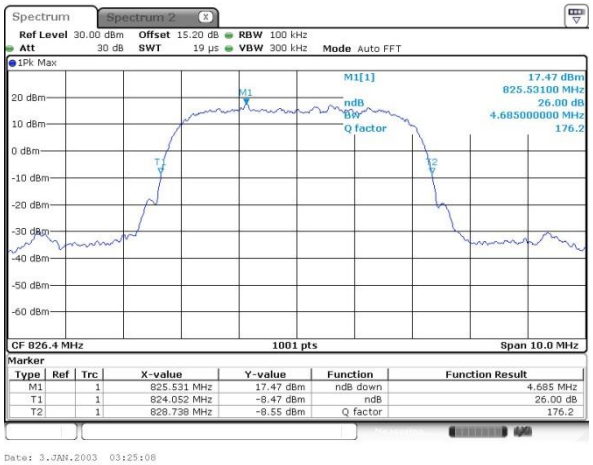
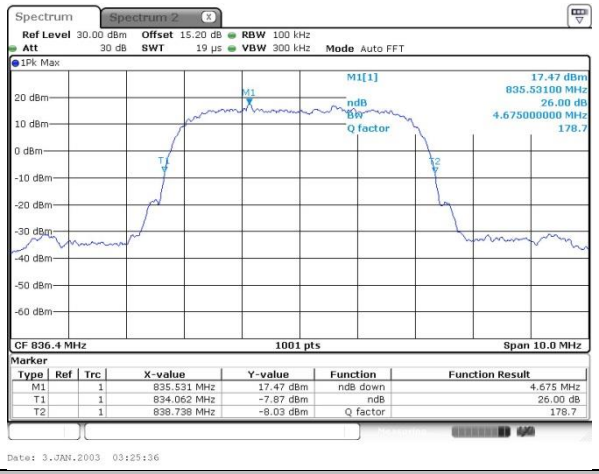
WCDMA Band V (RMC 12.2Kbps)

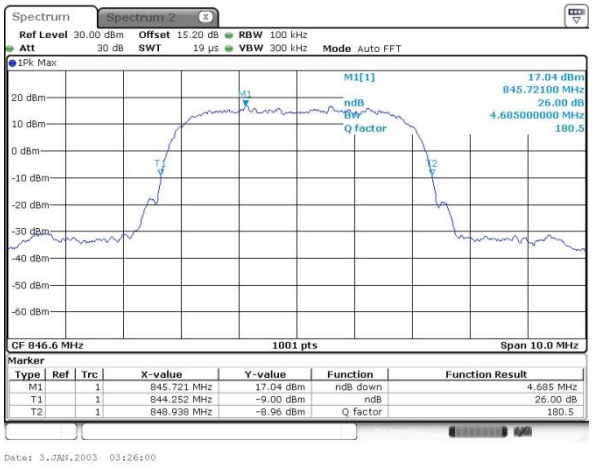
Lowest Channel



Middle Channel

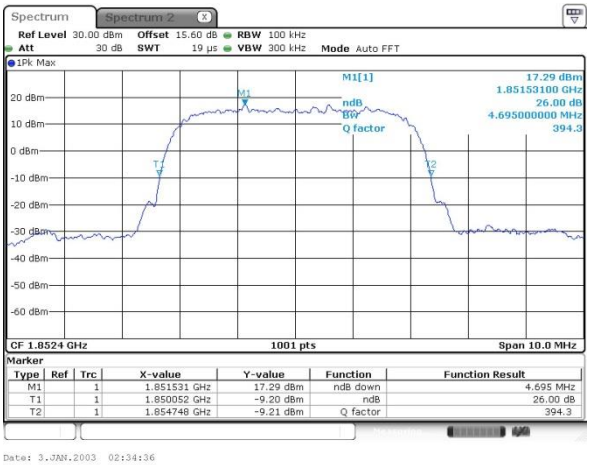


Highest Channel

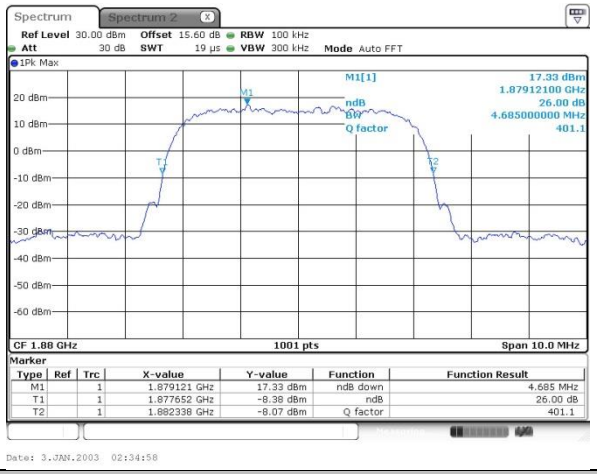


WCDMA Band II (RMC 12.2Kbps)

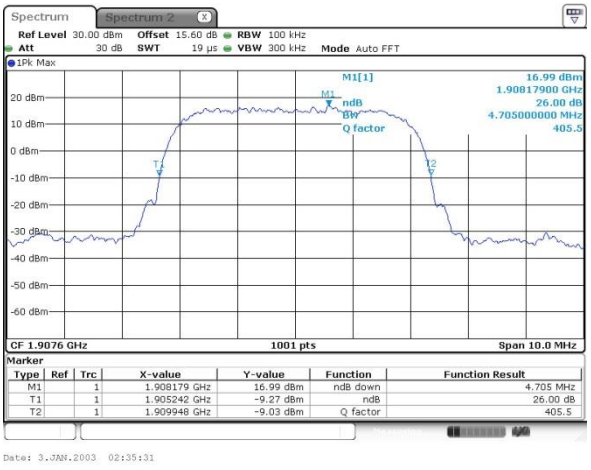
Lowest Channel



Middle Channel

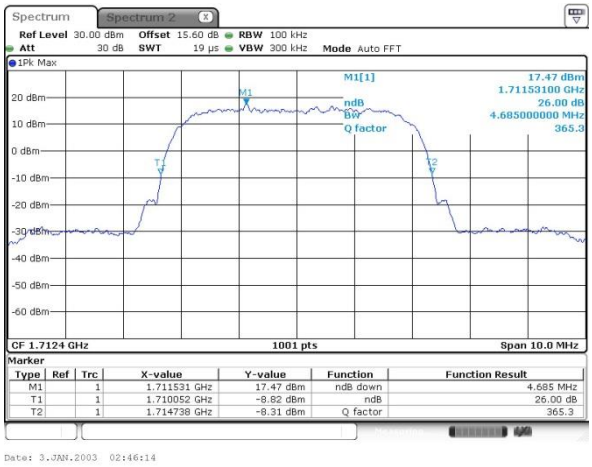


Highest Channel

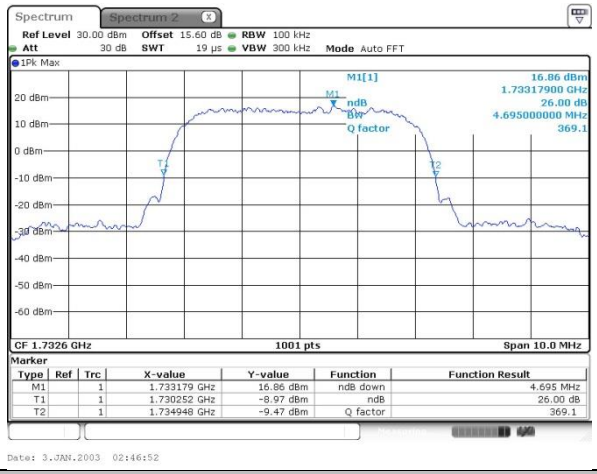


WCDMA Band IV (RMC 12.2Kbps)

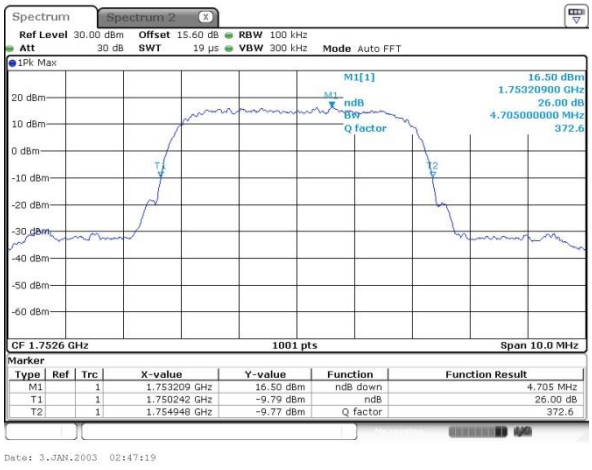
Lowest Channel



Middle Channel



Highest Channel

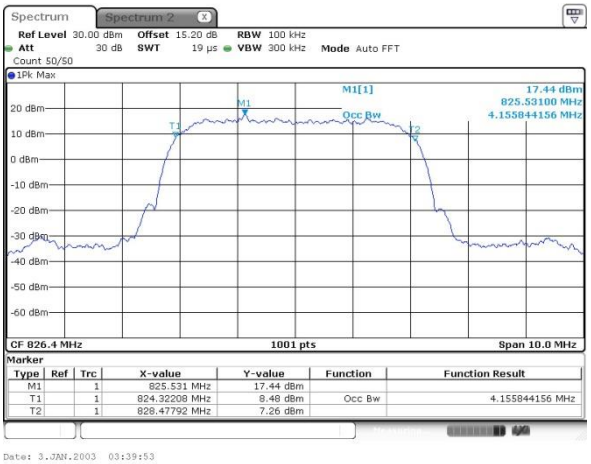


Occupied Bandwidth

Mode	WCDMA Band V(MHz)	WCDMA Band II(MHz)	WCDMA Band IV(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.156	4.146	4.136
Middle CH	4.146	4.146	4.146
Highest CH	4.126	4.146	4.146

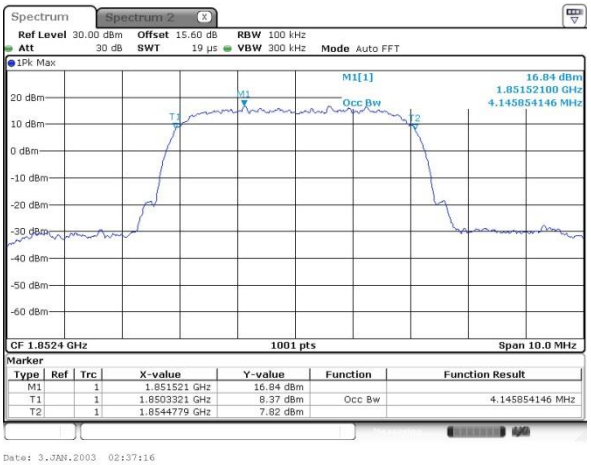
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

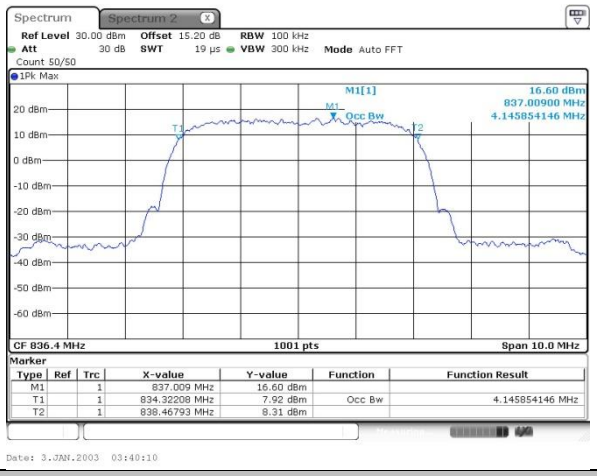


WCDMA Band II (RMC 12.2Kbps)

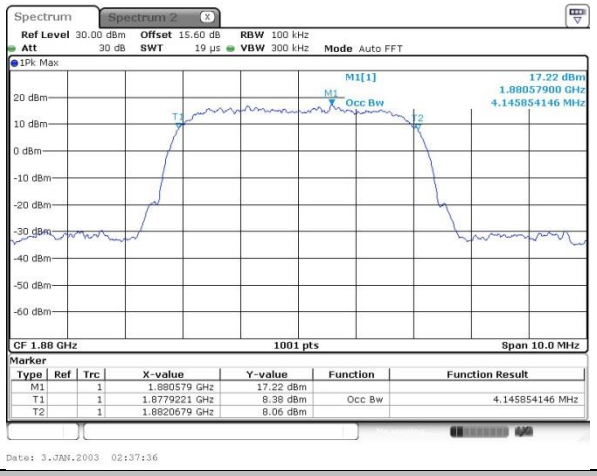
Lowest Channel



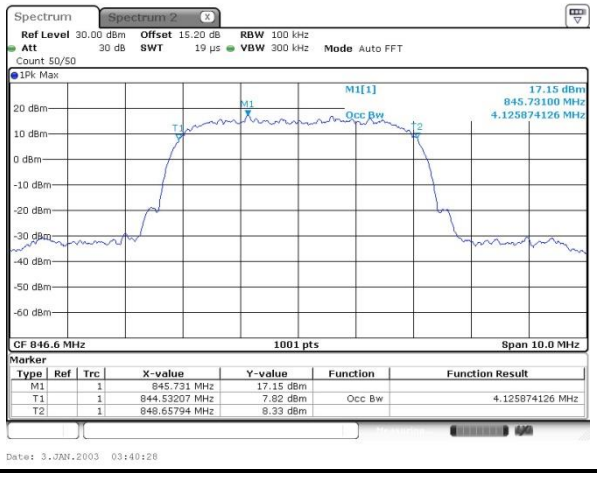
Middle Channel



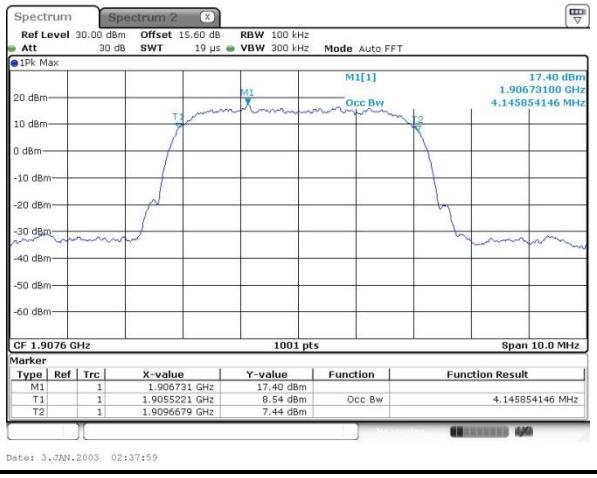
Middle Channel



Highest Channel

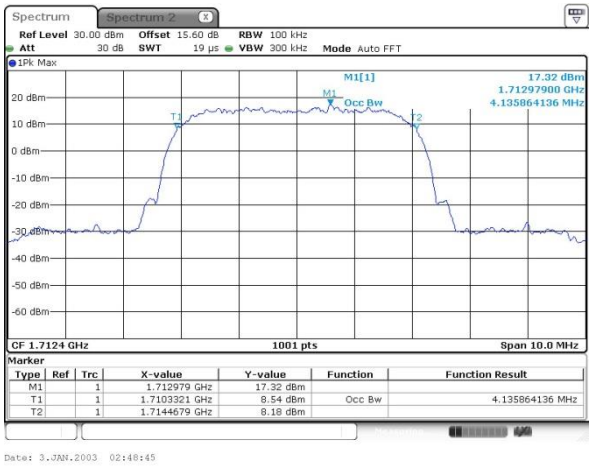


Highest Channel

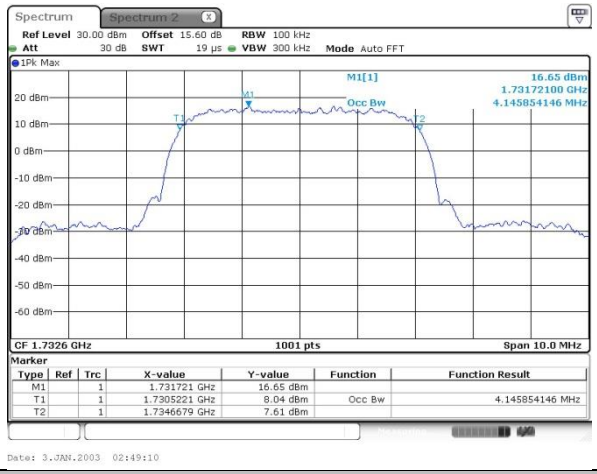


WCDMA Band IV (RMC 12.2Kbps)

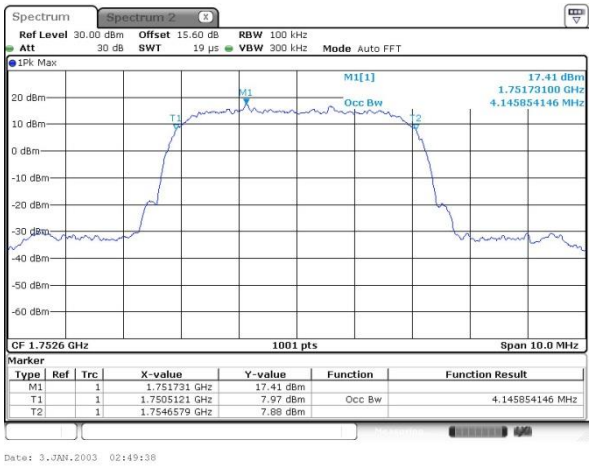
Lowest Channel



Middle Channel



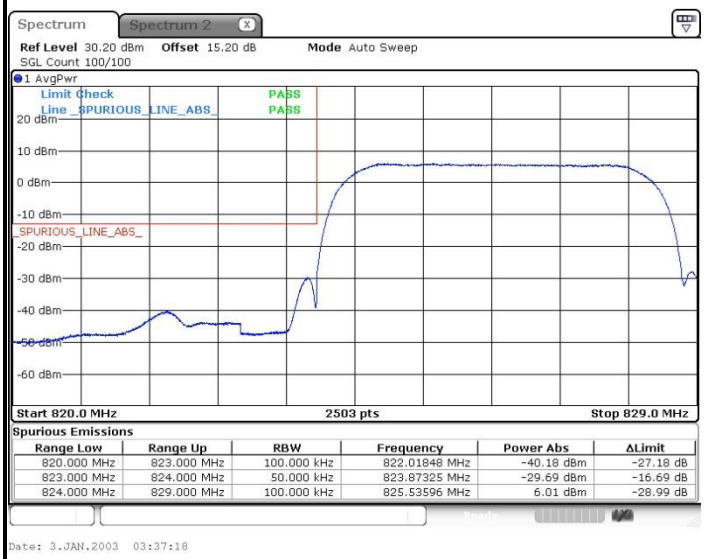
Highest Channel



Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

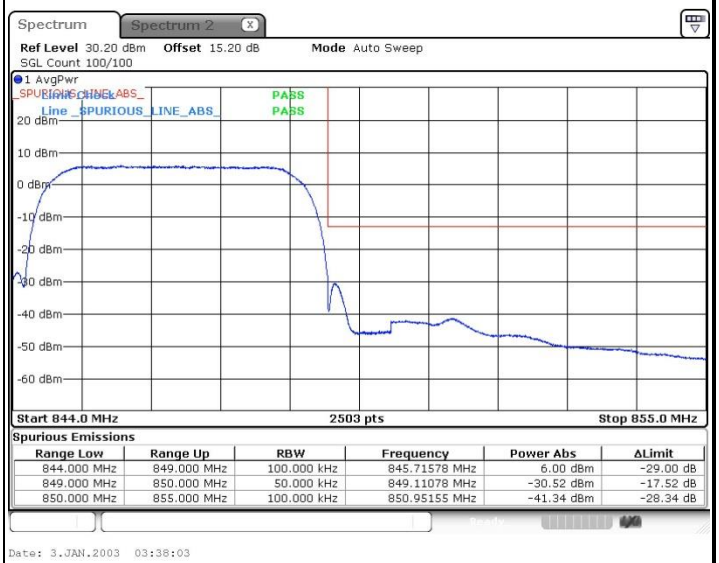


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.01848 MHz	-40.18 dBm	-27.18 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.87325 MHz	-29.69 dBm	-16.69 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.53596 MHz	6.01 dBm	-28.99 dB

Date: 3.JAN.2003 03:37:18

Highest Band Edge



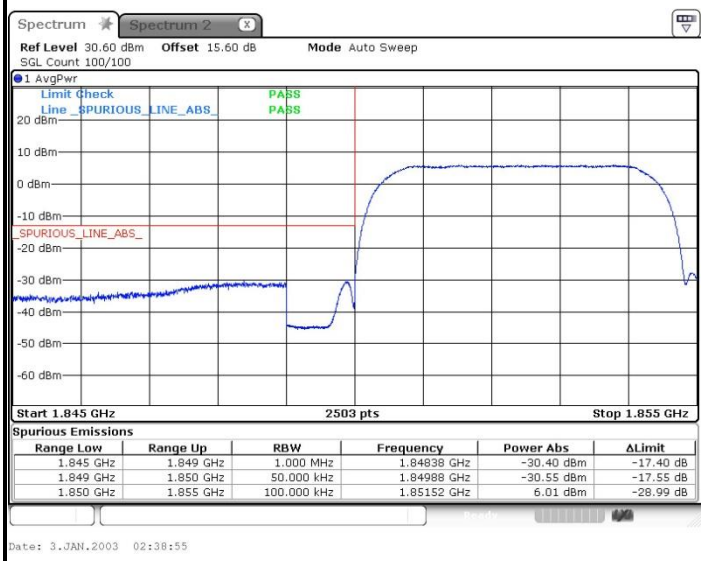
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.71578 MHz	6.00 dBm	-29.00 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.11078 MHz	-30.52 dBm	-17.52 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.95155 MHz	-41.34 dBm	-28.34 dB

Date: 3.JAN.2003 03:38:03

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

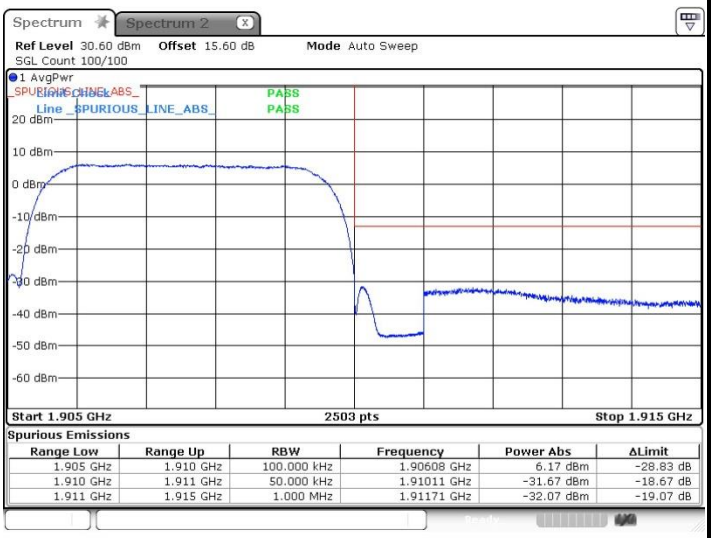


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84838 GHz	-30.40 dBm	-17.40 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84988 GHz	-30.55 dBm	-17.55 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85152 GHz	6.01 dBm	-28.99 dB

Date: 3.JAN.2003 02:38:55

Highest Band Edge



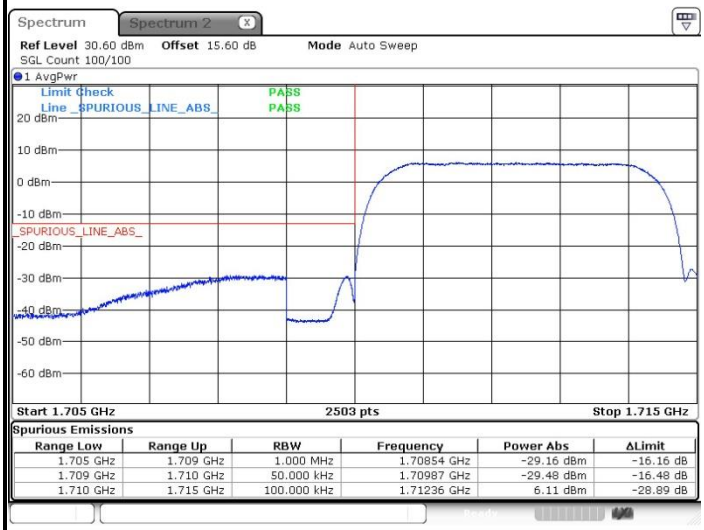
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90608 GHz	6.17 dBm	-28.83 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91011 GHz	-31.67 dBm	-18.67 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91171 GHz	-32.07 dBm	-19.07 dB

Date: 3.JAN.2003 02:42:21

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

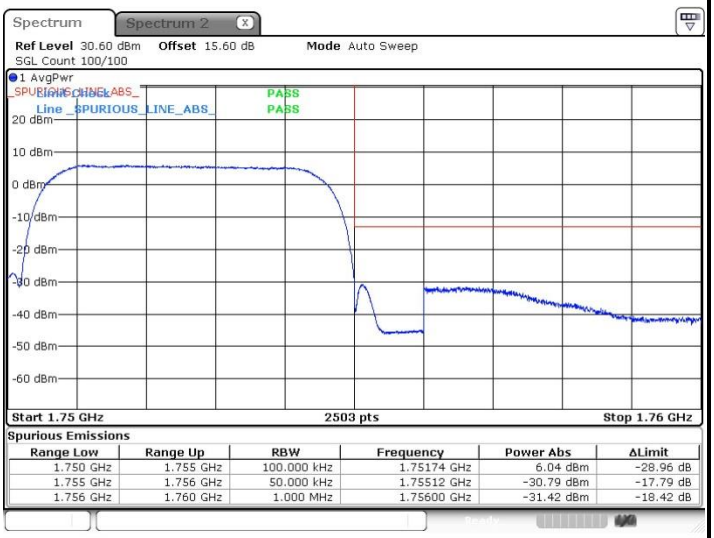


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70854 GHz	-29.16 dBm	-16.16 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70987 GHz	-29.48 dBm	-16.48 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71236 GHz	6.11 dBm	-28.89 dB

Date: 3.JAN.2003 02:52:05

Highest Band Edge



Spurious Emissions

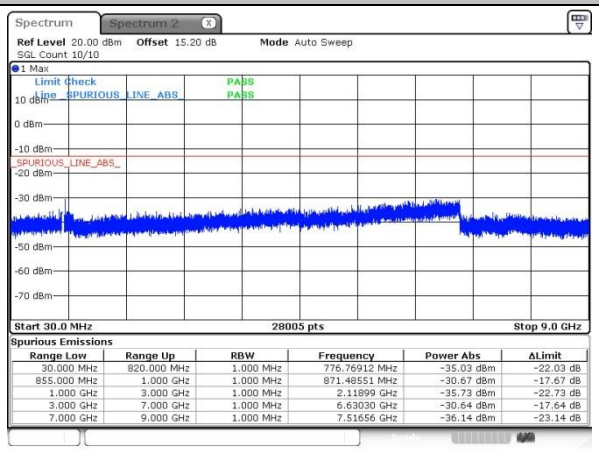
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75174 GHz	6.04 dBm	-28.96 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75512 GHz	-30.79 dBm	-17.79 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75600 GHz	-31.42 dBm	-18.42 dB

Date: 3.JAN.2003 02:52:57

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

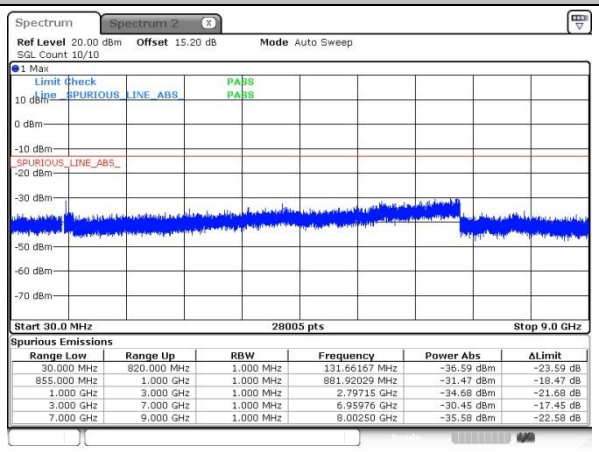


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	776.76912 MHz	-35.03 dBm	-22.03 dB
855.000 MHz	1.000 GHz	1.000 MHz	871.48551 MHz	-30.67 dBm	-17.67 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11899 GHz	-35.73 dBm	-22.73 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.63030 GHz	-30.64 dBm	-17.64 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.51656 GHz	-36.14 dBm	-23.14 dB

Date: 3.JAN.2003 03:38:29

Middle Channel

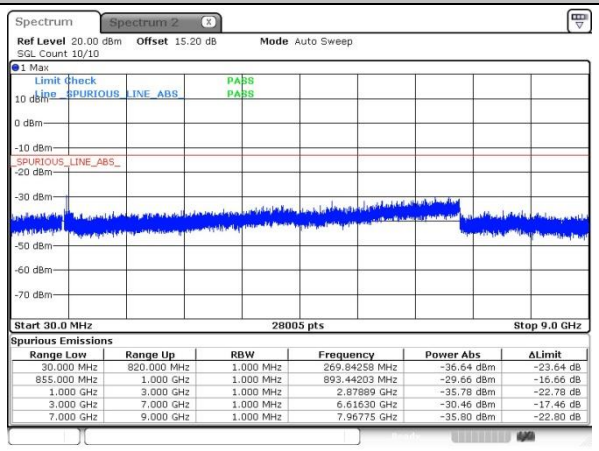


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	131.66167 MHz	-36.59 dBm	-23.59 dB
855.000 MHz	1.000 GHz	1.000 MHz	881.92029 MHz	-31.47 dBm	-18.47 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.79715 GHz	-34.68 dBm	-21.68 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95976 GHz	-30.45 dBm	-17.45 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.00250 GHz	-35.58 dBm	-22.58 dB

Date: 3.JAN.2003 03:38:45

Highest Channel



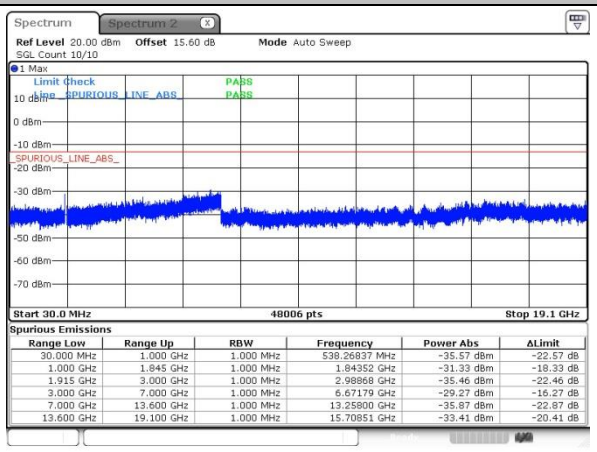
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	269.84258 MHz	-36.64 dBm	-23.64 dB
855.000 MHz	1.000 GHz	1.000 MHz	893.44203 MHz	-29.66 dBm	-16.66 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.87889 GHz	-35.78 dBm	-22.78 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.61630 GHz	-30.46 dBm	-17.46 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.96775 GHz	-35.80 dBm	-22.80 dB

Date: 3.JAN.2003 03:38:59

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

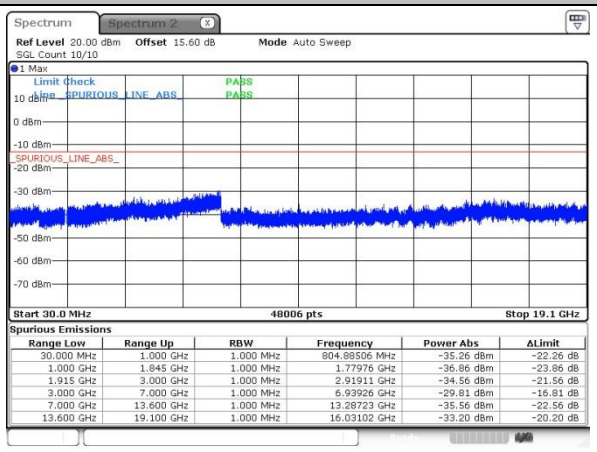


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	538.26837 MHz	-35.57 dBm	-22.57 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84352 GHz	-31.33 dBm	-18.33 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.98868 GHz	-35.46 dBm	-22.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.67179 GHz	-29.27 dBm	-16.27 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.25800 GHz	-35.87 dBm	-22.87 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.70851 GHz	-33.41 dBm	-20.41 dB

Date: 3.JAN.2003 02:43:38

Middle Channel

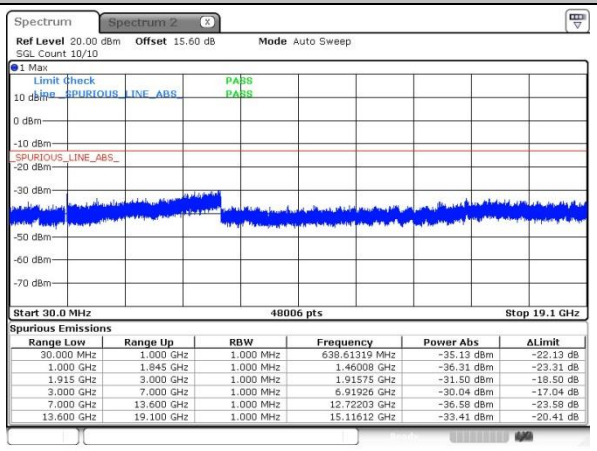


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	804.88506 MHz	-35.26 dBm	-22.26 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.77976 GHz	-36.86 dBm	-23.86 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.91911 GHz	-34.56 dBm	-21.56 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93926 GHz	-29.81 dBm	-16.81 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.28723 GHz	-35.56 dBm	-22.56 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.03102 GHz	-33.20 dBm	-20.20 dB

Date: 3.JAN.2003 02:44:01

Highest Channel



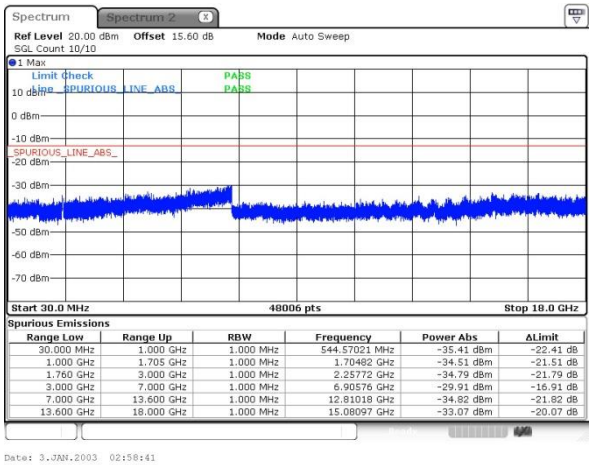
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	638.61319 MHz	-35.13 dBm	-22.13 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.46008 GHz	-36.31 dBm	-23.31 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91575 GHz	-31.50 dBm	-18.50 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91926 GHz	-30.04 dBm	-17.04 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.72203 GHz	-36.58 dBm	-23.58 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.11612 GHz	-33.41 dBm	-20.41 dB

Date: 3.JAN.2003 02:44:23

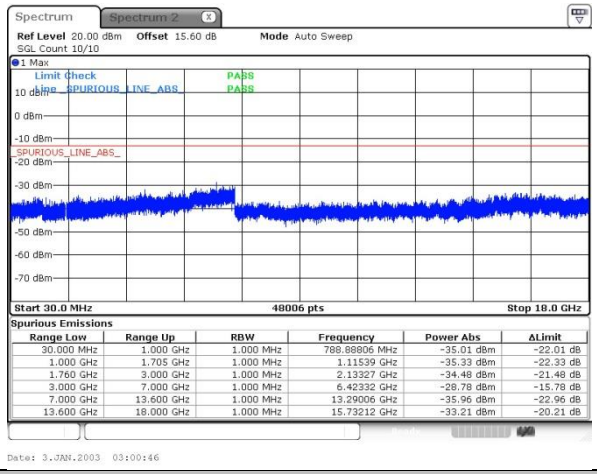
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



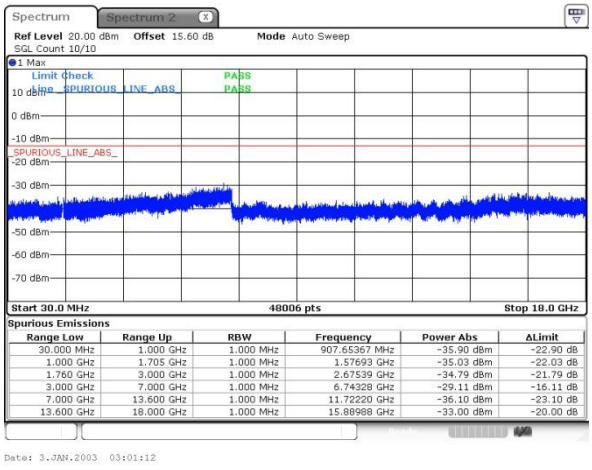
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	544.57021 MHz	-35.41 dBm	-22.41 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-34.51 dBm	-21.51 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.25772 GHz	-34.79 dBm	-21.79 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90576 GHz	-29.91 dBm	-16.91 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.81018 GHz	-34.82 dBm	-21.82 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.08097 GHz	-33.07 dBm	-20.07 dB

Middle Channel



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	788.88806 MHz	-35.01 dBm	-22.01 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.11539 GHz	-35.33 dBm	-22.33 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.13327 GHz	-34.48 dBm	-21.48 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.42332 GHz	-28.78 dBm	-15.78 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.29006 GHz	-35.96 dBm	-22.96 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.73212 GHz	-33.21 dBm	-20.21 dB

Highest Channel



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.65367 MHz	-35.90 dBm	-22.90 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.57693 GHz	-35.03 dBm	-22.03 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.67539 GHz	-34.79 dBm	-21.79 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.74328 GHz	-29.11 dBm	-16.11 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.72220 GHz	-36.10 dBm	-23.10 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.88988 GHz	-33.00 dBm	-20.00 dB

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0041	PASS
40	Normal Voltage	0.0358	
30	Normal Voltage	0.0426	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0352	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0125	
-30	Normal Voltage	0.0451	
20	Maximum Voltage	0.0269	
20	Normal Voltage	0.0126	
20	Battery End Point	0.0247	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0156	PASS
40	Normal Voltage	0.0347	
30	Normal Voltage	0.0217	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0059	
0	Normal Voltage	0.0148	
-10	Normal Voltage	0.0273	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0128	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0025	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0074	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0067	
-30	Normal Voltage	0.0216	
20	Maximum Voltage	0.0475	
20	Normal Voltage	0.0336	
20	Battery End Point	0.0217	

Note:

1. Normal Voltage = 3.88；Battery End Point (BEP) =3.6.；Maximum Voltage =4.53V
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

Test Engineer :	Kuang Jia	Temperature :	21~25℃
		Relative Humidity :	51~53%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to perform final test and record in the report.

GSM850 (GSM) Ant.1									
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	1672.8	-65.64	-13	-52.64	-75.60	-68.89	4.00	9.40	H
	2509.2	-51.97	-13	-38.97	-66.37	-55.54	4.88	10.60	H
	3345.6	-62.30	-13	-49.30	-78.29	-67.23	5.52	12.60	H
	1672.8	-54.01	-13	-41.01	-63.42	-57.26	4.00	9.40	V
	2509.2	-51.01	-13	-38.01	-65.37	-54.58	4.88	10.60	V
	3345.6	-61.21	-13	-48.21	-76.93	-66.14	5.52	12.60	V

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

GSM850 (EDGE 1 Tx slots) Ant.1									
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	1672.8	-65.25	-13	-52.25	-75.21	-68.50	4.00	9.40	H
	2509.2	-50.91	-13	-37.91	-65.31	-54.48	4.88	10.60	H
	3345.6	-62.34	-13	-49.34	-78.33	-67.27	5.52	12.60	H
	1672.8	-66.08	-13	-53.08	-75.49	-69.33	4.00	9.40	V
	2509.2	-50.71	-13	-37.71	-65.07	-54.28	4.88	10.60	V
	3345.6	-61.03	-13	-48.03	-76.75	-65.96	5.52	12.60	V

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

GSM1900 (GSM) Ant.2									
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	3760	-61.42	-13	-48.42	-80.05	-68.17	5.85	12.60	H
	5640	-57.30	-13	-44.30	-80.56	-63.10	7.30	13.10	H
	7520	-54.87	-13	-41.87	-81.68	-58.02	8.35	11.50	H
	3760	-61.53	-13	-48.53	-80.09	-68.28	5.85	12.60	V
	5640	-57.31	-13	-44.31	-79.82	-63.11	7.30	13.10	V
	7520	-55.04	-13	-42.04	-81.83	-58.19	8.35	11.50	V

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

GSM1900 (EDGE 1 Tx slots) Ant.2									
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	3760	-61.66	-13	-48.66	-80.29	-68.41	5.85	12.60	H
	5640	-58.83	-13	-45.83	-82.09	-64.63	7.30	13.10	H
	7520	-55.23	-13	-42.23	-82.04	-58.38	8.35	11.50	H
	3760	-61.68	-13	-48.68	-80.24	-68.43	5.85	12.60	V
	5640	-59.48	-13	-46.48	-81.99	-65.28	7.30	13.10	V
	7520	-55.03	-13	-42.03	-81.82	-58.18	8.35	11.50	V

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

WCDMA Band V(RMC 12.2Kbps) Ant.1									
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	1672.8	-65.14	-13	-52.14	-75.10	-68.39	4.00	9.40	H
	2509.2	-63.30	-13	-50.30	-77.70	-66.87	4.88	10.60	H
	3345.6	-62.82	-13	-49.82	-78.81	-67.75	5.52	12.60	H
	1672.8	-65.73	-13	-52.73	-75.14	-68.98	4.00	9.40	V
	2509.2	-63.18	-13	-50.18	-77.54	-66.75	4.88	10.60	V
	3345.6	-62.82	-13	-49.82	-78.54	-67.75	5.52	12.60	V

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

WCDMA Band II(RMC 12.2Kbps) Ant.2									
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	3760	-61.39	-13	-48.39	-80.02	-68.14	5.85	12.60	H
	5640	-59.19	-13	-46.19	-82.45	-64.99	7.30	13.10	H
	7520	-55.23	-13	-42.23	-82.04	-58.38	8.35	11.50	H
	3760	-61.78	-13	-48.78	-80.34	-68.53	5.85	12.60	V
	5640	-59.93	-13	-46.93	-82.44	-65.73	7.30	13.10	V
	7520	-55.15	-13	-42.15	-81.94	-58.30	8.35	11.50	V

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

WCDMA Band IV(RMC 12.2Kbps) Ant.2									
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	3465.2	-62.25	-13	-49.25	-79.15	-69.10	5.65	12.50	H
	5197.8	-60.83	-13	-47.83	-82.60	-66.50	7.13	12.80	H
	6930.4	-56.75	-13	-43.75	-82.55	-60.15	8.40	11.80	H
	3465.2	-62.25	-13	-49.25	-79.17	-69.10	5.65	12.50	V
	5197.8	-60.37	-13	-47.37	-82.45	-66.04	7.13	12.80	V
	6930.4	-56.20	-13	-43.20	-82.47	-59.60	8.40	11.80	V

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