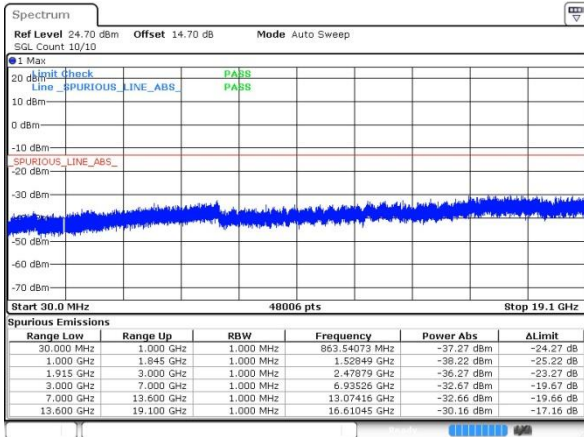




GSM1900 (GSM)

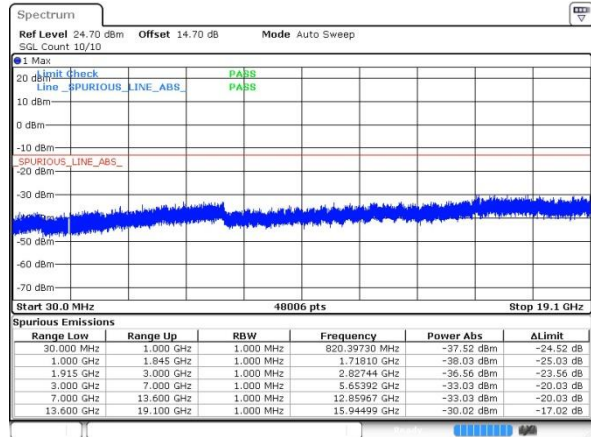
Lowest Channel



Date: 29 JUL 2020 15:38:18

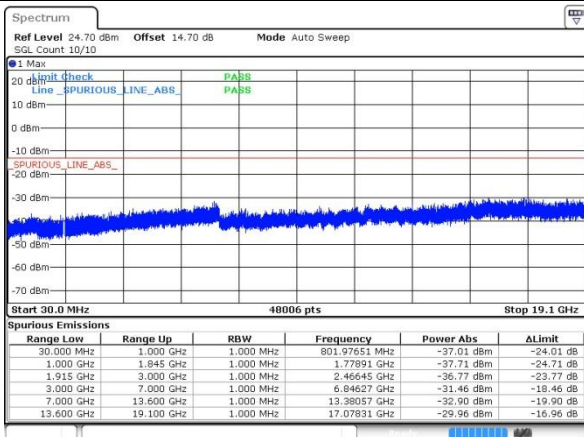
GSM1900 (EDGE class 8)

Lowest Channel



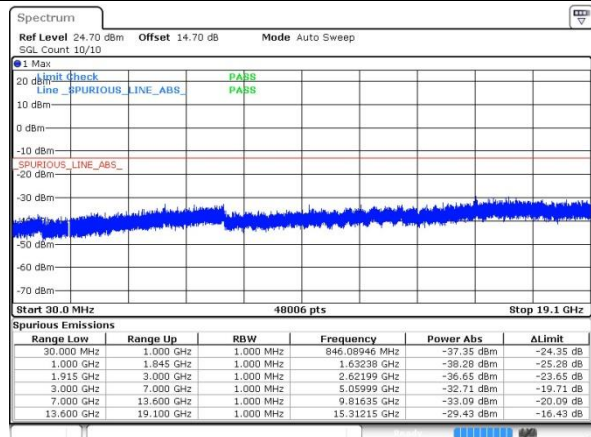
Date: 29 JUL 2020 16:42:15

Middle Channel



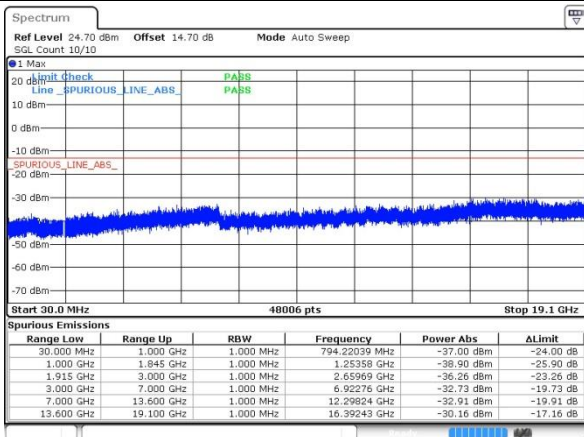
Date: 29 JUL 2020 15:39:38

Middle Channel



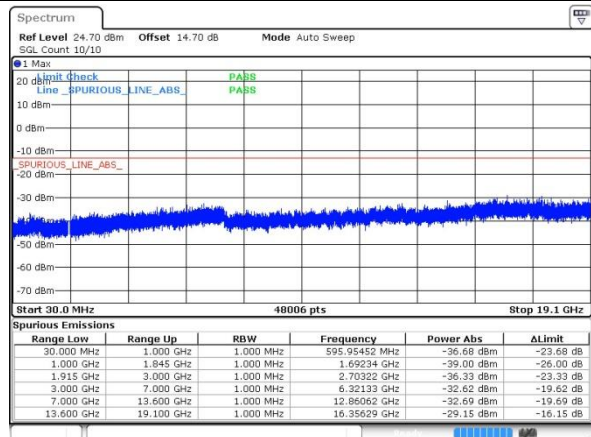
Date: 29 JUL 2020 16:44:00

Highest Channel



Date: 29 JUL 2020 15:41:16

Highest Channel



Date: 29 JUL 2020 16:46:29

**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	0.0000	0.0000	
20	Battery End Point	0.0191	0.0036	

Note: Normal Voltage =3.9 V. ; 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	0.0011	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	0.0000	0.0000	
20	Battery End Point	0.0128	0.0027	

Note:

1. Normal Voltage =3.9 V. ; 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.



A2. WCDMA

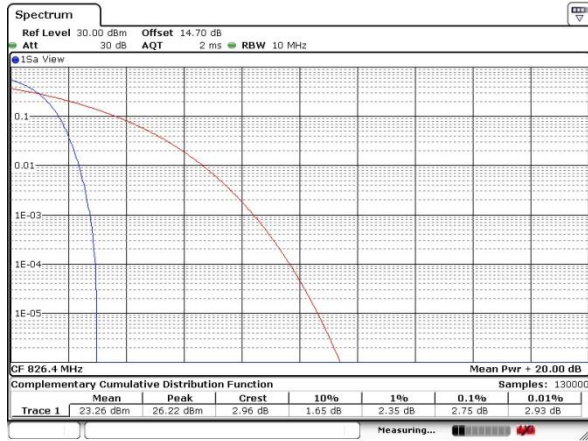
Peak-to-Average Ratio

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	2.75	3.07	3.25	PASS
Middle CH	2.64	3.01	3.16	
Highest CH	2.46	3.07	3.19	



WCDMA Band V (RMC 12.2Kbps)

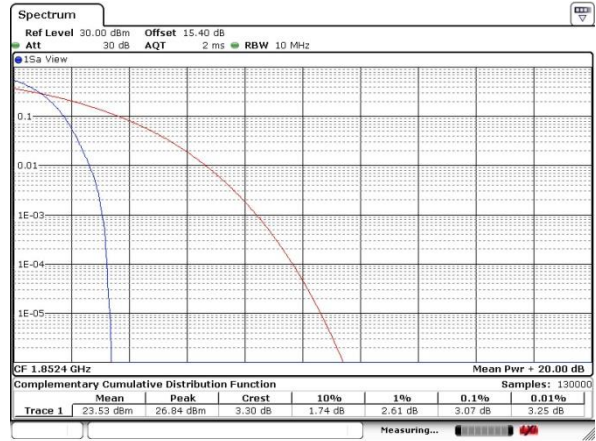
Lowest Channel



Date: 28 JUL 2020 20:36:05

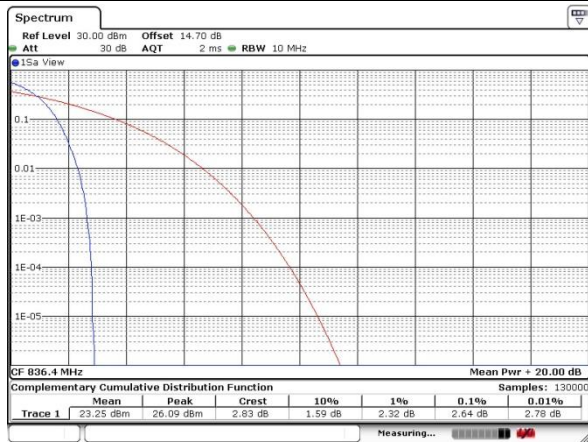
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



Date: 29 JUL 2020 11:07:08

Middle Channel



Date: 28 JUL 2020 20:36:13

Middle Channel



Date: 29 JUL 2020 11:07:16

Highest Channel

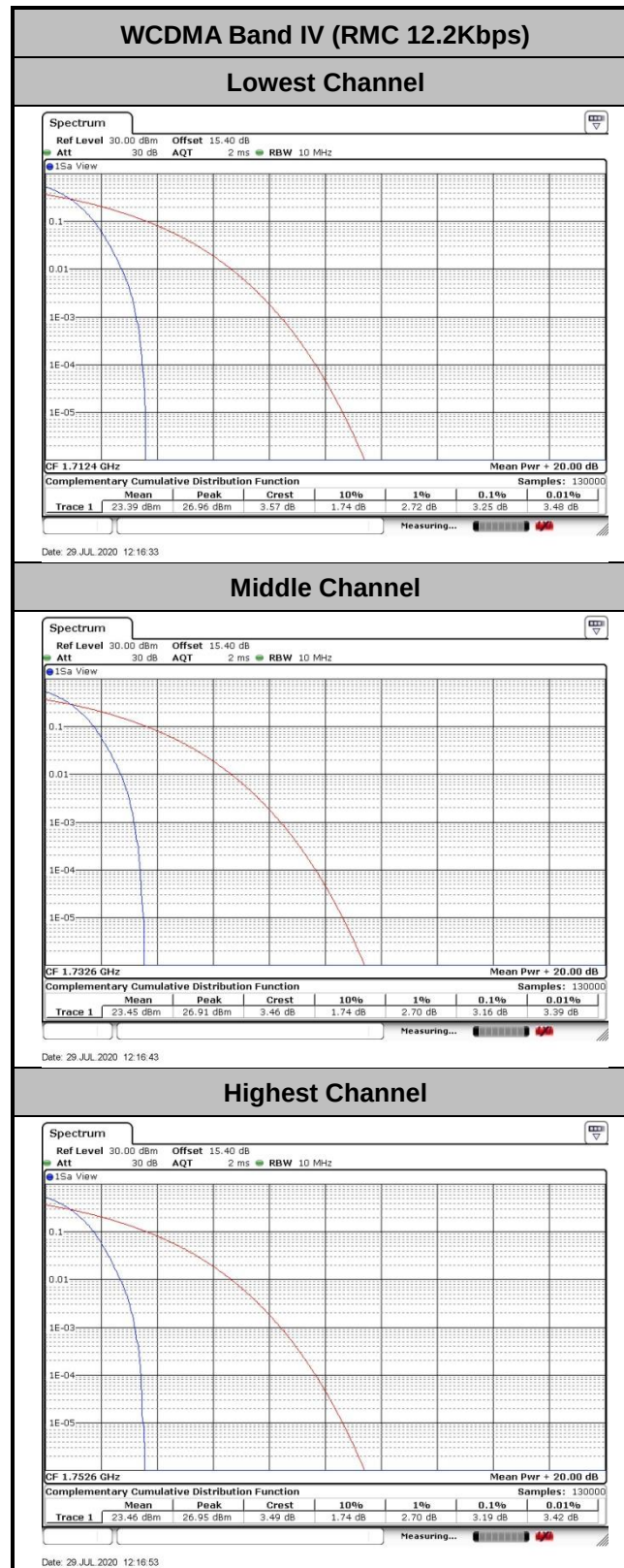


Date: 28 JUL 2020 20:36:22

Highest Channel



Date: 29 JUL 2020 11:07:24



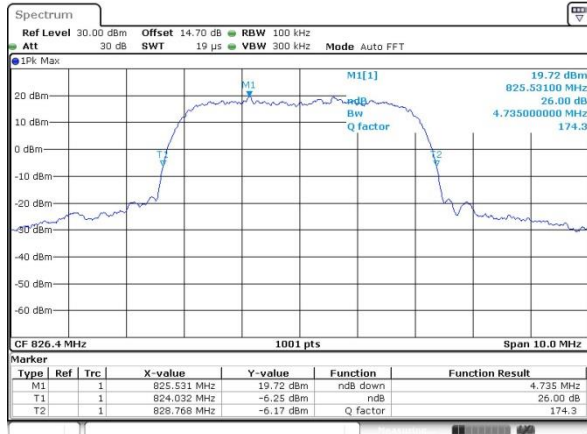
**26dB Bandwidth**

Mode	WCDMA Band V(MHz)	WCDMA Band II(MHz)	WCDMA Band IV(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.735	4.715	4.715
Middle CH	4.735	4.715	4.715
Highest CH	4.745	4.715	4.715



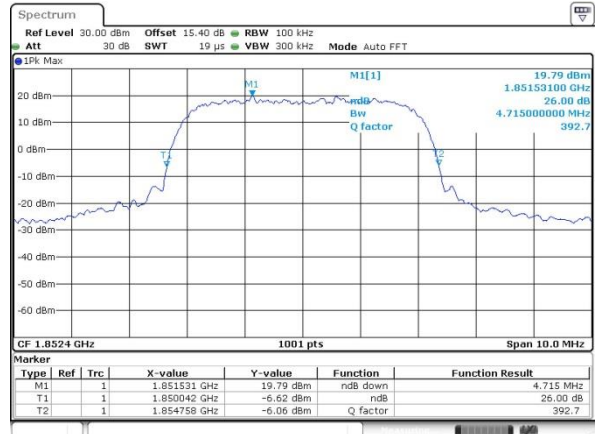
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

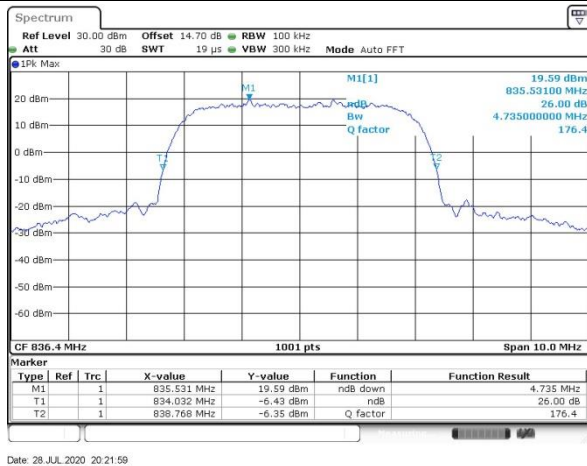


WCDMA Band II (RMC 12.2Kbps)

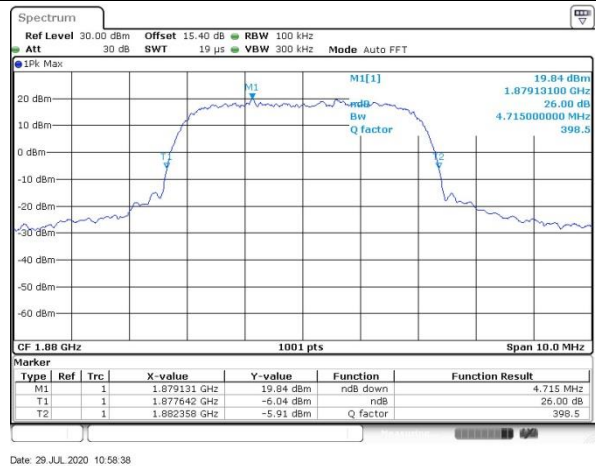
Lowest Channel



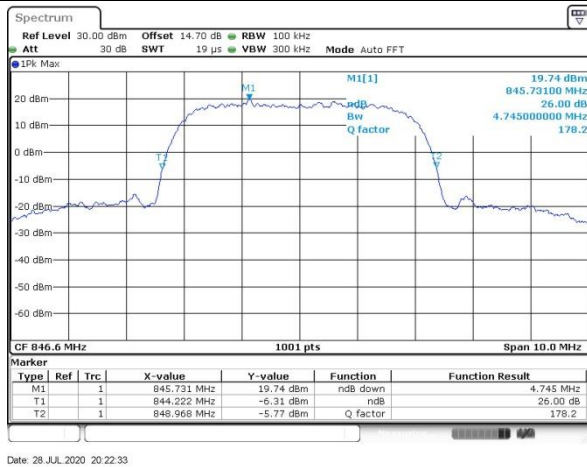
Middle Channel



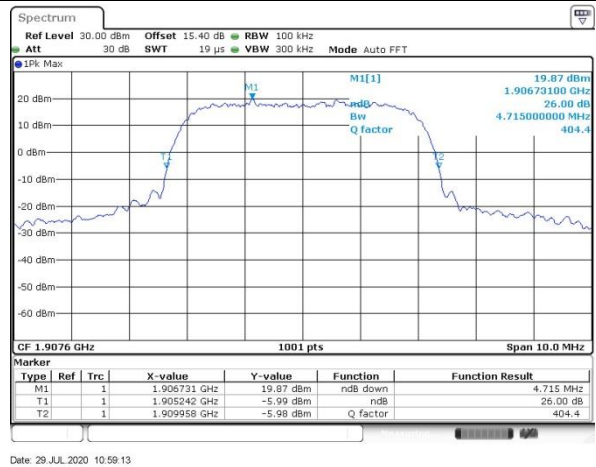
Middle Channel



Highest Channel



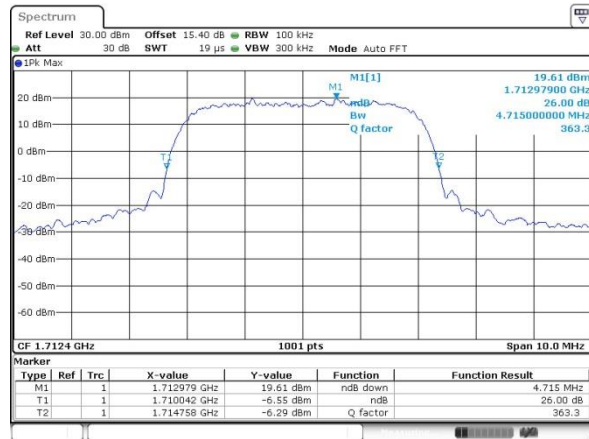
Highest Channel



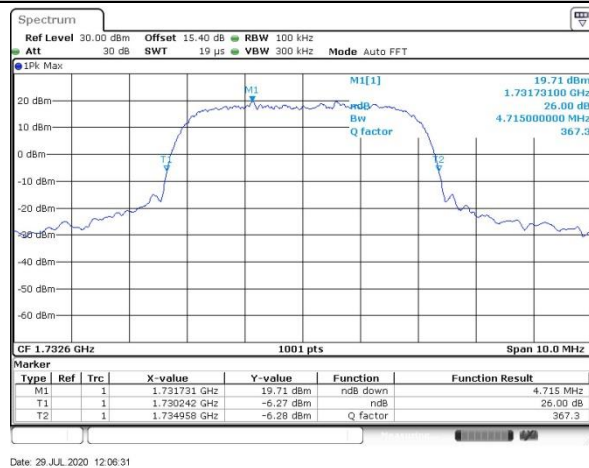


WCDMA Band IV (RMC 12.2Kbps)

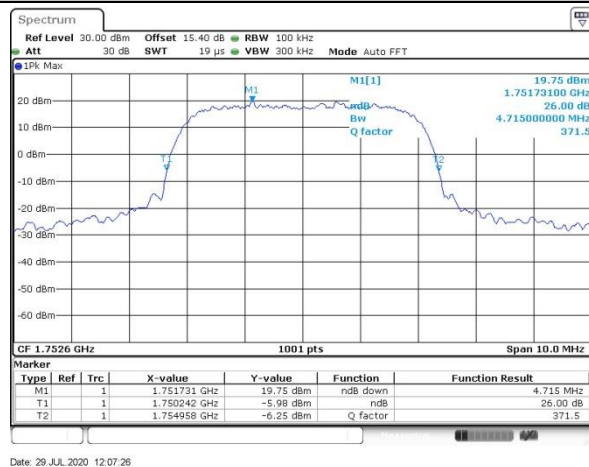
Lowest Channel



Middle Channel



Highest Channel



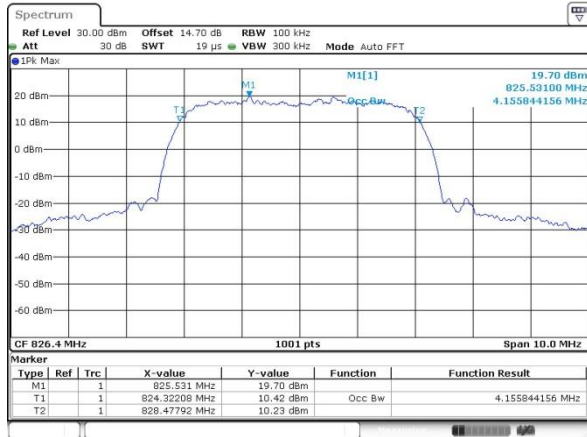
**Occupied Bandwidth**

Mode	WCDMA Band V(MHz)	WCDMA Band II(MHz)	WCDMA Band IV(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.156	4.146	4.136
Middle CH	4.136	4.146	4.126
Highest CH	4.146	4.136	4.126



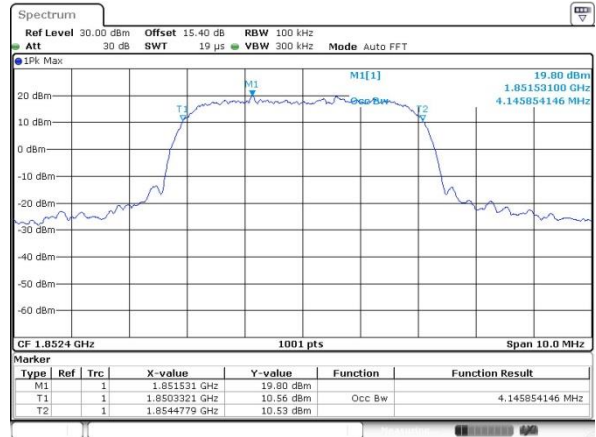
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

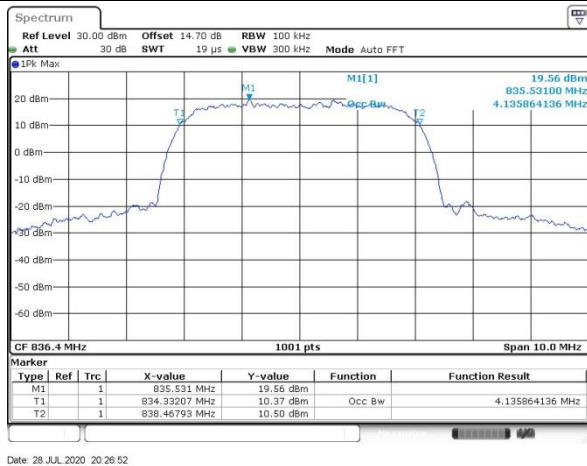


WCDMA Band II (RMC 12.2Kbps)

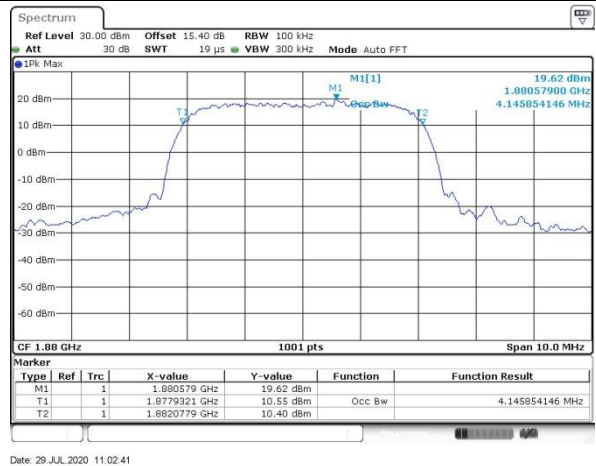
Lowest Channel



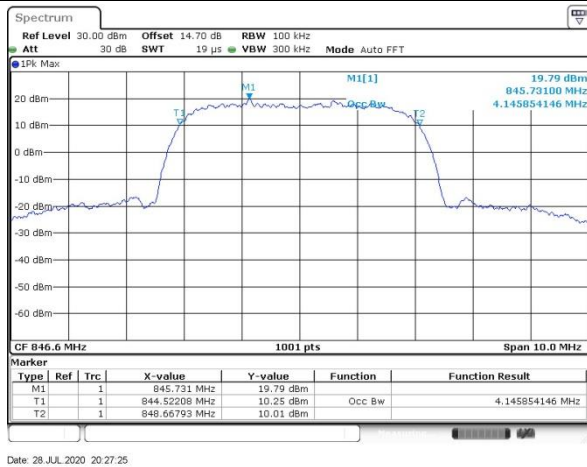
Middle Channel



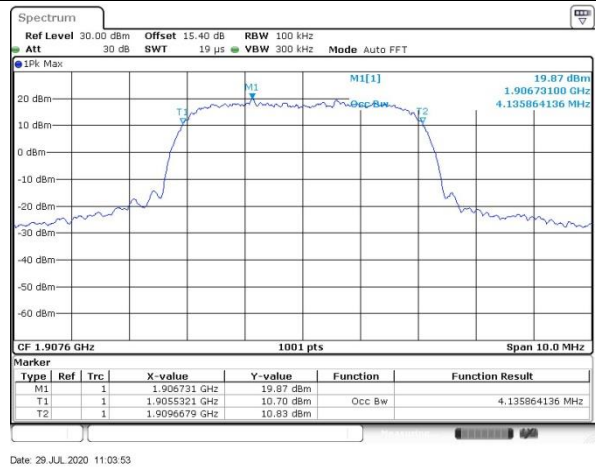
Middle Channel



Highest Channel



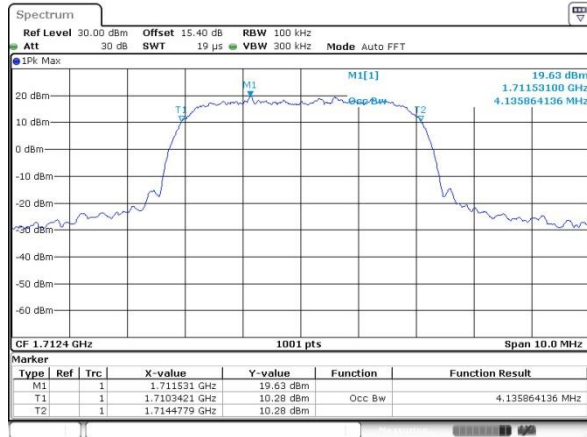
Highest Channel



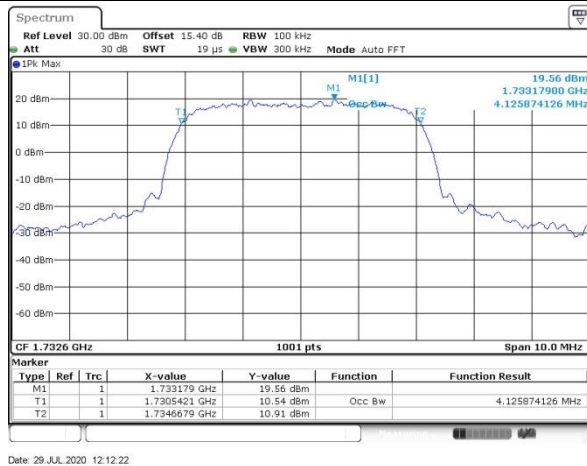


WCDMA Band IV (RMC 12.2Kbps)

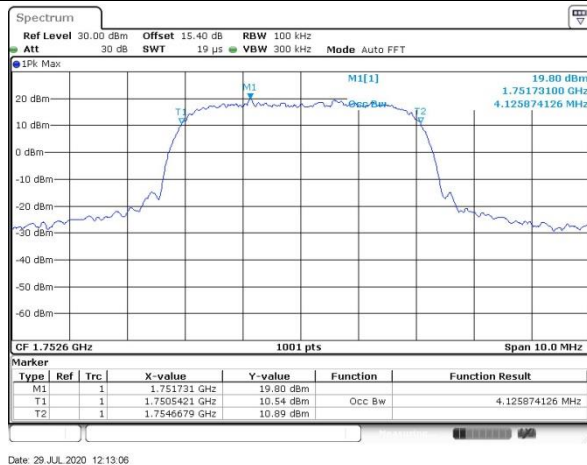
Lowest Channel



Middle Channel

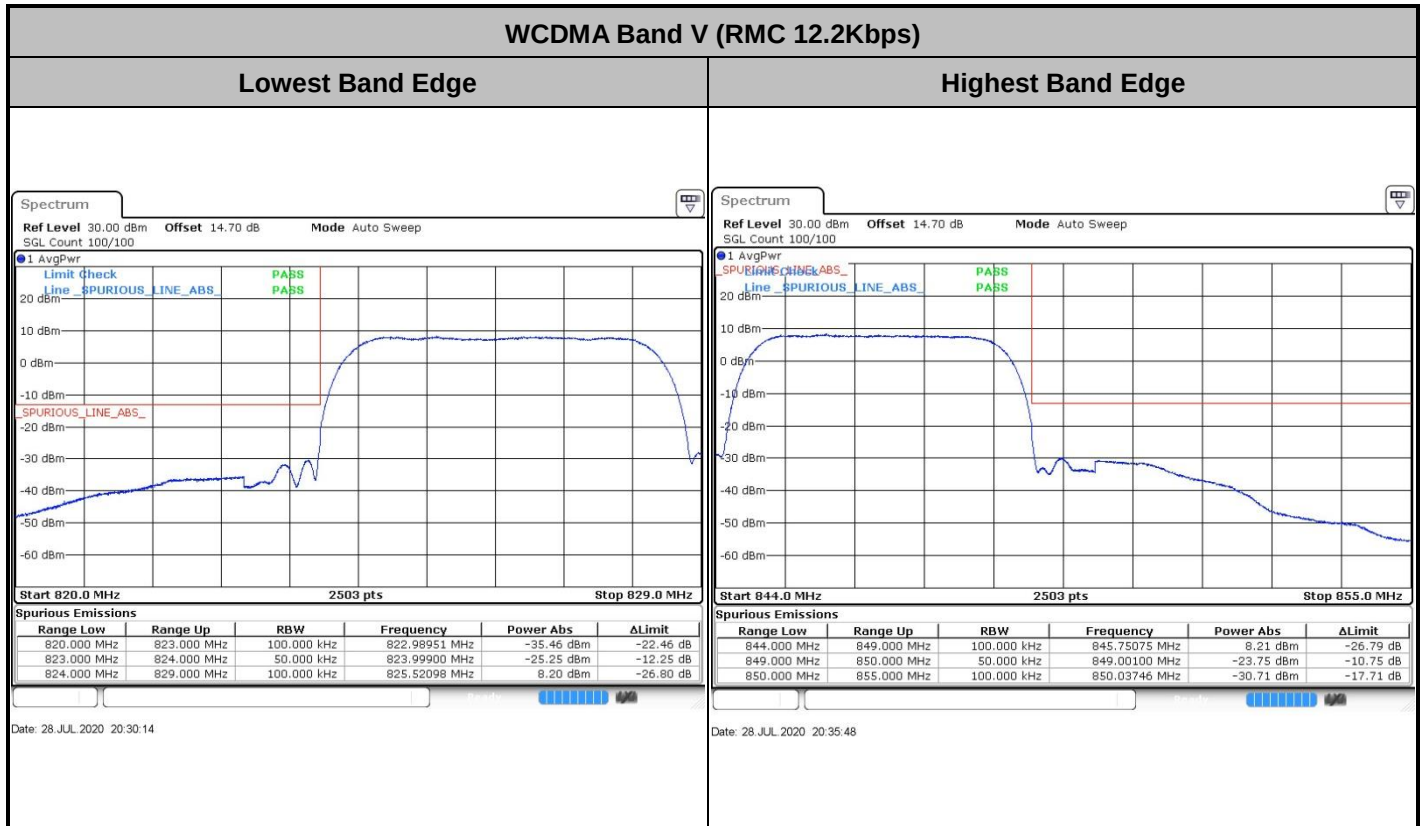


Highest Channel





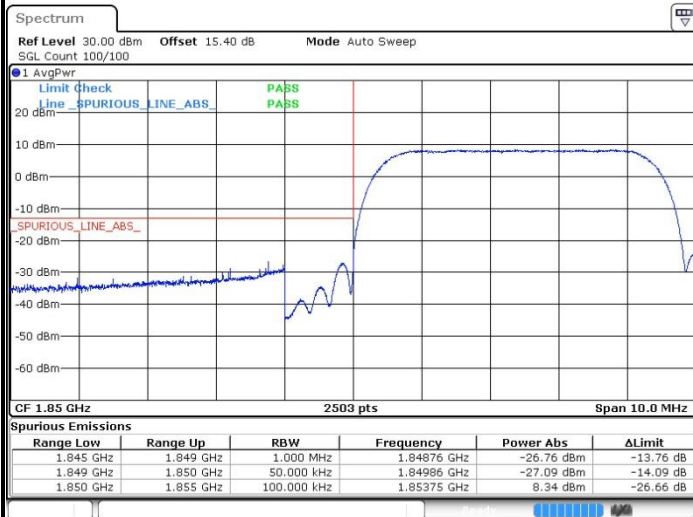
Conducted Band Edge



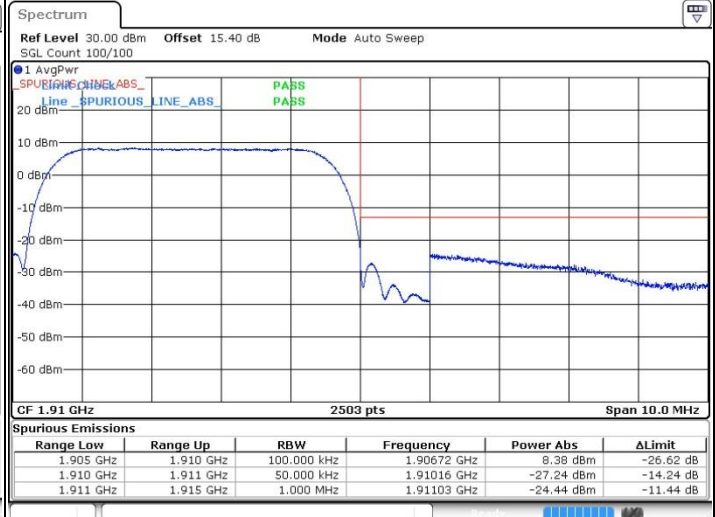


WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



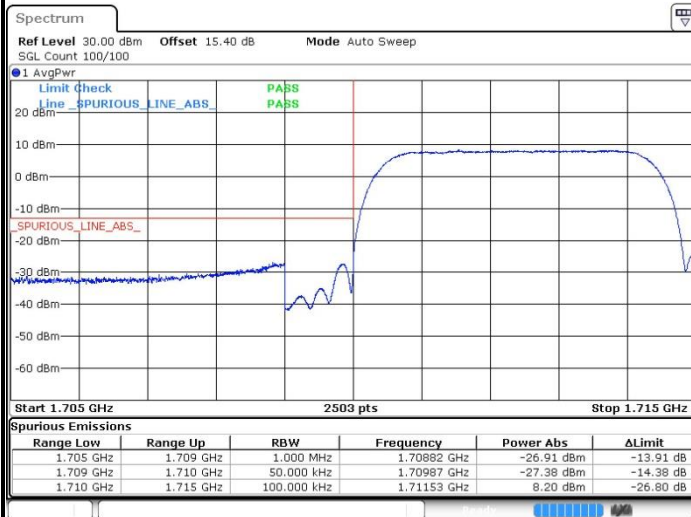
Highest Band Edge



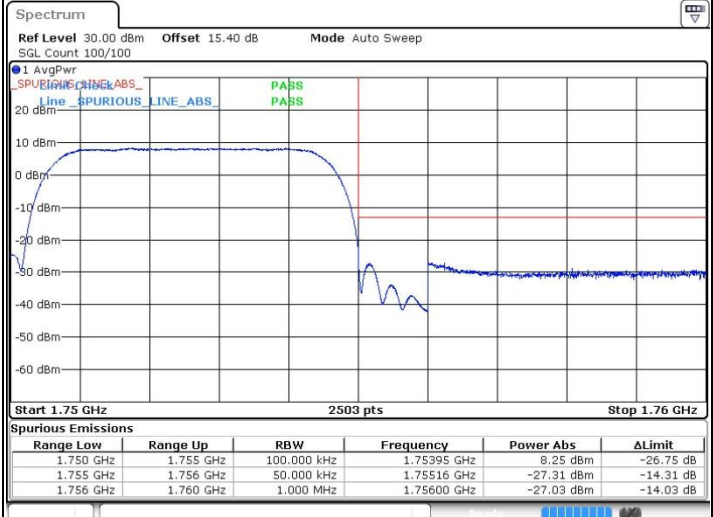


WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge



Highest Band Edge

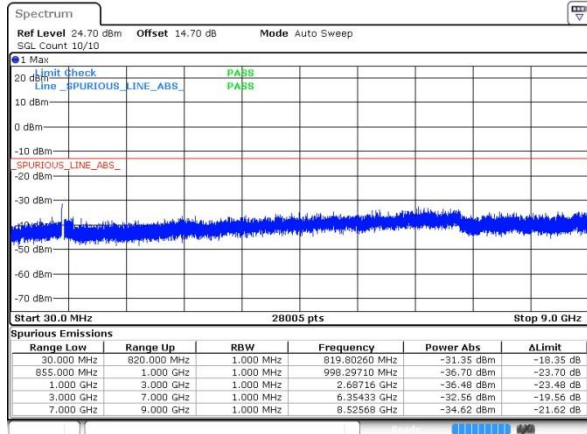




Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

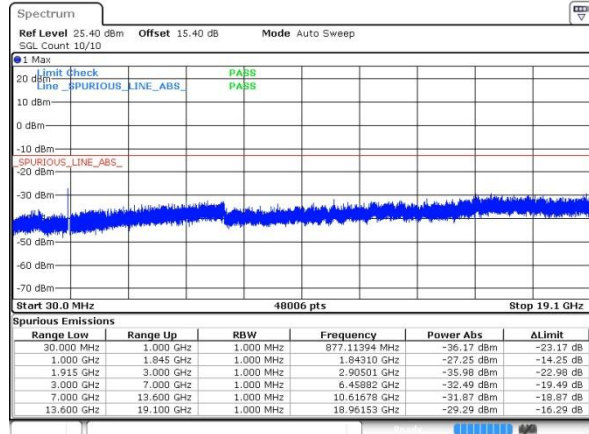
Lowest Channel



Date: 28 JUL 2020 20:37:43

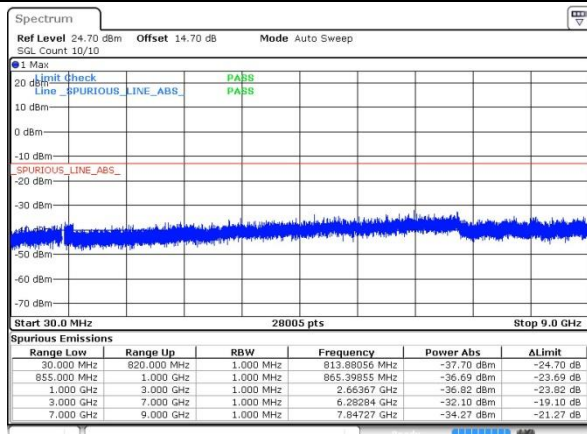
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



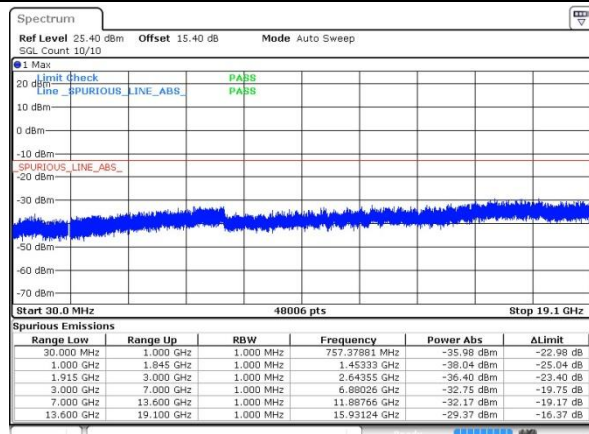
Date: 29 JUL 2020 11:15:45

Middle Channel



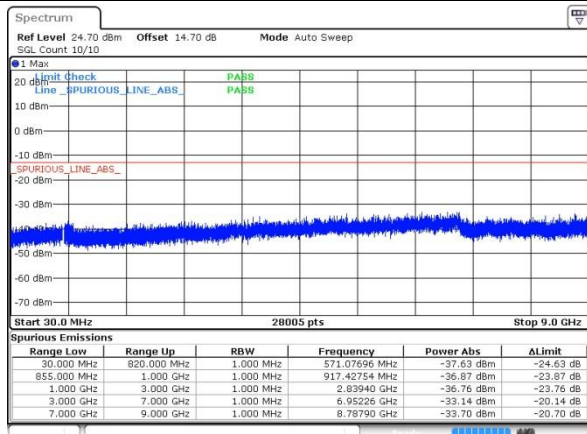
Date: 28 JUL 2020 20:39:04

Middle Channel



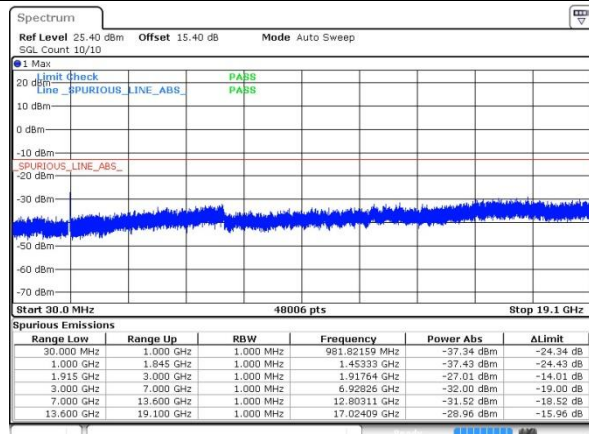
Date: 29 JUL 2020 12:02:13

Highest Channel



Date: 28 JUL 2020 20:40:28

Highest Channel

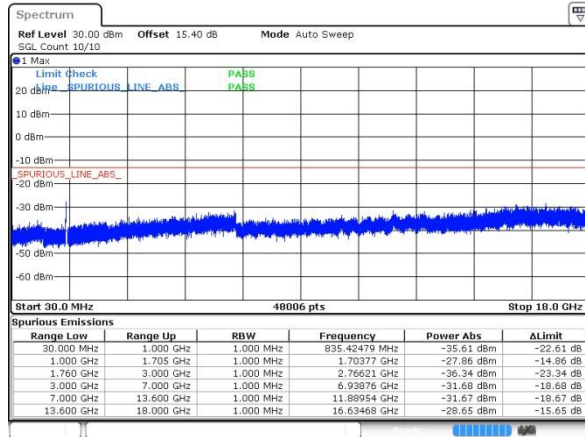


Date: 29 JUL 2020 12:03:37

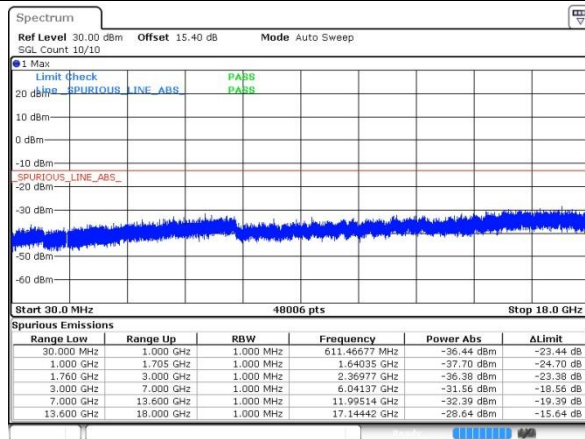


WCDMA Band IV (RMC 12.2Kbps)

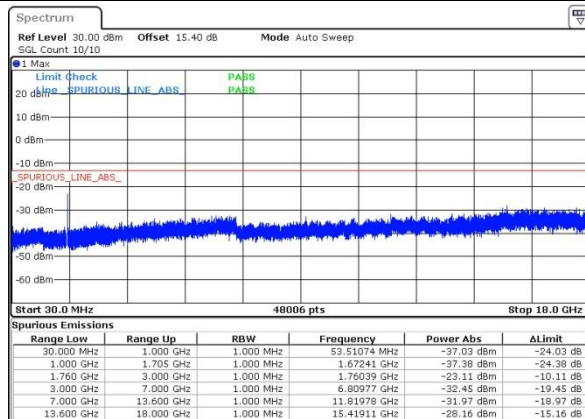
Lowest Channel



Middle Channel



Highest Channel



**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	0.0060	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	0.0000	
20	Battery End Point	0.0143	

Note: Normal Voltage =3.9 V. ; 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	0.0027	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	0.0000	
20	Battery End Point	0.0000	

Note:

1. Normal Voltage =3.9 V. ; 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	0.0061	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	0.0000	
20	Battery End Point	0.0207	

Note:

1. Normal Voltage =3.9 V. ; 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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-45.86	-13	-32.86	-52.83	1.58	10.70	H
	2510	-34.65	-13	-21.65	-42.90	2.102	12.50	H
	3348	-62.26	-13	-49.26	-71.15	2.856	13.90	H
	4182	-57.58	-13	-44.58	-66.04	2.689	13.30	H
	1672	-46.51	-13	-33.51	-53.48	1.58	10.70	V
	2510	-31.98	-13	-18.98	-40.23	2.10	12.50	V
	3348	-62.52	-13	-49.52	-71.41	2.86	13.90	V
	4182	-58.17	-13	-45.17	-66.63	2.69	13.30	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	-55.33	-13	-42.33	-62.30	1.58	10.70	H
	2510	-37.48	-13	-24.48	-45.73	2.102	12.50	H
	3348	-62.50	-13	-49.50	-71.39	2.856	13.90	H
	4182	-57.32	-13	-44.32	-65.78	2.689	13.30	H
	1672	-53.35	-13	-40.35	-60.32	1.58	10.70	V
	2510	-32.12	-13	-19.12	-40.37	2.10	12.50	V
	3348	-62.34	-13	-49.34	-71.23	2.86	13.90	V
	4182	-57.92	-13	-44.92	-66.38	2.69	13.30	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	-57.44	-13	-44.44	-69.70	2.641	14.90	H
	5640	-53.53	-13	-40.53	-65.39	2.94	14.80	H
	7524	-48.67	-13	-35.67	-58.44	3.39	13.16	H
	3759	-57.32	-13	-44.32	-69.58	2.64	14.90	V
	5640	-53.55	-13	-40.55	-65.41	2.94	14.80	V
	7524	-48.23	-13	-35.23	-58.00	3.39	13.16	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	3759	-57.41	-13	-44.41	-69.67	2.641	14.90	H
	5640	-53.69	-13	-40.69	-65.55	2.94	14.80	H
	7524	-48.24	-13	-35.24	-58.01	3.39	13.16	H
	3759	-57.31	-13	-44.31	-69.57	2.64	14.90	V
	5640	-53.40	-13	-40.40	-65.26	2.94	14.80	V
	7524	-48.13	-13	-35.13	-57.90	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	-65.82	-13	-52.82	-72.79	1.58	10.70	H
	2510	-58.93	-13	-45.93	-67.18	2.102	12.50	H
	3348	-62.31	-13	-49.31	-71.20	2.856	13.90	H
	1672	-66.26	-13	-53.26	-73.23	1.58	10.70	V
	2510	-58.62	-13	-45.62	-66.87	2.10	12.50	V
	3348	-62.46	-13	-49.46	-71.35	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	-57.46	-13	-44.46	-69.72	2.64	14.90	H
	5640	-53.17	-13	-40.17	-65.03	2.94	14.80	H
	7524	-48.76	-13	-35.76	-58.53	3.39	13.16	H
	3759	-57.44	-13	-44.44	-69.70	2.64	14.90	V
	5640	-53.40	-13	-40.40	-65.26	2.94	14.80	V
	7524	-48.51	-13	-35.51	-58.28	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	-60.07	-13	-47.07	-70.81	2.604	13.34	H
	5199	-54.20	-13	-41.20	-64.71	3.011	13.52	H
	6936	-50.54	-13	-37.54	-60.74	3.271	13.47	H
	3465	-60.03	-13	-47.03	-70.77	2.604	13.34	V
	5199	-53.96	-13	-40.96	-64.47	3.011	13.52	V
	6936	-50.24	-13	-37.24	-60.44	3.271	13.47	V

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