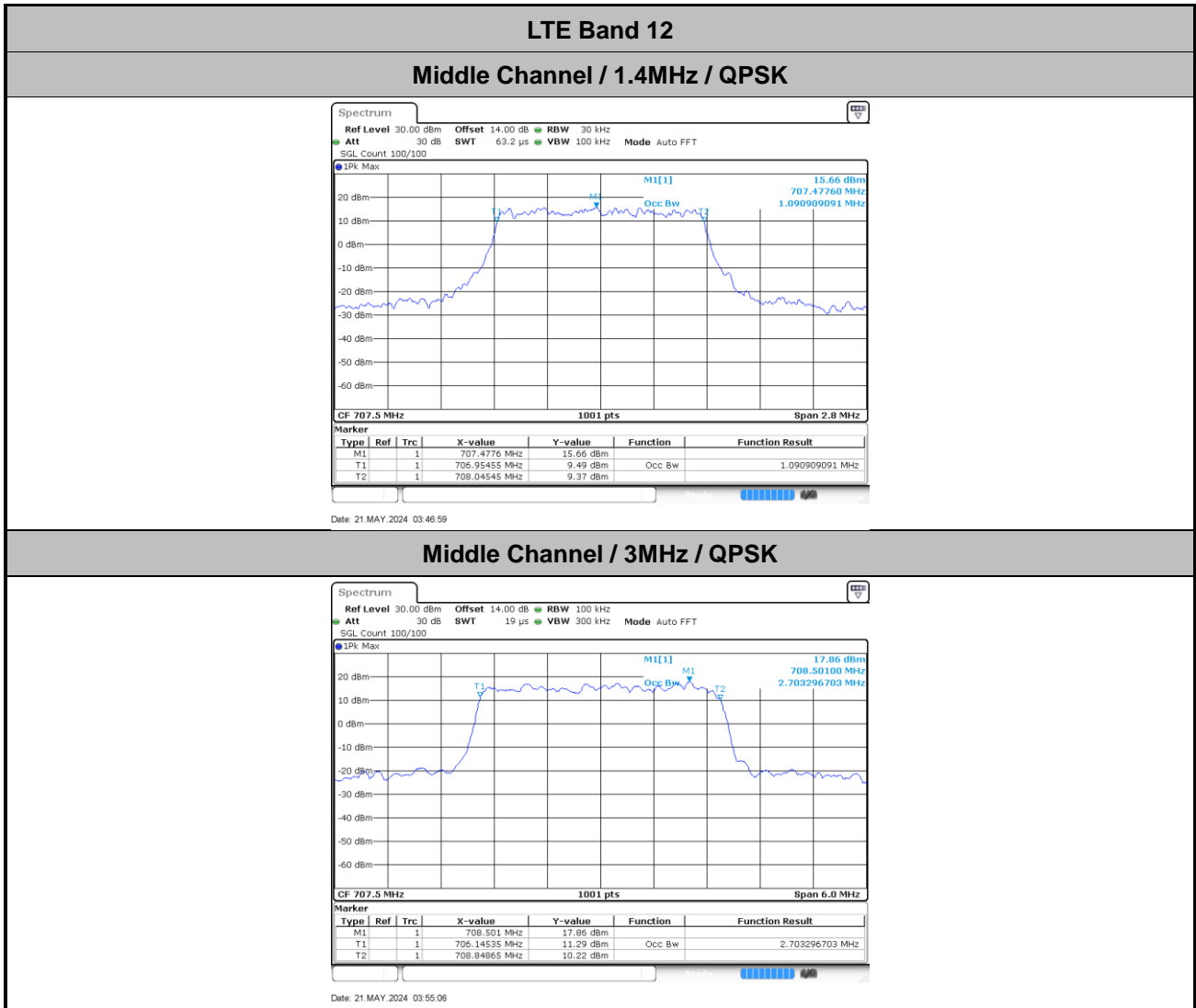




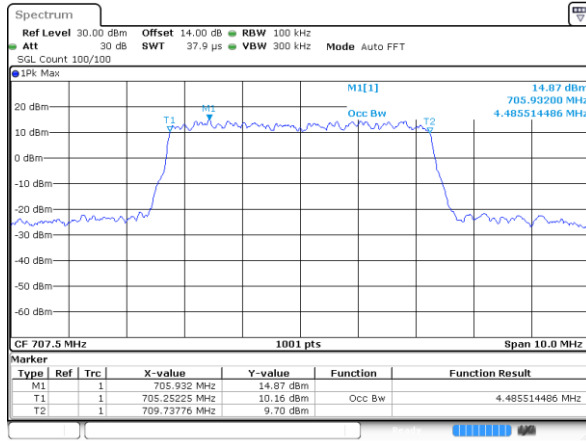
# Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)			
BW	1.4MHz	3MHz	5MHz	10MHz
Mod.	QPSK	QPSK	QPSK	QPSK
Middle CH	1.09	2.70	4.49	8.99





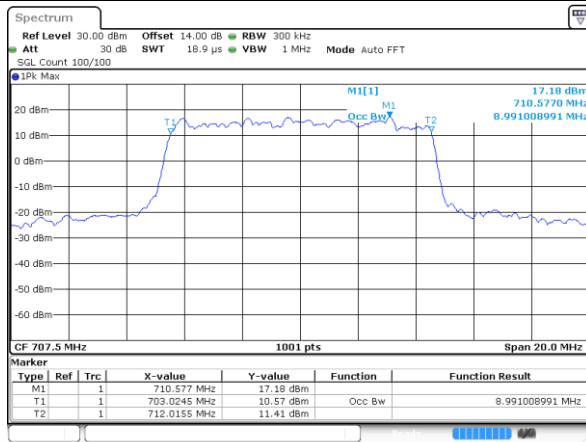
Middle Channel / 5MHz / QPSK



Date: 21.MAY.2024 04:03:11

LTE Band 12

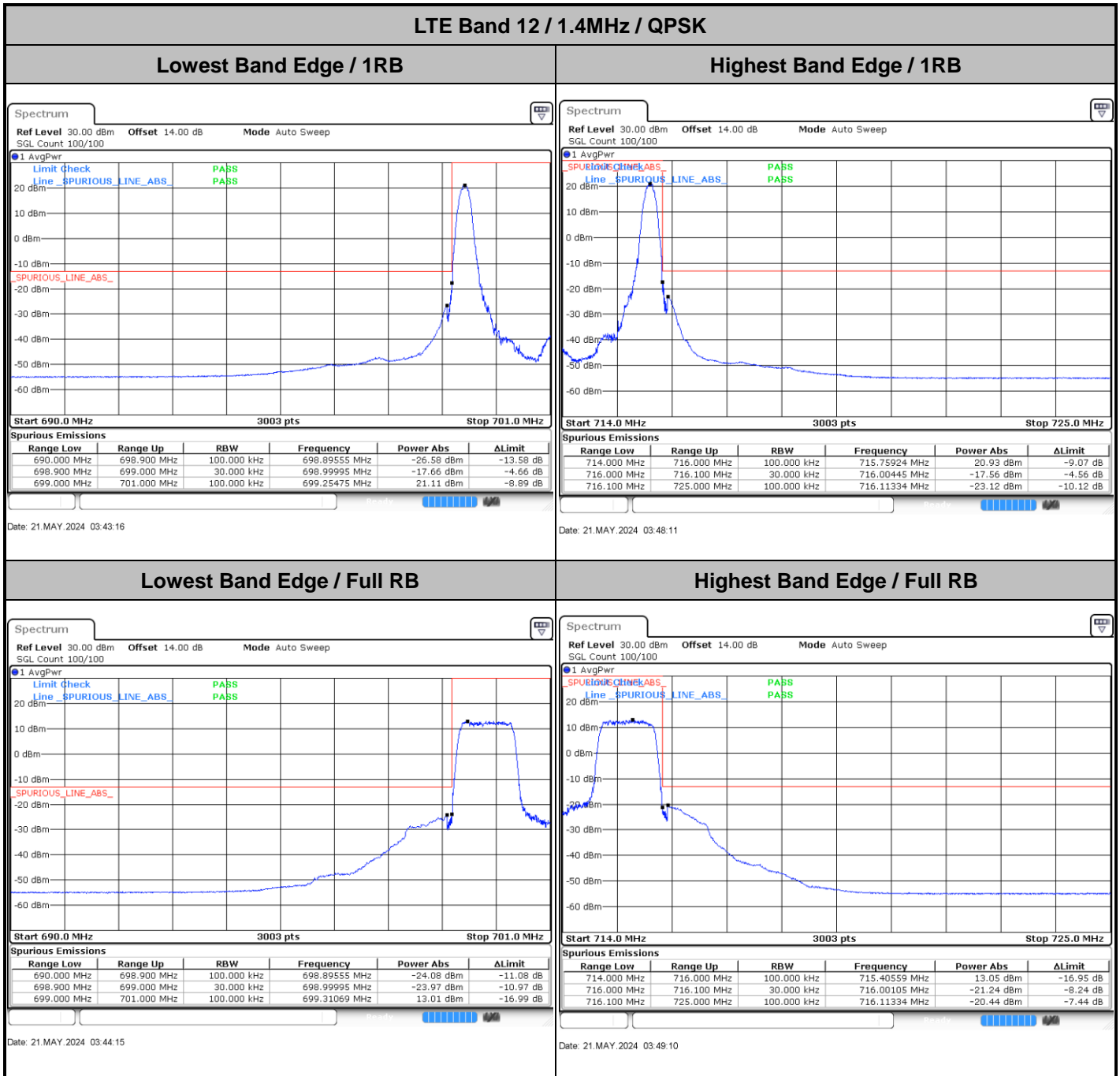
Middle Channel / 10MHz / QPSK



Date: 21.MAY.2024 04:11:16



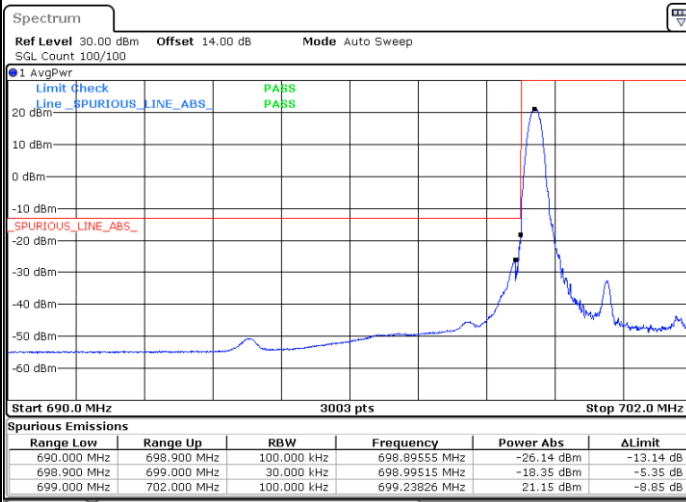
# Conducted Band Edge





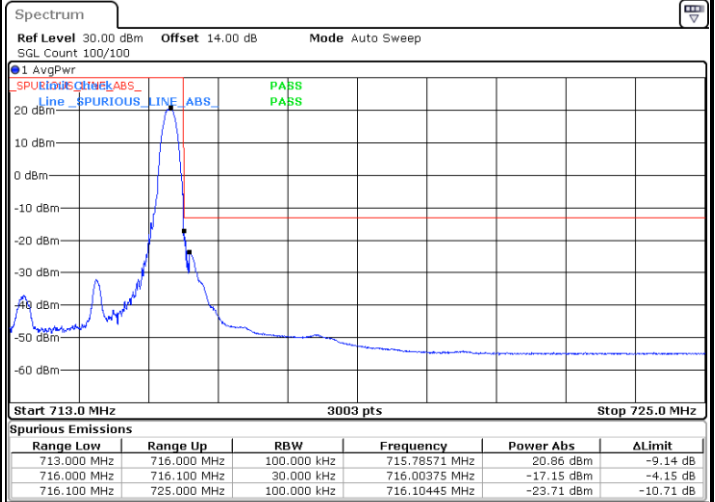
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



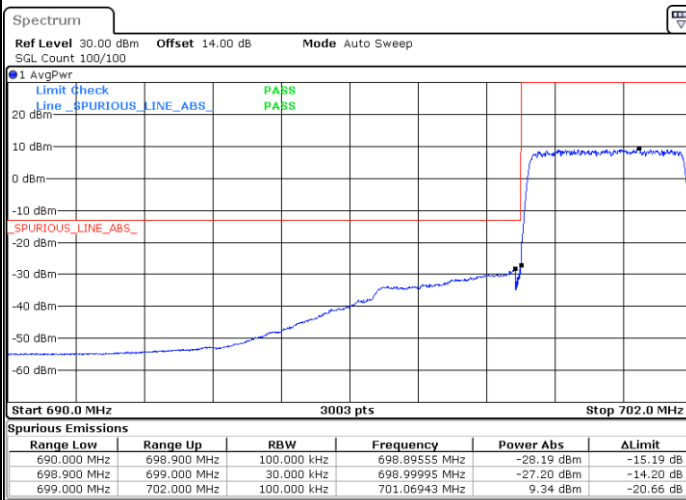
Date: 21.MAY.2024 03:51:22

Highest Band Edge / 1RB



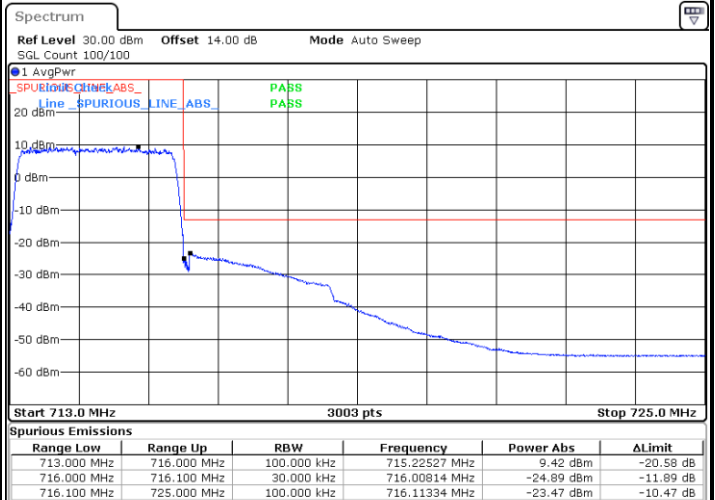
Date: 21.MAY.2024 03:56:17

Lowest Band Edge / Full RB



Date: 21.MAY.2024 03:52:21

Highest Band Edge / Full RB

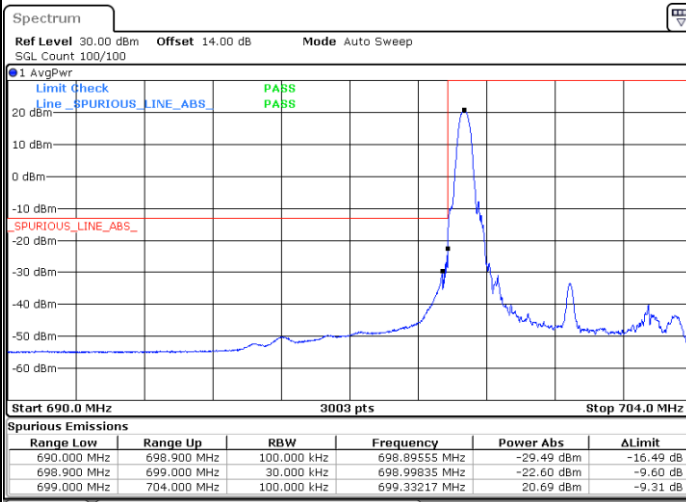


Date: 21.MAY.2024 03:57:16



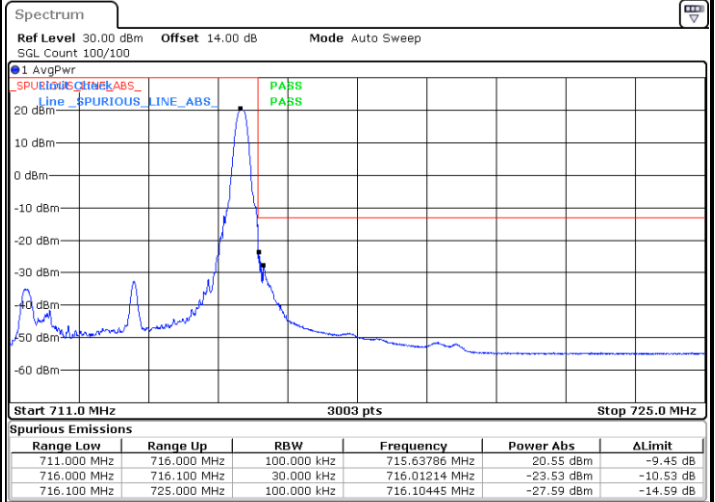
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1RB



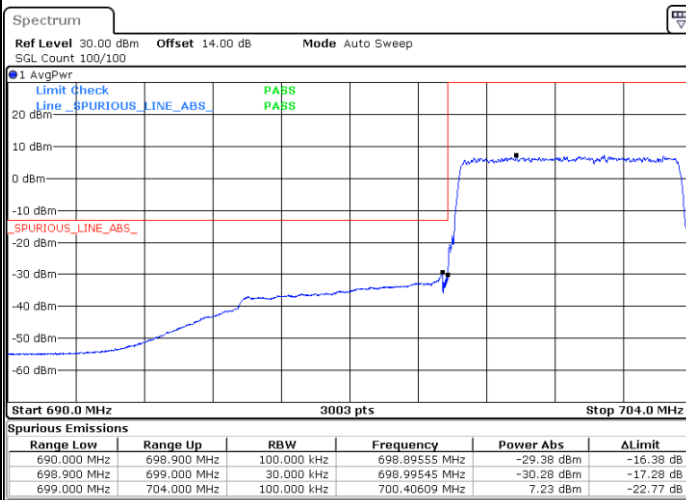
Date: 21.MAY.2024 03:59:27

Highest Band Edge / 1RB



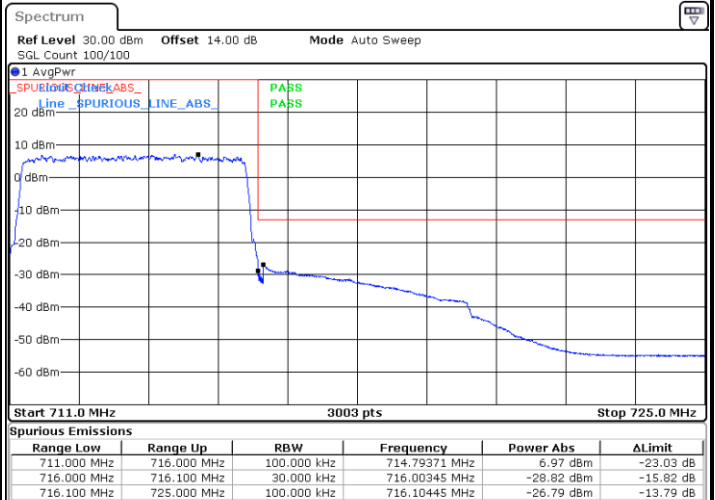
Date: 21.MAY.2024 04:04:22

Lowest Band Edge / Full RB



Date: 21.MAY.2024 04:00:26

Highest Band Edge / Full RB

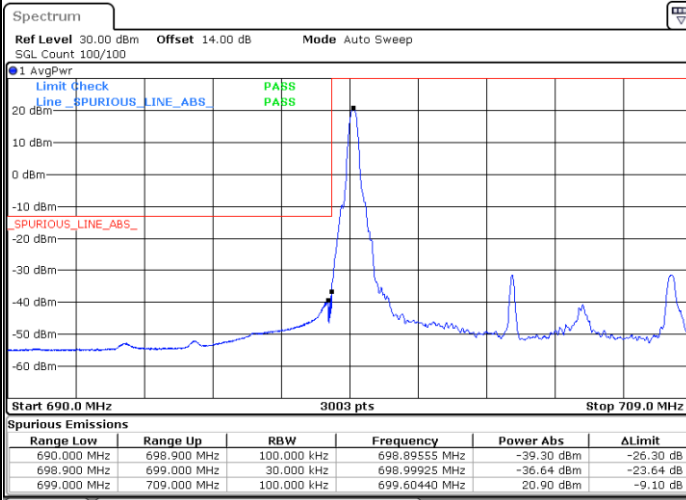


Date: 21.MAY.2024 04:05:21



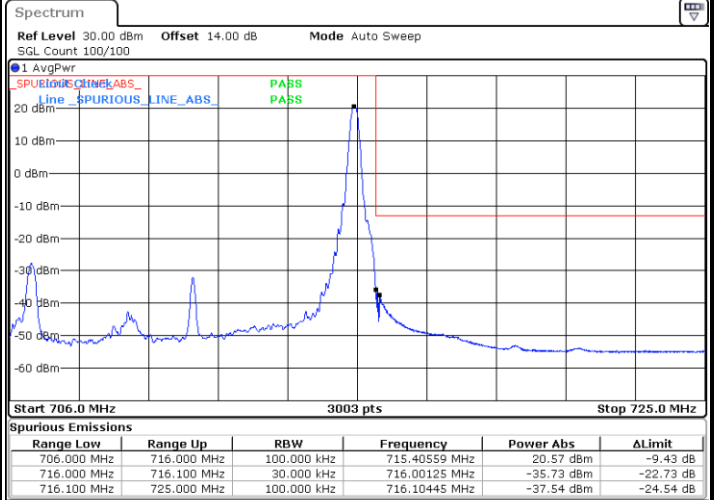
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1RB



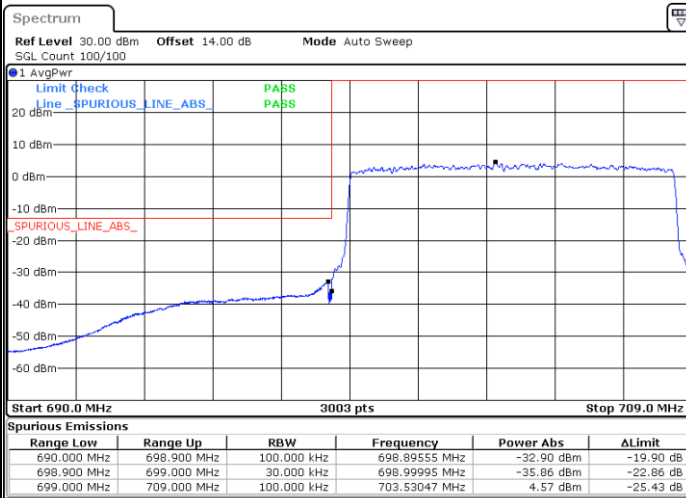
Date: 21.MAY.2024 04:07:33

Highest Band Edge / 1RB



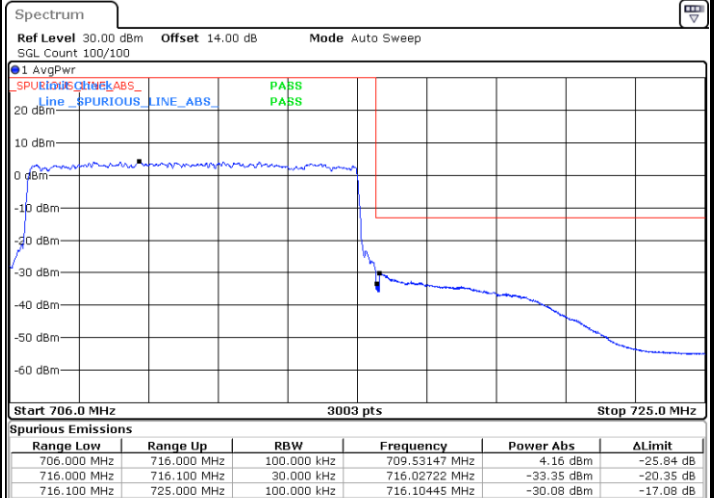
Date: 21.MAY.2024 04:12:28

Lowest Band Edge / Full RB



Date: 21.MAY.2024 04:08:31

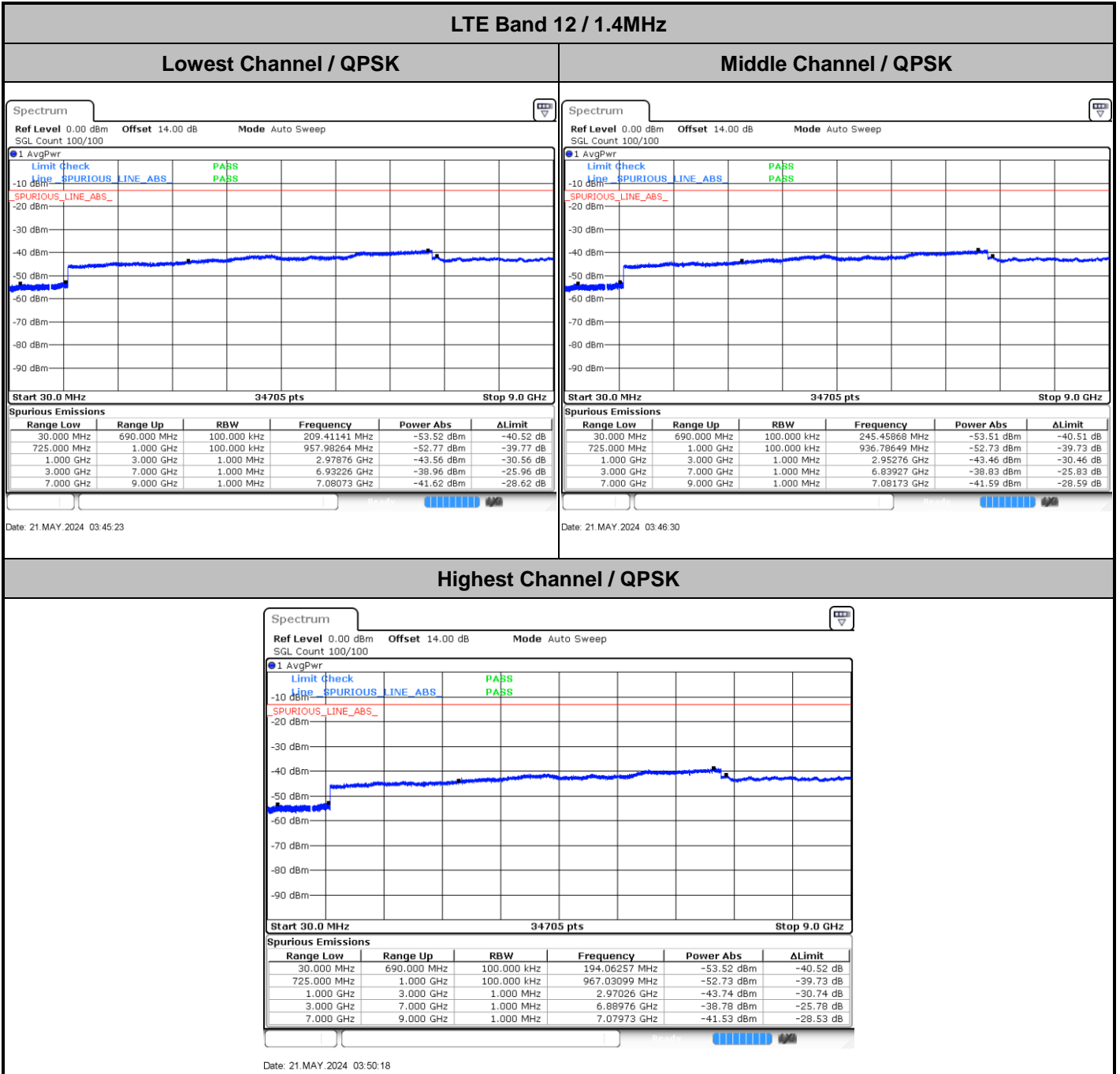
Highest Band Edge / Full RB



Date: 21.MAY.2024 04:13:26



# Conducted Spurious Emission

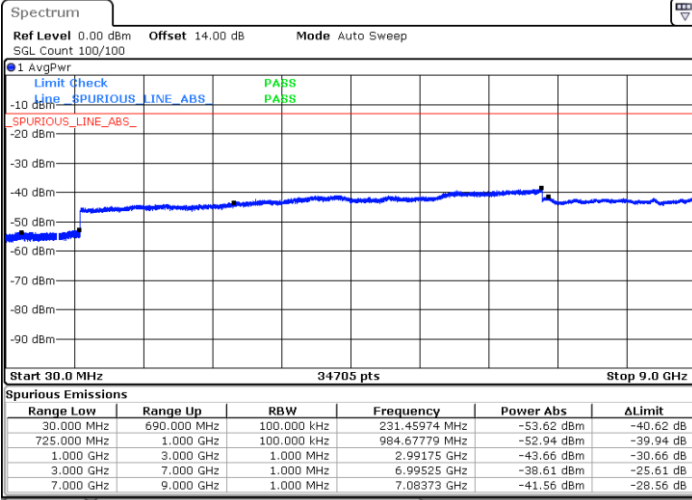




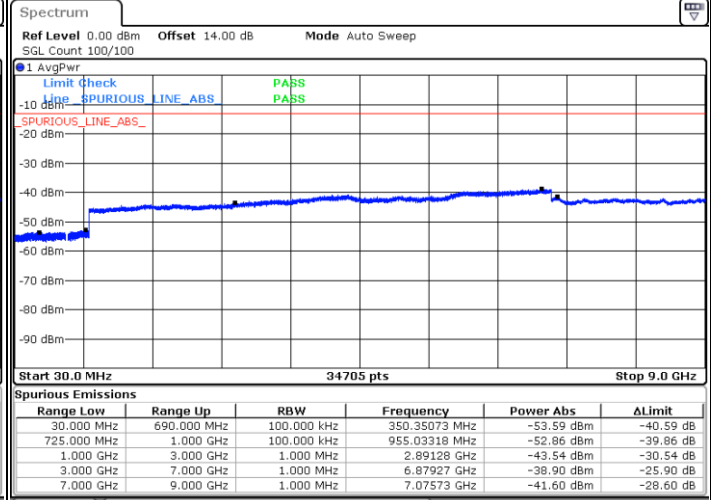
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

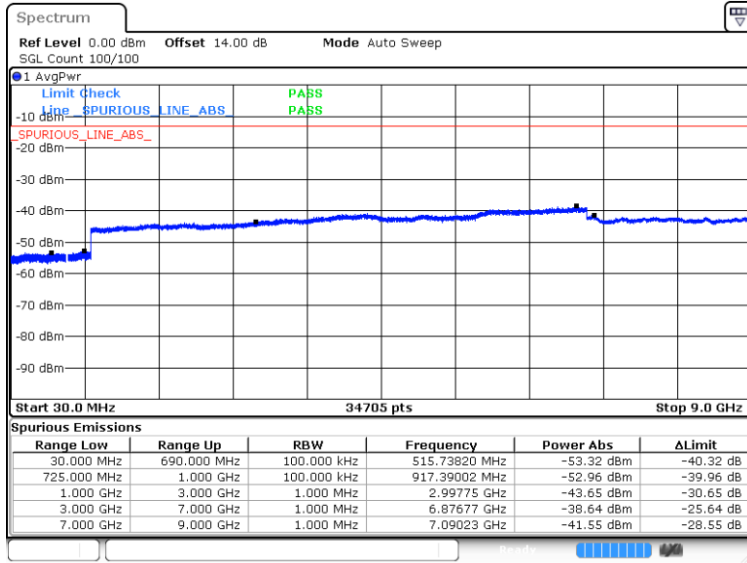


Date: 21.MAY.2024 03:53:29



Date: 21.MAY.2024 03:54:36

Highest Channel / QPSK



Date: 21.MAY.2024 03:58:24

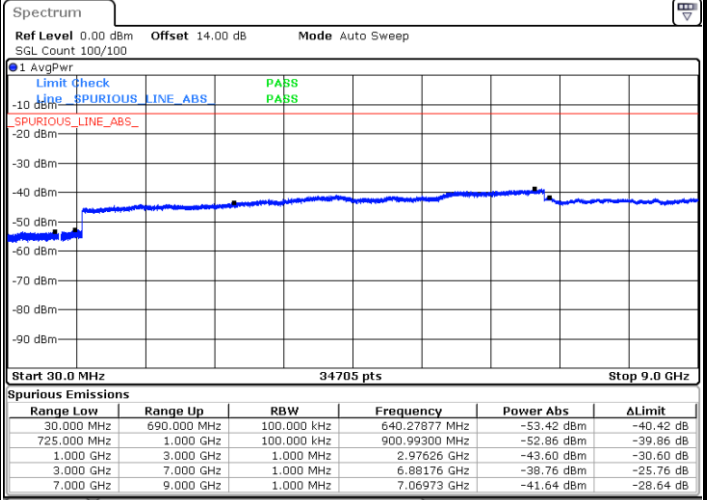
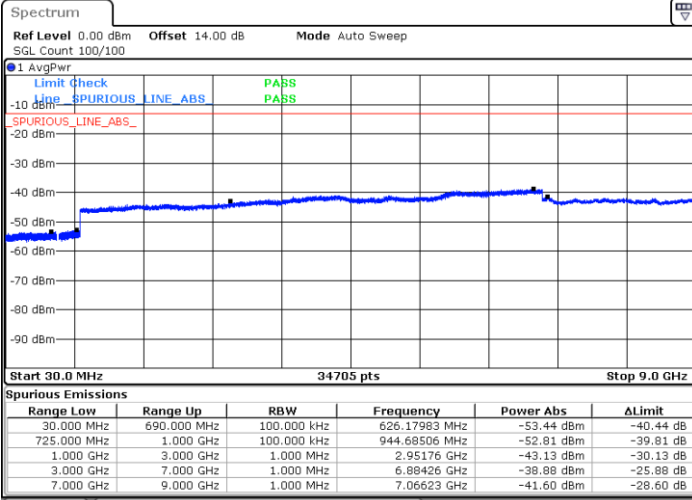




LTE Band 12 / 5MHz

Lowest Channel / QPSK

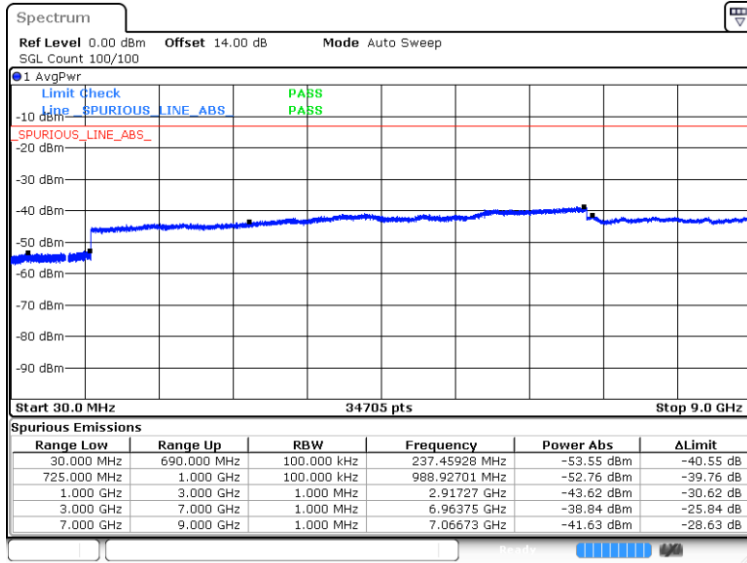
Middle Channel / QPSK



Date: 21.MAY.2024 04:01:34

Date: 21.MAY.2024 04:02:42

Highest Channel / QPSK



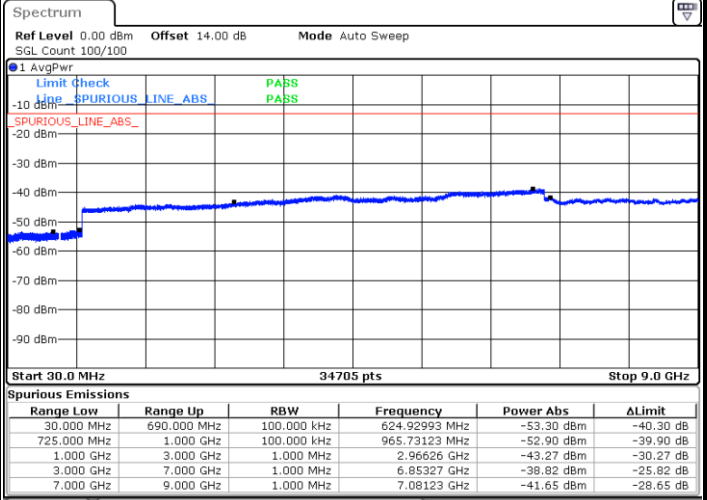
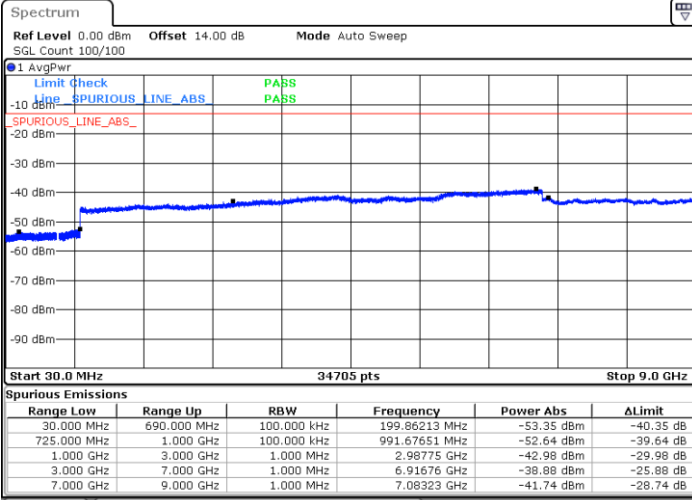
Date: 21.MAY.2024 04:06:29



LTE Band 12 / 10MHz

Lowest Channel / QPSK

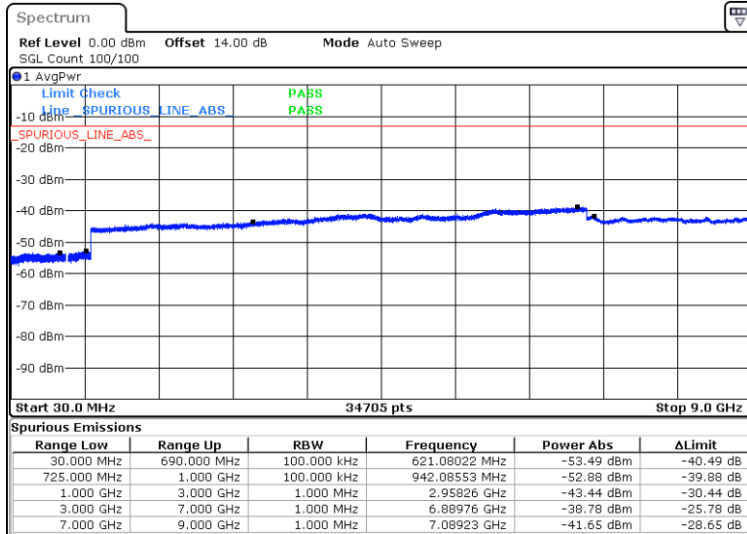
Middle Channel / QPSK



Date: 21.MAY.2024 04:09:39

Date: 21.MAY.2024 04:10:47

Highest Channel / QPSK



Date: 21.MAY.2024 04:14:35



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0033	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

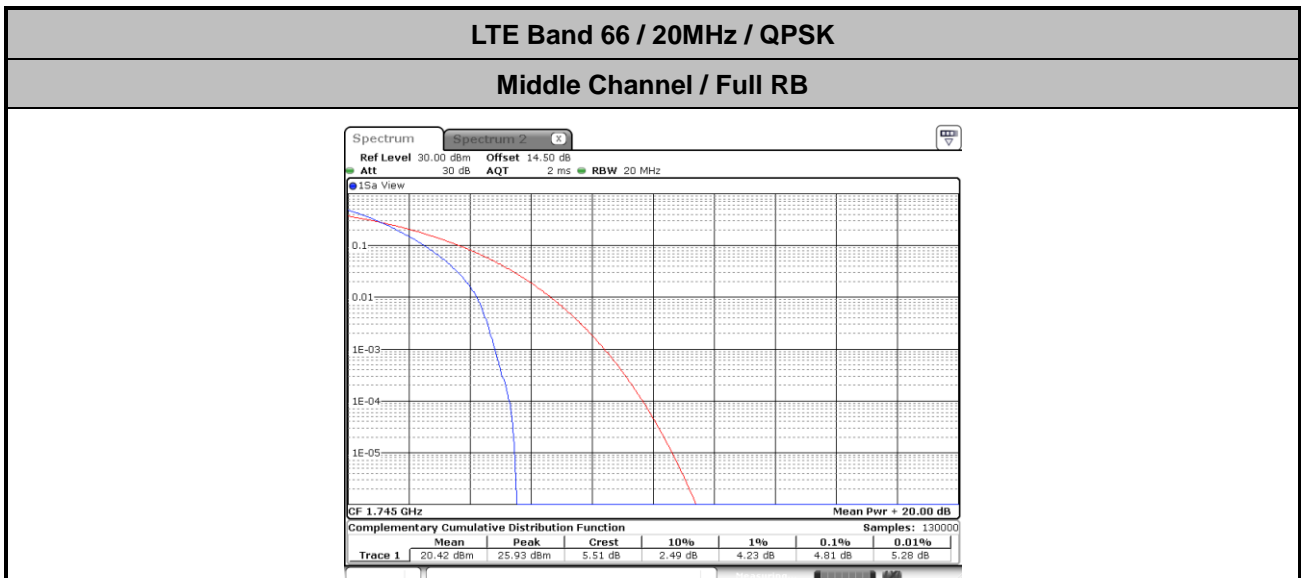
1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 66

## Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz	
Mod.	QPSK	Limit: 13dB
RB Size	Full RB	Result
Middle CH	4.81	PASS





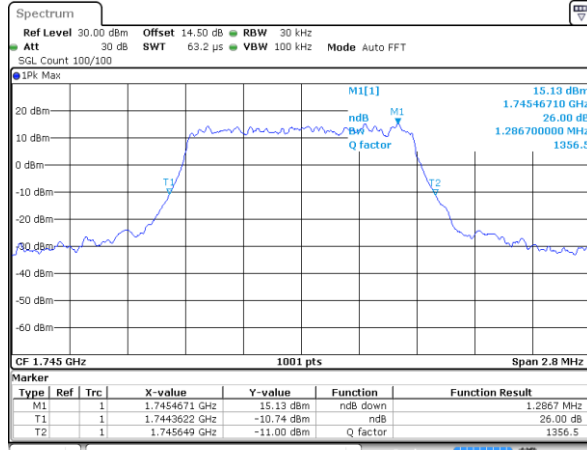
## 26dB Bandwidth

Mode	LTE Band 66 : 26dB BW(MHz)					
BW	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Middle CH	1.29	3.05	4.94	9.63	14.36	18.70

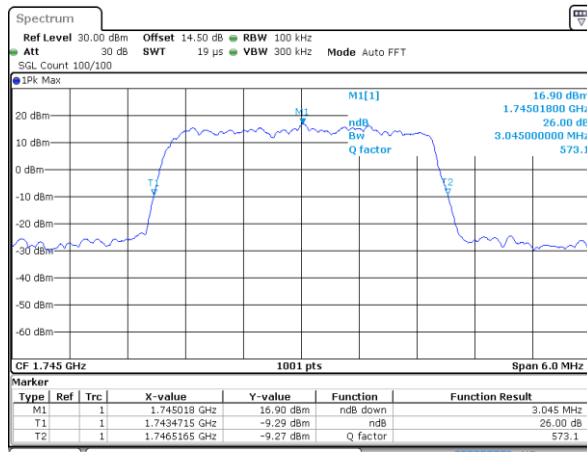


LTE Band 66

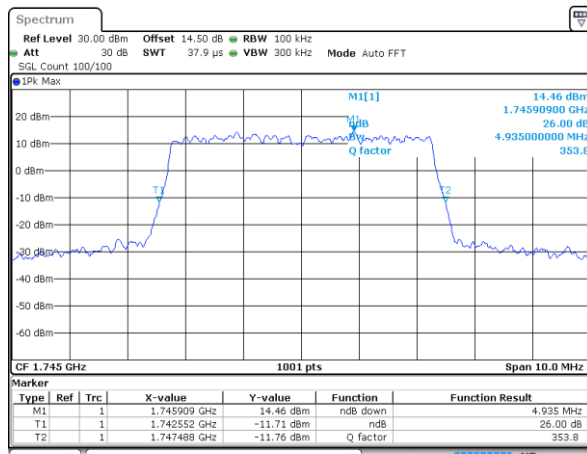
Middle Channel / 1.4MHz / QPSK



Middle Channel / 3MHz / QPSK



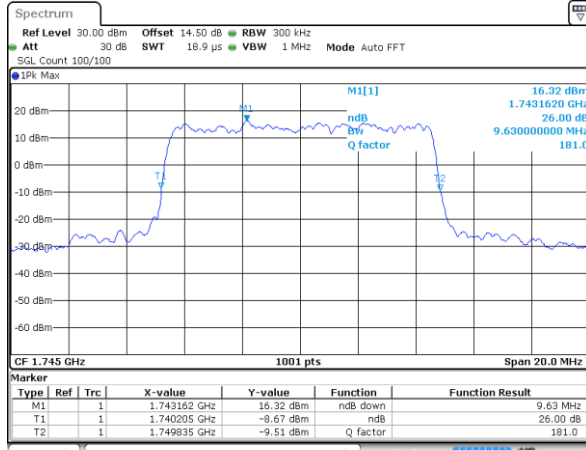
Middle Channel / 5MHz / QPSK



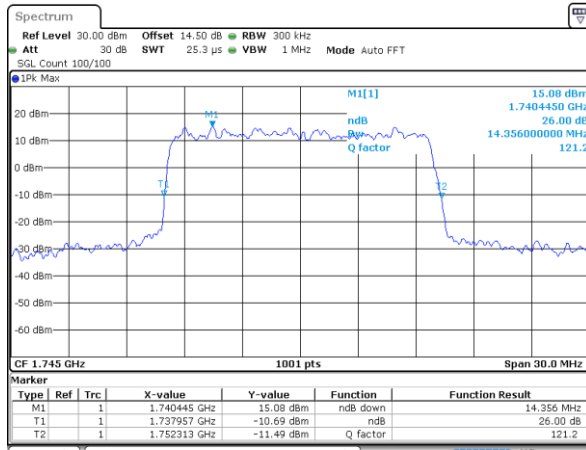


LTE Band 66

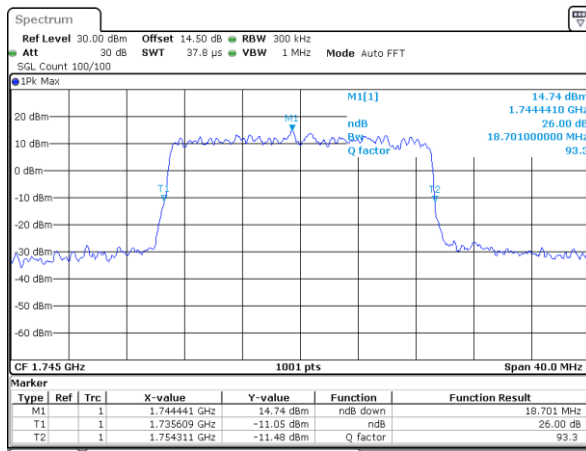
Middle Channel / 10MHz / QPSK



Middle Channel / 15MHz / QPSK



Middle Channel / 20MHz / QPSK





### Occupied Bandwidth

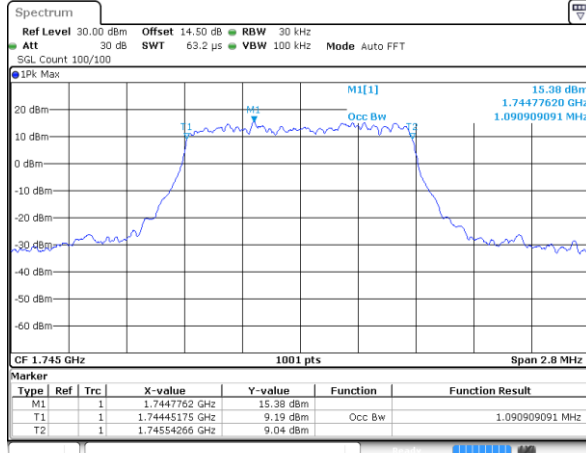
Mode	LTE Band 66 : 99%OBW(MHz)					
BW	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Middle CH	1.09	2.70	4.50	8.97	13.46	17.78



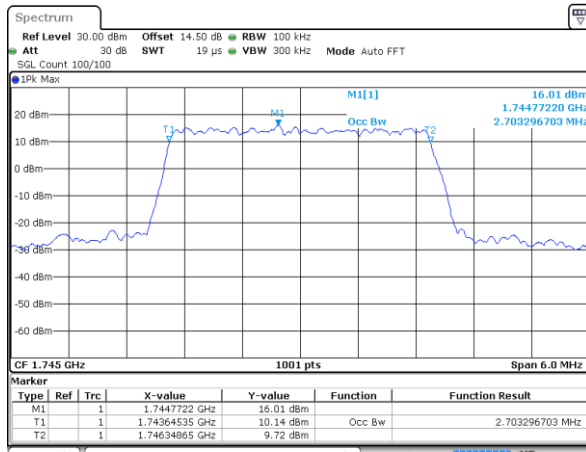


LTE Band 66

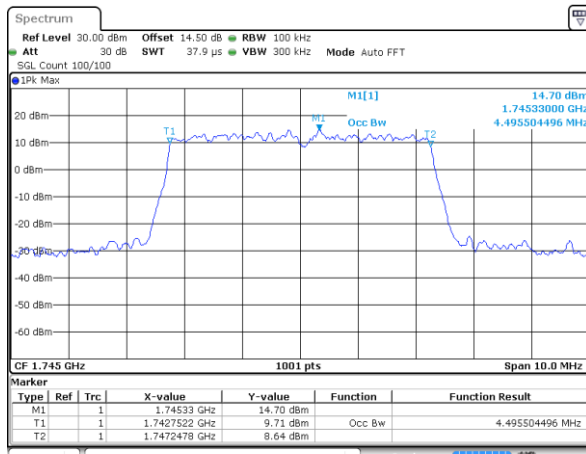
Middle Channel / 1.4MHz / QPSK



Middle Channel / 3MHz / QPSK



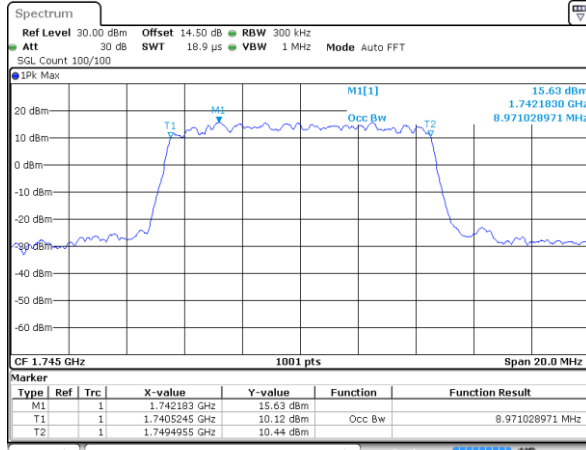
Middle Channel / 5MHz / QPSK



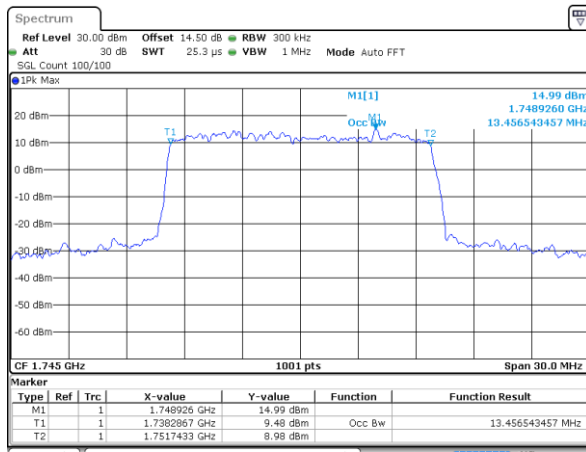


LTE Band 66

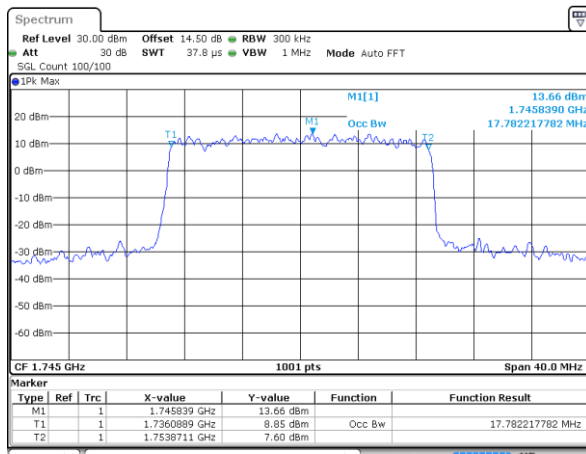
Middle Channel / 10MHz / QPSK



Middle Channel / 15MHz / QPSK

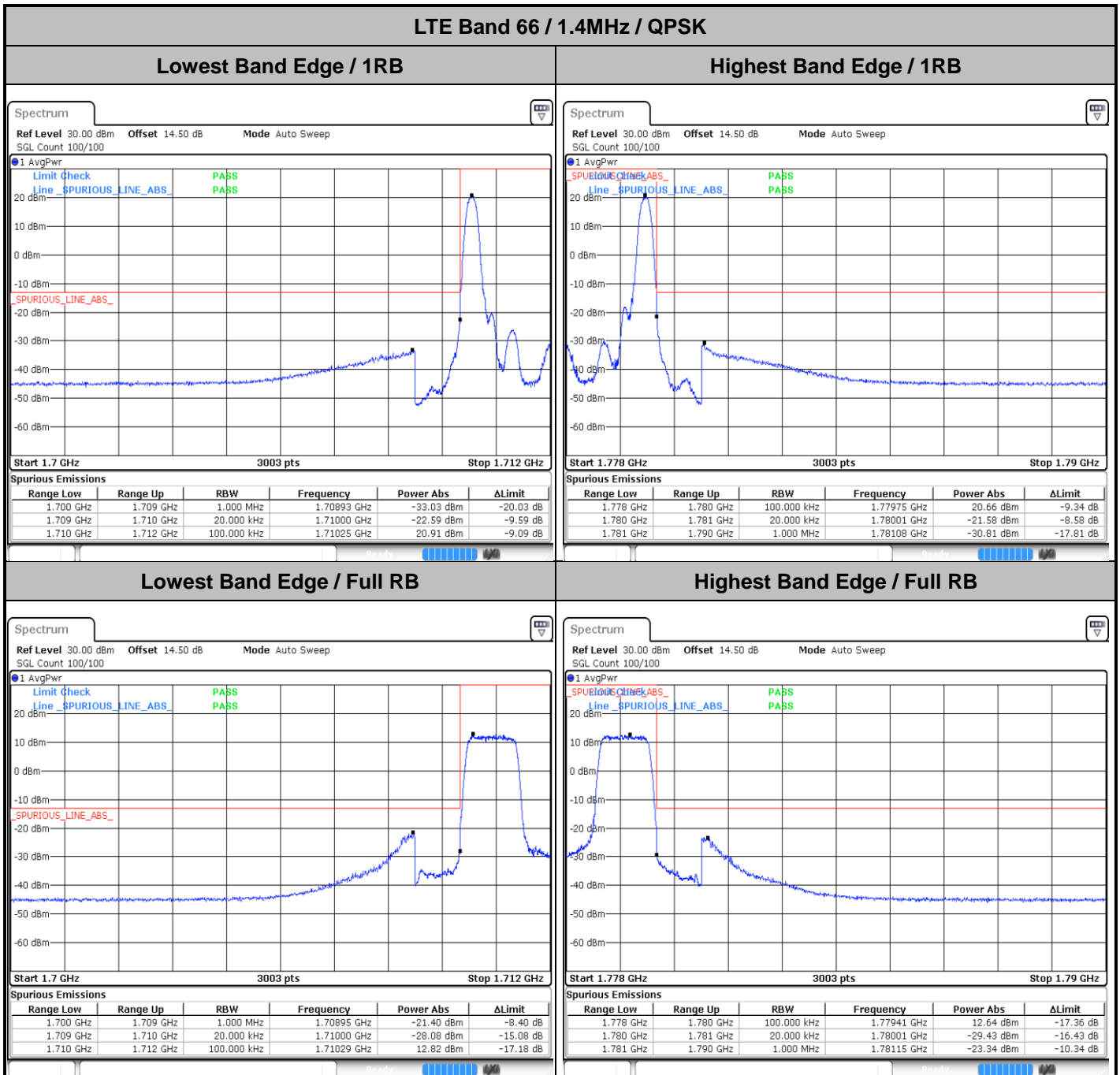


Middle Channel / 20MHz / QPSK





# Conducted Band Edge

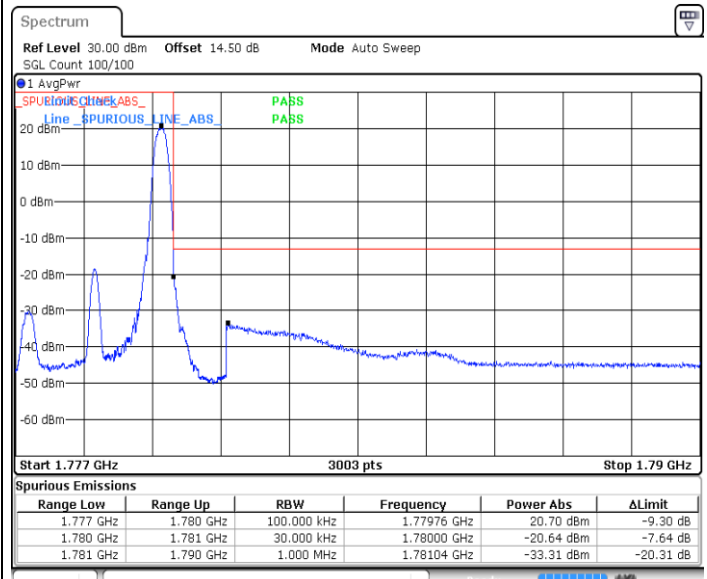
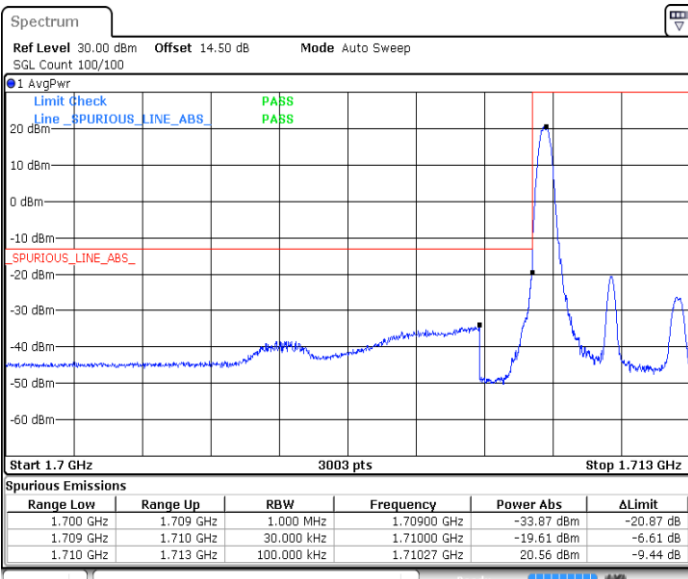




LTE Band 66 / 3MHz / QPSK

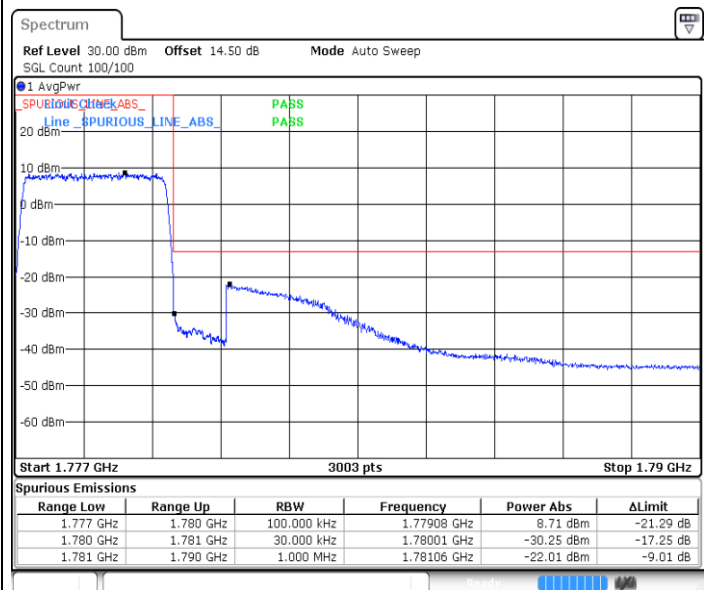
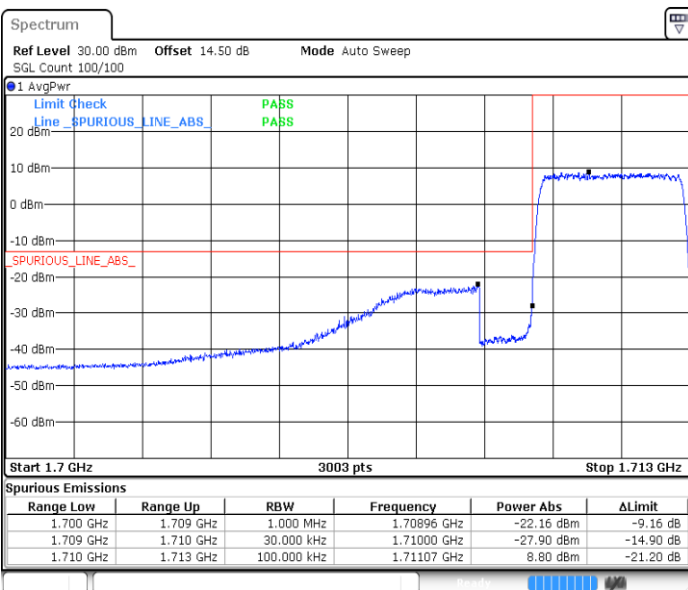
Lowest Band Edge / 1RB

Highest Band Edge / 1RB



Lowest Band Edge / Full RB

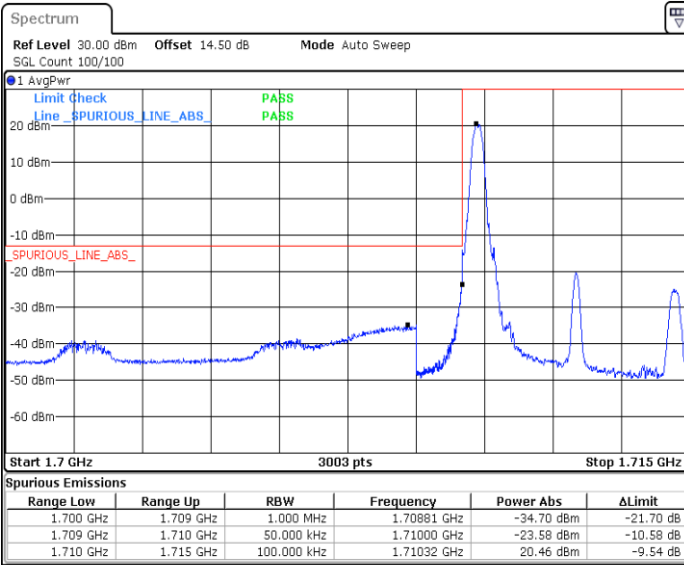
Highest Band Edge / Full RB



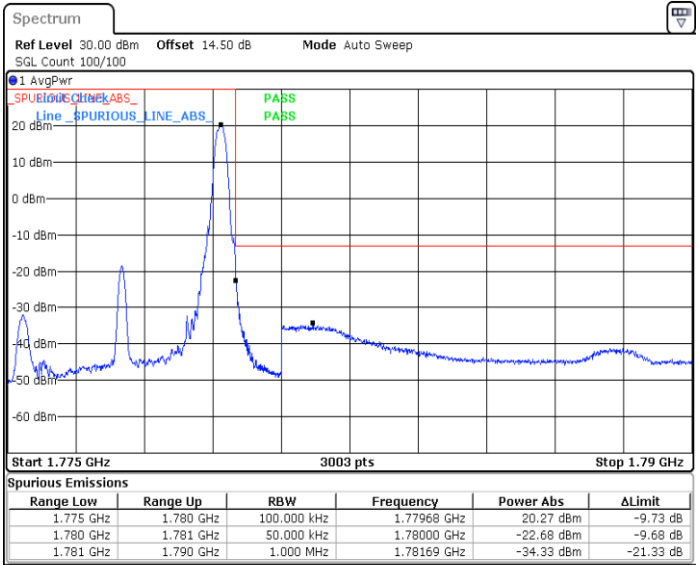


LTE Band 66 / 5MHz / QPSK

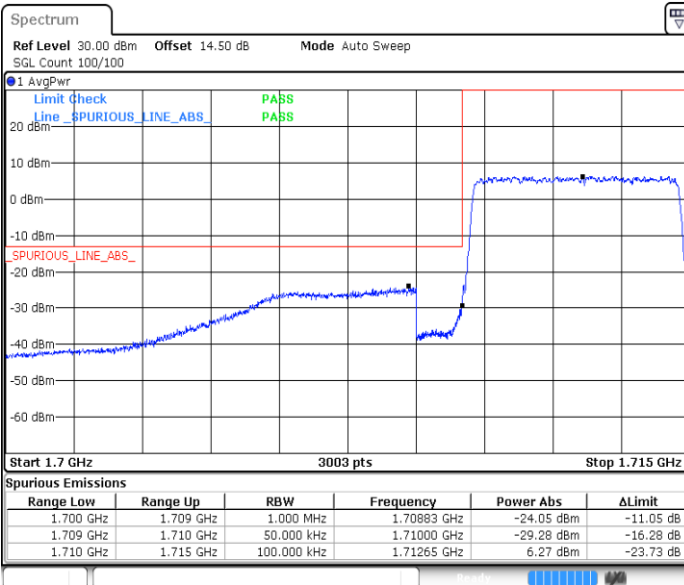
Lowest Band Edge / 1RB



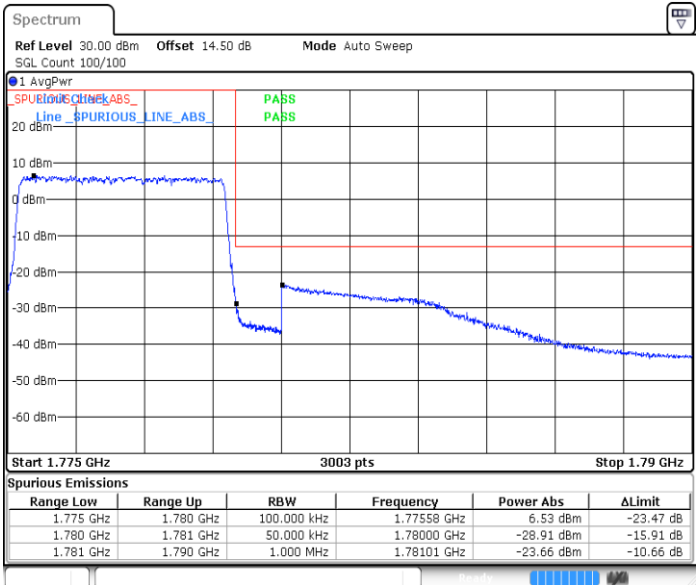
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

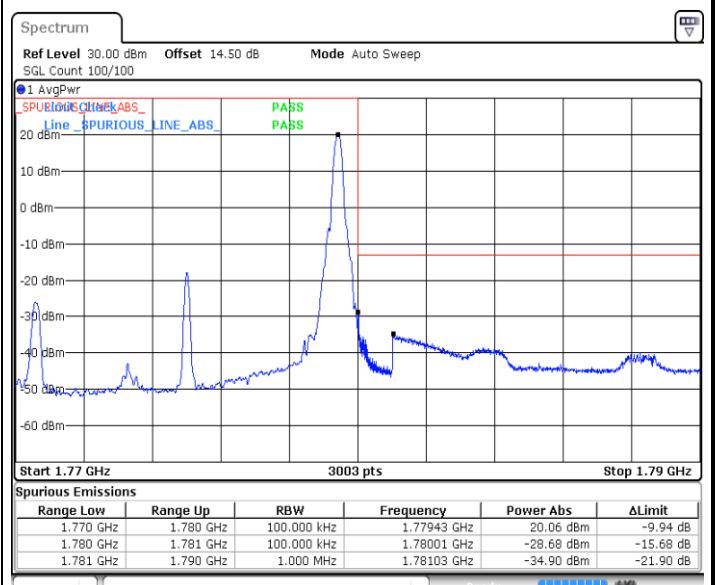
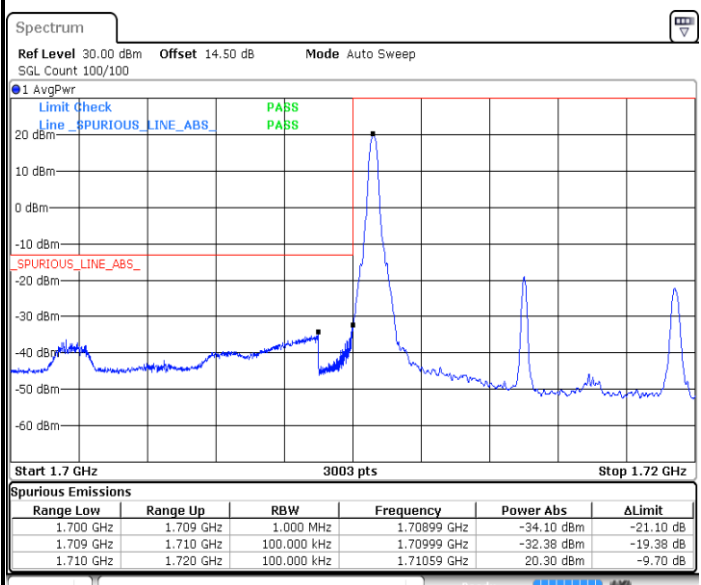




LTE Band 66 / 10MHz / QPSK

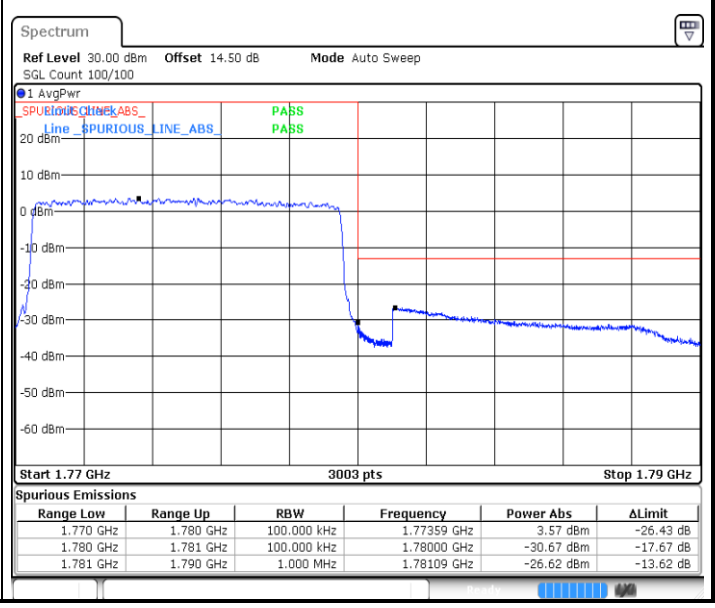
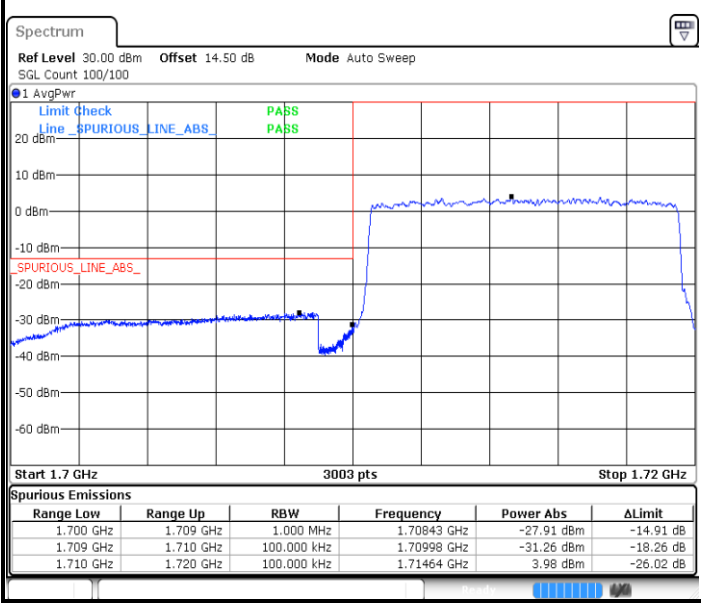
Lowest Band Edge / 1RB

Highest Band Edge / 1RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

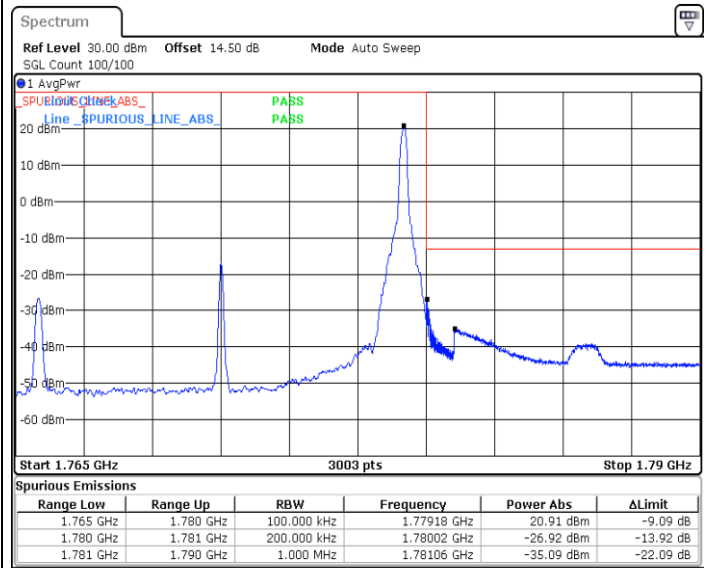
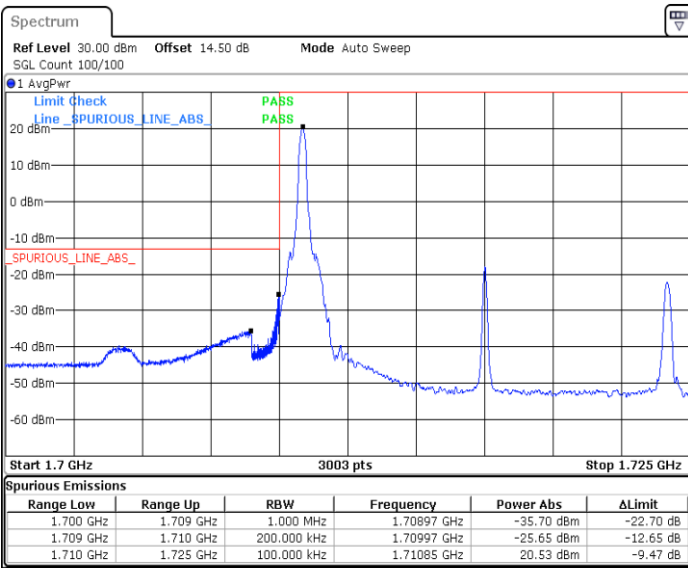




LTE Band 66 / 15MHz / QPSK

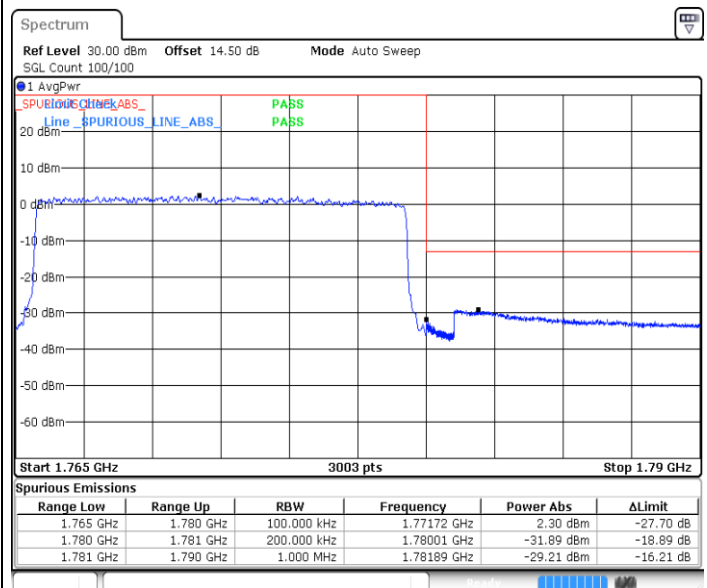
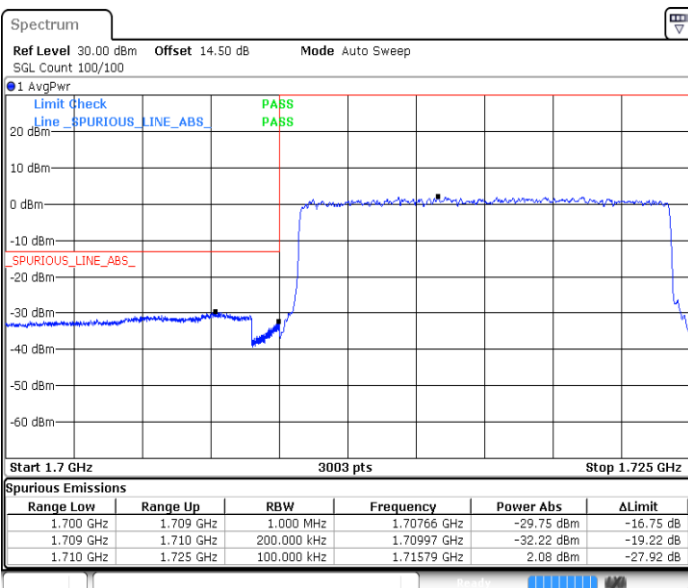
Lowest Band Edge / 1RB

Highest Band Edge / 1RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

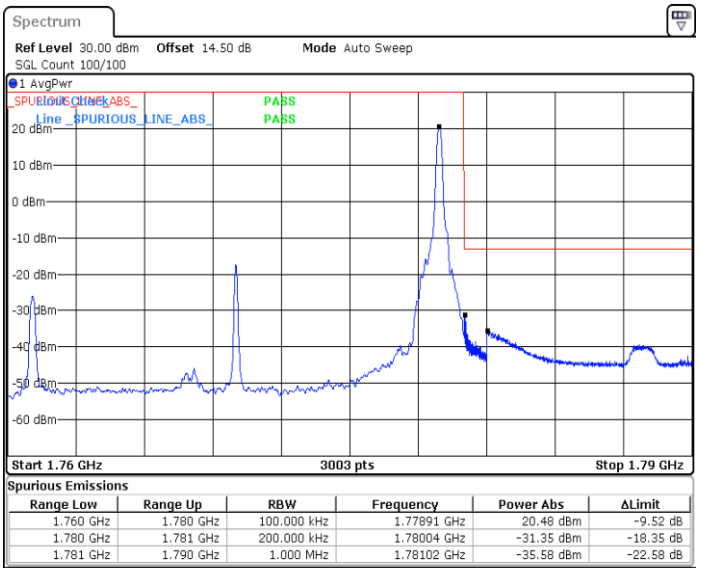
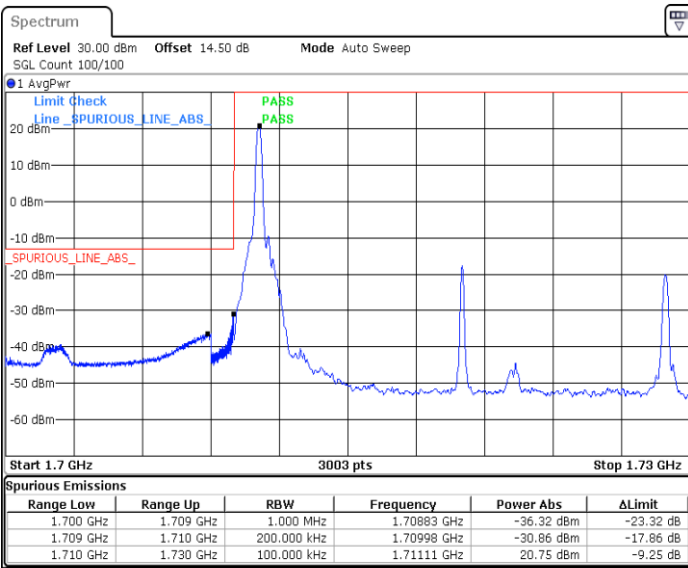




LTE Band 66 / 20MHz / QPSK

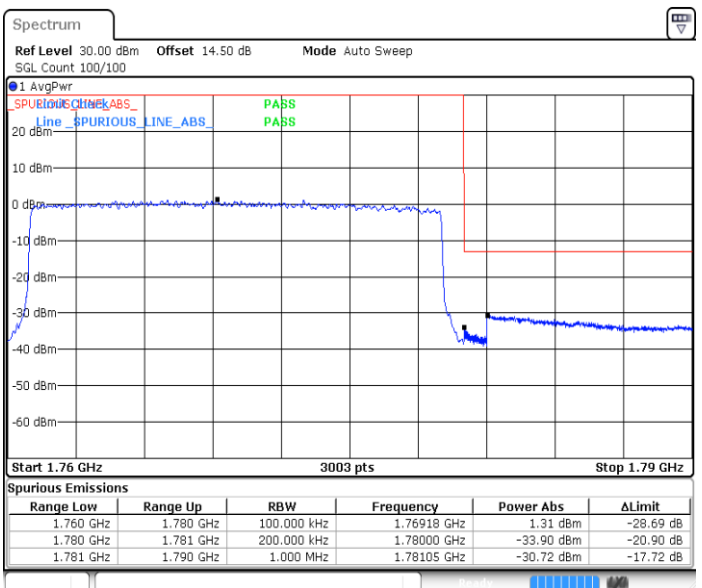
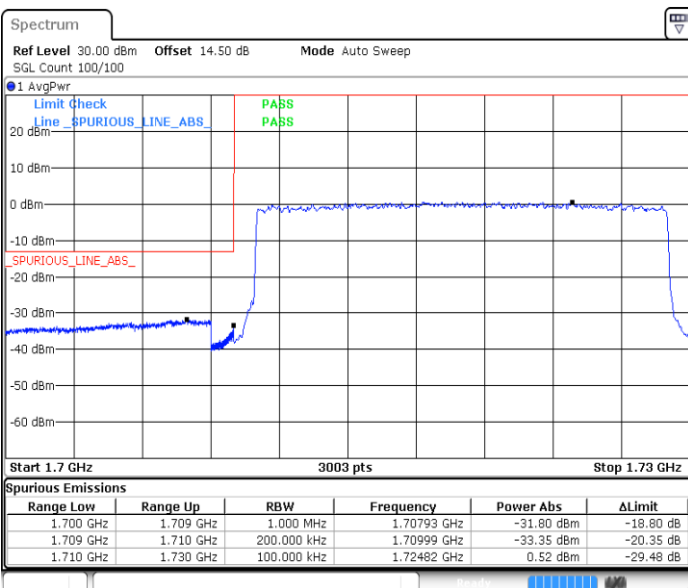
Lowest Band Edge / 1RB

Highest Band Edge / 1RB



Lowest Band Edge / Full RB

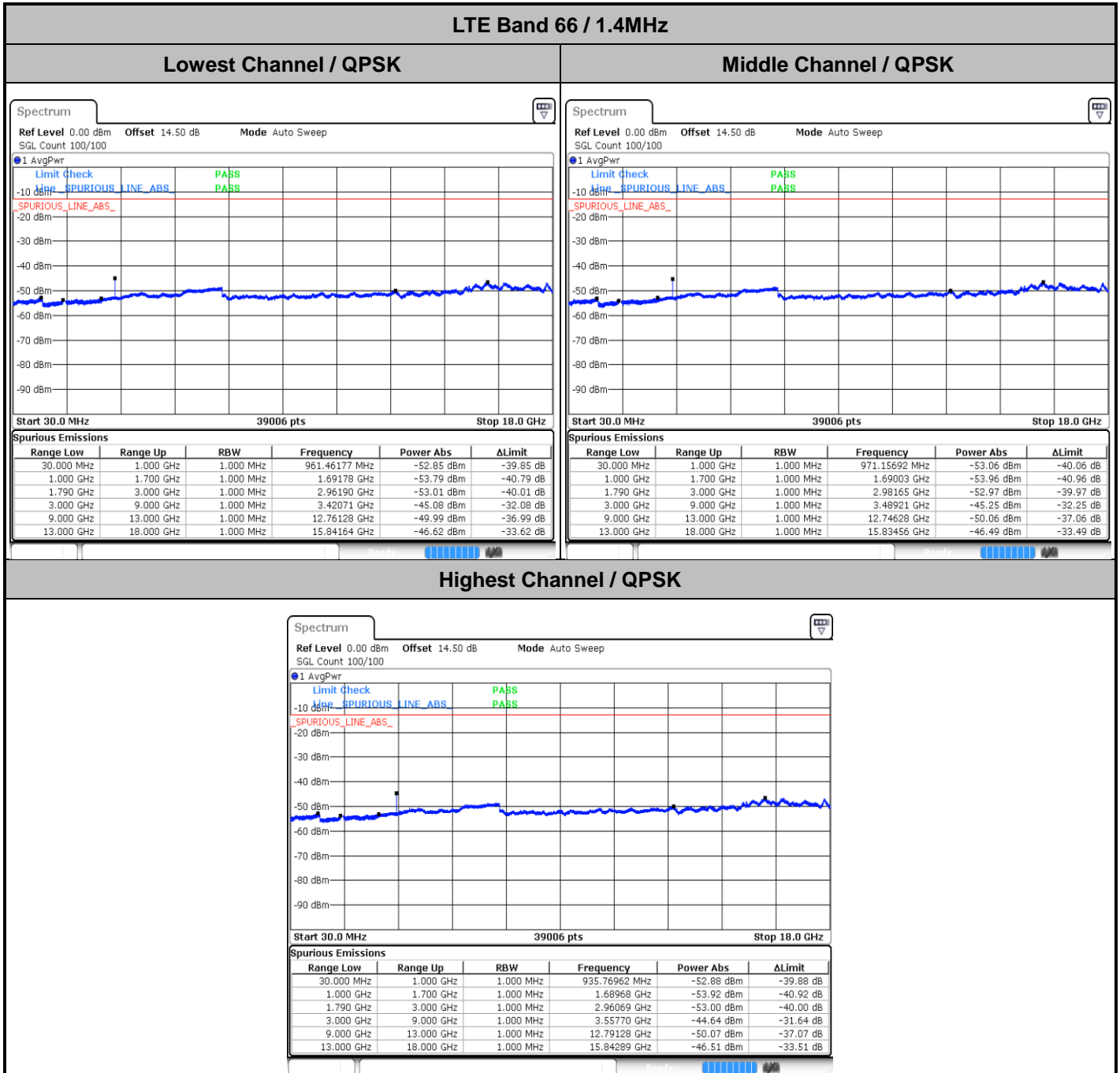
Highest Band Edge / Full RB







# Conducted Spurious Emission

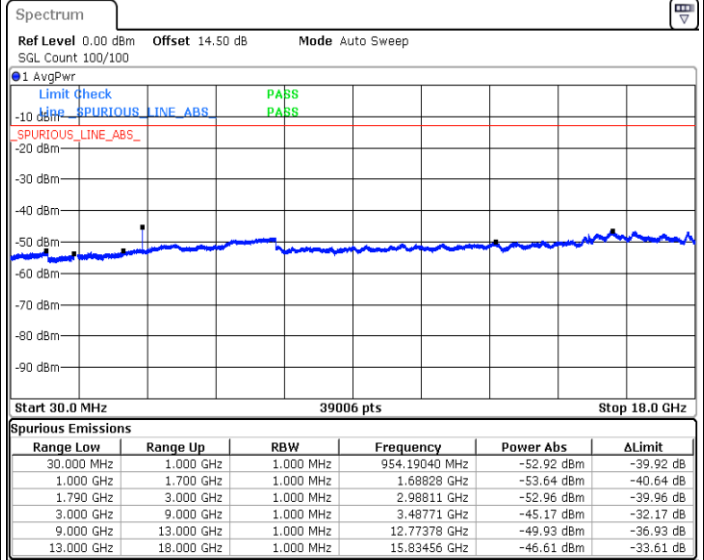
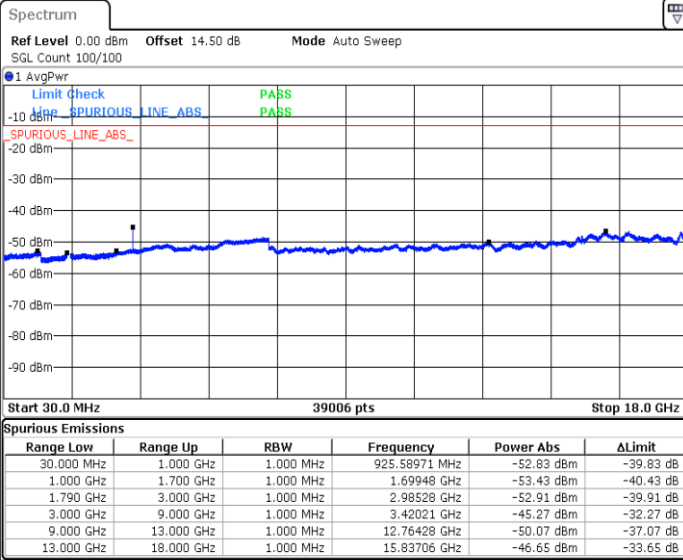




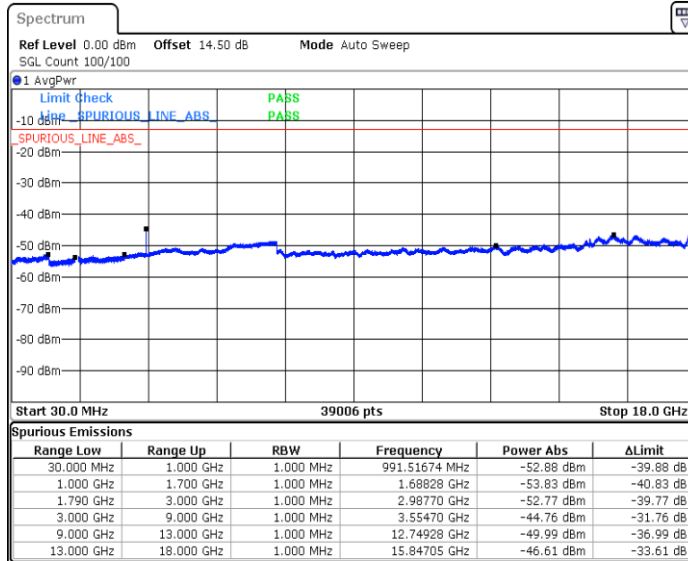
LTE Band 66 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

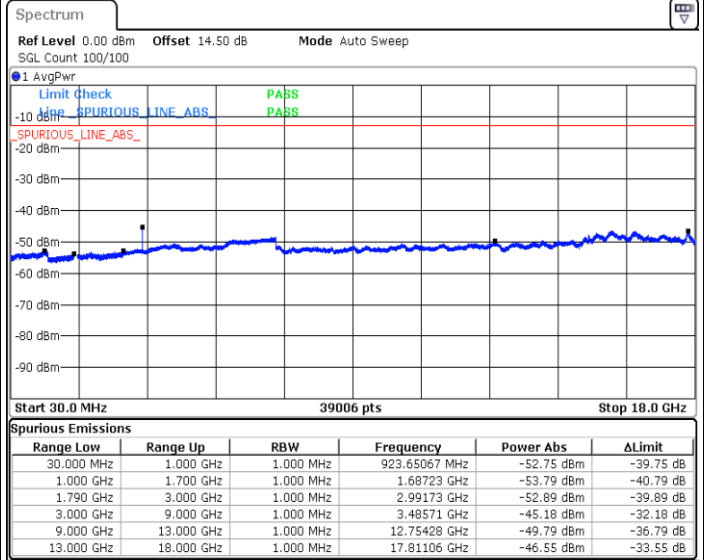
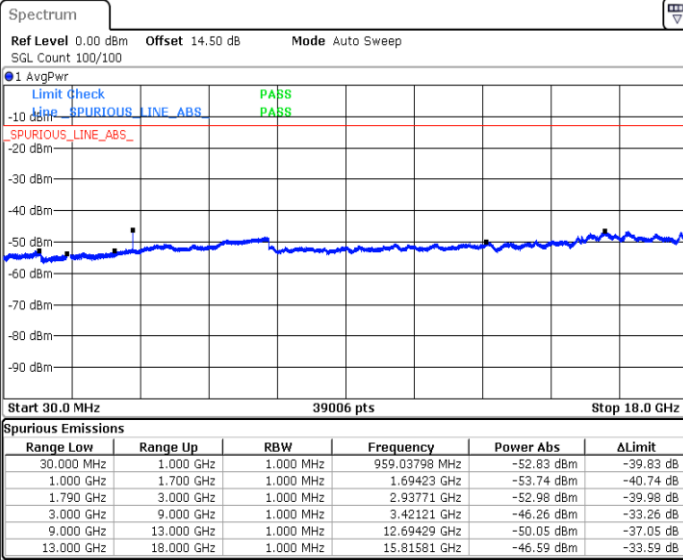




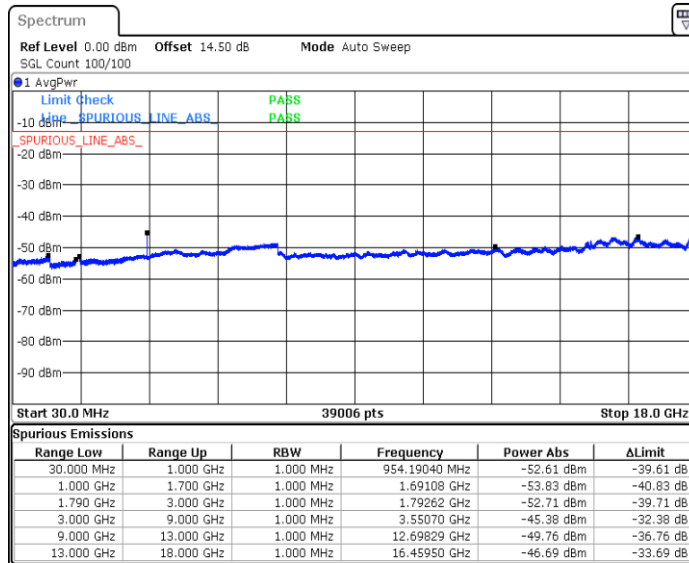
LTE Band 66 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

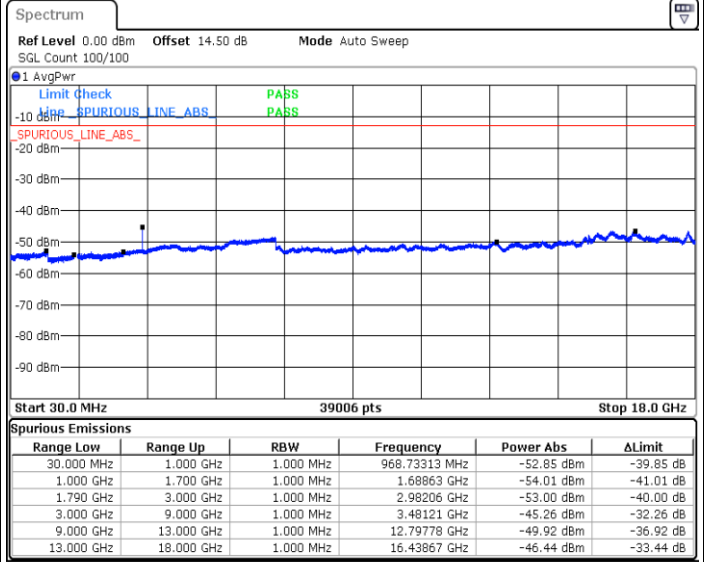
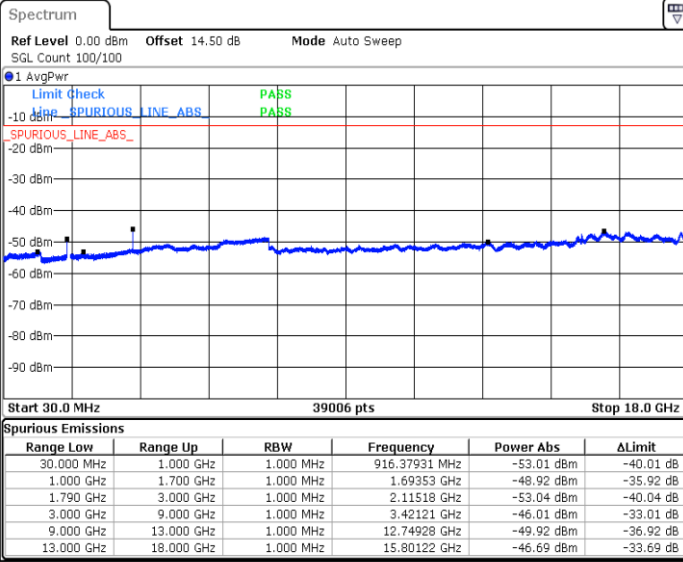




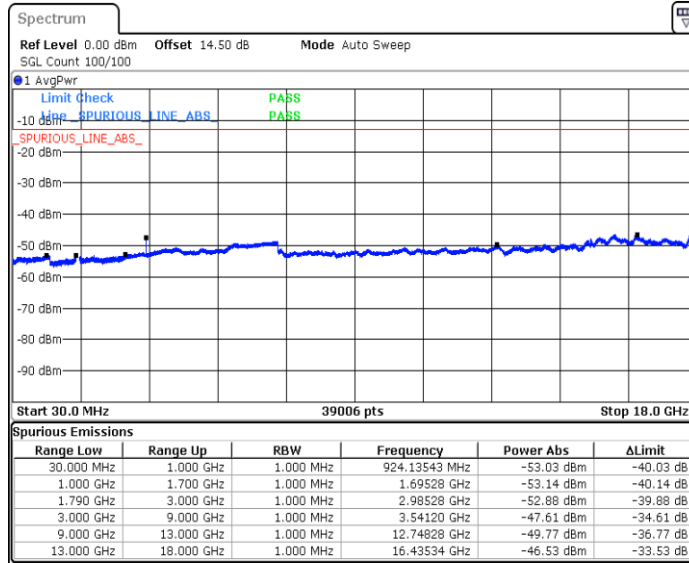
LTE Band 66 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

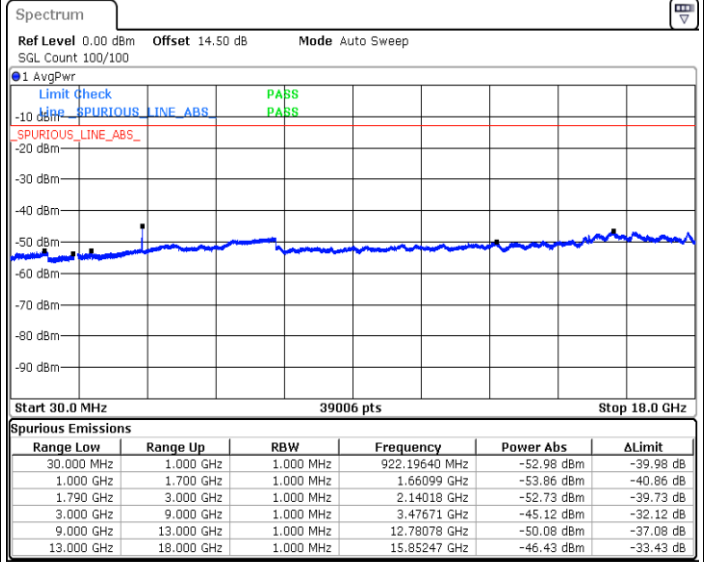
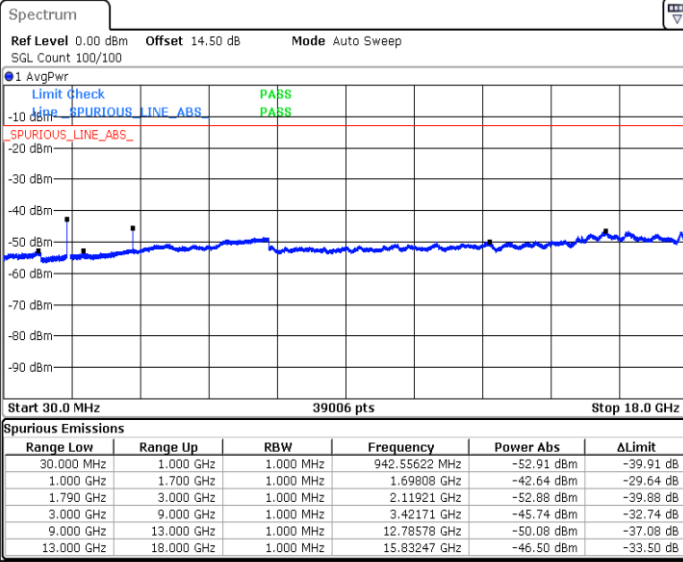




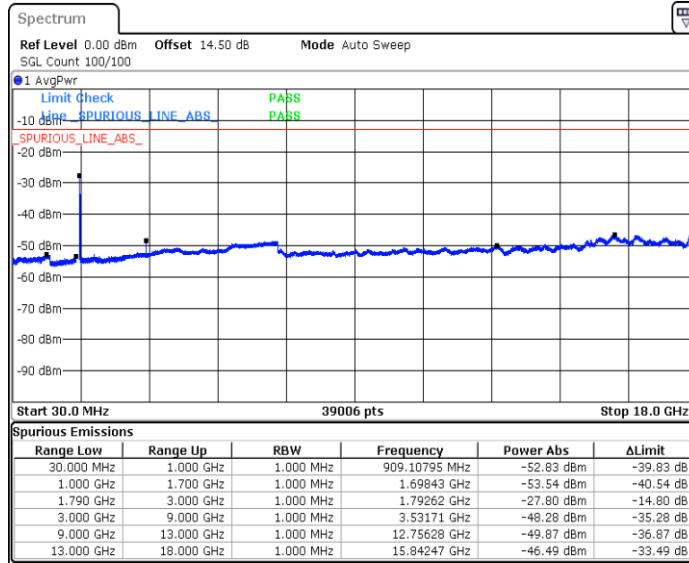
LTE Band 66 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

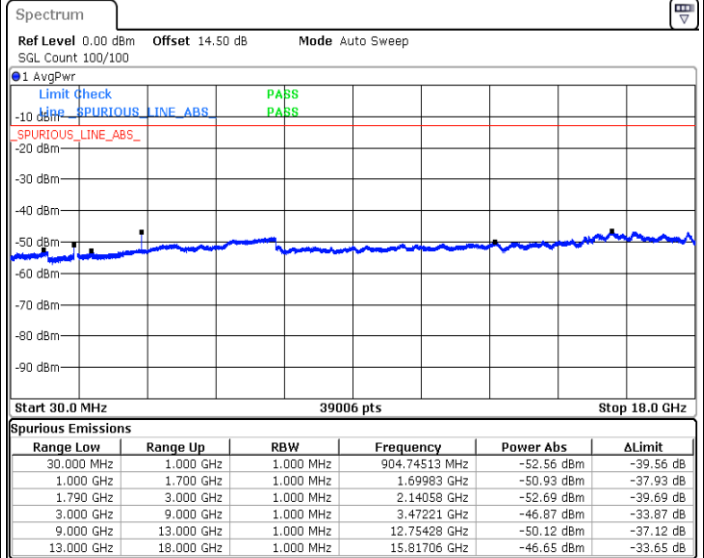
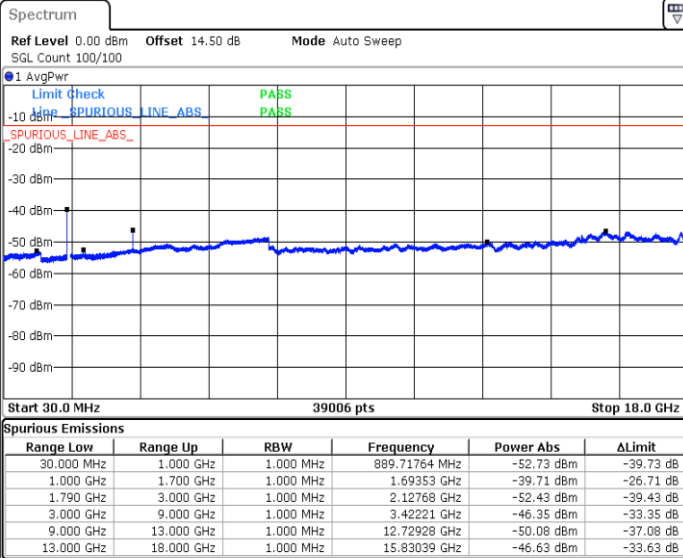




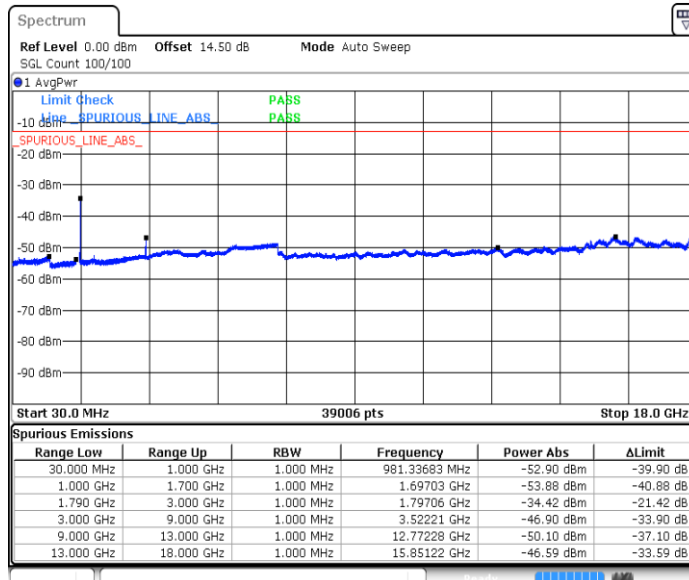
LTE Band 66 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





### Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0059	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0083	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

**Note:**

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

Test Engineer :	Kuang Jia	Temperature :	22~25°C
		Relative Humidity :	48~52%

LTE Band 2 / 20MHz / QPSK for sample 1									
Channel	Frequency ( MHz )	EIRP ( 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	3742.18	-53.76	-13	-40.76	-69.33	-60.51	5.85	12.60	H
	5613.27	-56.11	-13	-43.11	-75.75	-61.91	7.30	13.10	H
	7484.36	-55.49	-13	-42.49	-80.18	-58.64	8.35	11.50	H
	3742.18	-56.66	-13	-43.66	-71.85	-63.41	5.85	12.60	V
	5613.27	-55.92	-13	-42.92	-75.04	-61.72	7.30	13.10	V
	7484.36	-55.32	-13	-42.32	-80.4	-58.47	8.35	11.50	V

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

LTE Band 5 / 10MHz / QPSK for sample 1									
Channel	Frequency ( MHz )	EIRP ( 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	1664.18	-62.52	-13	-49.52	-70.10	-65.77	4.00	9.40	H
	2496.27	-49.99	-13	-36.99	-61.75	-53.56	4.88	10.60	H
	3328.36	-53.90	-13	-40.90	-68.27	-58.83	5.52	12.60	H
	1664.18	-65.47	-13	-52.47	-73.19	-68.72	4.00	9.40	V
	2496.27	-56.53	-13	-43.53	-68.38	-60.10	4.88	10.60	V
	3328.36	-55.11	-13	-42.11	-69.46	-60.04	5.52	12.60	V

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

LTE Band 12 / 10MHz / QPSK for sample 1									
Channel	Frequency ( MHz )	EIRP ( 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	1406	-63.86	-13	-50.86	-72.56	-67.11	4.00	9.40	H
	2109	-63.35	-13	-50.35	-74.60	-66.92	4.88	10.60	H
	2812	-62.53	-13	-49.53	-76.06	-67.46	5.52	12.60	H
	1406	-64.48	-13	-51.48	-73.07	-67.73	4.00	9.40	V
	2109	-63.65	-13	-50.65	-75.13	-67.22	4.88	10.60	V
	2812	-62.66	-13	-49.66	-76.12	-67.59	5.52	12.60	V

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





LTE Band 66 / 20MHz / QPSK for sample 1									
Channel	Frequency ( MHz )	EIRP ( 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	3492	-61.28	-13	-48.28	-75.93	-68.13	5.65	12.50	H
	5238	-55.17	-13	-42.17	-74.44	-60.84	7.13	12.80	H
	6984	-57.33	-13	-44.33	-80.24	-60.73	8.40	11.80	H
	3492	-61.43	-13	-48.43	-76.12	-68.28	5.65	12.50	V
	5238	-49.68	-13	-36.68	-68.52	-55.35	7.13	12.80	V
	6984	-57.00	-13	-44.00	-80.11	-60.40	8.40	11.80	V

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

LTE Band 66 / 20MHz / QPSK for sample 2									
Channel	Frequency ( MHz )	EIRP ( 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	3492	-59.52	-13	-46.52	-74.17	-66.37	5.65	12.50	H
	5238	-48.55	-13	-35.55	-67.82	-54.22	7.13	12.80	H
	6984	-56.44	-13	-43.44	-79.35	-59.84	8.40	11.80	H
	3492	-59.05	-13	-46.05	-73.74	-65.90	5.65	12.50	V
	5238	-48.00	-13	-35.00	-66.84	-53.67	7.13	12.80	V
	6984	-56.05	-13	-43.05	-79.16	-59.45	8.40	11.80	V

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