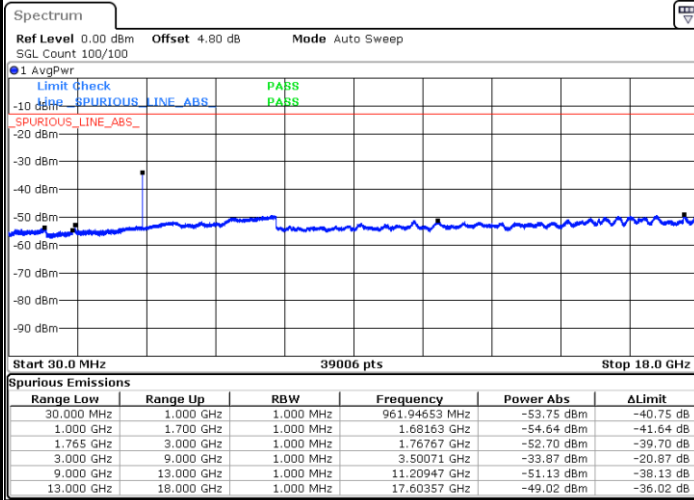




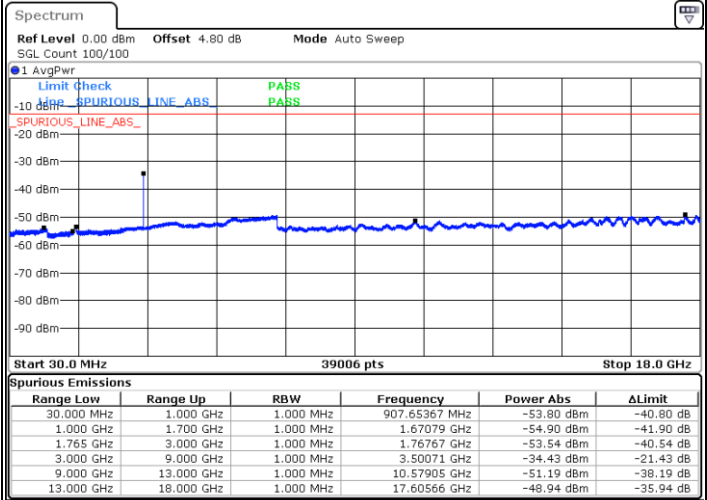
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 2 APR 2018 09:51:22

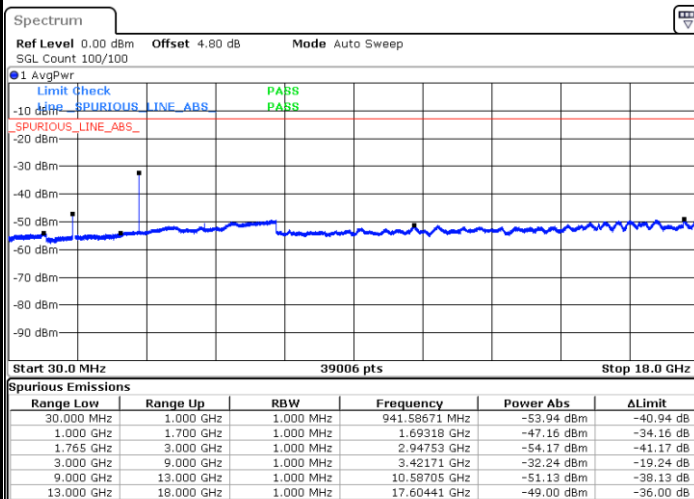
Highest Channel / 16QAM



Date: 2 APR 2018 09:52:15

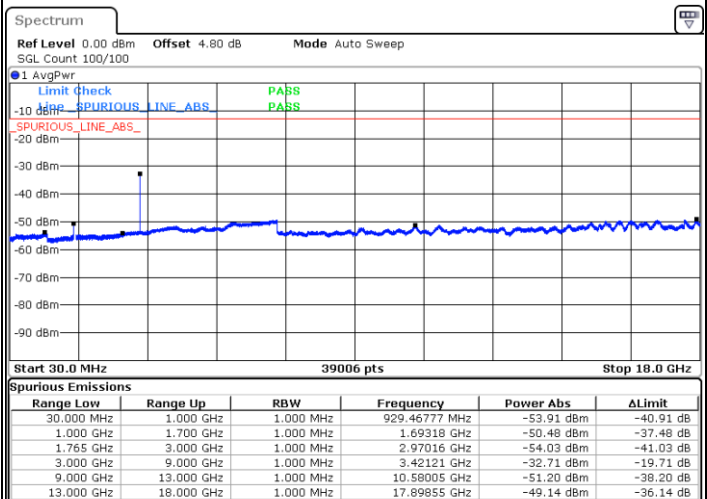
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 2 APR 2018 09:58:22

Lowest Channel / 16QAM

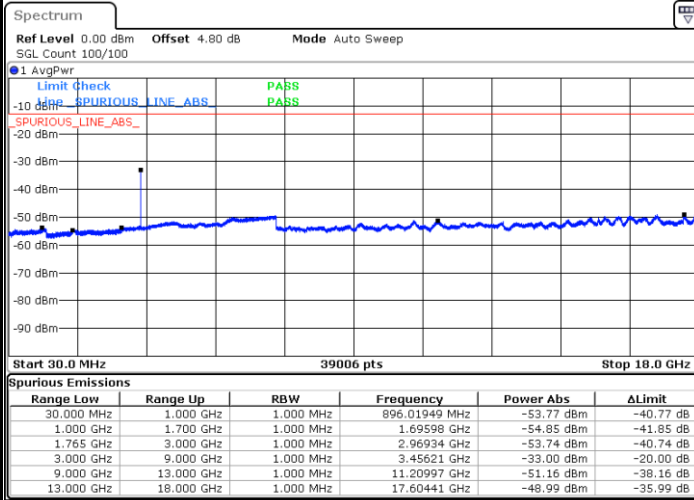


Date: 2 APR 2018 09:58:16



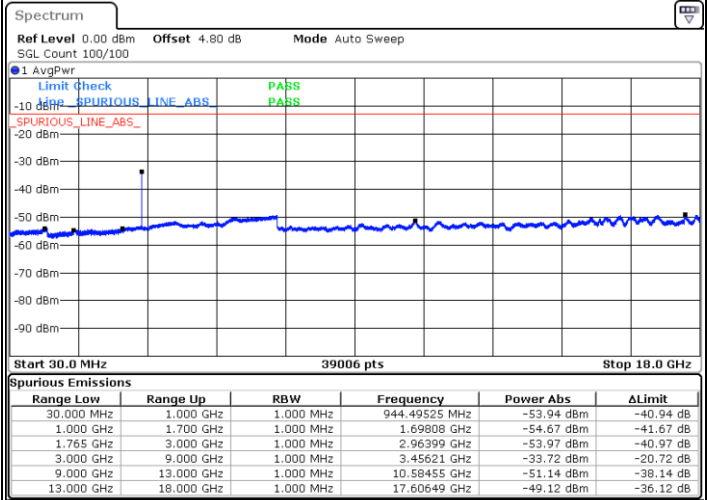
LTE Band 4 / 10MHz

Middle Channel / QPSK



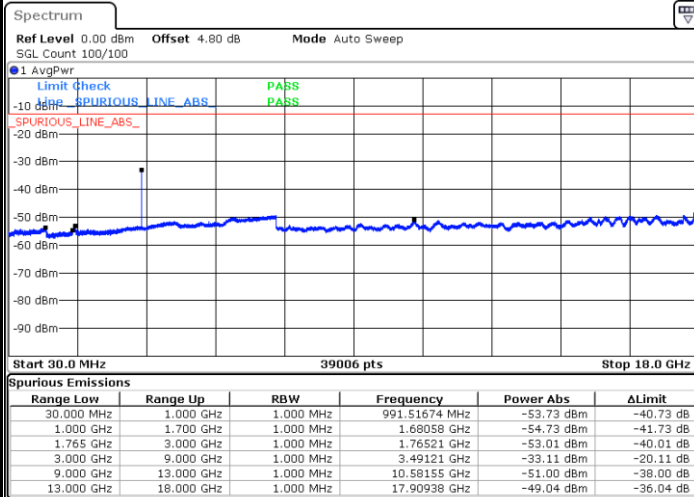
Date: 2 APR 2018 10:00:50

Middle Channel / 16QAM



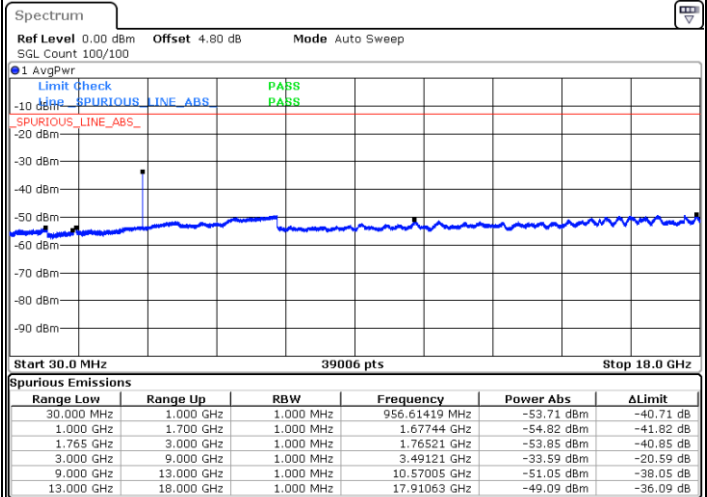
Date: 2 APR 2018 10:01:43

Highest Channel / QPSK



Date: 2 APR 2018 10:07:51

Highest Channel / 16QAM

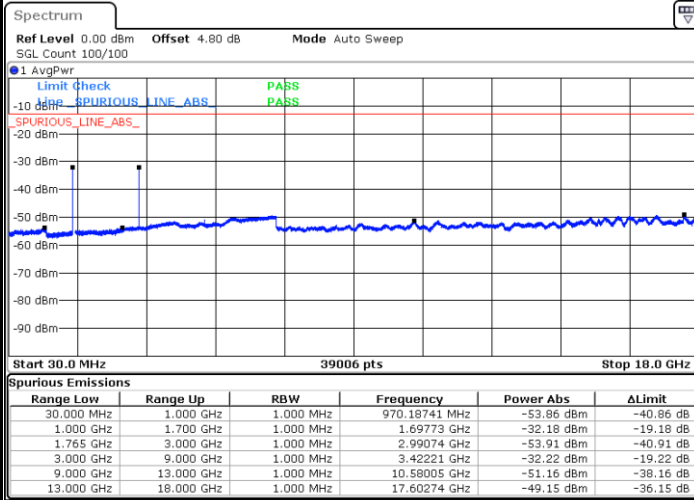


Date: 2 APR 2018 10:08:44



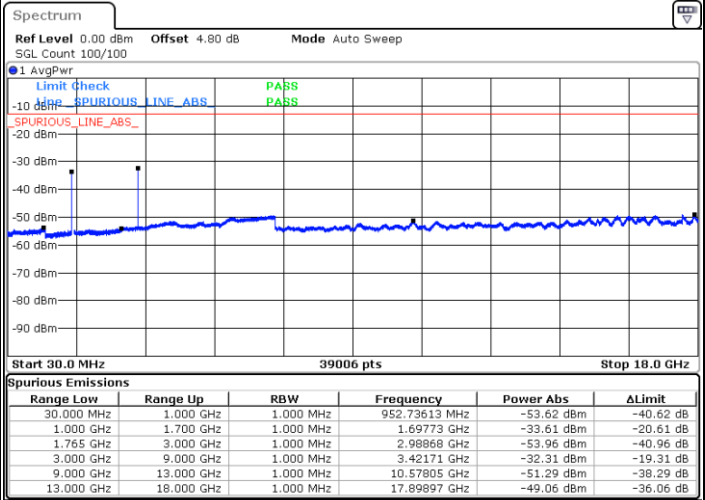
LTE Band 4 / 15MHz

Lowest Channel / QPSK



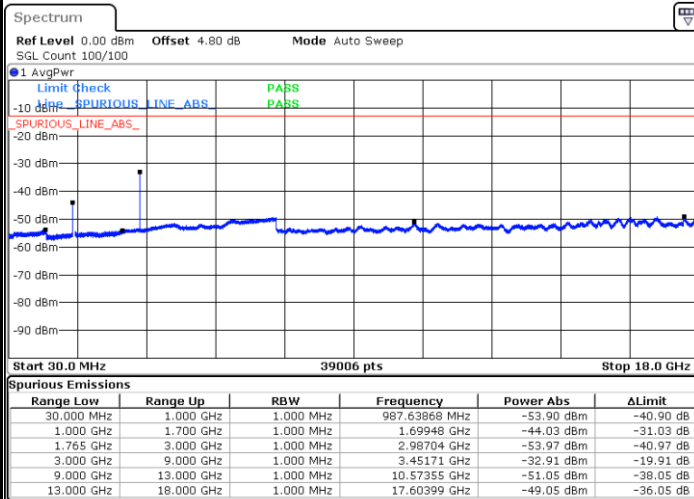
Date: 2 APR 2018 10:14:52

Lowest Channel / 16QAM



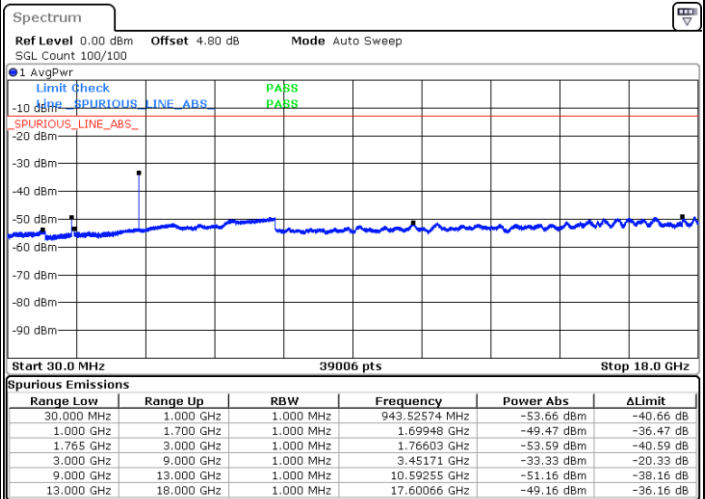
Date: 2 APR 2018 10:15:46

Middle Channel / QPSK



Date: 2 APR 2018 10:17:19

Middle Channel / 16QAM

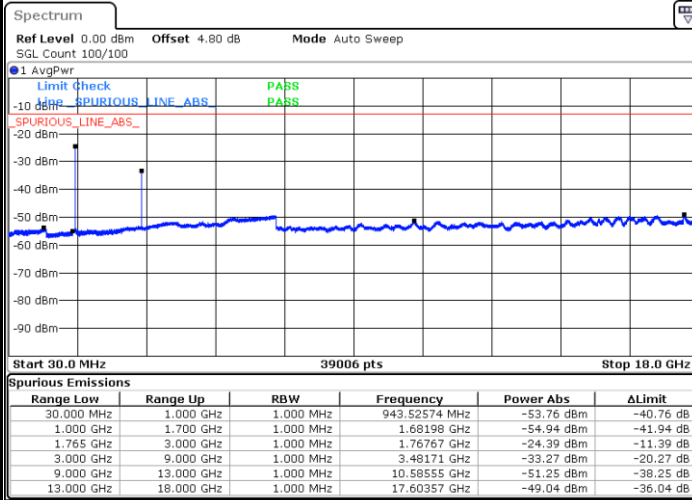


Date: 2 APR 2018 10:18:13



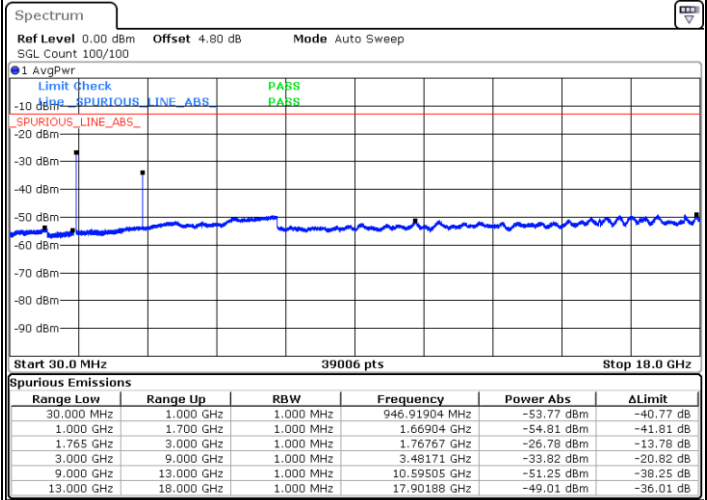
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 2 APR 2018 10:24:20

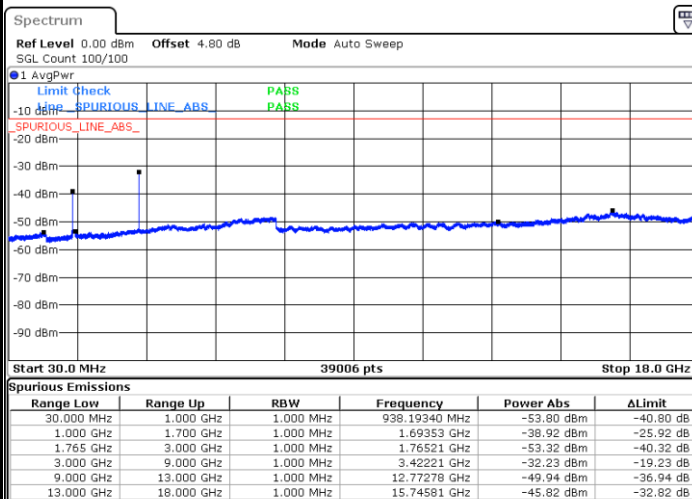
Highest Channel / 16QAM



Date: 2 APR 2018 10:25:14

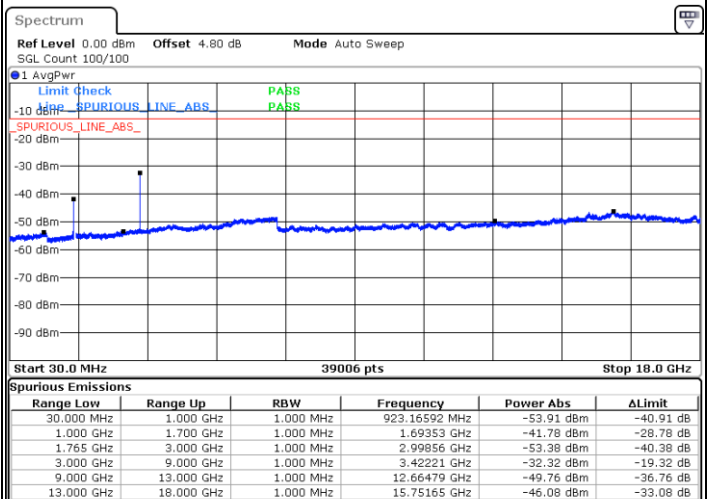
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 2 APR 2018 10:47:52

Lowest Channel / 16QAM

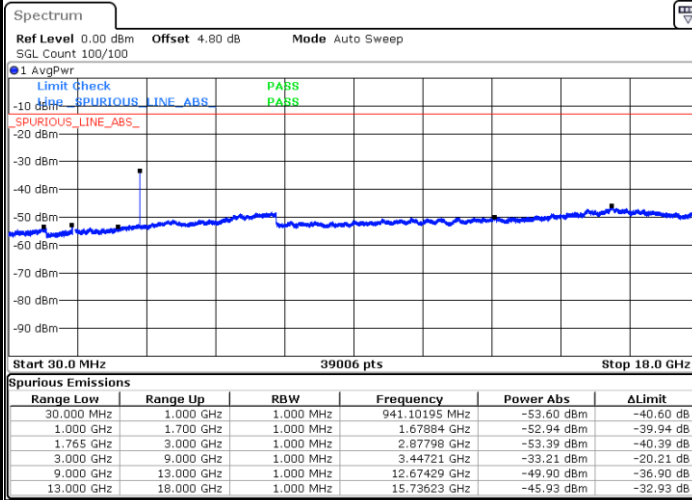


Date: 2 APR 2018 10:48:47



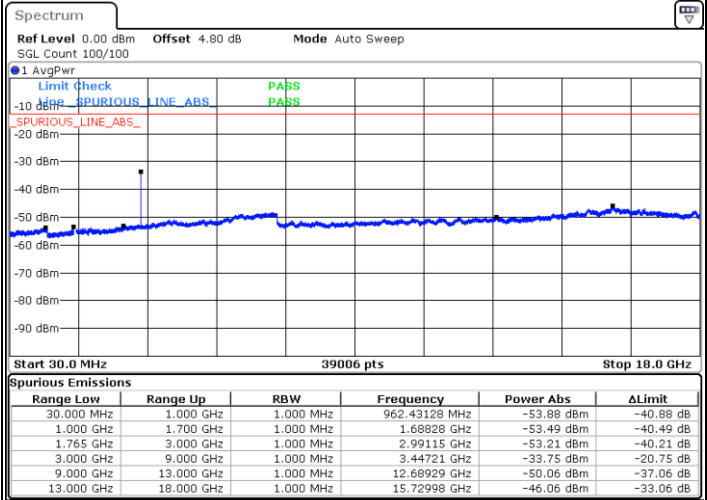
LTE Band 4 / 20MHz

Middle Channel / QPSK



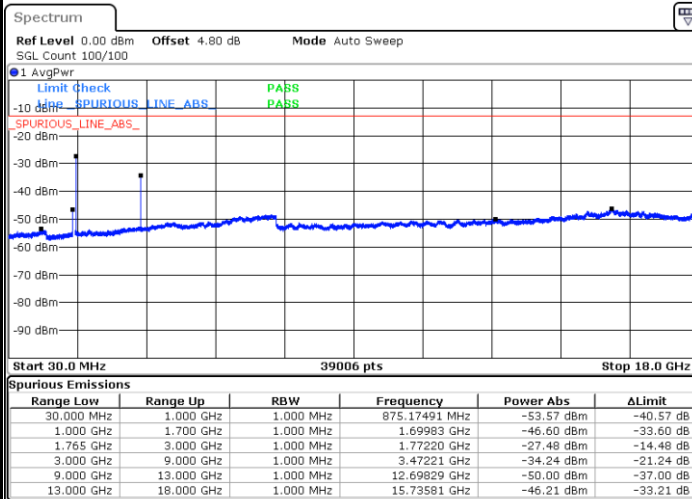
Date: 2 APR 2018 10:50:21

Middle Channel / 16QAM



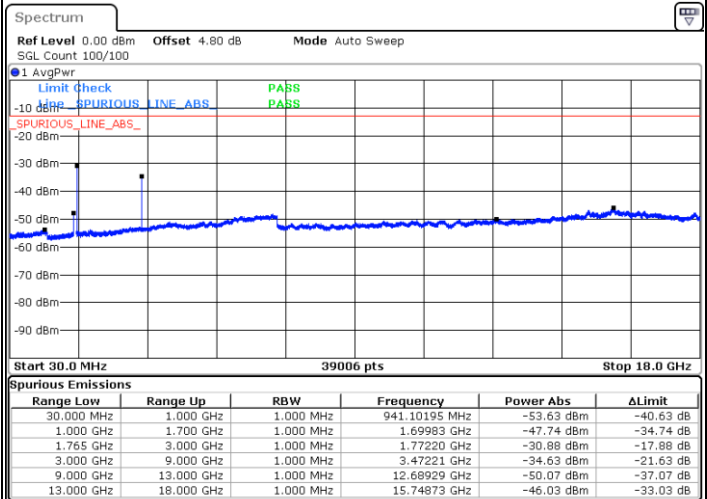
Date: 2 APR 2018 10:51:15

Highest Channel / QPSK



Date: 2 APR 2018 10:57:19

Highest Channel / 16QAM

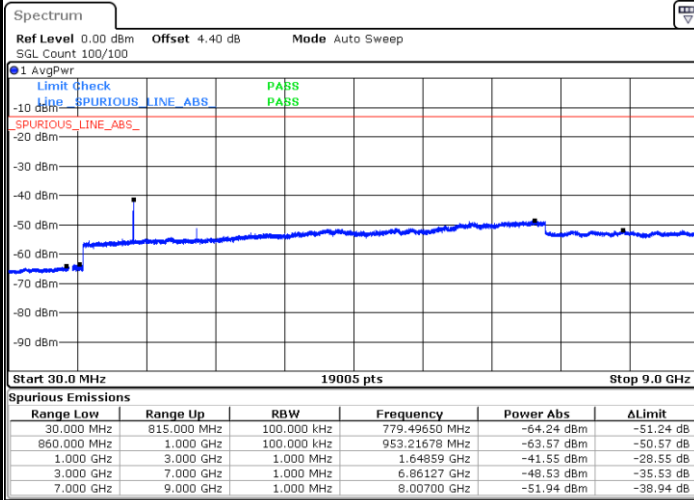


Date: 2 APR 2018 10:58:13



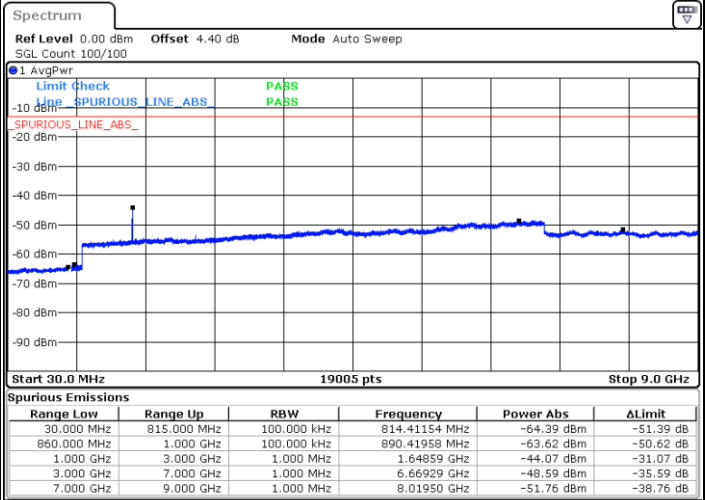
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



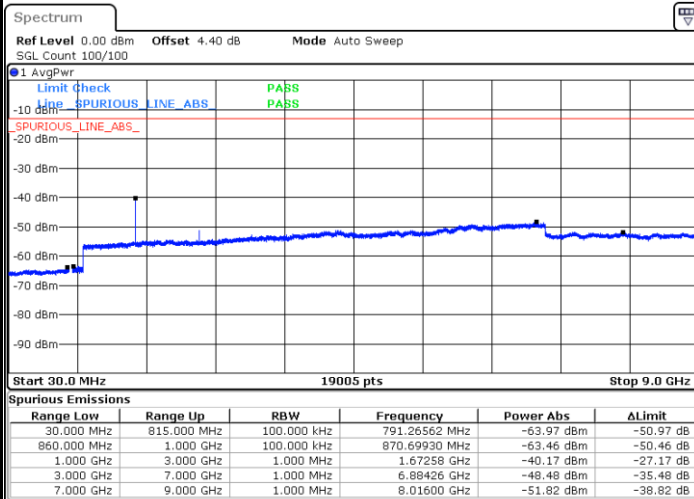
Date: 3 APR 2018 09:08:53

Lowest Channel / 16QAM



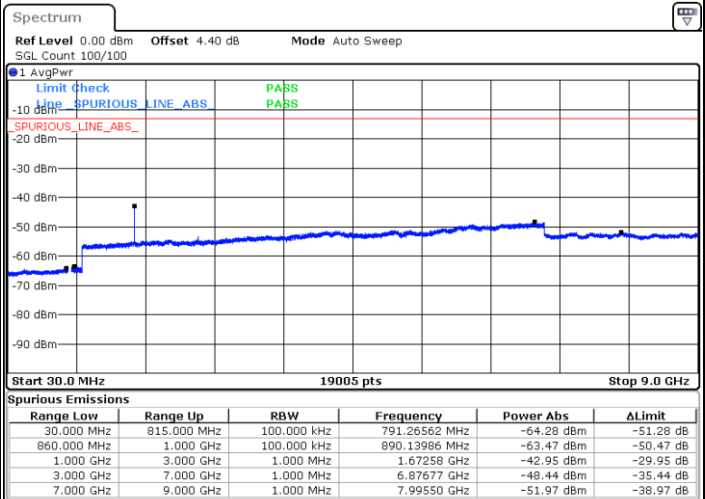
Date: 3 APR 2018 09:09:47

Middle Channel / QPSK



Date: 3 APR 2018 09:11:21

Middle Channel / 16QAM

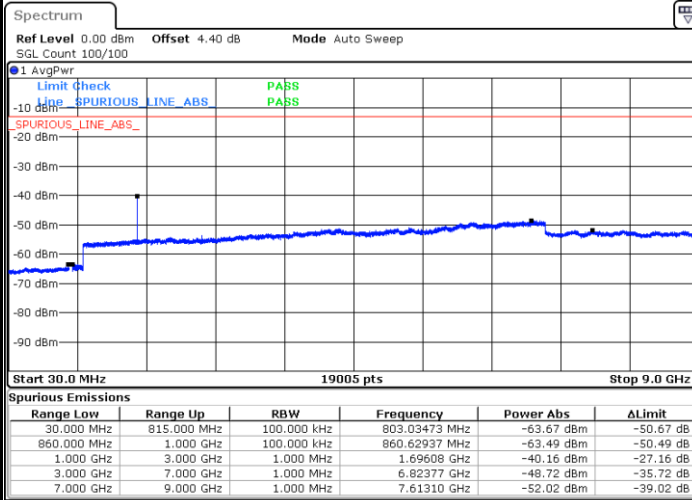


Date: 3 APR 2018 09:12:16



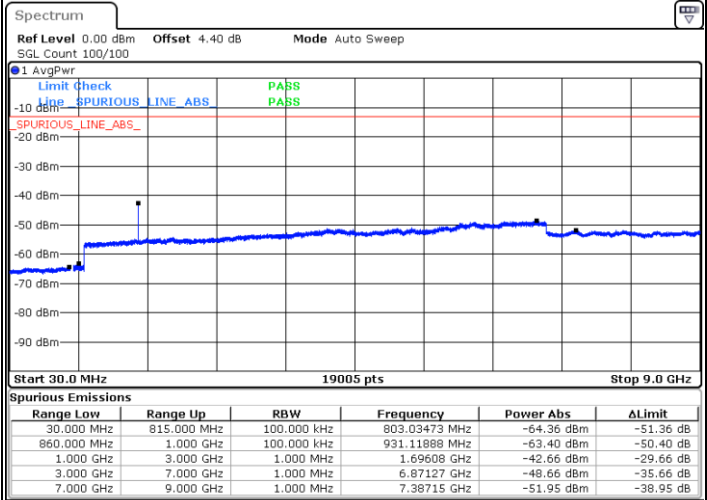
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 3 APR 2018 09:20:19

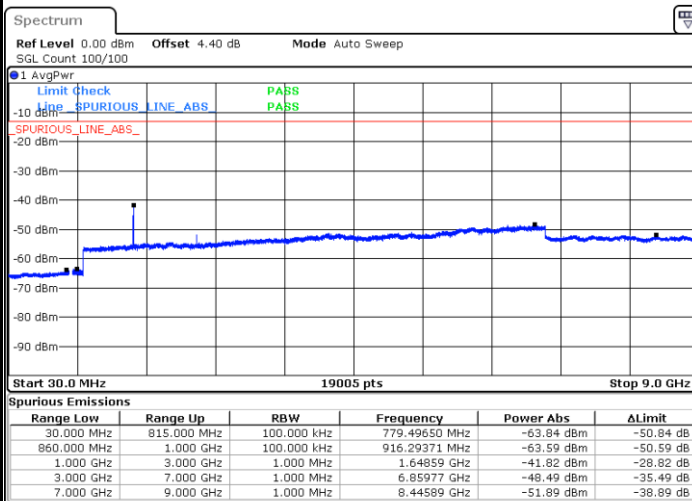
Highest Channel / 16QAM



Date: 3 APR 2018 09:21:13

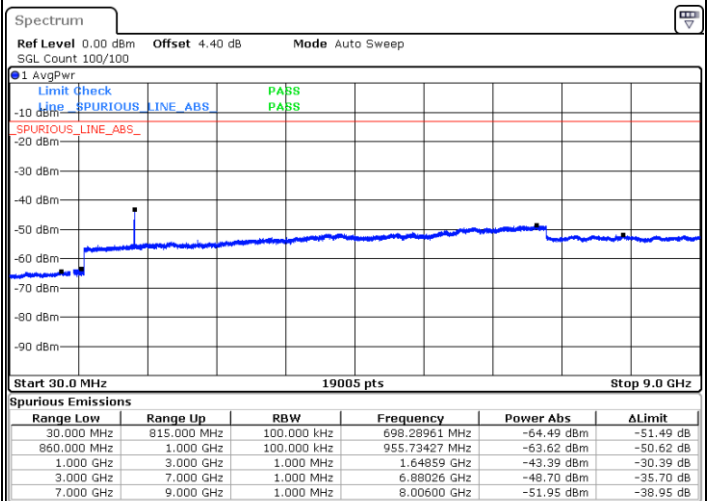
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 3 APR 2018 09:29:17

Lowest Channel / 16QAM

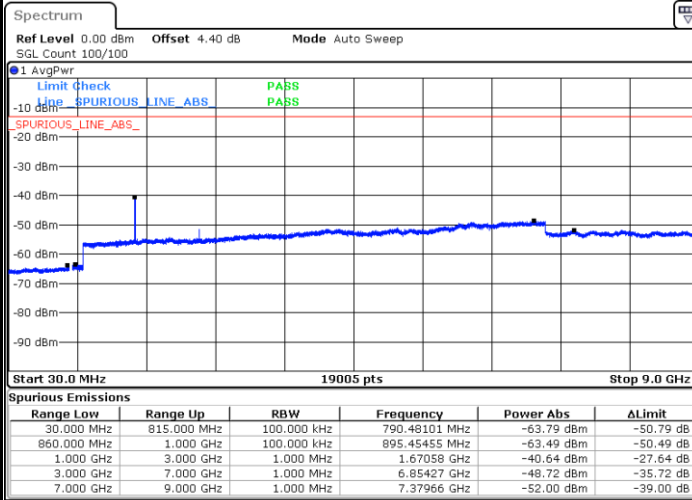


Date: 3 APR 2018 09:30:11



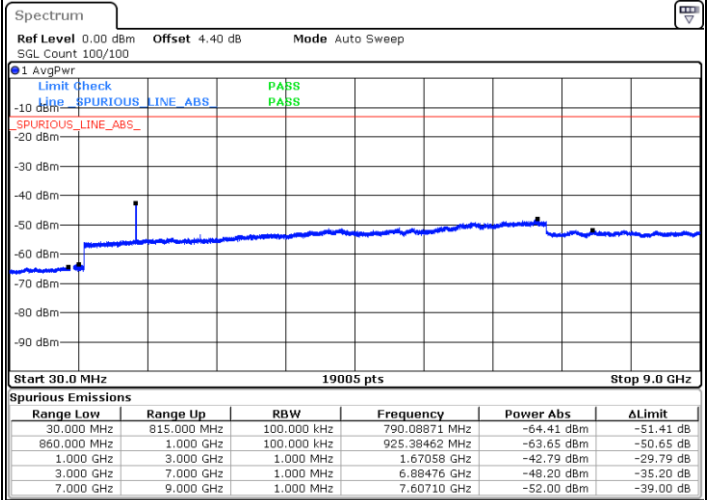
LTE Band 5 / 3MHz

Middle Channel / QPSK



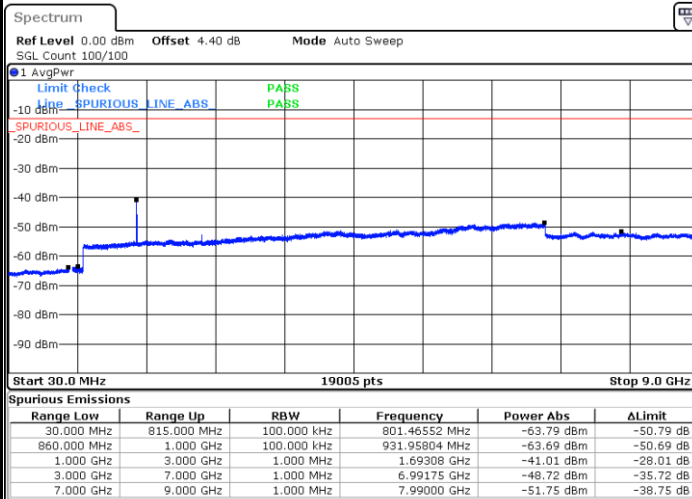
Date: 3 APR 2018 09:31:45

Middle Channel / 16QAM



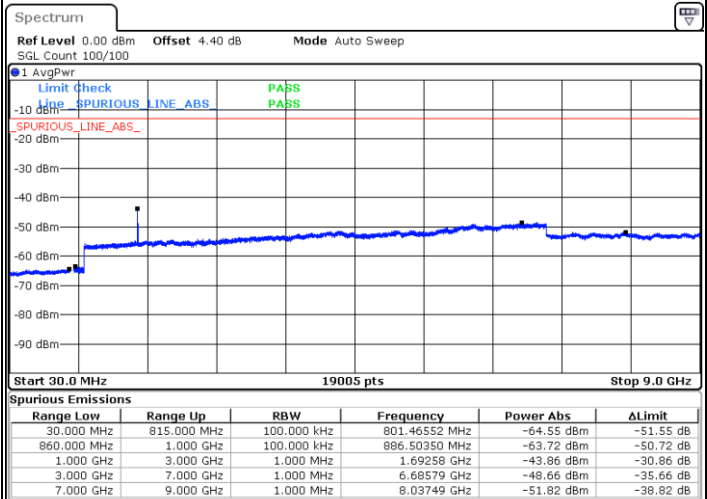
Date: 3 APR 2018 09:32:40

Highest Channel / QPSK



Date: 3 APR 2018 09:40:43

Highest Channel / 16QAM

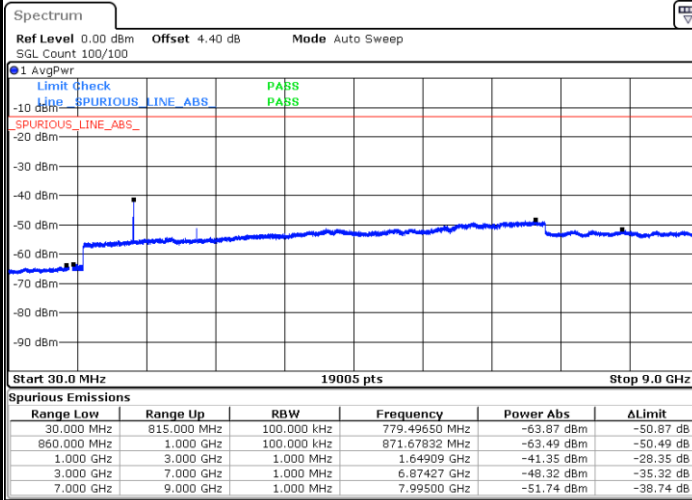


Date: 3 APR 2018 09:41:38



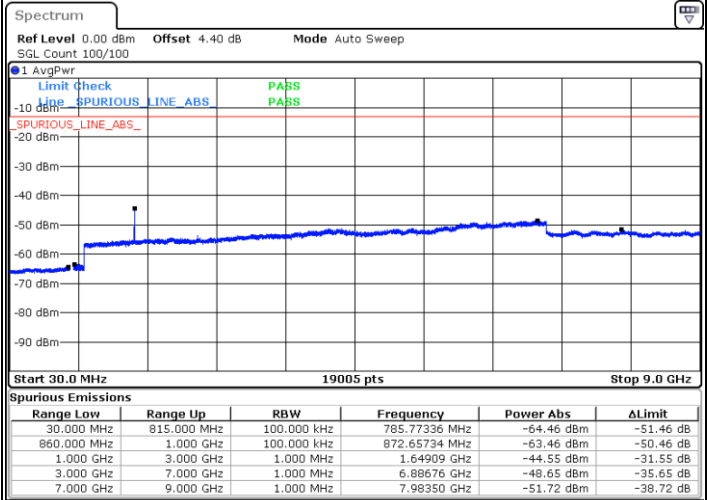
LTE Band 5 / 5MHz

Lowest Channel / QPSK



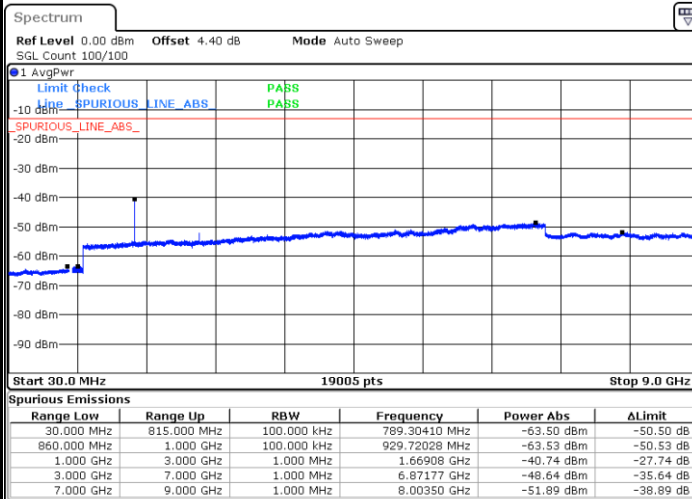
Date: 3 APR 2018 09:49:41

Lowest Channel / 16QAM



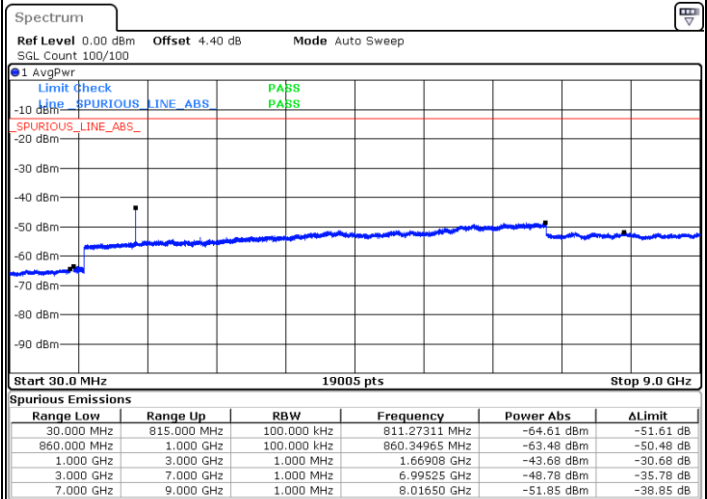
Date: 3 APR 2018 09:50:35

Middle Channel / QPSK



Date: 3 APR 2018 09:52:10

Middle Channel / 16QAM

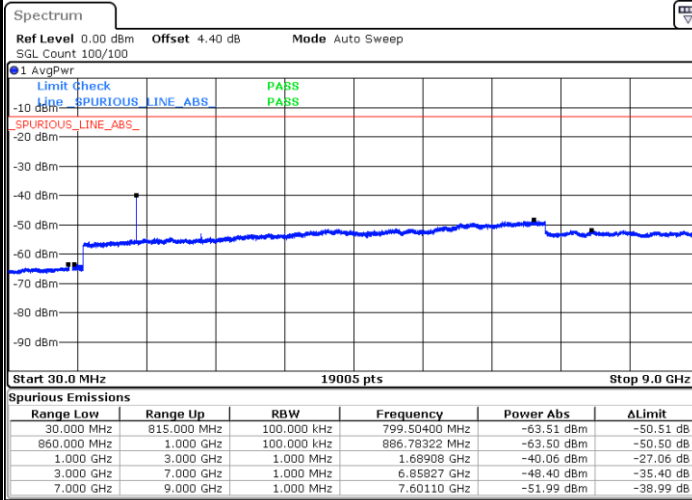


Date: 3 APR 2018 09:53:04



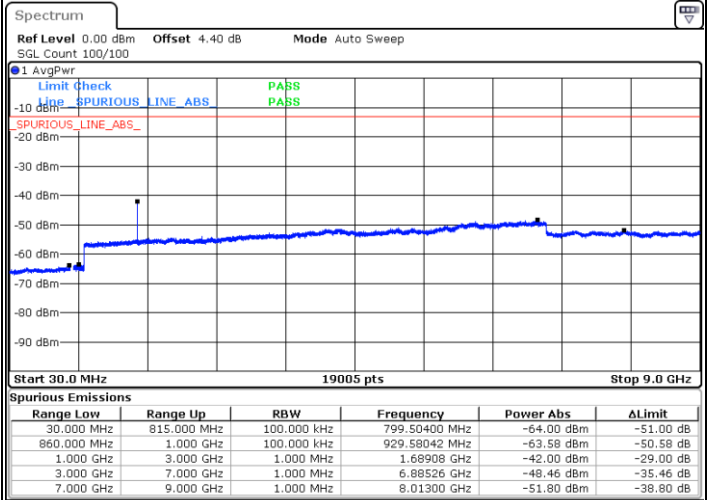
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 3 APR 2018 10:01:07

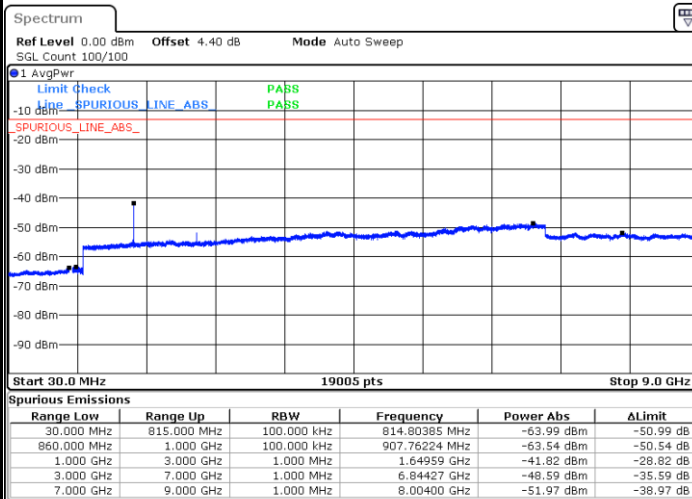
Highest Channel / 16QAM



Date: 3 APR 2018 10:02:02

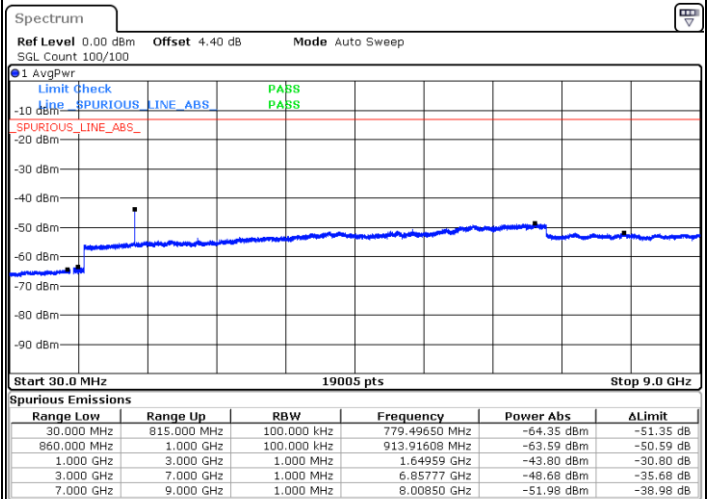
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 3 APR 2018 10:10:05

Lowest Channel / 16QAM

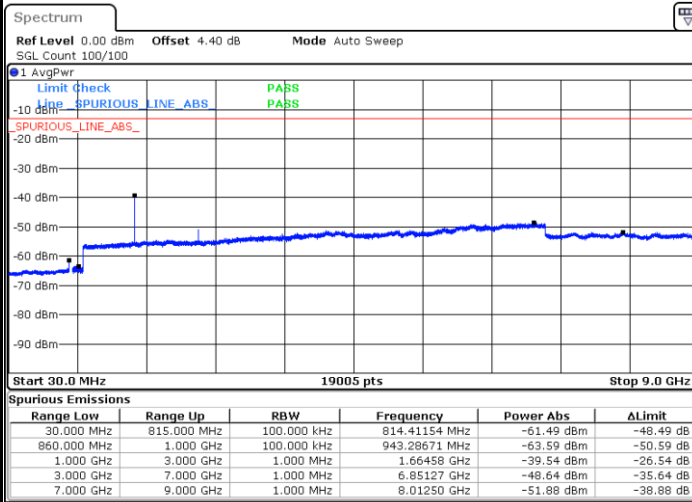


Date: 3 APR 2018 10:10:59



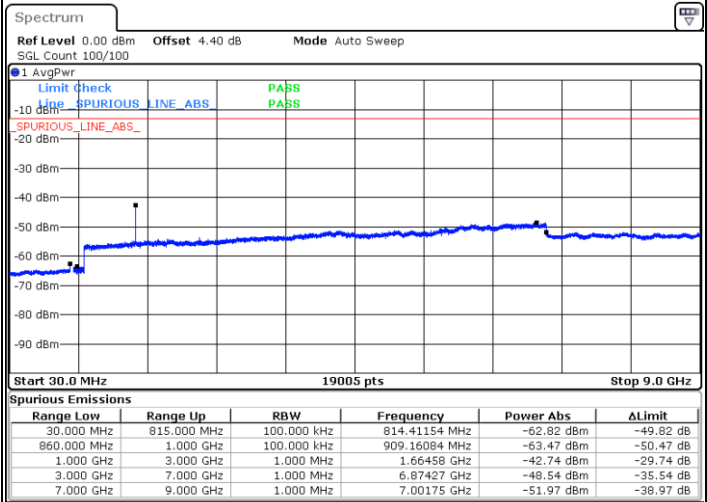
LTE Band 5 / 10MHz

Middle Channel / QPSK



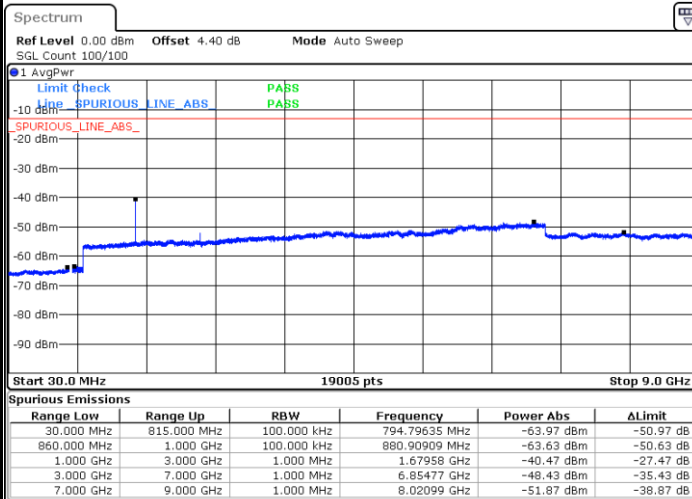
Date: 3 APR 2018 10:12:33

Middle Channel / 16QAM



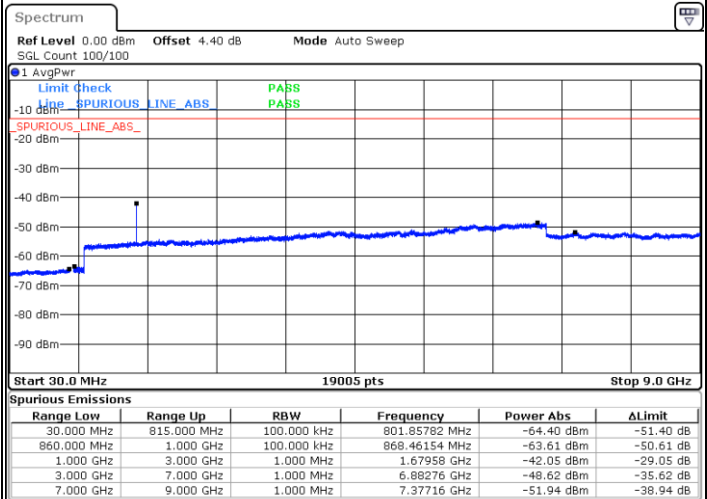
Date: 3 APR 2018 10:13:27

Highest Channel / QPSK



Date: 3 APR 2018 10:21:31

Highest Channel / 16QAM

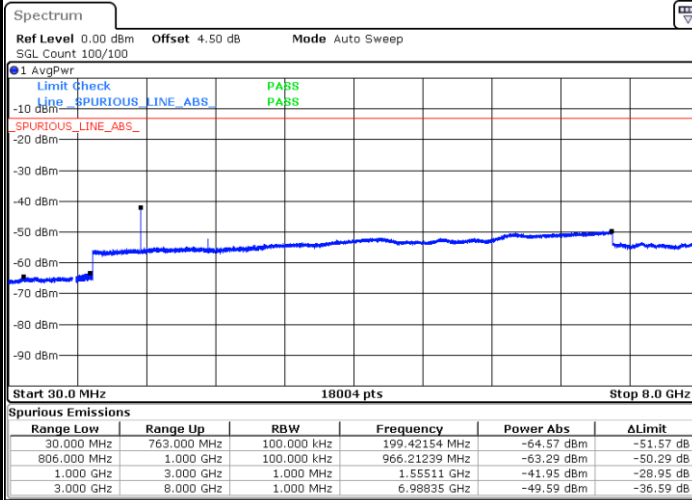


Date: 3 APR 2018 10:22:25



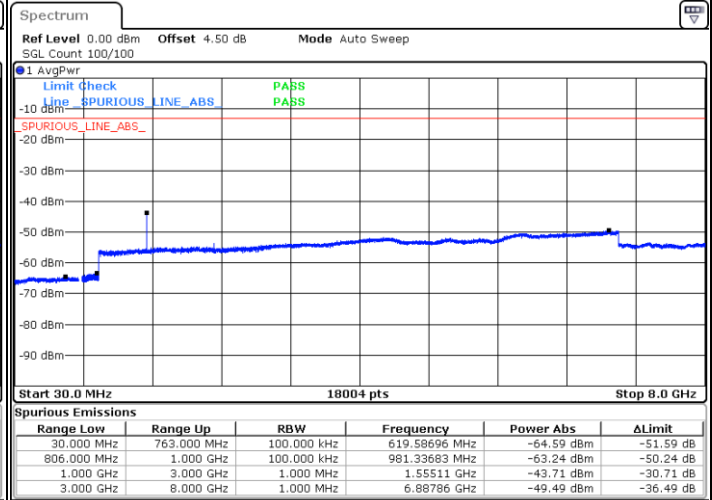
LTE Band 13 / 5MHz

Lowest Channel / QPSK



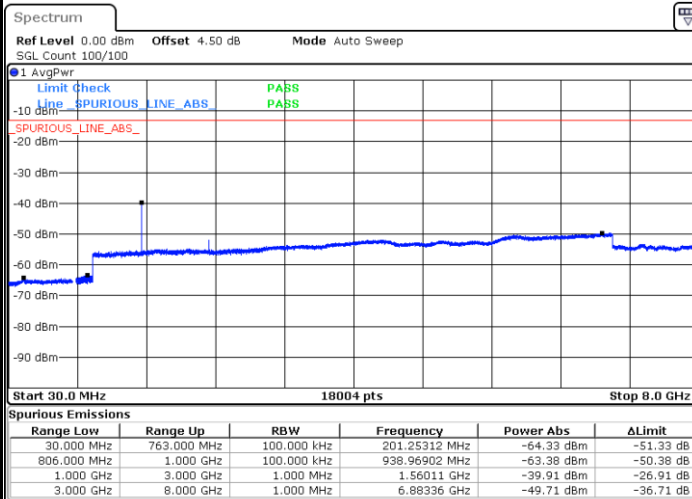
Date: 30 MAR 2018 23:23:16

Lowest Channel / 16QAM



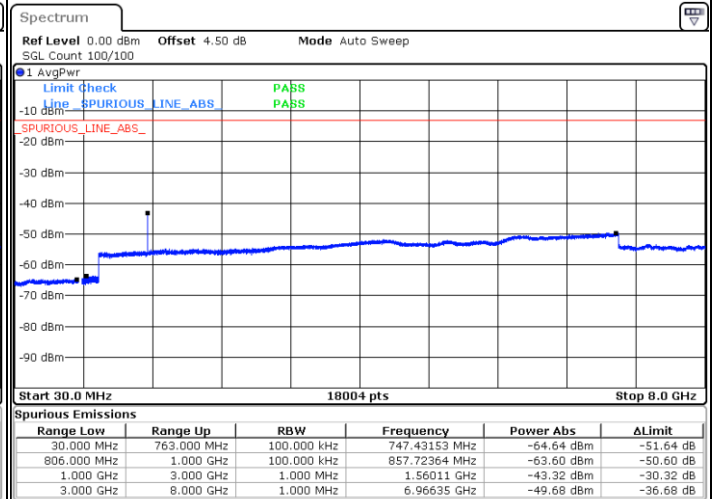
Date: 30 MAR 2018 23:22:23

Middle Channel / QPSK



Date: 30 MAR 2018 23:24:49

Middle Channel / 16QAM

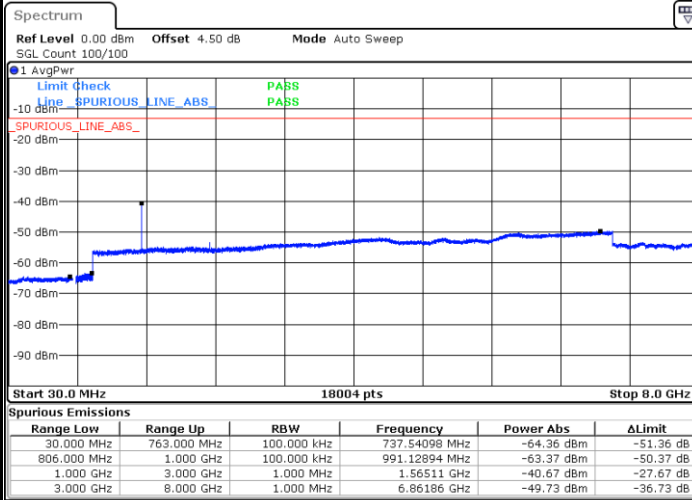


Date: 30 MAR 2018 23:25:42



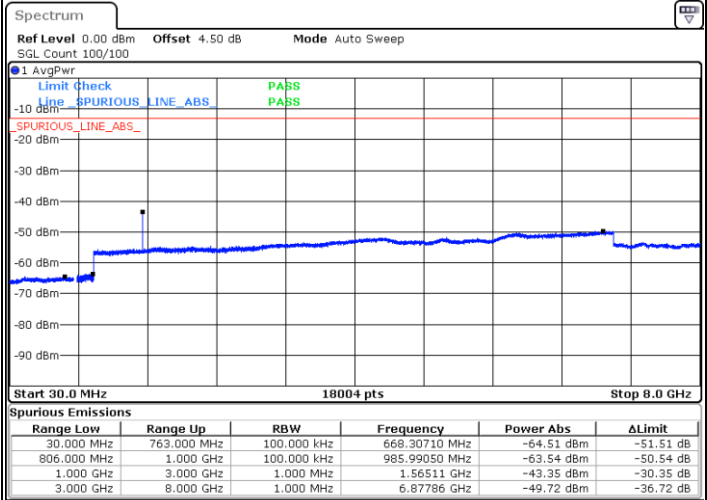
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 30 MAR 2018 23:34:44

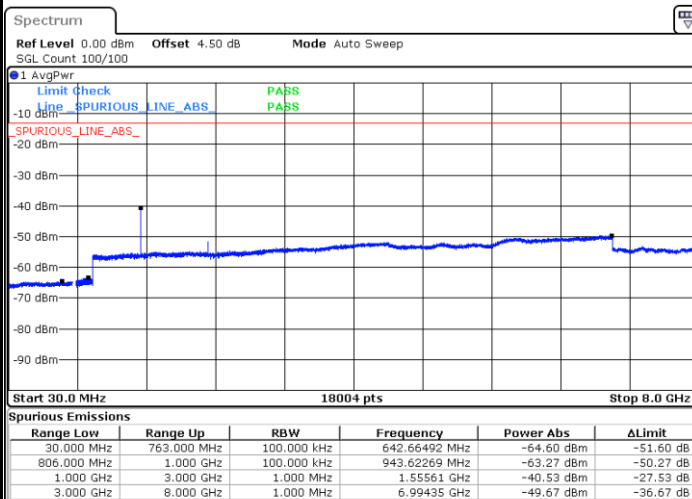
Highest Channel / 16QAM



Date: 30 MAR 2018 23:33:50

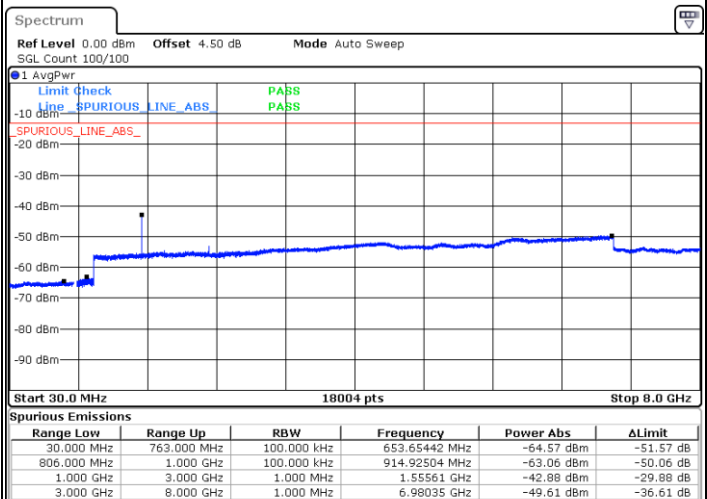
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 30 MAR 2018 23:35:37

Middle Channel / 16QAM



Date: 30 MAR 2018 23:36:30

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	0.0005	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 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	0.0039	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 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	0.0022	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0030	
0	Normal Voltage	0.0035	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0038	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0029	

Note: Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0049	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0074	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0050	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0040	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0047	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0055	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 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	-61.13	-13	-48.13	-66.30	1.83	7.00	H
	5613	-56.26	-13	-43.26	-63.88	2.18	9.80	H
	7485	-53.40	-13	-40.40	-63.07	2.53	12.20	H
	3741	-63.18	-13	-50.18	-68.35	1.83	7.00	V
	5613	-59.80	-13	-46.80	-67.42	2.18	9.80	V
	7485	-54.34	-13	-41.34	-64.01	2.53	12.20	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	-36.69	-13	-23.69	-41.83	1.81	6.95	H
	5172	-59.91	-13	-46.91	-66.98	2.23	9.30	H
	6894	-54.45	-13	-41.45	-62.73	2.60	10.88	H
	3447	-38.36	-13	-25.36	-43.50	1.81	6.95	V
	5172	-59.93	-13	-46.93	-67.00	2.23	9.30	V
	6894	-52.57	-13	-39.57	-60.85	2.6	10.88	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	-65.36	-13	-52.36	-67.27	1.14	5.20	H
	2496	-63.05	-13	-50.05	-65.68	1.12	5.90	H
	3330	-64.16	-13	-51.16	-67.37	1.34	6.70	H
	1664	-66.11	-13	-53.11	-68.02	1.14	5.20	V
	2496	-64.51	-13	-51.51	-67.14	1.12	5.90	V
	3330	-64.41	-13	-51.41	-67.62	1.34	6.70	V

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

LTE Band 13 / 5MHz / 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	1560	-65.26	-40	-25.26	-69.11	1.385	5.23	H
	2340	-64.44	-13	-51.44	-66.43	1.88	6.02	H
	3120	-63.35	-13	-50.35	-65.72	2.38	6.90	H
	1560	-65.26	-40	-25.26	-69.11	1.385	5.23	V
	2340	-64.77	-13	-51.77	-66.76	1.88	6.02	V
	3120	-63.66	-13	-50.66	-66.03	2.38	6.90	V

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