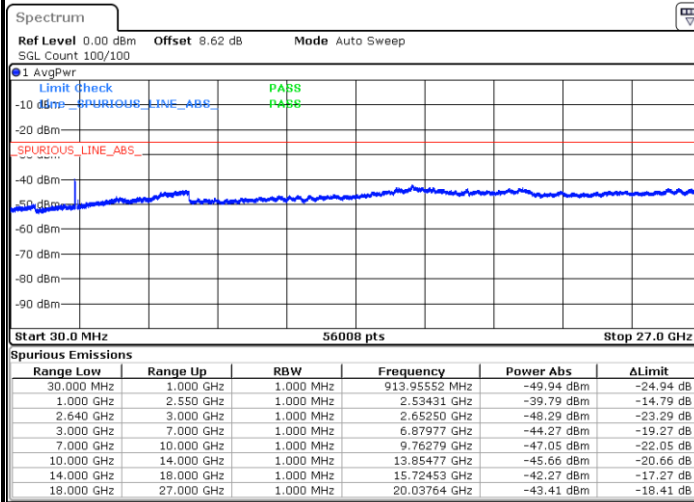




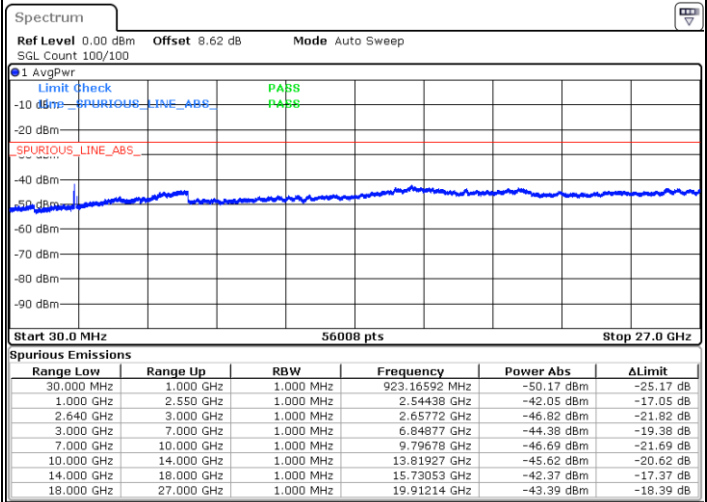
LTE Band 38 / 15MHz

Lowest Channel / QPSK



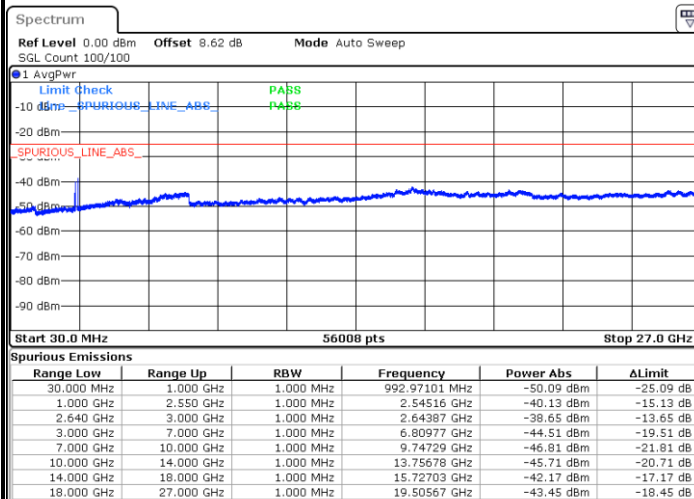
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Lowest Channel / 16QAM



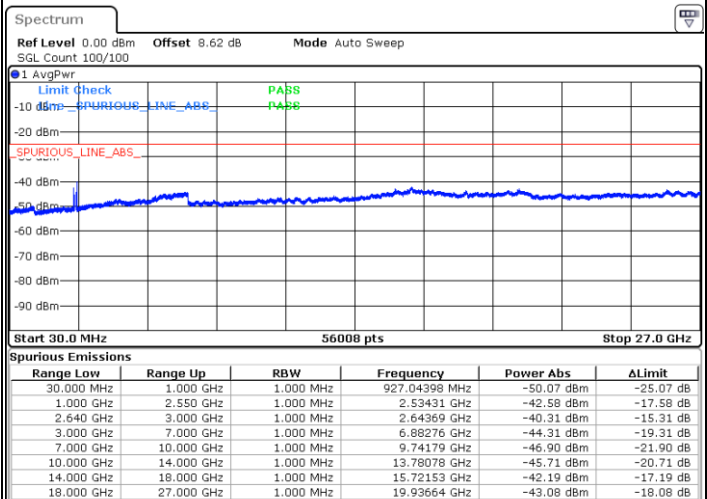
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Middle Channel / QPSK



Date: 2 JUN 2019 08:09:34

Middle Channel / 16QAM

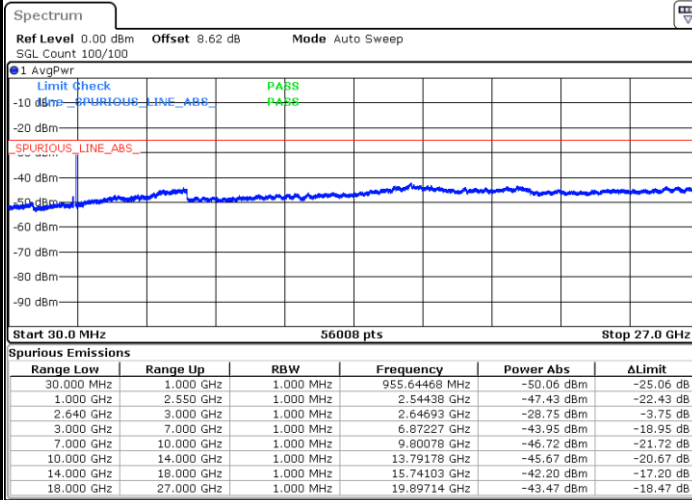


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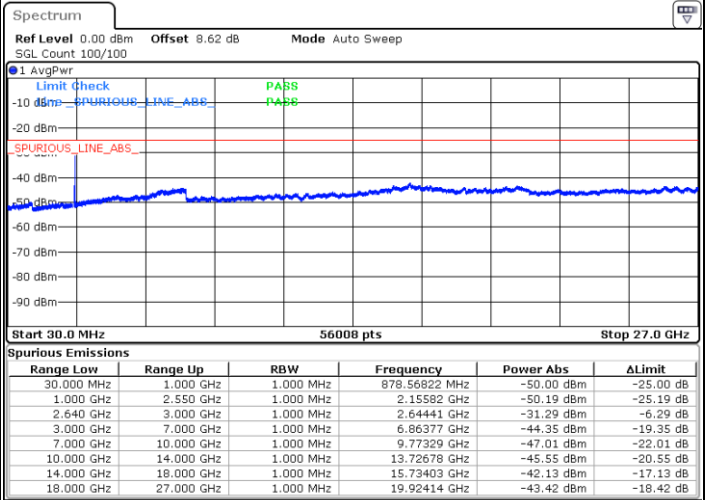
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 2 JUN 2019 08:11:24

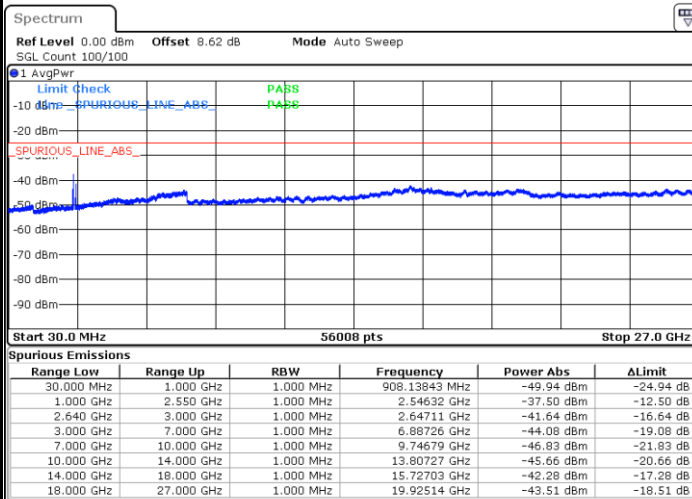
Highest Channel / 16QAM



Date: 2 JUN 2019 08:12:19

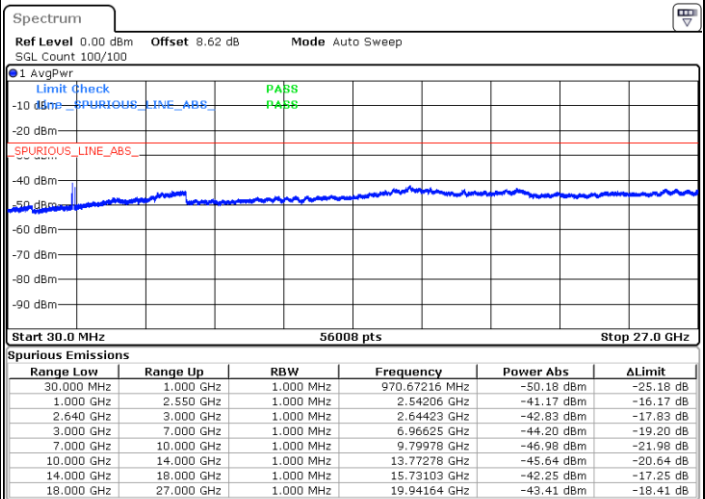
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 2 JUN 2019 08:13:14

Lowest Channel / 16QAM

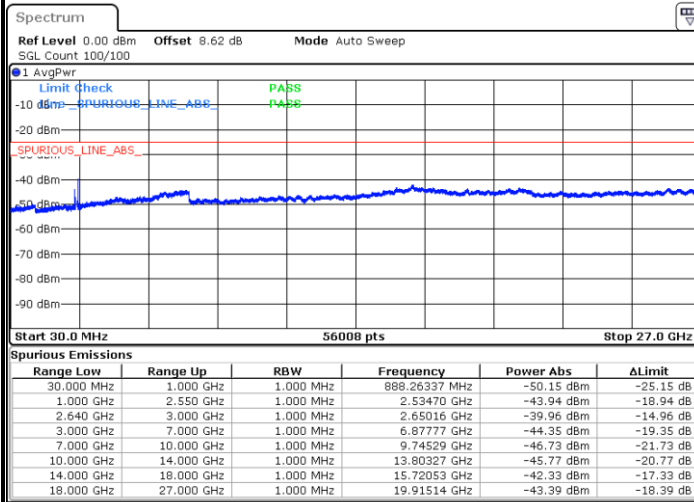


Date: 2 JUN 2019 08:14:09



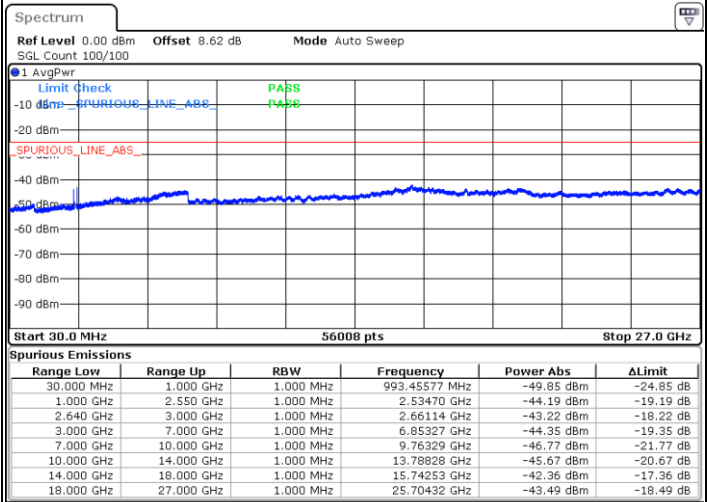
LTE Band 38 / 20MHz

Middle Channel / QPSK



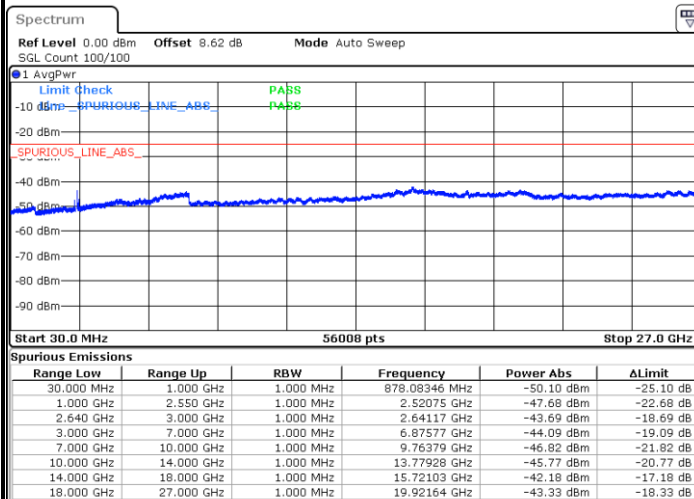
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Middle Channel / 16QAM



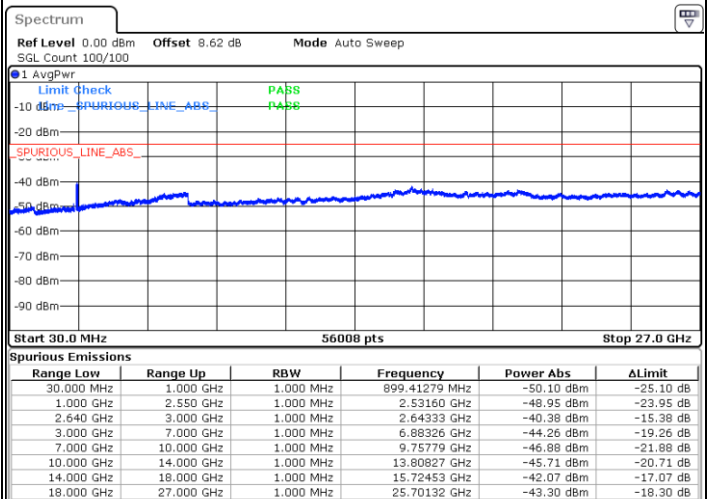
Date: 2 JUN 2019 08:15:59

Highest Channel / QPSK



Date: 2 JUN 2019 08:16:54

Highest Channel / 16QAM



Date: 2 JUN 2019 08:17:49

**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	0.0008	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0012	



Test Conditions		LTE Band 4 (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	0.0016	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0012	



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0066	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0060	
20	Battery End Point	0.0012	



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0033	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0027	

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0011	
20	Battery End Point	0.0034	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 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/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	3741	-53.84	-13	-40.84	-60.10	1.843	8.10	H
	5613	-41.43	-13	-28.43	-49.74	2.19	10.50	H
	7488	-52.27	-13	-39.27	-61.19	2.58	11.50	H
	3741	-56.17	-13	-43.17	-62.43	1.84	8.10	V
	5613	-45.92	-13	-32.92	-54.23	2.19	10.50	V
	7488	-52.16	-13	-39.16	-61.08	2.58	11.50	V

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

LTE Band 4 / 20MHz / QPSK/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	3447	-55.88	-13	-42.88	-62.57	1.75	8.44	H
	5170.77	-53.45	-13	-40.45	-61.87	1.94	10.36	H
	6900	-51.90	-13	-38.90	-61.14	2.47	11.71	H
	3447	-47.15	-13	-34.15	-53.84	1.75	8.44	V
	5172	-53.42	-13	-40.42	-61.84	1.94	10.36	V
	6900	-51.95	-13	-38.95	-61.19	2.47	11.71	V

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



LTE Band 5 / 10MHz / QPSK/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	1664	-58.29	-13	-45.29	-61.53	1.11	6.50	H
	2496.27	-61.17	-13	-48.17	-63.79	1.43	6.20	H
	3330	-59.36	-13	-46.36	-63.80	1.71	8.30	H
	1664	-58.71	-13	-45.71	-61.95	1.11	6.50	V
	2496	-60.54	-13	-47.54	-63.16	1.43	6.20	V
	3330	-59.45	-13	-46.45	-63.89	1.71	8.30	V

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

LTE Band 7 / 20MHz / QPSK/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	5052	-66.03	-25	-41.03	-76.24	3.03	13.24	H
	7580	-61.05	-25	-36.05	-70.50	3.56	13.01	H
	10100	-56.88	-25	-31.88	-66.40	3.92	13.44	H
	5052	-65.54	-25	-40.54	-75.75	3.03	13.24	V
	7580	-60.35	-25	-35.35	-69.80	3.56	13.01	V
	10100	-57.48	-25	-32.48	-67.00	3.92	13.44	V

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



LTE Band 38 / 20MHz / QPSK/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	-66.80	-25	-41.80	-77.01	3.03	13.24	H
	7760	-62.06	-25	-37.06	-71.51	3.56	13.01	H
	10340	-57.61	-25	-32.61	-67.13	3.92	13.44	H
	5172	-65.77	-25	-40.77	-75.98	3.03	13.24	V
	7760	-60.25	-25	-35.25	-69.70	3.56	13.01	V
	10340	-57.70	-25	-32.70	-67.22	3.92	13.44	V

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