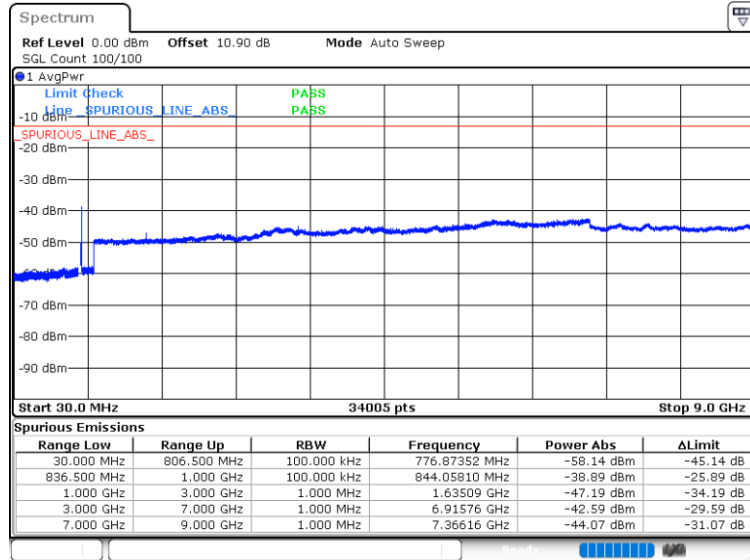




LTE Band 26 / 15MHz

Middle Channel / QPSK



Date: 1.AUG.2021 11:37:15

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	0.0182	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0098	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0171	
0	Normal Voltage	0.0204	
-10	Normal Voltage	0.0189	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0154	
20	Maximum Voltage	0.0057	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0187	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.3 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	0.0066	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0039	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0112	
0	Normal Voltage	0.0057	
-10	Normal Voltage	0.0058	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

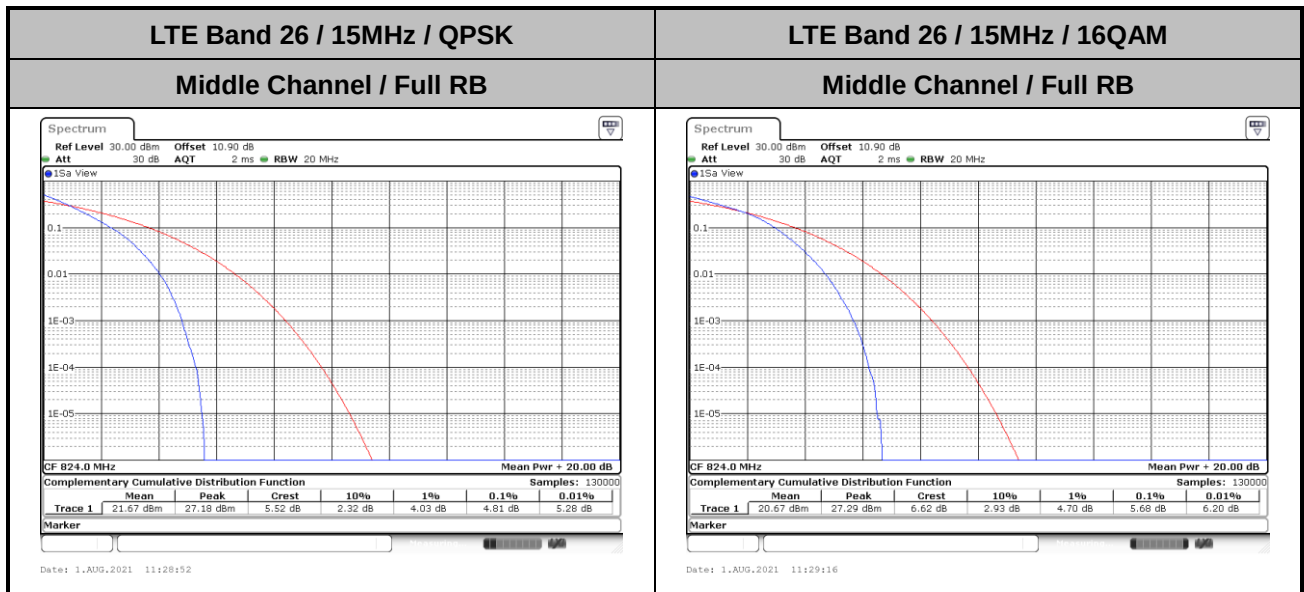
Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.3 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
Middle CH	4.81	5.68	-	-	PASS





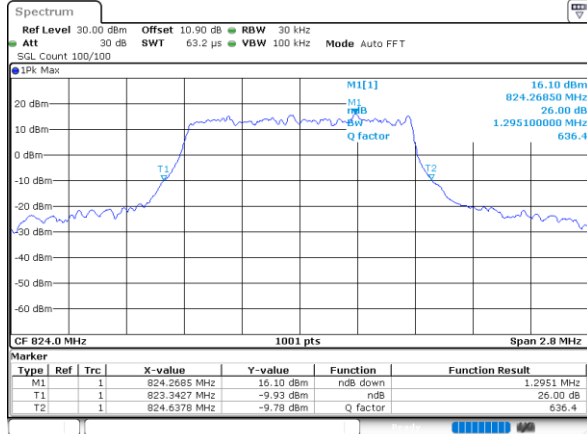
26dB Bandwidth

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
Middle CH	1.30	1.31	3.12	3.09	5.35	5.18	10.29	10.15	15.11	14.63	-	-

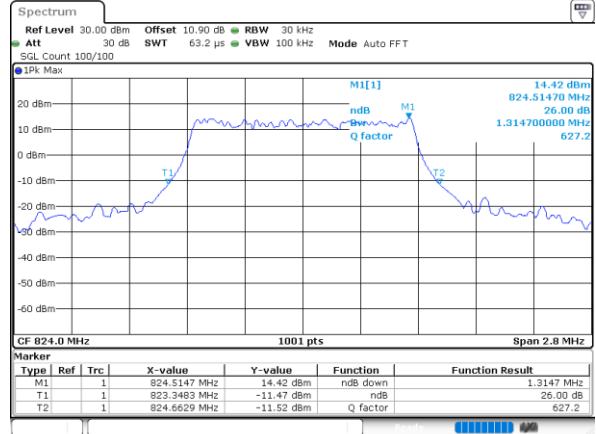


LTE Band 26

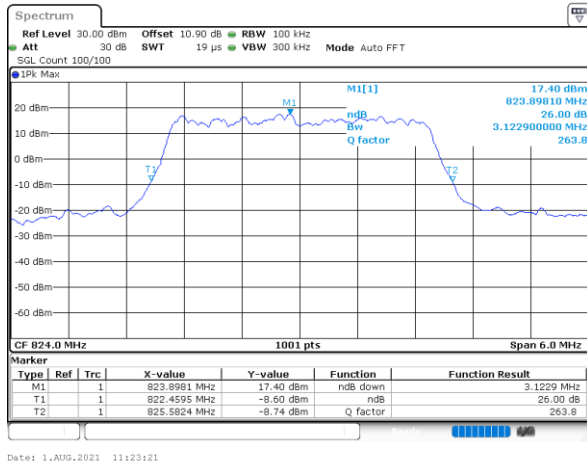
Middle Channel / 1.4MHz / QPSK



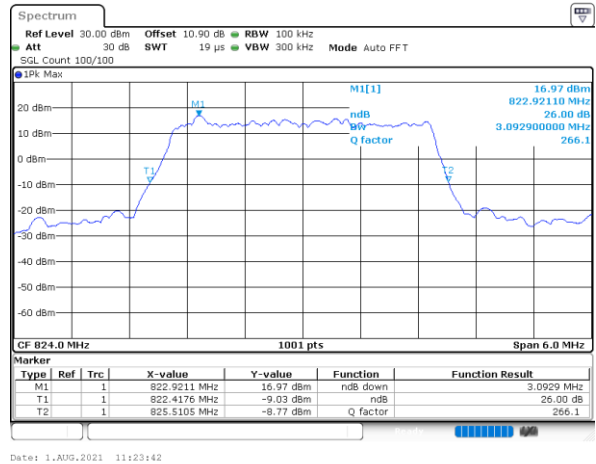
Middle Channel / 1.4MHz / 16QAM



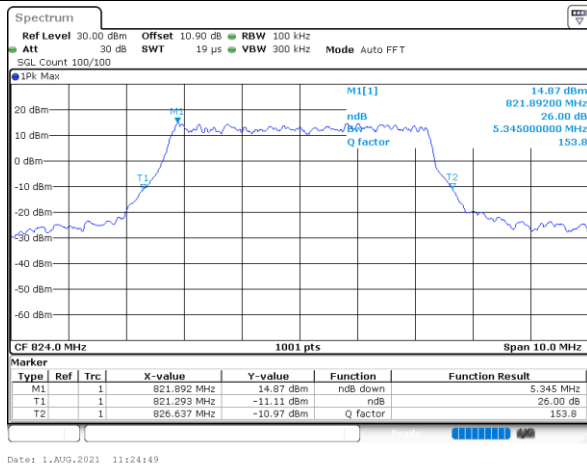
Middle Channel / 3MHz / QPSK



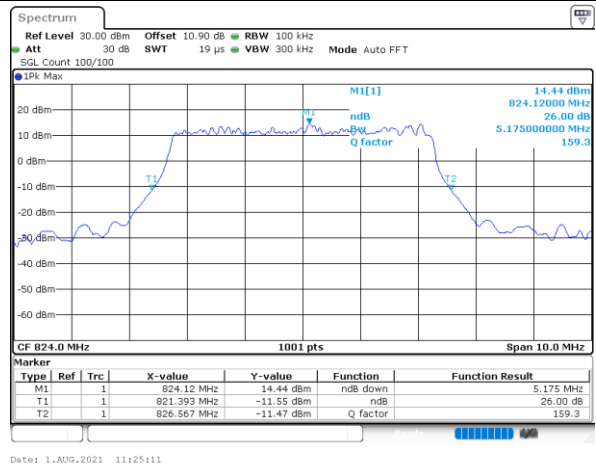
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



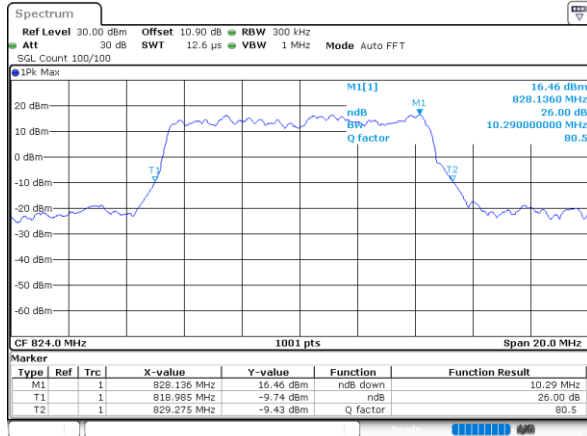
Middle Channel / 5MHz / 16QAM



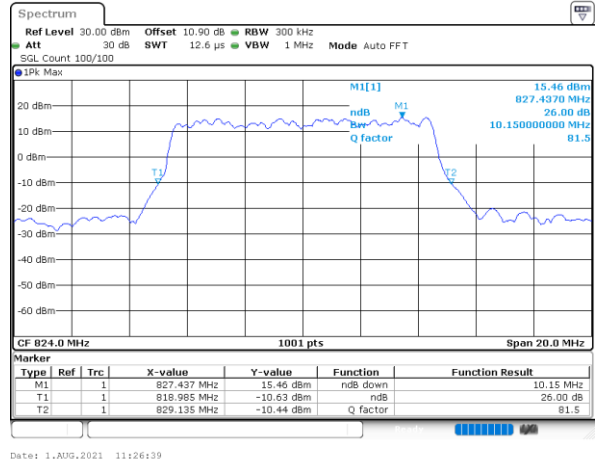


LTE Band 26

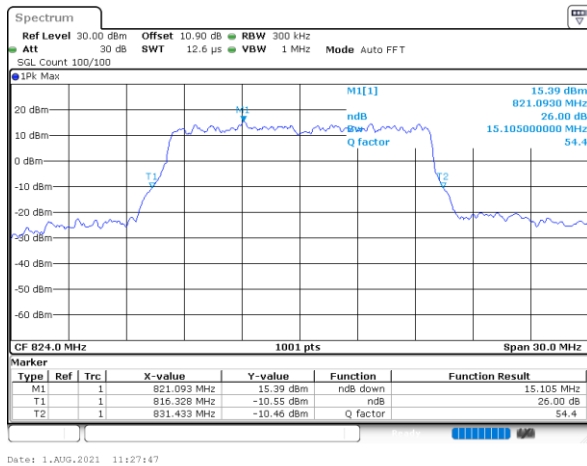
Middle Channel / 10MHz / QPSK



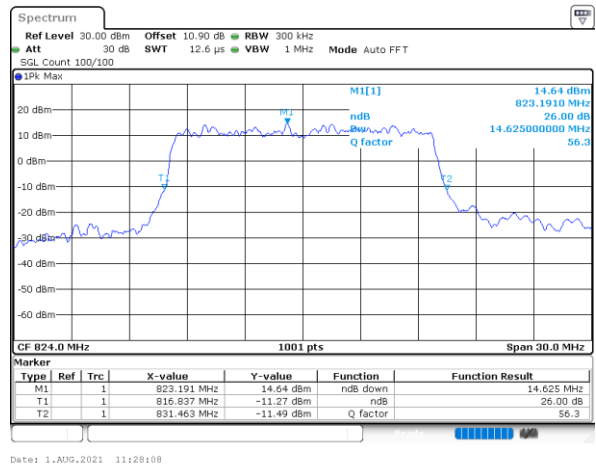
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM





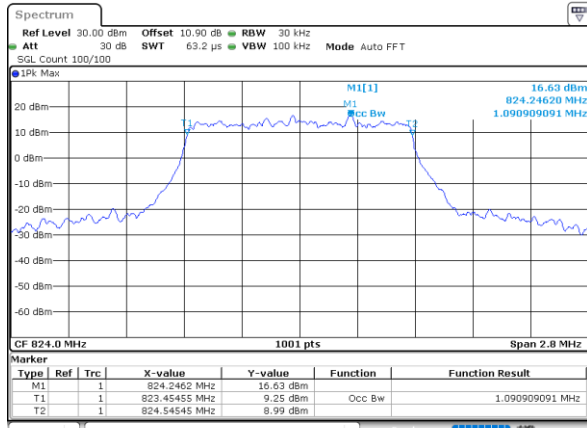
Occupied Bandwidth

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
Middle CH	1.09	1.10	2.74	2.71	4.54	4.48	9.01	8.99	13.43	13.49	-	-

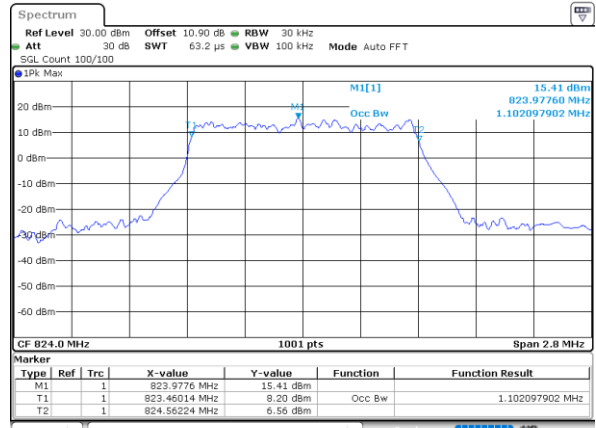


LTE Band 26

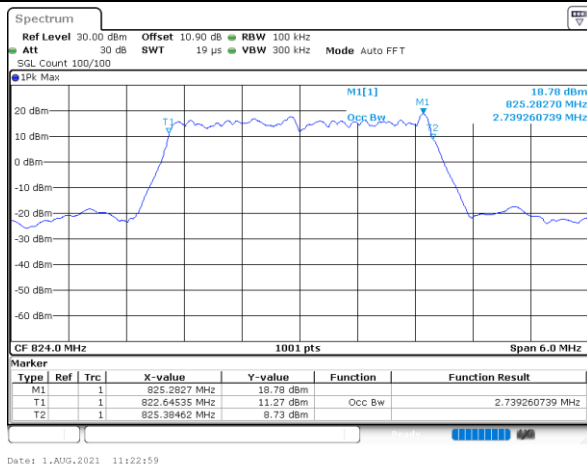
Middle Channel / 1.4MHz / QPSK



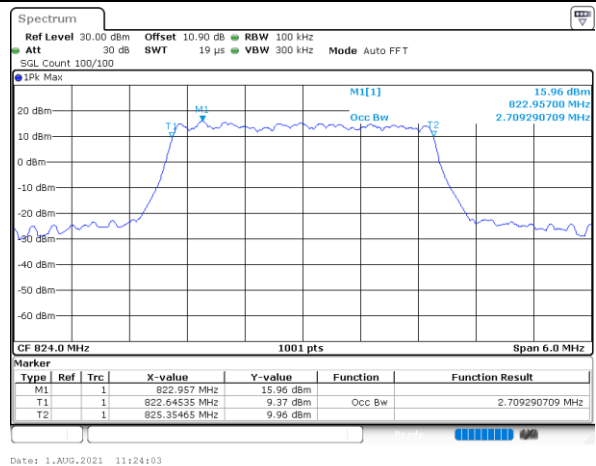
Middle Channel / 1.4MHz / 16QAM



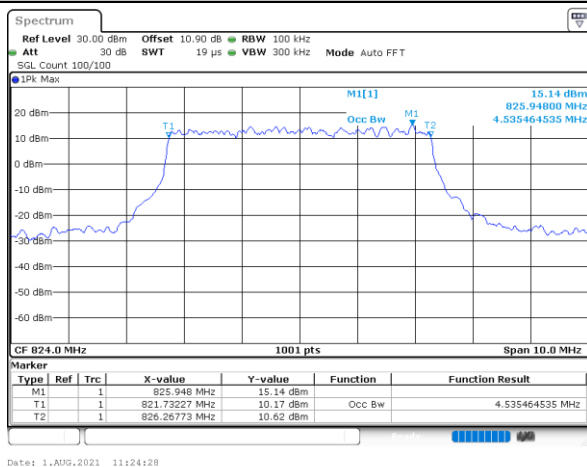
Middle Channel / 3MHz / QPSK



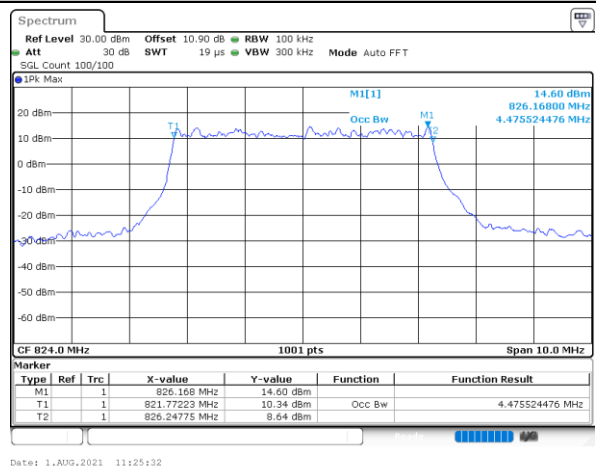
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



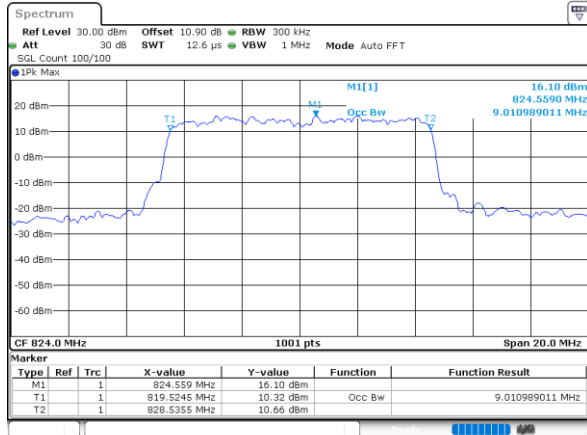
Middle Channel / 5MHz / 16QAM



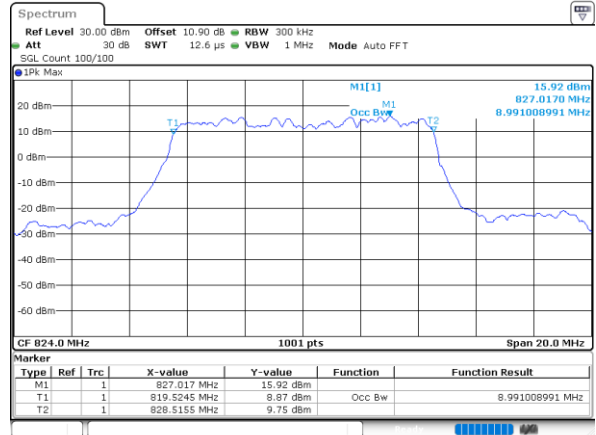


LTE Band 26

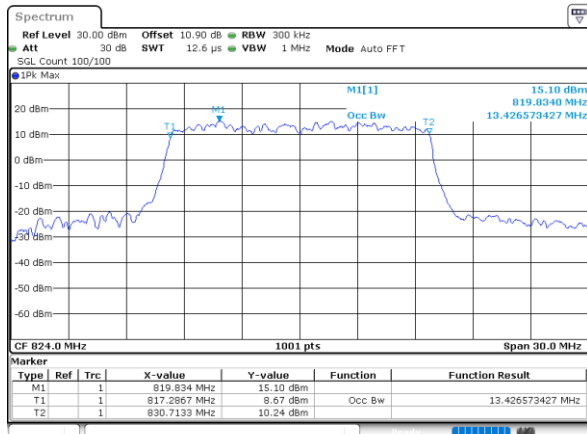
Middle Channel / 10MHz / QPSK



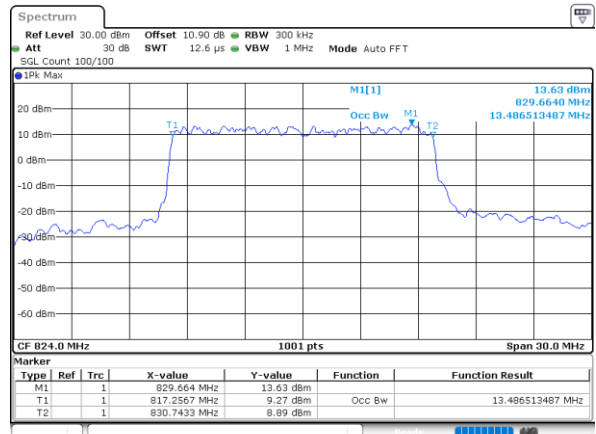
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM

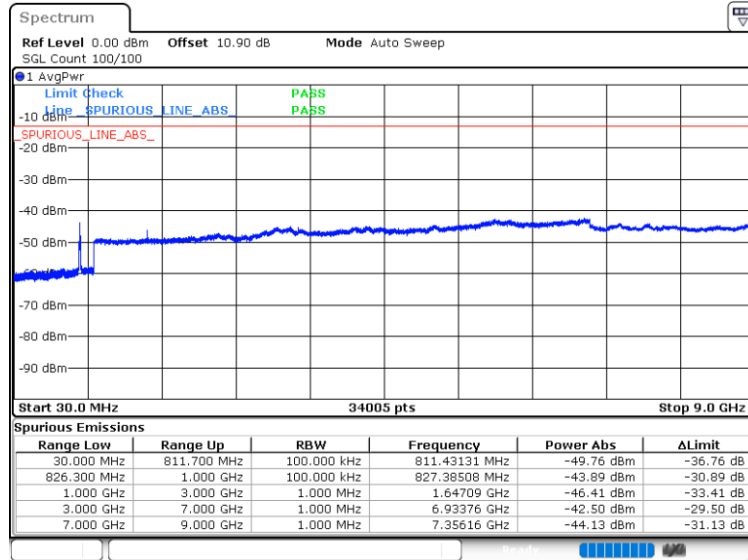




Emission masks – Out of band emissions

LTE Band 26 / 1.4MHz

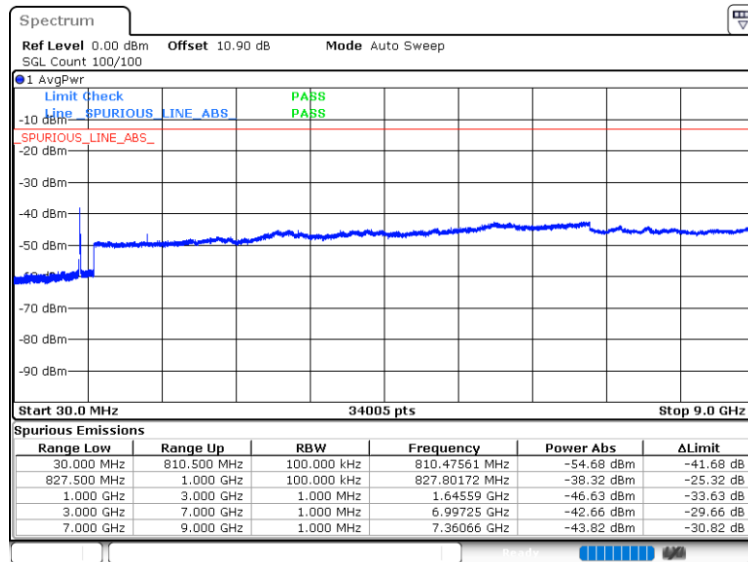
Middle Channel / QPSK



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LTE Band 26 / 3MHz

Middle Channel / QPSK

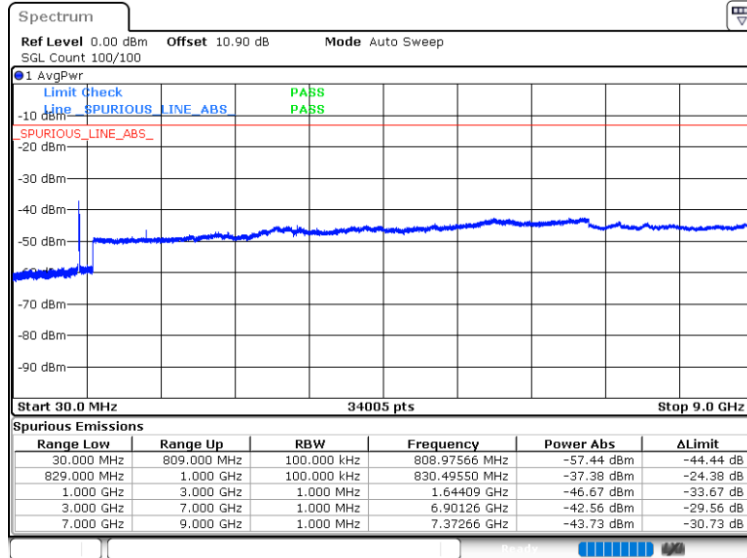


Date: 1.AUG.2021 11:30:39



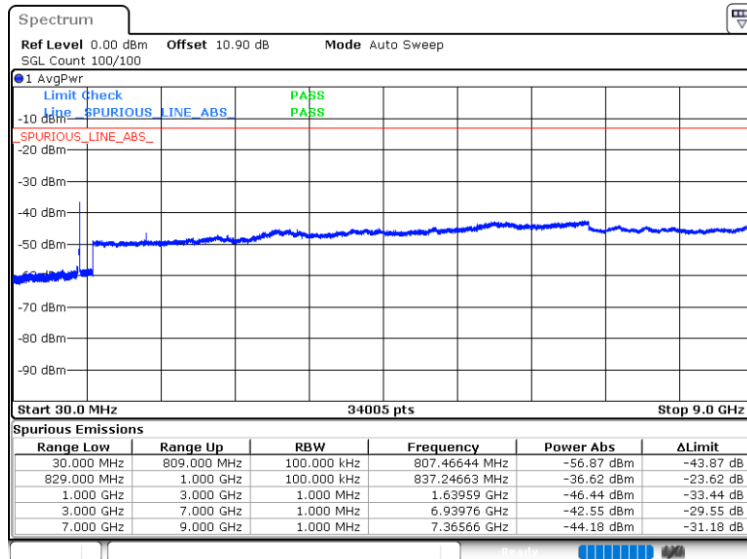
LTE Band 26 / 5MHz

Middle Channel / QPSK



LTE Band 26 / 10MHz

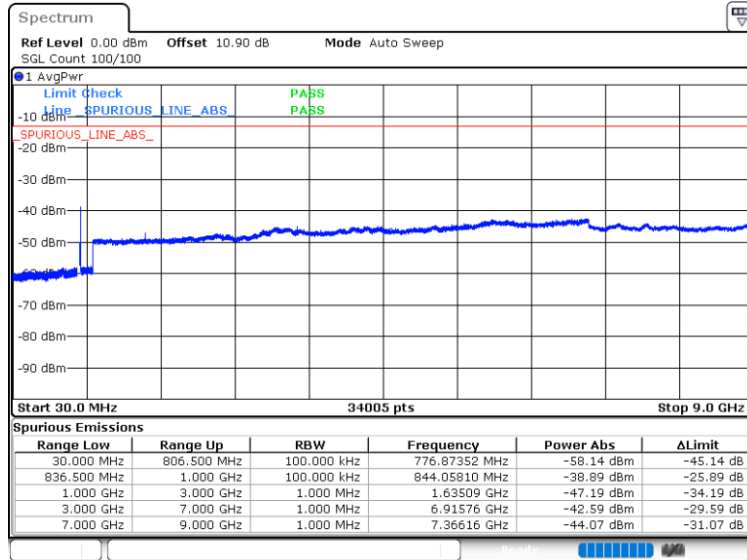
Middle Channel / QPSK





LTE Band 26 / 15MHz

Middle Channel / QPSK



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Appendix B. Test Results of Radiated Test

<EUT with Strap 1>

<Top Antenna>

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	1628	-64.38	-13	-51.38	-74.06	-71.29	0.52	9.58	H
	2443	-60.57	-13	-47.57	-74.87	-68.53	0.64	10.75	H
	3257	-59.10	-13	-46.10	-75.65	-68.07	0.75	11.87	H
									H
									H
									H
	1628	-64.38	-13	-51.38	-74.06	-71.29	0.52	9.58	V
	2443	-60.57	-13	-47.57	-74.87	-68.53	0.64	10.75	V
	3257	-58.90	-13	-45.90	-75.65	-67.87	0.75	11.87	V
									V
									V
									V
Middle	1633	-64.02	-13	-51.02	-73.89	-70.94	0.52	9.59	H
	2450	-60.90	-13	-47.90	-74.56	-68.86	0.64	10.76	H
	3267	-59.14	-13	-46.14	-75.55	-68.14	0.75	11.90	H
									H
									H
									H
	1633	-64.17	-13	-51.17	-73.86	-71.09	0.52	9.59	V
	2450	-60.30	-13	-47.30	-74.56	-68.26	0.64	10.76	V
	3267	-58.86	-13	-45.86	-75.38	-67.86	0.75	11.90	V
									V
									V
									V



Highest	1638	-63.26	-13	-50.26	-73.28	-70.19	0.52	9.60	H
	2458	-54.33	-13	-41.33	-68	-62.3	0.65	10.77	H
	3277	-59.23	-13	-46.23	-75.67	-68.26	0.75	11.93	H
									H
									H
									H
									H
	1638	-61.54	-13	-48.54	-71.25	-68.47	0.52	9.60	V
	2458	-57.15	-13	-44.15	-71.38	-65.12	0.65	10.77	V
	3277	-58.98	-13	-45.98	-75.48	-68.01	0.75	11.93	V
									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	1629	-63.82	-13	-50.82	-73.69	-70.73	0.52	9.58	H
	2443	-58.77	-13	-45.77	-72.47	-66.73	0.64	10.75	H
	3258	-58.05	-13	-45.05	-74.46	-67.02	0.75	11.87	H
									H
									H
									H
									H
	1629	-64.09	-13	-51.09	-73.77	-71	0.52	9.58	V
	2443	-60.47	-13	-47.47	-74.76	-68.43	0.64	10.75	V
	3258	-59.14	-13	-46.14	-75.69	-68.11	0.75	11.87	V
									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	-62.08	-13	-49.08	-71.95	-69	0.52	9.59	H
	2448	-57.41	-13	-44.41	-71.07	-65.37	0.64	10.76	H
	3256	-58.85	-13	-45.85	-75.26	-67.82	0.75	11.87	H
									H
									H
									H
									H
	1632	-61.99	-13	-48.99	-71.68	-68.91	0.52	9.59	V
	2448	-55.61	-13	-42.61	-69.88	-63.57	0.64	10.76	V
	3256	-58.87	-13	-45.87	-75.42	-67.84	0.75	11.87	V
									V
									V
									V
									V

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



<Bottom Antenna>

LTE Band 26

LTE Band 26 / 3MHz / 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	1633	-63.50	-13	-50.50	-73.37	-70.42	0.52	9.59	H
	2450	-61.22	-13	-48.22	-74.88	-69.18	0.64	10.76	H
	3267	-58.63	-13	-45.63	-75.04	-67.63	0.75	11.90	H
									H
									H
									H
									H
	1633	-63.87	-13	-50.87	-73.56	-70.79	0.52	9.59	V
	2450	-57.38	-13	-44.38	-71.65	-65.34	0.64	10.76	V
	3267	-59.06	-13	-46.06	-75.59	-68.06	0.75	11.90	V
									V
									V
									V
									V
Middle	1640	-63.78	-13	-50.78	-73.8	-70.71	0.52	9.61	H
	2460	-61.10	-13	-48.10	-74.77	-69.07	0.65	10.77	H
	3281	-59.23	-13	-46.23	-75.67	-68.27	0.75	11.94	H
									H
									H
									H
									H
	1640	-63.97	-13	-50.97	-73.68	-70.9	0.52	9.61	V
	2460	-60.27	-13	-47.27	-74.48	-68.24	0.65	10.77	V
	3281	-58.97	-13	-45.97	-75.46	-68.01	0.75	11.94	V
									V
									V
									V
									V



Highest	1647	-63.97	-13	-50.97	-73.99	-70.92	0.53	9.62	H
	2471	-60.77	-13	-47.77	-74.4	-68.75	0.65	10.78	H
	3295	-59.03	-13	-46.03	-75.51	-68.11	0.76	11.99	H
									H
									H
									H
									H
	1647	-64.05	-13	-51.05	-73.77	-71	0.53	9.62	V
	2471	-60.44	-13	-47.44	-74.61	-68.42	0.65	10.78	V
	3295	-59.29	-13	-46.29	-75.75	-68.37	0.76	11.99	V
									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	-64.09	-13	-51.09	-73.96	-71.01	0.52	9.59	H
	2440	-60.80	-13	-47.80	-74.5	-68.76	0.64	10.75	H
	3256	-59.15	-13	-46.15	-75.56	-68.12	0.75	11.87	H
									H
									H
									H
									H
	1632	-64.30	-13	-51.30	-73.99	-71.22	0.52	9.59	V
	2440	-59.35	-13	-46.35	-73.66	-67.31	0.64	10.75	V
	3256	-58.83	-13	-45.83	-75.38	-67.8	0.75	11.87	V
									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	-62.72	-13	-49.72	-72.59	-69.64	0.52	9.59	H
	2448	-60.64	-13	-47.64	-74.3	-68.6	0.64	10.76	H
	3256	-59.09	-13	-46.09	-75.5	-68.06	0.75	11.87	H
									H
									H
									H
									H
	1632	-63.99	-13	-50.99	-73.68	-70.91	0.52	9.59	V
	2448	-59.32	-13	-46.32	-73.59	-67.28	0.64	10.76	V
	3256	-58.70	-13	-45.70	-75.25	-67.67	0.75	11.87	V
									V
									V
									V
									V

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



<EUT with Strap 3>

<Top Antenna>

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)
Highest	1638	-64.25	-13	-51.25	-74.13	-71.18	0.52	9.60	H
	2456	-56.02	-13	-43.02	-69.69	-63.99	0.65	10.76	H
	3277	-59.61	-13	-46.61	-76.05	-68.64	0.75	11.93	H
									H
									H
									H
									H
	1638	-64.05	-13	-51.05	-73.76	-70.98	0.52	9.60	V
	2456	-57.28	-13	-44.28	-71.52	-65.25	0.65	10.76	V
	3277	-59.40	-13	-46.40	-75.9	-68.43	0.75	11.93	V
									V
									V
									V
									V

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



<Bottom Antenna>

LTE Band 26

LTE Band 26 / 3MHz / 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	1633	-63.61	-13	-50.61	-73.48	-70.53	0.52	9.59	H
	2450	-61.33	-13	-48.33	-74.99	-69.29	0.64	10.76	H
	3267	-58.76	-13	-45.76	-75.17	-67.76	0.75	11.90	H
									H
									H
									H
									H
	1633	-63.98	-13	-50.98	-73.67	-70.9	0.52	9.59	V
	2450	-57.51	-13	-44.51	-71.77	-65.47	0.64	10.76	V
	3267	-59.17	-13	-46.17	-75.7	-68.17	0.75	11.90	V
									V
									V
									V
									V

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

————THE END————