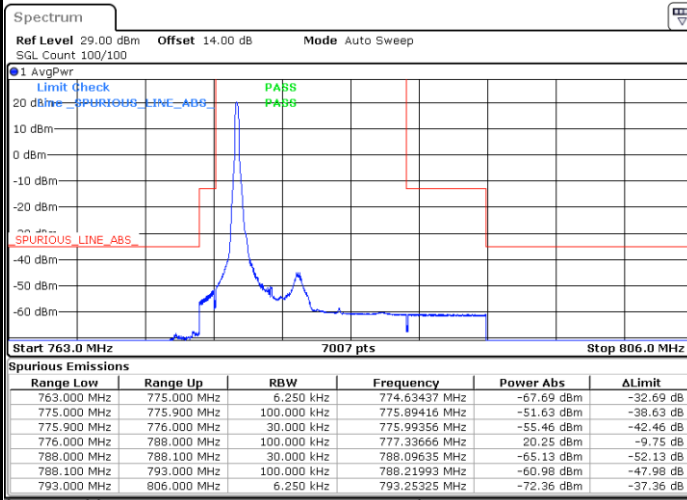




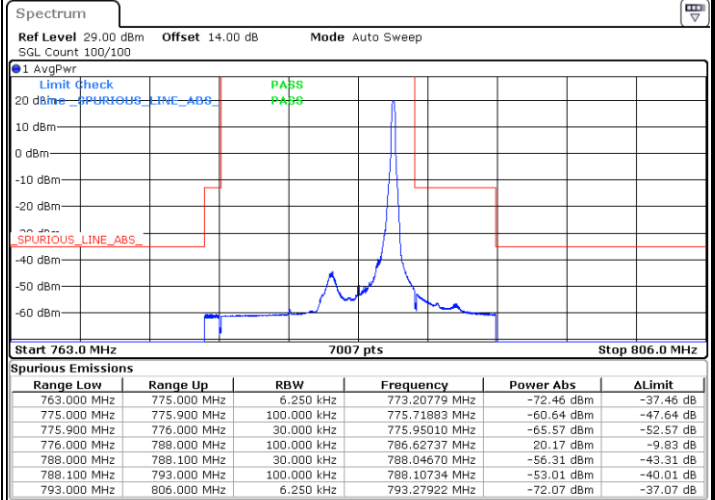
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



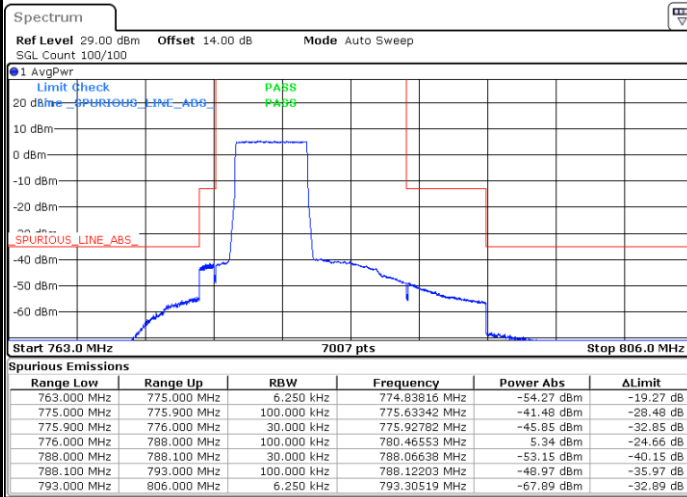
Date: 19 JUN 2023 05:43:59

Highest Band Edge / 1 RB



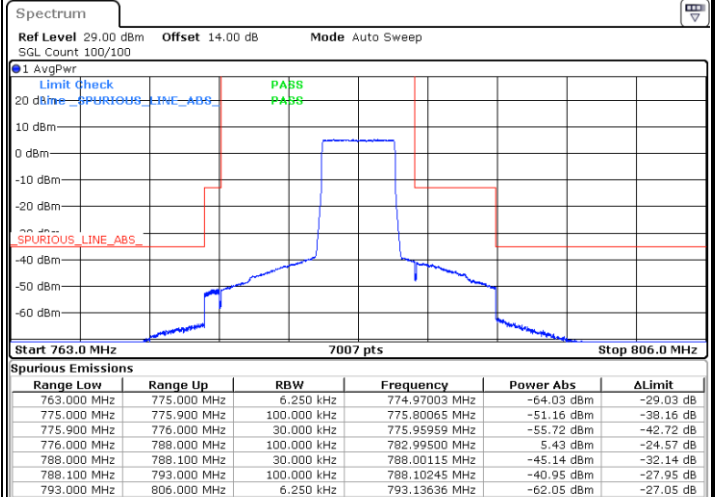
Date: 19 JUN 2023 05:55:18

Lowest Band Edge / Full RB



Date: 19 JUN 2023 05:38:19

Highest Band Edge / Full RB

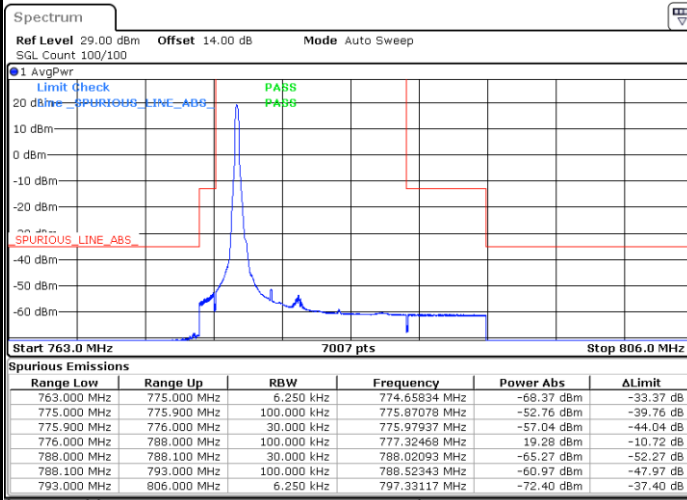


Date: 19 JUN 2023 05:49:38



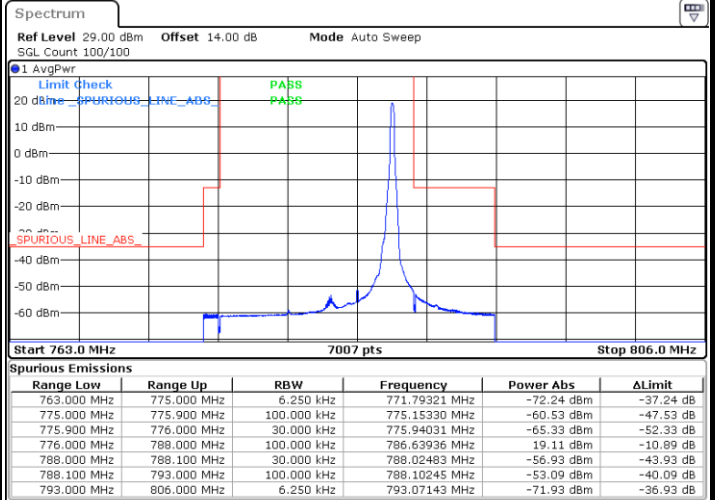
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



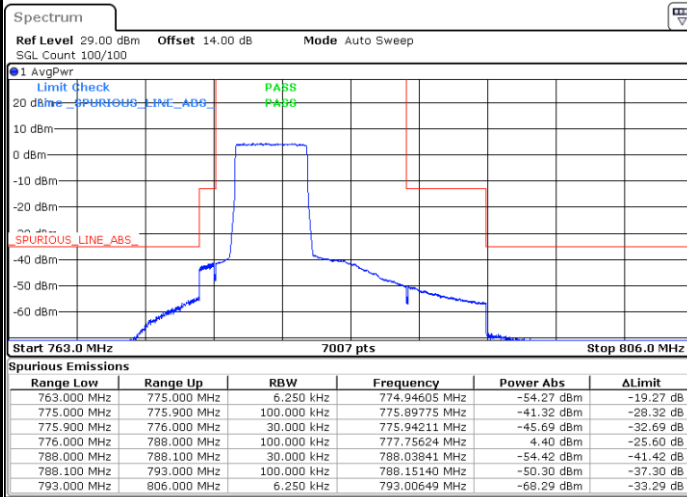
Date: 19 JUN.2023 05:45:52

Highest Band Edge / 1 RB



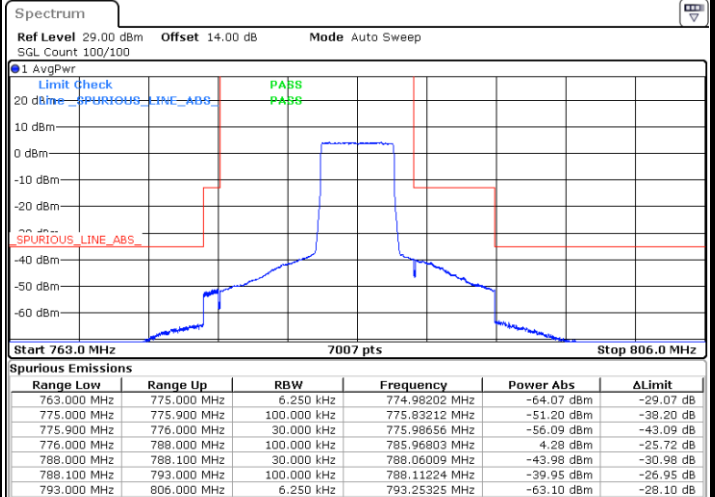
Date: 19 JUN.2023 05:57:11

Lowest Band Edge / Full RB



Date: 19 JUN.2023 05:40:13

Highest Band Edge / Full RB

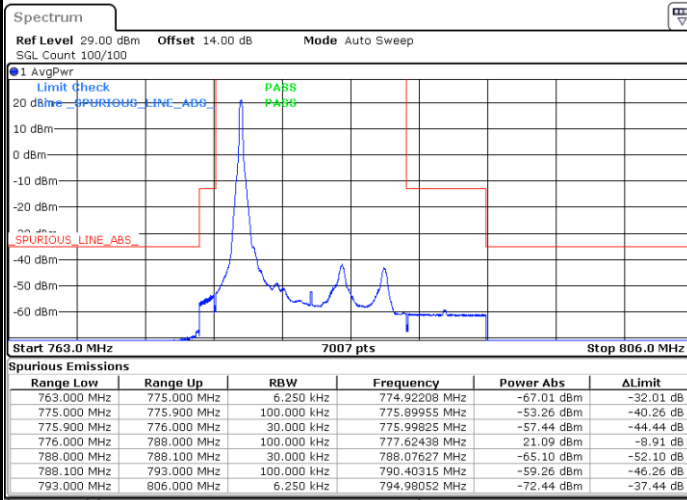


Date: 19 JUN.2023 05:51:31



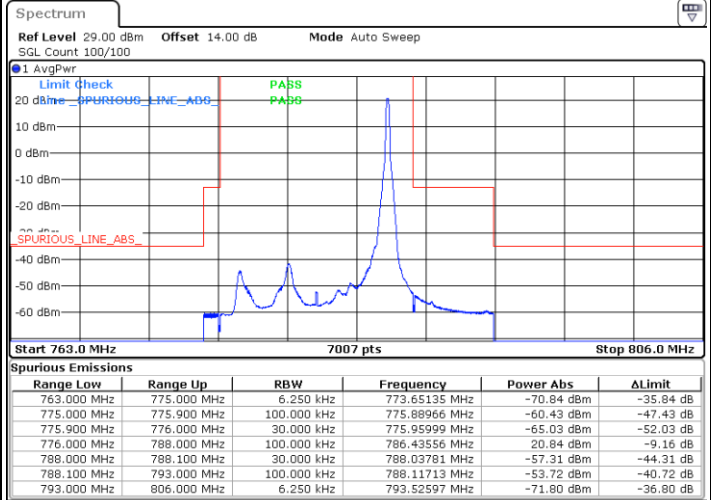
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



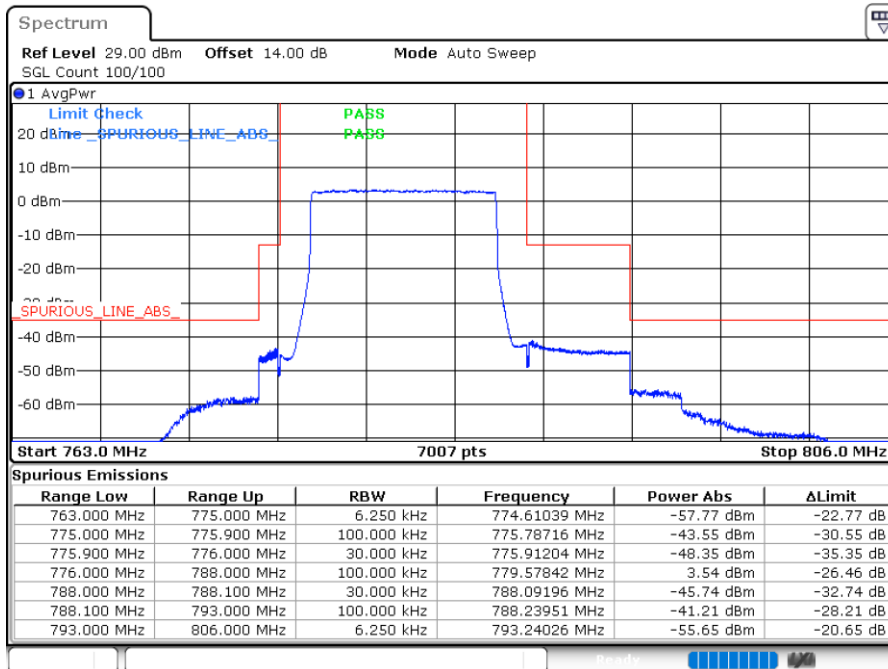
Date: 19 JUN 2023 06:09:19

Highest Band Edge / 1 RB



Date: 19 JUN 2023 06:14:56

Band Edge / Full RB

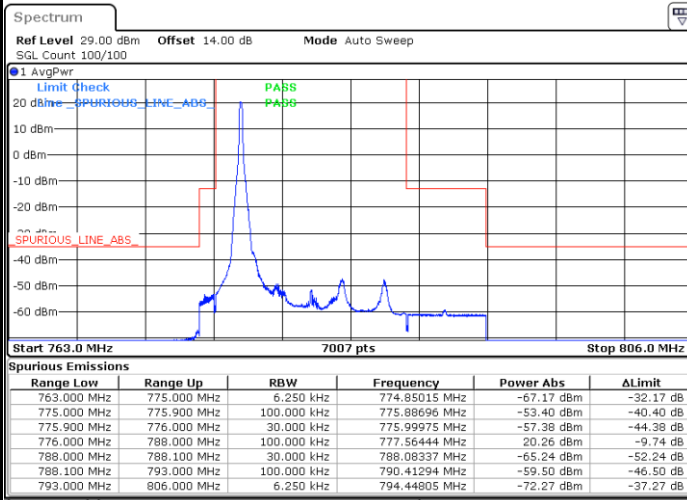


Date: 19 JUN 2023 06:03:42



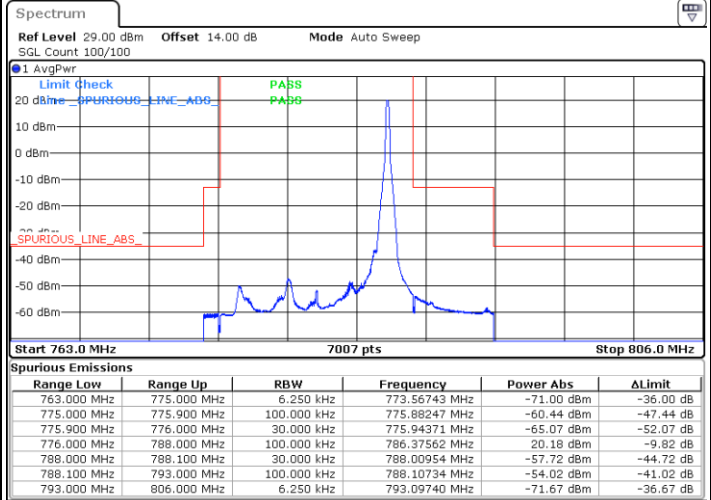
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



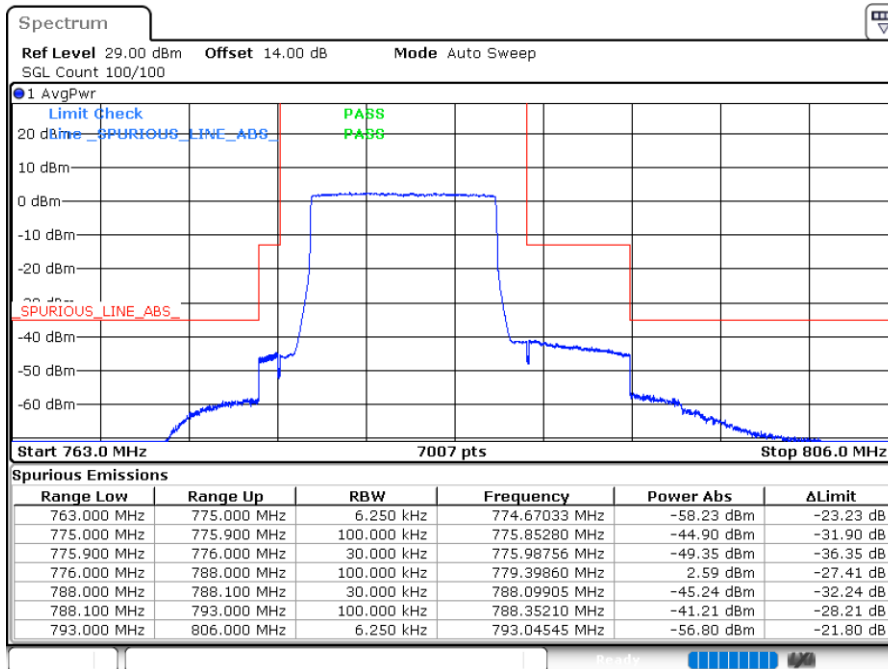
Date: 19 JUN 2023 06:11:11

Highest Band Edge / 1 RB



Date: 19 JUN 2023 06:16:48

Band Edge / Full RB

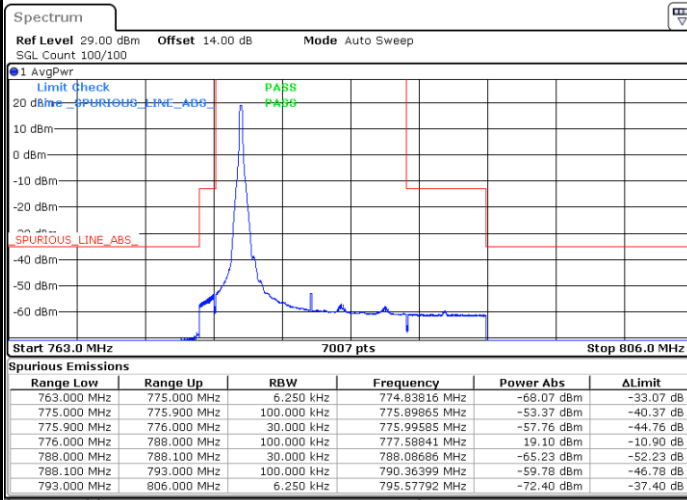


Date: 19 JUN 2023 06:05:34



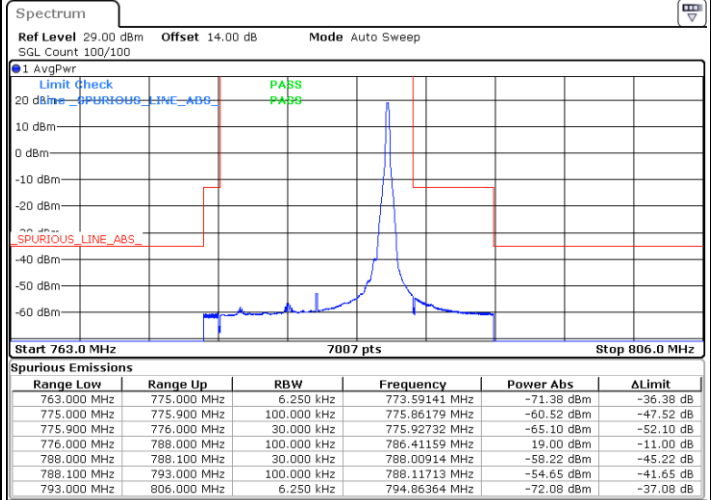
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



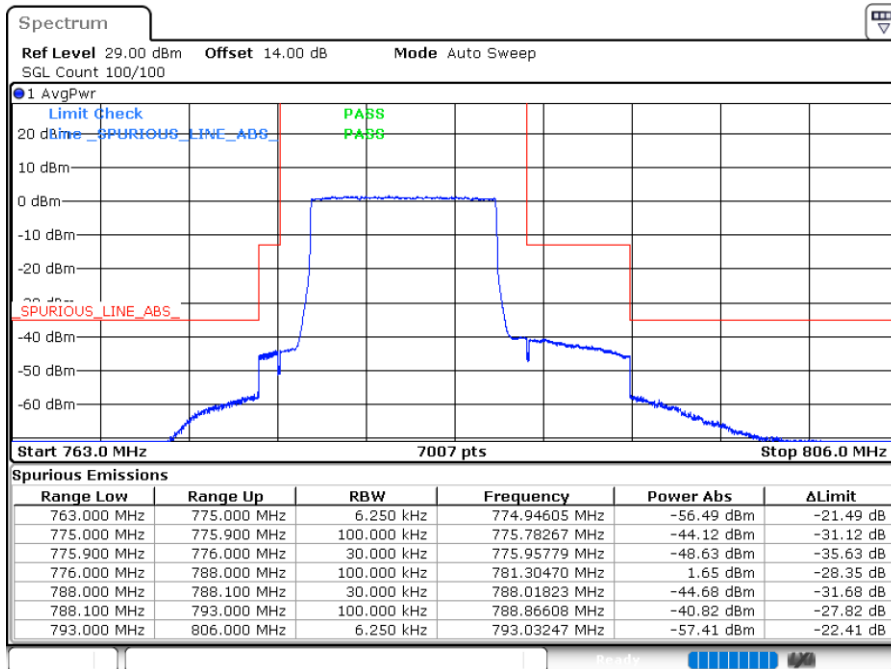
Date: 19 JUN 2023 06:13:04

Highest Band Edge / 1 RB



Date: 19 JUN 2023 06:18:41

Band Edge / Full RB



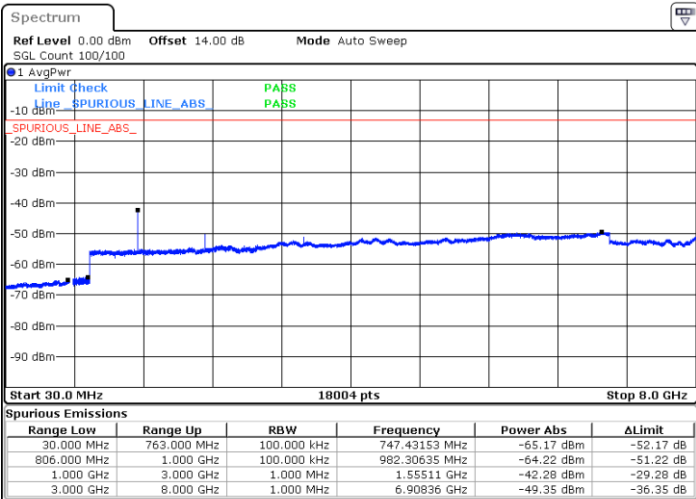
Date: 19 JUN 2023 06:07:26



Conducted Spurious Emission

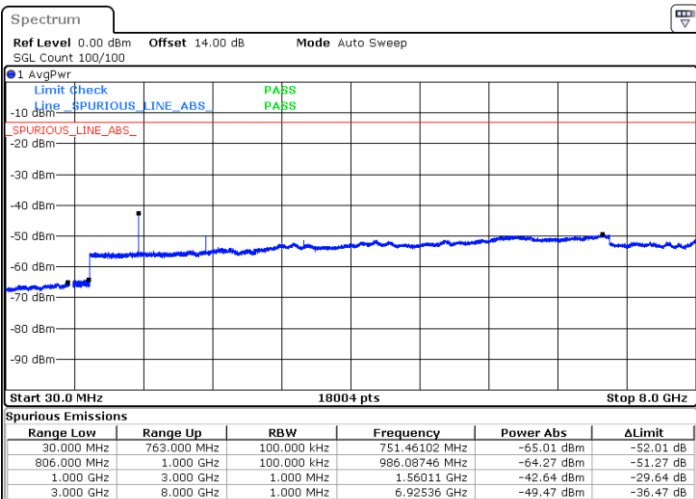
LTE Band 13

Lowest Channel / QPSK_5MHz



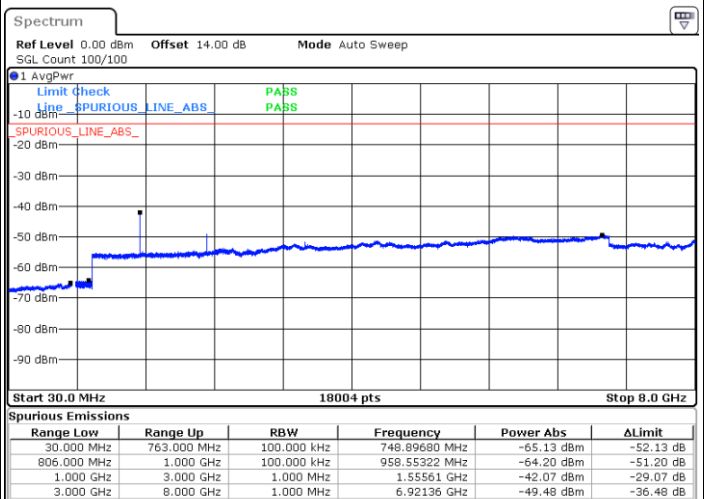
Date: 19 JUN.2023 05:58:44

Middle Channel / QPSK_5MHz



Date: 19 JUN.2023 06:00:16

Middle Channel / QPSK_10MHz

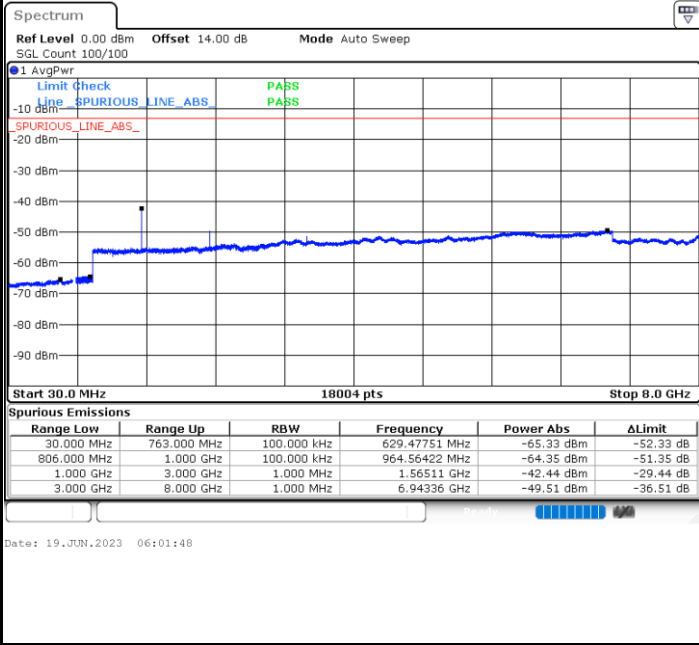


Date: 19 JUN.2023 06:20:13



LTE Band 13

Highest Channel / QPSK_5MHz





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.40 V. ; Maximum Voltage =4.50 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

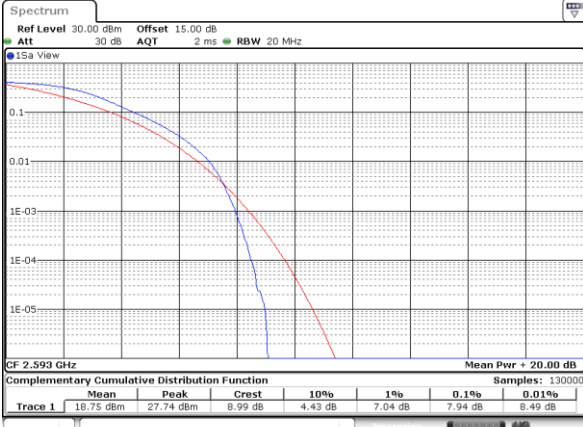
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	7.94	8.49	8.12	PASS



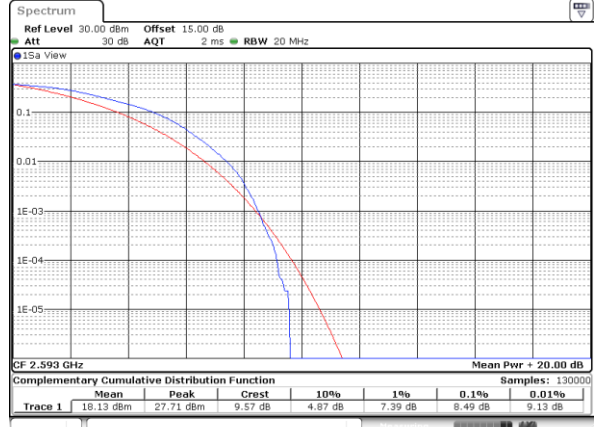
LTE Band 41 / 20MHz / QPSK

Middle Channel / Full RB_QPSK



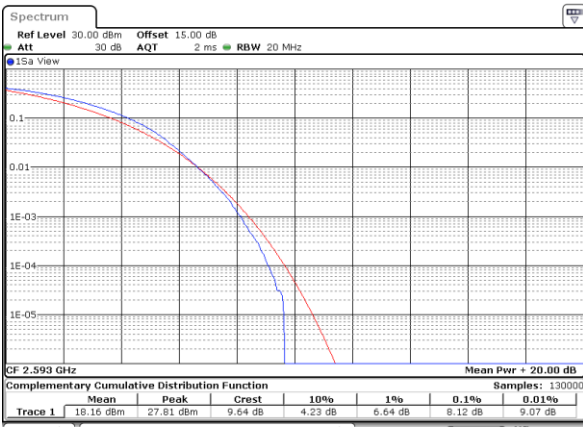
Date: 19 JUN 2023 08:34:15

Middle Channel / Full RB_16QAM



Date: 19 JUN 2023 08:34:40

Middle Channel / Full RB_64QAM

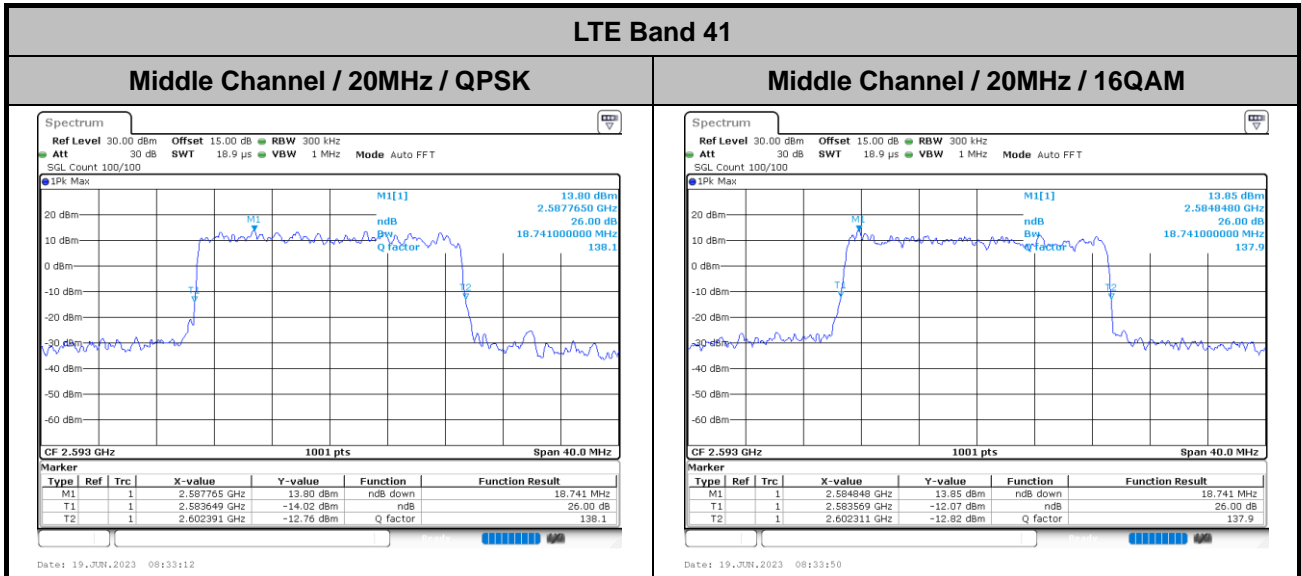


Date: 19 JUN 2023 08:35:06



26dB Bandwidth

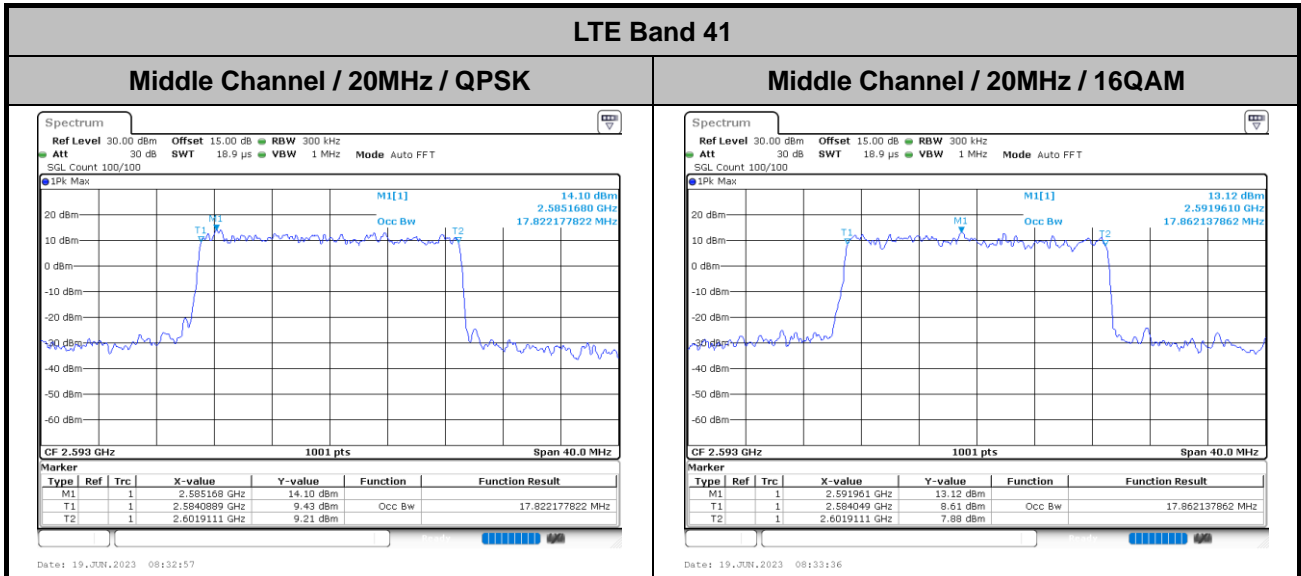
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.74	18.74





Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.86

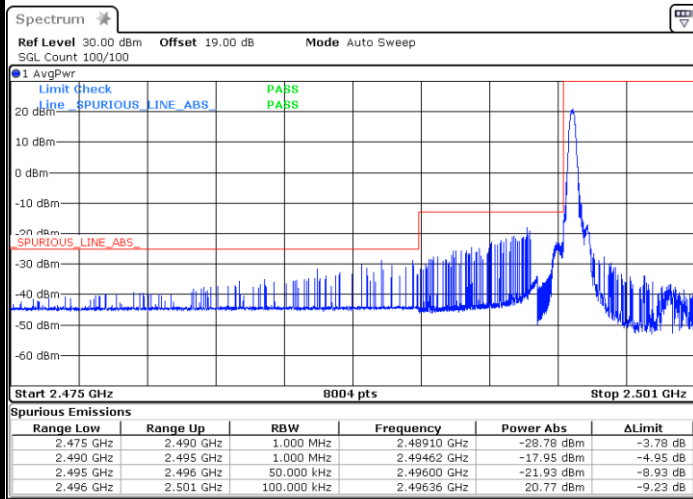




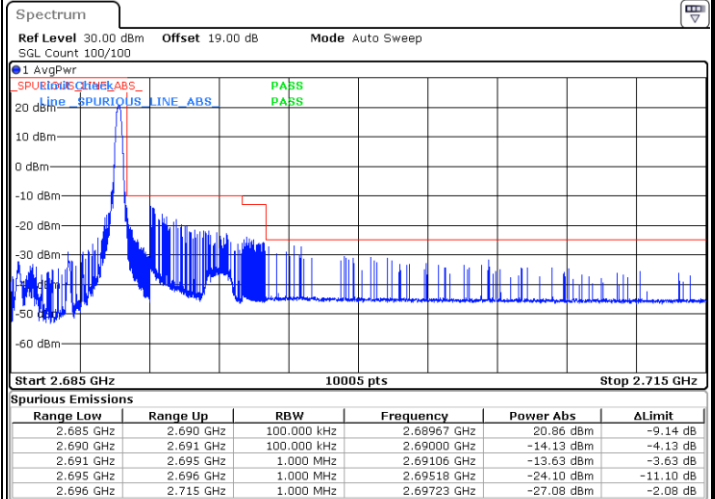
Conducted Band Edge

LTE Band 41 / 5MHz / QPSK

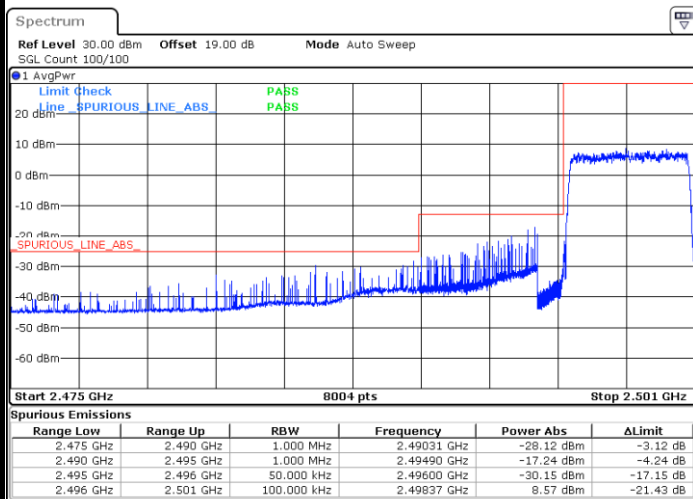
Lowest Band Edge / 1 RB



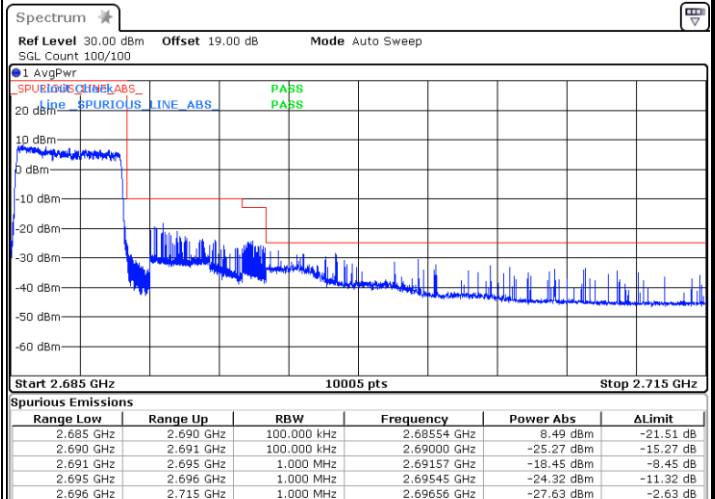
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



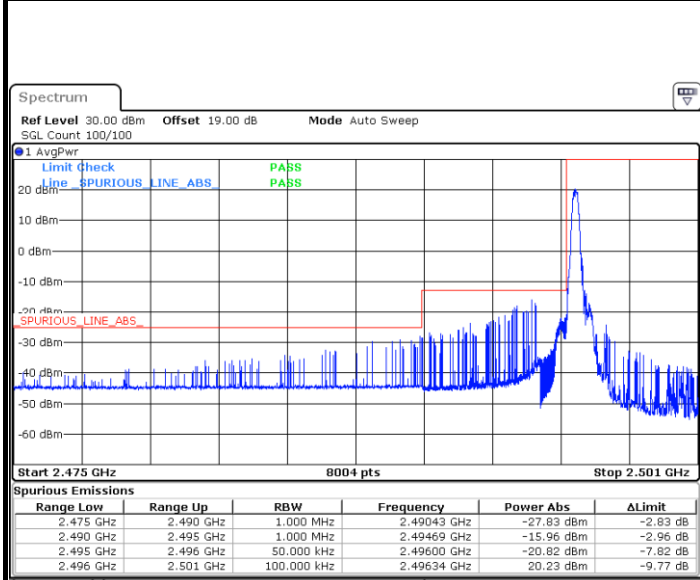
Highest Band Edge / Full RB





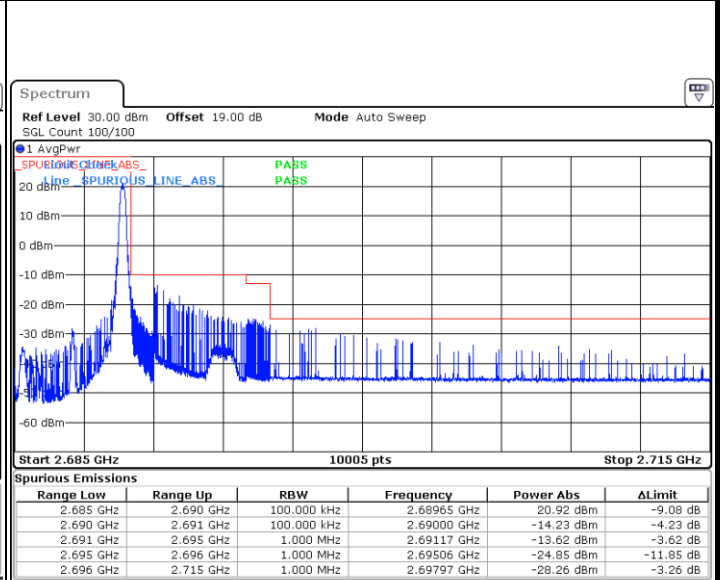
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



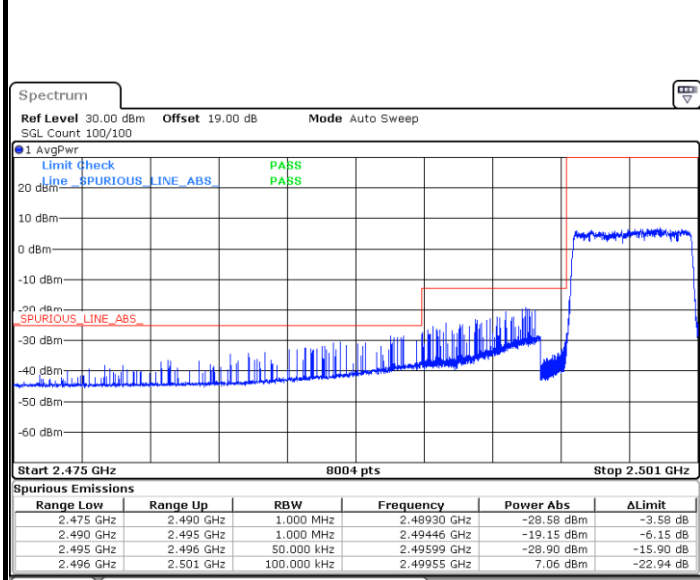
Date: 19 JUN.2023 07:07:42

Highest Band Edge / 1 RB



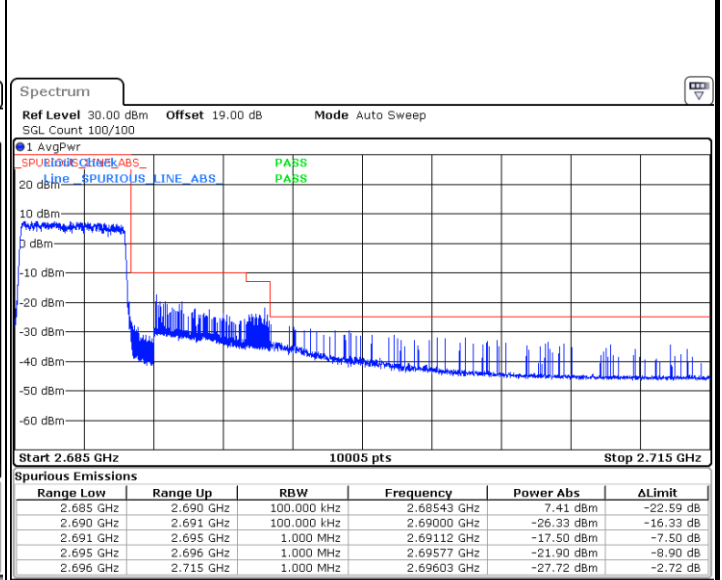
Date: 19 JUN.2023 07:12:00

Lowest Band Edge / Full RB



Date: 24 JUN.2023 18:52:57

Highest Band Edge / Full RB

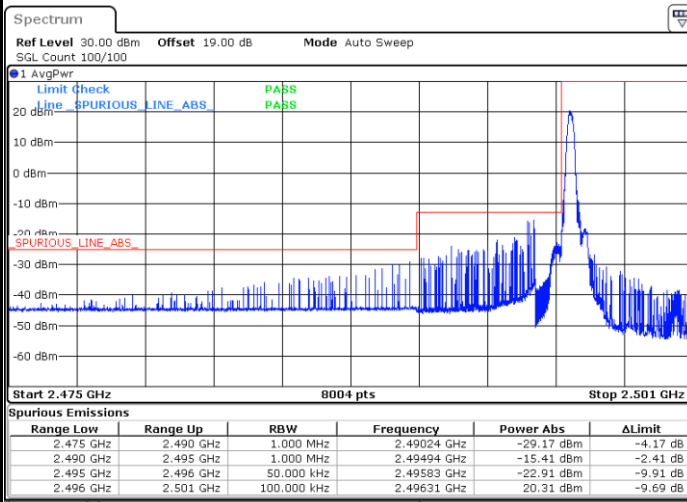


Date: 19 JUN.2023 07:09:51



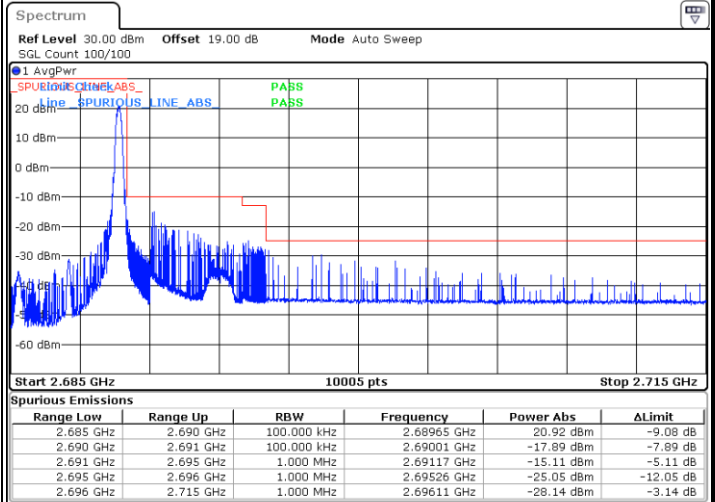
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



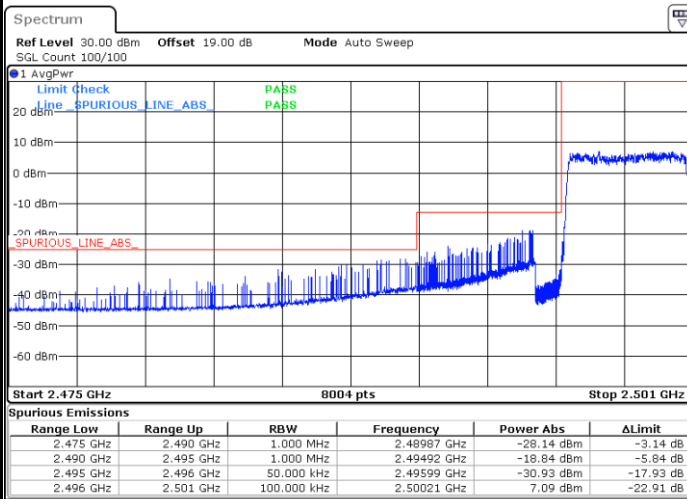
Date: 19 JUN 2023 07:08:25

Highest Band Edge / 1 RB



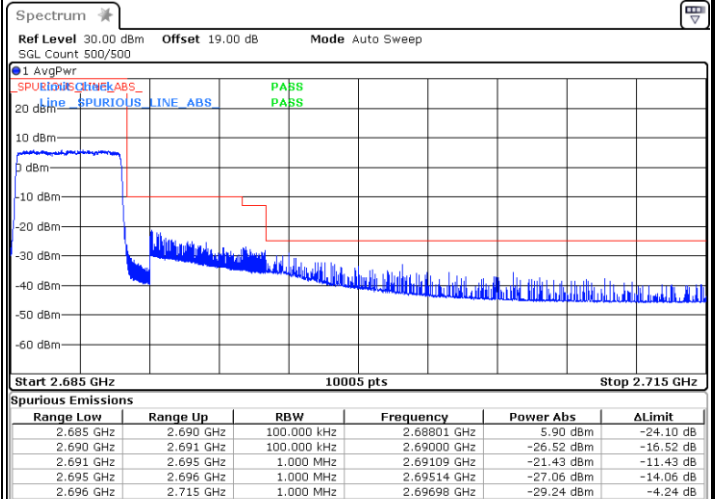
Date: 19 JUN 2023 07:12:43

Lowest Band Edge / Full RB



Date: 19 JUN 2023 07:06:16

Highest Band Edge / Full RB

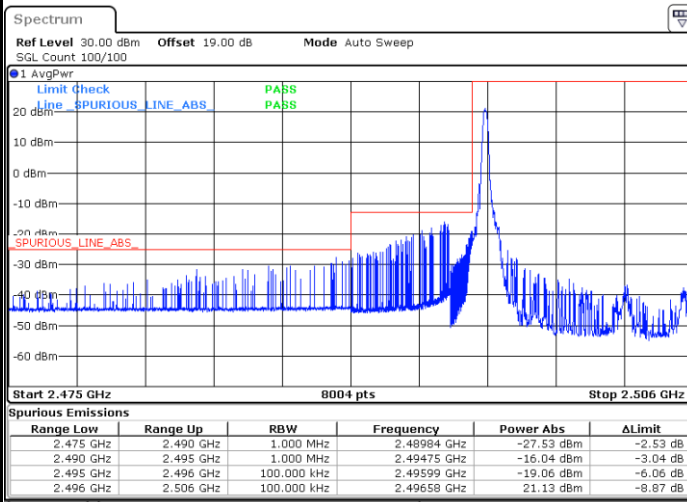


Date: 24 JUN 2023 18:54:58



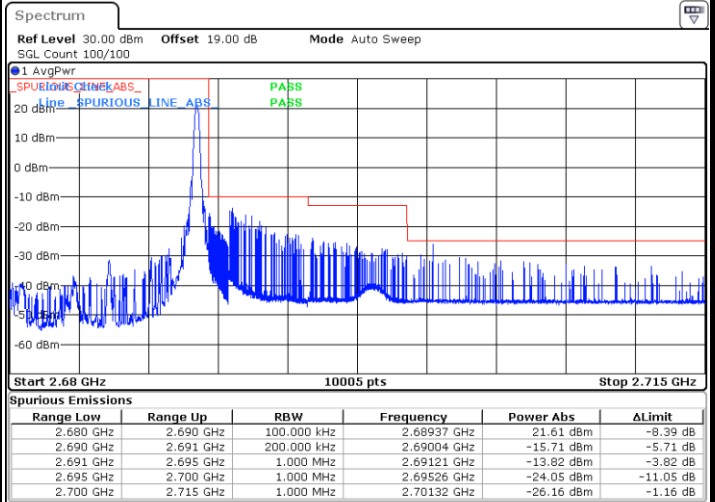
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



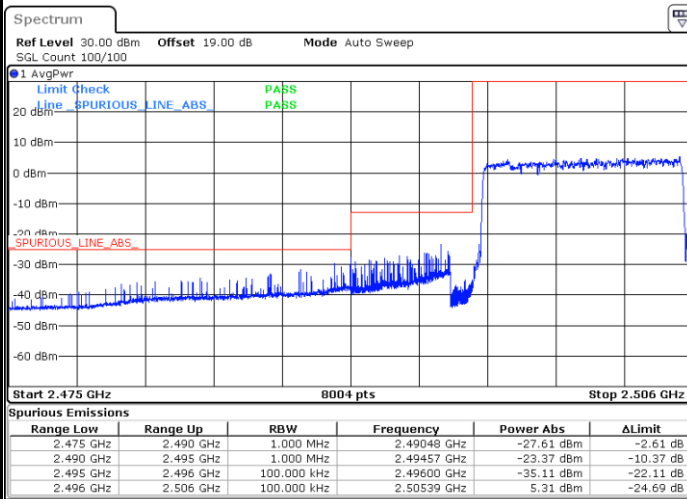
Date: 19 JUN.2023 07:20:15

Highest Band Edge / 1 RB



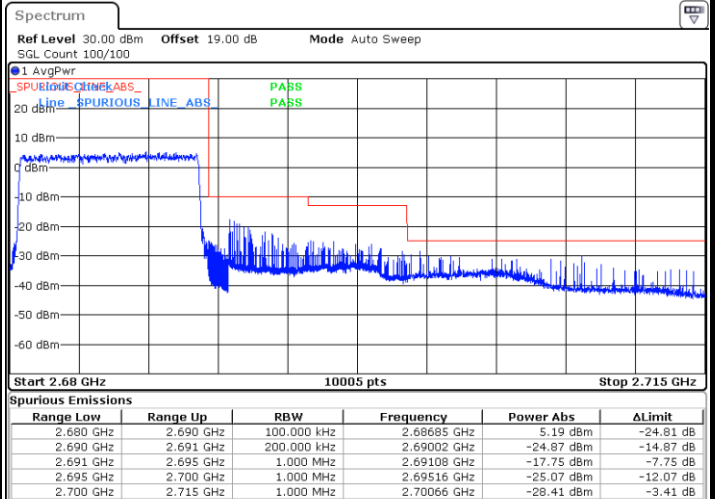
Date: 19 JUN.2023 07:24:34

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:18:05

Highest Band Edge / Full RB

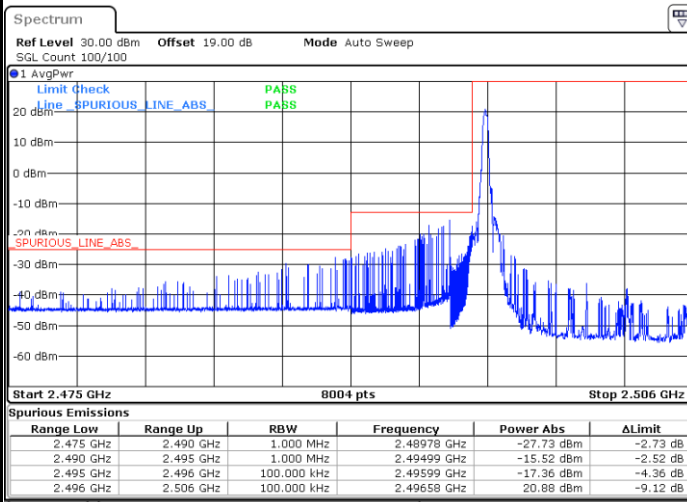


Date: 19 JUN.2023 07:22:25



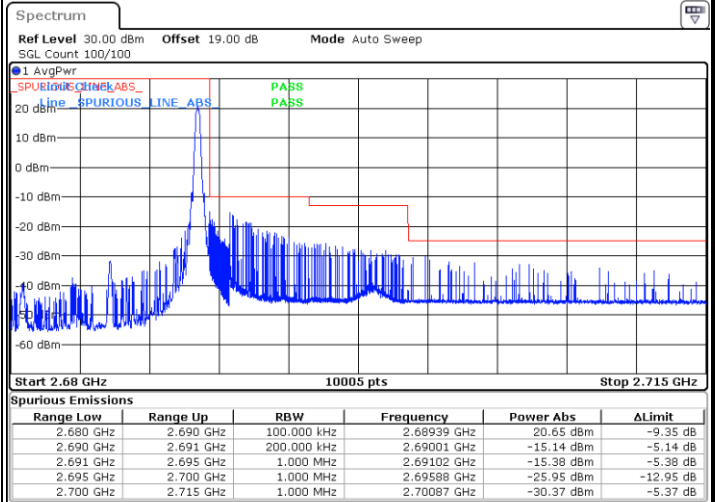
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



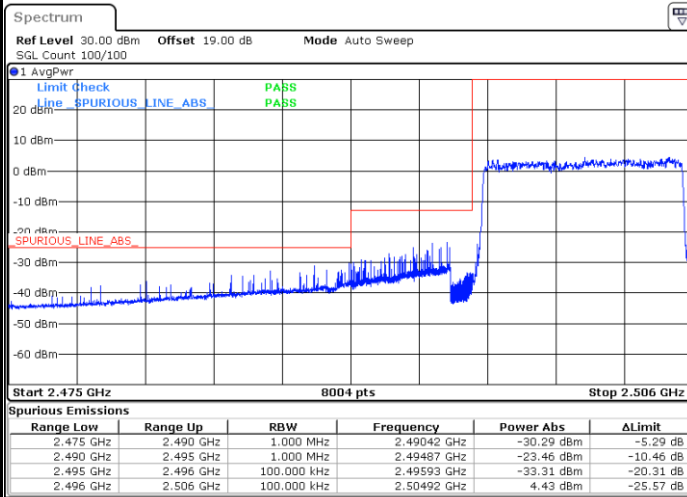
Date: 19 JUN.2023 07:20:58

Highest Band Edge / 1 RB



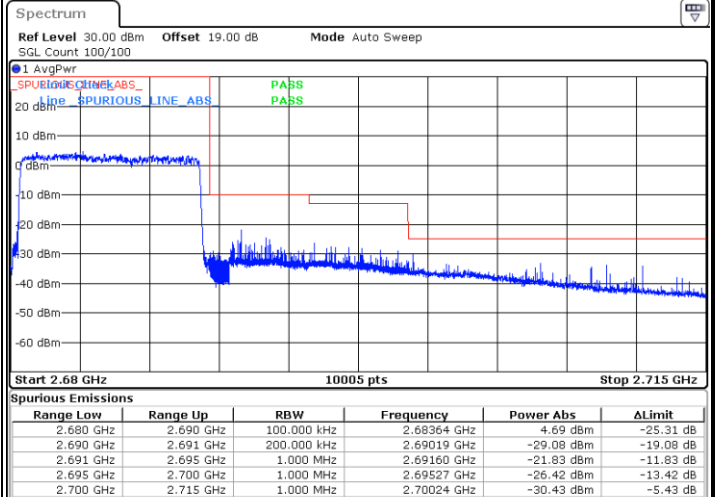
Date: 19 JUN.2023 07:25:17

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:18:48

Highest Band Edge / Full RB

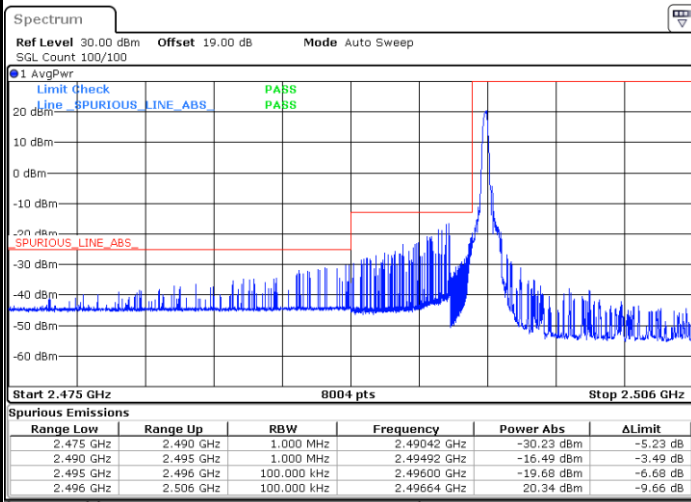


Date: 19 JUN.2023 07:23:08



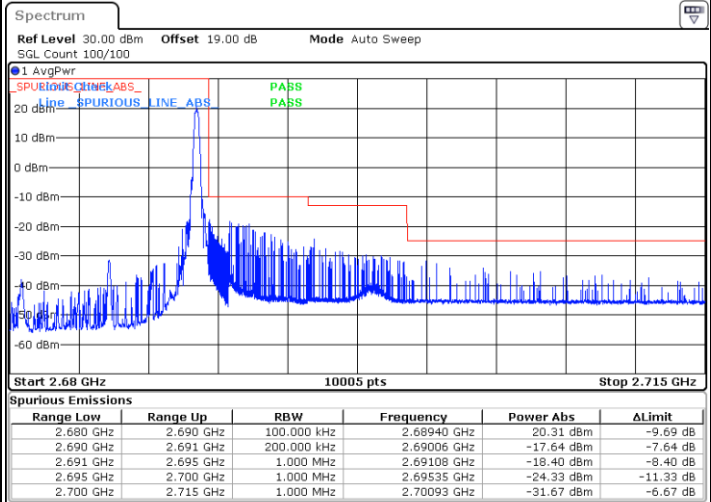
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



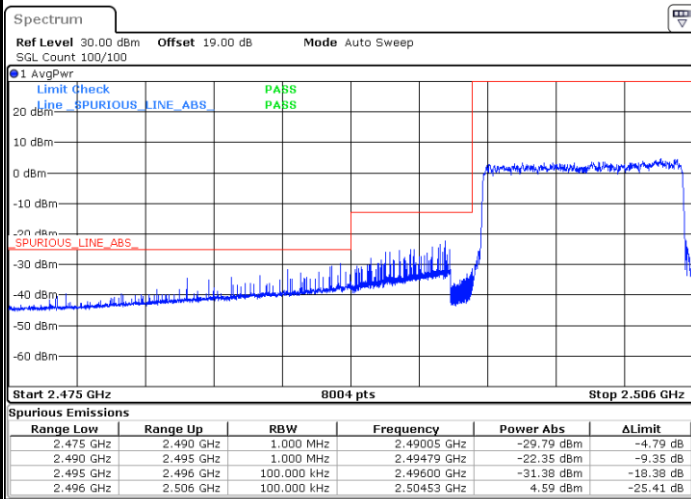
Date: 19 JUN.2023 07:21:42

Highest Band Edge / 1 RB



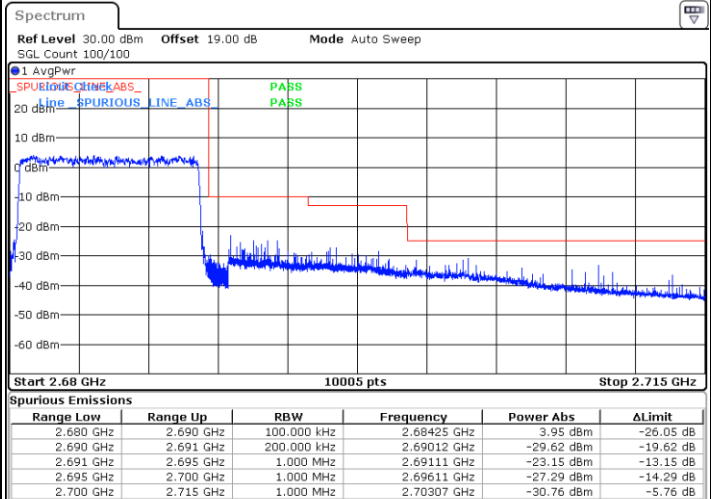
Date: 19 JUN.2023 07:26:00

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:19:32

Highest Band Edge / Full RB

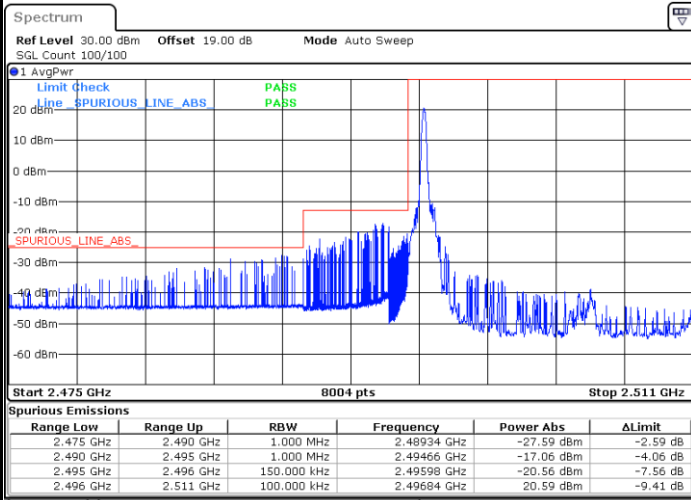


Date: 19 JUN.2023 07:23:51



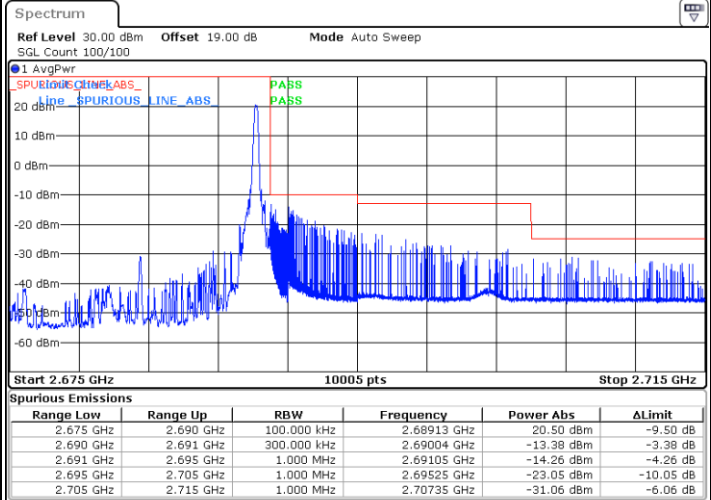
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



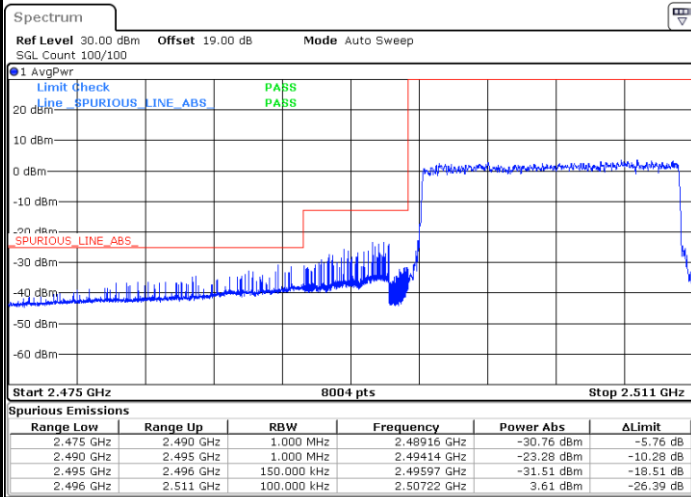
Date: 24 JUN.2023 18:57:32

Highest Band Edge / 1 RB



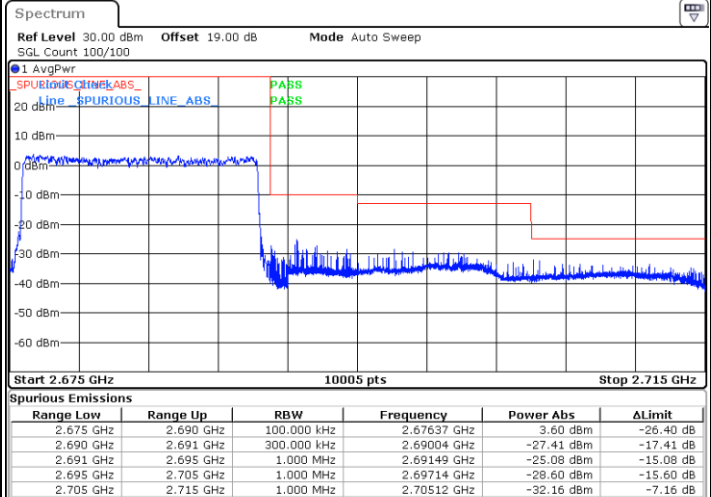
Date: 19 JUN.2023 07:37:50

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:31:21

Highest Band Edge / Full RB

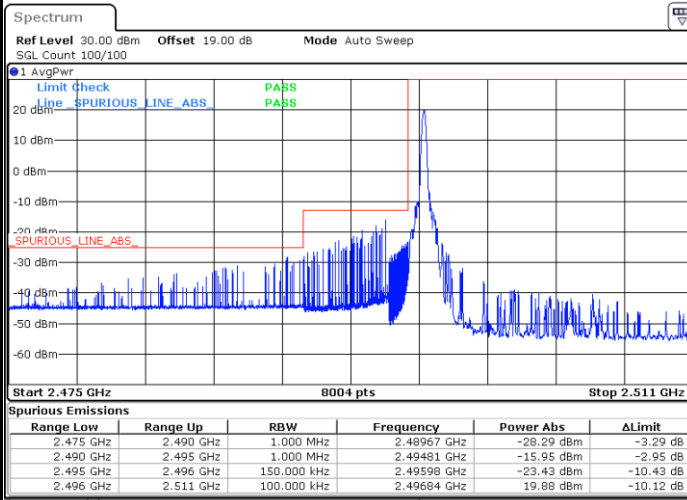


Date: 19 JUN.2023 07:35:41



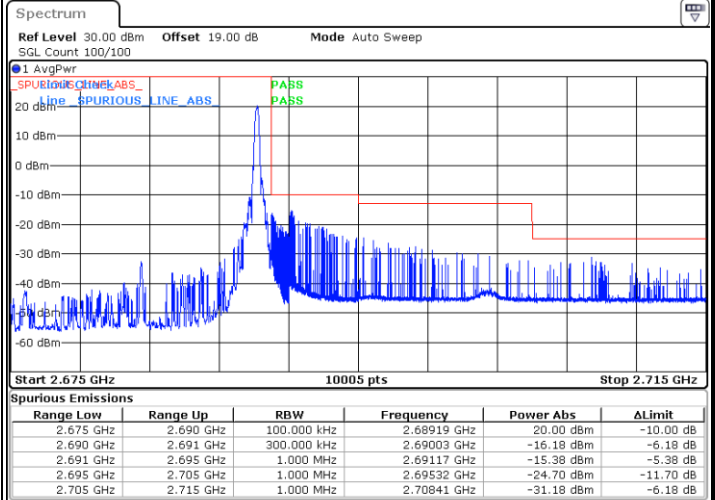
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



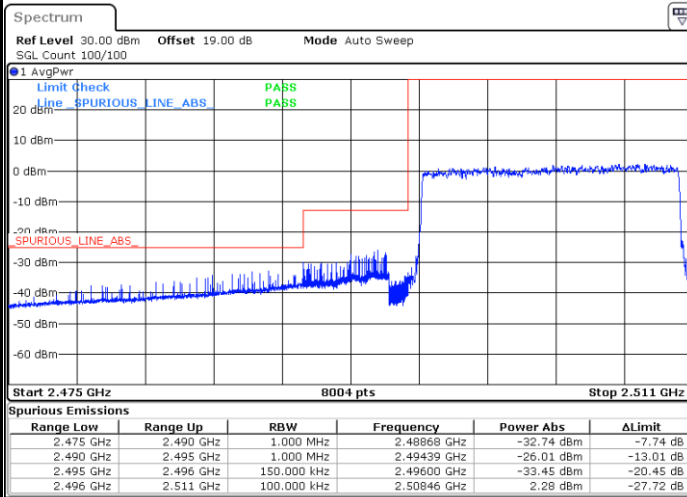
Date: 19 JUN.2023 07:34:15

Highest Band Edge / 1 RB



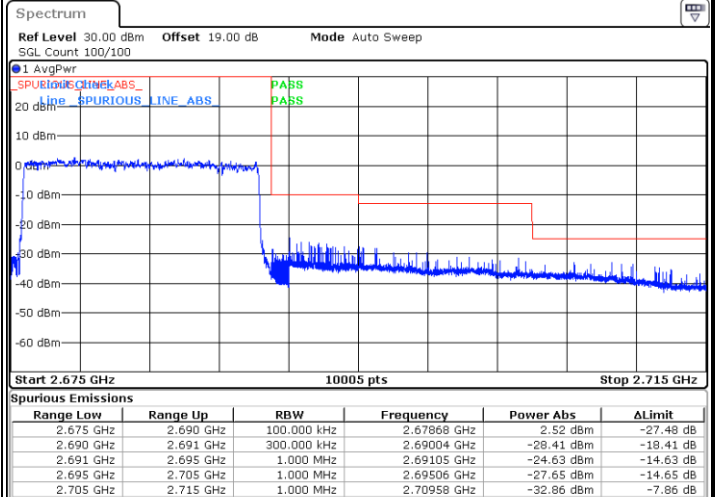
Date: 19 JUN.2023 07:38:34

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:32:05

Highest Band Edge / Full RB

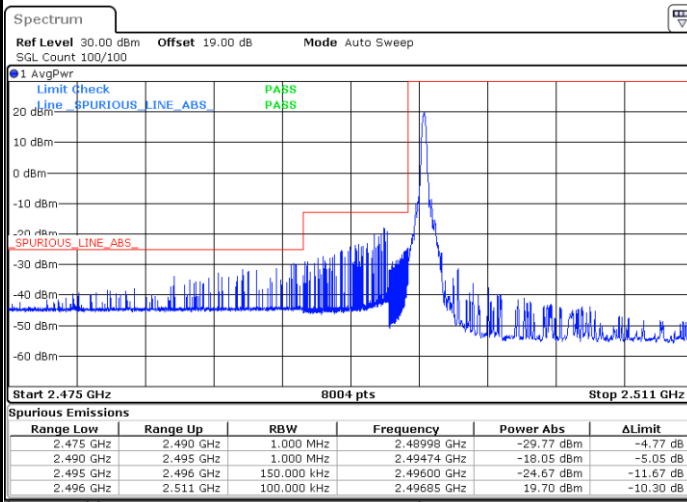


Date: 19 JUN.2023 07:36:24



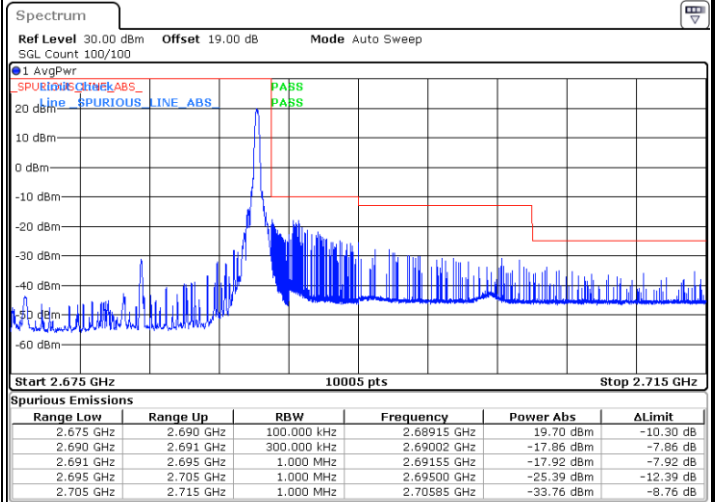
LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



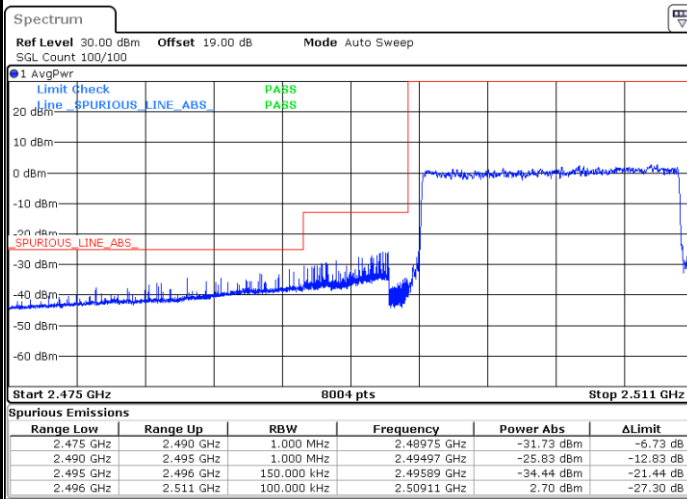
Date: 19 JUN 2023 07:34:58

Highest Band Edge / 1 RB



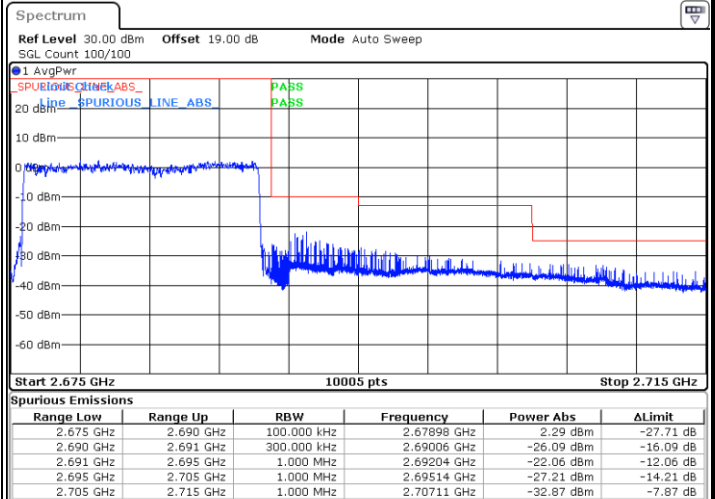
Date: 19 JUN 2023 07:39:17

Lowest Band Edge / Full RB



Date: 19 JUN 2023 07:32:48

Highest Band Edge / Full RB

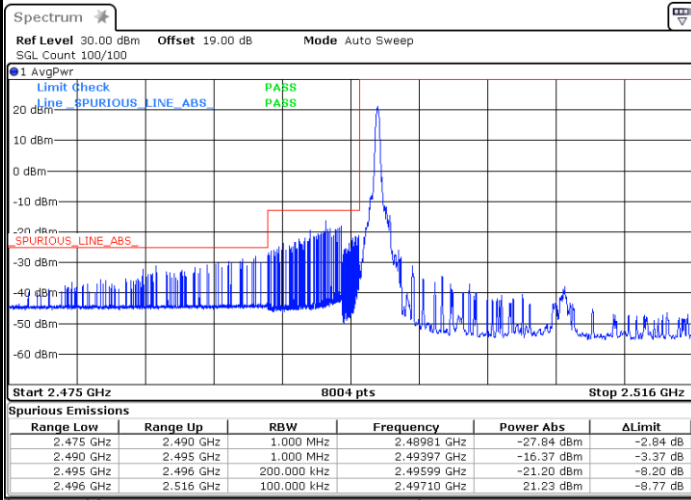


Date: 19 JUN 2023 07:37:07



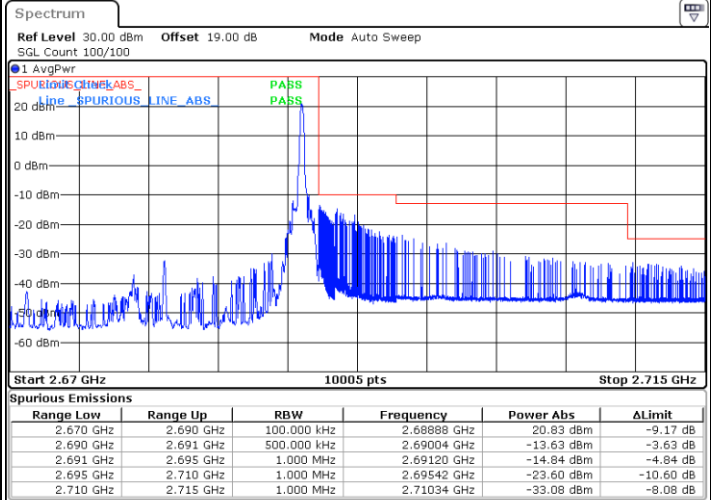
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



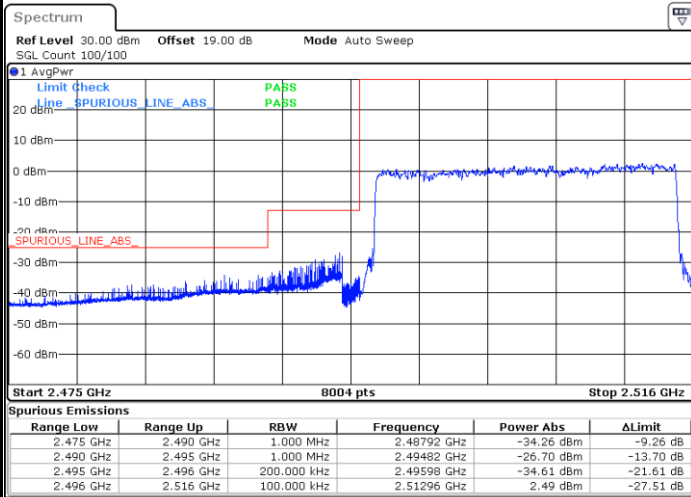
Date: 24.JUN.2023 18:59:03

Highest Band Edge / 1 RB



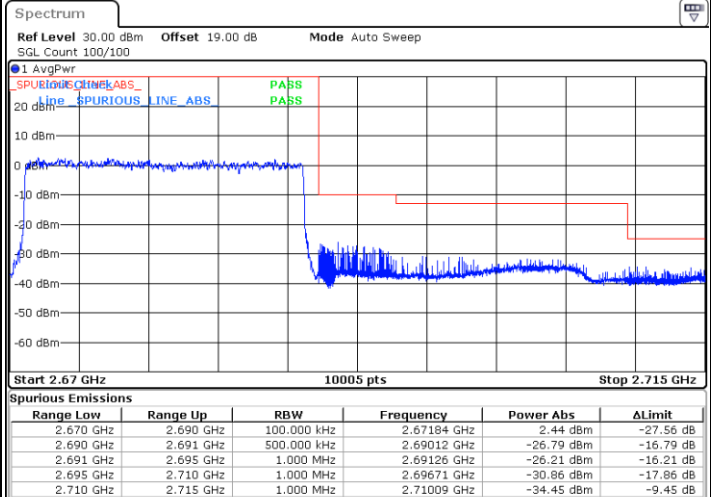
Date: 19.JUN.2023 07:51:08

Lowest Band Edge / Full RB



Date: 19.JUN.2023 07:44:38

Highest Band Edge / Full RB

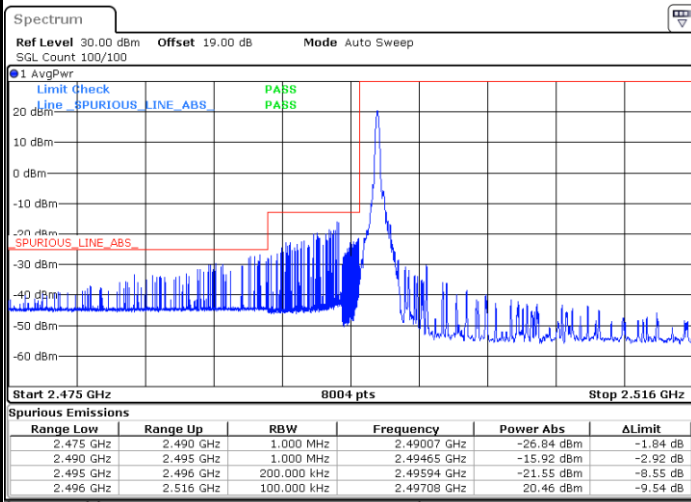


Date: 19.JUN.2023 07:48:59



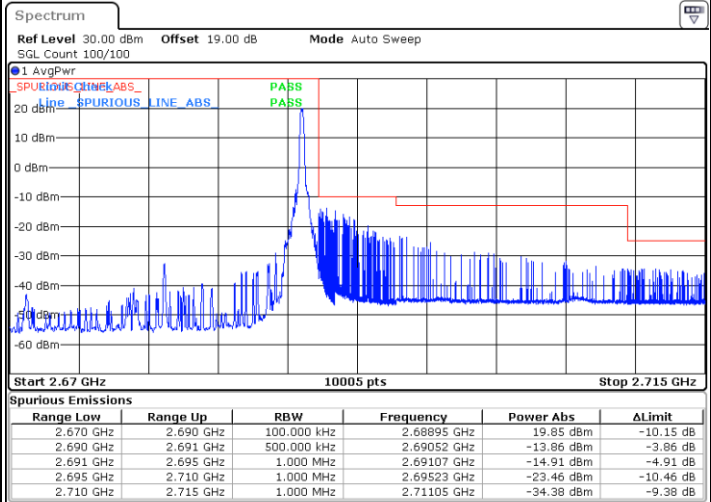
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



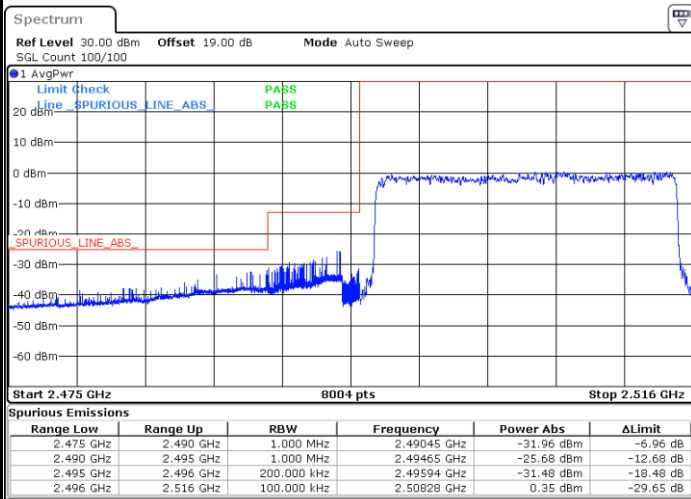
Date: 19 JUN 2023 07:47:32

Highest Band Edge / 1RB



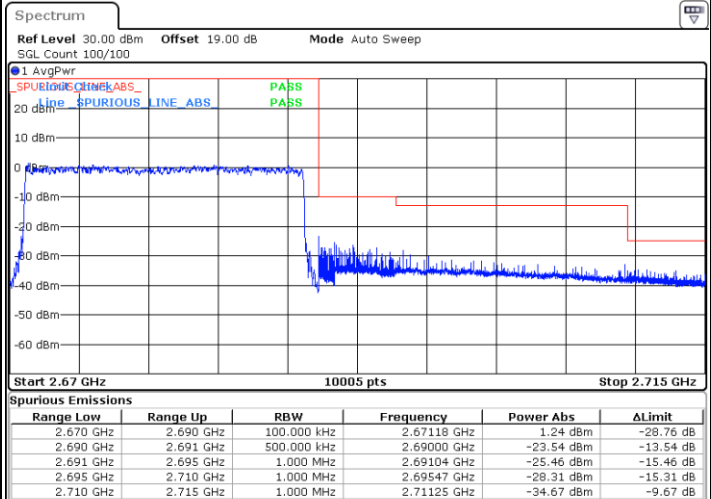
Date: 19 JUN 2023 07:51:51

Lowest Band Edge / Full RB



Date: 19 JUN 2023 07:45:22

Highest Band Edge / Full RB

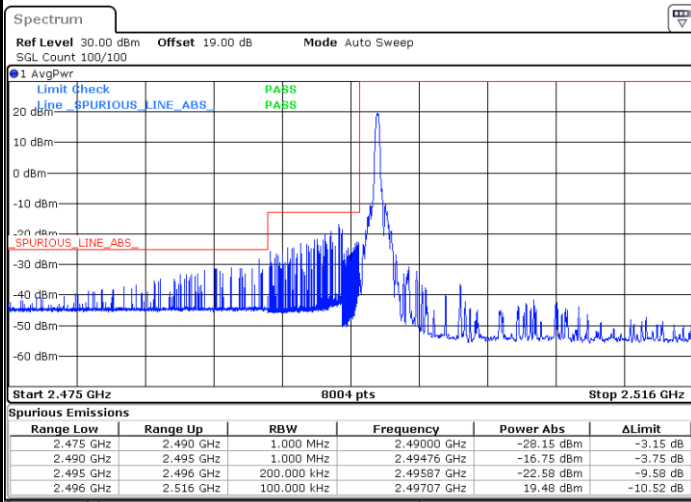


Date: 19 JUN 2023 07:49:42



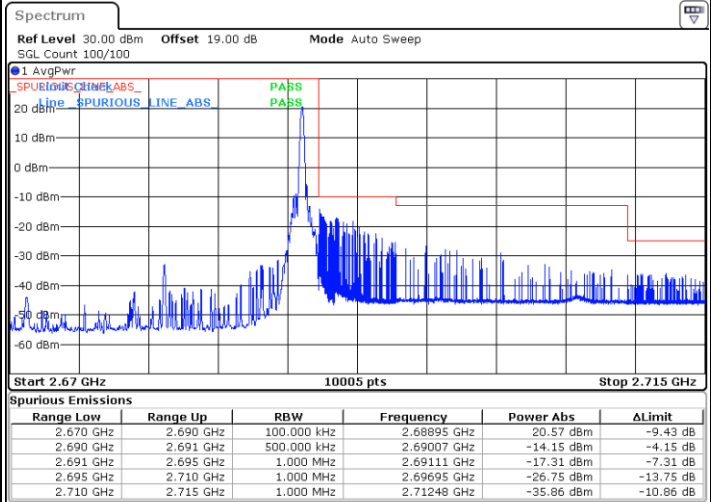
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



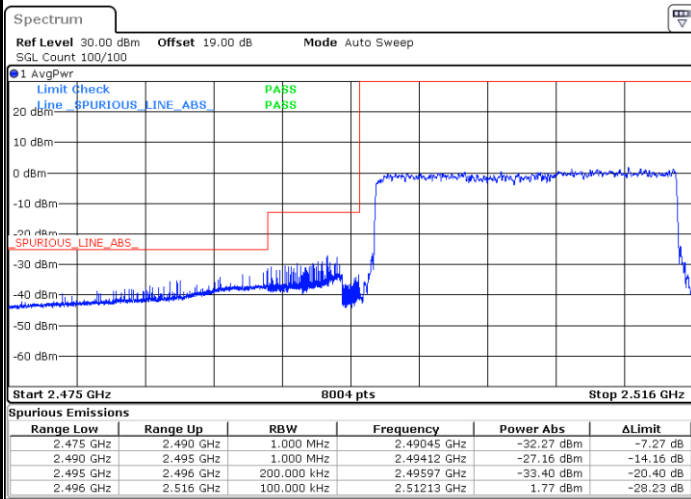
Date: 19 JUN.2023 07:48:15

Highest Band Edge / 1 RB



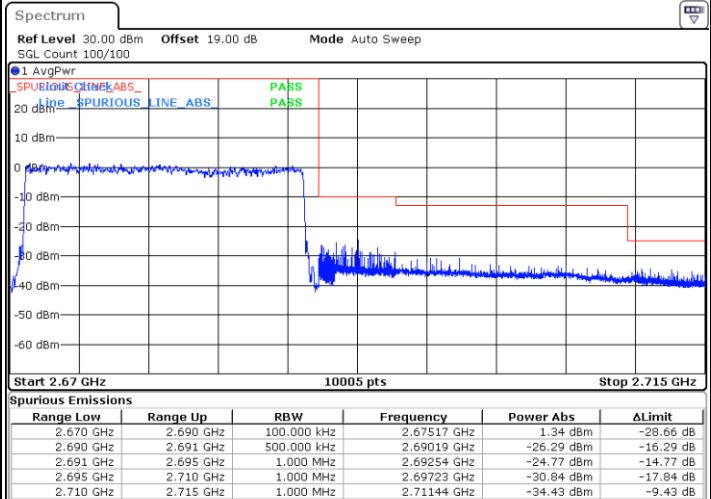
Date: 19 JUN.2023 07:52:34

Lowest Band Edge / Full RB



Date: 19 JUN.2023 07:46:05

Highest Band Edge / Full RB



Date: 19 JUN.2023 07:50:25

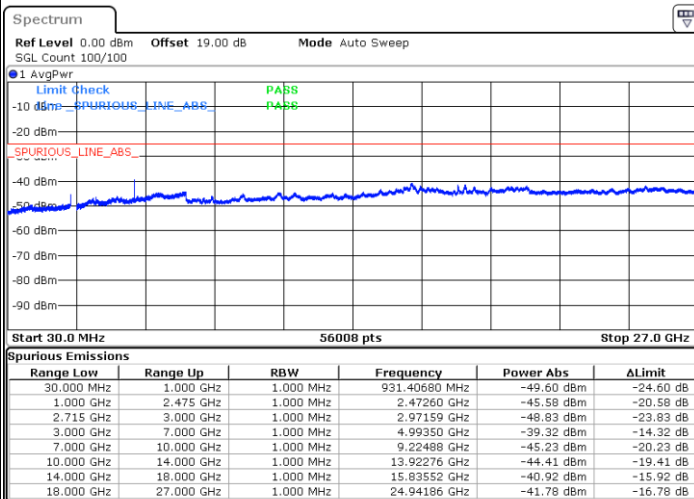
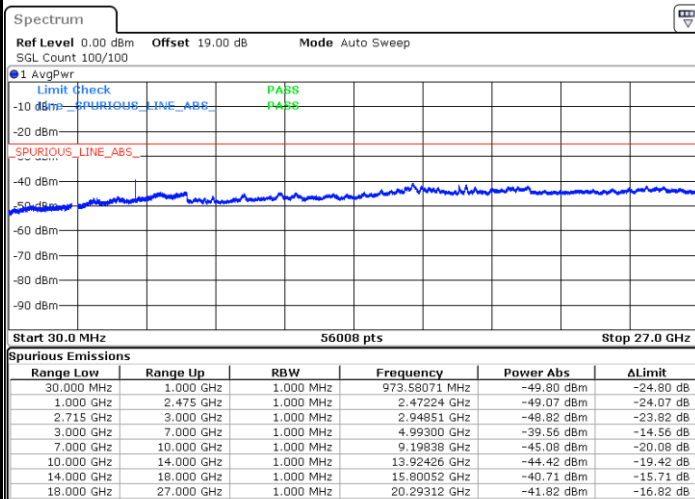


Conducted Spurious Emission

LTE Band 41

Lowest Channel / QPSK_5MHz

Lowest Channel / QPSK_10MHz

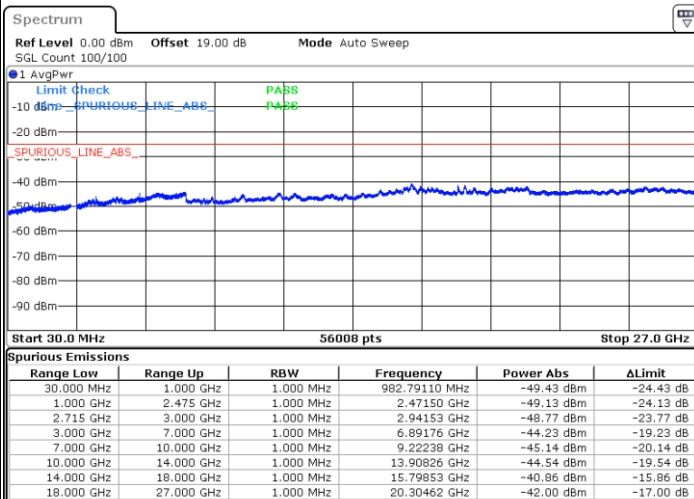
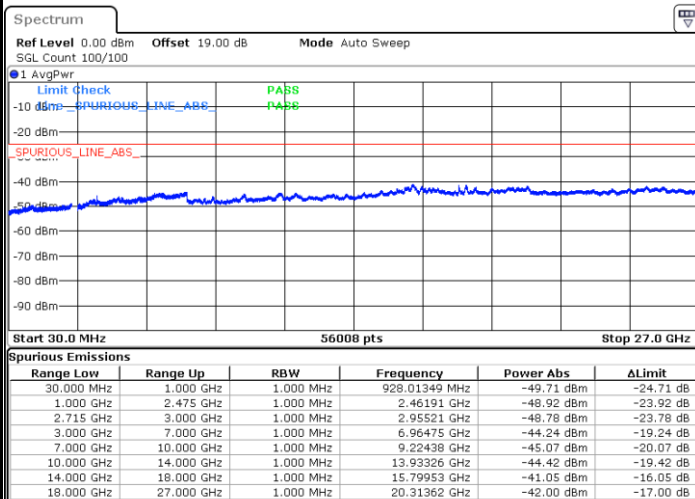


Date: 19 JUN.2023 07:14:16

Date: 19 JUN.2023 07:27:32

Middle Channel / QPSK_5MHz

Middle Channel / QPSK_10MHz



Date: 19 JUN.2023 07:15:49

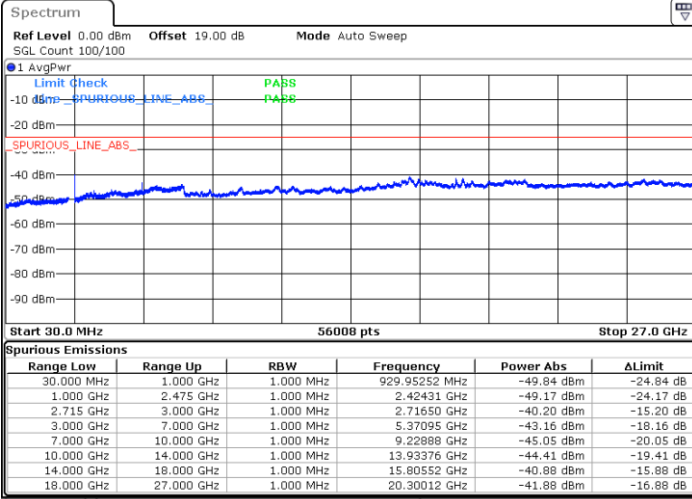
Date: 19 JUN.2023 07:29:05



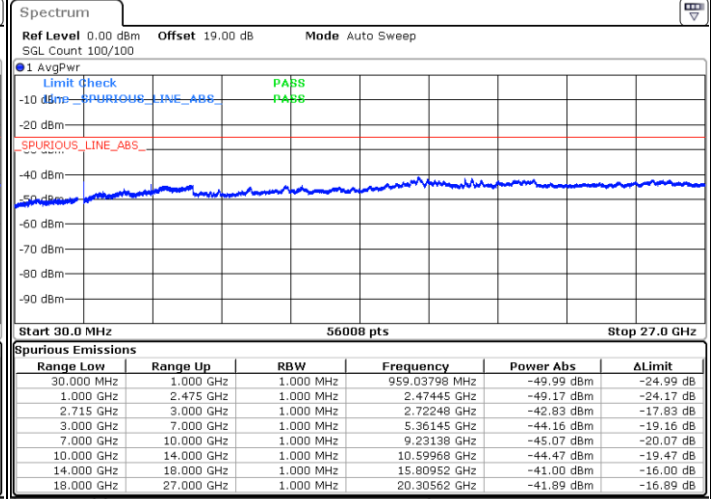
LTE Band 41

Highest Channel / QPSK_5MHz

Highest Channel / QPSK_10MHz



Date: 19 JUN.2023 07:17:21



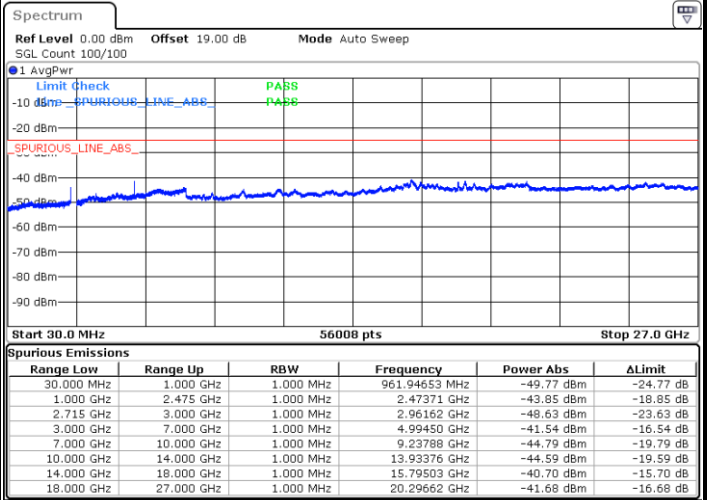
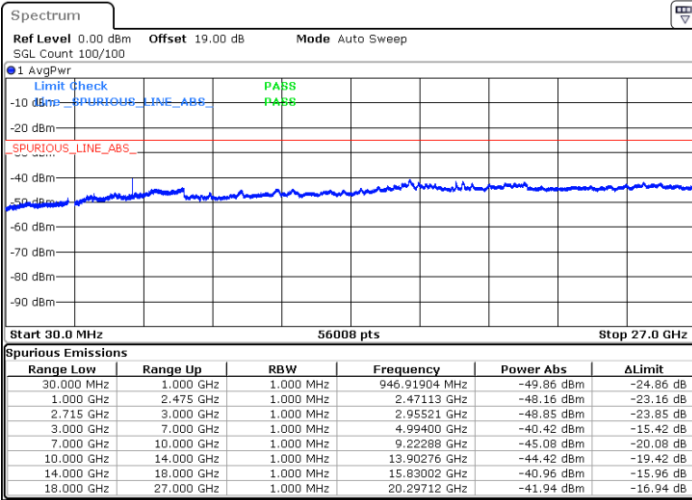
Date: 19 JUN.2023 07:30:38



LTE Band 41

Lowest Channel / QPSK_15MHz

Lowest Channel / QPSK_20MHz

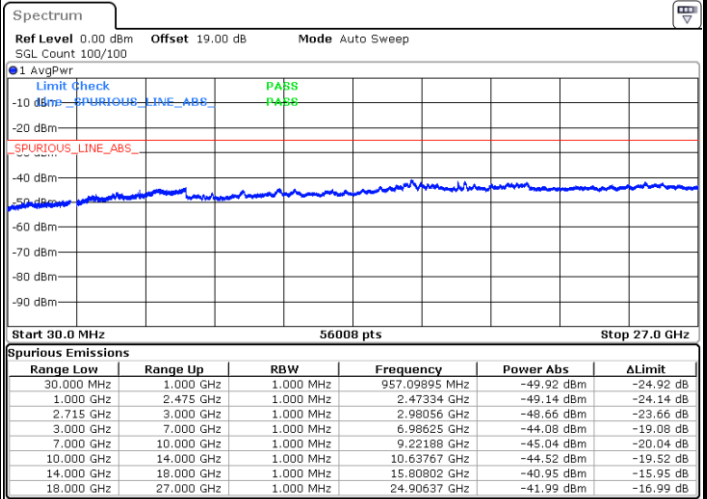
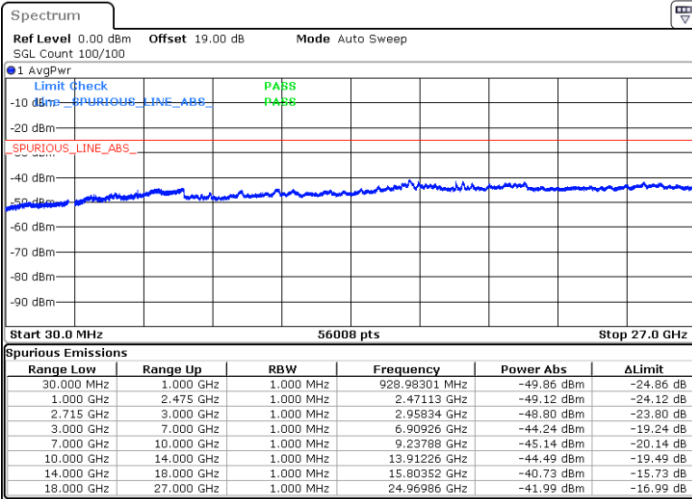


Date: 19 JUN.2023 07:40:50

Date: 19 JUN.2023 07:54:07

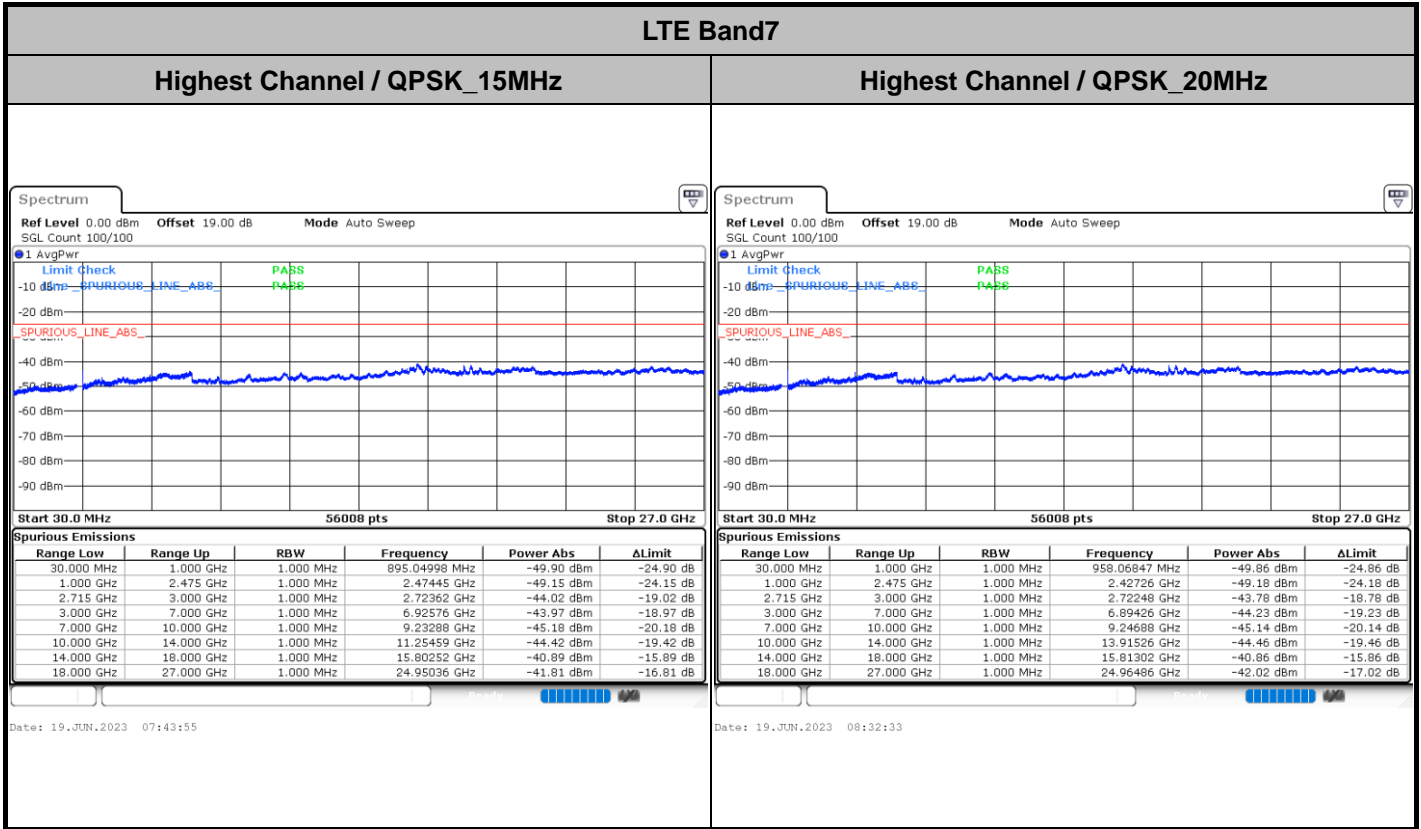
Middle Channel / QPSK_15MHz

Middle Channel / QPSK_20MHz



Date: 19 JUN.2023 07:42:22

Date: 19 JUN.2023 08:31:00





Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0007	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.40 V. ; Maximum Voltage =4.50 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 :	Shiwei Wen	Temperature :	22~25°C
		Relative Humidity :	48~52%

RSE pretest all the supported antennas, only the worst antenna are record in the report.

LTE Band 7 / 20MHz / QPSK / Ant.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	5052.18	-56.02	-25	-31.02	-78.09	-61.58	7.14	12.70	H
	7578.27	-52.11	-25	-27.11	-79.29	-55.41	8.30	11.60	H
	10104.36	-48.68	-25	-23.68	-80.59	-50.20	10.48	12.00	H
	5052.18	-56.98	-25	-31.98	-79.17	-62.54	7.14	12.70	V
	7578.27	-53.03	-25	-28.03	-80.17	-56.33	8.30	11.60	V
	10104.36	-50.15	-25	-25.15	-80.66	-51.67	10.48	12.00	V

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

LTE Band 12 / 10MHz / QPSK / Ant.0									
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	1406	-58.83	-13	-45.83	-68.95	-62.08	4.00	9.40	H
	2109	-63.89	-13	-50.89	-76.71	-67.46	4.88	10.60	H
	2812	-61.74	-13	-48.74	-77.36	-66.67	5.52	12.60	H
	1406	-60.55	-13	-47.55	-70.23	-63.80	4.00	9.40	V
	2109	-63.80	-13	-50.80	-76.57	-67.37	4.88	10.60	V
	2812	-61.91	-13	-48.91	-77.72	-66.84	5.52	12.60	V

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

LTE Band 13 / 5MHz / QPSK / Ant.0									
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	1559.5	-63.80	-42.15	-21.65	-73.36	-67.05	4.00	9.40	H
	2339.25	-62.07	-13	-49.07	-76.80	-65.64	4.88	10.60	H
	3119	-60.58	-13	-47.58	-77.09	-65.51	5.52	12.60	H
	1559.5	-62.85	-42.15	-20.70	-72.49	-66.10	4.00	9.40	V
	2339.25	-62.02	-13	-49.02	-76.75	-65.59	4.88	10.60	V
	3119	-60.33	-13	-47.33	-76.88	-65.26	5.52	12.60	V



LTE Band 13 / 10MHz / QPSK / Ant.0									
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	1559.5	-62.86	-42.15	-20.71	-72.42	-66.11	4.00	9.40	H
	2339.25	-62.47	-13	-49.47	-77.20	-66.04	4.88	10.60	H
	3119	-61.13	-13	-48.13	-77.64	-66.06	5.52	12.60	H
	1559.5	-60.76	-42.15	-18.61	-70.40	-64.01	4.00	9.40	V
	2339.25	-62.63	-13	-49.63	-77.36	-66.20	4.88	10.60	V
	3119	-61.19	-13	-48.19	-77.74	-66.12	5.52	12.60	V

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

LTE Band 41 / 20MHz / QPSK / Ant.4									
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	5168.18	-59.25	-25	-34.25	-81.04	-64.81	7.14	12.70	H
	7752.27	-52.86	-25	-27.86	-80.24	-56.16	8.30	11.60	H
	10336.36	-48.75	-25	-23.75	-80.62	-50.27	10.48	12.00	H
	5168.18	-59.21	-25	-34.21	-81.27	-64.77	7.14	12.70	V
	7752.27	-53.35	-25	-28.35	-80.58	-56.65	8.30	11.60	V
	10336.36	-49.28	-25	-24.28	-80.24	-50.80	10.48	12.00	V

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

LTE Band 7C_CA / 20MHz+20MHz / QPSK / Ant.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	5070.00	-57.95	-25	-32.95	-79.98	-63.51	7.14	12.70	H
	7605.00	-52.39	-25	-27.39	-79.57	-55.69	8.30	11.60	H
	10140.00	-47.70	-25	-22.70	-79.60	-49.22	10.48	12.00	H
	5070.00	-58.06	-25	-33.06	-80.23	-63.62	7.14	12.70	V
	7605.00	-52.65	-25	-27.65	-79.77	-55.95	8.30	11.60	V
	10140.00	-48.93	-25	-23.93	-79.5	-50.45	10.48	12.00	V

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