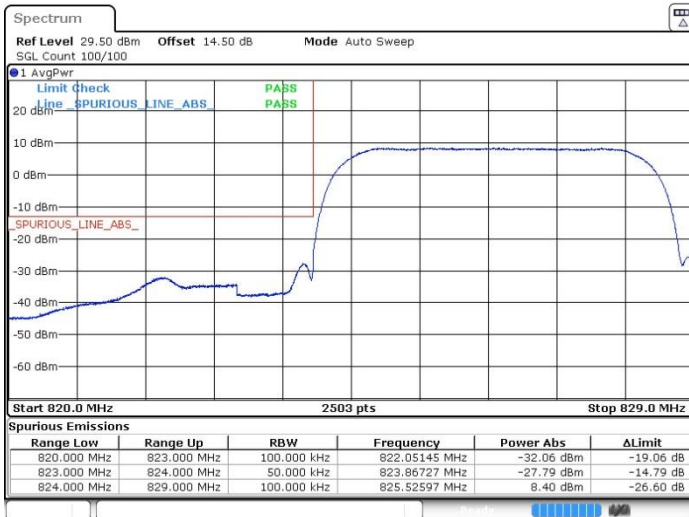




WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

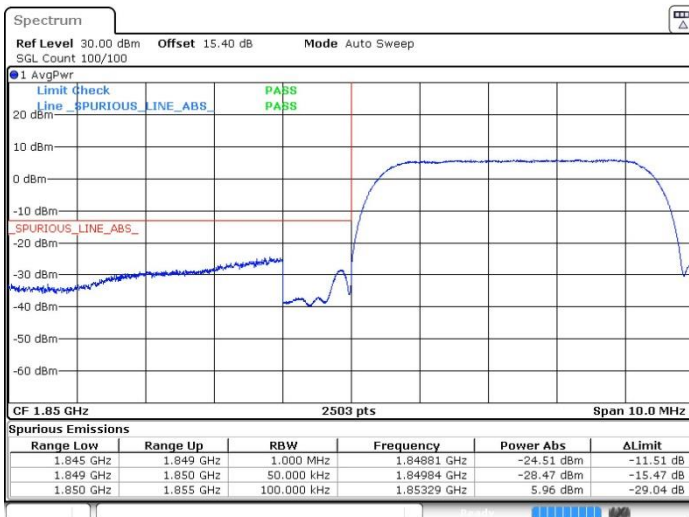


Highest Band Edge



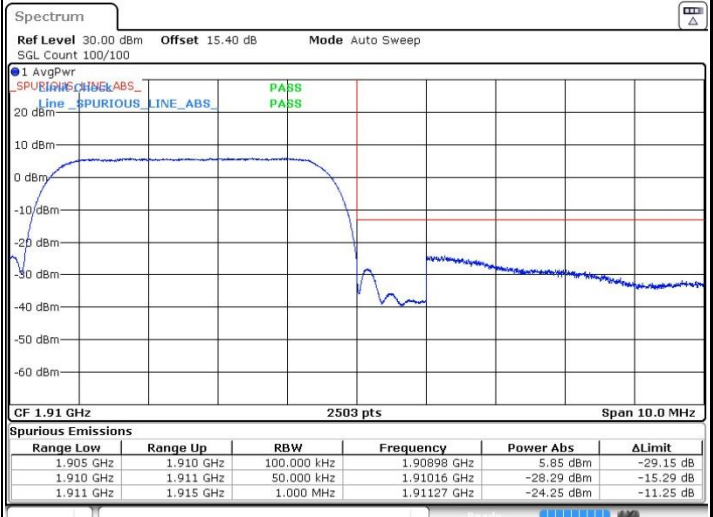
WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



Date: 8 JUL 2020 16:20:50

Highest Band Edge

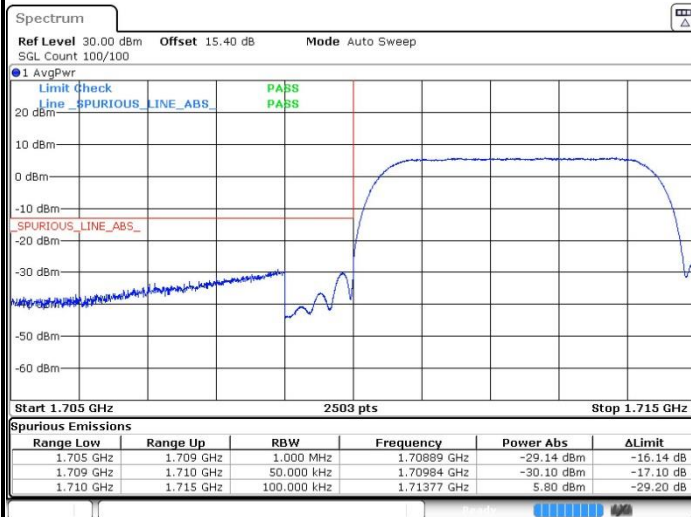


Date: 8 JUL 2020 16:23:39



WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge



Highest Band Edge

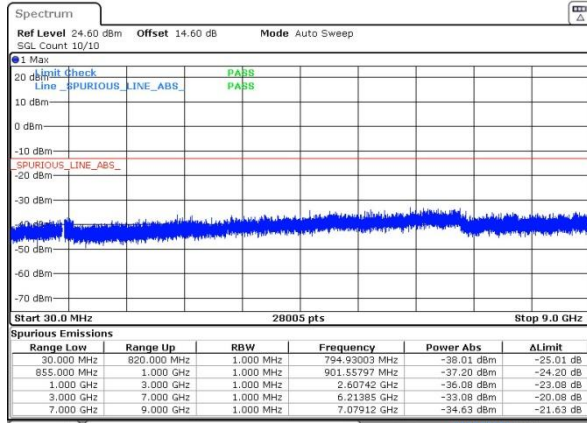




Conducted Spurious Emission

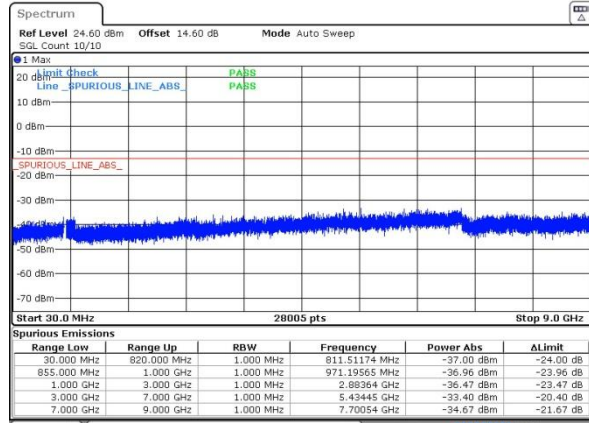
GSM850 (GSM)

Lowest Channel

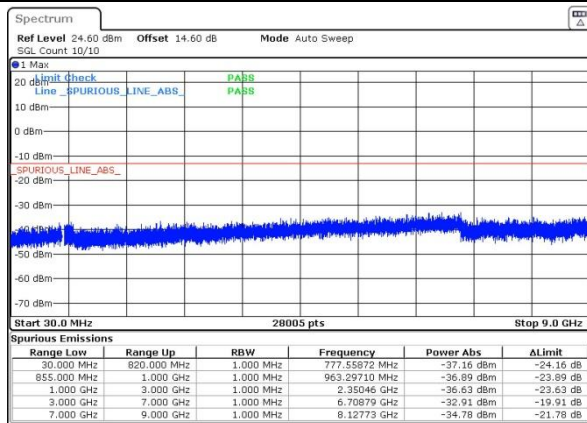


GSM850 (EDGE class 8)

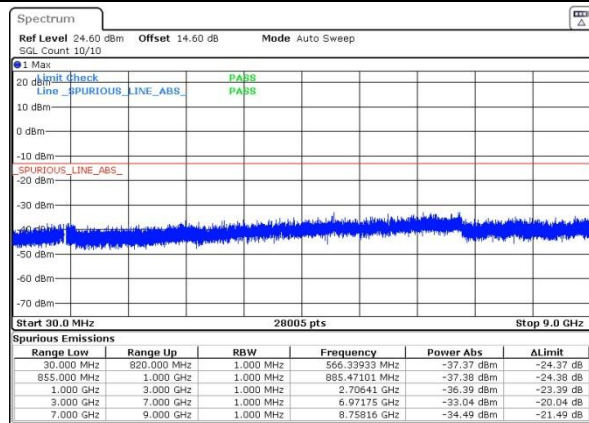
Lowest Channel



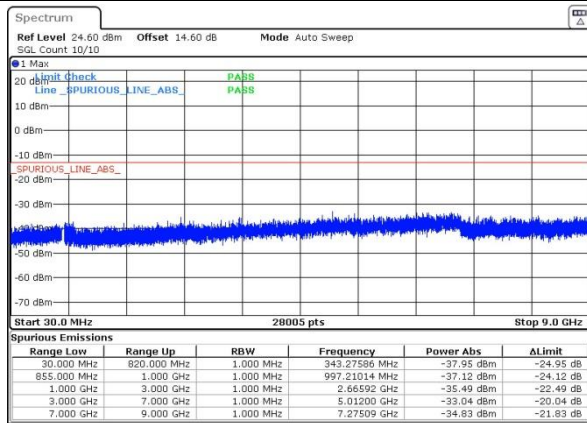
Middle Channel



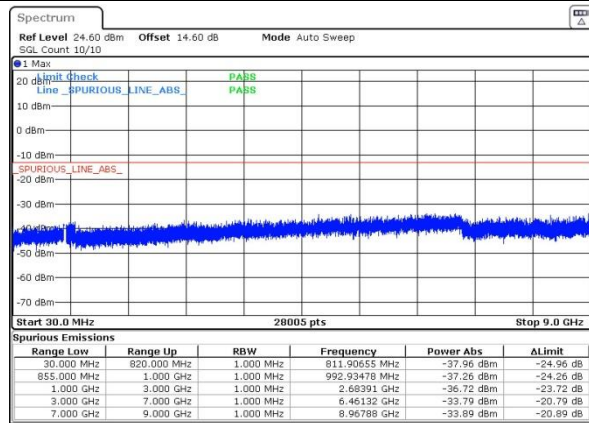
Middle Channel



Highest Channel



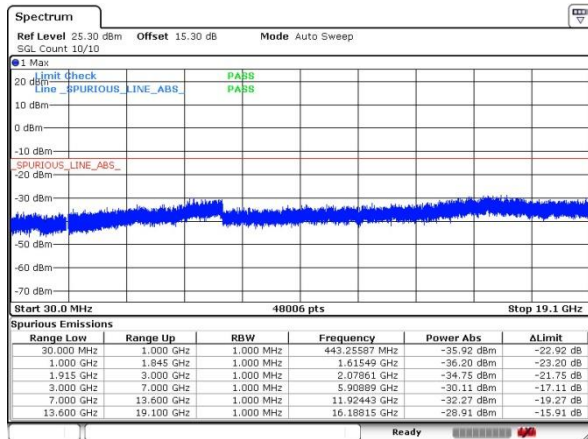
Highest Channel





GSM1900 (GSM)

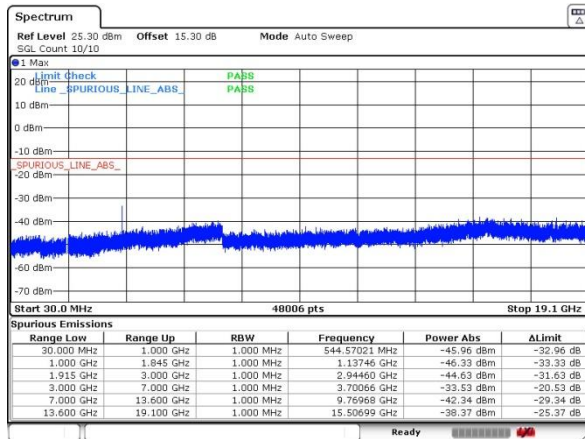
Lowest Channel



Date: 26 JUN 2020 14:48:38

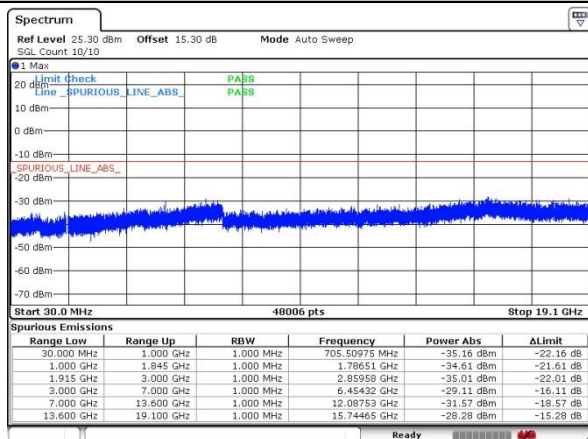
GSM1900 (EDGE class 8)

Lowest Channel

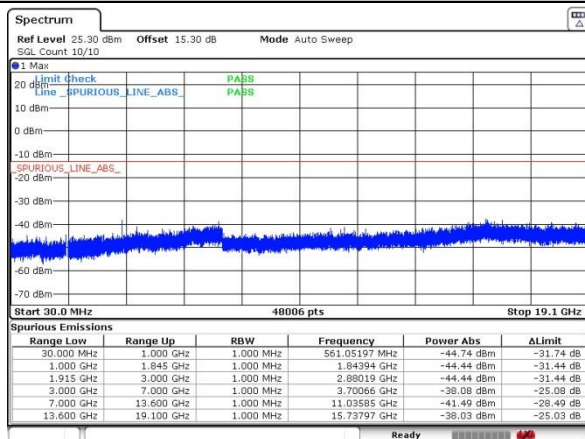


Date: 26 JUN 2020 15:13:20

Middle Channel

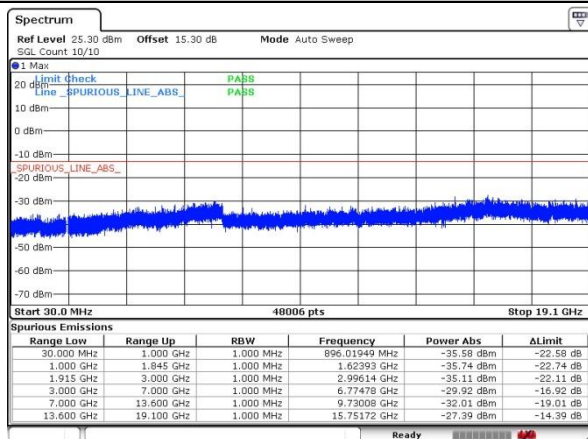


Date: 26 JUN 2020 14:49:26

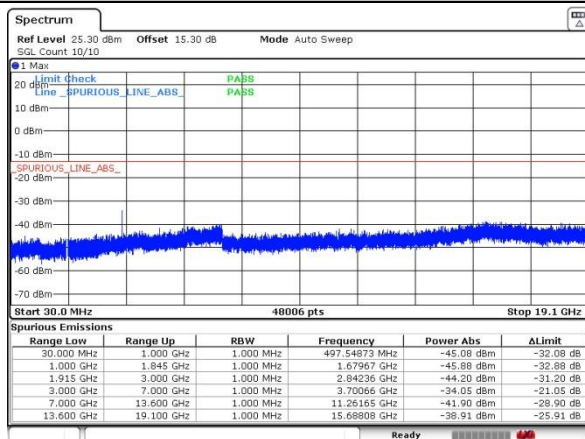


Date: 26 JUN 2020 15:13:44

Highest Channel



Date: 26 JUN 2020 14:49:51

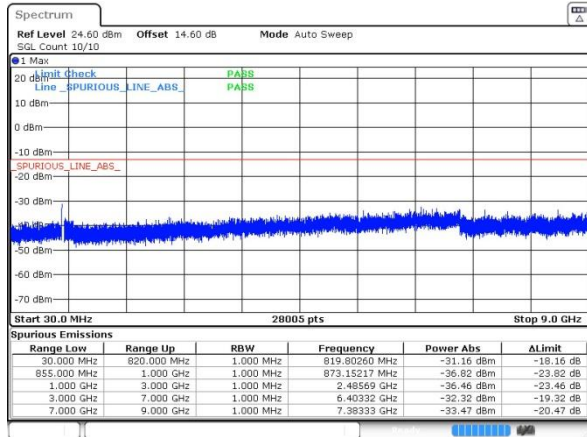


Date: 26 JUN 2020 15:14:00



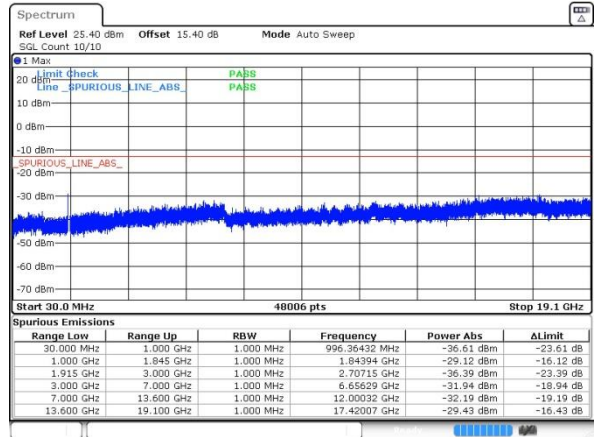
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

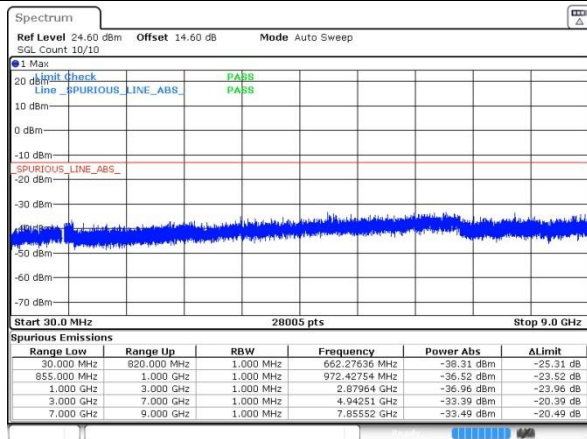


WCDMA Band II (RMC 12.2Kbps)

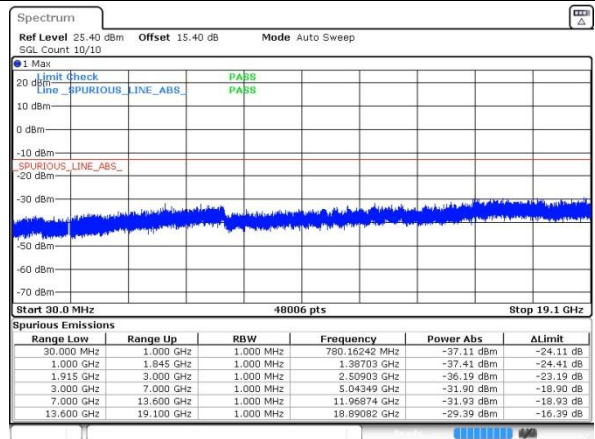
Lowest Channel



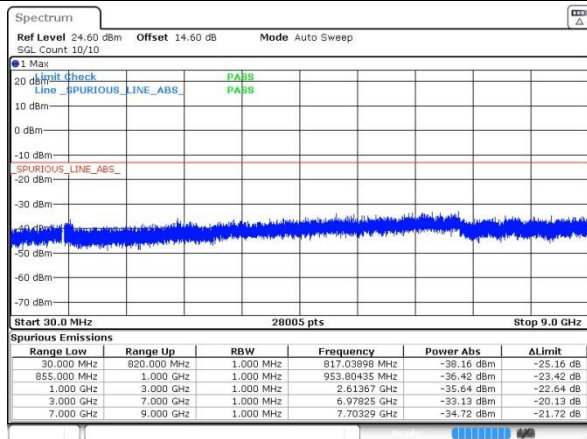
Middle Channel



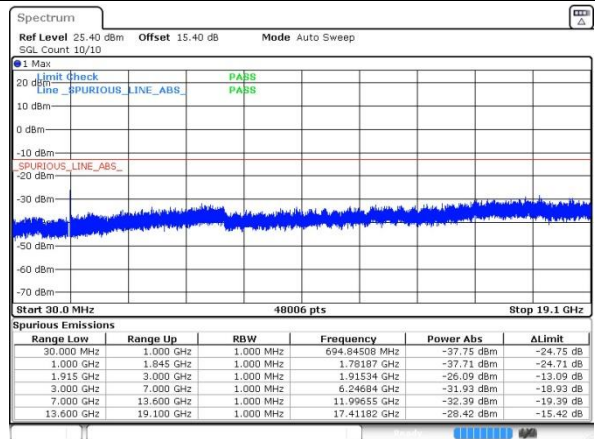
Middle Channel



Highest Channel



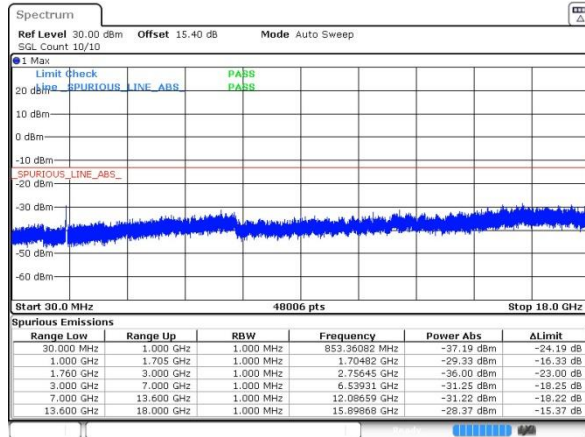
Highest Channel



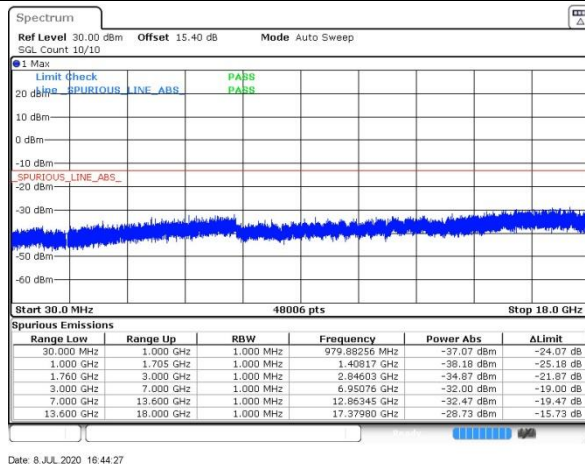


WCDMA Band IV (RMC 12.2Kbps)

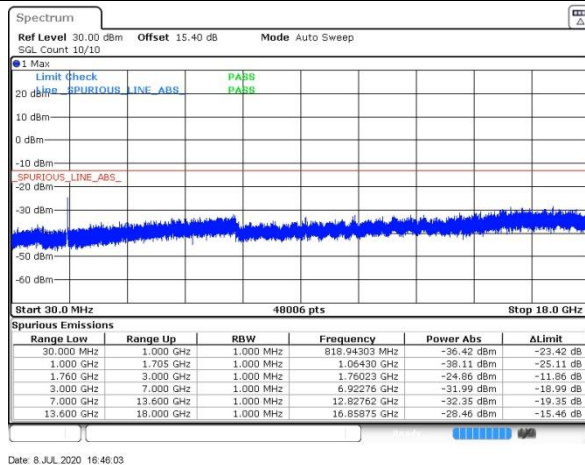
Lowest Channel



Middle Channel



Highest Channel



**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	0.0120	0.0251	PASS
40	Normal Voltage	0.0072	0.0239	
30	Normal Voltage	0.0132	0.0084	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0167	0.0167	
0	Normal Voltage	0.0072	0.0012	
-10	Normal Voltage	0.0203	0.0227	
-20	Normal Voltage	0.0227	0.0060	
-30	Normal Voltage	0.0143	0.0108	
20	Maximum Voltage	0.0096	0.0275	
20	Normal Voltage	0.0120	0.0203	
20	Battery End Point	0.0191	0.0036	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0011	0.0181	PASS
40	Normal Voltage	0.0005	0.0133	
30	Normal Voltage	0.0037	0.0170	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0133	0.0106	
0	Normal Voltage	0.0106	0.0149	
-10	Normal Voltage	0.0090	0.0170	
-20	Normal Voltage	0.0027	0.0122	
-30	Normal Voltage	0.0000	0.0117	
20	Maximum Voltage	0.0069	0.0117	
20	Normal Voltage	0.0016	0.0138	
20	Battery End Point	0.0128	0.0027	



Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0120	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0167	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0131	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0299	
20	Normal Voltage	0.0036	
20	Battery End Point	0.0143	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0074	
30	Normal Voltage	0.0064	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0000	



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0061	PASS
40	Normal Voltage	0.0171	
30	Normal Voltage	0.0110	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0183	
0	Normal Voltage	0.0195	
-10	Normal Voltage	0.0183	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0158	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0207	

Note:

1. Normal Voltage = 3.8V ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V
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

Top Antenna:

GSM850 (GSM)								
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)
Middle	1672	-63.49	-13	-50.49	-70.46	1.58	10.70	H
	2510	-50.65	-13	-37.65	-58.90	2.102	12.50	H
	3345.6	-58.20	-13	-45.20	-67.09	2.856	13.90	H
	4182	-46.93	-13	-33.93	-55.39	2.689	13.30	H
	1672.8	-63.84	-13	-50.84	-70.81	1.58	10.70	V
	2510	-53.15	-13	-40.15	-61.40	2.10	12.50	V
	3345.6	-58.35	-13	-45.35	-67.24	2.86	13.90	V
	4182	-46.67	-13	-33.67	-55.13	2.69	13.30	V

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

GSM850 (EDGE 1 Tx slots)								
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)
Middle	1675	-63.54	-13	-50.54	-70.51	1.58	10.70	H
	2510	-54.42	-13	-41.42	-62.67	2.102	12.50	H
	3345	-57.02	-13	-44.02	-65.91	2.856	13.90	H
	4180	-47.91	-13	-34.91	-56.37	2.689	13.30	H
	1760	-58.14	-13	-45.14	-65.11	1.58	10.70	V
	2510	-55.62	-13	-42.62	-63.87	2.10	12.50	V
	3345.6	-56.92	-13	-43.92	-65.81	2.86	13.90	V
	4180	-47.84	-13	-34.84	-56.30	2.69	13.30	V

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

GSM1900 (GSM)								
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)
Middle	3759	-50.15	-13	-37.15	-62.41	2.64	14.90	H
	5640	-41.08	-13	-28.08	-52.94	2.94	14.80	H
	7521	-41.48	-13	-28.48	-51.25	3.39	13.16	H
	3759	-50.54	-13	-37.54	-62.80	2.64	14.90	V
	5640	-42.02	-13	-29.02	-53.88	2.94	14.80	V
	7521	-42.21	-13	-29.21	-51.98	3.39	13.16	V

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



GSM1900 (EDGE 1 Tx slots)								
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)
Middle	3759	-50.70	-13	-37.70	-62.96	2.64	14.90	H
	5640	-43.69	-13	-30.69	-55.55	2.94	14.80	H
	7521	-41.67	-13	-28.67	-51.44	3.39	13.16	H
	3759	-50.32	-13	-37.32	-62.58	2.64	14.90	V
	5640	-44.88	-13	-31.88	-56.74	2.94	14.80	V
	7521	-42.02	-13	-29.02	-51.79	3.39	13.16	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1675	-62.93	-13	-49.93	-69.90	1.58	10.70	H
	2509.2	-58.45	-13	-45.45	-66.70	2.102	12.50	H
	3345.6	-56.65	-13	-43.65	-65.54	2.856	13.90	H
	1675	-63.23	-13	-50.23	-70.20	1.58	10.70	V
	2510	-58.35	-13	-45.35	-66.60	2.10	12.50	V
	3345	-57.14	-13	-44.14	-66.03	2.86	13.90	V

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

WCDMA Band II(RMC 12.2Kbps)								
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)
Middle	3759	-50.36	-13	-37.36	-62.62	2.64	14.90	H
	5640	-44.81	-13	-31.81	-56.67	2.94	14.80	H
	7521	-41.46	-13	-28.46	-51.23	3.39	13.16	H
	3759	-49.98	-13	-36.98	-62.24	2.64	14.90	V
	5640	-45.17	-13	-32.17	-57.03	2.94	14.80	V
	7521	-42.13	-13	-29.13	-51.90	3.39	13.16	V

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



WCDMA Band IV(RMC 12.2Kbps)								
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)
Middle	3465	-52.93	-13	-39.93	-65.19	2.64	14.90	H
	5197.8	-45.68	-13	-32.68	-57.54	2.94	14.80	H
	6930	-43.27	-13	-30.27	-53.04	3.39	13.16	H
	3465	-52.88	-13	-39.88	-65.14	2.64	14.90	V
	5197.8	-46.39	-13	-33.39	-58.25	2.94	14.80	V
	6930	-43.53	-13	-30.53	-53.30	3.39	13.16	V

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