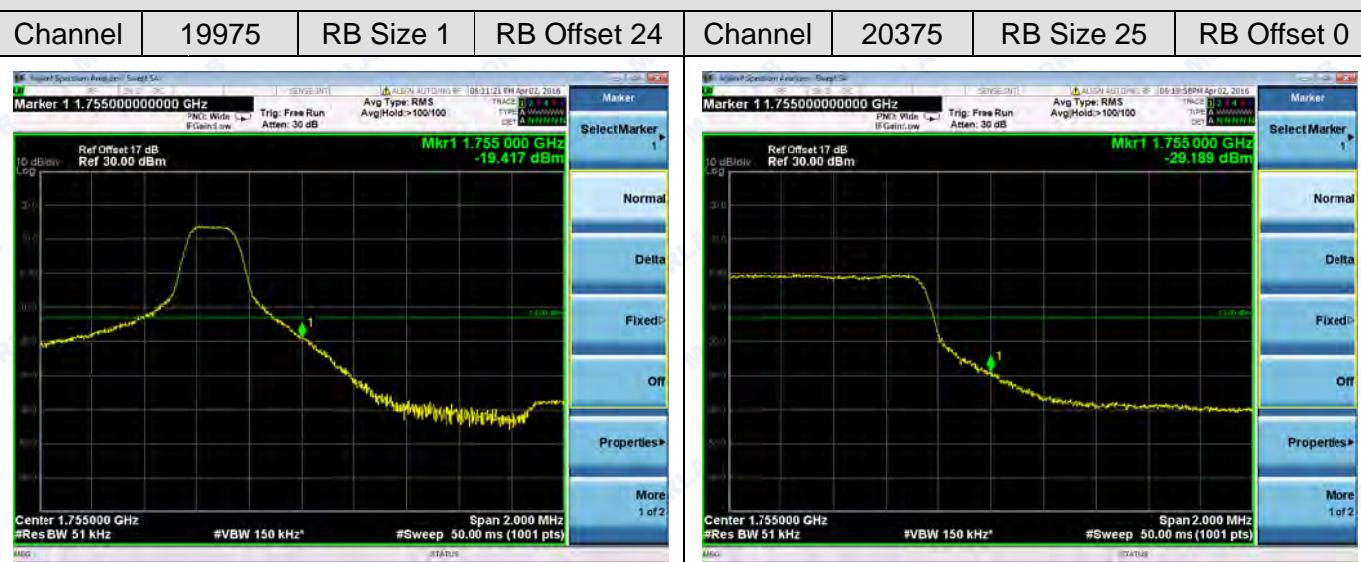
REPORT No.: SZ16030092W05

LTE Band 4

Channel Bandwidth: 5MHz



Channel Bandwidth: 5MHz



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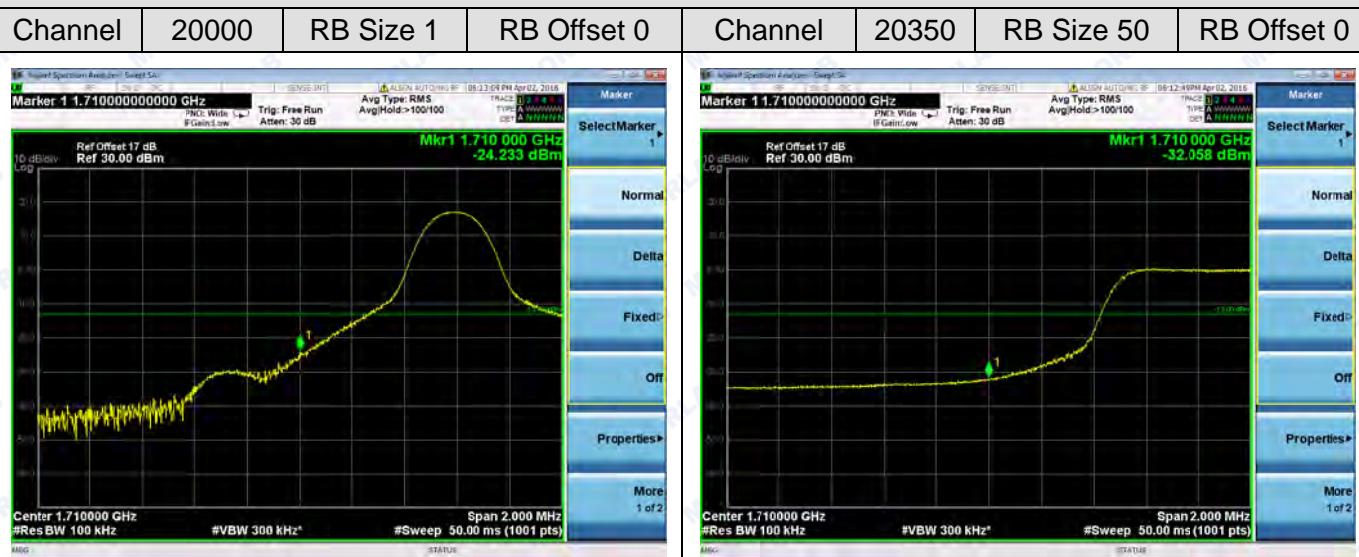
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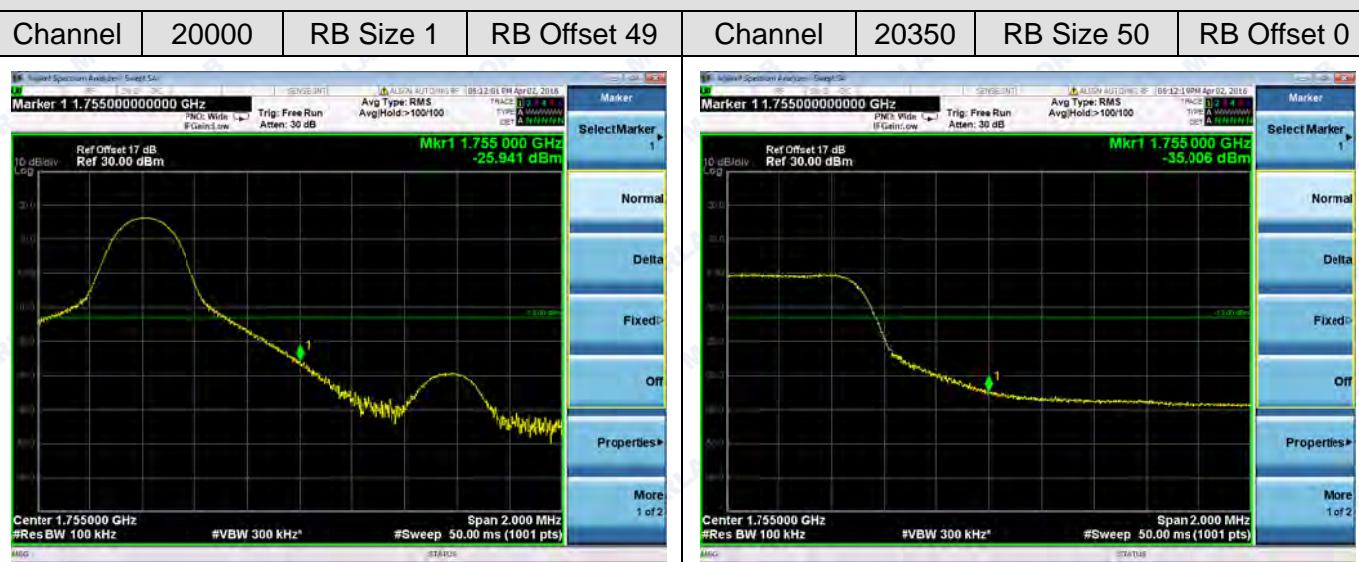
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LTE Band 4

Channel Bandwidth: 10MHz



Channel Bandwidth: 10MHz



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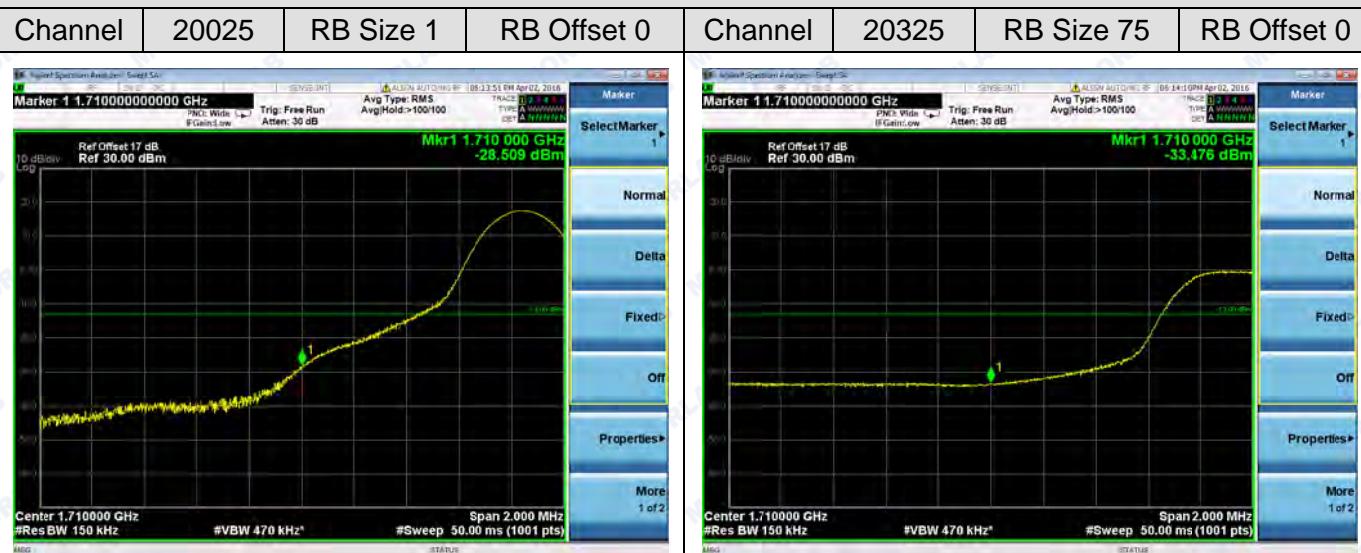
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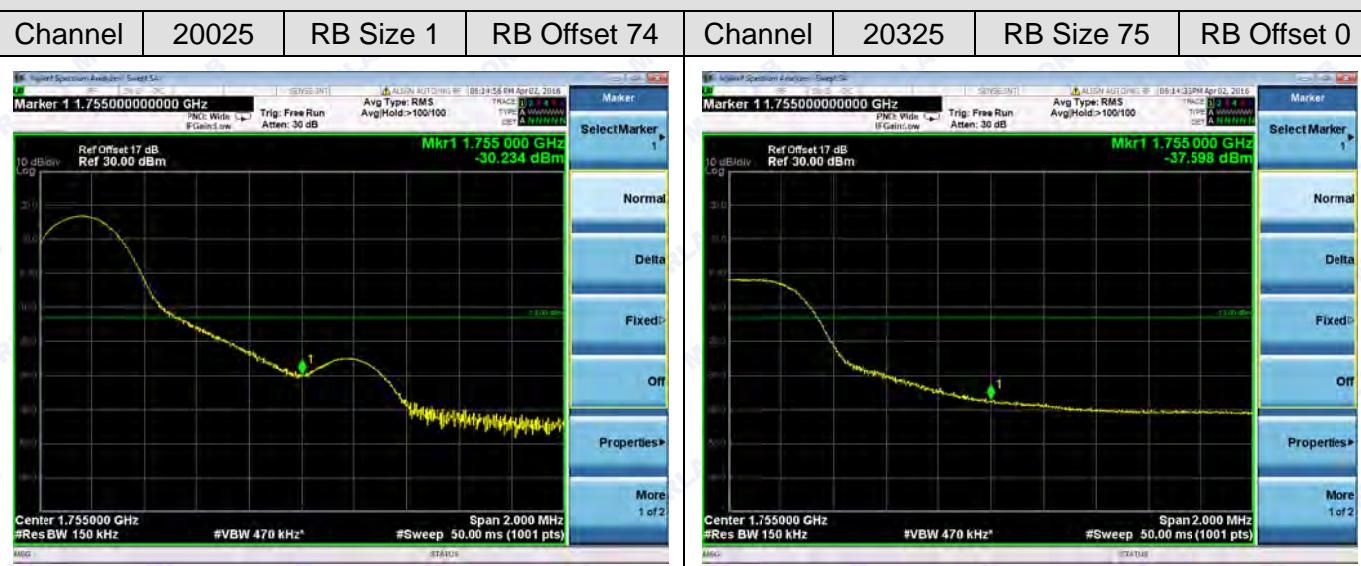
REPORT No.: SZ16030092W05

LTE Band 4

Channel Bandwidth: 15MHz



Channel Bandwidth: 15MHz



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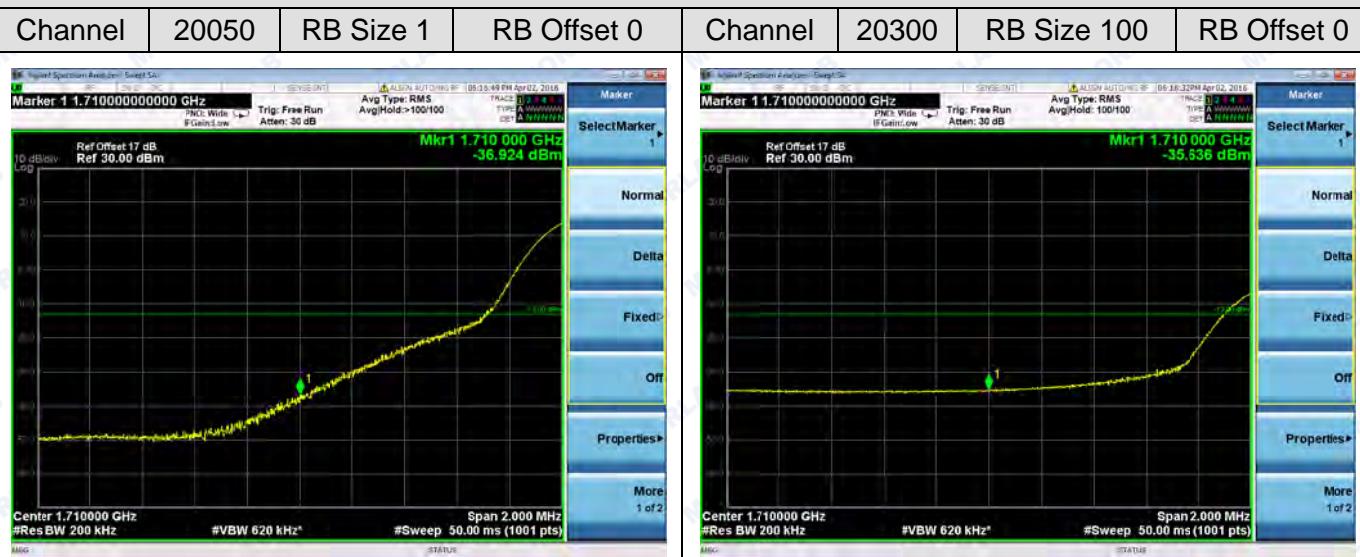
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LTE Band 4

Channel Bandwidth: 20MHz



Channel Bandwidth: 20MHz



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