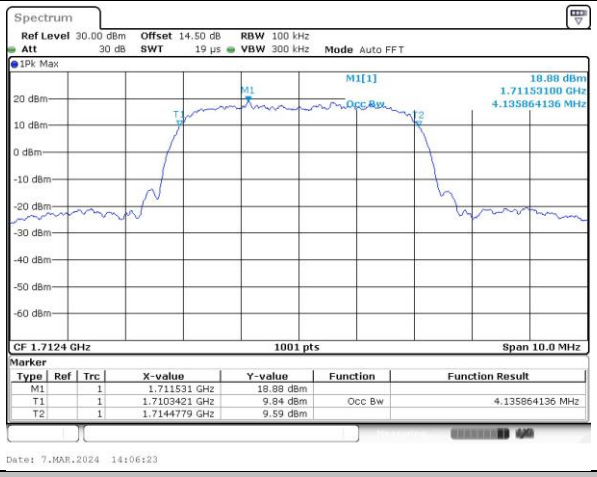
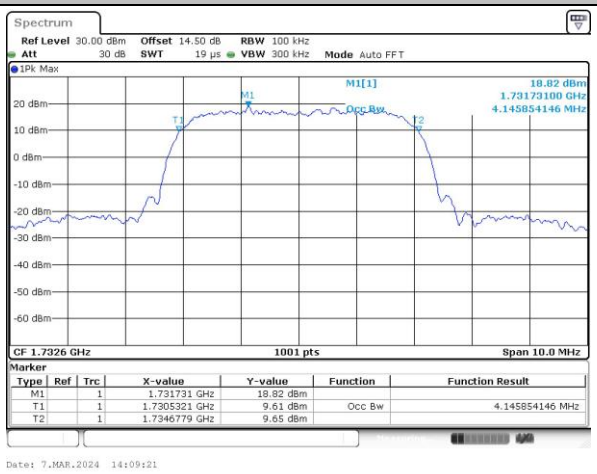
WCDMA Band IV (RMC 12.2Kbps)

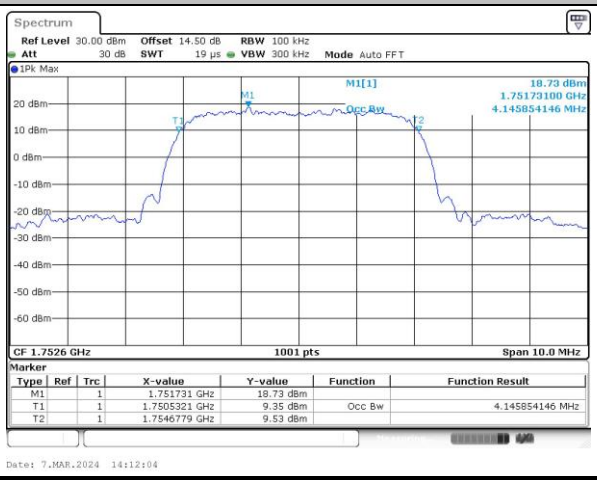
Lowest Channel



Middle Channel



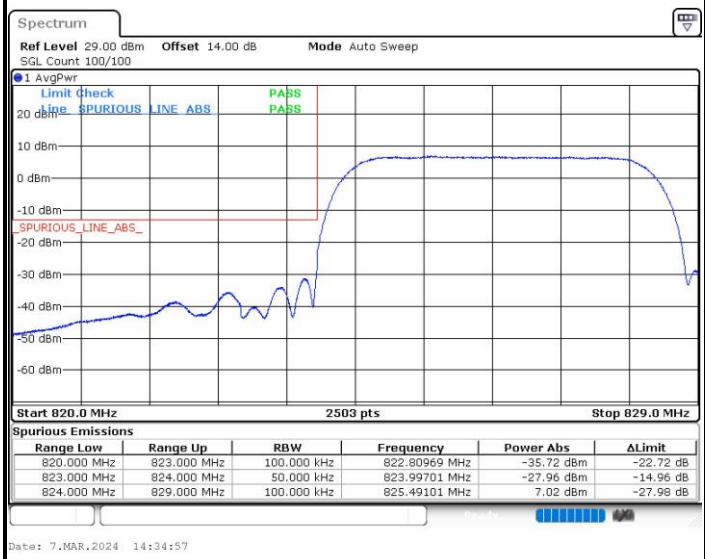
Highest Channel



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	822.80969 MHz	-35.72 dBm	-22.72 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.99701 MHz	-27.96 dBm	-14.96 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.49101 MHz	7.02 dBm	-27.98 dB

Date: 7.MAR.2024 14:34:57

Highest Band Edge

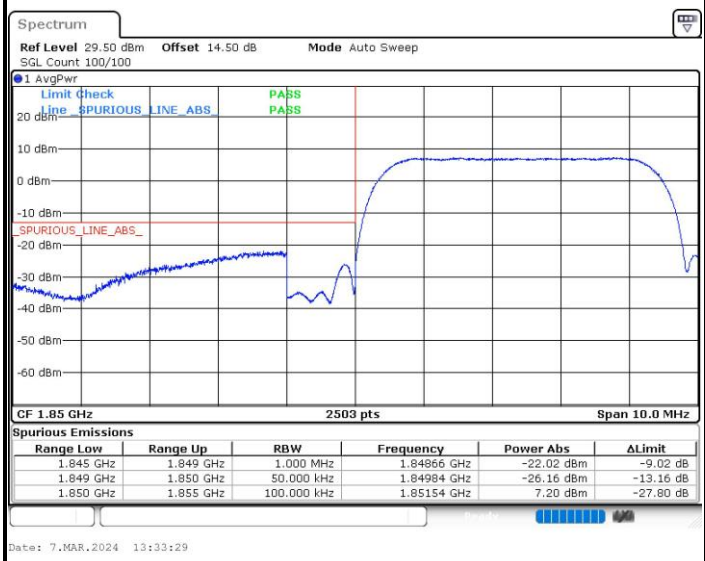
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	847.96853 MHz	7.46 dBm	-27.54 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.00100 MHz	-28.54 dBm	-15.54 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.19231 MHz	-36.20 dBm	-23.20 dB

Date: 7.MAR.2024 14:44:22

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

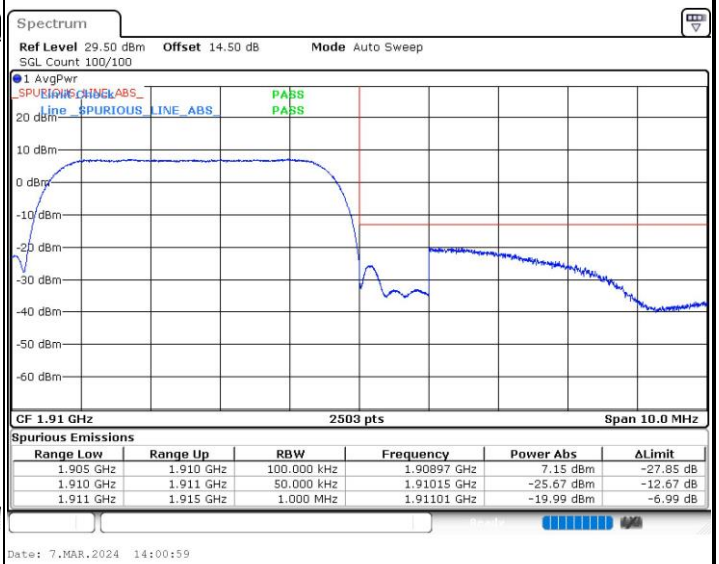


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84866 GHz	-22.02 dBm	-9.02 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84984 GHz	-26.16 dBm	-13.16 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85154 GHz	7.20 dBm	-27.80 dB

Date: 7.MAR.2024 13:33:29

Highest Band Edge



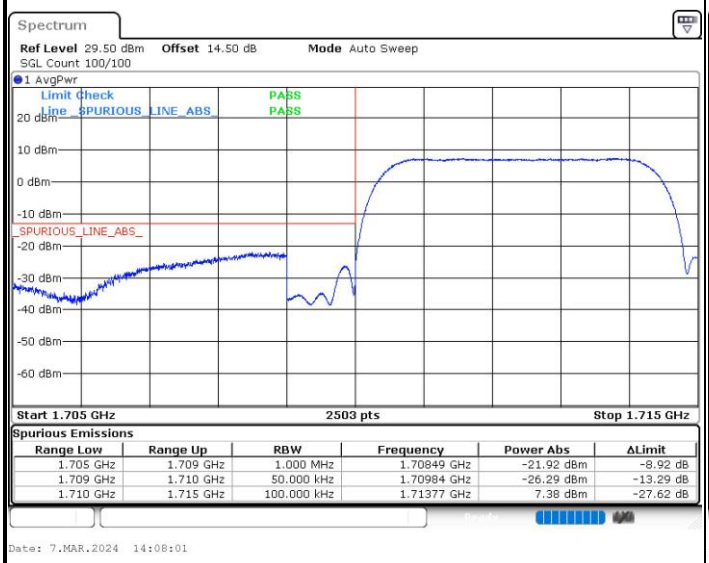
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90897 GHz	7.15 dBm	-27.85 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91015 GHz	-25.67 dBm	-12.67 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91101 GHz	-19.99 dBm	-6.99 dB

Date: 7.MAR.2024 14:00:59

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

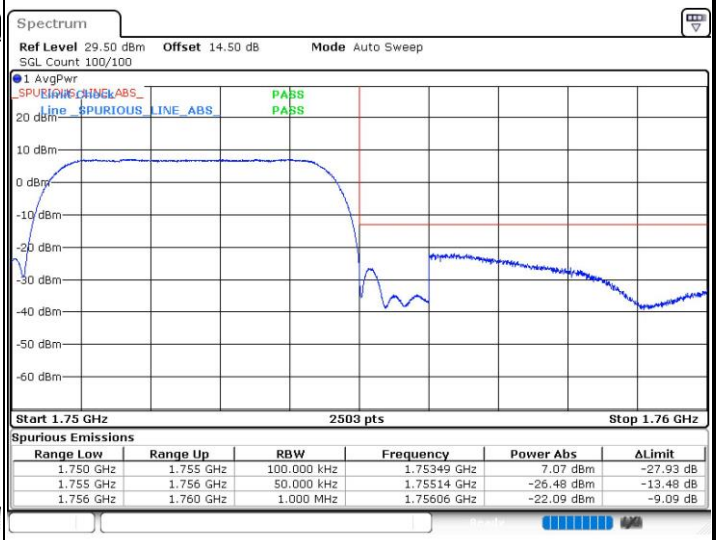


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70849 GHz	-21.92 dBm	-8.92 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70984 GHz	-26.29 dBm	-13.29 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71377 GHz	7.38 dBm	-27.62 dB

Date: 7.MAR.2024 14:08:01

Highest Band Edge



Spurious Emissions

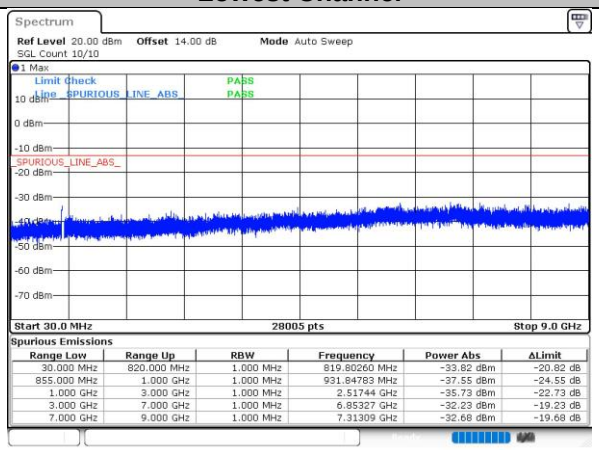
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75349 GHz	7.07 dBm	-27.93 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75514 GHz	-26.48 dBm	-13.48 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75606 GHz	-22.09 dBm	-9.09 dB

Date: 7.MAR.2024 14:12:56

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

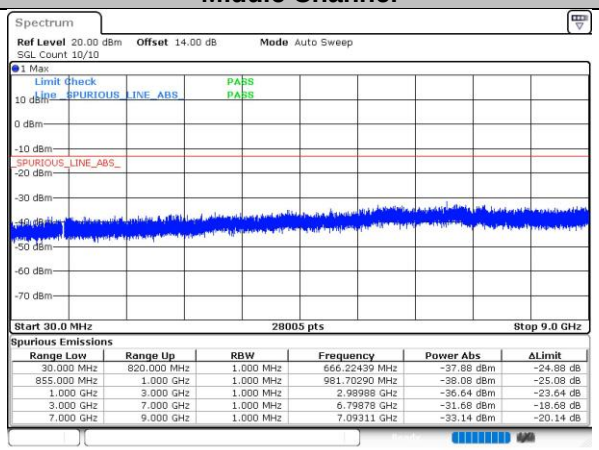


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.80260 MHz	-33.82 dBm	-20.82 dB
855.000 MHz	1.000 GHz	1.000 MHz	931.84783 MHz	-37.55 dBm	-24.55 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51744 GHz	-35.73 dBm	-22.73 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.85327 GHz	-32.23 dBm	-19.23 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.31309 GHz	-32.68 dBm	-19.68 dB

Date: 7.MAR.2024 14:35:41

Middle Channel

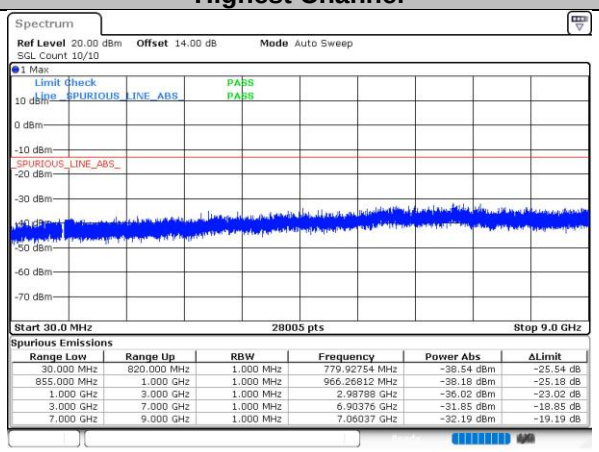


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	666.22439 MHz	-37.88 dBm	-24.88 dB
855.000 MHz	1.000 GHz	1.000 MHz	981.70290 MHz	-38.08 dBm	-25.08 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98988 GHz	-36.64 dBm	-23.64 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.79878 GHz	-31.68 dBm	-18.68 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.09311 GHz	-33.14 dBm	-20.14 dB

Date: 7.MAR.2024 14:36:43

Highest Channel



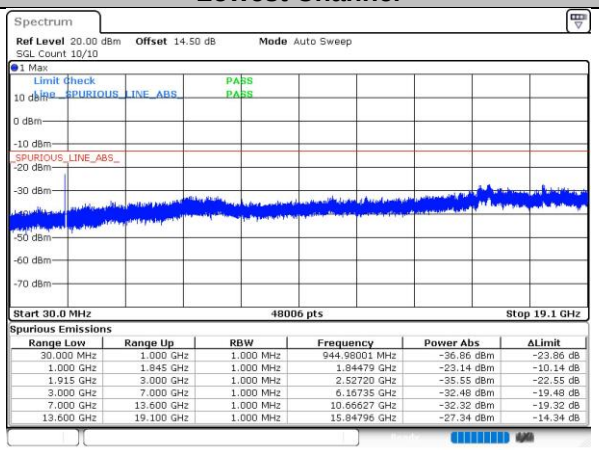
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	779.92754 MHz	-38.54 dBm	-25.54 dB
855.000 MHz	1.000 GHz	1.000 MHz	966.26812 MHz	-38.18 dBm	-25.18 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98788 GHz	-36.02 dBm	-23.02 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90376 GHz	-31.85 dBm	-18.85 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.06037 GHz	-32.19 dBm	-19.19 dB

Date: 7.MAR.2024 14:39:13

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

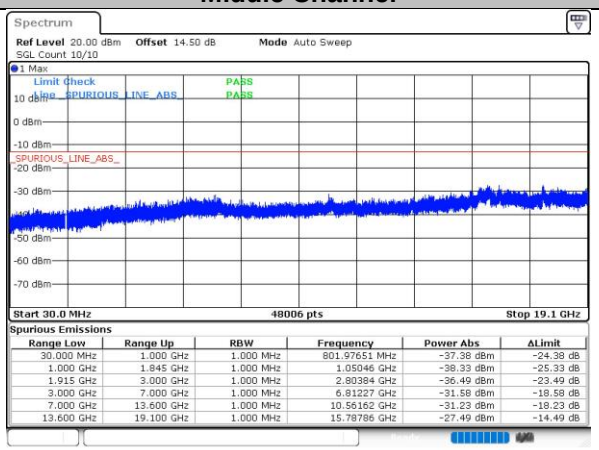


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.98001 MHz	-36.86 dBm	-23.86 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-23.14 dBm	-10.14 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.52720 GHz	-35.55 dBm	-22.55 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.16735 GHz	-32.48 dBm	-19.48 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.66627 GHz	-32.32 dBm	-19.32 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.84796 GHz	-27.34 dBm	-14.34 dB

Date: 7.MAR.2024 13:36:13

Middle Channel

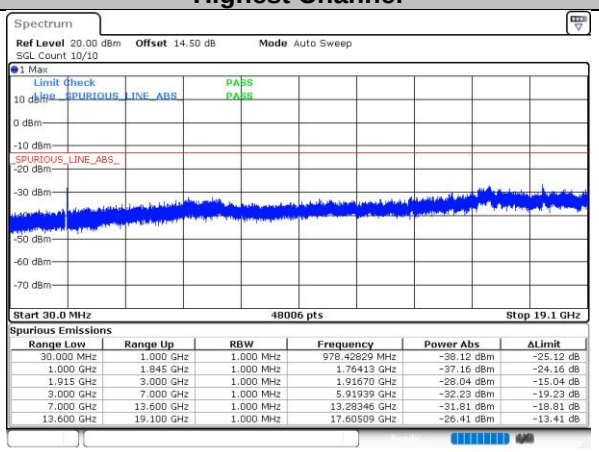


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	801.97651 MHz	-37.38 dBm	-24.38 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.05046 GHz	-38.33 dBm	-25.33 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.80384 GHz	-36.49 dBm	-23.49 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.81227 GHz	-31.58 dBm	-18.58 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.56162 GHz	-31.23 dBm	-18.23 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.78786 GHz	-27.49 dBm	-14.49 dB

Date: 7.MAR.2024 13:57:37

Highest Channel



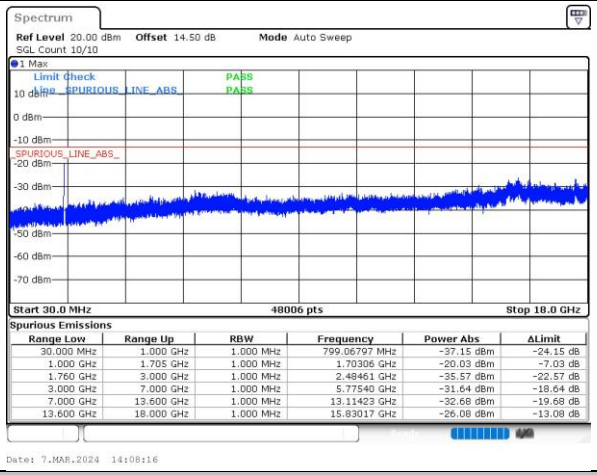
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.42829 MHz	-38.12 dBm	-25.12 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.76413 GHz	-37.16 dBm	-24.16 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91670 GHz	-28.04 dBm	-15.04 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.91939 GHz	-32.23 dBm	-19.23 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.28346 GHz	-31.81 dBm	-18.81 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.60509 GHz	-26.41 dBm	-13.41 dB

Date: 7.MAR.2024 14:01:28

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel

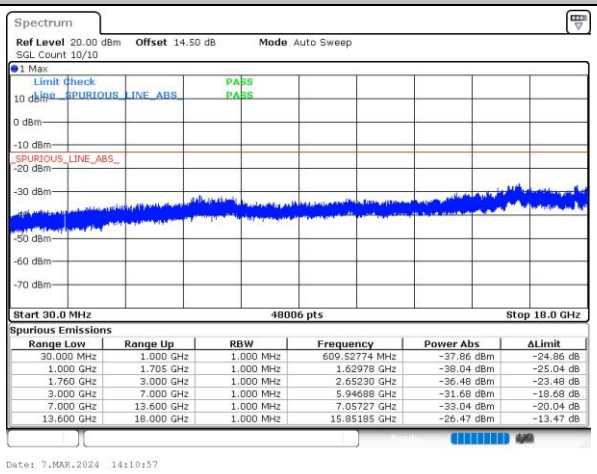


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	799.06797 MHz	-37.15 dBm	-24.15 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70306 GHz	-20.03 dBm	-7.03 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.48461 GHz	-35.57 dBm	-22.57 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.77540 GHz	-31.64 dBm	-18.64 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.11423 GHz	-32.68 dBm	-19.68 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.83017 GHz	-26.08 dBm	-13.08 dB

Date: 7.MAR.2024 14:08:16

Middle Channel

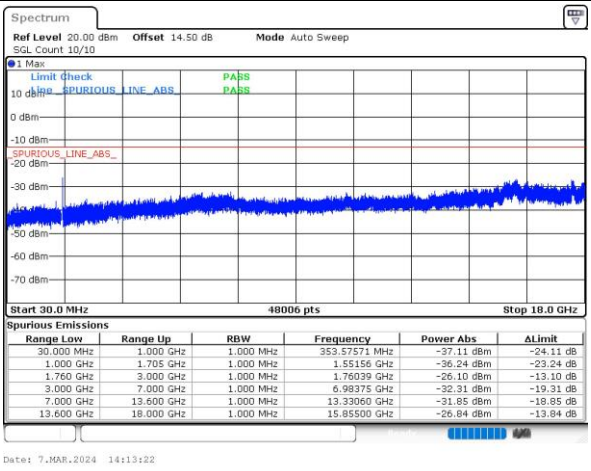


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	609.52774 MHz	-37.86 dBm	-24.86 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.62978 GHz	-38.04 dBm	-25.04 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.65230 GHz	-36.48 dBm	-23.48 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.94688 GHz	-31.68 dBm	-18.68 dB
7.000 GHz	13.600 GHz	1.000 MHz	7.05727 GHz	-33.04 dBm	-20.04 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.85185 GHz	-26.47 dBm	-13.47 dB

Date: 7.MAR.2024 14:10:57

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	353.57571 MHz	-37.11 dBm	-24.11 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.55156 GHz	-36.24 dBm	-23.24 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76039 GHz	-26.10 dBm	-13.10 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98375 GHz	-32.31 dBm	-19.31 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.33060 GHz	-31.85 dBm	-18.85 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.85500 GHz	-26.84 dBm	-13.84 dB

Date: 7.MAR.2024 14:13:22

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2KbpsRMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0079	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0051	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0032	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0019	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0052	PASS
40	Normal Voltage	0.0062	
30	Normal Voltage	0.0057	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0057	
20	Maximum Voltage	0.0056	
20	Normal Voltage	0.0062	
20	Battery End Point	0.0061	

Note:

1. Normal Voltage = 3.89V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.48 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	0.0006	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage = 3.89V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.48 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 :	Carl Ni	Temperature :	23~25℃
		Relative Humidity :	41~42%

RSE pre-scanned harmonic for different antennas, choose the worst antenna perform final test and record in the report.

GSM850 (GSM) / ANT1								
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	-49.88	-13	-36.88	-56.85	1.58	10.70	H
	2512	-32.96	-13	-19.96	-41.21	2.102	12.50	H
	3344	-59.48	-13	-46.48	-68.37	2.856	13.90	H
	1672	-55.86	-13	-42.86	-62.83	1.58	10.70	V
	2512	-46.92	-13	-33.92	-55.17	2.10	12.50	V
	3344	-59.92	-13	-46.92	-68.81	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 1								
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	-63.21	-13	-50.21	-70.18	1.58	10.70	H
	2512	-52.23	-13	-39.23	-60.48	2.102	12.50	H
	3344	-61.67	-13	-48.67	-70.56	2.856	13.90	H
	1672	-62.76	-13	-49.76	-69.73	1.58	10.70	V
	2512	-47.20	-13	-34.20	-55.45	2.10	12.50	V
	3344	-61.52	-13	-48.52	-70.41	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 1								
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	-64.98	-13	-51.98	-71.95	1.58	10.70	H
	2512	-61.04	-13	-48.04	-69.29	2.102	12.50	H
	3344	-61.37	-13	-48.37	-70.26	2.856	13.90	H
	1672	-64.23	-13	-51.23	-71.20	1.58	10.70	V
	2512	-60.41	-13	-47.41	-68.66	2.10	12.50	V
	3344	-61.62	-13	-48.62	-70.51	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	-44.90	-13	-31.90	-57.16	2.64	14.90	H
	5640	-42.61	-13	-29.61	-54.47	2.94	14.80	H
	7515	-49.69	-13	-36.69	-59.46	3.39	13.16	H
	3765	-47.29	-13	-34.29	-59.55	2.64	14.90	V
	5640	-38.85	-13	-25.85	-50.71	2.94	14.80	V
	7515	-49.96	-13	-36.96	-59.73	3.39	13.16	V

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

GSM1900 (EDGE 1 Tx slots) /ANT 2								
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	-52.44	-13	-39.44	-64.70	2.64	14.90	H
	5640	-48.87	-13	-35.87	-60.73	2.94	14.80	H
	7515	-53.30	-13	-40.30	-63.07	3.39	13.16	H
	3765	-50.21	-13	-37.21	-62.47	2.64	14.90	V
	5640	-54.73	-13	-41.73	-66.59	2.94	14.80	V
	7515	-53.09	-13	-40.09	-62.86	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) / ANT 2								
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	-55.59	-13	-42.59	-67.85	2.64	14.90	H
	5640	-54.17	-13	-41.17	-66.03	2.94	14.80	H
	7515	-53.03	-13	-40.03	-62.80	3.39	13.16	H
	3765	-55.45	-13	-42.45	-67.71	2.64	14.90	V
	5640	-54.24	-13	-41.24	-66.10	2.94	14.80	V
	7515	-53.06	-13	-40.06	-62.83	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) / ANT 2								
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	-57.94	-13	-44.94	-68.68	2.604	13.34	H
	5205	-52.68	-13	-39.68	-63.19	3.011	13.52	H
	6930	-54.16	-13	-41.16	-64.36	3.271	13.47	H
	3465	-57.74	-13	-44.74	-68.48	2.604	13.34	V
	5205	-53.23	-13	-40.23	-63.74	3.011	13.52	V
	6930	-54.27	-13	-41.27	-64.47	3.271	13.47	V

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