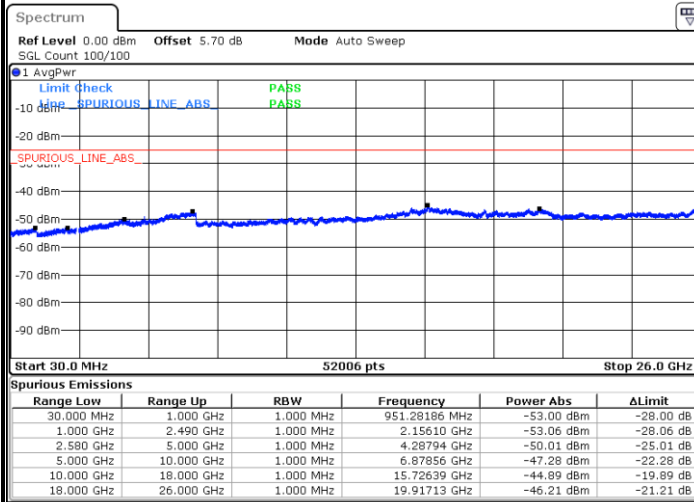




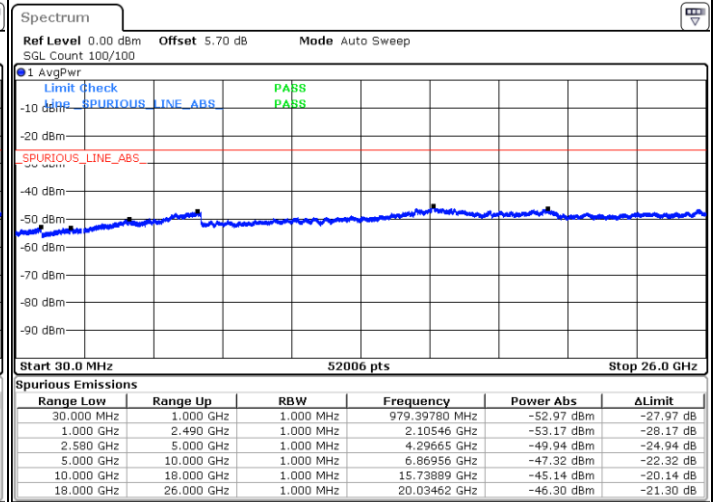
LTE Band 7 / 20MHz

Middle Channel / QPSK



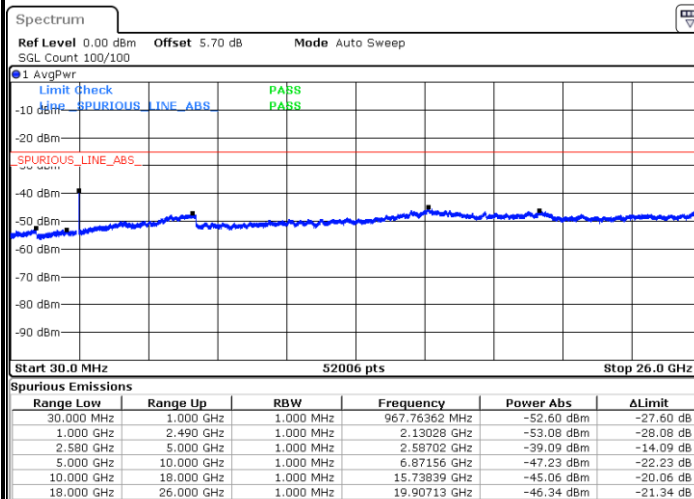
Date: 2 MAY 2019 19:44:54

Middle Channel / 16QAM



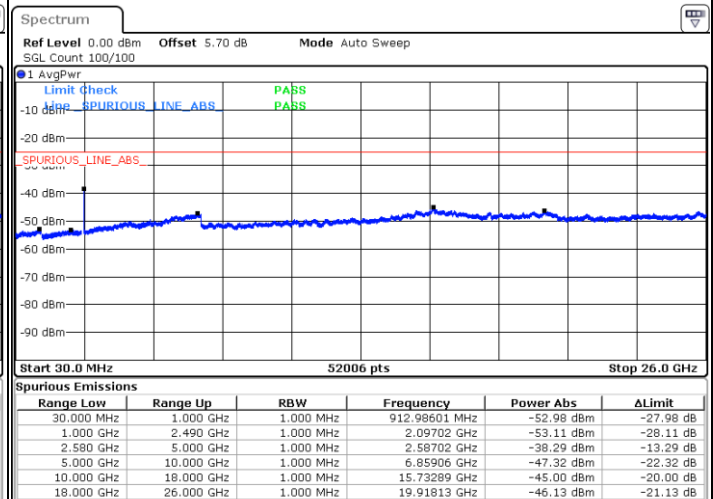
Date: 2 MAY 2019 19:44:01

Highest Channel / QPSK



Date: 2 MAY 2019 19:45:48

Highest Channel / 16QAM

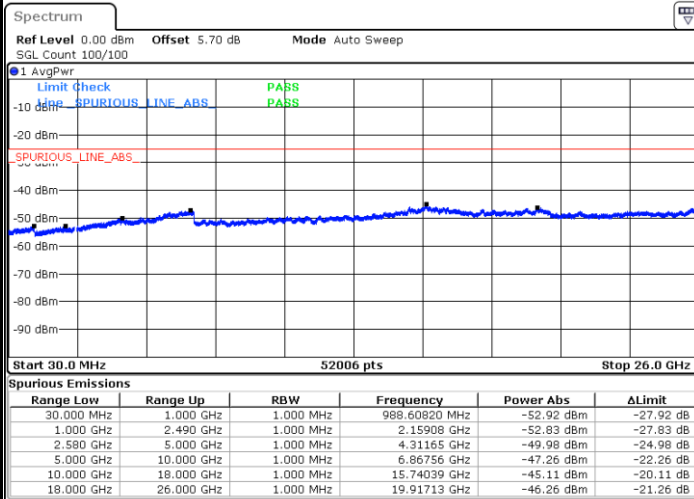


Date: 2 MAY 2019 19:46:42



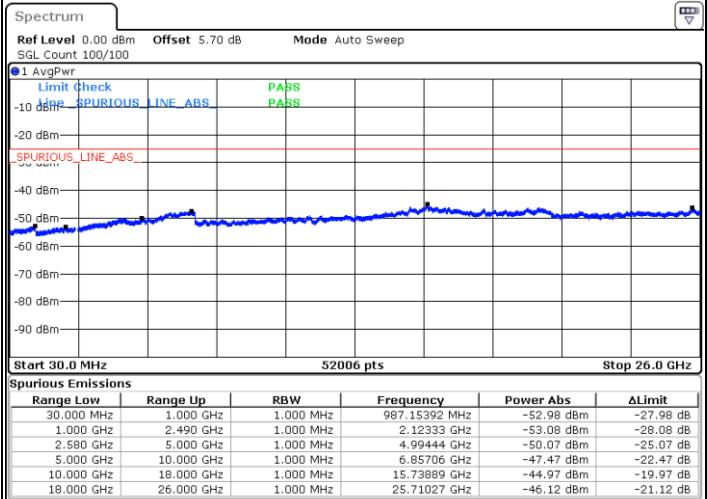
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



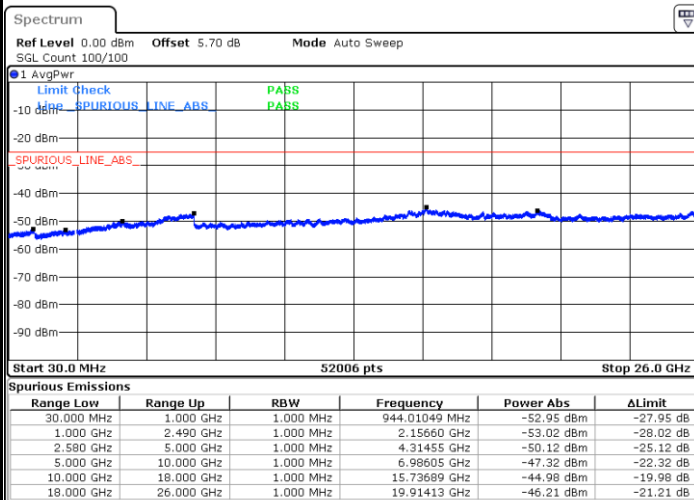
Date: 2 MAY 2019 19:48:36

Middle Channel / 64QAM



Date: 2 MAY 2019 19:49:30

Highest Channel / 64QAM

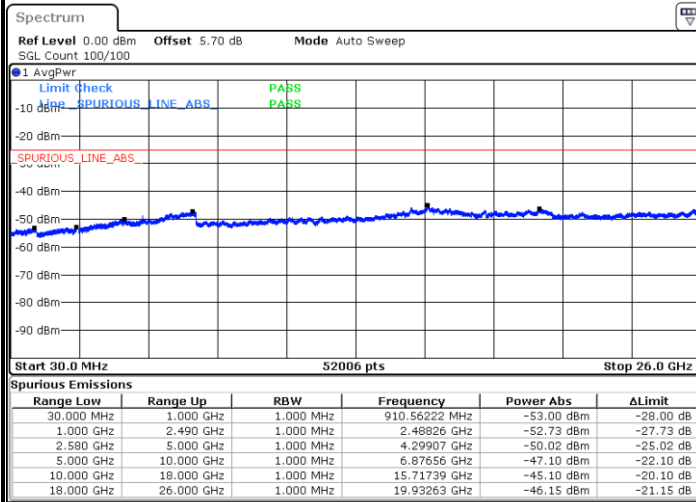


Date: 2 MAY 2019 19:50:24



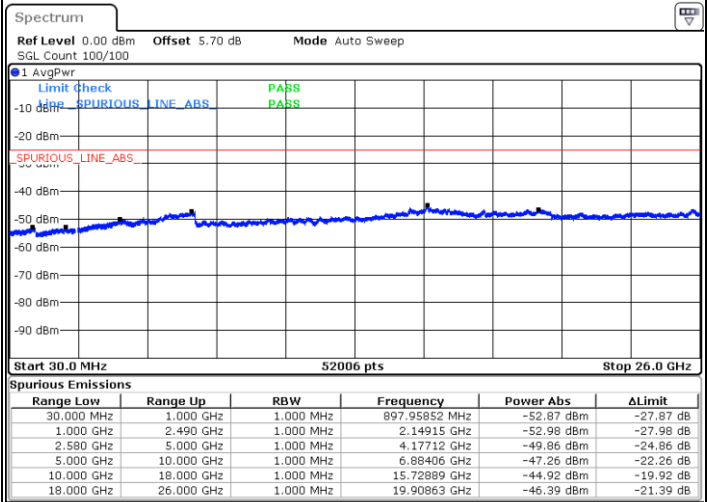
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



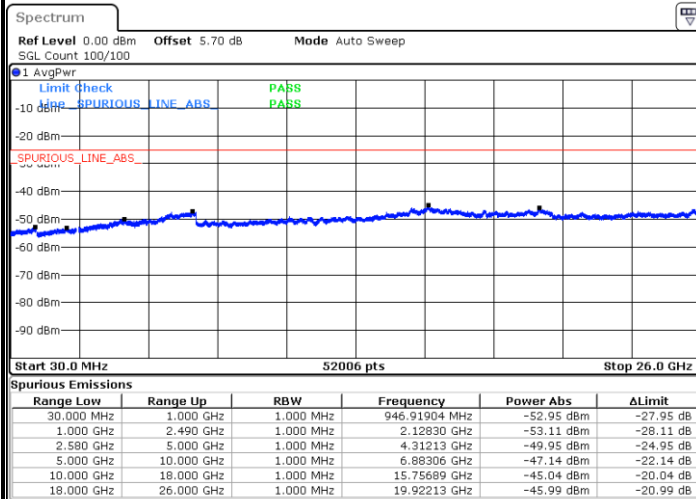
Date: 2 MAY 2019 19:56:51

Middle Channel / 64QAM



Date: 2 MAY 2019 19:57:45

Highest Channel / 64QAM

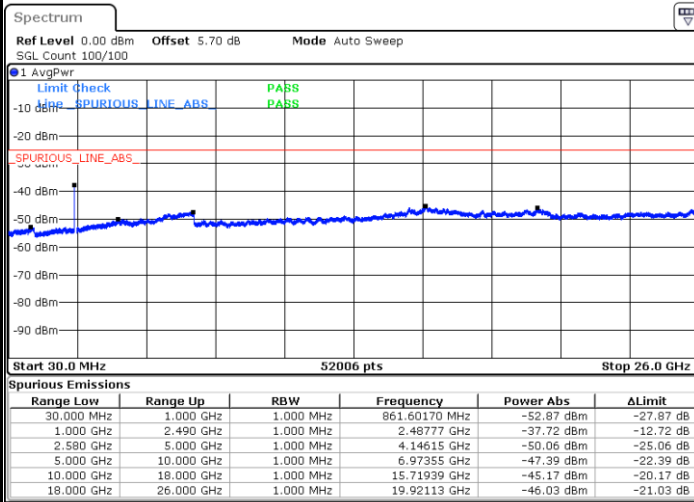


Date: 2 MAY 2019 19:58:39



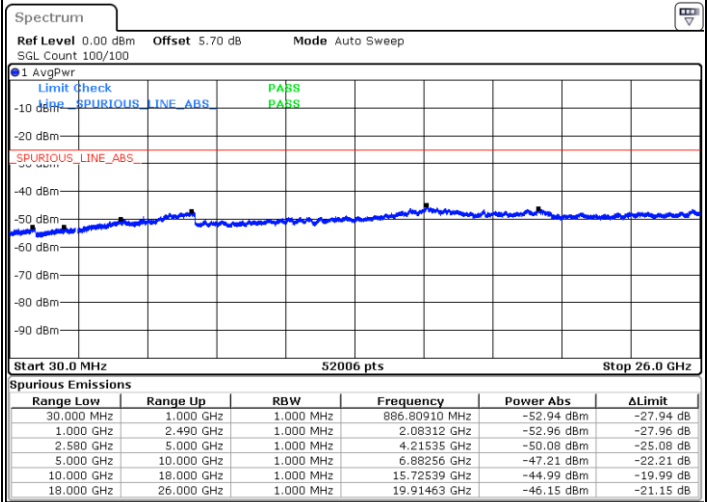
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



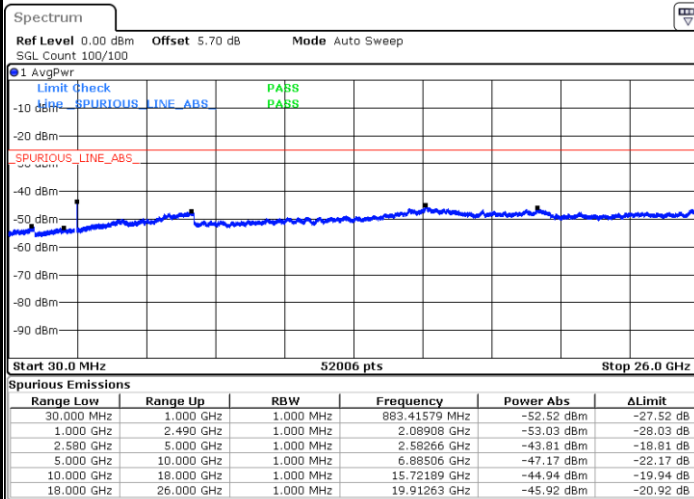
Date: 2 MAY. 2019 20:09:38

Middle Channel / 64QAM



Date: 2 MAY. 2019 20:10:32

Highest Channel / 64QAM

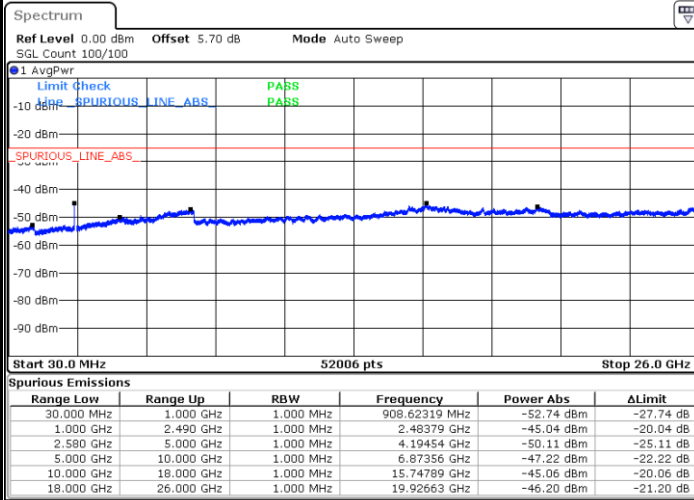


Date: 2 MAY. 2019 20:11:26



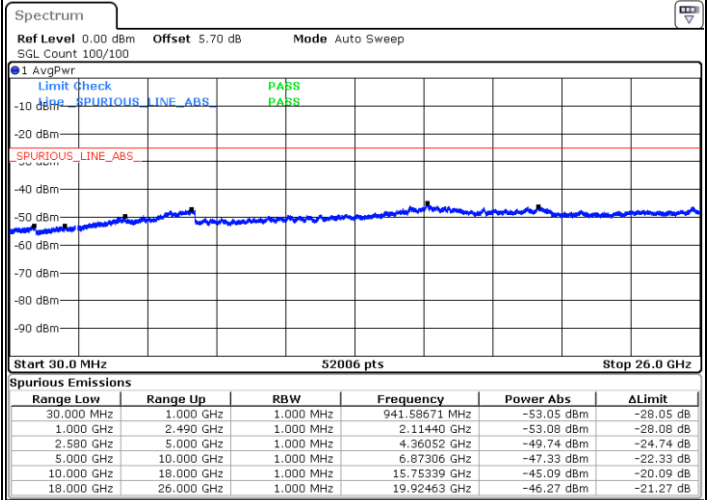
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



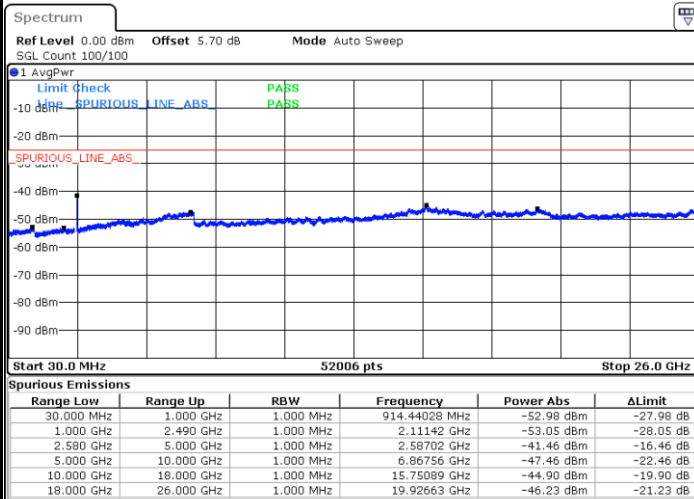
Date: 2 MAY 2019 20:17:53

Middle Channel / 64QAM



Date: 2 MAY 2019 20:18:47

Highest Channel / 64QAM

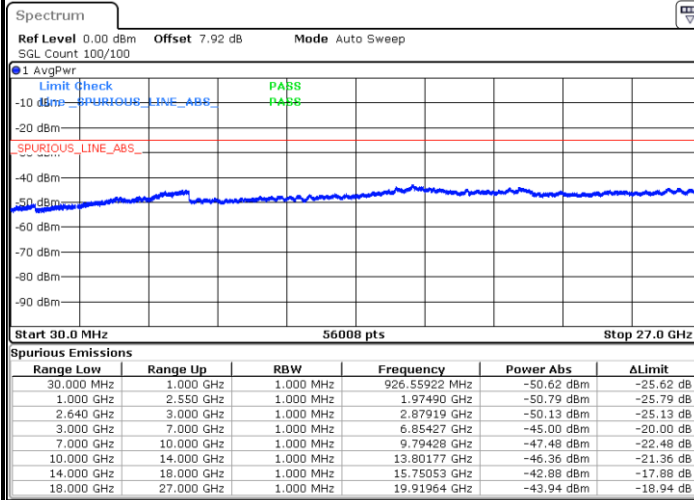


Date: 2 MAY 2019 20:19:41



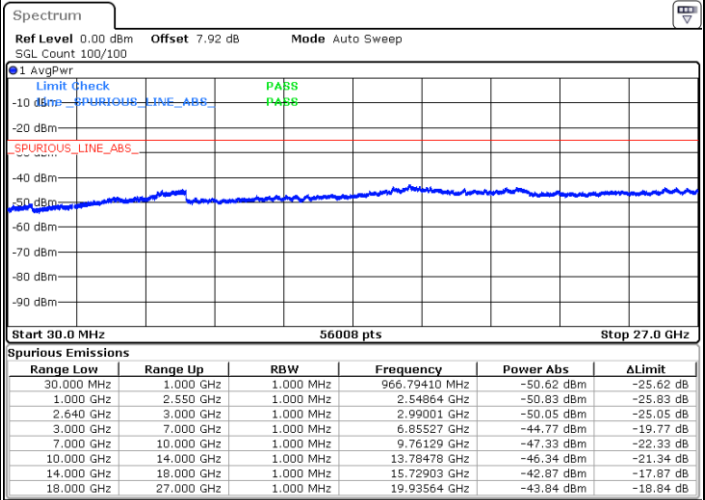
LTE Band 38 / 5MHz

Lowest Channel / QPSK



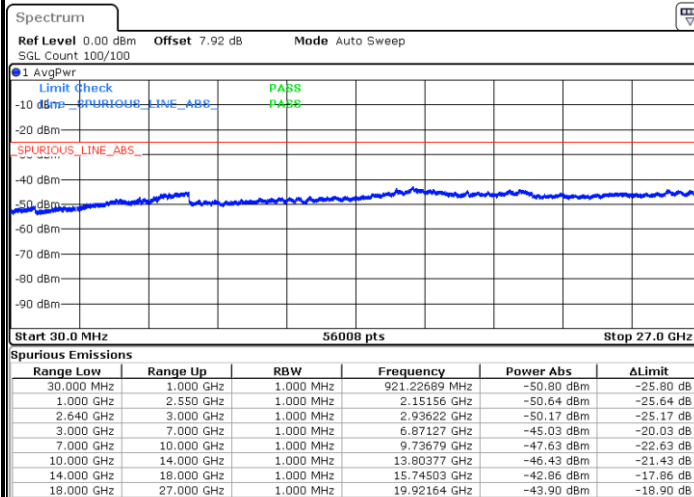
Date: 2 MAY 2019 20:33:24

Lowest Channel / 16QAM



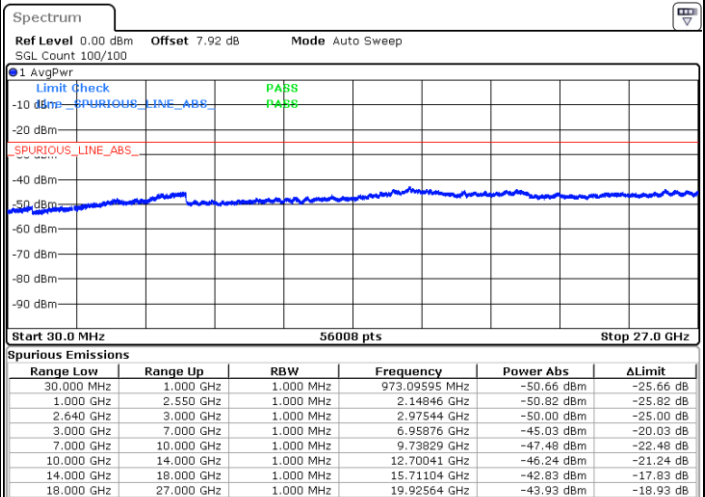
Date: 2 MAY 2019 20:34:19

Middle Channel / QPSK



Date: 2 MAY 2019 22:38:57

Middle Channel / 16QAM

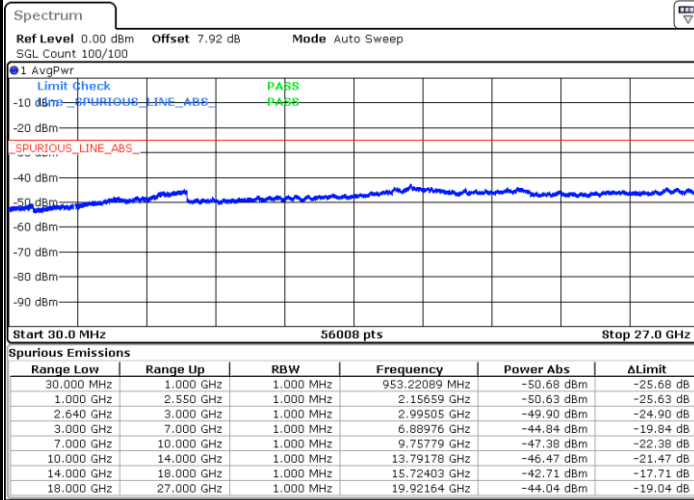


Date: 2 MAY 2019 20:36:08



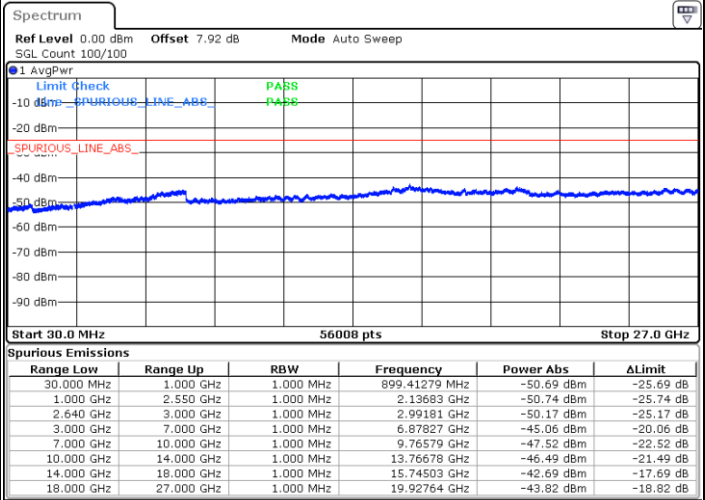
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 2 MAY 2019 20:37:03

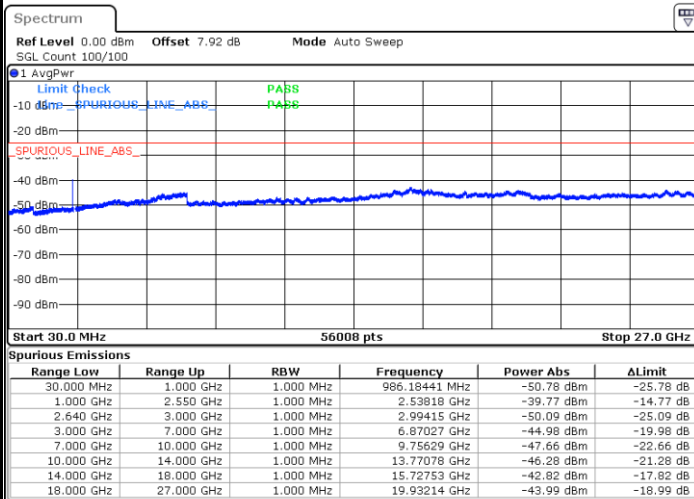
Highest Channel / 16QAM



Date: 2 MAY 2019 20:37:58

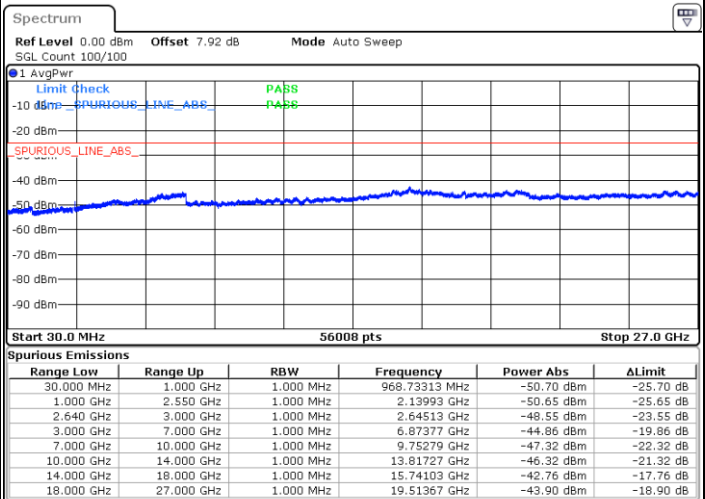
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 2 MAY 2019 20:38:53

Lowest Channel / 16QAM

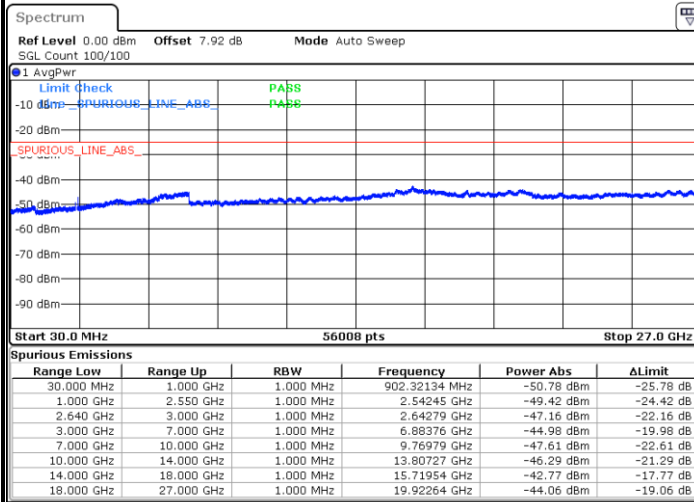


Date: 2 MAY 2019 20:39:48



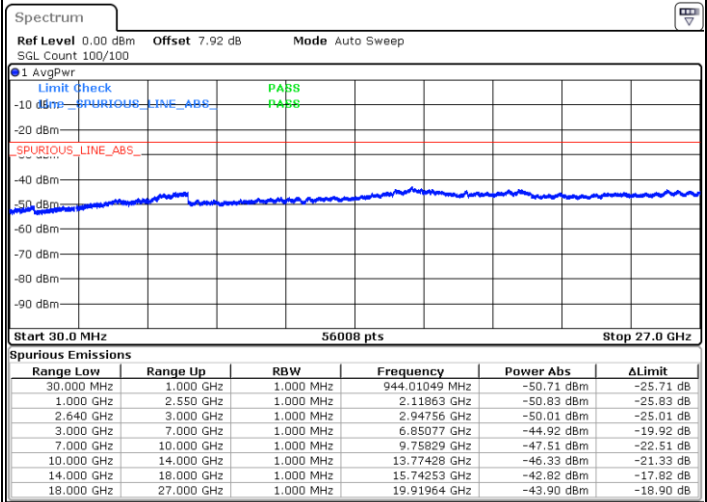
LTE Band 38 / 10MHz

Middle Channel / QPSK



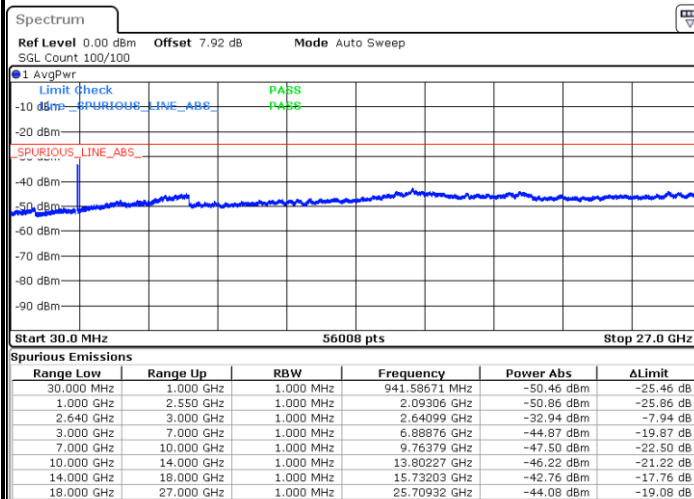
Date: 2 MAY 2019 20:40:43

Middle Channel / 16QAM



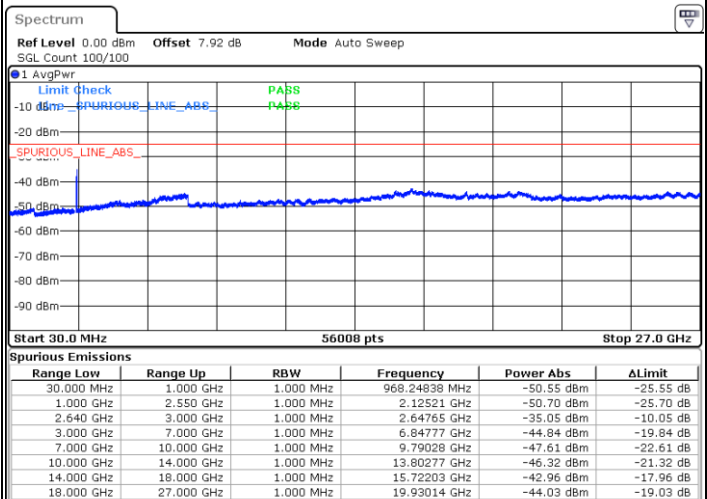
Date: 2 MAY 2019 20:41:38

Highest Channel / QPSK



Date: 2 MAY 2019 20:42:32

Highest Channel / 16QAM

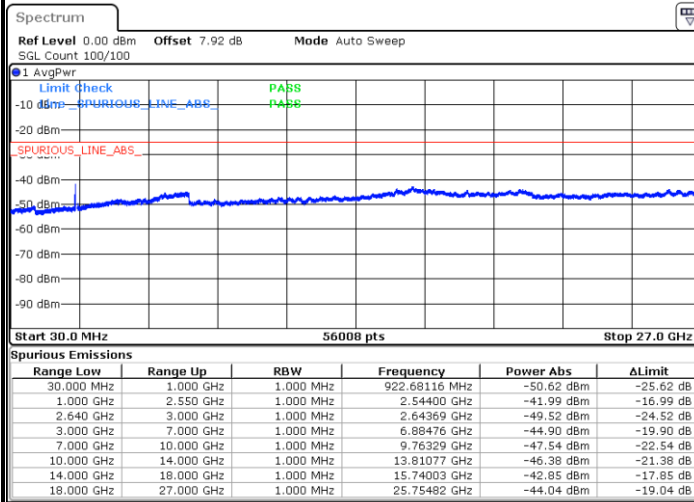


Date: 2 MAY 2019 20:43:27



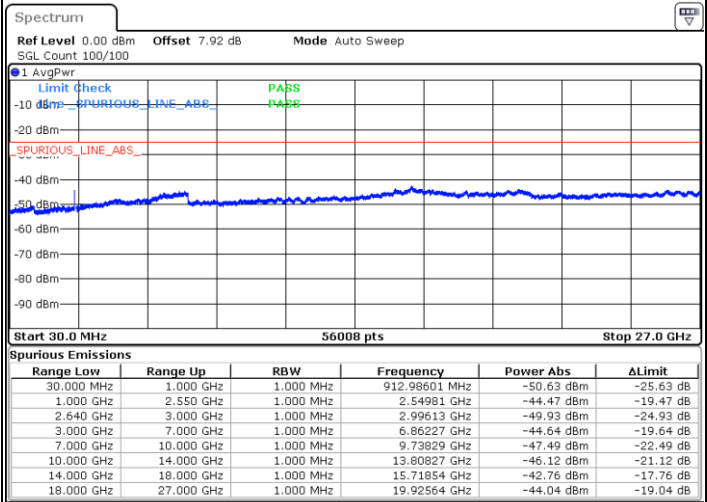
LTE Band 38 / 15MHz

Lowest Channel / QPSK



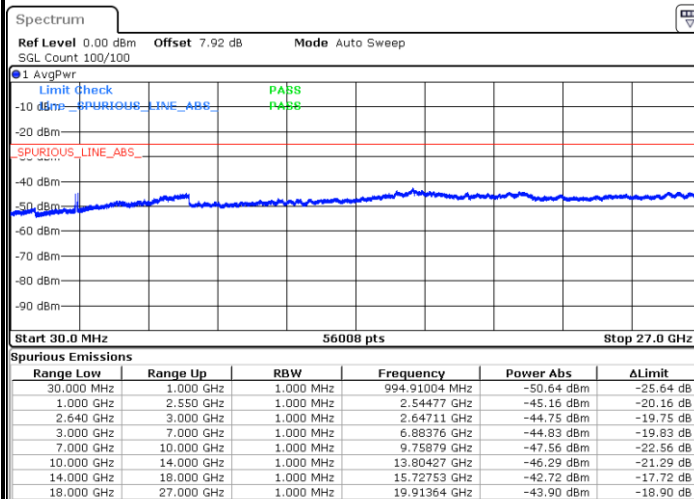
Date: 2 MAY 2019 20:44:22

Lowest Channel / 16QAM



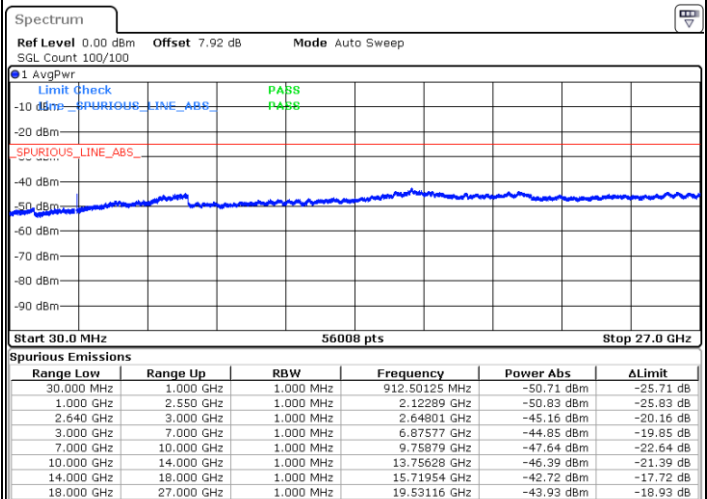
Date: 2 MAY 2019 20:45:17

Middle Channel / QPSK



Date: 2 MAY 2019 20:46:12

Middle Channel / 16QAM

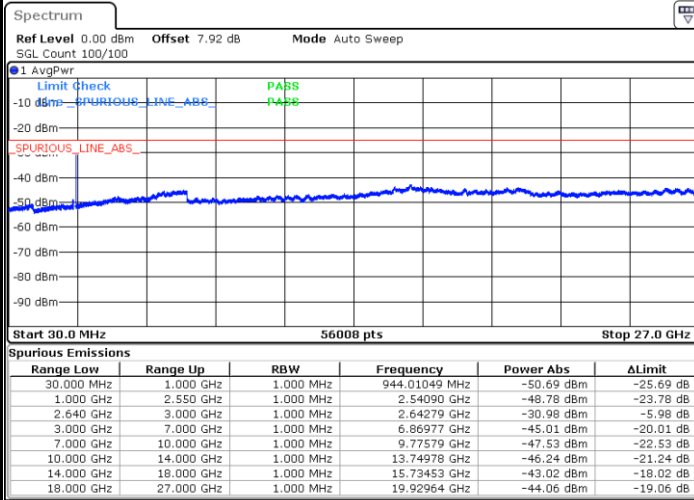


Date: 2 MAY 2019 20:47:07



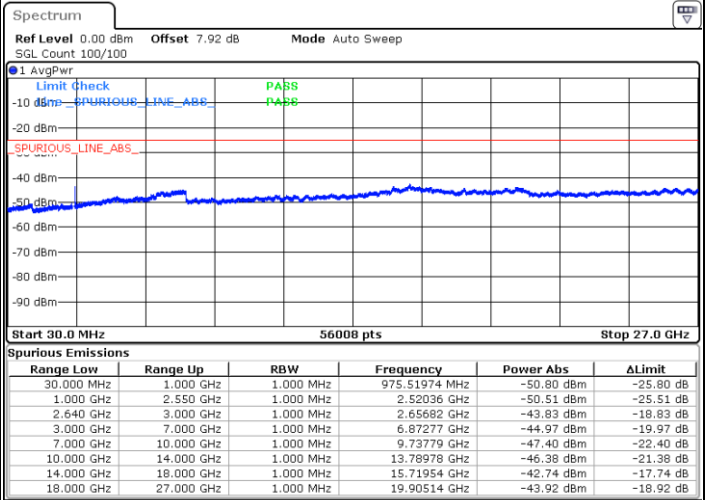
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 2 MAY 2019 20:48:02

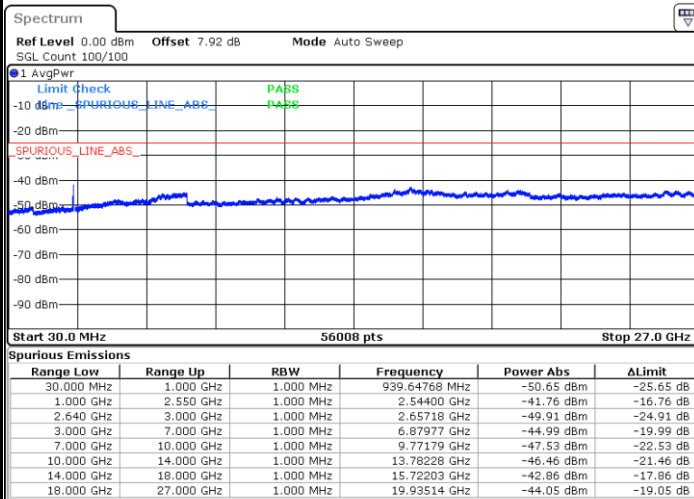
Highest Channel / 16QAM



Date: 2 MAY 2019 20:48:57

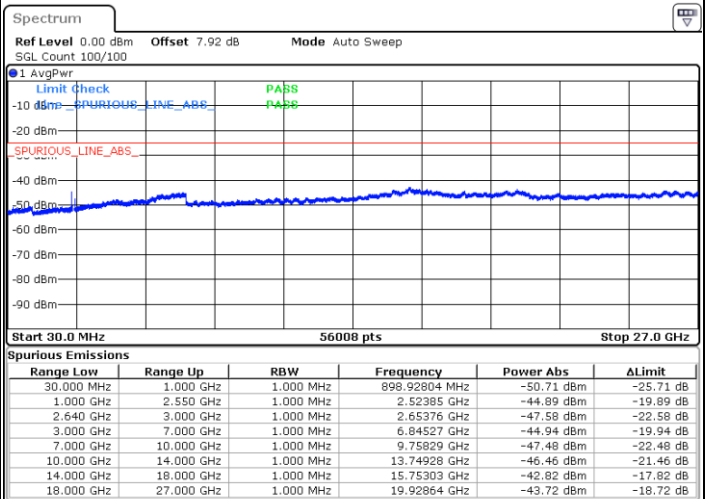
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 2 MAY 2019 20:49:52

Lowest Channel / 16QAM

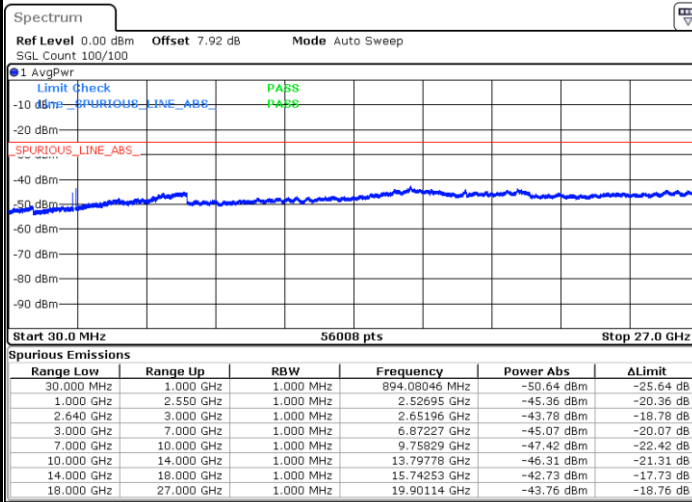


Date: 2 MAY 2019 20:50:47



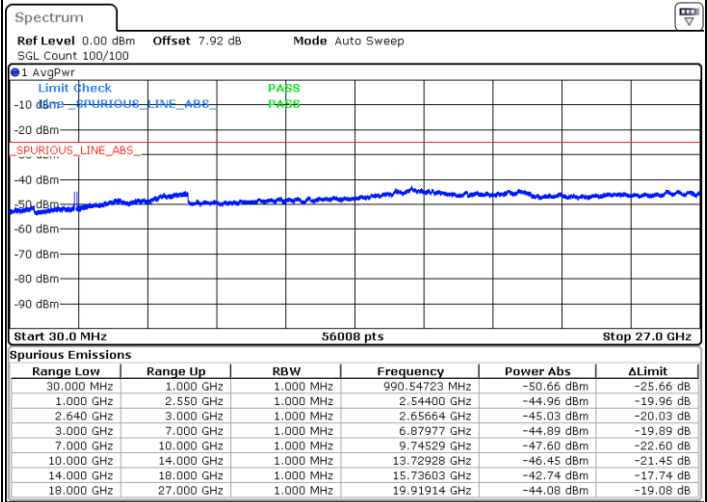
LTE Band 38 / 20MHz

Middle Channel / QPSK



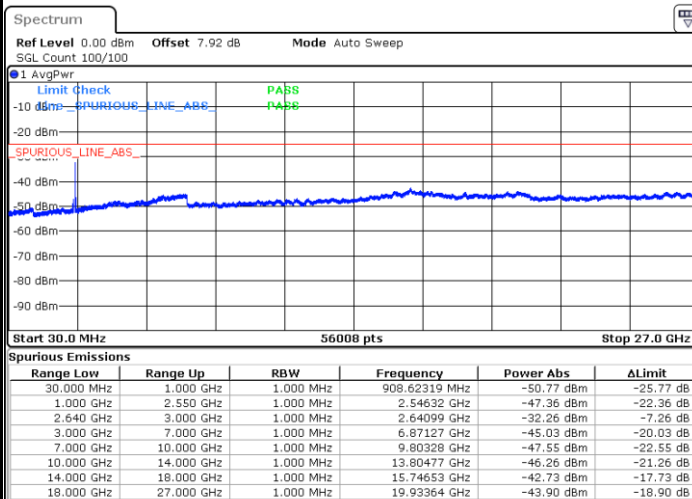
Date: 2 MAY 2019 20:51:42

Middle Channel / 16QAM



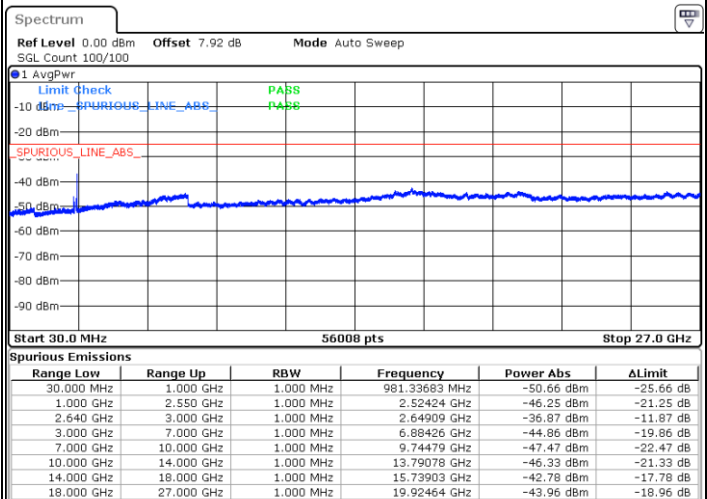
Date: 2 MAY 2019 20:52:37

Highest Channel / QPSK



Date: 2 MAY 2019 20:53:31

Highest Channel / 16QAM

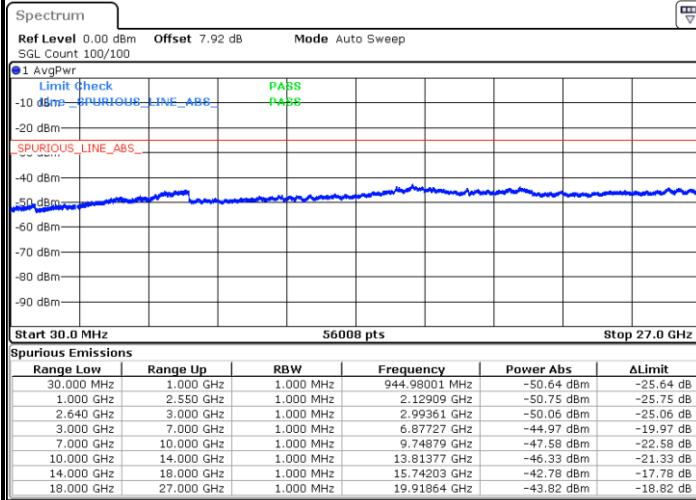


Date: 2 MAY 2019 20:54:26



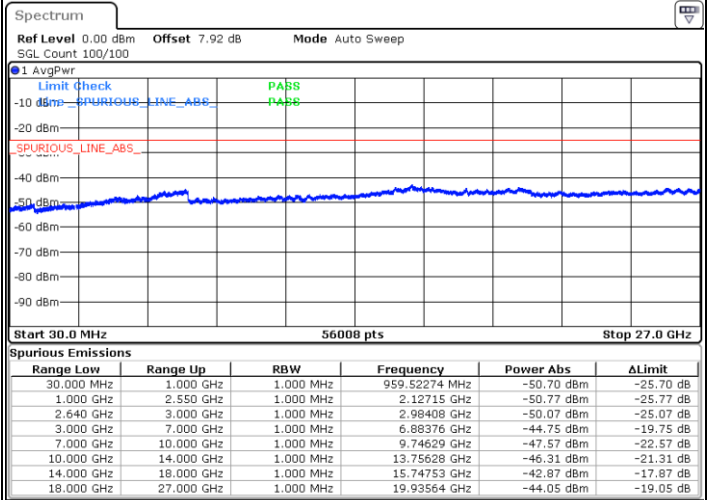
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



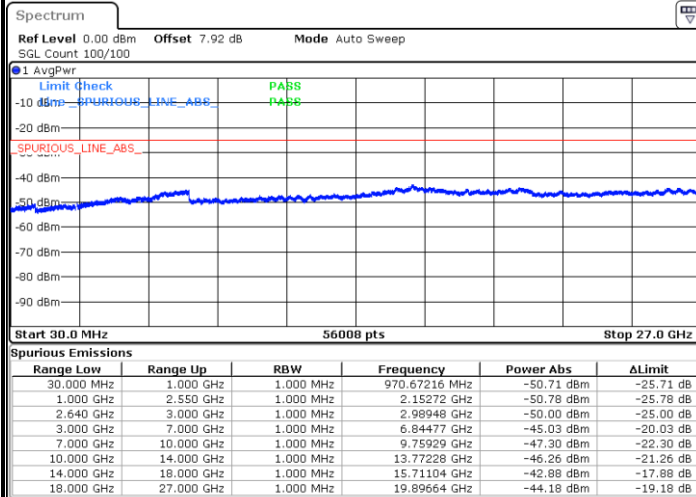
Date: 2 MAY 2019 20:55:21

Middle Channel / 64QAM



Date: 2 MAY 2019 20:56:16

Highest Channel / 64QAM

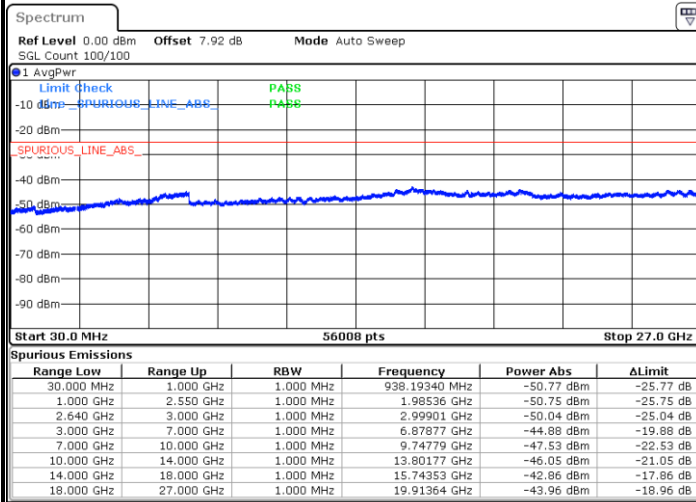


Date: 2 MAY 2019 20:57:11



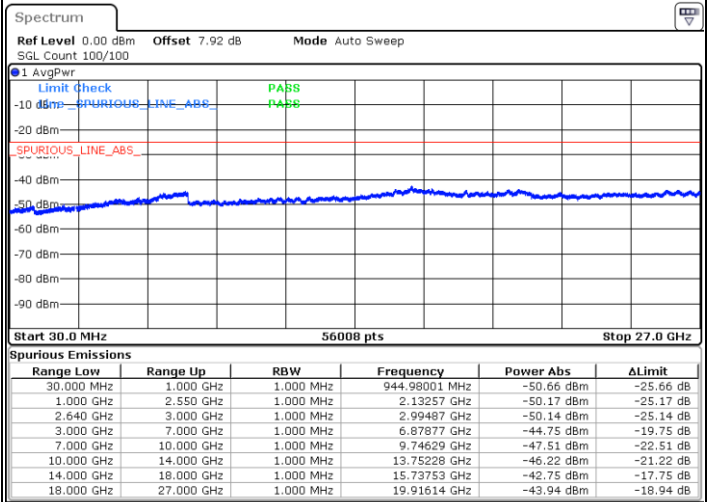
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



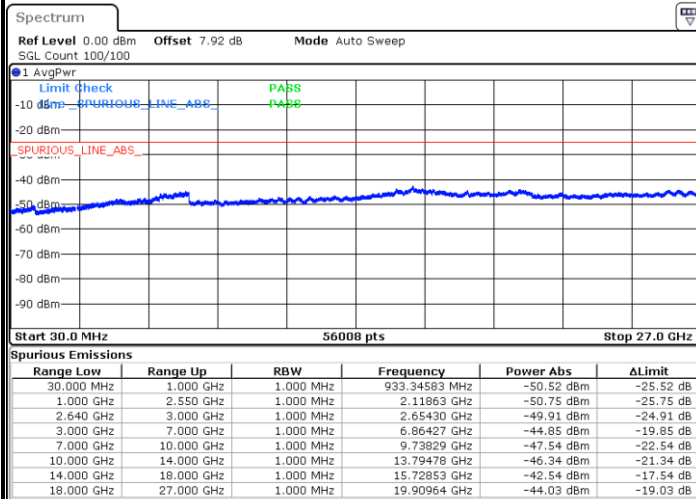
Date: 2 MAY. 2019 20:58:06

Middle Channel / 64QAM



Date: 2 MAY. 2019 20:59:01

Highest Channel / 64QAM

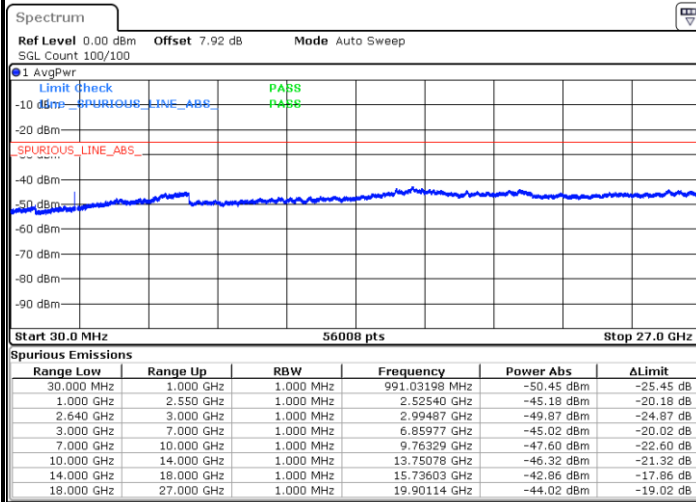


Date: 2 MAY. 2019 20:59:55



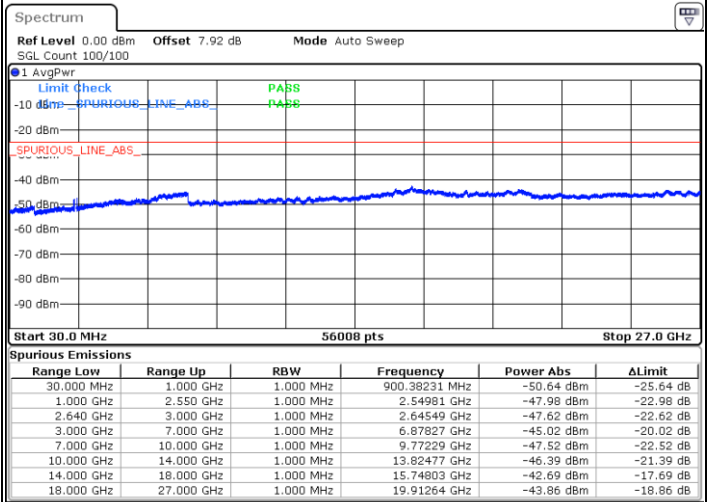
LTE Band 38 / 15MHz

Lowest Channel / 64QAM



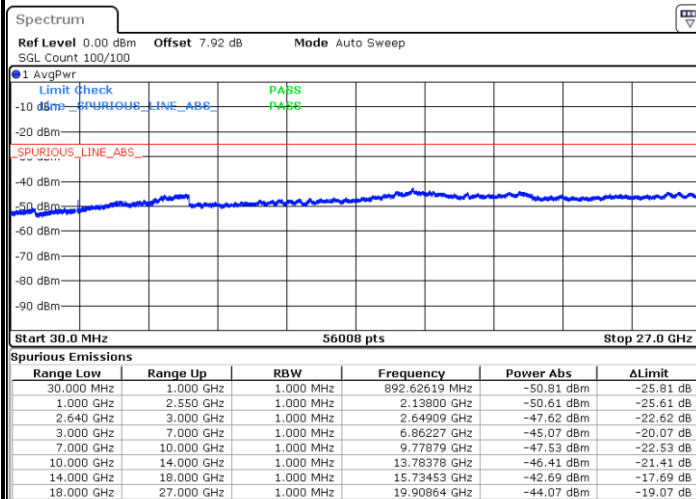
Date: 2 MAY 2019 21:00:50

Middle Channel / 64QAM



Date: 2 MAY 2019 21:01:45

Highest Channel / 64QAM

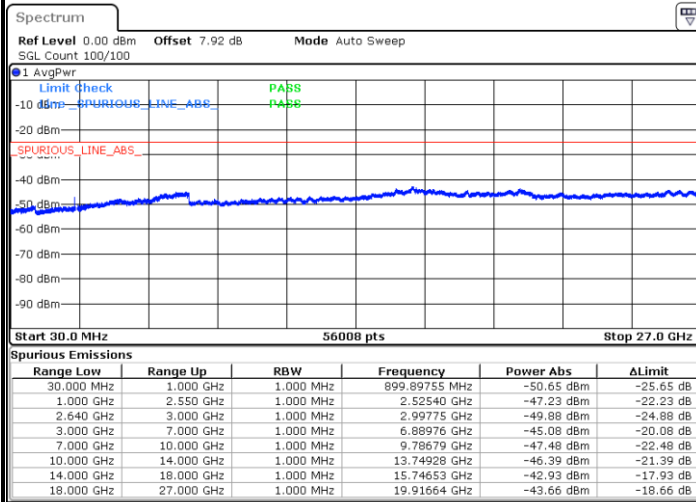


Date: 2 MAY 2019 21:02:40



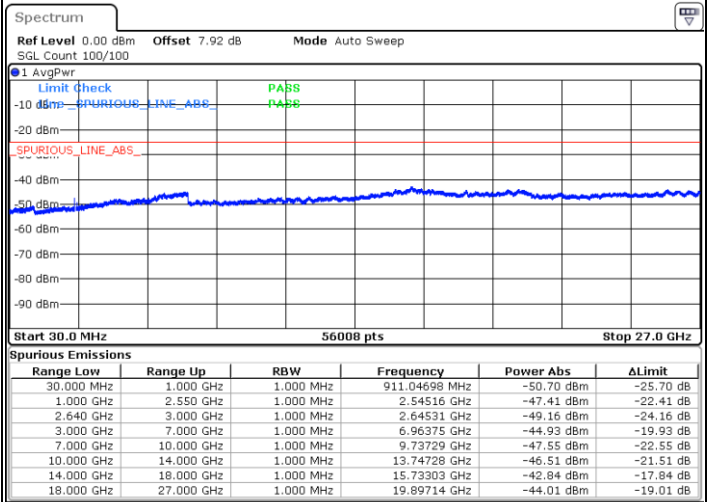
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



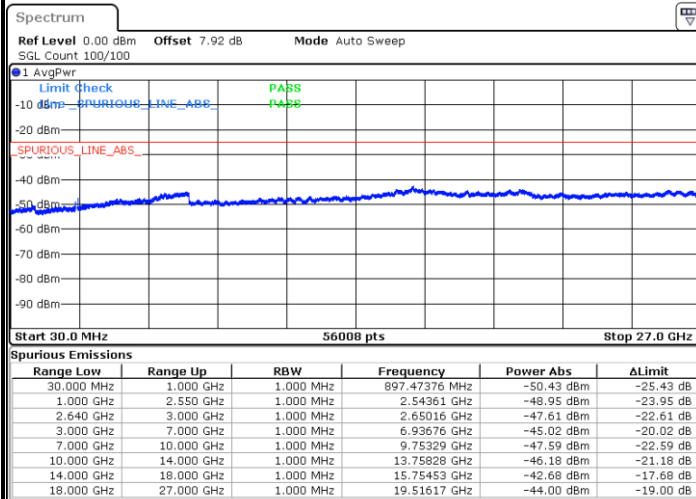
Date: 2 MAY 2019 21:03:35

Middle Channel / 64QAM



Date: 2 MAY 2019 21:04:30

Highest Channel / 64QAM



Date: 2 MAY 2019 21:05:25

**Frequency Stability**

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0045	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0038	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0033	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0046	
0	Normal Voltage	0.0069	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0060	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0034	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0001	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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 2 / 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	3741	-59.38	-13	-46.38	-71.64	2.641	14.90	H
	5613.27	-57.43	-13	-44.43	-69.29	2.94	14.80	H
	7482	-50.86	-13	-37.86	-60.63	3.39	13.16	H
	9354	-44.31	-13	-31.31	-54.79	4.00	14.48	H
	3742.18	-59.04	-13	-46.04	-68.88	4.49	14.32	V
	5613	-57.22	-13	-44.22	-67.47	4.94	15.19	V
	7482	-50.86	-13	-37.86	-60.75	5.01	14.90	V
	9354	-45.56	-13	-32.56	-54.68	5.57	14.69	V

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

LTE Band 4 / 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	3447	-53.45	-13	-40.45	-64.19	2.604	13.34	H
	5170.77	-58.95	-13	-45.95	-69.46	3.011	13.52	H
	6894	-54.61	-13	-41.61	-64.81	3.271	13.47	H
	3447	-53.38	-13	-40.38	-64.12	2.604	13.34	V
	5172	-58.97	-13	-45.97	-69.48	3.011	13.52	V
	6894	-54.39	-13	-41.39	-64.59	3.271	13.47	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-70.70	-13	-57.70	-77.67	1.58	10.70	H
	2496.27	-65.60	-13	-52.60	-73.85	2.102	12.50	H
	3328.36	-66.44	-13	-53.44	-75.33	2.856	13.90	H
	4161	-60.08	-13	-47.08	-68.54	2.689	13.30	H
	1664	-68.05	-13	-55.05	-75.81	3.09	13.00	V
	2496	-63.31	-13	-50.31	-72.08	3.18	14.10	V
	3328.36	-65.46	-13	-52.46	-72.70	3.31	12.70	V
	4161	-57.25	-13	-44.25	-64.84	3.41	13.15	V

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

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)
Middle	5052	-56.26	-25	-31.26	-66.47	3.03	13.24	H
	7580	-46.37	-25	-21.37	-55.82	3.56	13.01	H
	10104	-41.25	-25	-16.25	-50.77	3.92	13.44	H
	12630	-55.12	-25	-30.12	-65.04	4.44	14.36	H
	15156	-43.63	-25	-18.63	-54.00	4.77	15.14	H
	5052	-55.36	-25	-30.36	-65.57	3.03	13.24	V
	7580	-45.81	-25	-20.81	-55.26	3.56	13.01	V
	10104	-41.87	-25	-16.87	-51.39	3.92	13.44	V
	12630	-54.11	-25	-29.11	-64.03	4.44	14.36	V
	15156	-42.40	-25	-17.40	-52.77	4.77	15.14	V

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

LTE Band 38 / 15MHz / 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	5172	-60.18	-25	-35.18	-70.39	3.03	13.24	H
	7756	-42.42	-25	-17.42	-51.87	3.56	13.01	H
	10344	-51.41	-25	-26.41	-60.93	3.92	13.44	H
	12930	-56.30	-25	-31.30	-66.22	4.44	14.36	H
	15516	-45.53	-25	-20.53	-55.90	4.77	15.14	H
	5172	-62.89	-25	-37.89	-73.10	3.03	13.24	V
	7760	-45.17	-25	-20.17	-54.62	3.56	13.01	V
	10344	-50.51	-25	-25.51	-60.03	3.92	13.44	V
	12930	-56.92	-25	-31.92	-66.84	4.44	14.36	V
	15516	-53.51	-25	-28.51	-63.88	4.77	15.14	V

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