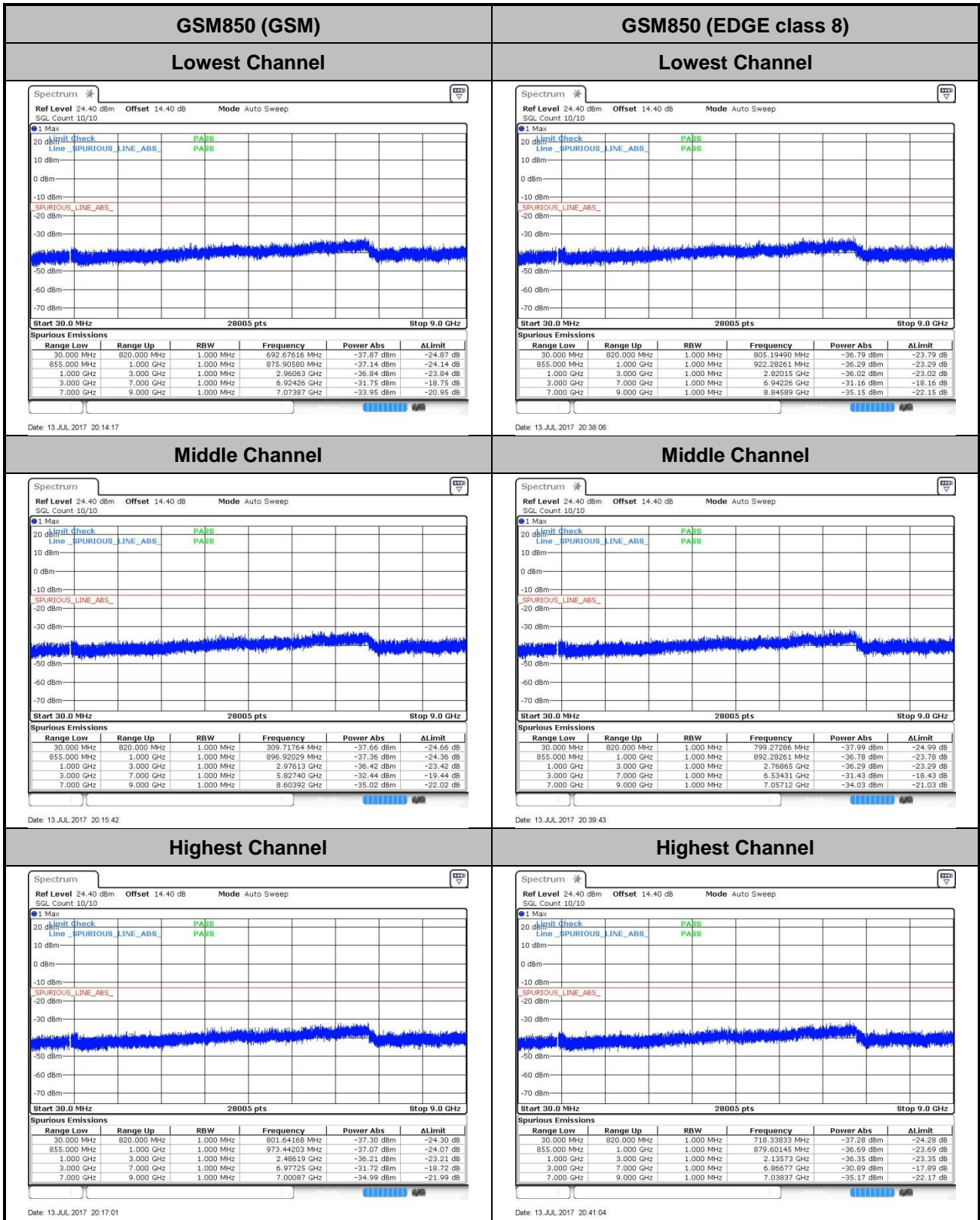




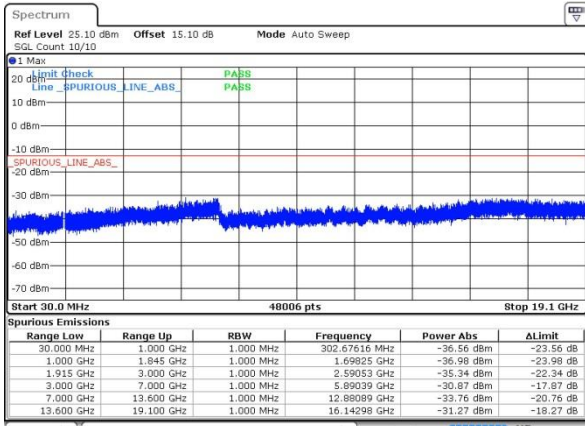
# Conducted Spurious Emission





GSM1900 (GSM)

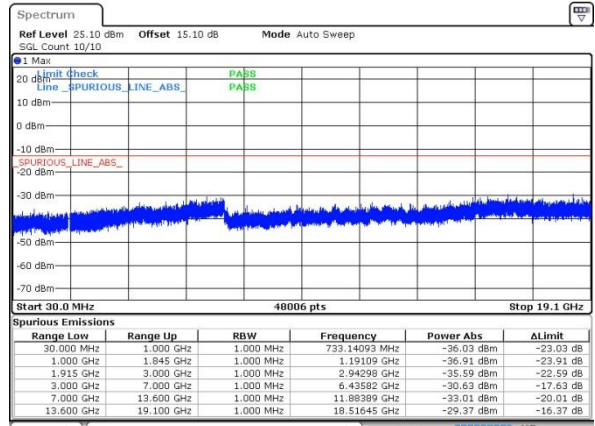
Lowest Channel



Date: 13.JUL.2017 21:01:29

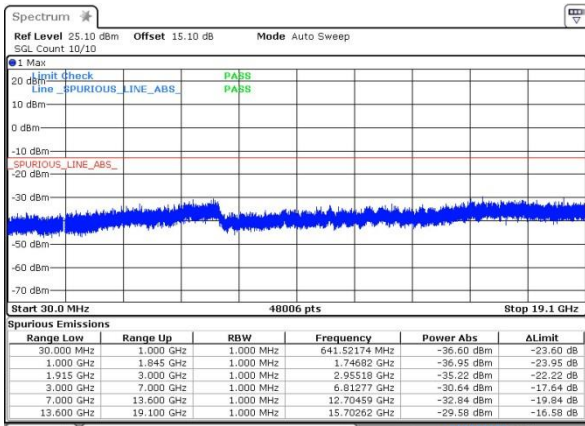
GSM1900 (EDGE class 8)

Lowest Channel



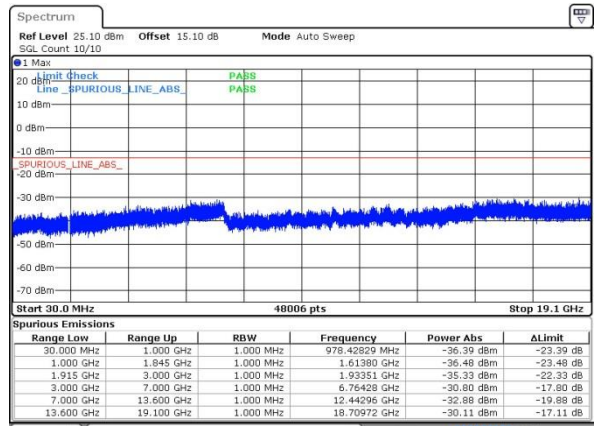
Date: 13.JUL.2017 21:28:46

Middle Channel



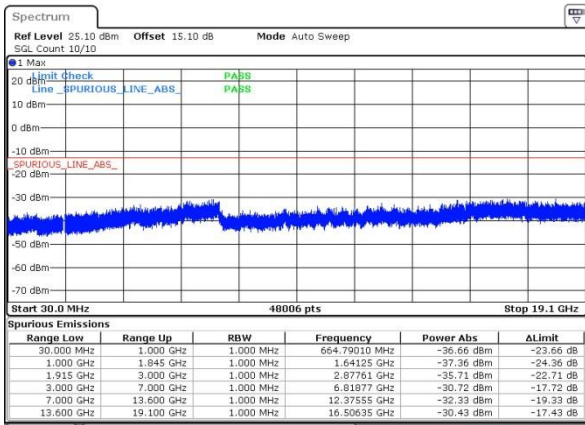
Date: 13.JUL.2017 21:03:03

Middle Channel



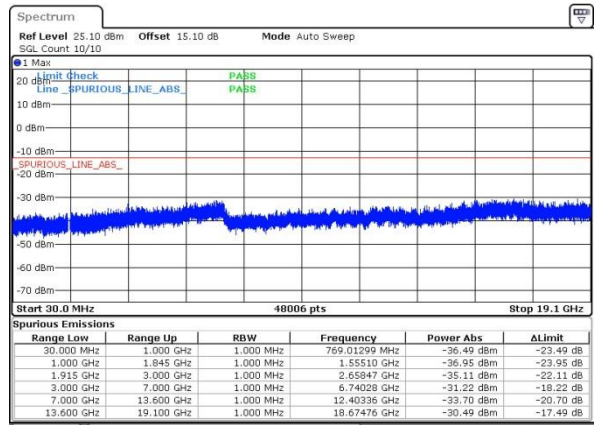
Date: 13.JUL.2017 21:30:45

Highest Channel



Date: 13.JUL.2017 21:04:26

Highest Channel

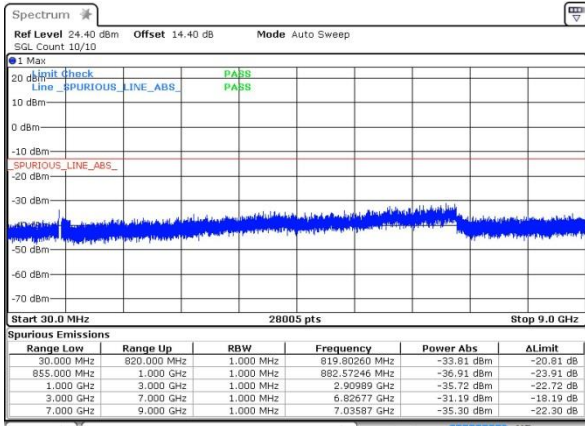


Date: 13.JUL.2017 21:30:06



WCDMA Band V (RMC 12.2Kbps)

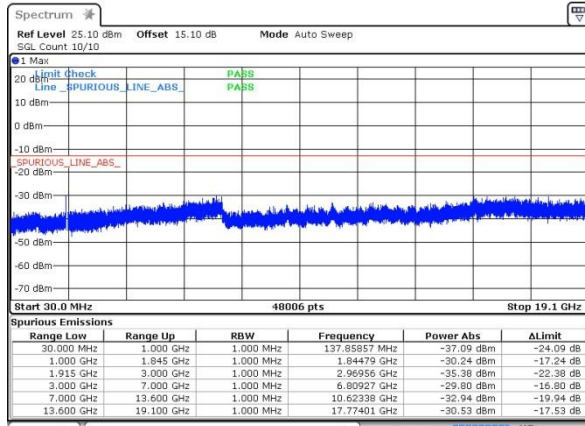
Lowest Channel



Date: 13.JUL.2017 22:58:09

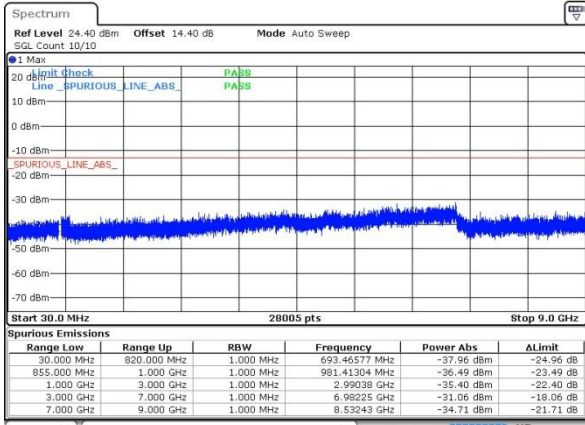
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



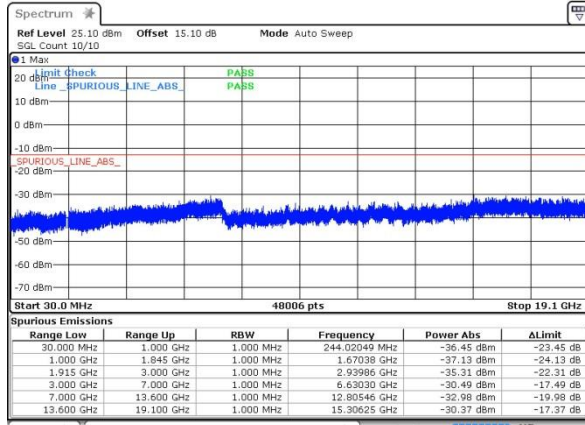
Date: 13.JUL.2017 22:41:49

Middle Channel



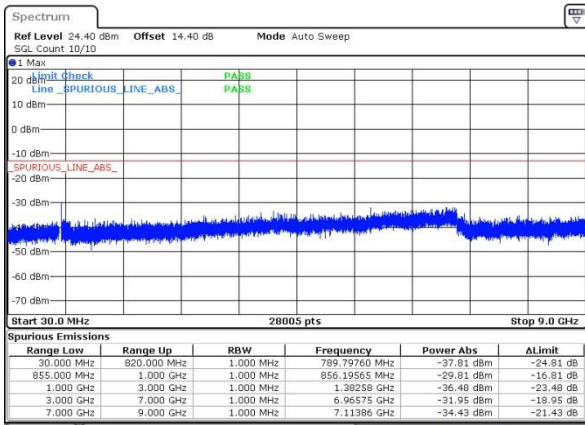
Date: 13.JUL.2017 22:13:06

Middle Channel



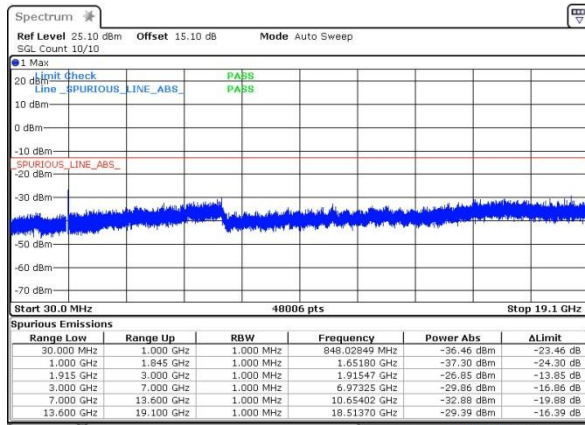
Date: 13.JUL.2017 22:43:12

Highest Channel



Date: 13.JUL.2017 22:14:30

Highest Channel



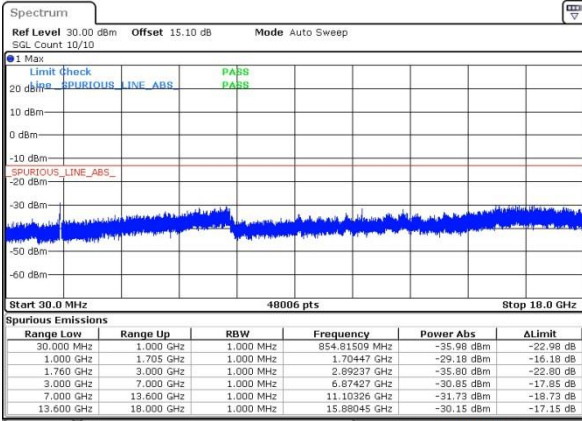
Date: 13.JUL.2017 22:44:34





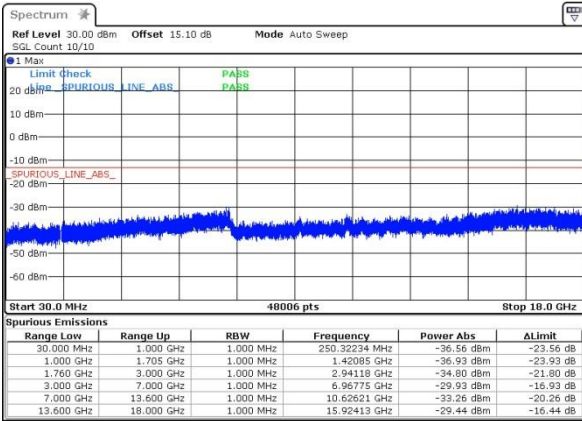
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



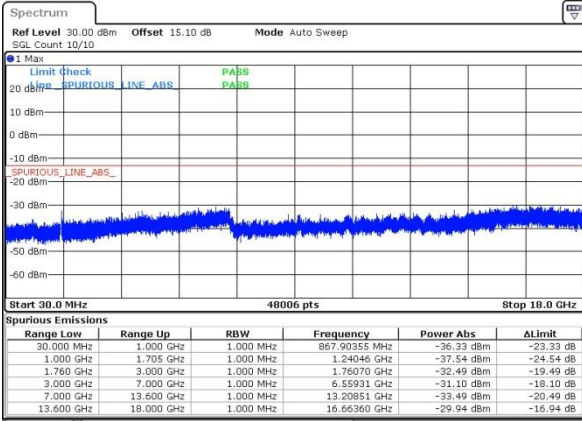
Date: 13.JUL.2017 23:32:15

Middle Channel



Date: 13.JUL.2017 23:33:38

Highest Channel



Date: 13.JUL.2017 23:34:58



**Frequency Stability**

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0048	0.0012	PASS
40	Normal Voltage	0.0060	0.0036	
30	Normal Voltage	0.0024	0.0060	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0036	0.0012	
0	Normal Voltage	0.0012	0.0108	
-10	Normal Voltage	0.0072	0.0096	
-20	Normal Voltage	0.0024	0.0072	
-30	Normal Voltage	0.0036	0.0215	
20	Maximum Voltage	0.0132	0.0024	
20	Normal Voltage	0.0072	0.0155	
20	Battery End Point	0.0167	0.0132	

Note: Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0117	0.0037	PASS
40	Normal Voltage	0.0106	0.0112	
30	Normal Voltage	0.0128	0.0011	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0048	0.0037	
0	Normal Voltage	0.0037	0.0005	
-10	Normal Voltage	0.0021	0.0011	
-20	Normal Voltage	0.0032	0.0027	
-30	Normal Voltage	0.0085	0.0096	
20	Maximum Voltage	0.0011	0.0021	
20	Normal Voltage	0.0133	0.0090	
20	Battery End Point	0.0080	0.0165	

**Note:**

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2KbpsRMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0203	PASS
40	Normal Voltage	0.0072	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0335	
0	Normal Voltage	0.0323	
-10	Normal Voltage	0.0060	
-20	Normal Voltage	0.0036	
-30	Normal Voltage	0.0311	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0191	

Note: Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0037	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0059	
-20	Normal Voltage	0.0069	
-30	Normal Voltage	0.0085	
20	Maximum Voltage	0.0032	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0074	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0110	PASS
40	Normal Voltage	0.0087	
30	Normal Voltage	0.0035	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0115	
-20	Normal Voltage	0.0127	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0012	
20	Battery End Point	0.0092	

**Note:**

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.





## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

GSM850 (GSM)									
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	-36.43	-13	-23.43	-37.68	-38.29	1.19	5.20	H
	2508	-56.04	-13	-43.04	-59.03	-58.26	1.53	5.90	H
	3345	-67.53	-13	-54.53	-71.48	-70.32	1.76	6.70	H
	1672	-40.00	-13	-27.00	-40.8	-41.86	1.19	5.20	V
	2508	-56.40	-13	-43.40	-58.38	-58.62	1.53	5.90	V
	3345	-69.27	-13	-56.27	-72.59	-72.06	1.76	6.70	V

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

GSM850 (EDGE class 8)									
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	-34.32	-13	-21.32	-35.65	-36.18	1.19	5.20	H
	2508	-49.37	-13	-36.37	-53.45	-51.59	1.53	5.90	H
	3345	-67.42	-13	-54.42	-71.37	-70.21	1.76	6.70	H
	1672	-34.80	-13	-21.80	-35.75	-36.66	1.19	5.20	V
	2508	-49.89	-13	-36.89	-53.36	-52.11	1.53	5.90	V
	3345	-69.05	-13	-56.05	-72.37	-71.84	1.76	6.70	V

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

GSM1900 (GSM)									
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	-67.45	-13	-54.45	-70.96	-72.44	1.88	6.87	H
	5640	-54.44	-13	-41.44	-62.63	-61.74	2.38	9.68	H
	7521	-63.41	-13	-50.41	-75.44	-72.48	2.74	11.81	H
	3759	-67.59	-13	-54.59	-71.38	-72.58	1.88	6.87	V
	5640	-42.46	-13	-29.46	-56.18	-49.76	2.38	9.68	V
	7521	-62.98	-13	-49.98	-73.69	-72.05	2.74	11.81	V

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



GSM1900 (EDGE class 8)									
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	-68.29	-13	-55.29	-71.80	-73.28	1.88	6.87	H
	5640	-54.67	-13	-41.67	-62.86	-61.97	2.38	9.68	H
	7520	-62.87	-13	-49.87	-74.90	-71.94	2.74	11.81	H
	3759	-67.08	-13	-54.08	-70.87	-72.07	1.88	6.87	V
	5640	-45.32	-13	-32.32	-58.12	-52.62	2.38	9.68	V
	7520	-64.56	-13	-51.56	-75.27	-73.63	2.74	11.81	V

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

WCDMA Band V(RMC 12.2Kbps)									
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	-59.14	-13	-46.14	-57.77	-61.00	1.19	5.20	H
	2509	-55.95	-13	-42.95	-58.94	-58.17	1.53	5.90	H
	3345	-68.37	-13	-55.37	-72.32	-71.16	1.76	6.70	H
	1672	-58.09	-13	-45.09	-56.05	-59.95	1.19	5.20	V
	2509	-54.01	-13	-41.01	-55.99	-56.23	1.53	5.90	V
	3345	-68.43	-13	-55.43	-71.75	-71.22	1.76	6.70	V

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

WCDMA Band II(RMC 12.2Kbps)									
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	-67.79	-13	-54.79	-71.30	-72.78	1.88	6.87	H
	5640	-63.67	-13	-50.67	-71.86	-70.97	2.38	9.68	H
	7521	-63.08	-13	-50.08	-75.11	-72.15	2.74	11.81	H
	3759	-66.28	-13	-53.28	-70.07	-71.27	1.88	6.87	V
	5640	-57.55	-13	-44.55	-66.12	-64.85	2.38	9.68	V
	7521	-63.95	-13	-50.95	-74.66	-73.02	2.74	11.81	V

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



WCDMA Band IV(RMC 12.2Kbps)									
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	-61.05	-13	-48.05	-67.84	-65.94	1.81	6.70	H
	5199	-59.28	-13	-46.28	-71.96	-66.18	2.23	9.13	H
	6930	-60.06	-13	-47.06	-75.24	-68.12	2.60	10.66	H
	3465	-63.46	-13	-50.46	-68.66	-68.35	1.81	6.70	V
	5199	-58.38	-13	-45.38	-71.93	-65.28	2.23	9.13	V
	6930	-59.49	-13	-46.49	-74.54	-67.55	2.6	10.66	V

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