

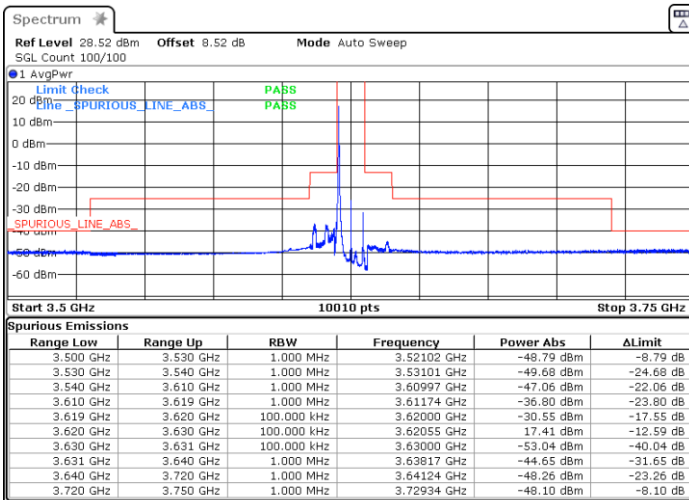


LTE Band 48 / 10MHz

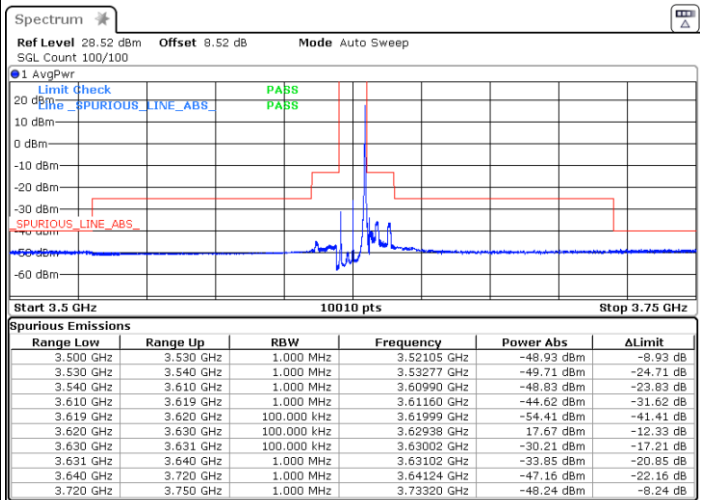
16QAM

MiddleChannel / 1RB0

Middle Channel / 1RBmax



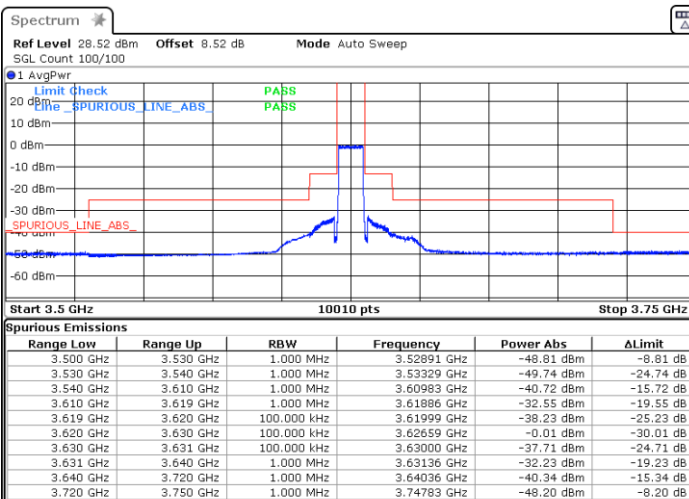
Date: 8.JAN.2021 01:10:36



Date: 8.JAN.2021 01:05:51

Middle Channel / Full RB

N/A



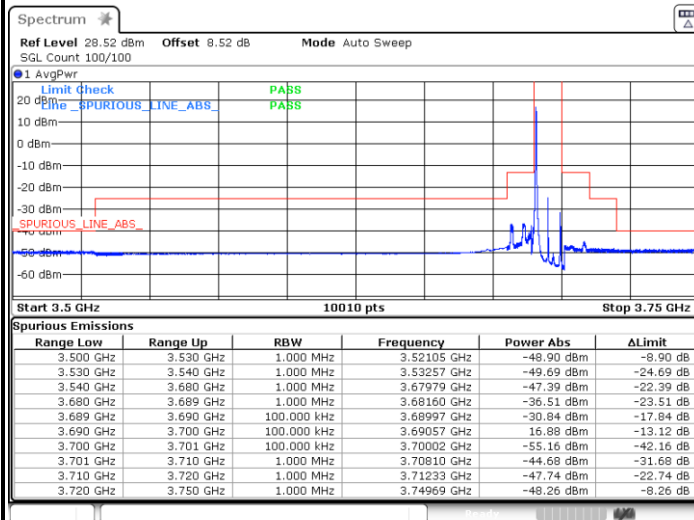
Date: 8.JAN.2021 01:13:46



LTE Band 48 / 10MHz

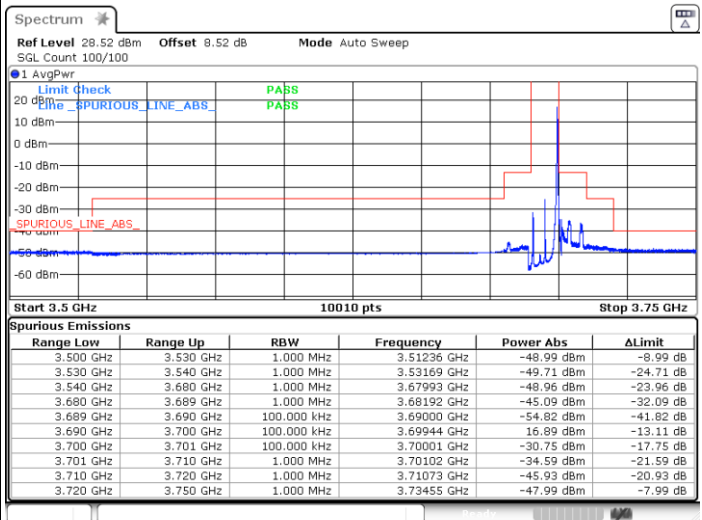
16QAM

Highest Channel / 1RB0



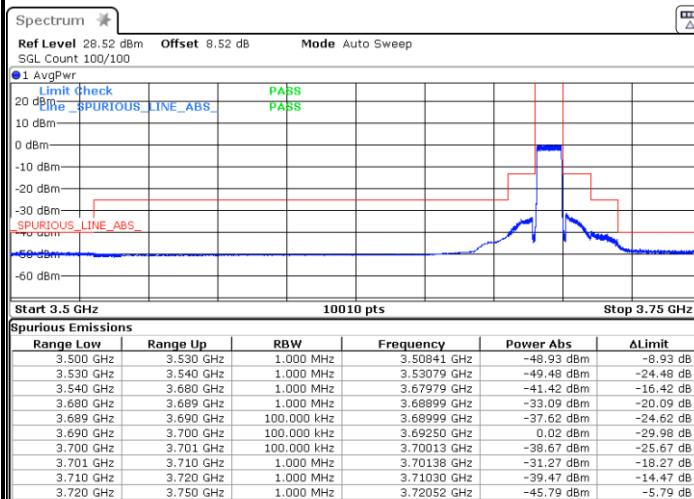
Date: 8.JAN.2021 01:21:37

Highest Channel / 1RBmax



Date: 8.JAN.2021 01:25:01

Highest Channel / Full RB



Date: 8.JAN.2021 01:18:20

N/A

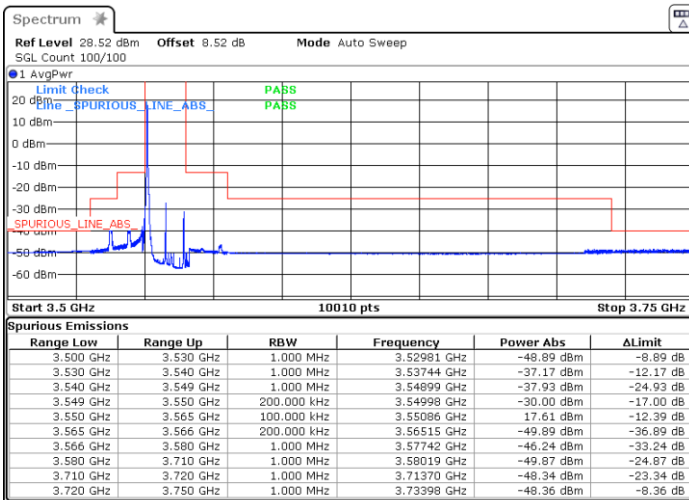


LTE Band 48 / 15MHz

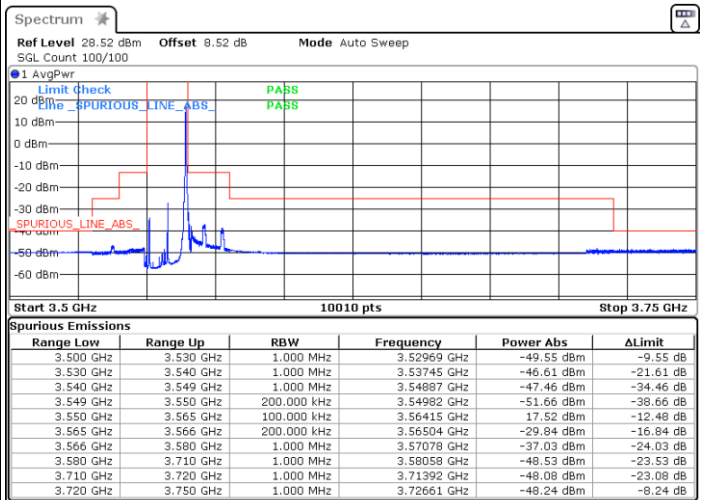
16QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



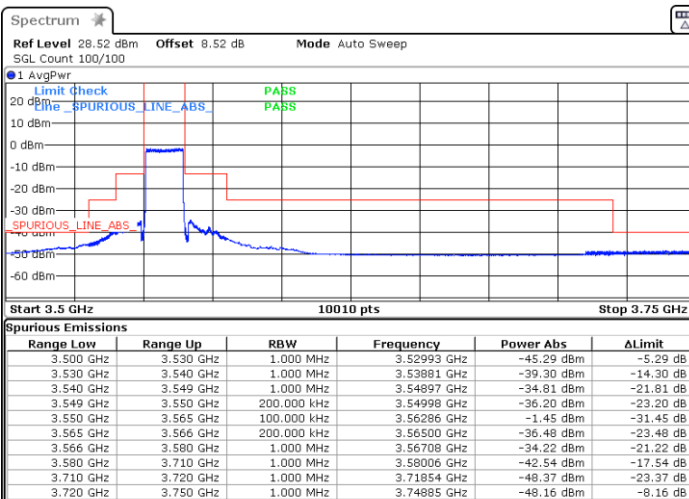
Date: 8.JAN.2021 01:41:01



Date: 8.JAN.2021 01:37:01

Lowest Channel / Full RB

N/A



Date: 8.JAN.2021 01:45:57

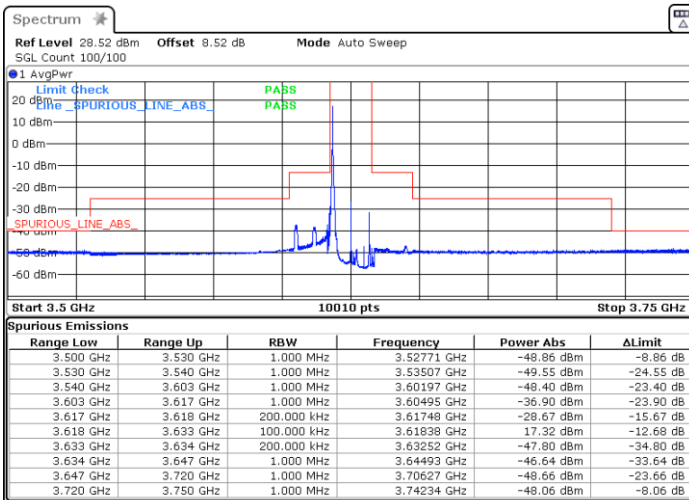


LTE Band 48 / 15MHz

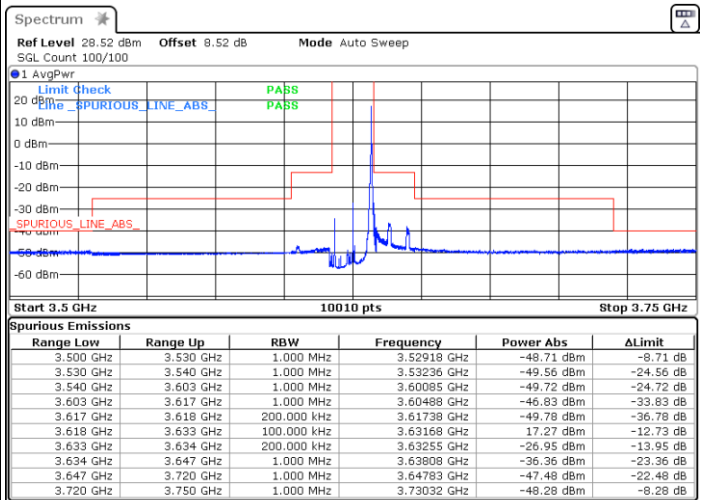
16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



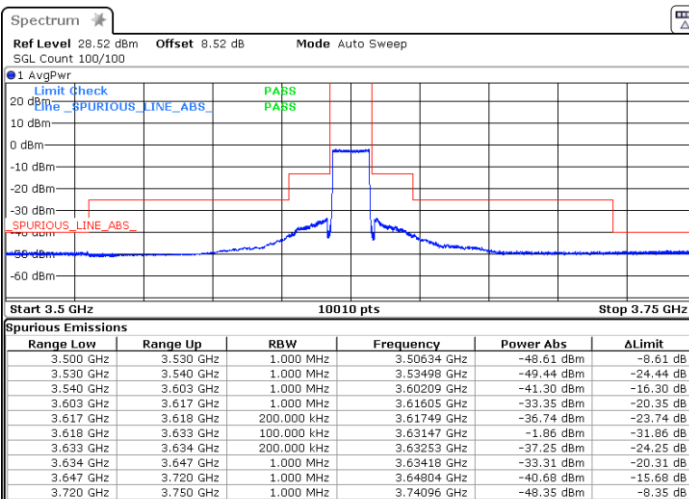
Date: 8.JAN.2021 01:53:35



Date: 8.JAN.2021 01:57:09

Middle Channel / Full RB

N/A



Date: 8.JAN.2021 01:49:57

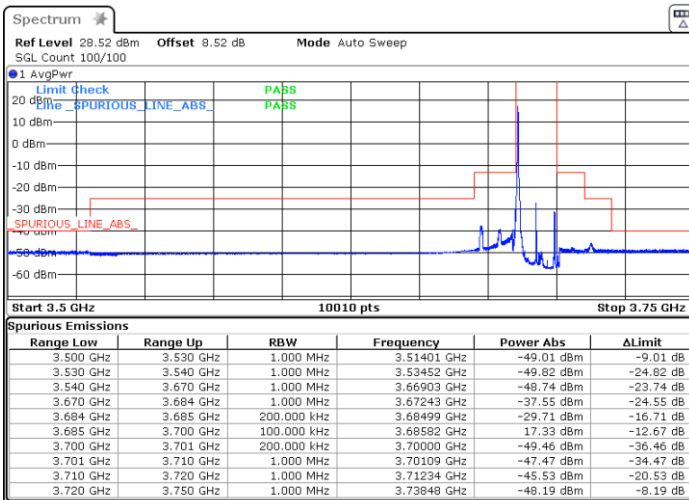


LTE Band 48 / 15MHz

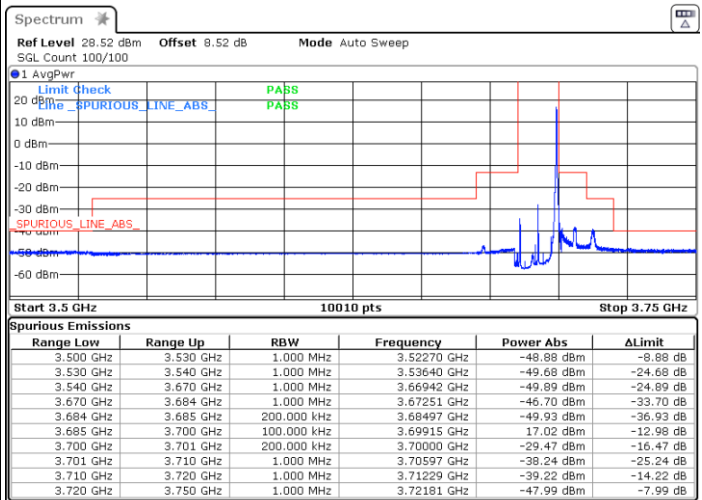
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



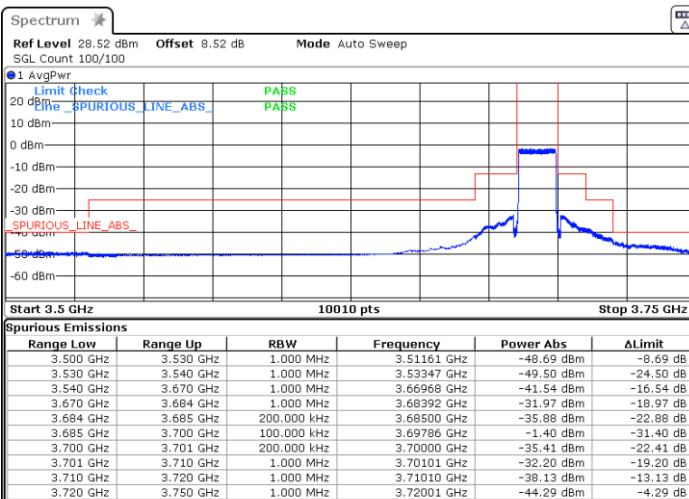
Date: 8.JAN.2021 02:07:42



Date: 8.JAN.2021 02:02:48

Highest Channel / Full RB

N/A



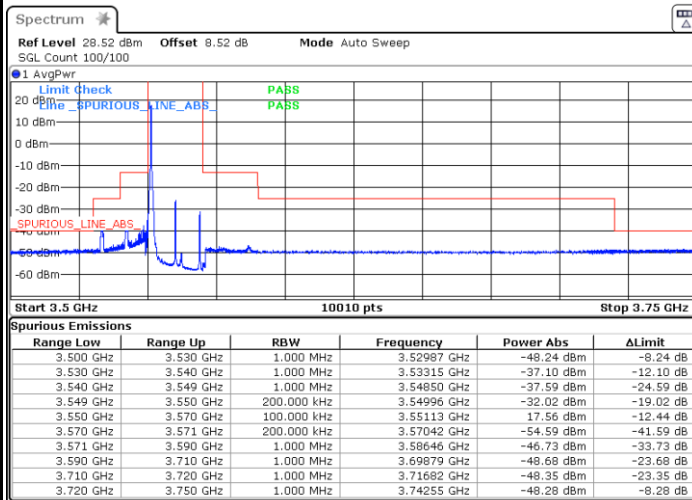
Date: 8.JAN.2021 02:14:48



LTE Band 48 / 20MHz

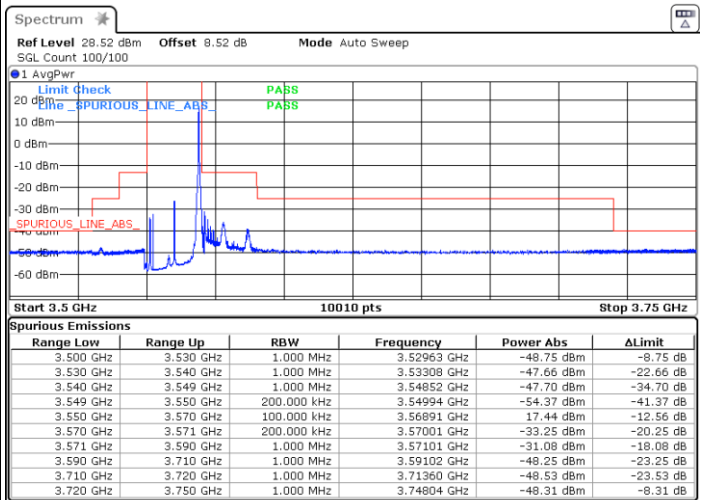
16QAM

Lowest Channel / 1RB0



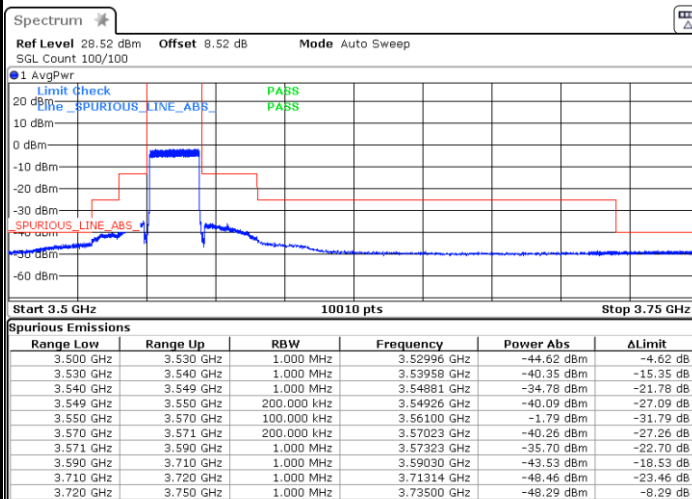
Date: 8.JAN.2021 02:33:24

Lowest Channel / 1RBmax



Date: 8.JAN.2021 02:38:43

Lowest Channel / Full RB



Date: 8.JAN.2021 02:26:57

N/A

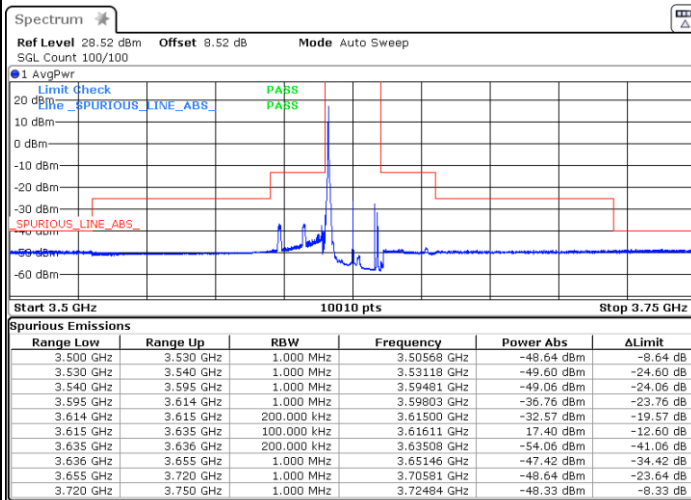


LTE Band 48 / 20MHz

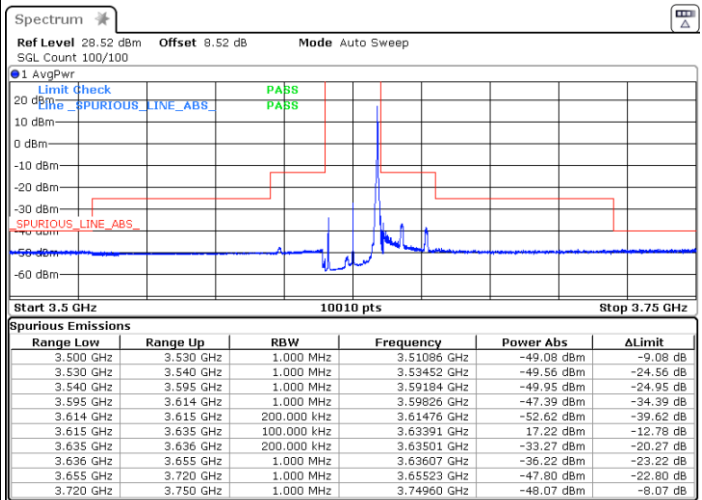
16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



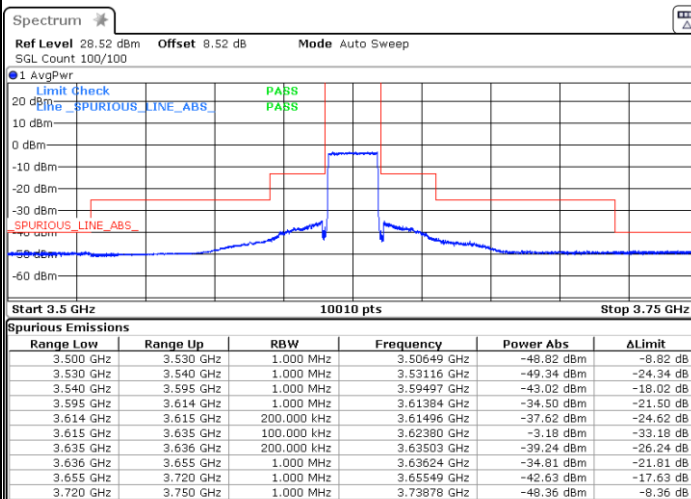
Date: 8.JAN.2021 03:02:06



Date: 8.JAN.2021 02:47:41

Middle Channel / Full RB

N/A



Date: 8.JAN.2021 02:54:14

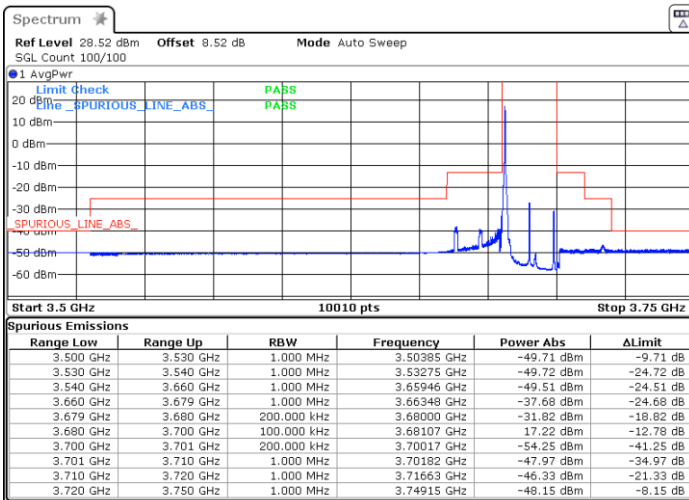


LTE Band 48 / 20MHz

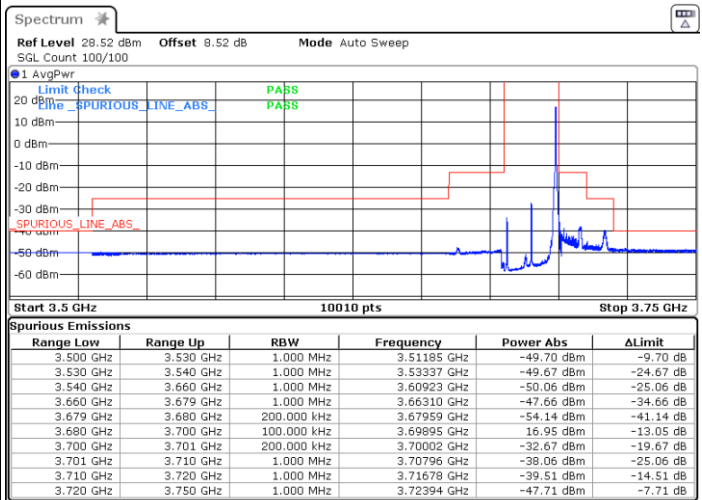
16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



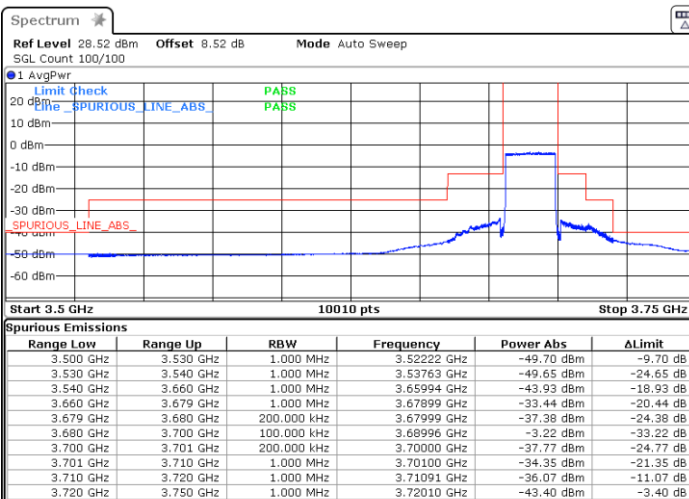
Date: 8.JAN.2021 03:15:30



Date: 8.JAN.2021 03:21:51

Highest Channel / Full RB

N/A



Date: 8.JAN.2021 03:30:14

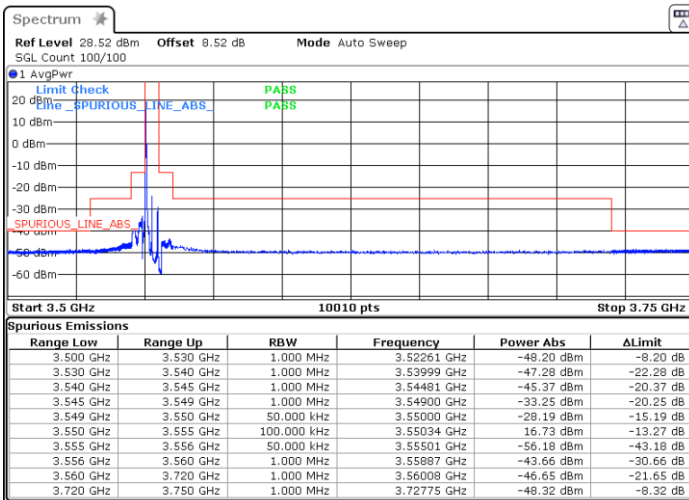


LTE Band 48 / 5MHz

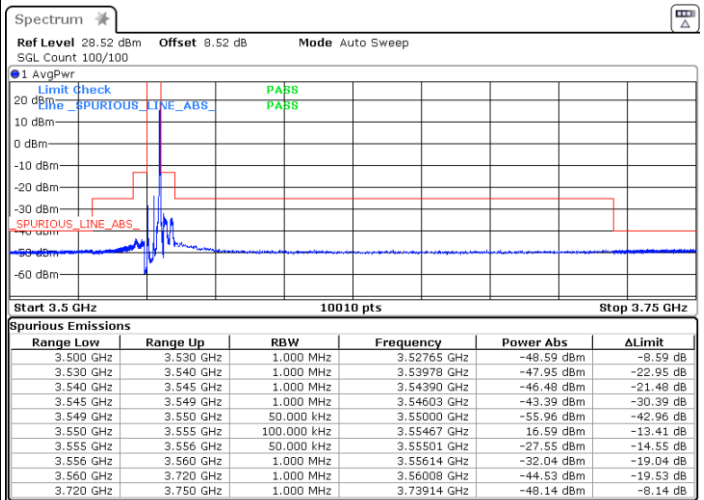
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



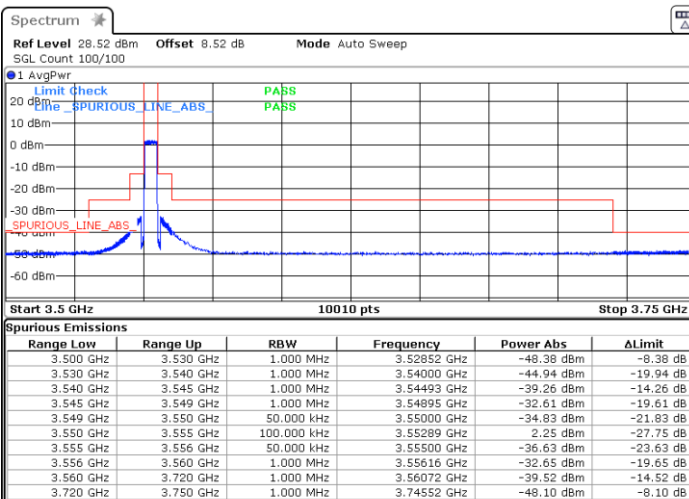
Date: 8.JAN.2021 00:56:55



Date: 8.JAN.2021 01:01:34

Lowest Channel / Full RB

N/A



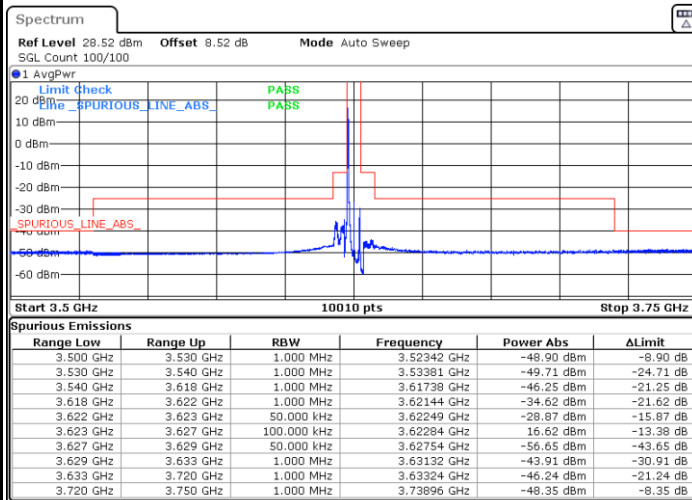
Date: 8.JAN.2021 00:52:33



LTE Band 48 / 5MHz

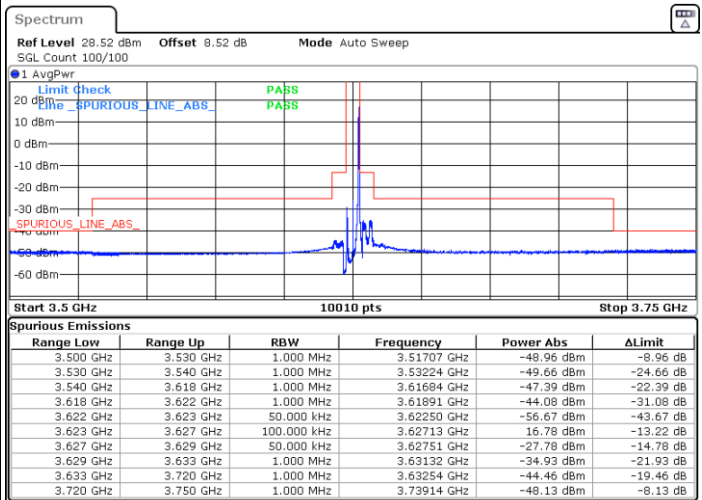
64QAM

Middle Channel / 1RB0



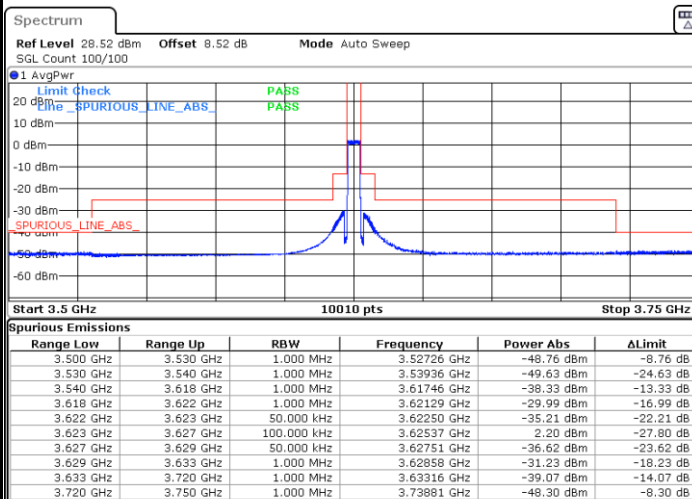
Date: 7.JAN.2021 23:39:30

Middle Channel / 1RBmax



Date: 7.JAN.2021 23:00:43

Middle Channel / Full RB



Date: 7.JAN.2021 23:43:48

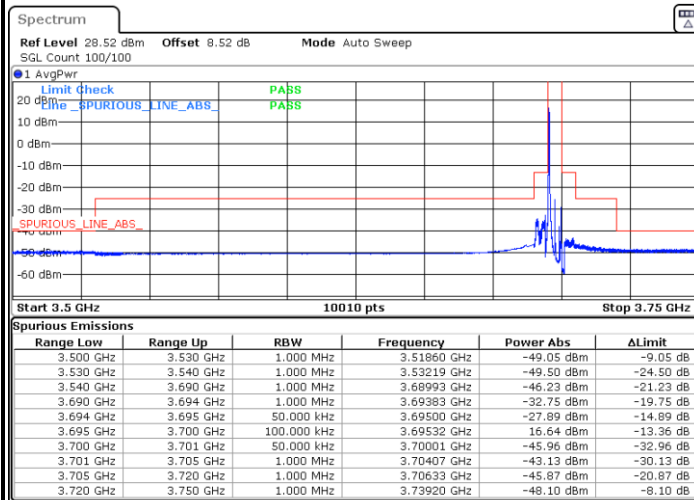
N/A



LTE Band 48 / 5MHz

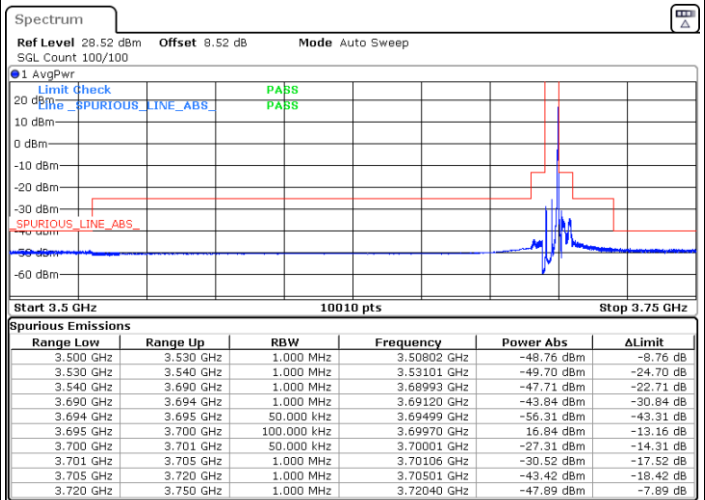
64QAM

Highest Channel / 1RB0



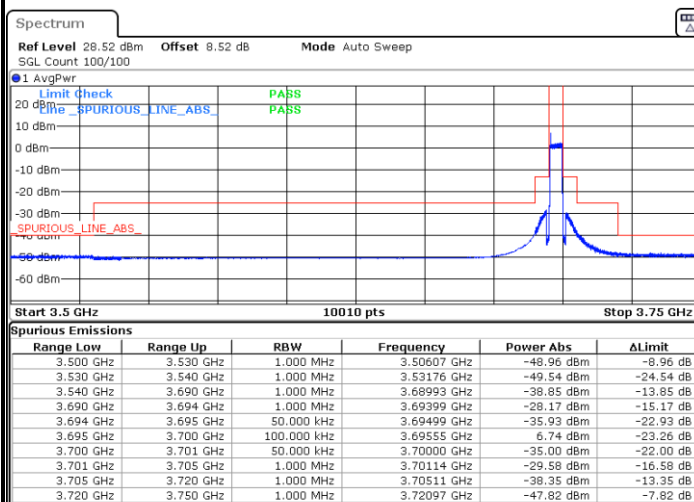
Date: 7.JAN.2021 23:50:38

Highest Channel / 1RBmax



Date: 7.JAN.2021 23:53:52

Highest Channel / Full RB



Date: 7.JAN.2021 23:47:32

N/A

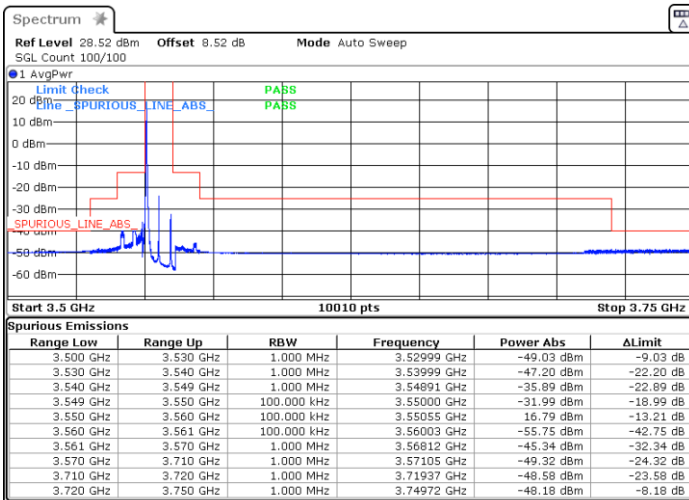


LTE Band 48 / 10MHz

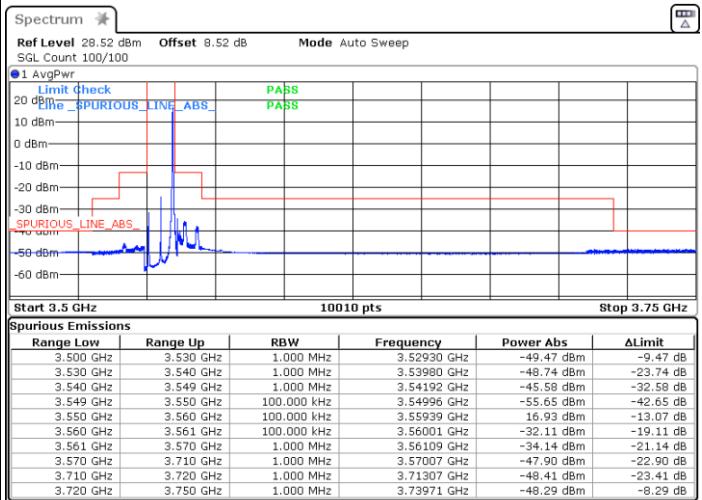
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



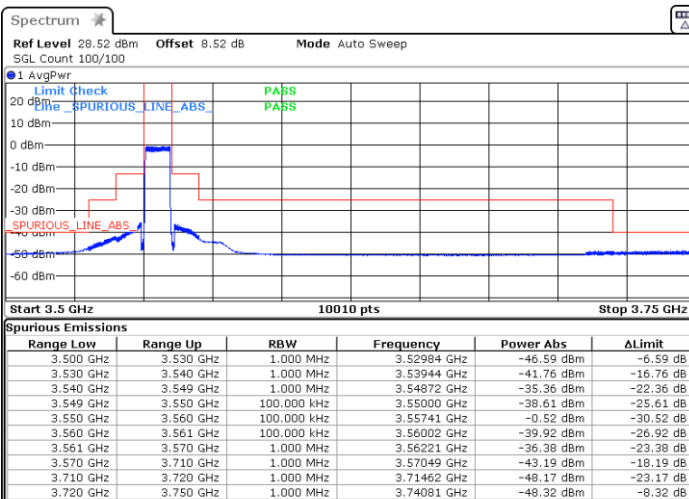
Date: 8.JAN.2021 00:43:29



Date: 8.JAN.2021 00:46:50

Lowest Channel / Full RB

N/A



Date: 8.JAN.2021 00:39:57

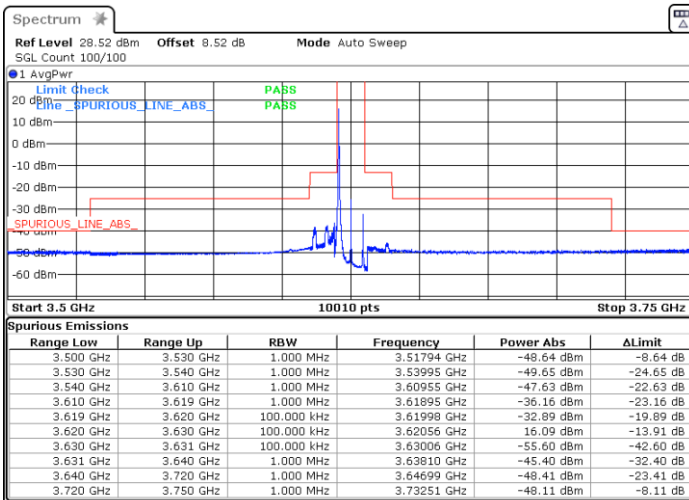


LTE Band 48 / 10MHz

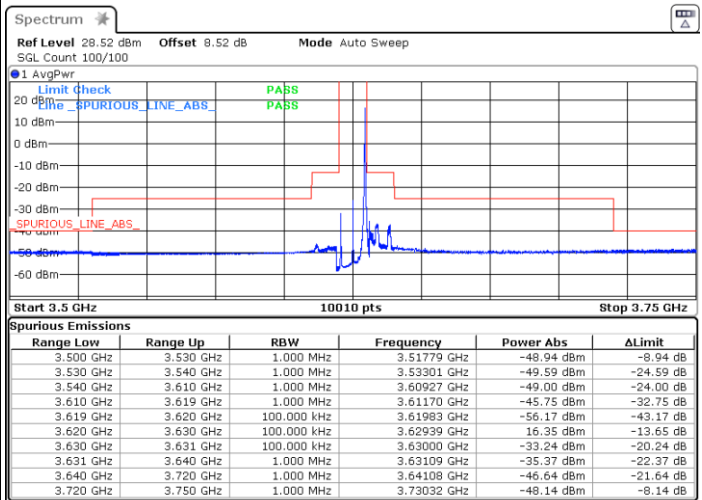
64QAM

MiddleChannel / 1RB0

Middle Channel / 1RBmax



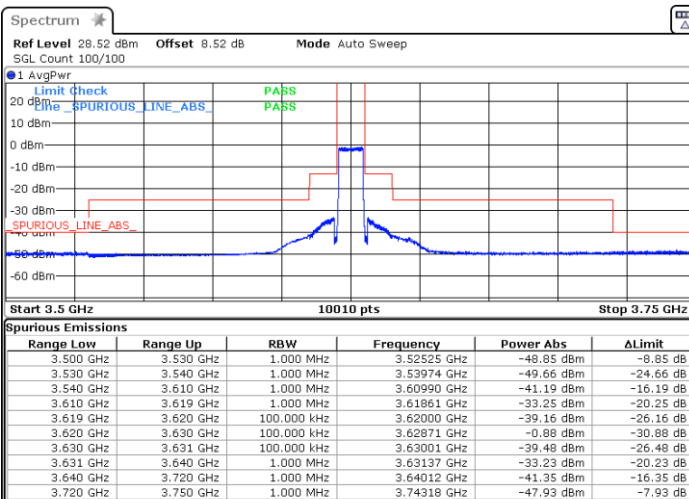
Date: 8.JAN.2021 01:11:29



Date: 8.JAN.2021 01:06:45

Middle Channel / Full RB

N/A



Date: 8.JAN.2021 01:14:38

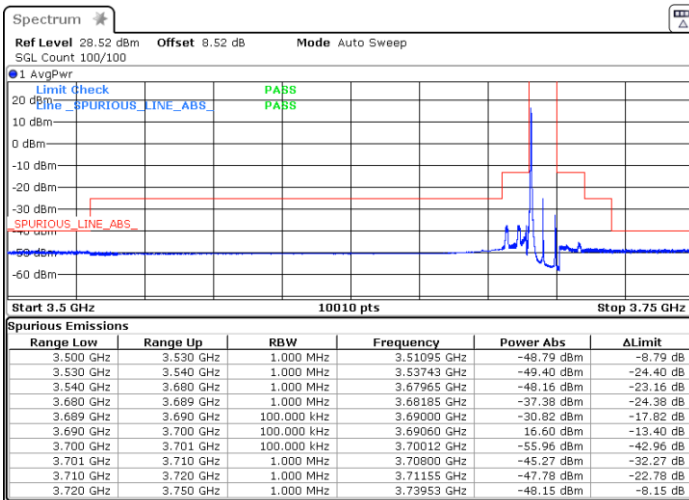


LTE Band 48 / 10MHz

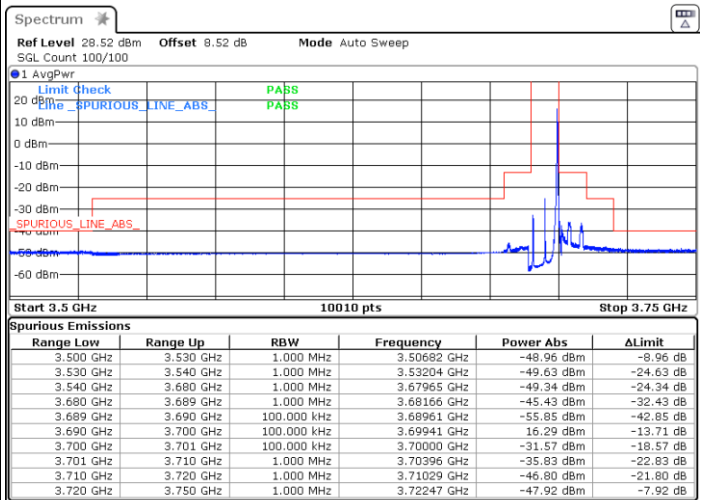
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



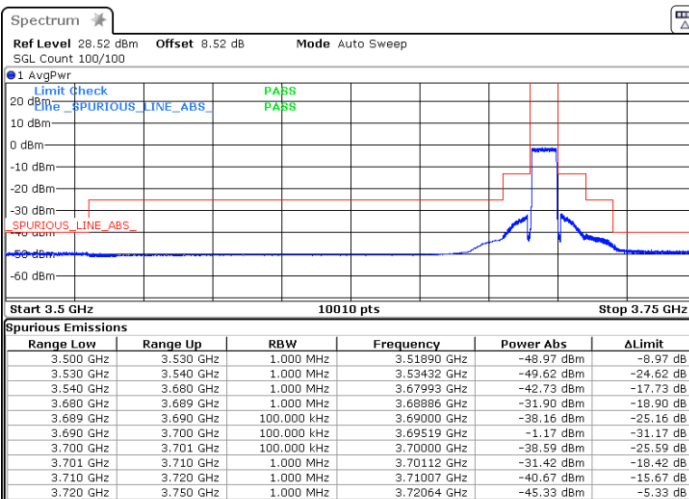
Date: 8.JAN.2021 01:22:43



Date: 8.JAN.2021 01:26:01

Highest Channel / Full RB

N/A



Date: 8.JAN.2021 01:19:21

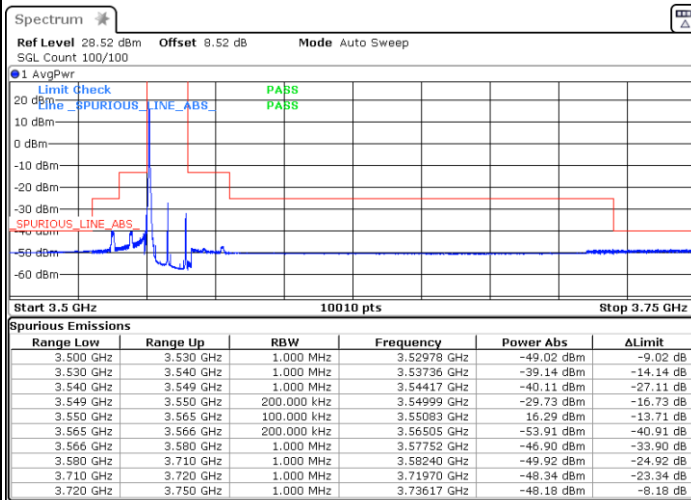


LTE Band 48 / 15MHz

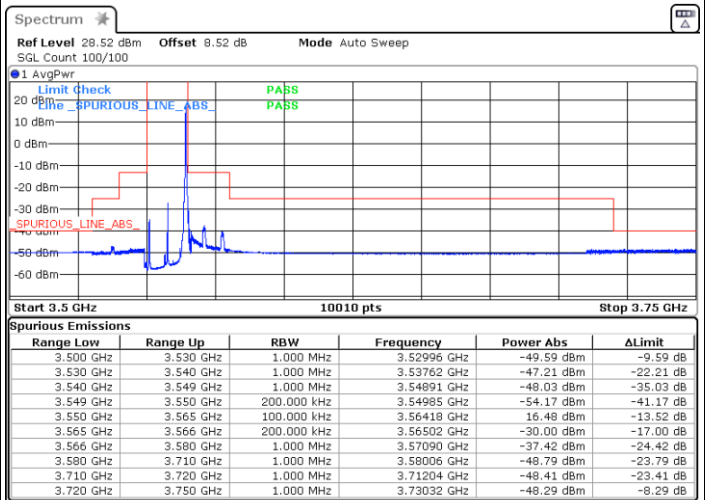
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



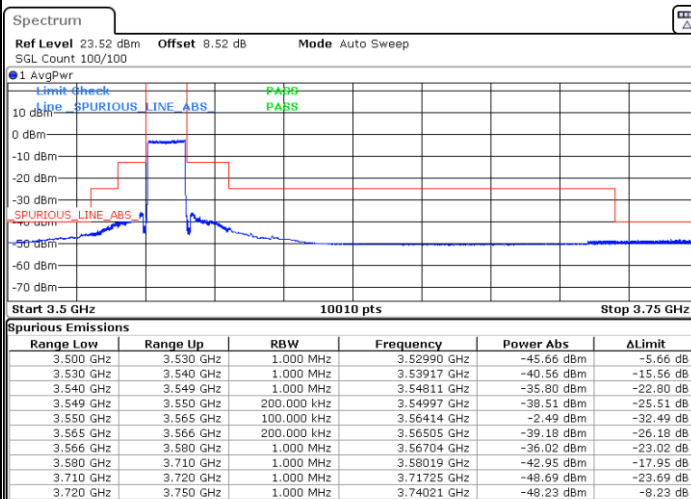
Date: 8.JAN.2021 01:42:13



Date: 8.JAN.2021 01:38:26

Lowest Channel / Full RB

N/A



Date: 8.JAN.2021 01:46:57

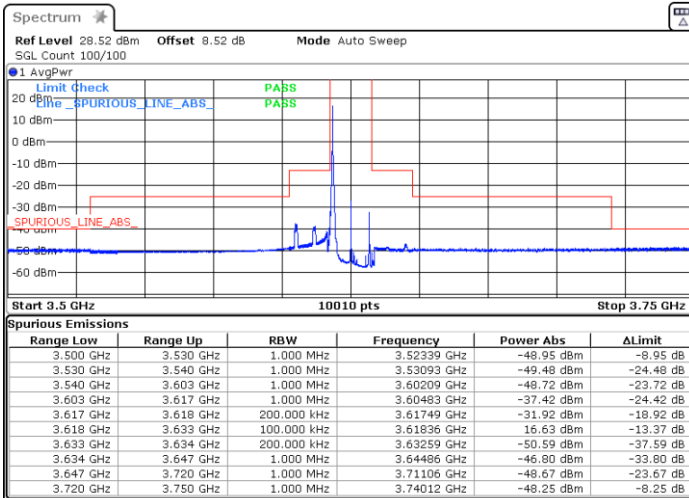


LTE Band 48 / 15MHz

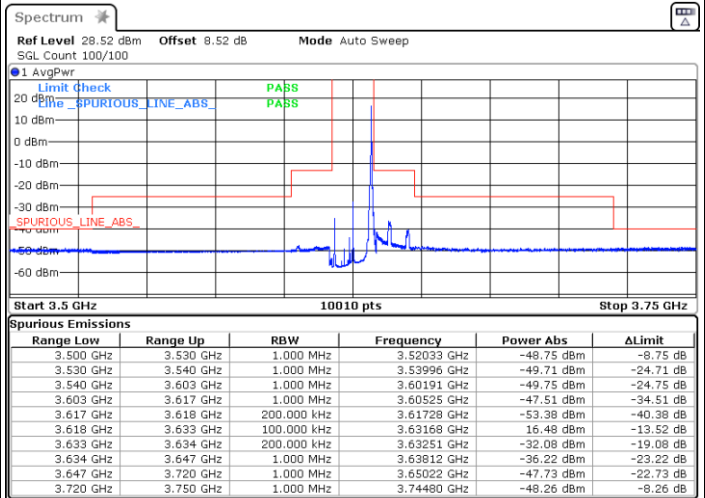
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



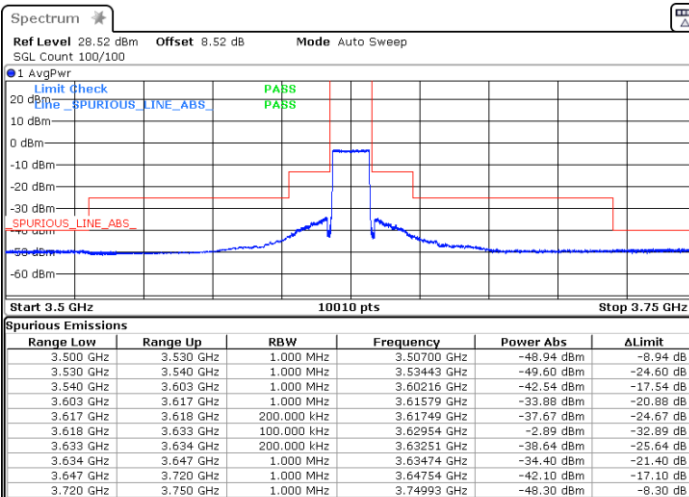
Date: 8.JAN.2021 01:54:50



Date: 8.JAN.2021 01:59:16

Middle Channel / Full RB

N/A



Date: 8.JAN.2021 01:51:00

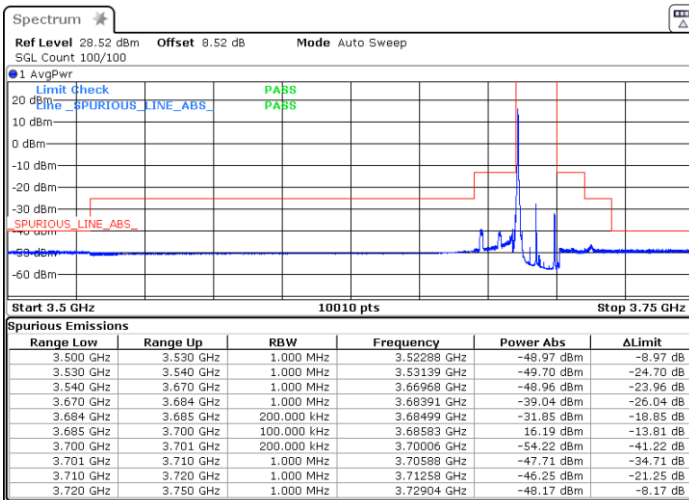


LTE Band 48 / 15MHz

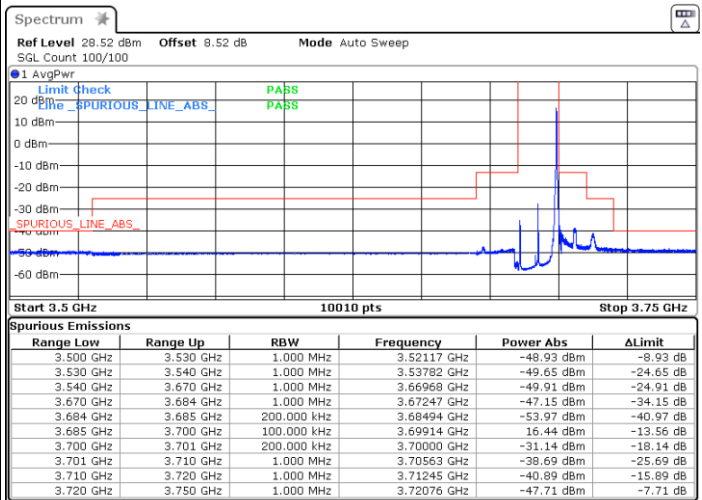
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



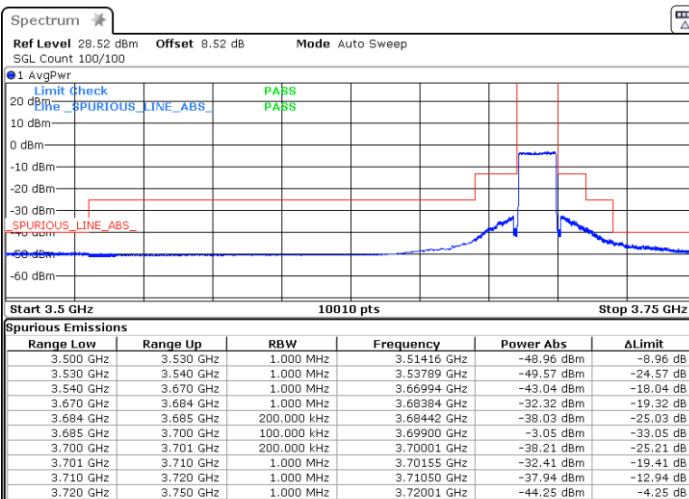
Date: 8.JAN.2021 02:09:43



Date: 8.JAN.2021 02:04:27

Highest Channel / Full RB

N/A



Date: 8.JAN.2021 02:16:31

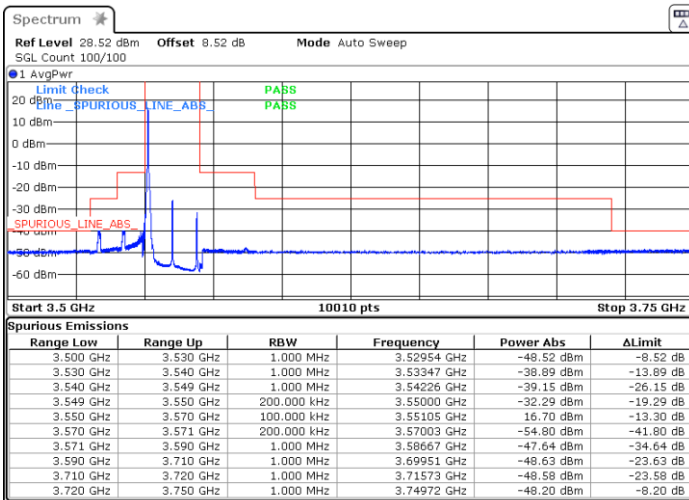


LTE Band 48 / 20MHz

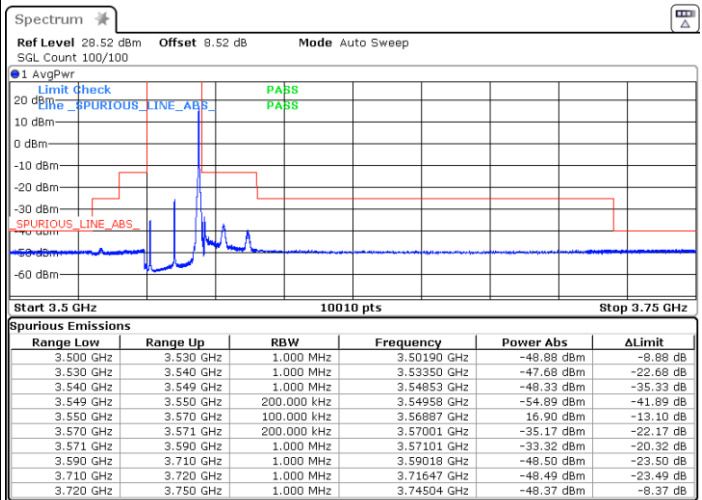
64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax



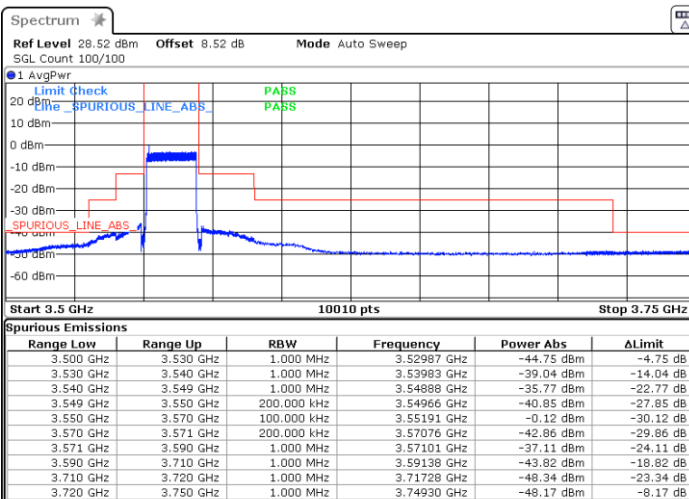
Date: 8.JAN.2021 02:35:16



Date: 8.JAN.2021 02:40:21

Lowest Channel / Full RB

N/A



Date: 8.JAN.2021 02:28:38

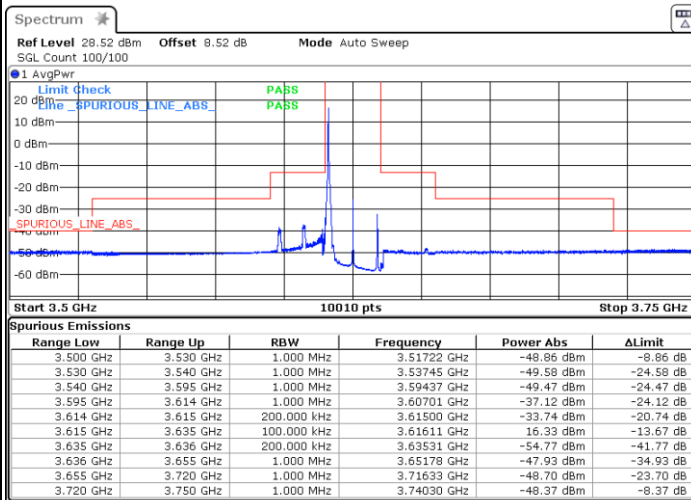


LTE Band 48 / 20MHz

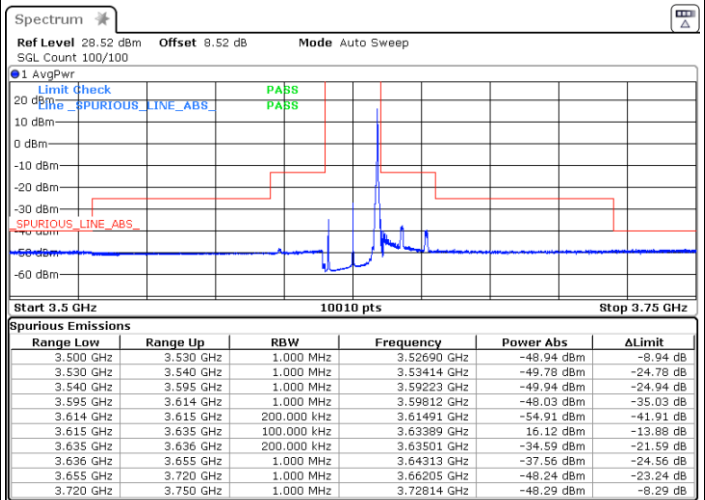
64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax



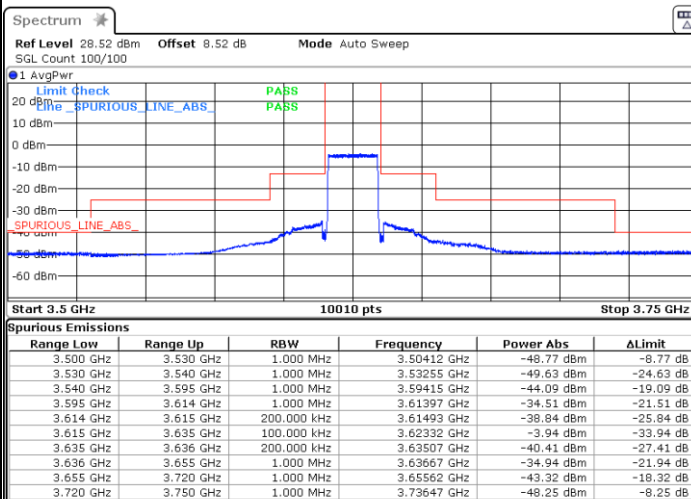
Date: 8.JAN.2021 03:03:44



Date: 8.JAN.2021 02:49:20

Middle Channel / Full RB

N/A



Date: 8.JAN.2021 02:57:25

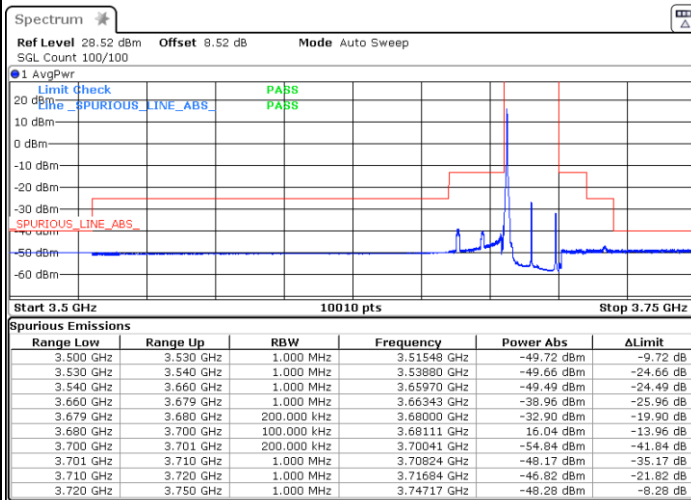


LTE Band 48 / 20MHz

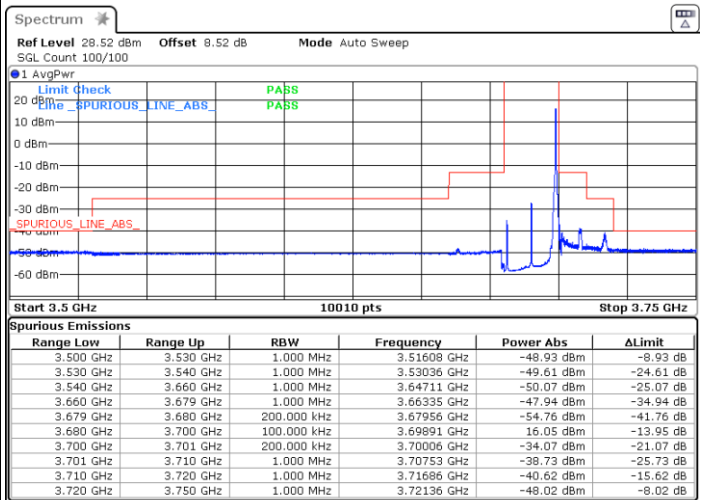
64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax



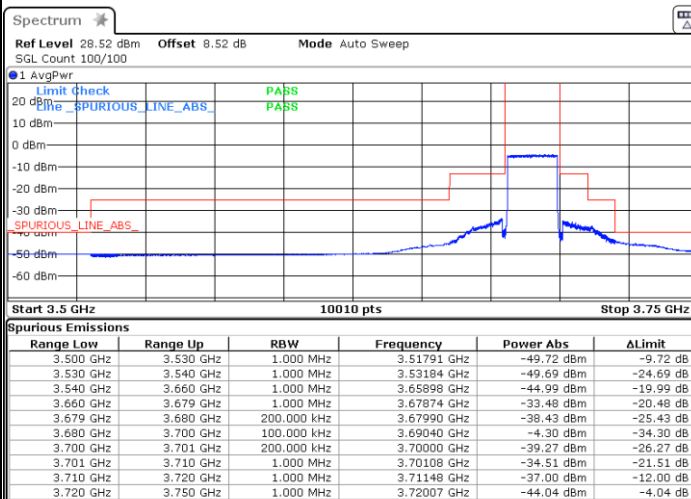
Date: 8.JAN.2021 03:17:29



Date: 8.JAN.2021 03:24:34

Highest Channel / Full RB

N/A



Date: 8.JAN.2021 03:32:24



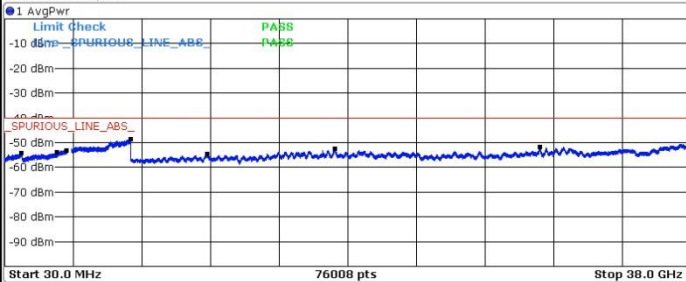
Conducted Spurious Emission

LTE Band 48 / 5MHz

Lowest Channel / 1RB0

Middle Channel / 1RB0

Spectrum

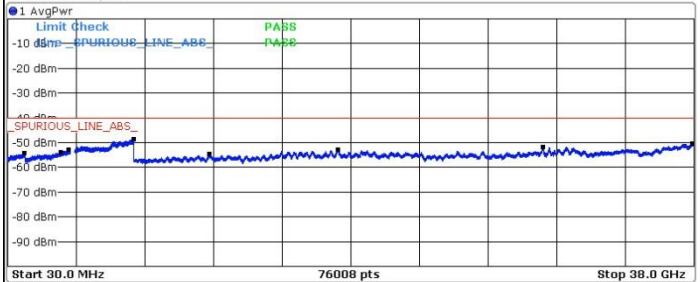
Ref Level 0.00 dBm Offset 8.52 dB Mode Auto Sweep
SGL Count 100/100

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	930.92204 MHz	-54.18 dBm	-14.18 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.92777 GHz	-54.01 dBm	-14.01 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.45779 GHz	-53.05 dBm	-13.05 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.99141 GHz	-48.61 dBm	-8.61 dB
7.000 GHz	14.000 GHz	1.000 MHz	11.20695 GHz	-54.56 dBm	-14.56 dB
14.000 GHz	22.000 GHz	1.000 MHz	18.27698 GHz	-52.56 dBm	-12.56 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.63377 GHz	-51.83 dBm	-11.83 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.93075 GHz	-50.15 dBm	-10.15 dB

Ready

Date: 13 JAN 2021 02:35:15

Spectrum

Ref Level 0.00 dBm Offset 8.52 dB Mode Auto Sweep
SGL Count 100/100

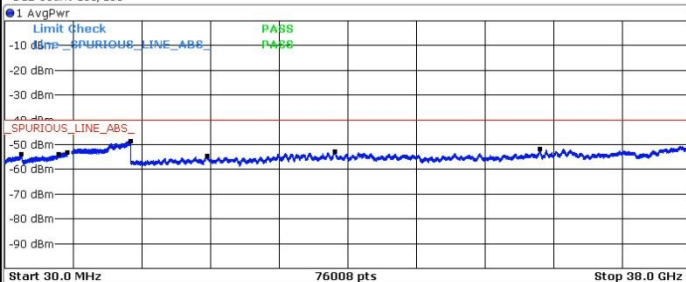
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	939.16292 MHz	-54.08 dBm	-14.08 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97926 GHz	-54.02 dBm	-14.02 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.40834 GHz	-52.91 dBm	-12.91 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.99327 GHz	-48.65 dBm	-8.65 dB
7.000 GHz	14.000 GHz	1.000 MHz	11.20445 GHz	-54.60 dBm	-14.60 dB
14.000 GHz	22.000 GHz	1.000 MHz	18.27998 GHz	-52.80 dBm	-12.80 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.64077 GHz	-51.79 dBm	-11.79 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.90076 GHz	-50.34 dBm	-10.34 dB

Ready

Date: 13 JAN 2021 02:36:44

Highest Channel / 1RB0

Spectrum

Ref Level 0.00 dBm Offset 8.52 dB Mode Auto Sweep
SGL Count 100/100

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	943.04098 MHz	-53.93 dBm	-13.93 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99625 GHz	-54.01 dBm	-14.01 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.47727 GHz	-53.08 dBm	-13.08 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.98723 GHz	-48.72 dBm	-8.72 dB
7.000 GHz	14.000 GHz	1.000 MHz	11.22045 GHz	-54.65 dBm	-14.65 dB
14.000 GHz	22.000 GHz	1.000 MHz	18.28548 GHz	-52.72 dBm	-12.72 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.63377 GHz	-51.76 dBm	-11.76 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.91126 GHz	-50.16 dBm	-10.16 dB

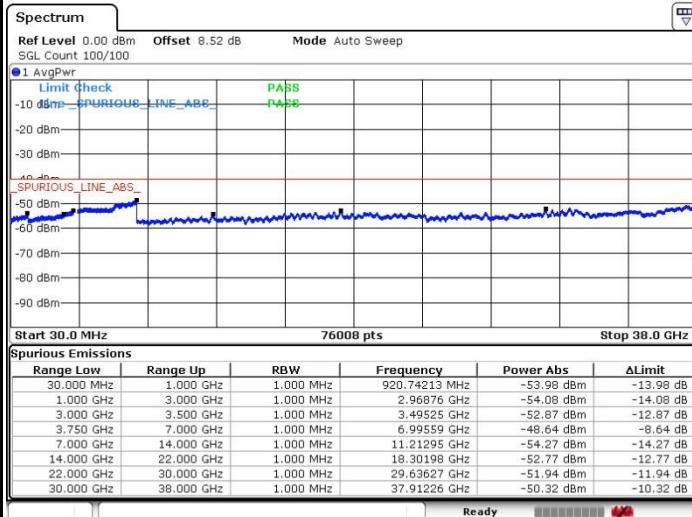
Ready

Date: 13 JAN 2021 02:37:49



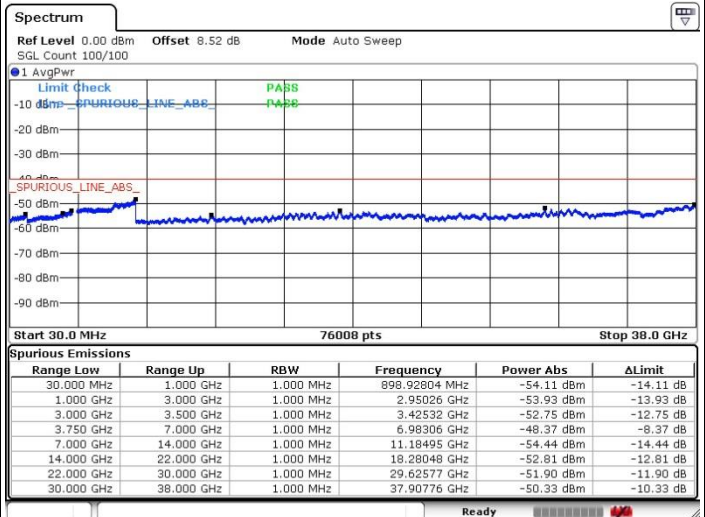
LTE Band 48 / 10MHz

Lowest Channel / 1RB0



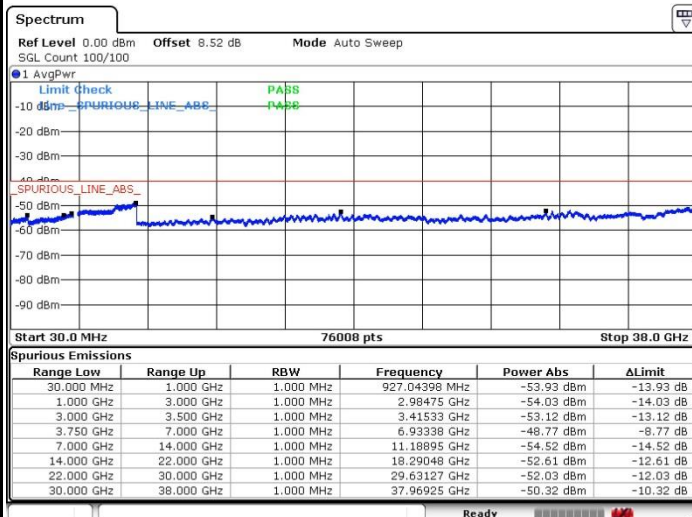
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Middle Channel / 1RB0



Date: 13.JAN.2021 02:40:15

Highest Channel / 1RB0

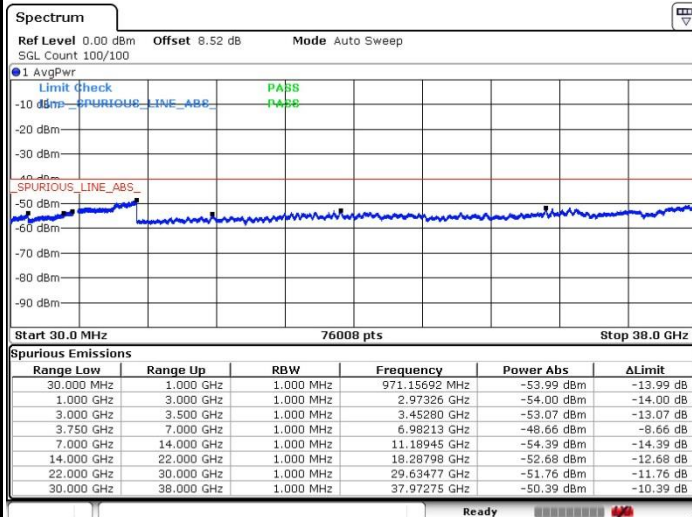


Date: 13.JAN.2021 02:41:50



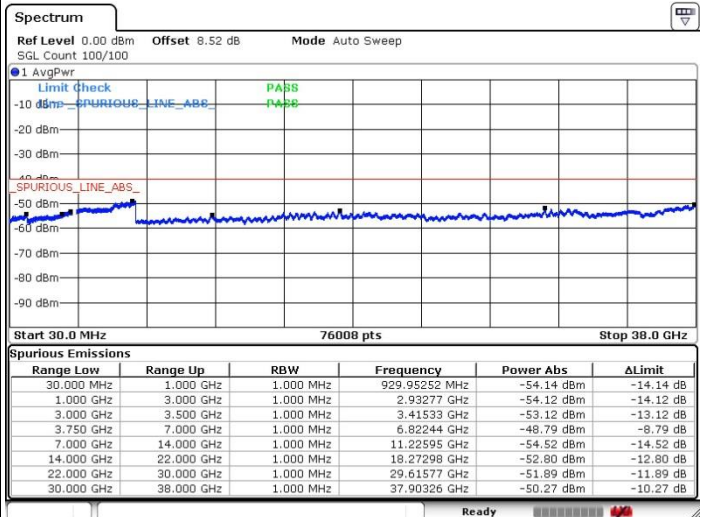
LTE Band 48 / 15MHz

Lowest Channel / 1RB0



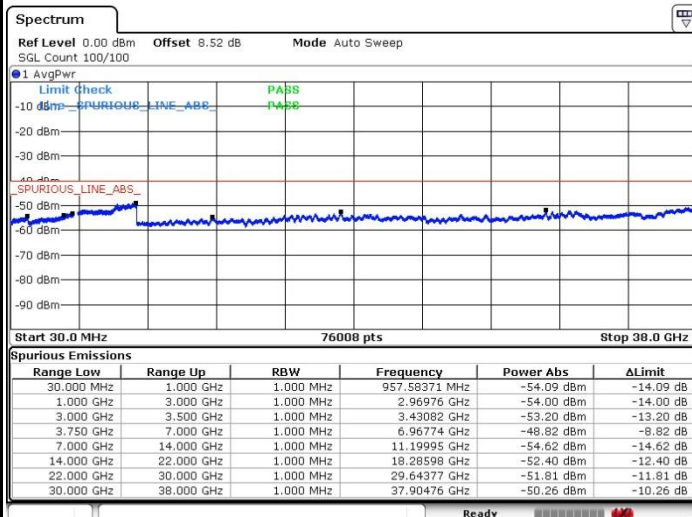
Date: 13.JAN.2021 02:43:21

Middle Channel / 1RB0



Date: 13.JAN.2021 02:44:27

Highest Channel / 1RB0



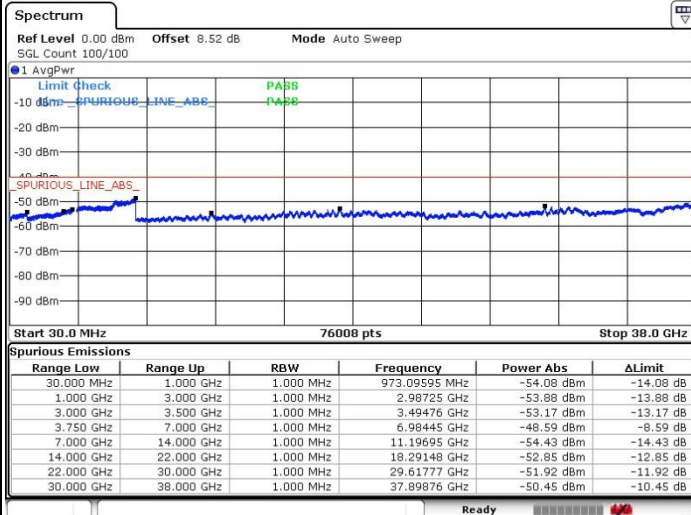
Date: 13.JAN.2021 02:45:46



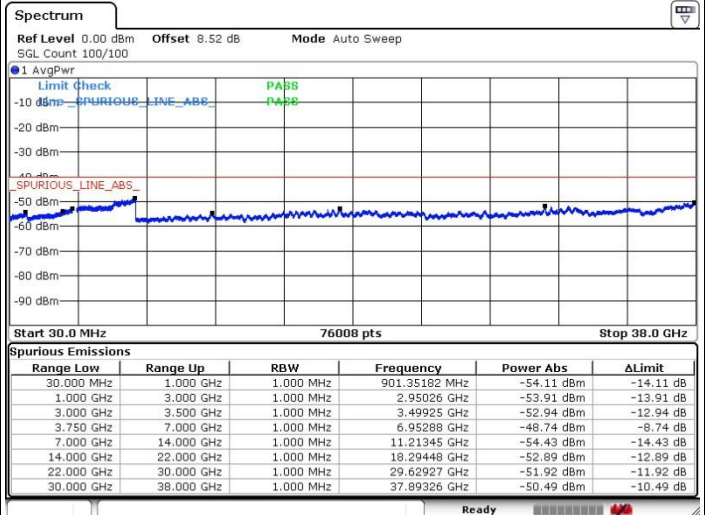
LTE Band 48 / 20MHz

Lowest Channel / 1RB0

Middle Channel / 1RB0

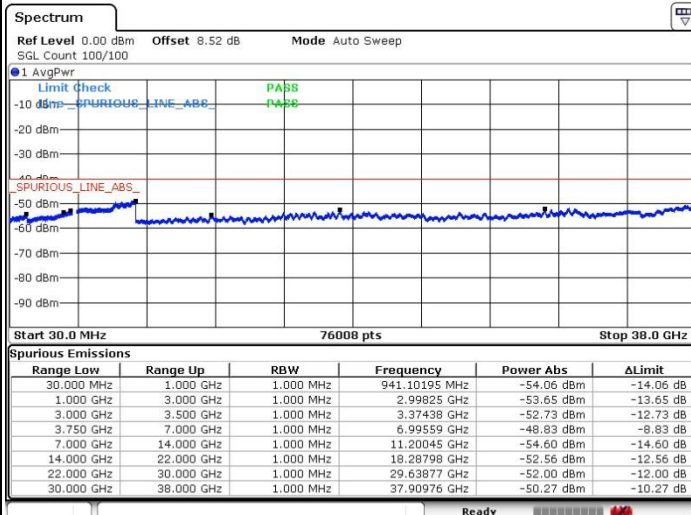


Date: 13.JAN.2021 02:47:48



Date: 13.JAN.2021 02:48:55

Highest Channel / 1RB0



Date: 13.JAN.2021 02:50:04

Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0044	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0032	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =7.74V. ; Battery End Point (BEP) =7.3 V. ; Maximum Voltage =8.7 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 48 / 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)
Middle	7230	-60.16	-40	-20.16	-71.62	2.84	14.30	H
	10848	-55.31	-40	-15.31	-65.25	3.49	13.43	H
	14466	-59.38	-40	-19.38	-69.62	3.85	14.09	H
	7230	-60.20	-40	-20.20	-71.66	2.84	14.30	V
	10848	-56.57	-40	-16.57	-66.51	3.49	13.43	V
	14466	-59.08	-40	-19.08	-69.32	3.85	14.09	V

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