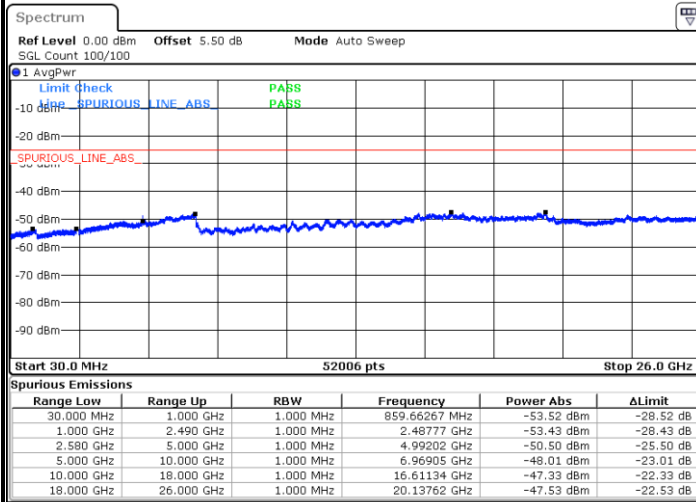




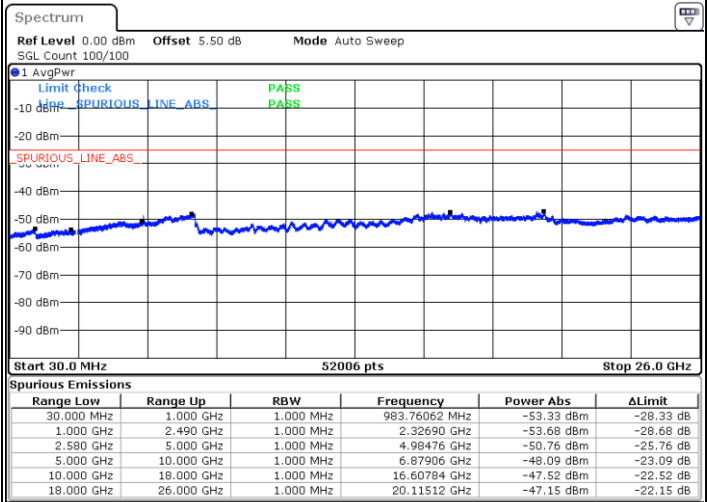
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



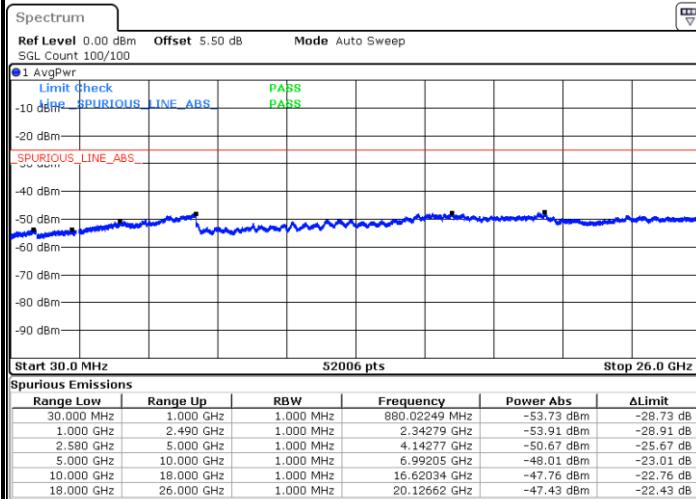
Date: 26 DEC 2018 15:08:11

Middle Channel / 64QAM



Date: 26 DEC 2018 15:09:05

Highest Channel / 64QAM

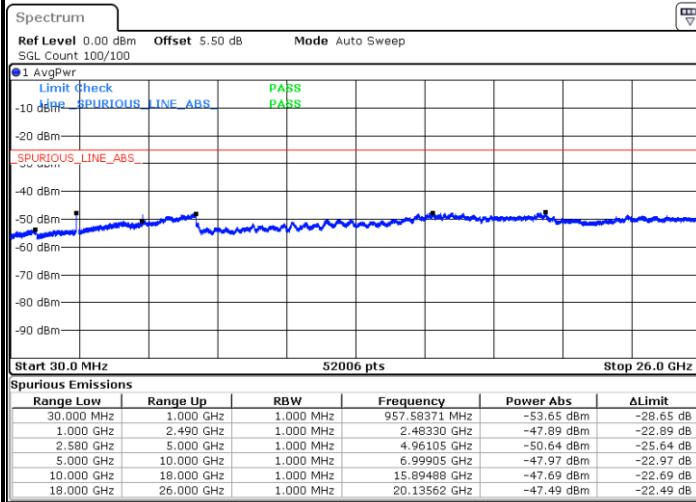


Date: 26 DEC 2018 15:09:58



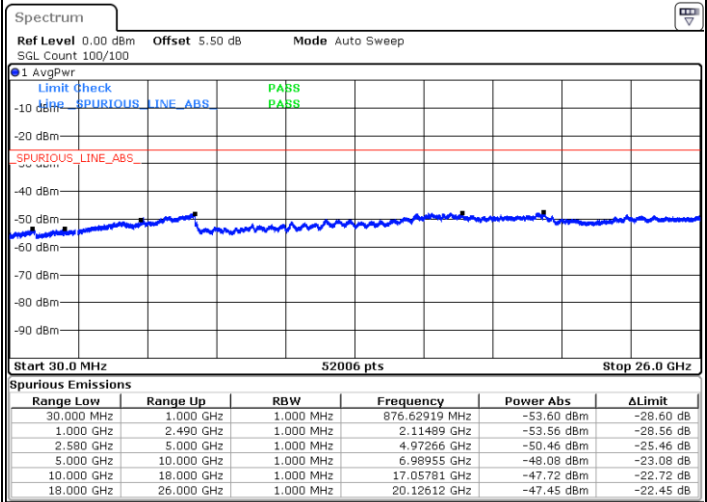
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



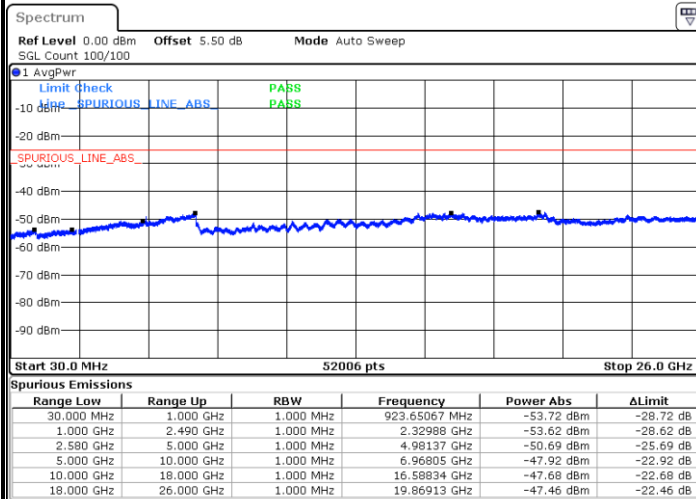
Date: 26 DEC 2018 15:14:06

Middle Channel / 64QAM



Date: 26 DEC 2018 15:15:00

Highest Channel / 64QAM

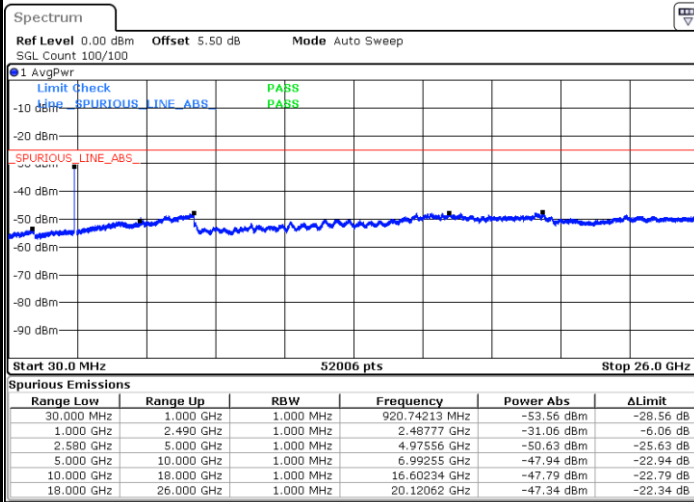


Date: 26 DEC 2018 15:15:54



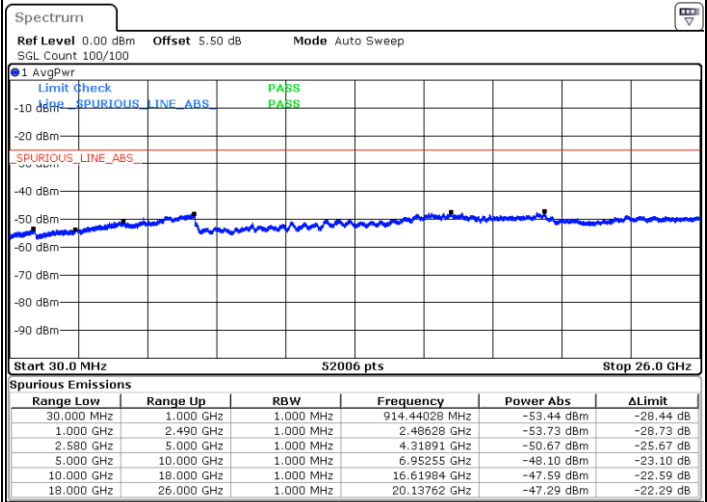
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



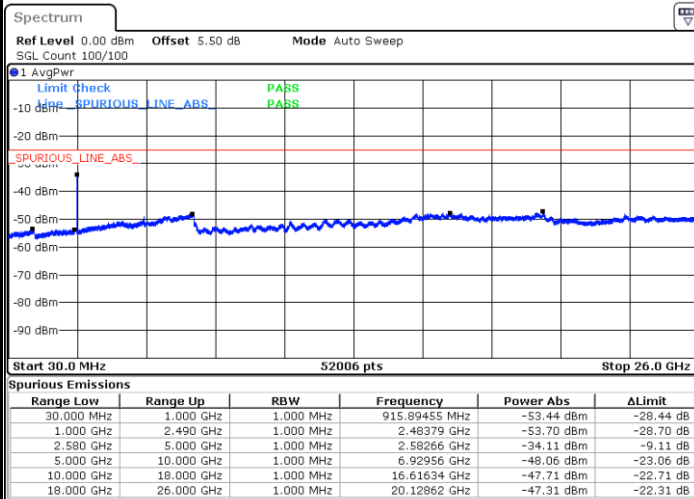
Date: 26 DEC 2018 15:22:16

Middle Channel / 64QAM



Date: 26 DEC 2018 15:23:09

Highest Channel / 64QAM

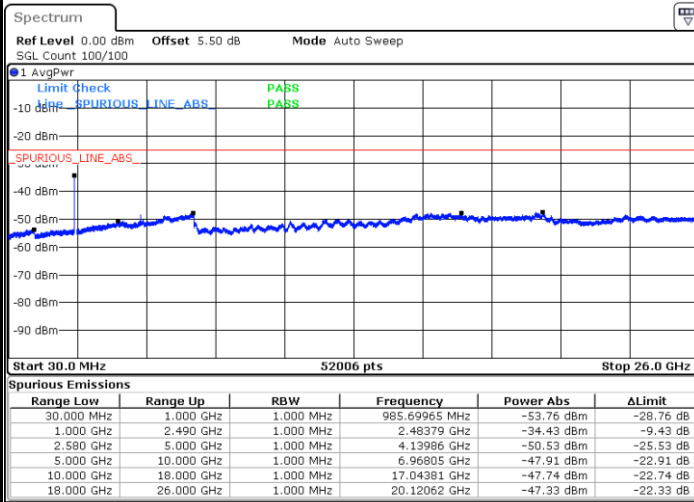


Date: 26 DEC 2018 15:24:03



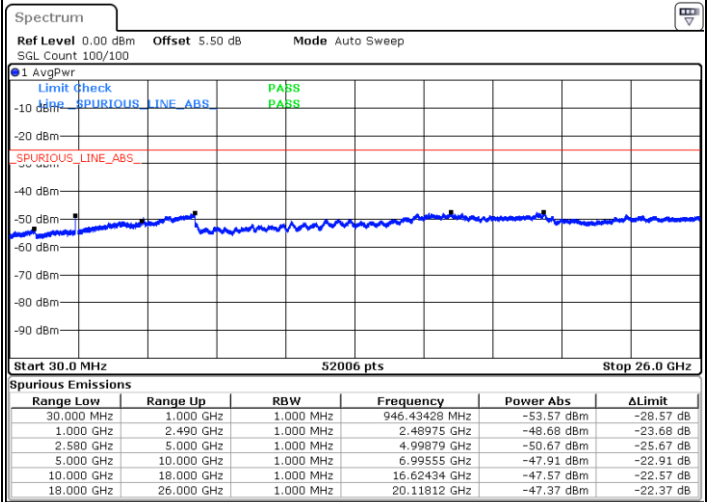
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



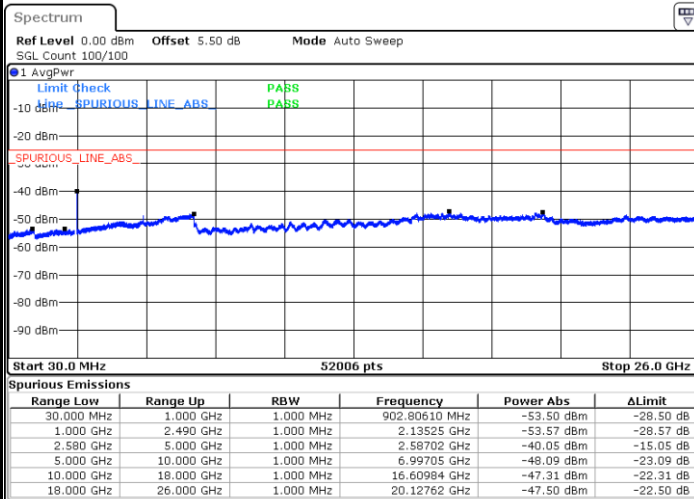
Date: 26 DEC 2018 15:28:11

Middle Channel / 64QAM



Date: 26 DEC 2018 15:29:05

Highest Channel / 64QAM

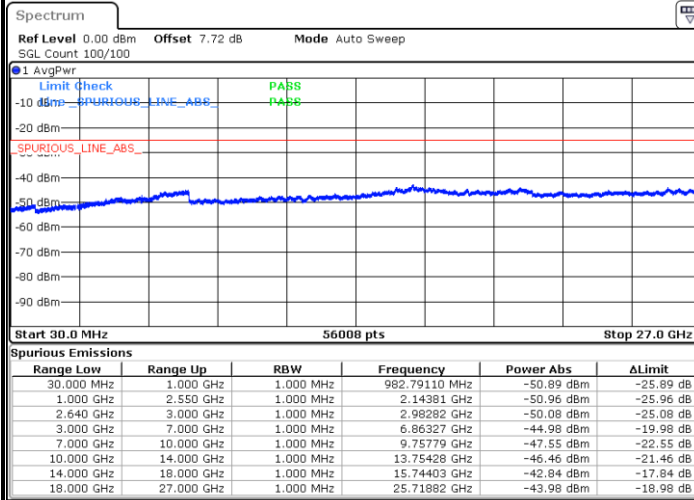


Date: 26 DEC 2018 15:29:58



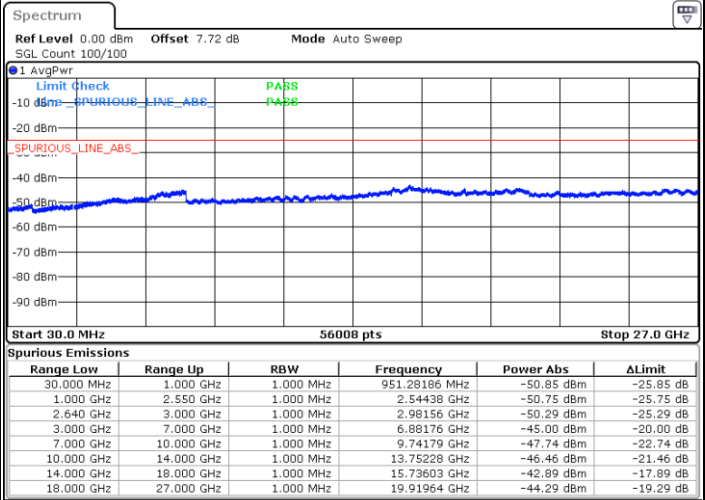
LTE Band 38 / 5MHz

Lowest Channel / QPSK



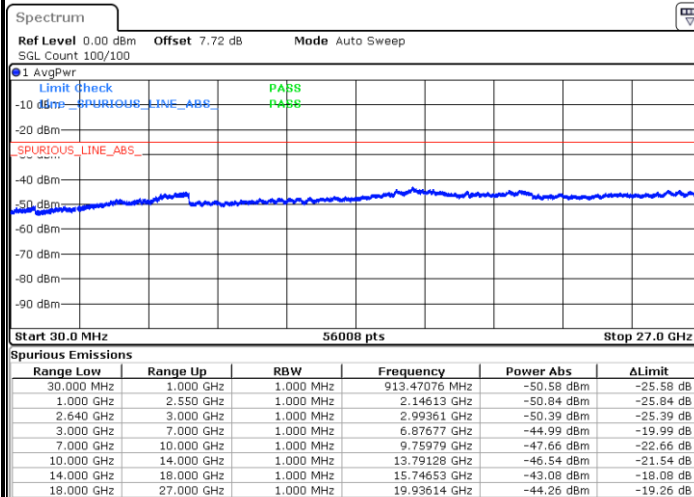
Date: 28 DEC 2018 10:00:32

Lowest Channel / 16QAM



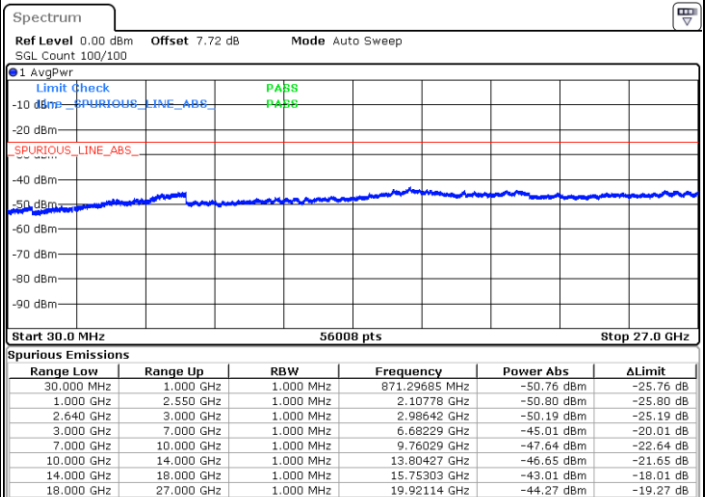
Date: 28 DEC 2018 10:01:27

Middle Channel / QPSK



Date: 28 DEC 2018 10:02:22

Middle Channel / 16QAM

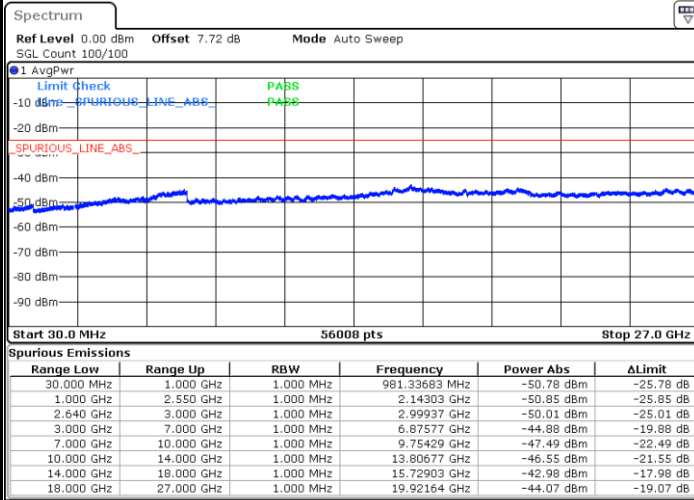


Date: 28 DEC 2018 10:03:17



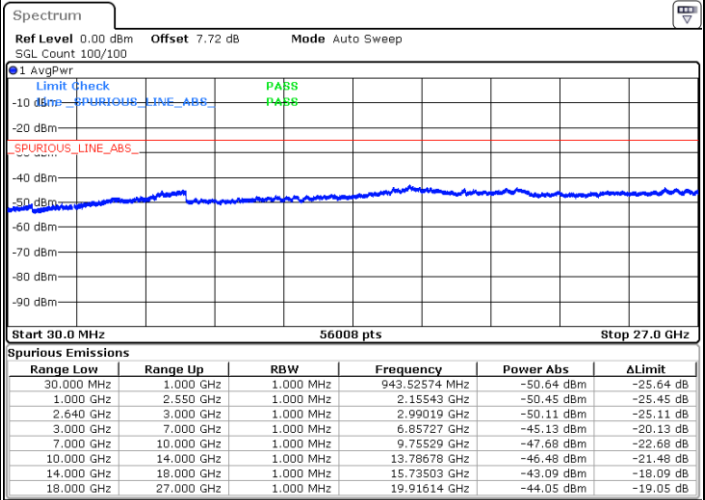
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 28 DEC 2018 10:04:12

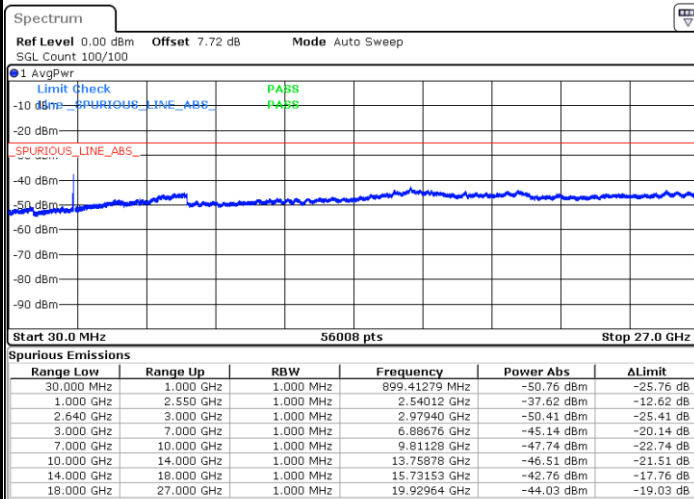
Highest Channel / 16QAM



Date: 28 DEC 2018 10:05:07

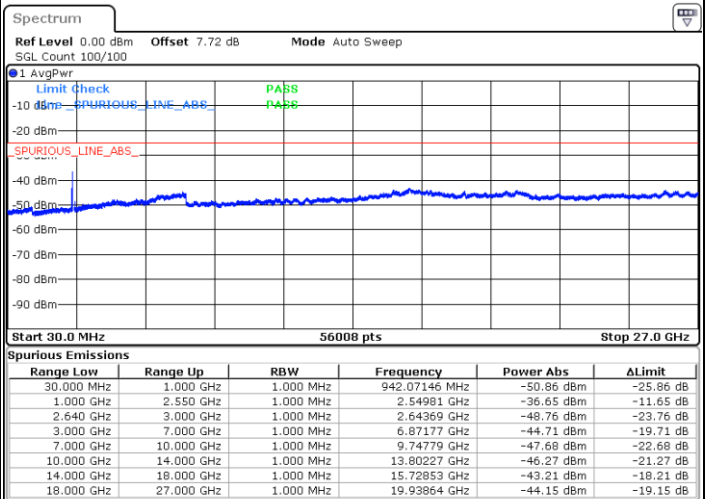
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 28 DEC 2018 10:06:01

Lowest Channel / 16QAM

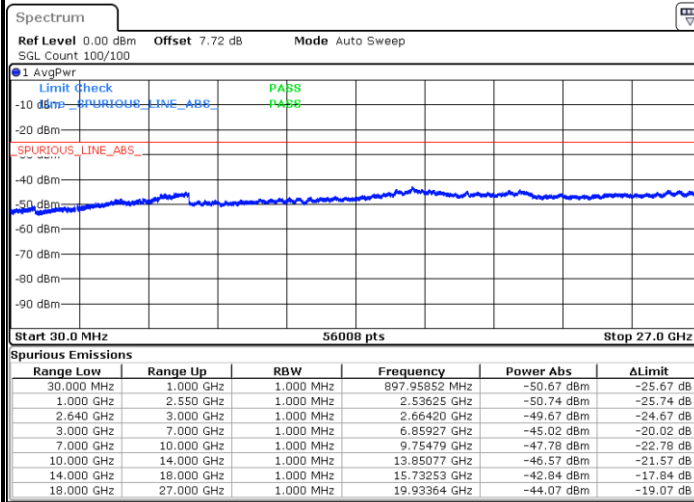


Date: 28 DEC 2018 10:06:56



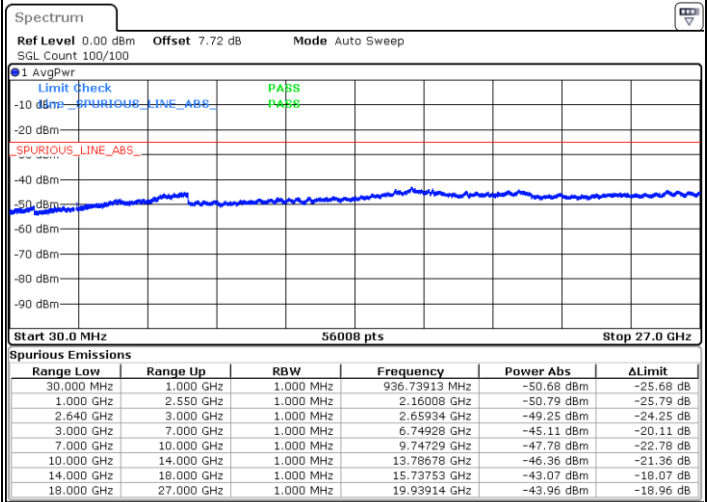
LTE Band 38 / 10MHz

Middle Channel / QPSK



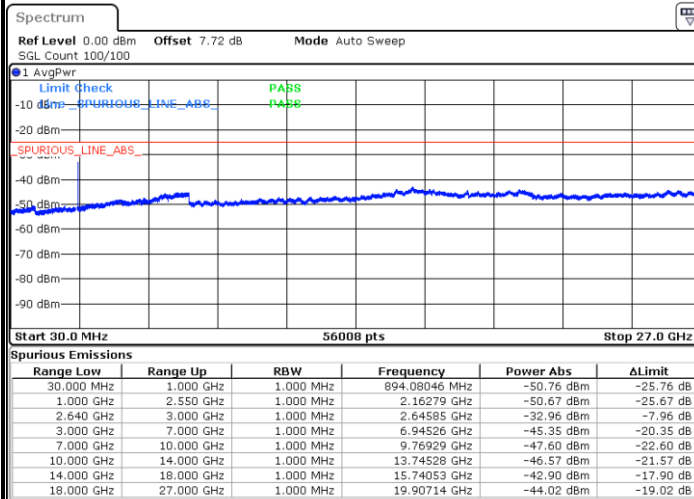
Date: 28 DEC 2018 10:07:51

Middle Channel / 16QAM



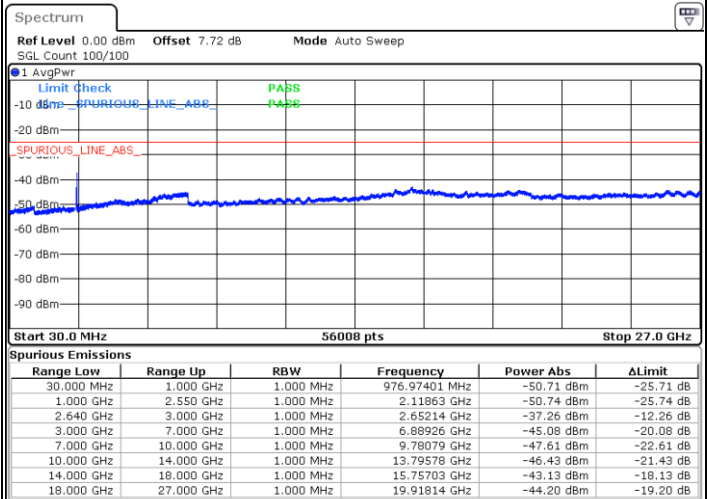
Date: 28 DEC 2018 10:08:46

Highest Channel / QPSK



Date: 28 DEC 2018 10:09:41

Highest Channel / 16QAM

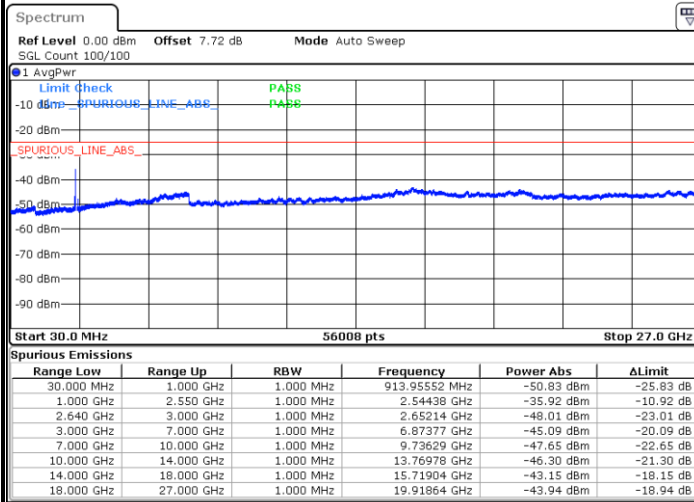


Date: 28 DEC 2018 10:10:36



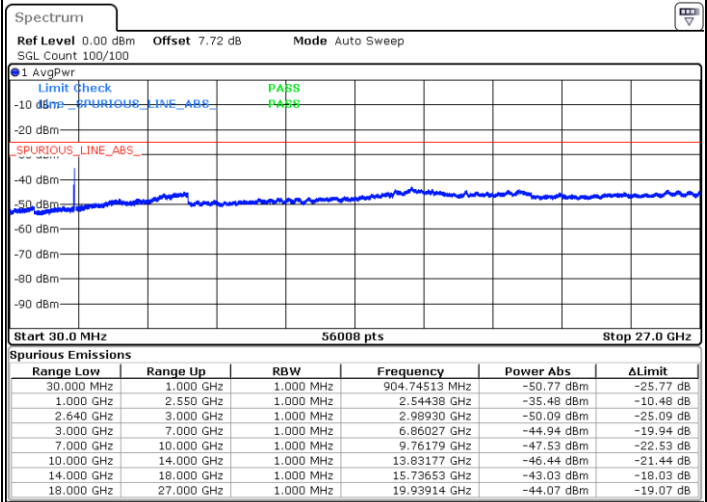
LTE Band 38 / 15MHz

Lowest Channel / QPSK



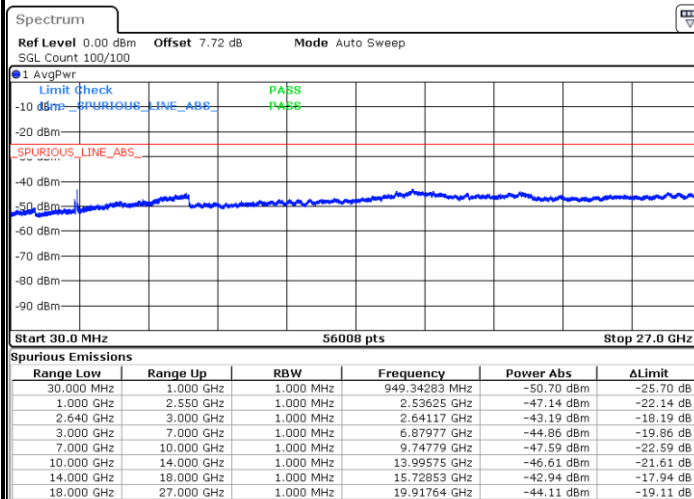
Date: 28 DEC 2018 10:11:31

Lowest Channel / 16QAM



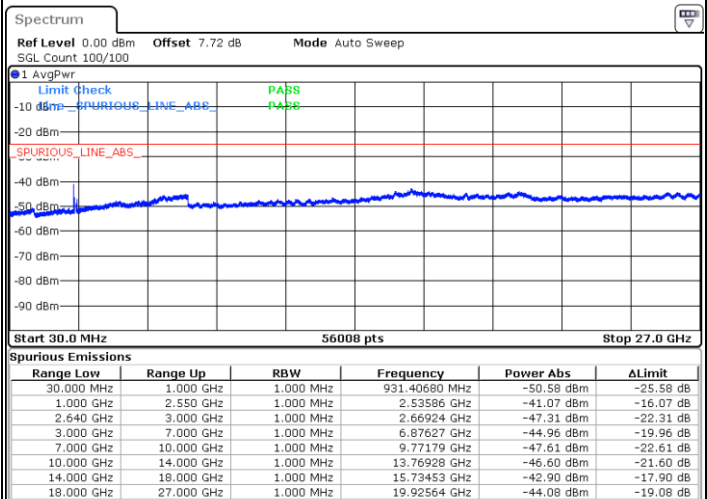
Date: 28 DEC 2018 10:12:26

Middle Channel / QPSK



Date: 28 DEC 2018 10:13:21

Middle Channel / 16QAM

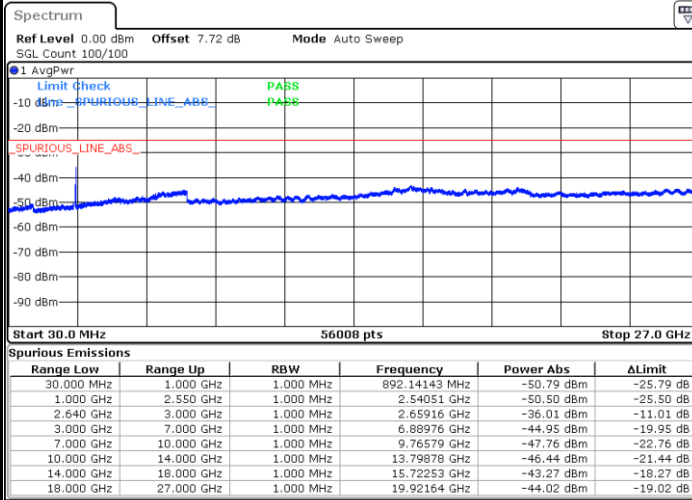


Date: 28 DEC 2018 10:14:16



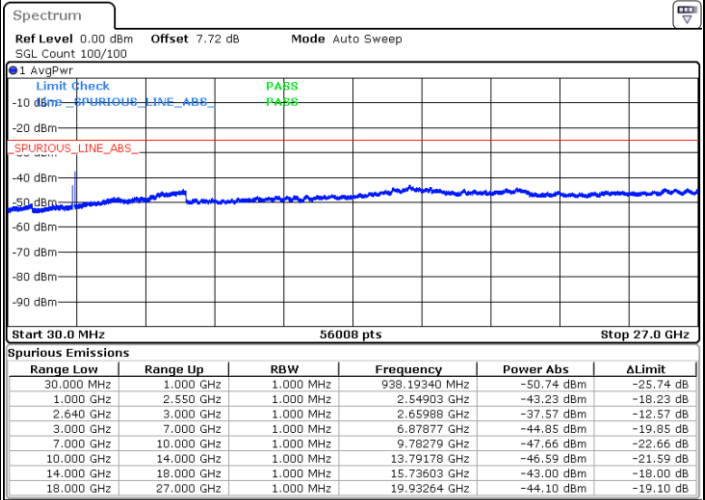
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 28 DEC 2018 10:15:11

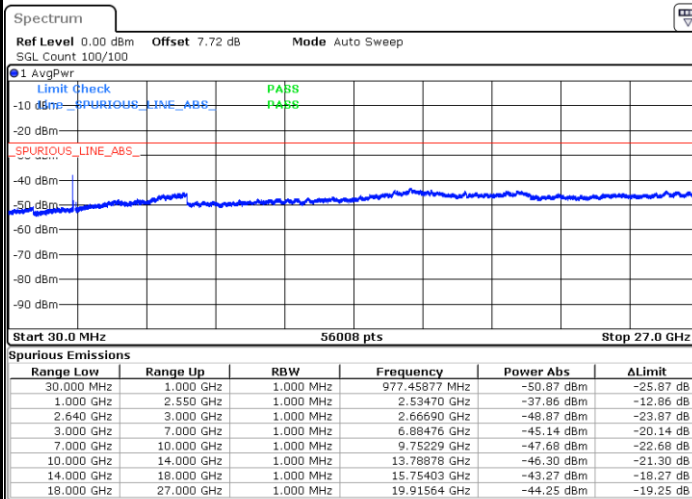
Highest Channel / 16QAM



Date: 28 DEC 2018 10:16:06

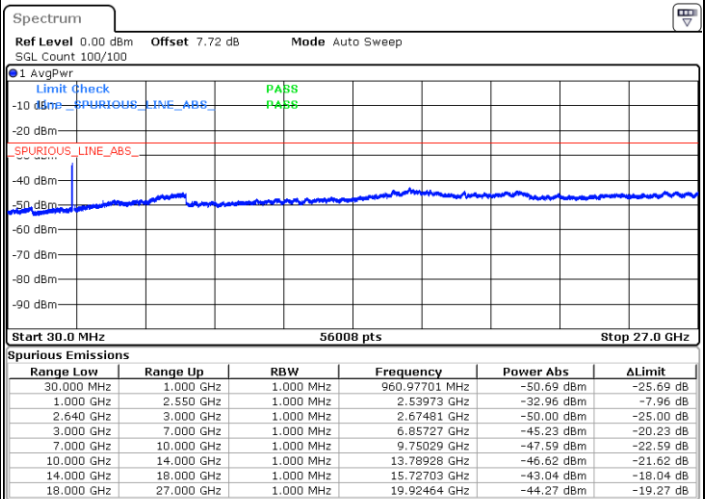
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 28 DEC 2018 10:17:01

Lowest Channel / 16QAM

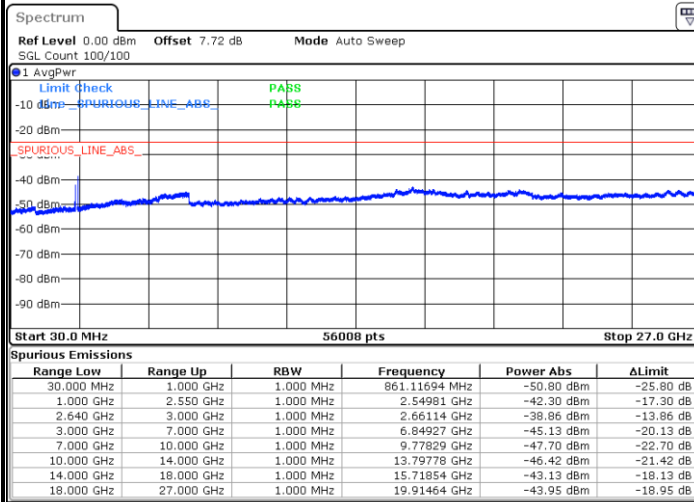


Date: 28 DEC 2018 10:17:55



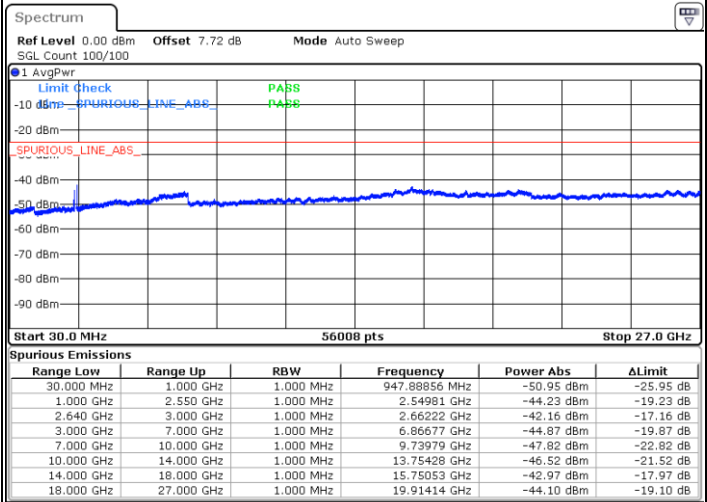
LTE Band 38 / 20MHz

Middle Channel / QPSK



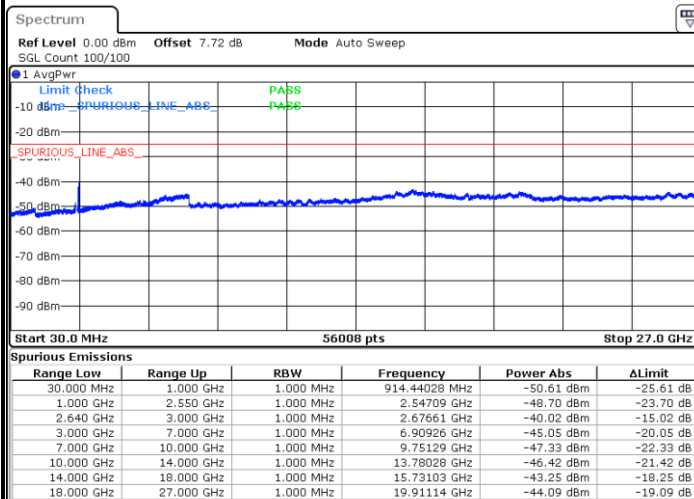
Date: 28 DEC 2018 10:18:50

Middle Channel / 16QAM



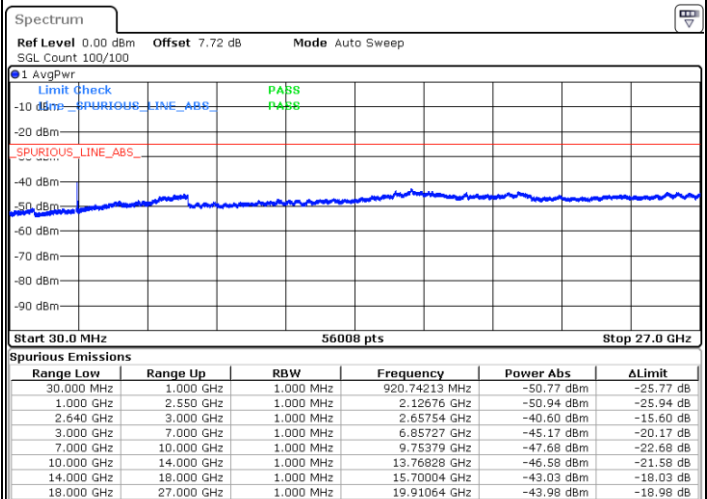
Date: 28 DEC 2018 10:19:45

Highest Channel / QPSK



Date: 28 DEC 2018 10:20:40

Highest Channel / 16QAM

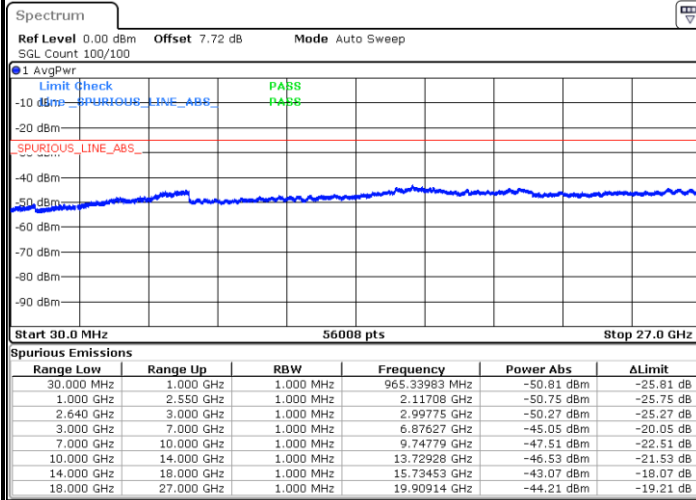


Date: 28 DEC 2018 10:21:35



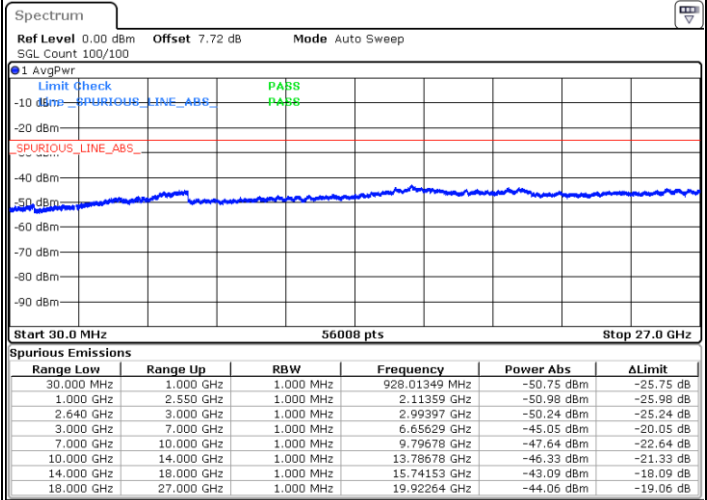
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



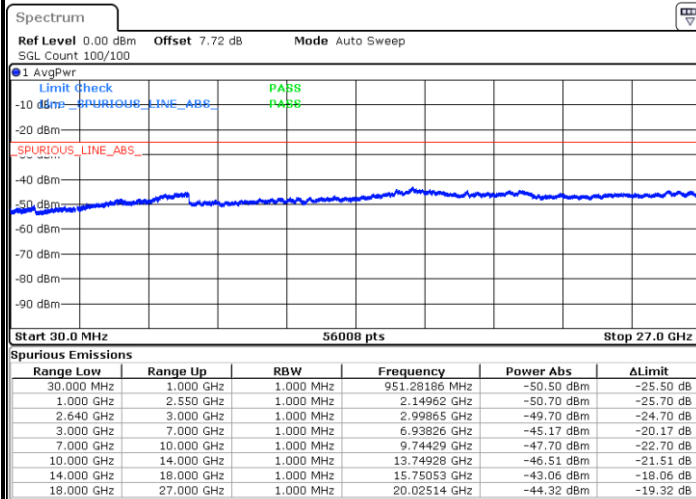
Date: 28 DEC 2018 10:22:30

Middle Channel / 64QAM



Date: 28 DEC 2018 10:23:24

Highest Channel / 64QAM

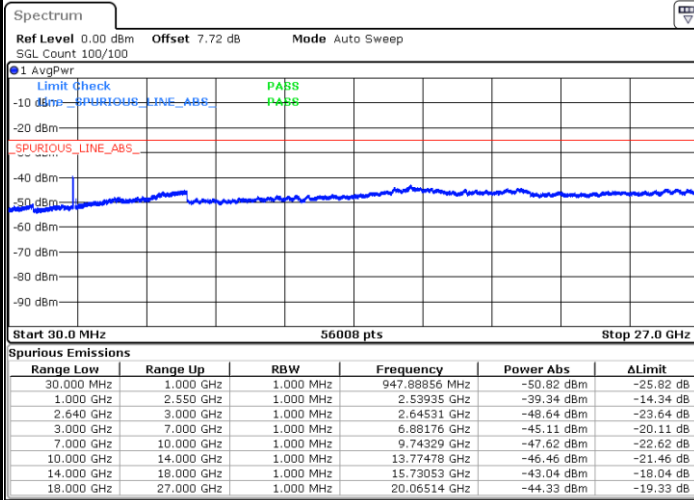


Date: 28 DEC 2018 10:24:19



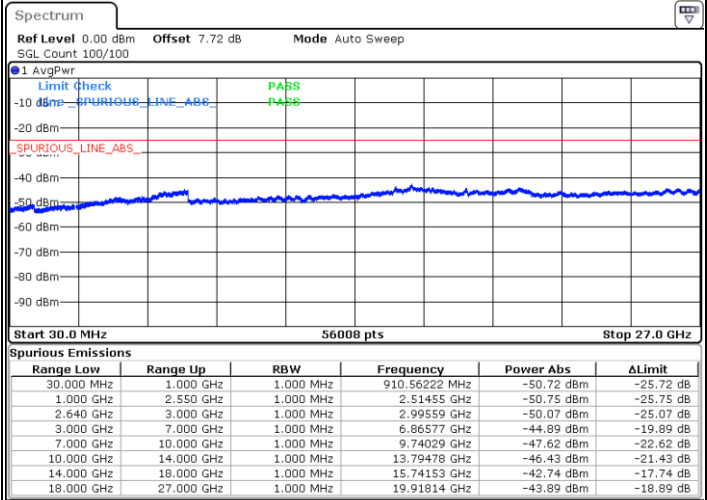
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



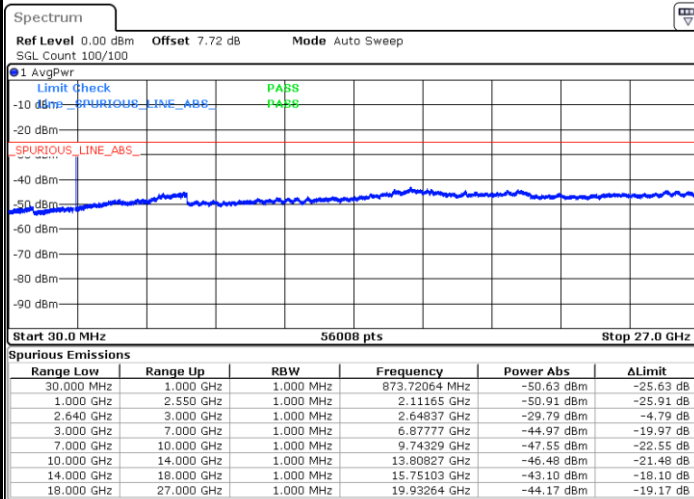
Date: 28 DEC 2018 10:25:14

Middle Channel / 64QAM



Date: 28 DEC 2018 10:26:09

Highest Channel / 64QAM

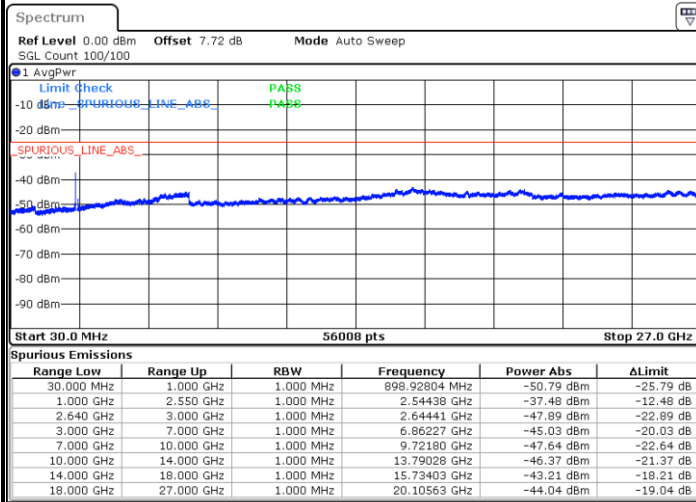


Date: 28 DEC 2018 10:27:04



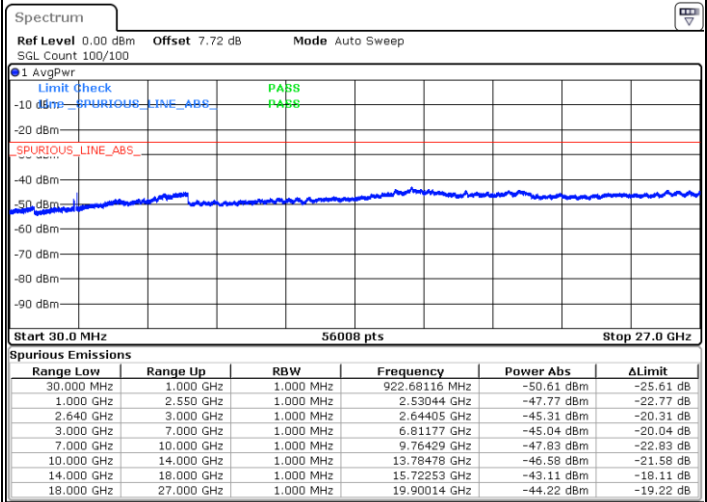
LTE Band 38 / 15MHz

Lowest Channel / 64QAM



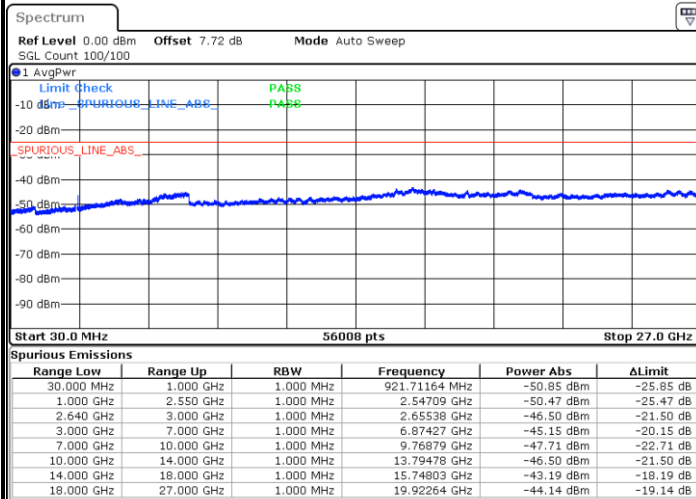
Date: 28 DEC 2018 10:27:59

Middle Channel / 64QAM



Date: 28 DEC 2018 10:28:54

Highest Channel / 64QAM

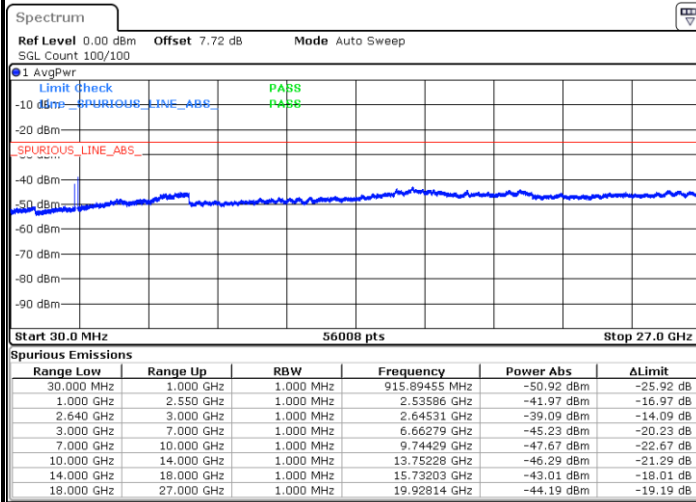


Date: 28 DEC 2018 10:29:49



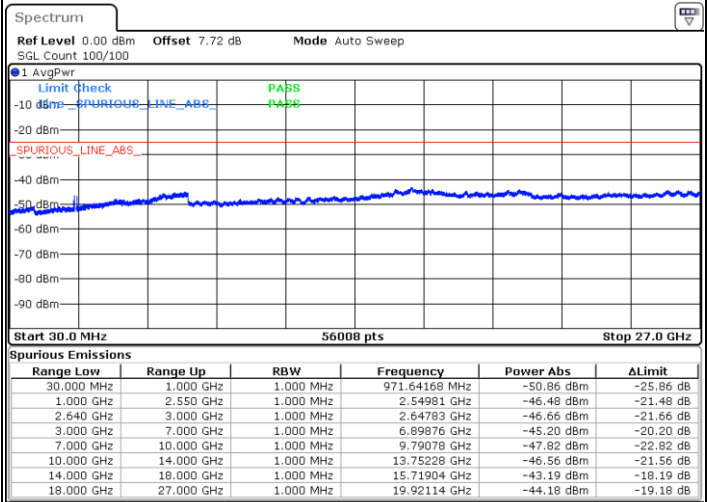
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



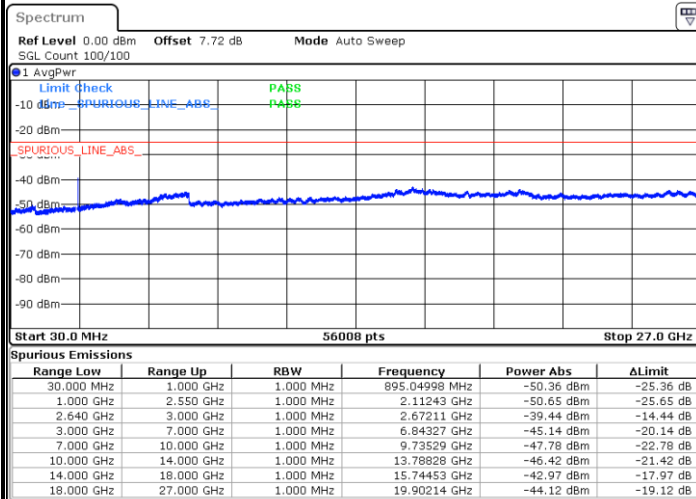
Date: 28 DEC 2018 10:30:43

Middle Channel / 64QAM



Date: 28 DEC 2018 10:31:38

Highest Channel / 64QAM



Date: 28 DEC 2018 10:32:33

**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	0.0034	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0020	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 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	0.0004	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0039	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 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	0.0037	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0045	
-10	Normal Voltage	0.0043	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0033	
20	Maximum Voltage	0.0067	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0030	

Note: Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0026	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 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	-43.06	-13	-30.06	-55.32	2.641	14.90	H
	5613	-56.30	-13	-43.30	-68.16	2.94	14.80	H
	7485	-51.85	-13	-38.85	-61.62	3.39	13.16	H
	3741	-45.62	-13	-32.62	-57.88	2.64	14.90	V
	5613	-56.53	-13	-43.53	-68.39	2.94	14.80	V
	7485	-51.51	-13	-38.51	-61.28	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	-54.35	-13	-41.35	-65.09	2.604	13.34	H
	5170.77	-56.75	-13	-43.75	-67.26	3.011	13.52	H
	6894	-54.91	-13	-41.91	-65.11	3.271	13.47	H
	3447	-53.35	-13	-40.35	-64.09	2.604	13.34	V
	5170.77	-58.41	-13	-45.41	-68.92	3.011	13.52	V
	6894	-54.40	-13	-41.40	-64.60	3.271	13.47	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	-63.07	-13	-50.07	-64.28	2.319	5.68	H
	2496	-62.91	-13	-49.91	-63.54	3.02	5.80	H
	4161	-62.19	-13	-49.19	-64.65	3.27	7.88	H
	1664	-66.24	-13	-53.24	-67.45	2.32	5.68	V
	2496	-67.01	-13	-54.01	-67.64	3.02	5.80	V
	4161	-57.84	-13	-44.84	-60.30	3.27	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	-54.44	-25	-29.44	-64.65	3.03	13.24	H
	7576	-43.46	-25	-18.46	-52.91	3.56	13.01	H
	10107	-57.64	-25	-32.64	-67.16	3.92	13.44	H
	5052	-54.08	-25	-29.08	-64.29	3.03	13.24	V
	7576	-37.54	-25	-12.54	-46.99	3.56	13.01	V
	10107	-57.99	-25	-32.99	-67.51	3.92	13.44	V

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

LTE Band 38 / 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	-54.05	-25	-29.05	-64.26	3.03	13.24	H
	7760	-48.46	-25	-23.46	-57.91	3.56	13.01	H
	10341	-58.05	-25	-33.05	-67.57	3.92	13.44	H
	5172	-57.74	-25	-32.74	-67.95	3.03	13.24	V
	7756	-42.20	-25	-17.20	-51.65	3.56	13.01	V
	10341	-58.81	-25	-33.81	-68.33	3.92	13.44	V

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