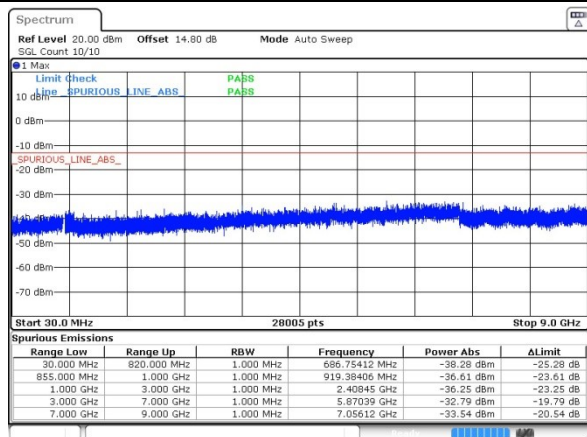




Conducted Spurious Emission

GSM850 (GSM)

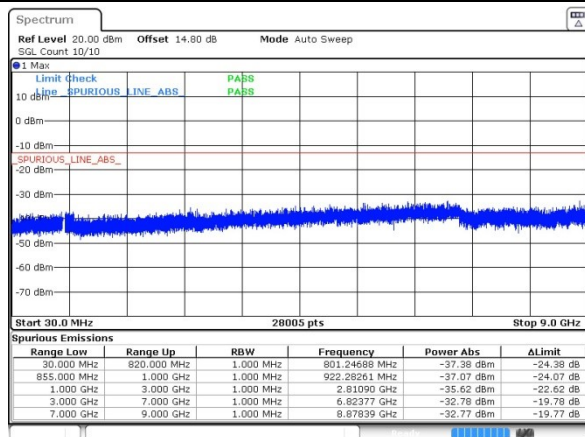
Lowest Channel



Date: 24 AUG 2021 15:37:37

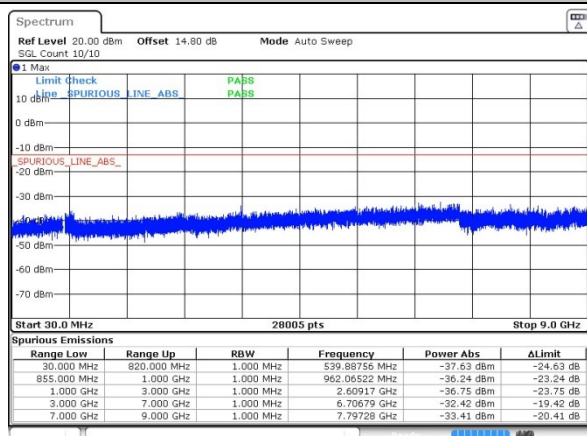
GSM850 (EDGE)

Lowest Channel



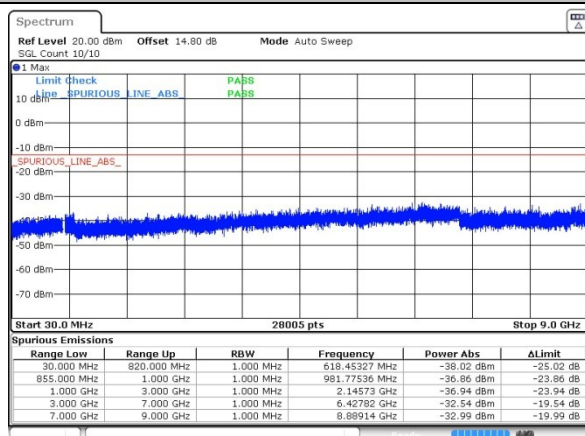
Date: 24 AUG 2021 16:08:39

Middle Channel



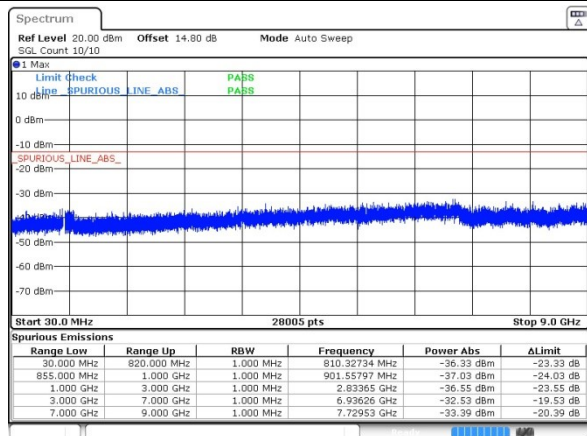
Date: 24 AUG 2021 15:38:11

Middle Channel



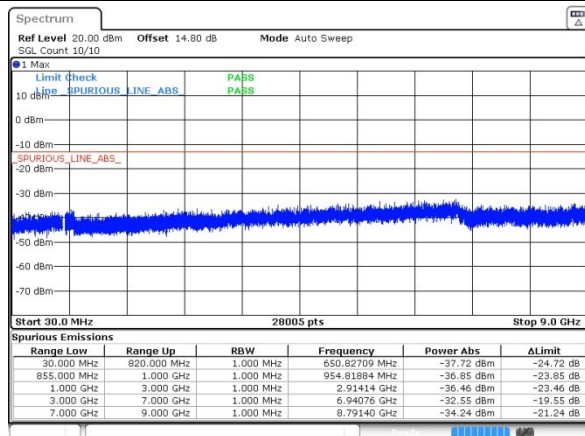
Date: 24 AUG 2021 16:09:07

Highest Channel



Date: 24 AUG 2021 15:40:45

Highest Channel

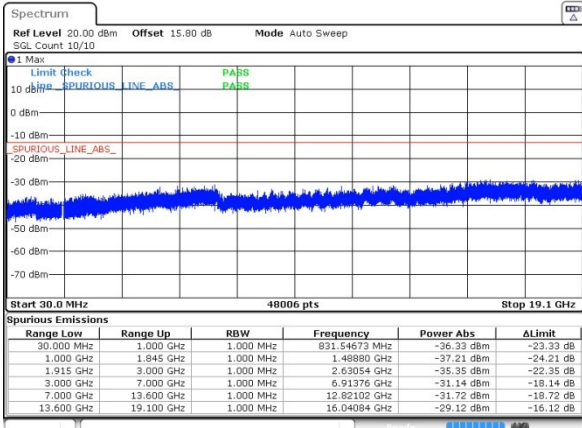


Date: 24 AUG 2021 16:09:25



GSM1900 (GSM)

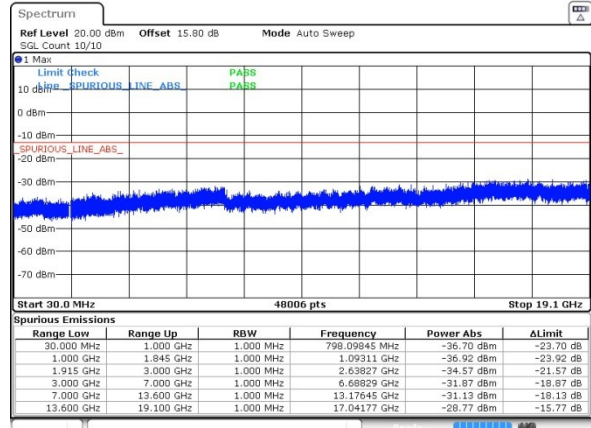
Lowest Channel



Date: 24 AUG 2021 16:25:46

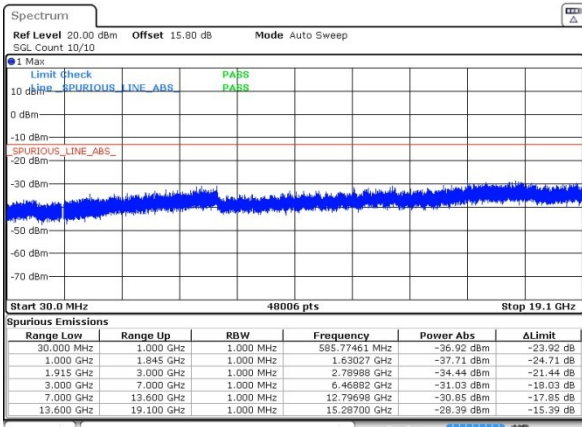
GSM1900 (EDGE)

Lowest Channel



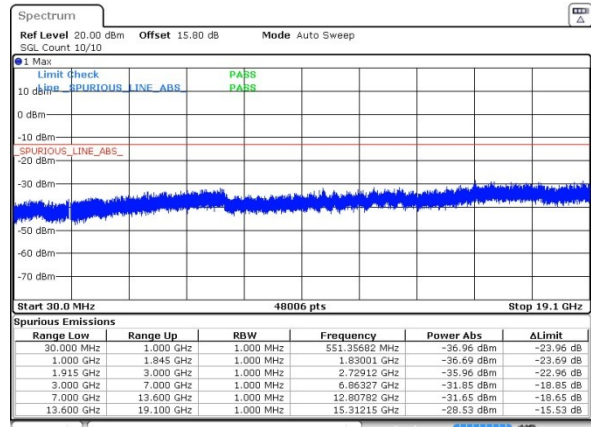
Date: 24 AUG 2021 16:43:05

Middle Channel



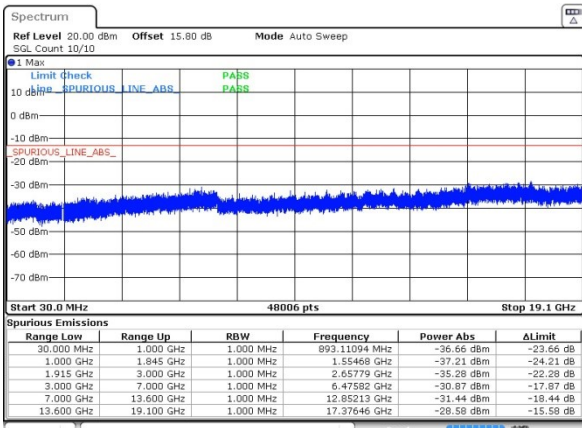
Date: 24 AUG 2021 16:26:06

Middle Channel



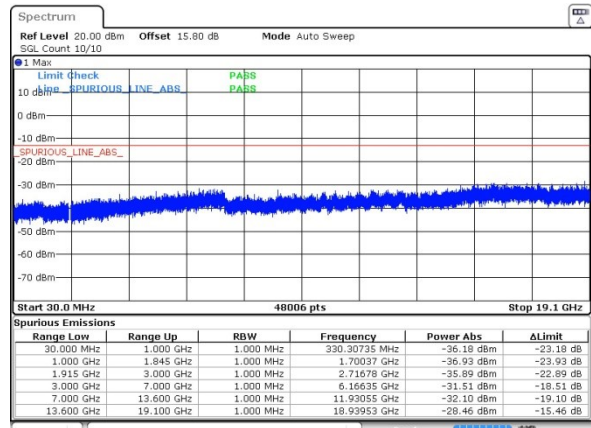
Date: 24 AUG 2021 16:43:27

Highest Channel



Date: 24 AUG 2021 16:26:30

Highest Channel



Date: 24 AUG 2021 16:43:44

**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	0.0038	0.0059	PASS
40	Normal Voltage	0.0523	0.0121	
30	Normal Voltage	0.0094	0.0538	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0533	0.0434	
0	Normal Voltage	0.0165	0.0528	
-10	Normal Voltage	0.0072	0.0441	
-20	Normal Voltage	0.0145	0.0136	
-30	Normal Voltage	0.0172	0.0489	
20	Maximum Voltage	0.0462	0.0561	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0325	0.0256	

Note: Normal Voltage = 3.87V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45V



Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0046	0.0008	PASS
40	Normal Voltage	0.0052	0.0037	
30	Normal Voltage	0.0064	0.0079	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0164	0.0256	
0	Normal Voltage	0.0041	0.0154	
-10	Normal Voltage	0.0138	0.0038	
-20	Normal Voltage	0.0216	0.0047	
-30	Normal Voltage	0.0004	0.0267	
20	Maximum Voltage	0.0056	0.0176	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0149	0.0027	

Note:

1. Normal Voltage = 3.87V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



A2. WCDMA

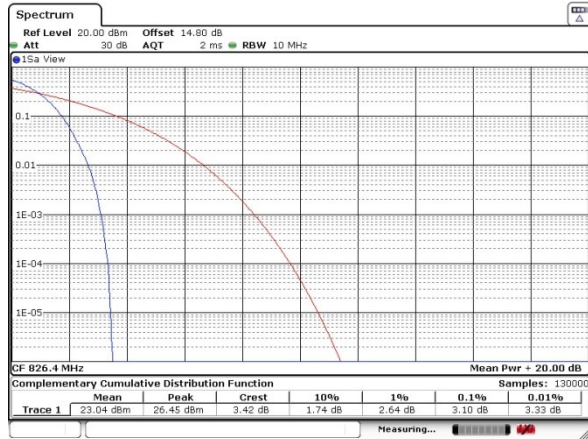
Peak-to-Average Ratio

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	3.10	3.01	3.19	PASS
Middle CH	3.16	3.36	3.30	
Highest CH	3.10	3.28	3.33	



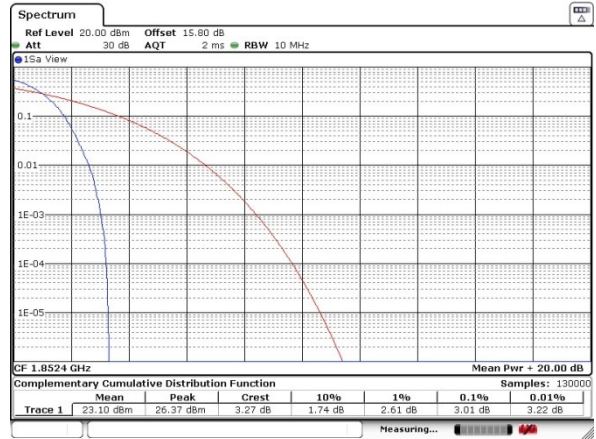
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



Middle Channel



Middle Channel



Highest Channel



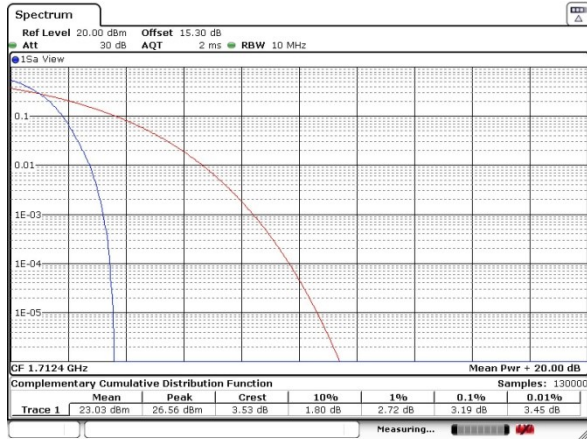
Highest Channel





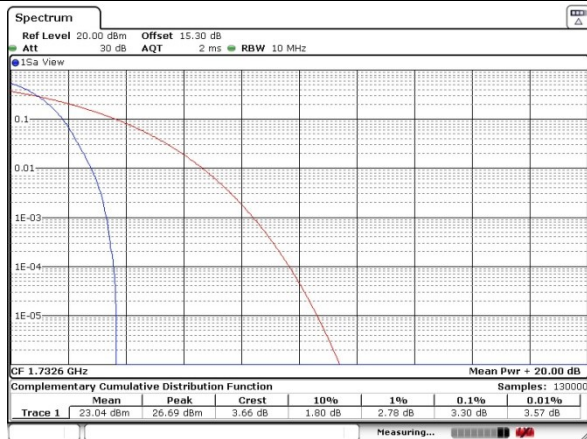
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



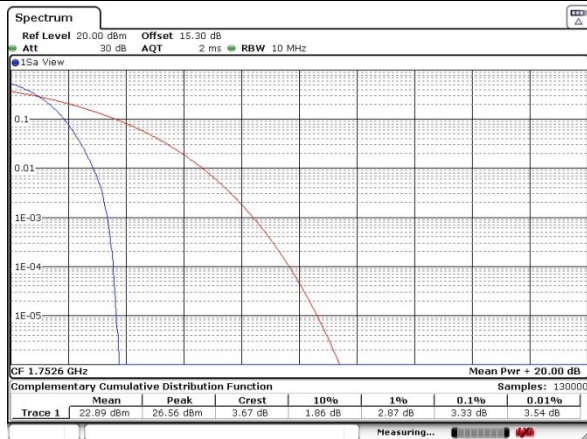
Date: 24 AUG 2021 14:48:52

Middle Channel



Date: 24 AUG 2021 14:49:16

Highest Channel



Date: 24 AUG 2021 14:49:26

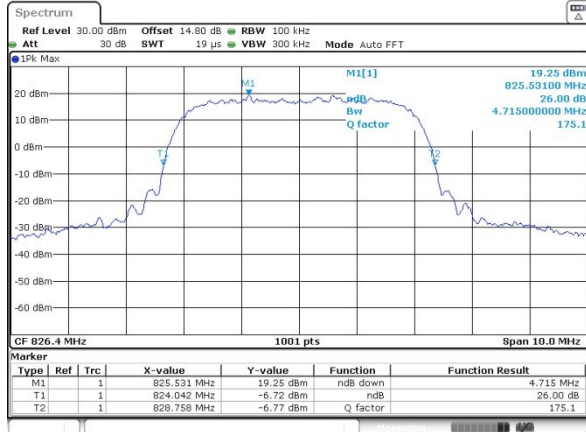
**26dB Bandwidth**

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.72	4.72	4.71
Middle CH	4.72	4.70	4.71
Highest CH	4.71	4.72	4.72



WCDMA Band V (RMC 12.2Kbps)

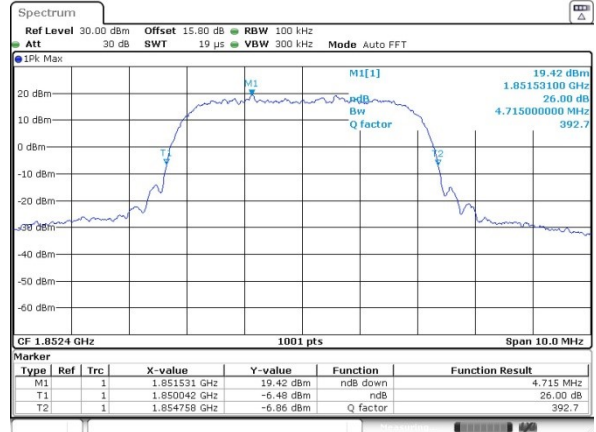
Lowest Channel



Date: 24 AUG 2021 14:50:52

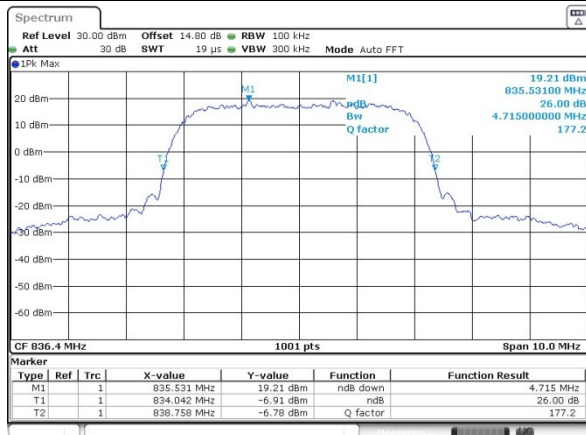
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



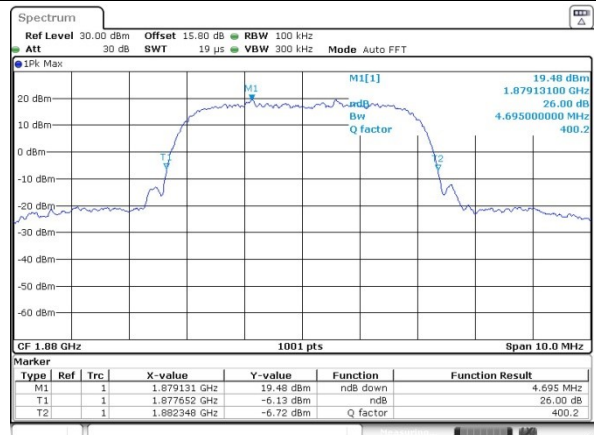
Date: 24 AUG 2021 14:59:39

Middle Channel



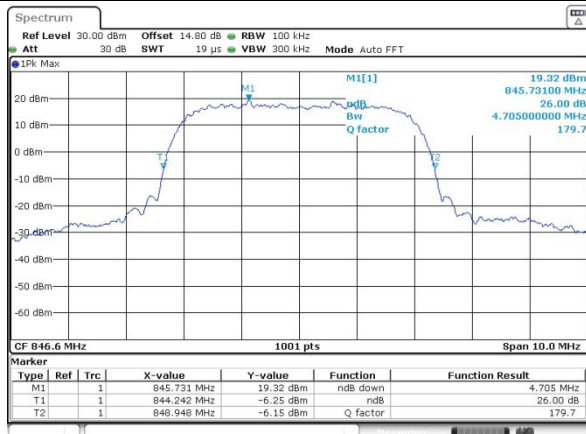
Date: 24 AUG 2021 14:51:16

Middle Channel



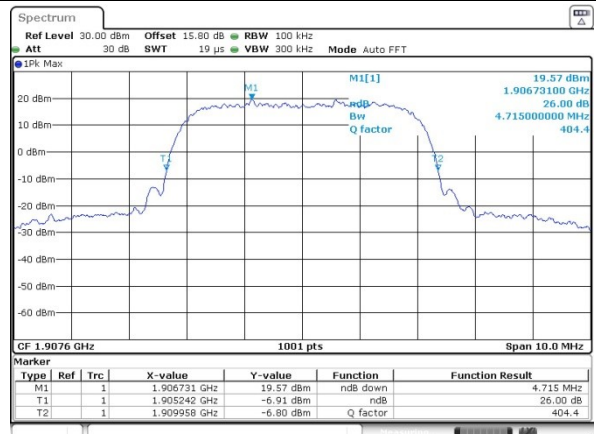
Date: 24 AUG 2021 15:00:04

Highest Channel



Date: 24 AUG 2021 14:51:39

Highest Channel

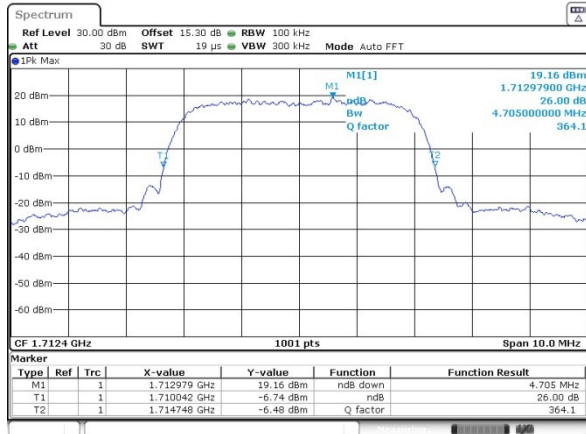


Date: 24 AUG 2021 15:00:29

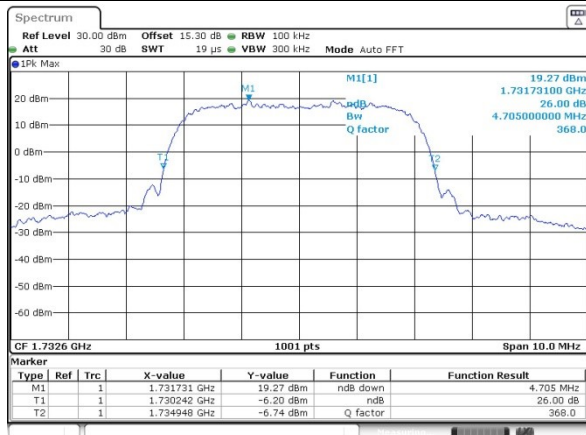


WCDMA Band IV (RMC 12.2Kbps)

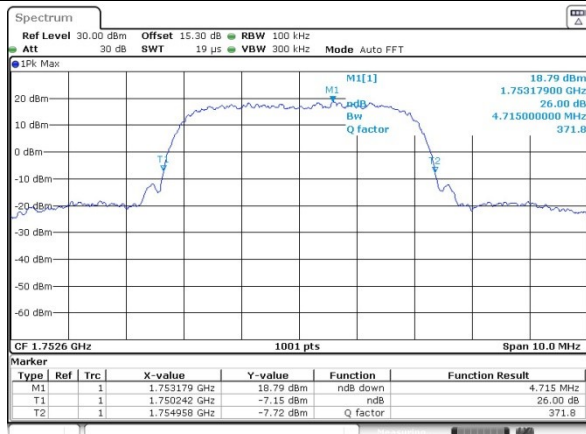
Lowest Channel



Middle Channel



Highest Channel



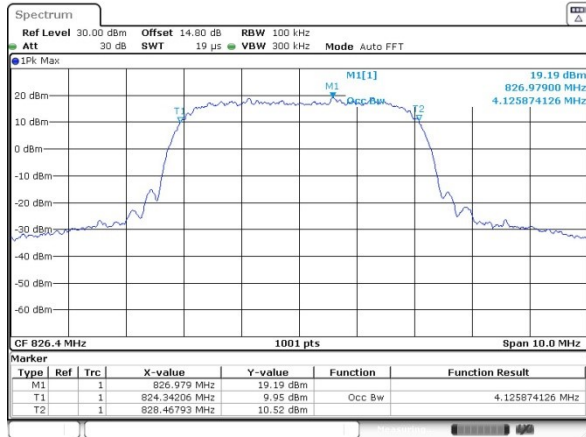
**Occupied Bandwidth**

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.13	4.14	4.14
Middle CH	4.13	4.14	4.14
Highest CH	4.13	4.15	4.15



WCDMA Band V (RMC 12.2Kbps)

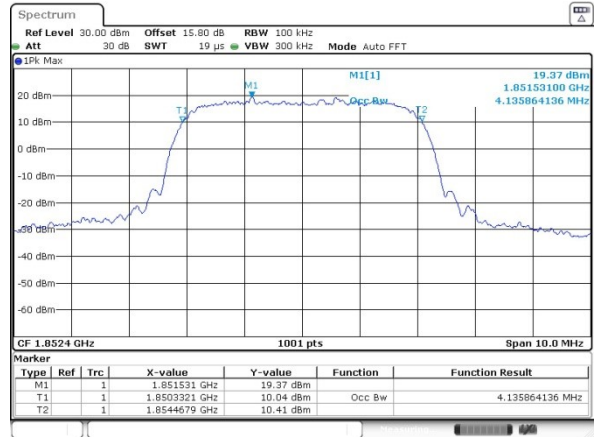
Lowest Channel



Date: 24 AUG 2021 14:53:59

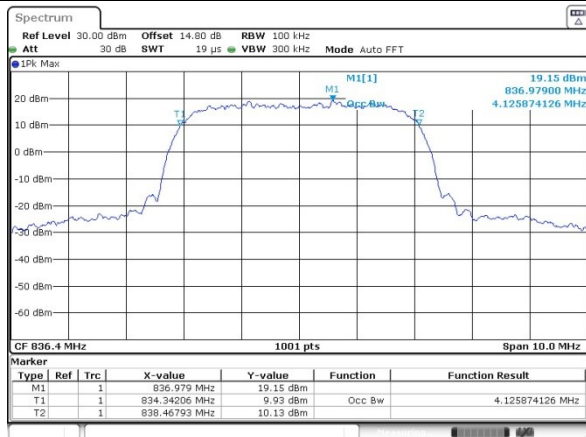
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



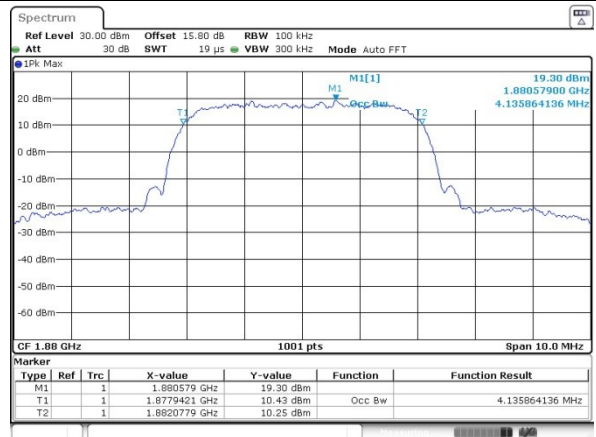
Date: 24 AUG 2021 15:00:57

Middle Channel



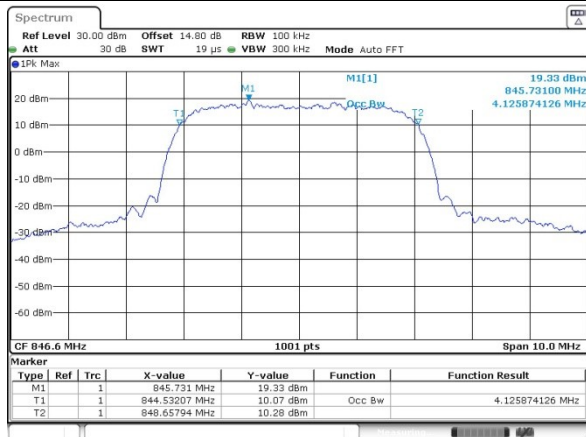
Date: 24 AUG 2021 14:54:17

Middle Channel



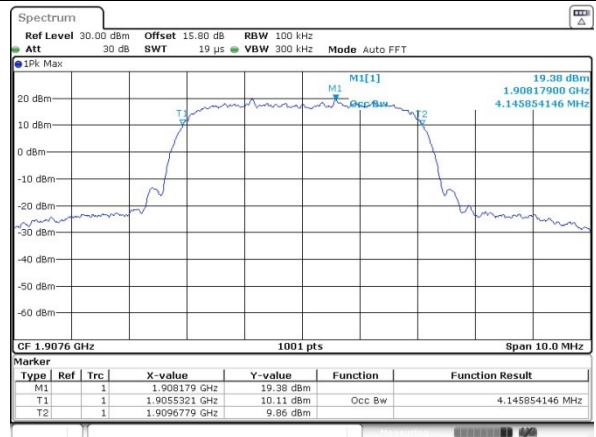
Date: 24 AUG 2021 15:01:34

Highest Channel



Date: 24 AUG 2021 14:54:36

Highest Channel

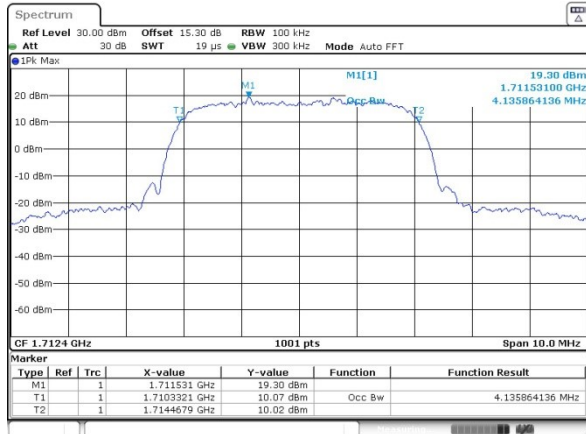


Date: 24 AUG 2021 15:01:54

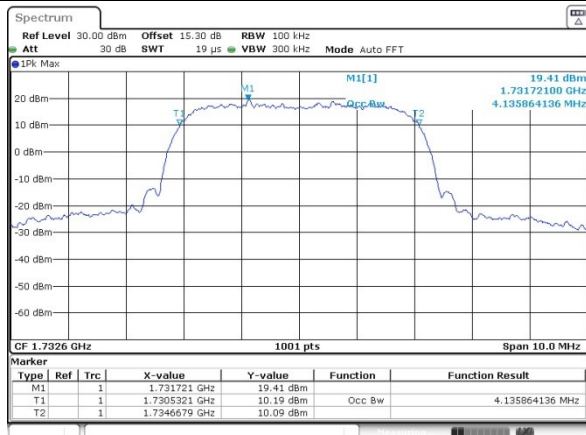


WCDMA Band IV (RMC 12.2Kbps)

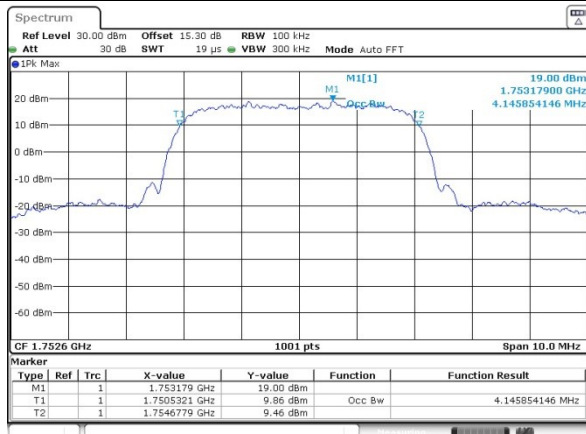
Lowest Channel



Middle Channel



Highest Channel

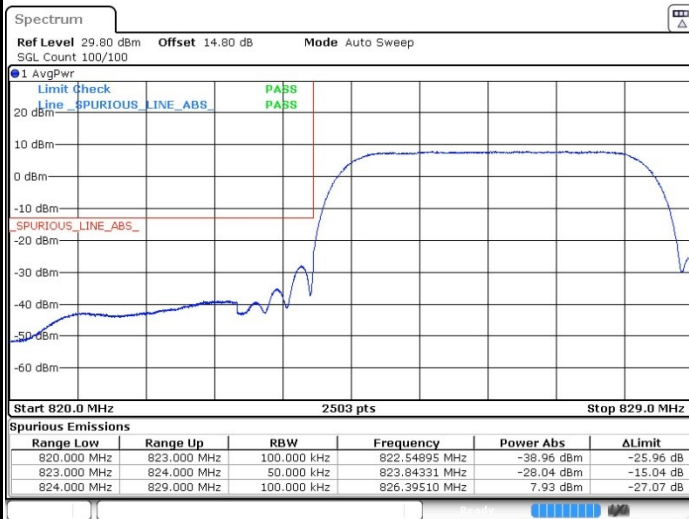




Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

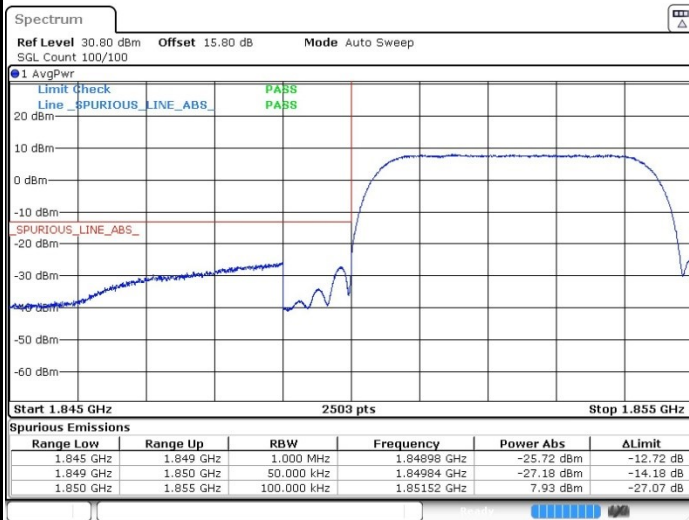


Highest Band Edge

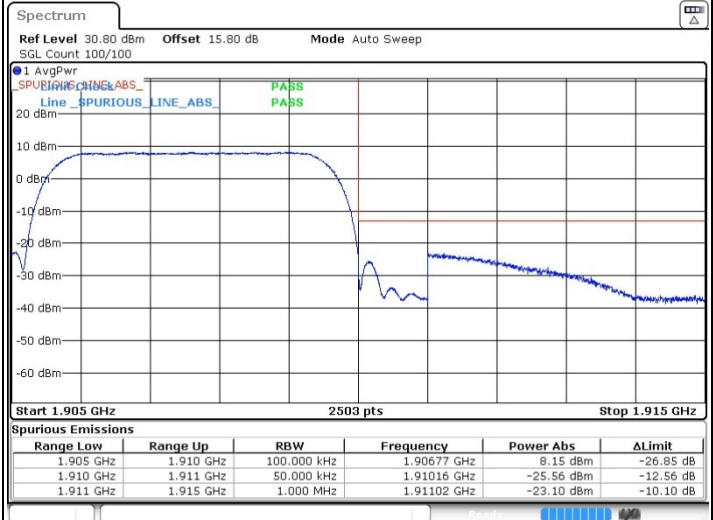


WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



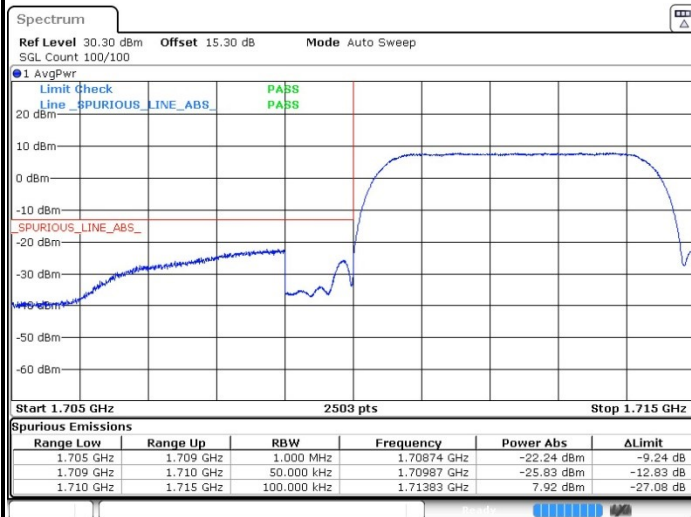
Highest Band Edge





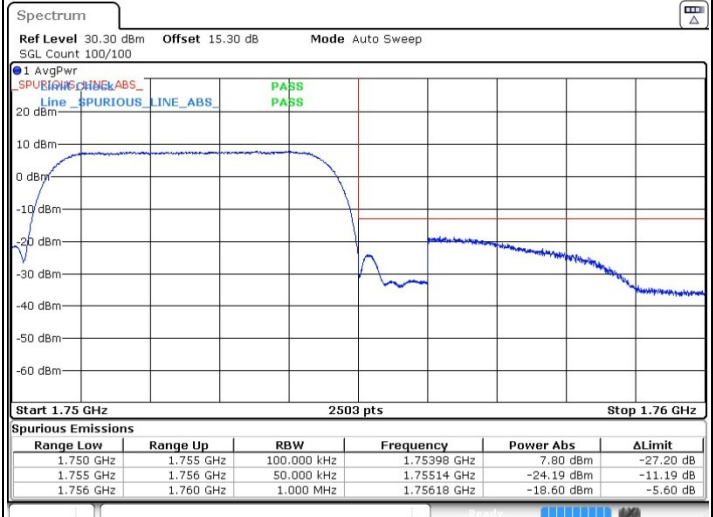
WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge



Date: 24 AUG 2021 14:46:25

Highest Band Edge



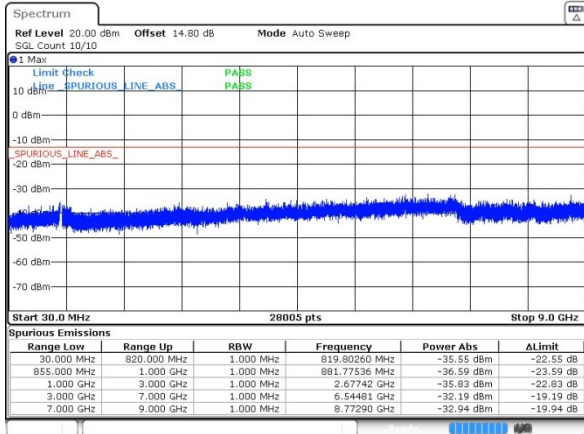
Date: 24 AUG 2021 14:47:06



Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

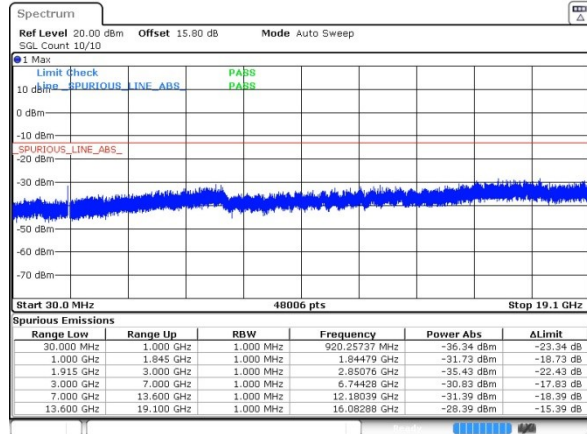
Lowest Channel



Date: 24 AUG 2021 14:56:22

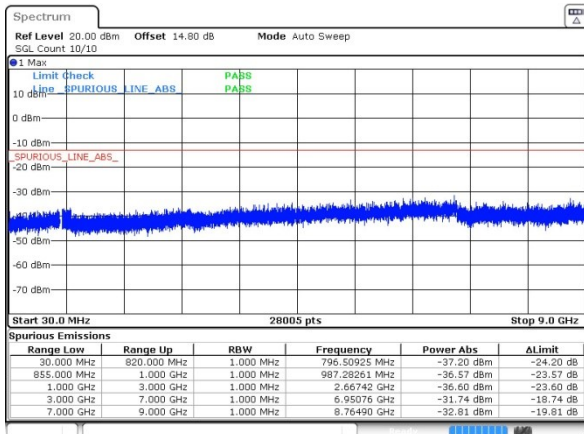
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



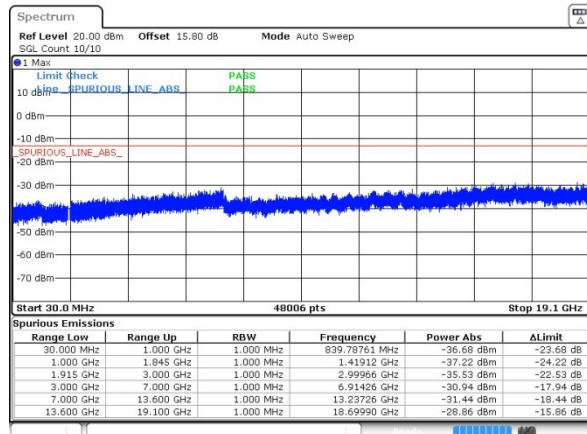
Date: 24 AUG 2021 15:05:43

Middle Channel



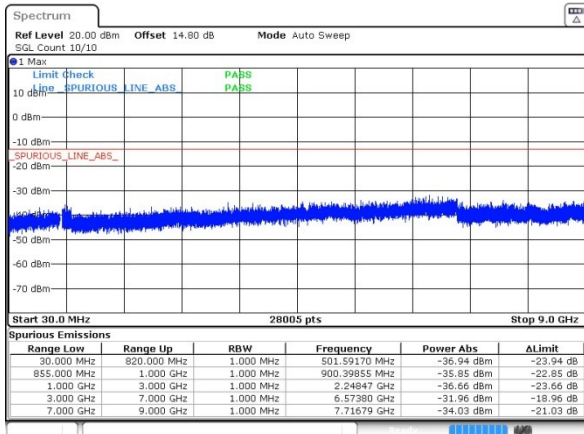
Date: 24 AUG 2021 14:56:39

Middle Channel



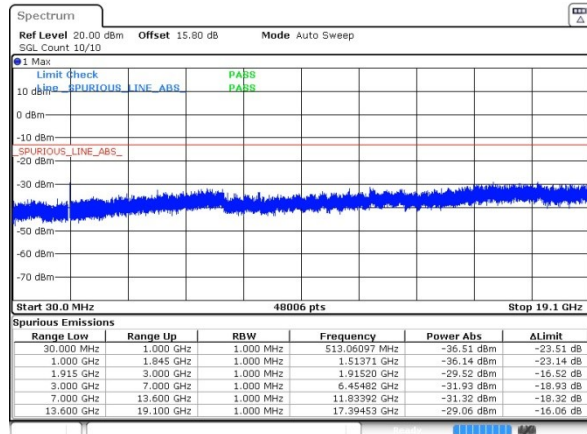
Date: 24 AUG 2021 15:06:05

Highest Channel



Date: 24 AUG 2021 14:57:02

Highest Channel

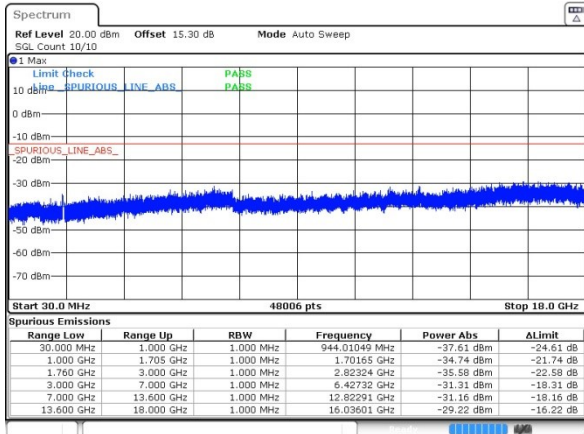


Date: 24 AUG 2021 15:06:25



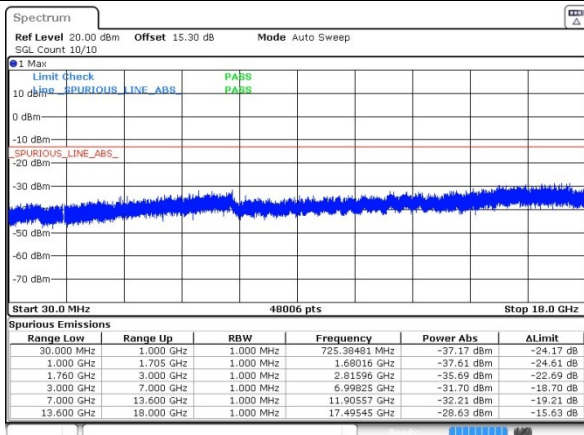
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



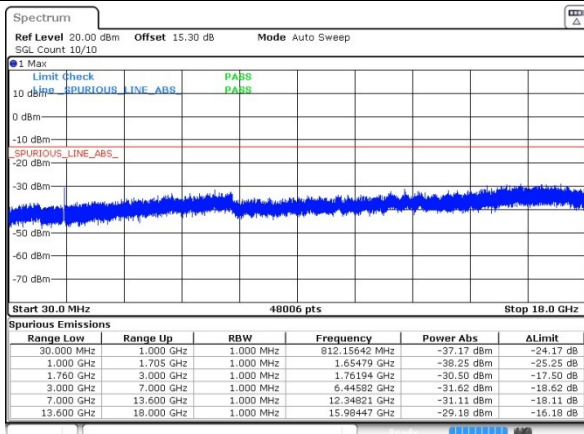
Date: 24 AUG 2021 14:47:38

Middle Channel



Date: 24 AUG 2021 14:48:03

Highest Channel



Date: 24 AUG 2021 14:48:28

**Frequency Stability**

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	0.0059	PASS
40	Normal Voltage	0.0368	
30	Normal Voltage	0.0472	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0065	
0	Normal Voltage	0.0342	
-10	Normal Voltage	0.0067	
-20	Normal Voltage	0.0163	
-30	Normal Voltage	0.0319	
20	Maximum Voltage	0.0428	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0067	

Note: Normal Voltage = 3.87V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45V



Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0176	PASS
40	Normal Voltage	0.0137	
30	Normal Voltage	0.0142	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0164	
0	Normal Voltage	0.0144	
-10	Normal Voltage	0.0248	
-20	Normal Voltage	0.0075	
-30	Normal Voltage	0.0169	
20	Maximum Voltage	0.0161	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage = 3.87V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45V
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	0.0043	PASS
40	Normal Voltage	0.0154	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0169	
-20	Normal Voltage	0.0158	
-30	Normal Voltage	0.0061	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0134	

Note:

1. Normal Voltage = 3.87V ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45V
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	-58.49	-13	-45.49	-65.46	1.58	10.70	H
	2510	-56.51	-13	-43.51	-64.76	2.102	12.50	H
	3348	-61.83	-13	-48.83	-70.72	2.856	13.90	H
	1672	-59.99	-13	-46.99	-66.96	1.58	10.70	V
	2510	-49.06	-13	-36.06	-57.31	2.10	12.50	V
	3348	-62.03	-13	-49.03	-70.92	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	-58.65	-13	-45.65	-65.62	1.58	10.70	H
	2510	-59.41	-13	-46.41	-67.66	2.102	12.50	H
	3348	-61.97	-13	-48.97	-70.86	2.856	13.90	H
	1672	-59.64	-13	-46.64	-66.61	1.58	10.70	V
	2510	-51.61	-13	-38.61	-59.86	2.10	12.50	V
	3348	-61.95	-13	-48.95	-70.84	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	-59.30	-13	-46.30	-71.56	2.641	14.90	H
	5640	-57.32	-13	-44.32	-69.18	2.94	14.80	H
	7524	-54.37	-13	-41.37	-64.14	3.39	13.16	H
	3759	-59.23	-13	-46.23	-71.49	2.64	14.90	V
	5640	-57.88	-13	-44.88	-69.74	2.94	14.80	V
	7524	-54.20	-13	-41.20	-63.97	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	-59.70	-13	-46.70	-71.96	2.641	14.90	H
	5640	-57.11	-13	-44.11	-68.97	2.94	14.80	H
	7524	-54.11	-13	-41.11	-63.88	3.39	13.16	H
	3759	-59.43	-13	-46.43	-71.69	2.64	14.90	V
	5640	-57.96	-13	-44.96	-69.82	2.94	14.80	V
	7524	-54.38	-13	-41.38	-64.15	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	-64.68	-13	-51.68	-71.65	1.58	10.70	H
	2510	-61.54	-13	-48.54	-69.79	2.102	12.50	H
	3348	-62.01	-13	-49.01	-70.90	2.856	13.90	H
	1672	-63.65	-13	-50.65	-70.62	1.58	10.70	V
	2510	-60.60	-13	-47.60	-68.85	2.10	12.50	V
	3348	-61.91	-13	-48.91	-70.80	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	-58.30	-13	-45.30	-70.56	2.64	14.90	H
	5640	-57.06	-13	-44.06	-68.92	2.94	14.80	H
	7524	-54.64	-13	-41.64	-64.41	3.39	13.16	H
	3759	-58.22	-13	-45.22	-70.48	2.64	14.90	V
	5640	-57.55	-13	-44.55	-69.41	2.94	14.80	V
	7524	-54.33	-13	-41.33	-64.10	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	-59.51	-13	-46.51	-70.25	2.604	13.34	H
	5199	-57.02	-13	-44.02	-67.53	3.011	13.52	H
	6936	-55.75	-13	-42.75	-65.95	3.271	13.47	H
	3465	-60.26	-13	-47.26	-71.00	2.604	13.34	V
	5199	-57.34	-13	-44.34	-67.85	3.011	13.52	V
	6936	-55.91	-13	-42.91	-66.11	3.271	13.47	V

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