

LTE Band 12

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	6	0	1.352	PASS
	MCH	6	0	1.457	PASS
	HCH	6	0	1.399	PASS
16QAM	LCH	6	0	1.359	PASS
	MCH	6	0	1.458	PASS
	HCH	6	0	1.374	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	15	0	2.937	PASS
	MCH	15	0	2.983	PASS
	HCH	15	0	2.948	PASS
16QAM	LCH	15	0	2.938	PASS
	MCH	15	0	2.948	PASS
	HCH	15	0	2.983	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	25	0	4.963	PASS
	MCH	25	0	4.975	PASS
	HCH	25	0	4.927	PASS
16QAM	LCH	25	0	4.986	PASS
	MCH	25	0	4.917	PASS
	HCH	25	0	4.964	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	50	0	9.835	PASS
	MCH	50	0	9.850	PASS
	HCH	50	0	9.628	PASS
16QAM	LCH	50	0	10.07	PASS
	MCH	50	0	9.785	PASS
	HCH	50	0	9.665	PASS

LTE Band 25

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	6	0	1.382	PASS
	MCH	6	0	1.361	PASS
	HCH	6	0	1.368	PASS
16QAM	LCH	6	0	1.377	PASS
	MCH	6	0	1.363	PASS
	HCH	6	0	1.255	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	15	0	2.927	PASS
	MCH	15	0	2.932	PASS
	HCH	15	0	2.936	PASS
16QAM	LCH	15	0	2.952	PASS
	MCH	15	0	2.929	PASS
	HCH	15	0	2.970	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	25	0	4.930	PASS
	MCH	25	0	4.923	PASS
	HCH	25	0	4.891	PASS
16QAM	LCH	25	0	4.923	PASS
	MCH	25	0	4.922	PASS
	HCH	25	0	4.937	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	50	0	9.652	PASS
	MCH	50	0	9.675	PASS
	HCH	50	0	9.590	PASS
16QAM	LCH	50	0	9.750	PASS
	MCH	50	0	9.811	PASS
	HCH	50	0	9.738	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	75	0	14.45	PASS
	MCH	75	0	14.35	PASS
	HCH	75	0	14.27	PASS
16QAM	LCH	75	0	14.51	PASS
	MCH	75	0	14.41	PASS
	HCH	75	0	14.35	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		26dB Bandwidth (MHz)	Verdict
		Size	Offset		
QPSK	LCH	100	0	18.83	PASS
	MCH	100	0	18.79	PASS
	HCH	100	0	18.75	PASS
16QAM	LCH	100	0	18.89	PASS
	MCH	100	0	18.86	PASS
	HCH	100	0	18.76	PASS

Note: Please refers to Appendix B for compliance test plots for emission bandwidth (-26dBc)

11. BAND EDGE

11.1 MEASUREMENT METHOD

The test set up and general procedure is similar to conducted peak output power test. Only different for setting the measurement configuration of the measuring instrument of Spectrum Analyzer.

11.2 PROVISIONS APPLICABLE

As Specified in FCC rules of §2.1051 §24.238(a) §27.53(g) §27.53(h) §27.53(m)
KDB 971168 D01v03 – Section 6.0

11.3 MEASUREMENT RESULT

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequency. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P[\text{Watts}])$, where P is the transmitter power in Watts.

For Band 7:

- (i) $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away
- (ii) $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and
- (iii) $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

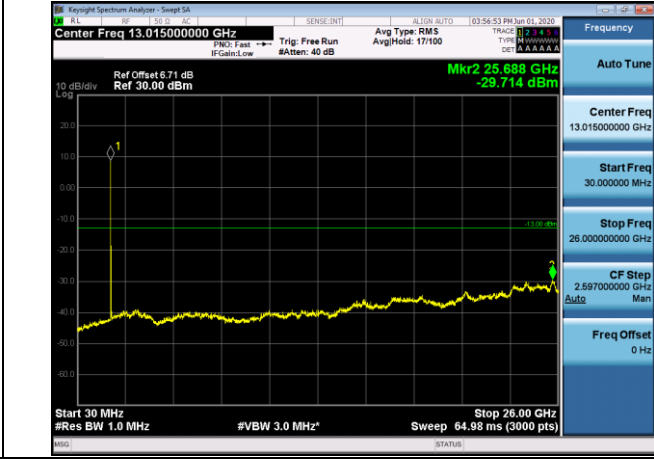
Please refers to Appendix C for compliance test plots for band edge

APPENDIX A TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION
LTE BAND 2

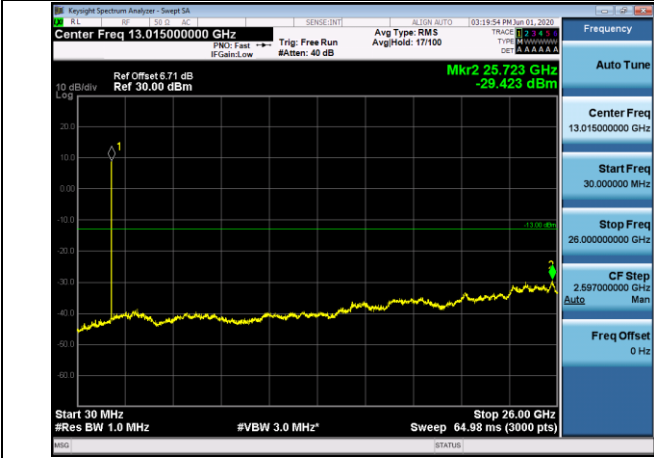
1.4MHz_LCH_QPSK_1RB#0



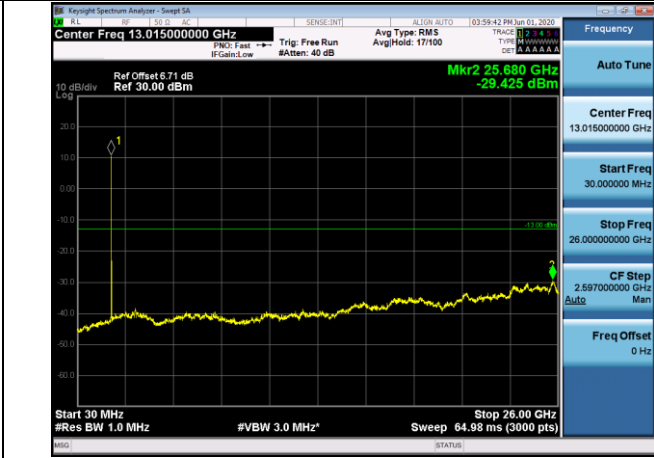
20MHz_LCH_QPSK_1RB#0



1.4MHz_MCH_QPSK_1RB#0



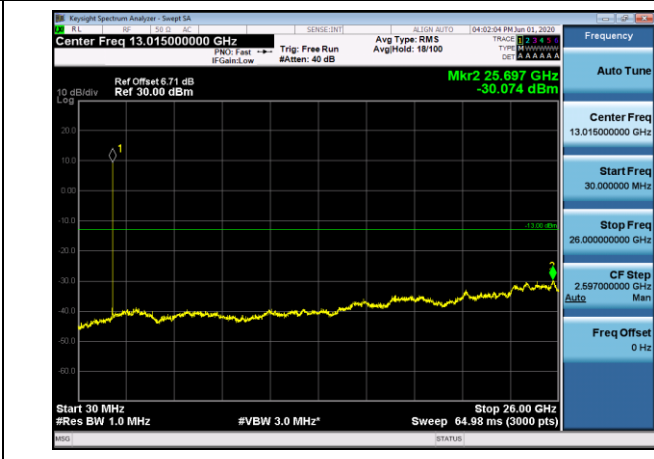
20MHz_MCH_QPSK_1RB#0



1.4MHz_HCH_QPSK_1RB#0

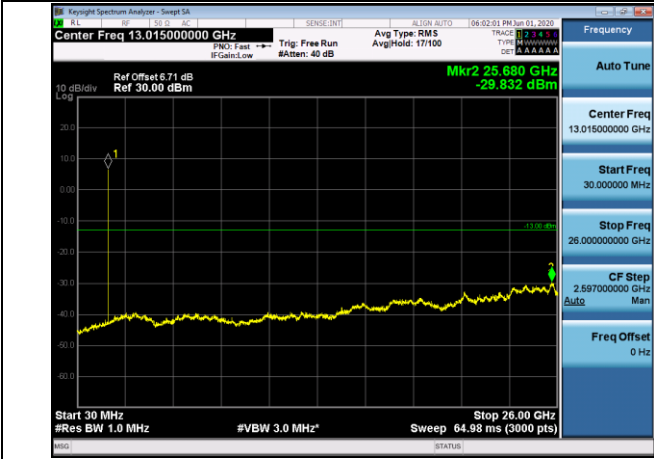


20MHz_HCH_QPSK_1RB#0

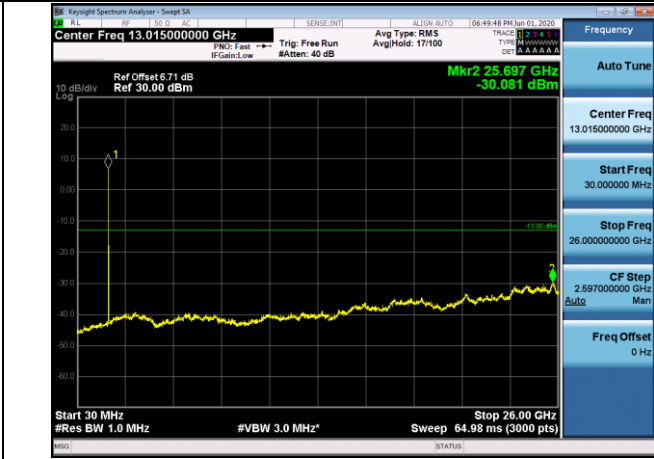


TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION
LTE BAND 4

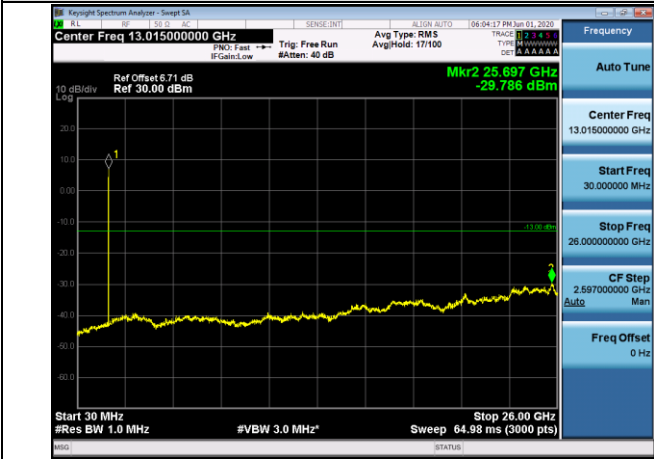
1.4MHz_LCH_QPSK_1RB#0



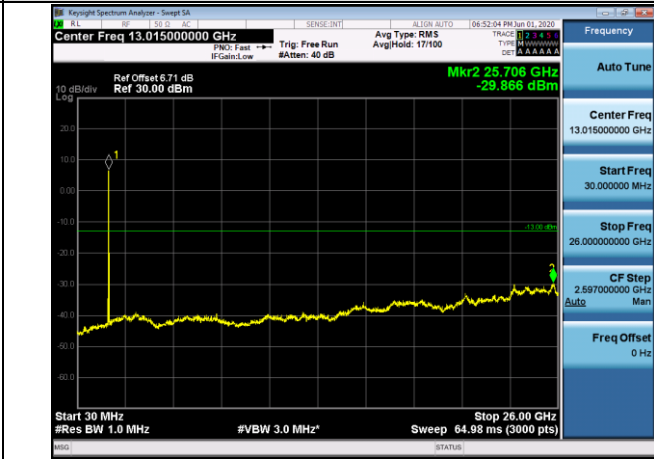
20MHz_LCH_QPSK_1RB#0



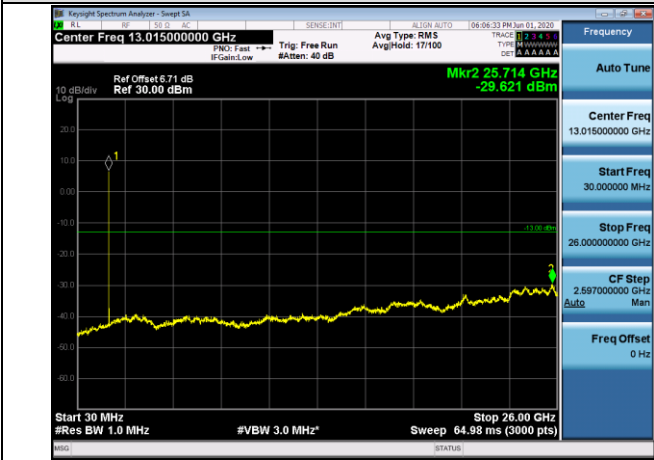
1.4MHz_MCH_QPSK_1RB#0



20MHz_MCH_QPSK_1RB#0



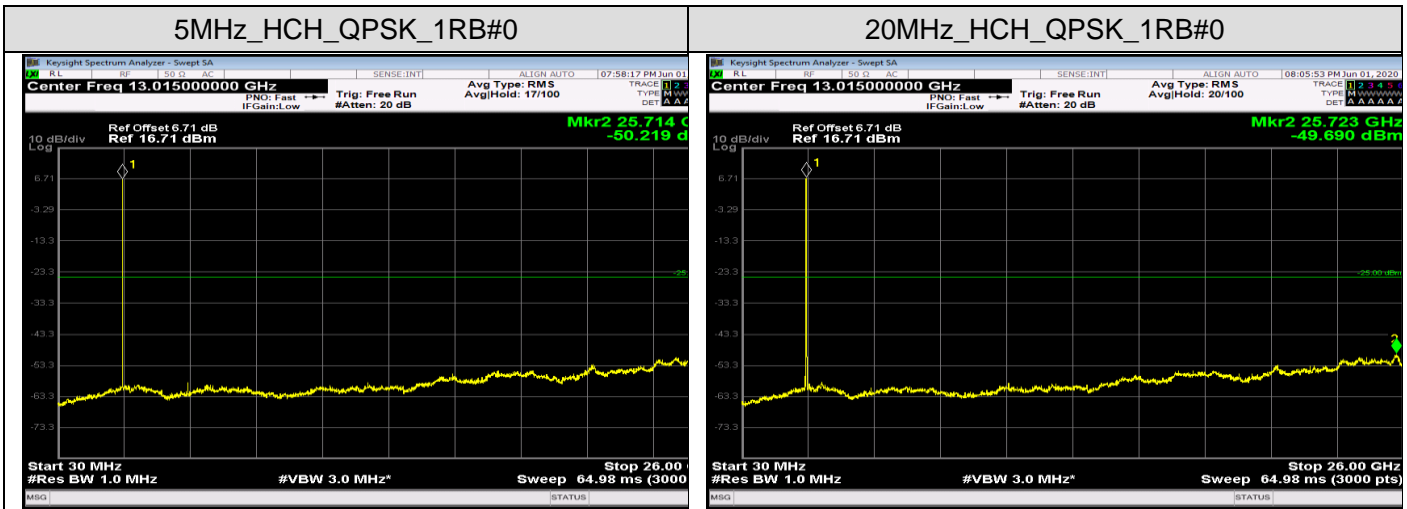
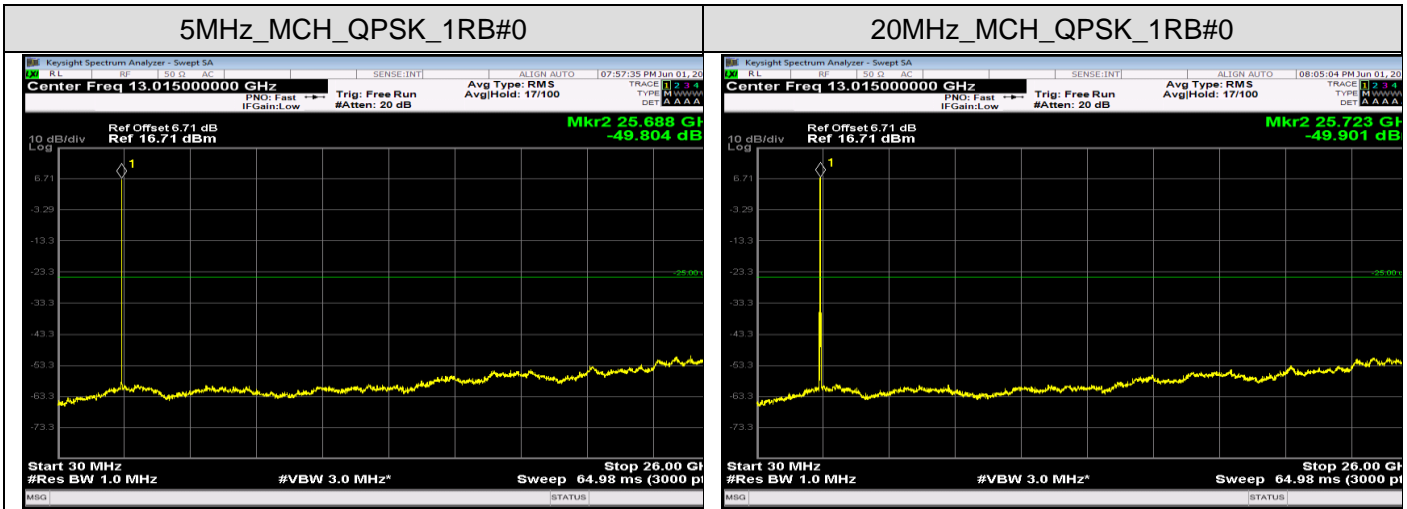
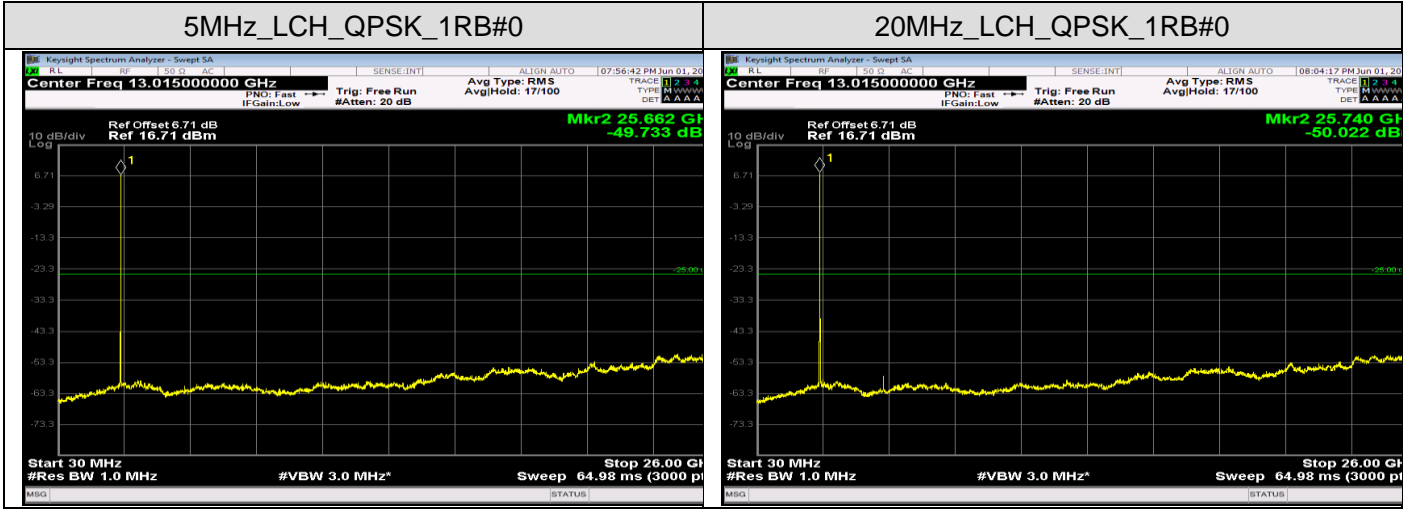
1.4MHz_HCH_QPSK_1RB#0



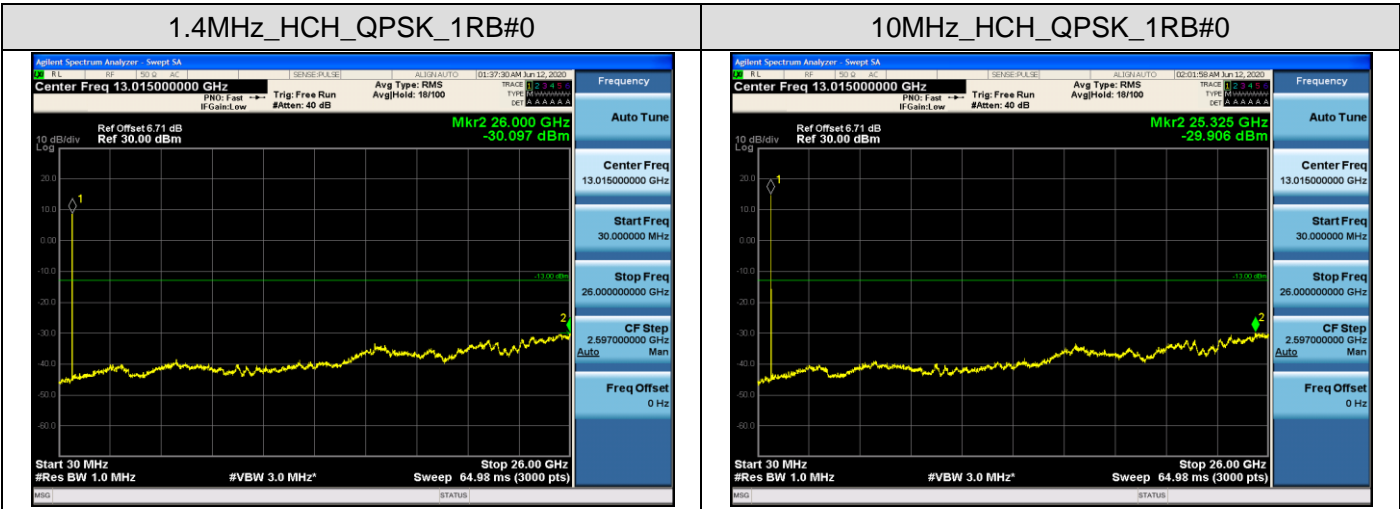
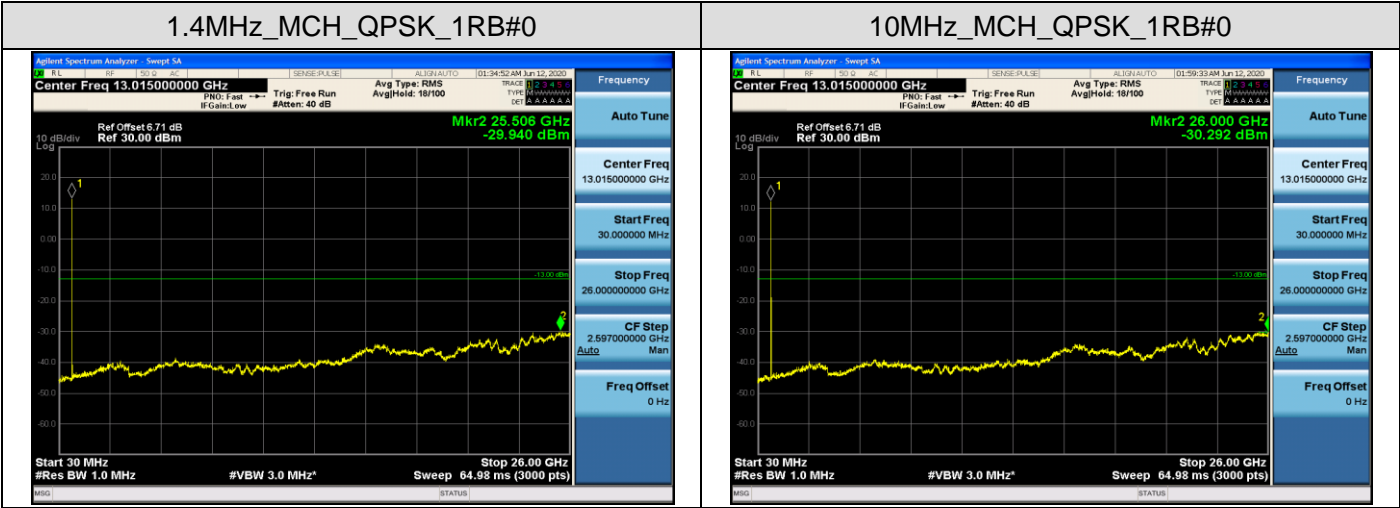
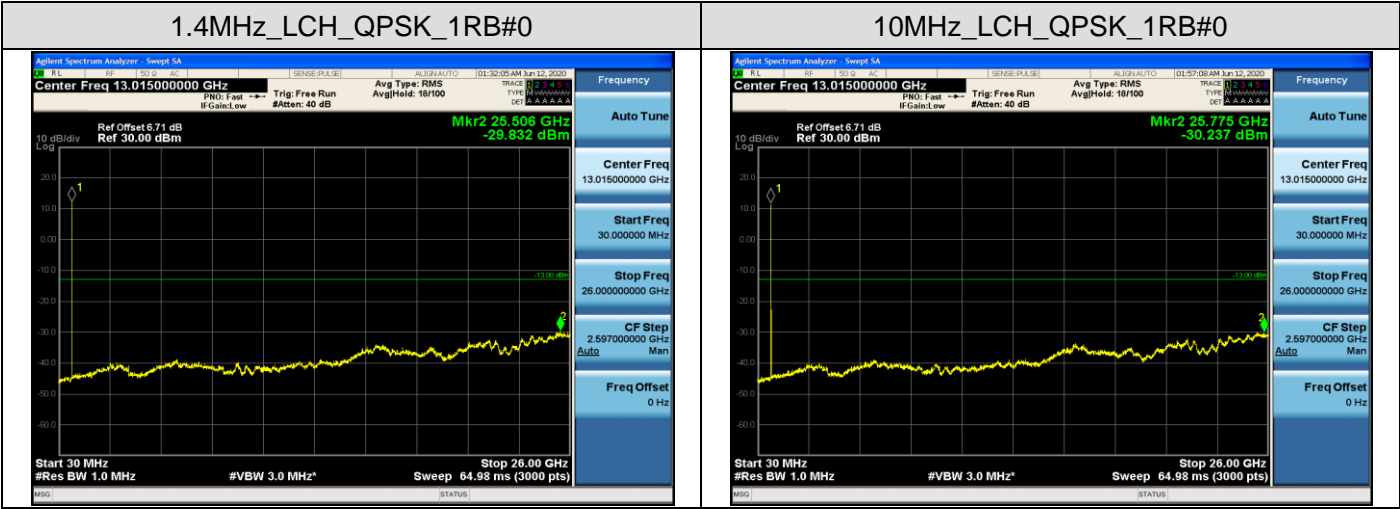
20MHz_HCH_QPSK_1RB#0



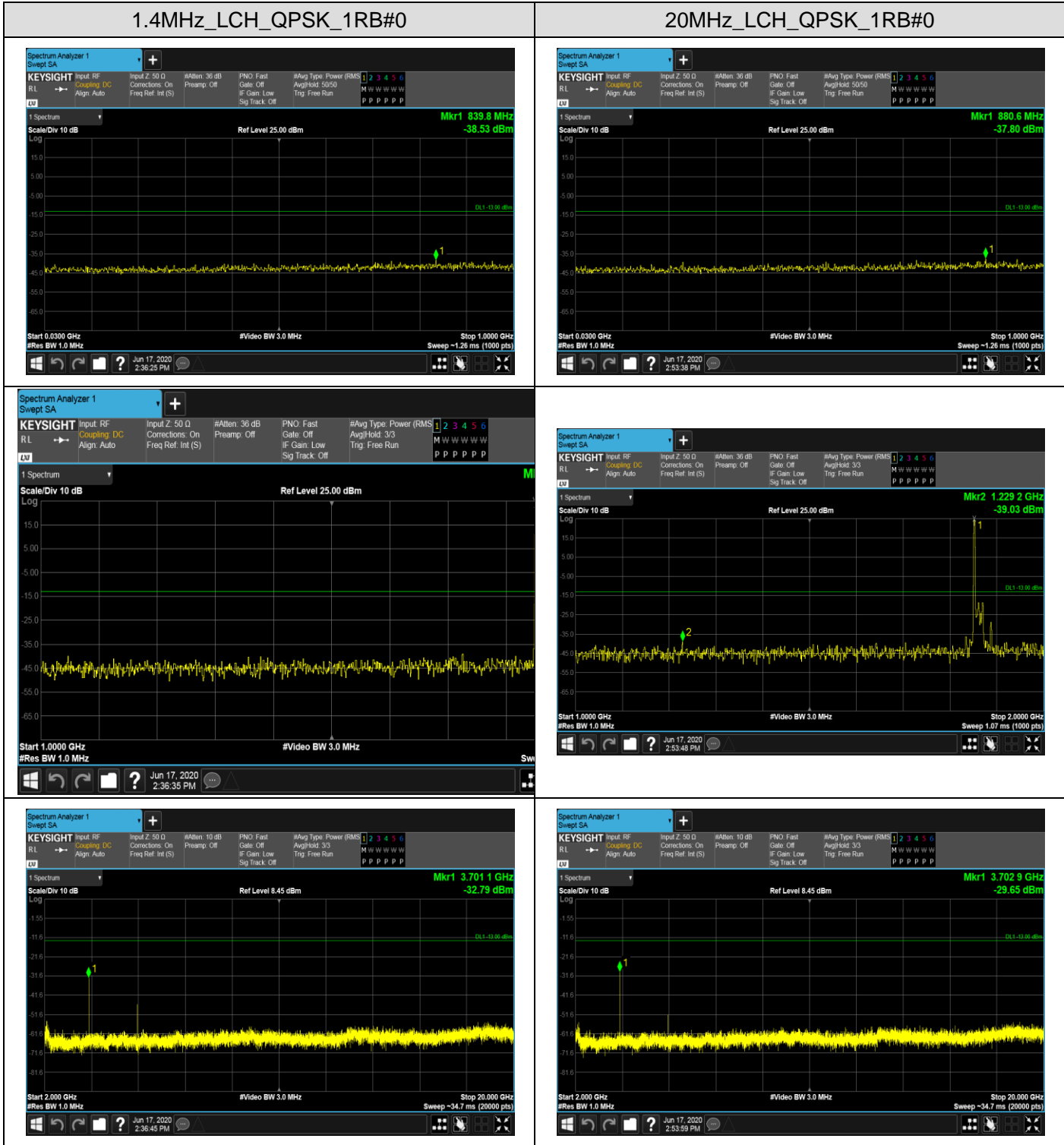
TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION
 LTE BAND 7



TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION
 LTE BAND 12

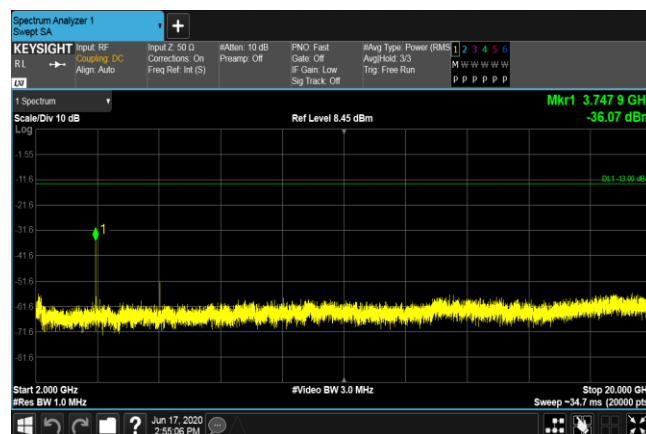
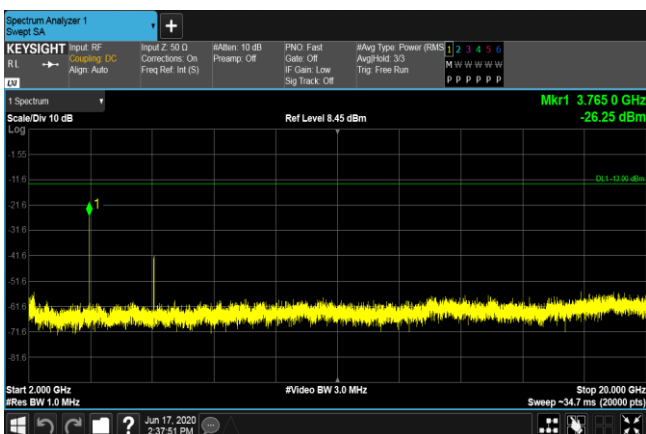
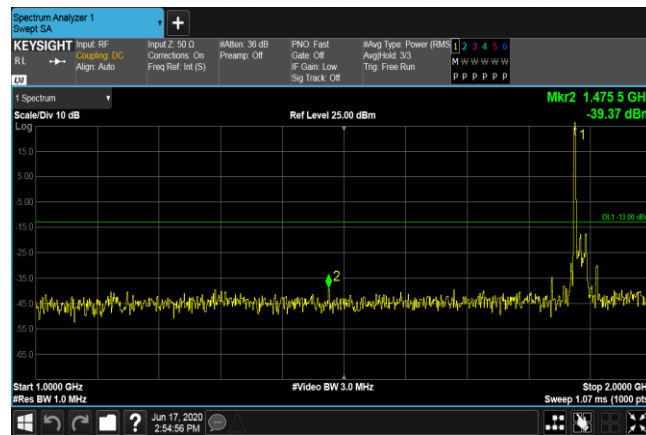
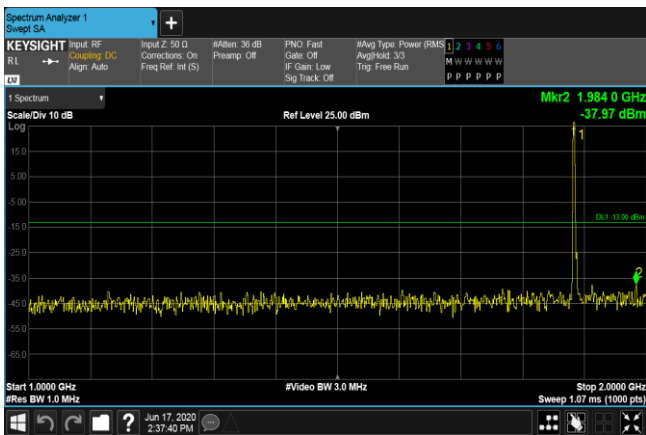
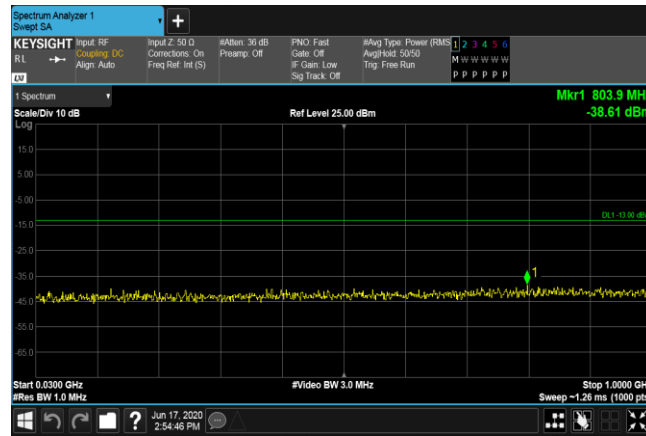
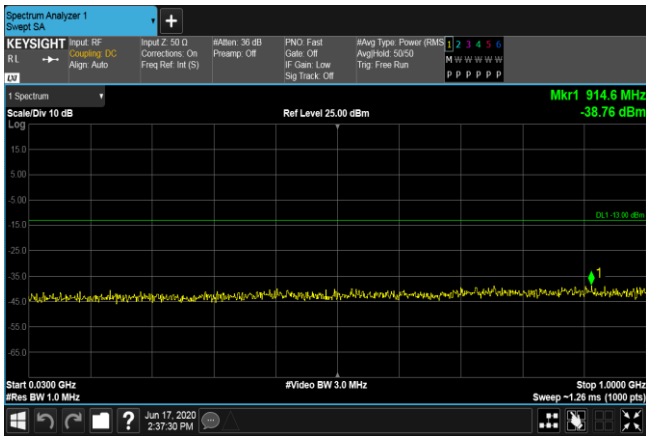


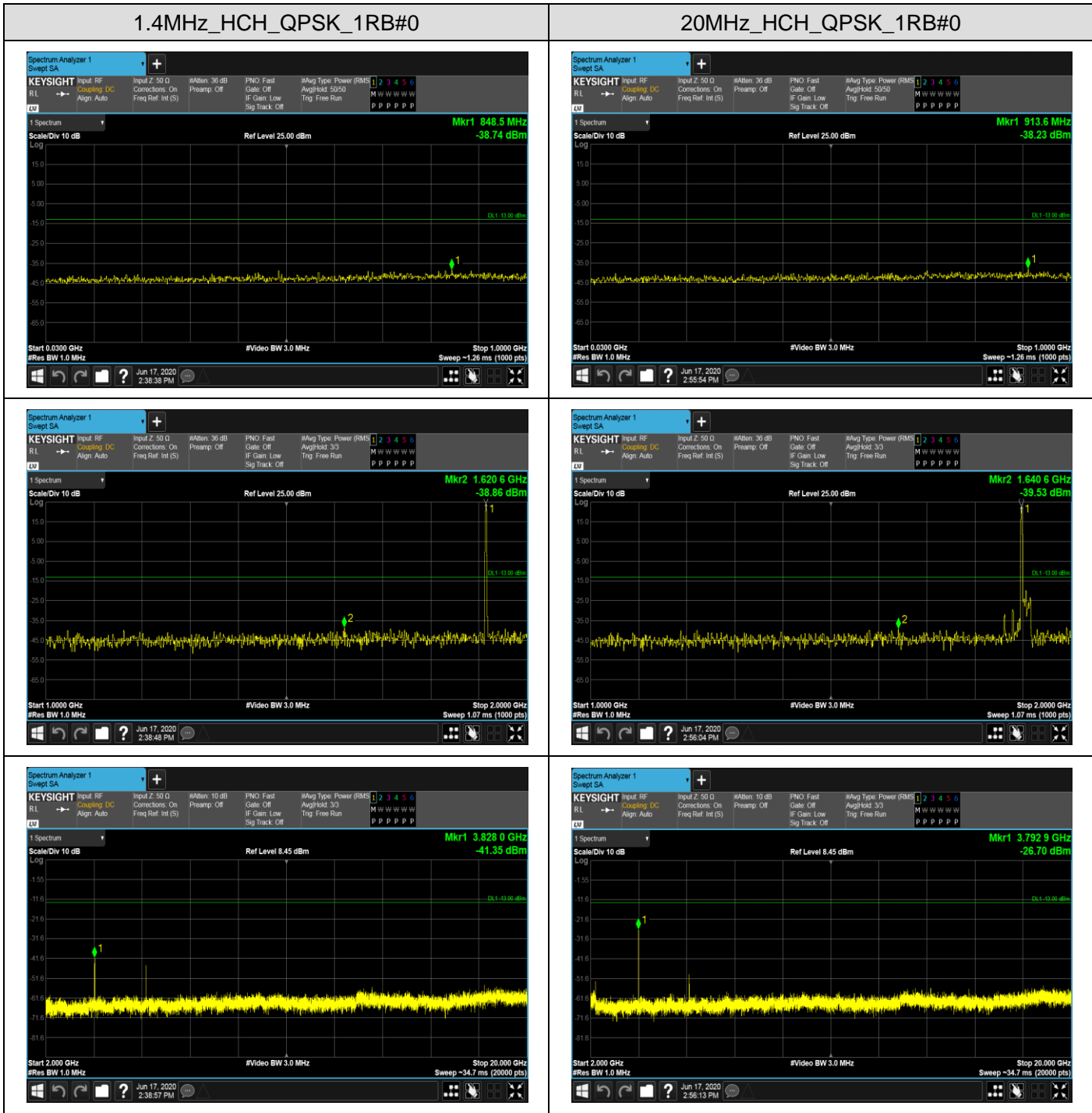
**TEST PLOTS FOR CONDUCTED SPURIOUS EMISSION
 LTE BAND 25**



1.4MHz_MCH_QPSK_1RB#0

20MHz_MCH_QPSK_1RB#0

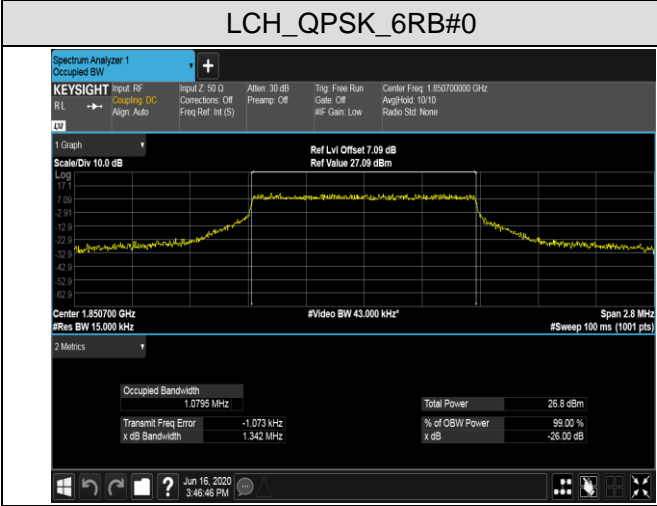




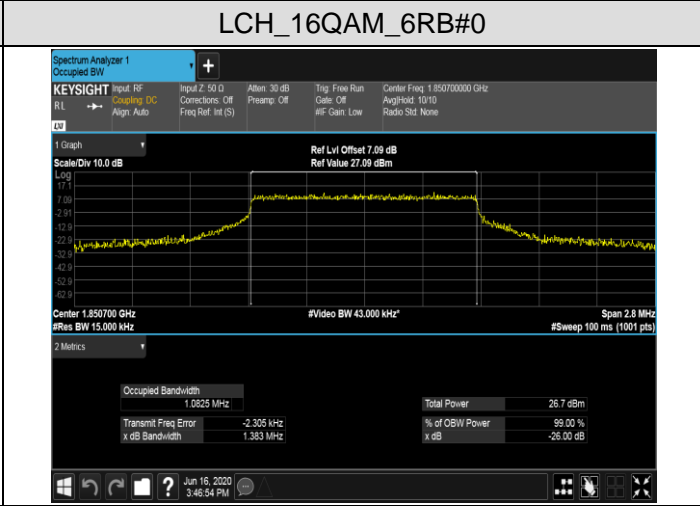
Note: 1. Below 30MHz no Spurious found and Above is the worst mode data.
 2. As no emission found in standby or receive mode, no recording in this report.

**APPENDIX B TEST PLOTS FOR OCCUPIED BANDWIDTH (99%)
 EMISSION BANDWIDTH (-26dBc)
 LTE Band 2 Channel Bandwidth: 1.4 MHz**

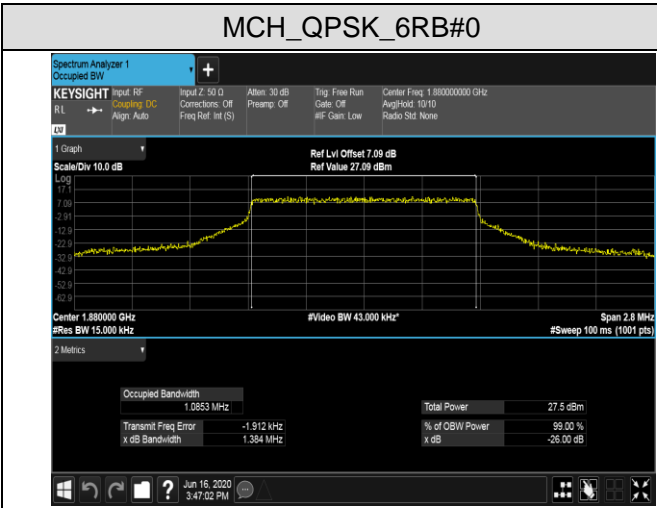
LCH_QPSK_6RB#0



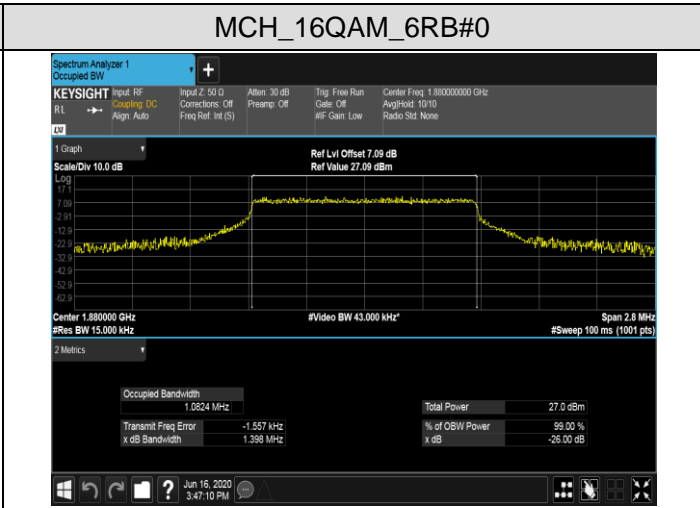
LCH_16QAM_6RB#0



MCH_QPSK_6RB#0

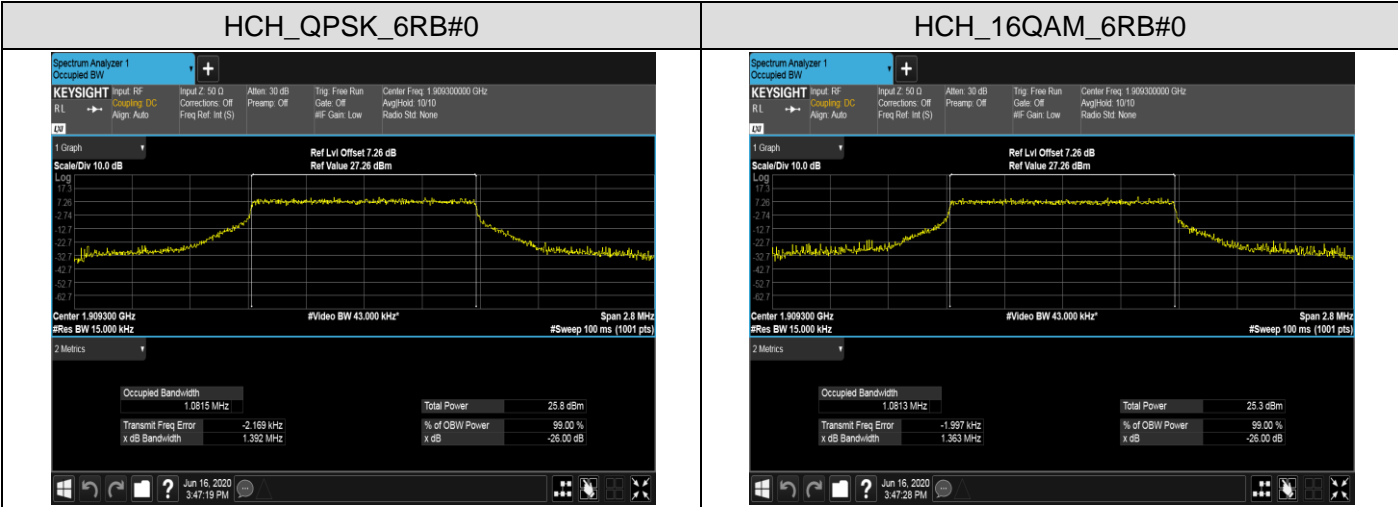


MCH_16QAM_6RB#0



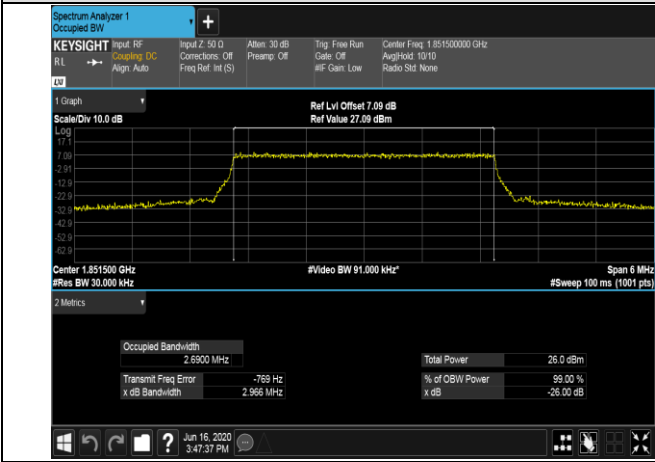
HCH_QPSK_6RB#0

HCH_16QAM_6RB#0

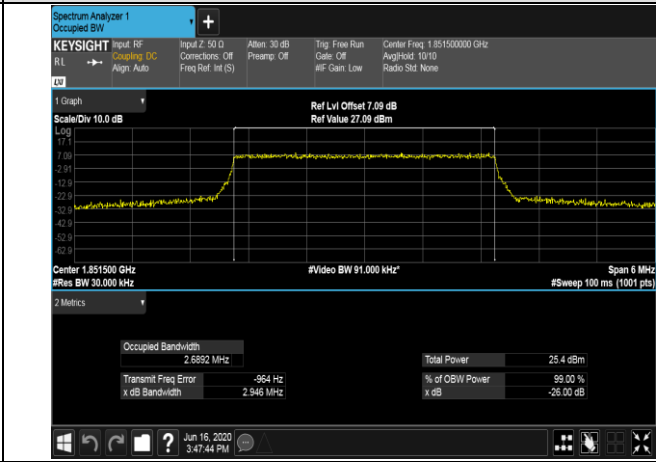


Channel Bandwidth: 3 MHz

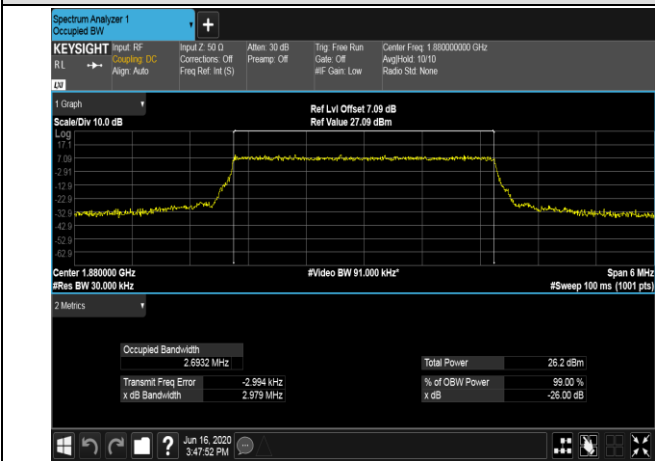
LCH_QPSK_15RB#0



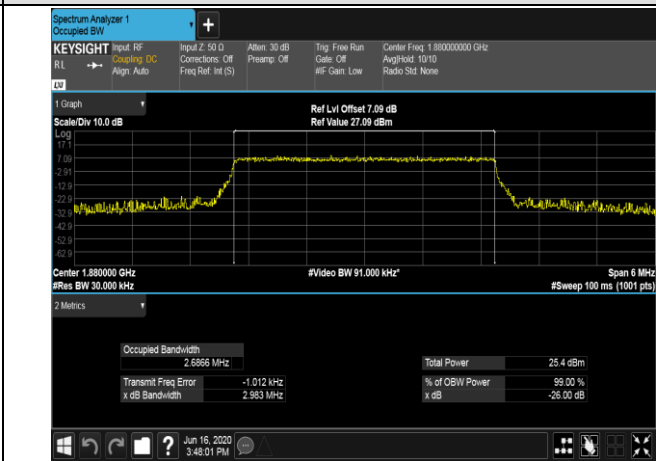
LCH_16QAM_15RB#0



MCH_QPSK_15RB#0



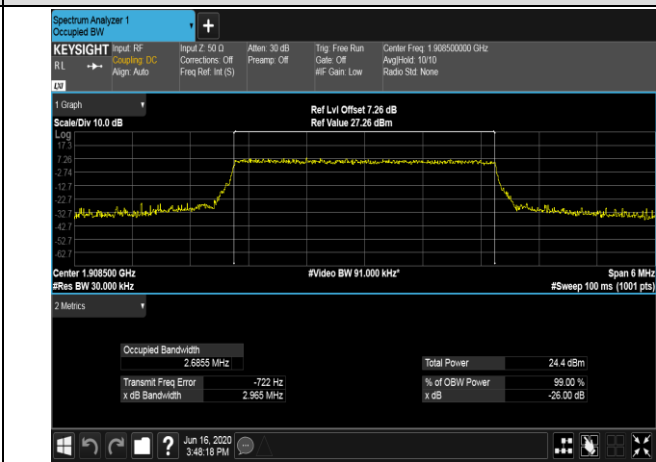
MCH_16QAM_15RB#0



HCH_QPSK_15RB#0

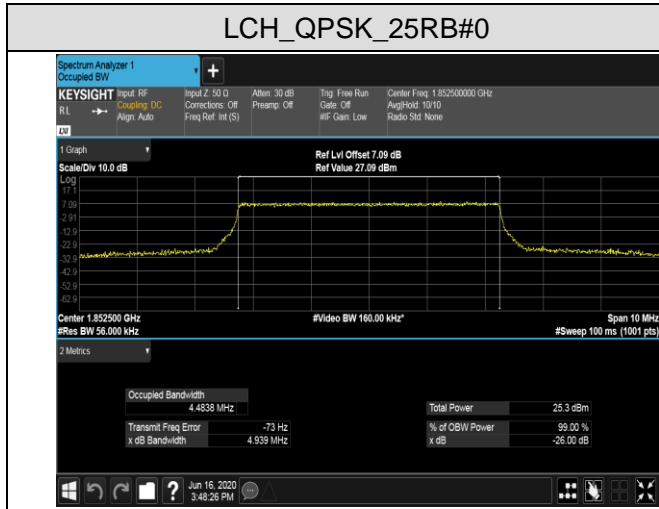


HCH_16QAM_15RB#0

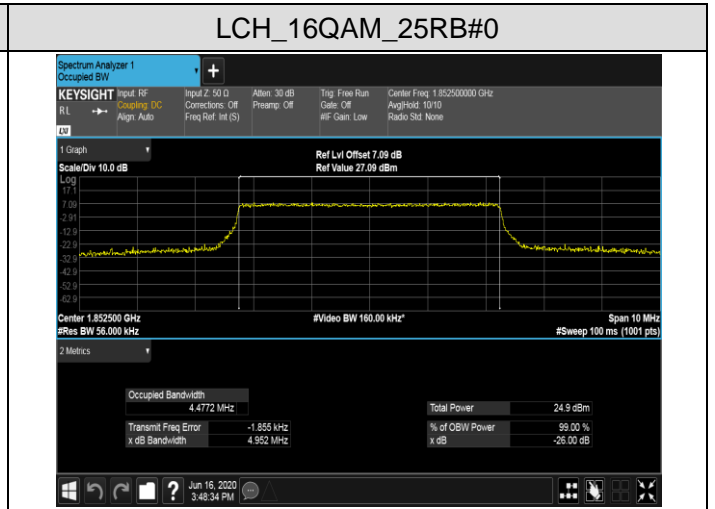


Channel Bandwidth: 5 MHz

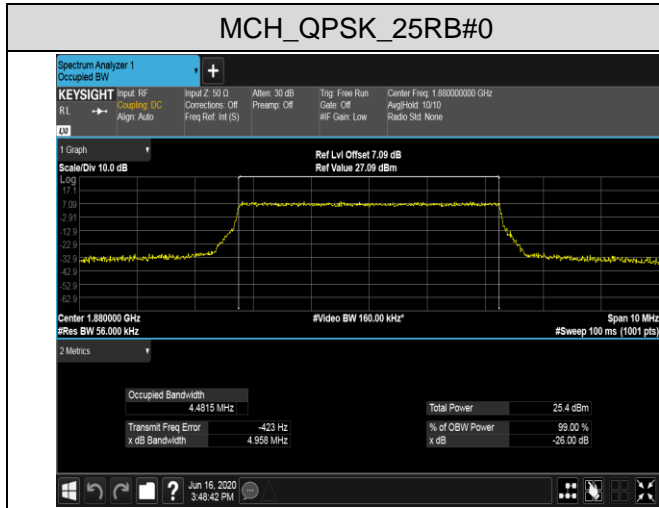
LCH_QPSK_25RB#0



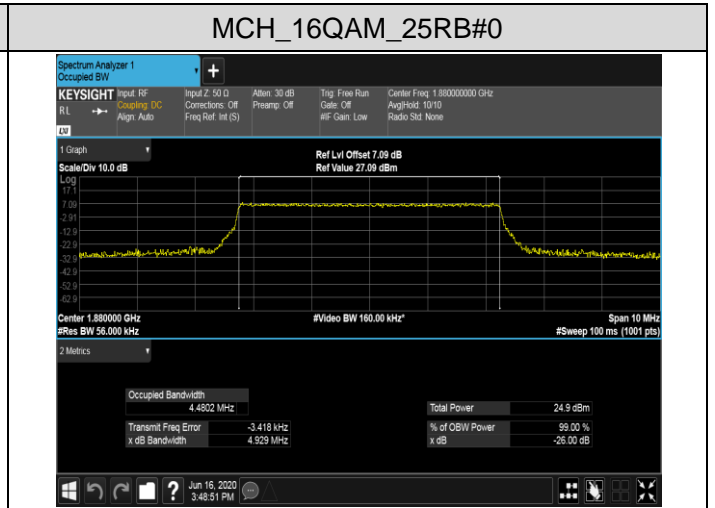
LCH_16QAM_25RB#0



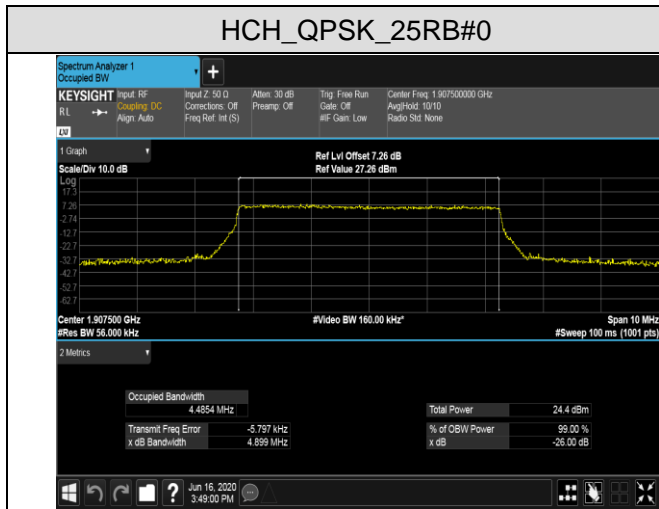
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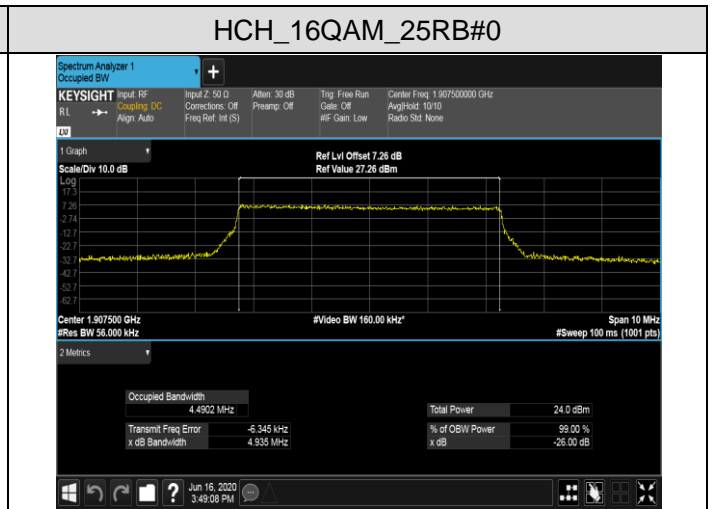
MCH_16QAM_25RB#0



HCH_QPSK_25RB#0

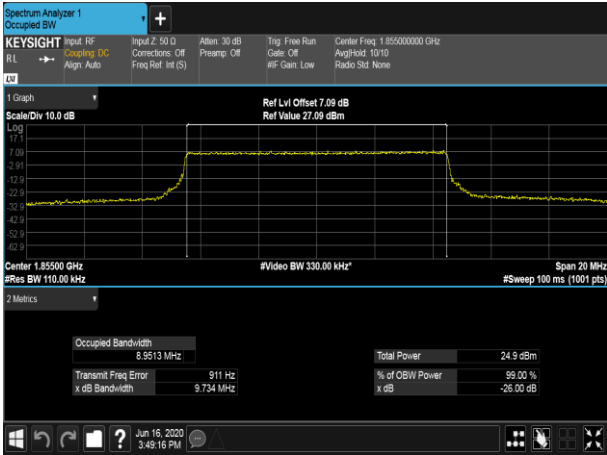


HCH_16QAM_25RB#0

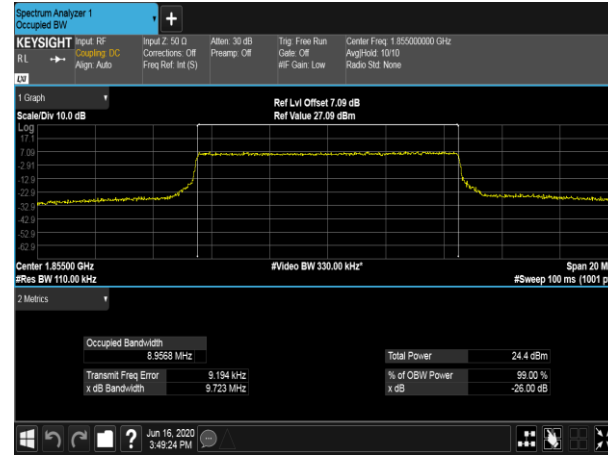


Channel Bandwidth: 10 MHz

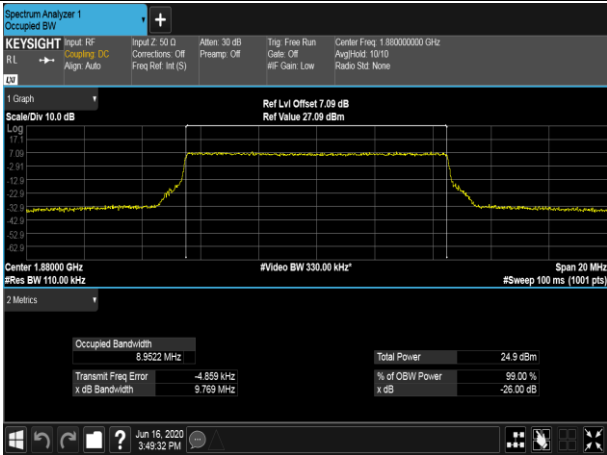
LCH_QPSK_50RB#0



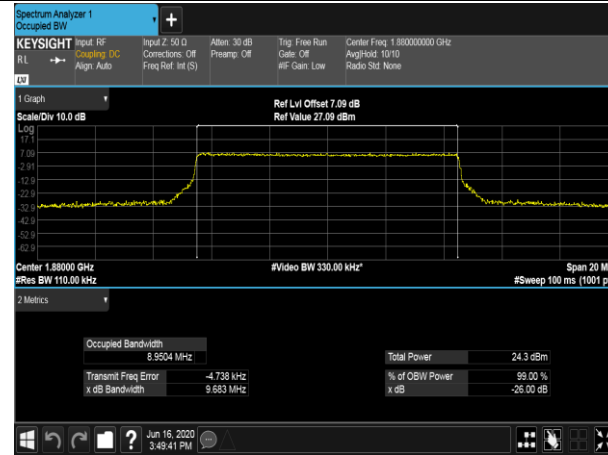
LCH_16QAM_50RB#0



MCH_QPSK_50RB#0



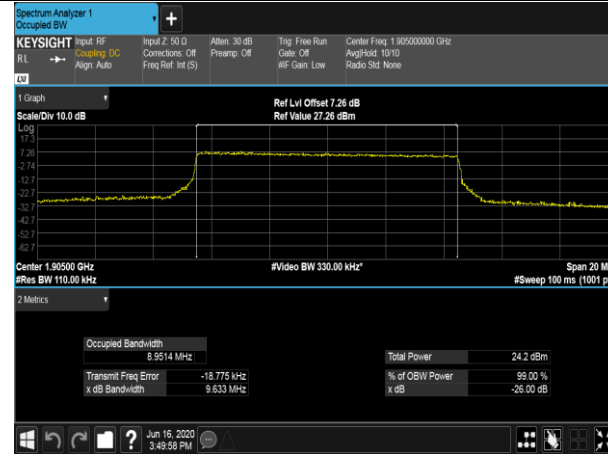
MCH_16QAM_50RB#0



HCH_QPSK_50RB#0

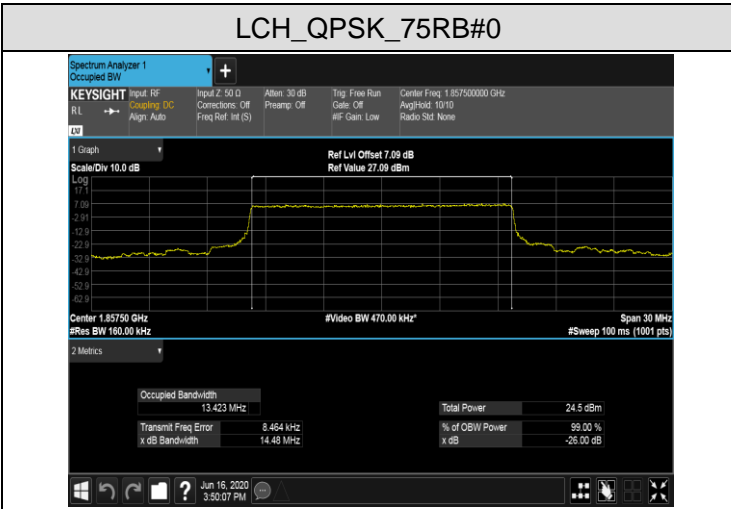


HCH_16QAM_50RB#0

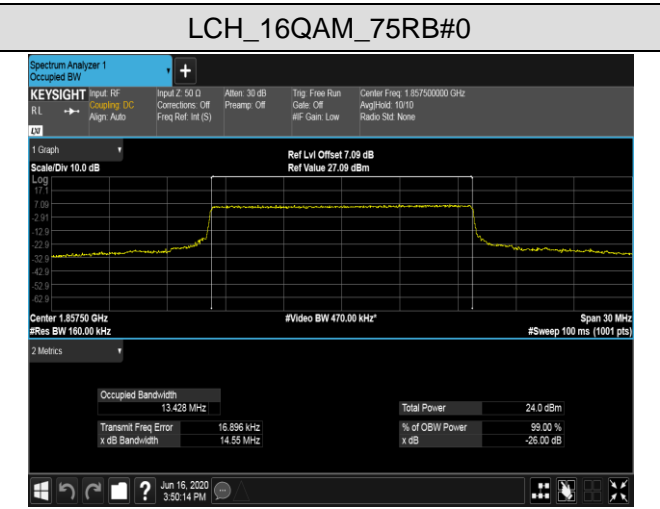


Channel Bandwidth: 15 MHz

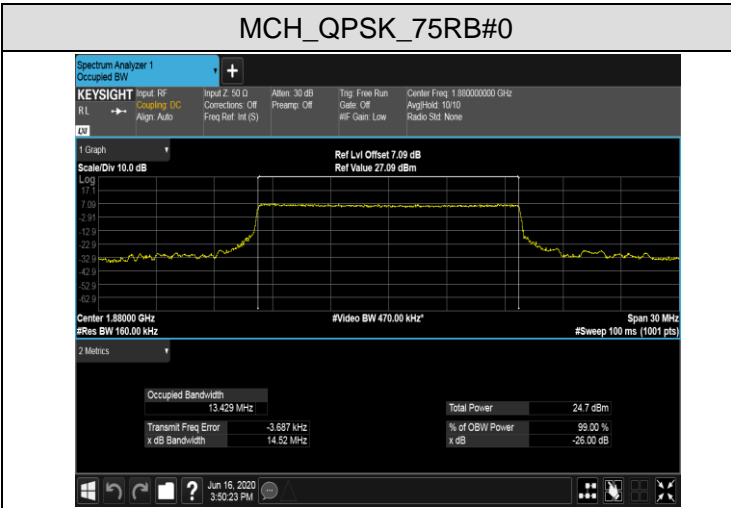
LCH_QPSK_75RB#0



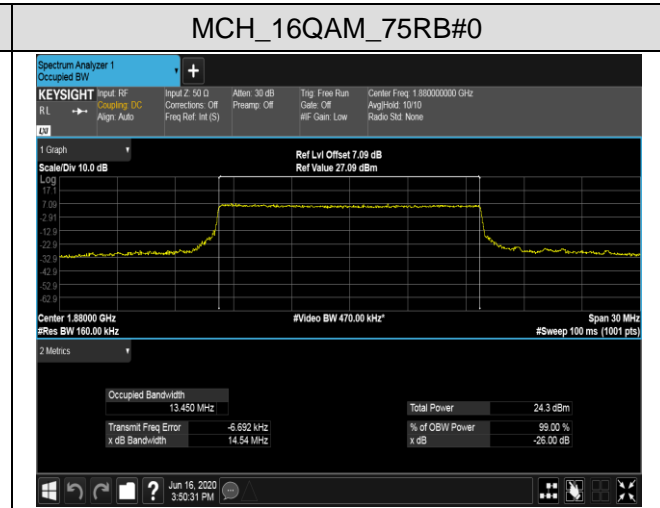
LCH_16QAM_75RB#0



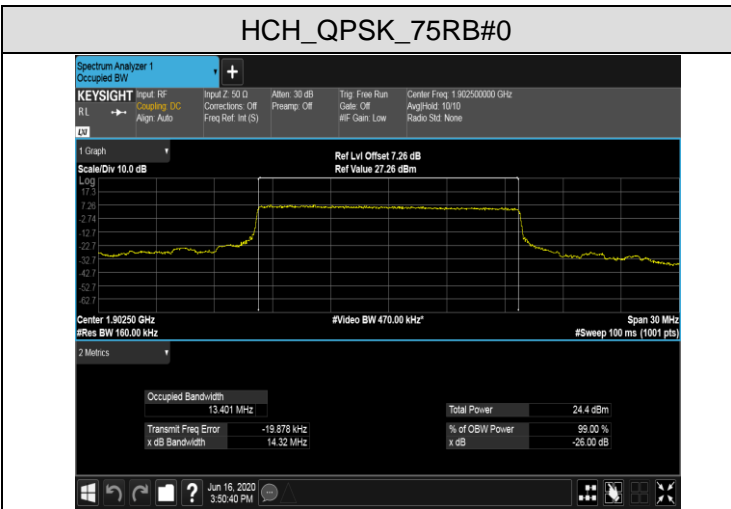
MCH_QPSK_75RB#0



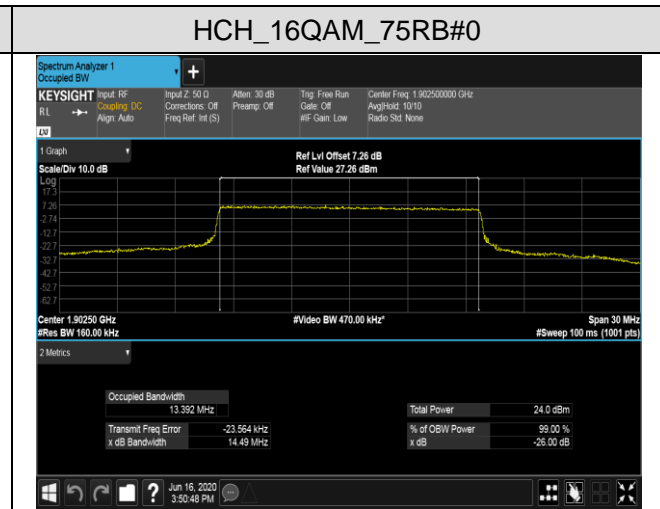
MCH_16QAM_75RB#0



HCH_QPSK_75RB#0

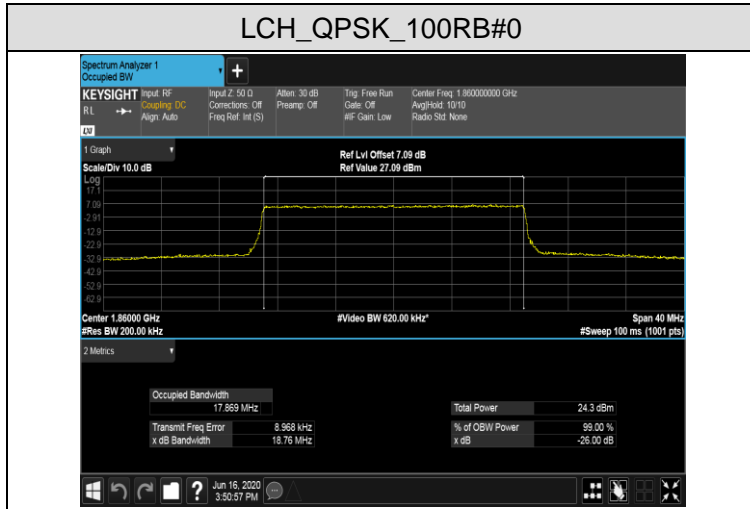


HCH_16QAM_75RB#0

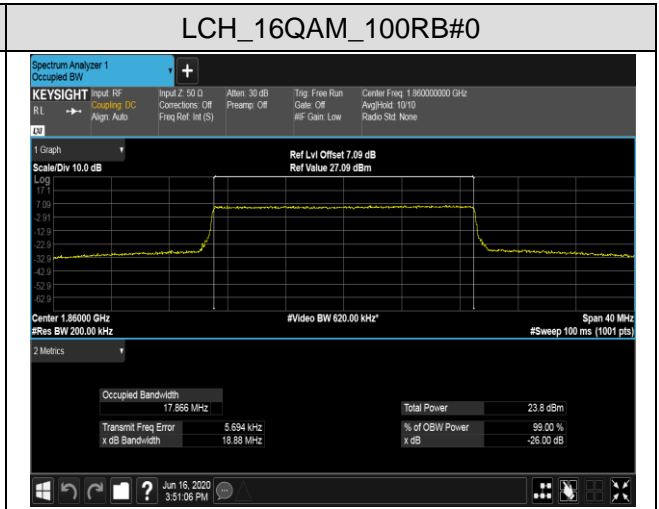


Channel Bandwidth: 20 MHz

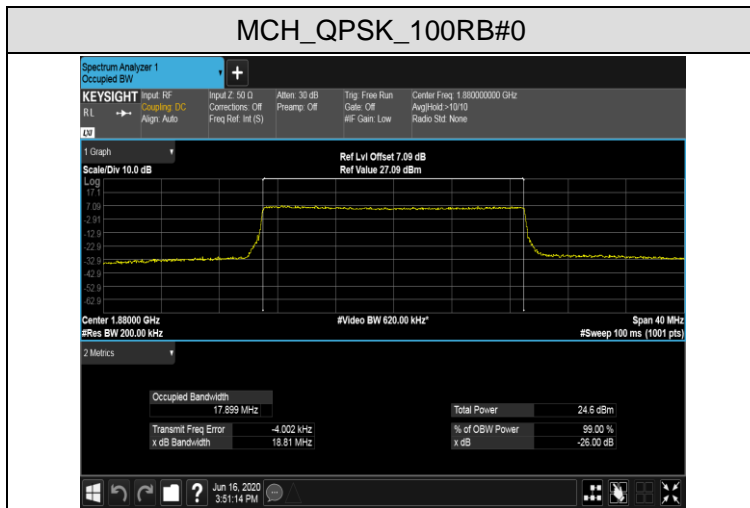
LCH_QPSK_100RB#0



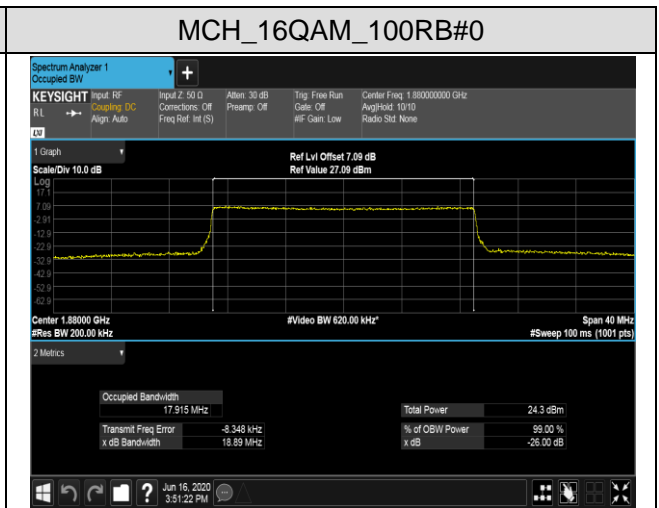
LCH_16QAM_100RB#0



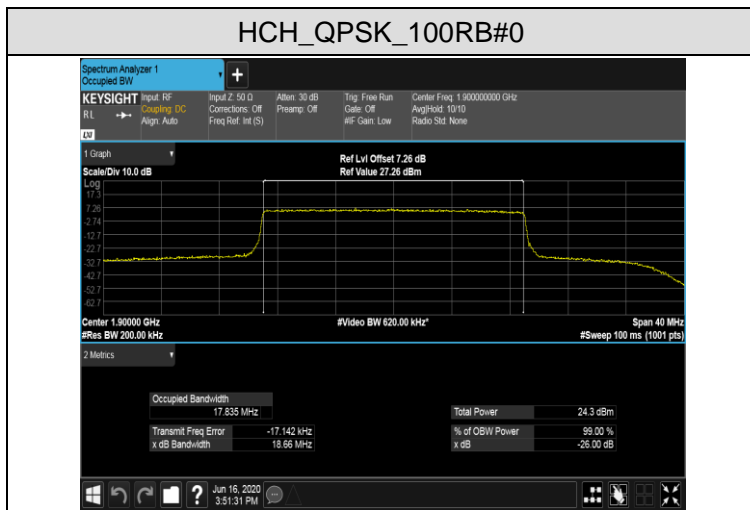
MCH_QPSK_100RB#0



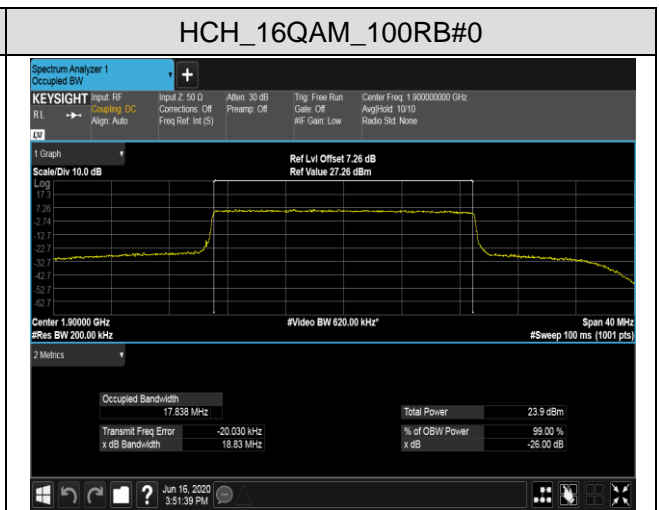
MCH_16QAM_100RB#0



HCH_QPSK_100RB#0



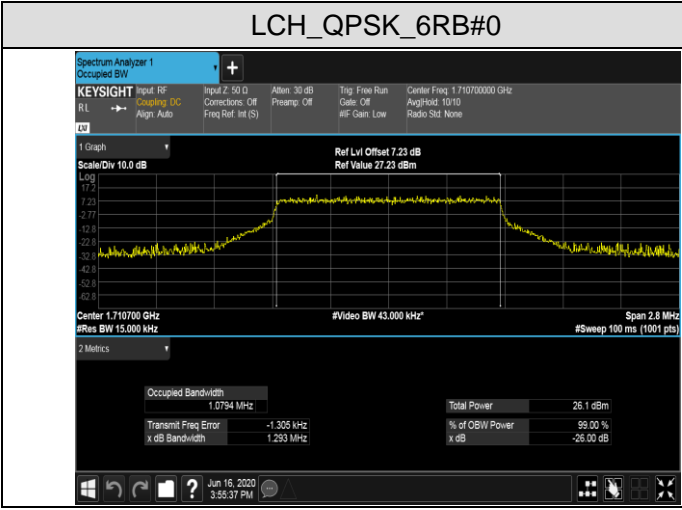
HCH_16QAM_100RB#0



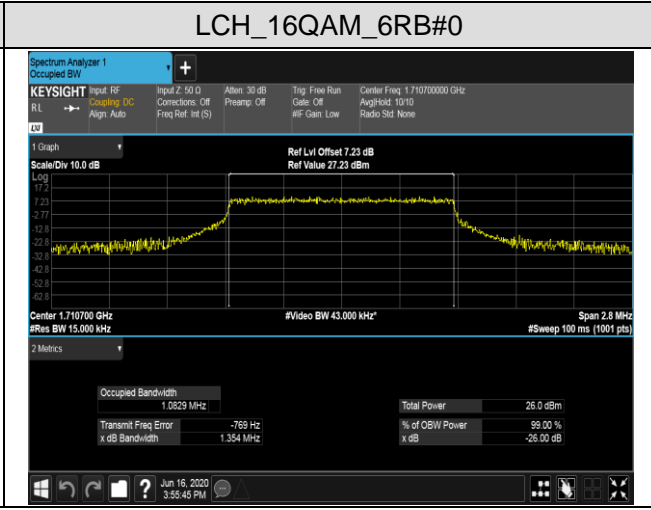
LTE Band 4

Channel Bandwidth: 1.4 MHz

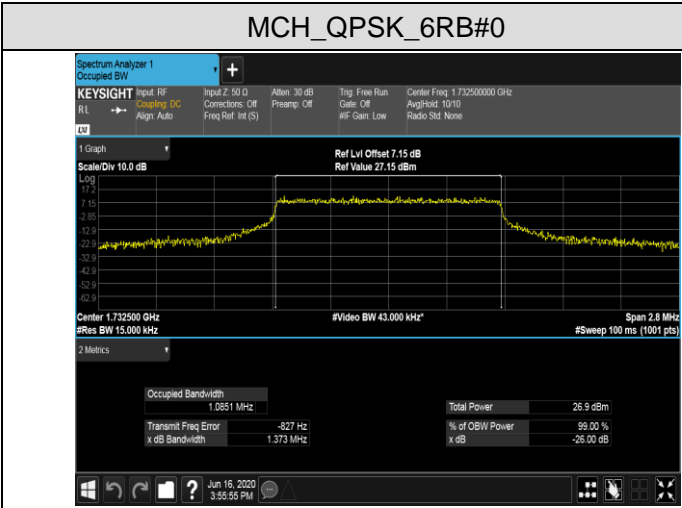
LCH_QPSK_6RB#0



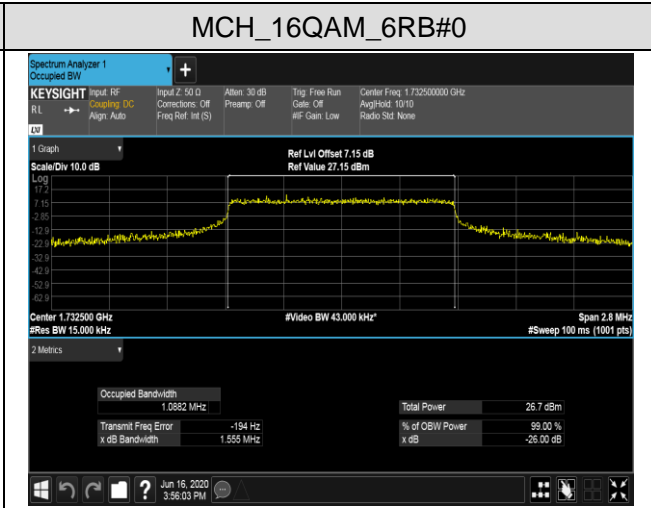
LCH_16QAM_6RB#0



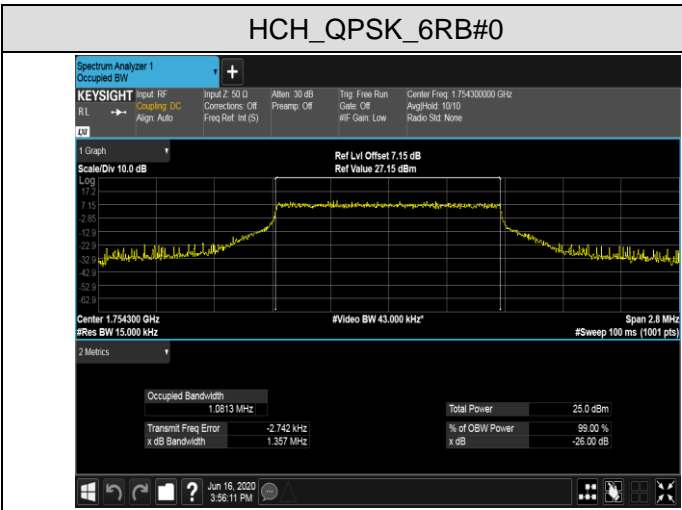
MCH_QPSK_6RB#0



MCH_16QAM_6RB#0



HCH_QPSK_6RB#0



HCH_16QAM_6RB#0

