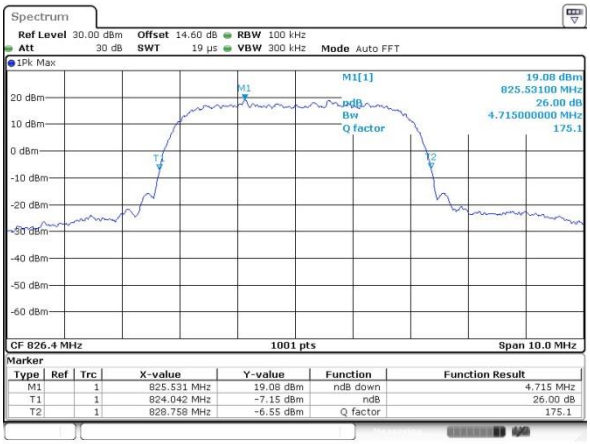
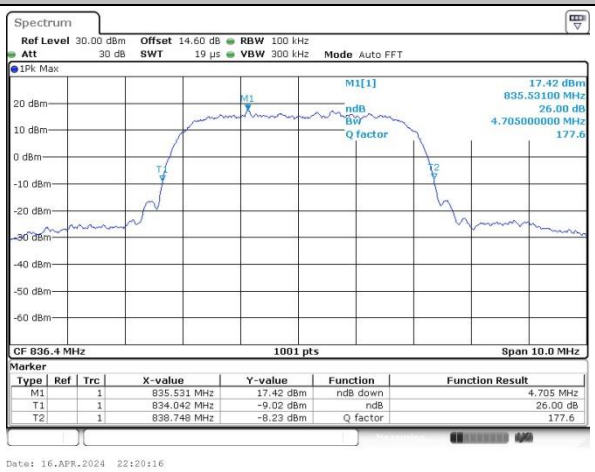
WCDMA Band V (RMC 12.2Kbps)

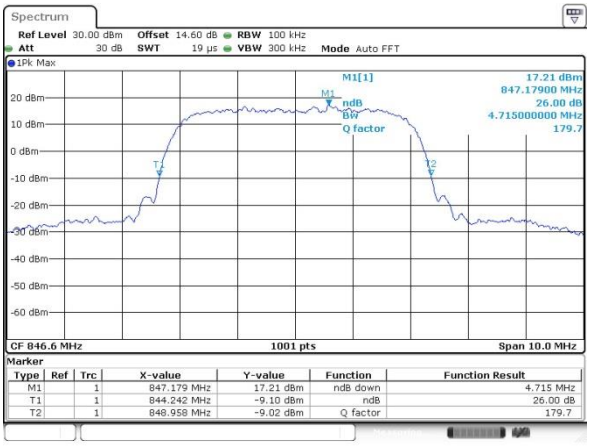
Lowest Channel



Middle Channel

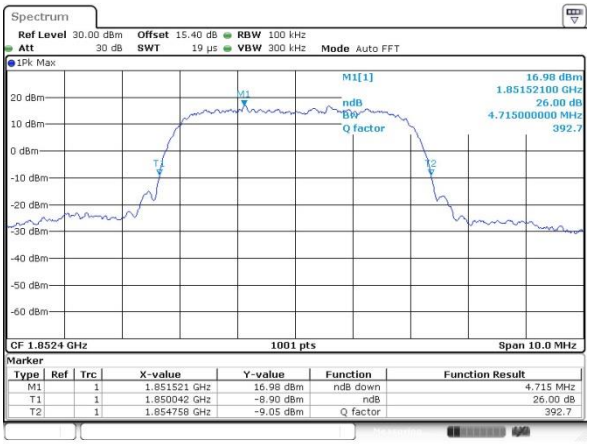


Highest Channel

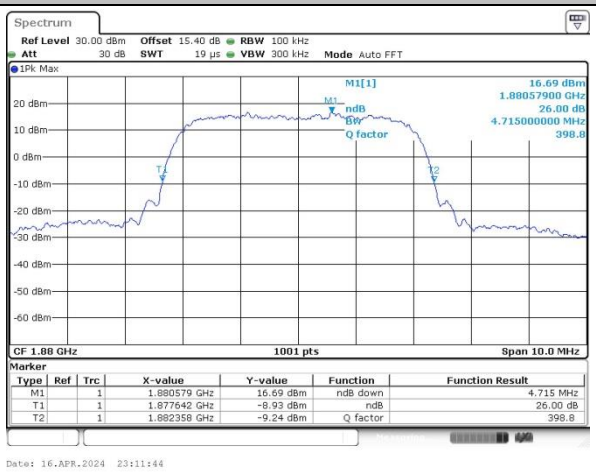


WCDMA Band II (RMC 12.2Kbps)

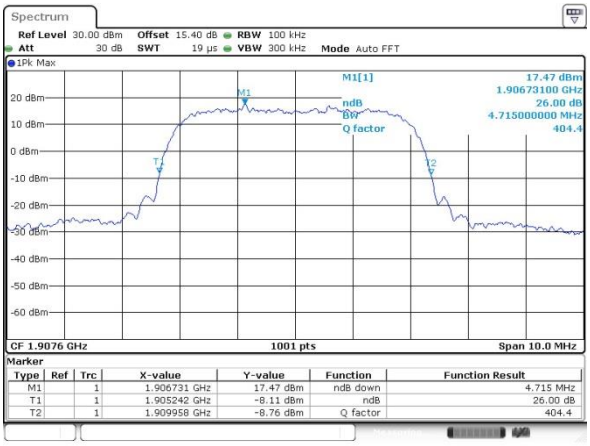
Lowest Channel



Middle Channel

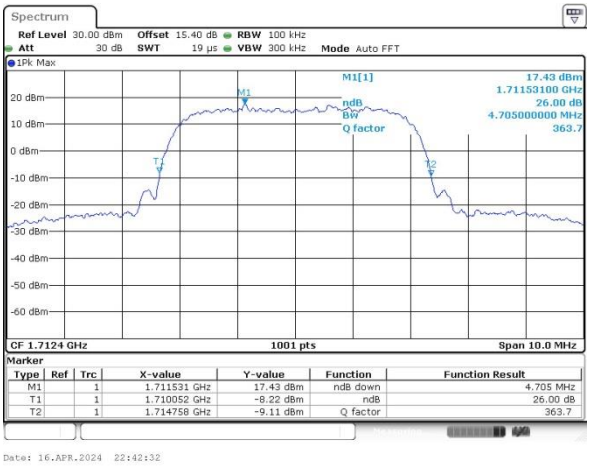


Highest Channel

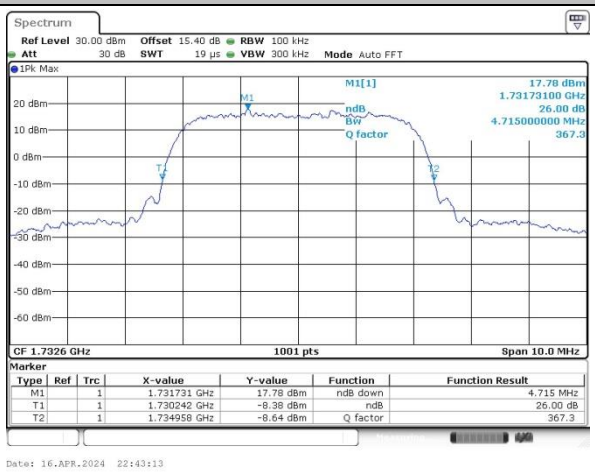


WCDMA Band IV (RMC 12.2Kbps)

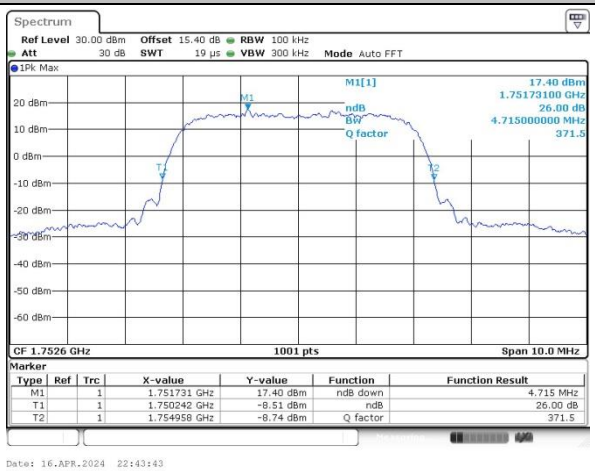
Lowest Channel



Middle Channel



Highest Channel

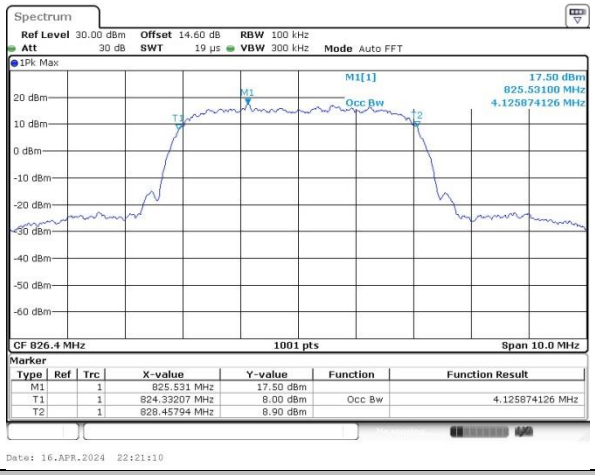


Occupied Bandwidth

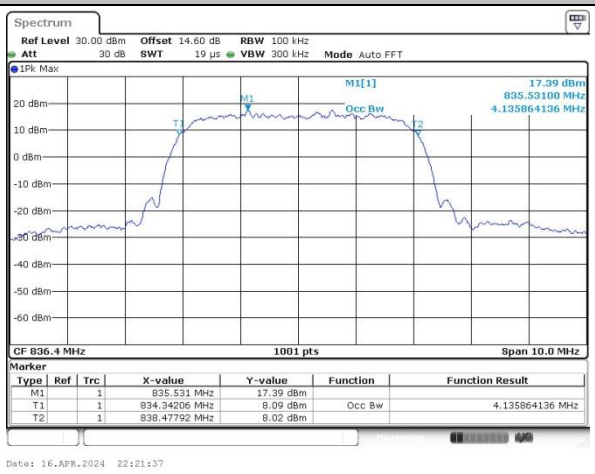
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.126	4.146	4.146
Middle CH	4.136	4.146	4.146
Highest CH	4.126	4.146	4.146

WCDMA Band V (RMC 12.2Kbps)

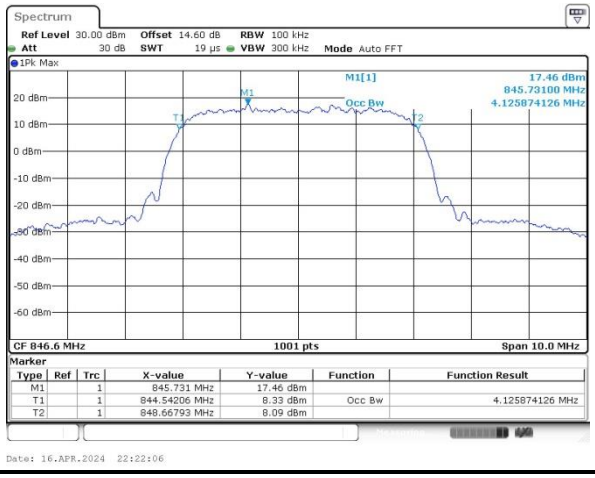
Lowest Channel



Middle Channel

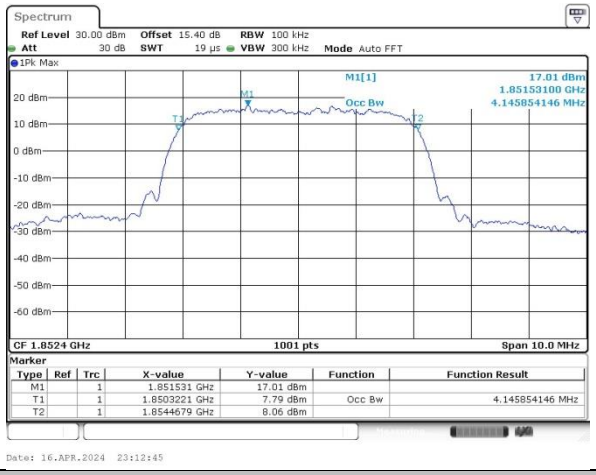


Highest Channel

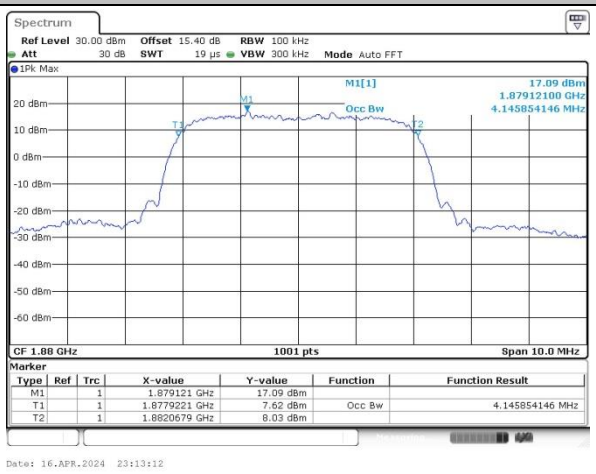


WCDMA Band II (RMC 12.2Kbps)

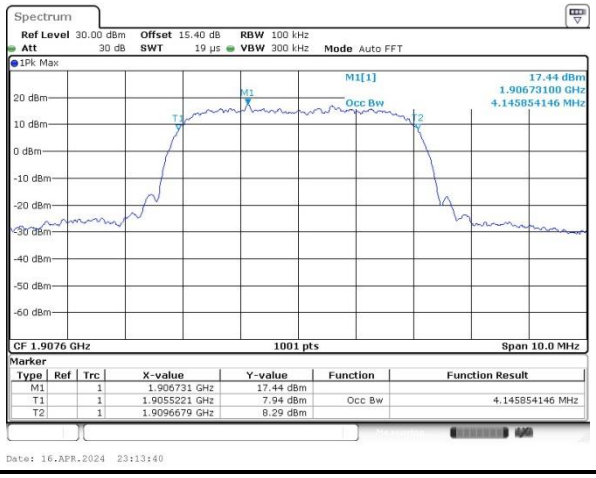
Lowest Channel



Middle Channel

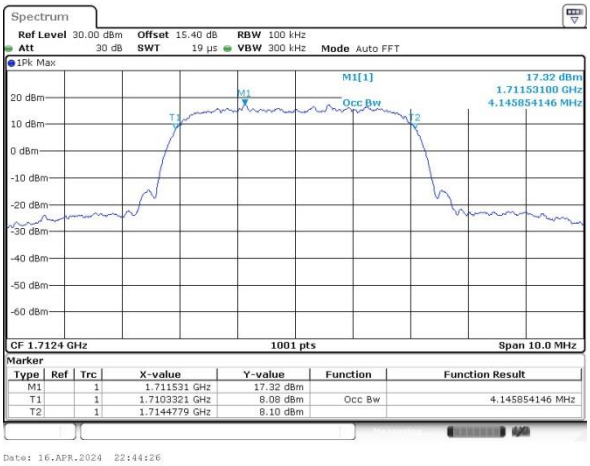


Highest Channel

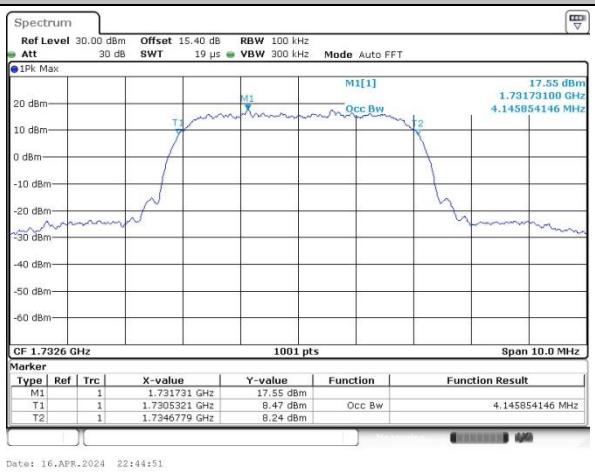


WCDMA Band IV (RMC 12.2Kbps)

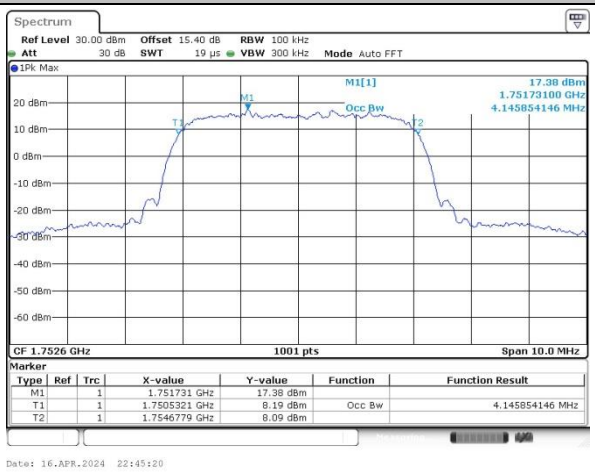
Lowest Channel



Middle Channel



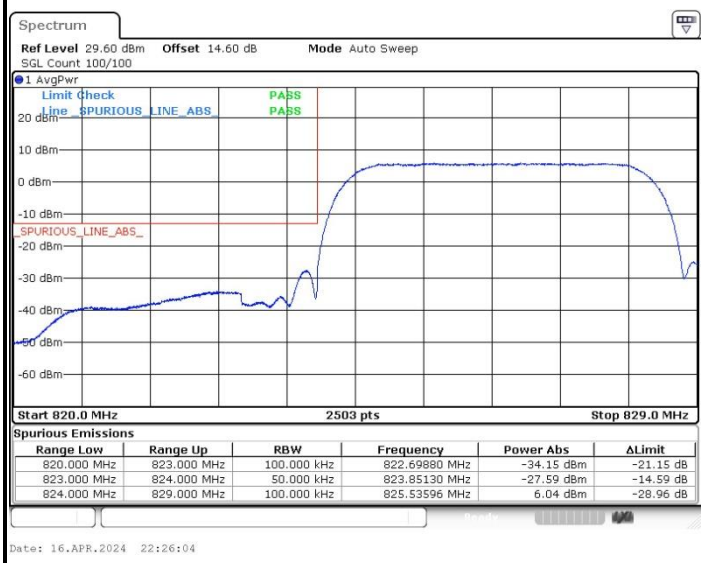
Highest Channel



Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

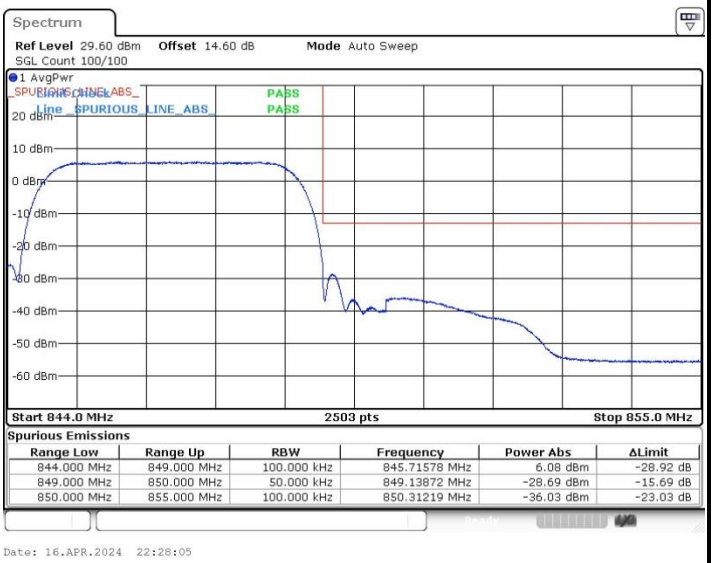


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.69880 MHz	-34.15 dBm	-21.15 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.85130 MHz	-27.59 dBm	-14.59 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.53596 MHz	6.04 dBm	-28.96 dB

Date: 16.APR.2024 22:26:04

Highest Band Edge



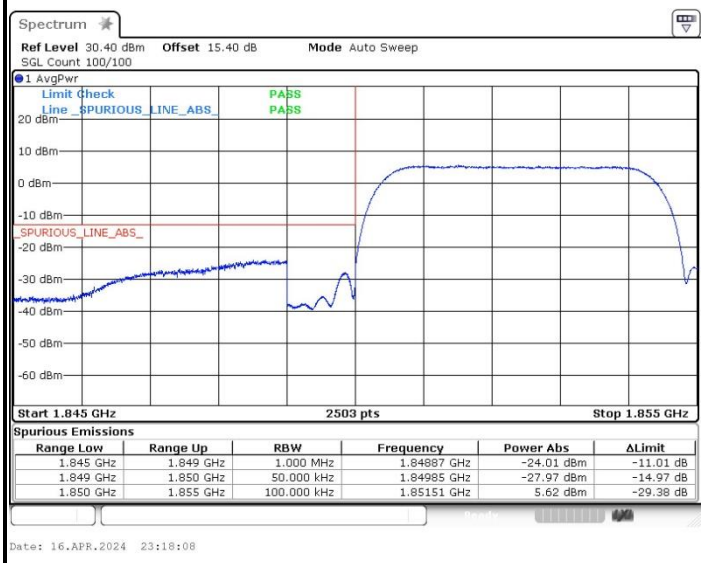
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.71578 MHz	6.08 dBm	-28.92 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.13872 MHz	-28.69 dBm	-15.69 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.31219 MHz	-36.03 dBm	-23.03 dB

Date: 16.APR.2024 22:28:05

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

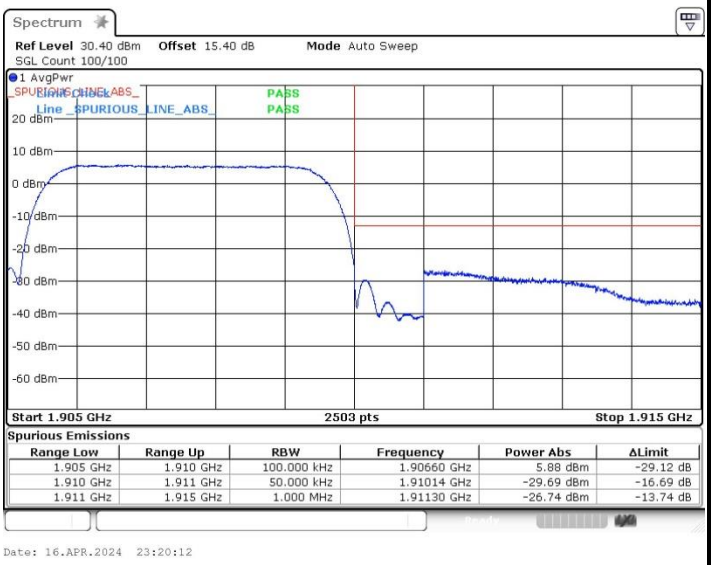


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84887 GHz	-24.01 dBm	-11.01 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84985 GHz	-27.97 dBm	-14.97 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85151 GHz	5.62 dBm	-29.38 dB

Date: 16.APR.2024 23:18:08

Highest Band Edge



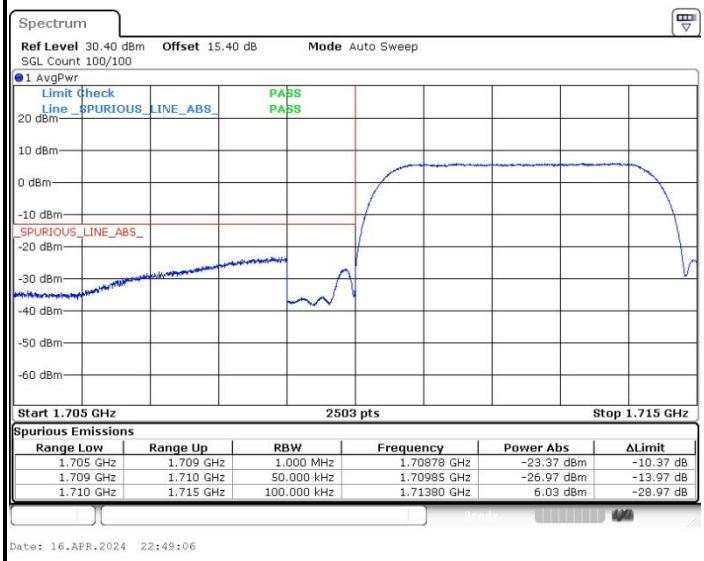
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90660 GHz	5.88 dBm	-29.12 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91014 GHz	-29.69 dBm	-16.69 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91130 GHz	-26.74 dBm	-13.74 dB

Date: 16.APR.2024 23:20:12

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

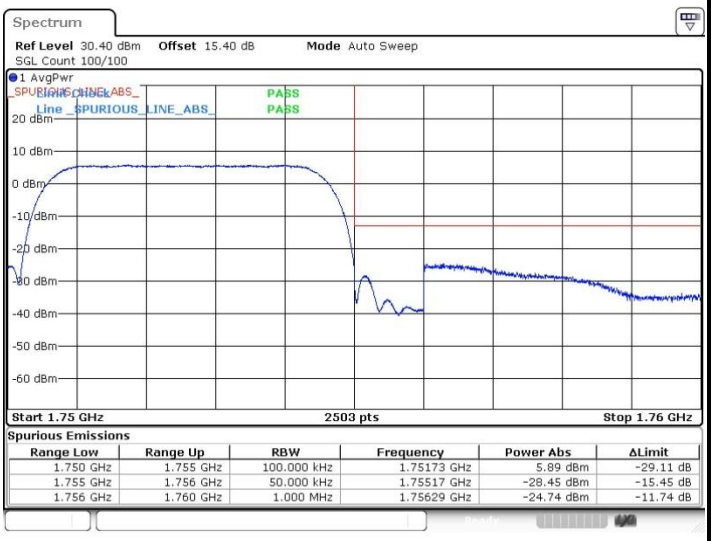


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70878 GHz	-23.37 dBm	-10.37 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70985 GHz	-26.97 dBm	-13.97 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71380 GHz	6.03 dBm	-28.97 dB

Date: 16.APR.2024 22:49:06

Highest Band Edge



Spurious Emissions

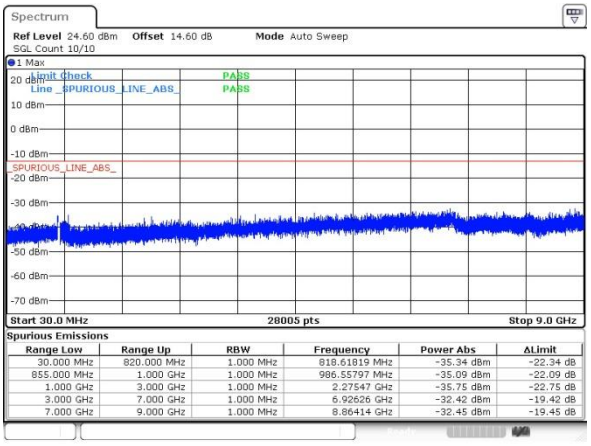
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75173 GHz	5.89 dBm	-29.11 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75517 GHz	-28.45 dBm	-15.45 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75629 GHz	-24.74 dBm	-11.74 dB

Date: 16.APR.2024 22:58:52

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

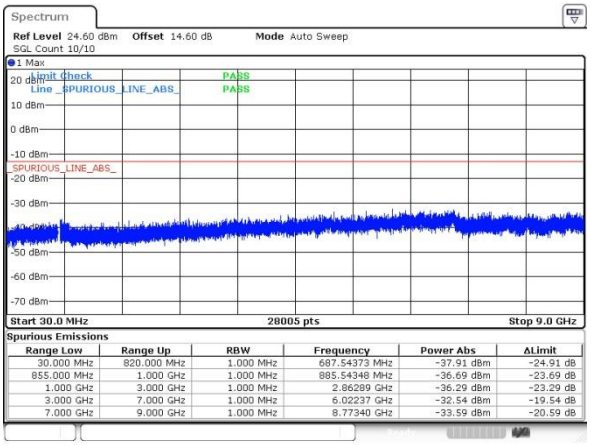


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	818.61819 MHz	-35.34 dBm	-22.34 dB
855.000 MHz	1.000 GHz	1.000 MHz	986.55797 MHz	-35.09 dBm	-22.09 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.27547 GHz	-35.75 dBm	-22.75 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92626 GHz	-32.42 dBm	-19.42 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.86414 GHz	-32.45 dBm	-19.45 dB

Date: 16.APR.2024 22:31:09

Middle Channel

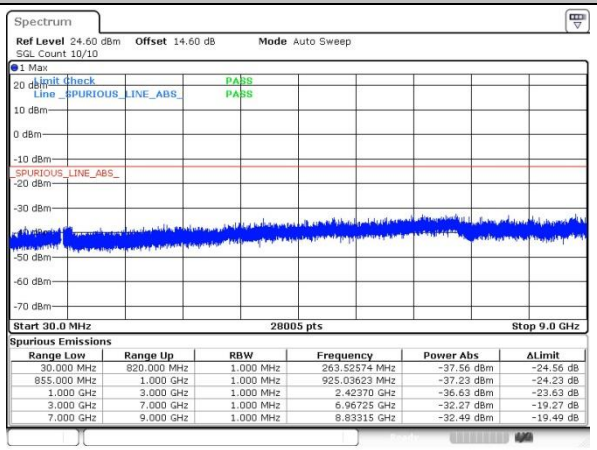


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	687.54373 MHz	-37.91 dBm	-24.91 dB
855.000 MHz	1.000 GHz	1.000 MHz	885.54348 MHz	-36.69 dBm	-23.69 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.86289 GHz	-36.29 dBm	-23.29 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.02237 GHz	-32.54 dBm	-19.54 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.77340 GHz	-33.59 dBm	-20.59 dB

Date: 16.APR.2024 22:34:23

Highest Channel



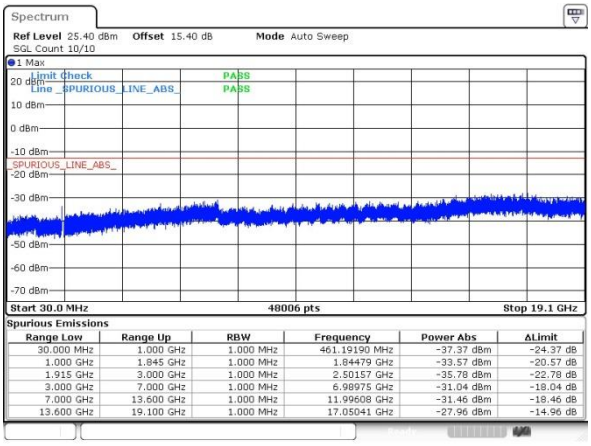
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	263.52574 MHz	-37.56 dBm	-24.56 dB
855.000 MHz	1.000 GHz	1.000 MHz	925.03623 MHz	-37.23 dBm	-24.23 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.42370 GHz	-36.63 dBm	-23.63 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96725 GHz	-32.27 dBm	-19.27 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.83315 GHz	-32.49 dBm	-19.49 dB

Date: 16.APR.2024 22:36:50

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

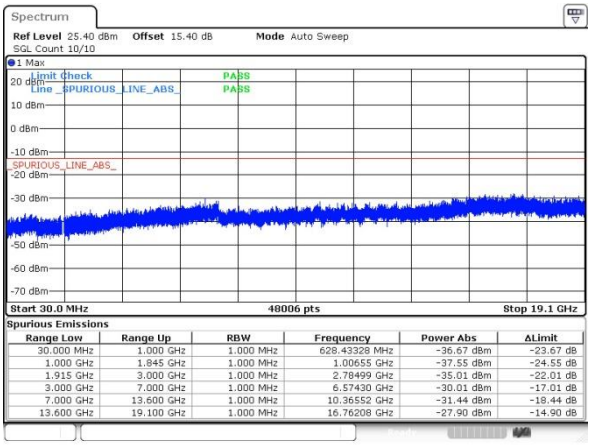


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	461.19190 MHz	-37.37 dBm	-24.37 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-33.57 dBm	-20.57 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.50157 GHz	-35.78 dBm	-22.78 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98975 GHz	-31.04 dBm	-18.04 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.99608 GHz	-31.46 dBm	-18.46 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.05041 GHz	-27.96 dBm	-14.96 dB

Date: 16.APR.2024 23:22:23

Middle Channel

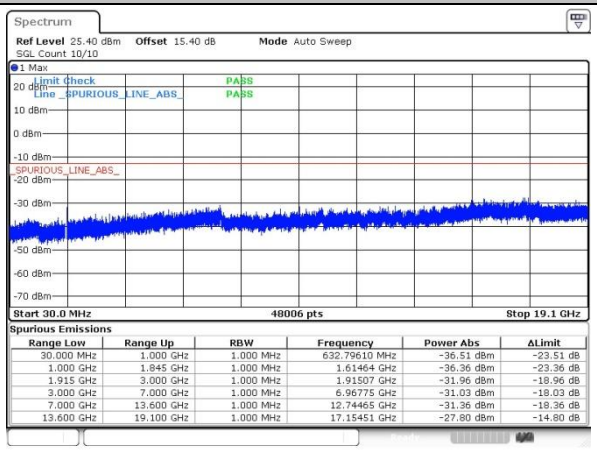


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	628.43328 MHz	-36.67 dBm	-23.67 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.00655 GHz	-37.55 dBm	-24.55 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.78499 GHz	-35.01 dBm	-22.01 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.57430 GHz	-30.01 dBm	-17.01 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.36552 GHz	-31.44 dBm	-18.44 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.76208 GHz	-27.90 dBm	-14.90 dB

Date: 16.APR.2024 23:27:26

Highest Channel



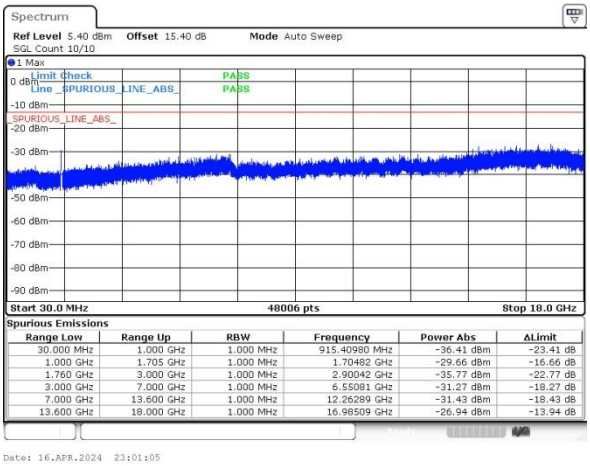
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	632.79610 MHz	-36.51 dBm	-23.51 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.61464 GHz	-36.36 dBm	-23.36 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91507 GHz	-31.96 dBm	-18.96 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96775 GHz	-31.03 dBm	-18.03 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.74465 GHz	-31.36 dBm	-18.36 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.15451 GHz	-27.80 dBm	-14.80 dB

Date: 16.APR.2024 23:30:13

WCDMA Band IV (RMC 12.2Kbps)

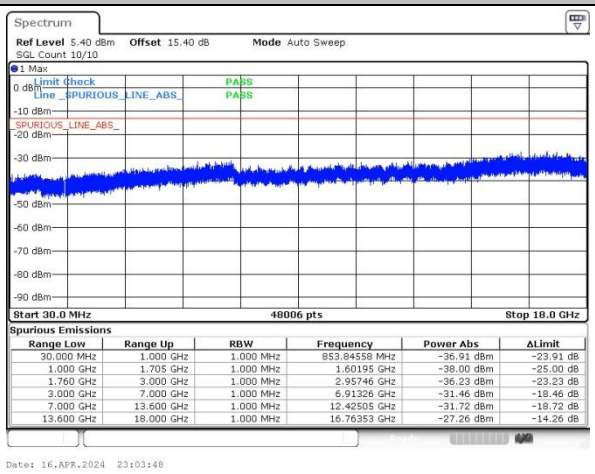
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.40980 MHz	-36.41 dBm	-23.41 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-29.66 dBm	-16.66 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.90042 GHz	-35.77 dBm	-22.77 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.55081 GHz	-31.27 dBm	-18.27 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.26289 GHz	-31.43 dBm	-18.43 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.98509 GHz	-26.94 dBm	-13.94 dB

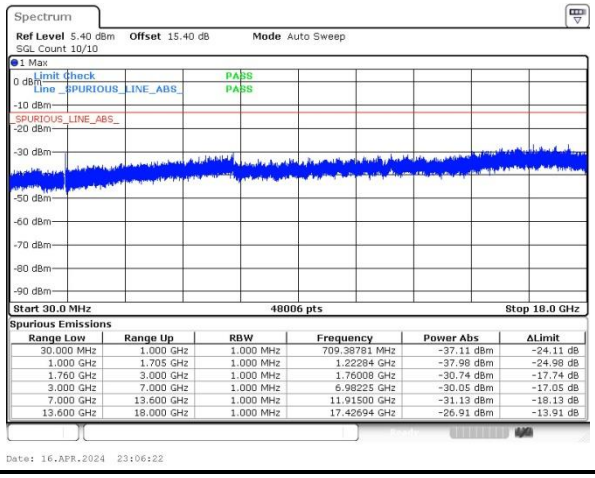
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	853.84558 MHz	-36.91 dBm	-23.91 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.60195 GHz	-38.00 dBm	-25.00 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.95746 GHz	-36.23 dBm	-23.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91326 GHz	-31.46 dBm	-18.46 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.42505 GHz	-31.72 dBm	-18.72 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.76353 GHz	-27.26 dBm	-14.26 dB

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	709.38781 MHz	-37.11 dBm	-24.11 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.22284 GHz	-37.98 dBm	-24.98 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76008 GHz	-30.74 dBm	-17.74 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98225 GHz	-30.05 dBm	-17.05 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.91500 GHz	-31.13 dBm	-18.13 dB
13.600 GHz	18.000 GHz	1.000 MHz	17.42694 GHz	-26.91 dBm	-13.91 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	0.0051	PASS
40	Normal Voltage	0.0372	
30	Normal Voltage	0.0489	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0064	
0	Normal Voltage	0.0357	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0129	
-30	Normal Voltage	0.0324	
20	Maximum Voltage	0.0418	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0059	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0133	PASS
40	Normal Voltage	0.0148	
30	Normal Voltage	0.0124	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0196	
0	Normal Voltage	0.0136	
-10	Normal Voltage	0.0249	
-20	Normal Voltage	0.0547	
-30	Normal Voltage	0.0142	
20	Maximum Voltage	0.0156	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0078	PASS
40	Normal Voltage	0.0141	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0151	
-20	Normal Voltage	0.0166	
-30	Normal Voltage	0.0064	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage = 3.91V ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.5V
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 :	ShunpingYou	Temperature :	22~25℃
		Relative Humidity :	48~52%

GSM850 (GSM)									
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	-53.40	-13	-40.40	-59.62	-56.65	4.00	9.40	H
	2509.2	-32.87	-13	-19.87	-43.12	-36.44	4.88	10.60	H
	3345.6	-56.38	-13	-43.38	-68.41	-61.31	5.52	12.60	H
	4182	-48.33	-13	-35.33	-64.03	-52.80	6.00	12.62	H
	5018.4	-61.49	-13	-48.49	-78.88	-64.90	7.14	12.70	H
	5854.8	-50.59	-13	-37.59	-69.31	-53.82	7.62	13.00	H
	1672.8	-50.62	-13	-37.62	-56.56	-53.87	4.00	9.40	V
	2509.2	-32.41	-13	-19.41	-42.99	-35.98	4.88	10.60	V
	3345.6	-50.64	-13	-37.64	-63.05	-55.57	5.52	12.60	V
	4182	-50.45	-13	-37.45	-66.36	-54.92	6.00	12.62	V
	5018.4	-62.19	-13	-49.19	-79.50	-65.60	7.14	12.70	V
	5854.8	-53.44	-13	-40.44	-72.35	-56.67	7.62	13.00	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672.8	-52.38	-13	-39.38	-58.60	-55.63	4.00	9.40	H
	2509.2	-33.32	-13	-20.32	-43.57	-36.89	4.88	10.60	H
	3345.6	-55.65	-13	-42.65	-67.68	-60.58	5.52	12.60	H
	4182	-44.85	-13	-31.85	-60.55	-49.32	6.00	12.62	H
	5018.4	-62.55	-13	-49.55	-79.94	-65.96	7.14	12.70	H
	5854.8	-51.10	-13	-38.10	-69.82	-54.33	7.62	13.00	H
	1672.8	-52.95	-13	-39.95	-58.89	-56.20	4.00	9.40	V
	2509.2	-34.37	-13	-21.37	-44.95	-37.94	4.88	10.60	V
	3345.6	-53.76	-13	-40.76	-66.17	-58.69	5.52	12.60	V
	4182	-46.93	-13	-33.93	-62.84	-51.40	6.00	12.62	V
	5018.4	-63.24	-13	-50.24	-80.55	-66.65	7.14	12.70	V
	5854.8	-53.01	-13	-40.01	-71.92	-56.24	7.62	13.00	V

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

GSM1900 (GSM)									
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	-54.58	-13	-41.58	-69.23	-61.33	5.85	12.60	H
	5640	-55.33	-13	-42.33	-73.08	-61.13	7.30	13.10	H
	7520	-56.61	-13	-43.61	-78.92	-59.76	8.35	11.50	H
	3760	-52.04	-13	-39.04	-66.87	-58.79	5.85	12.60	V
	5640	-54.38	-13	-41.38	-72.02	-60.18	7.30	13.10	V
	7520	-56.96	-13	-43.96	-79.15	-60.11	8.35	11.50	V

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

GSM1900 (EDGE 1 Tx slots)									
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	-62.68	-13	-49.68	-77.33	-69.43	5.85	12.60	H
	5640	-61.81	-13	-48.81	-79.56	-67.61	7.30	13.10	H
	7520	-56.93	-13	-43.93	-79.24	-60.08	8.35	11.50	H
	3760	-62.69	-13	-49.69	-77.52	-69.44	5.85	12.60	V
	5640	-61.85	-13	-48.85	-79.49	-67.65	7.30	13.10	V
	7520	-57.02	-13	-44.02	-79.21	-60.17	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)									
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	1673.04	-56.94	-13	-43.94	-63.16	-60.19	4.00	9.40	H
	2509.56	-61.94	-13	-48.94	-72.19	-65.51	4.88	10.60	H
	3346.08	-65.60	-13	-52.60	-77.63	-70.53	5.52	12.60	H
	1673.04	-57.58	-13	-44.58	-63.53	-60.83	4.00	9.40	V
	2509.56	-62.88	-13	-49.88	-73.46	-66.45	4.88	10.60	V
	3346.08	-64.95	-13	-51.95	-77.36	-69.88	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)									
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	-62.13	-13	-49.13	-76.78	-68.88	5.85	12.60	H
	5640	-62.11	-13	-49.11	-79.86	-67.91	7.30	13.10	H
	7520	-57.04	-13	-44.04	-79.35	-60.19	8.35	11.50	H
	3760	-61.95	-13	-48.95	-76.78	-68.70	5.85	12.60	V
	5640	-62.24	-13	-49.24	-79.88	-68.04	7.30	13.10	V
	7520	-57.03	-13	-44.03	-79.22	-60.18	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)									
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	-63.84	-13	-50.84	-76.59	-70.69	5.65	12.50	H
	5197.8	-62.49	-13	-49.49	-80.05	-68.16	7.13	12.80	H
	6930.4	-59.13	-13	-46.13	-79.98	-62.53	8.40	11.80	H
	3465.2	-62.61	-13	-49.61	-75.9	-69.46	5.65	12.50	V
	5197.8	-62.82	-13	-49.82	-80.33	-68.49	7.13	12.80	V
	6930.4	-59.43	-13	-46.43	-80.29	-62.83	8.40	11.80	V

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