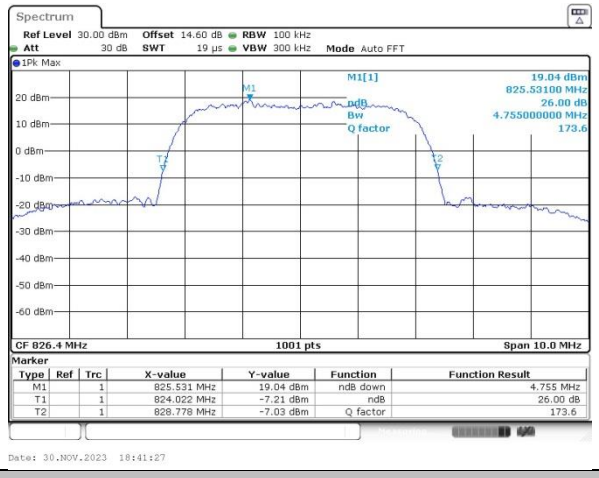
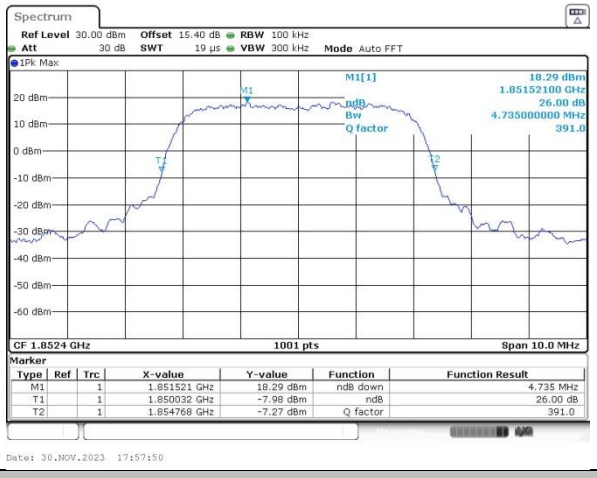
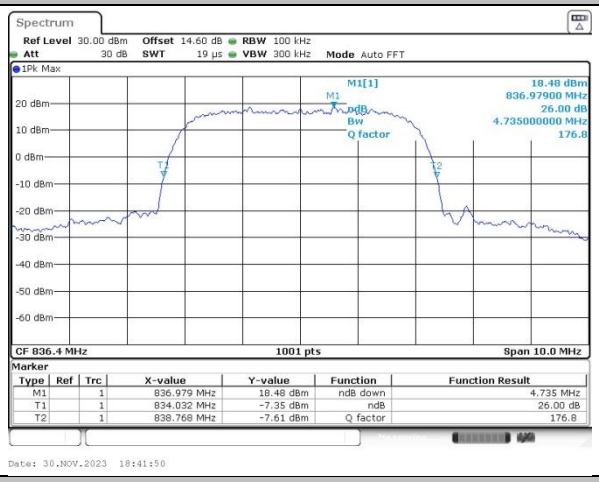
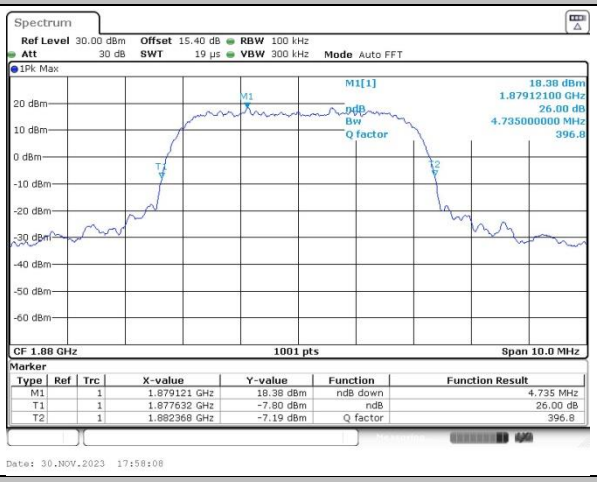
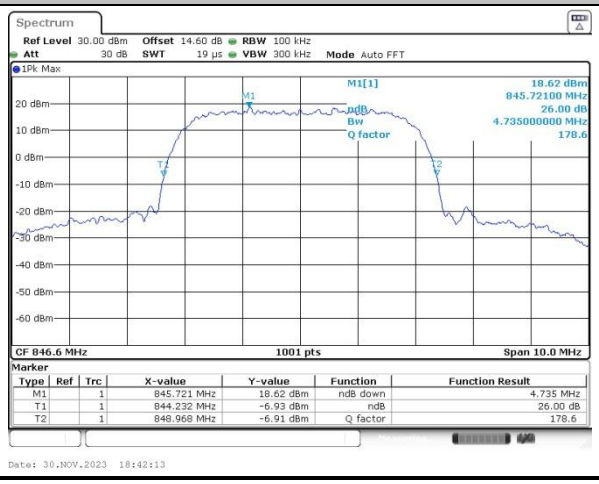
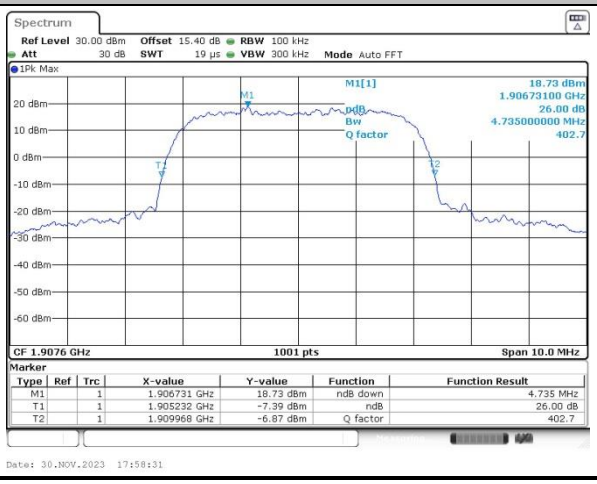
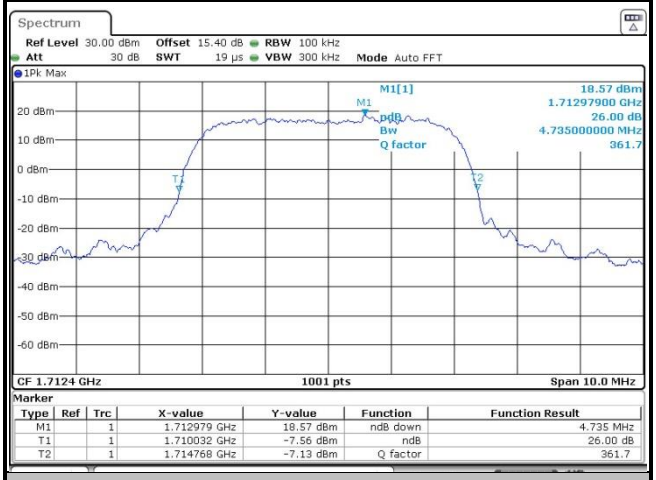
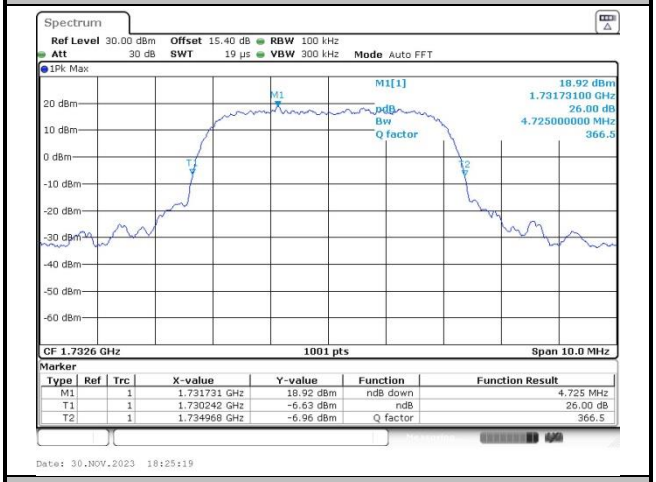
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

WCDMA Band IV (RMC 12.2Kbps)

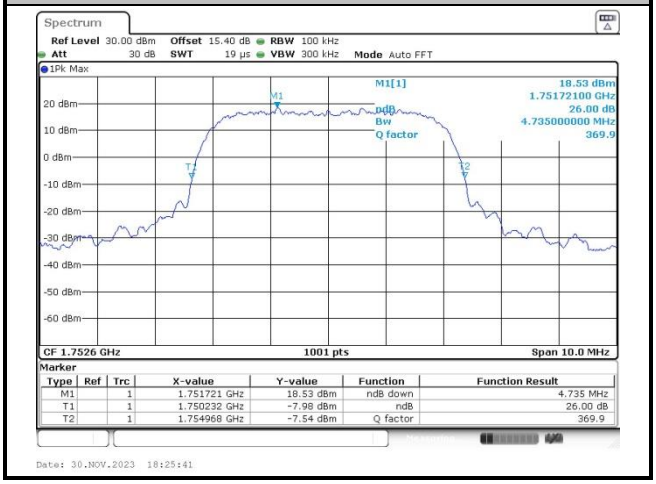
Lowest Channel



Middle Channel

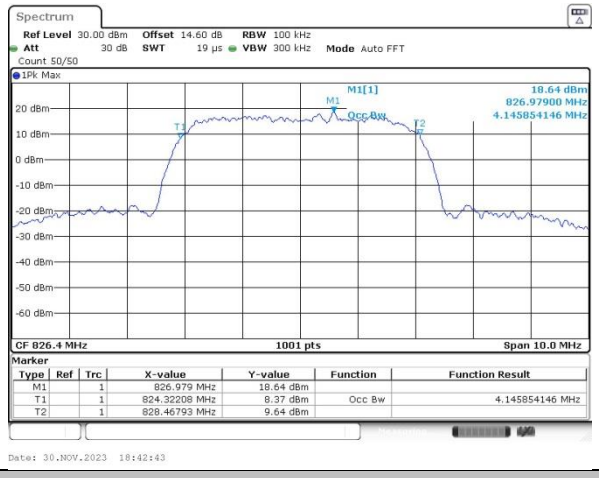
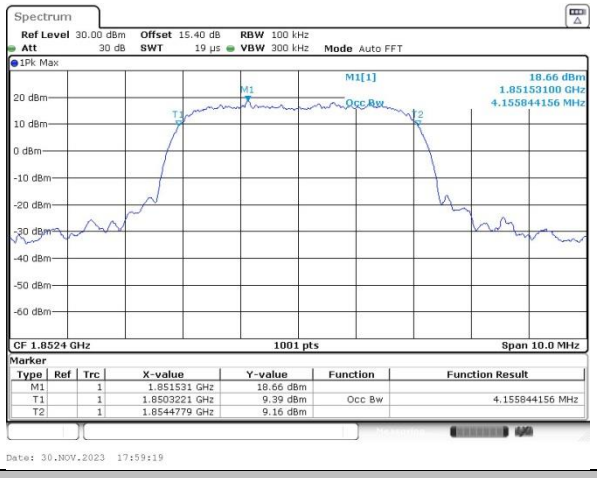
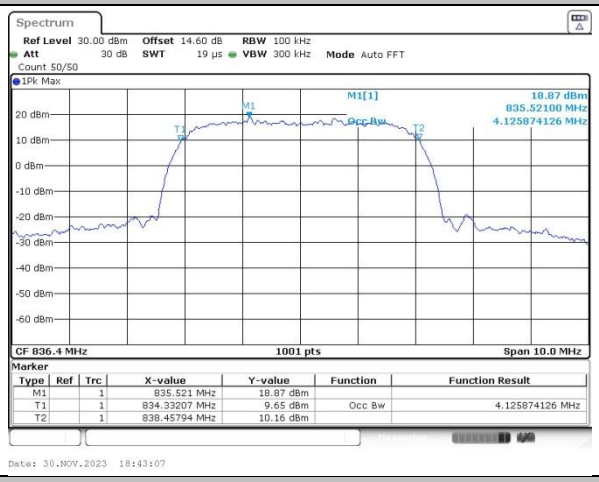
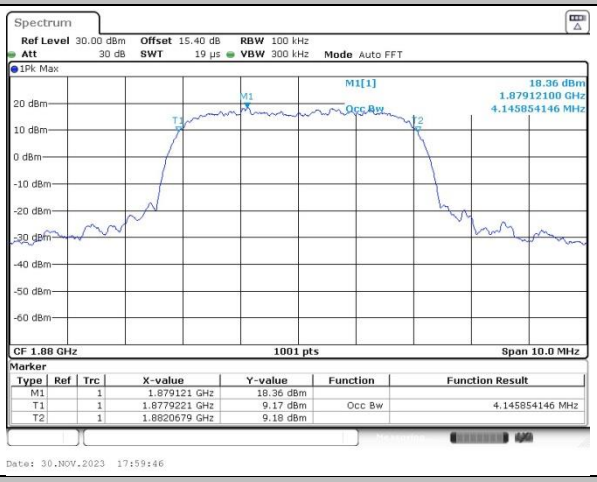
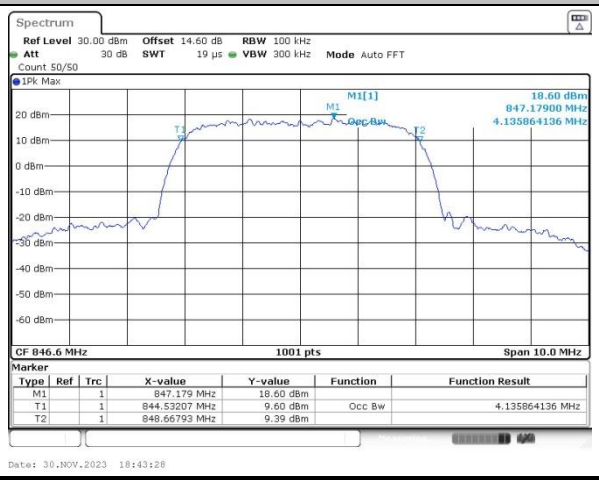
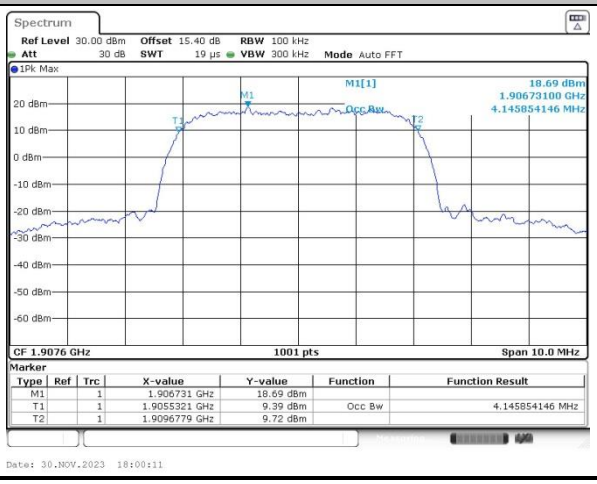


Highest Channel



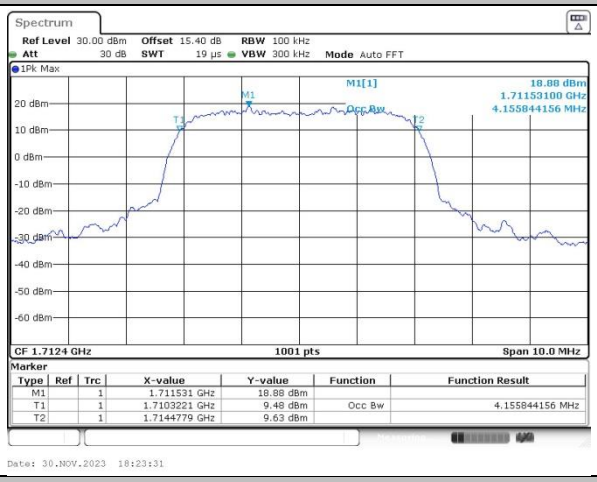
Occupied Bandwidth

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

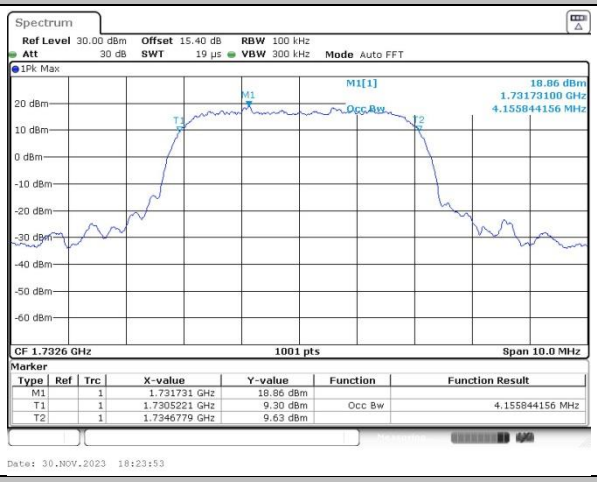
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

WCDMA Band IV (RMC 12.2Kbps)

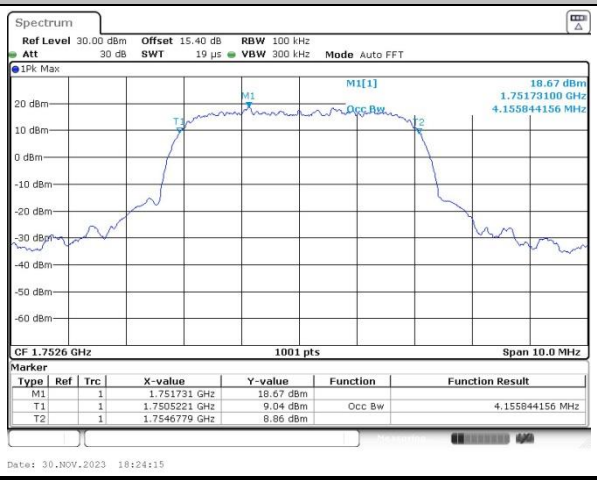
Lowest Channel



Middle Channel



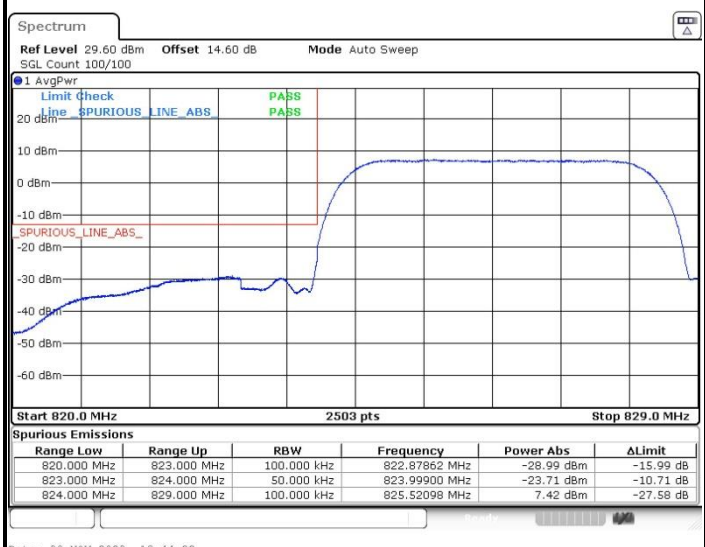
Highest Channel



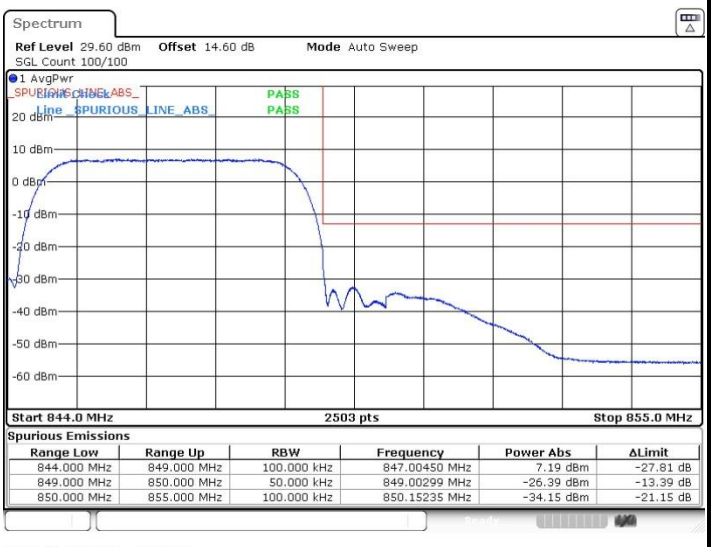
Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

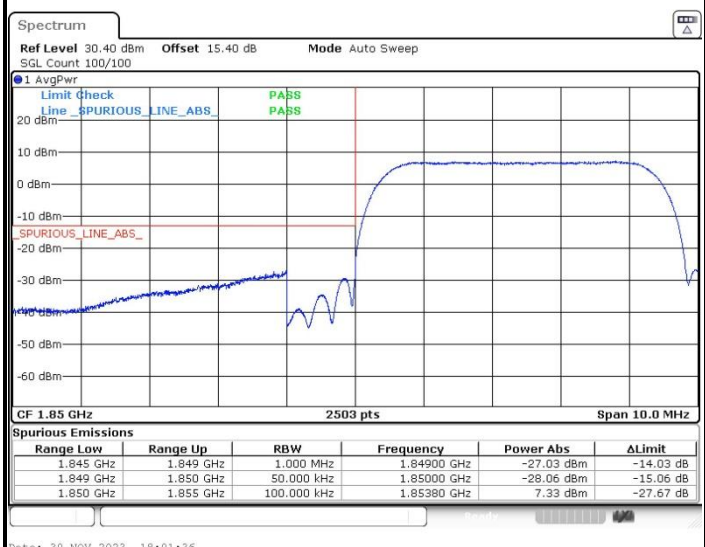


Highest Band Edge

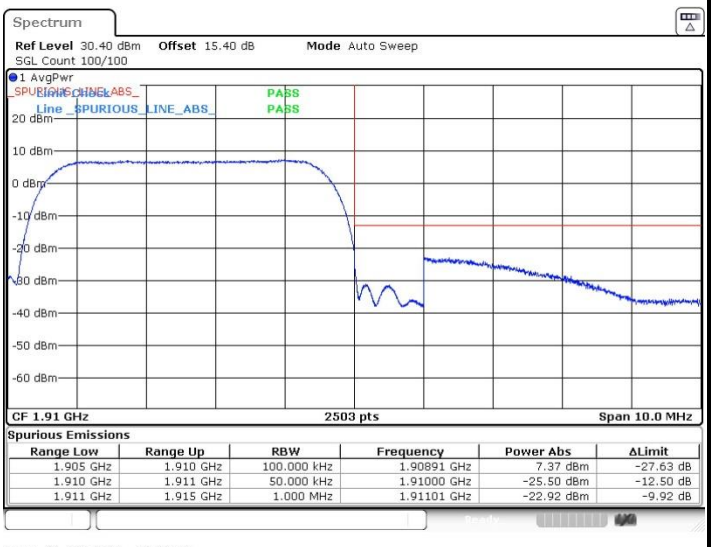


WCDMA Band II (RMC 12.2Kbps)

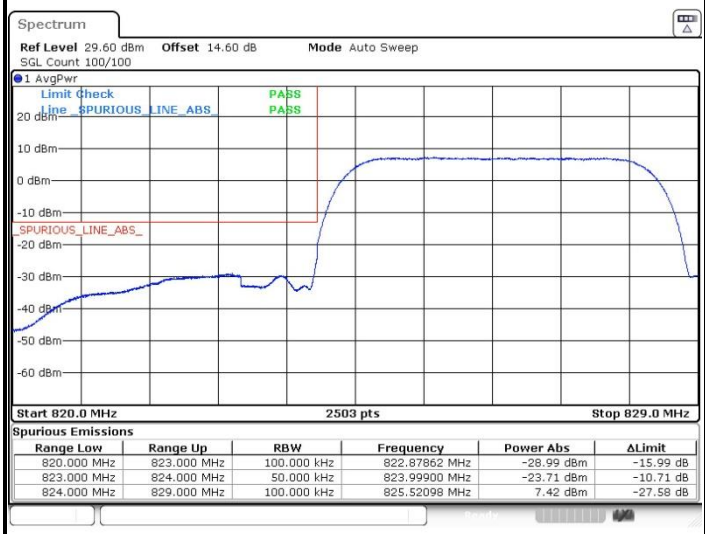
Lowest Band Edge



Highest Band Edge



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



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.87862 MHz	-28.99 dBm	-15.99 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.99900 MHz	-23.71 dBm	-10.71 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.52098 MHz	7.42 dBm	-27.58 dB

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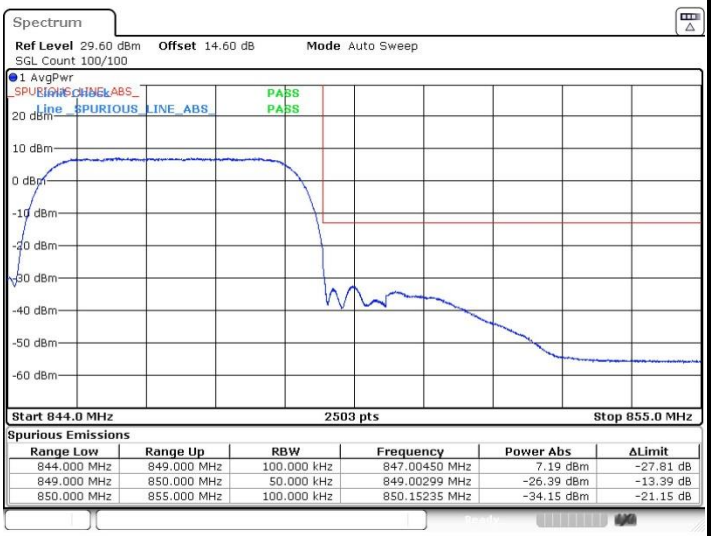

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	847.00450 MHz	7.19 dBm	-27.81 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.00299 MHz	-26.39 dBm	-13.39 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.15235 MHz	-34.15 dBm	-21.15 dB

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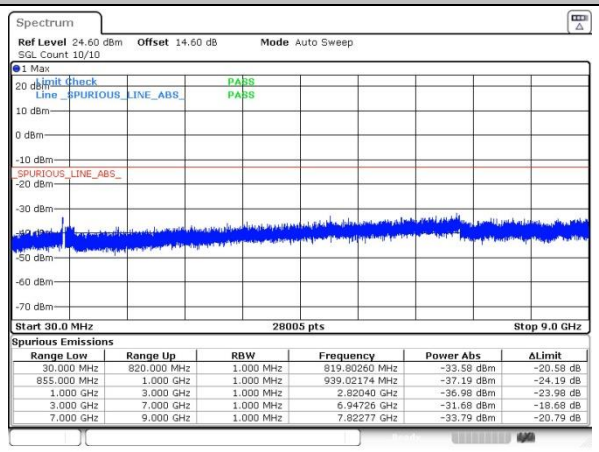
Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

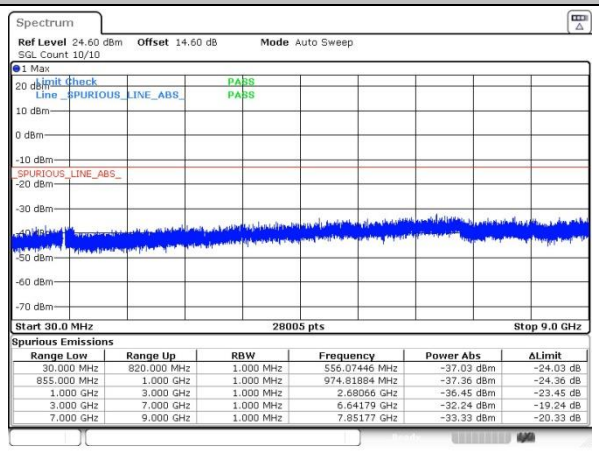
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.80260 MHz	-33.58 dBm	-20.58 dB
855.000 MHz	1.000 GHz	1.000 MHz	939.02174 MHz	-37.19 dBm	-24.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.82040 GHz	-36.98 dBm	-23.98 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.94726 GHz	-31.68 dBm	-18.68 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.82277 GHz	-33.79 dBm	-20.79 dB

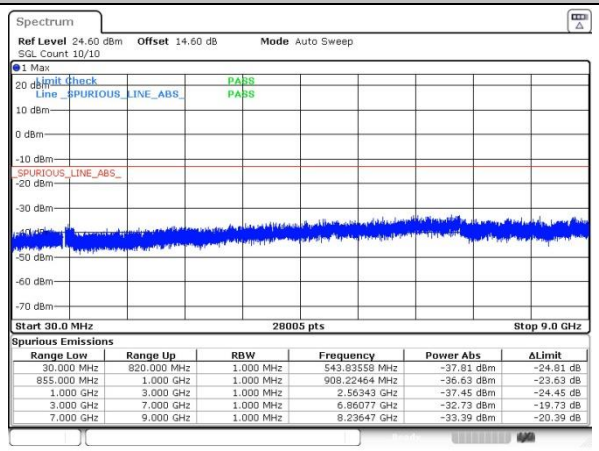
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	556.07446 MHz	-37.03 dBm	-24.03 dB
855.000 MHz	1.000 GHz	1.000 MHz	974.81884 MHz	-37.36 dBm	-24.36 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.68066 GHz	-36.45 dBm	-23.45 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.64179 GHz	-32.24 dBm	-19.24 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85177 GHz	-33.33 dBm	-20.33 dB

Highest Channel

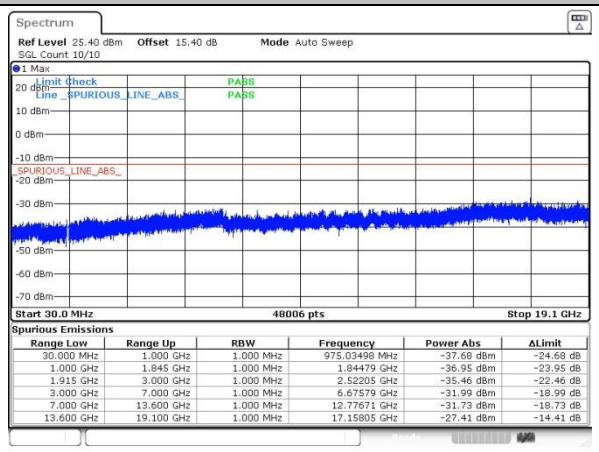


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	543.83558 MHz	-37.81 dBm	-24.81 dB
855.000 MHz	1.000 GHz	1.000 MHz	908.22464 MHz	-36.63 dBm	-23.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.56343 GHz	-37.45 dBm	-24.45 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.86077 GHz	-32.73 dBm	-19.73 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.23647 GHz	-33.39 dBm	-20.39 dB

WCDMA Band II (RMC 12.2Kbps)

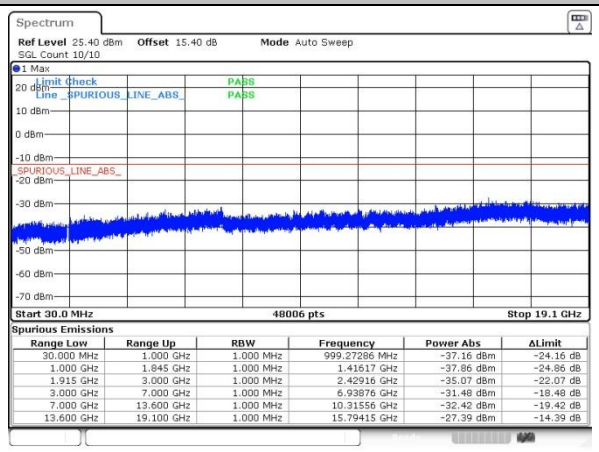
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.03498 MHz	-37.68 dBm	-24.68 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-36.95 dBm	-23.95 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.52205 GHz	-35.46 dBm	-22.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.67579 GHz	-31.99 dBm	-18.99 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.77671 GHz	-31.73 dBm	-18.73 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.15805 GHz	-27.41 dBm	-14.41 dB

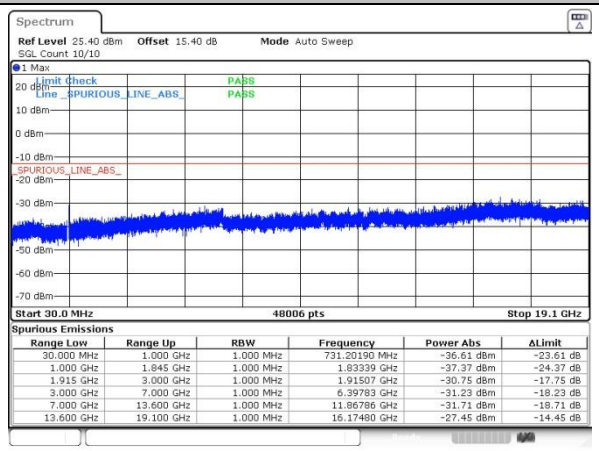
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-37.16 dBm	-24.16 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.41617 GHz	-37.86 dBm	-24.86 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.42916 GHz	-35.07 dBm	-22.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93876 GHz	-31.48 dBm	-18.48 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.31556 GHz	-32.42 dBm	-19.42 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.79415 GHz	-27.39 dBm	-14.39 dB

Highest Channel

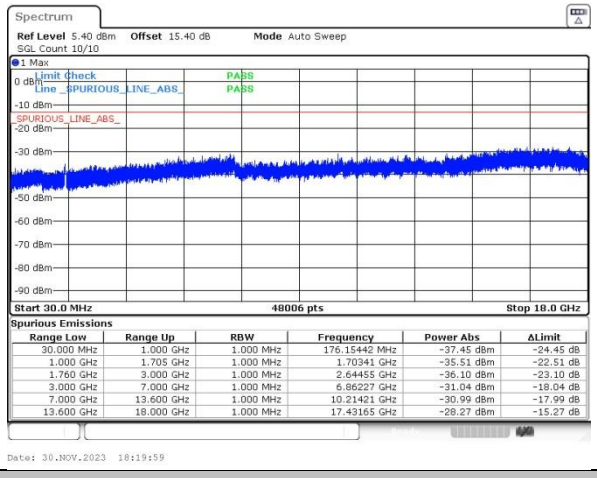


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	731.20190 MHz	-36.61 dBm	-23.61 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.83339 GHz	-37.37 dBm	-24.37 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91507 GHz	-30.75 dBm	-17.75 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.39783 GHz	-31.23 dBm	-18.23 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.86786 GHz	-31.71 dBm	-18.71 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.17480 GHz	-27.45 dBm	-14.45 dB

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	176.15442 MHz	-37.45 dBm	-24.45 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70341 GHz	-35.51 dBm	-22.51 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.64455 GHz	-36.10 dBm	-23.10 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.86227 GHz	-31.04 dBm	-18.04 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.21421 GHz	-30.99 dBm	-17.99 dB
13.600 GHz	18.000 GHz	1.000 MHz	17.43165 GHz	-28.27 dBm	-15.27 dB

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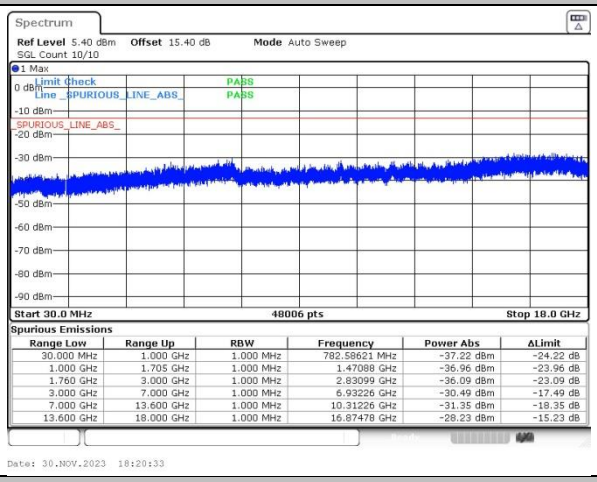
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	782.58621 MHz	-37.22 dBm	-24.22 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.47088 GHz	-36.96 dBm	-23.96 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.83099 GHz	-36.09 dBm	-23.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93226 GHz	-30.49 dBm	-17.49 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.31226 GHz	-31.35 dBm	-18.35 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.87478 GHz	-28.23 dBm	-15.23 dB

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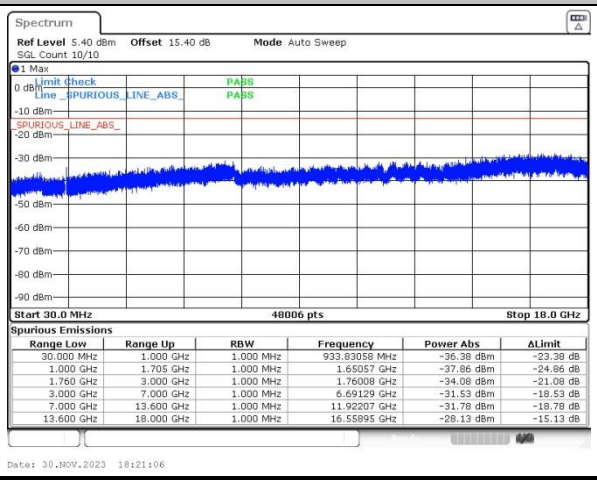
Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	933.83058 MHz	-36.38 dBm	-23.38 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.65057 GHz	-37.86 dBm	-24.86 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76008 GHz	-34.08 dBm	-21.08 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.69129 GHz	-31.53 dBm	-18.53 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.92207 GHz	-31.78 dBm	-18.78 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.55895 GHz	-28.13 dBm	-15.13 dB

Date: 30.NOV.2023 18:21:06

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	0.0042	PASS
40	Normal Voltage	0.0365	
30	Normal Voltage	0.0491	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0052	
0	Normal Voltage	0.0334	
-10	Normal Voltage	0.0066	
-20	Normal Voltage	0.0118	
-30	Normal Voltage	0.0249	
20	Maximum Voltage	0.0483	
20	Normal Voltage	0.0128	
20	Battery End Point	0.0069	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0138	PASS
40	Normal Voltage	0.0246	
30	Normal Voltage	0.0184	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0378	
0	Normal Voltage	0.0058	
-10	Normal Voltage	0.0249	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0163	
20	Normal Voltage	0.0276	
20	Battery End Point	0.0014	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0159	
0	Normal Voltage	0.0052	
-10	Normal Voltage	0.0184	
-20	Normal Voltage	0.0248	
-30	Normal Voltage	0.0263	
20	Maximum Voltage	0.0046	
20	Normal Voltage	0.0051	
20	Battery End Point	0.0138	

Note:

1. Normal Voltage = 3.87V ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.2V

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

RSE pretest all the support antennas, only the worst results are shown in the report.

<Sample 1>:

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	-43.82	-13	-30.82	-50.79	1.58	10.70	H
	2512	-57.50	-13	-44.50	-65.75	2.102	12.50	H
	3344	-68.97	-13	-55.97	-77.86	2.856	13.90	H
	1672	-48.22	-13	-35.22	-55.19	1.58	10.70	V
	2512	-64.77	-13	-51.77	-73.02	2.10	12.50	V
	3344	-69.42	-13	-56.42	-78.31	2.86	13.90	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-47.60	-13	-34.60	-54.57	1.58	10.70	H
	2512	-52.16	-13	-39.16	-60.41	2.102	12.50	H
	3344	-69.39	-13	-56.39	-78.28	2.856	13.90	H
	1672	-49.87	-13	-36.87	-56.84	1.58	10.70	V
	2512	-52.45	-13	-39.45	-60.70	2.10	12.50	V
	3344	-69.30	-13	-56.30	-78.19	2.86	13.90	V

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

GSM1900 (GSM) Ant0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3765	-64.00	-13	-51.00	-76.26	2.641	14.90	H
	5640	-61.64	-13	-48.64	-73.50	2.94	14.80	H
	7515	-54.58	-13	-41.58	-64.35	3.39	13.16	H
	3765	-65.32	-13	-52.32	-77.58	2.64	14.90	V
	5640	-61.33	-13	-48.33	-73.19	2.94	14.80	V
	7515	-59.26	-13	-46.26	-69.03	3.39	13.16	V

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

GSM1900 (EDGE 1 Tx slots) Ant0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3765	-68.45	-13	-55.45	-80.71	2.64	14.90	H
	5640	-60.56	-13	-47.56	-72.42	2.94	14.80	H
	7515	-58.75	-13	-45.75	-68.52	3.39	13.16	H
	3765	-65.91	-13	-52.91	-78.17	2.64	14.90	V
	5640	-59.94	-13	-46.94	-71.80	2.94	14.80	V
	7515	-58.53	-13	-45.53	-68.30	3.39	13.16	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-70.11	-13	-57.11	-77.08	1.58	10.70	H
	2512	-70.01	-13	-57.01	-78.26	2.102	12.50	H
	3344	-69.57	-13	-56.57	-78.46	2.856	13.90	H
	1672	-71.19	-13	-58.19	-78.16	1.58	10.70	V
	2512	-69.84	-13	-56.84	-78.09	2.10	12.50	V
	3344	-69.20	-13	-56.20	-78.09	2.86	13.90	V

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

WCDMA Band II(RMC 12.2Kbps) Ant0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3765	-68.08	-13	-55.08	-80.34	2.64	14.90	H
	5640	-61.51	-13	-48.51	-73.37	2.94	14.80	H
	7515	-59.57	-13	-46.57	-69.34	3.39	13.16	H
	3765	-68.47	-13	-55.47	-80.73	2.64	14.90	V
	5640	-61.34	-13	-48.34	-73.20	2.94	14.80	V
	7515	-59.46	-13	-46.46	-69.23	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) Ant0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465	-68.10	-13	-55.10	-78.84	2.604	13.34	H
	5205	-62.20	-13	-49.20	-72.71	3.011	13.52	H
	6930	-60.03	-13	-47.03	-70.23	3.271	13.47	H
	3465	-68.30	-13	-55.30	-79.04	2.604	13.34	V
	5205	-62.83	-13	-49.83	-73.34	3.011	13.52	V
	6930	-60.23	-13	-47.23	-70.43	3.271	13.47	V

<Sample 2>:

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	-56.37	-13	-43.37	-63.34	1.58	10.70	H
	2512	-52.41	-13	-39.41	-60.66	2.102	12.50	H
	3344	-59.41	-13	-46.41	-68.30	2.856	13.90	H
	1672	-50.28	-13	-37.28	-57.25	1.58	10.70	V
	2512	-55.45	-13	-42.45	-63.70	2.10	12.50	V
	3344	-59.40	-13	-46.40	-68.29	2.86	13.90	V

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

WCDMA Band II(RMC 12.2Kbps) Ant0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3765	-58.04	-13	-45.04	-70.30	2.64	14.90	H
	5640	-56.02	-13	-43.02	-67.88	2.94	14.80	H
	7515	-53.64	-13	-40.64	-63.41	3.39	13.16	H
	3765	-57.70	-13	-44.70	-69.96	2.64	14.90	V
	5640	-56.88	-13	-43.88	-68.74	2.94	14.80	V
	7515	-53.52	-13	-40.52	-63.29	3.39	13.16	V

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