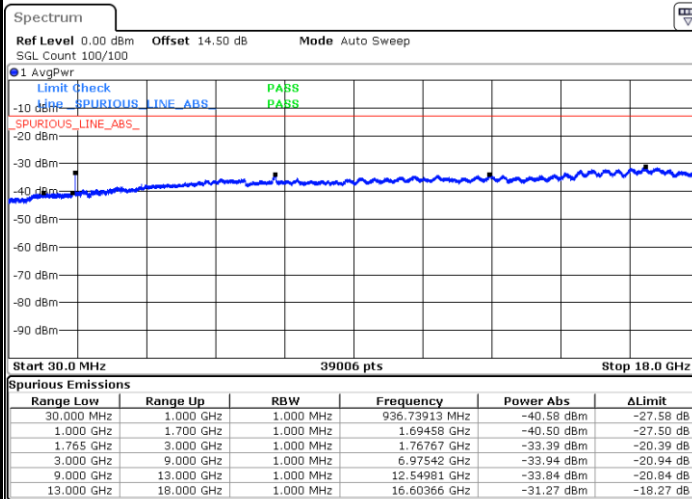




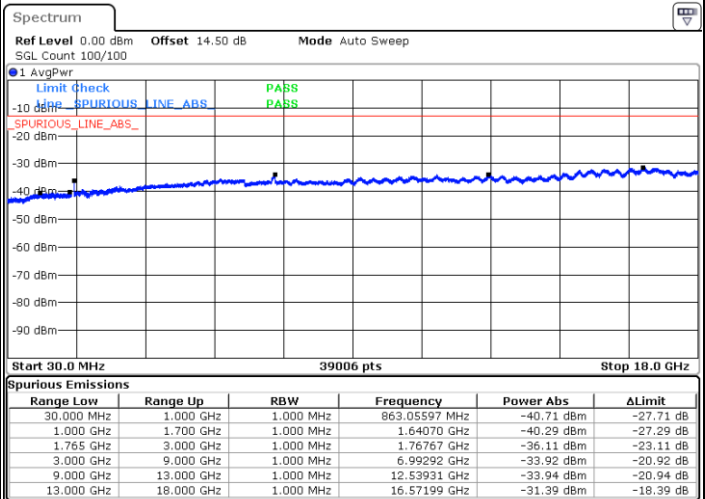
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 26.FEB.2019 10:19:56

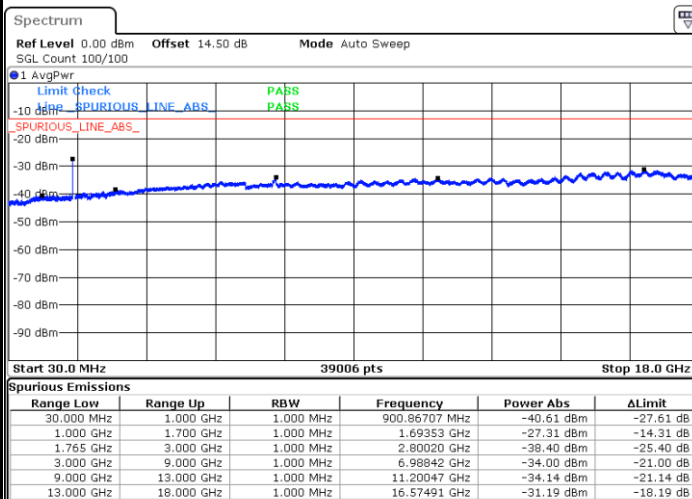
Highest Channel / 16QAM



Date: 26.FEB.2019 10:20:52

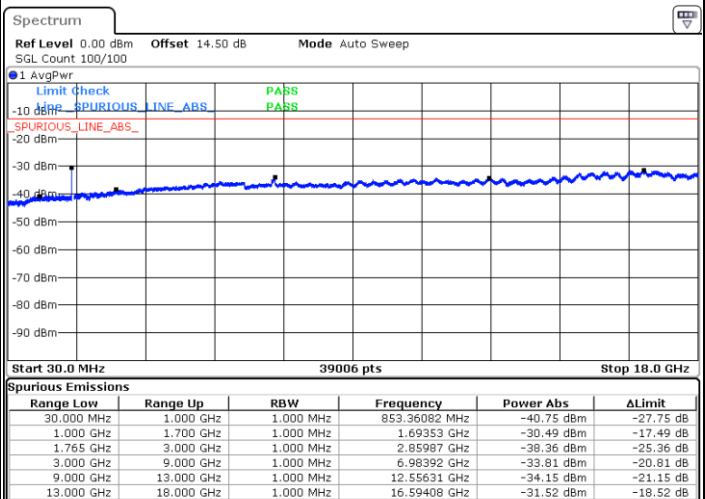
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 26.FEB.2019 10:39:08

Lowest Channel / 16QAM

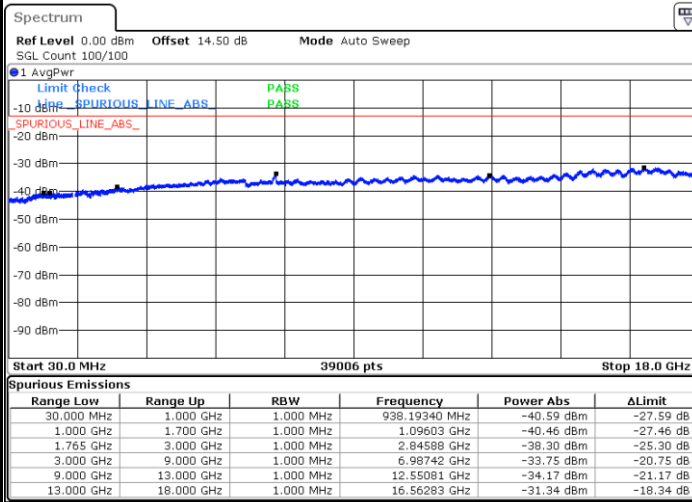


Date: 26.FEB.2019 10:40:04



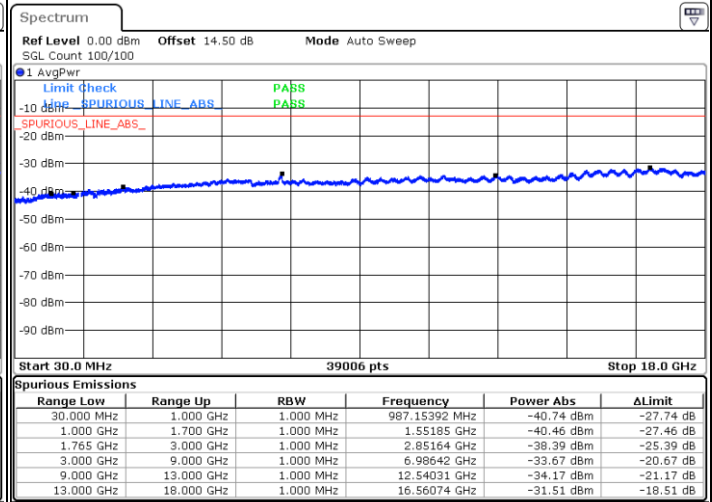
LTE Band 4 / 20MHz

Middle Channel / QPSK



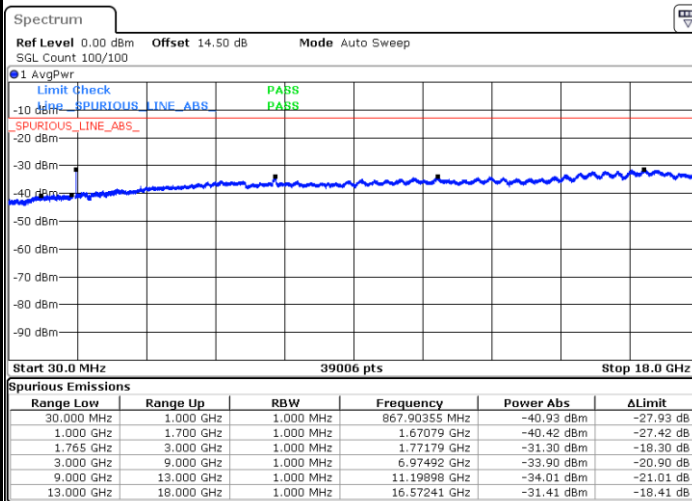
Date: 26.FEB.2019 10:41:42

Middle Channel / 16QAM



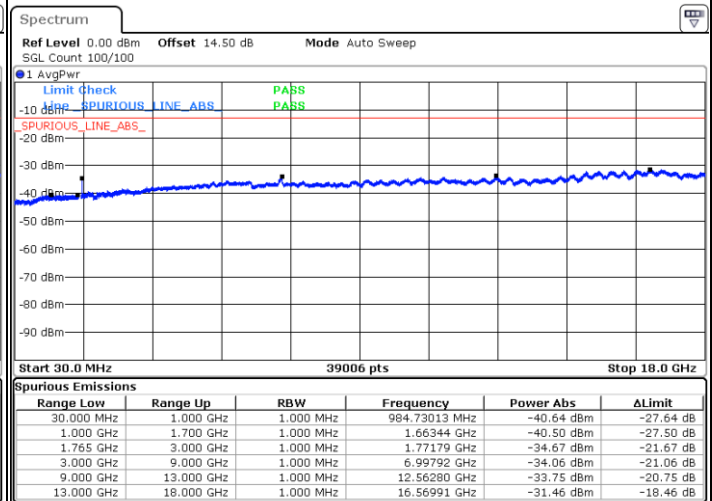
Date: 26.FEB.2019 10:42:38

Highest Channel / QPSK



Date: 26.FEB.2019 10:48:55

Highest Channel / 16QAM

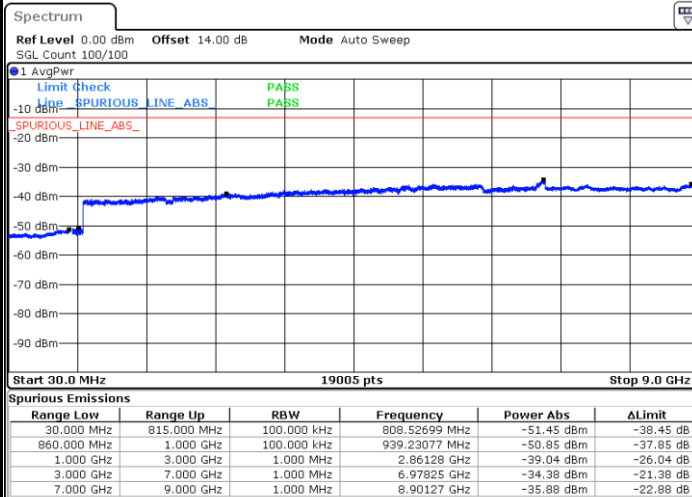


Date: 26.FEB.2019 10:49:51



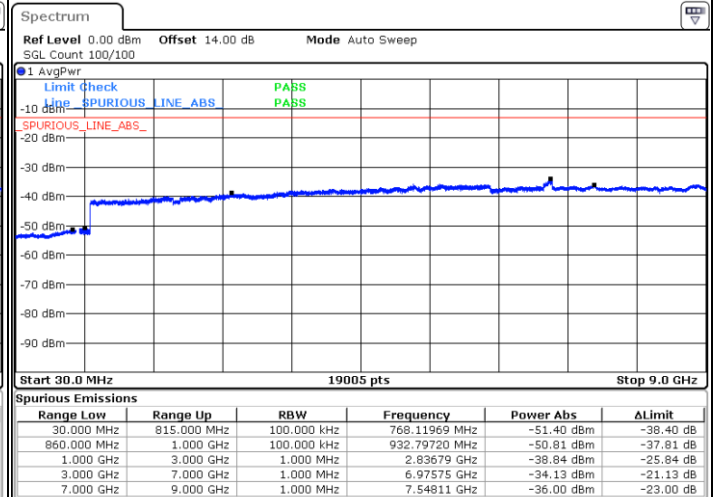
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



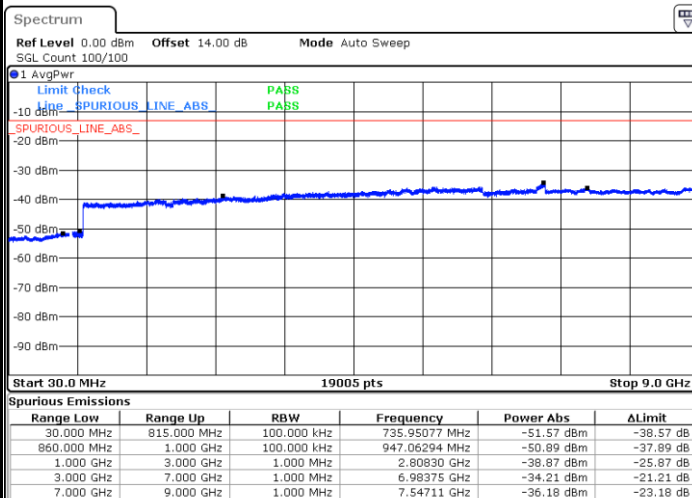
Date: 14.FEB.2019 20:34:01

Lowest Channel / 16QAM



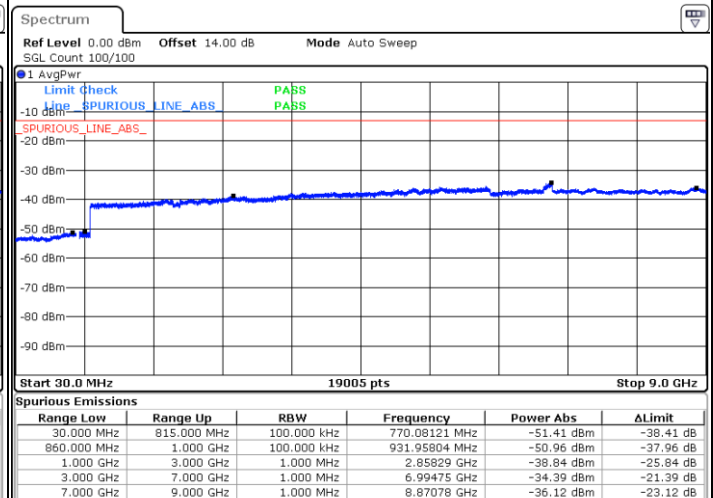
Date: 14.FEB.2019 20:34:56

Middle Channel / QPSK



Date: 14.FEB.2019 20:36:32

Middle Channel / 16QAM

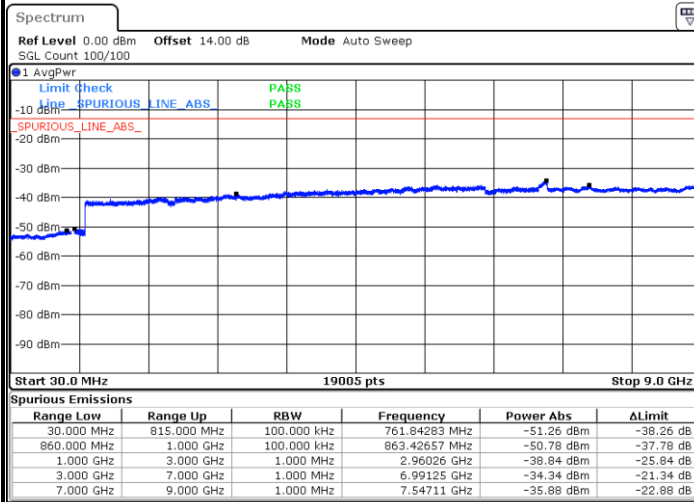


Date: 14.FEB.2019 20:37:27



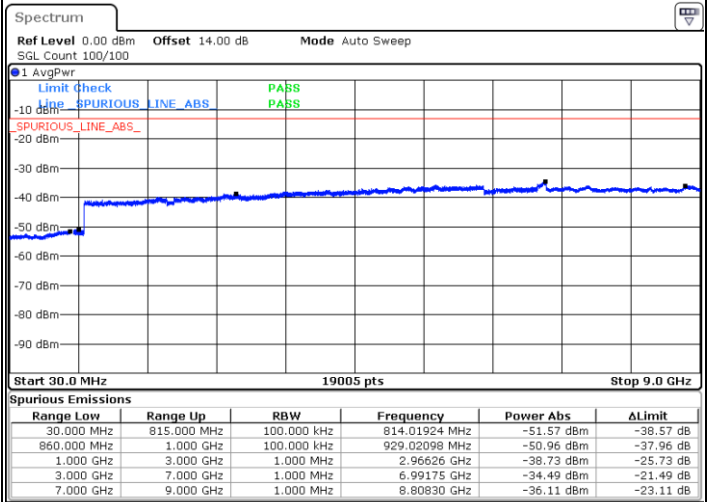
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 14.FEB.2019 20:45:38

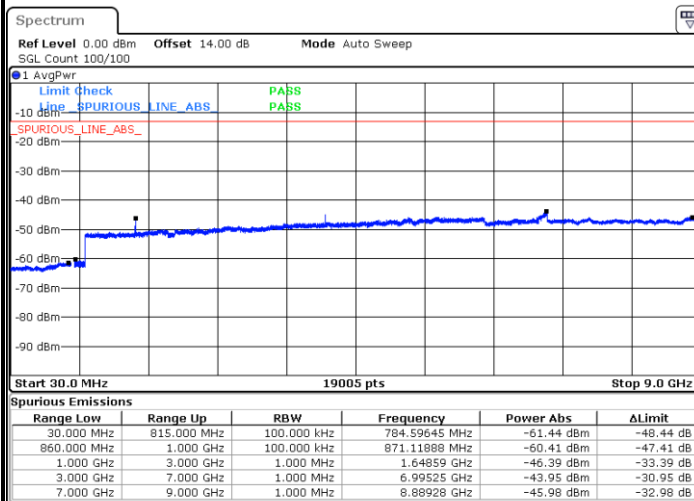
Highest Channel / 16QAM



Date: 14.FEB.2019 20:46:33

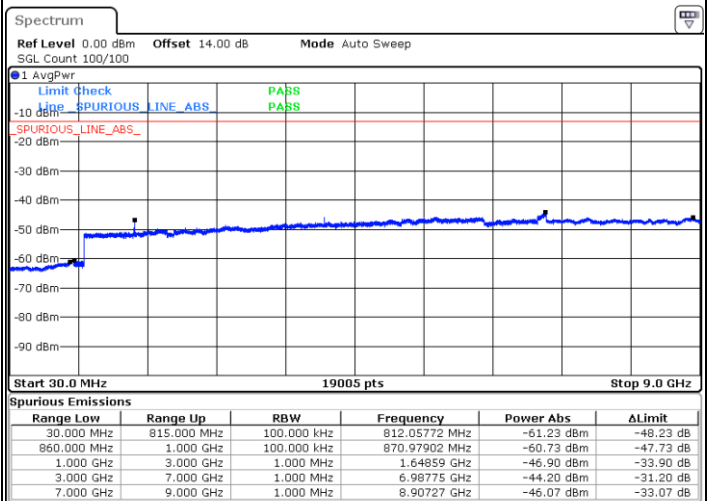
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 14.FEB.2019 21:11:49

Lowest Channel / 16QAM

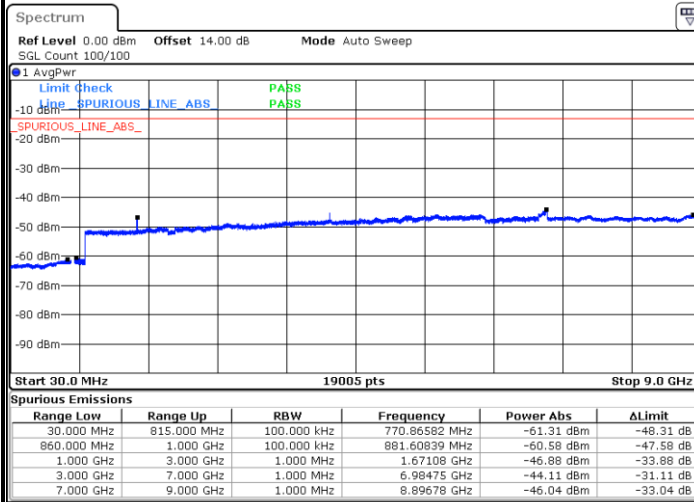


Date: 14.FEB.2019 21:12:44



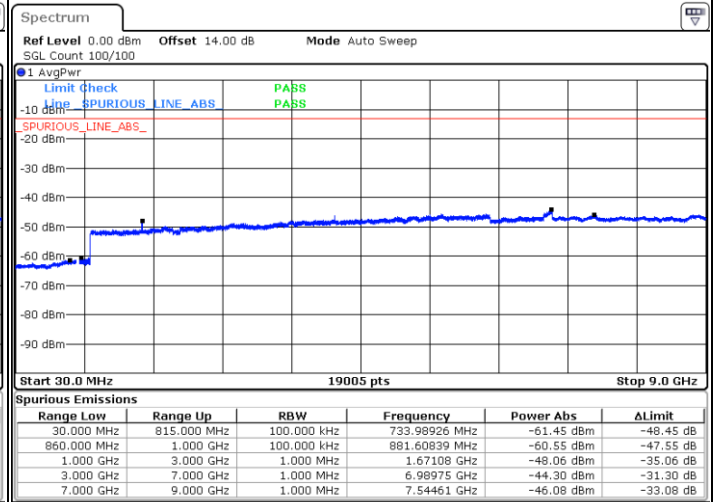
LTE Band 5 / 3MHz

Middle Channel / QPSK



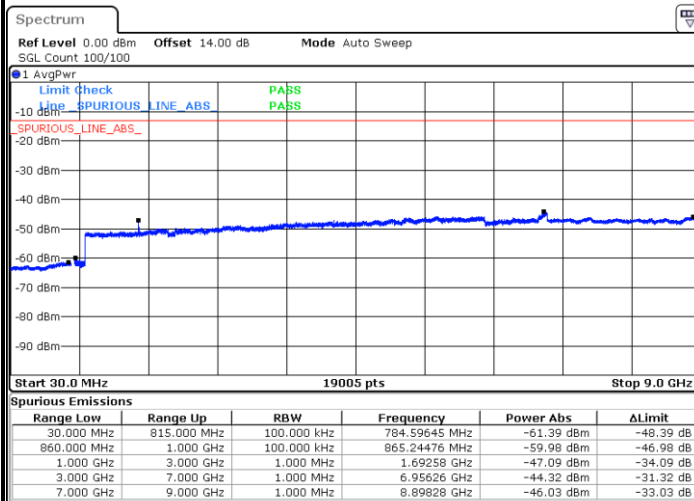
Date: 14.FEB.2019 21:14:20

Middle Channel / 16QAM



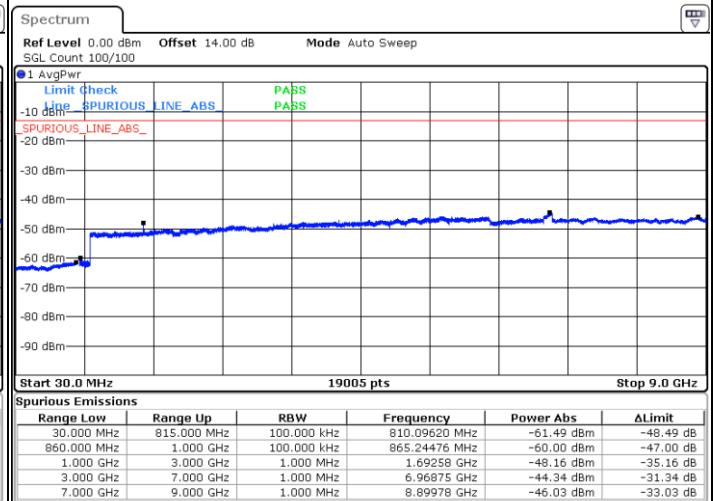
Date: 14.FEB.2019 21:15:15

Highest Channel / QPSK



Date: 14.FEB.2019 21:23:26

Highest Channel / 16QAM

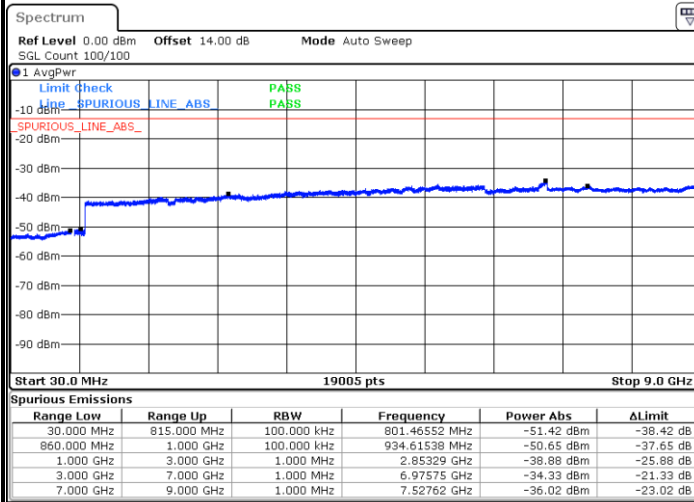


Date: 14.FEB.2019 21:24:21



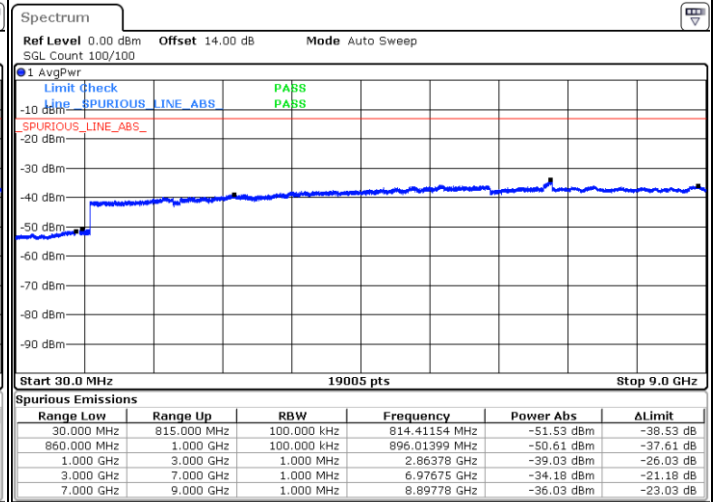
LTE Band 5 / 5MHz

Lowest Channel / QPSK



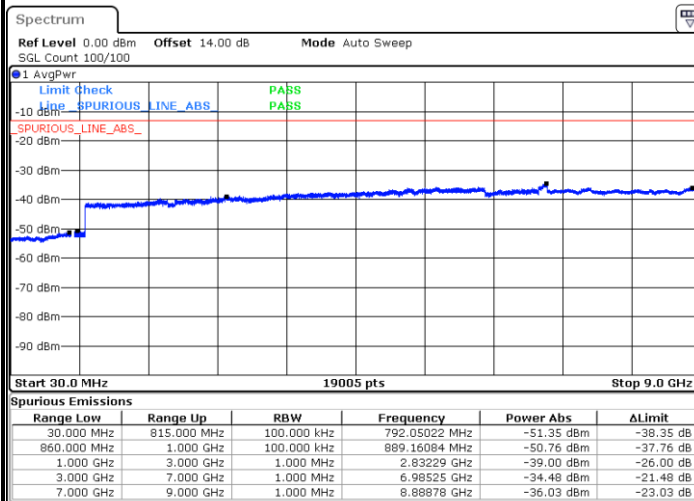
Date: 14.FEB.2019 21:32:33

Lowest Channel / 16QAM



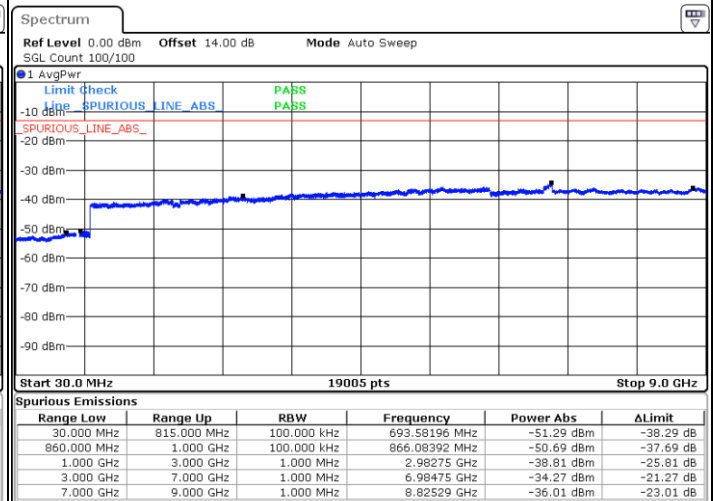
Date: 14.FEB.2019 21:33:28

Middle Channel / QPSK



Date: 14.FEB.2019 21:35:04

Middle Channel / 16QAM

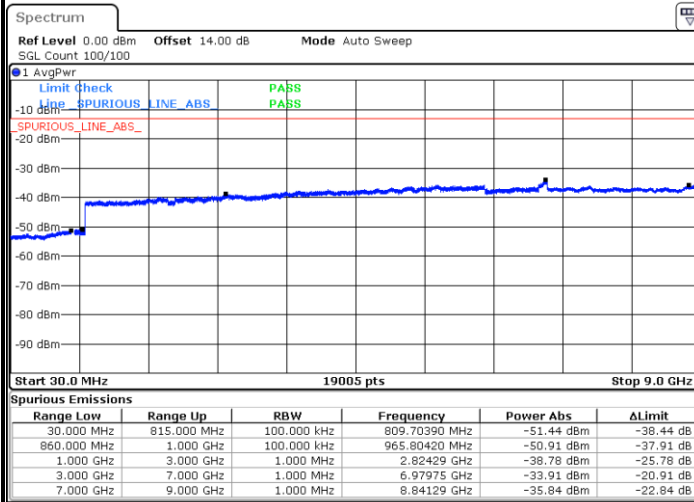


Date: 14.FEB.2019 21:35:59



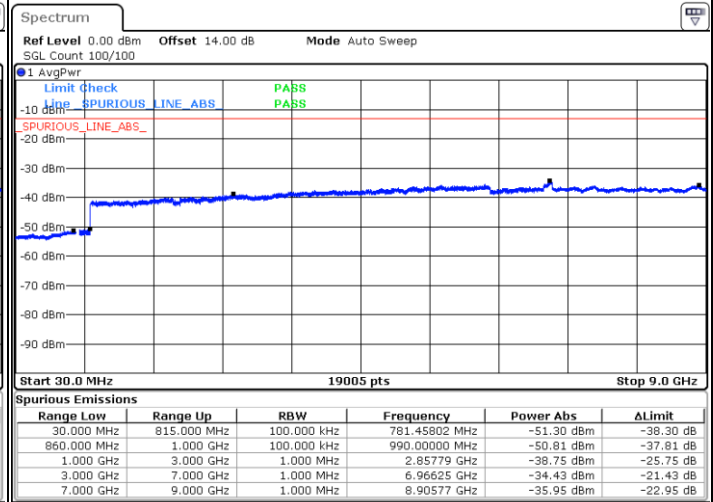
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 14.FEB.2019 21:44:10

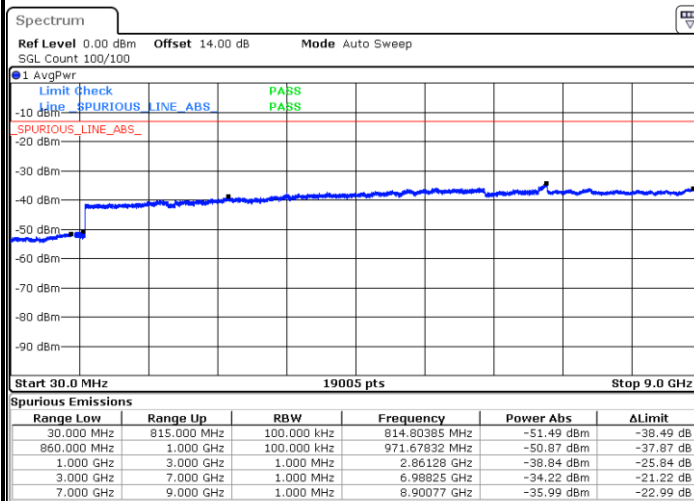
Highest Channel / 16QAM



Date: 14.FEB.2019 21:45:05

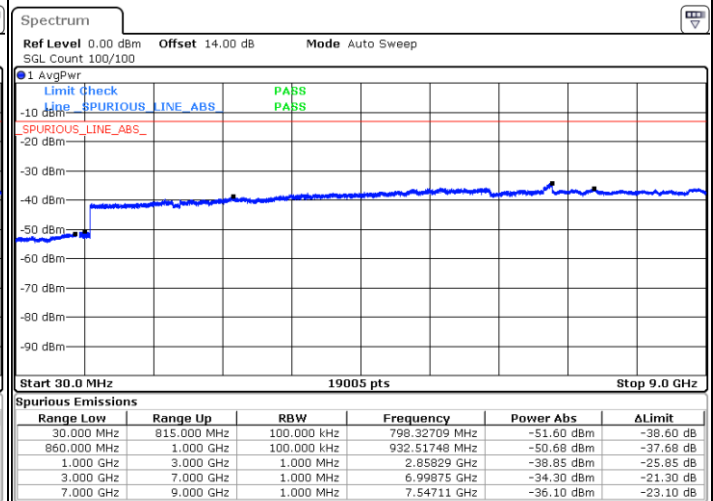
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 14.FEB.2019 21:53:17

Lowest Channel / 16QAM

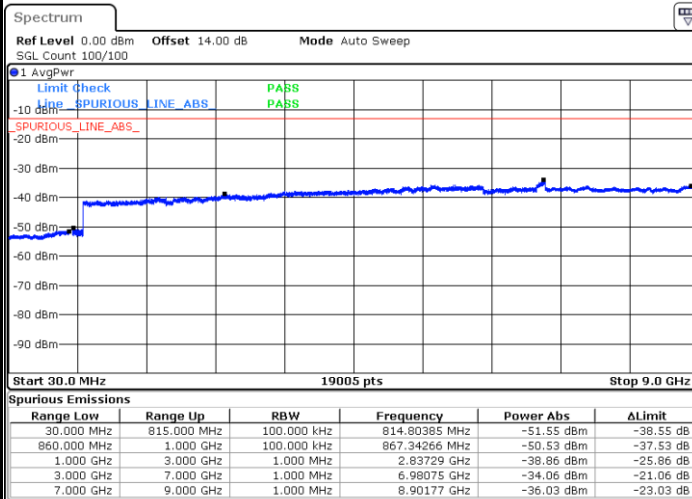


Date: 14.FEB.2019 21:54:12



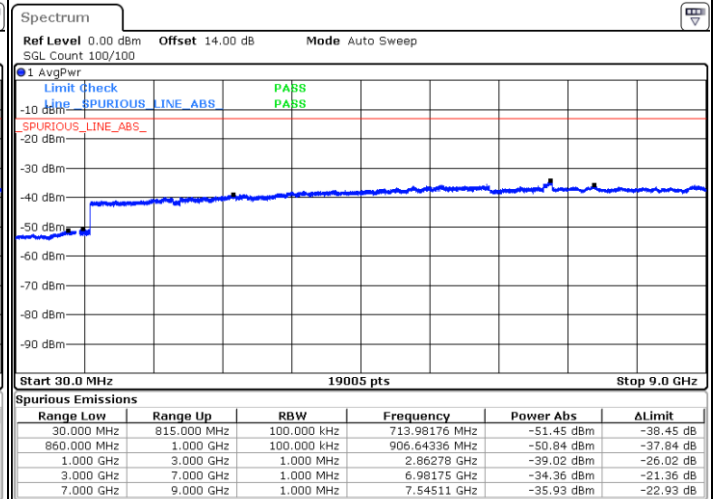
LTE Band 5 / 10MHz

Middle Channel / QPSK



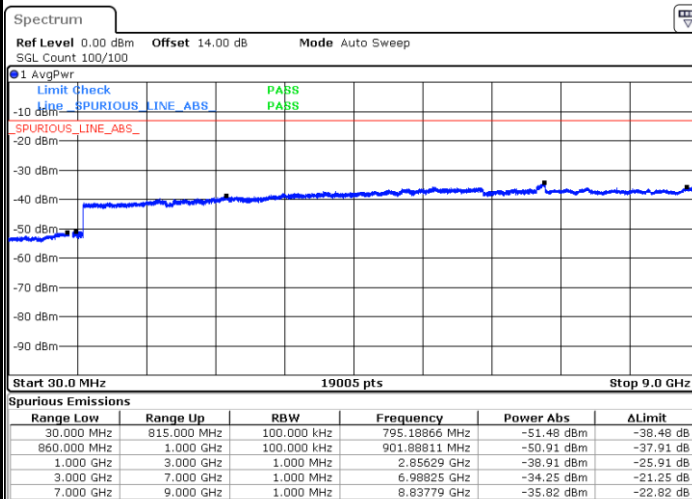
Date: 14.FEB.2019 21:55:48

Middle Channel / 16QAM



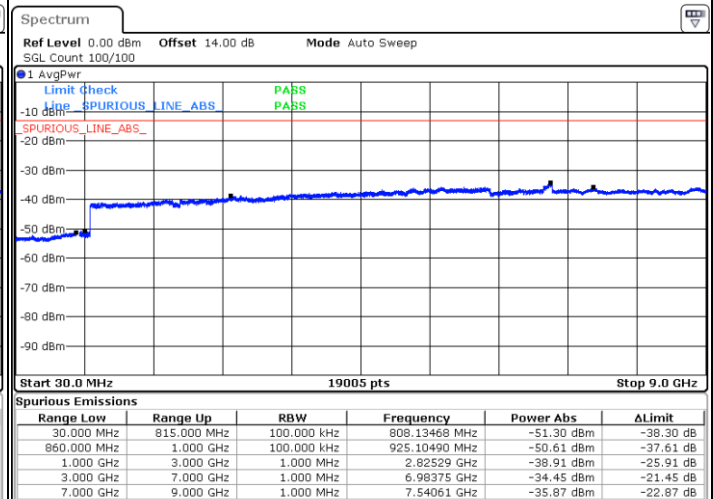
Date: 14.FEB.2019 21:56:43

Highest Channel / QPSK



Date: 14.FEB.2019 22:04:54

Highest Channel / 16QAM

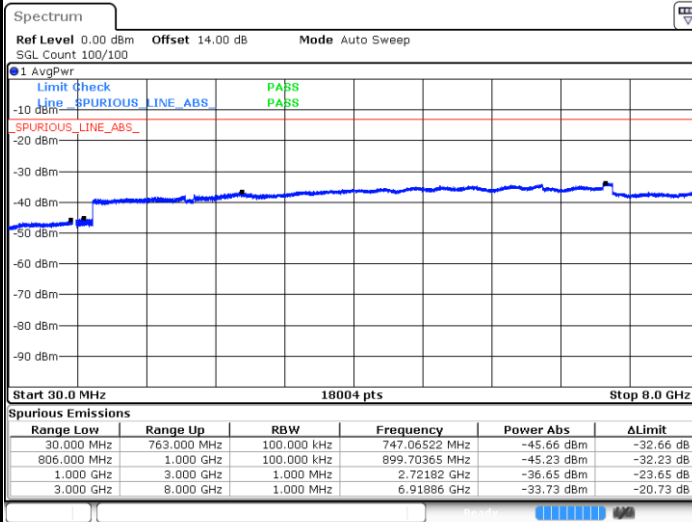


Date: 14.FEB.2019 22:05:49



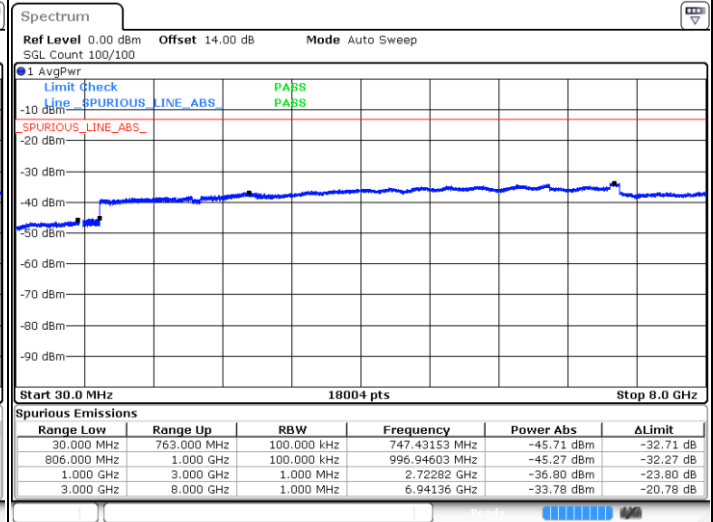
LTE Band 13 / 5MHz

Lowest Channel / QPSK



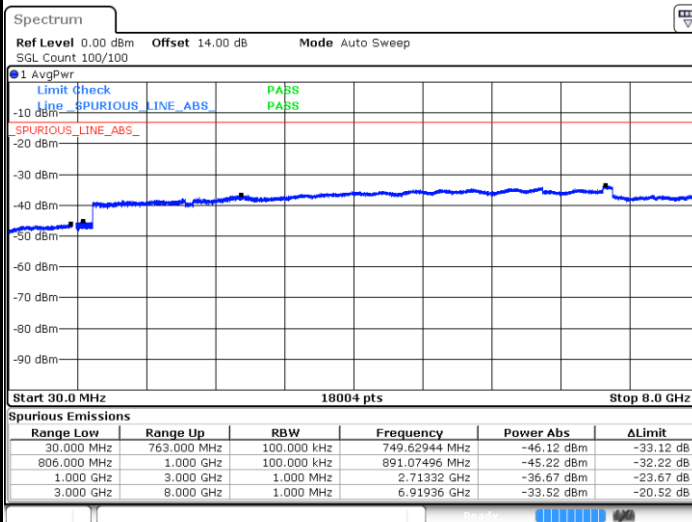
Date: 13 FEB 2019 00:24:43

Lowest Channel / 16QAM



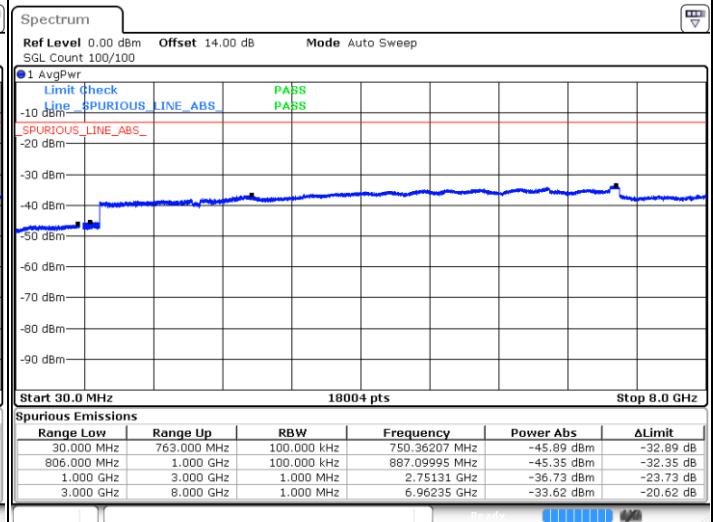
Date: 13 FEB 2019 00:25:36

Middle Channel / QPSK



Date: 13 FEB 2019 00:27:10

Middle Channel / 16QAM

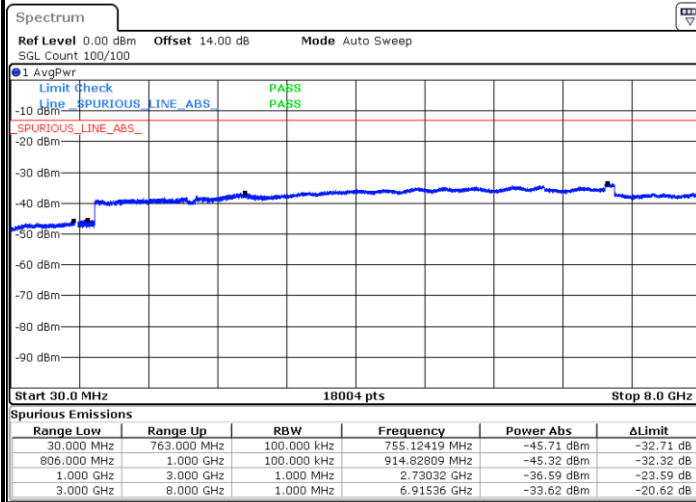


Date: 13 FEB 2019 00:28:04



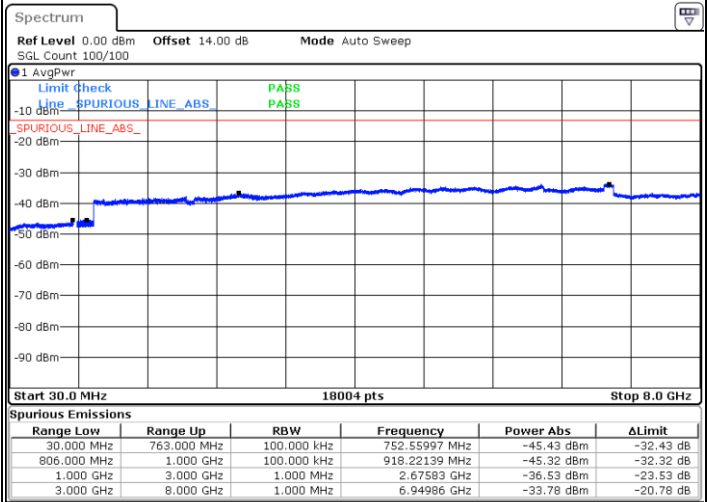
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 13 FEB 2019 00:36:13

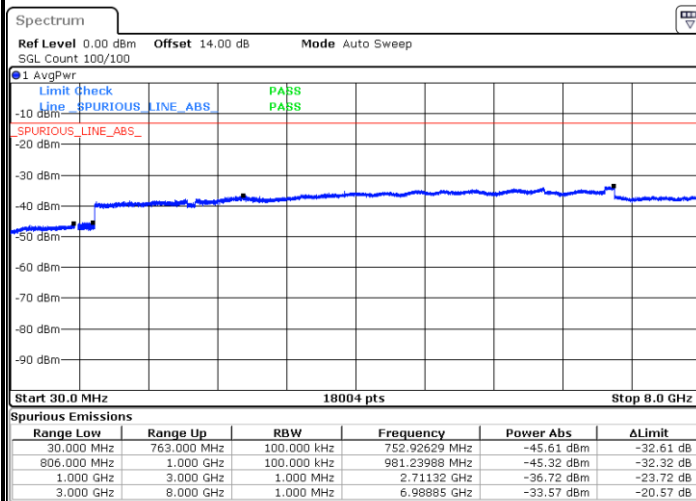
Highest Channel / 16QAM



Date: 13 FEB 2019 00:37:07

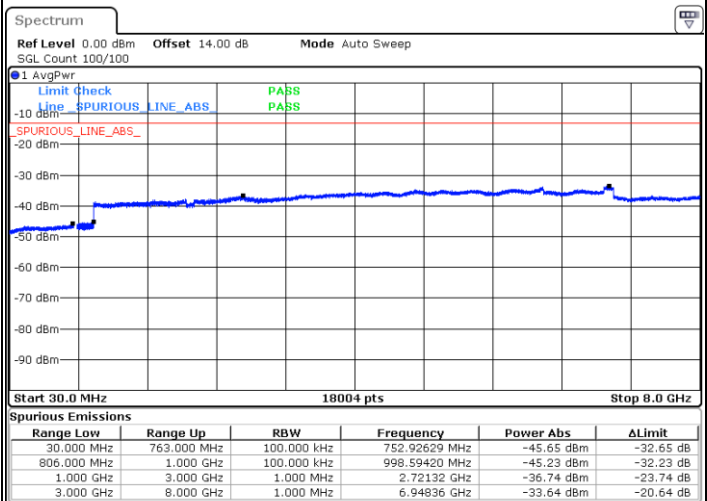
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 13 FEB 2019 00:48:33

Middle Channel / 16QAM



Date: 13 FEB 2019 00:49:27

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	0.0005	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 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	0.0008	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 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	0.0011	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 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	0.0008	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 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 / 20MHz / QPSK /16QAM									
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	3742.18	-45.79	-13	-32.79	-63.68	-52.54	5.85	12.60	H
	5613.27	-57.16	-13	-44.16	-78.40	-62.96	7.30	13.10	H
	7484.36	-54.57	-13	-41.57	-80.12	-57.72	8.35	11.50	H
	3742.18	-47.78	-13	-34.78	-64.94	-54.53	5.85	12.60	V
	5613.27	-54.93	-13	-41.93	-75.52	-60.73	7.30	13.10	V
	7484.36	-53.82	-13	-40.82	-78.73	-56.97	8.35	11.50	V

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

LTE Band 4 / 10MHz / QPSK /16QAM									
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	3460.68	-48.22	-13	-35.22	-63.92	-55.07	5.65	12.50	H
	5191.02	-57.13	-13	-44.13	-78.72	-62.80	7.13	12.80	H
	6921.36	-57.23	-13	-44.23	-80.76	-60.63	8.40	11.80	H
	3460.68	-50.14	-13	-37.14	-65.35	-56.99	5.65	12.50	V
	5191.02	-56.92	-13	-43.92	-77.44	-62.59	7.13	12.80	V
	6921.36	-57.81	-13	-44.81	-80.86	-61.21	8.40	11.80	V

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



LTE Band 5 / 10MHz / QPSK /16QAM									
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	1664.18	-51.28	-13	-38.28	-61.07	-54.53	4.00	9.40	H
	2496.27	-60.40	-13	-47.40	-73.91	-63.97	4.88	10.60	H
	3328.36	-61.23	-13	-48.23	-76.86	-66.16	5.52	12.60	H
	4160.23	-54.44	-13	-41.44	-73.32	-58.91	6.00	12.62	H
	1664.18	-58.27	-13	-45.27	-67.55	-61.52	4.00	9.40	V
	2496.27	-62.20	-13	-49.20	-75.53	-65.77	4.88	10.60	V
	3328.36	-61.80	-13	-48.80	-77.01	-66.73	5.52	12.60	V
	4160.23	-58.28	-13	-45.28	-76.18	-62.75	6.00	12.62	V

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

LTE Band 13 / 5MHz / 16QAM									
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	1559.5	-47.48	-40	-7.48	-56.71	-50.73	4.00	9.40	H
	2339.25	-34.10	-13	-21.10	-48.01	-37.67	4.88	10.60	H
	3119	-56.50	-13	-43.50	-72.06	-61.43	5.52	12.60	H
	3898.75	-42.38	-13	-29.38	-61.02	-46.85	6.00	12.62	H
	4678.5	-54.56	-13	-41.56	-74.50	-57.97	7.14	12.70	H
	1559.5	-55.94	-40	-15.94	-64.68	-59.19	4.00	9.40	V
	2339.25	-44.86	-13	-31.86	-58.52	-48.43	4.88	10.60	V
	3119	-58.76	-13	-45.76	-73.97	-63.69	5.52	12.60	V
	3898.75	-42.78	-13	-29.78	-60.65	-47.25	6.00	12.62	V
	4678.5	-58.77	-13	-45.77	-77.59	-62.18	7.14	12.70	V

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