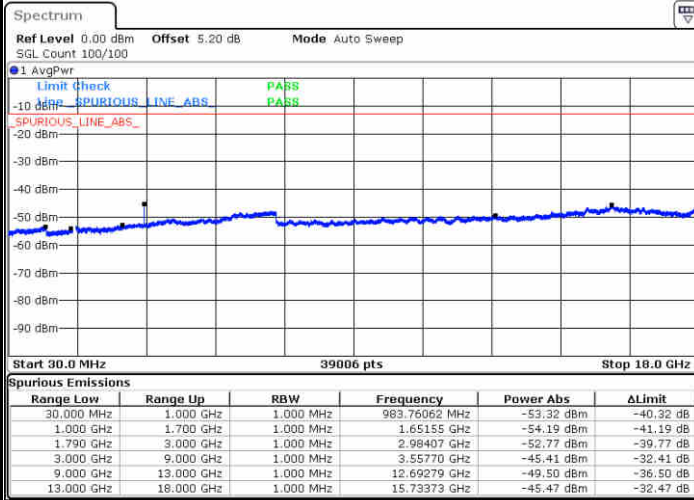




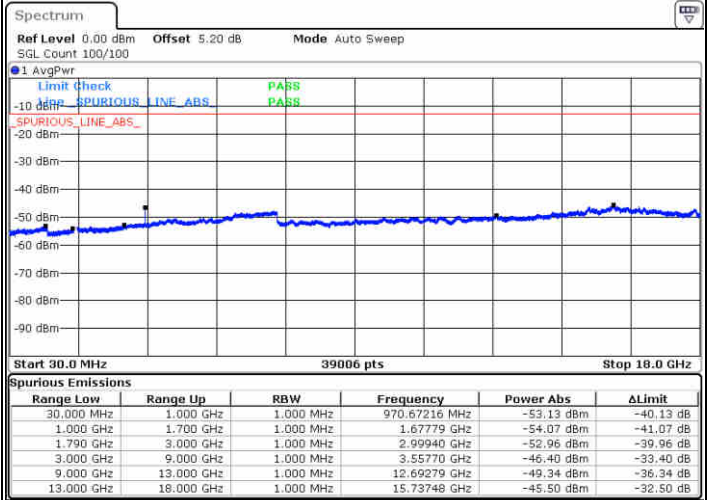
LTE Band 66 / 1.4MHz

Highest Channel / QPSK



Date: 30 APR 2019 15:57:34

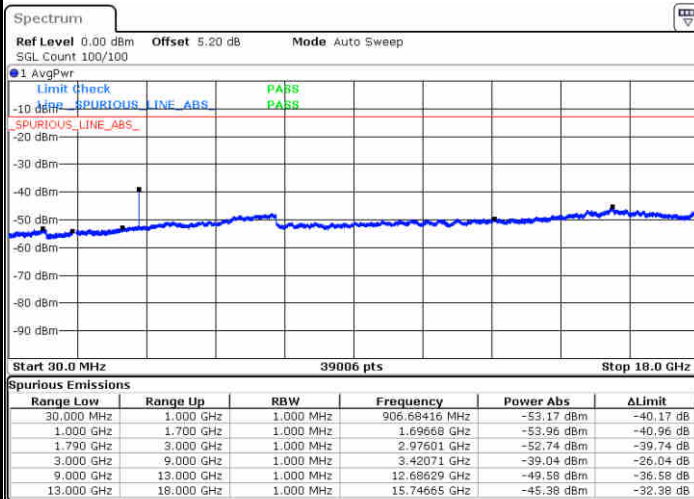
Highest Channel / 16QAM



Date: 30 APR 2019 15:58:19

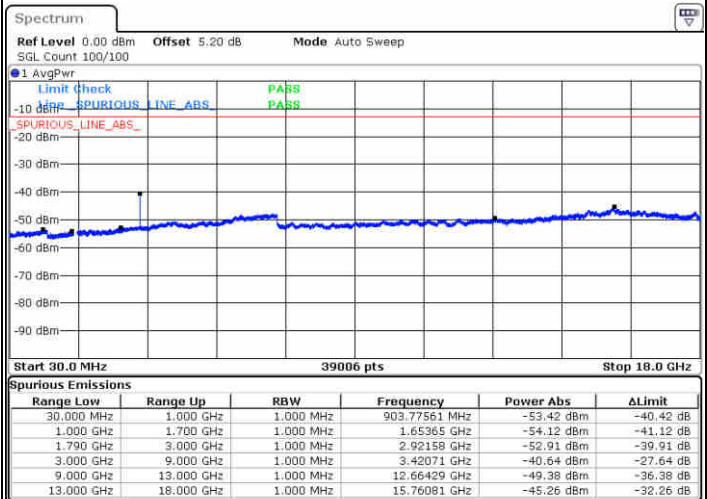
LTE Band 66 / 3MHz

Lowest Channel / QPSK



Date: 30 APR 2019 16:42:19

Lowest Channel / 16QAM

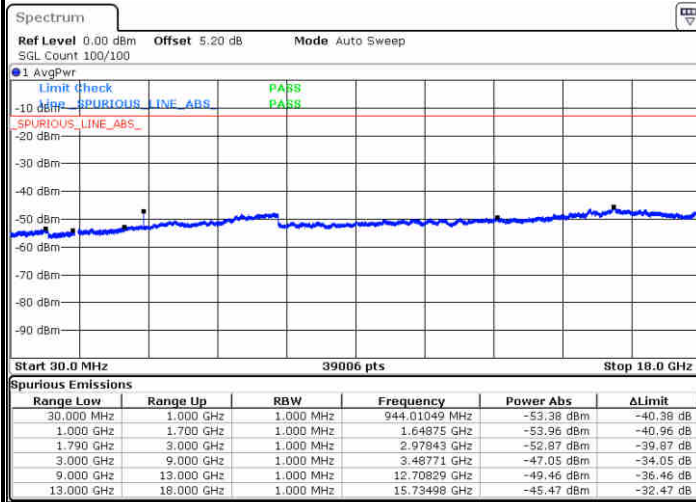


Date: 30 APR 2019 16:44:15



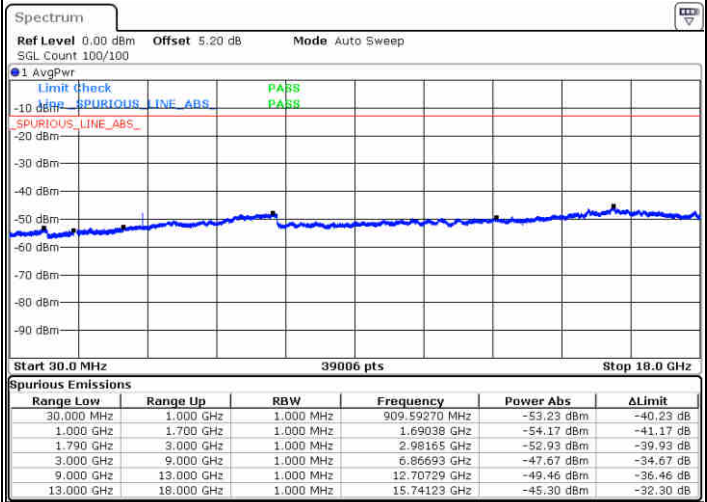
LTE Band 66 / 3MHz

Middle Channel / QPSK



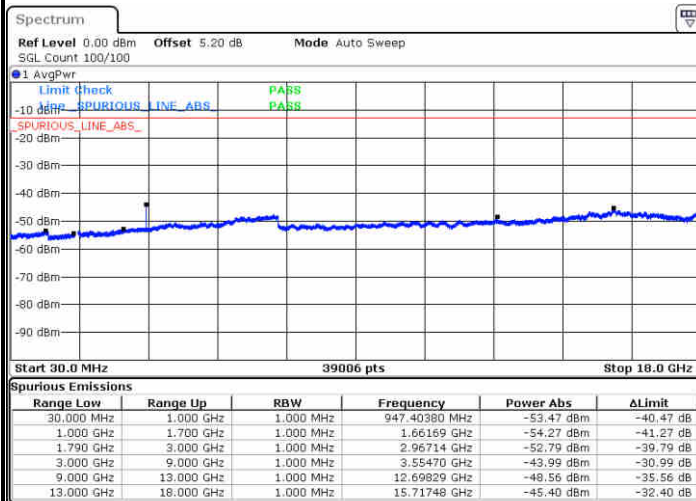
Date: 30 APR 2019 16:46:05

Middle Channel / 16QAM



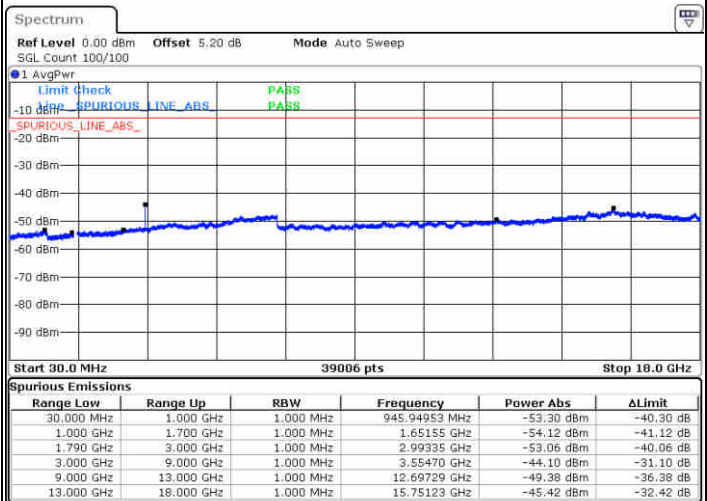
Date: 30 APR 2019 16:46:50

Highest Channel / QPSK



Date: 30 APR 2019 16:48:33

Highest Channel / 16QAM

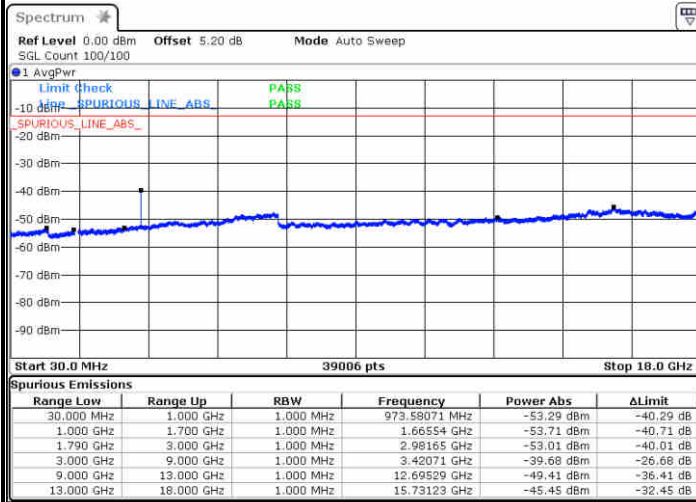


Date: 30 APR 2019 16:49:12



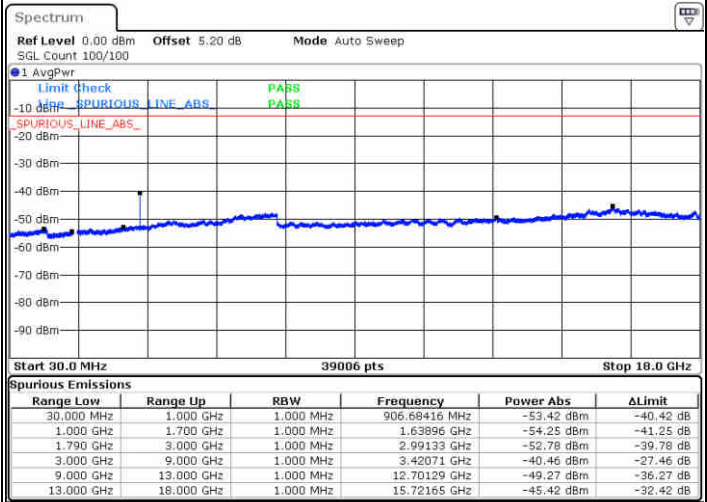
LTE Band 66 / 5MHz

Lowest Channel / QPSK



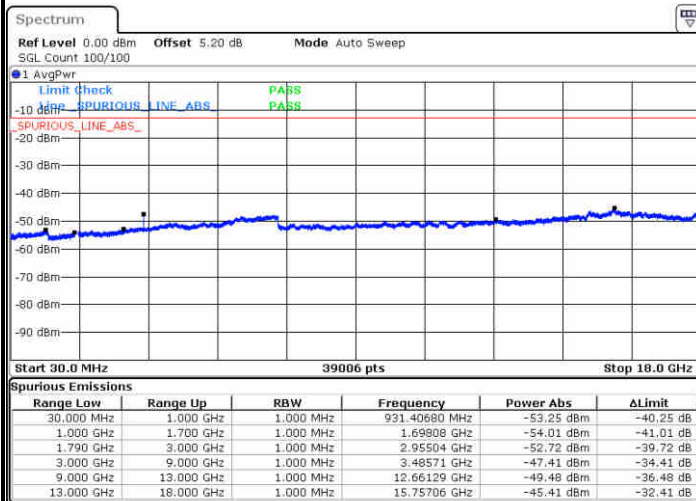
Date: 30 APR 2019 20:01:13

Lowest Channel / 16QAM



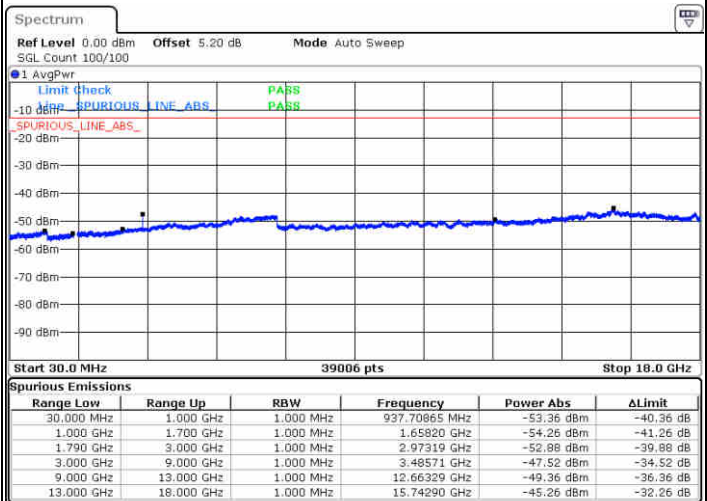
Date: 30 APR 2019 20:02:18

Middle Channel / QPSK



Date: 30 APR 2019 20:04:49

Middle Channel / 16QAM

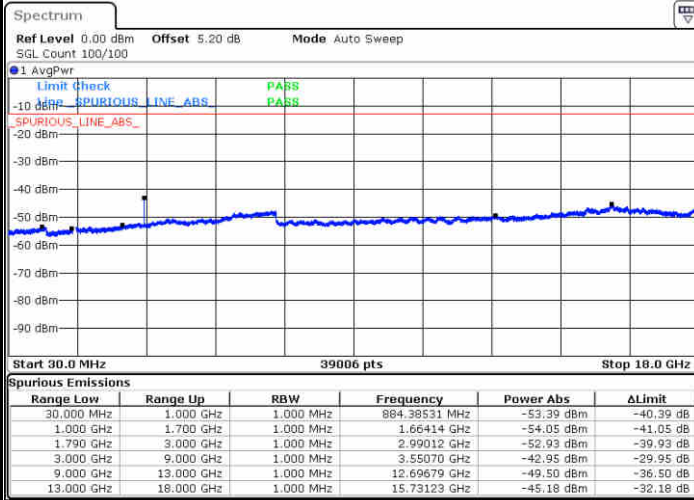


Date: 30 APR 2019 20:05:33



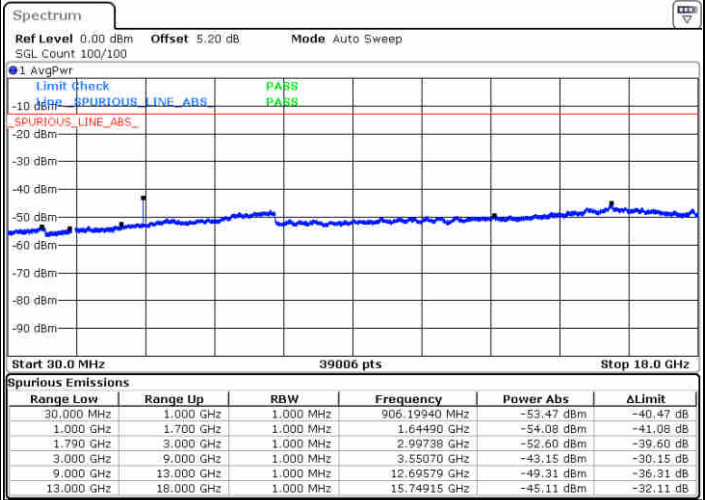
LTE Band 66 / 5MHz

Highest Channel / QPSK



Date: 30 APR 2019 20:07:52

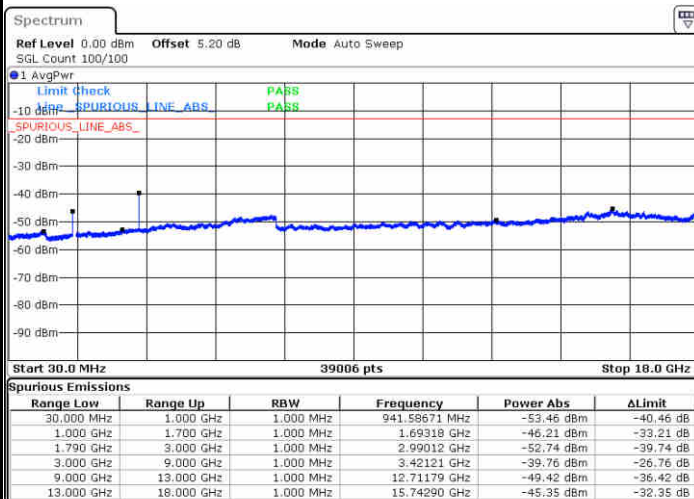
Highest Channel / 16QAM



Date: 30 APR 2019 20:08:41

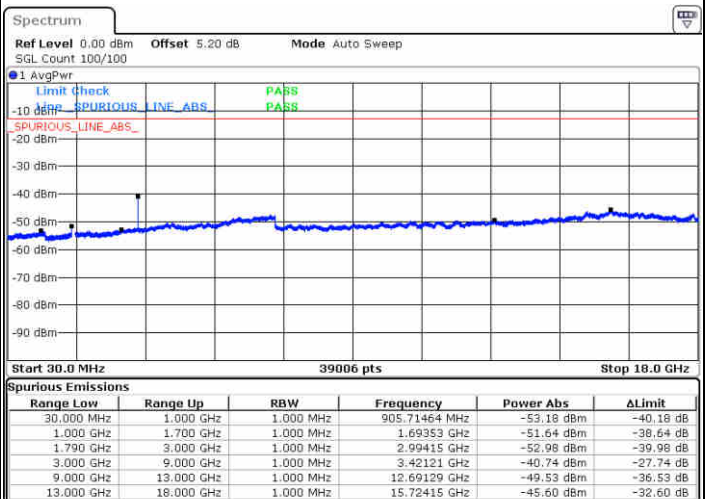
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Date: 3 MAY 2019 08:56:28

Lowest Channel / 16QAM

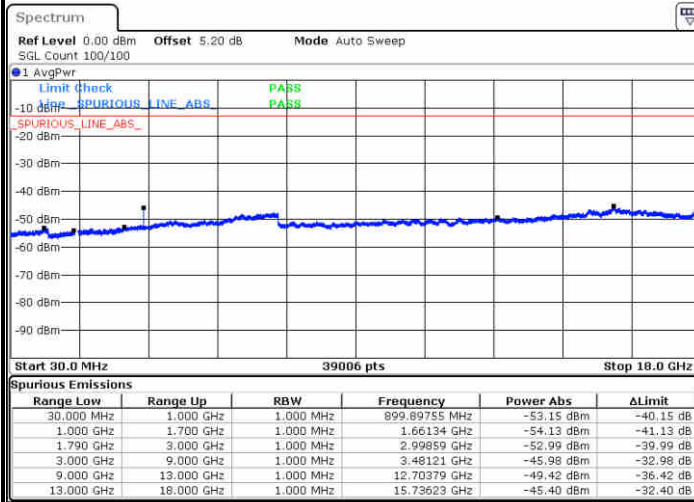


Date: 3 MAY 2019 08:57:10



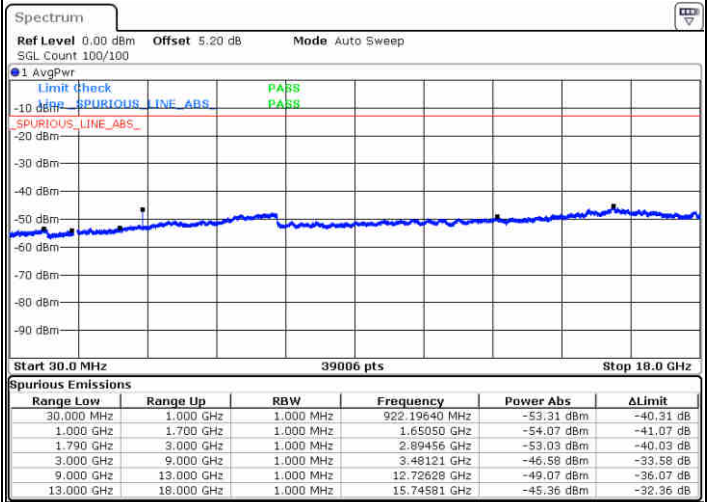
LTE Band 66 / 10MHz

Middle Channel / QPSK



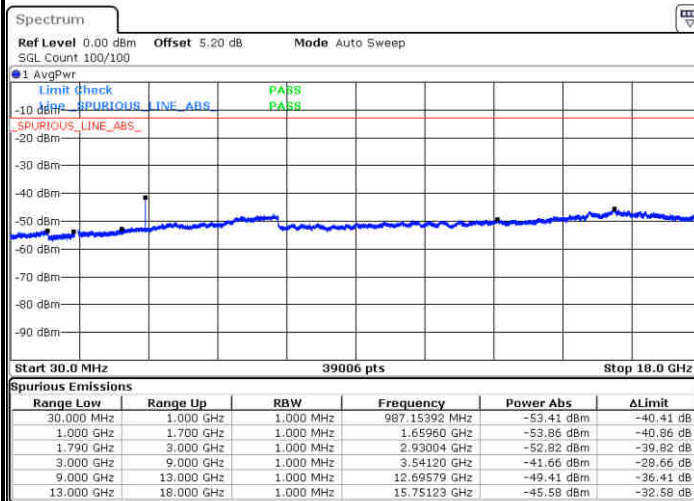
Date: 3 MAY 2019 08:53:45

Middle Channel / 16QAM



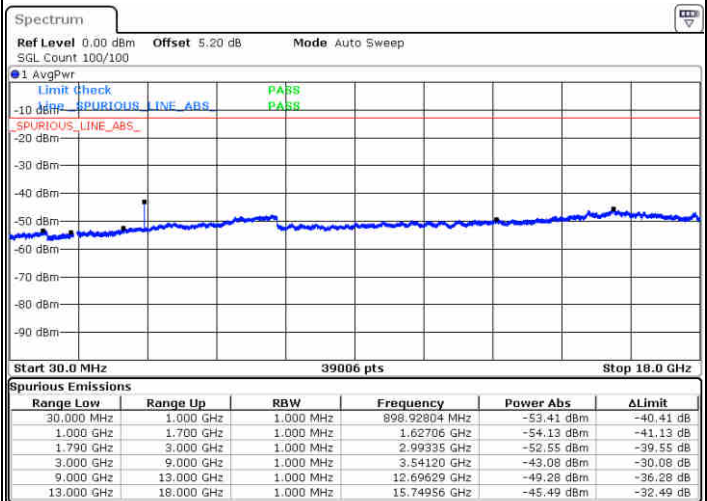
Date: 3 MAY 2019 08:54:29

Highest Channel / QPSK



Date: 3 MAY 2019 08:49:45

Highest Channel / 16QAM

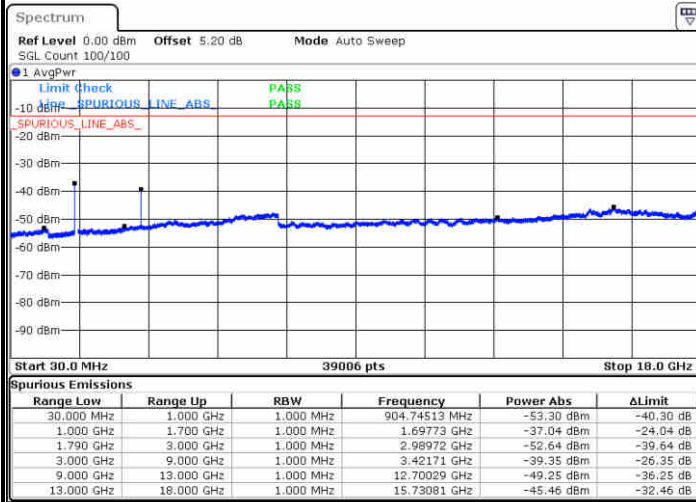


Date: 3 MAY 2019 08:51:42



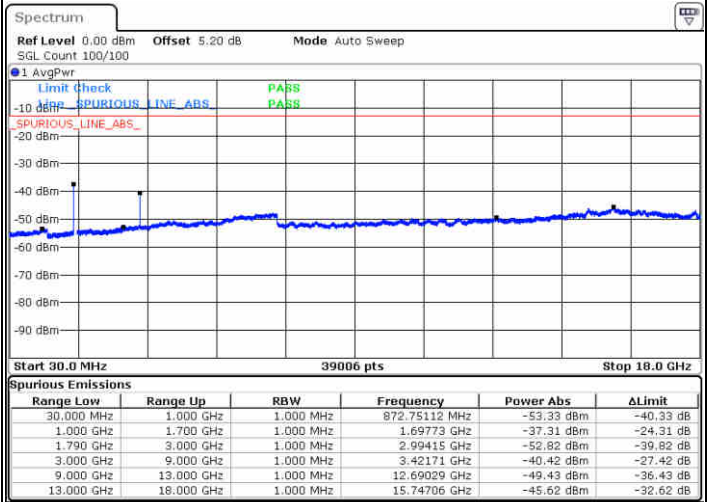
LTE Band 66 / 15MHz

Lowest Channel / QPSK



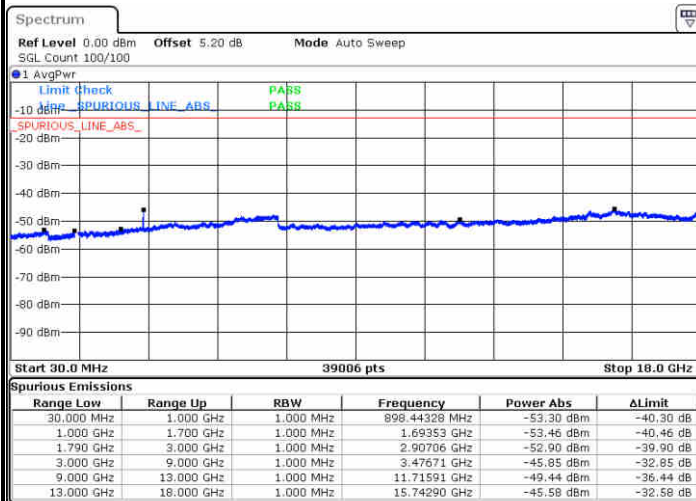
Date: 3 MAY 2019 09:24:34

Lowest Channel / 16QAM



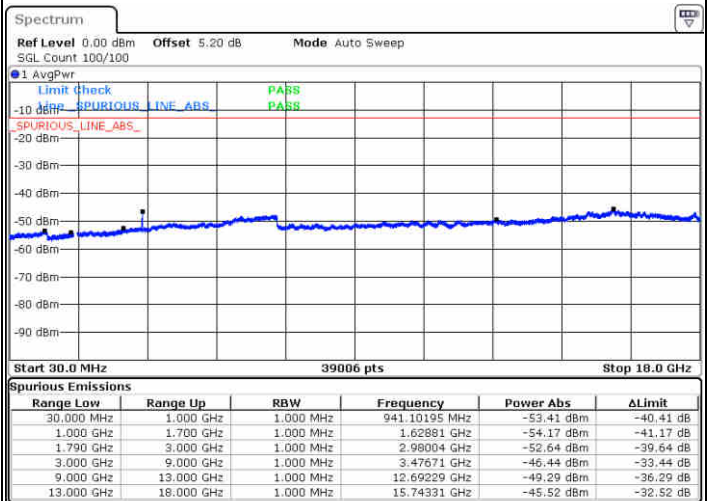
Date: 3 MAY 2019 09:25:19

Middle Channel / QPSK



Date: 3 MAY 2019 09:21:28

Middle Channel / 16QAM

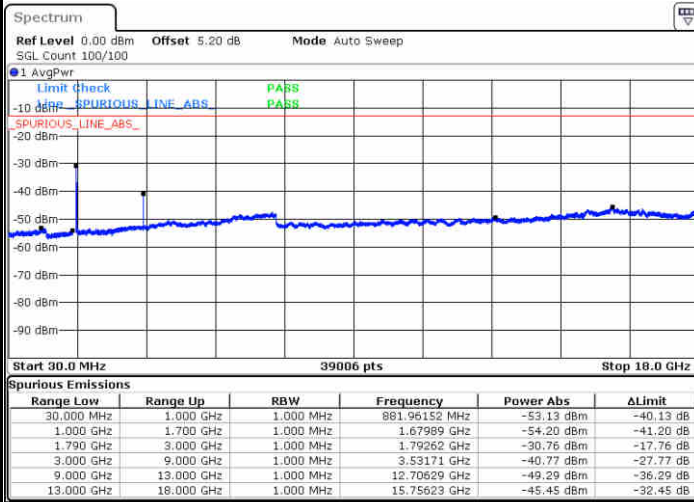


Date: 3 MAY 2019 09:22:11



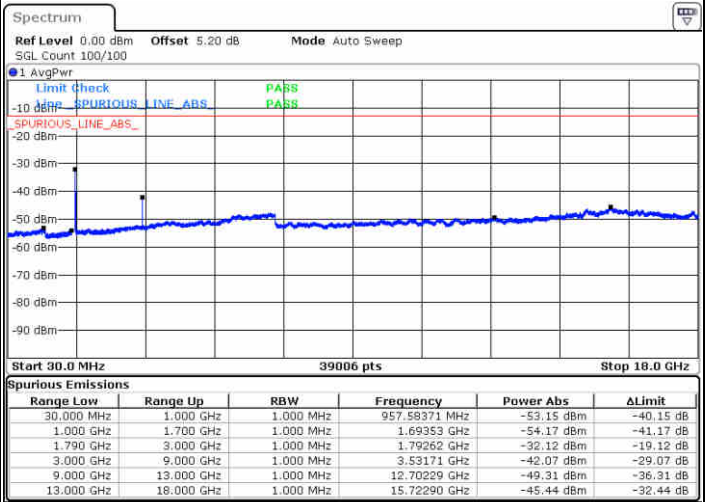
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 3 MAY 2019 09:18:54

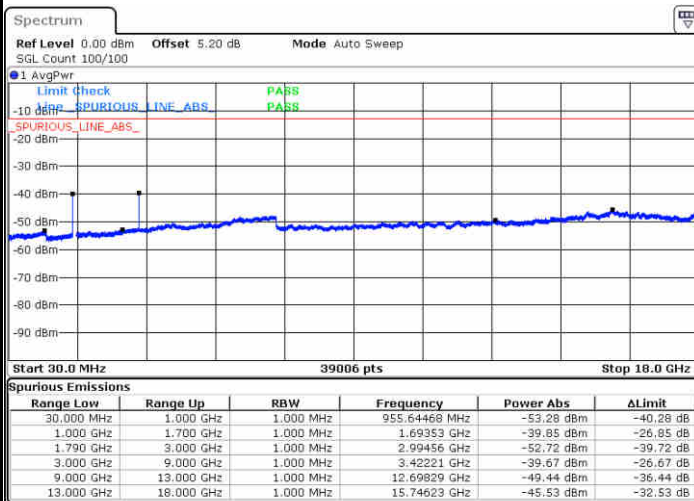
Highest Channel / 16QAM



Date: 3 MAY 2019 09:19:36

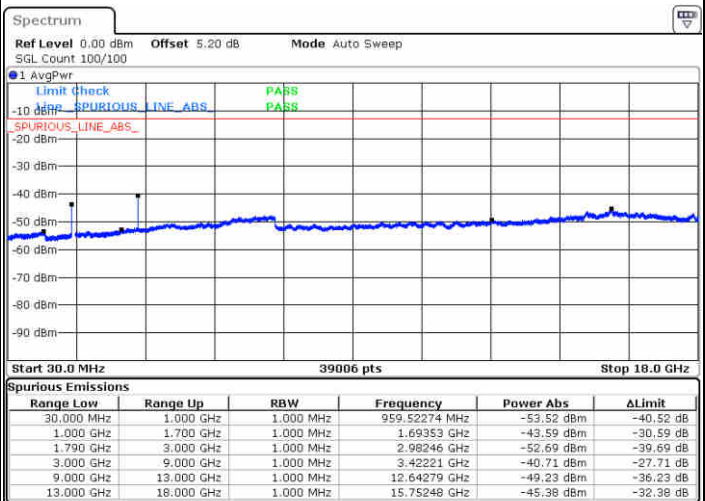
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 3 MAY 2019 09:44:08

Lowest Channel / 16QAM

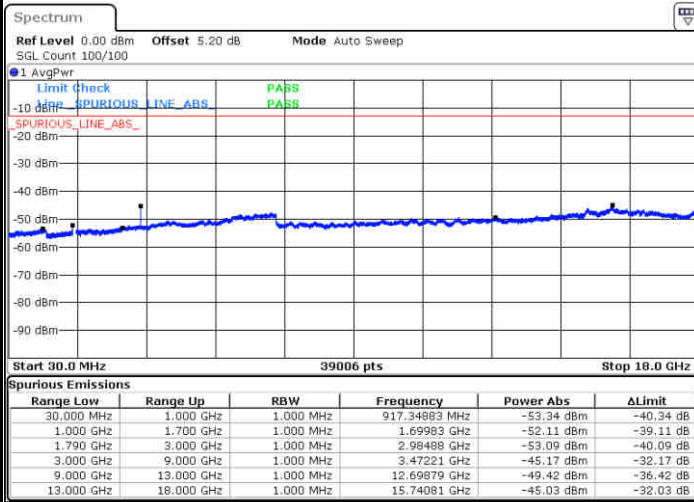


Date: 3 MAY 2019 09:44:48



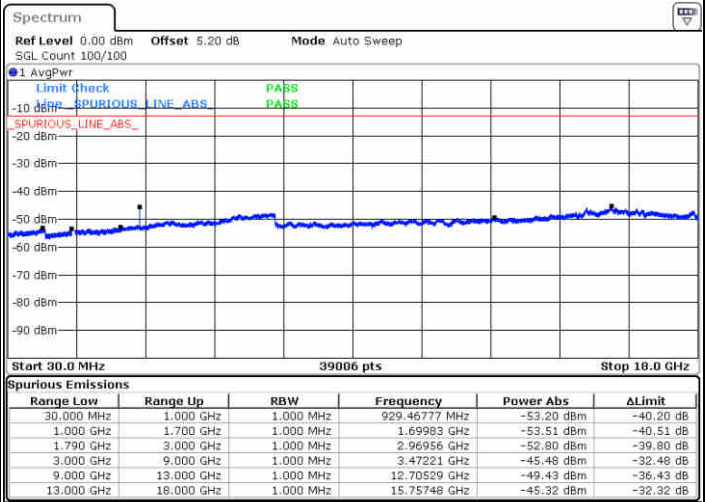
LTE Band 66 / 20MHz

Middle Channel / QPSK



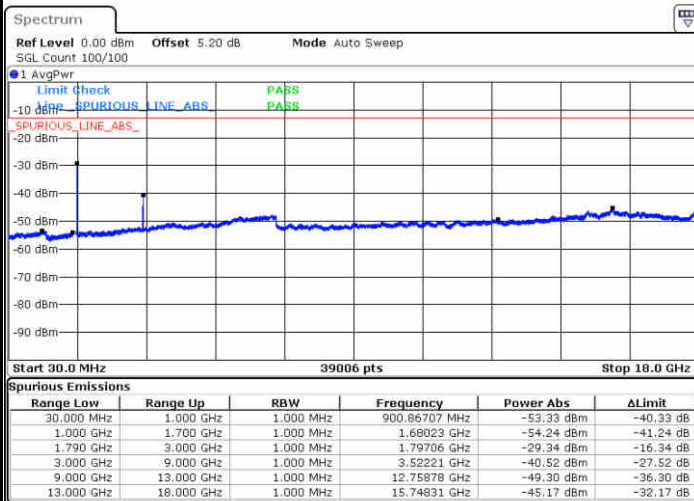
Date: 3 MAY 2019 09:48:26

Middle Channel / 16QAM



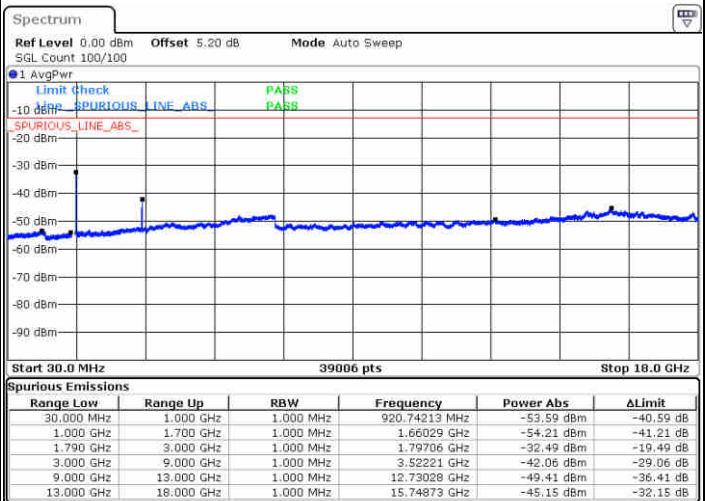
Date: 3 MAY 2019 09:49:17

Highest Channel / QPSK



Date: 3 MAY 2019 09:53:57

Highest Channel / 16QAM



Date: 3 MAY 2019 09:54:49

**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	0.0020	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage =4.4V.
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	0.0020	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0026	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage = 4.4V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0020	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0019	

Note:

1. Normal Voltage =3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage =4.4 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	0.0020	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage = 4.4V.
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	0.0020	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage = 4.4V.
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	0.0020	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.5V. ; Maximum Voltage = 4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 2 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-58.16	-13	-45.16	-64.73	1.848	8.42	H
	5556	-57.78	-13	-44.78	-66.14	2.32	10.68	H
	7404	-54.53	-13	-41.53	-63.86	2.61	11.94	H
	3702	-56.62	-13	-43.62	-63.19	1.85	8.42	V
	5556	-58.07	-13	-45.07	-66.43	2.32	10.68	V
	7404	-54.35	-13	-41.35	-63.68	2.61	11.94	V
Middle	3744	-60.04	-13	-47.04	-66.61	1.848	8.42	H
	5616	-57.53	-13	-44.53	-65.89	2.32	10.68	H
	7482	-54.68	-13	-41.68	-64.01	2.61	11.94	H
	3744	-60.03	-13	-47.03	-66.60	1.85	8.42	V
	5616	-58.29	-13	-45.29	-66.65	2.32	10.68	V
	7482	-54.81	-13	-41.81	-64.14	2.61	11.94	V
Highest	3780	-58.95	-13	-45.95	-65.52	1.848	8.42	H
	5676	-57.39	-13	-44.39	-65.75	2.32	10.68	H
	7566	-54.91	-13	-41.91	-64.24	2.61	11.94	H
	3780	-58.85	-13	-45.85	-65.42	1.85	8.42	V
	5676	-58.27	-13	-45.27	-66.63	2.32	10.68	V
	7566	-54.82	-13	-41.82	-64.15	2.61	11.94	V

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



LTE Band 5 / 10MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-68.39	-13	-55.39	-72.87	1.21	5.68	H
	2475	-64.51	-13	-51.51	-68.77	1.541	5.80	H
	3300	-63.30	-13	-50.30	-69.45	1.73	7.88	H
	1650	-68.13	-13	-55.13	-72.60	1.21	5.68	V
	2475	-63.88	-13	-50.88	-68.14	1.541	5.80	V
	3300	-63.59	-13	-50.59	-69.74	1.726	7.88	V
Middle	1665	-68.40	-13	-55.40	-72.88	1.21	5.68	H
	2495	-64.70	-13	-51.70	-68.96	1.541	5.80	H
	3330	-62.79	-13	-49.79	-68.94	1.73	7.88	H
	1665	-68.60	-13	-55.60	-73.07	1.21	5.68	V
	2495	-63.96	-13	-50.96	-68.22	1.541	5.80	V
	3330	-63.04	-13	-50.04	-69.19	1.726	7.88	V
Highest	1680	-68.37	-13	-55.37	-72.85	1.21	5.68	H
	2520	-64.73	-13	-51.73	-68.99	1.541	5.80	H
	3360	-63.06	-13	-50.06	-69.21	1.73	7.88	H
	1680	-68.67	-13	-55.67	-73.14	1.21	5.68	V
	2520	-63.43	-13	-50.43	-67.69	1.541	5.80	V
	3360	-63.25	-13	-50.25	-69.40	1.726	7.88	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5000	-60.20	-25	-35.20	-70.41	3.03	13.24	H
	7503.27	-61.10	-25	-36.10	-70.55	3.56	13.01	H
	10004	-49.32	-25	-24.32	-58.84	3.92	13.44	H
	12504	-53.26	-25	-28.26	-63.18	4.44	14.36	H
	15006	-43.55	-25	-18.55	-53.92	4.77	15.14	H
	5000	-53.64	-25	-28.64	-63.85	3.03	13.24	V
	7504	-57.49	-25	-32.49	-66.94	3.56	13.01	V
	10004	-52.66	-25	-27.66	-62.18	3.92	13.44	V
	12504	-55.30	-25	-30.30	-65.22	4.44	14.36	V
	15006	-44.78	-25	-19.78	-55.15	4.77	15.14	V
Middle	5052	-61.85	-25	-36.85	-72.06	3.03	13.24	H
	7578.27	-60.71	-25	-35.71	-70.16	3.56	13.01	H
	10104	-51.56	-25	-26.56	-61.08	3.92	13.44	H
	12630	-55.47	-25	-30.47	-65.39	4.44	14.36	H
	15156	-50.67	-25	-25.67	-61.04	4.77	15.14	H
	5052	-56.83	-25	-31.83	-67.04	3.03	13.24	V
	7576	-57.95	-25	-32.95	-67.40	3.56	13.01	V
	10104	-58.06	-25	-33.06	-67.58	3.92	13.44	V
	12630	-56.64	-25	-31.64	-66.56	4.44	14.36	V
	15156	-50.92	-25	-25.92	-61.29	4.77	15.14	V
Highest	5100	-60.63	-25	-35.63	-70.84	3.03	13.24	H
	7652	-61.04	-25	-36.04	-70.49	3.56	13.01	H
	10204	-51.05	-25	-26.05	-60.57	3.92	13.44	H
	12756	-49.48	-25	-24.48	-59.40	4.44	14.36	H
	15306	-48.05	-25	-23.05	-58.42	4.77	15.14	H
	5100	-50.78	-25	-25.78	-60.99	3.03	13.24	V
	7652	-55.92	-25	-30.92	-65.37	3.56	13.01	V
	10204	-55.15	-25	-30.15	-64.67	3.92	13.44	V
	12756	-52.03	-25	-27.03	-61.95	4.44	14.36	V
	15306	-50.15	-25	-25.15	-60.52	4.77	15.14	V



LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-66.33	-13	-53.33	-72.35	1.40	9.57	H
	2098.77	-64.93	-13	-51.93	-72.34	1.87	11.44	H
	2798.36	-62.48	-13	-49.48	-71.37	2.31	13.35	H
	1400	-66.76	-13	-53.76	-72.78	1.40	9.57	V
	2098.77	-65.05	-13	-52.05	-72.46	1.87	11.44	V
	2798	-62.53	-13	-49.53	-71.42	2.31	13.35	V
Middle	1406	-65.72	-13	-52.72	-71.74	1.40	9.57	H
	2110	-64.80	-13	-51.80	-72.21	1.87	11.44	H
	2813.36	-61.46	-13	-48.46	-70.35	2.31	13.35	H
	1406	-65.98	-13	-52.98	-72.00	1.40	9.57	V
	2110	-65.13	-13	-52.13	-72.54	1.87	11.44	V
	2814	-61.49	-13	-48.49	-70.38	2.31	13.35	V
Highest	1414	-66.33	-13	-53.33	-72.35	1.40	9.57	H
	2120	-65.64	-13	-52.64	-73.05	1.87	11.44	H
	2826.36	-61.84	-13	-48.84	-70.73	2.31	13.35	H
	1414	-67.01	-13	-54.01	-73.03	1.40	9.57	V
	2120	-65.74	-13	-52.74	-73.15	1.87	11.44	V
	2826.36	-62.11	-13	-49.11	-71.00	2.31	13.35	V

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



LTE Band 13 / 5MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554	-66.19	-13	-53.19	-67.90	2.23	6.09	H
	2332.02	-64.71	-13	-51.71	-65.24	2.83	5.51	H
	3108	-62.20	-13	-49.20	-64.14	3.21	7.30	H
	1554	-66.13	-13	-53.13	-67.84	2.23	6.09	V
	2332.02	-64.62	-13	-51.62	-65.15	2.83	5.51	V
	3108	-61.90	-13	-48.90	-63.84	3.21	7.30	V
Middle	1560	-66.96	-40	-26.96	-68.67	2.23	6.09	H
	2339.52	-63.96	-13	-50.96	-64.49	2.83	5.51	H
	3120	-62.35	-13	-49.35	-64.29	3.21	7.30	H
	1560	-66.78	-40	-26.78	-68.49	2.23	6.09	V
	2339.52	-64.22	-13	-51.22	-64.75	2.83	5.51	V
	3120	-62.79	-13	-49.79	-64.73	3.21	7.30	V
Highest	1564	-66.53	-40	-26.53	-68.24	2.23	6.09	H
	2346	-64.00	-13	-51.00	-64.53	2.83	5.51	H
	3126	-62.72	-13	-49.72	-64.66	3.21	7.30	H
	1564	-66.75	-40	-26.75	-68.46	2.23	6.09	V
	2346	-63.60	-13	-50.60	-64.13	2.83	5.51	V
	3126	-62.65	-13	-49.65	-64.59	3.21	7.30	V

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



LTE Band 13 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1556	-65.17	-13	-52.17	-66.88	2.23	6.09	H
	2332	-63.71	-13	-50.71	-64.24	2.83	5.51	H
	3108	-61.68	-13	-48.68	-63.62	3.21	7.30	H
	1556	-65.60	-13	-52.60	-67.31	2.23	6.09	V
	2332	-63.39	-13	-50.39	-63.92	2.83	5.51	V
	3108	-62.08	-13	-49.08	-64.02	3.21	7.30	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-60.70	-13	-47.70	-67.02	1.81	8.13	H
	5136	-58.01	-13	-45.01	-65.99	2.222	10.20	H
	6846	-55.26	-13	-42.26	-64.08	2.54	11.36	H
	3420	-60.57	-13	-47.57	-66.89	1.81	8.13	V
	5136	-58.32	-13	-45.32	-66.30	2.222	10.20	V
	6846	-56.42	-13	-43.42	-65.24	2.54	11.36	V
Middle	3474	-60.76	-13	-47.76	-67.08	1.81	8.13	H
	5208	-58.29	-13	-45.29	-66.27	2.222	10.20	H
	6942	-55.48	-13	-42.48	-64.30	2.54	11.36	H
	3474	-60.67	-13	-47.67	-66.99	1.81	8.13	V
	5208	-58.51	-13	-45.51	-66.49	2.222	10.20	V
	6942	-56.12	-13	-43.12	-64.94	2.54	11.36	V
Highest	3522	-60.02	-13	-47.02	-66.34	1.81	8.13	H
	5286	-57.81	-13	-44.81	-65.79	2.222	10.20	H
	7044	-55.33	-13	-42.33	-64.15	2.54	11.36	H
	3522	-60.12	-13	-47.12	-66.44	1.81	8.13	V
	5286	-58.29	-13	-45.29	-66.27	2.222	10.20	V
	7044	-56.10	-13	-43.10	-64.92	2.54	11.36	V

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