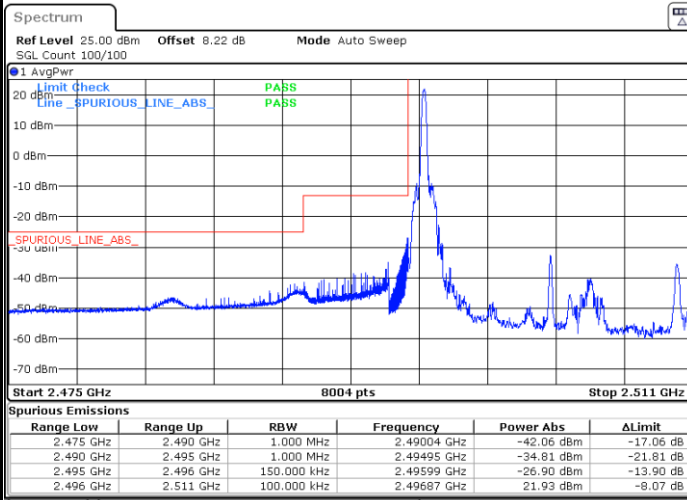




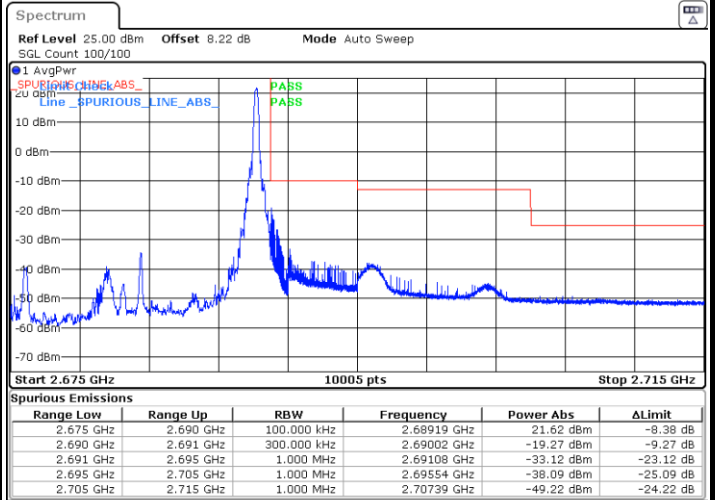
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



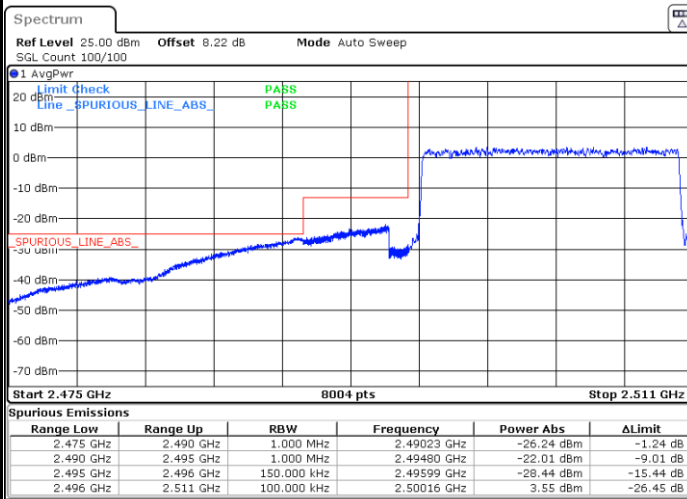
Date: 5.FEB.2023 14:29:45

Highest Band Edge / 1 RB



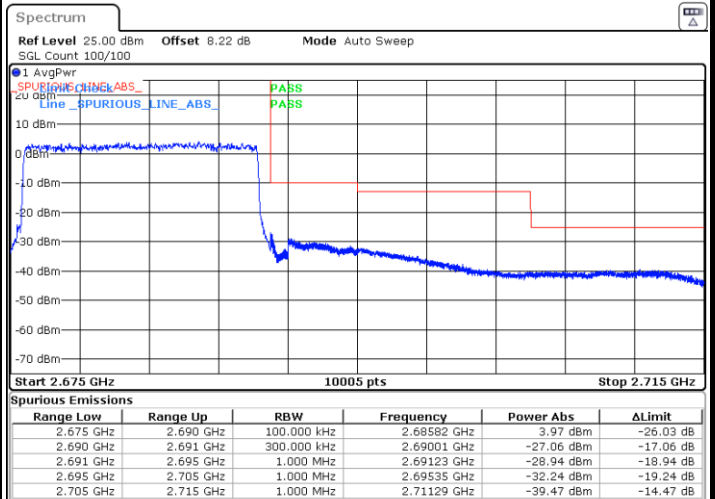
Date: 5.FEB.2023 14:34:26

Lowest Band Edge / Full RB



Date: 5.FEB.2023 14:33:16

Highest Band Edge / Full RB

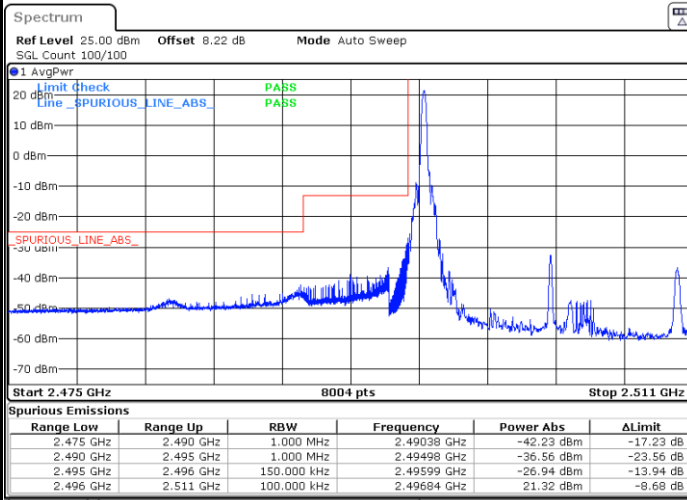


Date: 5.FEB.2023 14:37:56



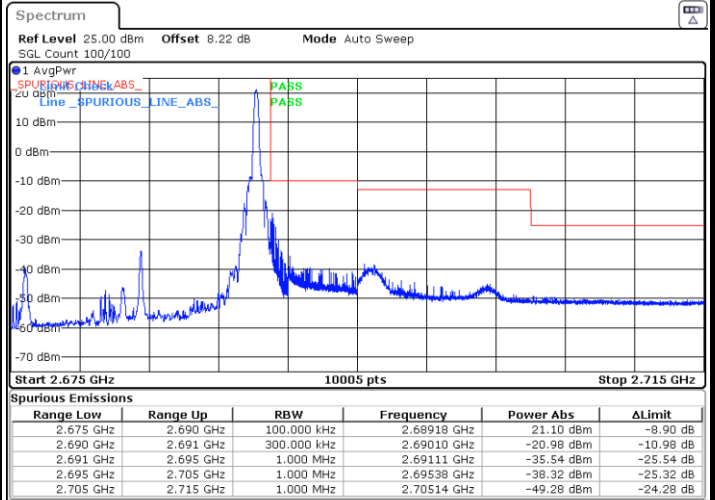
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



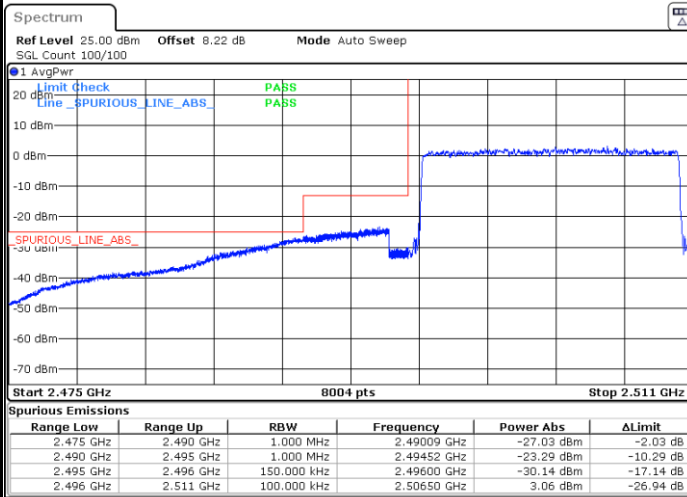
Date: 5.FEB.2023 14:30:55

Highest Band Edge / 1 RB



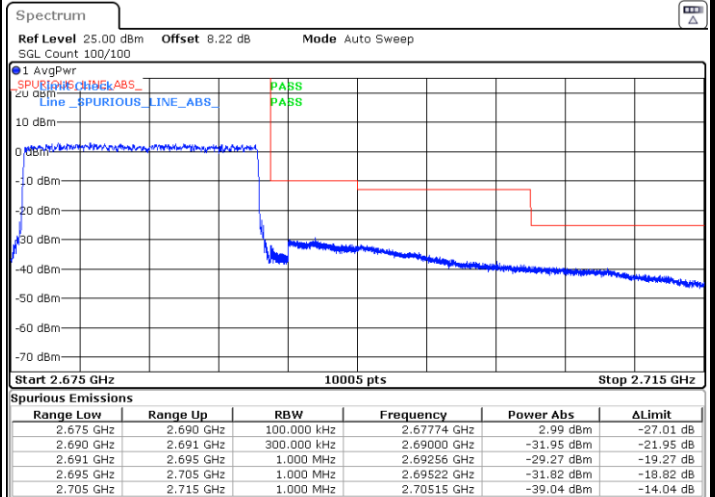
Date: 5.FEB.2023 14:35:36

Lowest Band Edge / Full RB



Date: 5.FEB.2023 14:32:05

Highest Band Edge / Full RB

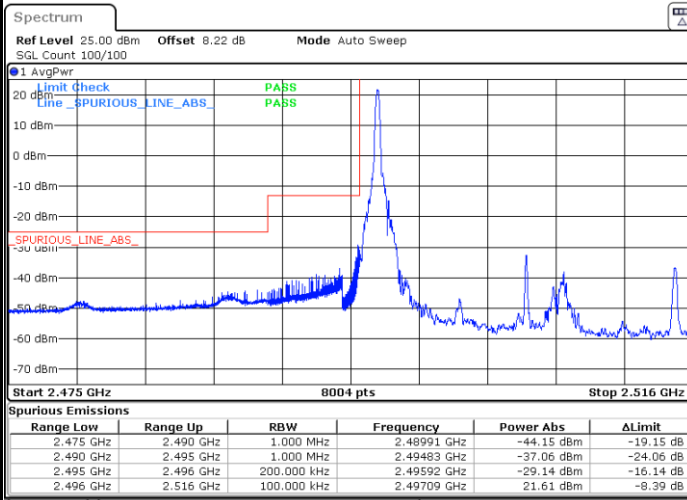


Date: 5.FEB.2023 14:36:46



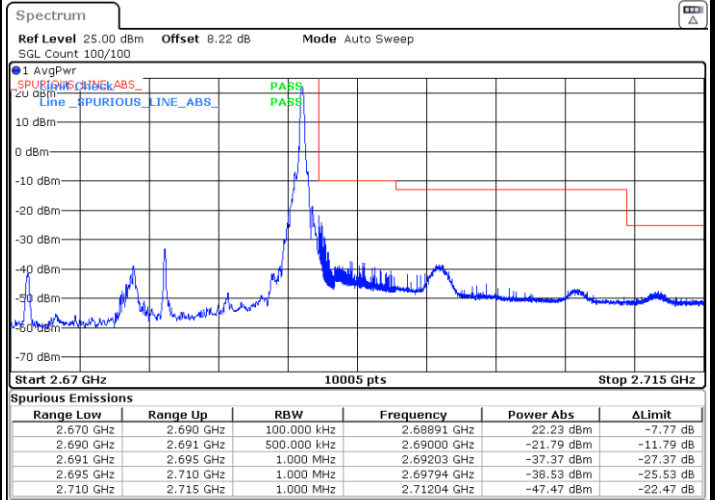
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



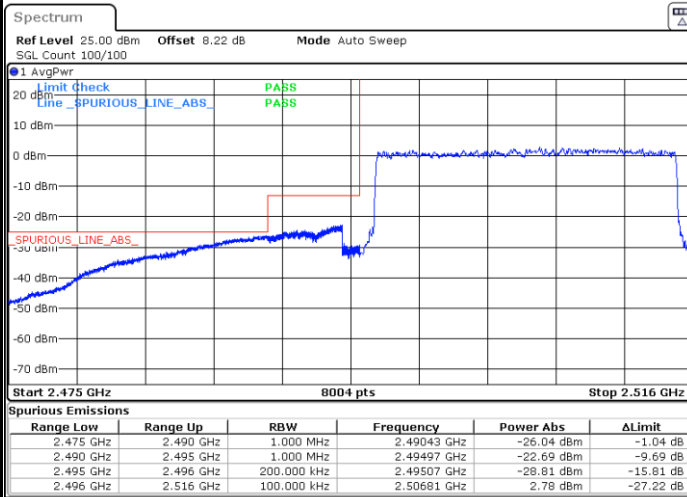
Date: 5.FEB.2023 14:43:07

Highest Band Edge / 1 RB



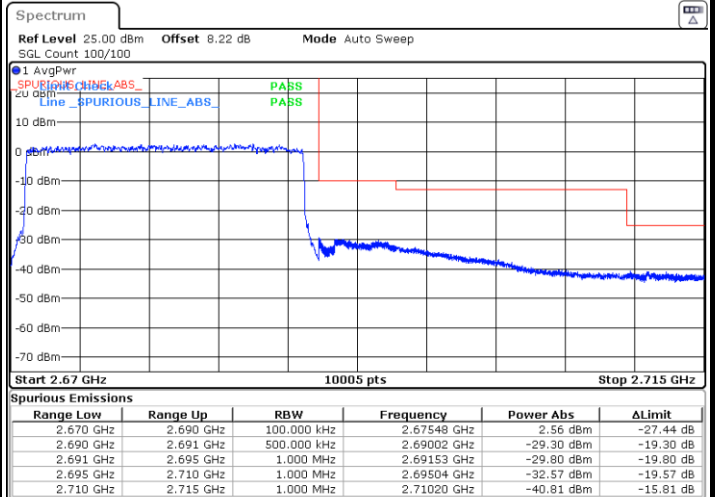
Date: 5.FEB.2023 14:47:48

Lowest Band Edge / Full RB



Date: 5.FEB.2023 14:46:38

Highest Band Edge / Full RB

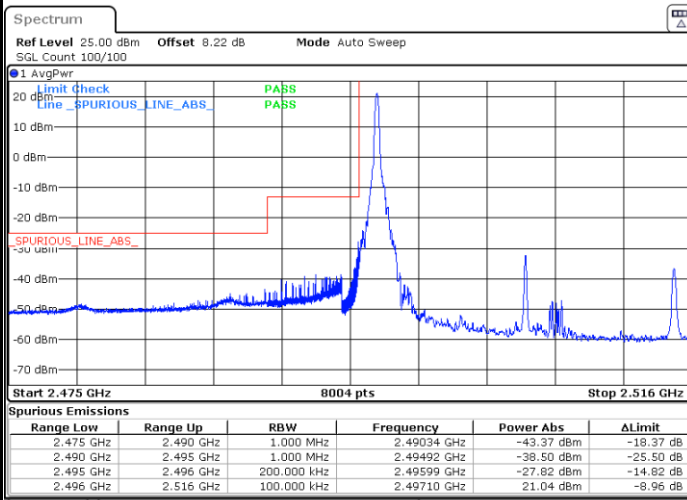


Date: 5.FEB.2023 14:51:18



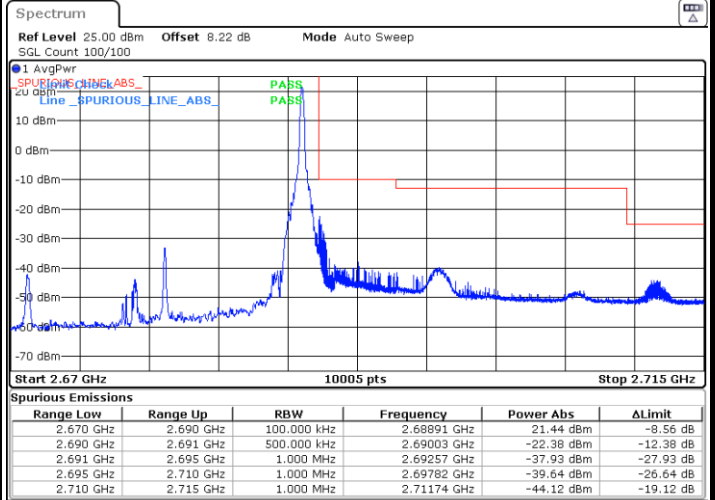
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



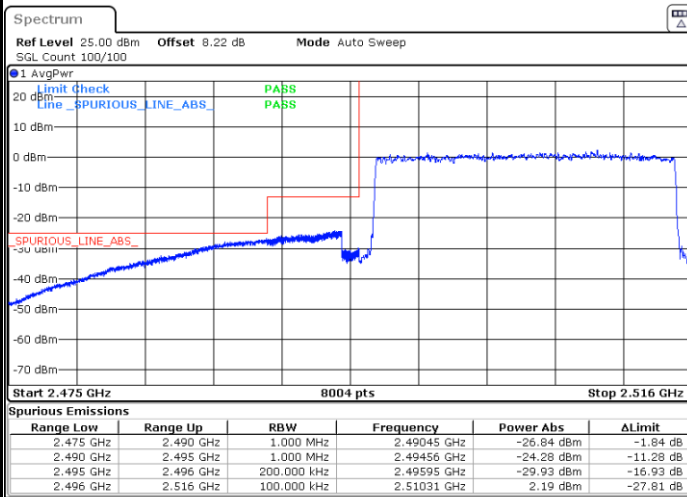
Date: 5.FEB.2023 14:44:17

Highest Band Edge / 1 RB



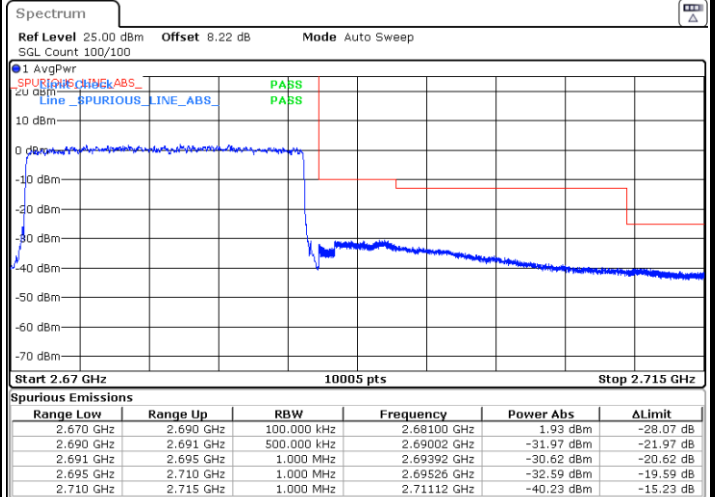
Date: 5.FEB.2023 14:46:58

Lowest Band Edge / Full RB



Date: 5.FEB.2023 14:45:27

Highest Band Edge / Full RB



Date: 5.FEB.2023 14:50:08

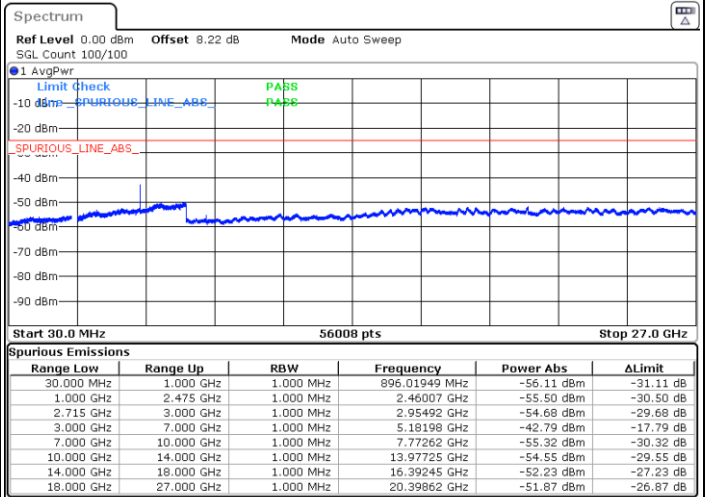
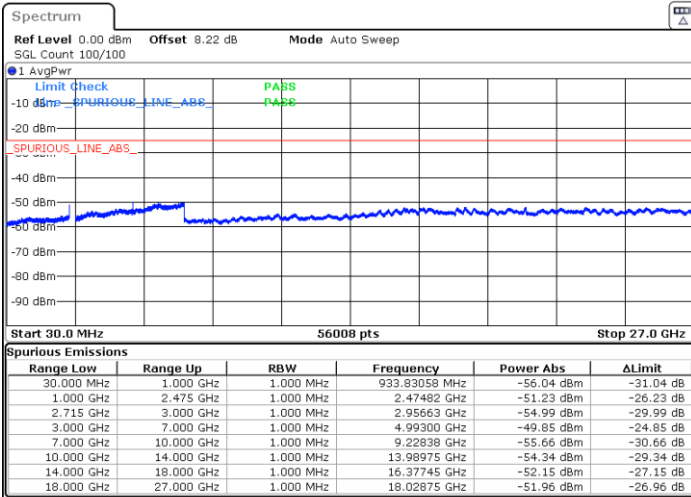


Conducted Spurious Emission

LTE Band 41 / 5MHz

Lowest Channel / QPSK

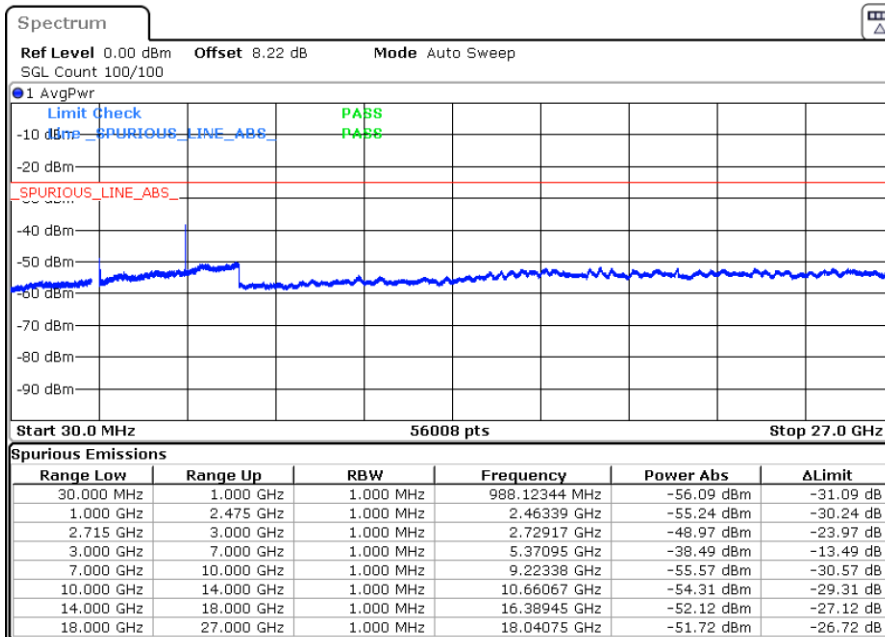
Middle Channel / QPSK



Date: 5.FEB.2023 14:12:32

Date: 5.FEB.2023 14:13:51

Highest Channel / QPSK



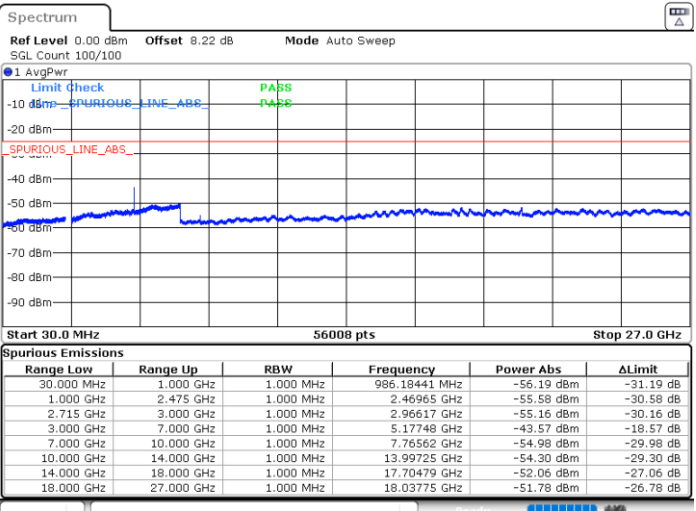
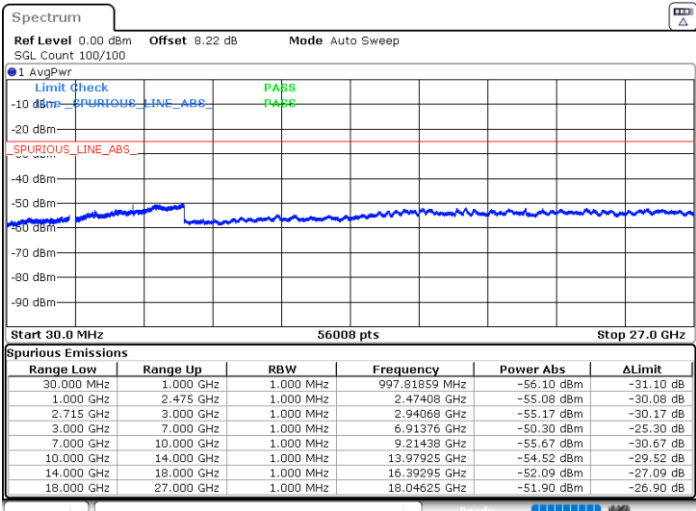
Date: 5.FEB.2023 14:15:11



LTE Band 41 / 10MHz

Lowest Channel / QPSK

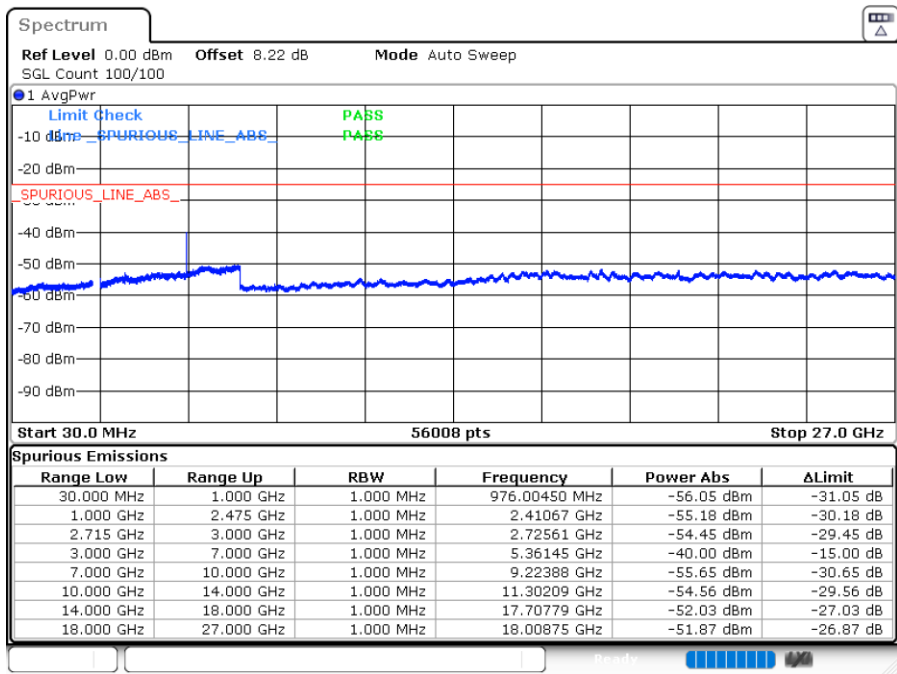
Middle Channel / QPSK



Date: 5.FEB.2023 14:25:54

Date: 5.FEB.2023 14:27:14

Highest Channel / QPSK



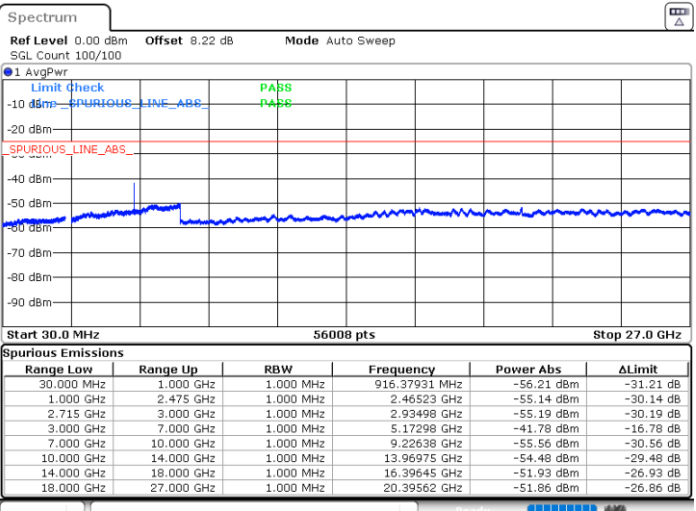
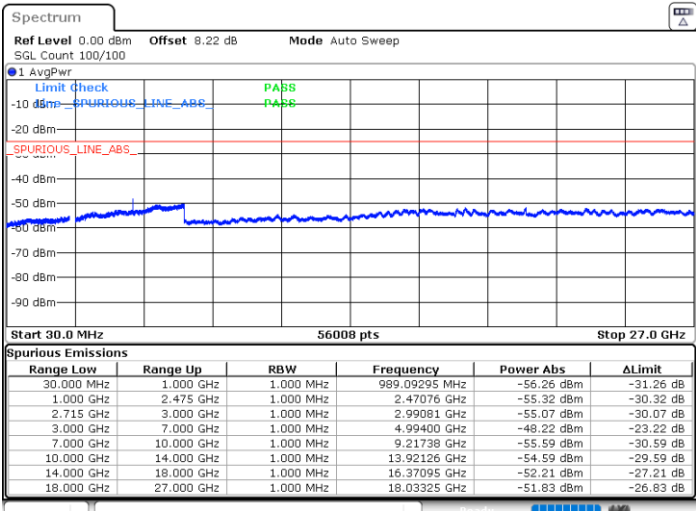
Date: 5.FEB.2023 14:28:34



LTE Band 41 / 15MHz

Lowest Channel / QPSK

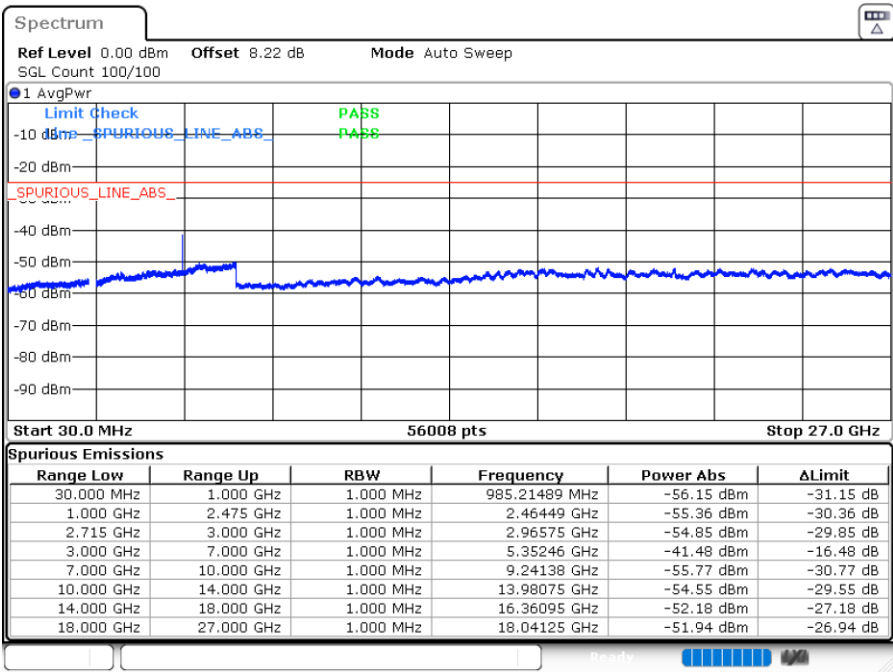
Middle Channel / QPSK



Date: 5.FEB.2023 14:39:16

Date: 5.FEB.2023 14:40:36

Highest Channel / QPSK



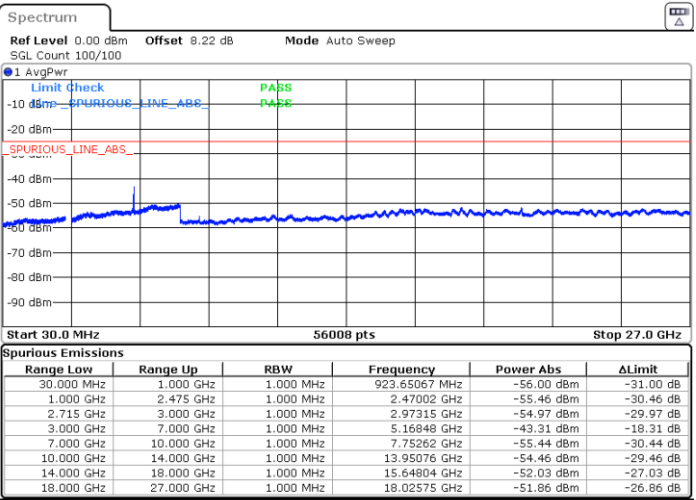
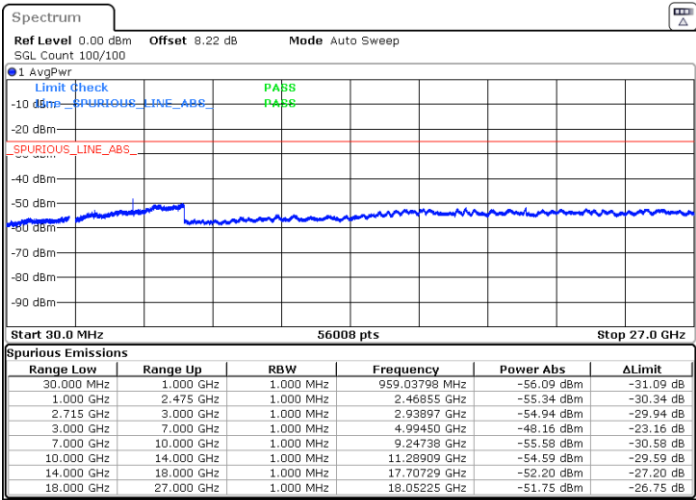
Date: 5.FEB.2023 14:41:56



LTE Band 41 / 20MHz

Lowest Channel / QPSK

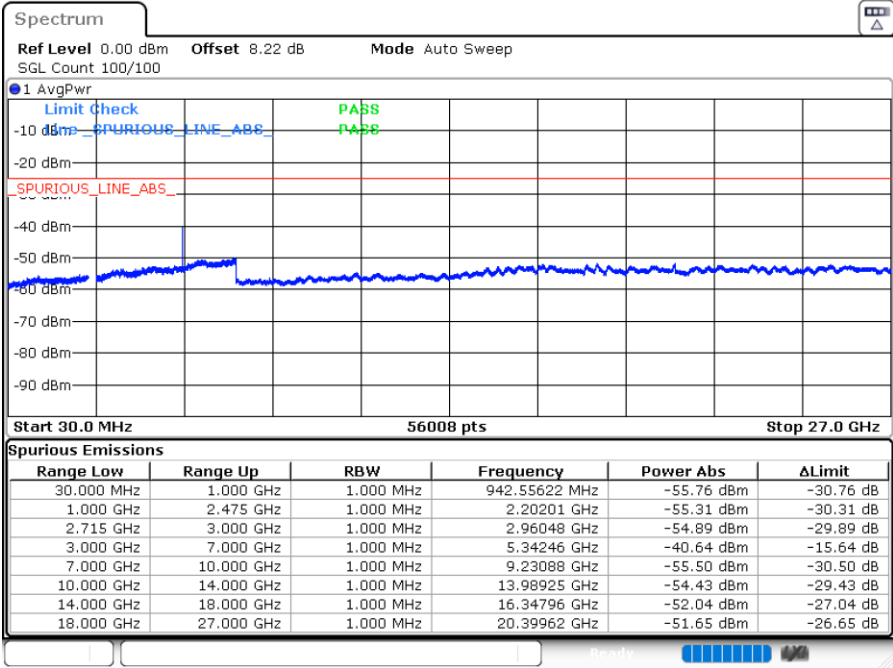
Middle Channel / QPSK



Date: 5.FEB.2023 14:52:38

Date: 5.FEB.2023 14:53:58

Highest Channel / QPSK



Date: 5.FEB.2023 14:55:18



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	0.0011	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0035	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0039	
20	Minimum Voltage	0.0023	

Note:

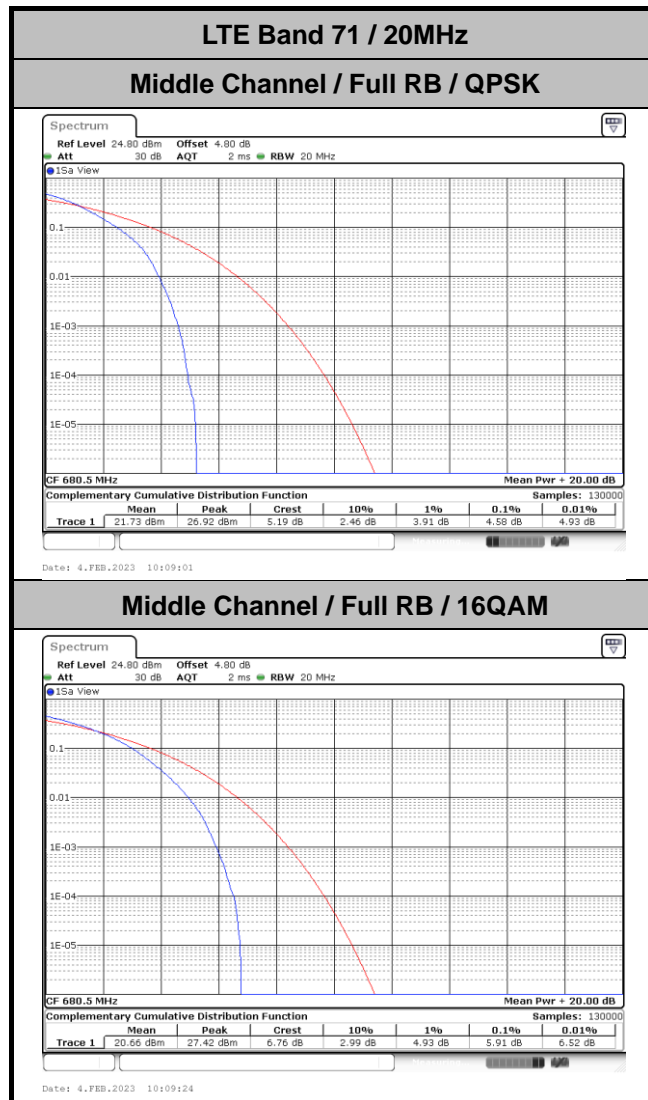
1. Normal Voltage =3.8V. ; Minimum Voltage =3.55 V. ; Maximum Voltage =4.4V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71

Peak-to-Average Ratio

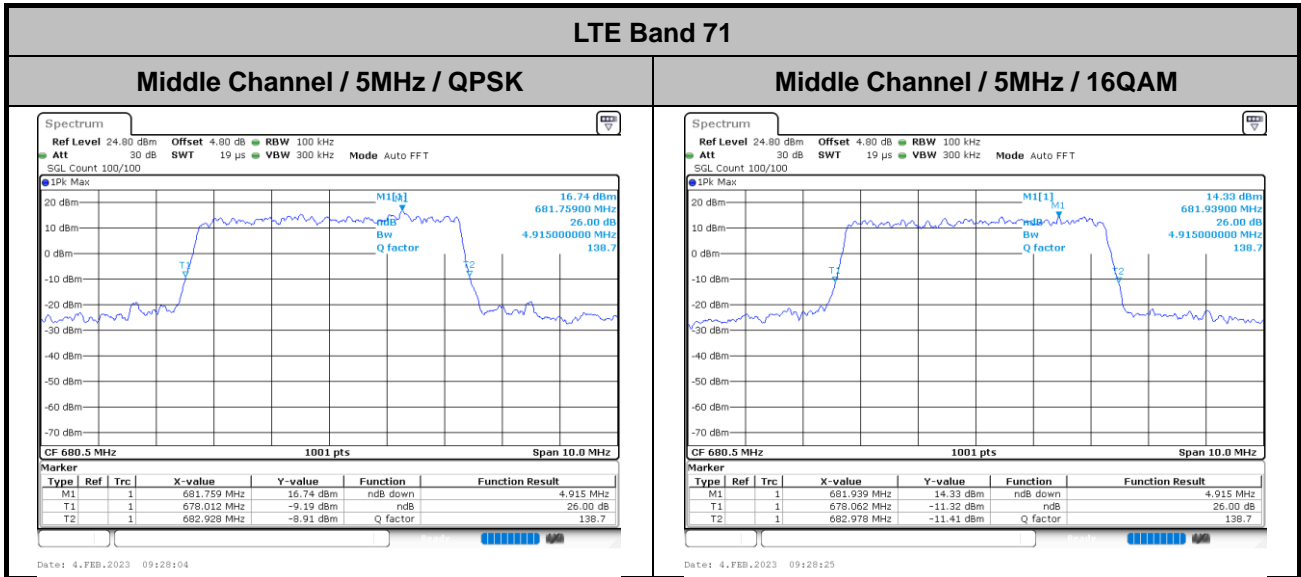
Mode	LTE Band 71 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.58	5.91	PASS





26dB Bandwidth

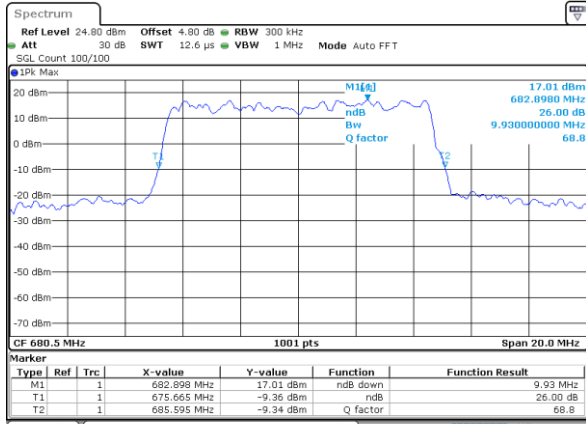
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.92	4.92
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.93	9.81
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.18	14.69
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.74	18.90





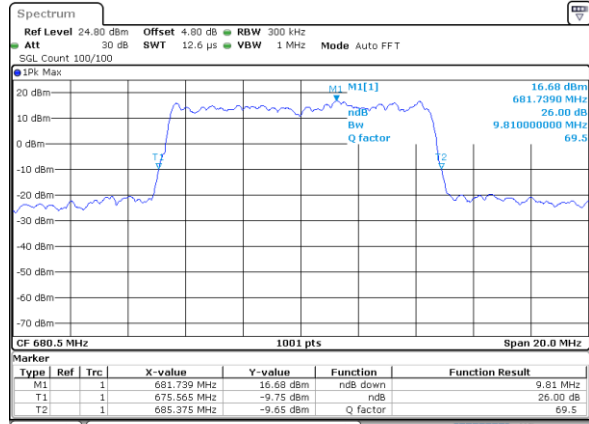
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 4.FEB.2023 09:39:48

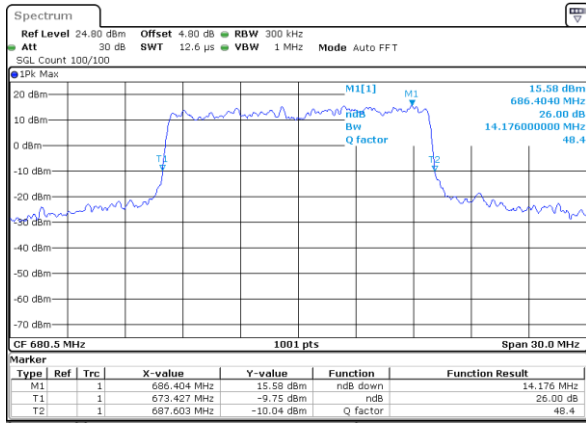
Middle Channel / 10MHz / 16QAM



Date: 4.FEB.2023 09:40:09

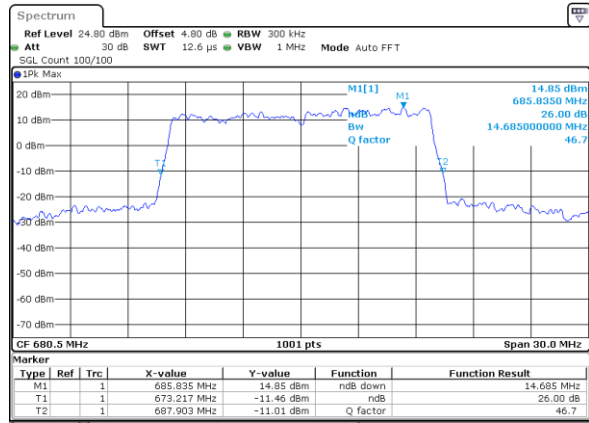
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 4.FEB.2023 09:51:32

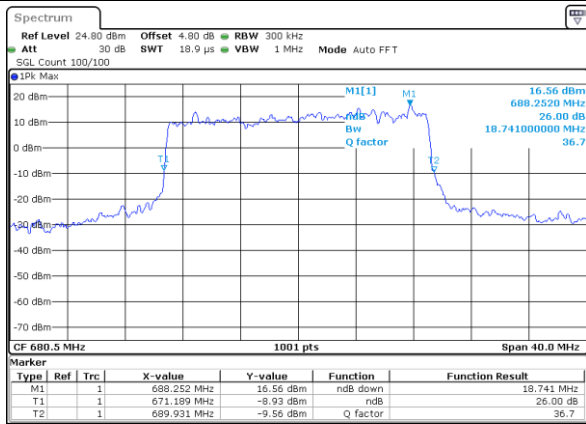
Middle Channel / 15MHz / 16QAM



Date: 4.FEB.2023 09:51:53

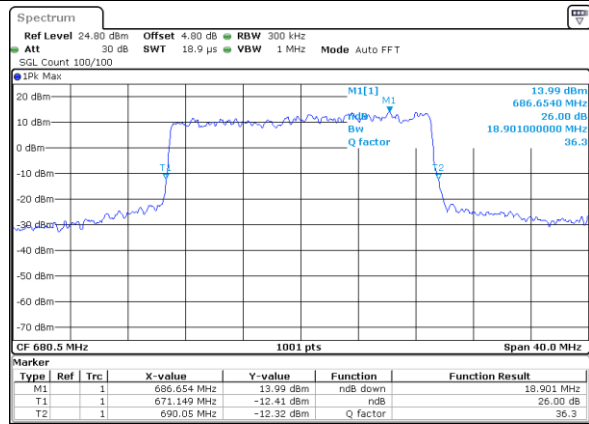
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 4.FEB.2023 10:03:17

Middle Channel / 20MHz / 16QAM

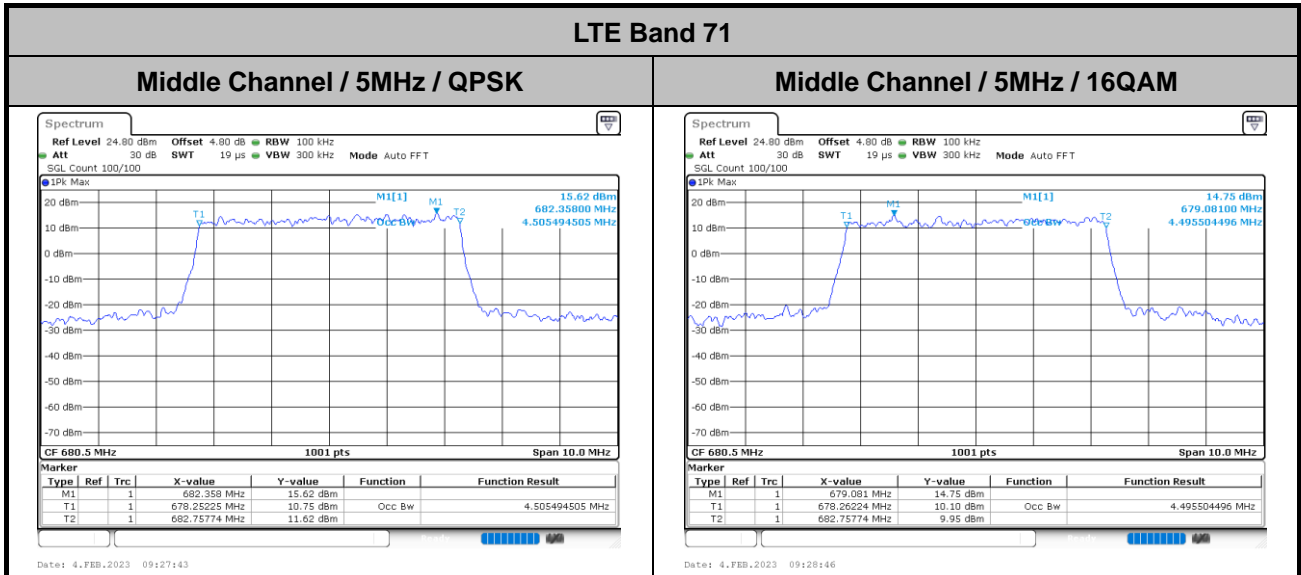


Date: 4.FEB.2023 10:03:38



Occupied Bandwidth

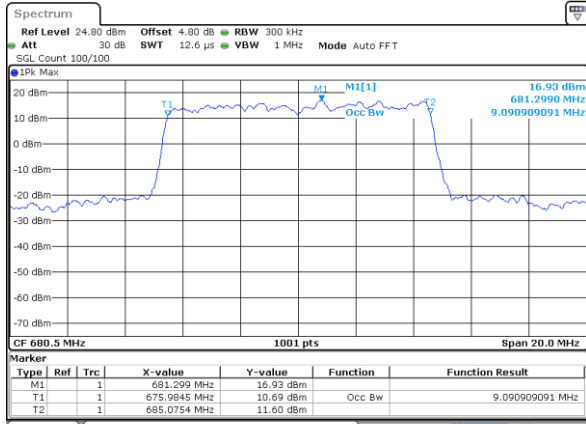
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.50
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.09	9.07
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.37
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.78	17.82





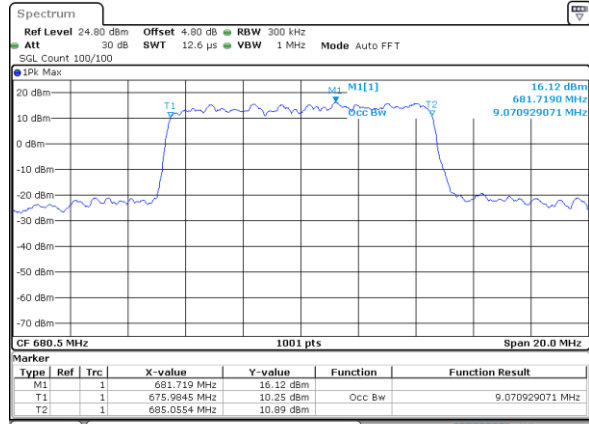
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 4.FEB.2023 09:39:27

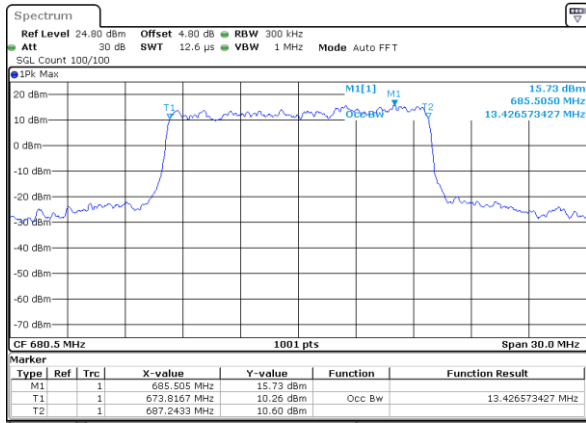
Middle Channel / 10MHz / 16QAM



Date: 4.FEB.2023 09:40:29

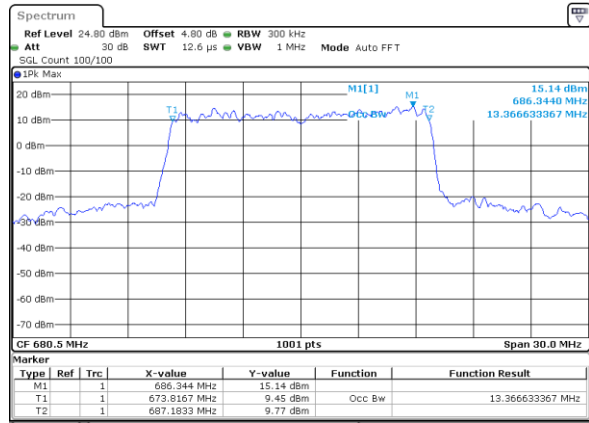
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 4.FEB.2023 09:51:11

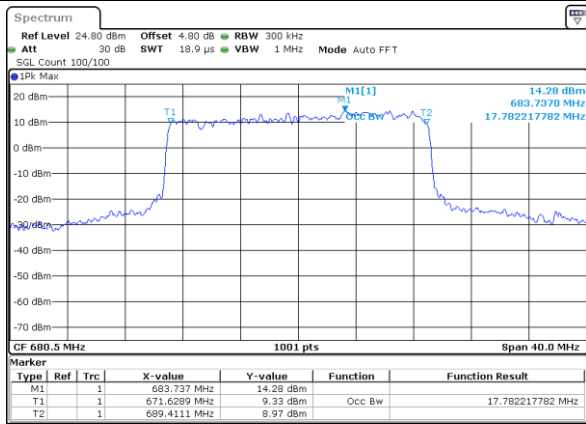
Middle Channel / 15MHz / 16QAM



Date: 4.FEB.2023 09:52:14

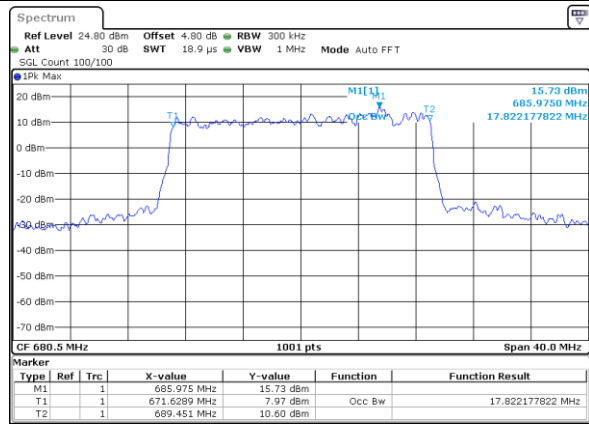
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 4.FEB.2023 10:02:56

Middle Channel / 20MHz / 16QAM



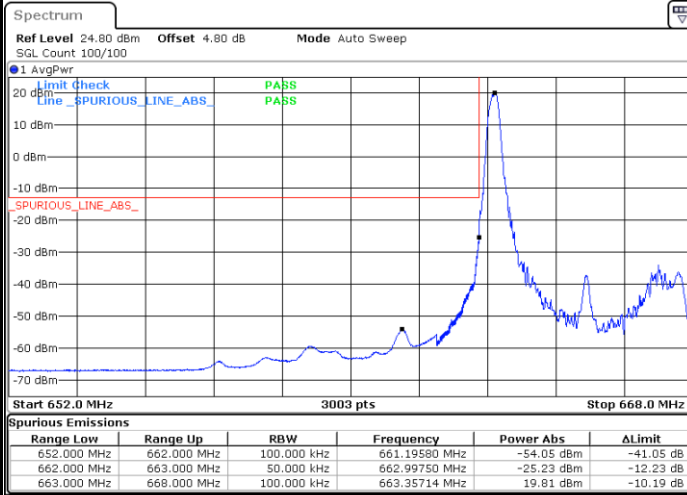
Date: 4.FEB.2023 10:03:59



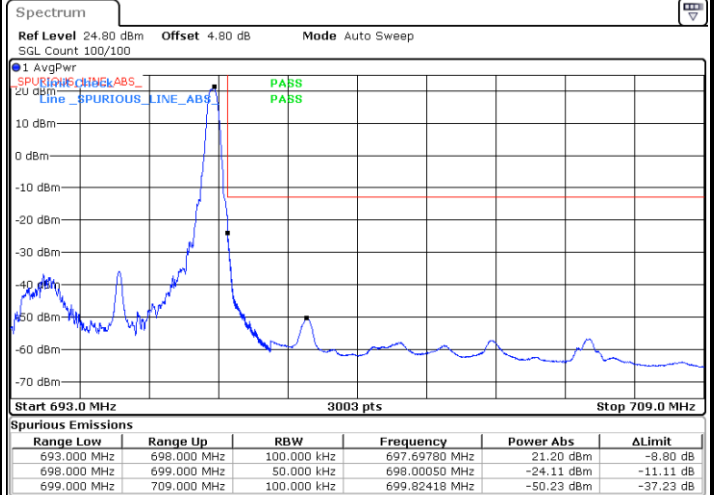
Conducted Band Edge

LTE Band 71 / 5MHz / QPSK

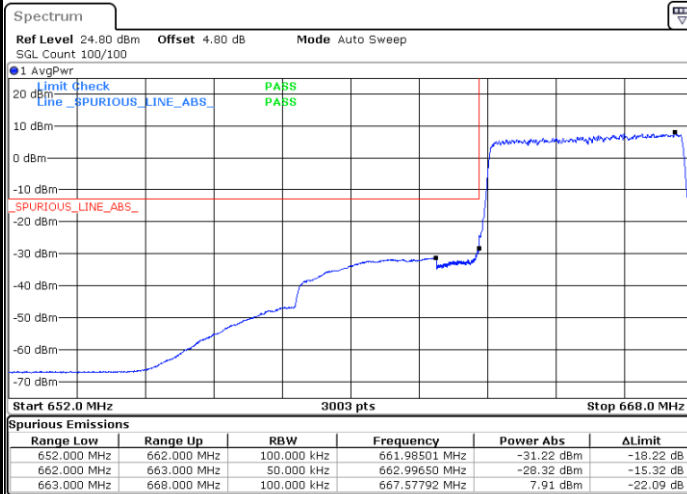
Lowest Band Edge / 1 RB



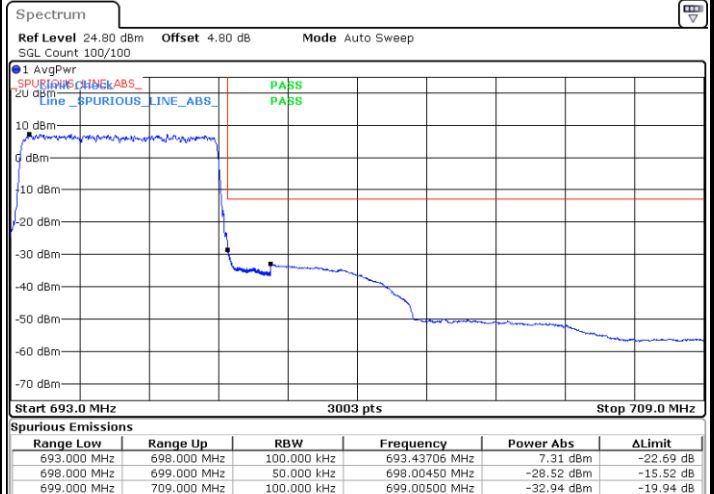
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



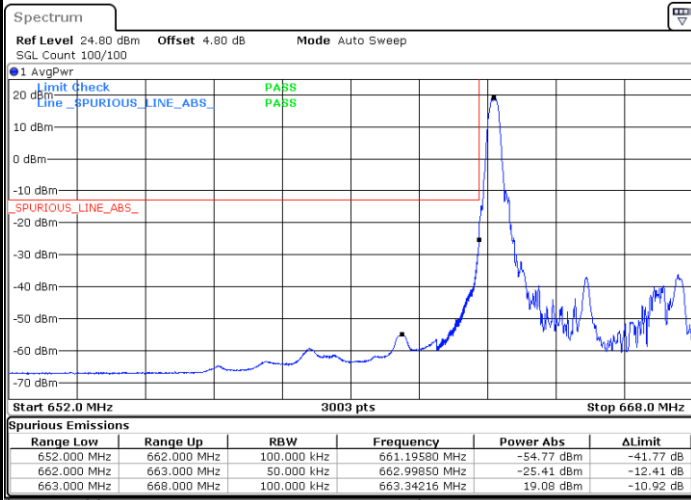
Highest Band Edge / Full RB





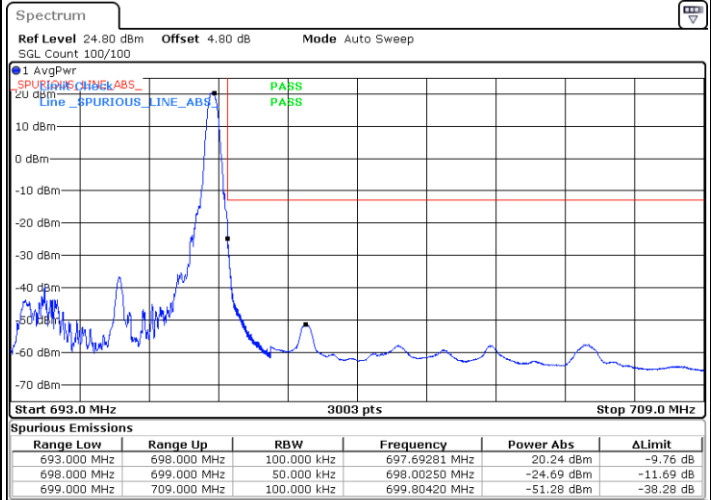
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



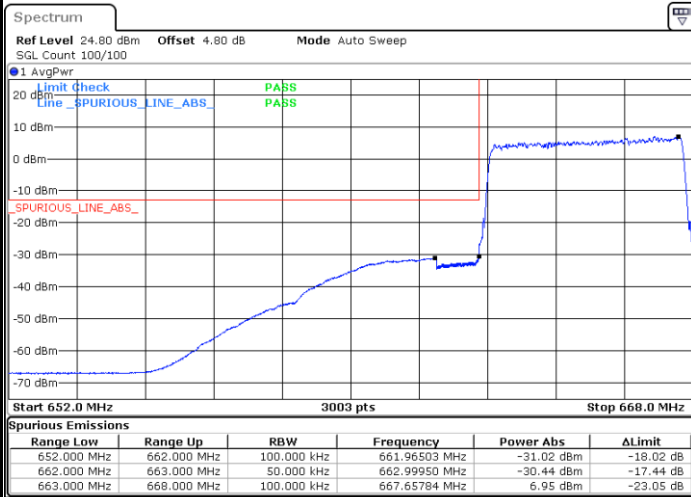
Date: 4.FEB.2023 09:24:33

Highest Band Edge / 1 RB



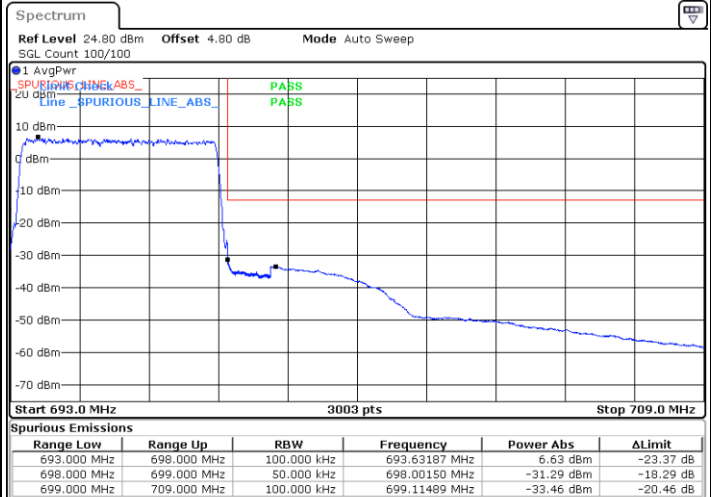
Date: 4.FEB.2023 09:31:35

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:26:23

Highest Band Edge / Full RB

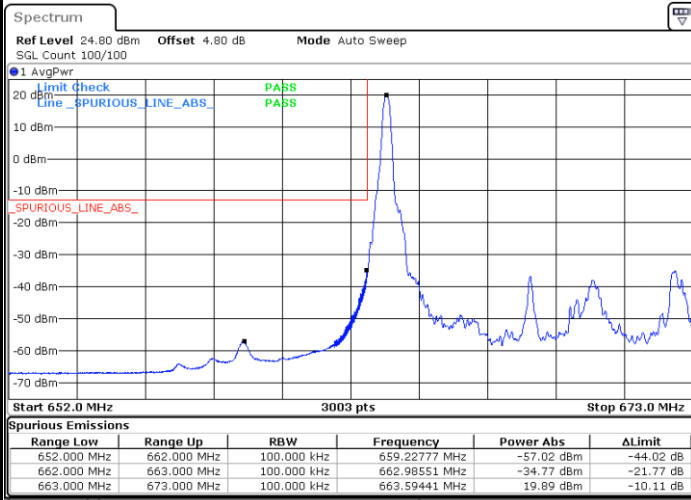


Date: 4.FEB.2023 09:33:26



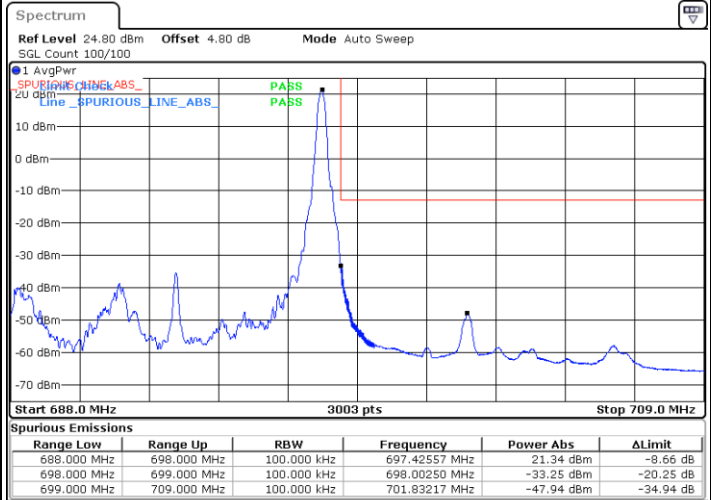
LTE Band 71 / 10MHz / QPSK

Lowest Band Edge / 1 RB



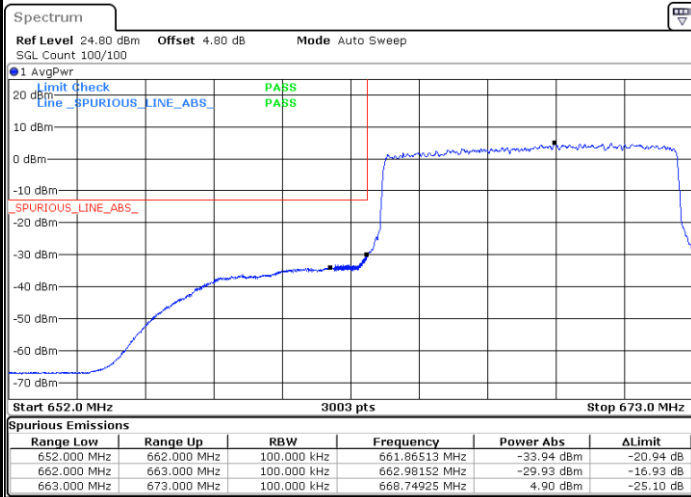
Date: 4.FEB.2023 09:36:12

Highest Band Edge / 1 RB



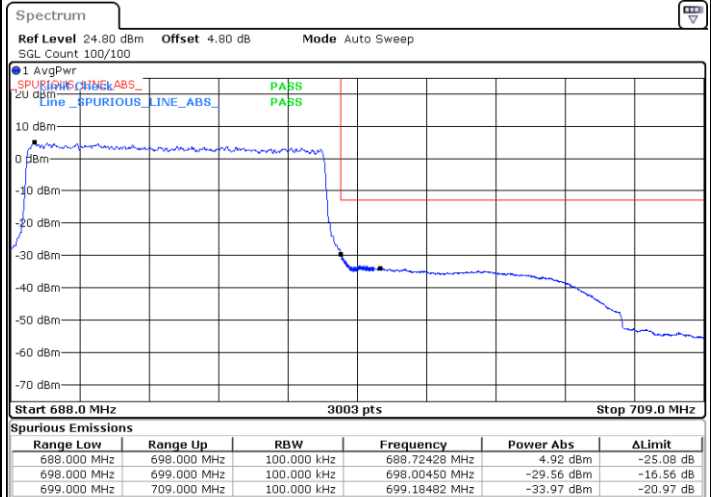
Date: 4.FEB.2023 09:42:24

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:34:22

Highest Band Edge / Full RB

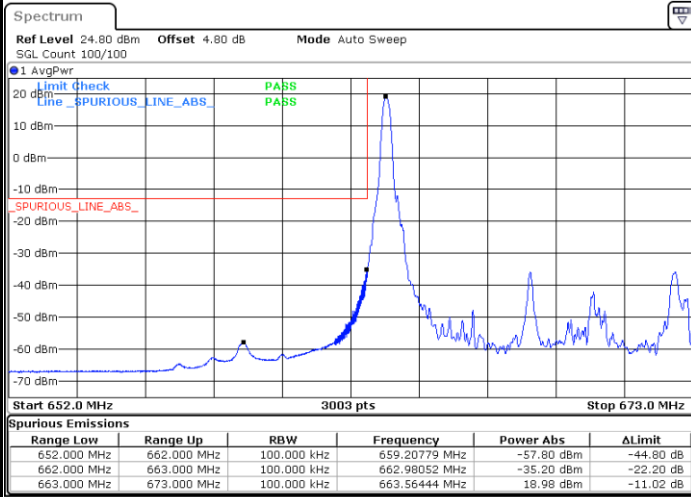


Date: 4.FEB.2023 09:44:15



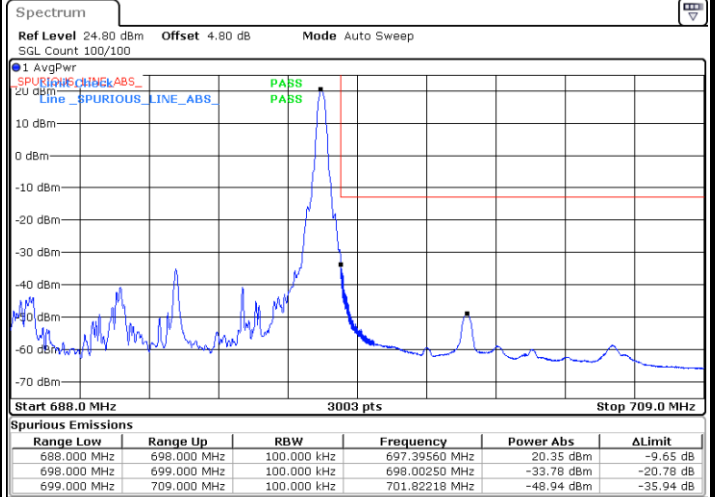
LTE Band 71 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



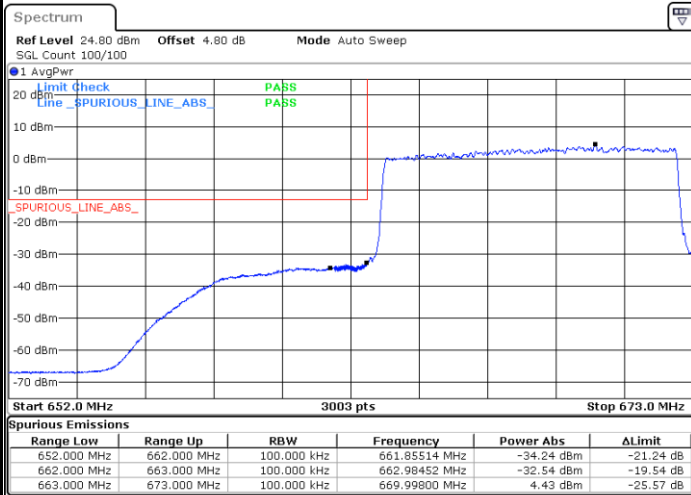
Date: 4.FEB.2023 09:37:07

Highest Band Edge / 1 RB



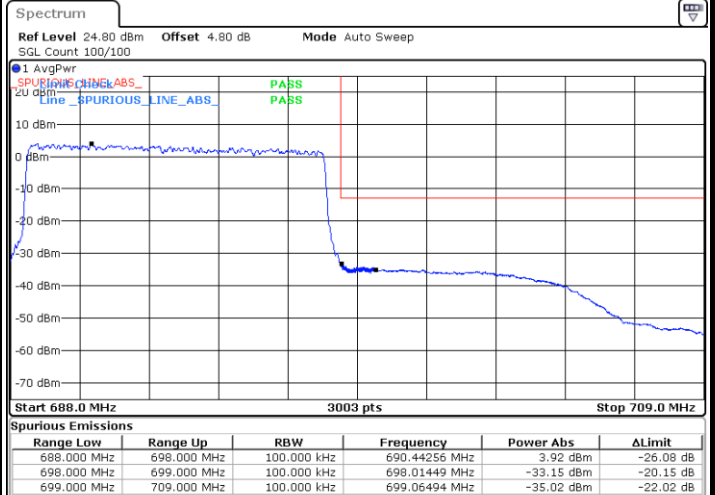
Date: 4.FEB.2023 09:43:19

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:35:17

Highest Band Edge / Full RB

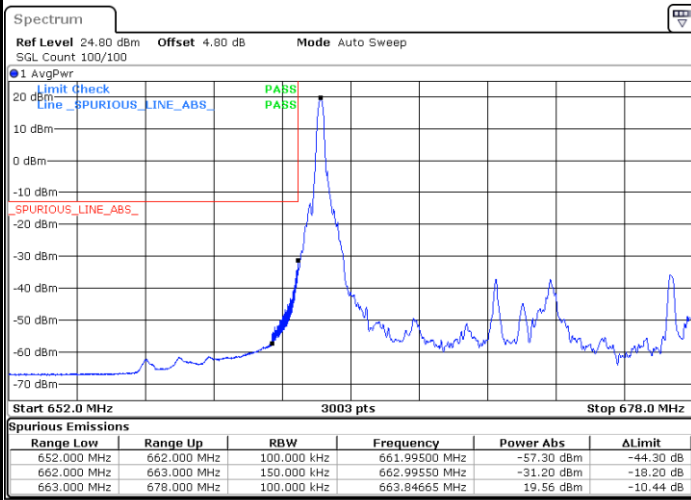


Date: 4.FEB.2023 09:45:10



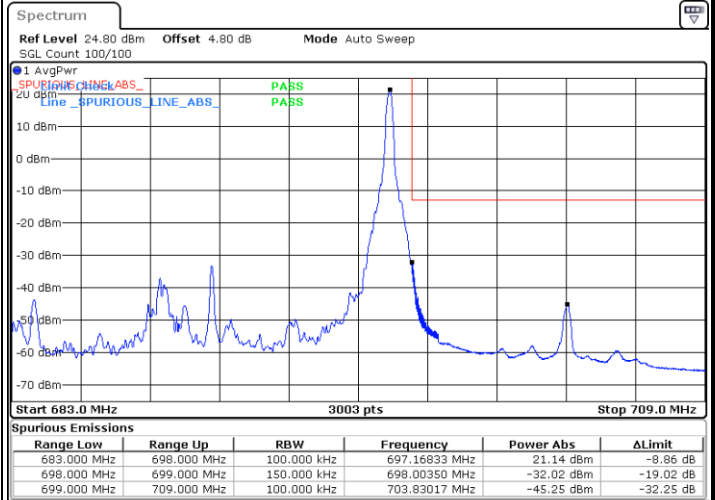
LTE Band 71 / 15MHz / QPSK

Lowest Band Edge / 1 RB



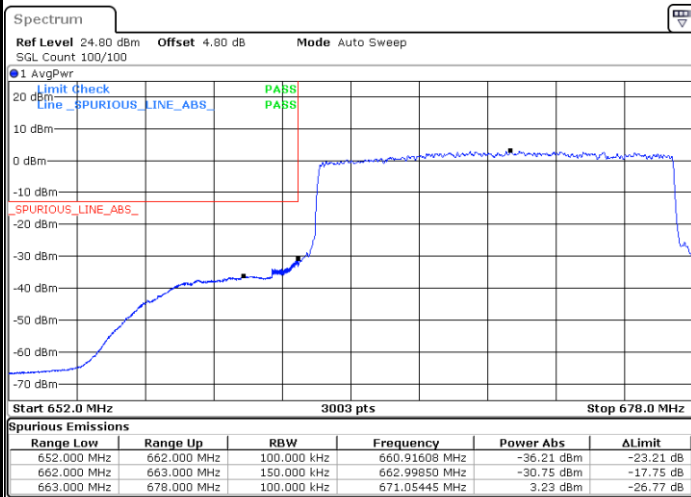
Date: 4.FEB.2023 09:47:57

Highest Band Edge / 1 RB



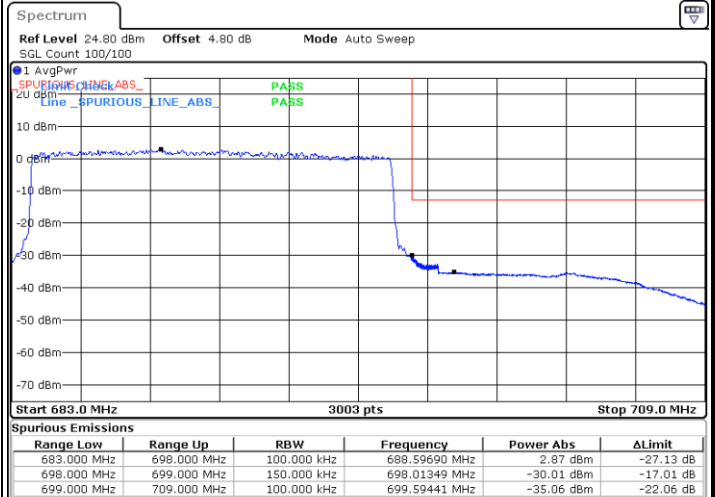
Date: 4.FEB.2023 09:54:08

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:46:06

Highest Band Edge / Full RB

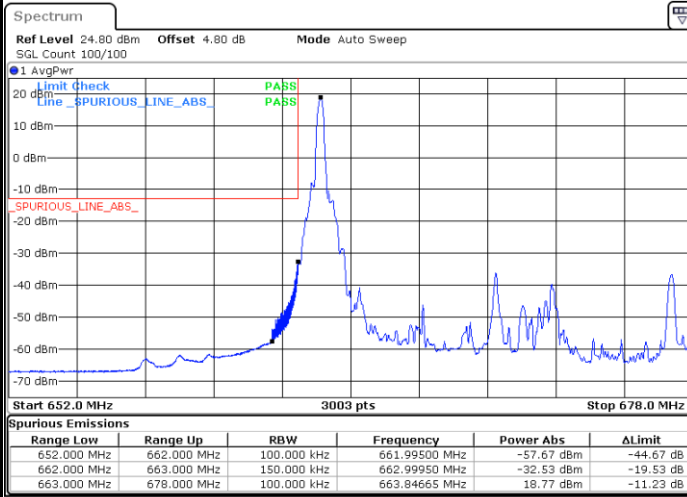


Date: 4.FEB.2023 09:55:59



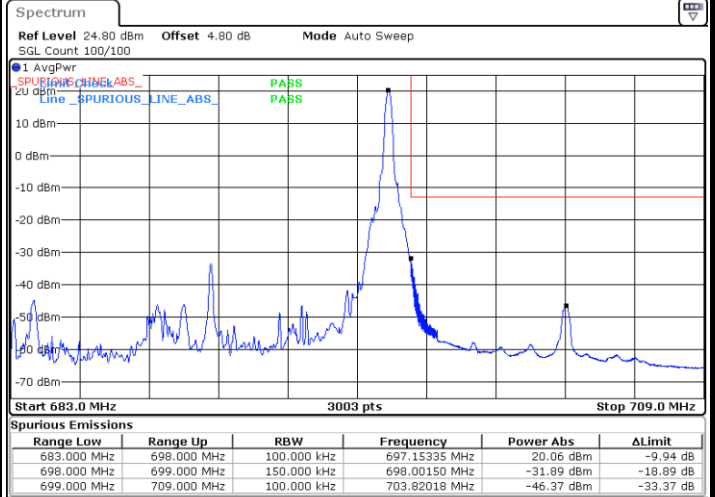
LTE Band 71 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



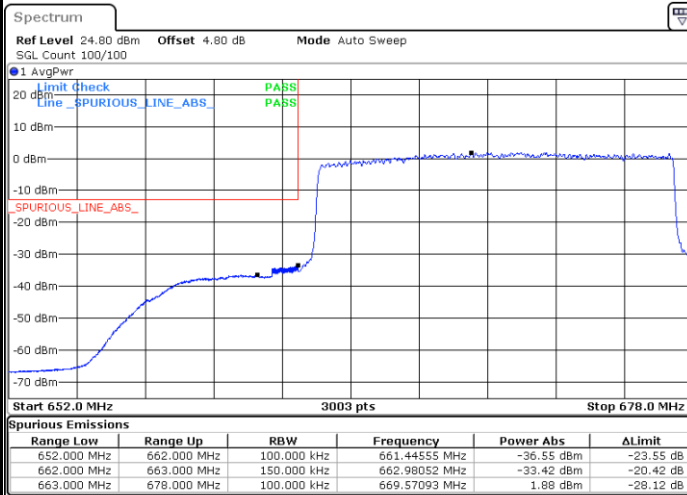
Date: 4.FEB.2023 09:48:52

Highest Band Edge / 1 RB



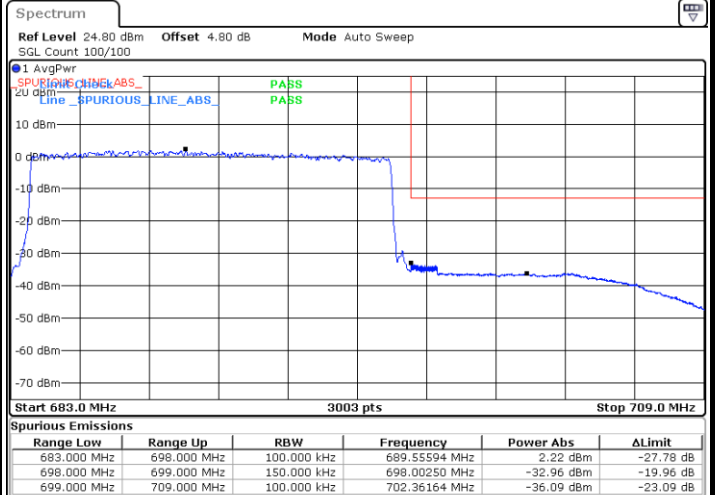
Date: 4.FEB.2023 09:55:04

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:47:01

Highest Band Edge / Full RB

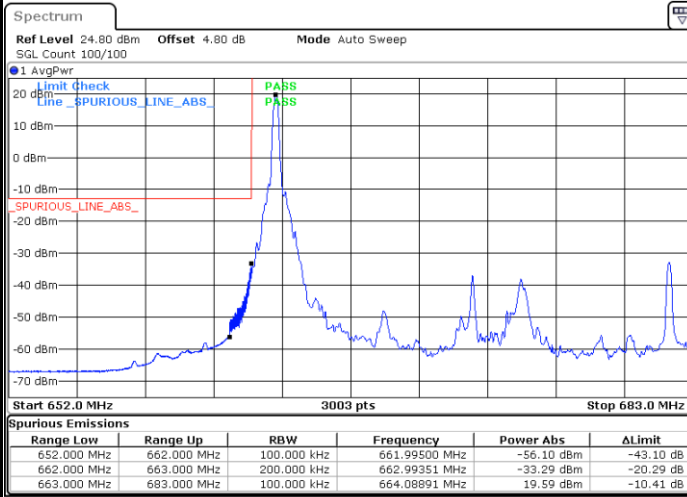


Date: 4.FEB.2023 09:56:55



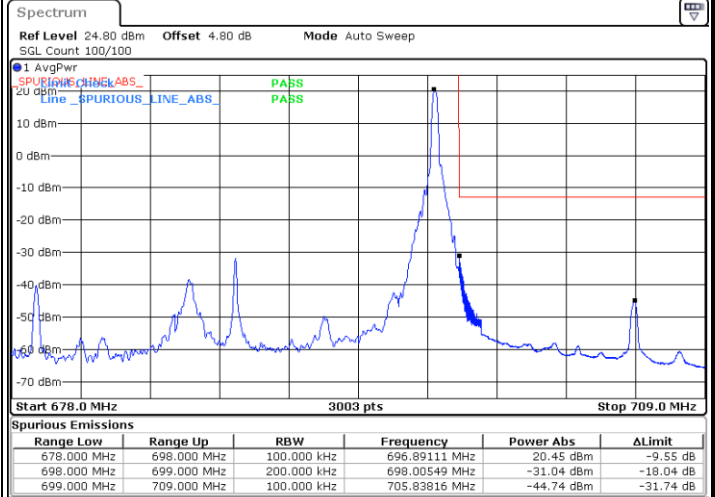
LTE Band 71 / 20MHz / QPSK

Lowest Band Edge / 1 RB



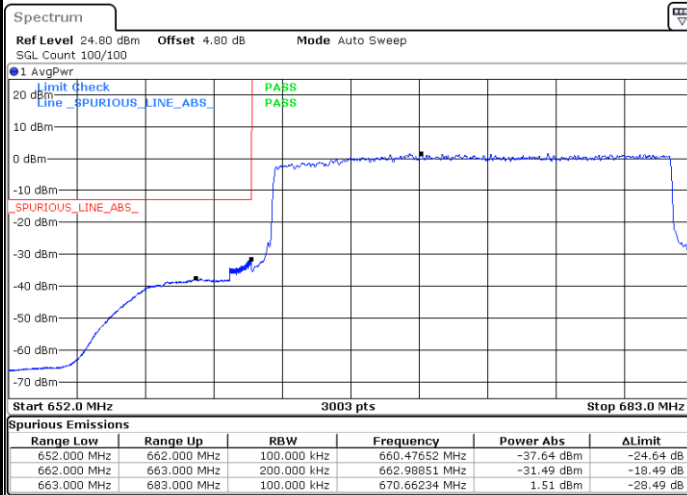
Date: 4.FEB.2023 09:59:41

Highest Band Edge / 1 RB



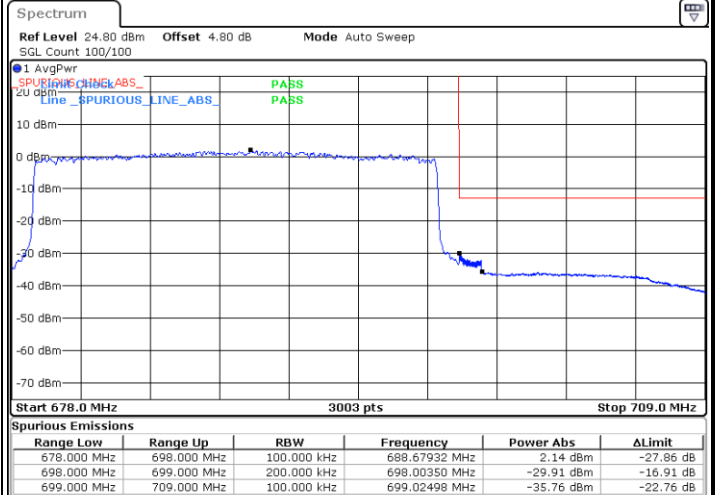
Date: 4.FEB.2023 10:05:53

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:57:51

Highest Band Edge / Full RB

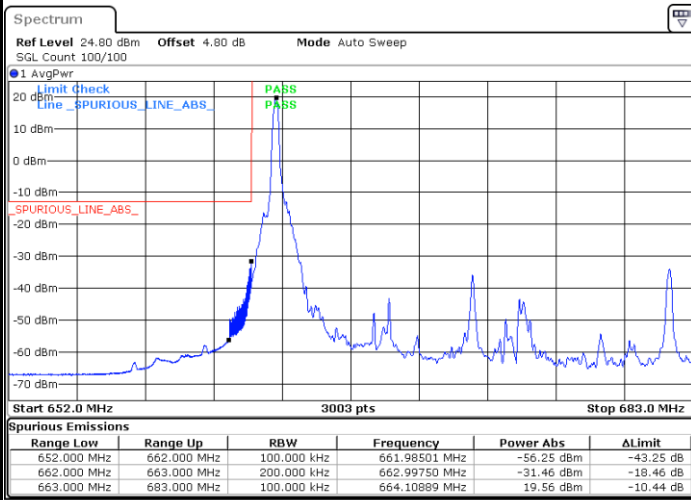


Date: 4.FEB.2023 10:07:44



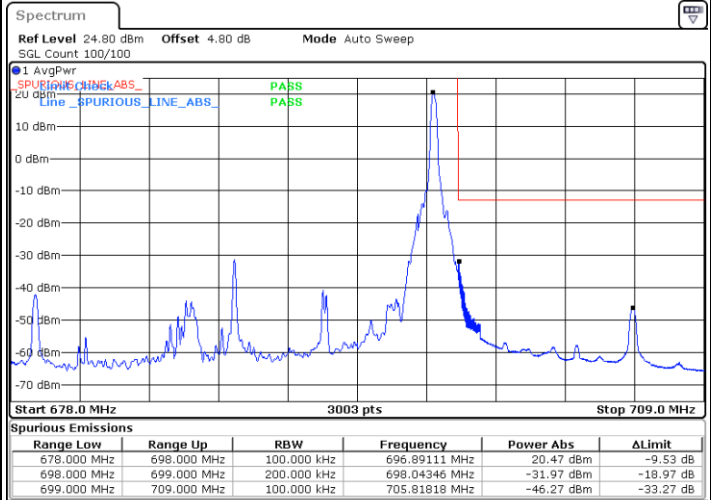
LTE Band 71 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



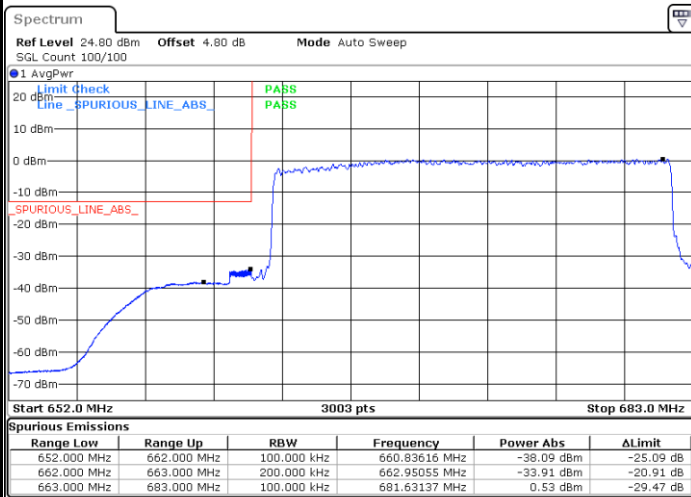
Date: 4.FEB.2023 10:00:37

Highest Band Edge / 1RB



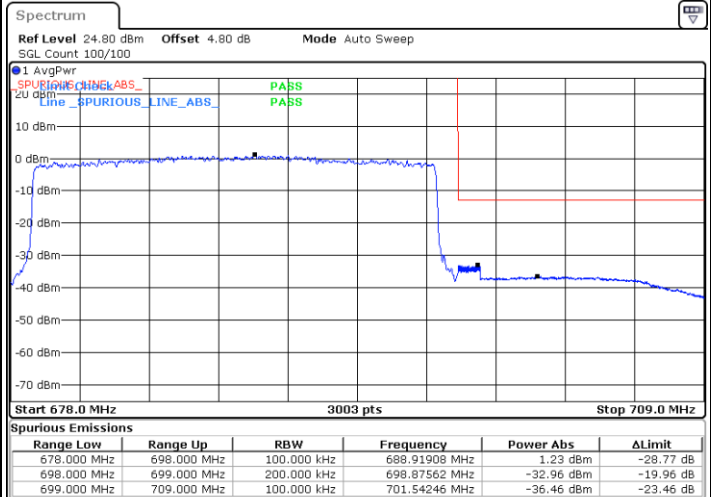
Date: 4.FEB.2023 10:06:48

Lowest Band Edge / Full RB



Date: 4.FEB.2023 09:58:46

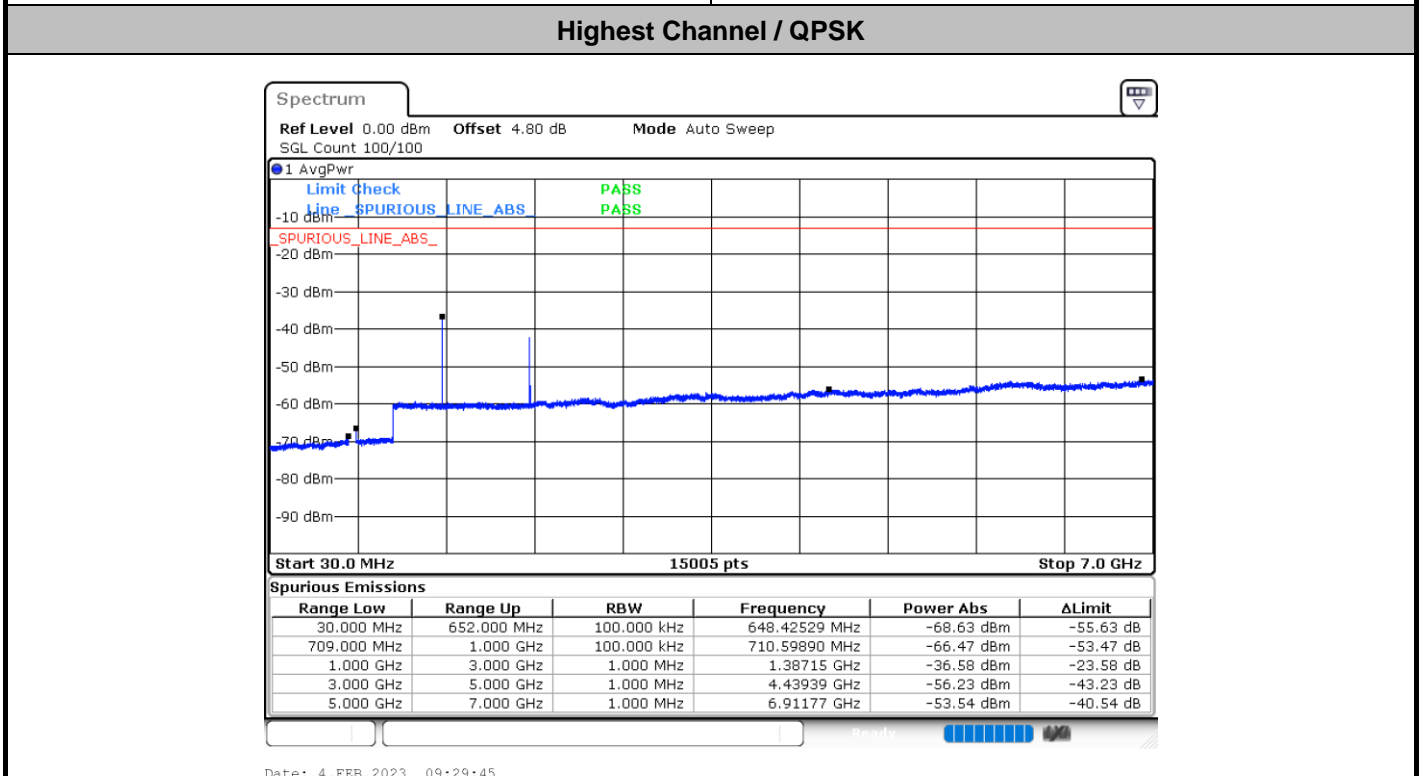
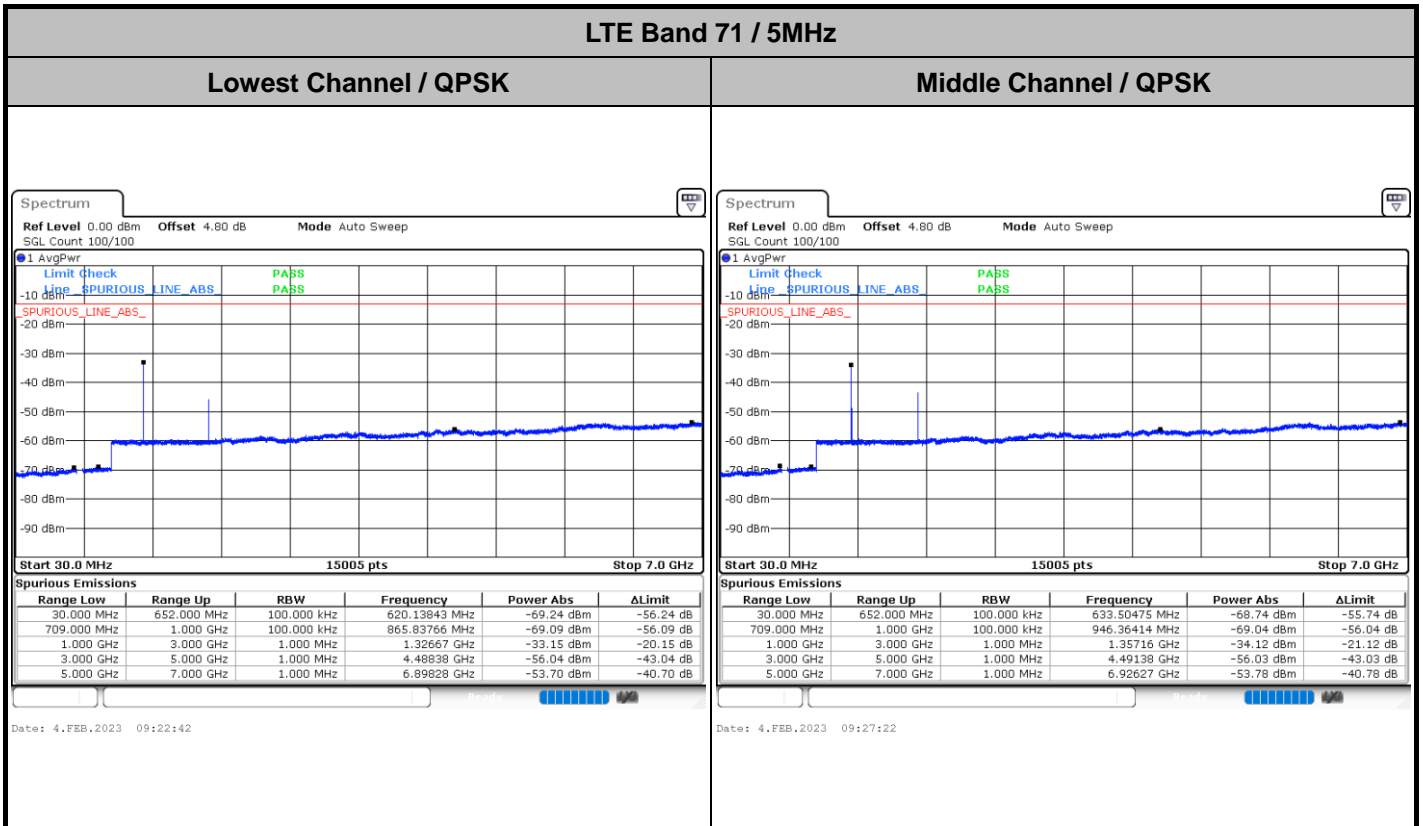
Highest Band Edge / Full RB



Date: 4.FEB.2023 10:08:39



Conducted Spurious Emission

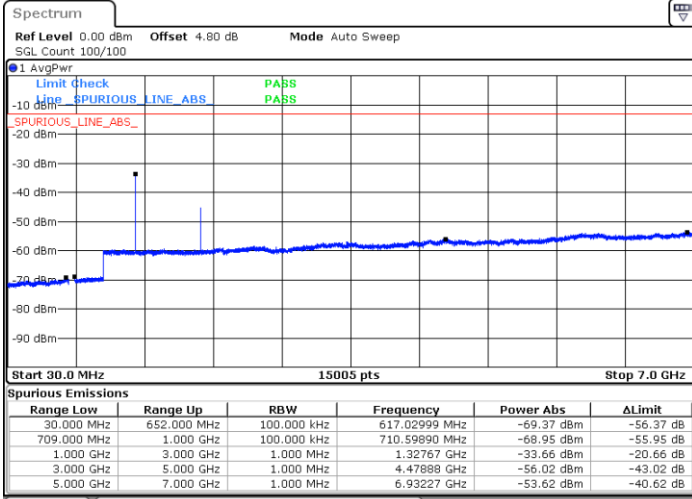




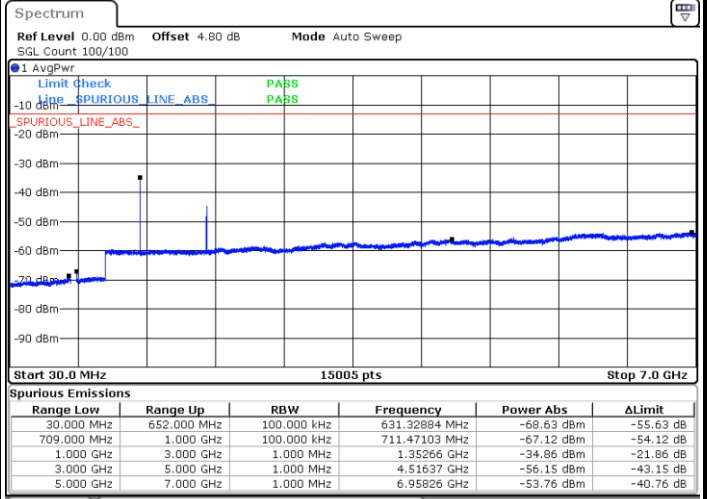
LTE Band 71 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

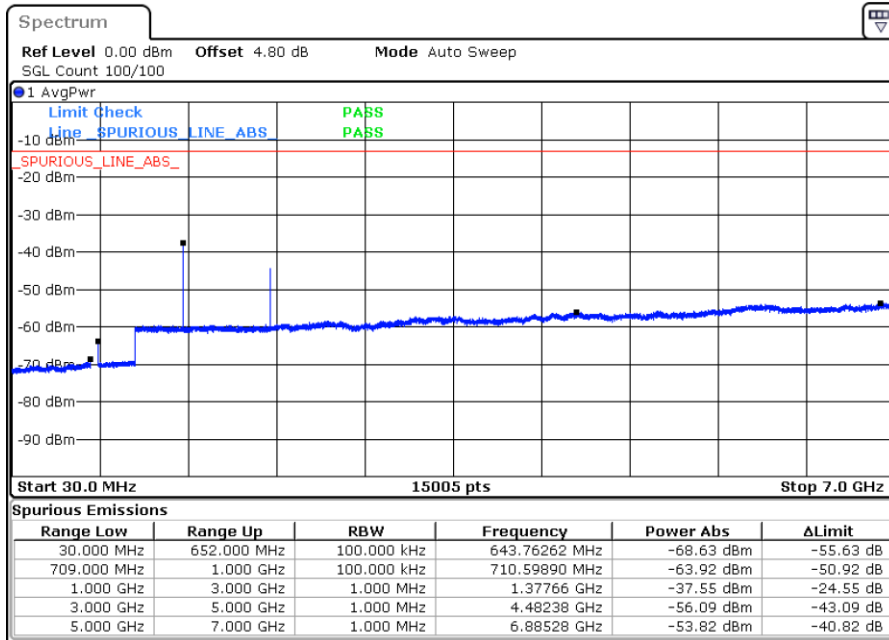


Date: 4.FEB.2023 09:38:07



Date: 4.FEB.2023 09:39:05

Highest Channel / QPSK



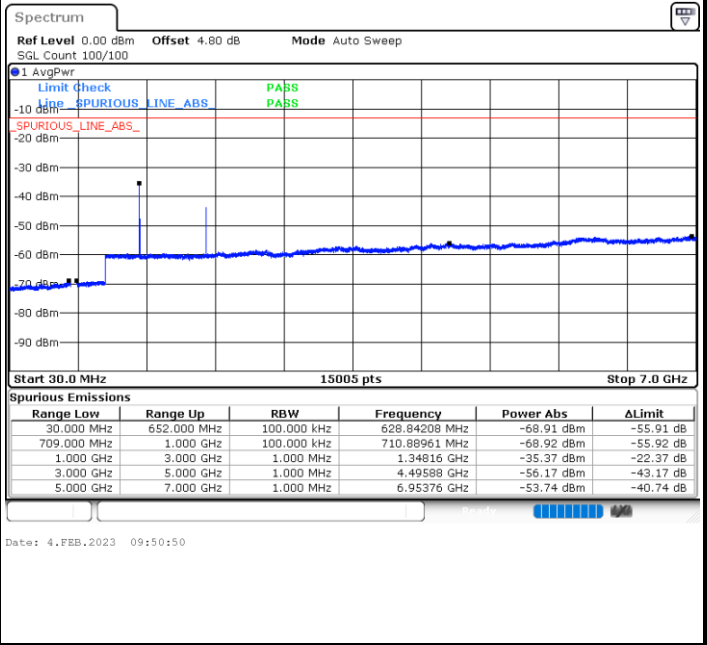
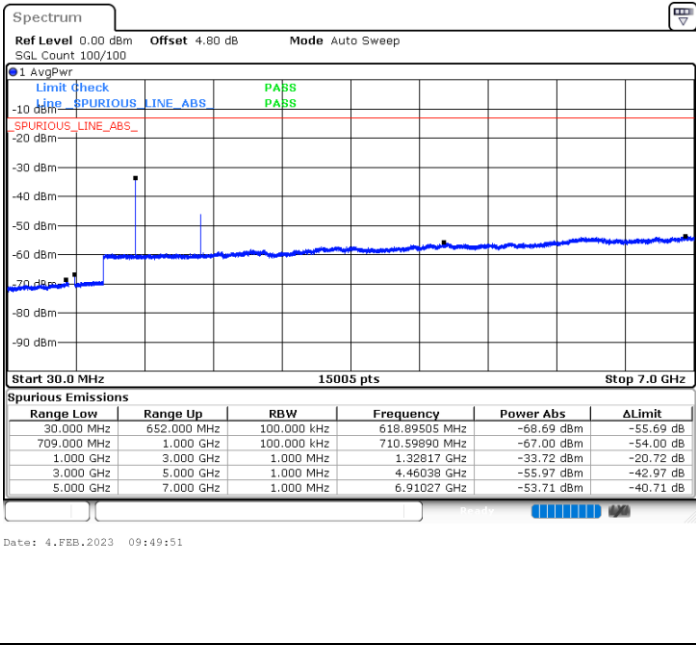
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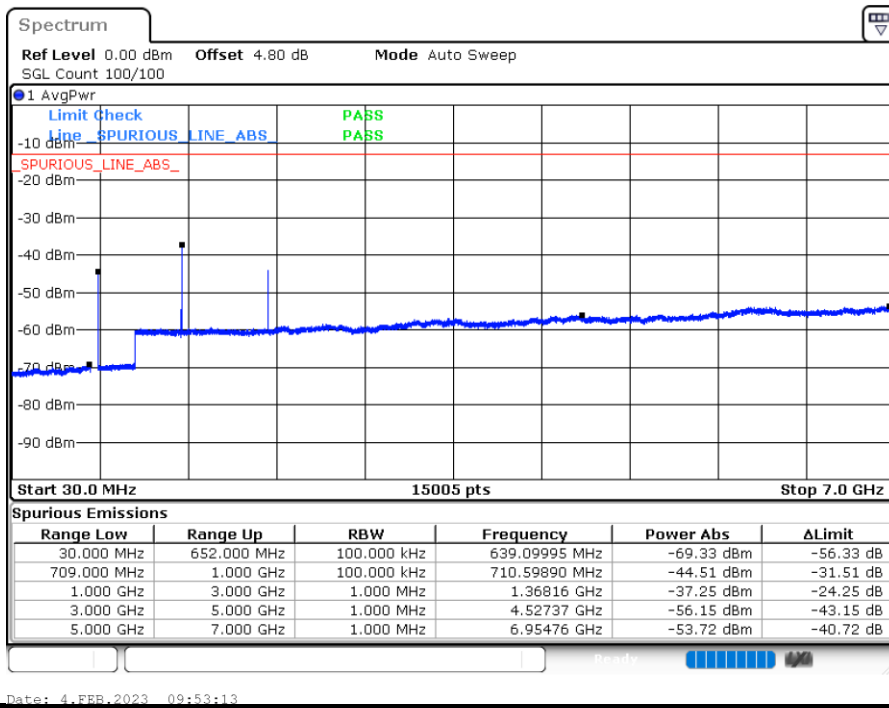
LTE Band 71 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

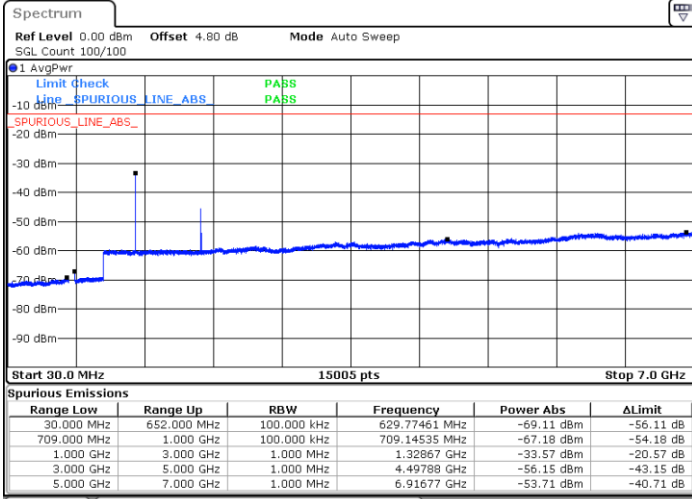




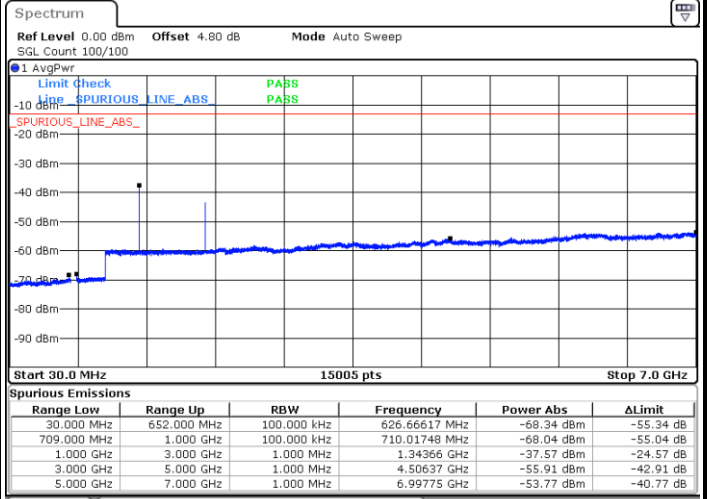
LTE Band 71 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

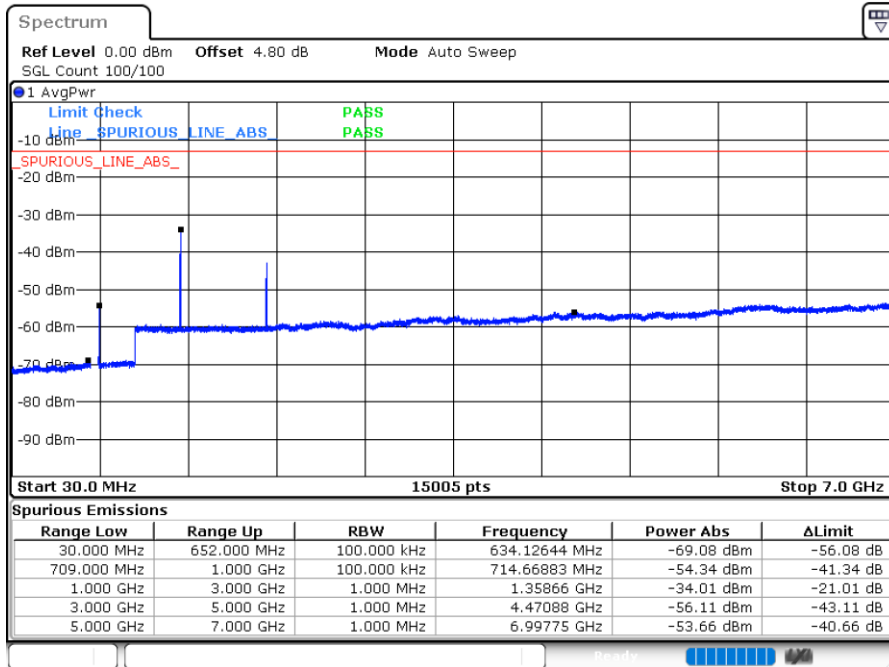


Date: 4.FEB.2023 10:01:36



Date: 4.FEB.2023 10:02:35

Highest Channel / QPSK



Date: 4.FEB.2023 10:04:58



Frequency Stability

Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0039	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0021	
20	Minimum Voltage	0.0008	

Note:

1. Normal Voltage =3.8V. ; Minimum Voltage =3.55 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carry Xu	Temperature :	23~25°C
		Relative Humidity :	41~42%

LTE Band 7 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5002.18	-63.73	-25	-38.73	-73.94	3.03	13.24	H
	7503.27	-62.95	-25	-37.95	-72.40	3.56	13.01	H
	10004.36	-62.17	-25	-37.17	-71.69	3.92	13.44	H
	5002.18	-64.08	-25	-39.08	-74.29	3.03	13.24	V
	7503.27	-62.98	-25	-37.98	-72.43	3.56	13.01	V
	10004.36	-62.68	-25	-37.68	-72.20	3.92	13.44	V
Middle	5050	-63.69	-25	-38.69	-73.90	3.03	13.24	H
	7578.27	-63.12	-25	-38.12	-72.57	3.56	13.01	H
	10104.36	-62.11	-25	-37.11	-71.63	3.92	13.44	H
	5050	-63.52	-25	-38.52	-73.73	3.03	13.24	V
	7578.27	-63.17	-25	-38.17	-72.62	3.56	13.01	V
	10104.36	-62.39	-25	-37.39	-71.91	3.92	13.44	V
Highest	5106	-64.17	-25	-39.17	-74.38	3.03	13.24	H
	7653.27	-62.51	-25	-37.51	-71.96	3.56	13.01	H
	10204.36	-62.19	-25	-37.19	-71.71	3.92	13.44	H
	5106	-64.23	-25	-39.23	-74.44	3.03	13.24	V
	7653.27	-62.18	-25	-37.18	-71.63	3.56	13.01	V
	10204.36	-62.04	-25	-37.04	-71.56	3.92	13.44	V

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



LTE Band 12 / 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)
Lowest	1400	-65.39	-13	-52.39	-72.36	1.58	10.70	H
	2098.77	-64.48	-13	-51.48	-72.73	2.102	12.50	H
	2798.36	-54.37	-13	-41.37	-63.26	2.856	13.90	H
	3497.95	-50.32	-13	-37.32	-57.91	3.406	13.15	H
	1399.18	-66.88	-13	-53.88	-73.85	1.58	10.70	V
	2098.77	-63.56	-13	-50.56	-71.81	2.10	12.50	V
	2798.36	-59.66	-13	-46.66	-68.55	2.86	13.90	V
3496	-57.71	-13	-44.71	-65.30	3.41	13.15	V	
Middle	1408	-64.92	-13	-51.92	-71.89	1.58	10.70	H
	2109.27	-64.41	-13	-51.41	-72.66	2.102	12.50	H
	2808	-52.08	-13	-39.08	-60.97	2.856	13.90	H
	3515.45	-46.18	-13	-33.18	-53.77	3.406	13.15	H
	1406.18	-67.02	-13	-54.02	-73.99	1.58	10.70	V
	2109.27	-63.36	-13	-50.36	-71.61	2.10	12.50	V
	2808	-57.56	-13	-44.56	-66.45	2.86	13.90	V
3512	-55.62	-13	-42.62	-63.21	3.41	13.15	V	
Highest	1413.18	-66.58	-13	-53.58	-73.55	1.58	10.70	H
	2120	-64.05	-13	-51.05	-72.30	2.102	12.50	H
	2826.36	-54.74	-13	-41.74	-63.63	2.856	13.90	H
	3532.95	-54.49	-13	-41.49	-62.08	3.406	13.15	H
	1413.18	-68.66	-13	-55.66	-75.63	1.58	10.70	V
	2119.77	-63.02	-13	-50.02	-71.27	2.10	12.50	V
	2826.36	-58.99	-13	-45.99	-67.88	2.86	13.90	V
3536	-60.41	-13	-47.41	-68.00	3.41	13.15	V	

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

LTE Band 13 / 5MHz / 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)
Lowest	1554.68	-66.89	-13	-53.89	-69.52	1.09	5.87	H
	2332.02	-58.51	-13	-45.51	-60.91	1.37	5.92	H
	3112	-61.66	-13	-48.66	-65.55	1.64	7.68	H
	1554.68	-66.62	-13	-53.62	-69.25	1.09	5.87	V
	2332.02	-61.56	-13	-48.56	-63.96	1.37	5.92	V
	3109.36	-61.36	-13	-48.36	-65.25	1.64	7.68	V
Middle	1560	-67.53	-42.15	-25.38	-70.16	1.09	5.87	H
	2339.52	-57.93	-13	-44.93	-60.33	1.37	5.92	H
	3119.36	-61.56	-13	-48.56	-65.45	1.64	7.68	H
	1559.68	-67.31	-42.15	-25.16	-69.94	1.09	5.87	V
	2339.52	-59.33	-13	-46.33	-61.73	1.37	5.92	V
	3120	-61.27	-13	-48.27	-65.16	1.64	7.68	V
Highest	1564.68	-68.21	-42.15	-26.06	-70.84	1.09	5.87	H
	2347.02	-57.42	-13	-44.42	-59.82	1.37	5.92	H
	3129.36	-61.46	-13	-48.46	-65.35	1.64	7.68	H
	1564.68	-67.71	-42.15	-25.56	-70.34	1.09	5.87	V
	2347.02	-58.96	-13	-45.96	-61.36	1.37	5.92	V
	3129.36	-61.04	-13	-48.04	-64.93	1.64	7.68	V

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



LTE Band 13 / 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	1555.18	-66.92	-13	-53.92	-69.55	1.09	5.87	H
	2332.77	-57.87	-13	-44.87	-60.27	1.37	5.92	H
	3110.36	-61.59	-13	-48.59	-65.48	1.64	7.68	H
	1555.18	-66.31	-13	-53.31	-68.94	1.09	5.87	V
	2332.77	-61.44	-13	-48.44	-63.84	1.37	5.92	V
	3110.36	-60.99	-13	-47.99	-64.88	1.64	7.68	V

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

LTE Band 41 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4994	-61.96	-25	-36.96	-72.17	3.03	13.24	H
	7491.27	-62.43	-25	-37.43	-71.88	3.56	13.01	H
	9988.36	-61.26	-25	-36.26	-70.78	3.92	13.44	H
	4994	-63.19	-25	-38.19	-73.40	3.03	13.24	V
	7491.27	-63.09	-25	-38.09	-72.54	3.56	13.01	V
	9988.36	-62.69	-25	-37.69	-72.21	3.92	13.44	V
Middle	5162	-60.95	-25	-35.95	-71.16	3.03	13.24	H
	7752.27	-61.15	-25	-36.15	-70.60	3.56	13.01	H
	10336.36	-59.84	-25	-34.84	-69.36	3.92	13.44	H
	5162	-58.58	-25	-33.58	-68.79	3.03	13.24	V
	7752.27	-57.99	-25	-32.99	-67.44	3.56	13.01	V
	10336.36	-58.26	-25	-33.26	-67.78	3.92	13.44	V
Highest	5344	-63.45	-25	-38.45	-73.66	3.03	13.24	H
	8013.27	-62.09	-25	-37.09	-71.54	3.56	13.01	H
	10684.36	-60.85	-25	-35.85	-70.37	3.92	13.44	H
	5344	-59.27	-25	-34.27	-69.48	3.03	13.24	V
	8013.27	-59.42	-25	-34.42	-68.87	3.56	13.01	V
	10684.36	-56.33	-25	-31.33	-65.85	3.92	13.44	V

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



LTE Band 71 / 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)
Lowest	1328	-67.35	-13	-54.35	-69.10	1.02	4.92	H
	1992.27	-64.11	-13	-51.11	-66.08	1.27	5.39	H
	2656.36	-61.90	-13	-48.90	-64.83	1.49	6.57	H
	1328.18	-68.49	-13	-55.49	-70.24	1.02	4.92	V
	1922.27	-62.43	-13	-49.43	-64.40	1.27	5.39	V
	2656	-61.41	-13	-48.41	-64.34	1.49	6.57	V
Middle	1348.18	-66.93	-13	-53.93	-68.68	1.02	4.92	H
	2022.27	-64.31	-13	-51.31	-66.28	1.27	5.39	H
	2696.36	-61.97	-13	-48.97	-64.90	1.49	6.57	H
	1348.18	-68.52	-13	-55.52	-70.27	1.02	4.92	V
	2022.27	-63.30	-13	-50.30	-65.27	1.27	5.39	V
	2696	-61.40	-13	-48.40	-64.33	1.49	6.57	V
Highest	1360	-66.87	-13	-53.87	-68.62	1.02	4.92	H
	2037.27	-64.08	-13	-51.08	-66.05	1.27	5.39	H
	2716.36	-61.39	-13	-48.39	-64.32	1.49	6.57	H
	1360	-68.58	-13	-55.58	-70.33	1.02	4.92	V
	2037.27	-63.08	-13	-50.08	-65.05	1.27	5.39	V
	2716.36	-60.83	-13	-47.83	-63.76	1.49	6.57	V

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