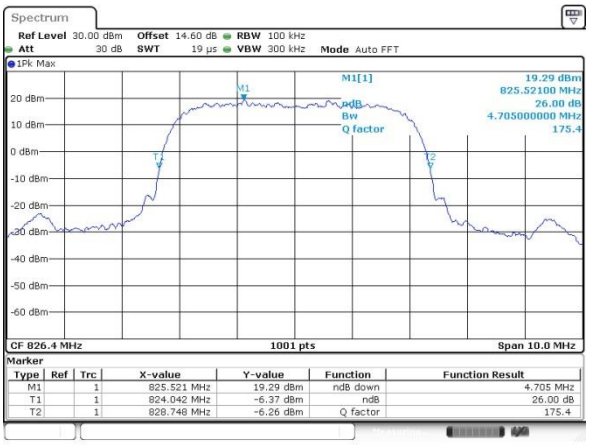
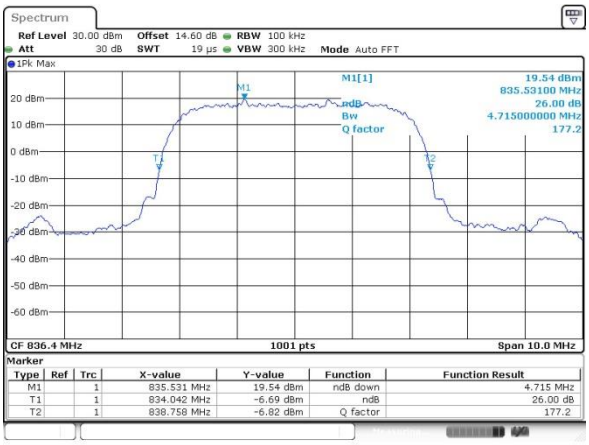
WCDMA Band V (RMC 12.2Kbps)

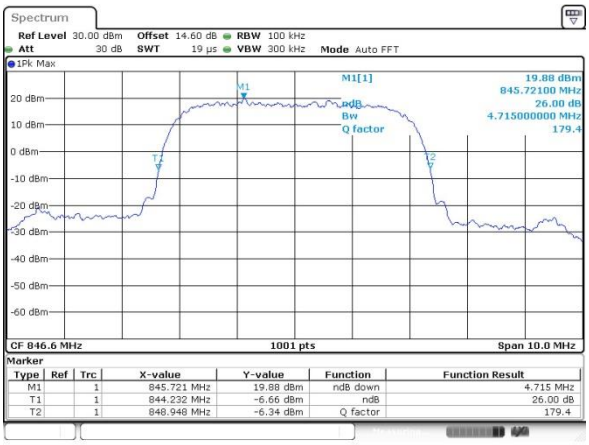
Lowest Channel



Middle Channl

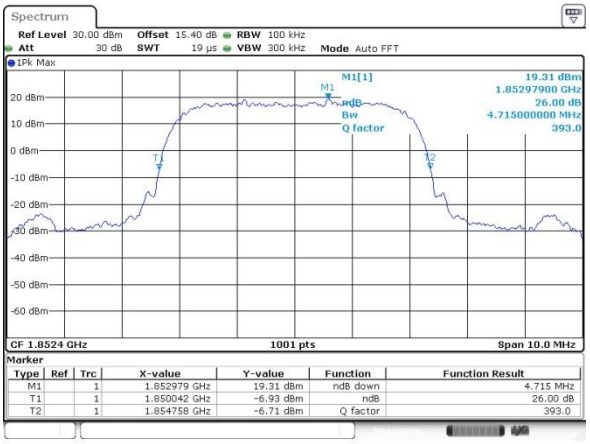


Highest Channel

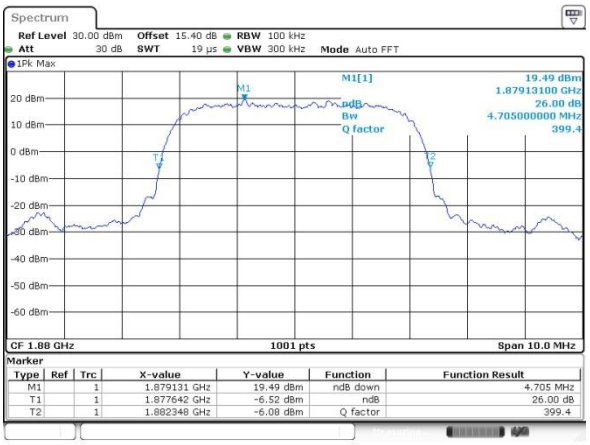


WCDMA Band II (RMC 12.2Kbps)

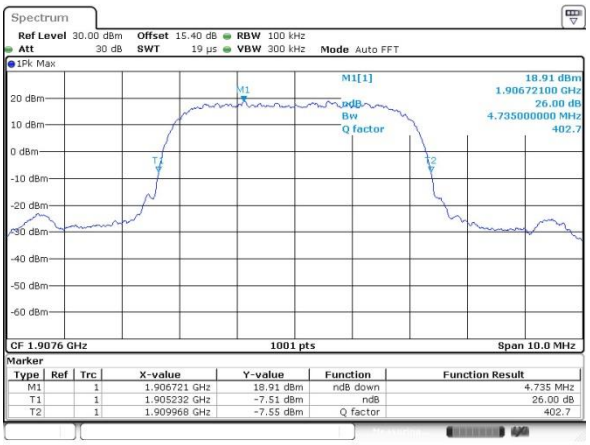
Lowest Channel



Middle Channel



Highest Channel

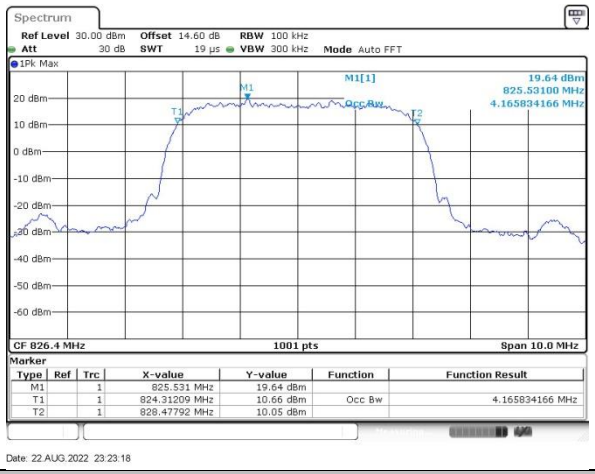


Occupied Bandwidth

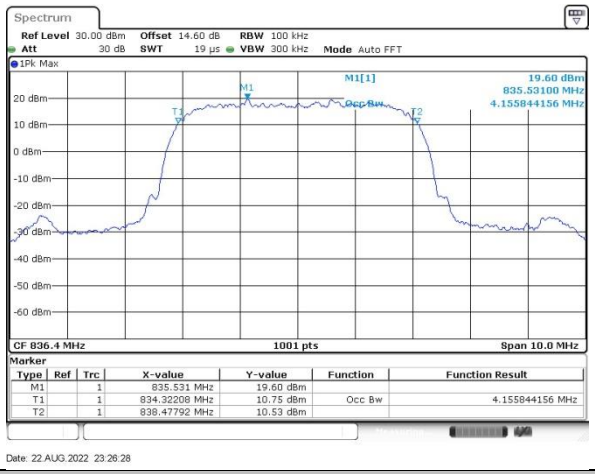
Mode	WCDMA Band V(MHz)	WCDMA Band II(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.166	4.156
Middle CH	4.156	4.156
Highest CH	4.146	4.166

WCDMA Band V (RMC 12.2Kbps)

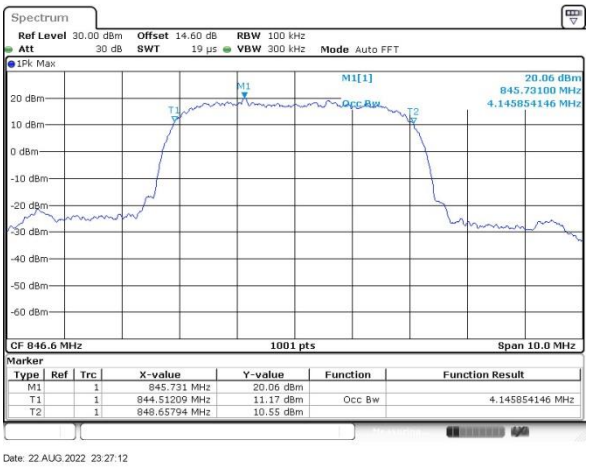
Lowest Channel



Middle Channel

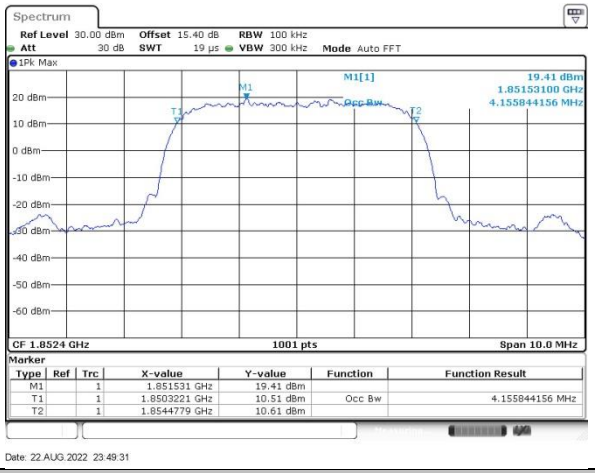


Highest Channel

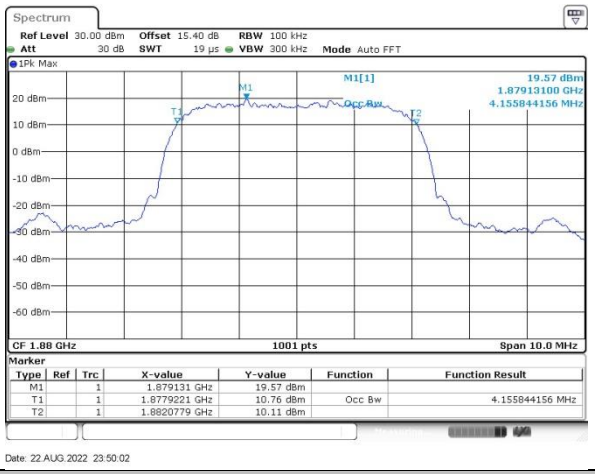


WCDMA Band II (RMC 12.2Kbps)

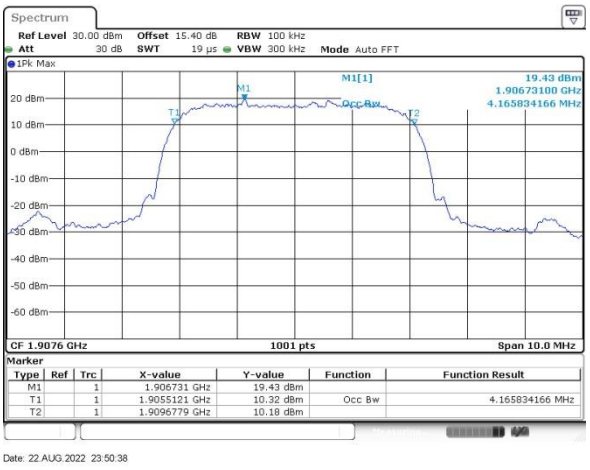
Lowest Channel



Middle Channel



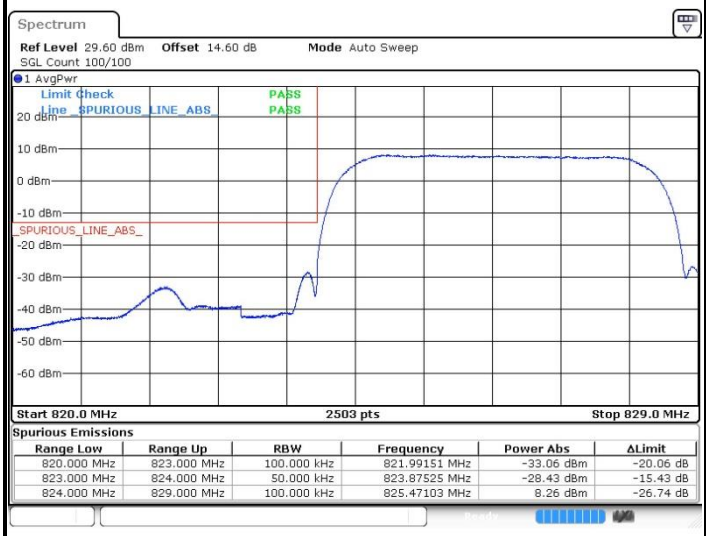
Highest Channel



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	821.99151 MHz	-33.06 dBm	-20.06 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.87525 MHz	-28.43 dBm	-15.43 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.47103 MHz	8.26 dBm	-26.74 dB

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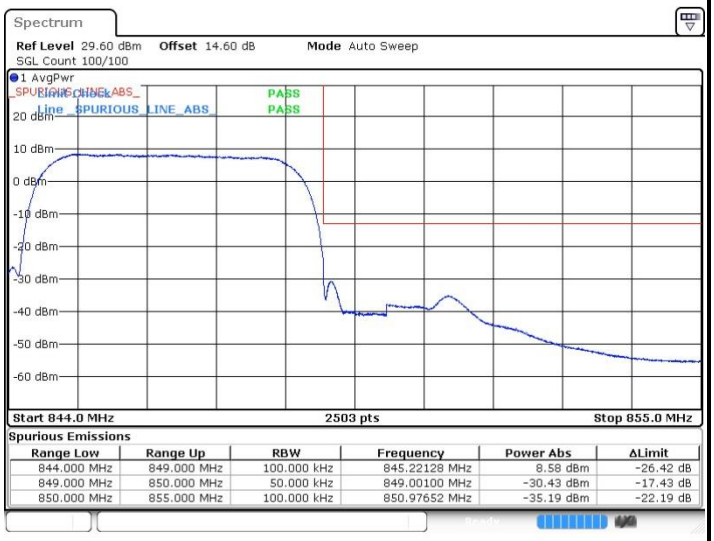
Highest Band Edge



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.22128 MHz	8.58 dBm	-26.42 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.00100 MHz	-30.43 dBm	-17.43 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.97652 MHz	-35.19 dBm	-22.19 dB

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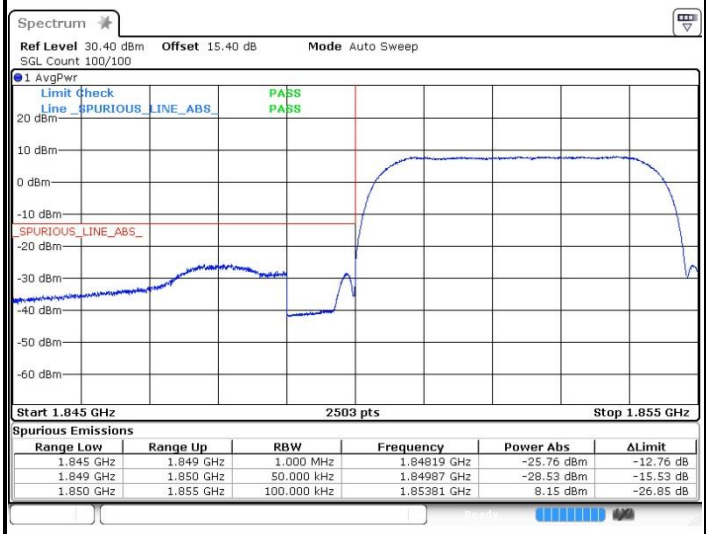
WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84819 GHz	-25.76 dBm	-12.76 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84987 GHz	-28.53 dBm	-15.53 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85381 GHz	8.15 dBm	-26.85 dB

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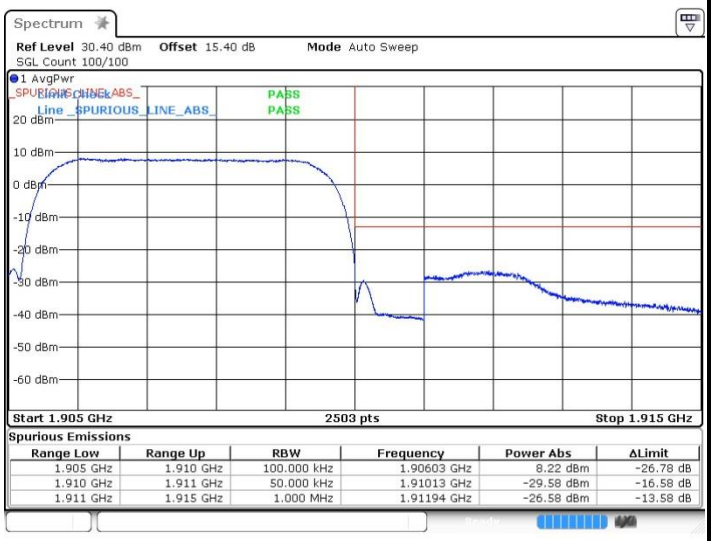
Highest Band Edge



Spurious Emissions

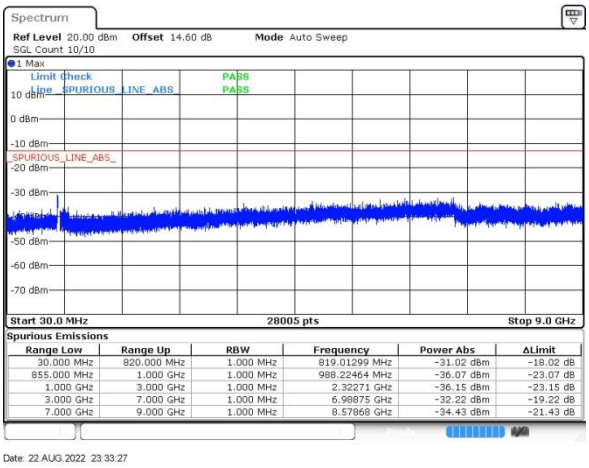
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90603 GHz	8.22 dBm	-26.78 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91013 GHz	-29.58 dBm	-16.58 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91194 GHz	-26.58 dBm	-13.58 dB

Date: 22.AUG.2022 23:54:08

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	819.01299 MHz	-31.02 dBm	-18.02 dB
855.000 MHz	1.000 GHz	1.000 MHz	988.22464 MHz	-36.07 dBm	-23.07 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.32271 GHz	-36.15 dBm	-23.15 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99875 GHz	-32.22 dBm	-19.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.57868 GHz	-34.43 dBm	-21.43 dB

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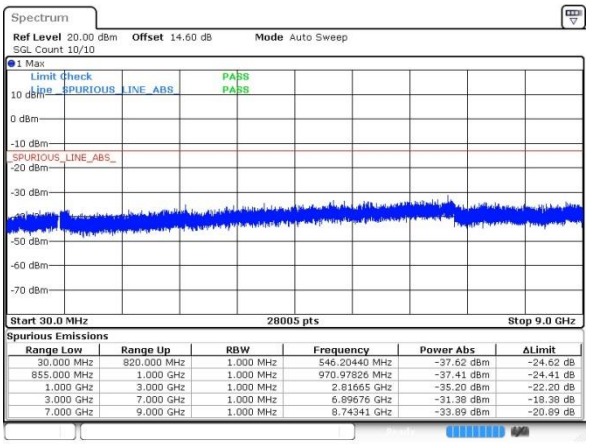
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	546.20440 MHz	-37.62 dBm	-24.62 dB
855.000 MHz	1.000 GHz	1.000 MHz	970.97826 MHz	-37.41 dBm	-24.41 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.81665 GHz	-35.20 dBm	-22.20 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.89676 GHz	-31.38 dBm	-18.38 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.74341 GHz	-33.89 dBm	-20.89 dB

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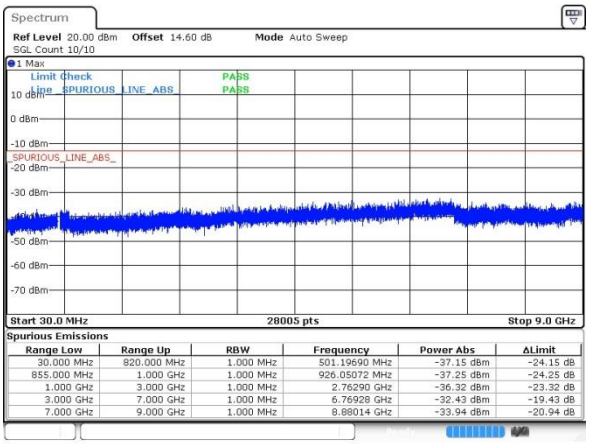
Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	501.19690 MHz	-37.15 dBm	-24.15 dB
855.000 MHz	1.000 GHz	1.000 MHz	926.05072 MHz	-37.25 dBm	-24.25 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.76290 GHz	-36.32 dBm	-23.32 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.76928 GHz	-32.43 dBm	-19.43 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88014 GHz	-33.94 dBm	-20.94 dB

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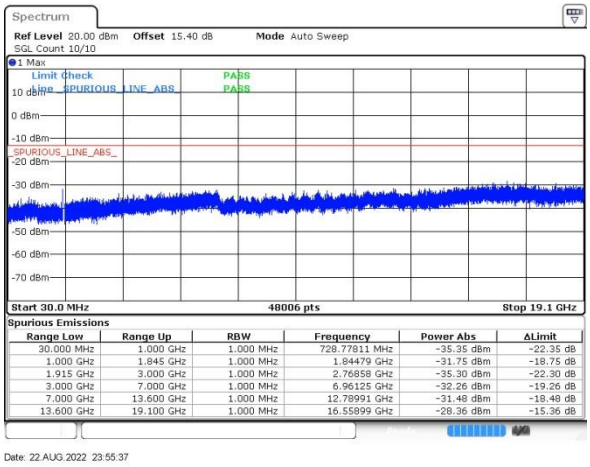
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

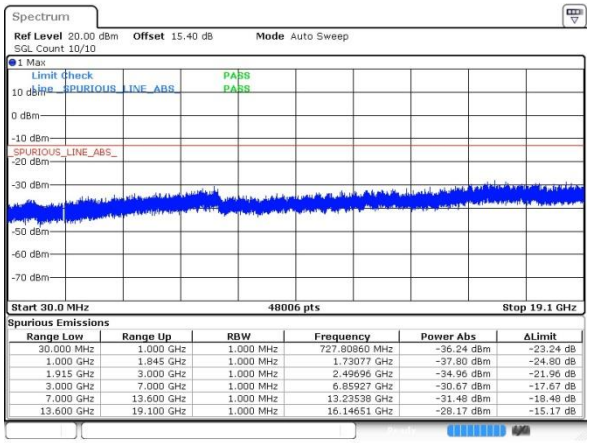


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	728.77811 MHz	-35.35 dBm	-22.35 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-31.75 dBm	-18.75 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.76858 GHz	-35.30 dBm	-22.30 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96125 GHz	-32.26 dBm	-19.26 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.78991 GHz	-31.48 dBm	-18.48 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.55899 GHz	-28.36 dBm	-15.36 dB

Date: 22.AUG.2022 23:55:37

Middle Channel

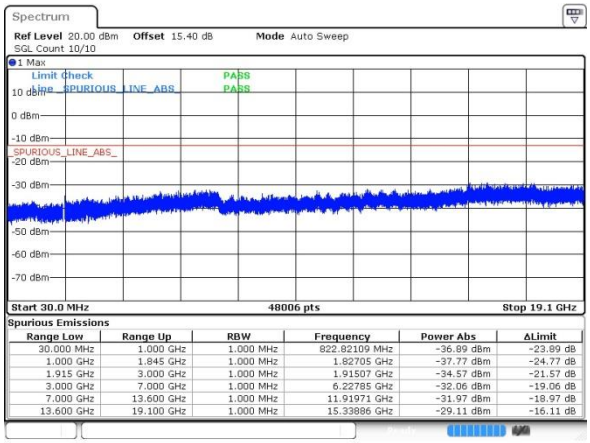


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	727.80860 MHz	-36.24 dBm	-23.24 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.73077 GHz	-37.80 dBm	-24.80 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.49696 GHz	-34.96 dBm	-21.96 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.85927 GHz	-30.67 dBm	-17.67 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.23538 GHz	-31.48 dBm	-18.48 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.14651 GHz	-28.17 dBm	-15.17 dB

Date: 22.AUG.2022 23:56:18

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	822.82109 MHz	-36.89 dBm	-23.89 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.82705 GHz	-37.77 dBm	-24.77 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91507 GHz	-34.57 dBm	-21.57 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.22785 GHz	-32.06 dBm	-19.06 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.91971 GHz	-31.97 dBm	-18.97 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.33886 GHz	-29.11 dBm	-16.11 dB

Date: 22.AUG.2022 23:56:52

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	0.0028	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage = 3.86V ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V
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 II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0031	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0019	

Note:

1. Normal Voltage = 3.86V ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V
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 :	Levi zhuo	Temperature :	22~23℃
		Relative Humidity :	41~42%

Note: Pre-scanned harmonic for all the supported antennas, choose the worst antenna perform final test and record in the report.

GSM850 (GSM)								
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	-37.48	-13	-24.48	-44.45	1.58	10.70	H
	2508	-30.84	-13	-17.84	-39.09	2.102	12.50	H
	3348	-50.86	-13	-37.86	-59.75	2.856	13.90	H
	1672	-42.28	-13	-29.28	-49.25	1.58	10.70	V
	2510	-35.55	-13	-22.55	-43.80	2.10	12.50	V
	3348	-52.58	-13	-39.58	-61.47	2.86	13.90	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-39.20	-13	-26.20	-46.17	1.58	10.70	H
	2512	-43.79	-13	-30.79	-52.04	2.102	12.50	H
	3344	-52.66	-13	-39.66	-61.55	2.856	13.90	H
	1672	-40.21	-13	-27.21	-47.18	1.58	10.70	V
	2512	-43.35	-13	-30.35	-51.60	2.10	12.50	V
	3344	-52.07	-13	-39.07	-60.96	2.86	13.90	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3759	-46.57	-13	-33.57	-58.83	2.64	14.90	H
	5640	-38.30	-13	-25.30	-50.16	2.94	14.80	H
	7524	-51.74	-13	-38.74	-61.51	3.39	13.16	H
	9396	-44.91	-13	-31.91	-55.39	4.00	14.48	H
	3759	-51.76	-13	-38.76	-64.02	2.64	14.90	V
	5640	-34.04	-13	-21.04	-45.90	2.94	14.80	V
	7524	-50.82	-13	-37.82	-60.59	3.39	13.16	V
	9396	-47.49	-13	-34.49	-57.97	4.00	14.48	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3765	-51.46	-13	-38.46	-63.72	2.64	14.90	H
	5640	-36.95	-13	-23.95	-48.81	2.94	14.80	H
	7515	-51.79	-13	-38.79	-61.56	3.39	13.16	H
	9405	-45.51	-13	-32.51	-55.99	4.00	14.48	H
	3765	-50.03	-13	-37.03	-62.29	2.64	14.90	V
	5640	-33.10	-13	-20.10	-44.96	2.94	14.80	V
	7515	-50.73	-13	-37.73	-60.50	3.39	13.16	V
	9405	-46.44	-13	-33.44	-56.92	4.00	14.48	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-60.11	-13	-47.11	-67.08	1.58	10.70	H
	2512	-59.92	-13	-46.92	-68.17	2.102	12.50	H
	3344	-60.20	-13	-47.20	-69.09	2.856	13.90	H
	1672	-57.76	-13	-44.76	-64.73	1.58	10.70	V
	2512	-58.73	-13	-45.73	-66.98	2.10	12.50	V
	3344	-60.15	-13	-47.15	-69.04	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)								
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	-55.35	-13	-42.35	-67.61	2.64	14.90	H
	5640	-54.48	-13	-41.48	-66.34	2.94	14.80	H
	7515	-52.60	-13	-39.60	-62.37	3.39	13.16	H
	3765	-55.96	-13	-42.96	-68.22	2.64	14.90	V
	5640	-54.59	-13	-41.59	-66.45	2.94	14.80	V
	7515	-52.82	-13	-39.82	-62.59	3.39	13.16	V

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