

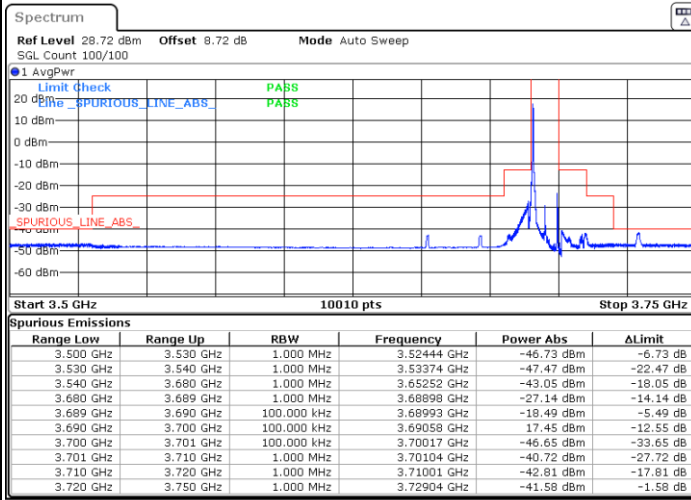


LTE Band 48 / 10MHz

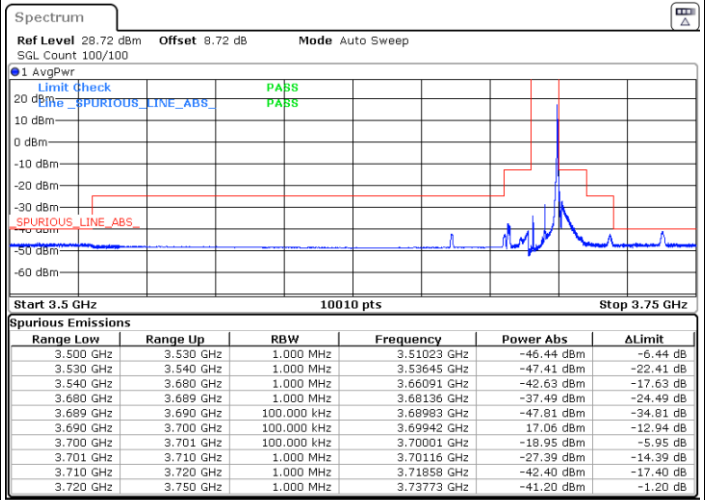
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



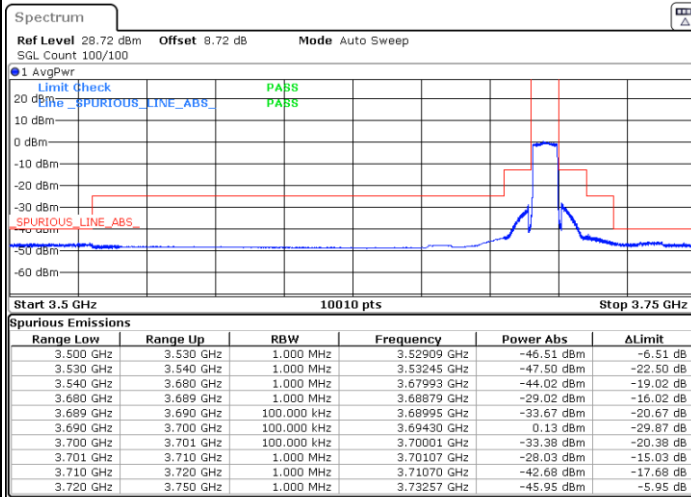
Date: 6.JAN.2023 11:45:24



Date: 6.JAN.2023 11:47:05

Highest Channel / FullIRB

N/A



Date: 6.JAN.2023 11:55:29

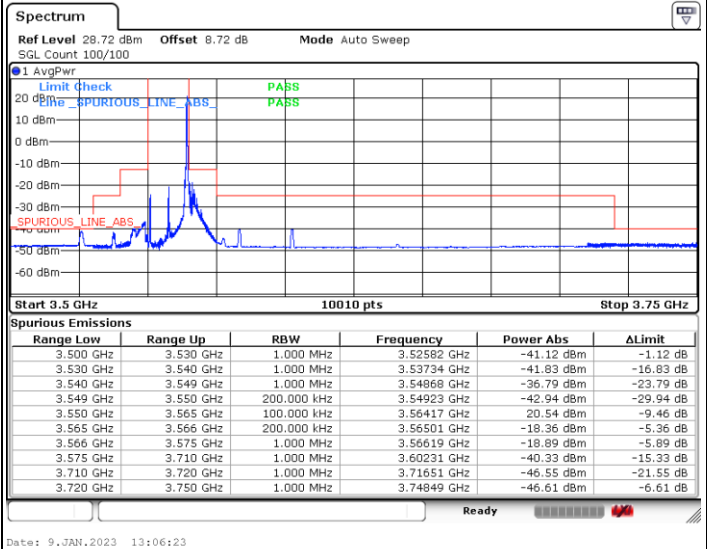
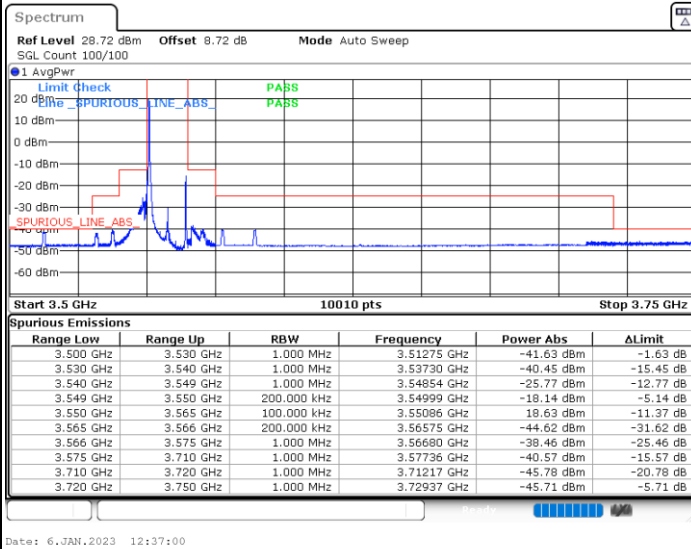


LTE Band 48 / 15MHz

QPSK

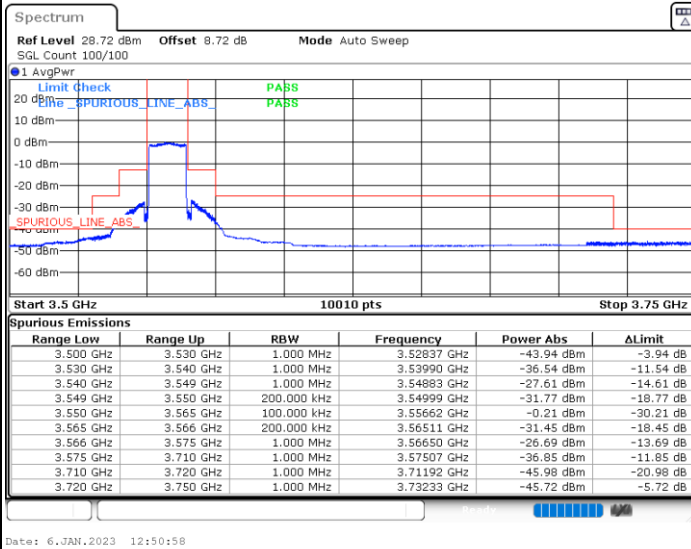
Lowest Channel / 1RB0

Lowest Channel / 1RBmax



Lowest Channel / FullRB

N/A



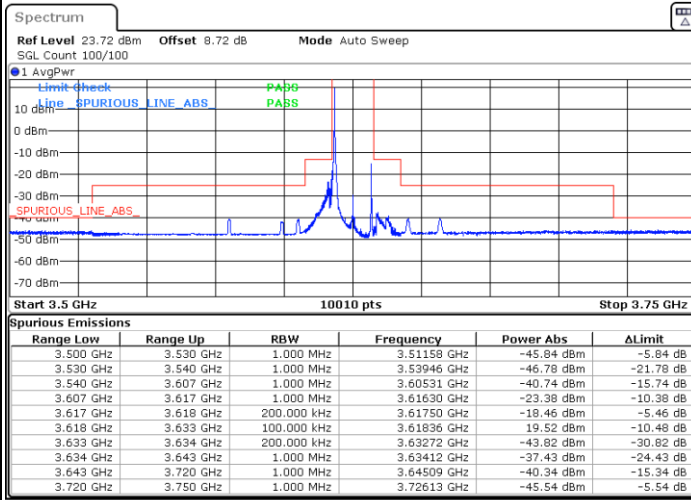


LTE Band 48 / 15MHz

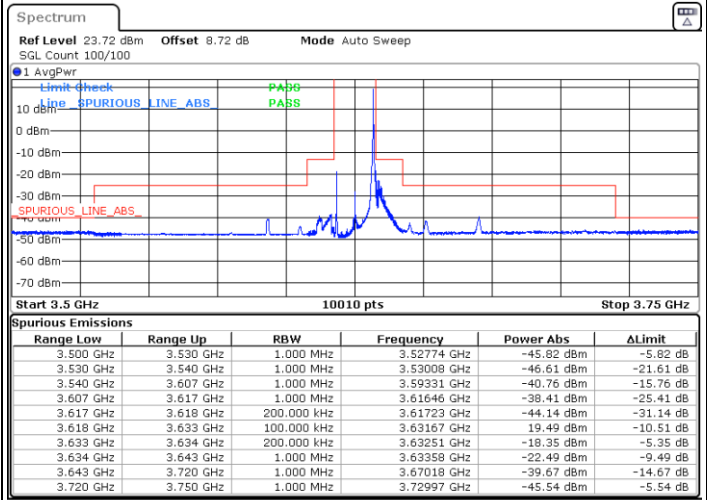
QPSK

Middle Channel / 1RB0

Middle Channel / 1RBmax



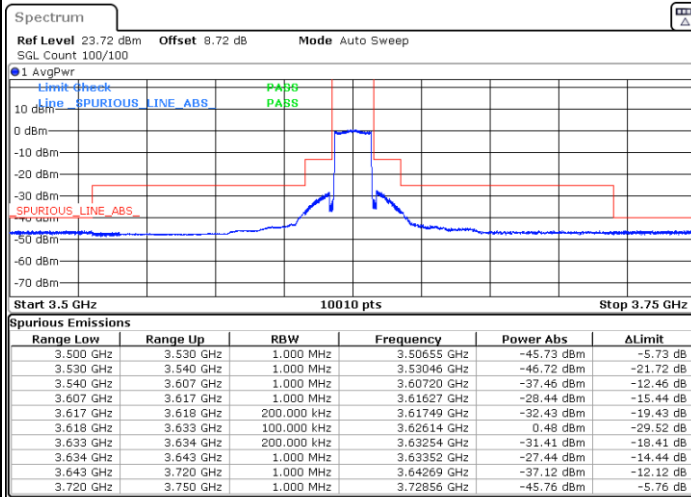
Date: 6.JAN.2023 12:53:36



Date: 6.JAN.2023 13:01:58

Middle Channel / Full

N/A



Date: 6.JAN.2023 13:03:39

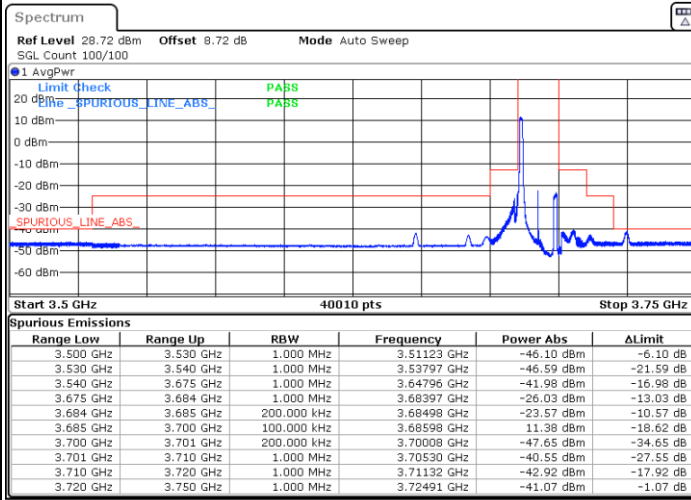


LTE Band 48 / 15MHz

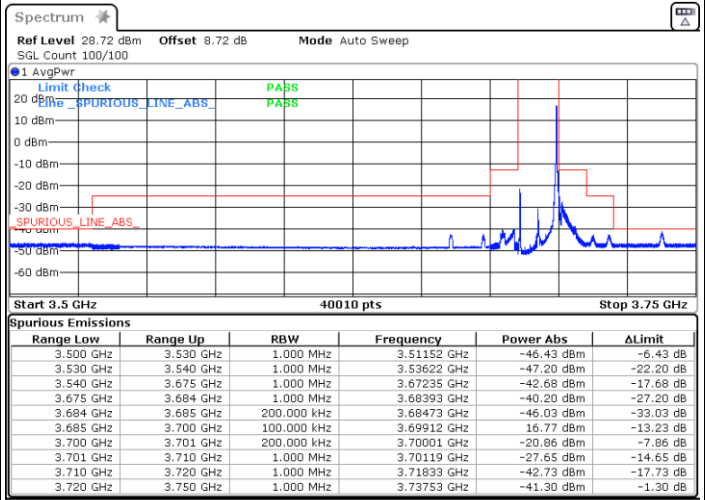
QPSK

Highest Channel / 1RB0

Highest Channel / 1RBmax



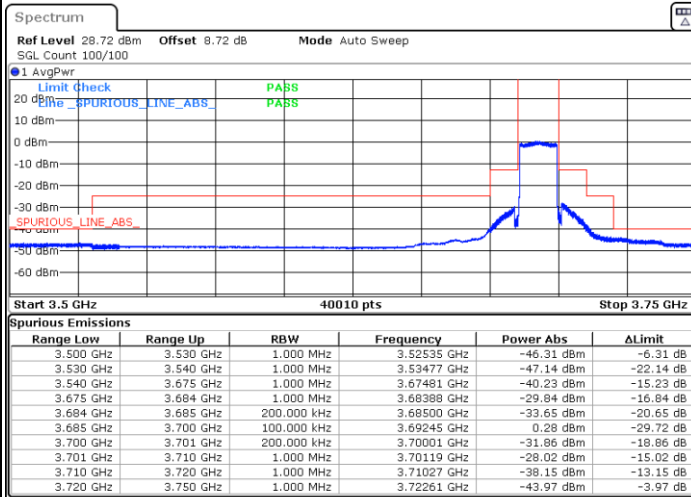
Date: 6.JAN.2023 13:15:39



Date: 6.JAN.2023 13:31:51

Highest Channel / FullIRB

N/A



Date: 6.JAN.2023 13:26:08

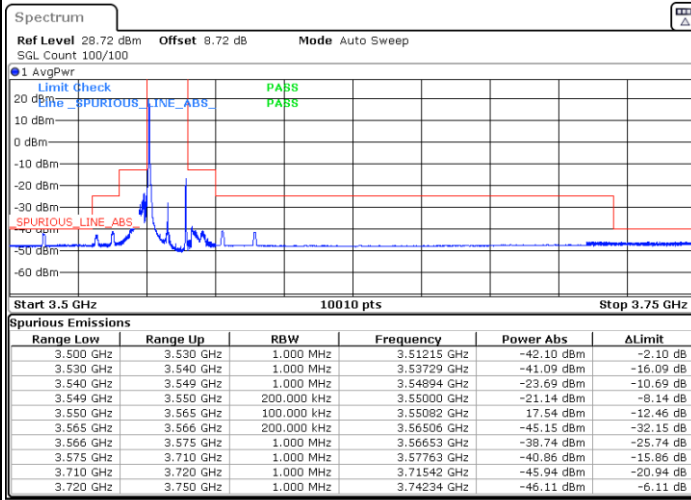


LTE Band 48 / 15MHz

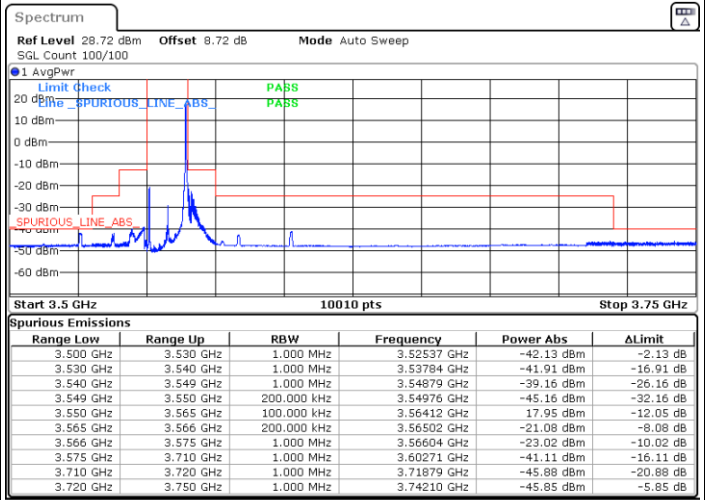
16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



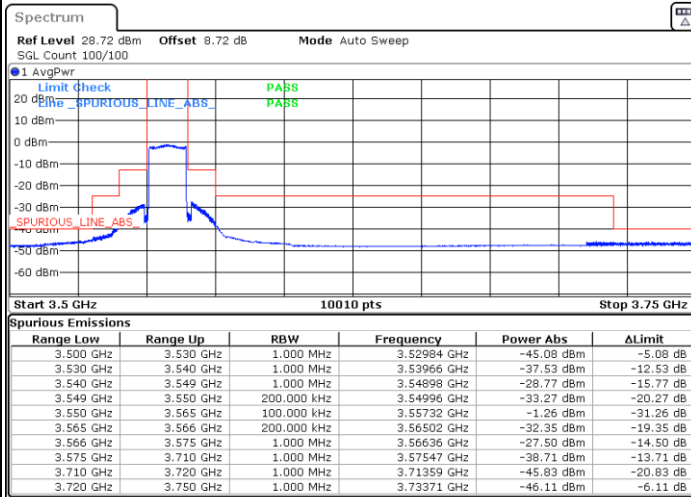
Date: 6.JAN.2023 12:38:45



Date: 6.JAN.2023 12:43:59

Lowest Channel / FullRB

N/A



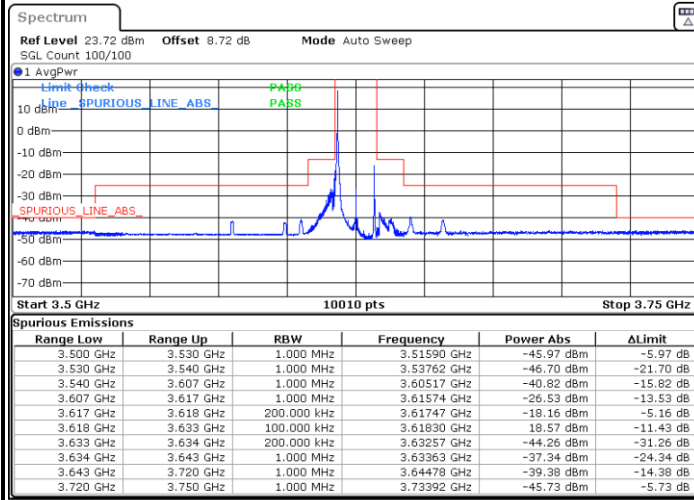
Date: 6.JAN.2023 12:49:13



LTE Band 48 / 15MHz

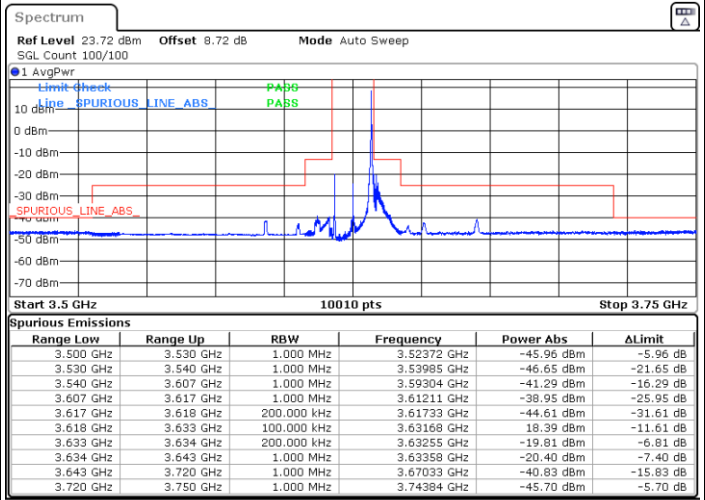
16QAM

Middle Channel / 1RB0



Date: 6.JAN.2023 12:55:16

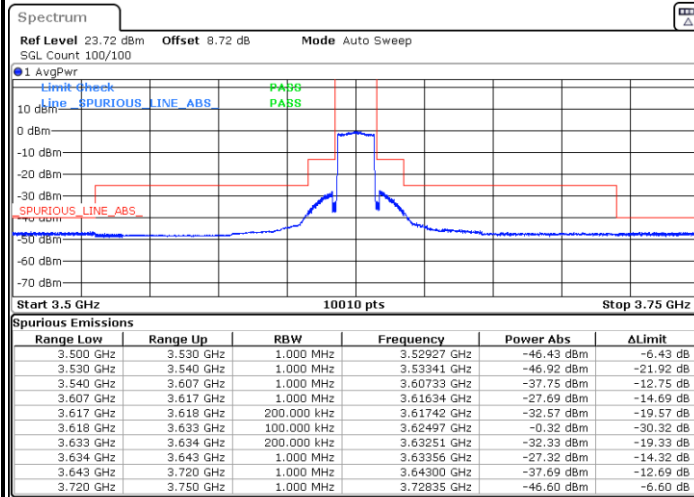
Middle Channel / 1RBmax



Date: 6.JAN.2023 13:00:18

Middle Channel / Full

N/A



Date: 6.JAN.2023 13:05:20

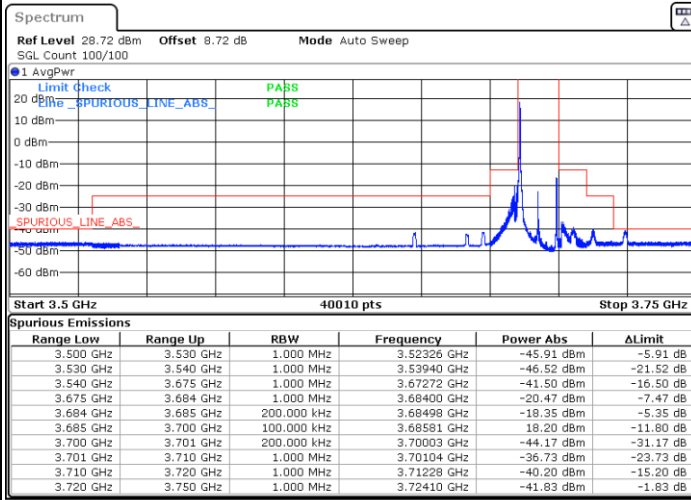


LTE Band 48 / 15MHz

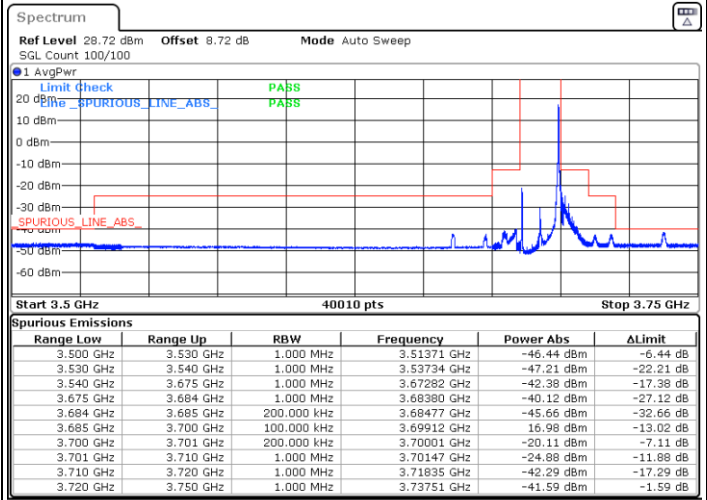
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



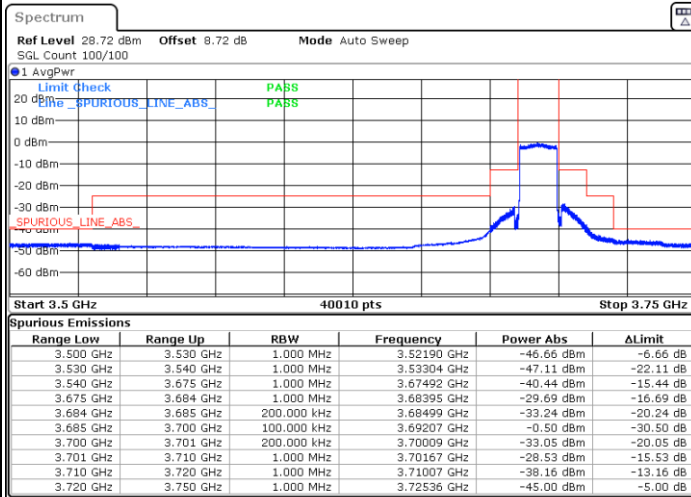
Date: 6.JAN.2023 13:17:24



Date: 6.JAN.2023 13:33:07

Highest Channel / FullIRB

N/A



Date: 6.JAN.2023 13:27:53

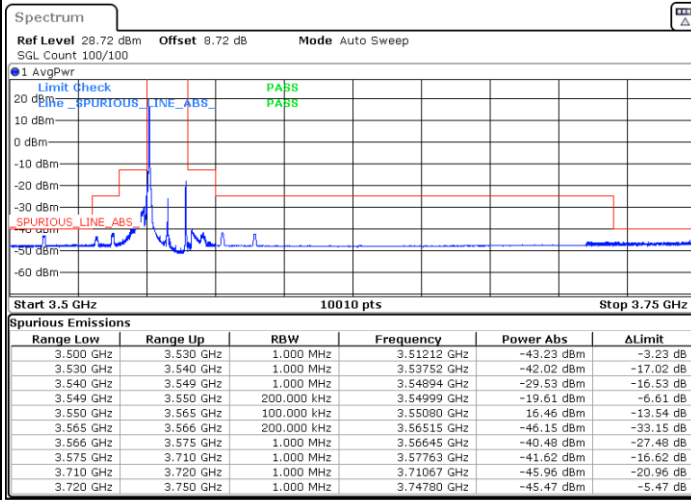


LTE Band 48 / 15MHz

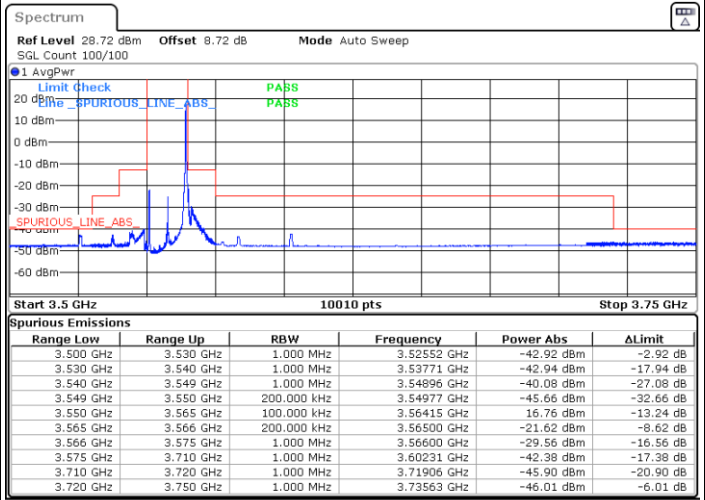
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



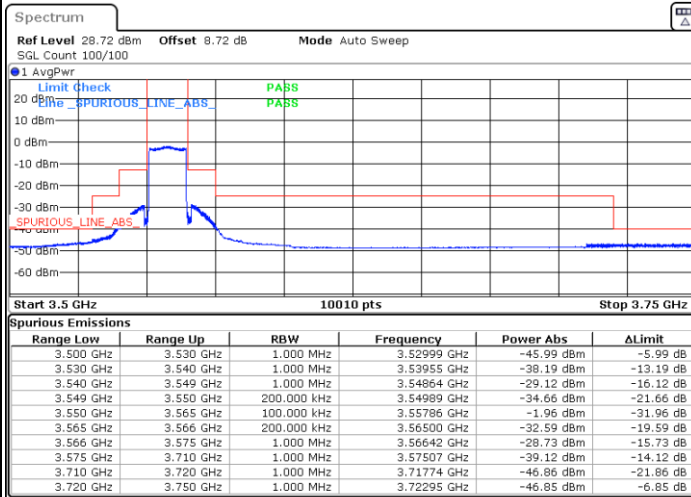
Date: 6.JAN.2023 12:40:30



Date: 6.JAN.2023 12:45:44

Lowest Channel / FullRB

N/A



Date: 6.JAN.2023 12:47:29

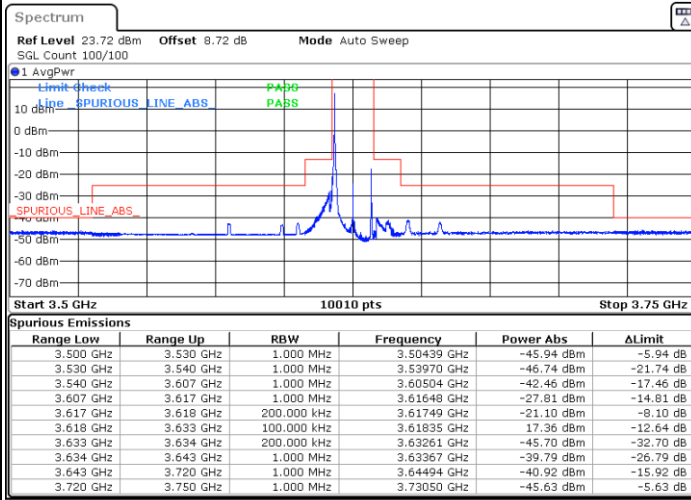


LTE Band 48 / 15MHz

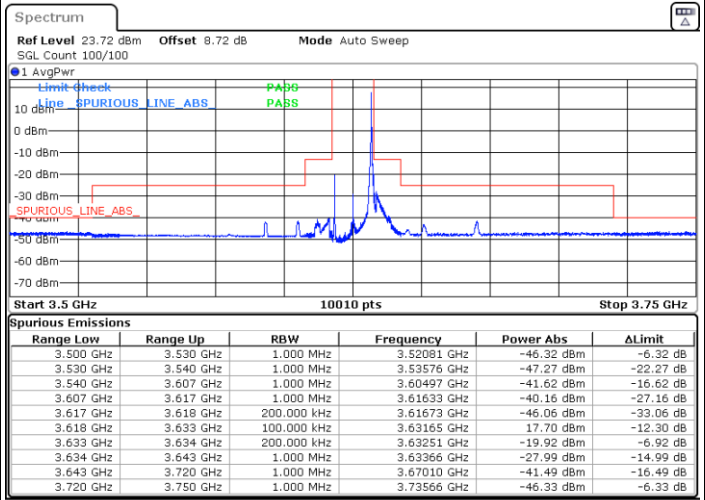
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



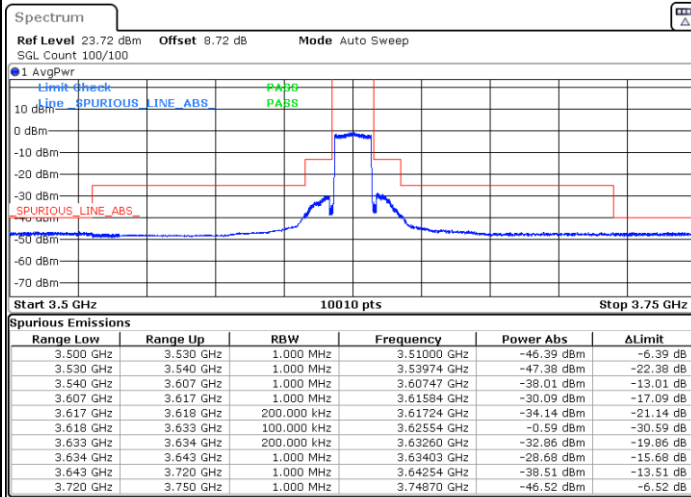
Date: 6.JAN.2023 12:56:57



Date: 6.JAN.2023 12:58:37

Middle Channel / Full

N/A



Date: 6.JAN.2023 13:07:01

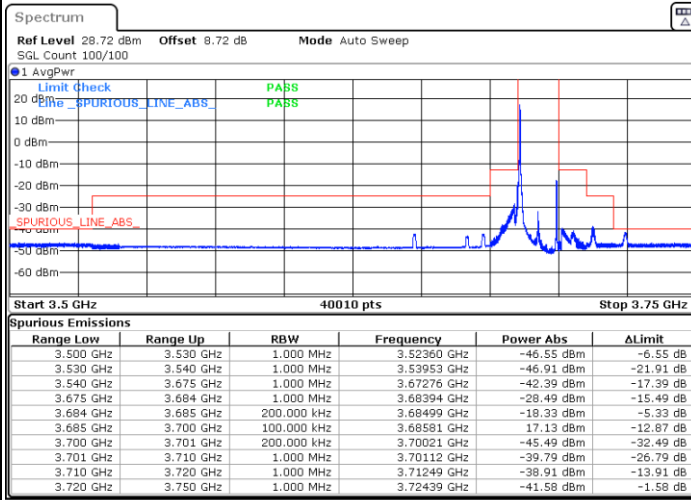


LTE Band 48 / 15MHz

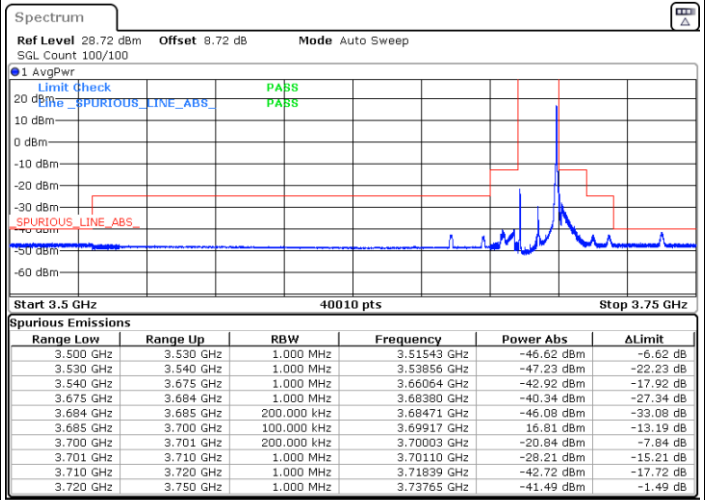
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



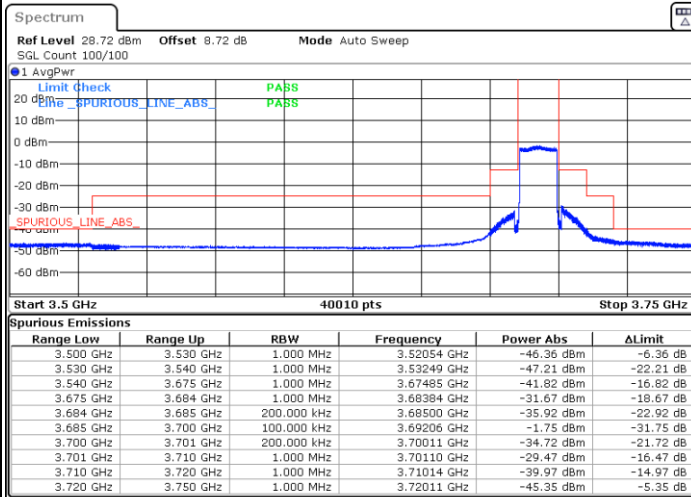
Date: 6.JAN.2023 13:19:09



Date: 6.JAN.2023 13:20:53

Highest Channel / FullIRB

N/A



Date: 6.JAN.2023 13:29:38

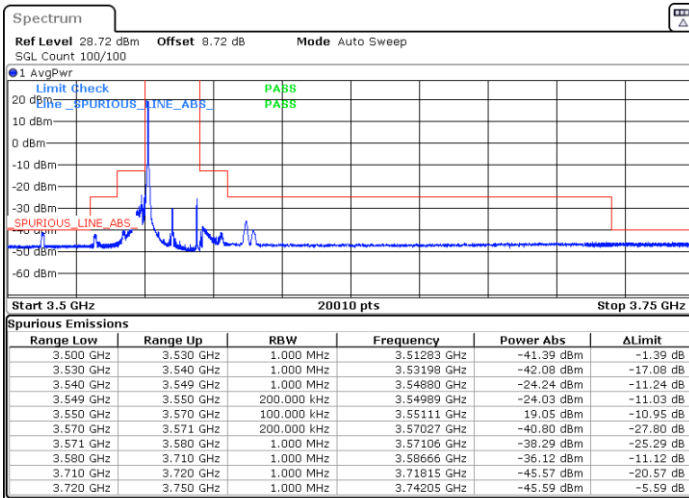


LTE Band 48 / 20MHz

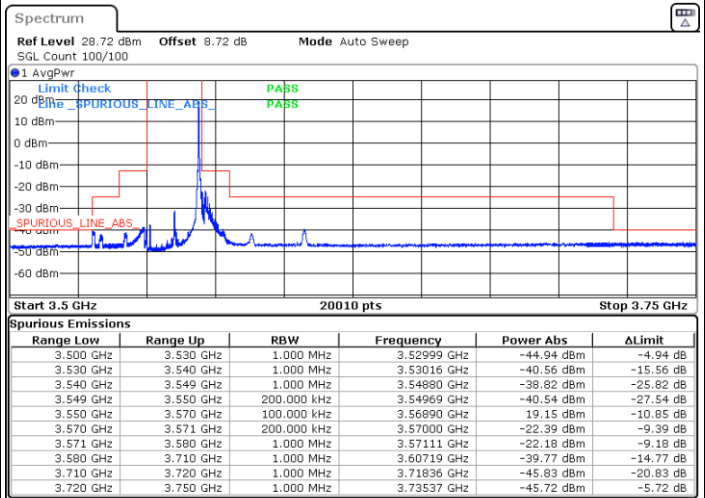
QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



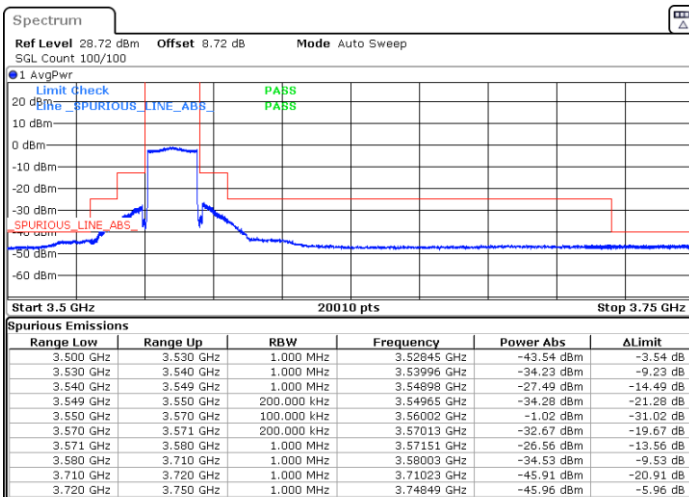
Date: 6.JAN.2023 13:36:29



Date: 6.JAN.2023 13:44:55

Lowest Channel / FullIRB

N/A



Date: 6.JAN.2023 13:46:36

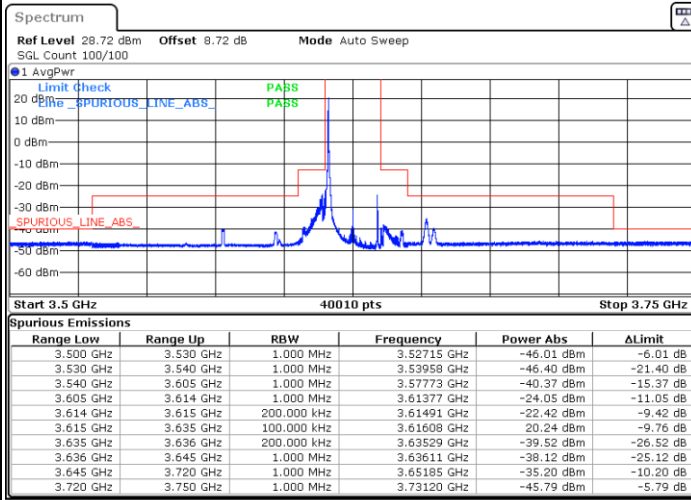


LTE Band 48 / 20MHz

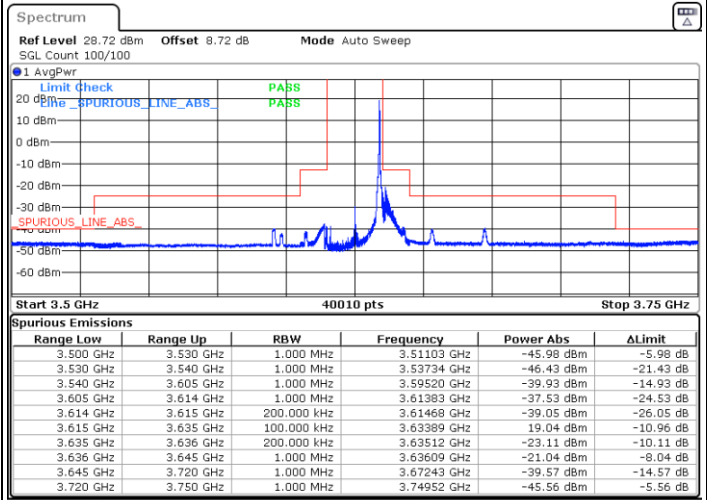
QPSK

Middle Channel / 1RB0

Middle Channel / 1RBmax



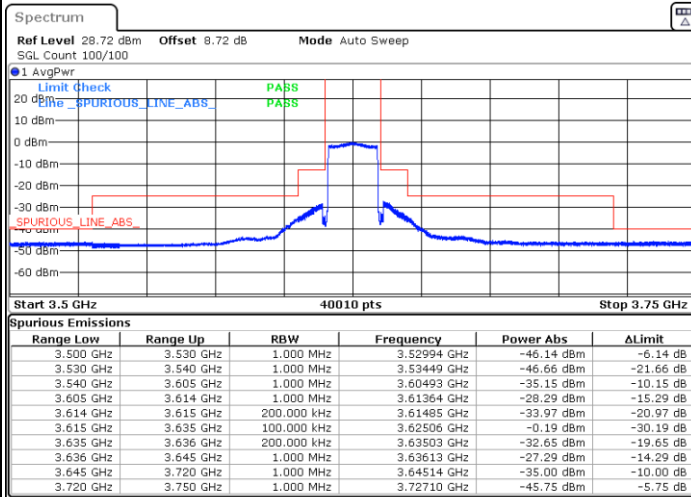
Date: 6.JAN.2023 13:51:39



Date: 6.JAN.2023 14:00:04

Middle Channel / Full

N/A



Date: 6.JAN.2023 14:01:45

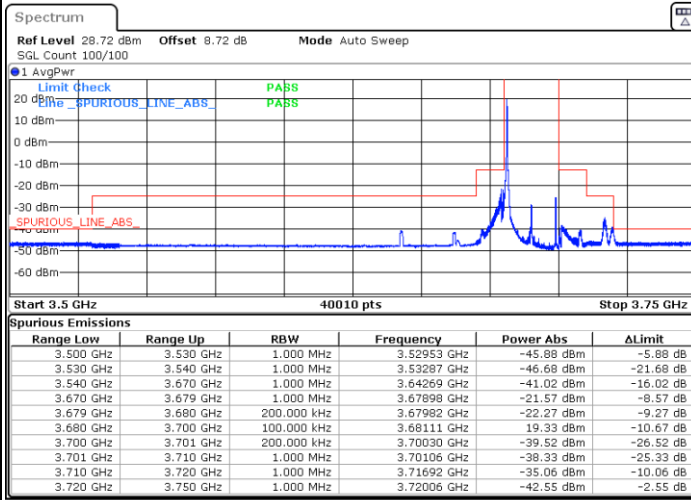


LTE Band 48 / 20MHz

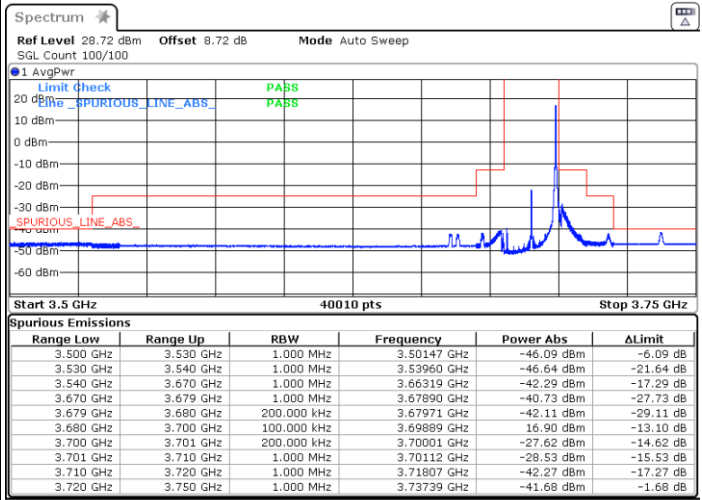
QPSK

Highest Channel / 1RB0

Highest Channel / 1RBmax



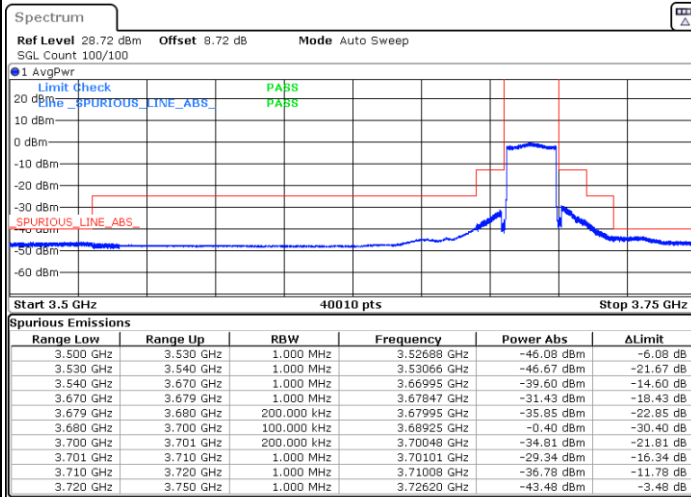
Date: 6.JAN.2023 14:06:48



Date: 6.JAN.2023 14:29:19

Highest Channel / FullRB

N/A



Date: 6.JAN.2023 14:16:55

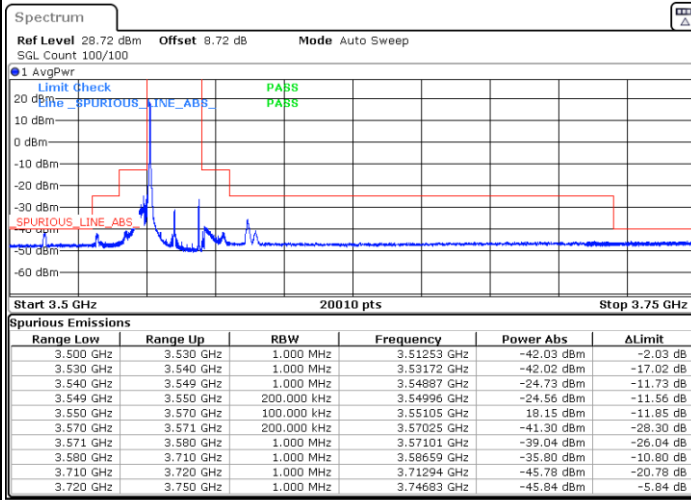


LTE Band 48 / 20MHz

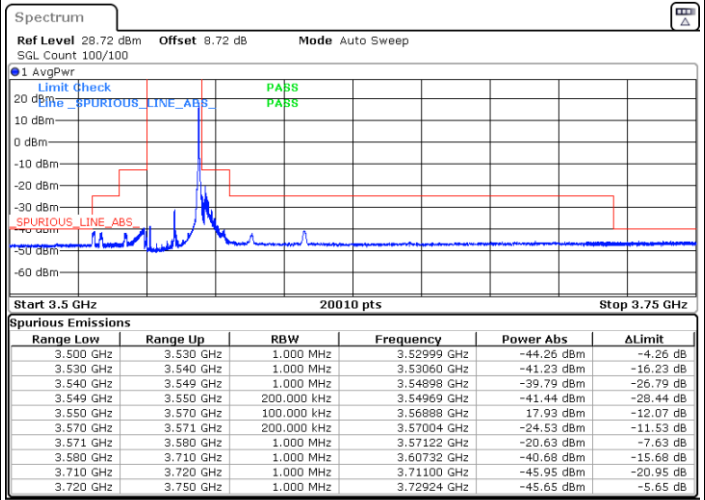
16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



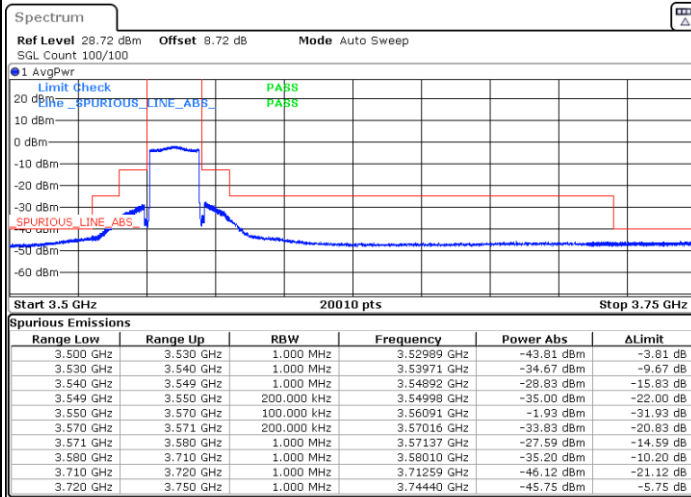
Date: 6.JAN.2023 13:38:10



Date: 6.JAN.2023 13:43:14

Lowest Channel / FullRB

N/A



Date: 6.JAN.2023 13:48:17

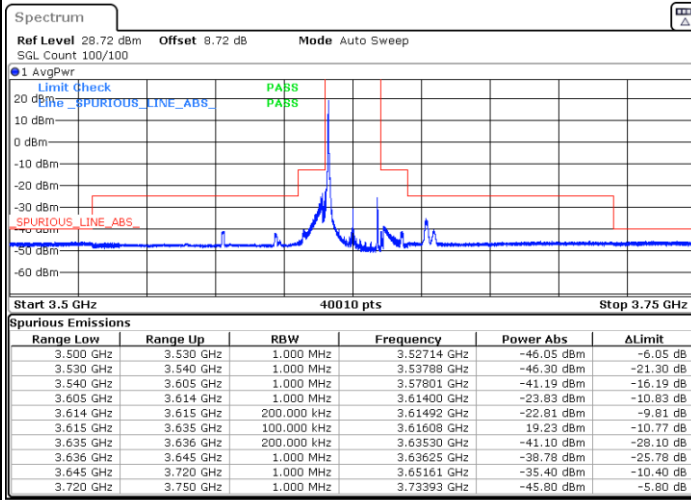


LTE Band 48 / 20MHz

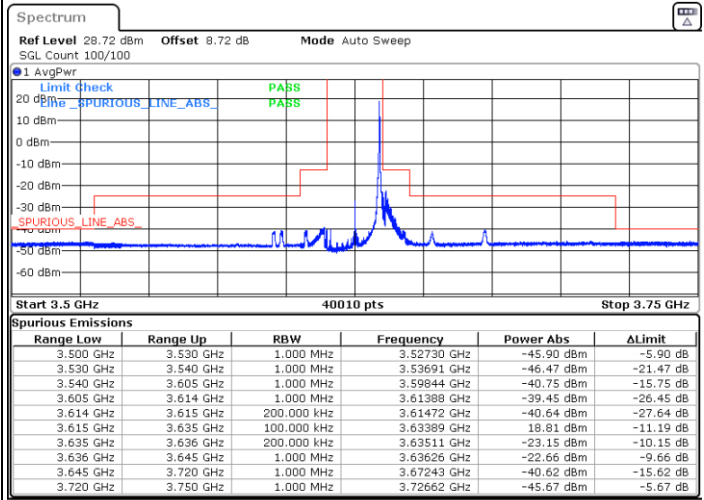
16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



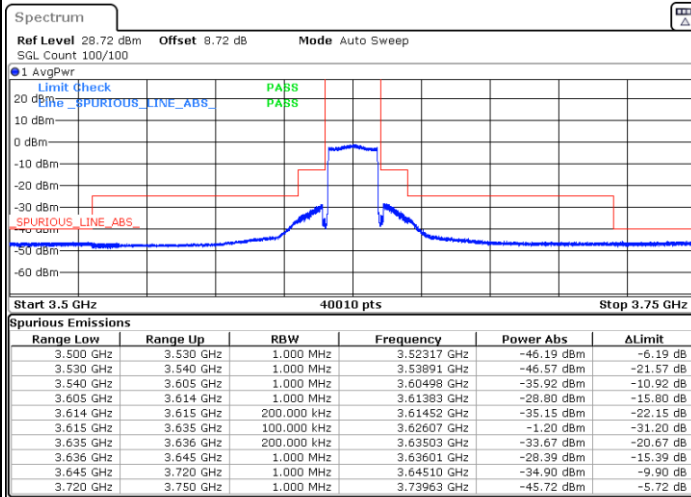
Date: 6.JAN.2023 13:53:20



Date: 6.JAN.2023 13:58:23

Middle Channel / Full

N/A



Date: 6.JAN.2023 14:03:25

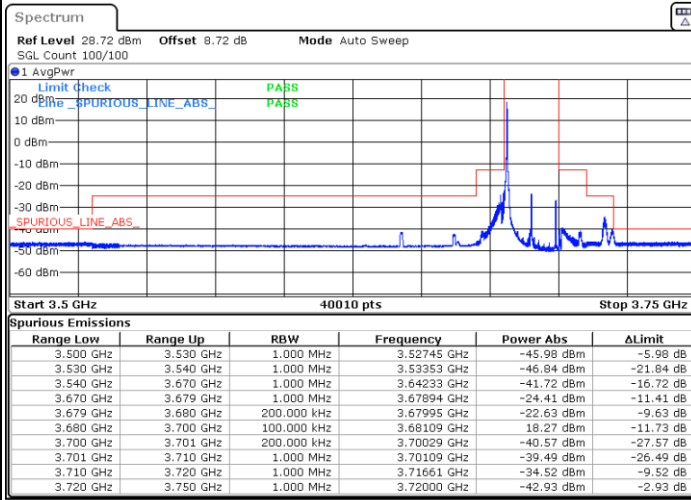


LTE Band 48 / 20MHz

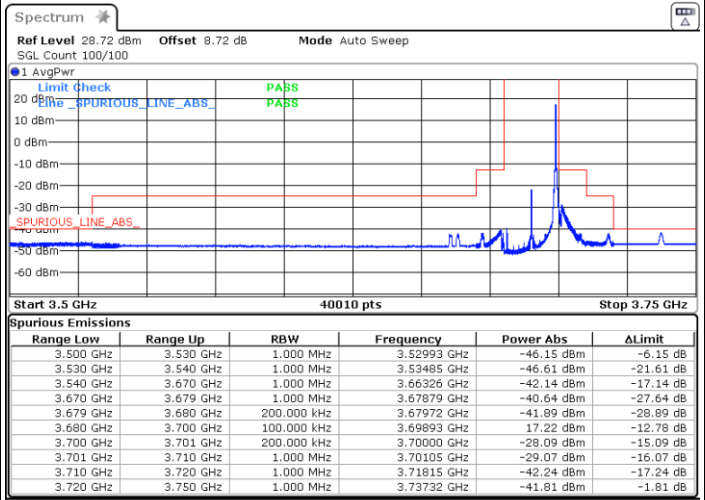
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



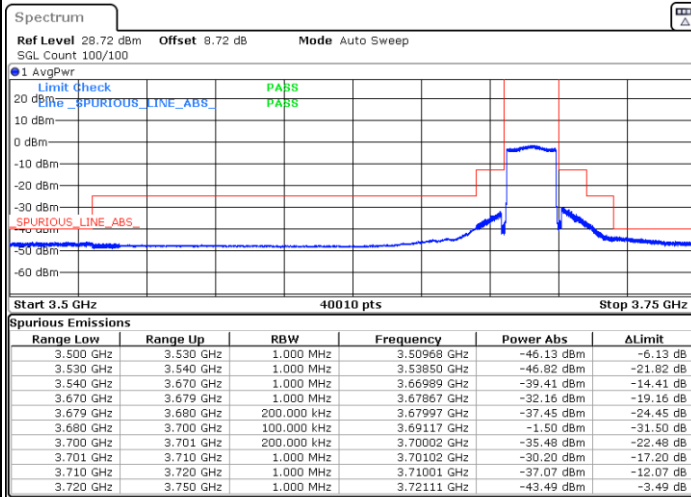
Date: 6.JAN.2023 14:08:29



Date: 6.JAN.2023 14:27:50

Highest Channel / FullIRB

N/A



Date: 6.JAN.2023 14:18:37

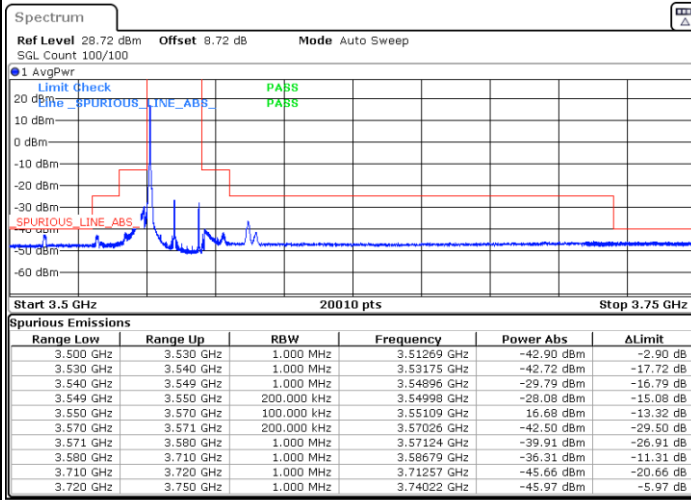


LTE Band 48 / 20MHz

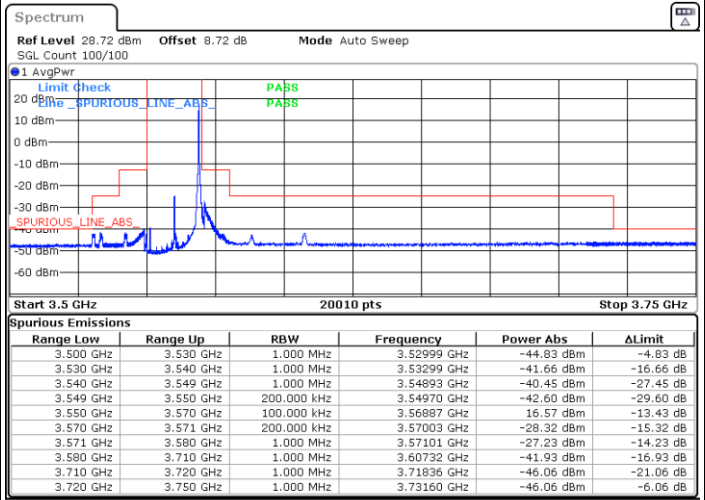
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



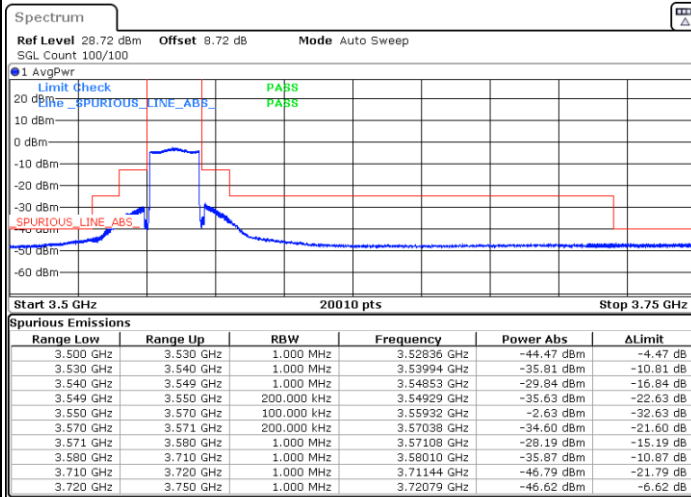
Date: 6.JAN.2023 13:39:51



Date: 6.JAN.2023 13:41:33

Lowest Channel / FullRB

N/A



Date: 6.JAN.2023 13:49:58

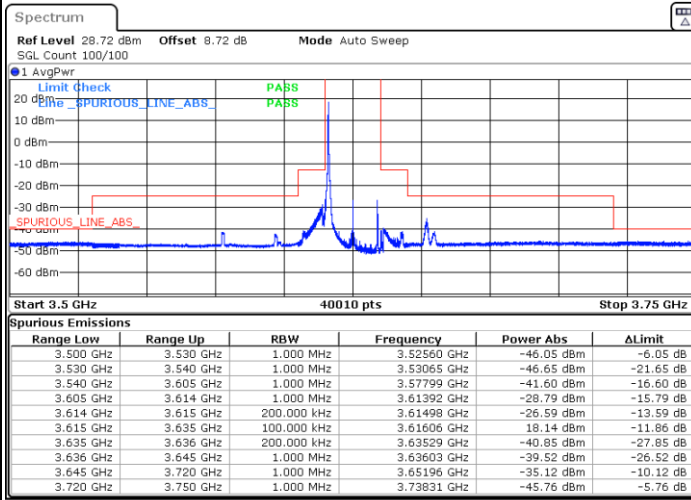


LTE Band 48 / 20MHz

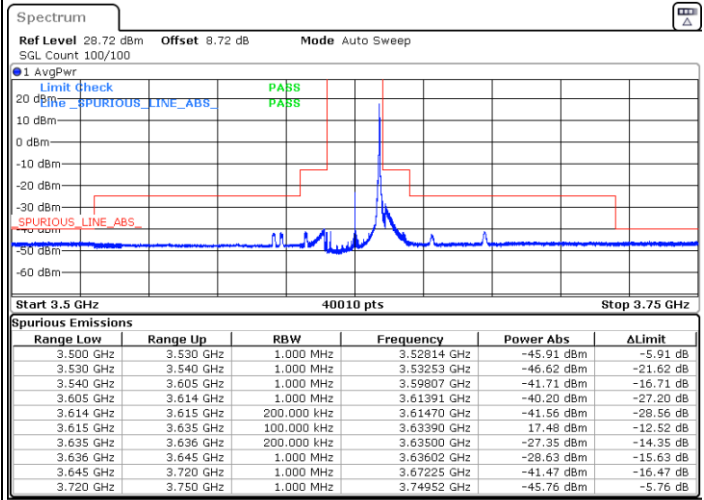
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



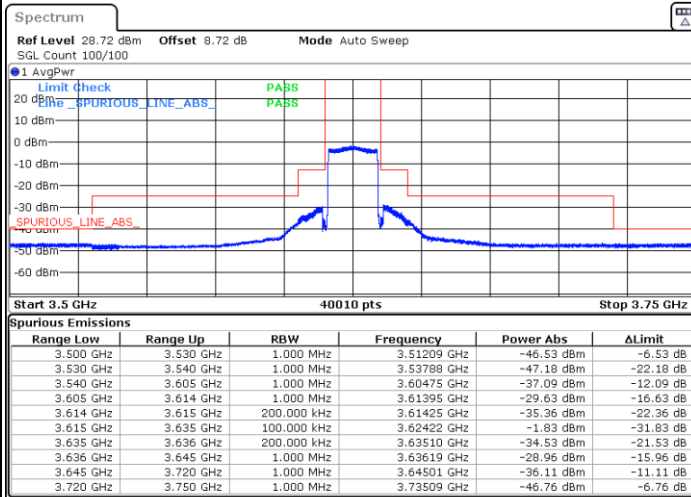
Date: 6.JAN.2023 13:55:02



Date: 6.JAN.2023 13:56:43

Middle Channel / Full

N/A



Date: 6.JAN.2023 14:05:06

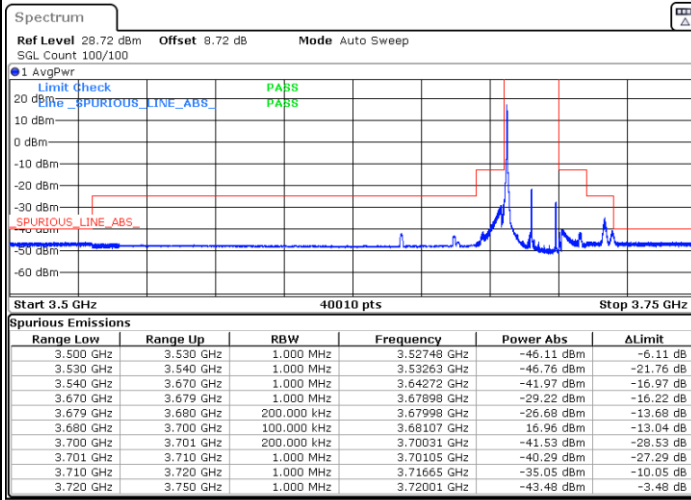


LTE Band 48 / 20MHz

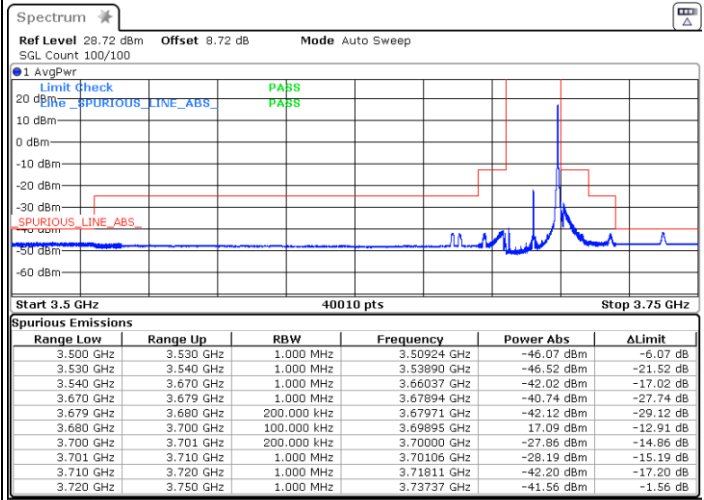
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



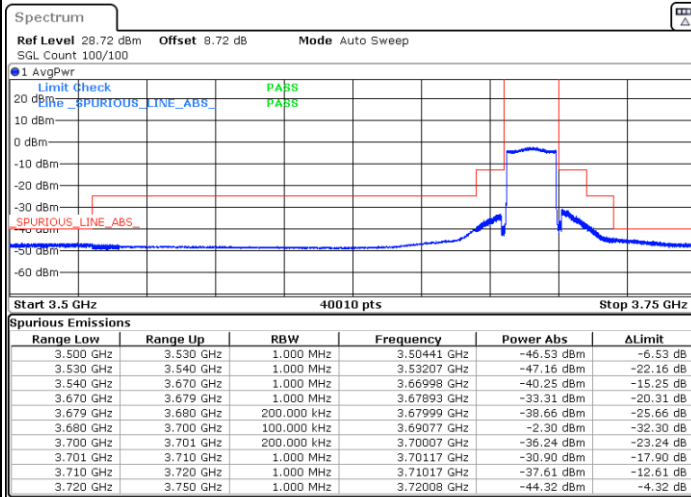
Date: 6.JAN.2023 14:10:10



Date: 6.JAN.2023 14:25:59

Highest Channel / FullRB

N/A



Date: 6.JAN.2023 14:20:19



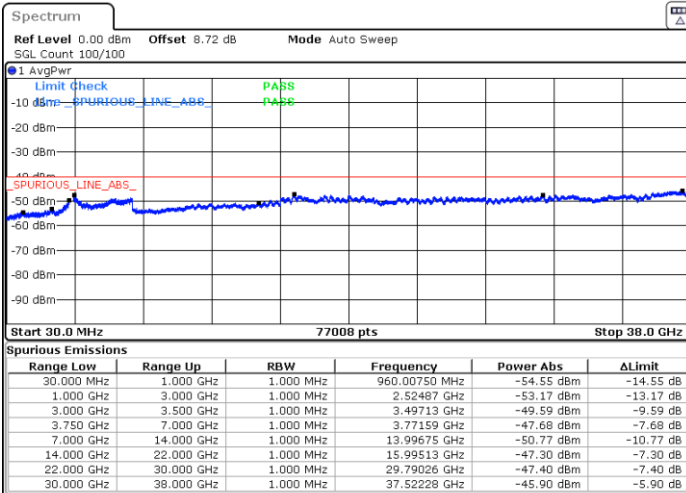
Conducted Spurious Emission

LTE Band 48 / 5MHz

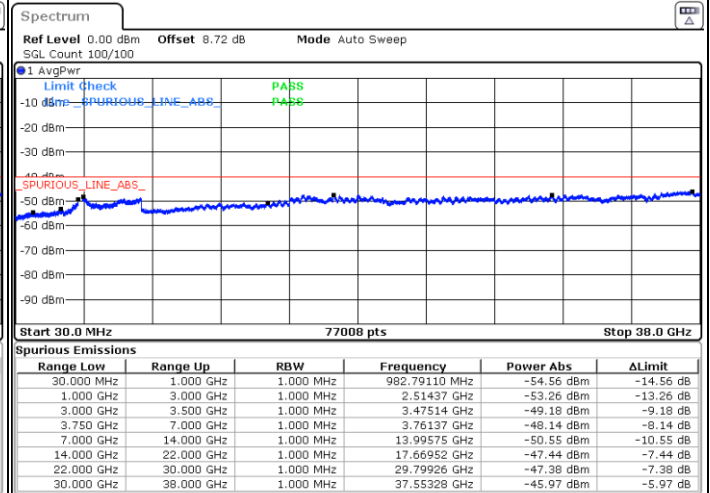
QPSK / 1RB0

Lowest Channel

Middle Channel

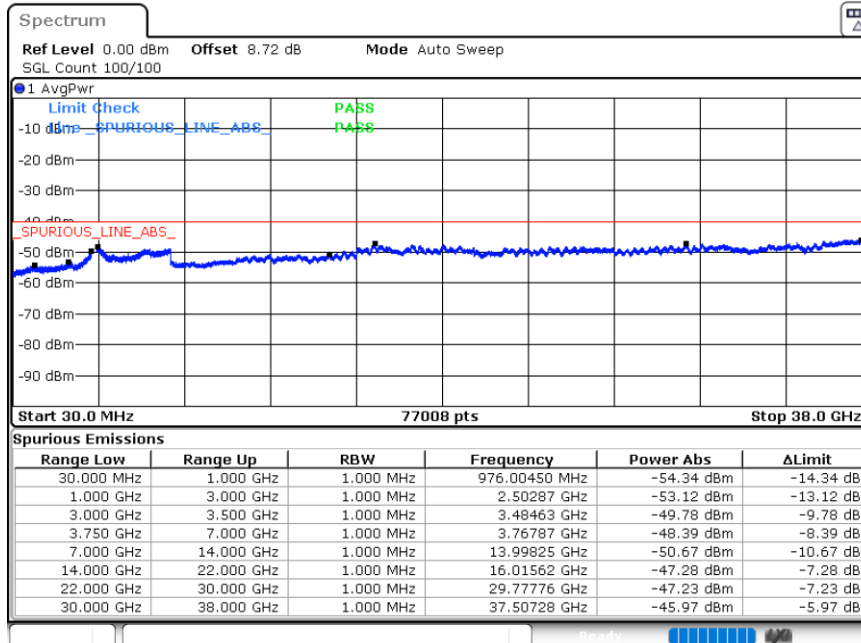


Date: 6.JAN.2023 16:07:58



Date: 6.JAN.2023 16:09:15

Highest Channel



Date: 6.JAN.2023 16:10:32

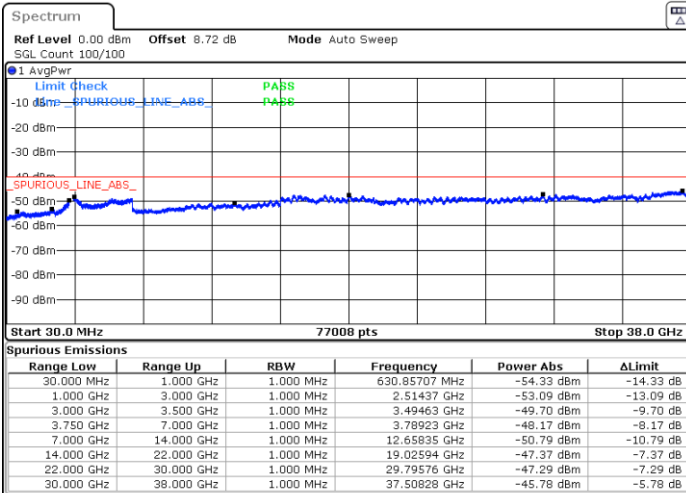


LTE Band 48 / 10MHz

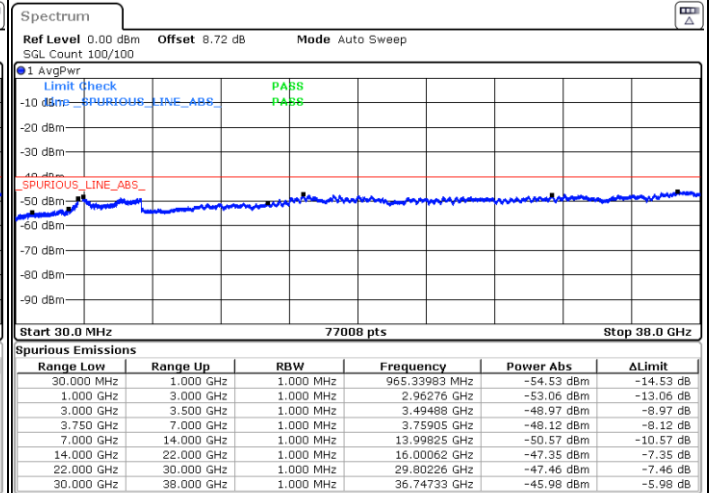
QPSK / 1RB0

Lowest Channel

Middle Channel

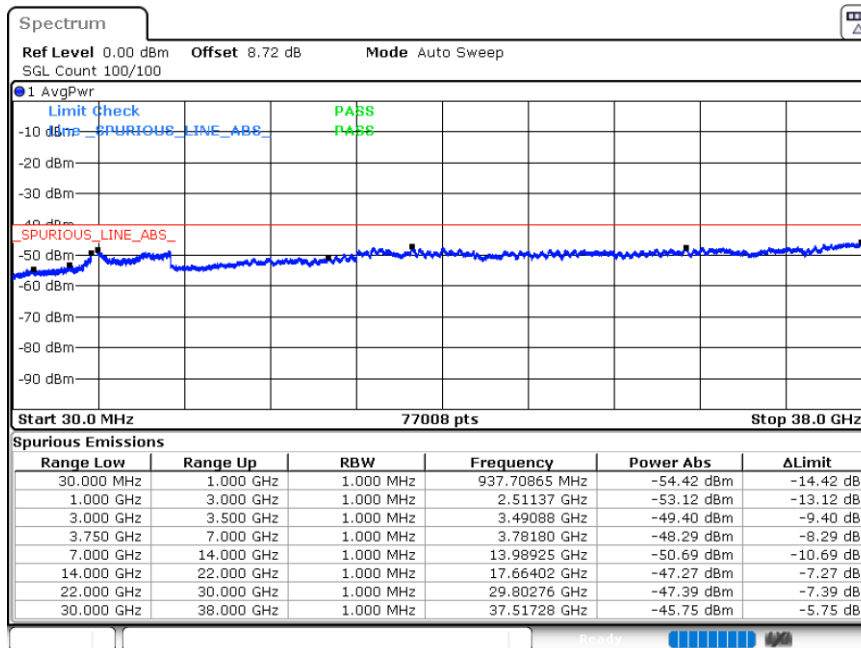


Date: 6.JAN.2023 16:11:58



Date: 6.JAN.2023 16:13:16

Highest Channel



Date: 6.JAN.2023 16:14:34

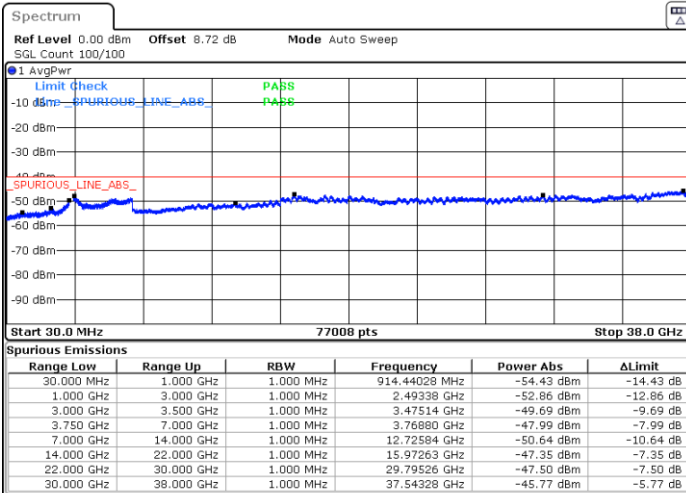


LTE Band 48 / 15MHz

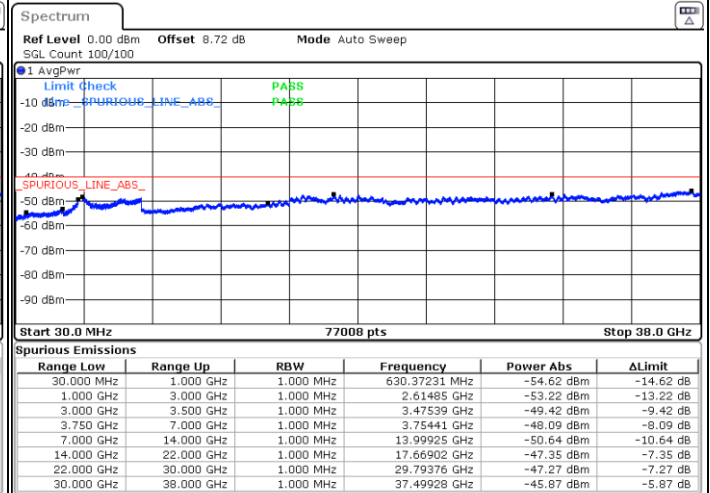
QPSK / 1RB0

Lowest Channel

Middle Channel

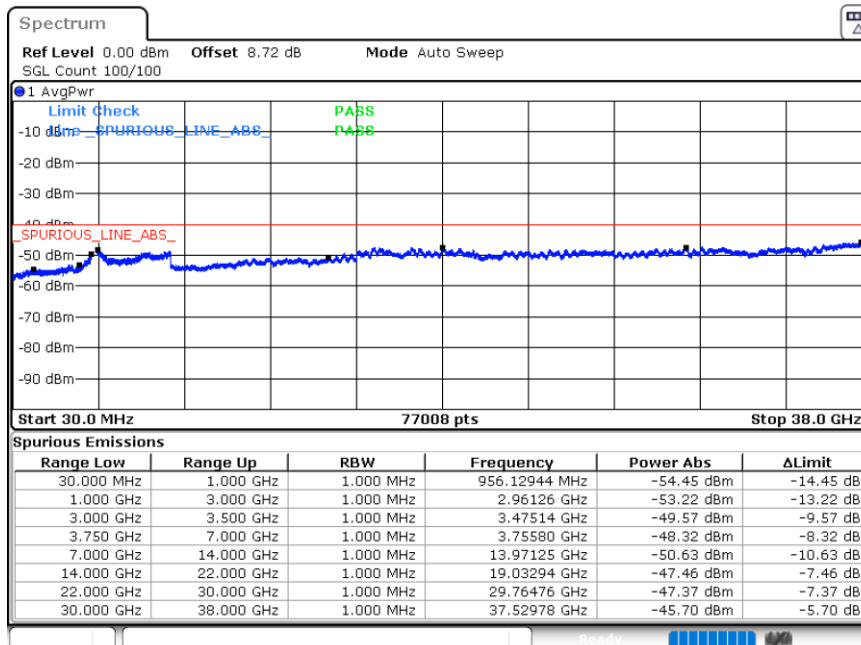


Date: 6.JAN.2023 16:16:00



Date: 6.JAN.2023 16:17:24

Highest Channel



Date: 6.JAN.2023 16:18:45

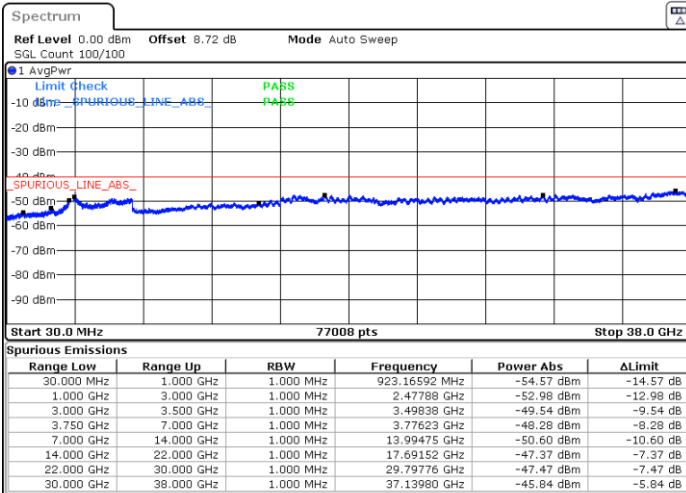


LTE Band 48 / 20MHz

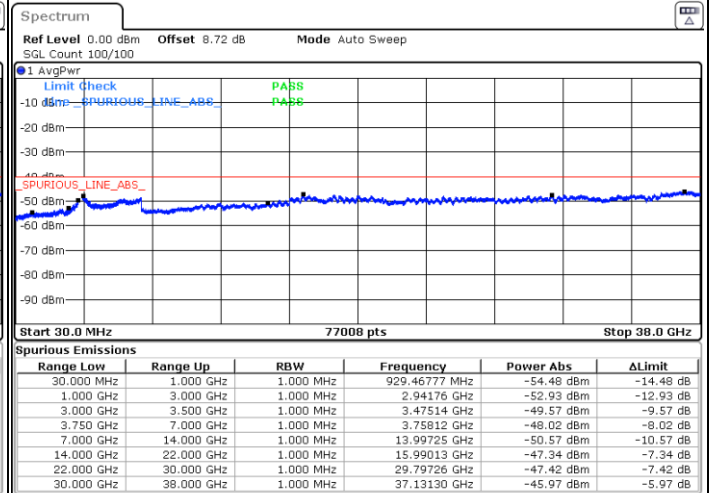
QPSK / 1RB0

Lowest Channel

Middle Channel

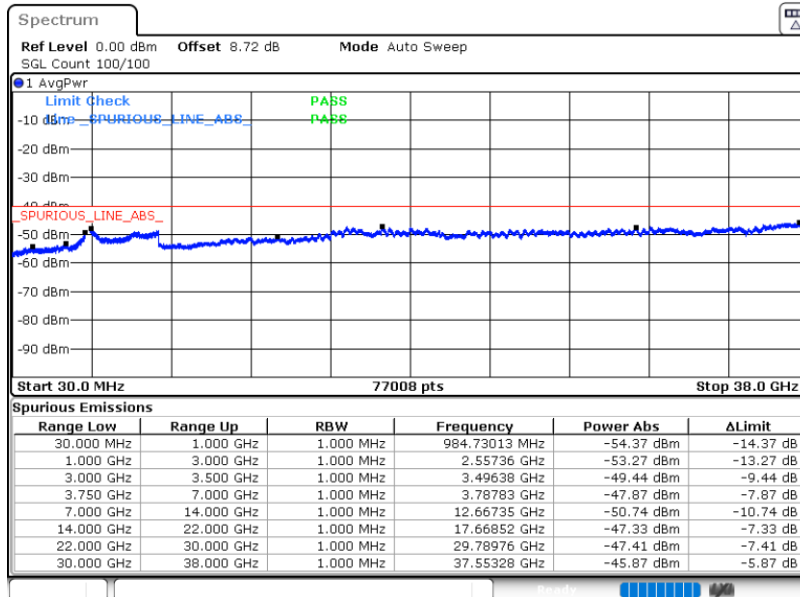


Date: 6, JAN, 2023 16:20:07



Date: 6, JAN, 2023 16:21:27

Highest Channel



Date: 6, JAN, 2023 16:24:35

Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0006	
20	Minimum Voltage	0.0022	

Note:

1. Normal Voltage =24 V. ; Minimum Voltage =20V. ; Maximum Voltage =28 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 48 UL MIMO – Ant 0 + Ant 2

EIRP PSD Density

LTE Band 48 UL MIMO-Ant 0+ Ant 2							
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.	EIRP PSD Limit
Channel				55340	55990	56640	37
Frequency (MHz)				3560	3625	3690	dBm/MHz
20	QPSK	1	0	28.56	28.37	28.71	pass
20	QPSK	1	99	28.78	28.27	29.38	pass
20	QPSK	100	0	17.18	16.51	16.49	pass
20	16QAM	1	0	27.93	27.98	28.13	pass
20	16QAM	1	99	28.41	27.74	28.12	pass
20	16QAM	100	0	16.61	15.94	15.90	pass
20	64QAM	1	0	27.61	27.58	27.24	pass
20	64QAM	1	99	28.02	27.36	27.20	pass
20	64QAM	100	0	16.15	15.50	15.00	pass
Channel				55315	55990	56665	37
Frequency (MHz)				3557.5	3625	3692.5	dBm/MHz
15	QPSK	1	0	28.39	28.29	28.70	pass
15	QPSK	1	74	28.71	28.25	28.47	pass
15	QPSK	75	0	17.96	17.57	17.97	pass
15	16QAM	1	0	28.16	27.80	28.04	pass
15	16QAM	1	74	28.23	27.96	28.22	pass
15	16QAM	75	0	17.56	17.09	17.59	pass
15	64QAM	1	0	27.49	27.34	27.82	pass
15	64QAM	1	74	27.87	27.31	27.53	pass
15	64QAM	75	0	16.56	16.01	16.52	pass
Channel				55290	55990	56690	37
Frequency (MHz)				3555	3625	3695	dBm/MHz
10	QPSK	1	0	28.63	28.37	28.70	pass
10	QPSK	1	49	28.75	28.47	28.48	pass
10	QPSK	50	0	19.66	19.47	19.73	pass
10	16QAM	1	0	28.18	28.15	28.16	pass
10	16QAM	1	49	28.27	27.96	28.32	pass
10	16QAM	50	0	19.21	18.82	19.29	pass
10	64QAM	1	0	27.57	27.42	27.70	pass
10	64QAM	1	49	27.72	27.47	27.67	pass
10	64QAM	50	0	18.15	17.91	18.42	pass
Channel				55265	55990	56715	37
Frequency (MHz)				3552.5	3625	3697.5	dBm/MHz
5	QPSK	1	0	27.69	27.58	27.82	pass
5	QPSK	1	24	28.02	27.82	27.78	pass



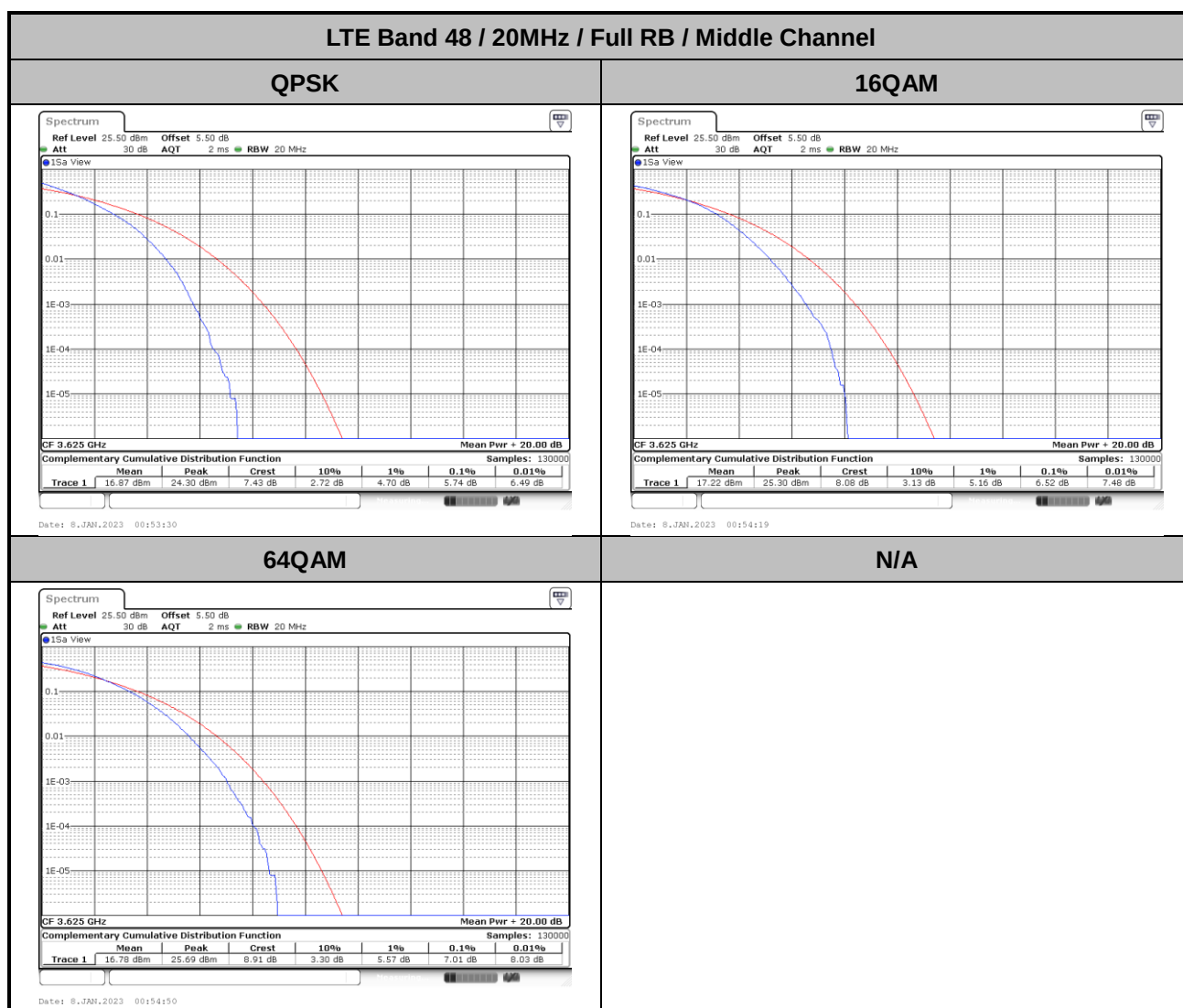
5	QPSK	25	0	22.26	22.14	22.17	pass
5	16QAM	1	0	27.97	27.49	27.79	pass
5	16QAM	1	24	28.09	27.79	27.81	pass
5	16QAM	25	0	22.27	22.16	22.32	pass
5	64QAM	1	0	27.90	27.92	28.16	pass
5	64QAM	1	24	28.22	27.70	27.91	pass
5	64QAM	25	0	21.33	21.16	21.48	pass



LTE Band 48 UL MIMO – Ant 0

Peak-to-Average Ratio

Mode	LTE Band 48 / 20MHz				
Mod.	QPSK	16QAM	64QAM	N/A	Limit: 13dB
RB Size	Full RB				Result
Middle CH	5.74	6.52	7.01		PASS



**26dB Bandwidth**

Mode	LTE Band 48 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.91	5.00
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	10.23	9.93
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.21	14.36
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.70	18.74

