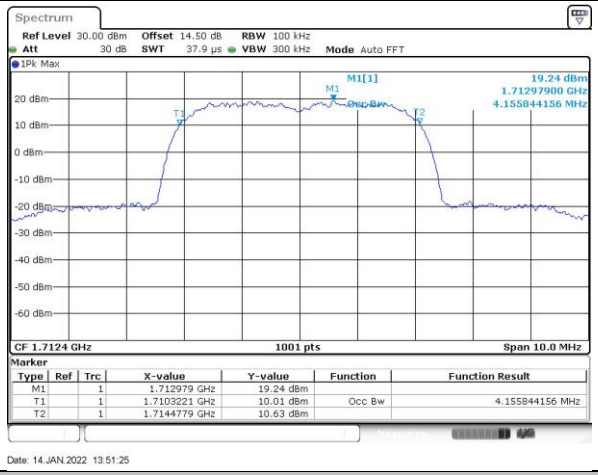
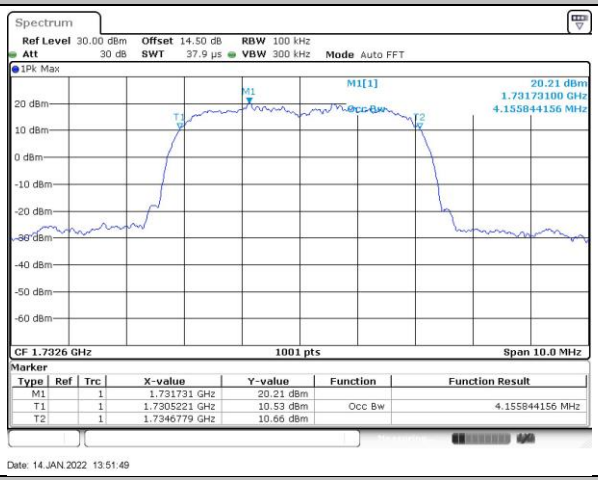
WCDMA Band IV (RMC 12.2Kbps)

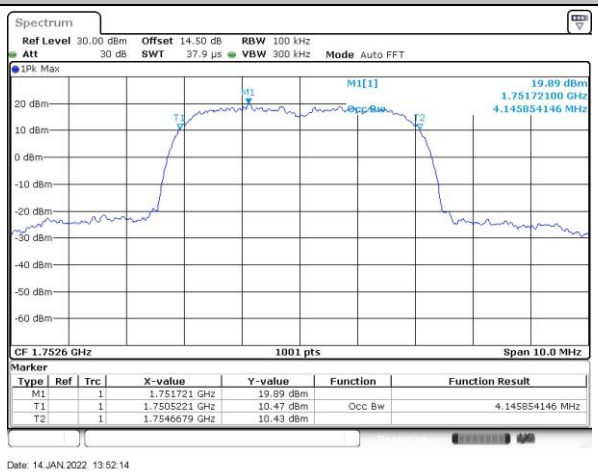
Lowest Channel



Middle Channel

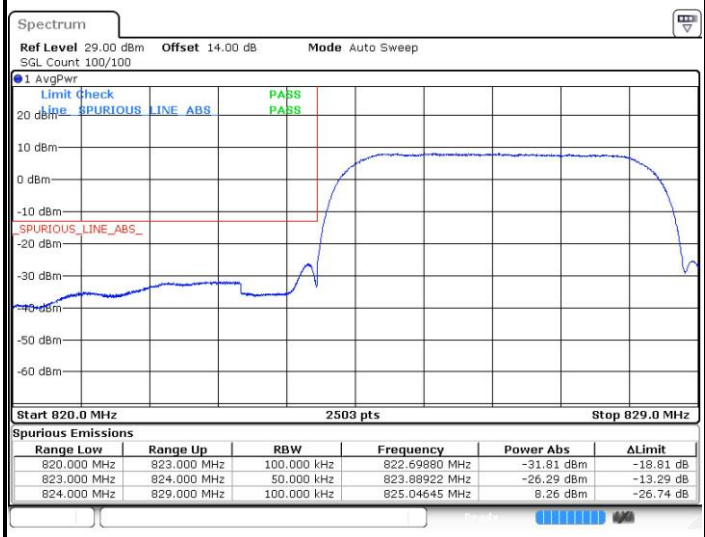


Highest Channel



Conducted Band Edge

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



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	822.69880 MHz	-31.81 dBm	-18.81 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.88922 MHz	-26.29 dBm	-13.29 dB
824.000 MHz	829.000 MHz	100.000 kHz	825.04645 MHz	8.26 dBm	-26.74 dB

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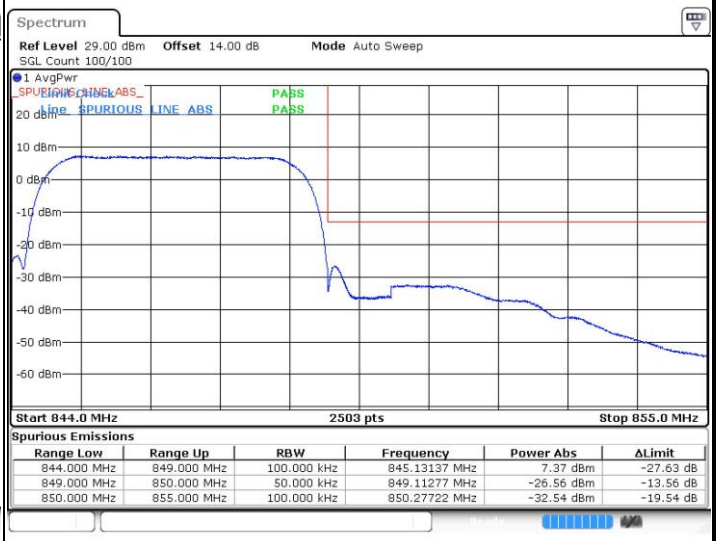
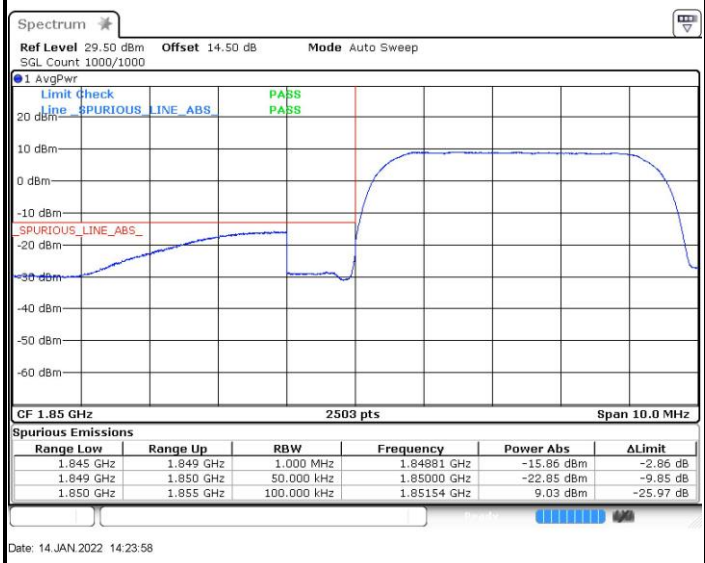


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.13137 MHz	7.37 dBm	-27.63 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.11277 MHz	-26.56 dBm	-13.56 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.27722 MHz	-32.54 dBm	-19.54 dB

Date: 14.JAN.2022 14:49:18

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



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.845 GHz	1.849 GHz	1.000 MHz	1.84881 GHz	-15.86 dBm	-2.86 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-22.85 dBm	-9.85 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85154 GHz	9.03 dBm	-25.97 dB

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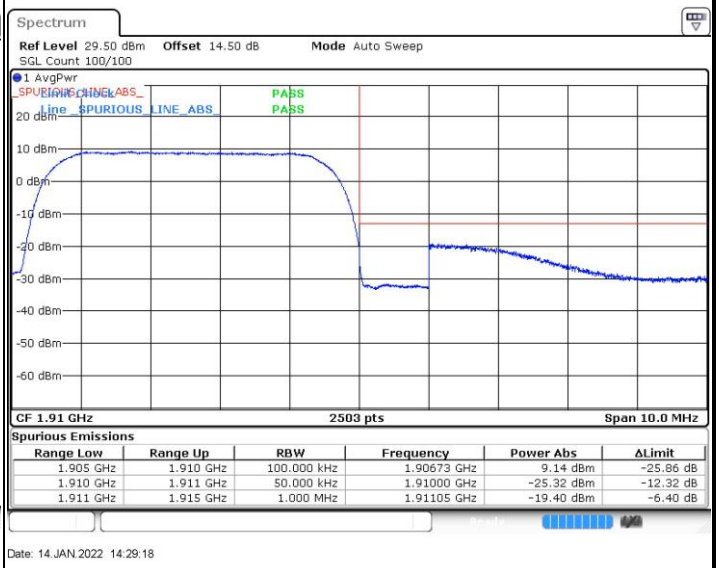
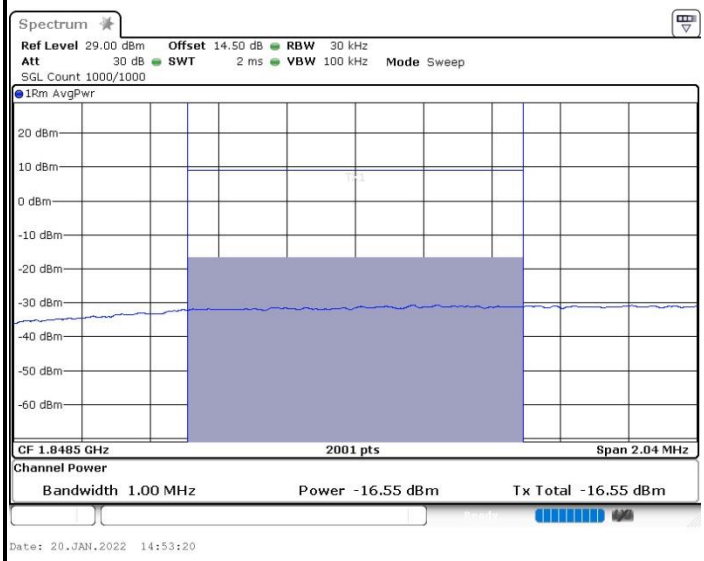


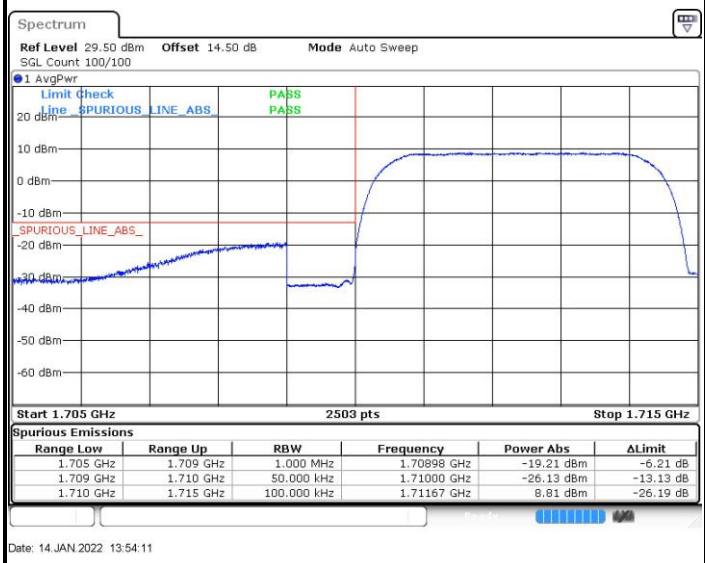
Spurious Emissions

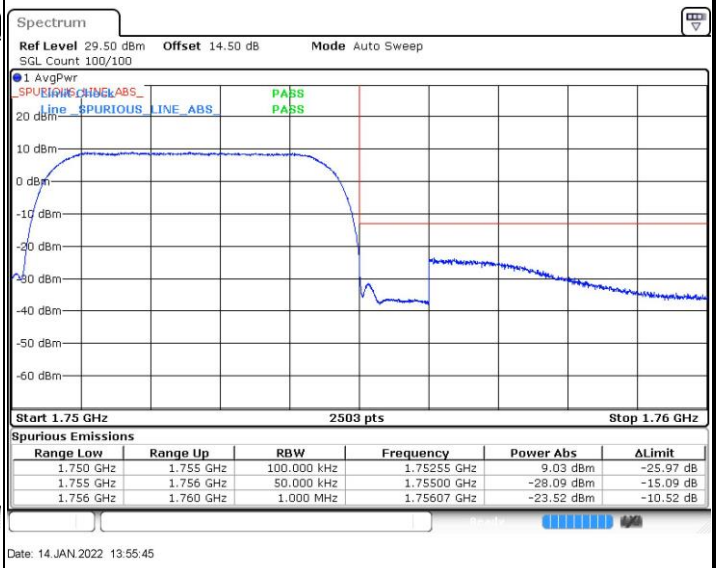
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90673 GHz	9.14 dBm	-25.86 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-25.32 dBm	-12.32 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91105 GHz	-19.40 dBm	-6.40 dB

Date: 14.JAN.2022 14:29:18

WCDMA Band II (RMC 12.2Kbps)	
Lowest Band Edge Channel Power	**N/A**
	N/A

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

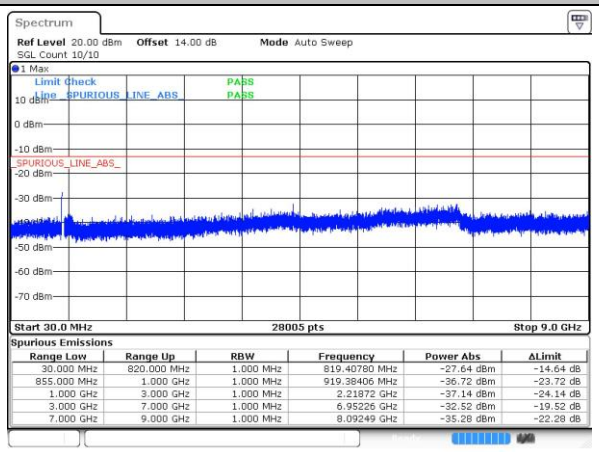




Conducted Spurious Emission

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	-27.64 dBm	-14.64 dB
855.000 MHz	1.000 GHz	1.000 MHz	919.38406 MHz	-36.72 dBm	-23.72 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.21872 GHz	-37.14 dBm	-24.14 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95226 GHz	-32.52 dBm	-19.52 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.09249 GHz	-35.28 dBm	-22.28 dB

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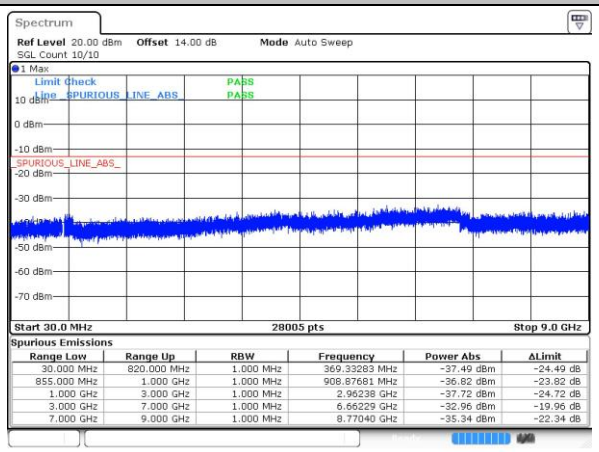
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	369.33283 MHz	-37.49 dBm	-24.49 dB
855.000 MHz	1.000 GHz	1.000 MHz	908.87681 MHz	-36.82 dBm	-23.82 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96238 GHz	-37.72 dBm	-24.72 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.66229 GHz	-32.96 dBm	-19.96 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.77040 GHz	-35.34 dBm	-22.34 dB

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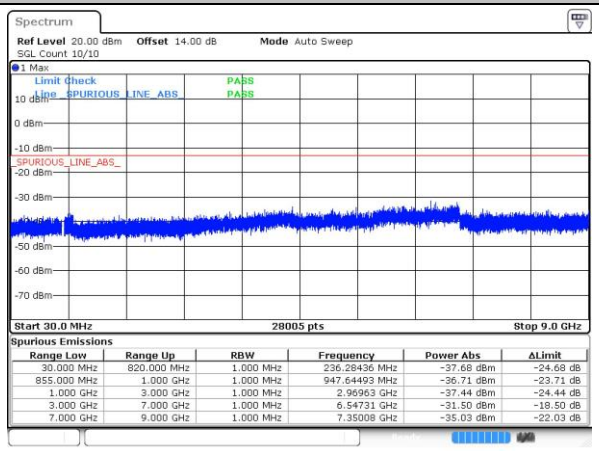
Highest Channel



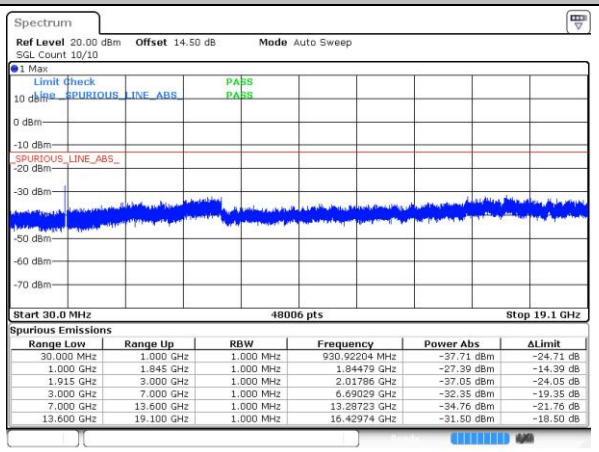
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	236.28436 MHz	-37.68 dBm	-24.68 dB
855.000 MHz	1.000 GHz	1.000 MHz	947.64493 MHz	-36.71 dBm	-23.71 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96963 GHz	-37.44 dBm	-24.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.54731 GHz	-31.50 dBm	-18.50 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.35008 GHz	-35.03 dBm	-22.03 dB

Date: 14.JAN.2022 14:50:35

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

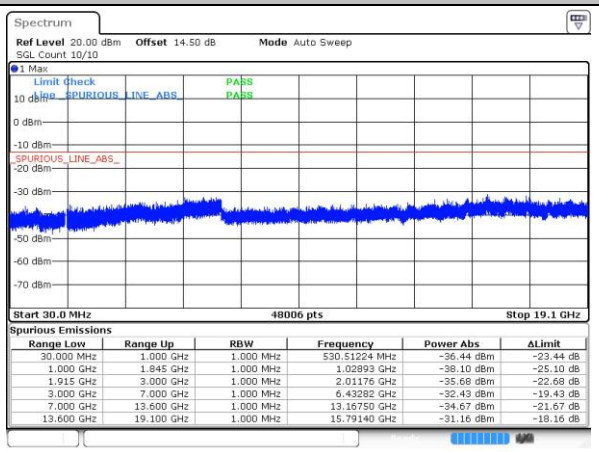


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	930.92204 MHz	-37.71 dBm	-24.71 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-27.39 dBm	-14.39 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.01786 GHz	-37.05 dBm	-24.05 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.69029 GHz	-32.35 dBm	-19.35 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.28723 GHz	-34.76 dBm	-21.76 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.42974 GHz	-31.50 dBm	-18.50 dB

Date: 14.JAN.2022 14:15:49

Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	530.51224 MHz	-36.44 dBm	-23.44 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.02893 GHz	-38.10 dBm	-25.10 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.01176 GHz	-35.68 dBm	-22.68 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.43282 GHz	-32.43 dBm	-19.43 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.16750 GHz	-34.67 dBm	-21.67 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.79140 GHz	-31.16 dBm	-18.16 dB

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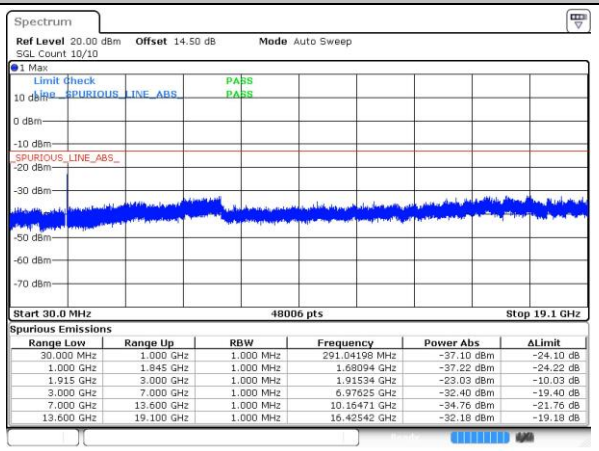
Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	291.04198 MHz	-37.10 dBm	-24.10 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.68094 GHz	-37.22 dBm	-24.22 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91534 GHz	-23.03 dBm	-10.03 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97625 GHz	-32.40 dBm	-19.40 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.16471 GHz	-34.76 dBm	-21.76 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.42542 GHz	-32.18 dBm	-19.18 dB

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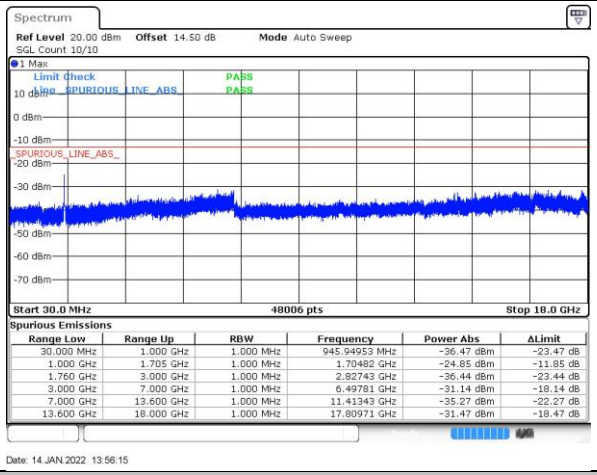
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	945.94953 MHz	-36.47 dBm	-23.47 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-24.85 dBm	-11.85 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.82743 GHz	-36.44 dBm	-23.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.49781 GHz	-31.14 dBm	-18.14 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.41343 GHz	-35.27 dBm	-22.27 dB
13.600 GHz	18.000 GHz	1.000 MHz	17.80971 GHz	-31.47 dBm	-18.47 dB

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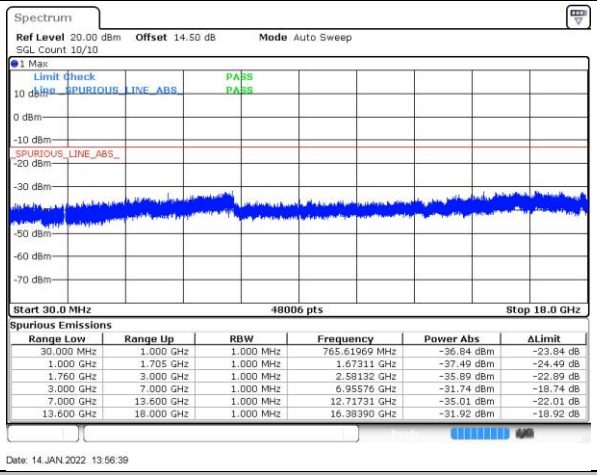
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	765.61969 MHz	-36.84 dBm	-23.84 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.67311 GHz	-37.49 dBm	-24.49 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.58132 GHz	-35.89 dBm	-22.89 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95576 GHz	-31.74 dBm	-18.74 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.71731 GHz	-35.01 dBm	-22.01 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.38390 GHz	-31.92 dBm	-18.92 dB

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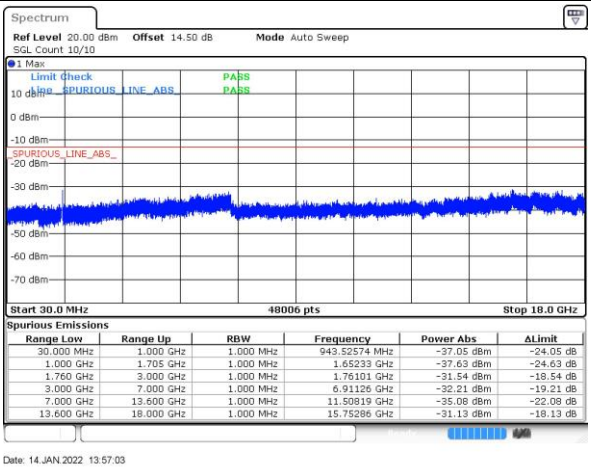
Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	943.52574 MHz	-37.05 dBm	-24.05 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.65233 GHz	-37.63 dBm	-24.63 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76101 GHz	-31.54 dBm	-18.54 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91126 GHz	-32.21 dBm	-19.21 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.50819 GHz	-35.08 dBm	-22.08 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.75286 GHz	-31.13 dBm	-18.13 dB

Date: 14.JAN.2022 13:57:03

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	0.0002	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.25 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 :	KuangJia/Zhao Hui Liang	Temperature :	22~25℃
		Relative Humidity :	48~52%

GSM850 (GSM) for Ant.0									
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	-64.80	-13	-51.80	-70.88	-68.05	4.00	9.40	H
	2509.2	-39.02	-13	-26.02	-49.17	-42.59	4.88	10.60	H
	3345.6	-63.44	-13	-50.44	-75.27	-68.37	5.52	12.60	H
	4182	-52.31	-13	-39.31	-67.81	-56.78	6.00	12.62	H
	1672.8	-66.39	-13	-53.39	-72.19	-69.64	4.00	9.40	V
	2509.2	-34.67	-13	-21.67	-45.15	-38.24	4.88	10.60	V
	3345.6	-63.20	-13	-50.20	-75.41	-68.13	5.52	12.60	V
	4182	-53.41	-13	-40.41	-69.12	-57.88	6.00	12.62	V

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

GSM850 (EDGE class 8) for Ant.0									
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	-64.17	-13	-51.17	-70.25	-67.42	4.00	9.40	H
	2509.2	-33.33	-13	-20.33	-43.48	-36.90	4.88	10.60	H
	3345.6	-63.87	-13	-50.87	-75.70	-68.80	5.52	12.60	H
	4182	-54.32	-13	-41.32	-69.82	-58.79	6.00	12.62	H
	1672.8	-65.89	-13	-52.89	-71.69	-69.14	4.00	9.40	V
	2509.2	-34.39	-13	-21.39	-44.87	-37.96	4.88	10.60	V
	3345.6	-63.56	-13	-50.56	-75.77	-68.49	5.52	12.60	V
	4182	-53.19	-13	-40.19	-68.90	-57.66	6.00	12.62	V

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

GSM1900 (GSM) for Ant.2									
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	-62.34	-13	-49.34	-76.79	-69.09	5.85	12.60	H
	5640	-61.64	-13	-48.64	-78.52	-67.44	7.30	13.10	H
	7520	-57.01	-13	-44.01	-79.31	-60.16	8.35	11.50	H
	3760	-62.30	-13	-49.30	-76.93	-69.05	5.85	12.60	V
	5640	-61.81	-13	-48.81	-78.58	-67.61	7.30	13.10	V
	7520	-57.07	-13	-44.07	-79.25	-60.22	8.35	11.50	V

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

GSM1900 (EDGE class 8) for Ant.2									
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	-62.32	-13	-49.32	-76.77	-69.07	5.85	12.60	H
	5640	-62.19	-13	-49.19	-79.07	-67.99	7.30	13.10	H
	7520	-57.11	-13	-44.11	-79.41	-60.26	8.35	11.50	H
	3760	-62.14	-13	-49.14	-76.77	-68.89	5.85	12.60	V
	5640	-62.10	-13	-49.10	-78.87	-67.90	7.30	13.10	V
	7520	-56.89	-13	-43.89	-79.07	-60.04	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) for Ant.0									
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	-66.55	-13	-53.55	-72.63	-69.80	4.00	9.40	H
	2509.2	-61.16	-13	-48.16	-71.31	-64.73	4.88	10.60	H
	3345.6	-62.99	-13	-49.99	-74.82	-67.92	5.52	12.60	H
	1672.8	-66.53	-13	-53.53	-72.33	-69.78	4.00	9.40	V
	2509.2	-61.00	-13	-48.00	-71.48	-64.57	4.88	10.60	V
	3345.6	-63.06	-13	-50.06	-75.27	-67.99	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) for Ant.2									
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	-61.99	-13	-48.99	-76.44	-68.74	5.85	12.60	H
	5640	-62.17	-13	-49.17	-79.05	-67.97	7.30	13.10	H
	7520	-57.46	-13	-44.46	-79.76	-60.61	8.35	11.50	H
	3760	-62.35	-13	-49.35	-76.98	-69.10	5.85	12.60	V
	5640	-62.41	-13	-49.41	-79.18	-68.21	7.30	13.10	V
	7520	-57.41	-13	-44.41	-79.59	-60.56	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) for Ant.2									
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	-63.31	-13	-50.31	-75.85	-70.16	5.65	12.50	H
	5197.8	-62.20	-13	-49.20	-79.44	-67.87	7.13	12.80	H
	6930.4	-59.03	-13	-46.03	-79.56	-62.43	8.40	11.80	H
	3465.2	-62.94	-13	-49.94	-76.02	-69.79	5.65	12.50	V
	5197.8	-62.46	-13	-49.46	-79.65	-68.13	7.13	12.80	V
	6930.4	-59.01	-13	-46.01	-79.55	-62.41	8.40	11.80	V

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