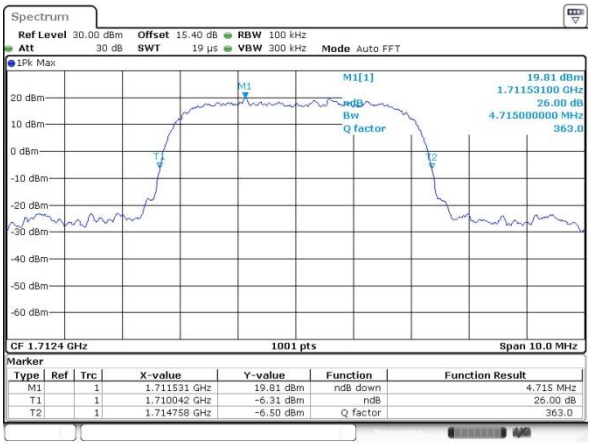
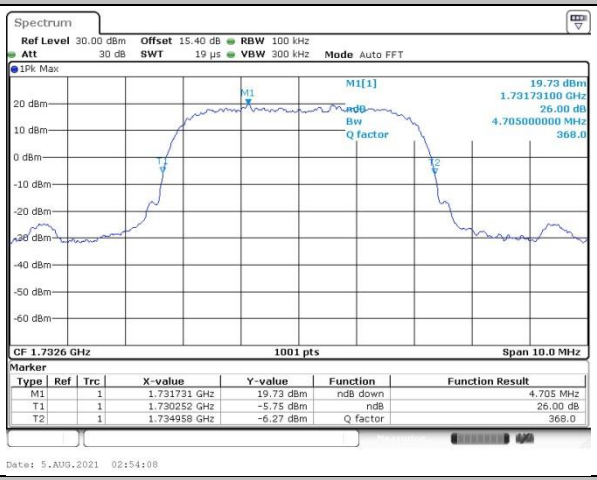
WCDMA Band IV (RMC 12.2Kbps)

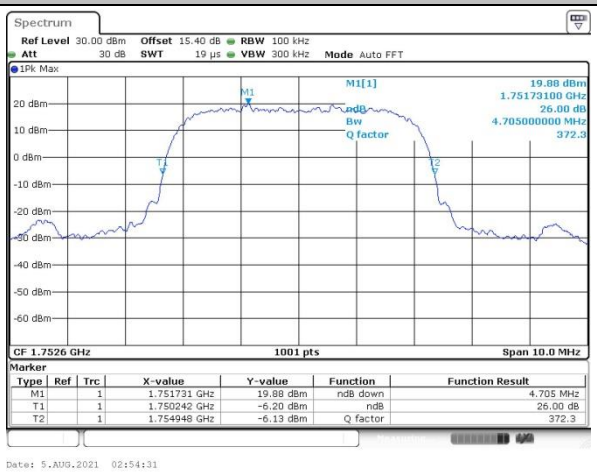
Lowest Channel



Middle Channel

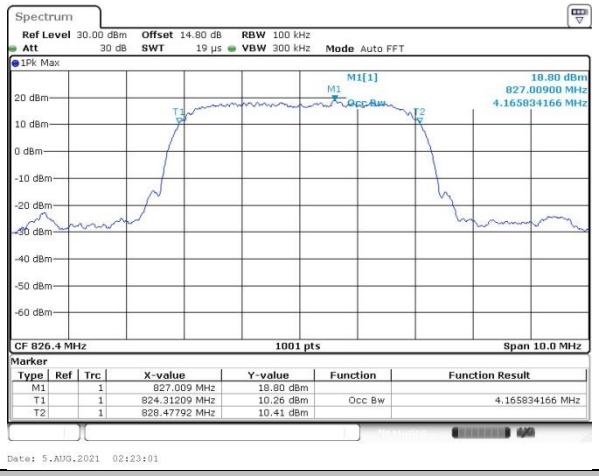
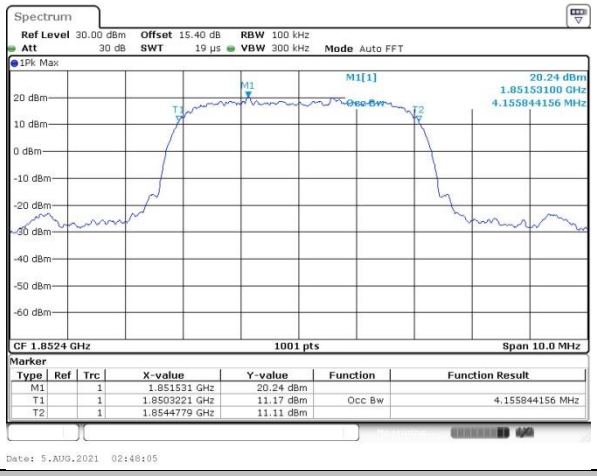
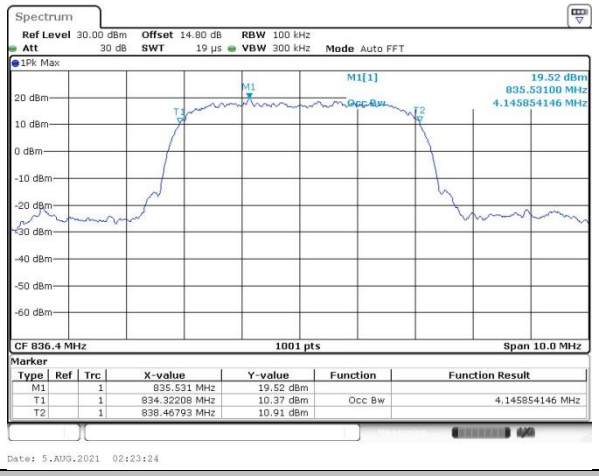
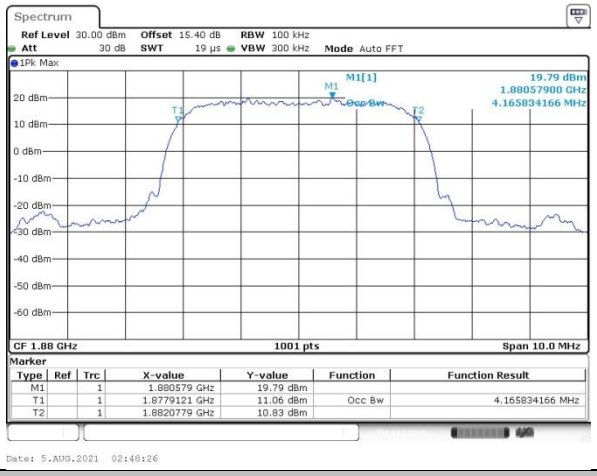
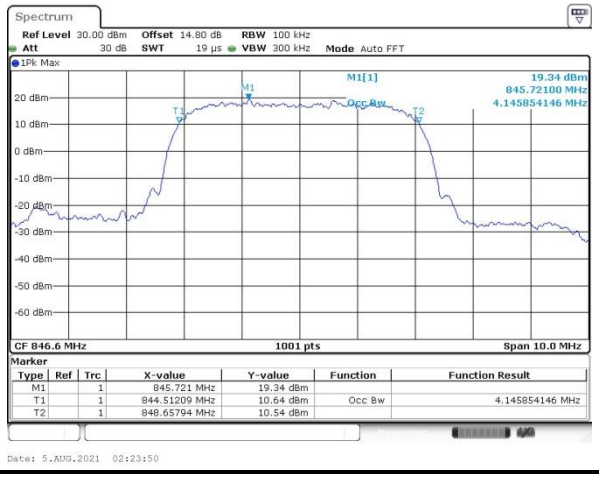
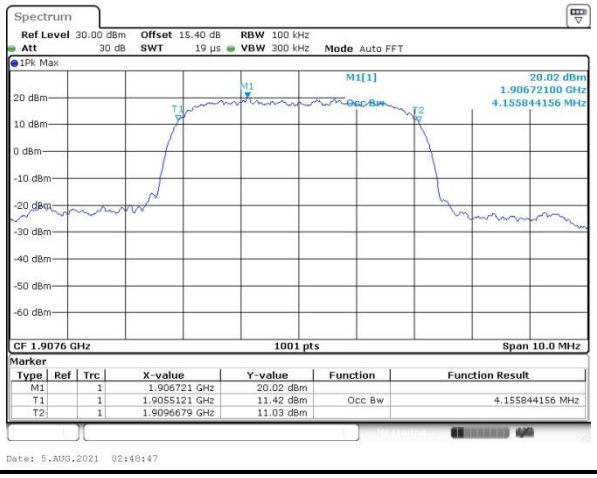


Highest Channel



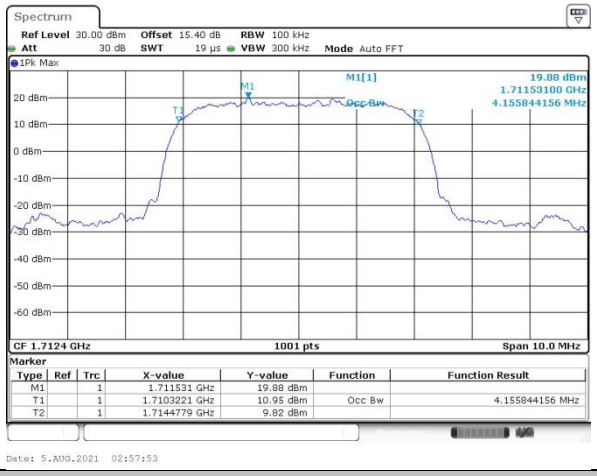
Occupied Bandwidth

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.17	4.16	4.16
Middle CH	4.15	4.17	4.15
Highest CH	4.15	4.16	4.16

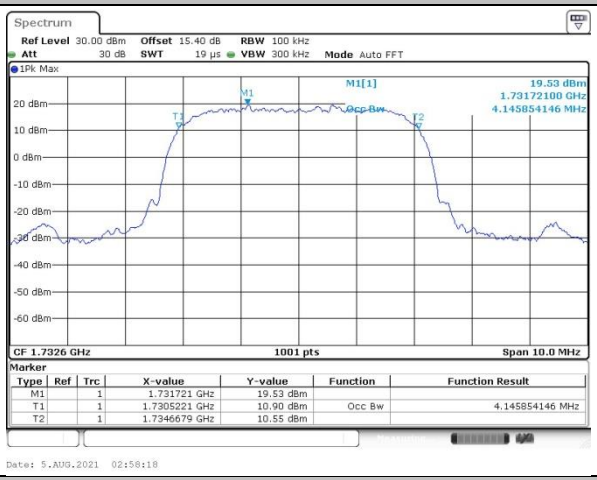
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

WCDMA Band IV (RMC 12.2Kbps)

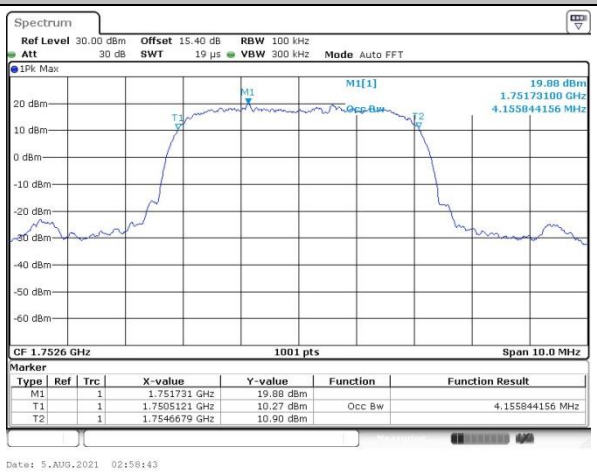
Lowest Channel



Middle Channel



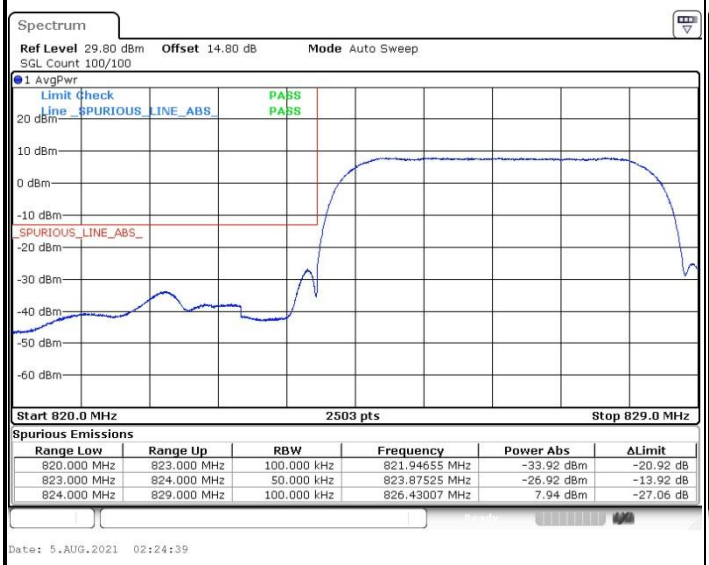
Highest Channel



Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

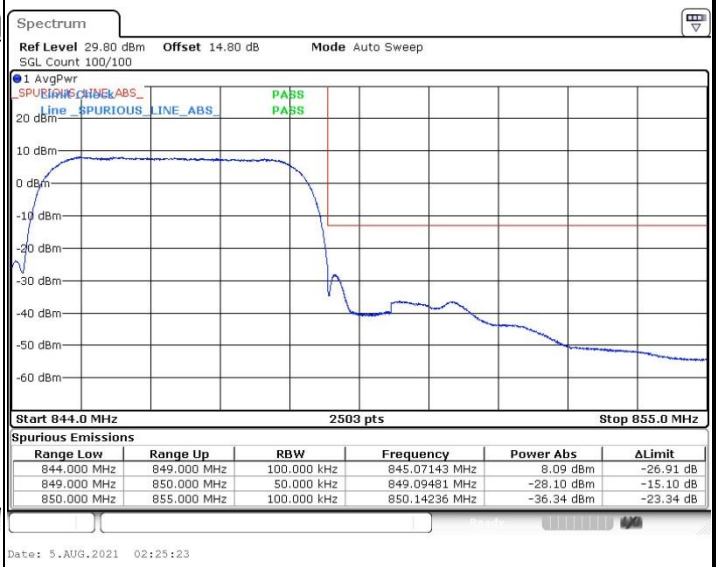


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
820.000 MHz	823.000 MHz	100.000 kHz	821.94655 MHz	-33.92 dBm	-20.92 dB
823.000 MHz	824.000 MHz	50.000 kHz	823.87525 MHz	-26.92 dBm	-13.92 dB
824.000 MHz	829.000 MHz	100.000 kHz	826.43007 MHz	7.94 dBm	-27.06 dB

Date: 5.AUG.2021 02:24:39

Highest Band Edge



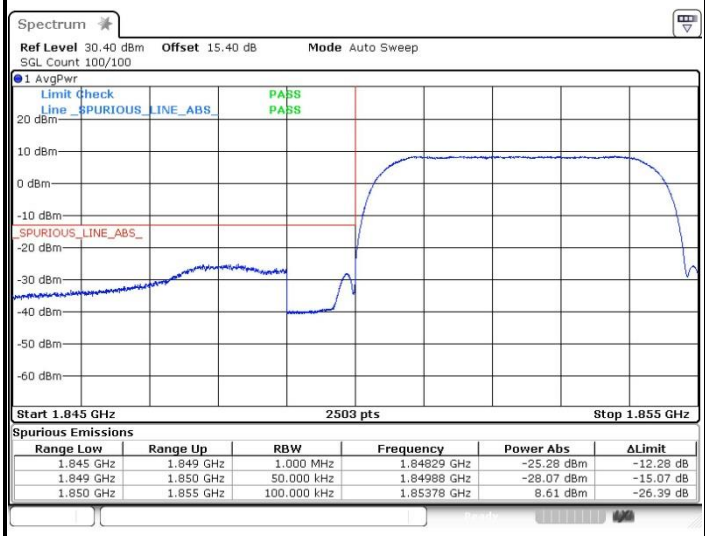
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
844.000 MHz	849.000 MHz	100.000 kHz	845.07143 MHz	8.09 dBm	-26.91 dB
849.000 MHz	850.000 MHz	50.000 kHz	849.09481 MHz	-28.10 dBm	-15.10 dB
850.000 MHz	855.000 MHz	100.000 kHz	850.14236 MHz	-36.34 dBm	-23.34 dB

Date: 5.AUG.2021 02:25:23

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	1.84829 GHz	-25.28 dBm	-12.28 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.84988 GHz	-28.07 dBm	-15.07 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85378 GHz	8.61 dBm	-26.39 dB

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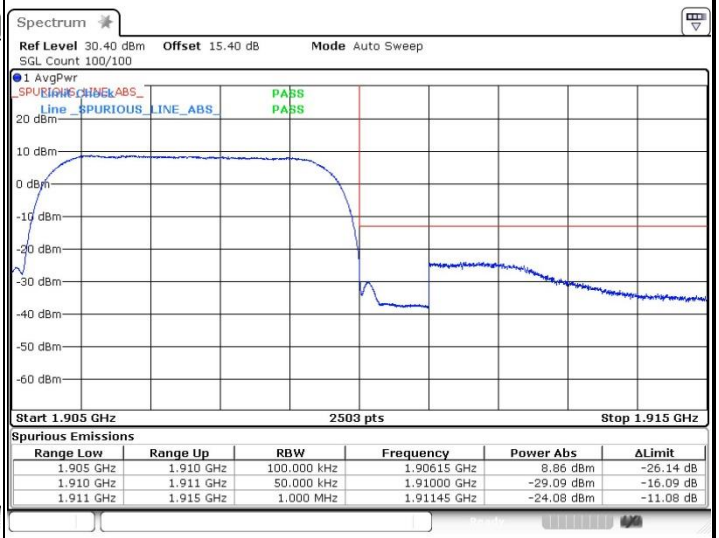
Highest Band Edge



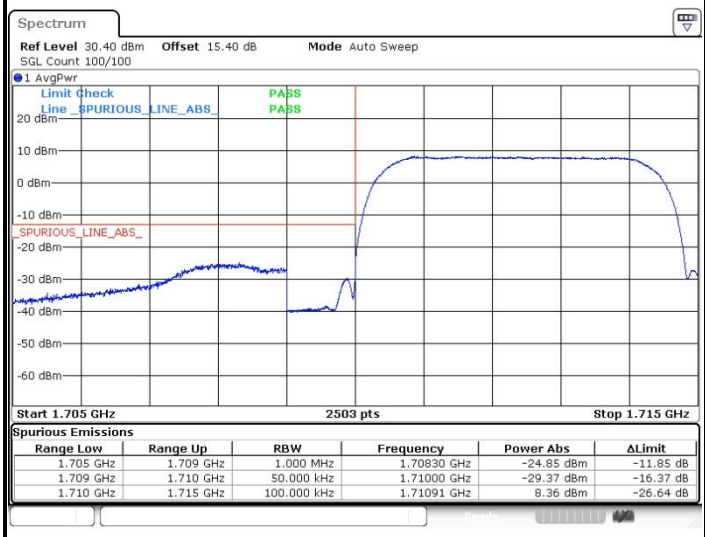
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90615 GHz	8.86 dBm	-26.14 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-29.09 dBm	-16.09 dB
1.911 GHz	1.915 GHz	1.000 MHz	1.91145 GHz	-24.08 dBm	-11.08 dB

Date: 5.AUG.2021 02:50:27

WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

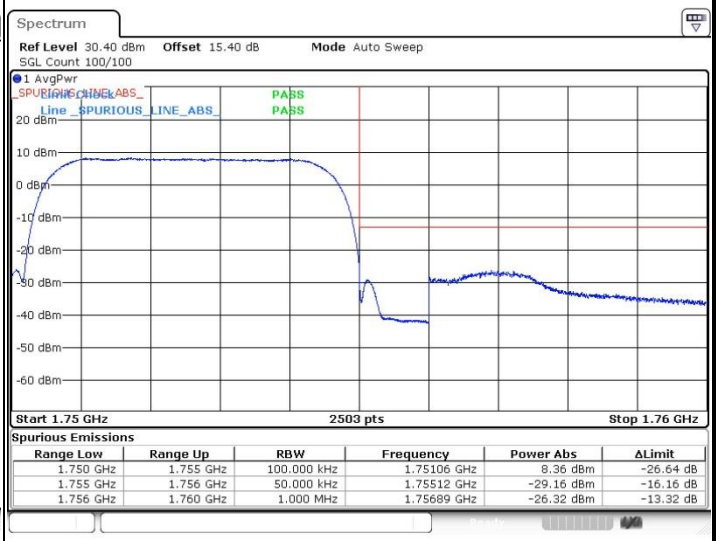


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.705 GHz	1.709 GHz	1.000 MHz	1.70830 GHz	-24.85 dBm	-11.85 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.71000 GHz	-29.37 dBm	-16.37 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71091 GHz	8.36 dBm	-26.64 dB

Date: 5.AUG.2021 02:59:31

Highest Band Edge



Spurious Emissions

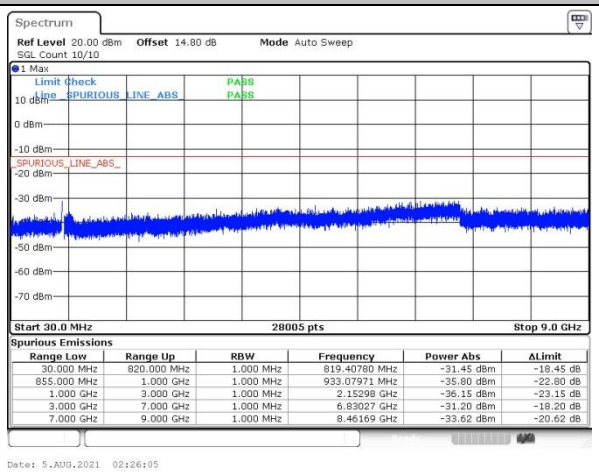
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75106 GHz	8.36 dBm	-26.64 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75512 GHz	-29.16 dBm	-16.16 dB
1.756 GHz	1.760 GHz	1.000 MHz	1.75689 GHz	-26.32 dBm	-13.32 dB

Date: 5.AUG.2021 03:00:17

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

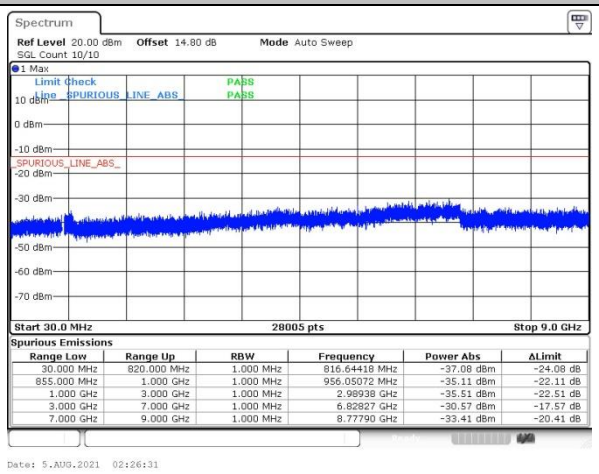


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	819.40780 MHz	-31.45 dBm	-18.45 dB
855.000 MHz	1.000 GHz	1.000 MHz	933.07971 MHz	-35.80 dBm	-22.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.15298 GHz	-36.15 dBm	-23.15 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.83027 GHz	-31.20 dBm	-18.20 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.46169 GHz	-33.62 dBm	-20.62 dB

Date: 5.AUG.2021 02:26:05

Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	816.64418 MHz	-37.08 dBm	-24.08 dB
855.000 MHz	1.000 GHz	1.000 MHz	956.05072 MHz	-35.11 dBm	-22.11 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98938 GHz	-35.51 dBm	-22.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.82827 GHz	-30.57 dBm	-17.57 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.77790 GHz	-33.41 dBm	-20.41 dB

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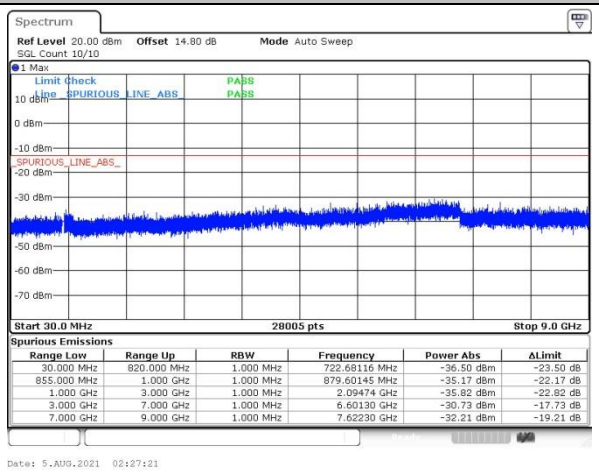
Highest Channel



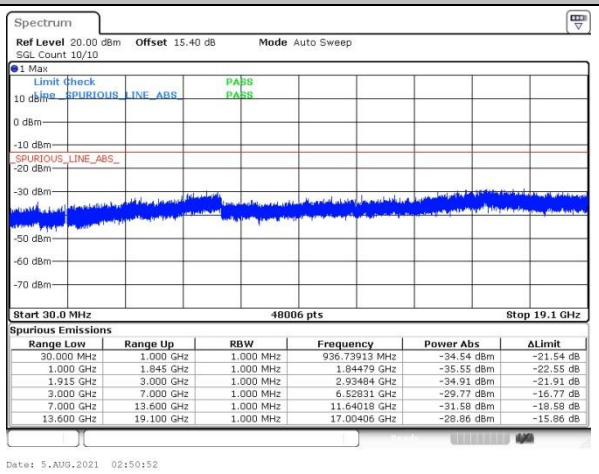
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	722.68116 MHz	-36.50 dBm	-23.50 dB
855.000 MHz	1.000 GHz	1.000 MHz	879.60145 MHz	-35.17 dBm	-22.17 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.09474 GHz	-35.82 dBm	-22.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.60130 GHz	-30.73 dBm	-17.73 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.62230 GHz	-32.21 dBm	-19.21 dB

Date: 5.AUG.2021 02:27:21

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

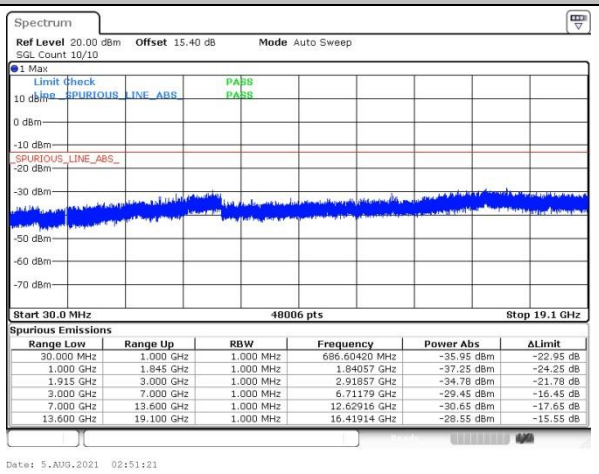


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	936.73913 MHz	-34.54 dBm	-21.54 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84479 GHz	-35.55 dBm	-22.55 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.93484 GHz	-34.91 dBm	-21.91 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.52831 GHz	-29.77 dBm	-16.77 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.64018 GHz	-31.58 dBm	-18.58 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.00406 GHz	-28.86 dBm	-15.86 dB

Date: 5.AUG.2021 02:50:52

Middle Channel

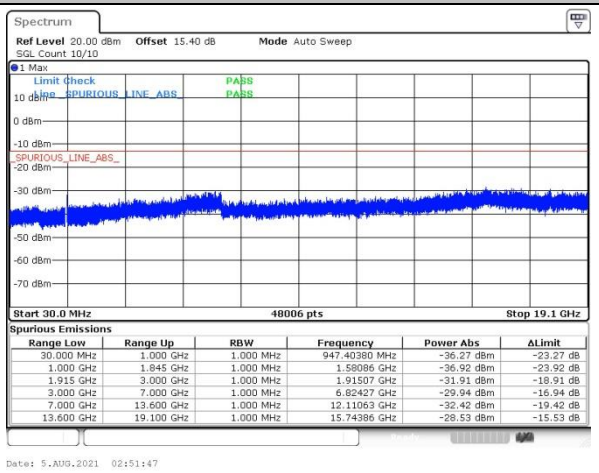


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	686.60420 MHz	-35.95 dBm	-22.95 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84057 GHz	-37.25 dBm	-24.25 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.91857 GHz	-34.78 dBm	-21.78 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.71179 GHz	-29.45 dBm	-16.45 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.62916 GHz	-30.65 dBm	-17.65 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.41914 GHz	-28.55 dBm	-15.55 dB

Date: 5.AUG.2021 02:51:21

Highest Channel



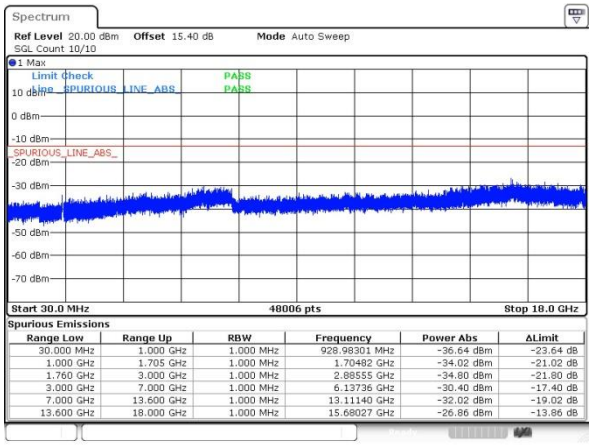
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	947.40380 MHz	-36.27 dBm	-23.27 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.58086 GHz	-36.92 dBm	-23.92 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91507 GHz	-31.91 dBm	-18.91 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.82427 GHz	-29.94 dBm	-16.94 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.11063 GHz	-32.42 dBm	-19.42 dB
13.600 GHz	19.100 GHz	1.000 MHz	15.74386 GHz	-28.53 dBm	-15.53 dB

Date: 5.AUG.2021 02:51:47

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel

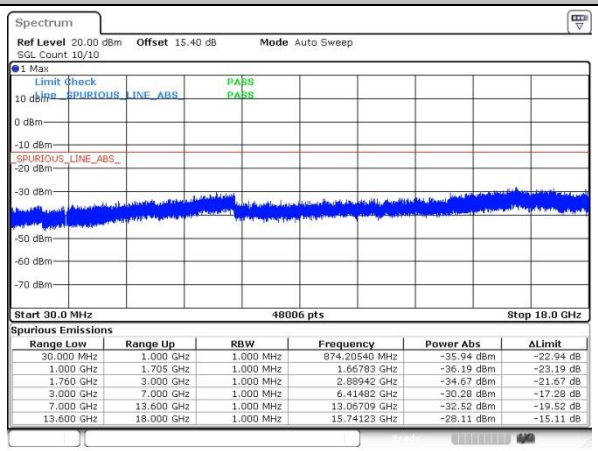


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	928.98301 MHz	-36.64 dBm	-23.64 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-34.02 dBm	-21.02 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.88555 GHz	-34.80 dBm	-21.80 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.13736 GHz	-30.40 dBm	-17.40 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.11140 GHz	-32.02 dBm	-19.02 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.68027 GHz	-26.86 dBm	-13.86 dB

Date: 5.AUG.2021 03:00:45

Middle Channel

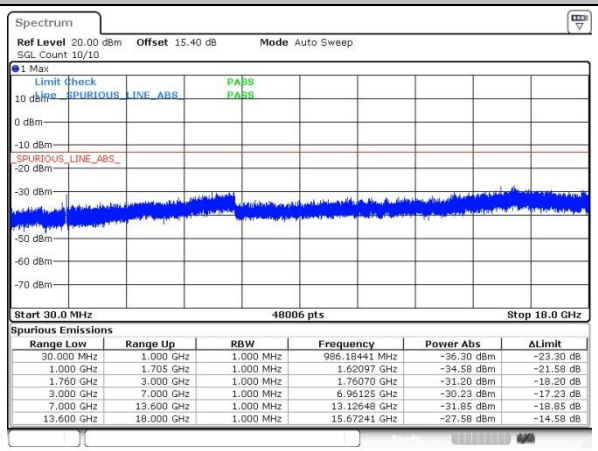


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	874.20540 MHz	-35.94 dBm	-22.94 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.66783 GHz	-36.19 dBm	-23.19 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.88942 GHz	-34.67 dBm	-21.67 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.41482 GHz	-30.28 dBm	-17.28 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.06709 GHz	-32.52 dBm	-19.52 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.74123 GHz	-28.11 dBm	-15.11 dB

Date: 5.AUG.2021 03:01:10

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.18441 MHz	-36.30 dBm	-23.30 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.62097 GHz	-34.58 dBm	-21.58 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76070 GHz	-31.20 dBm	-18.20 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96125 GHz	-30.23 dBm	-17.23 dB
7.000 GHz	13.600 GHz	1.000 MHz	13.12648 GHz	-31.85 dBm	-18.85 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.67241 GHz	-27.58 dBm	-14.58 dB

Date: 5.AUG.2021 03:01:42

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	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0026	
20	Battery End Point	0.0023	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0026	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0028	
20	Battery End Point	0.0019	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0028	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0028	

Note:

1. Normal Voltage = 3.85V ; Battery End Point (BEP) =3.65V. ; 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

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	-47.26	-13	-34.26	-54.23	1.58	10.70	H
	2510	-57.72	-13	-44.72	-65.97	2.10	12.50	H
	3348	-56.93	-13	-43.93	-65.82	2.86	13.90	H
	1672	-46.43	-13	-33.43	-53.40	1.58	10.70	V
	2510	-57.47	-13	-44.47	-65.72	2.10	12.50	V
	3348	-60.06	-13	-47.06	-68.95	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	-50.65	-13	-37.65	-57.62	1.58	10.70	H
	2510	-60.02	-13	-47.02	-68.27	2.102	12.50	H
	3348	-57.01	-13	-44.01	-65.90	2.856	13.90	H
	1672	-48.07	-13	-35.07	-55.04	1.58	10.70	V
	2510	-59.35	-13	-46.35	-67.60	2.10	12.50	V
	3348	-59.86	-13	-46.86	-68.75	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	-54.89	-13	-41.89	-67.15	2.641	14.90	H
	5640	-48.67	-13	-35.67	-60.53	2.94	14.80	H
	7524	-53.03	-13	-40.03	-62.80	3.39	13.16	H
	3759	-54.99	-13	-41.99	-67.25	2.64	14.90	V
	5640	-51.82	-13	-38.82	-63.68	2.94	14.80	V
	7524	-52.72	-13	-39.72	-62.49	3.39	13.16	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	3759	-55.46	-13	-42.46	-67.72	2.641	14.90	H
	5640	-51.29	-13	-38.29	-63.15	2.94	14.80	H
	7524	-52.99	-13	-39.99	-62.76	3.39	13.16	H
	3759	-55.07	-13	-42.07	-67.33	2.64	14.90	V
	5640	-50.17	-13	-37.17	-62.03	2.94	14.80	V
	7524	-52.62	-13	-39.62	-62.39	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)								
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	-65.15	-13	-52.15	-72.12	1.58	10.70	H
	2510	-60.24	-13	-47.24	-68.49	2.102	12.50	H
	3348	-60.67	-13	-47.67	-69.56	2.856	13.90	H
	1672	-64.53	-13	-51.53	-71.50	1.58	10.70	V
	2510	-59.62	-13	-46.62	-67.87	2.10	12.50	V
	3348	-60.59	-13	-47.59	-69.48	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	3759	-56.82	-13	-43.82	-69.08	2.64	14.90	H
	5640	-54.76	-13	-41.76	-66.62	2.94	14.80	H
	7524	-52.68	-13	-39.68	-62.45	3.39	13.16	H
	3759	-56.34	-13	-43.34	-68.60	2.64	14.90	V
	5640	-55.03	-13	-42.03	-66.89	2.94	14.80	V
	7524	-52.20	-13	-39.20	-61.97	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)								
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	-57.53	-13	-44.53	-68.27	2.604	13.34	H
	5199	-54.71	-13	-41.71	-65.22	3.011	13.52	H
	6936	-54.26	-13	-41.26	-64.46	3.271	13.47	H
	3465	-57.92	-13	-44.92	-68.66	2.604	13.34	V
	5199	-54.82	-13	-41.82	-65.33	3.011	13.52	V
	6936	-54.05	-13	-41.05	-64.25	3.271	13.47	V

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