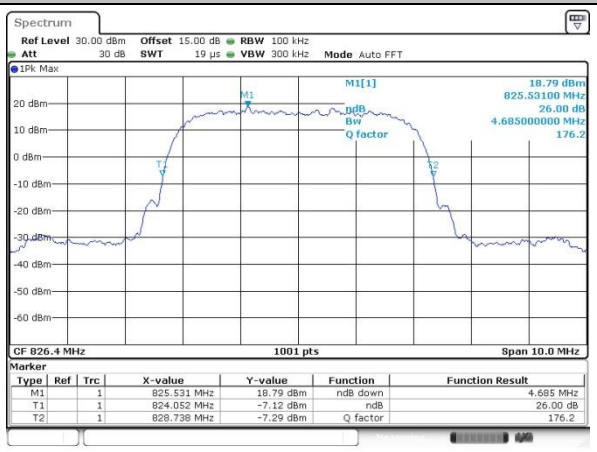
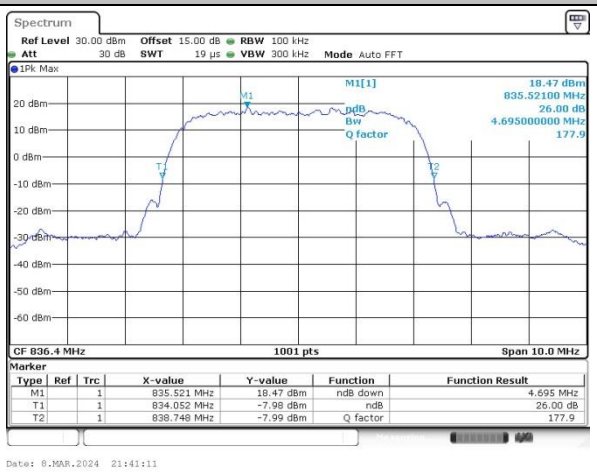
WCDMA Band V (RMC 12.2Kbps)

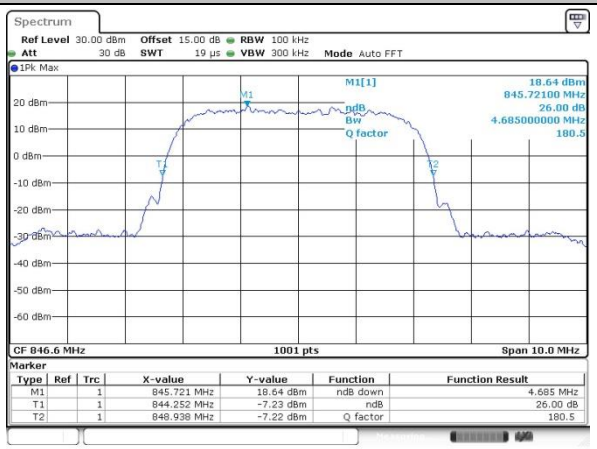
Lowest Channel



Middle Channl

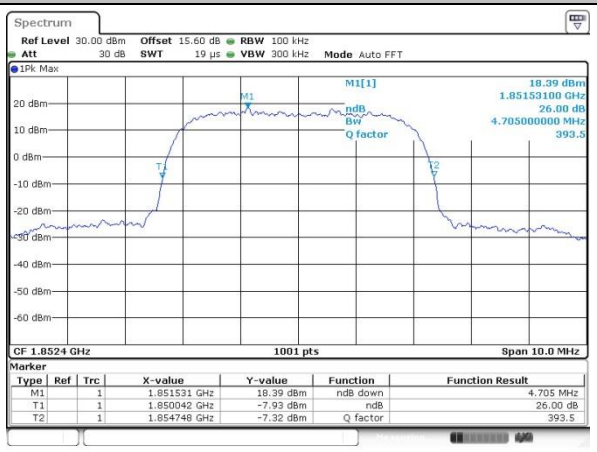


Highest Channel

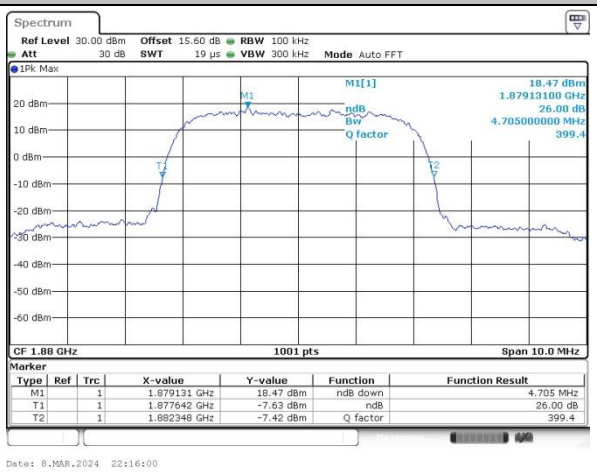


WCDMA Band II (RMC 12.2Kbps)

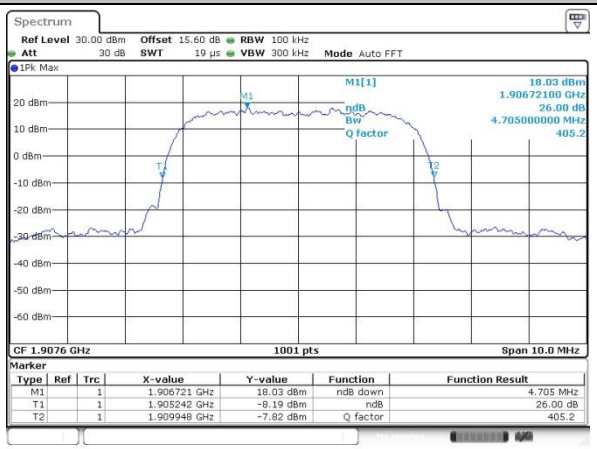
Lowest Channel



Middle Channel

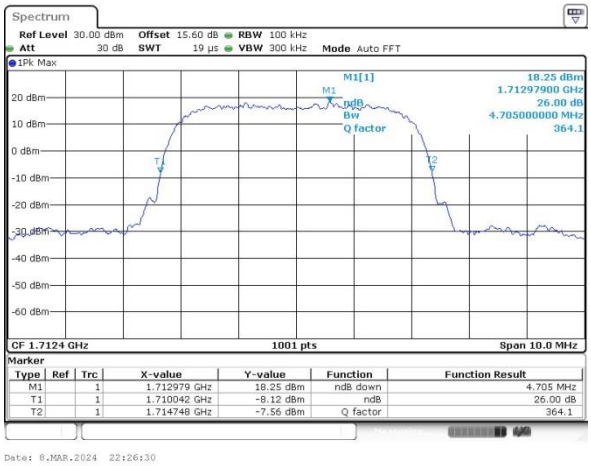


Highest Channel

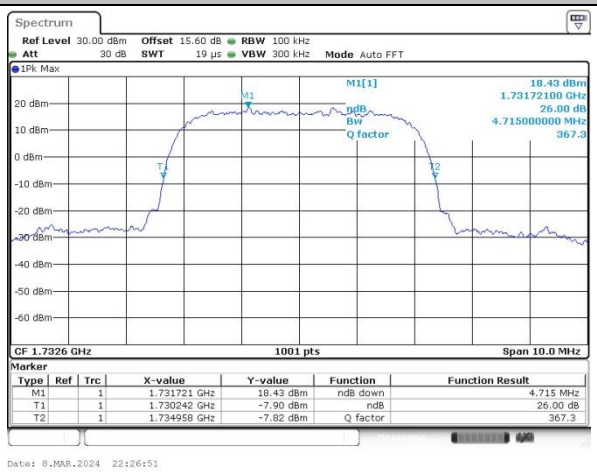


WCDMA Band IV (RMC 12.2Kbps)

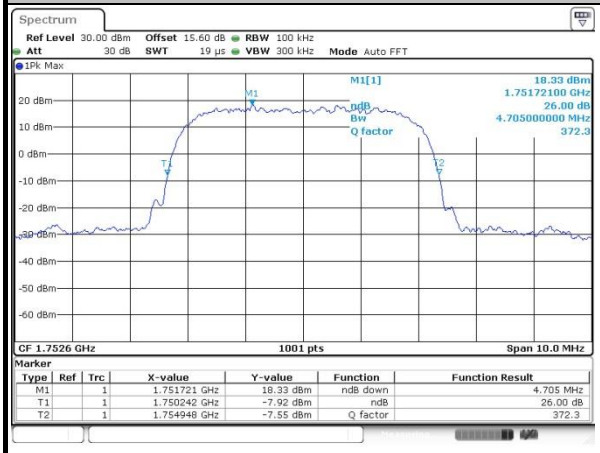
Lowest Channel



Middle Channel



Highest Channel



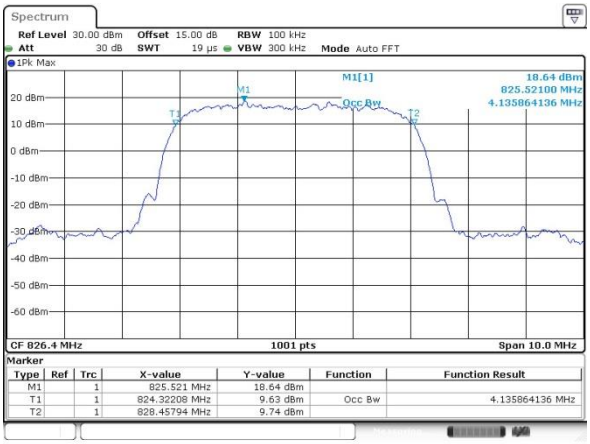
4.69

Occupied Bandwidth

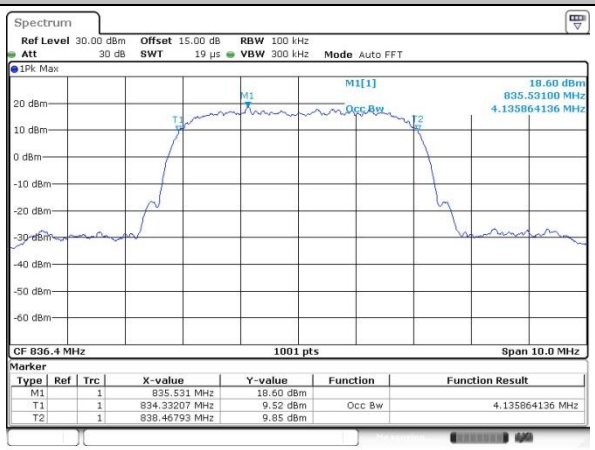
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.136	4.146	4.146
Middle CH	4.136	4.146	4.146
Highest CH	4.136	4.136	4.146

WCDMA Band V (RMC 12.2Kbps)

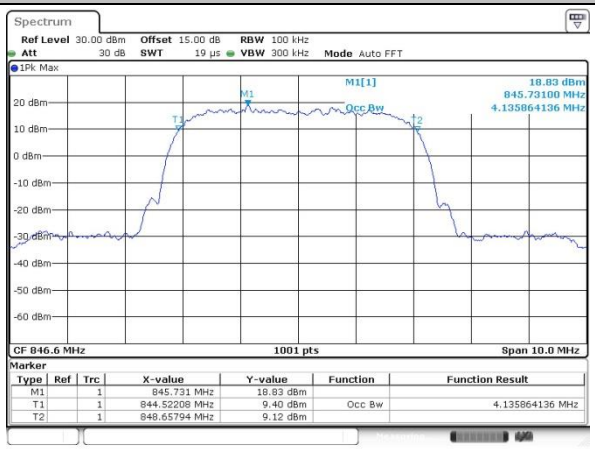
Lowest Channel



Middle Channel

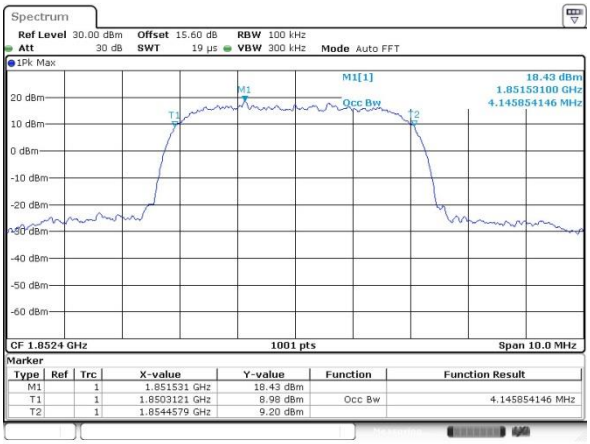


Highest Channel

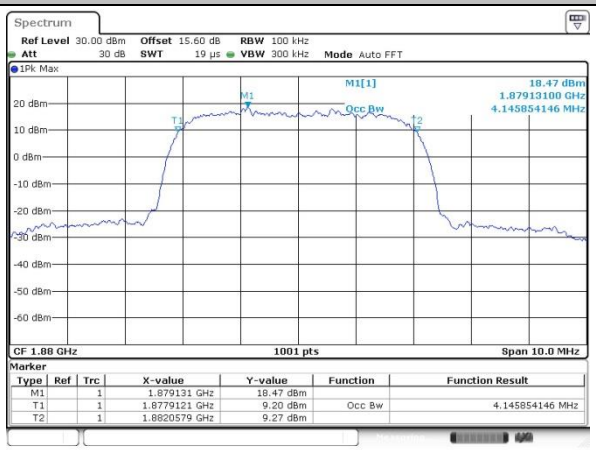


WCDMA Band II (RMC 12.2Kbps)

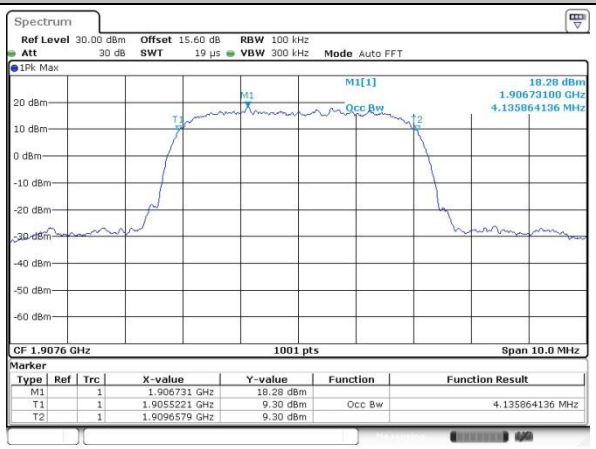
Lowest Channel



Middle Channel

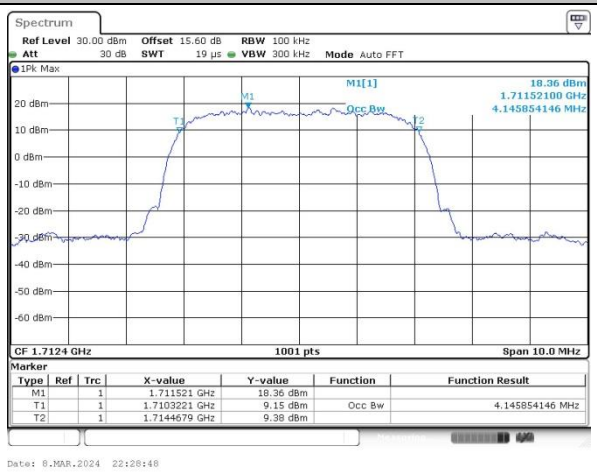


Highest Channel

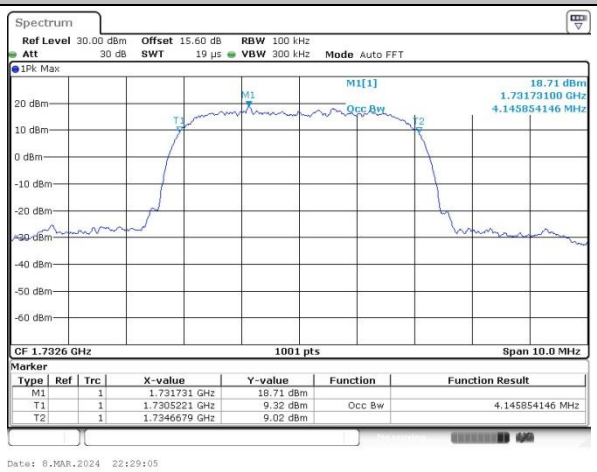


WCDMA Band IV (RMC 12.2Kbps)

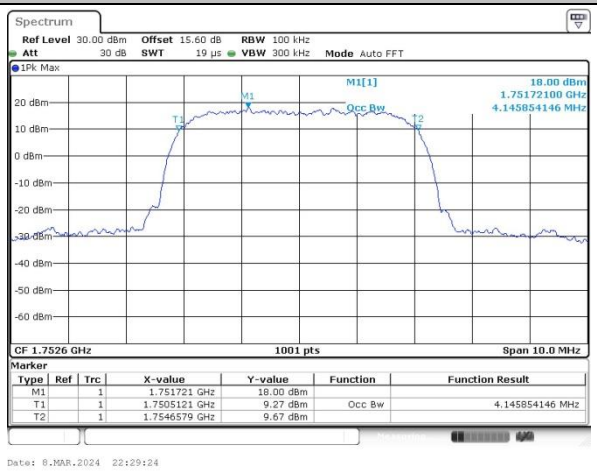
Lowest Channel



Middle Channel



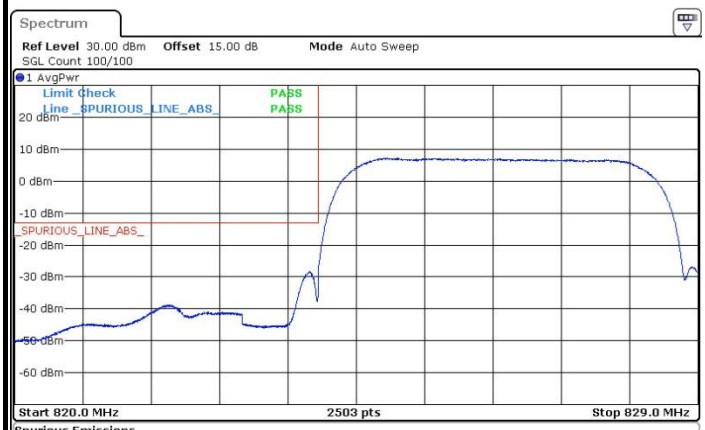
Highest Channel



Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

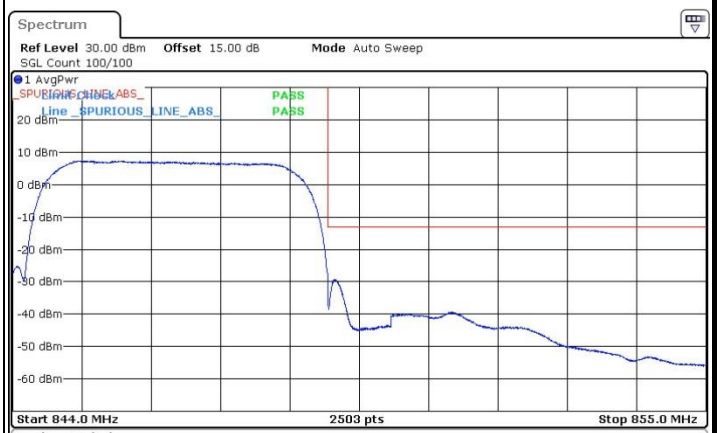


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.03347 MHz	-38.76 dBm	-25.76 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.88323 MHz	-28.30 dBm	-15.30 dB
824.000 MHz	829.000 MHz	100.000 kHz	824.86164 MHz	7.19 dBm	-27.81 dB

Date: 8.MAR.2024 21:47:57

Highest Band Edge



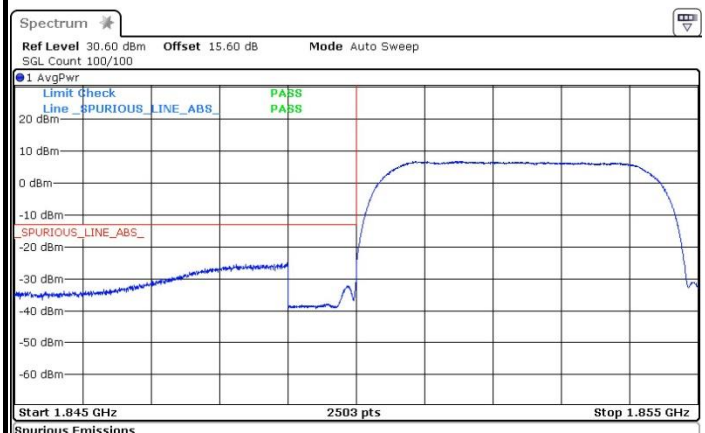
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.07143 MHz	7.37 dBm	-27.63 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.10080 MHz	-29.25 dBm	-16.25 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.98651 MHz	-39.27 dBm	-26.27 dB

Date: 8.MAR.2024 21:49:37

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

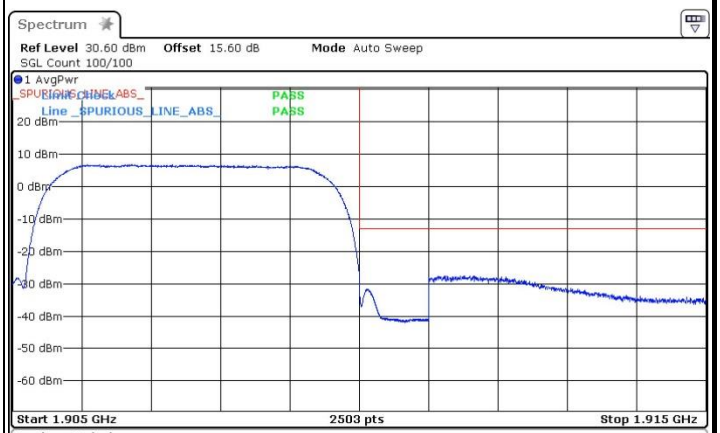


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84898 GHz	-25.01 dBm	-12.01 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-30.20 dBm	-17.20 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85082 GHz	6.71 dBm	-28.29 dB

Date: 8.MAR.2024 22:20:02

Highest Band Edge



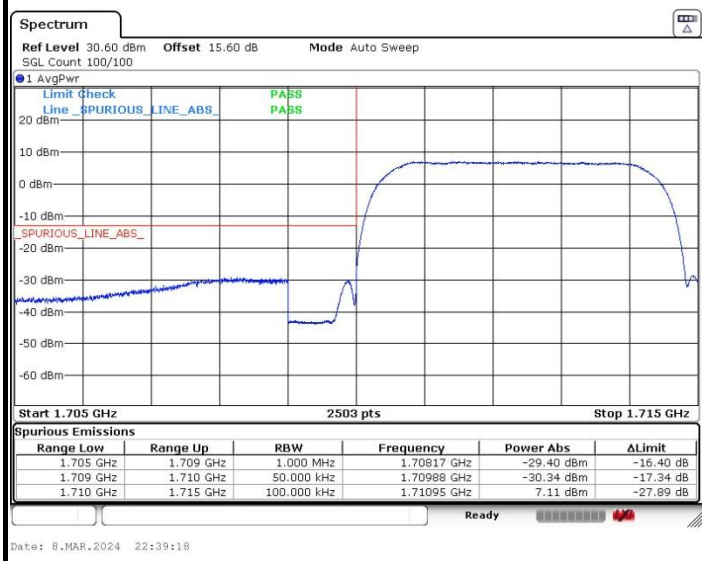
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90625 GHz	6.80 dBm	-28.20 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91012 GHz	-31.63 dBm	-18.63 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91123 GHz	-27.61 dBm	-14.61 dB

Date: 8.MAR.2024 22:20:52

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

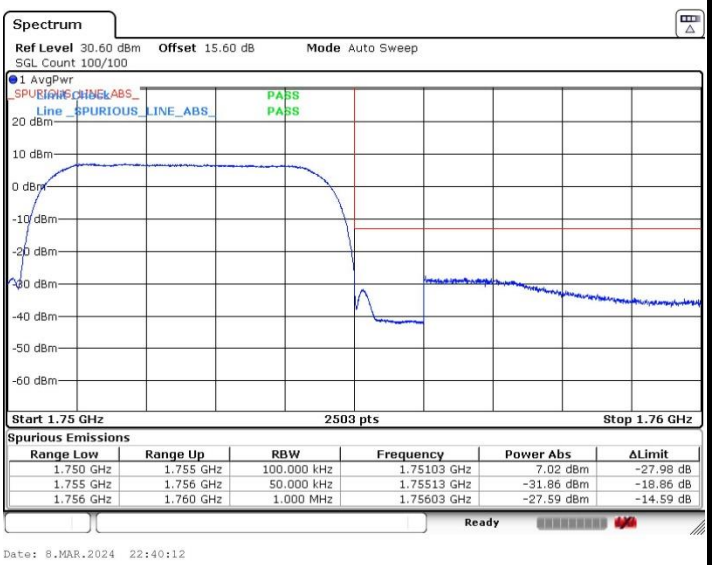


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70817 GHz	-29.40 dBm	-16.40 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70988 GHz	-30.34 dBm	-17.34 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71095 GHz	7.11 dBm	-27.89 dB

Date: 8.MAR.2024 22:39:18

Highest Band Edge



Spurious Emissions

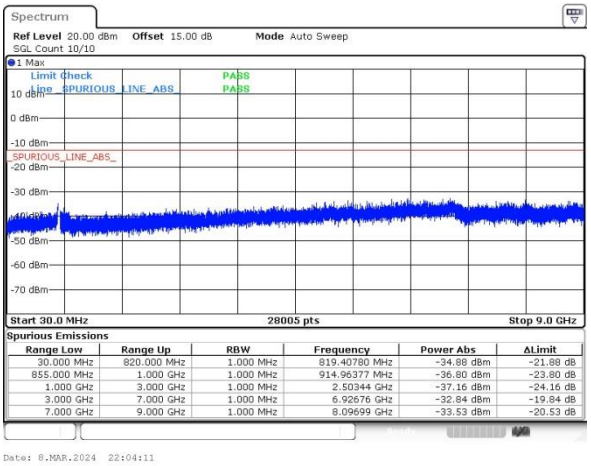
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75103 GHz	7.02 dBm	-27.98 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75513 GHz	-31.86 dBm	-18.86 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75603 GHz	-27.59 dBm	-14.59 dB

Date: 8.MAR.2024 22:40:12

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

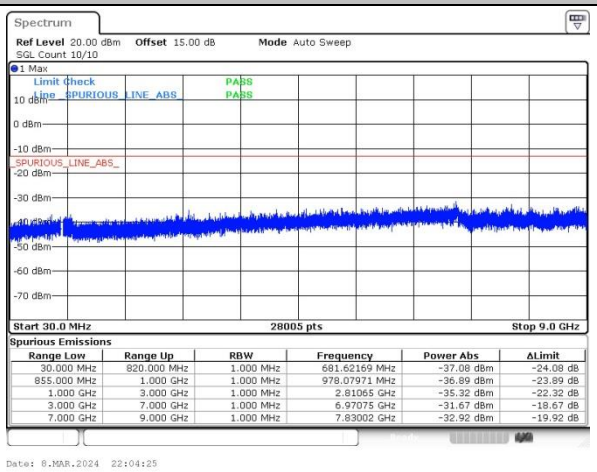


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.40780 MHz	-34.88 dBm	-21.88 dB
855.000 MHz	1.000 GHz	1.000 MHz	914.96377 MHz	-36.80 dBm	-23.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50344 GHz	-37.16 dBm	-24.16 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92676 GHz	-32.84 dBm	-19.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.09699 GHz	-33.53 dBm	-20.53 dB

Date: 8.MAR.2024 22:04:11

Middle Channel

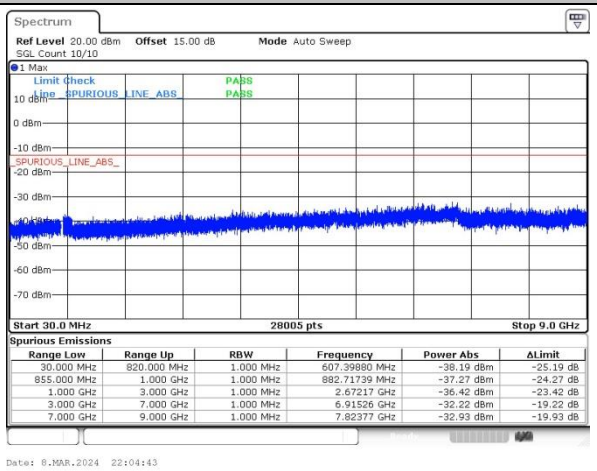


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	681.62169 MHz	-37.08 dBm	-24.08 dB
855.000 MHz	1.000 GHz	1.000 MHz	978.07971 MHz	-36.89 dBm	-23.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.81065 GHz	-35.32 dBm	-22.32 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97075 GHz	-31.67 dBm	-18.67 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.83002 GHz	-32.92 dBm	-19.92 dB

Date: 8.MAR.2024 22:04:25

Highest Channel



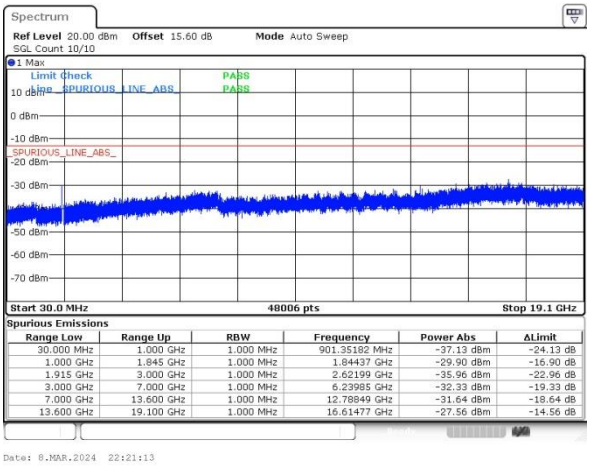
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	607.39880 MHz	-38.19 dBm	-25.19 dB
855.000 MHz	1.000 GHz	1.000 MHz	882.71739 MHz	-37.27 dBm	-24.27 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.67217 GHz	-36.42 dBm	-23.42 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91526 GHz	-32.22 dBm	-19.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.82377 GHz	-32.93 dBm	-19.93 dB

Date: 8.MAR.2024 22:04:43

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

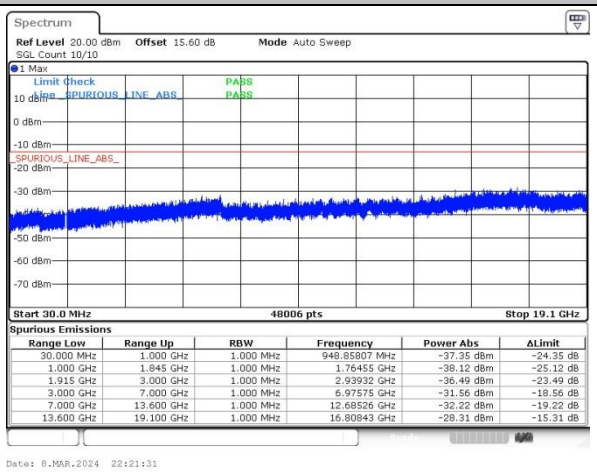


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	901.35182 MHz	-37.13 dBm	-24.13 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84437 GHz	-29.90 dBm	-16.90 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.62199 GHz	-35.96 dBm	-22.96 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.23985 GHz	-32.33 dBm	-19.33 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.78849 GHz	-31.64 dBm	-18.64 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.61477 GHz	-27.56 dBm	-14.56 dB

Date: 8.MAR.2024 22:21:13

Middle Channel

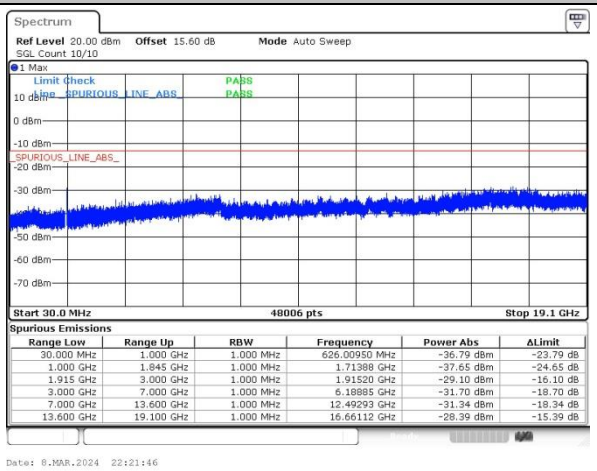


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	948.85807 MHz	-37.35 dBm	-24.35 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.76455 GHz	-38.12 dBm	-25.12 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.93932 GHz	-36.49 dBm	-23.49 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97575 GHz	-31.56 dBm	-18.56 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.68526 GHz	-32.22 dBm	-19.22 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.80843 GHz	-28.31 dBm	-15.31 dB

Date: 8.MAR.2024 22:21:31

Highest Channel



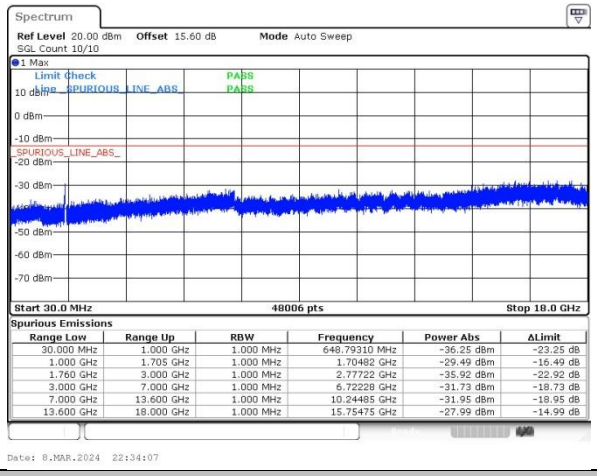
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	626.00950 MHz	-36.79 dBm	-23.79 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.71388 GHz	-37.65 dBm	-24.65 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91520 GHz	-29.10 dBm	-16.10 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.18885 GHz	-31.70 dBm	-18.70 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.49293 GHz	-31.34 dBm	-18.34 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.66112 GHz	-28.39 dBm	-15.39 dB

Date: 8.MAR.2024 22:21:46

WCDMA Band IV (RMC 12.2Kbps)

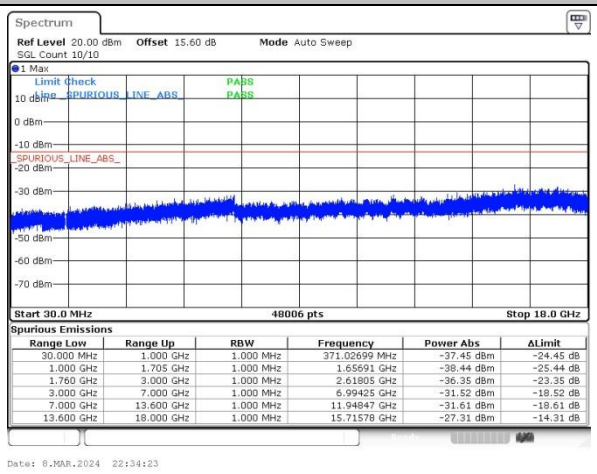
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	648.79310 MHz	-36.25 dBm	-23.25 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-29.49 dBm	-16.49 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.77722 GHz	-35.92 dBm	-22.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.72228 GHz	-31.73 dBm	-18.73 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.24485 GHz	-31.95 dBm	-18.95 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-27.99 dBm	-14.99 dB

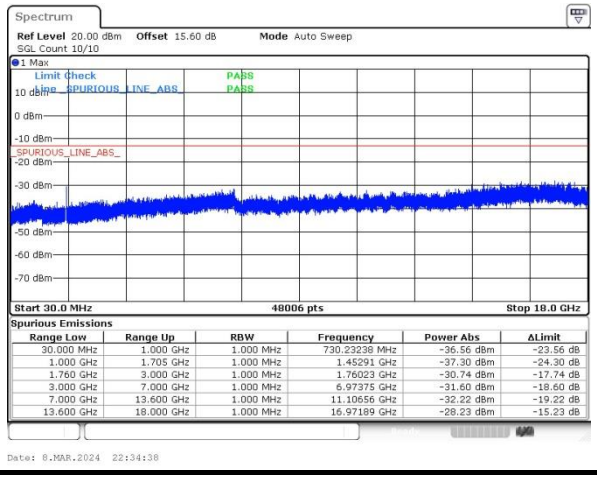
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	371.02699 MHz	-37.45 dBm	-24.45 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.65691 GHz	-38.44 dBm	-25.44 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.61805 GHz	-36.35 dBm	-23.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99425 GHz	-31.52 dBm	-18.52 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.94847 GHz	-31.61 dBm	-18.61 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.71578 GHz	-27.31 dBm	-14.31 dB

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	730.23238 MHz	-36.56 dBm	-23.56 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.45291 GHz	-37.30 dBm	-24.30 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76023 GHz	-30.74 dBm	-17.74 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97375 GHz	-31.60 dBm	-18.60 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.10656 GHz	-32.22 dBm	-19.22 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.97189 GHz	-28.23 dBm	-15.23 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	0.0058	PASS
40	Normal Voltage	0.0377	
30	Normal Voltage	0.0485	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0344	
-10	Normal Voltage	0.0063	
-20	Normal Voltage	0.0141	
-30	Normal Voltage	0.0325	
20	Maximum Voltage	0.0418	
20	Normal Voltage	0.0176	
20	Battery End Point	0.0063	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0169	PASS
40	Normal Voltage	0.0136	
30	Normal Voltage	0.0144	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0155	
0	Normal Voltage	0.0136	
-10	Normal Voltage	0.0247	
-20	Normal Voltage	0.0072	
-30	Normal Voltage	0.0169	
20	Maximum Voltage	0.0162	
20	Normal Voltage	0.0128	
20	Battery End Point	0.0019	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0146	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0044	
-10	Normal Voltage	0.0172	
-20	Normal Voltage	0.0163	
-30	Normal Voltage	0.0061	
20	Maximum Voltage	0.0028	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0118	

Note:

1. Normal Voltage = 3.88V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.48V
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 :	Carry Xu	Temperature :	23~25℃
		Relative Humidity :	41~42%

RSE pretest all the supported antennas, only the worst results are recorded in the report.

GSM850 (GSM) / ANT0								
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	-66.01	-13	-53.01	-72.98	1.58	10.70	H
	2512	-61.30	-13	-48.30	-69.55	2.102	12.50	H
	3344	-61.93	-13	-48.93	-70.82	2.856	13.90	H
	1672	-63.94	-13	-50.94	-70.91	1.58	10.70	V
	2512	-60.17	-13	-47.17	-68.42	2.10	12.50	V
	3344	-61.61	-13	-48.61	-70.50	2.86	13.90	V

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

GSM850 (EDGE 1 Tx slots) /ANT 0								
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	-60.44	-13	-47.44	-67.41	1.58	10.70	H
	2512	-60.26	-13	-47.26	-68.51	2.102	12.50	H
	3344	-61.20	-13	-48.20	-70.09	2.856	13.90	H
	1672	-64.40	-13	-51.40	-71.37	1.58	10.70	V
	2512	-60.15	-13	-47.15	-68.40	2.10	12.50	V
	3344	-60.99	-13	-47.99	-69.88	2.86	13.90	V

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

WCDMA Band V(RMC 12.2Kbps) / ANT 0								
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	-65.29	-13	-52.29	-72.26	1.58	10.70	H
	2512	-60.61	-13	-47.61	-68.86	2.102	12.50	H
	3344	-61.39	-13	-48.39	-70.28	2.856	13.90	H
	1672	-63.92	-13	-50.92	-70.89	1.58	10.70	V
	2512	-60.09	-13	-47.09	-68.34	2.10	12.50	V
	3344	-61.37	-13	-48.37	-70.26	2.86	13.90	V

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

GSM1900 (GSM) / ANT2								
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	3765	-56.23	-13	-43.23	-68.49	2.64	14.90	H
	5640	-54.38	-13	-41.38	-66.24	2.94	14.80	H
	7515	-52.88	-13	-39.88	-62.65	3.39	13.16	H
	3765	-55.89	-13	-42.89	-68.15	2.64	14.90	V
	5640	-55.06	-13	-42.06	-66.92	2.94	14.80	V
	7515	-53.11	-13	-40.11	-62.88	3.39	13.16	V

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

GSM1900 (EDGE 1 Tx slots) /ANT2								
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	3765	-56.02	-13	-43.02	-68.28	2.64	14.90	H
	5640	-53.69	-13	-40.69	-65.55	2.94	14.80	H
	7515	-52.82	-13	-39.82	-62.59	3.39	13.16	H
	3765	-55.99	-13	-42.99	-68.25	2.64	14.90	V
	5640	-54.19	-13	-41.19	-66.05	2.94	14.80	V
	7515	-52.91	-13	-39.91	-62.68	3.39	13.16	V

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

WCDMA Band II(RMC 12.2Kbps) / ANT2								
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	3765	-56.12	-13	-43.12	-68.38	2.64	14.90	H
	5640	-54.60	-13	-41.60	-66.46	2.94	14.80	H
	7515	-52.80	-13	-39.80	-62.57	3.39	13.16	H
	3765	-55.84	-13	-42.84	-68.10	2.64	14.90	V
	5640	-54.90	-13	-41.90	-66.76	2.94	14.80	V
	7515	-53.02	-13	-40.02	-62.79	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) / ANT2								
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	-58.07	-13	-45.07	-68.81	2.604	13.34	H
	5205	-53.21	-13	-40.21	-63.72	3.011	13.52	H
	6930	-54.46	-13	-41.46	-64.66	3.271	13.47	H
	3465	-58.20	-13	-45.20	-68.94	2.604	13.34	V
	5205	-53.40	-13	-40.40	-63.91	3.011	13.52	V
	6930	-54.50	-13	-41.50	-64.70	3.271	13.47	V

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