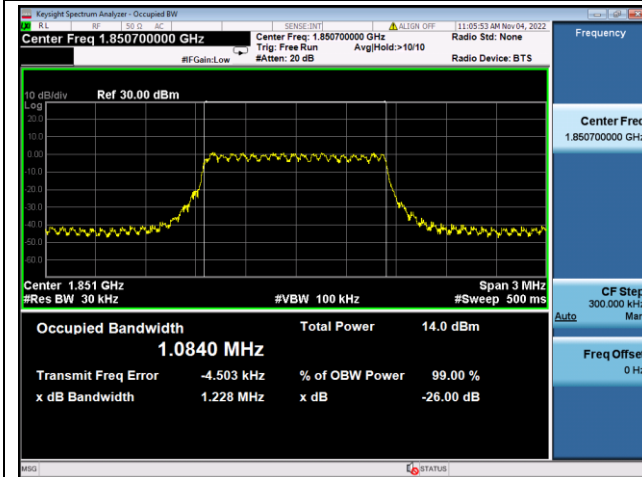


LTE Cat M Appendix-Bandwidth

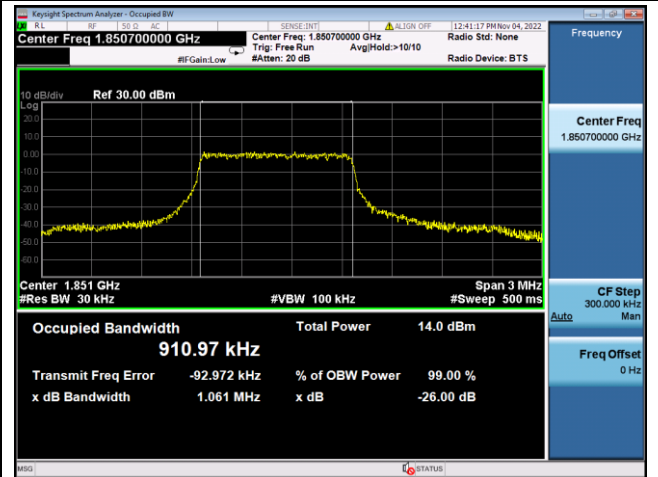
LTE Band 2					
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
1.4 MHz	QPSK	OBW	1.0840	1.0789	1.0833
		26dB bandwidth	1.228	1.229	1.226
	16QAM	OBW	0.91097	0.90915	0.90982
		26dB bandwidth	1.061	1.074	1.054
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
3.0 MHz	QPSK	OBW	1.0815	1.0843	1.0807
		26dB bandwidth	1.217	1.223	1.227
	16QAM	OBW	0.90884	0.90820	0.90926
		26dB bandwidth	1.083	1.058	1.039
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
5.0 MHz	QPSK	OBW	1.0817	1.0863	1.0796
		26dB bandwidth	1.220	1.225	1.211
	16QAM	OBW	0.91231	0.9087	0.91036
		26dB bandwidth	1.088	1.066	1.082
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
10.0 MHz	QPSK	OBW	1.0804	1.0856	1.0838
		26dB bandwidth	1.259	1.240	1.218
	16QAM	OBW	0.91125	0.91231	0.91184
		26dB bandwidth	1.107	1.133	1.096
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
15.0 MHz	QPSK	OBW	1.0838	1.0889	1.0815
		26dB bandwidth	1.279	1.263	1.262
	16QAM	OBW	0.9099	0.91198	0.91015
		26dB bandwidth	1.101	1.090	1.098
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
20.0 MHz	QPSK	OBW	1.0820	1.0852	1.0799
		26dB bandwidth	1.225	1.235	1.235
	16QAM	OBW	0.91326	0.90913	0.91358
		26dB bandwidth	1.153	1.101	1.113

LTE Band 2, Nominal Bandwidth: 1.4MHz, OBW & 26dB Bandwidth

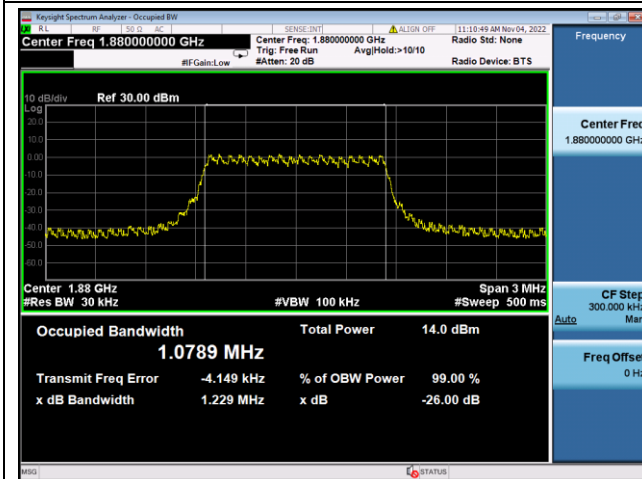
QPSK Low channel



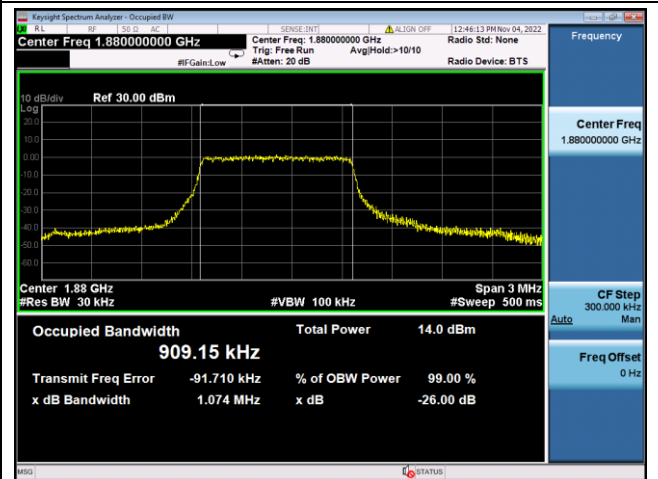
16QAM Low channel



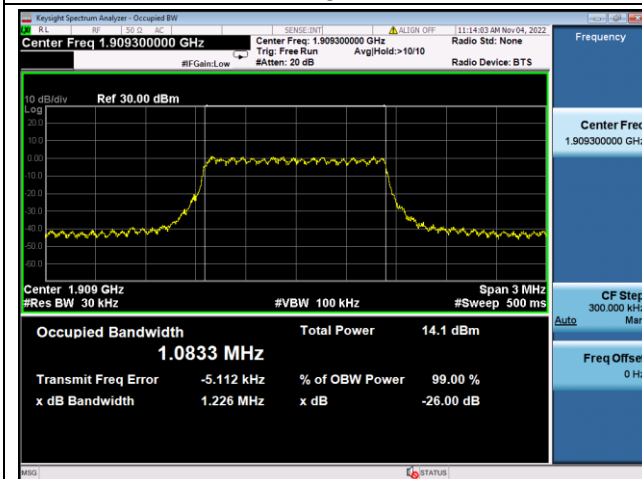
QPSK Middle channel



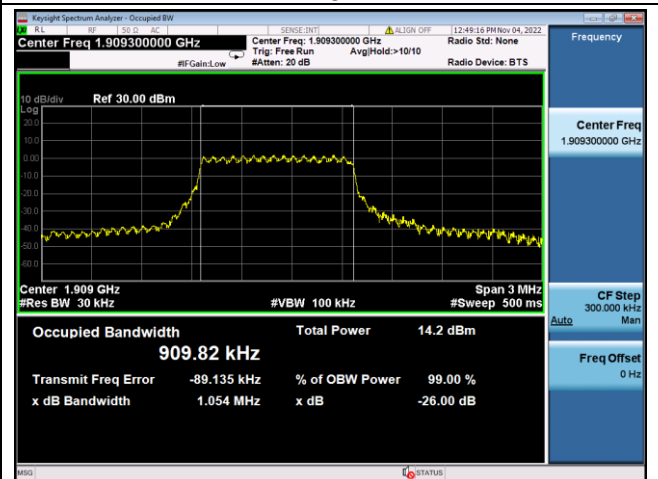
16QAM Middle channel



QPSK High channel

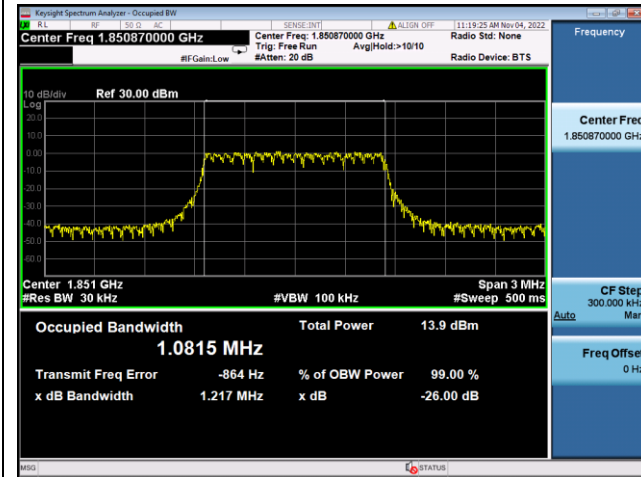


16QAM High channel

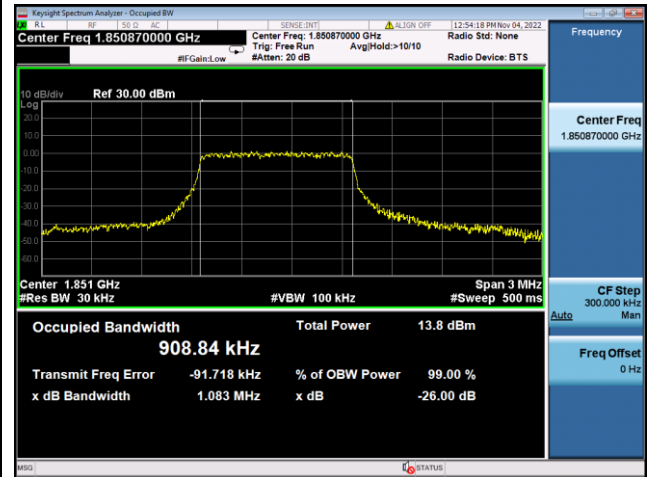


LTE Band 2, Nominal Bandwidth: 3.0MHz, OBW & 26dB Bandwidth

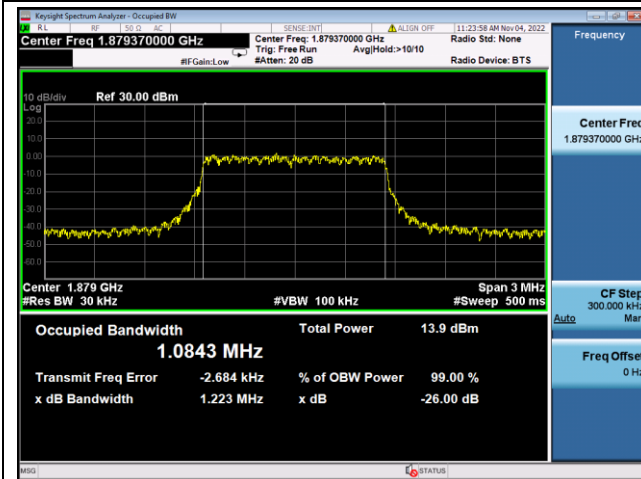
QPSK Low channel



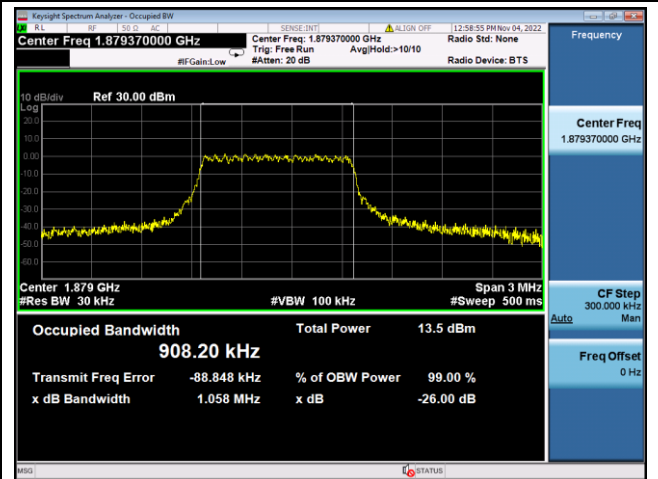
16QAM Low channel



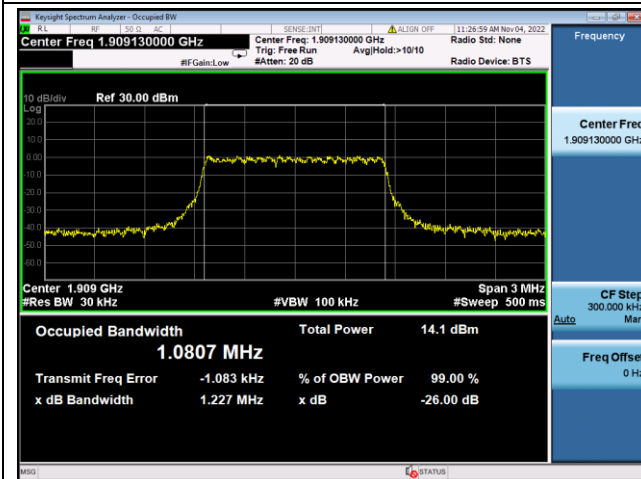
QPSK Middle channel



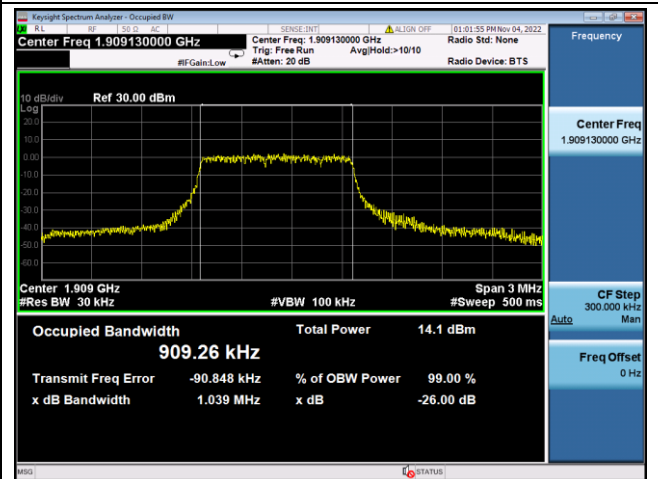
16QAM Middle channel



QPSK High channel

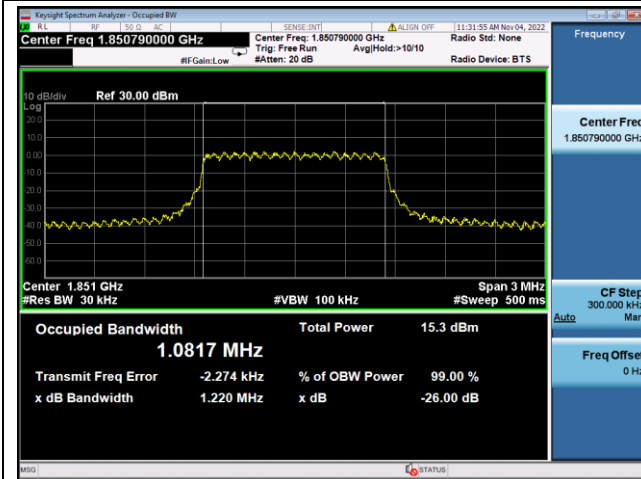


16QAM High channel

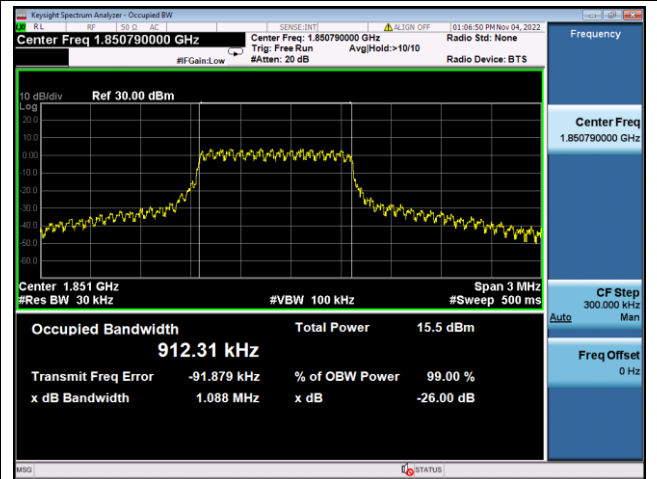


LTE Band 2, Nominal Bandwidth: 5MHz, OBW & 26dB Bandwidth

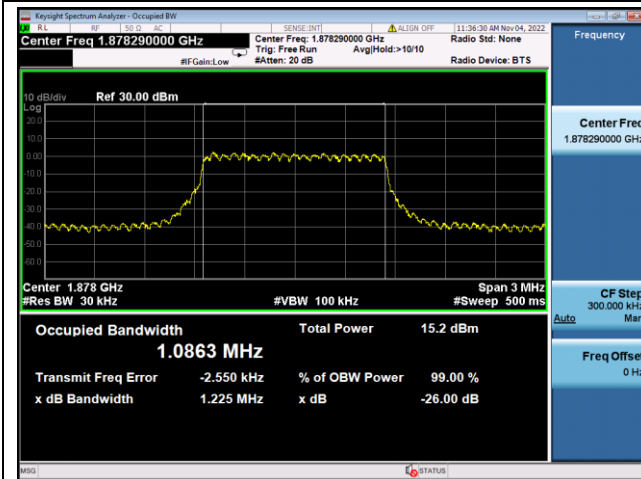
QPSK Low channel



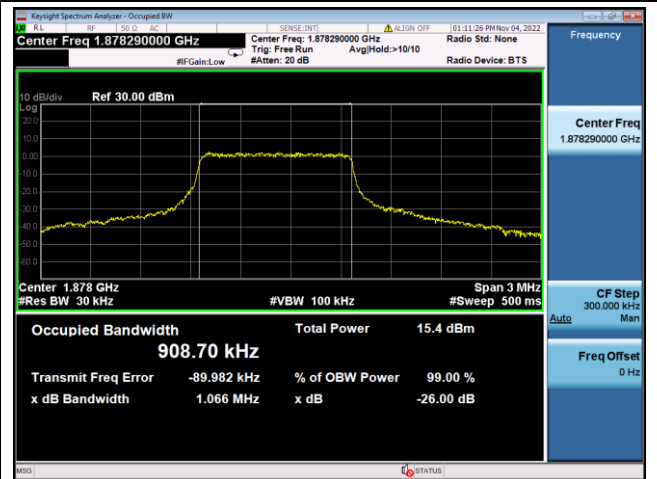
16QAM Low channel



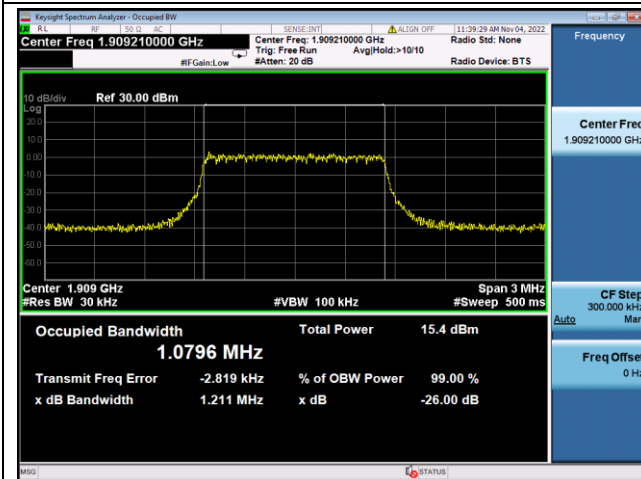
QPSK Middle channel



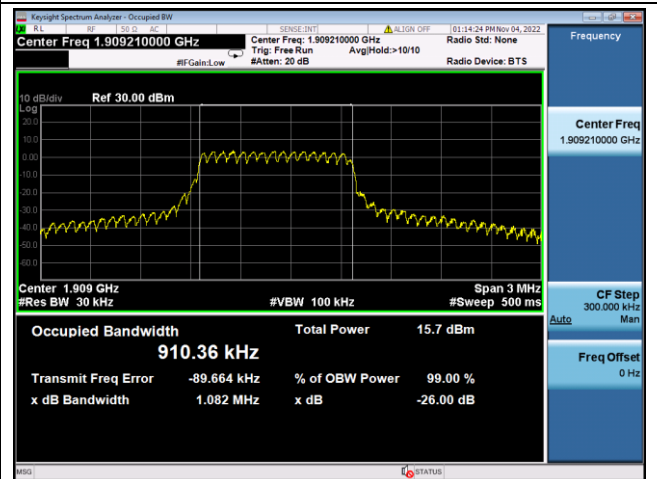
16QAM Middle channel



QPSK High channel

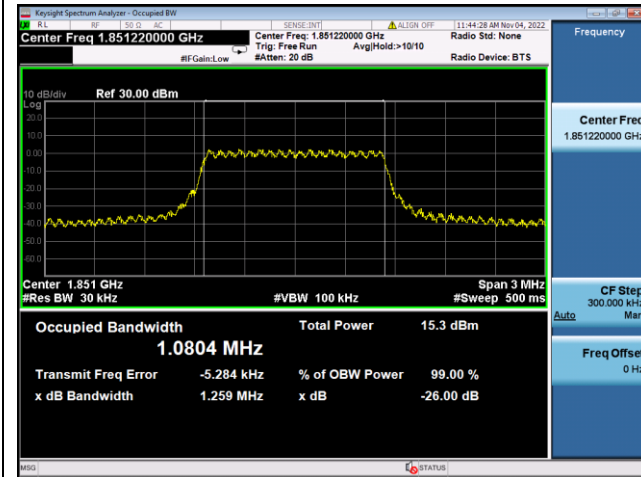


16QAM High channel



LTE Band 2, Nominal Bandwidth: 10MHz, OBW & 26dB Bandwidth

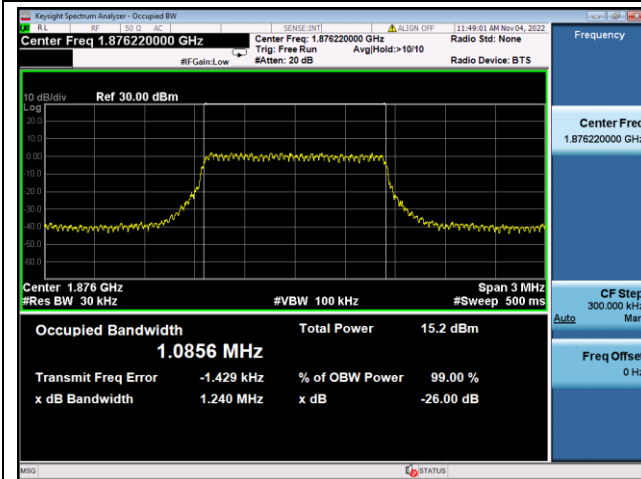
QPSK Low channel



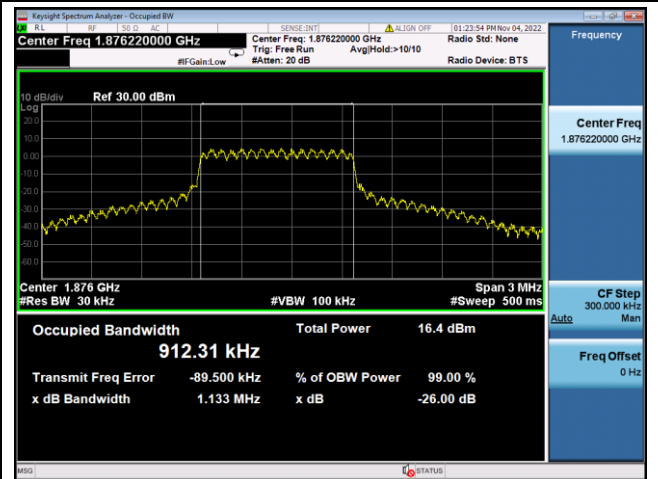
16QAM Low channel



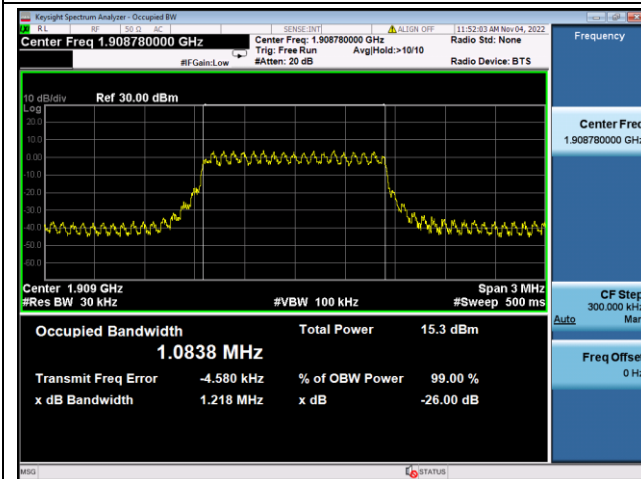
QPSK Middle channel



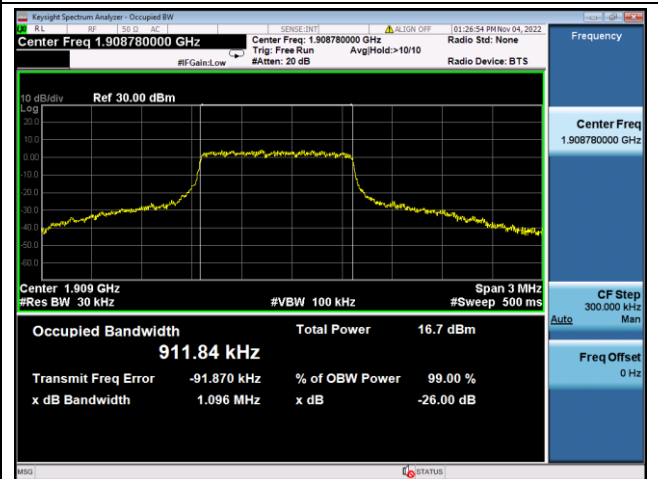
16QAM Middle channel



QPSK High channel

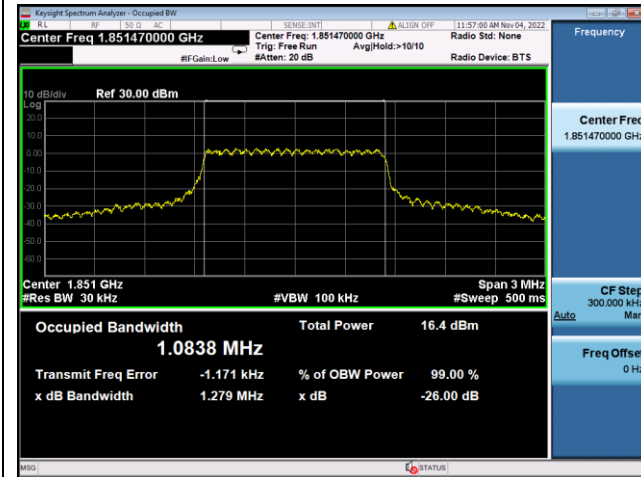


16QAM High channel

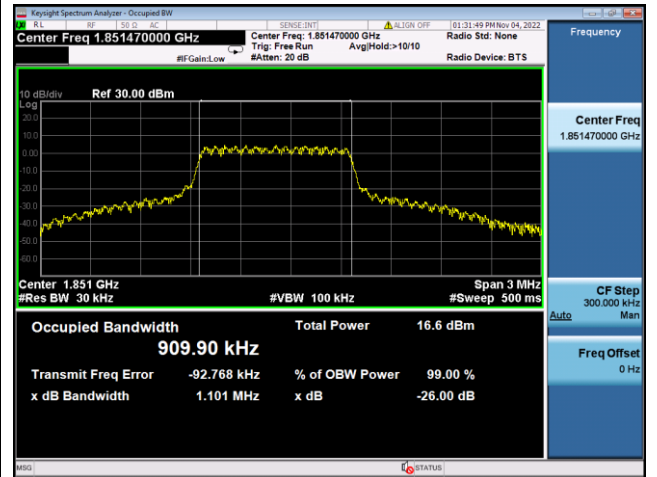


LTE Band 2, Nominal Bandwidth: 15MHz, OBW & 26dB Bandwidth

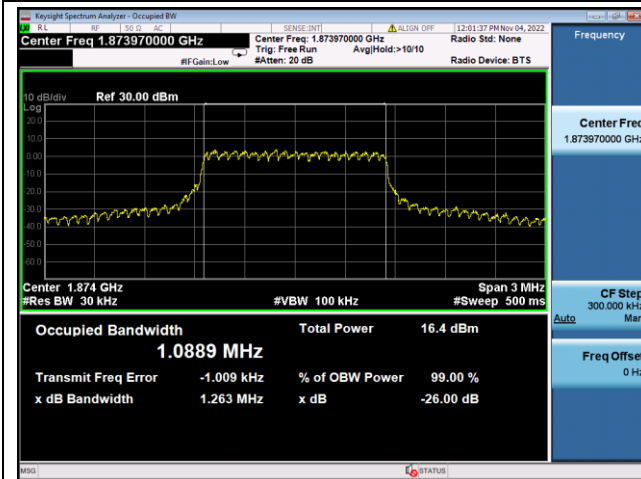
QPSK Low channel



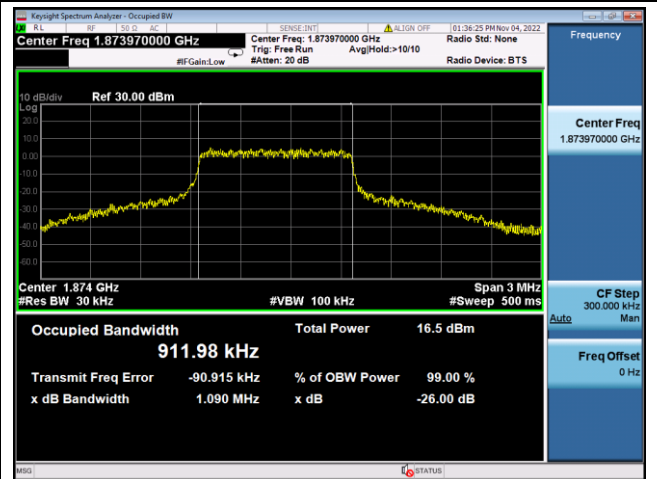
16QAM Low channel



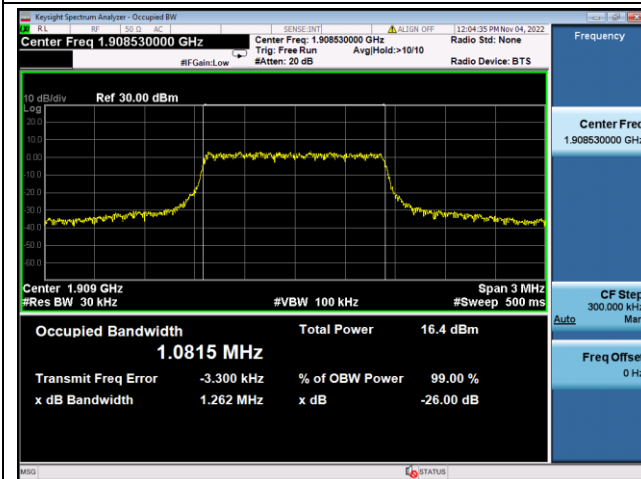
QPSK Middle channel



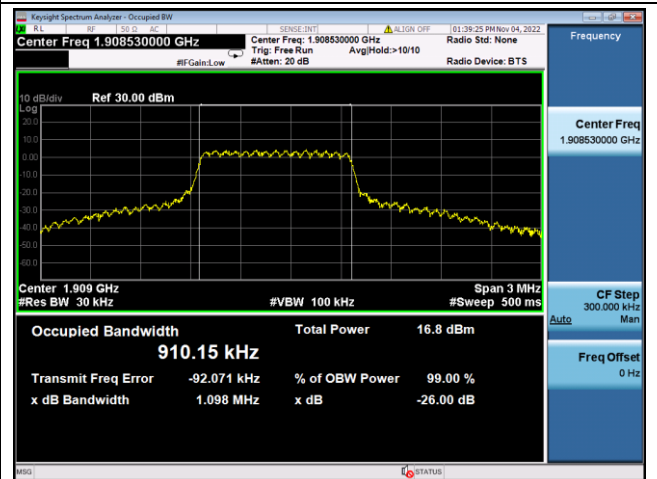
16QAM Middle channel



QPSK High channel

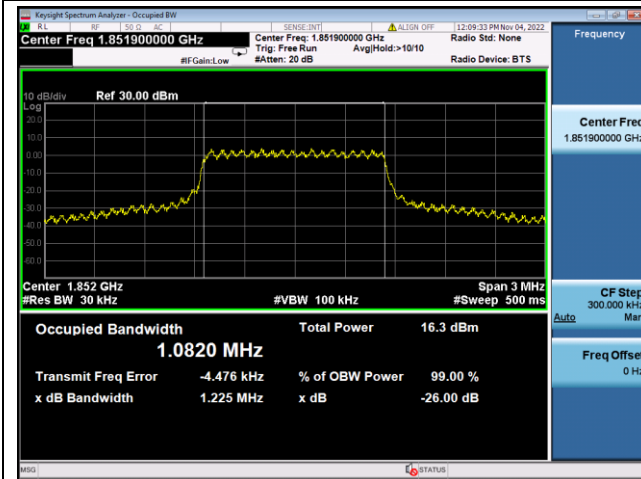


16QAM High channel

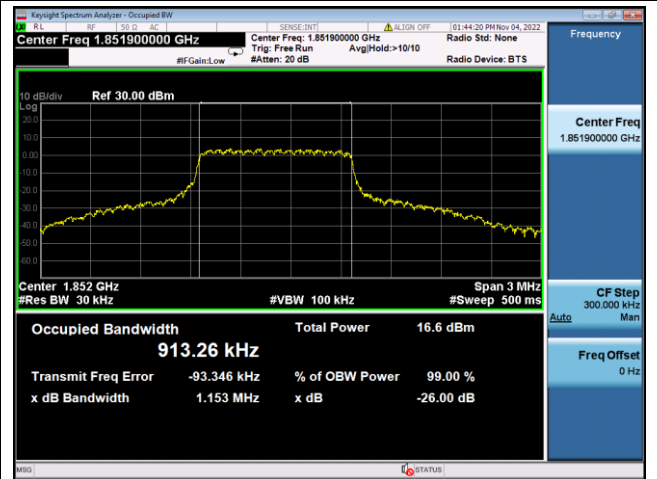


LTE Band 2, Nominal Bandwidth: 20MHz, OBW & 26dB Bandwidth

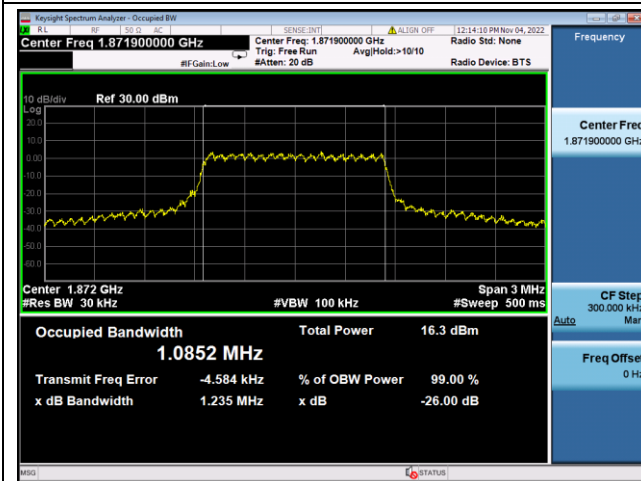
QPSK Low channel



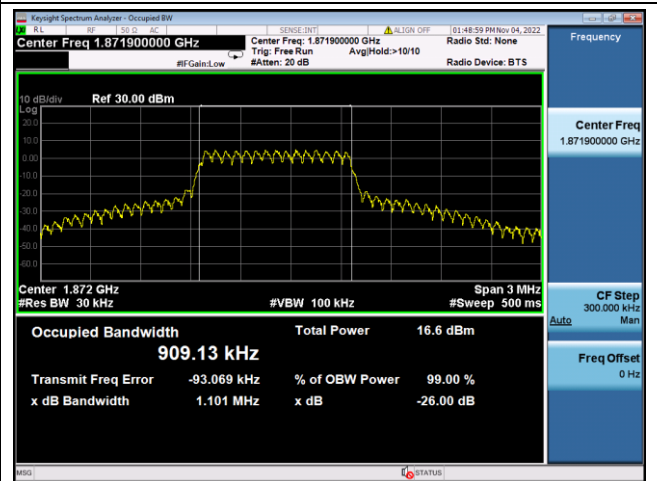
16QAM Low channel



QPSK Middle channel



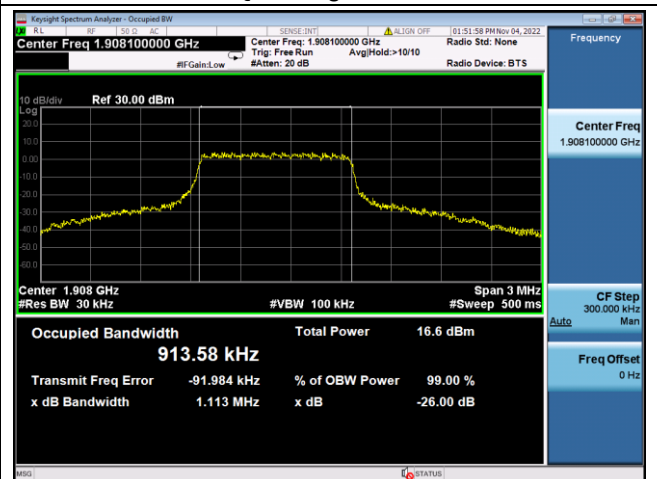
16QAM Middle channel



QPSK High channel



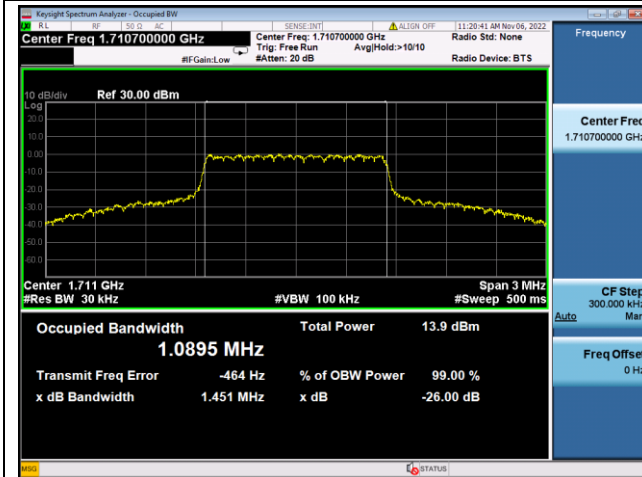
16QAM High channel



LTE Band 4					
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
1.4 MHz	QPSK	OBW	1.0895	1.0920	1.0859
		26dB bandwidth	1.451	1.445	1.381
	16QAM	OBW	0.91697	0.91366	0.91276
		26dB bandwidth	1.443	1.143	1.146
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
3.0 MHz	QPSK	OBW	1.0911	1.0926	1.0869
		26dB bandwidth	1.453	1.756	1.368
	16QAM	OBW	0.91392	0.91576	0.90736
		26dB bandwidth	1.152	1.168	1.099
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
5.0 MHz	QPSK	OBW	1.1149	1.1261	1.1053
		26dB bandwidth	2.197	2.222	2.165
	16QAM	OBW	0.92931	0.92583	0.92341
		26dB bandwidth	1.720	1.716	1.636
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
10.0 MHz	QPSK	OBW	1.1195	1.1187	1.1069
		26dB bandwidth	2.177	2.176	2.171
	16QAM	OBW	1.0176	1.0003	0.97582
		26dB bandwidth	1.959	1.938	1.927
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
15.0 MHz	QPSK	OBW	1.1215	1.1085	1.1051
		26dB bandwidth	2.066	2.175	2.178
	16QAM	OBW	0.99263	0.99560	0.98177
		26dB bandwidth	1.983	1.981	1.945
Nominal Bandwidth	Modulation	Test Item	Test result(MHz)		
			LCH	MCH	HCH
20.0 MHz	QPSK	OBW	1.1079	1.1106	1.1058
		26dB bandwidth	2.111	2.178	2.161
	16QAM	OBW	1.0013	1.0176	0.97688
		26dB bandwidth	1.940	1.980	1.953

LTE Band 4, Nominal Bandwidth: 1.4MHz, OBW & 26dB Bandwidth

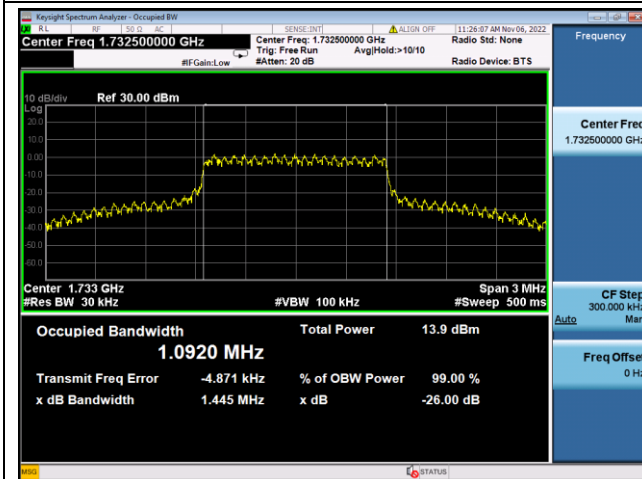
QPSK Low channel



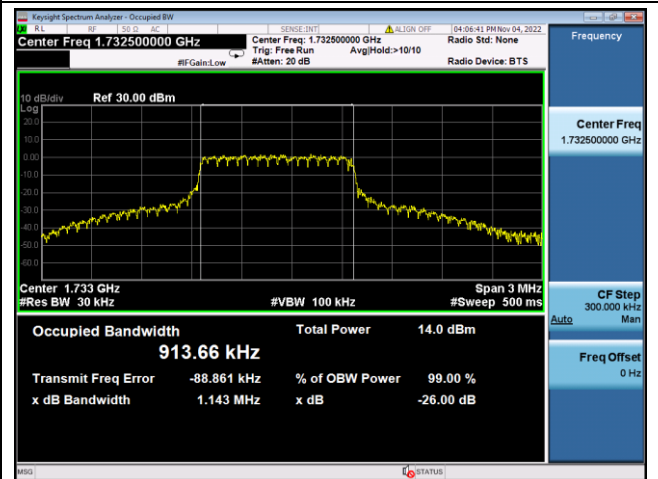
16QAM Low channel



QPSK Middle channel



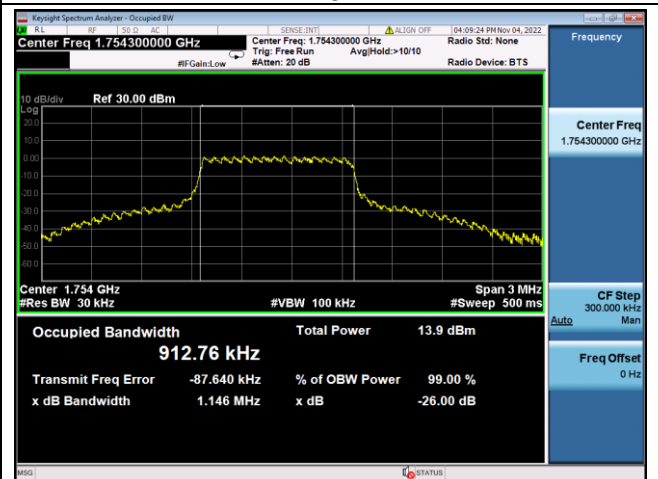
16QAM Middle channel



QPSK High channel

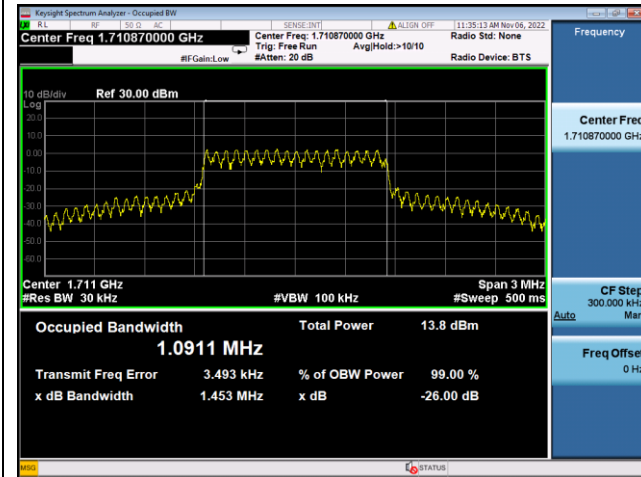


16QAM High channel

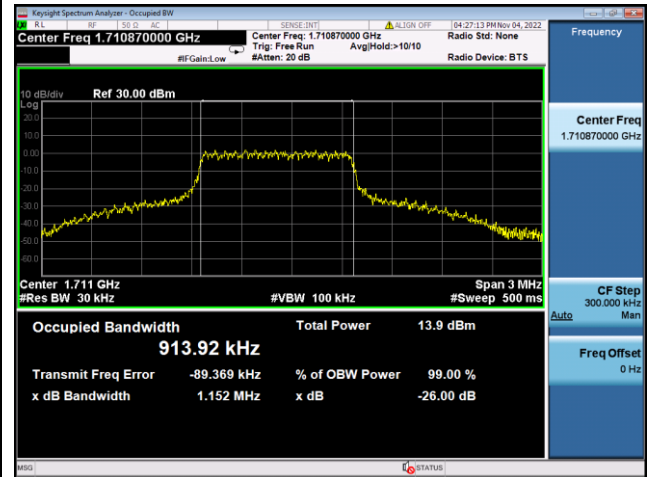


LTE Band 4, Nominal Bandwidth: 3.0MHz, OBW & 26dB Bandwidth

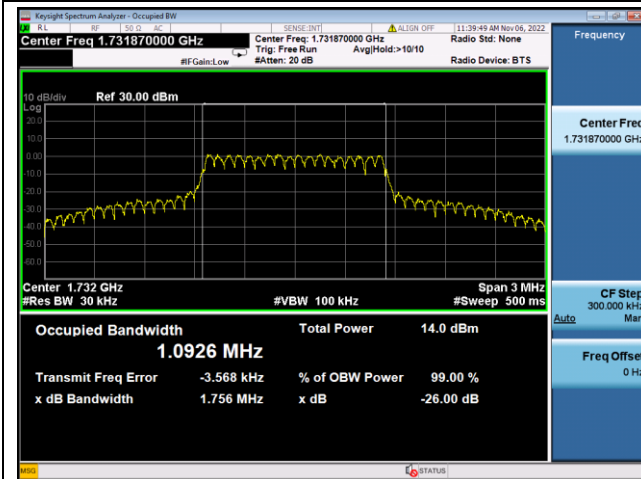
QPSK Low channel



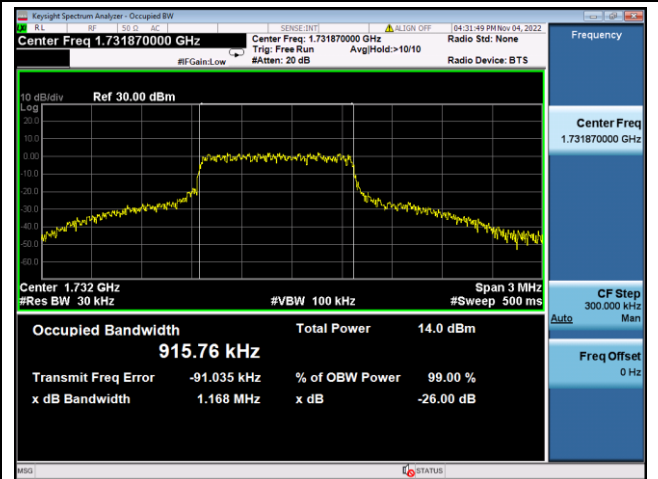
16QAM Low channel



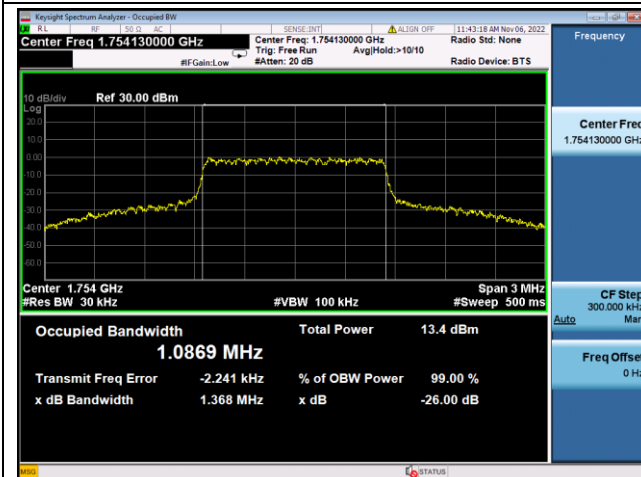
QPSK Middle channel



16QAM Middle channel



QPSK High channel

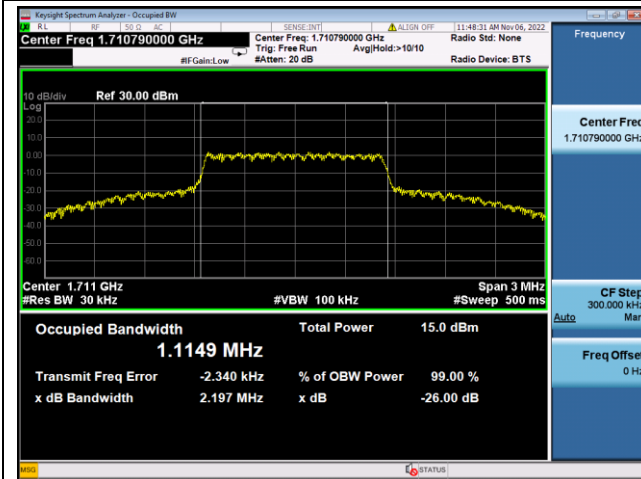


16QAM High channel

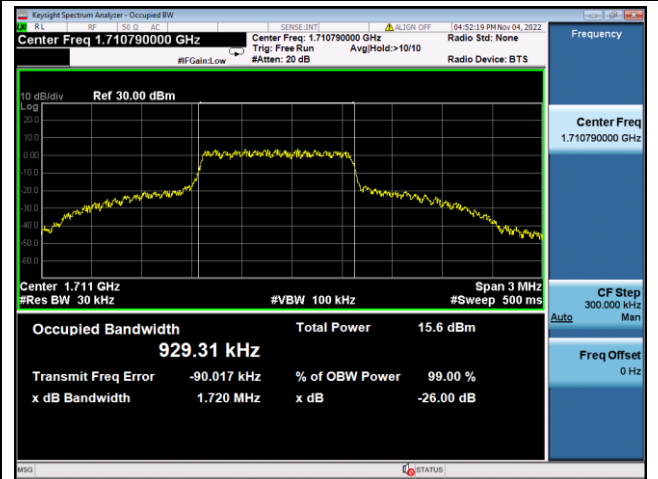


LTE Band 4, Nominal Bandwidth: 5MHz, OBW & 26dB Bandwidth

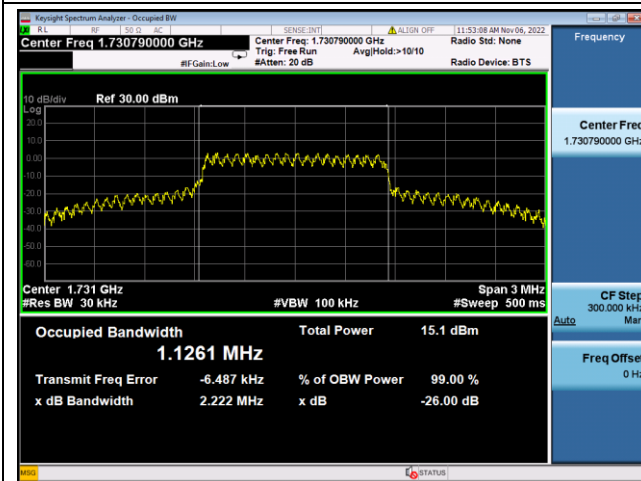
QPSK Low channel



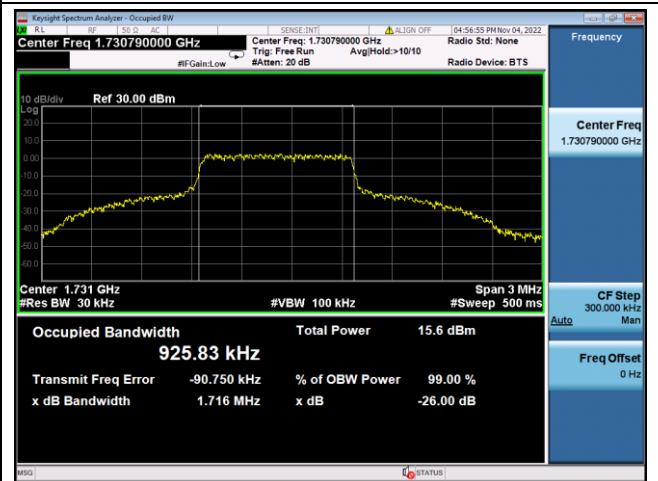
16QAM Low channel



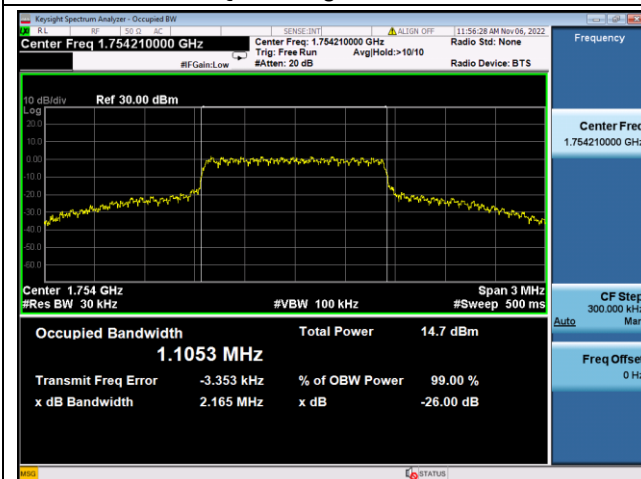
QPSK Middle channel



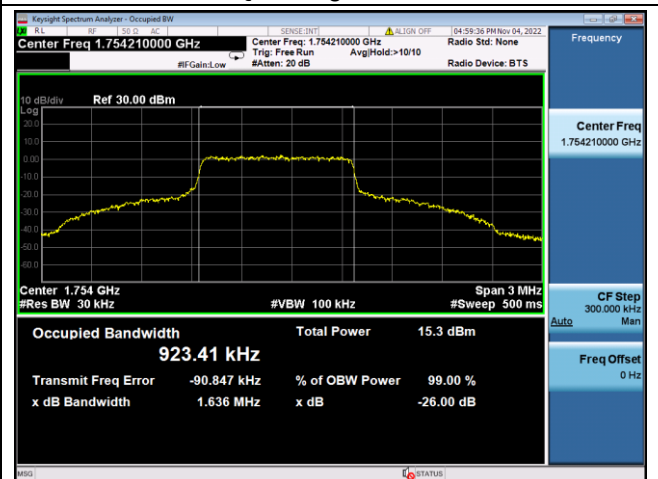
16QAM Middle channel



QPSK High channel

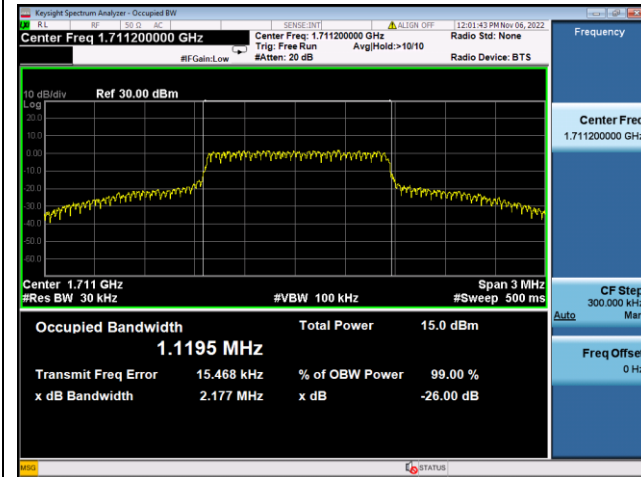


16QAM High channel



LTE Band 4, Nominal Bandwidth: 10MHz, OBW & 26dB Bandwidth

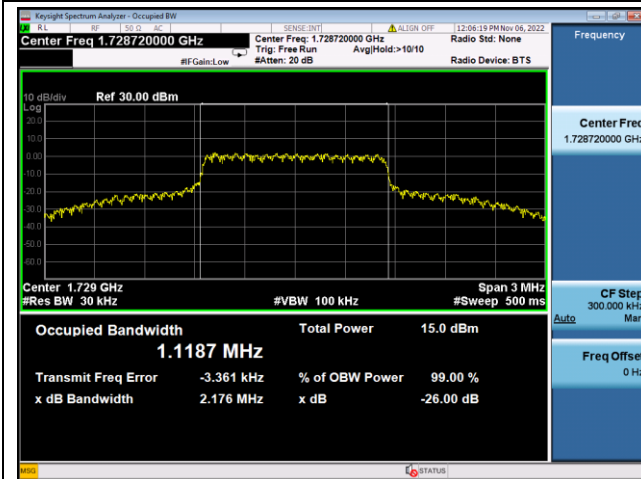
QPSK Low channel



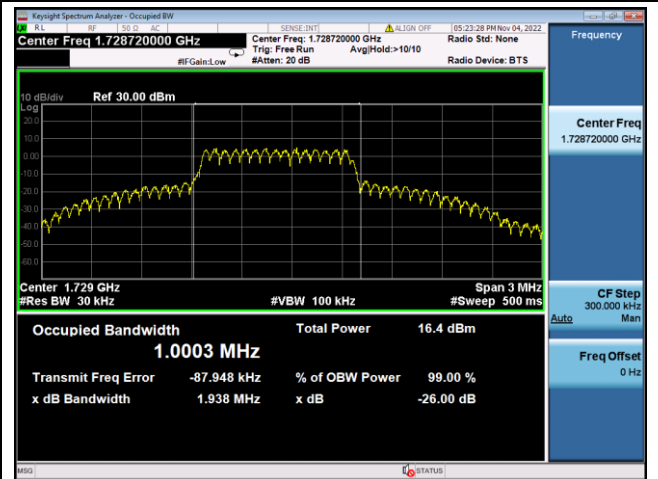
16QAM Low channel



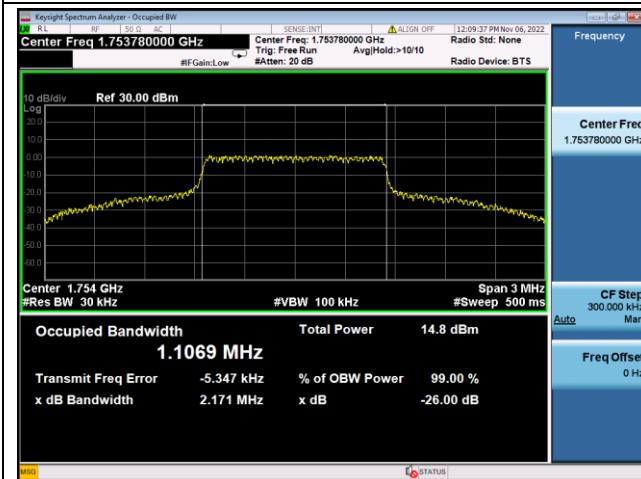
QPSK Middle channel



16QAM Middle channel



QPSK High channel



16QAM High channel

