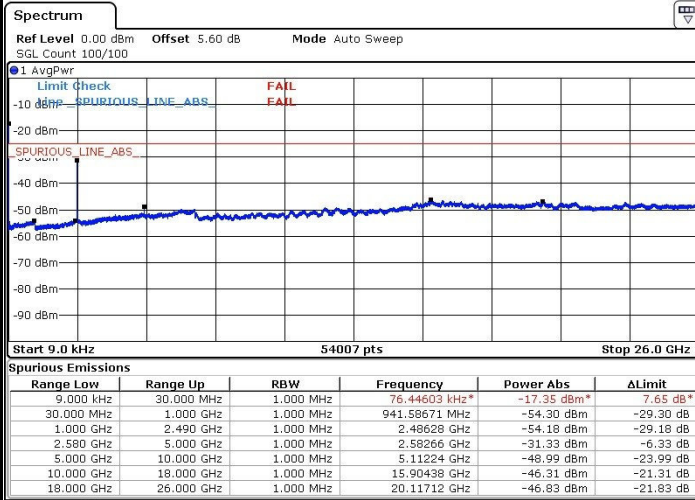




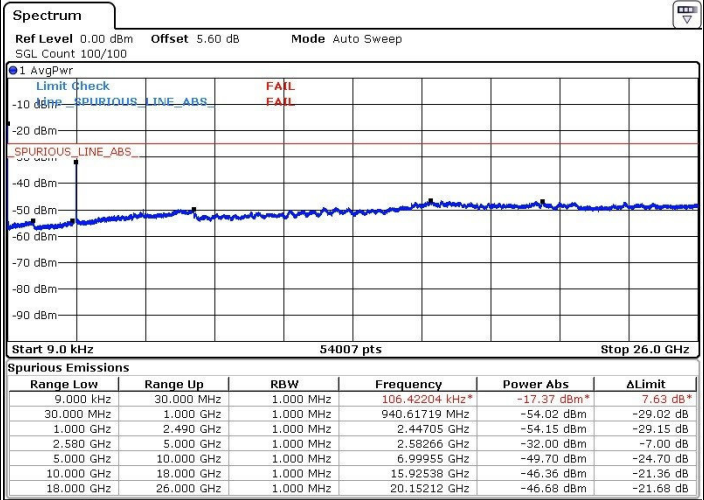
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 14.MAR.2017 17:59:54

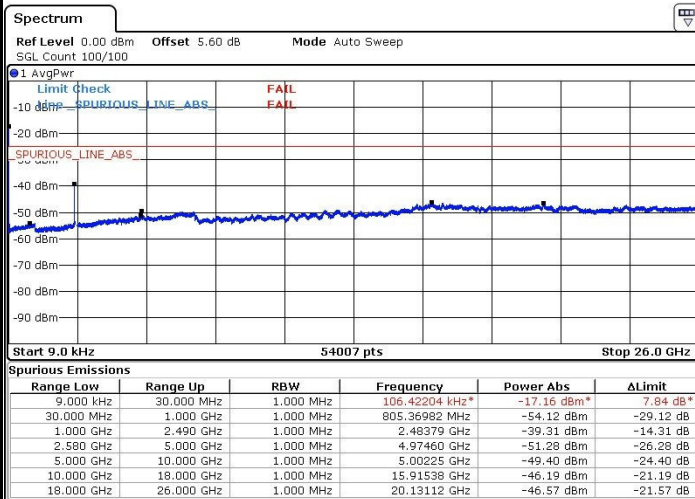
Highest Channel / 16QAM



Date: 14.MAR.2017 18:01:43

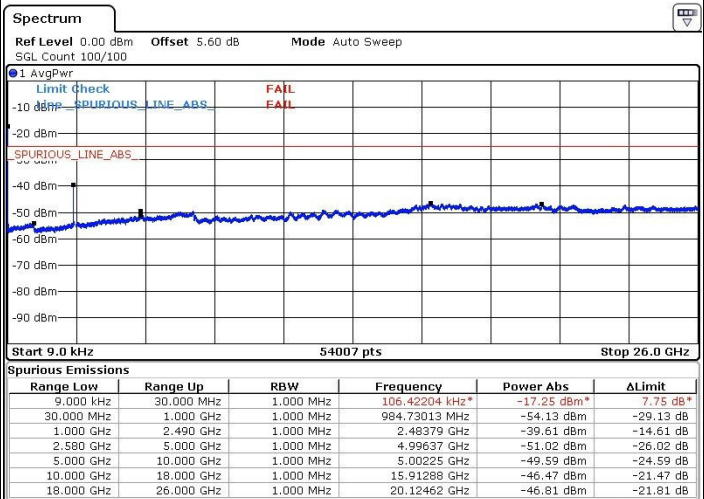
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 14.MAR.2017 18:02:57

Lowest Channel / 16QAM



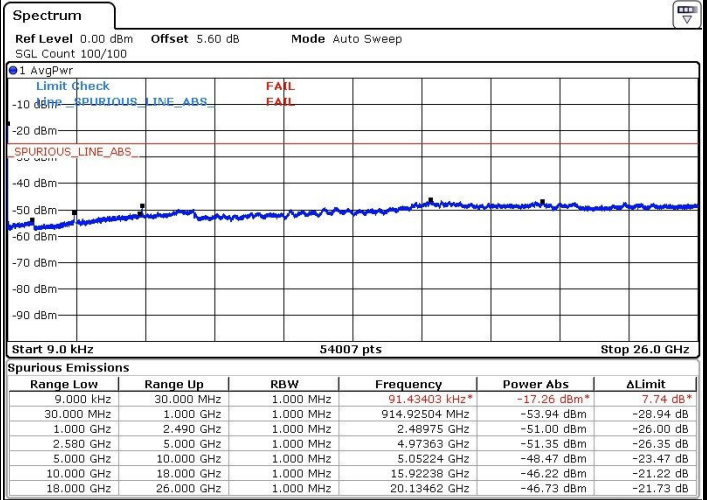
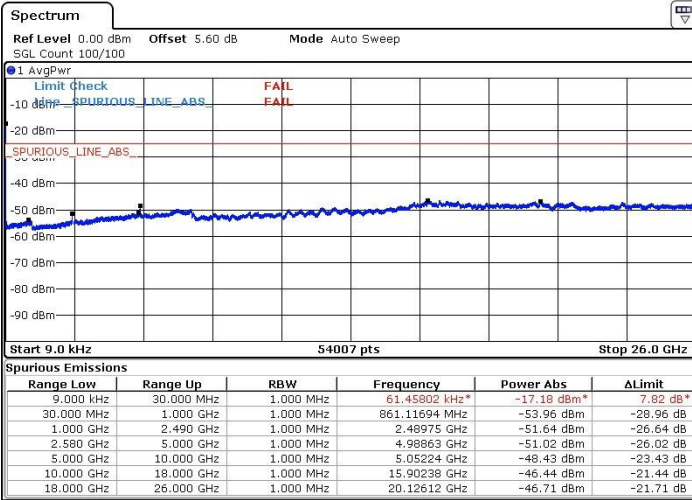
Date: 14.MAR.2017 18:03:52



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

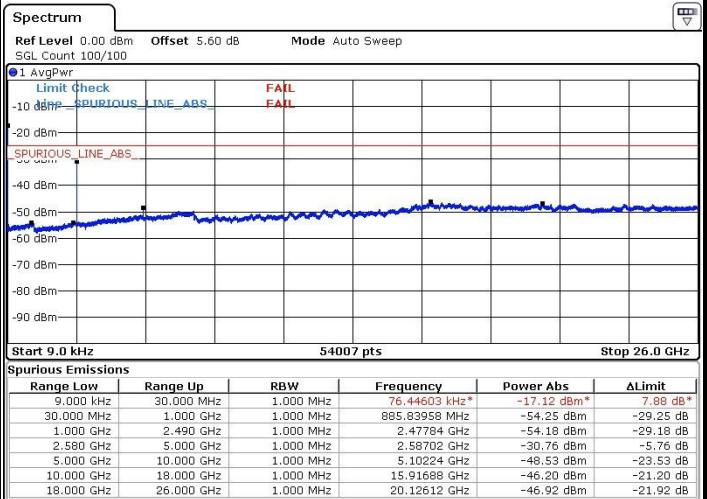
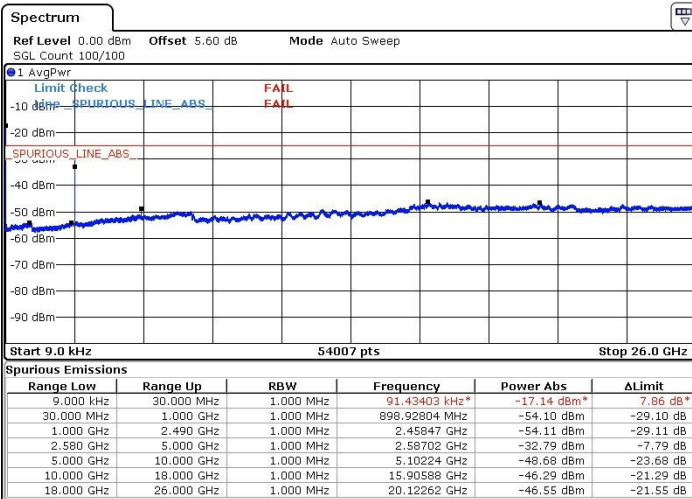


Date: 14.MAR.2017 18:04:51

Date: 14.MAR.2017 18:05:50

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.MAR.2017 18:06:55

Date: 14.MAR.2017 18:07:51



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	0.0034	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage =3.8 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	0.0025	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.8 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	0.0038	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.8 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 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0010	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.8 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 / 1.4MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3758	-68.65	-13	-55.65	-72.16	-73.64	1.88	6.87	H
	5638	-62.97	-13	-49.97	-71.16	-70.27	2.38	9.68	H
	7518	-63.65	-13	-50.65	-75.68	-72.72	2.74	11.81	H
	3758	-67.28	-13	-54.28	-71.07	-72.27	1.88	6.87	V
	5638	-61.81	-13	-48.81	-70.38	-69.11	2.38	9.68	V
	7518	-65.70	-13	-52.70	-76.41	-74.77	2.74	11.81	V

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

LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3756	-67.81	-13	-54.81	-71.32	-72.80	1.88	6.87	H
	5634	-60.16	-13	-47.16	-68.35	-67.46	2.38	9.68	H
	7514	-64.42	-13	-51.42	-76.45	-73.49	2.74	11.81	H
	3756	-66.65	-13	-53.65	-70.44	-71.64	1.88	6.87	V
	5634	-60.56	-13	-47.56	-69.13	-67.86	2.38	9.68	V
	7514	-65.63	-13	-52.63	-76.34	-74.70	2.74	11.81	V

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



LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3756	-68.97	-13	-55.97	-72.48	-73.96	1.88	6.87	H
	5634	-58.85	-13	-45.85	-67.04	-66.15	2.38	9.68	H
	7511	-64.54	-13	-51.54	-76.57	-73.61	2.74	11.81	H
	3756	-67.55	-13	-54.55	-71.34	-72.54	1.88	6.87	V
	5634	-57.18	-13	-44.18	-65.75	-64.48	2.38	9.68	V
	7511	-65.83	-13	-52.83	-76.54	-74.90	2.74	11.81	V

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

LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3750	-66.03	-13	-53.03	-69.54	-71.02	1.88	6.87	H
	5626	-61.70	-13	-48.70	-69.89	-69.00	2.38	9.68	H
	7502	-64.14	-13	-51.14	-76.17	-73.21	2.74	11.81	H
	3750	-65.30	-13	-52.30	-69.09	-70.29	1.88	6.87	V
	5626	-58.27	-13	-45.27	-66.84	-65.57	2.38	9.68	V
	7502	-64.70	-13	-51.70	-75.41	-73.77	2.74	11.81	V

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



LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3746	-68.18	-13	-55.18	-71.69	-73.17	1.88	6.87	H
	5620	-59.96	-13	-46.96	-68.15	-67.26	2.38	9.68	H
	7494	-63.56	-13	-50.56	-75.59	-72.63	2.74	11.81	H
	3746	-66.66	-13	-53.66	-70.45	-71.65	1.88	6.87	V
	5620	-60.78	-13	-47.78	-69.35	-68.08	2.38	9.68	V
	7494	-65.64	-13	-52.64	-76.35	-74.71	2.74	11.81	V

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

LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3742	-66.88	-13	-53.88	-70.39	-71.87	1.88	6.87	H
	5613	-59.90	-13	-46.90	-68.09	-67.20	2.38	9.68	H
	7484	-64.40	-13	-51.40	-76.43	-73.47	2.74	11.81	H
	3742	-64.29	-13	-51.29	-68.08	-69.28	1.88	6.87	V
	5613	-60.66	-13	-47.66	-69.23	-67.96	2.38	9.68	V
	7484	-65.71	-13	-52.71	-76.42	-74.78	2.74	11.81	V

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



LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3465	-66.46	-13	-53.46	-75.36	-70.43	4.87	8.84	H
	5196	-61.16	-13	-48.16	-72.09	-62.60	7.70	9.14	H
	6927	-57.66	-13	-44.66	-76.13	-59.34	8.98	10.66	H
	3465	-62.64	-13	-49.64	-74.26	-66.61	4.87	8.84	V
	5196	-59.43	-13	-46.43	-73.48	-60.87	7.70	9.14	V
	6927	-58.44	-13	-45.44	-76.46	-60.12	8.98	10.66	V

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

LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3462	-66.68	-13	-53.68	-75.58	-70.65	4.87	8.84	H
	5193	-61.53	-13	-48.53	-72.46	-62.97	7.70	9.14	H
	6924	-58.19	-13	-45.19	-76.66	-59.87	8.98	10.66	H
	3462	-62.02	-13	-49.02	-73.64	-65.99	4.87	8.84	V
	5193	-60.41	-13	-47.41	-74.46	-61.85	7.70	9.14	V
	6924	-58.69	-13	-45.69	-76.71	-60.37	8.98	10.66	V

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



LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3462	-66.75	-13	-53.75	-75.65	-70.72	4.87	8.84	H
	5190	-62.23	-13	-49.23	-73.16	-63.67	7.70	9.14	H
	6921	-58.32	-13	-45.32	-76.79	-60.00	8.98	10.66	H
	3462	-63.72	-13	-50.72	-75.34	-67.69	4.87	8.84	V
	5190	-60.66	-13	-47.66	-74.71	-62.10	7.70	9.14	V
	6921	-58.21	-13	-45.21	-76.23	-59.89	8.98	10.66	V

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

LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3456	-65.39	-13	-52.39	-74.29	-69.36	4.87	8.84	H
	5184	-60.38	-13	-47.38	-71.31	-61.82	7.70	9.14	H
	6912	-58.21	-13	-45.21	-76.68	-59.89	8.98	10.66	H
	3456	-61.19	-13	-48.19	-72.81	-65.16	4.87	8.84	V
	5184	-54.23	-13	-41.23	-68.28	-55.67	7.70	9.14	V
	6912	-58.91	-13	-45.91	-76.93	-60.59	8.98	10.66	V

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



LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3450	-64.18	-13	-51.18	-73.08	-68.15	4.87	8.84	H
	5178	-60.74	-13	-47.74	-71.67	-62.18	7.70	9.14	H
	6903	-58.55	-13	-45.55	-77.02	-60.23	8.98	10.66	H
	3450	-62.10	-13	-49.10	-73.72	-66.07	4.87	8.84	V
	5178	-54.39	-13	-41.39	-68.44	-55.83	7.70	9.14	V
	6903	-57.87	-13	-44.87	-75.89	-59.55	8.98	10.66	V

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

LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	3447	-64.30	-13	-51.30	-73.20	-68.27	4.87	8.84	H
	5169	-60.95	-13	-47.95	-71.88	-62.39	7.70	9.14	H
	6894	-58.51	-13	-45.51	-76.98	-60.19	8.98	10.66	H
	3447	-59.00	-13	-46.00	-70.62	-62.97	4.87	8.84	V
	5169	-58.68	-13	-45.68	-72.73	-60.12	7.70	9.14	V
	6894	-57.69	-13	-44.69	-75.71	-59.37	8.98	10.66	V

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



LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0 for									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-61.98	-13	-48.98	-64.58	-64.30	1.33	5.80	H
	2508	-48.06	-13	-35.06	-58.73	-51.23	1.58	6.90	H
	3342	-58.41	-13	-45.41	-67.62	-61.91	1.85	7.50	H
	1672	-64.10	-13	-51.10	-65.97	-66.42	1.33	5.80	V
	2508	-60.29	-13	-47.29	-68.26	-63.46	1.58	6.90	V
	3342	-61.14	-13	-48.14	-70.16	-64.64	1.85	7.50	V

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

LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1670	-62.05	-13	-49.05	-64.65	-64.37	1.33	5.80	H
	2506	-51.33	-13	-38.33	-60.93	-54.50	1.58	6.90	H
	3342	-56.76	-13	-43.76	-65.97	-60.26	1.85	7.50	H
	1670	-64.60	-13	-51.60	-66.47	-66.92	1.33	5.80	V
	2506	-62.23	-13	-49.23	-70.20	-65.40	1.58	6.90	V
	3342	-63.63	-13	-50.63	-72.65	-67.13	1.85	7.50	V

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



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1668	-60.79	-13	-47.79	-63.39	-63.11	1.33	5.80	H
	2502	-50.06	-13	-37.06	-60.16	-53.23	1.58	6.90	H
	3336	-58.02	-13	-45.02	-67.23	-61.52	1.85	7.50	H
	1668	-64.97	-13	-51.97	-66.84	-67.29	1.33	5.80	V
	2502	-62.79	-13	-49.79	-70.76	-65.96	1.58	6.90	V
	3336	-61.18	-13	-48.18	-70.20	-64.68	1.85	7.50	V

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

LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-62.55	-13	-49.55	-65.15	-64.87	1.33	5.80	H
	2496	-50.73	-13	-37.73	-60.56	-53.90	1.58	6.90	H
	3330	-60.18	-13	-47.18	-69.39	-63.68	1.85	7.50	H
	1664	-64.58	-13	-51.58	-66.45	-66.90	1.33	5.80	V
	2496	-61.79	-13	-48.79	-69.76	-64.96	1.58	6.90	V
	3330	-64.35	-13	-51.35	-73.37	-67.85	1.85	7.50	V

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



LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	5066	-53.59	-25	-28.59	-40.61	-60.02	2.54	8.97	H
	7598	-48.26	-25	-23.26	-40.36	-56.41	3.71	11.86	H
	10130	-62.97	-25	-37.97	-61.52	-71.48	3.59	12.11	H
	5066	-46.66	-25	-21.66	-36.88	-53.10	2.54	8.97	V
	7598	-42.86	-25	-17.86	-38.52	-51.02	3.71	11.86	V
	10130	-62.55	-25	-37.55	-61.16	-71.06	3.59	12.11	V

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

LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	5060	-51.60	-25	-26.60	-39.51	-58.03	2.54	8.97	H
	7592	-45.24	-25	-20.24	-37.93	-53.39	3.71	11.86	H
	10120	-63.38	-25	-38.38	-61.93	-71.89	3.59	12.11	H
	5060	-43.46	-25	-18.46	-34.52	-49.89	2.54	8.97	V
	7592	-39.80	-25	-14.80	-35.81	-47.95	3.71	11.86	V
	10120	-62.96	-25	-37.96	-61.57	-71.47	3.59	12.11	V

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



LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	5057	-54.51	-25	-29.51	-41.11	-60.95	2.54	8.97	H
	7586	-50.49	-25	-25.49	-42.59	-58.64	3.71	11.86	H
	10110	-63.06	-25	-38.06	-61.61	-71.57	3.59	12.11	H
	5057	-50.42	-25	-25.42	-39.26	-56.85	2.54	8.97	V
	7586	-45.92	-25	-20.92	-40.51	-54.07	3.71	11.86	V
	10110	-63.06	-25	-38.06	-61.67	-71.57	3.59	12.11	V

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

LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0									
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)
Middle	5051	-56.02	-25	-31.02	-41.70	-62.46	2.54	8.97	H
	7577	-51.79	-25	-26.79	-43.89	-59.94	3.71	11.86	H
	10100	-63.31	-25	-38.31	-61.86	-71.82	3.59	12.11	H
	5051	-48.13	-25	-23.13	-37.75	-54.57	2.54	8.97	V
	7577	-43.10	-25	-18.10	-38.71	-51.25	3.71	11.86	V
	10100	-63.46	-25	-38.46	-62.07	-71.97	3.59	12.11	V

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