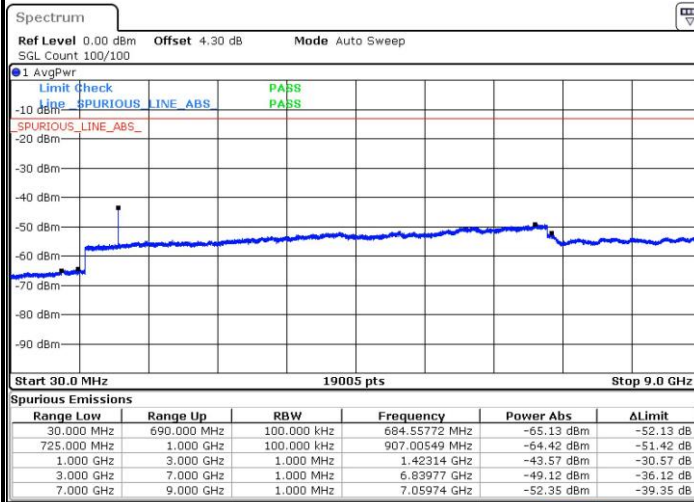




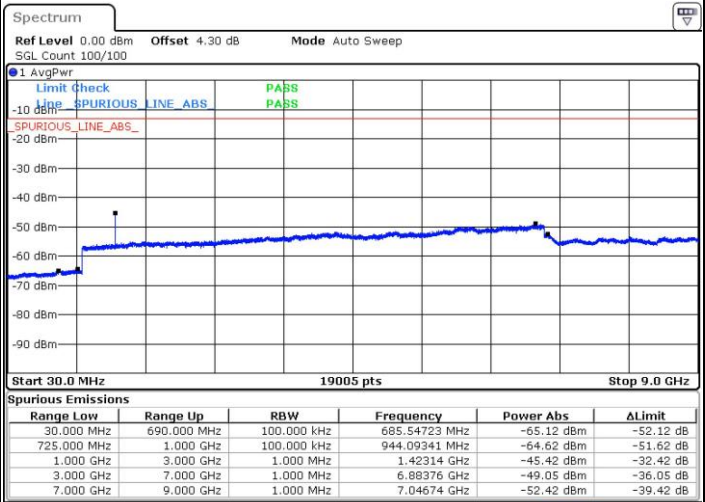
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 27 JUL 2017 18:58:57

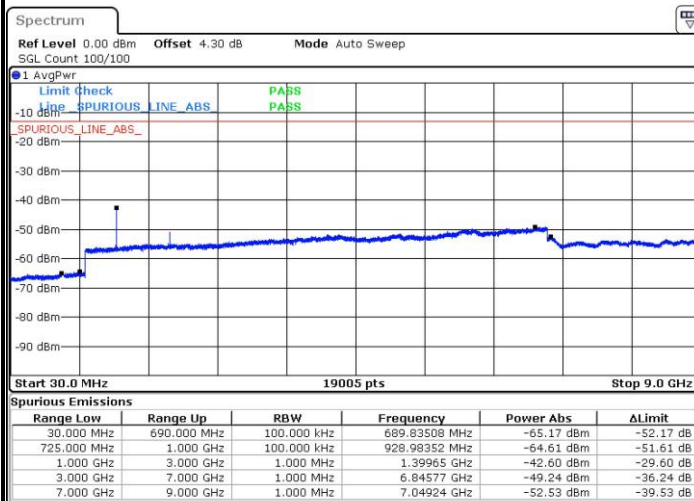
Highest Channel / 16QAM



Date: 27 JUL 2017 18:59:53

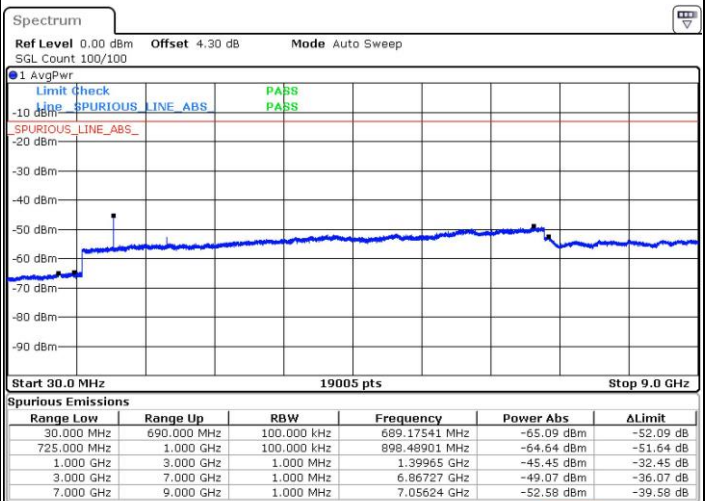
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 27 JUL 2017 19:12:19

Lowest Channel / 16QAM

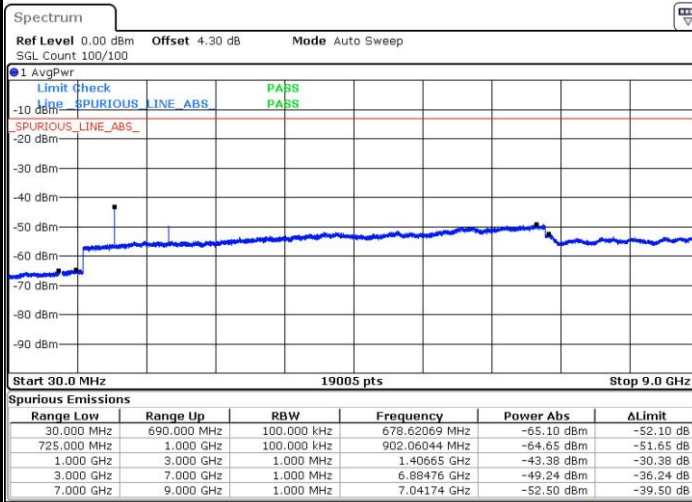


Date: 27 JUL 2017 19:13:15



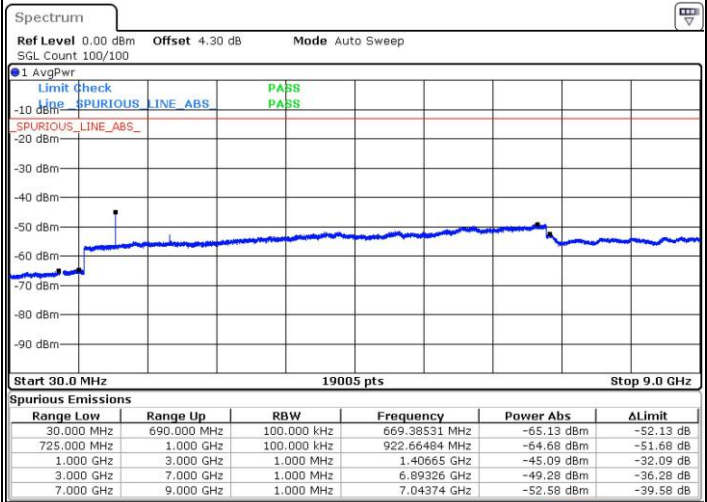
LTE Band 12 / 10MHz

Middle Channel / QPSK



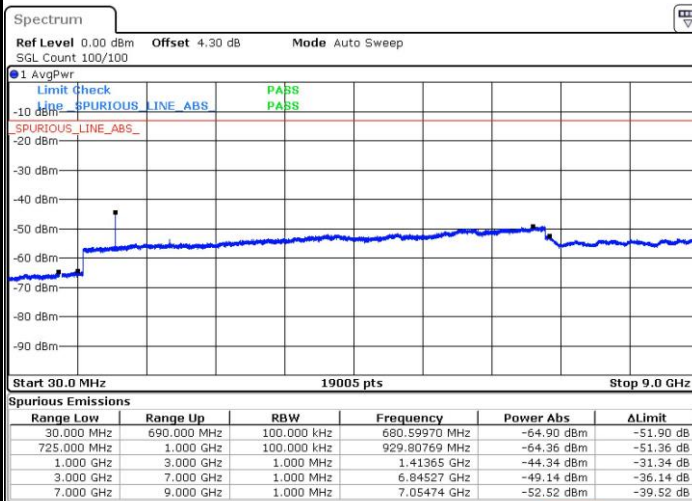
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Middle Channel / 16QAM



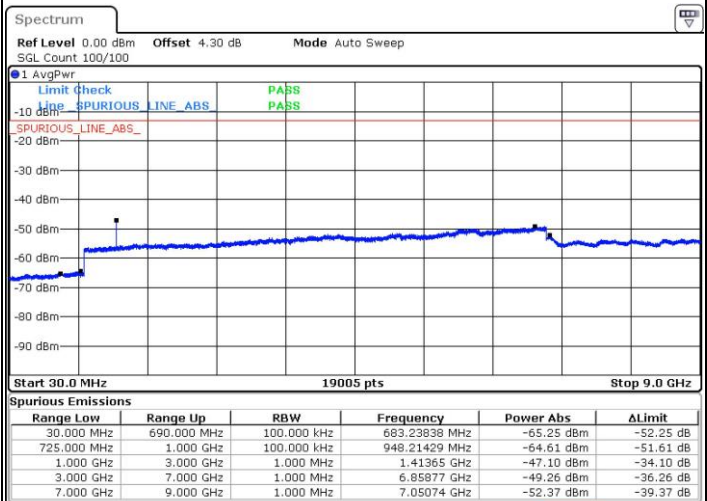
Date: 27.JUL.2017 19:14:11

Highest Channel / QPSK



Date: 27.JUL.2017 19:16:03

Highest Channel / 16QAM



Date: 27.JUL.2017 19:16:59

**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	0.0026	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0034	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0007	
5W20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0022	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 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.



Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0010	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage =3.8 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.



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0051	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0054	
20	Maximum Voltage	0.0066	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0004	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0040	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.8 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 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	3759	-56.30	-13	-43.30	-70.54	-58.01	5.08	6.80	H
	5637	-44.48	-13	-31.48	-61.28	-46.15	8.03	9.70	H
	7518	-53.92	-13	-40.92	-75.22	-56.30	9.43	11.81	H
	3758.92	-60.62	-13	-47.62	-73.05	-62.33	5.08	6.80	V
	5637	-51.48	-13	-38.48	-68.57	-53.15	8.03	9.70	V
	7518	-54.30	-13	-41.30	-75.44	-56.68	9.43	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	-56.22	-13	-43.22	-70.46	-57.93	5.08	6.80	H
	5637	-43.96	-13	-30.96	-60.76	-45.63	8.03	9.70	H
	7515	-53.73	-13	-40.73	-75.03	-56.11	9.43	11.81	H
	3756	-62.27	-13	-49.27	-74.7	-63.98	5.08	6.80	V
	5637	-52.02	-13	-39.02	-69.11	-53.69	8.03	9.70	V
	7515	-54.94	-13	-41.94	-76.08	-57.32	9.43	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	-56.91	-13	-43.91	-71.15	-58.62	5.08	6.80	H
	5634	-44.94	-13	-31.94	-61.74	-46.61	8.03	9.70	H
	7512	-54.47	-13	-41.47	-75.77	-56.85	9.43	11.81	H
	3756	-61.46	-13	-48.46	-73.89	-63.17	5.08	6.80	V
	5634	-50.97	-13	-37.97	-68.06	-52.64	8.03	9.70	V
	7512	-55.25	-13	-42.25	-76.39	-57.63	9.43	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	-55.86	-13	-42.86	-70.10	-57.57	5.08	6.80	H
	5625	-44.18	-13	-31.18	-60.98	-45.85	8.03	9.70	H
	7503	-54.17	-13	-41.17	-75.47	-56.55	9.43	11.81	H
	3750	-60.66	-13	-47.66	-73.09	-62.37	5.08	6.80	V
	5625	-50.90	-13	-37.90	-67.99	-52.57	8.03	9.70	V
	7503	-55.04	-13	-42.04	-76.18	-57.42	9.43	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	3747	-56.26	-13	-43.26	-70.50	-57.97	5.08	6.80	H
	5619	-43.63	-13	-30.63	-60.43	-45.30	8.03	9.70	H
	7494	-54.29	-13	-41.29	-75.59	-56.67	9.43	11.81	H
	3747	-60.98	-13	-47.98	-73.41	-62.69	5.08	6.80	V
	5619	-50.71	-13	-37.71	-67.8	-52.38	8.03	9.70	V
	7494	-55.88	-13	-42.88	-77.02	-58.26	9.43	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	3741	-56.75	-13	-43.75	-70.99	-58.46	5.08	6.80	H
	5613	-44.53	-13	-31.53	-61.33	-46.20	8.03	9.70	H
	7485	-54.01	-13	-41.01	-75.31	-56.39	9.43	11.81	H
	3741	-60.72	-13	-47.72	-73.15	-62.43	5.08	6.80	V
	5613	-50.52	-13	-37.52	-67.61	-52.19	8.03	9.70	V
	7485	-55.41	-13	-42.41	-76.55	-57.79	9.43	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	3463.92	-66.27	-13	-53.27	-75.17	-70.24	4.87	8.84	H
	5196	-53.00	-13	-40.00	-63.93	-54.44	7.70	9.14	H
	6927	-54.57	-13	-41.57	-73.04	-56.25	8.98	10.66	H
	3465	-62.97	-13	-49.97	-74.59	-66.94	4.87	8.84	V
	5196	-57.88	-13	-44.88	-71.93	-59.32	7.70	9.14	V
	6927	-55.48	-13	-42.48	-73.5	-57.16	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	-65.19	-13	-52.19	-74.09	-69.16	4.87	8.84	H
	5193	-47.10	-13	-34.10	-62.30	-48.54	7.70	9.14	H
	6924	-53.46	-13	-40.46	-71.93	-55.14	8.98	10.66	H
	3462	-64.06	-13	-51.06	-75.68	-68.03	4.87	8.84	V
	5193	-58.13	-13	-45.13	-72.18	-59.57	7.70	9.14	V
	6924	-56.74	-13	-43.74	-74.76	-58.42	8.98	10.66	V

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

LTE Band 4 / 5MHz / 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)
Middle	3460	-66.12	-13	-53.12	-75.02	-70.09	4.87	8.84	H
	5190	-50.89	-13	-37.89	-63.95	-52.33	7.70	9.14	H
	6921	-53.34	-13	-40.34	-71.81	-55.02	8.98	10.66	H
	3459	-64.10	-13	-51.10	-75.72	-68.07	4.87	8.84	V
	5190	-55.22	-13	-42.22	-69.27	-56.66	7.70	9.14	V
	6921	-57.51	-13	-44.51	-75.53	-59.19	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	3456.18	-66.49	-13	-53.49	-75.39	-70.46	4.87	8.84	H
	5184	-54.85	-13	-41.85	-65.78	-56.29	7.70	9.14	H
	6912	-54.98	-13	-41.98	-73.45	-56.66	8.98	10.66	H
	3456	-63.63	-13	-50.63	-75.25	-67.60	4.87	8.84	V
	5184	-57.52	-13	-44.52	-71.57	-58.96	7.70	9.14	V
	6912	-58.30	-13	-45.30	-76.32	-59.98	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	3451.68	-66.80	-13	-53.80	-75.70	-70.77	4.87	8.84	H
	5178	-55.73	-13	-42.73	-66.66	-57.17	7.70	9.14	H
	6903	-55.13	-13	-42.13	-73.60	-56.81	8.98	10.66	H
	3453	-63.62	-13	-50.62	-75.24	-67.59	4.87	8.84	V
	5178	-58.12	-13	-45.12	-72.17	-59.56	7.70	9.14	V
	6903	-58.65	-13	-45.65	-76.67	-60.33	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	-66.76	-13	-53.76	-75.66	-70.73	4.87	8.84	H
	5169	-57.26	-13	-44.26	-68.19	-58.70	7.70	9.14	H
	6894	-55.04	-13	-42.04	-73.51	-56.72	8.98	10.66	H
	3447.18	-63.42	-13	-50.42	-75.04	-67.39	4.87	8.84	V
	5169	-57.31	-13	-44.31	-71.36	-58.75	7.70	9.14	V
	6894	-58.08	-13	-45.08	-76.1	-59.76	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									
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	-65.07	-13	-52.07	-67.67	-67.39	1.33	5.80	H
	2507.88	-61.94	-13	-48.94	-71.29	-65.11	1.58	6.90	H
	3345	-66.22	-13	-53.22	-75.43	-69.72	1.85	7.50	H
	1671.92	-69.10	-13	-56.10	-70.97	-71.42	1.33	5.80	V
	2508	-64.14	-13	-51.14	-72.11	-67.31	1.58	6.90	V
	3345	-66.11	-13	-53.11	-75.13	-69.61	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	-65.00	-13	-52.00	-67.60	-67.32	1.33	5.80	H
	2505.72	-62.05	-13	-49.05	-71.40	-65.22	1.58	6.90	H
	3342	-65.75	-13	-52.75	-74.96	-69.25	1.85	7.50	H
	1670	-68.35	-13	-55.35	-70.22	-70.67	1.33	5.80	V
	2506	-64.15	-13	-51.15	-72.12	-67.32	1.58	6.90	V
	3342	-67.00	-13	-54.00	-76.02	-70.50	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	-62.09	-13	-49.09	-64.69	-64.41	1.33	5.80	H
	2504	-61.76	-13	-48.76	-71.11	-64.93	1.58	6.90	H
	3336	-65.80	-13	-52.80	-75.01	-69.30	1.85	7.50	H
	1668	-66.83	-13	-53.83	-68.70	-69.15	1.33	5.80	V
	2504	-63.66	-13	-50.66	-71.63	-66.83	1.58	6.90	V
	3336	-66.49	-13	-53.49	-75.51	-69.99	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	-58.76	-13	-45.76	-61.46	-61.08	1.33	5.80	H
	2496	-61.69	-13	-48.69	-71.04	-64.86	1.58	6.90	H
	3327	-65.88	-13	-52.88	-75.09	-69.38	1.85	7.50	H
	1664	-64.82	-13	-51.82	-66.69	-67.14	1.33	5.80	V
	2496	-64.01	-13	-51.01	-71.98	-67.18	1.58	6.90	V
	3327	-66.11	-13	-53.11	-75.13	-69.61	1.85	7.50	V

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

LTE Band 12 / 1.4MHz / 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	1414	-68.42	-13	-55.42	-64.26	-69.32	1.14	4.19	H
	2120	-62.08	-13	-49.08	-61.54	-63.54	1.4	5.01	H
	2828	-67.90	-13	-54.90	-68.54	-70.43	1.63	6.31	H
	1414	-69.81	-13	-56.81	-64.68	-70.71	1.14	4.19	V
	2120	-66.75	-13	-53.75	-64.87	-68.21	1.4	5.01	V
	2828	-65.72	-13	-52.72	-67.84	-68.25	1.63	6.31	V

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

LTE Band 12 / 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	1412	-66.10	-13	-53.10	-61.94	-67.00	1.14	4.19	H
	2118	-65.35	-13	-52.35	-64.81	-66.81	1.4	5.01	H
	2824	-66.82	-13	-53.82	-67.46	-69.35	1.63	6.31	H
	1412	-67.51	-13	-54.51	-62.38	-68.41	1.14	4.19	V
	2118	-65.67	-13	-52.67	-63.79	-67.13	1.4	5.01	V
	2824	-65.42	-13	-52.42	-67.54	-67.95	1.63	6.31	V

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



LTE Band 12 / 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	1410	-66.05	-13	-53.05	-61.89	-66.95	1.14	4.19	H
	2116	-67.62	-13	-54.62	-67.08	-69.08	1.4	5.01	H
	2822	-66.25	-13	-53.25	-66.89	-68.78	1.63	6.31	H
	1410	-67.67	-13	-54.67	-62.54	-68.57	1.14	4.19	V
	2116	-68.65	-13	-55.65	-66.77	-70.11	1.4	5.01	V
	2822	-65.46	-13	-52.46	-67.58	-67.99	1.63	6.31	V

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

LTE Band 12 / 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	1406	-69.12	-13	-56.12	-64.96	-70.02	1.14	4.19	H
	2110	-67.11	-13	-54.11	-66.57	-68.57	1.4	5.01	H
	2812	-67.72	-13	-54.72	-68.36	-70.25	1.63	6.31	H
	1406	-70.40	-13	-57.40	-65.27	-71.30	1.14	4.19	V
	2110	-69.24	-13	-56.24	-67.36	-70.70	1.4	5.01	V
	2812	-65.68	-13	-52.68	-67.8	-68.21	1.63	6.31	V

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