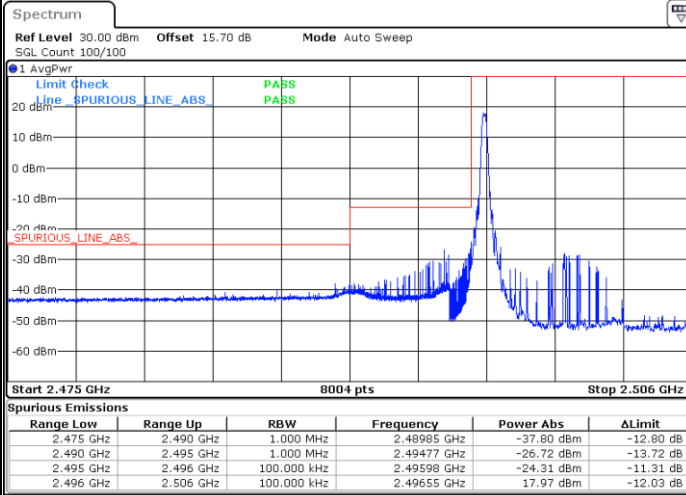




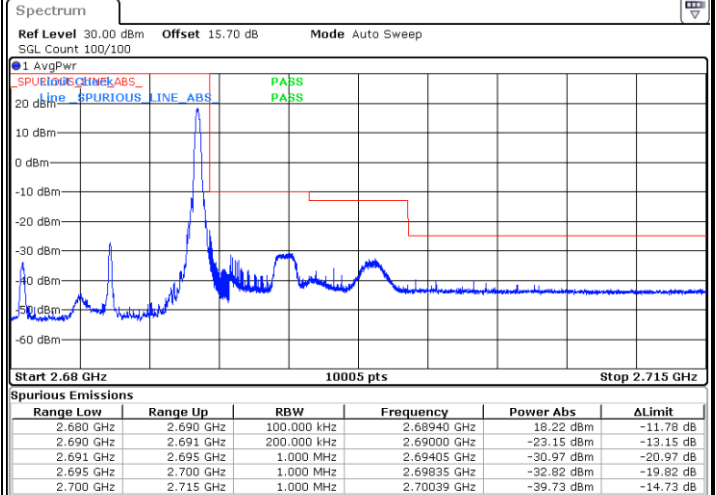
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



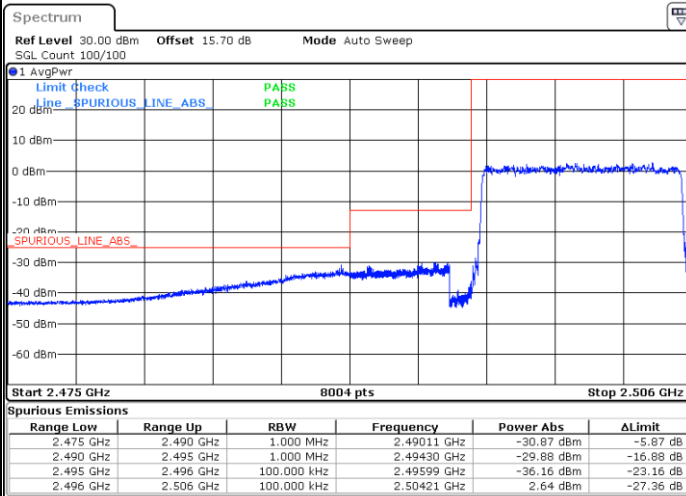
Date: 24.MAY.2021 11:33:48

Highest Band Edge / 1 RB



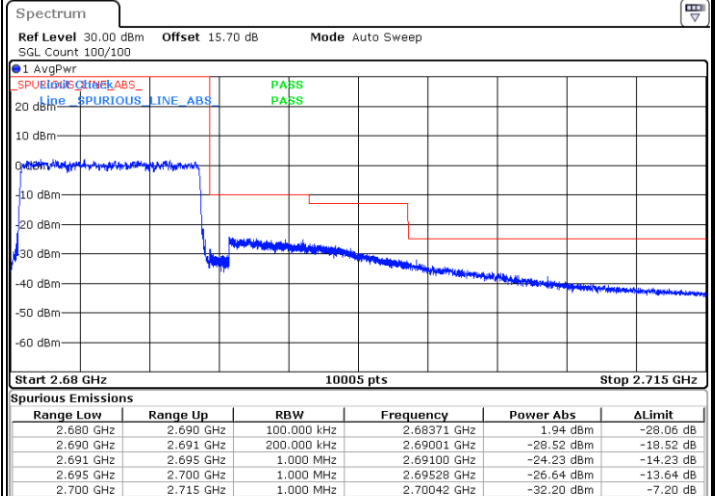
Date: 24.MAY.2021 11:34:41

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:34:15

Highest Band Edge / Full RB

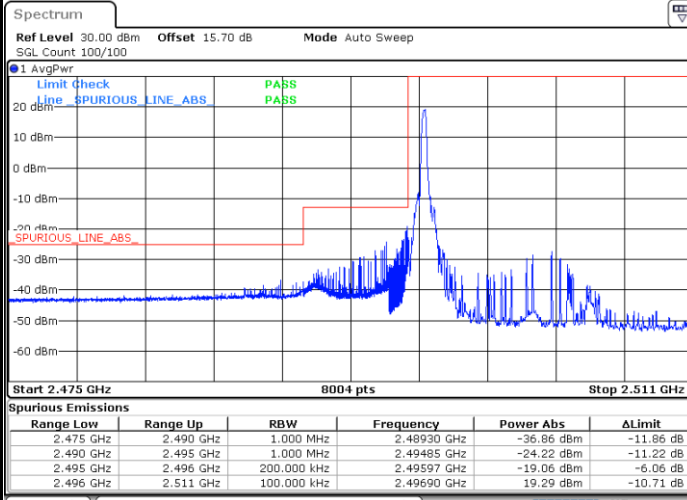


Date: 24.MAY.2021 11:35:07



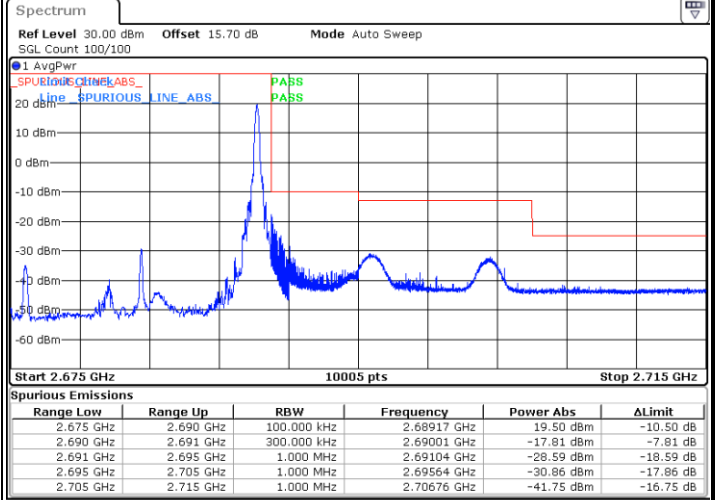
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



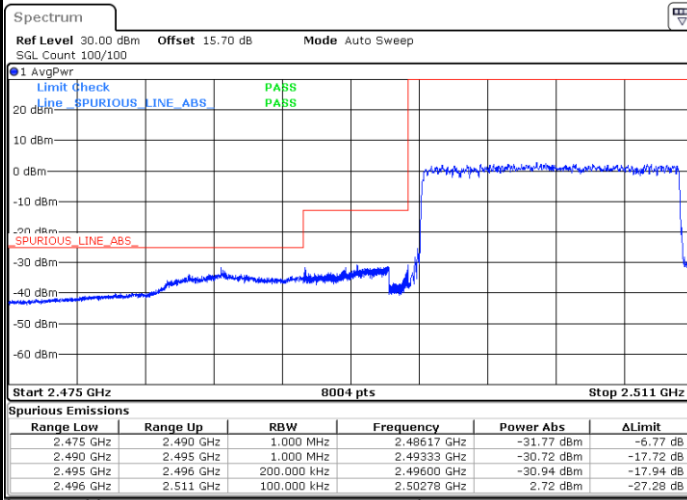
Date: 24.MAY.2021 11:37:19

Highest Band Edge / 1 RB



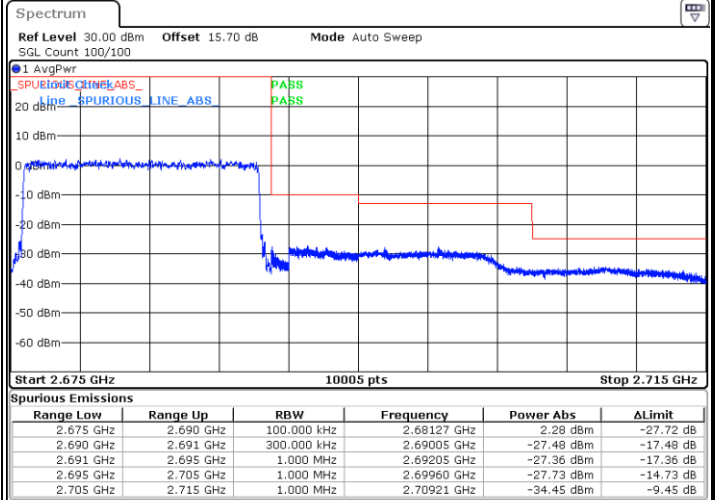
Date: 24.MAY.2021 11:39:04

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:38:12

Highest Band Edge / Full RB

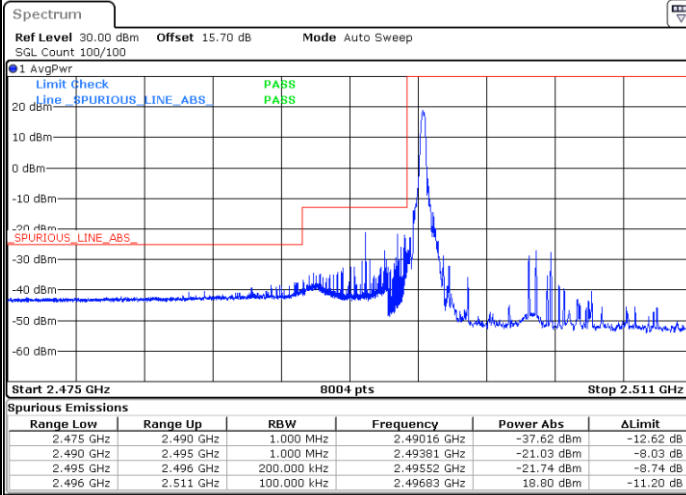


Date: 24.MAY.2021 11:39:56



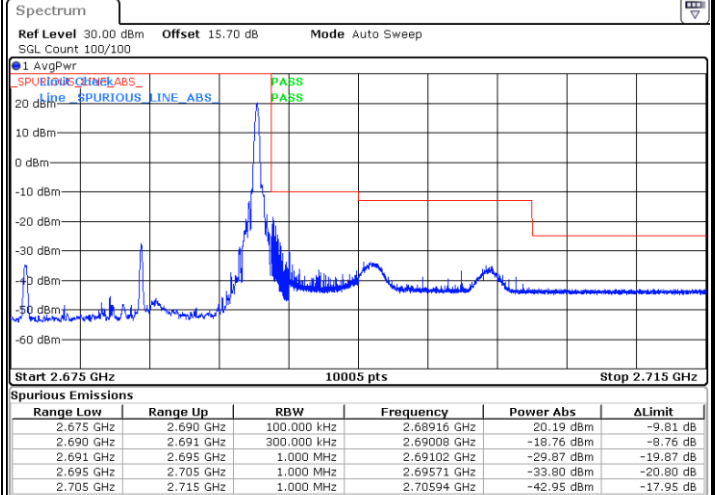
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



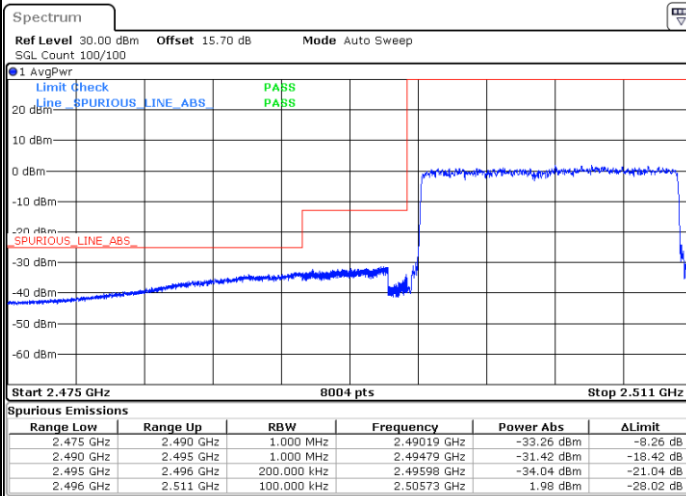
Date: 24.MAY.2021 11:37:45

Highest Band Edge / 1 RB



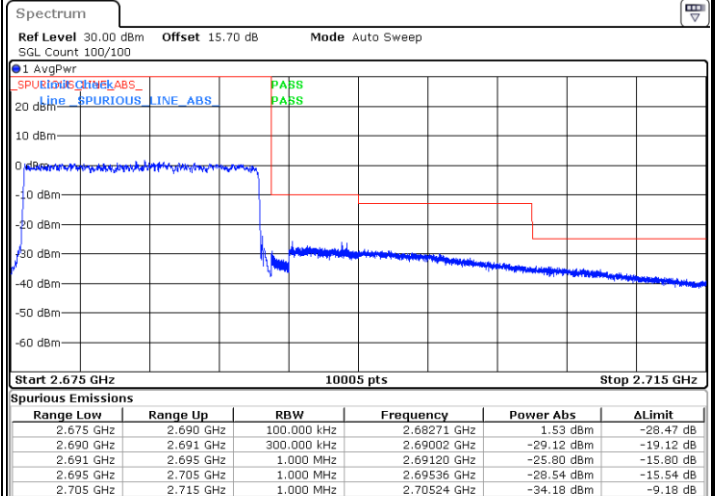
Date: 24.MAY.2021 11:39:30

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:38:38

Highest Band Edge / Full RB

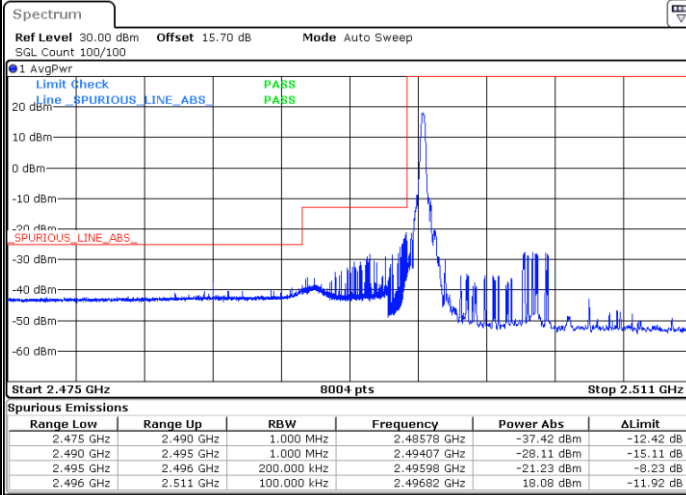


Date: 24.MAY.2021 11:40:22



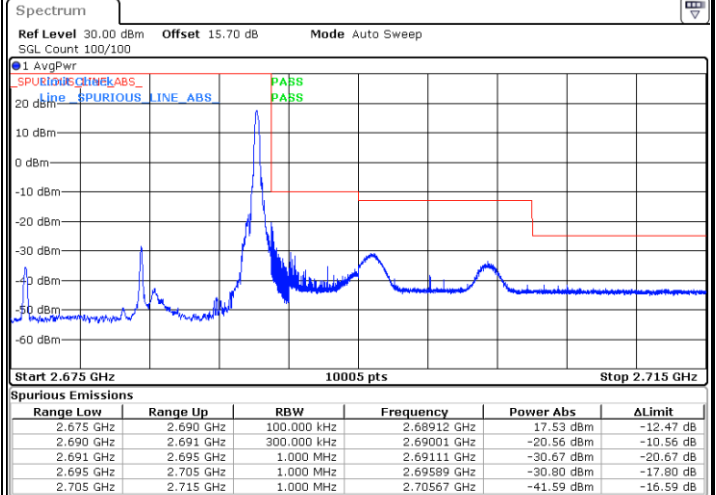
LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



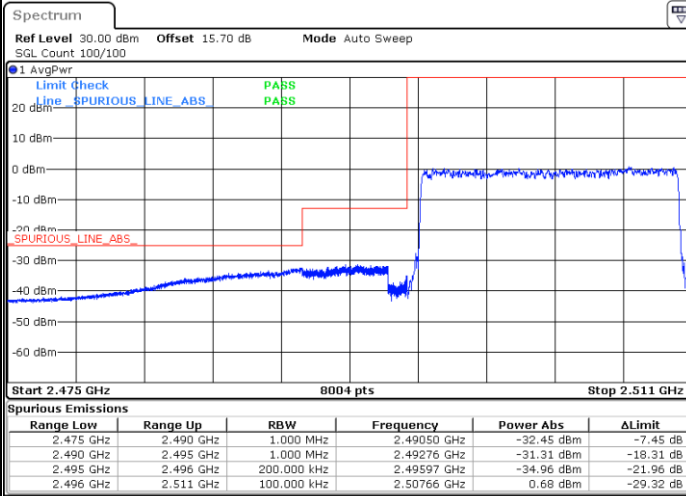
Date: 24.MAY.2021 11:35:34

Highest Band Edge / 1 RB



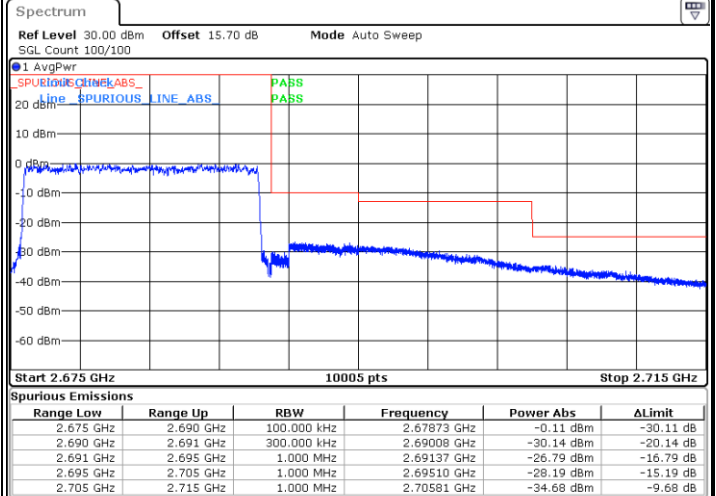
Date: 24.MAY.2021 11:36:26

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:36:01

Highest Band Edge / Full RB

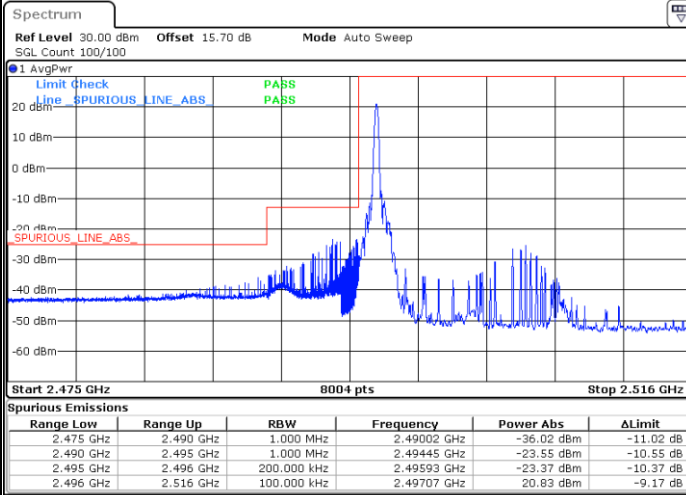


Date: 24.MAY.2021 11:36:53



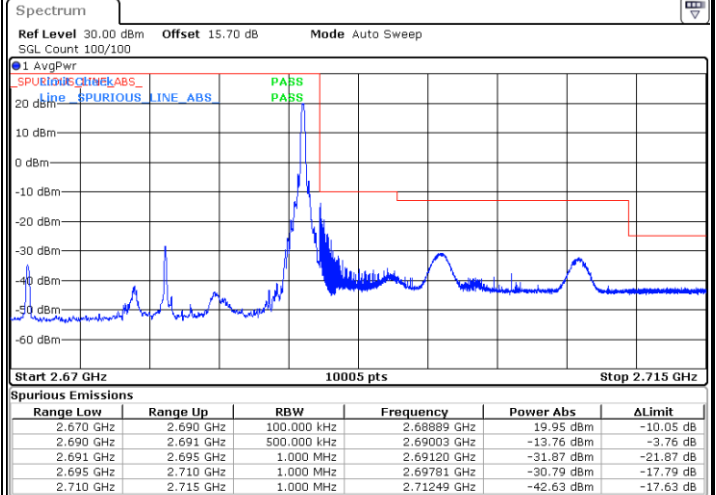
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



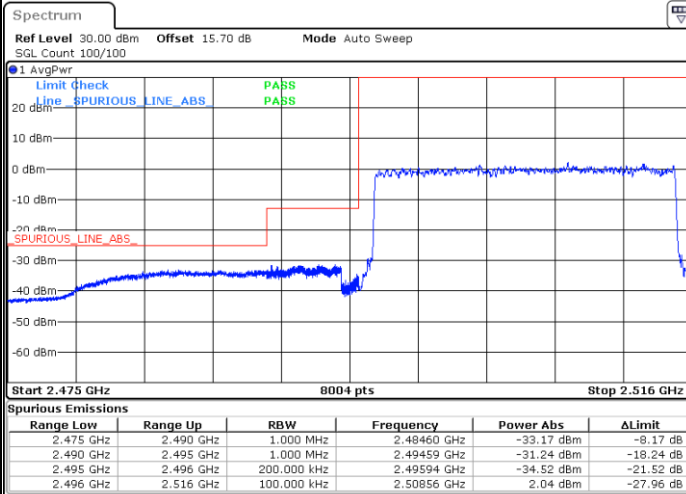
Date: 24.MAY.2021 11:40:49

Highest Band Edge / 1 RB



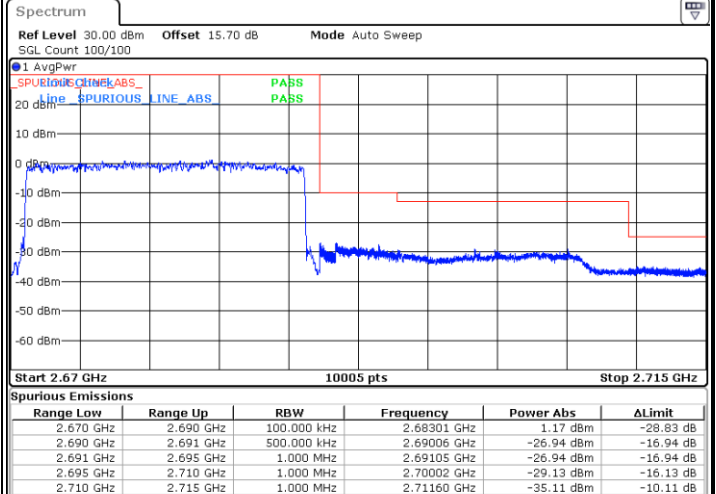
Date: 24.MAY.2021 11:42:33

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:41:41

Highest Band Edge / Full RB

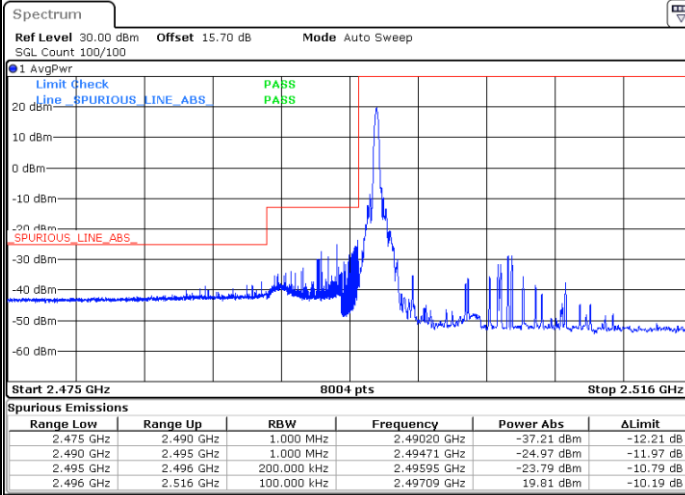


Date: 24.MAY.2021 11:43:51



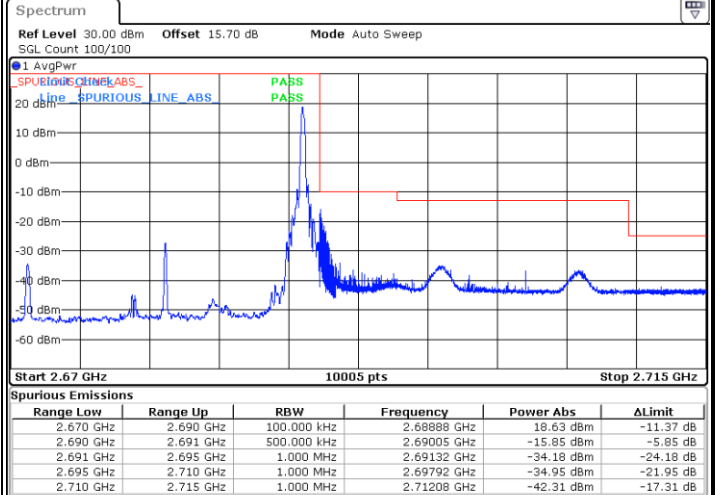
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



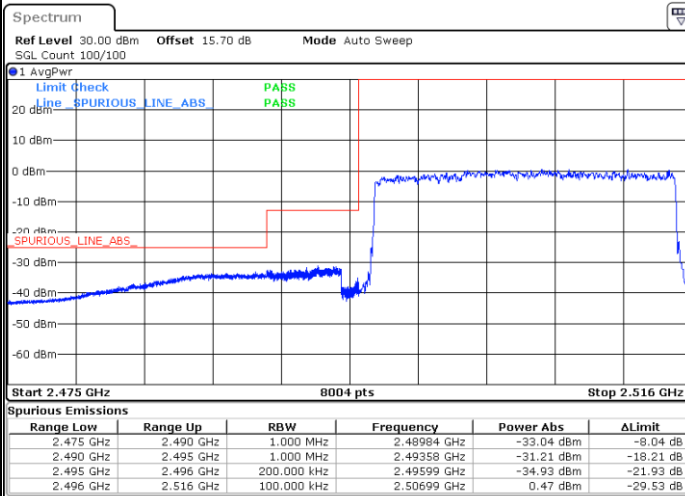
Date: 24.MAY.2021 11:41:15

Highest Band Edge / 1 RB



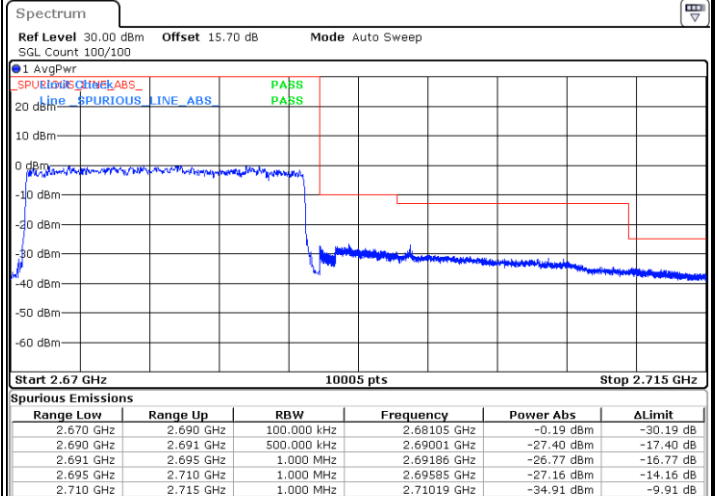
Date: 24.MAY.2021 11:42:59

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:42:07

Highest Band Edge / Full RB

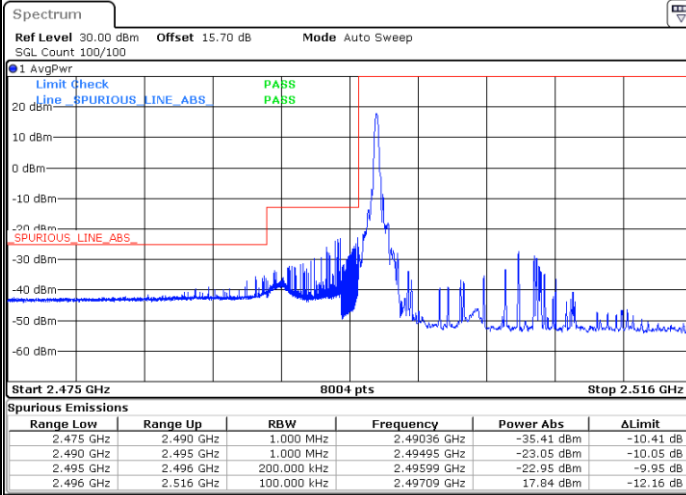


Date: 24.MAY.2021 11:43:25



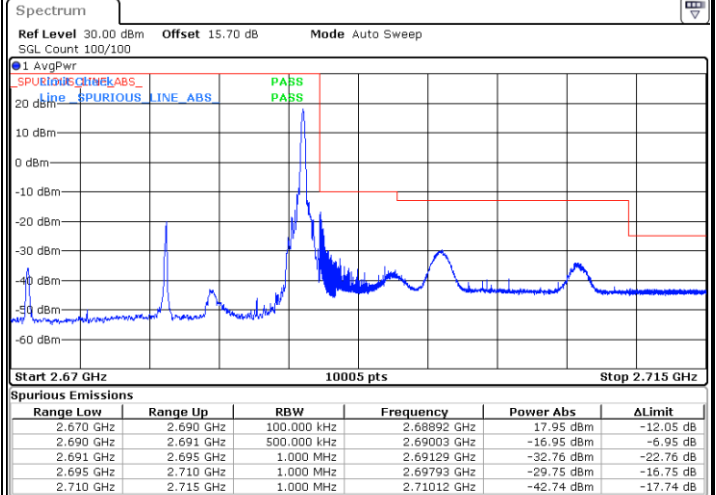
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



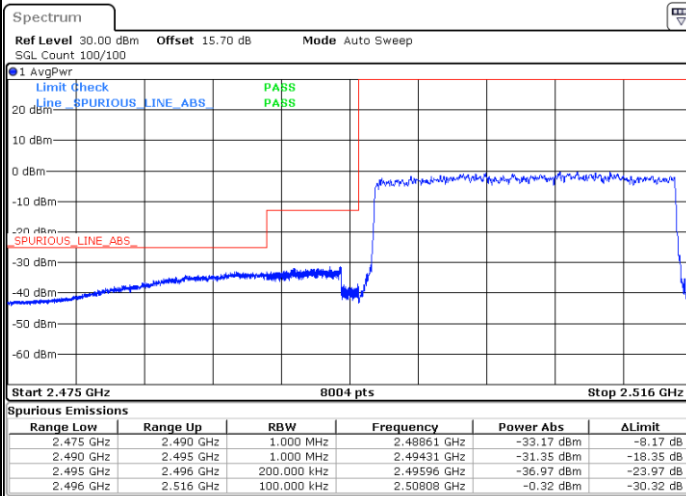
Date: 24.MAY.2021 11:44:18

Highest Band Edge / 1 RB



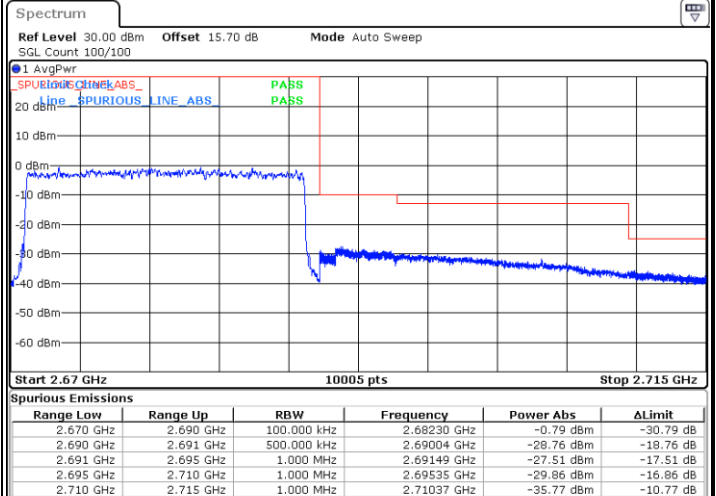
Date: 24.MAY.2021 11:45:10

Lowest Band Edge / Full RB



Date: 24.MAY.2021 11:44:44

Highest Band Edge / Full RB



Date: 24.MAY.2021 11:45:36

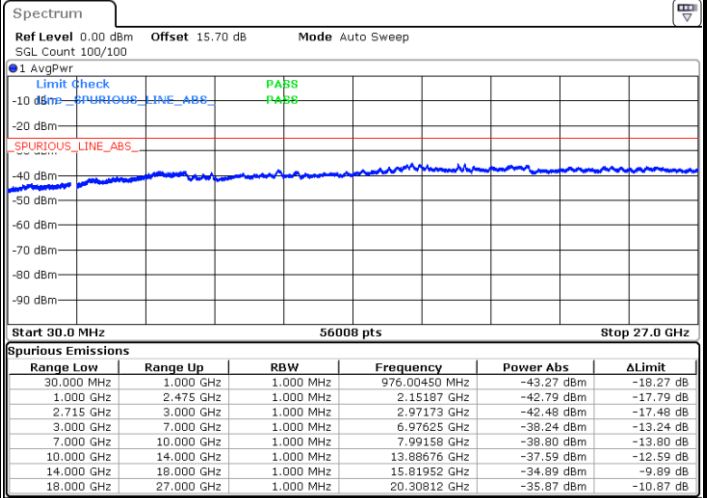
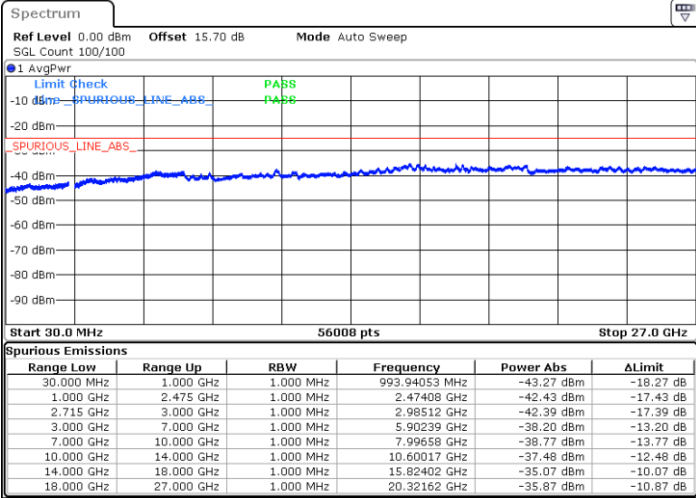


# Conducted Spurious Emission

## LTE Band 41 / 5MHz

### Lowest Channel / QPSK

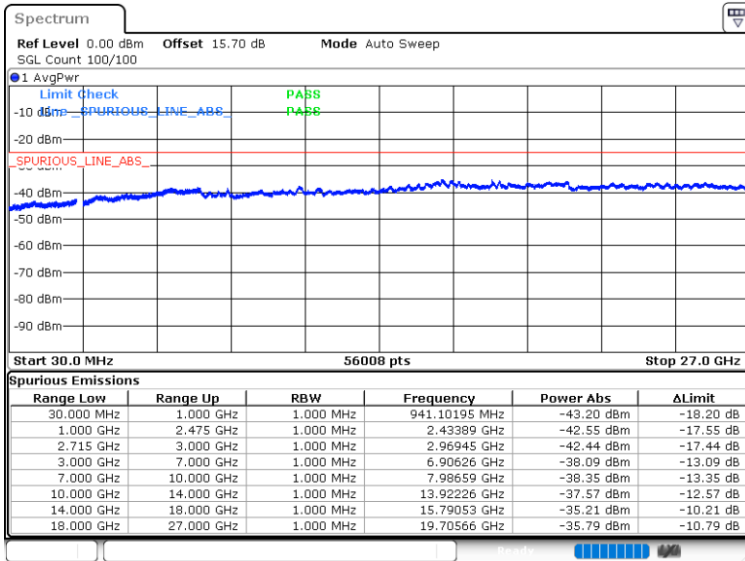
### Middle Channel / QPSK



Date: 24.MAY.2021 11:46:38

Date: 24.MAY.2021 11:47:39

### Highest Channel / QPSK



Date: 24.MAY.2021 11:48:39

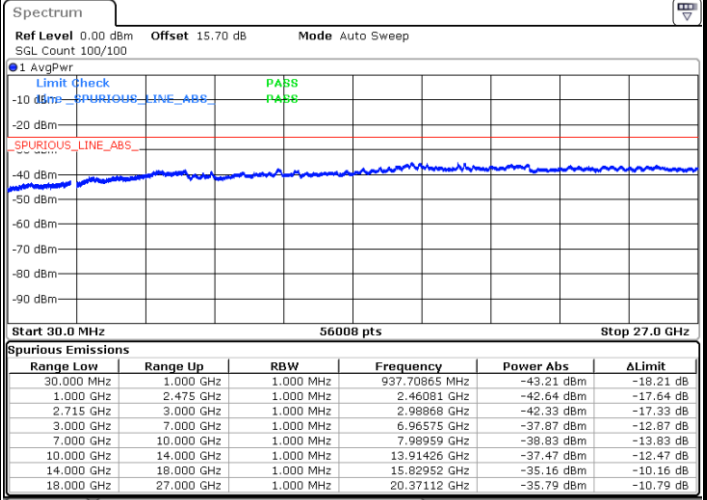
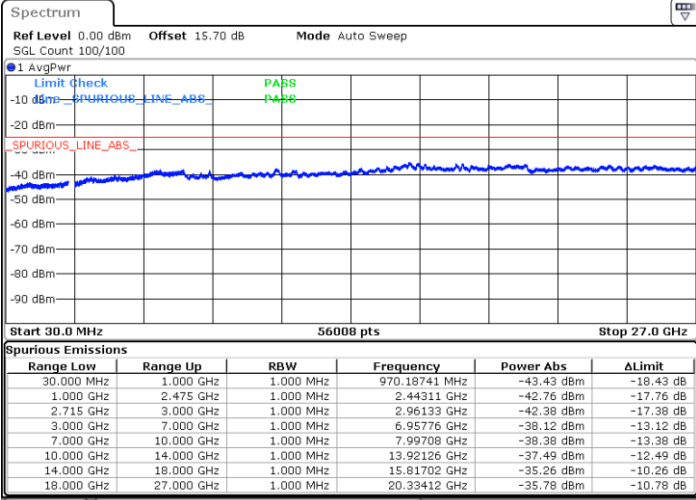




LTE Band 41 / 10MHz

Lowest Channel / QPSK

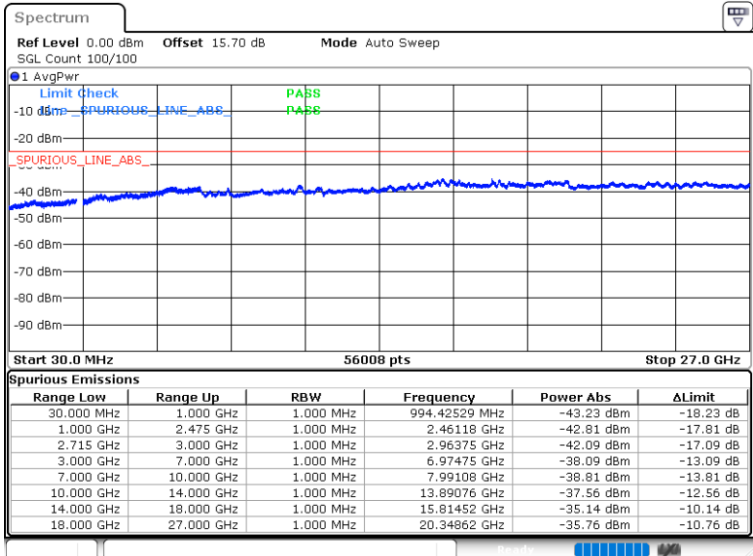
Middle Channel / QPSK



Date: 24.MAY.2021 11:49:41

Date: 24.MAY.2021 11:50:43

Highest Channel / QPSK



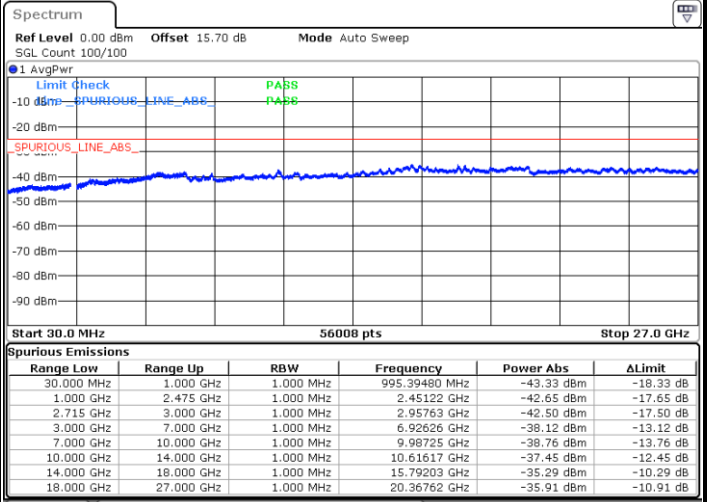
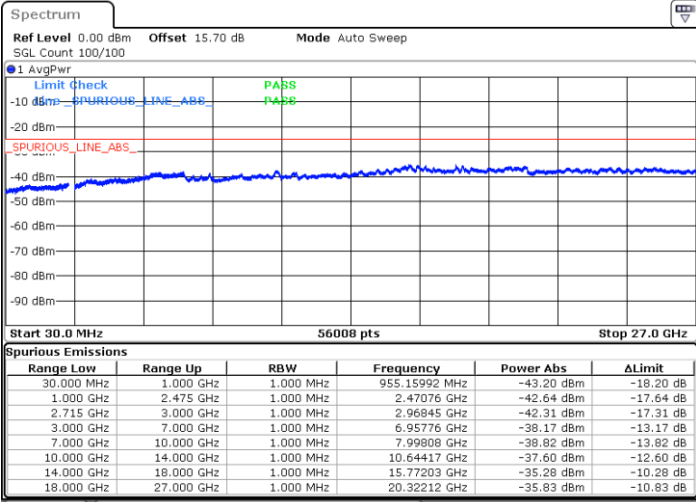
Date: 24.MAY.2021 11:51:44



LTE Band 41 / 15MHz

Lowest Channel / QPSK

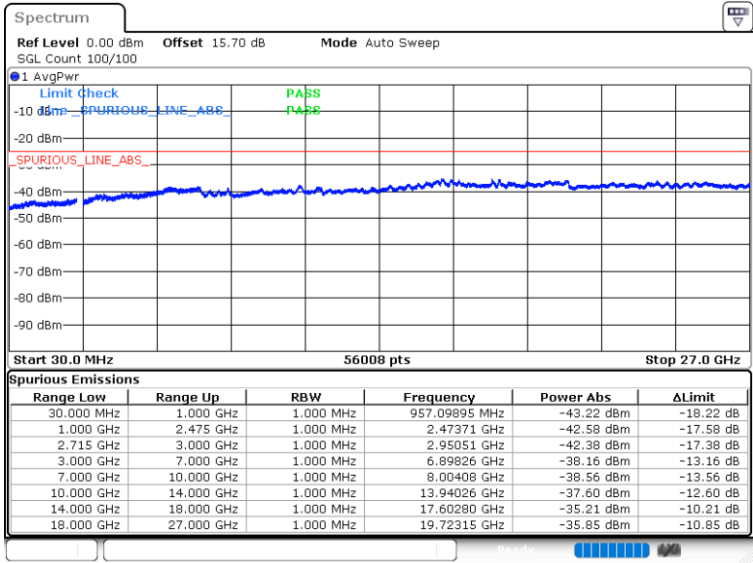
Middle Channel / QPSK



Date: 24.MAY.2021 11:52:45

Date: 24.MAY.2021 11:53:46

Highest Channel / QPSK



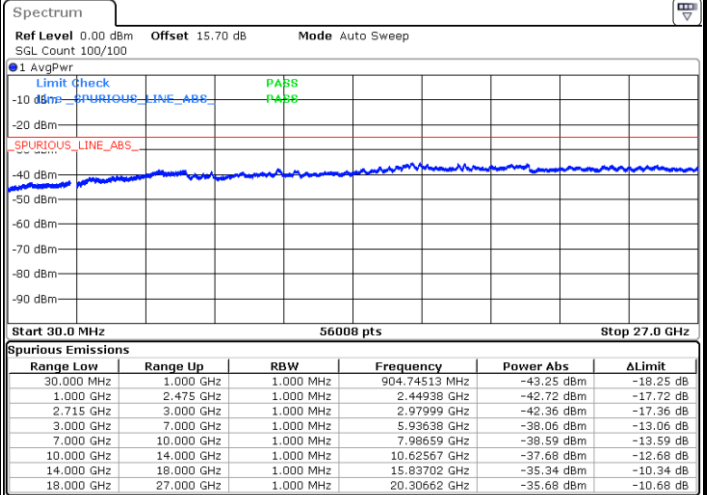
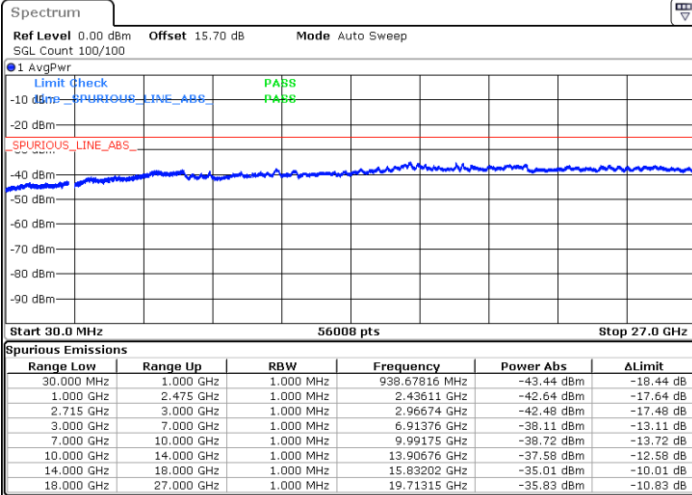
Date: 24.MAY.2021 11:54:47



LTE Band 41 / 20MHz

Lowest Channel / QPSK

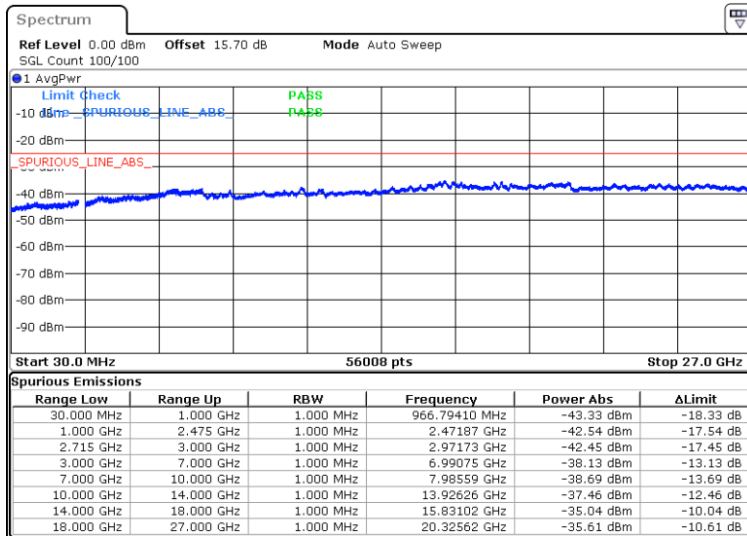
Middle Channel / QPSK



Date: 24.MAY.2021 11:55:48

Date: 24.MAY.2021 11:56:49

Highest Channel / QPSK



Date: 24.MAY.2021 11:57:51



### Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0076	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0044	
0	Normal Voltage	0.0046	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# Appendix B. Test Results of Radiated Test

<Sample 1>

## LTE Band 5

LTE Band 5 / 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)
Lowest	1648	-63.88	-13	-50.88	-73.79	-66.29	4.92	9.48	H
	3296	-61.64	-13	-48.64	-78.29	-63.55	7.03	11.09	H
	4120	-58.95	-13	-45.95	-78.67	-60.65	7.95	11.80	H
									H
									V
	1648	-58.91	-13	-45.91	-68.59	-61.32	4.92	9.48	V
	3296	-53.88	-13	-40.88	-70.28	-55.79	7.03	11.09	V
	4120	-54.32	-13	-41.32	-74.04	-56.02	7.95	11.80	V
									V
									V
Middle	1664	-61.39	-13	-48.39	-71.3	-63.88	4.95	9.58	H
	3328	-59.71	-13	-46.71	-76.31	-61.65	7.06	11.16	H
	4160	-56.20	-13	-43.20	-76.04	-57.87	7.98	11.80	H
									H
									H
	1664	-63.69	-13	-50.69	-73.38	-66.18	4.95	9.58	V
	3328	-51.36	-13	-38.36	-67.71	-53.30	7.06	11.16	V
	4160	-51.15	-13	-38.15	-71.06	-52.82	7.98	11.80	V
									V
									V



Highest	1680	-63.66	-13	-50.66	-73.57	-66.22	4.97	9.68	H
	3360	-61.37	-13	-48.37	-77.93	-63.34	7.10	11.22	H
	4200	-58.48	-13	-45.48	-78.44	-60.12	8.01	11.80	H
									H
									H
	1680	-61.32	-13	-48.32	-71.01	-63.88	4.97	9.68	V
	3360	-54.85	-13	-41.85	-71.16	-56.82	7.10	11.22	V
	4200	-55.45	-13	-42.45	-75.55	-57.09	8.01	11.80	V
									V
									V

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



### LTE Band 12

LTE Band 12 / 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)
Lowest	1400	-62.89	-13.00	-49.89	-72.47	-64.20	4.14	7.60	H
	2100	-64.29	-13.00	-51.29	-76.32	-65.97	5.57	9.40	H
	2800	-63.76	-13.00	-50.76	-78.59	-65.84	6.47	10.70	H
									H
									H
	1400	-65.15	-13.00	-52.15	-74.58	-66.46	4.14	7.60	V
	2100	-64.74	-13.00	-51.74	-76.72	-66.42	5.57	9.40	V
	2800	-64.03	-13.00	-51.03	-78.64	-66.11	6.47	10.70	V
									V
									V
Middle	1408	-64.59	-13.00	-51.59	-74.18	-65.95	4.14	7.65	H
	2112	-65.09	-13.00	-52.09	-77.17	-66.78	5.58	9.42	H
	2816	-63.28	-13.00	-50.28	-78.19	-65.34	6.49	10.70	H
									H
									H
	1408	-64.80	-13.00	-51.80	-74.26	-66.16	4.14	7.65	V
	2112	-64.97	-13.00	-51.97	-76.99	-66.66	5.58	9.42	V
	2816	-63.63	-13.00	-50.63	-78.31	-65.69	6.49	10.70	V
									V
									V



Highest	1416	-64.81	-13.00	-51.81	-74.41	-66.21	4.15	7.70	H
	2120	-65.21	-13.00	-52.21	-77.33	-66.91	5.59	9.44	H
	2824	-62.97	-13.00	-49.97	-77.92	-65.02	6.50	10.70	H
									H
									H
	1416	-65.64	-13.00	-52.64	-75.13	-67.04	4.15	7.70	V
	2120	-65.29	-13.00	-52.29	-77.34	-66.99	5.59	9.44	V
	2824	-62.93	-13.00	-49.93	-77.64	-64.98	6.50	10.70	V
									V
									V

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





**LTE Band 4**

LTE Band 4 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( 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	3422	-61.67	-13	-48.67	-78.85	-65.98	7.17	11.48	H
	5133	-58.36	-13	-45.36	-80.18	-61.13	8.82	11.60	H
	6846	-55.64	-13	-42.64	-81.79	-56.58	10.26	11.19	H
									H
									H
	3422	-61.77	-13	-48.77	-78.94	-66.08	7.17	11.48	V
	5133	-58.10	-13	-45.10	-79.92	-60.87	8.82	11.60	V
	6846	-55.43	-13	-42.43	-81.58	-56.37	10.26	11.19	V
									V
									V
Middle	3444	-62.15	-13	-49.15	-79.4	-66.61	7.19	11.65	H
	5170	-55.42	-13	-42.42	-77.27	-58.34	8.86	11.78	H
	6894	-55.85	-13	-42.85	-82.06	-56.93	10.30	11.38	H
									H
									H
	3444	-61.19	-13	-48.19	-78.44	-65.65	7.19	11.65	V
	5170	-56.88	-13	-43.88	-78.73	-59.80	8.86	11.78	V
	6894	-55.54	-13	-42.54	-81.75	-56.62	10.30	11.38	V
									V
									V



Highest	3474	-60.76	-13	-47.76	-78.12	-65.33	7.22	11.80	H
	5208	-58.09	-13	-45.09	-79.98	-61.12	8.89	11.92	H
	6944	-55.51	-13	-42.51	-81.78	-56.66	10.34	11.49	H
									H
									H
	3474	-61.40	-13	-48.40	-78.76	-65.97	7.22	11.80	V
	5208	-58.32	-13	-45.32	-80.21	-61.35	8.89	11.92	V
	6944	-55.54	-13	-42.54	-81.81	-56.69	10.34	11.49	V
									V
									V

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



### LTE Band 7

LTE Band 7 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( 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	5004	-58.85	-25	-33.85	-80.57	-61.34	8.71	11.20	H
	7503	-54.55	-25	-29.55	-81.29	-55.31	10.75	11.51	H
	10008	-53.91	-25	-28.91	-81.83	-52.41	12.46	10.96	H
									H
									H
	5004	-58.92	-25	-33.92	-80.64	-61.41	8.71	11.20	V
	7503	-55.54	-25	-30.54	-82.27	-56.30	10.75	11.51	V
	10008	-53.42	-25	-28.42	-81.34	-51.92	12.46	10.96	V
									V
									V
Middle	5052	-57.82	-25	-32.82	-79.58	-60.27	8.75	11.21	H
	7578	-55.02	-25	-30.02	-81.95	-55.91	10.81	11.70	H
	10098	-53.28	-25	-28.28	-81.31	-52.34	12.53	11.59	H
									H
									H
	5052	-58.17	-25	-33.17	-79.93	-60.62	8.75	11.21	V
	7578	-55.22	-25	-30.22	-82.15	-56.11	10.81	11.70	V
	10098	-52.93	-25	-27.93	-80.96	-51.99	12.53	11.59	V
									V
									V



Highest	5100	-58.06	-25	-33.06	-79.86	-60.66	8.80	11.40	H
	7653	-54.74	-25	-29.74	-81.79	-55.46	10.86	11.59	H
	10206	-53.11	-25	-28.11	-81.24	-52.01	12.61	11.51	H
									H
									H
	5100	-58.30	-25	-33.30	-80.1	-60.90	8.80	11.40	V
	7653	-55.14	-25	-30.14	-82.2	-55.86	10.86	11.59	V
	10206	-53.39	-25	-28.39	-81.52	-52.29	12.61	11.51	V
									V
									V

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



### LTE Band 41

LTE Band 41 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( 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	4992	-59.22	-25	-34.22	-80.93	-61.75	8.70	11.23	H
	7491	-55.96	-25	-30.96	-82.71	-56.70	10.74	11.48	H
	9990	-53.45	-25	-28.45	-81.39	-52.93	12.44	11.92	H
									H
									H
	4992	-59.03	-25	-34.03	-80.73	-61.56	8.70	11.23	V
	7491	-54.91	-25	-29.91	-81.66	-55.65	10.74	11.48	V
	9990	-53.91	-25	-28.91	-81.85	-53.39	12.44	11.92	V
									V
									V
Middle	5168	-57.62	-25	-32.62	-79.49	-60.54	8.85	11.77	H
	7752	-54.14	-25	-29.14	-81.34	-54.50	10.94	11.30	H
	10332	-52.56	-25	-27.56	-80.82	-51.58	12.72	11.73	H
									H
									V
	5168	-57.99	-25	-32.99	-79.85	-60.91	8.85	11.77	V
	7752	-54.60	-25	-29.60	-81.8	-54.96	10.94	11.30	V
	10332	-52.55	-25	-27.55	-80.81	-51.57	12.72	11.73	V
									V
									V



Highest	5342	-59.32	-25	-34.32	-81.3	-62.48	9.00	12.17	H
	8013	-54.09	-25	-29.09	-81.45	-54.26	11.13	11.30	H
	10692	-52.93	-25	-27.93	-81.56	-51.51	12.95	11.52	H
									H
									H
	5342	-58.32	-25	-33.32	-80.3	-61.48	9.00	12.17	V
	8013	-54.50	-25	-29.50	-81.87	-54.67	11.13	11.30	V
	10692	-52.76	-25	-27.76	-81.39	-51.34	12.95	11.52	V
									V
									V

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



<Sample 2>

**LTE Band 5**

LTE Band 5 / 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	1664	-62.54	-13	-49.54	-72.45	-65.03	4.95	9.58	H
	3328	-62.36	-13	-49.36	-78.96	-64.30	7.06	11.16	H
	4160	-56.44	-13	-43.44	-76.28	-58.11	7.98	11.80	H
									H
									H
	1664	-60.01	-13	-47.01	-69.7	-62.50	4.95	9.58	V
	3328	-60.39	-13	-47.39	-76.74	-62.33	7.06	11.16	V
	4160	-54.32	-13	-41.32	-74.23	-55.99	7.98	11.80	V
									V
									V

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



**LTE Band 41**

LTE Band 41 / 20MHz / QPSK									
Channel	Frequency ( MHz )	EIRP ( 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	5168	-58.06	-25	-33.06	-79.92	-60.98	8.85	11.77	H
	7752	-54.94	-25	-29.94	-82.14	-55.30	10.94	11.30	H
	10332	-53.01	-25	-28.01	-81.27	-52.03	12.72	11.73	H
									H
									H
	5168	-58.02	-25	-33.02	-79.88	-60.94	8.85	11.77	V
	7752	-54.46	-25	-29.46	-81.66	-54.82	10.94	11.30	V
	10332	-53.08	-25	-28.08	-81.34	-52.10	12.72	11.73	V
									V
									V

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