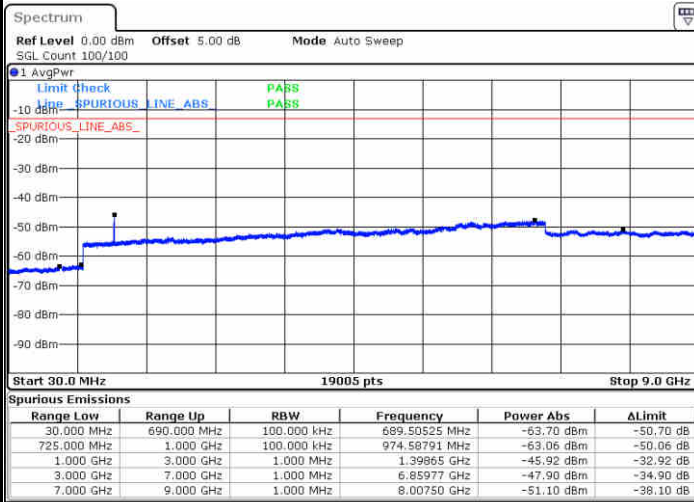




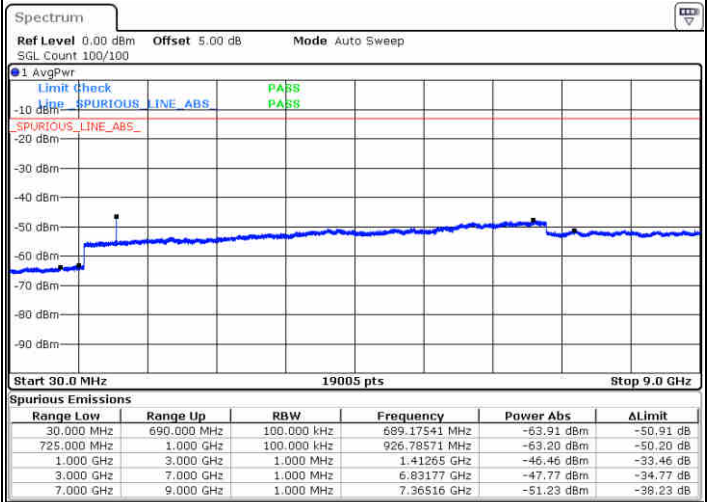
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



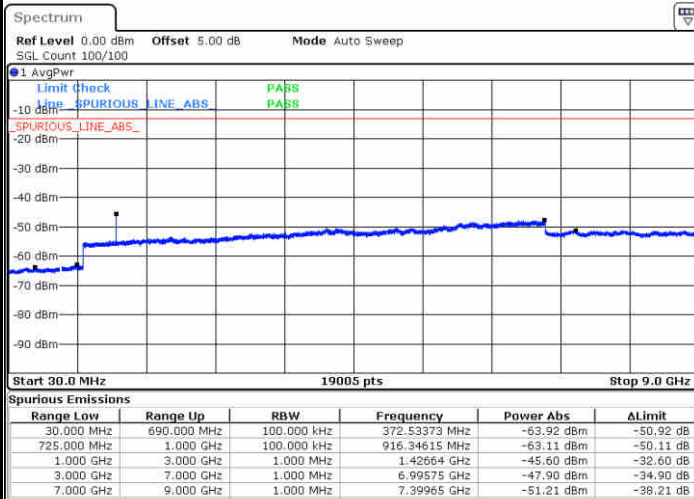
Date: 3 JUN 2019 07:28:31

Middle Channel / 64QAM



Date: 3 JUN 2019 07:29:26

Highest Channel / 64QAM

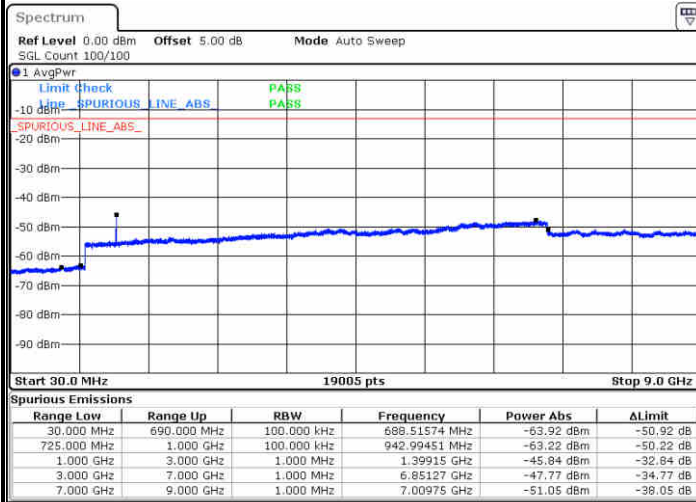


Date: 3 JUN 2019 07:30:21



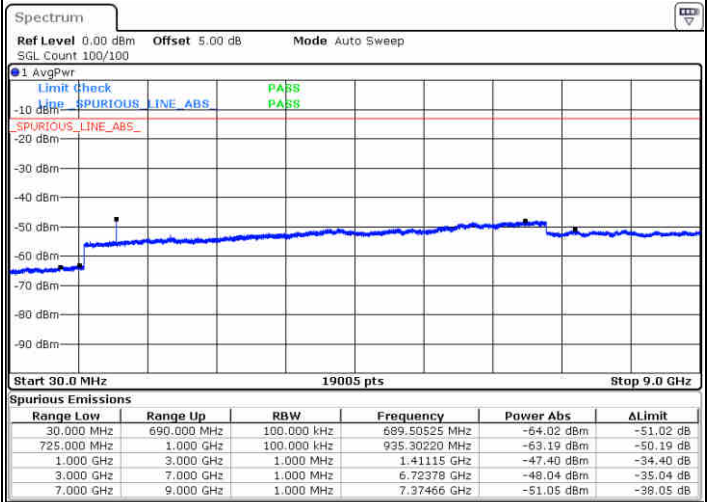
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



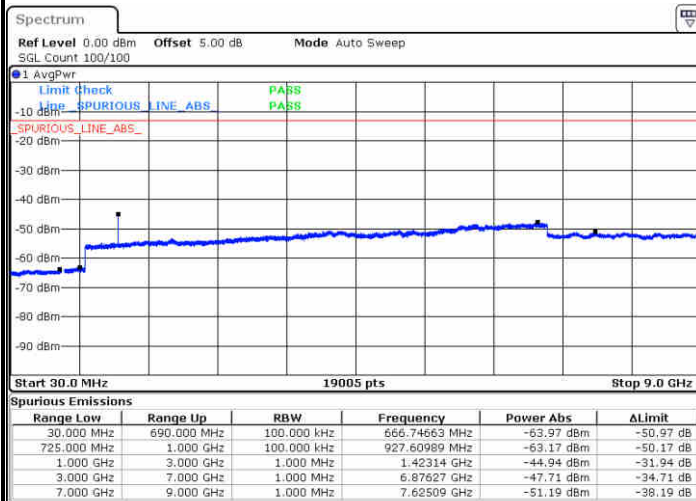
Date: 3 JUN 2019 07:38:01

Middle Channel / 64QAM



Date: 3 JUN 2019 07:39:33

Highest Channel / 64QAM

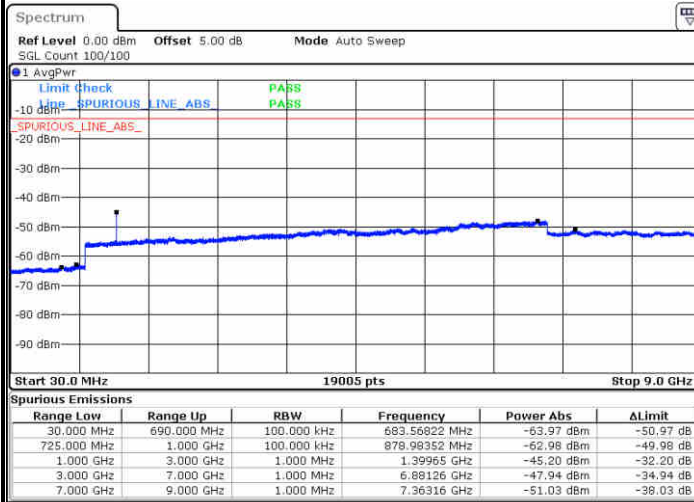


Date: 3 JUN 2019 07:39:59



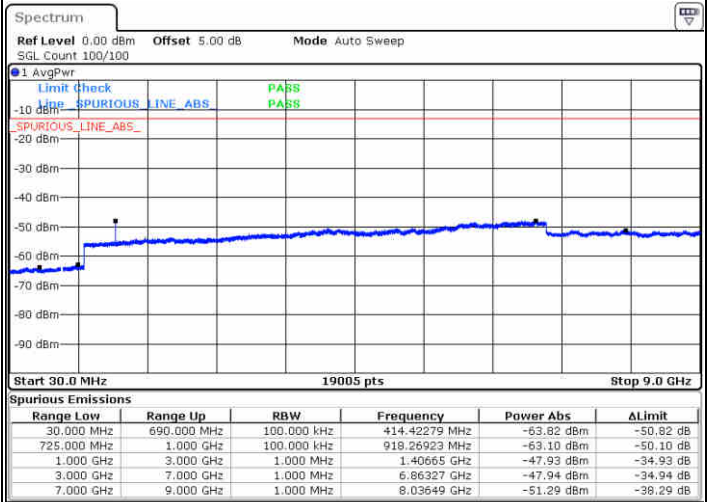
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



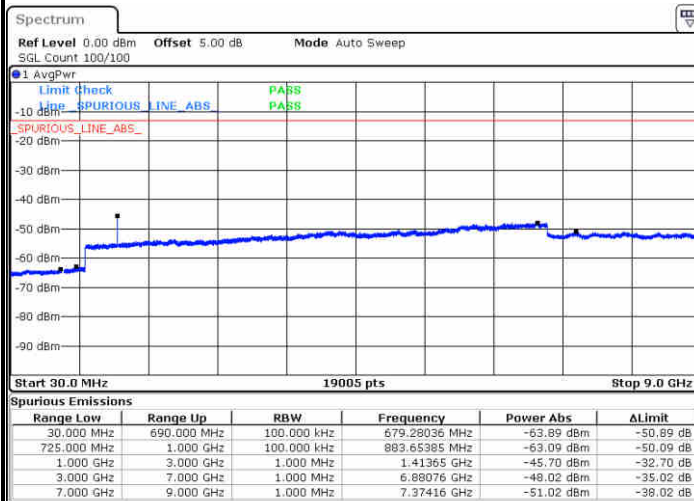
Date: 3 JUN 2019 07:46:39

Middle Channel / 64QAM



Date: 3 JUN 2019 07:47:43

Highest Channel / 64QAM

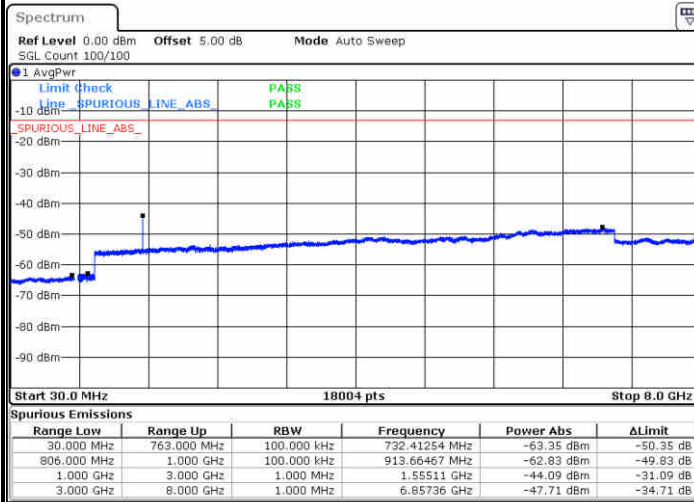


Date: 3 JUN 2019 07:45:10



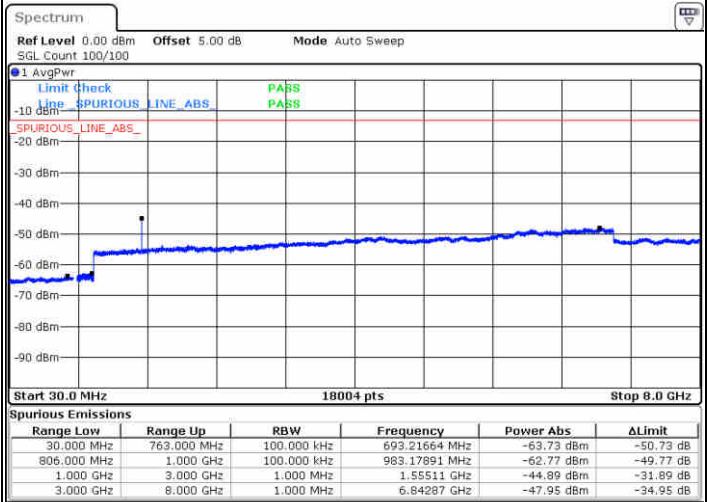
LTE Band 13 / 5MHz

Lowest Channel / QPSK



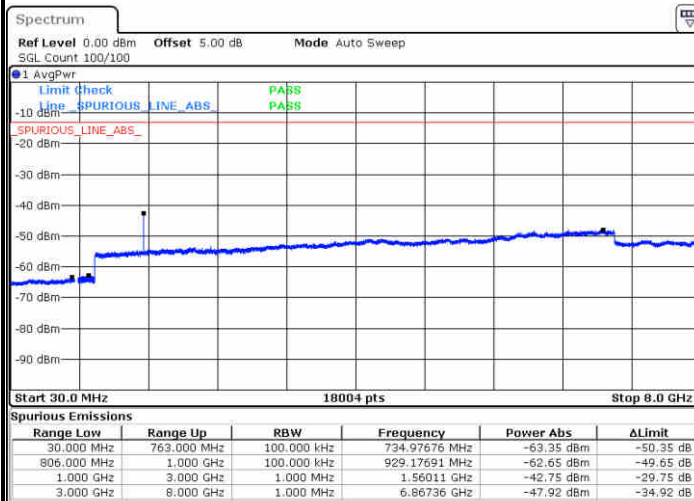
Date: 3 JUN 2019 07:49:03

Lowest Channel / 16QAM



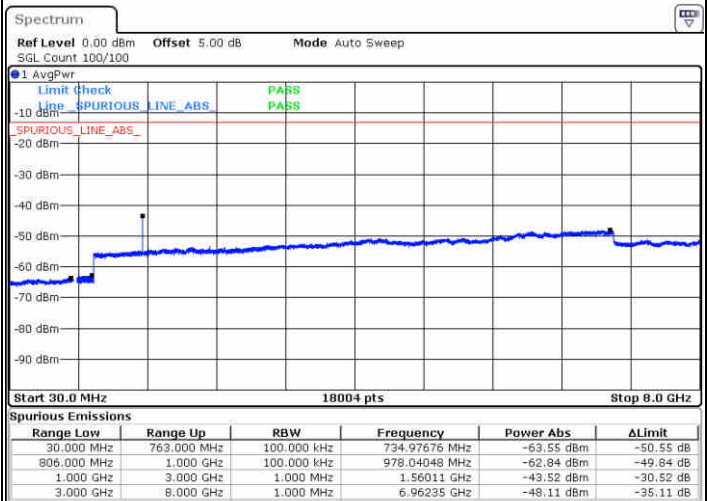
Date: 3 JUN 2019 07:50:07

Middle Channel / QPSK



Date: 3 JUN 2019 07:55:11

Middle Channel / 16QAM

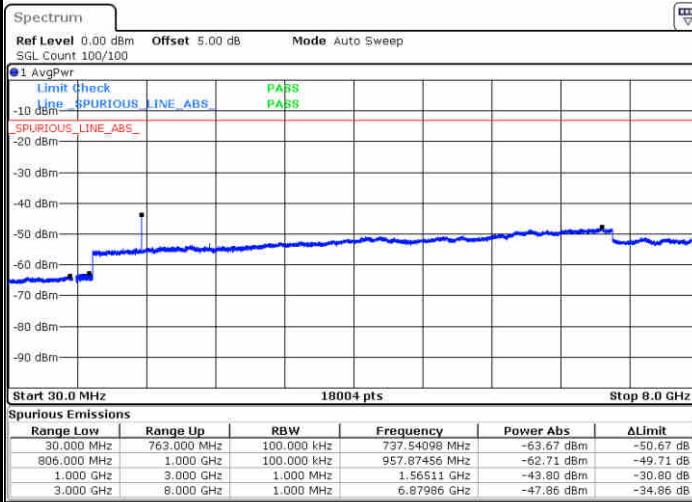


Date: 3 JUN 2019 07:54:47



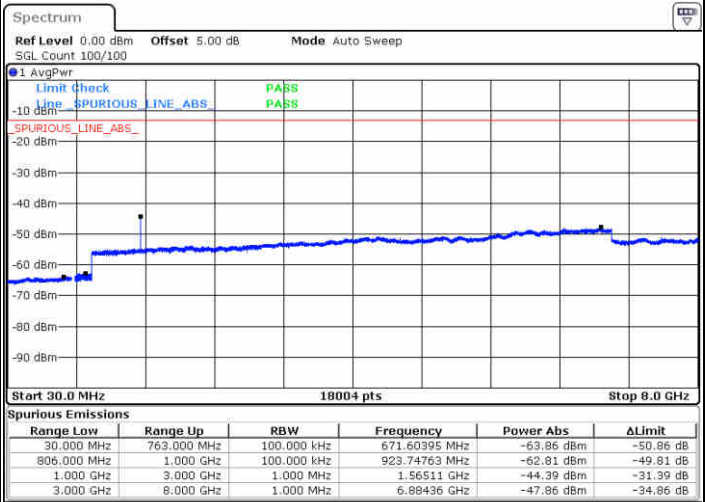
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 3 JUN 2019 07:55:41

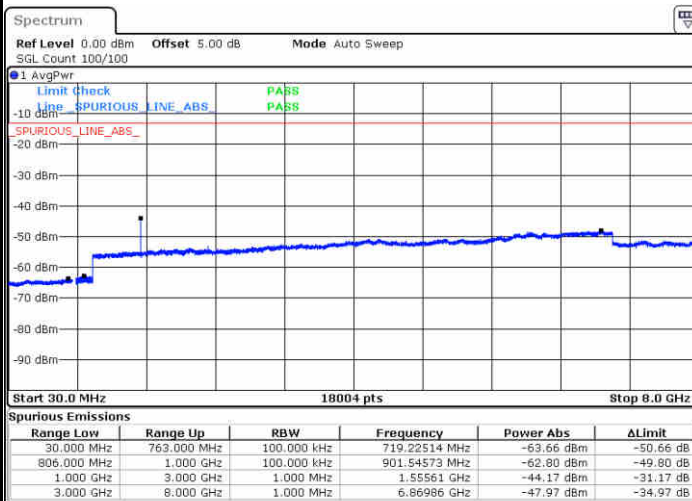
Highest Channel / 16QAM



Date: 3 JUN 2019 07:56:26

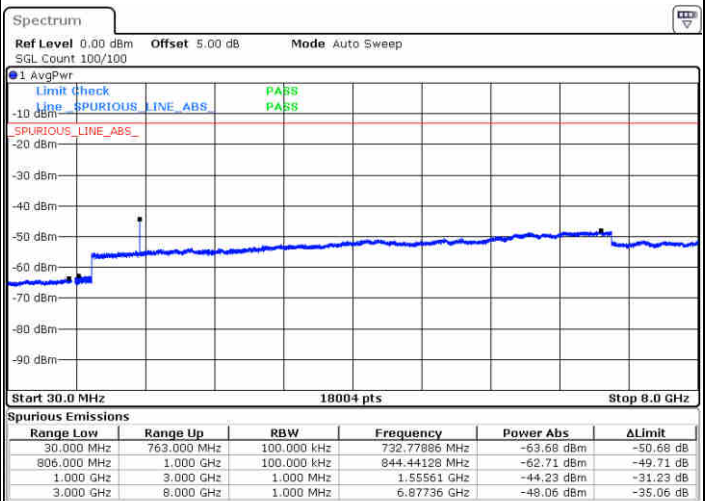
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 3 JUN 2019 08:16:36

Middle Channel / 16QAM

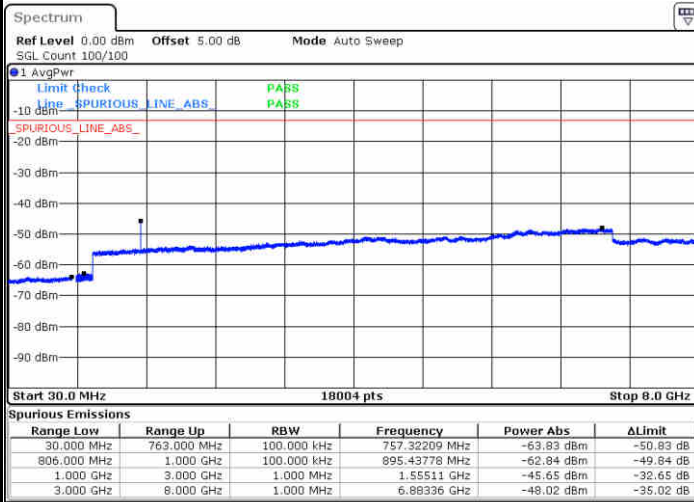


Date: 3 JUN 2019 08:18:15



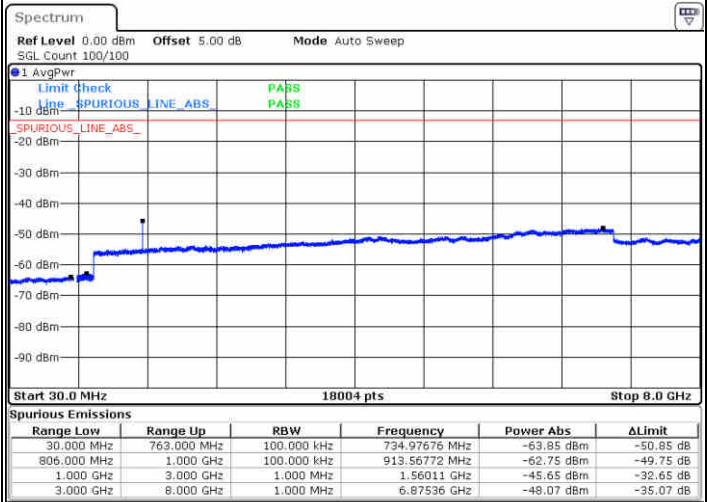
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



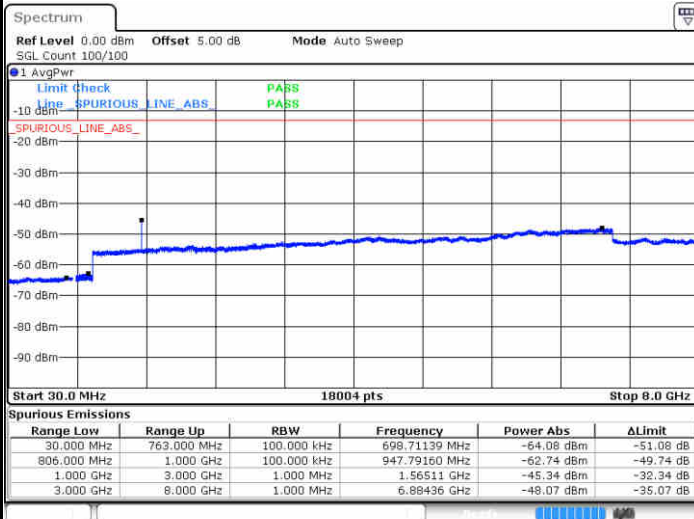
Date: 3 JUN 2019 07:53:57

Middle Channel / 64QAM



Date: 3 JUN 2019 07:54:23

Highest Channel / 64QAM

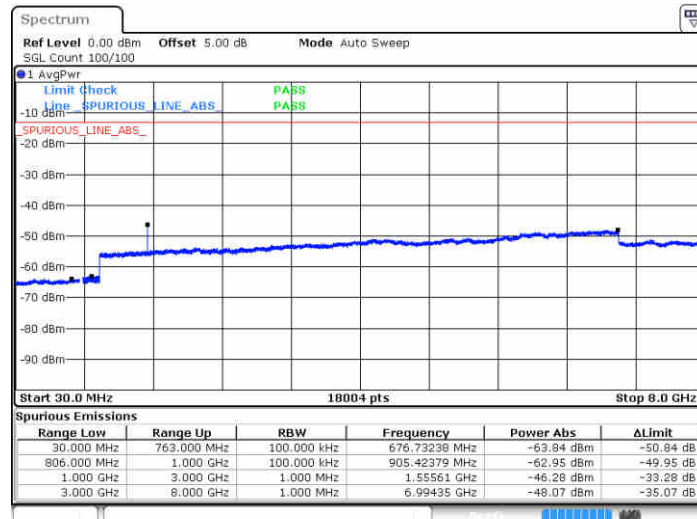


Date: 3 JUN 2019 07:57:14



LTE Band 13 / 10MHz

Middle Channel / 64QAM

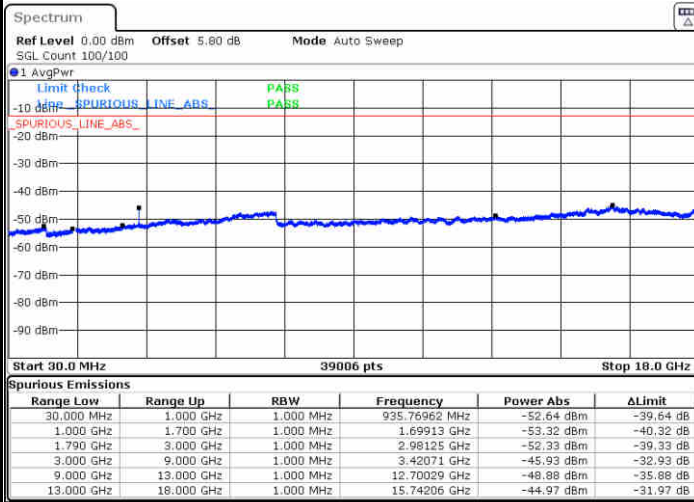


Date: 3 JUN 2019 08:20:03



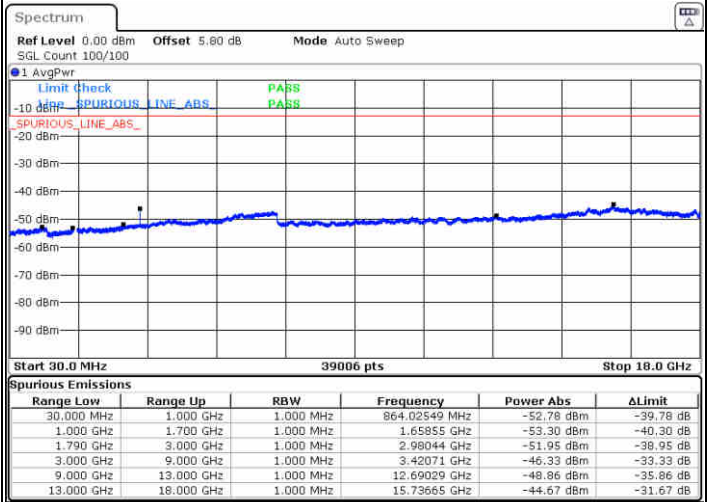
LTE Band 66 / 1.4MHz

Lowest Channel / QPSK



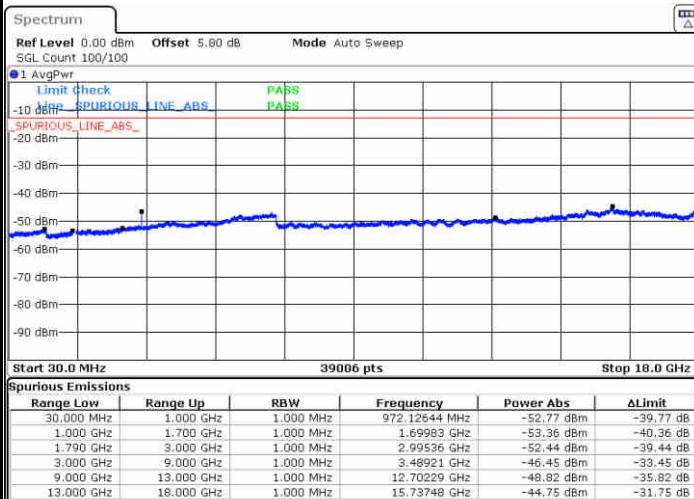
Date: 5 JUN 2019 01:31:11

Lowest Channel / 16QAM



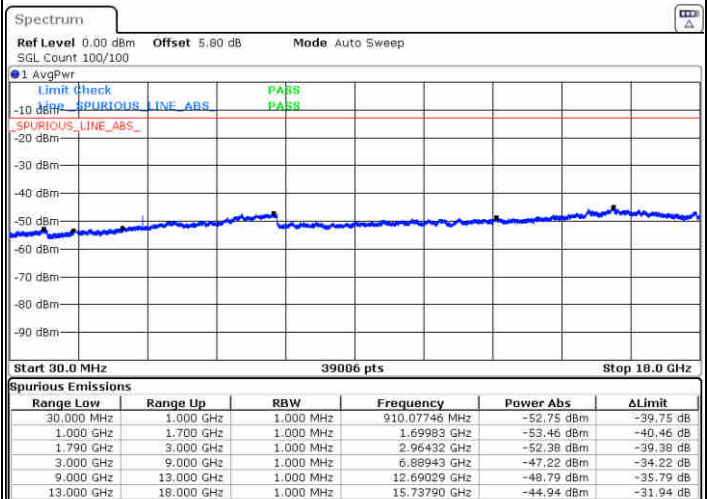
Date: 5 JUN 2019 01:28:21

Middle Channel / QPSK



Date: 5 JUN 2019 01:22:49

Middle Channel / 16QAM

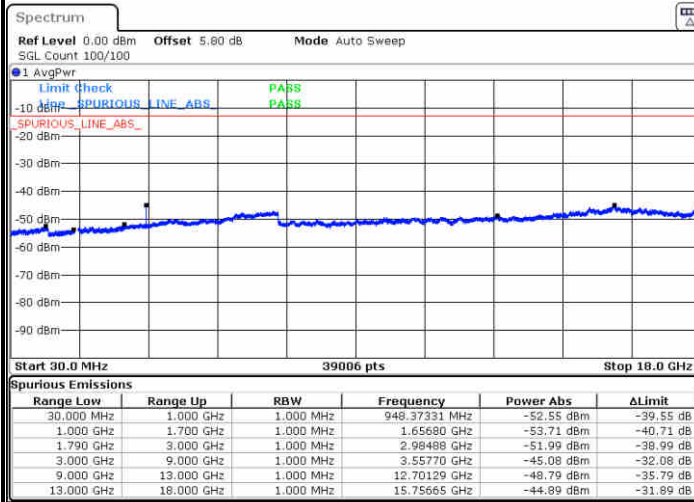


Date: 5 JUN 2019 01:23:29



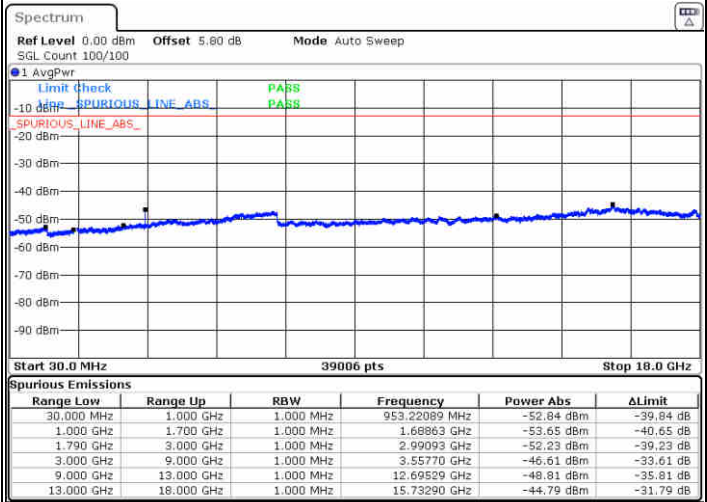
LTE Band 66 / 1.4MHz

Highest Channel / QPSK



Date: 5 JUN 2019 01:41:10

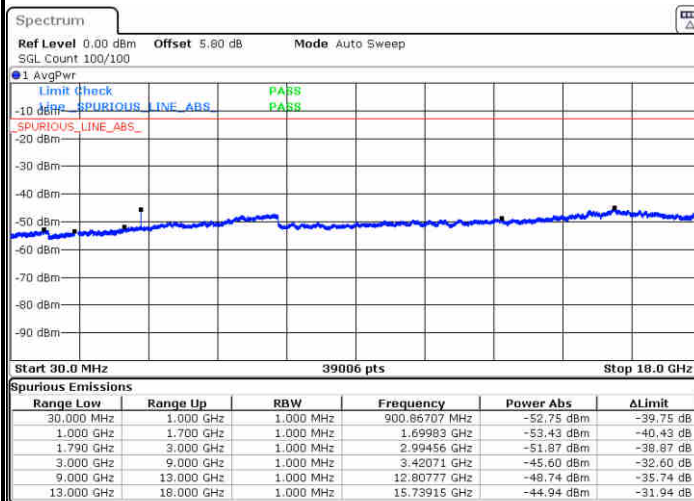
Highest Channel / 16QAM



Date: 5 JUN 2019 01:42:07

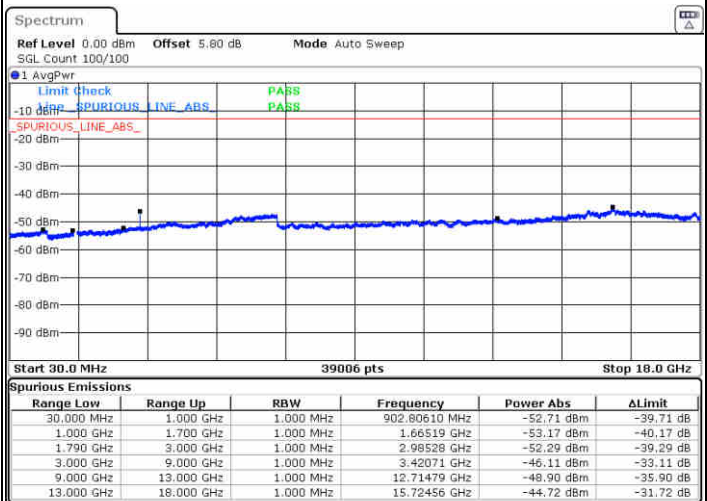
LTE Band 66 / 3MHz

Lowest Channel / QPSK



Date: 5 JUN 2019 01:00:58

Lowest Channel / 16QAM

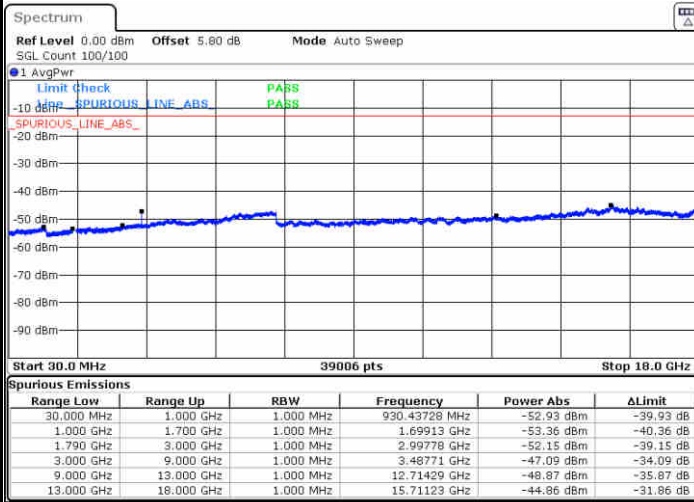


Date: 5 JUN 2019 01:02:14



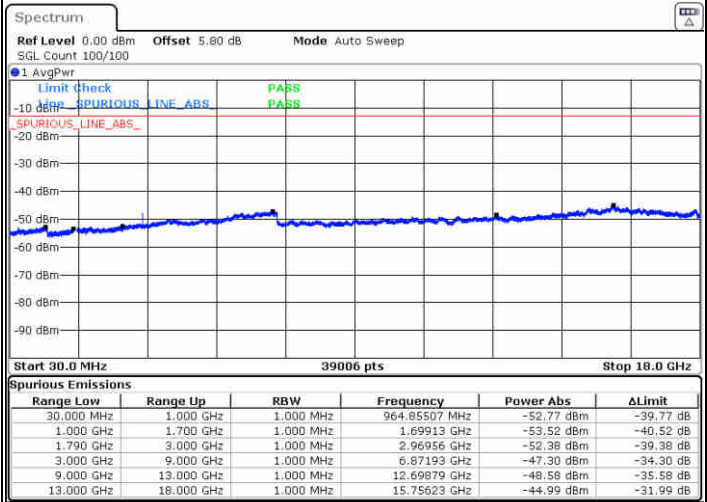
LTE Band 66 / 3MHz

Middle Channel / QPSK



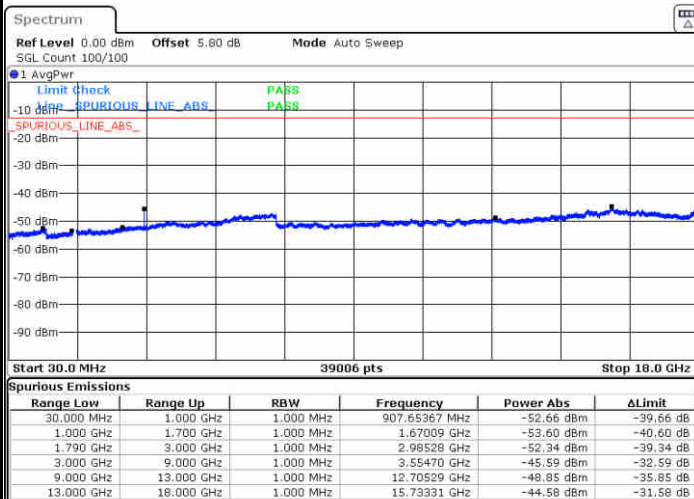
Date: 5 JUN 2019 01:00:10

Middle Channel / 16QAM



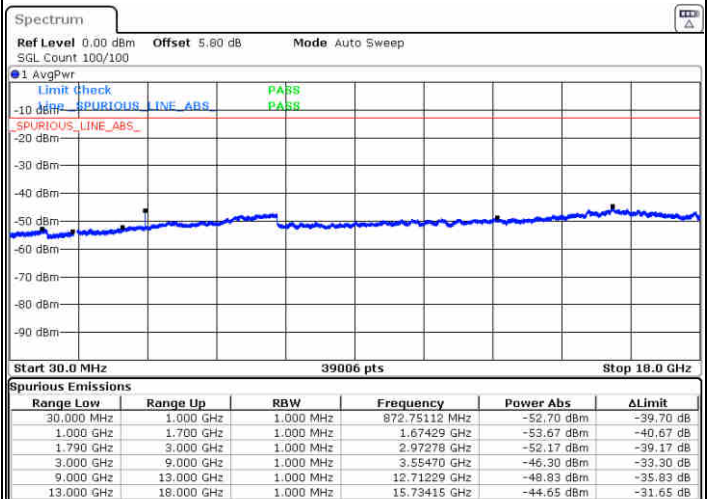
Date: 5 JUN 2019 00:59:29

Highest Channel / QPSK



Date: 5 JUN 2019 01:18:17

Highest Channel / 16QAM

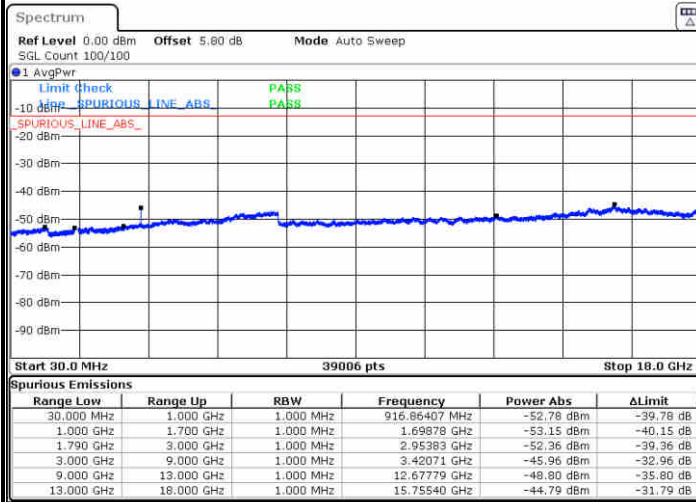


Date: 5 JUN 2019 01:17:37



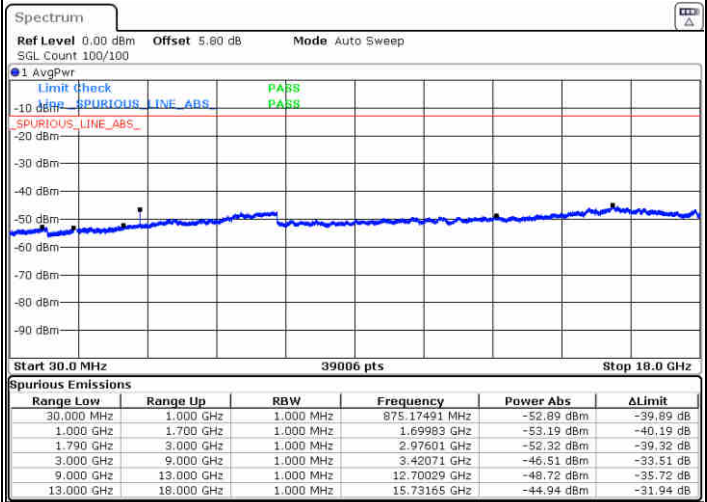
LTE Band 66 / 5MHz

Lowest Channel / QPSK



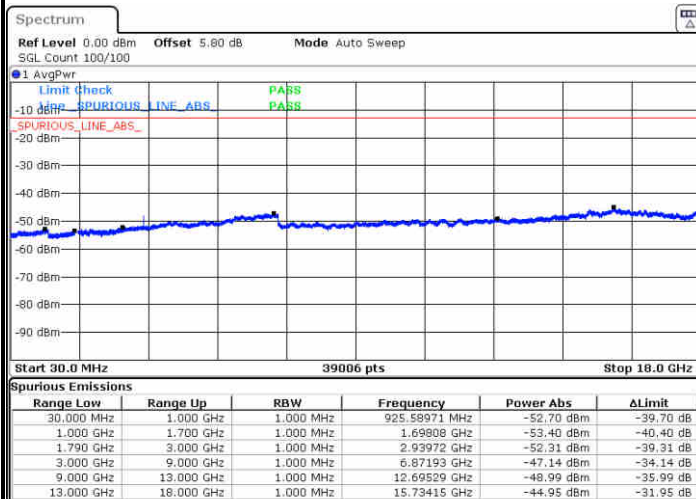
Date: 4 JUN 2019 22:48:48

Lowest Channel / 16QAM



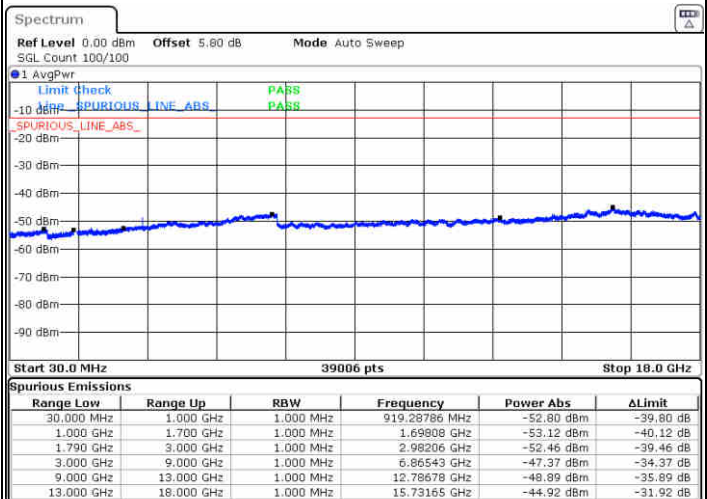
Date: 4 JUN 2019 22:52:35

Middle Channel / QPSK



Date: 4 JUN 2019 22:47:51

Middle Channel / 16QAM

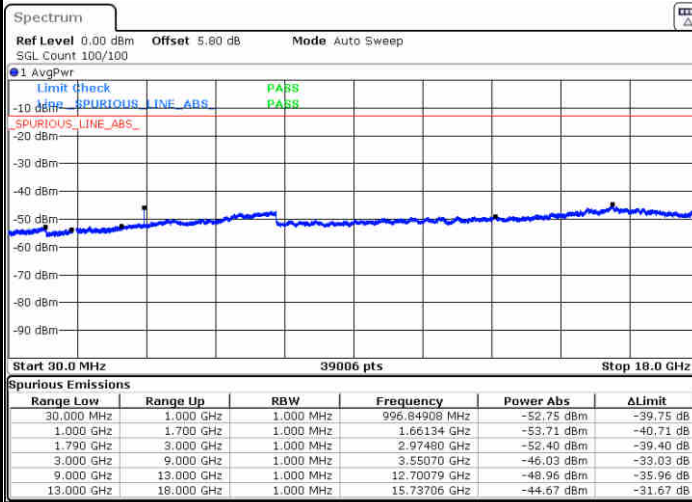


Date: 4 JUN 2019 22:47:13



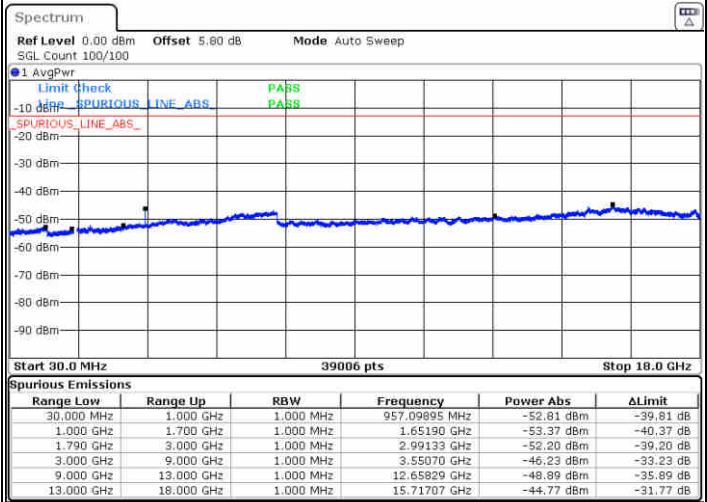
LTE Band 66 / 5MHz

Highest Channel / QPSK



Date: 4 JUN 2019 23:00:04

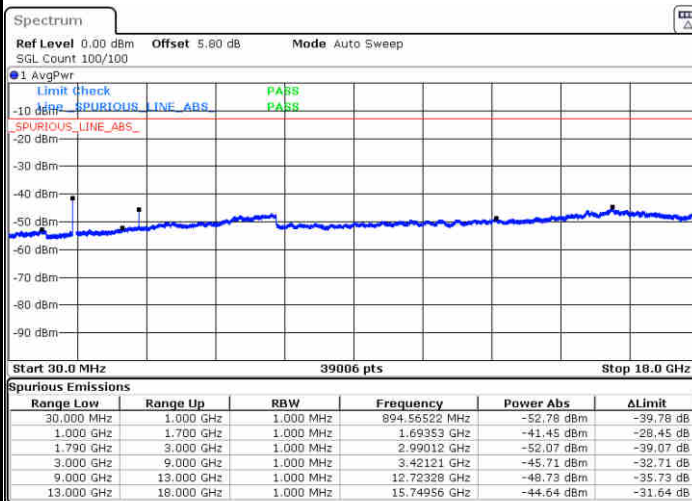
Highest Channel / 16QAM



Date: 4 JUN 2019 22:59:26

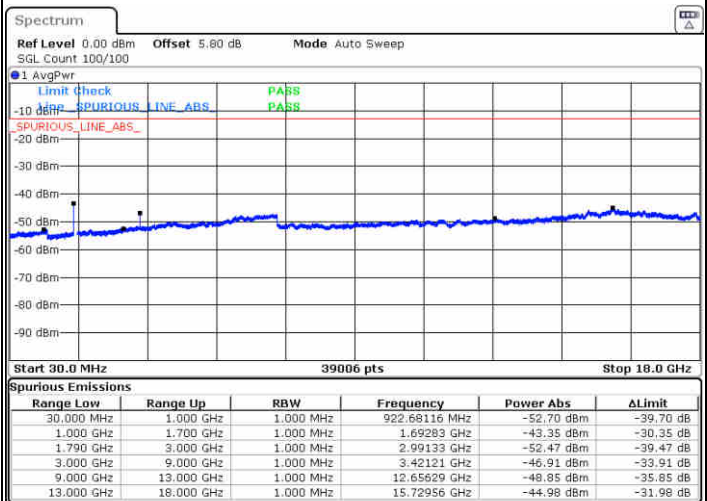
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Date: 4 JUN 2019 23:12:11

Lowest Channel / 16QAM

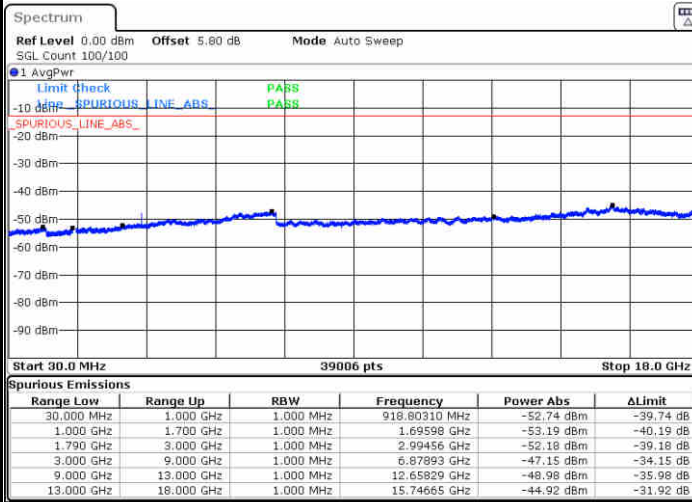


Date: 4 JUN 2019 23:13:23



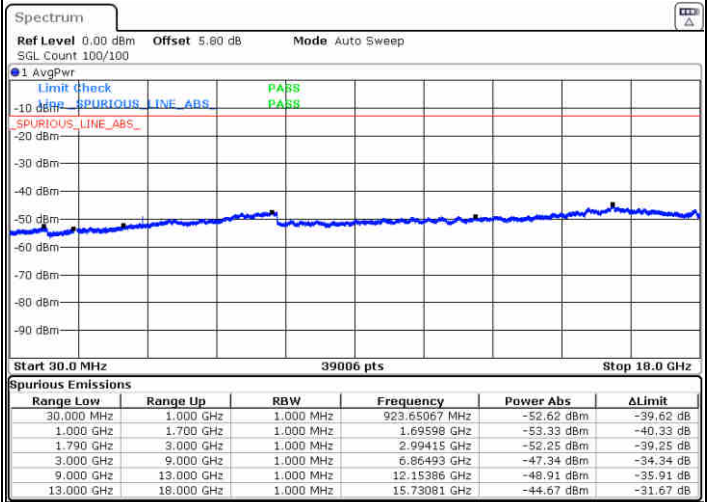
LTE Band 66 / 10MHz

Middle Channel / QPSK



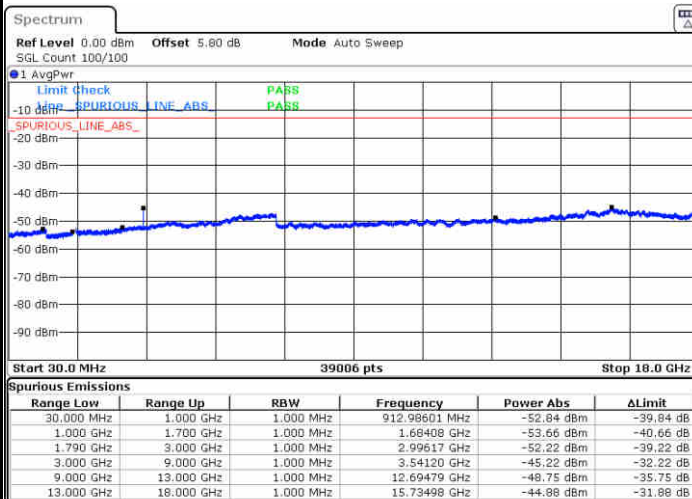
Date: 4 JUN 2019 23:09:33

Middle Channel / 16QAM



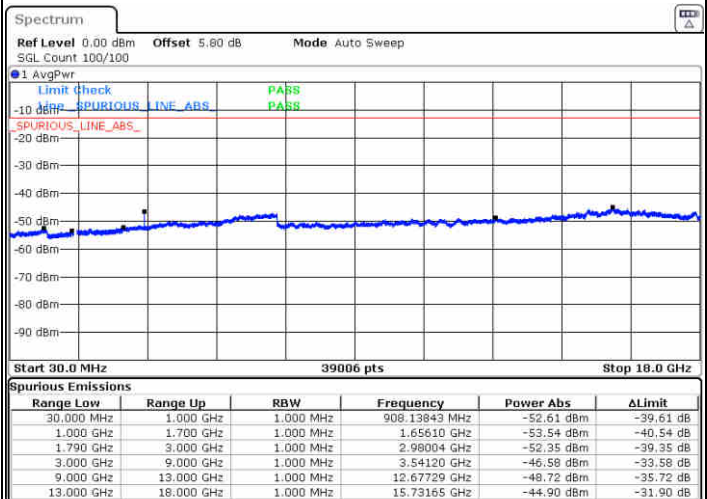
Date: 4 JUN 2019 23:08:56

Highest Channel / QPSK



Date: 4 JUN 2019 23:20:48

Highest Channel / 16QAM

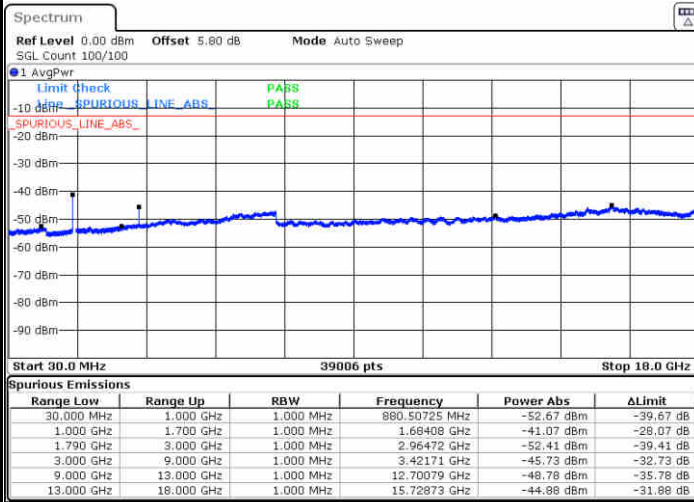


Date: 4 JUN 2019 23:19:58



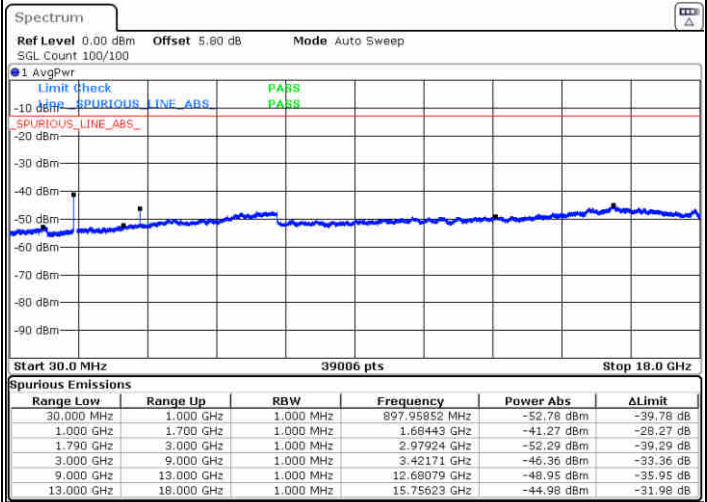
LTE Band 66 / 15MHz

Lowest Channel / QPSK



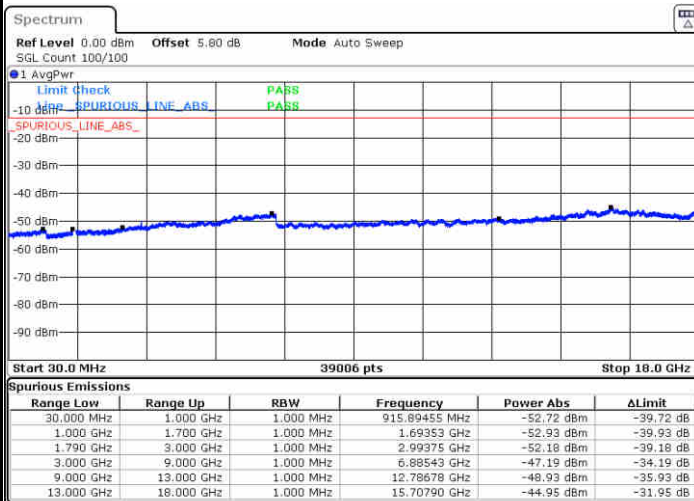
Date: 5 JUN 2019 00:26:11

Lowest Channel / 16QAM



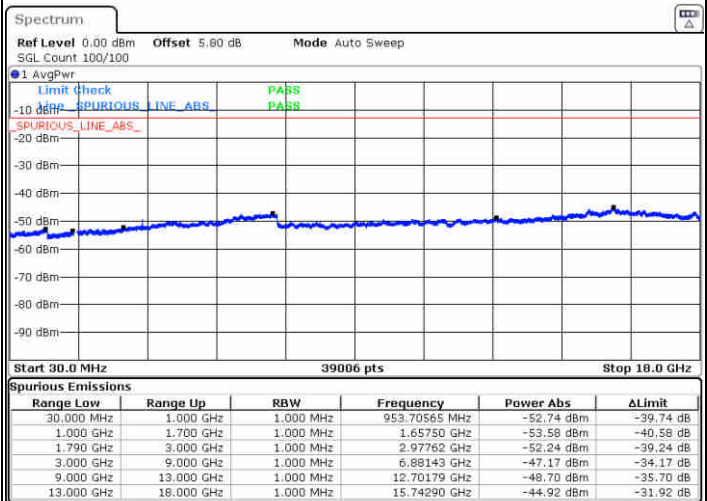
Date: 5 JUN 2019 00:27:07

Middle Channel / QPSK



Date: 5 JUN 2019 00:25:13

Middle Channel / 16QAM

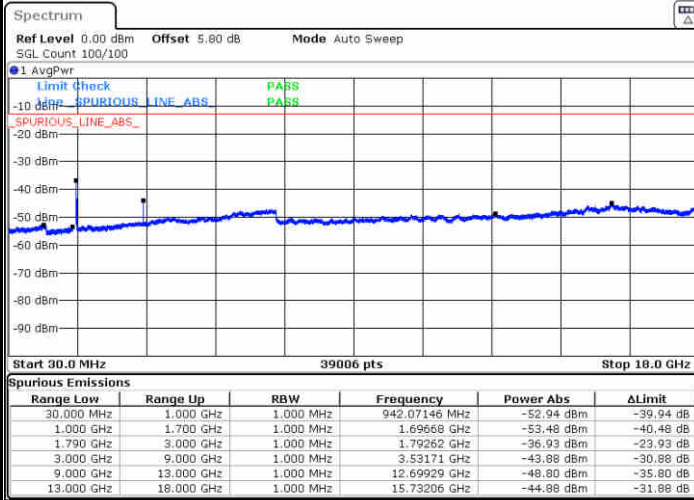


Date: 5 JUN 2019 00:24:34



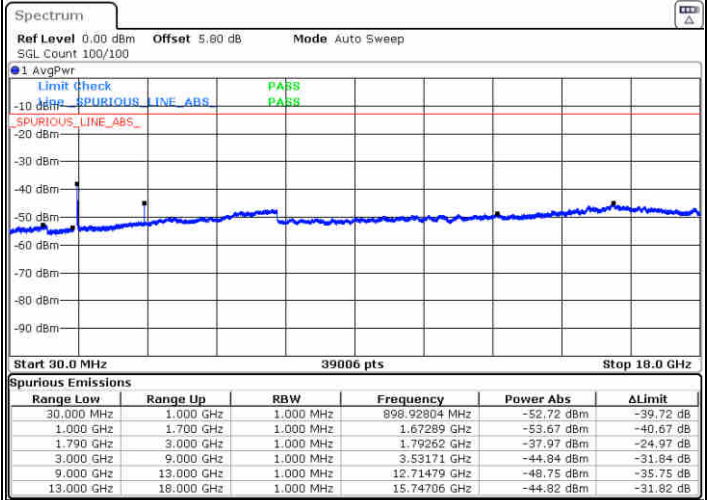
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 5 JUN 2019 00:34:27

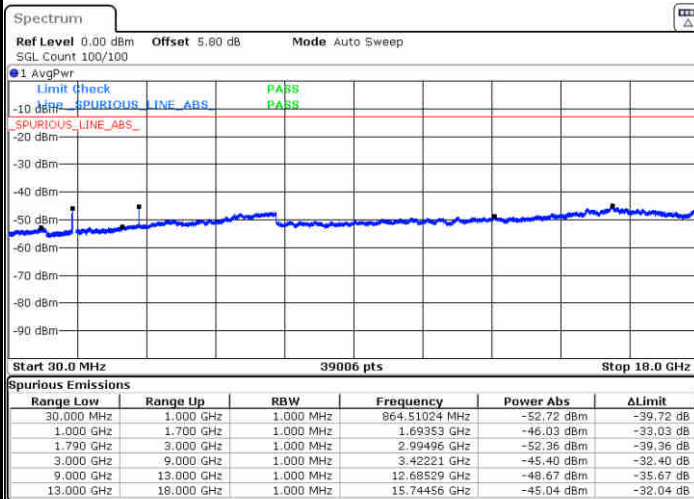
Highest Channel / 16QAM



Date: 5 JUN 2019 00:33:14

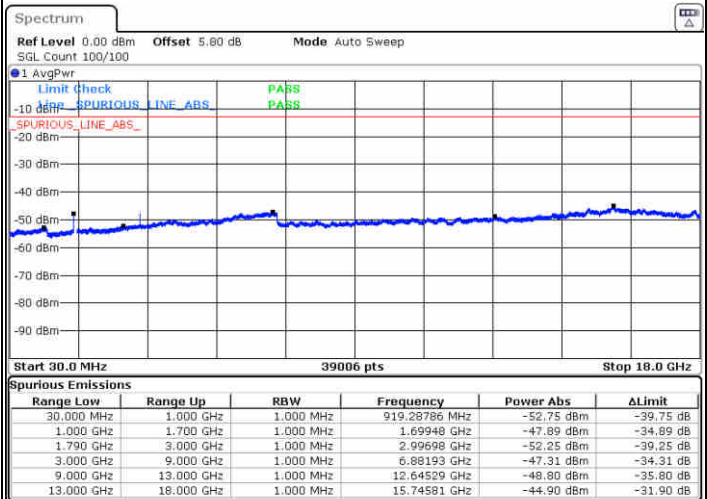
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 5 JUN 2019 00:39:49

Lowest Channel / 16QAM

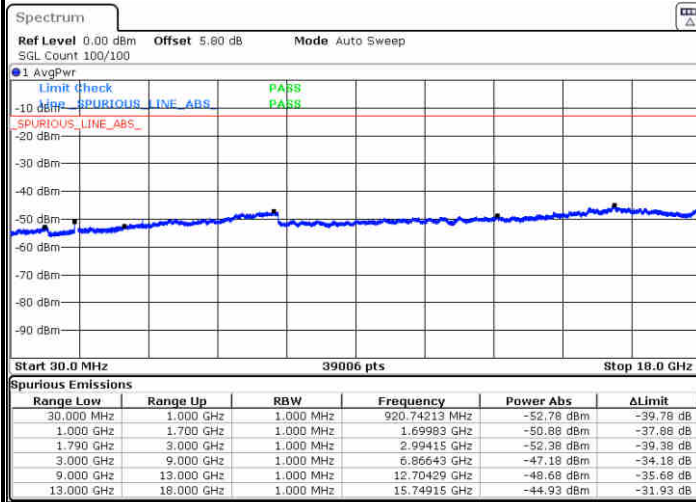


Date: 5 JUN 2019 00:42:55



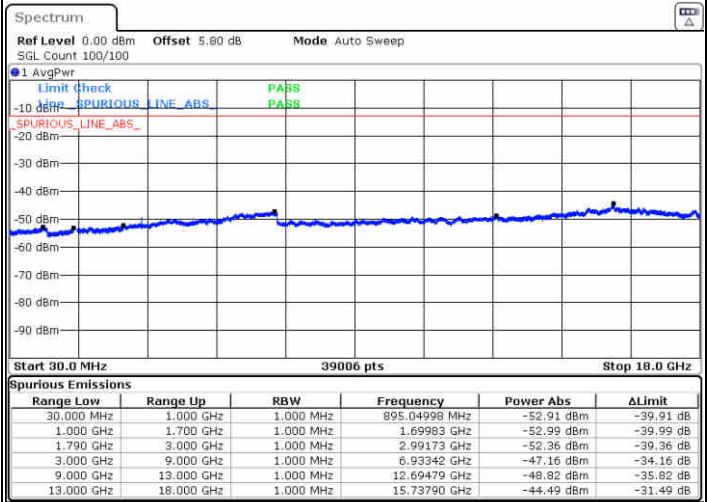
LTE Band 66 / 20MHz

Middle Channel / QPSK



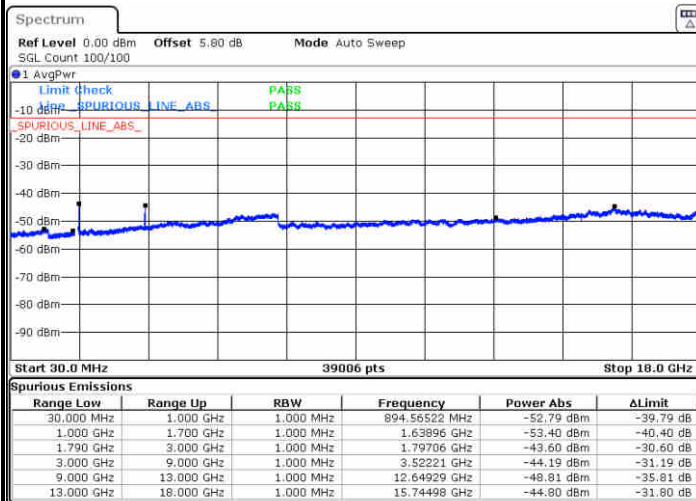
Date: 5 JUN 2019 00:39:03

Middle Channel / 16QAM



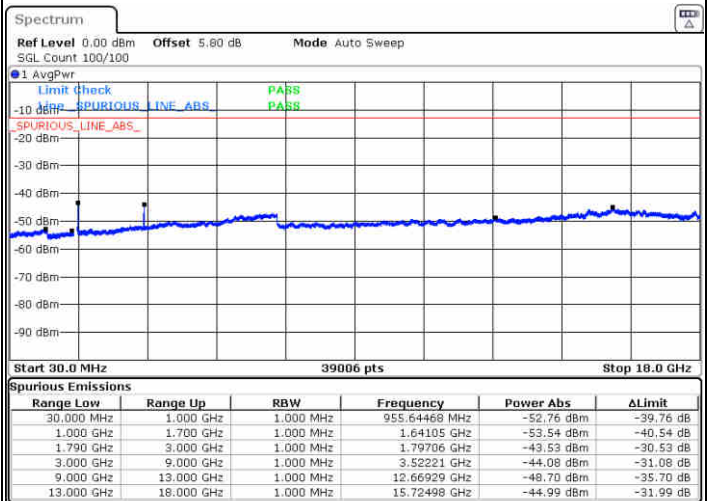
Date: 5 JUN 2019 00:38:24

Highest Channel / QPSK



Date: 5 JUN 2019 00:51:33

Highest Channel / 16QAM

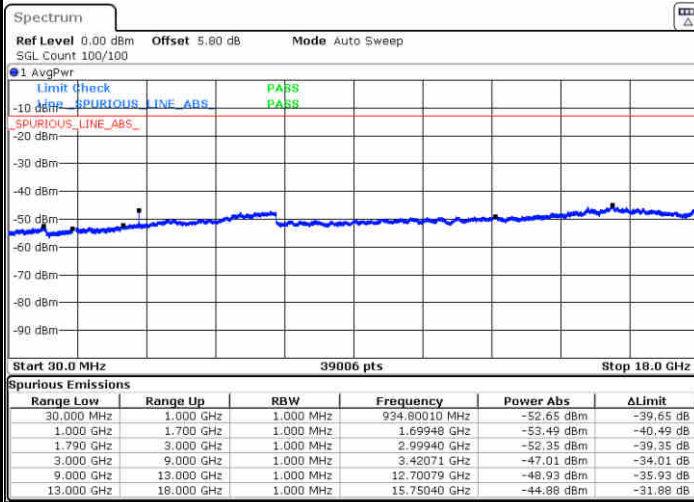


Date: 5 JUN 2019 00:50:47



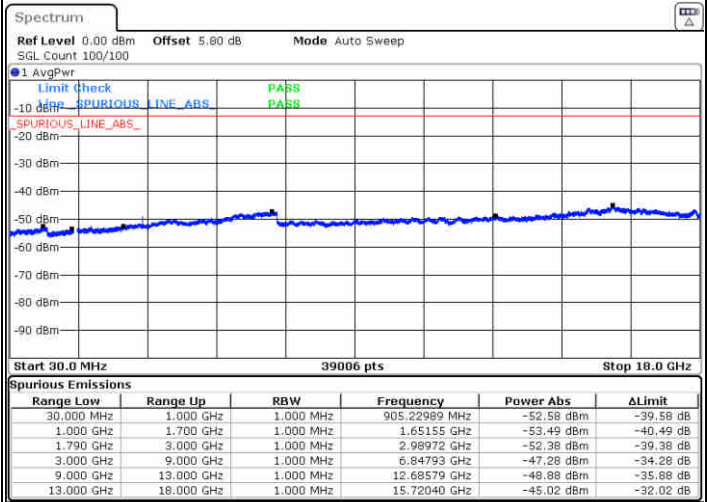
LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM



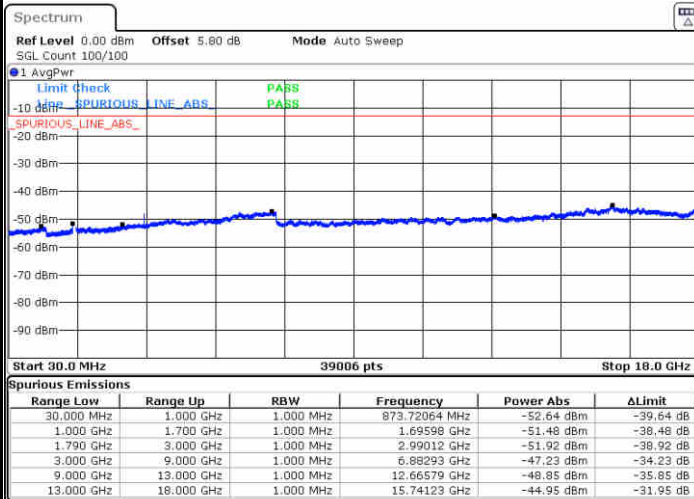
Date: 5 JUN 2019 01:25:49

Middle Channel / 64QAM



Date: 5 JUN 2019 01:24:51

Highest Channel / 64QAM

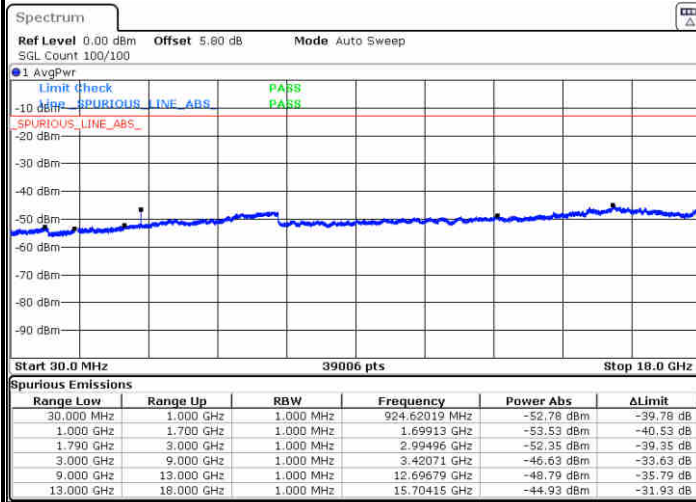


Date: 5 JUN 2019 01:43:06



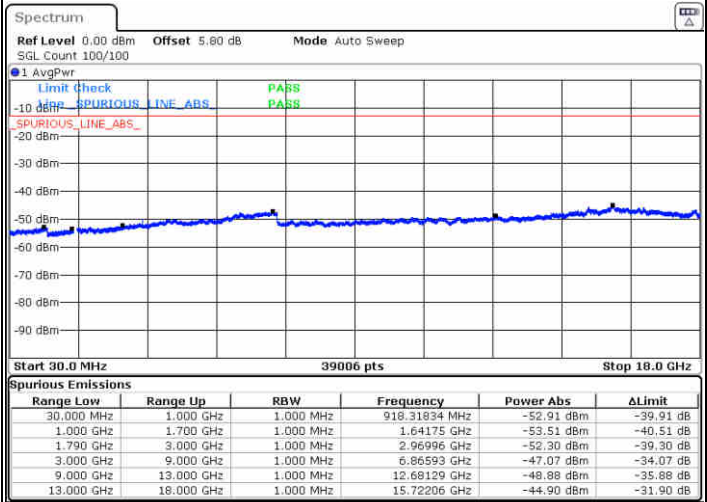
LTE Band 66 / 3MHz

Lowest Channel / 64QAM



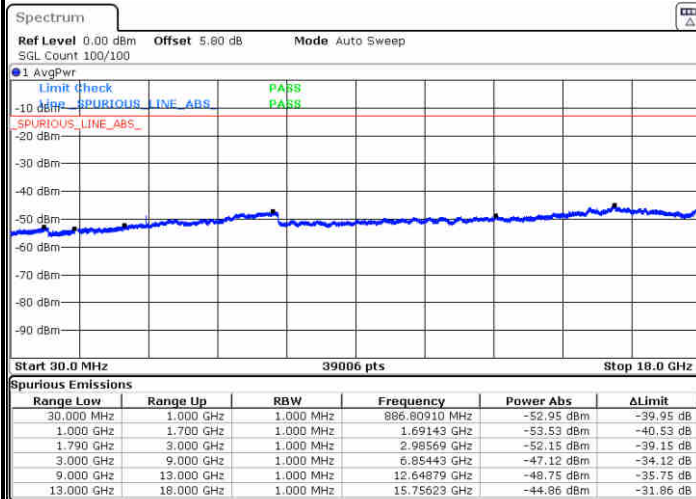
Date: 5 JUN 2019 01:04:07

Middle Channel / 64QAM



Date: 5 JUN 2019 00:58:48

Highest Channel / 64QAM

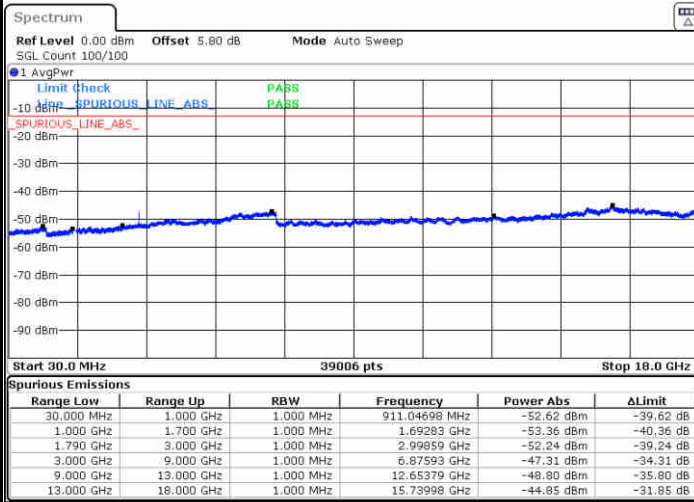


Date: 5 JUN 2019 01:16:12



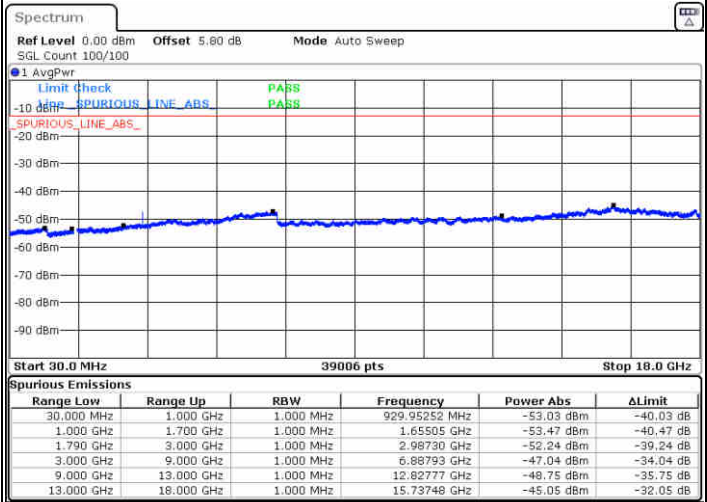
LTE Band 66 / 5MHz

Lowest Channel / 64QAM



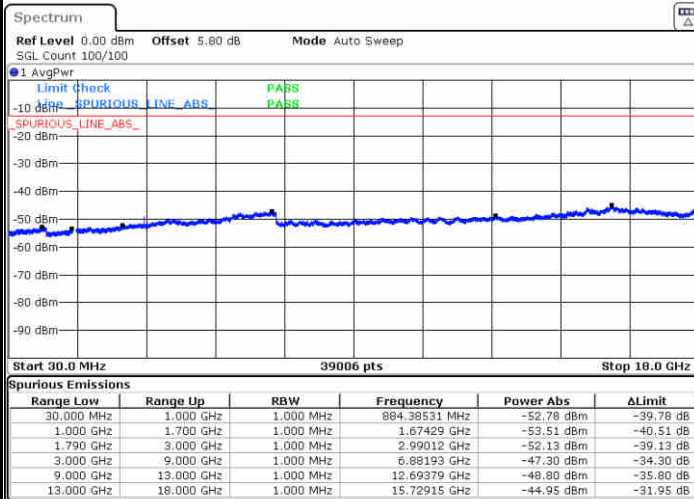
Date: 4 JUN 2019 22:53:33

Middle Channel / 64QAM



Date: 4 JUN 2019 22:45:35

Highest Channel / 64QAM

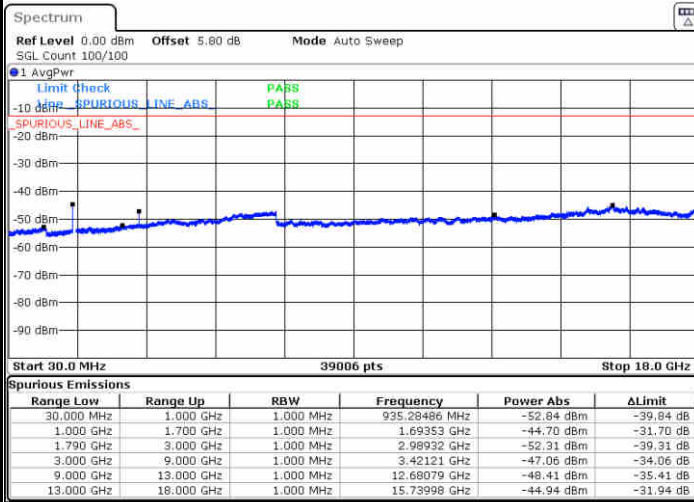


Date: 4 JUN 2019 22:58:46



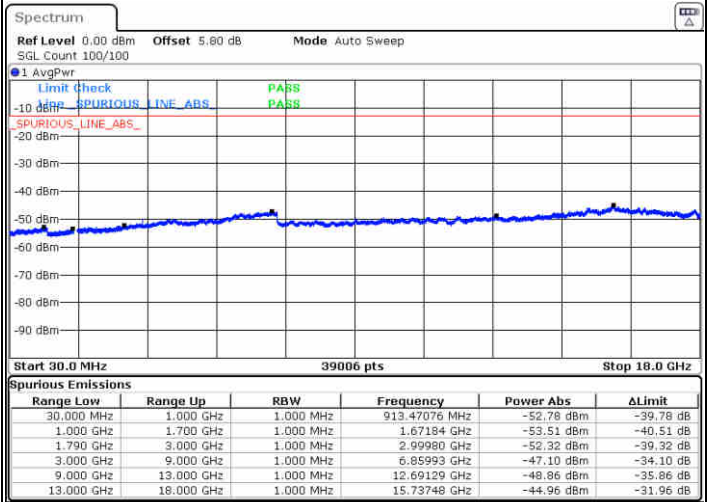
LTE Band 66 / 10MHz

Lowest Channel / 64QAM



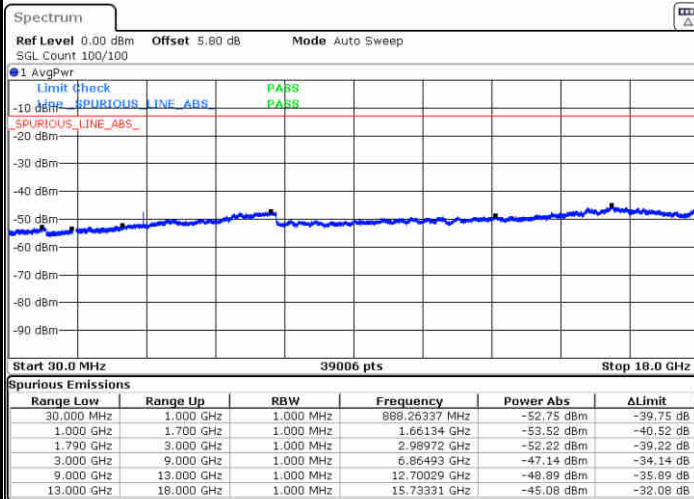
Date: 4 JUN 2019 23:14:52

Middle Channel / 64QAM



Date: 4 JUN 2019 23:08:15

Highest Channel / 64QAM

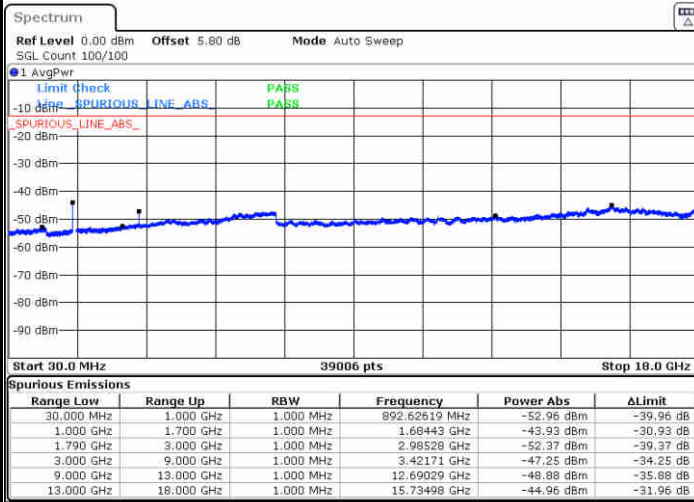


Date: 4 JUN 2019 23:19:17



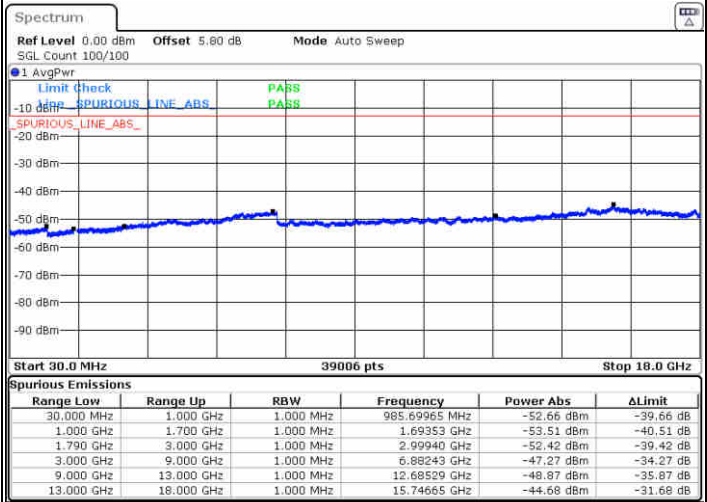
LTE Band 66 / 15MHz

Lowest Channel / 64QAM



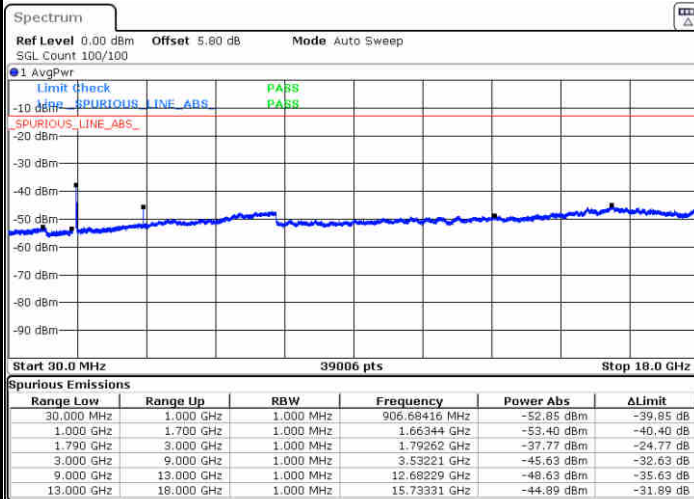
Date: 5 JUN 2019 00:27:59

Middle Channel / 64QAM



Date: 5 JUN 2019 00:23:55

Highest Channel / 64QAM

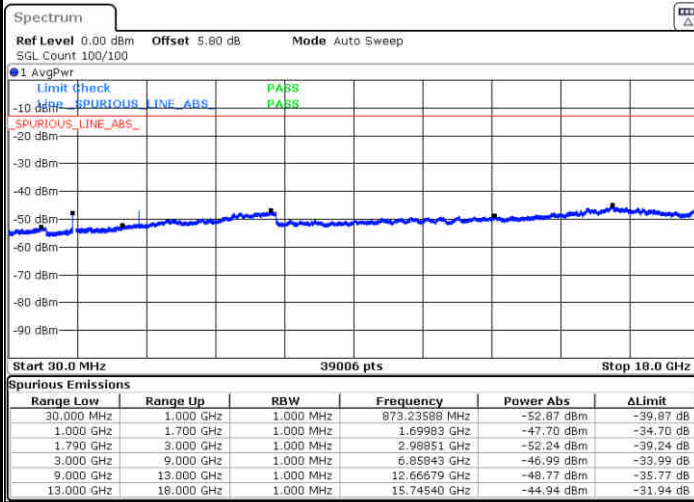


Date: 5 JUN 2019 00:32:18



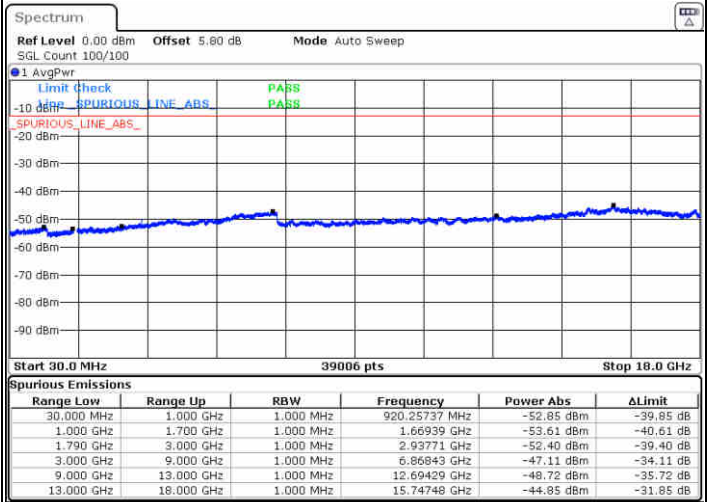
LTE Band 66 / 20MHz

Lowest Channel / 64QAM



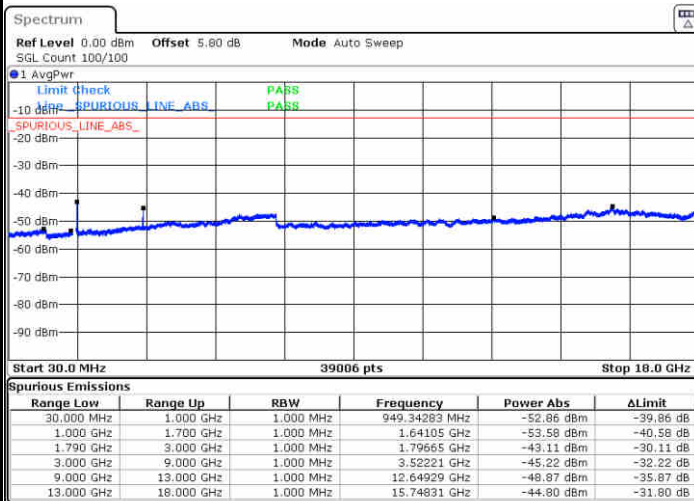
Date: 5 JUN 2019 00:44:11

Middle Channel / 64QAM



Date: 5 JUN 2019 00:37:44

Highest Channel / 64QAM



Date: 5 JUN 2019 00:50:01

**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	0.0038	PASS
40	Normal Voltage	0.0037	
30	Normal Voltage	0.0030	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0040	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.5 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	0.0011	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	0.0049	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0023	
-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) = 3.5V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0070	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0037	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0053	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0068	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0046	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage = 4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0044	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0039	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.5 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	-58.20	-13	-45.20	-64.77	1.85	8.42	H
	5613	-40.14	-13	-27.14	-48.50	2.32	10.68	H
	7488	-55.35	-13	-42.35	-64.68	2.61	11.94	H
	3741	-57.76	-13	-44.76	-64.33	1.85	8.42	V
	5613	-48.04	-13	-35.04	-56.40	2.32	10.68	V
	7488	-55.20	-13	-42.20	-64.53	2.61	11.94	V

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

LTE Band 5 / 10MHz / 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	1664.18	-66.74	-13	-53.74	-69.07	1.21	5.68	H
	2496	-55.61	-13	-42.61	-57.72	1.54	5.80	H
	3330	-61.22	-13	-48.22	-65.22	1.73	7.88	H
	1664	-60.71	-13	-47.71	-63.04	1.21	5.68	V
	2496	-43.49	-13	-30.49	-45.60	1.54	5.80	V
	3330	-61.22	-13	-48.22	-65.22	1.73	7.88	V

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

LTE Band 12 / 10MHz / 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	1406	-65.76	-13	-52.76	-68.09	1.21	5.68	H
	2110	-45.63	-13	-32.63	-47.74	1.54	5.80	H
	2812	-64.49	-13	-51.49	-68.49	1.73	7.88	H
	1406	-61.69	-13	-48.69	-64.02	1.21	5.68	V
	2110	-41.49	-13	-28.49	-43.60	1.54	5.80	V
	2812	-63.51	-13	-50.51	-67.51	1.73	7.88	V

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



LTE Band 13 / 5MHz / 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	1560	-66.76	-42.15	-24.61	-68.47	2.23	6.09	H
	2340	-52.94	-13	-39.94	-53.47	2.83	5.51	H
	3120	-63.67	-13	-50.67	-65.61	3.21	7.30	H
	1560	-67.79	-42.15	-25.64	-69.50	2.23	6.09	V
	2340	-51.41	-13	-38.41	-51.94	2.83	5.51	V
	3120	-63.34	-13	-50.34	-65.28	3.21	7.30	V

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

LTE Band 13 / 10MHz / 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	1554	-61.01	-13	-48.01	-62.72	2.23	6.09	H
	2332	-50.44	-13	-37.44	-50.97	2.83	5.51	H
	3108	-63.78	-13	-50.78	-65.72	3.21	7.30	H
	1554	-64.74	-13	-51.74	-66.45	2.23	6.09	V
	2332	-45.36	-13	-32.36	-45.89	2.83	5.51	V
	3108	-63.32	-13	-50.32	-65.26	3.21	7.30	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-54.18	-13	-41.18	-60.87	1.75	8.44	H
	5208	-52.47	-13	-39.47	-60.89	1.94	10.36	H
	6948	-51.42	-13	-38.42	-60.66	2.47	11.71	H
	3471	-55.65	-13	-42.65	-62.34	1.75	8.44	V
	5208	-53.31	-13	-40.31	-61.73	1.94	10.36	V
	6948	-51.25	-13	-38.25	-60.49	2.47	11.71	V

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