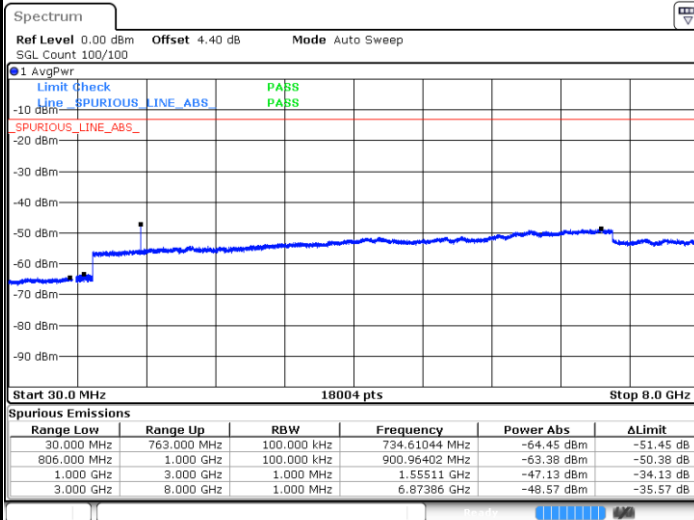




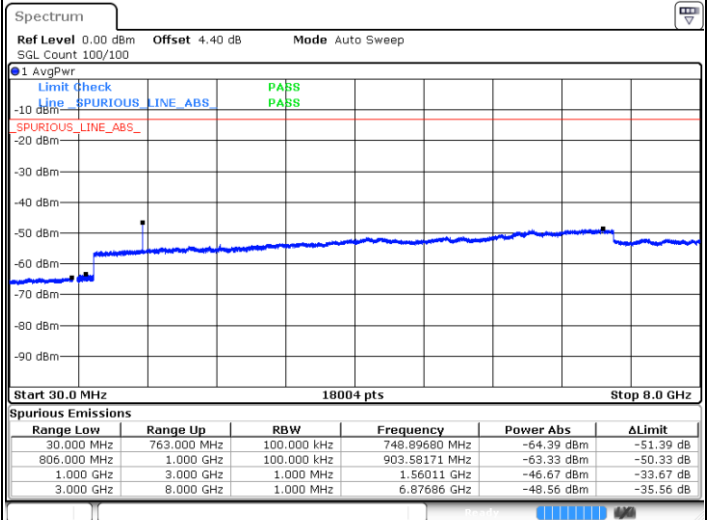
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



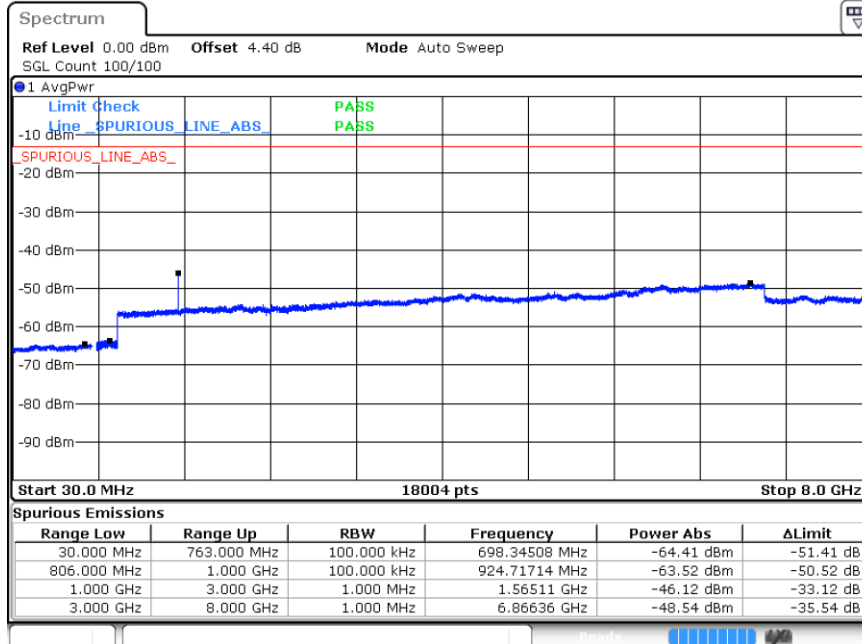
Date: 22 MAY 2018 15:39:06

Middle Channel / 64QAM



Date: 22 MAY 2018 15:40:23

Highest Channel / 64QAM

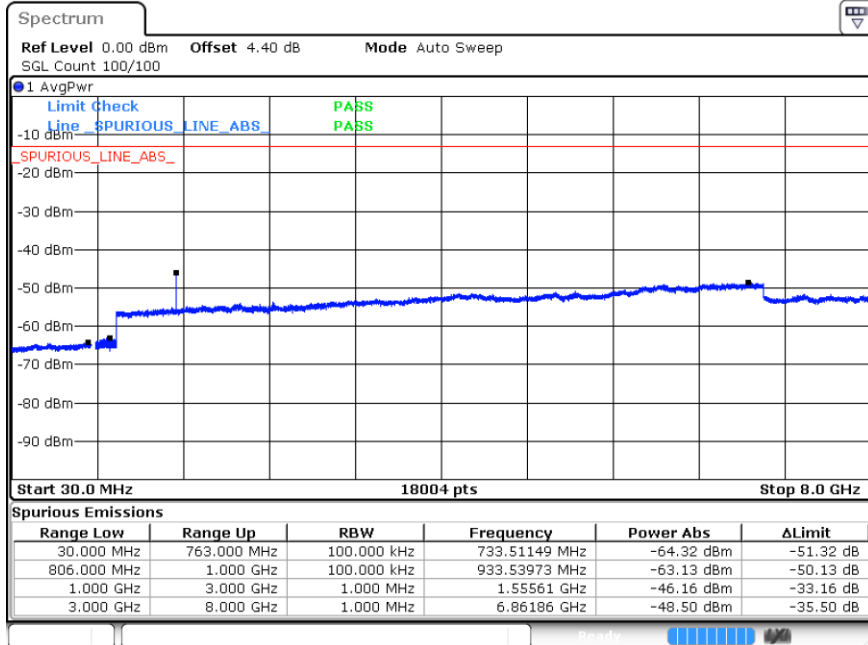


Date: 22 MAY 2018 15:44:56



LTE Band 13 / 10MHz

Middle Channel / 64QAM

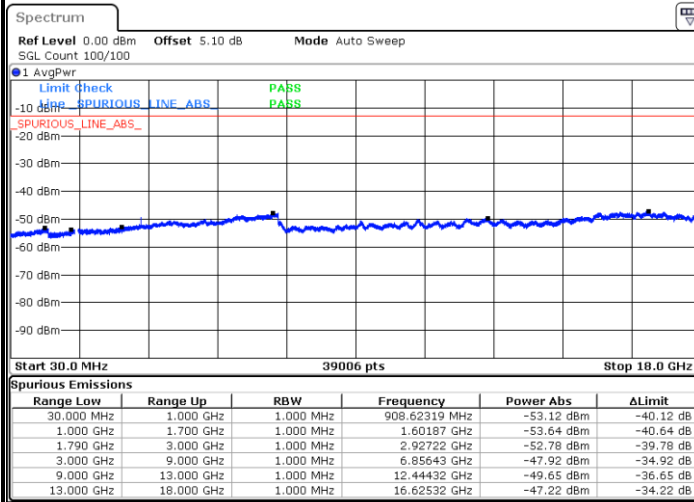


Date: 22.MAY.2018 15:45:51



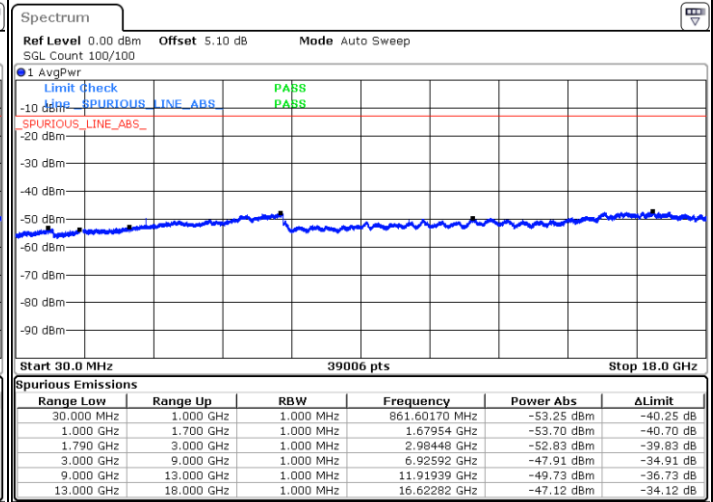
LTE Band 66 / 1.4MHz

Lowest Channel / QPSK



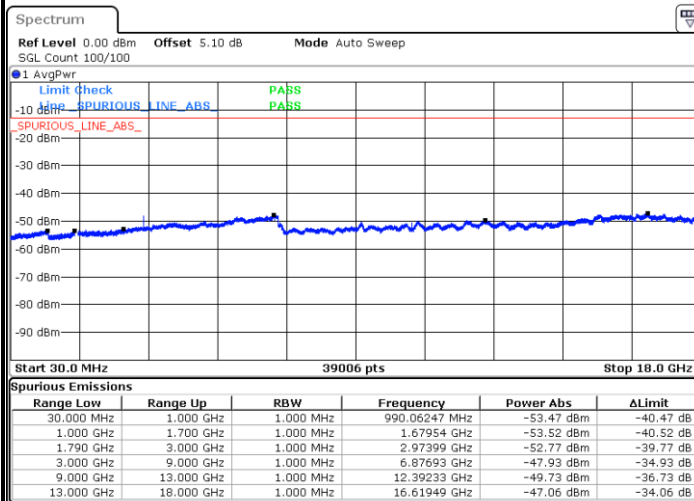
Date: 23 MAY 2018 11:49:16

Lowest Channel / 16QAM



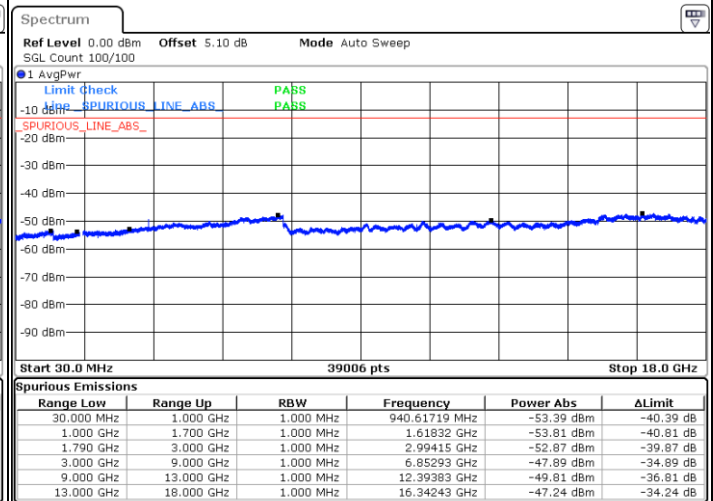
Date: 23 MAY 2018 11:48:29

Middle Channel / QPSK



Date: 23 MAY 2018 11:45:06

Middle Channel / 16QAM

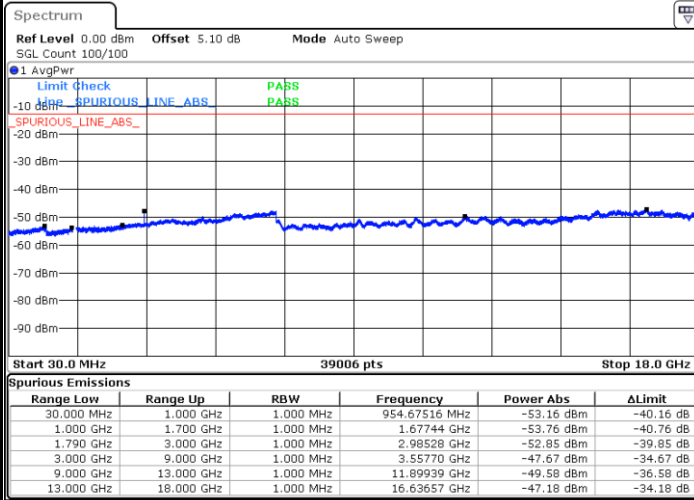


Date: 23 MAY 2018 11:45:57



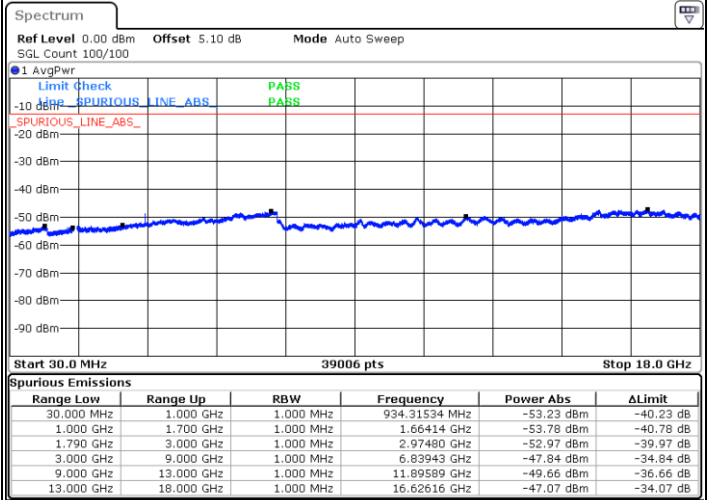
LTE Band 66 / 1.4MHz

Highest Channel / QPSK



Date: 23 MAY 2018 11:44:11

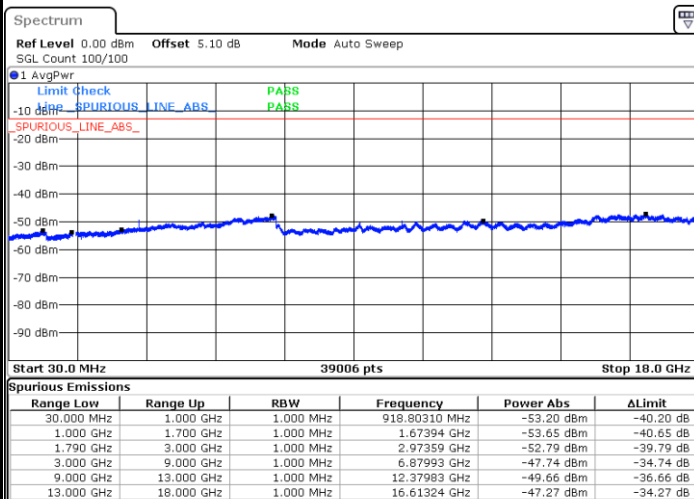
Highest Channel / 16QAM



Date: 23 MAY 2018 11:43:32

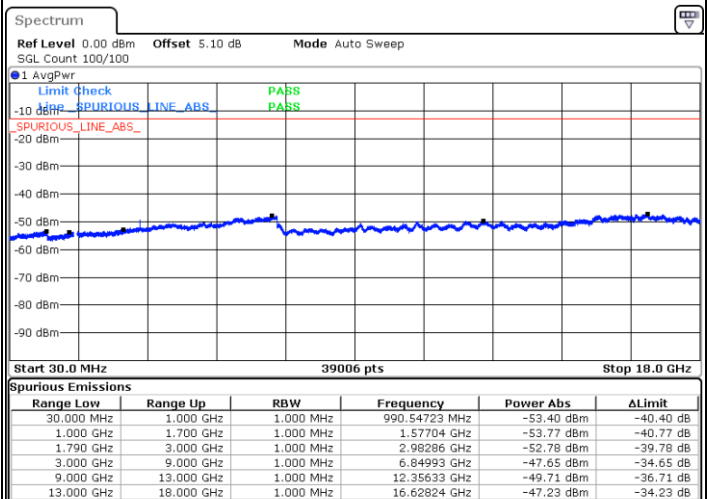
LTE Band 66 / 3MHz

Lowest Channel / QPSK



Date: 23 MAY 2018 14:01:15

Lowest Channel / 16QAM

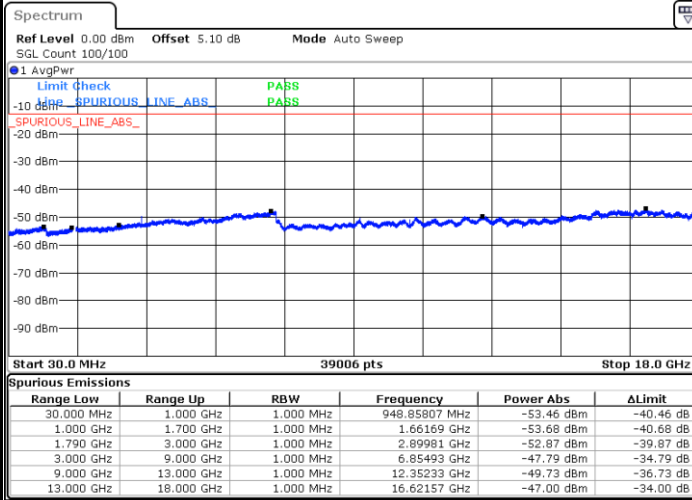


Date: 23 MAY 2018 14:00:30



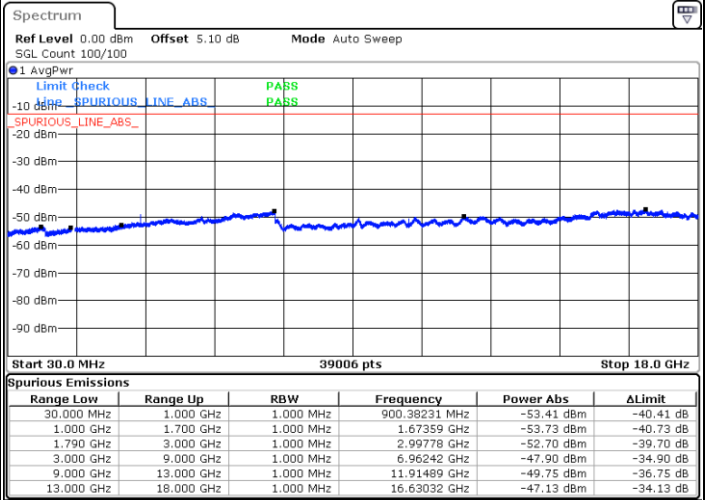
LTE Band 66 / 3MHz

Middle Channel / QPSK



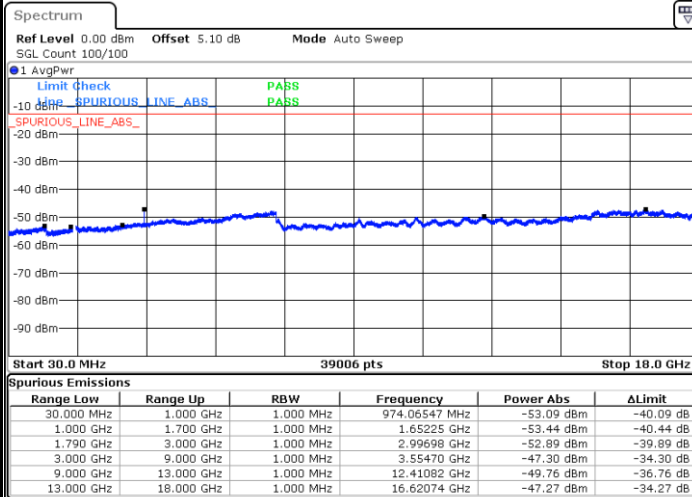
Date: 23 MAY 2018 13:57:35

Middle Channel / 16QAM



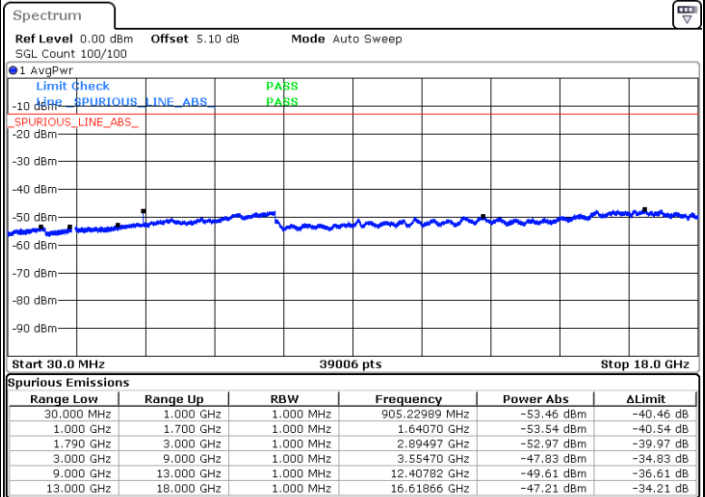
Date: 23 MAY 2018 13:58:16

Highest Channel / QPSK



Date: 23 MAY 2018 13:56:34

Highest Channel / 16QAM

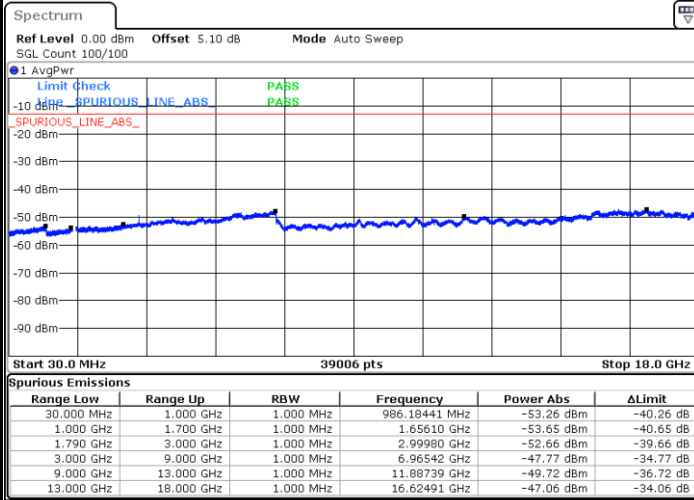


Date: 23 MAY 2018 13:55:12



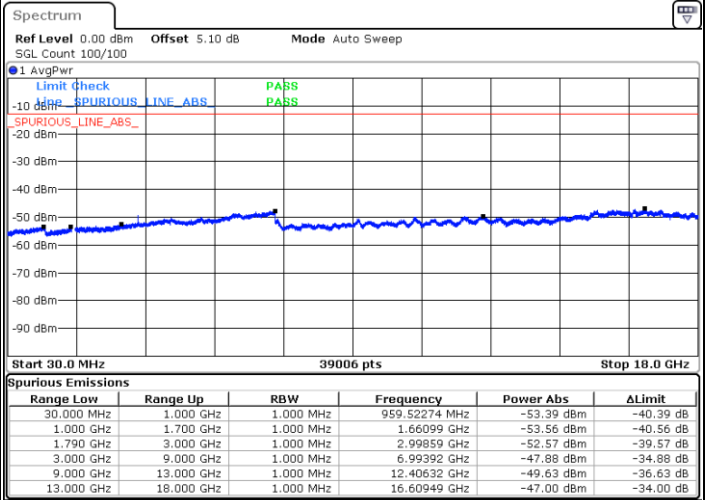
LTE Band 66 / 5MHz

Lowest Channel / QPSK



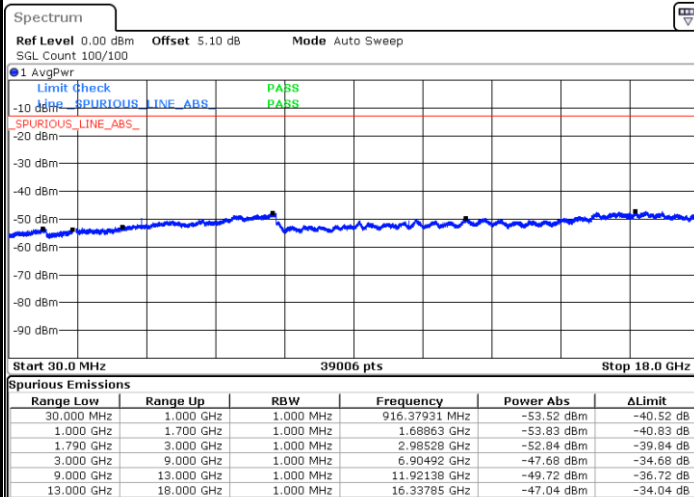
Date: 23 MAY 2018 14:30:25

Lowest Channel / 16QAM



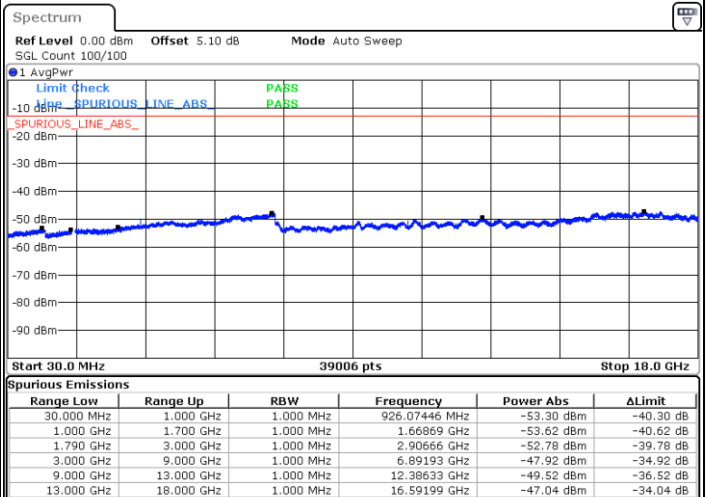
Date: 23 MAY 2018 14:28:33

Middle Channel / QPSK



Date: 23 MAY 2018 14:23:58

Middle Channel / 16QAM

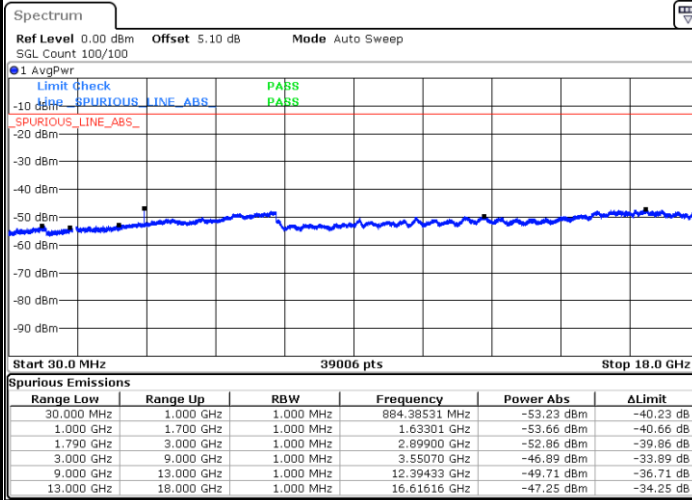


Date: 23 MAY 2018 14:25:01



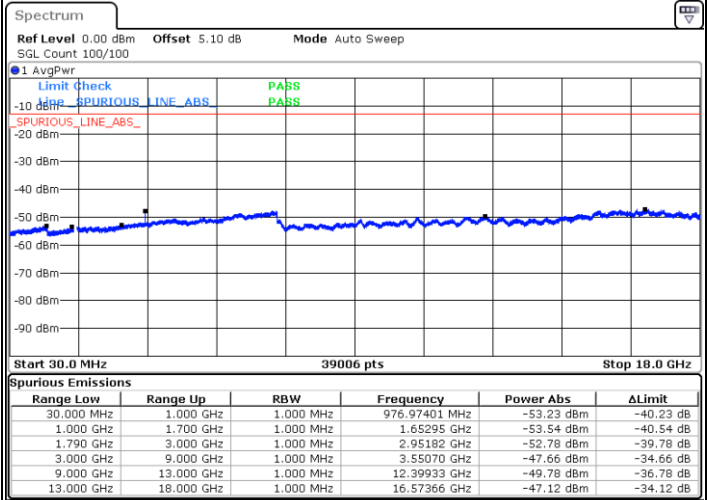
LTE Band 66 / 5MHz

Highest Channel / QPSK



Date: 23 MAY 2018 14:23:02

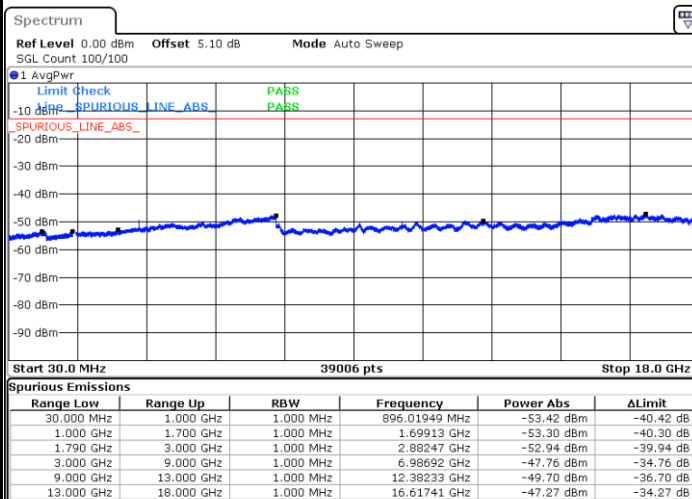
Highest Channel / 16QAM



Date: 23 MAY 2018 14:22:24

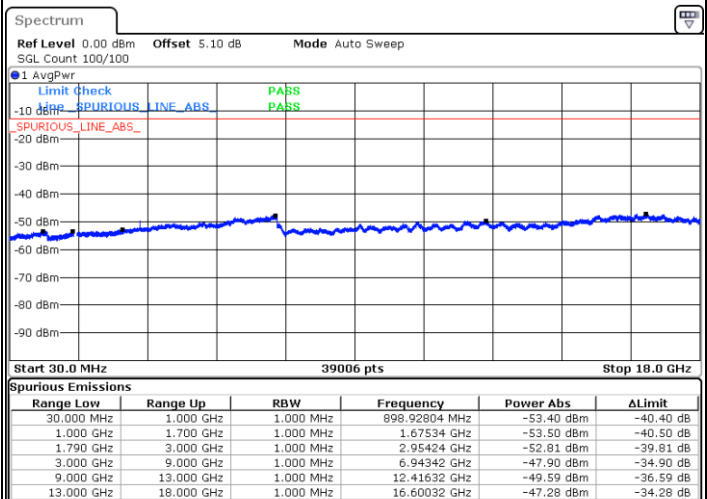
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Date: 23 MAY 2018 15:02:11

Lowest Channel / 16QAM

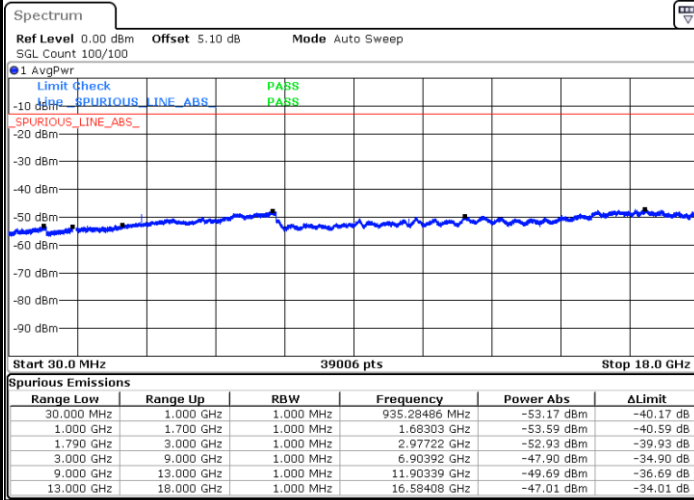


Date: 23 MAY 2018 15:01:29



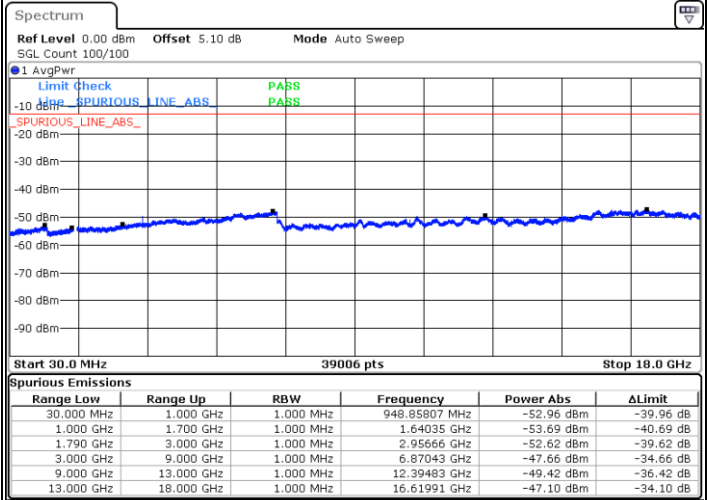
LTE Band 66 / 10MHz

Middle Channel / QPSK



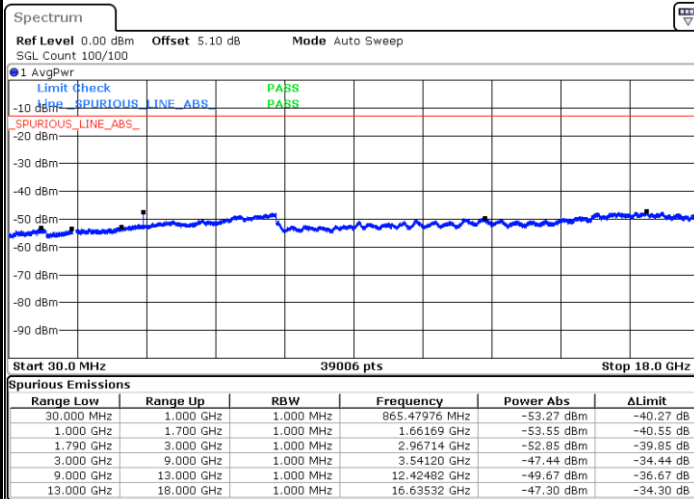
Date: 23 MAY 2018 14:55:39

Middle Channel / 16QAM



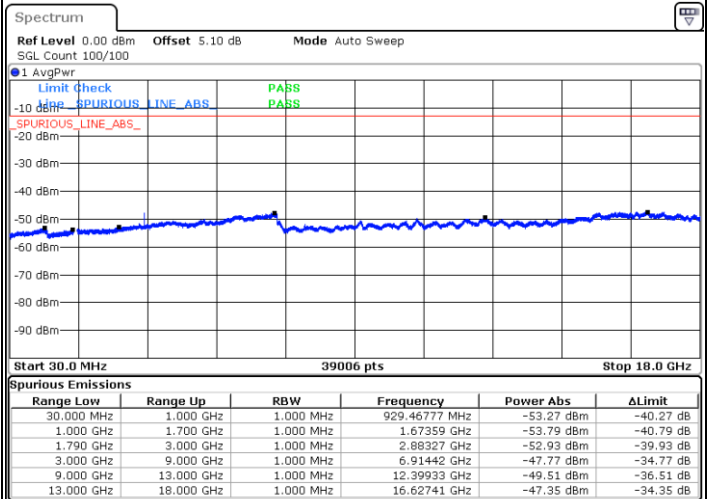
Date: 23 MAY 2018 14:57:30

Highest Channel / QPSK



Date: 23 MAY 2018 14:54:27

Highest Channel / 16QAM

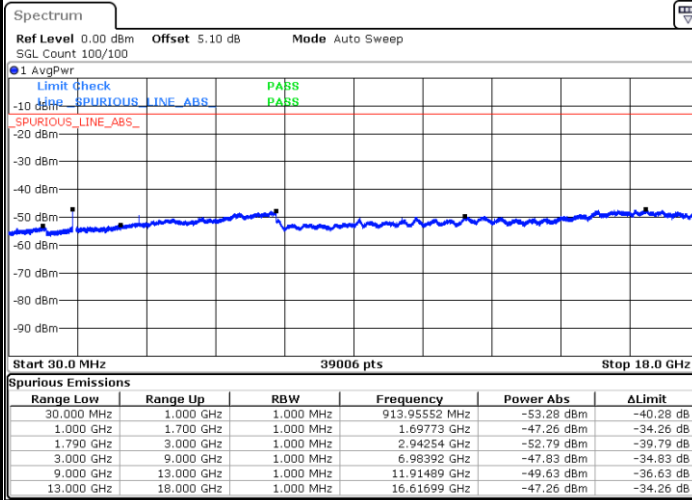


Date: 23 MAY 2018 14:53:48



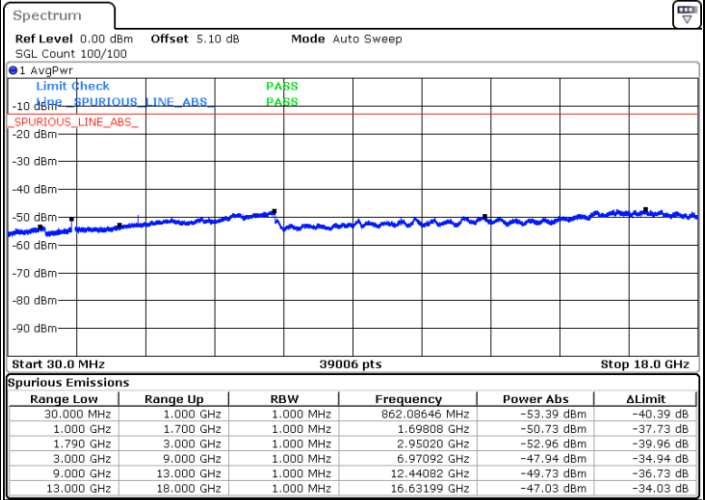
LTE Band 66 / 15MHz

Lowest Channel / QPSK



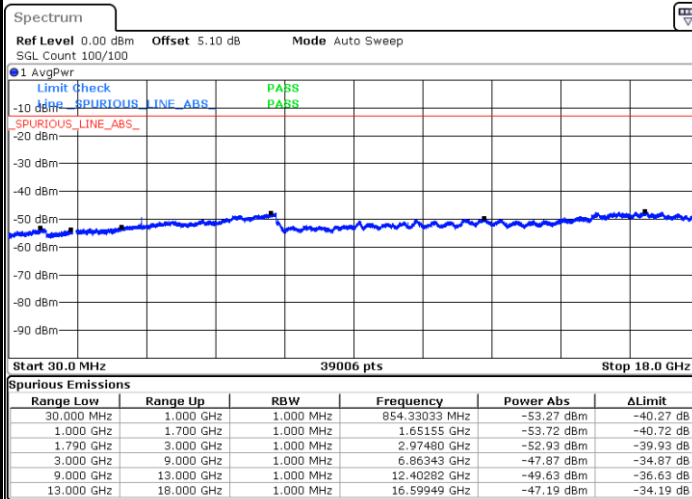
Date: 23 MAY 2018 15:18:52

Lowest Channel / 16QAM



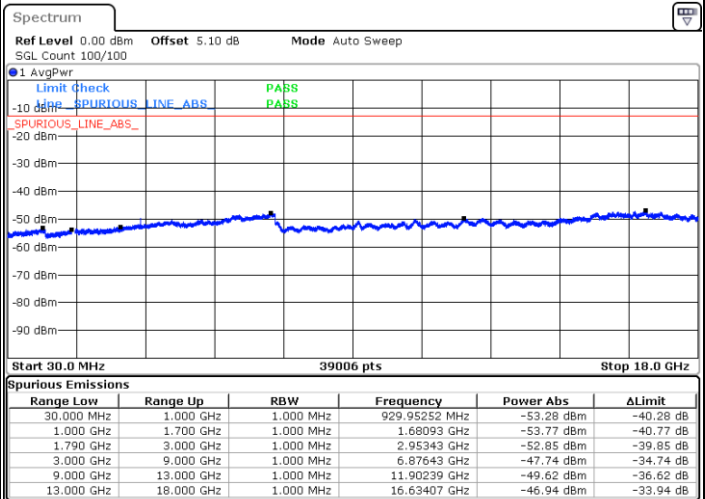
Date: 23 MAY 2018 15:18:13

Middle Channel / QPSK



Date: 23 MAY 2018 15:14:48

Middle Channel / 16QAM

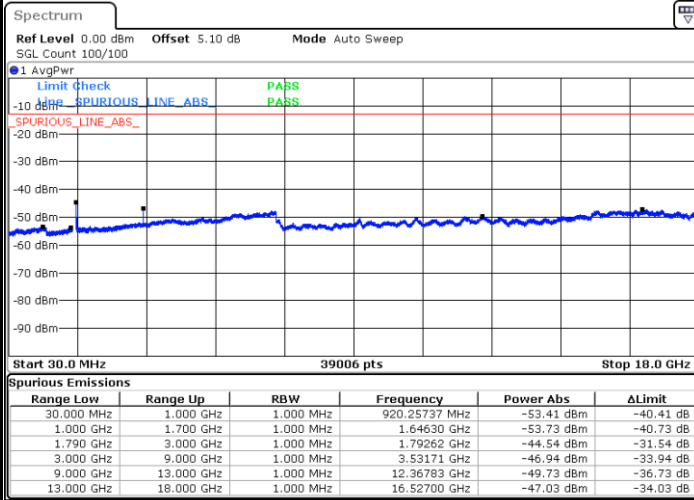


Date: 23 MAY 2018 15:15:31



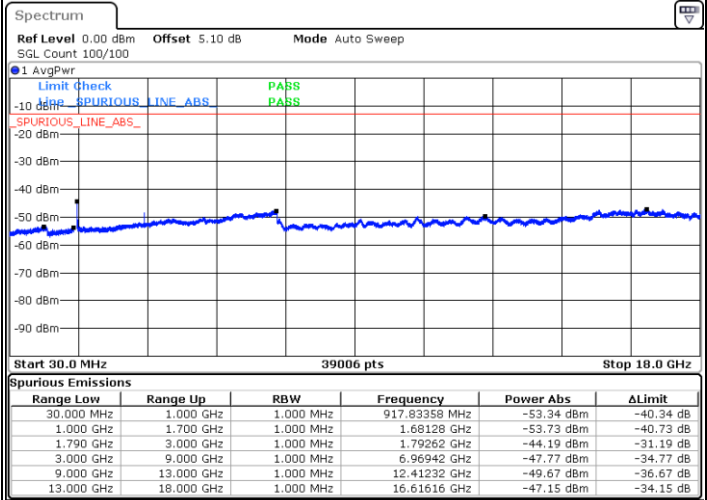
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 23 MAY 2018 15:13:52

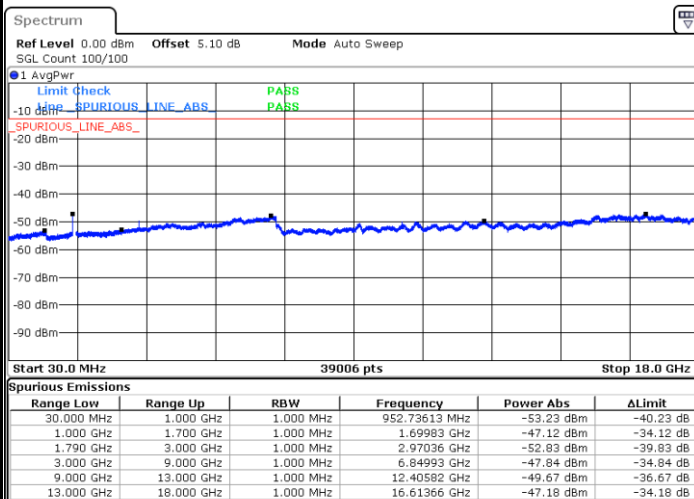
Highest Channel / 16QAM



Date: 23 MAY 2018 15:13:16

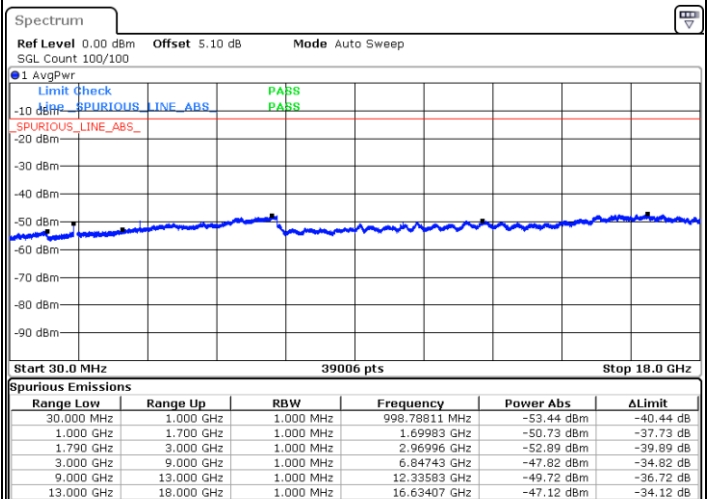
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 23 MAY 2018 15:52:05

Lowest Channel / 16QAM

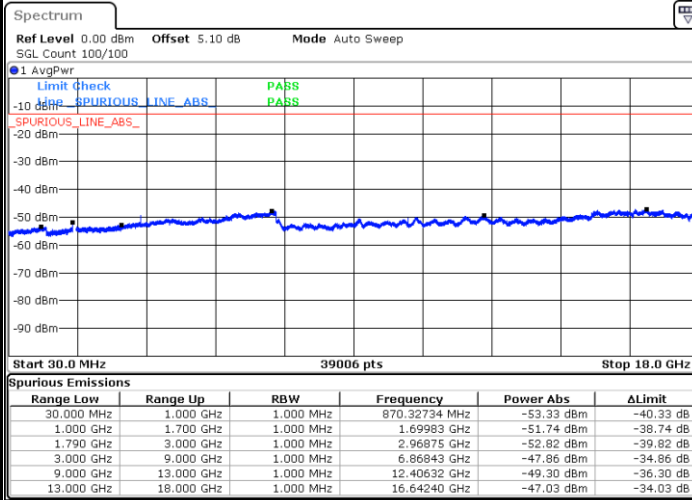


Date: 23 MAY 2018 15:51:28



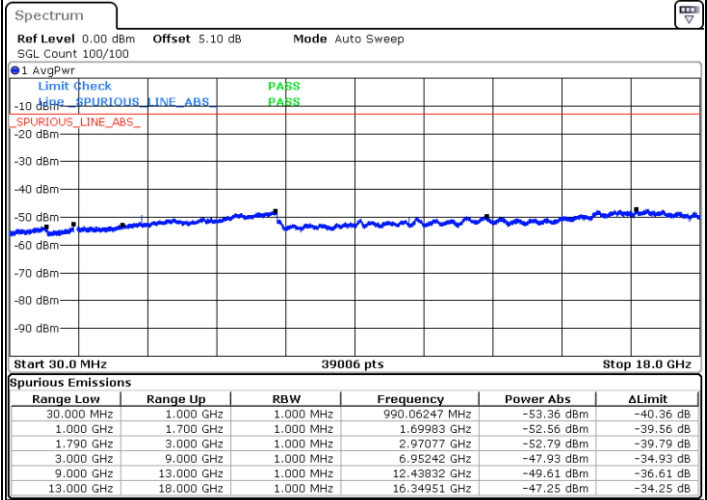
LTE Band 66 / 20MHz

Middle Channel / QPSK



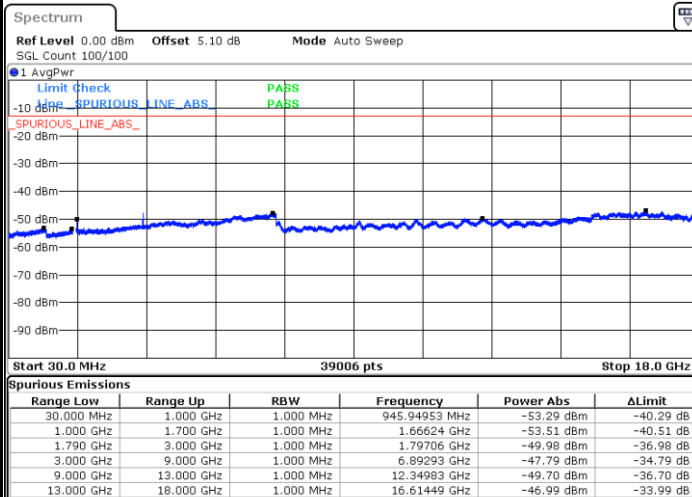
Date: 23 MAY 2018 15:46:24

Middle Channel / 16QAM



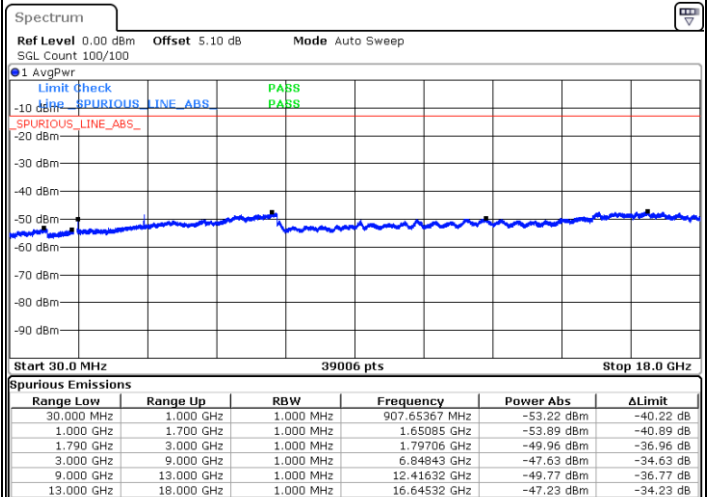
Date: 23 MAY 2018 15:47:15

Highest Channel / QPSK



Date: 23 MAY 2018 15:44:54

Highest Channel / 16QAM



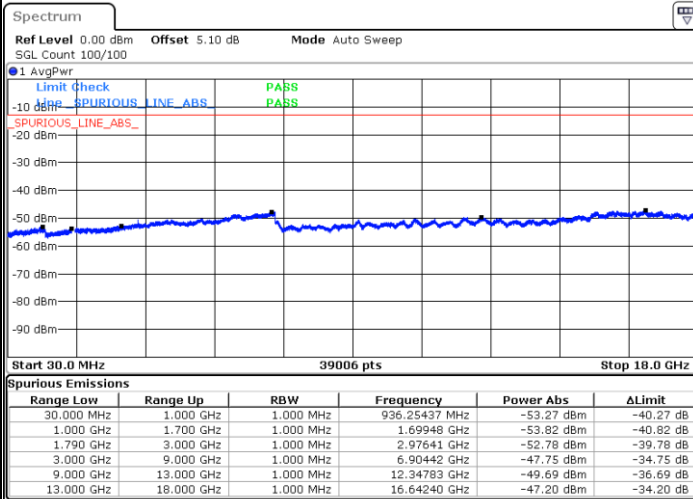
Date: 23 MAY 2018 15:29:28



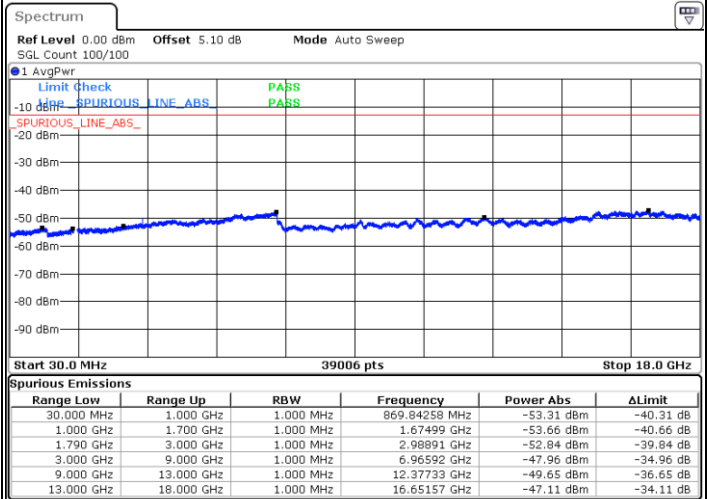
LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

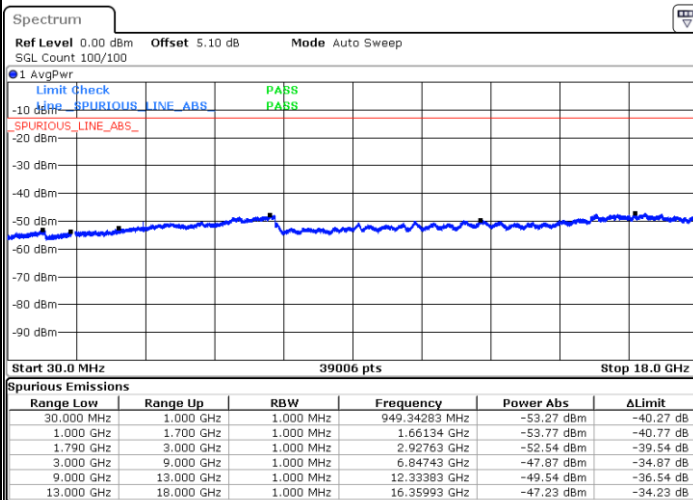


Date: 23 MAY 2018 11:47:33



Date: 23 MAY 2018 11:46:38

Highest Channel / 64QAM



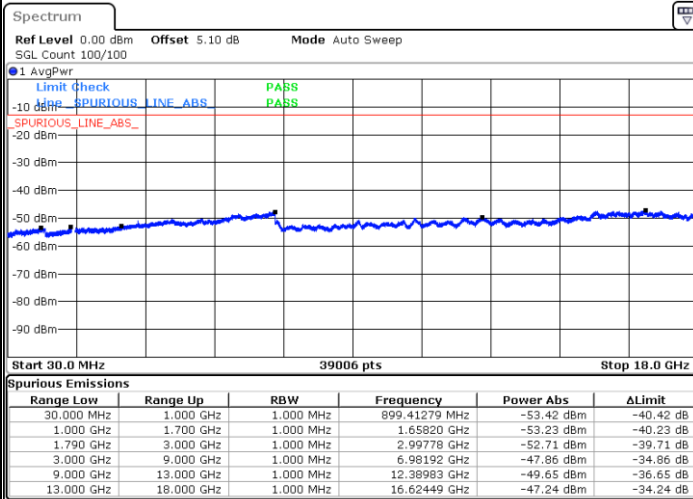
Date: 23 MAY 2018 11:42:03



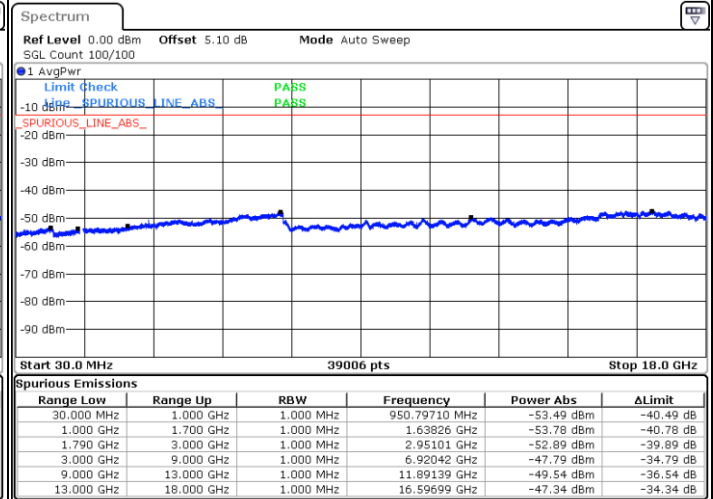
LTE Band 66 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

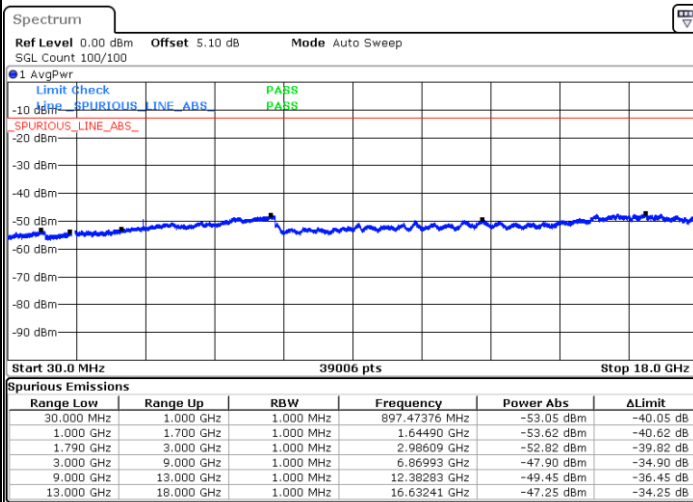


Date: 23 MAY 2018 13:59:50



Date: 23 MAY 2018 13:58:59

Highest Channel / 64QAM

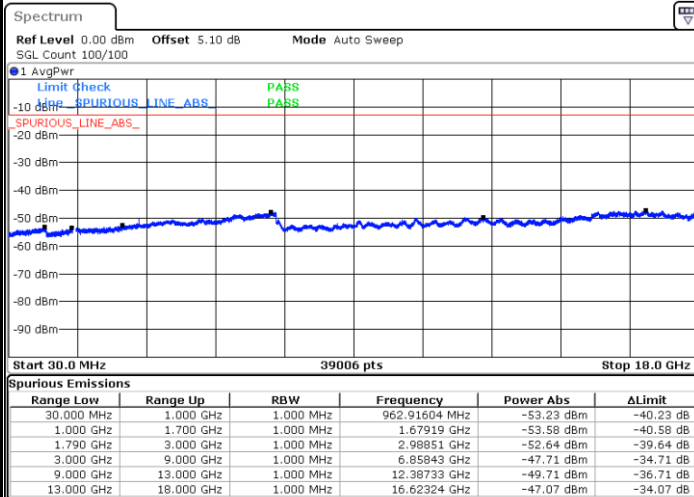


Date: 23 MAY 2018 13:53:02



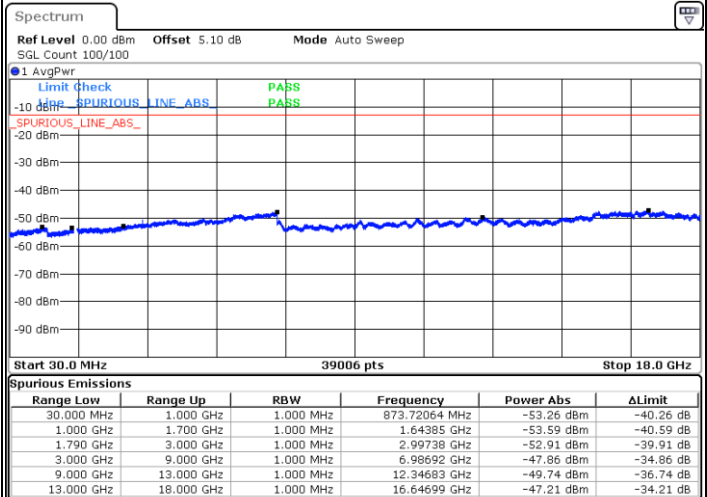
LTE Band 66 / 5MHz

Lowest Channel / 64QAM



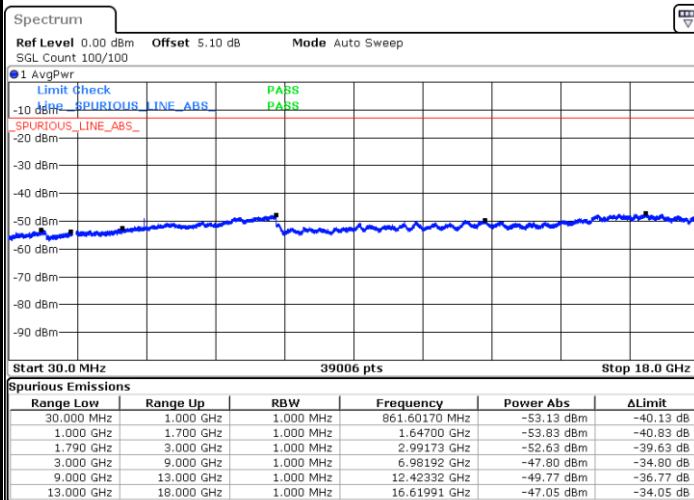
Date: 23 MAY 2018 14:27:33

Middle Channel / 64QAM



Date: 23 MAY 2018 14:25:46

Highest Channel / 64QAM



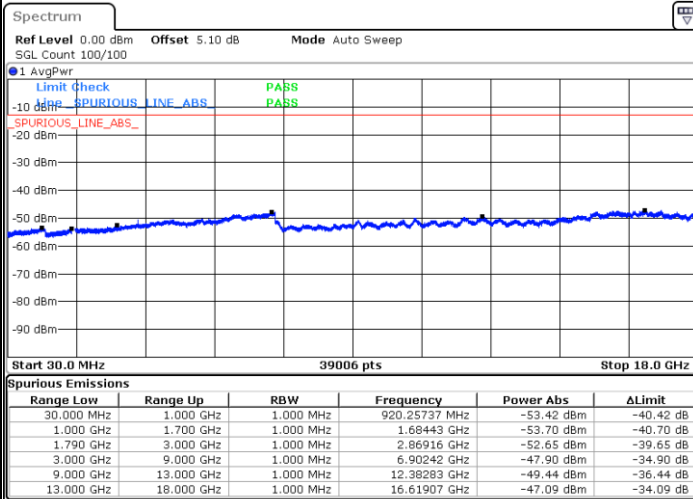
Date: 23 MAY 2018 14:21:42



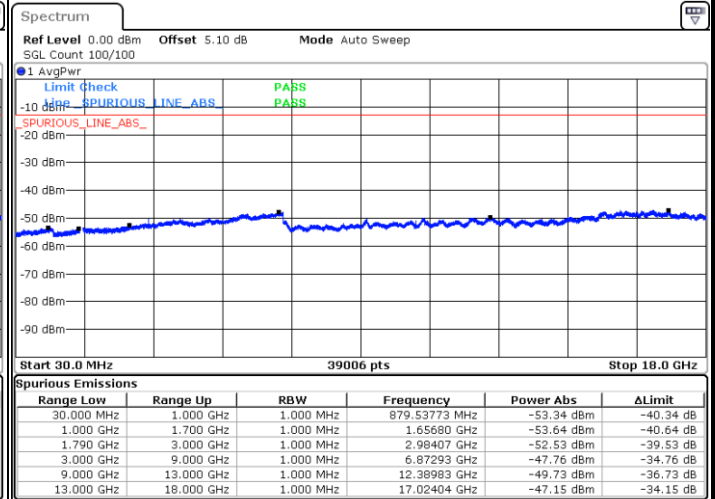
LTE Band 66 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

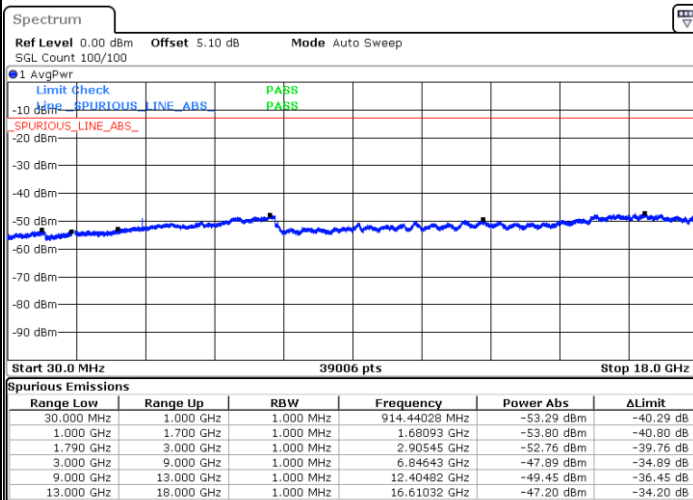


Date: 23 MAY 2018 15:00:49



Date: 23 MAY 2018 14:59:52

Highest Channel / 64QAM



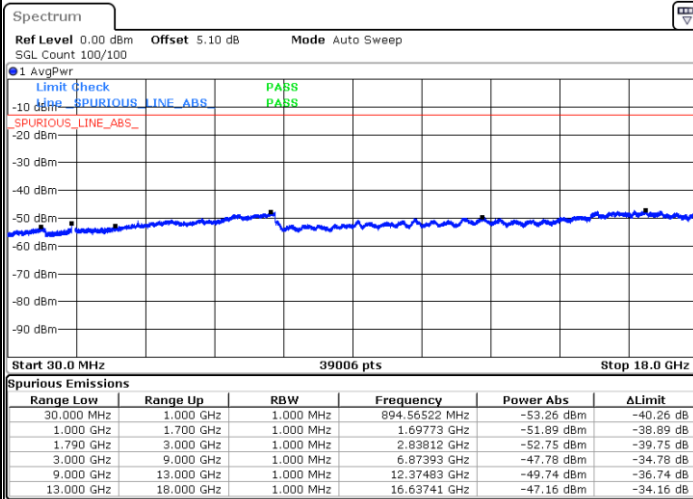
Date: 23 MAY 2018 14:50:48



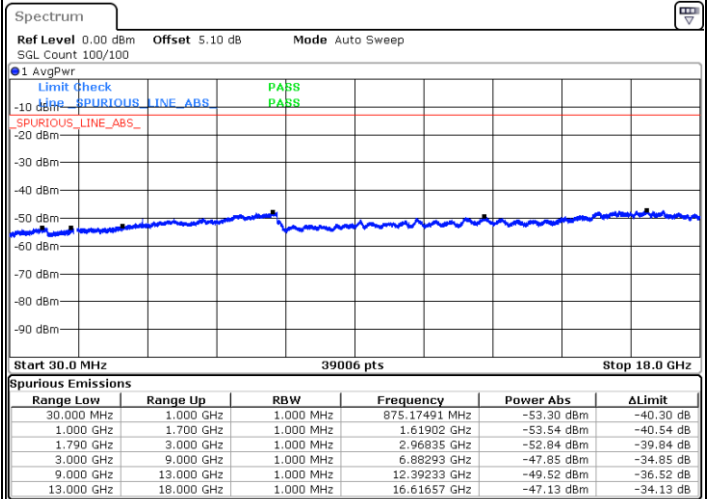
LTE Band 66 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

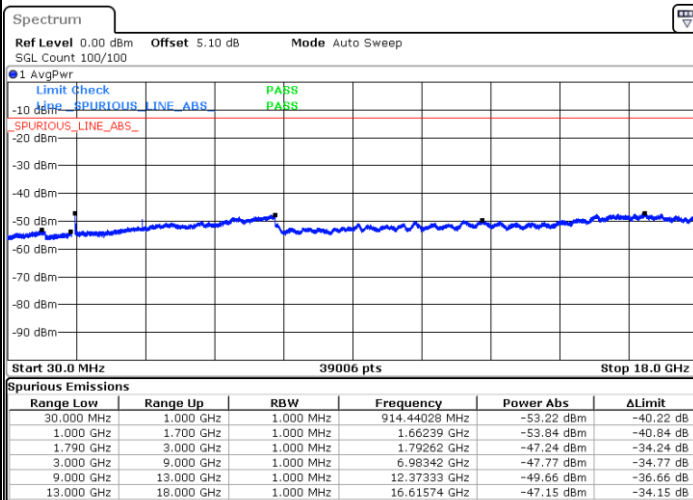


Date: 23 MAY 2018 15:17:16



Date: 23 MAY 2018 15:16:13

Highest Channel / 64QAM



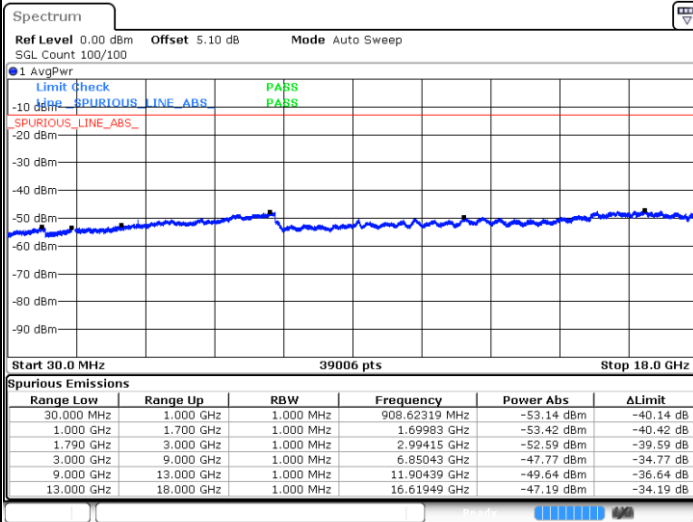
Date: 23 MAY 2018 15:12:39



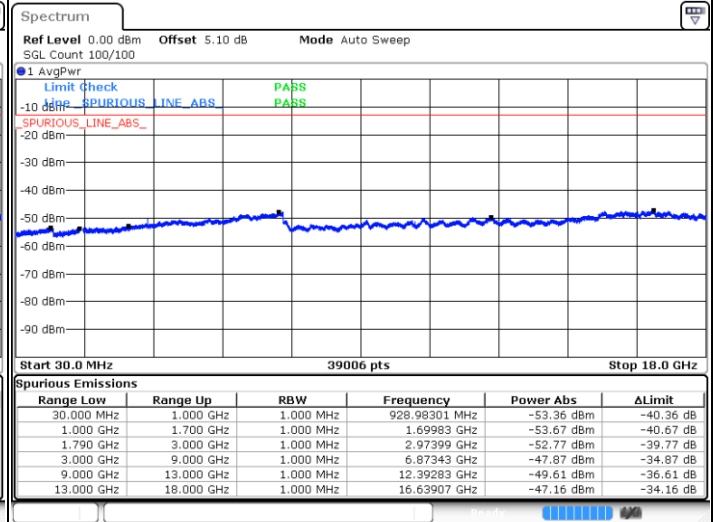
LTE Band 66 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

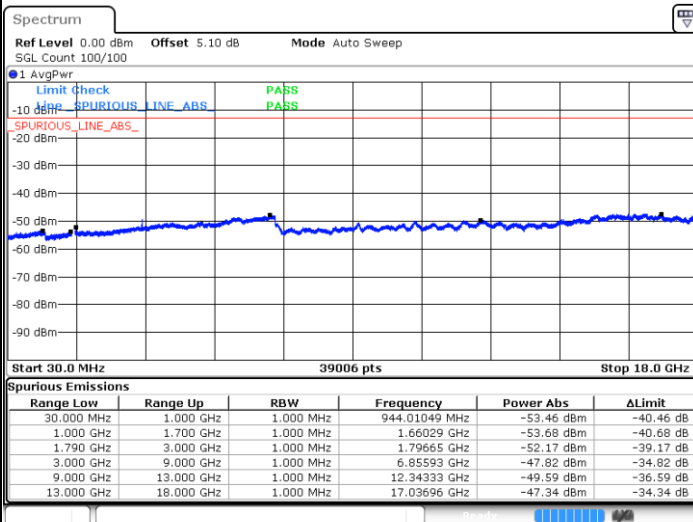


Date: 23 MAY 2018 15:49:47



Date: 23 MAY 2018 15:48:14

Highest Channel / 64QAM



Date: 23 MAY 2018 15:28:52

**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	0.0006	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 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	0.0051	PASS
40	Normal Voltage	0.0066	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0063	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0055	
20	Battery End Point	0.0010	

Note: Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 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	0.0042	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0063	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0049	
0	Normal Voltage	0.0069	
-10	Normal Voltage	0.0047	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0072	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0045	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
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	0.0007	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0067	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0082	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0060	
-30	Normal Voltage	0.0073	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0055	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-39.11	-13	-26.11	-59.43	-45.68	1.67	8.24	H
	5556	-35.13	-13	-22.13	-60.03	-42.2	2.66	9.72	H
	7404	-42.82	-13	-29.82	-69.53	-51.97	2.46	11.61	H
	3702	-39.75	-13	-26.75	-60.06	-46.32	1.67	8.24	V
	5556	-35.63	-13	-22.63	-60.5	-42.7	2.66	9.72	V
	7404	-44.30	-13	-31.30	-71.22	-53.45	2.46	11.61	V
Middle	3744	-35.83	-13	-22.83	-56.14	-42.44	1.68	8.29	H
	5616	-34.88	-13	-21.88	-59.93	-41.93	2.69	9.75	H
	7482	-46.40	-13	-33.40	-73.14	-55.73	2.44	11.76	H
	3744	-43.67	-13	-30.67	-63.99	-50.28	1.68	8.29	V
	5616	-35.27	-13	-22.27	-60.31	-42.32	2.69	9.75	V
	7482	-43.82	-13	-30.82	-70.79	-53.15	2.44	11.76	V
Highest	3780	-38.52	-13	-25.52	-58.8	-45.16	1.69	8.34	H
	5676	-35.97	-13	-22.97	-61.14	-43.01	2.73	9.77	H
	7566	-44.47	-13	-31.47	-71.4	-53.9	2.41	11.84	H
	3780	-38.46	-13	-25.46	-58.78	-45.1	1.69	8.34	V
	5676	-34.22	-13	-21.22	-59.38	-41.26	2.73	9.77	V
	7566	-43.65	-13	-30.65	-70.84	-53.08	2.41	11.84	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-36.74	-13	-23.74	-56.73	-42.81	1.58	7.65	H
	5136	-32.45	-13	-19.45	-56.27	-39.73	2.42	9.70	H
	6846	-38.58	-13	-25.58	-64.99	-46.56	2.64	10.62	H
	8556	-44.97	-13	-31.97	-73.47	-55.11	2.39	12.52	H
	3420	-32.60	-13	-19.60	-52.64	-38.67	1.58	7.65	V
	5136	-37.65	-13	-24.65	-61.31	-44.93	2.42	9.70	V
	6846	-38.13	-13	-25.13	-64.49	-46.11	2.64	10.62	V
	8556	-45.39	-13	-32.39	-74.23	-55.53	2.39	12.52	V
Middle	3450	-30.46	-13	-17.46	-50.62	-36.65	1.59	7.78	H
	5172	-34.65	-13	-21.65	-58.56	-41.91	2.44	9.70	H
	6894	-36.14	-13	-23.14	-62.57	-44.19	2.62	10.67	H
	8616	-45.66	-13	-32.66	-74.27	-55.81	2.40	12.55	H
	3444	-29.29	-13	-16.29	-49.42	-35.46	1.59	7.75	V
	5172	-34.58	-13	-21.58	-58.34	-41.84	2.44	9.70	V
	6894	-35.83	-13	-22.83	-62.25	-43.88	2.62	10.67	V
	8616	-46.09	-13	-33.09	-75.05	-56.24	2.40	12.55	V
Highest	3474	-36.13	-13	-23.13	-56.47	-42.42	1.60	7.89	H
	5208	-30.28	-13	-17.28	-54.32	-37.52	2.46	9.70	H
	6942	-41.72	-13	-28.72	-68.19	-49.84	2.61	10.73	H
	8682	-44.91	-13	-31.91	-73.62	-55.07	2.41	12.57	H
	3474	-31.27	-13	-18.27	-51.5	-37.56	1.60	7.89	V
	5208	-37.82	-13	-24.82	-61.73	-45.06	2.46	9.70	V
	6942	-42.17	-13	-29.17	-68.66	-50.29	2.61	10.73	V
	8682	-46.58	-13	-33.58	-75.66	-56.74	2.41	12.57	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-40.36	-13	-27.36	-52.58	-42.09	0.98	4.86	H
	2487	-59.26	-13	-46.26	-76.48	-61.18	1.29	5.36	H
	3316	-57.88	-13	-44.88	-77.28	-61.37	1.55	7.19	H
	1656	-35.66	-13	-22.66	-48.37	-37.39	0.98	4.86	V
	2487	-58.52	-13	-45.52	-76.21	-60.44	1.29	5.36	V
	3316	-57.56	-13	-44.56	-77.24	-61.05	1.55	7.19	V
Middle	1672	-44.18	-13	-31.18	-56.47	-45.86	0.99	4.82	H
	2512	-58.77	-13	-45.77	-76.16	-60.74	1.29	5.41	H
	3345	-58.48	-13	-45.48	-78.07	-62.09	1.56	7.32	H
	1672	-40.68	-13	-27.68	-53.54	-42.36	0.99	4.82	V
	2512	-57.87	-13	-44.87	-75.69	-59.84	1.29	5.41	V
	3345	-58.36	-13	-45.36	-78.14	-61.97	1.56	7.32	V
Highest	1688	-46.59	-13	-33.59	-58.93	-48.22	1.00	4.77	H
	2532	-59.67	-13	-46.67	-77.06	-61.64	1.30	5.43	H
	3376	-58.39	-13	-45.39	-78.14	-62.13	1.57	7.45	H
	1688	-43.88	-13	-30.88	-56.73	-45.51	1.00	4.77	V
	2532	-59.11	-13	-46.11	-76.98	-61.08	1.30	5.43	V
	3376	-58.13	-13	-45.13	-77.99	-61.87	1.57	7.45	V

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



LTE Band 7 / 20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5004	-33.39	-25	-8.39	-56.93	-40.75	2.34	9.70	H
	7506	-40.64	-25	-15.64	-60.73	-50.02	2.43	11.80	H
	10008	-34.27	-25	-9.27	-65.65	-43.78	2.70	12.20	H
	5004	-36.12	-25	-11.12	-59.45	-43.48	2.34	9.70	V
	7506	-34.59	-25	-9.59	-61.6	-43.97	2.43	11.80	V
	10008	-34.37	-25	-9.37	-65.62	-43.88	2.70	12.20	V
Middle	5052	-31.06	-25	-6.06	-54.64	-38.39	2.37	9.70	H
	7578	-32.12	-25	-7.12	-59.12	-41.56	2.40	11.85	H
	10098	-34.29	-25	-9.29	-65.88	-43.83	2.70	12.24	H
	5052	-35.73	-25	-10.73	-59.12	-43.06	2.37	9.70	V
	7578	-33.77	-25	-8.77	-60.93	-43.21	2.40	11.85	V
	10098	-38.34	-25	-13.34	-69.79	-47.88	2.70	12.24	V
Highest	5100	-32.15	-25	-7.15	-55.78	-39.46	2.39	9.70	H
	7656	-33.35	-25	-8.35	-60.55	-42.86	2.38	11.89	H
	10206	-38.92	-25	-13.92	-70.86	-48.51	2.70	12.28	H
	5100	-34.04	-25	-9.04	-57.67	-41.35	2.39	9.70	V
	7656	-34.07	-25	-9.07	-61.51	-43.58	2.38	11.89	V
	10206	-40.19	-25	-15.19	-71.86	-49.78	2.70	12.28	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1552	-64.16	-13	-51.16	-75.34	-66.23	0.94	5.15	H
	2328	-60.19	-13	-47.19	-76.69	-61.69	1.24	4.88	H
	3108	-59.33	-13	-46.33	-77.70	-61.97	1.48	6.28	H
	1552	-60.31	-13	-47.31	-72.04	-62.38	0.94	5.15	V
	2328	-60.24	-13	-47.24	-77.09	-61.74	1.24	4.88	V
	3108	-58.61	-13	-45.61	-77.69	-61.25	1.48	6.28	V
Middle	1560	-63.53	-42.15	-21.38	-74.90	-65.57	0.94	5.13	H
	2336	-60.41	-13	-47.41	-77.05	-61.93	1.24	4.91	H
	3120	-59.18	-13	-46.18	-77.55	-61.87	1.49	6.33	H
	1560	-60.98	-42.15	-18.83	-72.83	-63.02	0.94	5.13	V
	2336	-59.86	-13	-46.86	-76.94	-61.38	1.24	4.91	V
	3120	-58.58	-13	-45.58	-77.75	-61.27	1.49	6.33	V
Highest	1568	-63.36	-42.15	-21.21	-74.68	-65.38	0.94	5.11	H
	2344	-60.33	-13	-47.33	-76.98	-61.87	1.24	4.93	H
	3136	-59.43	-13	-46.43	-77.95	-62.19	1.49	6.40	H
	1568	-60.27	-42.15	-18.12	-72.15	-62.29	0.94	5.11	V
	2344	-59.58	-13	-46.58	-76.61	-61.12	1.24	4.93	V
	3136	-58.51	-13	-45.51	-77.69	-61.27	1.49	6.40	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-54.56	-13	-41.56	-74.55	-60.63	1.58	7.65	H
	5130	-43.85	-13	-30.85	-67.67	-51.14	2.41	9.70	H
	6840	-52.42	-13	-39.42	-78.83	-60.39	2.64	10.61	H
	3420	-50.29	-13	-37.29	-70.33	-56.36	1.58	7.65	V
	5130	-48.49	-13	-35.49	-72.15	-55.78	2.41	9.70	V
	6840	-52.54	-13	-39.54	-78.9	-60.51	2.64	10.61	V
Middle	3474	-49.66	-13	-36.66	-70	-55.95	1.60	7.89	H
	5208	-49.77	-13	-36.77	-73.81	-57.01	2.46	9.70	H
	6948	-52.24	-13	-39.24	-78.71	-60.37	2.61	10.74	H
	3474	-49.28	-13	-36.28	-69.51	-55.57	1.60	7.89	V
	5208	-47.16	-13	-34.16	-71.07	-54.4	2.46	9.70	V
	6948	-51.82	-13	-38.82	-78.31	-59.95	2.61	10.74	V
Highest	3522	-52.92	-13	-39.92	-73.34	-59.34	1.61	8.03	H
	5286	-43.41	-13	-30.41	-67.62	-50.61	2.50	9.70	H
	7040	-51.72	-13	-38.72	-78.23	-60.02	2.58	10.88	H
	3522	-50.17	-13	-37.17	-70.45	-56.59	1.61	8.03	V
	5286	-48.48	-13	-35.48	-72.59	-55.68	2.50	9.70	V
	7038	-51.32	-13	-38.32	-77.9	-59.62	2.58	10.88	V

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