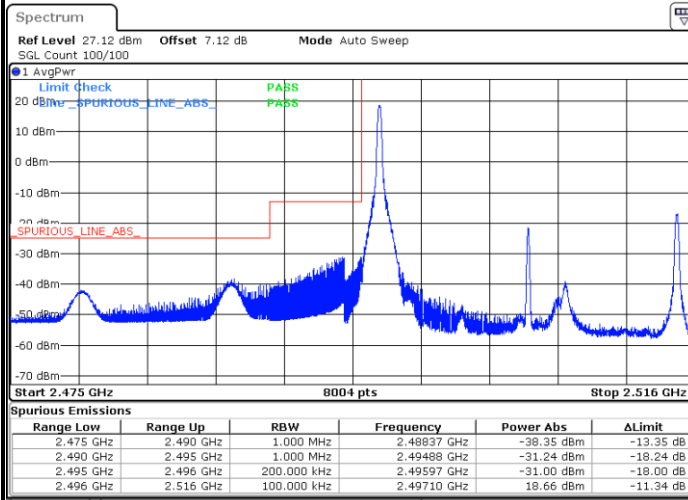




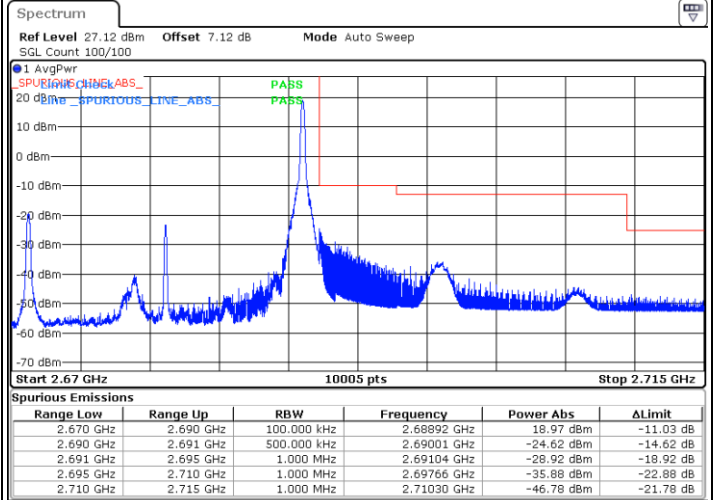
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



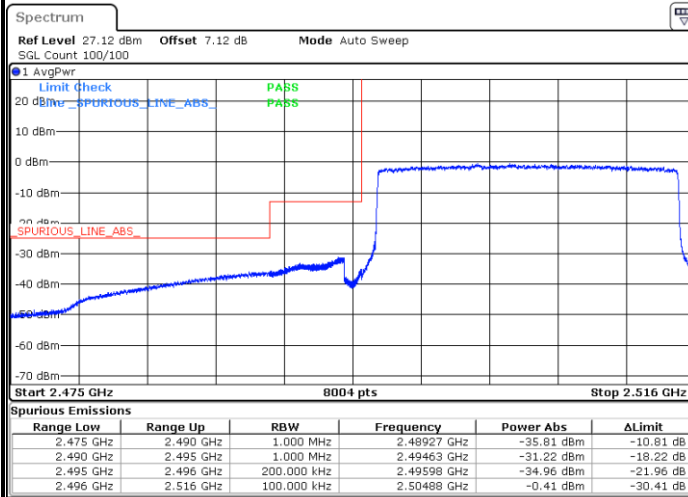
Date: 20.MAR.2025 08:21:47

Highest Band Edge / 1 RB



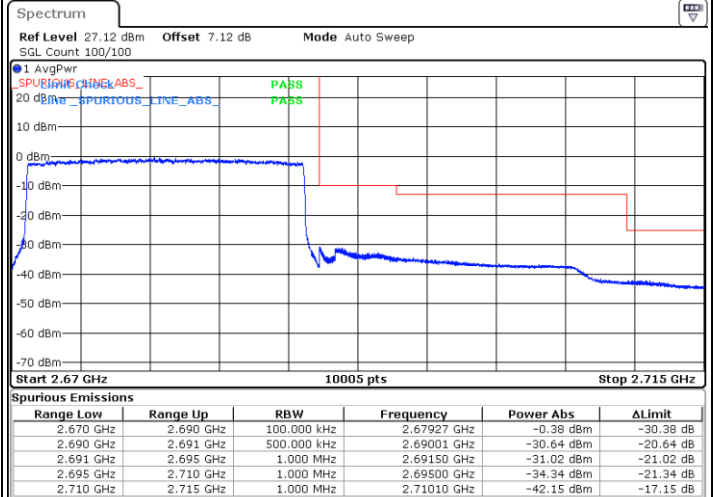
Date: 20.MAR.2025 08:30:46

Lowest Band Edge / Full RB



Date: 20.MAR.2025 08:27:24

Highest Band Edge / Full RB

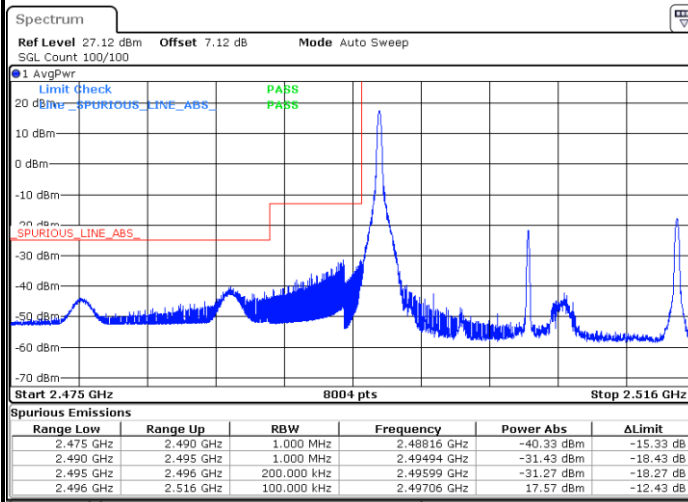


Date: 20.MAR.2025 08:36:23

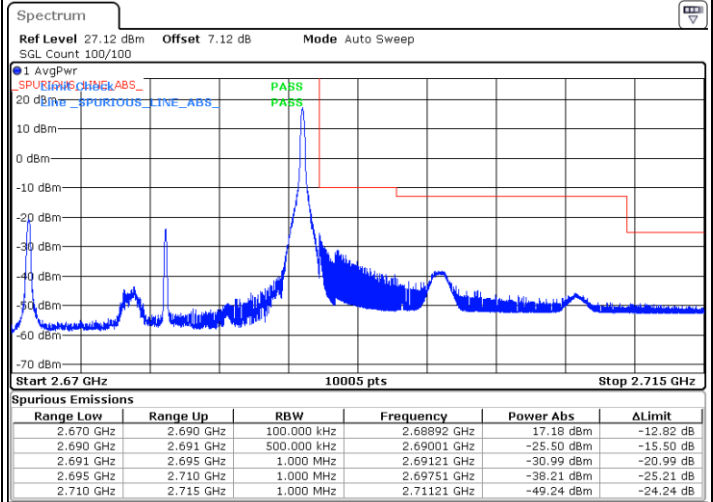


LTE Band 41 / 20MHz / 16QAM

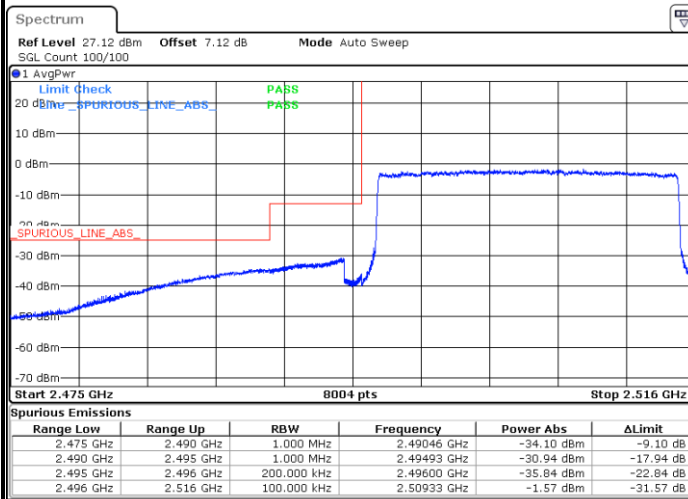
Lowest Band Edge / 1 RB



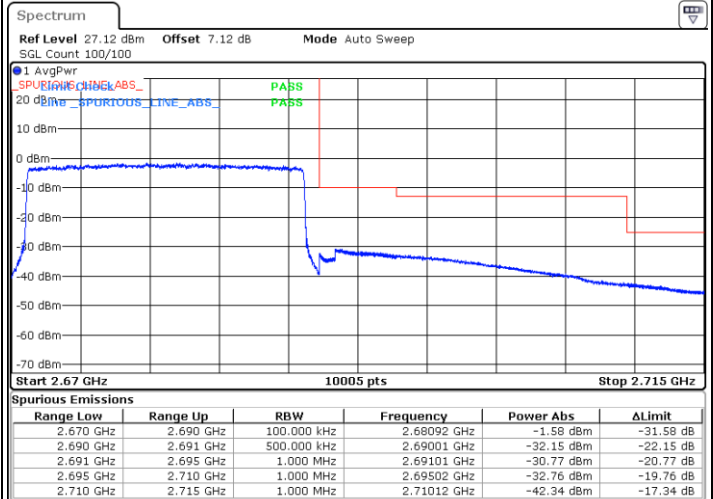
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

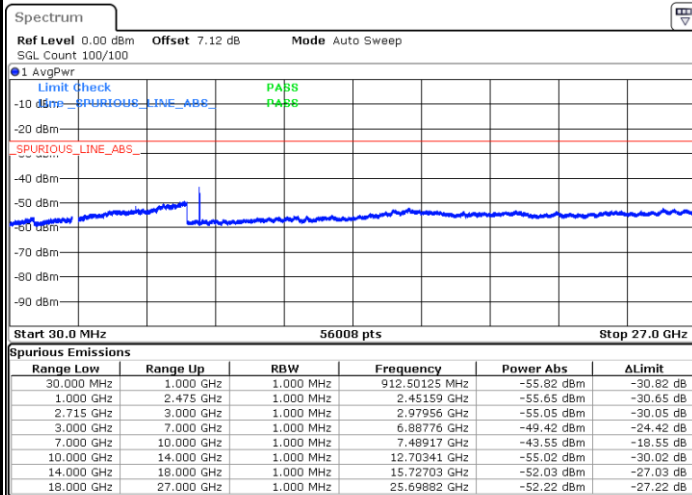




Conducted Spurious Emission

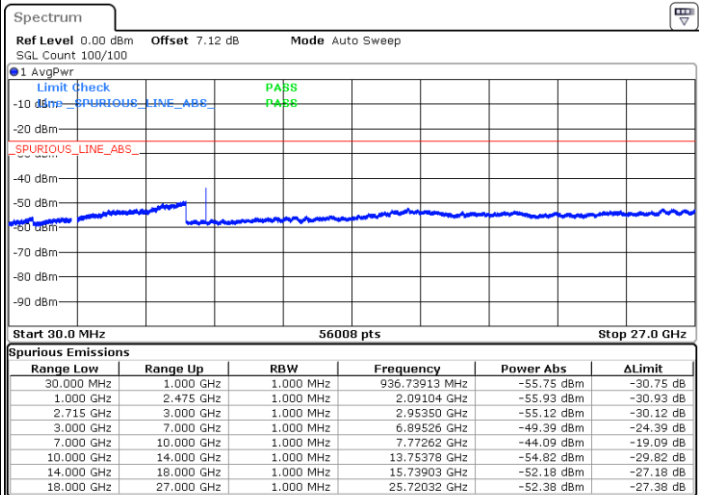
LTE Band 41 / 5MHz

Lowest Channel / QPSK



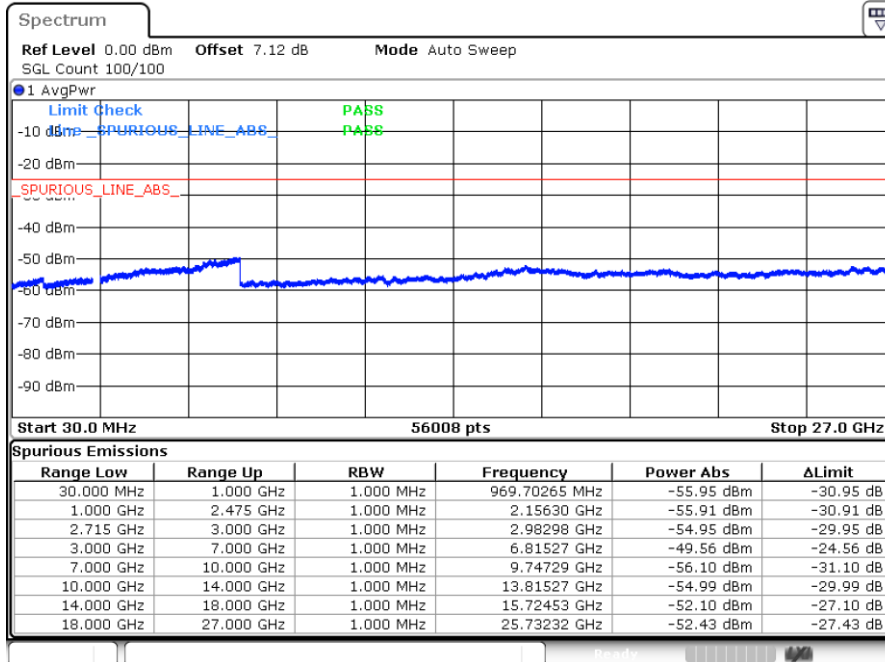
Date: 20.MAR.2025 07:18:45

Middle Channel / QPSK



Date: 20.MAR.2025 07:30:46

Highest Channel / QPSK

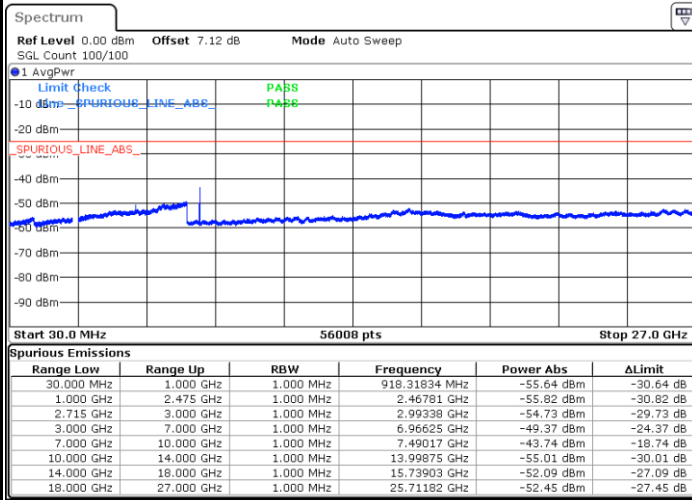


Date: 20.MAR.2025 07:31:53



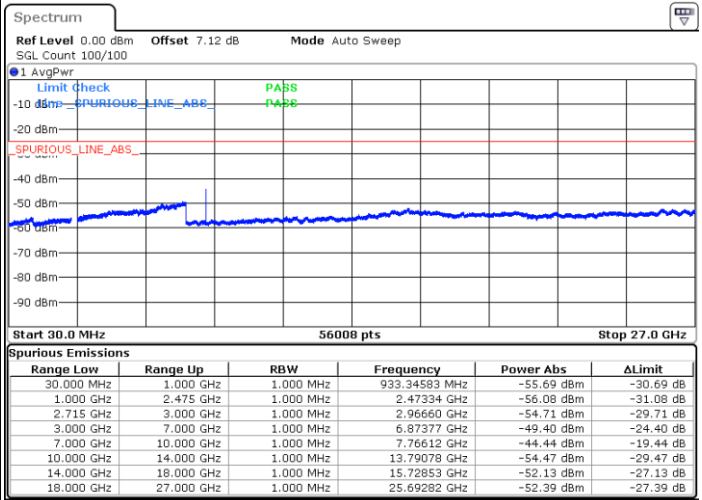
LTE Band 41 / 10MHz

Lowest Channel / QPSK



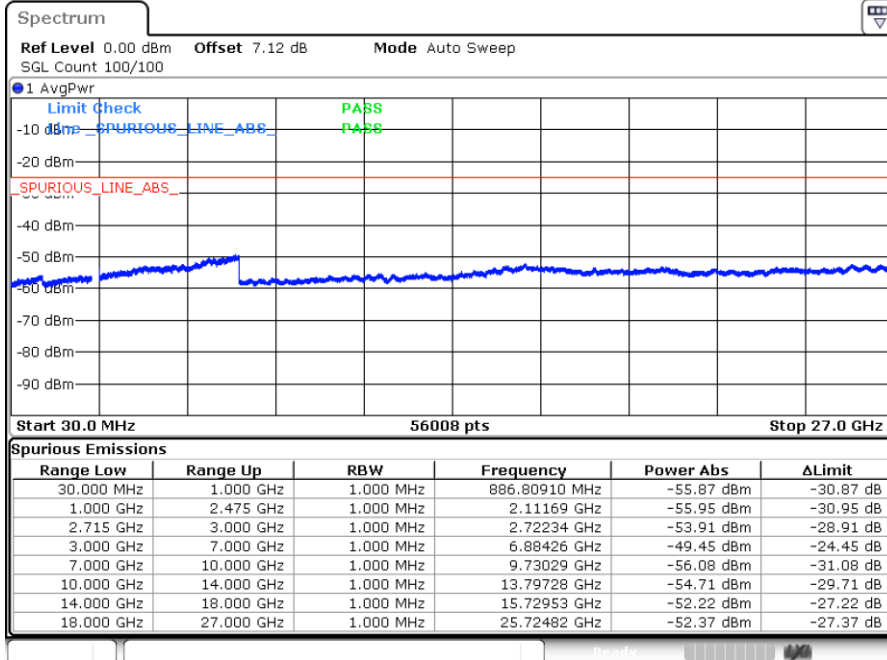
Date: 20.MAR.2025 07:42:09

Middle Channel / QPSK



Date: 20.MAR.2025 07:52:29

Highest Channel / QPSK

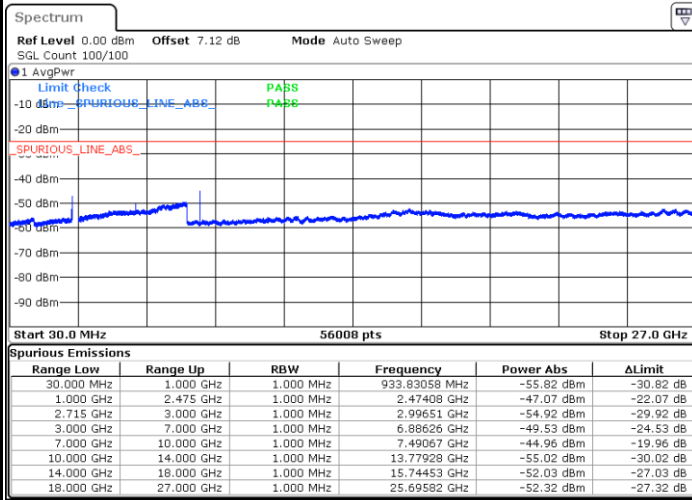


Date: 20.MAR.2025 07:53:36



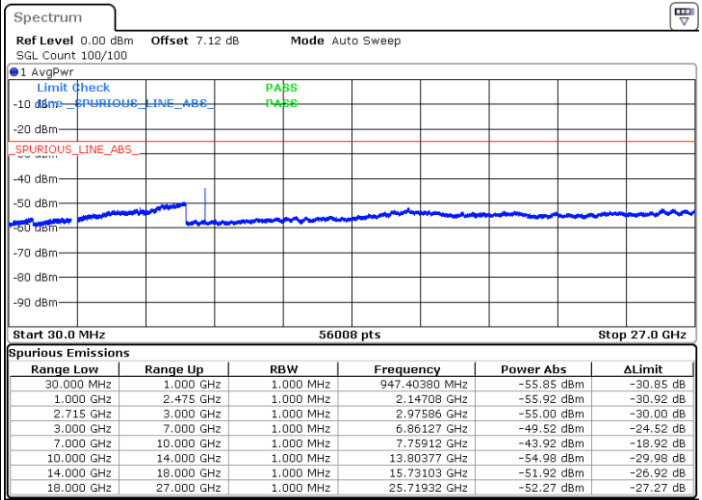
LTE Band 41 / 15MHz

Lowest Channel / QPSK



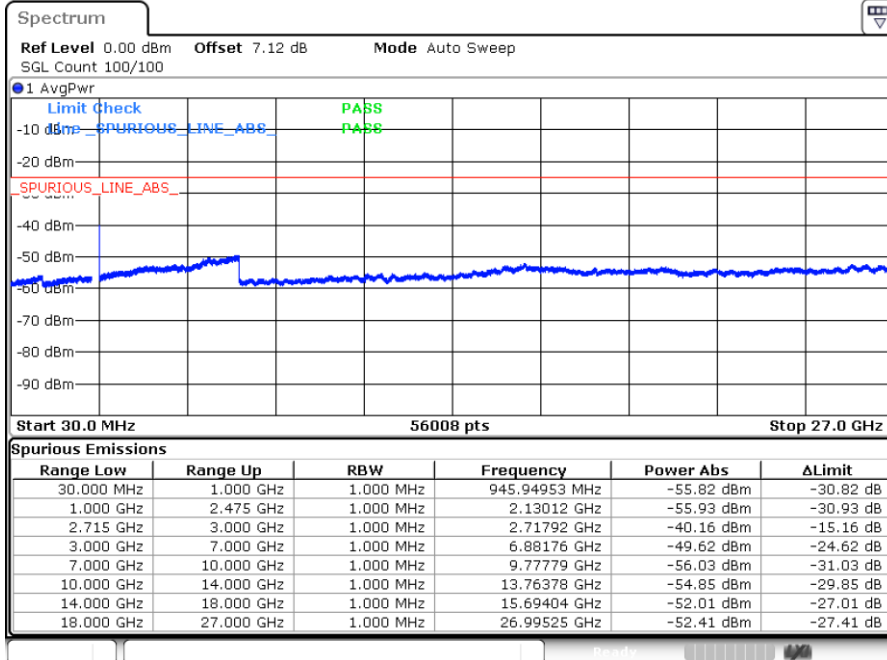
Date: 20.MAR.2025 08:04:00

Middle Channel / QPSK



Date: 20.MAR.2025 08:11:49

Highest Channel / QPSK

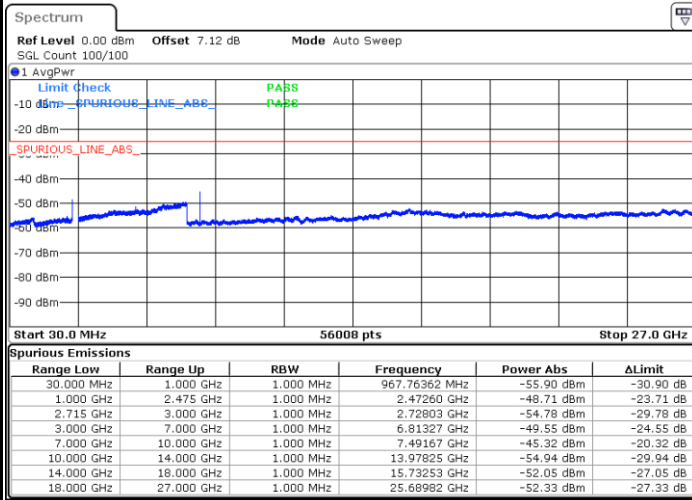


Date: 20.MAR.2025 08:12:56



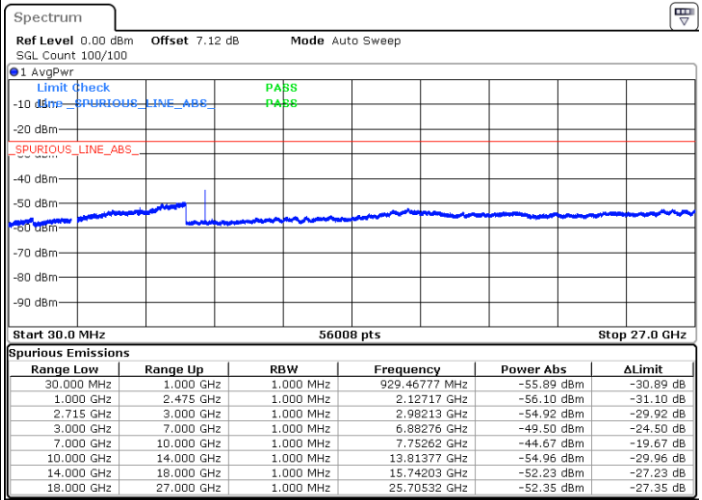
LTE Band 41 / 20MHz

Lowest Channel / QPSK



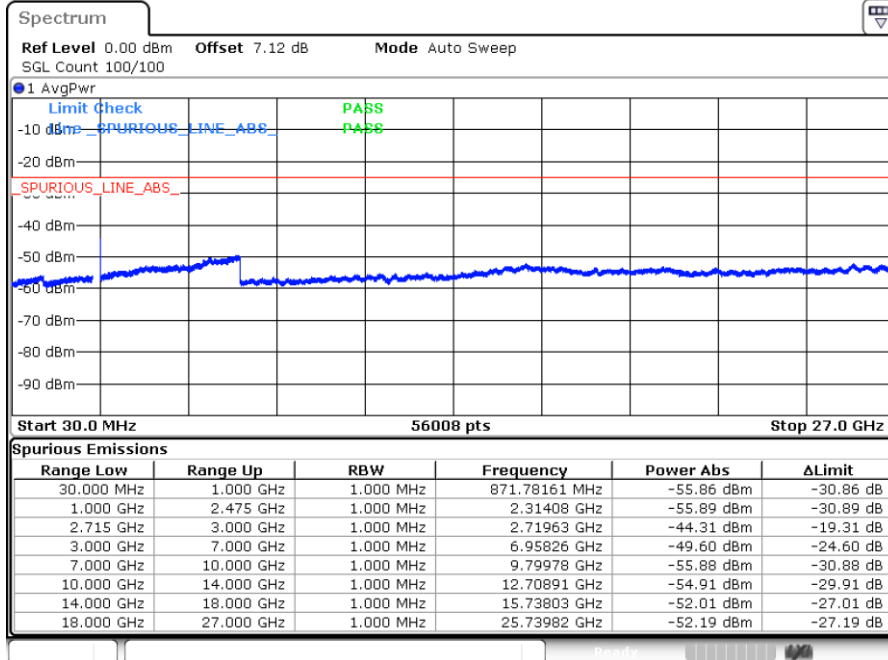
Date: 20.MAR.2025 08:20:39

Middle Channel / QPSK



Date: 20.MAR.2025 08:28:30

Highest Channel / QPSK



Date: 20.MAR.2025 08:29:37

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	0.0031	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.009	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0033	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0029	
20	Minimum Voltage	0.0012	

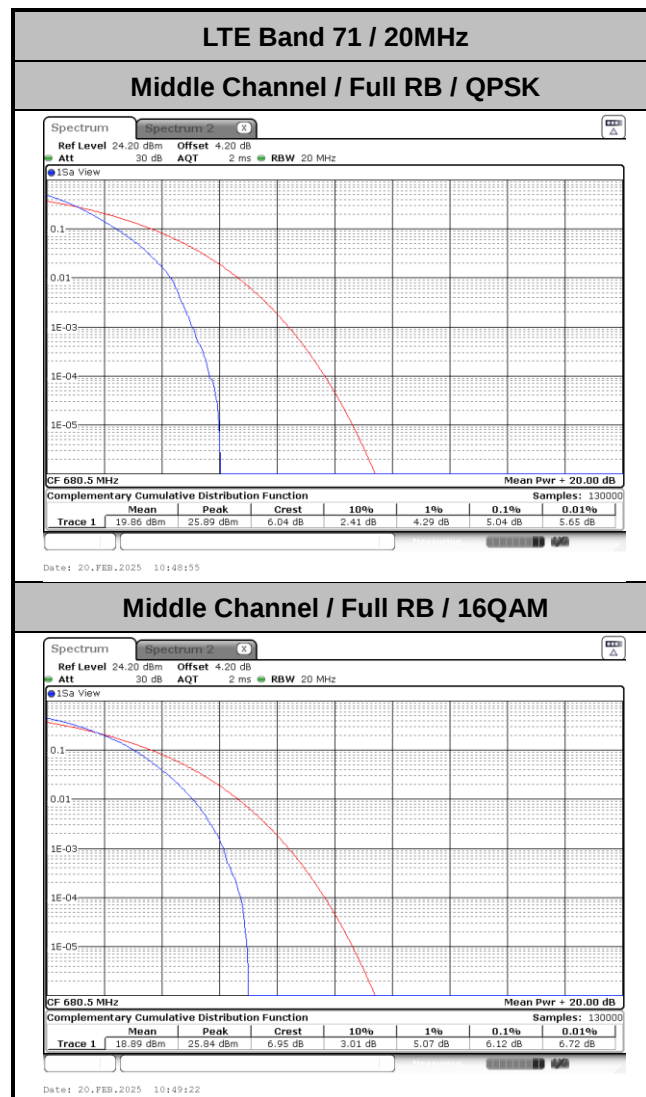
Note:

1. Normal Voltage =12 V. ; Minimum Voltage =9 V. ; Maximum Voltage =43 V.
2. Note: 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	5.04	6.12	PASS



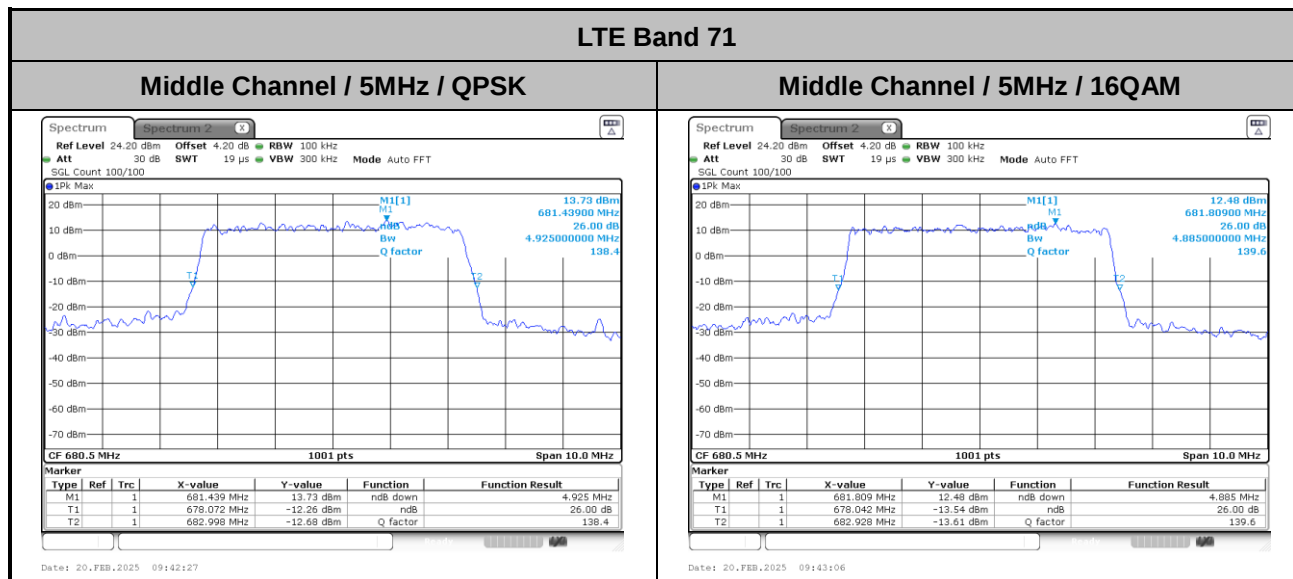
**26dB Bandwidth**

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.93	4.89

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.85

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.54	14.75

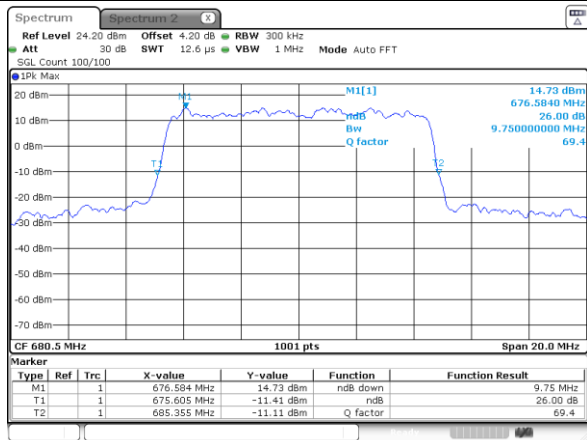
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.18	18.62



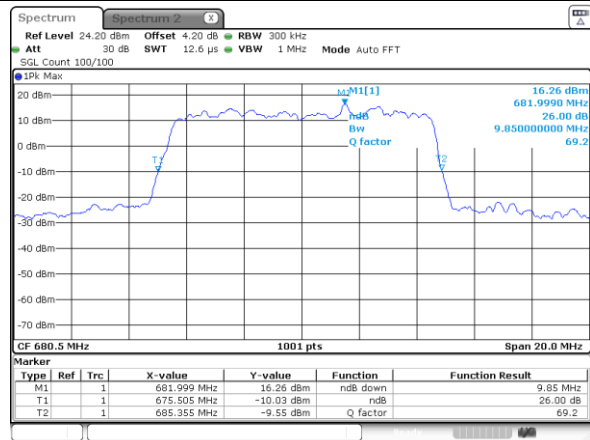


LTE Band 71

Middle Channel / 10MHz / QPSK

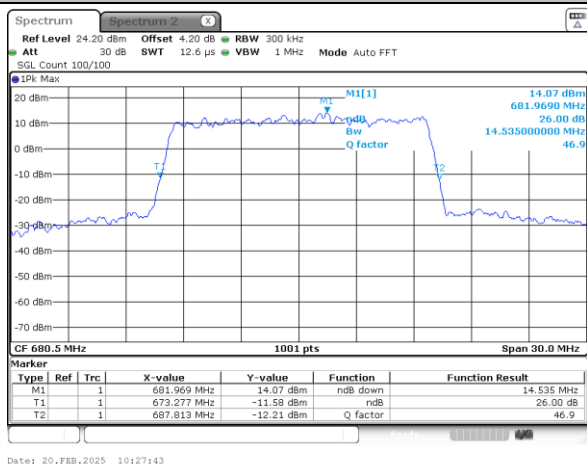


Middle Channel / 10MHz / 16QAM

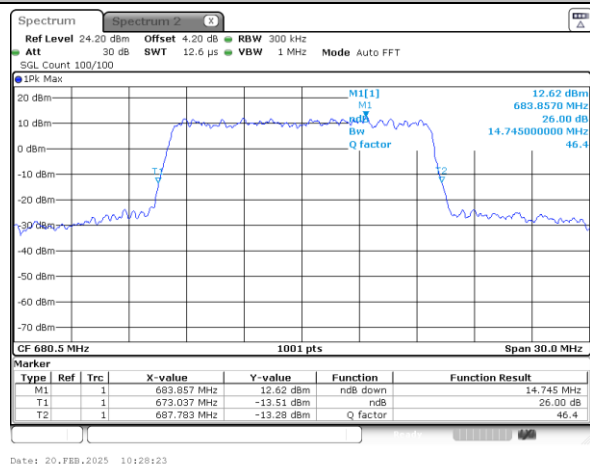


LTE Band 71

Middle Channel / 15MHz / QPSK

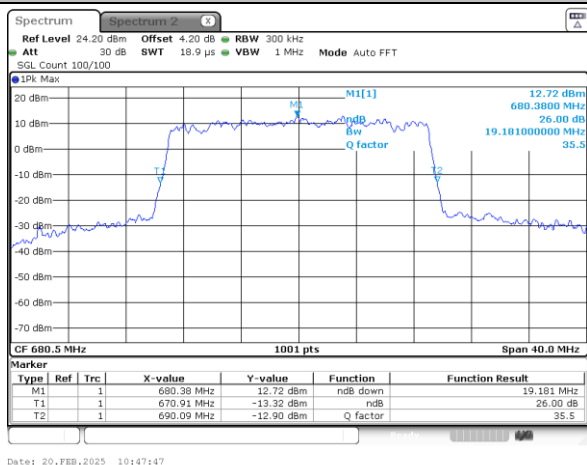


Middle Channel / 15MHz / 16QAM

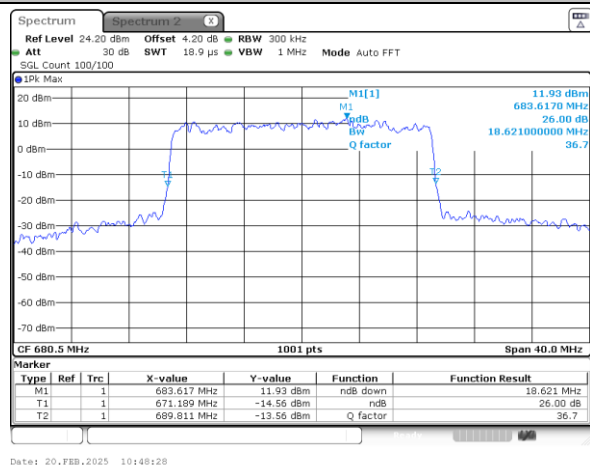


LTE Band 71

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM





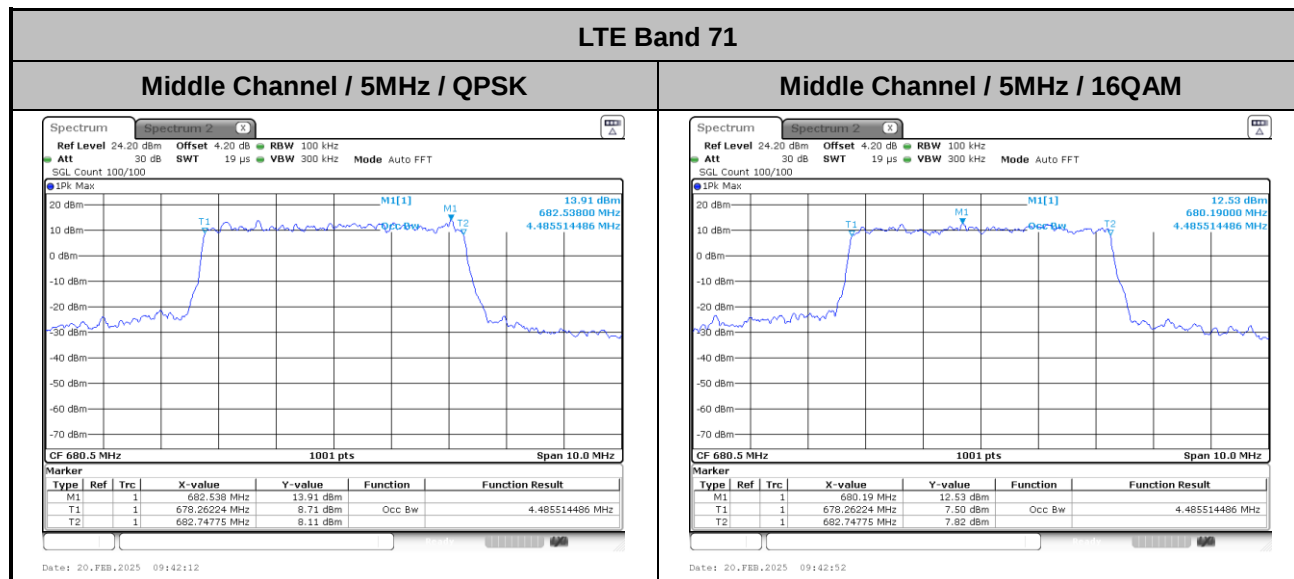
Occupied Bandwidth

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.49

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.93

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.40

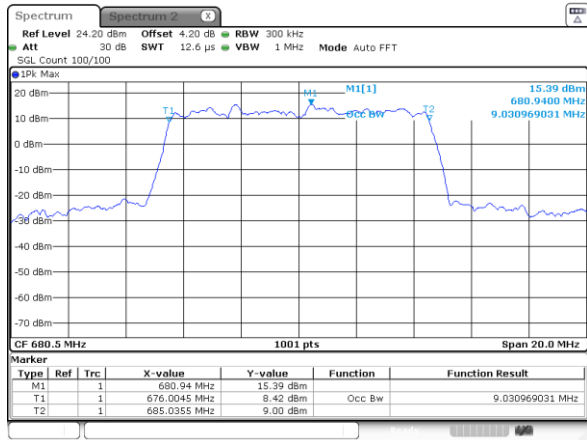
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.86



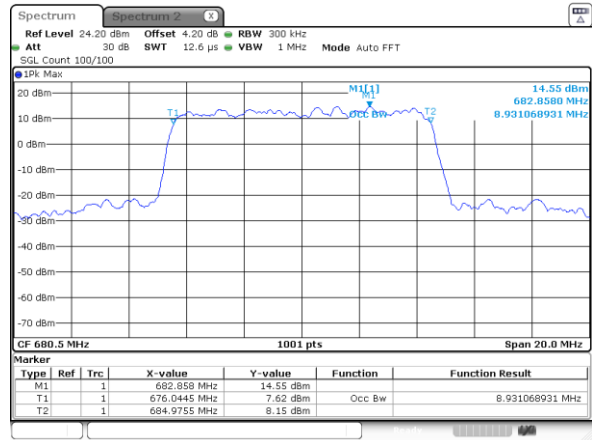


LTE Band 71

Middle Channel / 10MHz / QPSK

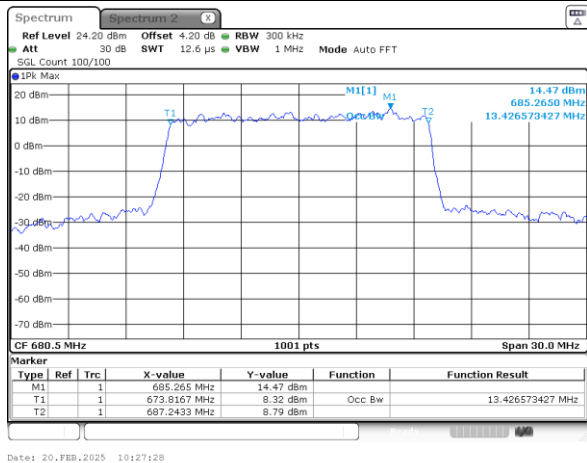


Middle Channel / 10MHz / 16QAM

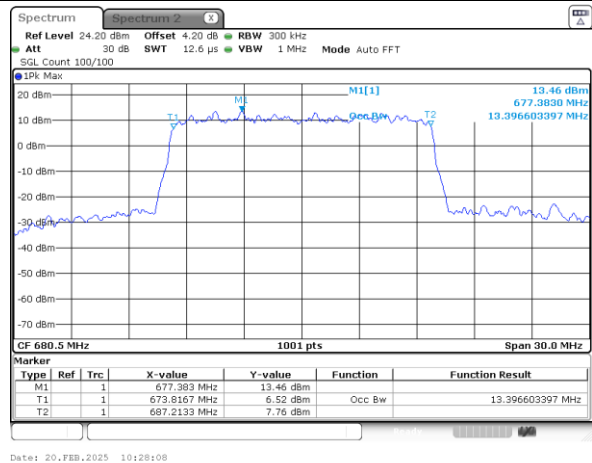


LTE Band 71

Middle Channel / 15MHz / QPSK

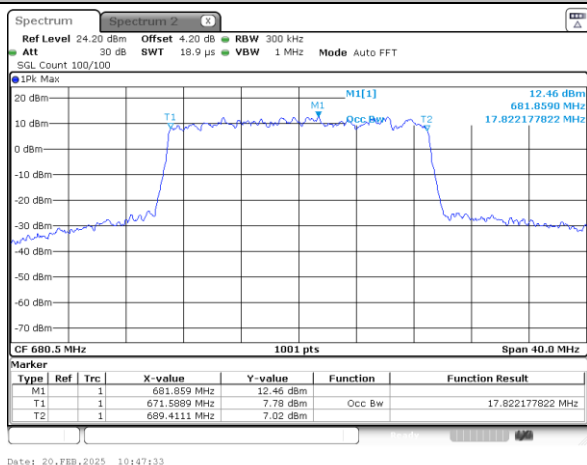


Middle Channel / 15MHz / 16QAM

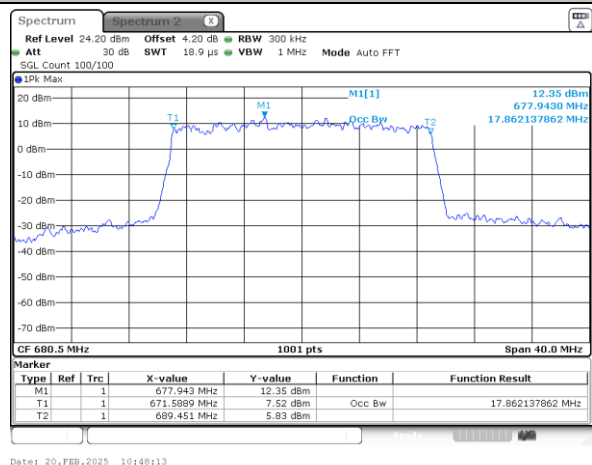


LTE Band 71

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

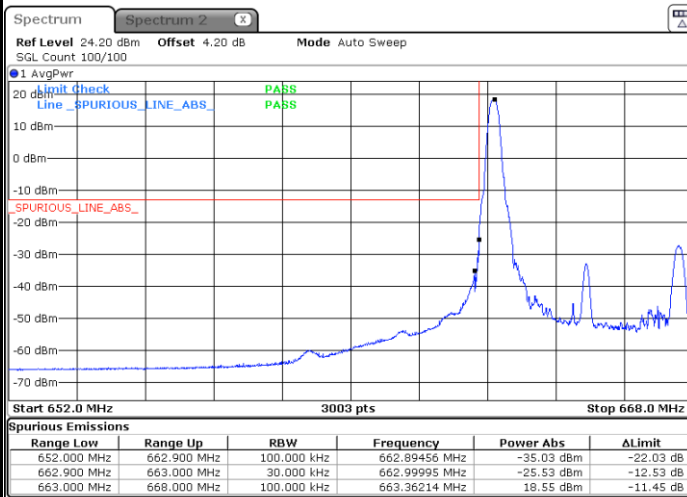




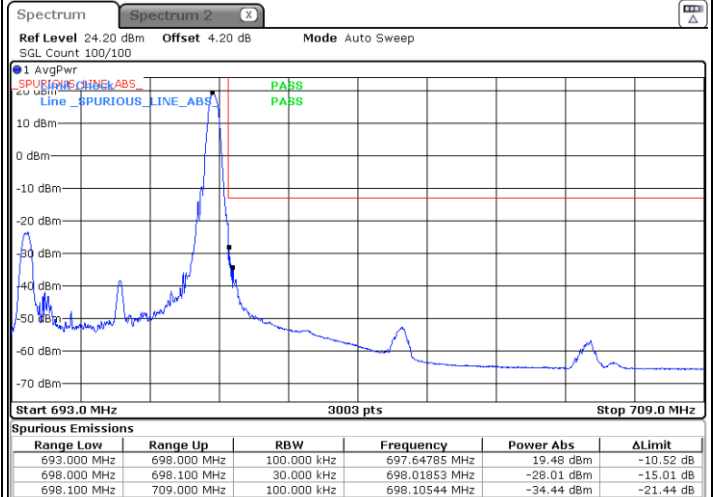
Conducted Band Edge

LTE Band 71 / 5MHz / QPSK

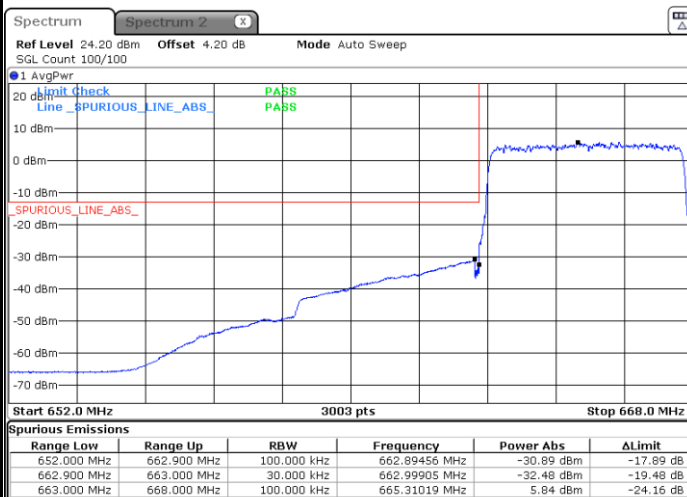
Lowest Band Edge / 1 RB



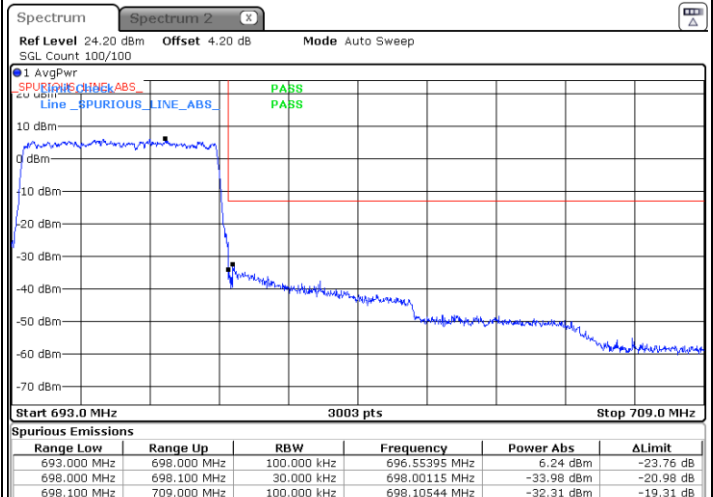
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



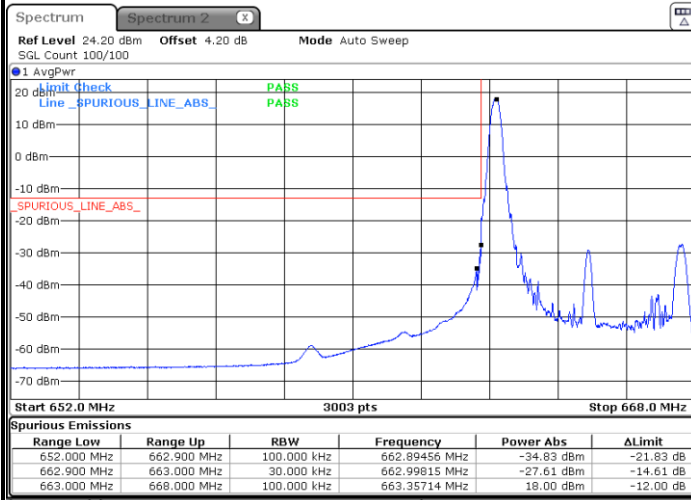
Highest Band Edge / Full RB



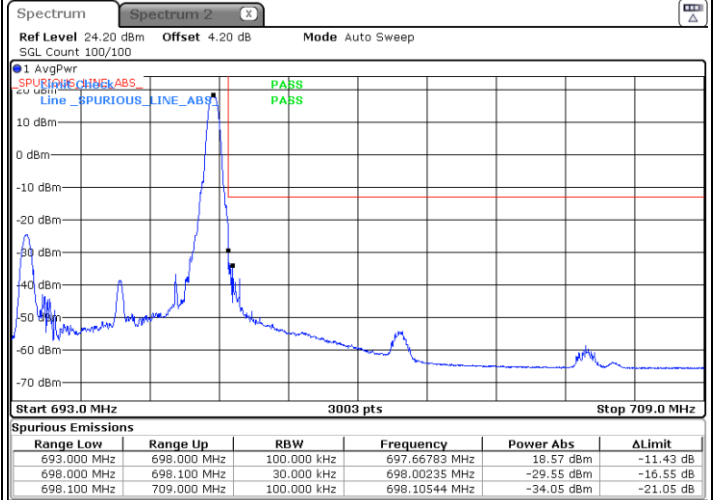


LTE Band 71 / 5MHz / 16QAM

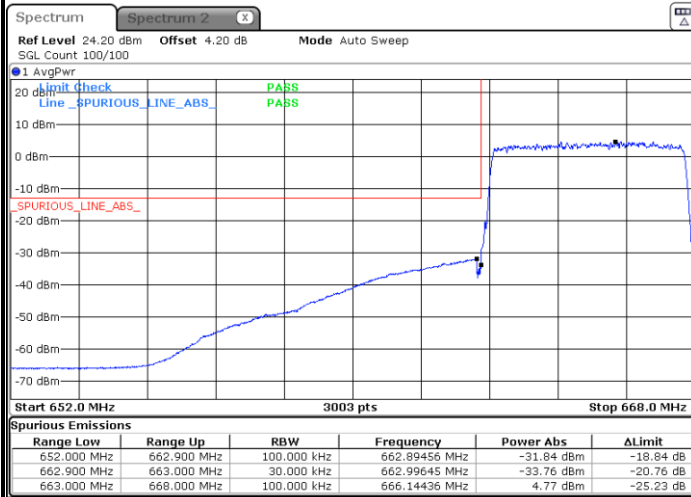
Lowest Band Edge / 1 RB



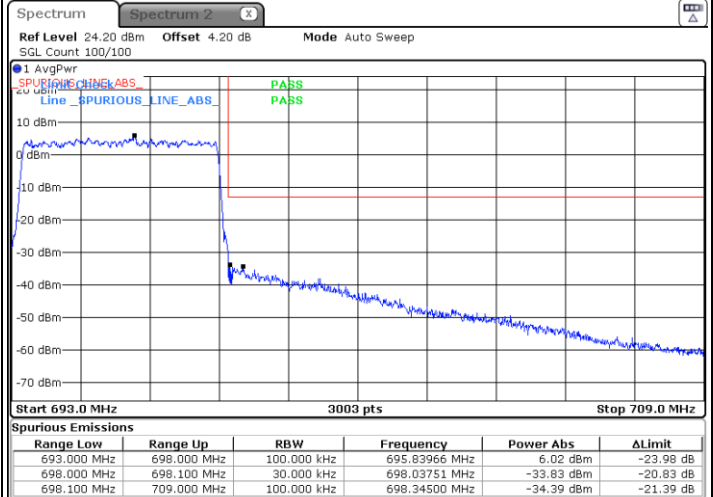
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



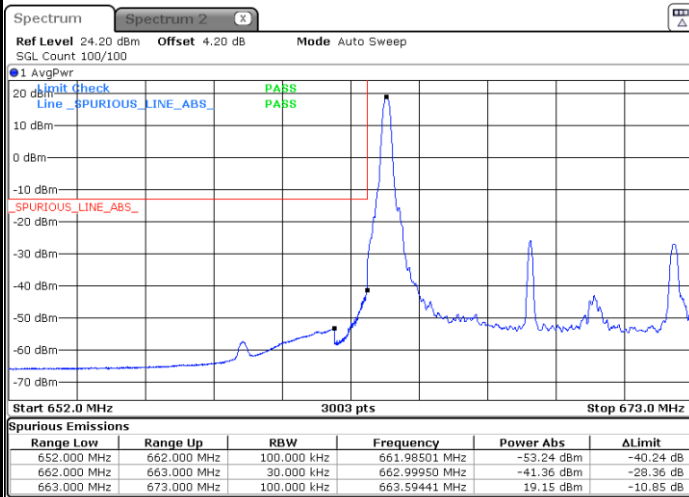
Highest Band Edge / Full RB



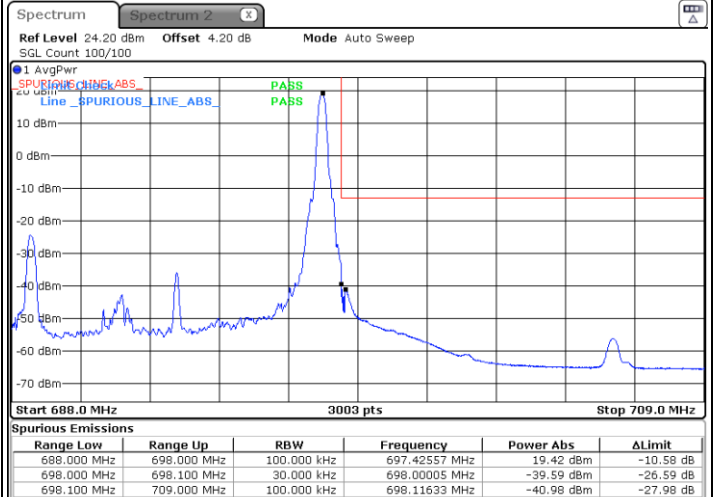


LTE Band 71 / 10MHz / QPSK

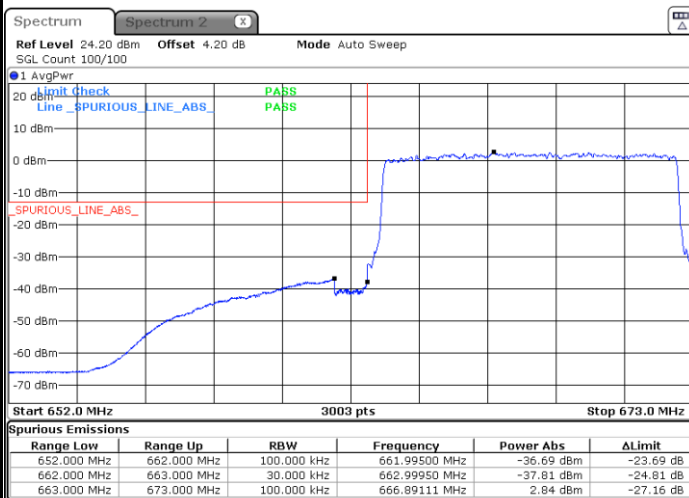
Lowest Band Edge / 1 RB



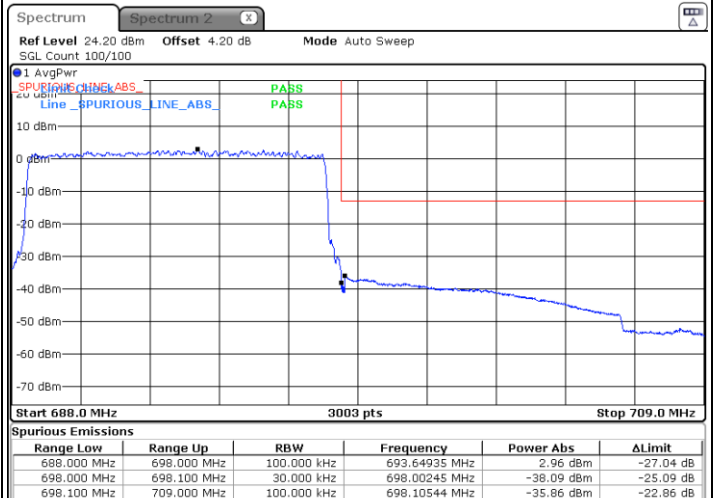
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



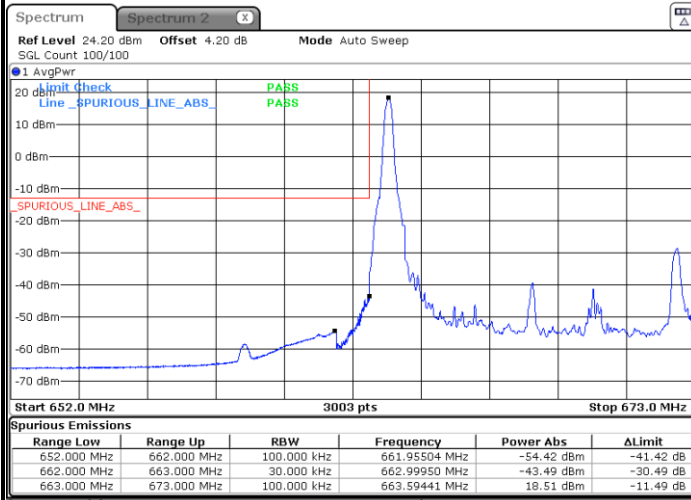
Highest Band Edge / Full RB



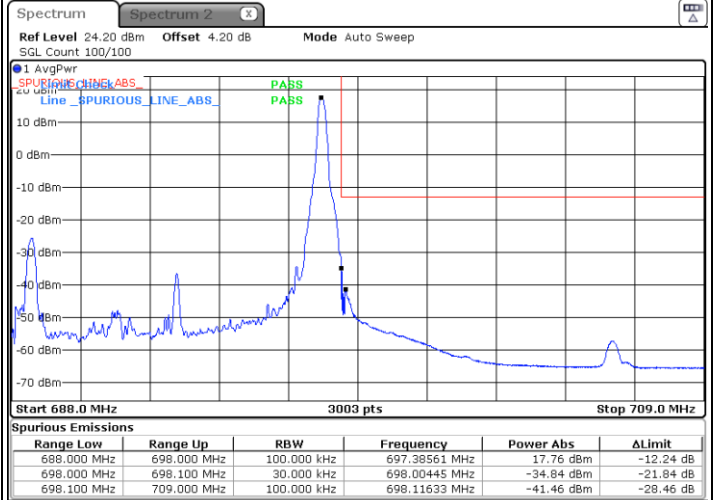


LTE Band 71 / 10MHz / 16QAM

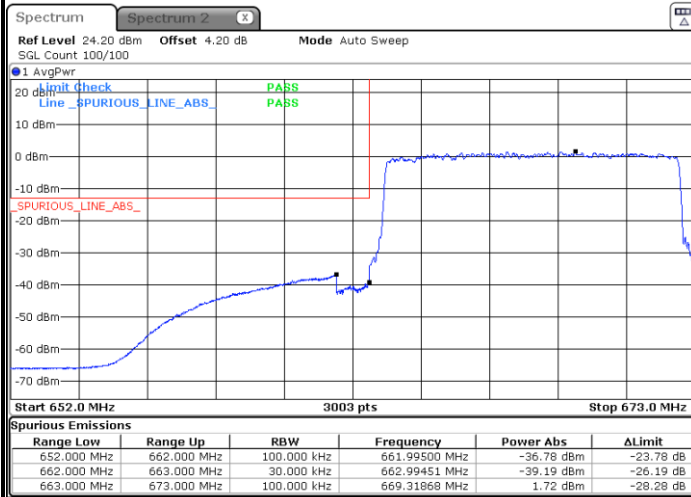
Lowest Band Edge / 1 RB



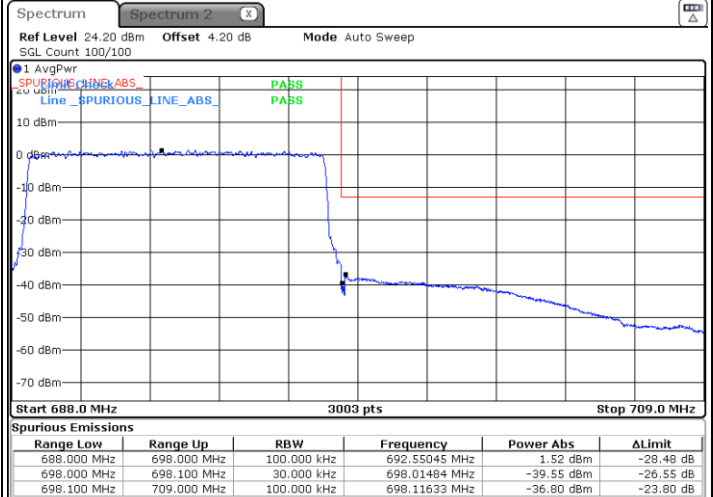
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



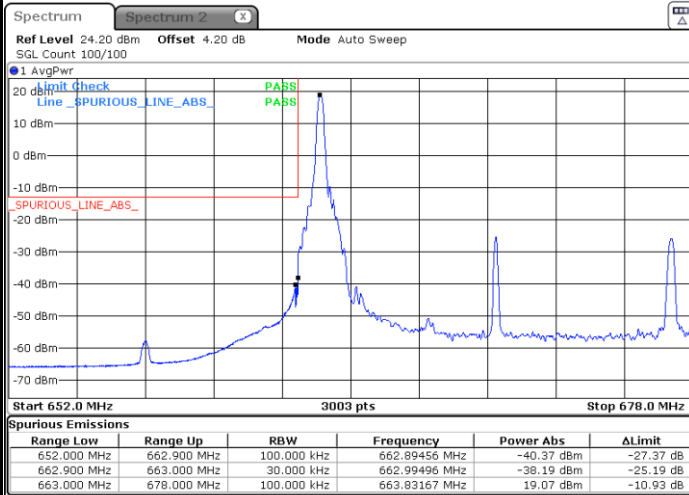
Highest Band Edge / Full RB



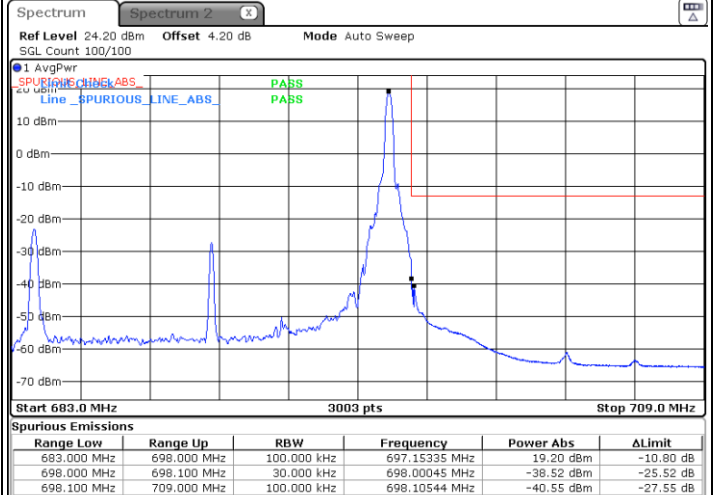


LTE Band 71 / 15MHz / QPSK

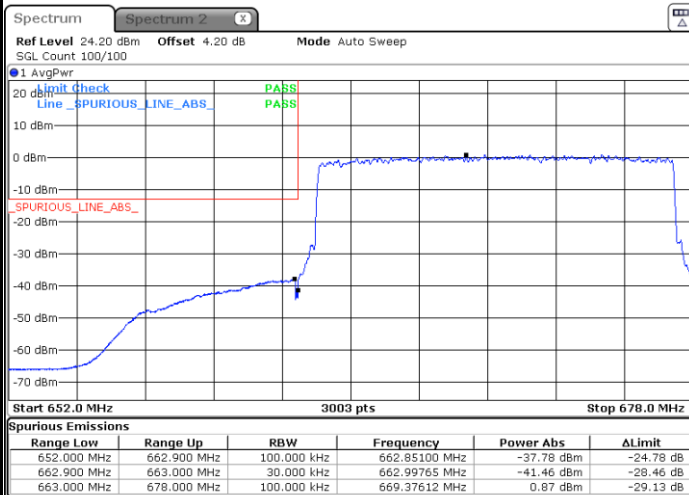
Lowest Band Edge / 1 RB



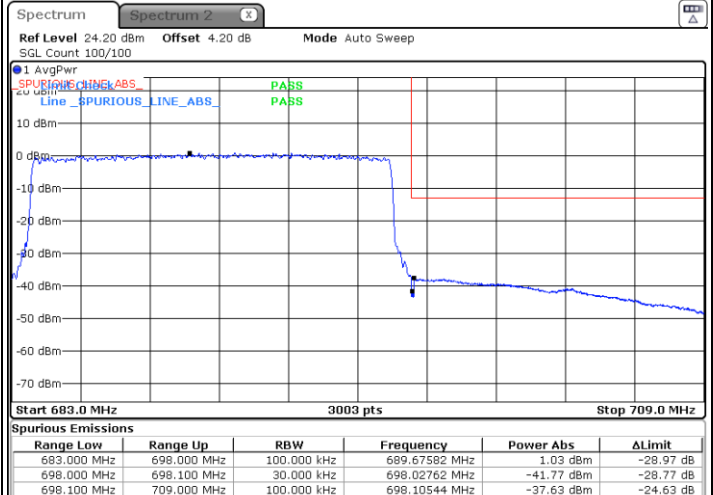
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



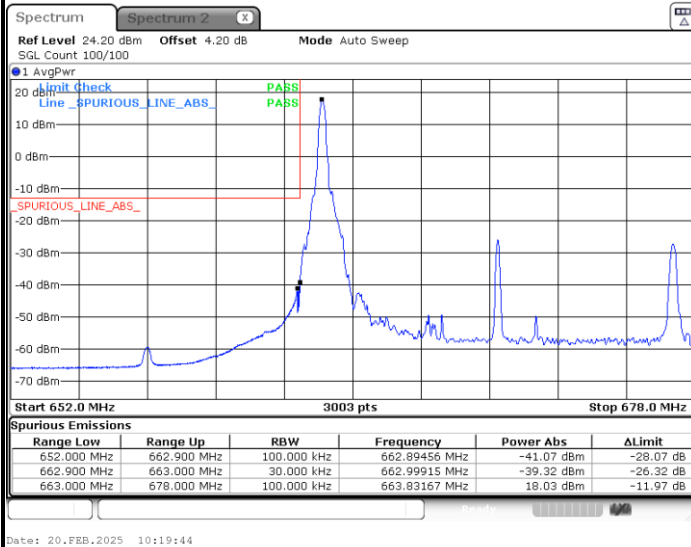
Highest Band Edge / Full RB



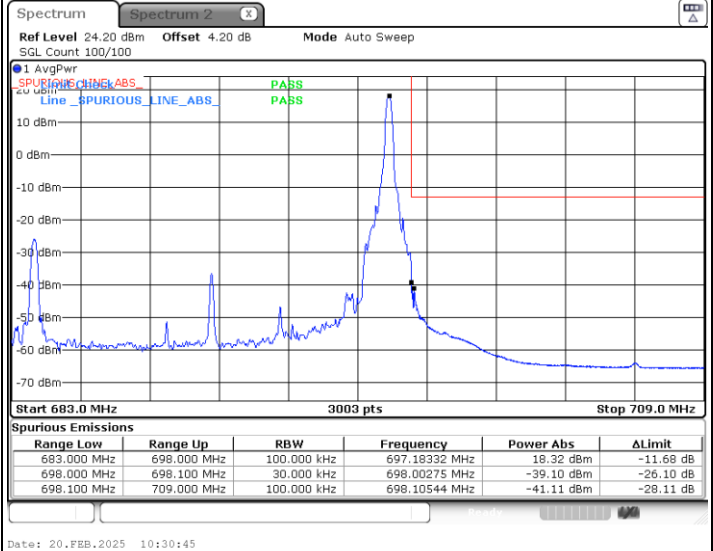


LTE Band 71 / 15MHz / 16QAM

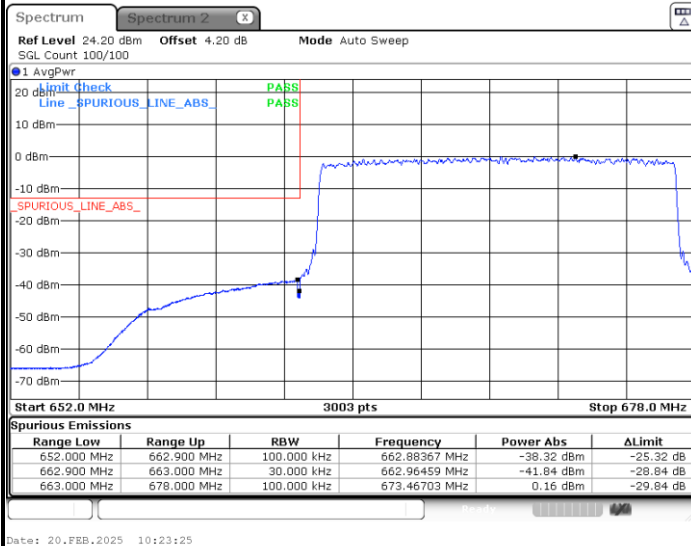
Lowest Band Edge / 1 RB



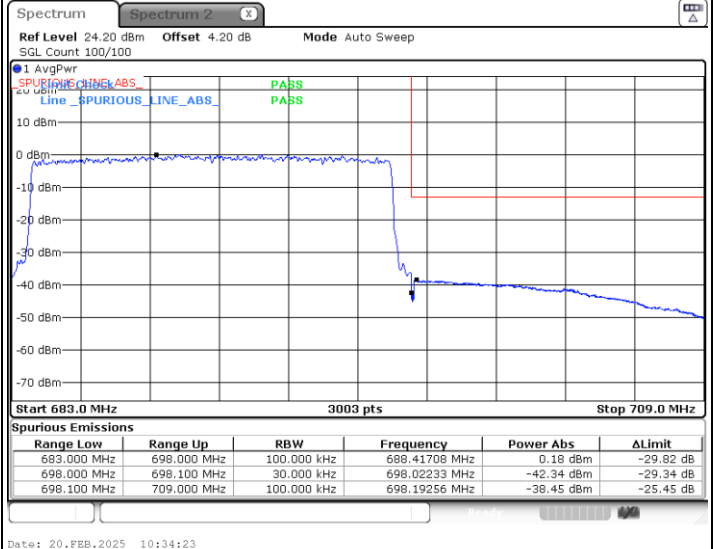
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



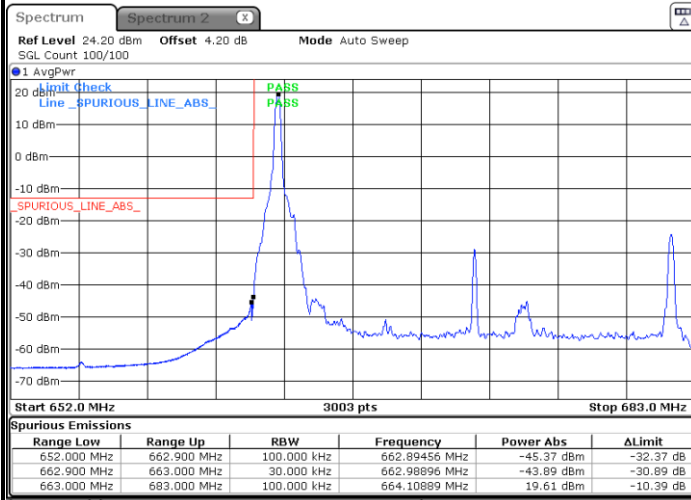
Highest Band Edge / Full RB



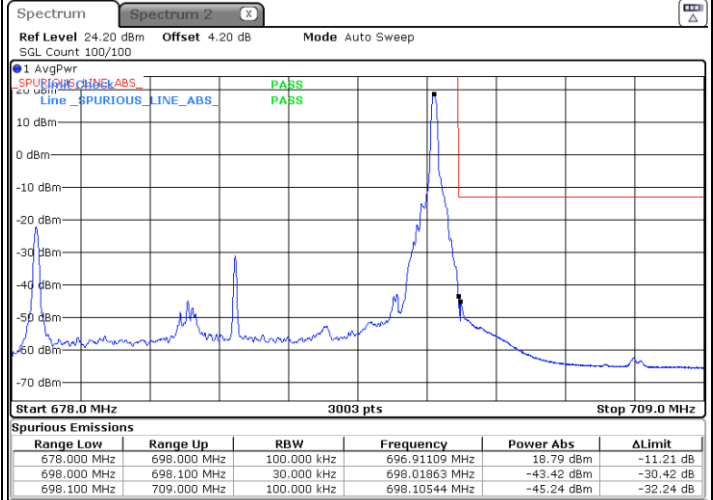


LTE Band 71 / 20MHz / QPSK

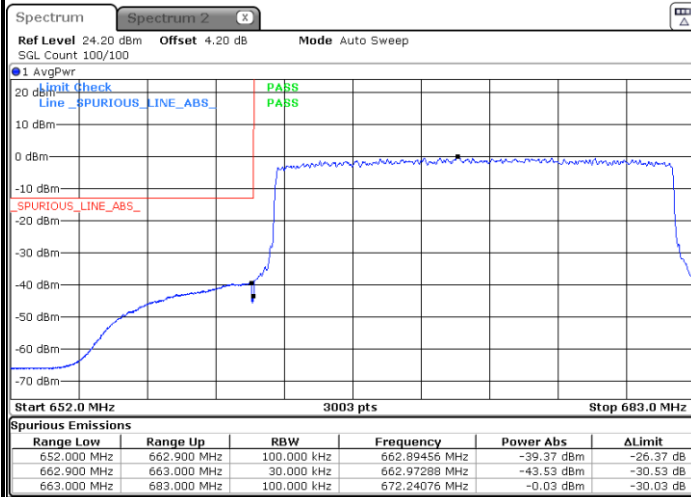
Lowest Band Edge / 1 RB



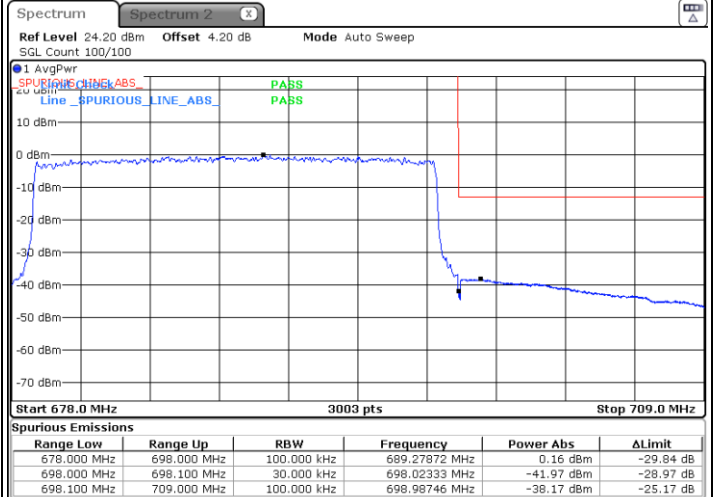
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



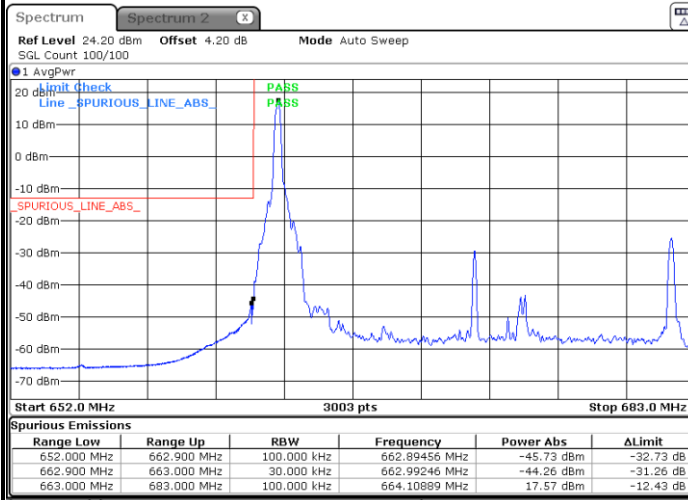
Highest Band Edge / Full RB



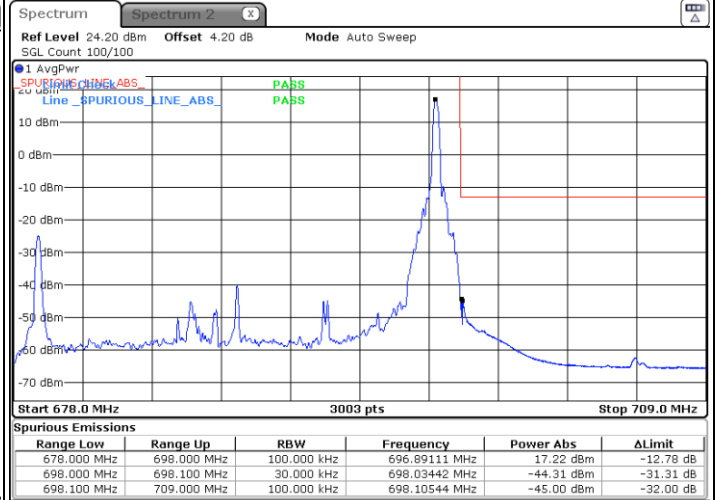


LTE Band 71 / 20MHz / 16QAM

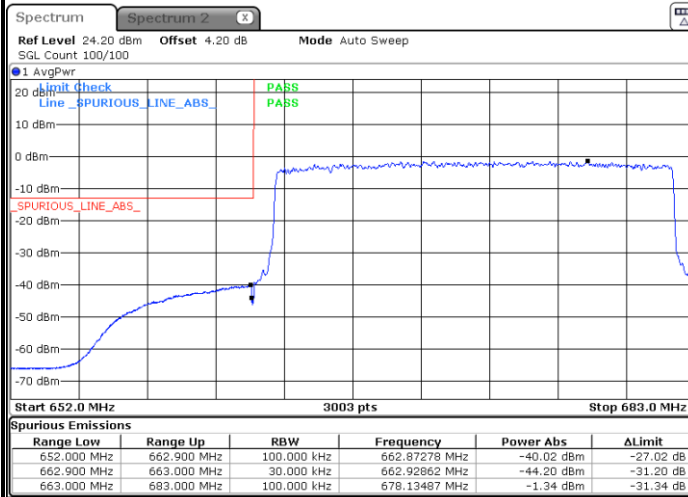
Lowest Band Edge / 1 RB



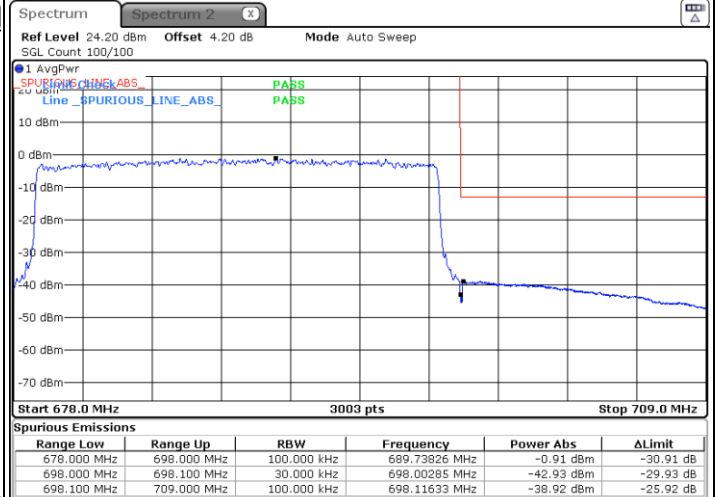
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

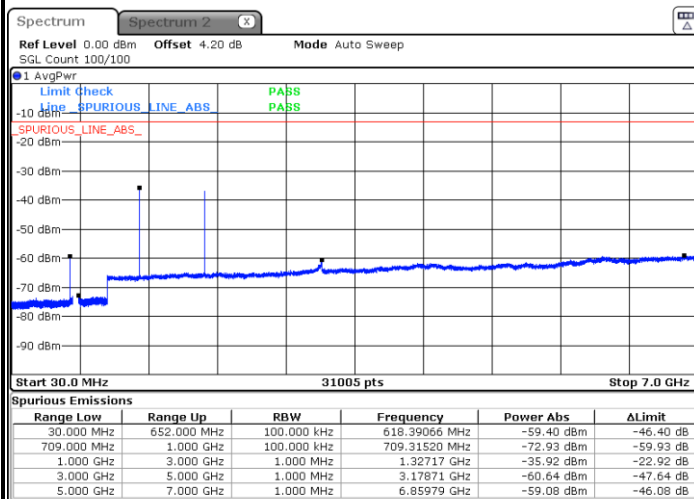




Conducted Spurious Emission

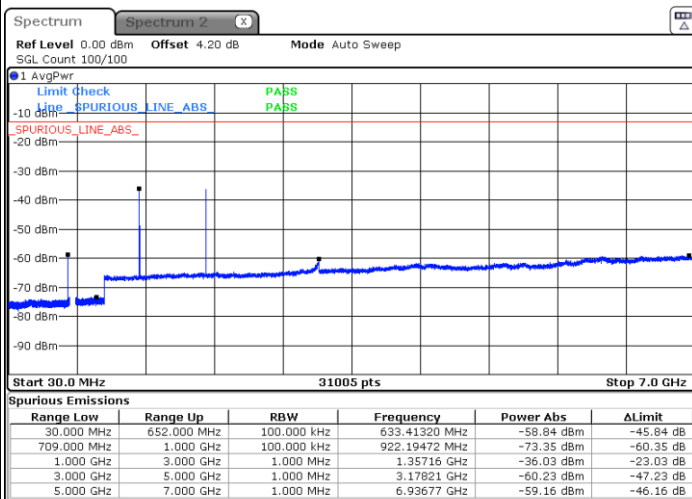
LTE Band 71 / 5MHz

Lowest Channel / QPSK



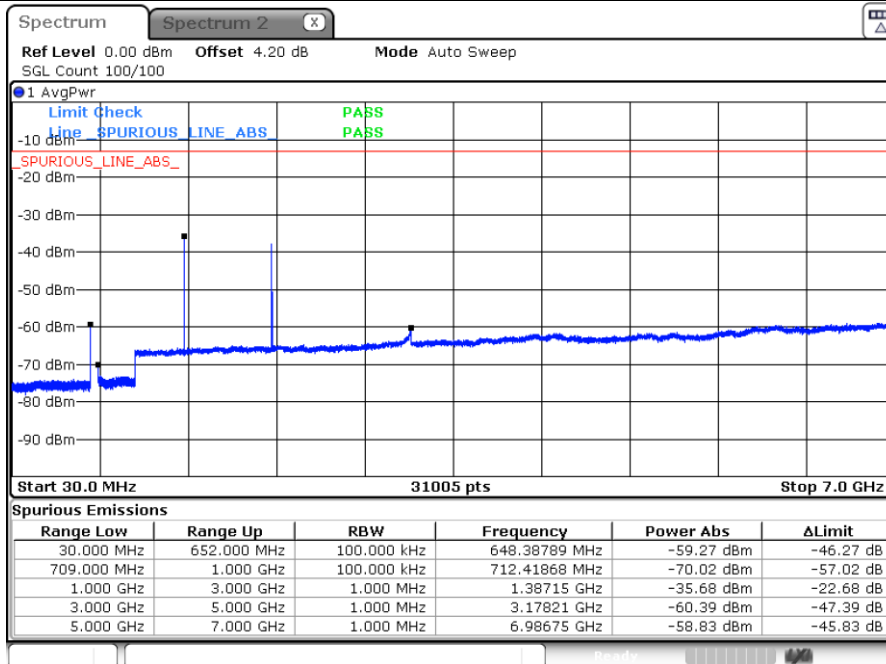
Date: 20.FEB.2025 09:40:34

Middle Channel / QPSK



Date: 20.FEB.2025 09:41:45

Highest Channel / QPSK

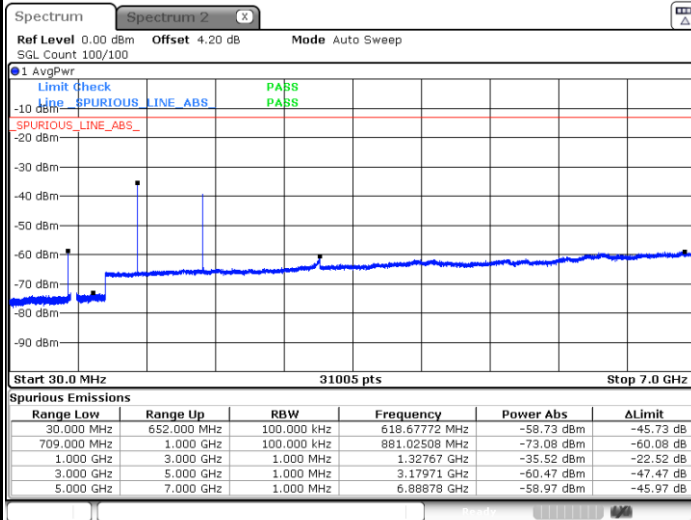


Date: 20.FEB.2025 09:54:30



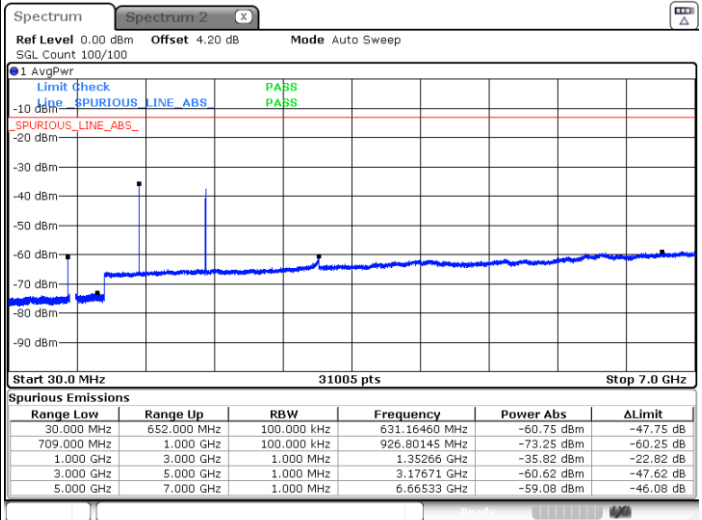
LTE Band 71 / 10MHz

Lowest Channel / QPSK



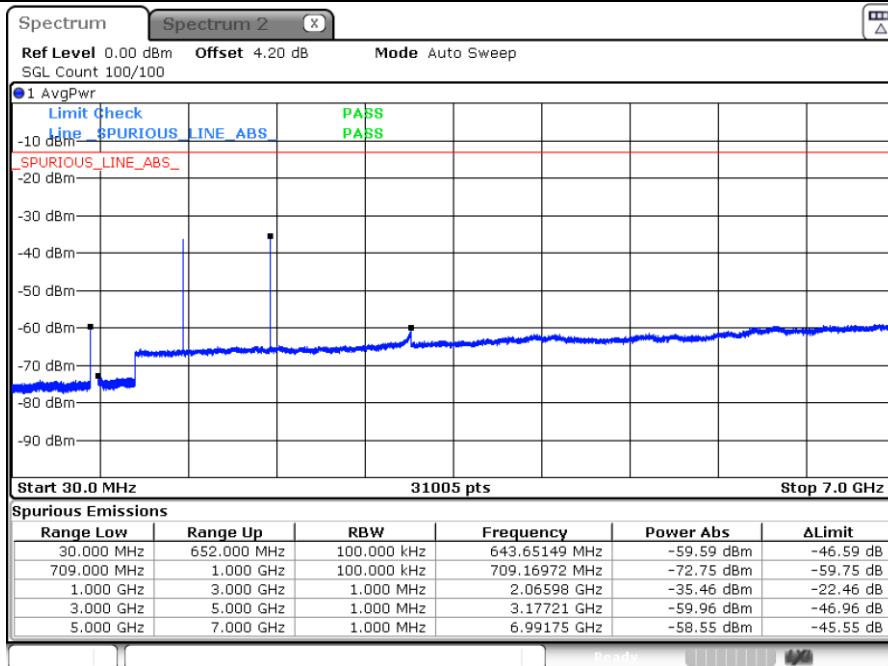
Date: 20.FEB.2025 10:05:39

Middle Channel / QPSK



Date: 20.FEB.2025 10:06:49

Highest Channel / QPSK

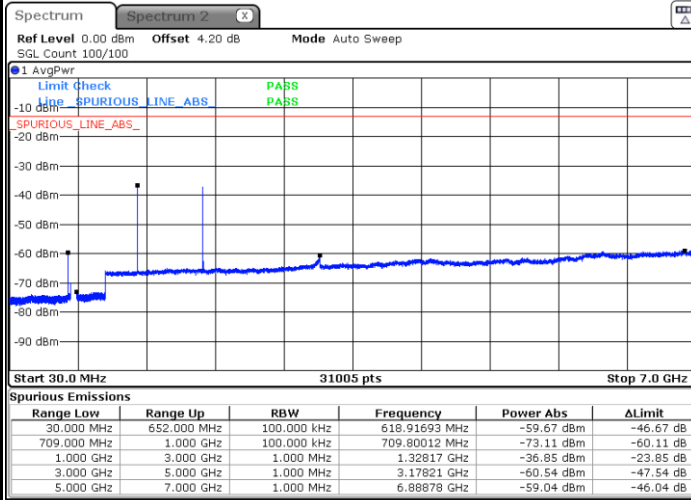


Date: 20.FEB.2025 10:16:37



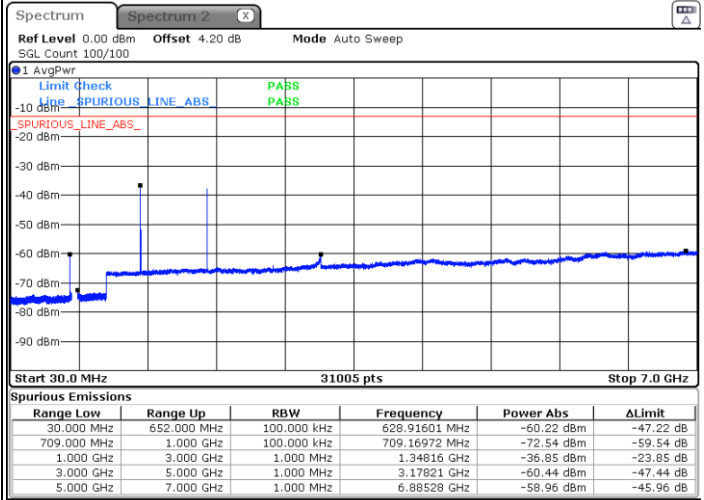
LTE Band 71 / 15MHz

Lowest Channel / QPSK



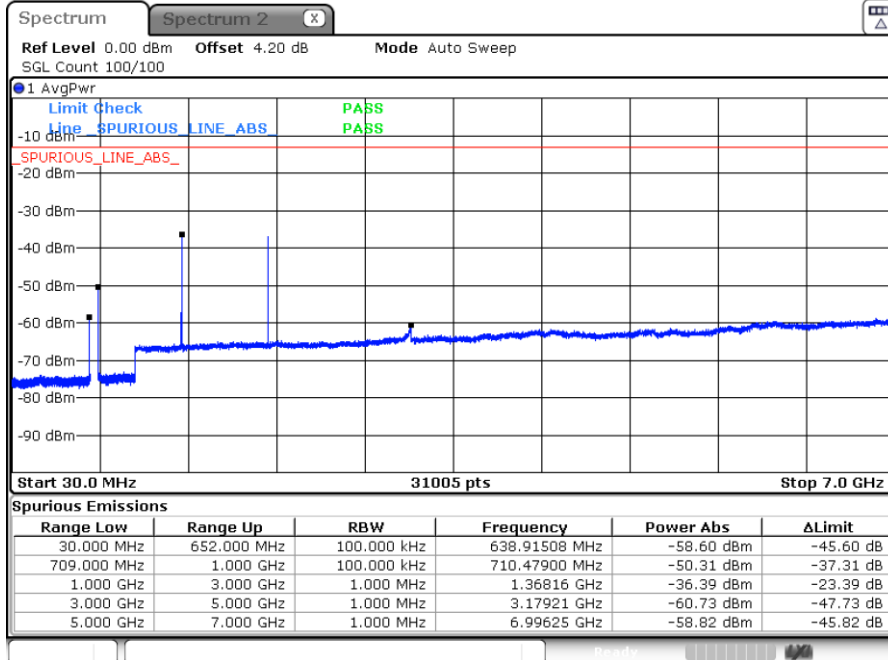
Date: 20.FEB.2025 10:25:51

Middle Channel / QPSK



Date: 20.FEB.2025 10:27:01

Highest Channel / QPSK

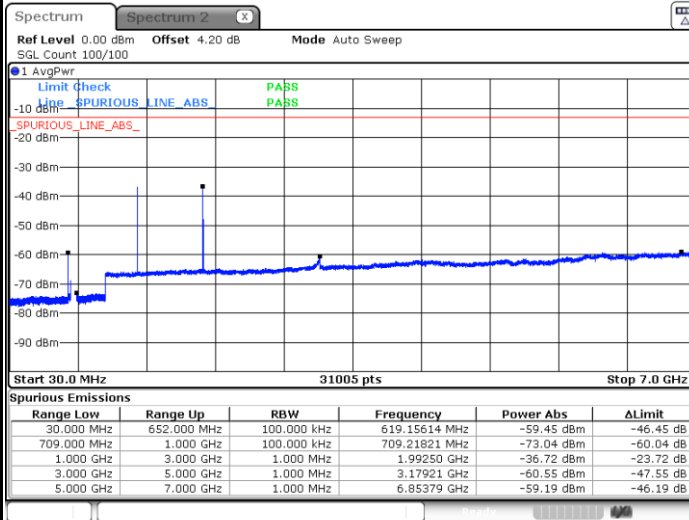


Date: 20.FEB.2025 10:36:46

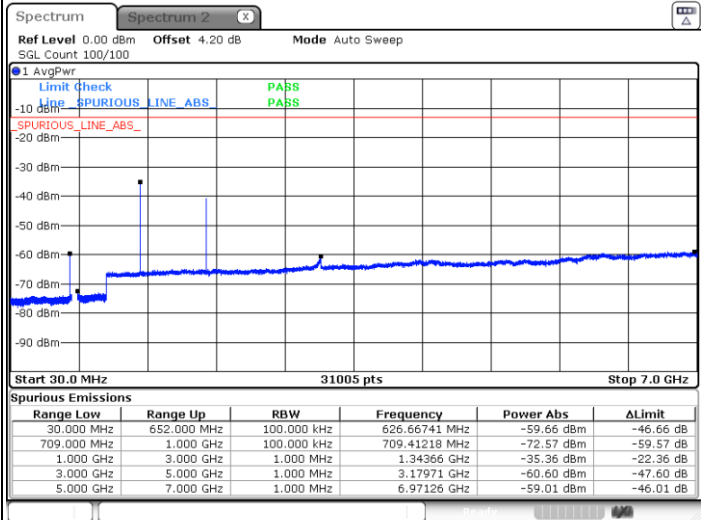


LTE Band 71 / 20MHz

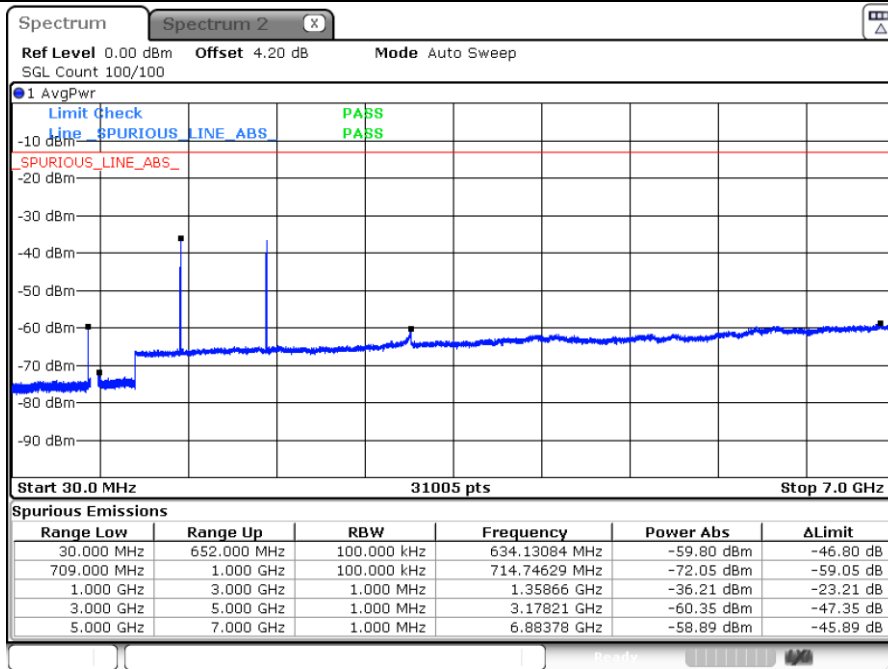
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



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	0.0026	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0021	
20	Minimum Voltage	0.0009	

Note:

1. Normal Voltage =12 V. ; Minimum Voltage =9 V. ; Maximum Voltage =43 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 :	Chris	Temperature :	22~25°C
		Relative Humidity :	51~54%

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	5008	-60.20	-25	-35.20	-70.41	3.03	13.24	H
	7500	-61.15	-25	-36.15	-70.60	3.56	13.01	H
	10006	-60.03	-25	-35.03	-69.55	3.92	13.44	H
	5008	-60.65	-25	-35.65	-70.86	3.03	13.24	V
	7500	-60.54	-25	-35.54	-69.99	3.56	13.01	V
	10006	-60.19	-25	-35.19	-69.71	3.92	13.44	V
Middle	5050	-60.24	-25	-35.24	-70.45	3.03	13.24	H
	7584	-60.86	-25	-35.86	-70.31	3.56	13.01	H
	10104	-60.27	-25	-35.27	-69.79	3.92	13.44	H
	12624	-56.53	-25	-31.53	-66.05	3.92	13.44	H
	5050	-61.39	-25	-36.39	-71.60	3.03	13.24	V
	7584	-59.98	-25	-34.98	-69.43	3.56	13.01	V
	10104	-60.81	-25	-35.81	-70.33	3.92	13.44	V
	12624	-55.67	-25	-30.67	-65.19	3.92	13.44	V
Highest	5106	-60.40	-25	-35.40	-70.61	3.03	13.24	H
	7654	-60.03	-25	-35.03	-69.48	3.56	13.01	H
	10202	-59.98	-25	-34.98	-69.50	3.92	13.44	H
	5106	-60.85	-25	-35.85	-71.06	3.03	13.24	V
	7654	-56.64	-25	-31.64	-66.09	3.56	13.01	V
	10202	-60.13	-25	-35.13	-69.65	3.92	13.44	V

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



LTE Band 12 / 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)
Lowest	1400	-66.05	-13	-53.05	-73.02	1.58	10.70	H
	2096	-62.11	-13	-49.11	-70.36	2.102	12.50	H
	2800	-59.23	-13	-46.23	-68.12	2.856	13.90	H
	1400	-61.49	-13	-48.49	-68.46	1.58	10.70	V
	2096	-60.81	-13	-47.81	-69.06	2.10	12.50	V
	2800	-58.41	-13	-45.41	-67.30	2.86	13.90	V
Middle	1408	-62.78	-13	-49.78	-69.75	1.58	10.70	H
	2112	-61.70	-13	-48.70	-69.95	2.102	12.50	H
	2808	-59.66	-13	-46.66	-68.55	2.856	13.90	H
	1408	-65.22	-13	-52.22	-72.19	1.58	10.70	V
	2112	-59.83	-13	-46.83	-68.08	2.10	12.50	V
	2808	-59.06	-13	-46.06	-67.95	2.86	13.90	V
Highest	1416	-65.76	-13	-52.76	-72.73	1.58	10.70	H
	2120	-61.59	-13	-48.59	-69.84	2.102	12.50	H
	2824	-58.76	-13	-45.76	-67.65	2.856	13.90	H
	1416	-60.71	-13	-47.71	-67.68	1.58	10.70	V
	2120	-61.19	-13	-48.19	-69.44	2.10	12.50	V
	2824	-58.55	-13	-45.55	-67.44	2.86	13.90	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	1552	-66.81	-13	-53.81	-69.44	1.09	5.87	H
	2328	-61.67	-13	-48.67	-64.07	1.37	5.92	H
	3112	-59.91	-13	-46.91	-63.80	1.64	7.68	H
	1552	-65.91	-13	-52.91	-68.54	1.09	5.87	V
	2328	-60.28	-13	-47.28	-62.68	1.37	5.92	V
	3112	-59.81	-13	-46.81	-63.70	1.64	7.68	V
Middle	1560	-66.83	-42.15	-24.68	-69.46	1.09	5.87	H
	2336	-61.78	-13	-48.78	-64.18	1.37	5.92	H
	3120	-60.03	-13	-47.03	-63.92	1.64	7.68	H
	1560	-66.29	-42.15	-24.14	-68.92	1.09	5.87	V
	2336	-60.17	-13	-47.17	-62.57	1.37	5.92	V
	3120	-59.82	-13	-46.82	-63.71	1.64	7.68	V
Highest	1560	-66.80	-42.15	-24.65	-69.43	1.09	5.87	H
	2344	-61.70	-13	-48.70	-64.10	1.37	5.92	H
	3128	-59.78	-13	-46.78	-63.67	1.64	7.68	H
	1560	-66.31	-42.15	-24.16	-68.94	1.09	5.87	V
	2344	-59.76	-13	-46.76	-62.16	1.37	5.92	V
	3128	-59.96	-13	-46.96	-63.85	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	1552	-66.59	-13	-53.59	-69.22	1.09	5.87	H
	2328	-61.47	-13	-48.47	-63.87	1.37	5.92	H
	3112	-59.60	-13	-46.60	-63.49	1.64	7.68	H
	1552	-65.78	-13	-52.78	-68.41	1.09	5.87	V
	2328	-59.74	-13	-46.74	-62.14	1.37	5.92	V
	3112	-59.90	-13	-46.90	-63.79	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	-62.92	-25	-37.92	-73.13	3.03	13.24	H
	7486	-60.11	-25	-35.11	-69.56	3.56	13.01	H
	9992	-59.52	-25	-34.52	-69.04	3.92	13.44	H
	4994	-62.98	-25	-37.98	-73.19	3.03	13.24	V
	7486	-60.60	-25	-35.60	-70.05	3.56	13.01	V
	9992	-58.54	-25	-33.54	-68.06	3.92	13.44	V
Middle	5162	-63.37	-25	-38.37	-73.58	3.03	13.24	H
	7752	-61.19	-25	-36.19	-70.64	3.56	13.01	H
	10342	-61.60	-25	-36.60	-71.12	3.92	13.44	H
	5162	-63.52	-25	-38.52	-73.73	3.03	13.24	V
	7752	-58.08	-25	-33.08	-67.53	3.56	13.01	V
	10342	-61.58	-25	-36.58	-71.10	3.92	13.44	V
Highest	5344	-63.91	-25	-38.91	-74.12	3.03	13.24	H
	8018	-52.59	-25	-27.59	-62.04	3.56	13.01	H
	10678	-58.87	-25	-33.87	-68.39	3.92	13.44	H
	5344	-61.96	-25	-36.96	-72.17	3.03	13.24	V
	8018	-58.83	-25	-33.83	-68.28	3.56	13.01	V
	10678	-55.31	-25	-30.31	-64.83	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	-67.10	-13	-54.10	-68.85	1.02	4.92	H
	1992	-62.85	-13	-49.85	-64.82	1.27	5.39	H
	2656	-61.17	-13	-48.17	-64.10	1.49	6.57	H
	1328	-63.67	-13	-50.67	-65.42	1.02	4.92	V
	1992	-62.12	-13	-49.12	-64.09	1.27	5.39	V
	2656	-60.82	-13	-47.82	-63.75	1.49	6.57	V
Middle	1344	-68.59	-13	-55.59	-70.34	1.02	4.92	H
	2016	-63.35	-13	-50.35	-65.32	1.27	5.39	H
	2688	-60.66	-13	-47.66	-63.59	1.49	6.57	H
	1344	-62.96	-13	-49.96	-64.71	1.02	4.92	V
	2016	-62.36	-13	-49.36	-64.33	1.27	5.39	V
	2688	-59.93	-13	-46.93	-62.86	1.49	6.57	V
Highest	1360	-64.47	-13	-51.47	-66.22	1.02	4.92	H
	2040	-63.24	-13	-50.24	-65.21	1.27	5.39	H
	2712	-60.55	-13	-47.55	-63.48	1.49	6.57	H
	1360	-65.95	-13	-52.95	-67.70	1.02	4.92	V
	2040	-62.23	-13	-49.23	-64.20	1.27	5.39	V
	2712	-60.04	-13	-47.04	-62.97	1.49	6.57	V

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