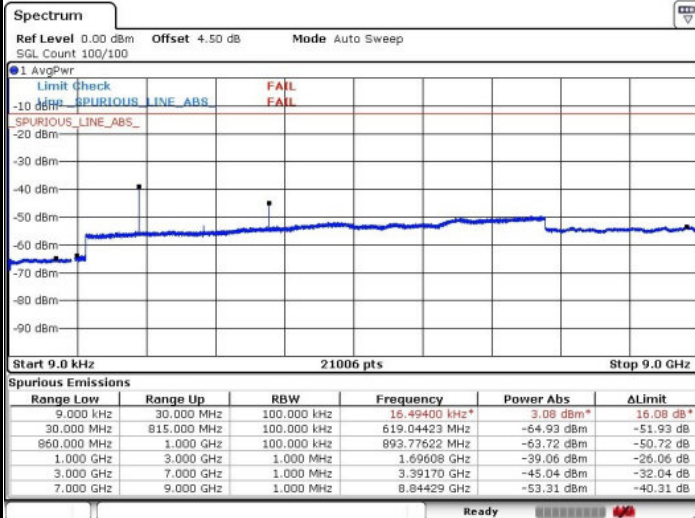




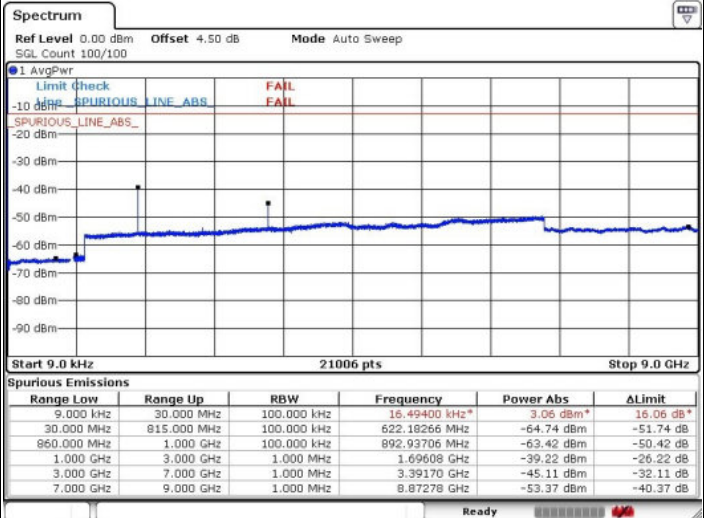
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 2 MAR 2017 21:32:55

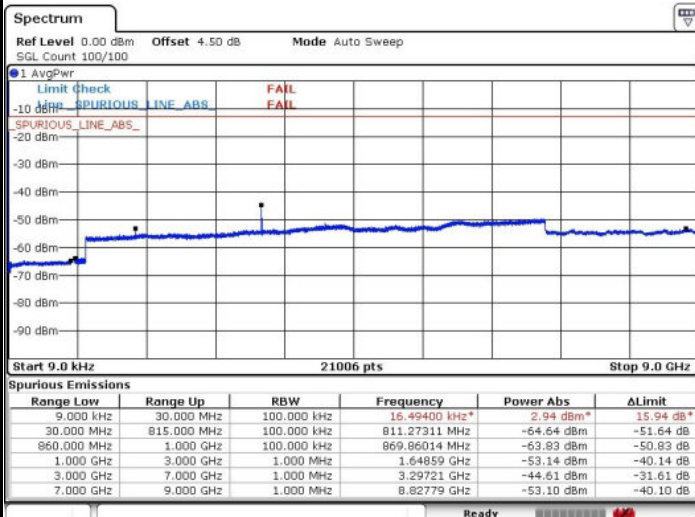
Highest Channel / 16QAM



Date: 2 MAR 2017 21:33:27

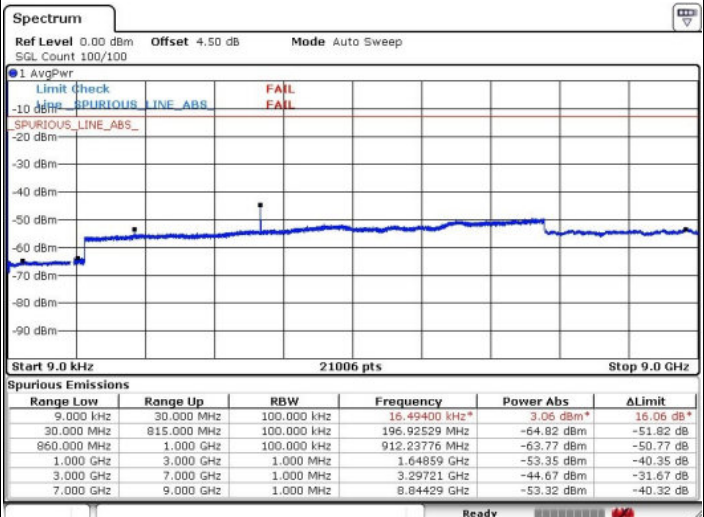
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 21:35:16

Lowest Channel / 16QAM



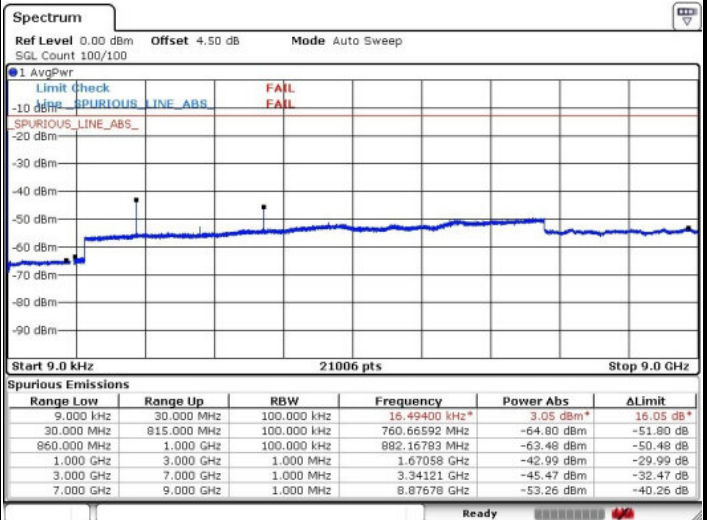
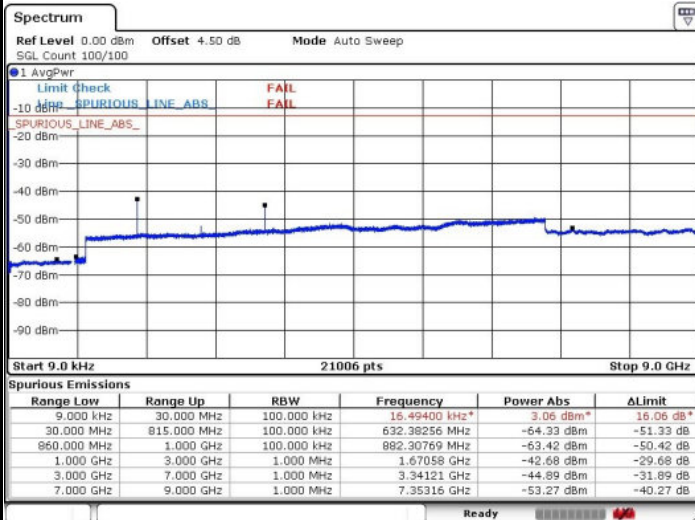
Date: 2 MAR 2017 21:35:53



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

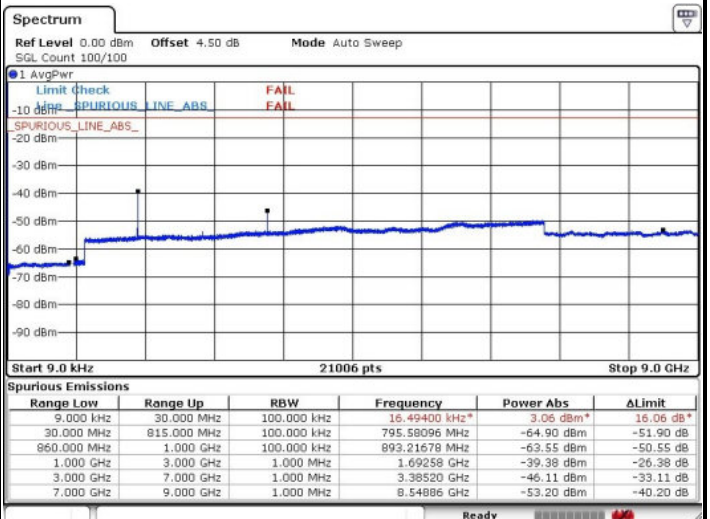
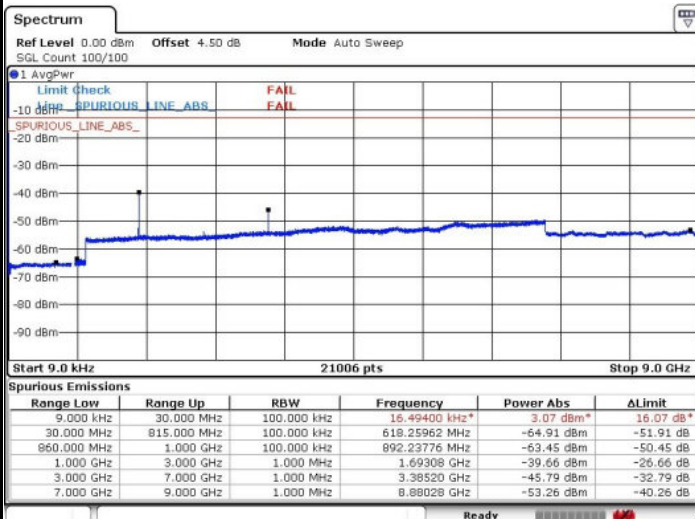


Date: 2 MAR 2017 21:37:13

Date: 2 MAR 2017 21:36:28

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 21:37:46

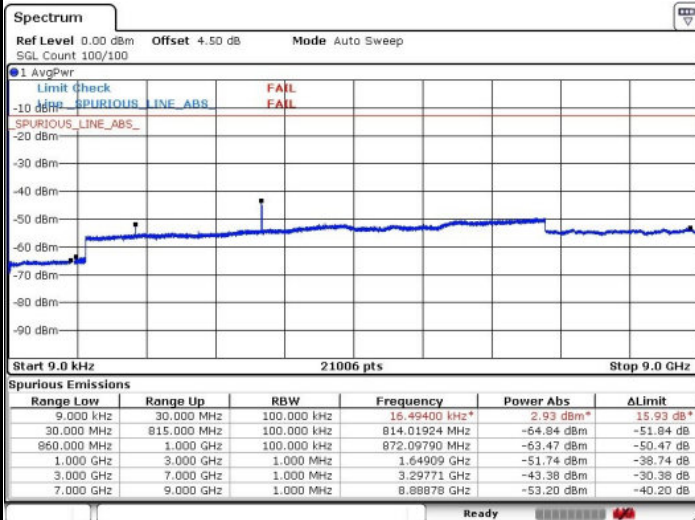
Date: 2 MAR 2017 21:38:19



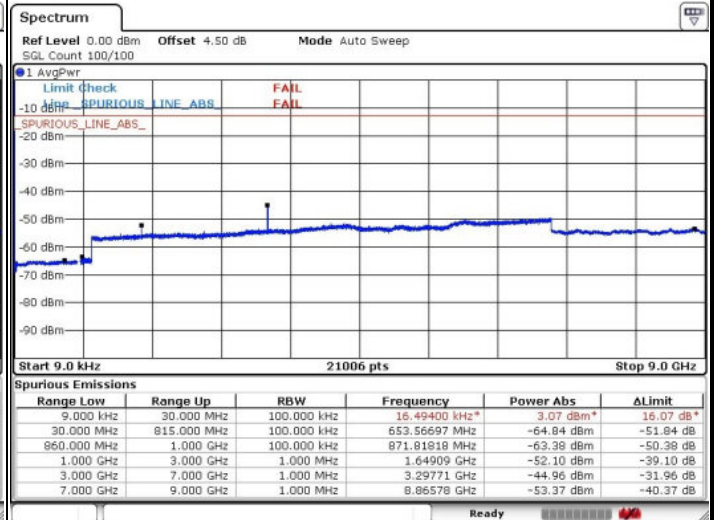
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



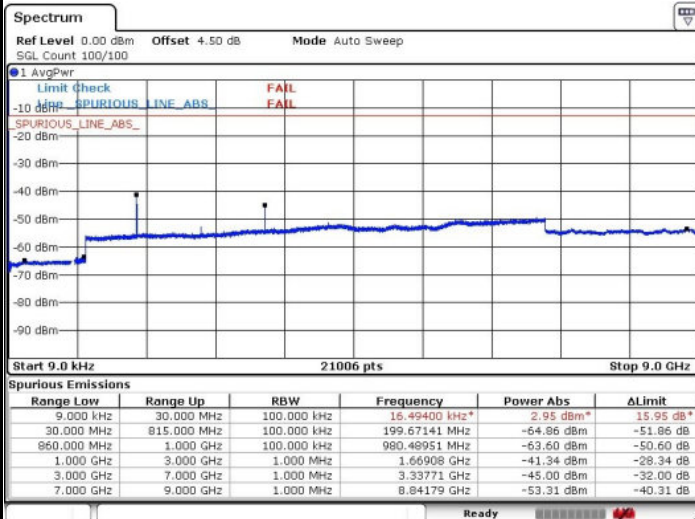
Date: 2 MAR 2017 21:40:03



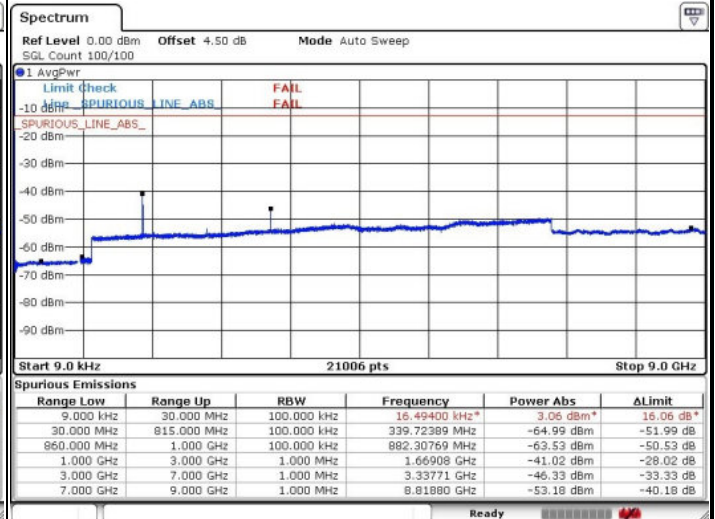
Date: 2 MAR 2017 21:40:41

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 2 MAR 2017 21:42:32

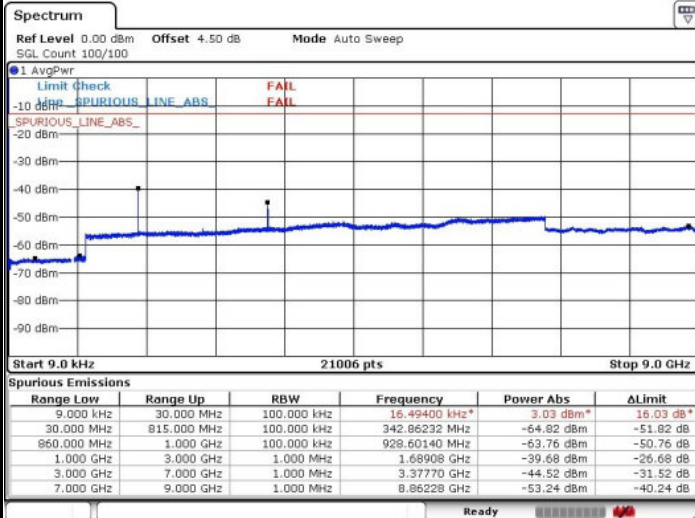


Date: 2 MAR 2017 21:43:16



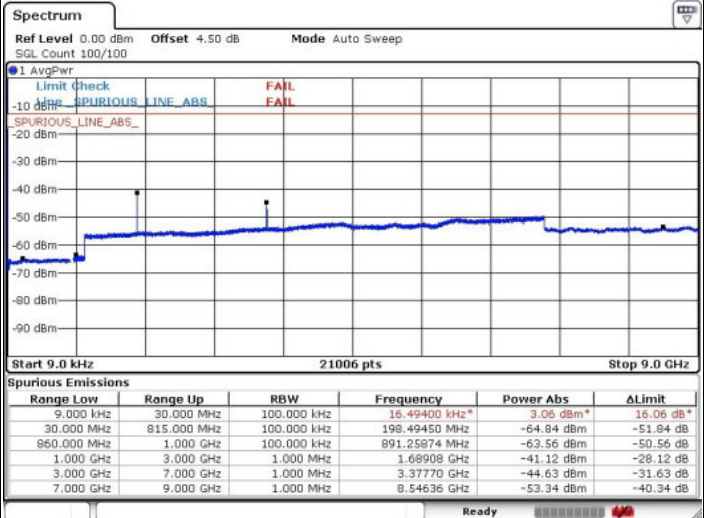
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 2 MAR 2017 21:46:43

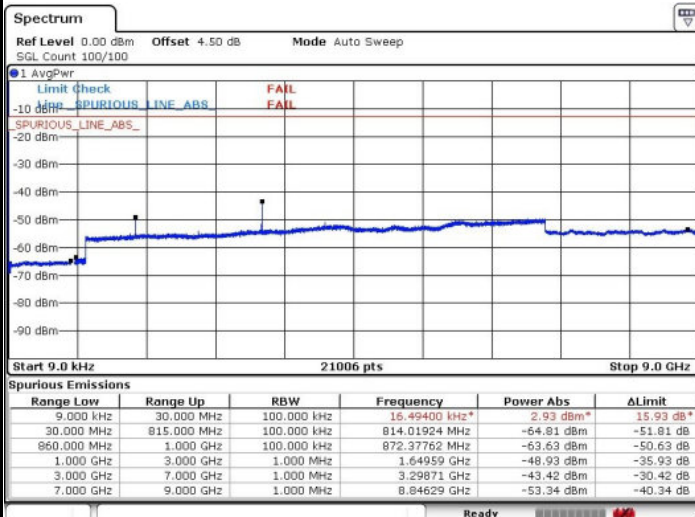
Highest Channel / 16QAM



Date: 2 MAR 2017 21:46:10

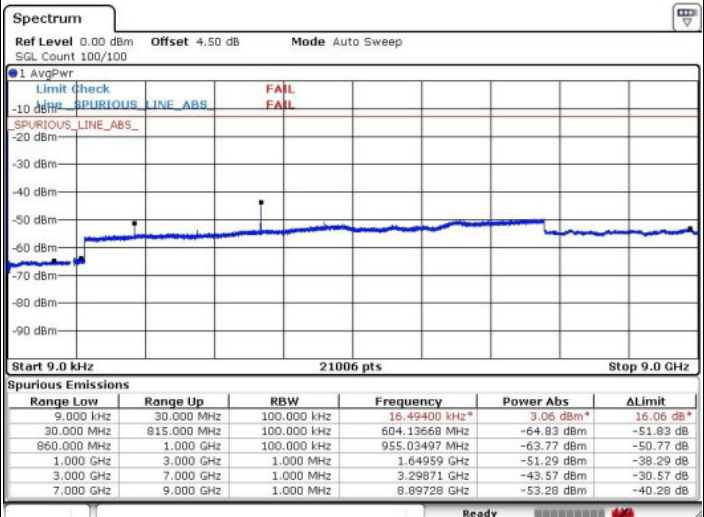
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 21:48:03

Lowest Channel / 16QAM



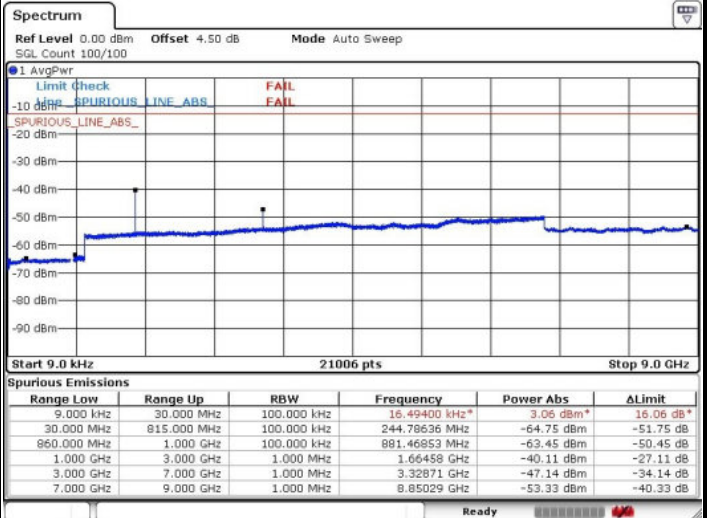
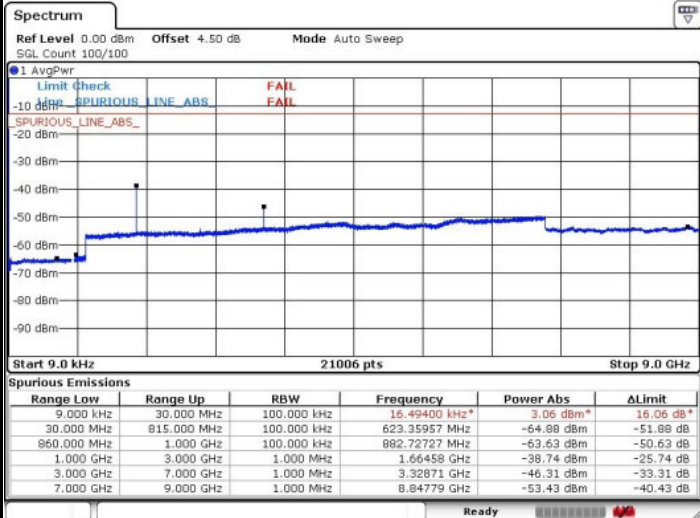
Date: 2 MAR 2017 21:51:40



LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

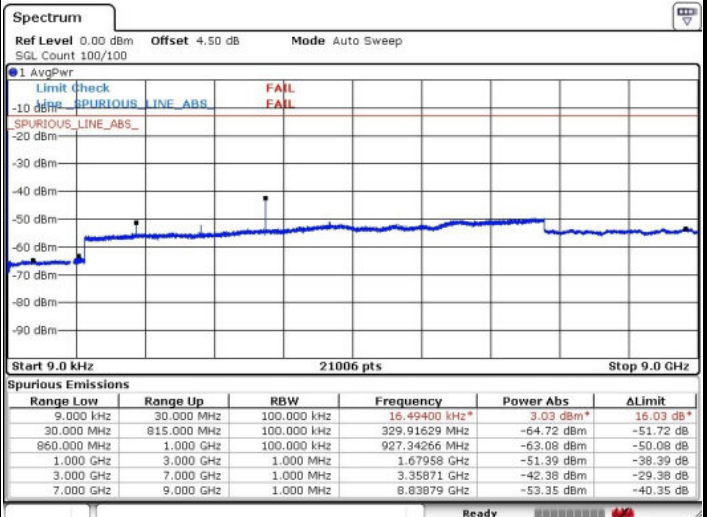
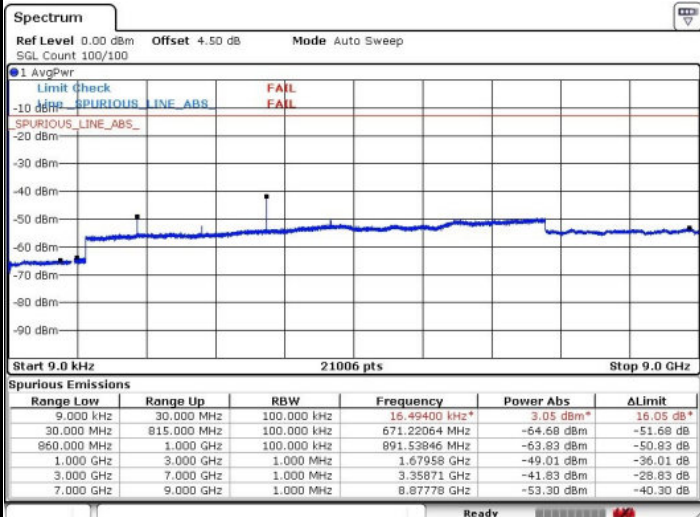


Date: 2 MAR 2017 21:53:09

Date: 2 MAR 2017 21:52:28

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 21:53:48

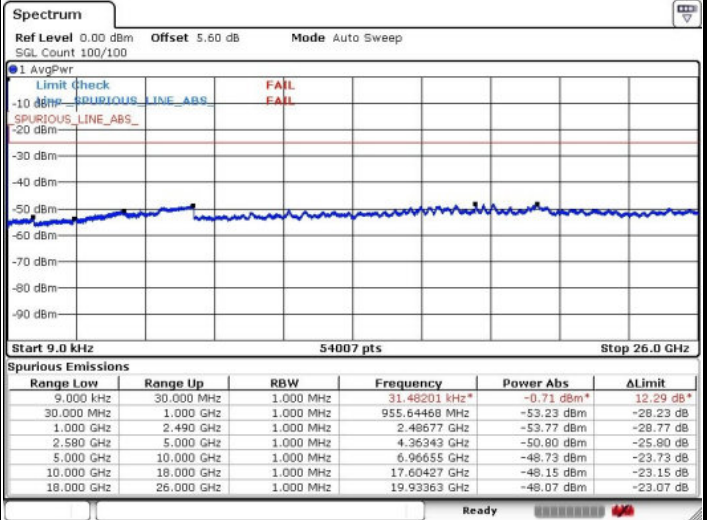
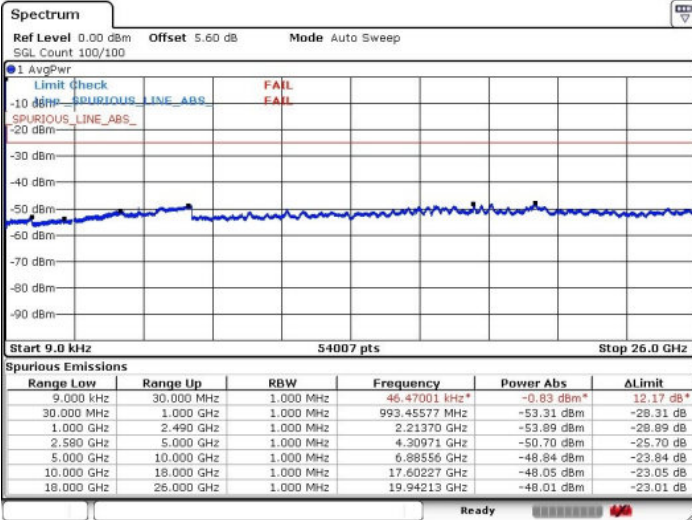
Date: 2 MAR 2017 21:54:38



LTE Band 7 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

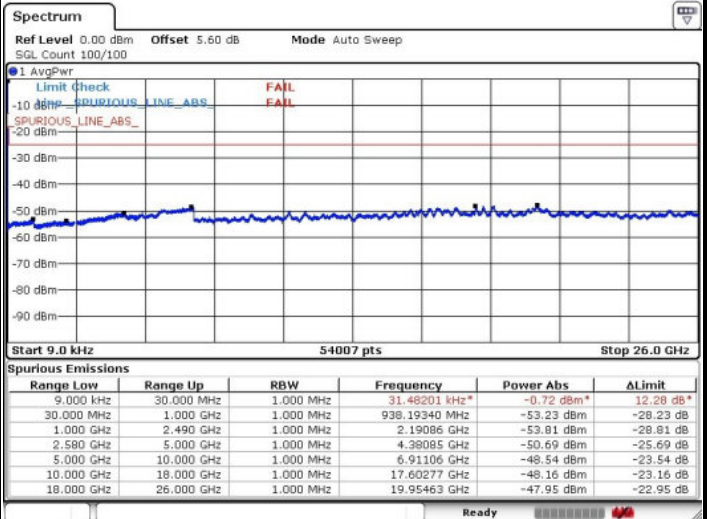
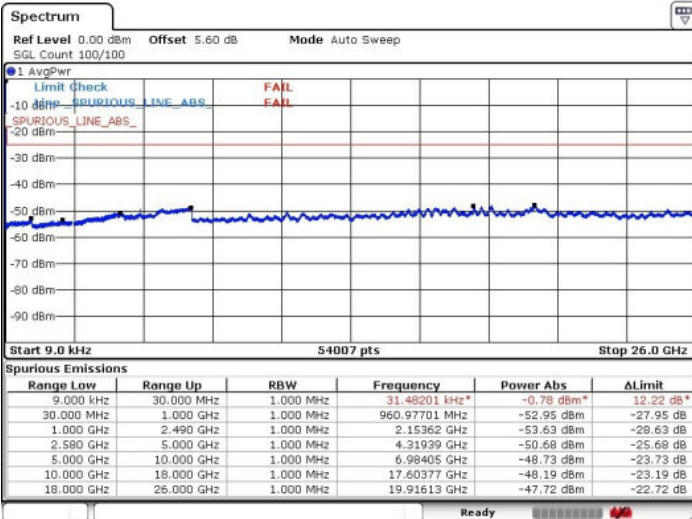


Date: 2 MAR 2017 21:58:51

Date: 2 MAR 2017 21:58:49

Middle Channel / QPSK

Middle Channel / 16QAM



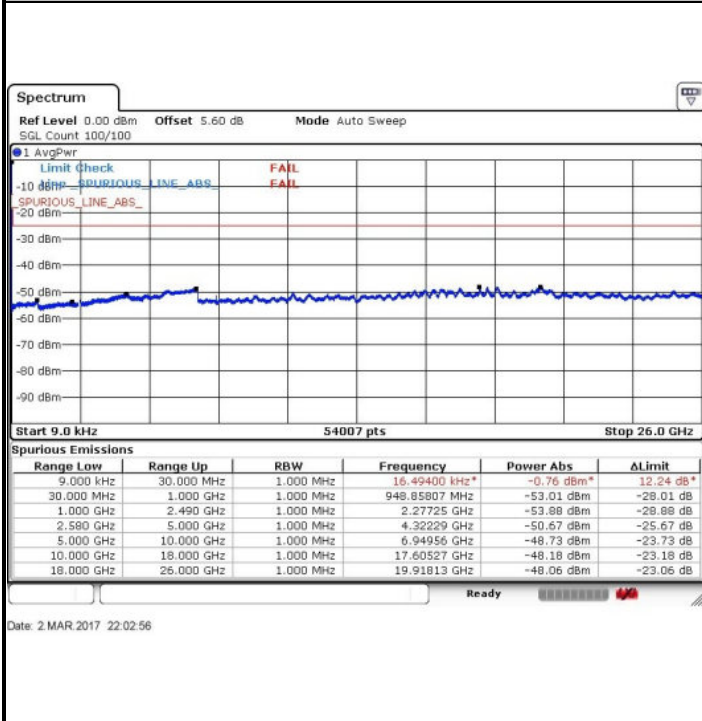
Date: 2 MAR 2017 22:01:55

Date: 2 MAR 2017 22:00:50



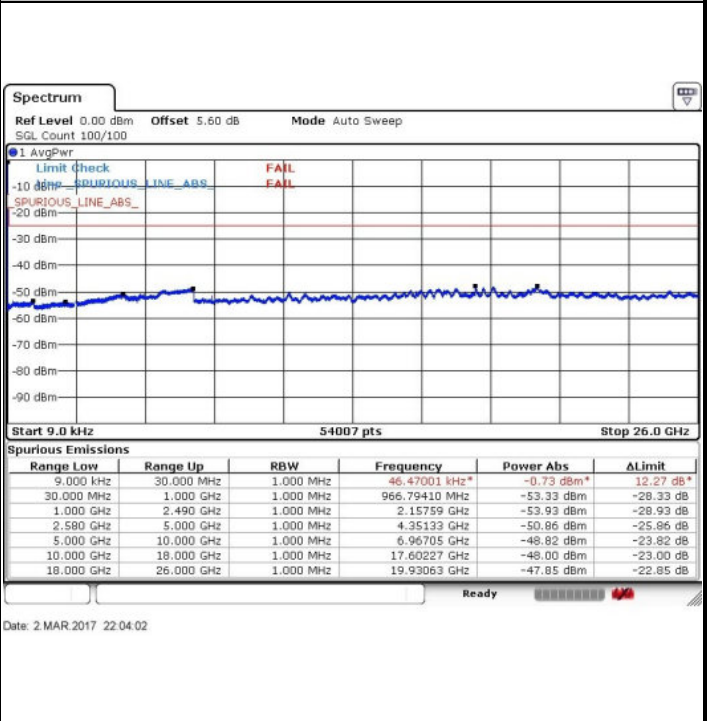
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 2 MAR 2017 22:02:56

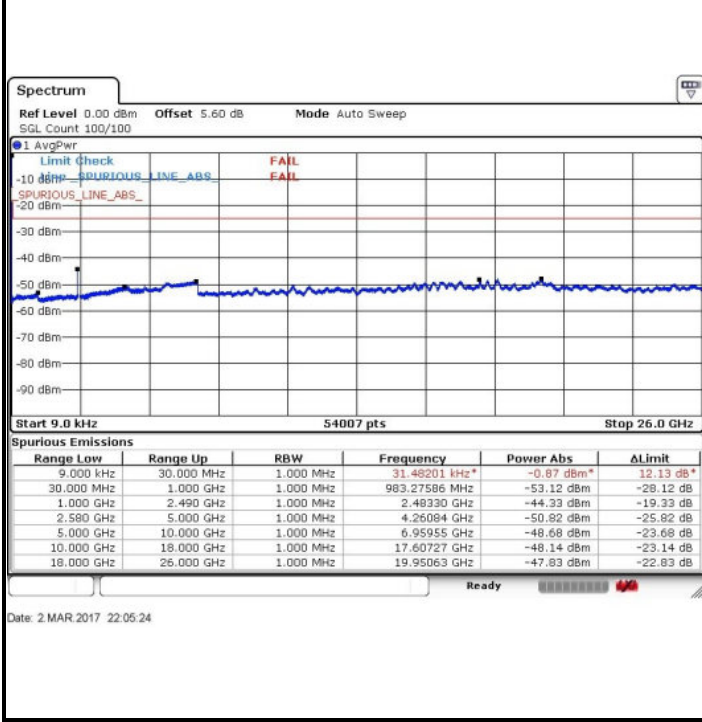
Highest Channel / 16QAM



Date: 2 MAR 2017 22:04:02

LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 22:05:24

Lowest Channel / 16QAM



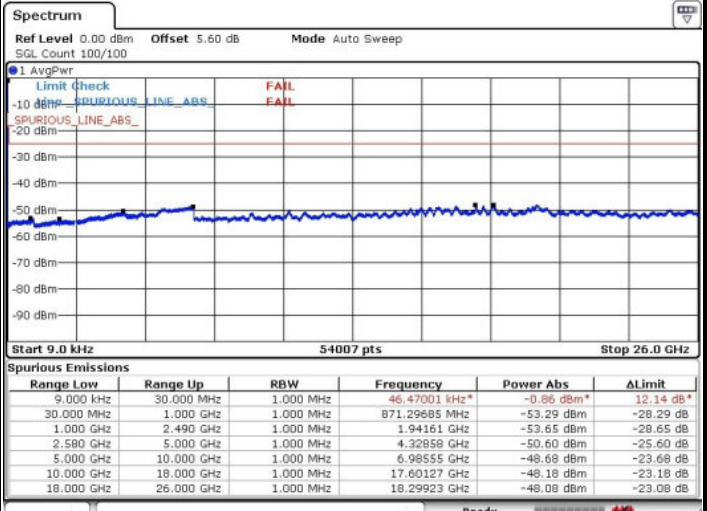
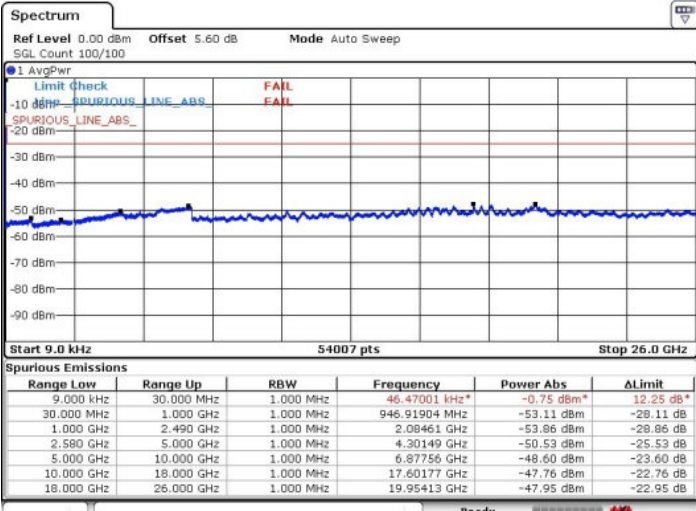
Date: 2 MAR 2017 22:06:45



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

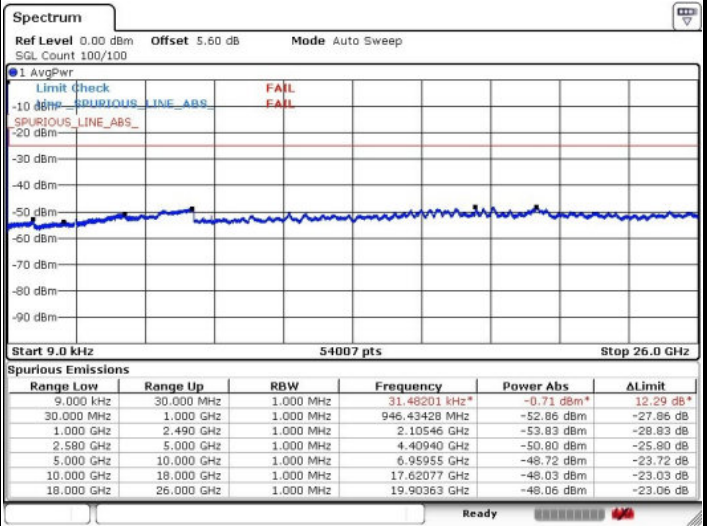
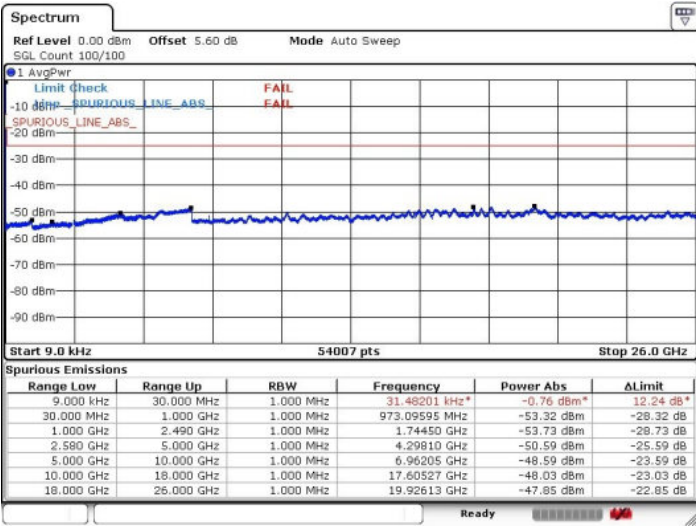


Date: 2 MAR 2017 22:09:26

Date: 2 MAR 2017 22:08:15

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 22:10:32

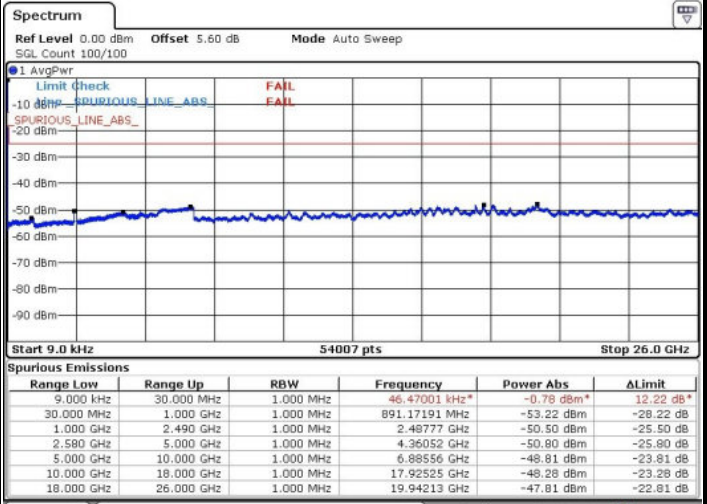
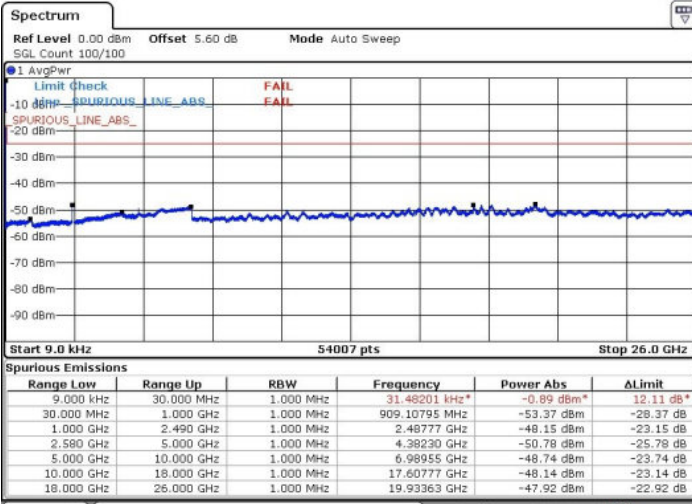
Date: 2 MAR 2017 22:11:53



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

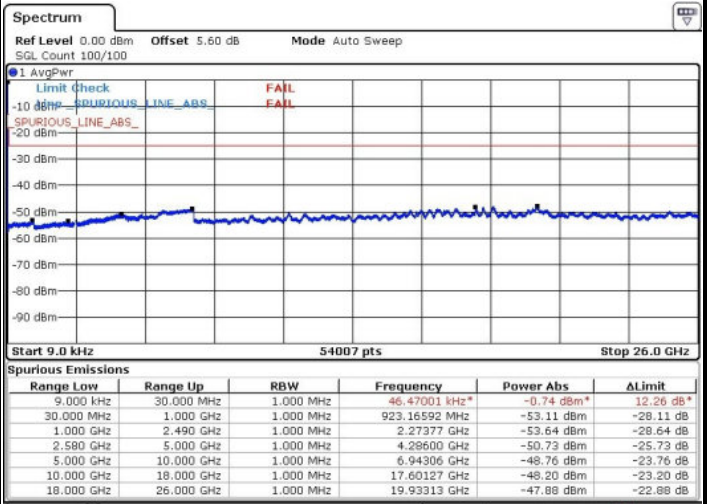
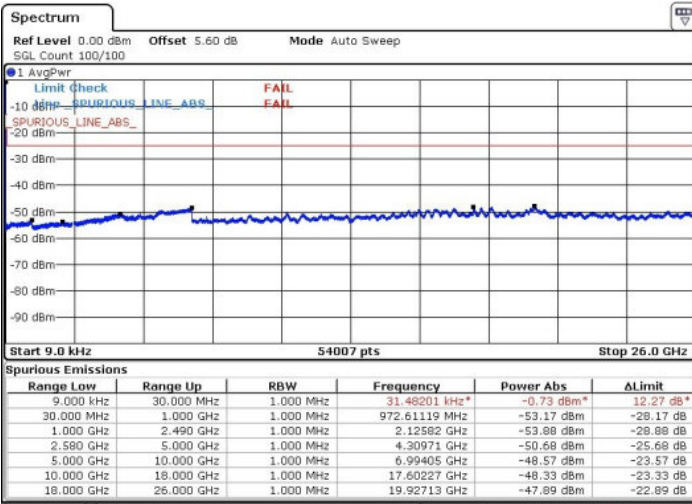


Date: 2 MAR 2017 22:13:17

Date: 2 MAR 2017 22:14:45

Middle Channel / QPSK

Middle Channel / 16QAM



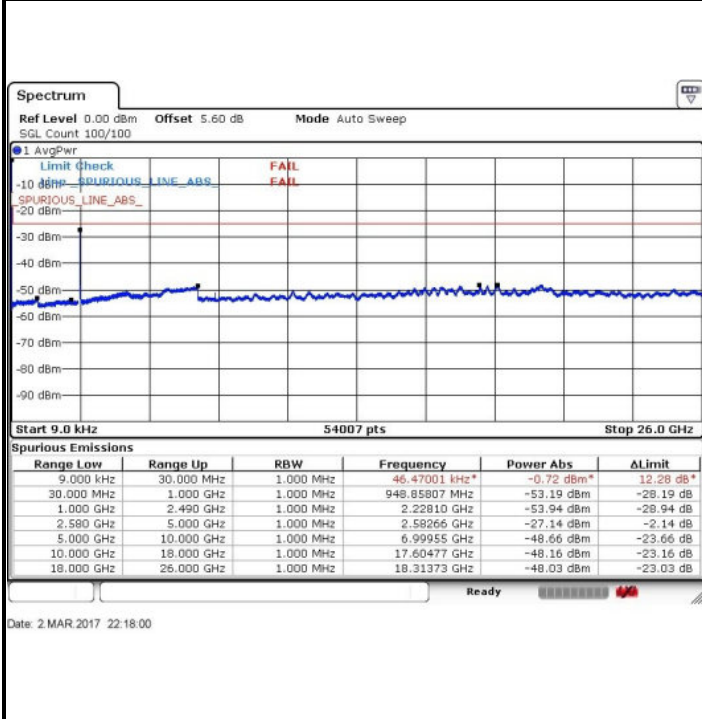
Date: 2 MAR 2017 22:16:55

Date: 2 MAR 2017 22:15:59



LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 2 MAR 2017 22:18:00

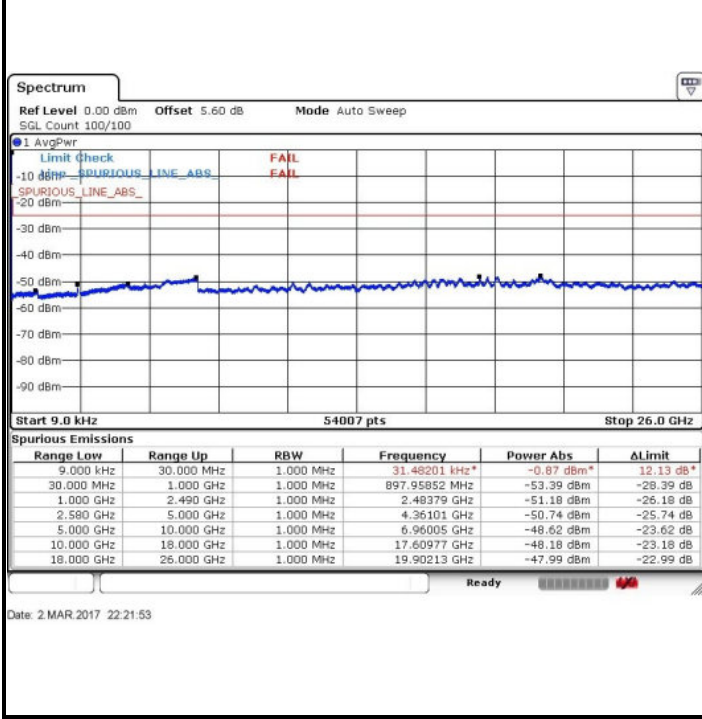
Highest Channel / 16QAM



Date: 2 MAR 2017 22:19:34

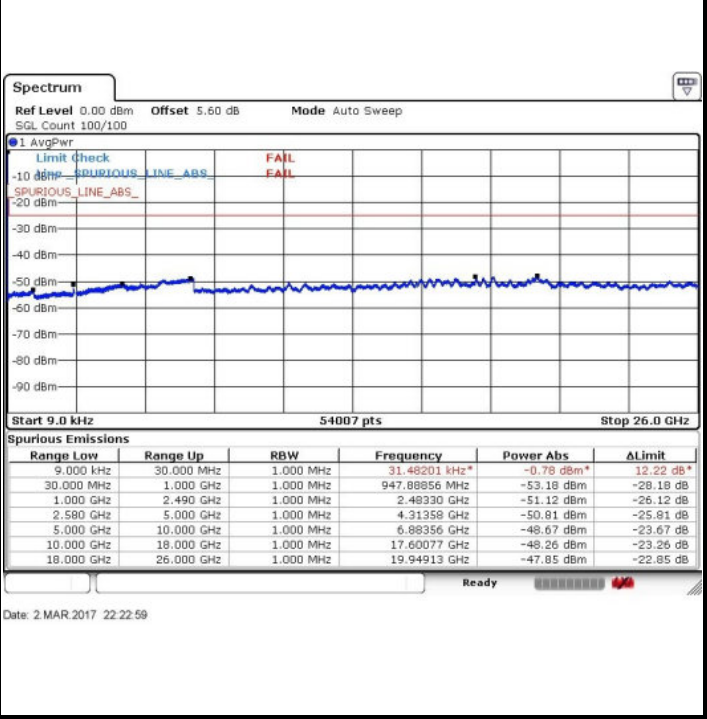
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 22:21:53

Lowest Channel / 16QAM



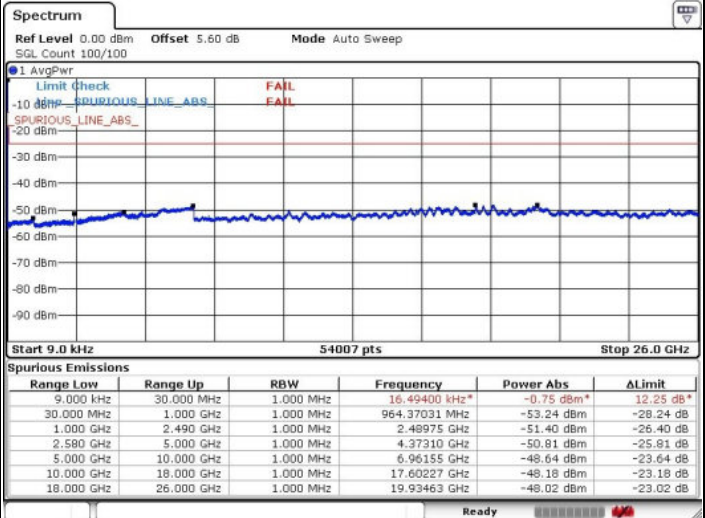
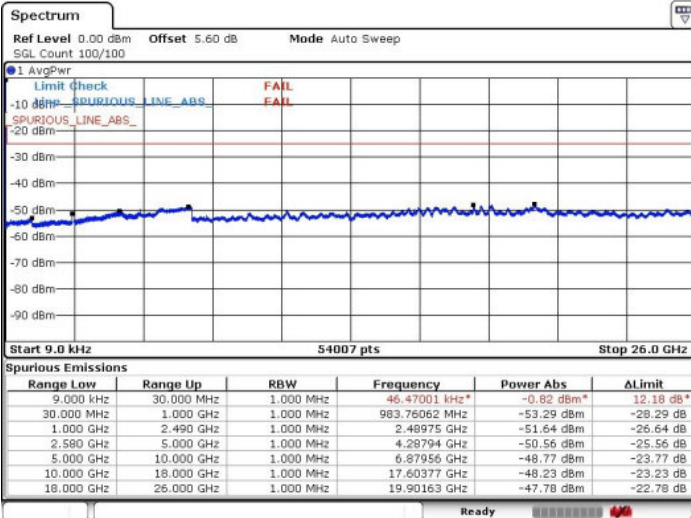
Date: 2 MAR 2017 22:22:59



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

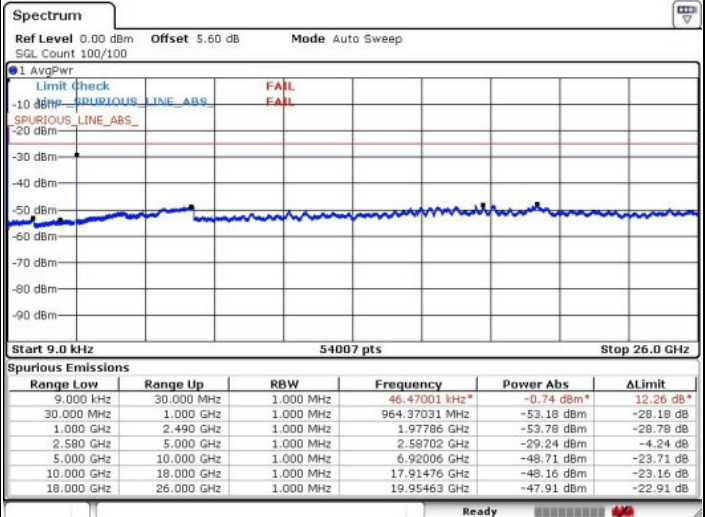
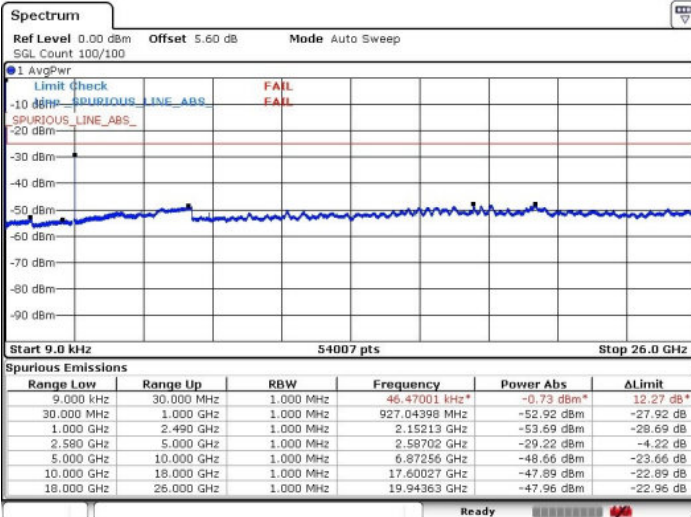


Date: 2 MAR 2017 22:26:08

Date: 2 MAR 2017 22:24:08

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 22:27:40

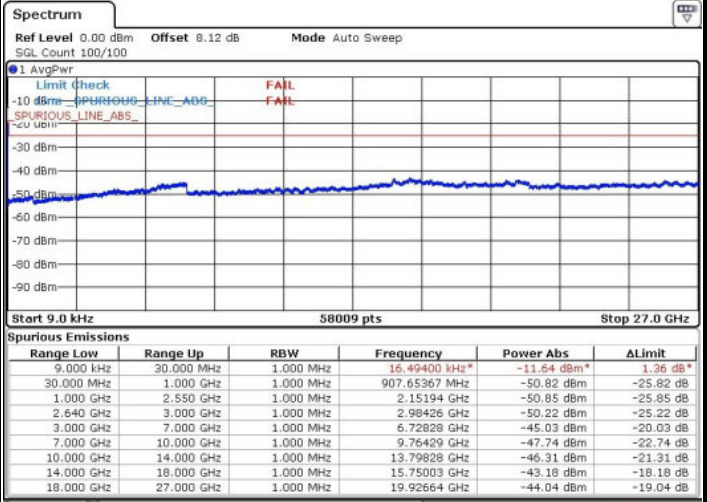
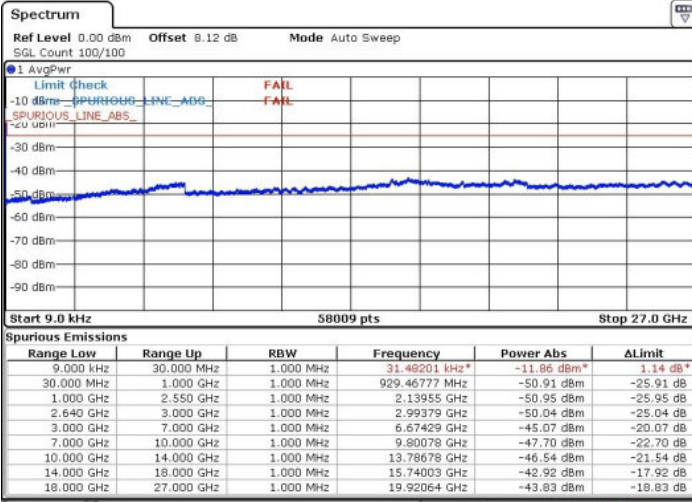
Date: 2 MAR 2017 22:29:36



LTE Band 38 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

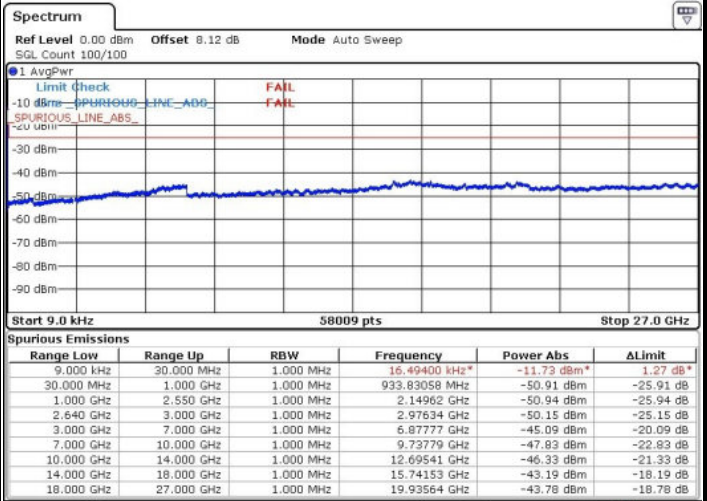
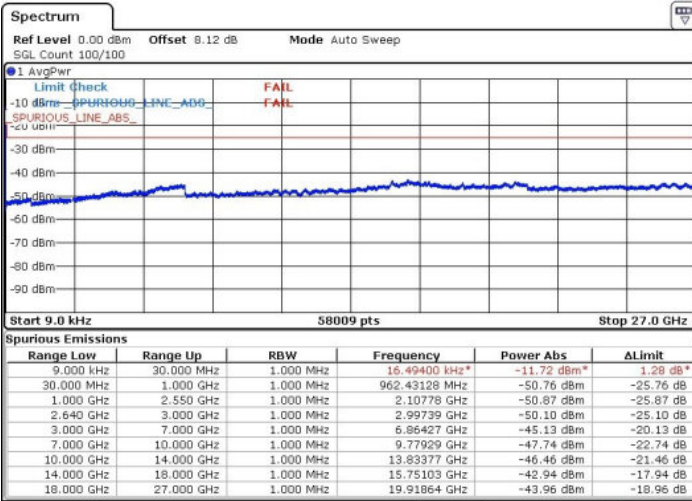


Date: 2 MAR 2017 21:30:33

Date: 2 MAR 2017 21:31:27

Middle Channel / QPSK

Middle Channel / 16QAM



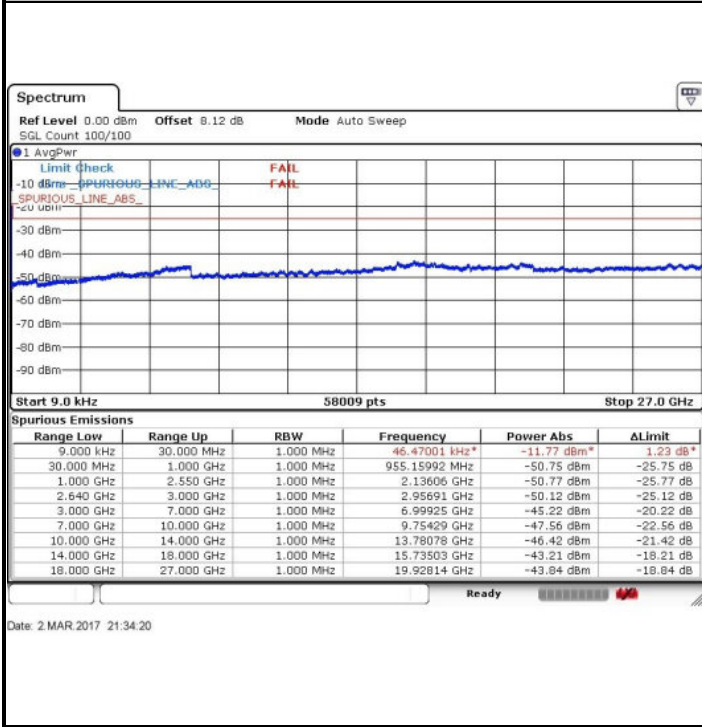
Date: 2 MAR 2017 21:33:28

Date: 2 MAR 2017 21:32:33

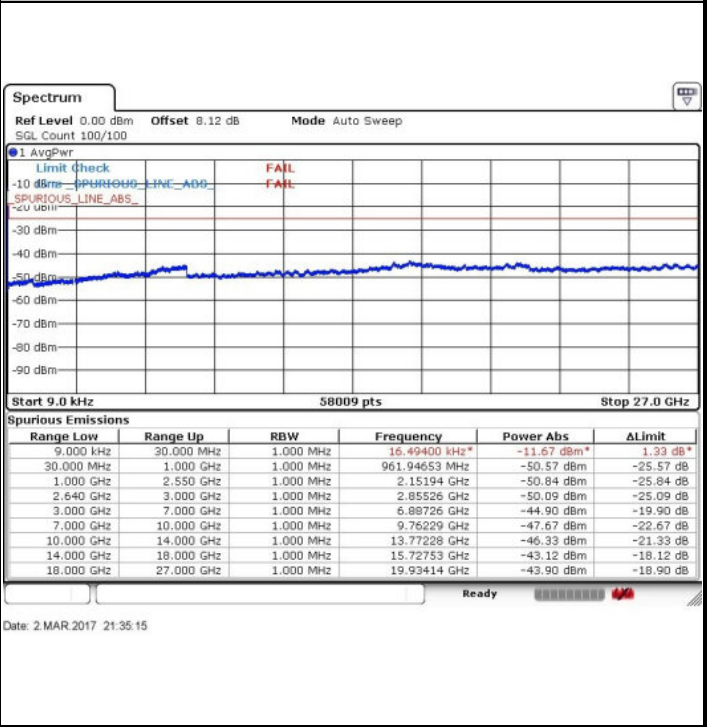


LTE Band 38 / 5MHz

Highest Channel / QPSK

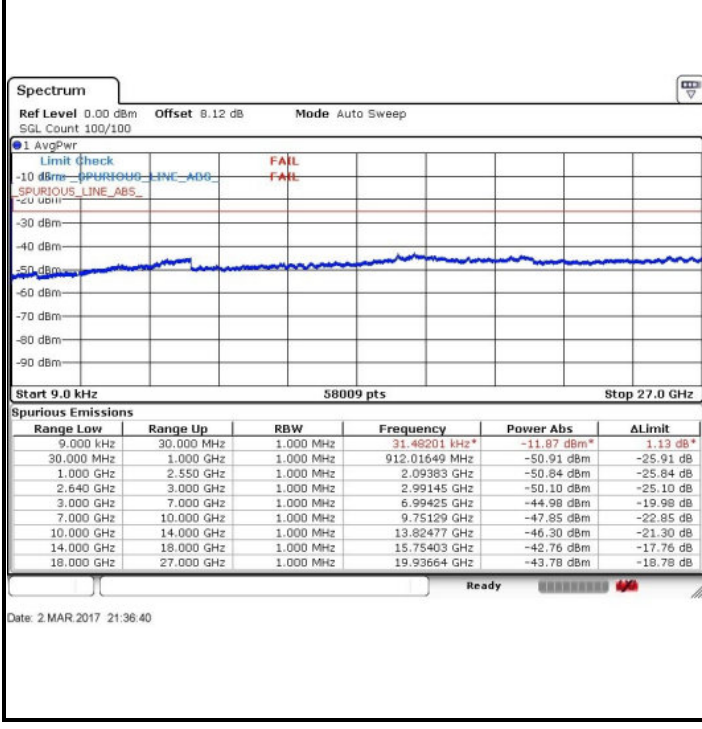


Highest Channel / 16QAM

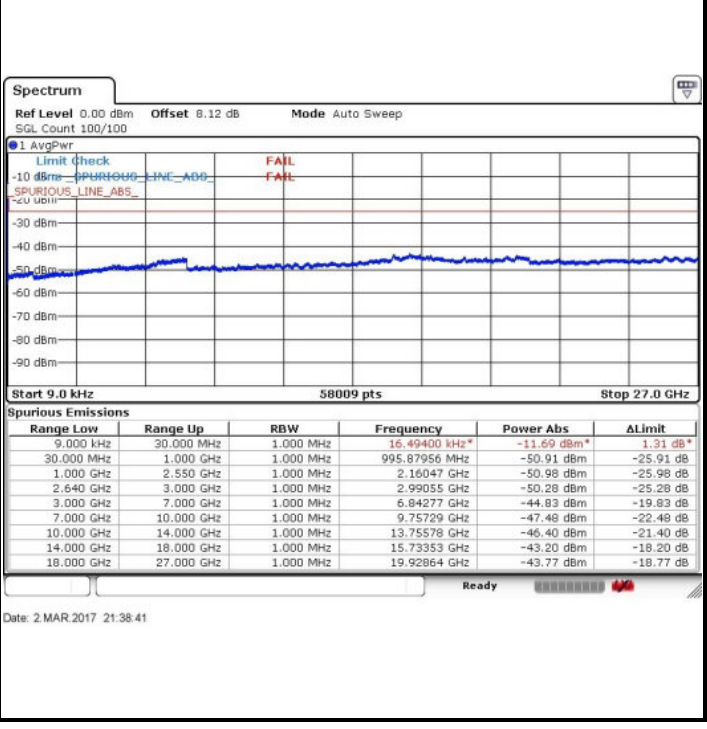


LTE Band 38 / 10MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

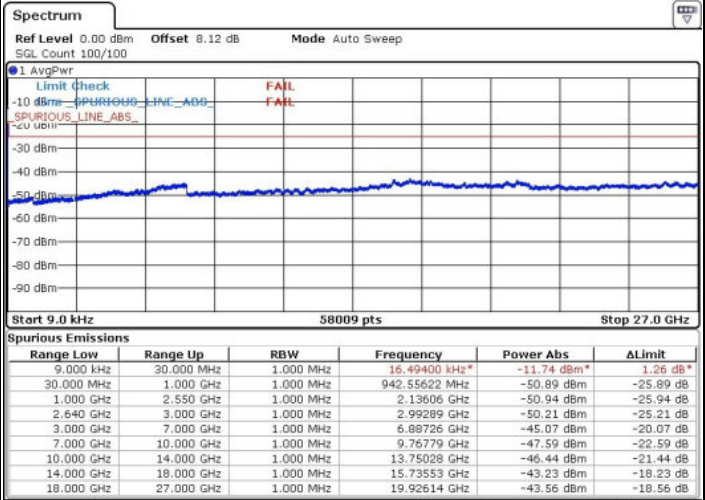
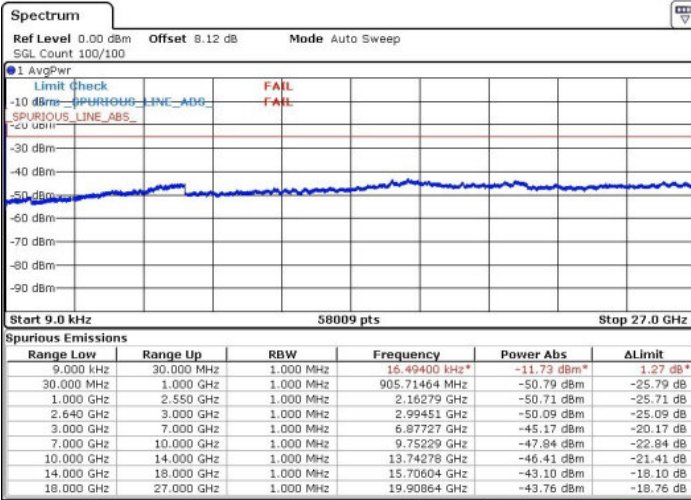




LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

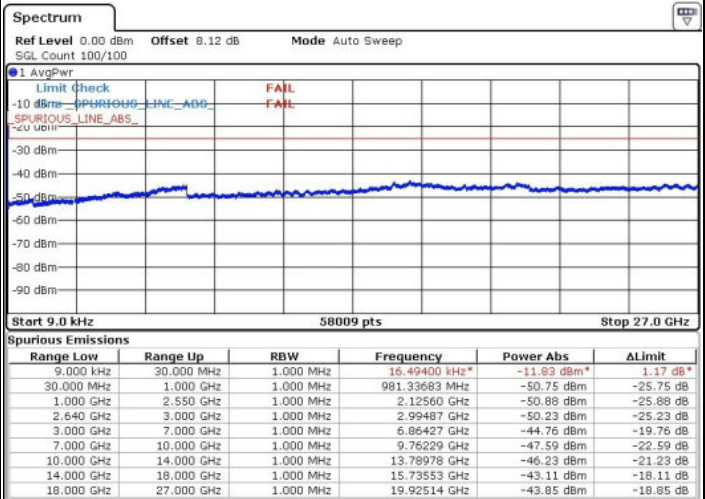
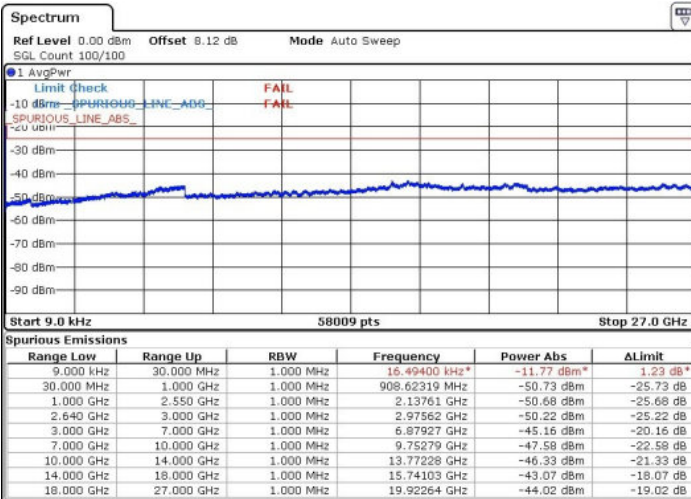


Date: 2 MAR 2017 21:40:29

Date: 2 MAR 2017 21:39:35

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 21:41:29

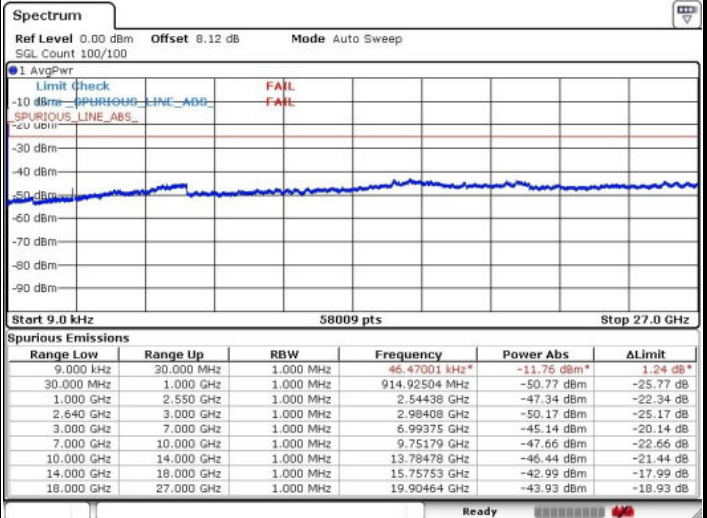
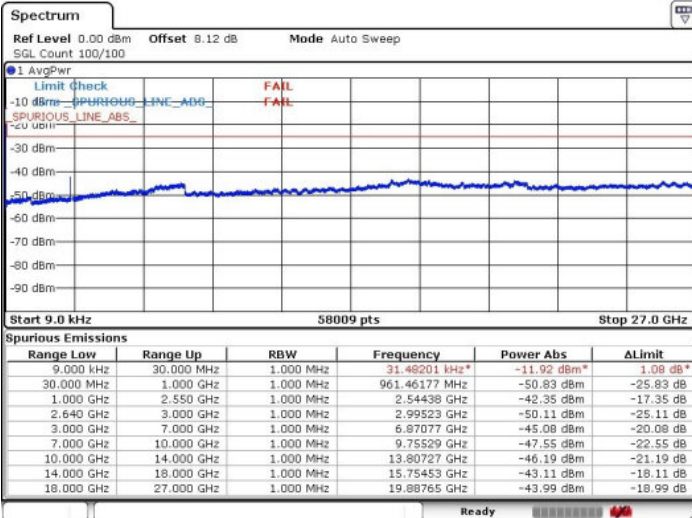
Date: 2 MAR 2017 21:43:39



LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

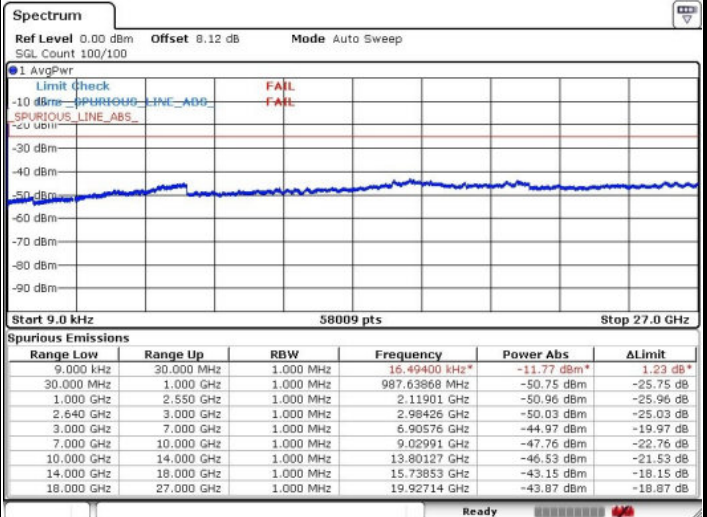
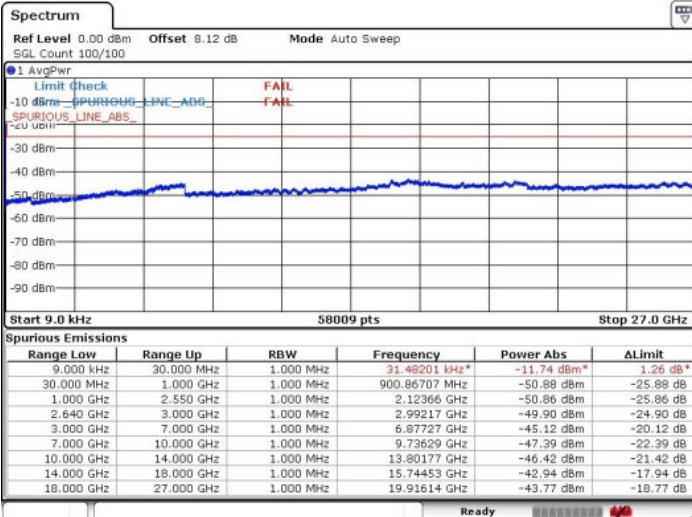


Date: 2 MAR 2017 21:45:12

Date: 2 MAR 2017 21:46:14

Middle Channel / QPSK

Middle Channel / 16QAM



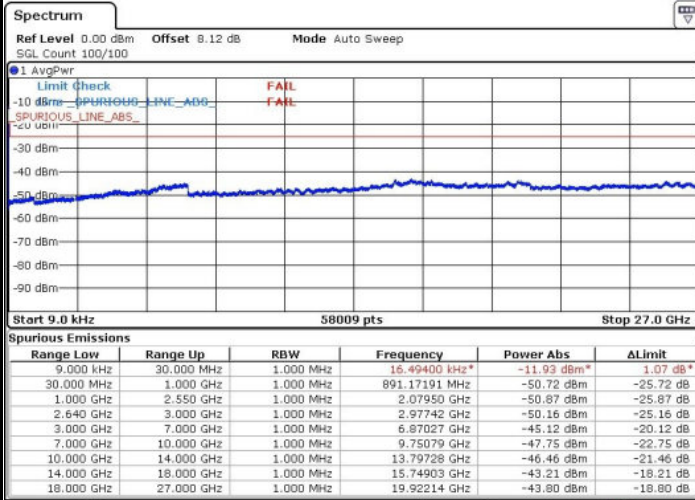
Date: 2 MAR 2017 21:48:00

Date: 2 MAR 2017 21:47:07



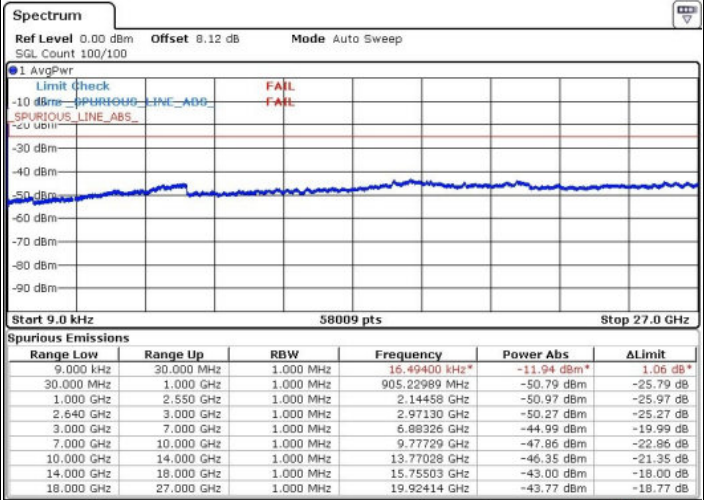
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 2 MAR 2017 21:51:18

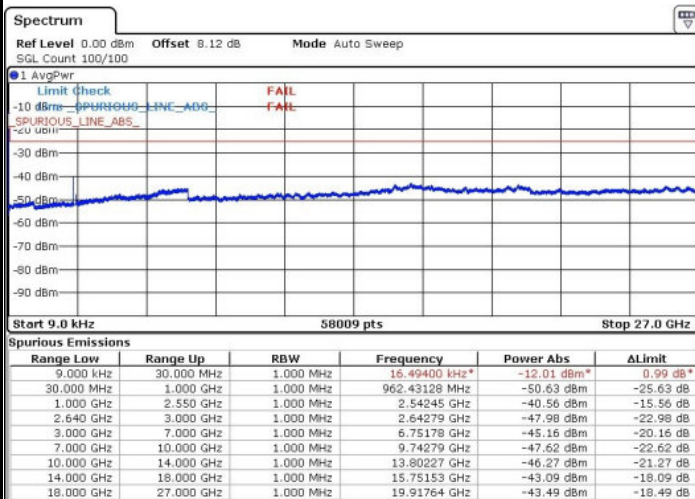
Highest Channel / 16QAM



Date: 2 MAR 2017 21:50:15

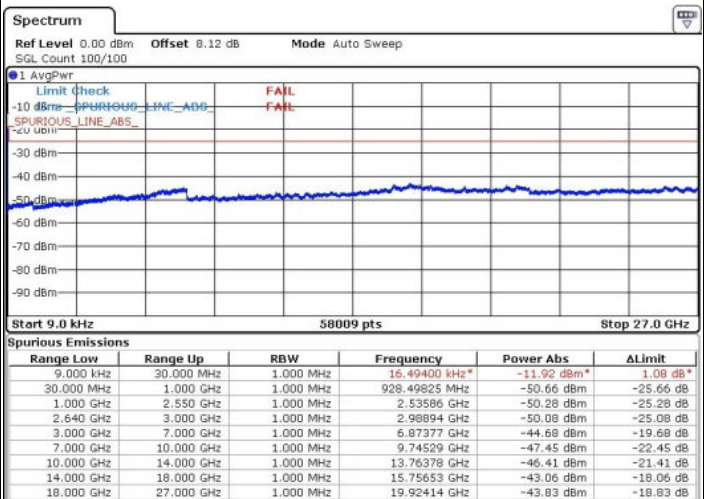
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 21:53:03

Lowest Channel / 16QAM



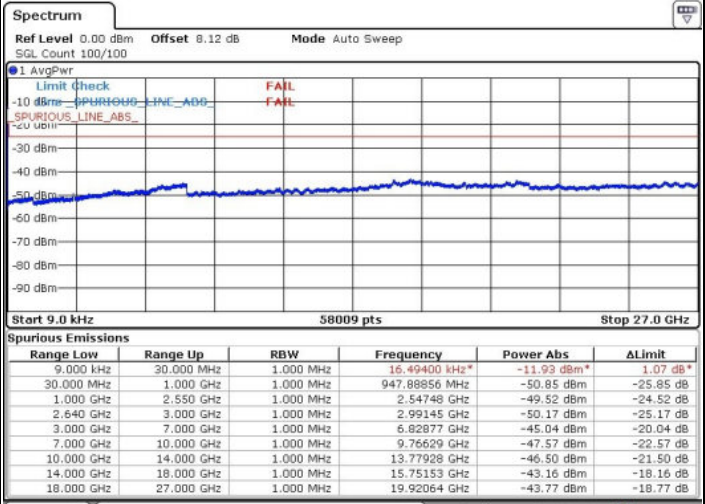
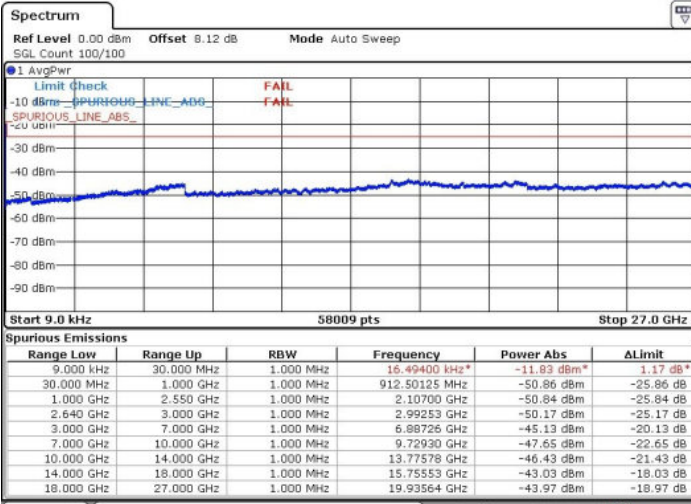
Date: 2 MAR 2017 21:54:02



LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

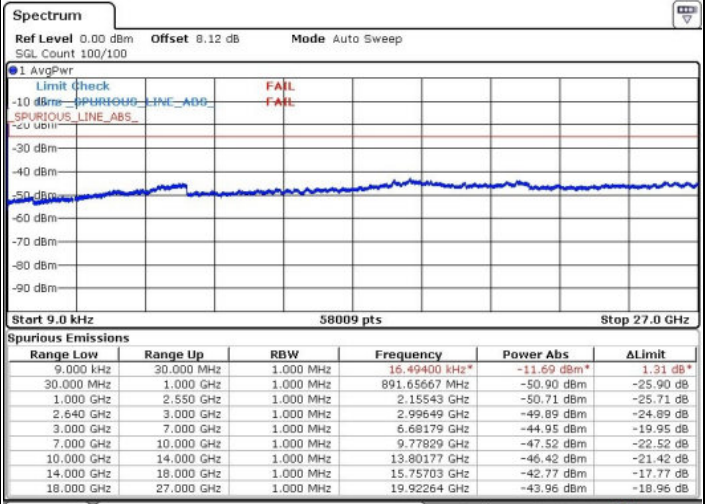
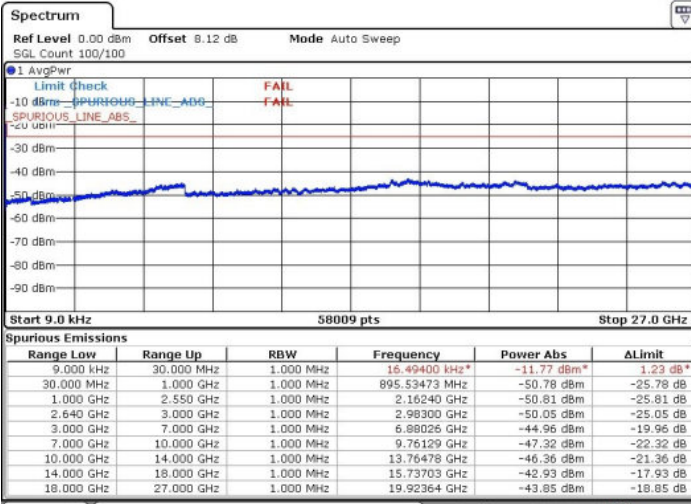


Date: 2 MAR 2017 21:56:14

Date: 2 MAR 2017 21:55:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 21:57:07

Date: 2 MAR 2017 21:58:06



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =3.82 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0003	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.82 V. ; Battery End Point (BEP) =3.65 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	0.0018	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.82 V. ; Battery End Point (BEP) =3.65 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 5 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-59.39	-13	-46.39	-58.02	-61.25	1.19	5.20	H
	2508	-62.98	-13	-49.98	-65.97	-65.20	1.53	5.90	H
	3345	-59.11	-13	-46.11	-63.06	-61.90	1.76	6.70	H
	1672	-65.09	-13	-52.09	-63.05	-66.95	1.19	5.20	V
	2508	-65.97	-13	-52.97	-67.95	-68.19	1.53	5.90	V
	3345	-65.49	-13	-52.49	-68.81	-68.28	1.76	6.70	V

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

LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1670	-58.52	-13	-45.52	-57.15	-60.38	1.19	5.20	H
	2506	-65.61	-13	-52.61	-68.60	-67.83	1.53	5.90	H
	3342	-59.37	-13	-46.37	-63.32	-62.16	1.76	6.70	H
	1670	-65.39	-13	-52.39	-63.35	-67.25	1.19	5.20	V
	2506	-66.42	-13	-53.42	-68.4	-68.64	1.53	5.90	V
	3342	-67.49	-13	-54.49	-70.81	-70.28	1.76	6.70	V

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



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1668	-58.42	-13	-45.42	-57.05	-60.28	1.19	5.20	H
	2503.02	-65.56	-13	-52.56	-68.55	-67.78	1.53	5.90	H
	3336	-61.23	-13	-48.23	-65.18	-64.02	1.76	6.70	H
	1668	-65.12	-13	-52.12	-63.08	-66.98	1.19	5.20	V
	2503.02	-66.66	-13	-53.66	-68.64	-68.88	1.53	5.90	V
	3336	-64.08	-13	-51.08	-67.4	-66.87	1.76	6.70	V

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

LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-46.25	-13	-33.25	-46.68	-48.11	1.19	5.20	H
	2496	-51.42	-13	-38.42	-54.93	-53.64	1.53	5.90	H
	3327	-55.20	-13	-42.20	-59.15	-57.99	1.76	6.70	H
	1664	-57.14	-13	-44.14	-55.1	-59.00	1.19	5.20	V
	2496	-55.80	-13	-42.80	-57.78	-58.02	1.53	5.90	V
	3327	-62.71	-13	-49.71	-66.03	-65.50	1.76	6.70	V

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



LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5065.68	-63.83	-25	-38.83	-73.05	-70.39	2.41	8.97	H
	7600	-58.65	-25	-33.65	-72.35	-67.65	2.86	11.86	H
	10134	-48.93	-25	-23.93	-67.28	-57.83	3.21	12.11	H
	5064	-62.45	-25	-37.45	-71.16	-69.01	2.41	8.97	V
	7600	-52.88	-25	-27.88	-67.51	-61.88	2.86	11.86	V
	10134	-37.42	-25	-12.42	-58.24	-46.32	3.21	12.11	V

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

LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5061.18	-64.53	-25	-39.53	-73.75	-71.09	2.41	8.97	H
	7592	-58.00	-25	-33.00	-71.70	-67.00	2.86	11.86	H
	10125	-49.80	-25	-24.80	-68.15	-58.70	3.21	12.11	H
	5060	-61.85	-25	-36.85	-70.56	-68.41	2.41	8.97	V
	7592	-50.68	-25	-25.68	-65.31	-59.68	2.86	11.86	V
	10125	-37.77	-25	-12.77	-58.44	-46.67	3.21	12.11	V

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



LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5056.68	-63.90	-25	-38.90	-73.12	-70.46	2.41	8.97	H
	7584	-57.59	-25	-32.59	-71.29	-66.59	2.86	11.86	H
	10116	-47.49	-25	-22.49	-65.84	-56.39	3.21	12.11	H
	5056	-62.71	-25	-37.71	-71.42	-69.27	2.41	8.97	V
	7584	-50.81	-25	-25.81	-65.44	-59.81	2.86	11.86	V
	10116	-40.03	-25	-15.03	-59.43	-48.93	3.21	12.11	V

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

LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052.18	-64.11	-25	-39.11	-73.33	-70.67	2.41	8.97	H
	7576	-59.32	-25	-34.32	-73.02	-68.32	2.86	11.86	H
	10107	-47.77	-25	-22.77	-66.12	-56.67	3.21	12.11	H
	5052	-60.85	-25	-35.85	-69.56	-67.41	2.41	8.97	V
	7576	-52.57	-25	-27.57	-67.2	-61.57	2.86	11.86	V
	10107	-37.87	-25	-12.87	-58.5	-46.77	3.21	12.11	V

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



LTE Band 38 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5185.68	-64.25	-25	-39.25	-73.47	-70.81	2.41	8.97	H
	7780	-50.26	-25	-25.26	-63.96	-59.26	2.86	11.86	H
	10368	-44.01	-25	-19.01	-62.36	-52.91	3.21	12.11	H
	5185.68	-65.47	-25	-40.47	-74.18	-72.03	2.41	8.97	V
	7780	-56.74	-25	-31.74	-71.37	-65.74	2.86	11.86	V
	10368	-54.11	-25	-29.11	-73.51	-63.01	3.21	12.11	V

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

LTE Band 38 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5180	-63.33	-25	-38.33	-72.55	-69.89	2.41	8.97	H
	7772	-47.68	-25	-22.68	-61.38	-56.68	2.86	11.86	H
	10359	-47.45	-25	-22.45	-65.80	-56.35	3.21	12.11	H
	5180	-65.61	-25	-40.61	-74.32	-72.17	2.41	8.97	V
	7772	-56.85	-25	-31.85	-71.48	-65.85	2.86	11.86	V
	10359	-53.02	-25	-28.02	-72.42	-61.92	3.21	12.11	V

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



LTE Band 38 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5176.68	-65.03	-25	-40.03	-74.25	-71.59	2.41	8.97	H
	7764	-47.82	-25	-22.82	-61.52	-56.82	2.86	11.86	H
	10350	-45.85	-25	-20.85	-64.20	-54.75	3.21	12.11	H
	5176.68	-65.43	-25	-40.43	-74.14	-71.99	2.41	8.97	V
	7764	-55.19	-25	-30.19	-69.82	-64.19	2.86	11.86	V
	10350	-50.61	-25	-25.61	-70.01	-59.51	3.21	12.11	V

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

LTE Band 38 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5172.18	-65.26	-25	-40.26	-74.48	-71.82	2.41	8.97	H
	7756	-48.75	-25	-23.75	-62.45	-57.75	2.86	11.86	H
	10341	-44.57	-25	-19.57	-62.92	-53.47	3.21	12.11	H
	5172.18	-65.50	-25	-40.50	-74.21	-72.06	2.41	8.97	V
	7756	-56.94	-25	-31.94	-71.57	-65.94	2.86	11.86	V
	10341	-52.52	-25	-27.52	-71.92	-61.42	3.21	12.11	V

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