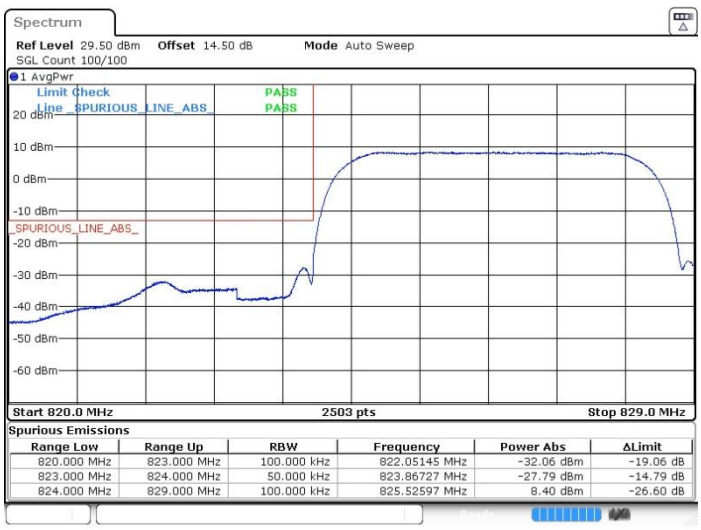
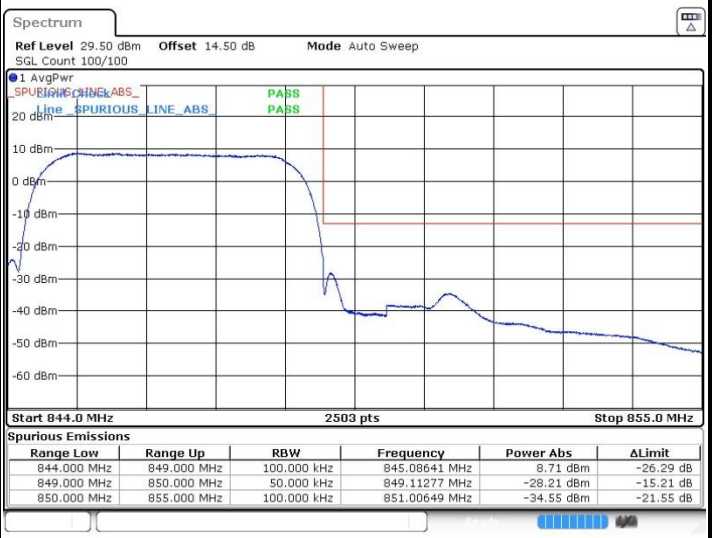
WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

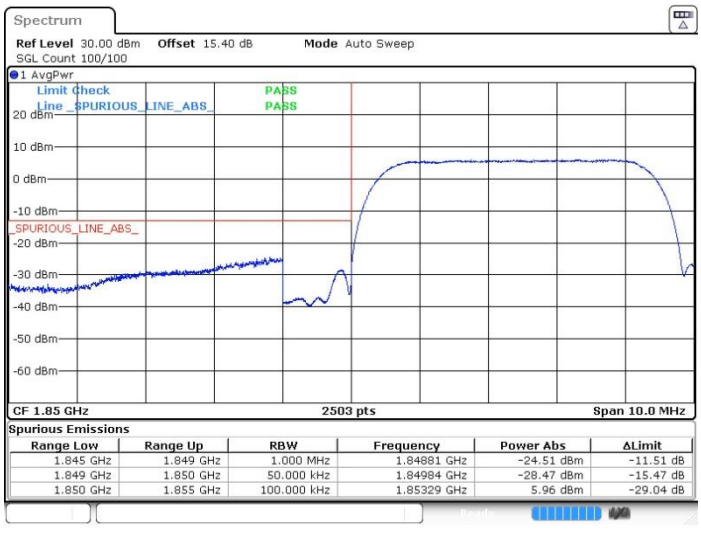


Highest Band Edge



WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



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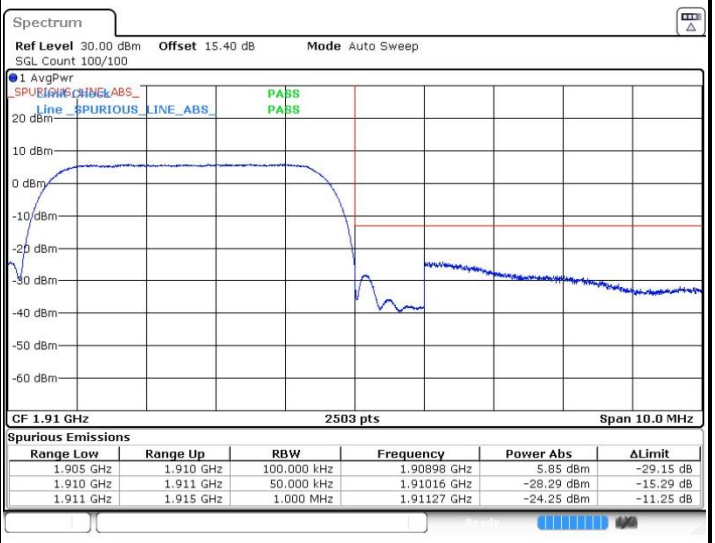
Highest Band Edge



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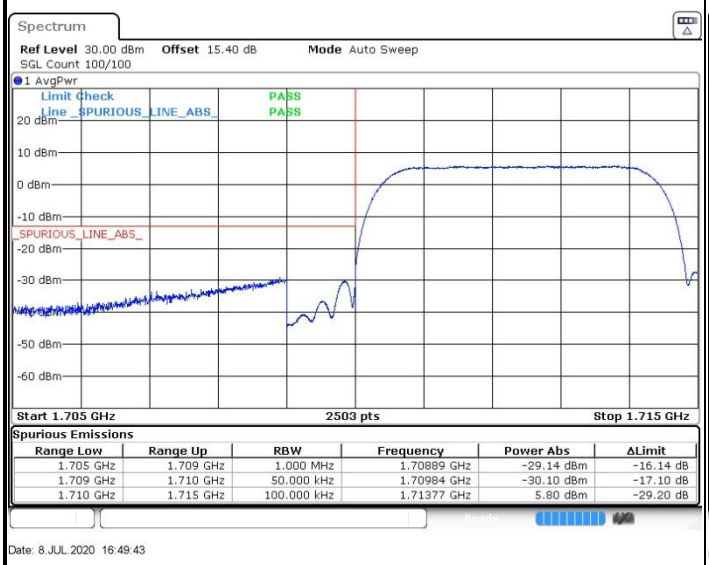
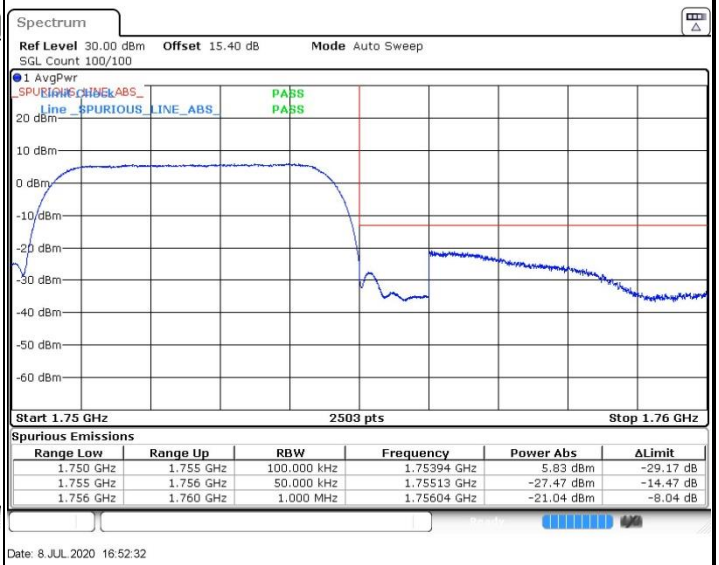
WCDMA Band IV (RMC 12.2Kbps)	
Lowest Band Edge	**Highest Band Edge**

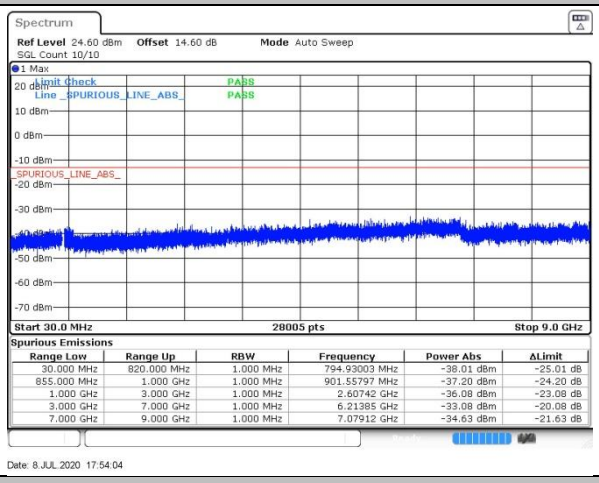




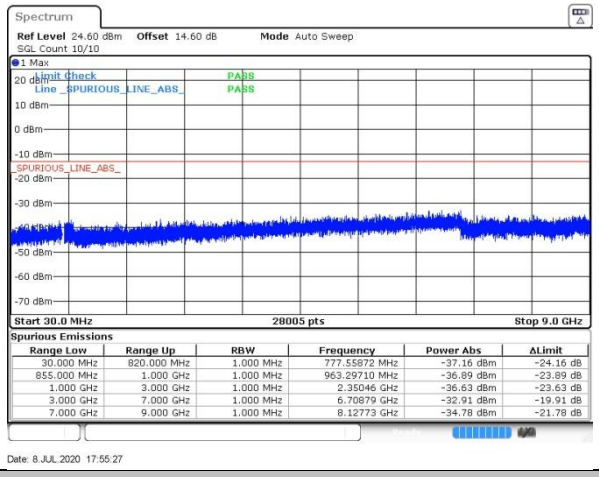
Conducted Spurious Emission

GSM850 (GSM)

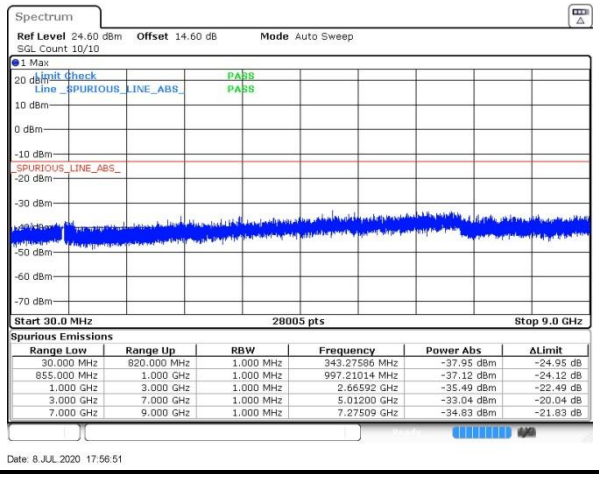
Lowest Channel



Middle Channel

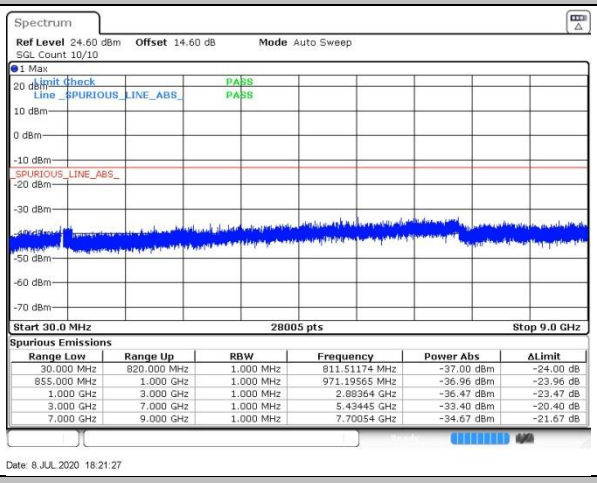


Highest Channel

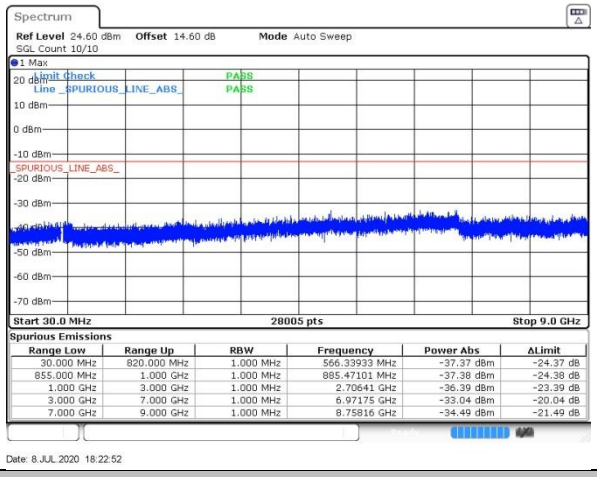


GSM850 (EDGE class 8)

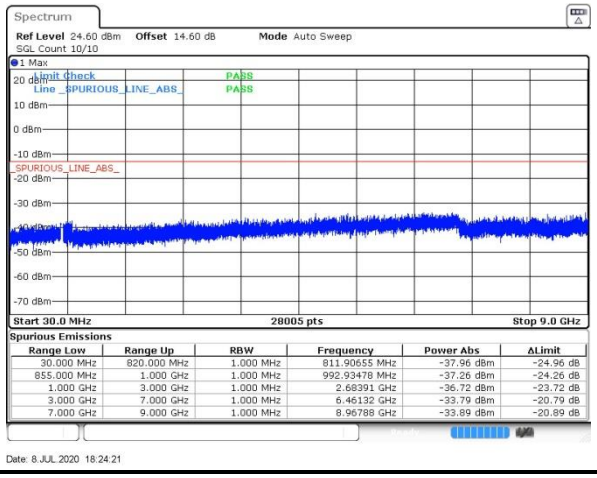
Lowest Channel

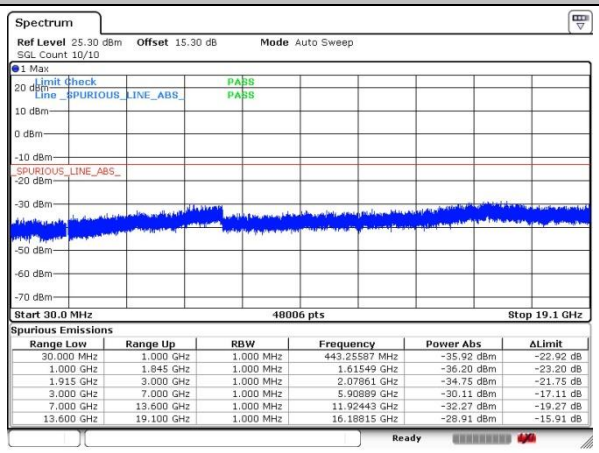
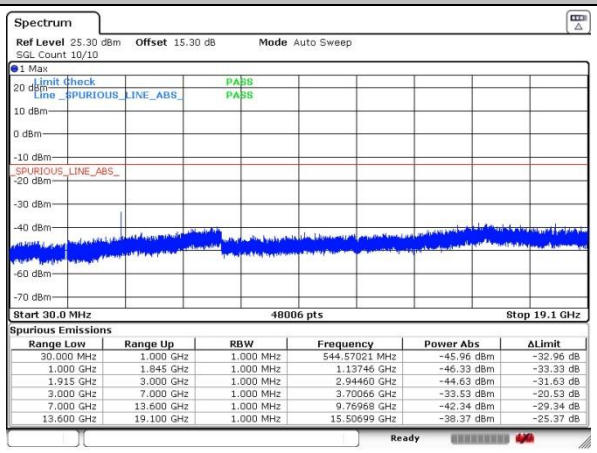
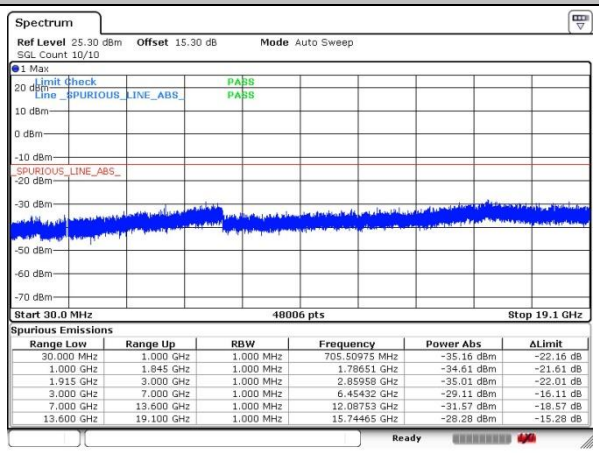
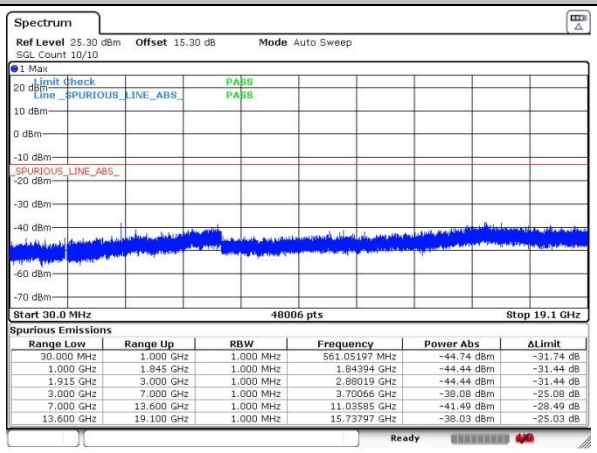
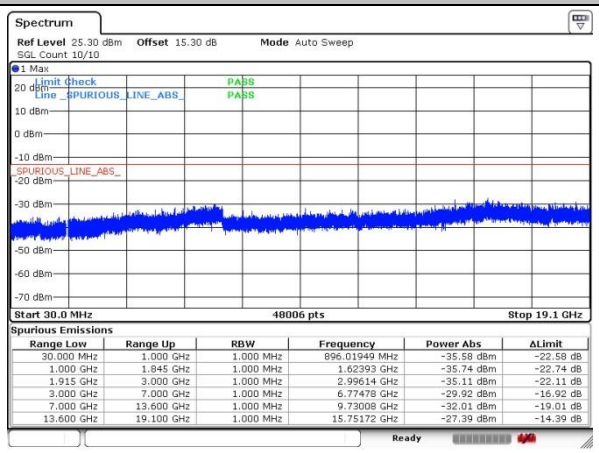
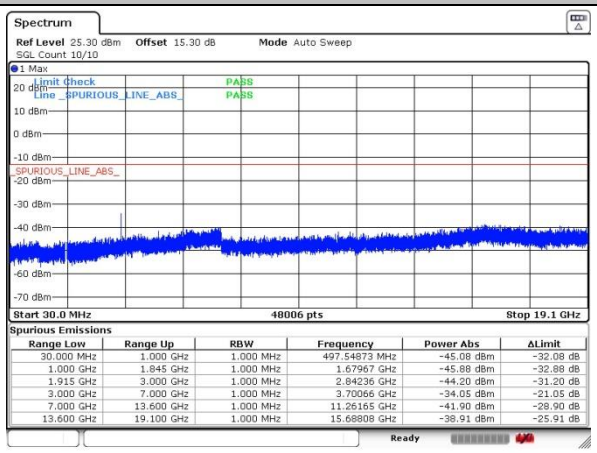


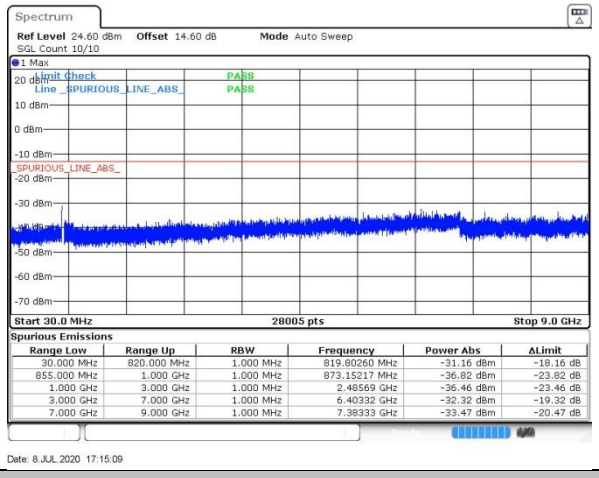
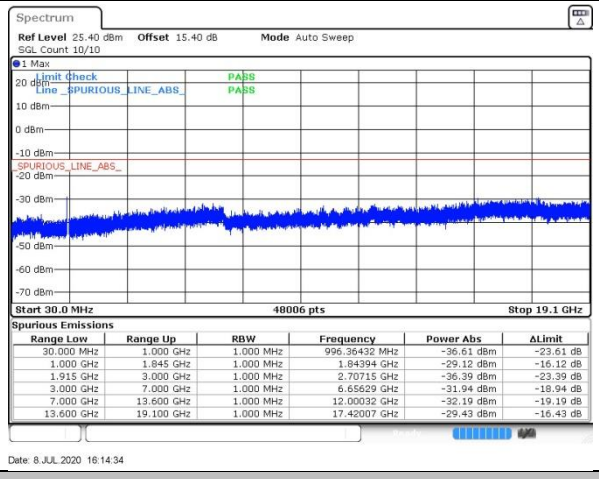
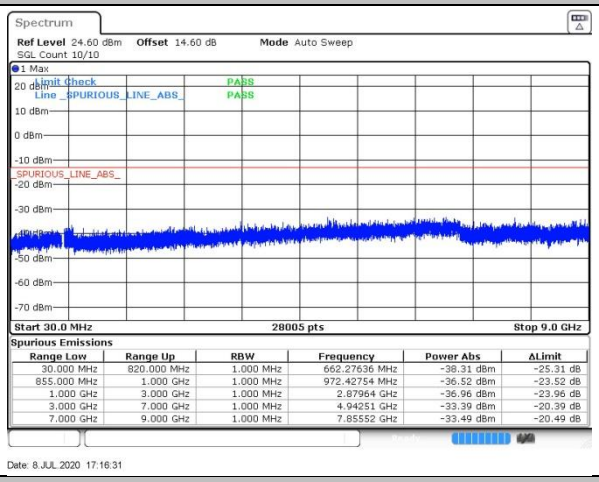
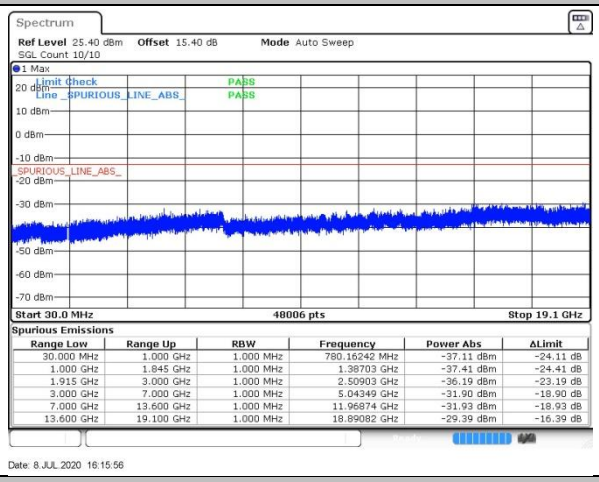
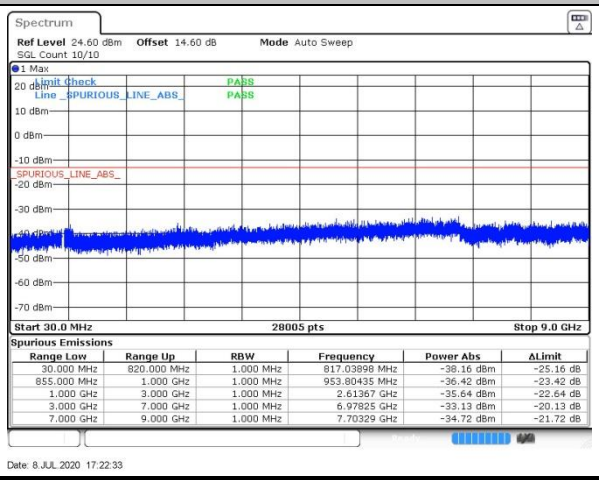
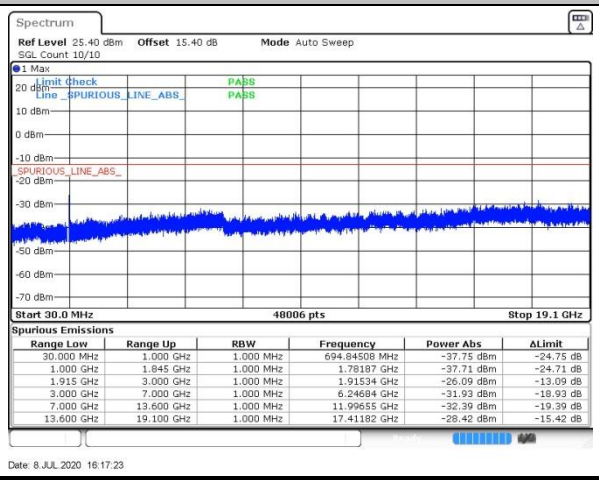
Middle Channel



Highest Channel

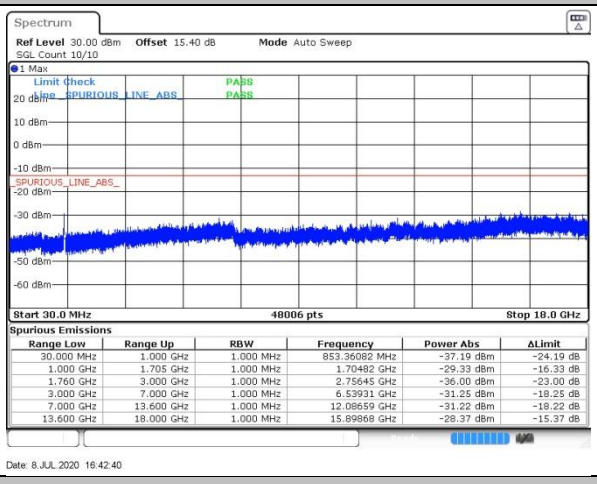


GSM1900 (GSM)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Middle Channel	**Middle Channel**
	
Highest Channel	**Highest Channel**
	

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

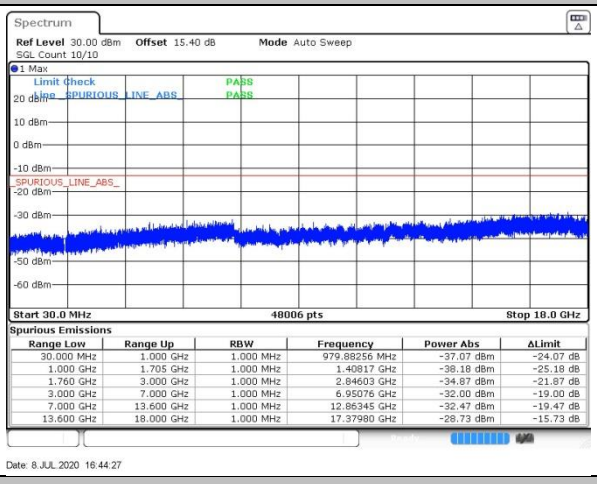


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	853.36082 MHz	-37.19 dBm	-24.19 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-29.33 dBm	-16.33 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.75645 GHz	-36.00 dBm	-23.00 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.53931 GHz	-31.25 dBm	-18.25 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.08659 GHz	-31.22 dBm	-18.22 dB
13.600 GHz	18.000 GHz	1.000 MHz	15.89868 GHz	-28.37 dBm	-15.37 dB

Date: 8.JUL.2020 16:42:40

Middle Channel

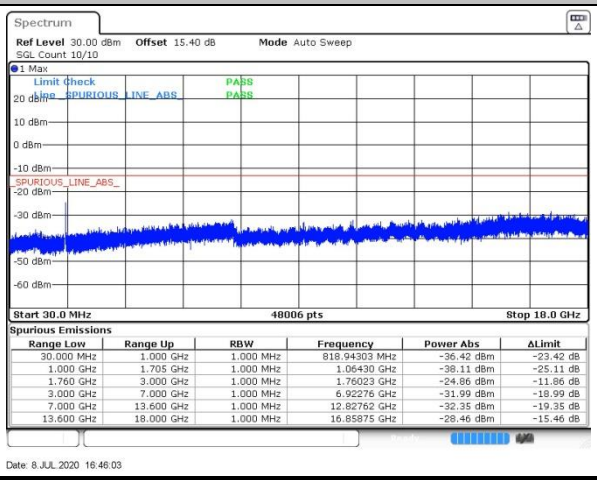


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	979.88256 MHz	-37.07 dBm	-24.07 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.40817 GHz	-38.18 dBm	-25.18 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.84603 GHz	-34.87 dBm	-21.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95076 GHz	-32.00 dBm	-19.00 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.86345 GHz	-32.47 dBm	-19.47 dB
13.600 GHz	18.000 GHz	1.000 MHz	17.37980 GHz	-28.73 dBm	-15.73 dB

Date: 8.JUL.2020 16:44:27

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	818.94303 MHz	-36.42 dBm	-23.42 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.06430 GHz	-38.11 dBm	-25.11 dB
1.760 GHz	3.000 GHz	1.000 MHz	1.76023 GHz	-24.86 dBm	-11.86 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92276 GHz	-31.99 dBm	-18.99 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.82762 GHz	-32.35 dBm	-19.35 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.85875 GHz	-28.46 dBm	-15.46 dB

Date: 8.JUL.2020 16:46:03

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0120	0.0251	PASS
40	Normal Voltage	0.0072	0.0239	
30	Normal Voltage	0.0132	0.0084	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0167	0.0167	
0	Normal Voltage	0.0072	0.0012	
-10	Normal Voltage	0.0203	0.0227	
-20	Normal Voltage	0.0227	0.0060	
-30	Normal Voltage	0.0143	0.0108	
20	Maximum Voltage	0.0096	0.0275	
20	Normal Voltage	0.0120	0.0203	
20	Battery End Point	0.0191	0.0036	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0011	0.0181	PASS
40	Normal Voltage	0.0005	0.0133	
30	Normal Voltage	0.0037	0.0170	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0133	0.0106	
0	Normal Voltage	0.0106	0.0149	
-10	Normal Voltage	0.0090	0.0170	
-20	Normal Voltage	0.0027	0.0122	
-30	Normal Voltage	0.0000	0.0117	
20	Maximum Voltage	0.0069	0.0117	
20	Normal Voltage	0.0016	0.0138	
20	Battery End Point	0.0128	0.0027	

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0120	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0167	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0131	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0299	
20	Normal Voltage	0.0036	
20	Battery End Point	0.0143	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0074	
30	Normal Voltage	0.0064	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0000	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0061	PASS
40	Normal Voltage	0.0171	
30	Normal Voltage	0.0110	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0183	
0	Normal Voltage	0.0195	
-10	Normal Voltage	0.0183	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0158	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0207	

Note:

1. Normal Voltage = 3.8V ; 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

Top Antenna:

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	-63.49	-13	-50.49	-70.46	1.58	10.70	H
	2510	-50.65	-13	-37.65	-58.90	2.102	12.50	H
	3345.6	-58.20	-13	-45.20	-67.09	2.856	13.90	H
	4182	-46.93	-13	-33.93	-55.39	2.689	13.30	H
	1672.8	-63.84	-13	-50.84	-70.81	1.58	10.70	V
	2510	-53.15	-13	-40.15	-61.40	2.10	12.50	V
	3345.6	-58.35	-13	-45.35	-67.24	2.86	13.90	V
	4182	-46.67	-13	-33.67	-55.13	2.69	13.30	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	1675	-63.54	-13	-50.54	-70.51	1.58	10.70	H
	2510	-54.42	-13	-41.42	-62.67	2.102	12.50	H
	3345	-57.02	-13	-44.02	-65.91	2.856	13.90	H
	4180	-47.91	-13	-34.91	-56.37	2.689	13.30	H
	1760	-58.14	-13	-45.14	-65.11	1.58	10.70	V
	2510	-55.62	-13	-42.62	-63.87	2.10	12.50	V
	3345.6	-56.92	-13	-43.92	-65.81	2.86	13.90	V
	4180	-47.84	-13	-34.84	-56.30	2.69	13.30	V

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

GSM1900 (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	3759	-50.15	-13	-37.15	-62.41	2.64	14.90	H
	5640	-41.08	-13	-28.08	-52.94	2.94	14.80	H
	7521	-41.48	-13	-28.48	-51.25	3.39	13.16	H
	3759	-50.54	-13	-37.54	-62.80	2.64	14.90	V
	5640	-42.02	-13	-29.02	-53.88	2.94	14.80	V
	7521	-42.21	-13	-29.21	-51.98	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3759	-50.70	-13	-37.70	-62.96	2.64	14.90	H
	5640	-43.69	-13	-30.69	-55.55	2.94	14.80	H
	7521	-41.67	-13	-28.67	-51.44	3.39	13.16	H
	3759	-50.32	-13	-37.32	-62.58	2.64	14.90	V
	5640	-44.88	-13	-31.88	-56.74	2.94	14.80	V
	7521	-42.02	-13	-29.02	-51.79	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	1675	-62.93	-13	-49.93	-69.90	1.58	10.70	H
	2509.2	-58.45	-13	-45.45	-66.70	2.102	12.50	H
	3345.6	-56.65	-13	-43.65	-65.54	2.856	13.90	H
	1675	-63.23	-13	-50.23	-70.20	1.58	10.70	V
	2510	-58.35	-13	-45.35	-66.60	2.10	12.50	V
	3345	-57.14	-13	-44.14	-66.03	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3759	-50.36	-13	-37.36	-62.62	2.64	14.90	H
	5640	-44.81	-13	-31.81	-56.67	2.94	14.80	H
	7521	-41.46	-13	-28.46	-51.23	3.39	13.16	H
	3759	-49.98	-13	-36.98	-62.24	2.64	14.90	V
	5640	-45.17	-13	-32.17	-57.03	2.94	14.80	V
	7521	-42.13	-13	-29.13	-51.90	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465	-52.93	-13	-39.93	-65.19	2.64	14.90	H
	5197.8	-45.68	-13	-32.68	-57.54	2.94	14.80	H
	6930	-43.27	-13	-30.27	-53.04	3.39	13.16	H
	3465	-52.88	-13	-39.88	-65.14	2.64	14.90	V
	5197.8	-46.39	-13	-33.39	-58.25	2.94	14.80	V
	6930	-43.53	-13	-30.53	-53.30	3.39	13.16	V

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