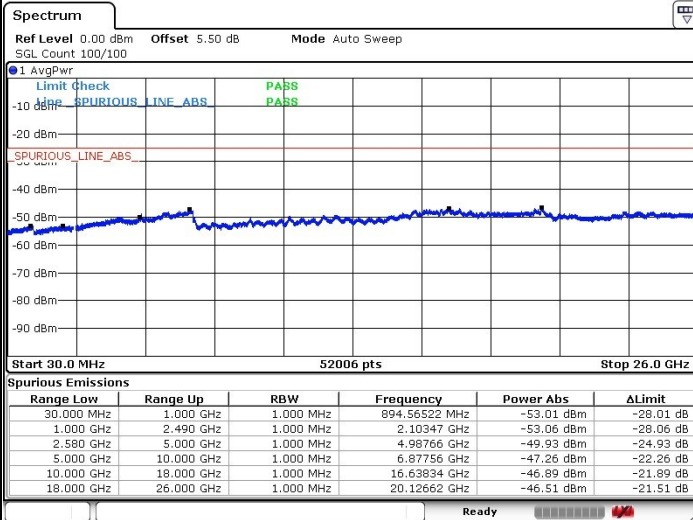




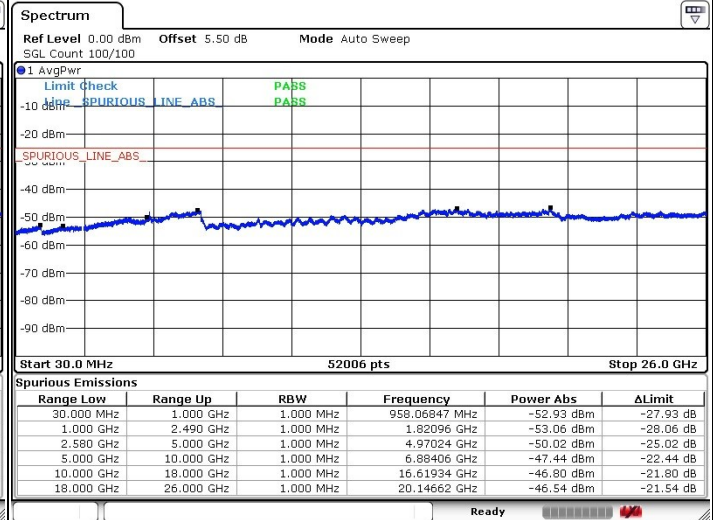
## LTE Band 7 / 20MHz+20MHz

## Middle Channel / QPSK

## Middle Channel / 16QAM

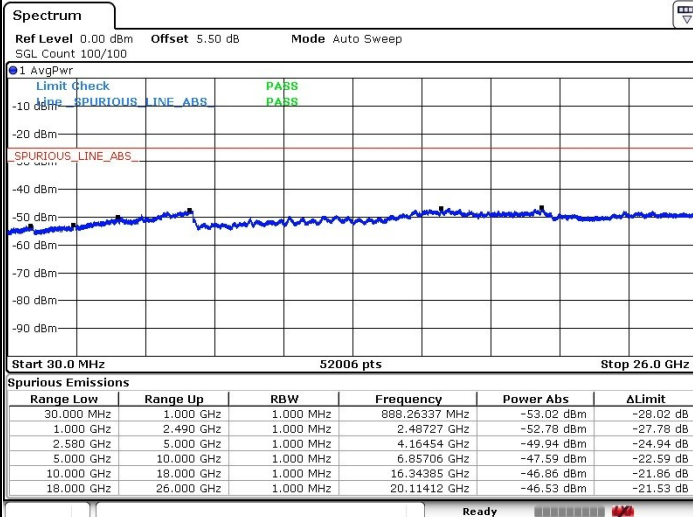


Date: 12 JUL 2018 09:19:08



Date: 12 JUL 2018 09:20:09

## Middle Channel / 64QAM

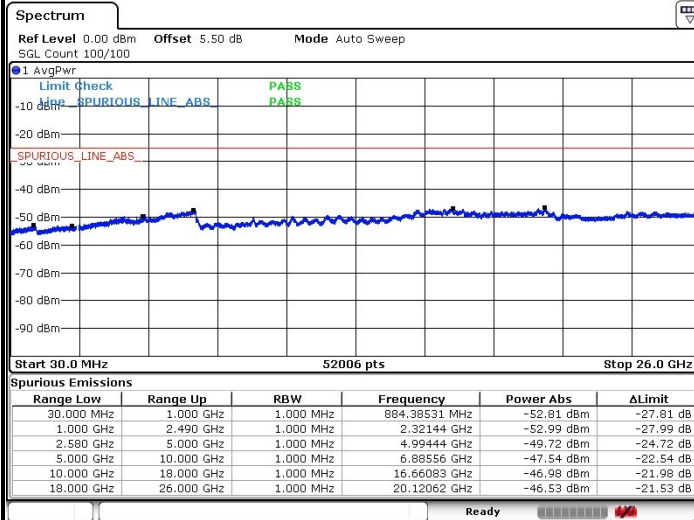


Date: 12 JUL 2018 09:21:07



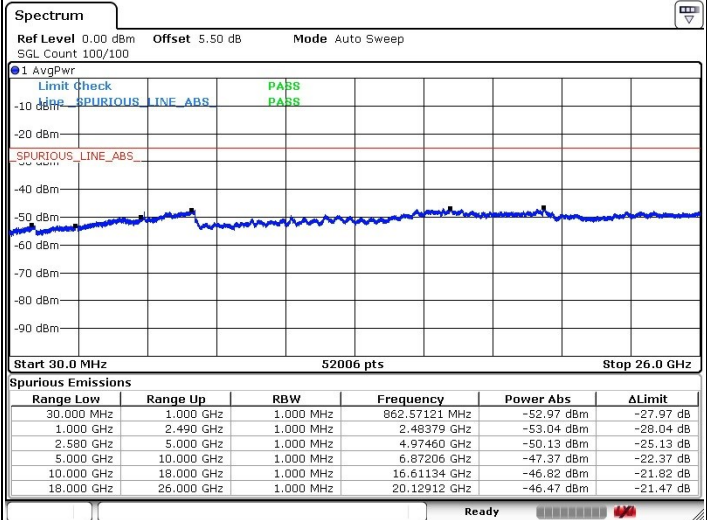
## LTE Band 7 / 20MHz+20MHz

## Highest Channel / QPSK



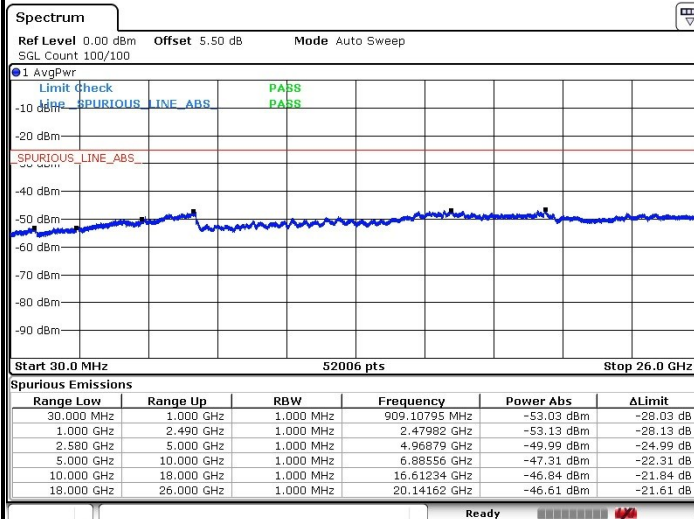
Date: 12 JUL 2018 09:33:25

## Highest Channel / 16QAM



Date: 12 JUL 2018 09:32:28

## Highest Channel / 64QAM



Date: 12 JUL 2018 09:31:29

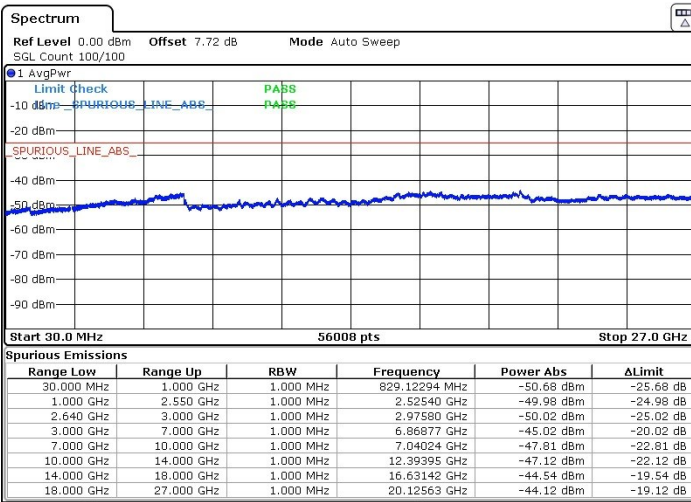


## LTE Band 38 / 15MHz+15MHz

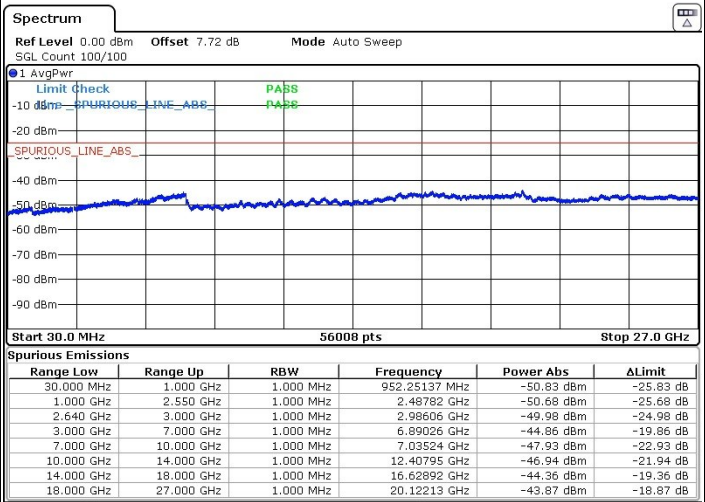
## QPSK

## Lowest Channel

## Middle Channel

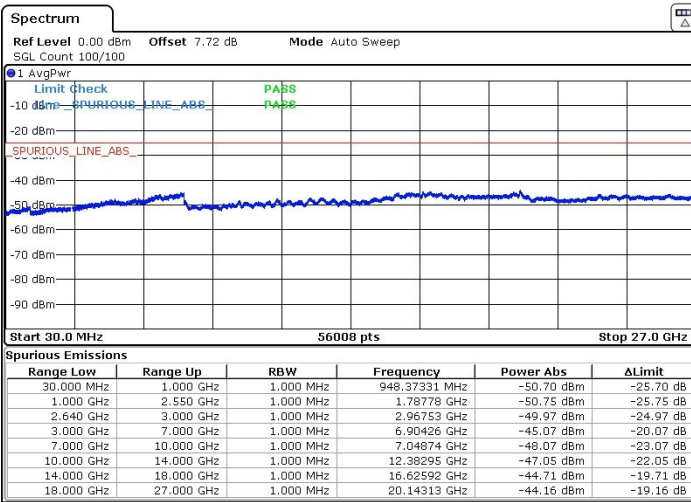


Date: 11.JUL.2018 11:08:06



Date: 11.JUL.2018 11:12:28

## Highest Channel



Date: 11.JUL.2018 11:14:03

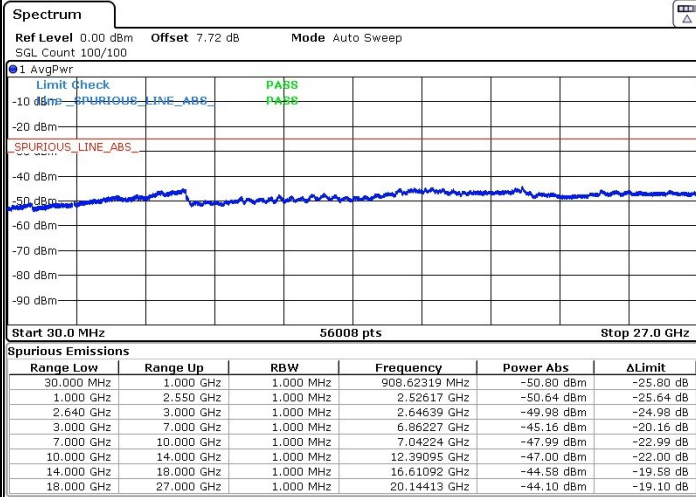


## LTE Band 38 / 15MHz+15MHz

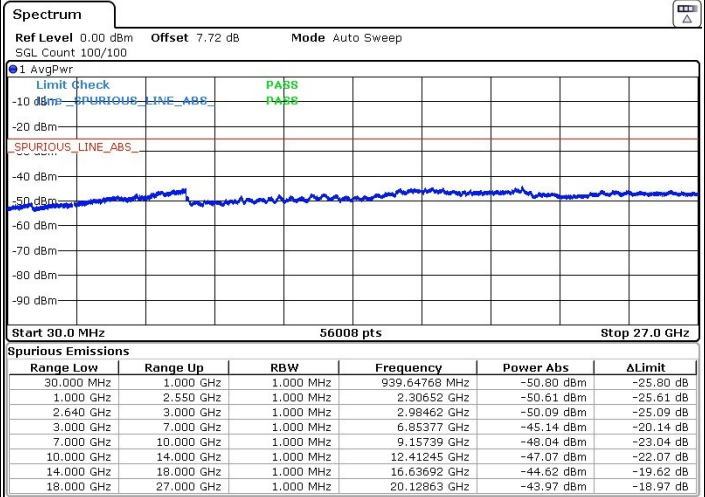
## 16QAM

## Lowest Channel

## Middle Channel

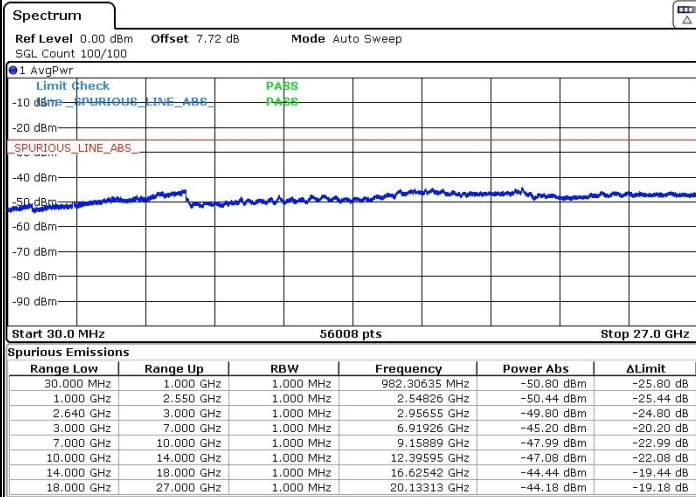


Date: 11.JUL.2018 11:07:09



Date: 11.JUL.2018 11:11:33

## Highest Channel



Date: 11.JUL.2018 11:15:04

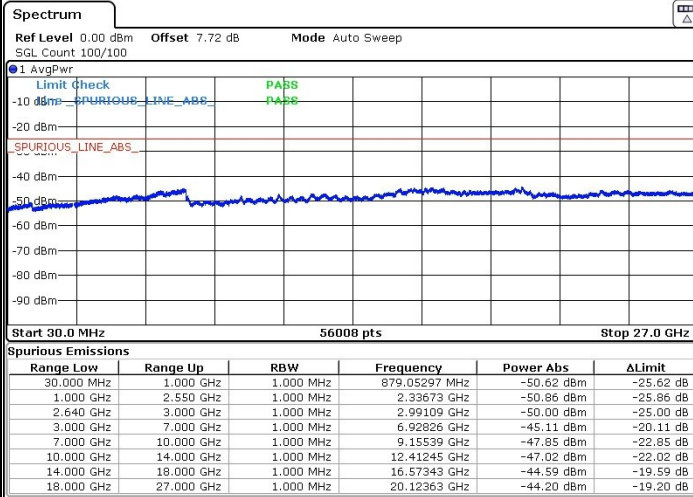


## LTE Band 38 / 15MHz+15MHz

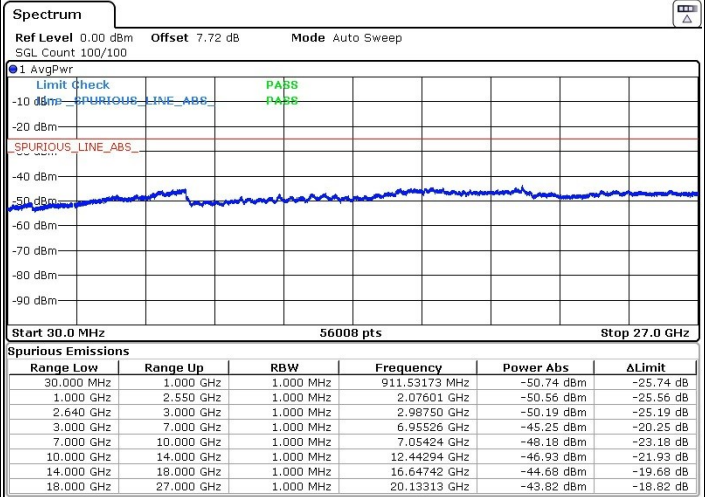
## 64QAM

## Lowest Channel

## Middle Channel

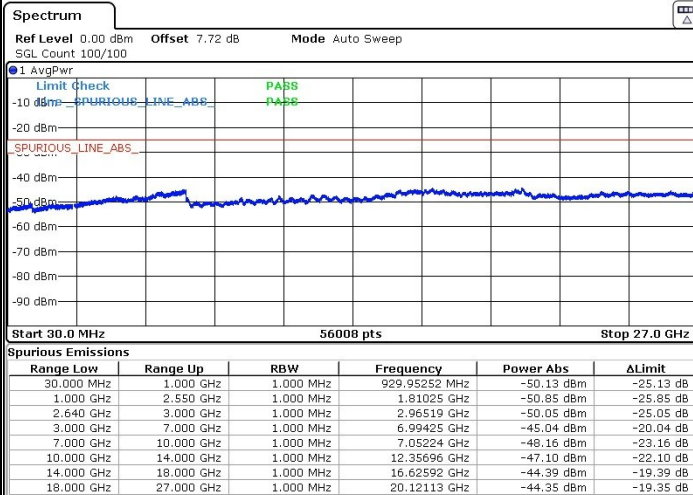


Date: 11.JUL.2018 11:04:05



Date: 11.JUL.2018 11:10:15

## Highest Channel



Date: 11.JUL.2018 11:15:57

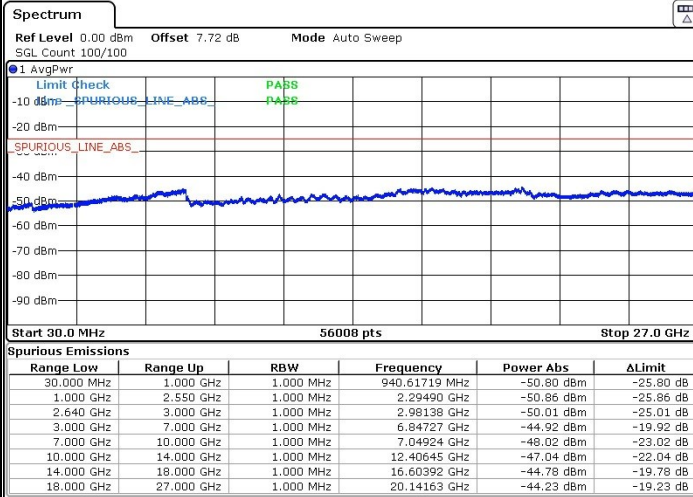


## LTE Band 38 / 20MHz+20MHz

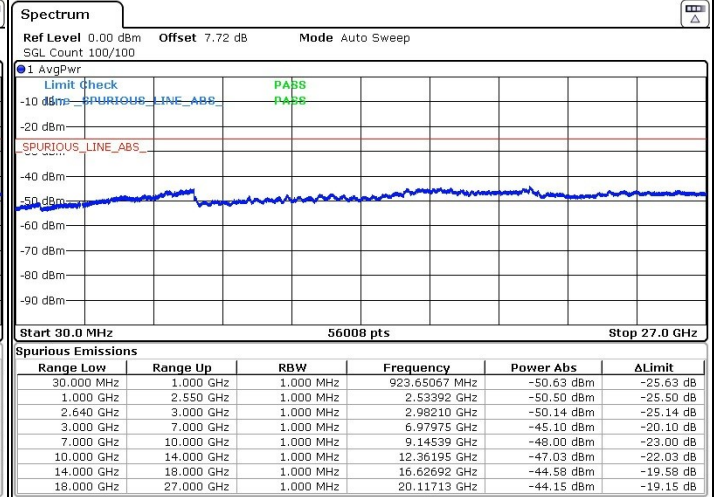
## QPSK

## Lowest Channel

## Middle Channel

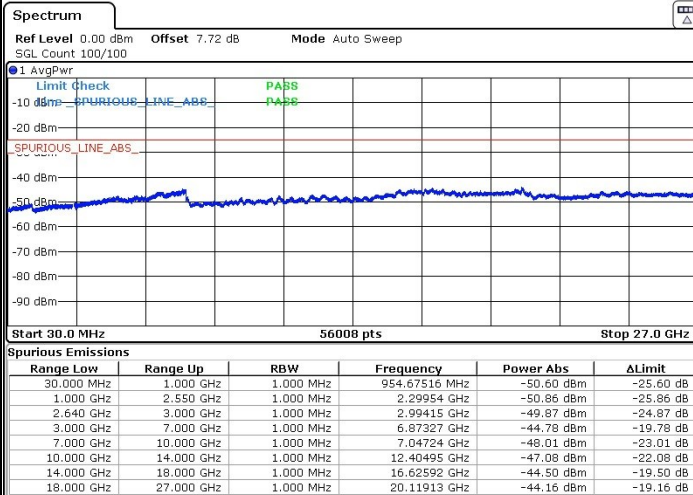


Date: 11.JUL.2018 10:46:51



Date: 11.JUL.2018 10:53:38

## Highest Channel



Date: 11.JUL.2018 10:55:35

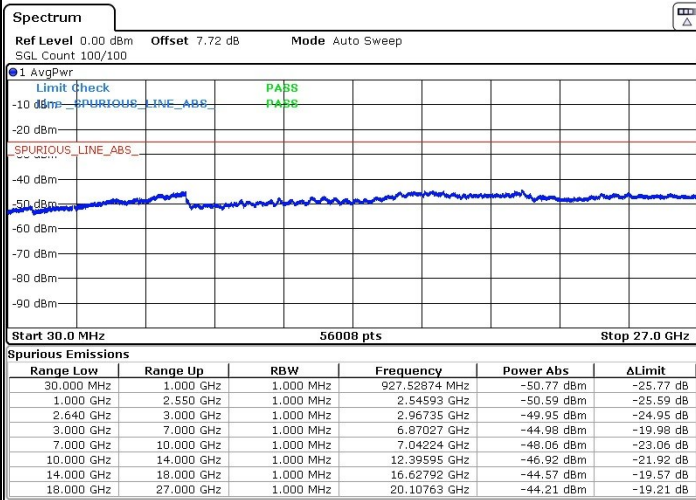


## LTE Band 38 / 20MHz+20MHz

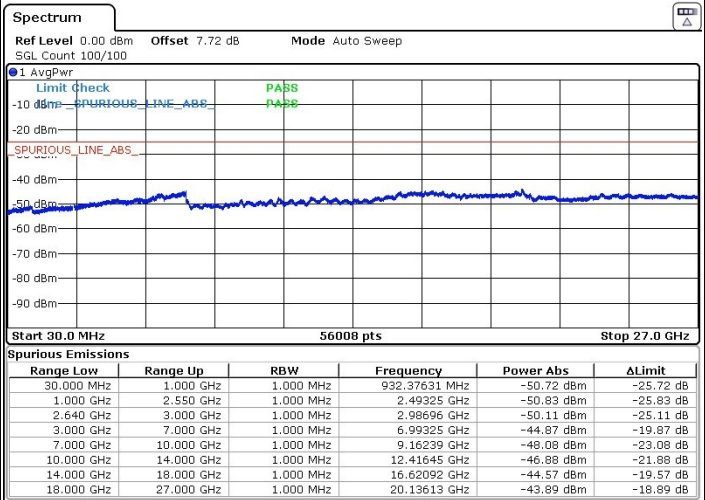
## 16QAM

## Lowest Channel

## Middle Channel

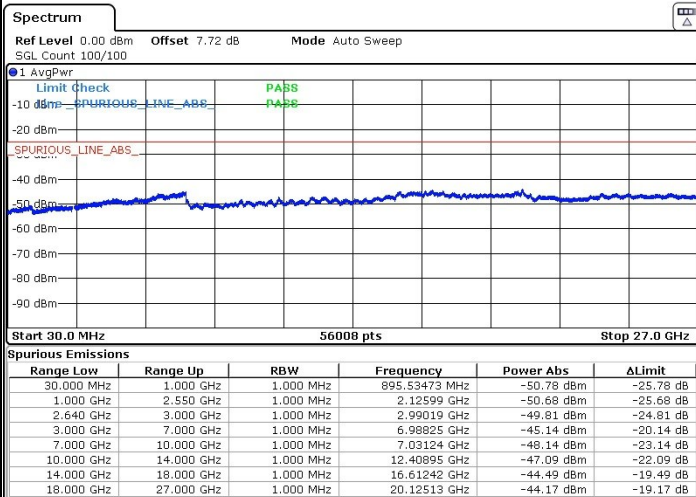


Date: 11.JUL.2018 10:48:19



Date: 11.JUL.2018 10:51:56

## Highest Channel



Date: 11.JUL.2018 10:56:46



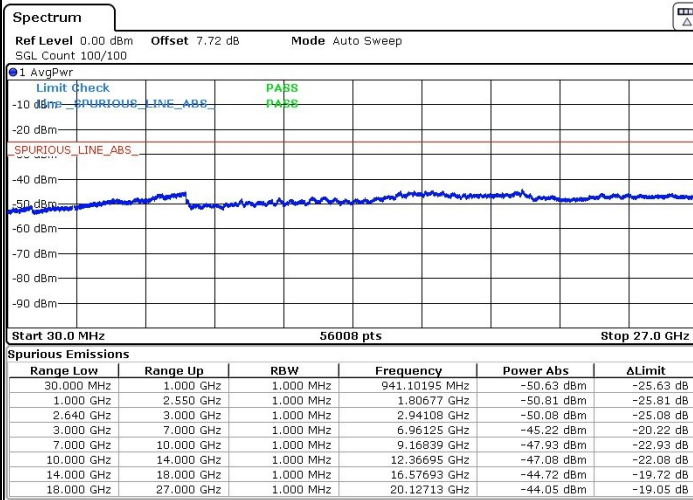


## LTE Band 38 / 20MHz+20MHz

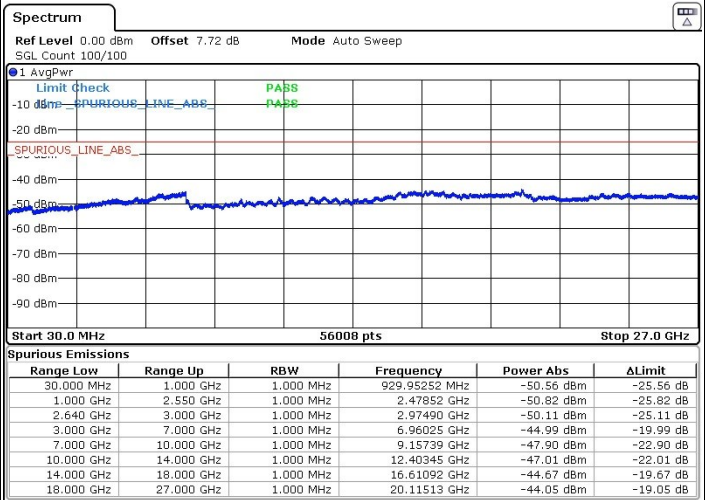
## 64QAM

## Lowest Channel

## Middle Channel

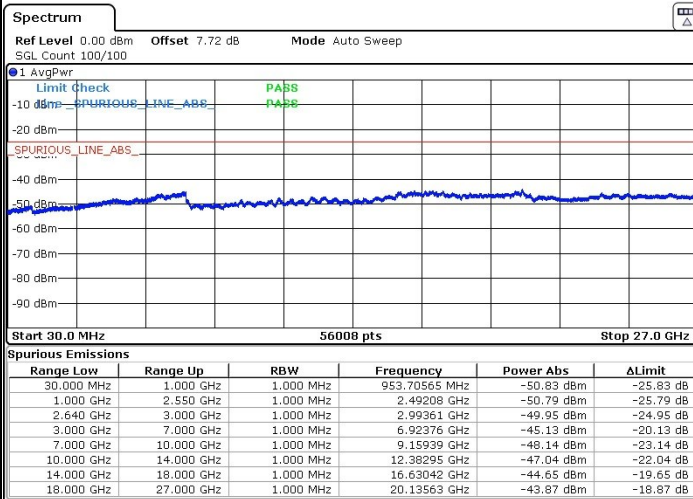


Date: 11.JUL.2018 10:49:19



Date: 11.JUL.2018 10:50:53

## Highest Channel



Date: 11.JUL.2018 10:57:44



**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	0.0011	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 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	0.0008	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0019	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 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	0.0018	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0044	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0050	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0041	

**Note:** Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 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	0.0005	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 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	0.0007	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 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

Note: Antenna 1 is Bottom Antenna, Antenna 2 is Top Antenna.

LTE Band 2 / 20MHz / QPSK for Ant 1								
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	-58.02	-13	-45.02	-59.74	5.08	6.80	H
	5613	-50.49	-13	-37.49	-52.16	8.03	9.70	H
	7485	-50.60	-13	-37.60	-52.98	9.43	11.81	H
	3741	-55.95	-13	-42.95	-57.67	5.08	6.80	V
	5613	-53.51	-13	-40.51	-55.18	8.03	9.70	V
	7485	-51.06	-13	-38.06	-53.44	9.43	11.81	V

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

LTE Band 2 / 20MHz / QPSK for Ant 2								
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	-57.91	-13	-44.91	-59.63	5.08	6.80	H
	5613	-51.84	-13	-38.84	-53.51	8.03	9.70	H
	7485	-50.62	-13	-37.62	-53.00	9.43	11.81	H
	3741	-56.50	-13	-43.50	-58.22	5.08	6.80	V
	5613	-55.41	-13	-42.41	-57.08	8.03	9.70	V
	7485	-50.91	-13	-37.91	-53.29	9.43	11.81	V

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



LTE Band 4 / 20MHz / QPSK for Ant 1								
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	-57.68	-13	-44.68	-61.65	4.87	8.84	H
	5172	-42.72	-13	-29.72	-44.16	7.70	9.14	H
	6894	-51.80	-13	-38.80	-53.49	8.98	10.66	H
	3447	-56.10	-13	-43.10	-60.07	4.87	8.84	V
	5172	-49.49	-13	-36.49	-50.93	7.70	9.14	V
	6894	-51.60	-13	-38.60	-53.29	8.98	10.66	V

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

LTE Band 4 / 20MHz / QPSK for Ant 2								
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	-55.22	-13	-42.22	-59.19	4.87	8.84	H
	5172	-47.85	-13	-34.85	-49.29	7.70	9.14	H
	6894	-51.78	-13	-38.78	-53.47	8.98	10.66	H
	3447	-54.87	-13	-41.87	-58.84	4.87	8.84	V
	5169	-49.93	-13	-36.93	-51.37	7.70	9.14	V
	6894	-51.75	-13	-38.75	-53.44	8.98	10.66	V

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





LTE Band 5 / 10MHz / QPSK for Ant 1								
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	-58.98	-13	-45.98	-60.89	1.14	5.20	H
	2496	-55.80	-13	-42.80	-58.43	1.12	5.90	H
	3327	-52.24	-13	-39.24	-55.45	1.34	6.70	H
	1664	-60.92	-13	-47.92	-62.83	1.14	5.20	V
	2496	-55.25	-13	-42.25	-57.88	1.12	5.90	V
	3327	-50.34	-13	-37.34	-53.55	1.34	6.70	V

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

LTE Band 5 / 10MHz / QPSK for Ant 2								
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	-57.89	-13	-44.89	-59.80	1.14	5.20	H
	2496	-50.78	-13	-37.78	-53.41	1.12	5.90	H
	3327	-48.04	-13	-35.04	-51.25	1.34	6.70	H
	1664	-55.14	-13	-42.14	-57.05	1.14	5.20	V
	2496	-49.40	-13	-36.40	-52.03	1.12	5.90	V
	3327	-49.41	-13	-36.41	-52.62	1.34	6.70	V

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



LTE Band 7 / 20MHz / QPSK for Ant 1								
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	-63.81	-25	-38.81	-71.17	1.76	9.12	H
	7578	-61.66	-25	-36.66	-71.63	2.16	12.13	H
	10107	-60.11	-25	-35.11	-69.99	2.22	12.10	H
	5052	-61.97	-25	-36.97	-69.33	1.76	9.12	V
	7578	-61.44	-25	-36.44	-71.41	2.16	12.13	V
	10107	-59.85	-25	-34.85	-69.73	2.22	12.10	V

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

LTE Band 7 / 20MHz / QPSK for Ant 2								
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	-63.64	-25	-38.64	-71.00	1.76	9.12	H
	7580	-55.91	-25	-30.91	-65.88	2.16	12.13	H
	10107	-60.04	-25	-35.04	-69.92	2.22	12.10	H
	5052	-62.43	-25	-37.43	-69.79	1.76	9.12	V
	7576	-58.88	-25	-33.88	-68.85	2.16	12.13	V
	10107	-59.79	-25	-34.79	-69.67	2.22	12.10	V

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



LTE Band 38 / 20MHz / QPSK for Ant 1								
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	-62.45	-25	-37.45	-69.43	2.40	9.38	H
	7760	-62.01	-25	-37.01	-71.56	2.97	12.51	H
	10341	-60.67	-25	-35.67	-69.28	3.49	12.10	H
	5172	-59.67	-25	-34.67	-66.65	2.40	9.38	V
	7758	-60.67	-25	-35.67	-70.22	2.97	12.51	V
	10341	-60.59	-25	-35.59	-69.20	3.49	12.10	V

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

LTE Band 38 / 20MHz / QPSK for Ant 2								
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	-62.93	-25	-37.93	-69.91	2.40	9.38	H
	7758	-61.94	-25	-36.94	-71.49	2.97	12.51	H
	10341	-60.80	-25	-35.80	-69.41	3.49	12.10	H
	5172	-62.15	-25	-37.15	-69.13	2.40	9.38	V
	7758	-61.80	-25	-36.80	-71.35	2.97	12.51	V
	10341	-60.55	-25	-35.55	-69.16	3.49	12.10	V

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

**For CA**

LTE Band 7 CA / 20M+20M / QPSK for Ant 1								
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	5032	-63.33	-25	-38.33	-70.69	1.76	9.12	H
	7548	-61.70	-25	-36.70	-71.67	2.16	12.13	H
	10062	-59.40	-25	-34.40	-69.28	2.22	12.10	H
	5032	-61.67	-25	-36.67	-69.03	1.76	9.12	V
	7548	-59.10	-25	-34.10	-69.07	2.16	12.13	V
	10062	-59.96	-25	-34.96	-69.84	2.22	12.10	V

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

LTE Band 7 CA / 20M+20M / QPSK for Ant 2								
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	5032	-61.63	-25	-36.63	-68.99	1.76	9.12	H
	7548	-59.83	-25	-34.83	-69.80	2.16	12.13	H
	10062	-59.15	-25	-34.15	-69.03	2.22	12.10	H
	5032	-58.89	-25	-33.89	-66.25	1.76	9.12	V
	7548	-60.44	-25	-35.44	-70.41	2.16	12.13	V
	10062	-59.80	-25	-34.80	-69.68	2.22	12.10	V

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



LTE Band 38 CA / 20M+20M / QPSK for Ant 1								
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	5152	-61.53	-25	-36.53	-68.51	2.40	9.38	H
	7728	-59.83	-25	-34.83	-69.38	2.97	12.51	H
	10305	-61.14	-25	-36.14	-69.75	3.49	12.10	H
	5152	-60.57	-25	-35.57	-67.55	2.40	9.38	V
	7728	-60.74	-25	-35.74	-70.29	2.97	12.51	V
	10305	-61.05	-25	-36.05	-69.66	3.49	12.10	V

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

LTE Band 38 CA / 20M+20M / QPSK for Ant 2								
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	5152	-61.45	-25	-36.45	-68.43	2.40	9.38	H
	7728	-61.92	-25	-36.92	-71.47	2.97	12.51	H
	10305	-60.80	-25	-35.80	-69.41	3.49	12.10	H
	5152	-61.11	-25	-36.11	-68.09	2.40	9.38	V
	7728	-62.05	-25	-37.05	-71.60	2.97	12.51	V
	10305	-60.43	-25	-35.43	-69.04	3.49	12.10	V

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