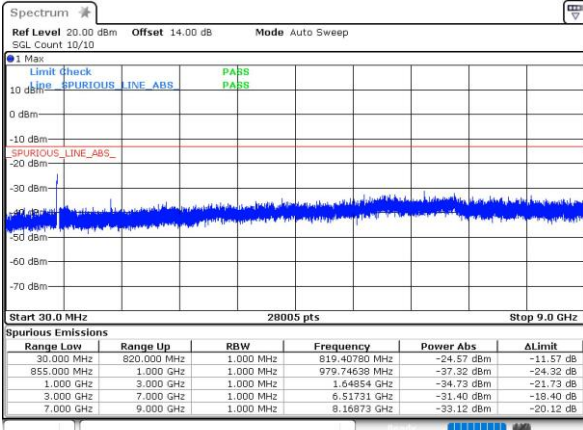




GSM850 (GSM)

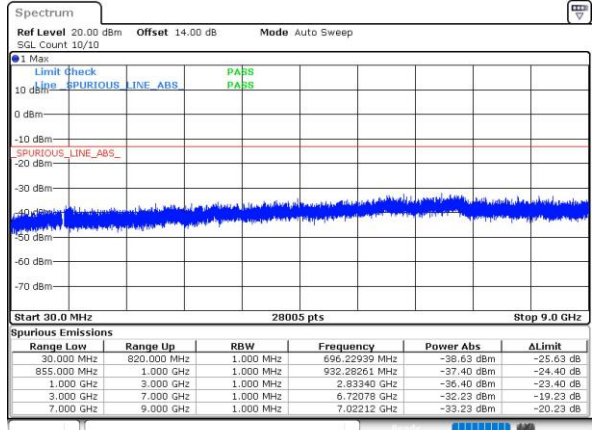
Lowest Channel



Date: 25.MAY.2021 11:15:51

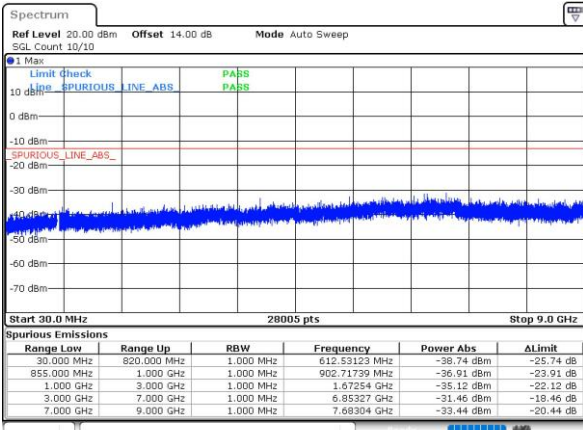
GSM850 (EDGE class 8)

Lowest Channel



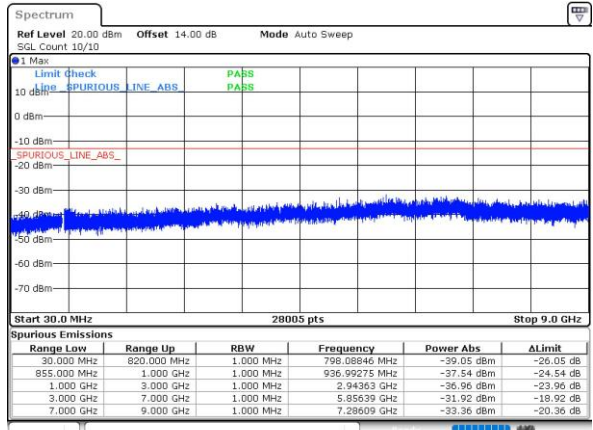
Date: 25.MAY.2021 14:03:54

Middle Channel



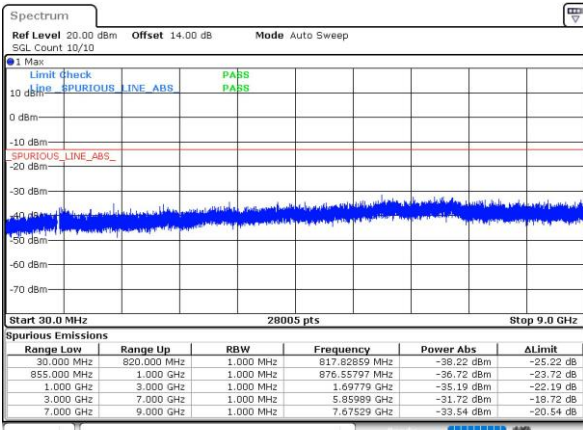
Date: 25.MAY.2021 11:16:32

Middle Channel



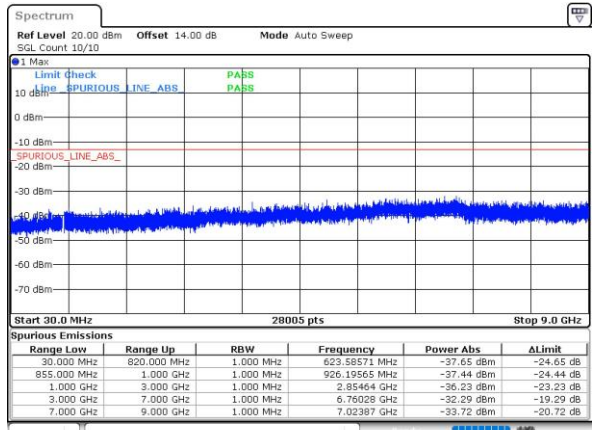
Date: 25.MAY.2021 14:05:09

Highest Channel



Date: 25.MAY.2021 11:17:45

Highest Channel

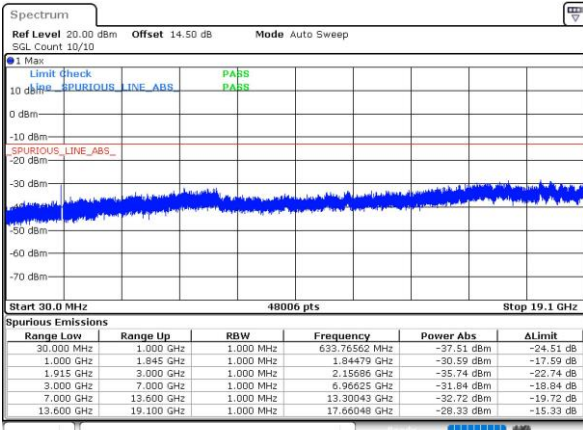


Date: 25.MAY.2021 14:05:45



GSM1900 (GSM)

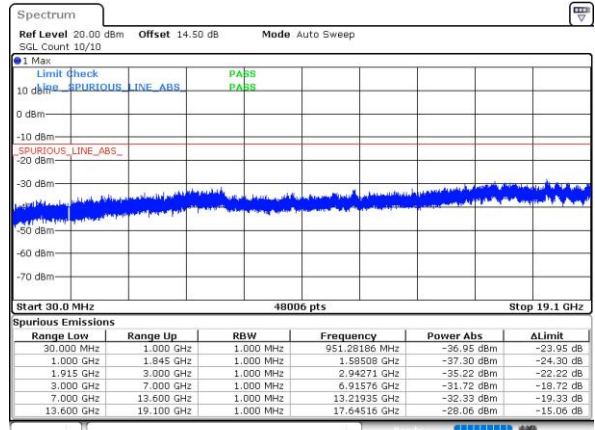
Lowest Channel



Date: 25.MAY.2021 14:41:13

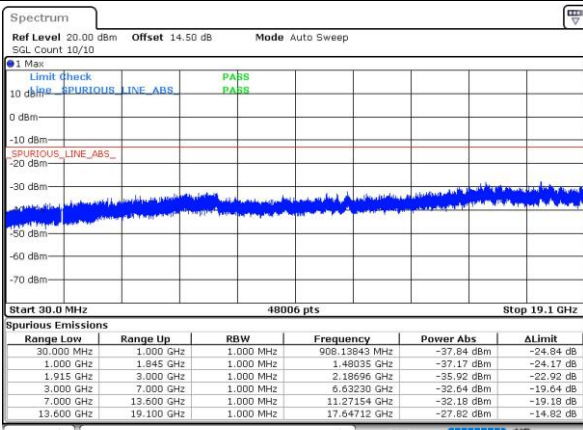
GSM1900 (EDGE class 8)

Lowest Channel



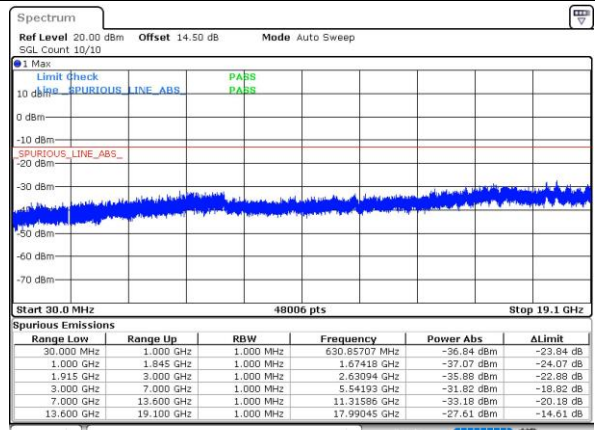
Date: 25.MAY.2021 15:28:24

Middle Channel



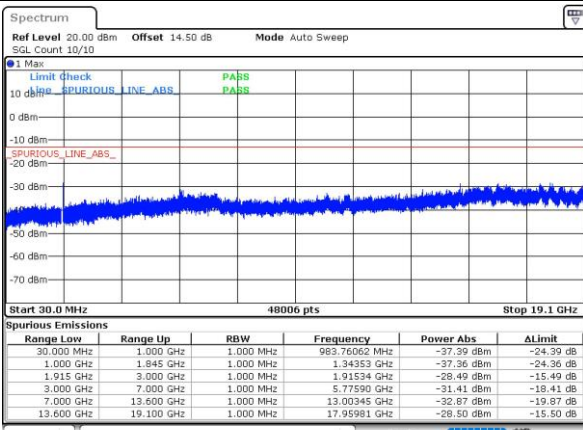
Date: 25.MAY.2021 14:42:20

Middle Channel



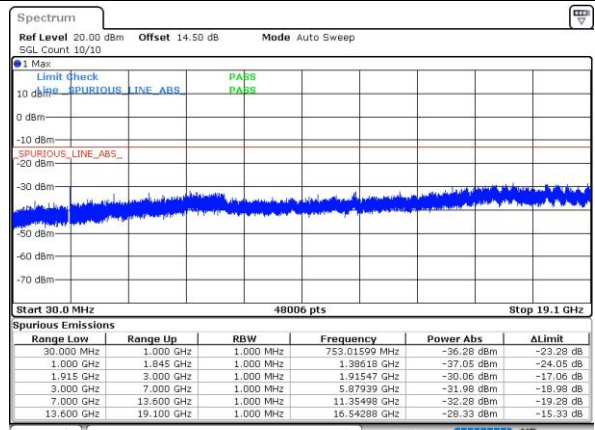
Date: 25.MAY.2021 15:32:36

Highest Channel



Date: 25.MAY.2021 14:43:12

Highest Channel



Date: 25.MAY.2021 15:33:14



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	0.0170	0.0012	PASS
40	Normal Voltage	0.0022	0.0023	
30	Normal Voltage	0.0026	0.0160	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0024	0.0017	
0	Normal Voltage	0.0017	0.0166	
-10	Normal Voltage	0.0029	0.0170	
-20	Normal Voltage	0.0004	0.0023	
-30	Normal Voltage	0.0011	0.0029	
20	Maximum Voltage	0.0148	0.0014	
20	Normal Voltage	0.0041	0.0000	
20	Battery End Point	0.0033	0.0170	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0138	0.0086	PASS
40	Normal Voltage	0.0015	0.0079	
30	Normal Voltage	0.0025	0.0080	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0154	0.0072	
0	Normal Voltage	0.0009	0.0069	
-10	Normal Voltage	0.0015	0.0002	
-20	Normal Voltage	0.0140	0.0005	
-30	Normal Voltage	0.0149	0.0011	
20	Maximum Voltage	0.0144	0.0076	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0137	0.0079	

Note:

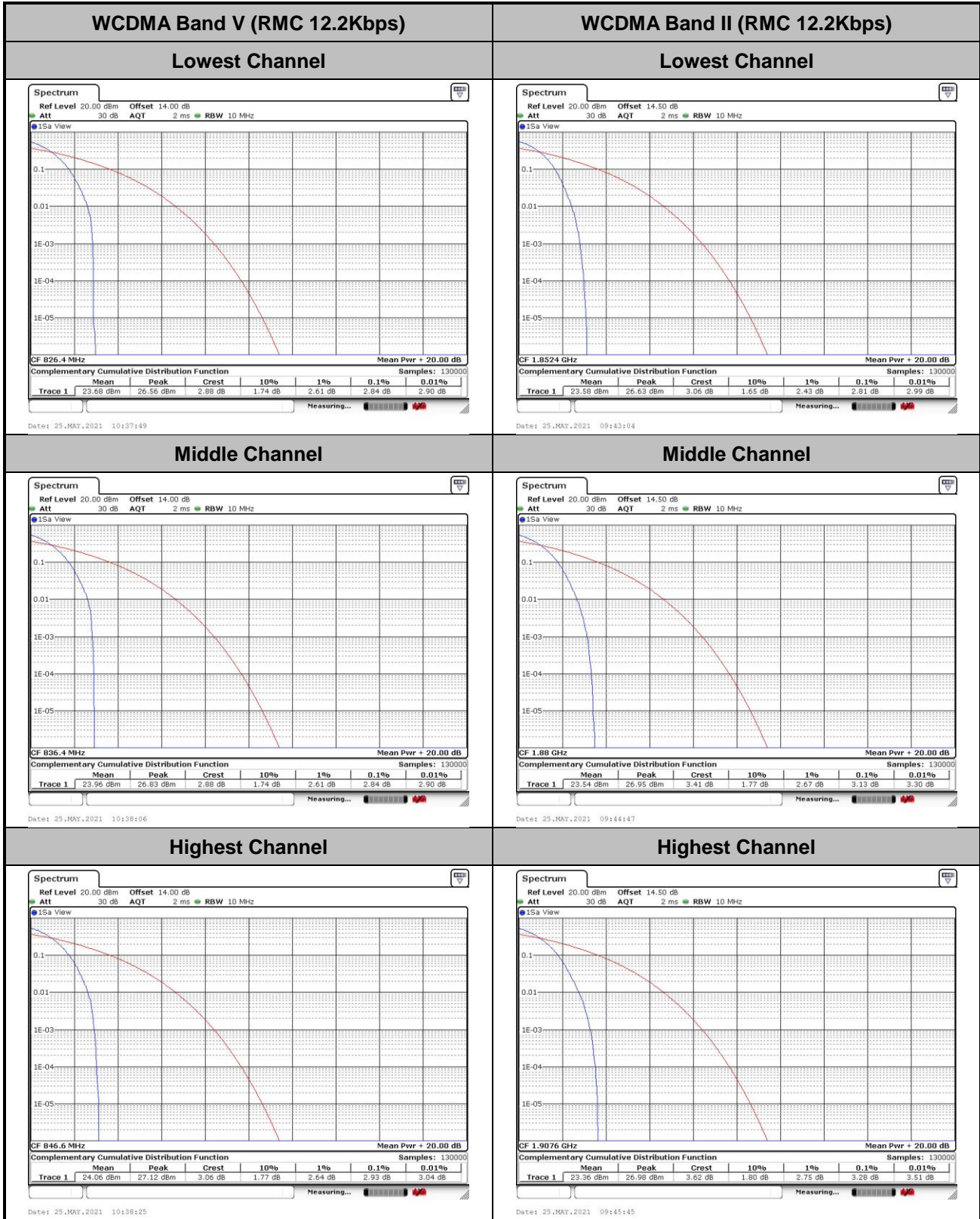
1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6V. ; Maximum Voltage =4.51V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

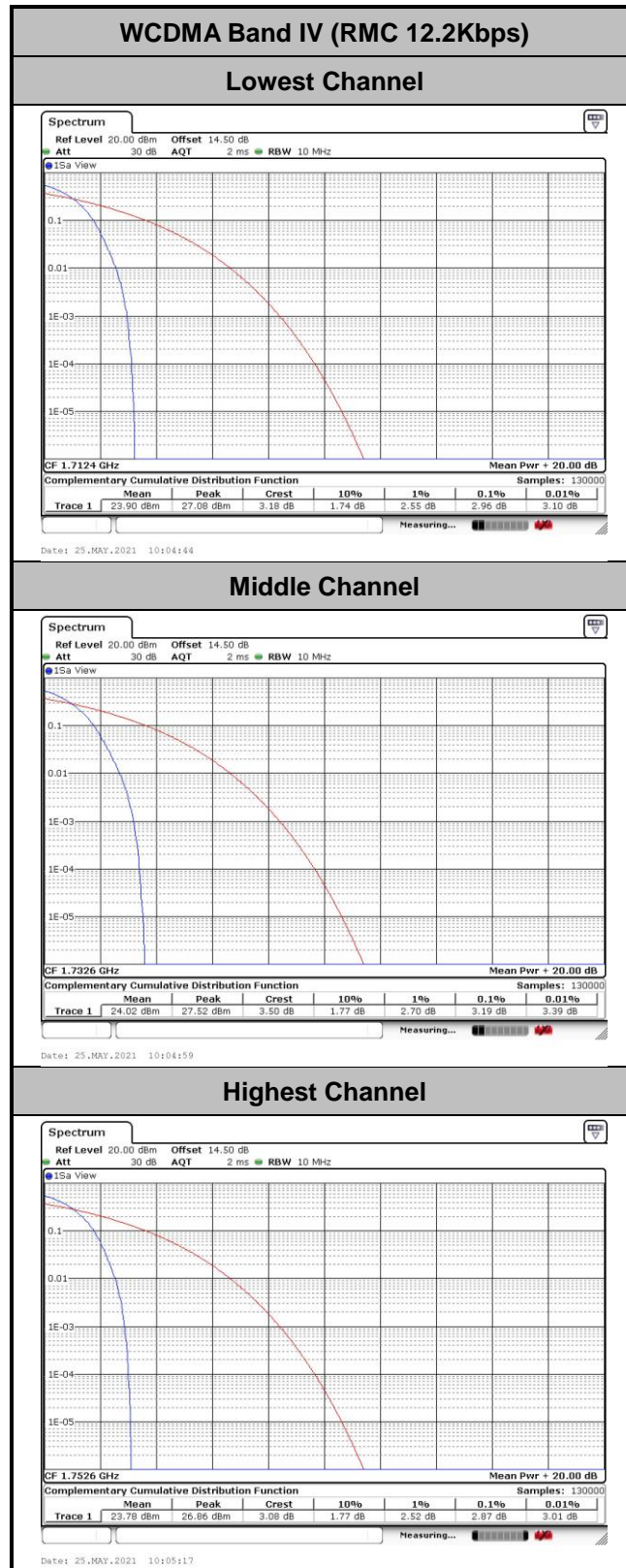


A2. WCDMA

Peak-to-Average Ratio

Mode	WCDMA Band V(dB)	WCDMA Band II(dB)	WCDMA Band IV(dB)	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	2.84	2.81	2.96	PASS
Middle CH	2.84	3.13	3.19	
Highest CH	2.93	3.28	2.87	







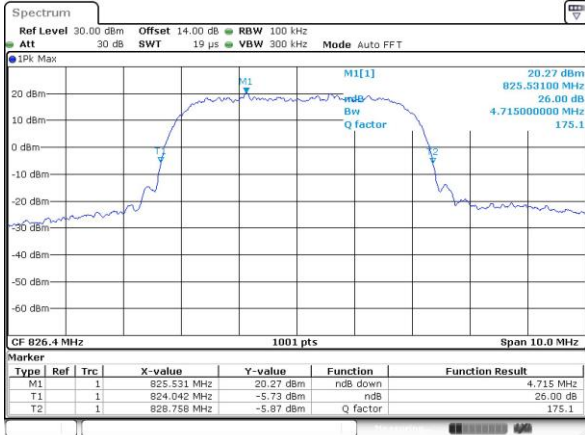
26dB Bandwidth

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	4.72	4.75	4.73
Middle CH	4.72	4.72	4.73
Highest CH	4.72	4.71	4.72



WCDMA Band V (RMC 12.2Kbps)

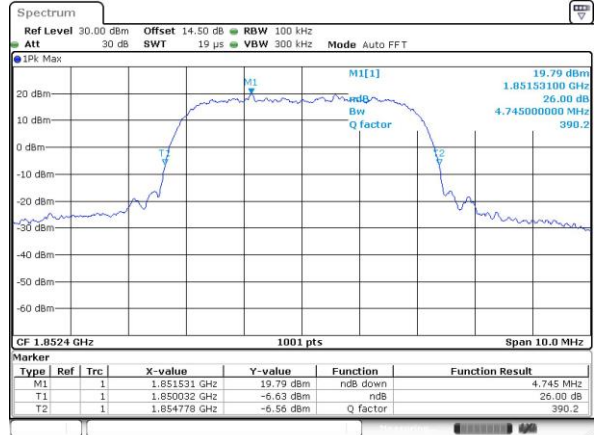
Lowest Channel



Date: 25.MAY.2021 10:15:34

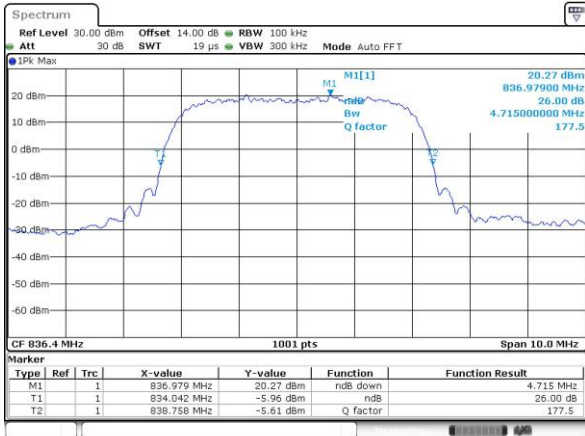
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



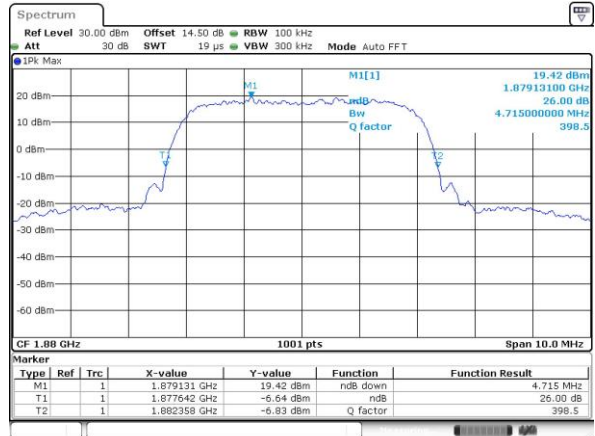
Date: 25.MAY.2021 09:21:29

Middle Channel



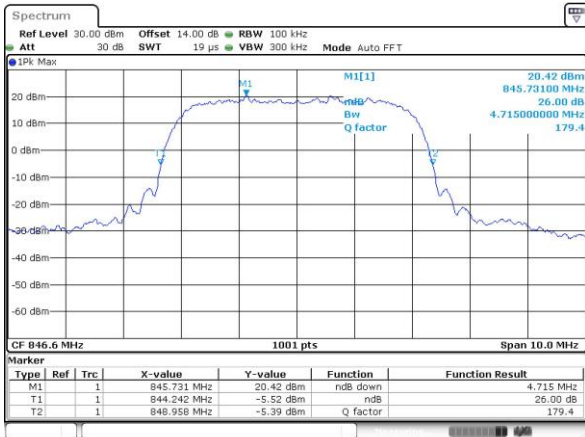
Date: 25.MAY.2021 10:18:12

Middle Channel



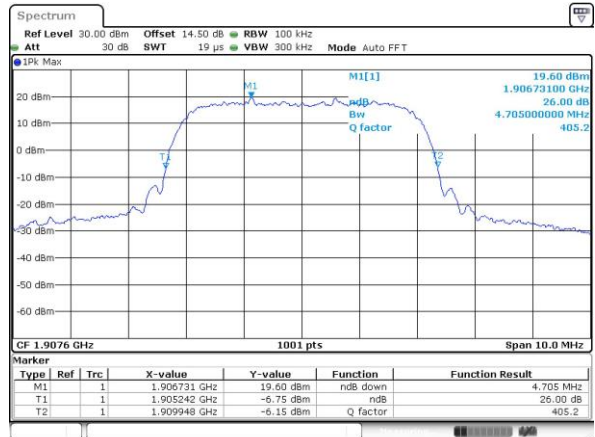
Date: 25.MAY.2021 09:21:51

Highest Channel

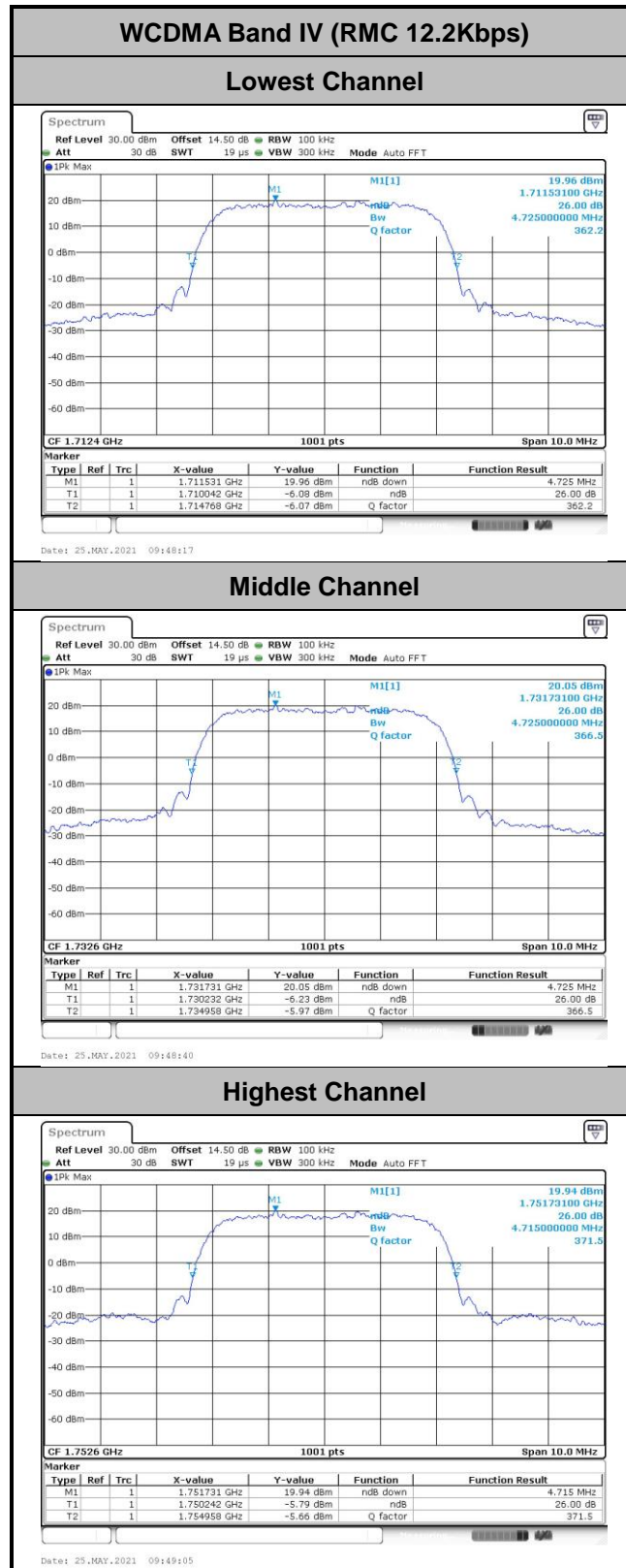


Date: 25.MAY.2021 10:18:36

Highest Channel



Date: 25.MAY.2021 09:22:16





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	4.14	4.14	4.15
Middle CH	4.14	4.15	4.15
Highest CH	4.15	4.14	4.15

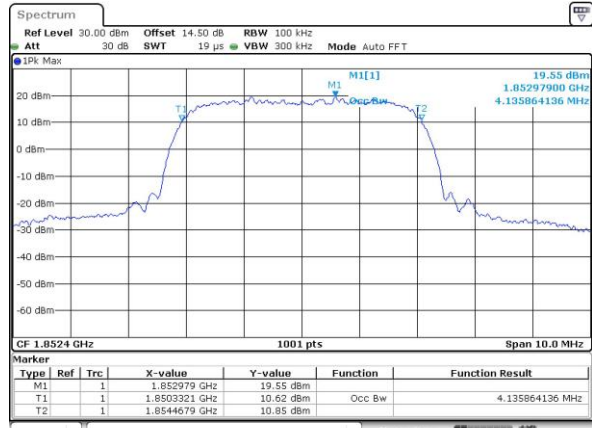
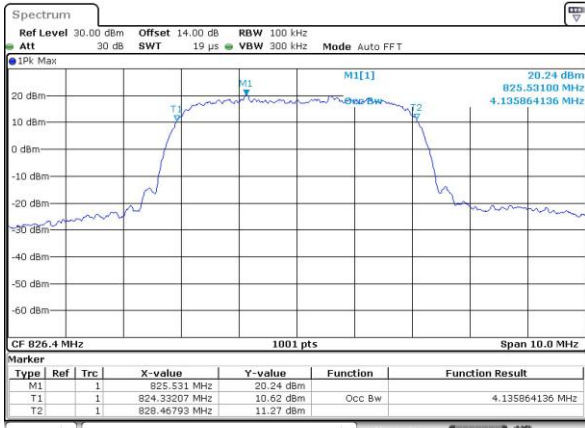


WCDMA Band V (RMC 12.2Kbps)

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

Lowest Channel

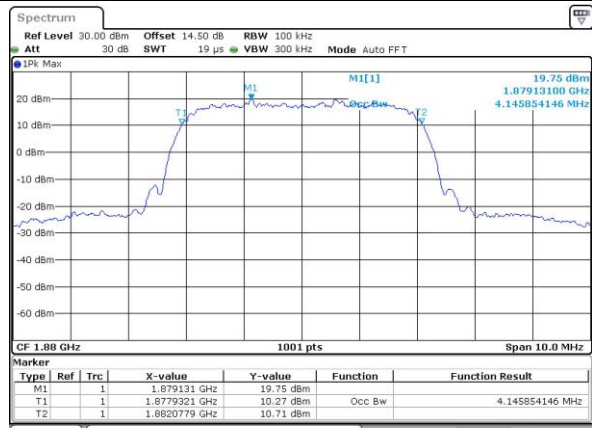
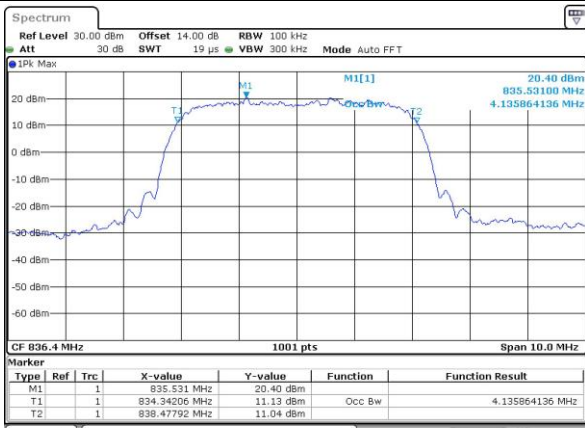


Date: 25.MAY.2021 10:19:41

Date: 25.MAY.2021 09:12:120

Middle Channel

Middle Channel

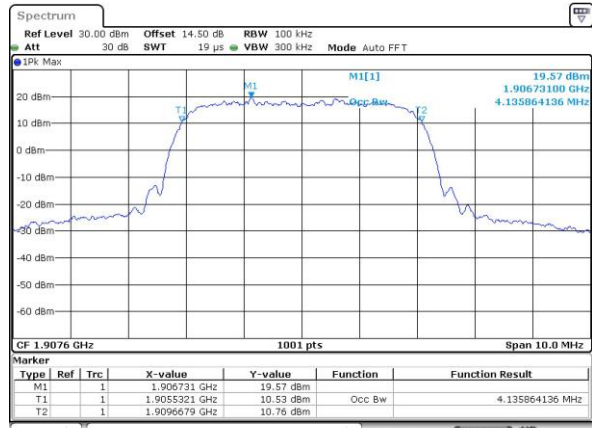
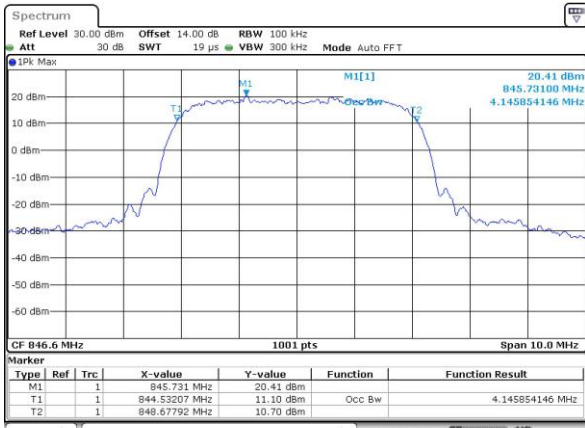


Date: 25.MAY.2021 10:20:21

Date: 25.MAY.2021 09:12:142

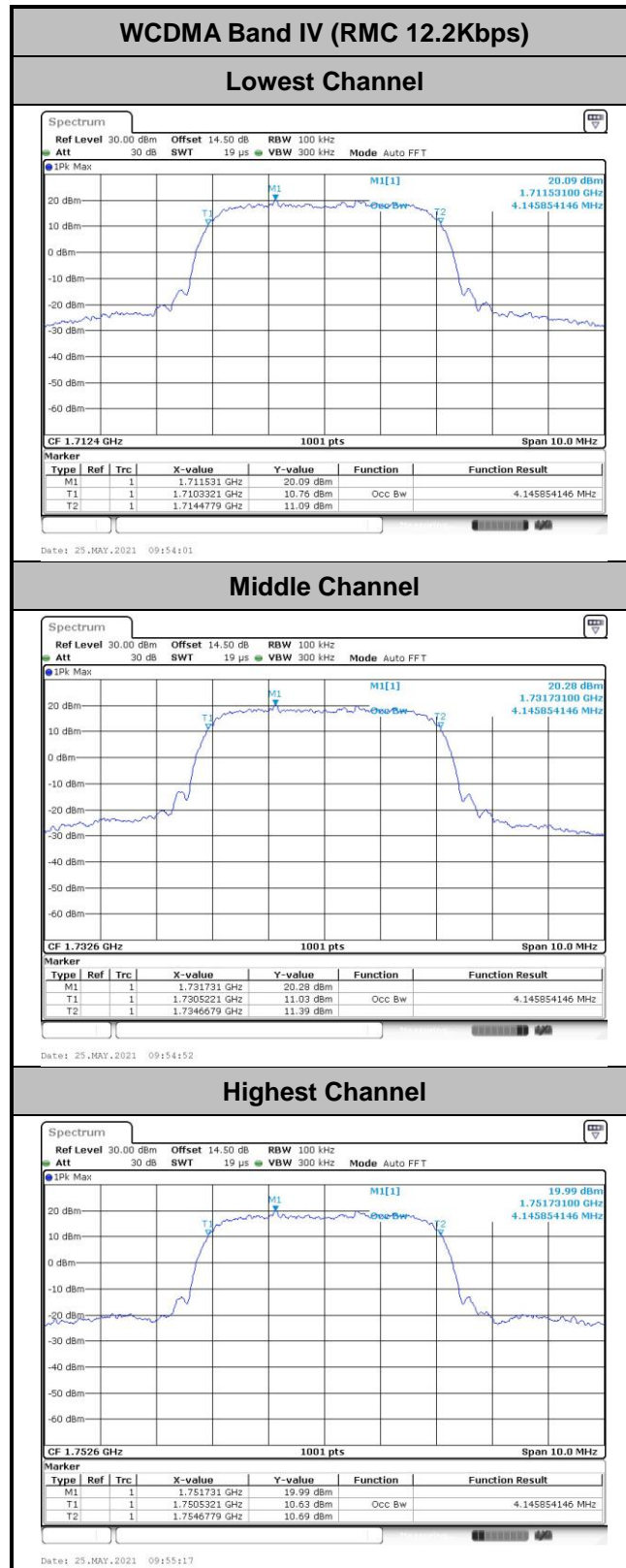
Highest Channel

Highest Channel



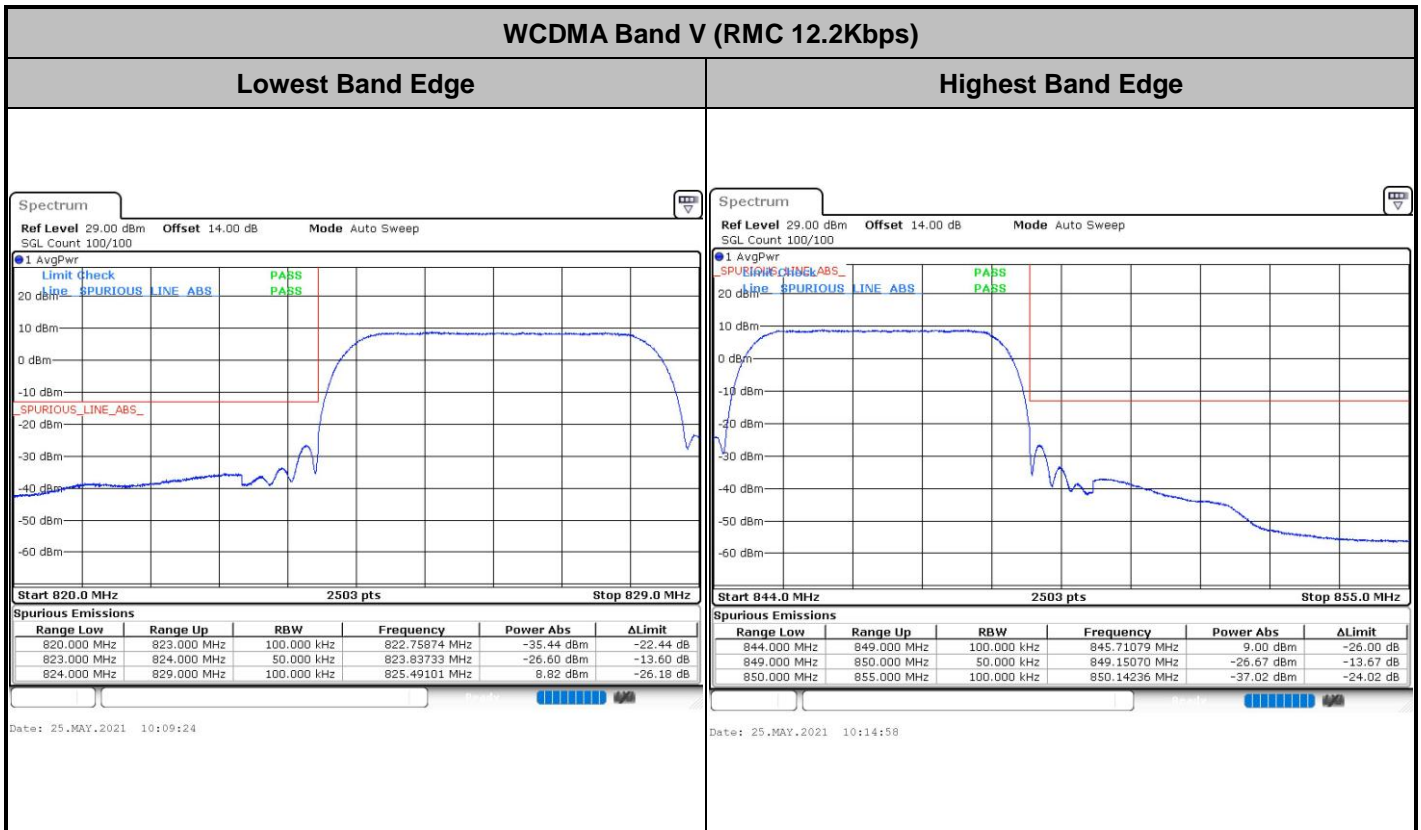
Date: 25.MAY.2021 10:21:03

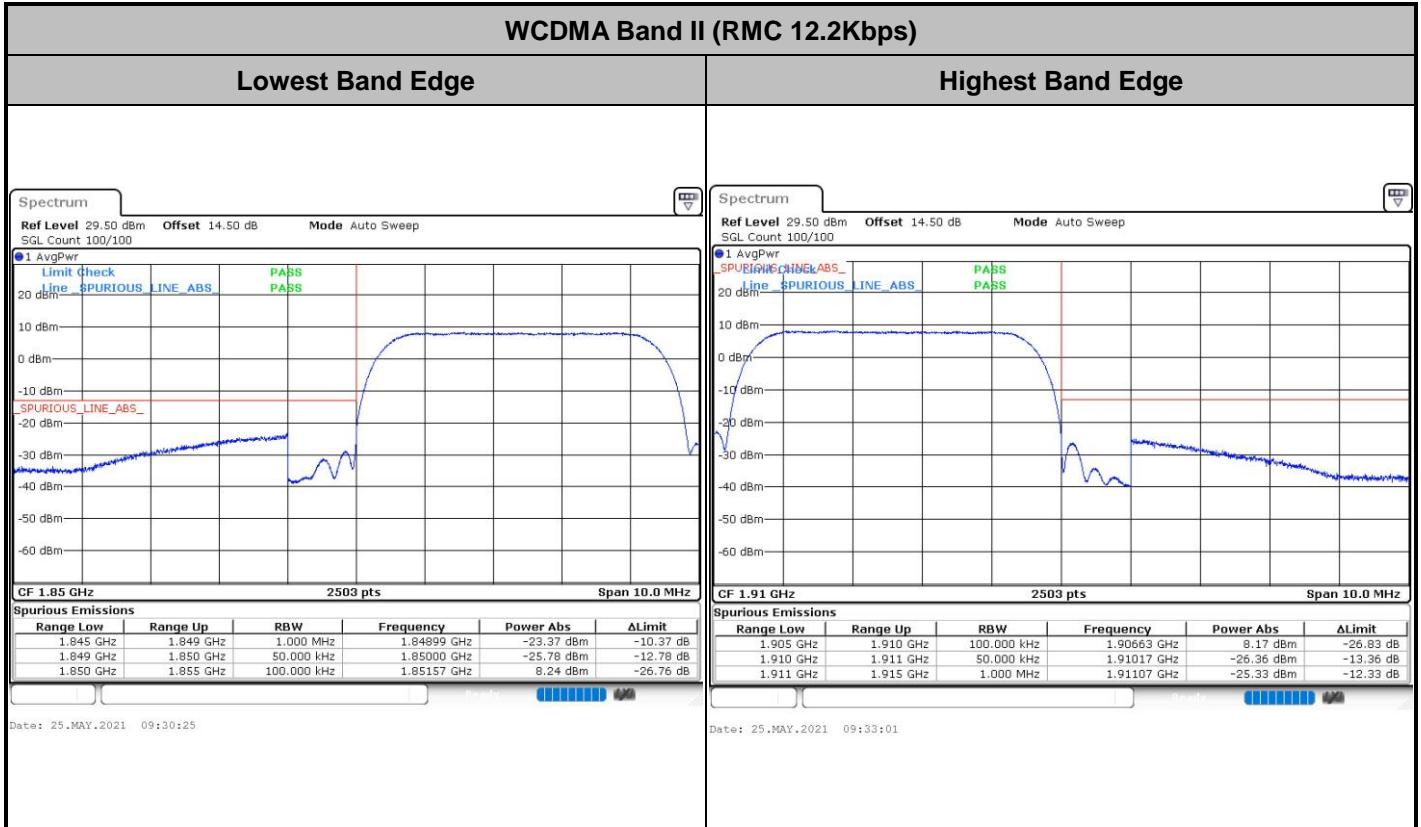
Date: 25.MAY.2021 09:12:808

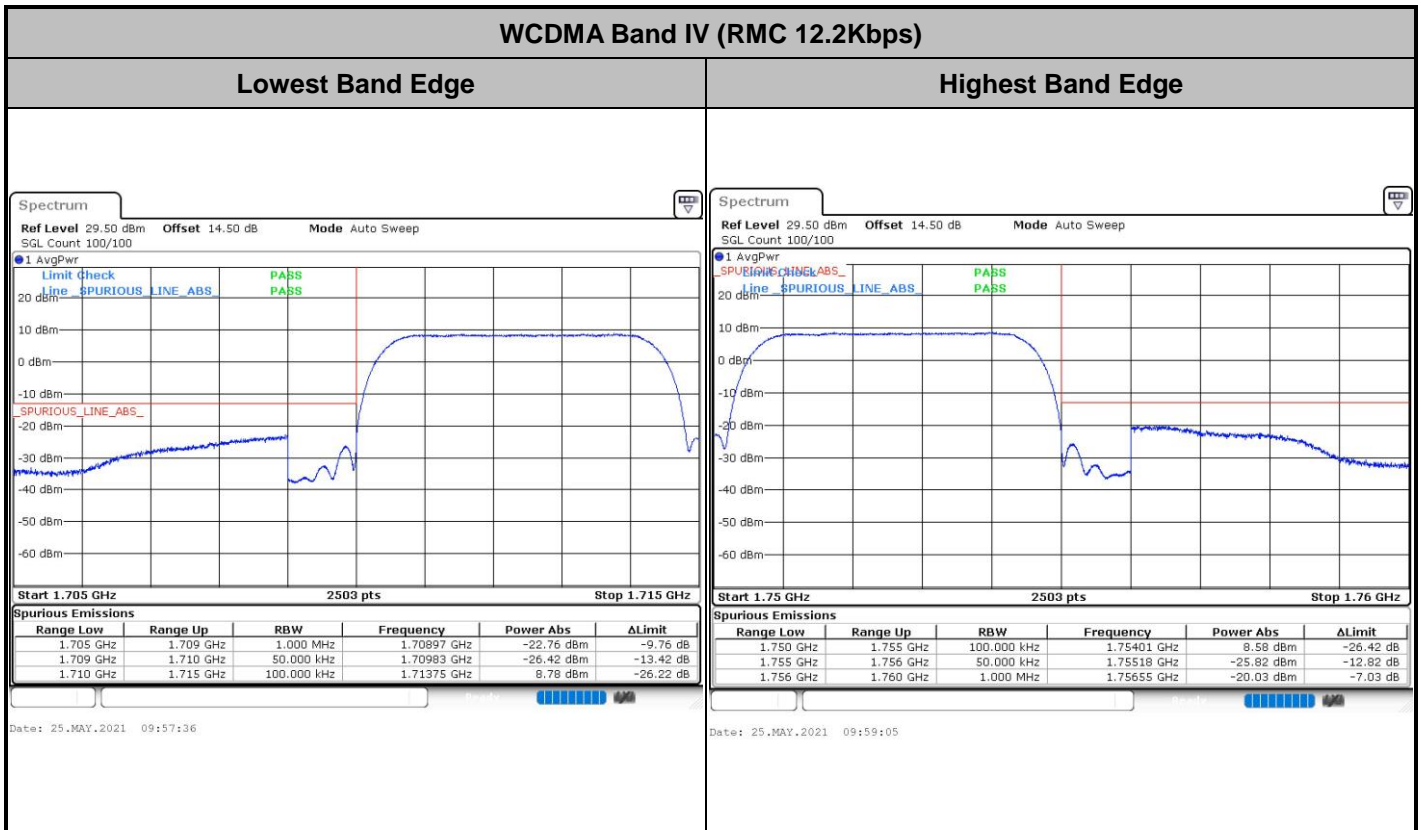




Conducted Band Edge







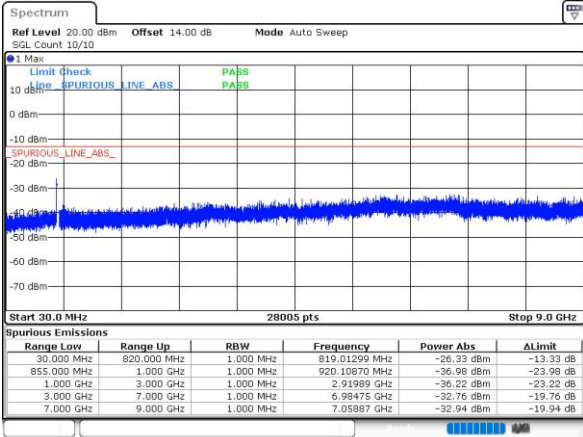


Conducted Spurious Emission



WCDMA Band V (RMC 12.2Kbps)

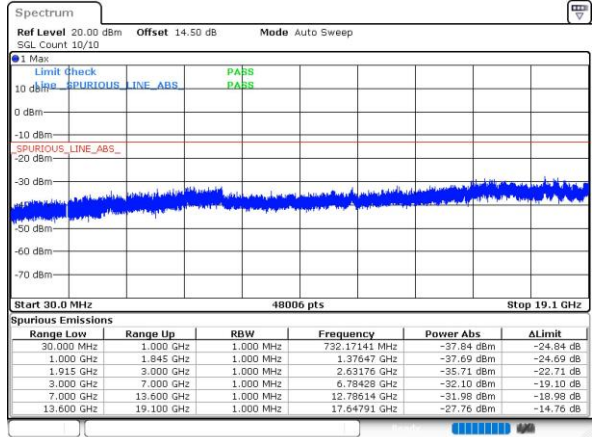
Lowest Channel



Date: 25.MAY.2021 10:22:16

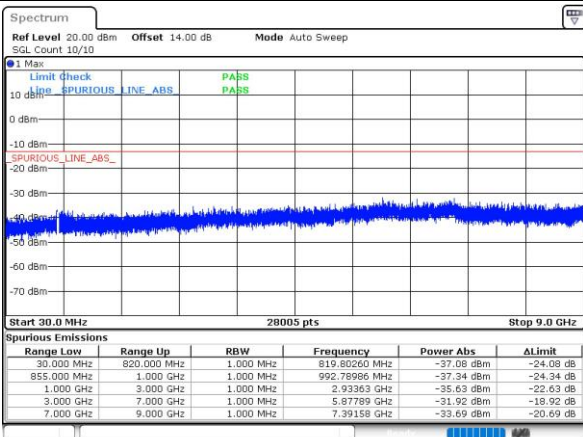
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



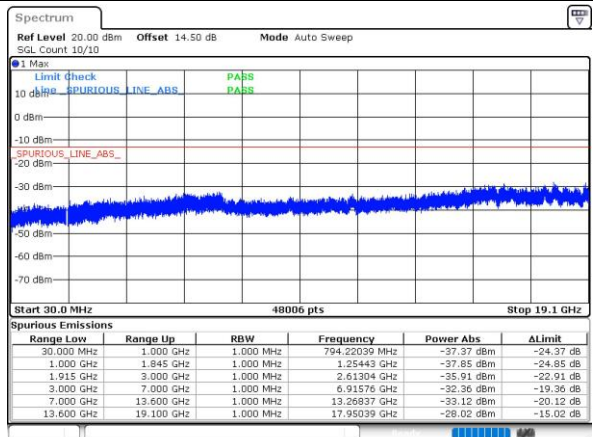
Date: 25.MAY.2021 09:13:49

Middle Channel



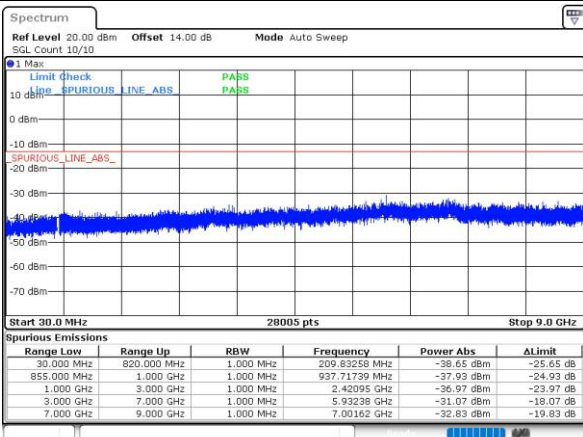
Date: 25.MAY.2021 10:28:13

Middle Channel



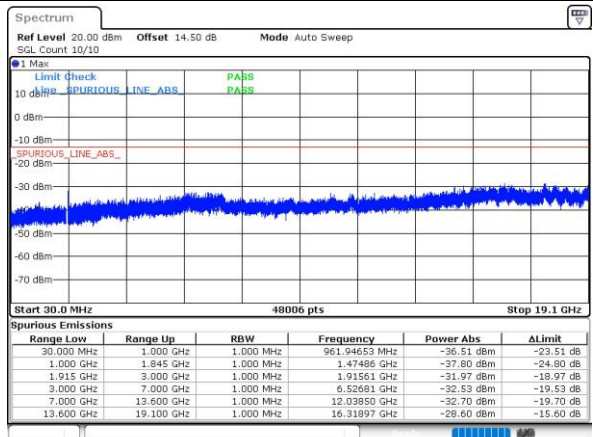
Date: 25.MAY.2021 09:13:52

Highest Channel

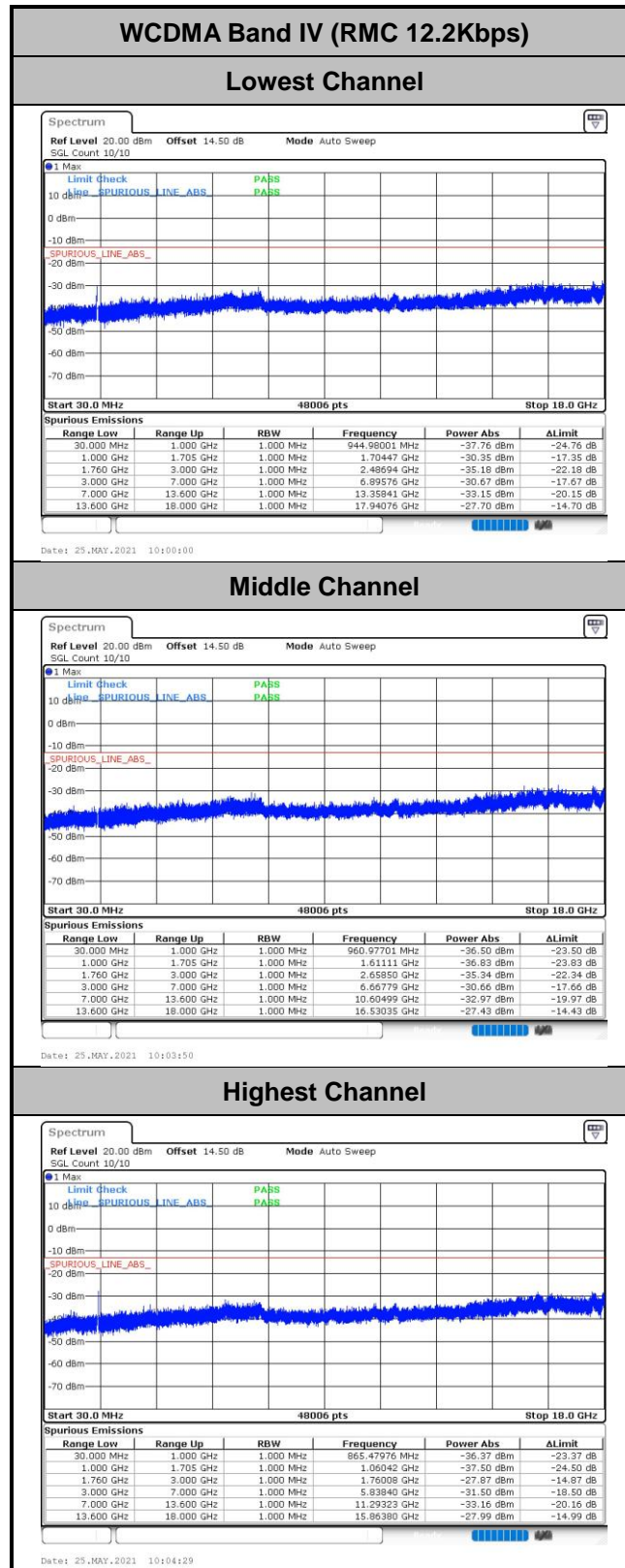


Date: 25.MAY.2021 10:33:25

Highest Channel



Date: 25.MAY.2021 09:41:37





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	0.0012	PASS
40	Normal Voltage	0.0081	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0099	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0030	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0036	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0034	
20	Maximum Voltage	0.0035	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0030	



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0040	
0	Normal Voltage	0.0040	
-10	Normal Voltage	0.0043	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0043	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage = 3.8 V ; Battery End Point (BEP) = 3.6 V ; Maximum Voltage =4.51 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

For Main Ant:

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	-55.76	-13	-42.76	-64.44	-59.01	4.00	9.40	H
	2509.2	-36.97	-13	-23.97	-49.76	-40.54	4.88	10.60	H
	3345.6	-62.34	-13	-49.34	-76.74	-67.27	5.52	12.60	H
	1672.8	-56.56	-13	-43.56	-64.69	-59.81	4.00	9.40	V
	2509.2	-37.52	-13	-24.52	-50.27	-41.09	4.88	10.60	V
	3345.6	-62.68	-13	-49.68	-76.81	-67.61	5.52	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	-55.33	-13	-42.33	-64.01	-58.58	4.00	9.40	H
	2509.2	-54.01	-13	-41.01	-66.80	-57.58	4.88	10.60	H
	3345.6	-62.18	-13	-49.18	-76.58	-67.11	5.52	12.60	H
	1672.8	-66.15	-13	-53.15	-74.28	-69.40	4.00	9.40	V
	2509.2	-62.99	-13	-49.99	-75.74	-66.56	4.88	10.60	V
	3345.6	-62.30	-13	-49.30	-76.43	-67.23	5.52	12.60	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	-64.86	-13	-51.86	-73.54	-68.11	4.00	9.40	H
	2509.2	-43.71	-13	-30.71	-56.50	-47.28	4.88	10.60	H
	3345.6	-61.72	-13	-48.72	-76.12	-66.65	5.52	12.60	H
	1672.8	-63.36	-13	-50.36	-71.49	-66.61	4.00	9.40	V
	2509.2	-44.42	-13	-31.42	-57.17	-47.99	4.88	10.60	V
	3345.6	-62.12	-13	-49.12	-76.25	-67.05	5.52	12.60	V

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



GSM1900 (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	3760	-60.55	-13	-47.55	-77.27	-67.30	5.85	12.60	H
	5640	-58.35	-13	-45.35	-78.95	-64.15	7.30	13.10	H
	7520	-54.32	-13	-41.32	-78.95	-57.47	8.35	11.50	H
	3760	-60.76	-13	-47.76	-77.41	-67.51	5.85	12.60	V
	5640	-58.63	-13	-45.63	-78.48	-64.43	7.30	13.10	V
	7520	-54.32	-13	-41.32	-78.93	-57.47	8.35	11.50	V

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

GSM1900 (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	3760	-60.69	-13	-47.69	-77.41	-67.44	5.85	12.60	H
	5640	-58.47	-13	-45.47	-79.07	-64.27	7.30	13.10	H
	7520	-54.35	-13	-41.35	-78.98	-57.50	8.35	11.50	H
	3760	-60.63	-13	-47.63	-77.28	-67.38	5.85	12.60	V
	5640	-59.52	-13	-46.52	-79.37	-65.32	7.30	13.10	V
	7520	-54.52	-13	-41.52	-79.13	-57.67	8.35	11.50	V

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

WCDMA Band II(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	3760	-60.55	-13.00	-47.55	-77.27	-67.30	5.85	12.60	H
	5640	-58.20	-13.00	-45.20	-78.80	-64.00	7.30	13.10	H
	7520	-54.36	-13.00	-41.36	-78.99	-57.51	8.35	11.50	H
	3760	-60.94	-13.00	-47.94	-77.59	-67.69	5.85	12.60	V
	5640	-59.43	-13.00	-46.43	-79.28	-65.23	7.30	13.10	V
	7520	-54.70	-13.00	-41.70	-79.31	-57.85	8.35	11.50	V

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

WCDMA Band IV(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	3465.2	-61.85	-13	-48.85	-77.23	-68.70	5.65	12.50	H
	5197.8	-58.22	-13	-45.22	-77.60	-63.89	7.13	12.80	H
	6930.4	-55.79	-13	-42.79	-79.59	-59.19	8.40	11.80	H
	3465.2	-61.86	-13	-48.86	-77.26	-68.71	5.65	12.50	V
	5197.8	-58.86	-13	-45.86	-78.55	-64.53	7.13	12.80	V
	6930.4	-55.17	-13	-42.17	-79.44	-58.57	8.40	11.80	V

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



For ASDiv Ant:

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	-66.33	-13	-53.33	-72.41	-69.58	4.00	9.40	H
	2509.2	-63.95	-13	-50.95	-74.10	-67.52	4.88	10.60	H
	3345.6	-64.09	-13	-51.09	-75.92	-69.02	5.52	12.60	H
	1672.8	-66.66	-13	-53.66	-72.46	-69.91	4.00	9.40	V
	2509.2	-63.92	-13	-50.92	-74.40	-67.49	4.88	10.60	V
	3345.6	-63.61	-13	-50.61	-75.82	-68.54	5.52	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	-66.62	-13	-53.62	-72.70	-69.87	4.00	9.40	H
	2509.2	-64.18	-13	-51.18	-74.33	-67.75	4.88	10.60	H
	3345.6	-64.22	-13	-51.22	-76.05	-69.15	5.52	12.60	H
	1672.8	-66.97	-13	-53.97	-72.77	-70.22	4.00	9.40	V
	2509.2	-63.99	-13	-50.99	-74.47	-67.56	4.88	10.60	V
	3345.6	-64.03	-13	-51.03	-76.24	-68.96	5.52	12.60	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	-66.76	-13	-53.76	-72.84	-70.01	4.00	9.40	H
	2509.2	-64.28	-13	-51.28	-74.43	-67.85	4.88	10.60	H
	3345.6	-63.96	-13	-50.96	-75.79	-68.89	5.52	12.60	H
	1672.8	-66.94	-13	-53.94	-72.74	-70.19	4.00	9.40	V
	2509.2	-64.10	-13	-51.10	-74.58	-67.67	4.88	10.60	V
	3345.6	-63.94	-13	-50.94	-76.15	-68.87	5.52	12.60	V

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