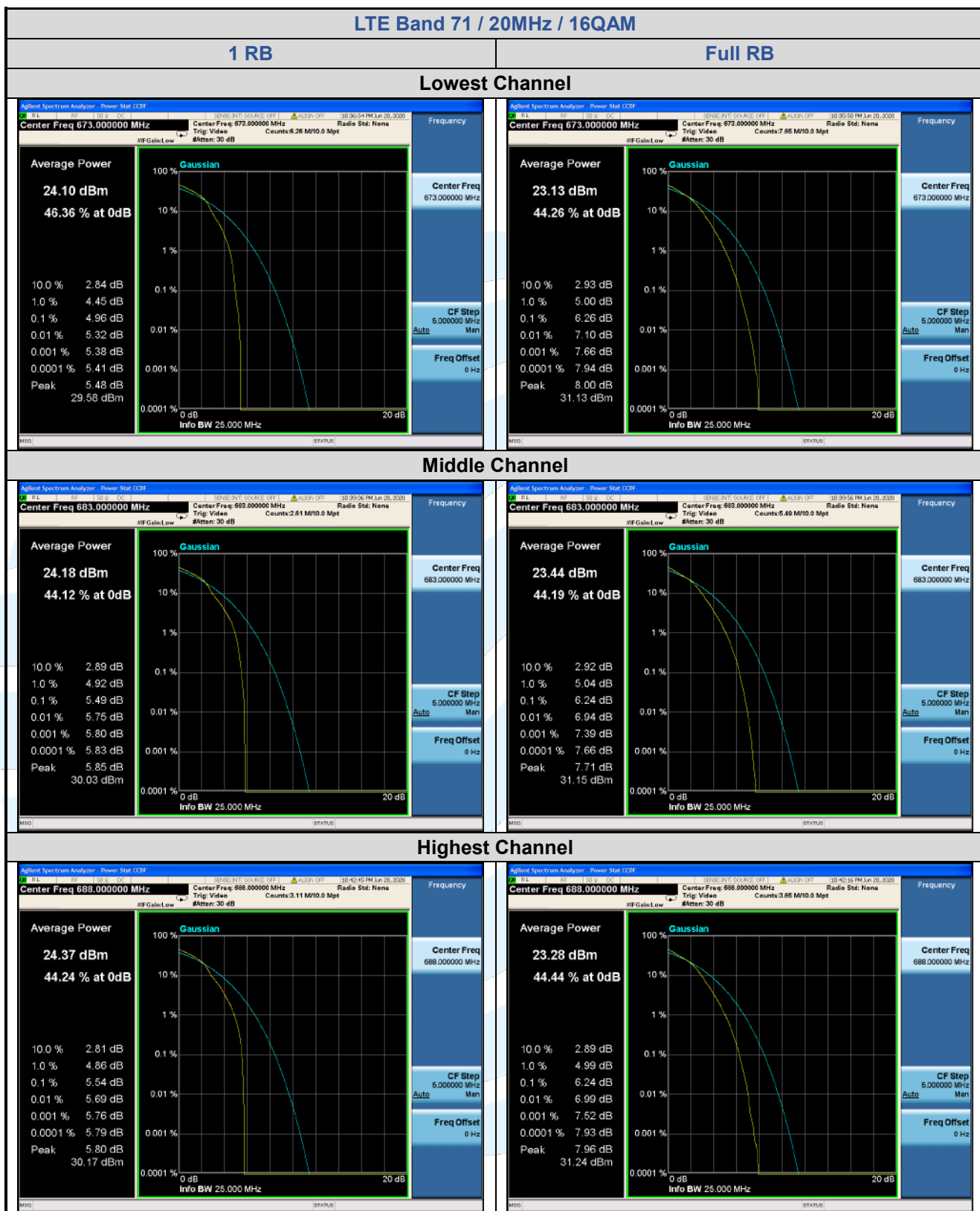




5.599%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

5.5.1 LTE Band 2

LTE Band 2								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.282	1.282	/	1.1017	1.0932	/
Middle	6	0	1.281	1.304	/	1.0932	1.0967	/
Highest	6	0	1.297	1.269	/	1.0948	1.0922	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.943	2.906	/	2.6925	2.6817	/
Middle	15	0	2.899	2.891	/	2.6779	2.6823	/
Highest	15	0	2.890	2.900	/	2.6835	2.6744	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.178	5.233	/	4.5030	4.5447	/
Middle	25	0	5.190	5.161	/	4.5281	4.5122	/
Highest	25	0	5.196	5.116	/	4.5283	4.5154	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.22	9.999	/	9.0121	9.0007	/
Middle	50	0	9.996	10.15	/	9.0018	9.0193	/
Highest	50	0	10.13	10.10	/	9.0085	8.9940	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.90	15.00	/	13.520	13.510	/
Middle	75	0	14.97	14.97	/	13.475	13.514	/
Highest	75	0	15.12	14.95	/	13.479	13.485	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.72	19.82	/	18.009	18.032	/
Middle	100	0	19.67	19.83	/	17.983	18.021	/
Highest	100	0	19.79	19.52	/	17.960	17.963	/

Shenzhen UnionTrust Quality and Technology Co., Ltd.

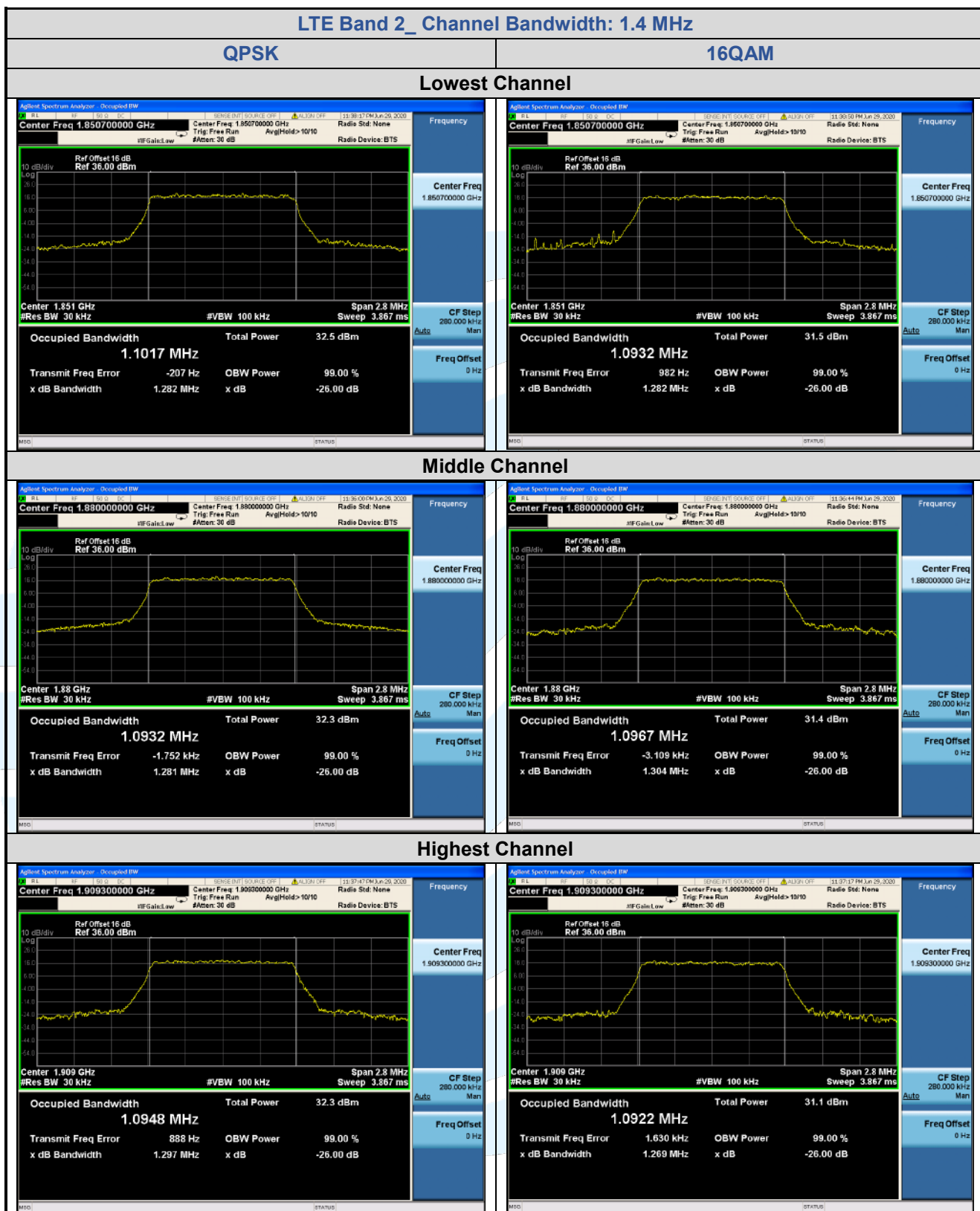
Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China Tel: +86-755-28230888

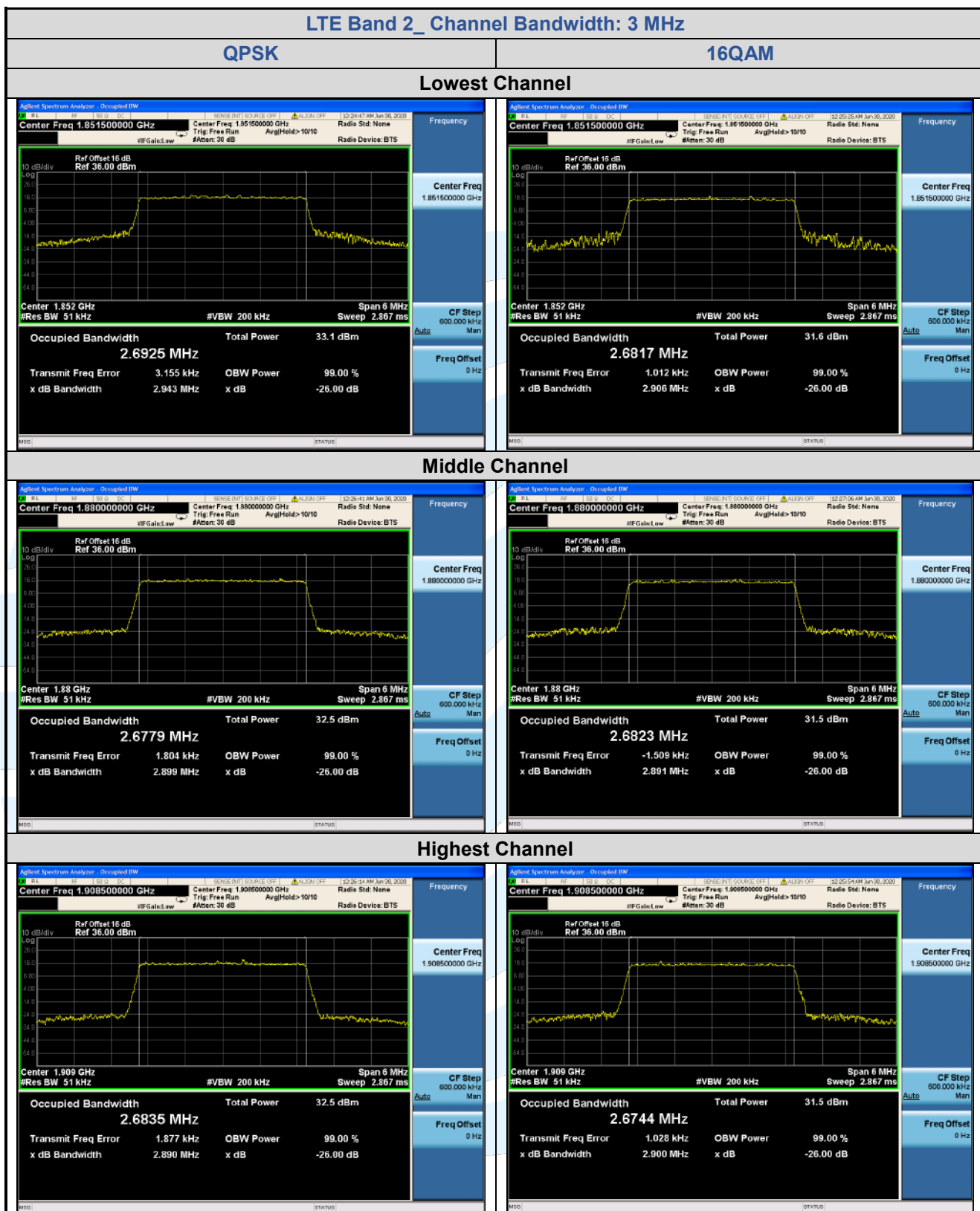
Fax: +86-755-28230886

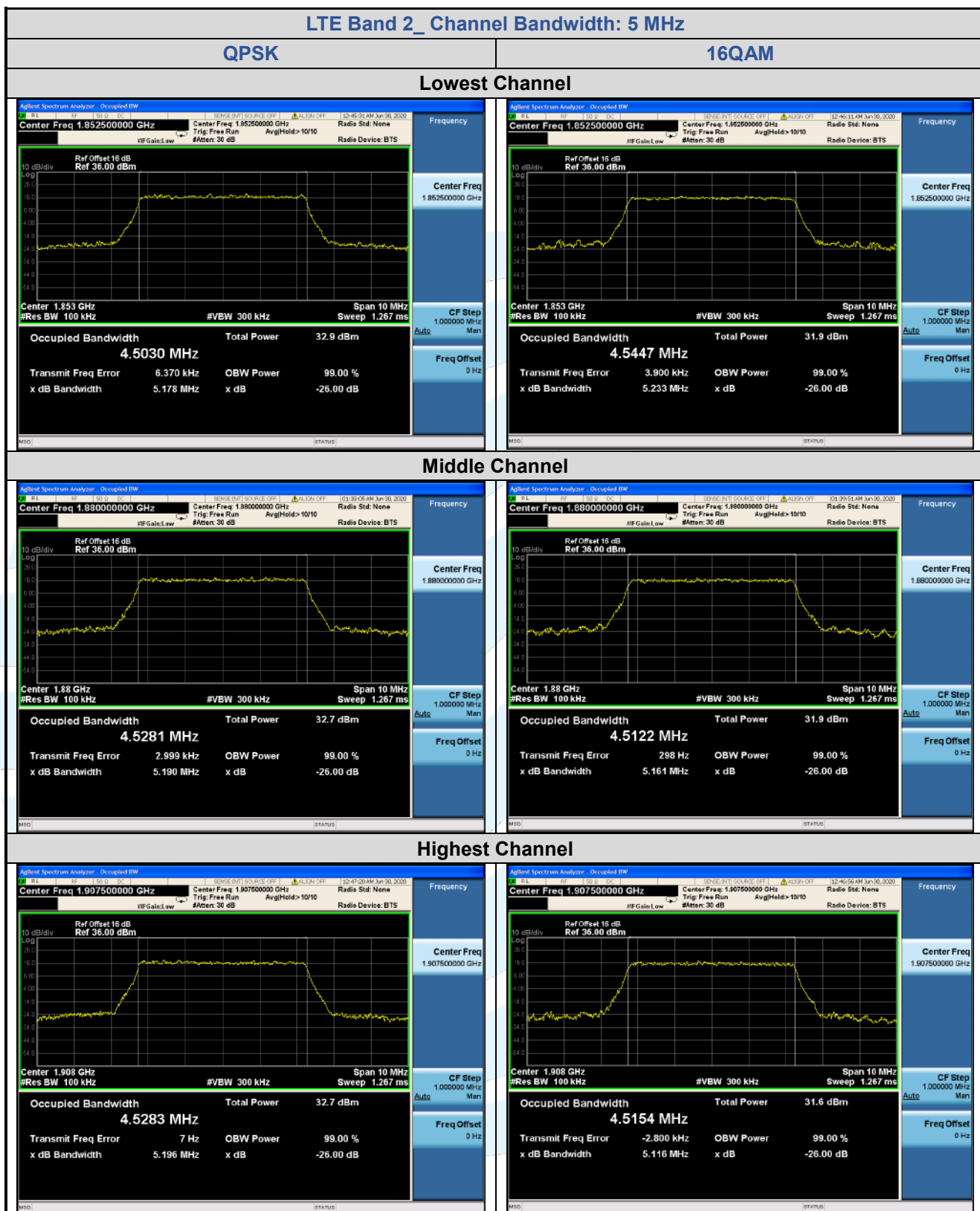
E-mail: info@uttlab.com

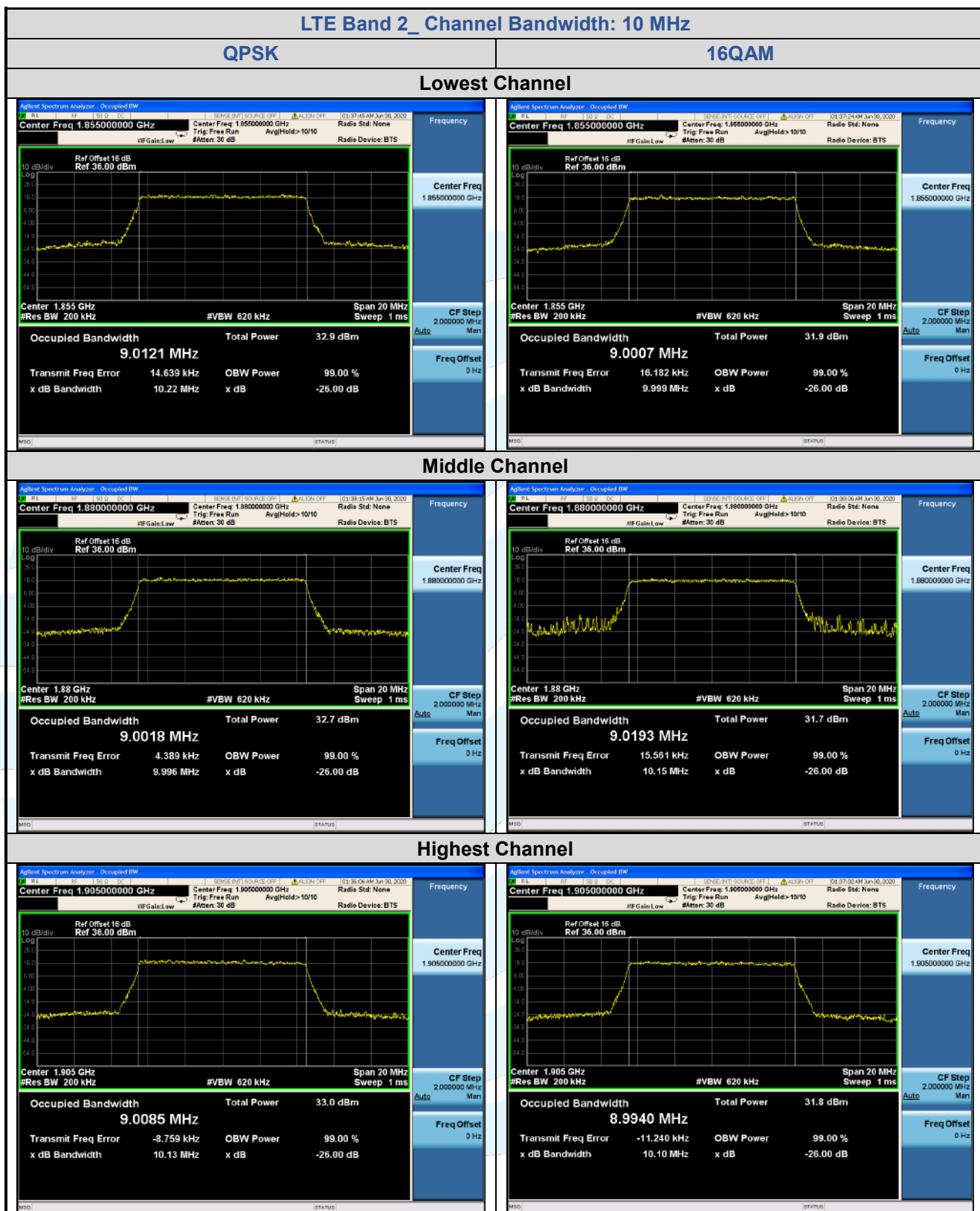
<http://www.uttlab.com>

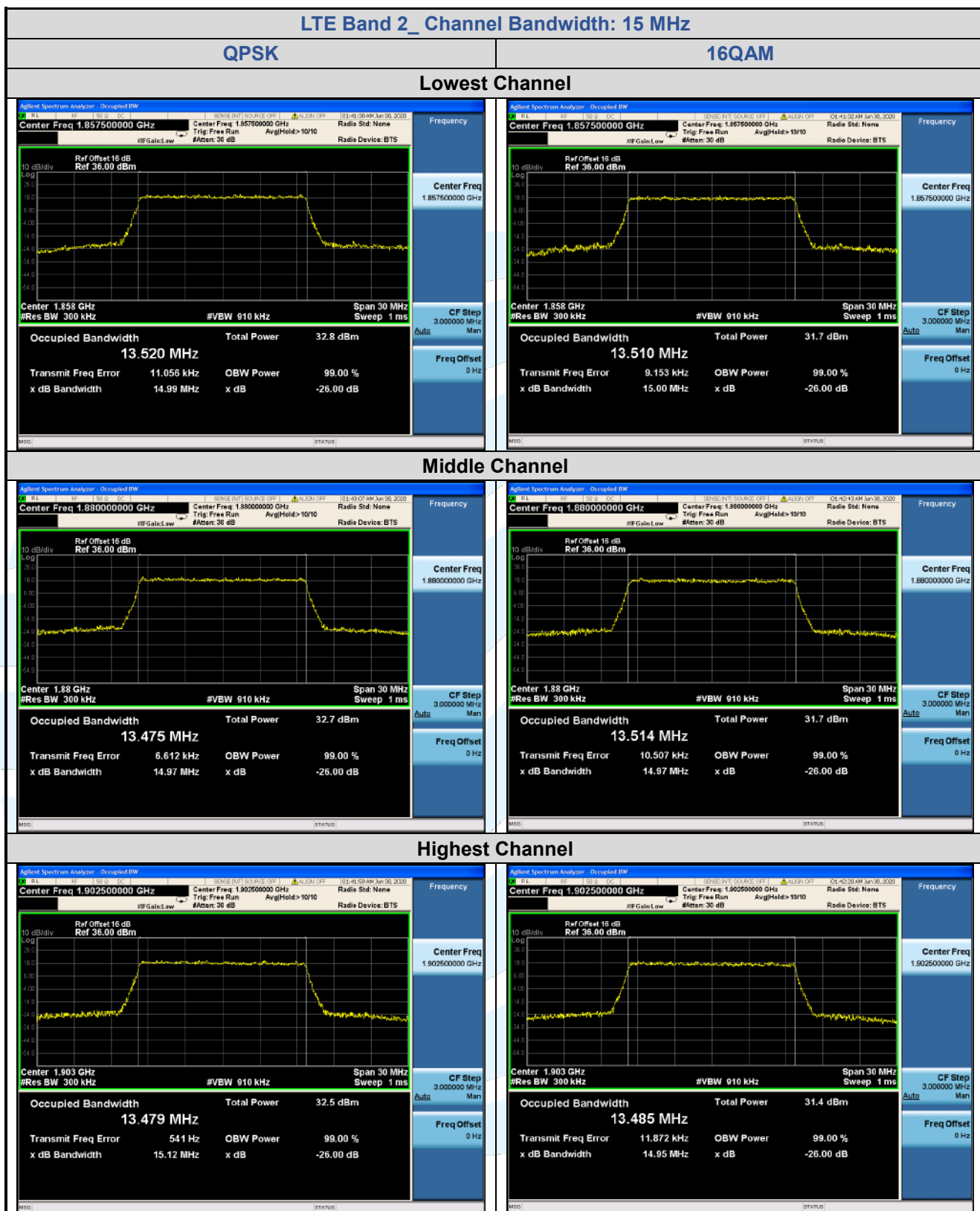
UTTR-RF-FCC4G-V1.1

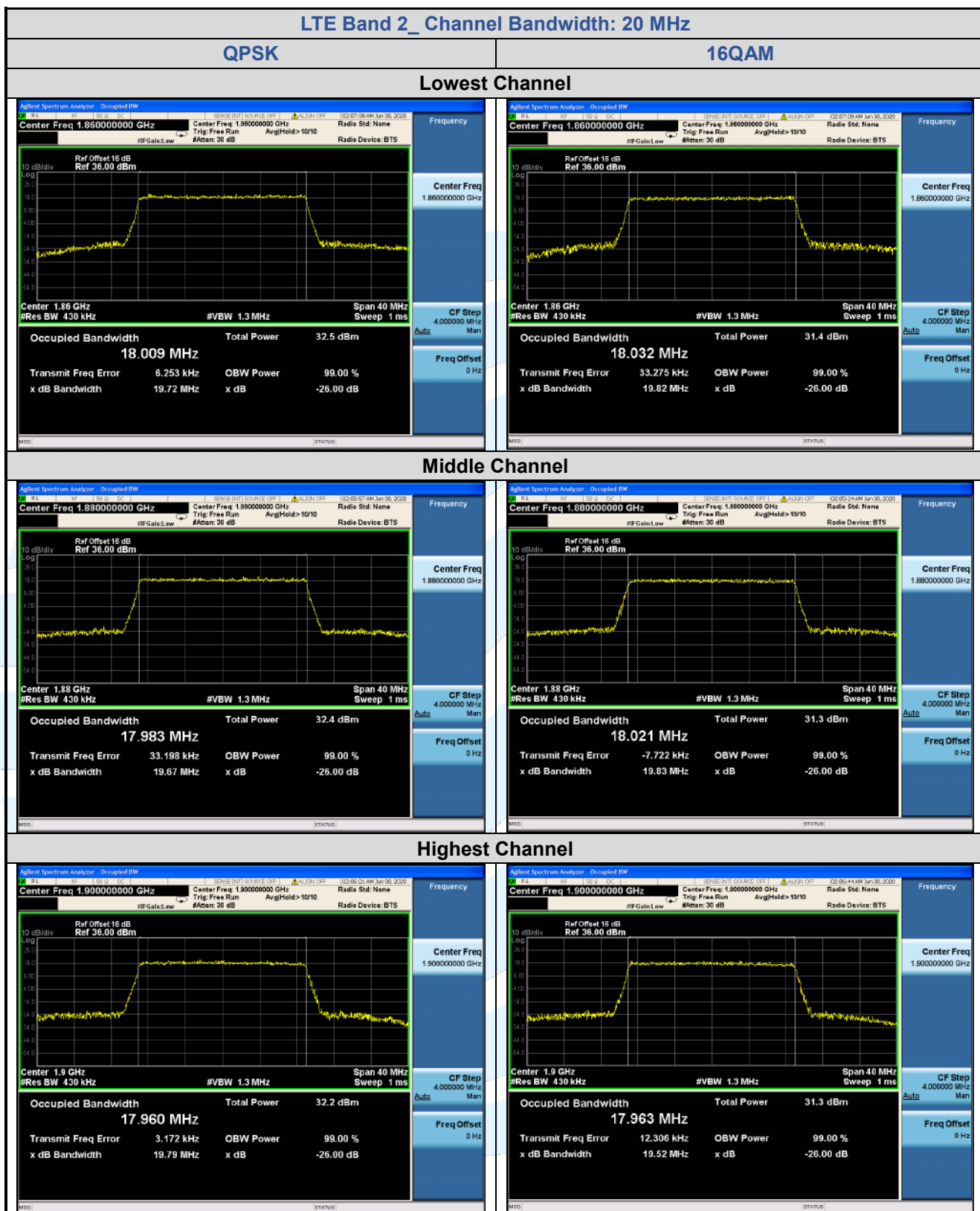












Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China Tel: +86-755-28230888

Fax: +86-755-28230886

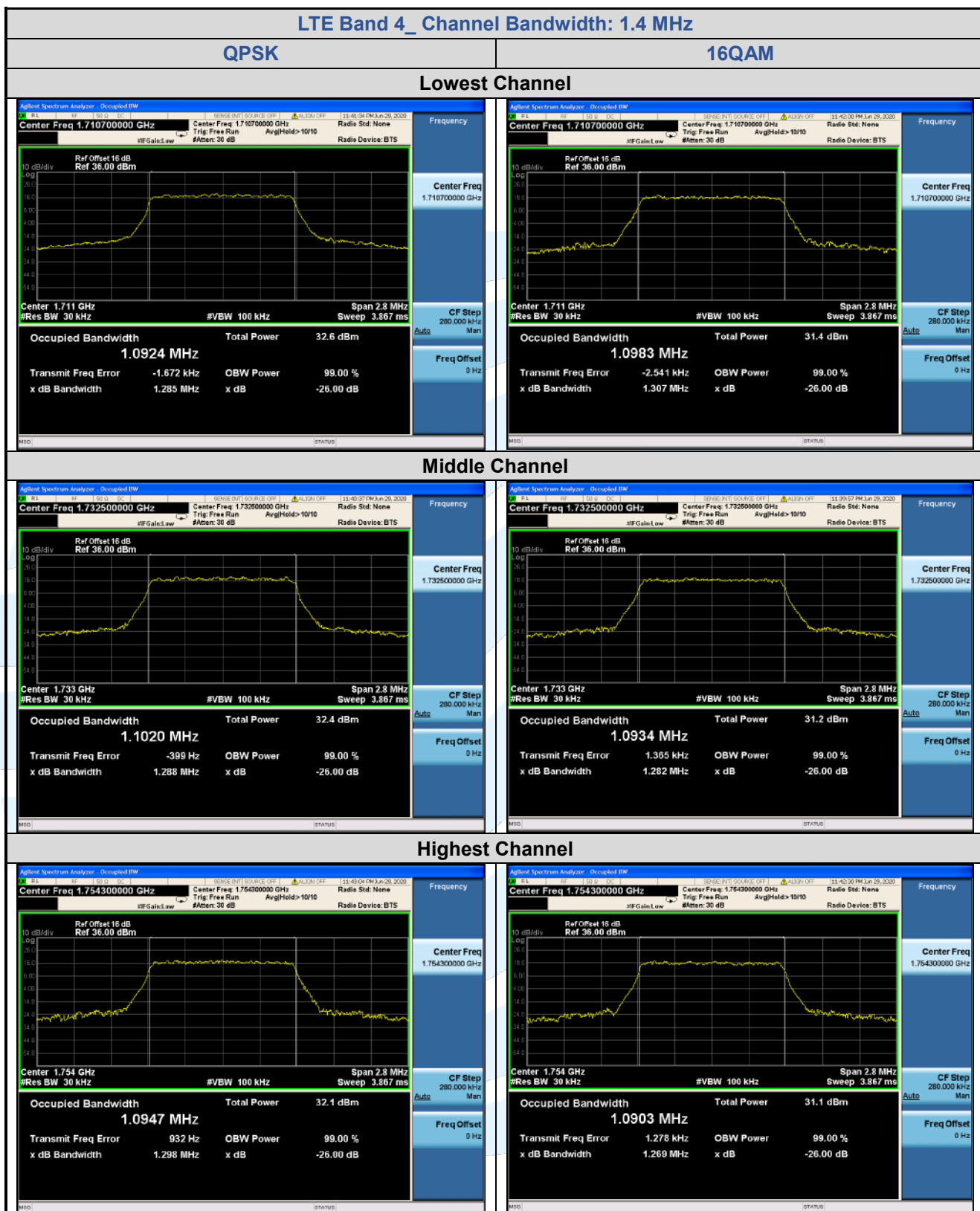
E-mail: info@uttlab.com

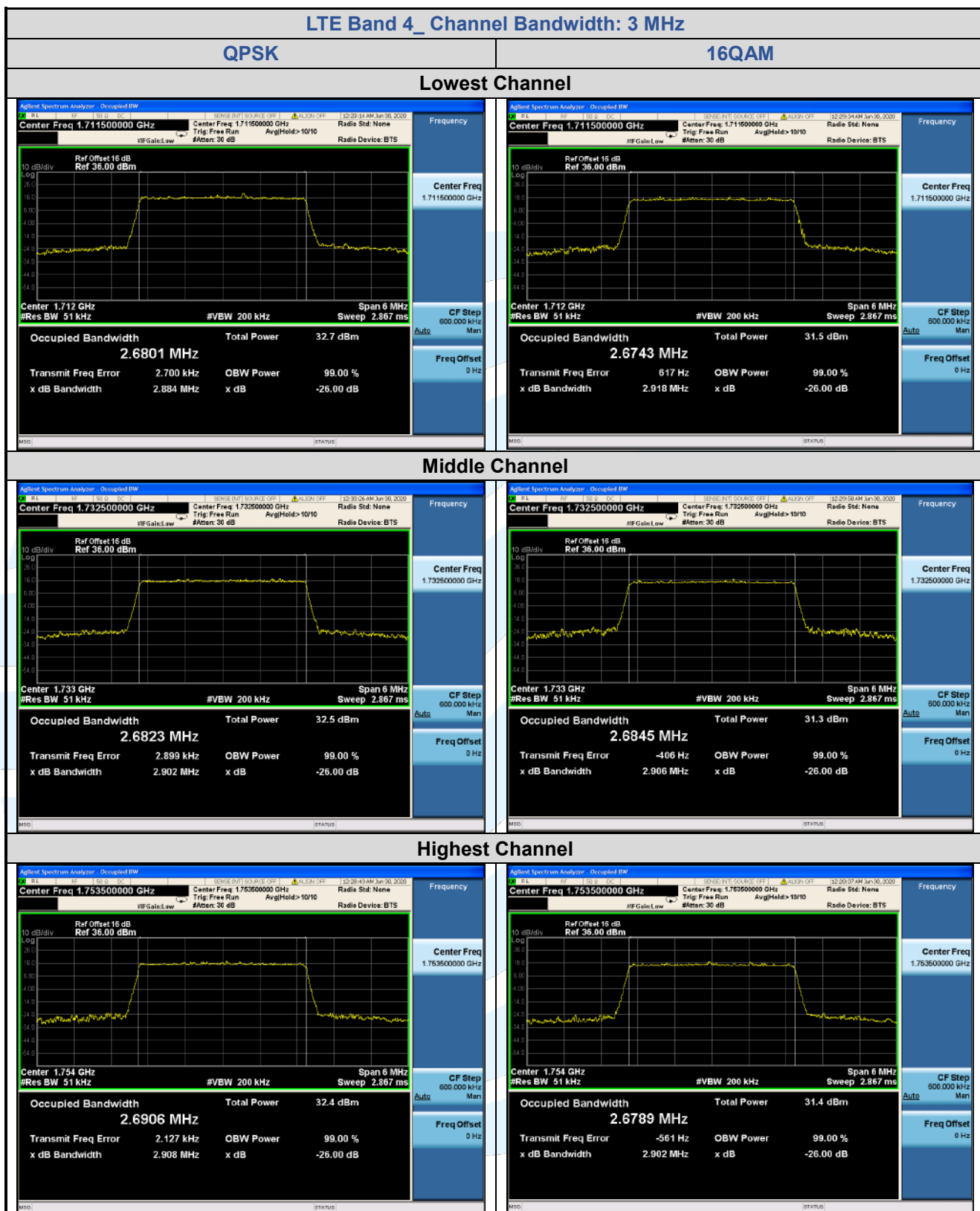
<http://www.uttlab.com>

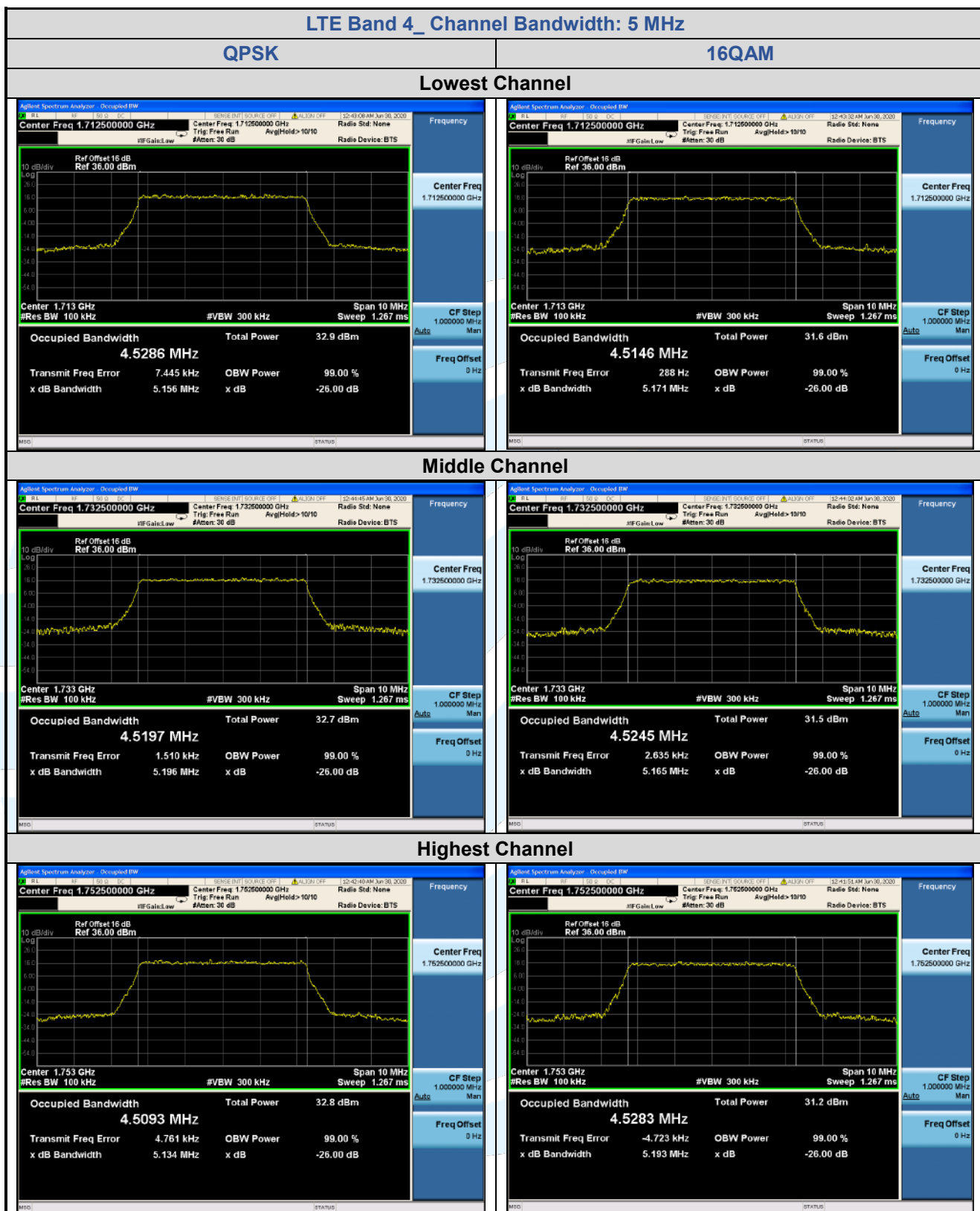
UTTR-RF-FCC4G-V1.1

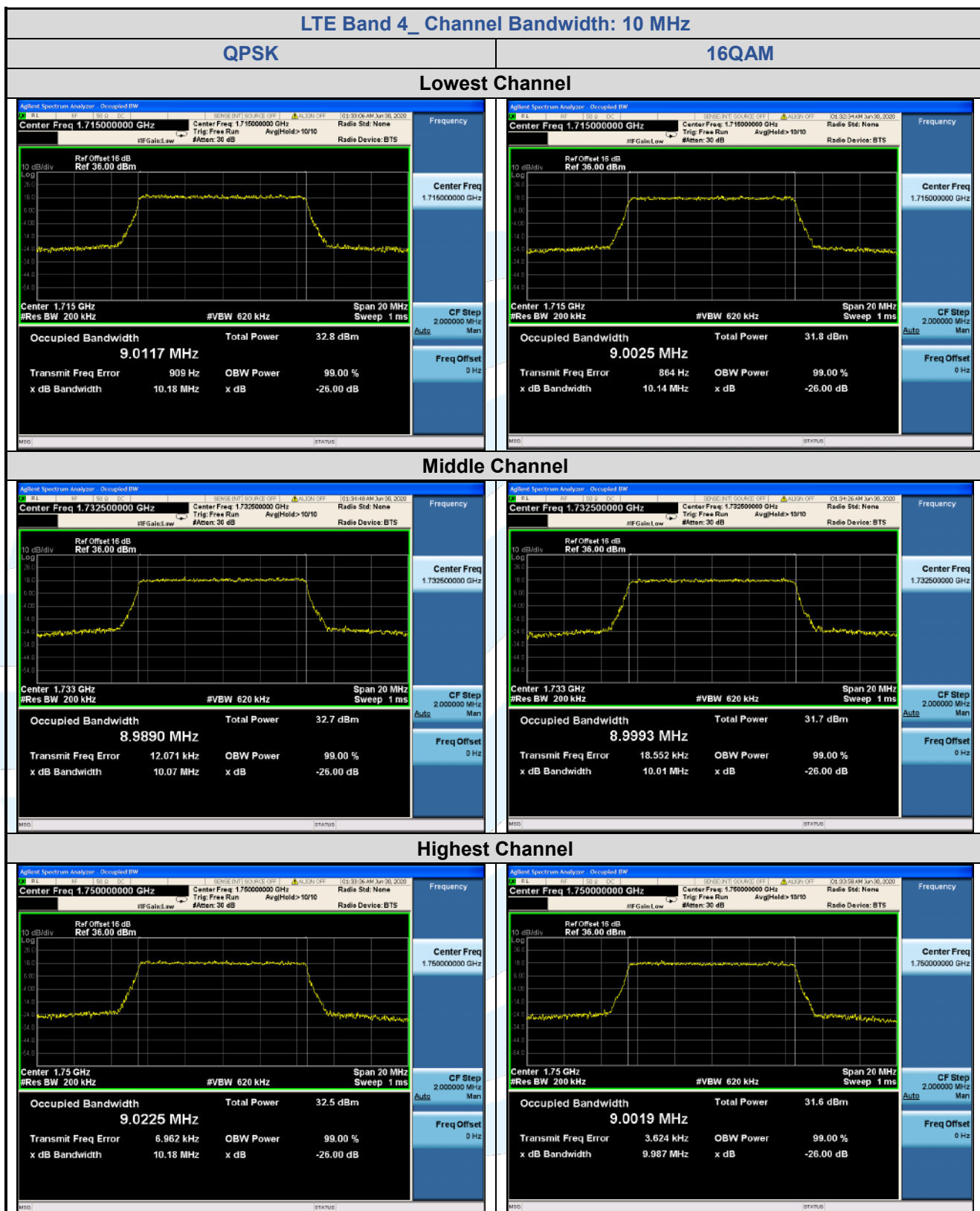
5.5.2 LTE Band 4

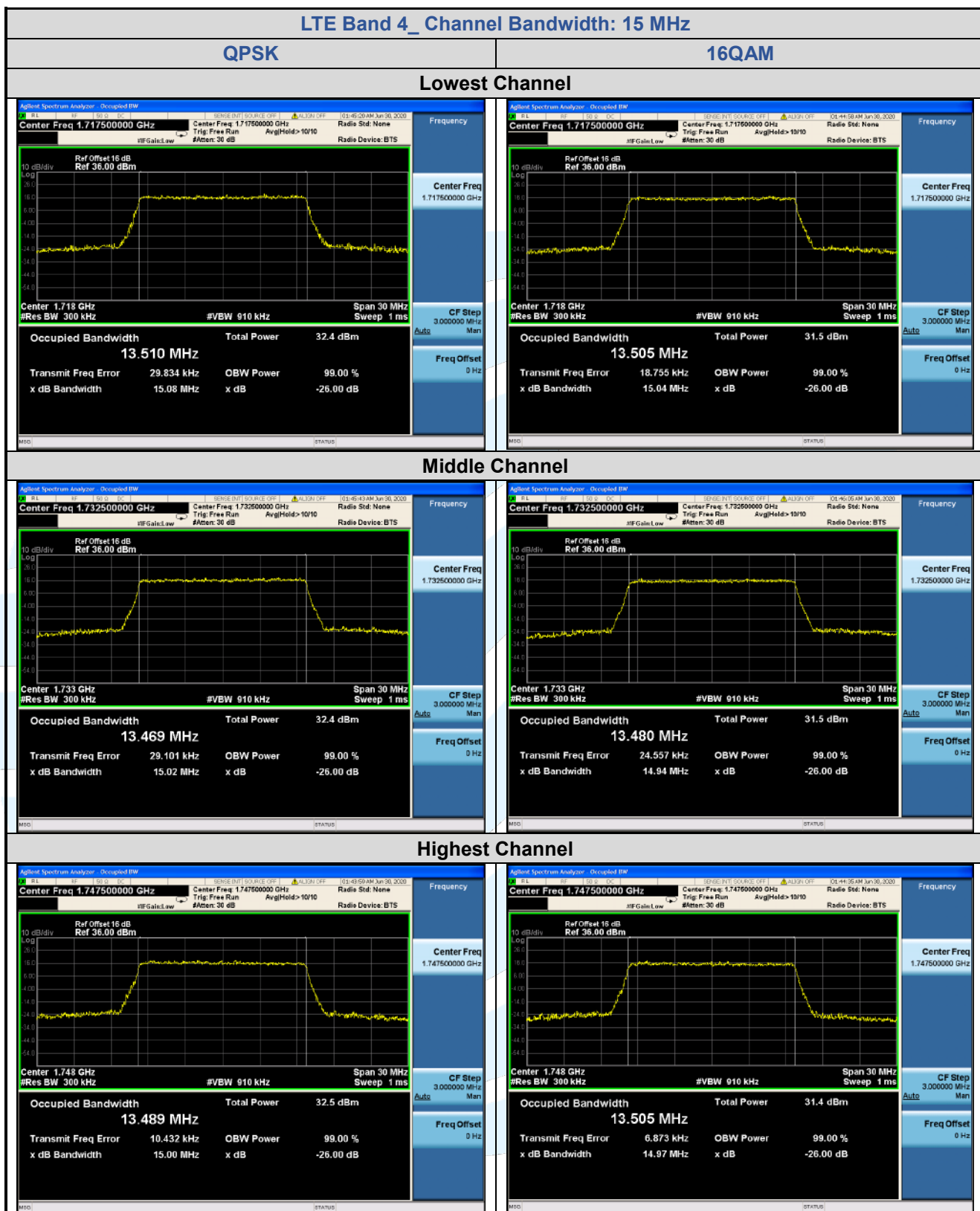
LTE Band 4								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.285	1.307	/	1.0924	1.0983	/
Middle	6	0	1.288	1.282	/	1.1020	1.0934	/
Highest	6	0	1.298	1.269	/	1.0947	1.0903	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.884	2.918	/	2.6801	2.6743	/
Middle	15	0	2.902	2.906	/	2.6823	2.6845	/
Highest	15	0	2.908	2.902	/	2.6906	2.6789	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.156	5.171	/	4.5286	4.5146	/
Middle	25	0	5.196	5.165	/	4.5197	4.5245	/
Highest	25	0	5.134	5.193	/	4.5093	4.5283	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.18	10.14	/	9.0117	9.0225	/
Middle	50	0	10.07	10.01	/	8.9890	8.9993	/
Highest	50	0	10.18	9.987	/	9.0225	9.0019	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.08	15.04	/	13.510	13.505	/
Middle	75	0	15.02	14.94	/	13.469	13.480	/
Highest	75	0	15.00	14.97	/	13.489	13.505	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.72	19.72	/	17.964	18.019	/
Middle	100	0	19.82	19.80	/	18.017	18.004	/
Highest	100	0	19.41	19.65	/	17.972	18.025	/

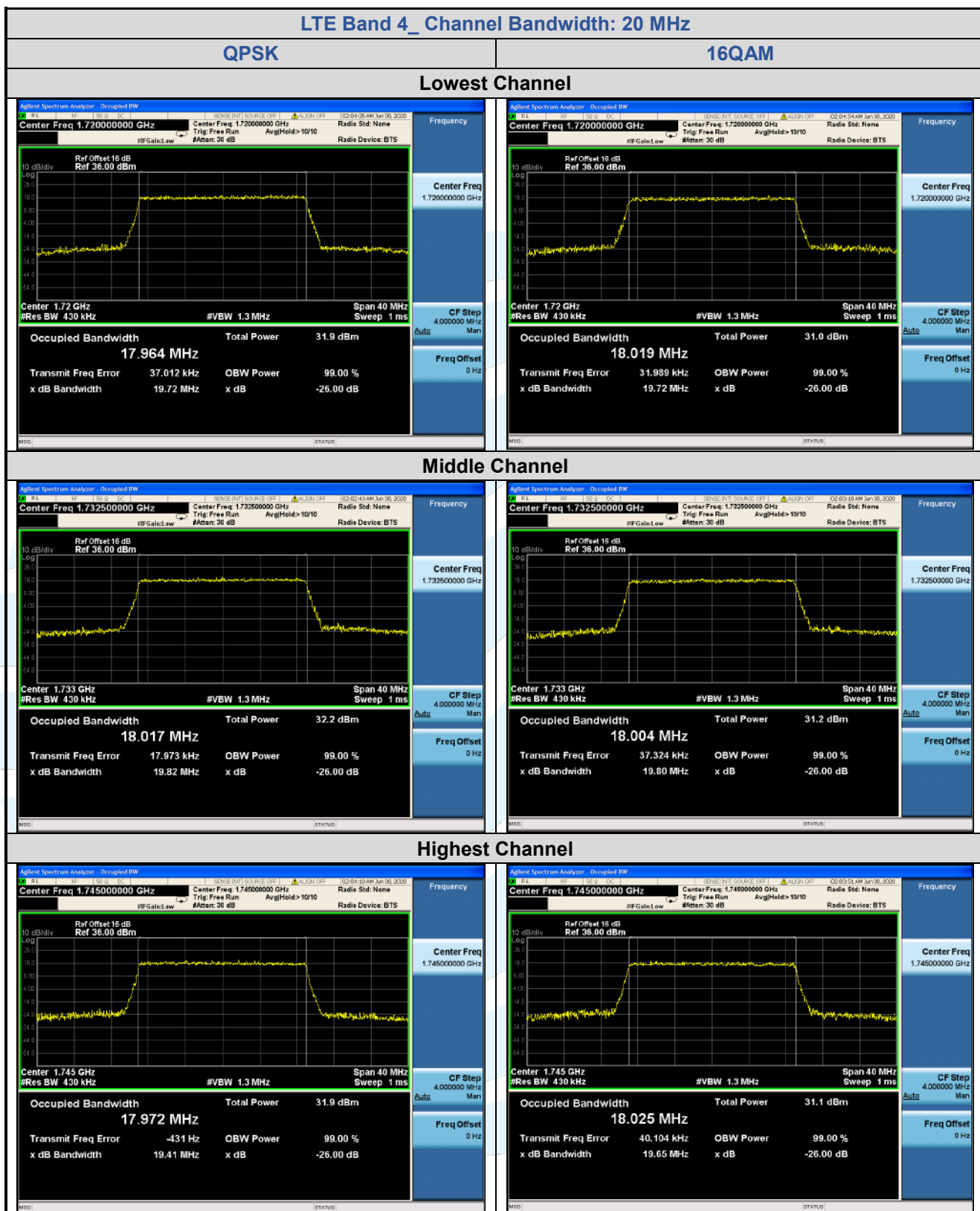












5.5.3 LTE Band 5

LTE Band 5								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.292	1.275	/	1.0960	1.0932	/
Middle	6	0	1.328	1.302	/	1.0964	1.0976	/
Highest	6	0	1.312	1.316	/	1.1049	1.0959	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.909	2.906	/	2.6907	2.6807	/
Middle	15	0	2.885	2.908	/	2.6844	2.6826	/
Highest	15	0	2.906	2.889	/	2.6930	2.6855	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.185	5.143	/	4.5216	4.5370	/
Middle	25	0	5.172	5.226	/	4.5139	4.5394	/
Highest	25	0	5.372	5.359	/	4.5424	4.5278	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.31	10.07	/	9.0366	9.0102	/
Middle	50	0	10.17	10.08	/	9.0089	8.9999	/
Highest	50	0	10.19	10.18	/	9.0226	9.0363	/

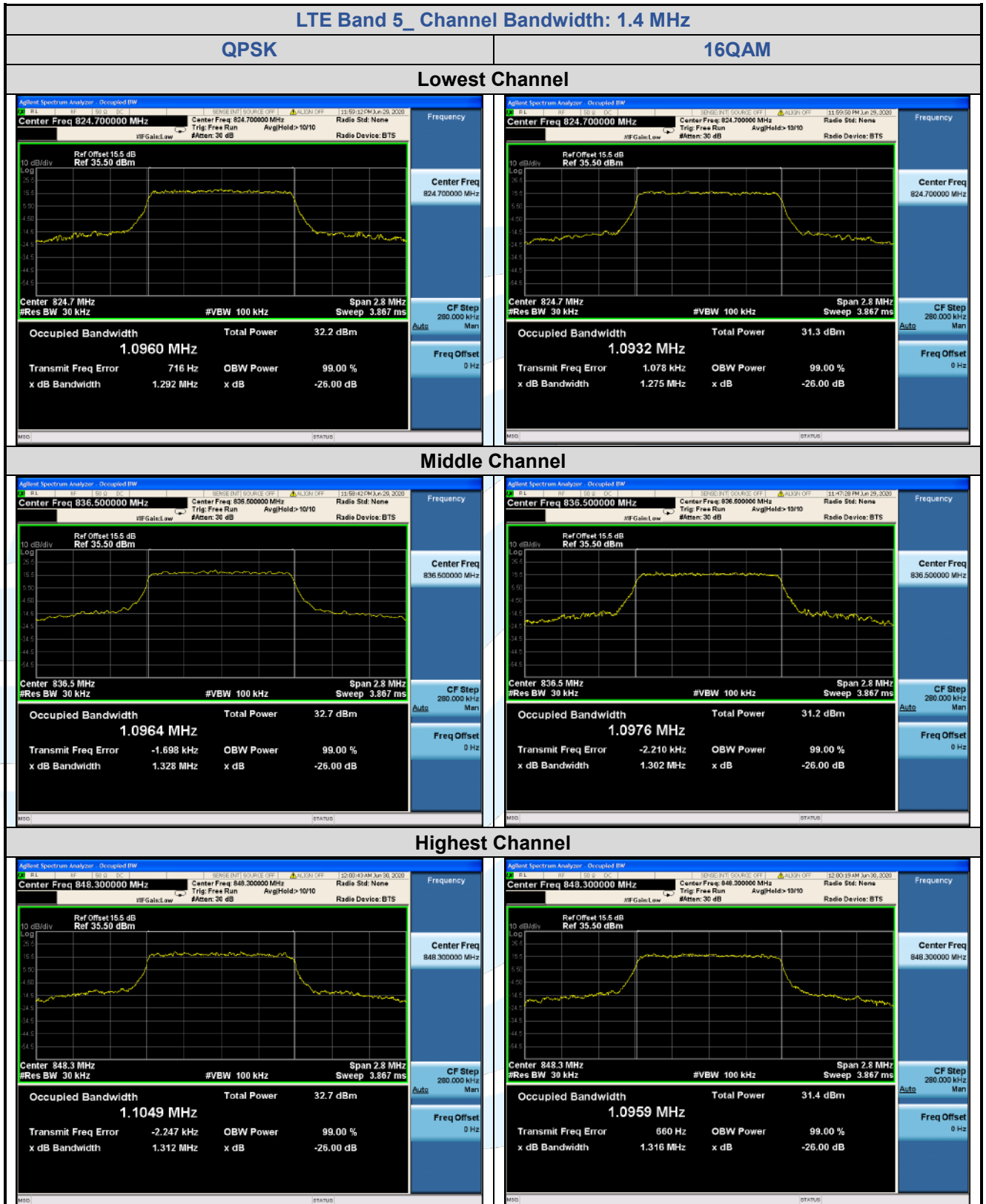
Shenzhen UnionTrust Quality and Technology Co., Ltd.

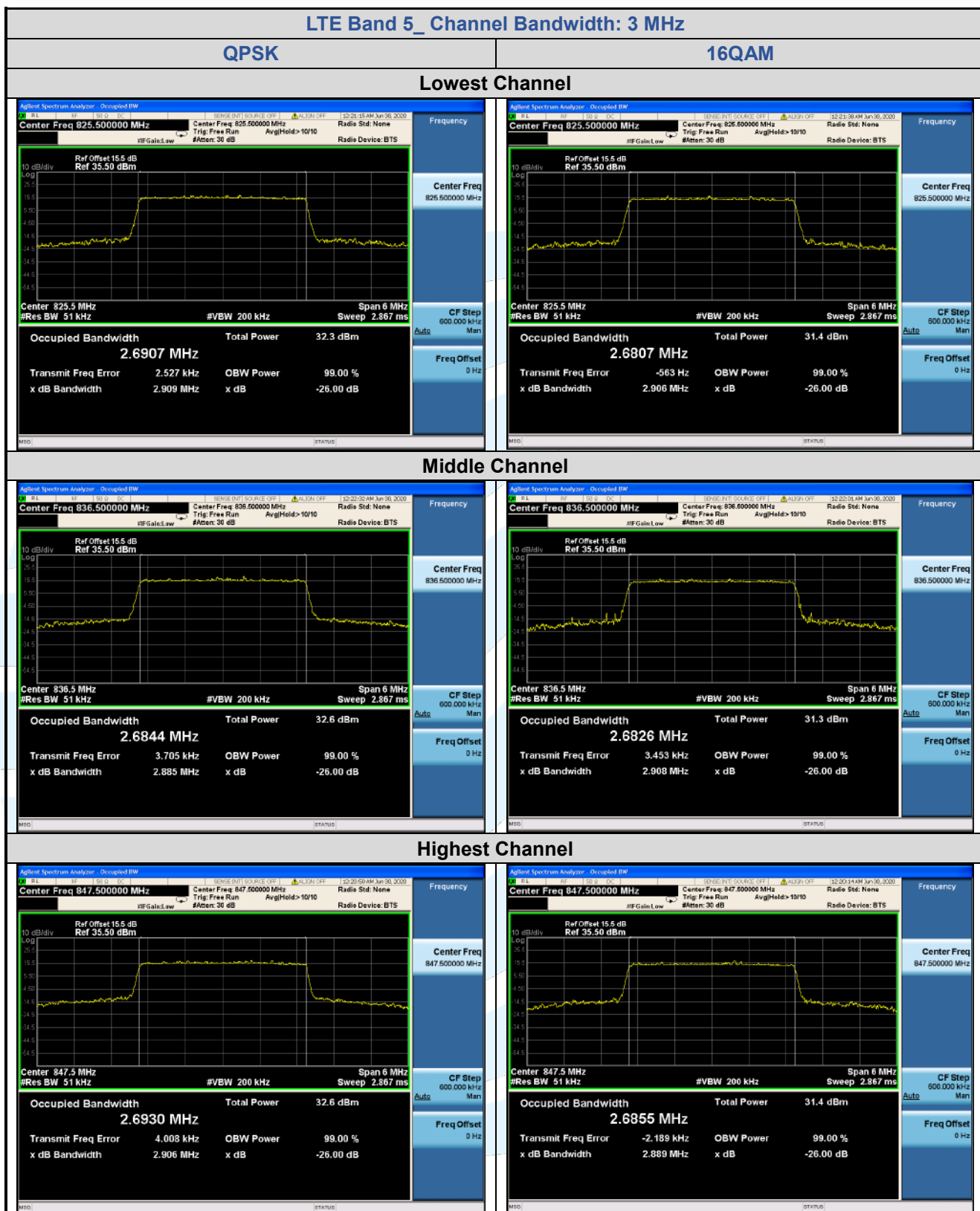
Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China Tel: +86-755-28230888

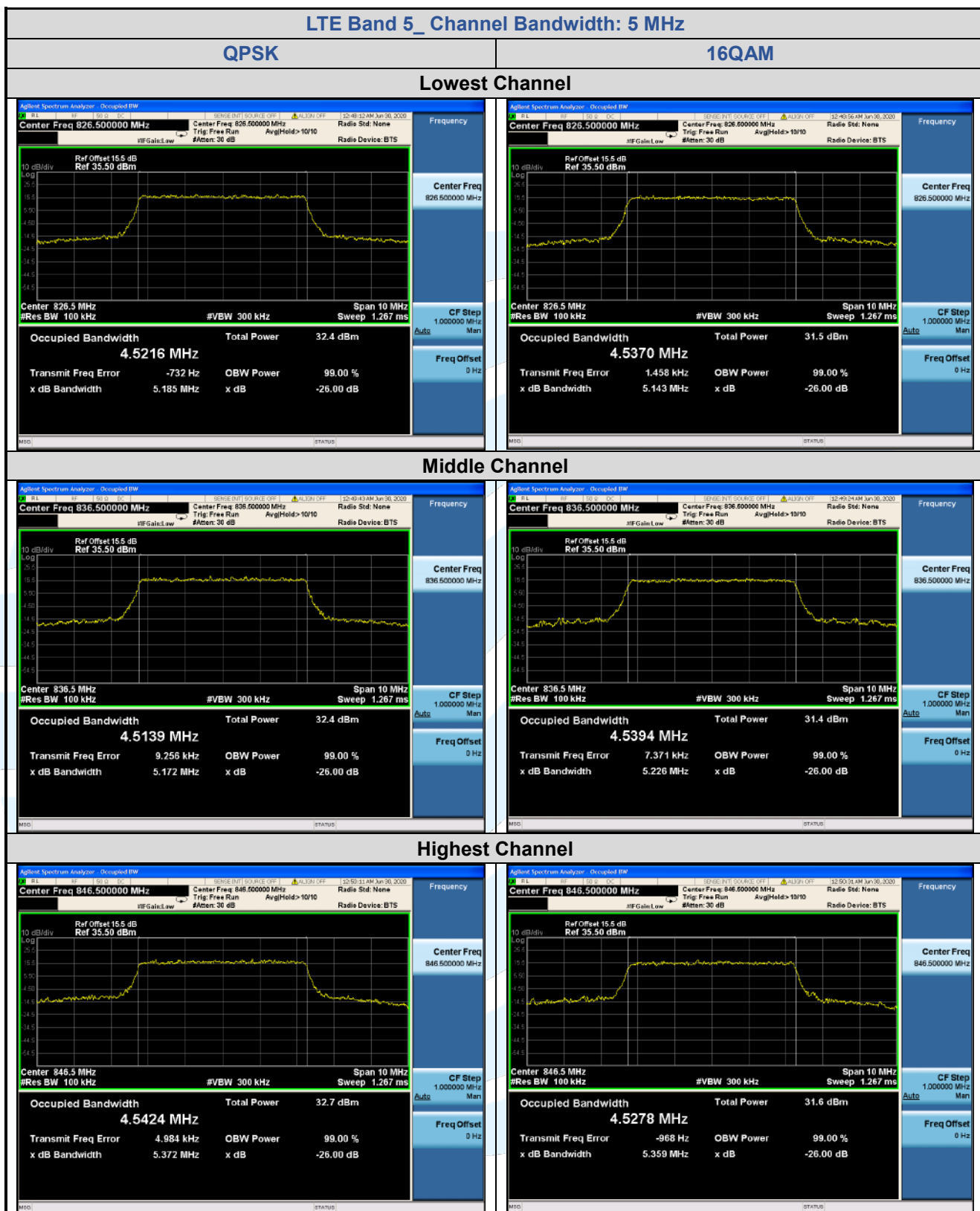
Fax: +86-755-28230886

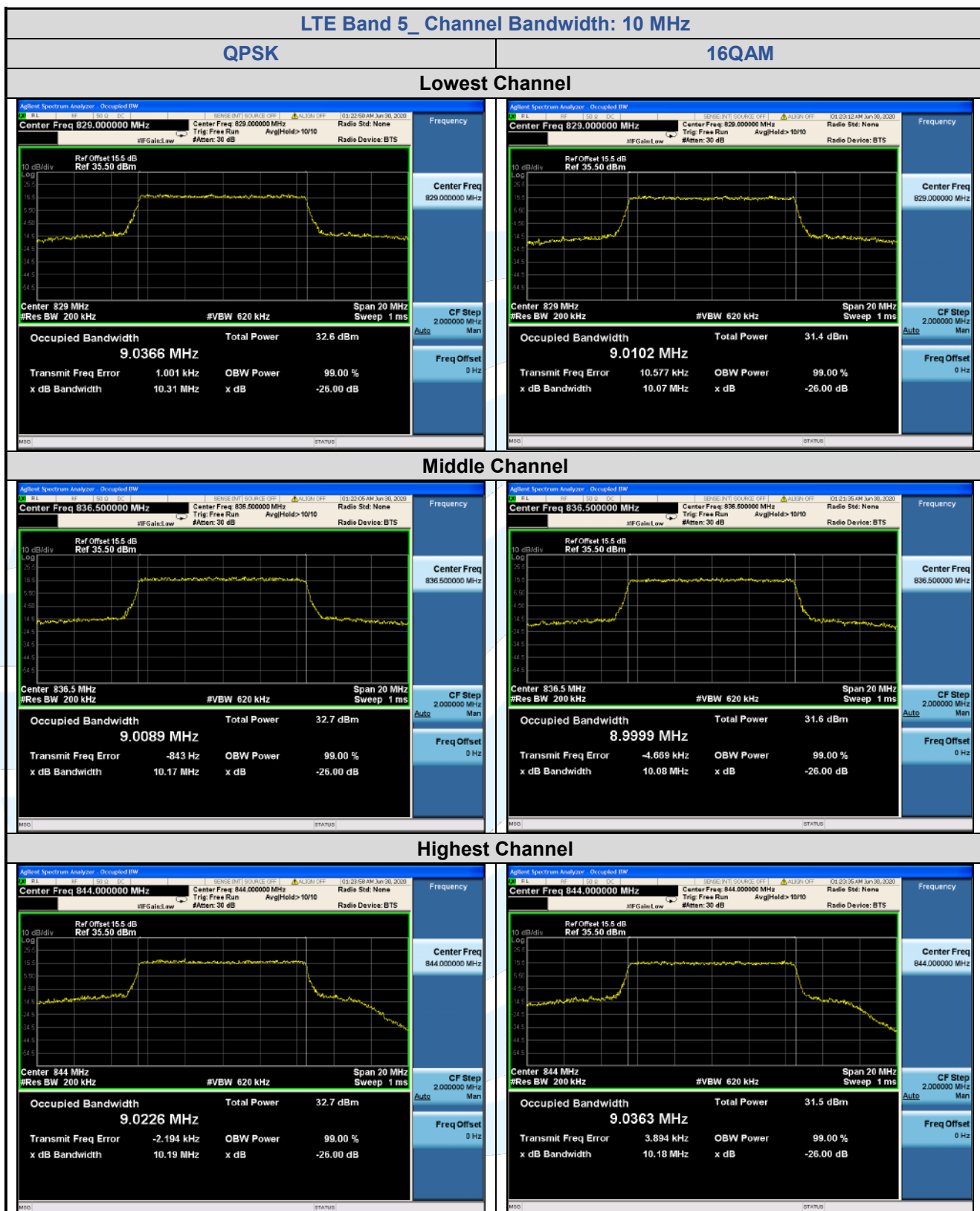
E-mail: info@uttlab.com
<http://www.uttlab.com>

UTTR-RF-FCC4G-V1.1



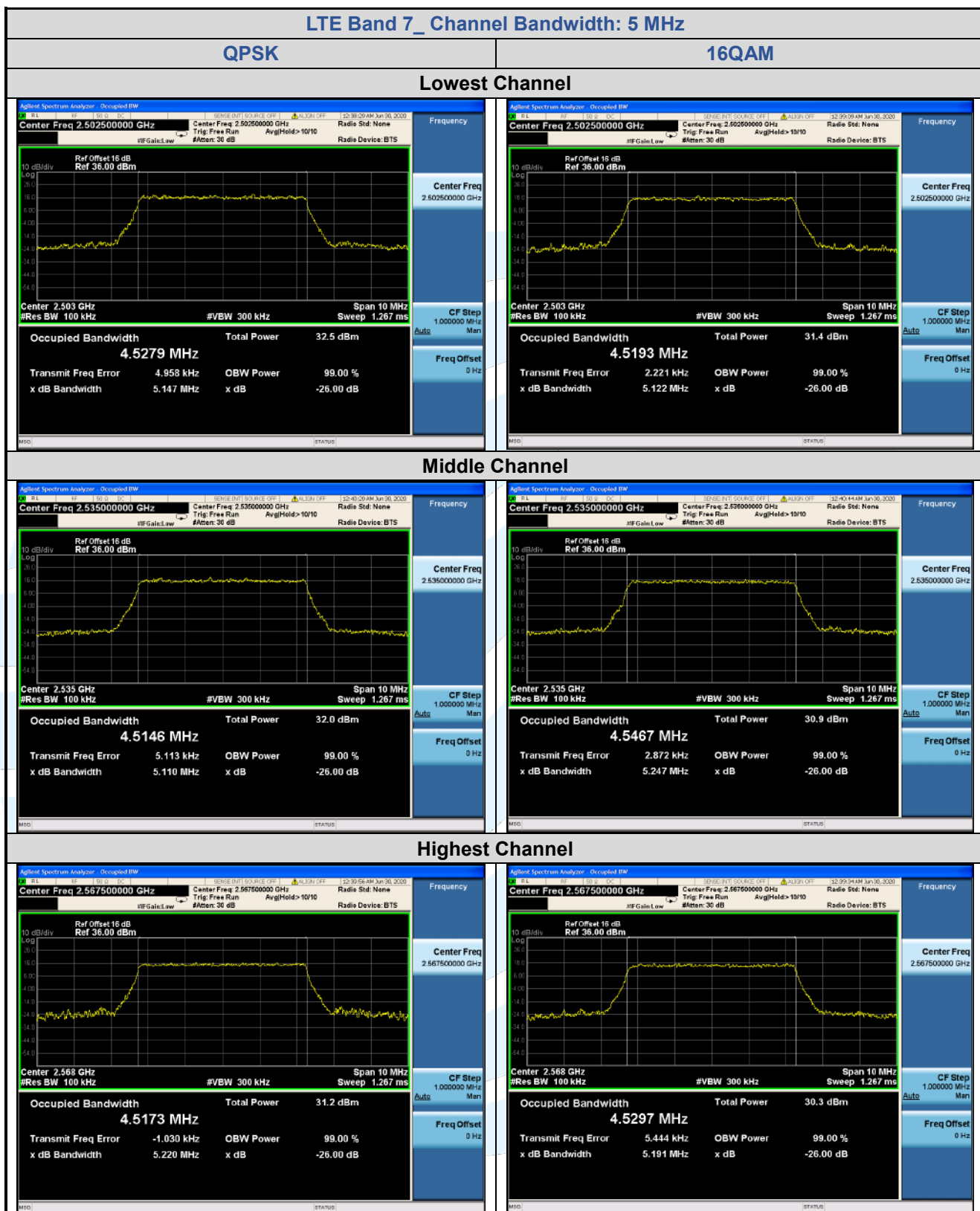


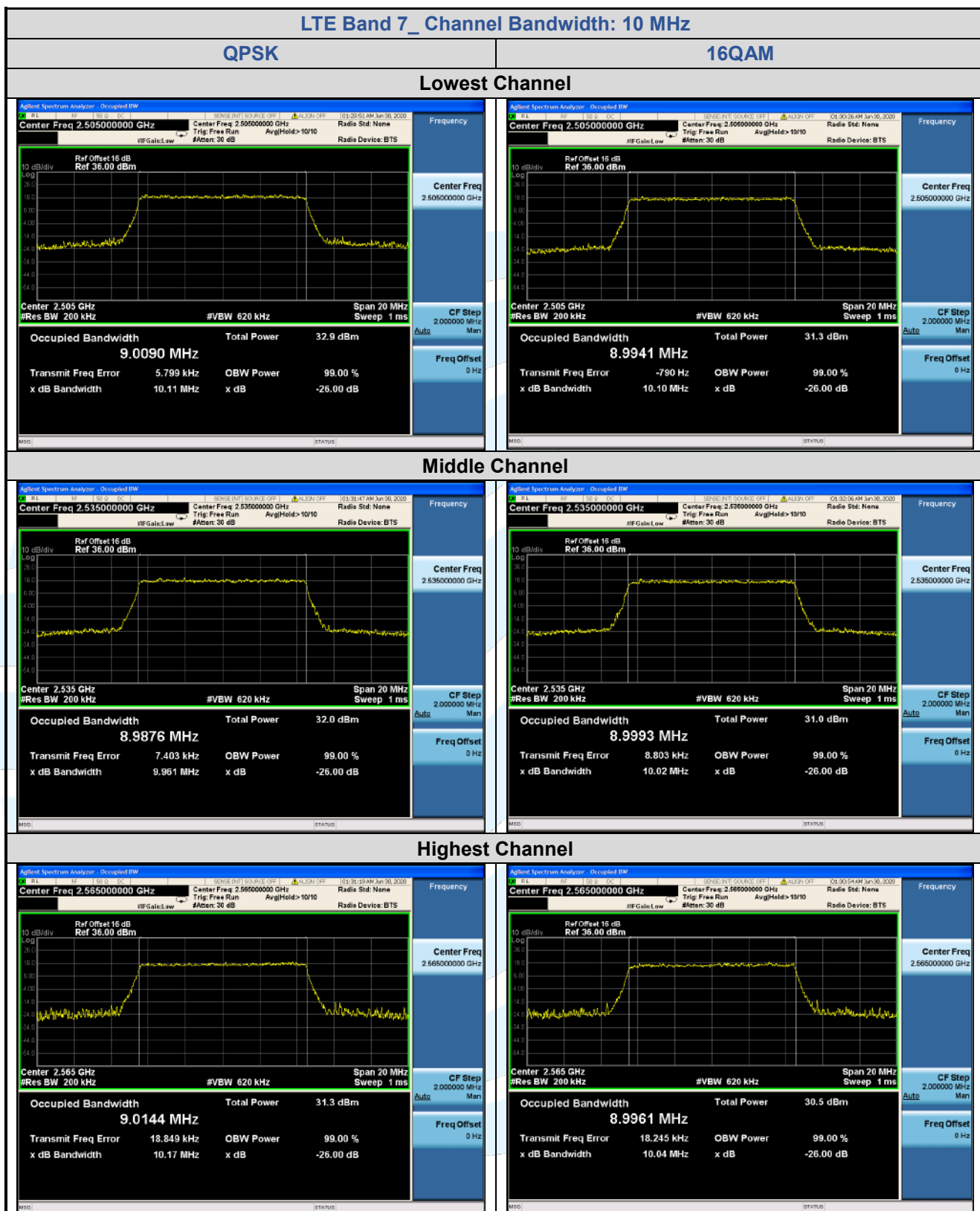


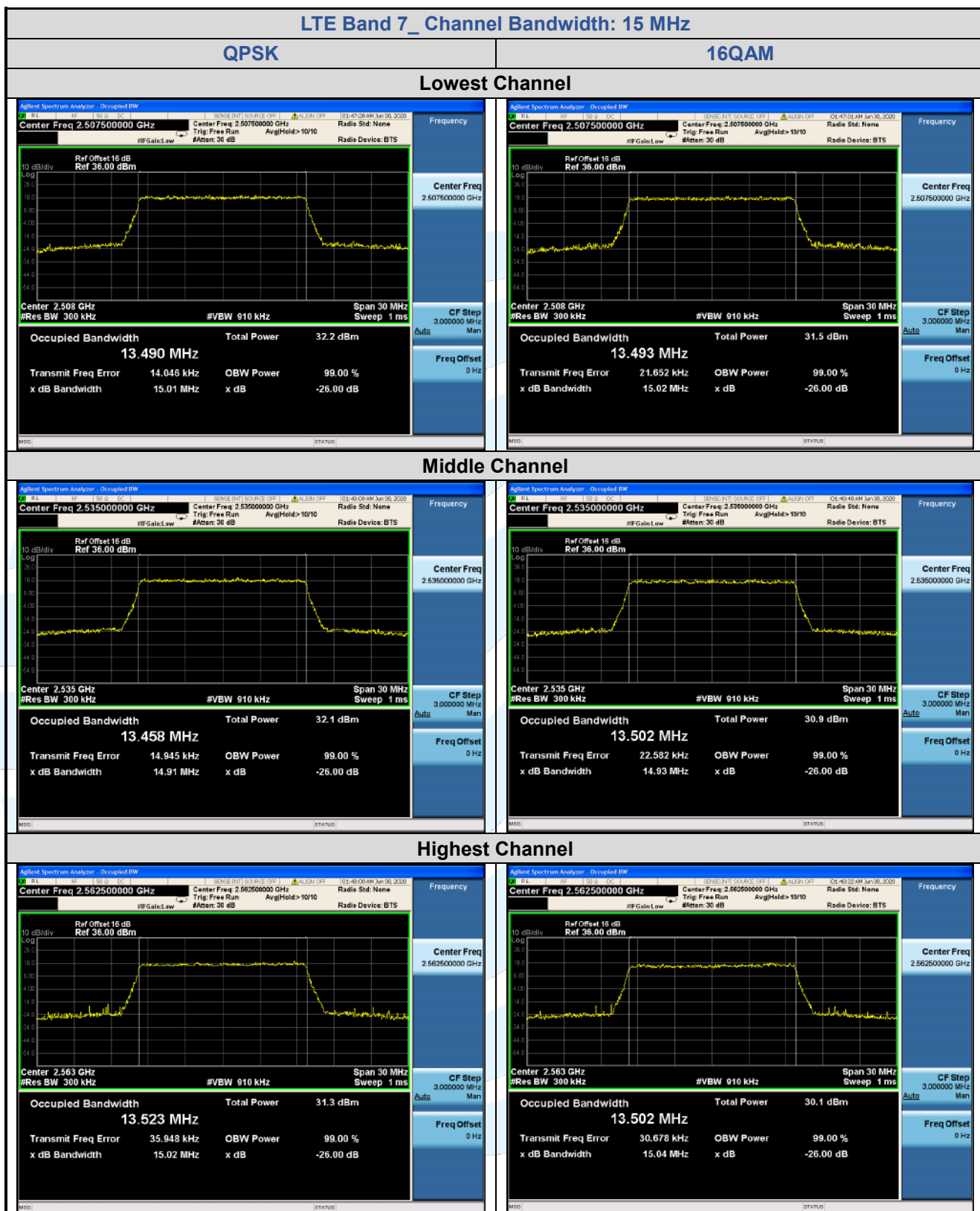


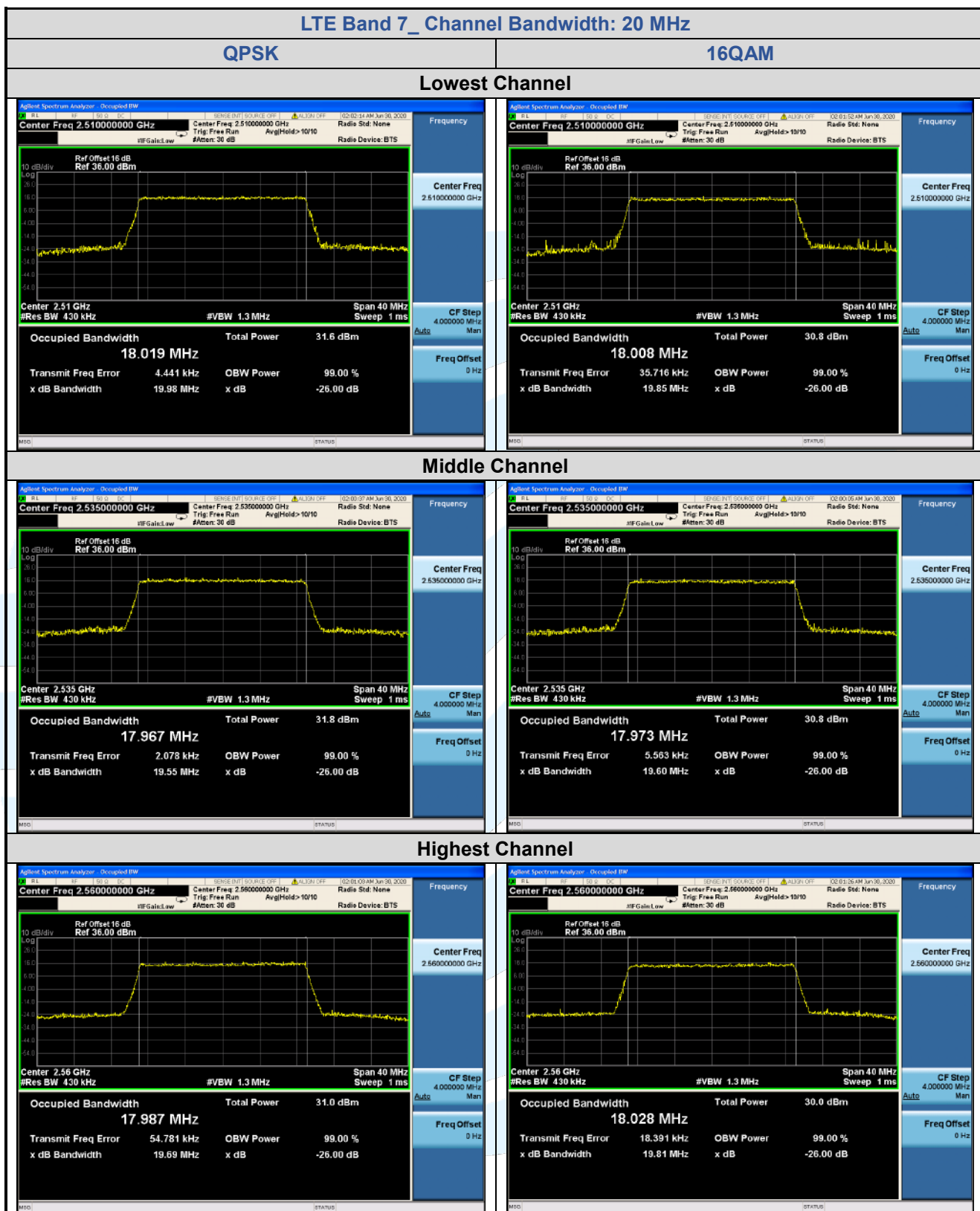
5.5.4 LTE Band 7

LTE Band 7								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.147	5.122	/	4.5279	4.5193	/
Middle	25	0	5.110	5.247	/	4.5146	4.5467	/
Highest	25	0	5.220	5.191	/	4.5173	4.5297	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.11	10.10	/	9.0090	8.9941	/
Middle	50	0	9.961	10.02	/	8.9876	8.9993	/
Highest	50	0	10.17	10.04	/	9.0144	8.9961	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.01	15.02	/	13.490	13.493	/
Middle	75	0	14.91	14.93	/	13.458	13.502	/
Highest	75	0	15.02	15.04	/	13.523	13.502	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.98	19.85	/	18.019	18.008	/
Middle	100	0	19.55	19.60	/	17.967	17.973	/
Highest	100	0	19.69	19.81	/	17.987	18.028	/



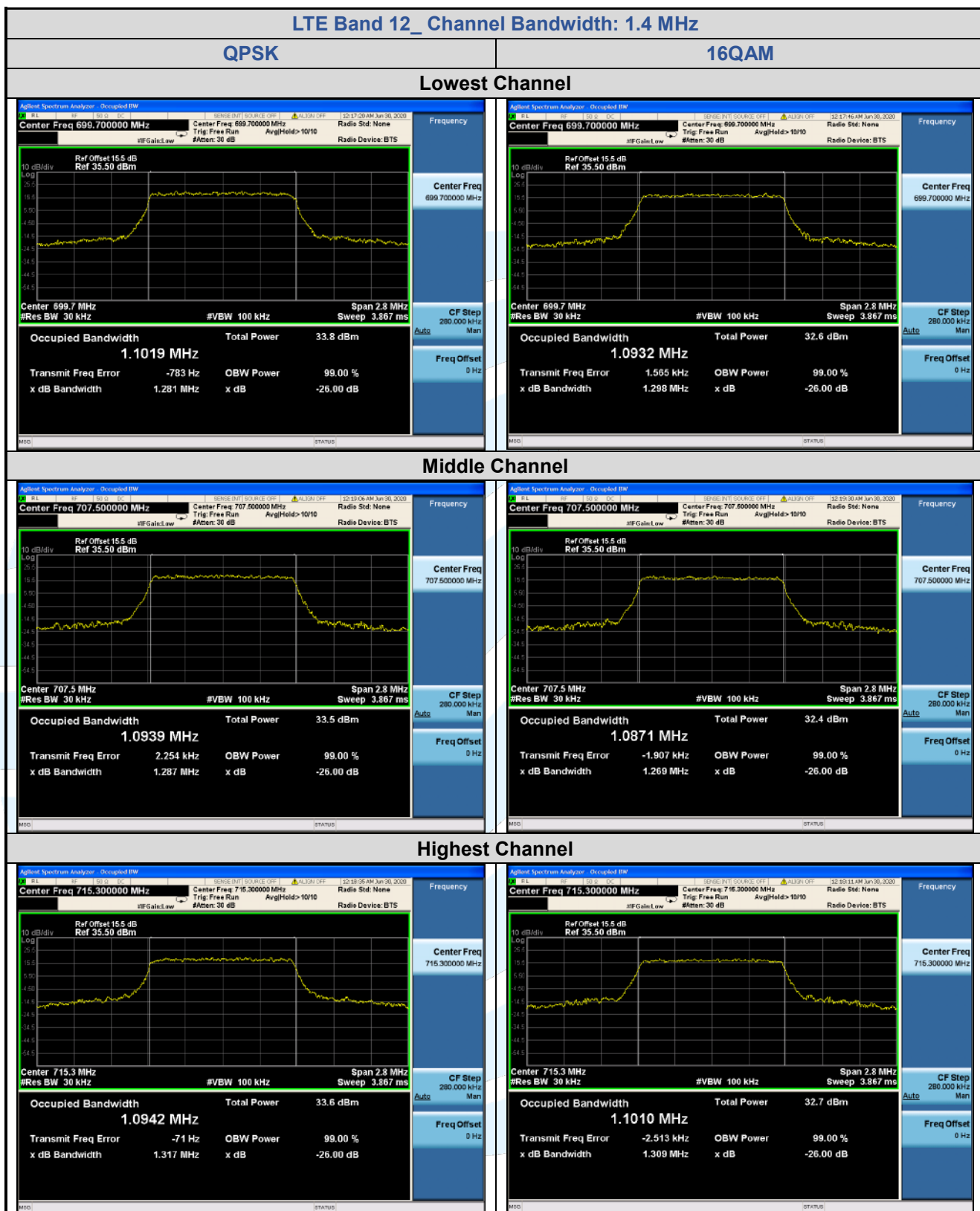


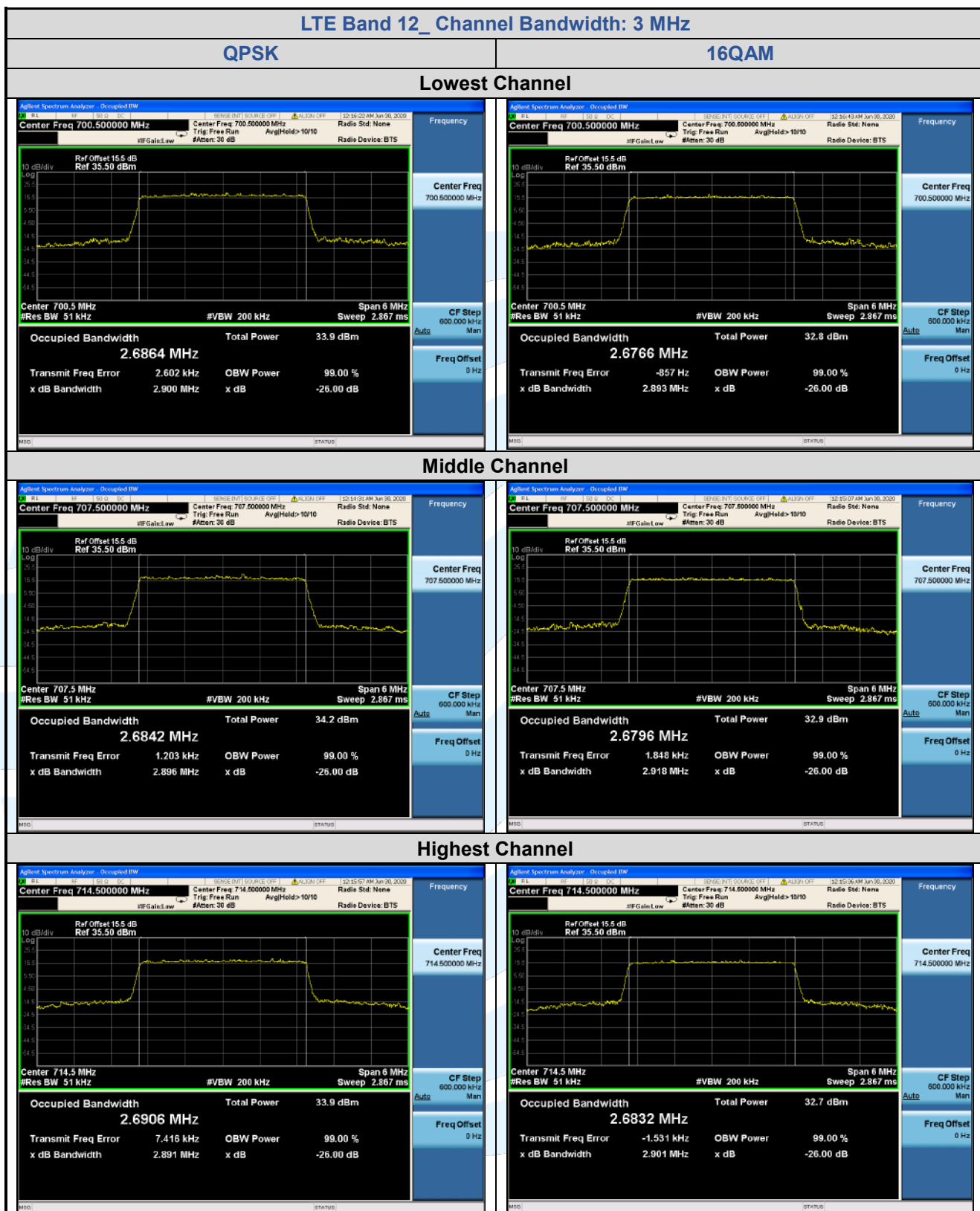


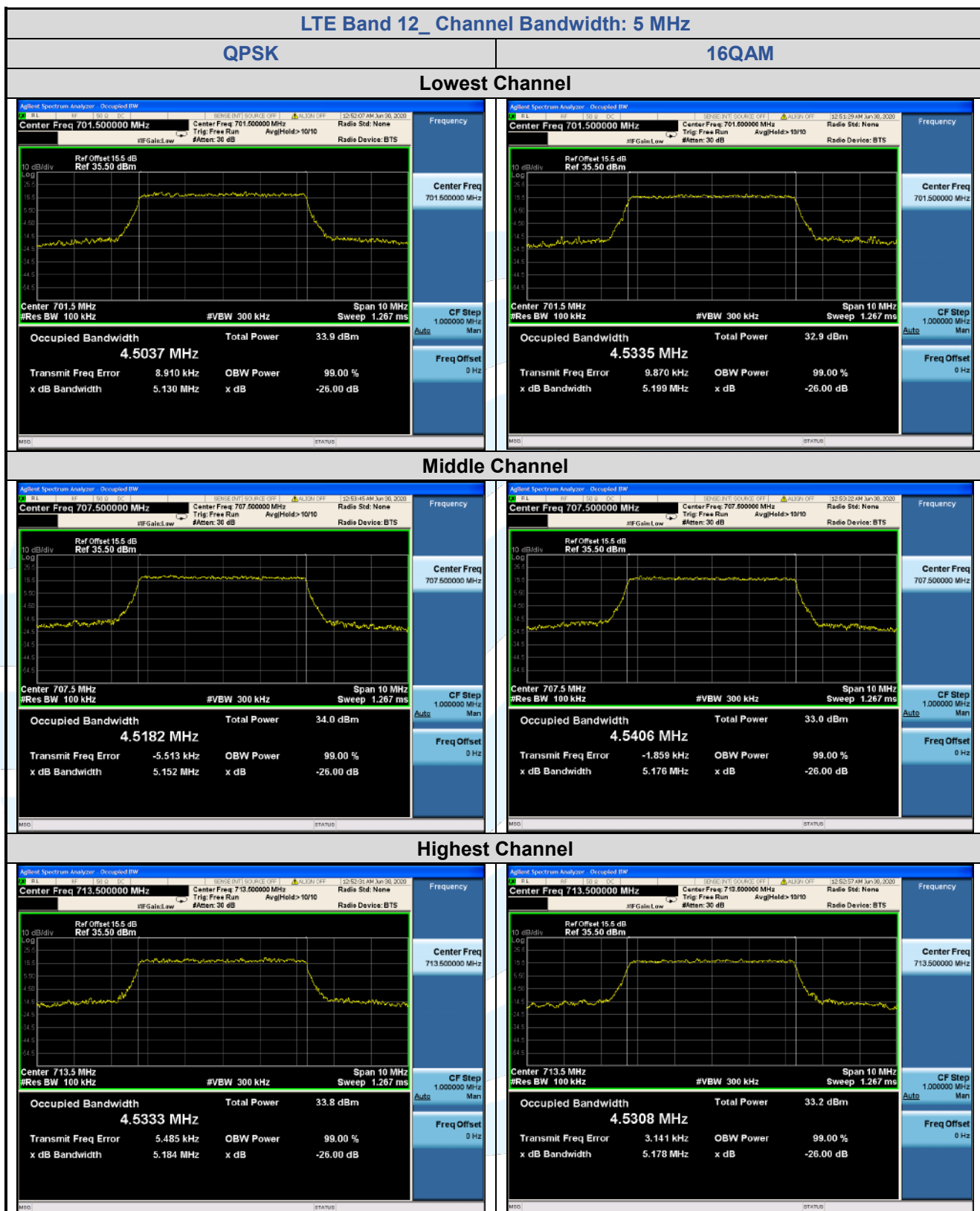


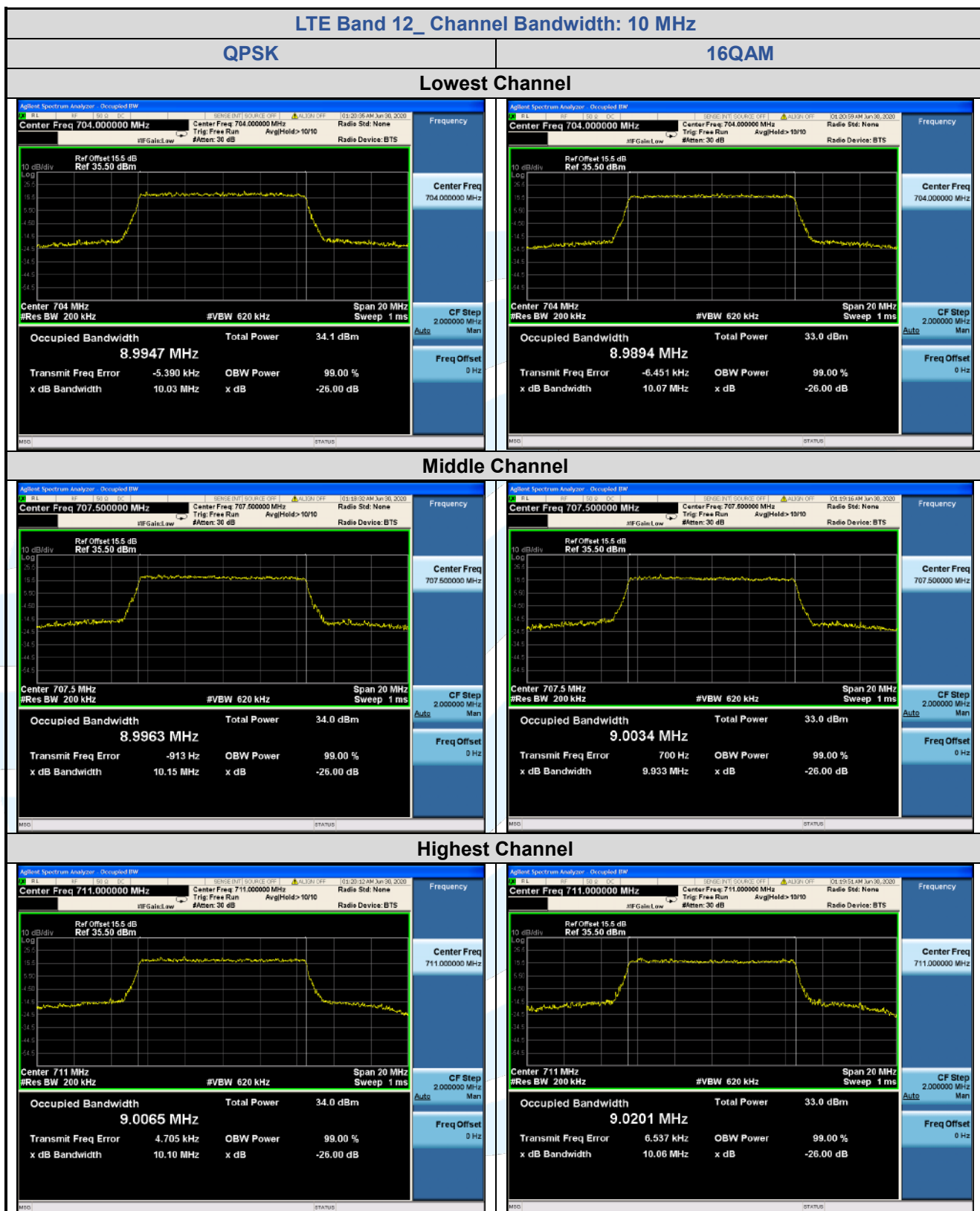
5.5.5 LTE Band 12

LTE Band 12								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.281	1.298	/	1.1019	1.0932	/
Middle	6	0	1.287	1.269	/	1.0939	1.0871	/
Highest	6	0	1.317	1.309	/	1.0942	1.1010	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.900	2.893	/	2.6864	2.6766	/
Middle	15	0	2.896	2.918	/	2.6842	2.6796	/
Highest	15	0	2.891	2.901	/	2.6906	2.6832	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.130	5.199	/	4.5037	4.5335	/
Middle	25	0	5.152	5.176	/	4.5182	4.5406	/
Highest	25	0	5.184	5.178	/	4.5333	4.5308	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.03	10.07	/	8.9947	8.9894	/
Middle	50	0	10.15	9.933	/	8.9963	9.0034	/
Highest	50	0	10.10	10.06	/	9.0065	9.0201	/



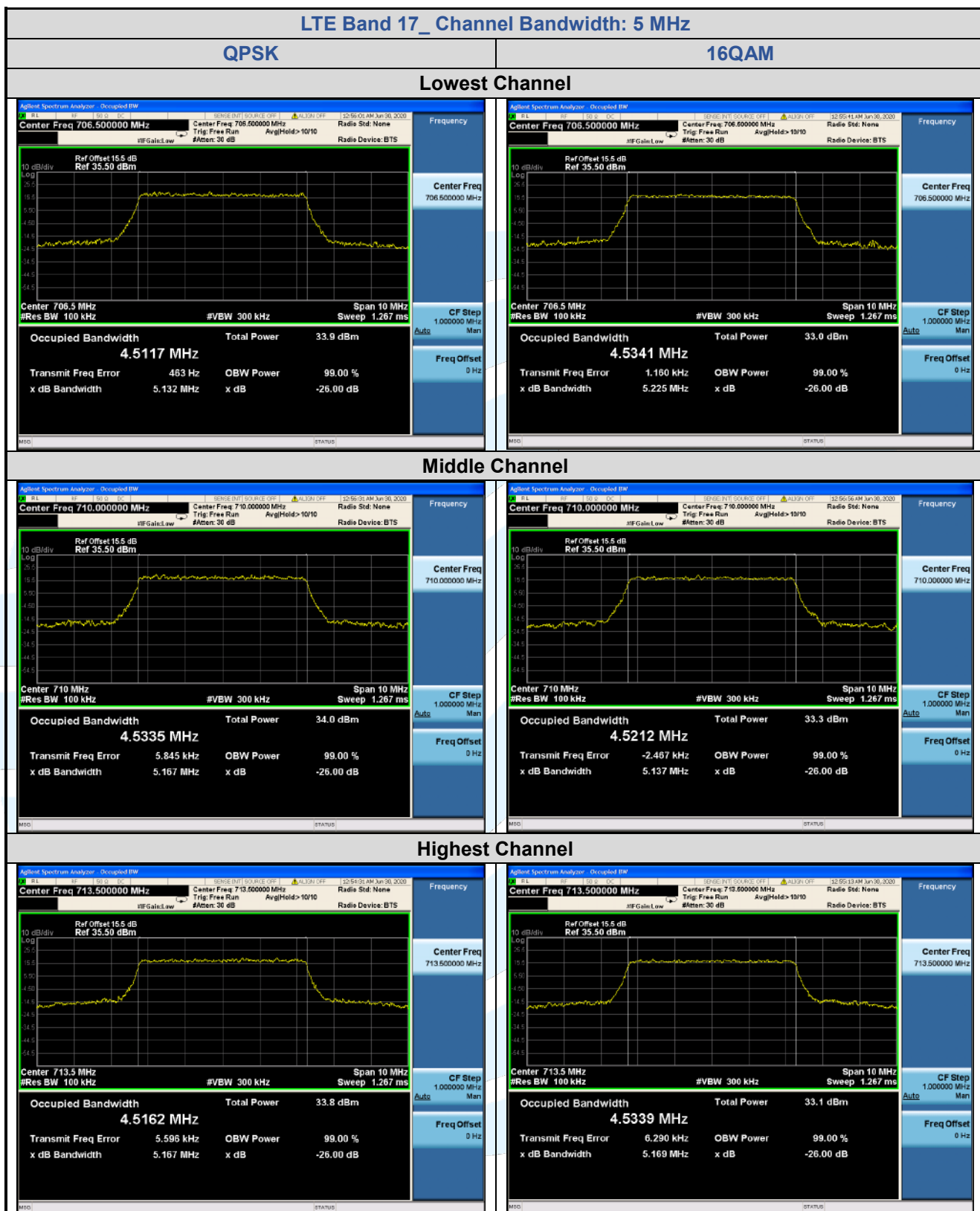


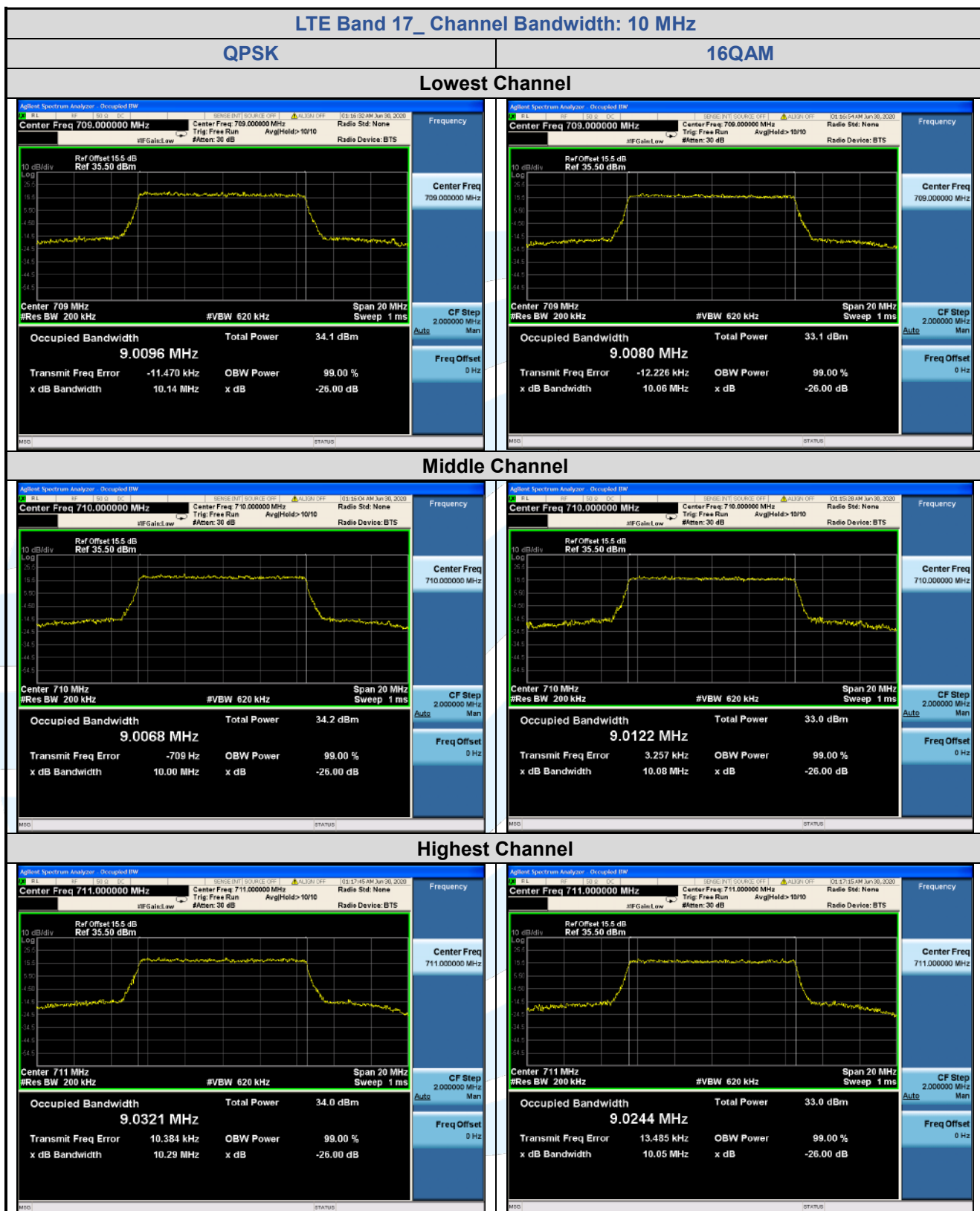




5.5.6 LTE Band 17

LTE Band 17								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.132	5.225	/	4.5117	4.5341	/
Middle	25	0	5.167	5.137	/	4.5335	4.5212	/
Highest	25	0	5.167	5.169	/	4.5162	4.5339	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.14	10.06	/	9.0096	9.0080	/
Middle	50	0	10.00	10.08	/	9.0068	9.0122	/
Highest	50	0	10.29	10.05	/	9.0321	9.0244	/





5.5.7 LTE Band 25

LTE Band 25								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.279	1.305	/	1.0930	1.0991	/
Middle	6	0	1.358	1.399	/	1.0959	1.0939	/
Highest	6	0	1.287	1.281	/	1.1032	1.0948	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.907	2.899	/	2.6831	2.6741	/
Middle	15	0	2.883	2.917	/	2.6816	2.6801	/
Highest	15	0	2.900	2.901	/	2.6903	2.6840	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.125	5.228	/	4.5033	4.5347	/
Middle	25	0	5.187	5.160	/	4.5185	4.5306	/
Highest	25	0	5.178	5.139	/	4.5263	4.5184	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.09	10.10	/	9.0165	8.9881	/
Middle	50	0	10.04	10.12	/	8.9882	9.0078	/
Highest	50	0	10.18	9.968	/	9.0271	9.0119	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.04	14.95	/	13.504	13.515	/
Middle	75	0	14.99	14.93	/	13.475	13.490	/
Highest	75	0	14.96	14.90	/	13.515	13.489	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.53	19.72	/	18.012	17.994	/
Middle	100	0	19.99	19.78	/	18.031	17.997	/
Highest	100	0	19.63	19.87	/	17.942	17.991	/

