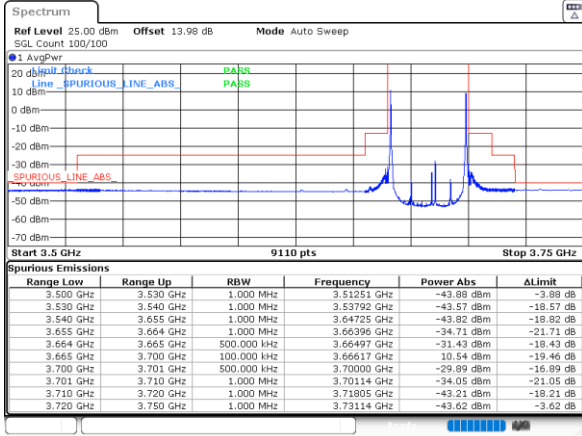




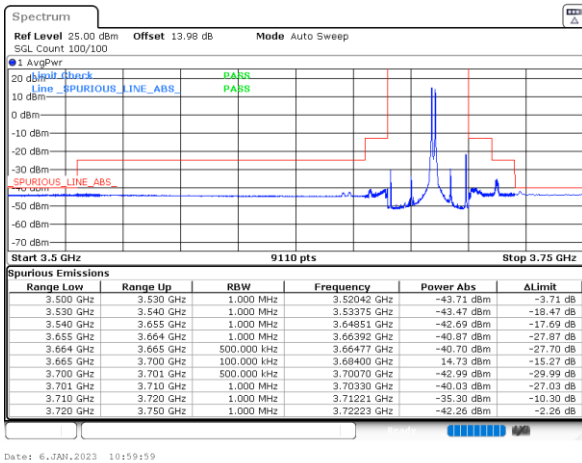
LTE Band 48C / 20MHz+15MHz

64QAM

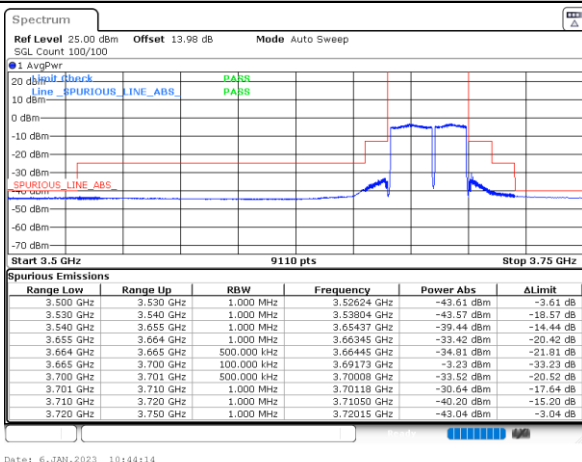
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



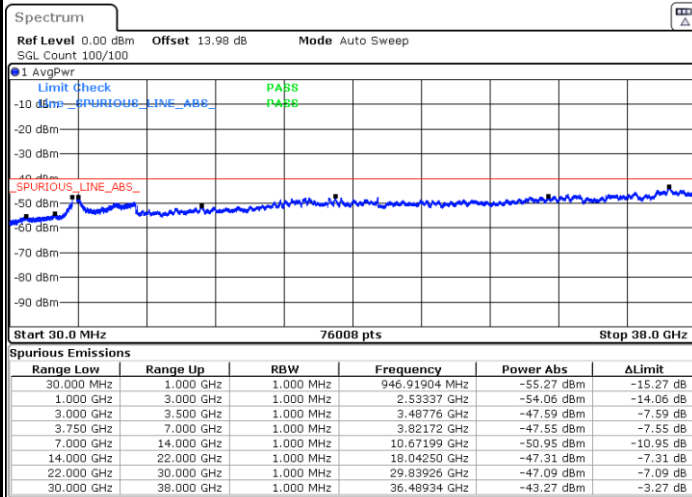
Highest Band Edge / Full RB





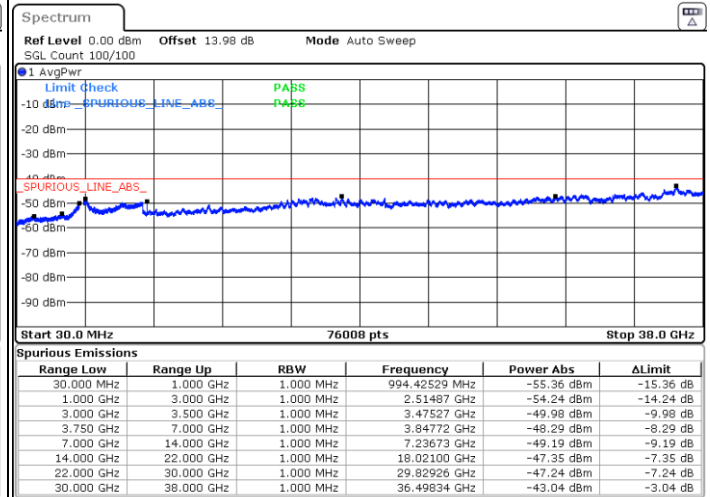
Conducted Spurious Emission

LTE Band 48C / 5MHz+20MHz QPSK Lowest Channel / 1RB24 and 1RB0



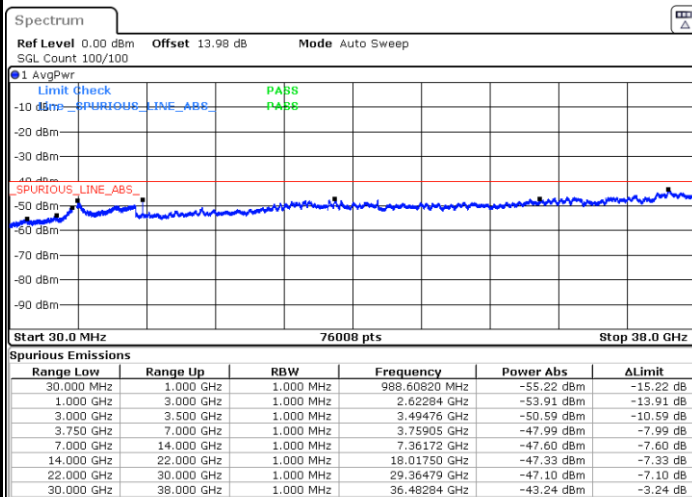
Date: 7.JAN.2023 00:02:48

LTE Band 48C / 5MHz+20MHz QPSK Middle Channel / 1RB24 and 1RB0

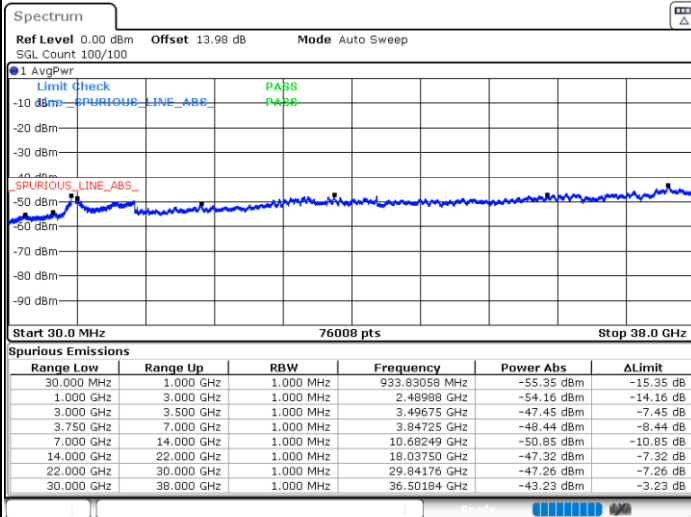


Date: 7.JAN.2023 00:04:21

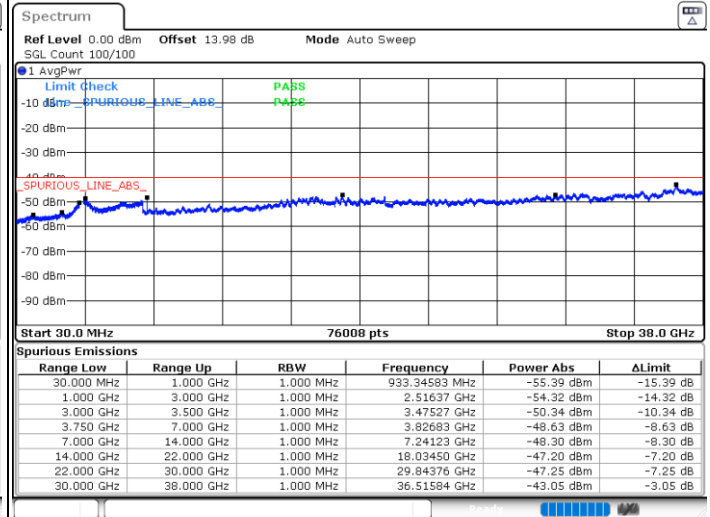
LTE Band 48C / 5MHz+20MHz QPSK Highest Channel / 1RB24 and 1RB0



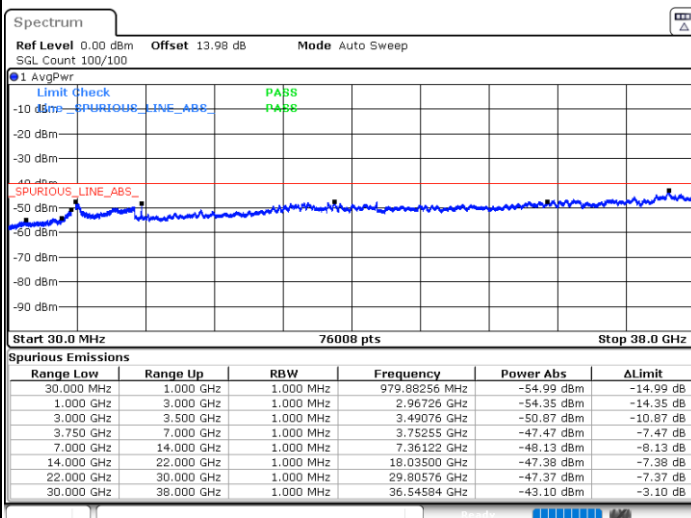
Date: 7.JAN.2023 00:05:53

LTE Band 48C / 10MHz+20MHz QPSK Lowest
Channel / 1RB49 and 1RB0LTE Band 48C / 10MHz+20MHz QPSK Middle
Channel / 1RB49 and 1RB0

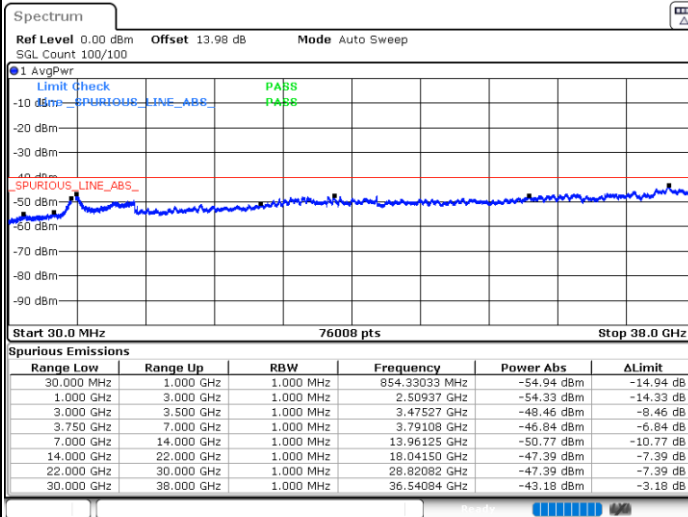
Date: 7.JAN.2023 00:38:01



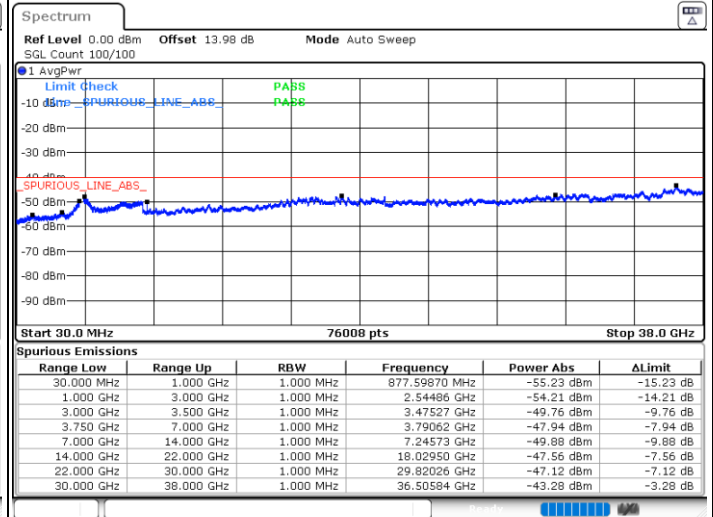
Date: 7.JAN.2023 00:45:20

LTE Band 48C / 10MHz+20MHz QPSK Highest
Channel / 1RB49 and 1RB0

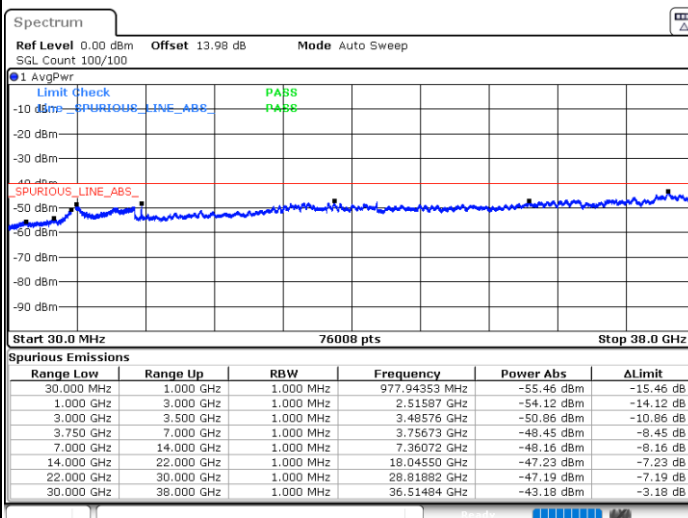
Date: 7.JAN.2023 00:47:56

**LTE Band 48C / 15MHz+20MHz QPSK Lowest
Channel / 1RB74 and 1RB0****LTE Band 48C / 15MHz+20MHz QPSK Middle
Channel / 1RB74 and 1RB0**

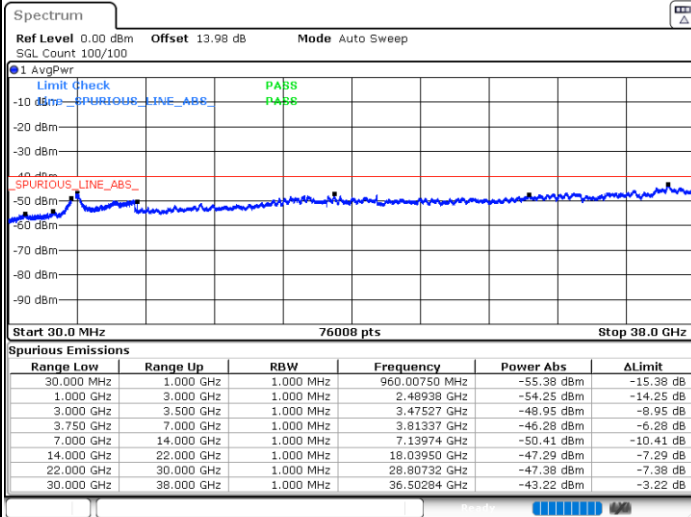
Date: 7.JAN.2023 00:50:23



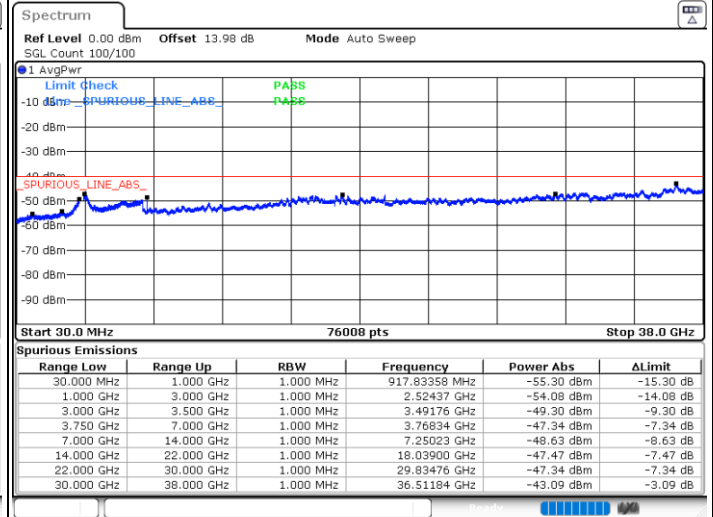
Date: 7.JAN.2023 00:53:37

**LTE Band 48C / 15MHz+20MHz QPSK Highest
Channel / 1RB74 and 1RB0**

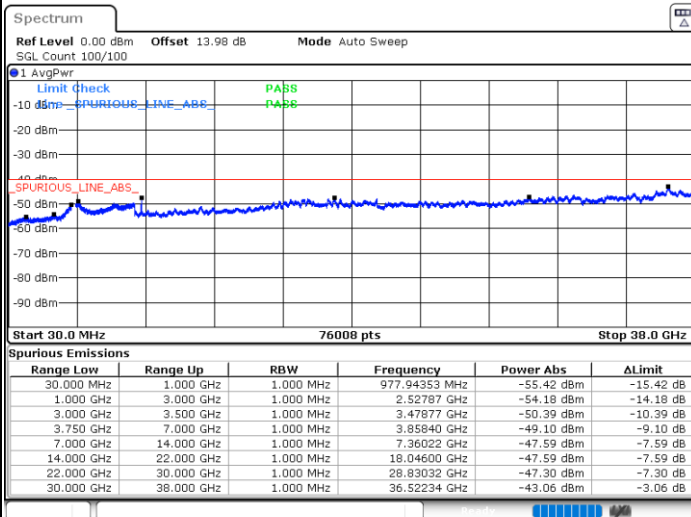
Date: 7.JAN.2023 00:55:32

LTE Band 48C / 20MHz+20MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+20MHz QPSK Middle
Channel / 1RB99 and 1RB0

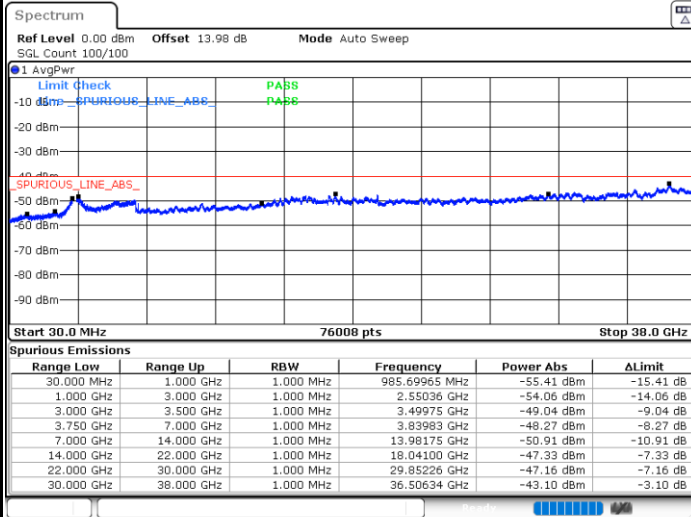
Date: 7.JAN.2023 01:05:52



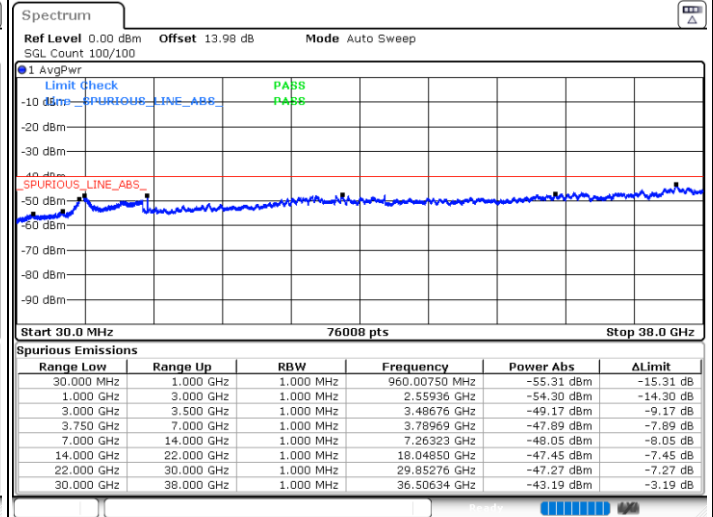
Date: 7.JAN.2023 01:07:46

LTE Band 48C / 20MHz+20MHz QPSK Highest
Channel / 1RB99 and 1RB0

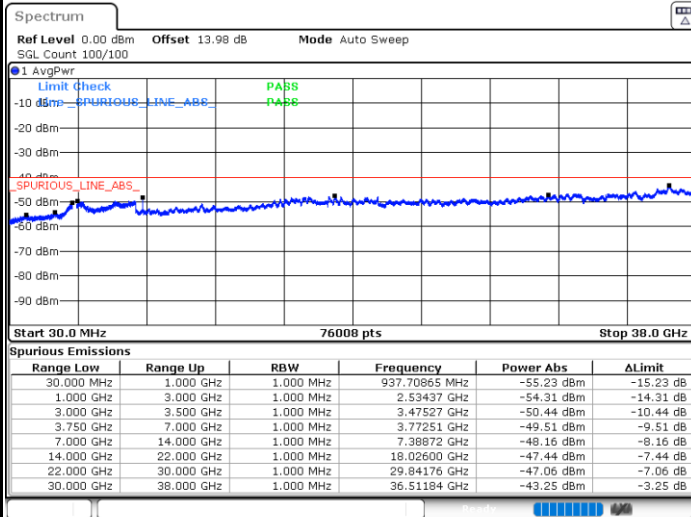
Date: 7.JAN.2023 01:09:56

LTE Band 48C / 20MHz+5MHz QPSK Lowest
Channel / 1RB99 and 1RB0

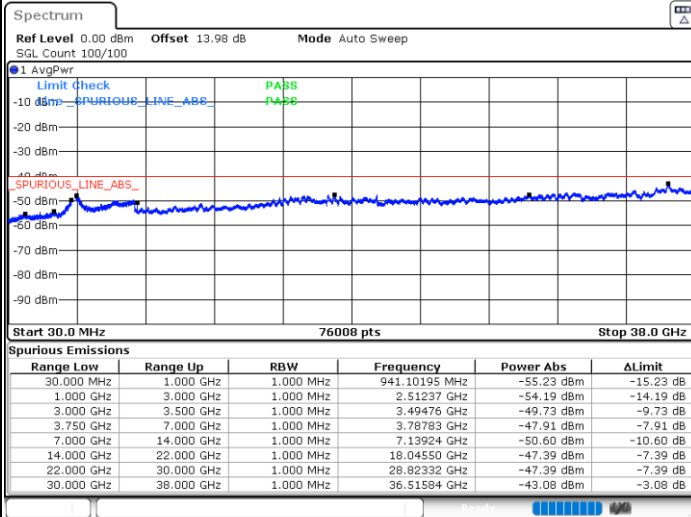
Date: 7.JAN.2023 01:17:47

LTE Band 48C / 20MHz+5MHz QPSK Middle Channel
/ 1RB99 and 1RB0

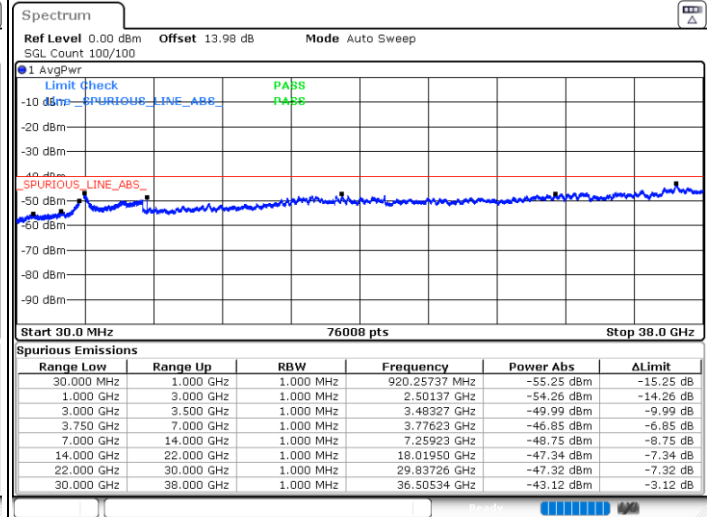
Date: 7.JAN.2023 01:19:45

LTE Band 48C / 20MHz+5MHz QPSK Highest
Channel / 1RB99 and 1RB0

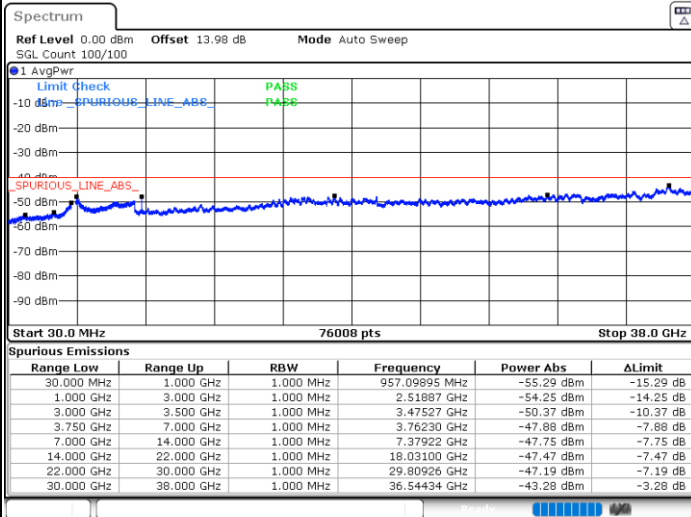
Date: 7.JAN.2023 01:21:42

LTE Band 48C / 20MHz+10MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+10MHz QPSK Middle
Channel / 1RB99 and 1RB0

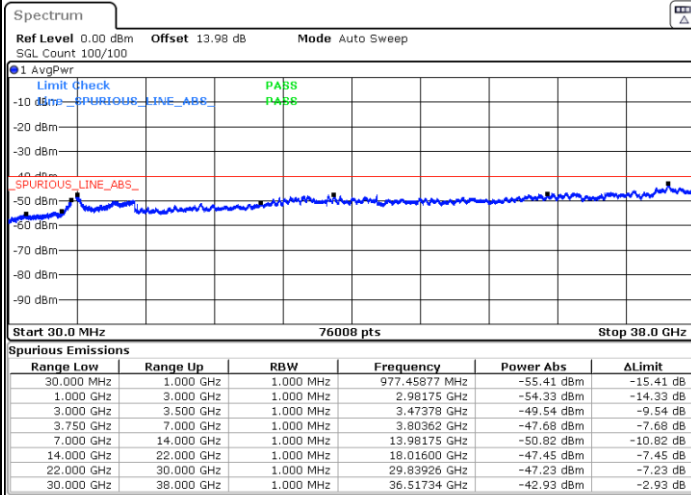
Date: 7.JAN.2023 01:23:42



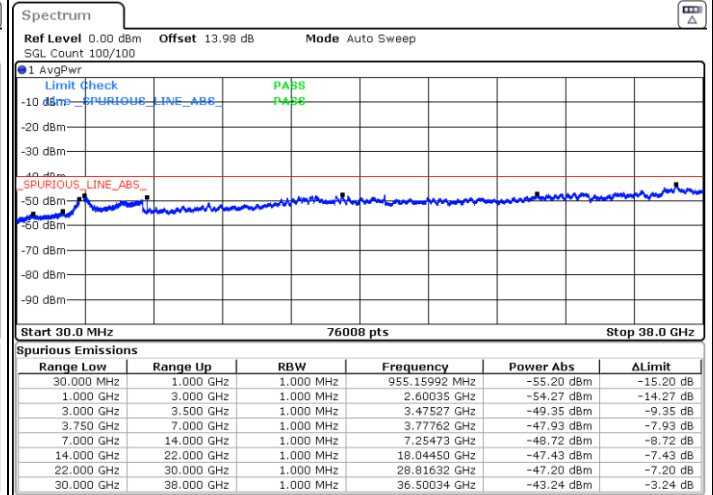
Date: 7.JAN.2023 01:25:47

LTE Band 48C / 20MHz+10MHz QPSK Highest
Channel / 1RB99 and 1RB0

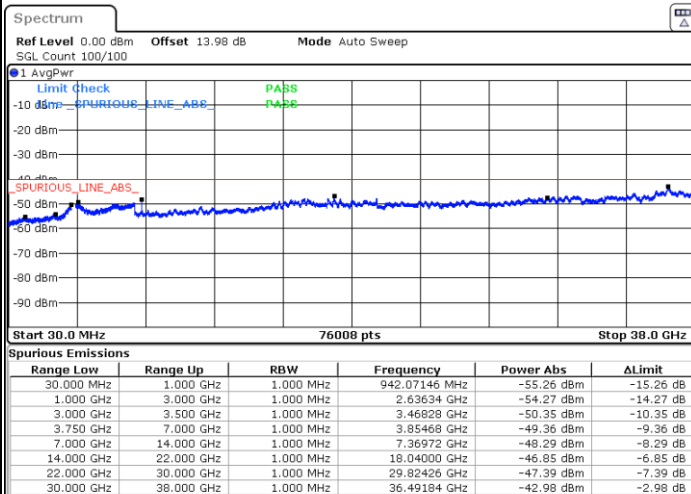
Date: 7.JAN.2023 01:27:44

LTE Band 48C / 20MHz+15MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+15MHz QPSK Middle
Channel / 1RB99 and 1RB0

Date: 7.JAN.2023 01:11:51



Date: 7.JAN.2023 01:13:45

LTE Band 48C / 20MHz+15MHz QPSK Highest
Channel / 1RB99 and 1RB0

Date: 7.JAN.2023 01:15:49

Frequency Stability

Test Conditions		LTE Band 48C (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20+20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0016	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0028	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0033	
20	Normal Voltage	0.0019	
20	Minimum Voltage	0.0027	

Note:

1. Normal Voltage =24 V. ; Minimum Voltage =20 V. ; Maximum Voltage =28 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 :	Carry Xu	Temperature :	22~23℃
		Relative Humidity :	40~42%

LTE Band 48 / 20MHz / QPSK Ant 0								
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	-55.85	-40	-15.85	-67.31	2.84	14.30	H
	10848	-58.88	-40	-18.88	-68.82	3.49	13.43	H
	14466	-57.22	-40	-17.22	-67.46	3.85	14.09	H
	7230	-52.31	-40	-12.31	-63.77	2.84	14.30	V
	10848	-60.15	-40	-20.15	-70.09	3.49	13.43	V
	14466	-53.62	-40	-13.62	-63.86	3.85	14.09	V

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

LTE Band 48 MIMO / 20MHz / QPSK Ant 0 + Ant 2								
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	-52.18	-40	-12.18	-63.64	2.84	14.30	H
	10848	-58.10	-40	-18.10	-68.04	3.49	13.43	H
	14466	-56.18	-40	-16.18	-66.42	3.85	14.09	H
	7230	-49.58	-40	-9.58	-61.04	2.84	14.30	V
	10848	-59.86	-40	-19.86	-69.80	3.49	13.43	V
	14466	-53.81	-40	-13.81	-64.05	3.85	14.09	V

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



ULCA_48B Ant.0								
Channel	Frequency (MHz)	EIRP/ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle 1RB0,QPSK	7266	-53.54	-40	-13.54	-65.00	2.84	14.30	H
	10902	-59.62	-40	-19.62	-69.56	3.49	13.43	H
	14532	-54.77	-40	-14.77	-65.01	3.85	14.09	H
	7266	-54.90	-40	-14.90	-66.36	2.84	14.30	V
	10902	-59.23	-40	-19.23	-69.17	3.49	13.43	V
	14532	-54.76	-40	-14.76	-65.00	3.85	14.09	V
Middle 1RBMAX,QPSK	7284	-55.99	-40	-15.99	-67.45	2.84	14.30	H
	10932	-60.36	-40	-20.36	-70.30	3.49	13.43	H
	14574	-60.19	-40	-20.19	-70.43	3.85	14.09	H
	7284	-46.28	-40	-6.28	-57.74	2.84	14.30	V
	10932	-60.74	-40	-20.74	-70.68	3.49	13.43	V
	14574	-60.13	-40	-20.13	-70.37	3.85	14.09	V

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

ULCA_48C Ant.0								
Channel	Frequency (MHz)	EIRP/ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle 1RB0,QPSK	7212	-50.23	-40	-10.23	-61.69	2.84	14.30	H
	10818	-57.04	-40	-17.04	-66.98	3.49	13.43	H
	14424	-57.05	-40	-17.05	-67.29	3.85	14.09	H
	7212	-48.05	-40	-8.05	-59.51	2.84	14.30	V
	10818	-55.92	-40	-15.92	-65.86	3.49	13.43	V
	14424	-51.81	-40	-11.81	-62.05	3.85	14.09	V
Middle 1RBMAX,QPSK	7248	-63.12	-40	-23.12	-74.58	2.84	14.30	H
	10878	-60.57	-40	-20.57	-70.51	3.49	13.43	H
	14502	-59.61	-40	-19.61	-69.85	3.85	14.09	H
	7248	-63.23	-40	-23.23	-74.69	2.84	14.30	V
	10878	-60.86	-40	-20.86	-70.80	3.49	13.43	V
	14502	-59.79	-40	-19.79	-70.03	3.85	14.09	V

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



ULCA_48A-48A Ant.0+Ant.0								
Channel	Frequency (MHz)	EIRP/ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B48 BW 20MHz Middle 1RB0,QPSK	7104	-52.86	-40	-12.86	-64.32	2.84	14.30	H
	10656	-58.37	-40	-18.37	-68.31	3.49	13.43	H
	14202	-57.23	-40	-17.23	-67.47	3.85	14.09	H
	7104	-58.33	-40	-18.33	-69.79	2.84	14.30	V
	10656	-58.02	-40	-18.02	-67.96	3.49	13.43	V
	14202	-59.75	-40	-19.75	-69.99	3.85	14.09	V
LTE B48 BW 20MHz Middle 1RBMAX,QPSK	7362	-63.13	-40	-23.13	-74.59	2.84	14.30	H
	11040	-61.32	-40	-21.32	-71.26	3.49	13.43	H
	14724	-59.62	-40	-19.62	-69.86	3.85	14.09	H
	7362	-63.08	-40	-23.08	-74.54	2.84	14.30	V
	11040	-61.15	-40	-21.15	-71.09	3.49	13.43	V
	14724	-59.61	-40	-19.61	-69.85	3.85	14.09	V

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