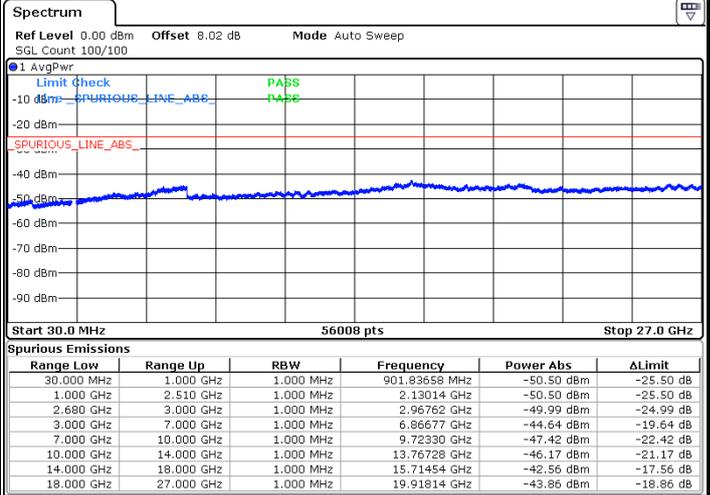
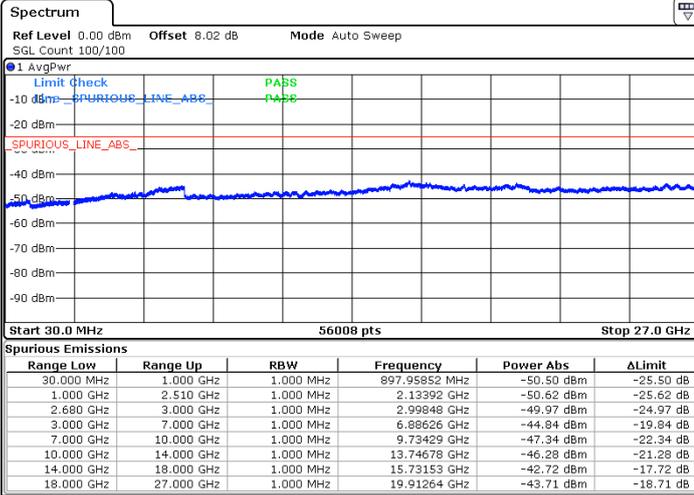




LTE Band 41 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

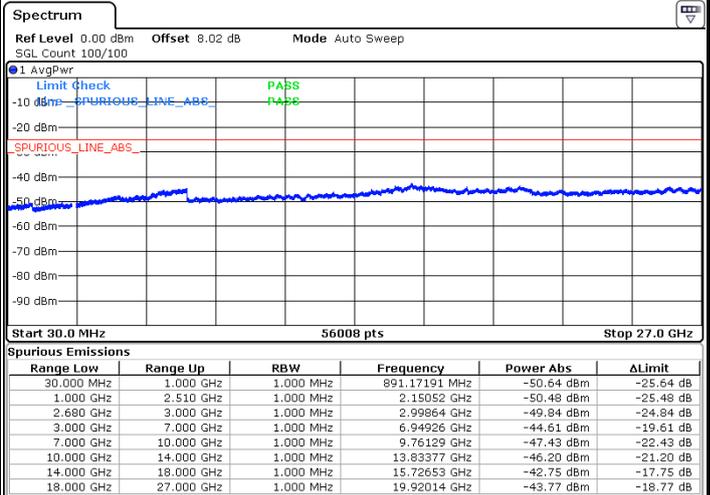
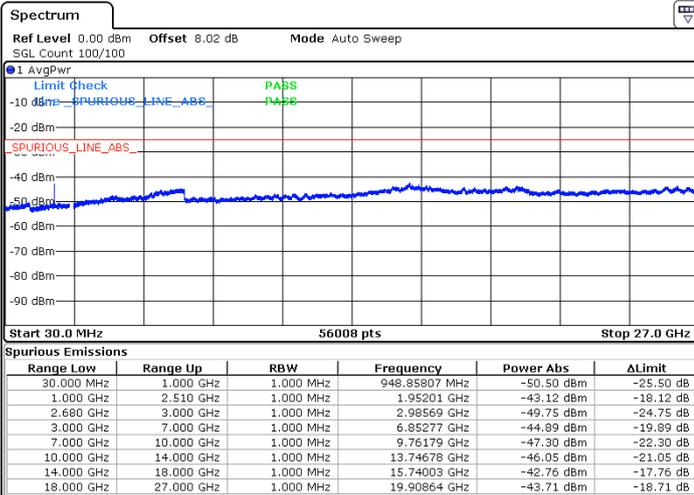


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Date: 5.OCT.2019 23:31:26

Middle Channel / QPSK

Middle Channel / 16QAM

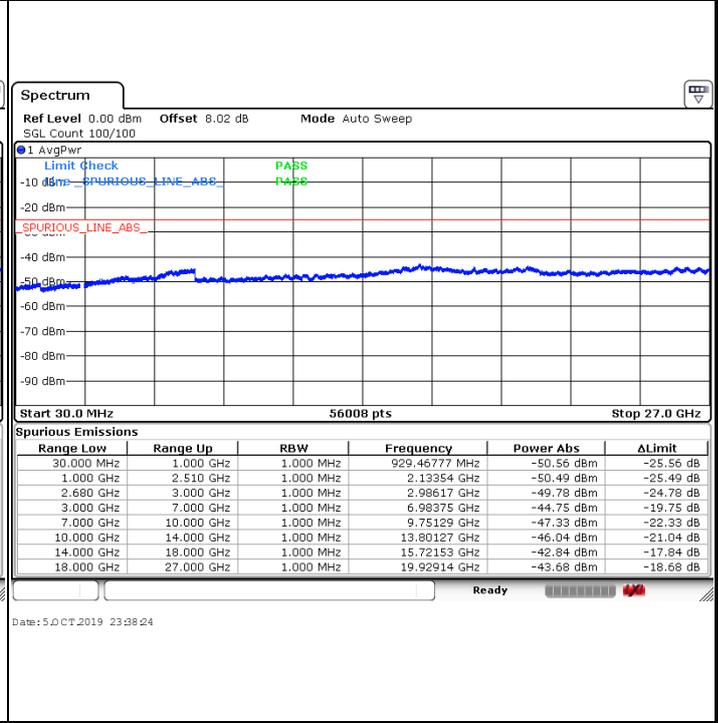
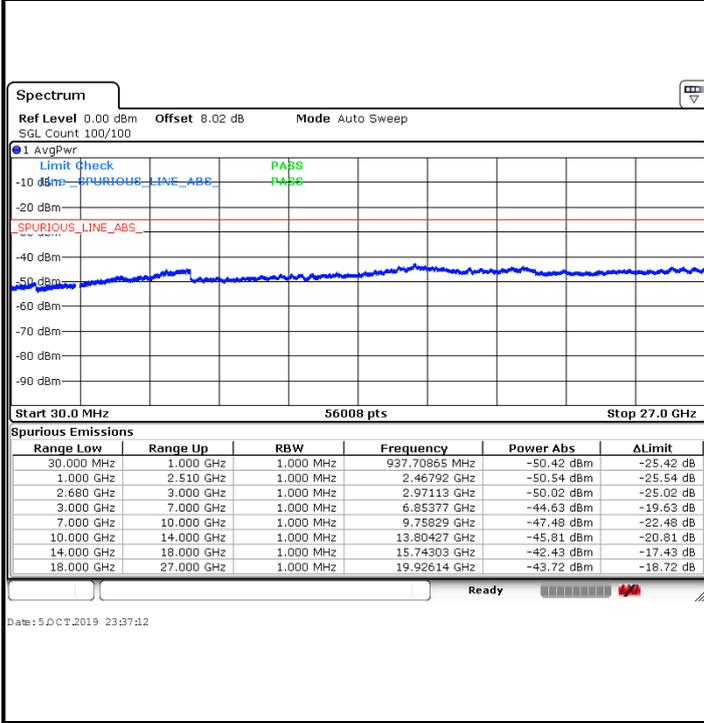


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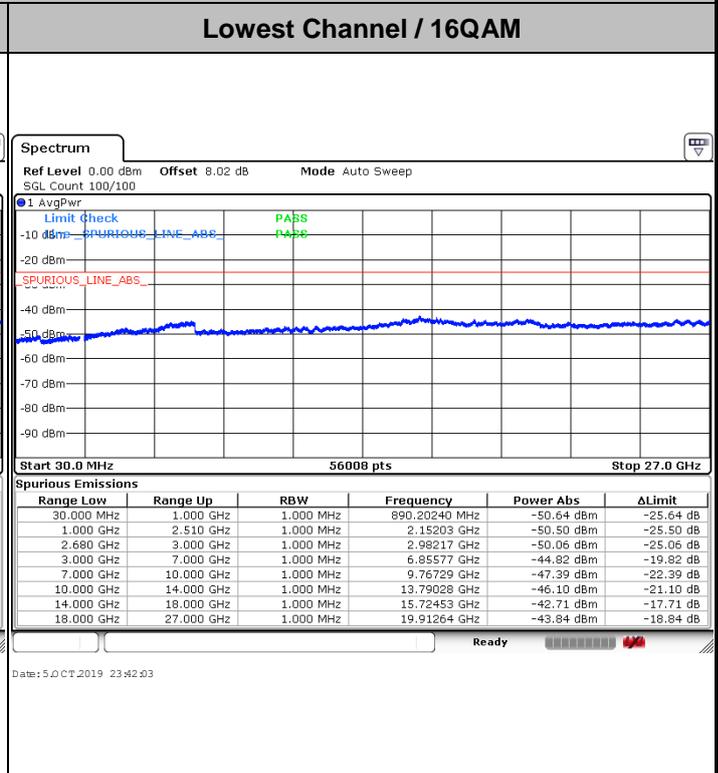
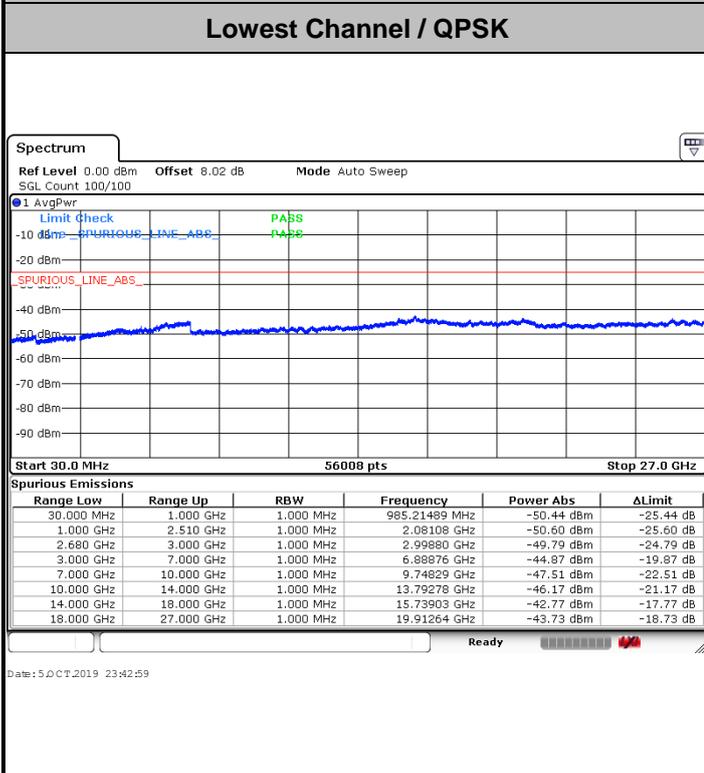
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Highest Channel / QPSK	Highest Channel / 16QAM
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LTE Band 41 / 20MHz

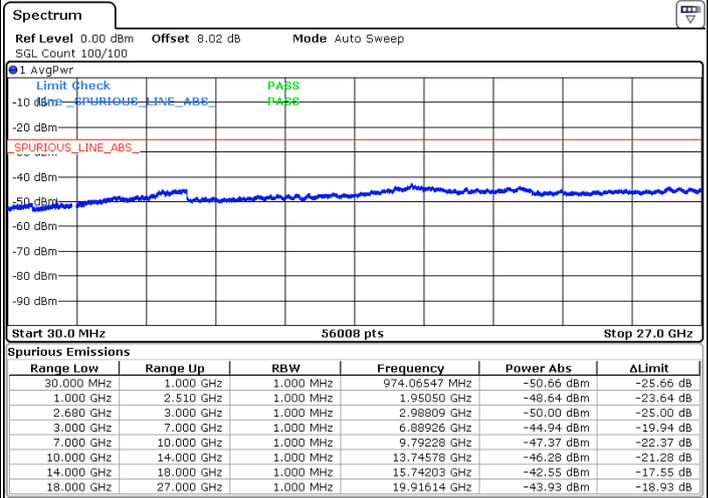
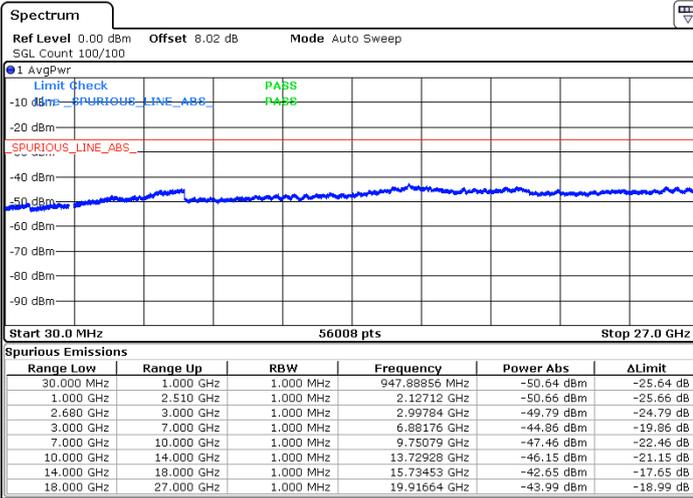




LTE Band 41 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

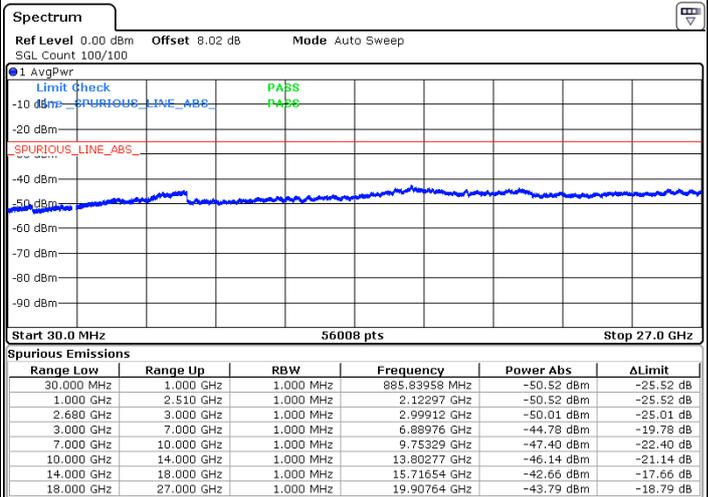
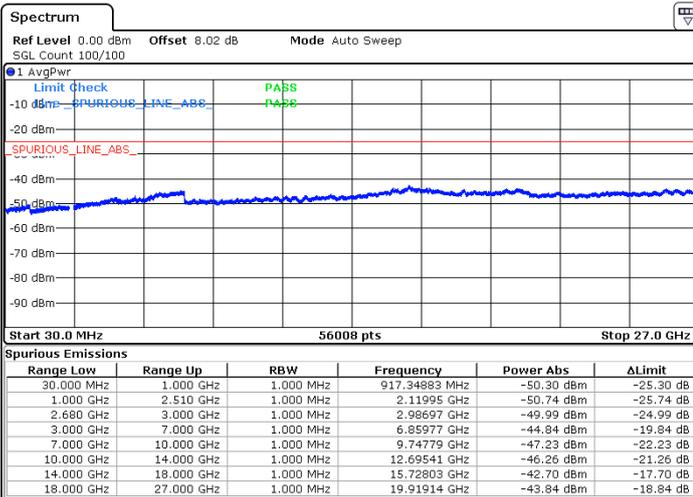


Date: 5 OCT 2019 23:44:04

Date: 5 OCT 2019 23:45:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 5 OCT 2019 23:49:42

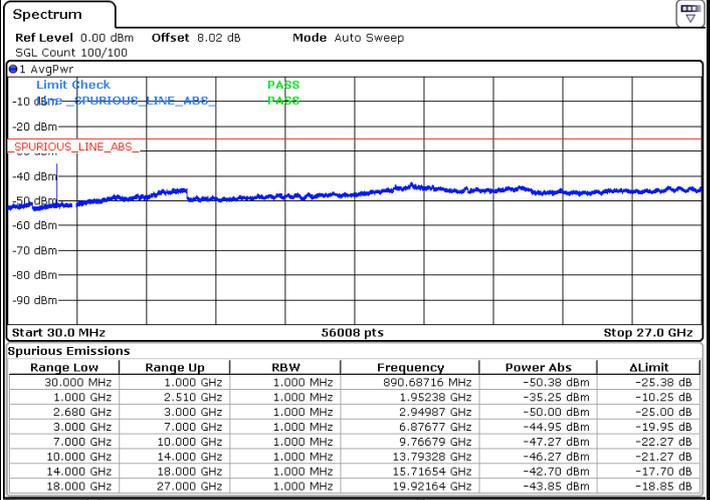
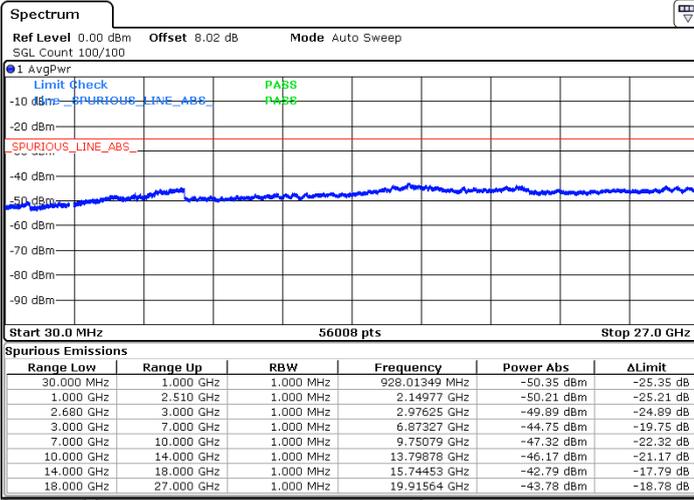
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LTE Band 41 / 5MHz

Lowest Channel / 64QAM

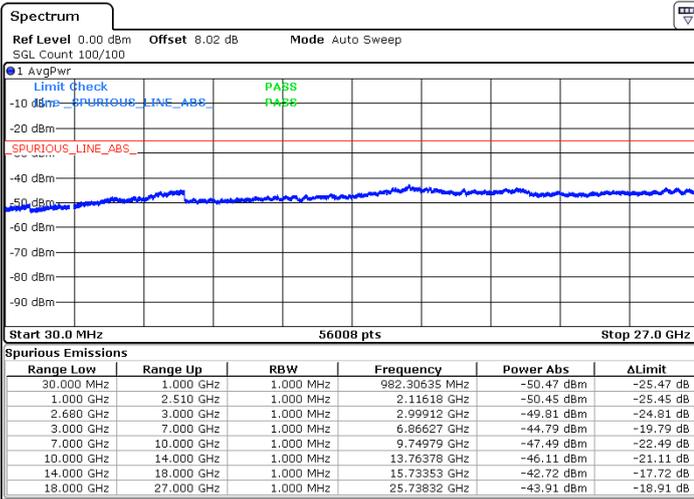
Middle Channel / 64QAM



Date: 5 OCT 2019 23:13:58

Date: 5 OCT 2019 23:15:04

Highest Channel / 64QAM



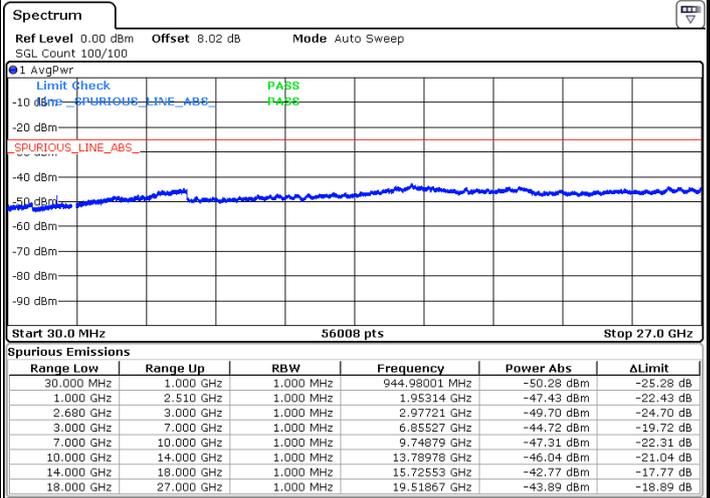
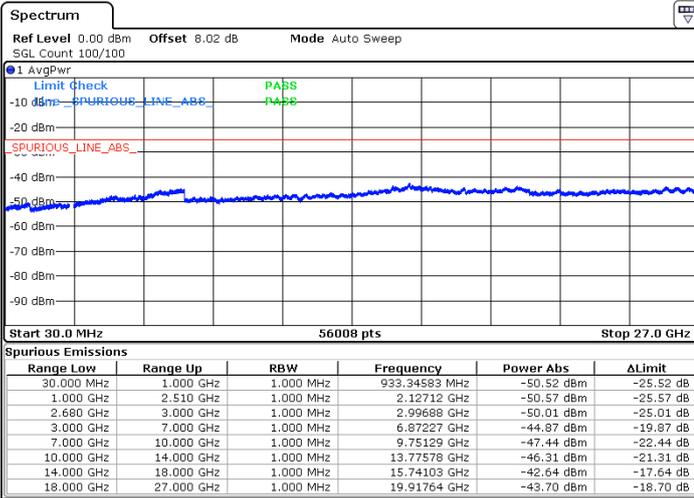
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LTE Band 41 / 10MHz

Lowest Channel / 64QAM

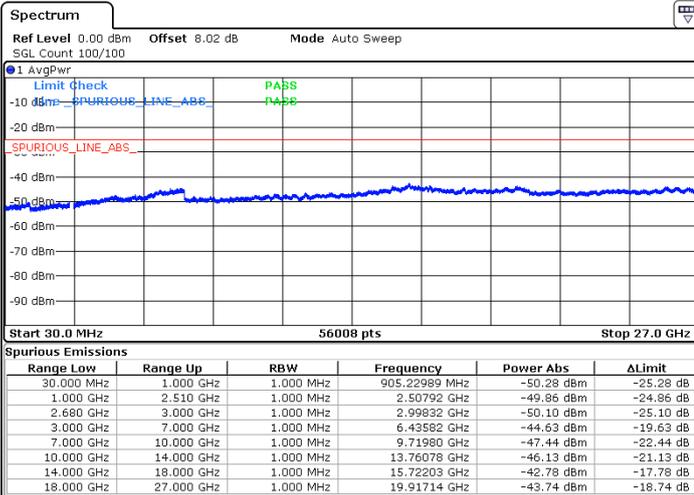
Middle Channel / 64QAM



Date: 5.OCT.2019 23:21:14

Date: 5.OCT.2019 23:26:01

Highest Channel / 64QAM



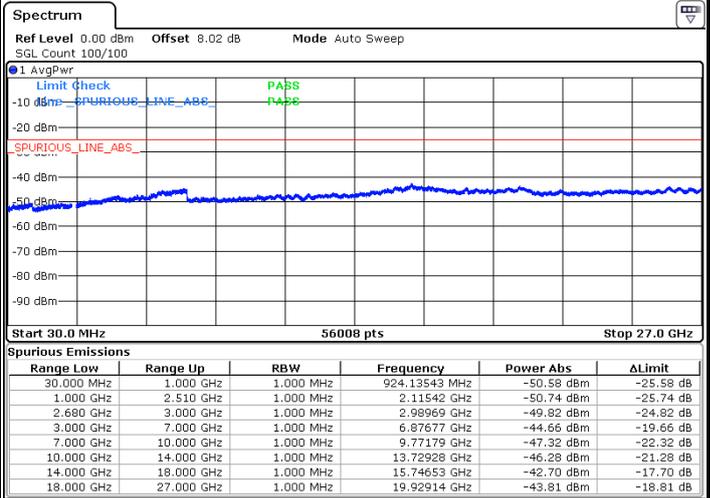
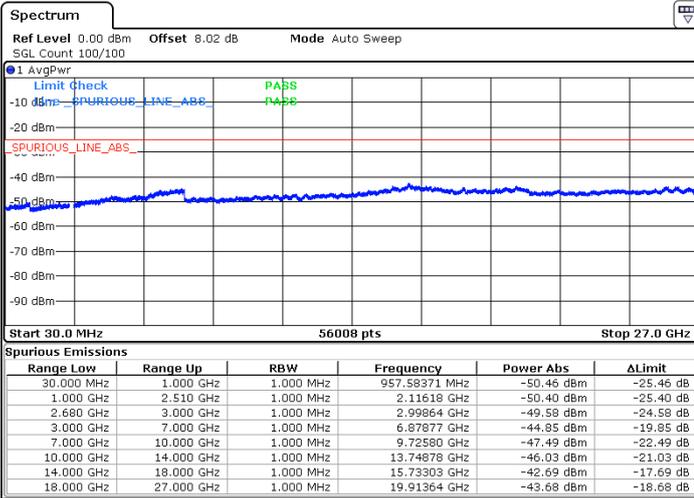
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LTE Band 41 / 15MHz

Lowest Channel / 64QAM

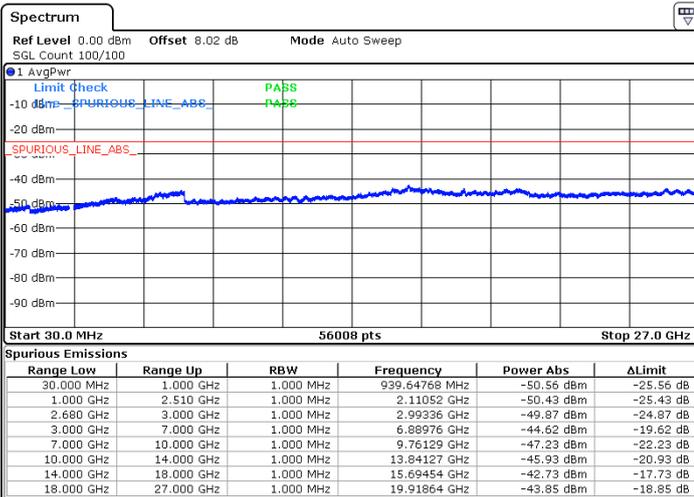
Middle Channel / 64QAM



Date: 5.OCT.2019 23:32:17

Date: 5.OCT.2019 23:33:27

Highest Channel / 64QAM



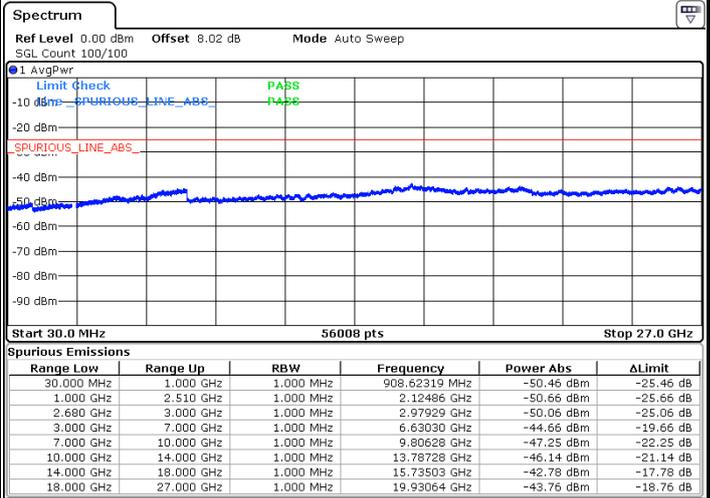
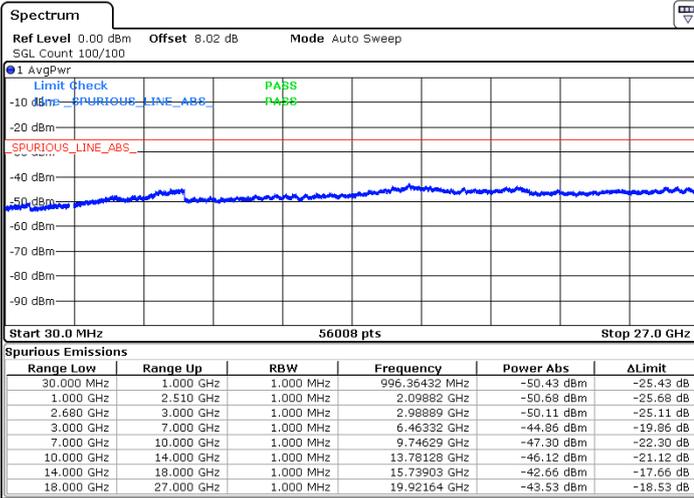
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LTE Band 41 / 20MHz

Lowest Channel / 64QAM

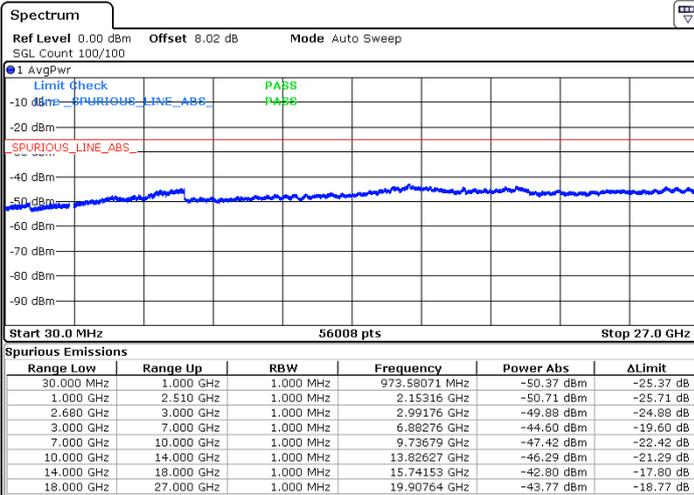
Middle Channel / 64QAM



Date: 5.OCT.2019 23:41:10

Date: 5.OCT.2019 23:46:25

Highest Channel / 64QAM



Date: 5.OCT.2019 23:47:45



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	0.0006	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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	0.0050	PASS
40	Normal Voltage	0.0046	
30	Normal Voltage	0.0043	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0041	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0040	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0039	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0106	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0080	
20	Maximum Voltage	0.0077	
20	Normal Voltage	0.0011	
20	Battery End Point	0.0084	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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	0.0020	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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	-56.14	-13	-43.14	-68.40	2.641	14.90	H
	5613	-50.92	-13	-37.92	-62.78	2.94	14.80	H
	7488	-50.22	-13	-37.22	-59.99	3.39	13.16	H
	3741	-55.45	-13	-42.45	-67.71	2.64	14.90	V
	5613	-45.65	-13	-32.65	-57.51	2.94	14.80	V
	7488	-46.73	-13	-33.73	-56.50	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)
Middle	3447	-59.63	-13	-46.63	-70.37	2.604	13.34	H
	5172	-45.22	-13	-32.22	-55.73	3.011	13.52	H
	6900	-51.55	-13	-38.55	-61.75	3.271	13.47	H
	3447	-60.57	-13	-47.57	-71.31	2.604	13.34	V
	5172	-50.12	-13	-37.12	-60.63	3.011	13.52	V
	6900	-52.23	-13	-39.23	-62.43	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)
Middle	5052	-32.63	-25	-7.63	-42.84	3.03	13.24	H
	7580	-37.89	-25	-12.89	-47.34	3.56	13.01	H
	10100	-39.99	-25	-14.99	-49.51	3.92	13.44	H
	12630	-45.99	-25	-20.99	-55.91	4.44	14.36	H
	15160	-45.57	-25	-20.57	-55.94	4.77	15.14	H
	5052	-38.47	-25	-13.47	-48.68	3.03	13.24	V
	7580	-44.57	-25	-19.57	-54.02	3.56	13.01	V
	10100	-47.80	-25	-22.80	-57.32	3.92	13.44	V
	12630	-49.32	-25	-24.32	-59.24	4.44	14.36	V
15160	-50.62	-25	-25.62	-60.99	4.77	15.14	V	

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

LTE Band 26 / 15MHz / 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	1660	-68.01	-13	-55.01	-74.98	1.58	10.70	H
	2490	-58.48	-13	-45.48	-66.73	2.102	12.50	H
	3318	-64.36	-13	-51.36	-73.25	2.856	13.90	H
	1660	-68.12	-13	-55.12	-75.09	1.58	10.70	V
	2490	-56.61	-13	-43.61	-64.86	2.10	12.50	V
	3318	-64.02	-13	-51.02	-72.91	2.86	13.90	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	5172	-32.39	-25	-7.39	-42.60	3.03	13.24	H
	7760	-40.01	-25	-15.01	-49.46	3.56	13.01	H
	10340	-54.57	-25	-29.57	-64.09	3.92	13.44	H
	12930	-54.06	-25	-29.06	-63.98	4.44	14.36	H
	15520	-54.76	-25	-29.76	-65.13	4.77	15.14	H
	5172	-38.69	-25	-13.69	-48.90	3.03	13.24	V
	7760	-44.44	-25	-19.44	-53.89	3.56	13.01	V
	10340	-58.25	-25	-33.25	-67.77	3.92	13.44	V
	12930.45	-57.60	-25	-32.60	-67.52	4.44	14.36	V
	15516.54	-57.90	-25	-32.90	-68.27	4.77	15.14	V

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



Appendix D. Reference Report

Please refer to Sporton report number FG9815171B which is issued separately.