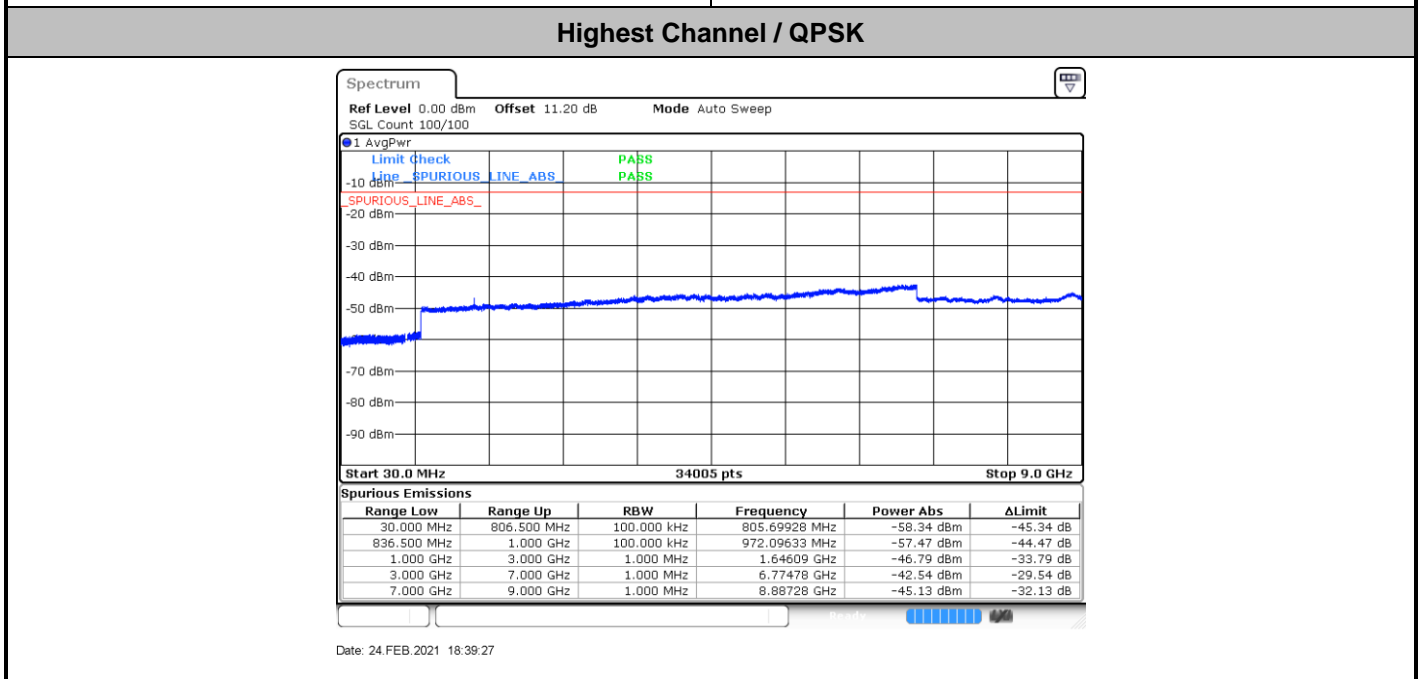
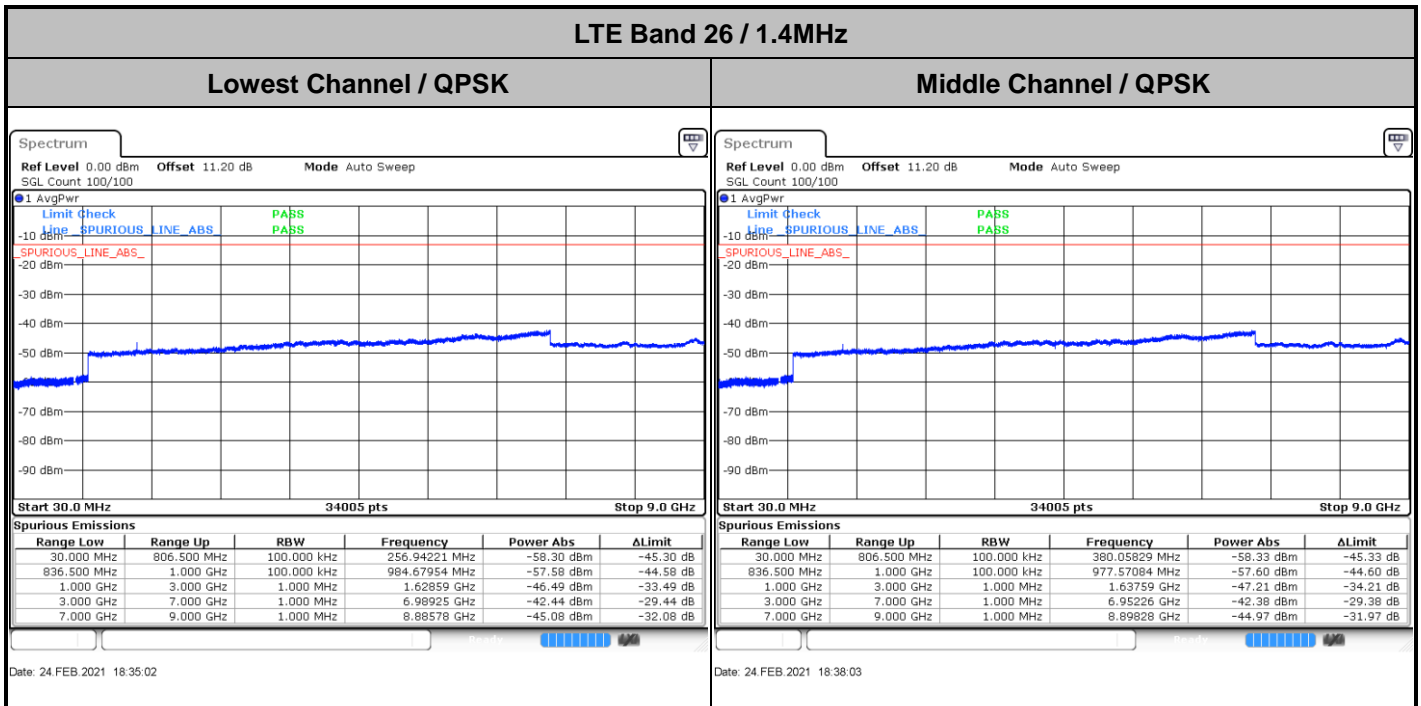




# Emission masks – Out of band emissions

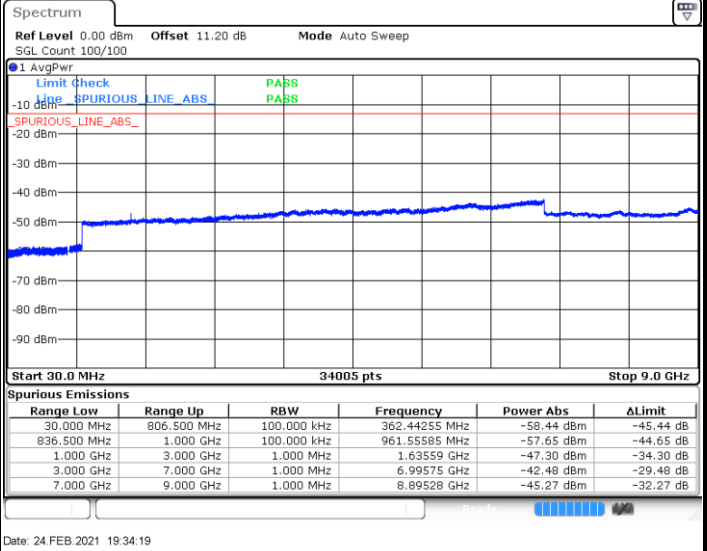
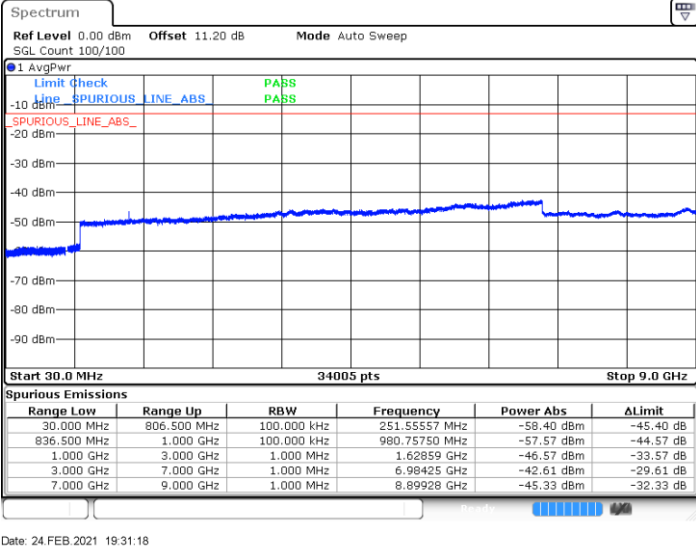




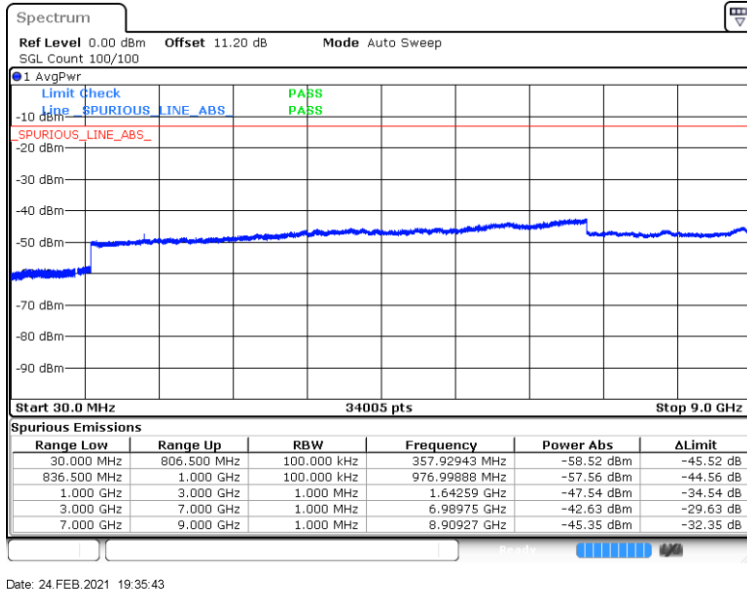
LTE Band 26 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

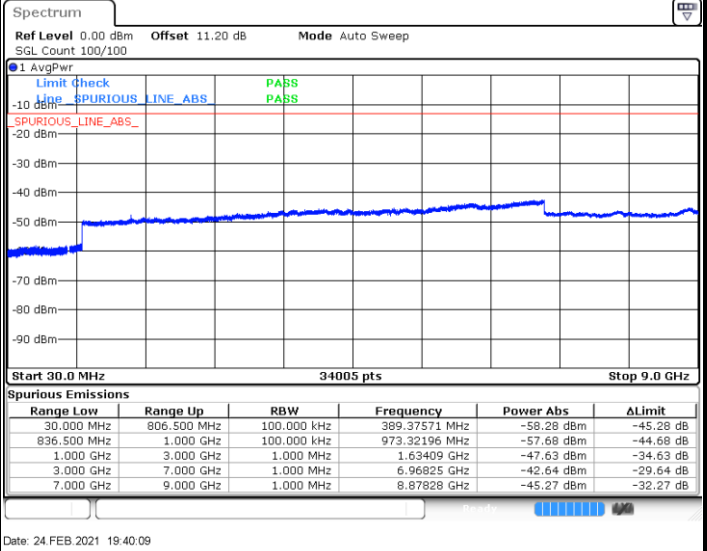
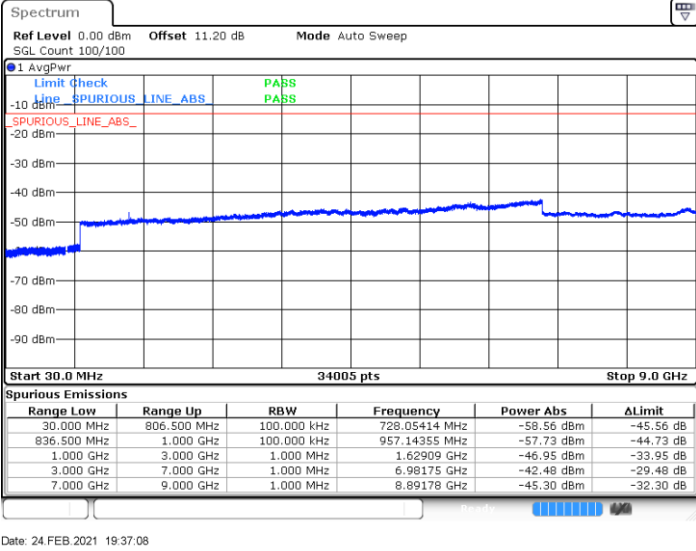




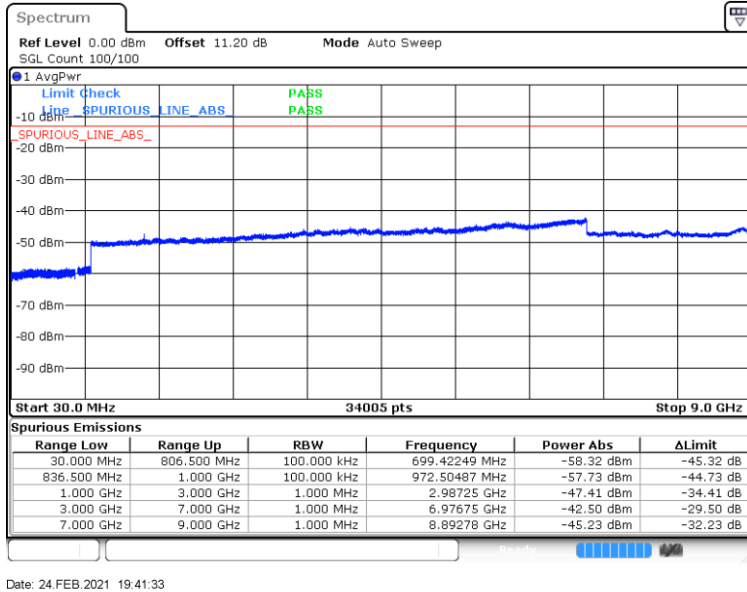
LTE Band 26 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



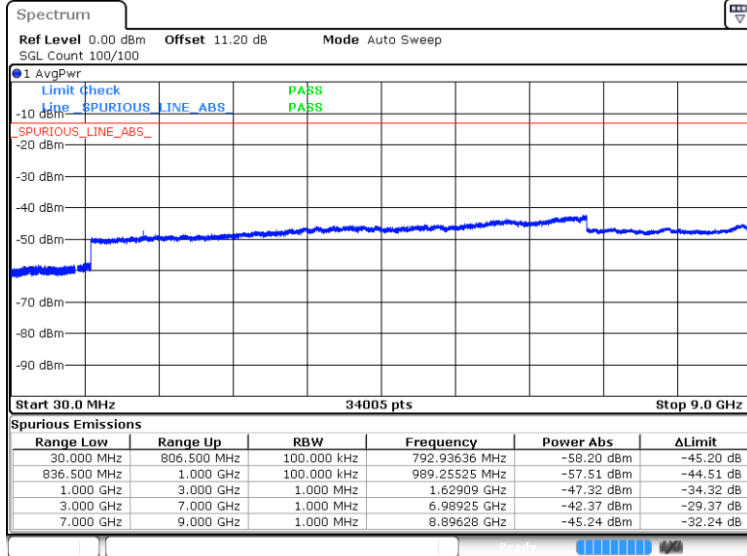
Highest Channel / QPSK





LTE Band 26 / 10MHz

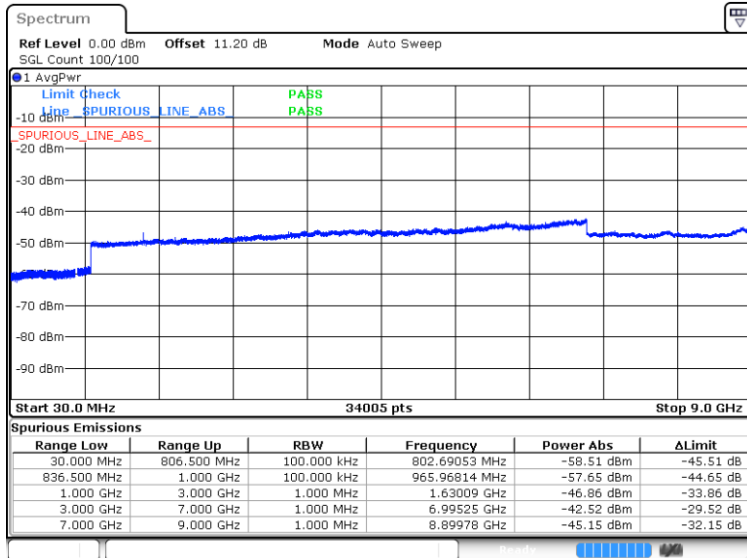
Middle Channel / QPSK



Date: 24.FEB.2021 19:44:35

LTE Band 26 / 15MHz

Low Channel / QPSK



Date: 24.FEB.2021 19:46:36



### Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0088	
30	Normal Voltage	0.0074	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0066	
-10	Normal Voltage	0.0068	
-20	Normal Voltage	0.0089	
-30	Normal Voltage	0.0056	
20	Maximum Voltage	0.0043	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0089	

**Note:**

- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Low Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0183	PASS
40	Normal Voltage	0.0164	
30	Normal Voltage	0.0063	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0062	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0185	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0184	

**Note:**

- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 26 - 824MHz

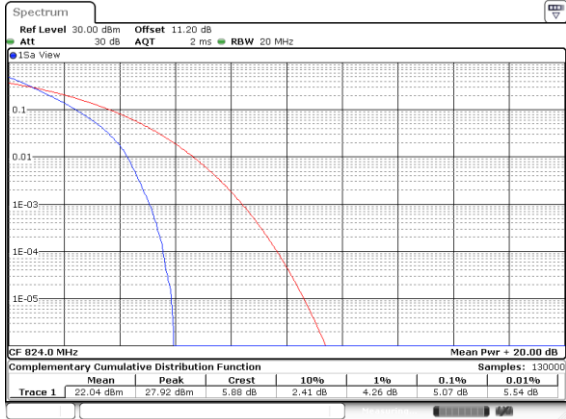
### Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
824MHz	5.07	5.97	6.58	-	PASS



LTE Band 26 / 15MHz / QPSK

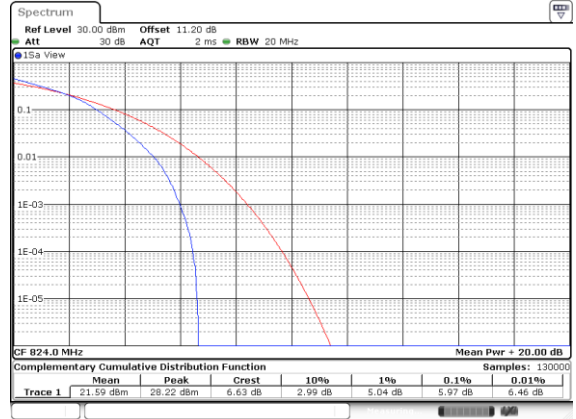
824MHz/ Full RB



Date: 25 FEB 2021 00:43:13

LTE Band 26 / 15MHz / 16QAM

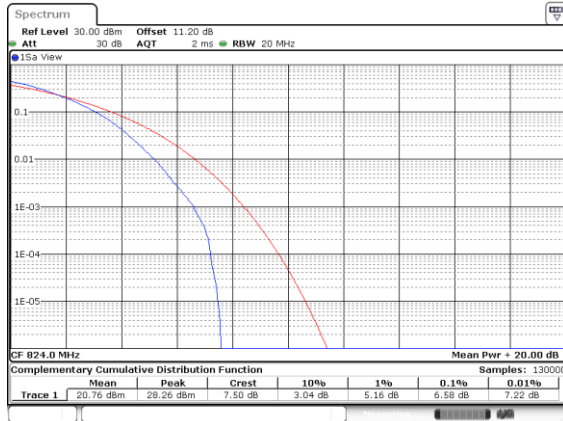
824MHz/ Full RB



Date: 25 FEB 2021 00:43:39

LTE Band 26 / 15MHz / 64QAM

824MHz/ Full RB



Date: 25 FEB 2021 00:44:05





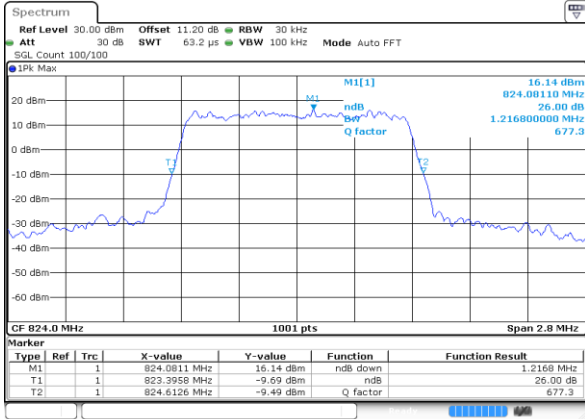
**26dB Bandwidth**

Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
824MHz	1.22	1.23	3.04	3.01	4.86	4.83	9.79	9.65	14.60	14.51	-	-
Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
824MHz	1.24	-	2.97	-	4.90	-	9.73	-	14.36	-	-	-



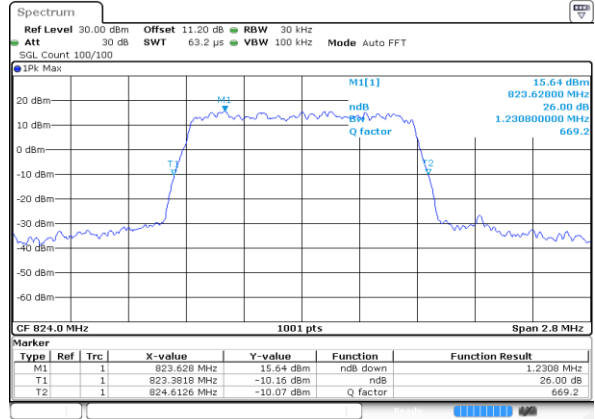
LTE Band 26

824MHz/ 1.4MHz / QPSK



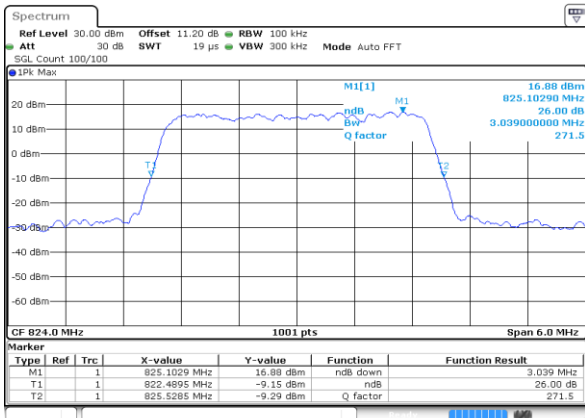
Date: 25 FEB 2021 00:24:58

824MHz/ 1.4MHz / 16QAM



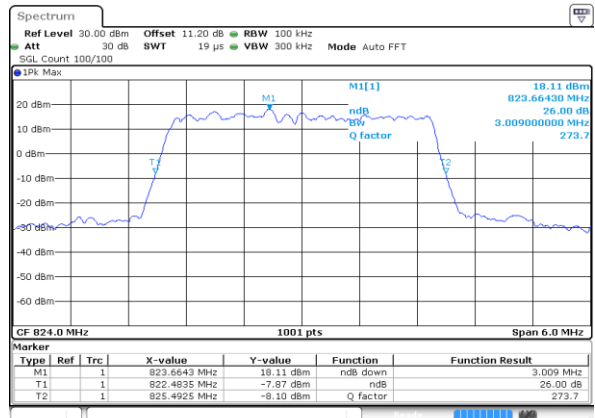
Date: 25 FEB 2021 00:25:21

824MHz/ 3MHz / QPSK



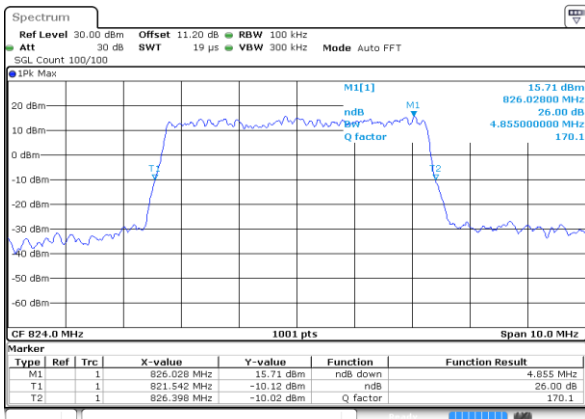
Date: 25 FEB 2021 00:35:32

824MHz/ 3MHz / 16QAM



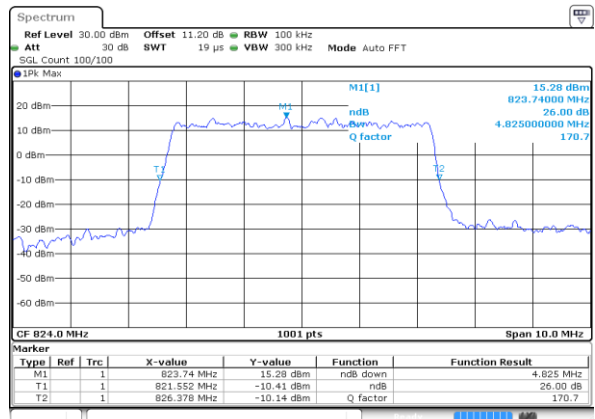
Date: 25 FEB 2021 00:35:55

824MHz/ 5MHz / QPSK



Date: 25 FEB 2021 00:37:31

824MHz/ 5MHz / 16QAM

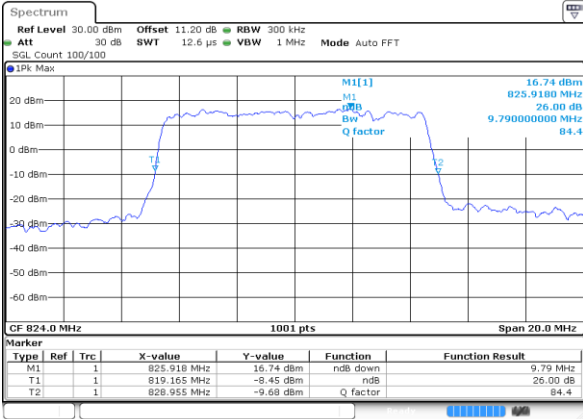


Date: 25 FEB 2021 00:37:54



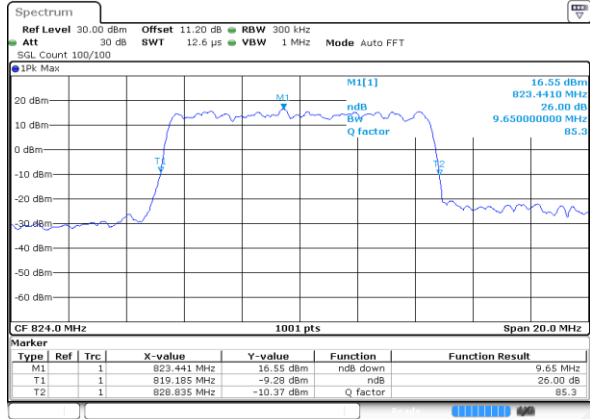
LTE Band 26

824MHz/ 10MHz / QPSK



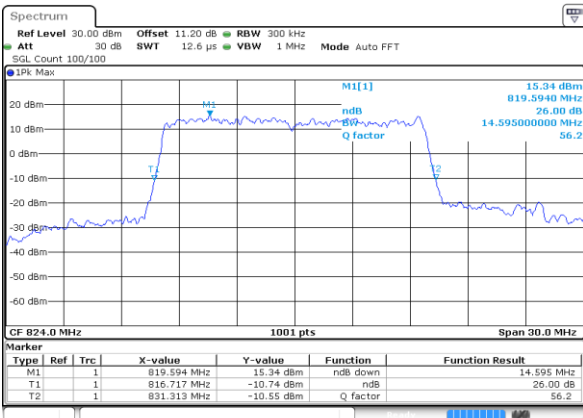
Date: 25 FEB 2021 00:39:30

824MHz/ 10MHz / 16QAM



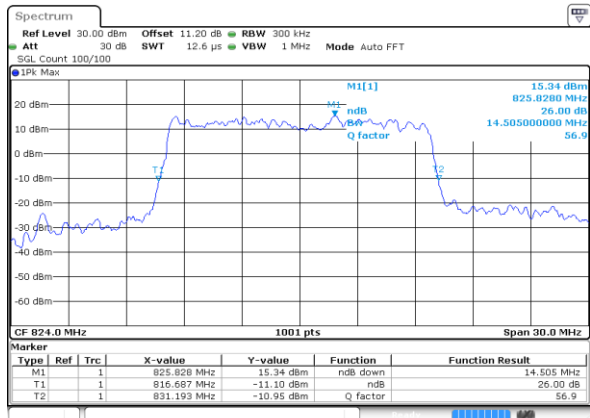
Date: 25 FEB 2021 00:39:53

824MHz/ 15MHz / QPSK



Date: 25 FEB 2021 00:41:29

824MHz/ 15MHz / 16QAM

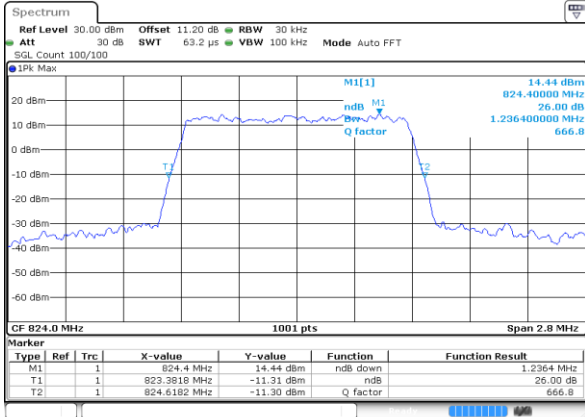


Date: 25 FEB 2021 00:41:53



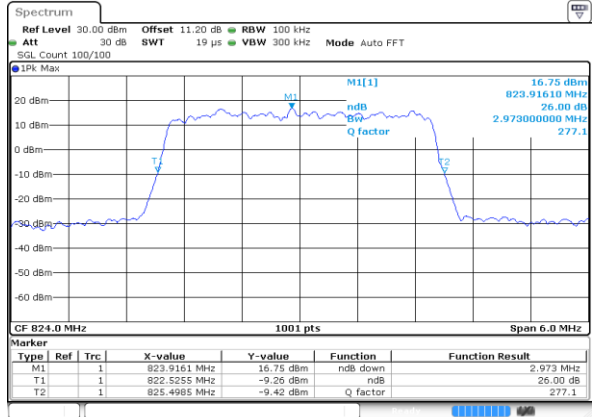
LTE Band 26

824MHz/ 1.4MHz / 64QAM



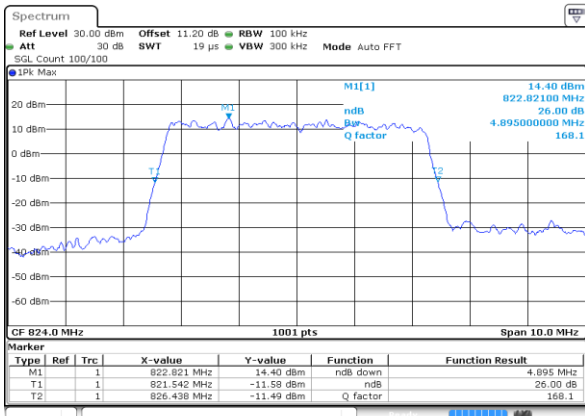
Date: 25 FEB 2021 00:26:17

824MHz/ 3MHz / 64QAM



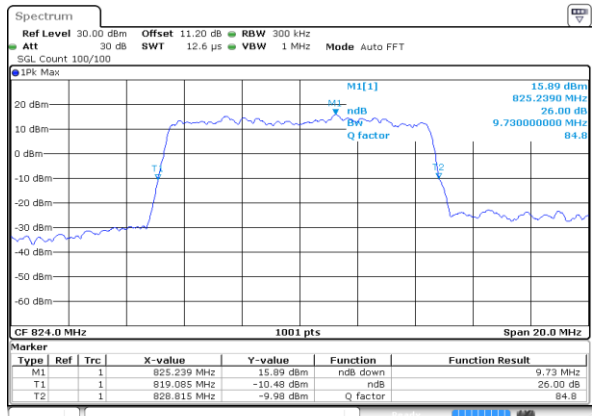
Date: 25 FEB 2021 00:36:51

824MHz/ 5MHz / 64QAM



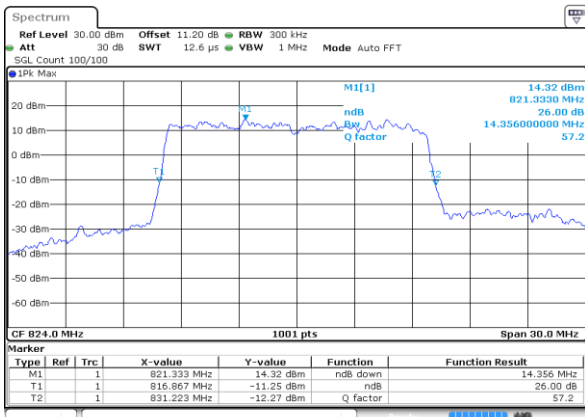
Date: 25 FEB 2021 00:38:50

824MHz/ 10MHz / 64QAM



Date: 25 FEB 2021 00:40:49

824MHz/ 15MHz / 64QAM



Date: 25 FEB 2021 00:42:48

N/A



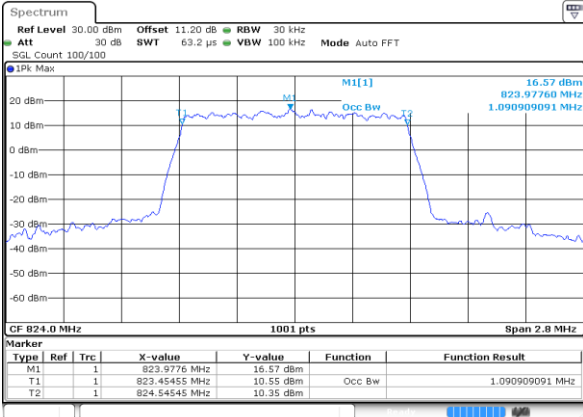
**Occupied Bandwidth**

Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
824MHz	1.09	1.09	2.72	2.73	4.50	4.51	8.97	9.01	13.37	13.49	-	-
Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
824MHz	1.09	-	2.73	-	4.47	-	8.99	-	13.40	-	-	-



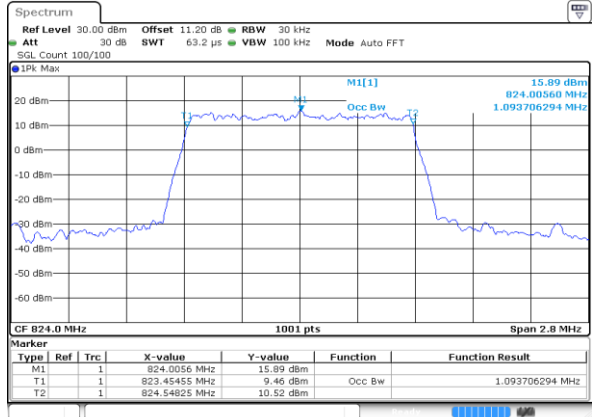
LTE Band 26

824MHz/ 1.4MHz / QPSK



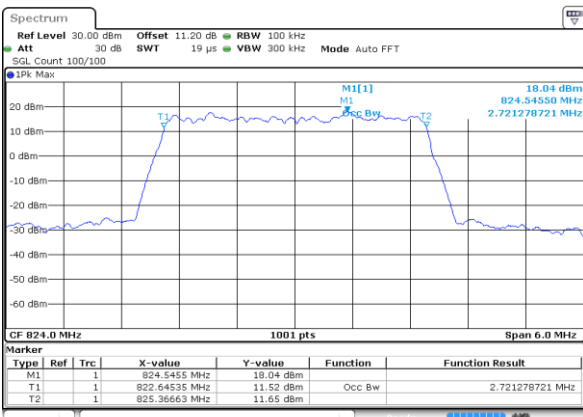
Date: 25 FEB 2021 00:24:42

824MHz/ 1.4MHz / 16QAM



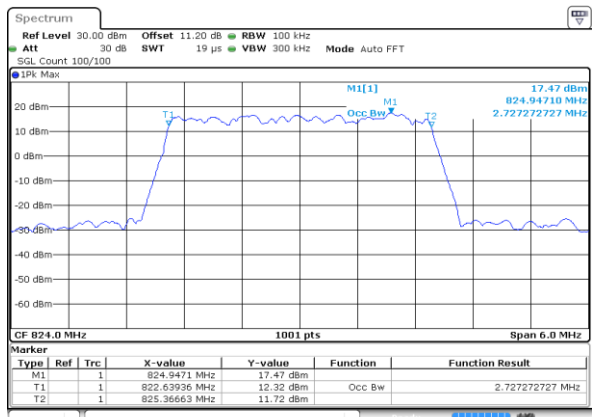
Date: 25 FEB 2021 00:25:36

824MHz/ 3MHz / QPSK



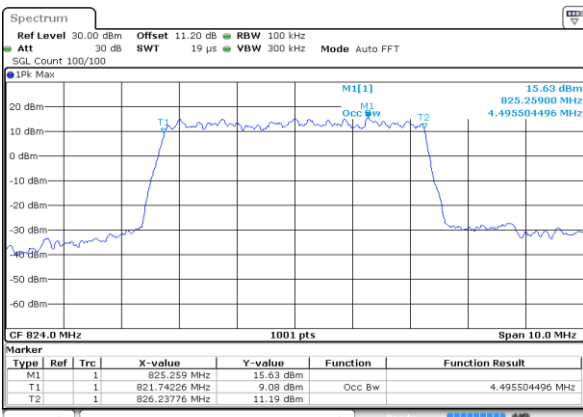
Date: 25 FEB 2021 00:35:15

824MHz/ 3MHz / 16QAM



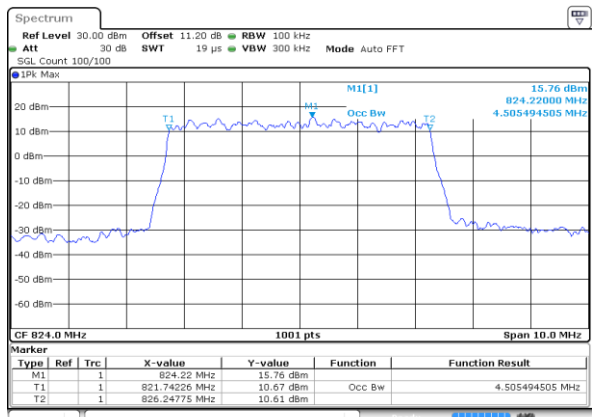
Date: 25 FEB 2021 00:36:09

824MHz/ 5MHz / QPSK



Date: 25 FEB 2021 00:37:15

824MHz/ 5MHz / 16QAM

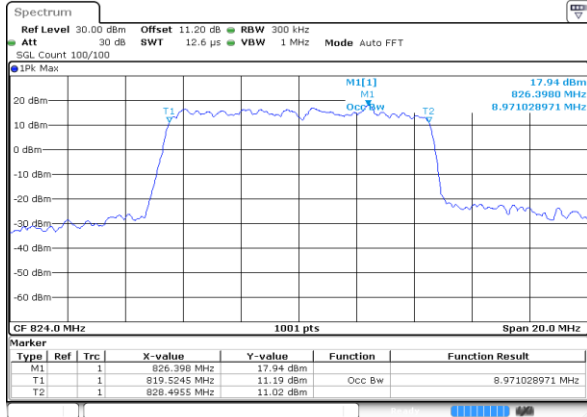


Date: 25 FEB 2021 00:38:09



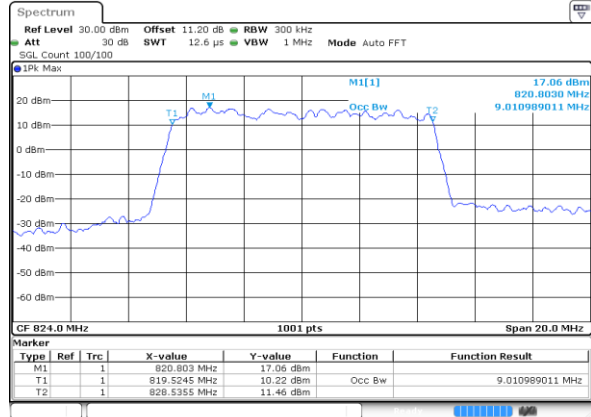
LTE Band 26

824MHz/ 10MHz / QPSK



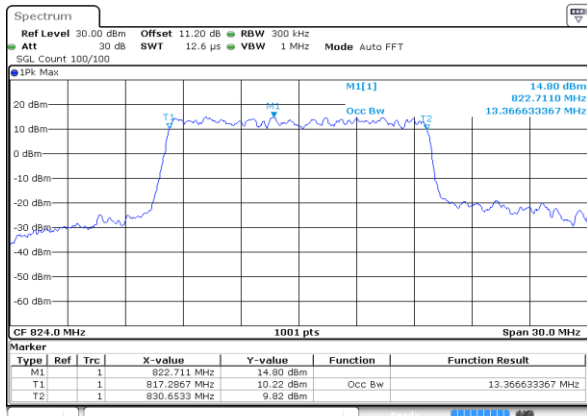
Date: 25 FEB 2021 00:39:14

824MHz/ 10MHz / 16QAM



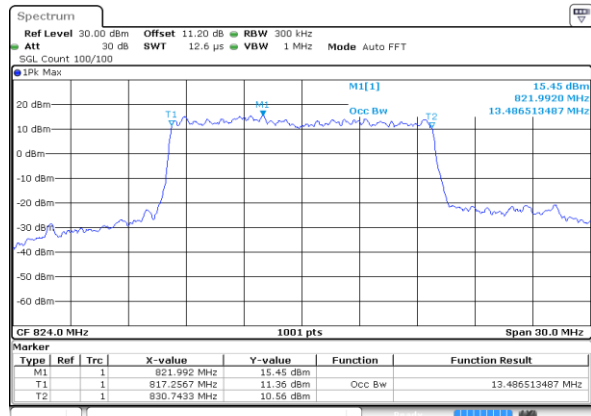
Date: 25 FEB 2021 00:40:08

824MHz/ 15MHz / QPSK



Date: 25 FEB 2021 00:41:13

824MHz/ 15MHz / 16QAM

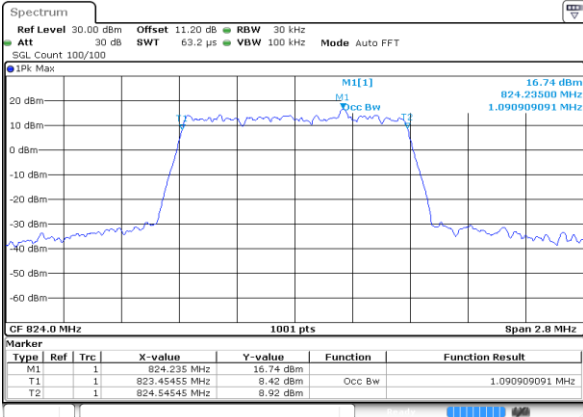


Date: 25 FEB 2021 00:42:07



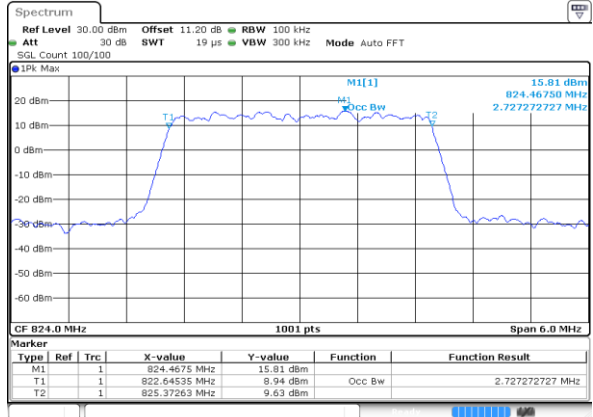
LTE Band 26

824MHz/ 1.4MHz / 64QAM



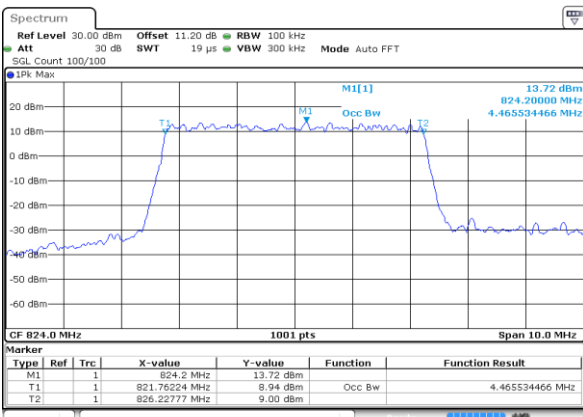
Date: 25 FEB 2021 00:26:01

824MHz/ 3MHz / 64QAM



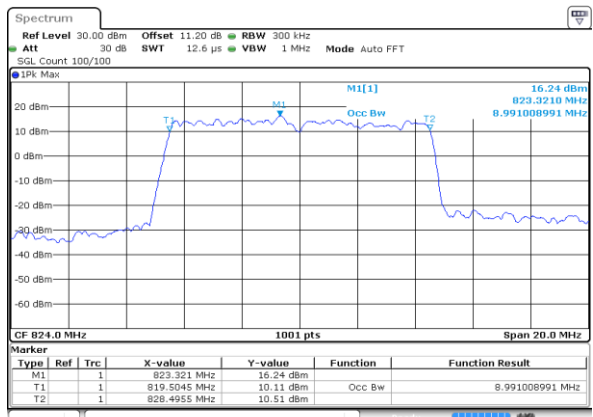
Date: 25 FEB 2021 00:36:34

824MHz/ 5MHz / 64QAM



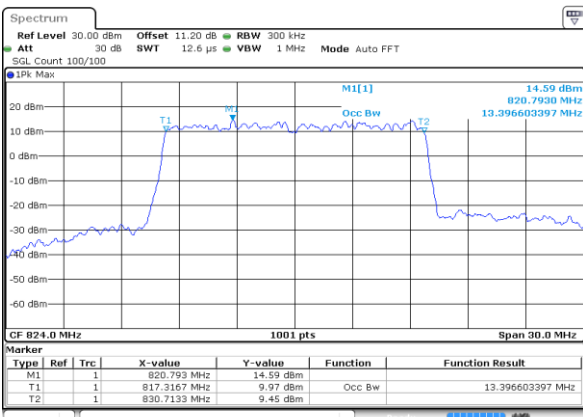
Date: 25 FEB 2021 00:38:34

824MHz/ 10MHz / 64QAM



Date: 25 FEB 2021 00:40:33

824MHz/ 15MHz / 64QAM



Date: 25 FEB 2021 00:42:32

N/A

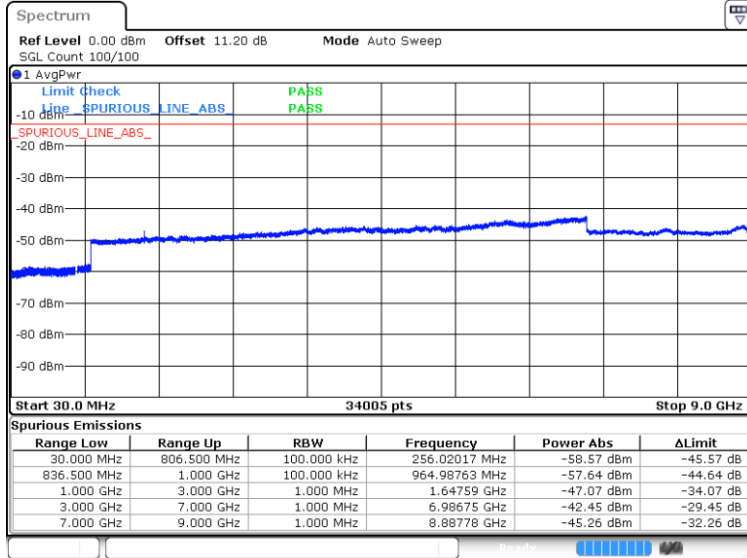




# Conducted Spurious Emission

LTE Band 26 / 1.4MHz

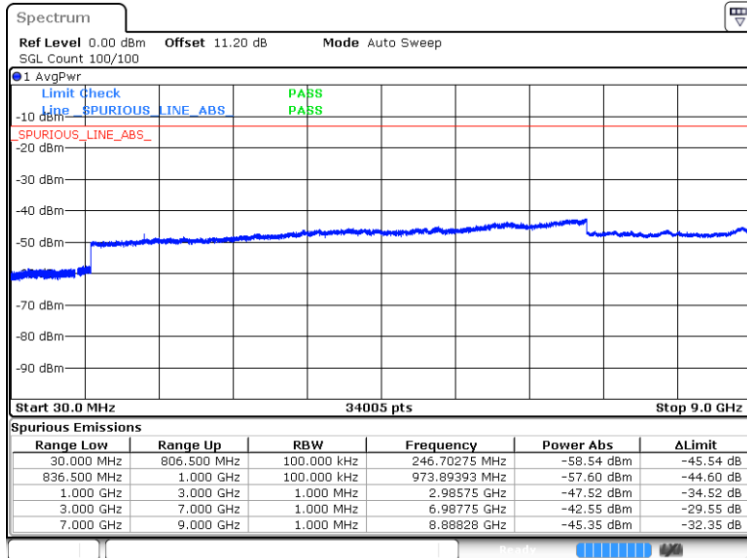
824MHz/ QPSK



Date: 25.FEB.2021 00:45:31

LTE Band 26 / 3MHz

824MHz/ QPSK

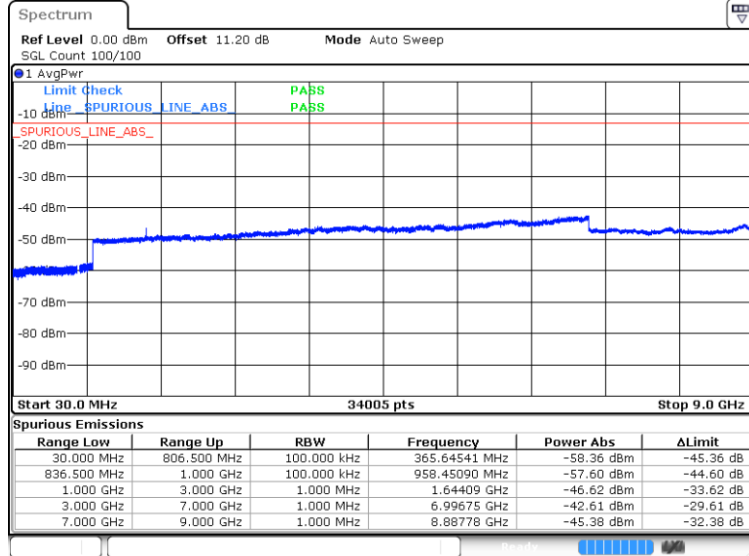


Date: 25.FEB.2021 00:46:56



LTE Band 26 / 5MHz

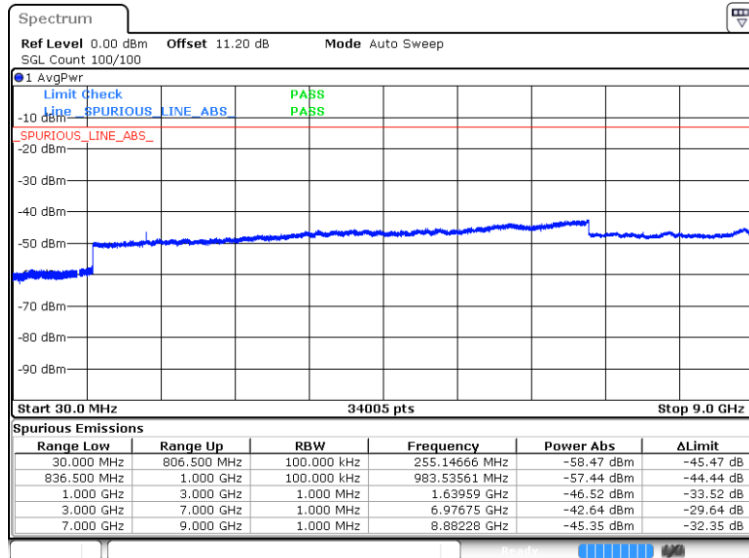
824MHz/ QPSK



Date: 25.FEB.2021 00:48:20

LTE Band 26 / 10MHz

824MHz/ QPSK

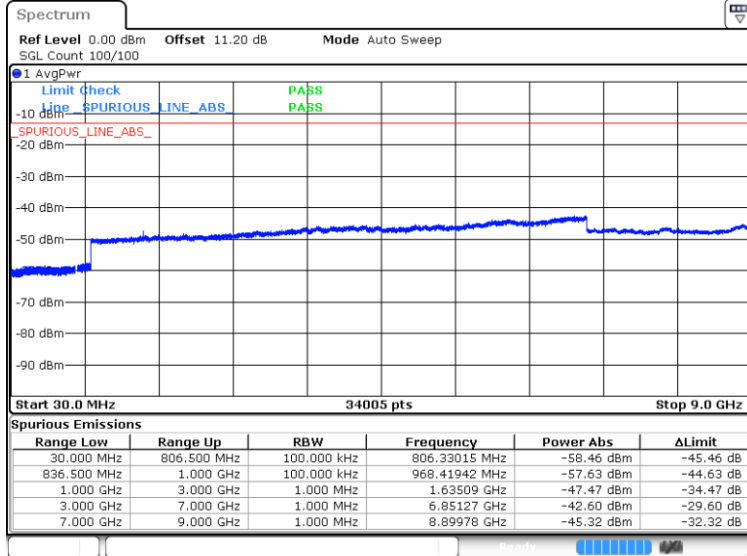


Date: 25.FEB.2021 00:49:45



LTE Band 26 / 15MHz

824MHz/ QPSK



Date: 25.FEB.2021 00:51:09



## Appendix B. Test Results of Radiated Test

### LTE Band 26

LTE Band 26 / 5MHz / QPSK									
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)
Lowest	1624	-63.19	-13	-50.19	-71.58	-68.70	0.91	8.57	H
	2440	-52.28	-13	-39.28	-65.74	-59.61	1.14	10.62	H
	3256	-57.13	-13	-44.13	-72.58	-65.58	1.32	11.91	H
									H
									H
									H
	1624	-63.53	-13	-50.53	-71.47	-69.04	0.91	8.57	V
	2440	-51.41	-13	-38.41	-64.94	-58.74	1.14	10.62	V
	3256	-56.62	-13	-43.62	-72.56	-65.07	1.32	11.91	V
									V
									V
									V
Middle	1632	-61.82	-13	-48.82	-70.23	-67.36	0.91	8.60	H
	2448	-53.58	-13	-40.58	-67.06	-60.92	1.14	10.63	H
	3264	-57.27	-13	-44.27	-72.7	-65.74	1.32	11.93	H
									H
									H
									H
	1632	-63.20	-13	-50.20	-71.14	-68.74	0.91	8.60	V
	2448	-51.65	-13	-38.65	-65.22	-58.99	1.14	10.63	V
	3264	-56.79	-13	-43.79	-72.7	-65.26	1.32	11.93	V
									V
									V
									V



Highest	1640	-60.45	-13	-47.45	-68.89	-66.01	0.92	8.63	H
	2456	-51.88	-13	-38.88	-65.37	-59.23	1.14	10.64	H
	3280	-57.14	-13	-44.14	-72.53	-65.64	1.32	11.97	H
									H
									H
									H
	1640	-62.98	-13	-49.98	-70.91	-68.54	0.92	8.63	V
	2456	-51.73	-13	-38.73	-65.32	-59.08	1.14	10.64	V
	3280	-56.17	-13	-43.17	-72.04	-64.67	1.32	11.97	V
									V
									V
									V

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



LTE Band 26 / 10MHz / QPSK									
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	1632	-62.13	-13	-49.13	-70.54	-67.67	0.91	8.60	H
	2440	-54.12	-13	-41.12	-67.58	-61.45	1.14	10.62	H
	3256	-57.07	-13	-44.07	-72.52	-65.52	1.32	11.91	H
									H
									H
									H
	1632	-62.89	-13	-49.89	-70.83	-68.43	0.91	8.60	V
	2440	-51.42	-13	-38.42	-64.95	-58.75	1.14	10.62	V
	3256	-56.48	-13	-43.48	-72.42	-64.93	1.32	11.91	V
									V
									V
									V

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



LTE Band 26 / 15MHz / QPSK									
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)
Lowest	1632	-61.60	-13	-48.60	-70.01	-67.14	0.91	8.60	H
	2448	-50.16	-13	-37.16	-63.64	-57.50	1.14	10.63	H
	3256	-57.05	-13	-44.05	-72.5	-65.50	1.32	11.91	H
									H
									H
									H
	1632	-62.42	-13	-49.42	-70.36	-67.96	0.91	8.60	V
	2448	-49.72	-13	-36.72	-63.29	-57.06	1.14	10.63	V
	3256	-56.33	-13	-43.33	-72.27	-64.78	1.32	11.91	V
									V
									V
									V

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



LTE Band 26 / 15MHz / QPSK									
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)
824MHz	1648	-63.13	-13	-50.13	-71.58	-68.72	0.92	8.66	H
	2472	-58.74	-13	-45.74	-72.25	-66.11	1.14	10.66	H
	3296	-57.26	-13	-44.26	-72.6	-65.80	1.32	12.01	H
									H
									H
									H
	1648	-63.87	-13	-50.87	-71.79	-69.46	0.92	8.66	V
	2472	-58.42	-13	-45.42	-72.08	-65.79	1.14	10.66	V
	3296	-56.64	-13	-43.64	-72.45	-65.18	1.32	12.01	V
									V
									V
									V

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

————THE END————