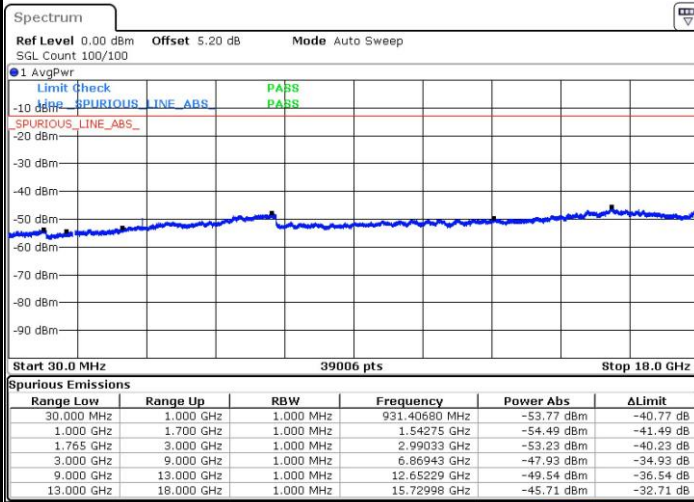




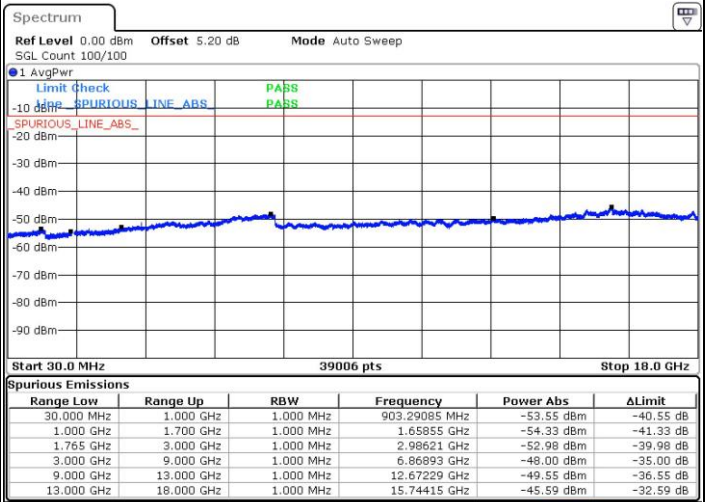
LTE Band 4 / 1.4MHz

Highest Channel / QPSK



Date: 4 APR 2019 23:17:39

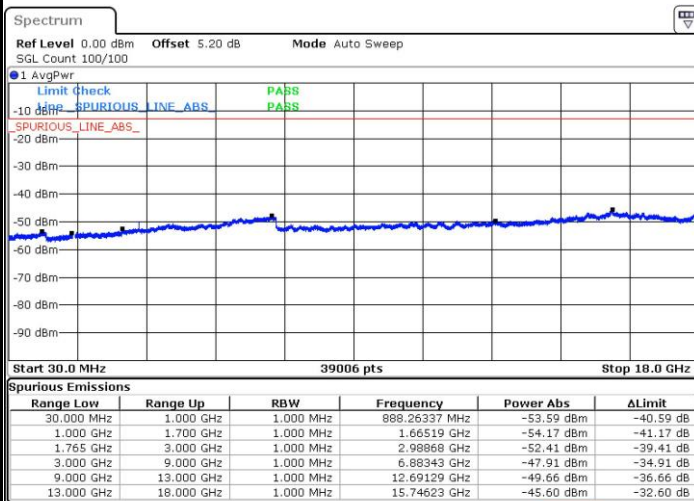
Highest Channel / 16QAM



Date: 4 APR 2019 23:18:22

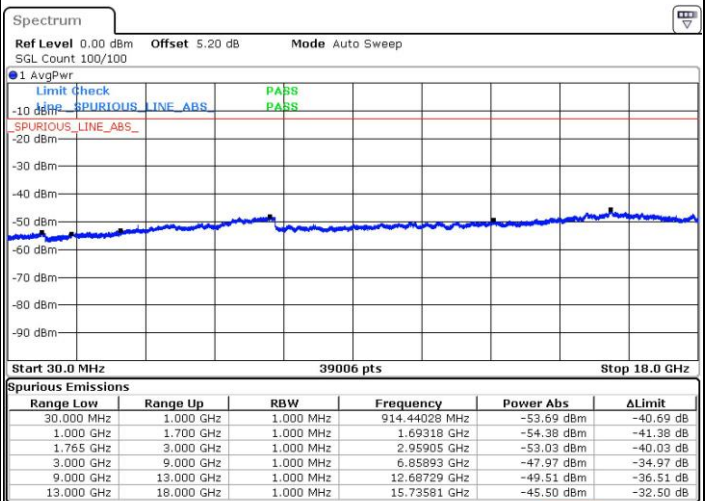
LTE Band 4 / 3MHz

Lowest Channel / QPSK



Date: 4 APR 2019 23:33:18

Lowest Channel / 16QAM

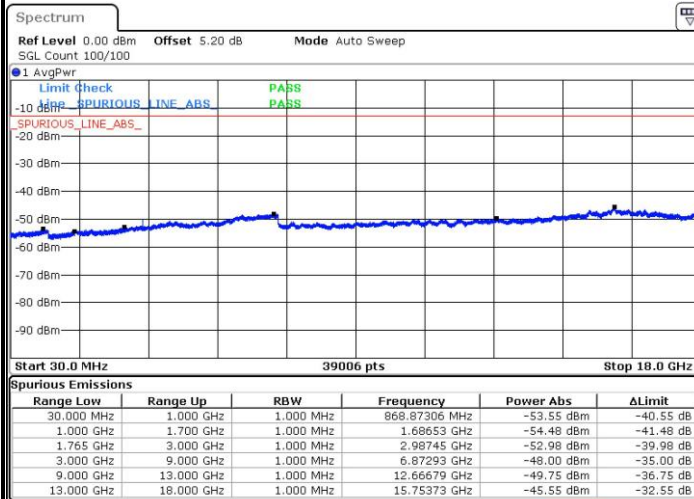


Date: 4 APR 2019 23:34:50



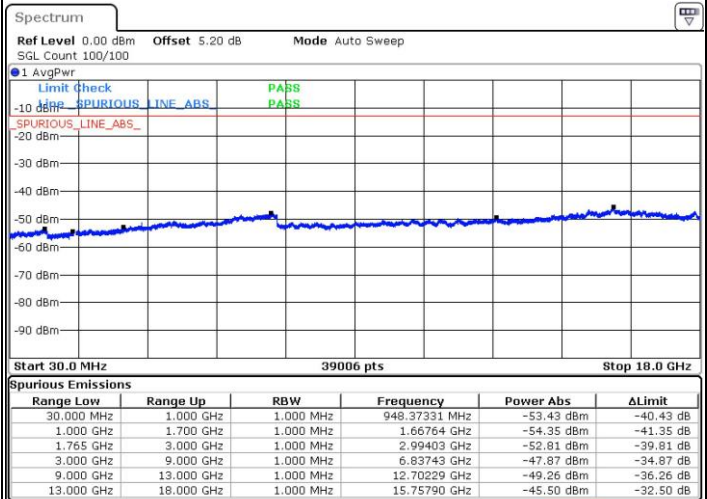
LTE Band 4 / 3MHz

Middle Channel / QPSK



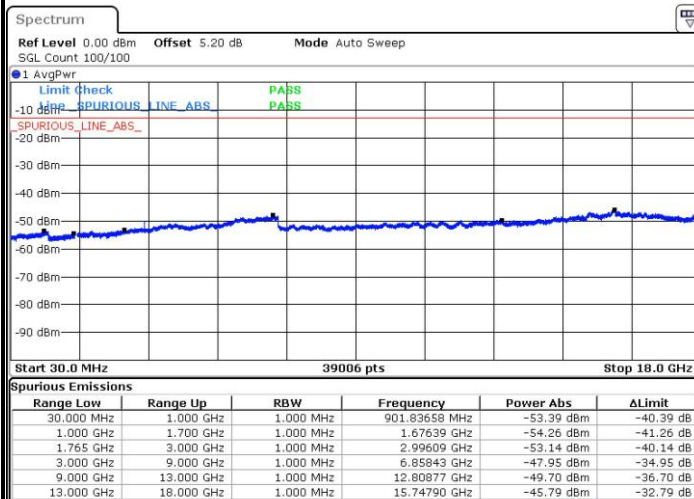
Date: 4 APR 2019 23:35:35

Middle Channel / 16QAM



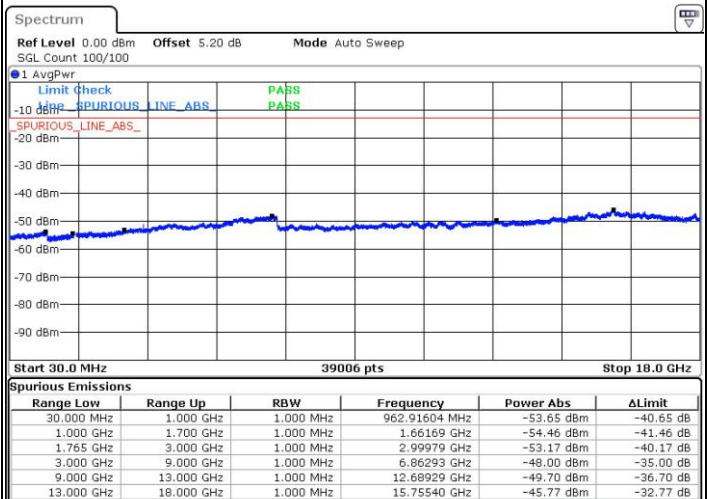
Date: 4 APR 2019 23:36:19

Highest Channel / QPSK



Date: 4 APR 2019 23:37:03

Highest Channel / 16QAM

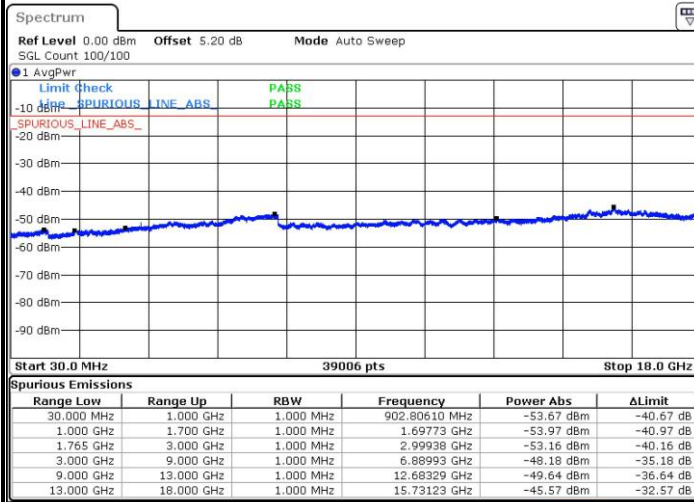


Date: 4 APR 2019 23:39:50



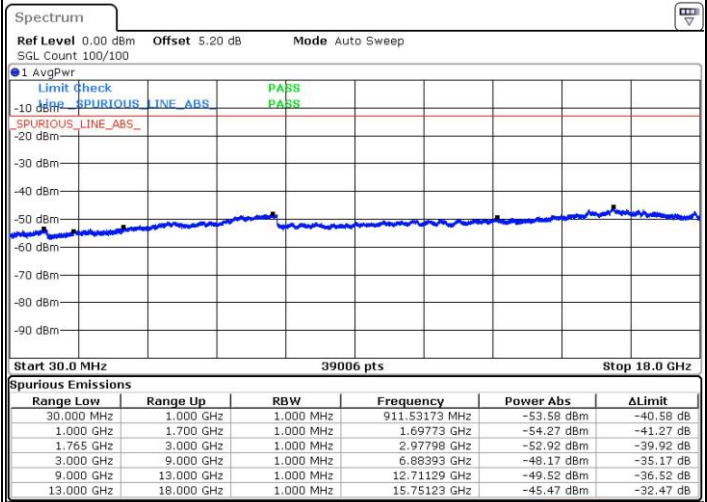
LTE Band 4 / 5MHz

Lowest Channel / QPSK



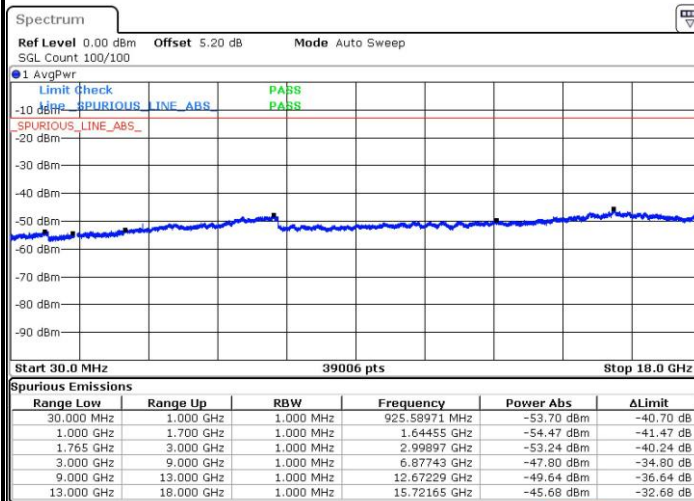
Date: 4 APR 2019 23:53:13

Lowest Channel / 16QAM



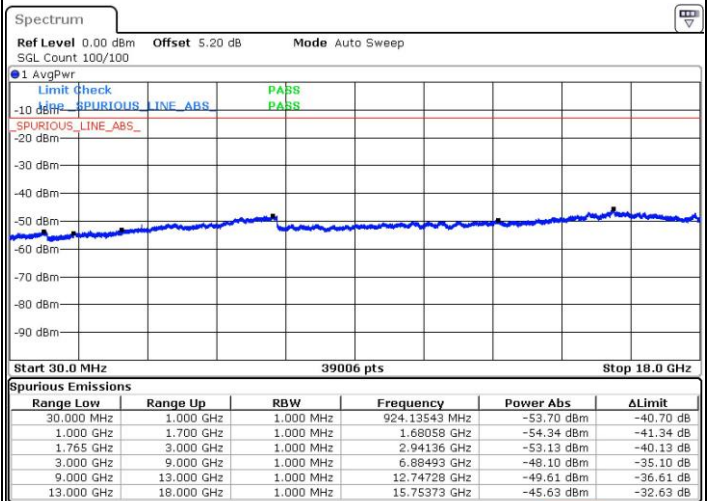
Date: 4 APR 2019 23:54:35

Middle Channel / QPSK



Date: 4 APR 2019 23:55:26

Middle Channel / 16QAM

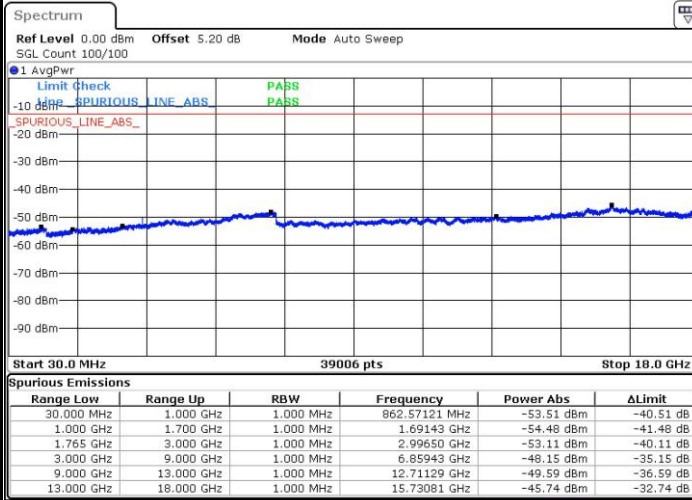


Date: 4 APR 2019 23:56:05



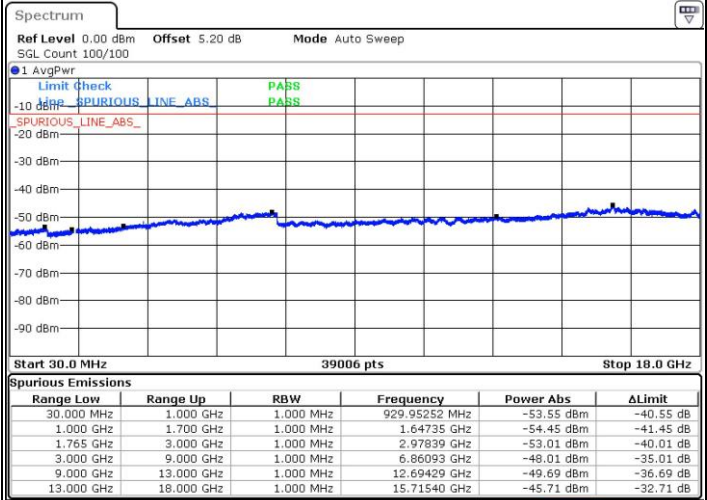
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 4 APR 2019 23:56:50

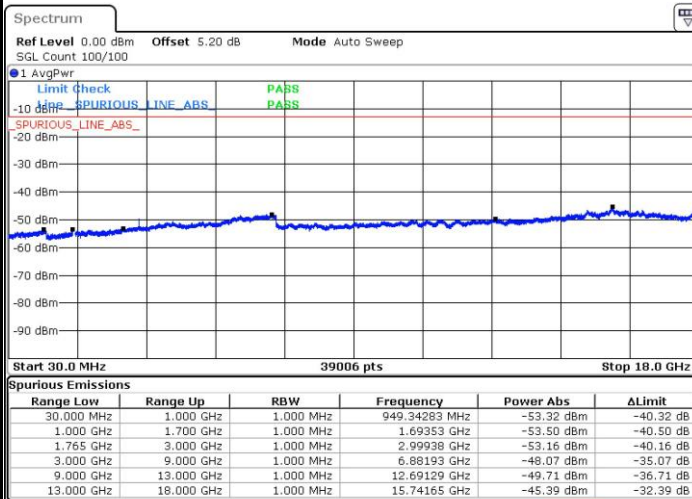
Highest Channel / 16QAM



Date: 4 APR 2019 23:57:30

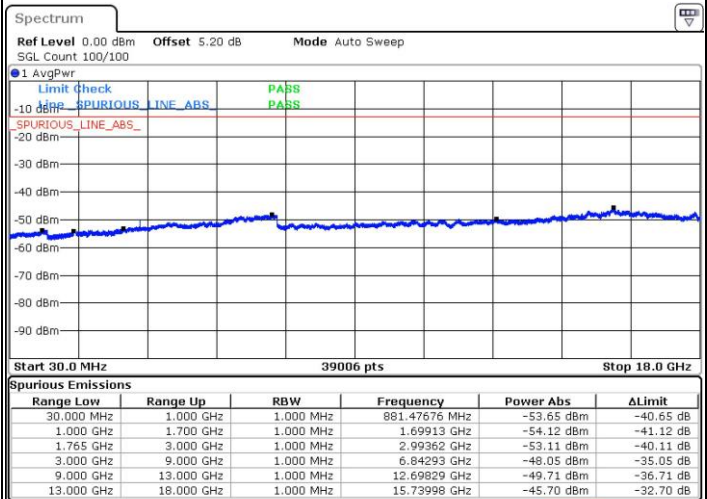
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 5 APR 2019 00:27:32

Lowest Channel / 16QAM

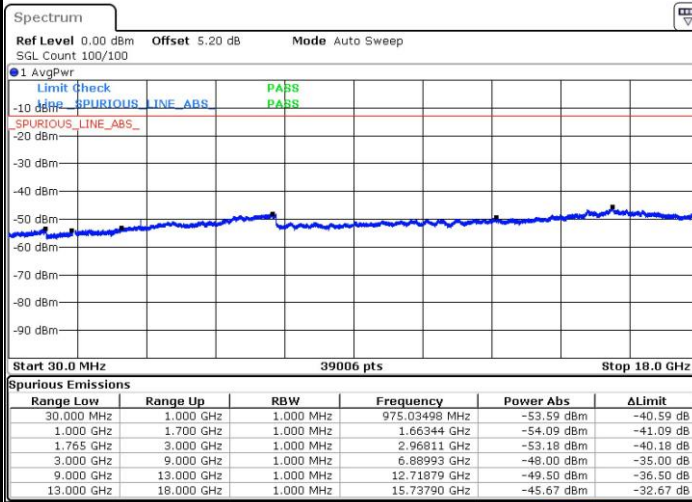


Date: 6 APR 2019 05:54:42



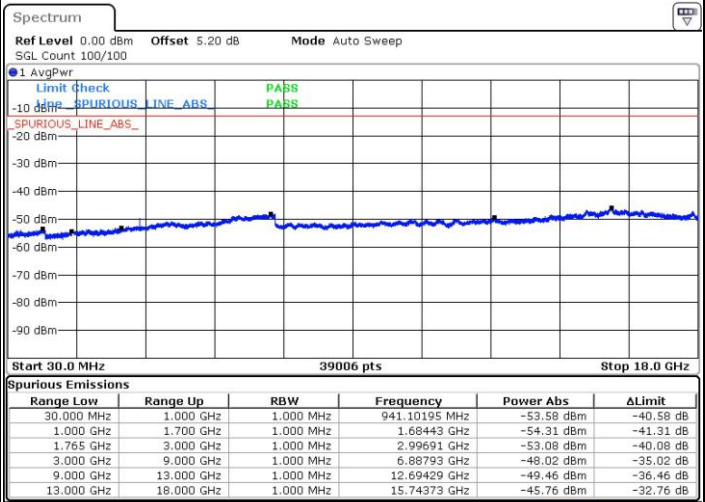
LTE Band 4 / 10MHz

Middle Channel / QPSK



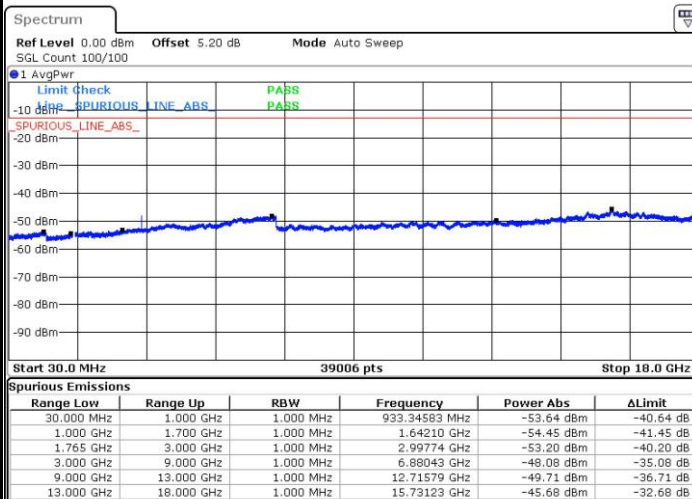
Date: 5 APR 2019 00:29:09

Middle Channel / 16QAM



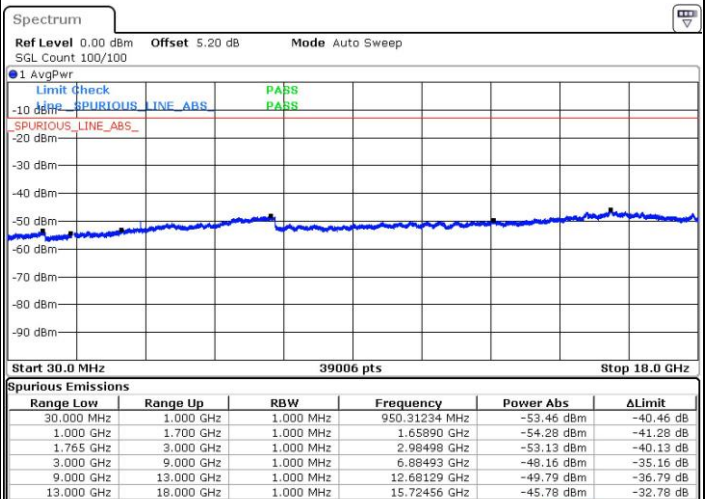
Date: 6 APR 2019 05:55:37

Highest Channel / QPSK



Date: 5 APR 2019 00:29:50

Highest Channel / 16QAM

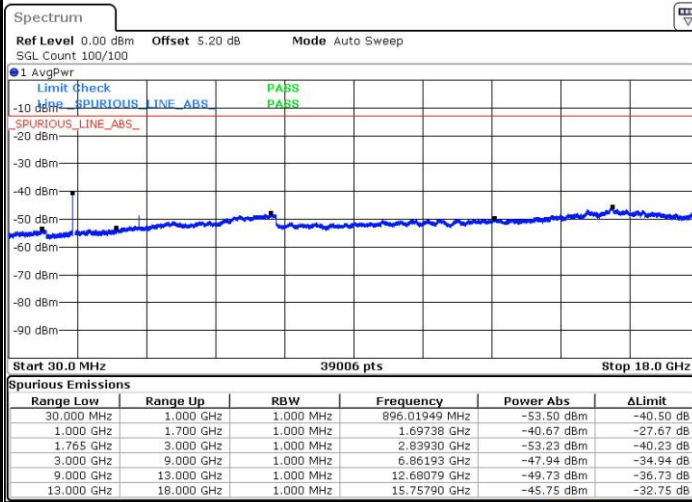


Date: 6 APR 2019 05:56:32



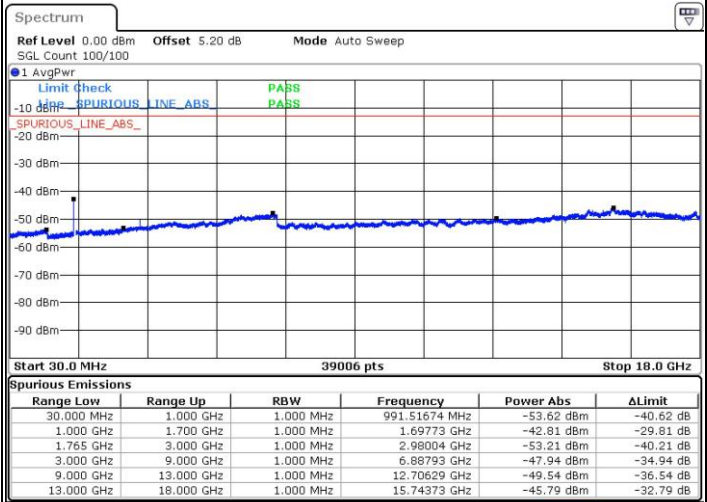
LTE Band 4 / 15MHz

Lowest Channel / QPSK



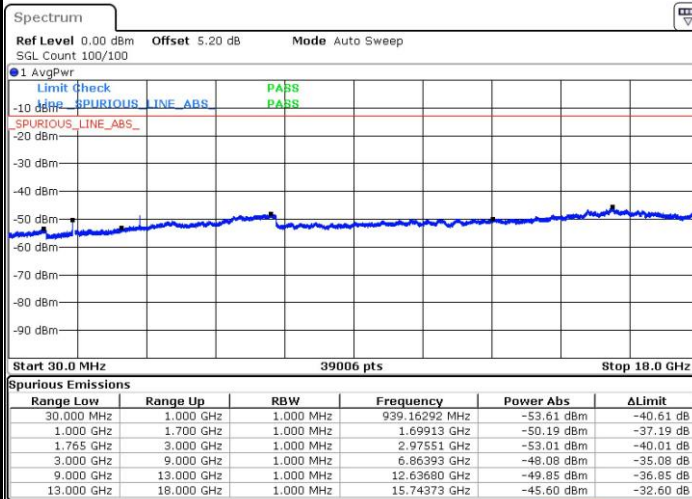
Date: 5 APR 2019 01:32:30

Lowest Channel / 16QAM



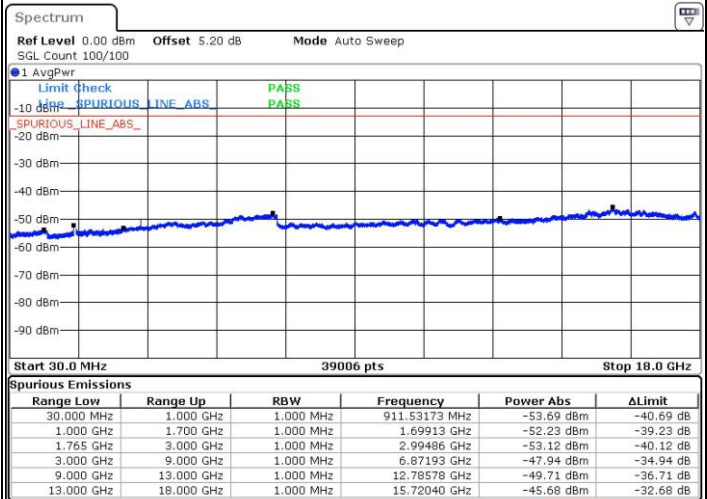
Date: 6 APR 2019 05:57:56

Middle Channel / QPSK



Date: 5 APR 2019 01:33:53

Middle Channel / 16QAM

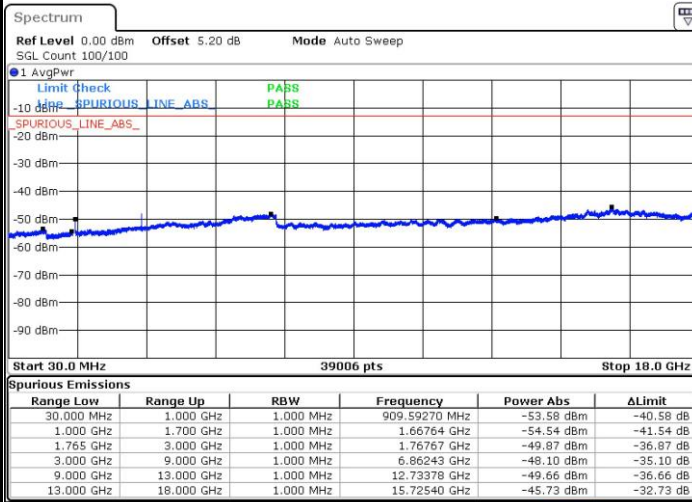


Date: 6 APR 2019 05:58:36



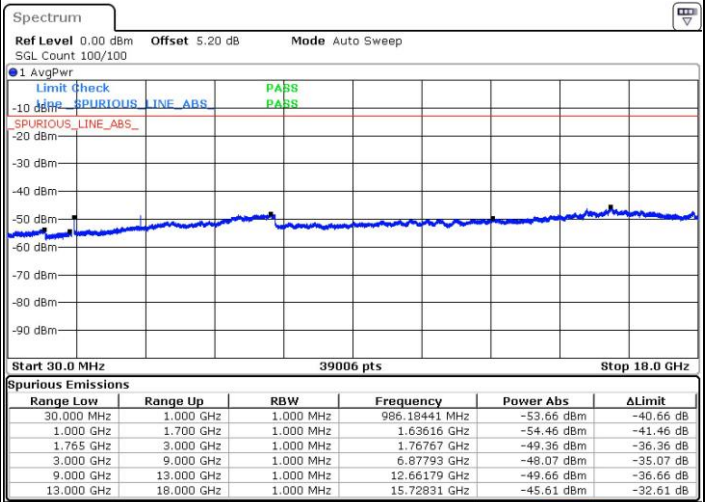
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 5 APR 2019 01:34:35

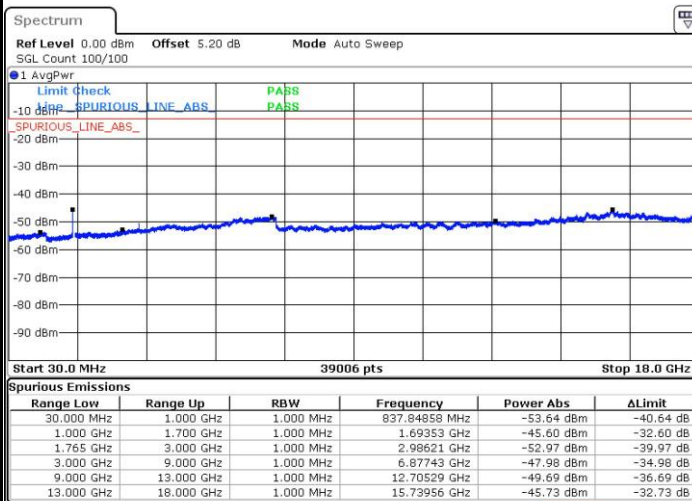
Highest Channel / 16QAM



Date: 6 APR 2019 05:59:17

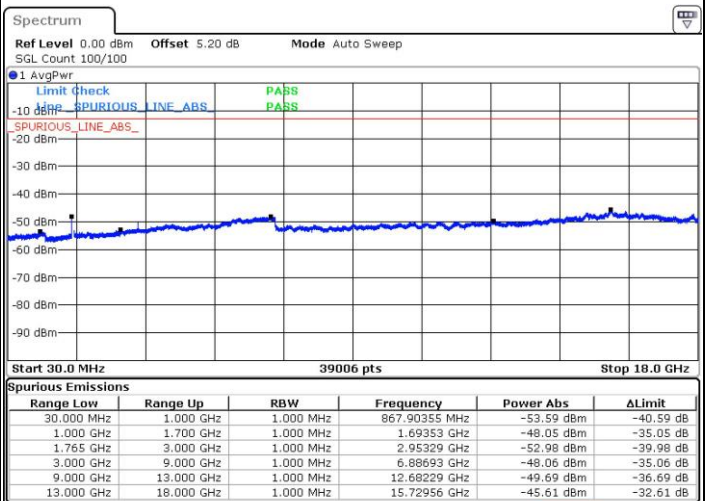
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 5 APR 2019 01:45:34

Lowest Channel / 16QAM

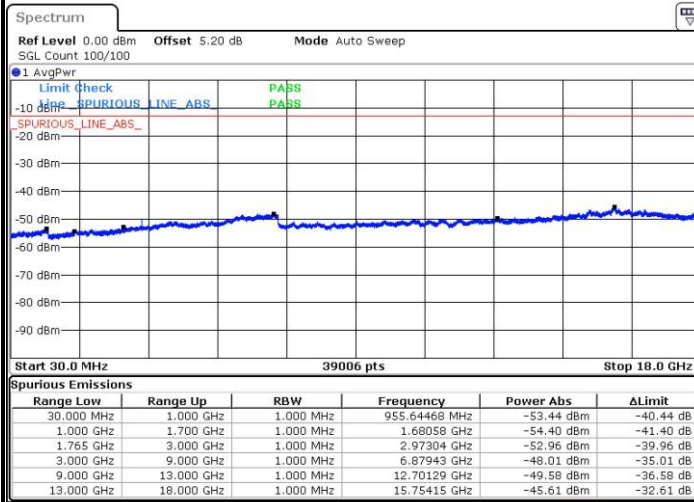


Date: 6 APR 2019 06:00:47



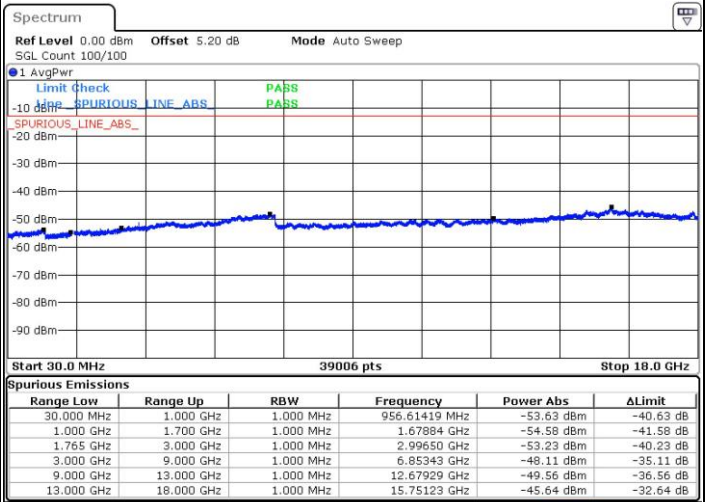
LTE Band 4 / 20MHz

Middle Channel / QPSK



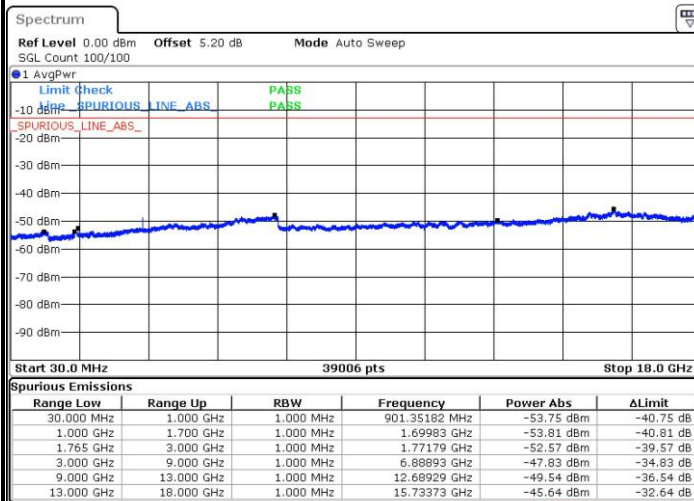
Date: 5 APR 2019 01:47:03

Middle Channel / 16QAM



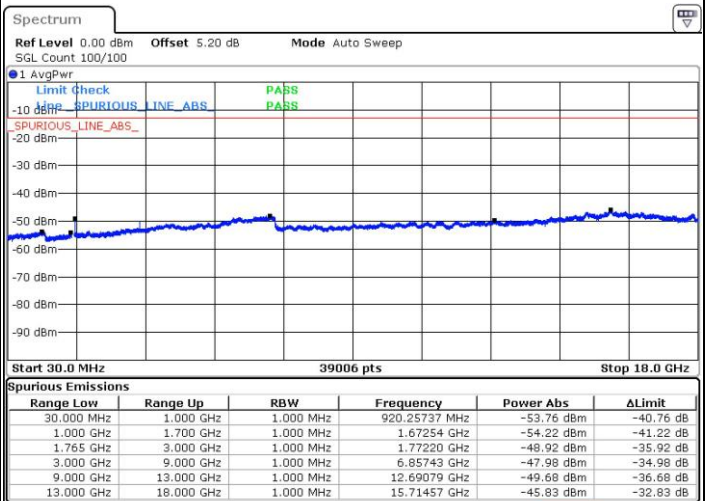
Date: 6 APR 2019 06:01:26

Highest Channel / QPSK



Date: 5 APR 2019 01:47:43

Highest Channel / 16QAM

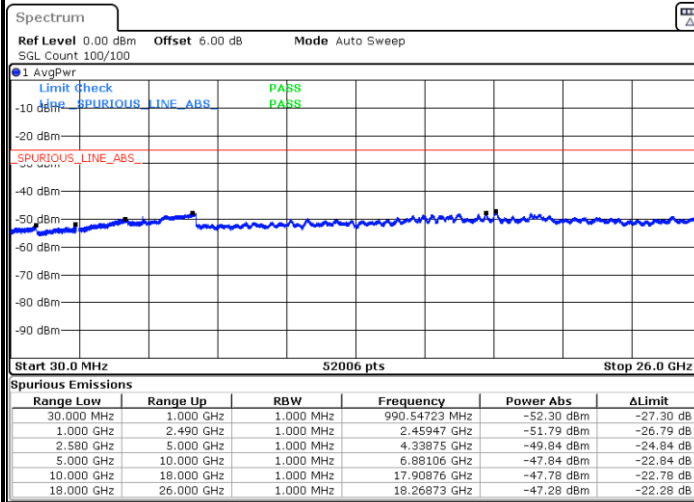


Date: 6 APR 2019 06:02:05



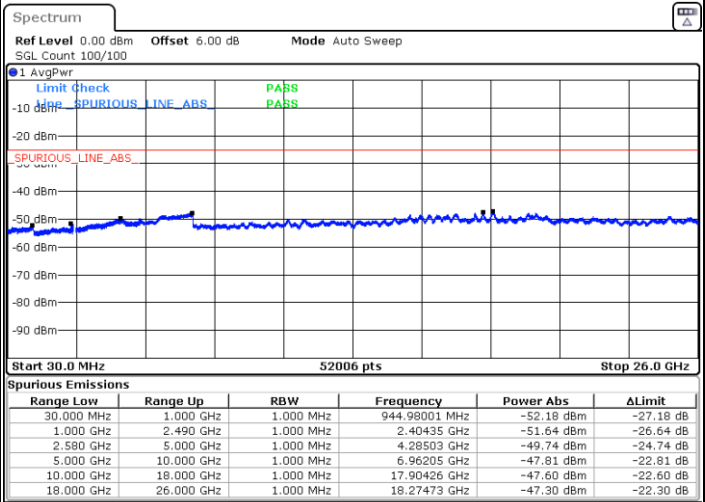
LTE Band 7 / 5MHz

Lowest Channel / QPSK



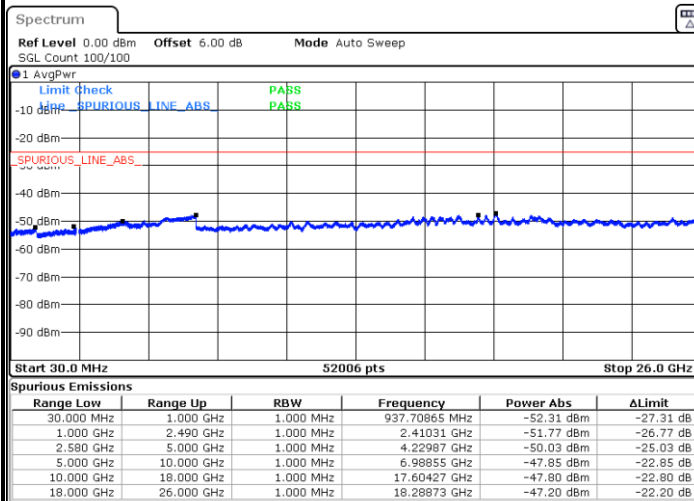
Date: 29 JUN 2020 03:32:24

Lowest Channel / 16QAM



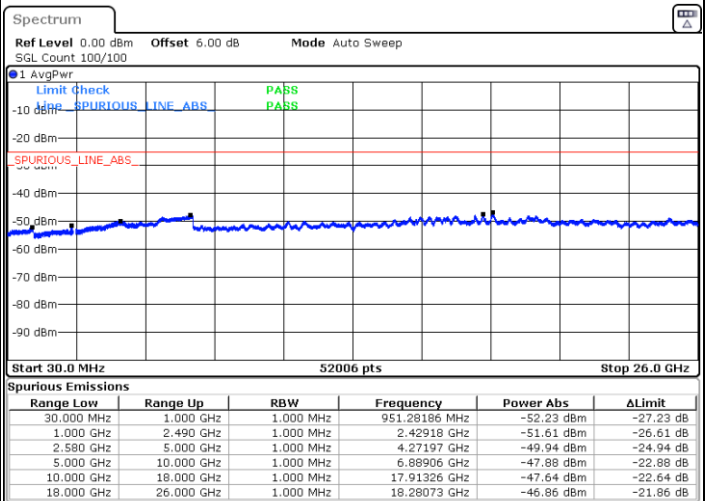
Date: 29 JUN 2020 03:33:17

Middle Channel / QPSK



Date: 29 JUN 2020 03:35:03

Middle Channel / 16QAM

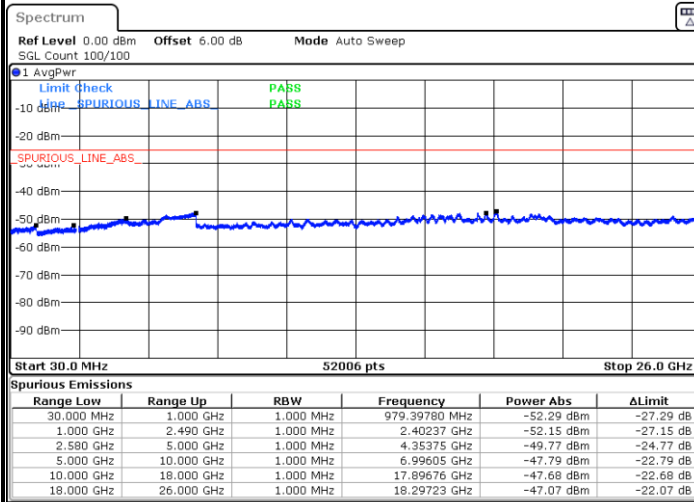


Date: 29 JUN 2020 03:34:10



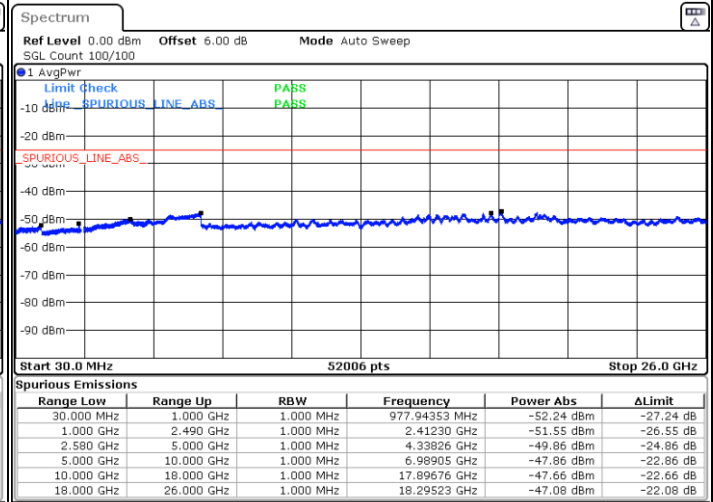
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 29 JUN 2020 03:35:56

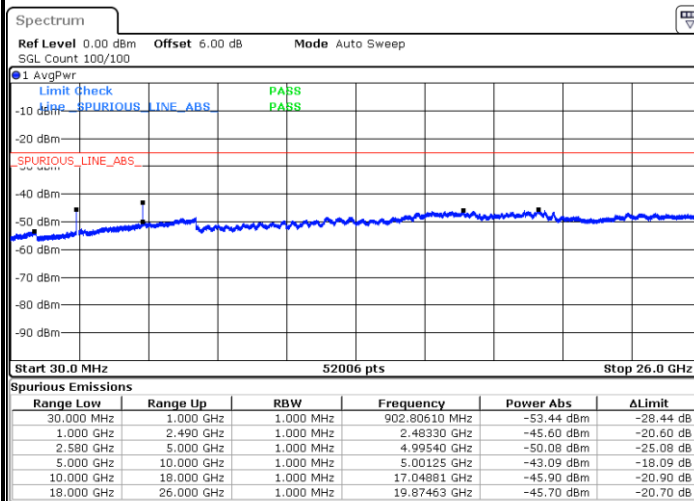
Highest Channel / 16QAM



Date: 29 JUN 2020 03:36:49

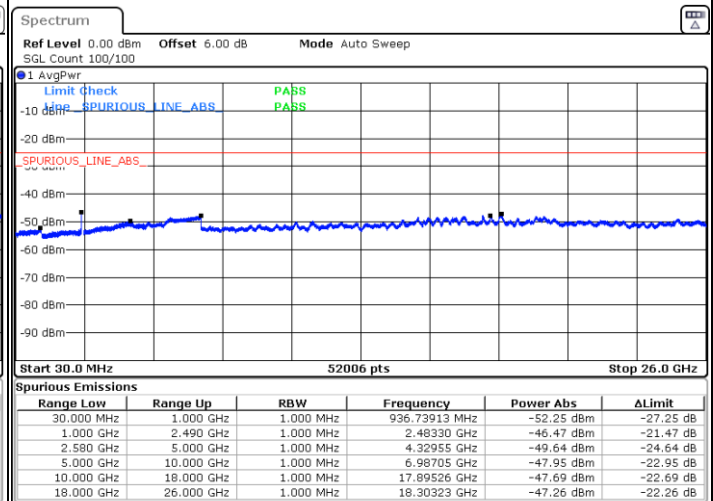
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 3 JUL 2020 05:56:37

Lowest Channel / 16QAM

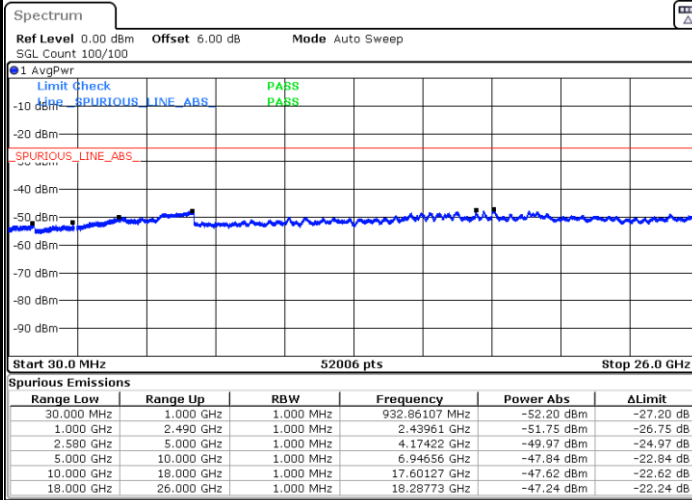


Date: 29 JUN 2020 03:59:23



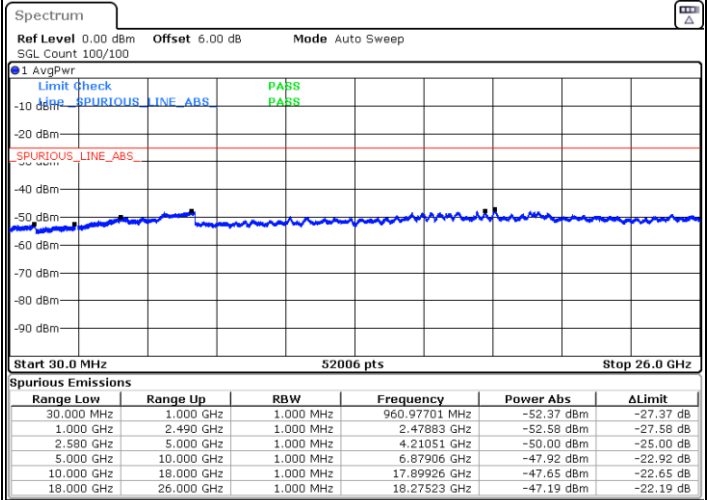
LTE Band 7 / 10MHz

Middle Channel / QPSK



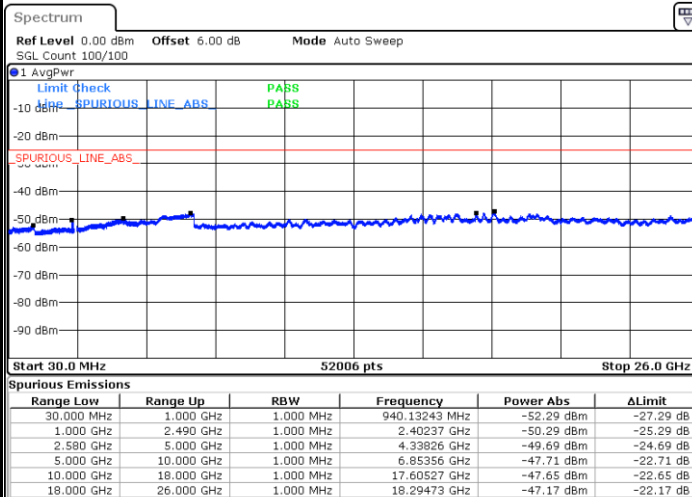
Date: 29 JUN 2020 04:03:23

Middle Channel / 16QAM



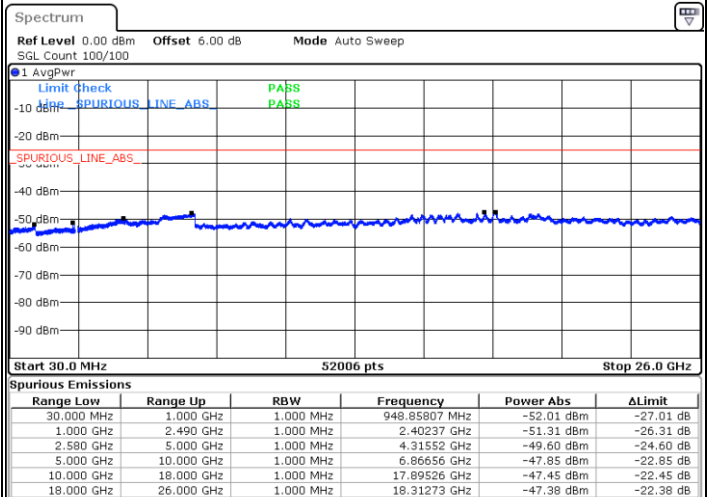
Date: 29 JUN 2020 04:02:01

Highest Channel / QPSK



Date: 29 JUN 2020 00:57:25

Highest Channel / 16QAM

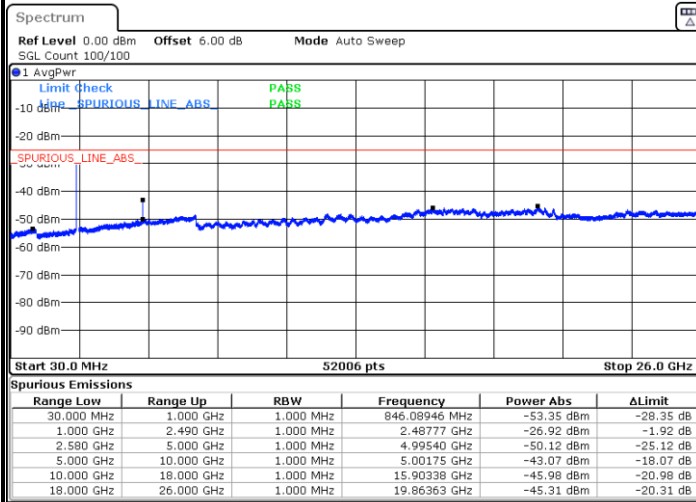


Date: 29 JUN 2020 00:58:18



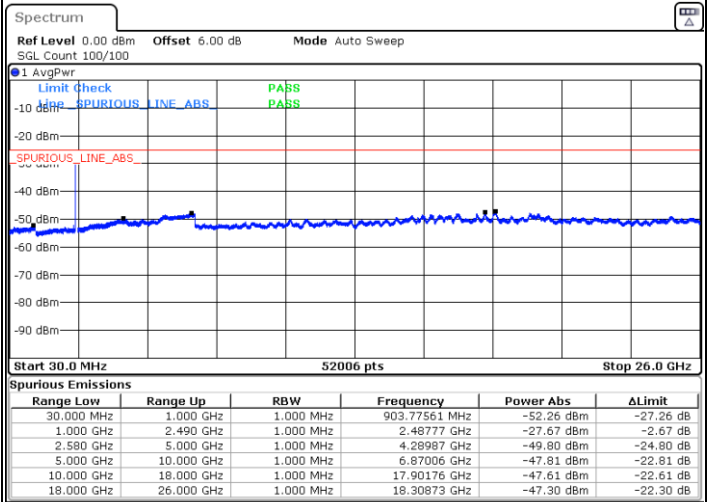
LTE Band 7 / 15MHz

Lowest Channel / QPSK



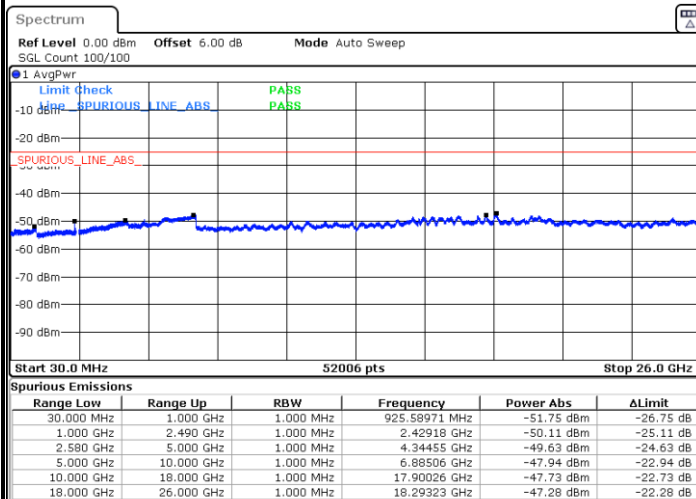
Date: 8 JUL 2020 23:41:52

Lowest Channel / 16QAM



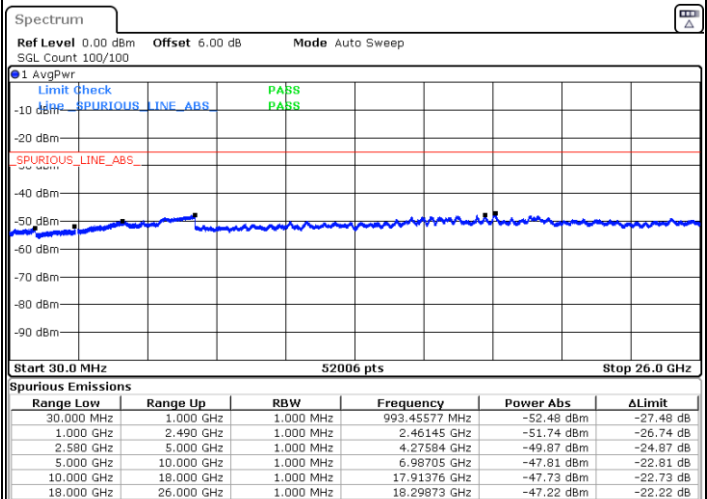
Date: 29 JUN 2020 05:00:06

Middle Channel / QPSK



Date: 29 JUN 2020 05:01:52

Middle Channel / 16QAM

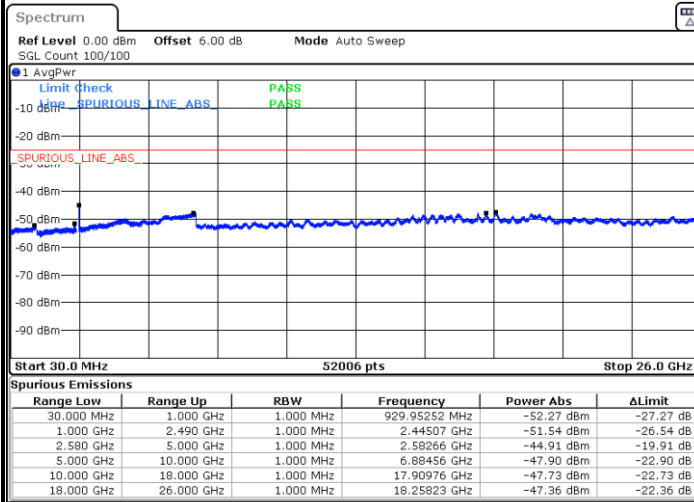


Date: 29 JUN 2020 05:00:59



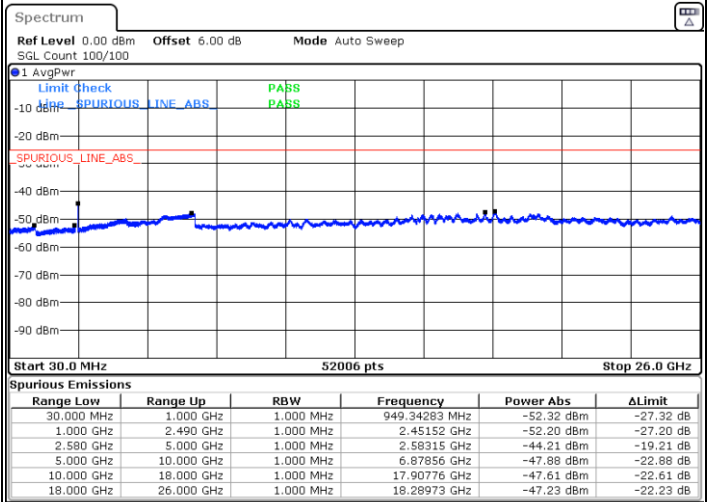
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 29 JUN 2020 05:02:45

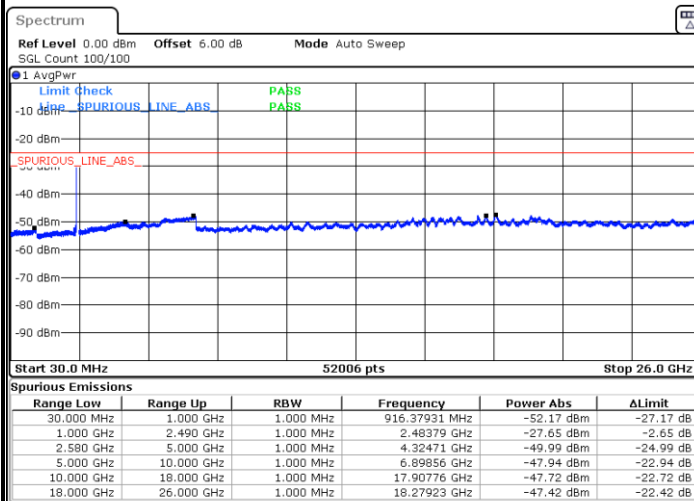
Highest Channel / 16QAM



Date: 29 JUN 2020 05:03:38

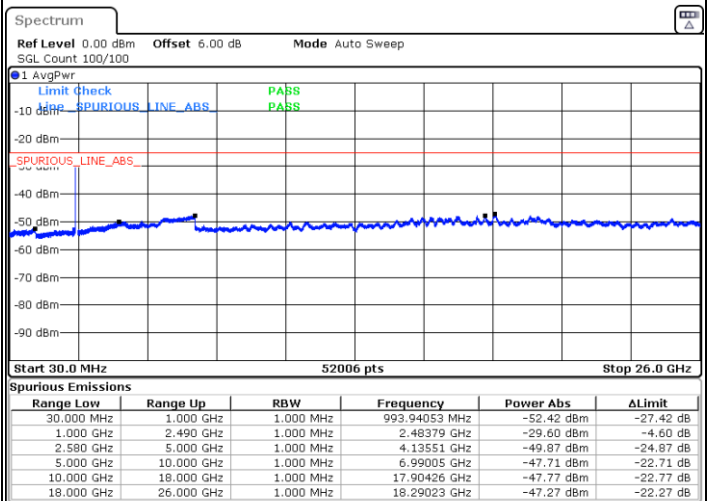
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 29 JUN 2020 05:25:44

Lowest Channel / 16QAM

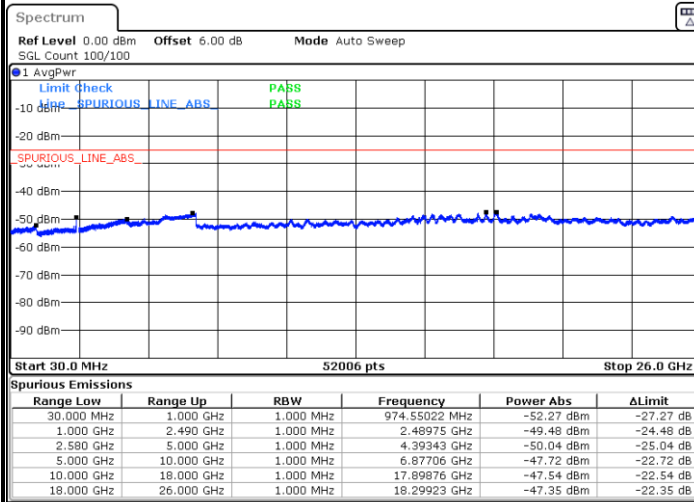


Date: 29 JUN 2020 05:26:37



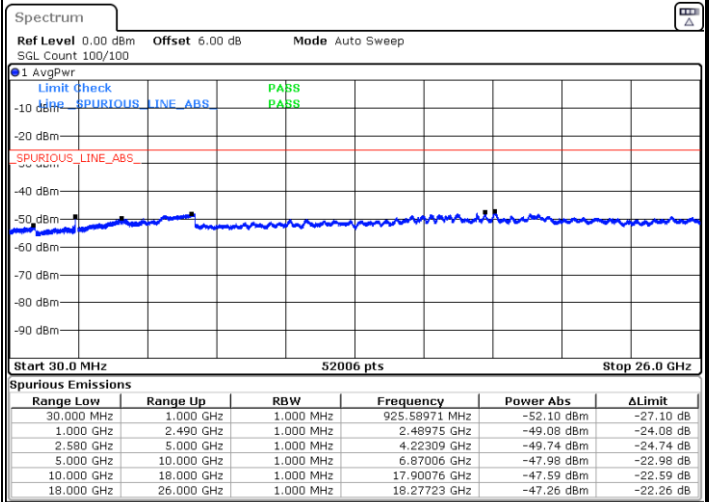
LTE Band 7 / 20MHz

Middle Channel / QPSK



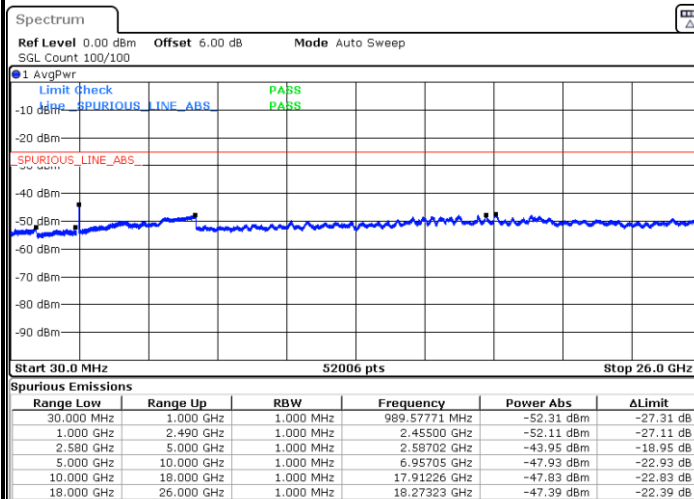
Date: 29 JUN 2020 05:28:23

Middle Channel / 16QAM



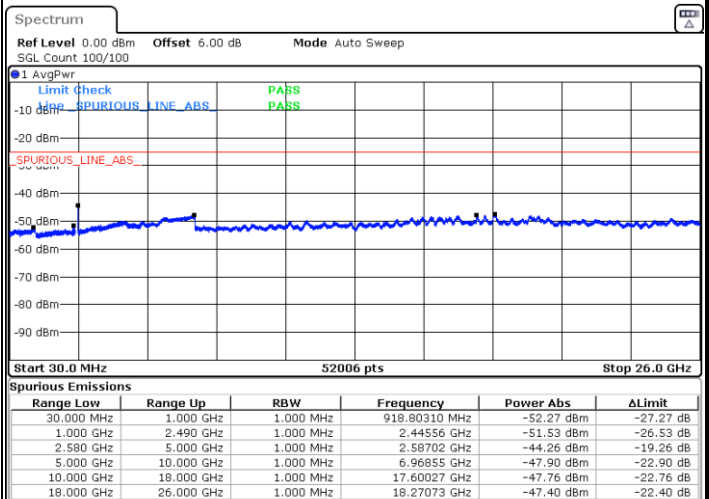
Date: 29 JUN 2020 05:27:30

Highest Channel / QPSK



Date: 29 JUN 2020 05:29:16

Highest Channel / 16QAM

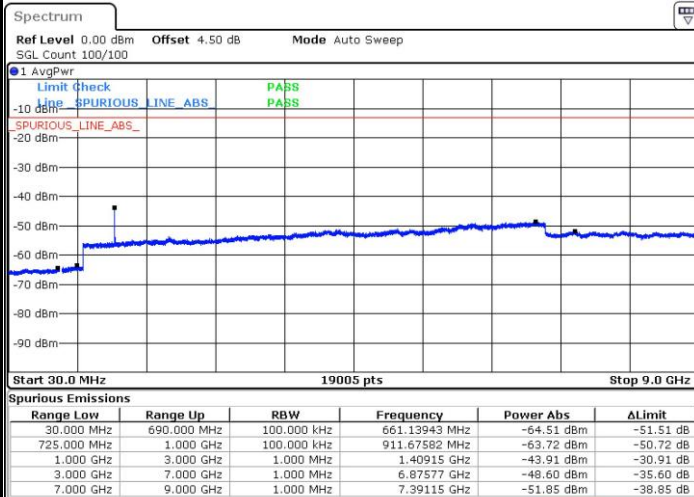


Date: 29 JUN 2020 05:30:09



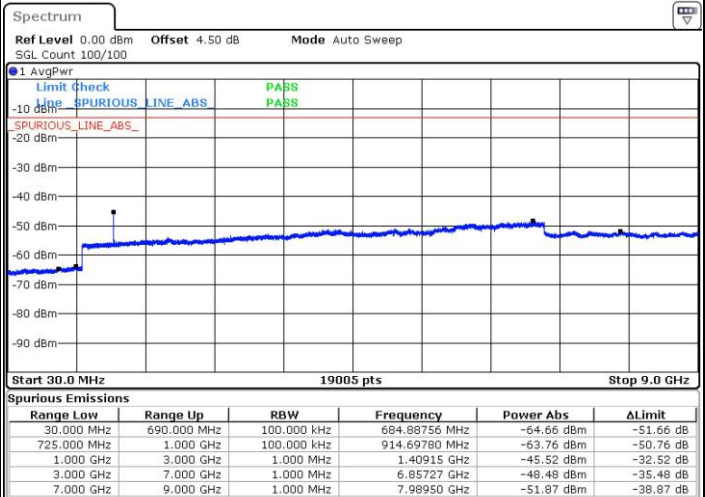
LTE Band 17 / 5MHz

Lowest Channel / QPSK



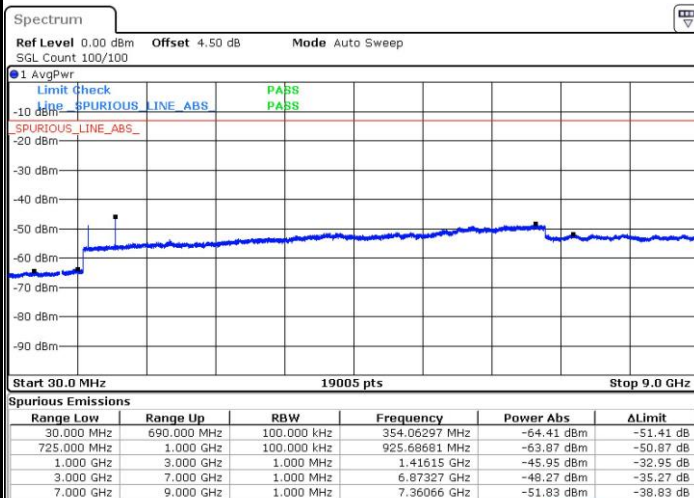
Date: 4 APR 2019 22:18:26

Lowest Channel / 16QAM



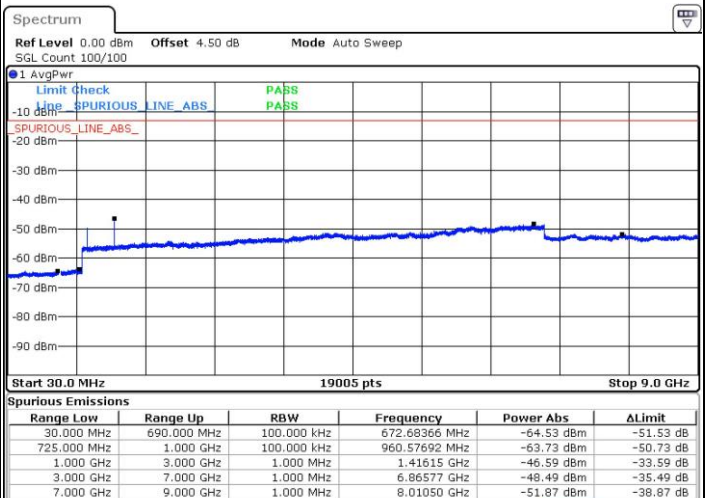
Date: 4 APR 2019 22:20:07

Middle Channel / QPSK



Date: 4 APR 2019 22:20:42

Middle Channel / 16QAM

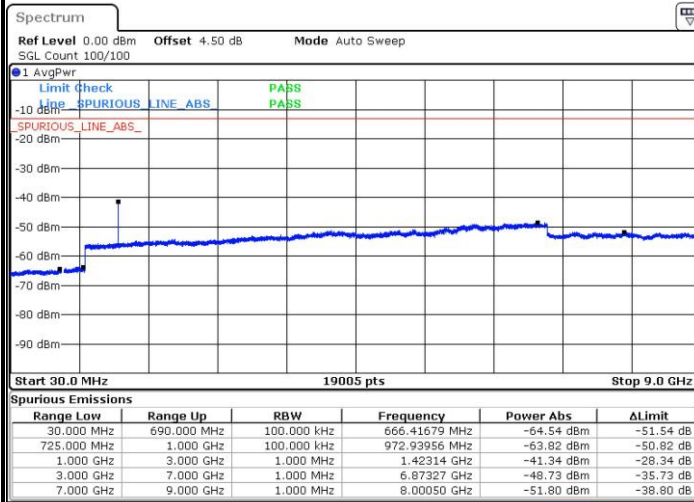


Date: 4 APR 2019 22:21:09



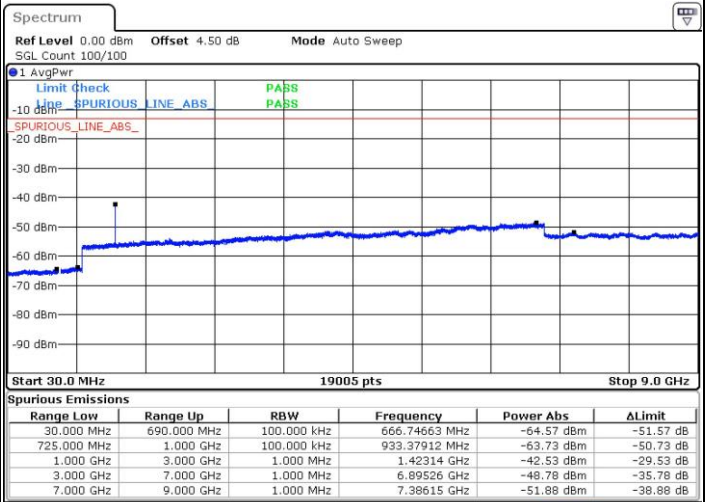
LTE Band 17 / 5MHz

Highest Channel / QPSK



Date: 4 APR 2019 22:21:38

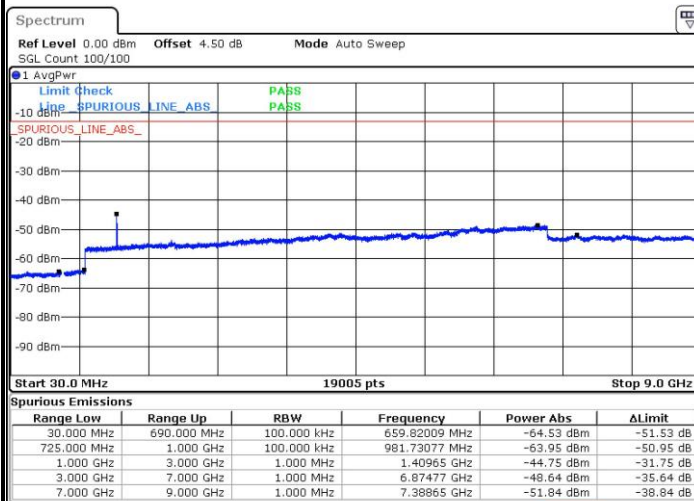
Highest Channel / 16QAM



Date: 4 APR 2019 22:22:07

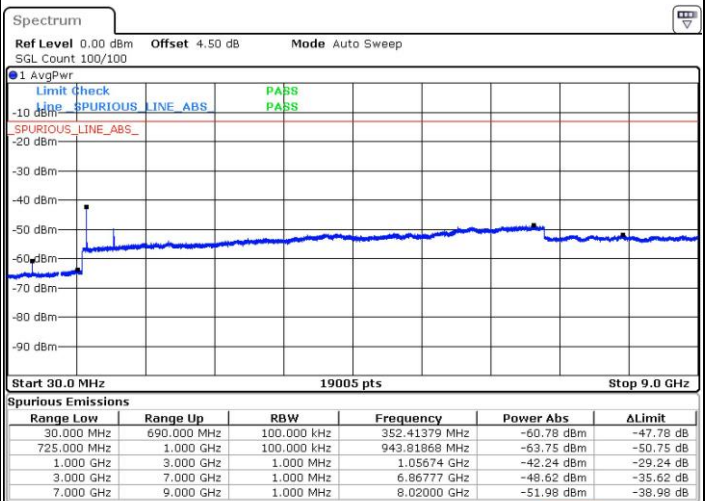
LTE Band 17 / 10MHz

Lowest Channel / QPSK



Date: 5 APR 2019 01:12:57

Lowest Channel / 16QAM

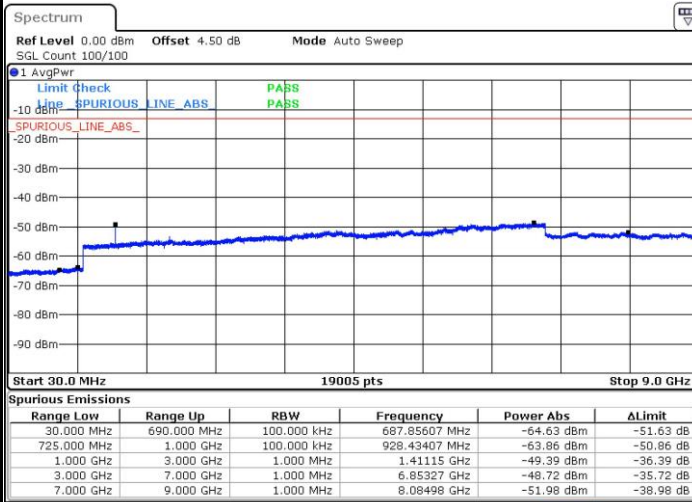


Date: 6 APR 2019 06:06:15



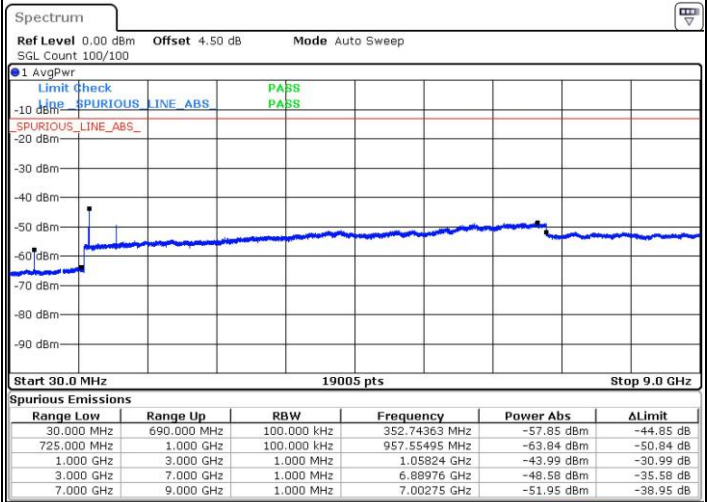
LTE Band 17 / 10MHz

Middle Channel / QPSK



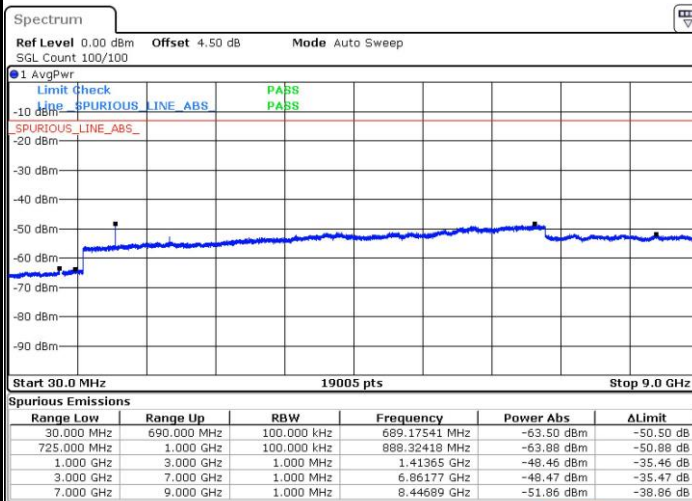
Date: 5 APR 2019 01:14:03

Middle Channel / 16QAM



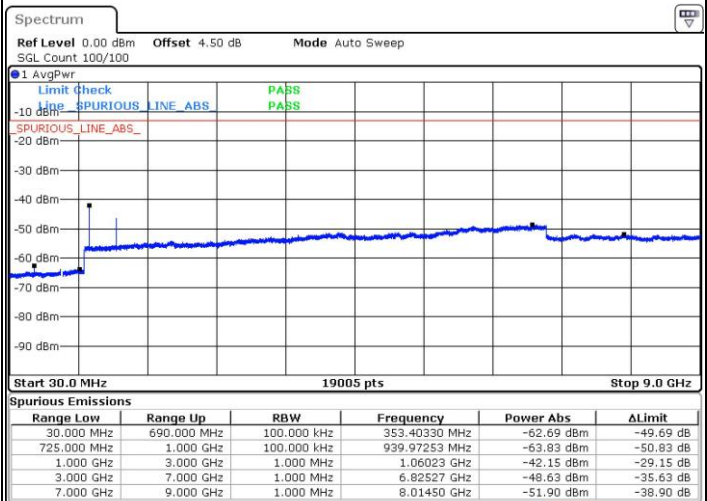
Date: 6 APR 2019 06:07:35

Highest Channel / QPSK



Date: 5 APR 2019 01:14:31

Highest Channel / 16QAM



Date: 6 APR 2019 06:08:20

**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	0.0016	
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	0.0009	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.7 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 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0020	PASS
40	Normal Voltage	0.0016	
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	0.0013	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.7 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 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0071	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0080	
0	Normal Voltage	0.0082	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0075	
20	Normal Voltage	0.0084	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.7 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 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.7 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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-57.36	-13	-44.36	-69.62	2.641	14.90	H
	5553	-53.71	-13	-40.71	-65.57	2.94	14.80	H
	7404	-49.07	-13	-36.07	-58.84	3.39	13.16	H
	3702	-57.58	-13	-44.58	-69.84	2.64	14.90	V
	5553	-54.55	-13	-41.55	-66.41	2.94	14.80	V
	7404	-48.95	-13	-35.95	-58.72	3.39	13.16	V
Middle	3741	-57.58	-13	-44.58	-69.84	2.641	14.90	H
	5613	-57.12	-13	-44.12	-68.98	2.94	14.80	H
	7488	-52.43	-13	-39.43	-62.20	3.39	13.16	H
	3741	-54.85	-13	-41.85	-67.11	2.64	14.90	V
	5613.27	-57.01	-13	-44.01	-68.87	2.94	14.80	V
	7488	-51.68	-13	-38.68	-61.45	3.39	13.16	V
Highest	3782	-57.09	-13	-44.09	-69.35	2.64	14.90	H
	5673	-53.96	-13	-40.96	-65.82	2.94	14.80	H
	7564	-48.65	-13	-35.65	-58.42	3.39	13.16	H
	3782	-57.23	-13	-44.23	-69.49	2.64	14.90	V
	5673	-54.10	-13	-41.10	-65.96	2.94	14.80	V
	7564	-48.47	-13	-35.47	-58.24	3.39	13.16	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)
Lowest	3423	-48.67	-13	-35.67	-59.41	2.604	13.34	H
	5133	-54.74	-13	-41.74	-65.25	3.011	13.52	H
	6844	-51.25	-13	-38.25	-61.45	3.271	13.47	H
	3423	-46.90	-13	-33.90	-57.64	2.604	13.34	V
	5133	-54.25	-13	-41.25	-64.76	3.011	13.52	V
	6844	-50.98	-13	-37.98	-61.18	3.271	13.47	V
Middle	3447	-53.05	-13	-40.05	-63.79	2.604	13.34	H
	5172	-58.93	-13	-45.93	-69.44	3.011	13.52	H
	6900	-55.10	-13	-42.10	-65.30	3.271	13.47	H
	3447	-54.30	-13	-41.30	-65.04	2.604	13.34	V
	5170.77	-58.81	-13	-45.81	-69.32	3.011	13.52	V
	6900	-54.14	-13	-41.14	-64.34	3.271	13.47	V
Highest	3471	-48.64	-13	-35.64	-59.38	2.604	13.34	H
	5208.27	-54.69	-13	-41.69	-65.20	3.011	13.52	H
	6944	-50.42	-13	-37.42	-60.62	3.271	13.47	H
	3471	-49.30	-13	-36.30	-60.04	2.604	13.34	V
	5208	-54.76	-13	-41.76	-65.27	3.011	13.52	V
	6944	-50.30	-13	-37.30	-60.50	3.271	13.47	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	5004	-65.95	-25	-40.95	-76.16	3.03	13.24	H
	7503	-58.72	-25	-33.72	-68.17	3.56	13.01	H
	10004.36	-57.55	-25	-32.55	-67.07	3.92	13.44	H
	5002.18	-65.84	-25	-40.84	-76.05	3.03	13.24	V
	7504	-60.00	-25	-35.00	-69.45	3.56	13.01	V
	10004.36	-57.41	-25	-32.41	-66.93	3.92	13.44	V
Middle	5052	-63.13	-25	-38.13	-73.34	3.03	13.24	H
	7578.27	-60.21	-25	-35.21	-69.66	3.56	13.01	H
	10104.36	-57.84	-25	-32.84	-67.36	3.92	13.44	H
	5052	-64.21	-25	-39.21	-74.42	3.03	13.24	V
	7580	-60.27	-25	-35.27	-69.72	3.56	13.01	V
	10104.36	-57.34	-25	-32.34	-66.86	3.92	13.44	V
Highest	5100	-63.10	-25	-38.10	-73.31	3.03	13.24	H
	7652	-58.79	-25	-33.79	-68.24	3.56	13.01	H
	10204.36	-57.90	-25	-32.90	-67.42	3.92	13.44	H
	5102.18	-65.37	-25	-40.37	-75.58	3.03	13.24	V
	7652	-59.87	-25	-34.87	-69.32	3.56	13.01	V
	10204.36	-57.92	-25	-32.92	-67.44	3.92	13.44	V

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



LTE Band 17 / 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)
Lowest	1410	-37.71	-13	-24.71	-44.68	1.58	10.70	H
	2114	-51.42	-13	-38.42	-59.67	2.102	12.50	H
	2818	-57.86	-13	-44.86	-66.75	2.856	13.90	H
	1410	-35.93	-13	-22.93	-42.90	1.58	10.70	V
	2114	-53.15	-13	-40.15	-61.40	2.10	12.50	V
	2818	-55.42	-13	-42.42	-64.31	2.86	13.90	V
Middle	1410	-34.58	-13	-21.58	-42.75	1.40	9.57	H
	2116	-60.37	-13	-47.37	-69.93	1.87	11.44	H
	2822	-59.71	-13	-46.71	-70.75	2.31	13.35	H
	1412	-46.73	-13	-33.73	-54.90	1.40	9.57	V
	2116	-64.13	-13	-51.13	-73.69	1.87	11.44	V
	2822	-61.12	-13	-48.12	-72.16	2.31	13.35	V
Highest	1414	-38.60	-13	-25.60	-45.57	1.58	10.70	H
	2120	-53.56	-13	-40.56	-61.81	2.102	12.50	H
	2826	-58.03	-13	-45.03	-66.92	2.856	13.90	H
	1414	-38.17	-13	-25.17	-45.14	1.58	10.70	V
	2120	-54.15	-13	-41.15	-62.40	2.10	12.50	V
	2826	-56.33	-13	-43.33	-65.22	2.86	13.90	V

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