

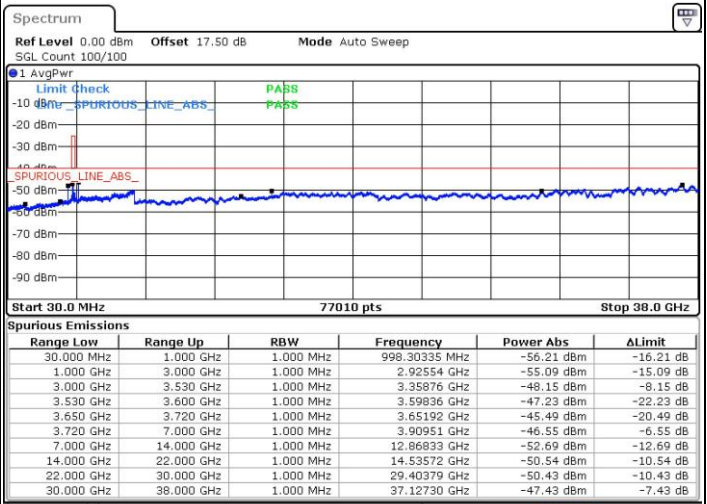
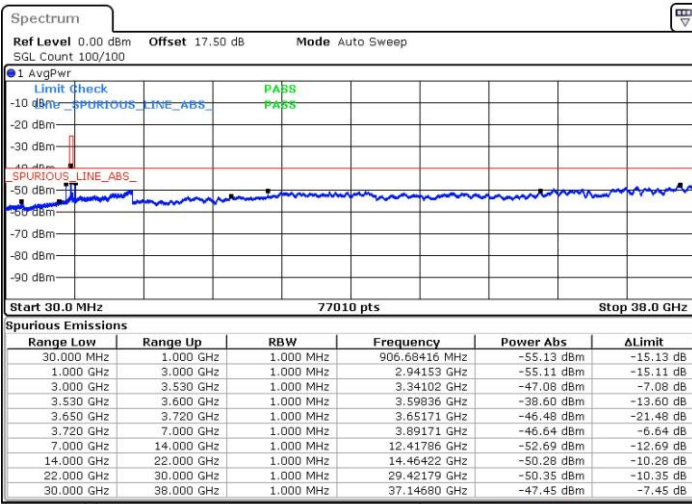


LTE Band 48 / 20MHz

16QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

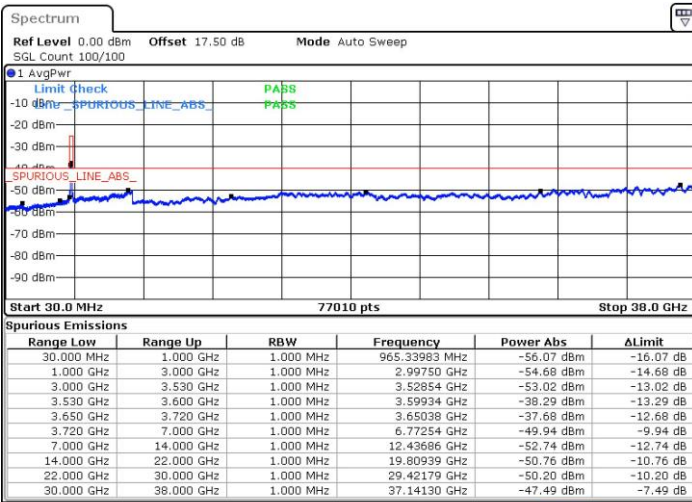


Date: 22 APR 2019 16:24:21

Date: 22 APR 2019 16:30:30

Middle Channel / FullIRB

N/A



Date: 22 APR 2019 16:18:12

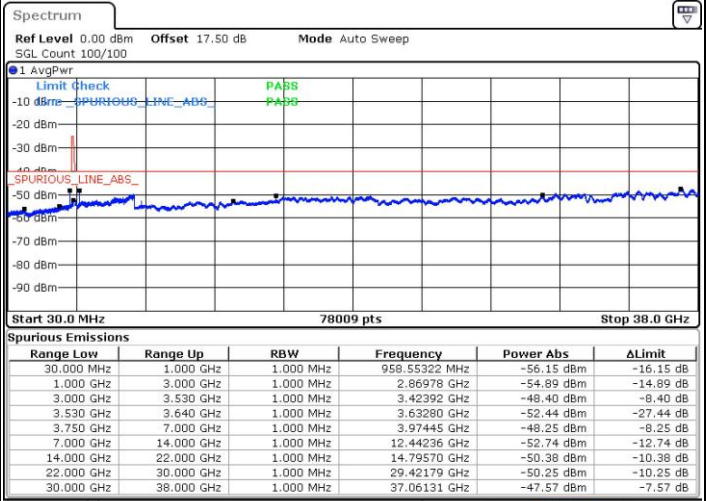
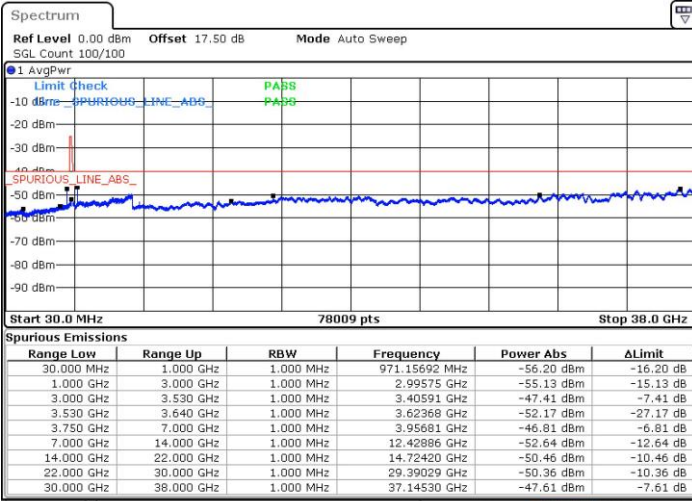


LTE Band 48 / 20MHz

16QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

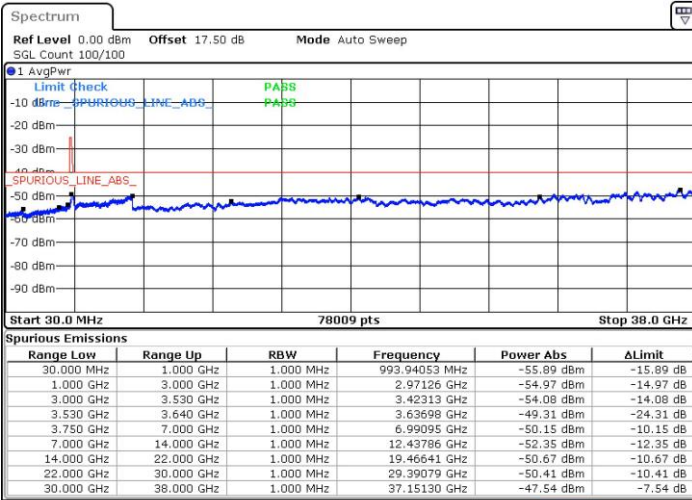


Date: 22 APR 2019 16:25:22

Date: 22 APR 2019 16:31:31

Highest Channel / FullIRB

N/A



Date: 22 APR 2019 16:19:14



Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0085	PASS
40	Normal Voltage	0.0089	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0081	
0	Normal Voltage	0.0088	
-10	Normal Voltage	0.0083	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0088	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of EIRP and Radiated Test

EIRP

<Reporting Only>

LTE Band 48 / 5MHz (Average) (GT - LC = 0.95 dB)									
Channel	Mode	RB		Conducted		EIRP			
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
Lowest	QPSK	1	0	20.78	0.1197	21.73	0.1489	21.73	23.00
Middle		1	0	19.74	0.0942	20.69	0.1172	20.69	23.00
Highest		1	0	19.32	0.0855	20.27	0.1064	20.27	23.00
Lowest	16QAM	12	0	19.76	0.0946	20.71	0.1178	20.71	23.00
Middle		12	0	18.72	0.0745	19.67	0.0927	19.67	23.00
Highest		12	0	18.31	0.0678	19.26	0.0843	19.26	23.00

LTE Band 48 / 10MHz (Average) (GT - LC = 0.95 dB)									
Channel	Mode	RB		Conducted		EIRP			
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
Lowest	QPSK	1	0	20.84	0.1213	21.79	0.1510	21.79	23.00
Middle		1	0	19.72	0.0938	20.67	0.1167	20.67	23.00
Highest		1	0	19.41	0.0873	20.36	0.1086	20.36	23.00
Lowest	16QAM	25	0	19.76	0.0946	20.71	0.1178	20.71	23.00
Middle		25	0	18.67	0.0736	19.62	0.0916	19.62	23.00
Highest		25	0	18.31	0.0678	19.26	0.0843	19.26	23.00

LTE Band 48 / 15MHz (Average) (GT - LC = 0.95 dB)									
Channel	Mode	RB		Conducted		EIRP			
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
Lowest	QPSK	1	0	20.85	0.1216	21.80	0.1514	21.80	23.00
Middle		1	0	19.86	0.0968	20.81	0.1205	20.81	23.00
Highest		1	0	19.45	0.0881	20.40	0.1096	20.40	23.00
Lowest	16QAM	1	0	20.08	0.1019	21.03	0.1268	21.03	23.00
Middle		1	0	19.02	0.0798	19.97	0.0993	19.97	23.00
Highest		1	0	18.57	0.0719	19.52	0.0895	19.52	23.00

LTE Band 48 / 20MHz (Average) (GT - LC = 0.95 dB)									
Channel	Mode	RB		Conducted		EIRP			
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
Lowest	QPSK	1	0	20.89	0.1227	21.84	0.1528	21.84	23.00
Middle		1	0	19.87	0.0971	20.82	0.1208	20.82	23.00
Highest		1	0	19.46	0.0883	20.41	0.1099	20.41	23.00
Lowest	16QAM	1	0	19.92	0.0982	20.87	0.1222	20.87	23.00
Middle		1	0	18.96	0.0787	19.91	0.0979	19.91	23.00
Highest		1	0	19.54	0.0899	20.49	0.1119	20.49	23.00



Radiated Spurious Emission

LTE Band 48

LTE Band 48 / 20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7100	-59.08	-40	-19.08	-61.58	-69.05	1.77	11.74	H
	10653	-63.18	-40	-23.18	-66.68	-71.61	2.47	10.90	H
	14204	-58.38	-40	-18.38	-65.47	-67.22	2.87	11.71	H
	21306	-54.81	-40	-14.81	-70.71	-71.53	1.98	18.70	H
	24857	-53.12	-40	-13.12	-79.47	-69.13	2.07	18.07	H
	28408	-52.52	-40	-12.52	-81.03	-69.76	2.32	19.56	H
									H
	7100	-63.33	-40	-23.33	-65.44	-73.30	1.77	11.74	V
	10653	-62.94	-40	-22.94	-66.18	-71.37	2.47	10.90	V
	14204	-60.08	-40	-20.08	-66.89	-68.92	2.87	11.71	V
	21306	-61.82	-40	-21.82	-80.61	-78.54	1.98	18.70	V
	24857	-56.36	-40	-16.36	-79.02	-72.37	2.07	18.07	V
	28408	-56.20	-40	-16.20	-81.5	-73.44	2.32	19.56	V
									V



Middle	7230	-62.11	-40	-22.11	-64.85	-71.80	1.84	11.53	H
	10848	-64.87	-40	-24.87	-68.08	-73.20	2.57	10.90	H
	14462	-61.01	-40	-21.01	-67.75	-69.25	2.85	11.09	H
	21696	-56.29	-40	-16.29	-81.92	-73.08	1.99	18.78	H
	25312	-51.54	-40	-11.54	-79.61	-68.14	2.14	18.74	H
	28928	-50.35	-40	-10.35	-78.83	-67.08	2.36	19.09	H
									H
	7230	-62.59	-40	-22.59	-65.07	-72.28	1.84	11.53	V
	10848	-64.91	-40	-24.91	-67.92	-73.24	2.57	10.90	V
	14462	-62.35	-40	-22.35	-68.27	-70.59	2.85	11.09	V
	21696	-63.21	-40	-23.21	-82.08	-80.00	1.99	18.78	V
	25312	-55.01	-40	-15.01	-79.37	-71.61	2.14	18.74	V
	28928	-52.79	-40	-12.79	-78.84	-69.52	2.36	19.09	V
									V
Highest	7360	-62.90	-40	-22.90	-65.73	-72.31	1.91	11.32	H
	11043	-64.13	-40	-24.13	-67.23	-72.45	2.63	10.95	H
	14724	-60.31	-40	-20.31	-68.54	-69.11	2.91	11.72	H
	22084	-56.90	-40	-16.90	-81.27	-73.69	2.08	18.87	H
	25767	-50.26	-40	-10.26	-78.99	-67.28	2.03	19.05	H
	29448	-49.50	-40	-9.50	-79.42	-66.61	2.15	19.27	H
									H
	7360	-63.84	-40	-23.84	-66.49	-73.25	1.91	11.32	V
	11043	-64.52	-40	-24.52	-67.45	-72.84	2.63	10.95	V
	14724	-62.26	-40	-22.26	-68.85	-71.06	2.91	11.72	V
	22084	-63.16	-40	-23.16	-81.27	-79.95	2.08	18.87	V
	25767	-54.01	-40	-14.01	-79.14	-71.03	2.03	19.05	V
	29448	-54.70	-40	-14.70	-79.16	-71.81	2.15	19.27	V
									V

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