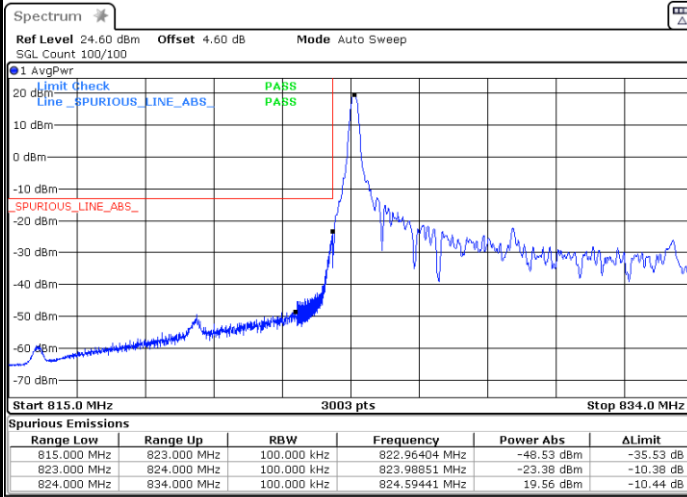




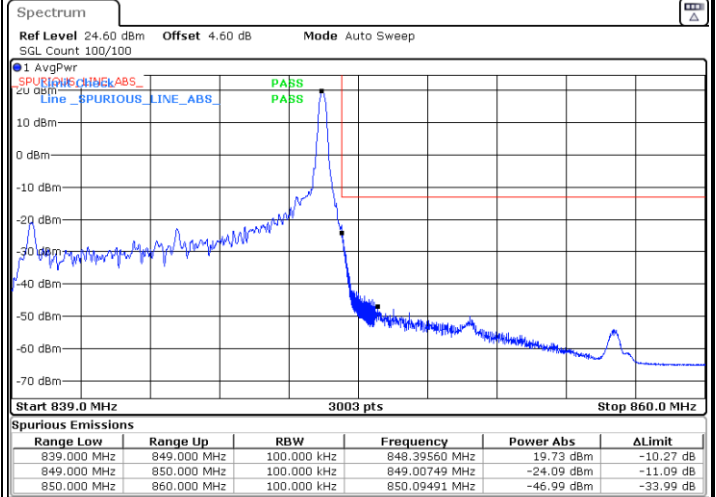
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



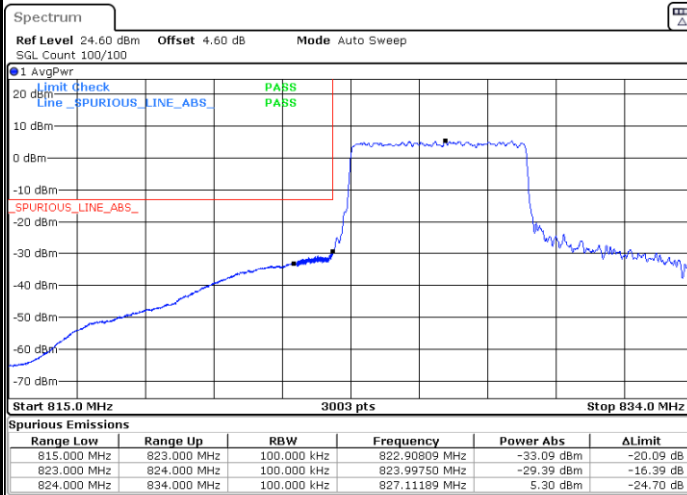
Date: 14.JUN.2022 11:26:33

Highest Band Edge / 1 RB



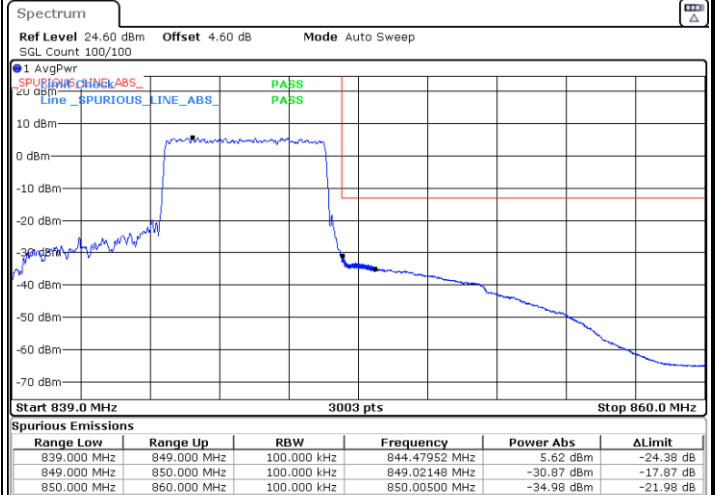
Date: 14.JUN.2022 11:51:10

Lowest Band Edge / Full RB



Date: 14.JUN.2022 11:27:29

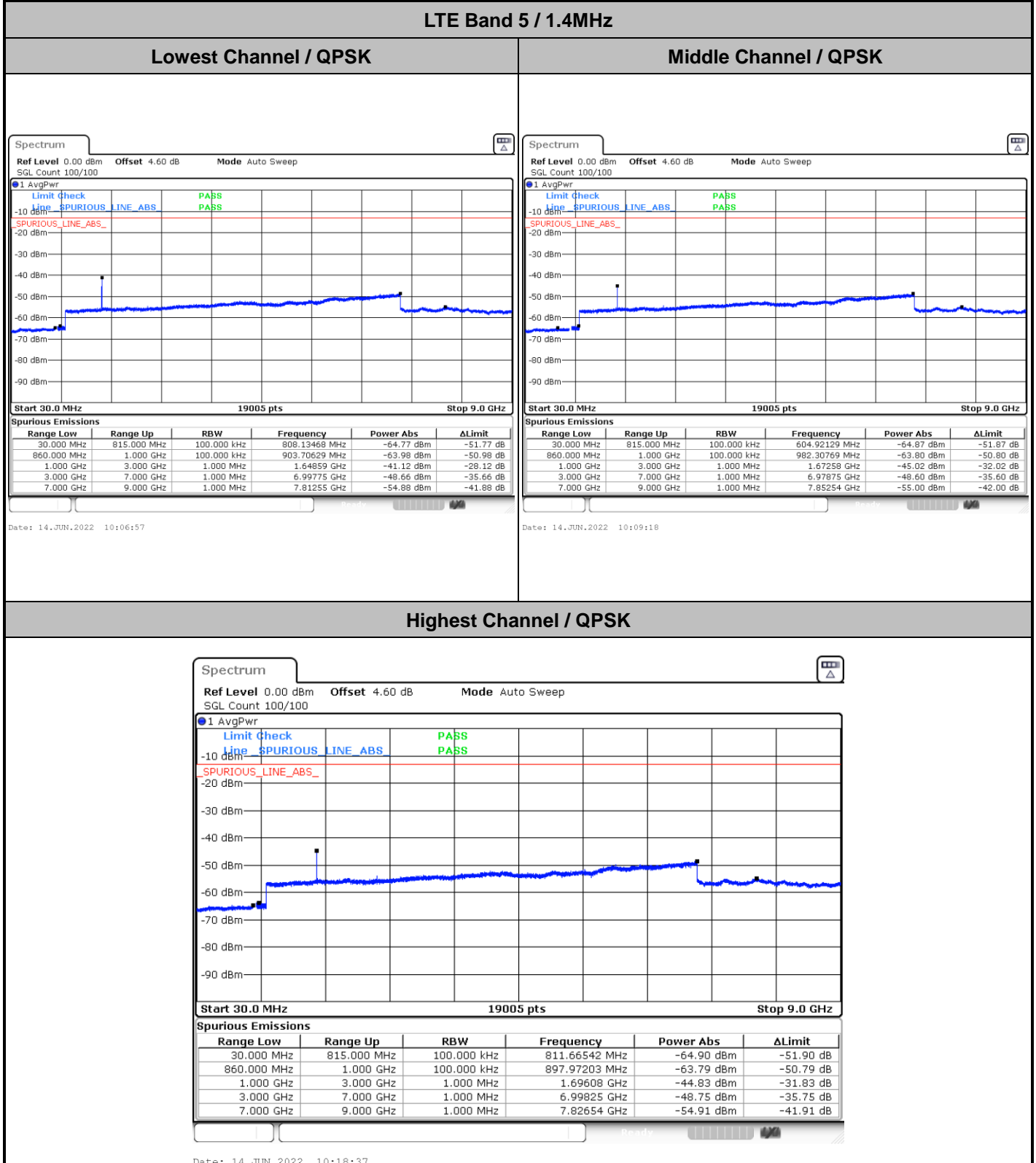
Highest Band Edge / Full RB



Date: 14.JUN.2022 11:52:12



Conducted Spurious Emission

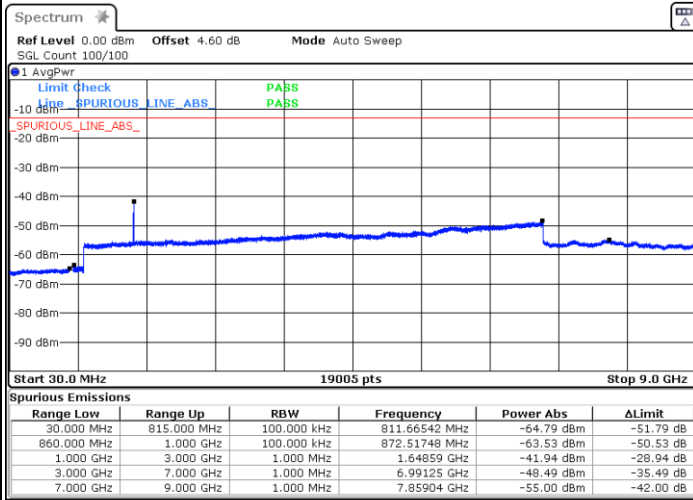




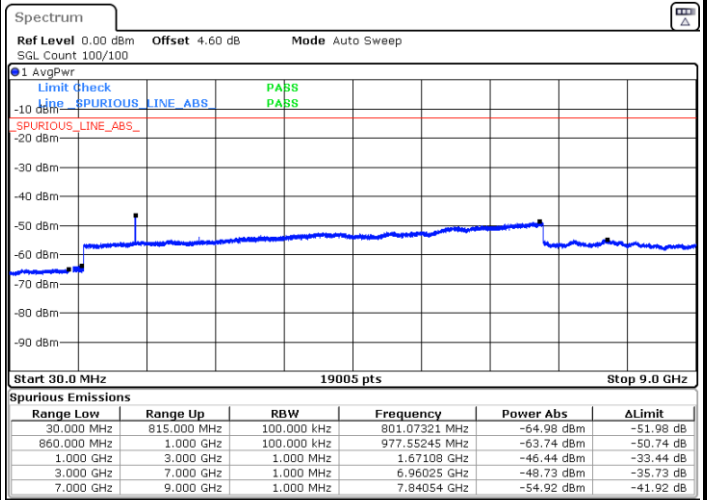
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

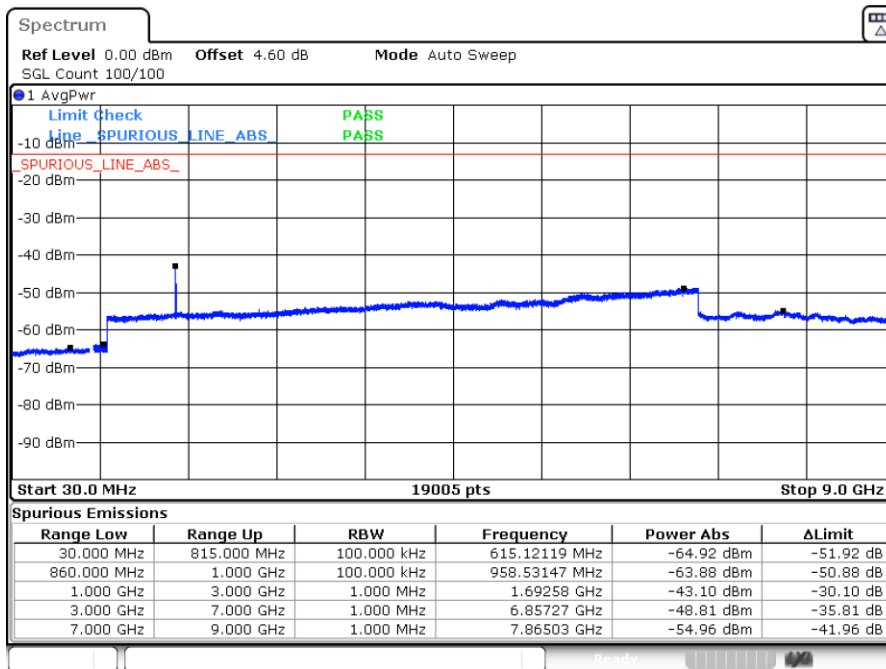


Date: 14. JUN. 2022 10:41:52



Date: 14. JUN. 2022 10:52:44

Highest Channel / QPSK



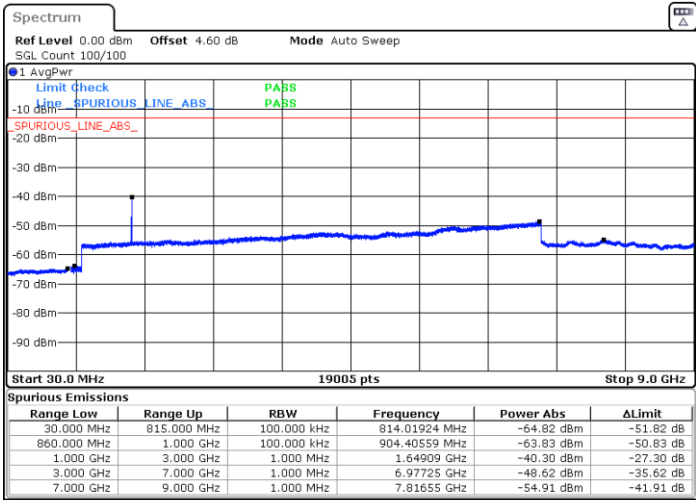
Date: 14. JUN. 2022 10:54:06



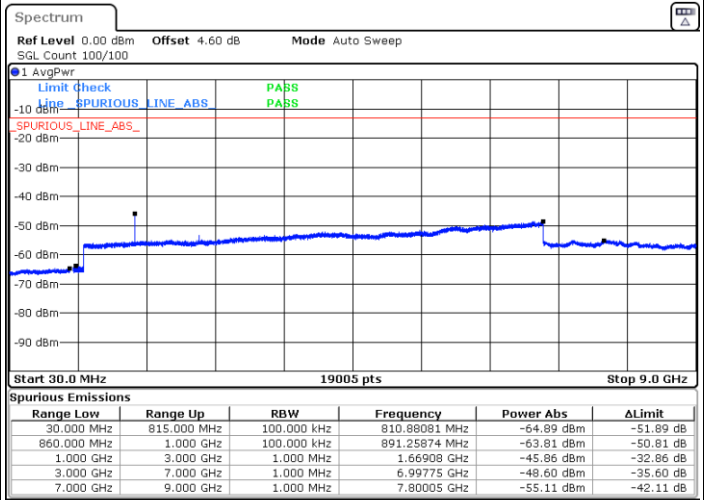
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

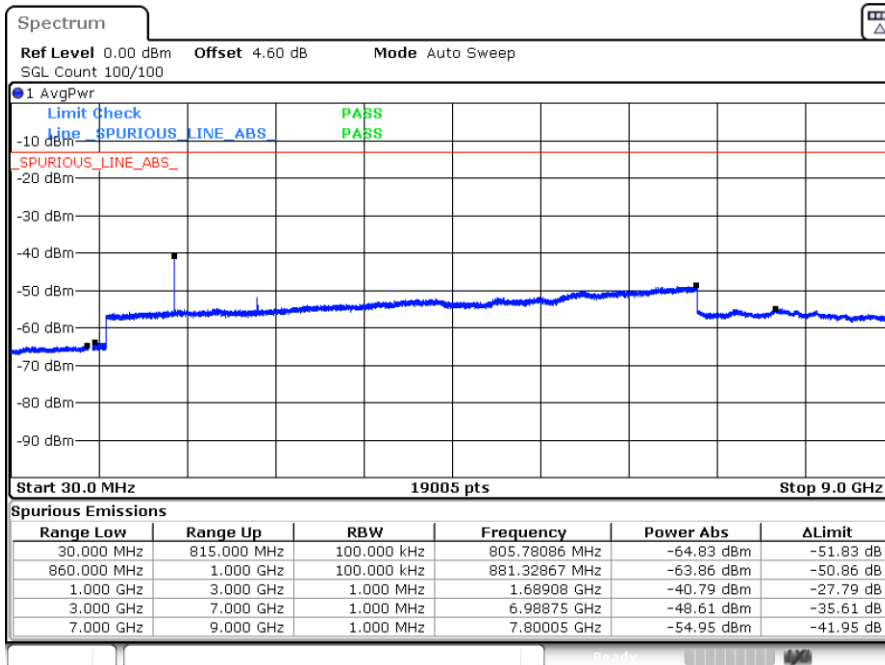


Date: 14. JUN. 2022 11:01:49



Date: 14. JUN. 2022 11:10:31

Highest Channel / QPSK



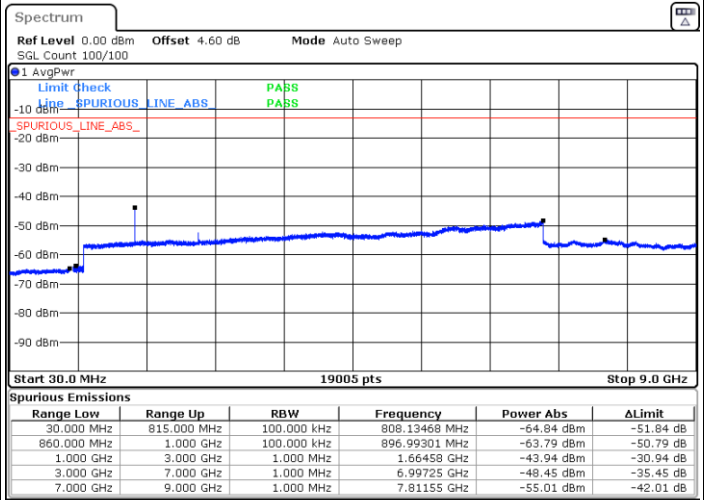
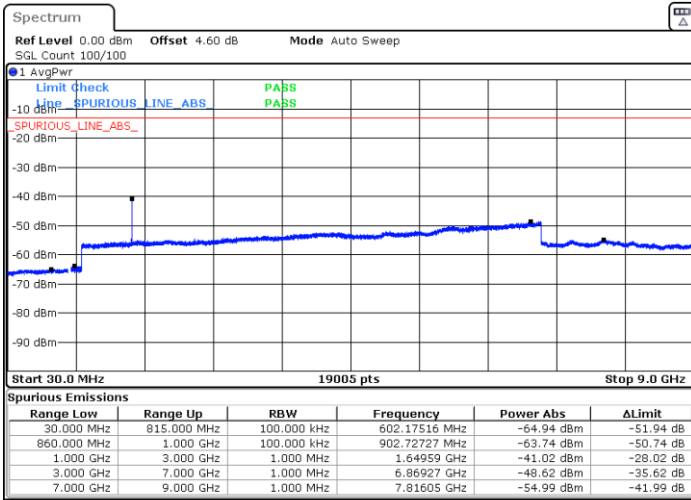
Date: 14. JUN. 2022 11:12:37



LTE Band 5 / 10MHz

Lowest Channel / QPSK

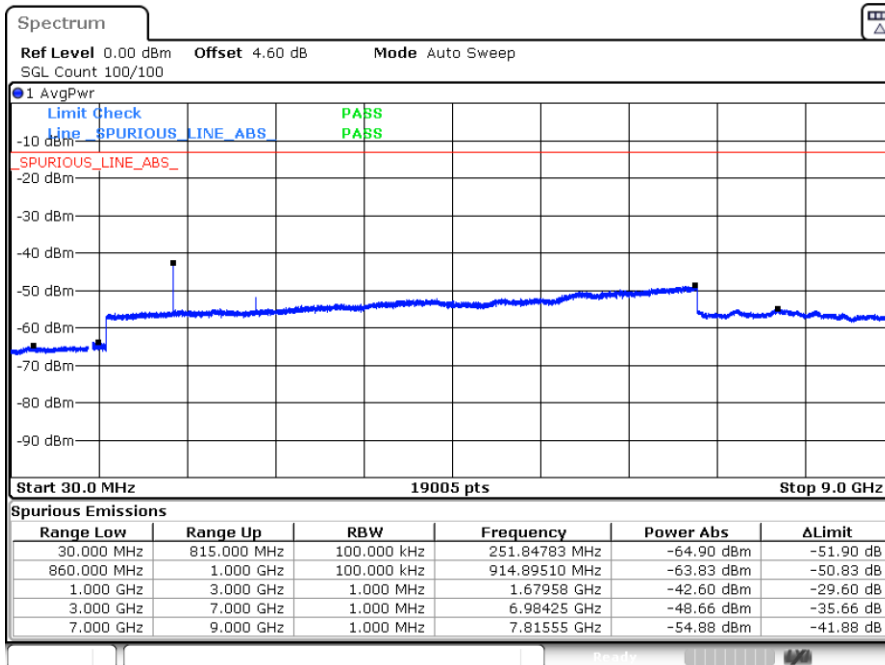
Middle Channel / QPSK



Date: 14. JUN. 2022 11:23:21

Date: 14. JUN. 2022 11:41:01

Highest Channel / QPSK



Date: 14. JUN. 2022 11:48:47



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0019	
20	Battery End Point	0.0022	

Note:

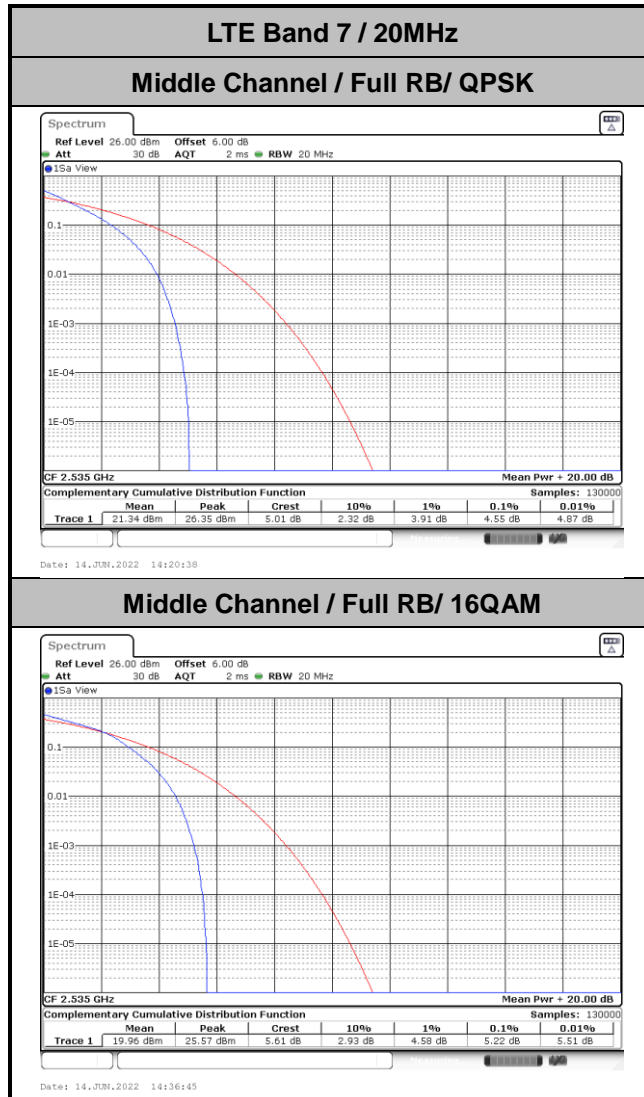
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.



LTE Band 7

Peak-to-Average Ratio

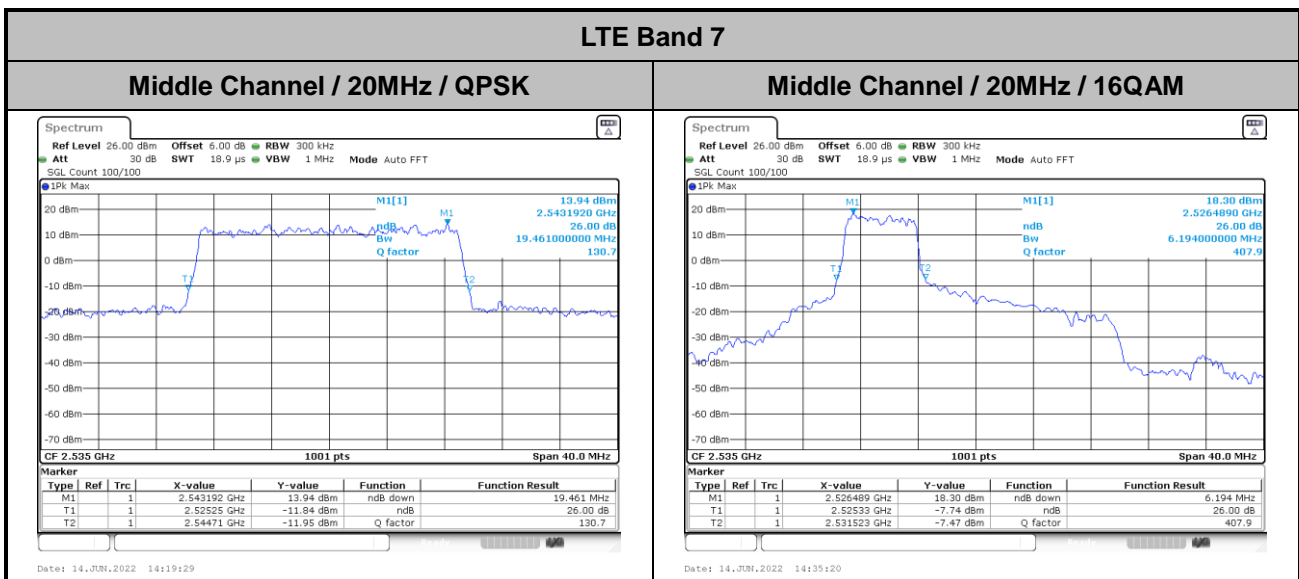
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	-	Result
Middle CH	4.55	5.22	-	PASS





26dB Bandwidth

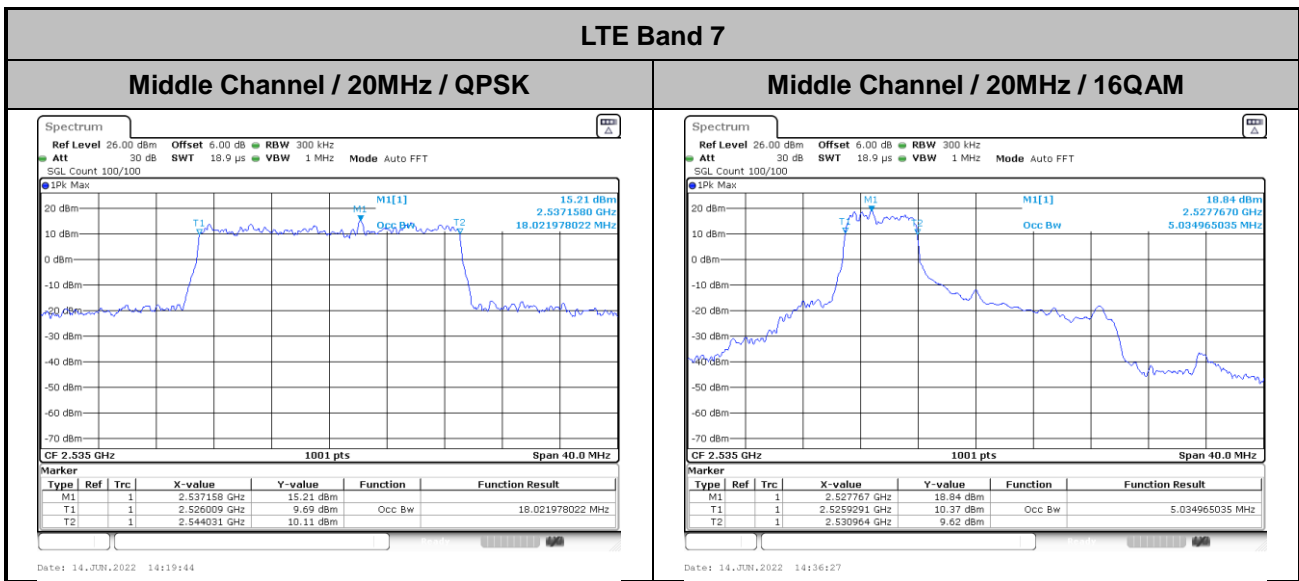
Mode	LTE Band 7 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.46	6.19





Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.02	5.03

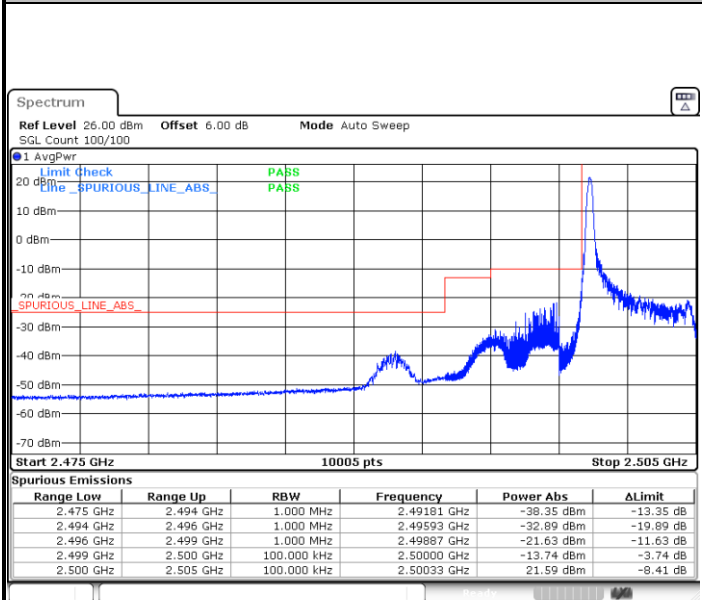




Conducted Band Edge

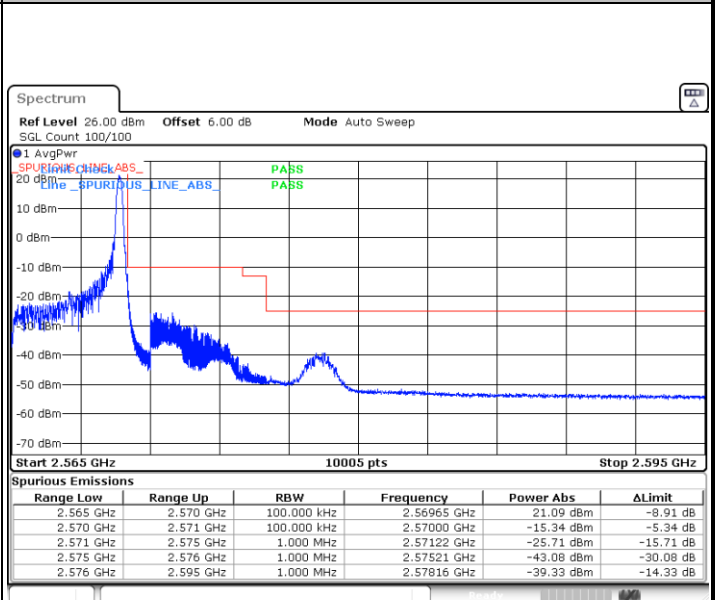
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



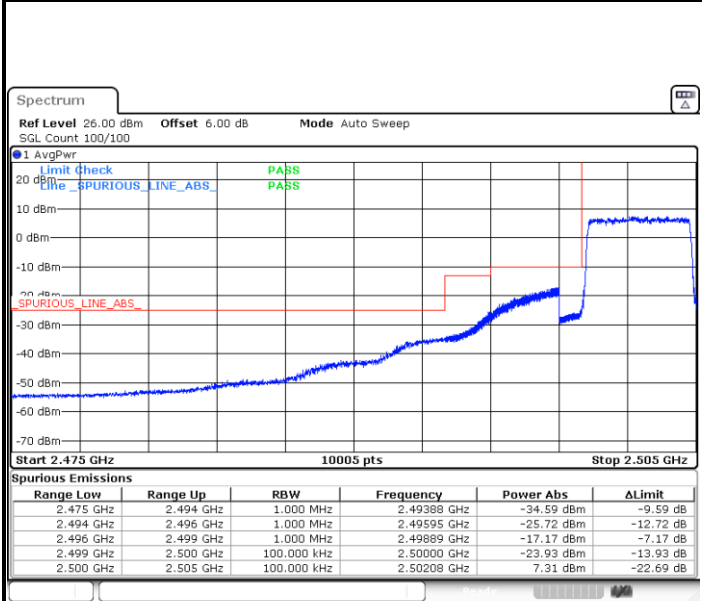
Date: 14.JUN.2022 12:08:27

Highest Band Edge / 1 RB



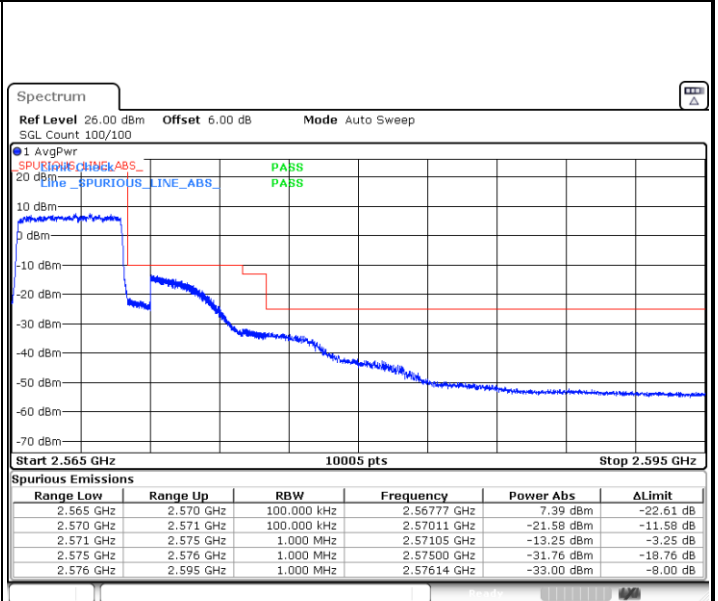
Date: 14.JUN.2022 13:21:23

Lowest Band Edge / Full RB



Date: 14.JUN.2022 13:12:57

Highest Band Edge / Full RB

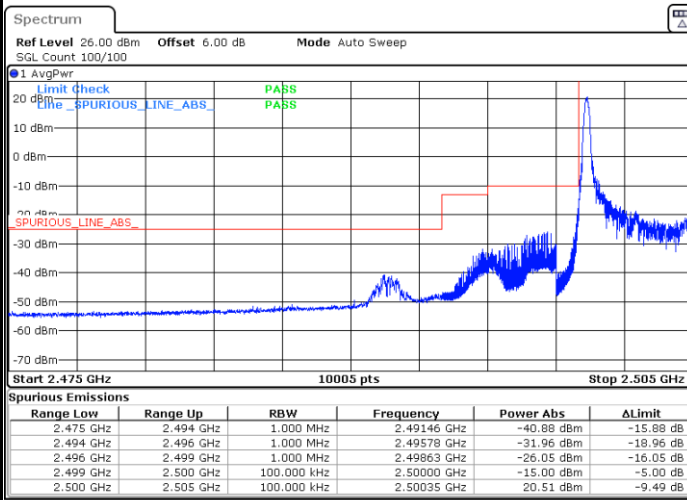


Date: 14.JUN.2022 13:24:01



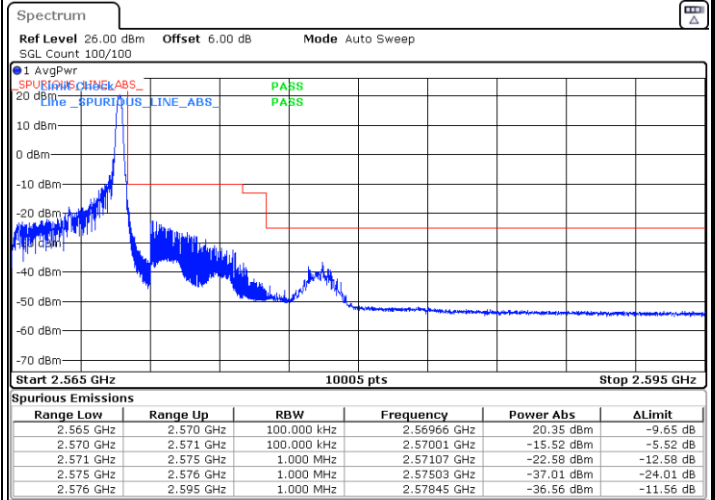
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



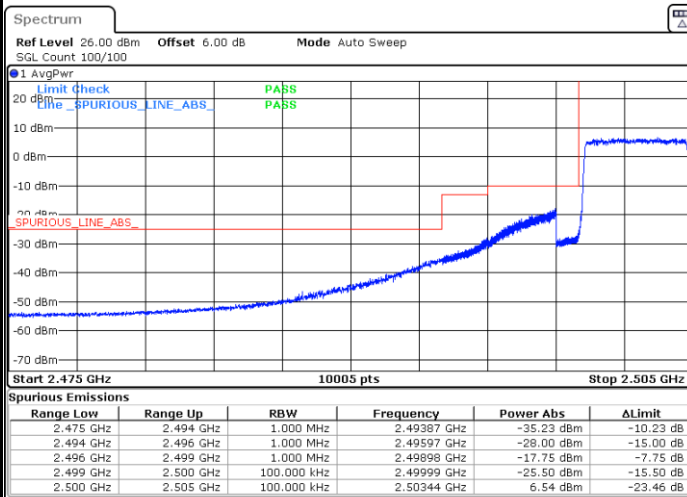
Date: 14.JUN.2022 12:09:10

Highest Band Edge / 1 RB



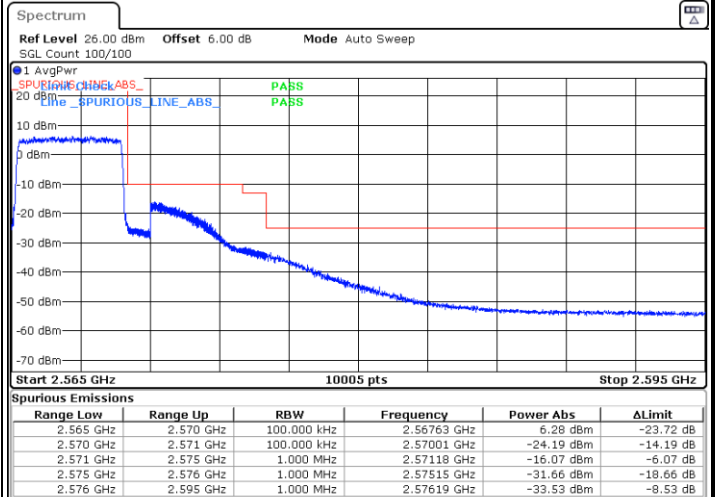
Date: 14.JUN.2022 13:22:35

Lowest Band Edge / Full RB



Date: 14.JUN.2022 12:10:18

Highest Band Edge / Full RB



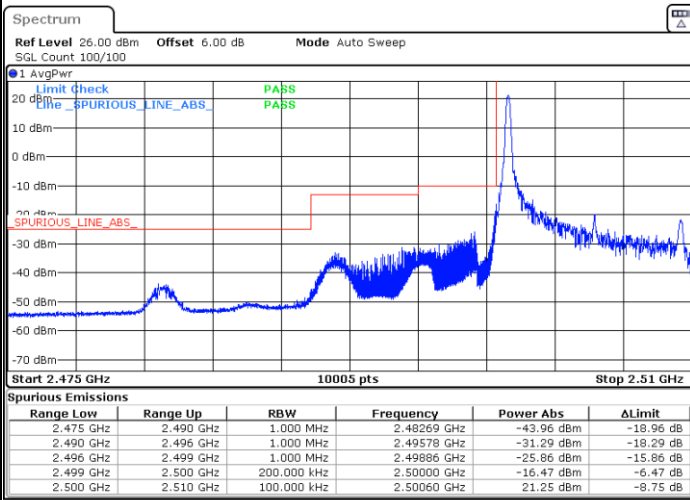
Date: 14.JUN.2022 13:23:23



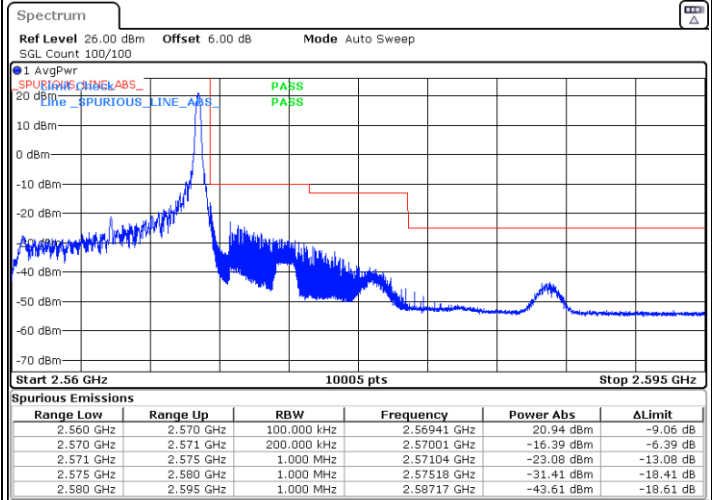
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



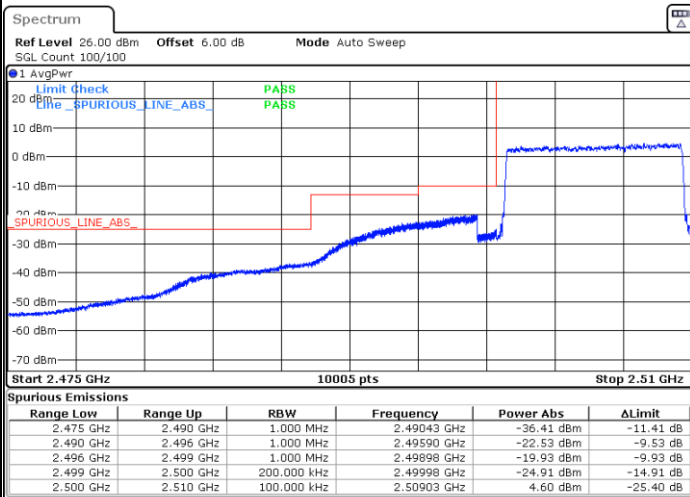
Date: 14.JUN.2022 13:28:22



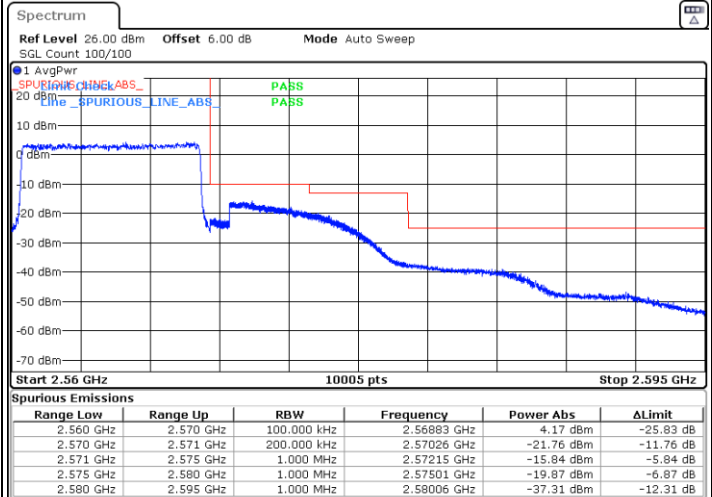
Date: 14.JUN.2022 13:37:15

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.JUN.2022 13:30:43

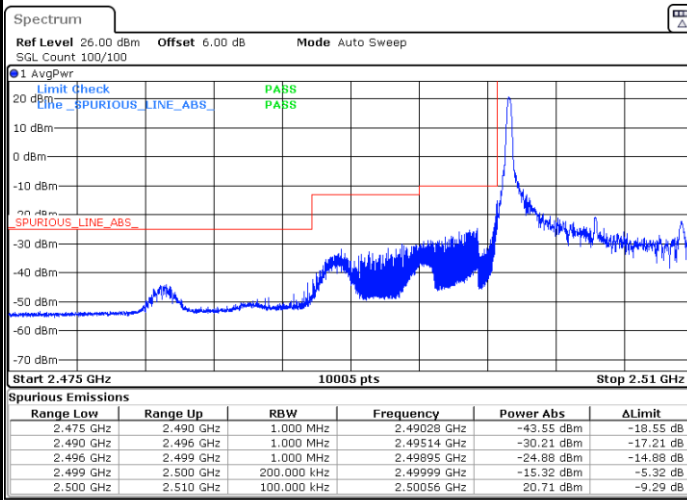


Date: 14.JUN.2022 13:48:54



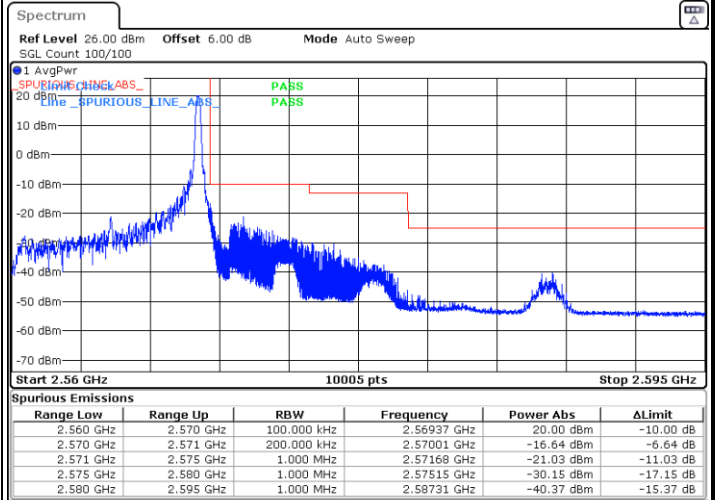
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



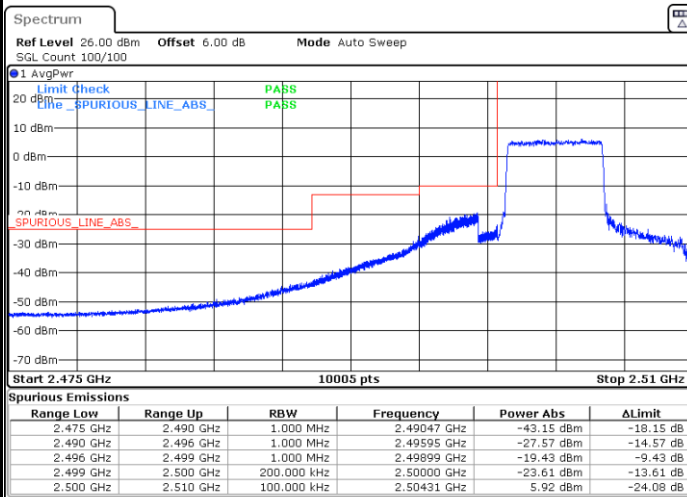
Date: 14.JUN.2022 13:29:01

Highest Band Edge / 1 RB



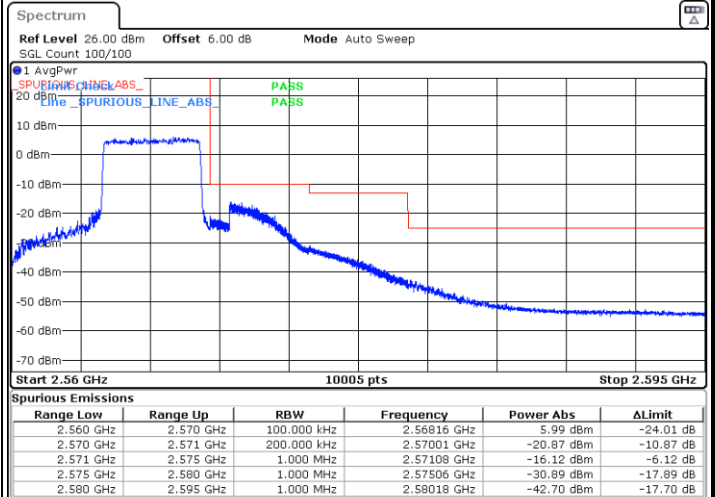
Date: 14.JUN.2022 13:38:29

Lowest Band Edge / Full RB



Date: 14.JUN.2022 13:30:05

Highest Band Edge / Full RB



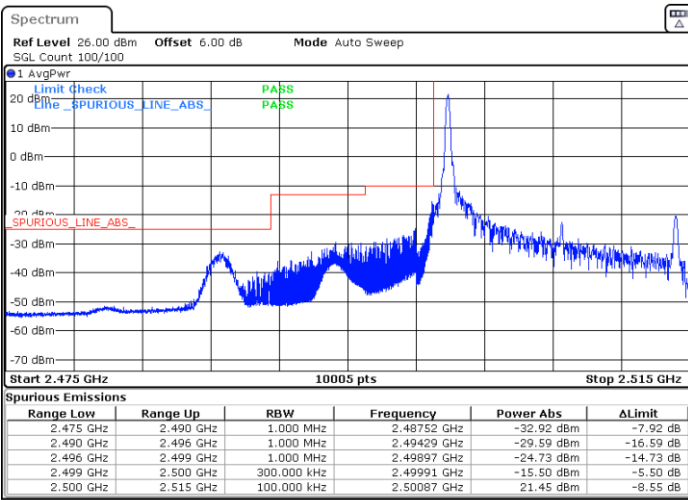
Date: 14.JUN.2022 13:39:27



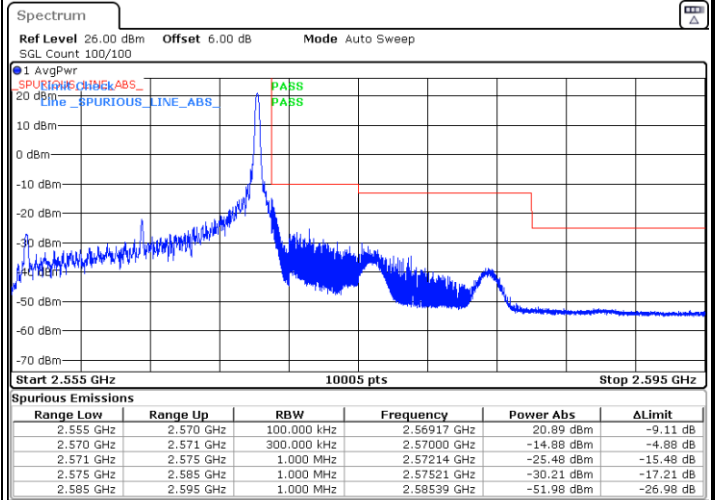
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



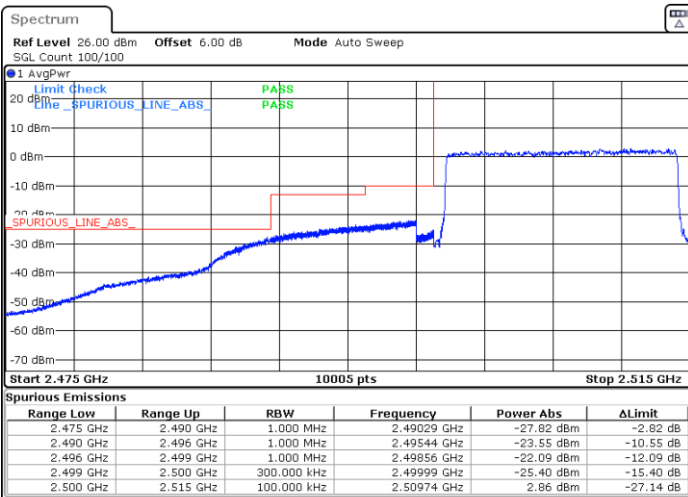
Date: 14.JUN.2022 13:52:38



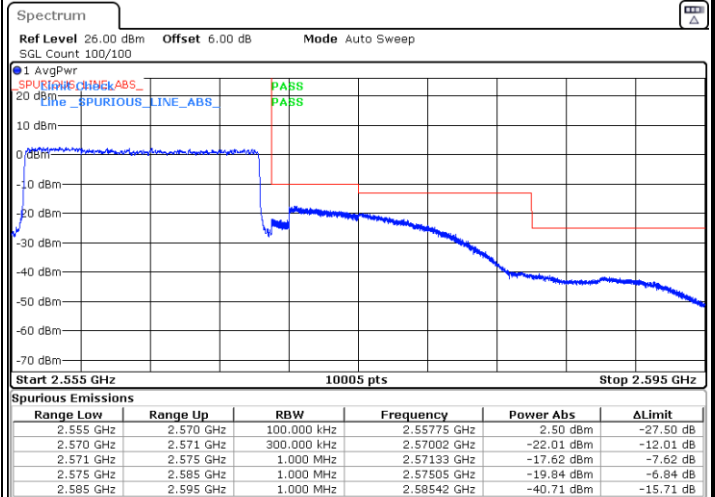
Date: 14.JUN.2022 14:00:27

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.JUN.2022 13:54:34

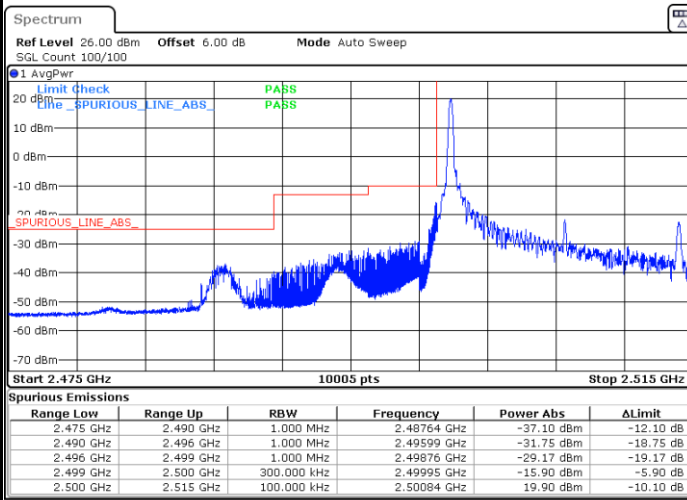


Date: 14.JUN.2022 14:02:48



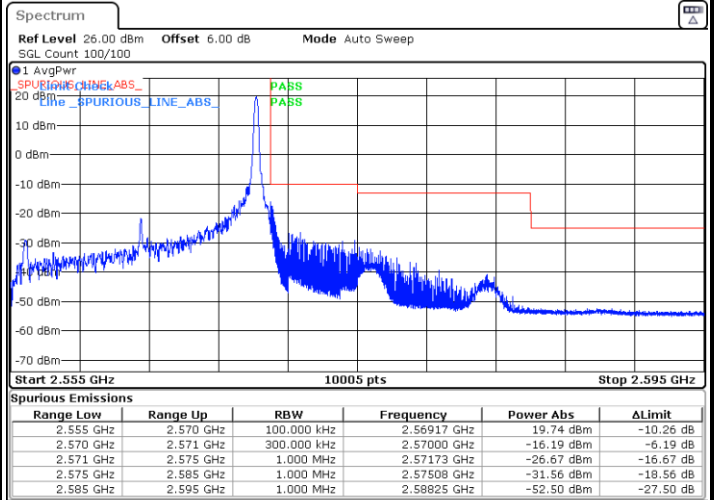
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



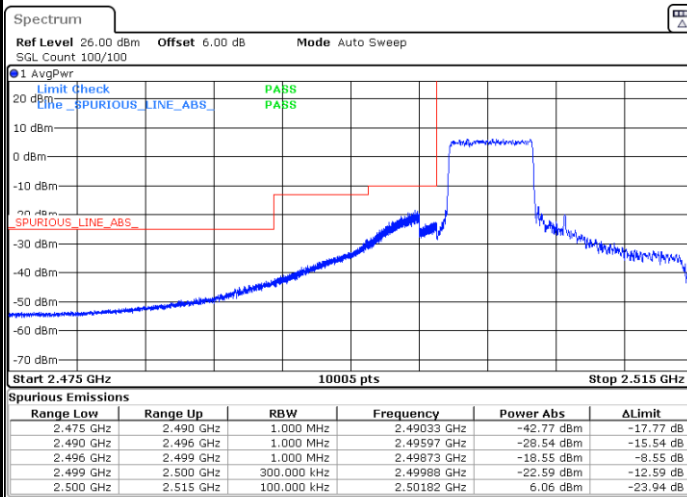
Date: 14.JUN.2022 13:53:10

Highest Band Edge / 1 RB



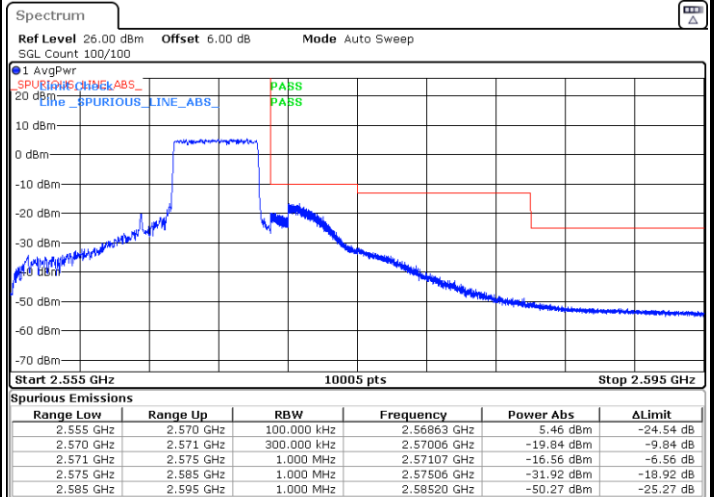
Date: 14.JUN.2022 14:01:23

Lowest Band Edge / Full RB



Date: 14.JUN.2022 13:53:52

Highest Band Edge / Full RB

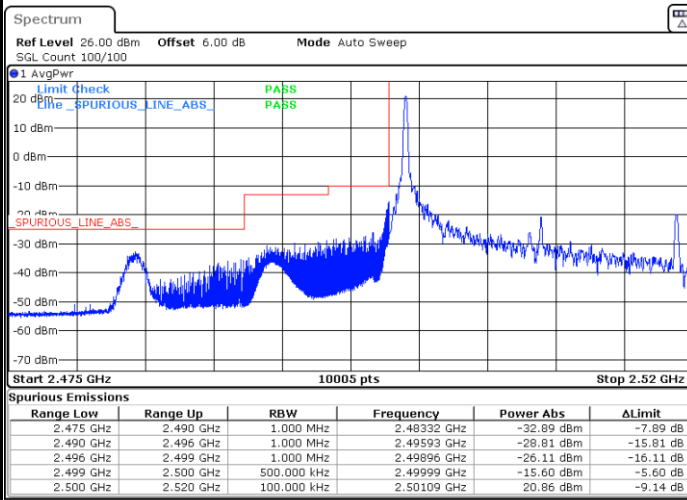


Date: 14.JUN.2022 14:02:02



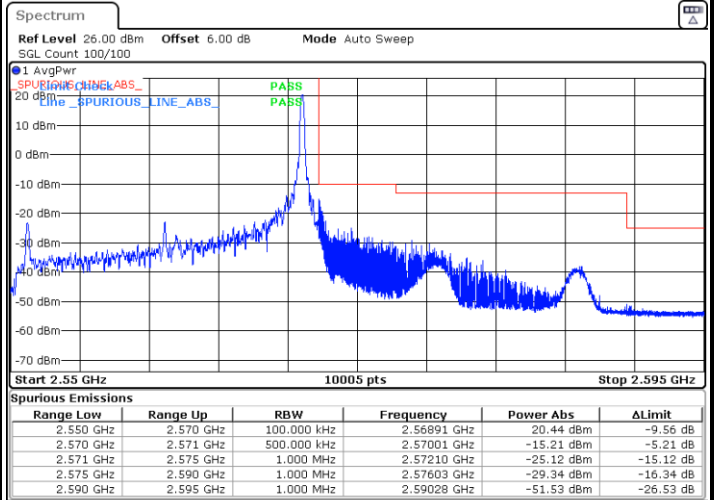
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



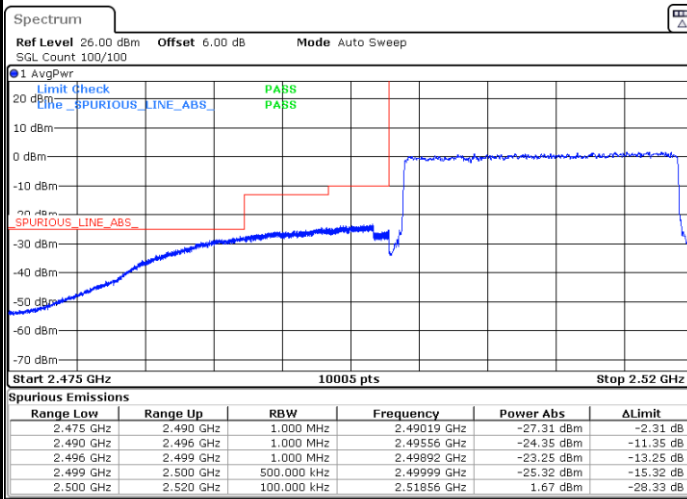
Date: 14.JUN.2022 14:06:19

Highest Band Edge / 1 RB



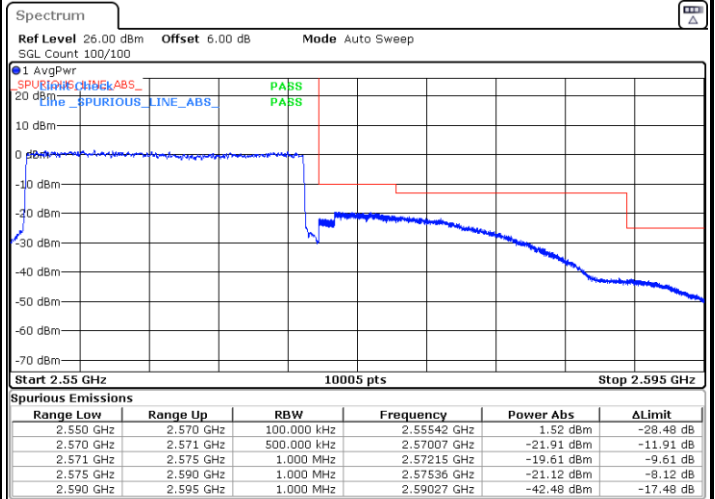
Date: 14.JUN.2022 14:15:06

Lowest Band Edge / Full RB



Date: 14.JUN.2022 14:09:11

Highest Band Edge / Full RB

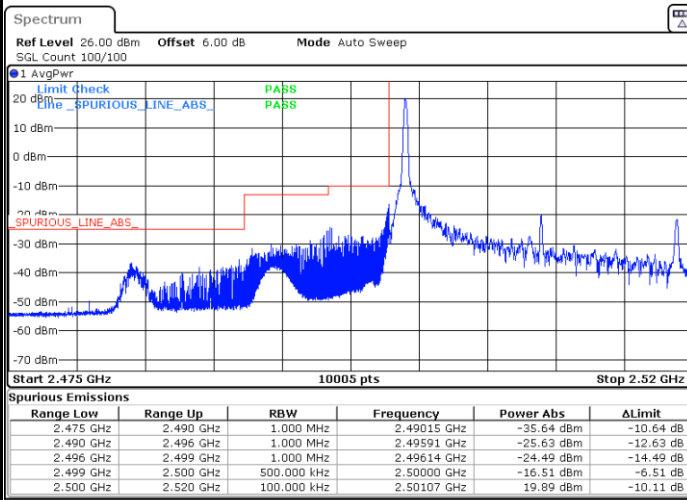


Date: 14.JUN.2022 14:18:25



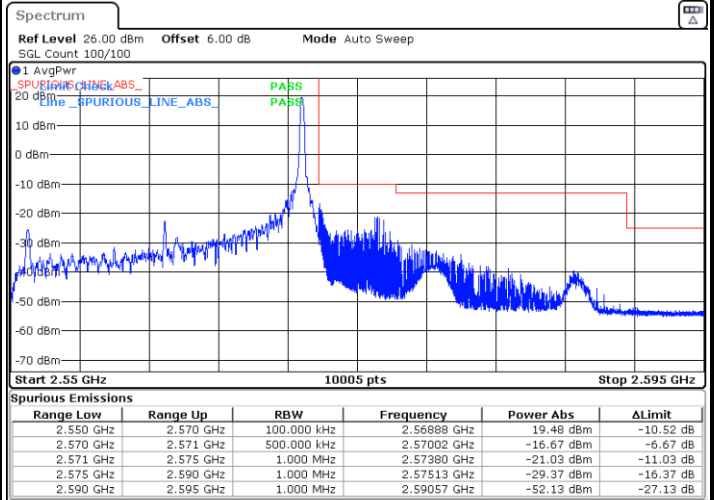
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



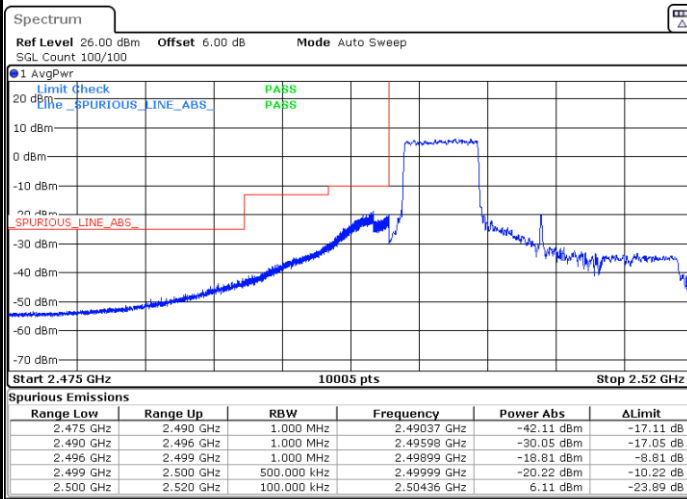
Date: 14.JUN.2022 14:06:55

Highest Band Edge / 1 RB



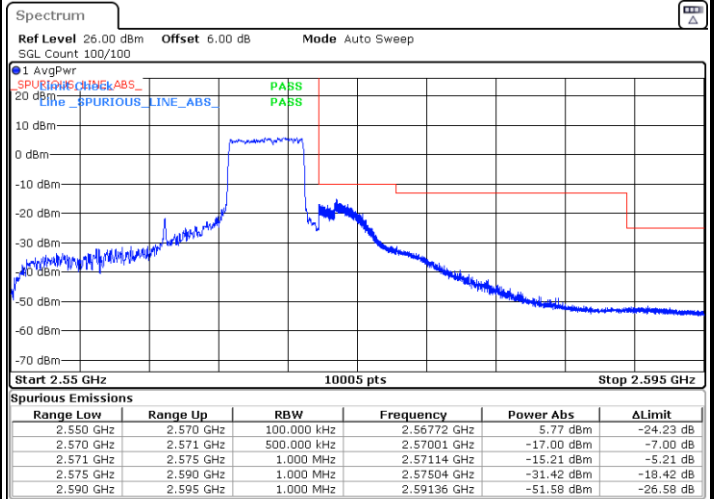
Date: 14.JUN.2022 14:15:46

Lowest Band Edge / Full RB



Date: 14.JUN.2022 14:08:04

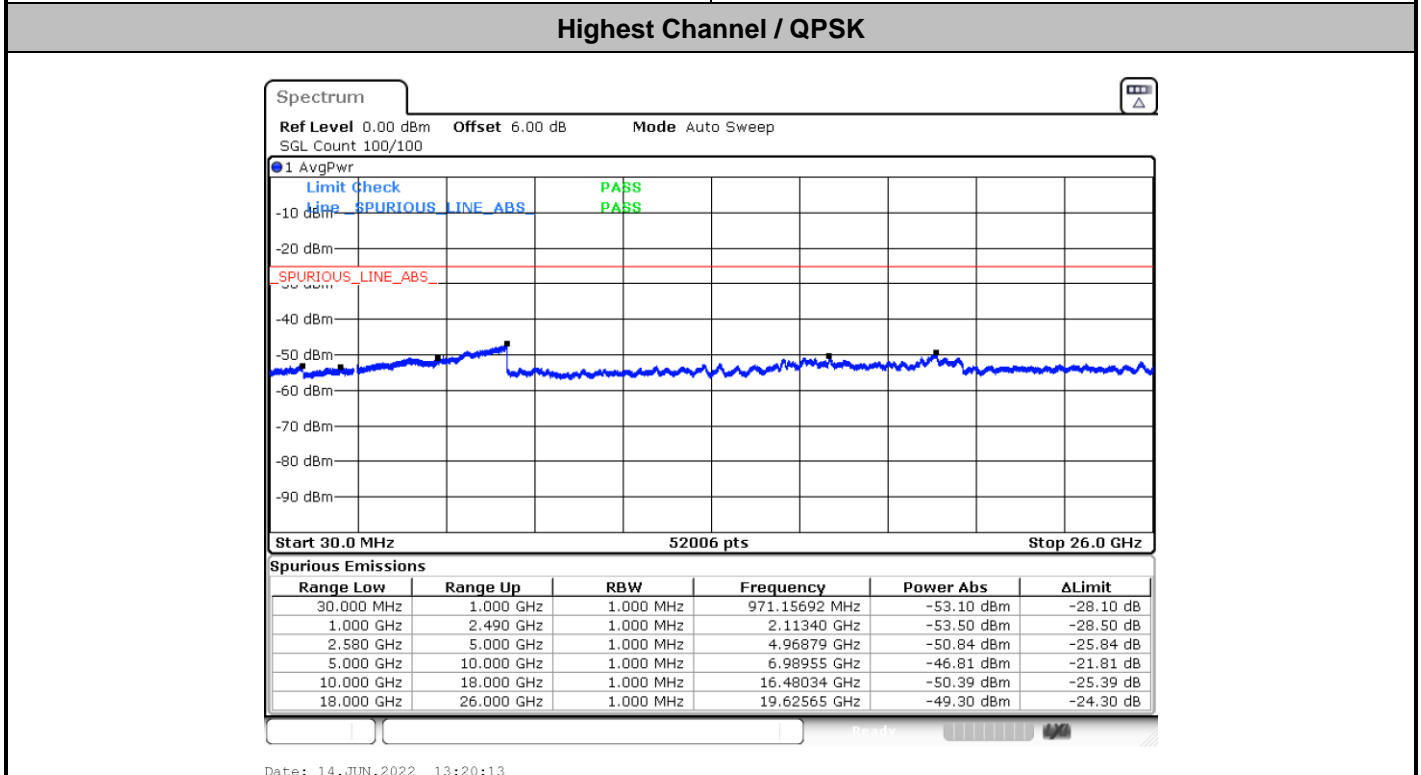
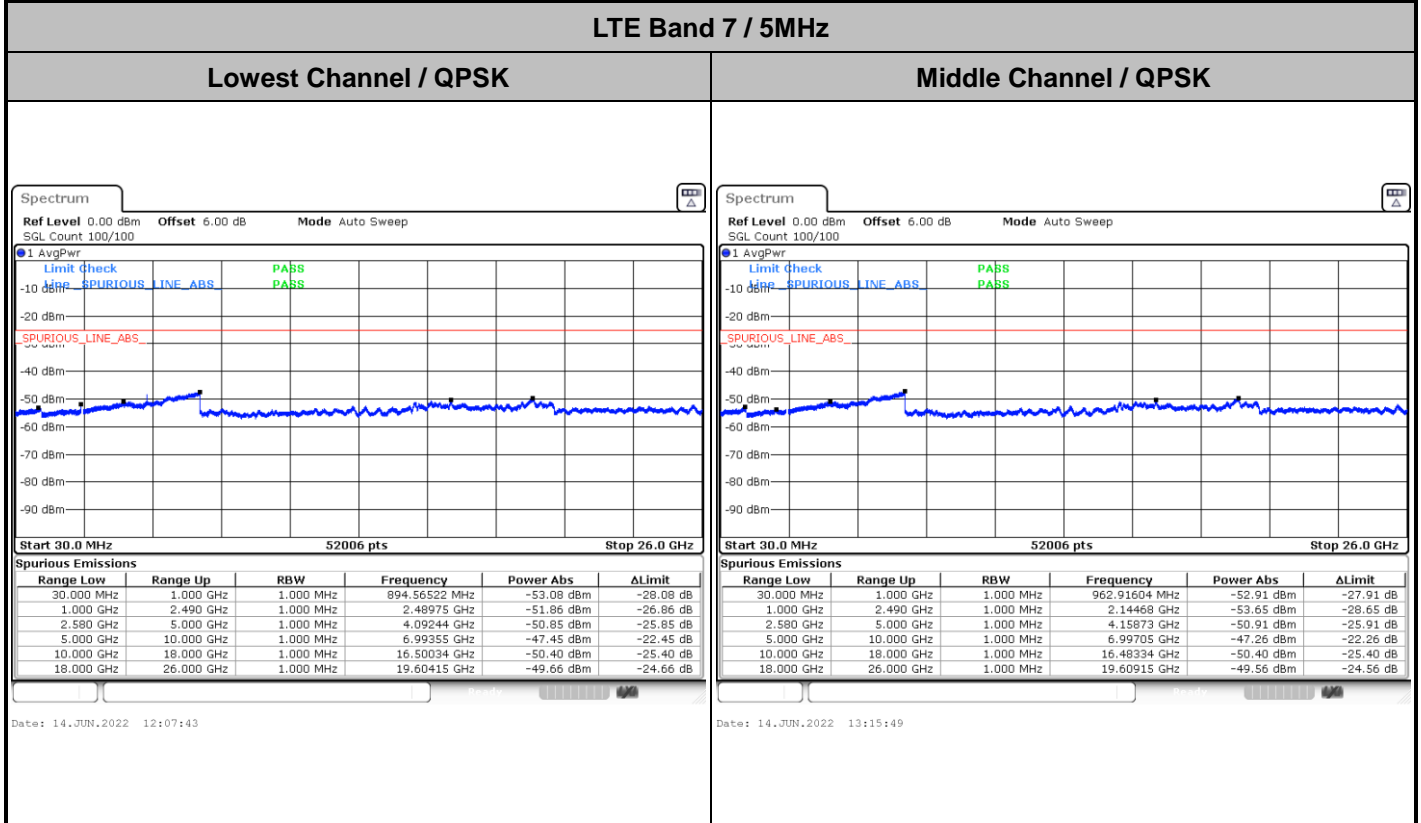
Highest Band Edge / Full RB



Date: 14.JUN.2022 14:17:42



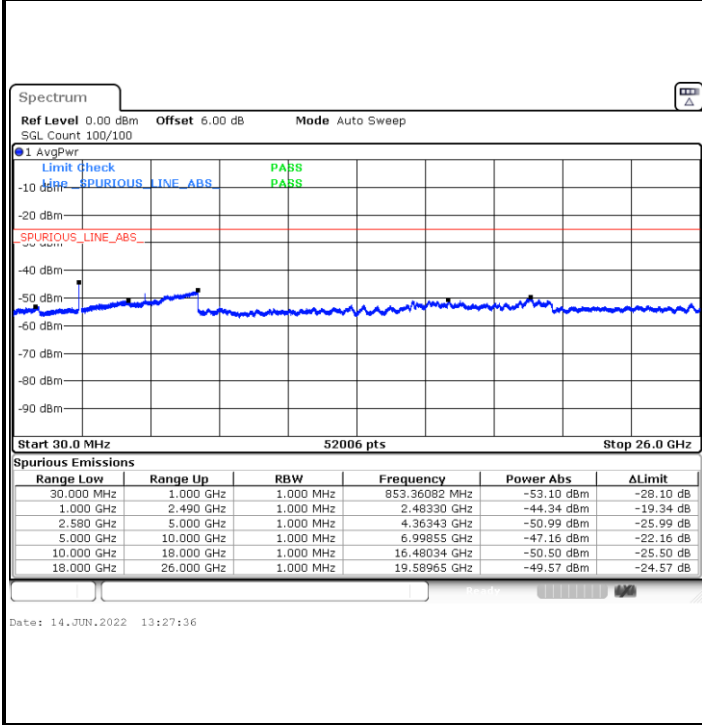
Conducted Spurious Emission



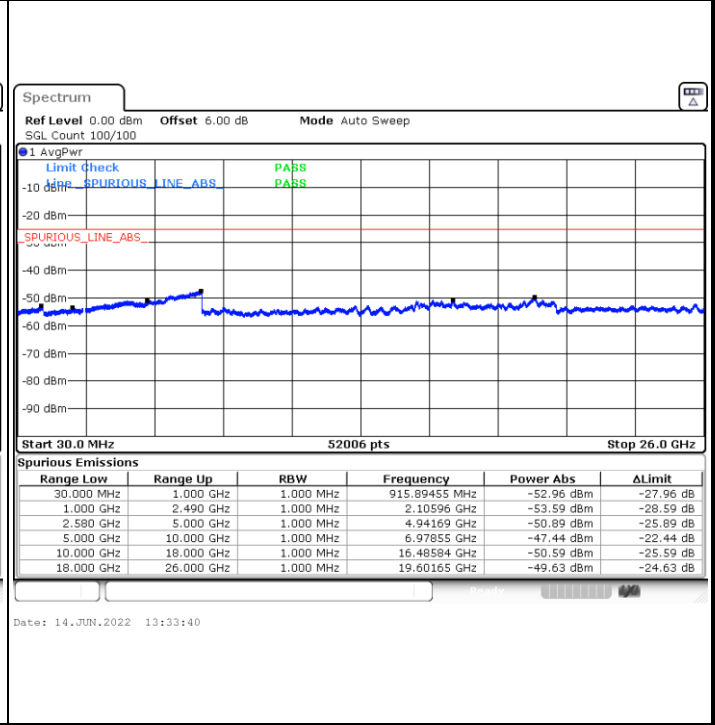


LTE Band 7 / 10MHz

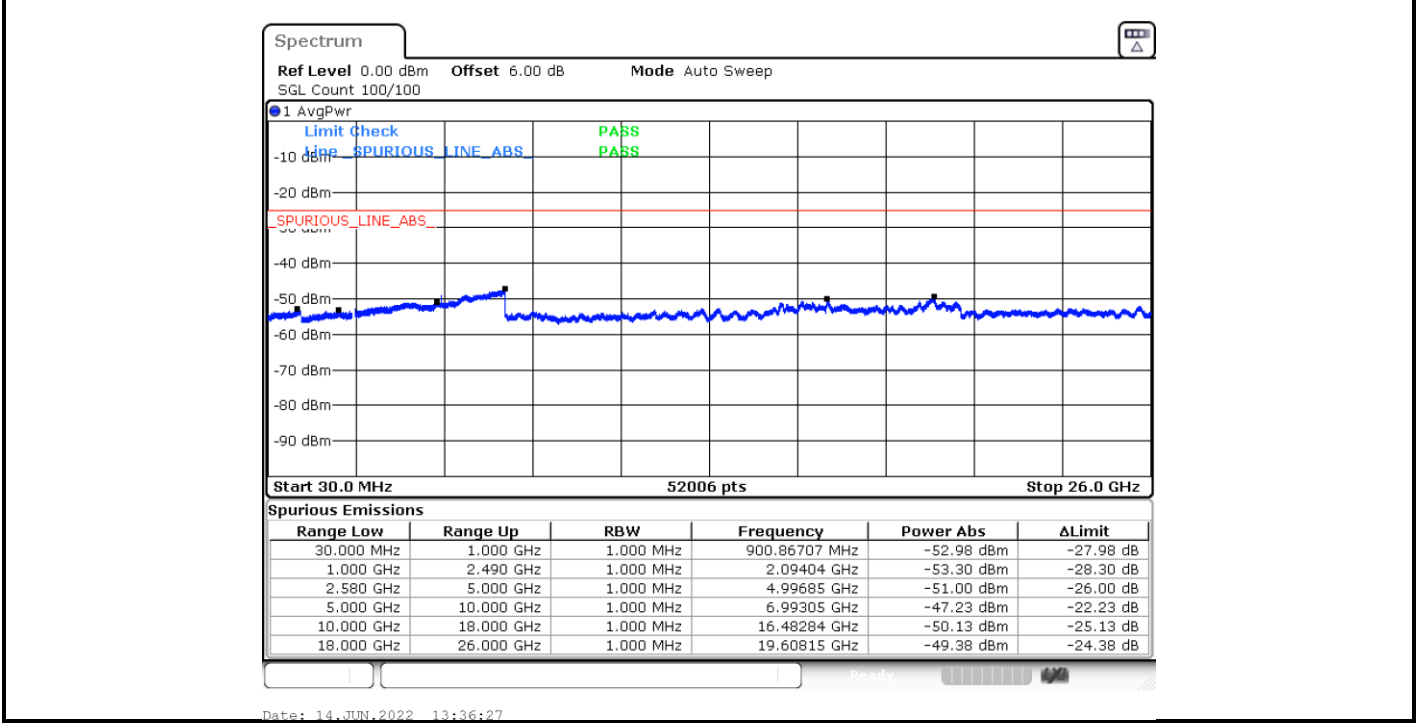
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

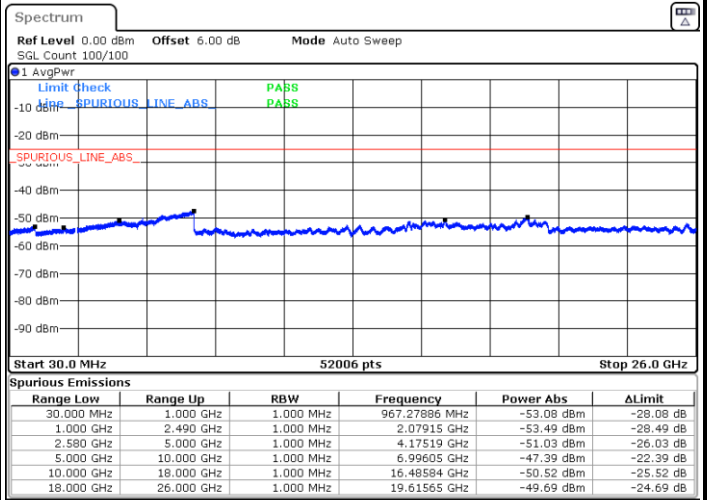
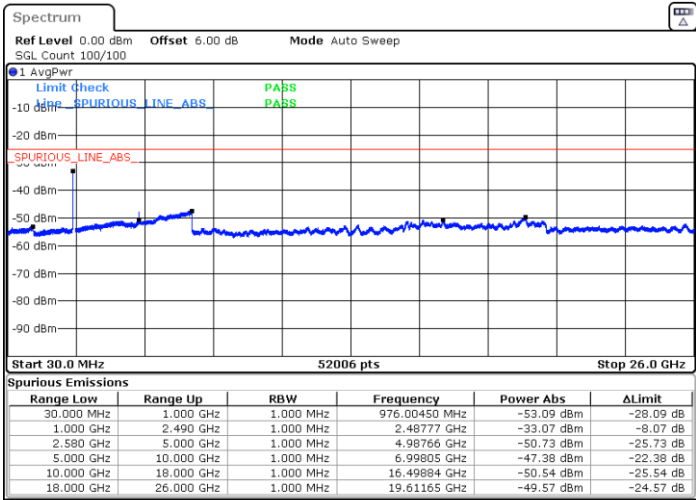




LTE Band 7 / 15MHz

Lowest Channel / QPSK

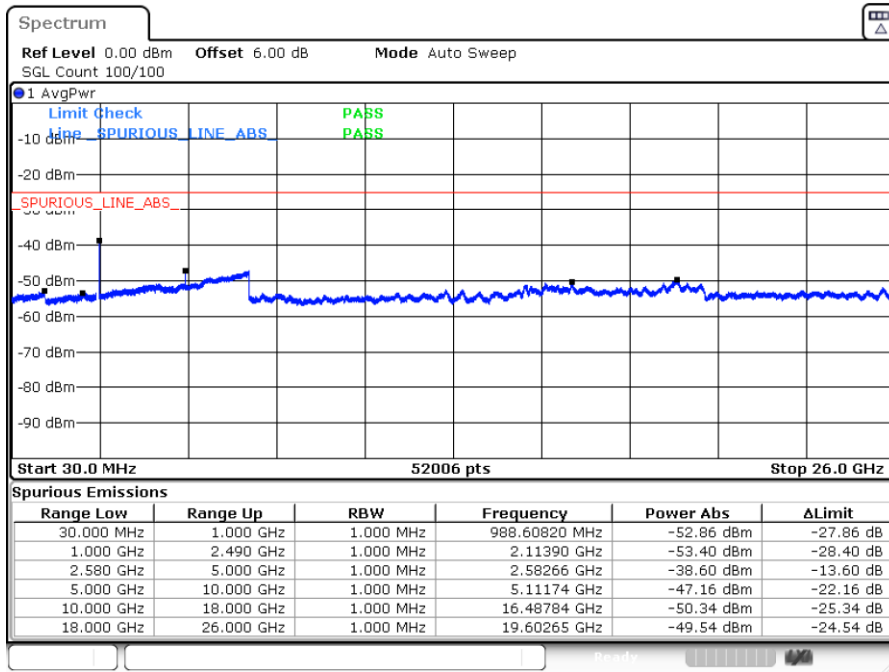
Middle Channel / QPSK



Date: 14. JUN. 2022 13:52:08

Date: 14. JUN. 2022 13:57:12

Highest Channel / QPSK

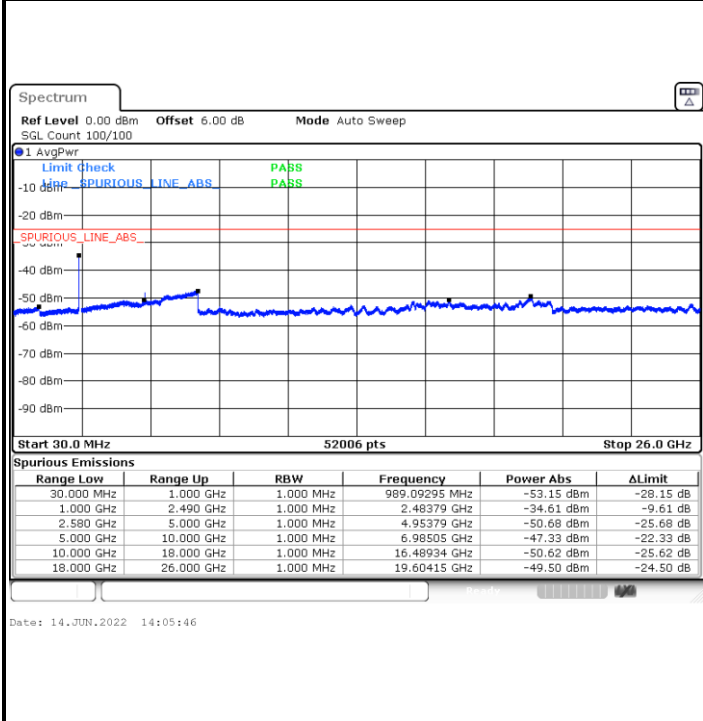


Date: 14. JUN. 2022 13:59:46

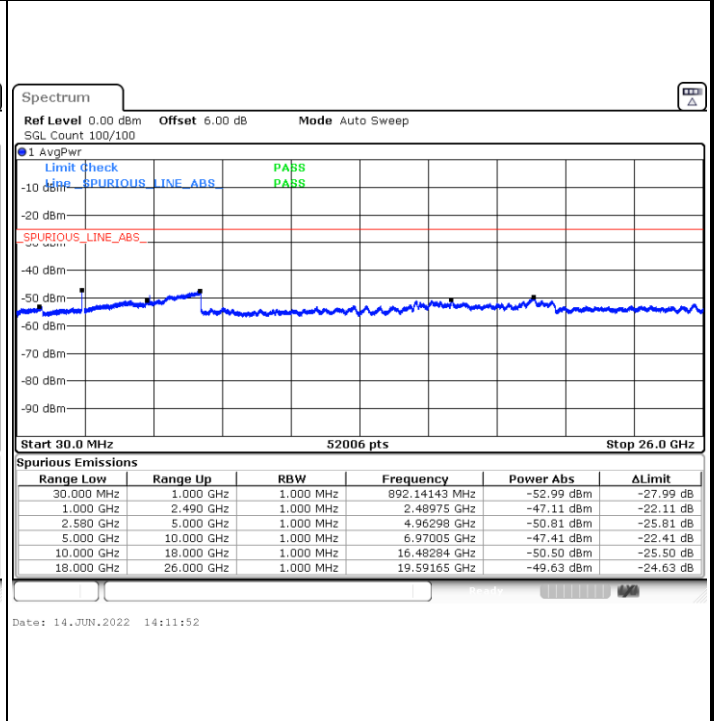


LTE Band 7 / 20MHz

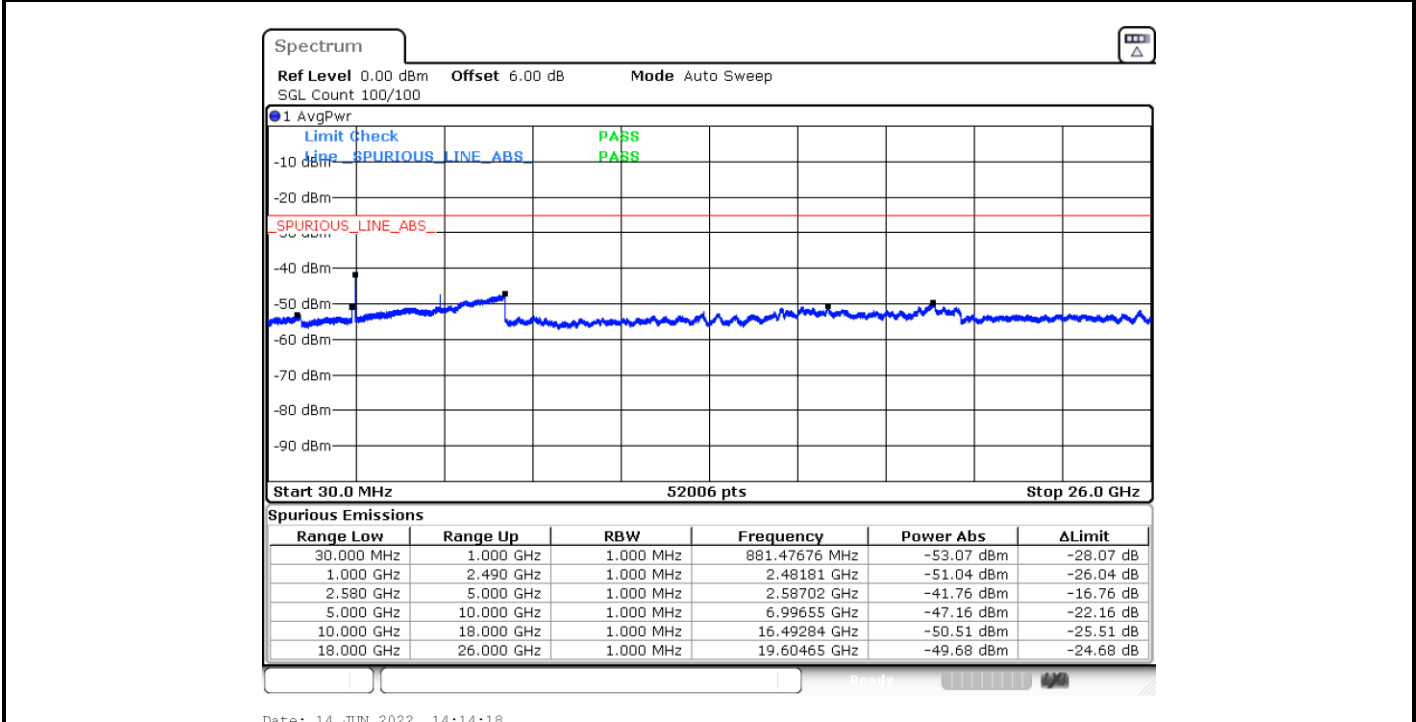
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0028	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Levi ZHUO	Temperature :	22~23°C
		Relative Humidity :	41~42%

LTE Band 2 / 20MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741	-49.84	-13	-36.84	-62.10	2.64	14.90	H
	5613	-53.59	-13	-40.59	-65.45	2.94	14.80	H
	7488	-45.50	-13	-32.50	-55.27	3.39	13.16	H
	3741	-51.72	-13	-38.72	-63.98	2.64	14.90	V
	5613	-52.01	-13	-39.01	-63.87	2.94	14.80	V
	7488	-45.58	-13	-32.58	-55.35	3.39	13.16	V

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

LTE Band 4 / 20MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3447	-54.91	-13	-41.91	-65.65	2.604	13.34	H
	5169	-54.91	-13	-41.91	-65.42	3.011	13.52	H
	6888	-53.78	-13	-40.78	-63.98	3.271	13.47	H
	3447	-56.57	-13	-43.57	-67.31	2.604	13.34	V
	5169	-54.66	-13	-41.66	-65.17	3.011	13.52	V
	6888	-53.79	-13	-40.79	-63.99	3.271	13.47	V

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

LTE Band 5 /10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-65.87	-13	-52.87	-72.84	1.58	10.70	H
	2496	-60.97	-13	-47.97	-69.22	2.102	12.50	H
	3328	-60.49	-13	-47.49	-69.38	2.856	13.90	H
	1664	-65.11	-13	-52.11	-72.08	1.58	10.70	V
	2496	-59.62	-13	-46.62	-67.87	2.10	12.50	V
	3328	-60.62	-13	-47.62	-69.51	2.86	13.90	V

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



LTE Band 7 / 20MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052	-41.31	-25	-16.31	-52.05	2.604	13.34	H
	7576	-52.60	-25	-27.60	-63.11	3.011	13.52	H
	10100	-41.09	-25	-16.09	-51.29	3.271	13.47	H
	12630	-40.93	-25	-15.93	-47.90	5.527	12.5	H
	5052	-43.80	-25	-18.80	-54.54	2.604	13.34	V
	7576	-53.96	-25	-28.96	-64.47	3.011	13.52	V
	10100	-50.22	-25	-25.22	-60.42	3.271	13.47	V
	12630	-43.79	-25	-18.79	-50.76	5.527	12.50	V

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