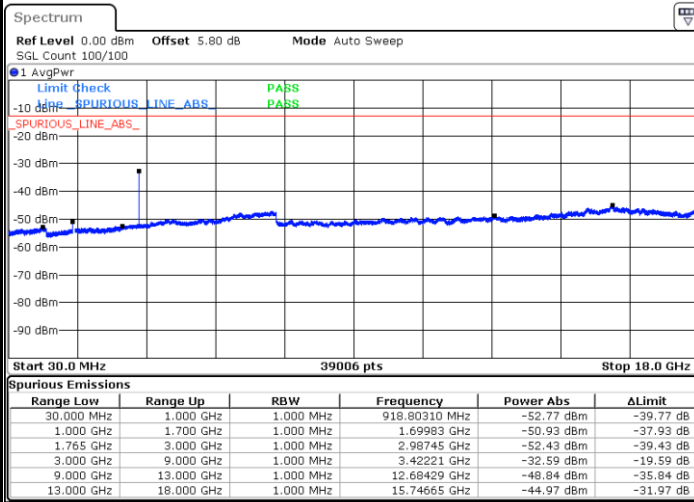




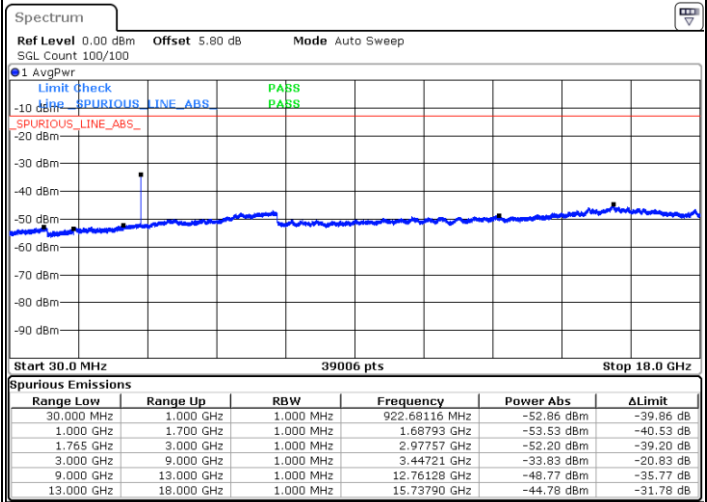
LTE Band 4 / 20MHz

Lowest Channel / 64QAM



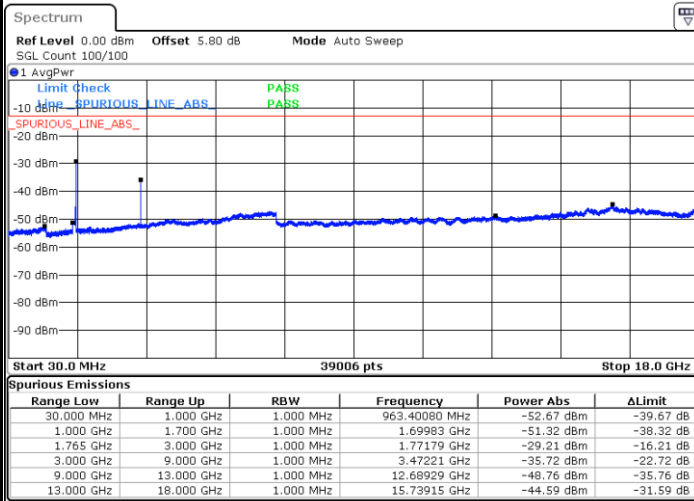
Date: 6 JUL 2019 22:51:23

Middle Channel / 64QAM



Date: 6 JUL 2019 22:52:39

Highest Channel / 64QAM

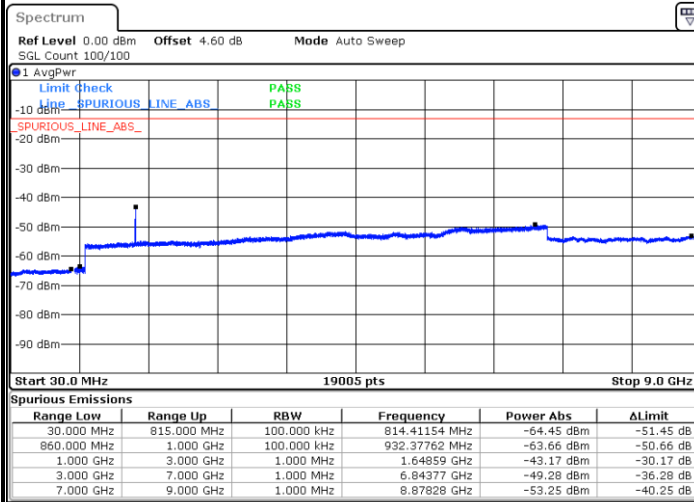


Date: 6 JUL 2019 22:56:09



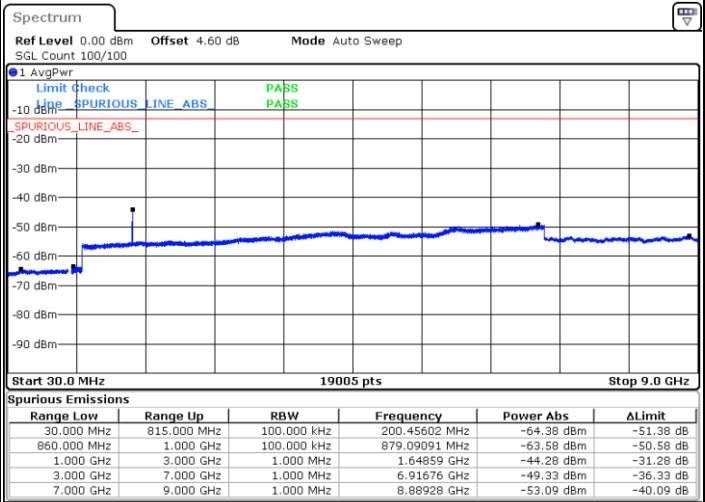
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



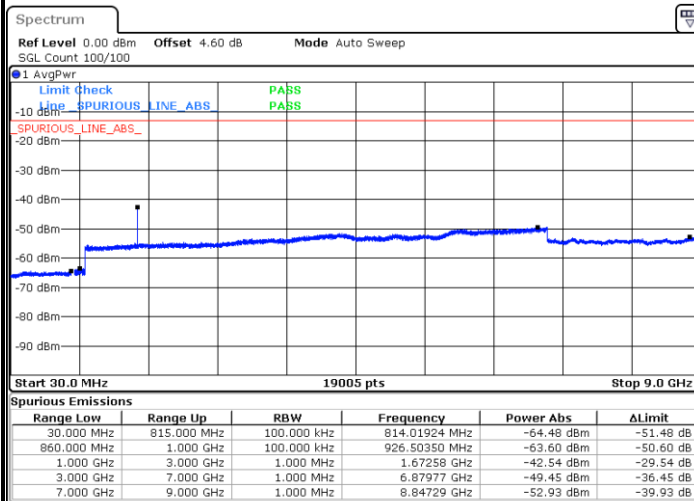
Date: 6 JUL 2019 14:49:54

Lowest Channel / 16QAM



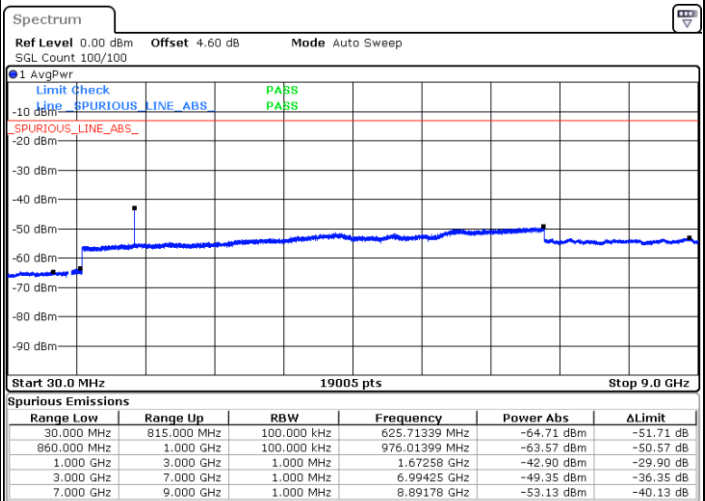
Date: 6 JUL 2019 14:50:48

Middle Channel / QPSK



Date: 6 JUL 2019 14:52:21

Middle Channel / 16QAM

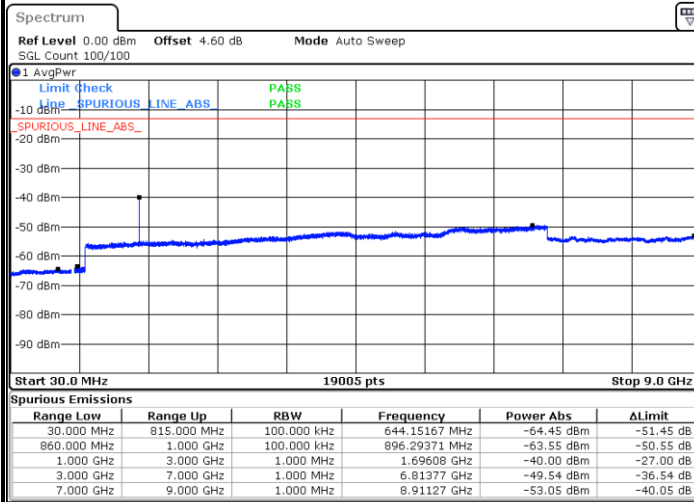


Date: 6 JUL 2019 14:53:15



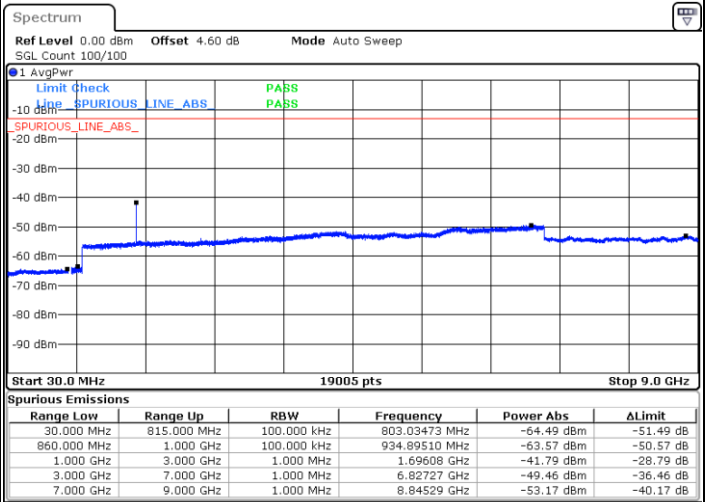
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 6 JUL 2019 15:01:24

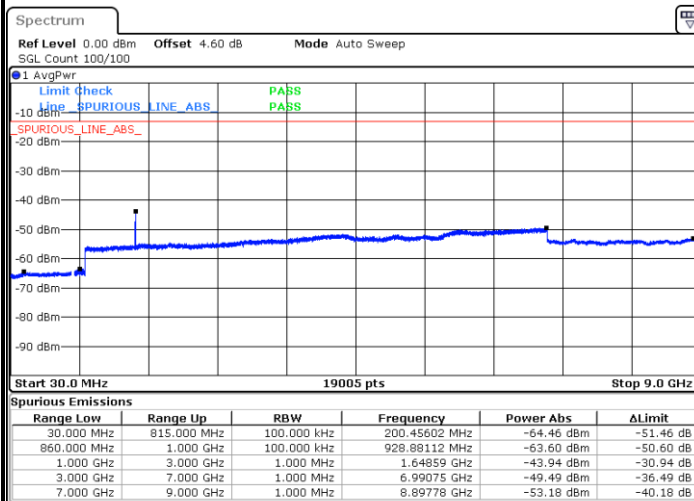
Highest Channel / 16QAM



Date: 6 JUL 2019 15:02:18

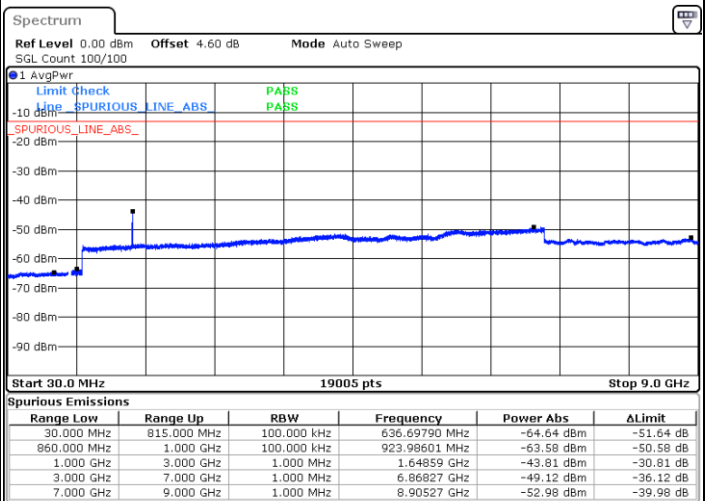
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 6 JUL 2019 15:39:20

Lowest Channel / 16QAM

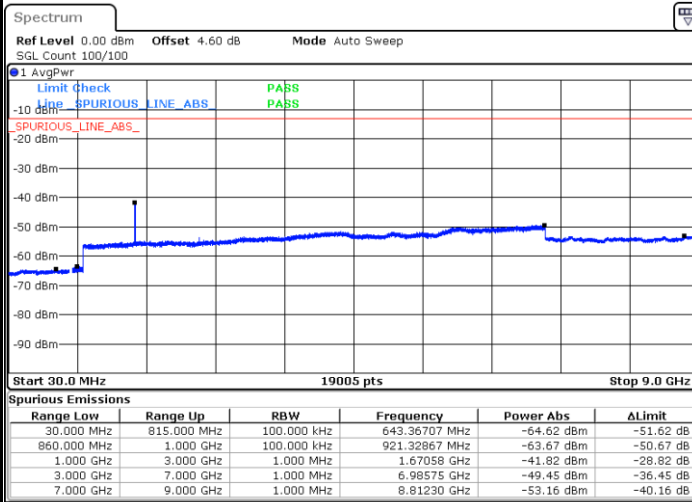


Date: 6 JUL 2019 15:40:14



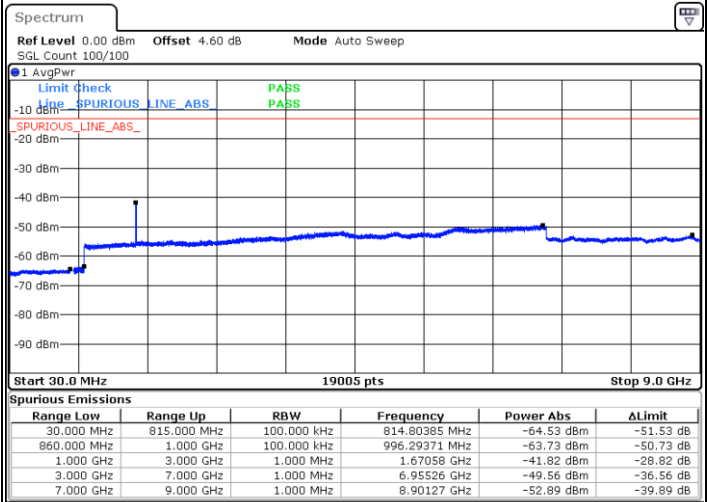
LTE Band 5 / 3MHz

Middle Channel / QPSK



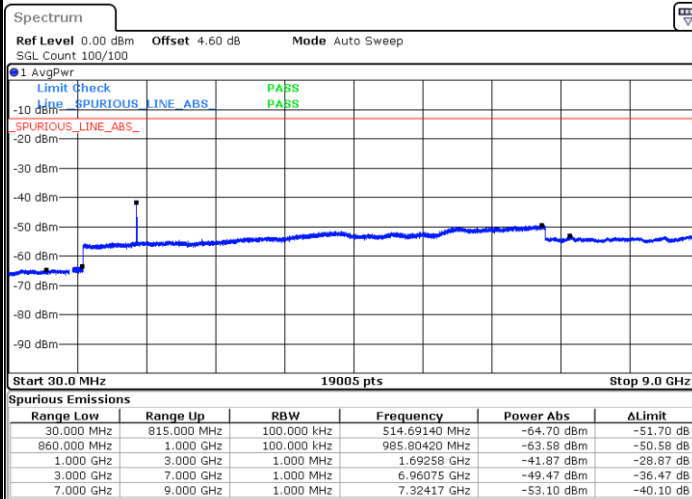
Date: 6 JUL 2019 15:41:48

Middle Channel / 16QAM



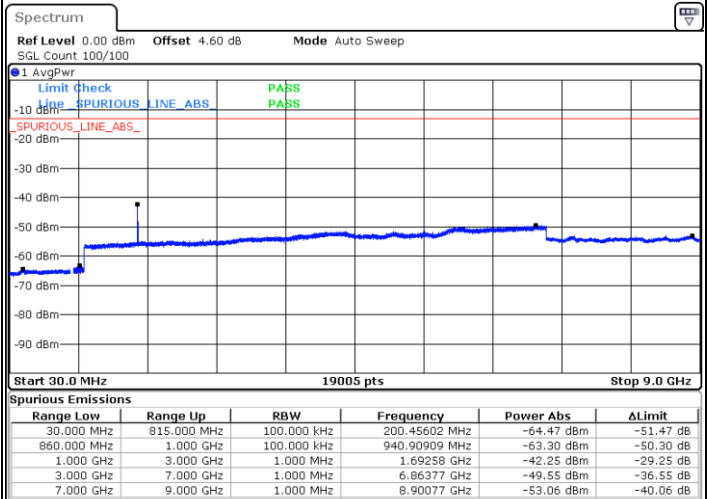
Date: 6 JUL 2019 15:42:42

Highest Channel / QPSK



Date: 6 JUL 2019 15:50:51

Highest Channel / 16QAM

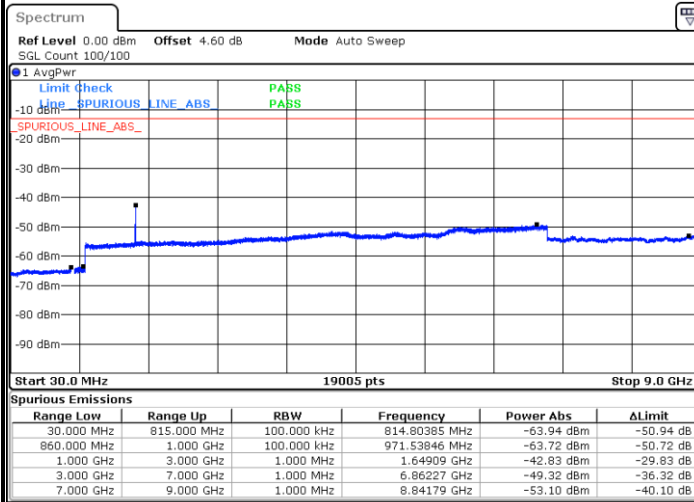


Date: 6 JUL 2019 15:51:45



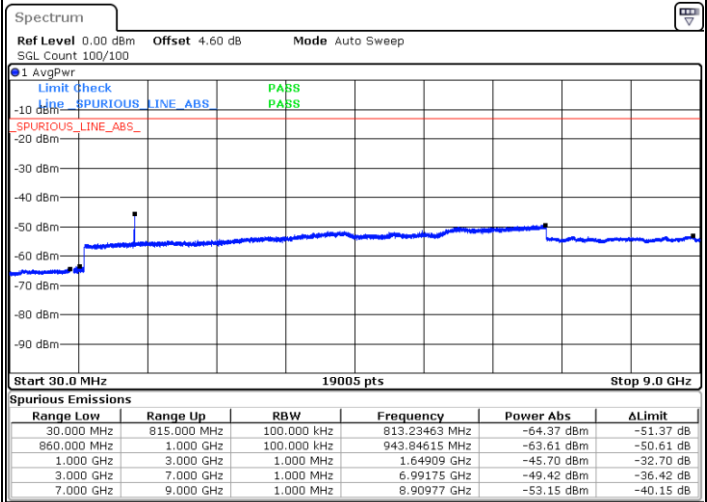
LTE Band 5 / 5MHz

Lowest Channel / QPSK



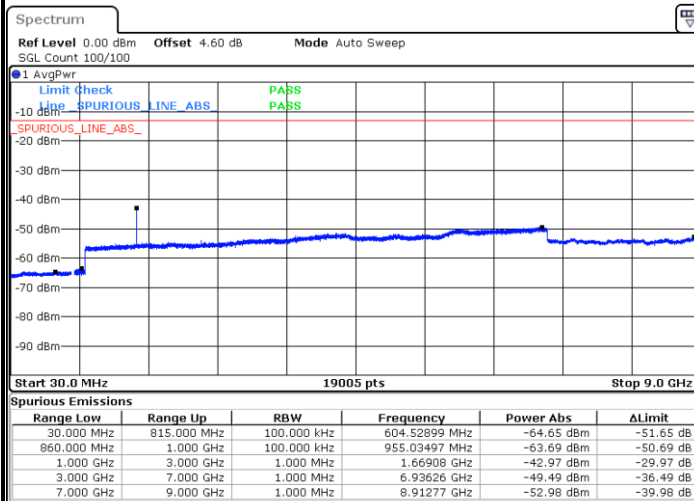
Date: 6 JUL 2019 15:59:54

Lowest Channel / 16QAM



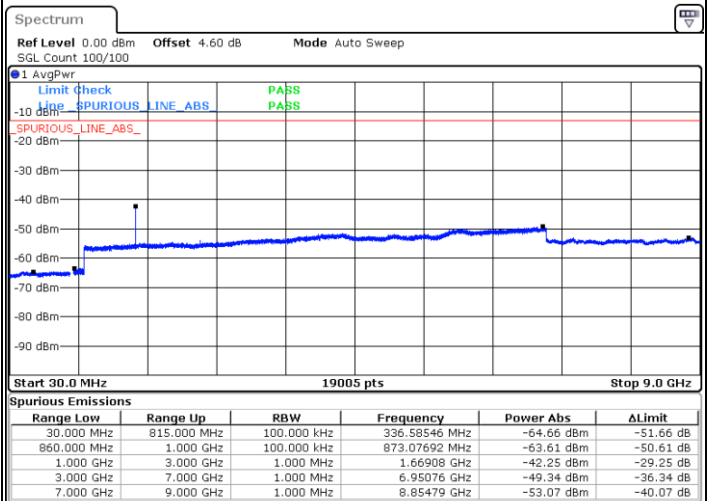
Date: 6 JUL 2019 16:00:47

Middle Channel / QPSK



Date: 6 JUL 2019 16:02:22

Middle Channel / 16QAM

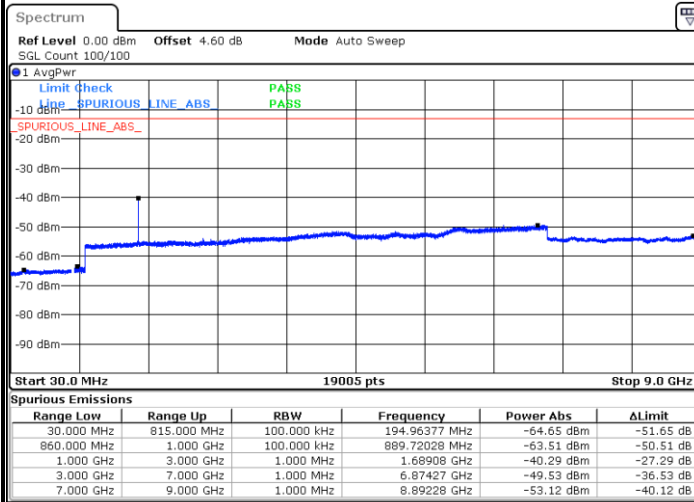


Date: 6 JUL 2019 16:03:15



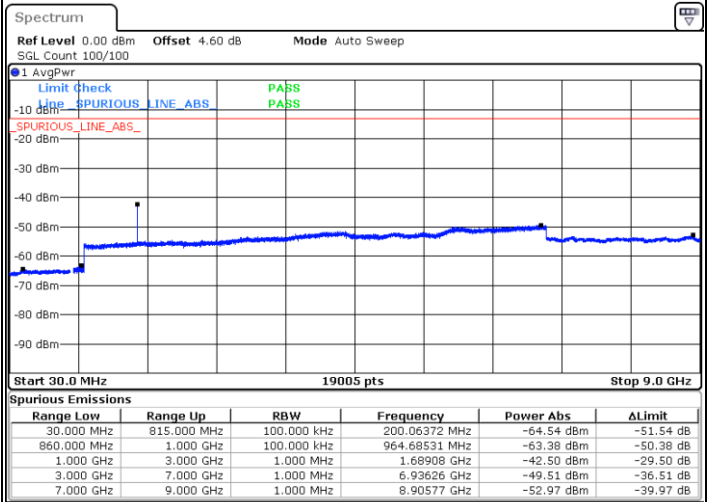
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 6 JUL 2019 16:11:24

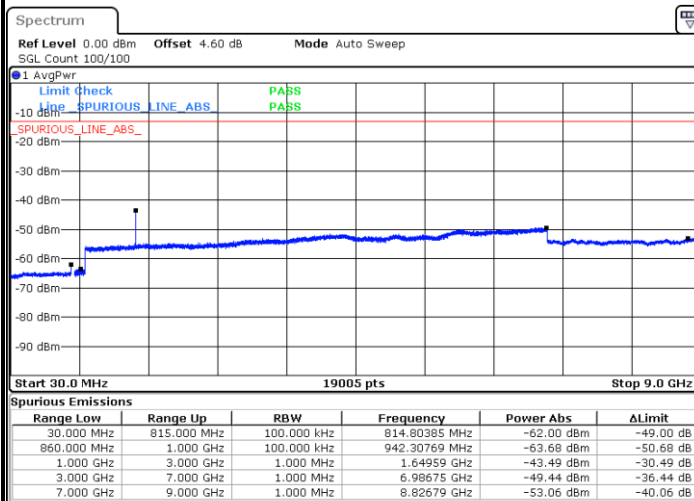
Highest Channel / 16QAM



Date: 6 JUL 2019 16:12:18

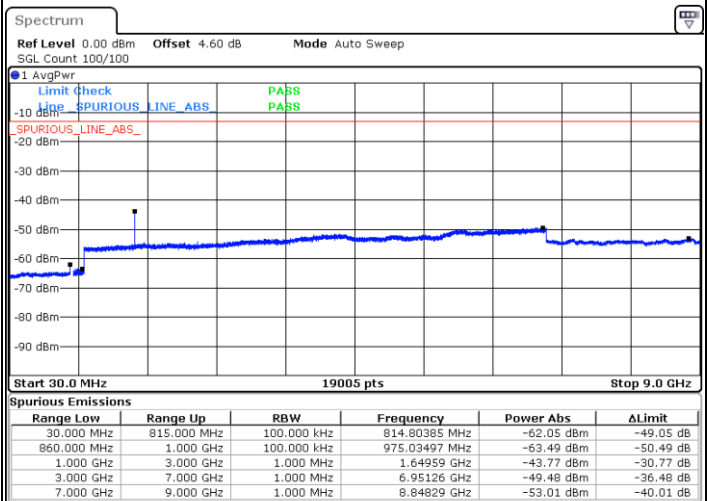
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 6 JUL 2019 16:20:27

Lowest Channel / 16QAM

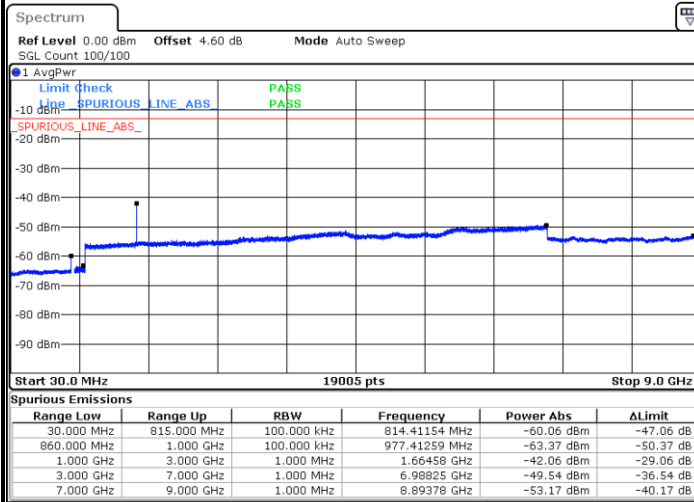


Date: 6 JUL 2019 16:21:21



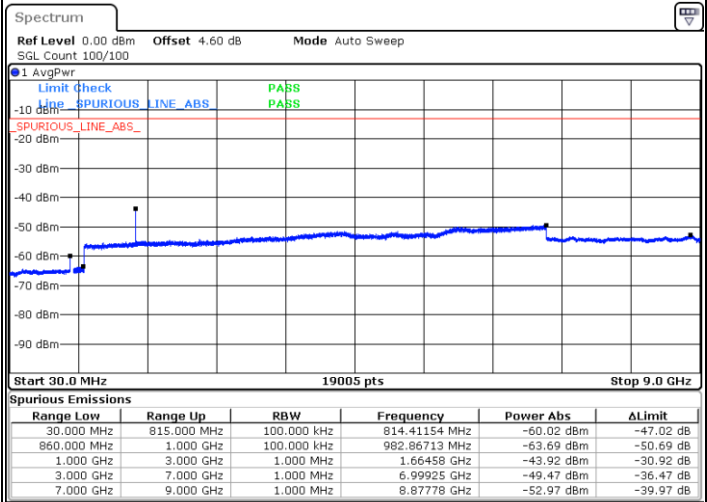
LTE Band 5 / 10MHz

Middle Channel / QPSK



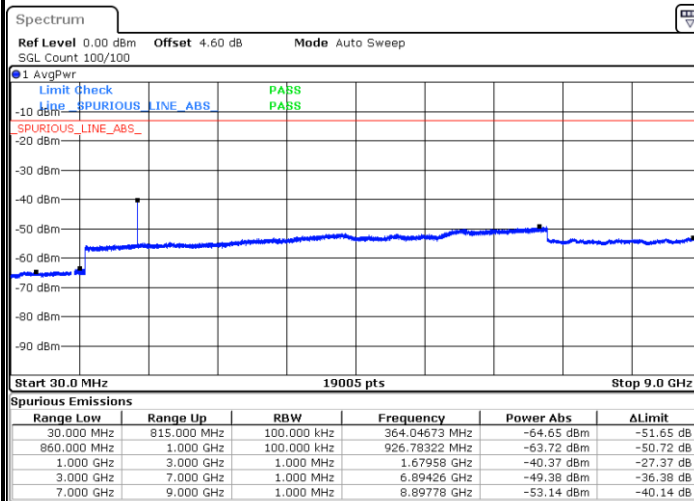
Date: 6 JUL 2019 16:22:55

Middle Channel / 16QAM



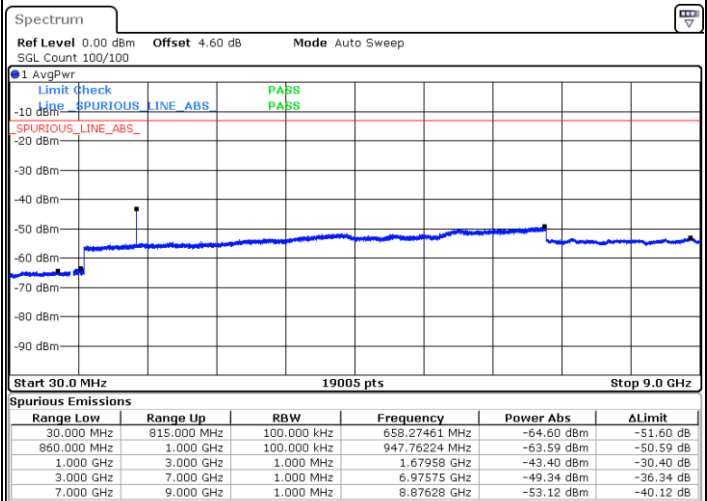
Date: 6 JUL 2019 16:23:49

Highest Channel / QPSK



Date: 6 JUL 2019 16:31:58

Highest Channel / 16QAM

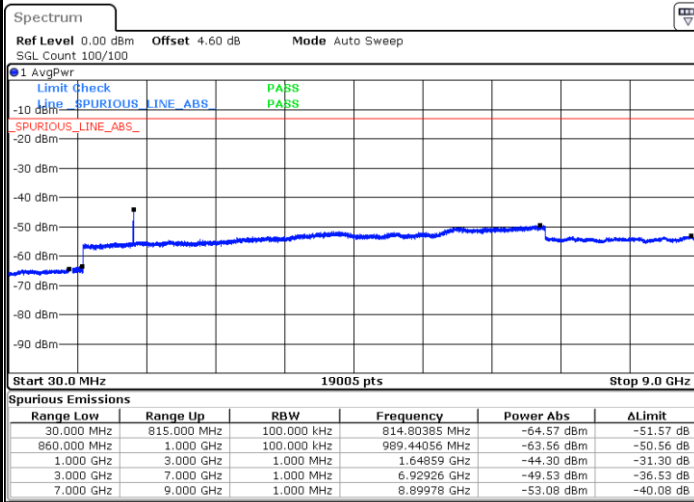


Date: 6 JUL 2019 16:32:52



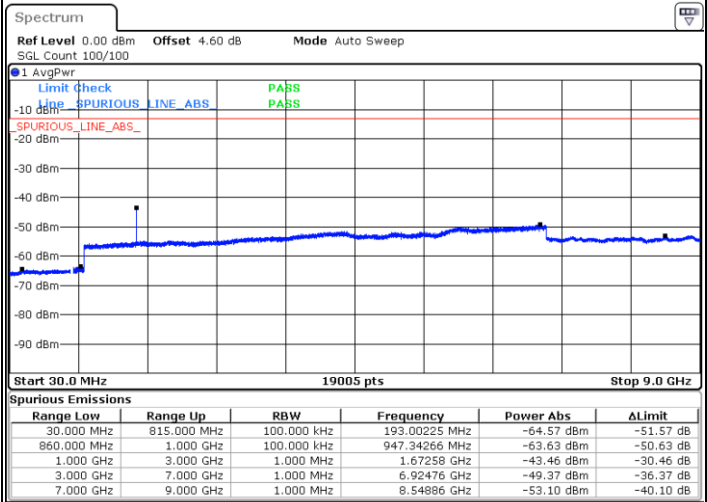
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM



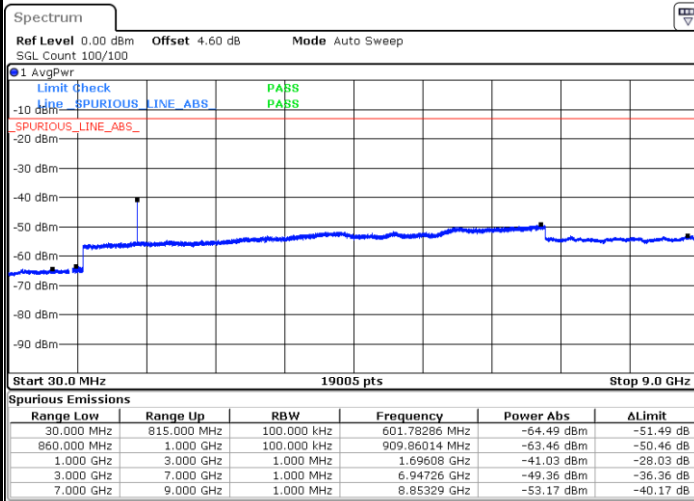
Date: 6 JUL 2019 16:49:10

Middle Channel / 64QAM



Date: 6 JUL 2019 16:50:04

Highest Channel / 64QAM

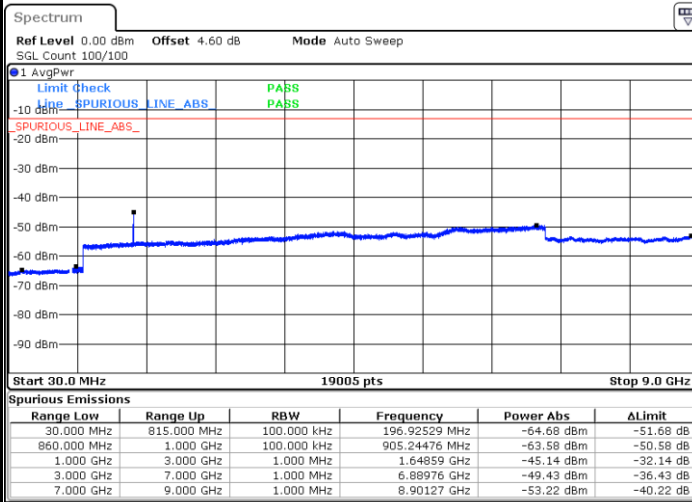


Date: 6 JUL 2019 16:54:55



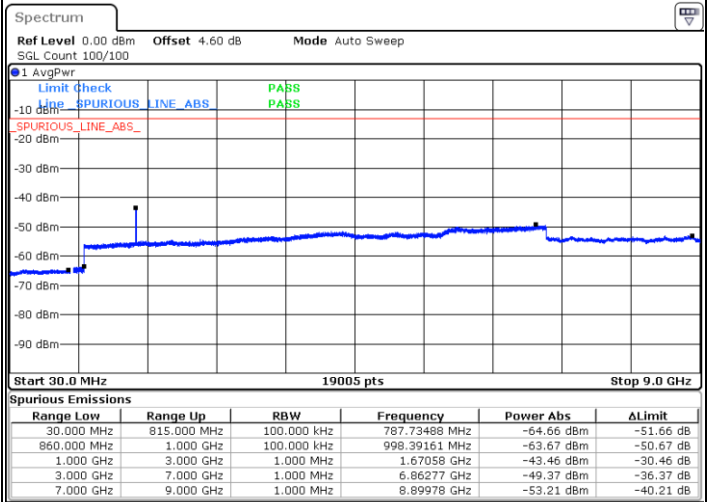
LTE Band 5 / 3MHz

Lowest Channel / 64QAM



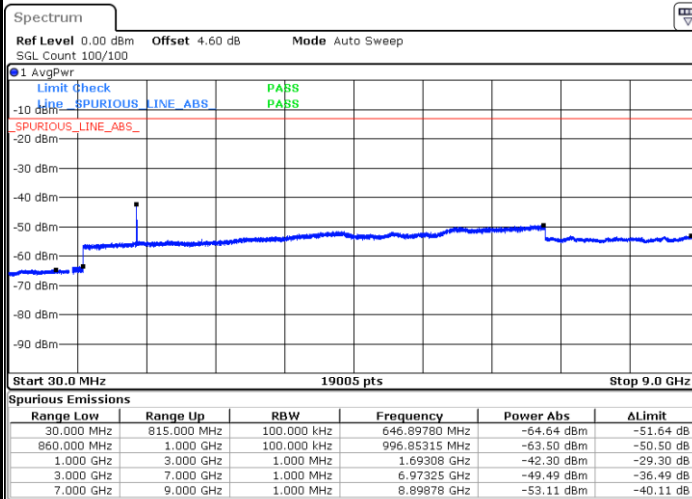
Date: 6 JUL 2019 16:59:26

Middle Channel / 64QAM



Date: 6 JUL 2019 17:00:20

Highest Channel / 64QAM

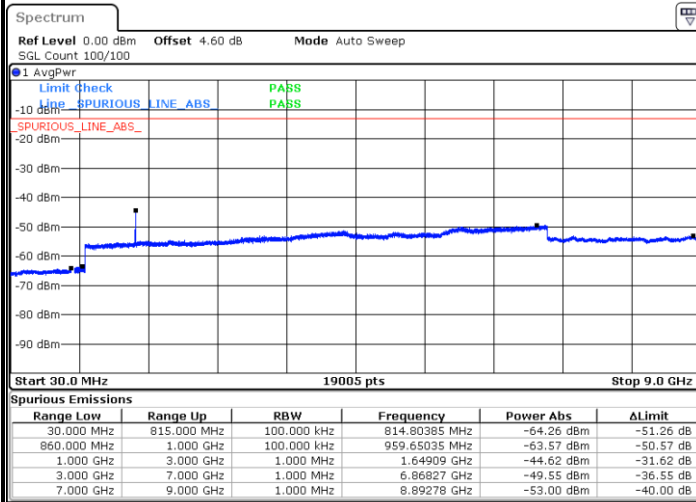


Date: 6 JUL 2019 17:05:12



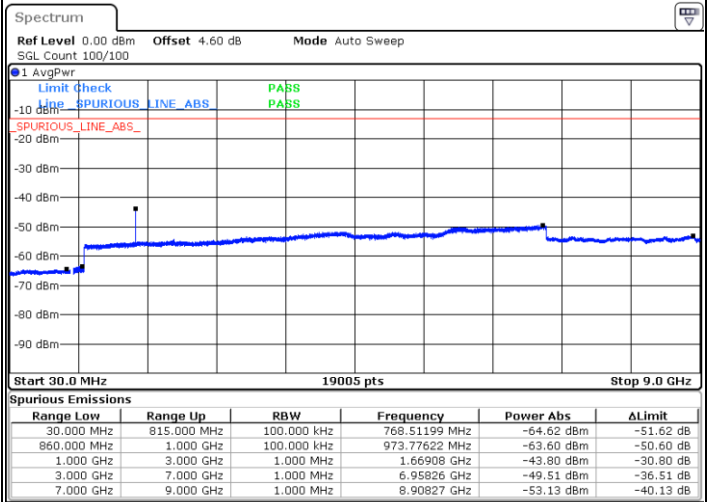
LTE Band 5 / 5MHz

Lowest Channel / 64QAM



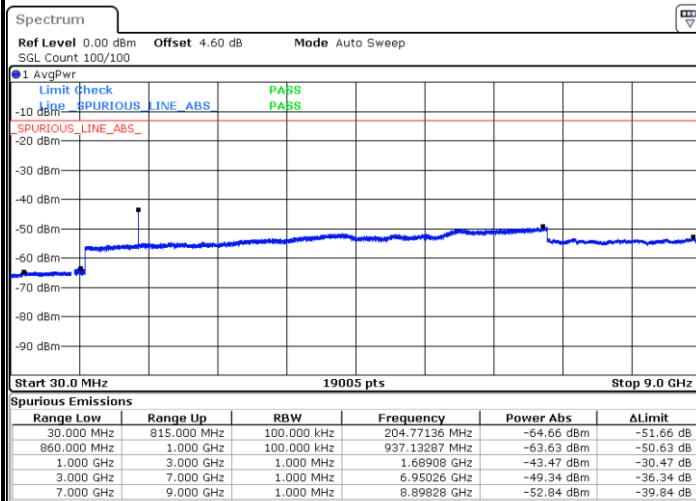
Date: 6 JUL 2019 17:09:43

Middle Channel / 64QAM



Date: 6 JUL 2019 17:10:37

Highest Channel / 64QAM

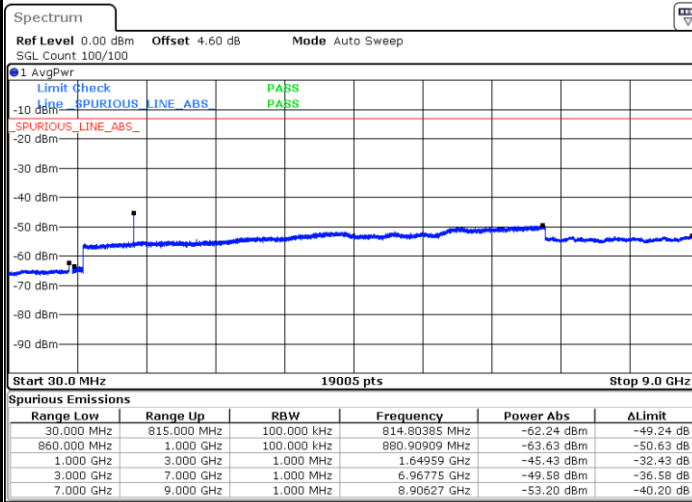


Date: 6 JUL 2019 17:15:28



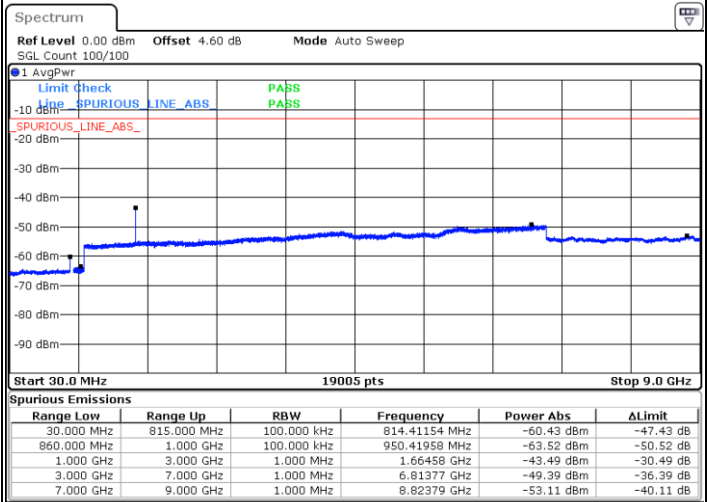
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



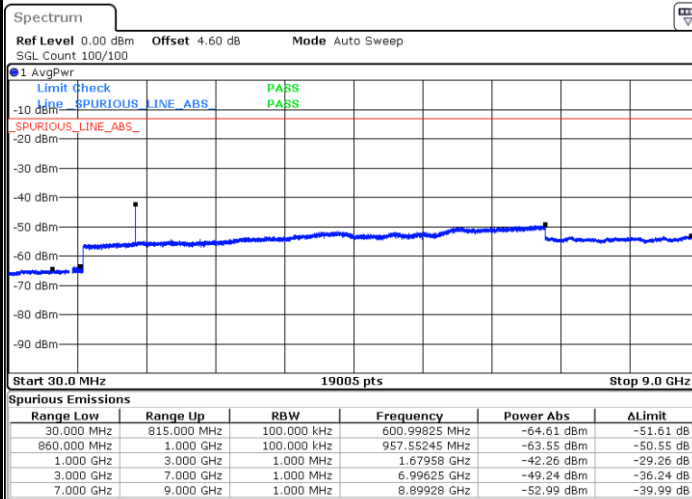
Date: 6 JUL 2019 17:20:00

Middle Channel / 64QAM



Date: 6 JUL 2019 17:20:53

Highest Channel / 64QAM

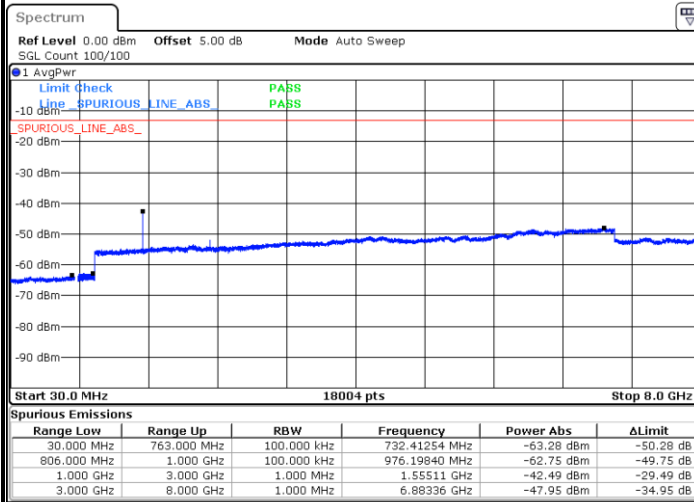


Date: 6 JUL 2019 17:25:45



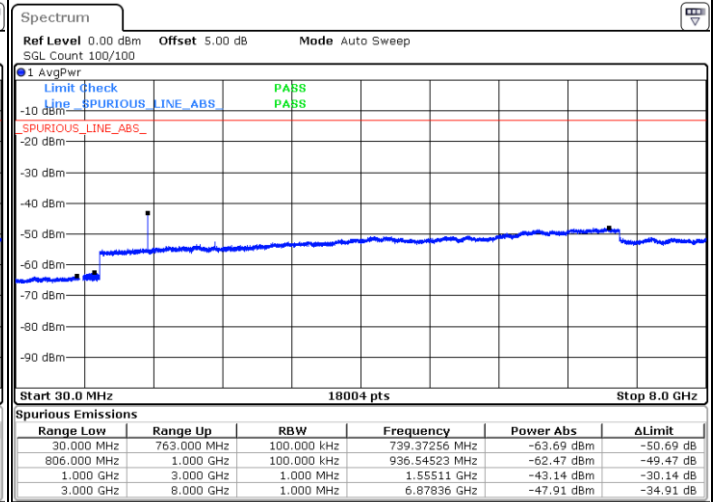
LTE Band 13 / 5MHz

Lowest Channel / QPSK



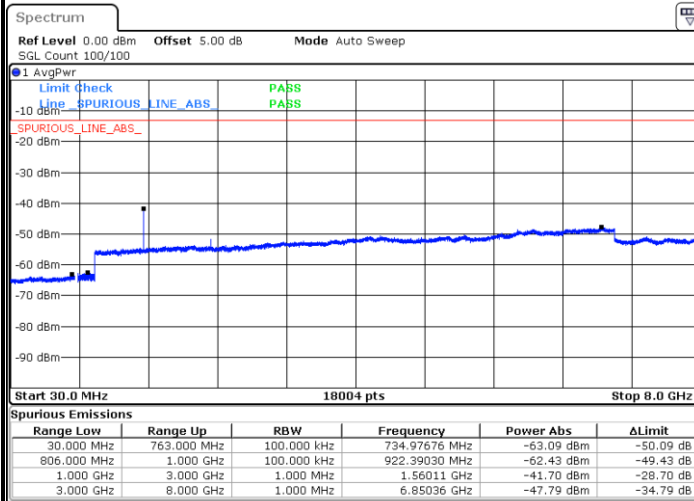
Date: 12 JUL 2019 04:50:48

Lowest Channel / 16QAM



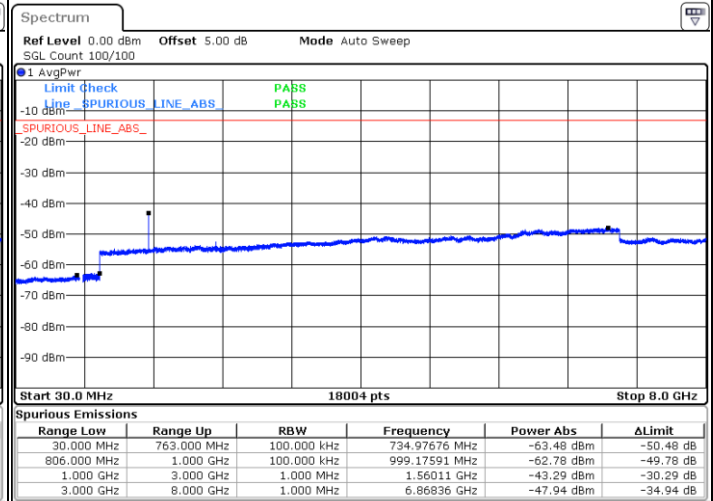
Date: 12 JUL 2019 04:49:54

Middle Channel / QPSK



Date: 12 JUL 2019 04:52:23

Middle Channel / 16QAM

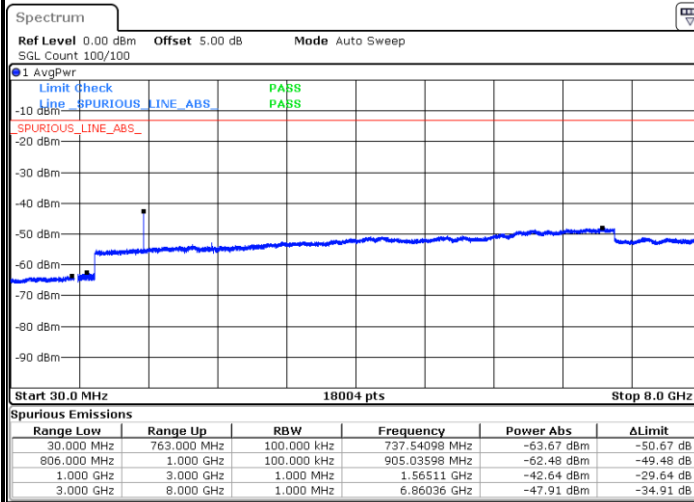


Date: 12 JUL 2019 04:53:17



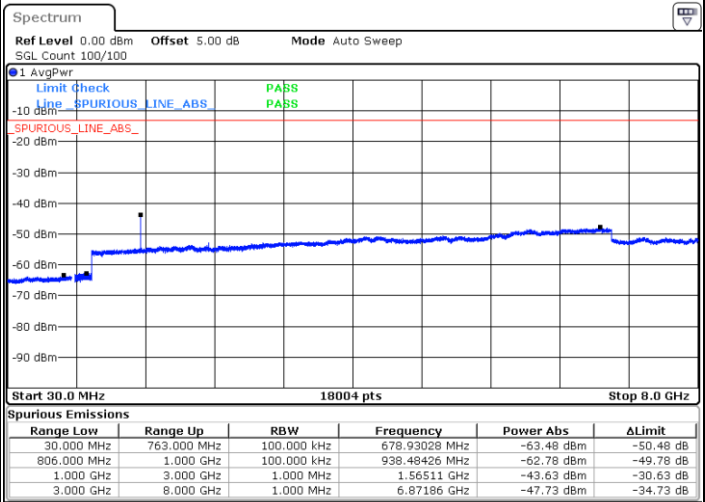
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 12 JUL 2019 05:02:17

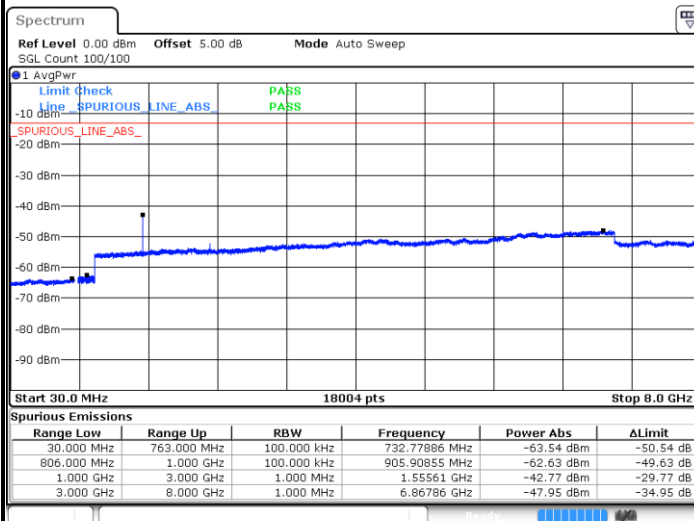
Highest Channel / 16QAM



Date: 12 JUL 2019 05:01:22

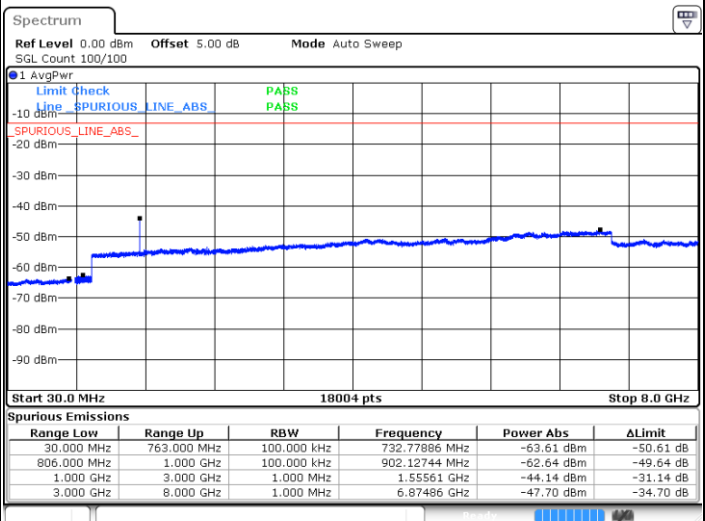
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 12 JUL 2019 05:03:11

Middle Channel / 16QAM

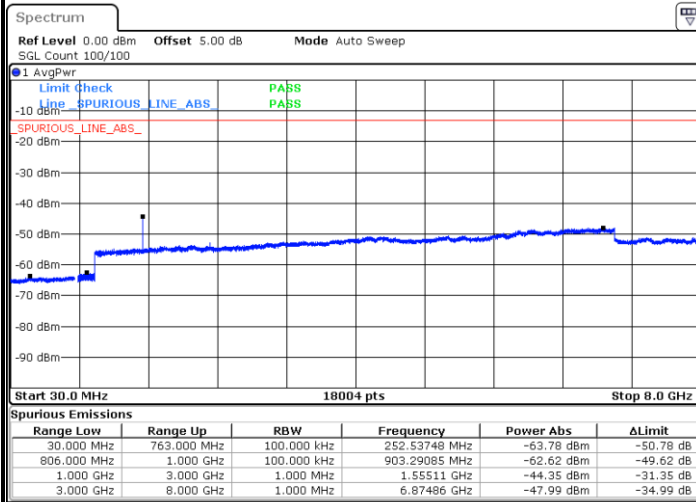


Date: 12 JUL 2019 05:04:05



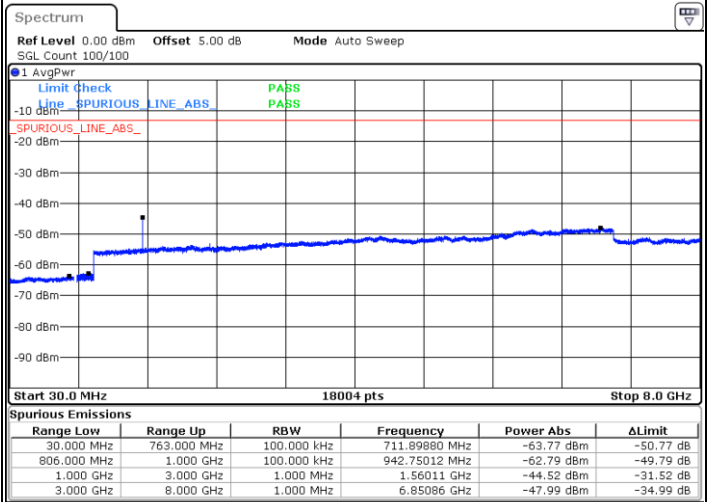
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



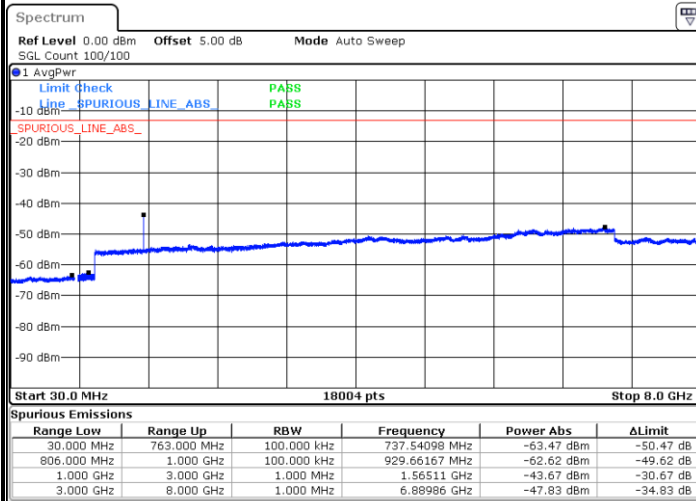
Date: 12 JUL 2019 05:25:00

Middle Channel / 64QAM



Date: 12 JUL 2019 05:25:54

Highest Channel / 64QAM

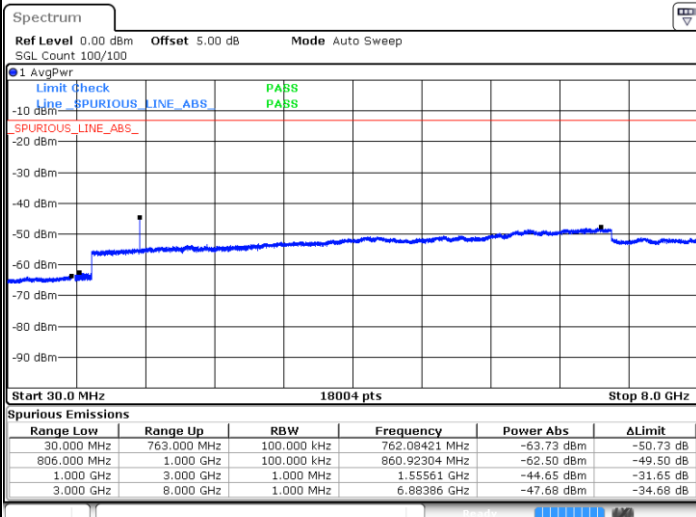


Date: 12 JUL 2019 05:26:49



LTE Band 13 / 10MHz

Middle Channel / 64QAM



Date: 12 JUL 2019 05:32:56

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	0.0011	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0001	
20	Battery End Point	0.0009	

Note:

1. Normal Voltage =3.7 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.2 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	0.0030	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.7 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.2 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	0.0032	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0035	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0020	
20	Battery End Point	0.0011	

Note: Normal Voltage =3.7 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.2 V.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0022	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.7 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.2 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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741	-47.32	-13	-34.32	-53.58	1.843	8.10	H
	5613	-53.34	-13	-40.34	-61.65	2.19	10.50	H
	7482	-52.43	-13	-39.43	-61.35	2.58	11.50	H
	3741	-49.61	-13	-36.61	-55.87	1.84	8.10	V
	5613	-53.35	-13	-40.35	-61.66	2.19	10.50	V
	7482	-52.43	-13	-39.43	-61.35	2.58	11.50	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3447	-32.38	-13	-19.38	-39.07	1.75	8.44	H
	5172	-53.69	-13	-40.69	-62.11	1.94	10.36	H
	6894	-51.73	-13	-38.73	-60.97	2.47	11.71	H
	3447	-37.54	-13	-24.54	-44.23	1.75	8.44	V
	5172	-53.51	-13	-40.51	-61.93	1.94	10.36	V
	6894	-52.03	-13	-39.03	-61.27	2.47	11.71	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-63.41	-13	-50.41	-66.65	1.11	6.50	H
	2496	-60.89	-13	-47.89	-63.51	1.43	6.20	H
	3330	-59.54	-13	-46.54	-63.98	1.71	8.30	H
	1664	-62.12	-13	-49.12	-65.36	1.11	6.50	V
	2496	-57.17	-13	-44.17	-59.79	1.43	6.20	V
	3330	-59.01	-13	-46.01	-63.45	1.71	8.30	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1560	-65.54	-42.15	-23.39	-68.17	1.09	5.87	H
	2340	-61.76	-13	-48.76	-64.16	1.37	5.92	H
	3120	-60.25	-13	-47.25	-64.14	1.64	7.68	H
	1560	-65.82	-42.15	-23.67	-68.45	1.09	5.87	V
	2340	-60.58	-13	-47.58	-62.98	1.37	5.92	V
	3120	-59.67	-13	-46.67	-63.56	1.64	7.68	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	-65.48	-13	-52.48	-68.11	1.09	5.87	H
	2332	-61.36	-13	-48.36	-63.76	1.37	5.92	H
	3110	-59.78	-13	-46.78	-63.67	1.64	7.68	H
	1556	-65.63	-13	-52.63	-68.26	1.09	5.87	V
	2332	-59.44	-13	-46.44	-61.84	1.37	5.92	V
	3110	-59.21	-13	-46.21	-63.10	1.64	7.68	V

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