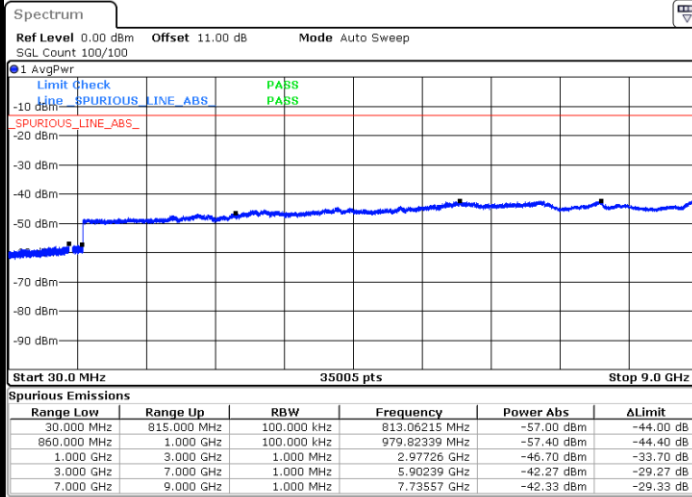




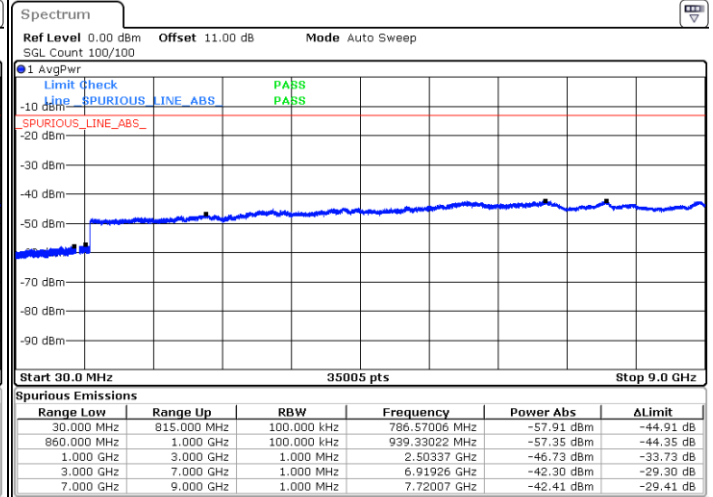
LTE Band 26 / 5MHz

Lowest Channel / QPSK



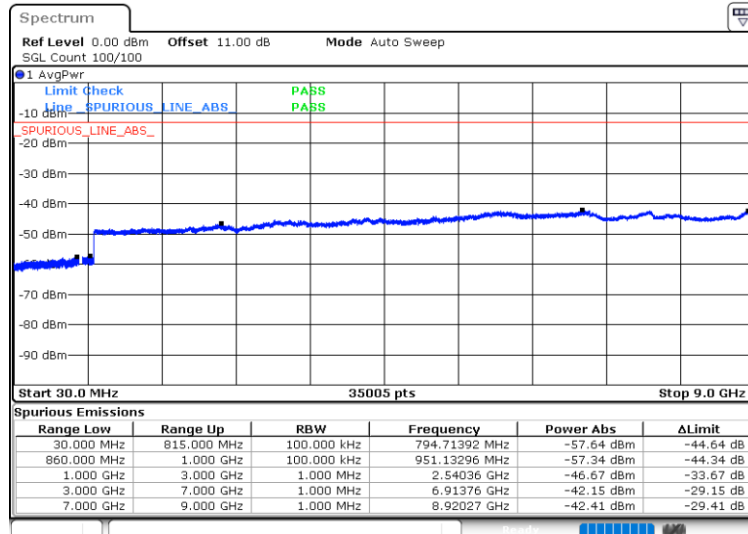
Date: 17.JUN.2023 00:45:21

Middle Channel / QPSK



Date: 17.JUN.2023 01:19:01

Highest Channel / QPSK

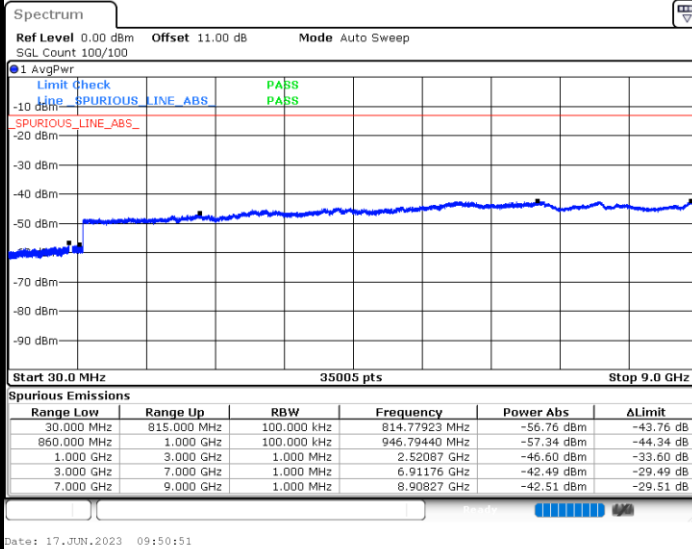


Date: 17.JUN.2023 01:21:02

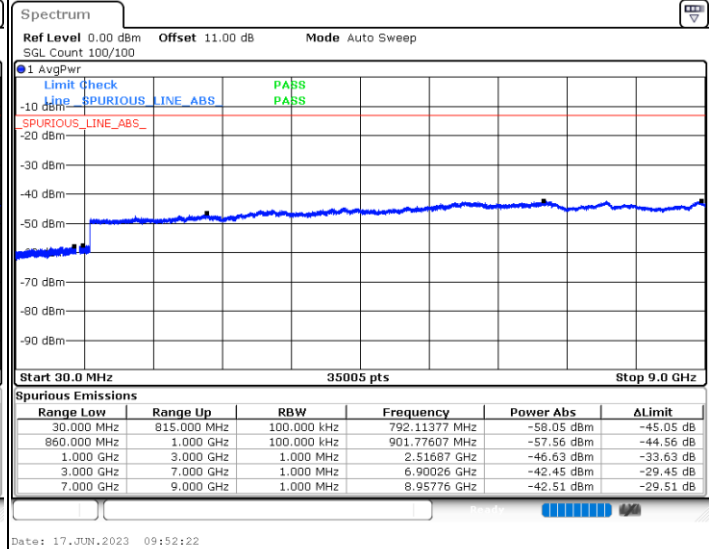


LTE Band 26 / 10MHz

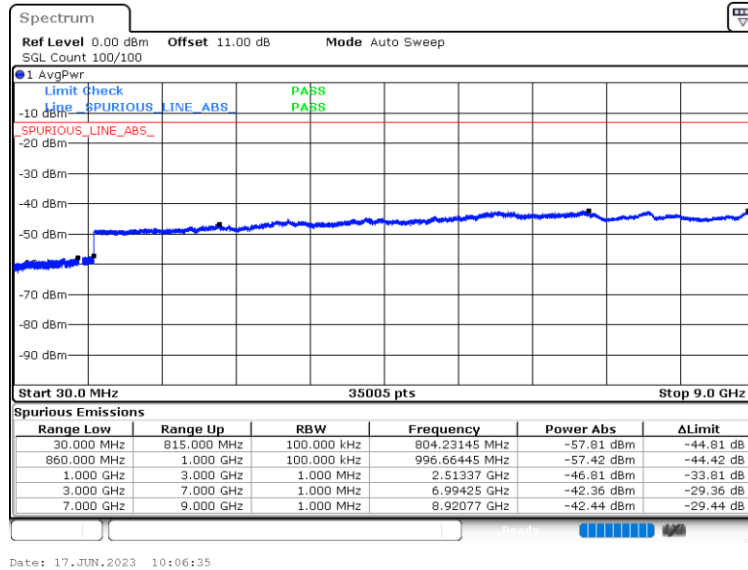
Lowest Channel / QPSK



Middle Channel / QPSK



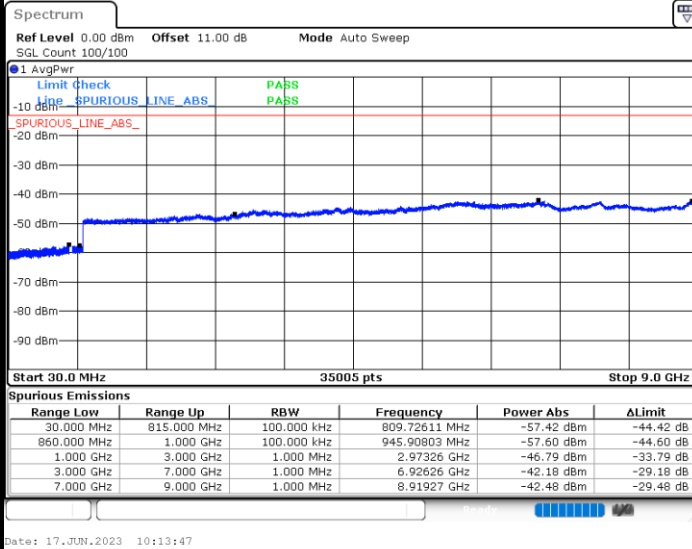
Highest Channel / QPSK



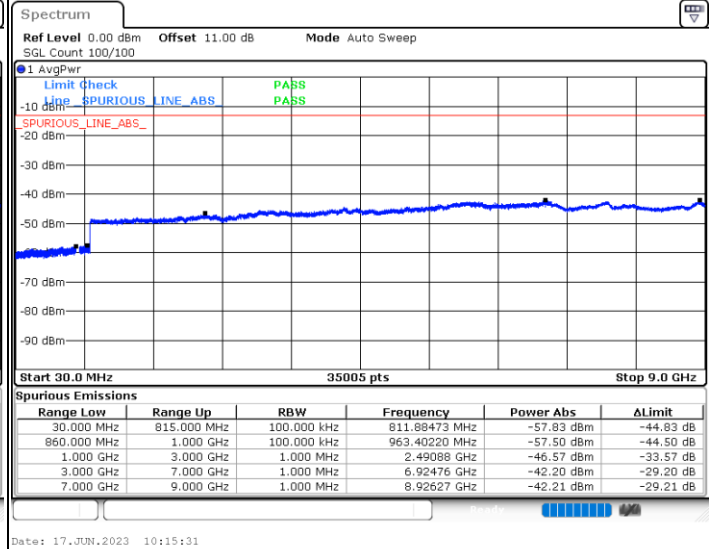


LTE Band 26 / 15MHz

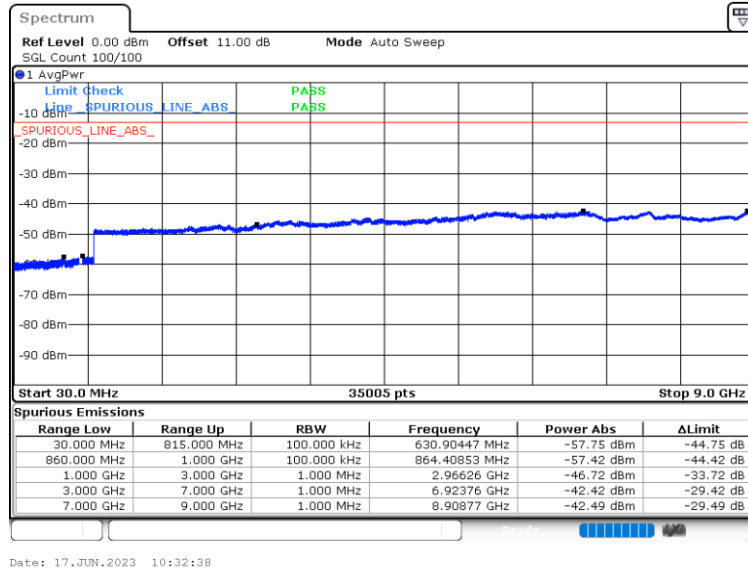
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



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	0.0004	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0039	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0097	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0072	
20	Maximum Voltage	0.0092	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

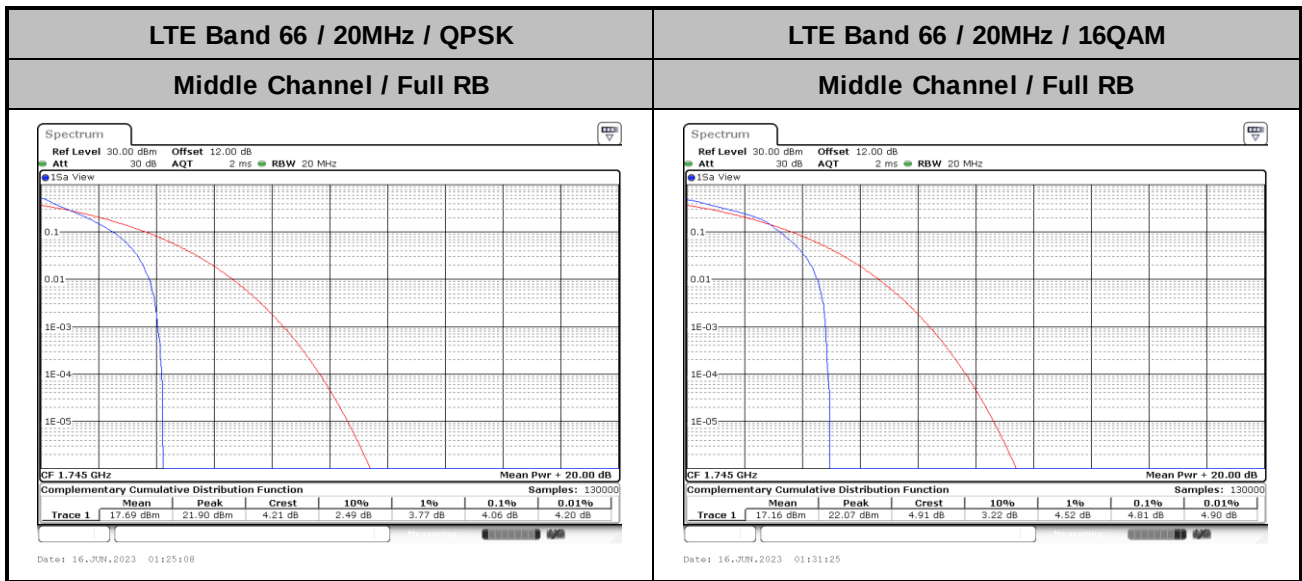
1. Normal Voltage = 3.7 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.06	4.81	PASS



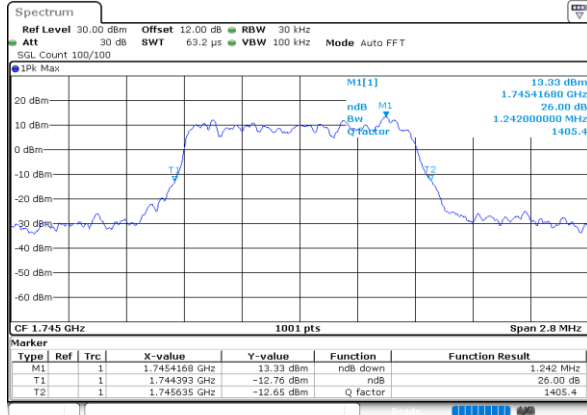
**26dB Bandwidth**

Mode	LTE Band 66 : 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	1.24	1.06	1.34	1.16	1.37	1.21	1.78	1.98	1.80	1.59	1.84	1.60
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-



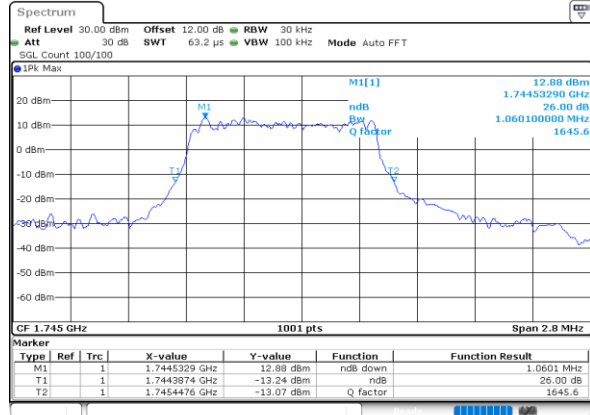
LTE Band 66

Middle Channel / 1.4MHz / QPSK



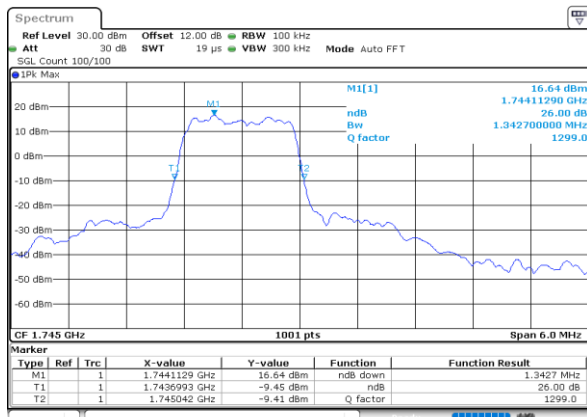
Date: 7 JUN 2023 20:40:18

Middle Channel / 1.4MHz / 16QAM



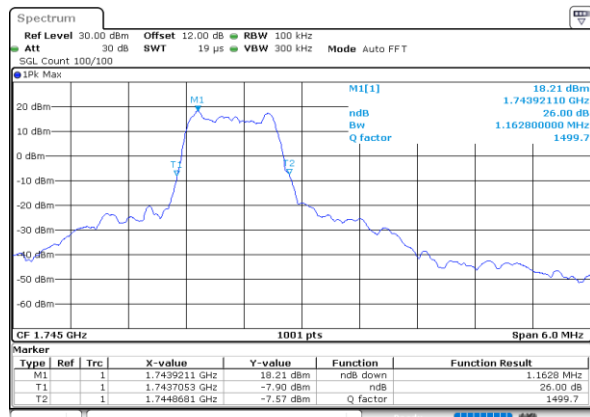
Date: 7 JUN 2023 20:41:49

Middle Channel / 3MHz / QPSK



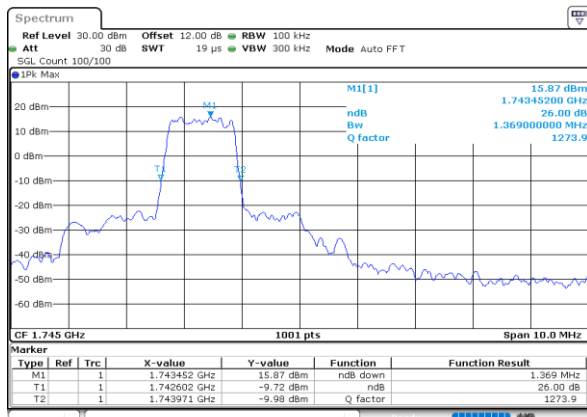
Date: 7 JUN 2023 22:13:53

Middle Channel / 3MHz / 16QAM



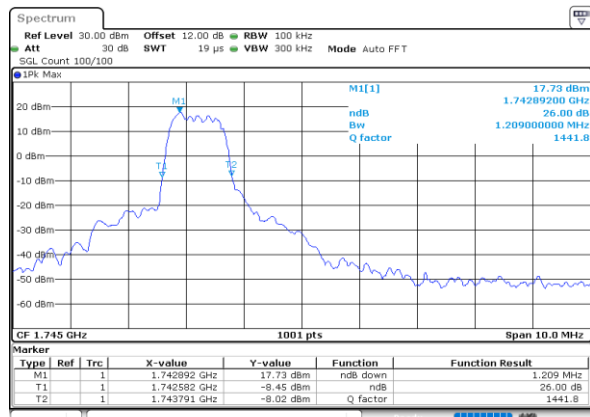
Date: 7 JUN 2023 22:17:34

Middle Channel / 5MHz / QPSK



Date: 15 JUN 2023 20:44:00

Middle Channel / 5MHz / 16QAM

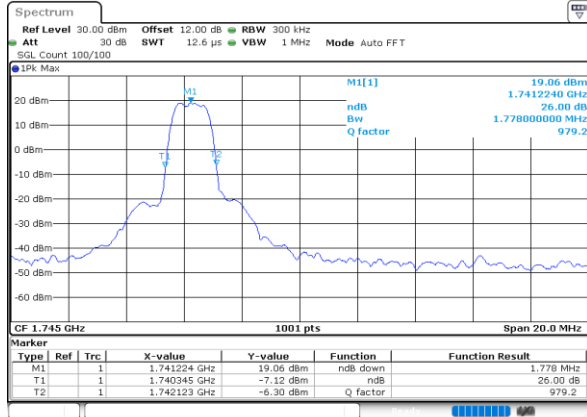


Date: 15 JUN 2023 20:53:54

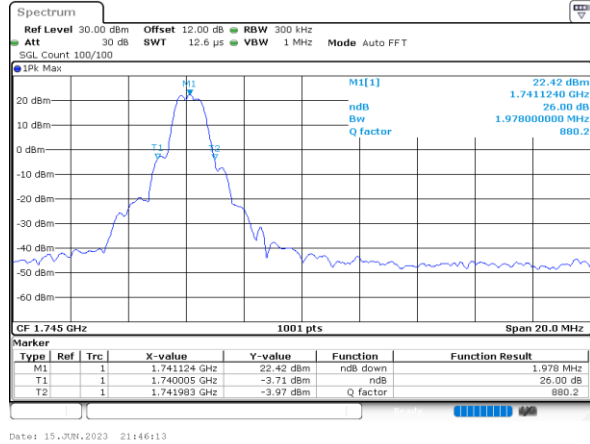


LTE Band 66

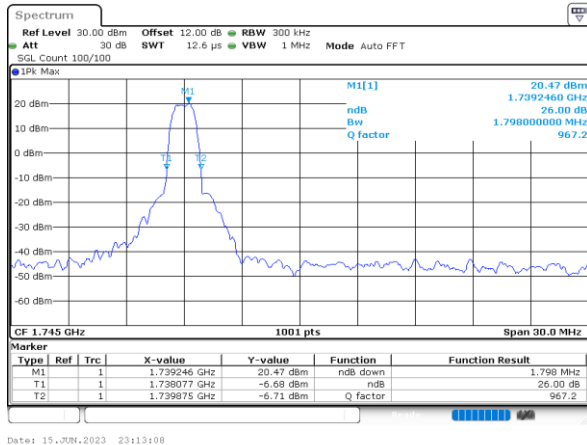
Middle Channel / 10MHz / QPSK



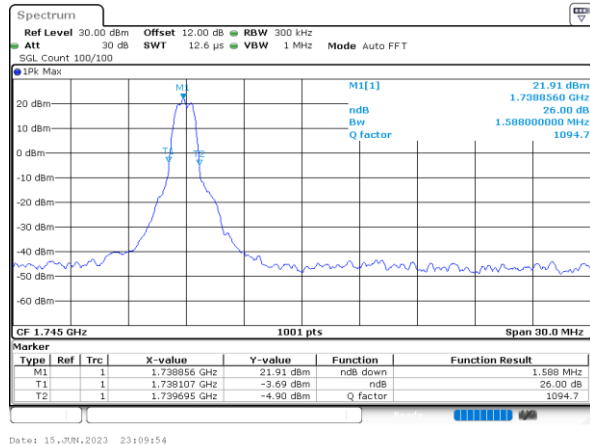
Middle Channel / 10MHz / 16QAM



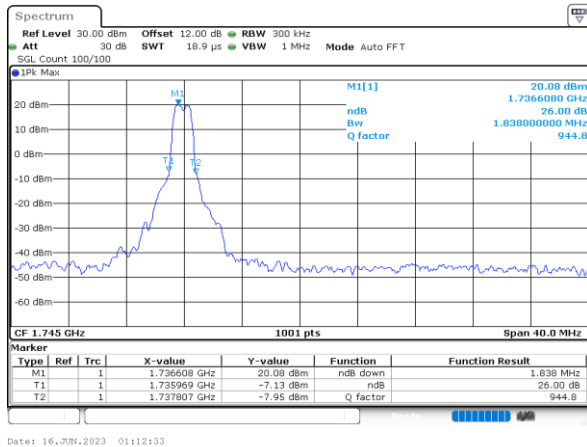
Middle Channel / 15MHz / QPSK



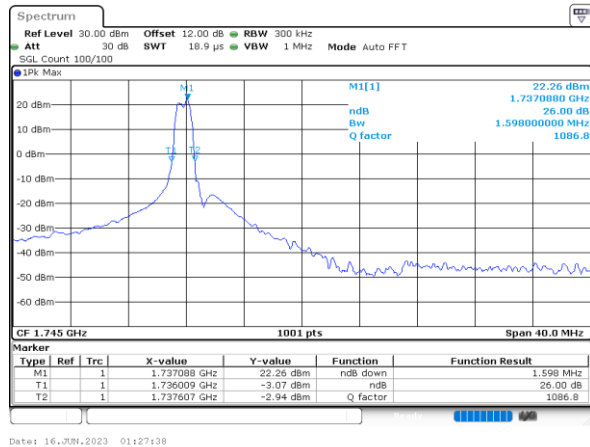
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



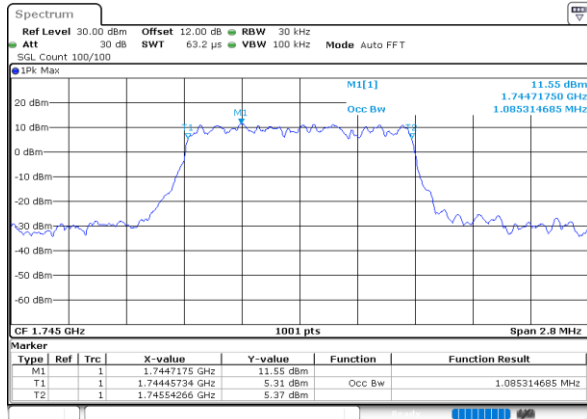
**Occupied Bandwidth**

Mode	LTE Band 66 : 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	0.93	1.17	0.99	1.16	0.98	1.42	1.28	1.41	1.26	1.44	1.28
Mode	LTE Band 66 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-

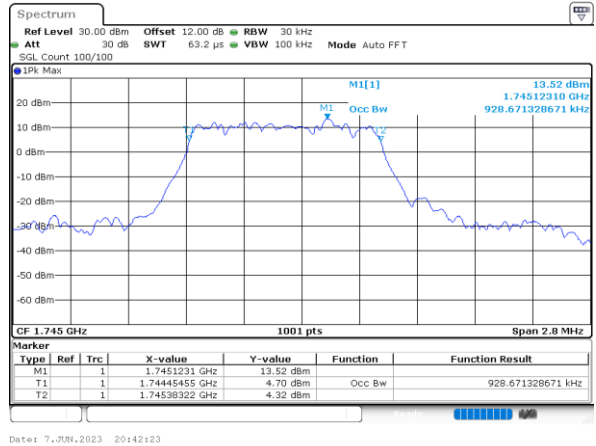


LTE Band 66

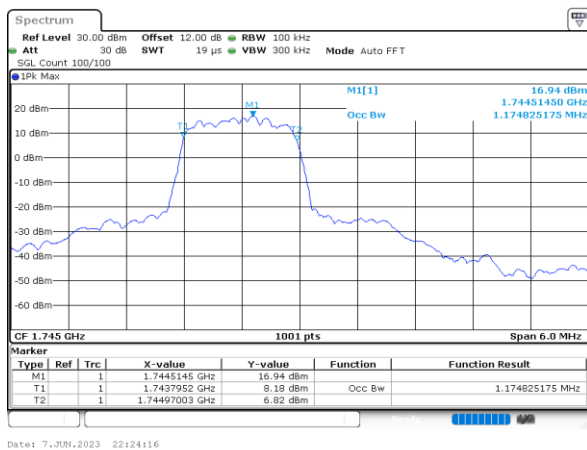
Middle Channel / 1.4MHz / QPSK



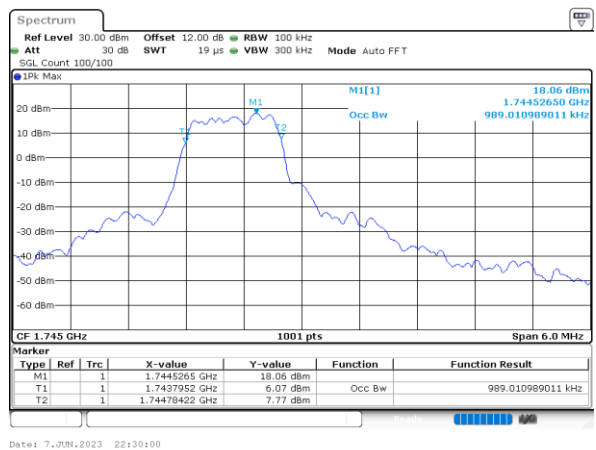
Middle Channel / 1.4MHz / 16QAM



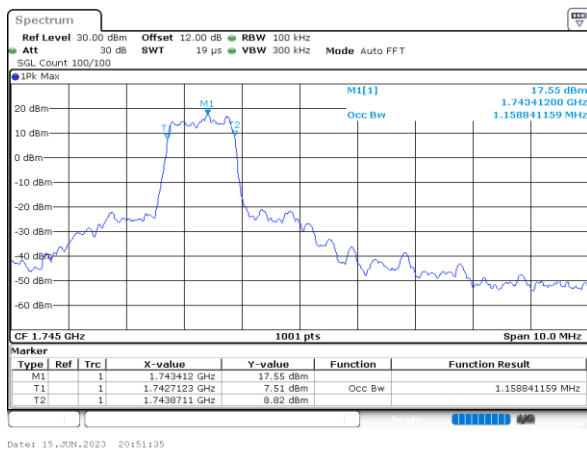
Middle Channel / 3MHz / QPSK



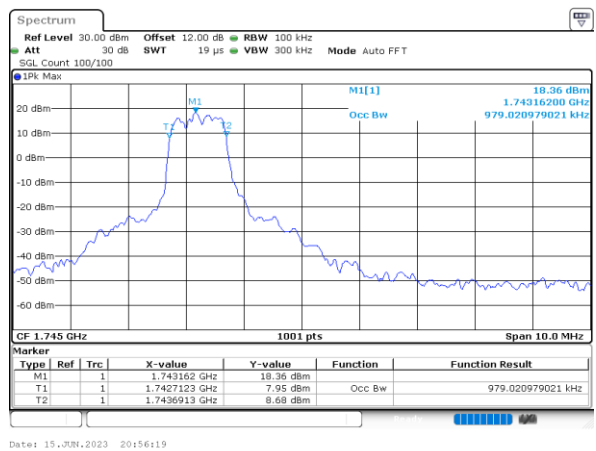
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



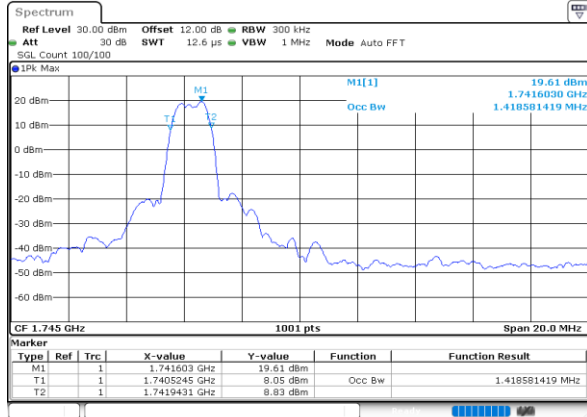
Middle Channel / 5MHz / 16QAM



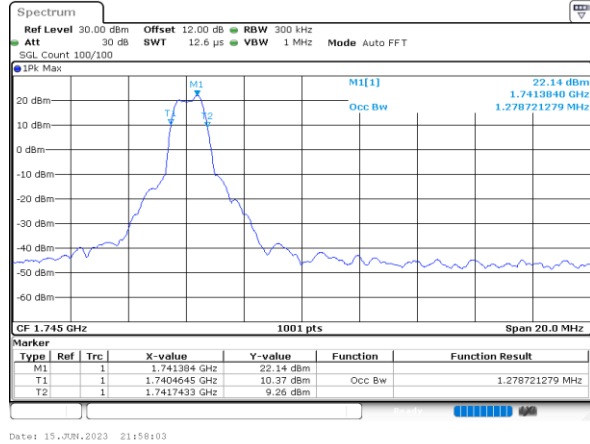


LTE Band 66

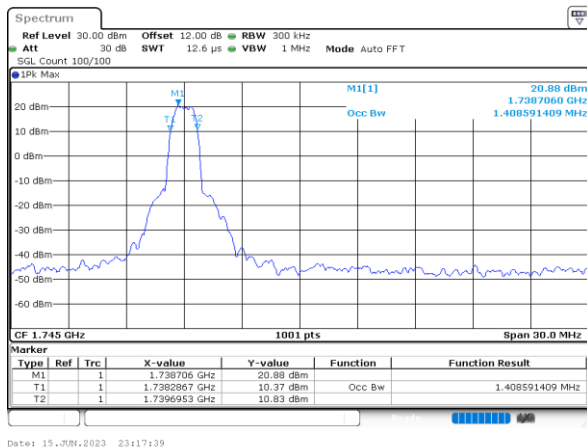
Middle Channel / 10MHz / QPSK



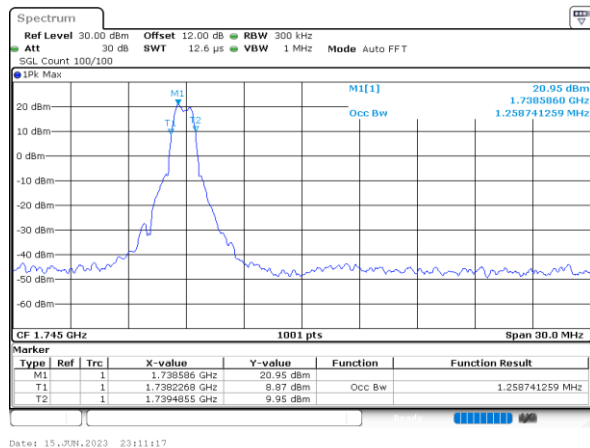
Middle Channel / 10MHz / 16QAM



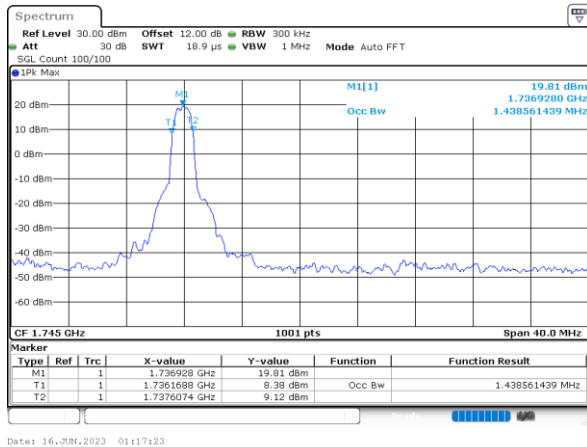
Middle Channel / 15MHz / QPSK



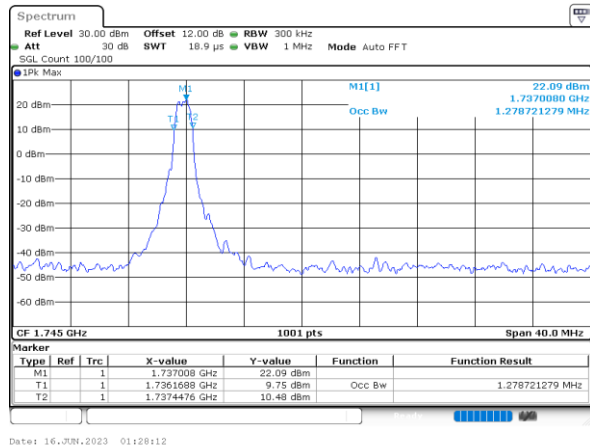
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

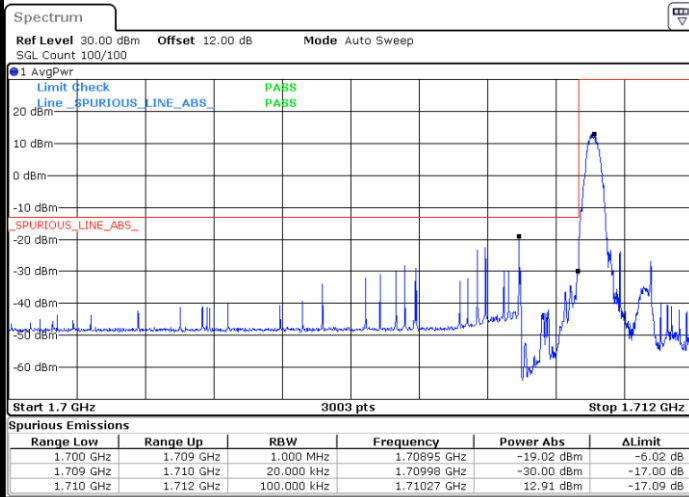




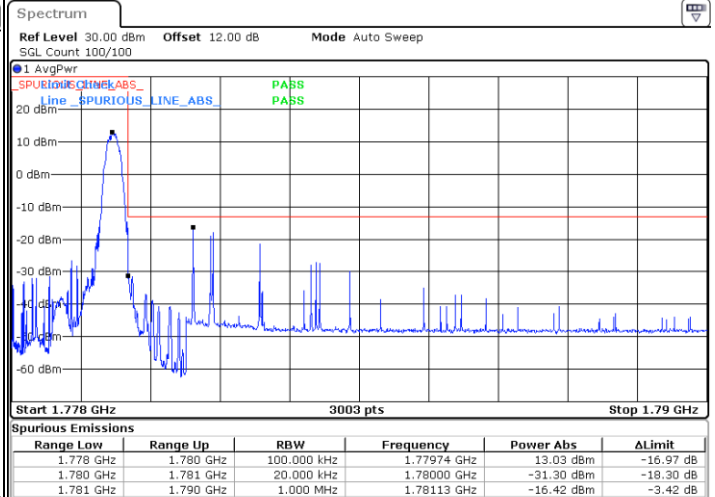
Conducted Band Edge

LTE Band 66 / 1.4MHz / QPSK

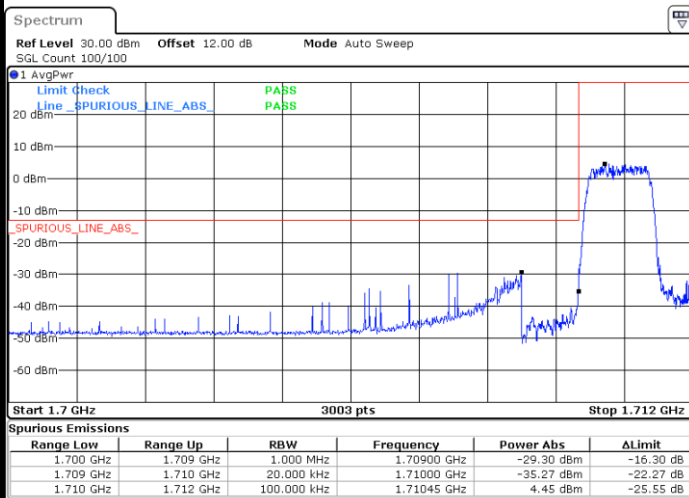
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



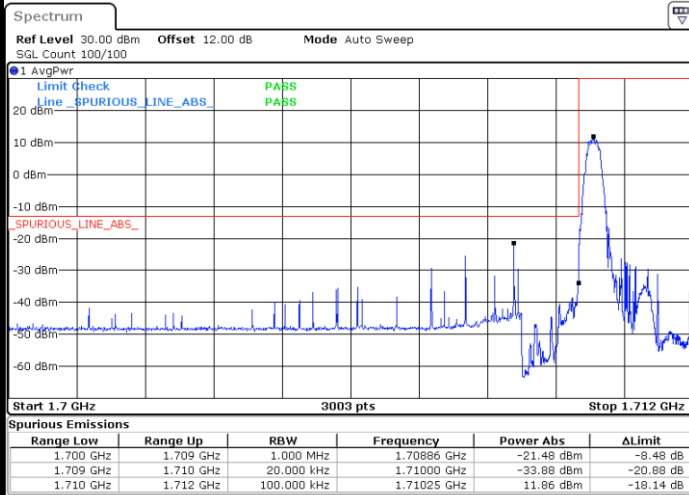
Highest Band Edge / Full RB





LTE Band 66 / 1.4MHz / 16QAM

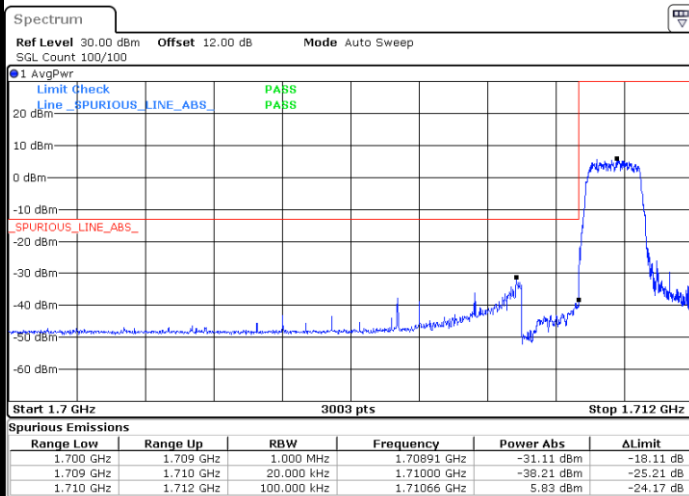
Lowest Band Edge / 1 RB



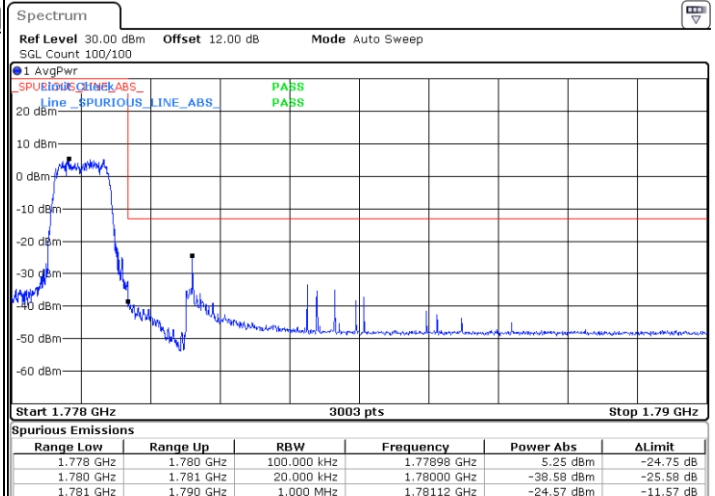
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



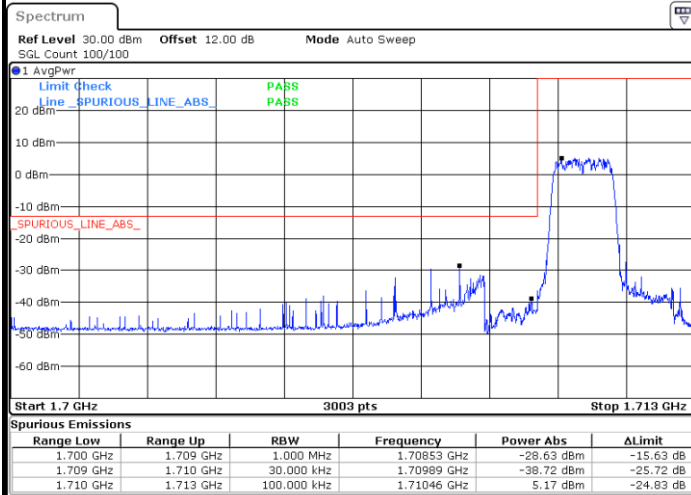
Highest Band Edge / Full RB





LTE Band 66 / 3MHz / QPSK

Lowest Band Edge / Full RB

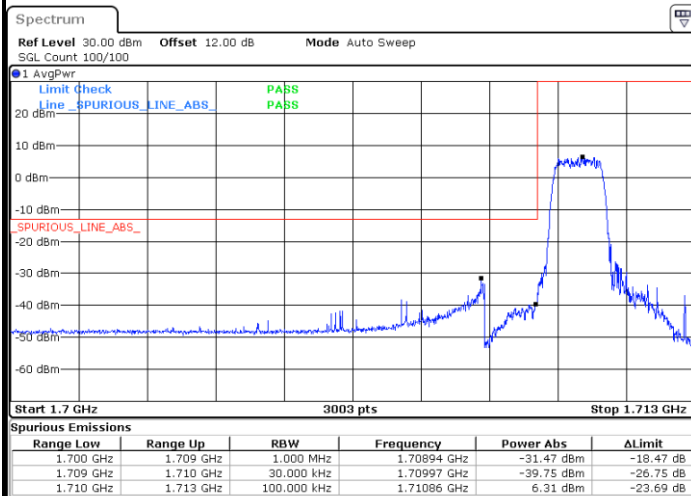


Highest Band Edge / Full RB

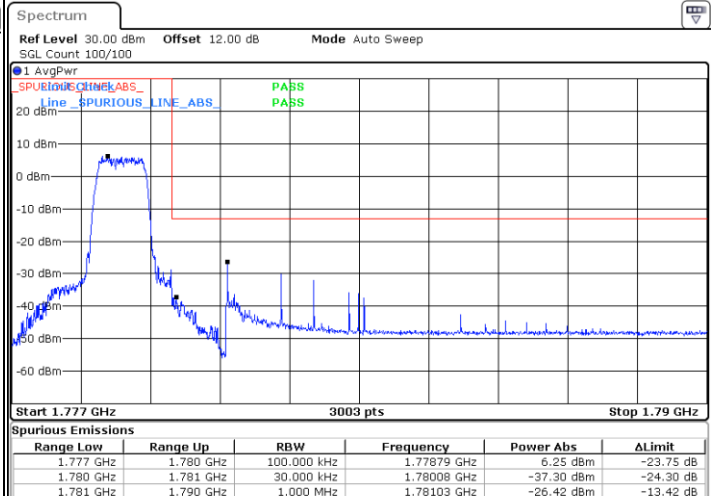


LTE Band 66 / 3MHz / 16QAM

Lowest Band Edge / Full RB



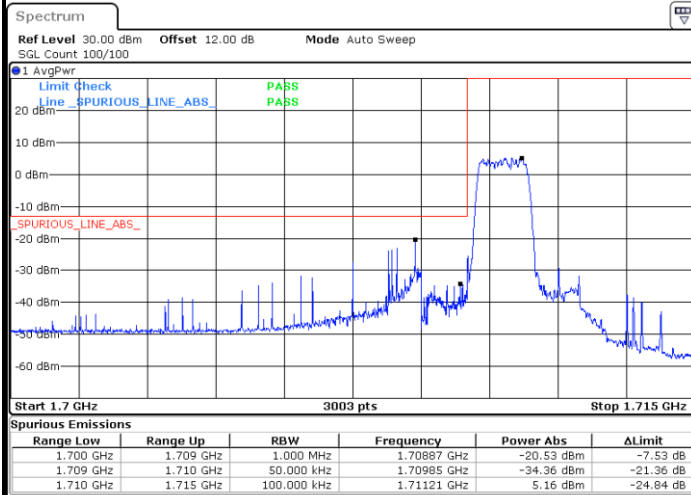
Highest Band Edge / Full RB





LTE Band 66 / 5MHz / QPSK

Lowest Band Edge / Full RB

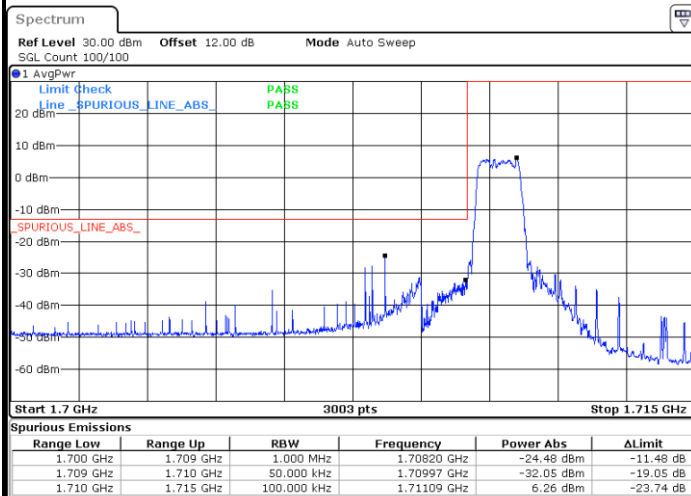


Highest Band Edge / Full RB



LTE Band 66 / 5MHz / 16QAM

Lowest Band Edge / Full RB



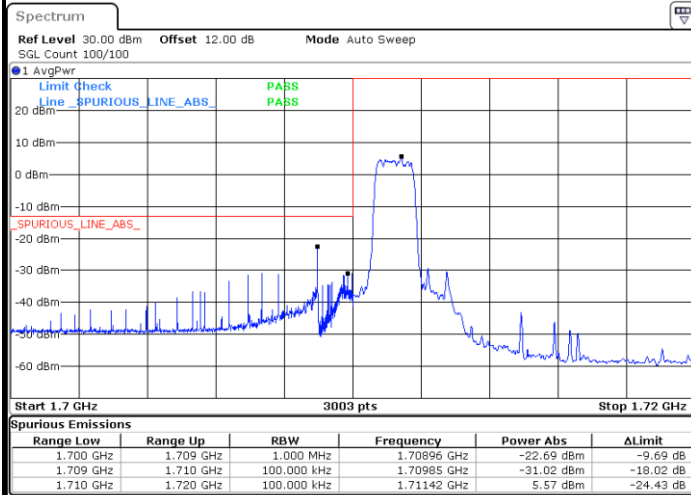
Highest Band Edge / Full RB





LTE Band 66 / 10MHz / QPSK

Lowest Band Edge / Full RB

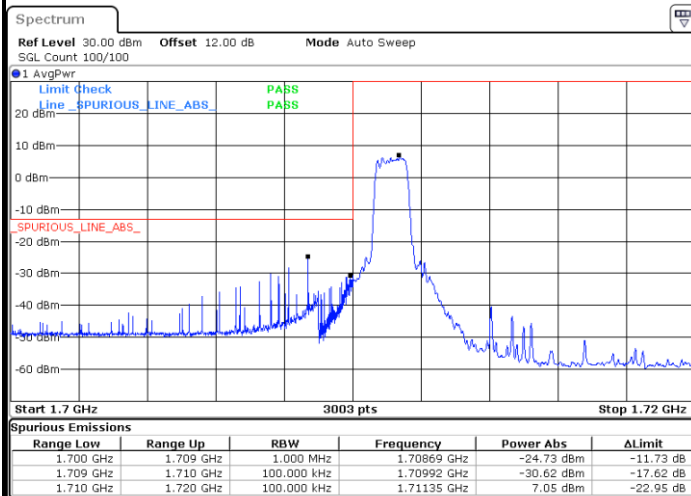


Highest Band Edge / Full RB

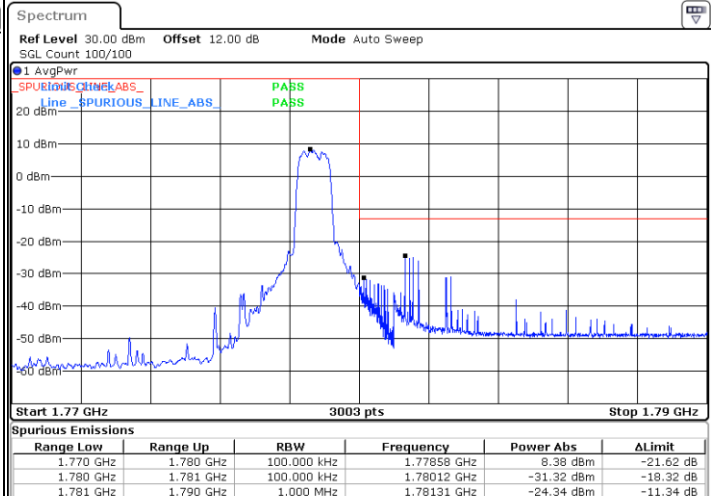


LTE Band 66 / 10MHz / 16QAM

Lowest Band Edge / Full RB



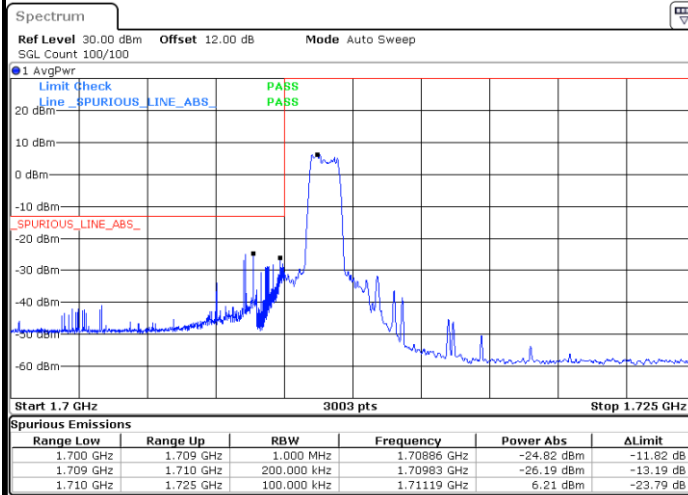
Highest Band Edge / Full RB



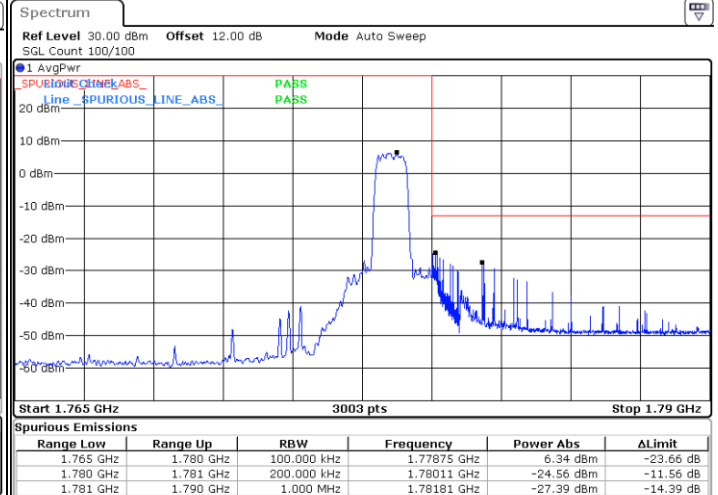


LTE Band 66 / 15MHz / QPSK

Lowest Band Edge / Full RB

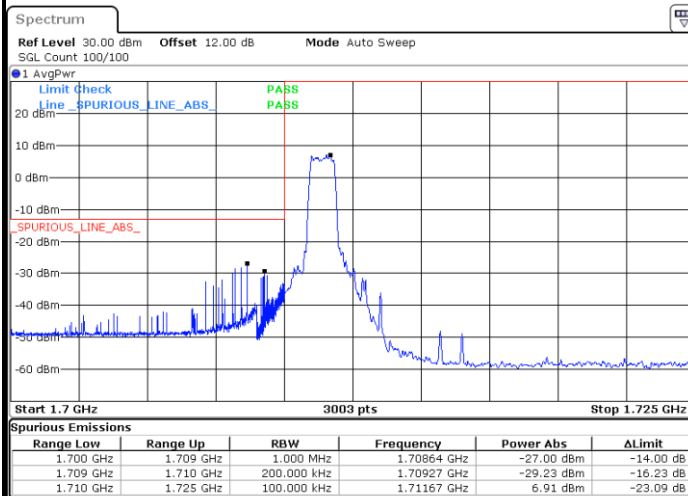


Highest Band Edge / Full RB

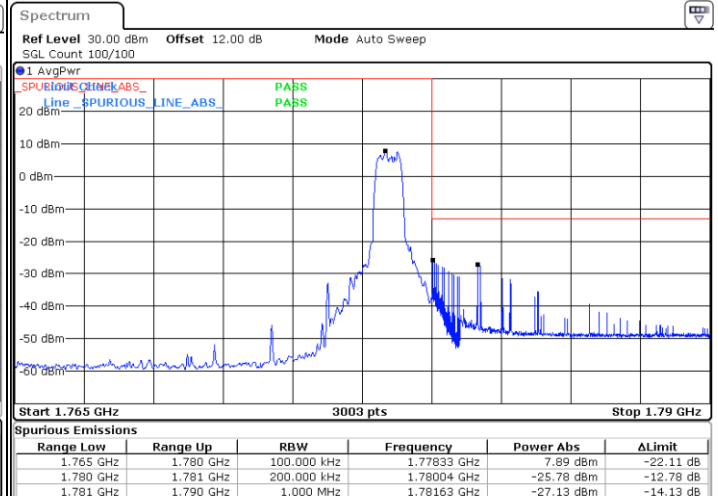


LTE Band 66 / 15MHz / 16QAM

Lowest Band Edge / Full RB



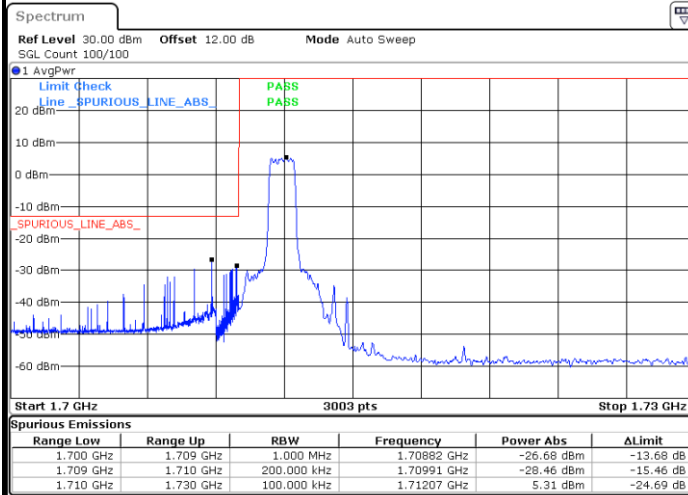
Highest Band Edge / Full RB



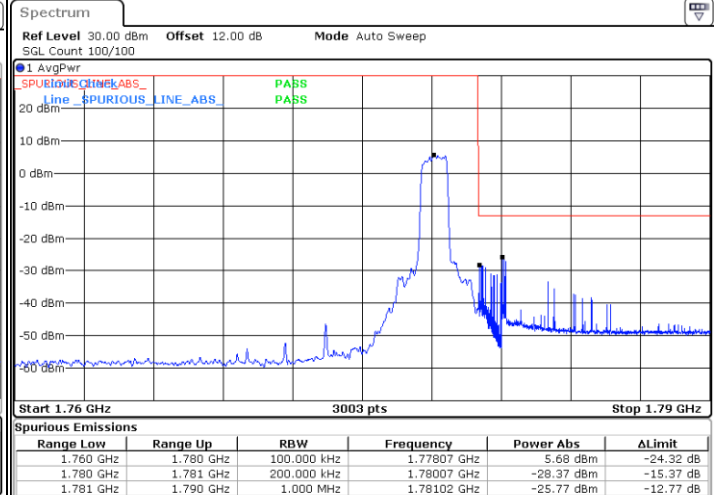


LTE Band 66 / 20MHz / QPSK

Lowest Band Edge / Full RB

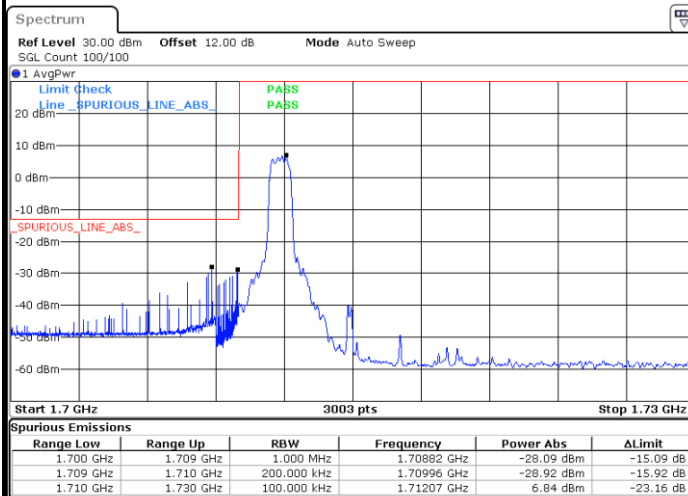


Highest Band Edge / Full RB

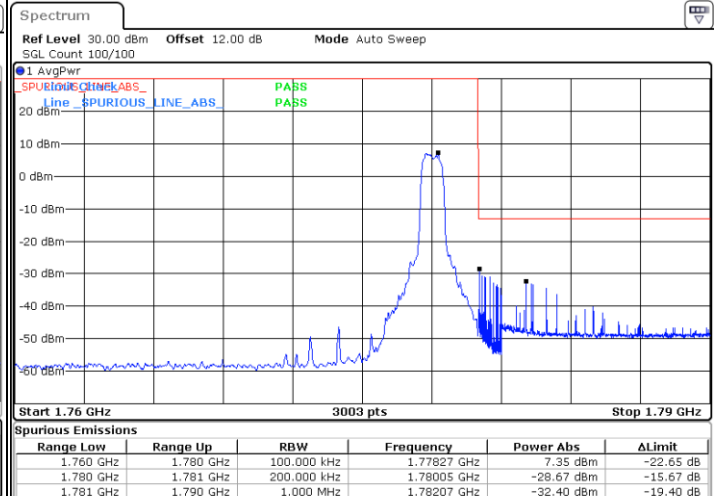


LTE Band 66 / 20MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

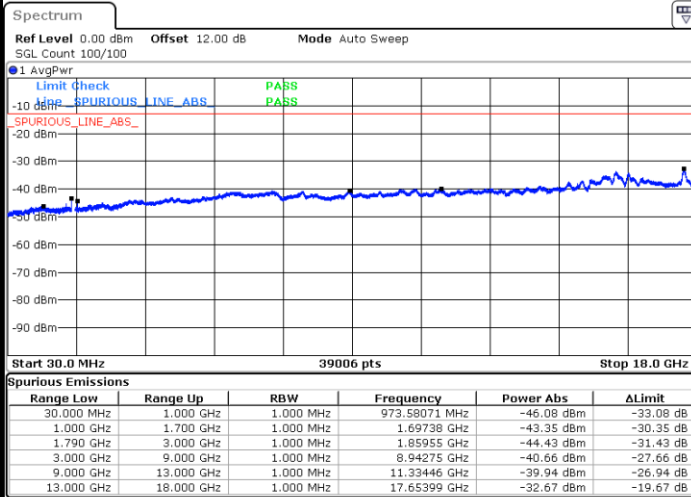




Conducted Spurious Emission

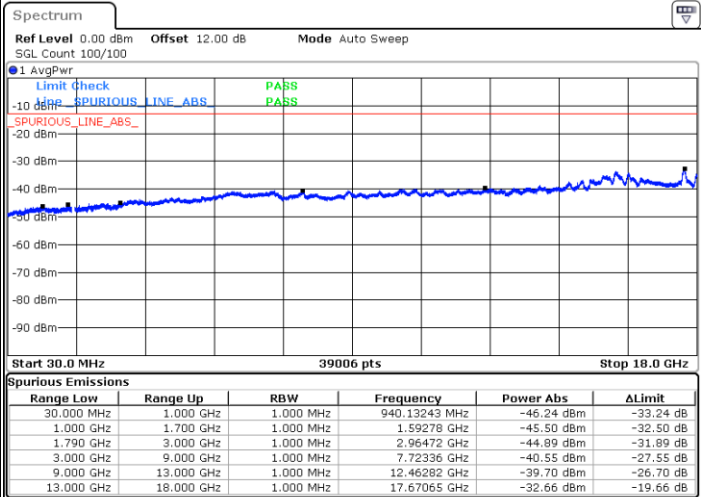
LTE Band 66 / 1.4MHz

Lowest Channel / QPSK



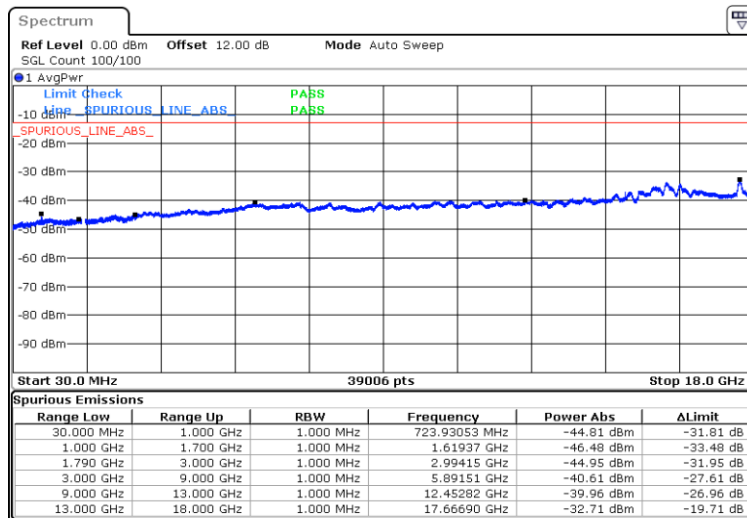
Date: 7.JUN.2023 20:36:28

Middle Channel / QPSK



Date: 7.JUN.2023 20:38:38

Highest Channel / QPSK

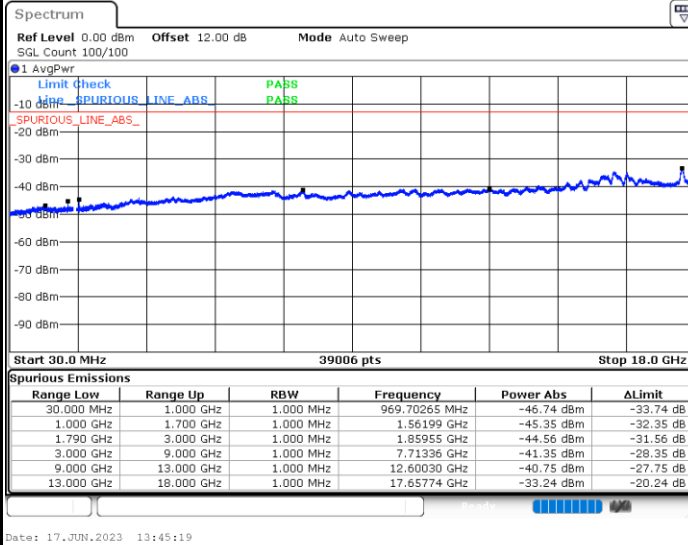


Date: 7.JUN.2023 20:57:32

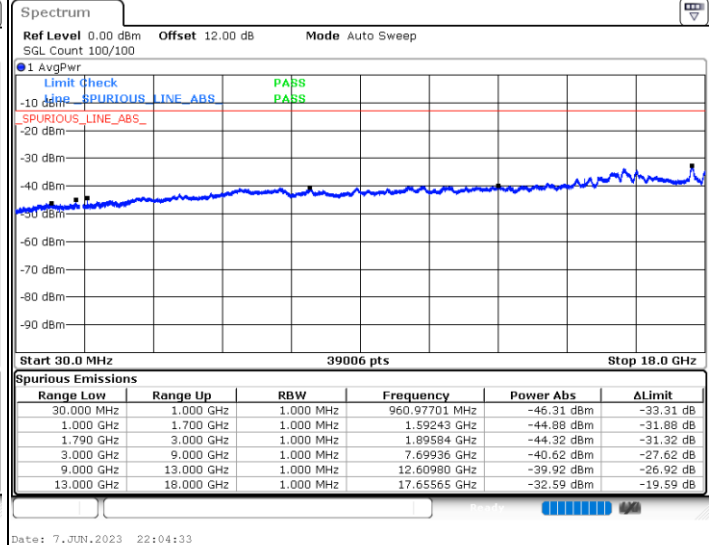


LTE Band 66 / 3MHz

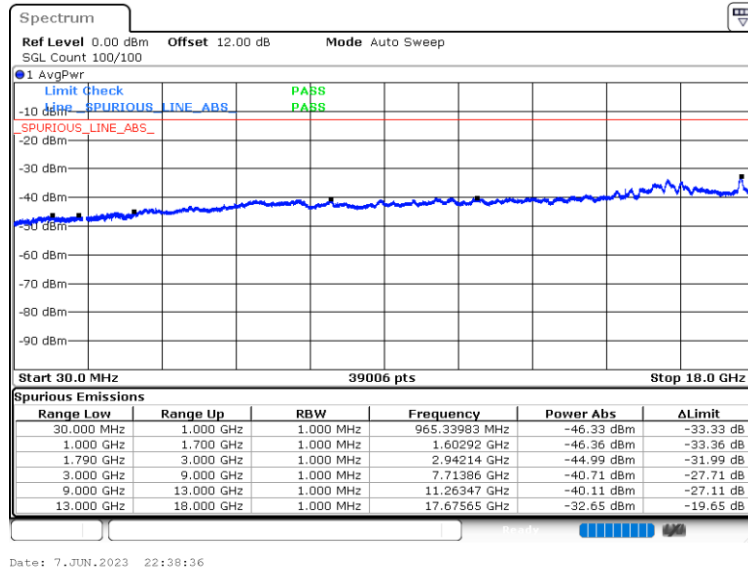
Lowest Channel / QPSK



Middle Channel / QPSK



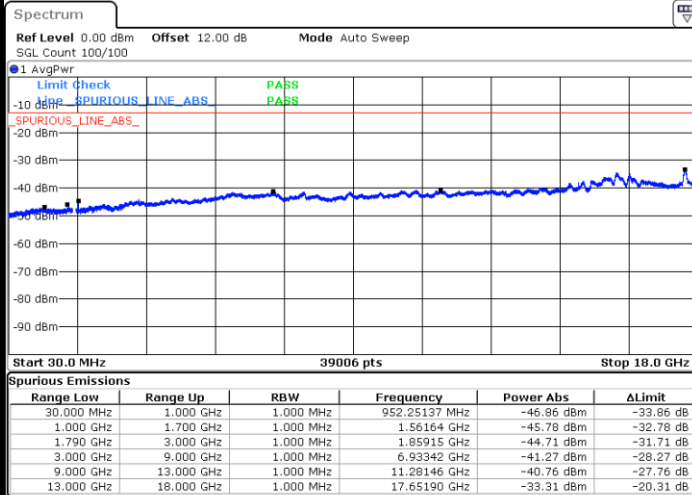
Highest Channel / QPSK





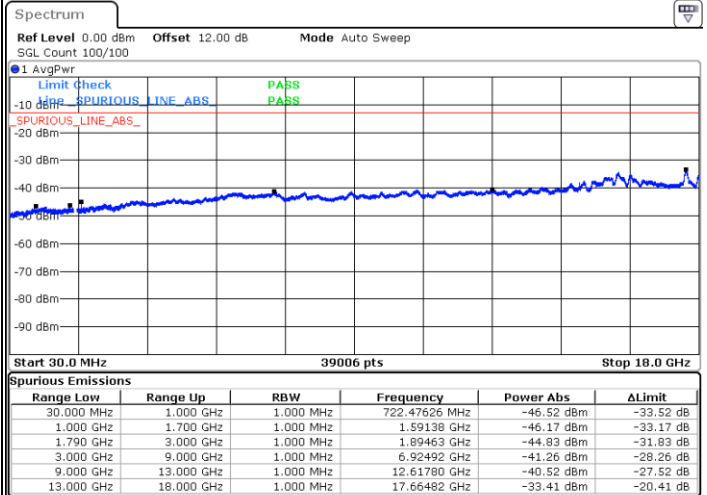
LTE Band 66 / 5MHz

Lowest Channel / QPSK



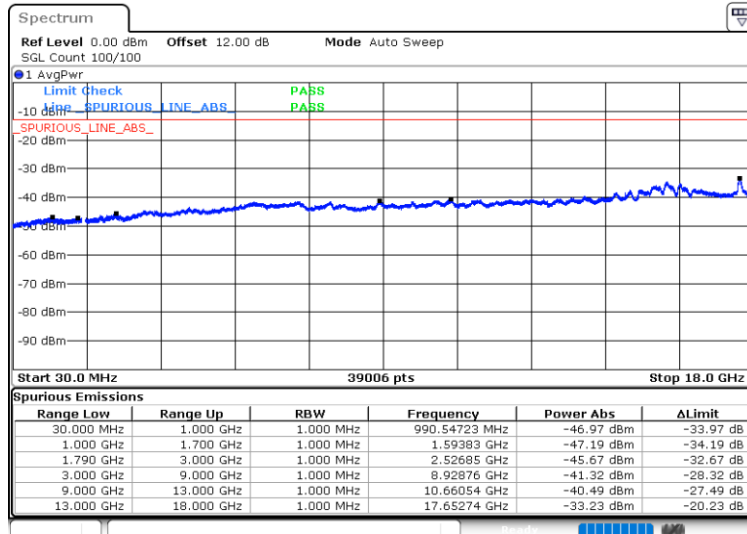
Date: 15.JUN.2023 20:39:24

Middle Channel / QPSK



Date: 15.JUN.2023 20:58:07

Highest Channel / QPSK

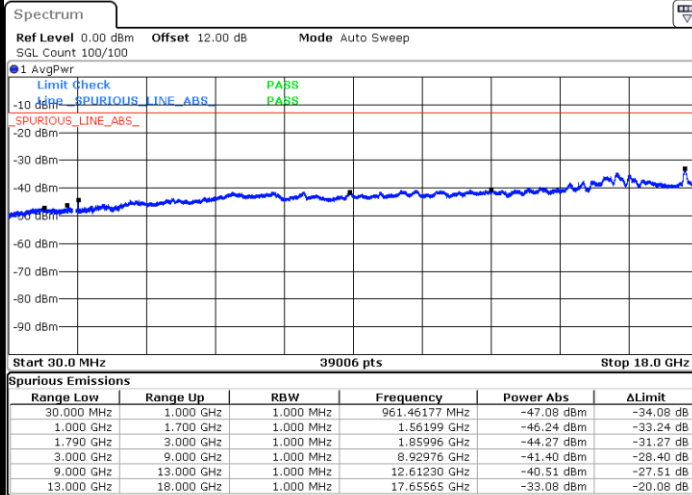


Date: 15.JUN.2023 21:01:09



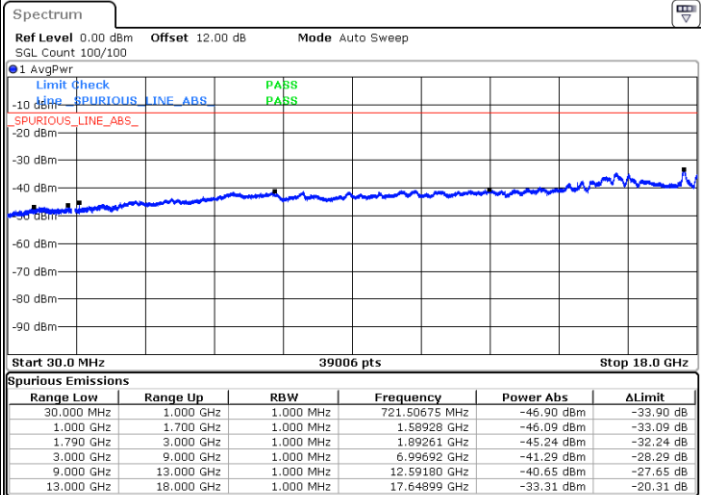
LTE Band 66 / 10MHz

Lowest Channel / QPSK



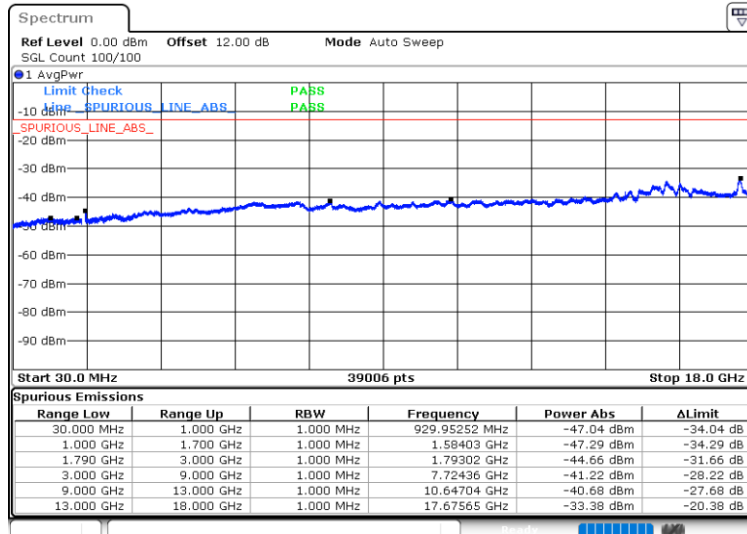
Date: 15.JUN.2023 21:31:25

Middle Channel / QPSK



Date: 15.JUN.2023 21:34:46

Highest Channel / QPSK

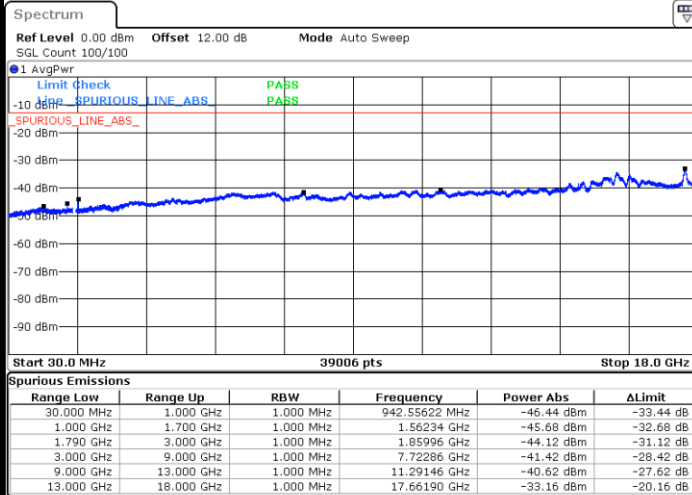


Date: 15.JUN.2023 22:43:51



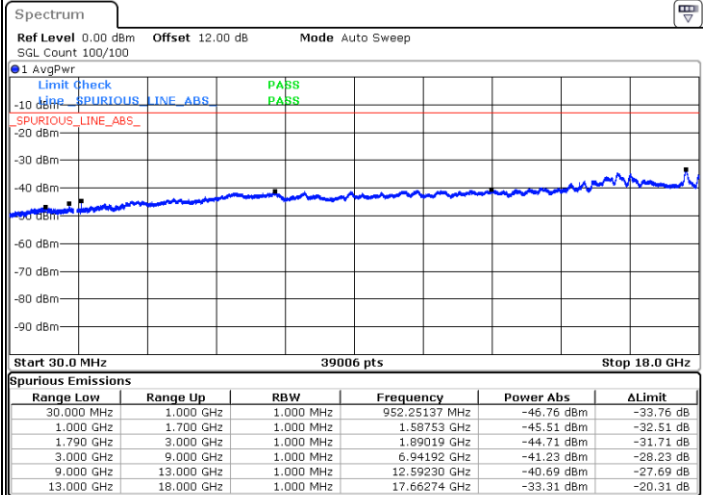
LTE Band 66 / 15MHz

Lowest Channel / QPSK



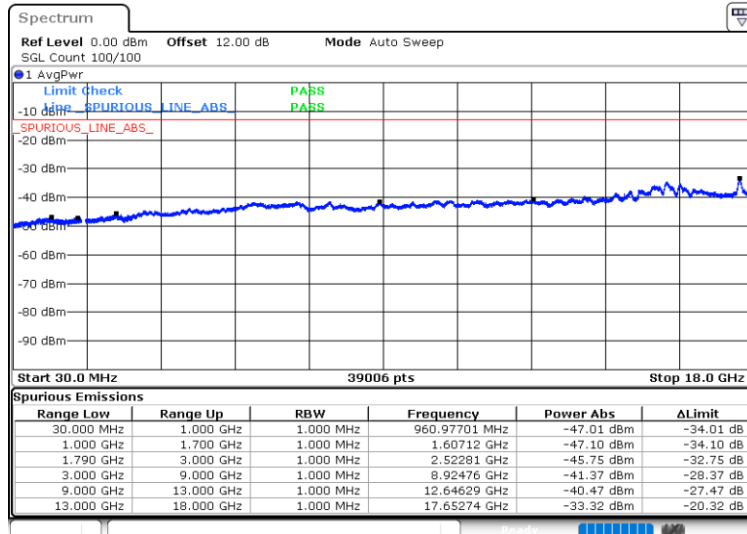
Date: 15.JUN.2023 22:56:57

Middle Channel / QPSK



Date: 15.JUN.2023 23:25:49

Highest Channel / QPSK

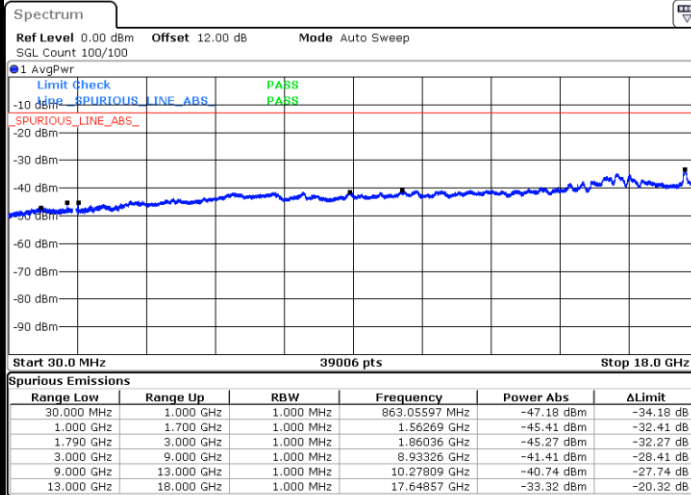


Date: 15.JUN.2023 23:55:51



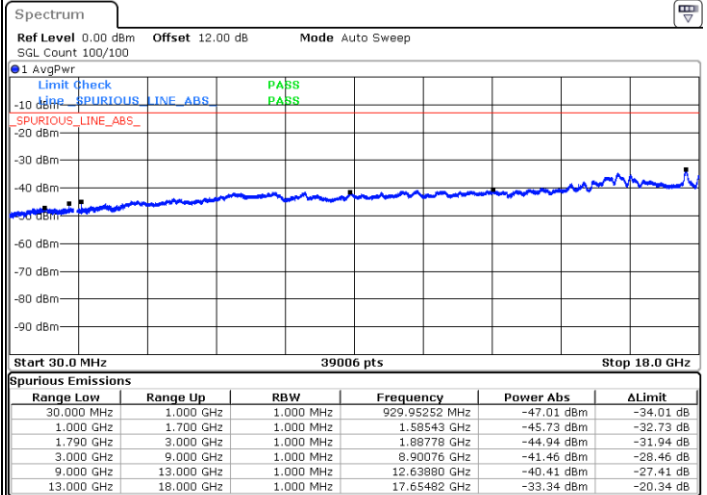
LTE Band 66 / 20MHz

Lowest Channel / QPSK



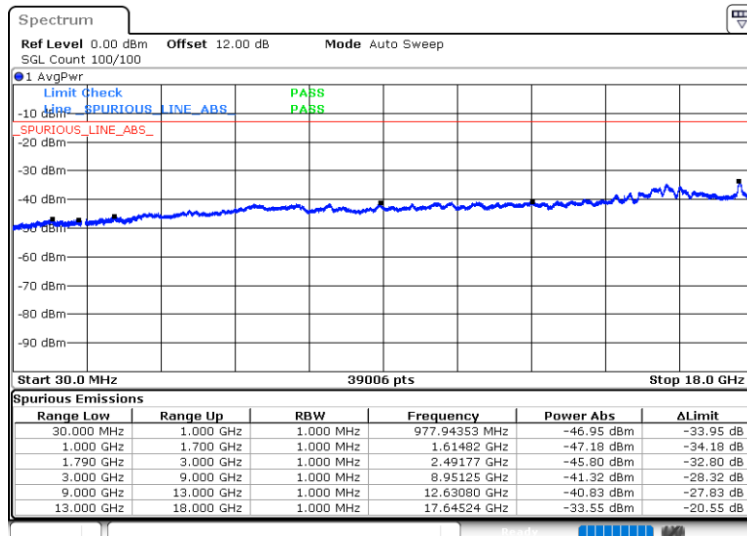
Date: 16.JUN.2023 00:56:20

Middle Channel / QPSK



Date: 16.JUN.2023 01:08:23

Highest Channel / QPSK



Date: 16.JUN.2023 01:37:17

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0084	PASS
40	Normal Voltage	0.0049	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0085	
0	Normal Voltage	0.0081	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0083	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage = 3.7 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

LTE Band 26

LTE Band 26 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1649	-51.35	-13	-38.35	-55.22	-57.24	0.95	8.99	H
	2474	-61.94	-13	-48.94	-68.52	-68.88	1.05	10.15	H
	3298	-62.46	-13	-49.46	-72.36	-70.19	1.11	10.99	H
									H
									H
									H
	1649	-52.68	-13	-39.68	-56.28	-58.57	0.95	8.99	V
	2474	-58.27	-13	-45.27	-65.27	-65.21	1.05	10.15	V
	3298	-63.11	-13	-50.11	-72.86	-70.84	1.11	10.99	V
	4123	-60.51	-13	-47.51	-71.21	-68.13	1.48	11.25	V
									V
									V
									V
									V
Middle	1664	-50.27	-13	-37.27	-54.11	-56.33	0.95	9.17	H
	2496	-60.51	-13	-47.51	-67.2	-67.49	1.06	10.19	H
	3328	-62.13	-13	-49.13	-71.99	-69.93	1.10	11.06	H
									H
									H
									H
	1664	-54.26	-13	-41.26	-57.86	-60.32	0.95	9.17	V
	2496	-59.09	-13	-46.09	-66.26	-66.07	1.06	10.19	V
	3328	-62.26	-13	-49.26	-72.01	-70.06	1.10	11.06	V
	4160	-61.68	-13	-48.68	-72.37	-69.34	1.49	11.30	V
	4993	-57.37	-13	-44.37	-71.29	-64.63	1.52	10.93	V
	5825	-58.20	-13	-45.20	-73.77	-65.78	1.67	11.40	V
	6657	-55.18	-13	-42.18	-73	-61.91	1.82	10.70	V
									V



Highest	1691	-49.27	-13	-36.27	-53.05	-55.66	0.95	9.49	H
	2542	-61.02	-13	-48.02	-68.14	-68.08	1.07	10.28	H
	3400	-62.86	-13	-49.86	-72.61	-70.82	1.09	11.20	H
									H
									H
									H
	1691	-51.15	-13	-38.15	-54.75	-57.54	0.95	9.49	V
	2542	-59.65	-13	-46.65	-66.99	-66.71	1.07	10.28	V
	3400	-62.58	-13	-49.58	-72.32	-70.54	1.09	11.20	V
									V
									V
									V

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

**LTE Band 25**

LTE Band 25 / 10MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3701	-39.93	-13	-26.93	-50.44	-50.40	1.23	11.70	H
	5552	-56.88	-13	-43.88	-71.81	-67.26	1.63	12.00	H
	7402	-54.50	-13	-41.50	-73.48	-63.48	1.93	10.91	H
									H
									H
									H
									H
	3701	-41.44	-13	-28.44	-51.76	-51.91	1.23	11.70	V
	5552	-50.11	-13	-37.11	-64.89	-60.49	1.63	12.00	V
	7402	-54.33	-13	-41.33	-73.33	-63.31	1.93	10.91	V
									V
									V
									V
									V
Middle	3751	-41.81	-13	-28.81	-52.32	-52.04	1.27	11.49	H
	5627	-56.30	-13	-43.30	-71.34	-66.71	1.64	12.05	H
	7502	-54.02	-13	-41.02	-73.13	-63.39	1.94	11.31	H
									H
									H
									H
									H
	3751	-42.10	-13	-29.10	-52.41	-52.33	1.27	11.49	V
	5627	-50.38	-13	-37.38	-65.24	-60.79	1.64	12.05	V
	7502	-54.08	-13	-41.08	-73.17	-63.45	1.94	11.31	V
									V
									V
									V
									V



Highest	3826	-42.74	-13	-29.74	-53.43	-52.46	1.32	11.04	H
	5737	-54.95	-13	-41.95	-70.29	-64.84	1.66	11.55	H
	7641	-54.07	-13	-41.07	-73.04	-63.46	1.94	11.34	H
									H
									H
									H
									H
	3826	-42.34	-13	-29.34	-52.82	-52.06	1.32	11.04	V
	5737	-48.26	-13	-35.26	-63.63	-58.15	1.66	11.55	V
	7641	-54.66	-13	-41.66	-73.34	-64.05	1.94	11.34	V
									V
									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)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1399	-57.12	-13.00	-44.12	-60.82	-61.27	0.90	7.19	H
	2098	-50.93	-13.00	-37.93	-56.54	-57.01	0.98	9.21	H
	2798	-51.62	-13.00	-38.62	-59.62	-58.74	1.13	10.40	H
									H
									H
									H
									H
	1399	-61.05	-13.00	-48.05	-63.93	-65.20	0.90	7.19	V
	2098	-59.21	-13.00	-46.21	-65.03	-65.29	0.98	9.21	V
	2798	-54.73	-13.00	-41.73	-62.31	-61.85	1.13	10.40	V
									V
									V
									V
									V
Middle	1406	-61.18	-13.00	-48.18	-64.86	-65.37	0.90	7.24	H
	2109	-50.61	-13.00	-37.61	-56.31	-56.70	0.98	9.22	H
	2812	-50.73	-13.00	-37.73	-58.81	-57.90	1.13	10.45	H
									H
									H
									H
									H
	1406	-61.27	-13.00	-48.27	-64.17	-65.46	0.90	7.24	V
	2109	-54.76	-13.00	-41.76	-60.68	-60.85	0.98	9.22	V
	2812	-54.09	-13.00	-41.09	-61.75	-61.26	1.13	10.45	V
									V
									V
									V
									V



Highest	1413	-56.75	-13.00	-43.75	-60.43	-60.97	0.90	7.28	H
	2119	-50.64	-13.00	-37.64	-56.41	-56.74	0.98	9.24	H
	2826	-50.78	-13.00	-37.78	-58.96	-58.00	1.13	10.50	H
									H
									H
									H
									H
	1413	-61.47	-13.00	-48.47	-64.40	-65.69	0.90	7.28	V
	2119	-57.34	-13.00	-44.34	-63.34	-63.44	0.98	9.24	V
	2826	-53.69	-13.00	-40.69	-61.43	-60.91	1.13	10.50	V
									V
									V
									V
									V

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

**LTE Band 13**

LTE Band 13 / 5MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554	-50.69	-13	-37.69	-54.57	-56.09	0.95	8.50	H
	2332	-60.35	-13	-47.35	-66.63	-67.50	1.03	10.33	H
	3109	-57.92	-13	-44.92	-67.66	-64.82	1.15	10.20	H
									H
									H
									H
									H
	1554	-53.96	-13.00	-40.96	-57.48	-59.36	0.95	8.50	V
	2332	-64.02	-13	-51.02	-70.54	-71.17	1.03	10.33	V
	3109	-57.12	-13	-44.12	-66.47	-64.02	1.15	10.20	V
									V
									V
									V
									V
Middle	1559	-51.59	-42.15	-9.44	-55.48	-56.99	0.95	8.50	H
	2339	-61.04	-13	-48.04	-67.31	-68.22	1.03	10.36	H
	3119	-57.97	-13	-44.97	-67.74	-64.87	1.15	10.20	H
									H
									H
									H
									H
	1559	-52.40	-42.15	-10.25	-55.93	-57.80	0.95	8.50	V
	2339	-62.22	-13	-49.22	-68.72	-69.40	1.03	10.36	V
	3119	-56.37	-13	-43.37	-65.76	-63.27	1.15	10.20	V
									V
									V
									V
									V



Highest	1564	-51.62	-42.15	-9.47	-55.52	-57.02	0.95	8.50	H
	2347	-62.55	-13	-49.55	-68.82	-69.76	1.03	10.39	H
	3129	-57.93	-13	-44.93	-67.74	-64.84	1.14	10.20	H
									H
									H
									H
									H
	1564	-53.56	-42.15	-11.41	-57.09	-58.96	0.95	8.50	V
	2347	-64.74	-13	-51.74	-71.24	-71.95	1.03	10.39	V
	3129	-57.64	-13	-44.64	-67.08	-64.55	1.14	10.20	V
									V
									V
									V
									V

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

**LTE Band 66**

LTE Band 66 / 10MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3421	-42.32	-13	-29.32	-52.92	-52.48	1.09	11.24	H
	5132	-59.10	-13	-46.10	-73.38	-68.82	1.55	11.26	H
	6842	-56.77	-13	-43.77	-74.72	-65.91	1.84	10.98	H
									H
									H
									H
									H
	3421	-41.88	-13	-28.88	-52.42	-52.04	1.09	11.24	V
	5132	-59.22	-13	-46.22	-73.37	-68.94	1.55	11.26	V
	6842	-56.07	-13	-43.07	-74.43	-65.21	1.84	10.98	V
									V
									V
									V
									V
Middle	3481	-36.87	-13	-23.87	-47.64	-47.16	1.07	11.36	H
	5222	-57.99	-13	-44.99	-72.56	-67.83	1.56	11.40	H
	6962	-56.32	-13	-43.32	-73.85	-65.48	1.86	11.02	H
									H
									H
									H
									H
	3481	-35.47	-13	-22.47	-46.03	-45.76	1.07	11.36	V
	5222	-54.58	-13	-41.58	-69.07	-64.42	1.56	11.40	V
	6962	-56.17	-13	-43.17	-74.18	-65.33	1.86	11.02	V
									V
									V
									V
									V



Highest	3556	-36.38	-13	-23.38	-47.01	-46.69	1.11	11.42	H
	5334	-53.50	-13	-40.50	-68.56	-63.72	1.59	11.80	H
	7112	-55.97	-13	-42.97	-74.19	-64.81	1.89	10.73	H
									H
									H
									H
									H
	3556	-36.90	-13	-23.90	-47.32	-47.21	1.11	11.42	V
	5334	-48.20	-13	-35.20	-63.11	-58.42	1.59	11.80	V
	7112	-55.64	-13	-42.64	-74.11	-64.48	1.89	10.73	V
									V
									V
									V
									V

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