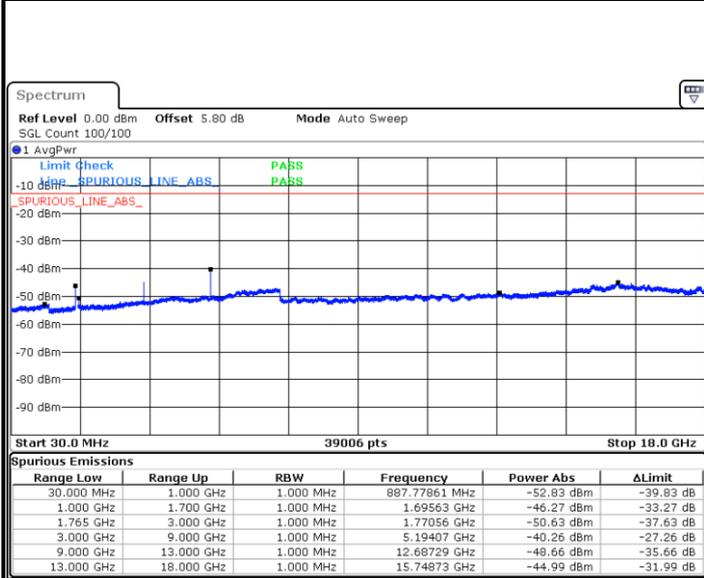




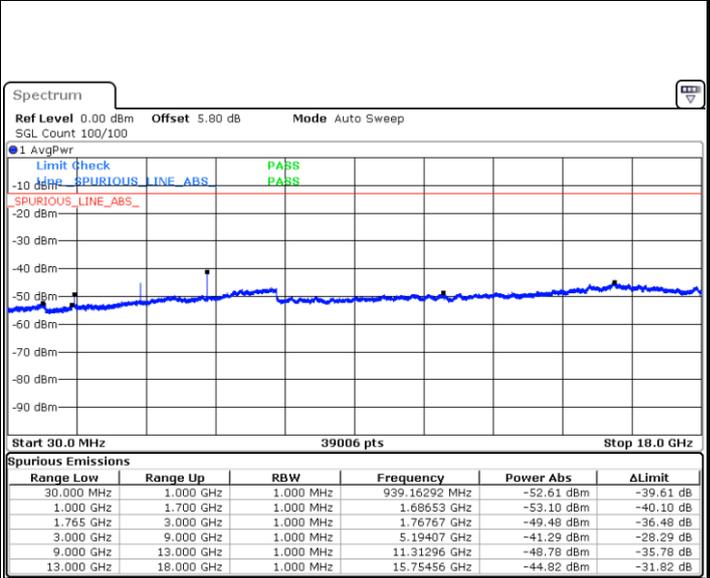
LTE Band 4 / 3MHz

Middle Channel / QPSK



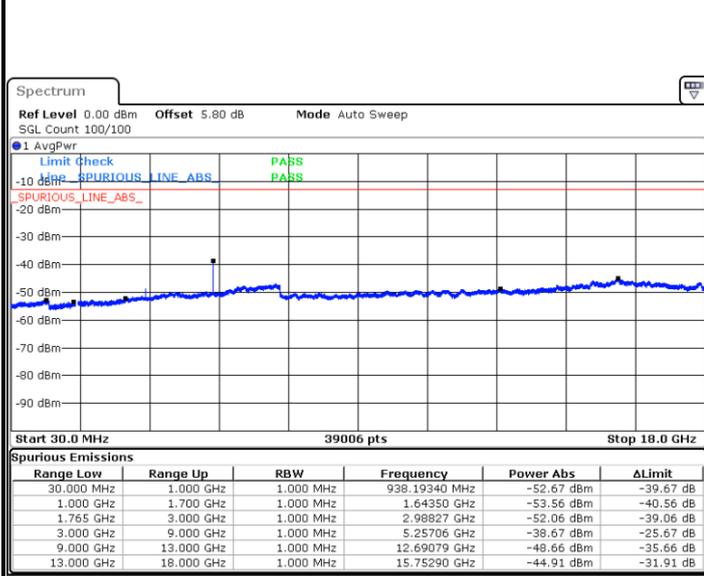
Date: 5 AUG.2019 04:56:19

Middle Channel / 16QAM



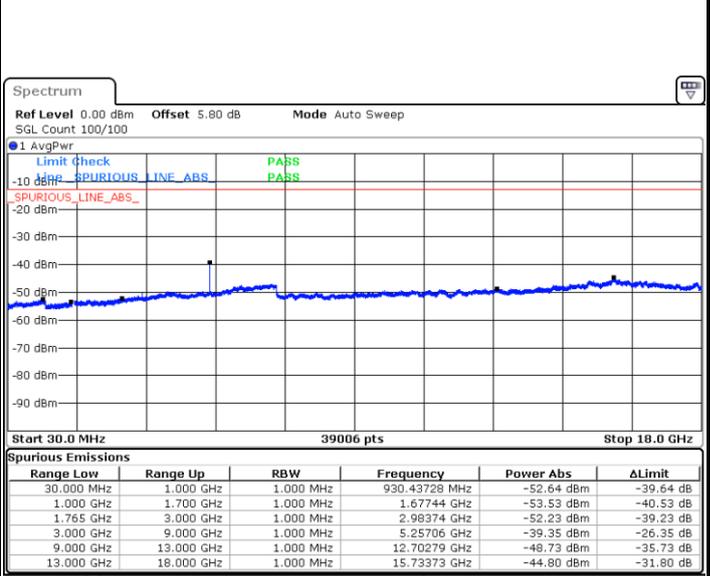
Date: 5 AUG.2019 04:57:14

Highest Channel / QPSK



Date: 5 AUG.2019 05:03:19

Highest Channel / 16QAM



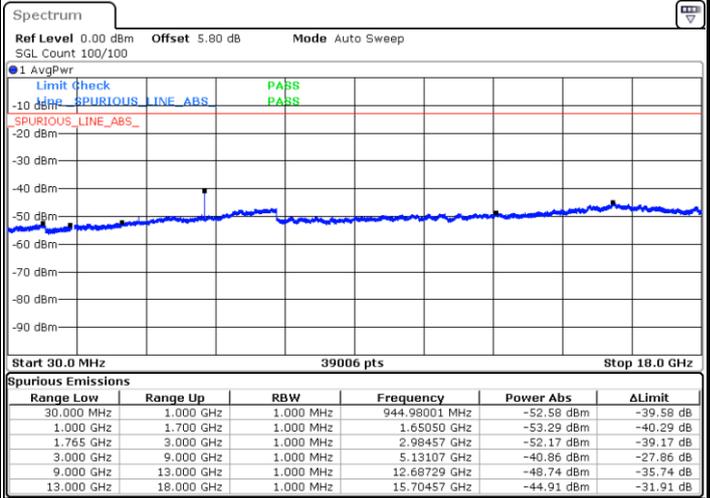
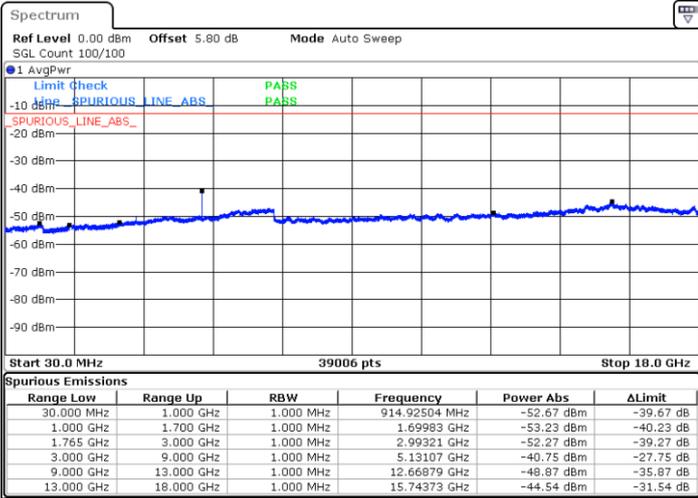
Date: 5 AUG.2019 05:04:14



LTE Band 4 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

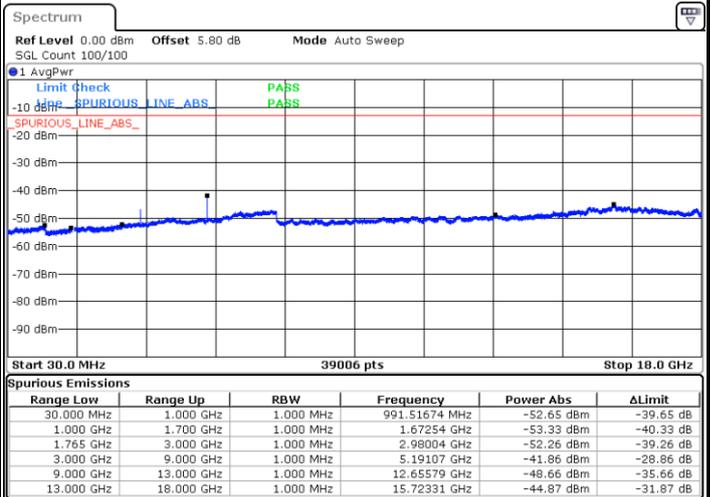
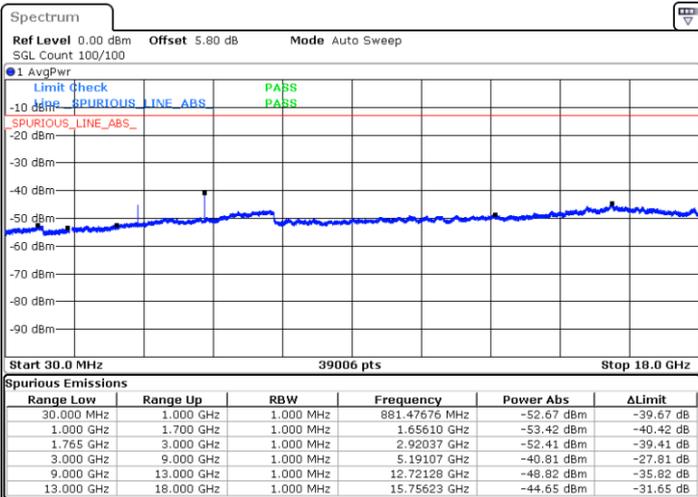


Date: 5 AUG.2019 05:10:19

Date: 5 AUG.2019 05:11:14

Middle Channel / QPSK

Middle Channel / 16QAM



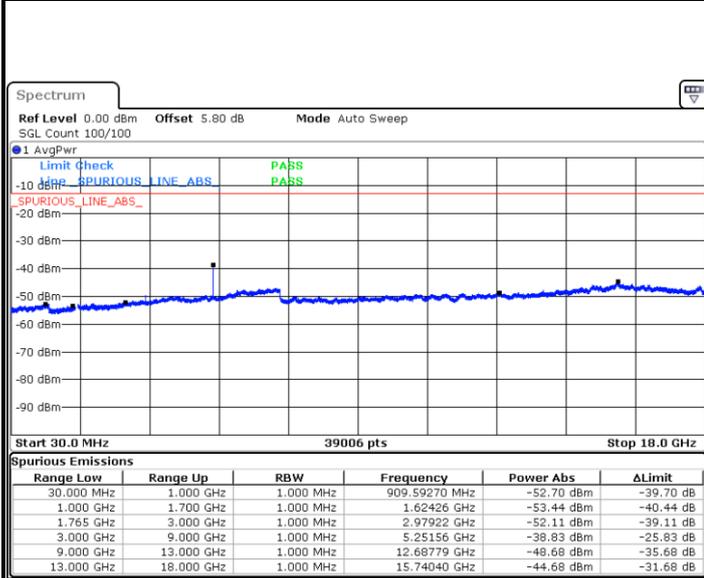
Date: 5 AUG.2019 05:12:49

Date: 5 AUG.2019 05:13:44



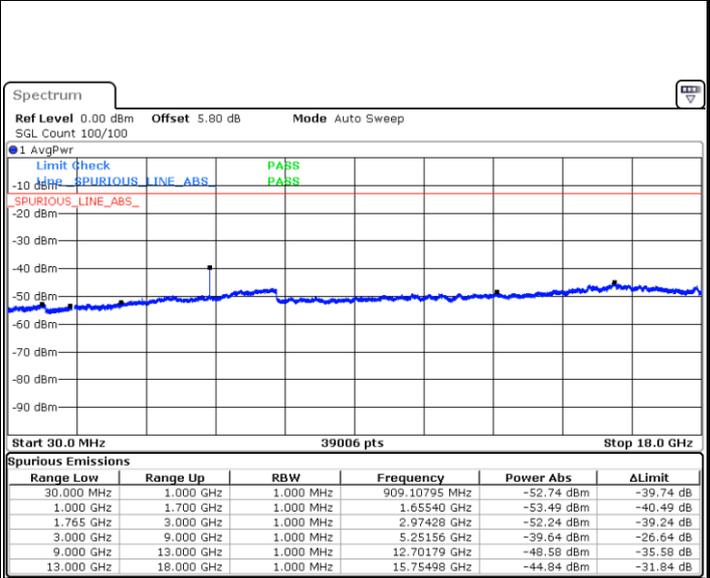
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 5 AUG.2019 05:19:49

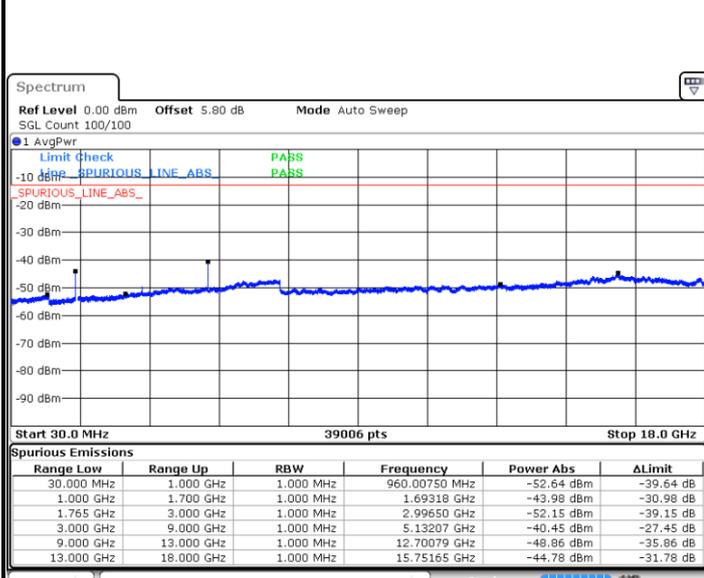
Highest Channel / 16QAM



Date: 5 AUG.2019 05:20:44

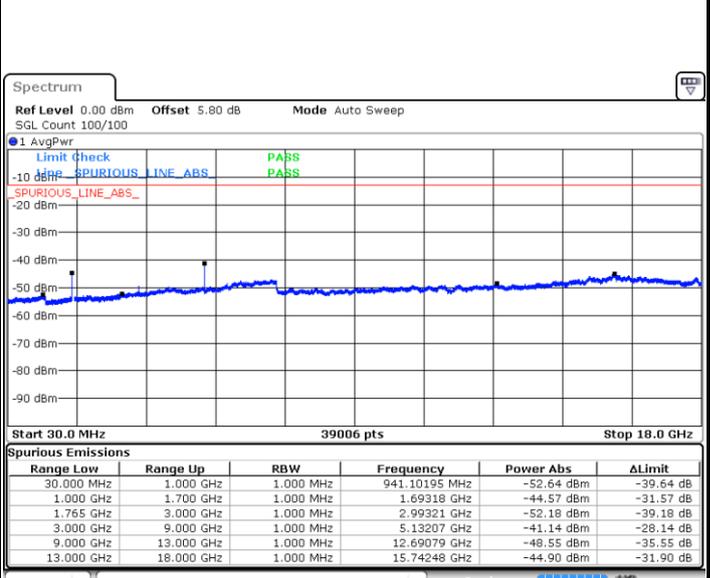
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 5 AUG.2019 05:26:49

Lowest Channel / 16QAM



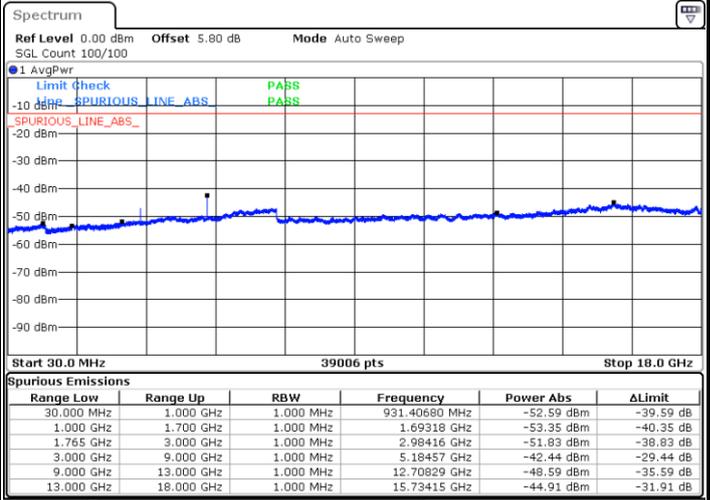
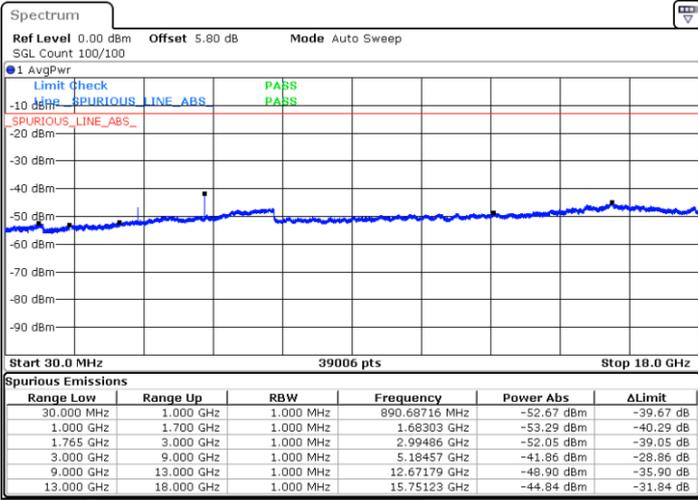
Date: 5 AUG.2019 05:27:44



LTE Band 4 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

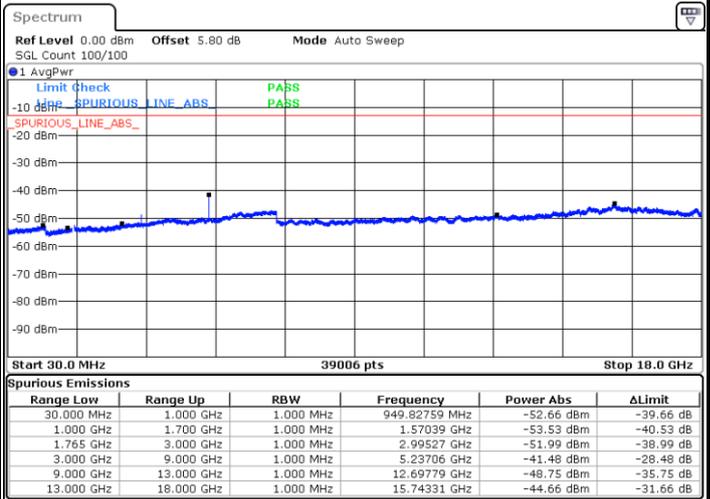
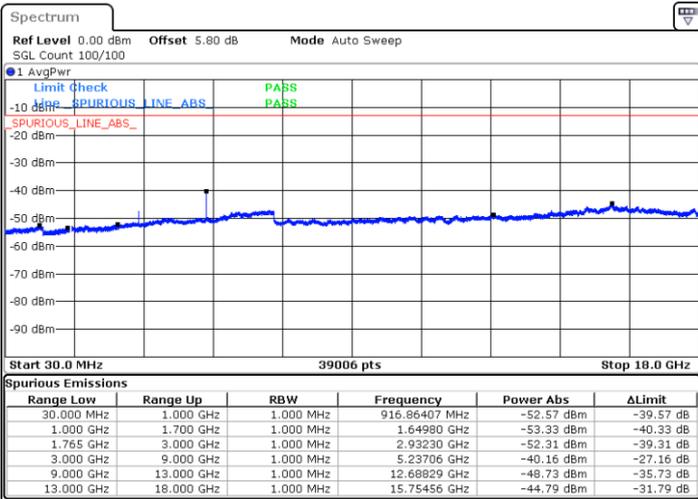


Date: 5 AUG.2019 05:29:19

Date: 5 AUG.2019 05:30:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 5 AUG.2019 05:36:19

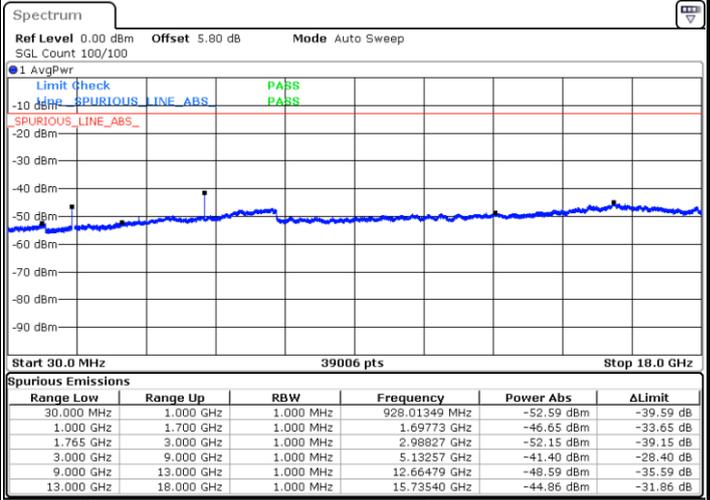
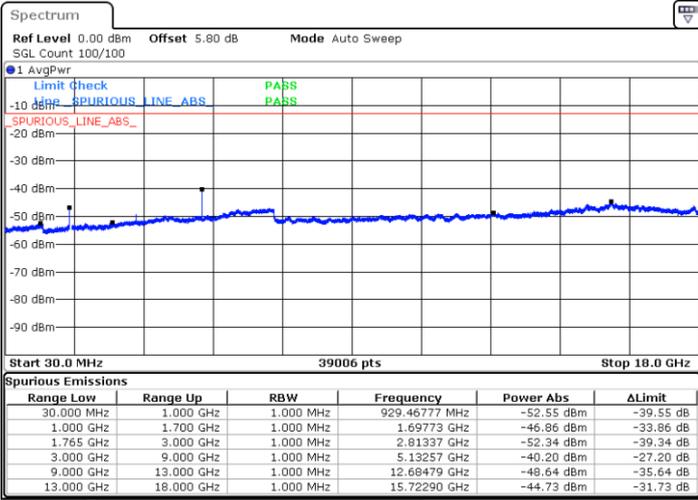
Date: 5 AUG.2019 05:37:14



LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

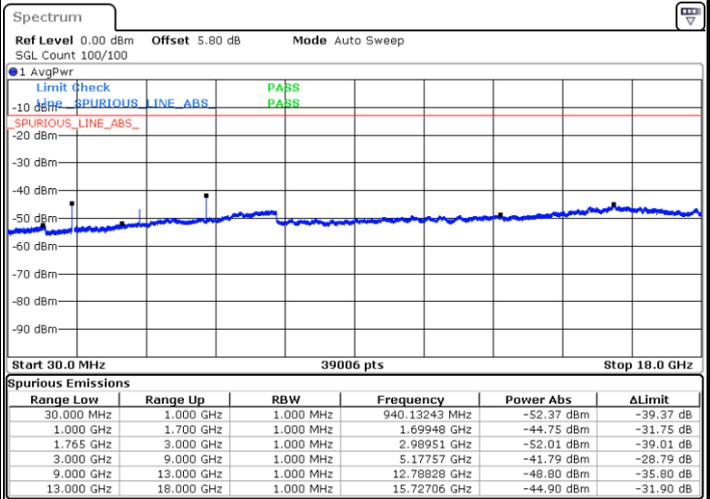
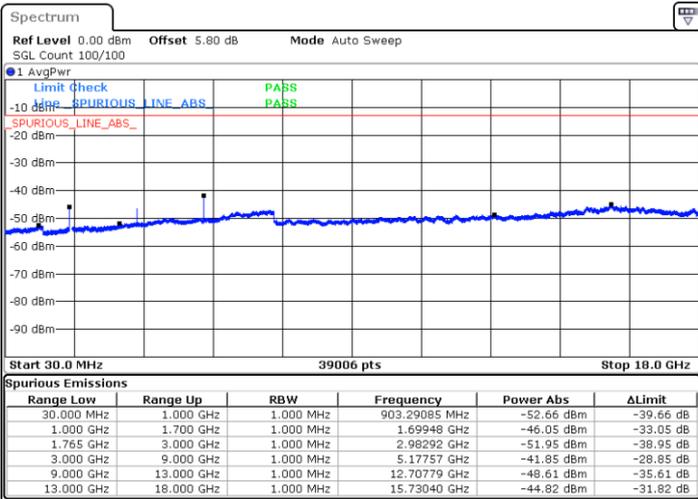


Date: 5 AUG.2019 05:43:19

Date: 5 AUG.2019 05:44:14

Middle Channel / QPSK

Middle Channel / 16QAM



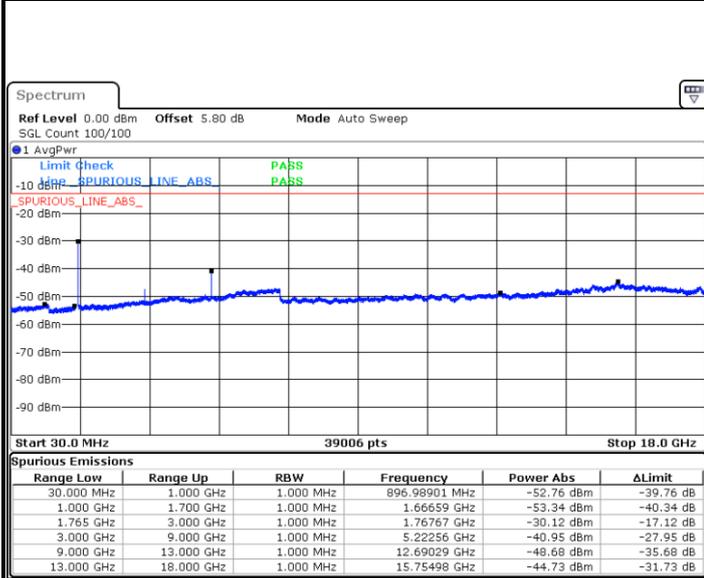
Date: 5 AUG.2019 05:45:49

Date: 5 AUG.2019 05:46:44



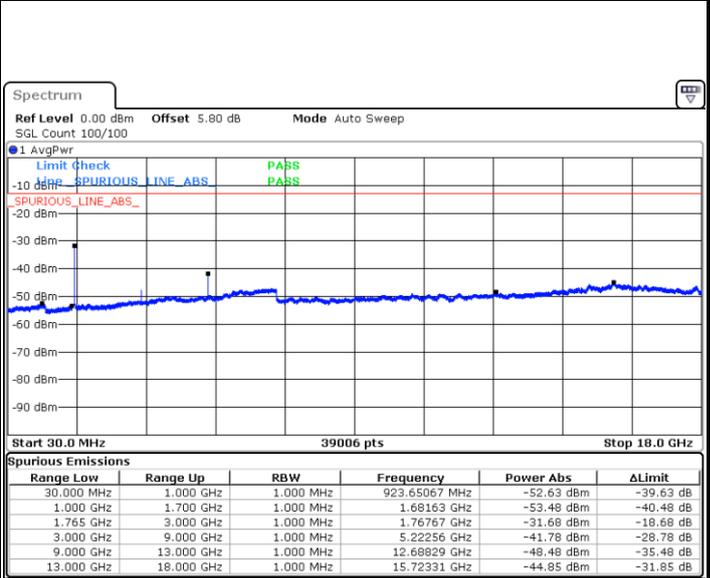
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 5 AUG.2019 05:52:49

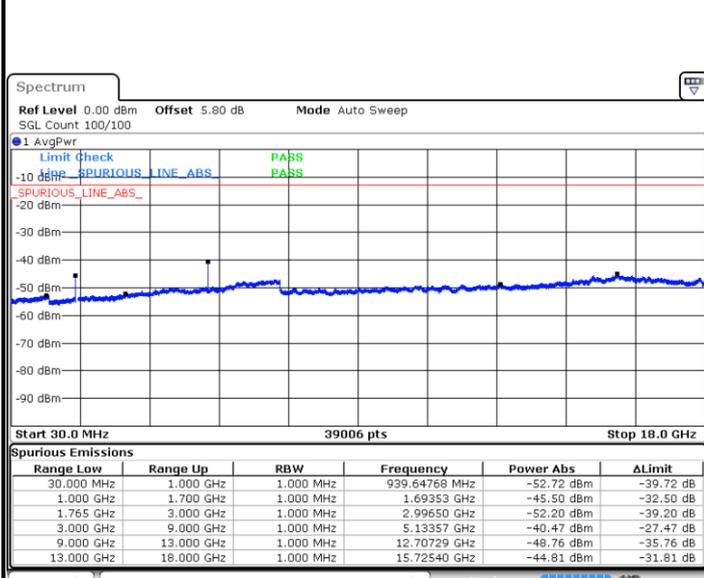
Highest Channel / 16QAM



Date: 5 AUG.2019 05:53:44

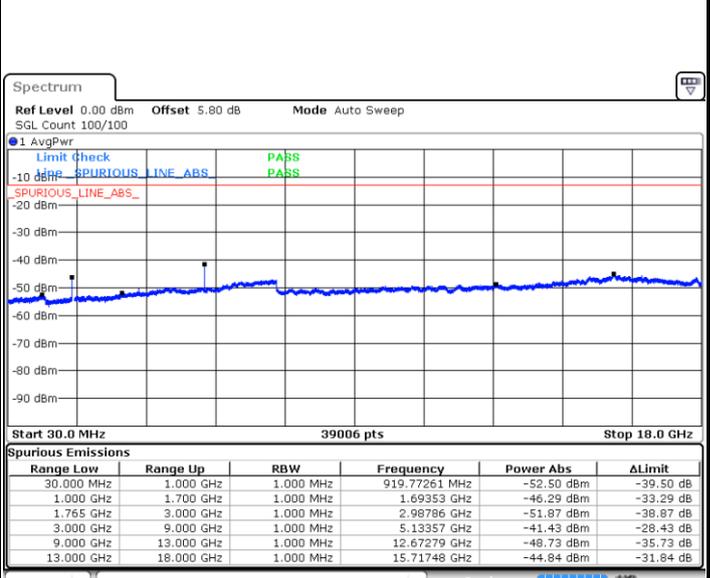
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 5 AUG.2019 05:59:49

Lowest Channel / 16QAM



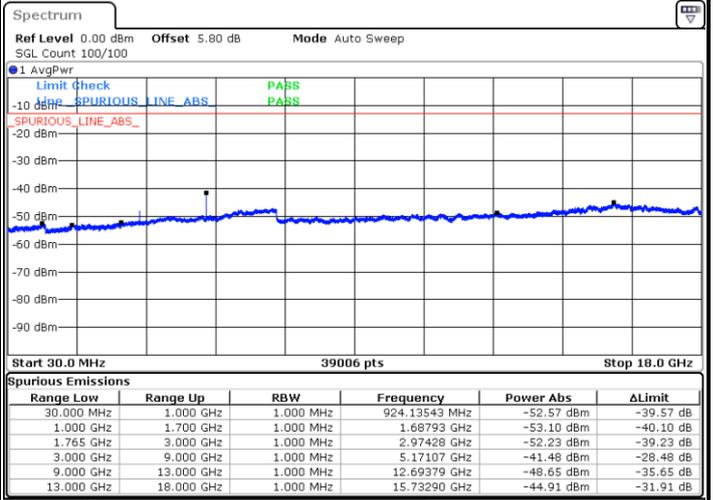
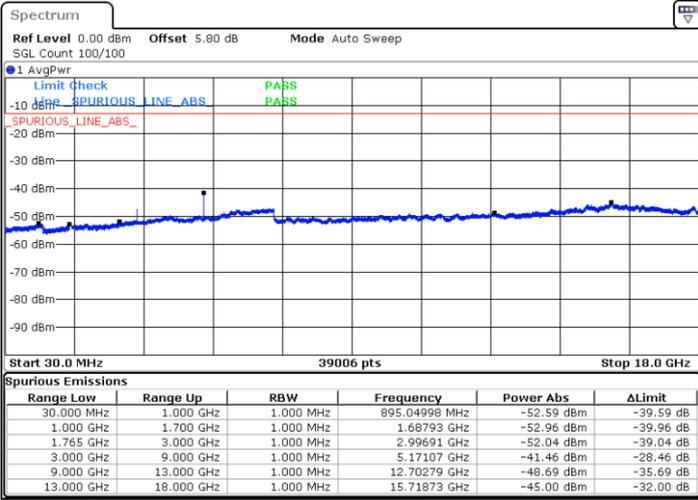
Date: 5 AUG.2019 06:00:43



LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

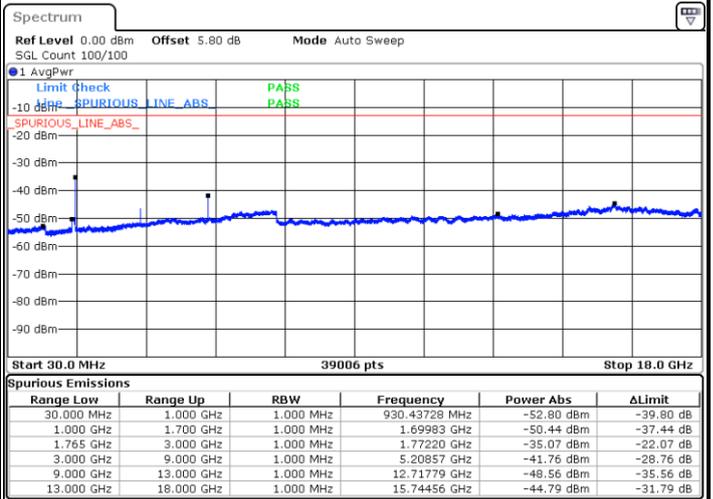
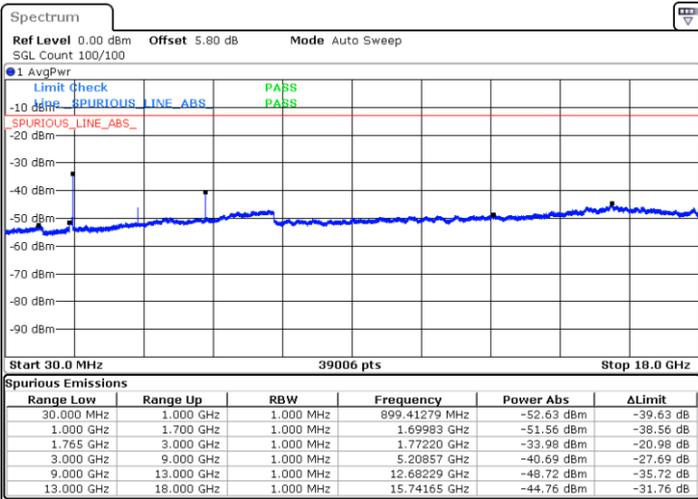


Date: 5 AUG.2019 06:02:18

Date: 5 AUG.2019 06:03:13

Highest Channel / QPSK

Highest Channel / 16QAM

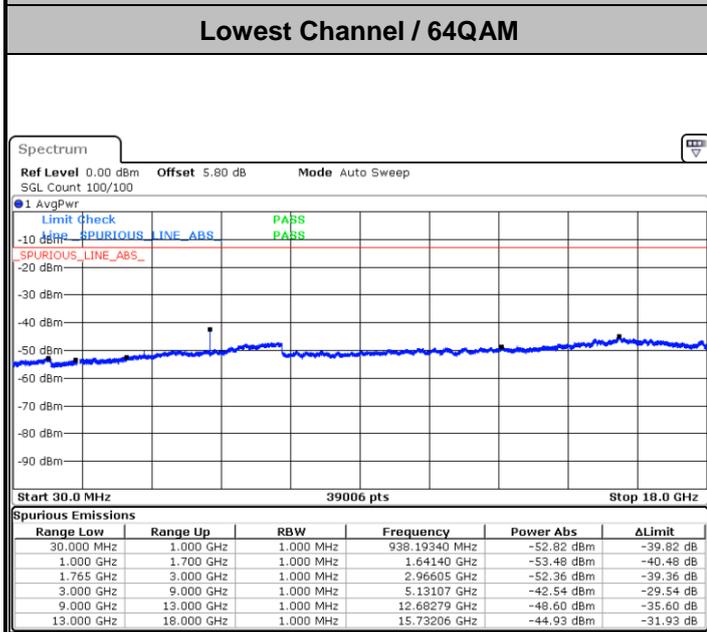


Date: 5 AUG.2019 06:09:18

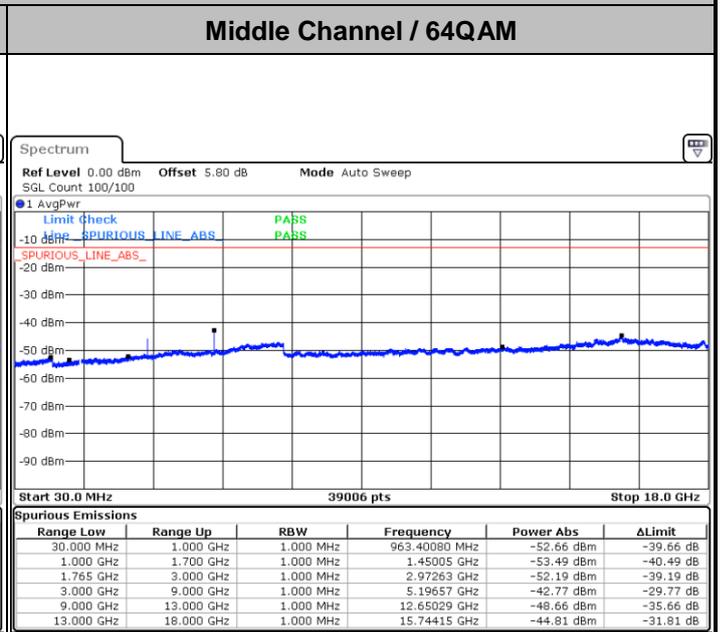
Date: 5 AUG.2019 06:10:13



LTE Band 4 / 1.4MHz

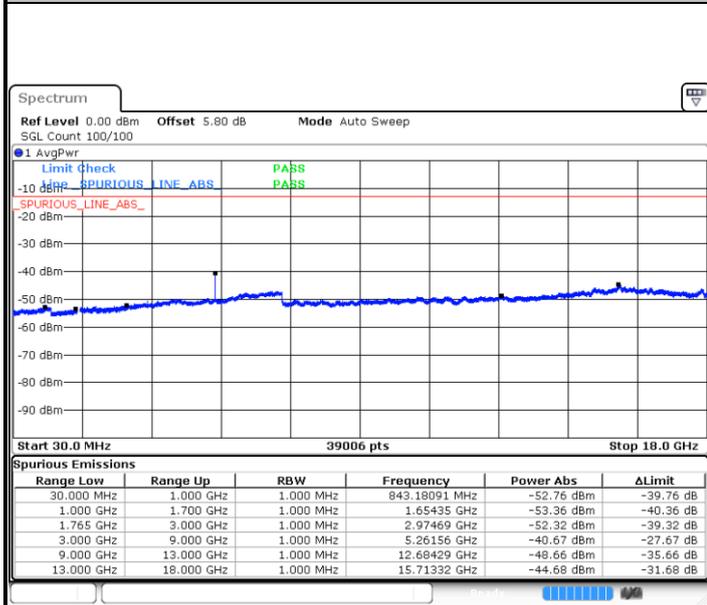


Date: 5.AUG.2019 06:15:26



Date: 5.AUG.2019 06:16:41

Highest Channel / 64QAM



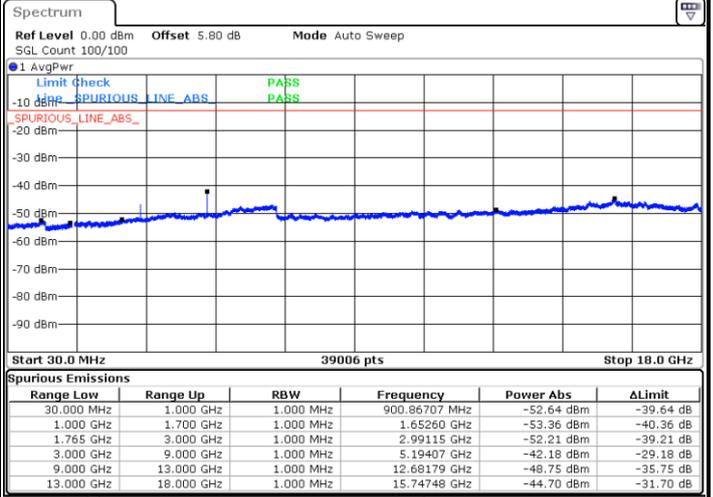
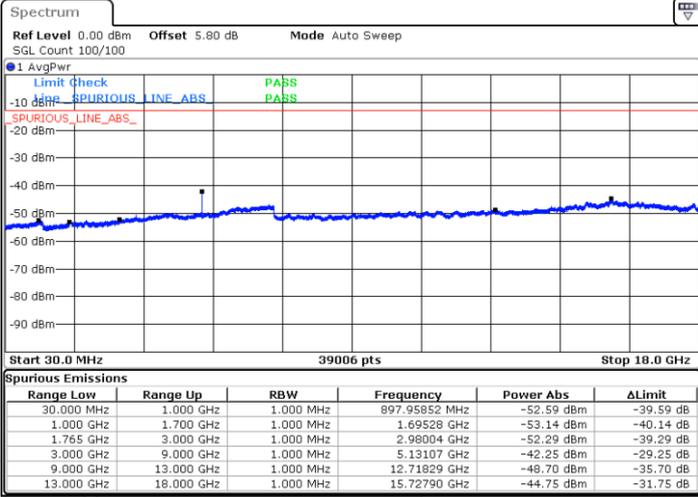
Date: 5.AUG.2019 06:20:11



LTE Band 4 / 3MHz

Lowest Channel / 64QAM

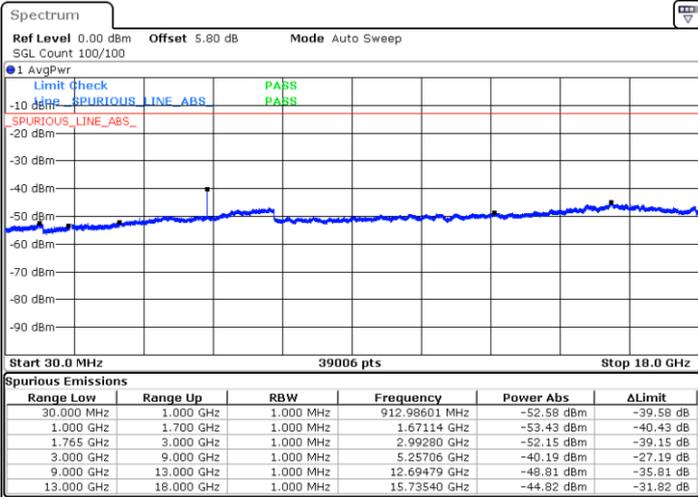
Middle Channel / 64QAM



Date: 5.AUG.2019 06:23:41

Date: 5.AUG.2019 06:24:56

Highest Channel / 64QAM

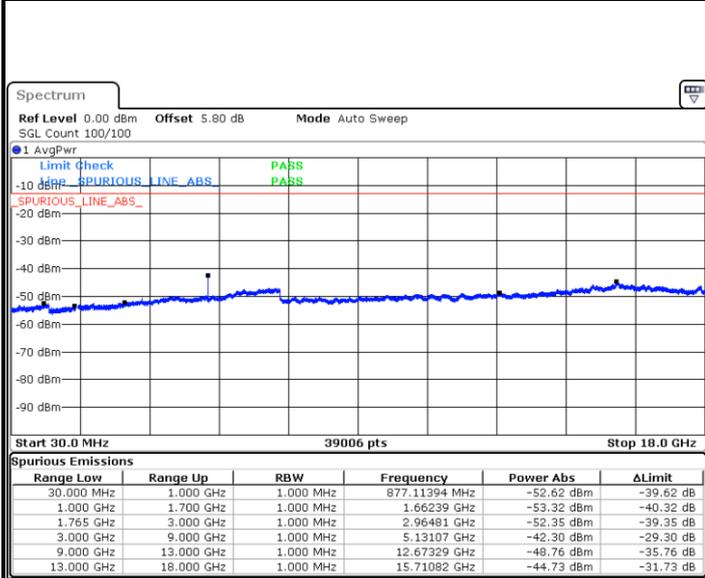


Date: 5.AUG.2019 06:28:26



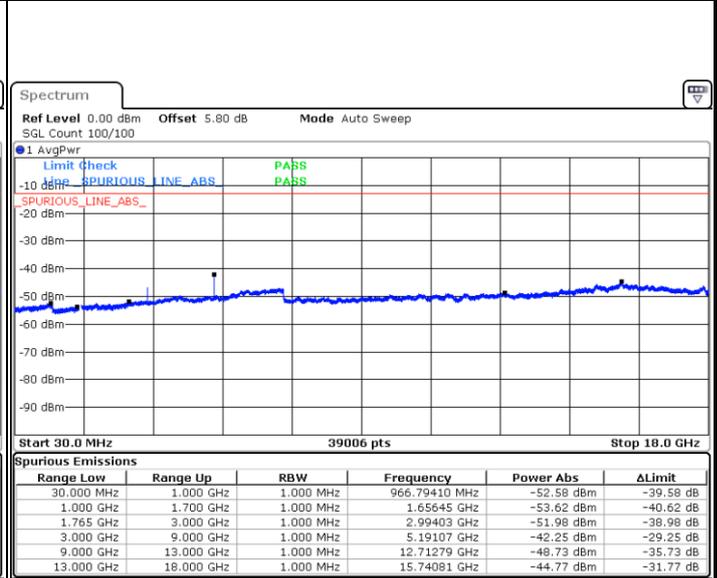
LTE Band 4 / 5MHz

Lowest Channel / 64QAM



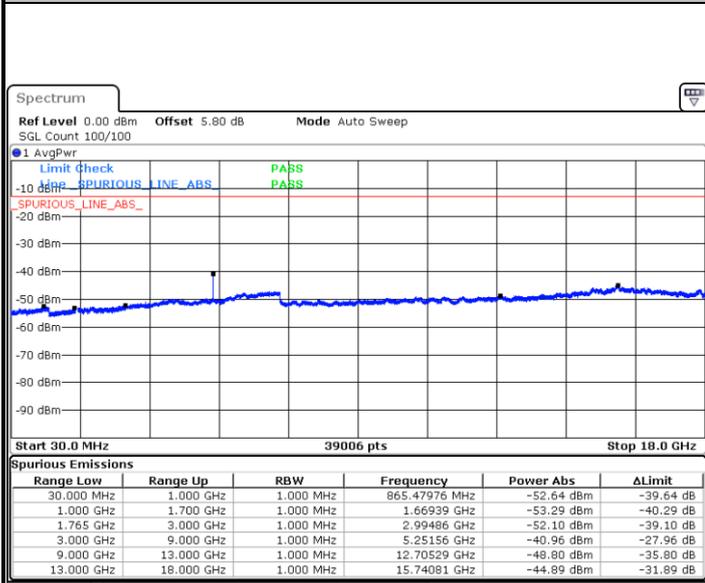
Date: 5.AUG.2019 06:31:56

Middle Channel / 64QAM

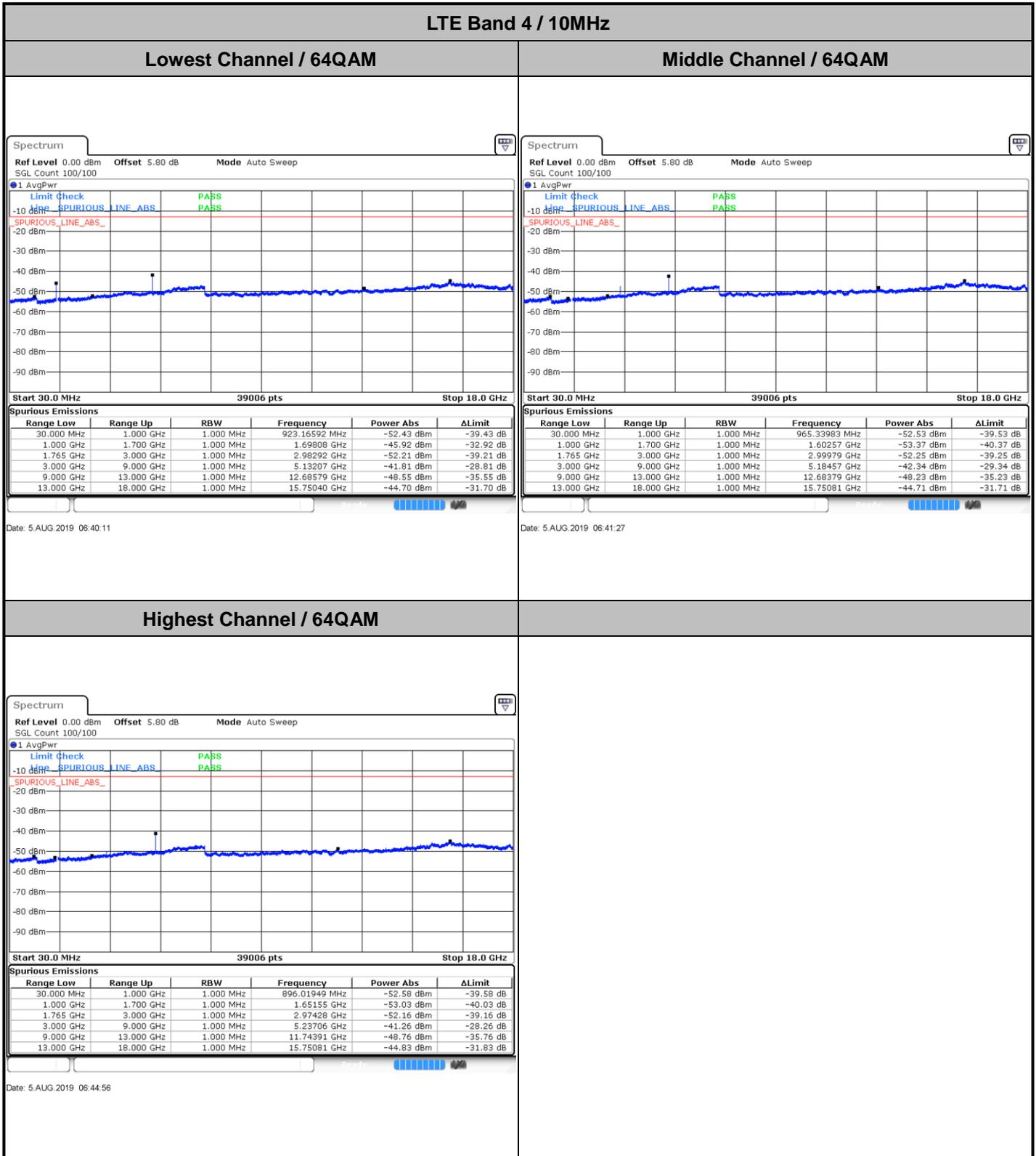


Date: 5.AUG.2019 06:33:11

Highest Channel / 64QAM



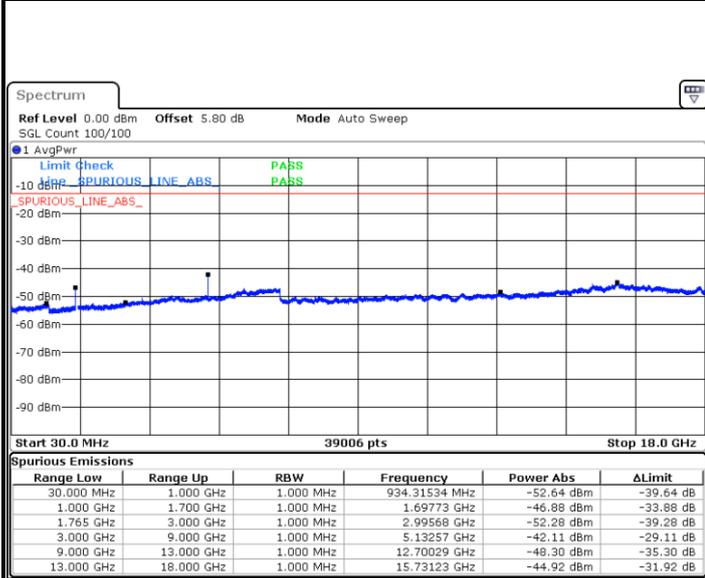
Date: 5.AUG.2019 06:36:41





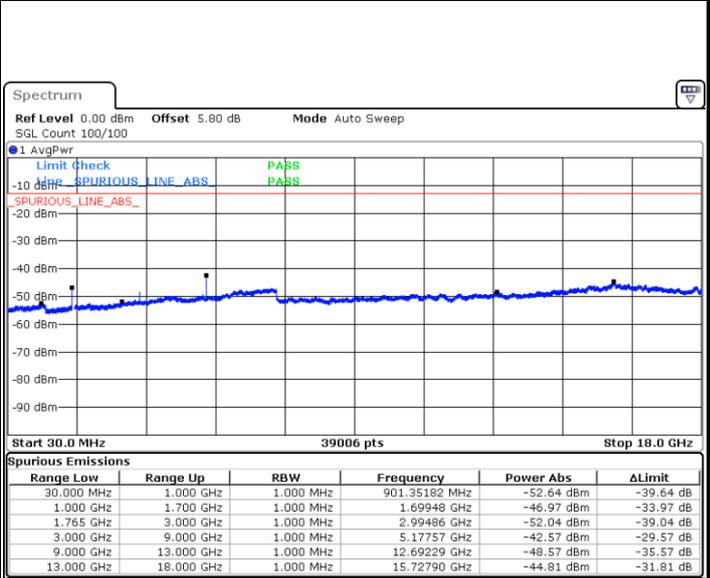
LTE Band 4 / 15MHz

Lowest Channel / 64QAM



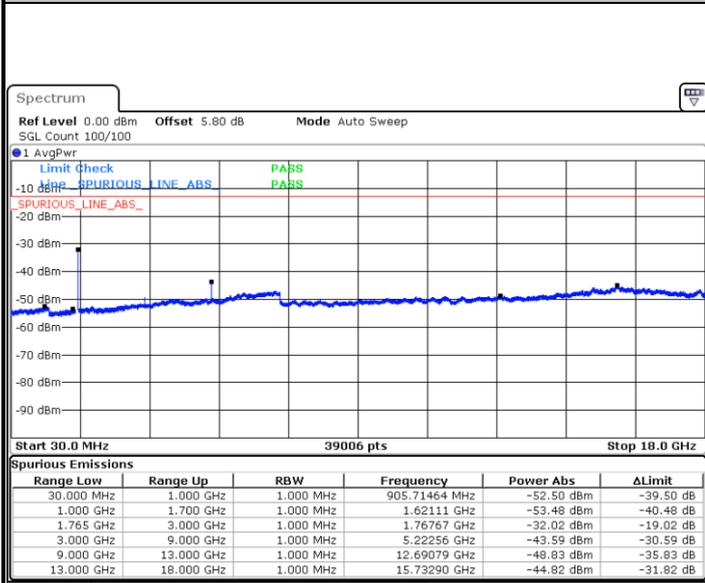
Date: 5.AUG.2019 06:48:27

Middle Channel / 64QAM



Date: 5.AUG.2019 06:49:42

Highest Channel / 64QAM



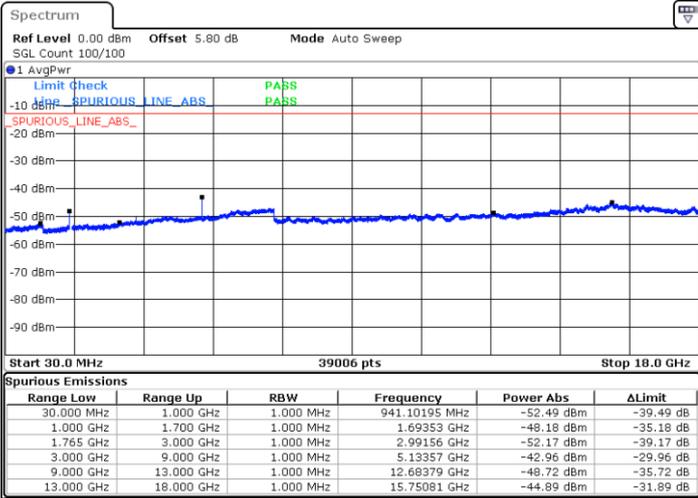
Date: 5.AUG.2019 06:53:12



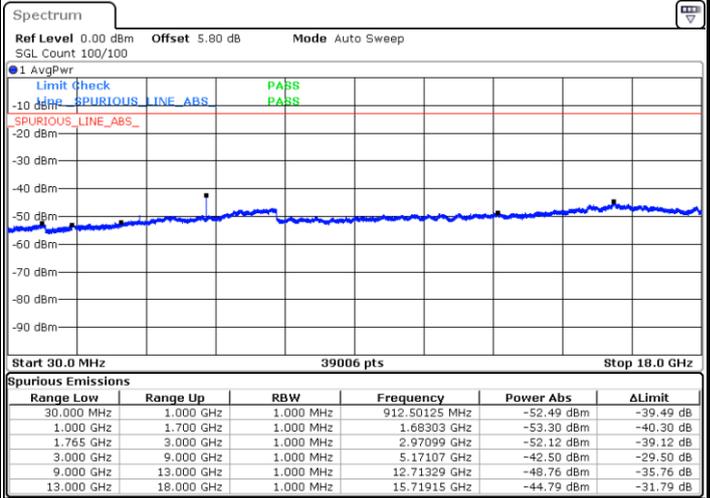
LTE Band 4 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

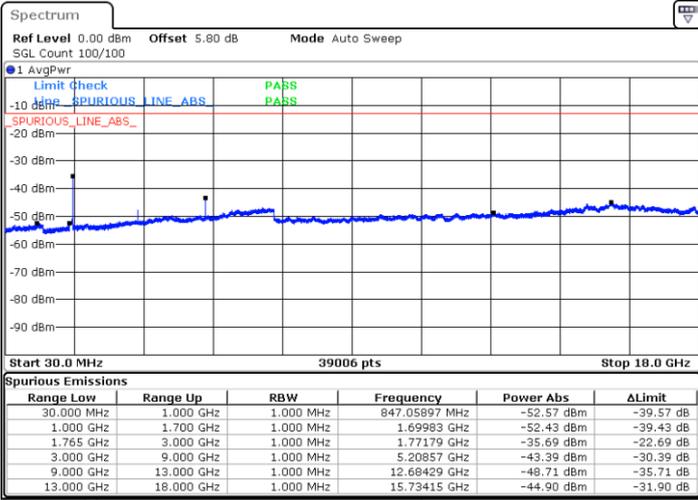


Date: 5 AUG.2019 06:56:42



Date: 5 AUG.2019 06:57:57

Highest Channel / 64QAM



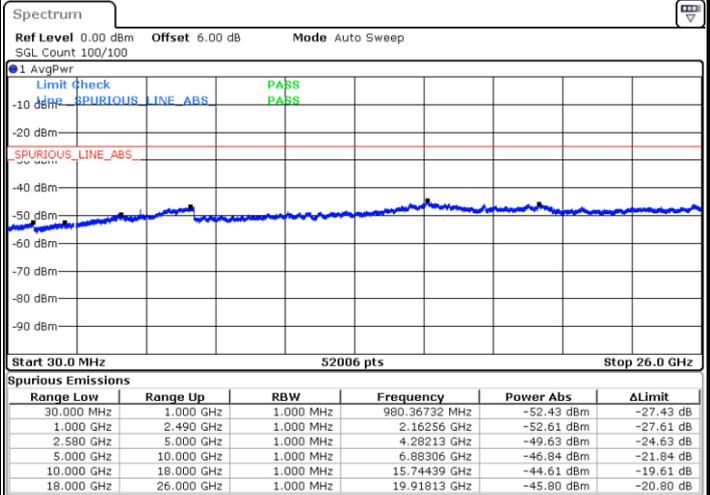
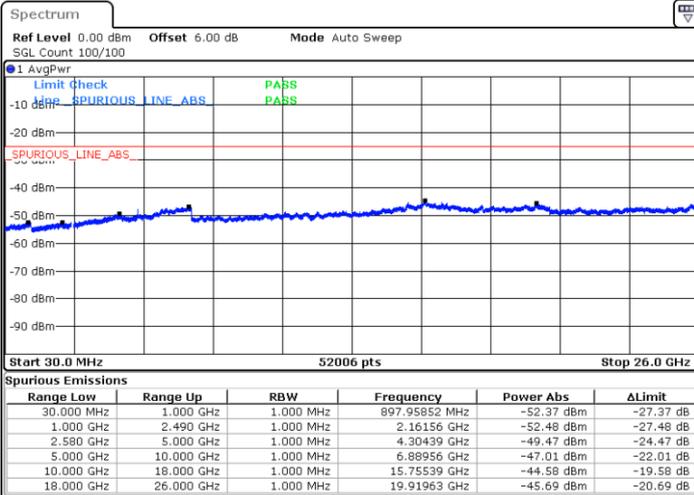
Date: 5 AUG.2019 07:01:27



LTE Band 7 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

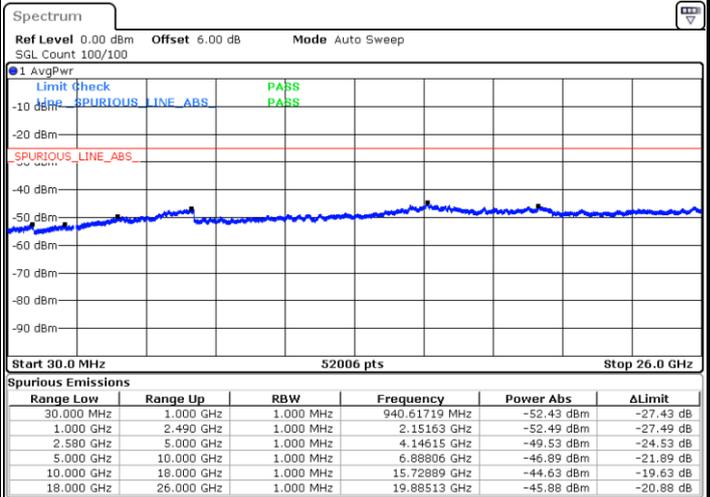
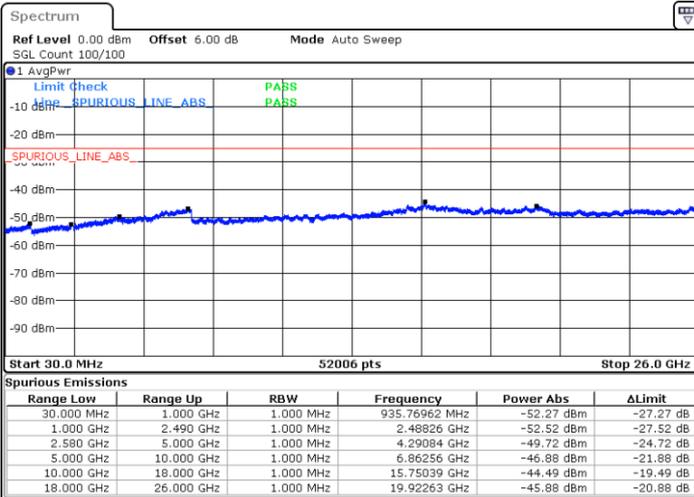


Date: 8.AUG.2019 16:56:59

Date: 8.AUG.2019 16:57:52

Middle Channel / QPSK

Middle Channel / 16QAM



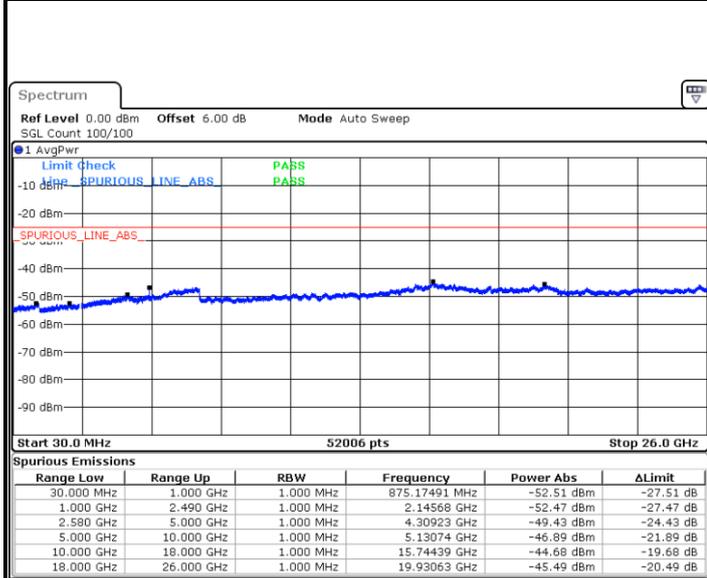
Date: 8.AUG.2019 16:59:40

Date: 8.AUG.2019 16:58:46



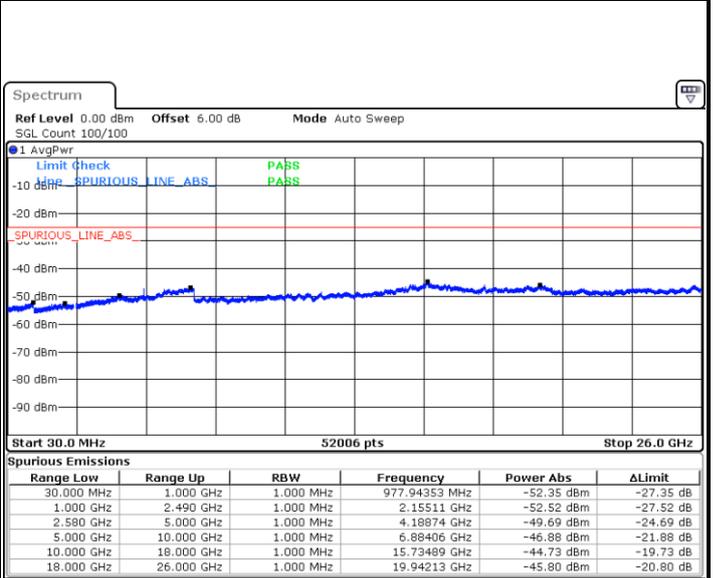
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 8 AUG.2019 17:00:34

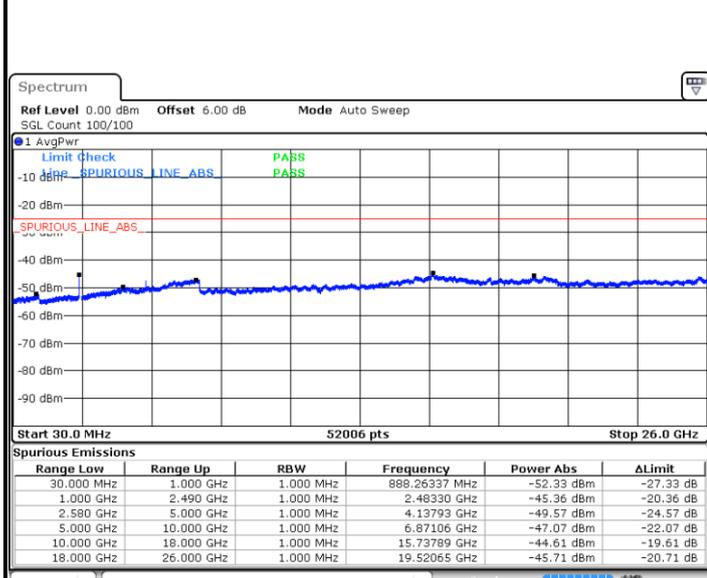
Highest Channel / 16QAM



Date: 8 AUG.2019 17:01:28

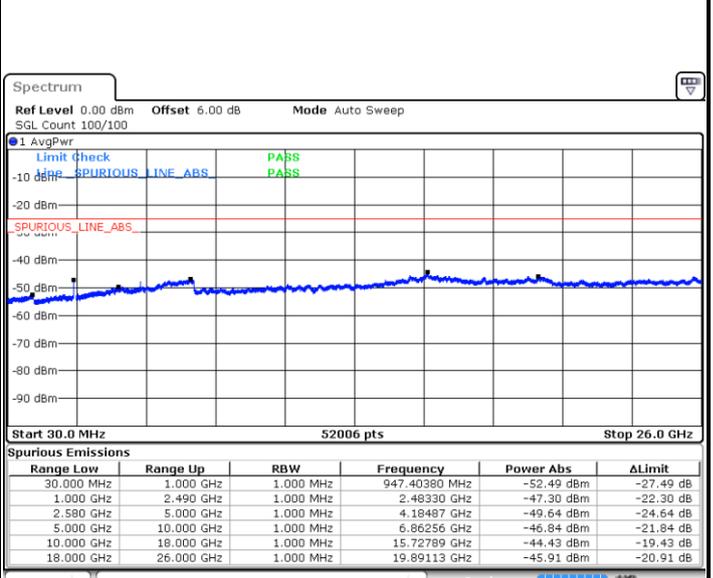
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 8 AUG.2019 17:04:21

Lowest Channel / 16QAM



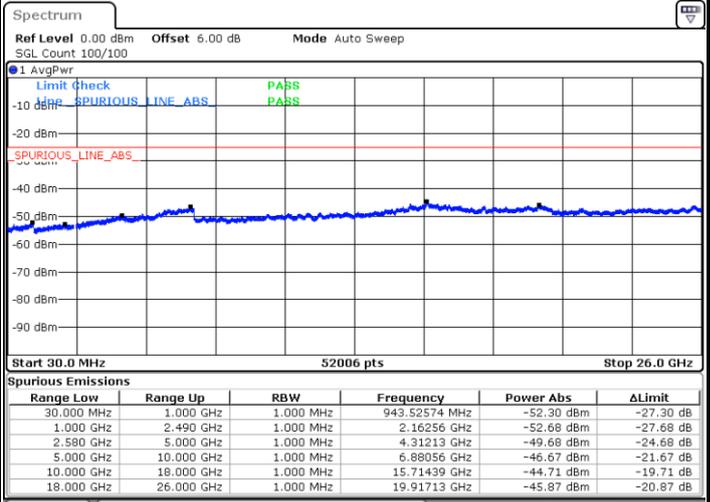
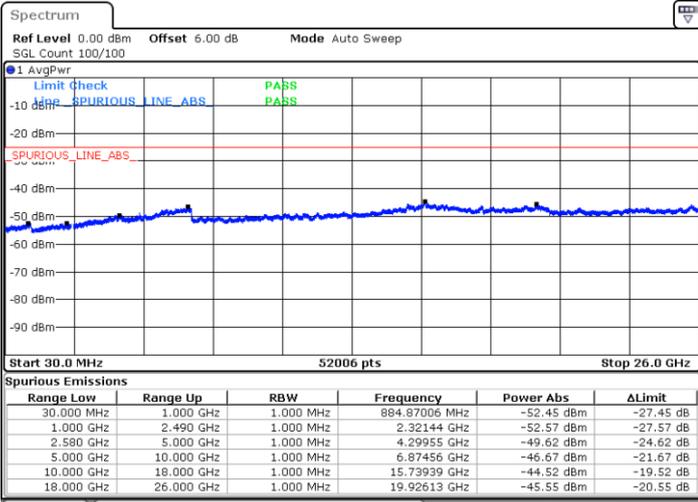
Date: 8 AUG.2019 17:05:14



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

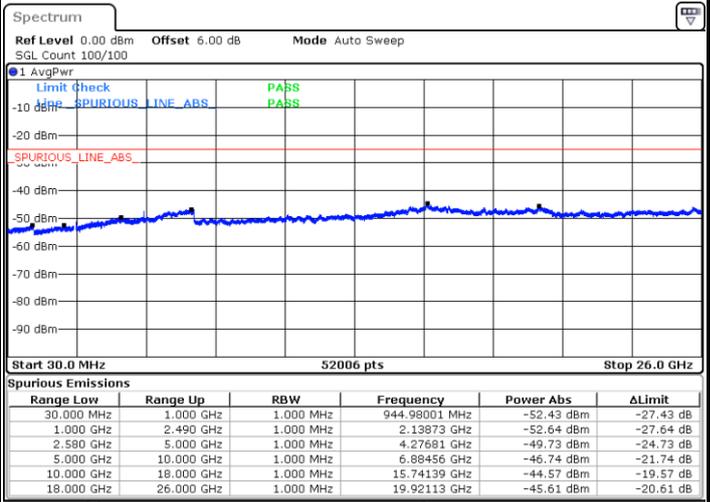
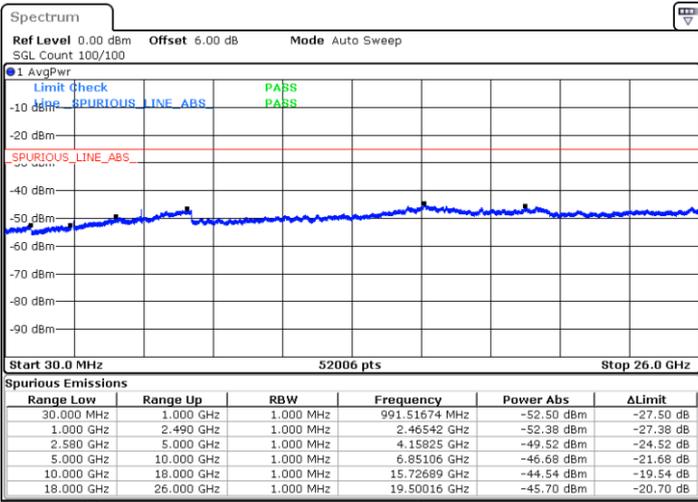


Date: 8 AUG.2019 17:07:02

Date: 8 AUG.2019 17:06:08

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 AUG.2019 17:07:55

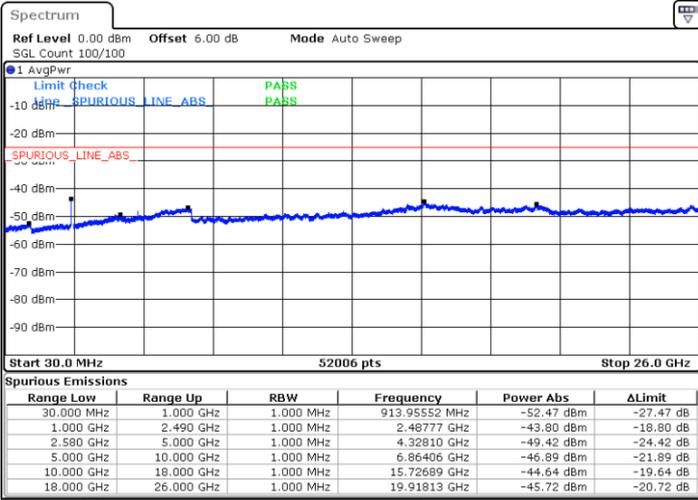
Date: 8 AUG.2019 17:08:49



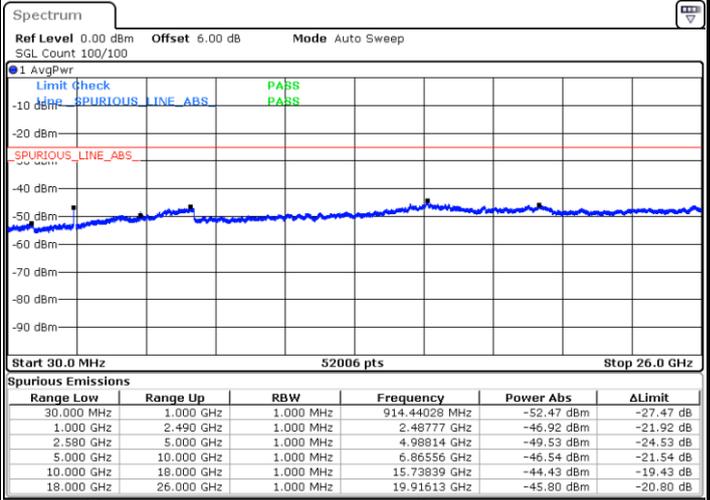
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



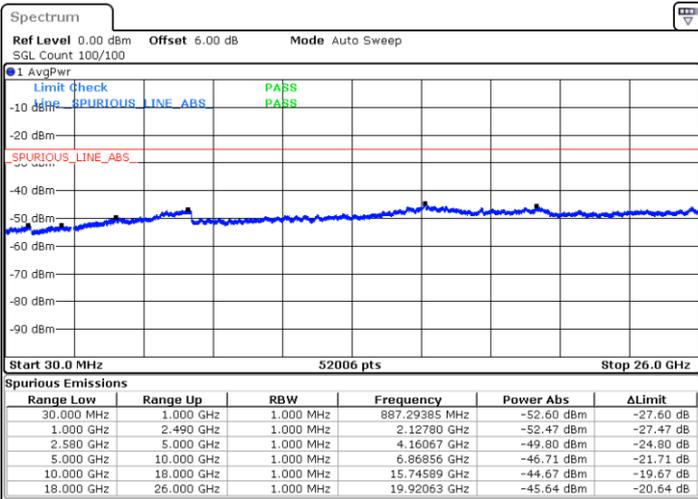
Date: 8 AUG.2019 17:11:42



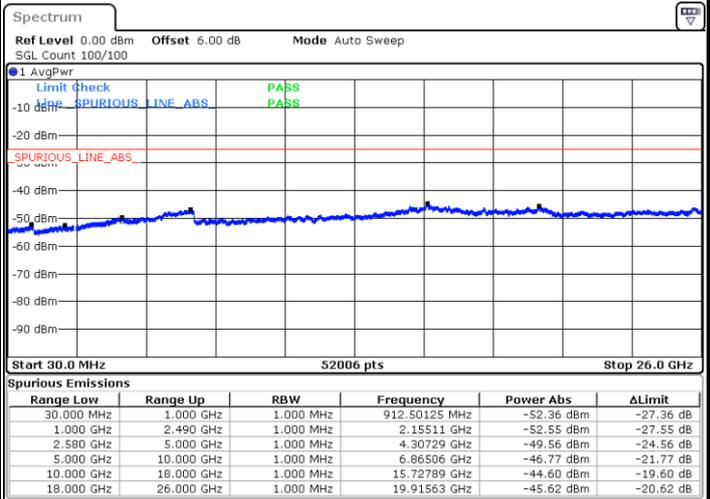
Date: 8 AUG.2019 17:12:36

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 8 AUG.2019 17:14:23

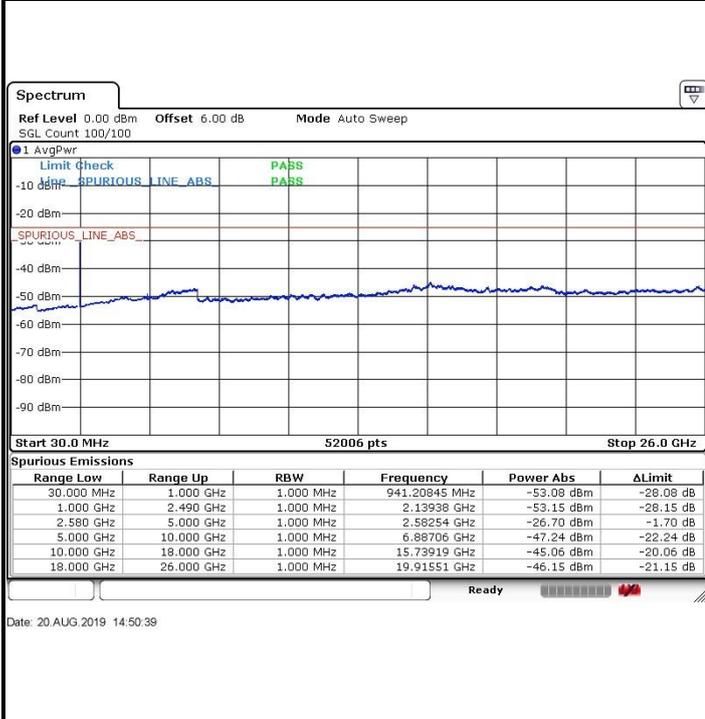


Date: 8 AUG.2019 17:13:30

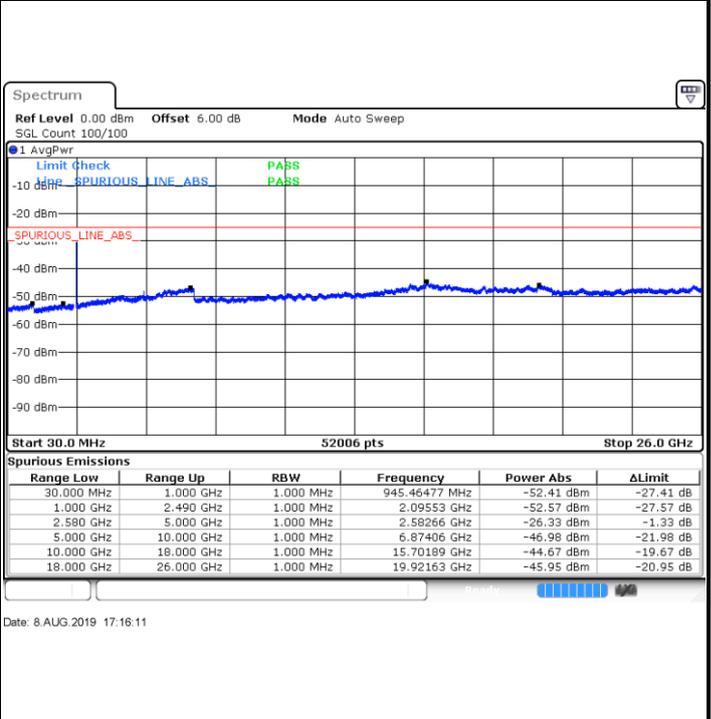


LTE Band7 / 15MHz

Highest Channel / QPSK

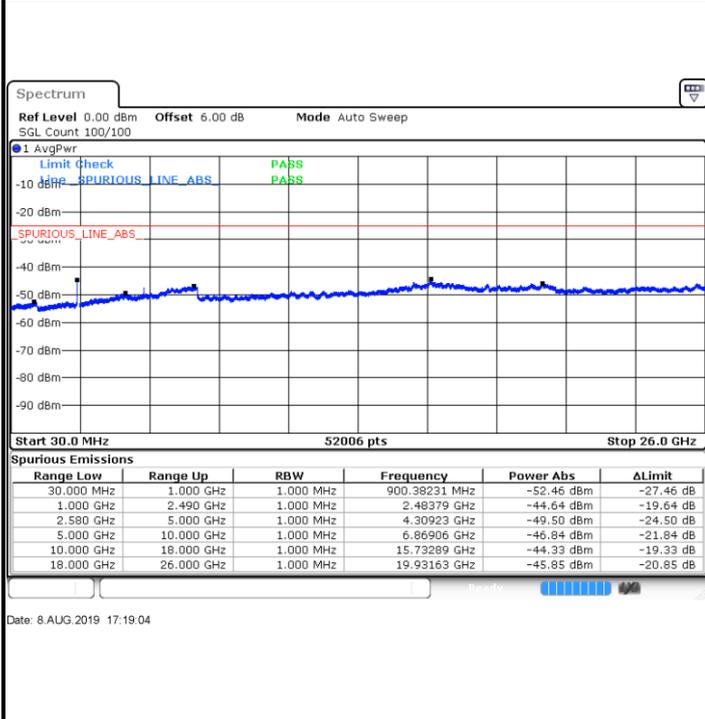


Highest Channel / 16QAM

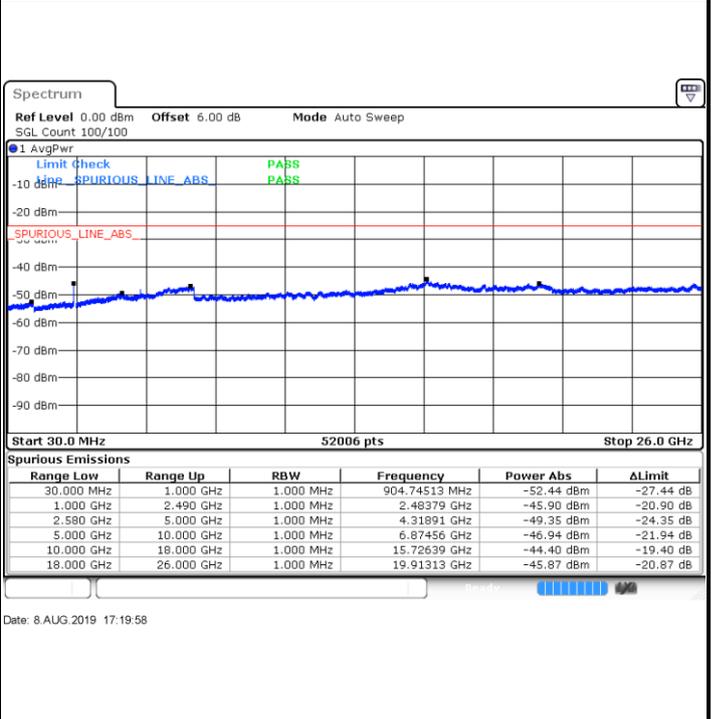


LTE Band 7 / 20MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

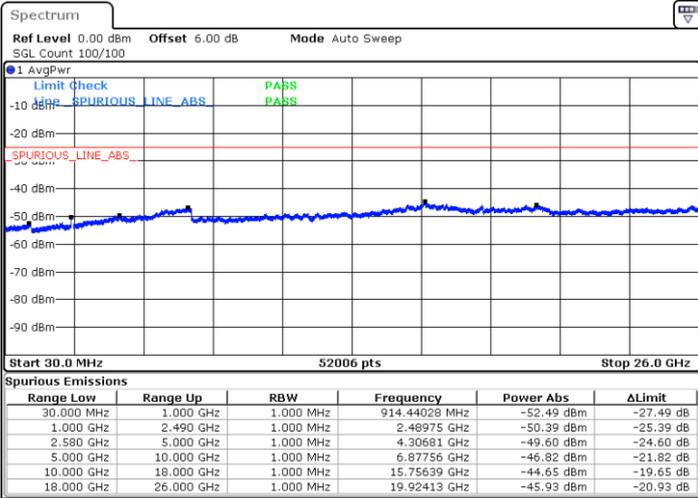




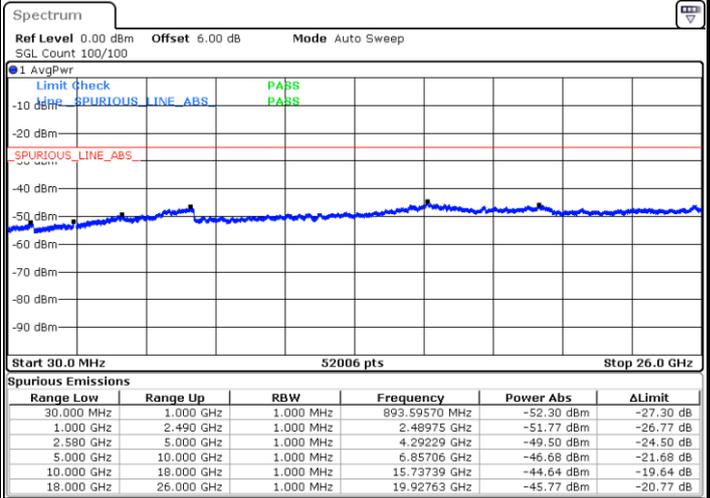
LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM



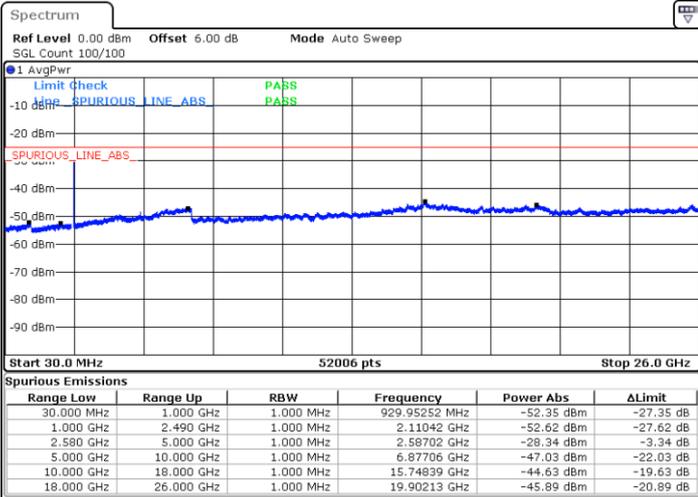
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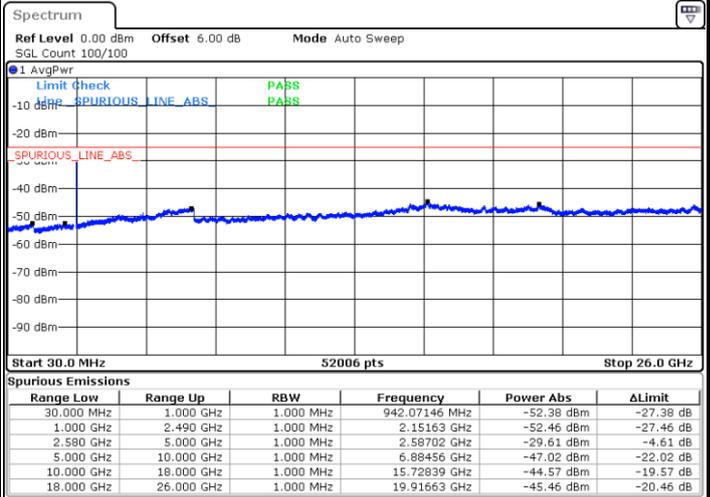
Date: 8 AUG.2019 17:20:52

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 AUG.2019 17:22:39



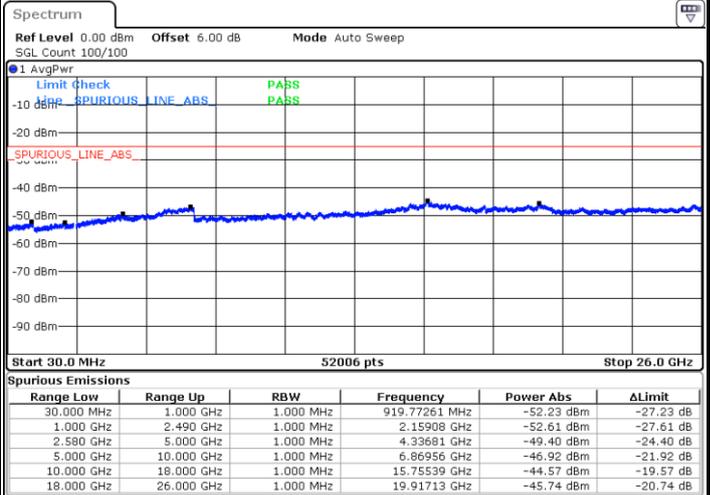
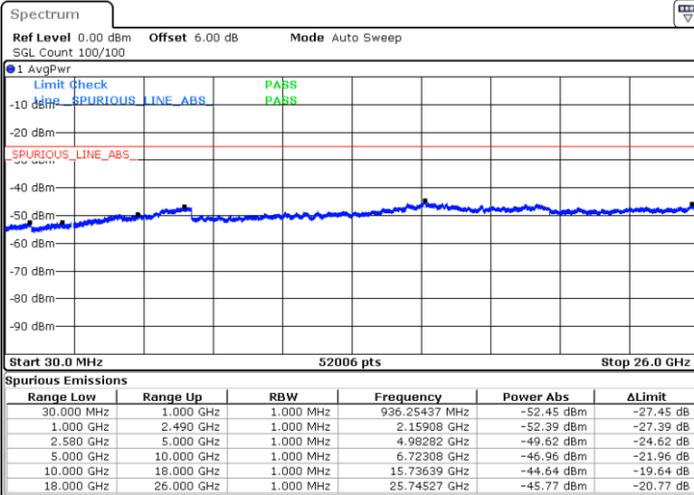
Date: 8 AUG.2019 17:23:33



LTE Band 7 / 5MHz

Lowest Channel / 64QAM

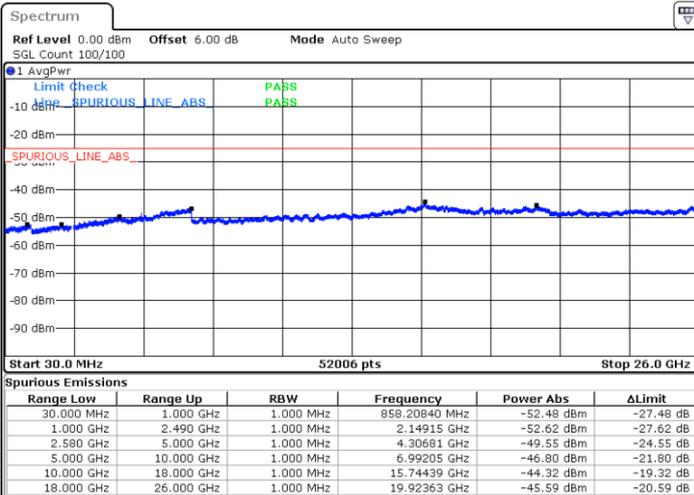
Middle Channel / 64QAM



Date: 8.AUG.2019 17:29:04

Date: 8.AUG.2019 17:29:58

Highest Channel / 64QAM



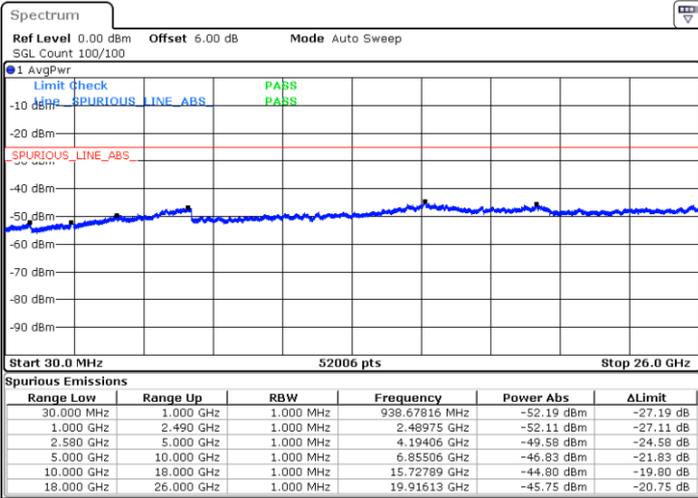
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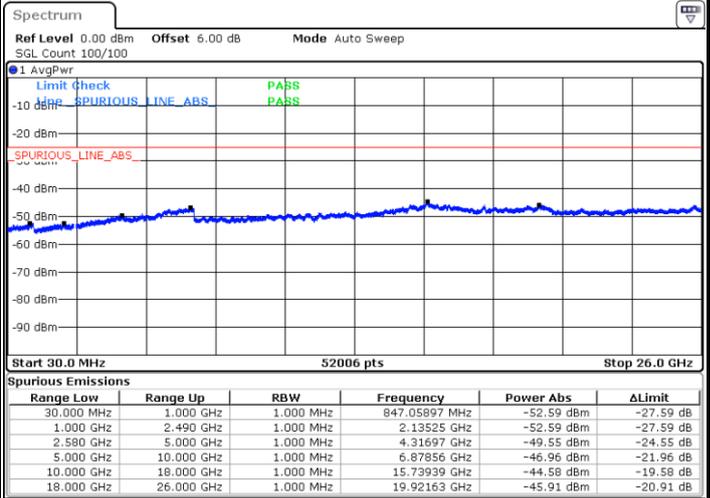
LTE Band 7 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

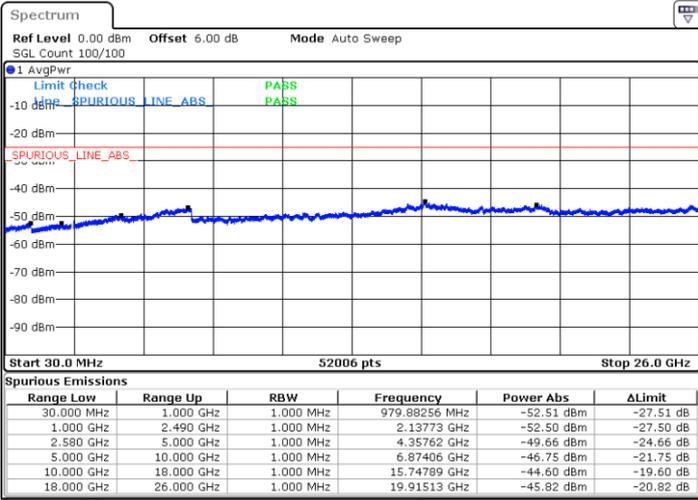


Date: 8 AUG.2019 17:32:46



Date: 8 AUG.2019 17:33:39

Highest Channel / 64QAM



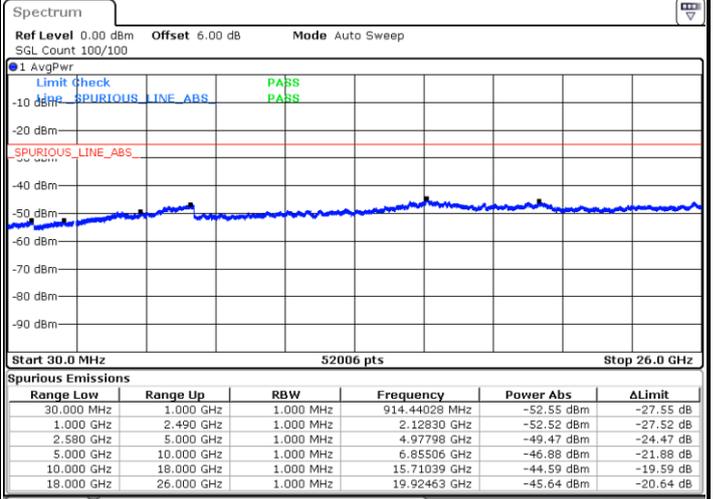
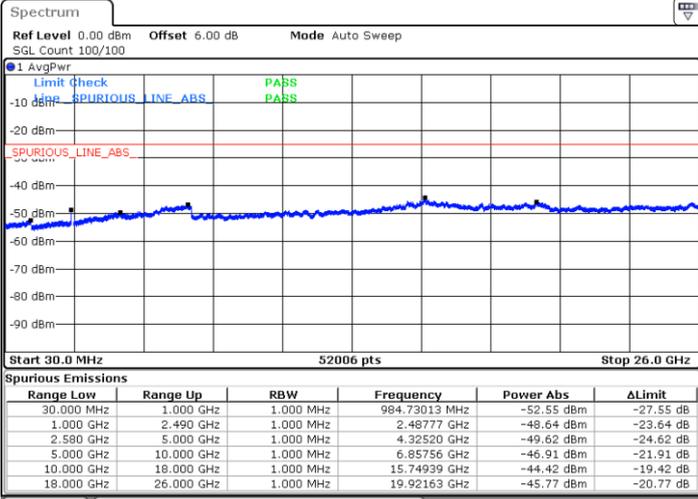
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LTE Band 7 / 15MHz

Lowest Channel / 64QAM

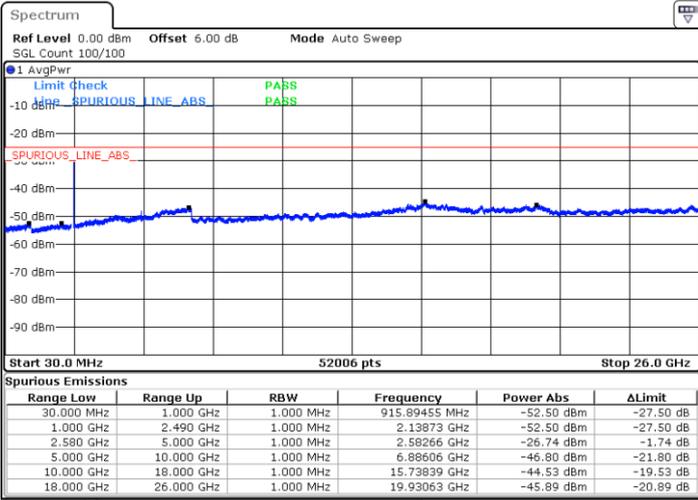
Middle Channel / 64QAM



Date: 8 AUG.2019 17:36:27

Date: 8 AUG.2019 17:37:21

Highest Channel / 64QAM



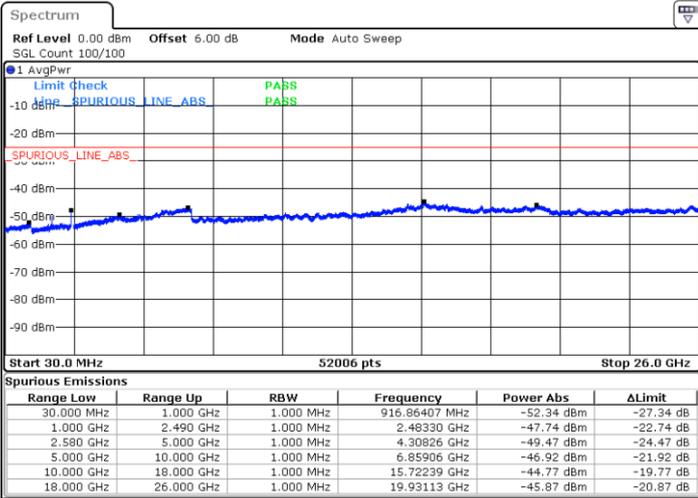
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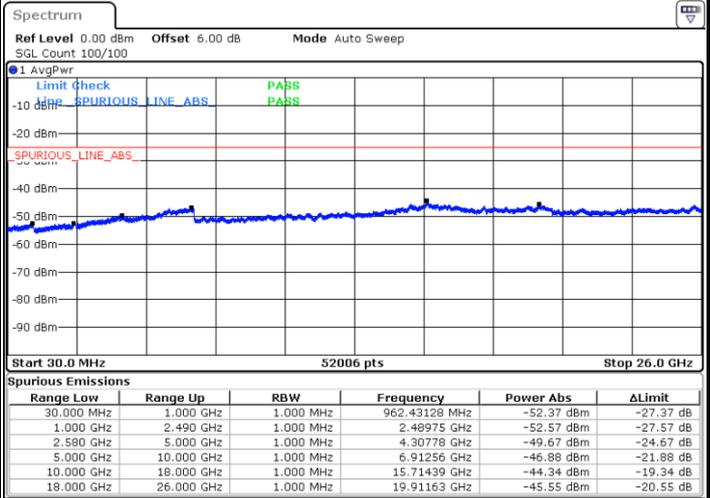
LTE Band 7 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

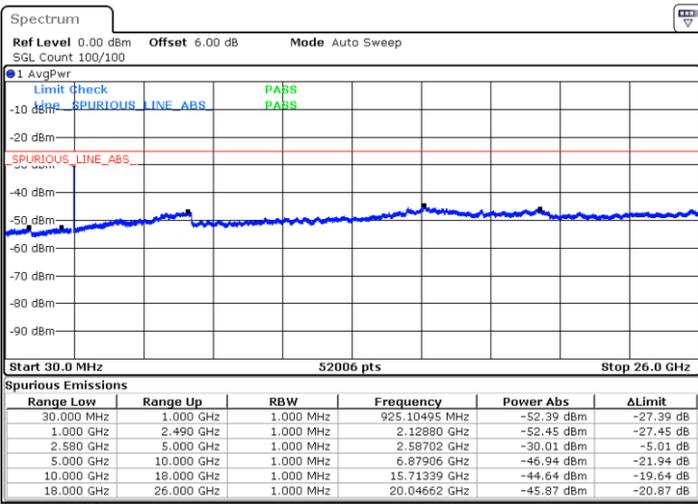


Date: 8.AUG.2019 17:40:08



Date: 8.AUG.2019 17:41:02

Highest Channel / 64QAM



Date: 8.AUG.2019 17:41:56



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.45 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	0.0027	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0022	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.45 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 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	-57.56	-13	-44.56	-64.25	1.75	8.44	H
	5172	-38.07	-13	-25.07	-46.49	1.94	10.36	H
	6894	-51.85	-13	-38.85	-61.09	2.47	11.71	H
	3447	-57.28	-13	-44.28	-63.97	1.75	8.44	V
	5172	-44.64	-13	-31.64	-53.06	1.94	10.36	V
	6894	-51.94	-13	-38.94	-61.18	2.47	11.71	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	5050	-50.65	-25	-25.65	-59.14	1.83	10.32	H
	7580	-50.69	-25	-25.69	-59.70	2.60	11.61	H
	10107	-46.30	-25	-21.30	-57.06	2.67	13.43	H
	5050	-46.40	-25	-21.40	-54.89	1.83	10.32	V
	7580	-48.31	-25	-23.31	-57.32	2.60	11.61	V
	10107	-46.94	-25	-21.94	-57.70	2.67	13.43	V

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