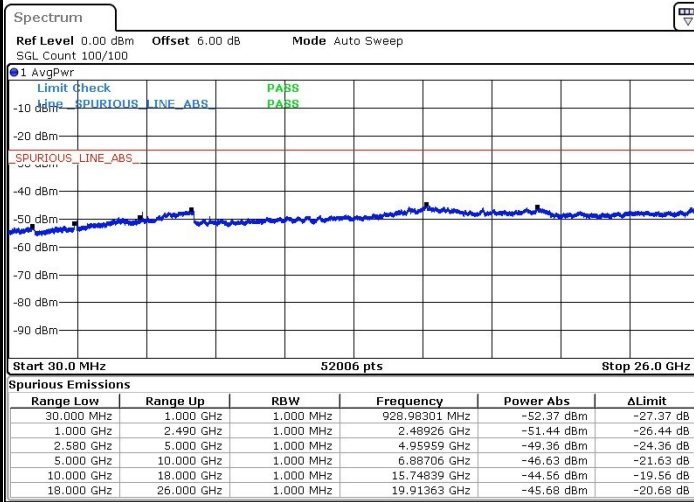




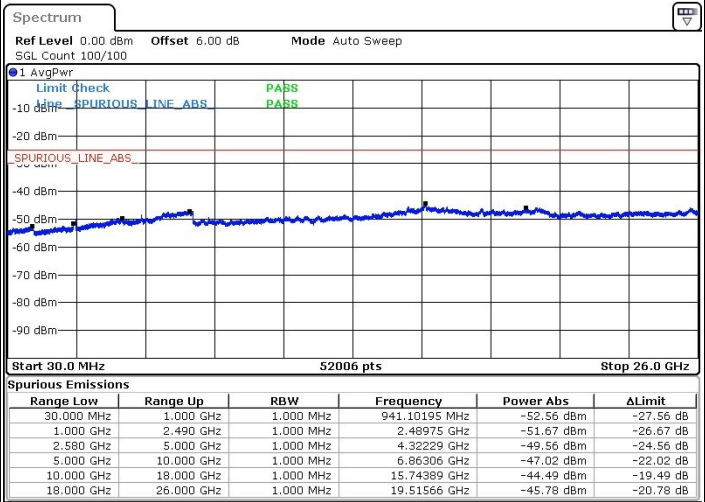
## LTE Band 7 / 20MHz+20MHz

## Middle Channel / QPSK



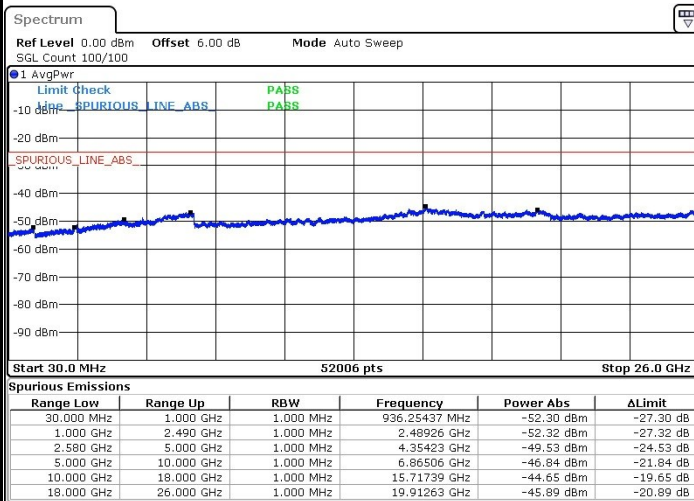
Date: 31.JUL.2019 12:00:20

## Middle Channel / 16QAM



Date: 31.JUL.2019 11:56:08

## Middle Channel / 64QAM

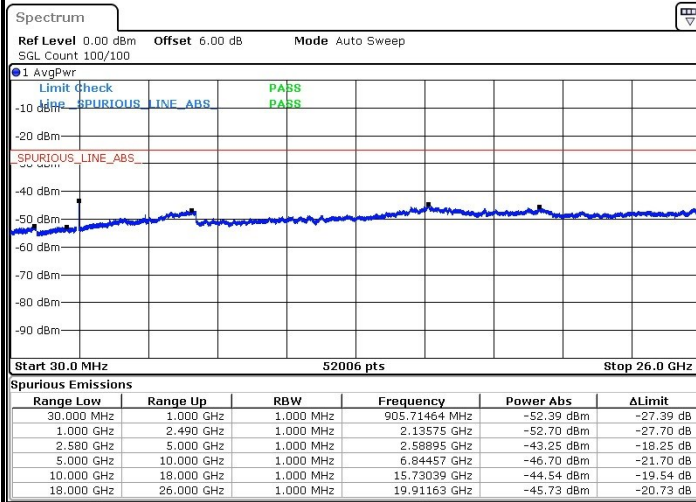


Date: 31.JUL.2019 11:55:12



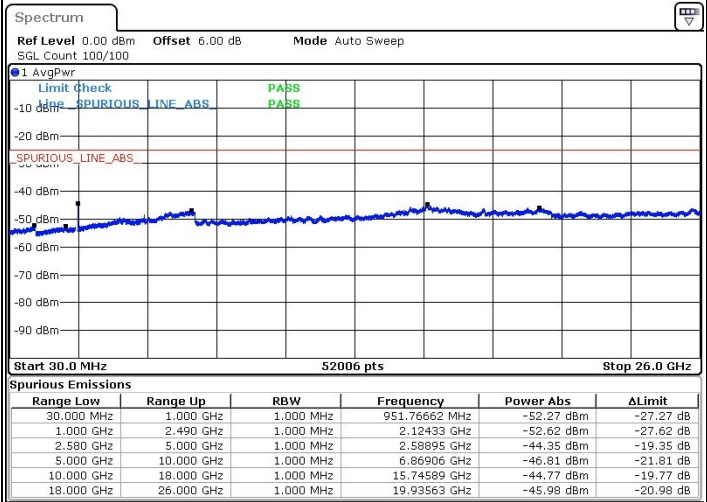
## LTE Band 7 / 20MHz+20MHz

## Highest Channel / QPSK



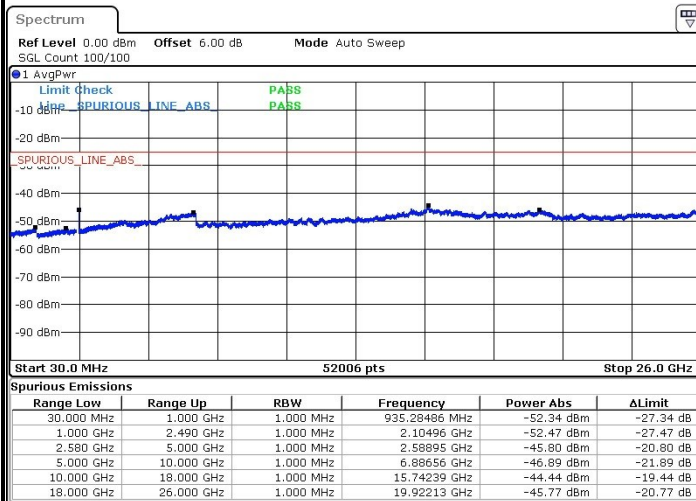
Date: 31.JUL.2019 13:47:51

## Highest Channel / 16QAM



Date: 31.JUL.2019 13:49:17

## Highest Channel / 64QAM



Date: 31.JUL.2019 13:51:48

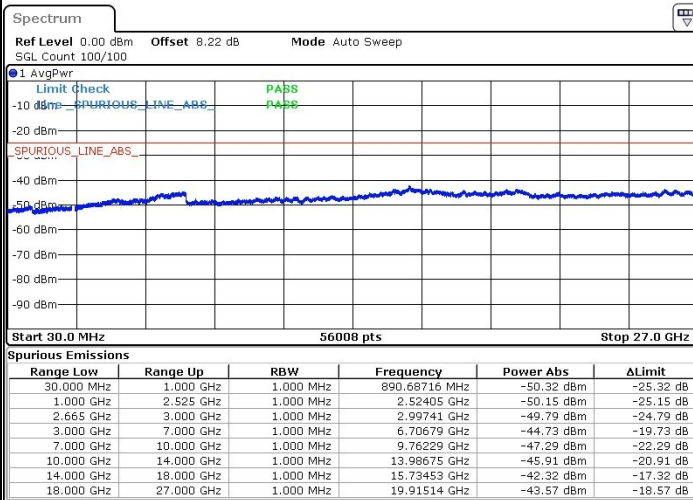


## LTE Band 38 / 15MHz+15MHz

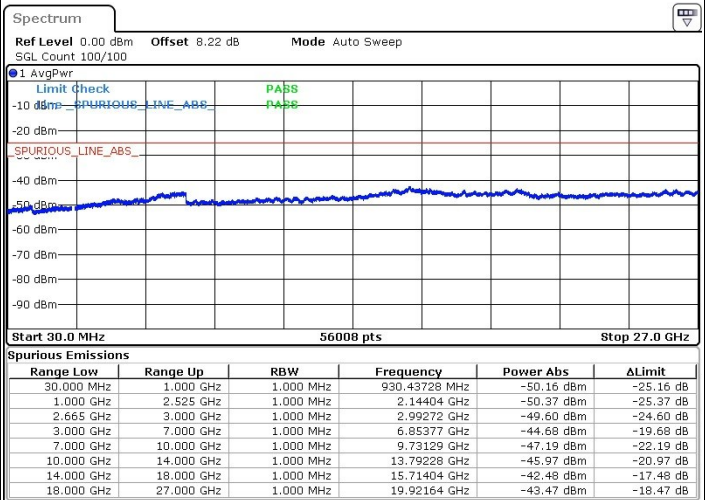
## QPSK

## Lowest Channel

## Middle Channel



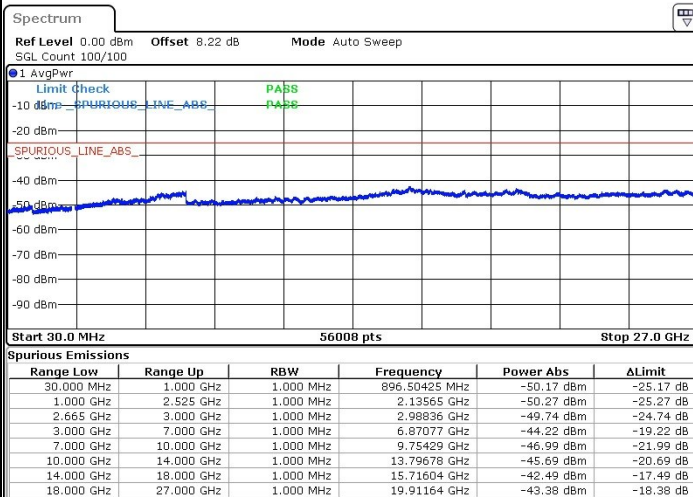
Date: 29 JUL 2019 09:27:42



Date: 29 JUL 2019 09:26:14

## Highest Channel

## N/A



Date: 29 JUL 2019 09:21:34

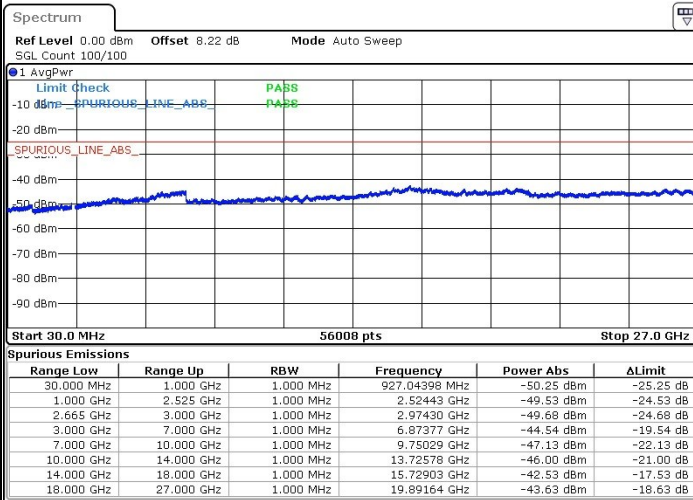


## LTE Band 38 / 15MHz+15MHz

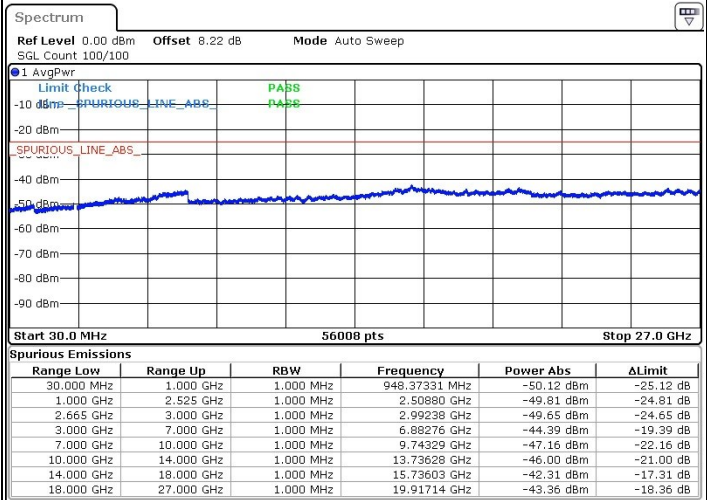
## 16QAM

## Lowest Channel

## Middle Channel



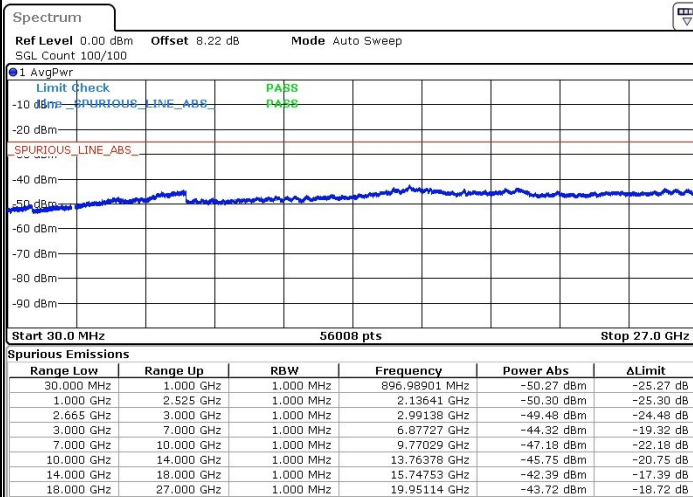
Date: 29 JUL 2019 09:28:36



Date: 29 JUL 2019 09:25:22

## Highest Channel

## N/A



Date: 29 JUL 2019 09:22:25

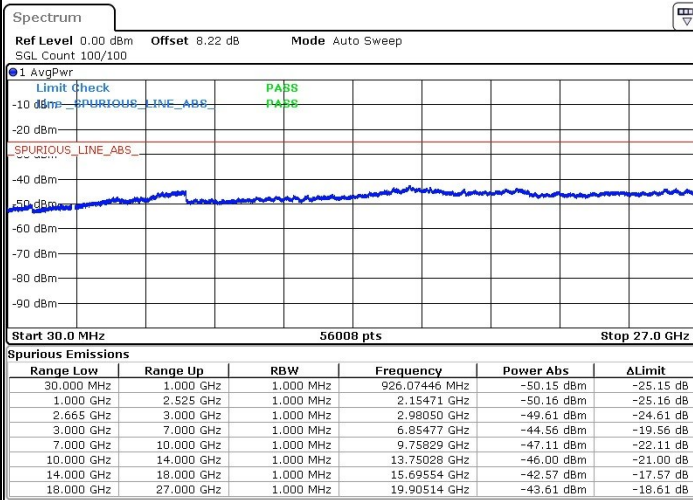


## LTE Band 38 / 15MHz+15MHz

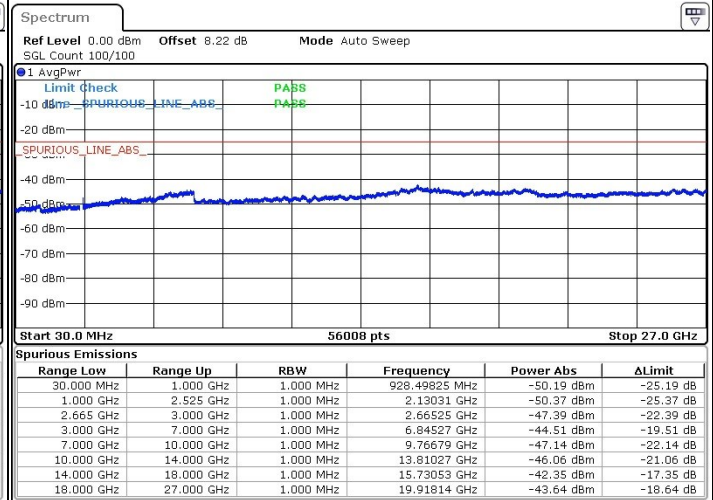
## 64QAM

## Lowest Channel

## Middle Channel



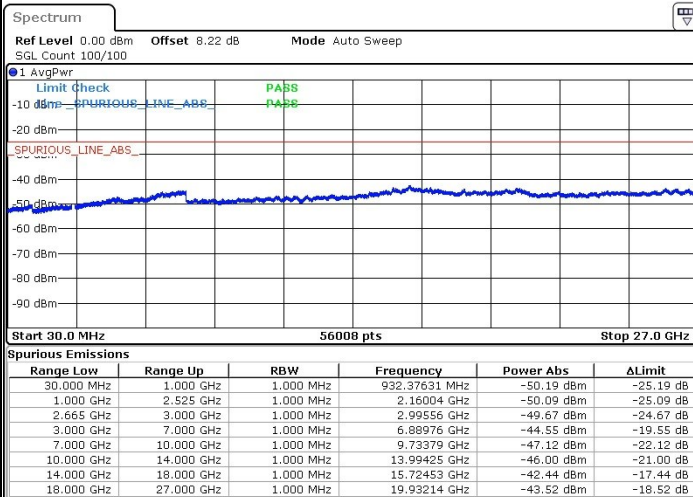
Date: 29 JUL 2019 09:29:26



Date: 29 JUL 2019 09:24:29

## Highest Channel

## N/A



Date: 29 JUL 2019 09:23:16

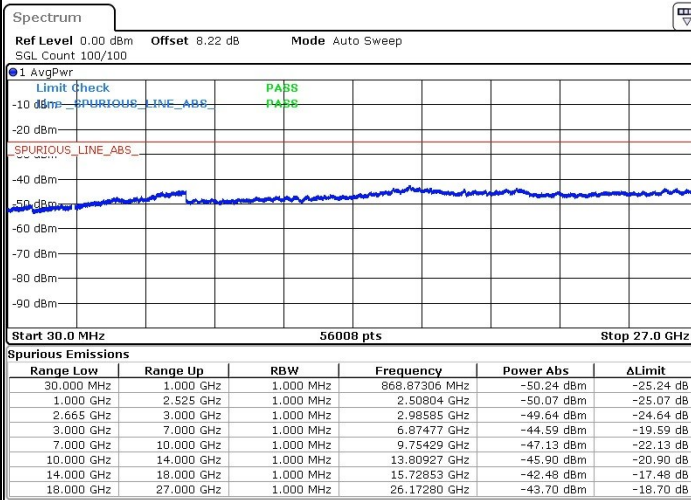


## LTE Band 38 / 20MHz+20MHz

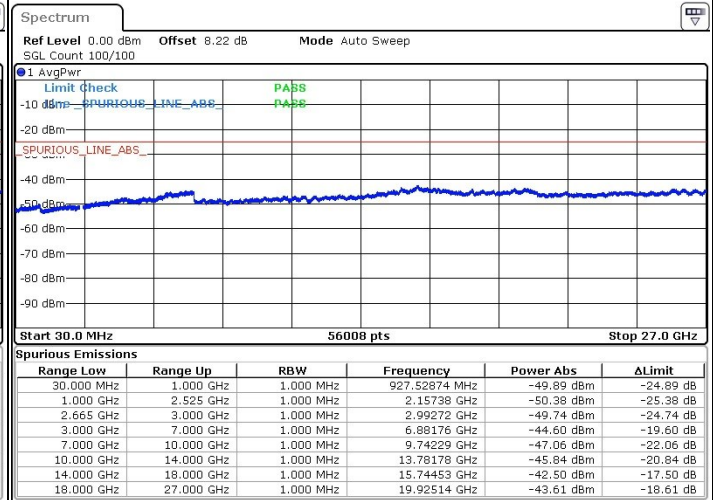
## QPSK

## Lowest Channel

## Middle Channel



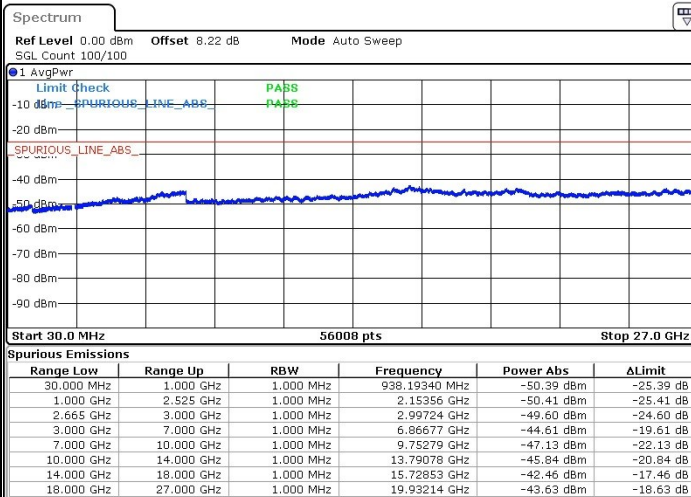
Date: 29 JUL 2019 09:41:28



Date: 29 JUL 2019 09:46:29

## Highest Channel

## N/A



Date: 29 JUL 2019 09:51:13

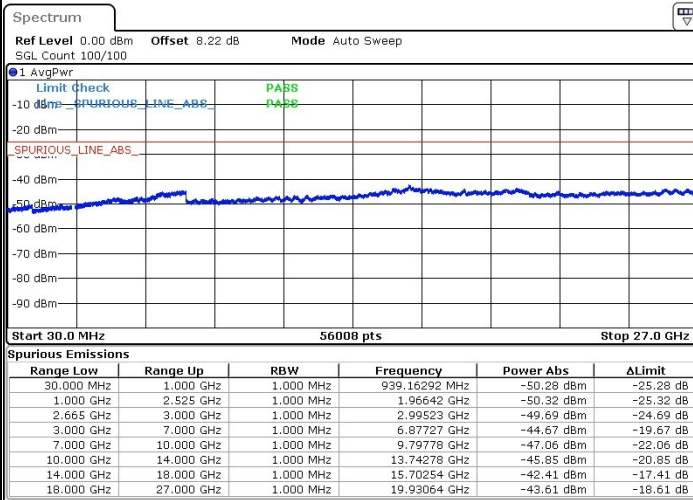


## LTE Band 38 / 20MHz+20MHz

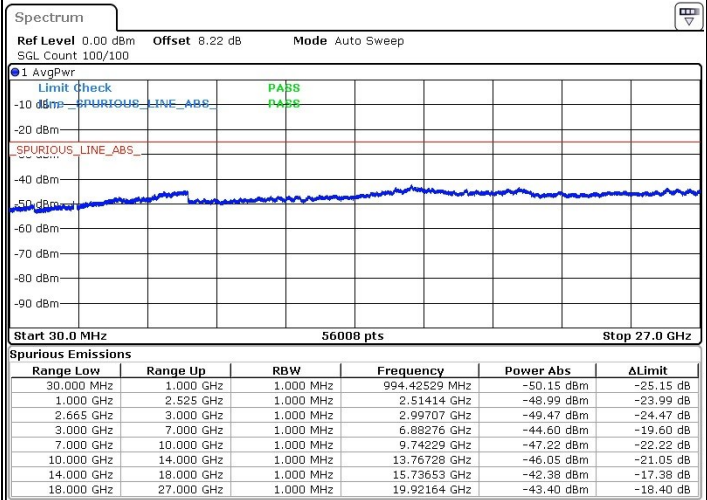
## 16QAM

## Lowest Channel

## Middle Channel



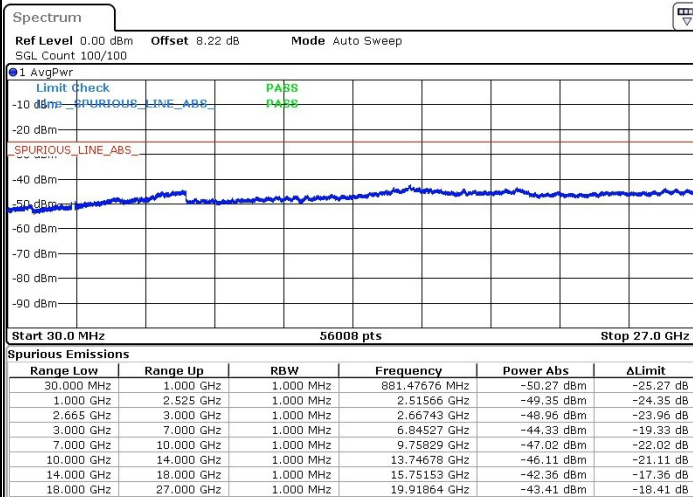
Date: 29 JUL 2019 09:42:29



Date: 29 JUL 2019 09:45:36

## Highest Channel

## N/A



Date: 29 JUL 2019 09:52:23



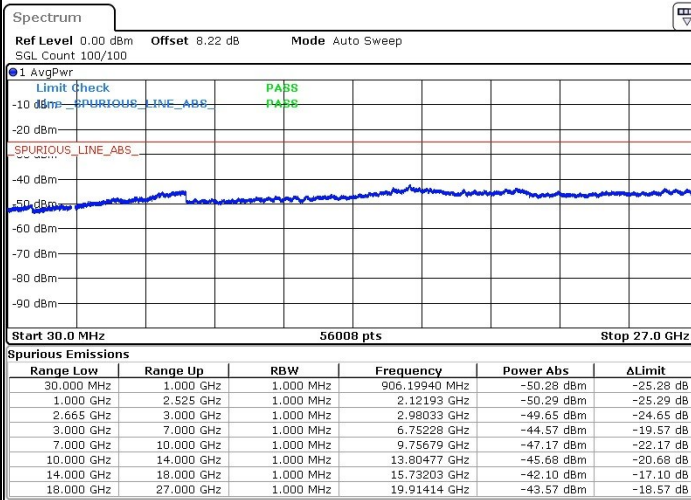


## LTE Band 38 / 20MHz+20MHz

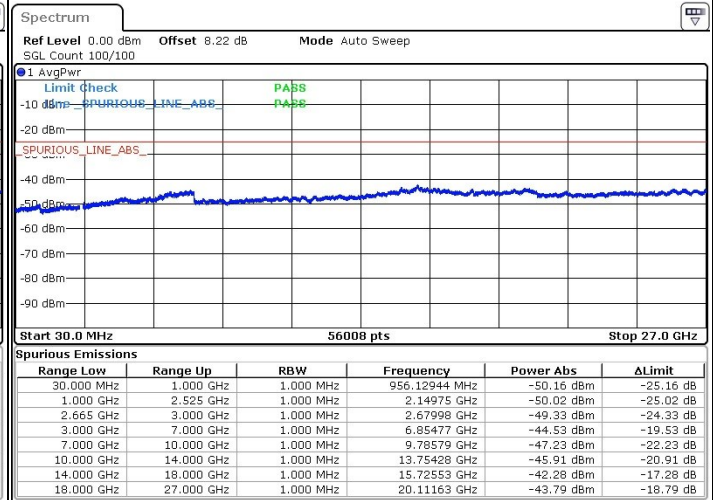
## 64QAM

## Lowest Channel

## Middle Channel



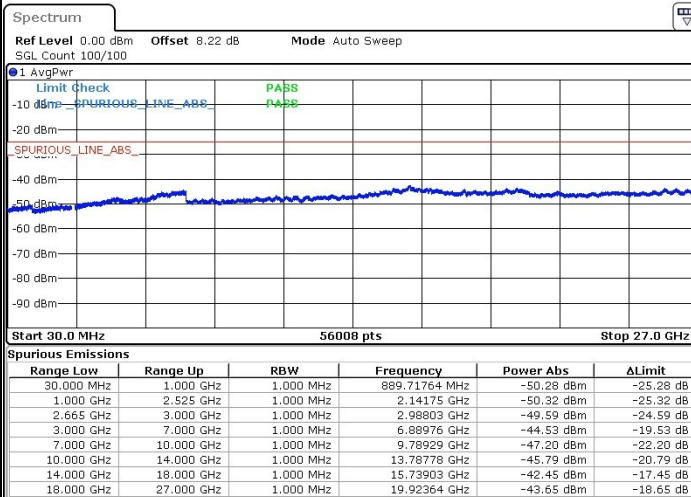
Date: 29 JUL 2019 09:43:31



Date: 29 JUL 2019 09:44:46

## Highest Channel

## N/A



Date: 29 JUL 2019 09:53:27



## 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	0.0003	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0052	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

**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	0.0001	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

**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	0.0003	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0056	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0052	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0057	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

**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	0.0026	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

**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	0.0023	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0028	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

**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	3742	-56.81	-13	-43.81	-69.07	2.641	14.90	H
	5613	-49.25	-13	-36.25	-61.11	2.94	14.80	H
	7488	-49.43	-13	-36.43	-59.20	3.39	13.16	H
	3741	-56.70	-13	-43.70	-68.96	2.64	14.90	V
	5613	-53.42	-13	-40.42	-65.28	2.94	14.80	V
	7488	-49.41	-13	-36.41	-59.18	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	-53.36	-13	-40.36	-64.10	2.604	13.34	H
	5172	-50.07	-13	-37.07	-60.58	3.011	13.52	H
	6894	-51.69	-13	-38.69	-61.89	3.271	13.47	H
	3447	-52.99	-13	-39.99	-63.73	2.604	13.34	V
	5170	-49.76	-13	-36.76	-60.27	3.011	13.52	V
	6894	-48.84	-13	-35.84	-59.04	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	-59.70	-13	-46.70	-66.67	1.58	10.70	H
	2496	-53.00	-13	-40.00	-61.25	2.102	12.50	H
	3330	-63.82	-13	-50.82	-72.71	2.856	13.90	H
	1664	-56.40	-13	-43.40	-63.37	1.58	10.70	V
	2496	-56.38	-13	-43.38	-64.63	2.10	12.50	V
	3330	-63.48	-13	-50.48	-72.37	2.86	13.90	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	-60.67	-25	-35.67	-70.88	3.03	13.24	H
	7580	-52.65	-25	-27.65	-62.10	3.56	13.01	H
	10100	-53.95	-25	-28.95	-63.47	3.92	13.44	H
	5052	-62.32	-25	-37.32	-72.53	3.03	13.24	V
	7580	-53.89	-25	-28.89	-63.34	3.56	13.01	V
	10100	-54.65	-25	-29.65	-64.17	3.92	13.44	V

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

LTE Band 38 / 20MHz / 16QAM								
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	-58.33	-25	-33.33	-68.54	3.03	13.24	H
	7760	-49.30	-25	-24.30	-58.75	3.56	13.01	H
	10344	-55.58	-25	-30.58	-65.10	3.92	13.44	H
	12930	-52.49	-25	-27.49	-62.41	4.44	14.36	H
	5172	-61.29	-25	-36.29	-71.50	3.03	13.24	V
	7756	-54.96	-25	-29.96	-64.41	3.56	13.01	V
	10344	-50.30	-25	-25.30	-59.82	3.92	13.44	V
	12930	-55.18	-25	-30.18	-65.10	4.44	14.36	V

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



**For CA:**

LTE Band 7C_CA / 20M+20M / 16QAM								
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	-63.42	-25	-38.42	-73.63	3.03	13.24	H
	7548	-57.12	-25	-32.12	-66.57	3.56	13.01	H
	10060	-56.60	-25	-31.60	-66.12	3.92	13.44	H
	5032	-65.57	-25	-40.57	-75.78	3.03	13.24	V
	7548	-57.95	-25	-32.95	-67.40	3.56	13.01	V
	10060	-58.44	-25	-33.44	-67.96	3.92	13.44	V

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

LTE Band 38C_CA / 20M+20M / 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	5152	-65.11	-25	-40.11	-75.32	3.03	13.24	H
	7728	-60.33	-25	-35.33	-69.78	3.56	13.01	H
	10300	-57.55	-25	-32.55	-67.07	3.92	13.44	H
	5152	-65.53	-25	-40.53	-75.74	3.03	13.24	V
	7728	-58.93	-25	-33.93	-68.38	3.56	13.01	V
	10300	-57.59	-25	-32.59	-67.11	3.92	13.44	V

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