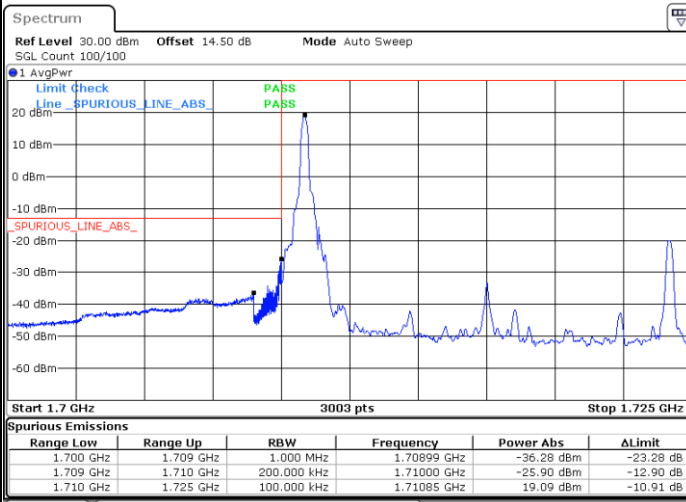




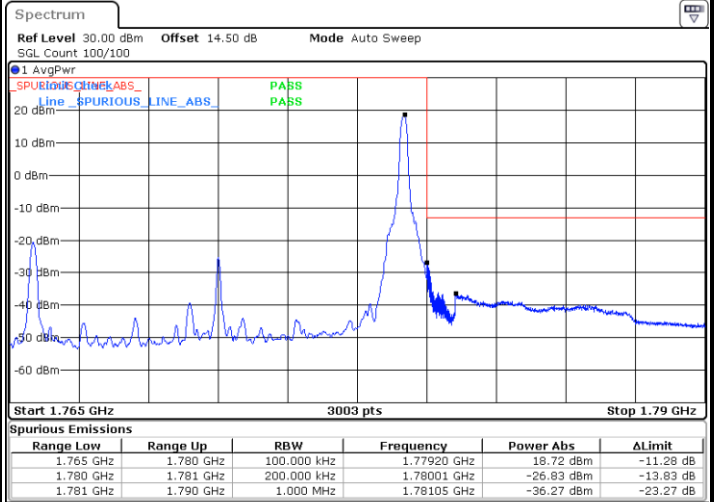
LTE Band 66 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



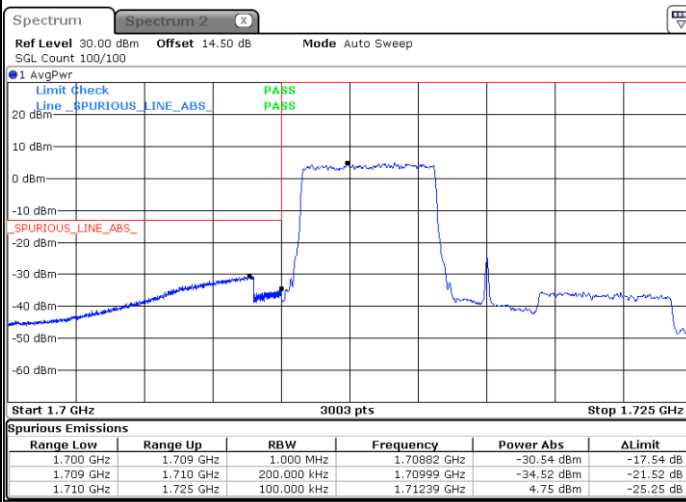
Date: 26.DEC.2023 20:28:50

Highest Band Edge / 1 RB



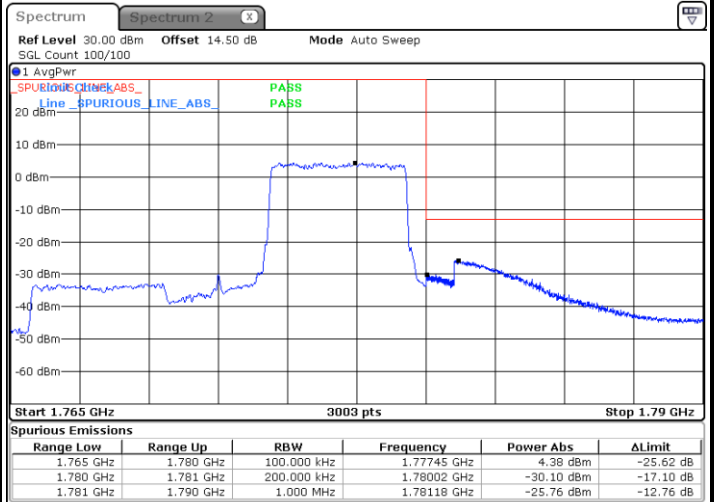
Date: 26.DEC.2023 20:34:52

Lowest Band Edge / Full RB



Date: 11.JAN.2024 15:29:41

Highest Band Edge / Full RB

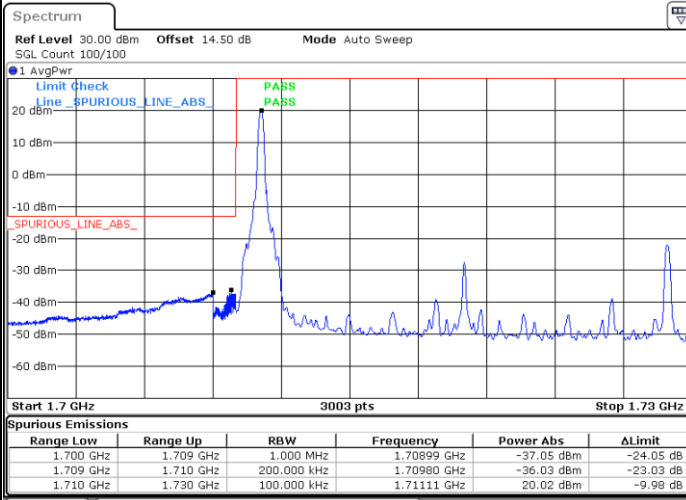


Date: 11.JAN.2024 21:12:52



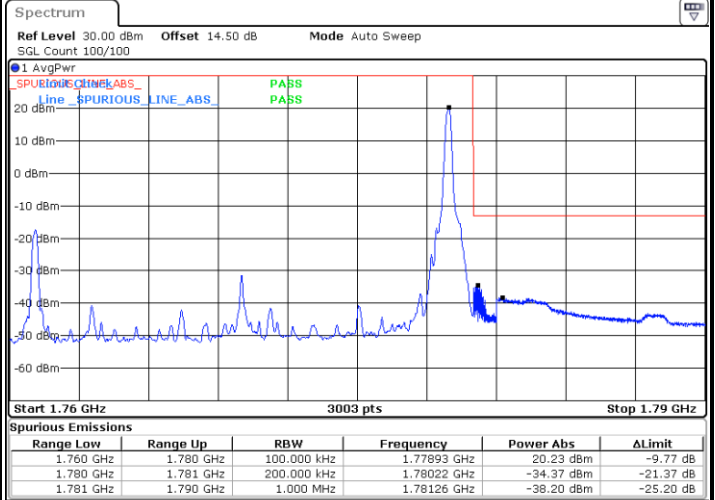
LTE Band 66 / 20MHz / QPSK

Lowest Band Edge / 1RB



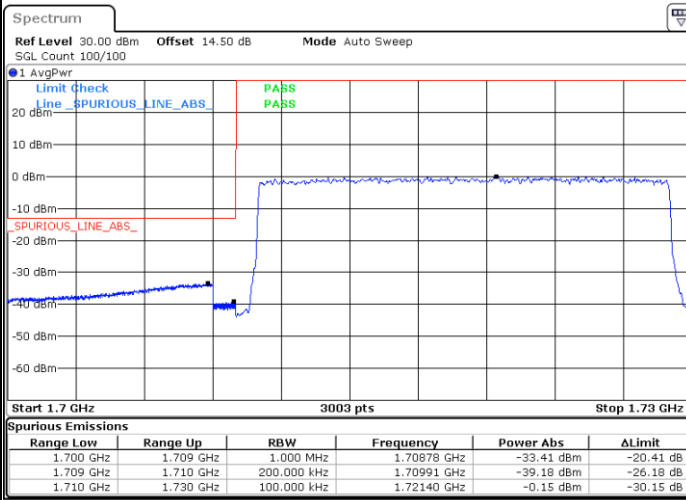
Date: 26.DEC.2023 20:38:46

Highest Band Edge / 1RB



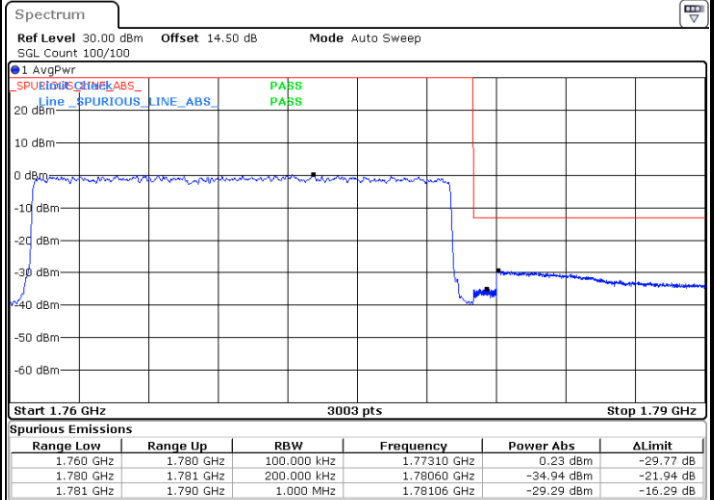
Date: 26.DEC.2023 20:48:03

Lowest Band Edge / Full RB



Date: 26.DEC.2023 20:40:48

Highest Band Edge / Full RB

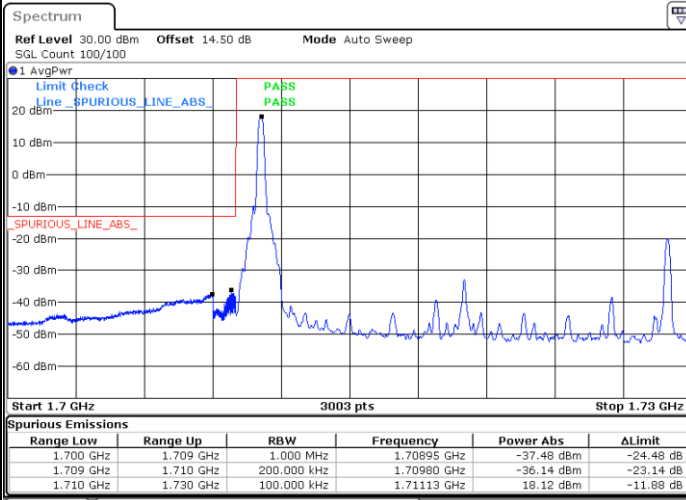


Date: 26.DEC.2023 20:50:38



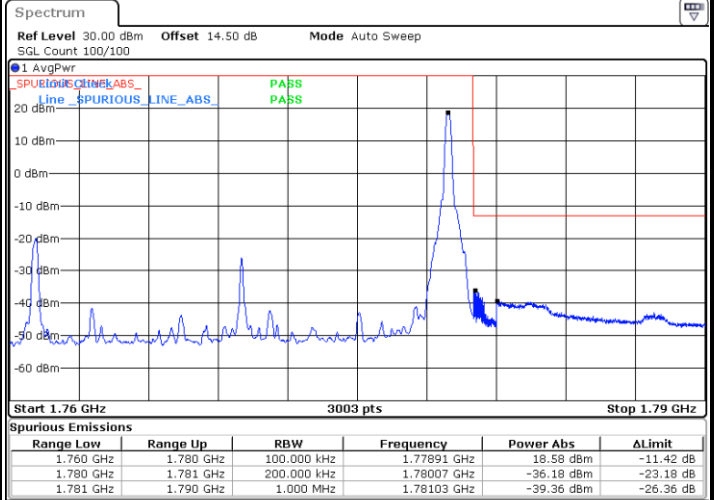
LTE Band 66 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



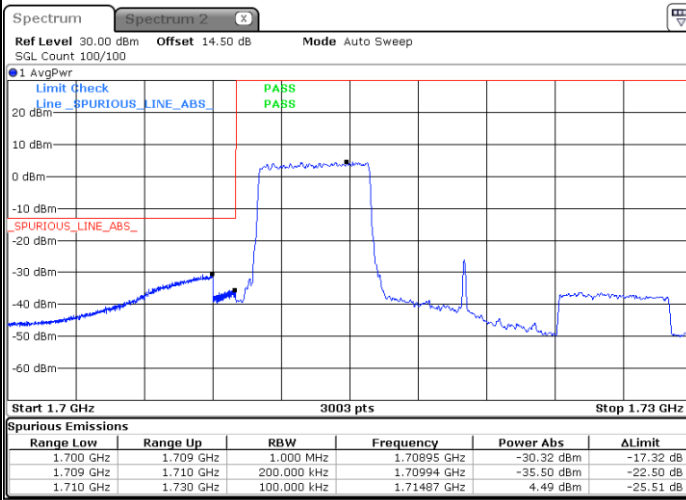
Date: 26.DEC.2023 20:39:47

Highest Band Edge / 1 RB



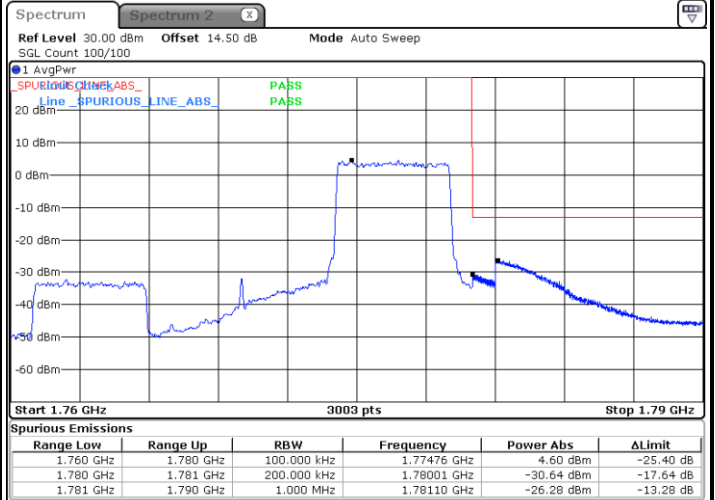
Date: 26.DEC.2023 20:48:23

Lowest Band Edge / Full RB



Date: 11.JAN.2024 15:30:49

Highest Band Edge / Full RB



Date: 11.JAN.2024 21:14:06

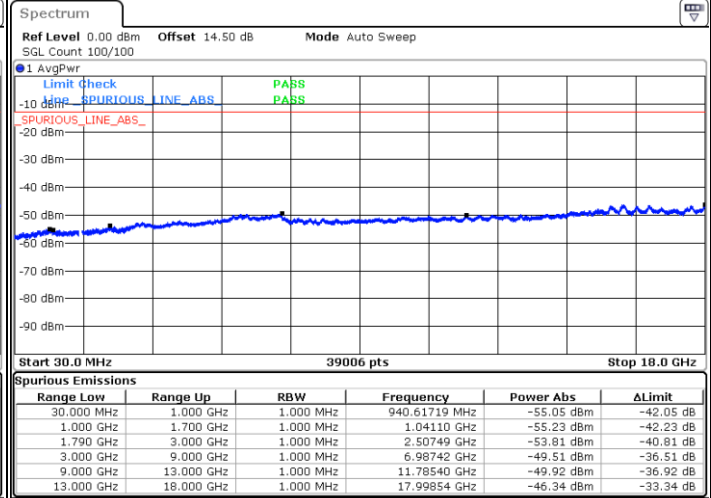
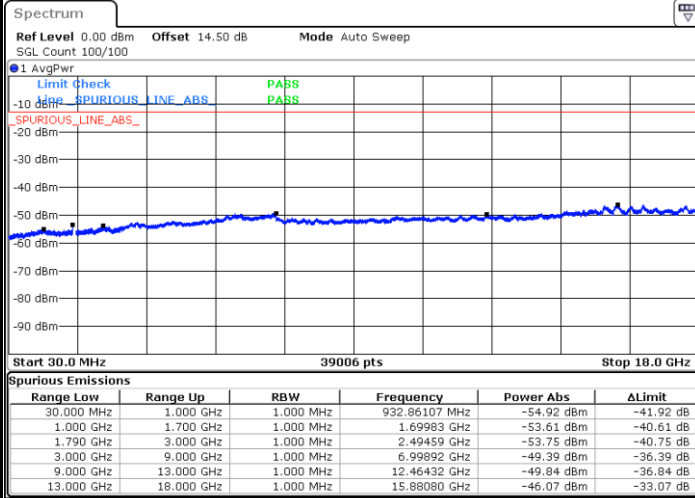


# Conducted Spurious Emission

## LTE Band 66 / 1.4MHz

### Lowest Channel / QPSK

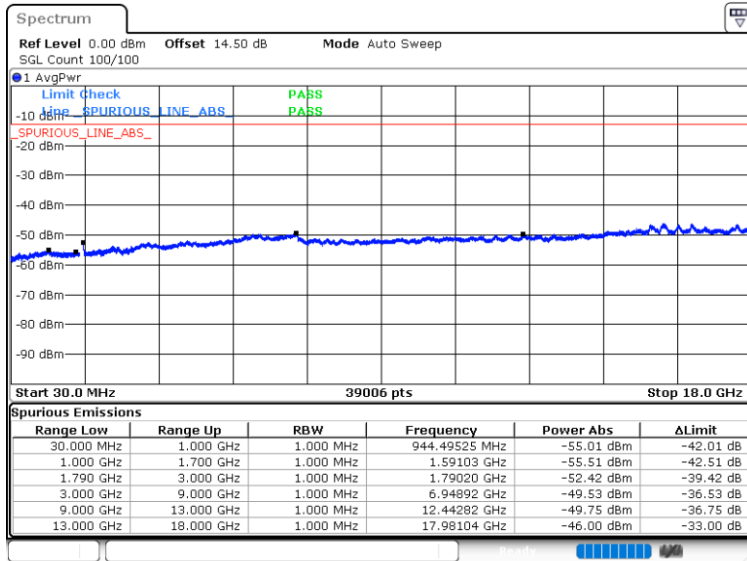
### Middle Channel / QPSK



Date: 26.DEC.2023 19:31:42

Date: 26.DEC.2023 19:34:53

### Highest Channel / QPSK



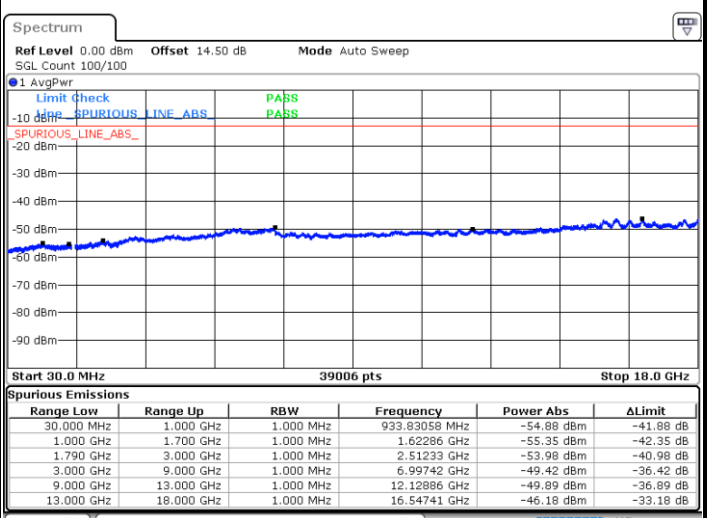
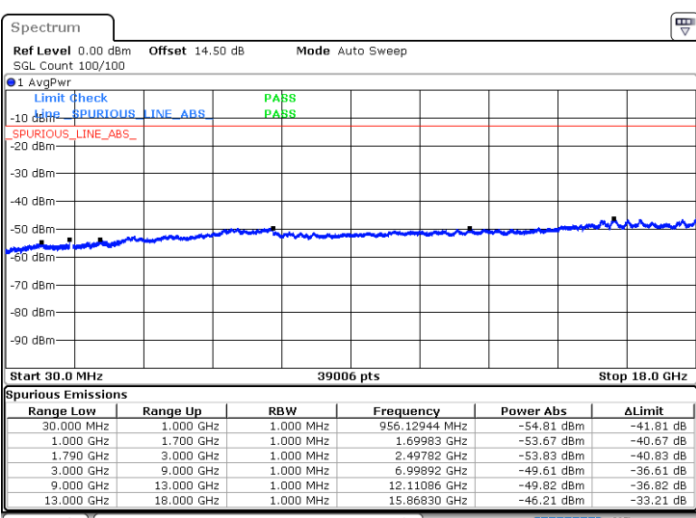
Date: 26.DEC.2023 19:39:24



LTE Band 66 / 3MHz

Lowest Channel / QPSK

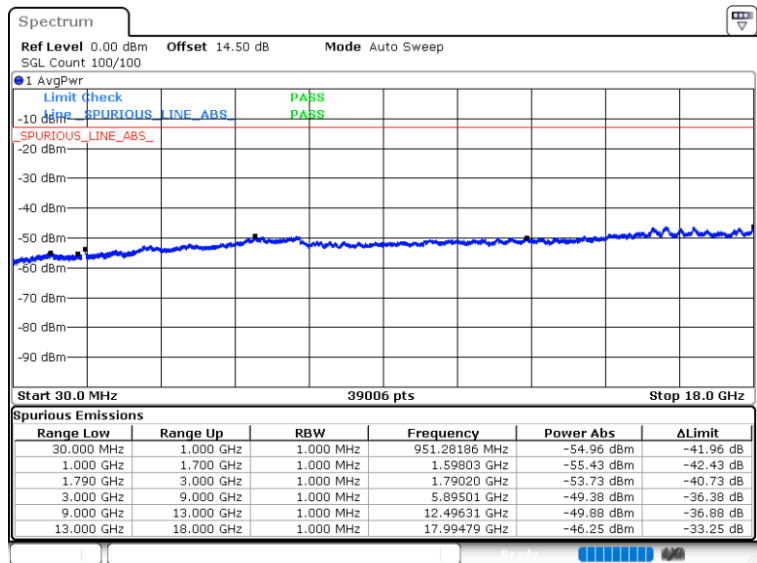
Middle Channel / QPSK



Date: 26.DEC.2023 19:49:04

Date: 26.DEC.2023 19:52:16

Highest Channel / QPSK



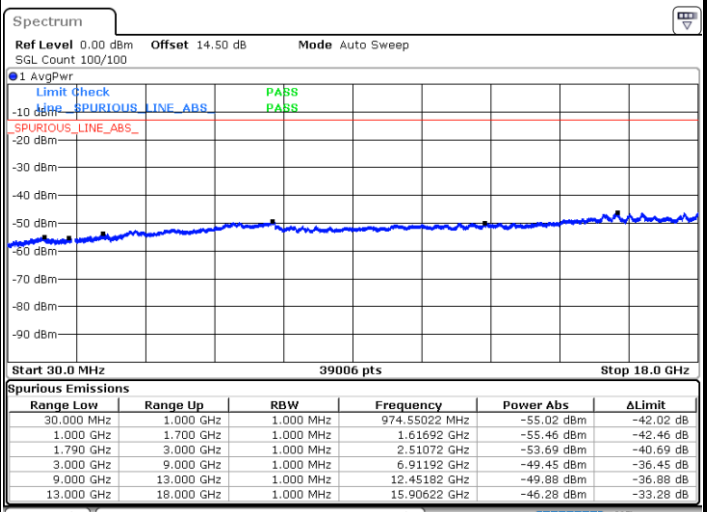
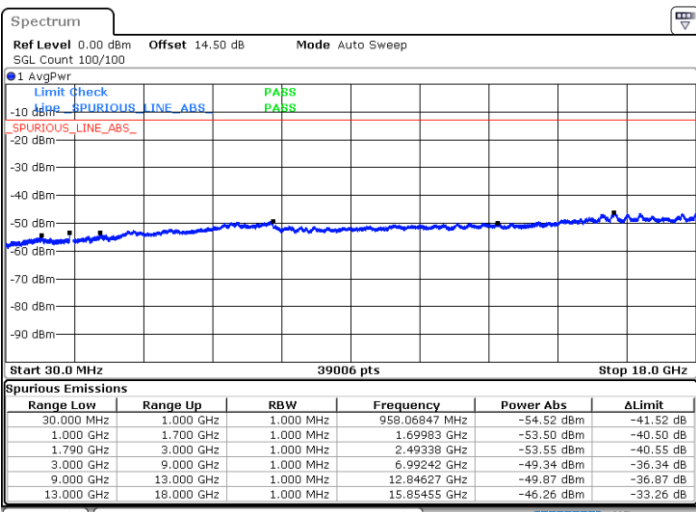
Date: 26.DEC.2023 19:58:48



LTE Band 66 / 5MHz

Lowest Channel / QPSK

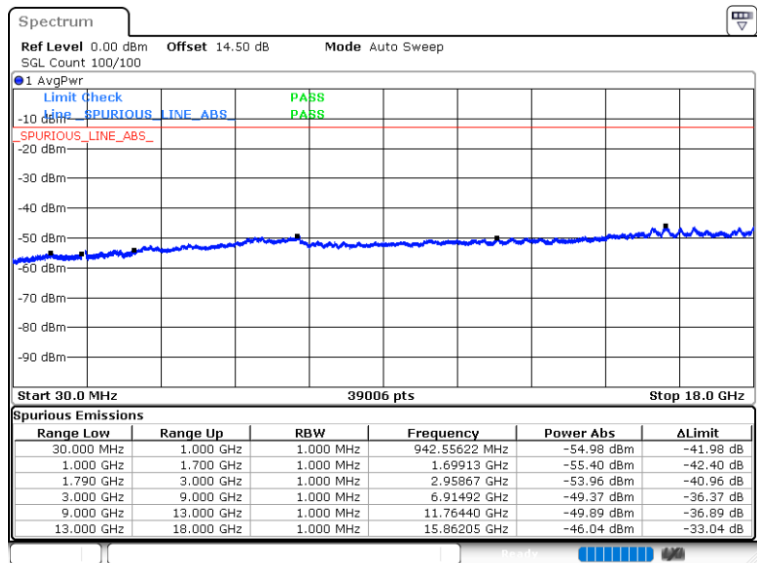
Middle Channel / QPSK



Date: 26.DEC.2023 20:03:14

Date: 26.DEC.2023 20:06:25

Highest Channel / QPSK



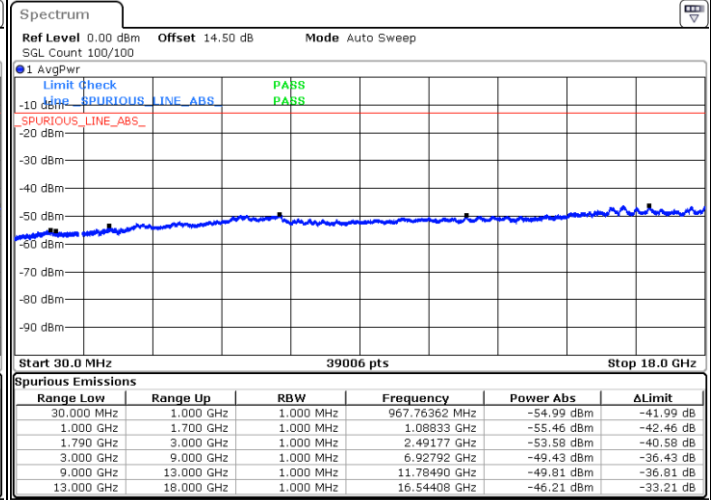
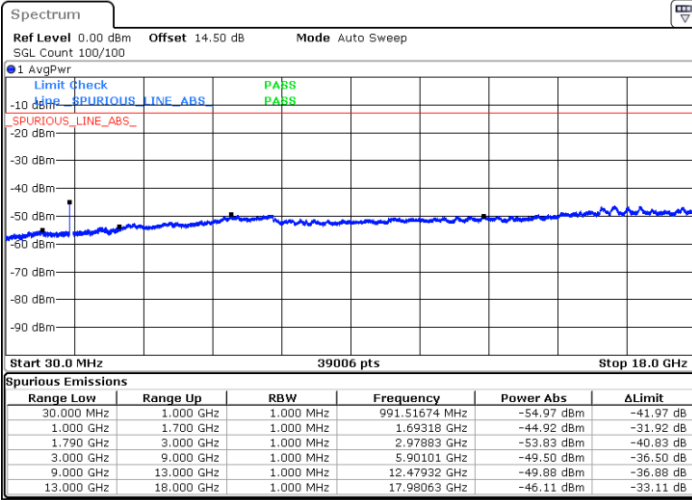
Date: 26.DEC.2023 20:12:57



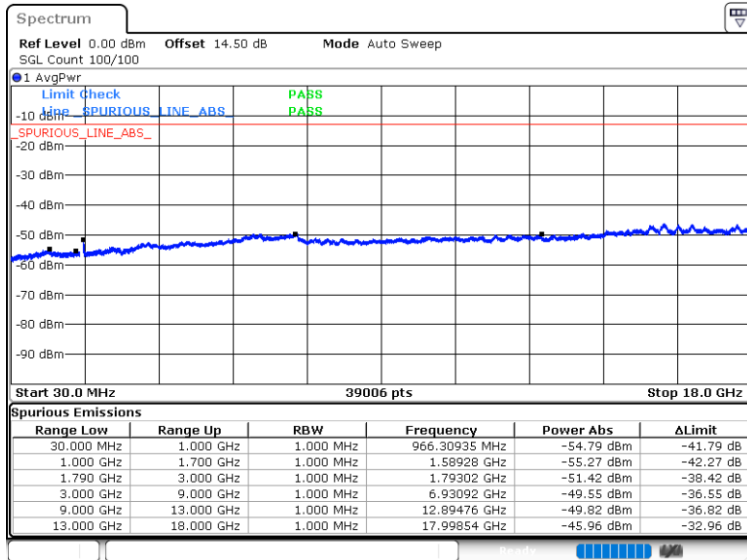
LTE Band 66 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

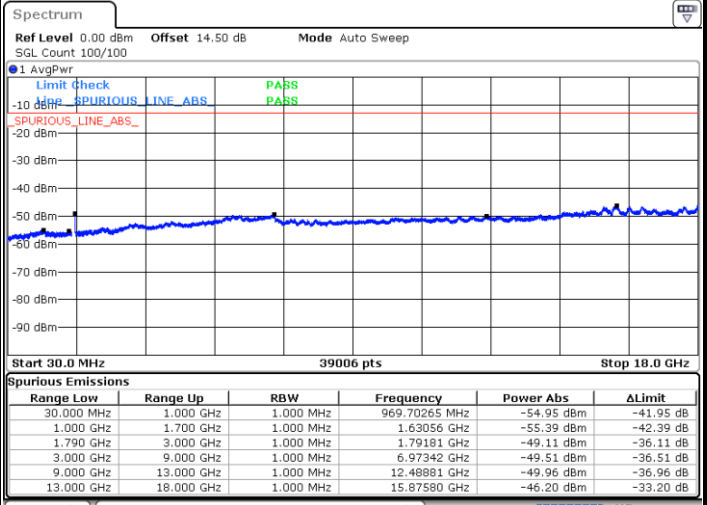
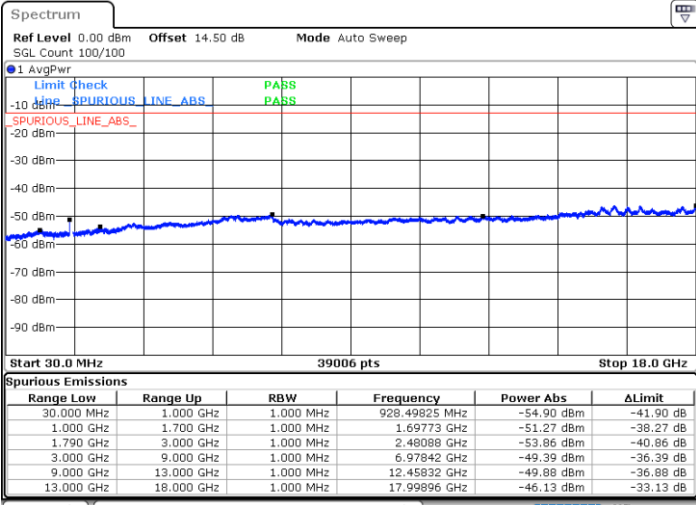




LTE Band 66 / 15MHz

Lowest Channel / QPSK

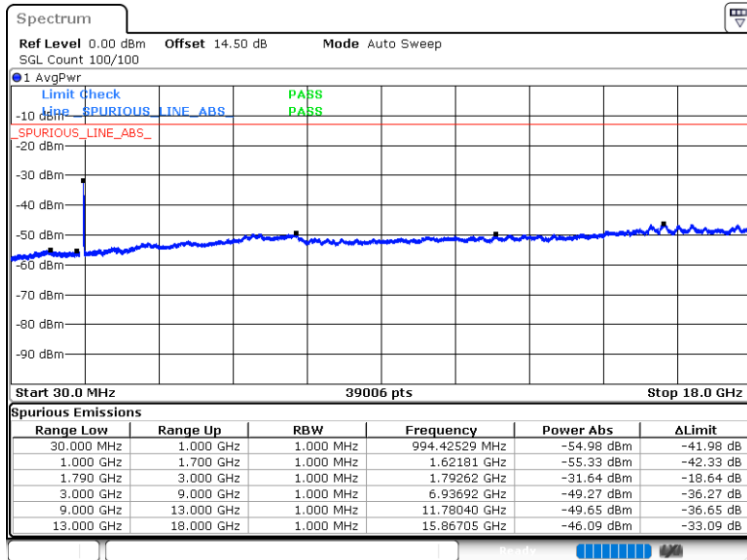
Middle Channel / QPSK



Date: 26.DEC.2023 20:31:01

Date: 26.DEC.2023 20:32:11

Highest Channel / QPSK



Date: 26.DEC.2023 20:37:03

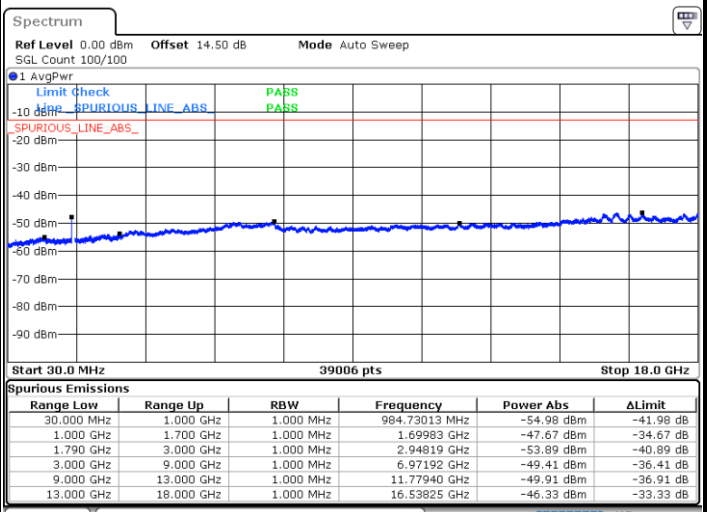
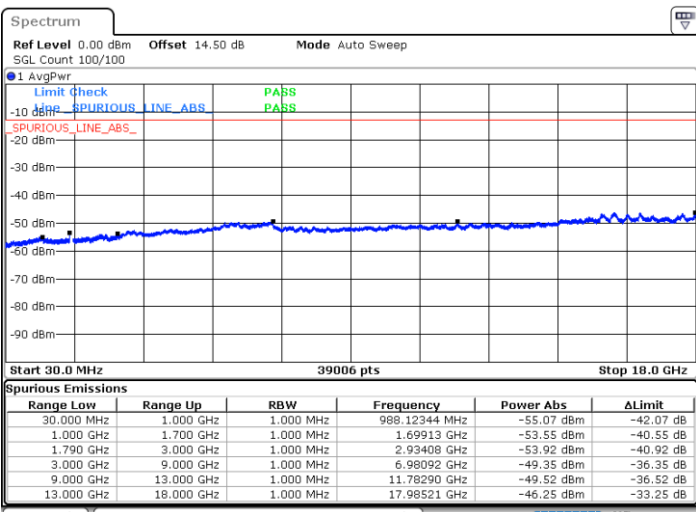




LTE Band 66 / 20MHz

Lowest Channel / QPSK

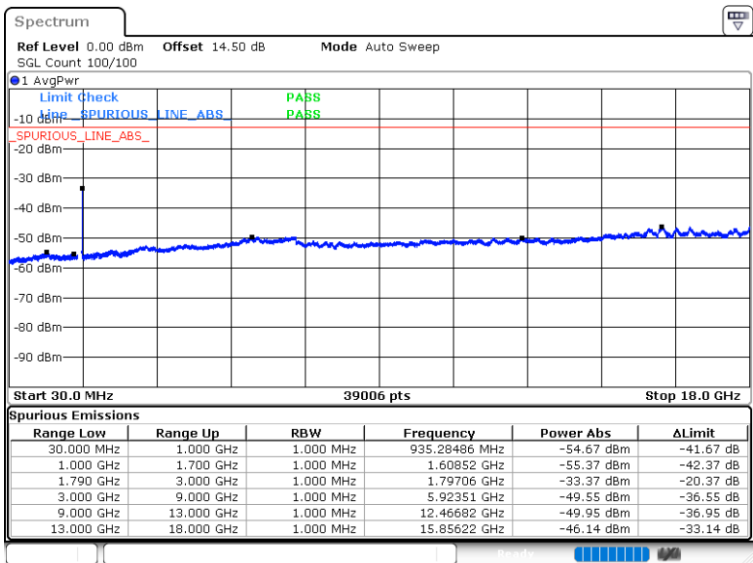
Middle Channel / QPSK



Date: 26.DEC.2023 20:41:58

Date: 26.DEC.2023 20:43:08

Highest Channel / QPSK



Date: 26.DEC.2023 20:49:36



### Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	End Point	0.0006	

**Note:**

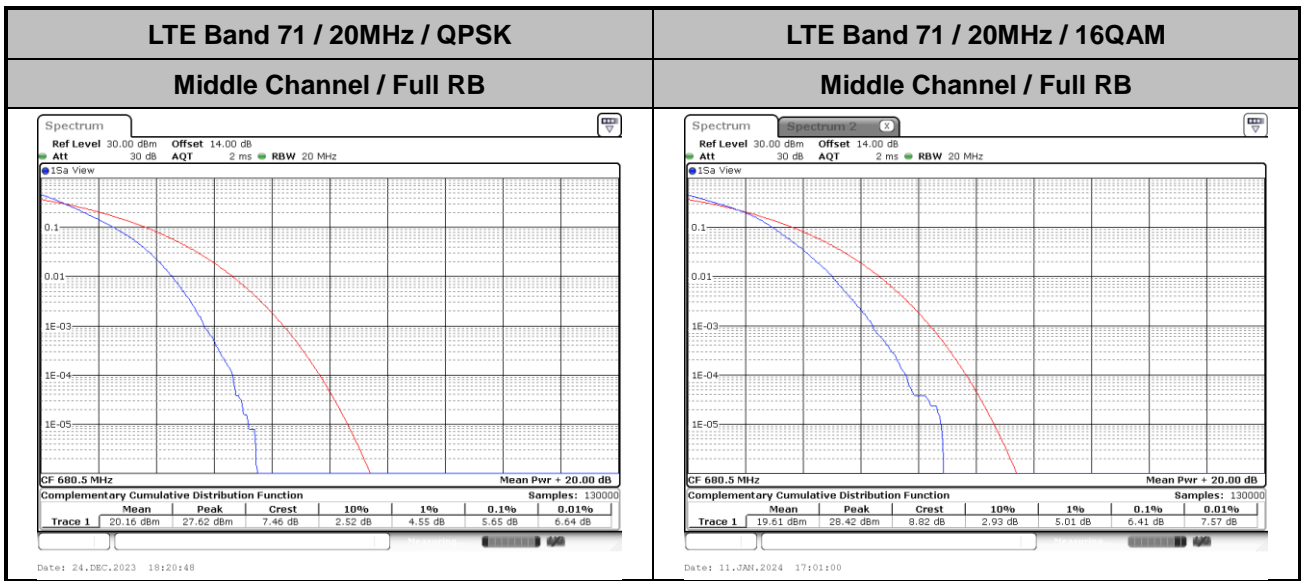
1. Normal Voltage = 3.8 V. ; End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 71

## Peak-to-Average Ratio

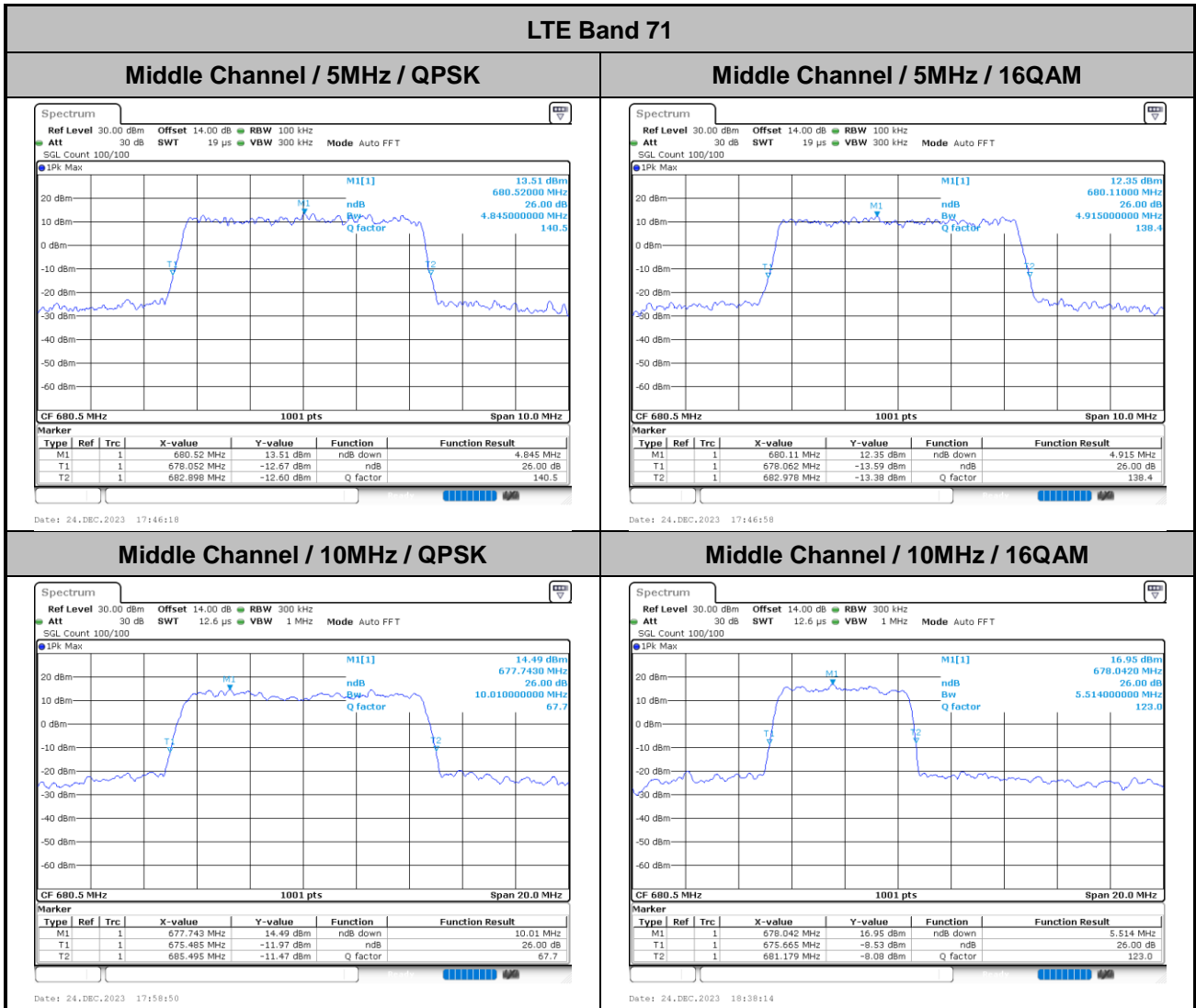
Mode	LTE Band 71 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.65	6.41	PASS





# 26dB Bandwidth

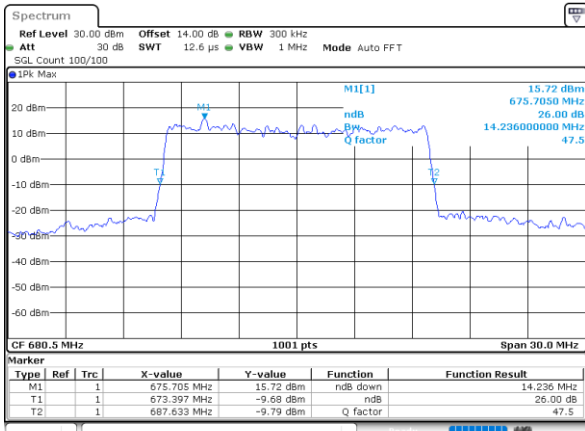
Mode	LTE Band 71 : 26dB BW(MHz)							
	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.85	4.92	10.01	5.51	14.24	5.60	18.86	5.75





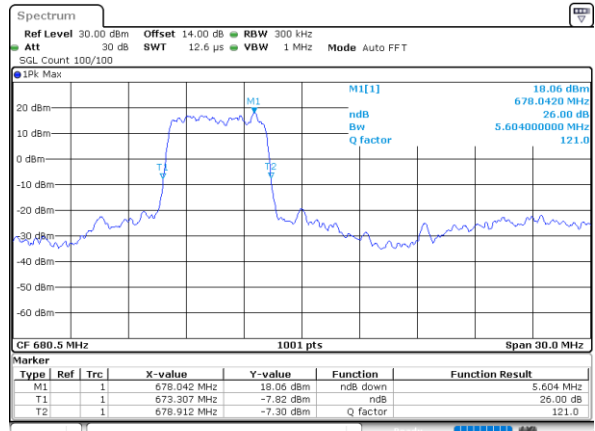
LTE Band 71

Middle Channel / 15MHz / QPSK



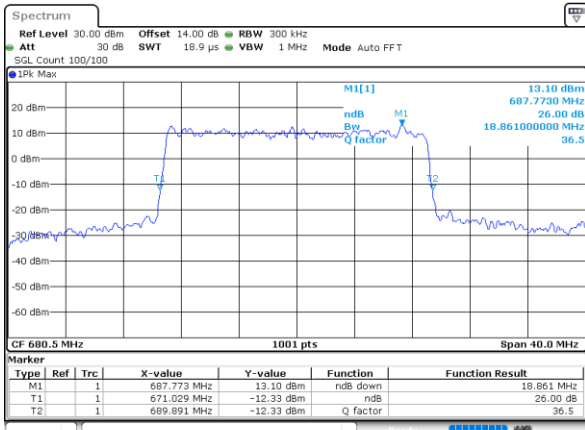
Date: 24.DEC.2023 18:09:42

Middle Channel / 15MHz / 16QAM



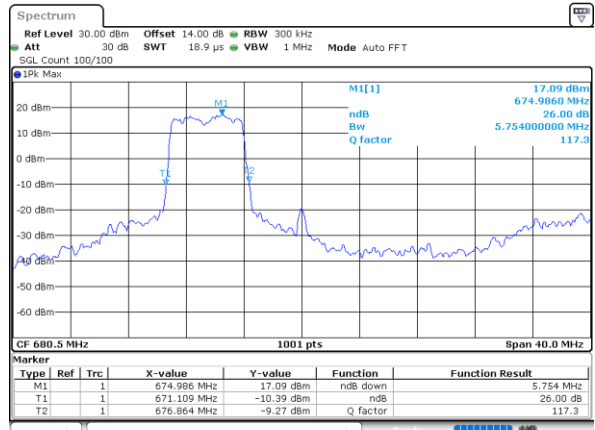
Date: 24.DEC.2023 18:13:08

Middle Channel / 20MHz / QPSK



Date: 24.DEC.2023 18:20:33

Middle Channel / 20MHz / 16QAM

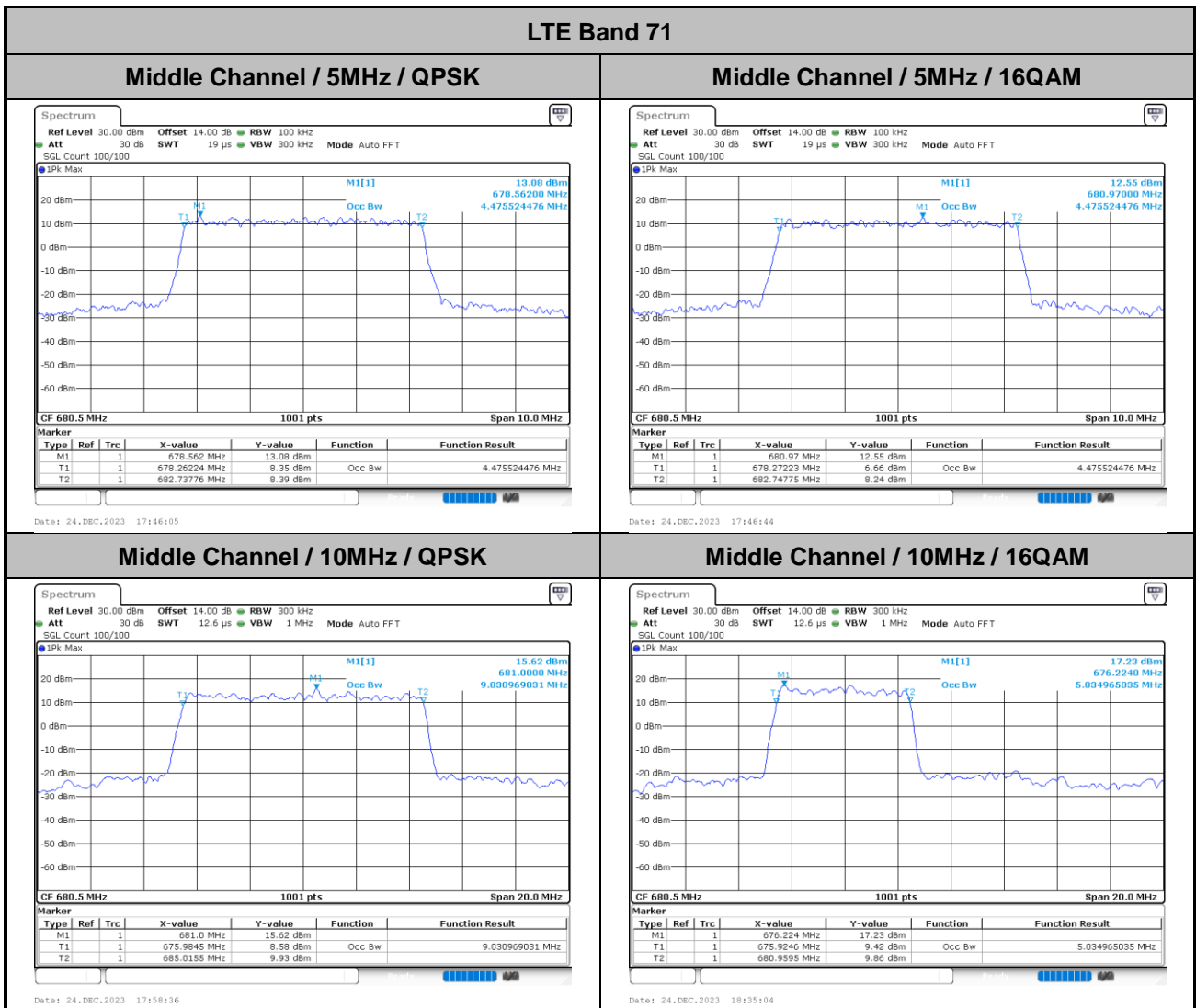


Date: 24.DEC.2023 18:41:24



# Occupied Bandwidth

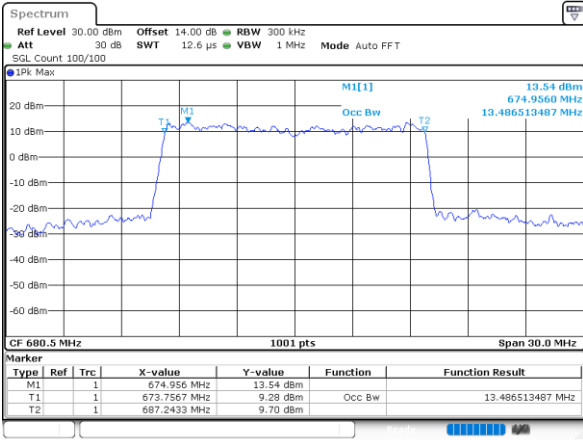
Mode	LTE Band 71 : 99%OBW(MHz)							
	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.48	4.48	9.03	5.03	13.49	5.00	17.86	5.00





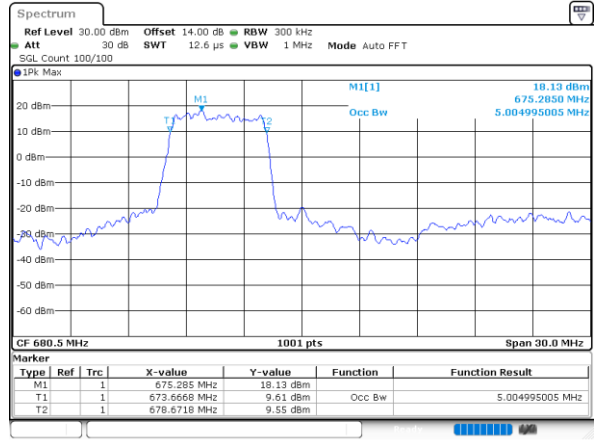
LTE Band 71

Middle Channel / 15MHz / QPSK



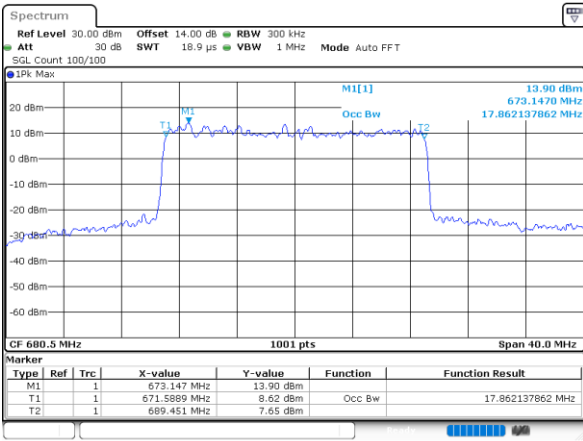
Date: 24.DEC.2023 18:09:28

Middle Channel / 15MHz / 16QAM



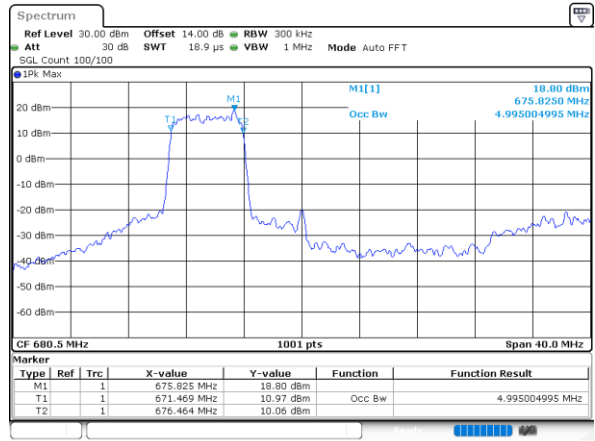
Date: 24.DEC.2023 18:38:56

Middle Channel / 20MHz / QPSK



Date: 24.DEC.2023 18:20:19

Middle Channel / 20MHz / 16QAM



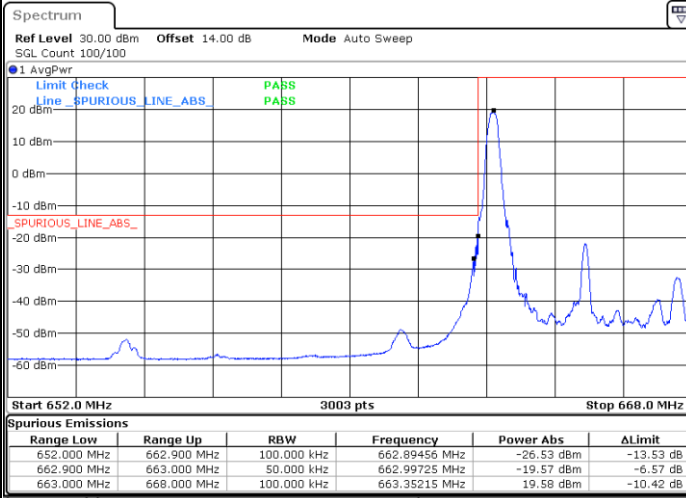
Date: 24.DEC.2023 18:41:11



# Conducted Band Edge

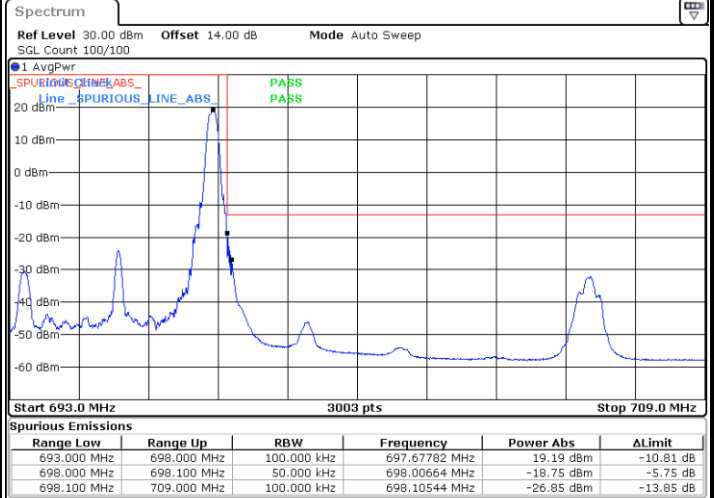
## LTE Band 71 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



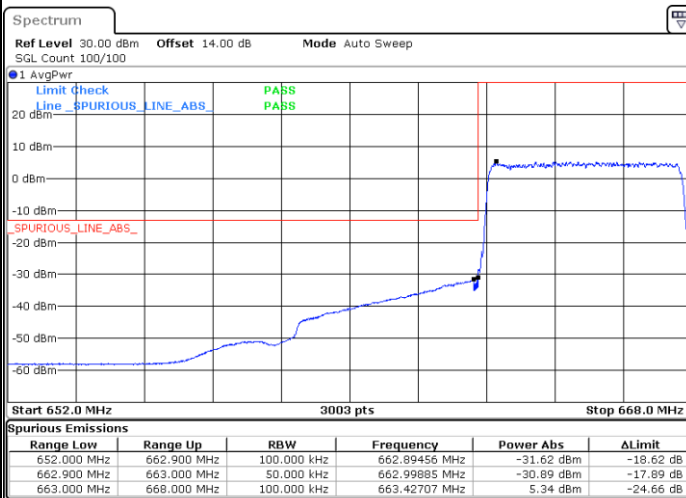
Date: 24.DEC.2023 17:40:19

### Highest Band Edge / 1 RB



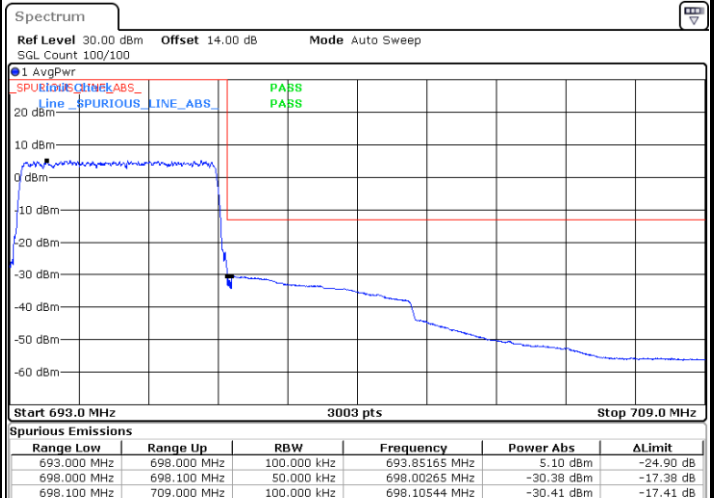
Date: 24.DEC.2023 17:47:57

### Lowest Band Edge / Full RB



Date: 24.DEC.2023 17:42:20

### Highest Band Edge / Full RB



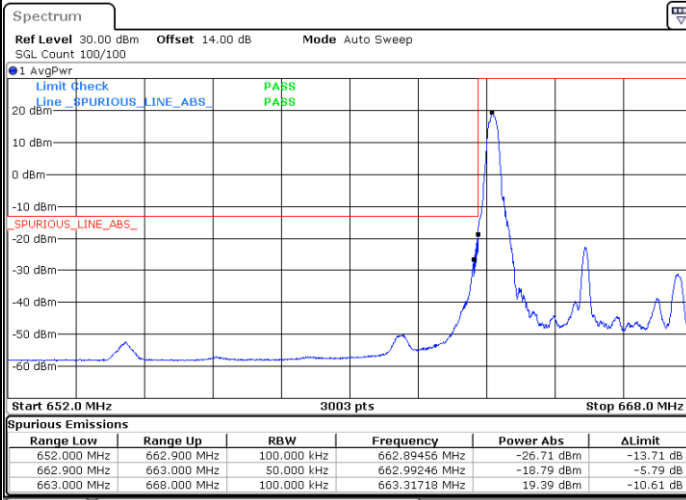
Date: 24.DEC.2023 17:49:58





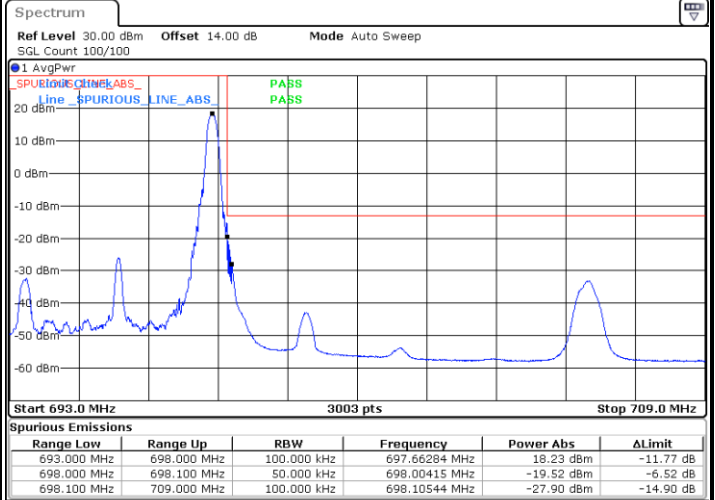
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1RB



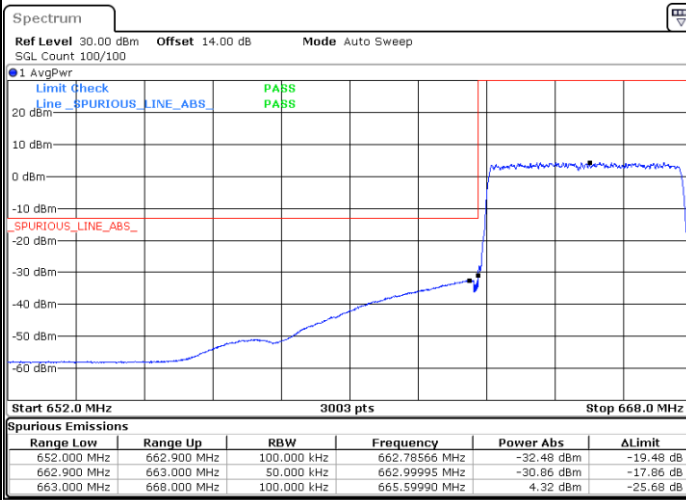
Date: 24.DEC.2023 17:41:20

Highest Band Edge / 1 RB



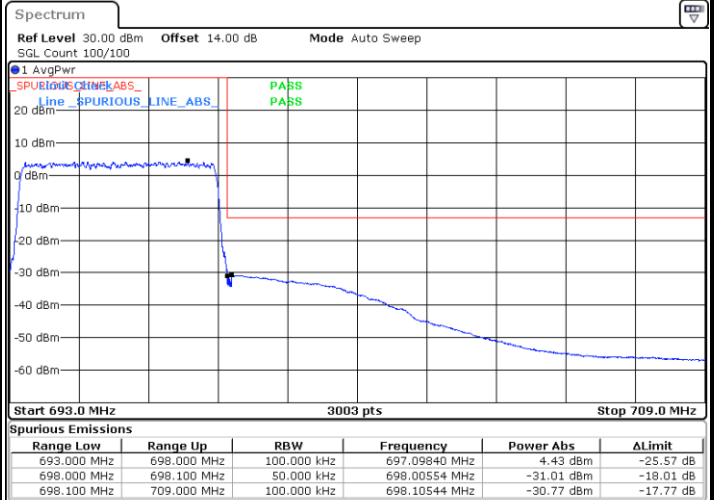
Date: 24.DEC.2023 17:48:57

Lowest Band Edge / Full RB



Date: 24.DEC.2023 17:43:20

Highest Band Edge / Full RB

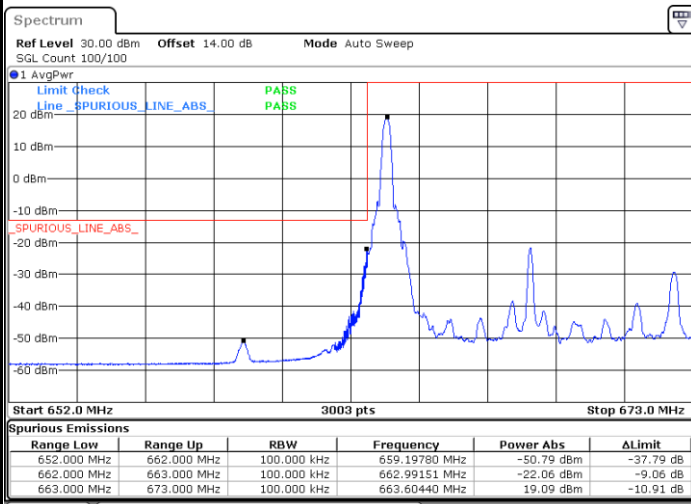


Date: 24.DEC.2023 17:50:58



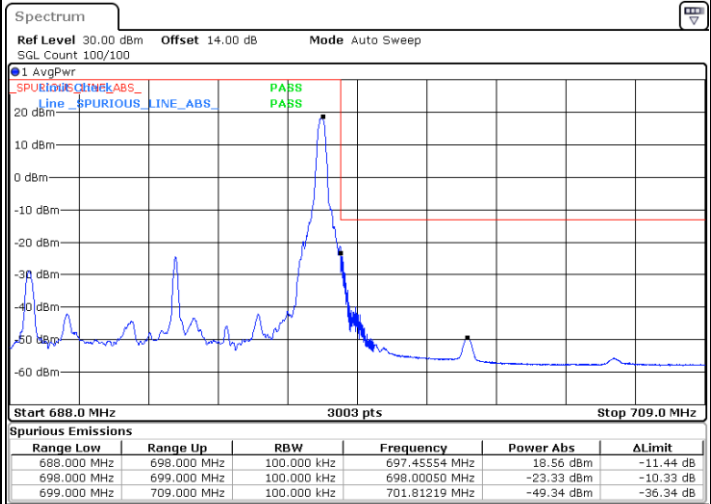
LTE Band 71 / 10MHz / QPSK

Lowest Band Edge / 1 RB



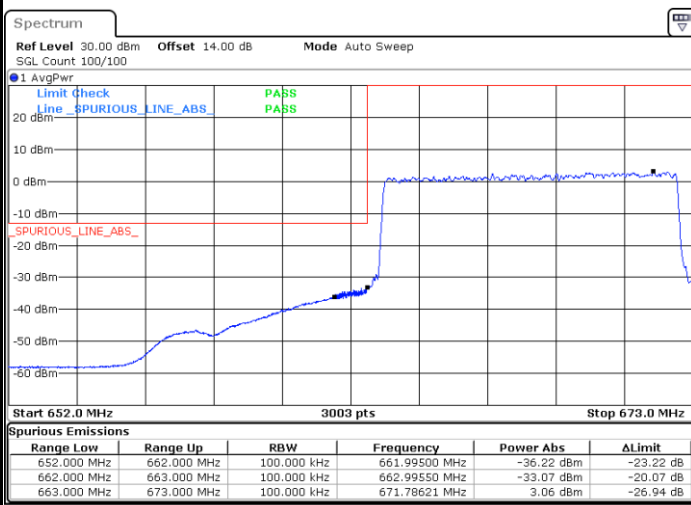
Date: 24.DEC.2023 17:53:51

Highest Band Edge / 1 RB



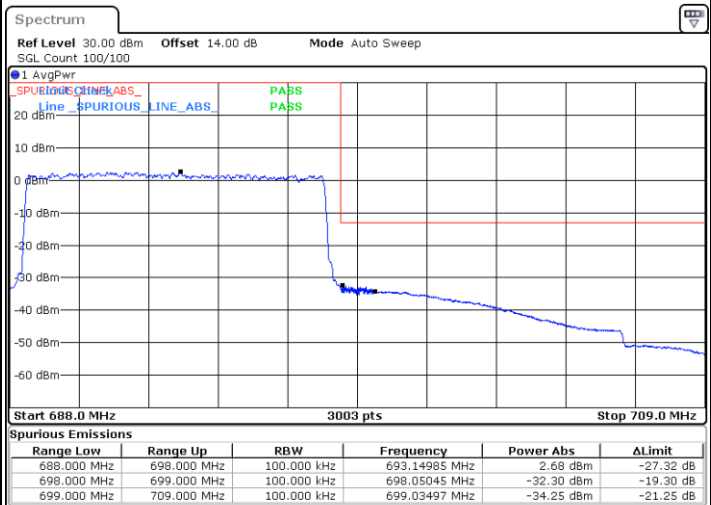
Date: 24.DEC.2023 17:59:50

Lowest Band Edge / Full RB



Date: 24.DEC.2023 17:55:52

Highest Band Edge / Full RB

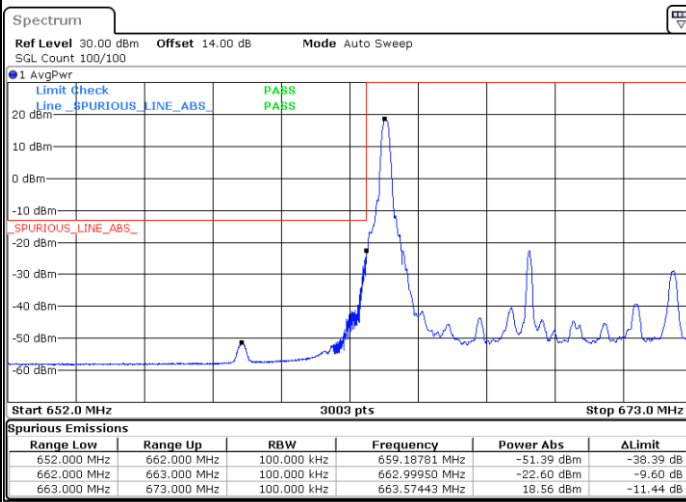


Date: 24.DEC.2023 18:01:50



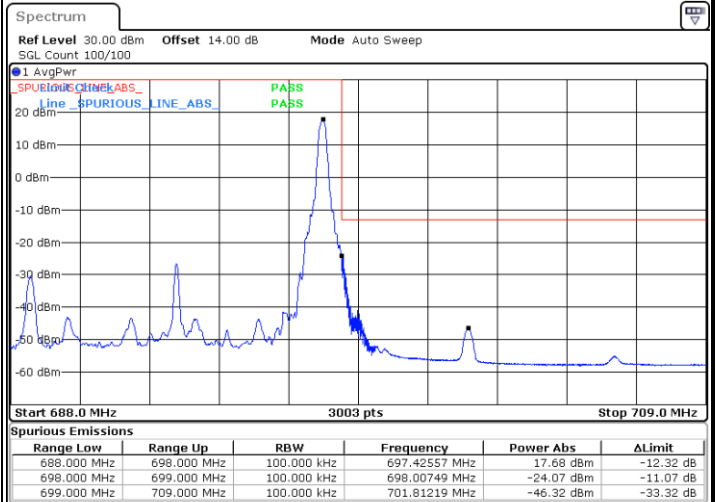
LTE Band 71 / 10MHz / 16QAM

Lowest Band Edge / 1RB



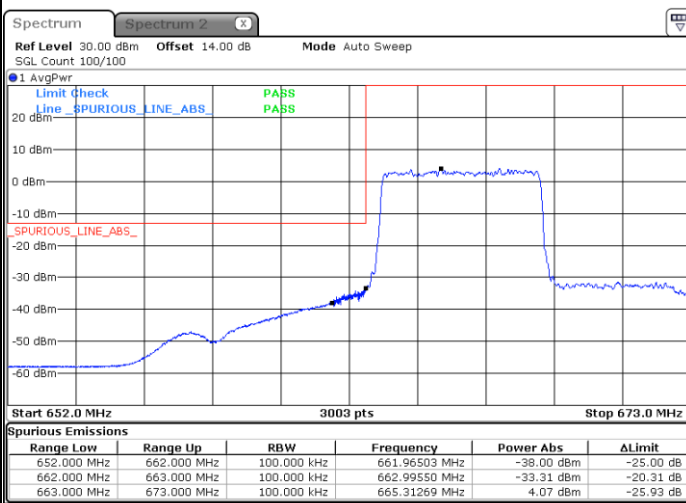
Date: 24.DEC.2023 17:54:51

Highest Band Edge / 1 RB



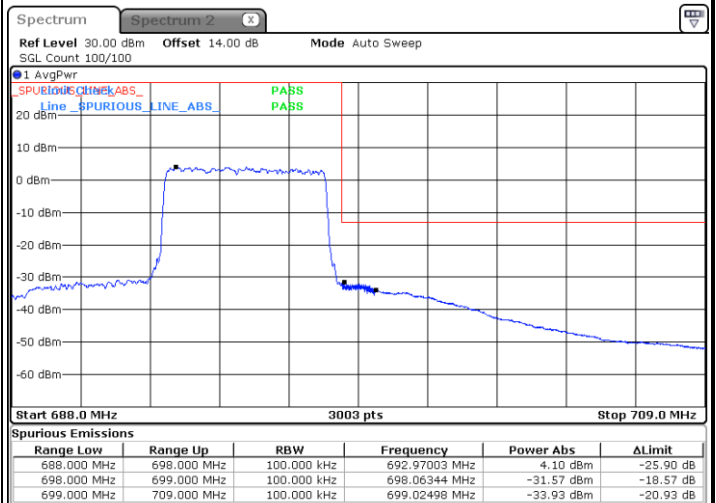
Date: 24.DEC.2023 18:00:50

Lowest Band Edge / Full RB



Date: 11.JAN.2024 15:36:19

Highest Band Edge / Full RB

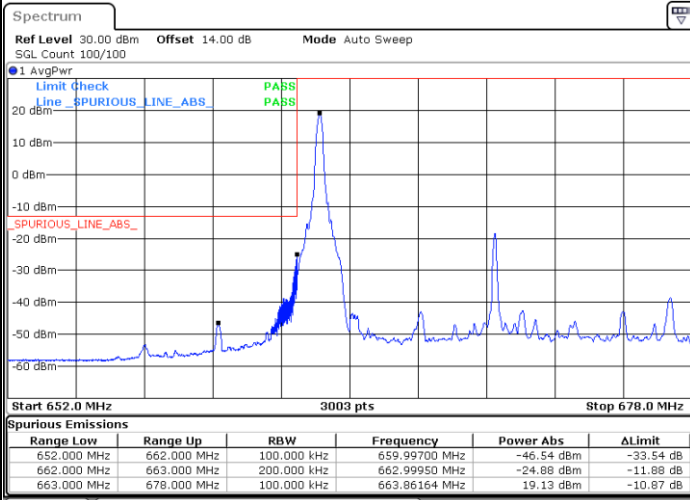


Date: 11.JAN.2024 19:47:55



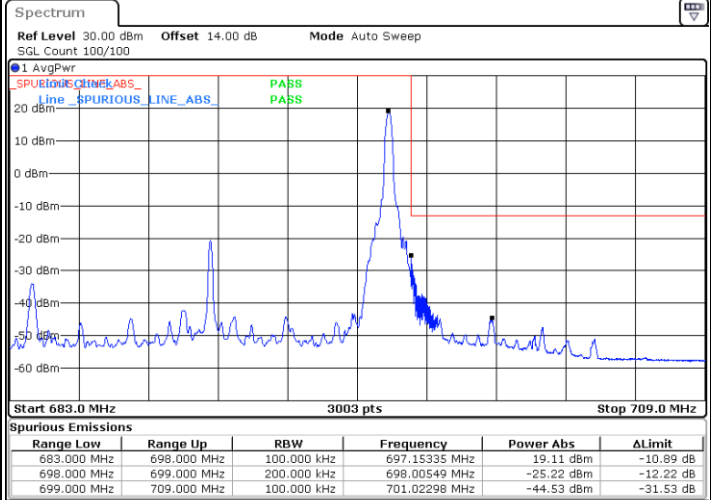
LTE Band 71 / 15MHz / QPSK

Lowest Band Edge / 1 RB



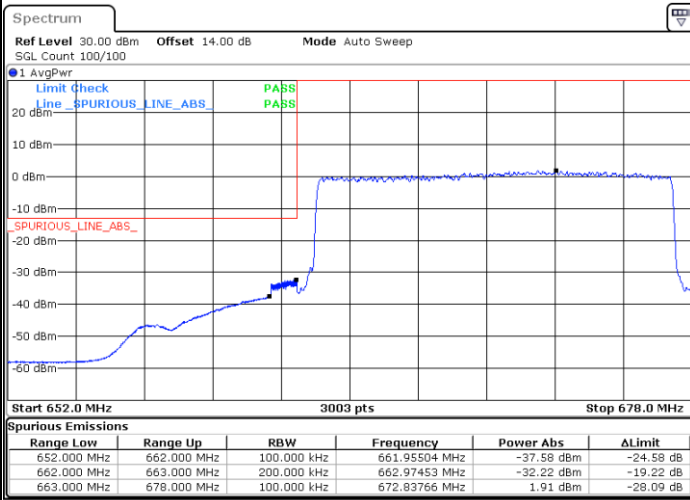
Date: 24.DEC.2023 18:04:43

Highest Band Edge / 1 RB



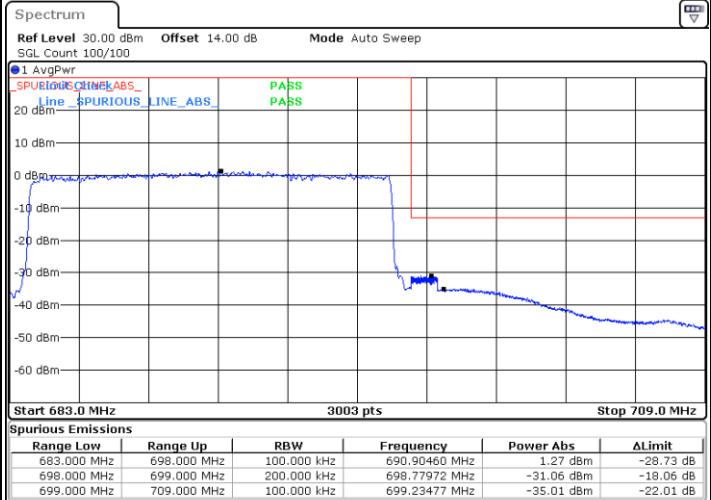
Date: 24.DEC.2023 18:10:41

Lowest Band Edge / Full RB



Date: 24.DEC.2023 18:06:44

Highest Band Edge / Full RB

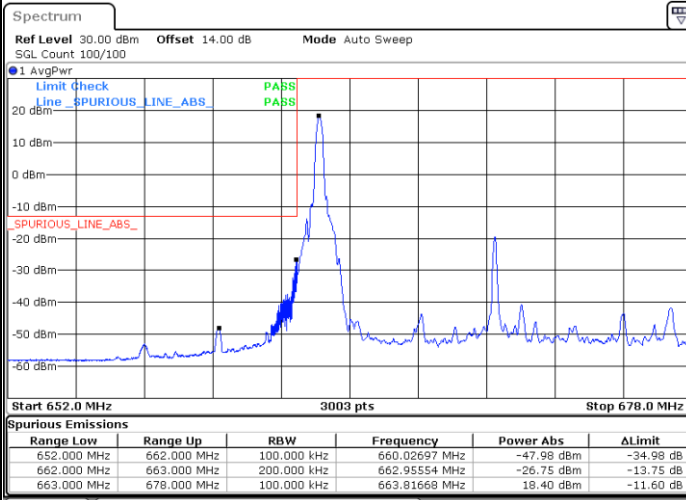


Date: 24.DEC.2023 18:12:42



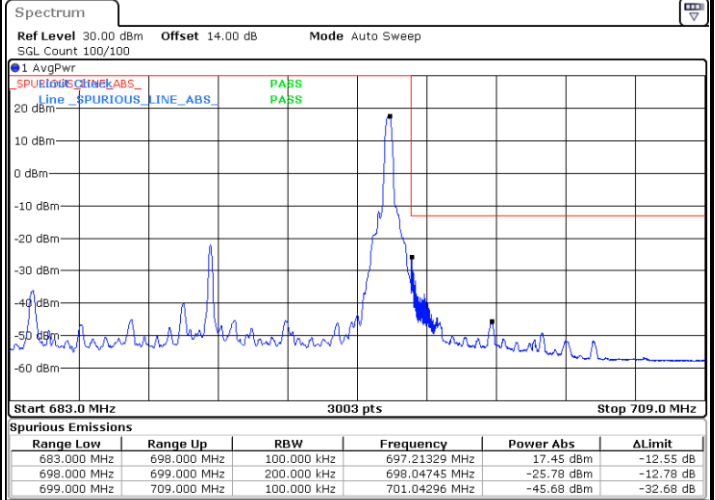
LTE Band 71 / 15MHz / 16QAM

Lowest Band Edge / 1RB



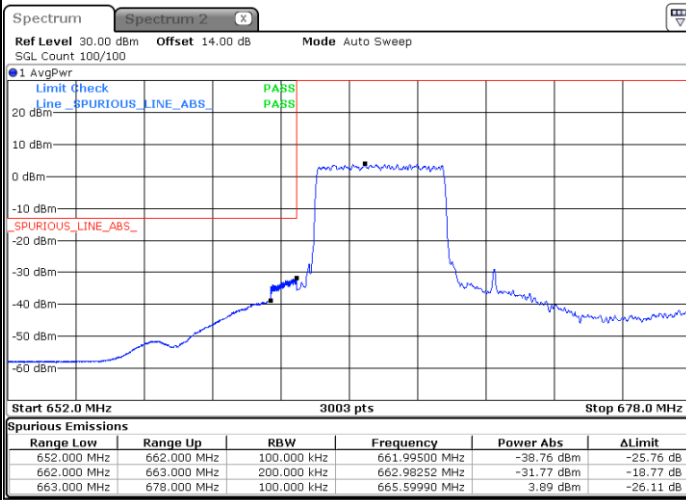
Date: 24.DEC.2023 18:05:43

Highest Band Edge / 1 RB



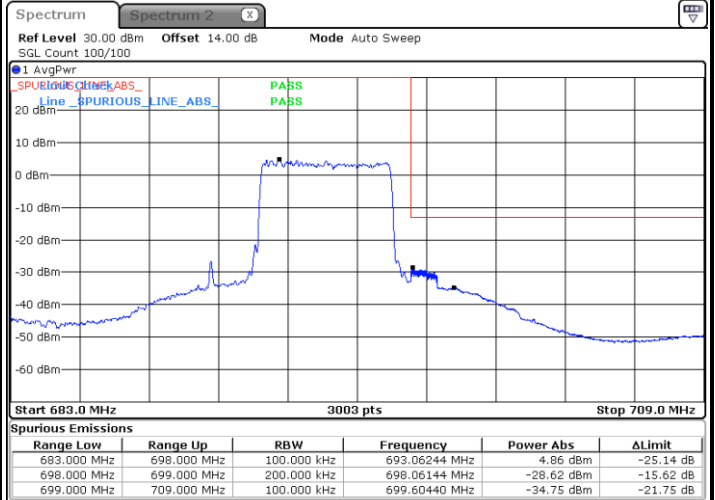
Date: 24.DEC.2023 18:11:41

Lowest Band Edge / Full RB



Date: 11.JAN.2024 15:38:15

Highest Band Edge / Full RB

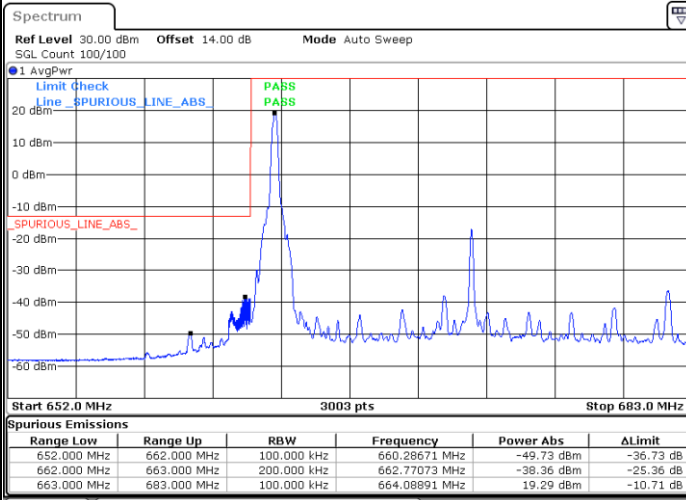


Date: 11.JAN.2024 21:16:39



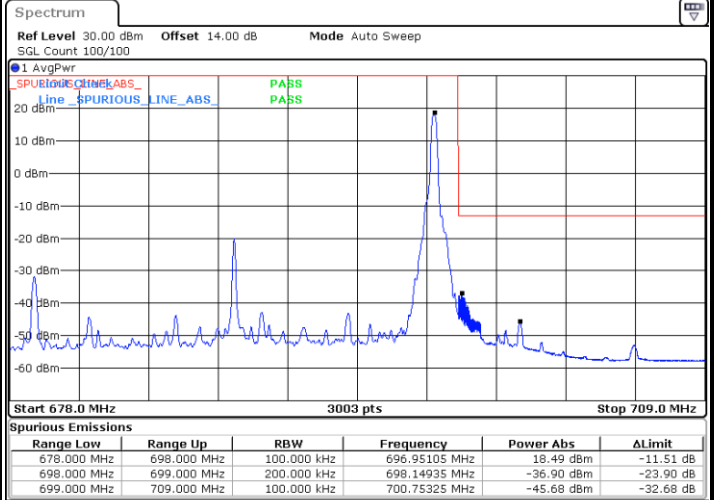
LTE Band 71 / 20MHz / QPSK

Lowest Band Edge / 1 RB



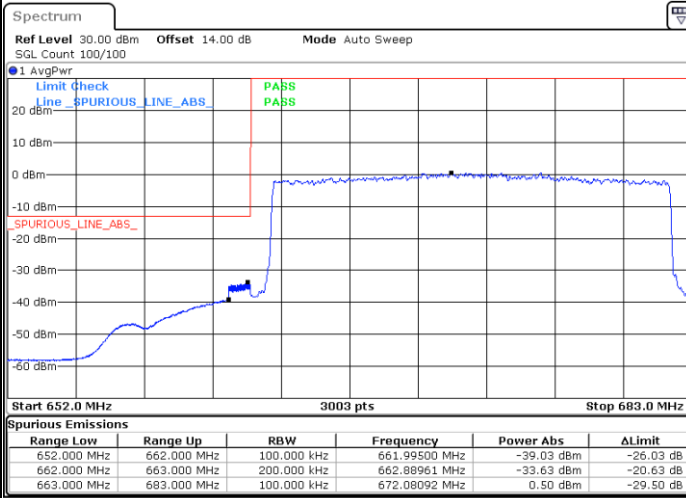
Date: 24.DEC.2023 18:15:34

Highest Band Edge / 1 RB



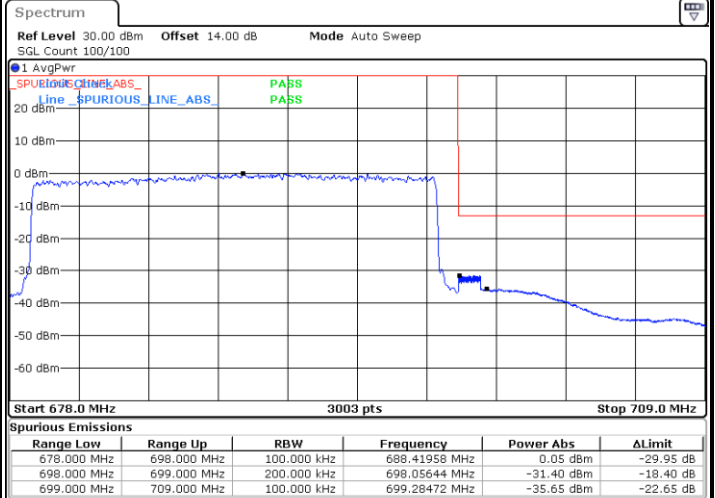
Date: 24.DEC.2023 18:21:48

Lowest Band Edge / Full RB



Date: 24.DEC.2023 18:17:35

Highest Band Edge / Full RB

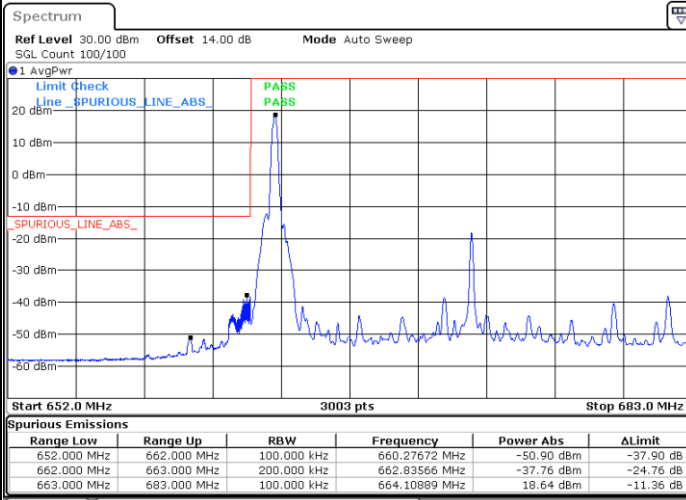


Date: 24.DEC.2023 18:23:49



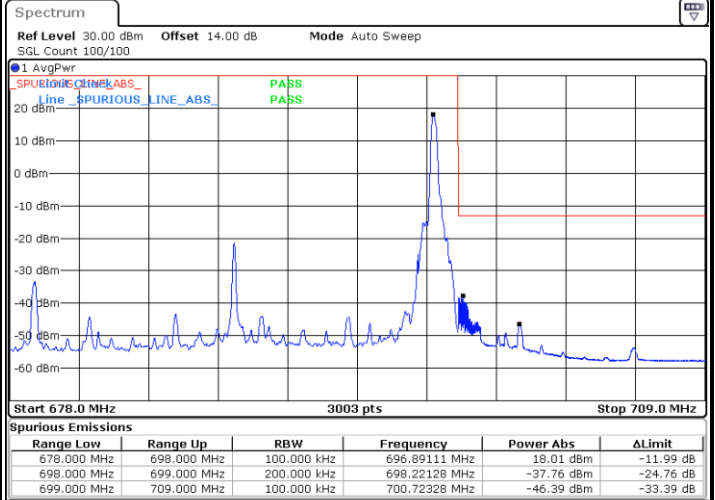
LTE Band 71 / 20MHz / 16QAM

Lowest Band Edge / 1RB



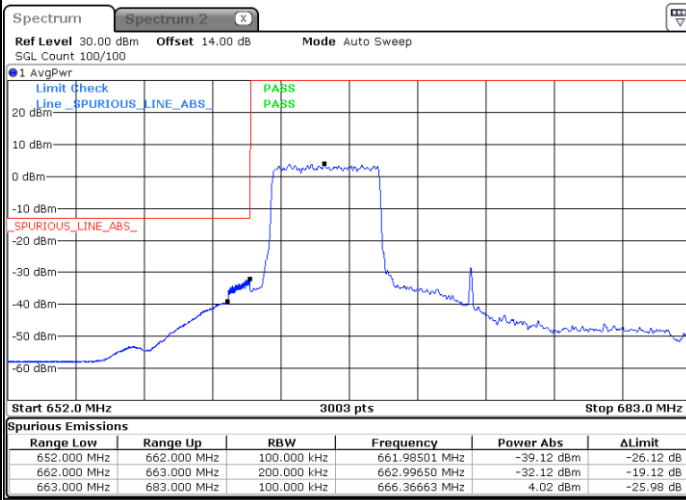
Date: 24.DEC.2023 18:16:35

Highest Band Edge / 1 RB



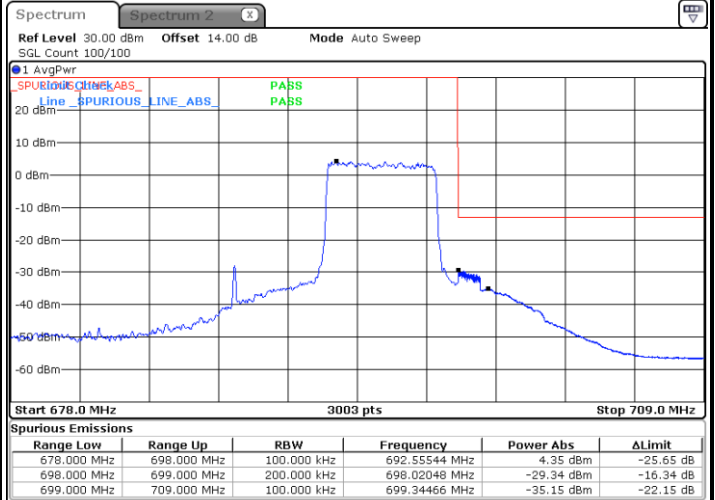
Date: 24.DEC.2023 18:22:48

Lowest Band Edge / Full RB



Date: 11.JAN.2024 15:40:16

Highest Band Edge / Full RB



Date: 11.JAN.2024 21:15:26

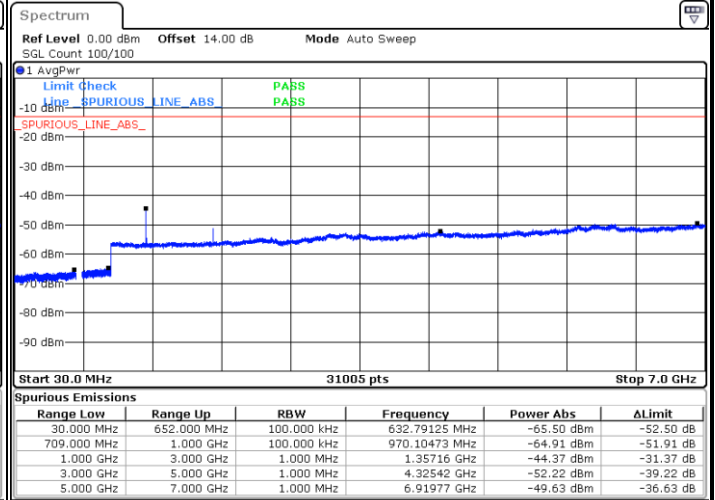
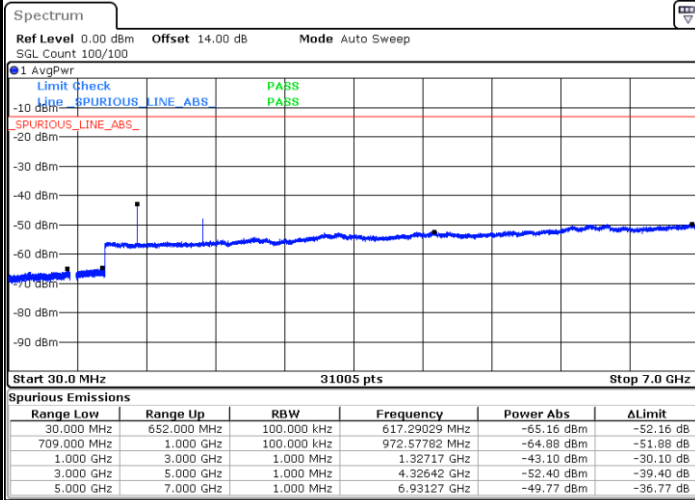


# Conducted Spurious Emission

## LTE Band 71 / 5MHz

### Lowest Channel / QPSK

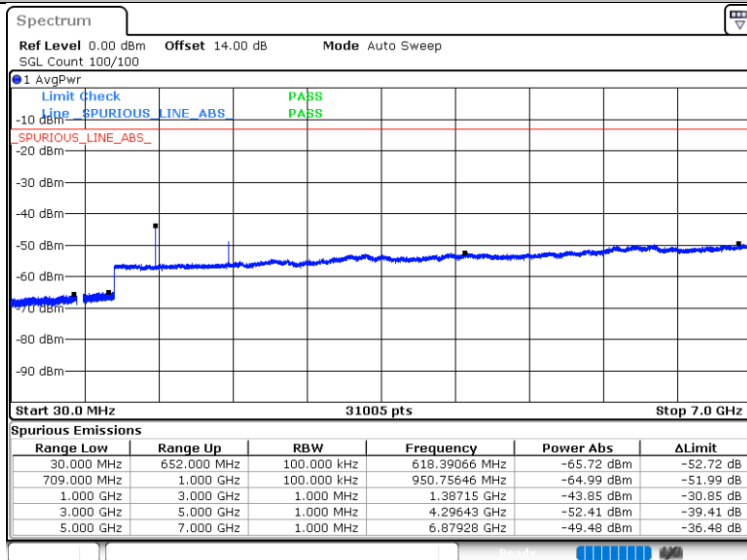
### Middle Channel / QPSK



Date: 24.DEC.2023 17:44:30

Date: 24.DEC.2023 17:45:39

### Highest Channel / QPSK



Date: 24.DEC.2023 17:52:08

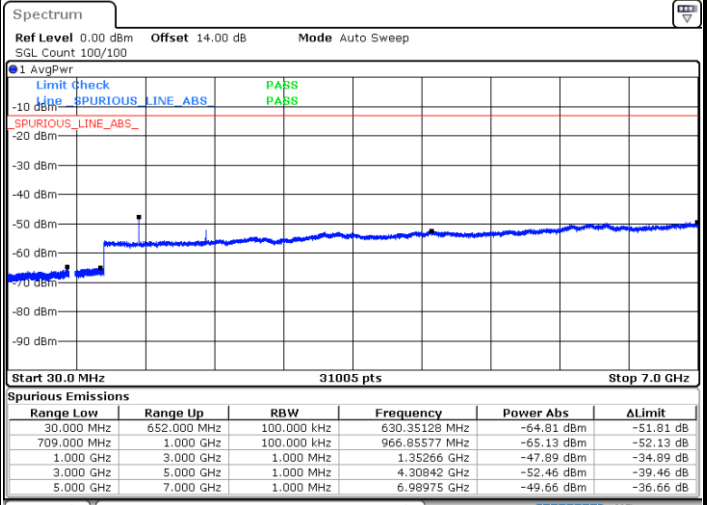
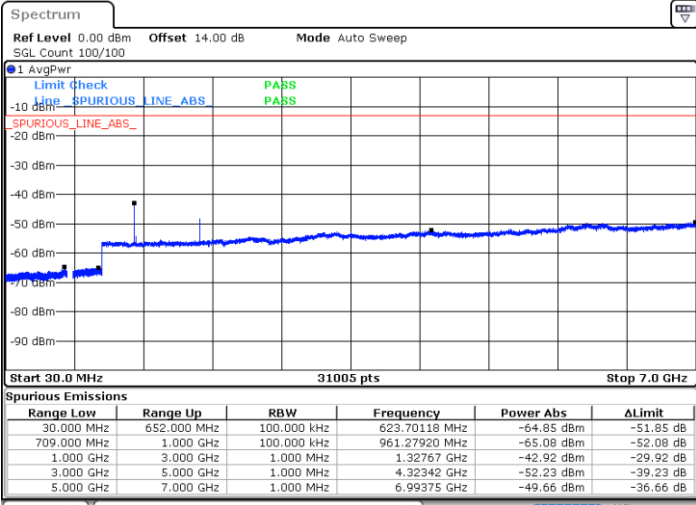




LTE Band 71 / 10MHz

Lowest Channel / QPSK

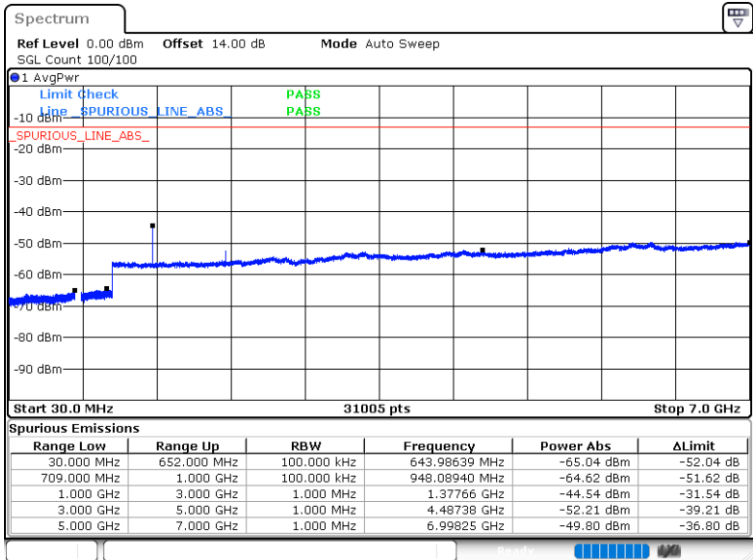
Middle Channel / QPSK



Date: 24.DEC.2023 17:57:02

Date: 24.DEC.2023 17:58:11

Highest Channel / QPSK



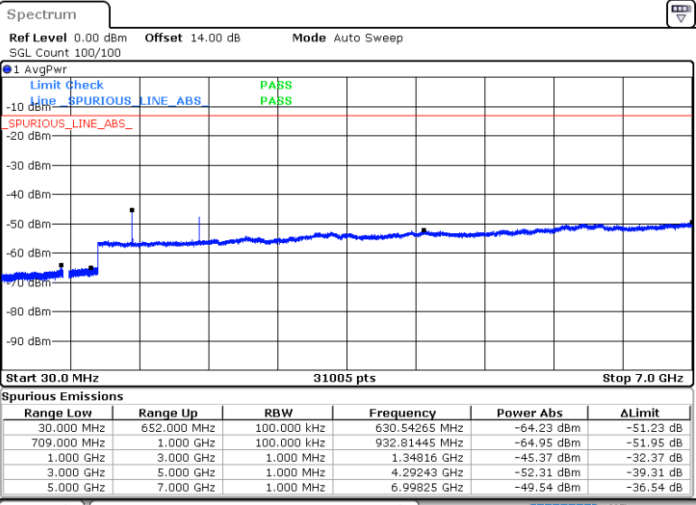
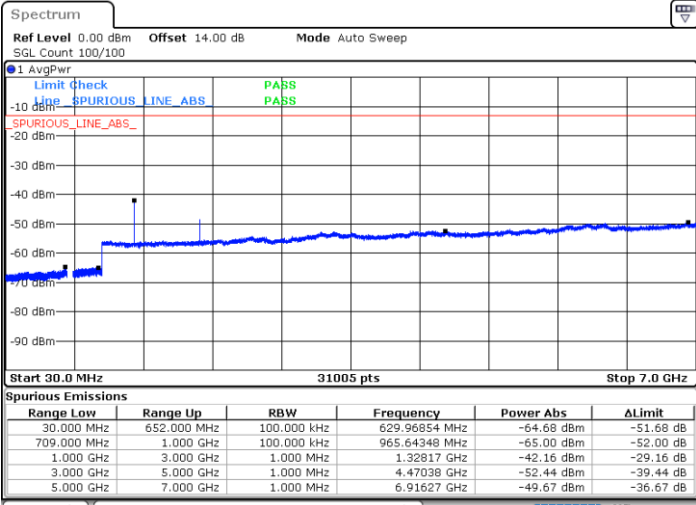
Date: 24.DEC.2023 18:03:00



LTE Band 71 / 15MHz

Lowest Channel / QPSK

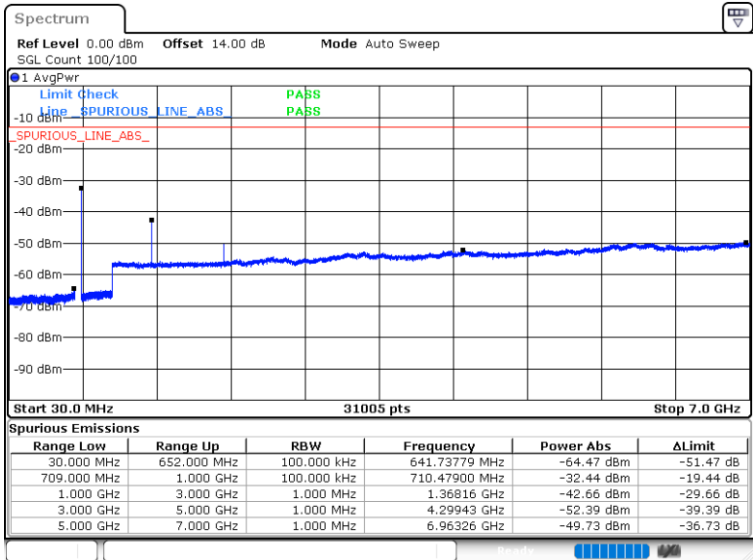
Middle Channel / QPSK



Date: 24.DEC.2023 18:07:53

Date: 24.DEC.2023 18:09:02

Highest Channel / QPSK



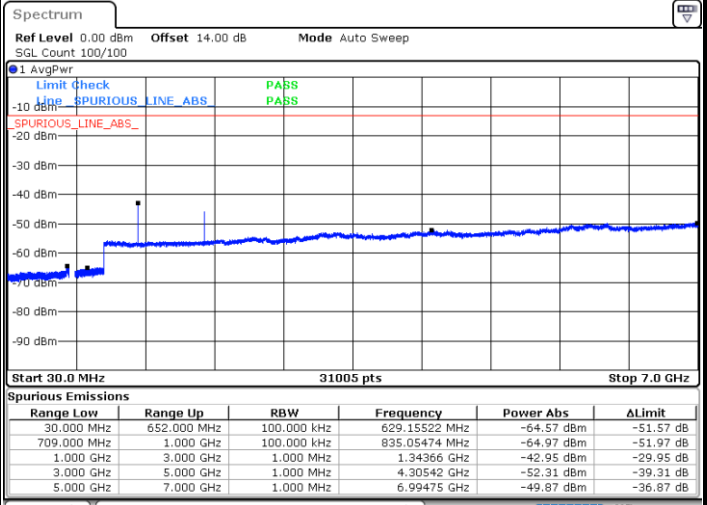
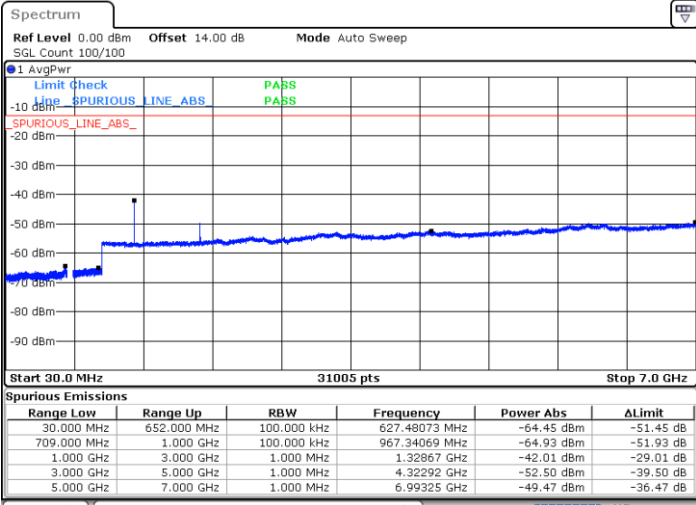
Date: 24.DEC.2023 18:13:51



LTE Band 71 / 20MHz

Lowest Channel / QPSK

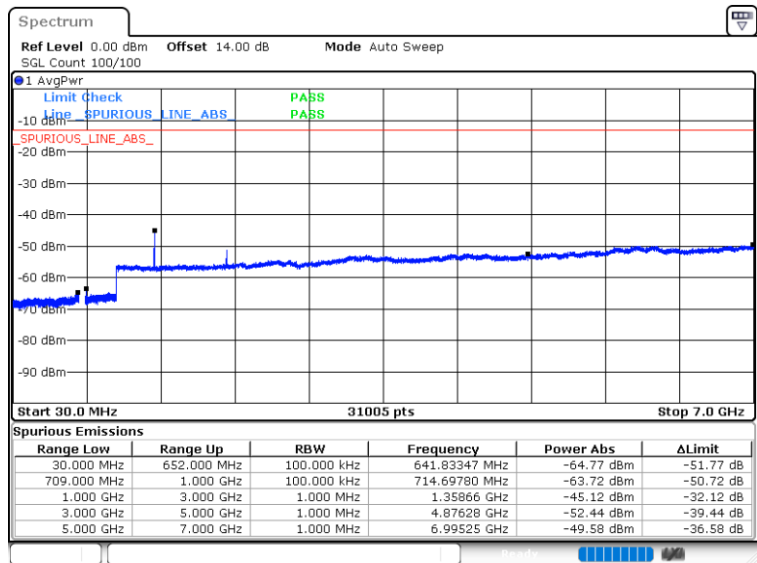
Middle Channel / QPSK



Date: 24.DEC.2023 18:18:45

Date: 24.DEC.2023 18:19:54

Highest Channel / QPSK



Date: 24.DEC.2023 18:24:58



### 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	0.0014	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	End Point	0.0010	

**Note:**

1. Normal Voltage = 3.8 V. ; End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

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

LTE Band 2 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3742.18	-48.09	-13	-35.09	-63.80	-54.84	5.85	12.60	H
	5613.27	-57.56	-13	-44.56	-76.32	-63.36	7.30	13.10	H
	7484.36	-55.05	-13	-42.05	-79.94	-58.20	8.35	11.50	H
	3742.18	-43.25	-13	-30.25	-58.58	-50.00	5.85	12.60	V
	5613.27	-54.81	-13	-41.81	-73.05	-60.61	7.30	13.10	V
	7484.36	-51.22	-13	-38.22	-76.5	-54.37	8.35	11.50	V

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

LTE Band 5 / 10MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664.18	-50.61	-13	-37.61	-58.03	-53.86	4.00	9.40	H
	2496.27	-63.27	-13	-50.27	-74.73	-66.84	4.88	10.60	H
	3328.36	-63.05	-13	-50.05	-77.22	-67.98	5.52	12.60	H
	1664.18	-45.30	-13	-32.30	-52.86	-48.55	4.00	9.40	V
	2496.27	-58.31	-13	-45.31	-69.86	-61.88	4.88	10.60	V
	3328.36	-55.19	-13	-42.19	-69.34	-60.12	5.52	12.60	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 )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-49.32	-13	-36.32	-57.82	-52.57	4.00	9.40	H
	2109	-60.53	-13	-47.53	-71.33	-64.10	4.88	10.60	H
	2812	-63.62	-13	-50.62	-76.79	-68.55	5.52	12.60	H
	1406	-43.32	-13	-30.32	-51.71	-46.57	4.00	9.40	V
	2109	-57.68	-13	-44.68	-68.71	-61.25	4.88	10.60	V
	2812	-61.11	-13	-48.11	-74.21	-66.04	5.52	12.60	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 )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-57.19	-42.15	-15.04	-66.40	-60.44	4.00	9.40	H
	2339.25	-61.81	-13	-48.81	-73.84	-65.38	4.88	10.60	H
	3119	-61.24	-13	-48.24	-76.40	-66.17	5.52	12.60	H
	1559.5	-54.94	-42.15	-12.79	-63.92	-58.19	4.00	9.40	V
	2339.25	-60.07	-13	-47.07	-72.11	-63.64	4.88	10.60	V
	3119	-61.52	-13	-48.52	-76.49	-66.45	5.52	12.60	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 )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-62.63	-42.15	-20.48	-71.84	-65.88	4.00	9.40	H
	2339.25	-64.09	-13	-51.09	-76.12	-67.66	4.88	10.60	H
	3119	-61.20	-13	-48.20	-76.36	-66.13	5.52	12.60	H
	1559.5	-60.70	-42.15	-18.55	-69.68	-63.95	4.00	9.40	V
	2339.25	-63.96	-13	-50.96	-76.00	-67.53	4.88	10.60	V
	3119	-61.32	-13	-48.32	-76.29	-66.25	5.52	12.60	V

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

LTE Band 66 / 20MHz / QPSK									
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	3472	-57.35	-13	-44.35	-71.79	-64.20	5.65	12.50	H
	5208	-61.48	-13	-48.48	-80.61	-67.15	7.13	12.80	H
	6944	-56.88	-13	-43.88	-79.87	-60.28	8.40	11.80	H
	3472	-54.10	-13	-41.10	-68.57	-60.95	5.65	12.50	V
	5208	-61.27	-13	-48.27	-80.01	-66.94	7.13	12.80	V
	6944	-55.31	-13	-42.31	-78.57	-58.71	8.40	11.80	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 )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1343	-40.72	-13	-27.72	-48.30	-43.97	4.00	9.40	H
	2014.5	-64.40	-13	-51.40	-74.21	-67.97	4.88	10.60	H
	2686	-64.35	-13	-51.35	-76.96	-69.28	5.52	12.60	H
	1343	-38.03	-13	-25.03	-45.54	-41.28	4.00	9.40	V
	2014.5	-56.51	-13	-43.51	-66.43	-60.08	4.88	10.60	V
	2686	-64.33	-13	-51.33	-76.82	-69.26	5.52	12.60	V

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