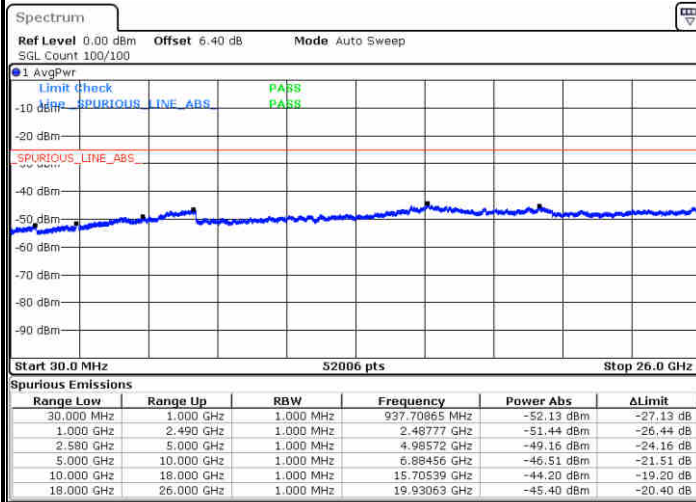




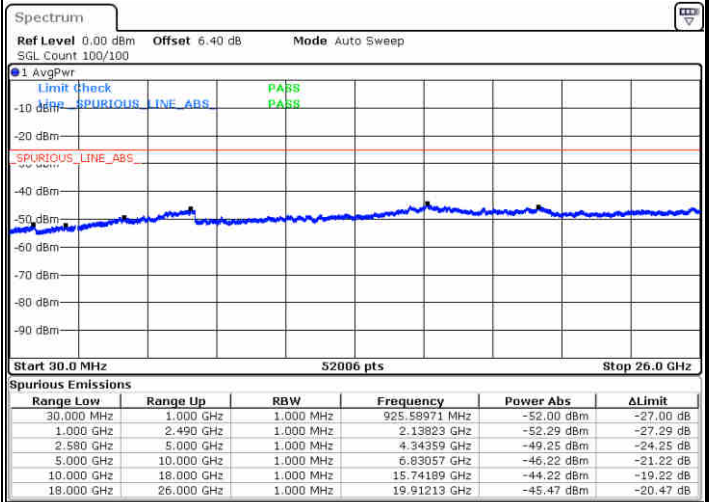
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



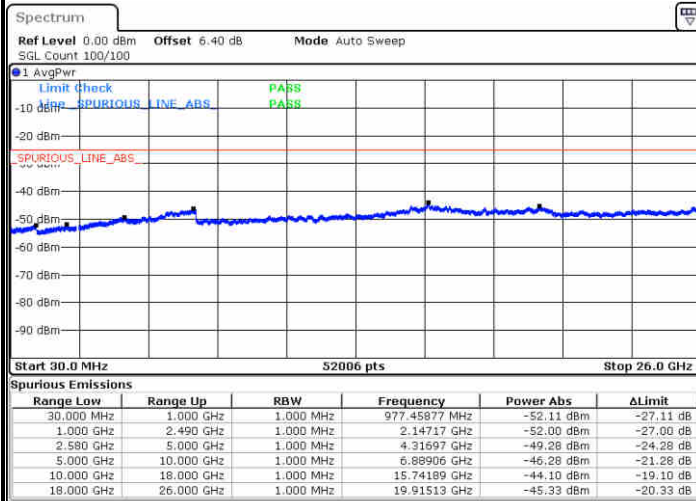
Date: 11 JUL 2019 03:09:57

Middle Channel / 64QAM



Date: 11 JUL 2019 03:10:51

Highest Channel / 64QAM

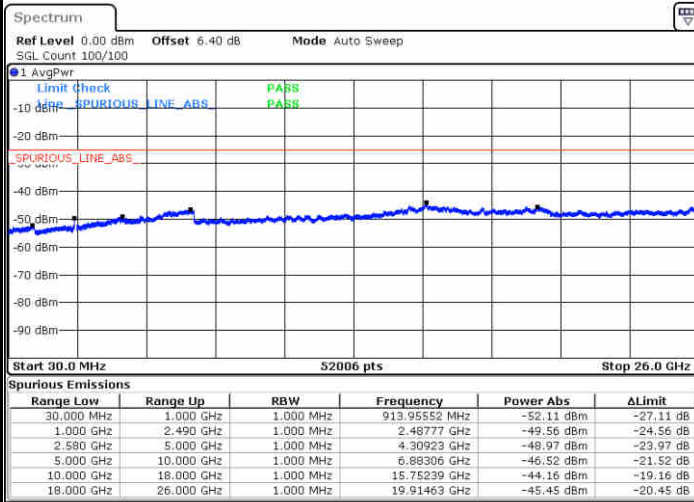


Date: 11 JUL 2019 03:11:45



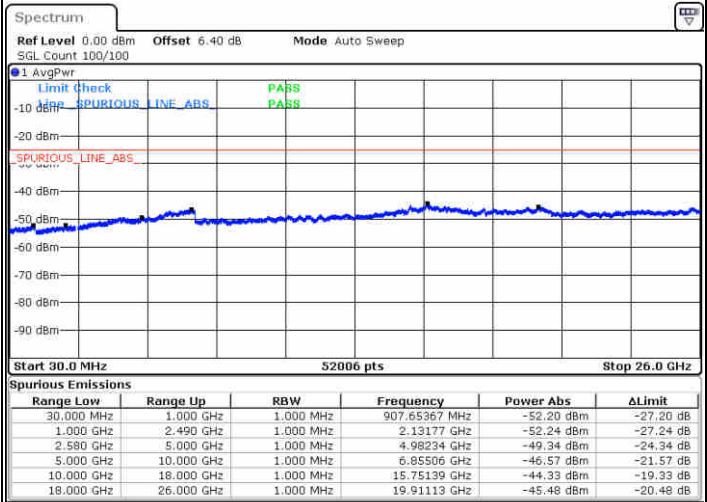
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



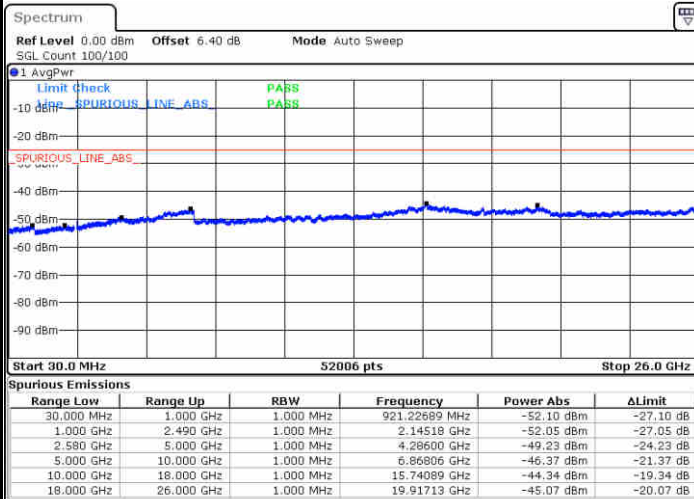
Date: 11 JUL 2019 03:22:45

Middle Channel / 64QAM



Date: 11 JUL 2019 03:23:39

Highest Channel / 64QAM

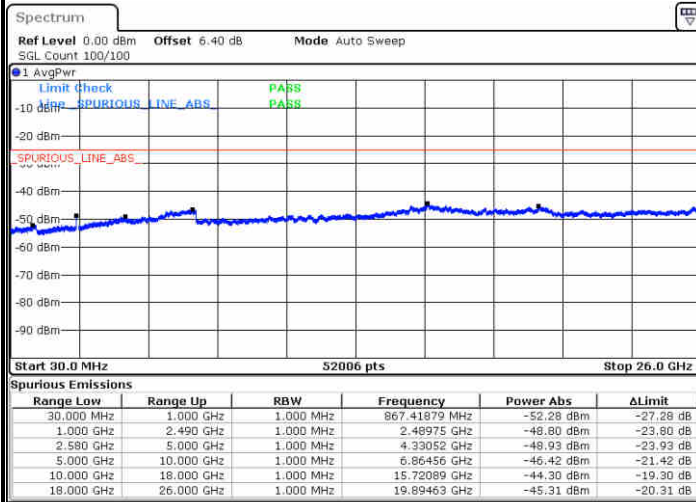


Date: 11 JUL 2019 03:24:33



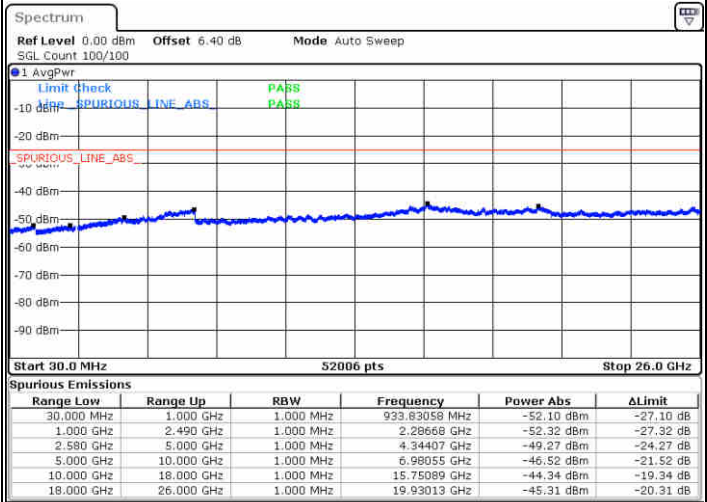
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



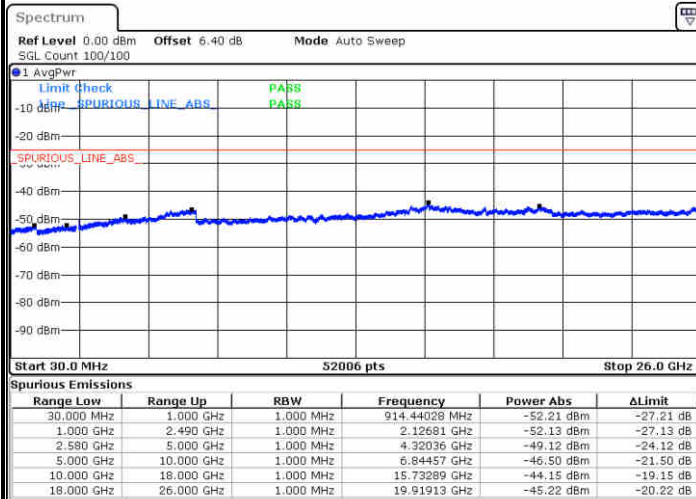
Date: 11 JUL 2019 03:31:01

Middle Channel / 64QAM



Date: 11 JUL 2019 03:31:55

Highest Channel / 64QAM

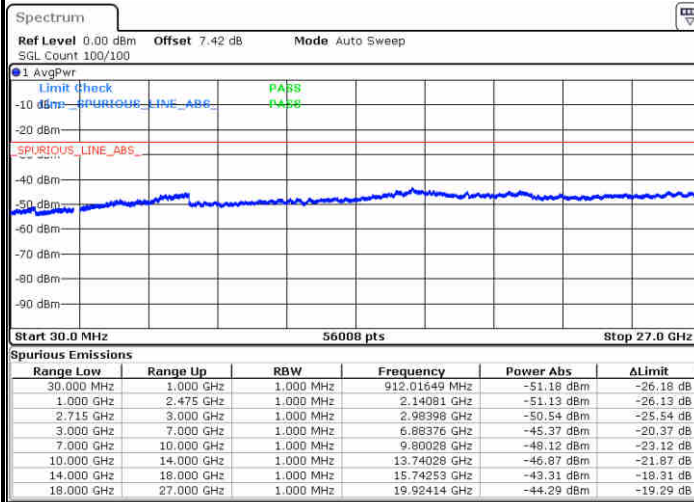


Date: 11 JUL 2019 03:32:49



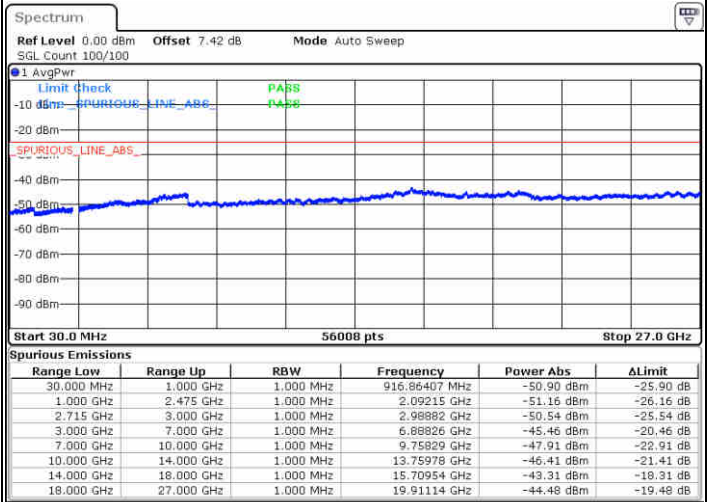
LTE Band 41 / 5MHz

Lowest Channel / QPSK



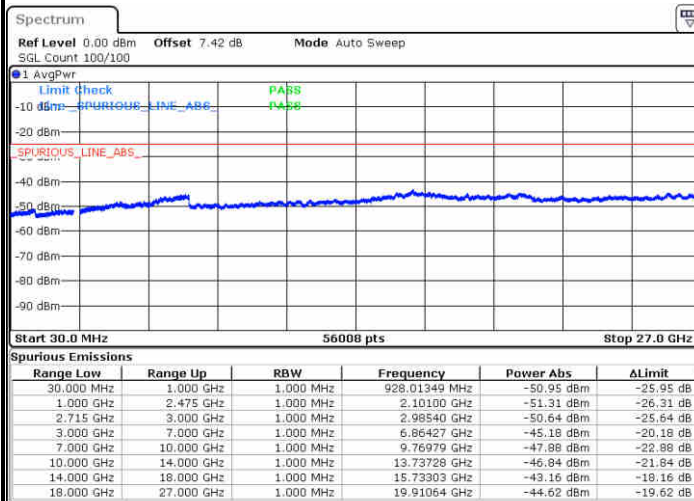
Date: 11 JUL 2019 10:35:28

Lowest Channel / 16QAM



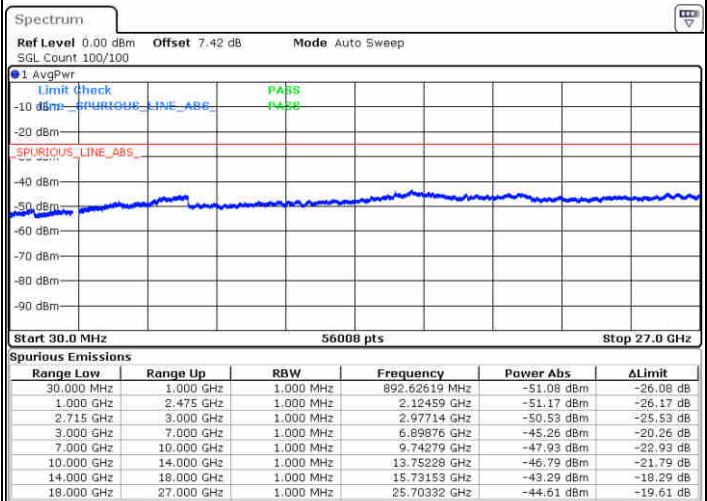
Date: 11 JUL 2019 10:36:22

Middle Channel / QPSK



Date: 11 JUL 2019 10:37:17

Middle Channel / 16QAM

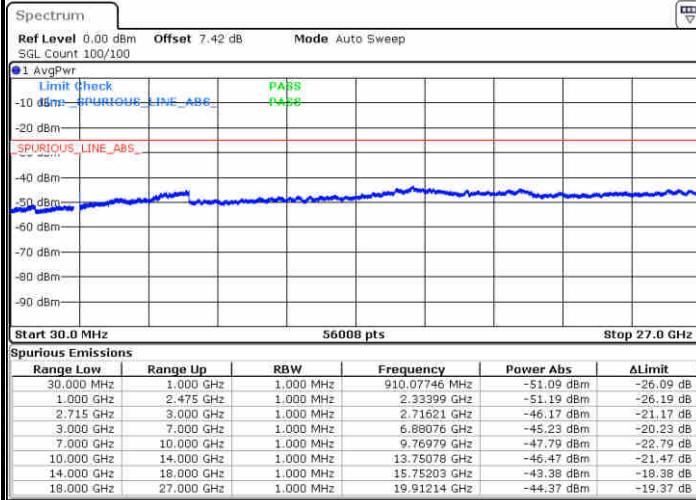


Date: 11 JUL 2019 10:38:12



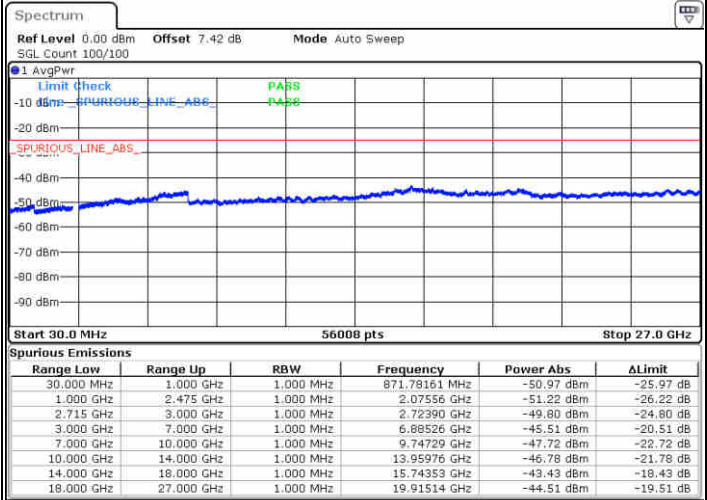
LTE Band 41 / 5MHz

Highest Channel / QPSK



Date: 11 JUL 2019 10:39:07

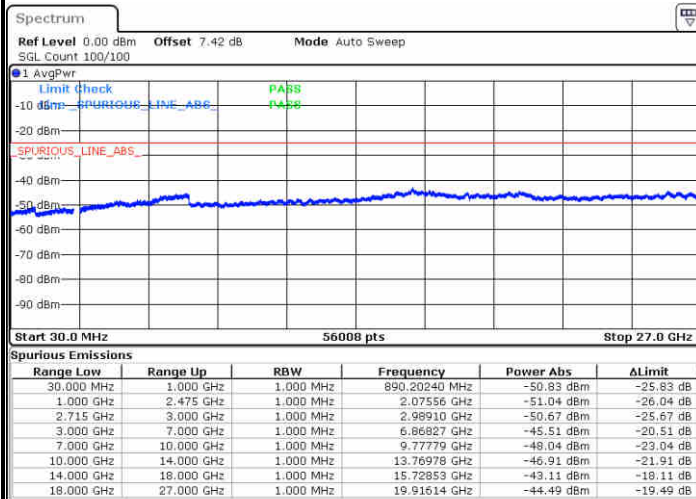
Highest Channel / 16QAM



Date: 11 JUL 2019 10:40:01

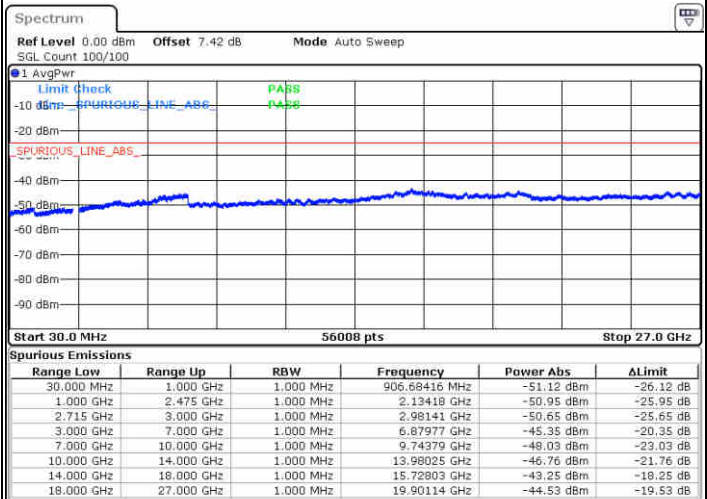
LTE Band 41 / 10MHz

Lowest Channel / QPSK



Date: 11 JUL 2019 10:40:56

Lowest Channel / 16QAM

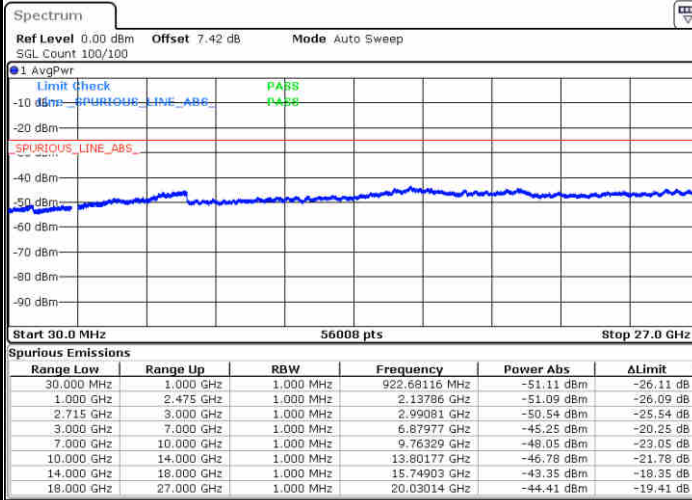


Date: 11 JUL 2019 10:41:51



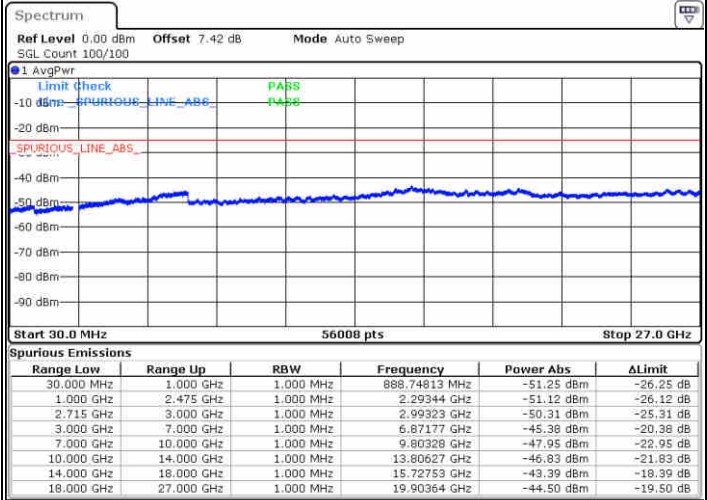
LTE Band 41 / 10MHz

Middle Channel / QPSK



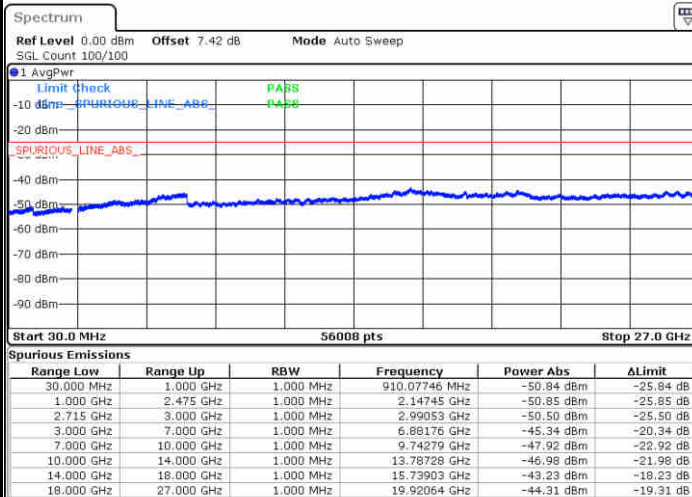
Date: 11 JUL 2019 10:42:45

Middle Channel / 16QAM



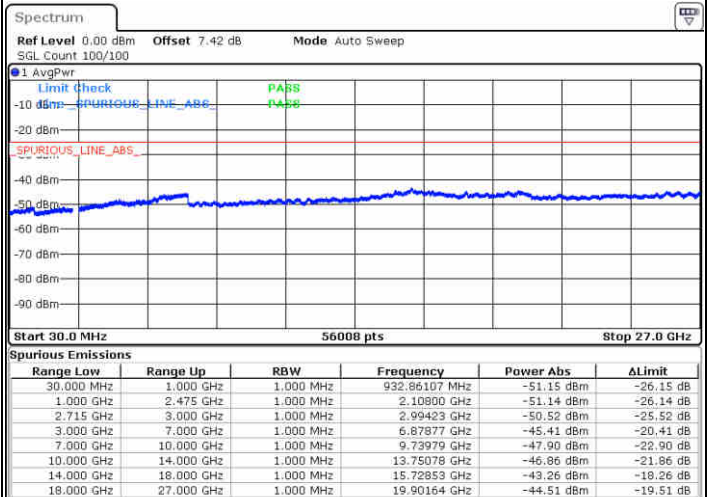
Date: 11 JUL 2019 10:43:40

Highest Channel / QPSK



Date: 11 JUL 2019 10:44:35

Highest Channel / 16QAM

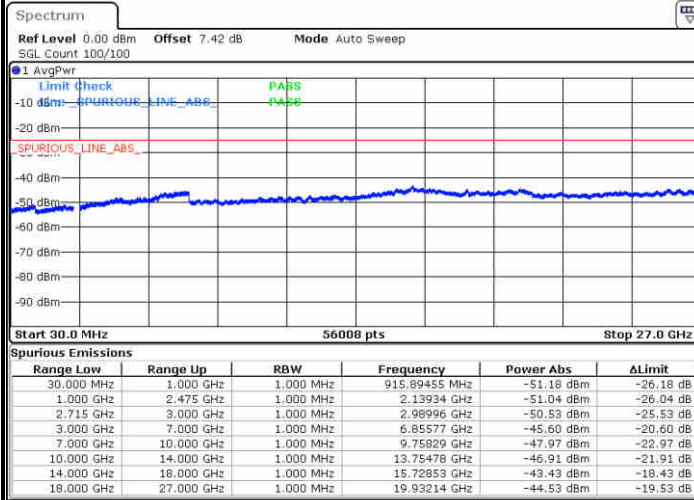


Date: 11 JUL 2019 10:45:30



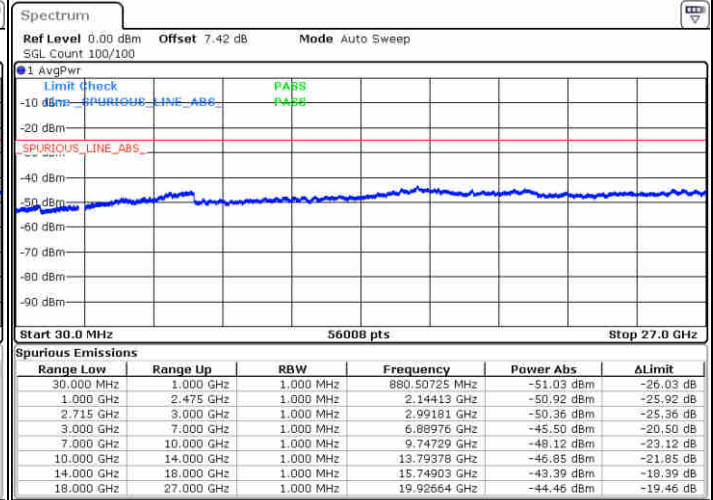
LTE Band 41 / 15MHz

Lowest Channel / QPSK



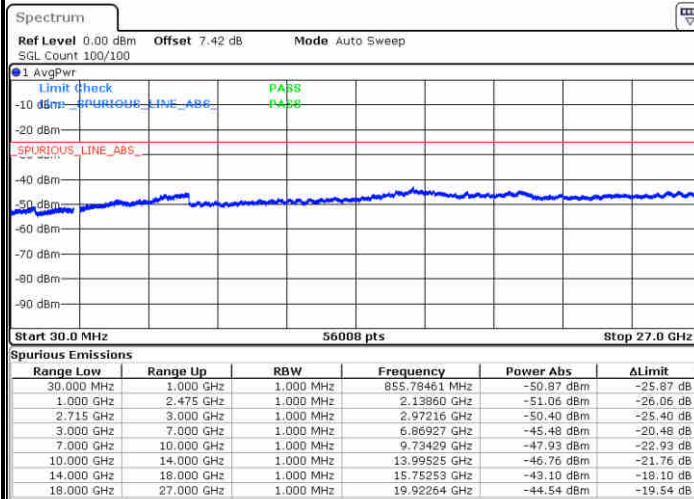
Date: 11 JUL 2019 10:46:24

Lowest Channel / 16QAM



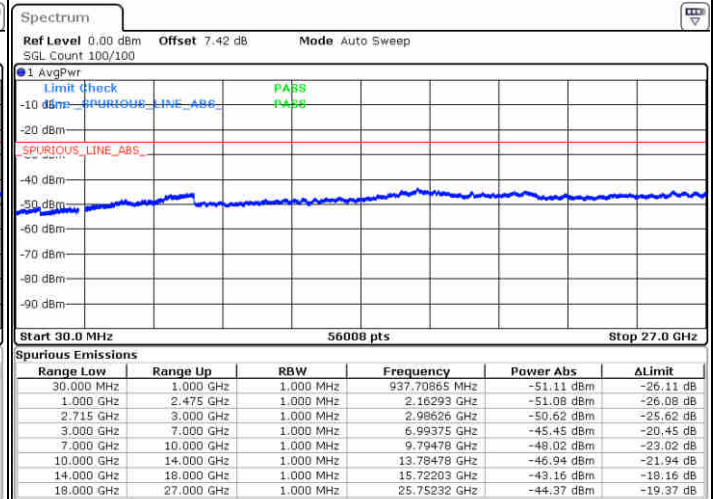
Date: 11 JUL 2019 10:47:19

Middle Channel / QPSK



Date: 11 JUL 2019 10:48:14

Middle Channel / 16QAM

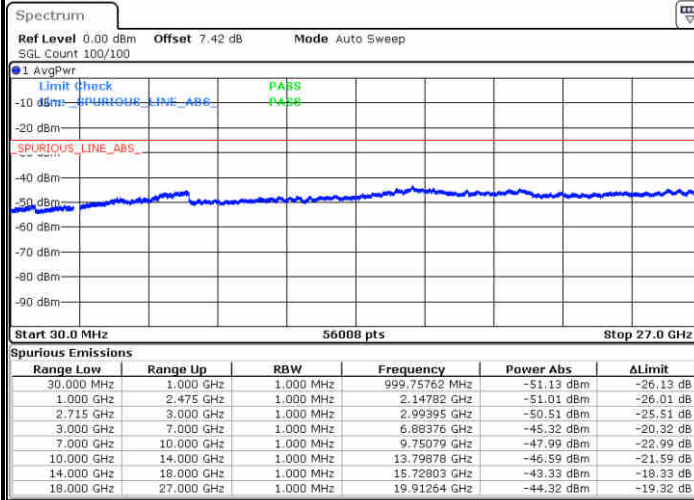


Date: 11 JUL 2019 10:49:09



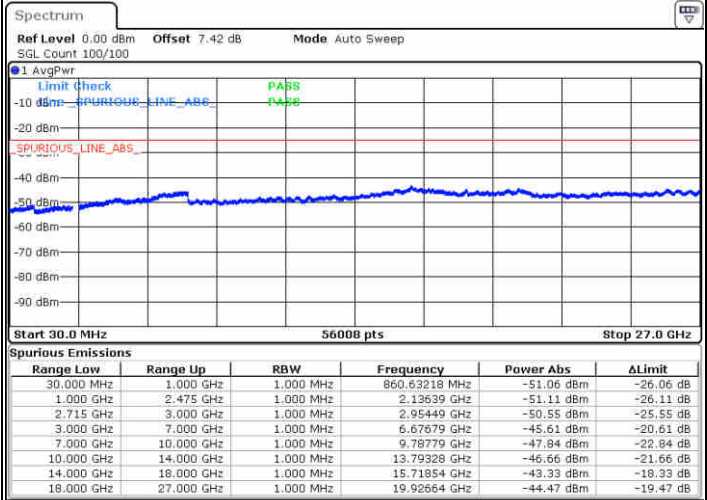
LTE Band 41 / 15MHz

Highest Channel / QPSK



Date: 11 JUL 2019 10:50:03

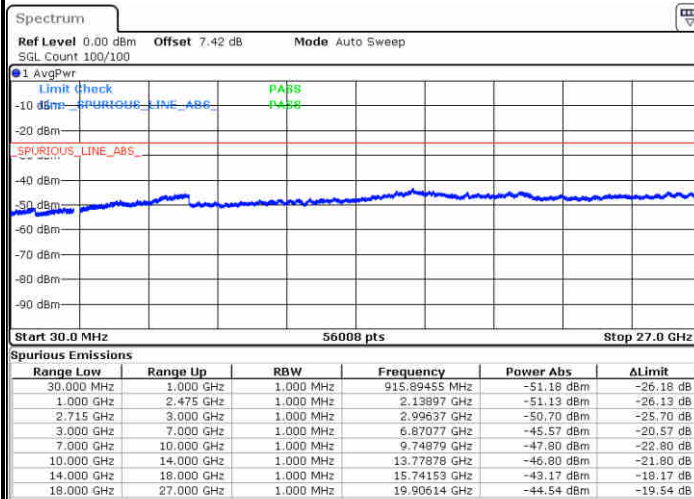
Highest Channel / 16QAM



Date: 11 JUL 2019 10:50:58

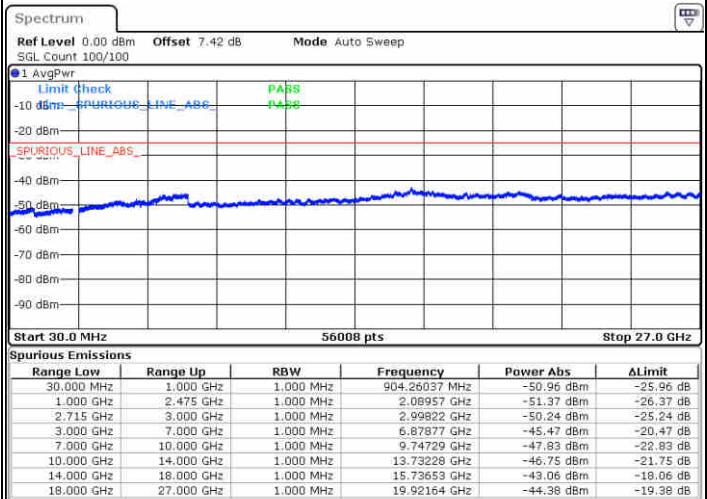
LTE Band 41 / 20MHz

Lowest Channel / QPSK



Date: 11 JUL 2019 10:51:53

Lowest Channel / 16QAM

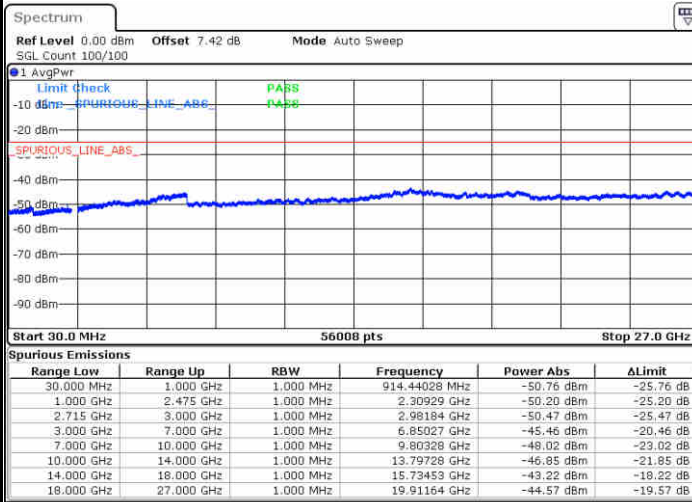


Date: 11 JUL 2019 10:52:48



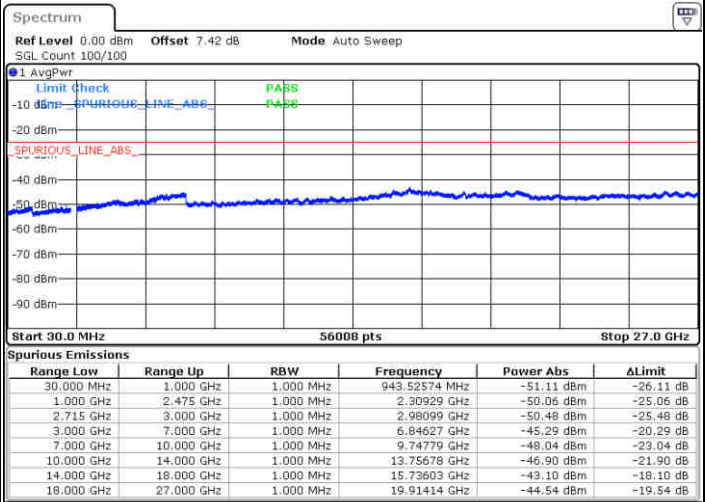
LTE Band 41 / 20MHz

Middle Channel / QPSK



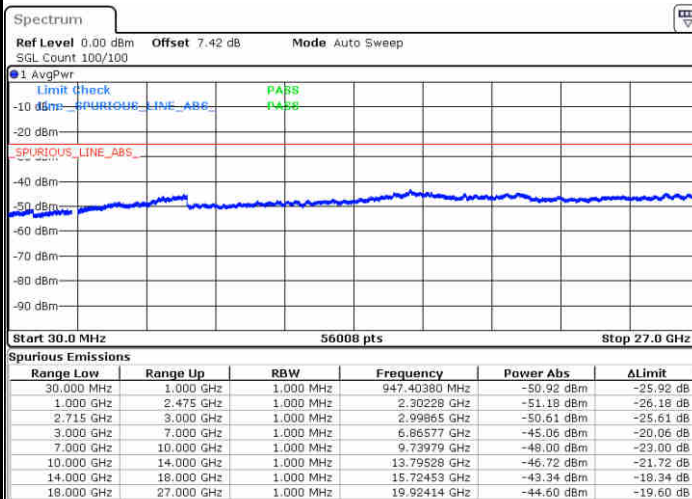
Date: 11 JUL 2019 10:53:43

Middle Channel / 16QAM



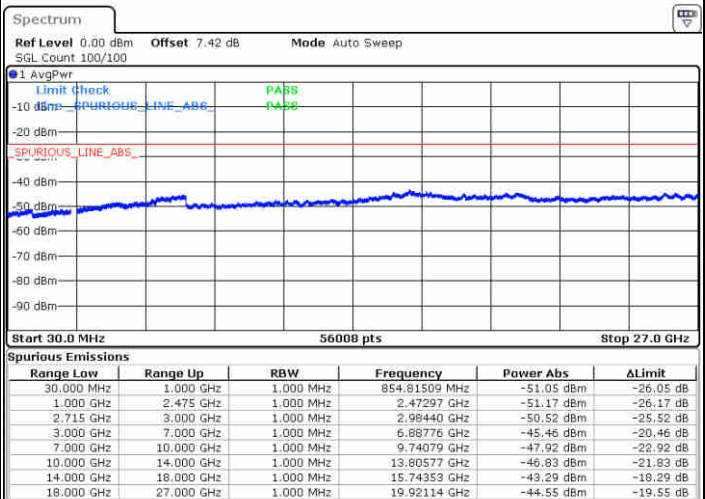
Date: 11 JUL 2019 10:54:37

Highest Channel / QPSK



Date: 11 JUL 2019 10:55:32

Highest Channel / 16QAM

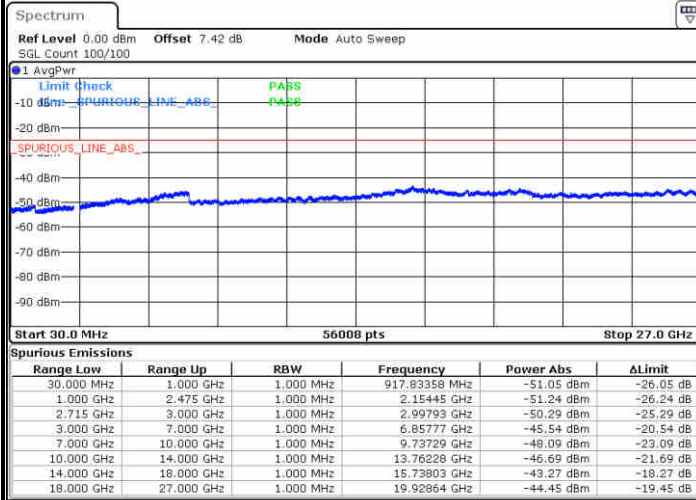


Date: 11 JUL 2019 10:56:27



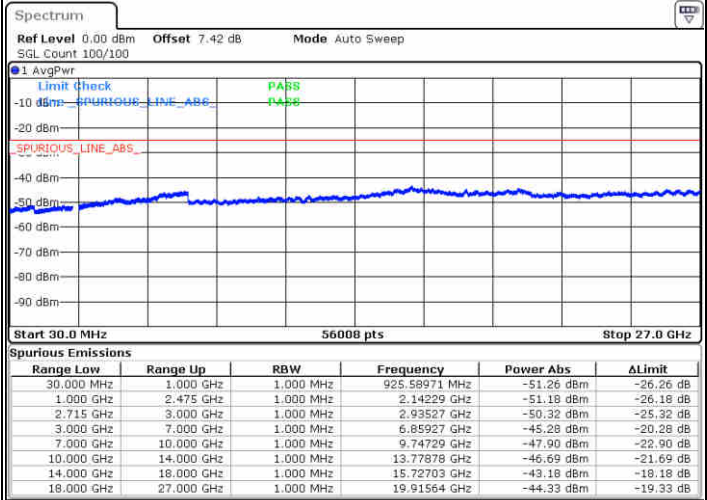
LTE Band 41 / 5MHz

Lowest Channel / 64QAM



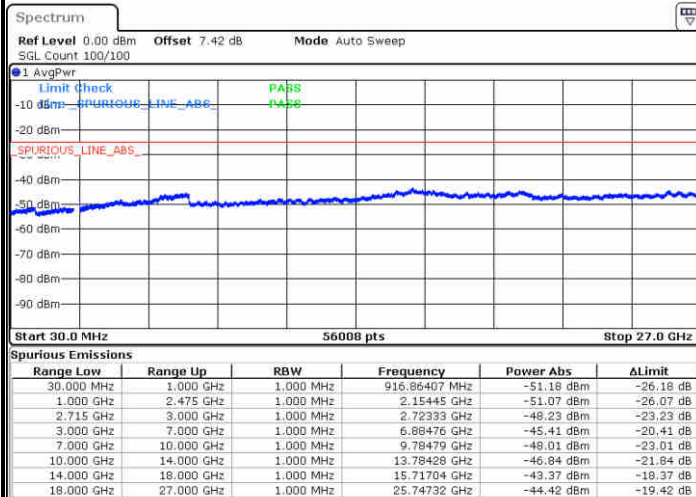
Date: 11 JUL 2019 10:57:22

Middle Channel / 64QAM



Date: 11 JUL 2019 10:58:16

Highest Channel / 64QAM

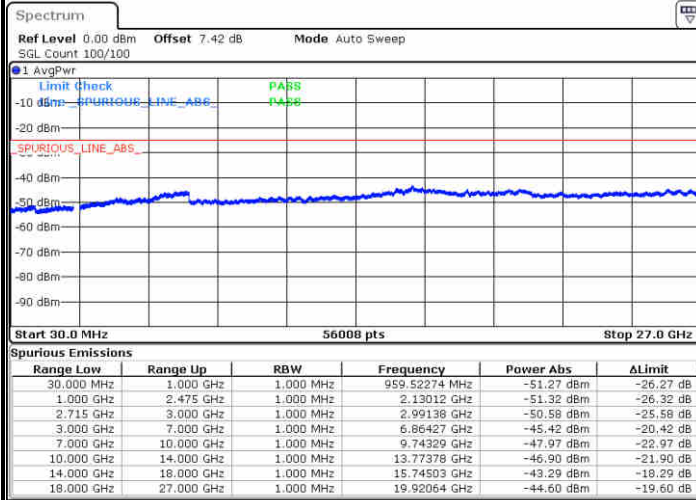


Date: 11 JUL 2019 10:59:11



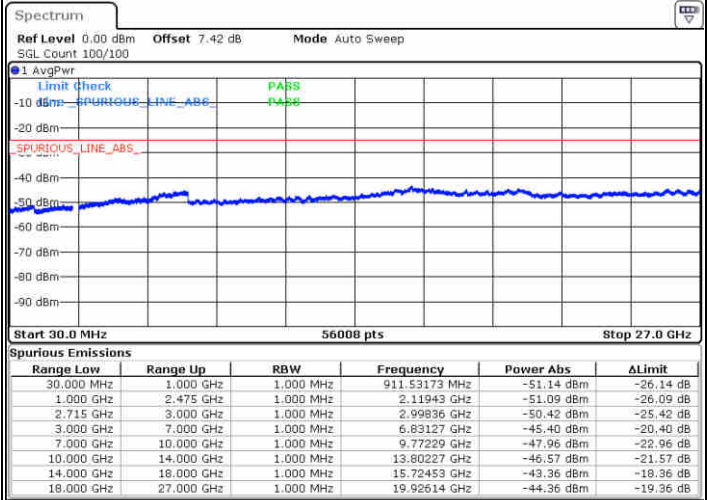
LTE Band 41 / 10MHz

Lowest Channel / 64QAM



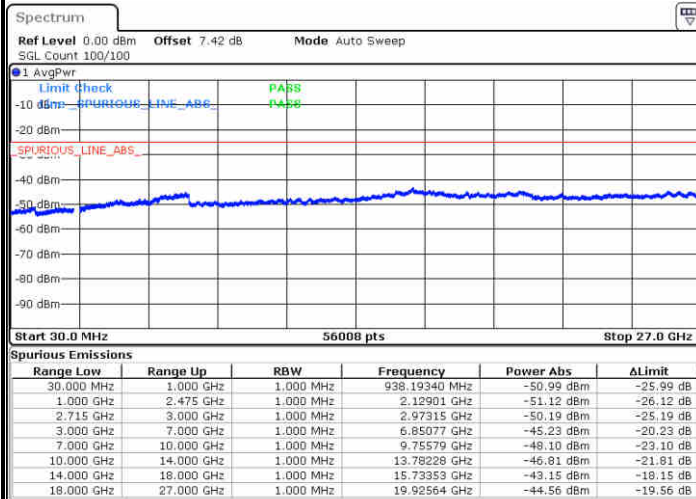
Date: 11.JUL.2019 11:00:06

Middle Channel / 64QAM



Date: 11.JUL.2019 11:01:00

Highest Channel / 64QAM

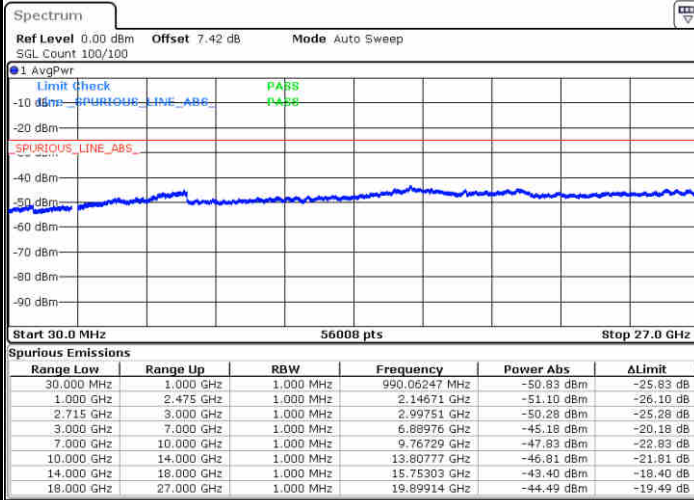


Date: 11.JUL.2019 11:01:55



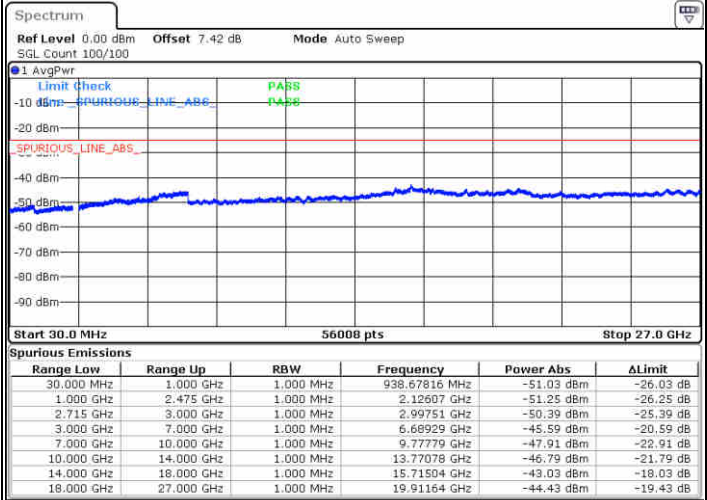
LTE Band 41 / 15MHz

Lowest Channel / 64QAM



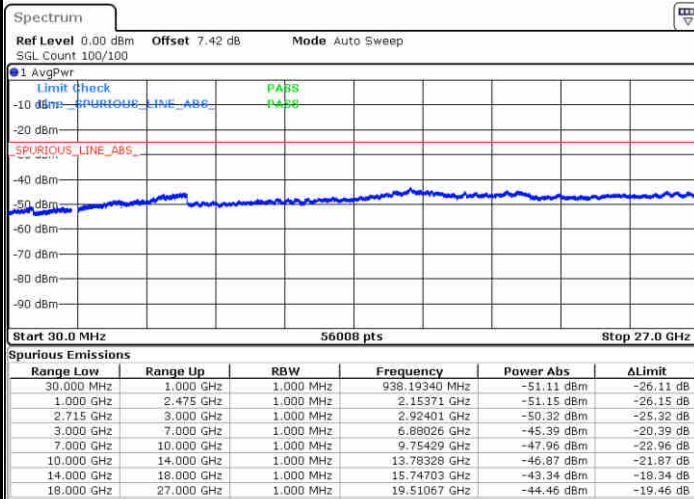
Date: 11 JUL 2019 11:02:50

Middle Channel / 64QAM



Date: 11 JUL 2019 11:03:45

Highest Channel / 64QAM

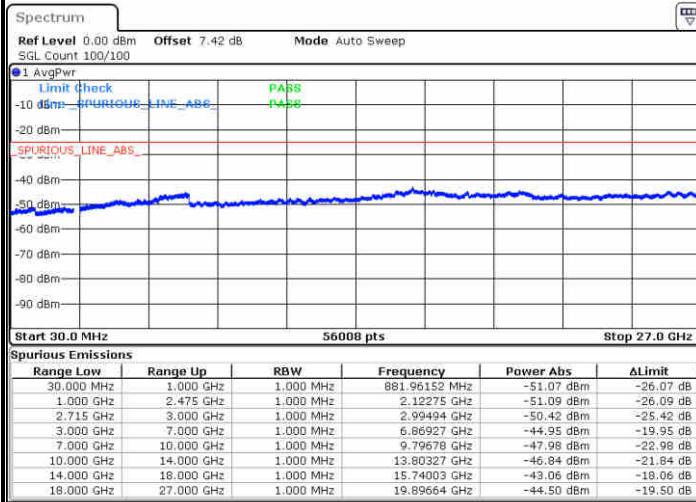


Date: 11 JUL 2019 11:04:39



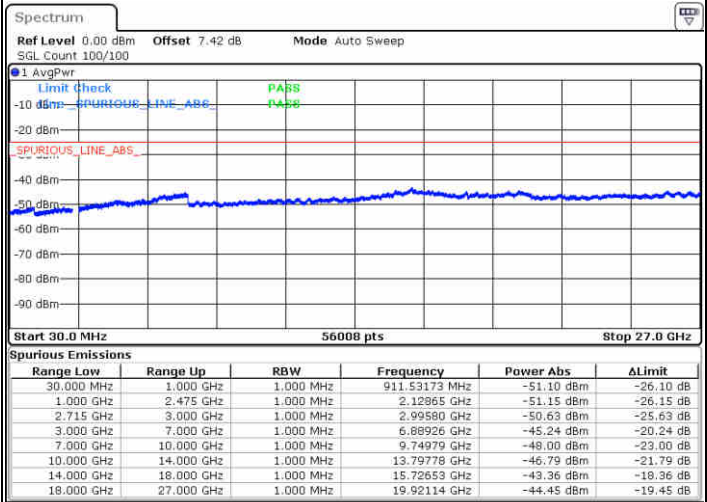
LTE Band 41 / 20MHz

Lowest Channel / 64QAM



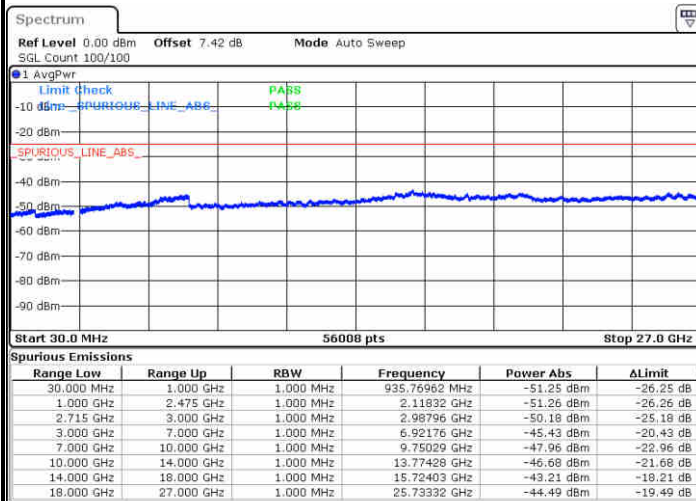
Date: 11.JUL.2019 11:05:34

Middle Channel / 64QAM



Date: 11.JUL.2019 11:06:29

Highest Channel / 64QAM



Date: 11.JUL.2019 11:07:24

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	0.0015	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 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	0.0025	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 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	0.0024	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note: Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0044	PASS
40	Normal Voltage	0.0041	
30	Normal Voltage	0.0047	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0038	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0037	
-30	Normal Voltage	0.0042	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0031	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0031	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 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	-43.80	-13	-30.80	-56.06	2.641	14.90	H
	5613	-39.40	-13	-26.40	-51.26	2.94	14.80	H
	7488	-51.32	-13	-38.32	-61.09	3.39	13.16	H
	9355	-47.89	-13	-34.89	-58.37	4.00	14.48	H
	11226	-47.94	-13	-34.94	-57.45	4.23	13.74	H
	13097	-46.75	-13	-33.75	-56.59	4.49	14.32	H
	14968	-44.51	-13	-31.51	-54.76	4.94	15.19	H
	16839	-46.35	-13	-33.35	-56.24	5.01	14.90	H
	3741	-37.07	-13	-24.07	-49.33	2.64	14.90	V
	5613	-31.56	-13	-18.56	-43.42	2.94	14.80	V
	7488	-43.94	-13	-30.94	-53.71	3.39	13.16	V
	9360	-43.96	-13	-30.96	-54.44	4.00	14.48	V
	11226	-38.99	-13	-25.99	-48.50	4.23	13.74	V
	13092	-36.93	-13	-23.93	-46.77	4.49	14.32	V
	14964	-36.65	-13	-23.65	-46.90	4.94	15.19	V
	16836	-42.37	-13	-29.37	-52.26	5.01	14.90	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	-55.83	-13	-42.83	-66.57	2.604	13.34	H
	5172	-40.24	-13	-27.24	-50.75	3.011	13.52	H
	6900	-55.94	-13	-42.94	-66.14	3.271	13.47	H
	8616	-51.29	-13	-38.29	-58.26	5.527	12.5	H
	10344	-48.83	-13	-35.83	-55.69	6.038	12.9	H
	12060	-46.78	-13	-33.78	-53.98	6.726	13.93	H
	13788	-45.10	-13	-32.10	-52.54	6.963	14.4	H
	15516	-47.37	-13	-34.37	-54.00	7.57	14.2	H
	3447	-49.42	-13	-36.42	-60.16	2.604	13.34	V
	5172	-33.22	-13	-20.22	-43.73	3.011	13.52	V
	6900	-49.80	-13	-36.80	-60.00	3.271	13.47	V
	8616	-51.88	-13	-38.88	-58.85	5.527	12.50	V
	10344	-43.97	-13	-30.97	-50.83	6.038	12.90	V
	12060	-45.25	-13	-32.25	-52.45	6.726	13.93	V
	13788	-43.41	-13	-30.41	-50.85	6.963	14.40	V
	15516	-35.59	-13	-22.59	-42.22	7.57	14.20	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	-46.47	-13	-33.47	-53.44	1.58	10.70	H
	2496	-48.04	-13	-35.04	-56.29	2.102	12.50	H
	3330	-57.93	-13	-44.93	-66.82	2.856	13.90	H
	4158	-63.64	-13	-50.64	-72.10	2.689	13.30	H
	4992	-62.01	-13	-49.01	-69.77	3.093	13.00	H
	5826	-57.82	-13	-44.82	-66.59	3.178	14.10	H
	6654	-58.96	-13	-45.96	-66.20	3.306	12.70	H
	7488	-54.81	-13	-41.81	-62.40	3.406	13.15	H
	1664	-46.64	-13	-33.64	-53.61	1.58	10.70	V
	2496	-49.58	-13	-36.58	-57.83	2.10	12.50	V
	3330	-50.74	-13	-37.74	-59.63	2.86	13.90	V
	4158	-63.09	-13	-50.09	-71.55	2.69	13.30	V
	4992	-60.46	-13	-47.46	-68.22	3.09	13.00	V
	5826	-52.02	-13	-39.02	-60.79	3.18	14.10	V
	6654	-57.81	-13	-44.81	-65.05	3.31	12.70	V
	7488	-47.97	-13	-34.97	-55.56	3.41	13.15	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)
Middle	5052	-43.46	-25	-18.46	-53.67	3.03	13.24	H
	7580	-48.85	-25	-23.85	-58.30	3.56	13.01	H
	10100	-44.95	-25	-19.95	-54.47	3.92	13.44	H
	12630	-58.97	-25	-33.97	-68.89	4.44	14.36	H
	15160	-51.16	-25	-26.16	-61.53	4.77	15.14	H
	5052	-30.74	-25	-5.74	-40.95	3.03	13.24	V
	7580	-34.67	-25	-9.67	-44.12	3.56	13.01	V
	10100	-37.00	-25	-12.00	-46.52	3.92	13.44	V
	12630	-47.24	-25	-22.24	-57.16	4.44	14.36	V
	15160	-43.53	-25	-18.53	-53.90	4.77	15.14	V

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

LTE Band 41 / 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	5168	-39.73	-25	-14.73	-49.94	3.03	13.24	H
	7752	-43.39	-25	-18.39	-52.84	3.56	13.01	H
	10340	-35.24	-25	-10.24	-44.76	3.92	13.44	H
	12920	-52.62	-25	-27.62	-62.54	4.44	14.36	H
	15500	-50.30	-25	-25.30	-60.67	4.77	15.14	H
	5168.18	-27.15	-25	-2.15	-37.36	3.03	13.24	V
	7752	-30.37	-25	-5.37	-39.82	3.56	13.01	V
	10340	-26.70	-25	-1.70	-36.22	3.92	13.44	V
	12920	-40.95	-25	-15.95	-50.87	4.44	14.36	V
	15500	-36.70	-25	-11.70	-47.07	4.77	15.14	V

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