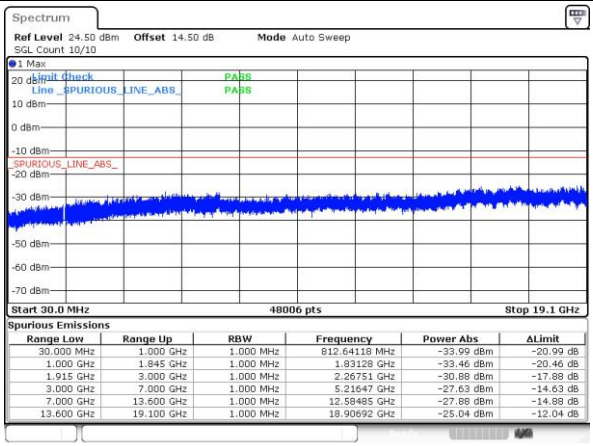
GSM1900 (GSM)

Lowest Channel

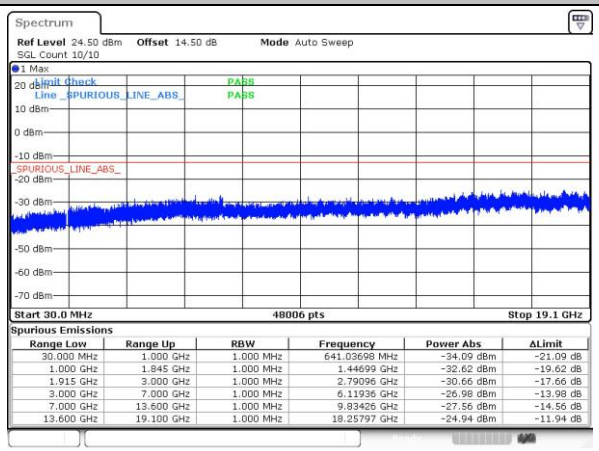


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	812.64118 MHz	-33.99 dBm	-20.99 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.83128 GHz	-33.46 dBm	-20.46 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.26751 GHz	-30.88 dBm	-17.88 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.21647 GHz	-27.63 dBm	-14.63 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.58485 GHz	-27.88 dBm	-14.88 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.90692 GHz	-25.04 dBm	-12.04 dB

Date: 29.JAN.2019 15:30:09

Middle Channel

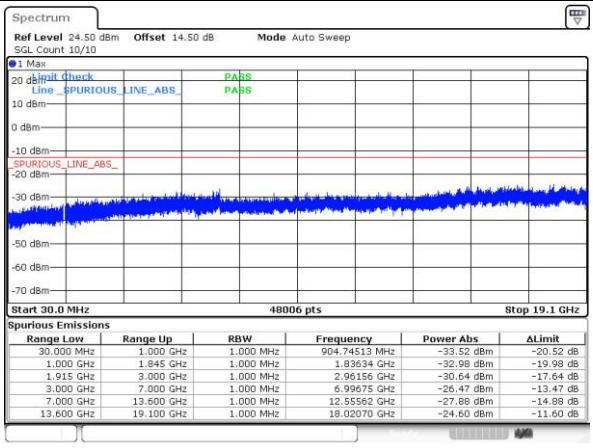


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	641.03698 MHz	-34.09 dBm	-21.09 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.44699 GHz	-32.62 dBm	-19.62 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.79096 GHz	-30.66 dBm	-17.66 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.11936 GHz	-26.98 dBm	-13.98 dB
7.000 GHz	13.600 GHz	1.000 MHz	9.83426 GHz	-27.56 dBm	-14.56 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.25797 GHz	-24.94 dBm	-11.94 dB

Date: 29.JAN.2019 15:31:54

Highest Channel



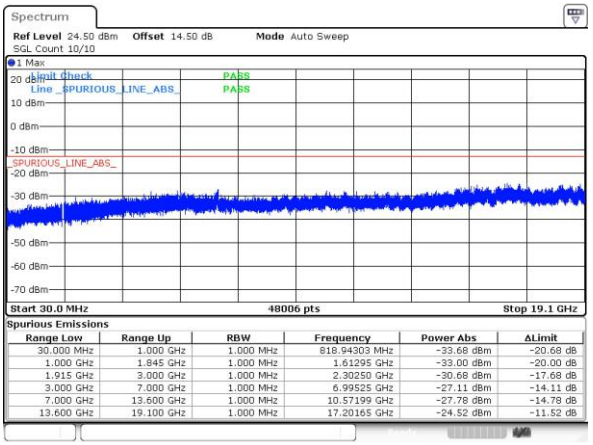
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.74513 MHz	-33.52 dBm	-20.52 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.83634 GHz	-32.98 dBm	-19.98 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.96156 GHz	-30.64 dBm	-17.64 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99675 GHz	-26.47 dBm	-13.47 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.55562 GHz	-27.88 dBm	-14.88 dB
13.600 GHz	19.100 GHz	1.000 MHz	18.02070 GHz	-24.60 dBm	-11.60 dB

Date: 29.JAN.2019 15:35:26

GSM1900 (EDGE class 8)

Lowest Channel

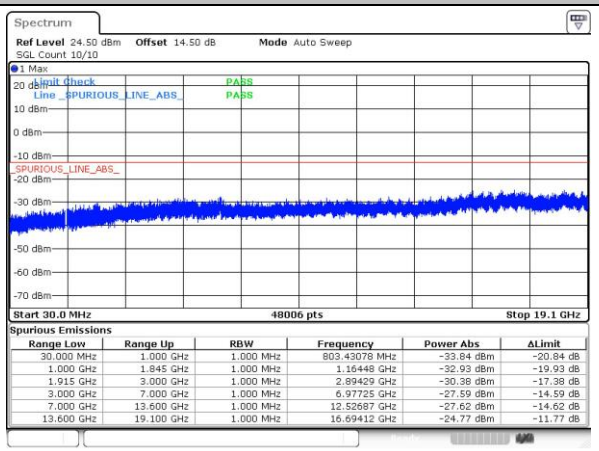


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	818.94303 MHz	-33.68 dBm	-20.68 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.61295 GHz	-33.00 dBm	-20.00 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.30250 GHz	-30.68 dBm	-17.68 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-27.11 dBm	-14.11 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.57199 GHz	-27.78 dBm	-14.78 dB
13.600 GHz	19.100 GHz	1.000 MHz	17.20165 GHz	-24.52 dBm	-11.52 dB

Date: 29.JAN.2019 16:39:21

Middle Channel

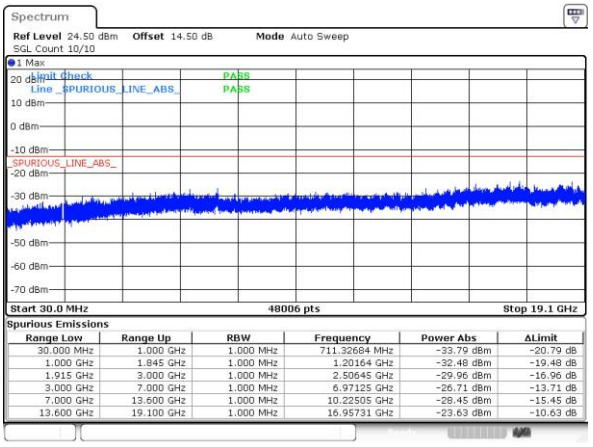


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	803.43078 MHz	-33.84 dBm	-20.84 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.16448 GHz	-32.93 dBm	-19.93 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.89429 GHz	-30.38 dBm	-17.38 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97725 GHz	-27.59 dBm	-14.59 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.52687 GHz	-27.62 dBm	-14.62 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.69412 GHz	-24.77 dBm	-11.77 dB

Date: 29.JAN.2019 16:40:51

Highest Channel



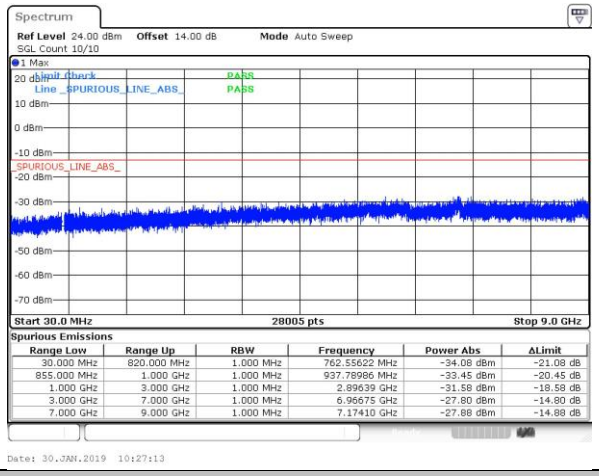
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	711.32684 MHz	-33.79 dBm	-20.79 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.20164 GHz	-32.48 dBm	-19.48 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.50645 GHz	-29.96 dBm	-16.96 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97125 GHz	-26.71 dBm	-13.71 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.22505 GHz	-28.45 dBm	-15.45 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.95731 GHz	-23.63 dBm	-10.63 dB

Date: 29.JAN.2019 16:42:16

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

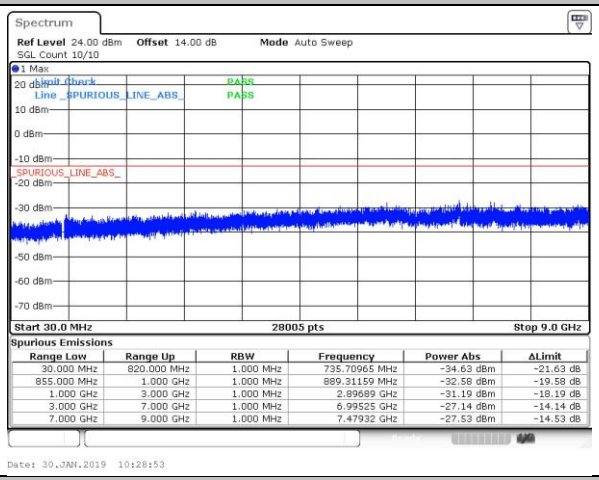


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	762.55622 MHz	-34.08 dBm	-21.08 dB
855.000 MHz	1.000 GHz	1.000 MHz	937.78986 MHz	-33.45 dBm	-20.45 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.89639 GHz	-31.58 dBm	-18.58 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96675 GHz	-27.80 dBm	-14.80 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.17410 GHz	-27.88 dBm	-14.88 dB

Date: 30.JAN.2019 10:27:13

Middle Channel

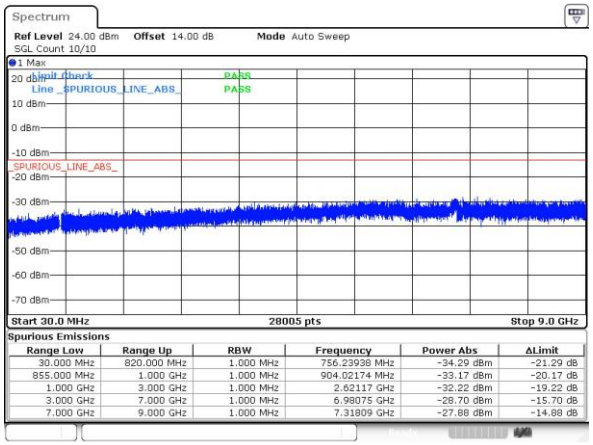


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	735.70965 MHz	-34.63 dBm	-21.63 dB
855.000 MHz	1.000 GHz	1.000 MHz	889.31159 MHz	-32.58 dBm	-19.58 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.89689 GHz	-31.19 dBm	-18.19 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-27.14 dBm	-14.14 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.47932 GHz	-27.53 dBm	-14.53 dB

Date: 30.JAN.2019 10:28:53

Highest Channel



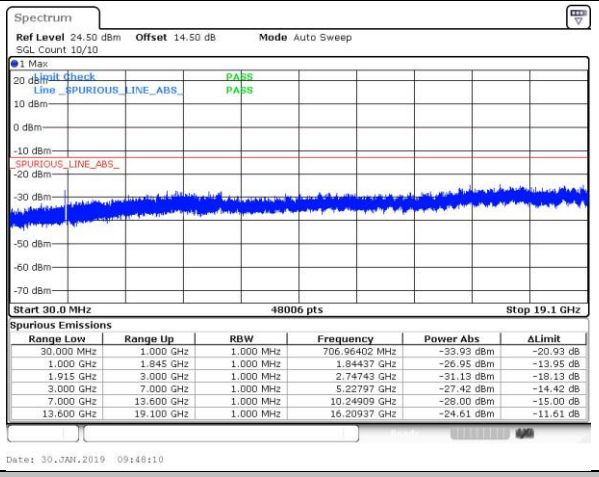
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	820.000 MHz	1.000 MHz	756.23938 MHz	-34.29 dBm	-21.29 dB
855.000 MHz	1.000 GHz	1.000 MHz	904.02174 MHz	-33.17 dBm	-20.17 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.62117 GHz	-32.22 dBm	-19.22 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98075 GHz	-28.70 dBm	-15.70 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.31809 GHz	-27.88 dBm	-14.88 dB

Date: 30.JAN.2019 10:30:19

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

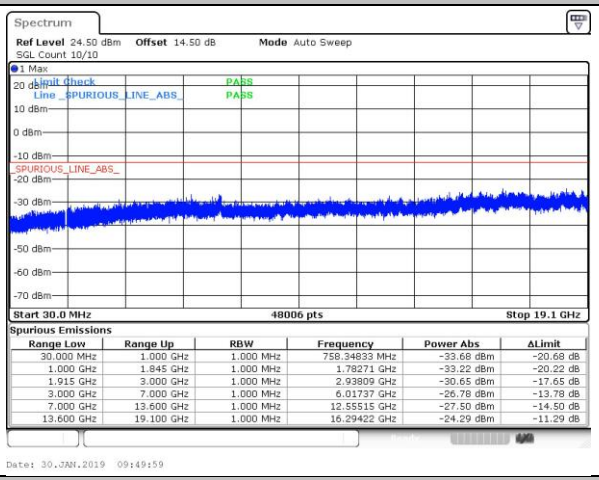


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	706.96402 MHz	-33.93 dBm	-20.93 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.84437 GHz	-26.95 dBm	-13.95 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.74743 GHz	-31.13 dBm	-18.13 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.22797 GHz	-27.42 dBm	-14.42 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.24909 GHz	-28.00 dBm	-15.00 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.20937 GHz	-24.61 dBm	-11.61 dB

Date: 30.JAN.2019 09:48:10

Middle Channel

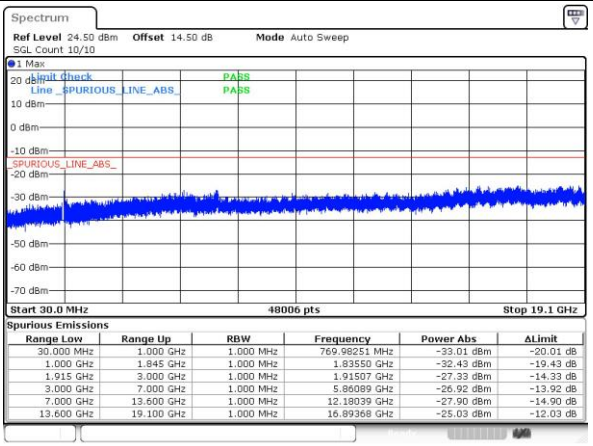


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	758.34833 MHz	-33.68 dBm	-20.68 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.78271 GHz	-33.22 dBm	-20.22 dB
1.915 GHz	3.000 GHz	1.000 MHz	2.93809 GHz	-30.65 dBm	-17.65 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.01737 GHz	-26.78 dBm	-13.78 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.55515 GHz	-27.50 dBm	-14.50 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.29422 GHz	-24.29 dBm	-11.29 dB

Date: 30.JAN.2019 09:49:59

Highest Channel



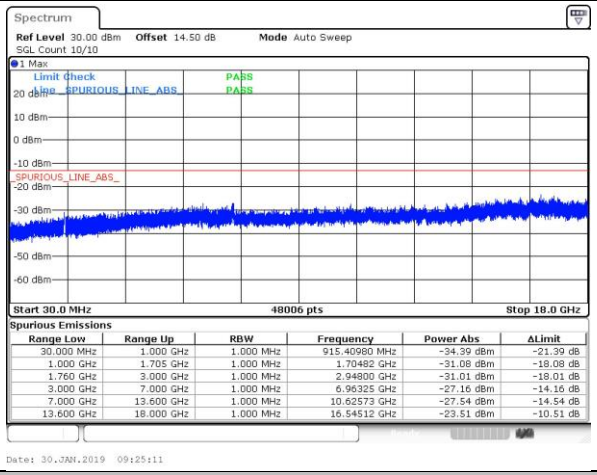
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	769.98251 MHz	-33.01 dBm	-20.01 dB
1.000 GHz	1.845 GHz	1.000 MHz	1.83550 GHz	-32.43 dBm	-19.43 dB
1.915 GHz	3.000 GHz	1.000 MHz	1.91507 GHz	-27.33 dBm	-14.33 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.86089 GHz	-26.92 dBm	-13.92 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.18039 GHz	-27.90 dBm	-14.90 dB
13.600 GHz	19.100 GHz	1.000 MHz	16.89368 GHz	-25.03 dBm	-12.03 dB

Date: 30.JAN.2019 09:51:53

WCDMA Band IV (RMC 12.2Kbps)

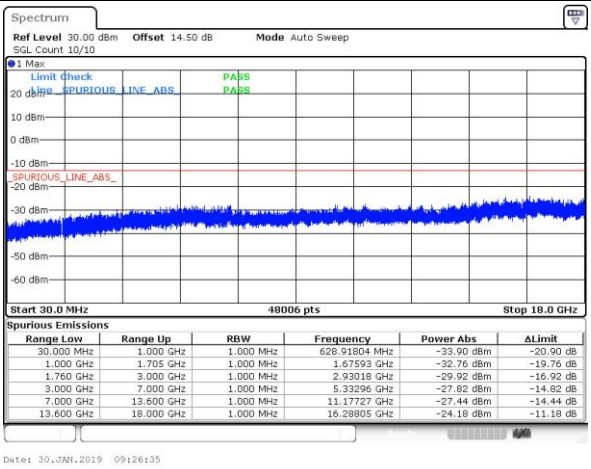
Lowest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.40980 MHz	-34.39 dBm	-21.39 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.70482 GHz	-31.08 dBm	-18.08 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.94800 GHz	-31.01 dBm	-18.01 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96325 GHz	-27.16 dBm	-14.16 dB
7.000 GHz	13.600 GHz	1.000 MHz	10.62573 GHz	-27.54 dBm	-14.54 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.54512 GHz	-23.51 dBm	-10.51 dB

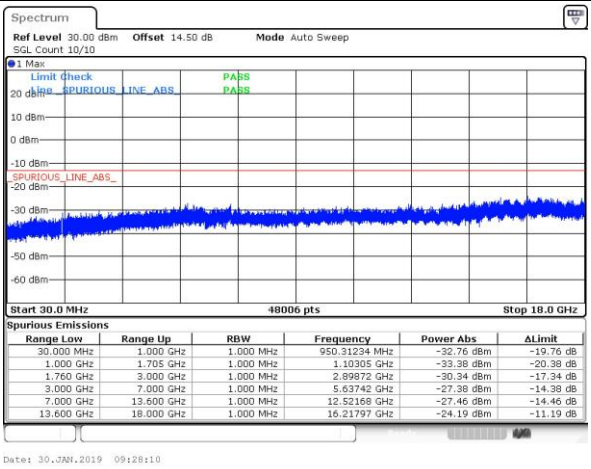
Middle Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	628.91804 MHz	-33.90 dBm	-20.90 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.67593 GHz	-32.76 dBm	-19.76 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.93018 GHz	-29.92 dBm	-16.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.33296 GHz	-27.82 dBm	-14.82 dB
7.000 GHz	13.600 GHz	1.000 MHz	11.17727 GHz	-27.44 dBm	-14.44 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.28805 GHz	-24.18 dBm	-11.18 dB

Highest Channel



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	950.31234 MHz	-32.76 dBm	-19.76 dB
1.000 GHz	1.705 GHz	1.000 MHz	1.10305 GHz	-33.38 dBm	-20.38 dB
1.760 GHz	3.000 GHz	1.000 MHz	2.89872 GHz	-30.34 dBm	-17.34 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.63742 GHz	-27.38 dBm	-14.38 dB
7.000 GHz	13.600 GHz	1.000 MHz	12.52168 GHz	-27.46 dBm	-14.46 dB
13.600 GHz	18.000 GHz	1.000 MHz	16.21797 GHz	-24.19 dBm	-11.19 dB

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	0.0013	0.0033	PASS
40	Normal Voltage	0.0004	0.0008	
30	Normal Voltage	0.0006	0.0036	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0010	0.0039	
0	Normal Voltage	0.0030	0.0029	
-10	Normal Voltage	0.0007	0.0044	
-20	Normal Voltage	0.0024	0.0031	
-30	Normal Voltage	0.0005	0.0006	
20	Maximum Voltage	0.0017	0.0031	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0016	0.0020	

Note: Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 V

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0012	0.0014	PASS
40	Normal Voltage	0.0029	0.0004	
30	Normal Voltage	0.0004	0.0019	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0003	0.0005	
0	Normal Voltage	0.0010	0.0015	
-10	Normal Voltage	0.0001	0.0013	
-20	Normal Voltage	0.0004	0.0032	
-30	Normal Voltage	0.0002	0.0026	
20	Maximum Voltage	0.0006	0.0009	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0007	0.0004	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 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 V (RMC 12.2KbpsRMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0038	

Note: Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 V

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 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	0.0014	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 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

GSM850 (GSM)									
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	-71.42	-13	-58.42	-73.13	-75.79	2.88	9.40	H
	2509.2	-61.60	-13	-48.60	-67.66	-66.55	3.50	10.60	H
	3345.6	-67.69	-13	-54.69	-75.69	-73.51	4.63	12.60	H
	1672.8	-71.36	-13	-58.36	-73.20	-75.73	2.88	9.40	V
	2509.2	-58.82	-13	-45.82	-64.77	-63.77	3.50	10.60	V
	3345.6	-67.73	-13	-54.73	-75.76	-73.55	4.63	12.60	V

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

GSM850 (EDGE class 8)									
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	-71.58	-13	-58.58	-73.29	-75.95	2.88	9.40	H
	2509.2	-68.20	-13	-55.20	-74.26	-73.15	3.50	10.60	H
	3345.6	-67.88	-13	-54.88	-75.88	-73.70	4.63	12.60	H
	1672.8	-71.42	-13	-58.42	-73.26	-75.79	2.88	9.40	V
	2509.2	-66.41	-13	-53.41	-72.36	-71.36	3.50	10.60	V
	3345.6	-67.89	-13	-54.89	-75.92	-73.71	4.63	12.60	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760.00	-60.64	-13	-47.64	-74.26	-68.24	5.00	12.60	H
	5640.00	-60.36	-13	-47.36	-76.96	-66.16	7.30	13.10	H
	7520.00	-58.76	-13	-45.76	-78.74	-62.33	7.73	11.30	H
	3760.00	-60.34	-13	-47.34	-74.67	-67.94	5.00	12.60	V
	5640.00	-58.49	-13	-45.49	-75.02	-64.29	7.30	13.10	V
	7520.00	-59.23	-13	-46.23	-78.87	-62.80	7.73	11.30	V

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

GSM1900 (EDGE class 8)									
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	3760.00	-59.68	-13	-46.68	-73.30	-67.28	5.00	12.60	H
	5640.00	-61.95	-13	-48.95	-78.55	-67.75	7.30	13.10	H
	7520.00	-58.97	-13	-45.97	-78.95	-62.54	7.73	11.30	H
	3760.00	-61.82	-13	-48.82	-76.15	-69.42	5.00	12.60	V
	5640.00	-60.49	-13	-47.49	-77.02	-66.29	7.30	13.10	V
	7520.00	-59.41	-13	-46.41	-79.05	-62.98	7.73	11.30	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672.8	-71.61	-13	-58.61	-73.32	-75.98	2.88	9.40	H
	2509.2	-72.80	-13	-59.80	-78.86	-77.75	3.50	10.60	H
	3345.6	-67.93	-13	-54.93	-75.93	-73.75	4.63	12.60	H
	1672.8	-71.30	-13	-58.30	-73.14	-75.67	2.88	9.40	V
	2509.2	-72.79	-13	-59.79	-78.74	-77.74	3.50	10.60	V
	3345.6	-67.93	-13	-54.93	-75.96	-73.75	4.63	12.60	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760.00	-56.16	-13	-43.16	-69.78	-63.76	5.00	12.60	H
	5640.00	-61.82	-13	-48.82	-78.42	-67.62	7.30	13.10	H
	7520.00	-59.02	-13	-46.02	-79.00	-62.59	7.73	11.30	H
	3760.00	-55.05	-13	-42.05	-69.38	-62.65	5.00	12.60	V
	5640.00	-62.31	-13	-49.31	-78.84	-68.11	7.30	13.10	V
	7520.00	-59.31	-13	-46.31	-78.95	-62.88	7.73	11.30	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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465.2	-53.27	-13	-40.27	-66.97	-61.24	4.63	12.60	H
	5197.8	-59.20	-13	-46.20	-77.13	-65.65	6.25	12.70	H
	6930.4	-58.93	-13	-45.93	-78.55	-63.70	8.23	13.00	H
	3465.2	-58.99	-13	-45.99	-70.40	-66.96	4.63	12.60	V
	5197.8	-64.22	-13	-51.22	-77.83	-70.67	6.25	12.70	V
	6930.4	-59.64	-13	-46.64	-78.76	-64.41	8.23	13.00	V

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