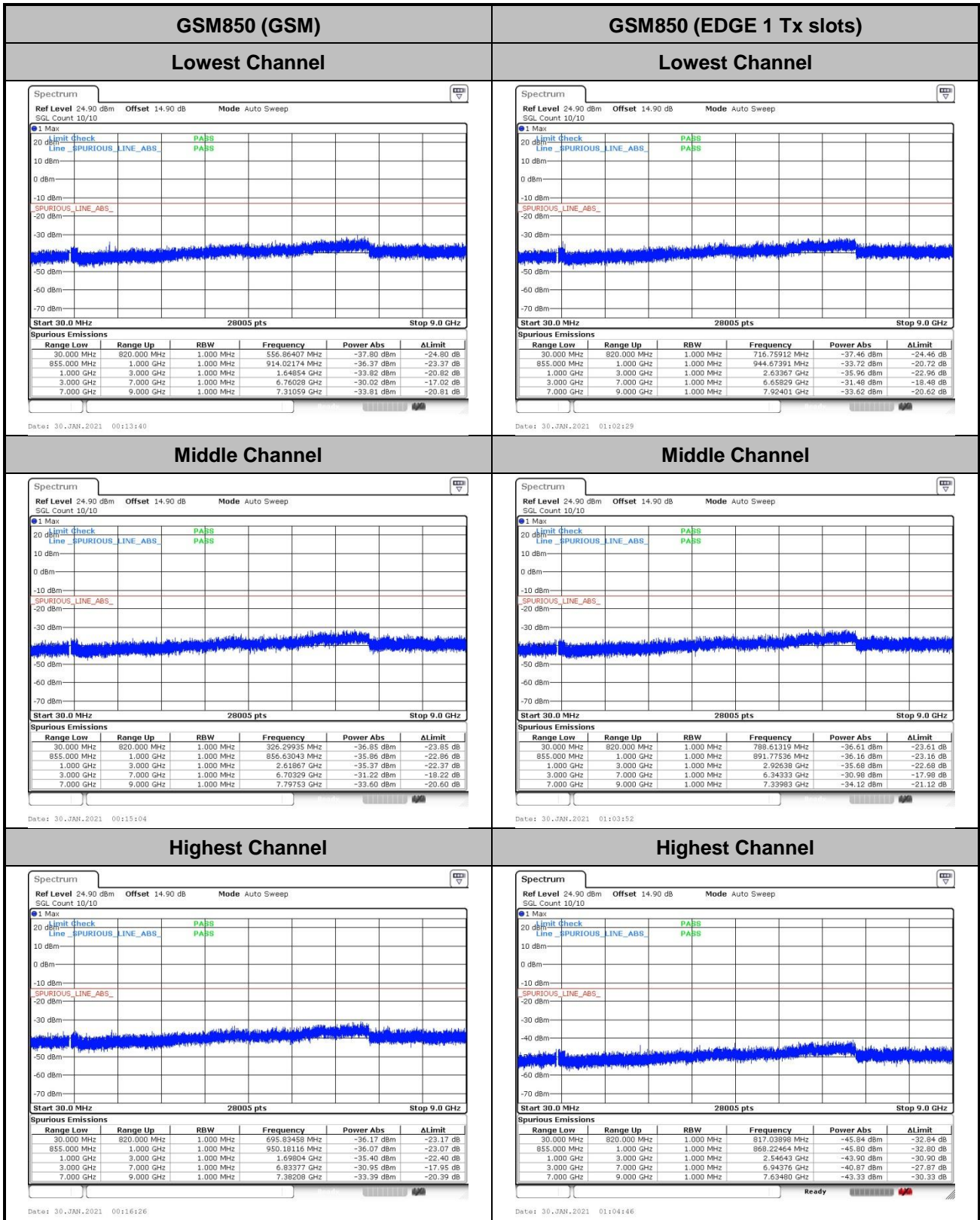




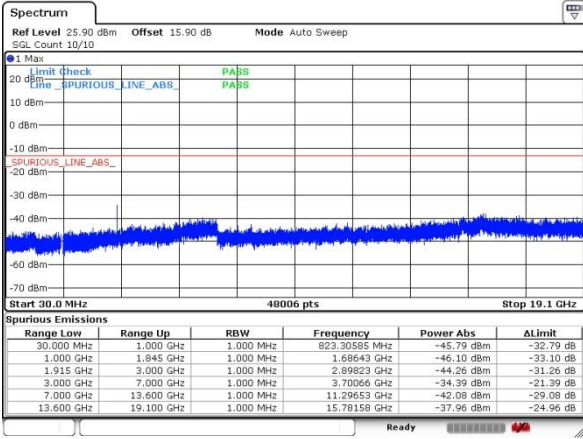
Conducted Spurious Emission





GSM1900 (GSM)

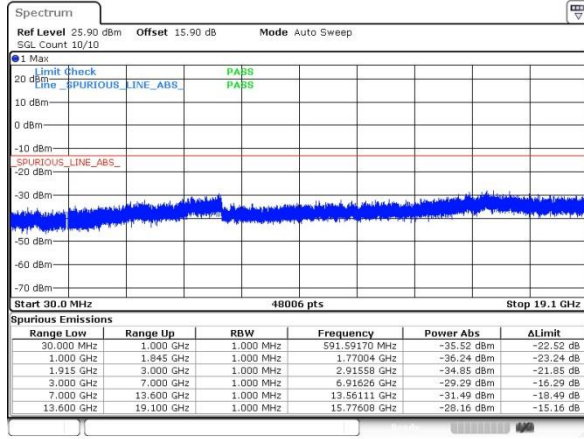
Lowest Channel



Date: 30_JAN.2021 01:50:07

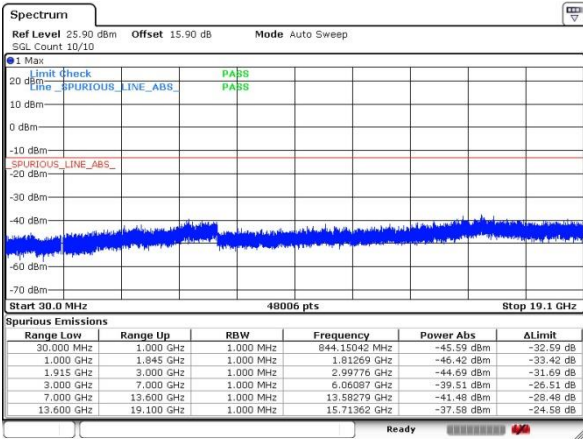
GSM1900 (EDGE 1 Tx slots)

Lowest Channel



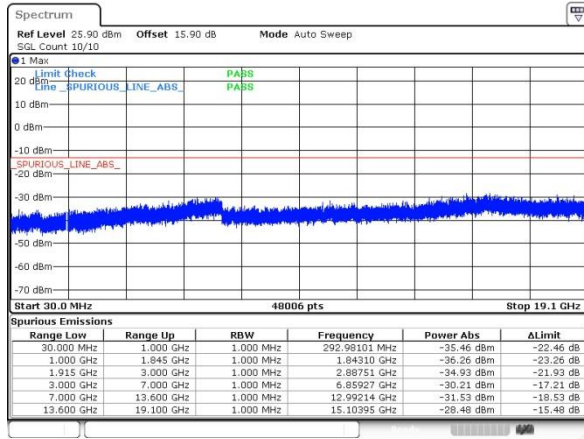
Date: 30_JAN.2021 02:13:01

Middle Channel



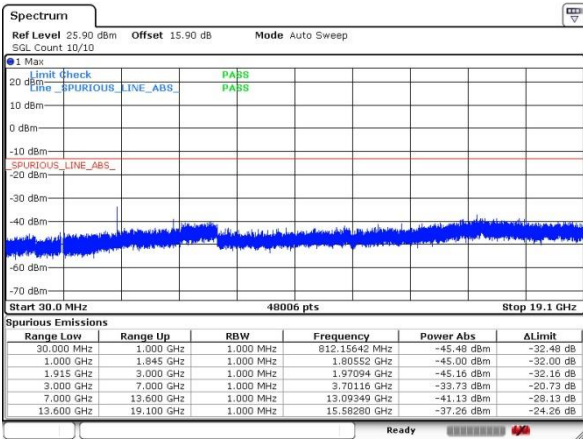
Date: 30_JAN.2021 01:50:44

Middle Channel



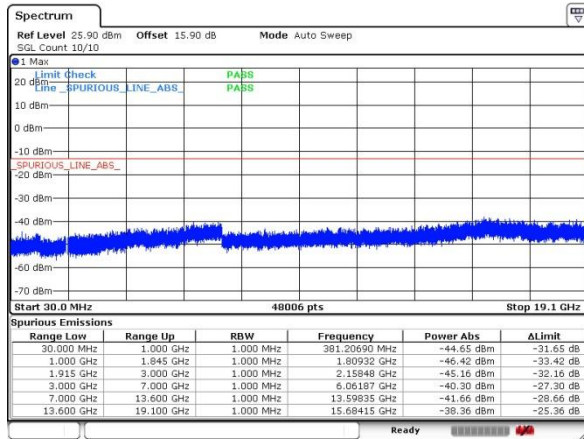
Date: 30_JAN.2021 02:14:27

Highest Channel



Date: 30_JAN.2021 01:51:02

Highest Channel



Date: 30_JAN.2021 02:16:45



Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE 1 Tx slot)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0108	0.0224	PASS
40	Normal Voltage	0.0032	0.0178	
30	Normal Voltage	0.0130	0.0087	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0145	0.0155	
0	Normal Voltage	0.0078	0.0169	
-10	Normal Voltage	0.0175	0.0234	
-20	Normal Voltage	0.0159	0.0065	
-30	Normal Voltage	0.0143	0.0109	
20	Maximum Voltage	0.0096	0.0132	
20	Normal Voltage	0.0120	0.0203	
20	Battery End Point	0.0191	0.0036	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE 1 Tx slot)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0058	0.0181	PASS
40	Normal Voltage	0.0015	0.0131	
30	Normal Voltage	0.0119	0.0023	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0145	0.0112	
0	Normal Voltage	0.0136	0.0135	
-10	Normal Voltage	0.0089	0.0174	
-20	Normal Voltage	0.0021	0.0127	
-30	Normal Voltage	0.0118	0.0119	
20	Maximum Voltage	0.0052	0.0018	
20	Normal Voltage	0.0011	0.0134	
20	Battery End Point	0.0124	0.0027	

Note:

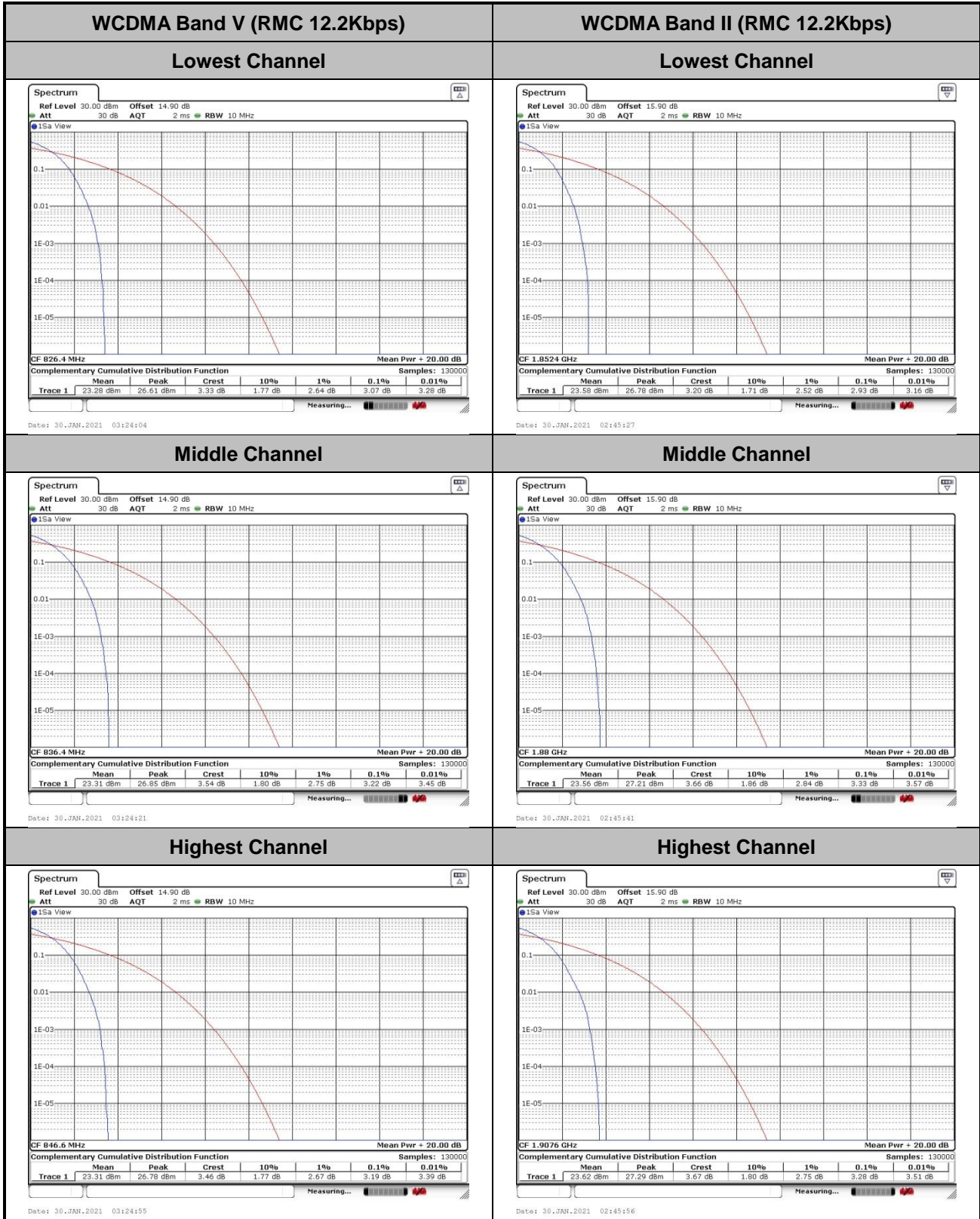
1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

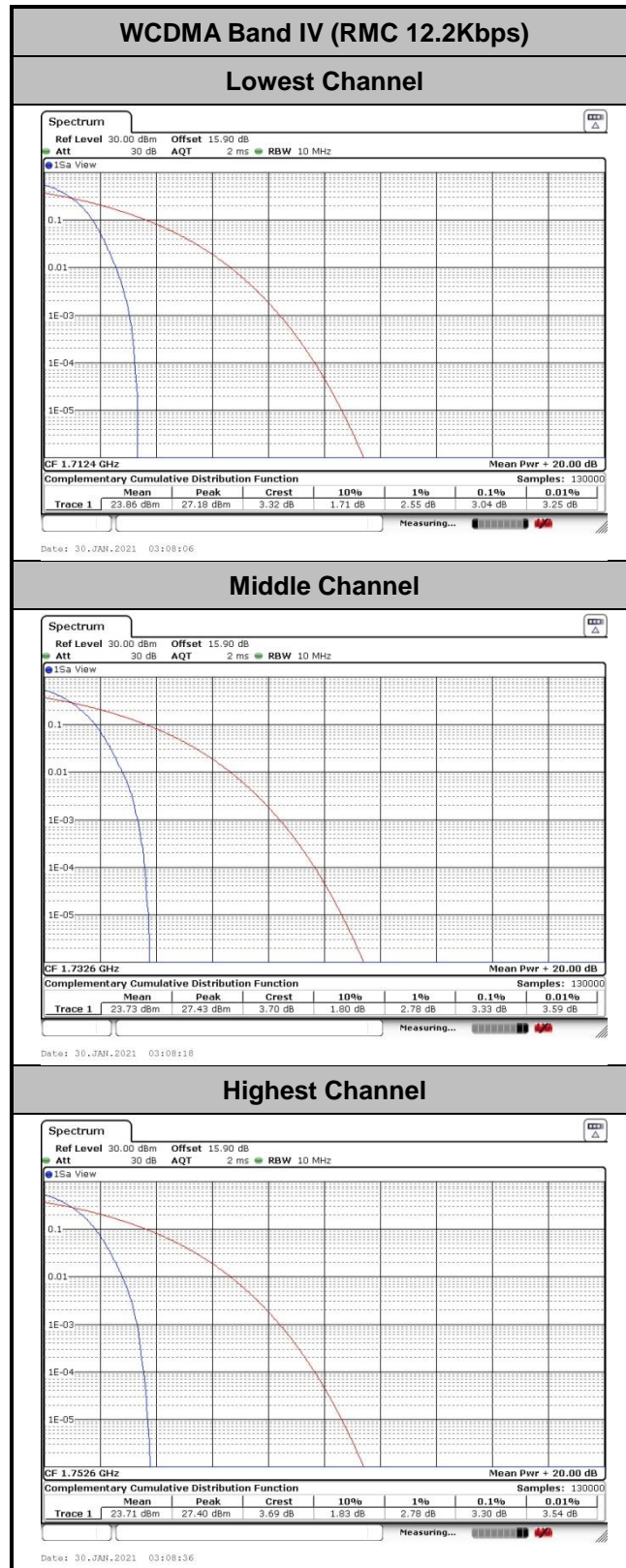


A2. WCDMA

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	3.07	2.93	3.04	PASS
Middle CH	3.22	3.33	3.33	
Highest CH	3.19	3.28	3.30	







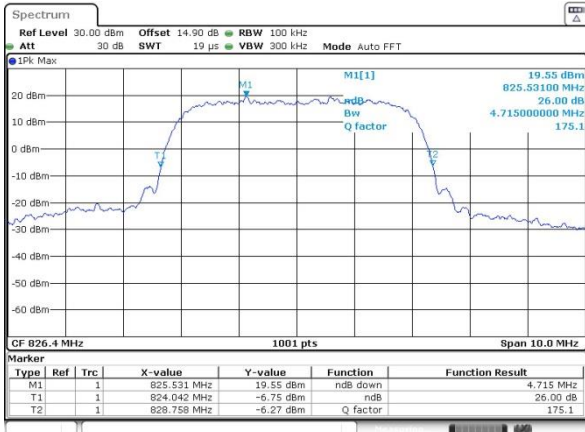
26dB Bandwidth

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.715	4.735	4.725
Middle CH	4.705	4.705	4.715
Highest CH	4.715	4.715	4.705



WCDMA Band V (RMC 12.2Kbps)

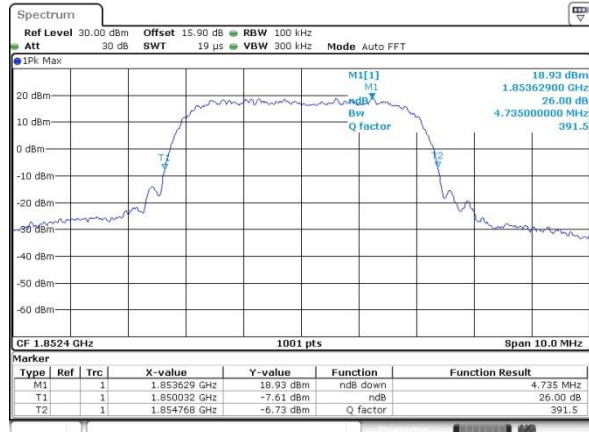
Lowest Channel



Date: 30_JAN_2021 03:17:40

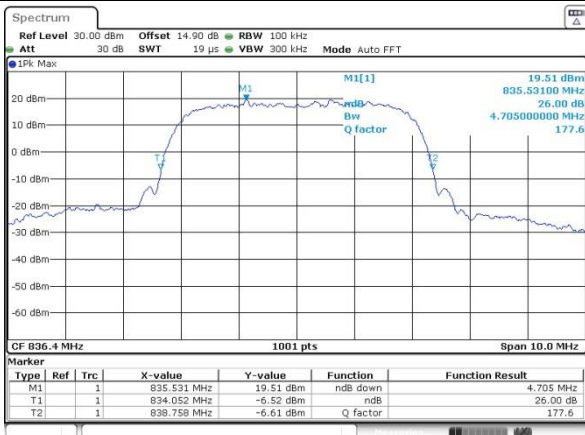
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



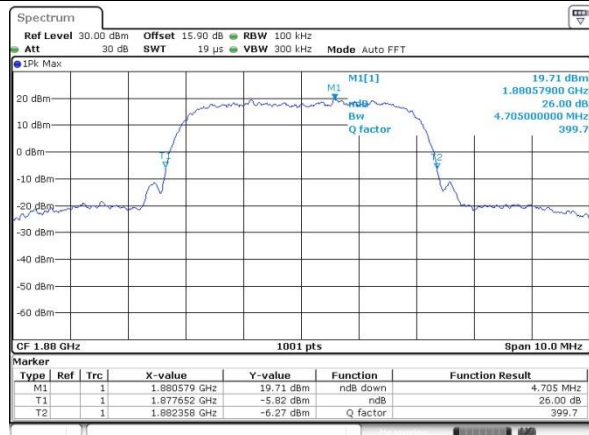
Date: 30_JAN_2021 02:38:38

Middle Channel



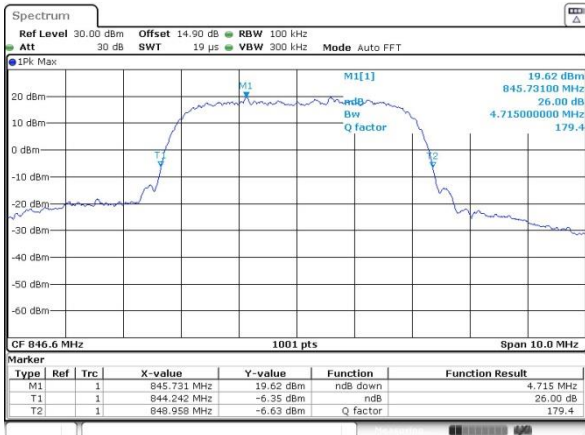
Date: 30_JAN_2021 03:18:27

Middle Channel



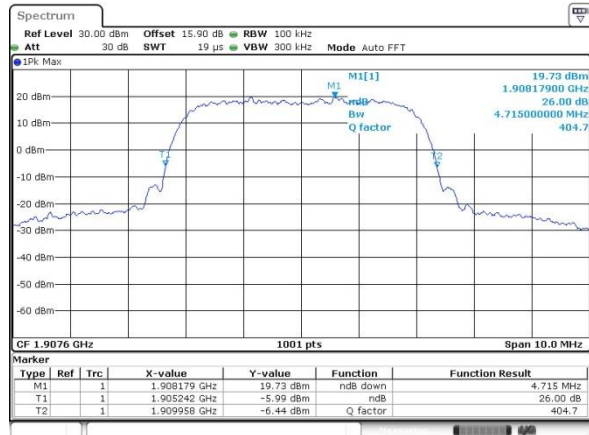
Date: 30_JAN_2021 02:39:40

Highest Channel

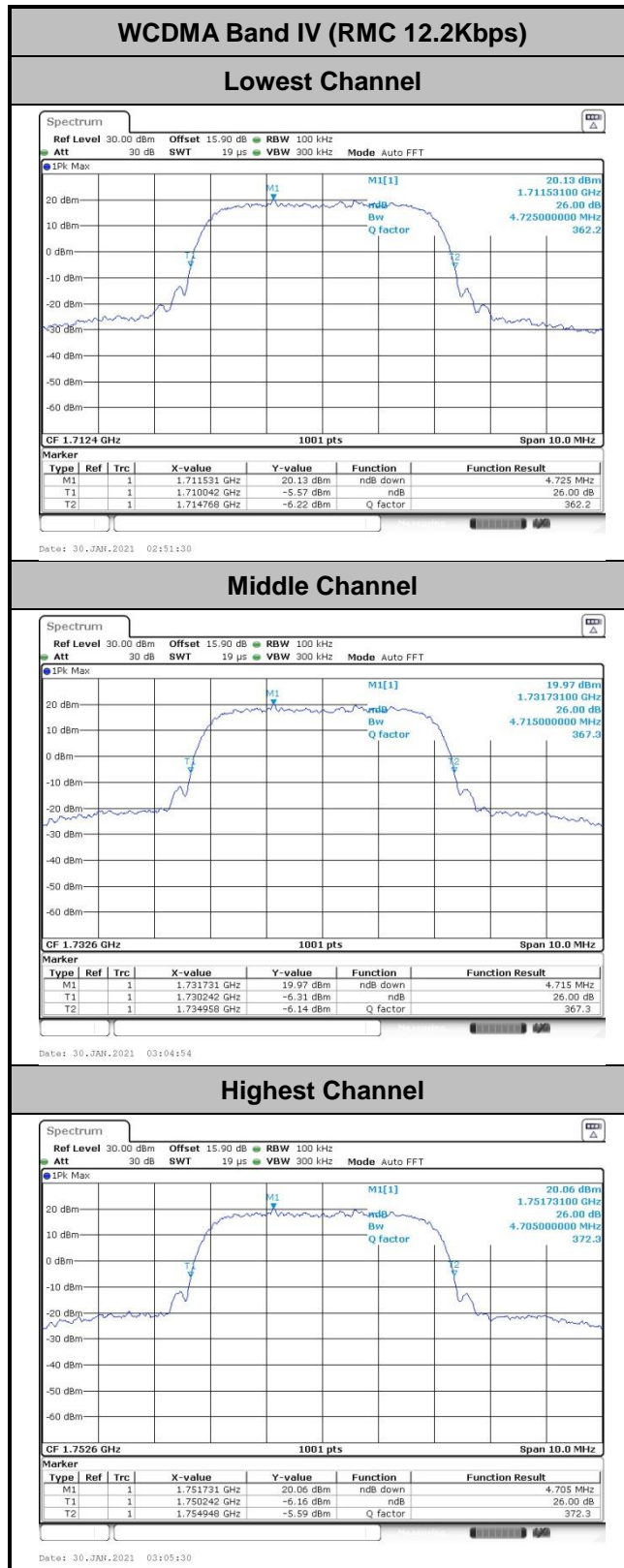


Date: 30_JAN_2021 03:19:17

Highest Channel



Date: 30_JAN_2021 02:40:16





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	4.15
Highest CH	4.13	4.14	4.14

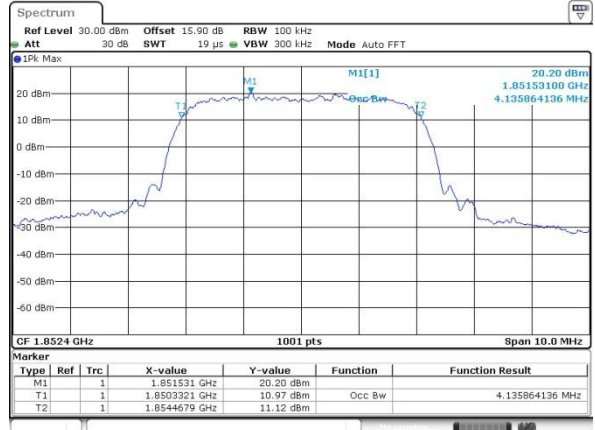
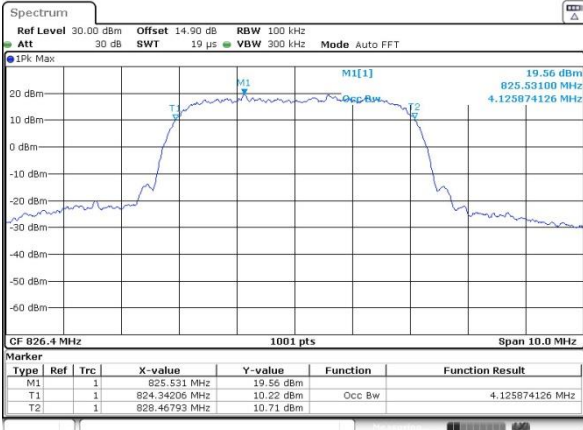


WCDMA Band V (RMC 12.2Kbps)

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

Lowest Channel

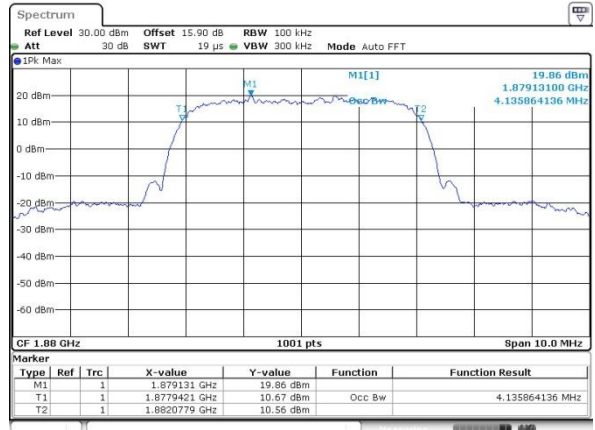
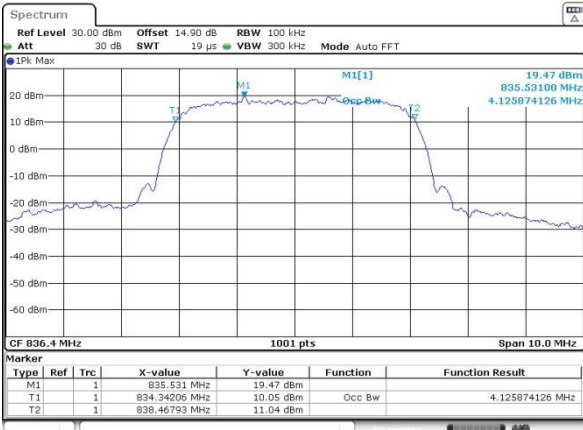


Date: 30.JAN.2021 03:20:01

Date: 30.JAN.2021 02:40:57

Middle Channel

Middle Channel

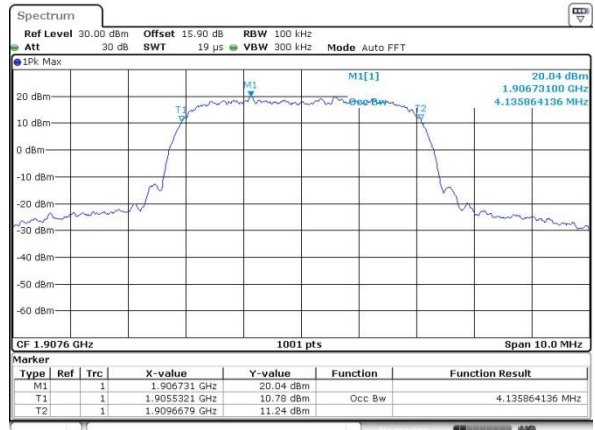
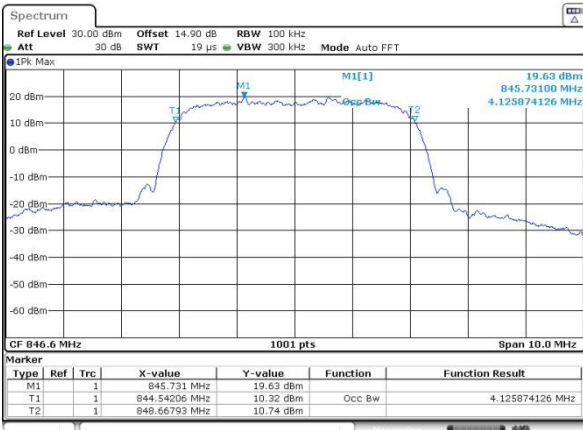


Date: 30.JAN.2021 03:20:38

Date: 30.JAN.2021 02:41:49

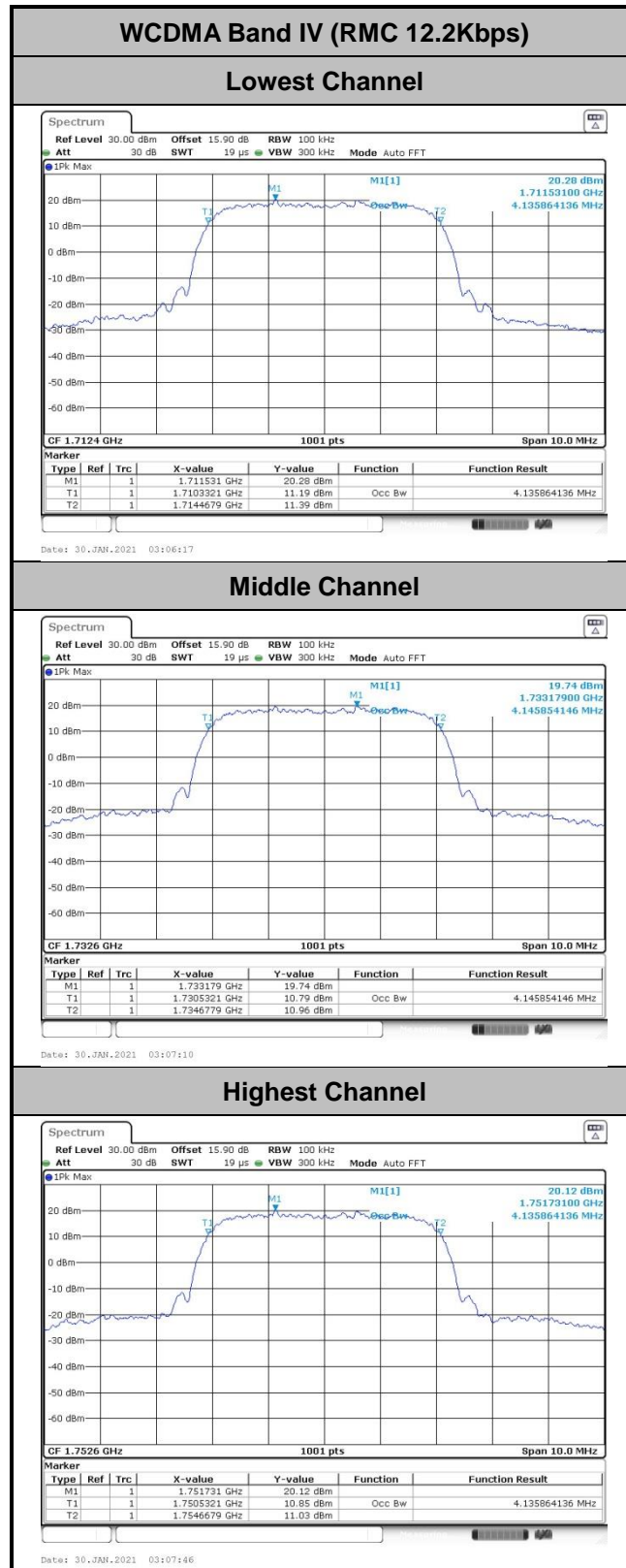
Highest Channel

Highest Channel



Date: 30.JAN.2021 03:21:18

Date: 30.JAN.2021 02:42:30

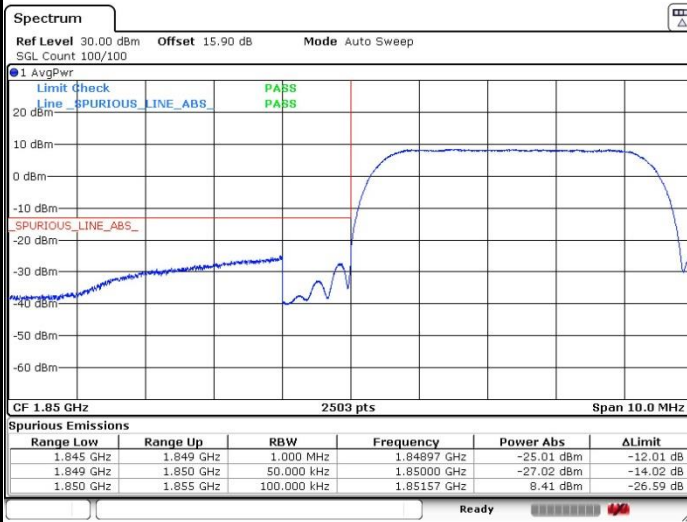




Conducted Band Edge

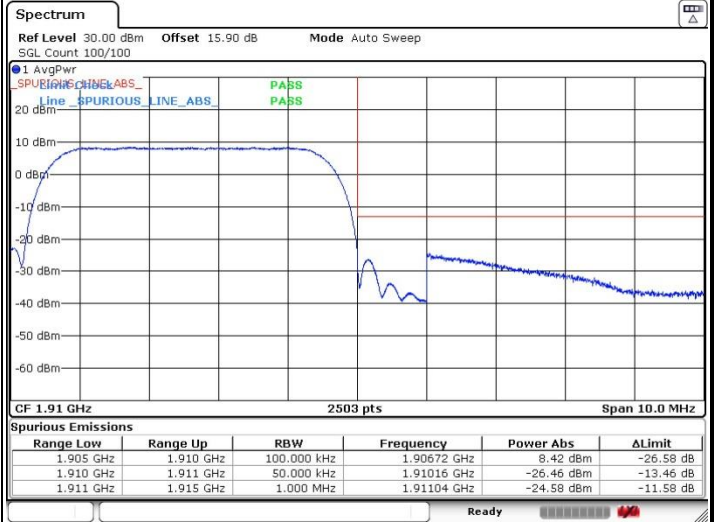
WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge



Date: 30.JAN.2021 02:47:56

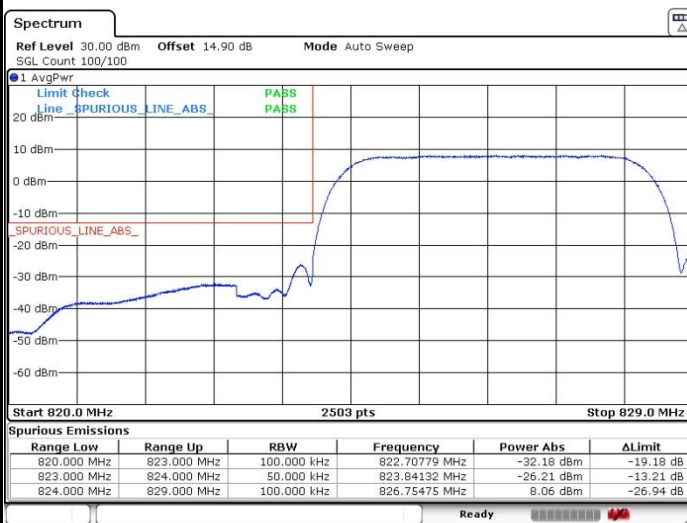
Highest Band Edge



Date: 30.JAN.2021 02:49:02

WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge

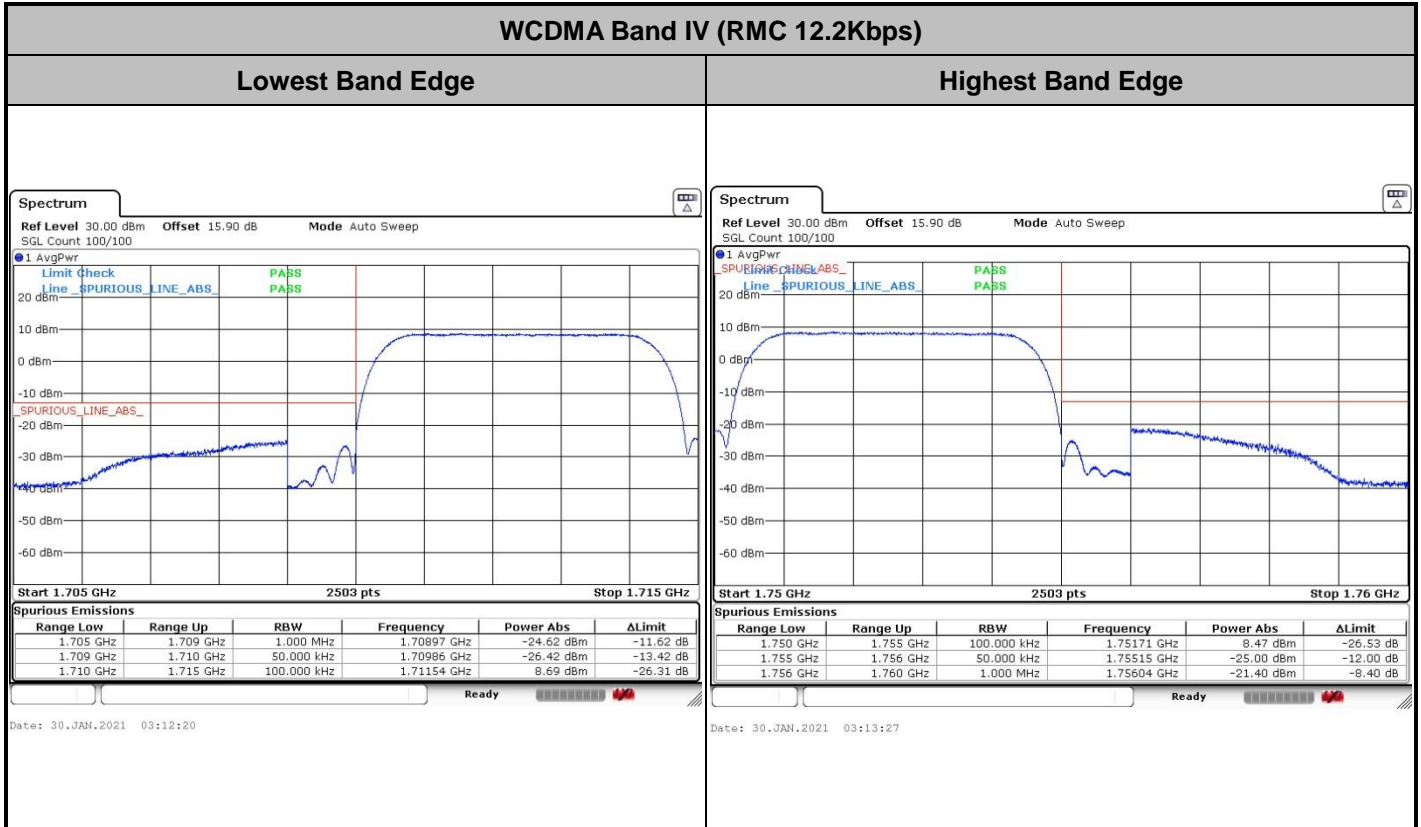


Date: 30.JAN.2021 03:26:51

Highest Band Edge

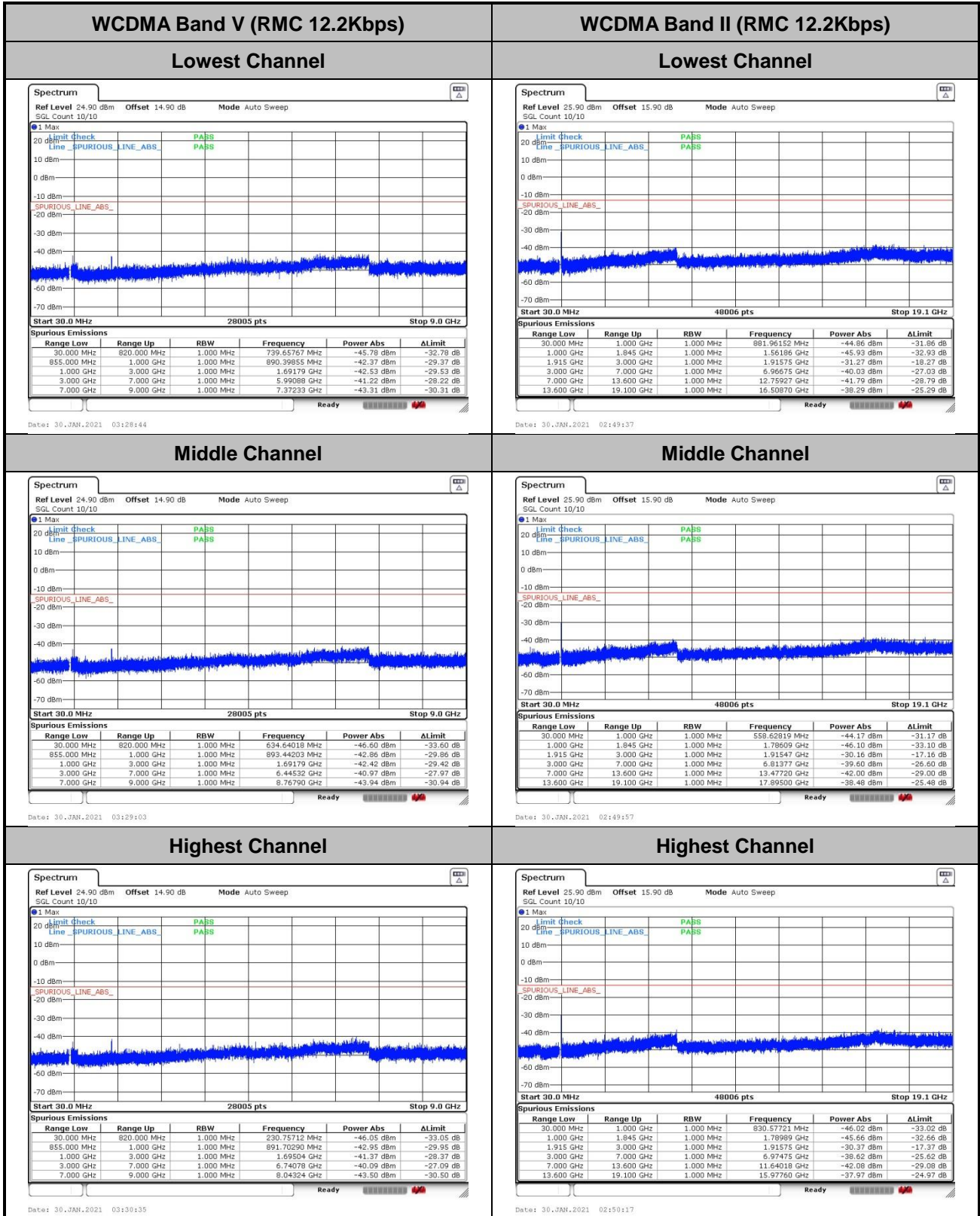


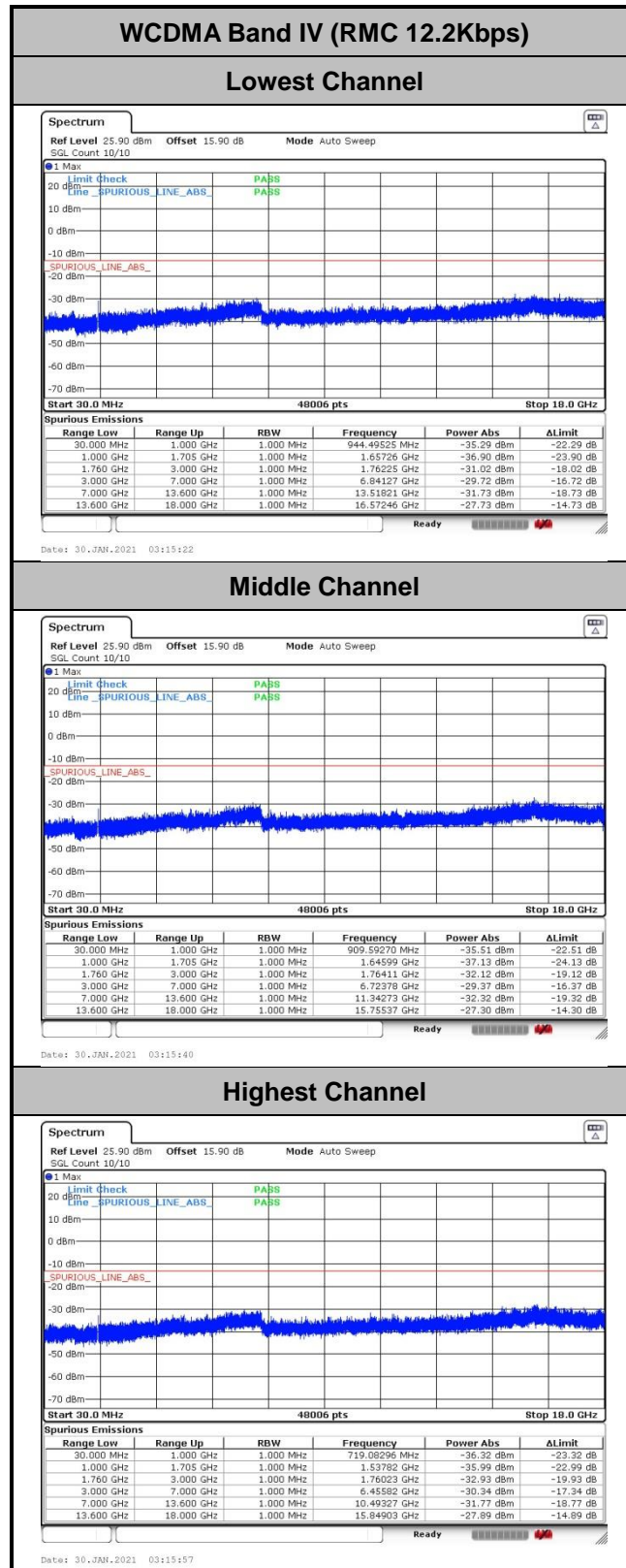
Date: 30.JAN.2021 03:28:06





Conducted Spurious Emission







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	0.0088	PASS
40	Normal Voltage	0.0255	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0278	
0	Normal Voltage	0.0243	
-10	Normal Voltage	0.0068	
-20	Normal Voltage	0.0273	
-30	Normal Voltage	0.0036	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0234	
20	Battery End Point	0.0263	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0122	
30	Normal Voltage	0.0118	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0174	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0143	
-20	Normal Voltage	0.0159	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0096	
20	Battery End Point	0.0032	



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0150	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0127	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0144	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0133	
20	Battery End Point	0.0035	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.4 V. ; 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

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	-63.00	-13	-50.00	-69.97	1.58	10.70	H
	2510	-58.89	-13	-45.89	-67.14	2.102	12.50	H
	3348	-57.52	-13	-44.52	-66.41	2.856	13.90	H
	1672	-62.89	-13	-49.89	-69.86	1.58	10.70	V
	2510	-58.61	-13	-45.61	-66.86	2.10	12.50	V
	3348	-57.66	-13	-44.66	-66.55	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	-63.51	-13	-50.51	-70.48	1.58	10.70	H
	2510	-59.13	-13	-46.13	-67.38	2.102	12.50	H
	3348	-57.96	-13	-44.96	-66.85	2.856	13.90	H
	1672	-63.06	-13	-50.06	-70.03	1.58	10.70	V
	2510	-58.87	-13	-45.87	-67.12	2.10	12.50	V
	3348	-57.43	-13	-44.43	-66.32	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	-53.56	-13	-40.56	-65.82	2.641	14.90	H
	5640	-51.63	-13	-38.63	-63.49	2.94	14.80	H
	7524	-48.58	-13	-35.58	-58.35	3.39	13.16	H
	3759	-53.63	-13	-40.63	-65.89	2.64	14.90	V
	5640	-50.97	-13	-37.97	-62.83	2.94	14.80	V
	7524	-48.77	-13	-35.77	-58.54	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	-53.65	-13	-40.65	-65.91	2.641	14.90	H
	5640	-51.70	-13	-38.70	-63.56	2.94	14.80	H
	7524	-48.56	-13	-35.56	-58.33	3.39	13.16	H
	3759	-53.73	-13	-40.73	-65.99	2.64	14.90	V
	5640	-51.51	-13	-38.51	-63.37	2.94	14.80	V
	7524	-48.98	-13	-35.98	-58.75	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	-63.42	-13	-50.42	-70.39	1.58	10.70	H
	2510	-57.81	-13	-44.81	-66.06	2.102	12.50	H
	3348	-58.25	-13	-45.25	-67.14	2.856	13.90	H
	1672	-62.21	-13	-49.21	-69.18	1.58	10.70	V
	2510	-57.20	-13	-44.20	-65.45	2.10	12.50	V
	3348	-58.16	-13	-45.16	-67.05	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	-53.83	-13	-40.83	-66.09	2.64	14.90	H
	5640	-51.42	-13	-38.42	-63.28	2.94	14.80	H
	7524	-49.23	-13	-36.23	-59.00	3.39	13.16	H
	3759	-53.72	-13	-40.72	-65.98	2.64	14.90	V
	5640	-51.41	-13	-38.41	-63.27	2.94	14.80	V
	7524	-49.47	-13	-36.47	-59.24	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	-56.74	-13	-43.74	-67.48	2.604	13.34	H
	5199	-51.30	-13	-38.30	-61.81	3.011	13.52	H
	6936	-48.87	-13	-35.87	-59.07	3.271	13.47	H
	3465	-55.75	-13	-42.75	-66.49	2.604	13.34	V
	5199	-50.97	-13	-37.97	-61.48	3.011	13.52	V
	6936	-49.25	-13	-36.25	-59.45	3.271	13.47	V

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