

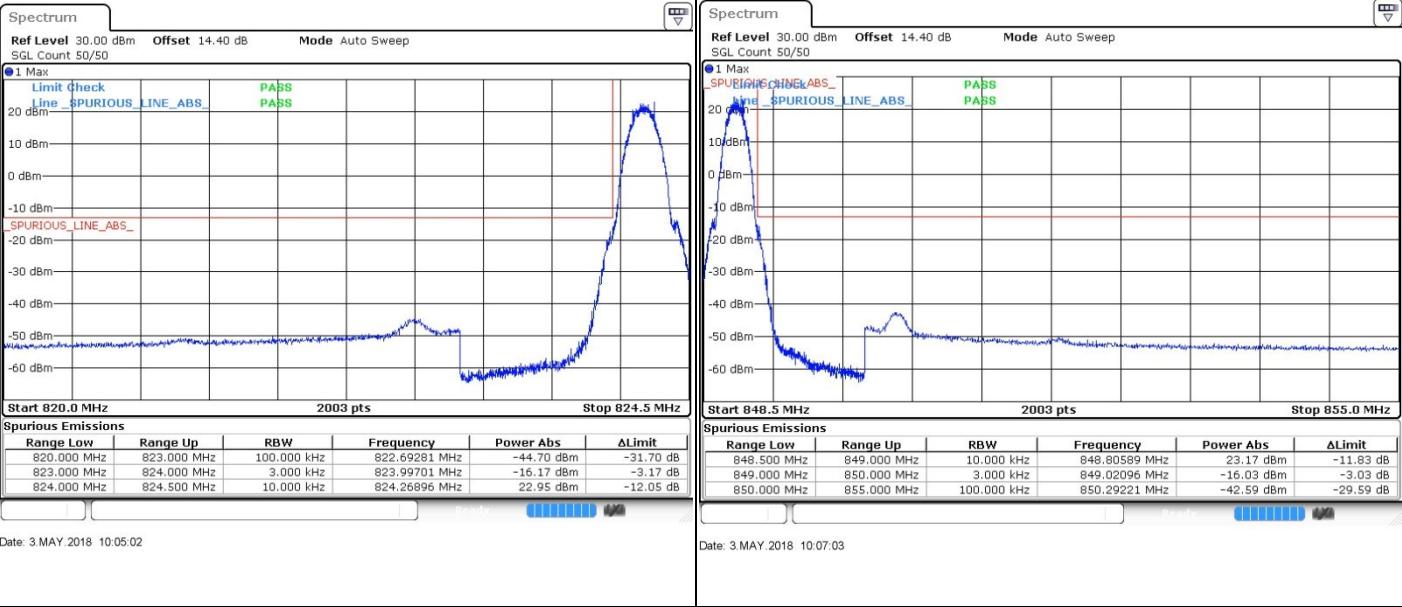


Conducted Band Edge

GSM850 (GSM)

Lowest Band Edge

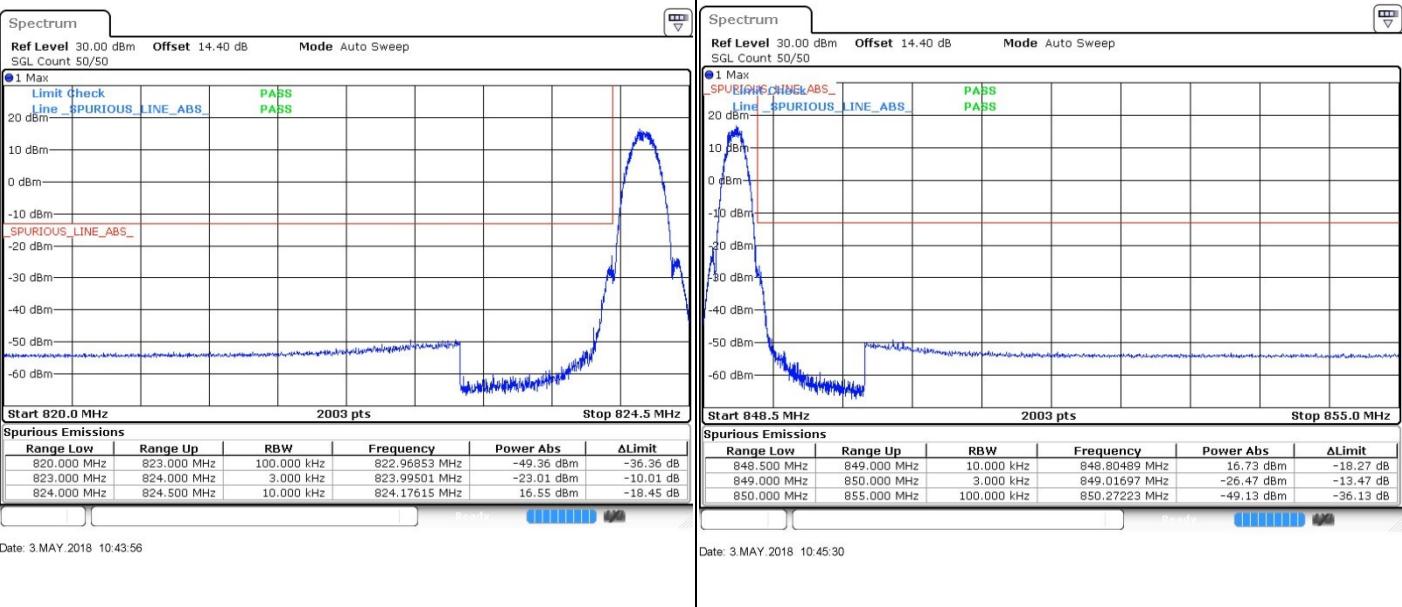
Highest Band Edge

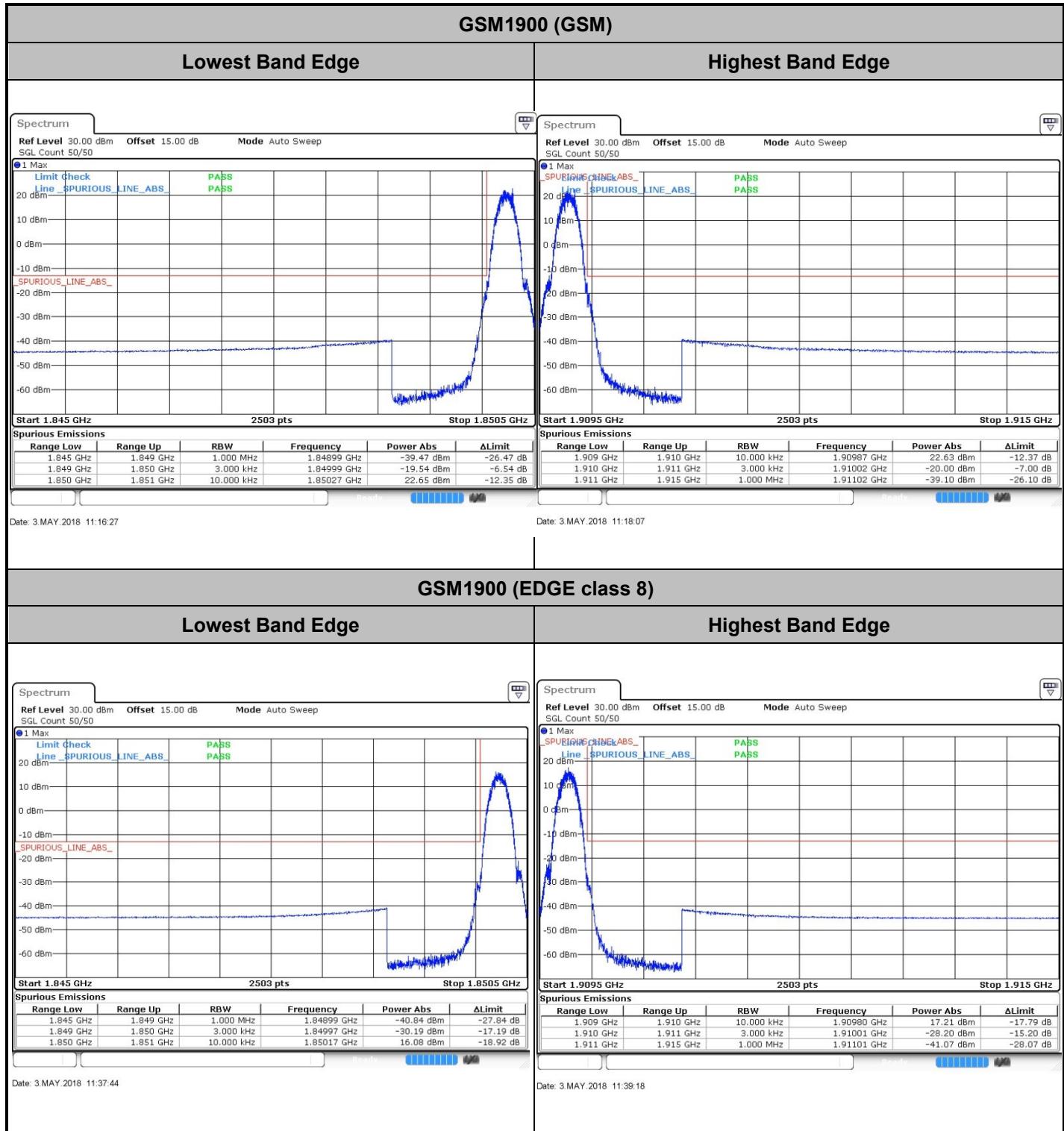


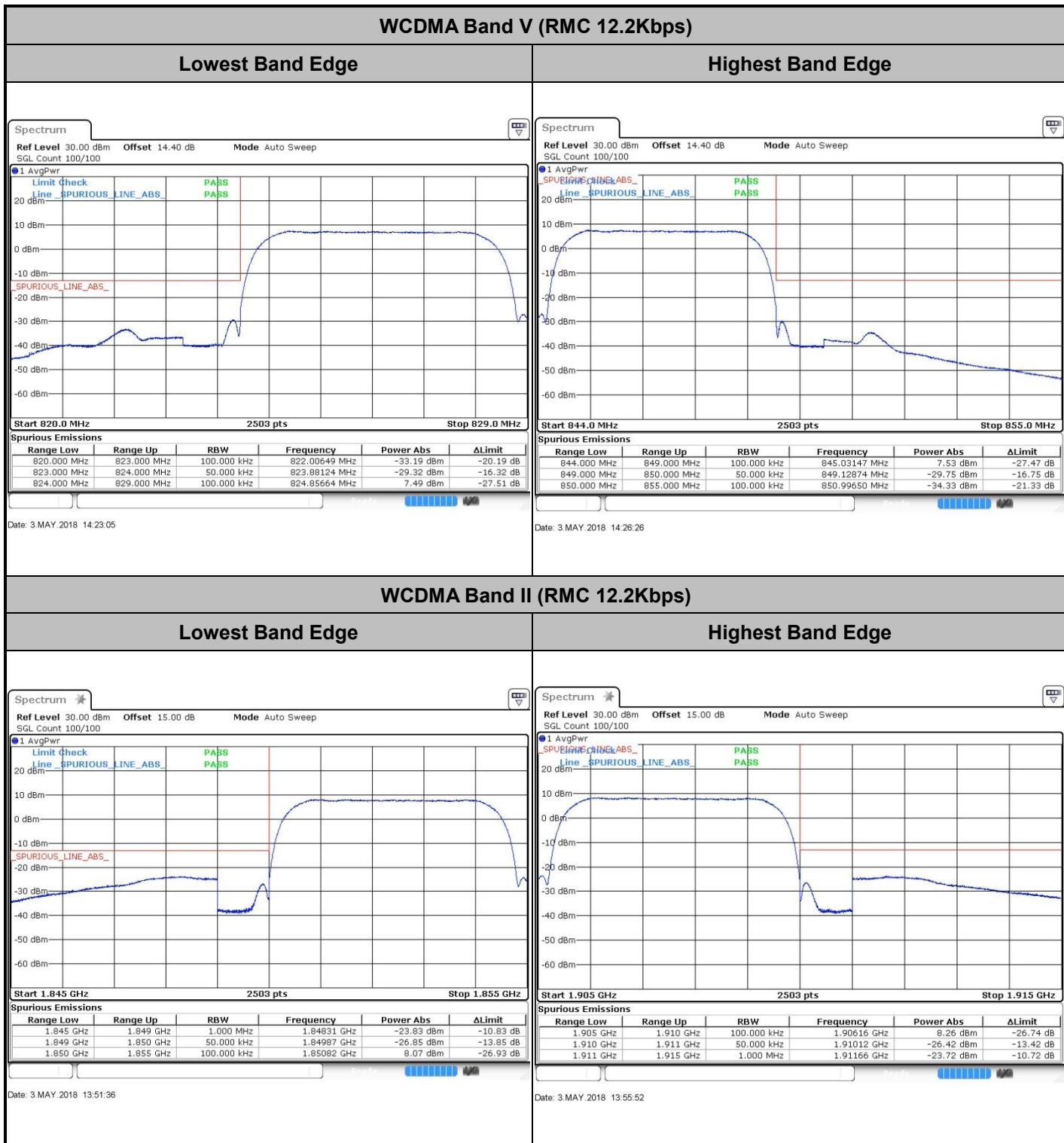
GSM850 (EDGE class 8)

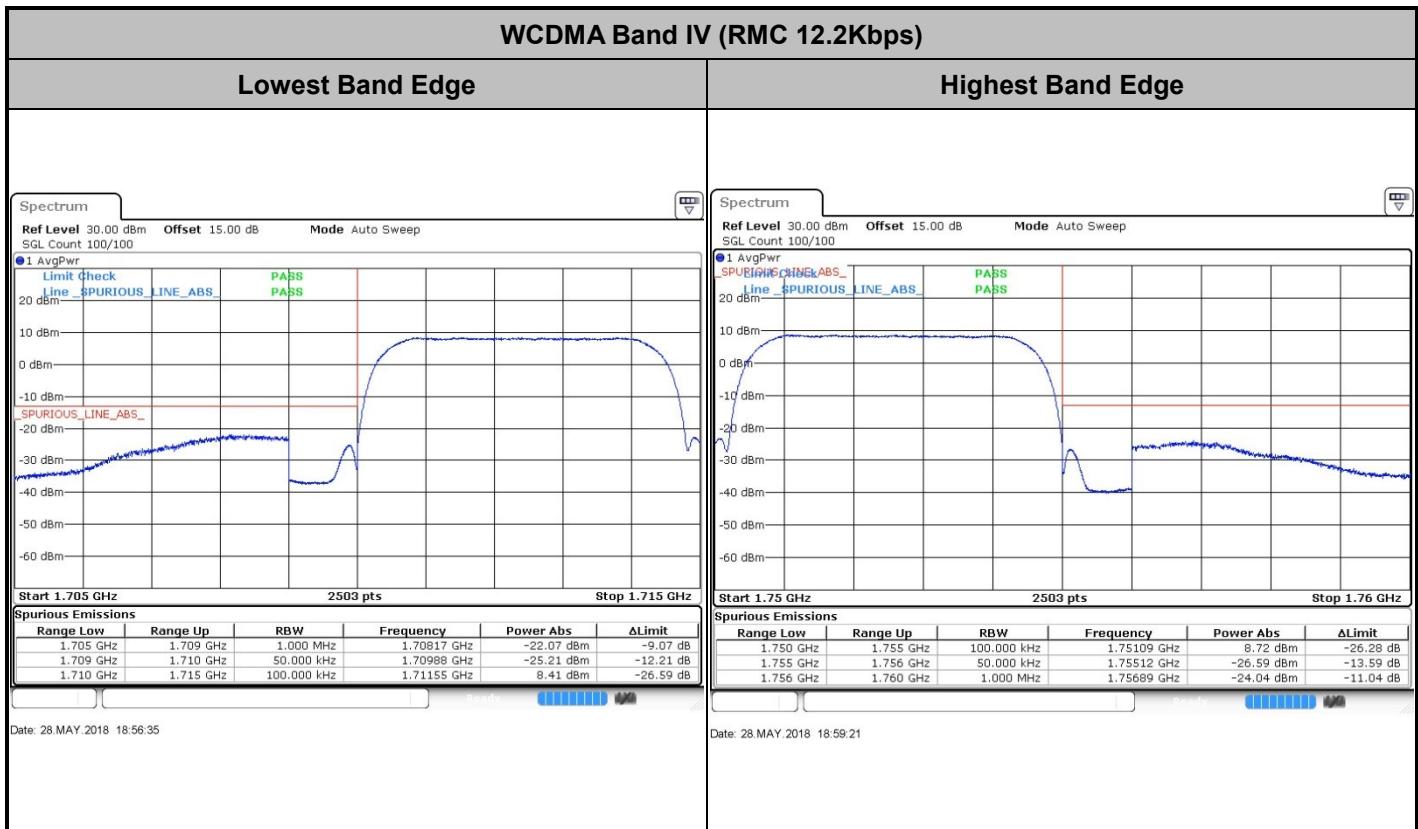
Lowest Band Edge

Highest Band Edge



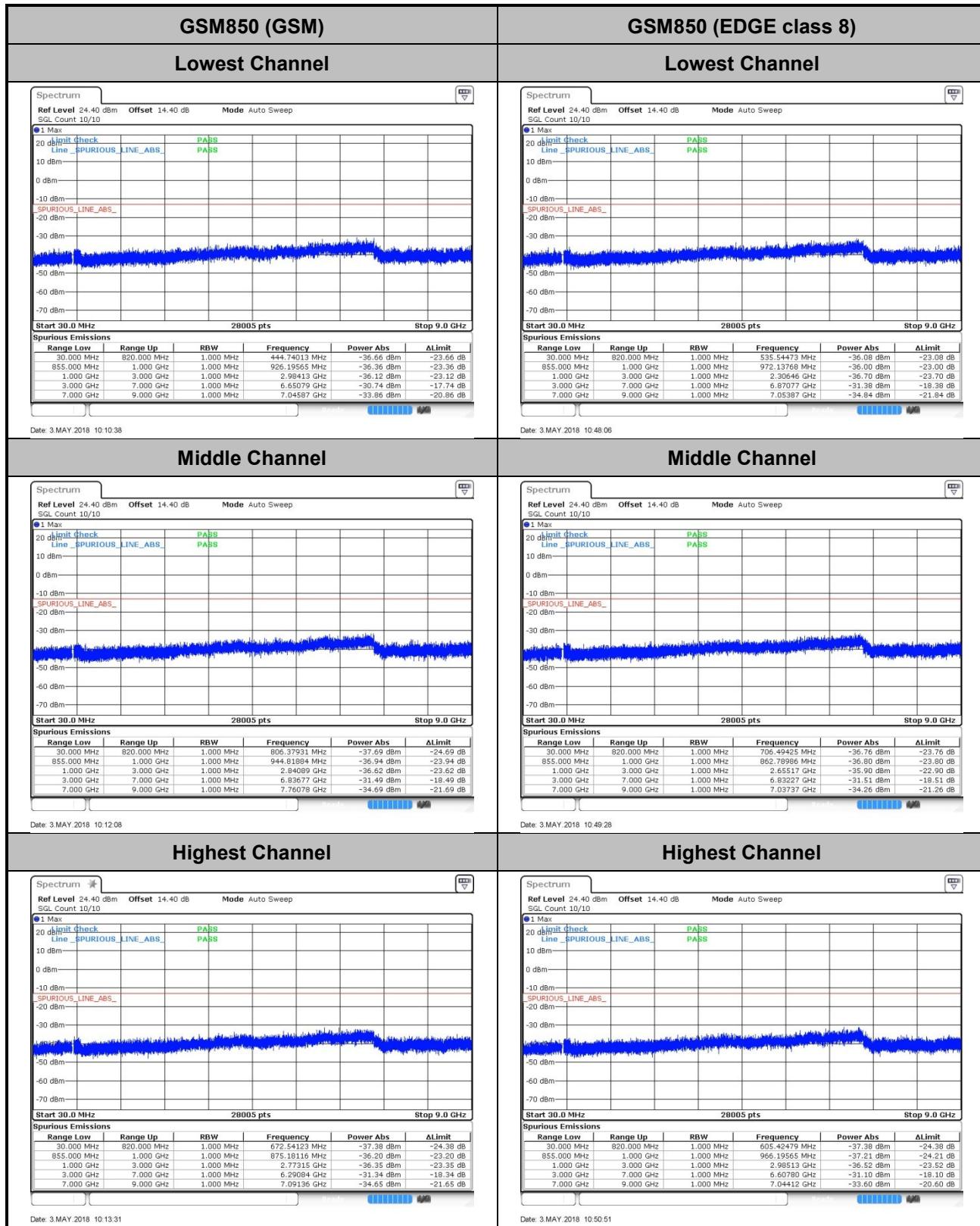


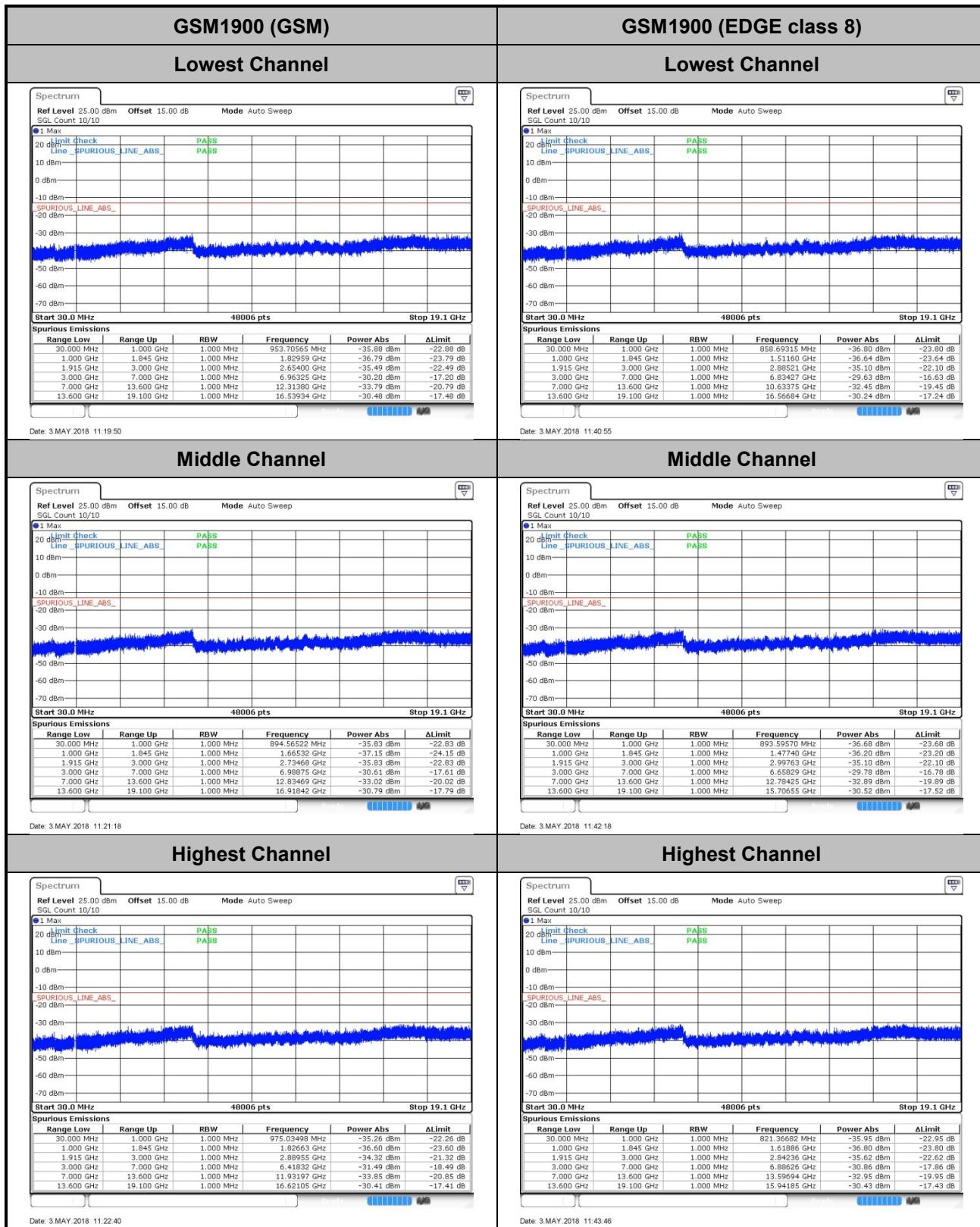


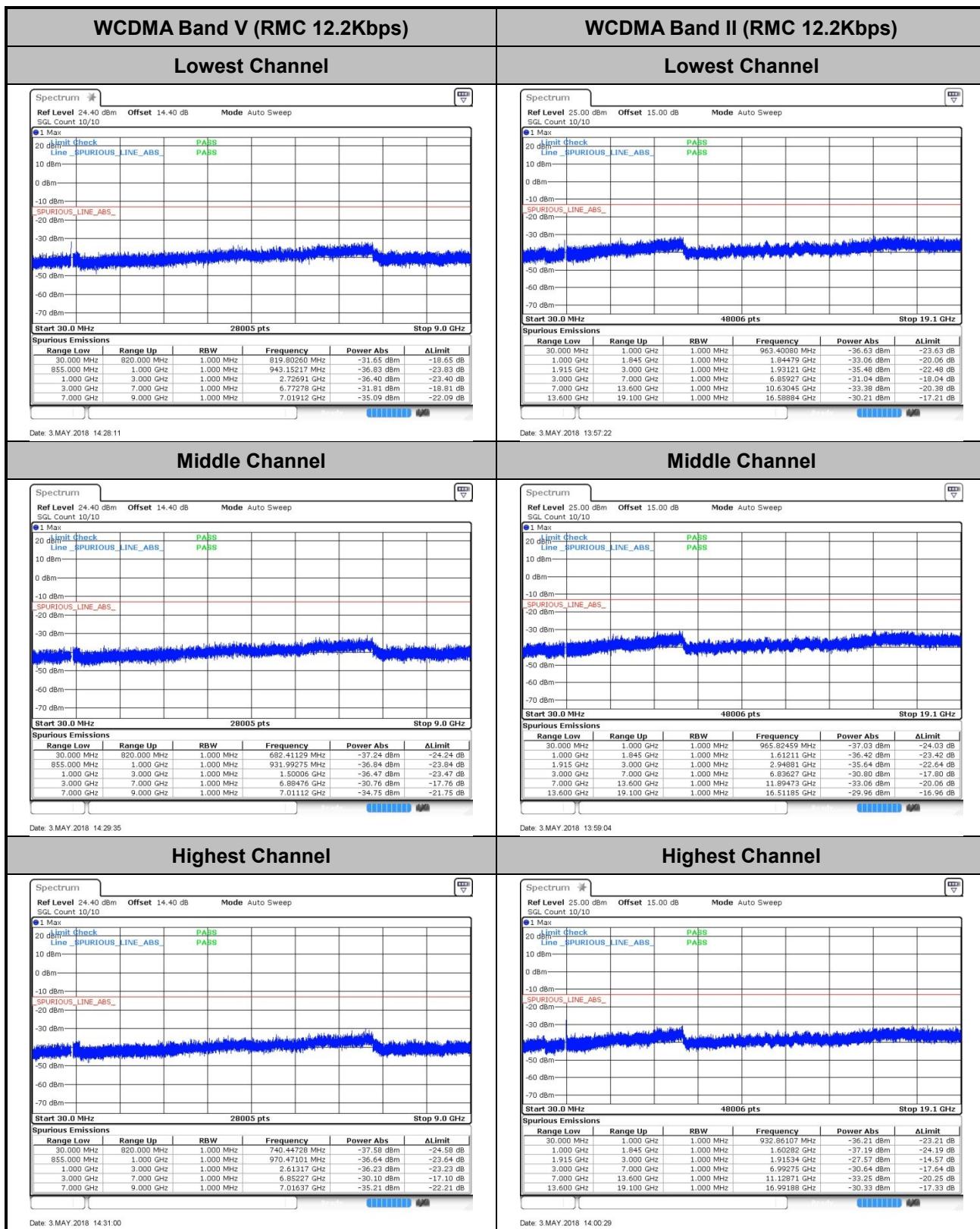


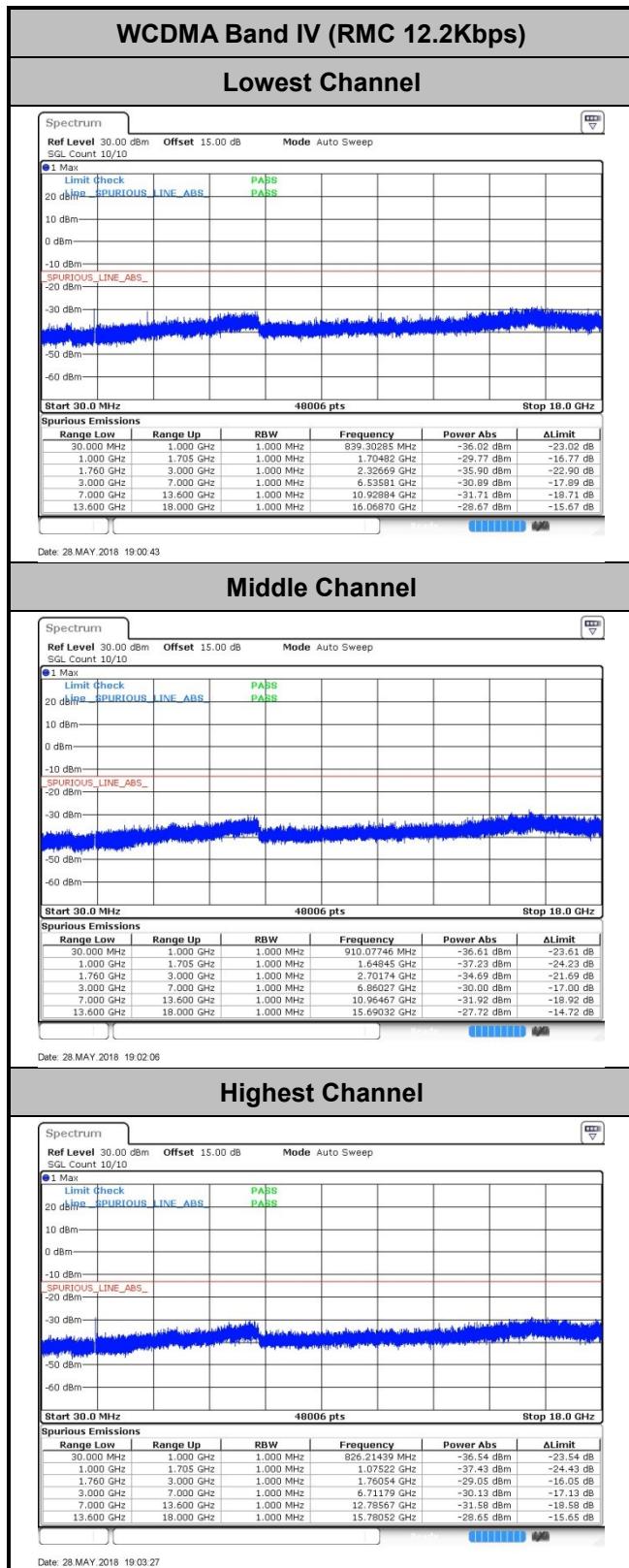


Conducted Spurious Emission











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	0.0048	0.0442	PASS
40	Normal Voltage	0.0167	0.0335	
30	Normal Voltage	0.0179	0.0072	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0287	0.0418	
0	Normal Voltage	0.0155	0.0024	
-10	Normal Voltage	0.0060	0.0275	
-20	Normal Voltage	0.0275	0.0371	
-30	Normal Voltage	0.0036	0.0048	
20	Maximum Voltage	0.0263	0.0395	
20	Normal Voltage	0.0036	0.0239	
20	Battery End Point	0.0132	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	0.0037	0.0059	PASS
40	Normal Voltage	0.0122	0.0027	
30	Normal Voltage	0.0096	0.0181	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0064	0.0149	
0	Normal Voltage	0.0101	0.0122	
-10	Normal Voltage	0.0165	0.0016	
-20	Normal Voltage	0.0059	0.0144	
-30	Normal Voltage	0.0016	0.0005	
20	Maximum Voltage	0.0032	0.0160	
20	Normal Voltage	0.0096	0.0037	
20	Battery End Point	0.0048	0.0016	

Note:

1. Normal Voltage =3.85V. ; 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.



Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0251	PASS
40	Normal Voltage	0.0203	
30	Normal Voltage	0.0143	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0132	
0	Normal Voltage	0.0096	
-10	Normal Voltage	0.0263	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0191	
20	Maximum Voltage	0.0108	
20	Normal Voltage	0.0120	
20	Battery End Point	0.0024	

Note: Normal Voltage =3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0133	PASS
40	Normal Voltage	0.0074	
30	Normal Voltage	0.0032	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0112	
0	Normal Voltage	0.0101	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0080	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0122	
20	Normal Voltage	0.0043	
20	Battery End Point	0.0090	

Note:

1. Normal Voltage =3.85V. ; 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.



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0110	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0075	
-20	Normal Voltage	0.0167	
-30	Normal Voltage	0.0040	
20	Maximum Voltage	0.0058	
20	Normal Voltage	0.0139	
20	Battery End Point	0.0127	

Note:

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) =3.6 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 Conducted 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	1672.8	-63.12	-13	-50.12	-67.53	2.84	9.40	H
	2509.2	-52.24	-13	-39.24	-56.99	3.7	10.60	H
	3345.6	-65.90	-13	-52.90	-71.98	4.37	12.60	H
	1672.8	-70.96	-13	-57.96	-75.37	2.84	9.40	V
	2509.2	-61.91	-13	-48.91	-66.66	3.70	10.60	V
	3345.6	-67.28	-13	-54.28	-73.36	4.37	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672.8	-62.96	-13	-49.96	-67.37	2.84	9.40	H
	2509.2	-54.59	-13	-41.59	-59.34	3.7	10.60	H
	3345.6	-66.16	-13	-53.16	-72.24	4.37	12.60	H
	1672.8	-70.62	-13	-57.62	-75.03	2.84	9.40	V
	2509.2	-57.02	-13	-44.02	-61.77	3.70	10.60	V
	3345.6	-67.39	-13	-54.39	-73.47	4.37	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760	-55.40	-13	-42.40	-63.15	4.85	12.60	H
	5640	-58.07	-13	-45.07	-65.59	5.58	13.10	H
	7520	-58.48	-13	-45.48	-63.22	6.56	11.30	H
	3760	-54.45	-13	-41.45	-62.20	4.85	12.60	V
	5640	-57.04	-13	-44.04	-64.56	5.58	13.10	V
	7520	-58.65	-13	-45.65	-63.39	6.56	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760	-60.29	-13	-47.29	-68.04	4.85	12.60	H
	5640	-58.26	-13	-45.26	-65.78	5.58	13.10	H
	7520	-58.75	-13	-45.75	-63.49	6.56	11.30	H
	3760	-59.68	-13	-46.68	-67.43	4.85	12.60	V
	5640	-57.38	-13	-44.38	-64.90	5.58	13.10	V
	7520	-58.74	-13	-45.74	-63.48	6.56	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672.8	-66.46	-13	-53.46	-70.87	2.84	9.40	H
	2509.2	-65.63	-13	-52.63	-70.38	3.7	10.60	H
	3345.6	-64.08	-13	-51.08	-70.16	4.37	12.60	H
	1672.8	-70.97	-13	-57.97	-75.38	2.84	9.40	V
	2509.2	-67.14	-13	-54.14	-71.89	3.70	10.60	V
	3345.6	-65.50	-13	-52.50	-71.58	4.37	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760	-60.48	-13	-47.48	-68.23	4.85	12.60	H
	5640	-58.30	-13	-45.30	-65.82	5.58	13.10	H
	7520	-58.68	-13	-45.68	-63.42	6.56	11.30	H
	3760	-59.37	-13	-46.37	-67.12	4.85	12.60	V
	5640	-57.19	-13	-44.19	-64.71	5.58	13.10	V
	7520	-58.89	-13	-45.89	-63.63	6.56	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465	-57.85	-13	-44.85	-64.20	1.80	8.15	H
	5199	-50.19	-13	-37.19	-57.87	2.25	9.93	H
	6930	-52.33	-13	-39.33	-61.00	2.76	11.43	H
	3465	-57.95	-13	-44.95	-64.30	1.80	8.15	V
	5199	-51.94	-13	-38.94	-59.62	2.25	9.93	V
	6930	-52.20	-13	-39.20	-60.87	2.76	11.43	V

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