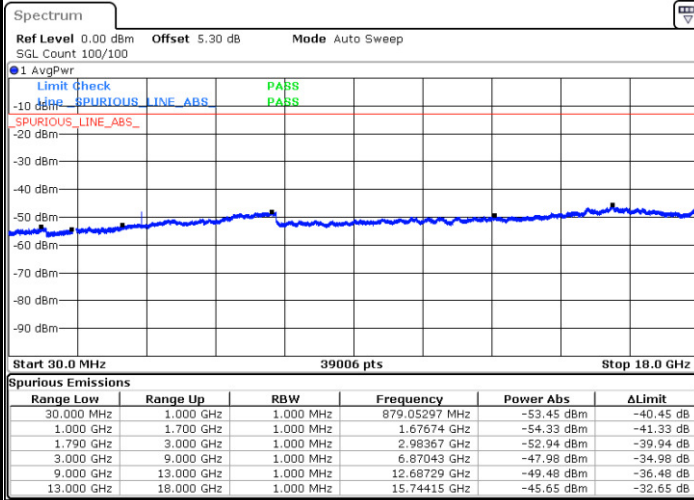




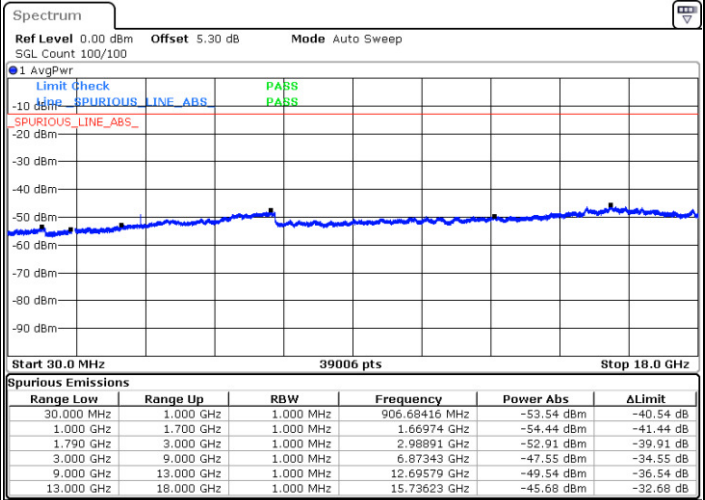
LTE Band 66 / 10MHz

Middle Channel / QPSK



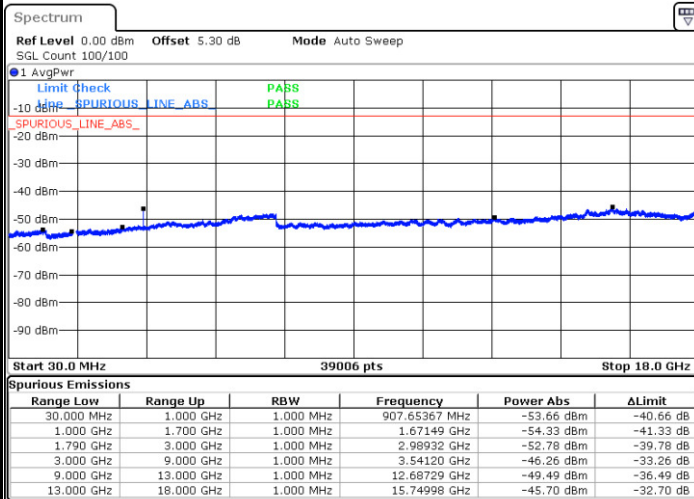
Date: 6 JUL 2017 22:27:58

Middle Channel / 16QAM



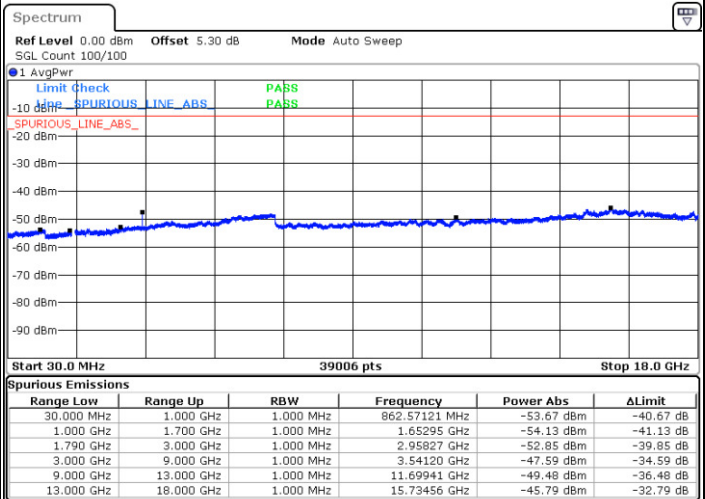
Date: 6 JUL 2017 22:28:46

Highest Channel / QPSK



Date: 6 JUL 2017 22:35:35

Highest Channel / 16QAM

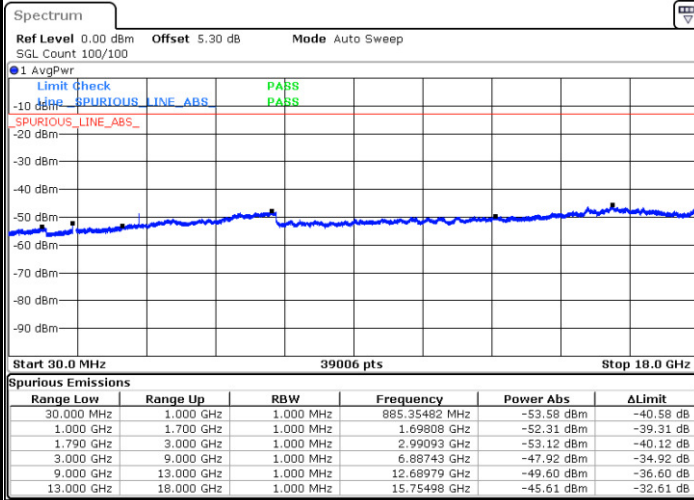


Date: 6 JUL 2017 22:34:58



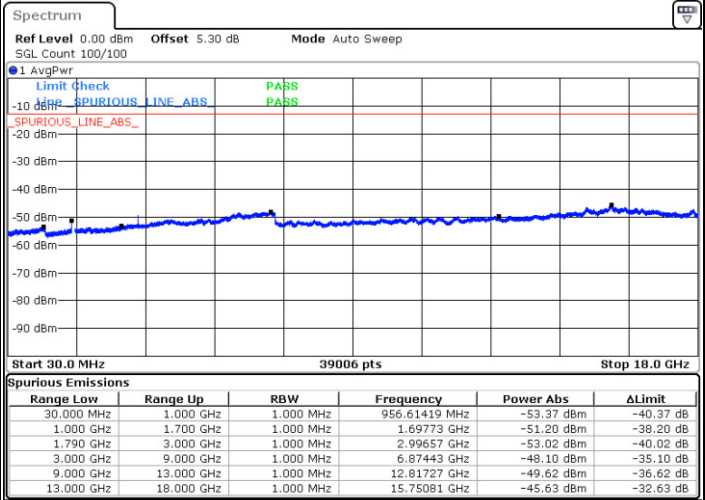
LTE Band 66 / 15MHz

Lowest Channel / QPSK



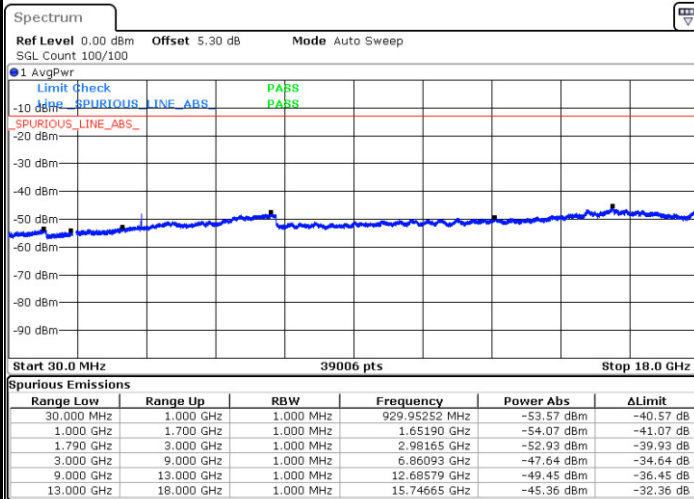
Date: 6 JUL 2017 22:40:20

Lowest Channel / 16QAM



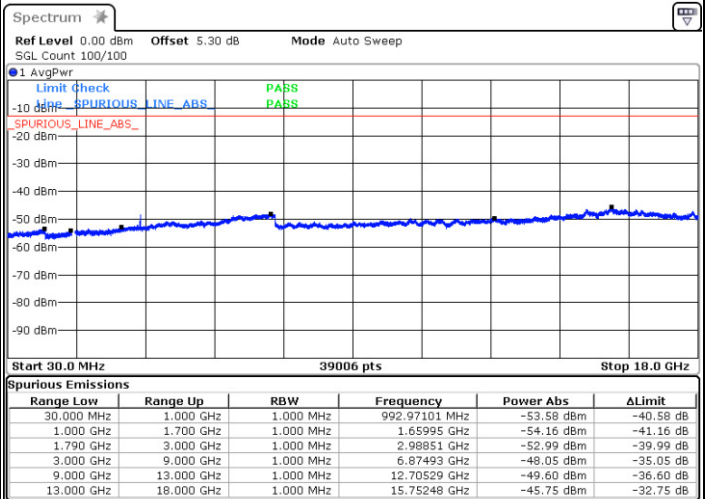
Date: 6 JUL 2017 22:39:42

Middle Channel / QPSK



Date: 6 JUL 2017 22:41:14

Middle Channel / 16QAM

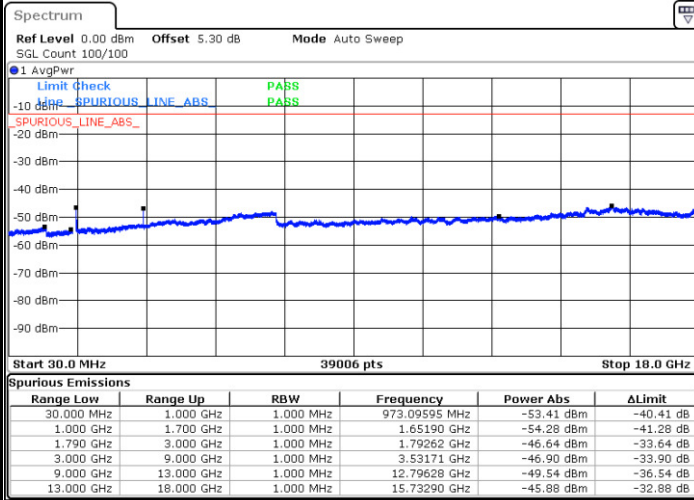


Date: 6 JUL 2017 22:42:30



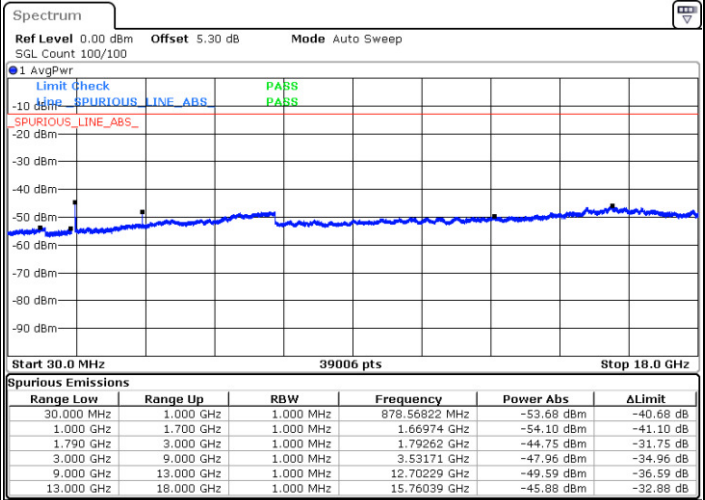
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 6 JUL 2017 22:49:48

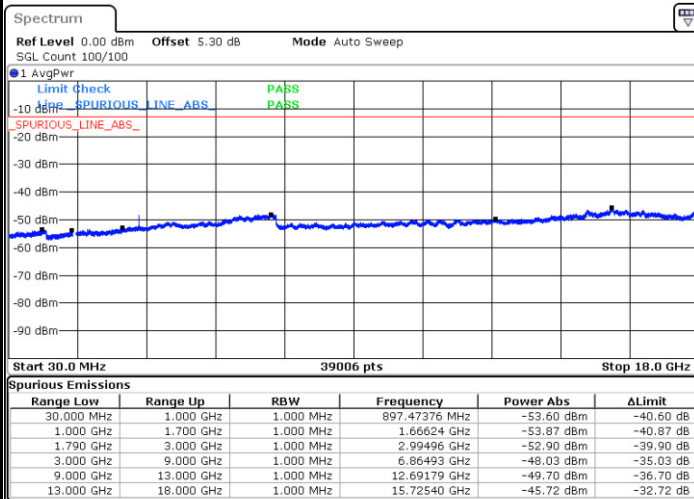
Highest Channel / 16QAM



Date: 6 JUL 2017 22:48:47

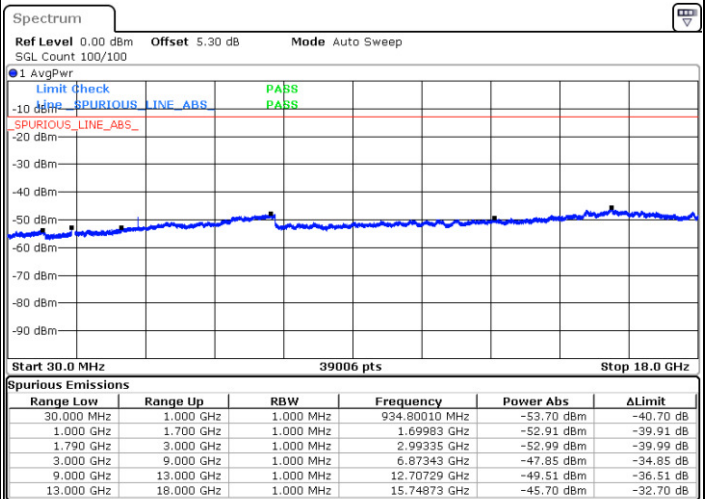
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 6 JUL 2017 22:55:18

Lowest Channel / 16QAM

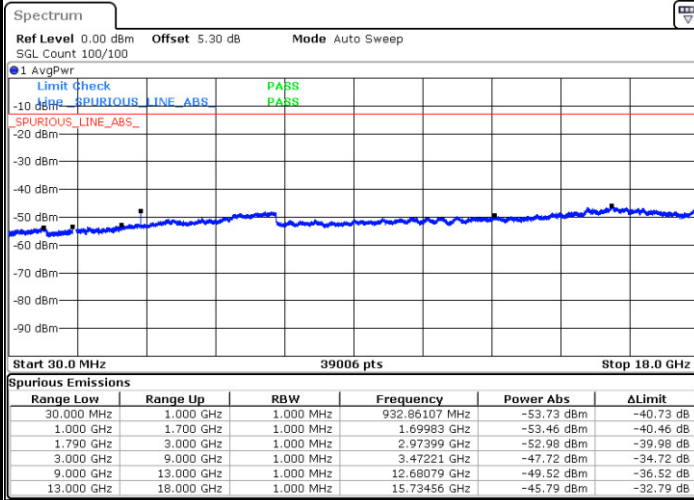


Date: 6 JUL 2017 22:53:56



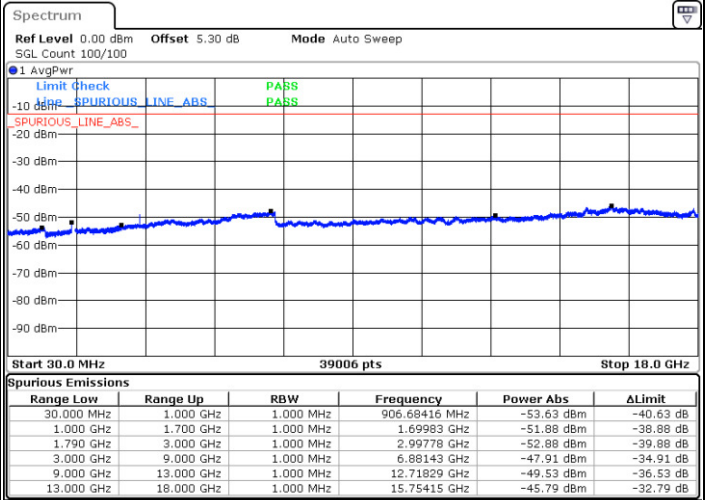
LTE Band 66 / 20MHz

Middle Channel / QPSK



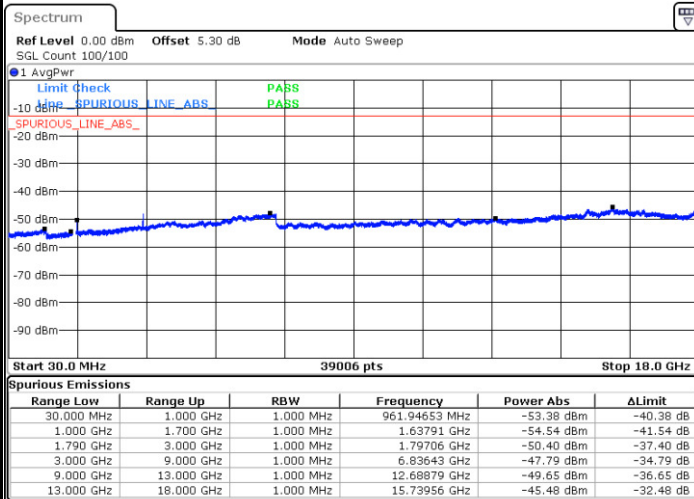
Date: 6 JUL 2017 22:56:23

Middle Channel / 16QAM



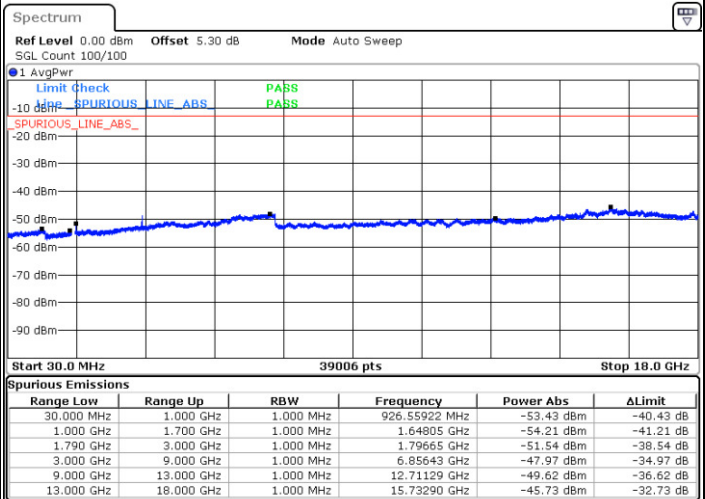
Date: 6 JUL 2017 22:57:33

Highest Channel / QPSK



Date: 6 JUL 2017 23:04:40

Highest Channel / 16QAM

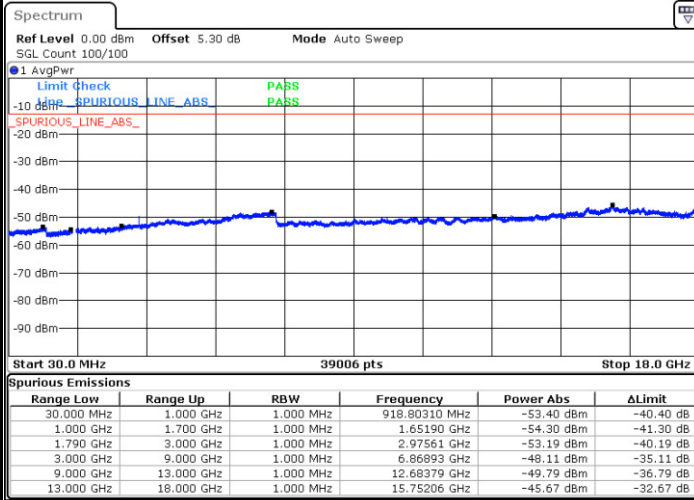


Date: 6 JUL 2017 23:02:49



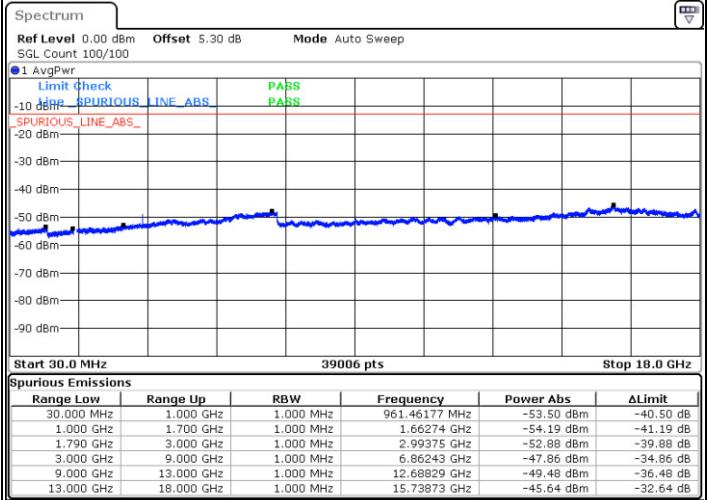
LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM



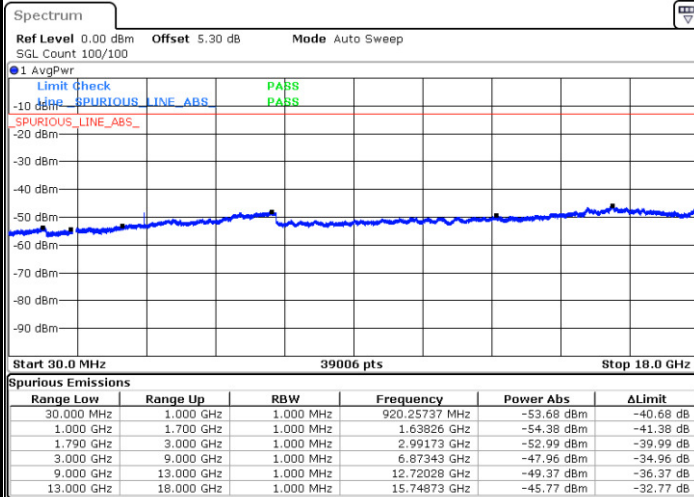
Date: 6 JUL 2017 21:21:12

Middle Channel / 64QAM



Date: 6 JUL 2017 21:26:13

Highest Channel / 64QAM

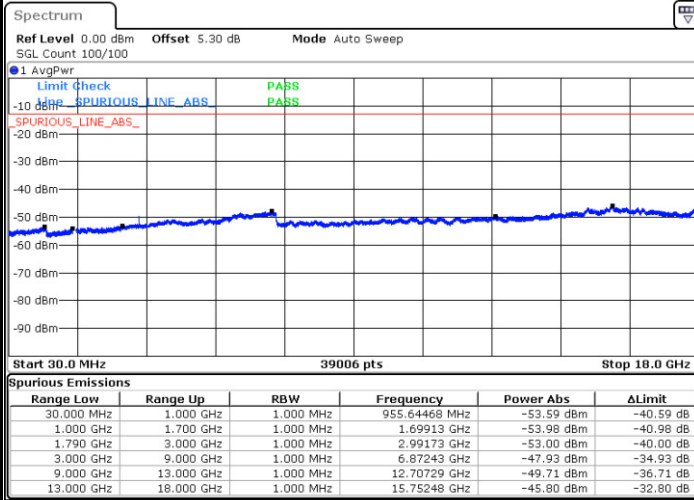


Date: 6 JUL 2017 21:31:09



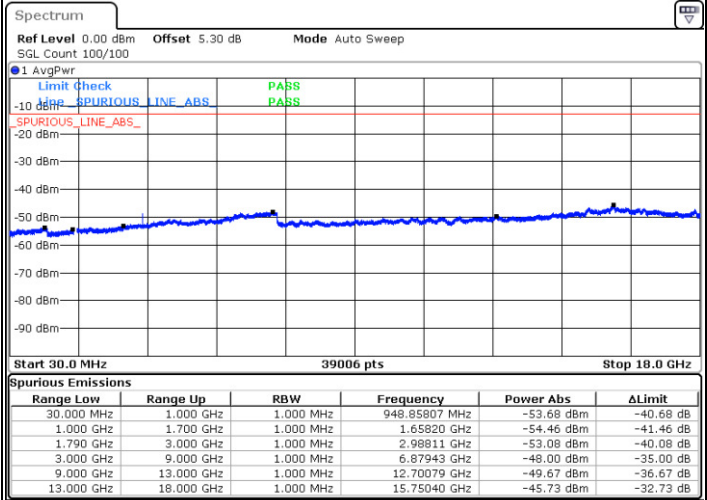
LTE Band 66 / 3MHz

Lowest Channel / 64QAM



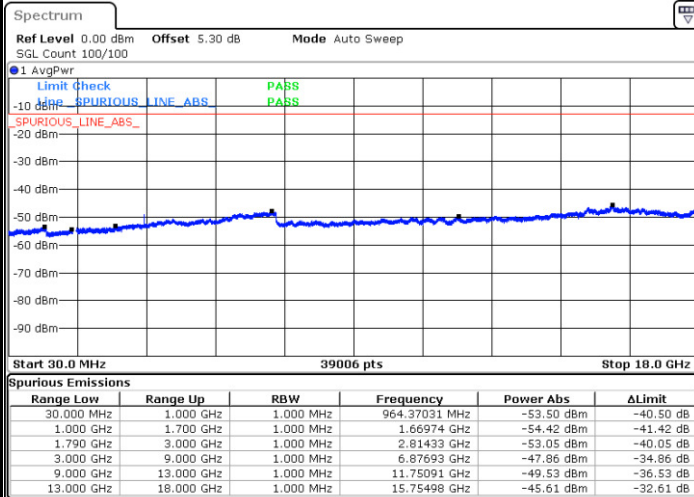
Date: 6 JUL 2017 21:37:55

Middle Channel / 64QAM



Date: 6 JUL 2017 21:45:08

Highest Channel / 64QAM

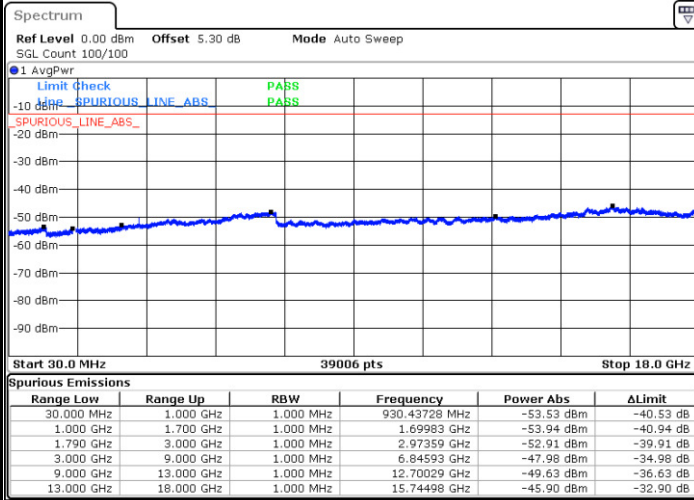


Date: 6 JUL 2017 21:46:30



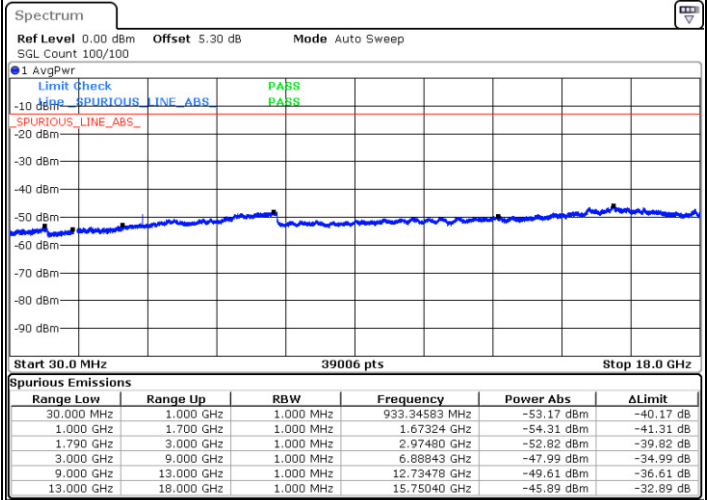
LTE Band 66 / 5MHz

Lowest Channel / 64QAM



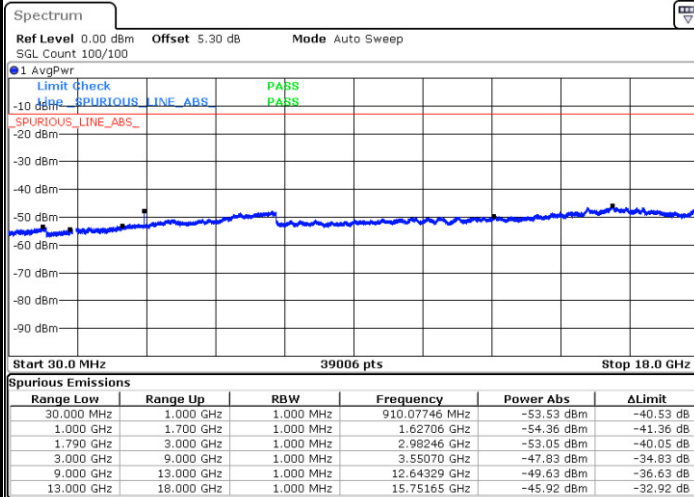
Date: 6 JUL 2017 21:56:08

Middle Channel / 64QAM



Date: 6 JUL 2017 22:16:08

Highest Channel / 64QAM

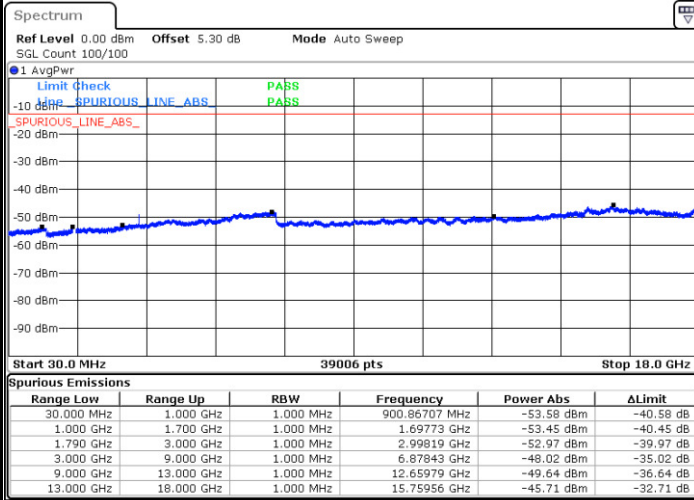


Date: 6 JUL 2017 22:20:40



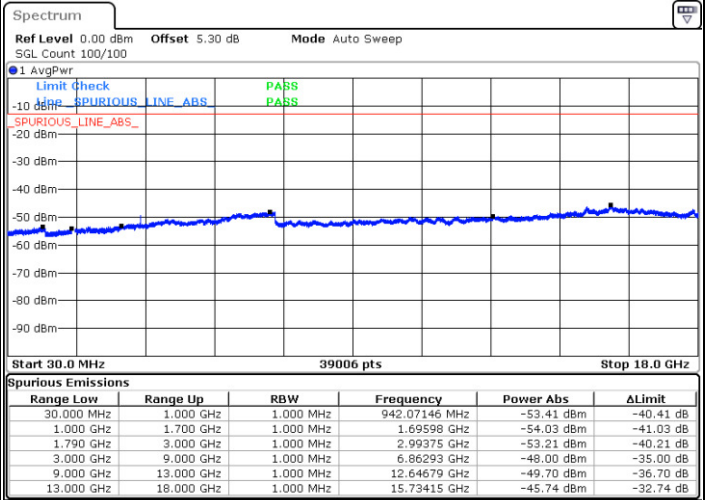
LTE Band 66 / 10MHz

Lowest Channel / 64QAM



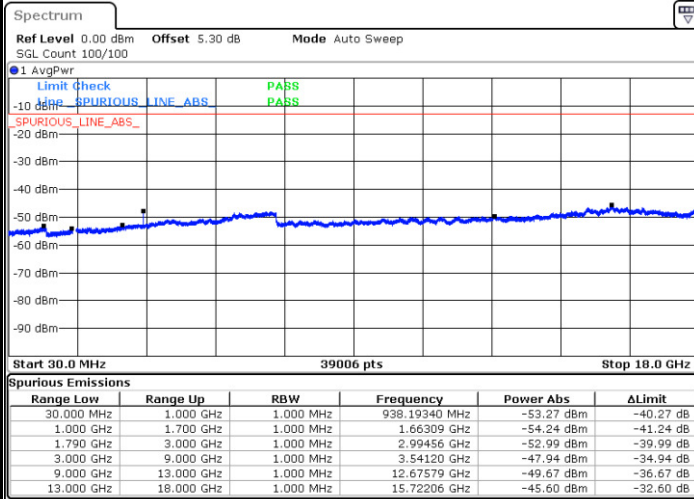
Date: 6 JUL 2017 22:25:39

Middle Channel / 64QAM



Date: 6 JUL 2017 22:29:51

Highest Channel / 64QAM

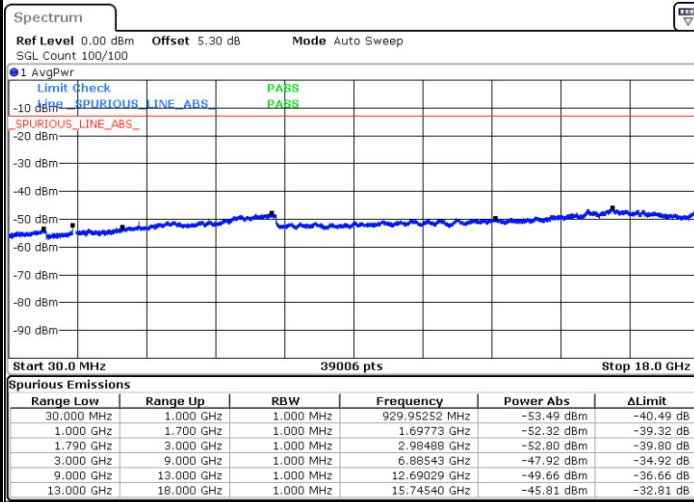


Date: 6 JUL 2017 22:34:17



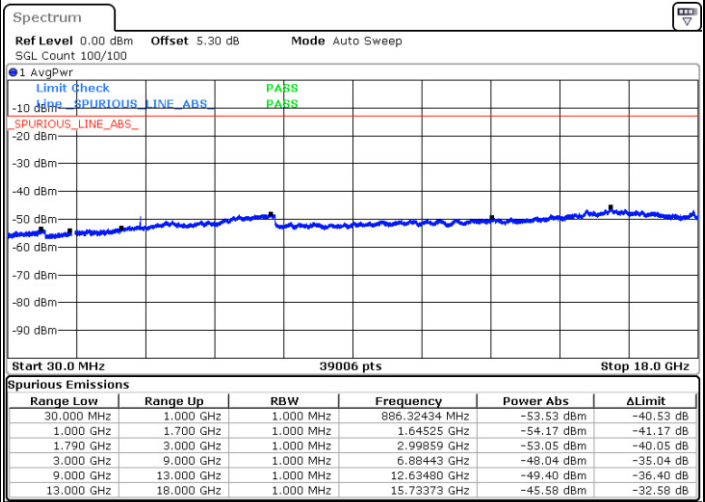
LTE Band 66 / 15MHz

Lowest Channel / 64QAM



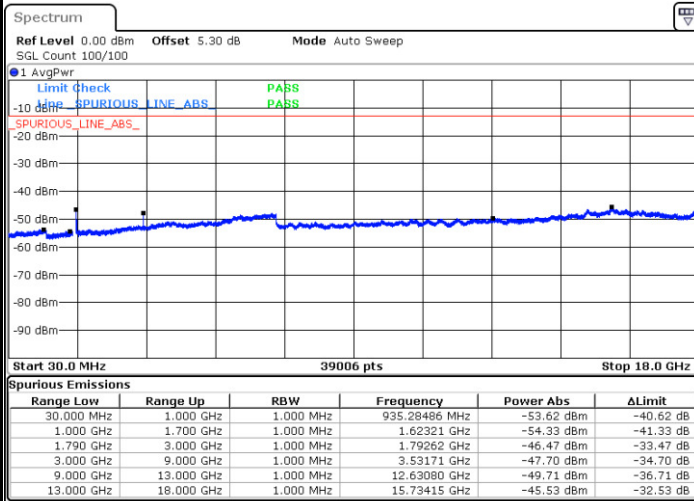
Date: 6 JUL 2017 22:39:02

Middle Channel / 64QAM



Date: 6 JUL 2017 22:43:14

Highest Channel / 64QAM

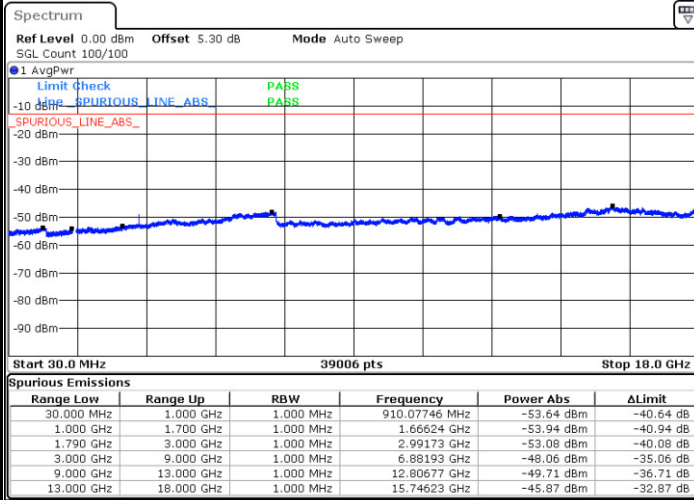


Date: 6 JUL 2017 22:48:07



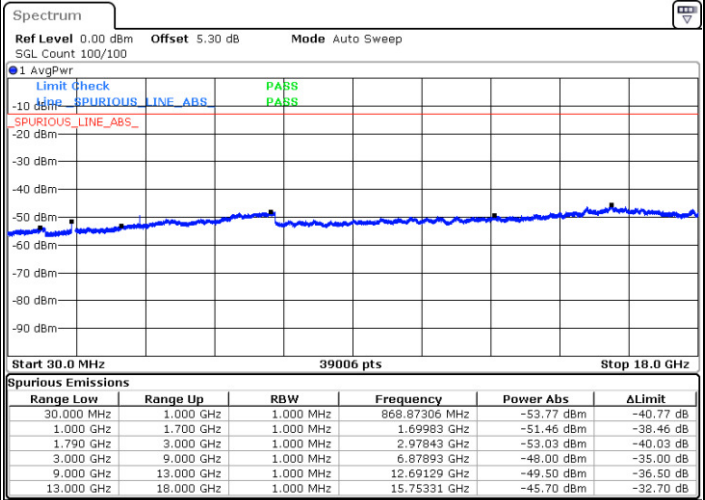
LTE Band 66 / 20MHz

Lowest Channel / 64QAM



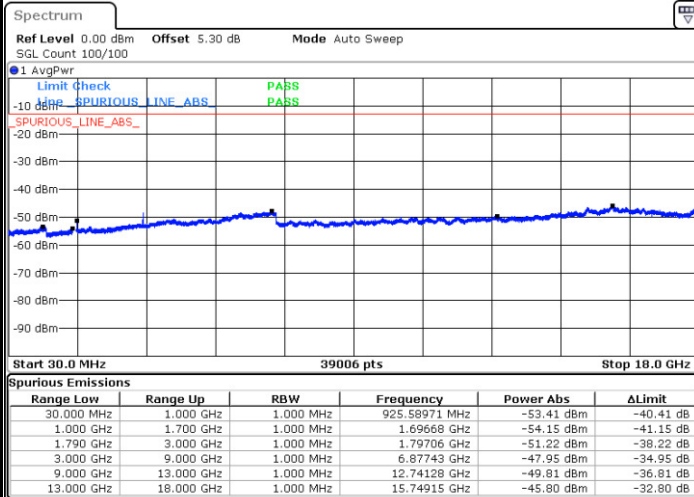
Date: 6 JUL 2017 22:53:12

Middle Channel / 64QAM



Date: 6 JUL 2017 22:58:23

Highest Channel / 64QAM



Date: 6 JUL 2017 23:02:07

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	0.0012	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0018	

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 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0036	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0026	
20	Battery End Point	0.0025	

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 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0045	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0043	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0041	
20	Battery End Point	0.0011	

Note: Normal Voltage =3.82 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0010	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0050	
0	Normal Voltage	0.0043	
-10	Normal Voltage	0.0065	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0041	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0045	
20	Battery End Point	0.0029	

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 2 / 1.4MHz / 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	3759	-53.36	-13	-40.36	-67.60	-55.07	5.08	6.80	H
	5637	-58.95	-13	-45.95	-75.75	-60.62	8.03	9.70	H
	7518	-54.84	-13	-41.84	-76.14	-57.22	9.43	11.81	H
	3759	-53.61	-13	-40.61	-66.04	-55.32	5.08	6.80	V
	5637	-58.74	-13	-45.74	-75.83	-60.41	8.03	9.70	V
	7518	-55.39	-13	-42.39	-76.53	-57.77	9.43	11.81	V

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

LTE Band 2 / 3MHz / 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	3756	-54.08	-13	-41.08	-68.32	-55.79	5.08	6.80	H
	5637	-59.37	-13	-46.37	-76.17	-61.04	8.03	9.70	H
	7515	-55.42	-13	-42.42	-76.72	-57.80	9.43	11.81	H
	3756	-53.36	-13	-40.36	-65.79	-55.07	5.08	6.80	V
	5637	-58.94	-13	-45.94	-76.03	-60.61	8.03	9.70	V
	7515	-55.62	-13	-42.62	-76.76	-58.00	9.43	11.81	V

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

LTE Band 2 / 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	3756	-54.98	-13	-41.98	-69.22	-56.69	5.08	6.80	H
	5634	-58.21	-13	-45.21	-75.01	-59.88	8.03	9.70	H
	7512	-54.98	-13	-41.98	-76.28	-57.36	9.43	11.81	H
	3756	-54.39	-13	-41.39	-66.82	-56.10	5.08	6.80	V
	5634	-58.72	-13	-45.72	-75.81	-60.39	8.03	9.70	V
	7512	-54.86	-13	-41.86	-76	-57.24	9.43	11.81	V

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



LTE Band 2 / 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	3750	-54.46	-13	-41.46	-68.70	-56.17	5.08	6.80	H
	5628	-51.60	-13	-38.60	-68.40	-53.27	8.03	9.70	H
	7503	-54.40	-13	-41.40	-75.70	-56.78	9.43	11.81	H
	3750	-53.44	-13	-40.44	-65.87	-55.15	5.08	6.80	V
	5625	-50.29	-13	-37.29	-67.38	-51.96	8.03	9.70	V
	7503	-55.59	-13	-42.59	-76.73	-57.97	9.43	11.81	V

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

LTE Band 2 / 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	3747	-53.06	-13	-40.06	-67.30	-54.77	5.08	6.80	H
	5619	-58.81	-13	-45.81	-75.61	-60.48	8.03	9.70	H
	7494	-56.30	-13	-43.30	-77.60	-58.68	9.43	11.81	H
	3747	-53.04	-13	-40.04	-65.47	-54.75	5.08	6.80	V
	5619	-59.42	-13	-46.42	-76.51	-61.09	8.03	9.70	V
	7494	-55.65	-13	-42.65	-76.79	-58.03	9.43	11.81	V

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

LTE Band 2 / 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	3741	-53.96	-13	-40.96	-68.20	-55.67	5.08	6.80	H
	5613	-59.30	-13	-46.30	-76.10	-60.97	8.03	9.70	H
	7485	-55.25	-13	-42.25	-76.55	-57.63	9.43	11.81	H
	3741	-53.10	-13	-40.10	-65.53	-54.81	5.08	6.80	V
	5613	-58.91	-13	-45.91	-76	-60.58	8.03	9.70	V
	7485	-55.63	-13	-42.63	-76.77	-58.01	9.43	11.81	V

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



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	-44.11	-13	-31.11	-50.30	-46.43	1.33	5.80	H
	2508	-44.34	-13	-31.34	-56.03	-47.51	1.58	6.90	H
	3342	-61.11	-13	-48.11	-70.32	-64.61	1.85	7.50	H
	1672	-46.12	-13	-33.12	-52.03	-48.44	1.33	5.80	V
	2508	-49.60	-13	-36.60	-59.27	-52.77	1.58	6.90	V
	3342	-67.99	-13	-54.99	-77.01	-71.49	1.85	7.50	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	-44.43	-13	-31.43	-50.59	-46.75	1.33	5.80	H
	2506	-44.30	-13	-31.30	-56.00	-47.47	1.58	6.90	H
	3342	-68.63	-13	-55.63	-77.84	-72.13	1.85	7.50	H
	1670	-45.30	-13	-32.30	-51.35	-47.62	1.33	5.80	V
	2506	-53.37	-13	-40.37	-61.46	-56.54	1.58	6.90	V
	3342	-68.22	-13	-55.22	-77.24	-71.72	1.85	7.50	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	-44.95	-13	-31.95	-51.05	-47.27	1.33	5.80	H
	2502	-41.41	-13	-28.41	-53.63	-44.58	1.58	6.90	H
	3336	-68.19	-13	-55.19	-77.40	-71.69	1.85	7.50	H
	1668	-45.47	-13	-32.47	-51.49	-47.79	1.33	5.80	V
	2502	-51.94	-13	-38.94	-60.77	-55.11	1.58	6.90	V
	3336	-68.20	-13	-55.20	-77.22	-71.70	1.85	7.50	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	-45.15	-13	-32.15	-51.22	-47.47	1.33	5.80	H
	2496	-38.81	-13	-25.81	-51.31	-41.98	1.58	6.90	H
	3330	-67.95	-13	-54.95	-77.16	-71.45	1.85	7.50	H
	1664	-45.51	-13	-32.51	-51.52	-47.83	1.33	5.80	V
	2496	-46.79	-13	-33.79	-57.23	-49.96	1.58	6.90	V
	3330	-68.75	-13	-55.75	-77.77	-72.25	1.85	7.50	V

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



LTE Band 66 / 1.4MHz / 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	3489	-61.01	-13	-48.01	-69.91	-64.98	4.87	8.84	H
	5233.38	-61.80	-13	-48.80	-72.73	-63.24	7.70	9.14	H
	6978	-58.91	-13	-45.91	-77.38	-60.59	8.98	10.66	H
	3489	-55.64	-13	-42.64	-67.26	-59.61	4.87	8.84	V
	5233.38	-61.62	-13	-48.62	-75.67	-63.06	7.70	9.14	V
	6978	-59.63	-13	-46.63	-77.65	-61.31	8.98	10.66	V

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

LTE Band 66 / 3MHz / 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	3486	-60.20	-13	-47.20	-69.10	-64.17	4.87	8.84	H
	5231.22	-63.64	-13	-50.64	-74.57	-65.08	7.70	9.14	H
	6975	-57.91	-13	-44.91	-76.38	-59.59	8.98	10.66	H
	3486	-55.62	-13	-42.62	-67.24	-59.59	4.87	8.84	V
	5232	-62.72	-13	-49.72	-76.77	-64.16	7.70	9.14	V
	6975	-58.39	-13	-45.39	-76.41	-60.07	8.98	10.66	V

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

LTE Band 66 / 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	3486	-58.15	-13	-45.15	-67.05	-62.12	4.87	8.84	H
	5229	-56.96	-13	-43.96	-67.89	-58.40	7.70	9.14	H
	6972	-58.85	-13	-45.85	-77.32	-60.53	8.98	10.66	H
	3486	-53.24	-13	-40.24	-64.86	-57.21	4.87	8.84	V
	5228.52	-62.31	-13	-49.31	-76.36	-63.75	7.70	9.14	V
	6972	-59.01	-13	-46.01	-77.03	-60.69	8.98	10.66	V

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



LTE Band 66 / 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	3480	-56.33	-13	-43.33	-65.23	-60.30	4.87	8.84	H
	5220	-61.32	-13	-48.32	-72.25	-62.76	7.70	9.14	H
	6963	-59.04	-13	-46.04	-77.51	-60.72	8.98	10.66	H
	3480	-50.56	-13	-37.56	-63.14	-54.53	4.87	8.84	V
	5221.77	-61.52	-13	-48.52	-75.57	-62.96	7.70	9.14	V
	6963	-57.95	-13	-44.95	-75.97	-59.63	8.98	10.66	V

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

LTE Band 66 / 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	3477	-58.65	-13	-45.65	-67.55	-62.62	4.87	8.84	H
	5215.02	-64.76	-13	-51.76	-75.69	-66.20	7.70	9.14	H
	6954	-58.78	-13	-45.78	-77.25	-60.46	8.98	10.66	H
	3477	-51.20	-13	-38.20	-63.44	-55.17	4.87	8.84	V
	5214	-57.74	-13	-44.74	-71.79	-59.18	7.70	9.14	V
	6954	-58.00	-13	-45.00	-76.02	-59.68	8.98	10.66	V

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

LTE Band 66 / 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	3471	-57.93	-13	-44.93	-66.83	-61.90	4.87	8.84	H
	5208.27	-64.69	-13	-51.69	-75.62	-66.13	7.70	9.14	H
	6945	-57.82	-13	-44.82	-76.29	-59.50	8.98	10.66	H
	3471	-52.91	-13	-39.91	-64.56	-56.88	4.87	8.84	V
	5208.27	-61.98	-13	-48.98	-76.03	-63.42	7.70	9.14	V
	6945	-58.86	-13	-45.86	-76.88	-60.54	8.98	10.66	V

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



Appendix D. Original Report

Please refer to Sporton report number FG761702-01B which is issued separately.