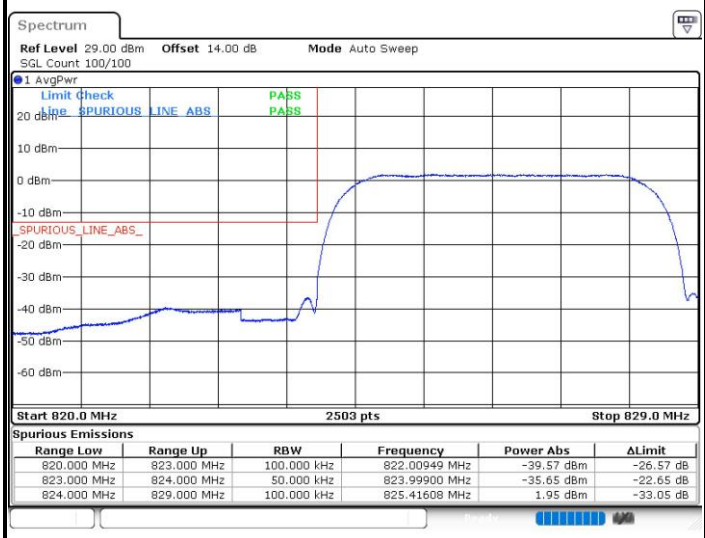
Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

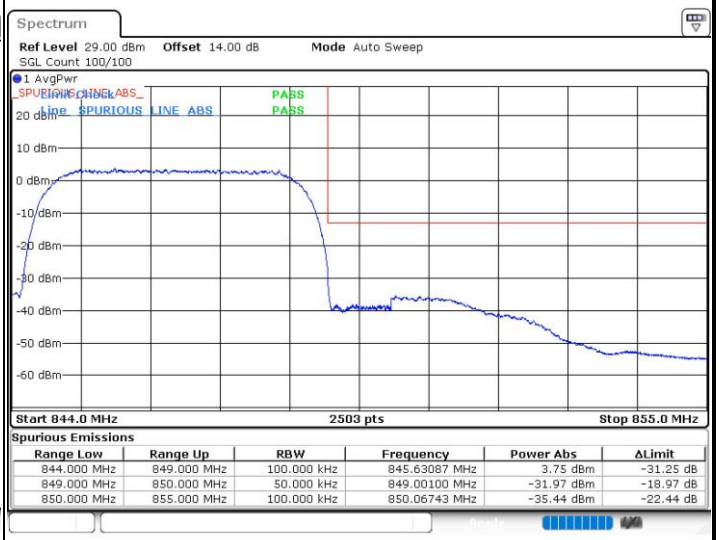


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.00949 MHz	-39.57 dBm	-26.57 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.99900 MHz	-35.65 dBm	-22.65 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.41608 MHz	1.95 dBm	-33.05 dB

Date: 8.MAY.2025 09:57:57

Highest Band Edge



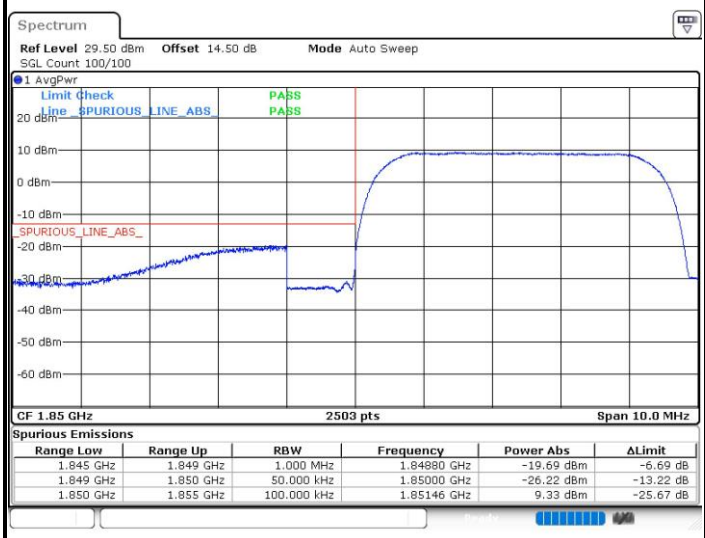
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.63087 MHz	3.75 dBm	-31.25 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.00100 MHz	-31.97 dBm	-18.97 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.06743 MHz	-35.44 dBm	-22.44 dB

Date: 8.MAY.2025 10:06:37

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

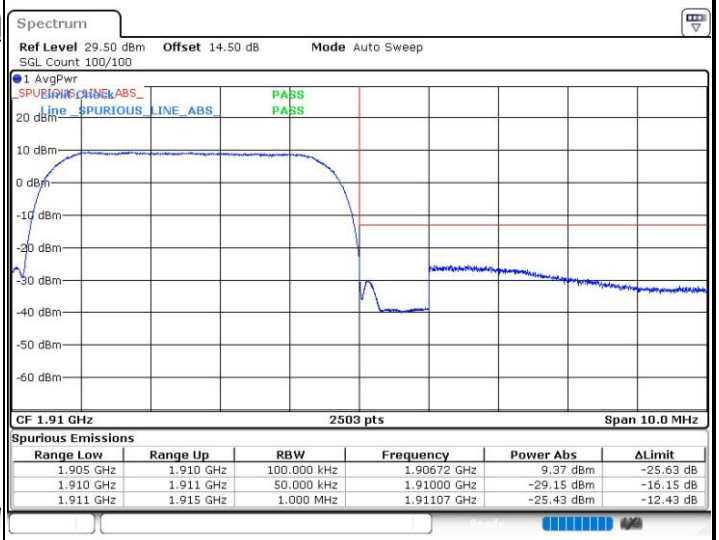


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84880 GHz	-19.69 dBm	-6.69 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-26.22 dBm	-13.22 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85146 GHz	9.33 dBm	-25.67 dB

Date: 8.MAY.2025 09:04:34

Highest Band Edge

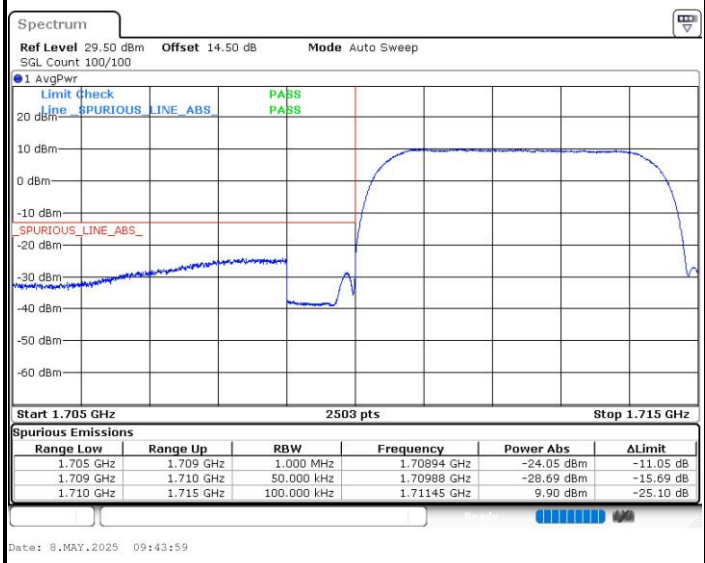


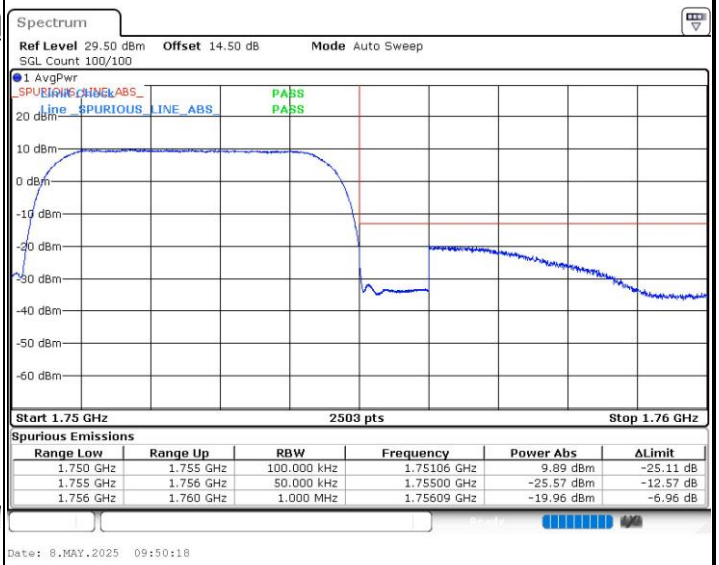
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90672 GHz	9.37 dBm	-25.63 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-29.15 dBm	-16.15 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91107 GHz	-25.43 dBm	-12.43 dB

Date: 8.MAY.2025 09:10:05

WCDMA Band IV (RMC 12.2Kbps)	
Lowest Band Edge	**Highest Band Edge**

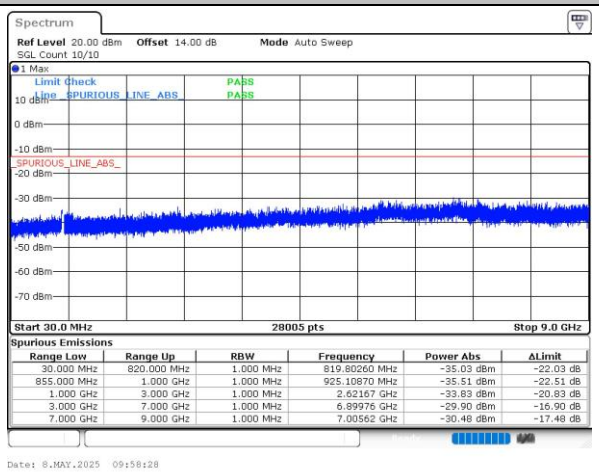




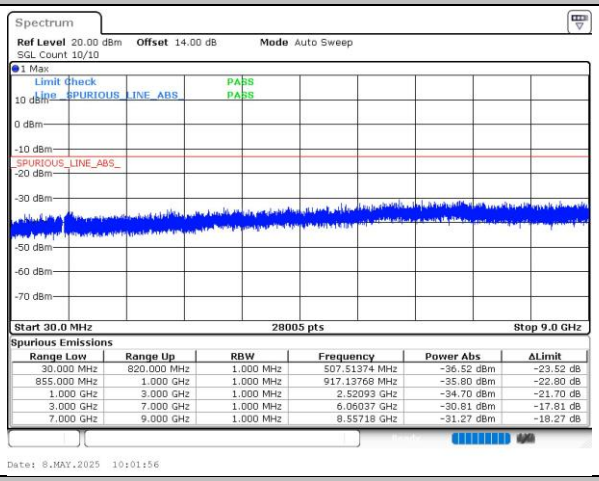
Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

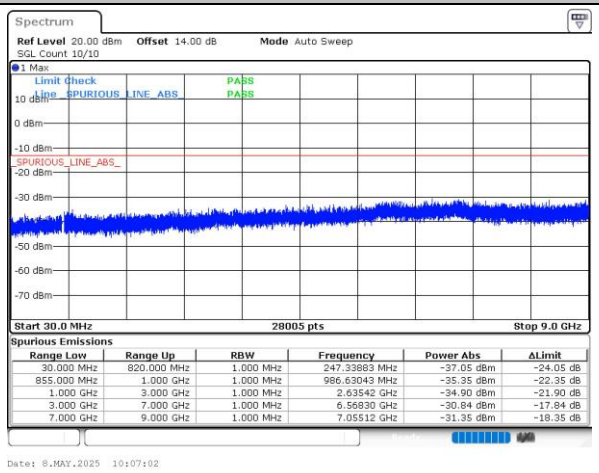
Lowest Channel



Middle Channel

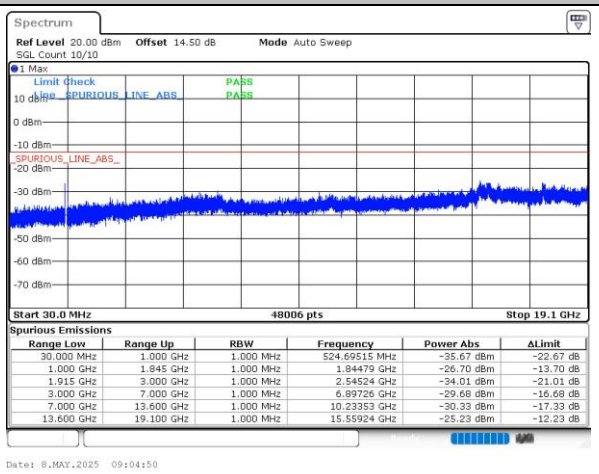


Highest Channel

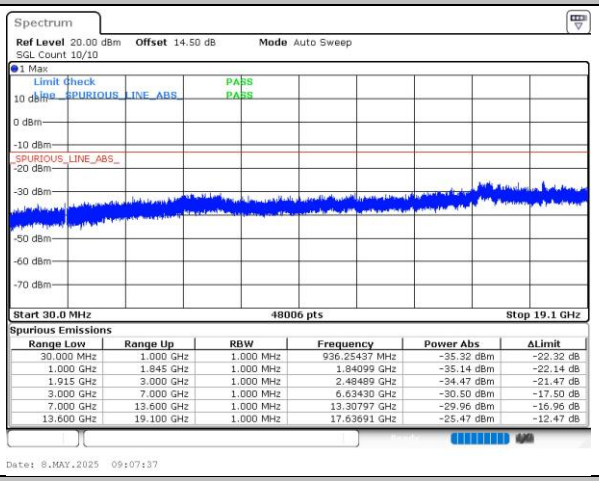


WCDMA Band II (RMC 12.2Kbps)

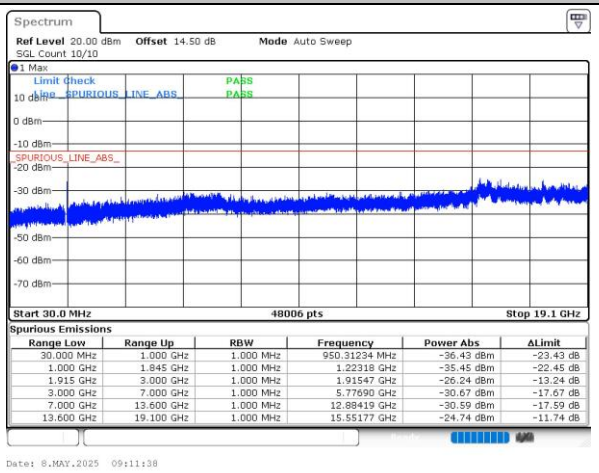
Lowest Channel



Middle Channel

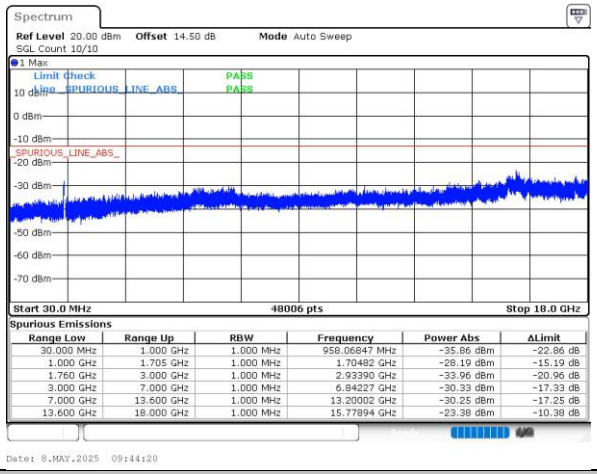


Highest Channel



WCDMA Band IV (RMC 12.2Kbps)

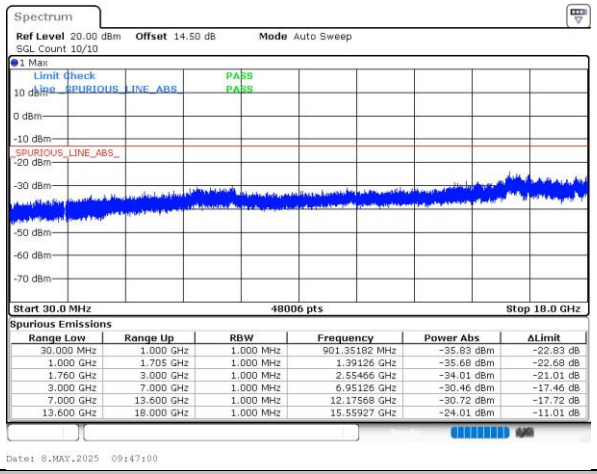
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-35.86 dBm	-22.86 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-28.19 dBm	-15.19 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.93390 GHz	-33.96 dBm	-20.96 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84227 GHz	-30.33 dBm	-17.33 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.20002 GHz	-30.25 dBm	-17.25 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.77894 GHz	-23.38 dBm	-10.38 dB

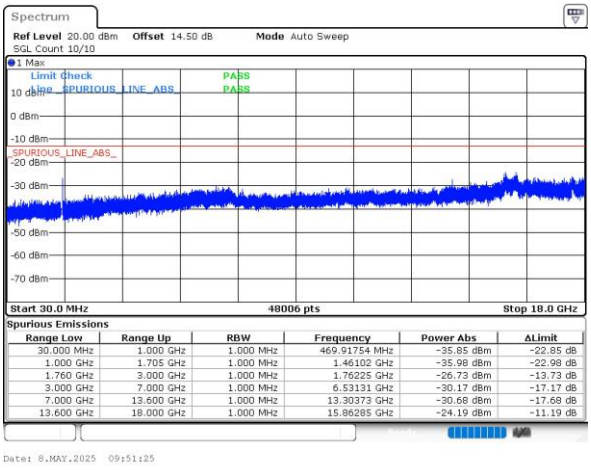
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	901.35182 MHz	-35.83 dBm	-22.83 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.39126 GHz	-35.68 dBm	-22.68 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.55466 GHz	-34.01 dBm	-21.01 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95126 GHz	-30.46 dBm	-17.46 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.17568 GHz	-30.72 dBm	-17.72 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.55927 GHz	-24.01 dBm	-11.01 dB

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	469.91754 MHz	-35.85 dBm	-22.85 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.46102 GHz	-35.98 dBm	-22.98 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76225 GHz	-26.73 dBm	-13.73 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.53131 GHz	-30.17 dBm	-17.17 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.30373 GHz	-30.68 dBm	-17.68 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.86285 GHz	-24.19 dBm	-11.19 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	0.0005	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0068	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0105	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0057	
-20	Normal Voltage	0.0041	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0087	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage = 3.93V. ; Battery End Point (BEP) = 3.7V. ; Maximum Voltage =4.3 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	0.0062	PASS
40	Normal Voltage	0.0461	
30	Normal Voltage	0.0271	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0365	
-10	Normal Voltage	0.0240	
-20	Normal Voltage	0.0274	
-30	Normal Voltage	0.0487	
20	Maximum Voltage	0.0361	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0551	

Note:

1. Normal Voltage = 3.93V. ; Battery End Point (BEP) = 3.7 V. ; Maximum Voltage =4.3 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 :	LiangPing Zhou	Temperature :	22~25℃
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to test.

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	-60.88	-13	-47.88	-70.48	-64.13	4.00	9.40	H
	2509.2	-46.69	-13	-33.69	-60.53	-50.26	4.88	10.60	H
	3345.6	-62.66	-13	-49.66	-77.98	-67.59	5.52	12.60	H
	1672.8	-61.53	-13	-48.53	-70.58	-64.78	4.00	9.40	V
	2509.2	-51.26	-13	-38.26	-65.06	-54.83	4.88	10.60	V
	3345.6	-62.71	-13	-49.71	-77.76	-67.64	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	-60.09	-13	-47.09	-69.69	-63.34	4.00	9.40	H
	2509.2	-47.85	-13	-34.85	-61.69	-51.42	4.88	10.60	H
	3345.6	-62.50	-13	-49.50	-77.82	-67.43	5.52	12.60	H
	1672.8	-62.07	-13	-49.07	-71.12	-65.32	4.00	9.40	V
	2509.2	-51.18	-13	-38.18	-64.98	-54.75	4.88	10.60	V
	3345.6	-62.69	-13	-49.69	-77.74	-67.62	5.52	12.60	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	-65.29	-13	-52.29	-74.89	-68.54	4.00	9.40	H
	2509.2	-63.36	-13	-50.36	-77.20	-66.93	4.88	10.60	H
	3345.6	-62.85	-13	-49.85	-78.17	-67.78	5.52	12.60	H
	1672.8	-66.02	-13	-53.02	-75.07	-69.27	4.00	9.40	V
	2509.2	-62.80	-13	-49.80	-76.60	-66.37	4.88	10.60	V
	3345.6	-62.94	-13	-49.94	-77.99	-67.87	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	-58.13	-13	-45.13	-75.92	-64.88	5.85	12.60	H
	5640	-40.16	-13	-27.16	-62.73	-45.96	7.30	13.10	H
	7520	-54.44	-13	-41.44	-80.59	-57.59	8.35	11.50	H
	3760	-59.34	-13	-46.34	-77.06	-66.09	5.85	12.60	V
	5640	-42.67	-13	-29.67	-64.49	-48.47	7.30	13.10	V
	7520	-55.02	-13	-42.02	-81.15	-58.17	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	-58.33	-13	-45.33	-76.12	-65.08	5.85	12.60	H
	5640	-40.44	-13	-27.44	-63.01	-46.24	7.30	13.10	H
	7520	-54.70	-13	-41.70	-80.85	-57.85	8.35	11.50	H
	3760	-58.58	-13	-45.58	-76.3	-65.33	5.85	12.60	V
	5640	-41.70	-13	-28.70	-63.52	-47.50	7.30	13.10	V
	7520	-54.62	-13	-41.62	-80.75	-57.77	8.35	11.50	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	-61.14	-13	-48.14	-78.93	-67.89	5.85	12.60	H
	5640	-56.49	-13	-43.49	-79.06	-62.29	7.30	13.10	H
	7520	-54.47	-13	-41.47	-80.62	-57.62	8.35	11.50	H
	3760	-61.21	-13	-48.21	-78.93	-67.96	5.85	12.60	V
	5640	-57.70	-13	-44.70	-79.52	-63.50	7.30	13.10	V
	7520	-54.75	-13	-41.75	-80.88	-57.90	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	-61.36	-13	-48.36	-77.64	-68.11	5.85	12.60	H
	5197.8	-58.88	-13	-45.88	-80.36	-64.68	7.30	13.10	H
	6930.4	-56.31	-13	-43.31	-81.63	-59.46	8.35	11.50	H
	3465.2	-61.84	-13	-48.84	-78.14	-68.59	5.85	12.60	V
	5197.8	-57.05	-13	-44.05	-78.84	-62.85	7.30	13.10	V
	6930.4	-55.52	-13	-42.52	-81.31	-58.67	8.35	11.50	V

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