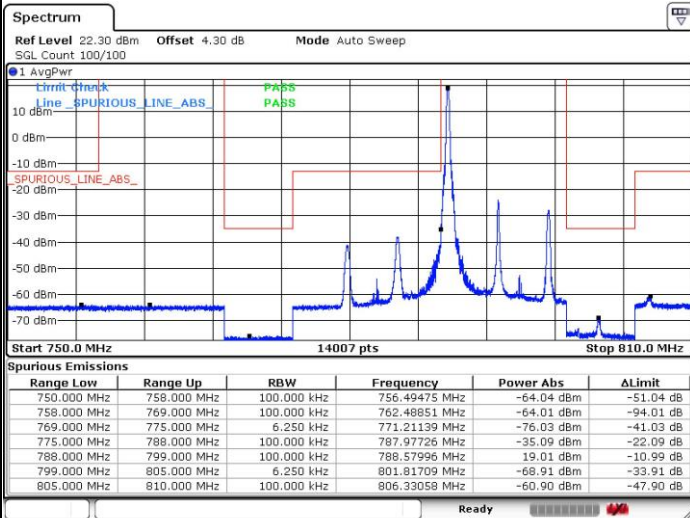




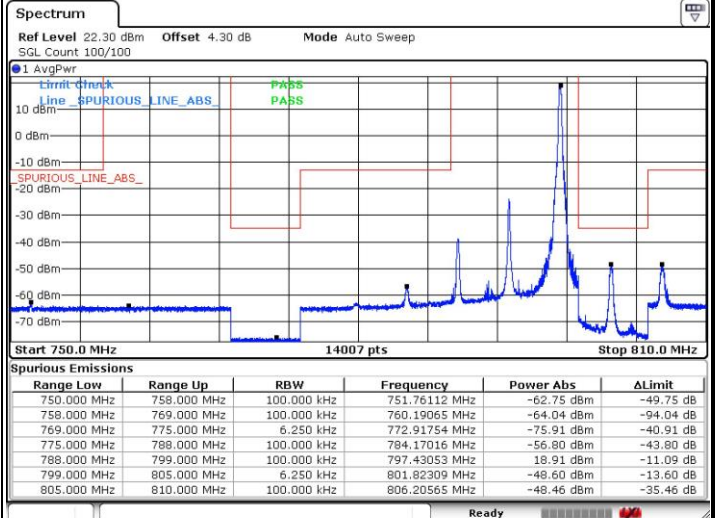
LTE Band 14 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

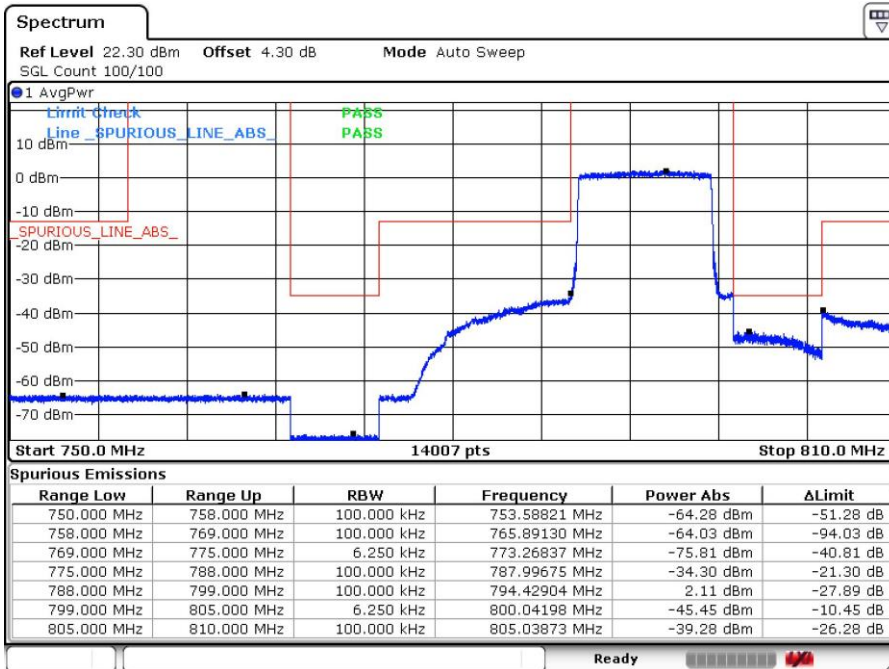


Date: 9 SEP.2018 02:32:33



Date: 9 SEP.2018 02:36:00

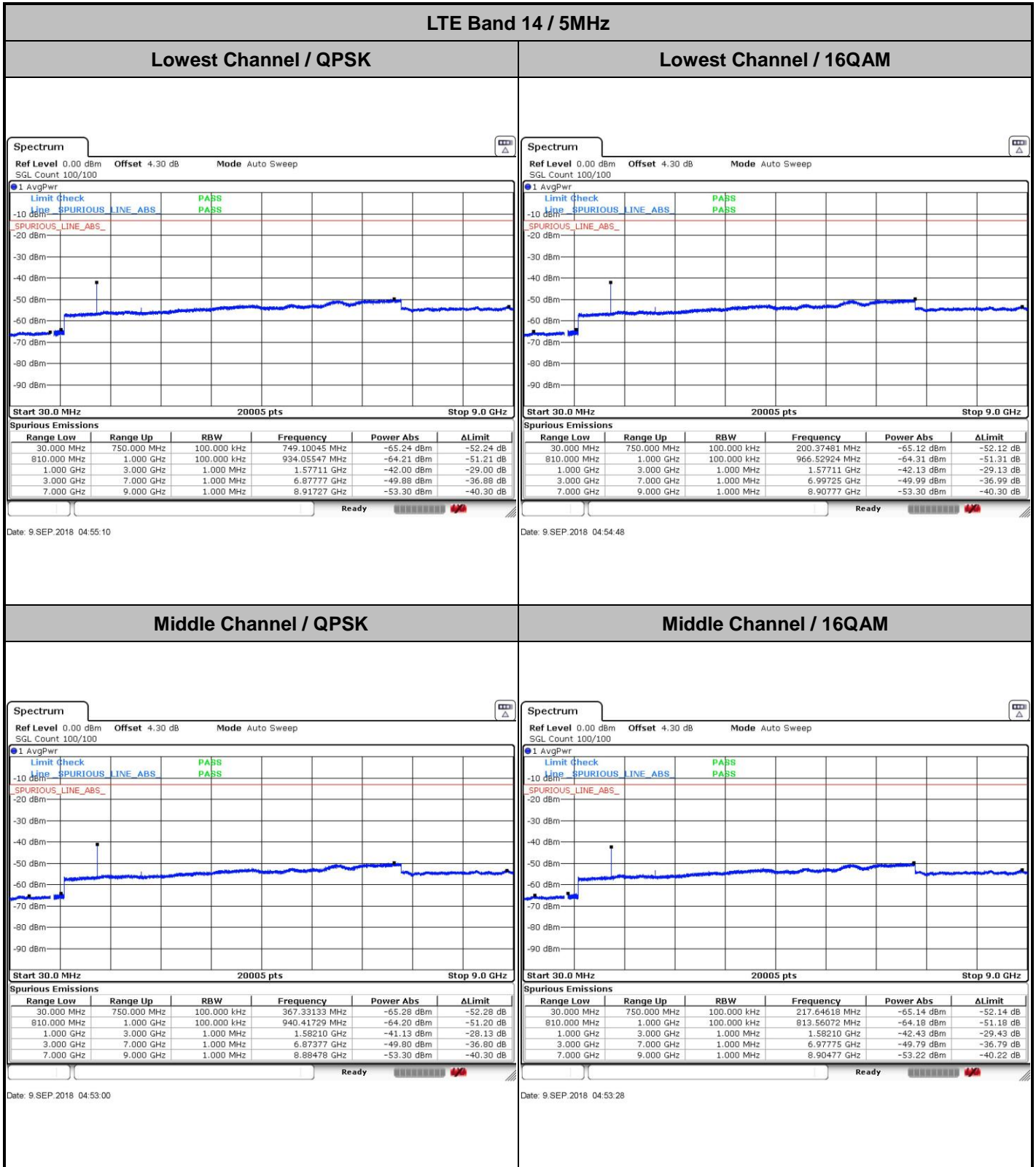
Band Edge / Full RB



Date: 9 SEP.2018 02:32:04



# Conducted Spurious Emission

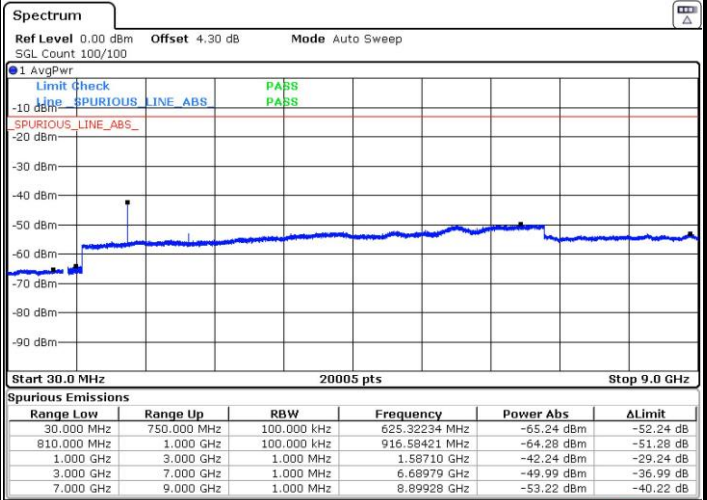
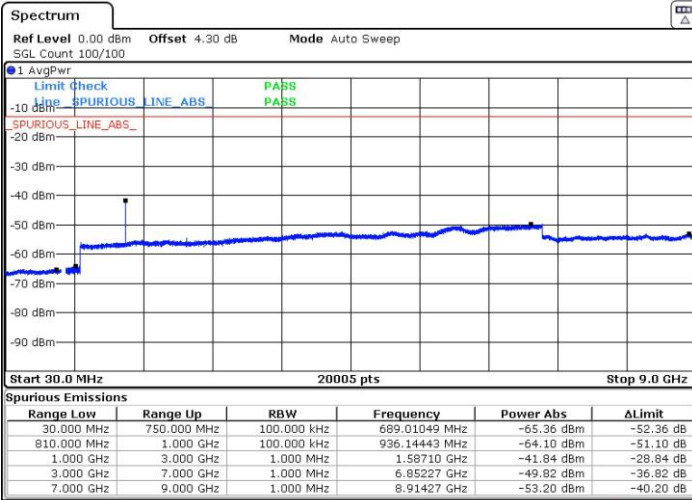




LTE Band 14 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



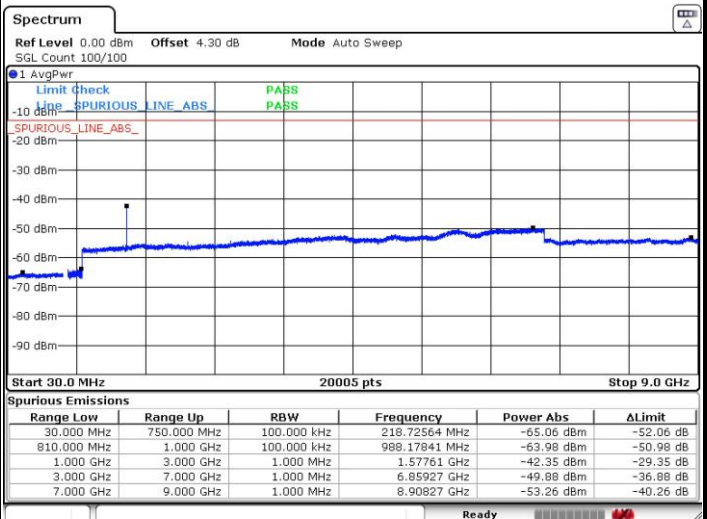
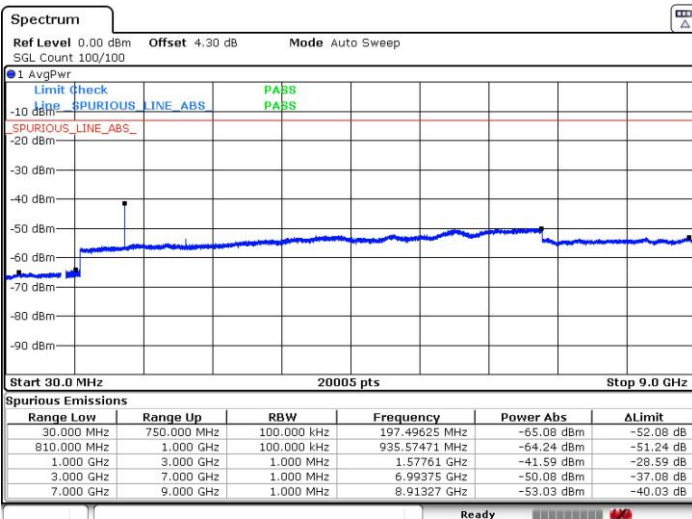
Date: 9 SEP.2018 04:55:37

Date: 9 SEP.2018 04:56:00

LTE Band 14 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 9 SEP.2018 04:52:07

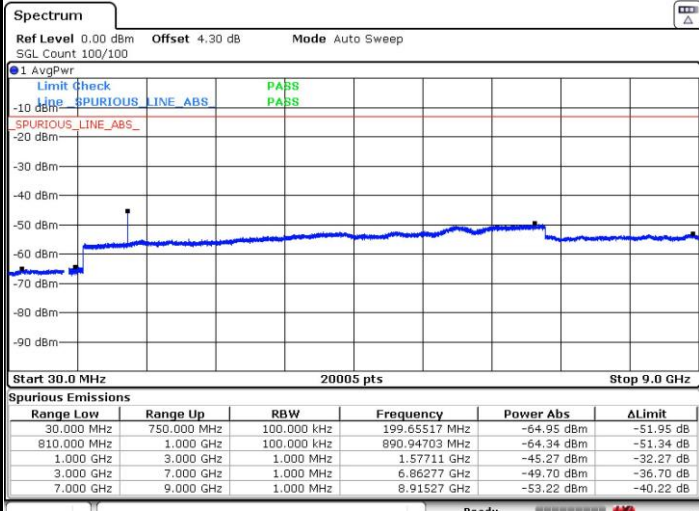
Date: 9 SEP.2018 04:51:28



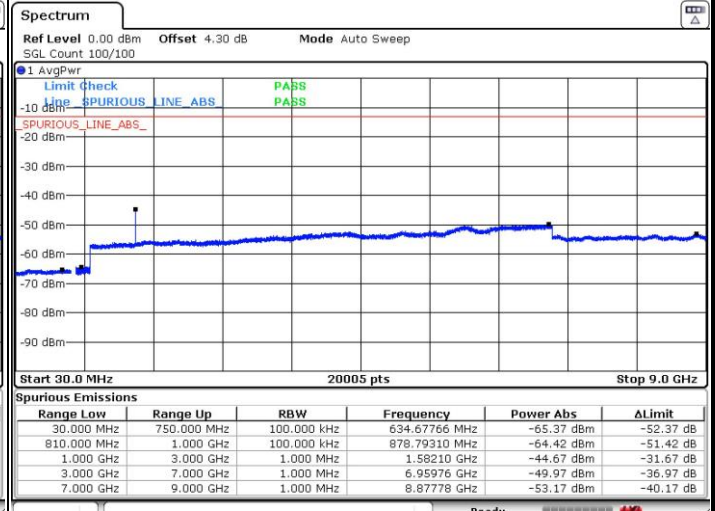
LTE Band 14 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

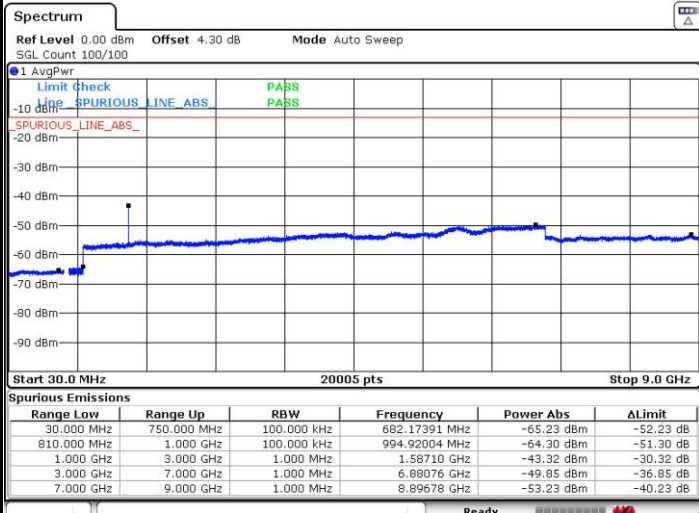


Date: 9 SEP.2018 04:54:23



Date: 9 SEP.2018 04:53:53

Highest Channel / 64QAM

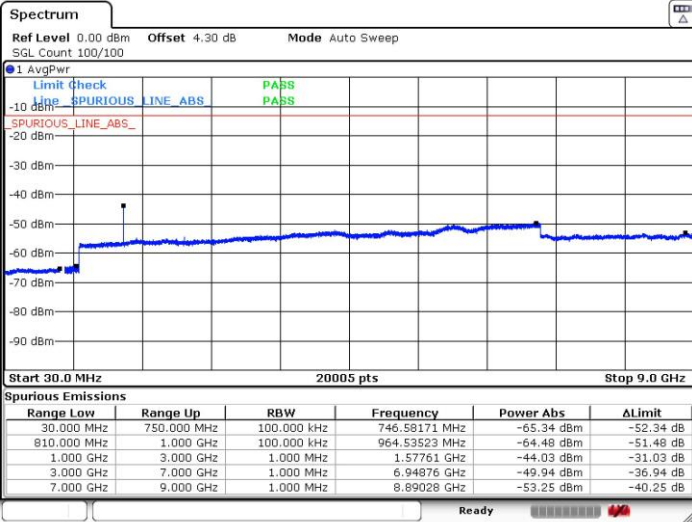


Date: 9 SEP.2018 04:56:38



LTE Band 14 / 10MHz

Middle Channel / 64QAM



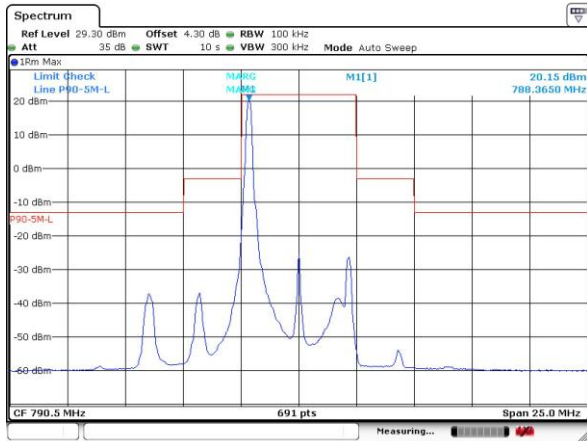
Date: 9.SEP.2018 04:51:06



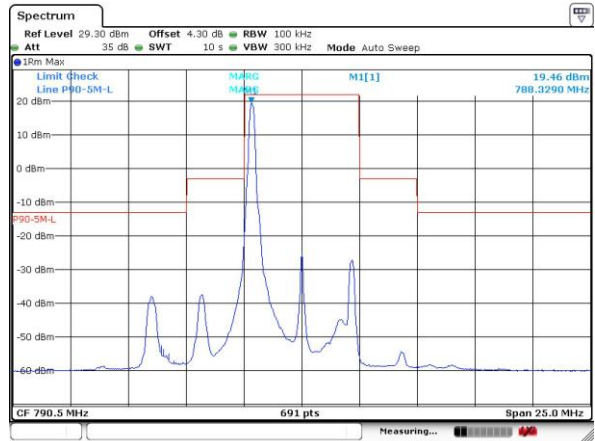
# Emission Mask

## LTE Band 14/ 5M(1RB0)

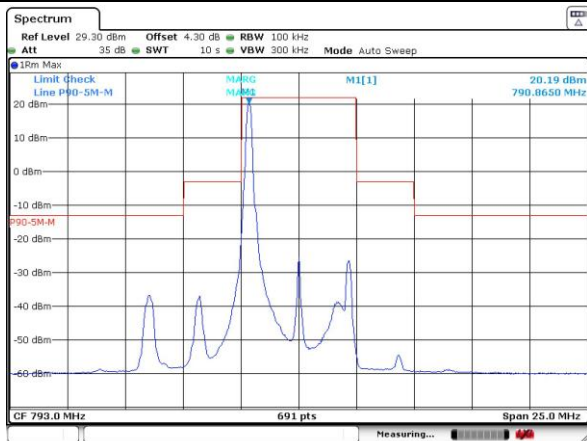
### Lowest Channel / 5MHz / QPSK



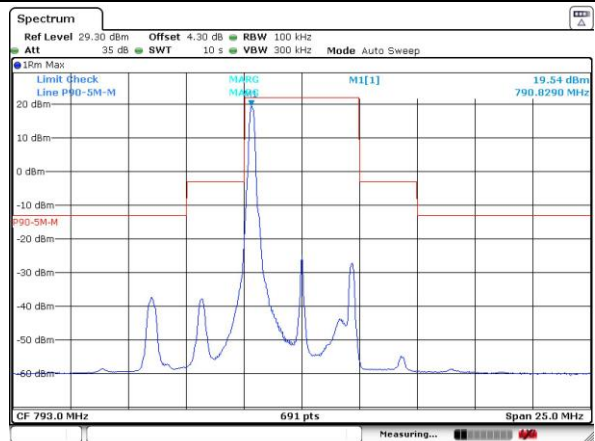
### Lowest Channel / 5MHz / 16QAM



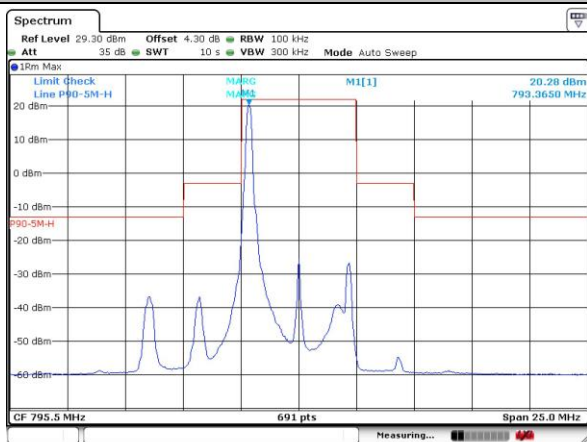
### Middle Channel / 5MHz / QPSK



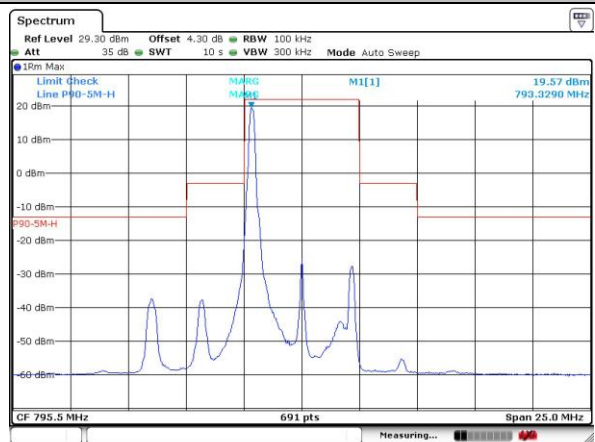
### Middle Channel / 5MHz / 16QAM



### Highest Channel / 5MHz / QPSK



### Highest Channel / 5MHz / 16QAM

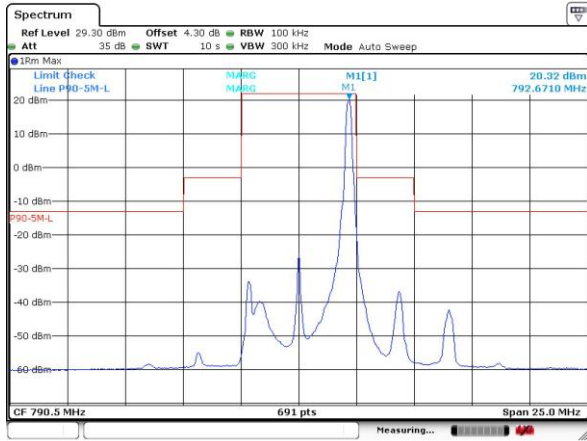






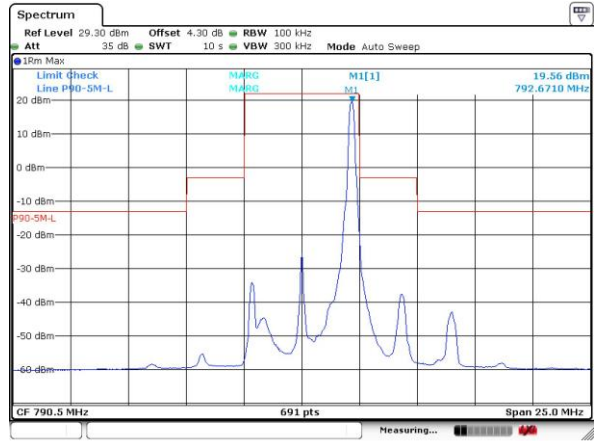
LTE Band 14/ 5M(1RBmax)

Lowest Channel / 5MHz / QPSK



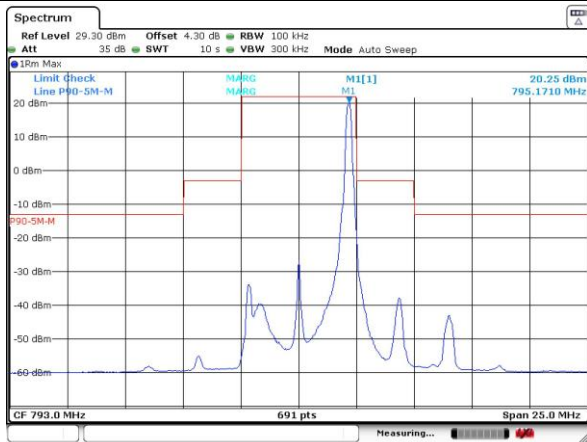
Date: 9.SEP.2018 04:23:31

Lowest Channel / 5MHz / 16QAM



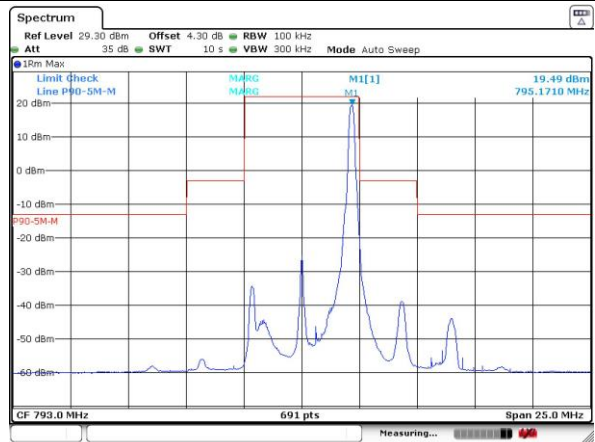
Date: 9.SEP.2018 04:24:29

Middle Channel / 5MHz / QPSK



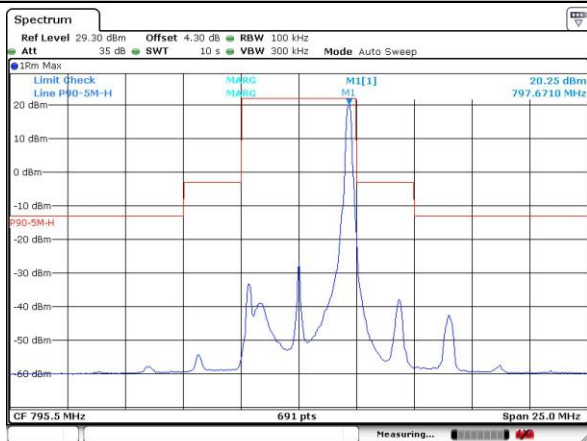
Date: 9.SEP.2018 04:06:02

Middle Channel / 5MHz / 16QAM



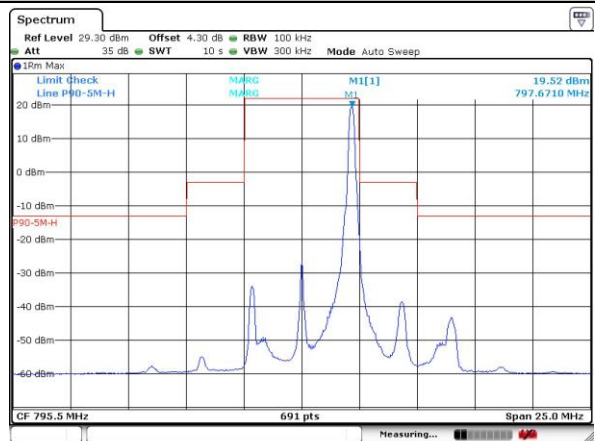
Date: 9.SEP.2018 04:07:08

Highest Channel / 5MHz / QPSK



Date: 9.SEP.2018 04:17:49

Highest Channel / 5MHz / 16QAM

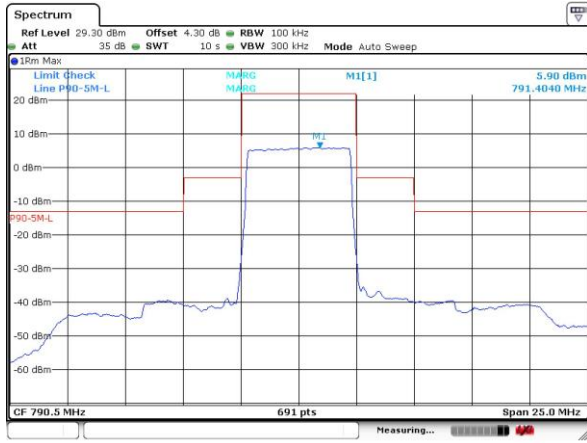


Date: 9.SEP.2018 04:17:11

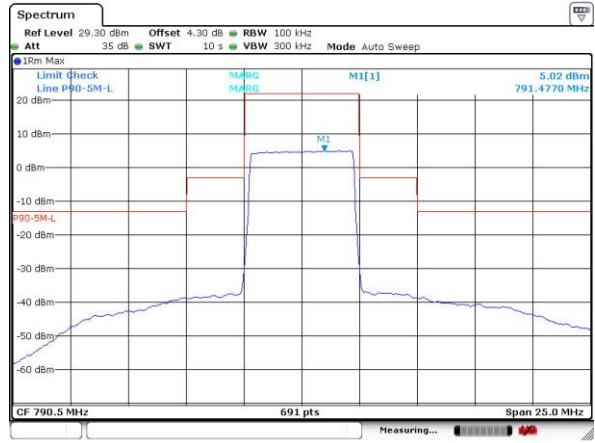


LTE Band 14/ 5M(fullIRB0)

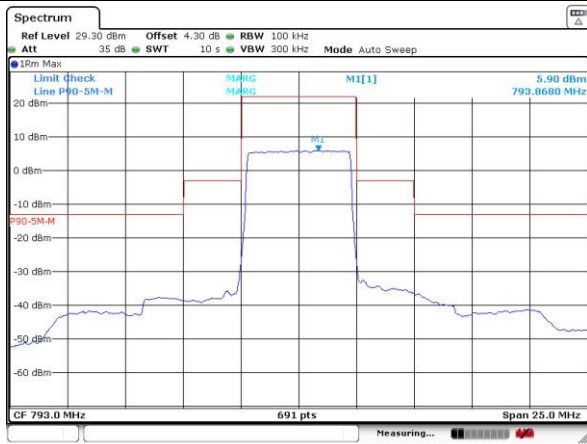
Lowest Channel / 5MHz / QPSK



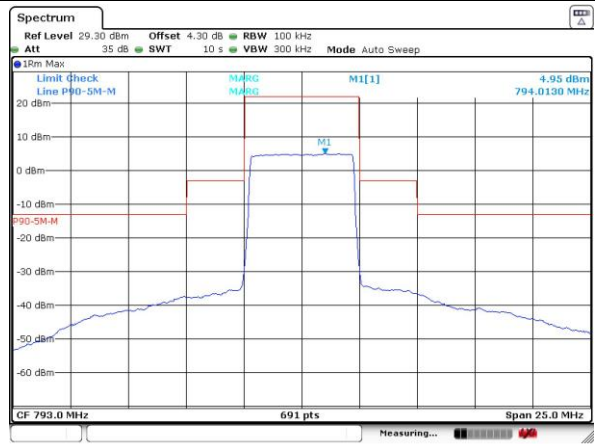
Lowest Channel / 5MHz / 16QAM



Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

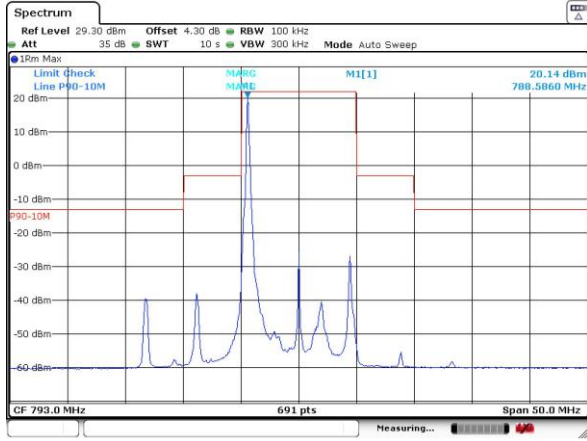






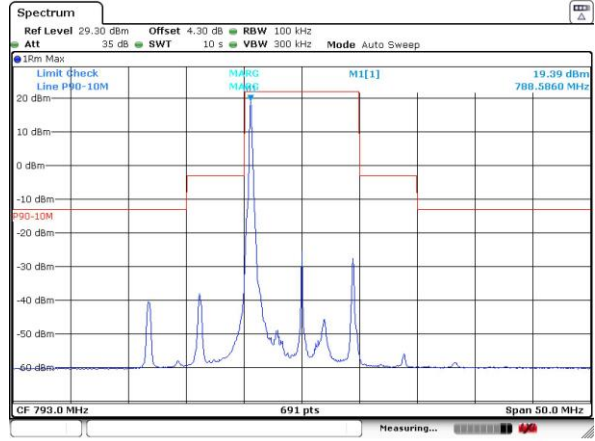
LTE Band 14/ 10MHz

Middle Channel / 1RB0 / QPSK



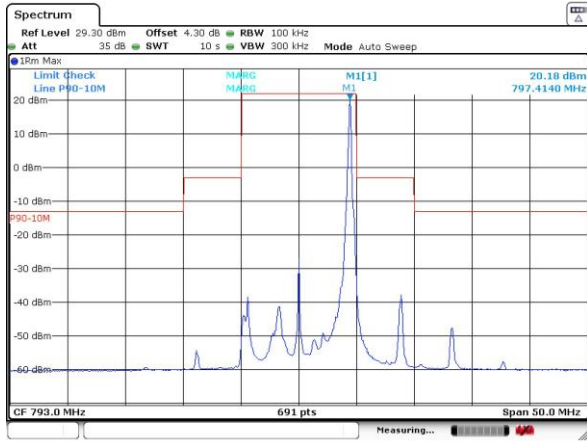
Date: 9.SEP.2018 03:55:12

Middle Channel / 1RB0 / 16QAM



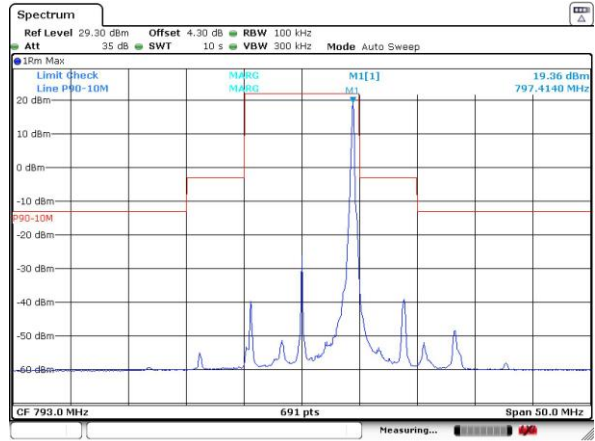
Date: 9.SEP.2018 03:54:46

Middle Channel / 1RBmax / QPSK



Date: 9.SEP.2018 03:52:58

Middle Channel / 1RBmax / 16QAM



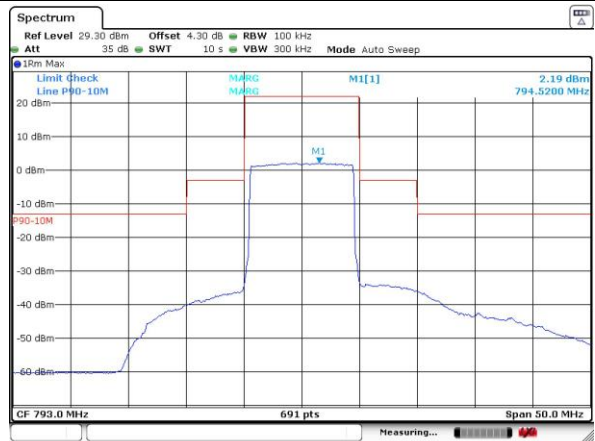
Date: 9.SEP.2018 03:52:21

Middle Channel / fullRB0 / QPSK



Date: 9.SEP.2018 03:55:49

Middle Channel / fullRB0 / 16QAM

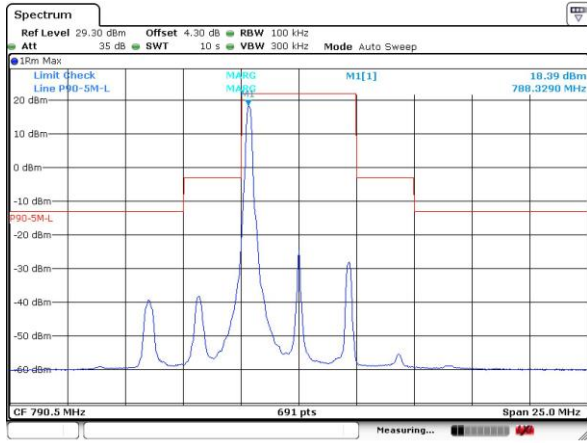


Date: 9.SEP.2018 03:56:48

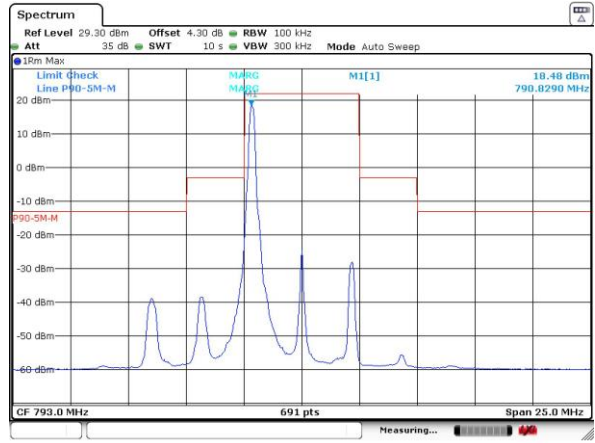


LTE Band 14/ 5MHz

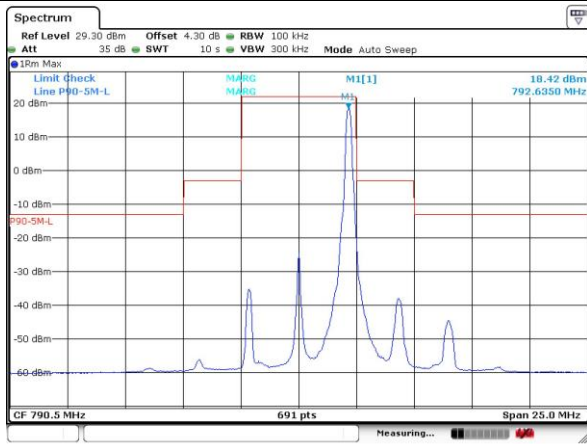
Lowest Channel / 1RB0 / 64QAM



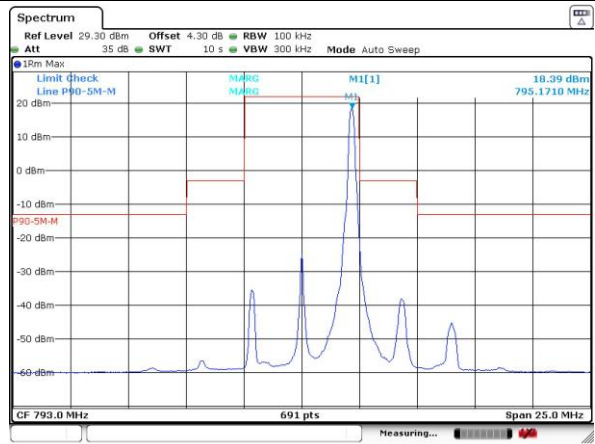
Middle Channel / 1RB0 / 64QAM



Lowest Channel / 1RBmax / 64QAM



Middle Channel / 1RBmax / 64QAM



Lowest Channel / fullRB0 / 64QAM



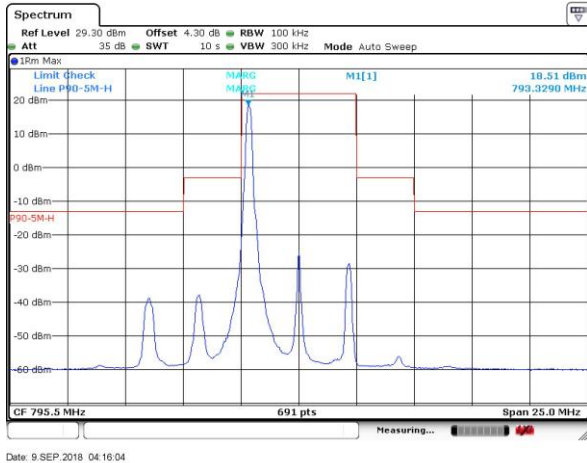
Middle Channel / fullRB0 / 64QAM



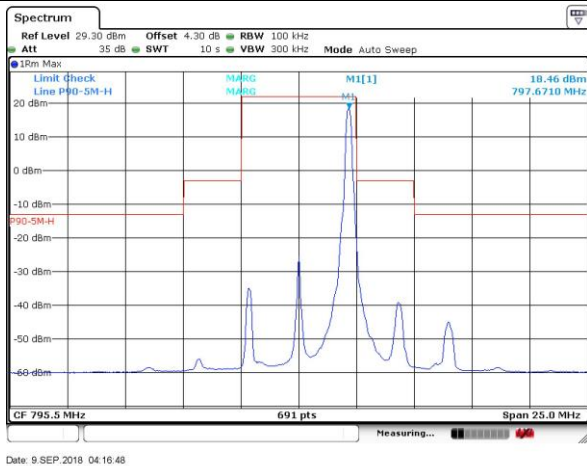


LTE Band 14/ 5MHz

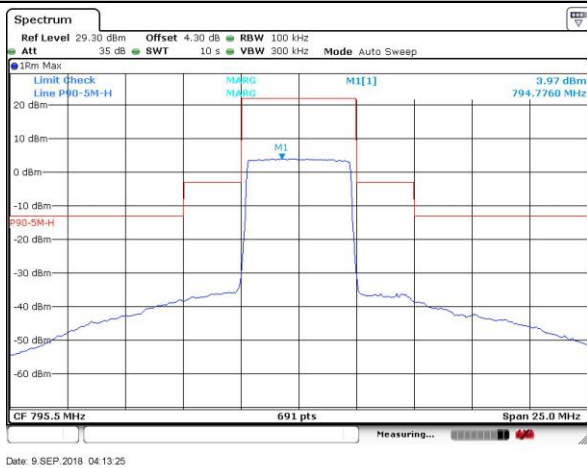
Highest Channel / 1RB0 / 64QAM



Highest Channel / 1RBmax / 64QAM



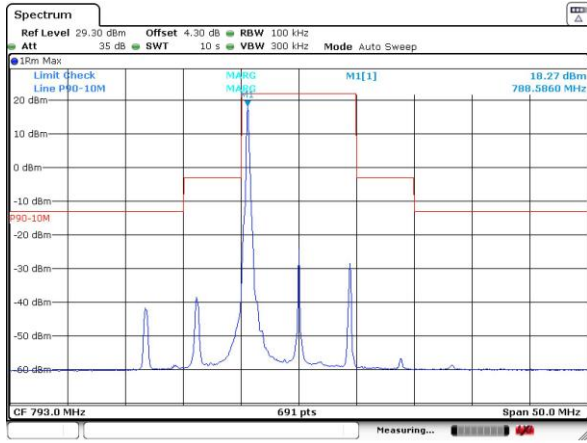
Highest Channel / fullRB0 / 64QAM



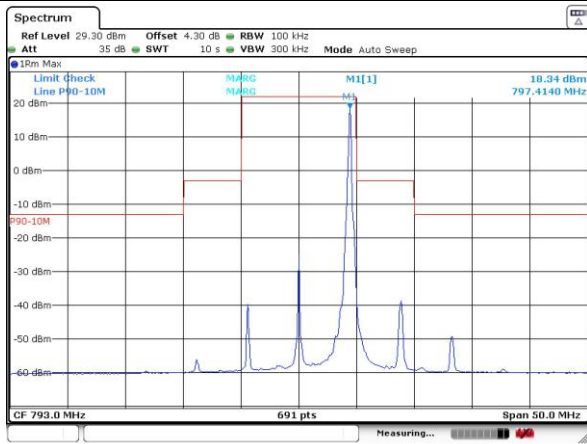


LTE Band 14/ 10MHz

Middle Channel / 1RB0 / 64QAM



Middle Channel / 1RBmax / 64QAM



Middle Channel / fullRB0 / 64QAM





### 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	0.0044	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0042	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0034	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0024	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



### Appendix B. Test Results of ERP/EIRP and Radiated Test

**ERP**

LTE Band 14 / 5MHz (Average) (GT - LC = -3.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	23.26	0.2118	17.41	0.0551
Middle		1	0	23.31	0.2143	17.46	0.0557
Highest		1	0	23.33	0.2153	17.48	0.0560
Lowest	16QAM	1	0	22.57	0.1807	16.72	0.0470
Middle		1	0	22.68	0.1854	16.83	0.0482
Highest		1	0	22.77	0.1892	16.92	0.0492
Lowest	64QAM	1	12	21.55	0.1429	15.70	0.0372
Middle		1	12	21.63	0.1455	15.78	0.0378
Highest		1	12	21.56	0.1432	15.71	0.0372
Limit	ERP < 3W			Result		PASS	

LTE Band 14 / 10MHz (Average) (GT - LC = -3.7 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	23.34	0.2158	17.49	0.0561
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	25	22.71	0.1866	16.86	0.0485
Highest		-	-	-	-	-	-
Lowest	64QAM	-	-	-	-	-	-
Middle		1	25	21.58	0.1439	15.73	0.0374
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	





**Radiated Spurious Emission**

**Part90R LTE Band 14**

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	-60.69	-42.15	-18.54	-72.52	-65.83	1.20	8.49	H
	2368	-45.04	-13	-32.04	-61.08	-51.87	1.42	10.39	H
	3152	-58.97	-13	-45.97	-76.33	-66.59	1.58	11.36	H
									H
									H
									H
									H
	1576	-63.75	-42.15	-21.60	-73.88	-68.89	1576	-63.75	V
	2368	-50.05	-13	-37.05	-65.12	-56.88	2368	-50.05	V
	3152	-59.87	-13	-46.87	-76.67	-67.49	3152	-59.87	V
									V
									V
									V
									V

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