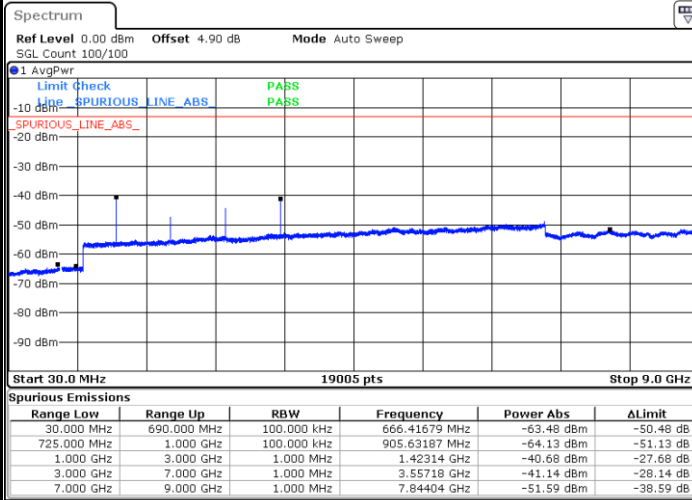




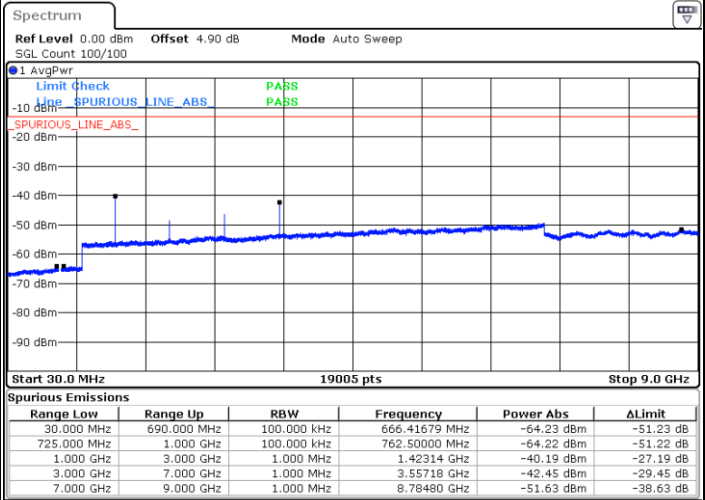
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 9 NOV. 2019 12:39:58

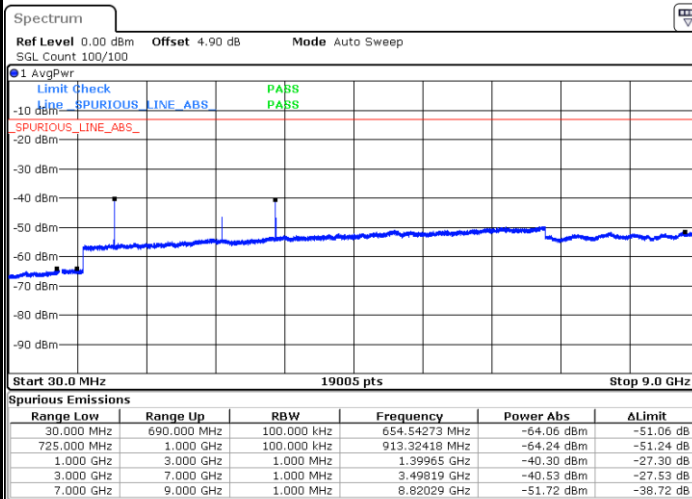
Highest Channel / 16QAM



Date: 9 NOV. 2019 12:40:52

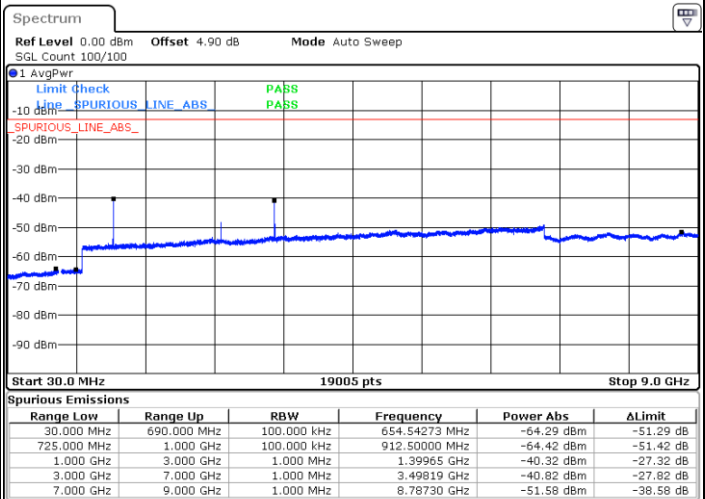
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 9 NOV. 2019 12:52:45

Lowest Channel / 16QAM

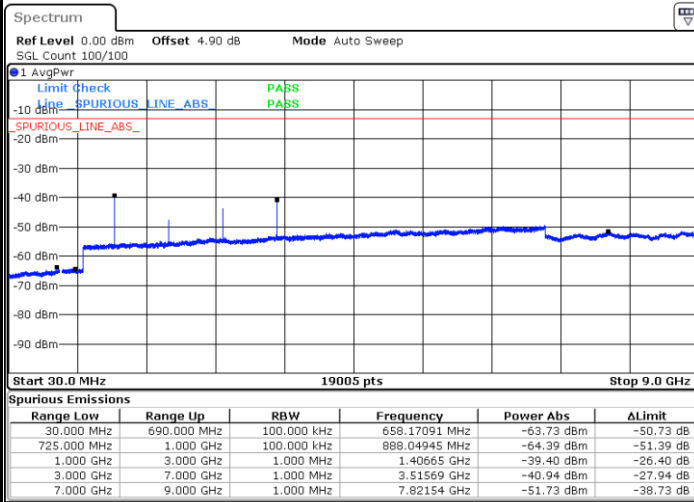


Date: 9 NOV. 2019 12:53:40



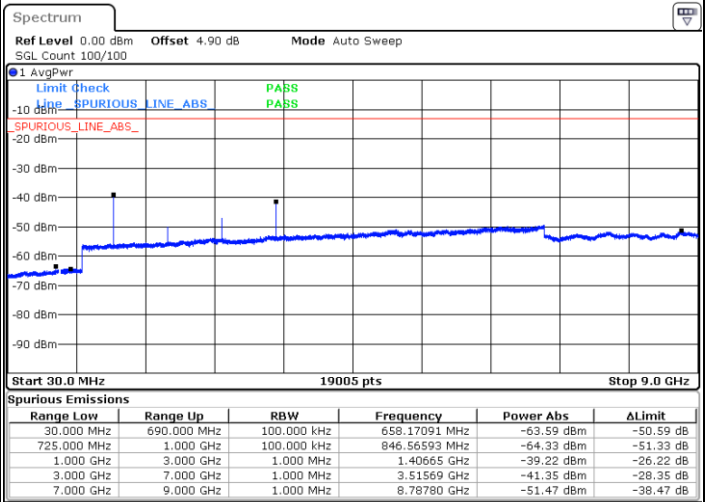
LTE Band 12 / 10MHz

Middle Channel / QPSK



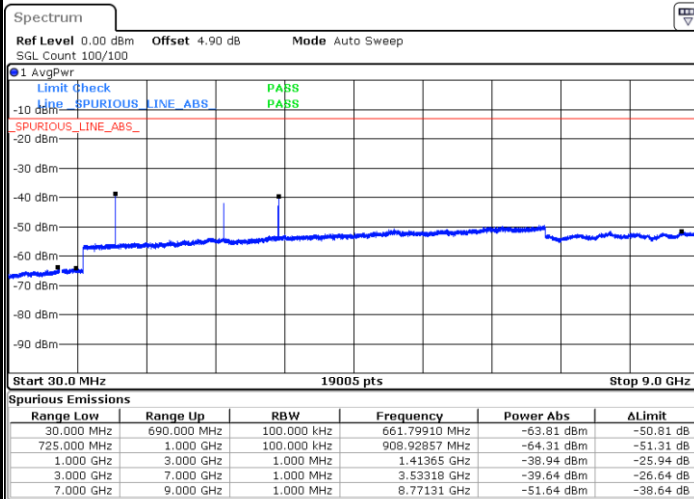
Date: 9 NOV. 2019 12:55:28

Middle Channel / 16QAM



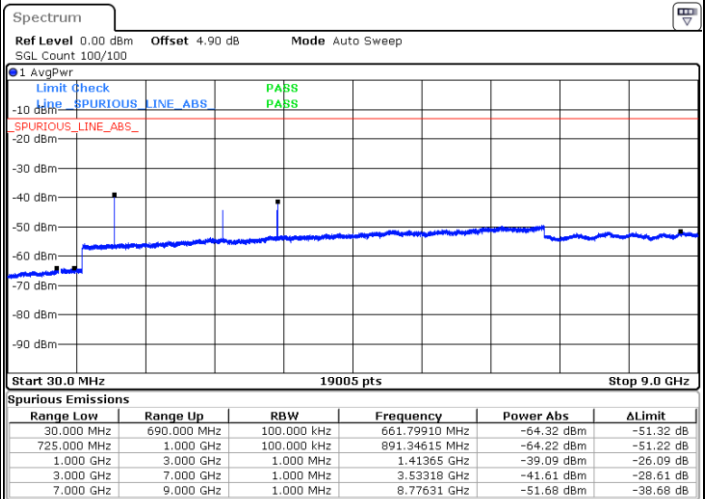
Date: 9 NOV. 2019 12:54:34

Highest Channel / QPSK



Date: 9 NOV. 2019 12:56:22

Highest Channel / 16QAM



Date: 9 NOV. 2019 12:57:16

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =5 V. ; Battery End Point (BEP) =4.75 V. ; Maximum Voltage =5.25 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)
Lowest	3702	-56.79	-13	-43.79	-69.05	2.641	14.90	H
	5553	-55.04	-13	-42.04	-66.90	2.94	14.80	H
	7404	-50.47	-13	-37.47	-60.24	3.39	13.16	H
	3702	-57.32	-13	-44.32	-69.58	2.64	14.90	V
	5553	-51.09	-13	-38.09	-62.95	2.94	14.80	V
	7404	-50.26	-13	-37.26	-60.03	3.39	13.16	V
Middle	3741	-56.41	-13	-43.41	-68.67	2.641	14.90	H
	5613	-42.39	-13	-29.39	-54.25	2.94	14.80	H
	7488	-50.40	-13	-37.40	-60.17	3.39	13.16	H
	3741	-53.47	-13	-40.47	-65.73	2.64	14.90	V
	5613	-42.03	-13	-29.03	-53.89	2.94	14.80	V
	7488	-50.03	-13	-37.03	-59.80	3.39	13.16	V
Highest	3783	-57.17	-13	-44.17	-69.43	2.641	14.90	H
	5673	-54.09	-13	-41.09	-65.95	2.94	14.80	H
	7560	-50.52	-13	-37.52	-60.29	3.39	13.16	H
	3783	-55.85	-13	-42.85	-68.11	2.64	14.90	V
	5673	-51.29	-13	-38.29	-63.15	2.94	14.80	V
	7560	-50.28	-13	-37.28	-60.05	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)
Lowest	3423	-60.24	-13	-47.24	-70.98	2.604	13.34	H
	5133	-52.65	-13	-39.65	-63.16	3.011	13.52	H
	6840	-53.79	-13	-40.79	-63.99	3.271	13.47	H
	3423	-61.29	-13	-48.29	-72.03	2.604	13.34	V
	5133	-54.04	-13	-41.04	-64.55	3.011	13.52	V
	6840	-52.63	-13	-39.63	-62.83	3.271	13.47	V
Middle	3447	-59.87	-13	-46.87	-70.61	2.604	13.34	H
	5172	-51.34	-13	-38.34	-61.85	3.011	13.52	H
	6900	-53.35	-13	-40.35	-63.55	3.271	13.47	H
	3447	-61.22	-13	-48.22	-71.96	2.604	13.34	V
	5172	-51.50	-13	-38.50	-62.01	3.011	13.52	V
	6900	-53.01	-13	-40.01	-63.21	3.271	13.47	V
Highest	3471	-60.64	-13	-47.64	-71.38	2.604	13.34	H
	5208	-47.65	-13	-34.65	-58.16	3.011	13.52	H
	6948	-52.53	-13	-39.53	-62.73	3.271	13.47	H
	3471	-61.83	-13	-48.83	-72.57	2.604	13.34	V
	5208	-50.90	-13	-37.90	-61.41	3.011	13.52	V
	6948	-52.01	-13	-39.01	-62.21	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)
Lowest	1650	-48.69	-13	-35.69	-55.66	1.58	10.70	H
	2474	-38.58	-13	-25.58	-46.83	2.102	12.50	H
	3300	-46.37	-13	-33.37	-55.26	2.856	13.90	H
	4122	-55.64	-13	-42.64	-64.10	2.689	13.30	H
	1650	-54.60	-13	-41.60	-61.57	1.58	10.70	V
	2474	-47.49	-13	-34.49	-55.74	2.10	12.50	V
	3300	-54.56	-13	-41.56	-63.45	2.86	13.90	V
	4122	-58.92	-13	-45.92	-67.38	2.69	13.30	V
Middle	1664	-46.16	-13	-33.16	-53.13	1.58	10.70	H
	2496	-35.00	-13	-22.00	-43.25	2.102	12.50	H
	3330	-48.31	-13	-35.31	-57.20	2.856	13.90	H
	4160.45	-56.21	-13	-43.21	-64.67	2.689	13.30	H
	1664	-49.79	-13	-36.79	-56.76	1.58	10.70	V
	2496	-45.27	-13	-32.27	-53.52	2.10	12.50	V
	3330	-57.88	-13	-44.88	-66.77	2.86	13.90	V
	4158	-58.87	-13	-45.87	-67.33	2.69	13.30	V
Highest	1680	-50.90	-13	-37.90	-57.87	1.58	10.70	H
	2518	-41.42	-13	-28.42	-49.67	2.102	12.50	H
	3360	-54.55	-13	-41.55	-63.44	2.856	13.90	H
	4200	-58.86	-13	-45.86	-67.32	2.689	13.30	H
	1680	-58.82	-13	-45.82	-65.79	1.58	10.70	V
	2518	-52.09	-13	-39.09	-60.34	2.10	12.50	V
	3360	-59.25	-13	-46.25	-68.14	2.86	13.90	V
	4200	-59.40	-13	-46.40	-67.86	2.69	13.30	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)
Lowest	5000	-48.41	-25	-23.41	-58.62	3.03	13.24	H
	7504	-47.49	-25	-22.49	-56.94	3.56	13.01	H
	10000	-56.47	-25	-31.47	-65.99	3.92	13.44	H
	5000	-53.84	-25	-28.84	-64.05	3.03	13.24	V
	7504	-48.59	-25	-23.59	-58.04	3.56	13.01	V
	10000	-55.57	-25	-30.57	-65.09	3.92	13.44	V
Middle	5052	-44.87	-25	-19.87	-55.08	3.03	13.24	H
	7580	-42.18	-25	-17.18	-51.63	3.56	13.01	H
	10100	-56.53	-25	-31.53	-66.05	3.92	13.44	H
	5052	-44.30	-25	-19.30	-54.51	3.03	13.24	V
	7576	-39.49	-25	-14.49	-48.94	3.56	13.01	V
	10100	-57.23	-25	-32.23	-66.75	3.92	13.44	V
Highest	5100	-54.33	-25	-29.33	-64.54	3.03	13.24	H
	7652	-49.81	-25	-24.81	-59.26	3.56	13.01	H
	10200	-57.34	-25	-32.34	-66.86	3.92	13.44	H
	5100	-51.95	-25	-26.95	-62.16	3.03	13.24	V
	7652	-57.14	-25	-32.14	-66.59	3.56	13.01	V
	10200	-55.61	-25	-30.61	-65.13	3.92	13.44	V

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



LTE Band 12 / 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)
Lowest	1400	-52.35	-13	-39.35	-59.32	1.58	10.70	H
	2098	-59.59	-13	-46.59	-67.84	2.102	12.50	H
	2798	-63.72	-13	-50.72	-72.61	2.856	13.90	H
	3498	-62.78	-13	-49.78	-71.24	2.689	13.30	H
	1400	-59.87	-13	-46.87	-66.84	1.58	10.70	V
	2098	-60.91	-13	-47.91	-69.16	2.10	12.50	V
	2798	-63.50	-13	-50.50	-72.39	2.86	13.90	V
	3498	-63.58	-13	-50.58	-72.04	2.69	13.30	V
Middle	1406	-57.37	-13	-44.37	-64.34	1.58	10.70	H
	2110	-60.91	-13	-47.91	-69.16	2.102	12.50	H
	2812	-63.74	-13	-50.74	-72.63	2.856	13.90	H
	3516	-62.65	-13	-49.65	-71.11	2.689	13.30	H
	1406	-63.69	-13	-50.69	-70.66	1.58	10.70	V
	2110	-64.08	-13	-51.08	-72.33	2.10	12.50	V
	2812	-64.11	-13	-51.11	-73.00	2.86	13.90	V
	3516	-63.18	-13	-50.18	-71.64	2.69	13.30	V
Highest	1414	-55.84	-13	-42.84	-62.81	1.58	10.70	H
	2120	-56.57	-13	-43.57	-64.82	2.102	12.50	H
	2826	-61.62	-13	-48.62	-70.51	2.856	13.90	H
	3534	-61.73	-13	-48.73	-70.19	2.689	13.30	H
	1414	-64.73	-13	-51.73	-71.70	1.58	10.70	V
	2120	-58.40	-13	-45.40	-66.65	2.10	12.50	V
	2826	-63.26	-13	-50.26	-72.15	2.86	13.90	V
	3534	-63.01	-13	-50.01	-71.47	2.69	13.30	V

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