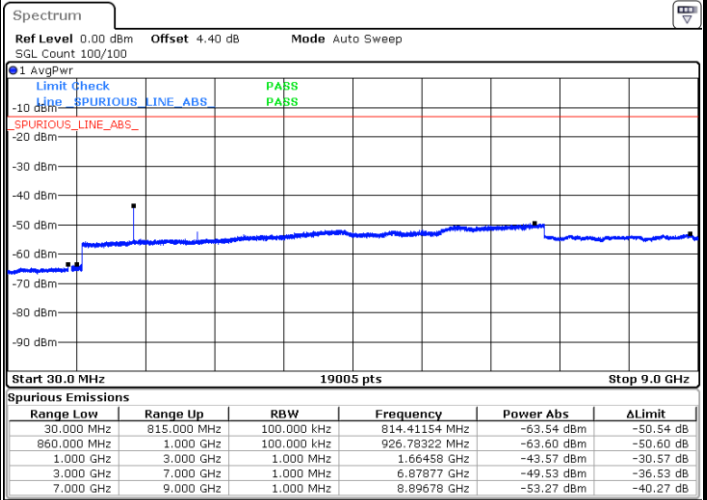
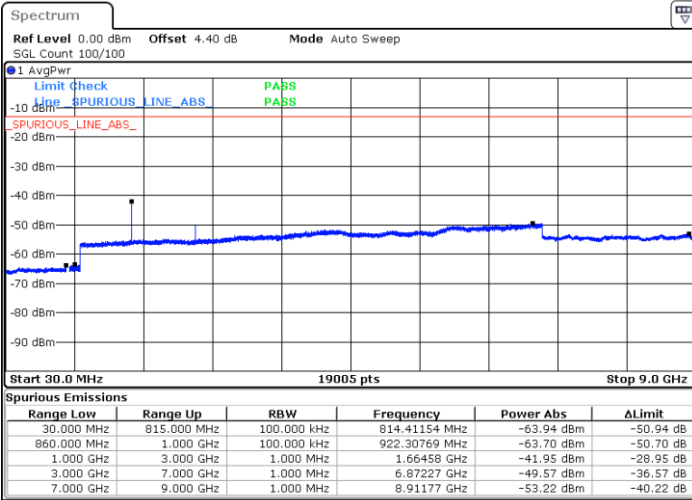




LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

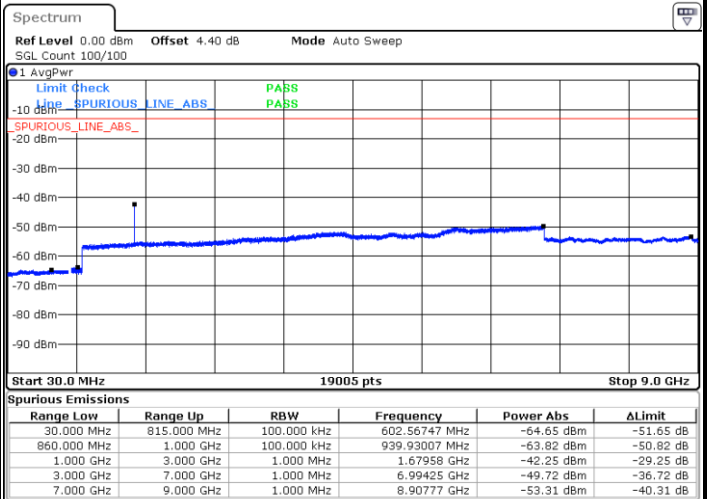
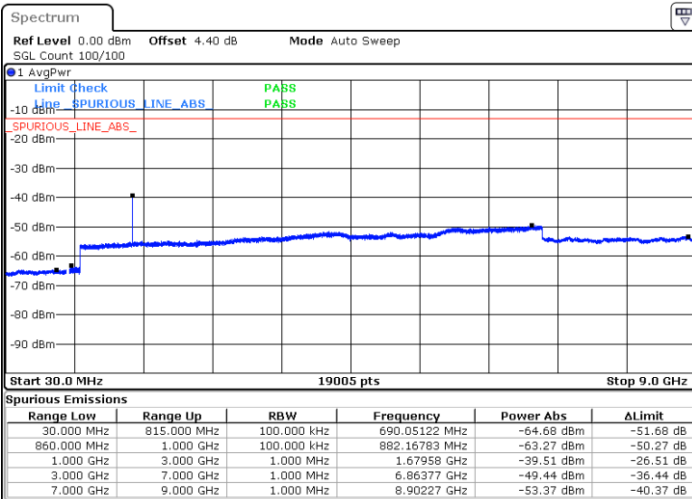


Date: 28.FEB.2018 17:40:07

Date: 28.FEB.2018 17:41:01

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 28.FEB.2018 17:49:09

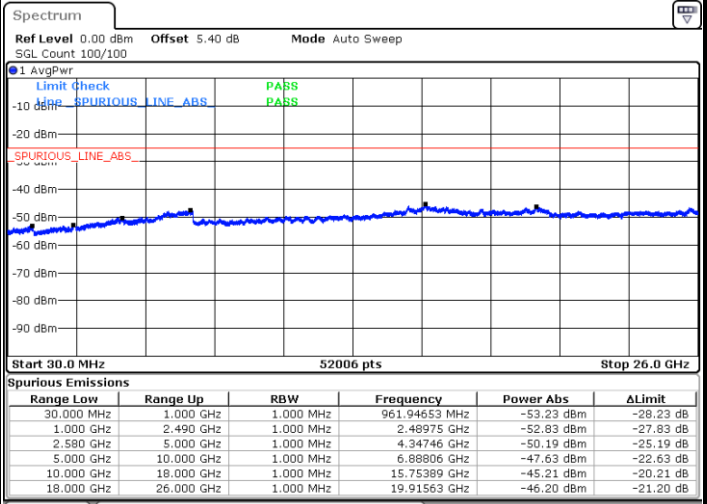
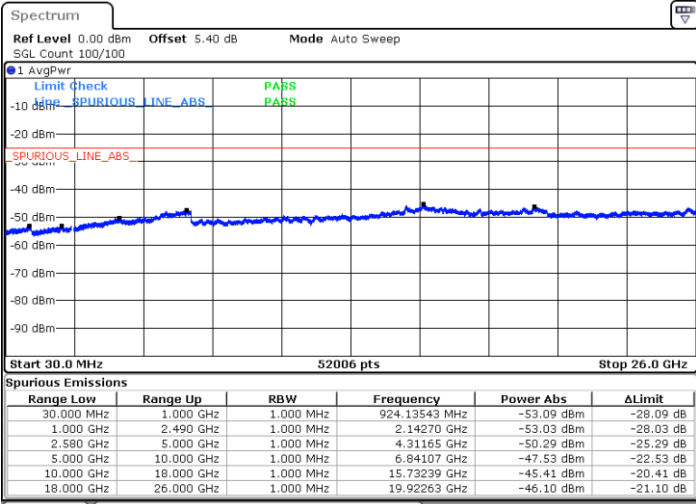
Date: 28.FEB.2018 17:50:03



LTE Band 7 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

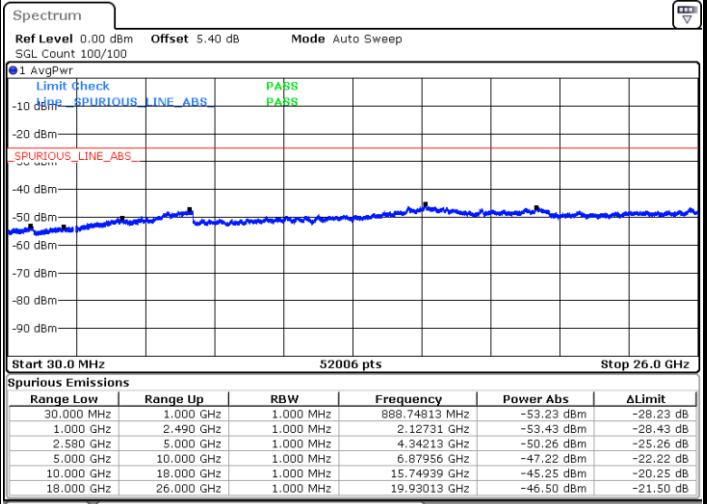
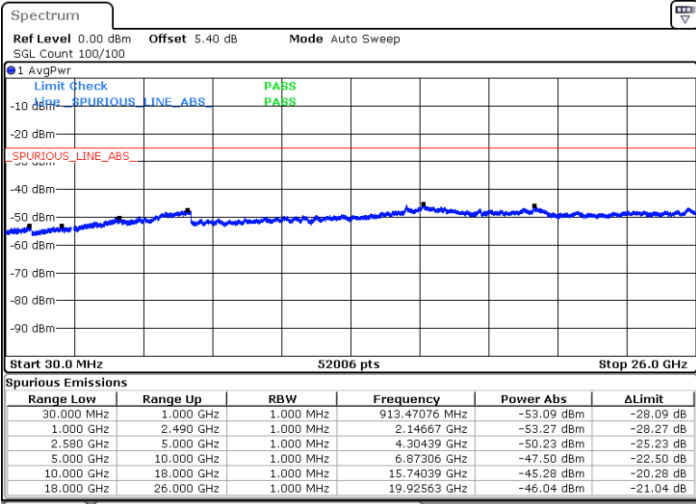


Date: 4 MAR 2018 04:51:04

Date: 4 MAR 2018 04:50:10

Middle Channel / QPSK

Middle Channel / 16QAM



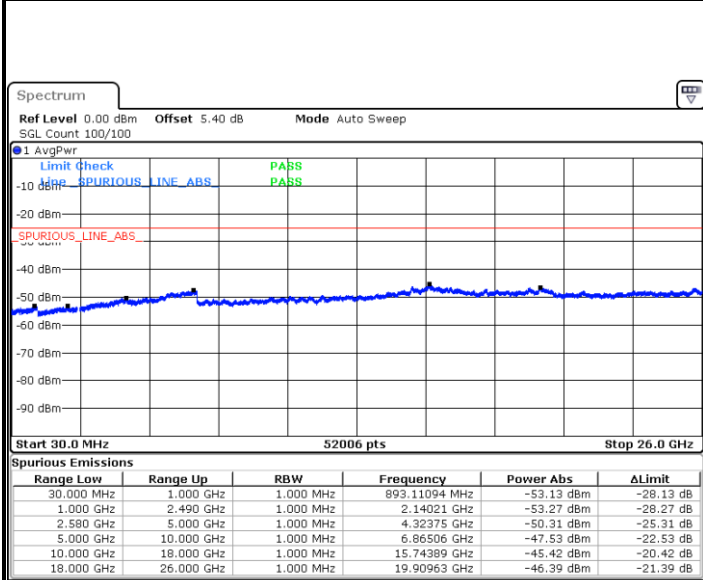
Date: 4 MAR 2018 04:51:58

Date: 4 MAR 2018 04:52:52



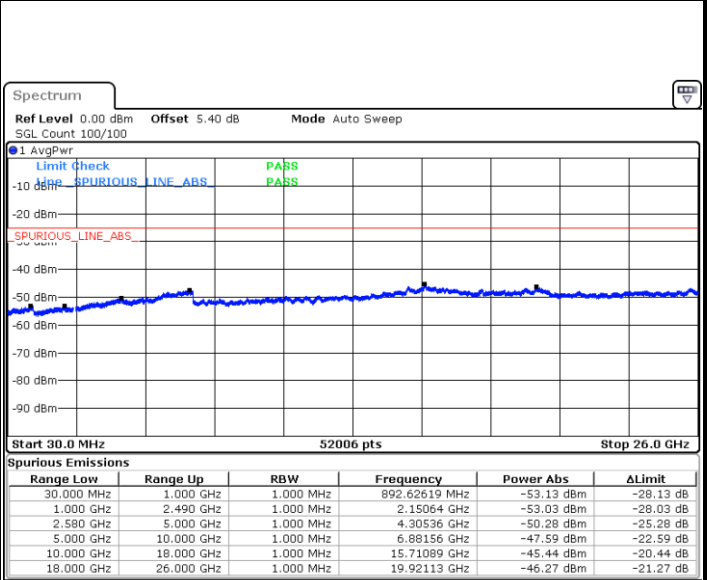
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 4 MAR 2018 05:00:32

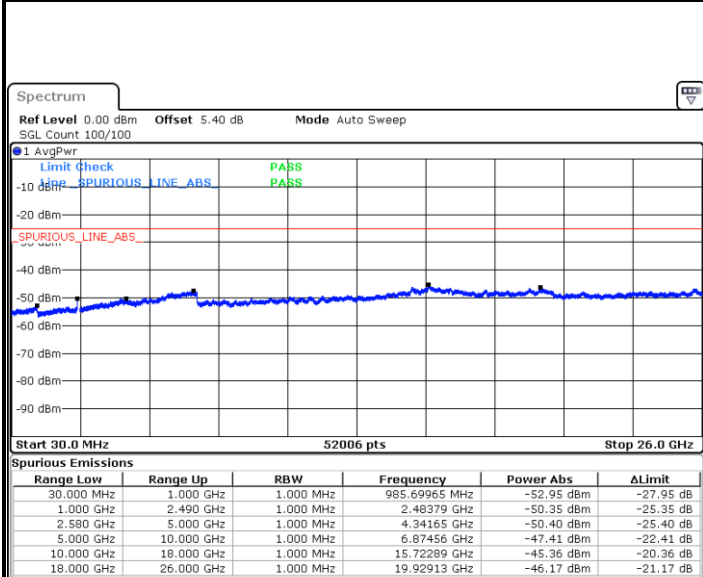
Highest Channel / 16QAM



Date: 4 MAR 2018 04:59:38

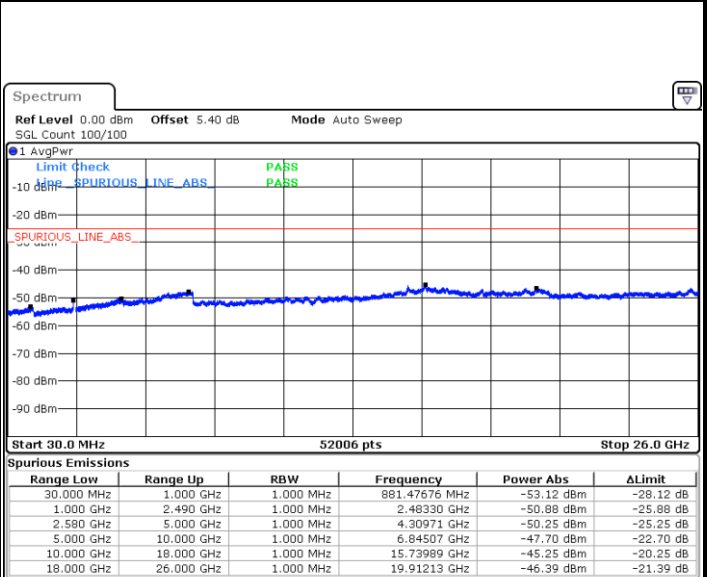
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 4 MAR 2018 05:03:00

Lowest Channel / 16QAM



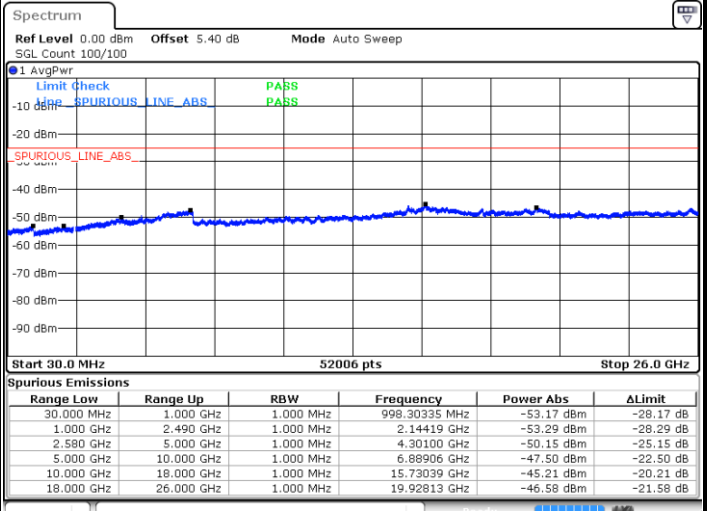
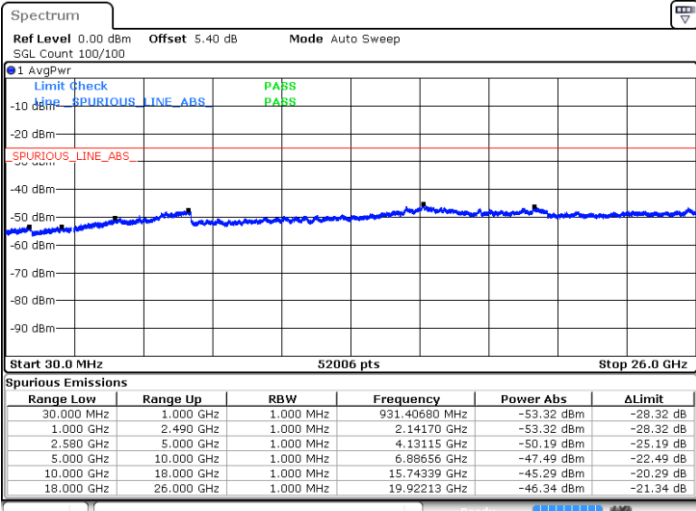
Date: 4 MAR 2018 05:02:06



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

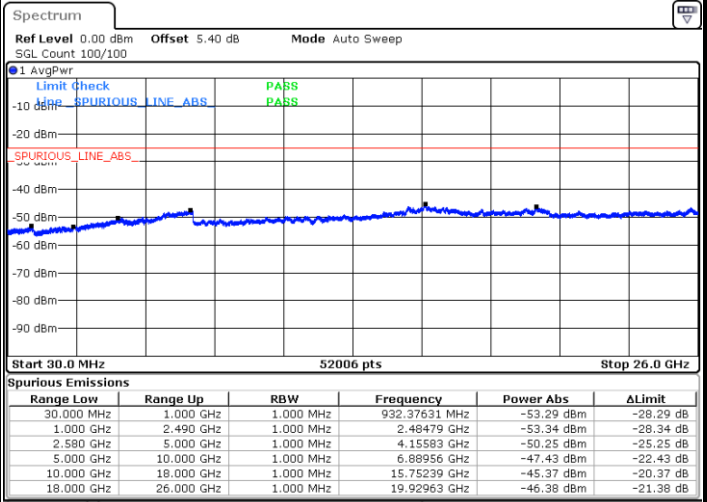
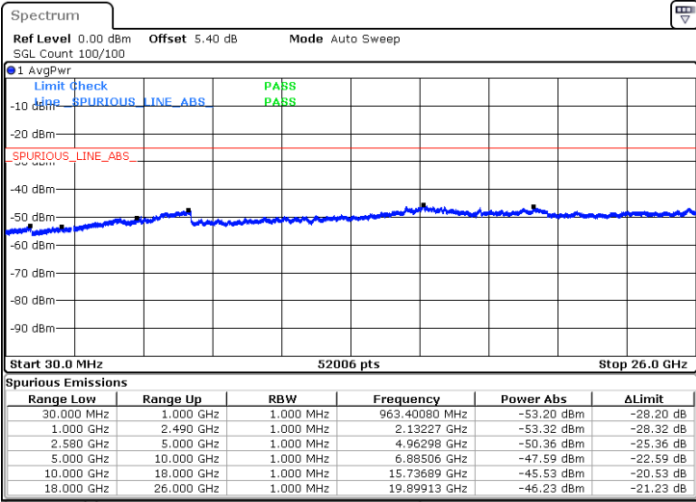


Date: 4 MAR 2018 05:03:54

Date: 4 MAR 2018 05:04:48

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 MAR 2018 05:12:28

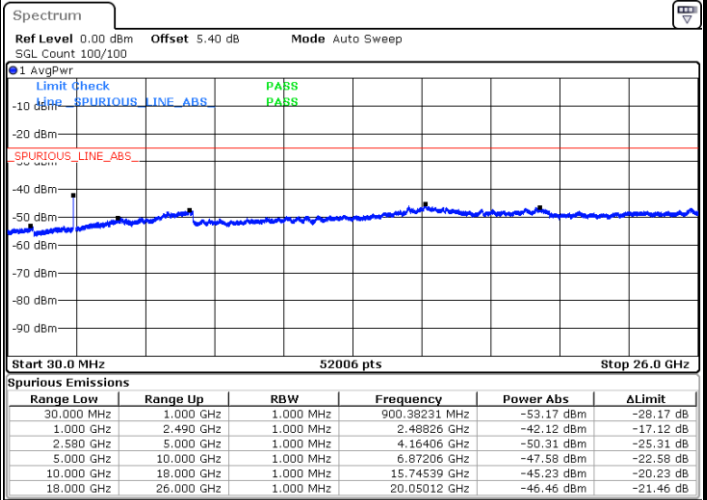
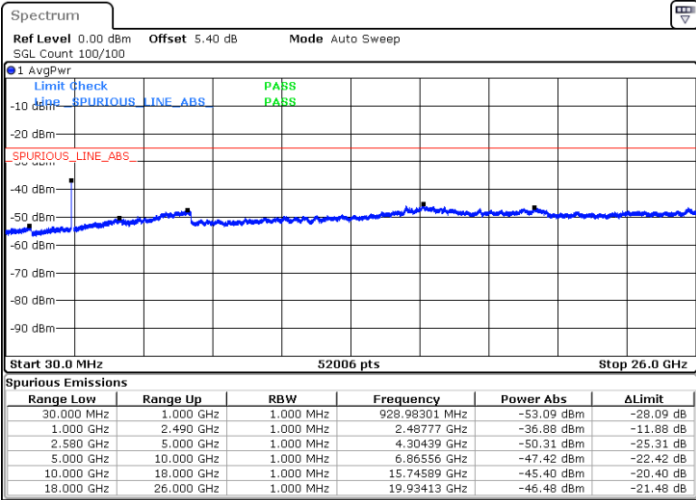
Date: 4 MAR 2018 05:11:34



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

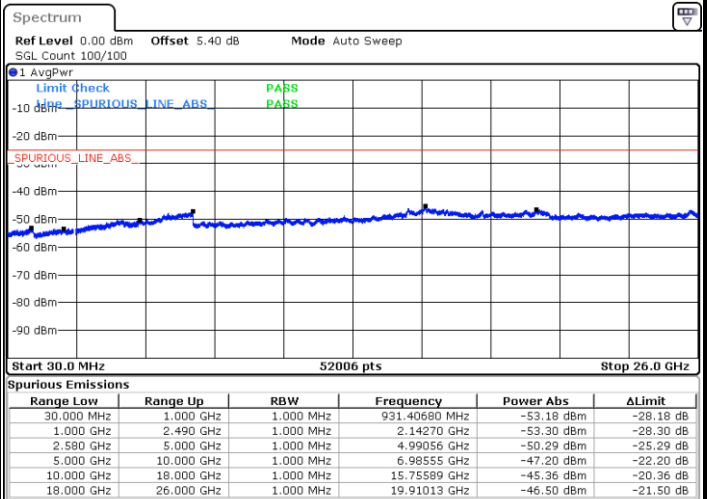
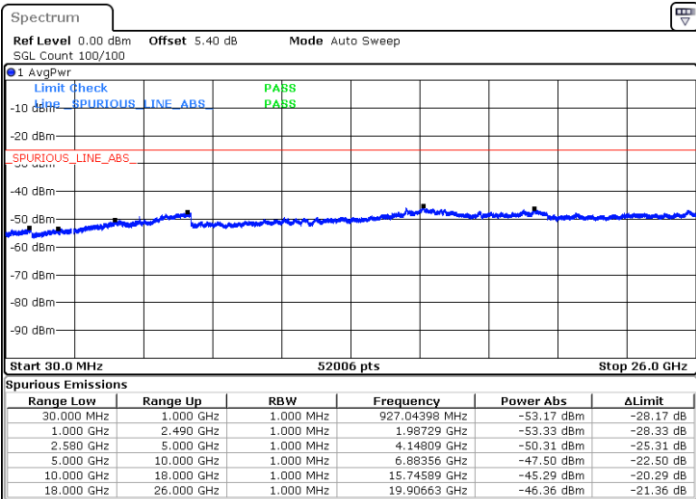


Date: 4 MAR 2018 05:14:56

Date: 4 MAR 2018 05:14:02

Middle Channel / QPSK

Middle Channel / 16QAM



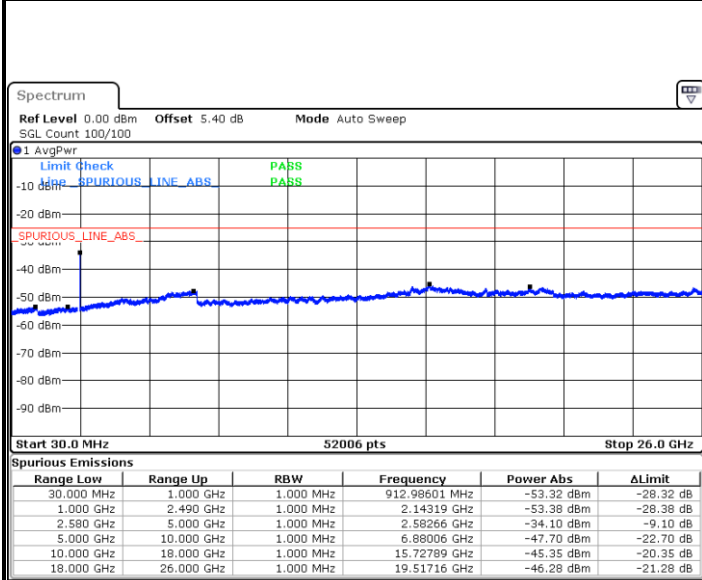
Date: 4 MAR 2018 05:15:50

Date: 4 MAR 2018 05:16:44



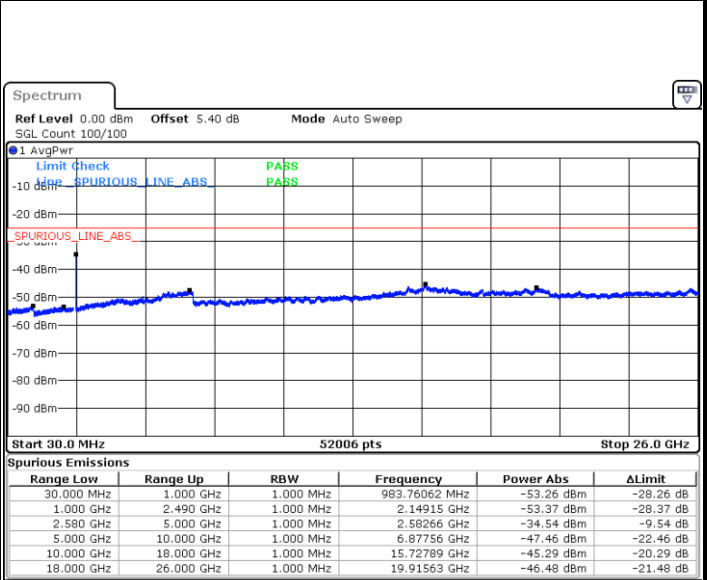
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 4 MAR 2018 05:24:24

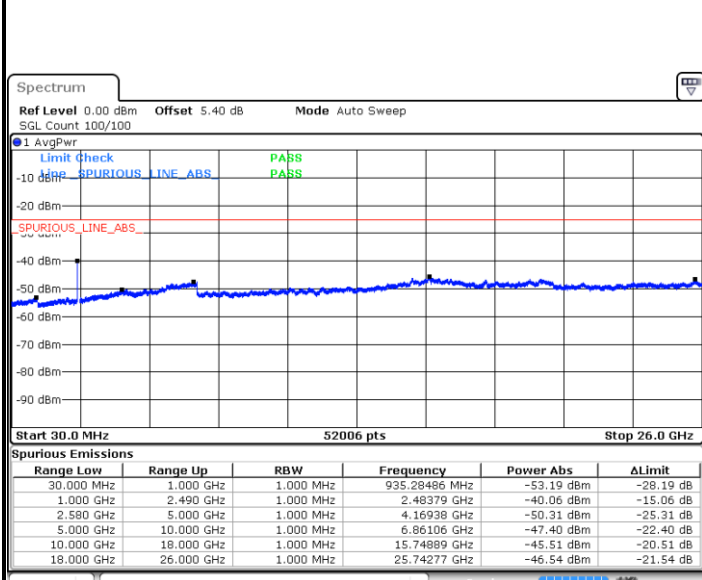
Highest Channel / 16QAM



Date: 4 MAR 2018 05:23:30

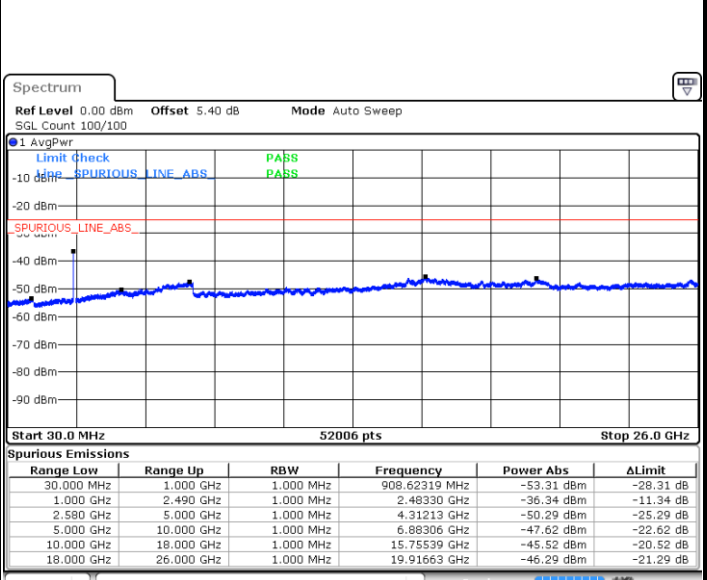
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 MAR 2018 05:26:52

Lowest Channel / 16QAM



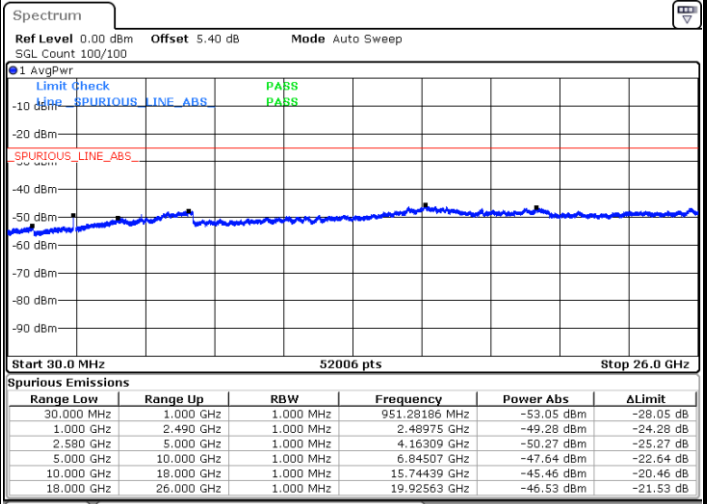
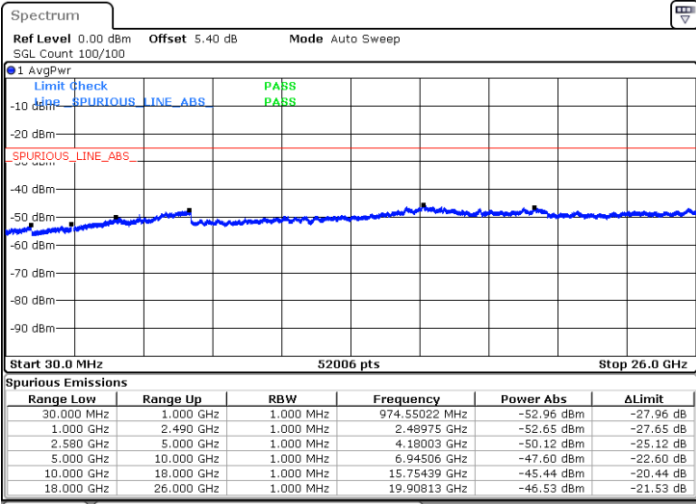
Date: 4 MAR 2018 05:25:58



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

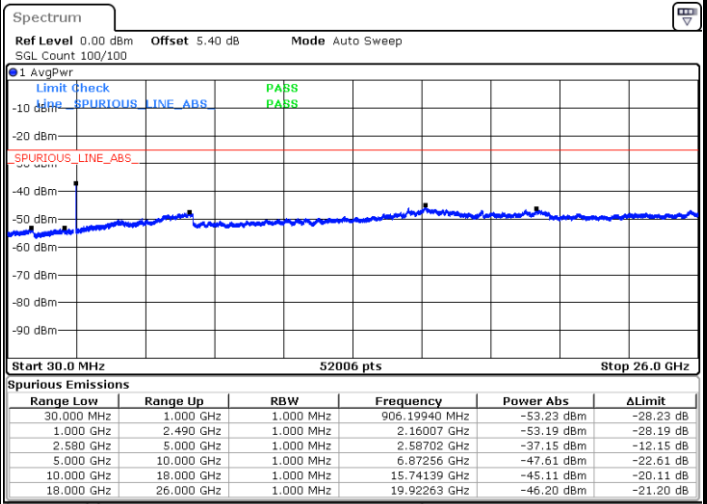
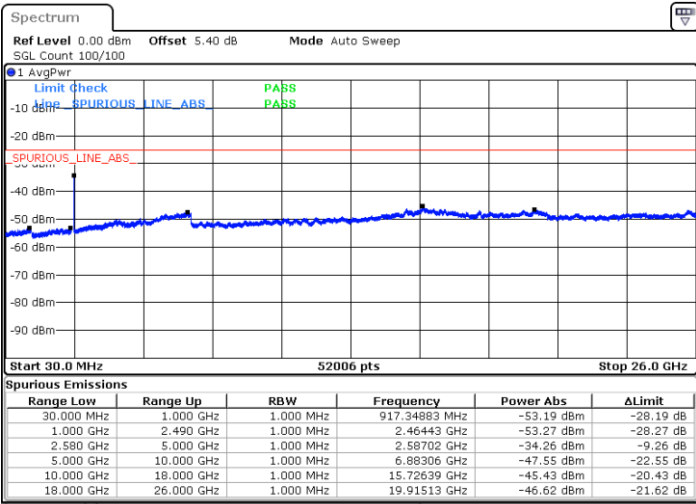


Date: 4 MAR 2018 05:27:46

Date: 4 MAR 2018 05:28:41

Highest Channel / QPSK

Highest Channel / 16QAM



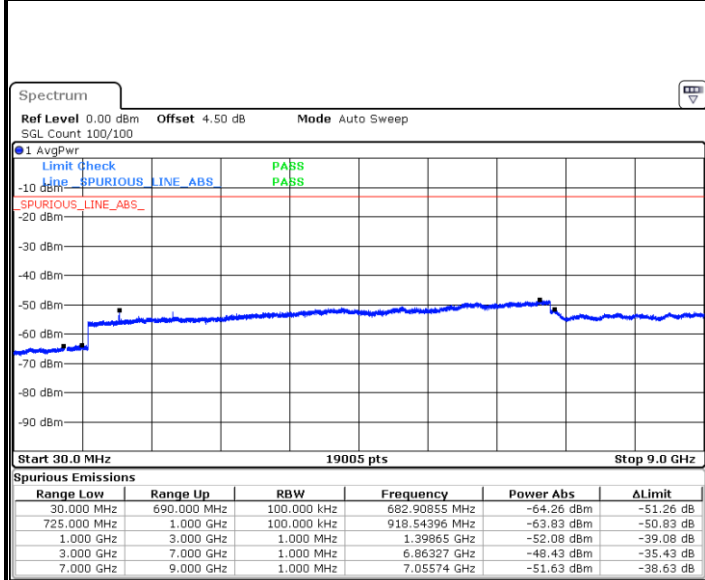
Date: 4 MAR 2018 05:36:21

Date: 4 MAR 2018 05:35:26



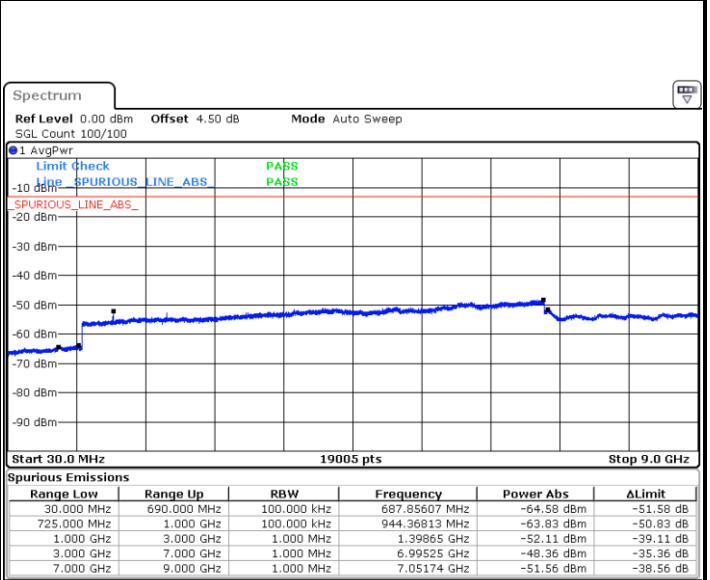
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



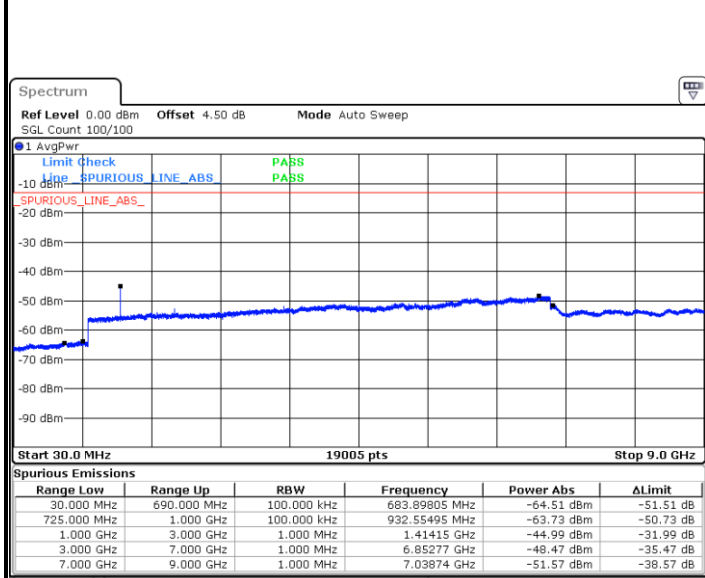
Date: 2 MAR 2018 20:48:39

Lowest Channel / 16QAM



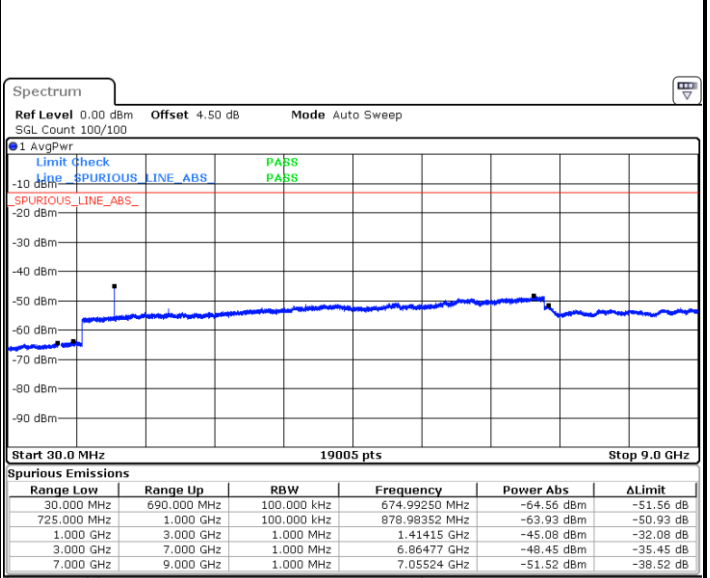
Date: 2 MAR 2018 20:49:34

Middle Channel / QPSK



Date: 2 MAR 2018 20:51:24

Middle Channel / 16QAM

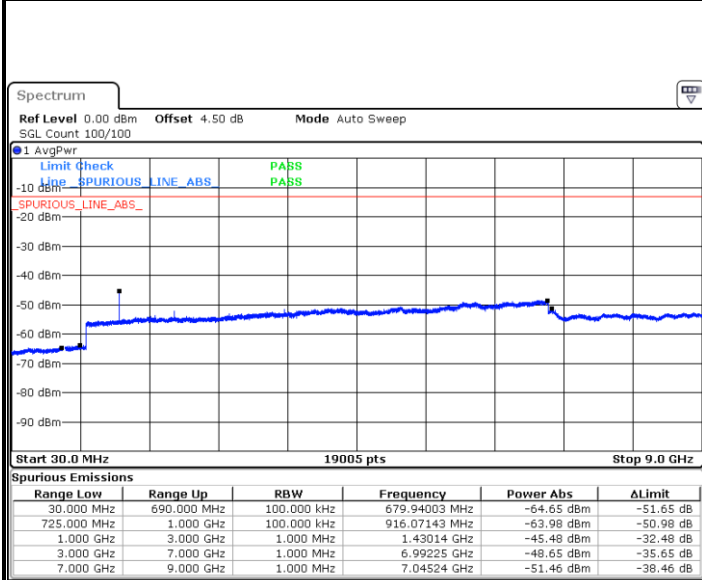


Date: 2 MAR 2018 22:16:16



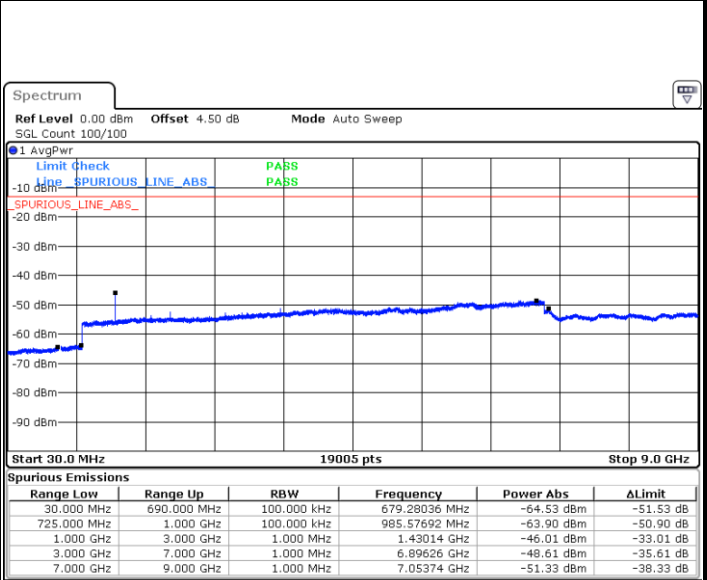
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 2.MAR.2018 20:52:19

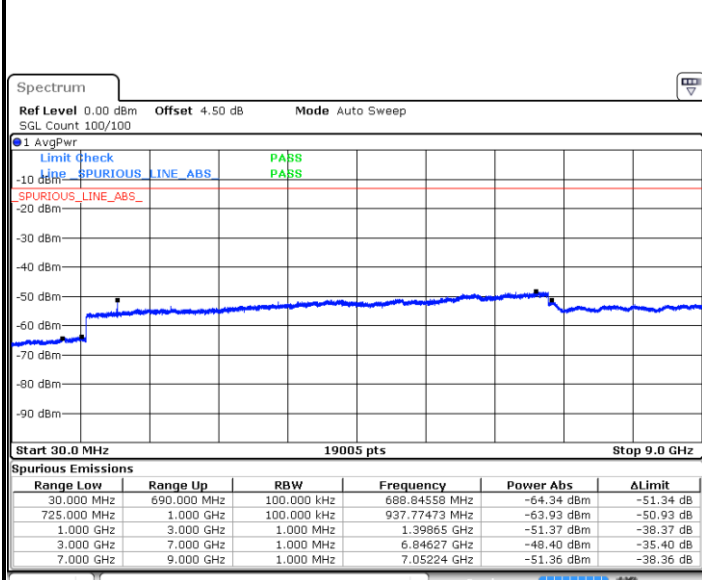
Highest Channel / 16QAM



Date: 2.MAR.2018 22:17:06

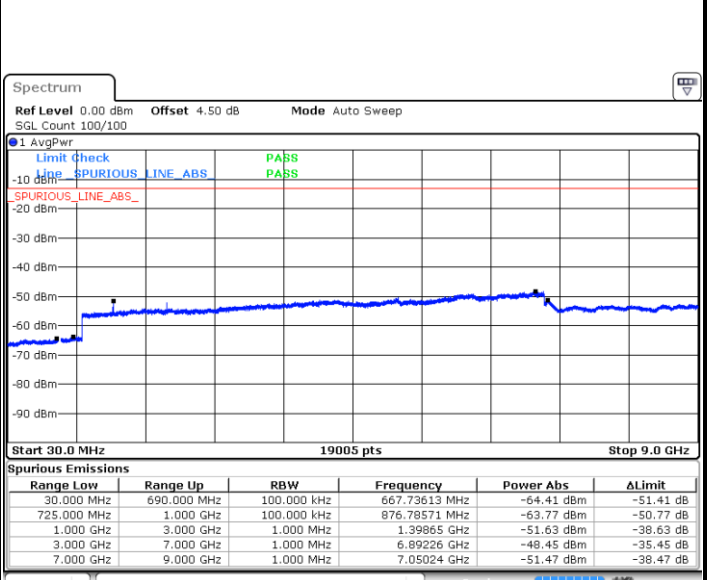
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 2.MAR.2018 22:19:48

Lowest Channel / 16QAM

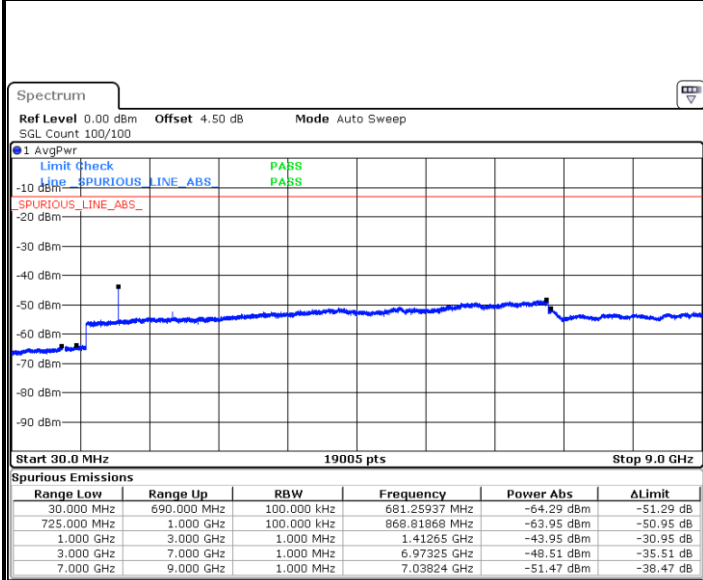


Date: 2.MAR.2018 21:06:17



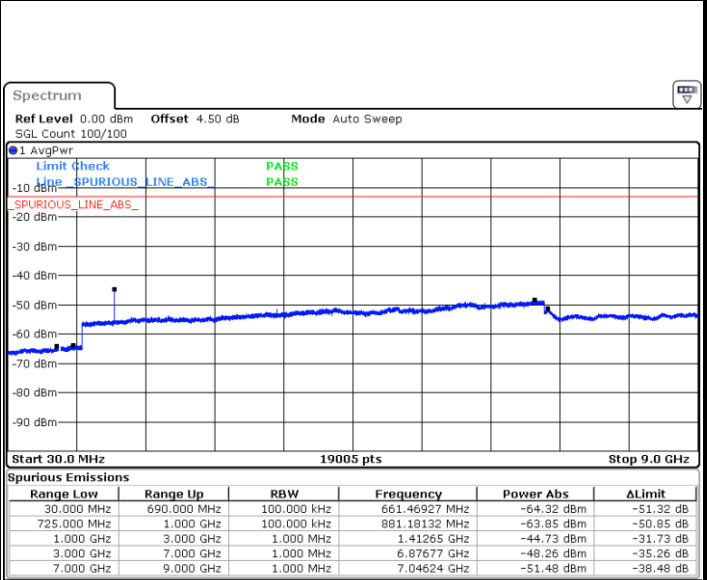
LTE Band 12 / 3MHz

Middle Channel / QPSK



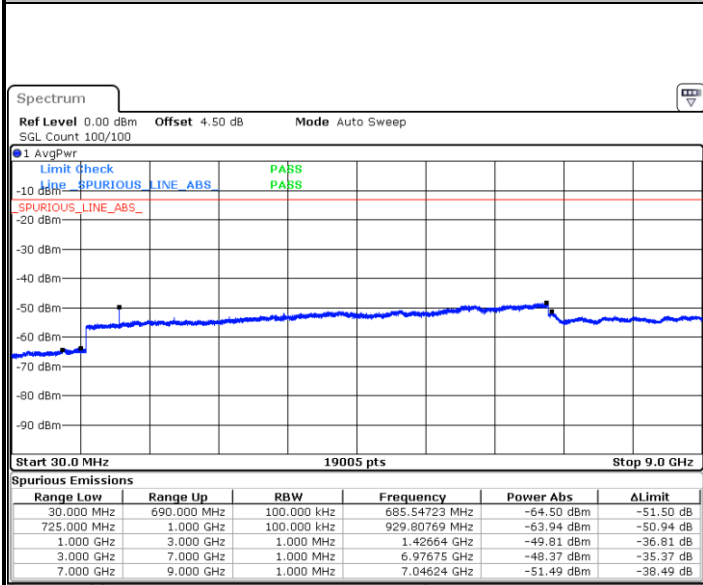
Date: 2.MAR.2018 21:08:08

Middle Channel / 16QAM



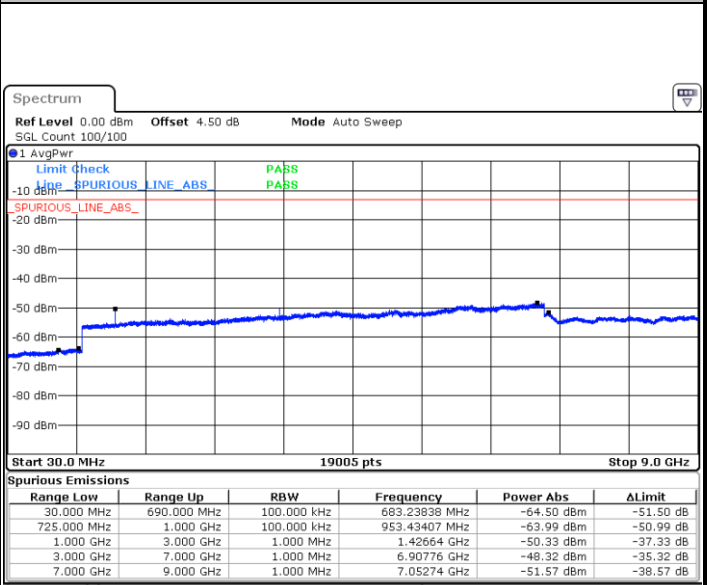
Date: 2.MAR.2018 21:07:12

Highest Channel / QPSK



Date: 2.MAR.2018 22:18:29

Highest Channel / 16QAM

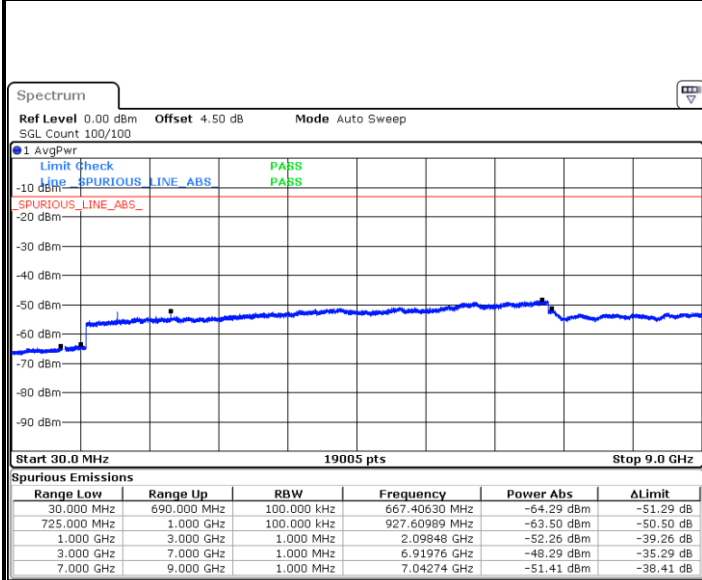


Date: 2.MAR.2018 21:09:58



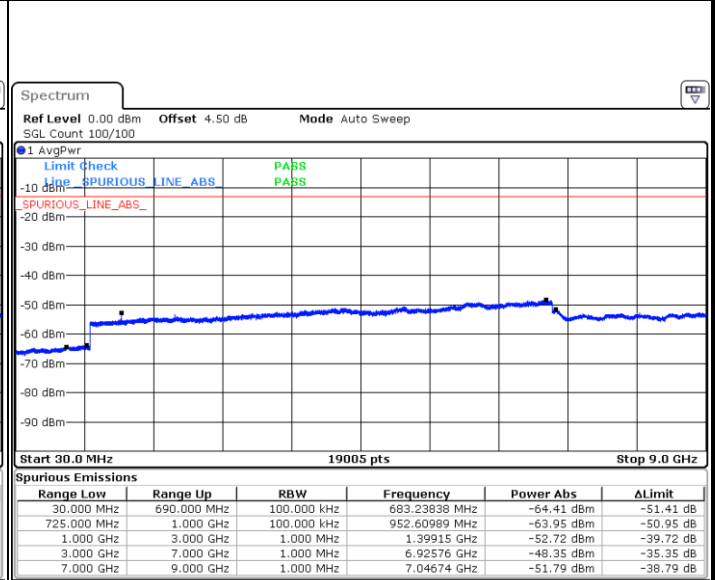
LTE Band 12 / 5MHz

Lowest Channel / QPSK



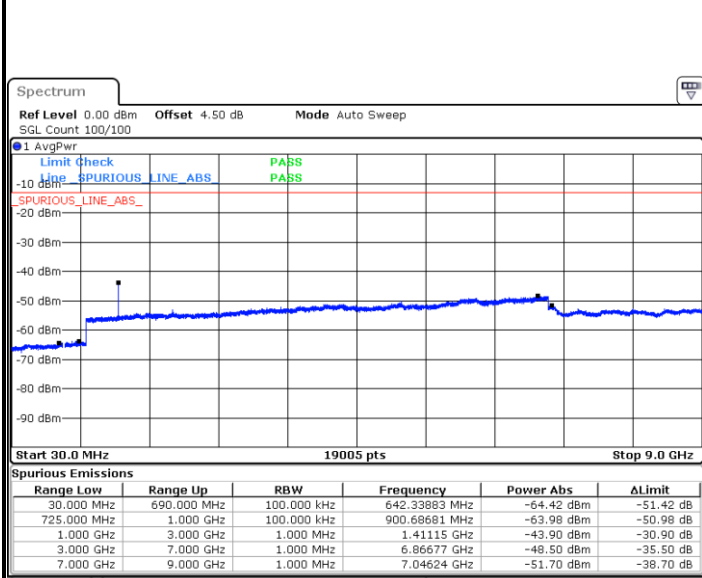
Date: 2.MAR.2018 21:22:06

Lowest Channel / 16QAM



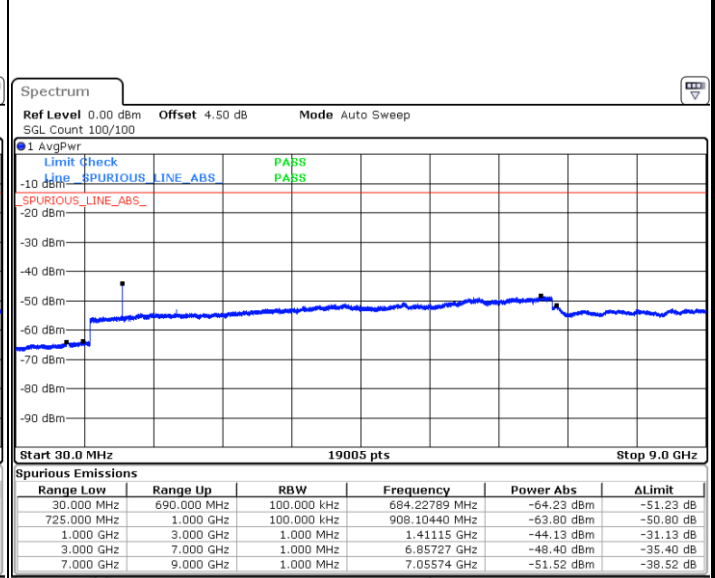
Date: 2.MAR.2018 21:23:01

Middle Channel / QPSK



Date: 2.MAR.2018 21:24:51

Middle Channel / 16QAM



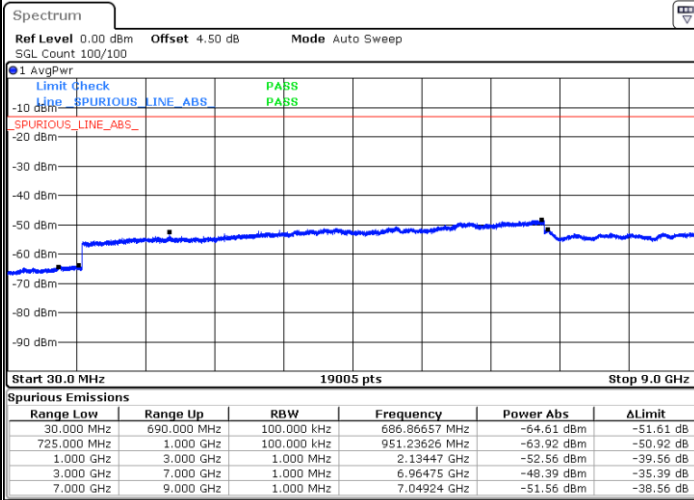
Date: 2.MAR.2018 21:23:56



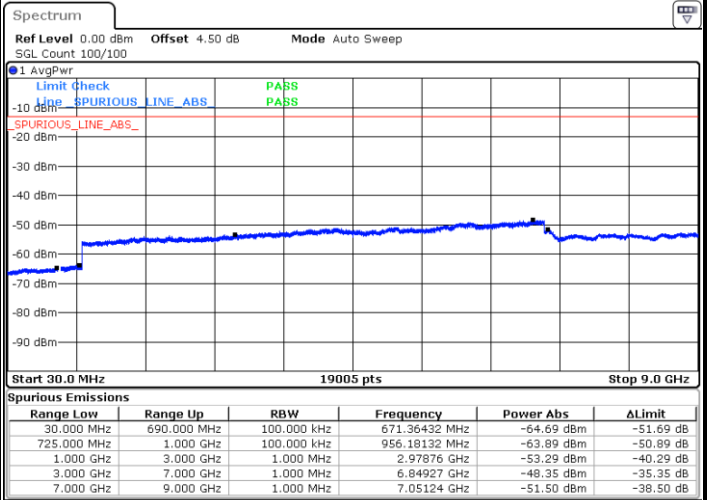
LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2.MAR.2018 21:25:46

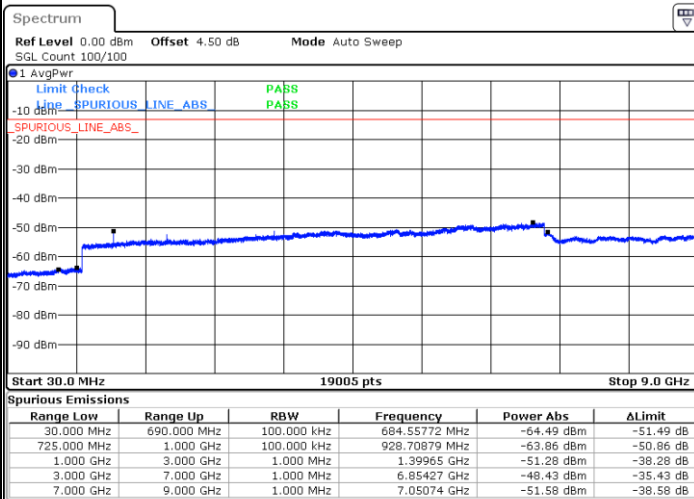


Date: 2.MAR.2018 21:26:42

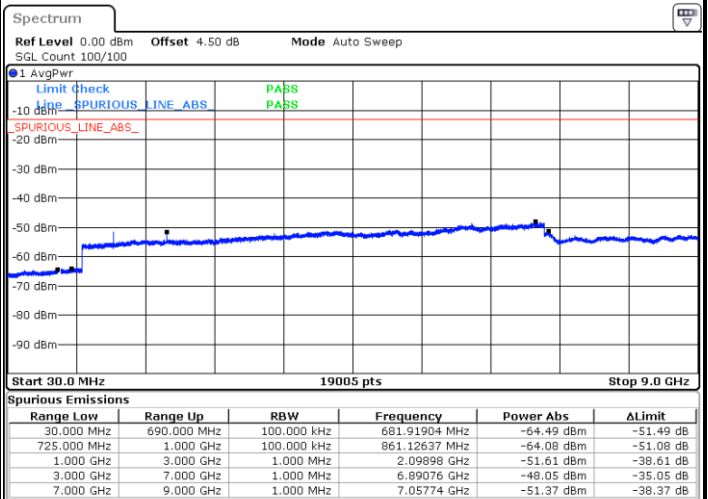
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 2.MAR.2018 21:47:18

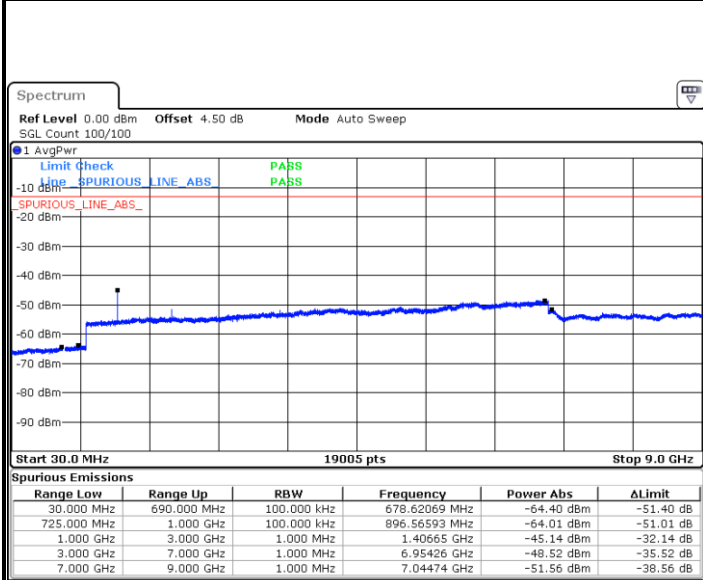


Date: 2.MAR.2018 21:48:13



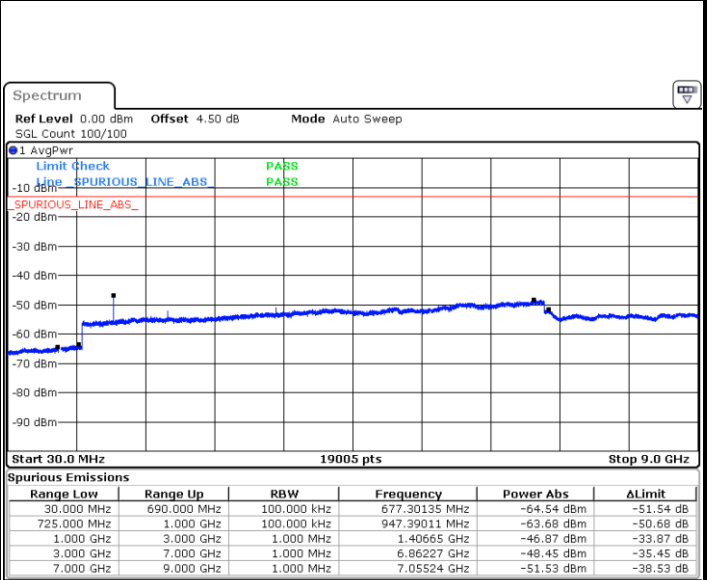
LTE Band 12 / 10MHz

Middle Channel / QPSK



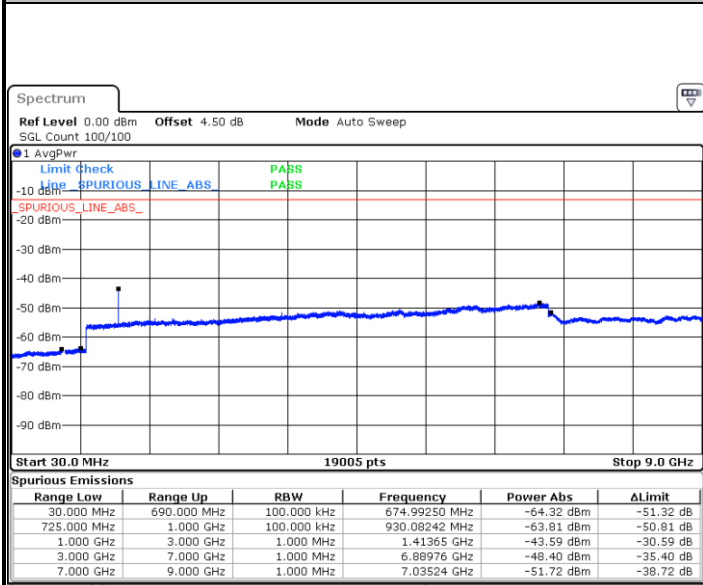
Date: 2 MAR 2018 21:50:03

Middle Channel / 16QAM



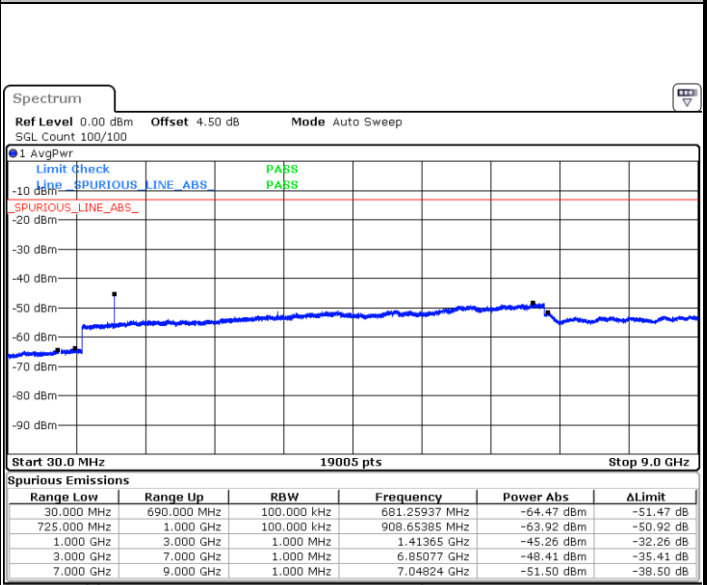
Date: 2 MAR 2018 21:49:08

Highest Channel / QPSK



Date: 2 MAR 2018 21:50:59

Highest Channel / 16QAM



Date: 2 MAR 2018 21:51:54



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	0.0003	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0028	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 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	0.0033	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.85V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 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	0.0023	PASS
40	Normal Voltage	0.0053	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0067	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0061	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0056	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 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	0.0023	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0020	
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) =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0093	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0105	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0031	
-20	Normal Voltage	0.0079	
-30	Normal Voltage	0.0071	
20	Maximum Voltage	0.0083	
20	Normal Voltage	0.0004	
20	Battery End Point	0.0109	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of ERP/EIRP and Radiated Test

Radiated Spurious Emission

LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 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)
Lowest	3699	-41.52	-13	-28.52	-46.69	1.83	7.00	H
	5550	-53.65	-13	-40.65	-61.27	2.18	9.80	H
	7401	-49.08	-13	-36.08	-58.75	2.53	12.20	H
	3699	-45.70	-13	-32.70	-50.87	1.83	7.00	V
	5550	-55.13	-13	-42.13	-62.75	2.18	9.80	V
	7401	-46.03	-13	-33.03	-55.70	2.53	12.20	V
Middle	3756	-38.63	-13	-25.63	-43.80	1.83	7.00	H
	5637	-52.89	-13	-39.89	-60.51	2.18	9.80	H
	7515	-48.01	-13	-35.01	-57.68	2.53	12.20	H
	3756	-43.62	-13	-30.62	-48.79	1.83	7.00	V
	5637	-53.55	-13	-40.55	-61.17	2.18	9.80	V
	7515	-45.23	-13	-32.23	-54.90	2.53	12.20	V
Highest	3813	-37.68	-13	-24.68	-42.85	1.83	7.00	H
	5721	-54.44	-13	-41.44	-62.06	2.18	9.80	H
	7629	-47.70	-13	-34.70	-57.37	2.53	12.20	H
	3813	-42.02	-13	-29.02	-47.19	1.83	7.00	V
	5721	-52.74	-13	-39.74	-60.36	2.18	9.80	V
	7629	-46.66	-13	-33.66	-56.33	2.53	12.20	V

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



LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 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)
Lowest	3423	-57.82	-13	-44.82	-62.96	1.81	6.95	H
	5133	-55.62	-13	-42.62	-62.69	2.23	9.30	H
	6843	-37.60	-13	-24.60	-45.88	2.6	10.88	H
	8556	-41.95	-13	-28.95	-51.52	2.96	12.53	H
	3423	-58.46	-13	-45.46	-63.60	1.81	6.95	V
	5133	-54.20	-13	-41.20	-61.27	2.23	9.30	V
	6843	-44.94	-13	-31.94	-53.22	2.6	10.88	V
	8556	-45.18	-13	-32.18	-54.75	2.96	12.53	V
Middle	3447	-57.72	-13	-44.72	-62.86	1.81	6.95	H
	5172	-54.94	-13	-41.94	-62.01	2.23	9.30	H
	6894	-38.27	-13	-25.27	-46.55	2.6	10.88	H
	8619	-42.77	-13	-29.77	-52.34	2.96	12.53	H
	3447	-59.47	-13	-46.47	-64.61	1.81	6.95	V
	5172	-52.80	-13	-39.80	-59.87	2.23	9.30	V
	6894	-45.11	-13	-32.11	-53.39	2.6	10.88	V
	8619	-46.03	-13	-33.03	-55.60	2.96	12.53	V
Highest	3471	-59.22	-13	-46.22	-64.36	1.81	6.95	H
	5208	-56.99	-13	-43.99	-64.06	2.23	9.30	H
	6945	-37.57	-13	-24.57	-45.85	2.6	10.88	H
	8679	-42.08	-13	-29.08	-51.65	2.96	12.53	H
	3471	-60.79	-13	-47.79	-65.93	1.81	6.95	V
	5208	-54.28	-13	-41.28	-61.35	2.23	9.30	V
	6945	-45.01	-13	-32.01	-53.29	2.6	10.88	V
	8679	-45.04	-13	-32.04	-54.61	2.96	12.53	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)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-61.13	-13	-48.13	-63.04	1.14	5.20	H
	2474	-45.70	-13	-32.70	-48.33	1.12	5.90	H
	3300	-53.97	-13	-40.97	-57.18	1.34	6.70	H
	1650	-55.41	-13	-42.41	-57.32	1.14	5.20	V
	2474	-43.10	-13	-30.10	-45.73	1.12	5.90	V
	3300	-55.77	-13	-42.77	-58.98	1.34	6.70	V
Middle	1664	-57.74	-13	-44.74	-59.65	1.14	5.20	H
	2496	-56.11	-13	-43.11	-58.74	1.12	5.90	H
	3330	-64.37	-13	-51.37	-67.58	1.34	6.70	H
	1664	-56.09	-13	-43.09	-58.00	1.14	5.20	V
	2496	-50.14	-13	-37.14	-52.77	1.12	5.90	V
	3330	-64.80	-13	-51.80	-68.01	1.34	6.70	V
Highest	1680	-57.83	-13	-44.83	-59.74	1.14	5.20	H
	2518	-51.96	-13	-38.96	-54.59	1.12	5.90	H
	3360	-59.74	-13	-46.74	-62.95	1.34	6.70	H
	1680	-52.16	-13	-39.16	-54.07	1.14	5.20	V
	2518	-52.22	-13	-39.22	-54.85	1.12	5.90	V
	3360	-60.90	-13	-47.90	-64.11	1.34	6.70	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5000	-56.84	-25	-31.84	-63.56	2.40	9.12	H
	7505	-38.81	-25	-13.81	-48.44	2.87	12.50	H
	10008	-51.02	-25	-26.02	-59.94	3.18	12.10	H
	5000	-58.55	-25	-33.55	-65.27	2.40	9.12	V
	7505	-42.62	-25	-17.62	-52.25	2.87	12.50	V
	10008	-52.83	-25	-27.83	-61.75	3.18	12.10	V
Middle	5052	-48.60	-25	-23.60	-55.32	2.40	9.12	H
	7580	-36.27	-25	-11.27	-45.90	2.87	12.50	H
	10107	-55.58	-25	-30.58	-64.50	3.18	12.10	H
	5052	-55.35	-25	-30.35	-62.07	2.40	9.12	V
	7580	-41.50	-25	-16.50	-51.13	2.87	12.50	V
	10107	-55.67	-25	-30.67	-64.59	3.18	12.10	V
Highest	5100	-52.03	-25	-27.03	-58.75	2.40	9.12	H
	7652	-43.27	-25	-18.27	-52.90	2.87	12.50	H
	10206	-55.26	-25	-30.26	-64.18	3.18	12.10	H
	5100	-52.85	-25	-27.85	-59.57	2.40	9.12	V
	7652	-48.77	-25	-23.77	-58.40	2.87	12.50	V
	10206	-56.43	-25	-31.43	-65.35	3.18	12.10	V

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



LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 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)
Lowest	1400	-62.86	-13	-49.86	-64.23	1.167	4.69	H
	2098	-63.38	-13	-50.38	-65.98	1.446	6.20	H
	2798	-63.61	-13	-50.61	-67.17	1.694	7.40	H
	1400	-64.16	-13	-51.16	-65.53	1.167	4.69	V
	2098	-64.24	-13	-51.24	-66.84	1.446	6.20	V
	2798	-64.00	-13	-51.00	-67.56	1.694	7.40	V
Middle	1406	-59.86	-13	-46.86	-61.23	1.167	4.69	H
	2110	-51.54	-13	-38.54	-54.14	1.446	6.20	H
	2812	-63.48	-13	-50.48	-67.04	1.694	7.40	H
	1406	-62.02	-13	-49.02	-63.39	1.167	4.69	V
	2110	-54.74	-13	-41.74	-57.34	1.446	6.20	V
	2812	-63.79	-13	-50.79	-67.35	1.694	7.40	V
Highest	1414	-63.39	-13	-50.39	-64.76	1.167	4.69	H
	2120	-59.86	-13	-46.86	-62.46	1.446	6.20	H
	2826	-60.63	-13	-47.63	-64.19	1.694	7.40	H
	1414	-63.40	-13	-50.40	-64.77	1.167	4.69	V
	2120	-44.72	-13	-31.72	-47.32	1.446	6.20	V
	2826	-59.81	-13	-46.81	-63.37	1.694	7.40	V

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