

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

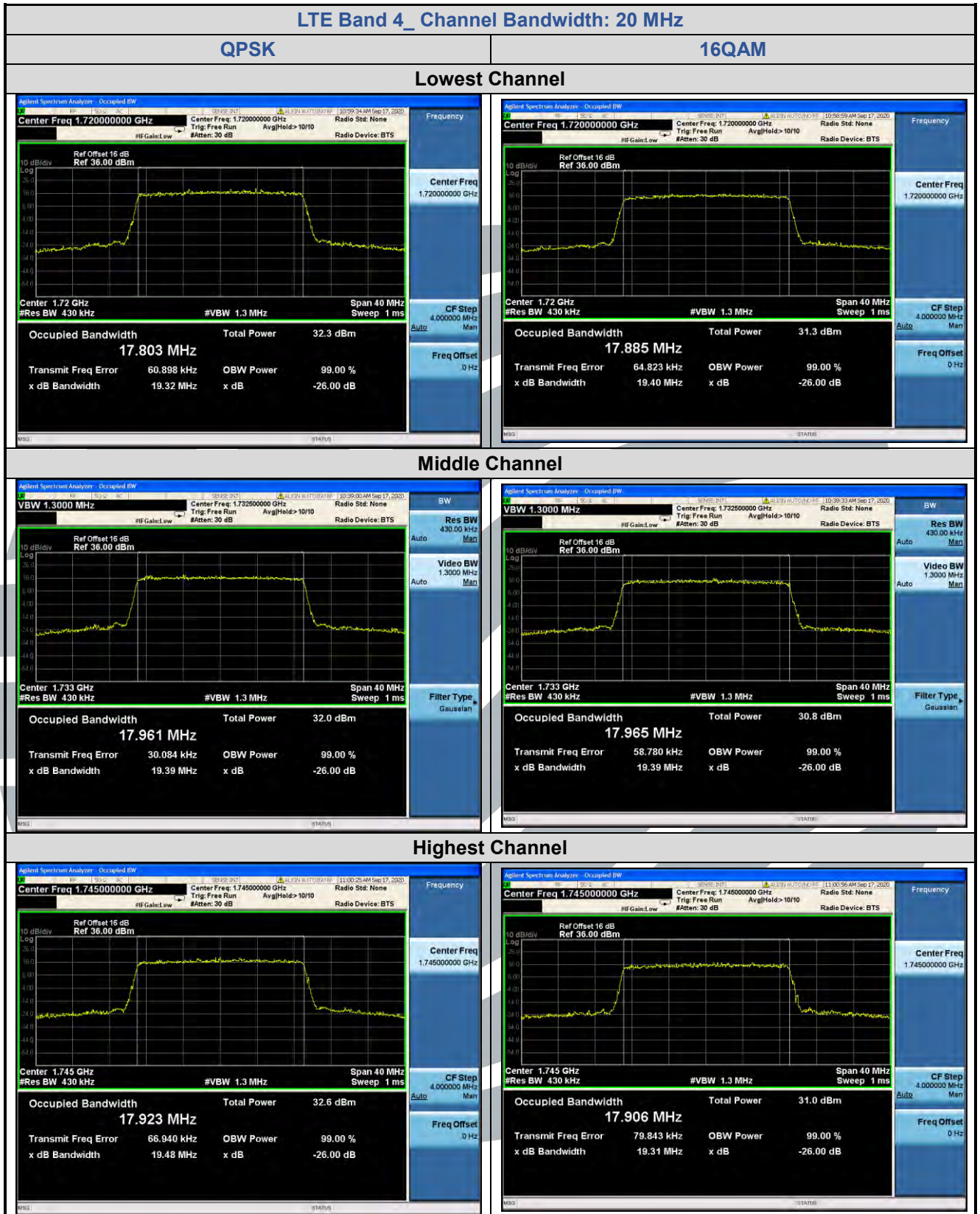
Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

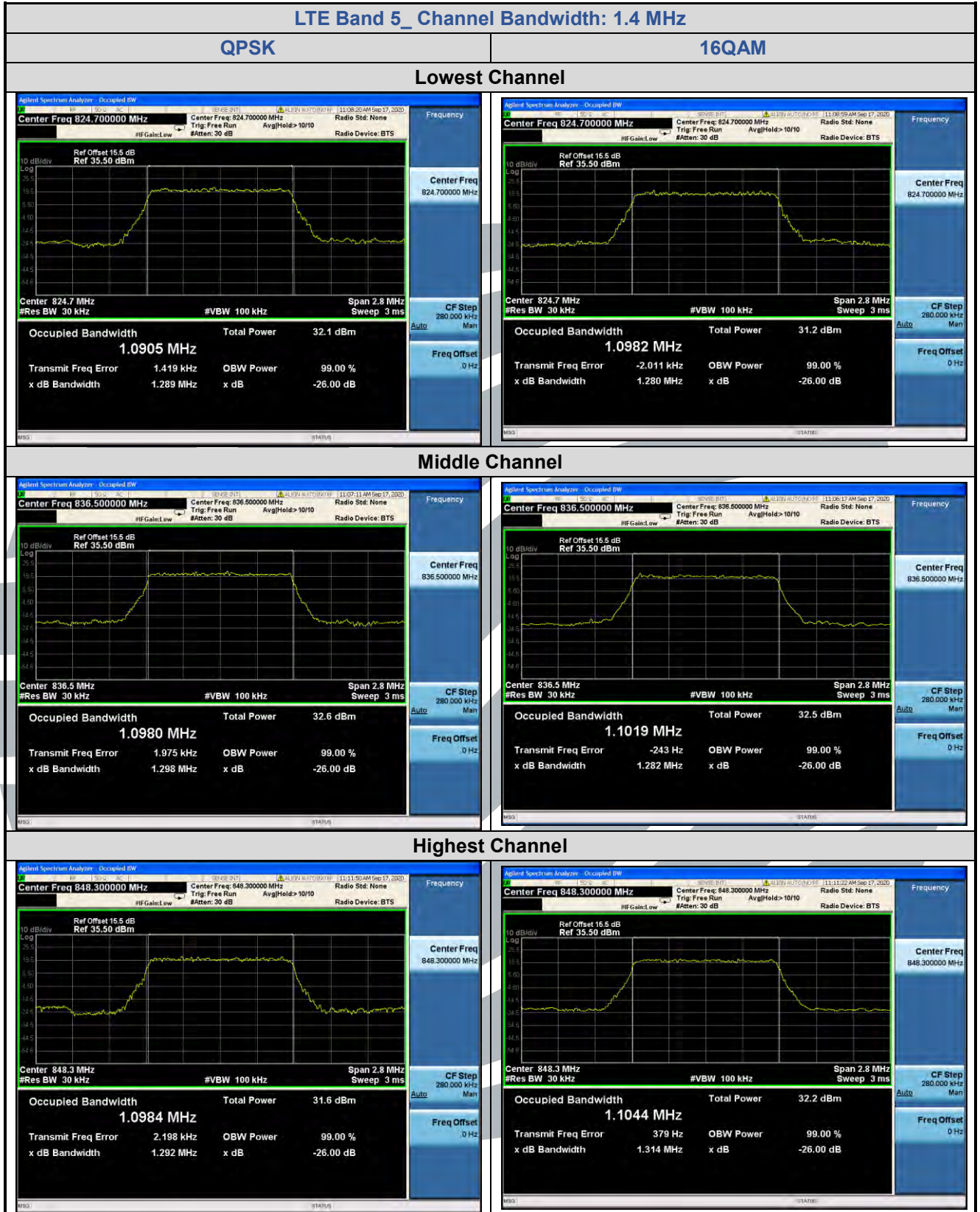
<http://www.uttlab.com>

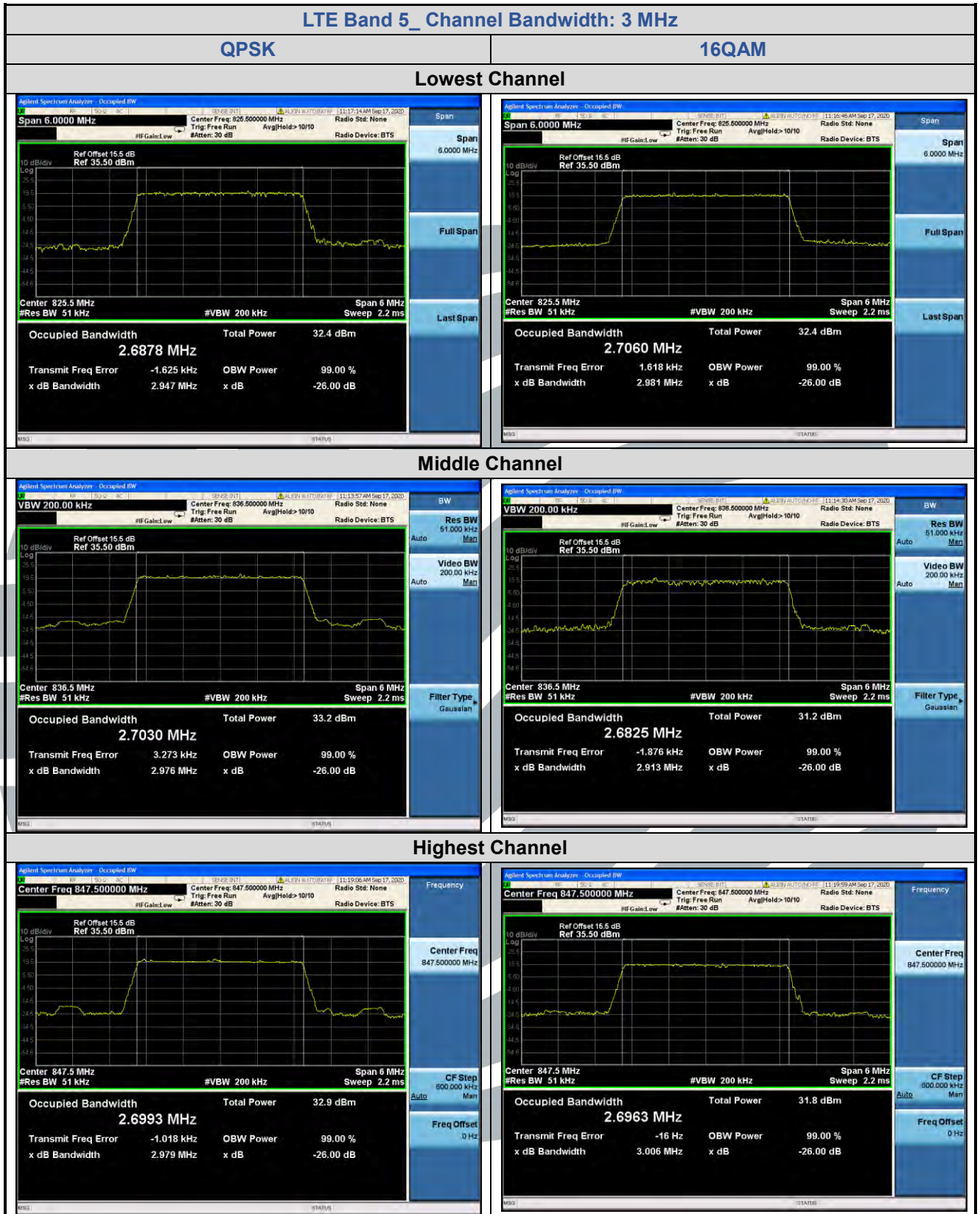
UTTR-RF-FCC4G-V1.1

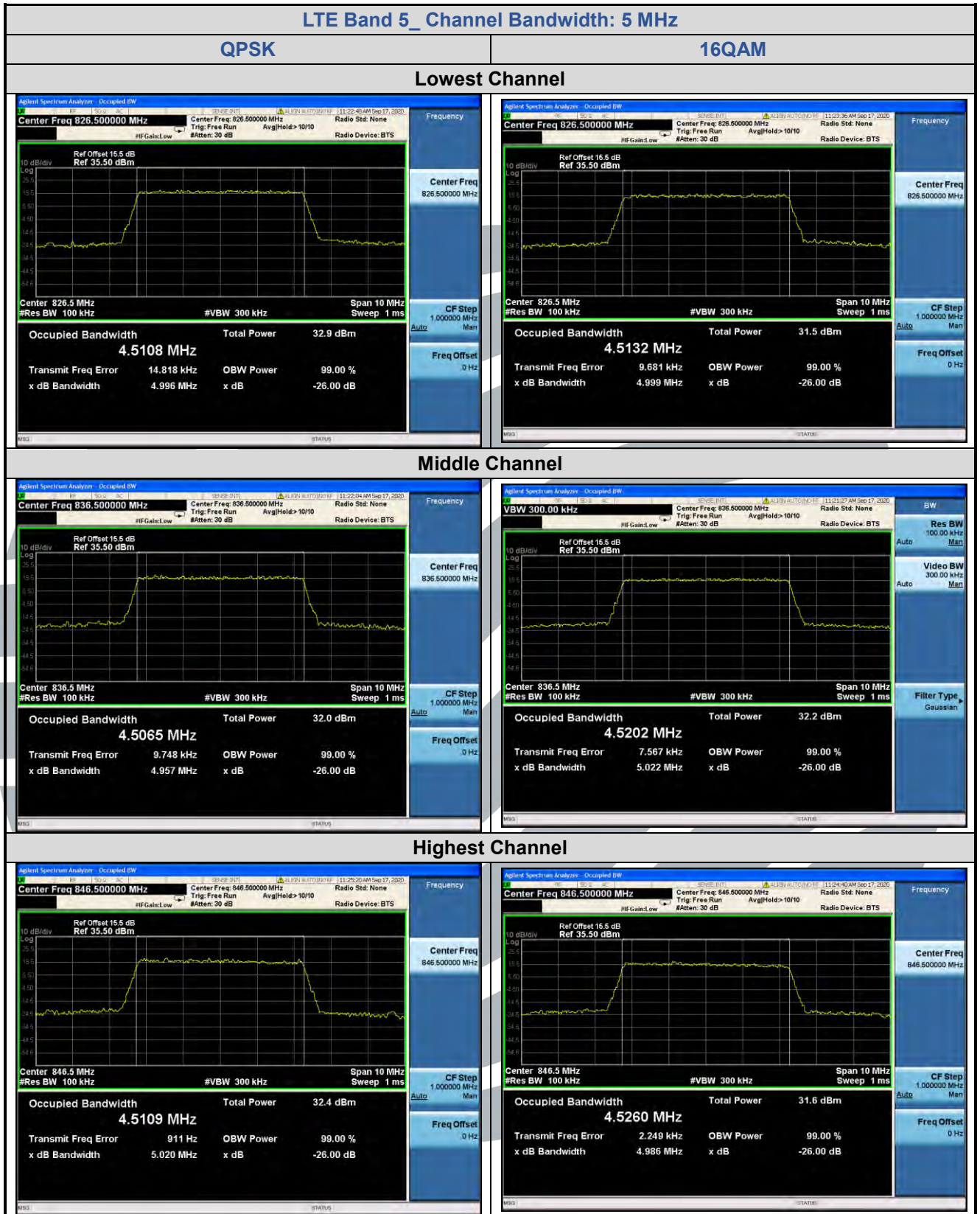


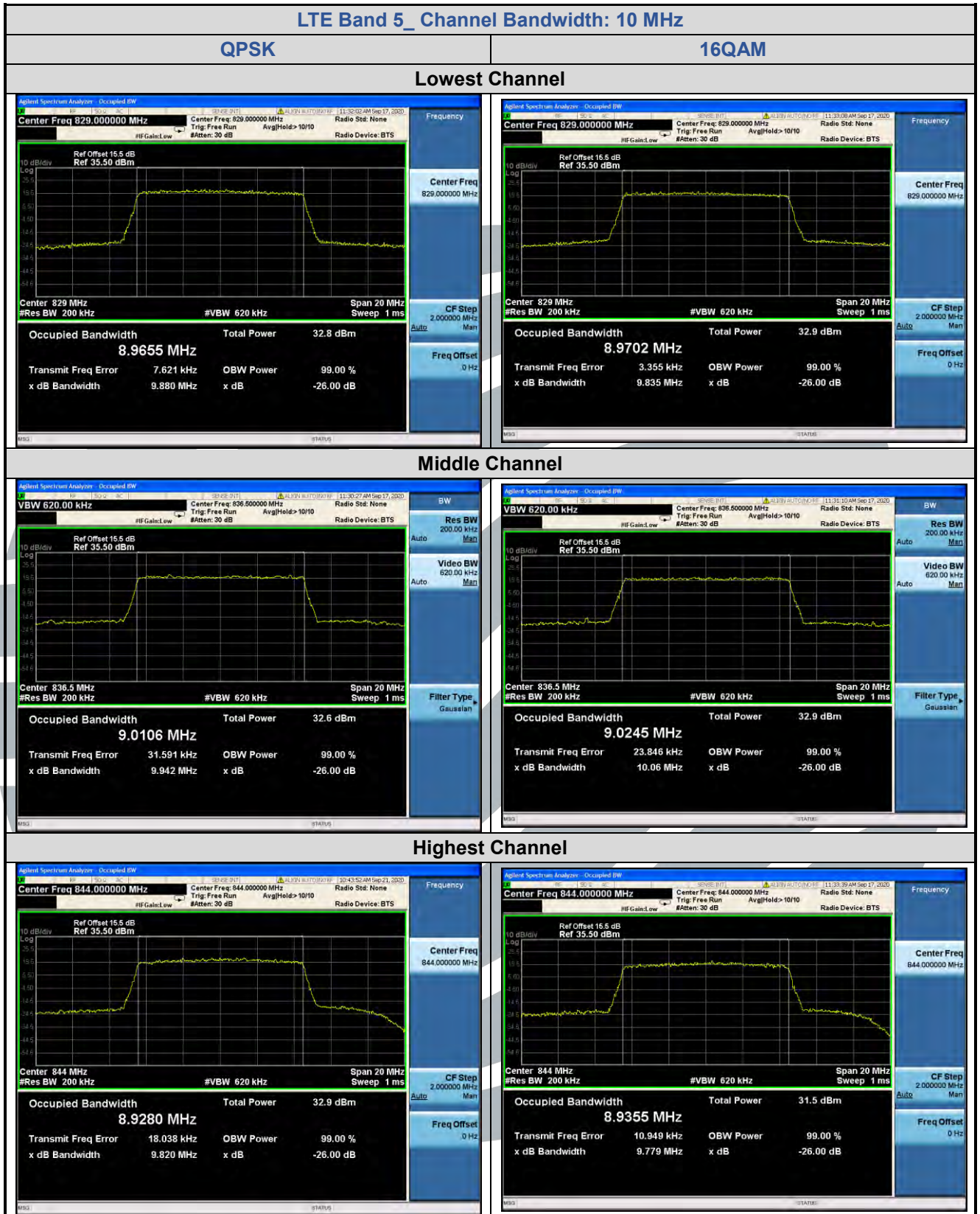
5.5.3 LTE Band 5

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	1.289	1.280	/	1.0905	1.0982	/
Middle	6	0	1.298	1.282	/	1.0980	1.1019	/
Highest	6	0	1.292	1.314	/	1.0984	1.1044	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.947	2.981	/	2.6878	2.7060	/
Middle	15	0	2.976	2.913	/	2.7030	2.6825	/
Highest	15	0	2.979	3.006	/	2.6993	2.6963	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	4.996	4.999	/	4.5108	4.5132	/
Middle	25	0	4.957	5.022	/	4.5065	4.5202	/
Highest	25	0	5.020	4.986	/	4.5109	4.5260	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.880	9.835	/	8.9655	8.9702	/
Middle	50	0	9.942	10.06	/	9.0106	9.0245	/
Highest	50	0	9.820	9.779	/	8.9280	8.9355	/



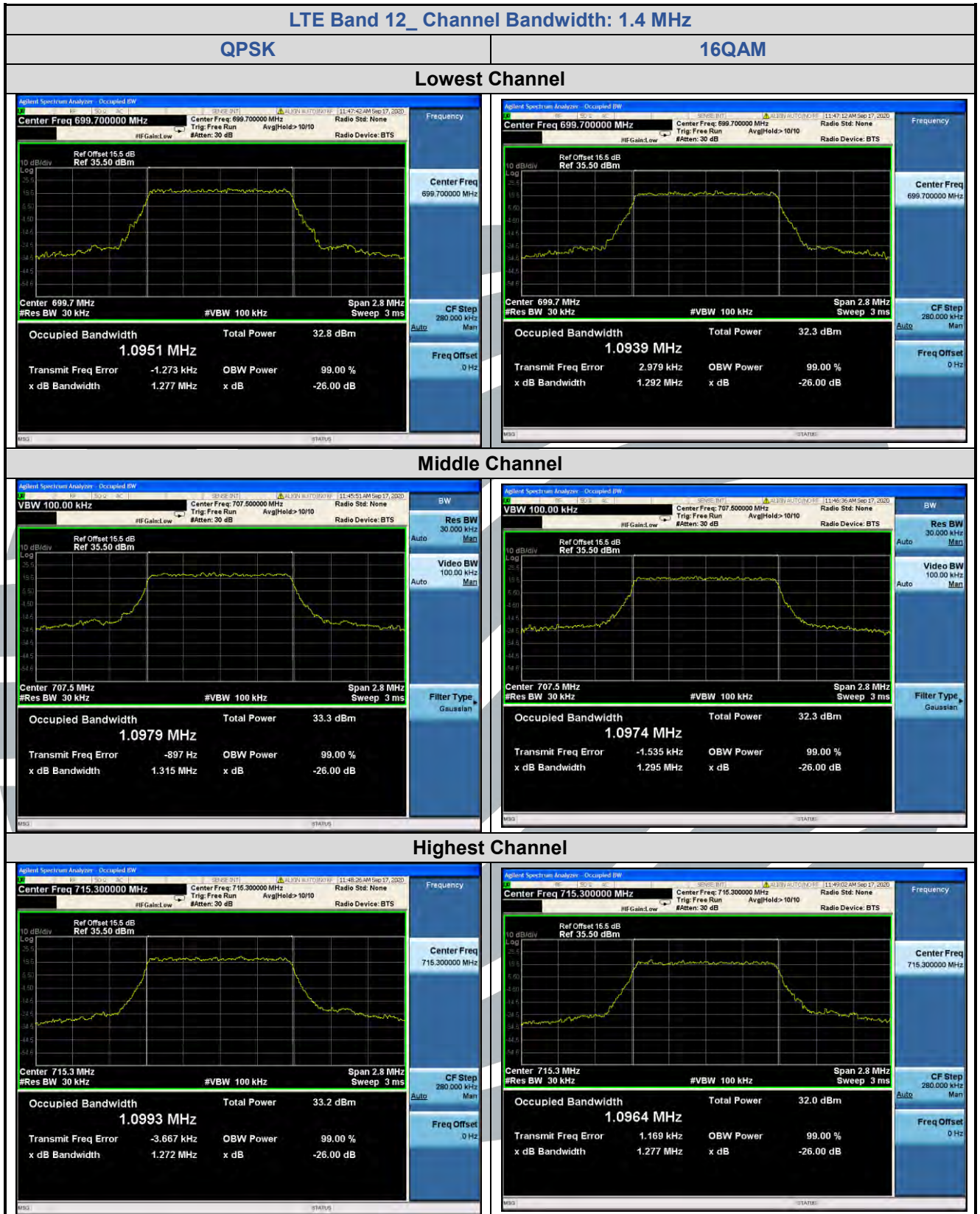






5.5.4 LTE Band 12

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	1.277	1.292	/	1.0951	1.0939	/
Middle	6	0	1.315	1.295	/	1.0979	1.0974	/
Highest	6	0	1.272	1.277	/	1.0993	1.0964	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.969	2.979	/	2.6973	2.7000	/
Middle	15	0	2.976	2.996	/	2.6982	2.7061	/
Highest	15	0	2.986	2.973	/	2.7036	2.7073	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	4.958	5.018	/	4.5159	4.5166	/
Middle	25	0	4.920	4.978	/	4.5084	4.5088	/
Highest	25	0	5.014	5.015	/	4.5217	4.5218	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.883	9.887	/	8.9424	8.9691	/
Middle	50	0	9.819	9.811	/	8.9805	8.9715	/
Highest	50	0	9.841	9.932	/	9.0164	8.9957	/



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

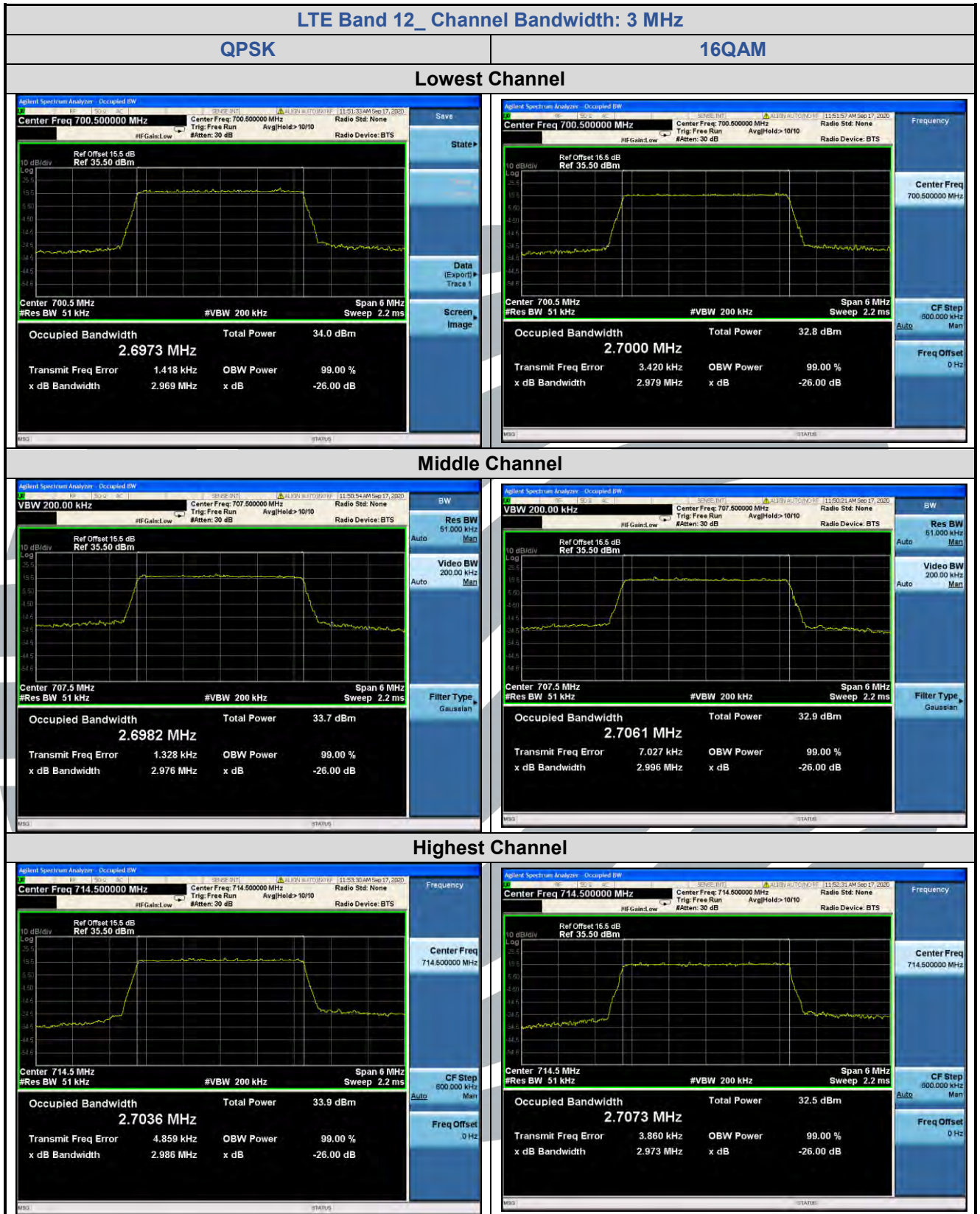
Tel: +86-755-28230888

Fax: +86-755-28230886

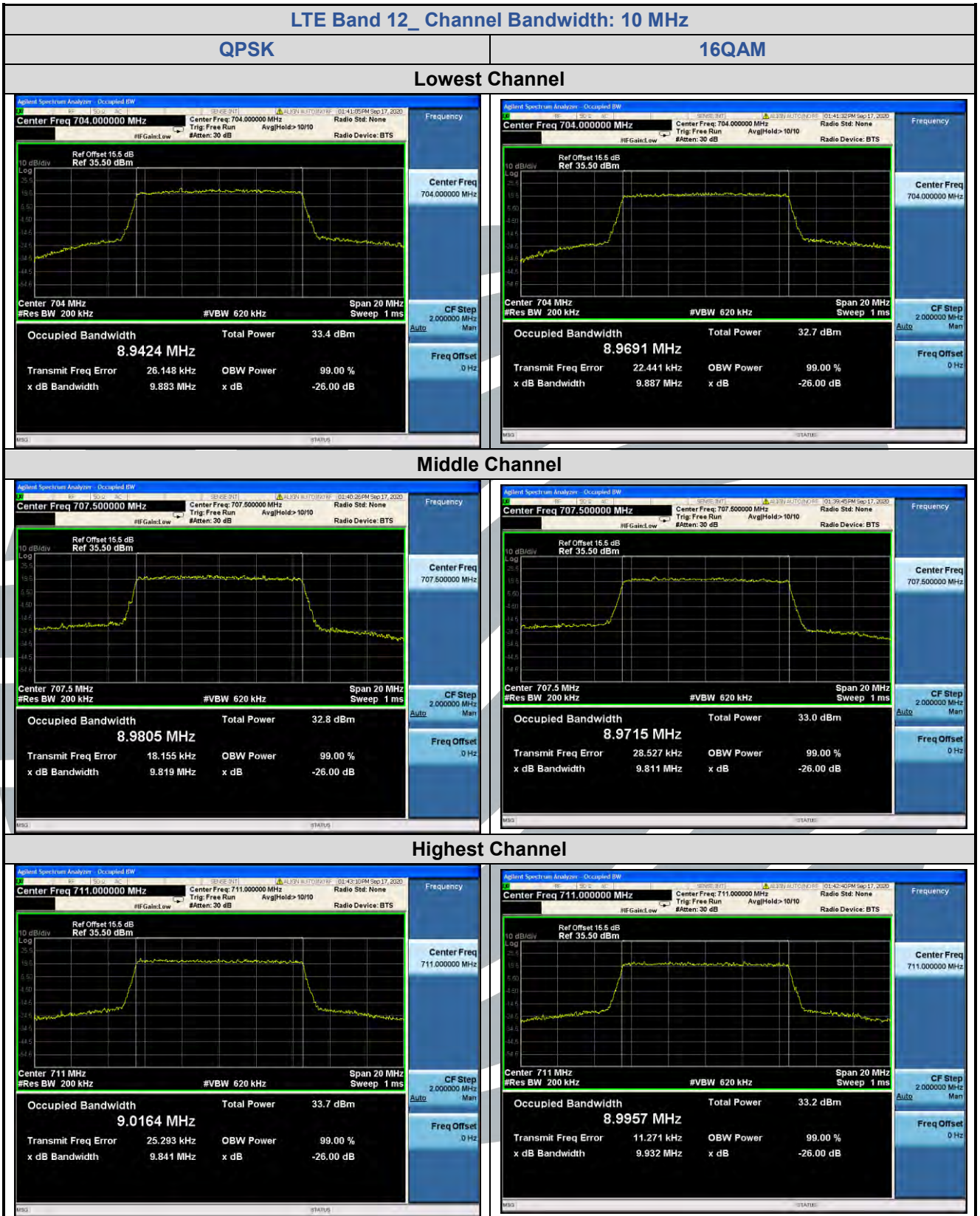
E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-FCC4G-V1.1

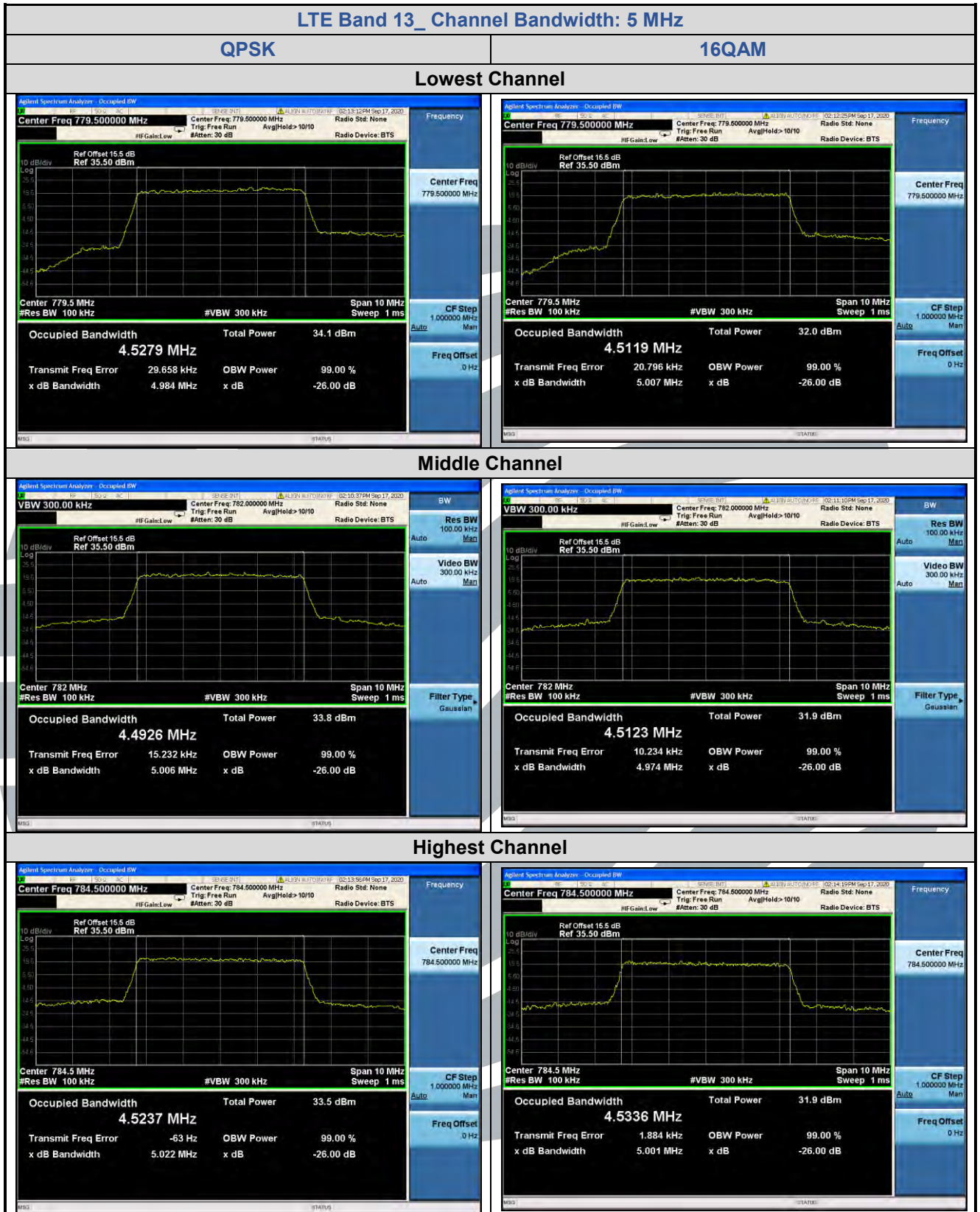






5.5.5 LTE Band 13

LTE Band 13								
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	4.984	5.007	/	4.5279	4.5119	/
Middle	25	0	5.006	4.974	/	4.4926	4.5123	/
Highest	25	0	5.022	5.001	/	4.5237	4.5336	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	/	/	/	/	/	/
Middle	50	0	9.833	9.784	/	8.9627	8.9468	/
Highest	50	0	/	/	/	/	/	/



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

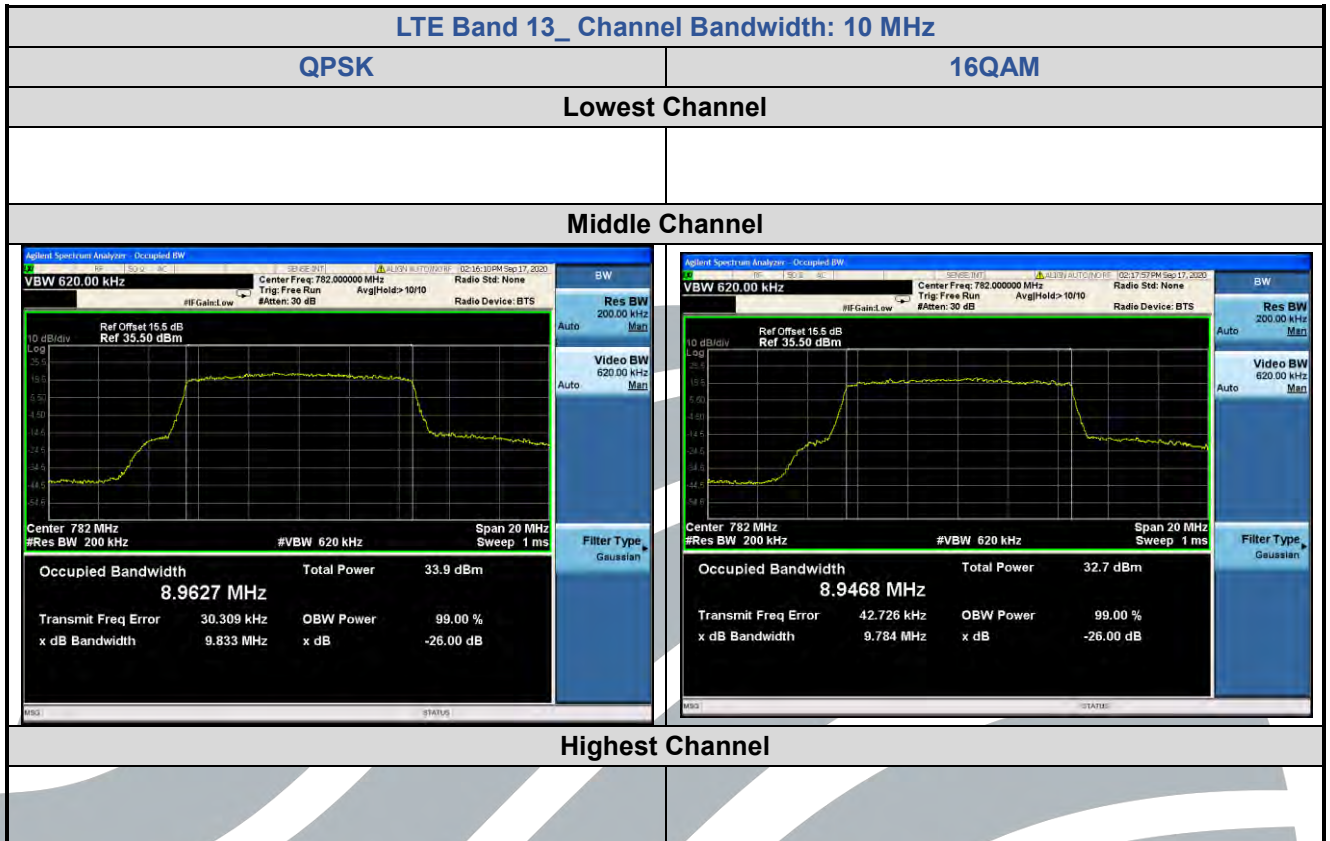
Tel: +86-755-28230888

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

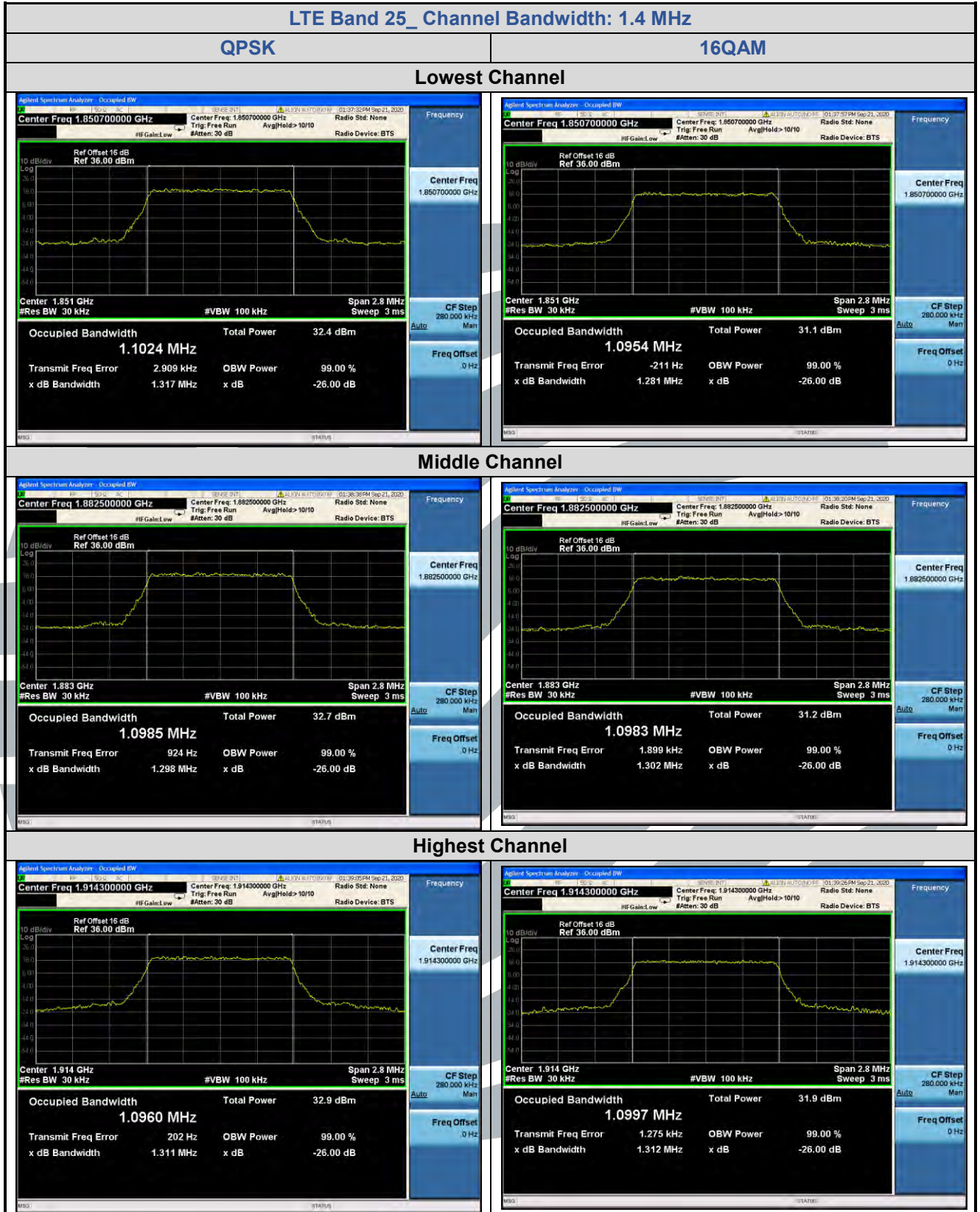
E-mail: info@uttlab.com

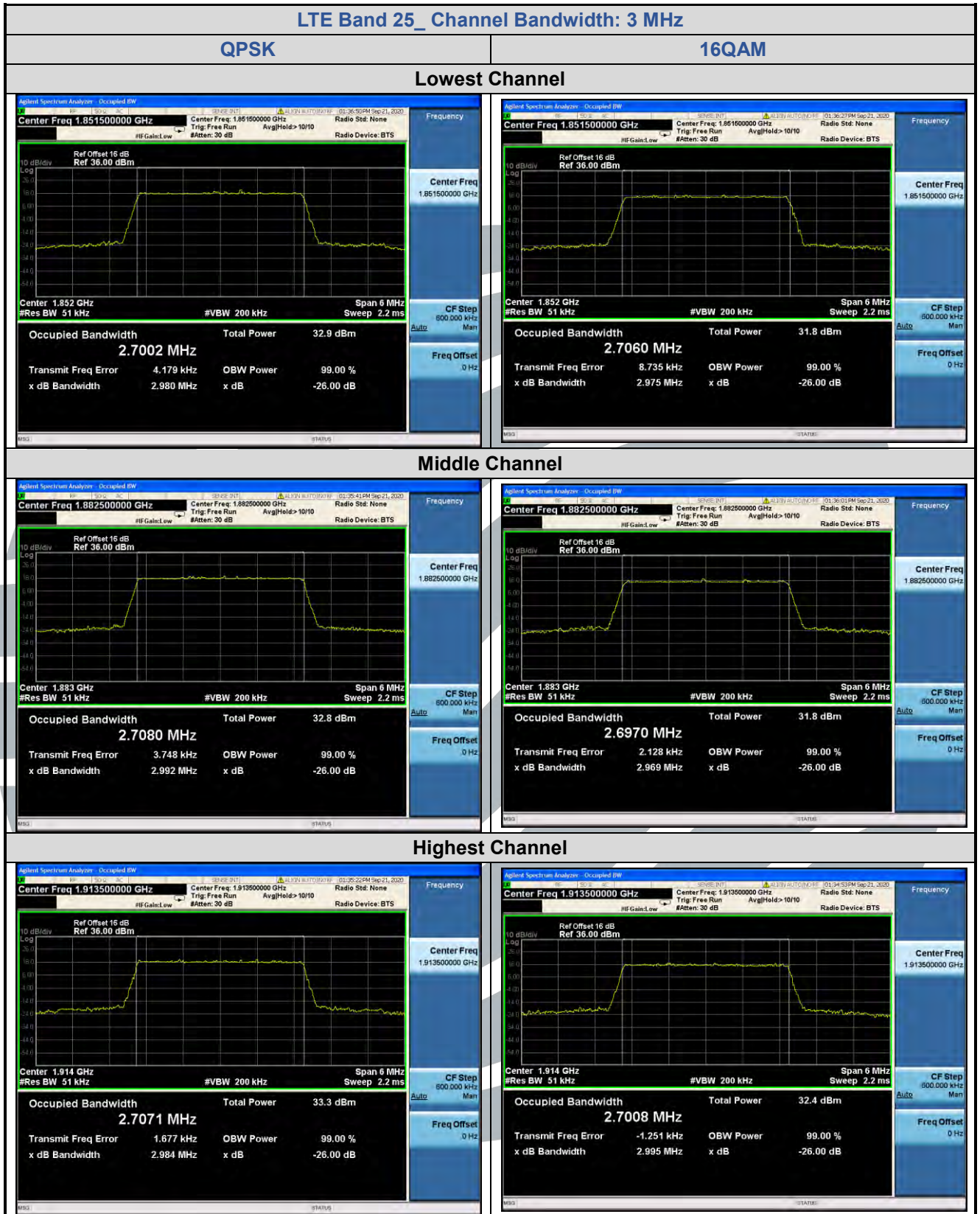
<http://www.uttlab.com>

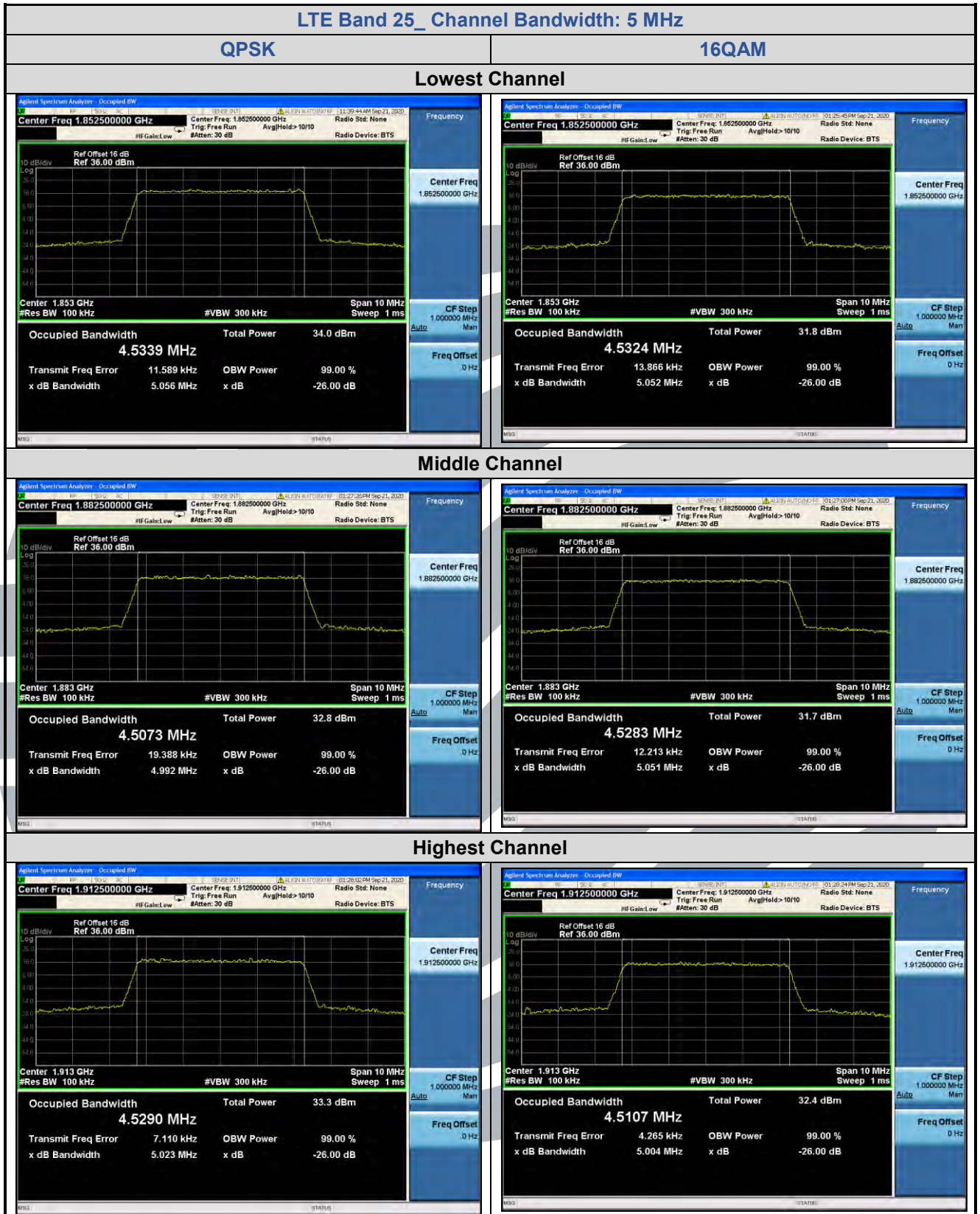
UTTR-RF-FCC4G-V1.1

5.5.6 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	1.317	1.281	/	1.1024	1.0954	/
Middle	6	0	1.298	1.302	/	1.0985	1.0983	/
Highest	6	0	1.311	1.312	/	1.0960	1.0997	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.980	2.975	/	2.7002	2.7060	/
Middle	15	0	2.992	2.969	/	2.7080	2.6970	/
Highest	15	0	2.984	2.995	/	2.7071	2.7008	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.056	5.052	/	4.5339	4.5324	/
Middle	25	0	4.992	5.051	/	4.5073	4.5283	/
Highest	25	0	5.023	5.004	/	4.5290	4.5107	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.865	9.813	/	8.9726	8.9664	/
Middle	50	0	9.863	9.841	/	8.9730	8.9822	/
Highest	50	0	9.955	9.836	/	8.9931	8.9538	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.72	14.71	/	13.452	13.480	/
Middle	75	0	14.71	14.61	/	13.446	13.459	/
Highest	75	0	14.61	14.74	/	13.406	13.437	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.41	19.42	/	17.930	17.954	/
Middle	100	0	19.40	19.48	/	17.920	17.898	/
Highest	100	0	19.40	19.44	/	17.938	17.924	/









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>

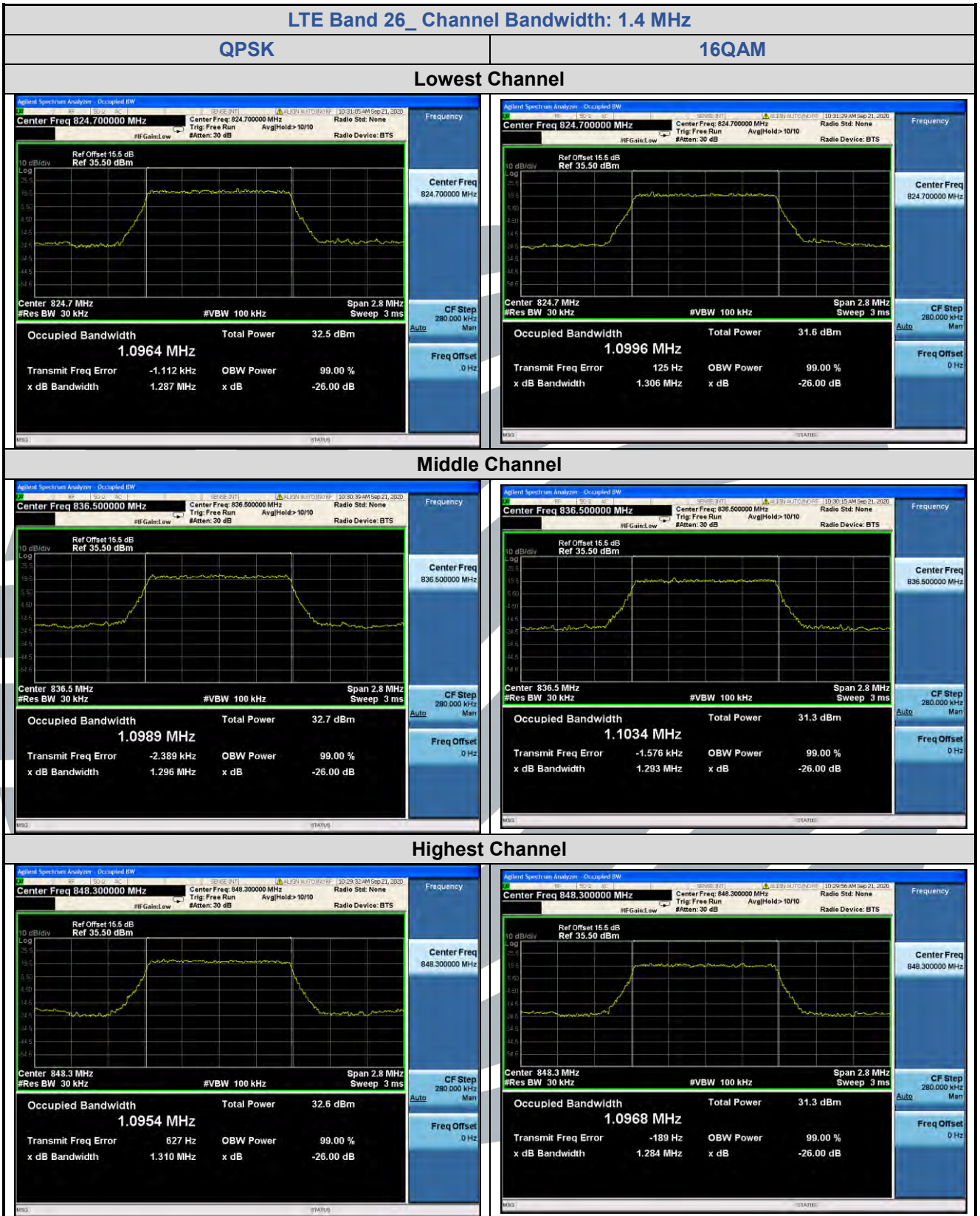
UTTR-RF-FCC4G-V1.1





5.5.7 LTE Band 26

LTE Band 26								
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	1.287	1.306	/	1.0964	1.0996	/
Middle	6	0	1.296	1.293	/	1.0989	1.1034	/
Highest	6	0	1.310	1.284	/	1.0954	1.0968	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.973	2.962	/	2.6930	2.6932	/
Middle	15	0	2.983	2.993	/	2.7080	2.6929	/
Highest	15	0	2.976	2.980	/	2.7029	2.6970	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.013	5.030	/	4.5130	4.5193	/
Middle	25	0	5.050	5.011	/	4.5379	4.5231	/
Highest	25	0	5.000	5.013	/	4.5169	4.5110	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.893	9.837	/	8.9641	8.9243	/
Middle	50	0	9.895	9.928	/	9.0080	8.9894	/
Highest	50	0	9.781	9.786	/	8.9344	8.9378	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.67	14.53	/	13.441	13.422	/
Middle	75	0	14.86	14.82	/	13.538	13.523	/
Highest	75	0	14.69	14.58	/	13.425	13.395	/



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

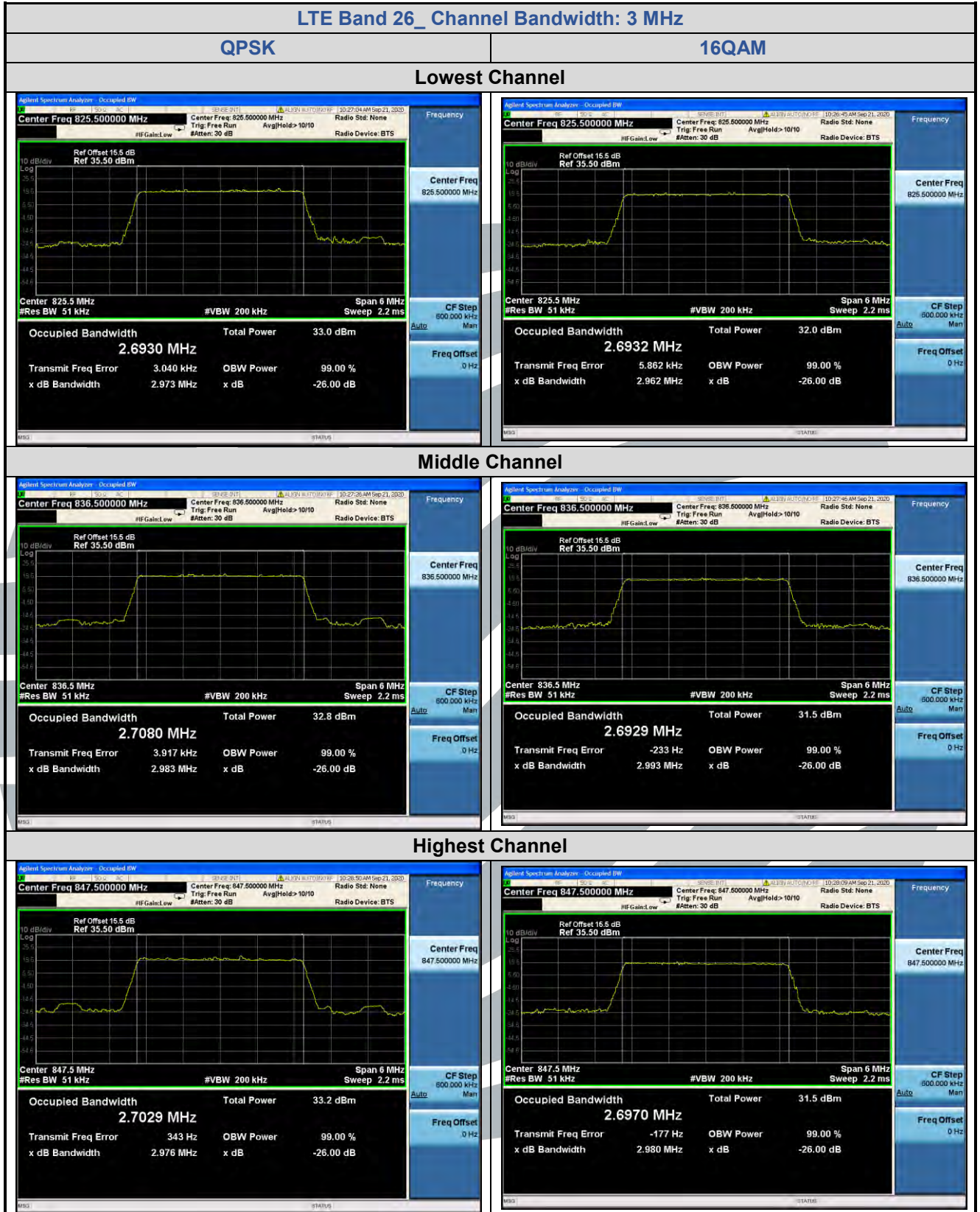
Tel: +86-755-28230888

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

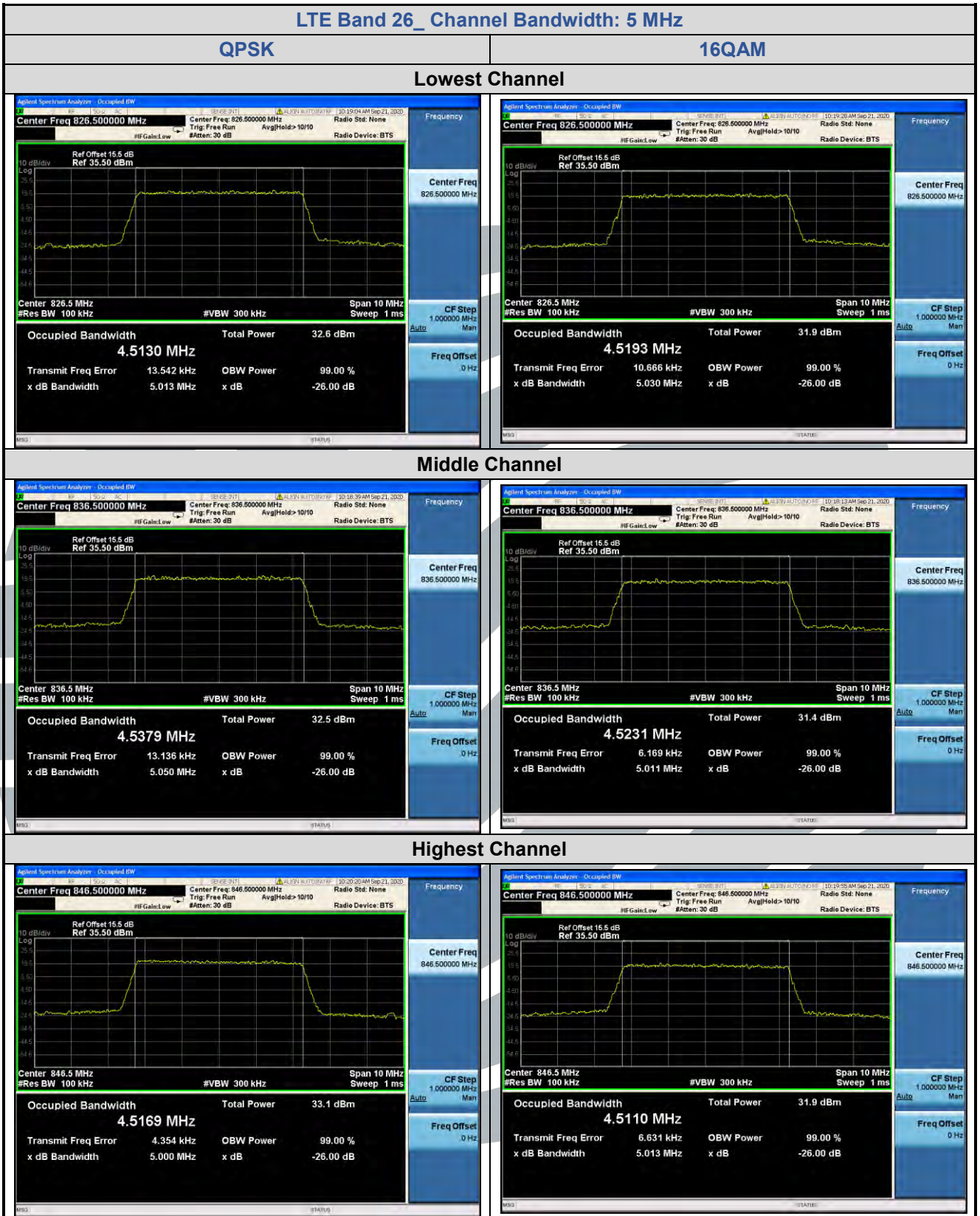
Tel: +86-755-28230888

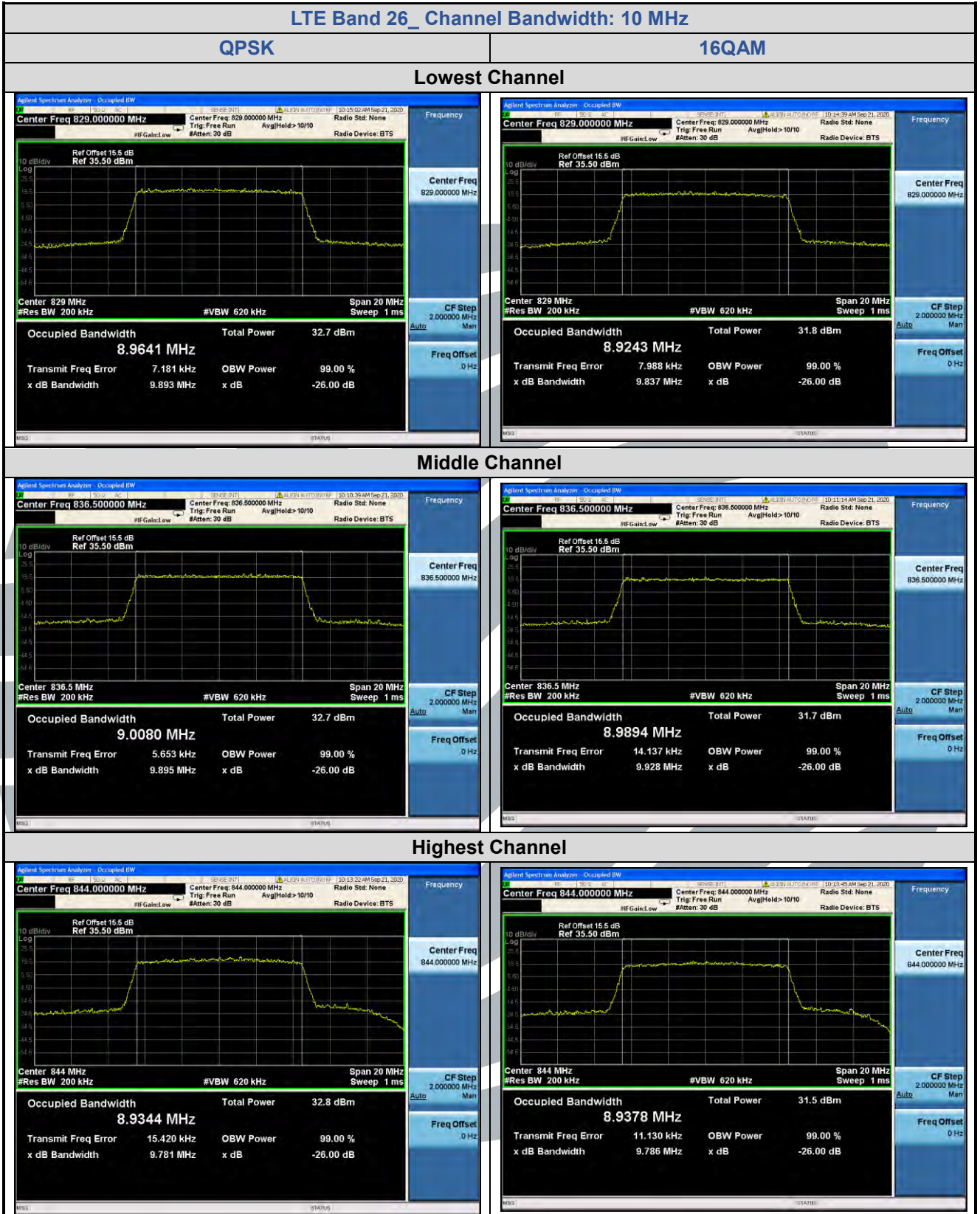
Fax: +86-755-28230886

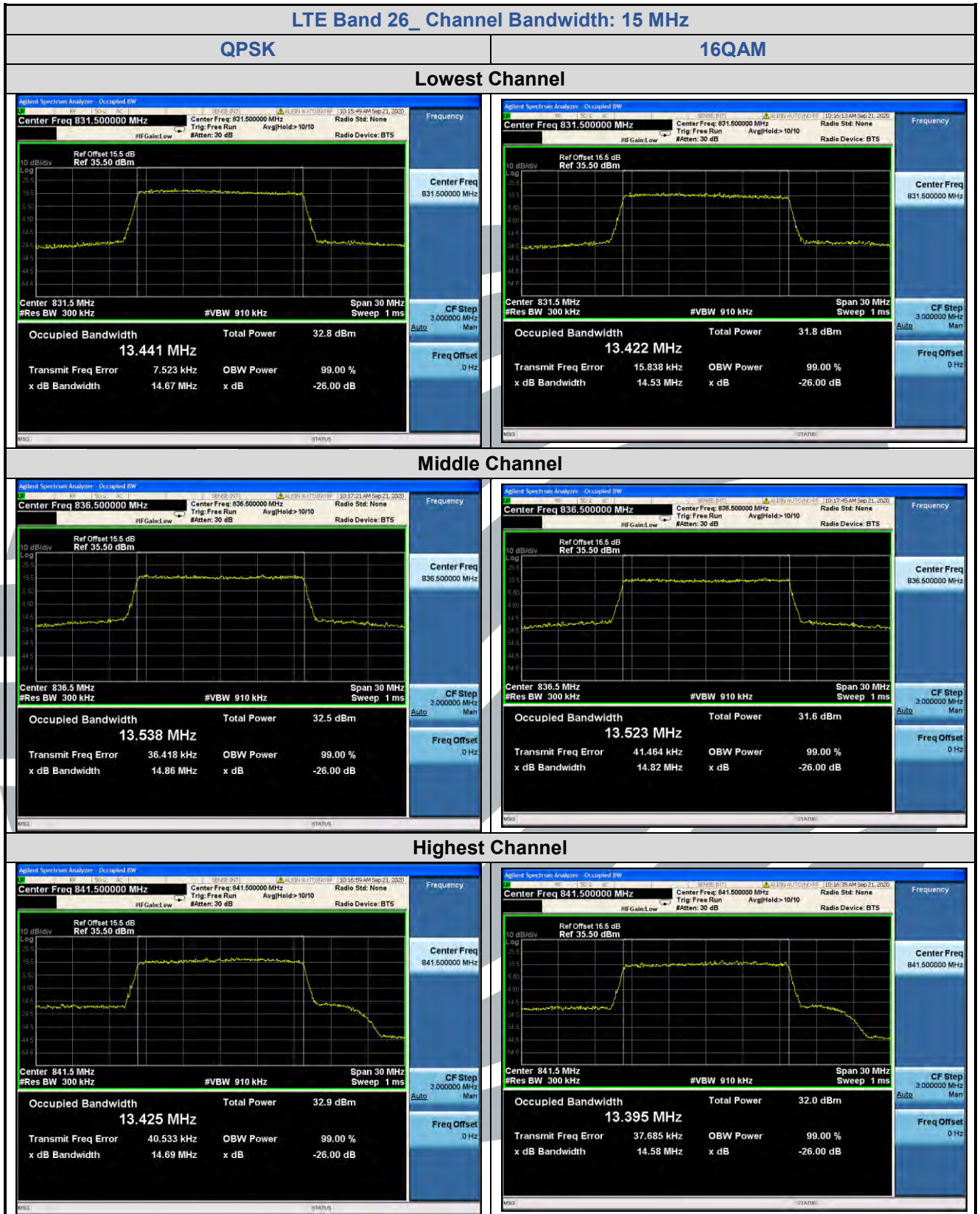
E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-FCC4G-V1.1







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

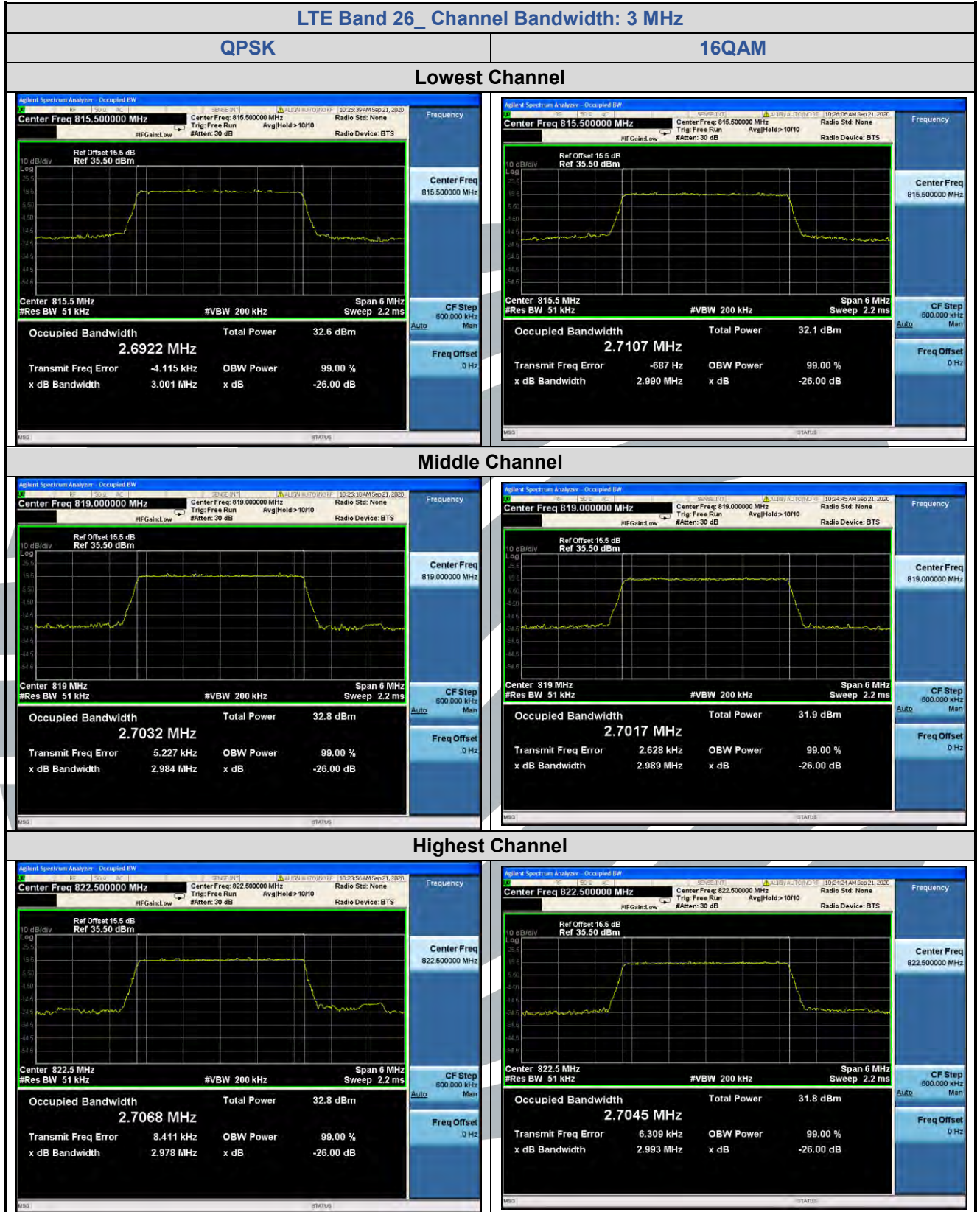
<http://www.uttlab.com>

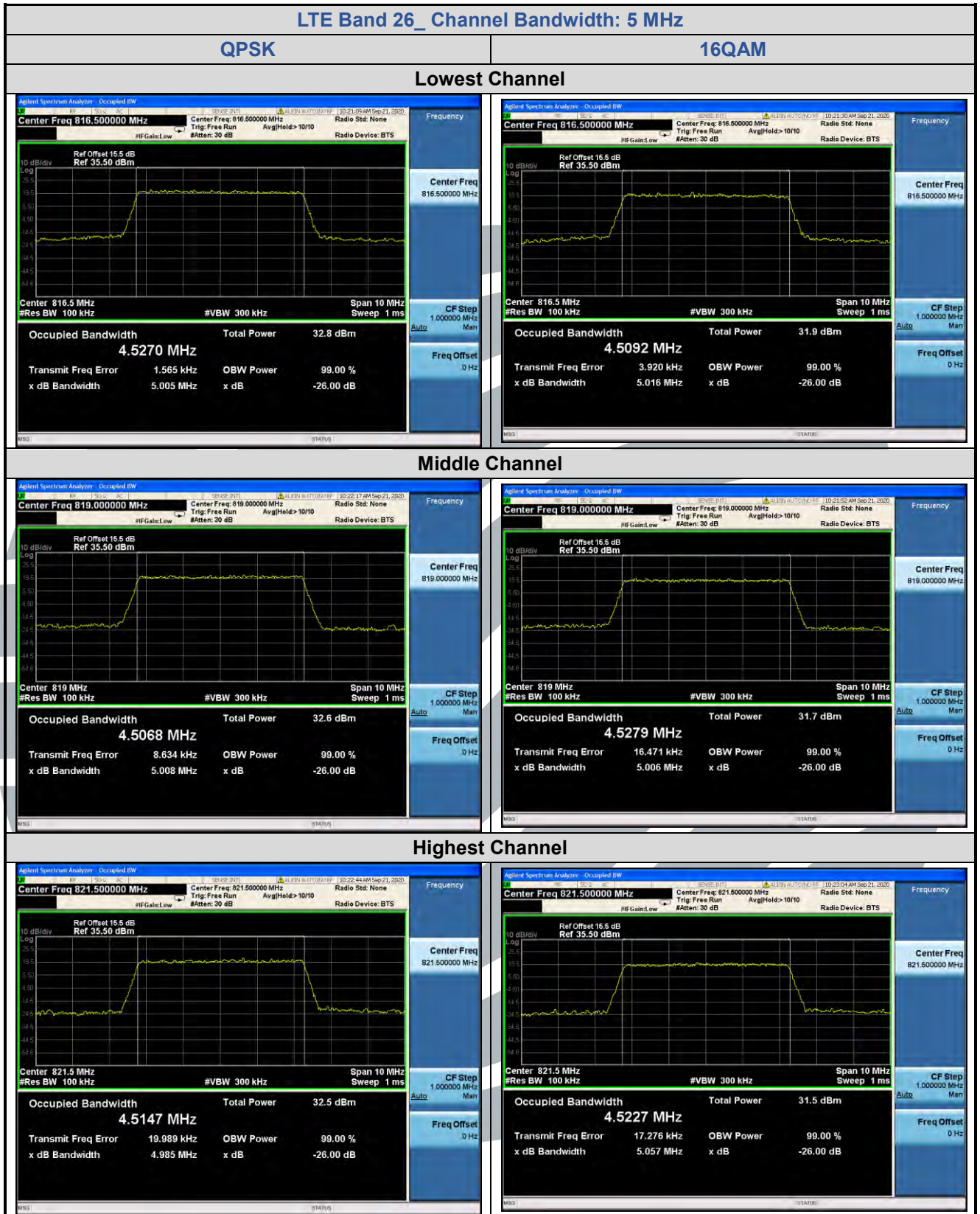
UTTR-RF-FCC4G-V1.1

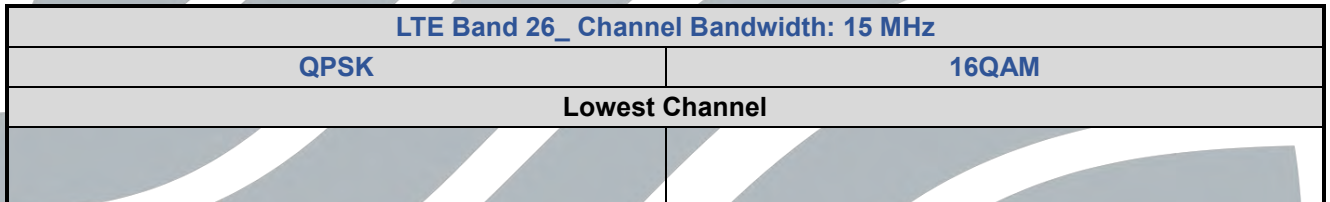
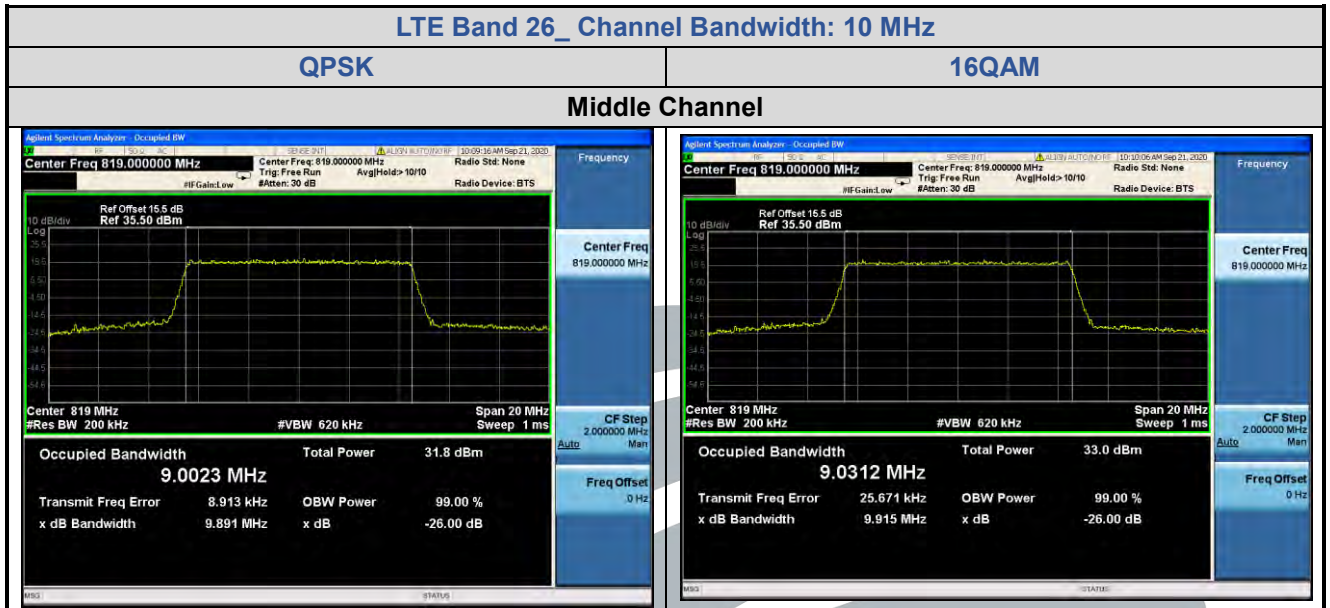
5.5.8 LTE Band 26 (Part 90S)

LTE Band 26								
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	1.307	1.330	/	1.0993	1.1010	/
Middle	6	0	1.310	1.286	/	1.1006	1.0955	/
Highest	6	0	1.283	1.288	/	1.1035	1.0996	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	3.001	2.990	/	2.6922	2.7107	/
Middle	15	0	2.984	2.989	/	2.7032	2.7017	/
Highest	15	0	2.978	2.993	/	2.7068	2.7045	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.005	5.016	/	4.5270	4.5092	/
Middle	25	0	5.008	5.006	/	4.5068	4.5279	/
Highest	25	0	4.985	5.057	/	4.5147	4.5227	/
Channel Bandwidth: 10 MHz								
Middle	50	0	9.891	9.915	/	9.0023	9.0312	/



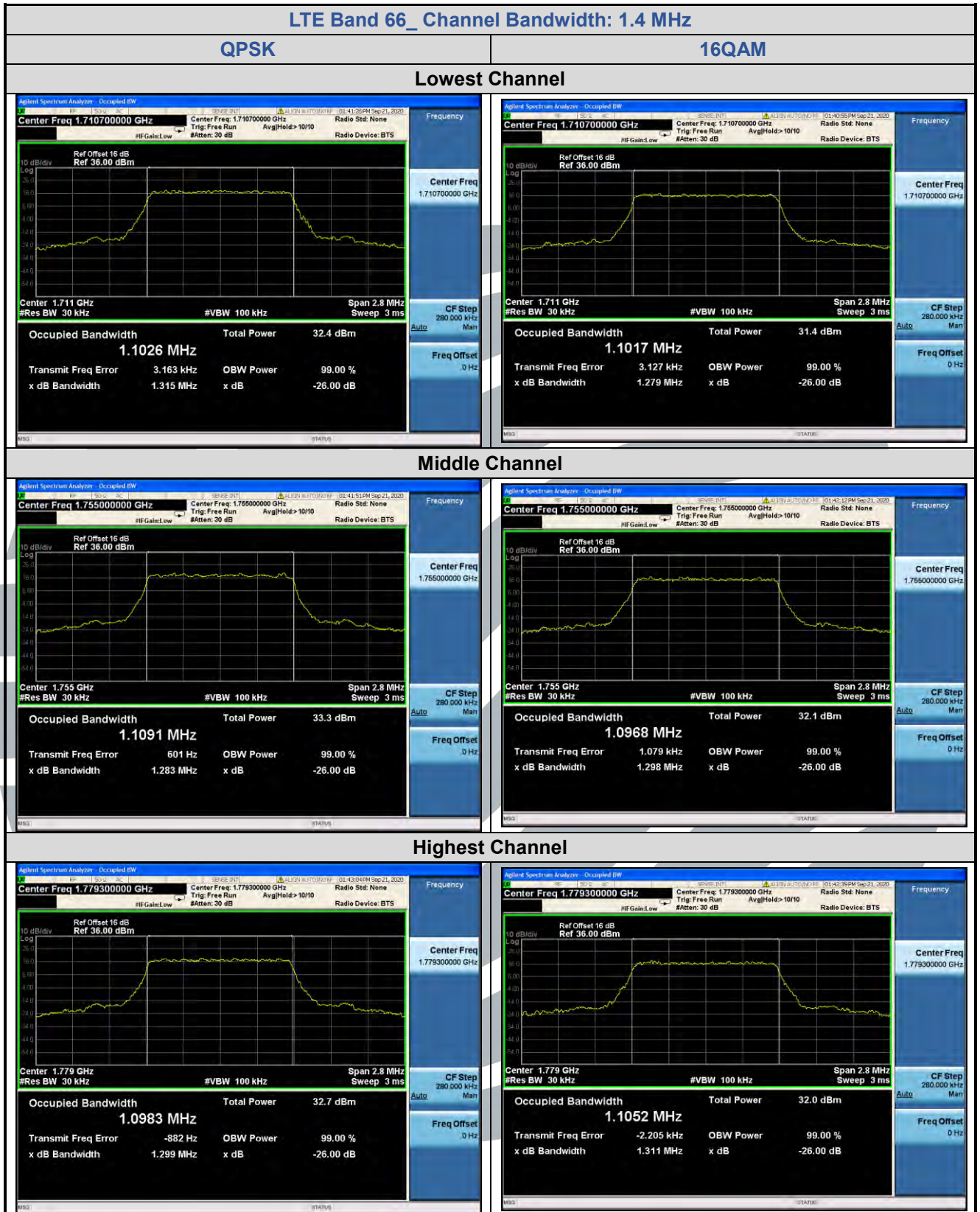


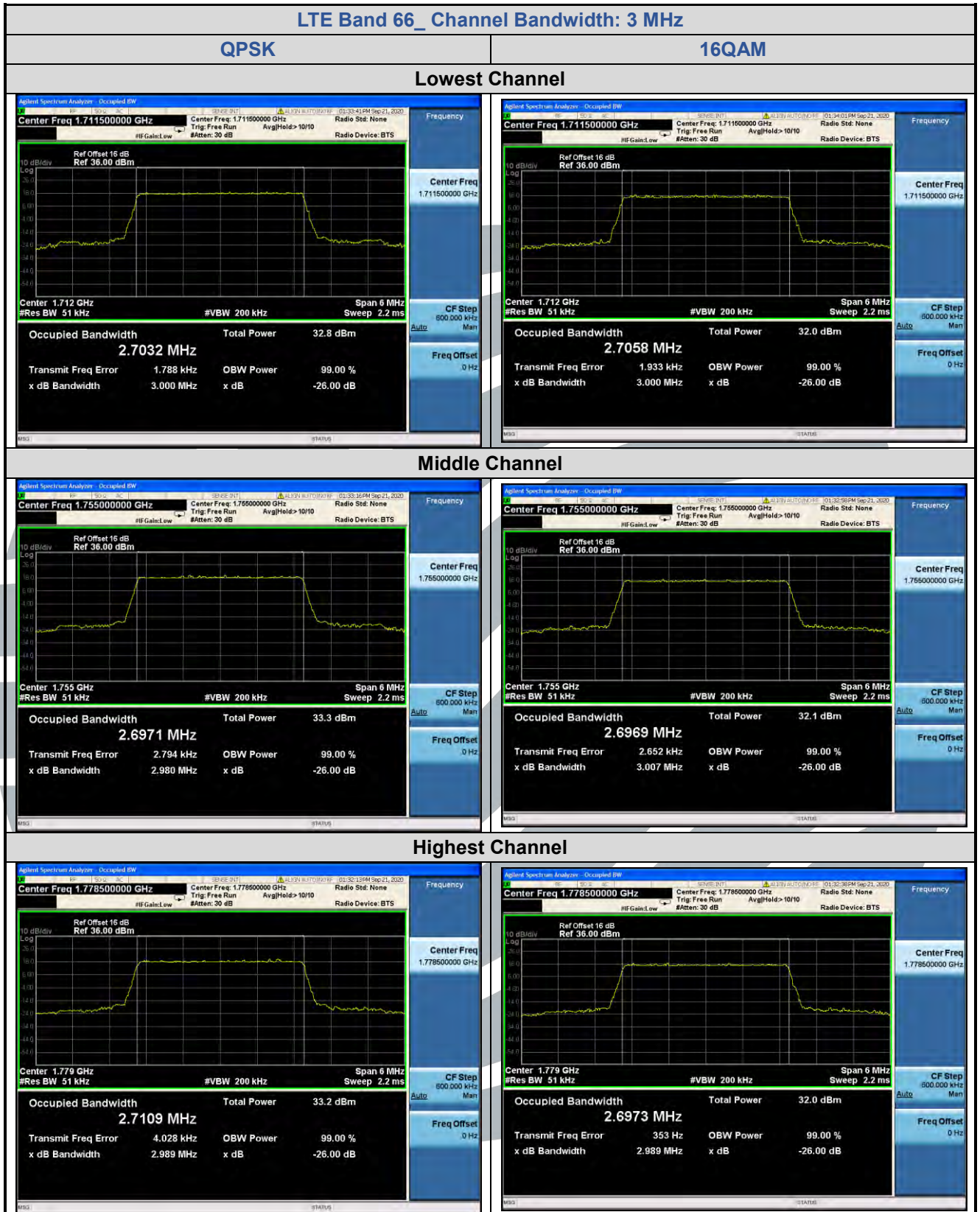


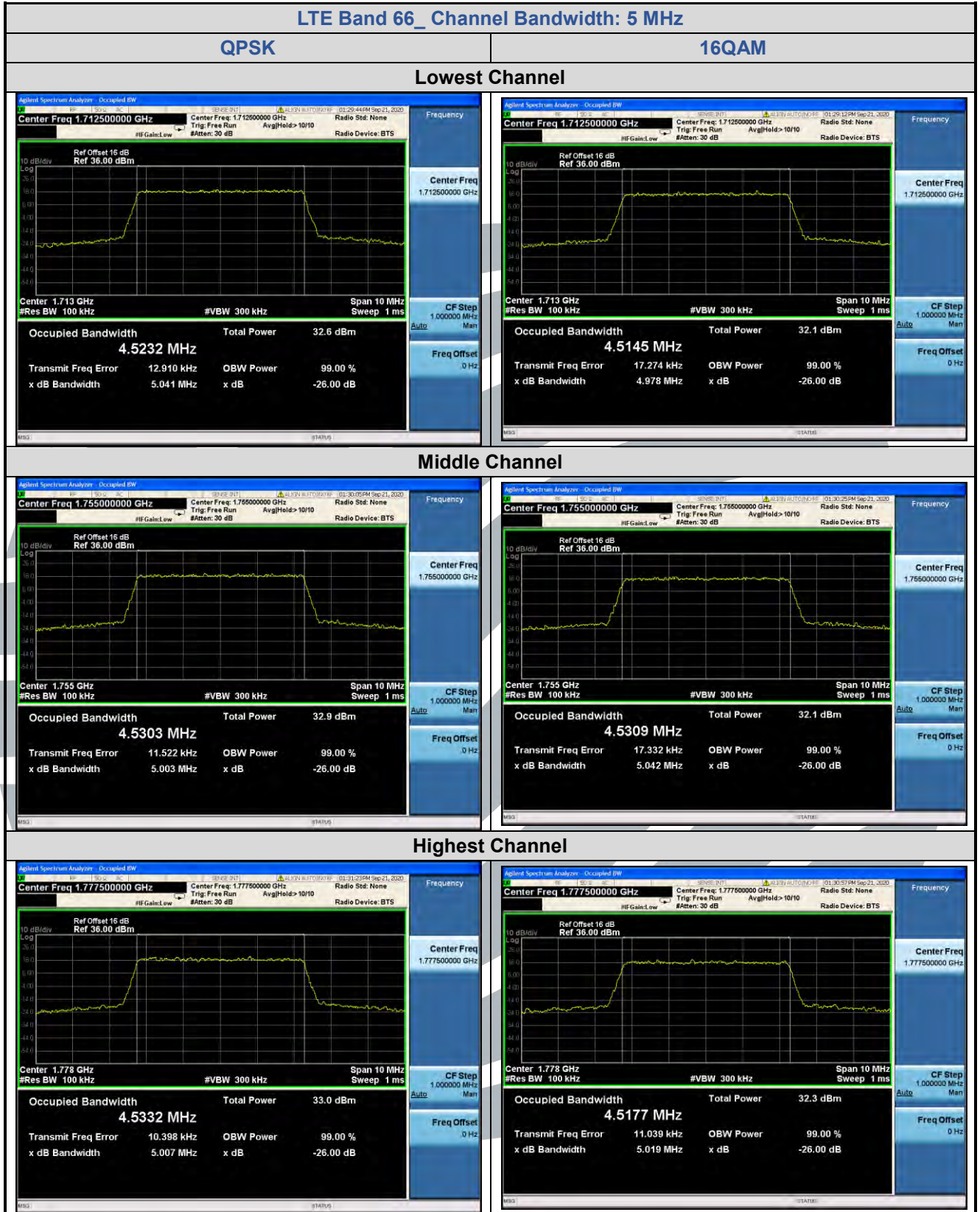


5.5.9 LTE Band 66

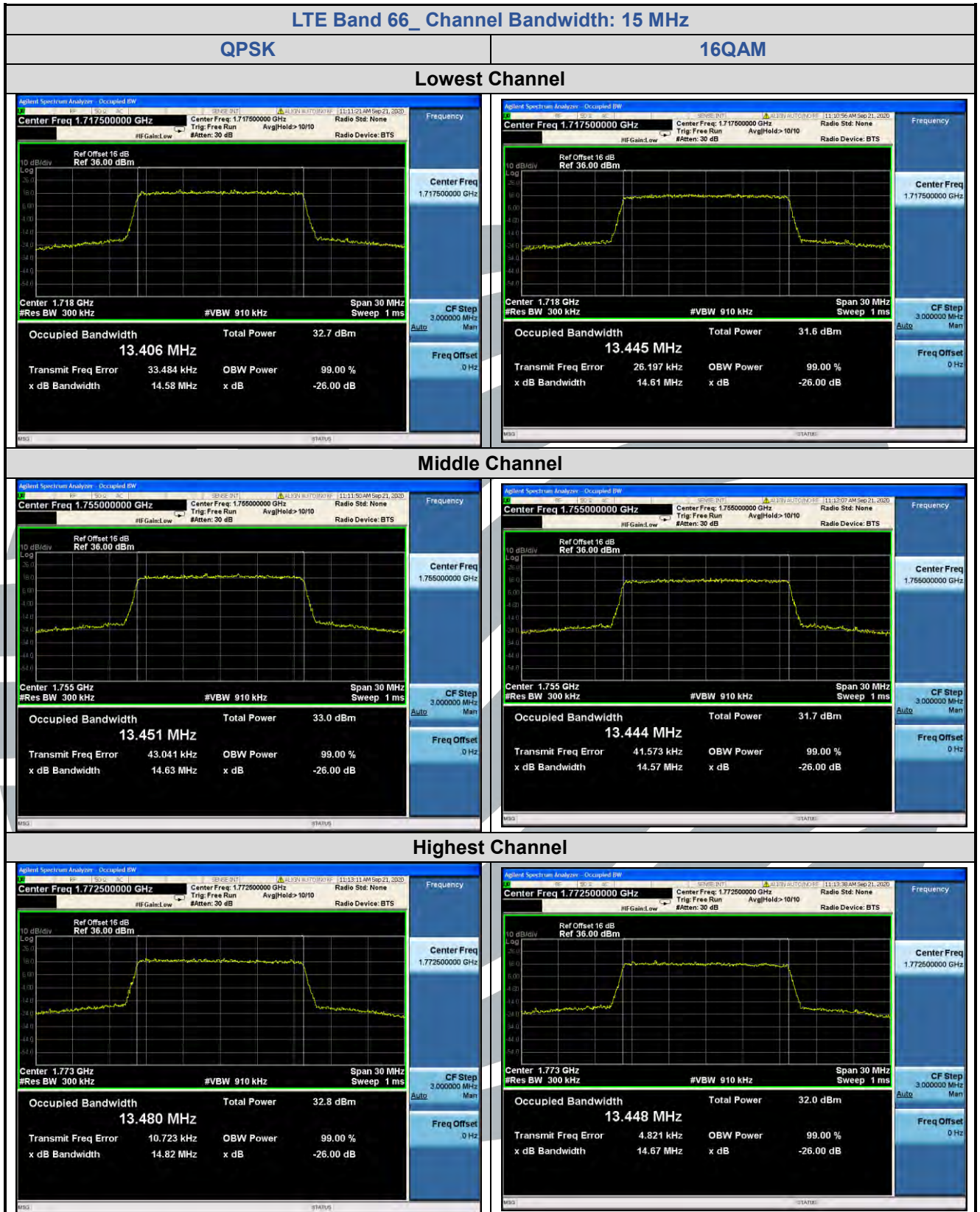
LTE Band 66								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.315	1.279	/	1.1026	1.1017	/
Middle	6	0	1.283	1.298	/	1.1091	1.0968	/
Highest	6	0	1.299	1.311	/	1.0983	1.1052	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	3.000	3.000	/	2.7032	2.7058	/
Middle	15	0	2.980	3.007	/	2.6971	2.6969	/
Highest	15	0	2.989	2.989	/	2.7109	2.6973	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.041	4.978	/	4.5232	4.5145	/
Middle	25	0	5.003	5.042	/	4.5303	4.5309	/
Highest	25	0	5.007	5.019	/	4.5332	4.5177	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.865	9.908	/	8.9837	8.9635	/
Middle	50	0	9.798	9.806	/	8.9645	8.9739	/
Highest	50	0	9.906	9.866	/	8.9935	8.9875	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.58	14.61	/	13.406	13.445	/
Middle	75	0	14.63	14.57	/	13.451	13.444	/
Highest	75	0	14.82	14.67	/	13.480	13.448	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.53	19.52	/	17.930	17.901	/
Middle	100	0	19.41	19.28	/	17.895	17.959	/
Highest	100	0	19.50	19.53	/	17.933	17.949	/













5.5.10 LTE Band 71

LTE Band 71								
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	4.995	5.040	/	4.5113	4.5270	/
Middle	25	0	5.033	5.032	/	4.5339	4.5202	/
Highest	25	0	5.026	5.045	/	4.5131	4.5247	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	9.890	9.760	/	8.9431	8.9431	/
Middle	50	0	9.889	9.857	/	8.9646	8.9599	/
Highest	50	0	9.833	9.820	/	8.9898	8.9849	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	14.77	14.54	/	13.409	13.422	/
Middle	75	0	14.74	14.65	/	13.385	13.425	/
Highest	75	0	14.70	14.66	/	13.451	13.457	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.57	19.20	/	17.886	17.886	/
Middle	100	0	19.42	19.39	/	17.867	17.916	/
Highest	100	0	19.47	19.40	/	17.886	17.878	/

