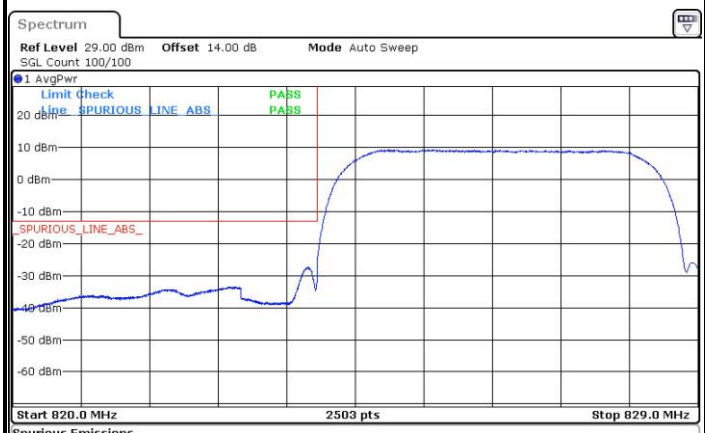
Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

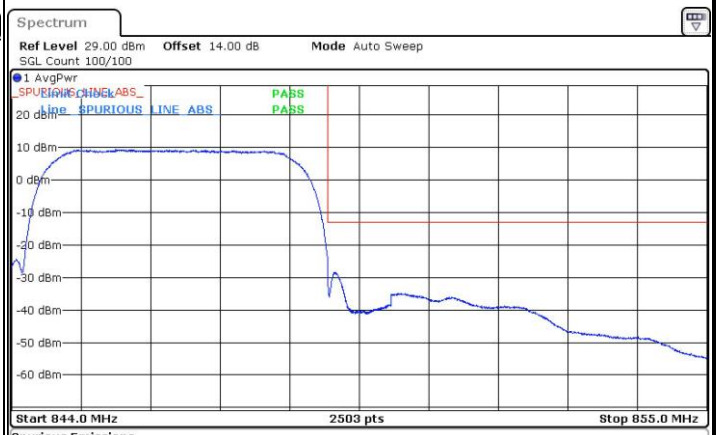


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.86364 MHz	-33.53 dBm	-20.53 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.88723 MHz	-27.41 dBm	-14.41 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.50599 MHz	9.33 dBm	-25.67 dB

Date: 17.FEB.2025 23:18:57

Highest Band Edge



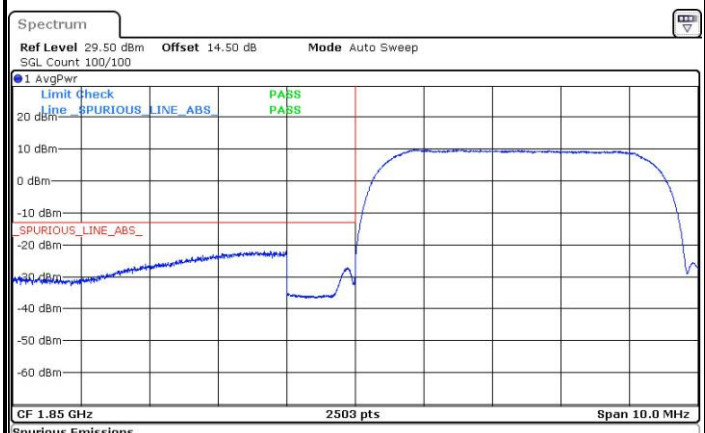
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.64585 MHz	9.39 dBm	-25.61 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.12275 MHz	-28.43 dBm	-15.43 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.15235 MHz	-34.94 dBm	-21.94 dB

Date: 17.FEB.2025 23:28:36

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

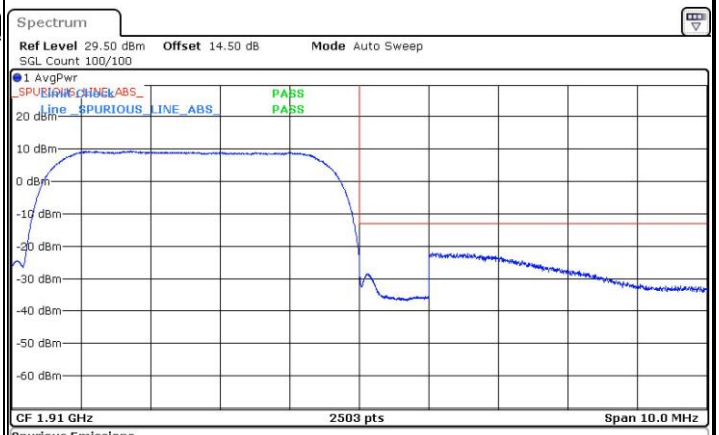


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84899 GHz	-21.93 dBm	-8.93 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84988 GHz	-27.27 dBm	-14.27 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85102 GHz	9.67 dBm	-25.33 dB

Date: 17.FEB.2025 23:00:54

Highest Band Edge



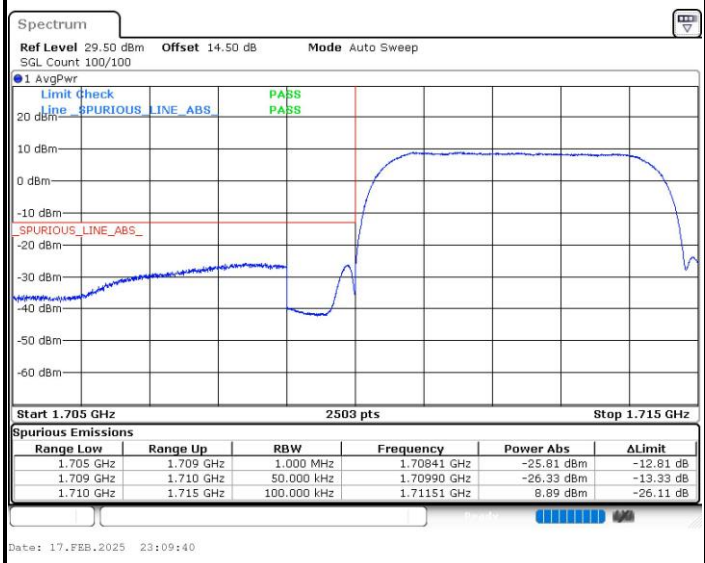
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90671 GHz	9.33 dBm	-25.67 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-28.35 dBm	-15.35 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91105 GHz	-22.06 dBm	-9.06 dB

Date: 17.FEB.2025 23:07:15

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

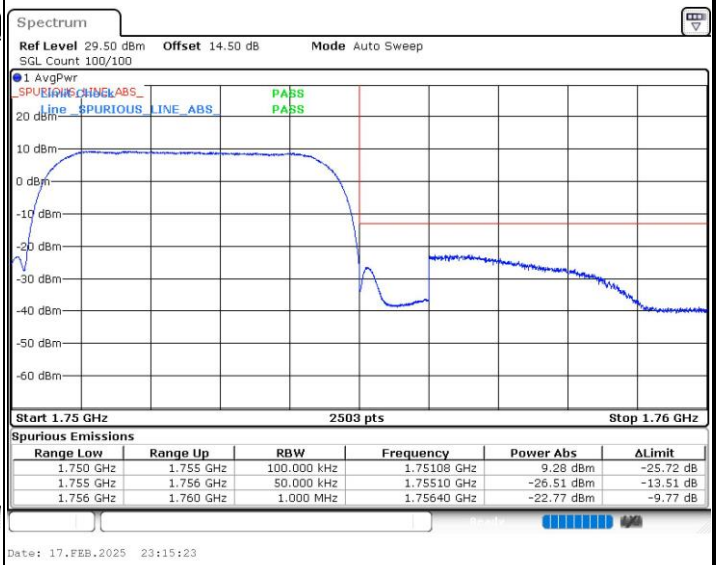


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70841 GHz	-25.81 dBm	-12.81 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70990 GHz	-26.33 dBm	-13.33 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71151 GHz	8.89 dBm	-26.11 dB

Date: 17.FEB.2025 23:09:40

Highest Band Edge



Spurious Emissions

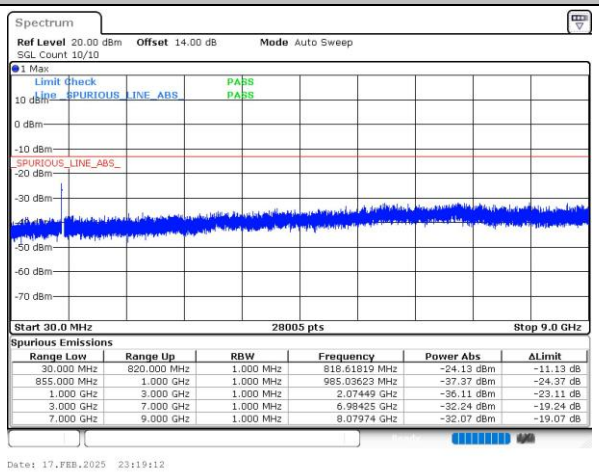
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75108 GHz	9.28 dBm	-25.72 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75510 GHz	-26.51 dBm	-13.51 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75640 GHz	-22.77 dBm	-9.77 dB

Date: 17.FEB.2025 23:15:23

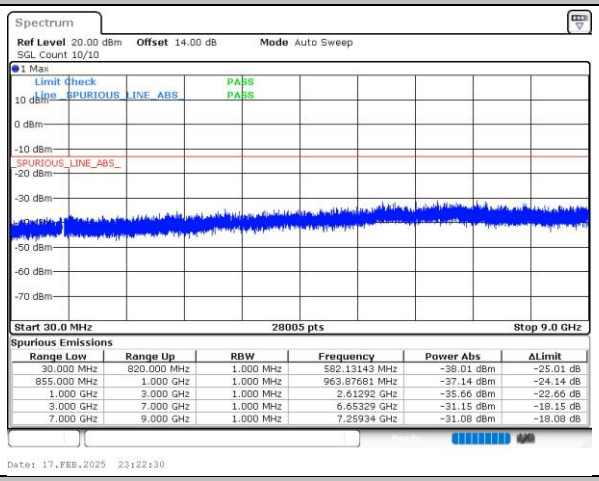
Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

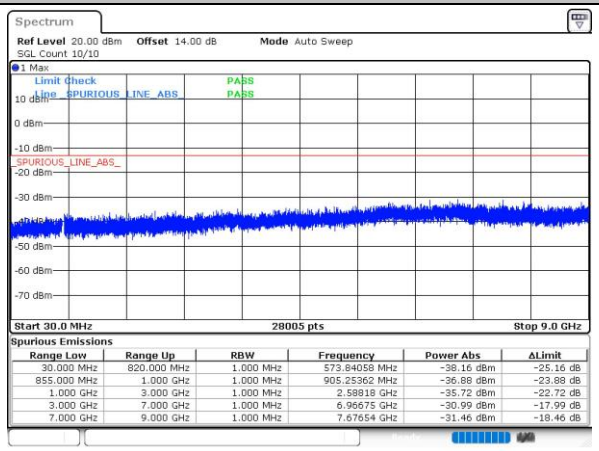
Lowest Channel



Middle Channel

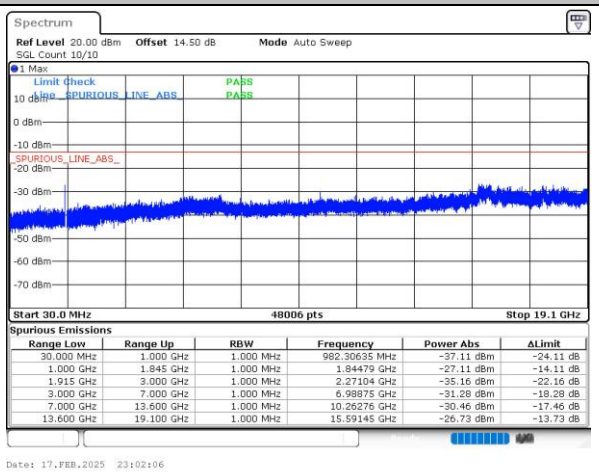


Highest Channel

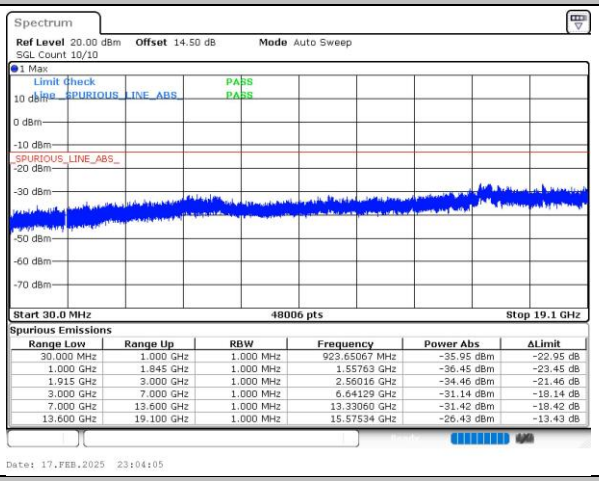


WCDMA Band II (RMC 12.2Kbps)

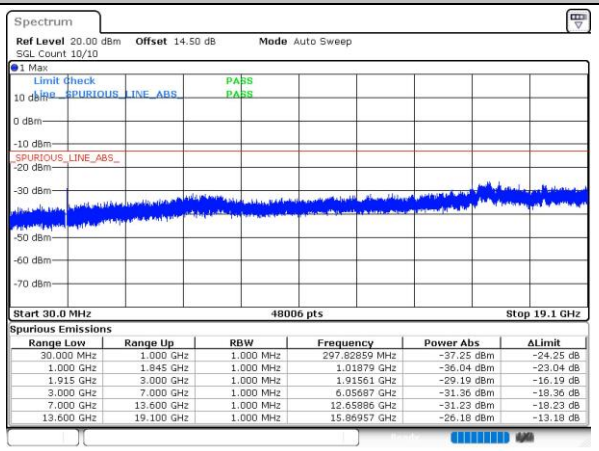
Lowest Channel



Middle Channel

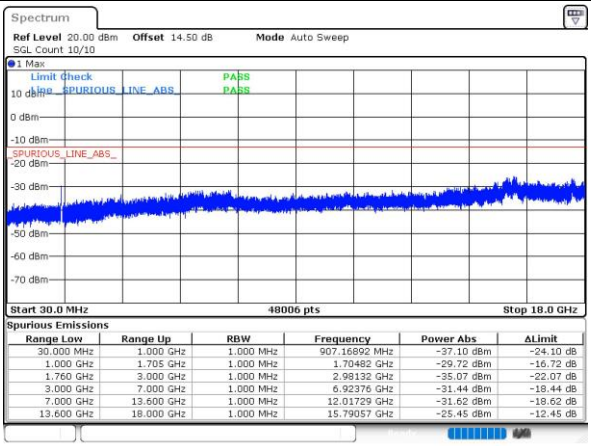


Highest Channel



WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel

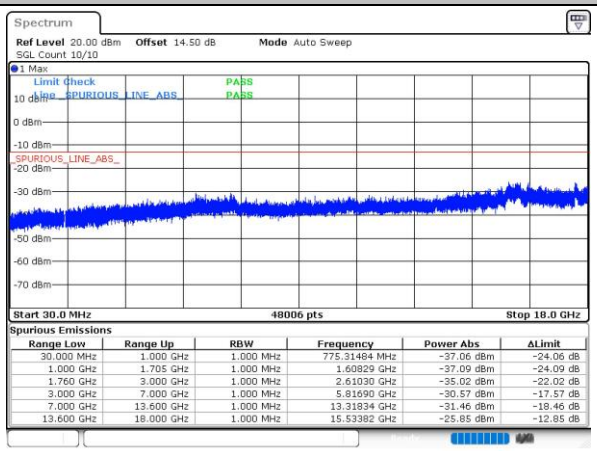


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.16892 MHz	-37.10 dBm	-24.10 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-29.72 dBm	-16.72 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.98132 GHz	-35.07 dBm	-22.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92376 GHz	-31.44 dBm	-18.44 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.01729 GHz	-31.62 dBm	-18.62 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.79057 GHz	-25.45 dBm	-12.45 dB

Date: 17.FEB.2025 23:10:23

Middle Channel

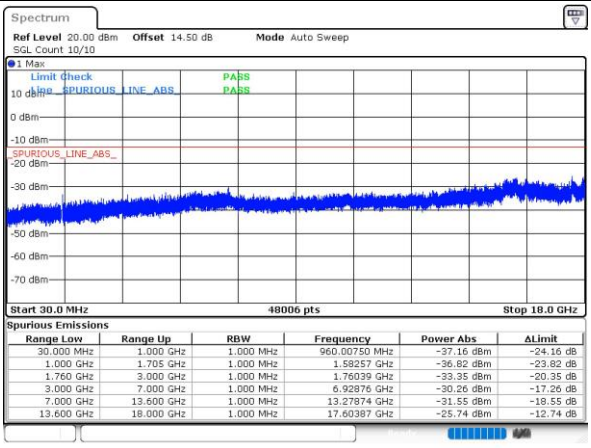


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	775.31484 MHz	-37.06 dBm	-24.06 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.60829 GHz	-37.09 dBm	-24.09 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.61030 GHz	-35.02 dBm	-22.02 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.81690 GHz	-30.57 dBm	-17.57 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.31834 GHz	-31.46 dBm	-18.46 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.53382 GHz	-25.85 dBm	-12.85 dB

Date: 17.FEB.2025 23:11:34

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	960.00750 MHz	-37.16 dBm	-24.16 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.58257 GHz	-36.82 dBm	-23.82 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76039 GHz	-33.35 dBm	-20.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92876 GHz	-30.26 dBm	-17.26 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.27874 GHz	-31.55 dBm	-18.55 dB
13.600 GHz	18.000 GHz	1.000 MHz	17.60387 GHz	-25.74 dBm	-12.74 dB

Date: 17.FEB.2025 23:14:39

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	0.0289	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0270	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0033	
-10	Normal Voltage	0.0218	
-20	Normal Voltage	0.0039	
-30	Normal Voltage	0.0253	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0263	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0125	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0145	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0171	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage = 3.92V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.53 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	0.0020	PASS
40	Normal Voltage	0.0106	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0050	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0158	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0174	

Note:

1. Normal Voltage = 3.92V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.53 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

Test Engineer :	PingZhou Liang	Temperature :	22~25℃
		Relative Humidity :	48~52%

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)_ANT0									
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	-65.49	-13	-52.49	-75.45	-68.74	4.00	9.40	H
	2509.2	-40.02	-13	-27.02	-54.42	-43.59	4.88	10.60	H
	3345.6	-62.81	-13	-49.81	-78.80	-67.74	5.52	12.60	H
	1672.8	-65.61	-13	-52.61	-75.02	-68.86	4.00	9.40	V
	2509.2	-48.77	-13	-35.77	-63.13	-52.34	4.88	10.60	V
	3345.6	-63.05	-13	-50.05	-78.77	-67.98	5.52	12.60	V

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

GSM850 (EDGE 1 Tx slots) _ANT0									
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	-65.90	-13	-52.90	-75.86	-69.15	4.00	9.40	H
	2509.2	-45.40	-13	-32.40	-59.80	-48.97	4.88	10.60	H
	3345.6	-62.74	-13	-49.74	-78.73	-67.67	5.52	12.60	H
	1672.8	-66.83	-13	-53.83	-76.24	-70.08	4.00	9.40	V
	2509.2	-53.28	-13	-40.28	-67.64	-56.85	4.88	10.60	V
	3345.6	-63.23	-13	-50.23	-78.95	-68.16	5.52	12.60	V

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

GSM1900 (GSM) _ANT3									
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	3760	-61.42	-13	-48.42	-80.05	-68.17	5.85	12.60	H
	5640	-59.26	-13	-46.26	-82.52	-65.06	7.30	13.10	H
	7520	-55.28	-13	-42.28	-82.09	-58.43	8.35	11.50	H
	3760	-61.74	-13	-48.74	-80.3	-68.49	5.85	12.60	V
	5640	-59.82	-13	-46.82	-82.33	-65.62	7.30	13.10	V
	7520	-55.26	-13	-42.26	-82.05	-58.41	8.35	11.50	V

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

GSM1900 (EDGE 1 Tx slots) _ANT3									
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	3760	-61.68	-13	-48.68	-80.31	-68.43	5.85	12.60	H
	5640	-59.01	-13	-46.01	-82.27	-64.81	7.30	13.10	H
	7520	-55.57	-13	-42.57	-82.38	-58.72	8.35	11.50	H
	3760	-61.60	-13	-48.60	-80.16	-68.35	5.85	12.60	V
	5640	-59.54	-13	-46.54	-82.05	-65.34	7.30	13.10	V
	7520	-55.21	-13	-42.21	-82	-58.36	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) _ANT0									
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	-66.06	-13	-53.06	-76.02	-69.31	4.00	9.40	H
	2509.2	-63.53	-13	-50.53	-77.93	-67.10	4.88	10.60	H
	3345.6	-62.85	-13	-49.85	-78.84	-67.78	5.52	12.60	H
	1672.8	-66.85	-13	-53.85	-76.26	-70.10	4.00	9.40	V
	2509.2	-63.57	-13	-50.57	-77.93	-67.14	4.88	10.60	V
	3345.6	-63.09	-13	-50.09	-78.81	-68.02	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) _ANT3									
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	3760	-60.68	-13	-47.68	-79.31	-67.43	5.85	12.60	H
	5640	-57.95	-13	-44.95	-81.21	-63.75	7.30	13.10	H
	7520	-54.22	-13	-41.22	-81.03	-57.37	8.35	11.50	H
	3760	-60.97	-13	-47.97	-79.53	-67.72	5.85	12.60	V
	5640	-58.64	-13	-45.64	-81.15	-64.44	7.30	13.10	V
	7520	-54.08	-13	-41.08	-80.87	-57.23	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) _ANT3									
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	3465.2	-61.63	-13	-48.63	-78.53	-68.48	5.65	12.50	H
	5197.8	-60.36	-13	-47.36	-82.13	-66.03	7.13	12.80	H
	6930.4	-56.05	-13	-43.05	-81.85	-59.45	8.40	11.80	H
	3465.2	-61.96	-13	-48.96	-78.88	-68.81	5.65	12.50	V
	5197.8	-60.39	-13	-47.39	-82.47	-66.06	7.13	12.80	V
	6930.4	-56.16	-13	-43.16	-82.43	-59.56	8.40	11.80	V

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