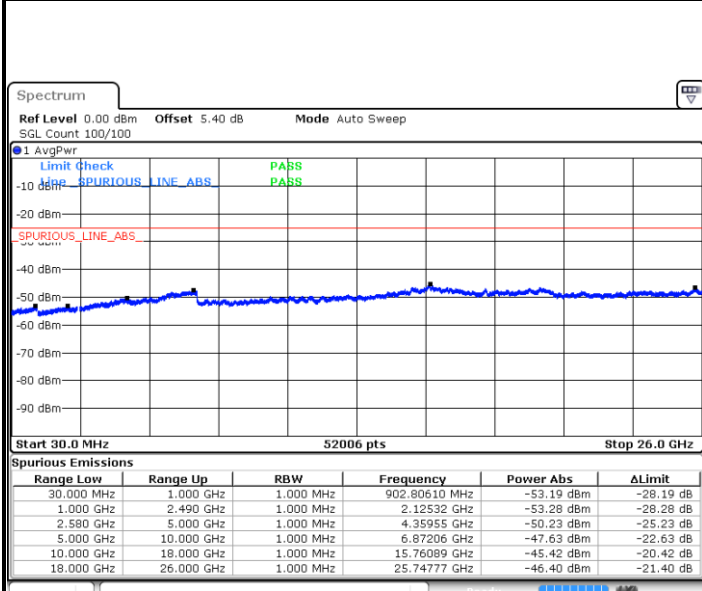




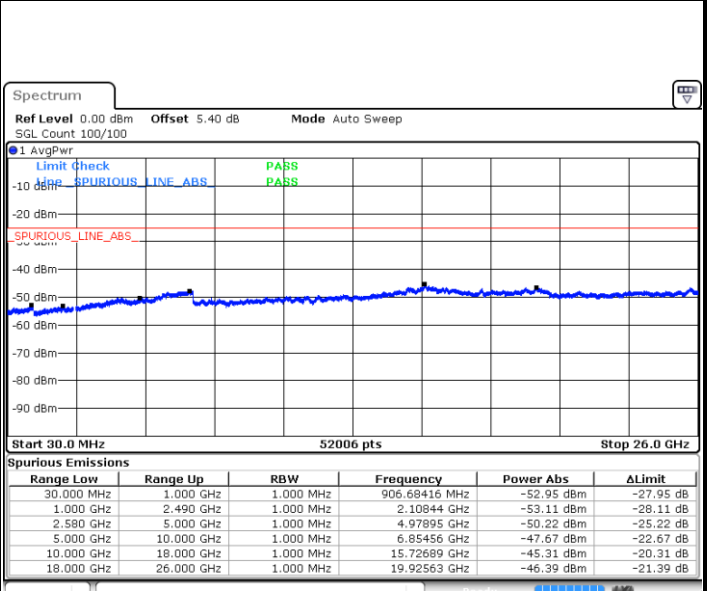
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 19.SEP.2018 09:20:27

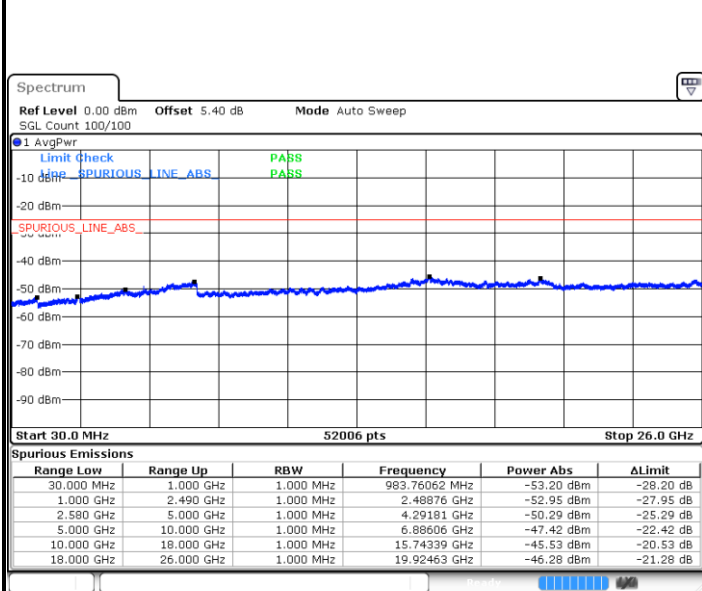
Highest Channel / 16QAM



Date: 19.SEP.2018 09:19:33

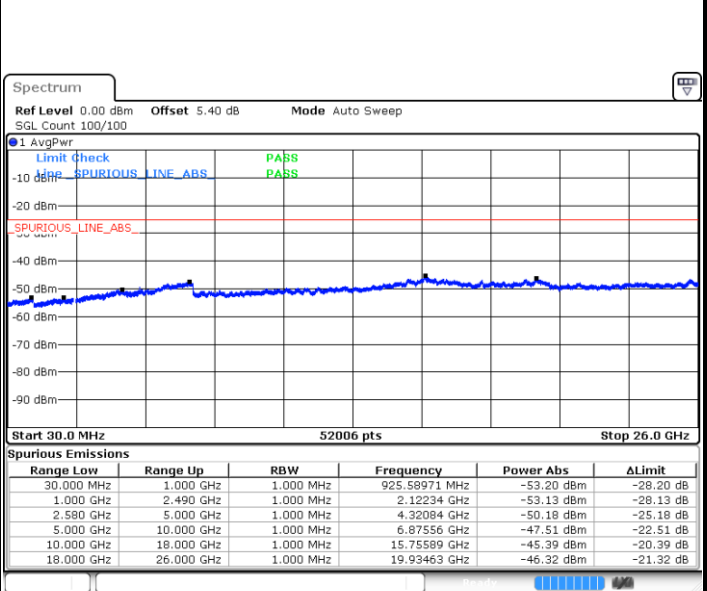
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 19.SEP.2018 09:22:55

Lowest Channel / 16QAM



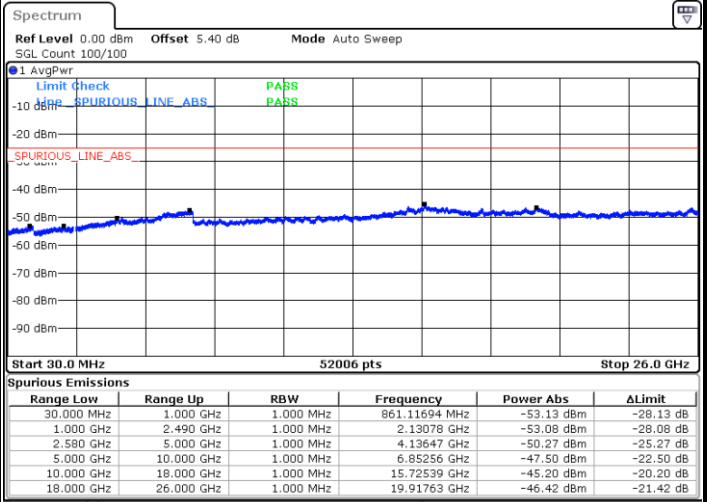
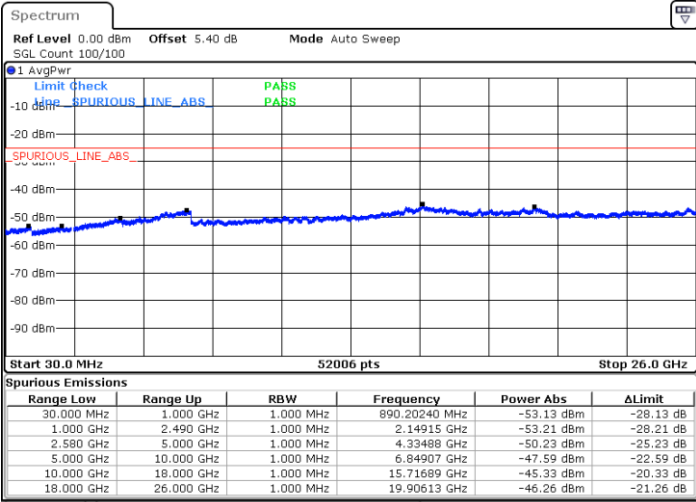
Date: 19.SEP.2018 09:22:01



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

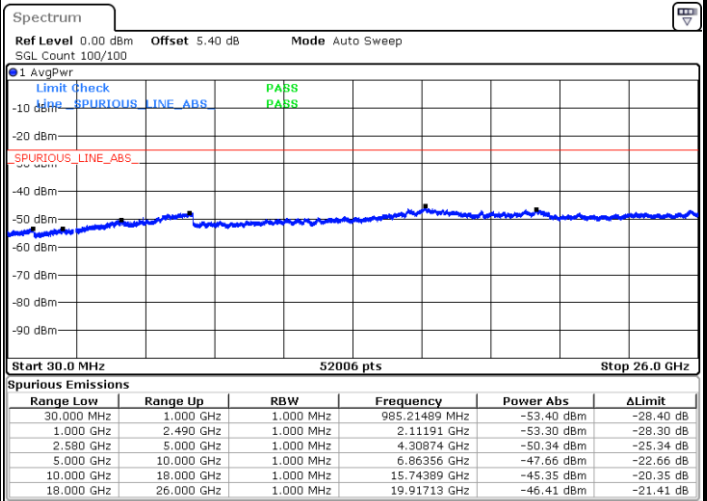
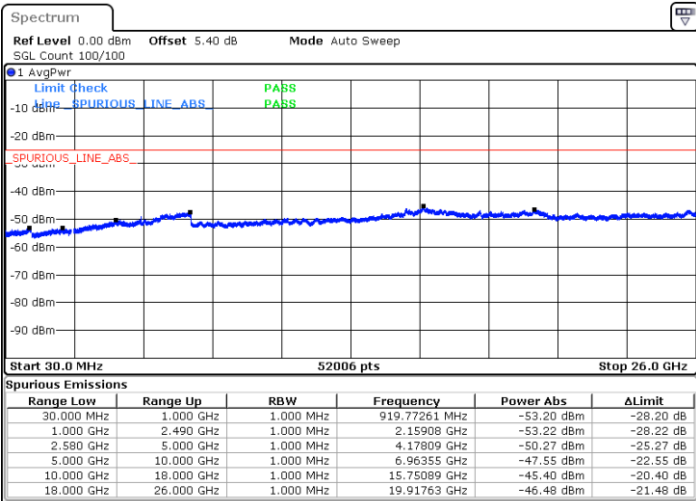


Date: 19.SEP.2018 09:23:49

Date: 19.SEP.2018 09:24:43

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19.SEP.2018 09:27:51

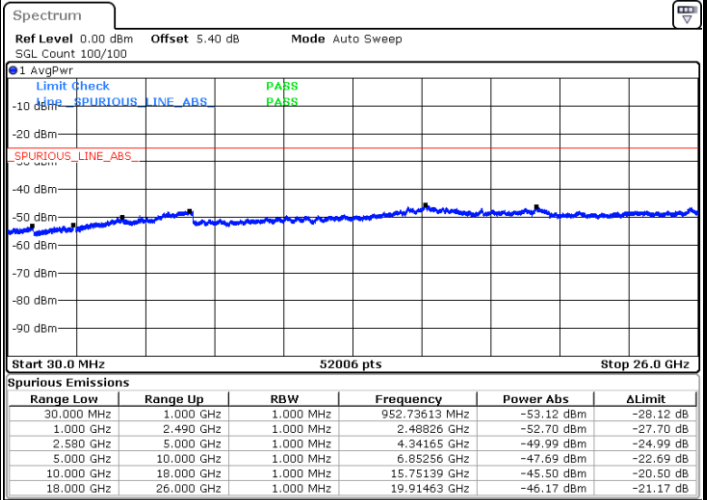
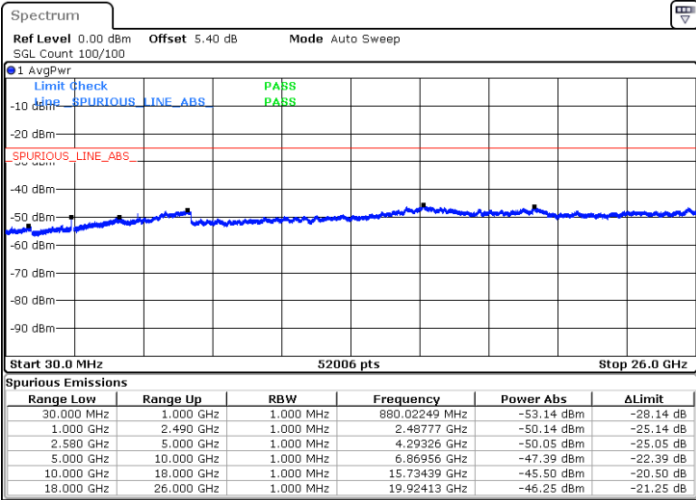
Date: 19.SEP.2018 09:26:57



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

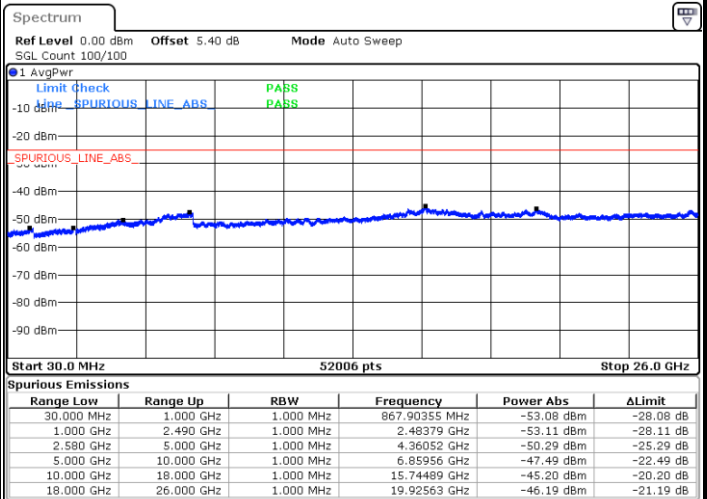
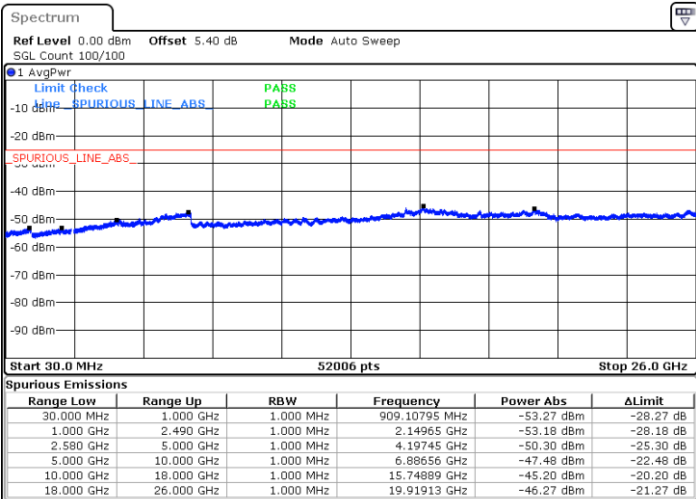


Date: 19.SEP.2018 09:30:19

Date: 19.SEP.2018 09:29:25

Middle Channel / QPSK

Middle Channel / 16QAM



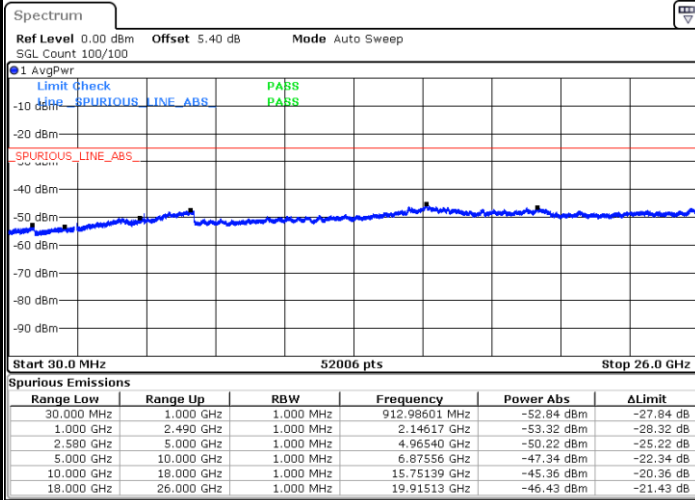
Date: 19.SEP.2018 09:31:13

Date: 19.SEP.2018 09:32:07



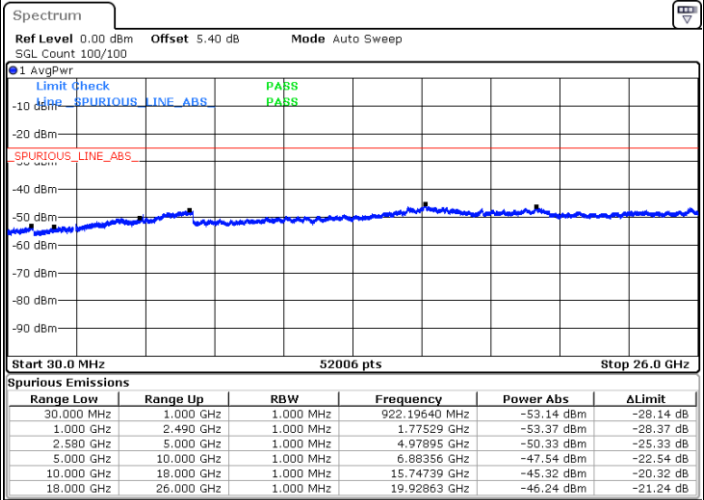
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 19.SEP.2018 09:35:18

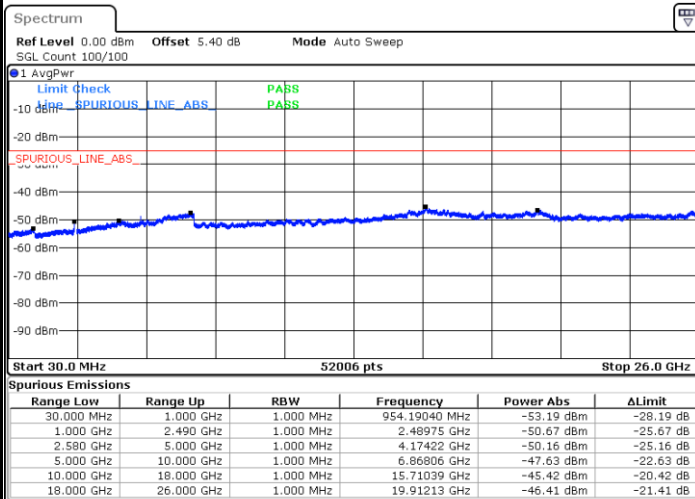
Highest Channel / 16QAM



Date: 19.SEP.2018 09:34:22

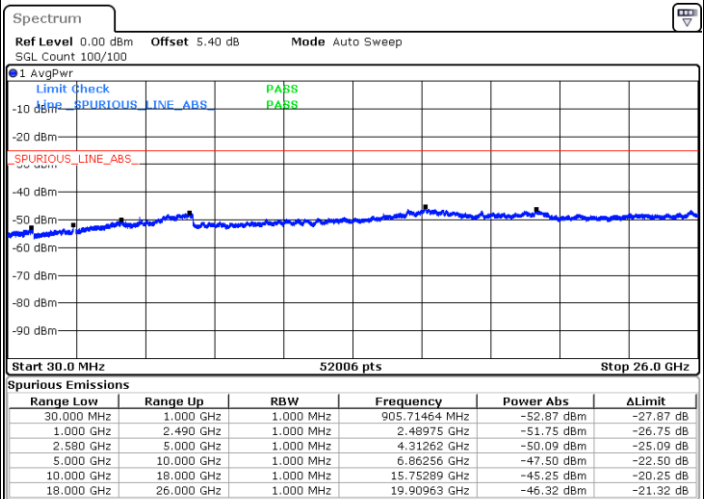
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 19.SEP.2018 09:37:46

Lowest Channel / 16QAM



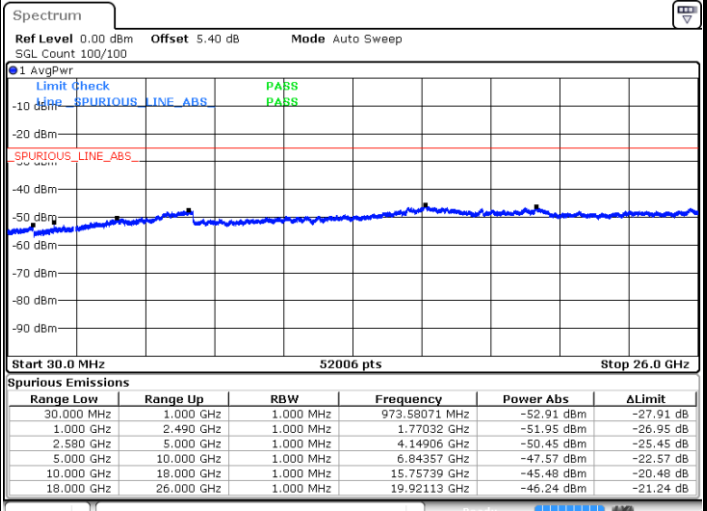
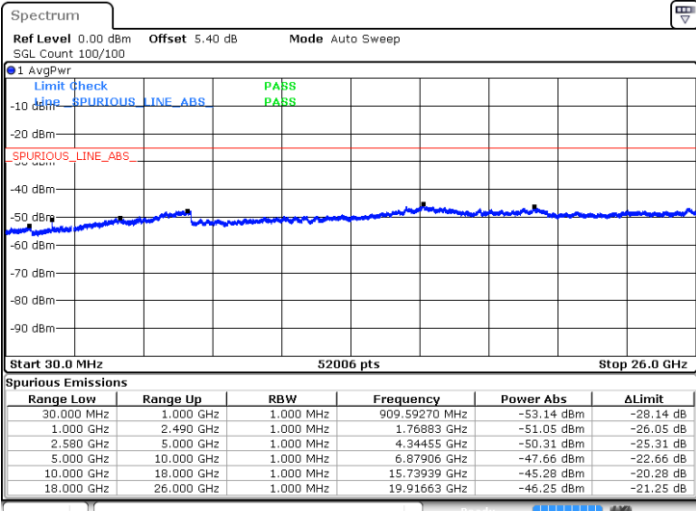
Date: 19.SEP.2018 09:36:52



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

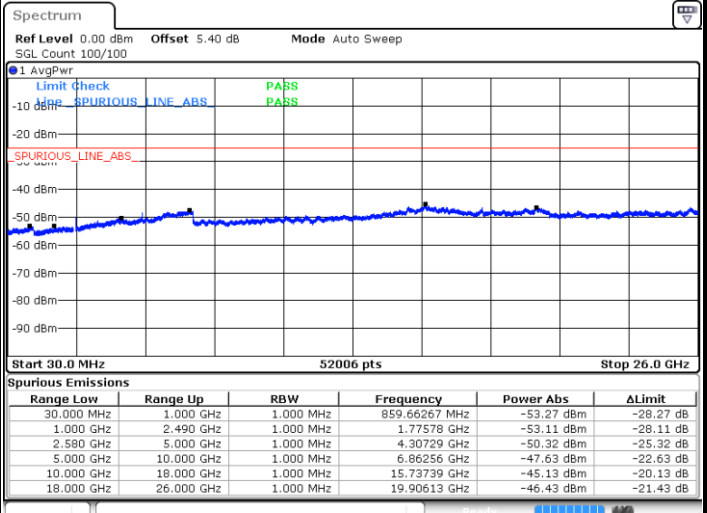
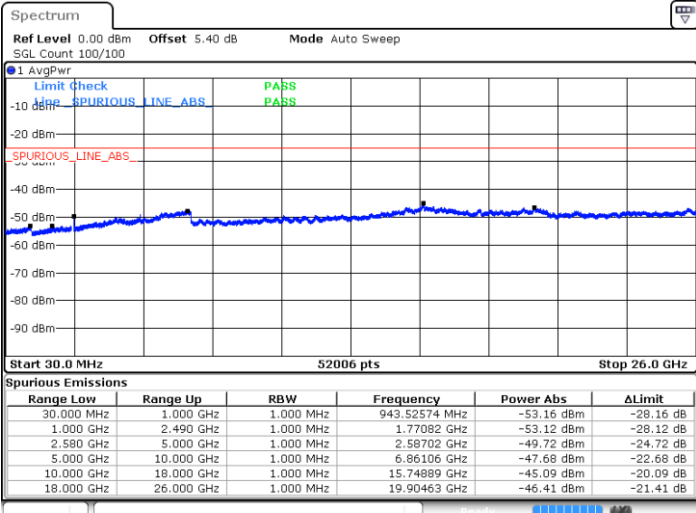


Date: 19.SEP.2018 09:38:40

Date: 19.SEP.2018 09:39:34

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19.SEP.2018 09:42:42

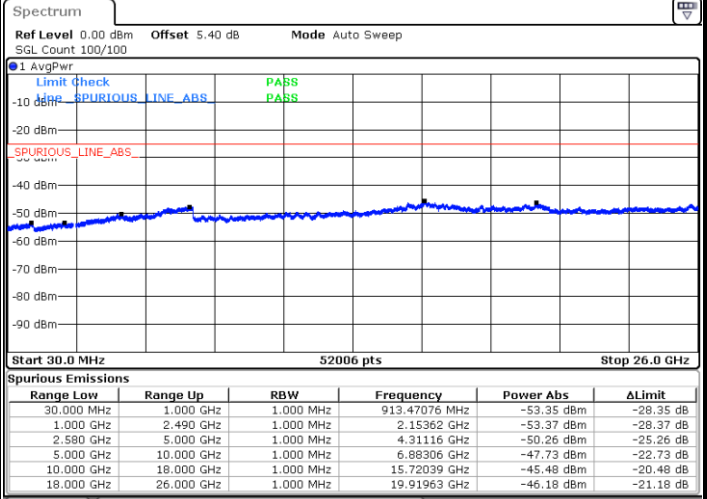
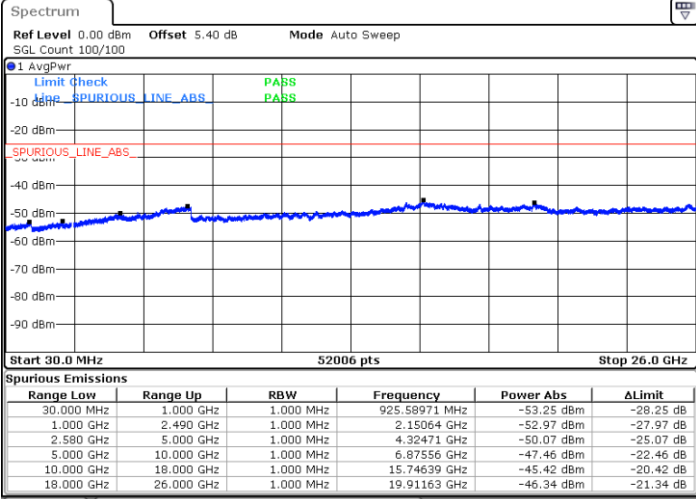
Date: 19.SEP.2018 09:41:48



LTE Band 7 / 5MHz

Lowest Channel / 64QAM

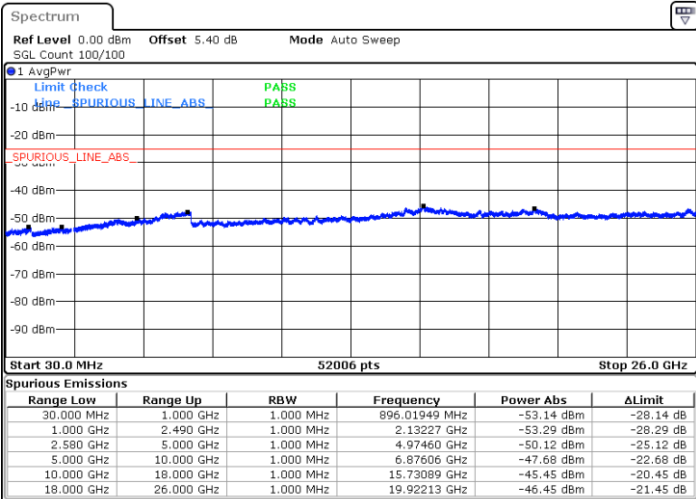
Middle Channel / 64QAM



Date: 19.SEP.2018 09:48:28

Date: 19.SEP.2018 09:49:22

Highest Channel / 64QAM



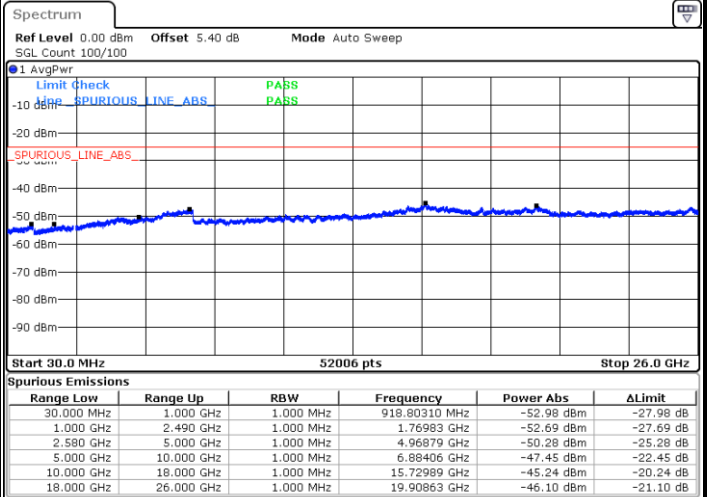
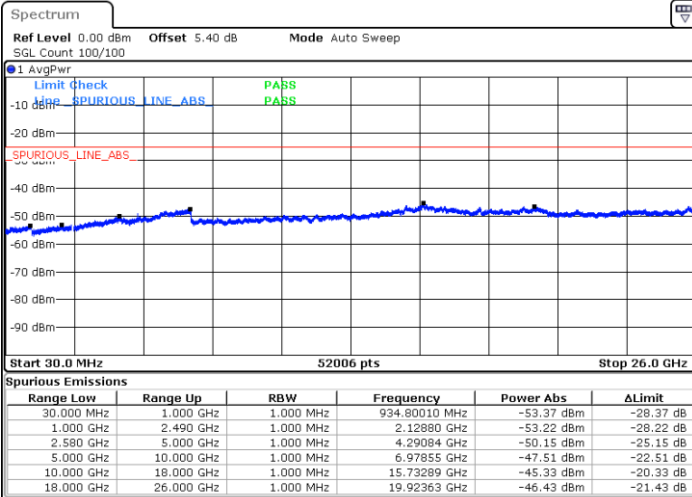
Date: 19.SEP.2018 09:50:15



LTE Band 7 / 10MHz

Lowest Channel / 64QAM

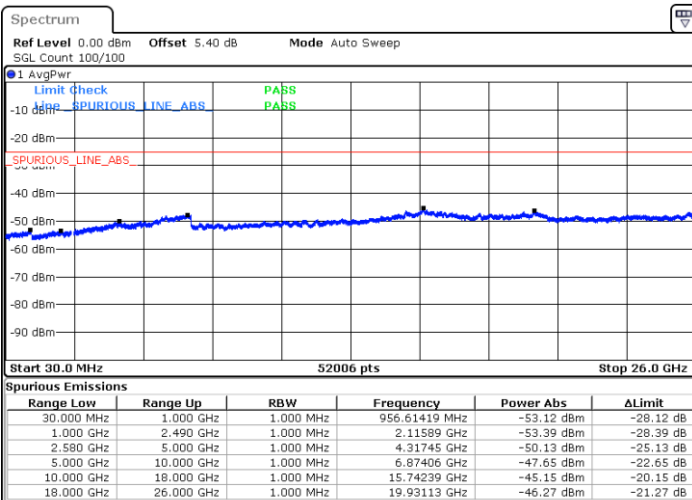
Middle Channel / 64QAM



Date: 19.SEP.2018 09:52:10

Date: 19.SEP.2018 09:53:03

Highest Channel / 64QAM



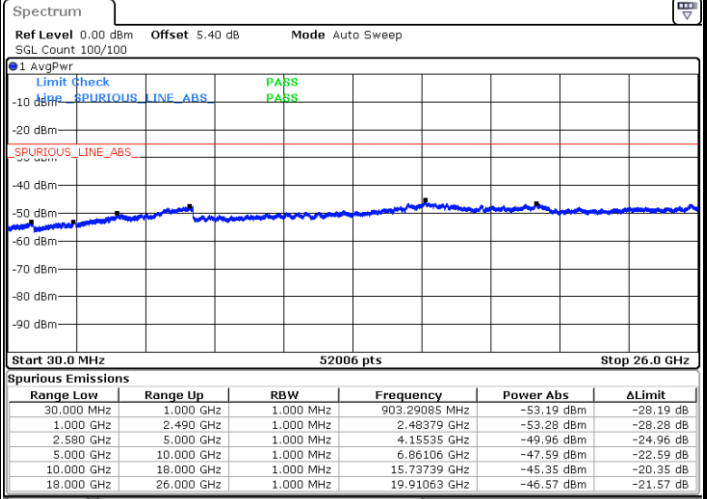
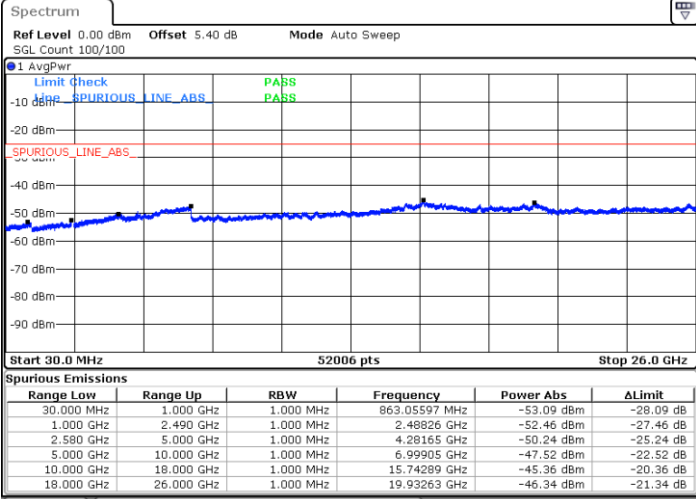
Date: 19.SEP.2018 09:53:57



LTE Band 7 / 15MHz

Lowest Channel / 64QAM

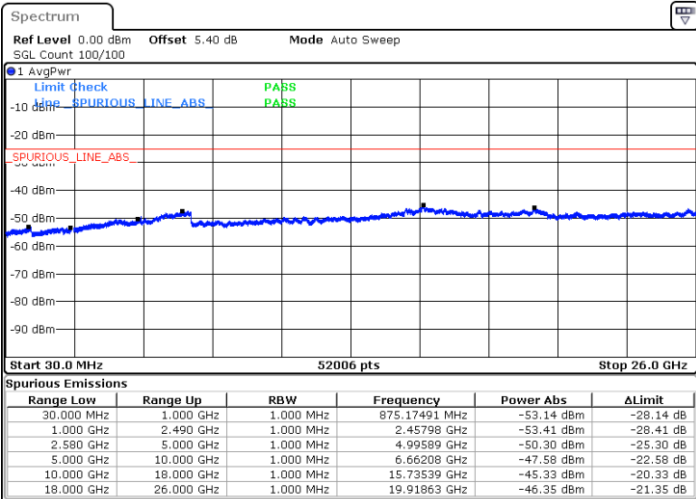
Middle Channel / 64QAM



Date: 19.SEP.2018 09:55:52

Date: 19.SEP.2018 09:56:45

Highest Channel / 64QAM



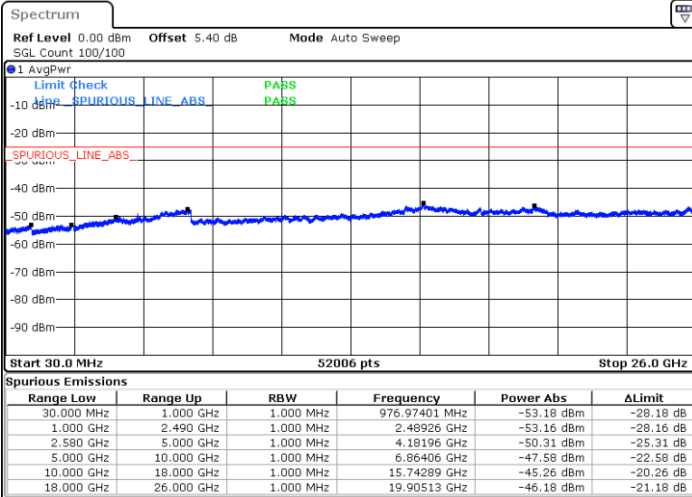
Date: 19.SEP.2018 09:57:39



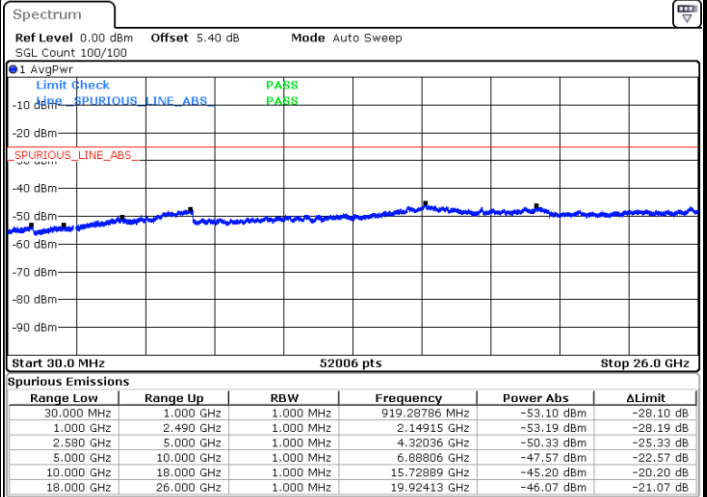
LTE Band 7 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

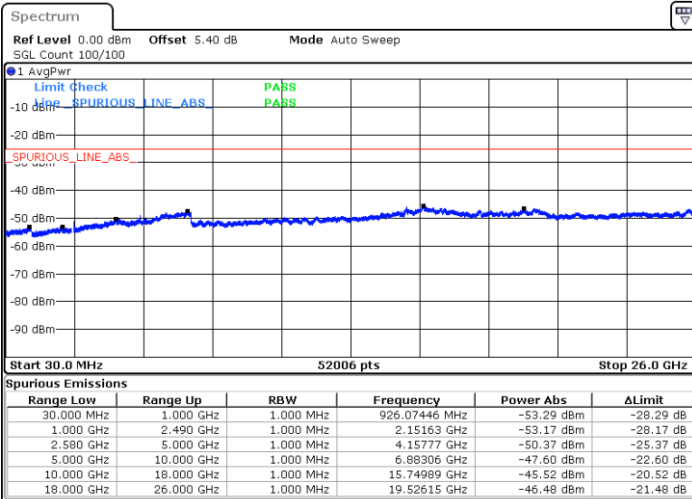


Date: 19.SEP.2018 09:59:33



Date: 19.SEP.2018 10:00:27

Highest Channel / 64QAM



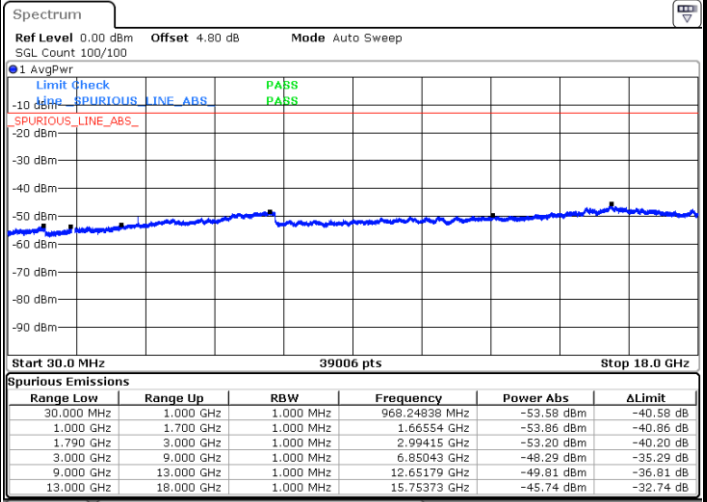
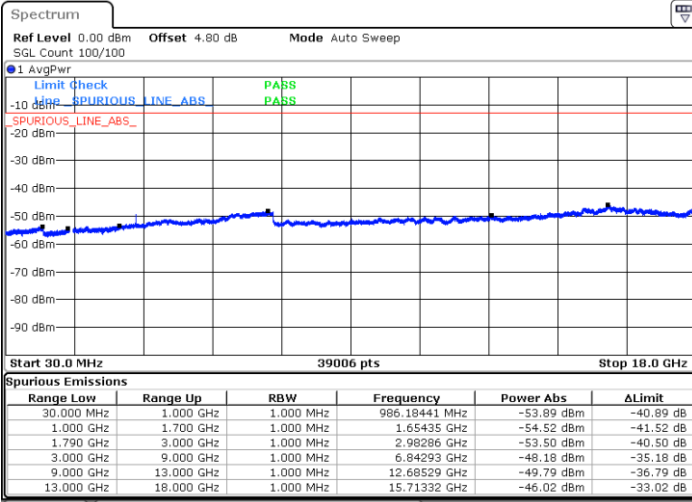
Date: 19.SEP.2018 10:01:21



LTE Band 66 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

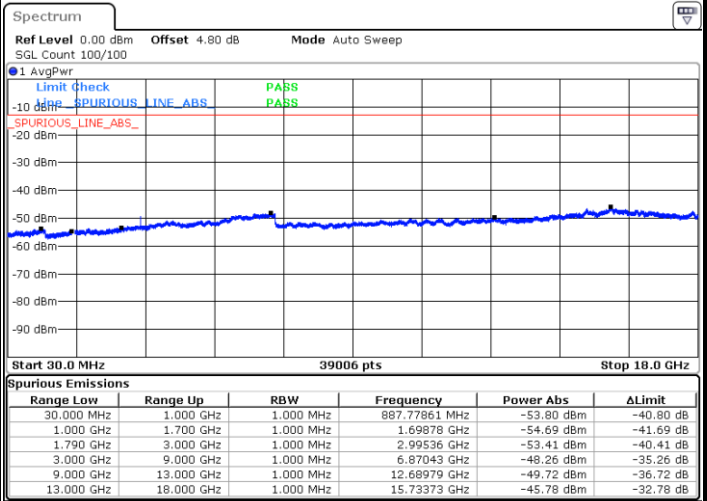
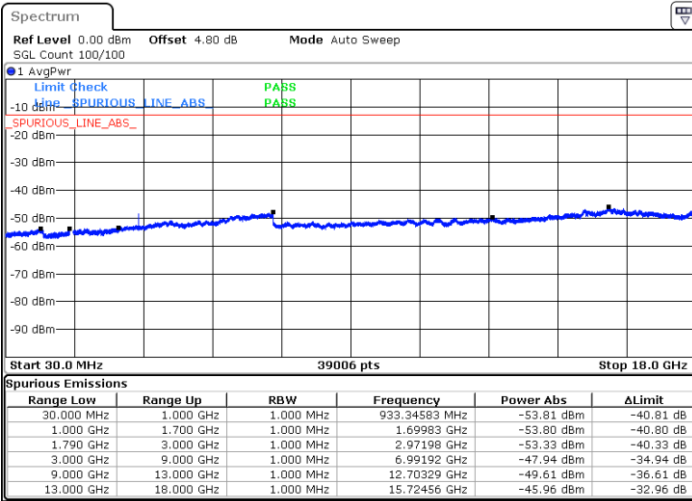


Date: 19.SEP.2018 10:59:27

Date: 19.SEP.2018 10:58:47

Middle Channel / QPSK

Middle Channel / 16QAM



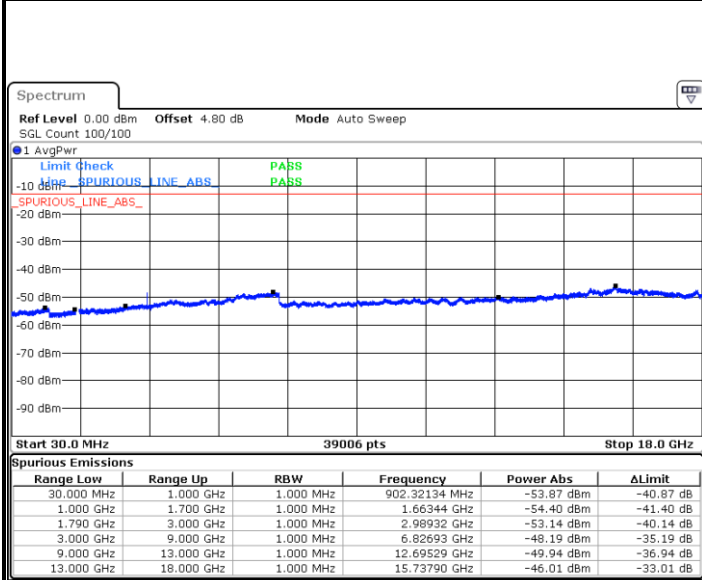
Date: 19.SEP.2018 11:13:40

Date: 19.SEP.2018 11:13:00



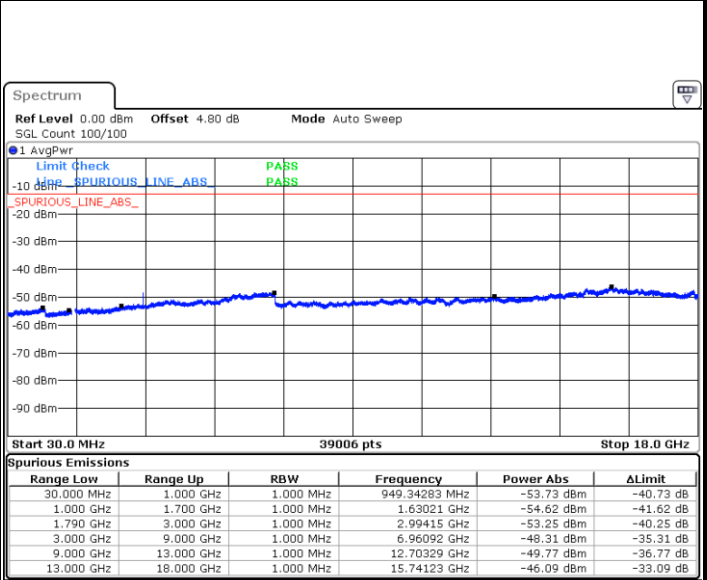
LTE Band 66 / 1.4MHz

Highest Channel / QPSK



Date: 19.SEP.2018 11:14:46

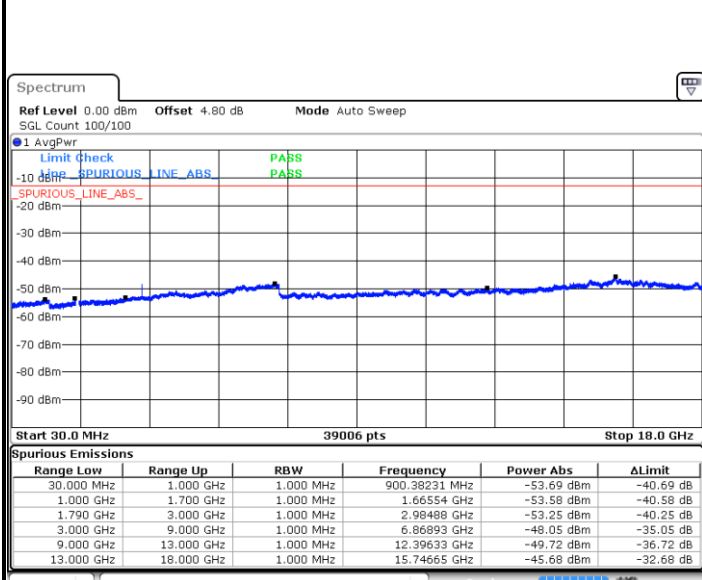
Highest Channel / 16QAM



Date: 19.SEP.2018 11:15:34

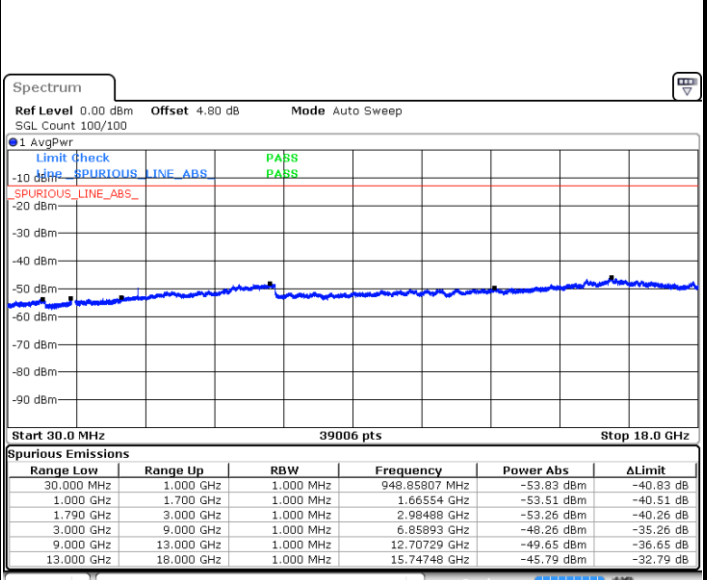
LTE Band 66 / 3MHz

Lowest Channel / QPSK



Date: 19.SEP.2018 13:30:53

Lowest Channel / 16QAM



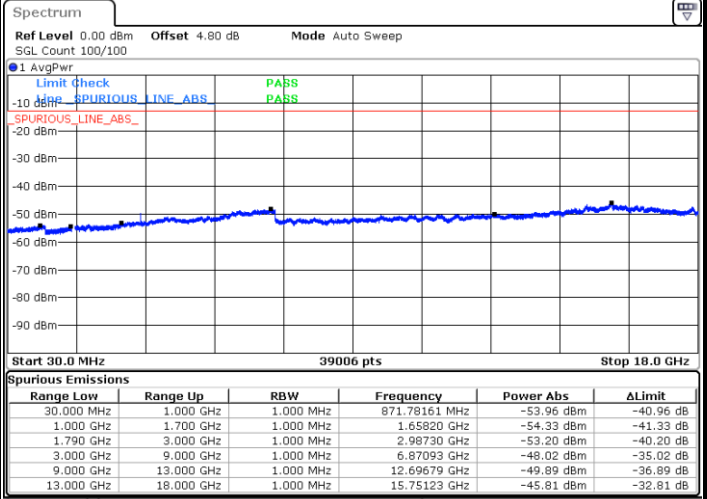
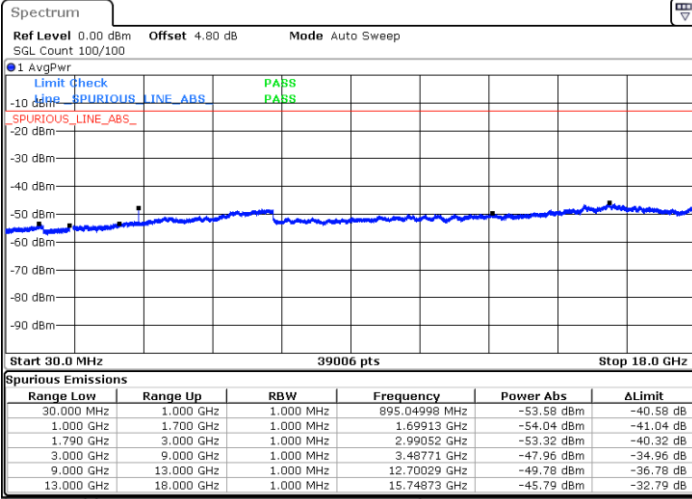
Date: 19.SEP.2018 13:32:08



LTE Band 66 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

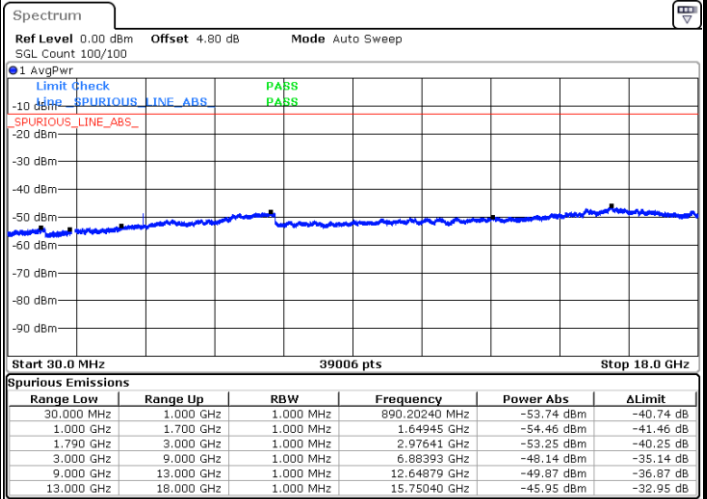
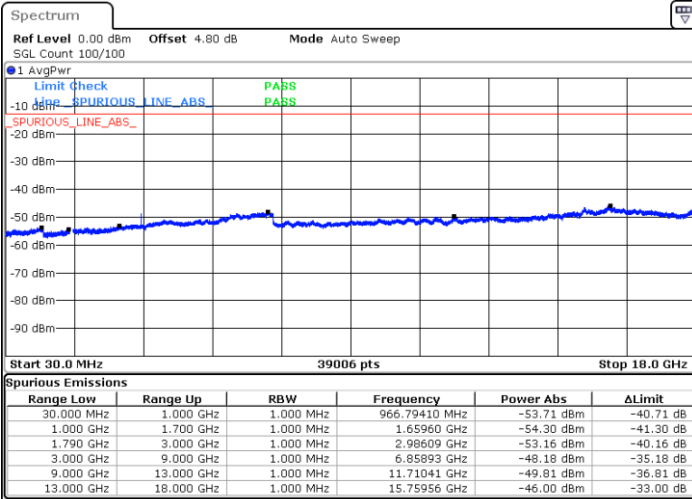


Date: 19.SEP.2018 13:37:58

Date: 19.SEP.2018 13:38:37

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19.SEP.2018 13:43:31

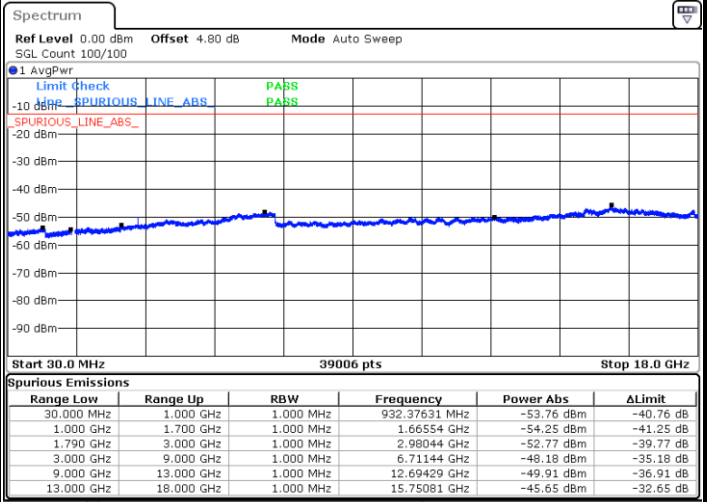
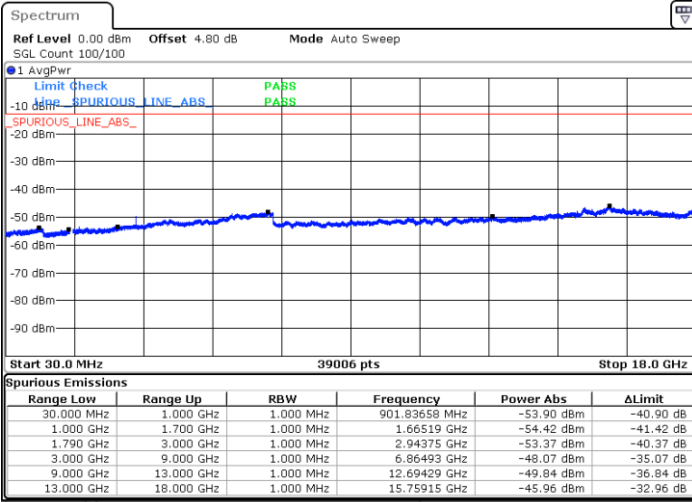
Date: 19.SEP.2018 13:44:10



LTE Band 66 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

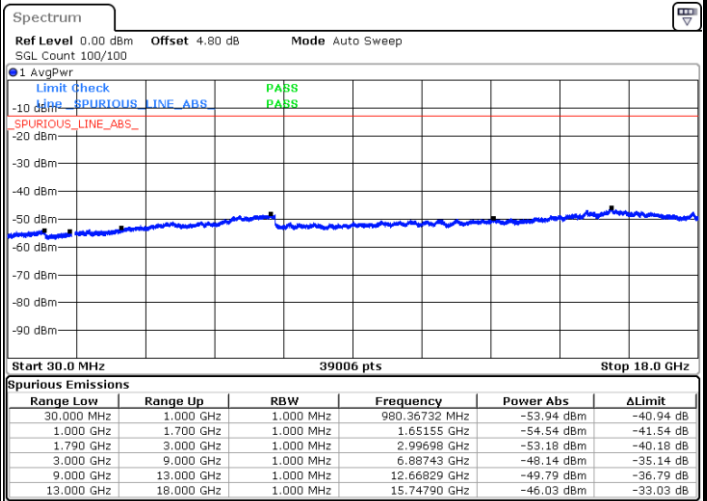
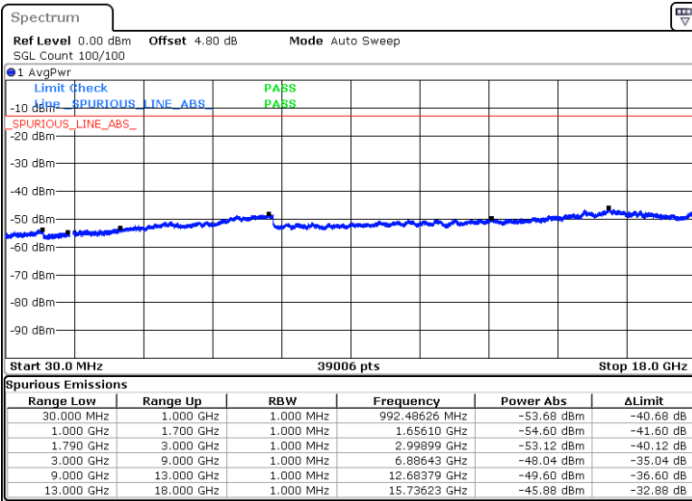


Date: 19.SEP.2018 13:51:56

Date: 19.SEP.2018 13:52:55

Middle Channel / QPSK

Middle Channel / 16QAM



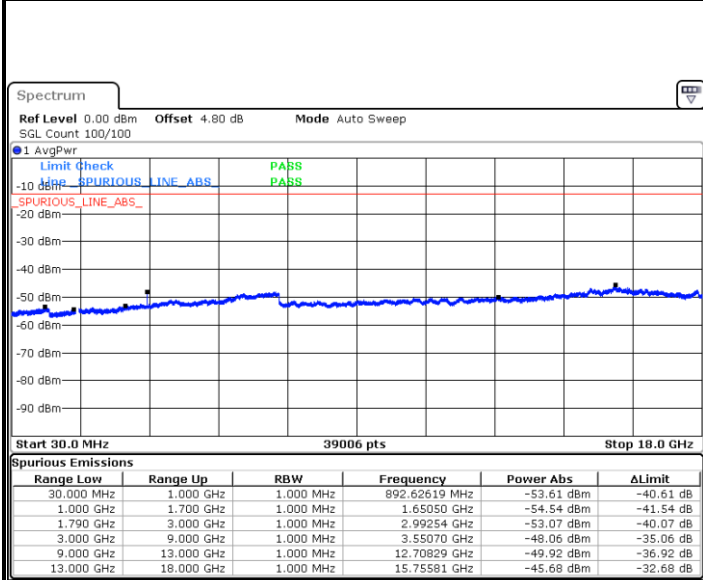
Date: 19.SEP.2018 13:56:21

Date: 19.SEP.2018 13:56:58



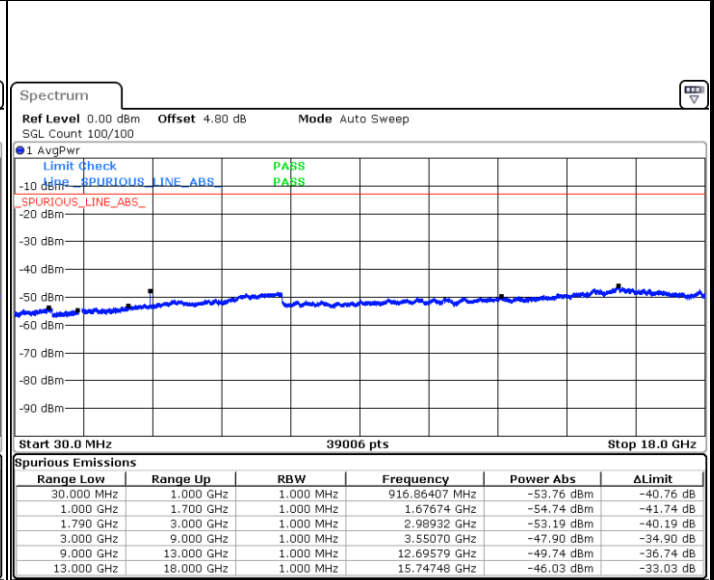
LTE Band 66 / 5MHz

Highest Channel / QPSK



Date: 19.SEP.2018 13:58:32

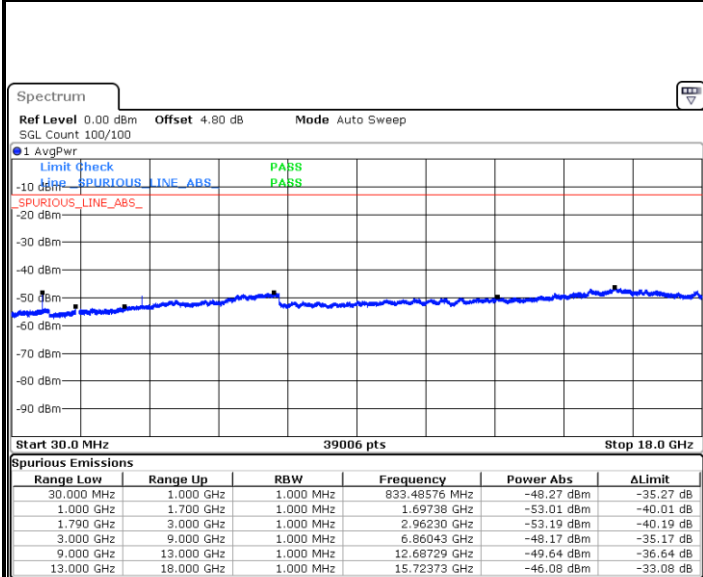
Highest Channel / 16QAM



Date: 19.SEP.2018 13:59:16

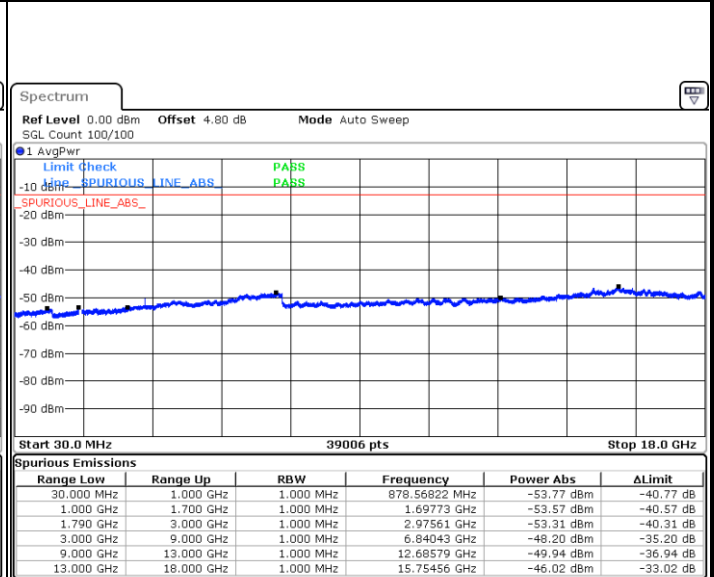
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Date: 19.SEP.2018 14:07:02

Lowest Channel / 16QAM



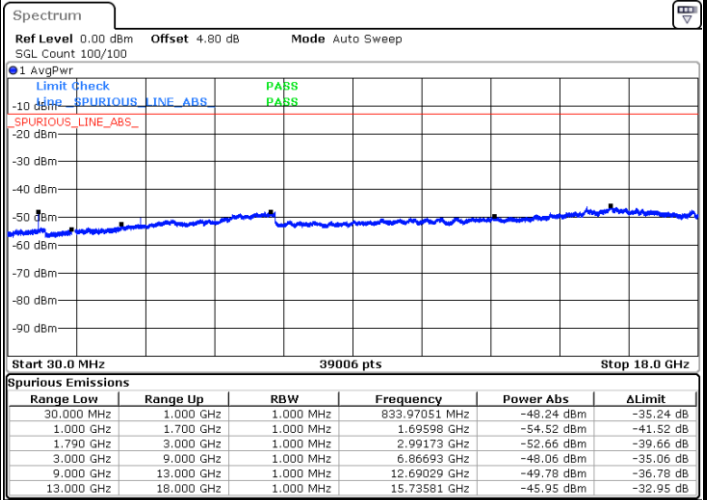
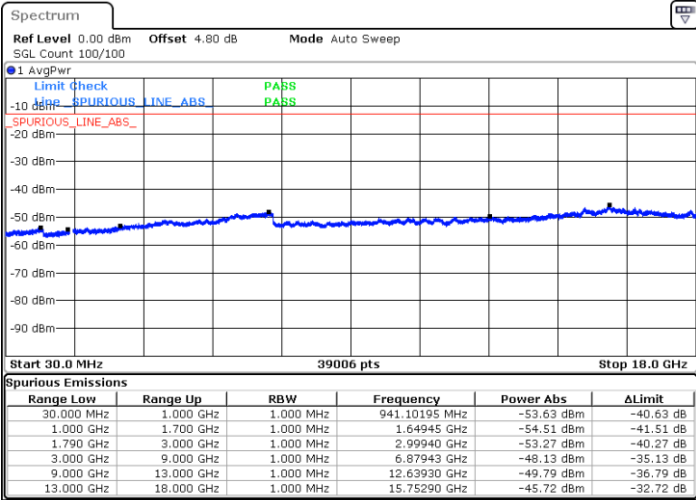
Date: 19.SEP.2018 14:07:56



LTE Band 66 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

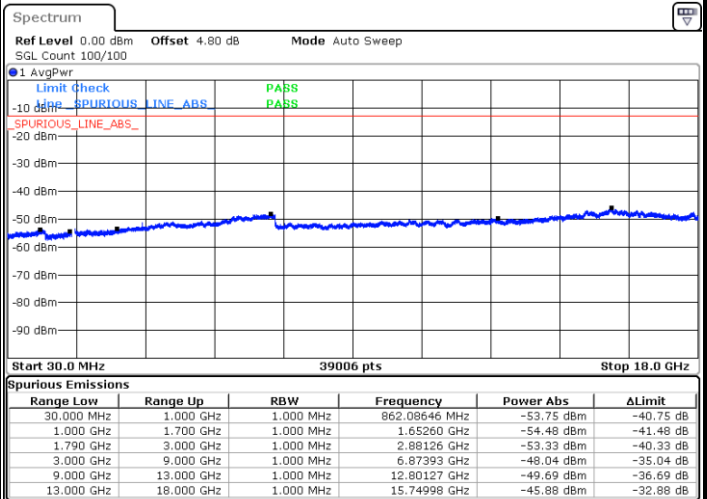
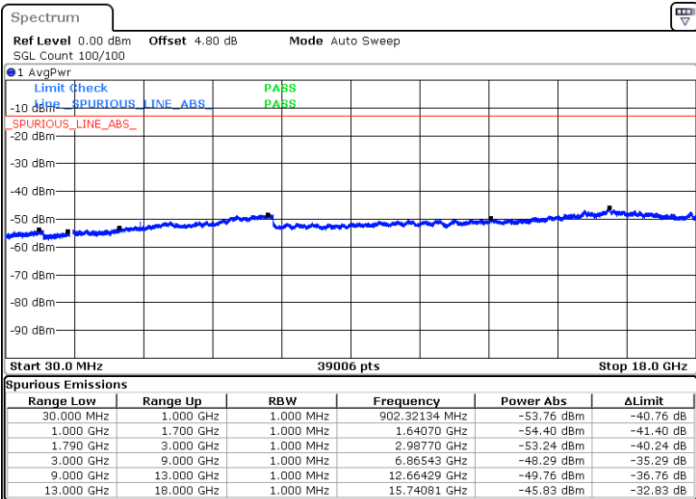


Date: 19.SEP.2018 14:09:37

Date: 19.SEP.2018 14:10:13

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19.SEP.2018 14:16:40

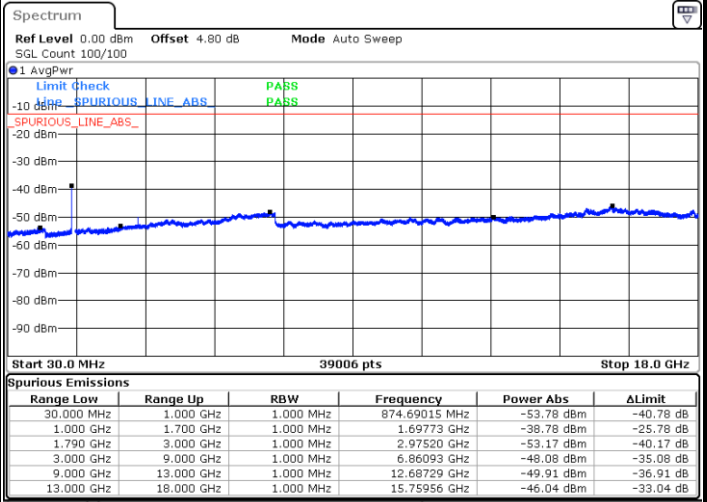
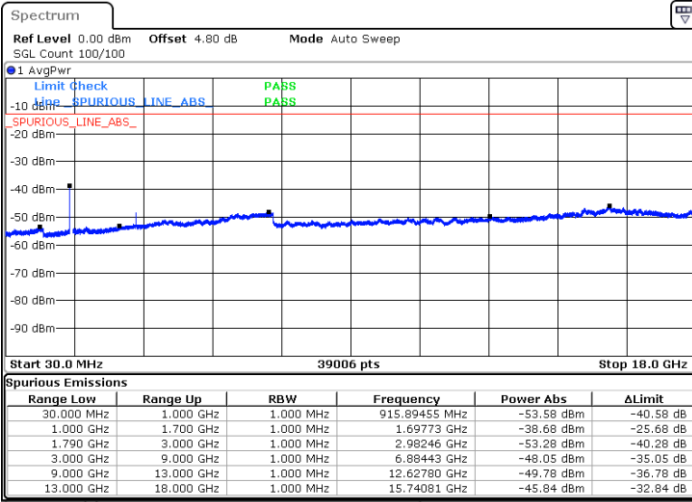
Date: 19.SEP.2018 14:17:14



LTE Band 66 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

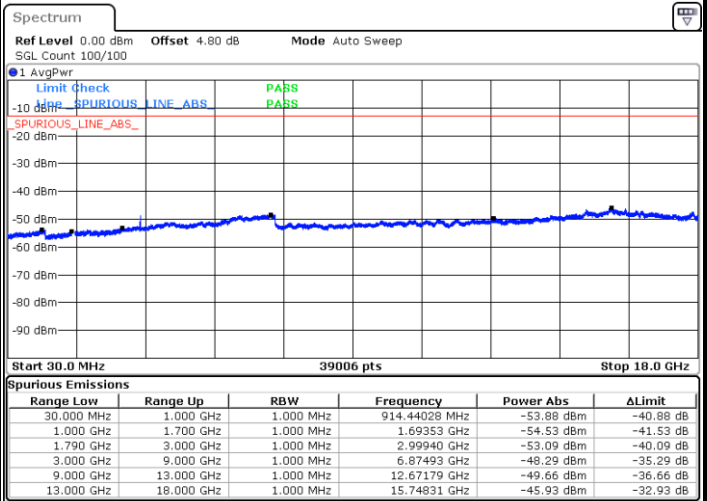
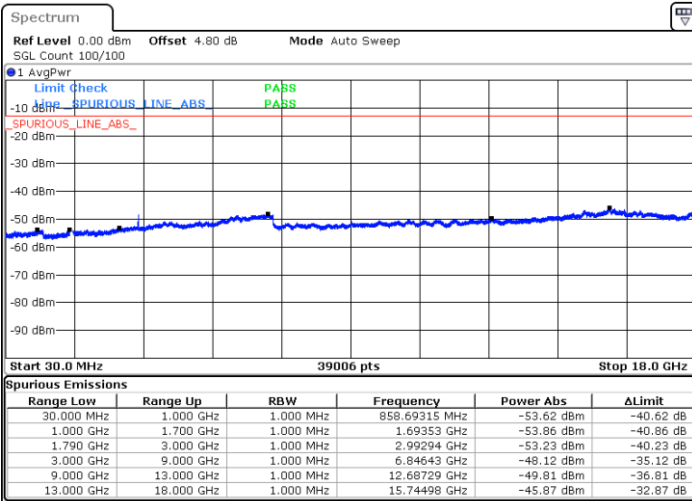


Date: 19.SEP.2018 14:22:25

Date: 19.SEP.2018 14:23:11

Middle Channel / QPSK

Middle Channel / 16QAM



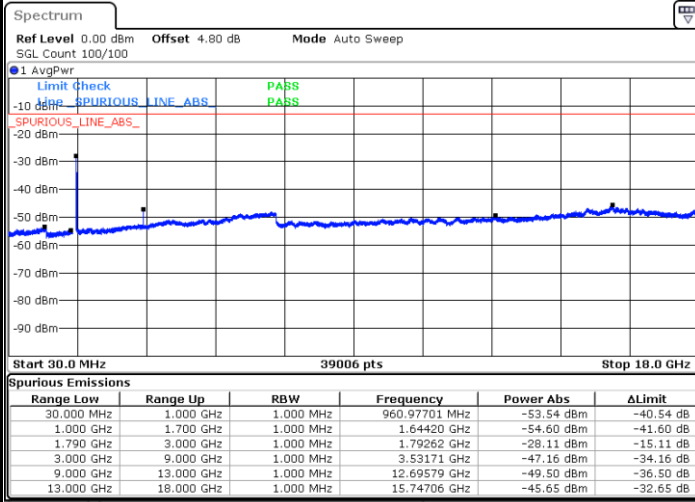
Date: 19.SEP.2018 14:24:49

Date: 19.SEP.2018 14:25:35



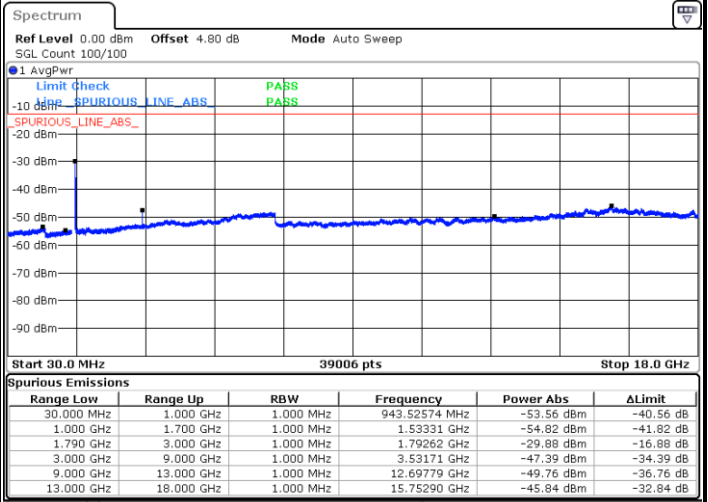
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 19.SEP.2018 14:30:42

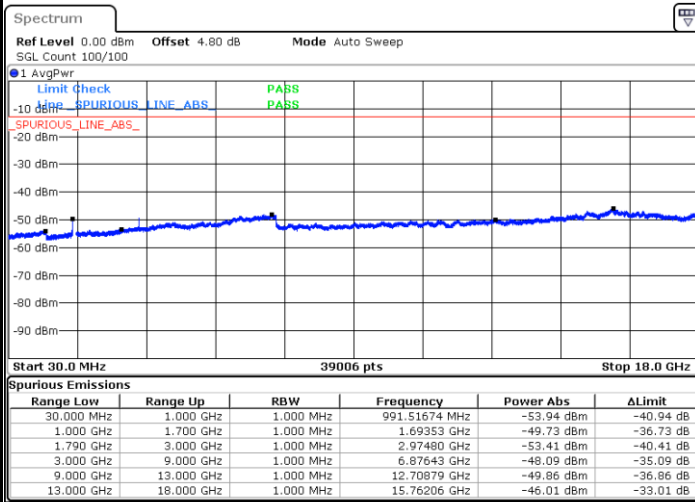
Highest Channel / 16QAM



Date: 19.SEP.2018 14:31:18

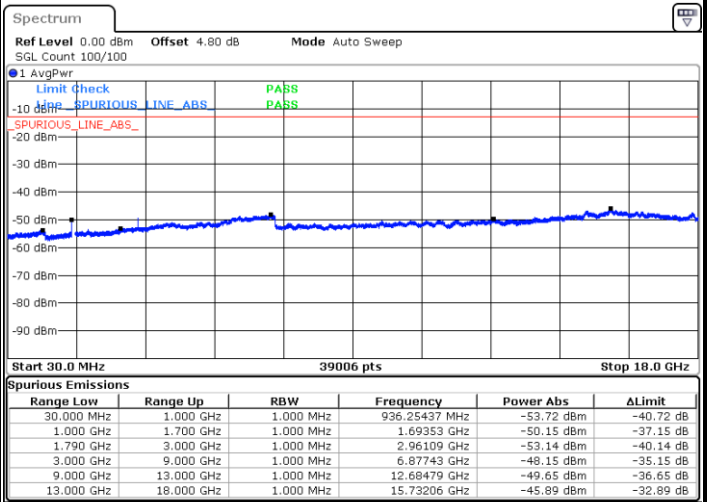
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 19.SEP.2018 14:56:00

Lowest Channel / 16QAM



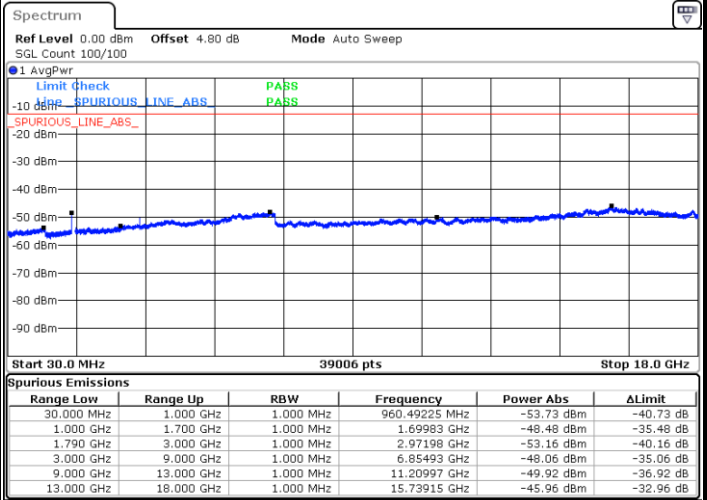
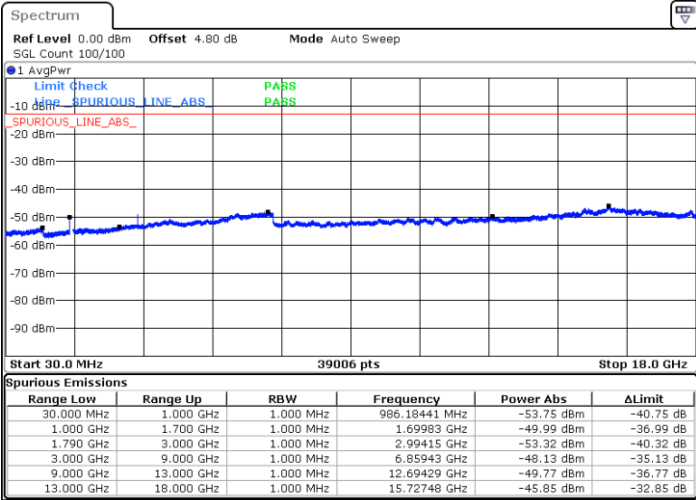
Date: 19.SEP.2018 14:56:56



LTE Band 66 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

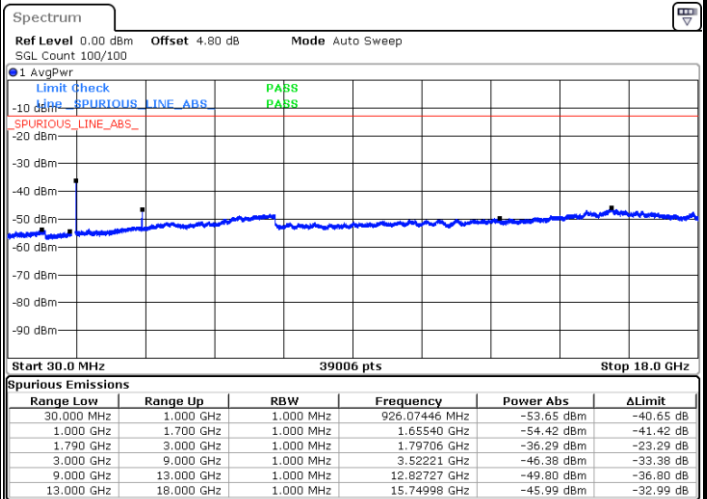
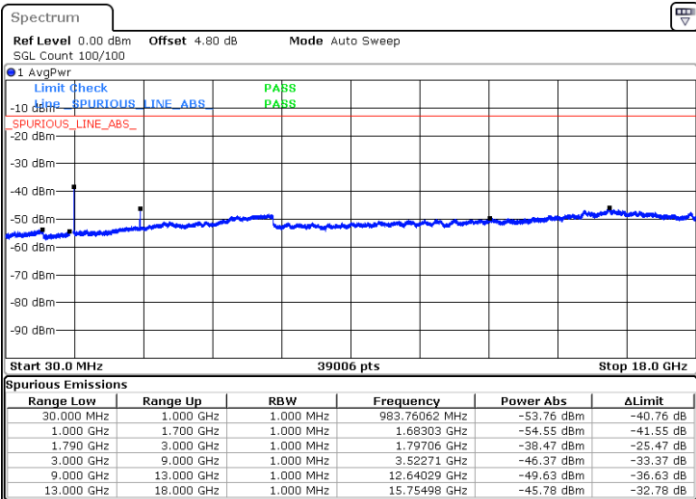


Date: 19.SEP.2018 14:58:51

Date: 19.SEP.2018 14:59:28

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19.SEP.2018 15:04:09

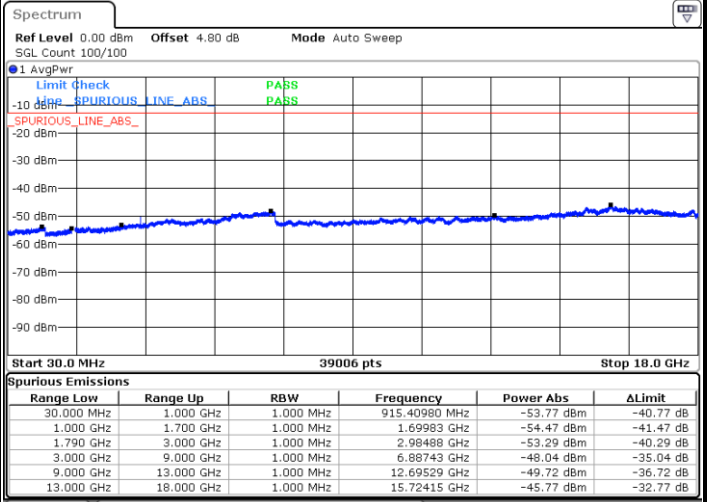
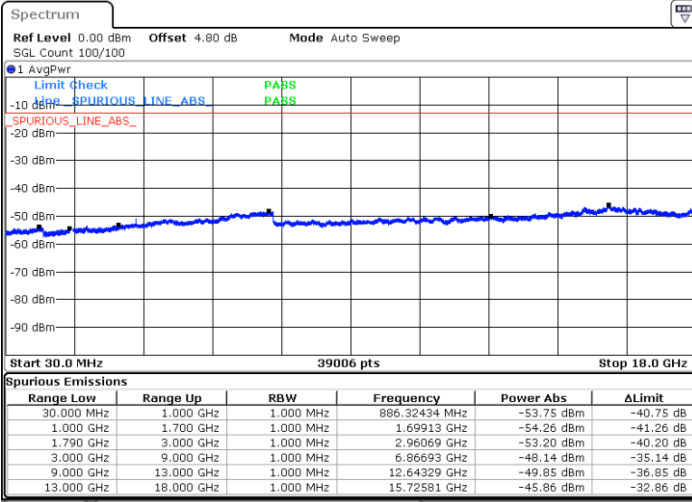
Date: 19.SEP.2018 15:04:48



LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM

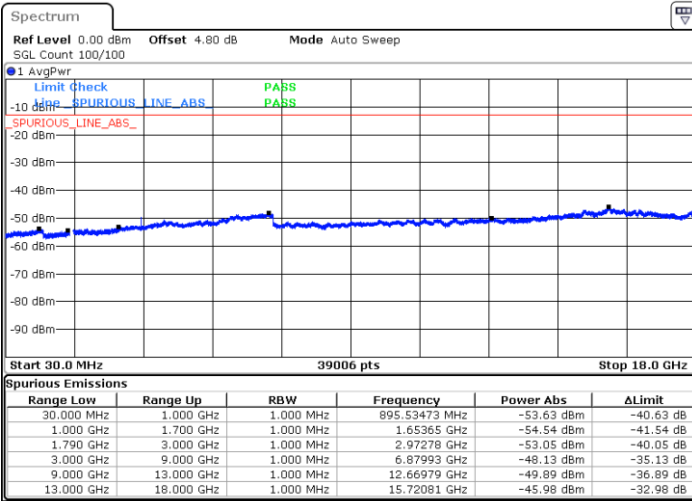
Middle Channel / 64QAM



Date: 19.SEP.2018 10:57:24

Date: 19.SEP.2018 11:11:34

Highest Channel / 64QAM



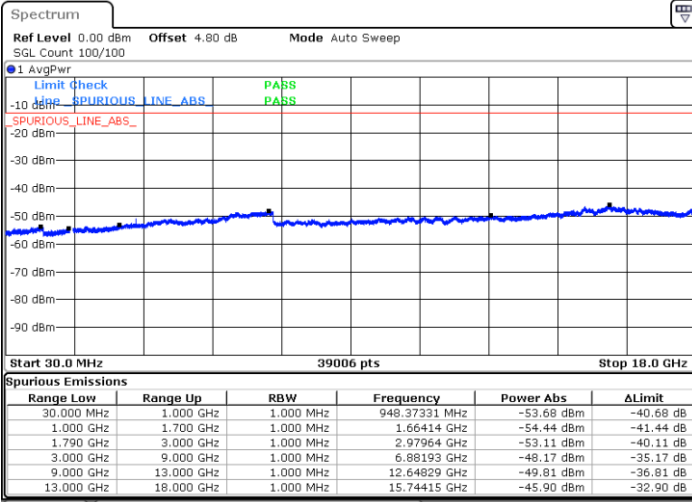
Date: 19.SEP.2018 11:16:11



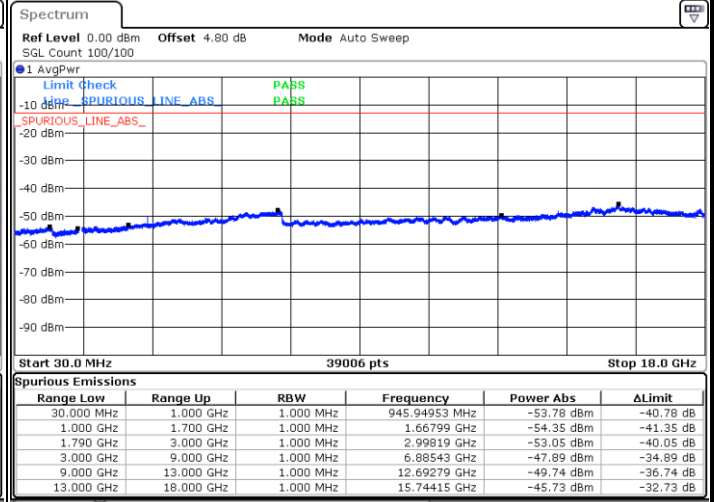
LTE Band 66 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

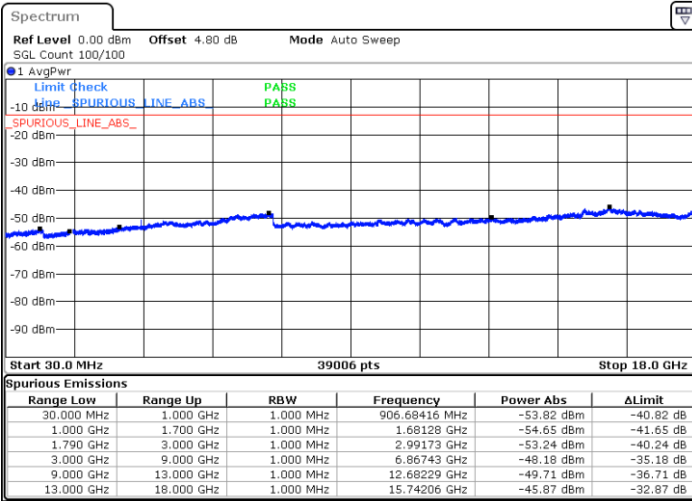


Date: 19.SEP.2018 13:33:54



Date: 19.SEP.2018 13:39:15

Highest Channel / 64QAM



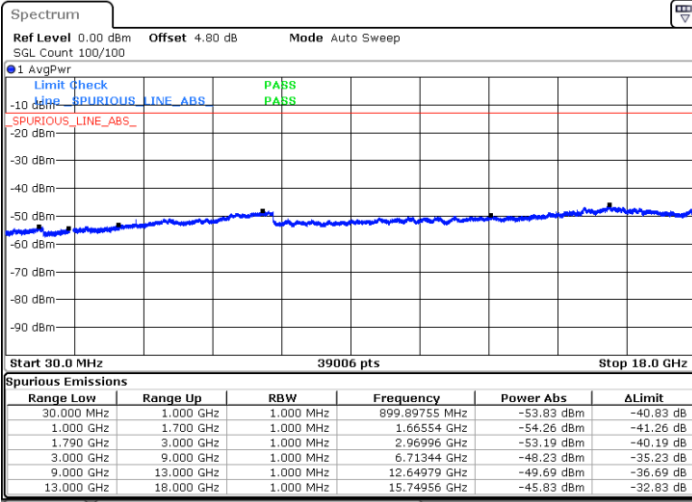
Date: 19.SEP.2018 13:44:49



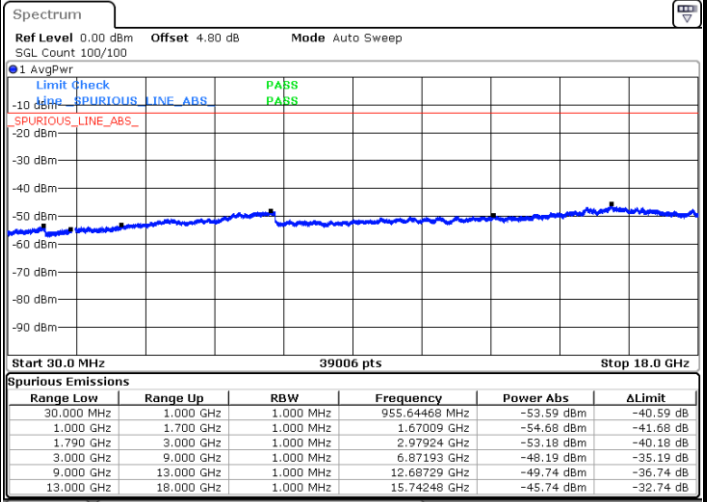
LTE Band 66 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

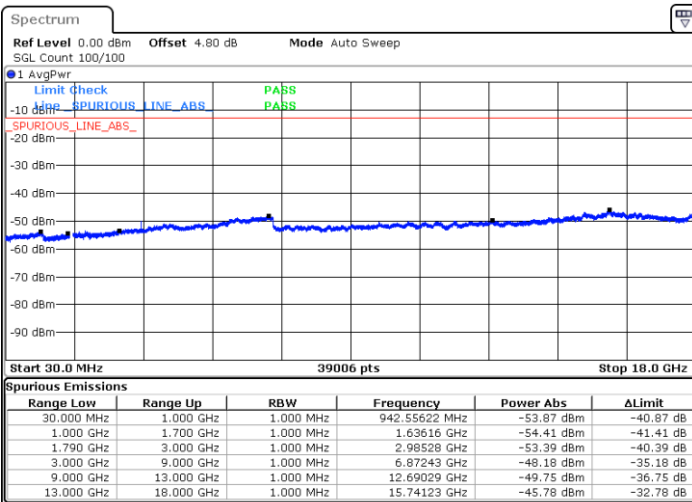


Date: 19.SEP.2018 13:53:55



Date: 19.SEP.2018 13:57:34

Highest Channel / 64QAM



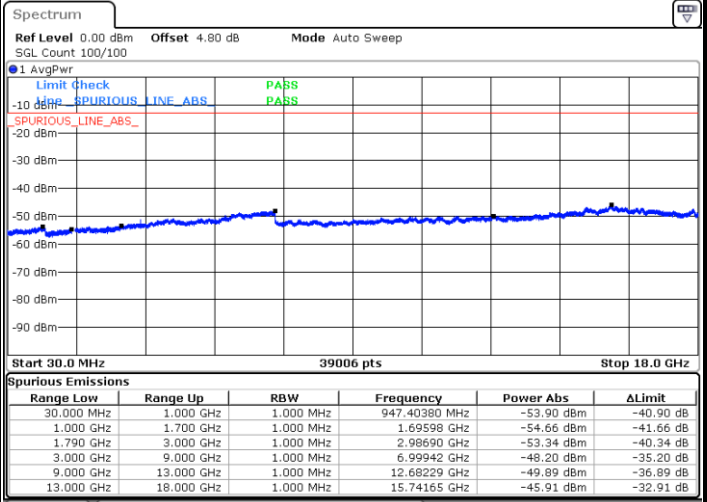
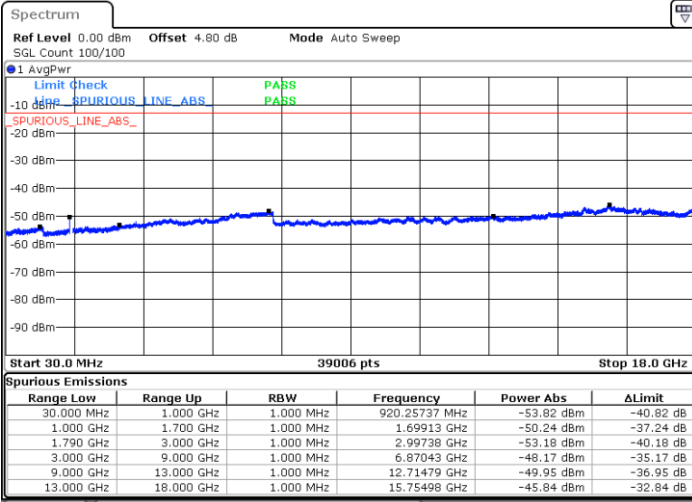
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LTE Band 66 / 10MHz

Lowest Channel / 64QAM

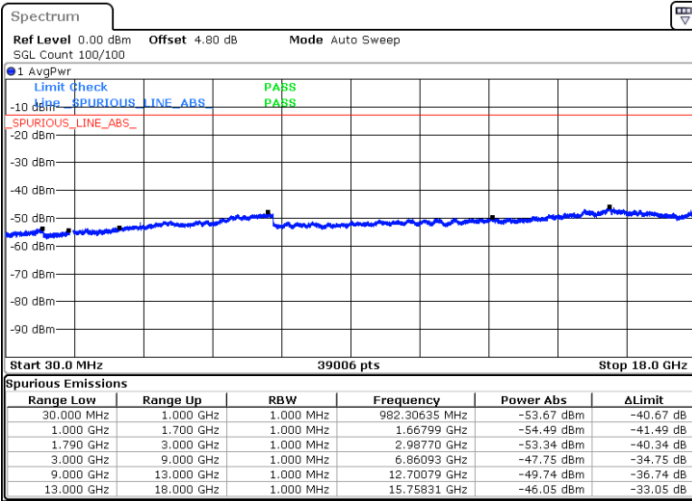
Middle Channel / 64QAM



Date: 19.SEP.2018 14:08:31

Date: 19.SEP.2018 14:10:52

Highest Channel / 64QAM



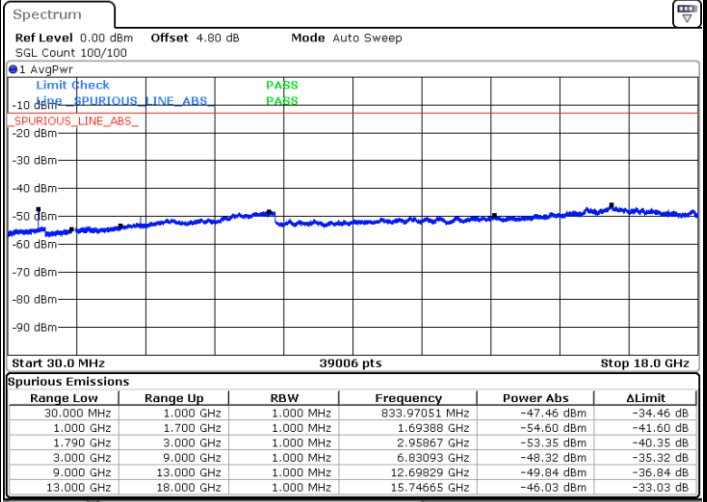
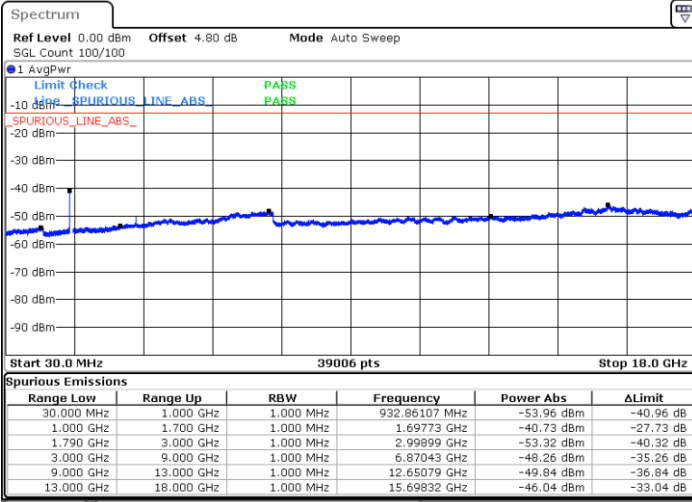
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LTE Band 66 / 15MHz

Lowest Channel / 64QAM

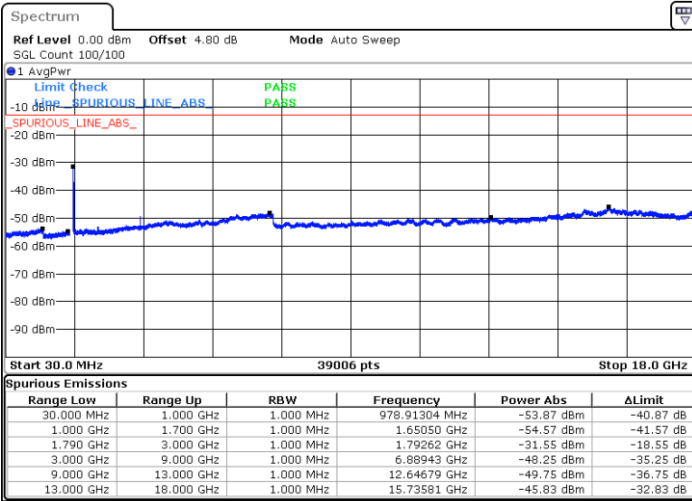
Middle Channel / 64QAM



Date: 19.SEP.2018 14:23:47

Date: 19.SEP.2018 14:26:14

Highest Channel / 64QAM



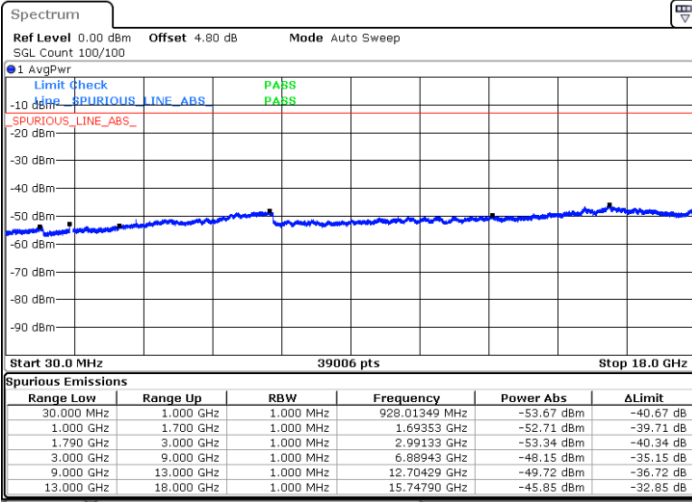
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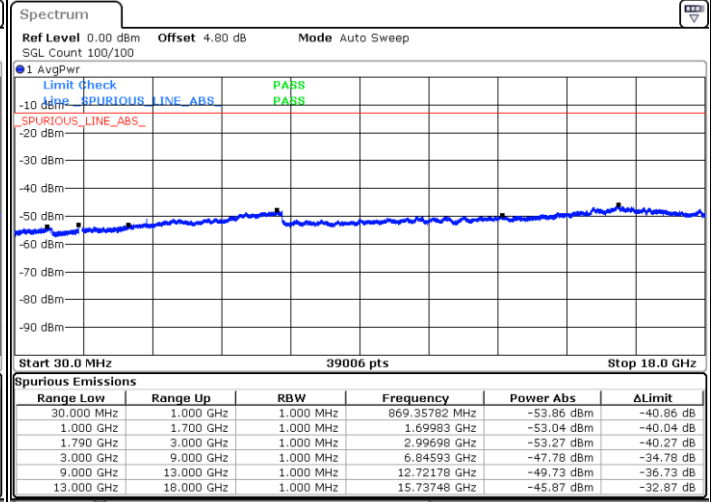
LTE Band 66 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

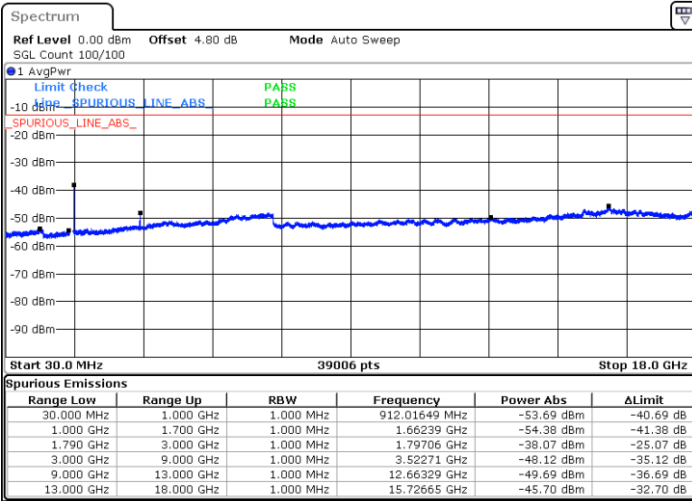


Date: 19.SEP.2018 14:57:46



Date: 19.SEP.2018 15:00:07

Highest Channel / 64QAM



Date: 19.SEP.2018 15:05:25



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	0.0002	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 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	0.0066	PASS
40	Normal Voltage	0.0077	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0051	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 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	0.0024	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 V.
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	0.0011	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0007	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 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	-58.30	-13	-45.30	-64.87	1.848	8.42	H
	5613	-46.02	-13	-33.02	-54.38	2.32	10.68	H
	7485	-51.84	-13	-38.84	-61.17	2.61	11.94	H
	3741	-56.79	-13	-43.79	-63.36	1.85	8.42	V
	5613	-45.15	-13	-32.15	-53.51	2.32	10.68	V
	7485	-55.26	-13	-42.26	-64.59	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-64.35	-13	-51.35	-66.68	1.21	5.68	H
	2496	-61.75	-13	-48.75	-63.86	1.54	5.80	H
	3327	-59.92	-13	-46.92	-63.92	1.73	7.88	H
	1664	-65.19	-13	-52.19	-67.52	1.21	5.68	V
	2496	-60.65	-13	-47.65	-62.76	1.54	5.80	V
	3327	-59.92	-13	-46.92	-63.92	1.73	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)
Middle	5052	-51.42	-25	-26.42	-59.45	2.18	10.21	H
	7578.27	-48.23	-25	-23.23	-57.54	2.69	12.00	H
	10104	-45.79	-25	-20.79	-55.50	3.19	12.90	H
	12630	-50.59	-25	-25.59	-60.49	3.90	13.80	H
	5052	-54.18	-25	-29.18	-62.21	2.18	10.21	V
	7580	-53.04	-25	-28.04	-62.35	2.69	12.00	V
	10104	-46.94	-25	-21.94	-56.65	3.19	12.90	V
	12630	-52.36	-25	-27.36	-62.26	3.90	13.80	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)
Middle	3471	-59.40	-13	-46.40	-65.72	1.81	8.13	H
	5208	-53.40	-13	-40.40	-61.38	2.222	10.20	H
	6945	-50.79	-13	-37.79	-59.61	2.54	11.36	H
	8679	-48.49	-13	-35.49	-58.10	2.89	12.50	H
	3471	-56.79	-13	-43.79	-63.11	1.81	8.13	V
	5208.27	-56.25	-13	-43.25	-64.23	2.222	10.20	V
	6945	-51.86	-13	-38.86	-60.68	2.54	11.36	V
	8679	-49.29	-13	-36.29	-58.90	2.888	12.50	V

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