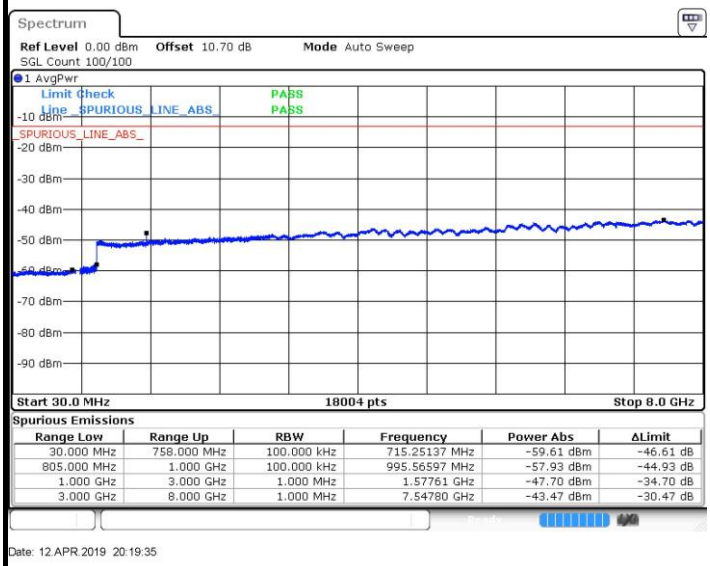
LTE Band 14 / 10MHz	
Middle Channel / 64QAM	



Spurious Emissions

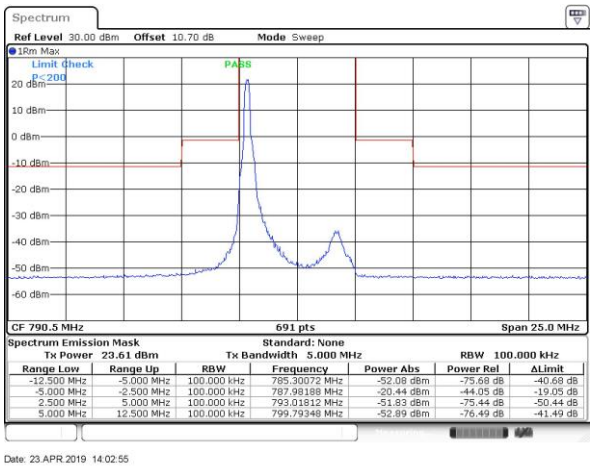
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	715.25137 MHz	-59.61 dBm	-46.61 dB
805.000 MHz	1.000 GHz	100.000 kHz	995.56597 MHz	-57.93 dBm	-44.93 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57761 GHz	-47.70 dBm	-34.70 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.54780 GHz	-43.47 dBm	-30.47 dB

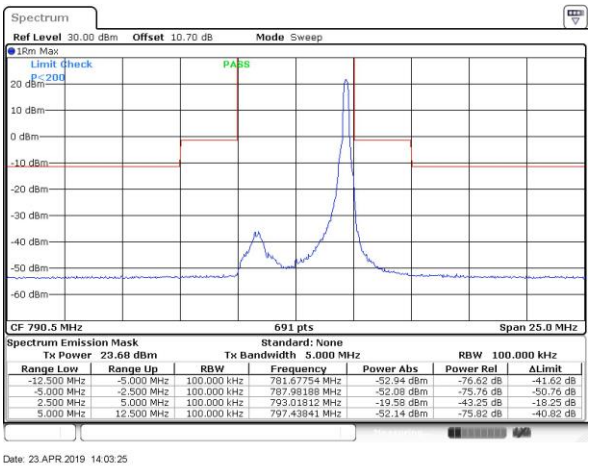
Date: 12.APR.2019 20:19:35

Mask

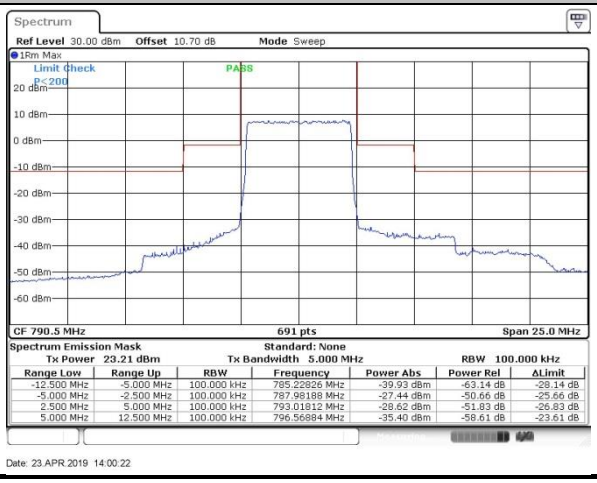
LTE Band 14 / 5MHz / QPSK

Lowest Channel / 1RB



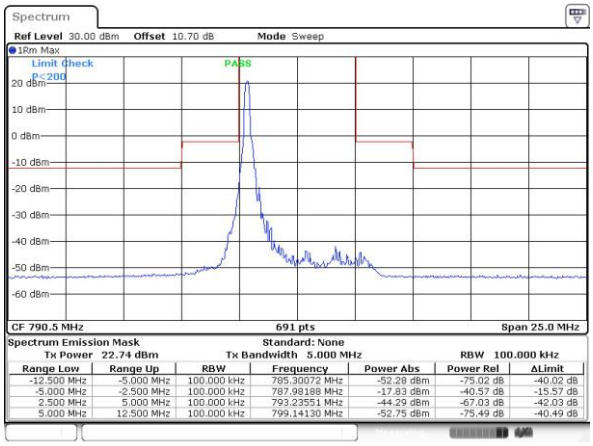


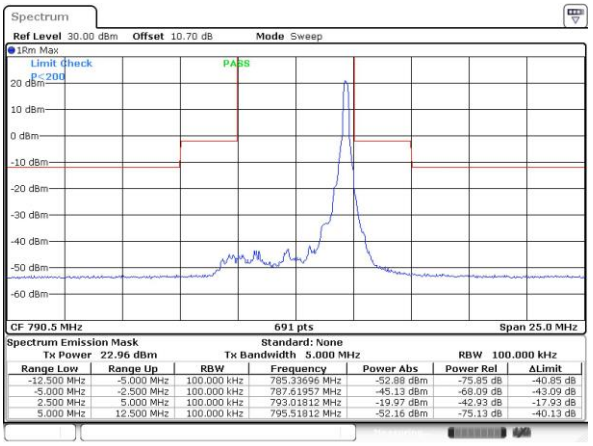
Lowest Channel / Full RB



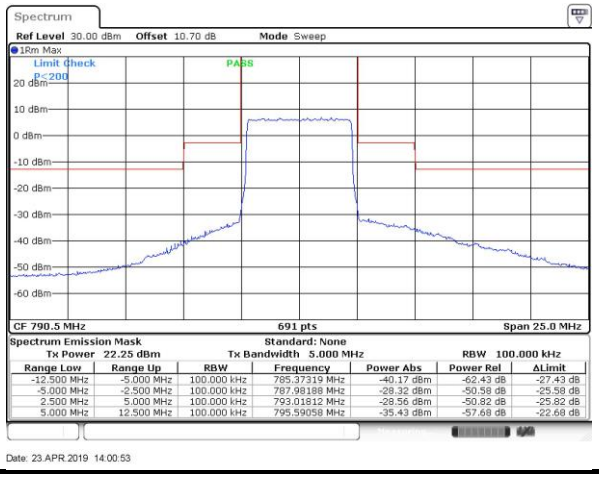
LTE Band 14 / 5MHz / 16QAM

Lowest Channel / 1RB



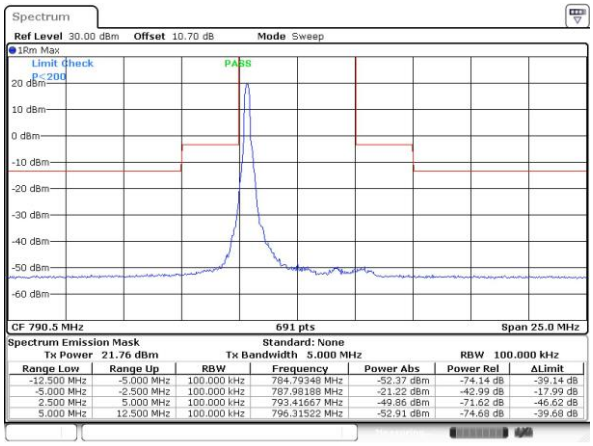


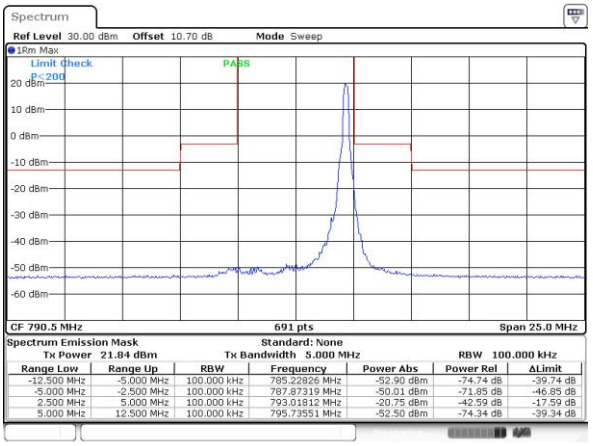
Lowest Channel / Full RB



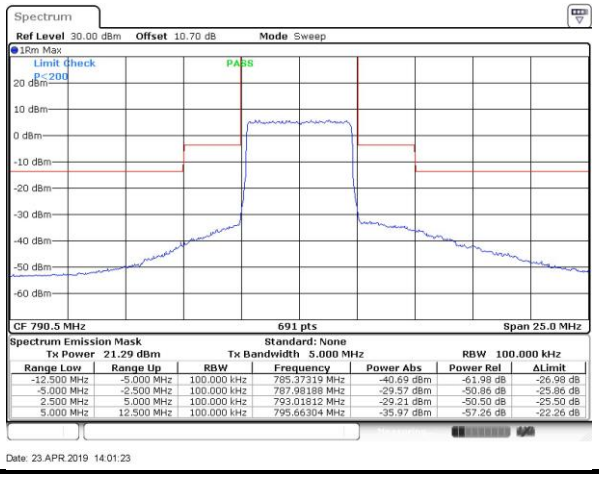
LTE Band 14 / 5MHz / 64QAM

Lowest Channel / 1RB



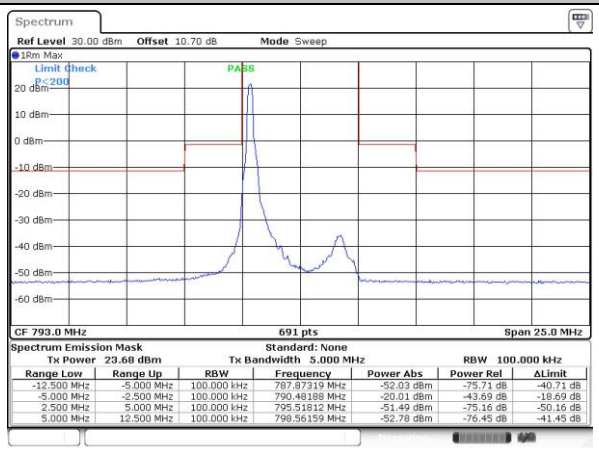


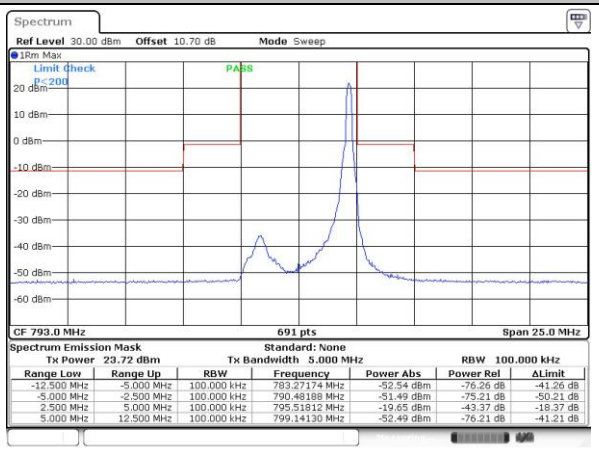
Lowest Channel / Full RB



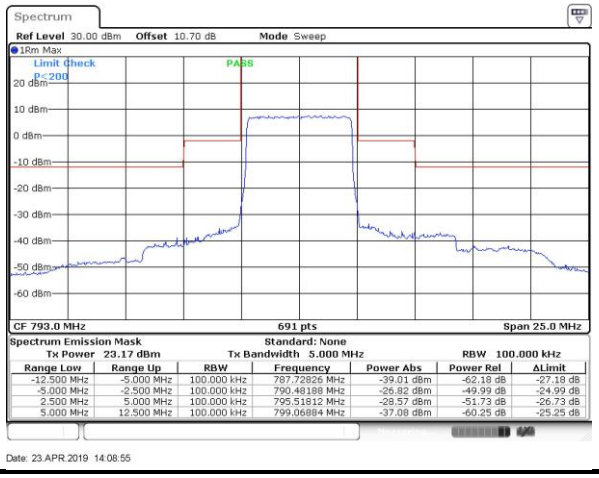
LTE Band 14 / 5MHz / QPSK

Middle Channel / 1RB



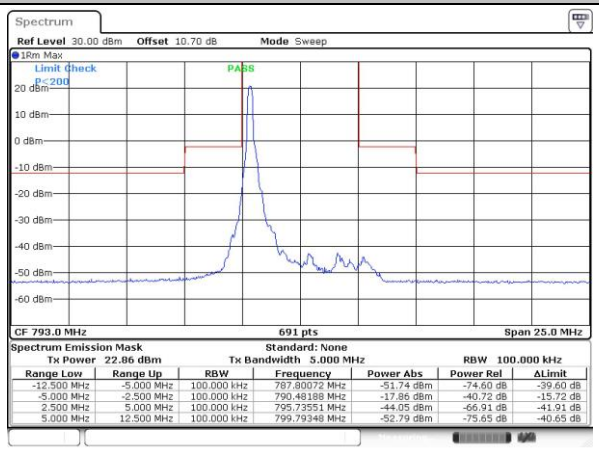


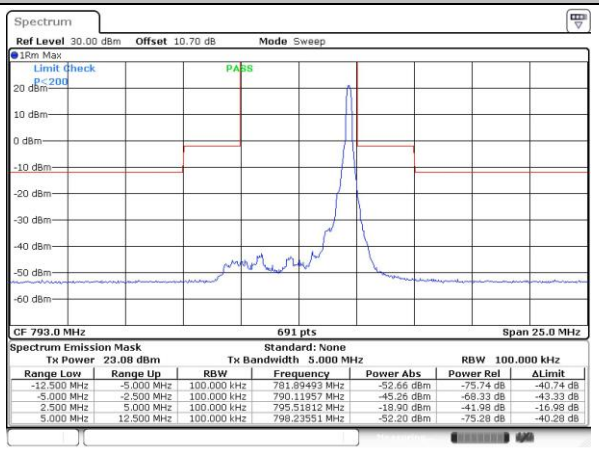
Middle Channel / Full RB



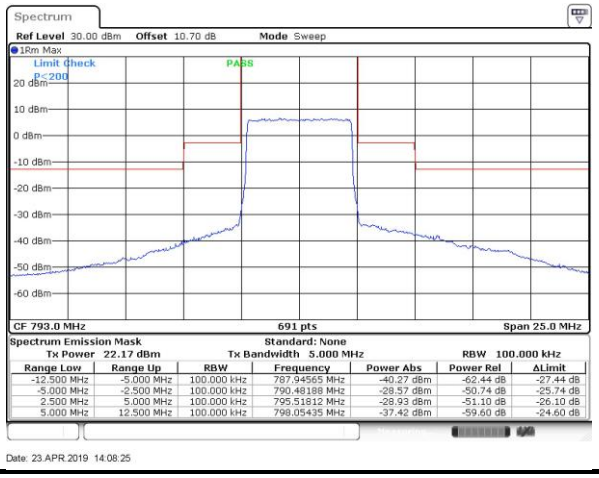
LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB



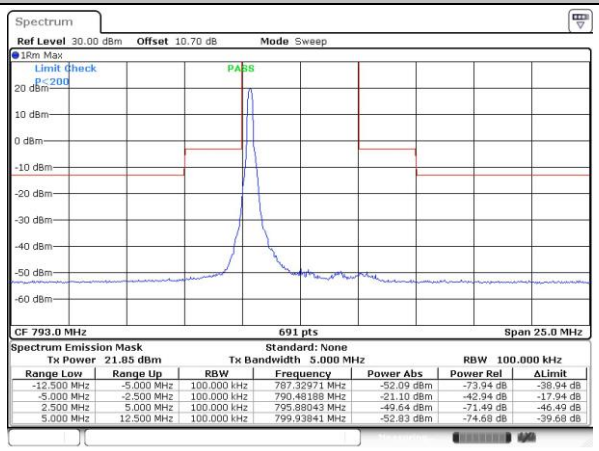


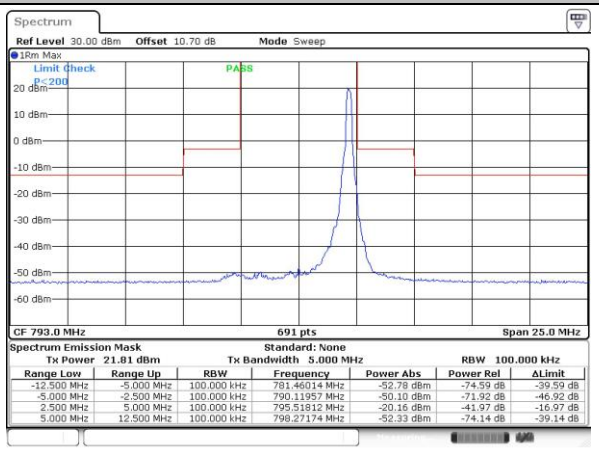
Middle Channel / Full RB



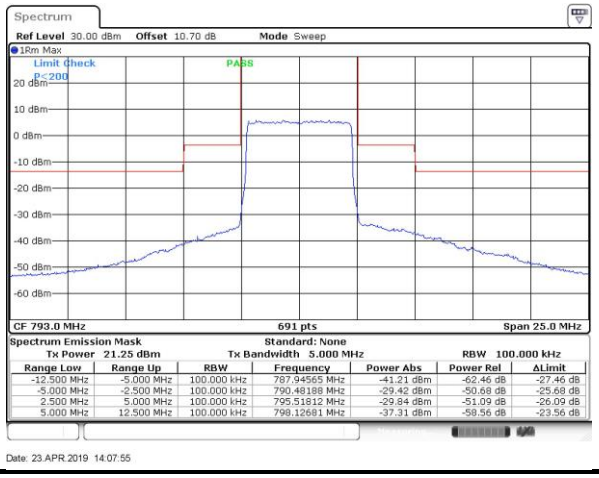
LTE Band 14 / 5MHz / 64QAM

Middle Channel / 1RB



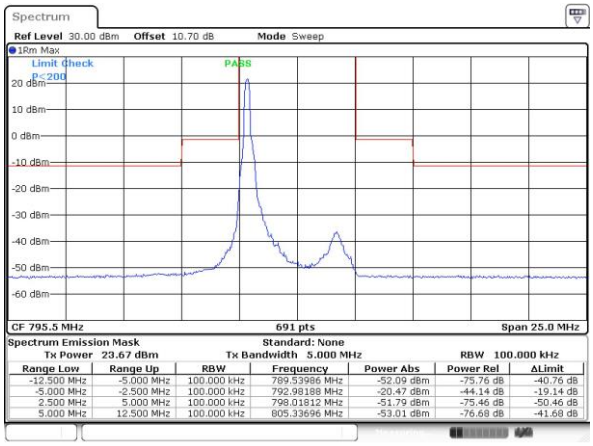


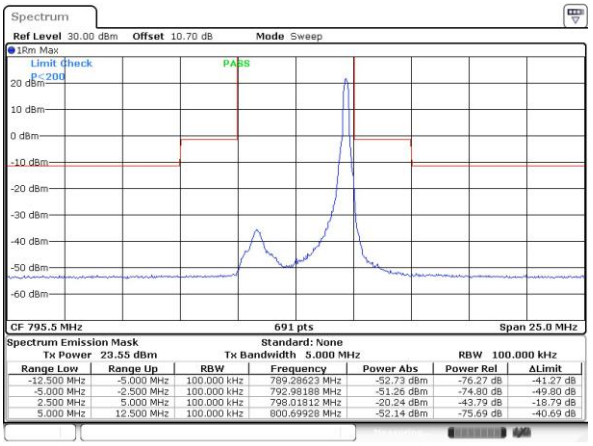
Middle Channel / Full RB



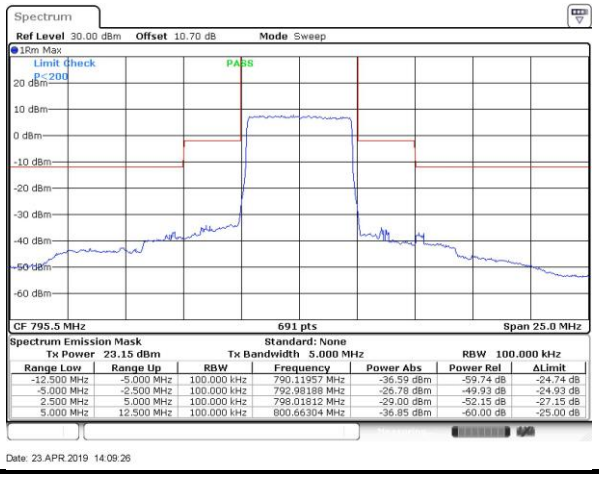
LTE Band 14 / 5MHz / QPSK

Highest Channel / 1RB



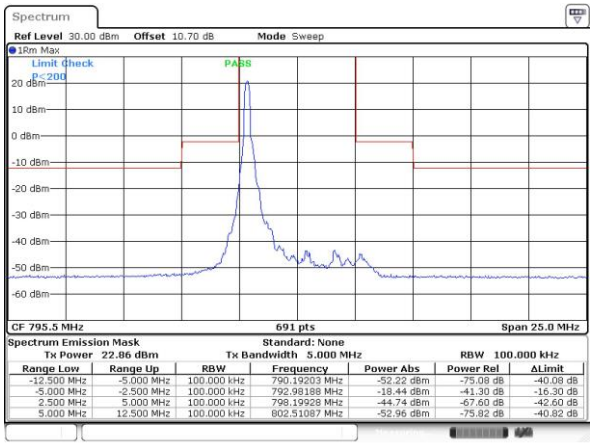


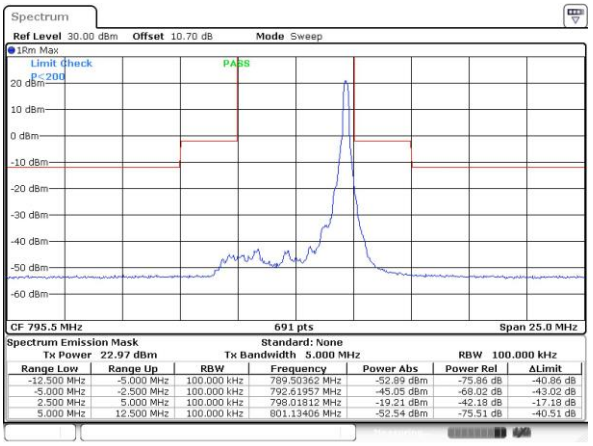
Highest Channel / Full RB



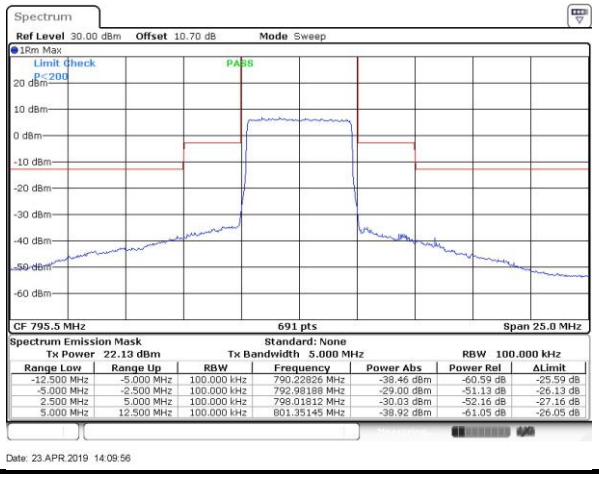
LTE Band 14 / 5MHz / 16QAM

Highest Channel / 1RB



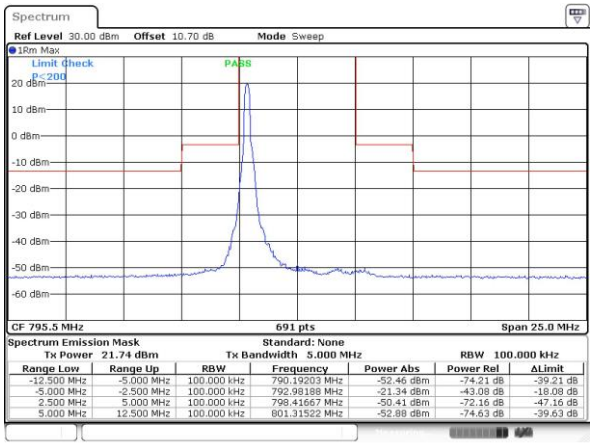


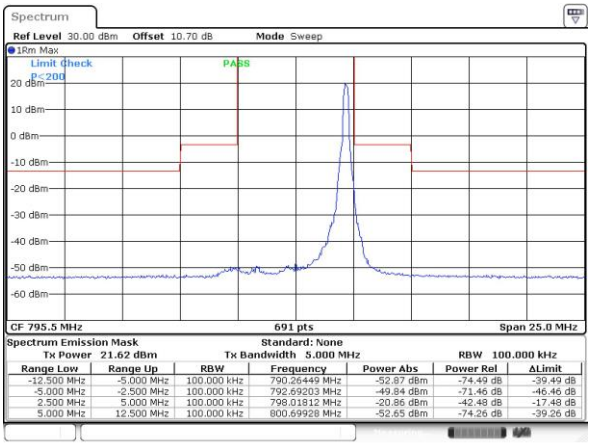
Highest Channel / Full RB



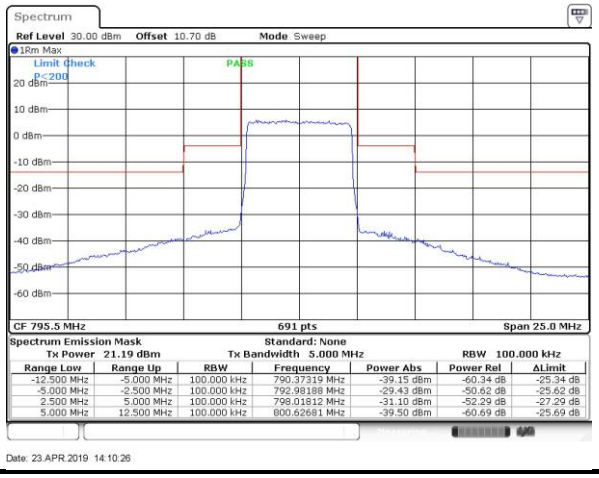
LTE Band 14 / 5MHz / 64QAM

Highest Channel / 1RB



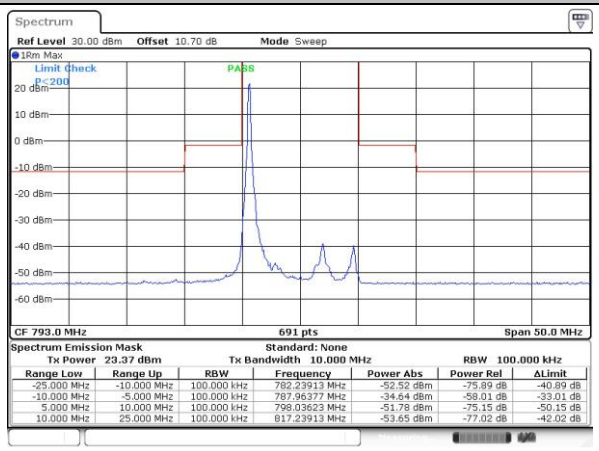


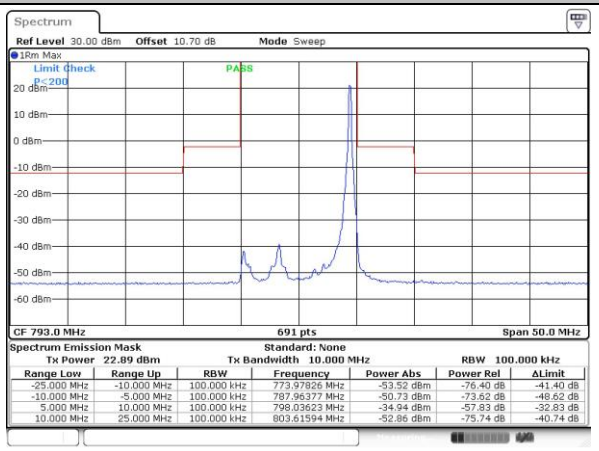
Highest Channel / Full RB



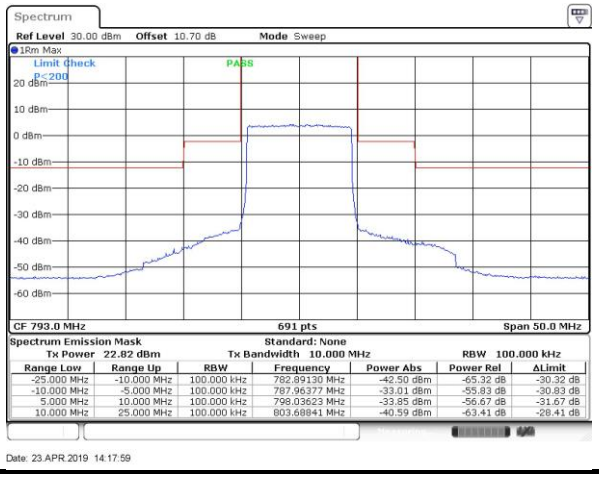
LTE Band 14 / 10MHz / QPSK

Middle Channel / 1RB



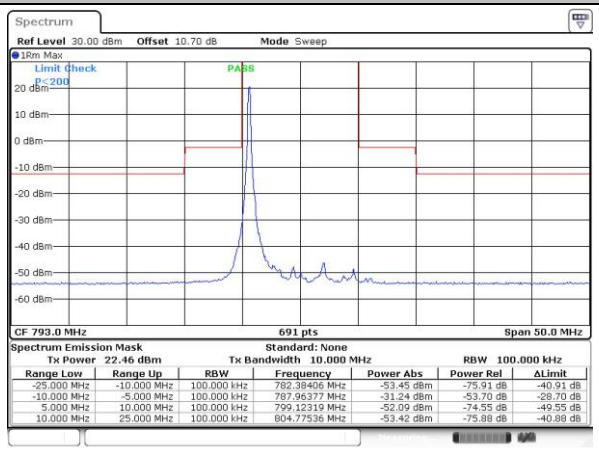


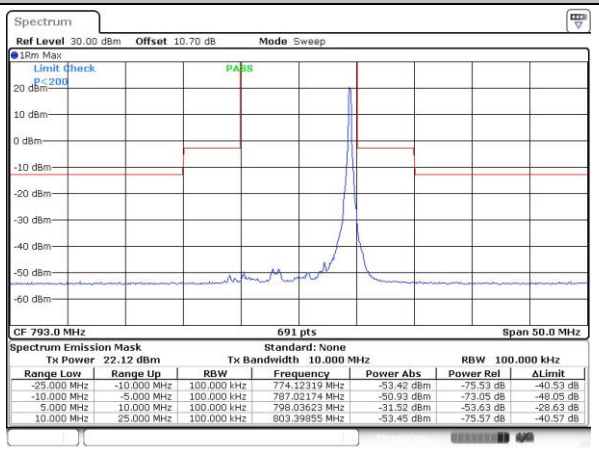
Middle Channel / Full RB



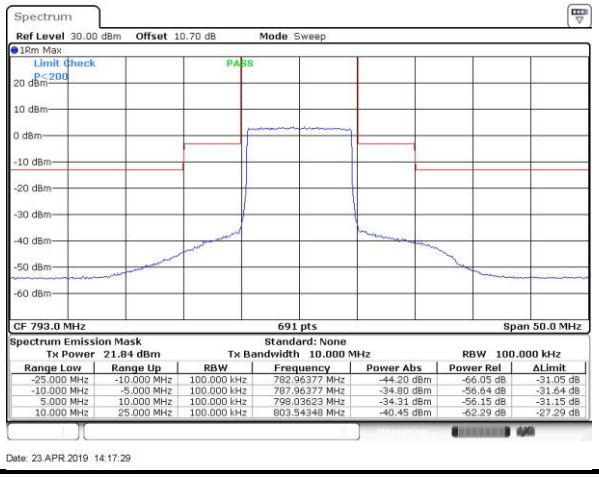
LTE Band 14 / 10MHz / 16QAM

Middle Channel / 1RB



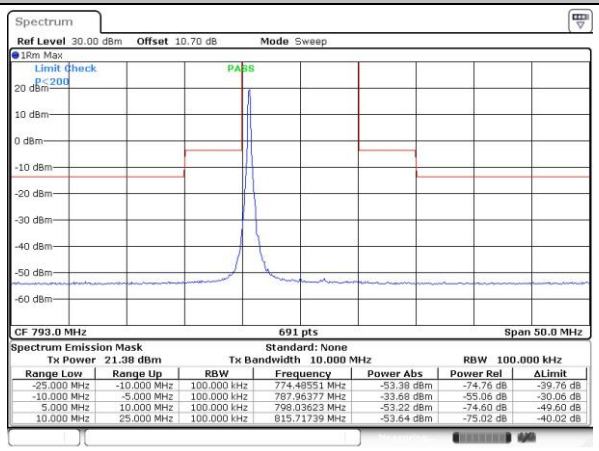


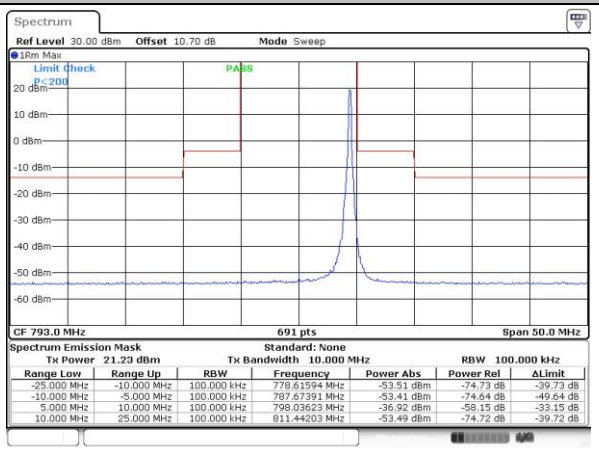
Middle Channel / Full RB



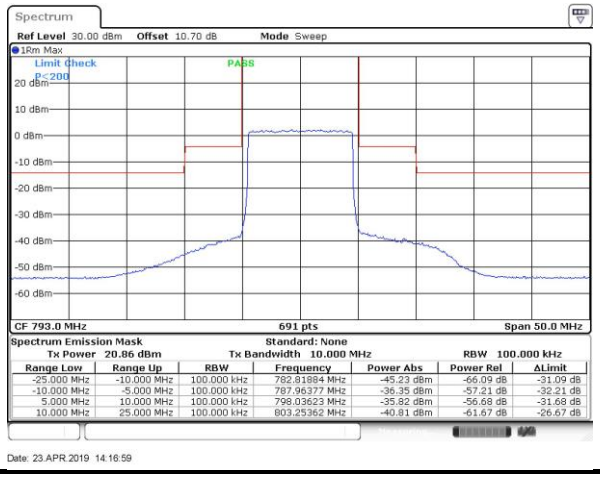
LTE Band 14 / 10MHz / 64QAM

Middle Channel / 1RB





Middle Channel / Full RB



Frequency Stability

Test Conditions		LTE Band 14 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0040	PASS
40	Normal Voltage	0.0052	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0037	
0	Normal Voltage	0.0033	
-10	Normal Voltage	0.0084	
-20	Normal Voltage	0.0048	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0052	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.85 V.；Battery End Point (BEP) =3.5 V.；Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of ERP and Radiated Test

ERP

<For Ant. 0_C>

LTE Band 14 / 5MHz (Average) (GT - LC = 0.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	24.48	0.2805	23.03	0.2009
Middle		1	24	24.43	0.2773	22.98	0.1986
Highest		1	24	24.40	0.2754	22.95	0.1972
Lowest	16QAM	1	12	23.78	0.2388	22.33	0.1710
Middle		1	12	23.75	0.2371	22.30	0.1698
Highest		1	12	23.69	0.2339	22.24	0.1675
Lowest	64QAM	1	24	22.73	0.1875	21.28	0.1343
Middle		1	24	22.67	0.1849	21.22	0.1324
Highest		1	24	22.60	0.1820	21.15	0.1303
Limit	ERP < 3W			Result		PASS	

LTE Band 14 / 10MHz (Average) (GT - LC = 0.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	24.70	0.2951	23.25	0.2113
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	0	23.79	0.2393	22.34	0.1714
Highest		-	-	-	-	-	-
Lowest	64QAM	-	-	-	-	-	-
Middle		1	0	22.77	0.1892	21.32	0.1355
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	

<For Ant. 1>

LTE Band 14 / 5MHz (Average) (GT - LC = -5.4 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	24.48	0.2805	16.93	0.0493
Middle		1	24	24.43	0.2773	16.88	0.0488
Highest		1	24	24.40	0.2754	16.85	0.0484
Lowest	16QAM	1	12	23.78	0.2388	16.23	0.0420
Middle		1	12	23.75	0.2371	16.20	0.0417
Highest		1	12	23.69	0.2339	16.14	0.0411
Lowest	64QAM	1	24	22.73	0.1875	15.18	0.0330
Middle		1	24	22.67	0.1849	15.12	0.0325
Highest		1	24	22.60	0.1820	15.05	0.0320
Limit	ERP < 3W			Result		PASS	

LTE Band 14 / 10MHz (Average) (GT - LC = -5.4 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	24.70	0.2951	17.15	0.0519
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	0	23.79	0.2393	16.24	0.0421
Highest		-	-	-	-	-	-
Lowest	64QAM	-	-	-	-	-	-
Middle		1	0	22.77	0.1892	15.22	0.0333
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	

Radiated Spurious Emission

<Ant. 0_C>

LTE Band 14

LTE Band 14 / 5MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1584	-60.50	-42.15	-18.35	-70.58	-65.87	0.90	8.42	H
	2378	-50.56	-13	-37.56	-65.05	-57.82	1.12	10.53	H
	3171	-54.85	-13	-41.85	-70.73	-63.11	1.30	11.71	H
									H
									H
									H
	1584	-61.19	-42.15	-19.04	-70.80	-66.56	0.90	8.42	V
	2378	-49.60	-13	-36.60	-63.94	-56.86	1.12	10.53	V
	3171	-54.49	-13	-41.49	-70.84	-62.75	1.30	11.71	V
									V
									V
									V
Middle	1592	-60.52	-42.15	-18.37	-70.45	-65.92	0.90	8.45	H
	2385	-50.98	-13	-37.98	-65.46	-58.24	1.12	10.54	H
	3184	-54.82	-13	-41.82	-70.70	-63.11	1.30	11.74	H
									H
									H
									H
	1592	-60.92	-42.15	-18.77	-70.50	-66.32	0.90	8.45	V
	2385	-50.63	-13	-37.63	-64.96	-57.89	1.12	10.54	V
	3184	-54.50	-13	-41.50	-70.85	-62.79	1.30	11.74	V
									V
									V
									V

Highest	1595	-60.66	-42.15	-18.51	-70.60	-66.07	0.90	8.46	H
	2392	-51.50	-13	-38.50	-65.86	-58.77	1.13	10.55	H
	3192	-54.94	-13	-41.94	-70.85	-63.25	1.30	11.76	H
									H
									H
									H
									H
	1595	-61.18	-42.15	-19.03	-70.76	-66.59	0.90	8.46	V
	2392	-49.97	-13	-36.97	-64.29	-57.24	1.13	10.55	V
	3192	-54.31	-13	-41.31	-70.73	-62.62	1.30	11.76	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 14 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1577	-60.83	-42.15	-18.68	-70.9	-66.18	0.90	8.39	H
	2368	-51.30	-13	-38.30	-65.91	-58.54	1.12	10.52	H
	3154	-55.24	-13	-42.24	-71.1	-63.46	1.30	11.67	H
									H
									H
									H
									H
	1577	-61.11	-42.15	-18.96	-70.71	-66.46	0.90	8.39	V
	2368	-51.81	-13	-38.81	-66.16	-59.05	1.12	10.52	V
	3154	-54.72	-13	-41.72	-71.02	-62.94	1.30	11.67	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

<Ant. 1>

LTE Band 14

LTE Band 14 / 5MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1584	-57.56	-42.15	-15.41	-67.64	-62.93	0.90	8.42	H
	2376	-56.16	-13	-43.16	-70.65	-63.41	1.12	10.53	H
	3168	-54.53	-13	-41.53	-70.41	-62.78	1.30	11.70	H
									H
									H
									H
	1584	-53.73	-42.15	-11.58	-63.34	-59.10	0.90	8.42	V
	2376	-56.71	-13	-43.71	-71.05	-63.96	1.12	10.53	V
	3168	-53.90	-13	-40.90	-70.25	-62.15	1.30	11.70	V
									V
									V
									V
Middle	1592	-55.18	-42.15	-13.03	-65.11	-60.58	0.90	8.45	H
	2385	-55.92	-13	-42.92	-70.40	-63.18	1.12	10.54	H
	3180	-54.16	-13	-41.16	-70.04	-62.44	1.30	11.73	H
									H
									H
									H
	1592	-52.61	-42.15	-10.46	-62.19	-58.01	0.90	8.45	V
	2385	-56.43	-13	-43.43	-70.76	-63.69	1.12	10.54	V
	3180	-54.00	-13	-41.00	-70.35	-62.28	1.30	11.73	V
									V
									V
									V

Highest	1592	-56.65	-42.15	-14.50	-66.58	-62.05	0.90	8.45	H
	2392	-56.40	-13	-43.40	-70.76	-63.67	1.13	10.55	H
	3190	-54.59	-13	-41.59	-70.50	-62.89	1.30	11.76	H
									H
									H
									H
									H
	1592	-52.94	-42.15	-10.79	-62.52	-58.34	0.90	8.45	V
	2392	-56.68	-13	-43.68	-71.00	-63.95	1.13	10.55	V
	3190	-54.54	-13	-41.54	-70.96	-62.84	1.30	11.76	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 14 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1576	-52.89	-42.15	-10.74	-62.96	-58.23	0.90	8.39	H
	2364	-56.53	-13	-43.53	-71.14	-63.77	1.12	10.51	H
	3152	-55.31	-13	-42.31	-71.17	-63.53	1.30	11.66	H
									H
									H
									H
									H
	1576	-52.40	-42.15	-10.25	-62	-57.74	0.90	8.39	V
	2364	-56.51	-13	-43.51	-70.86	-63.75	1.12	10.51	V
	3152	-54.74	-13	-41.74	-71.04	-62.96	1.30	11.66	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.