

Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	≤2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0041	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0008	

Note:

1. Normal Voltage = 3.8 V. ; Minimum Voltage = 3.3 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

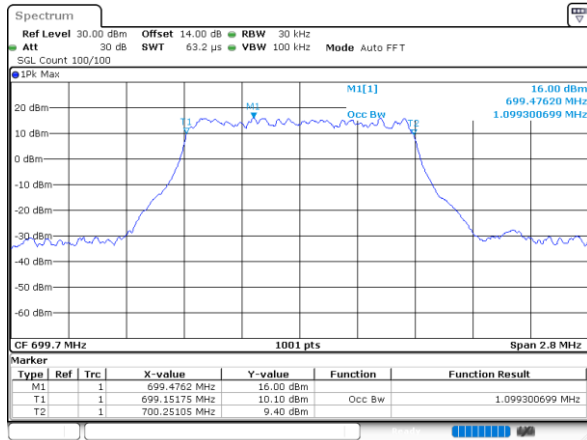
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1M4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.71	2.73	4.48	4.47	9.05	8.99
Middle CH	1.10	1.09	2.71	2.72	4.49	4.50	8.97	9.01
Highest CH	1.09	1.09	2.74	2.71	4.48	4.50	9.01	8.99

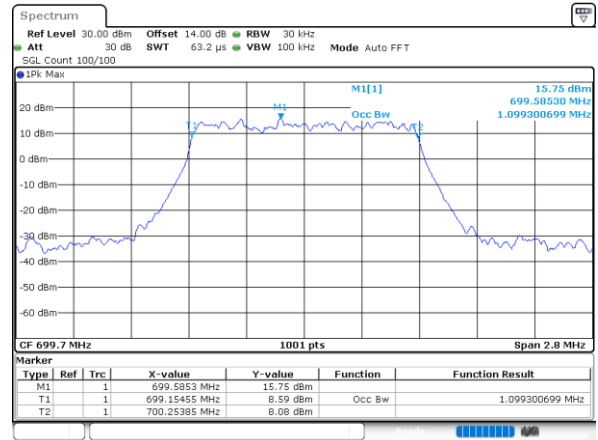


LTE Band 12

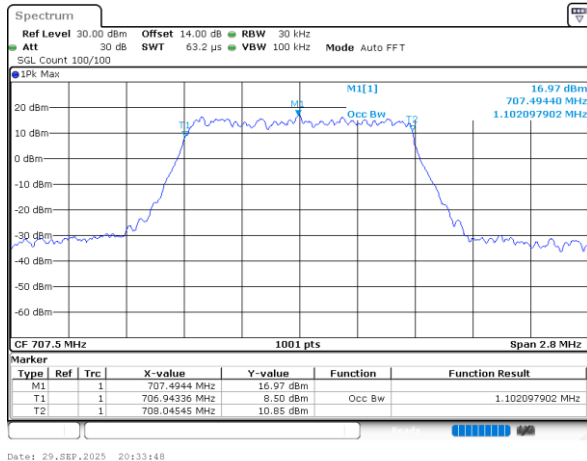
Lowest Channel / 1M4MHz / QPSK



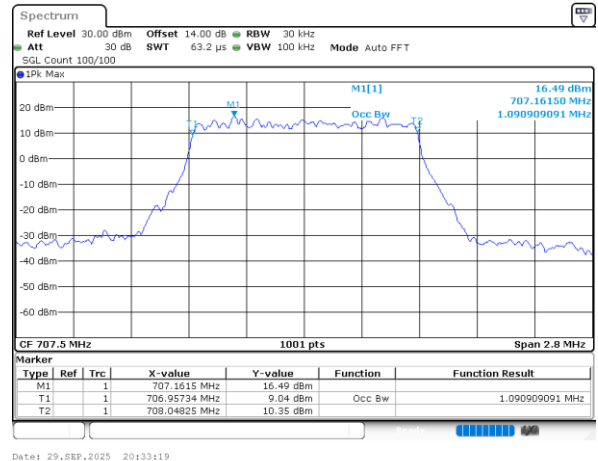
Lowest Channel / 1M4MHz / 16QAM



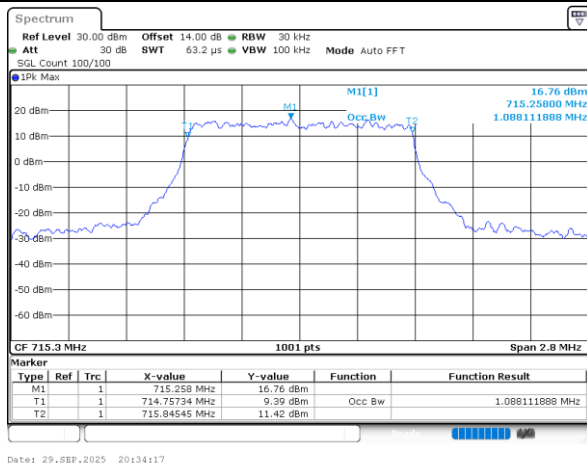
Middle Channel / 1M4MHz / QPSK



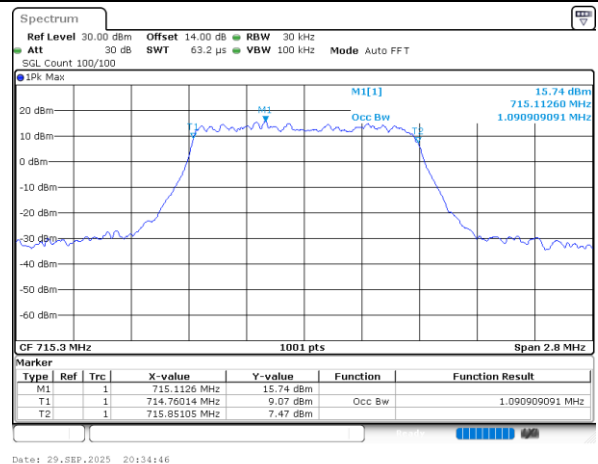
Middle Channel / 1M4MHz / 16QAM



Highest Channel / 1M4MHz / QPSK



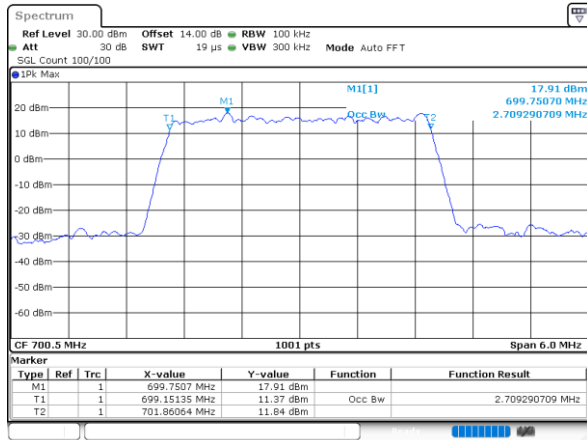
Highest Channel / 1M4MHz / 16QAM



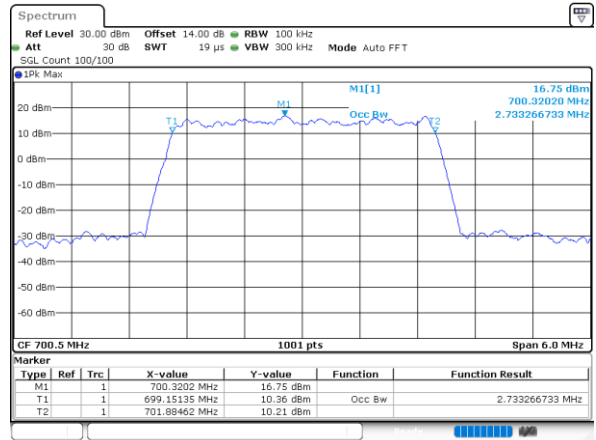


LTE Band 12

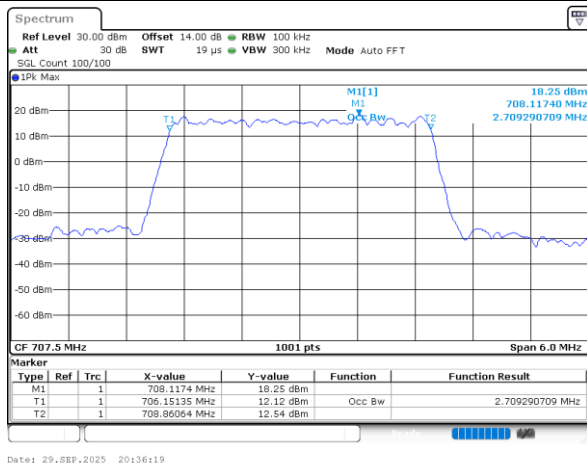
Lowest Channel / 3MHz / QPSK



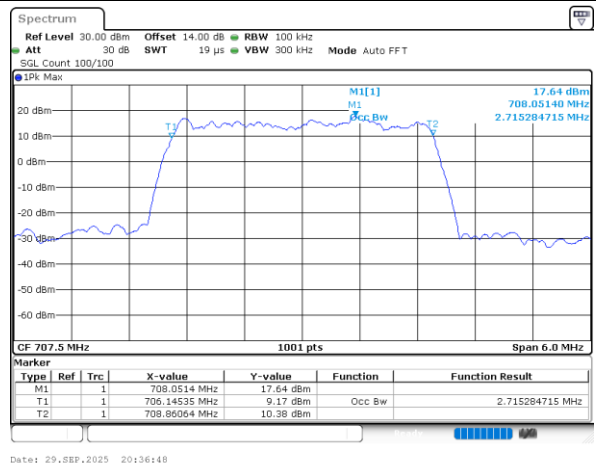
Lowest Channel / 3MHz / 16QAM



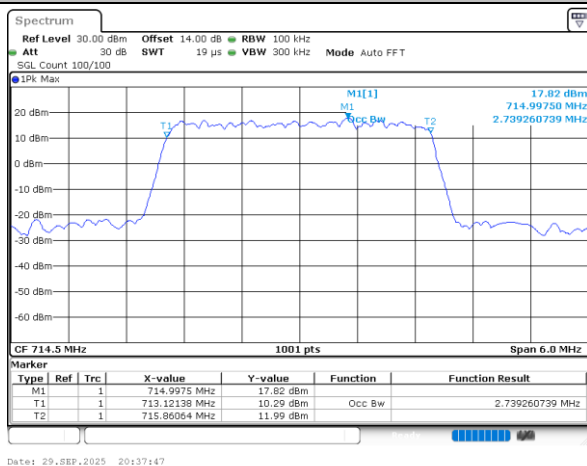
Middle Channel / 3MHz / QPSK



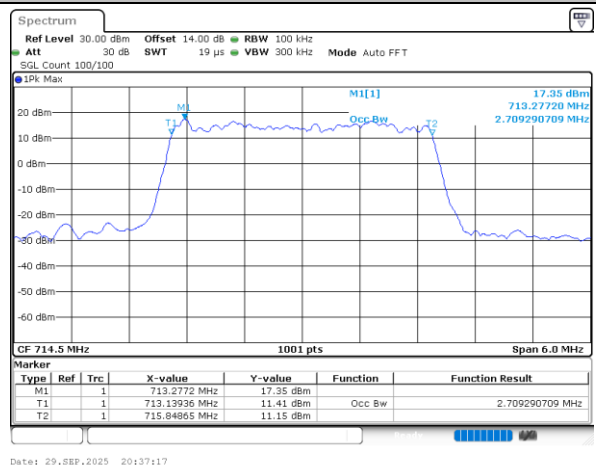
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



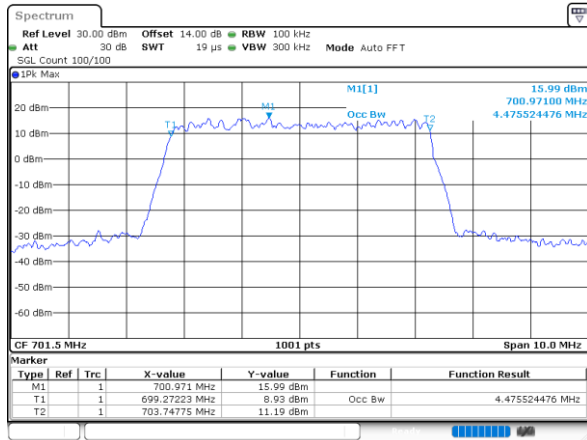
Highest Channel / 3MHz / 16QAM



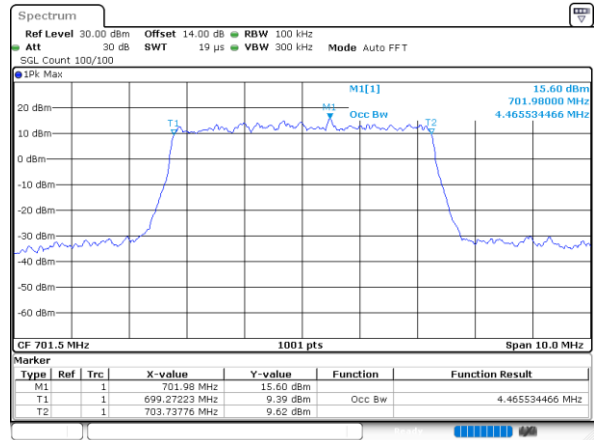


LTE Band 12

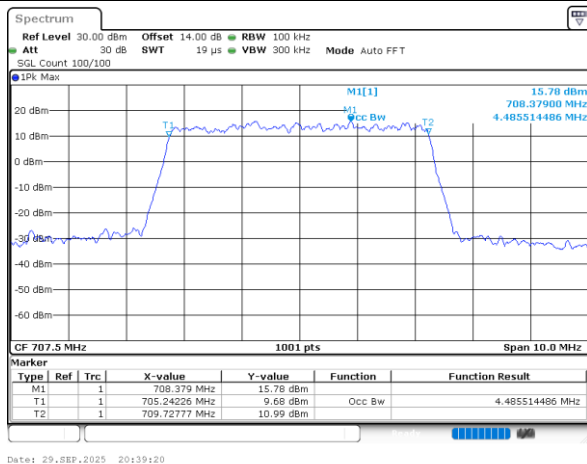
Lowest Channel / 5MHz / QPSK



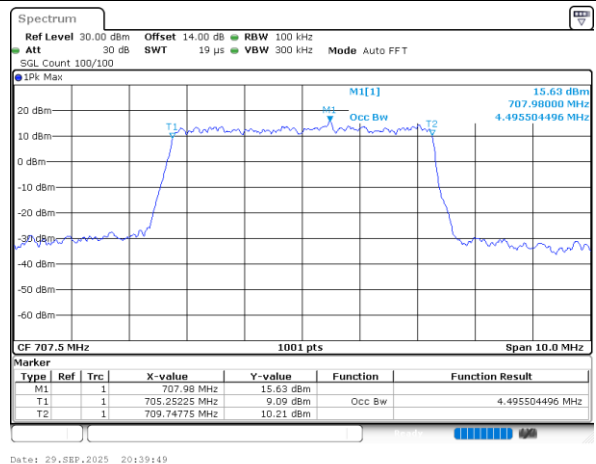
Lowest Channel / 5MHz / 16QAM



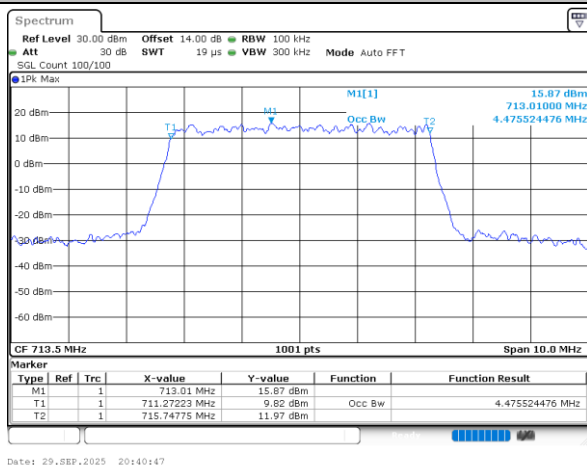
Middle Channel / 5MHz / QPSK



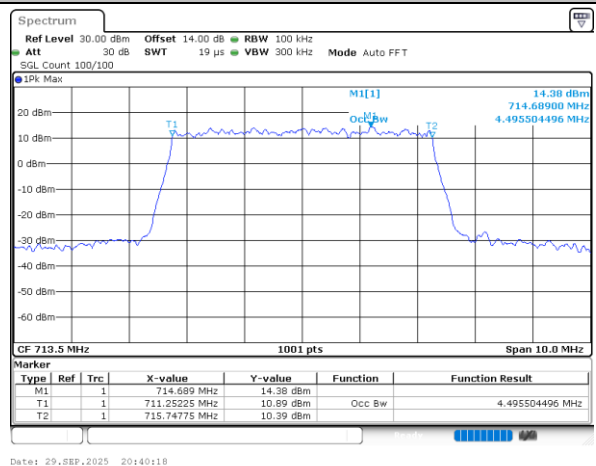
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



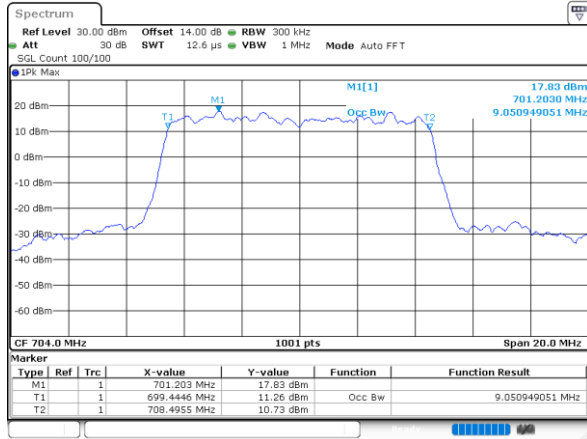
Highest Channel / 5MHz / 16QAM



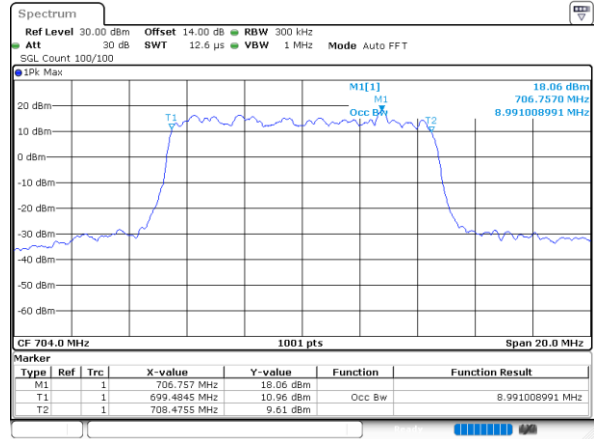


LTE Band 12

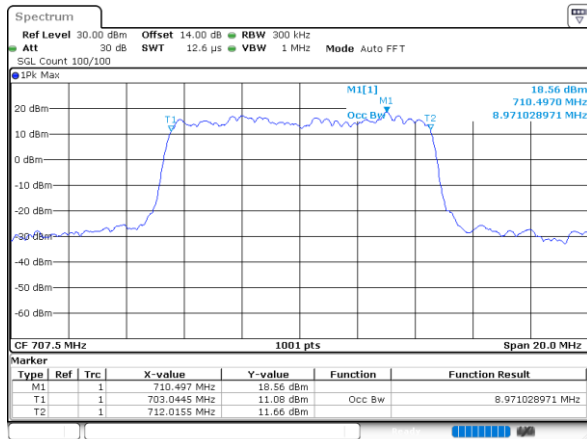
Lowest Channel / 10MHz / QPSK



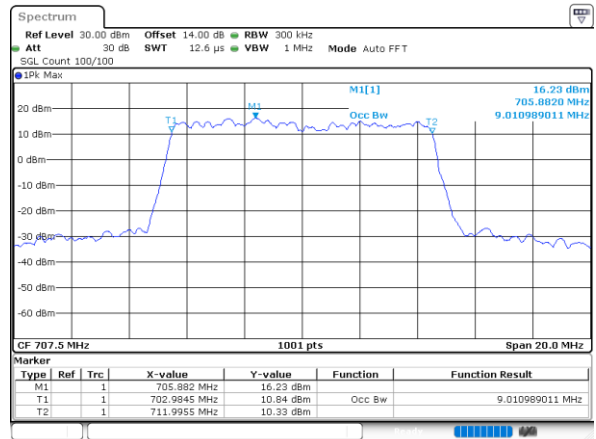
Lowest Channel / 10MHz / 16QAM



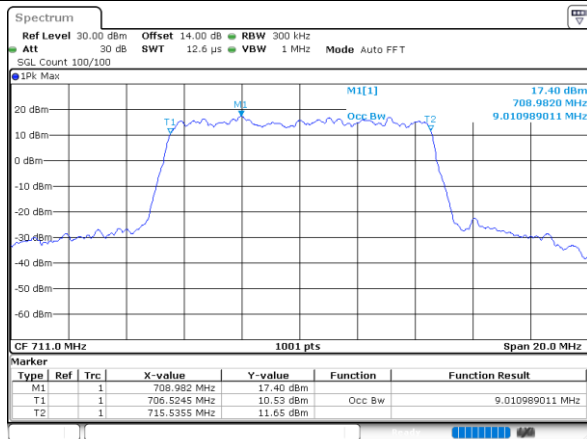
Middle Channel / 10MHz / QPSK



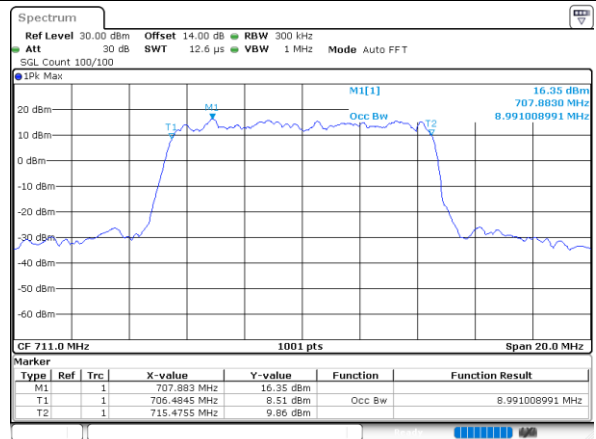
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

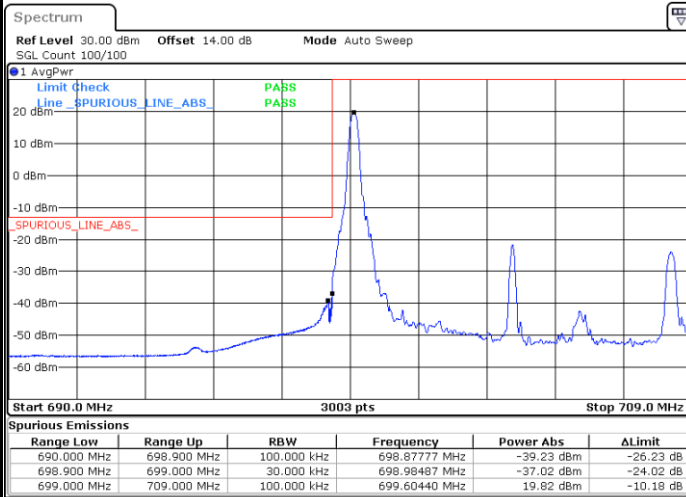




Conducted Band Edge

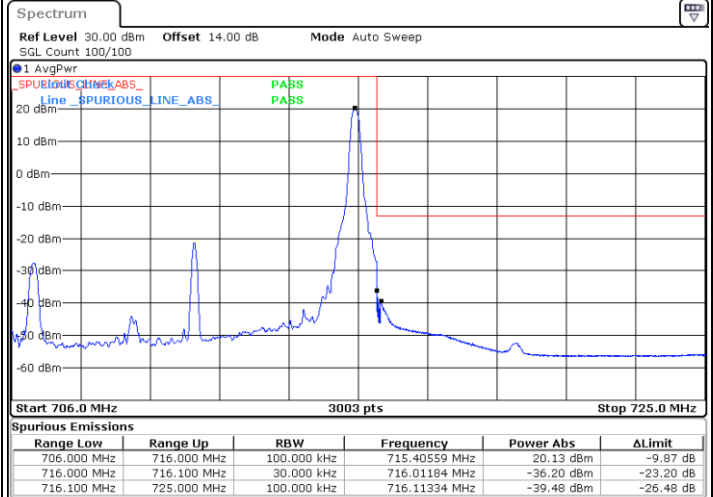
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1RB



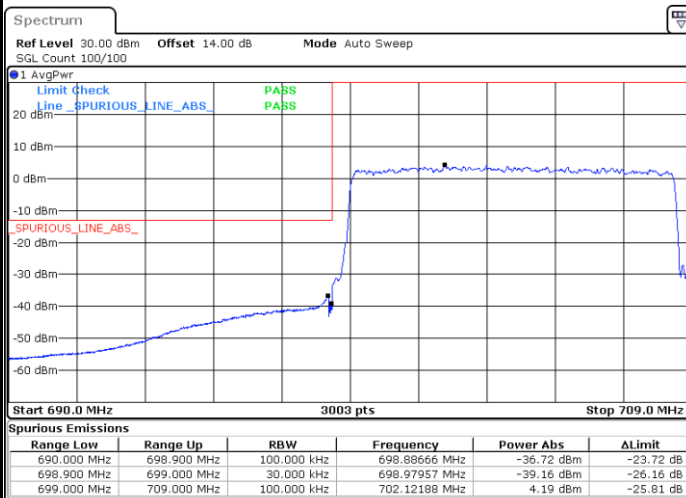
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Highest Band Edge / 1RB



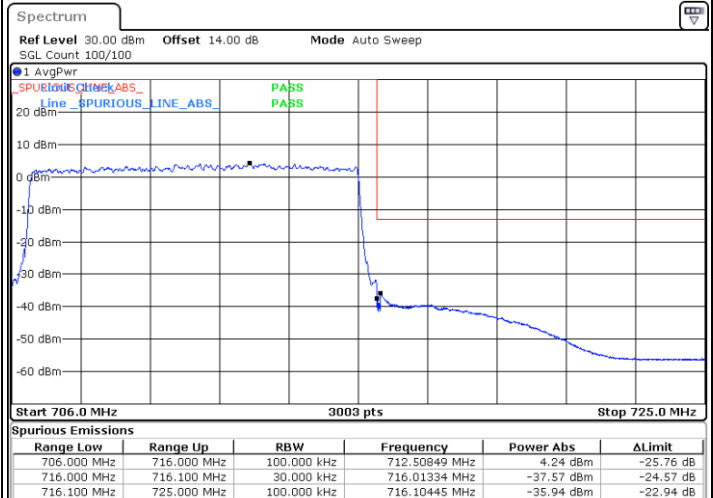
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Lowest Band Edge / Full RB



Date: 29.SEP.2025 20:41:41

Highest Band Edge / Full RB



Date: 29.SEP.2025 20:44:11



LTE Band 13

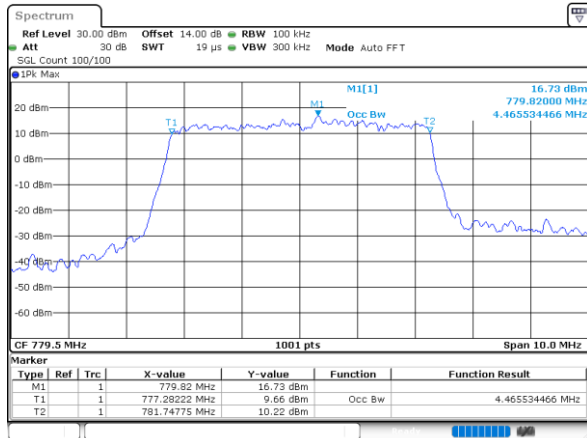
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.47	4.47	-	-
Middle CH	4.50	4.47	9.03	9.01
Highest CH	4.48	4.49	-	-

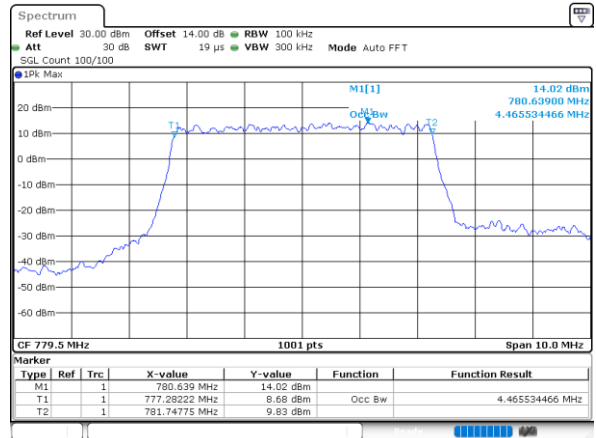


LTE Band 13

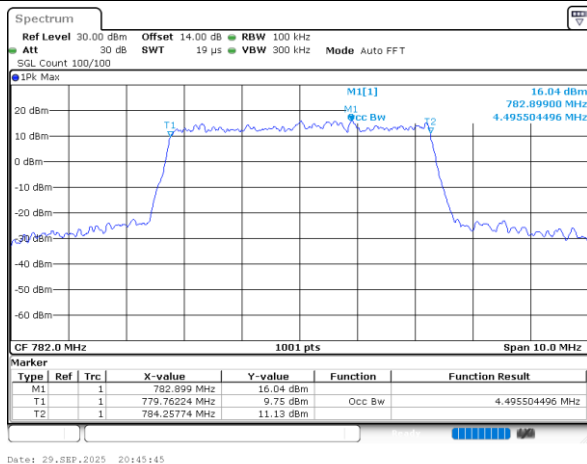
Lowest Channel / 5MHz / QPSK



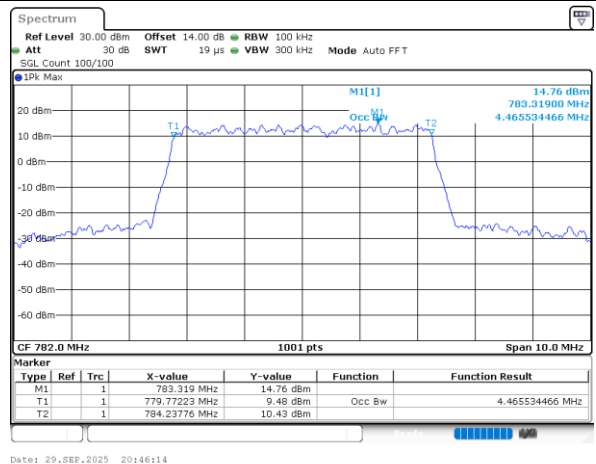
Lowest Channel / 5MHz / 16QAM



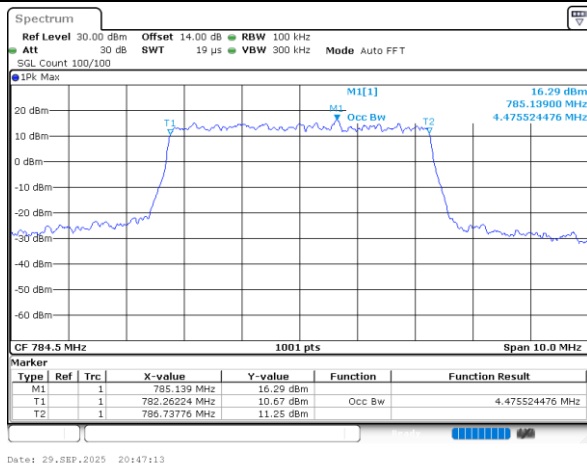
Middle Channel / 5MHz / QPSK



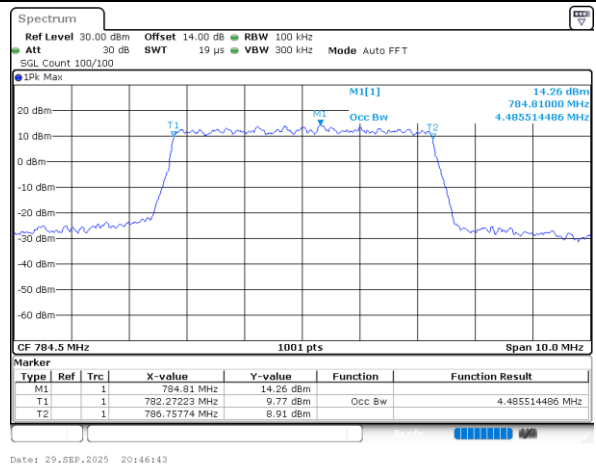
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



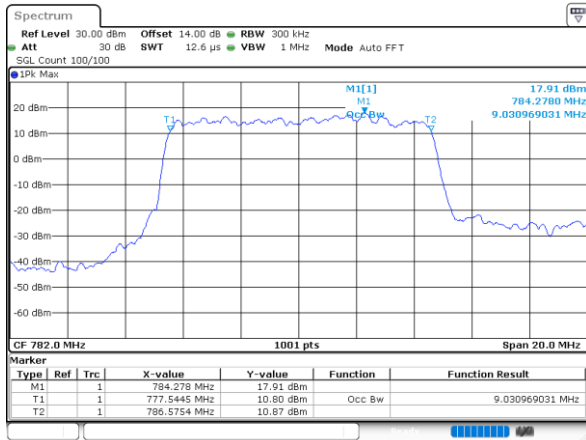
Highest Channel / 5MHz / 16QAM



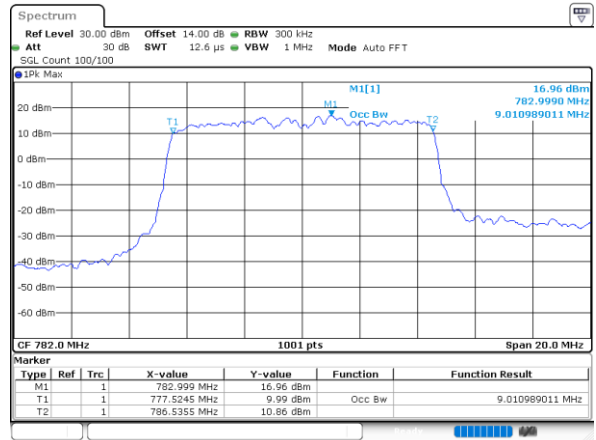


LTE Band 13

Lowest Channel / 10MHz / QPSK



Lowest Channel / 10MHz / 16QAM

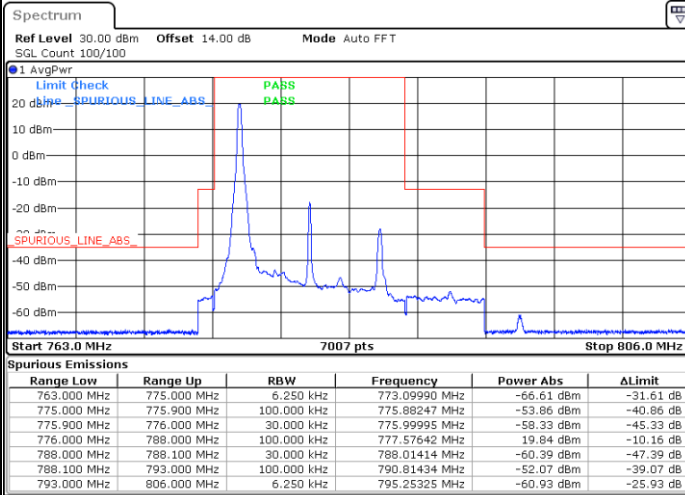




Conducted Band Edge

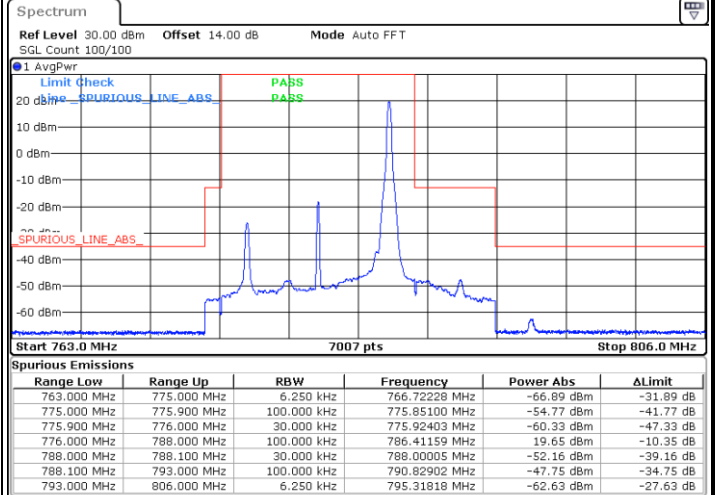
LTE Band 13 / 10MHz / 16QAM

Band Edge / 1RB



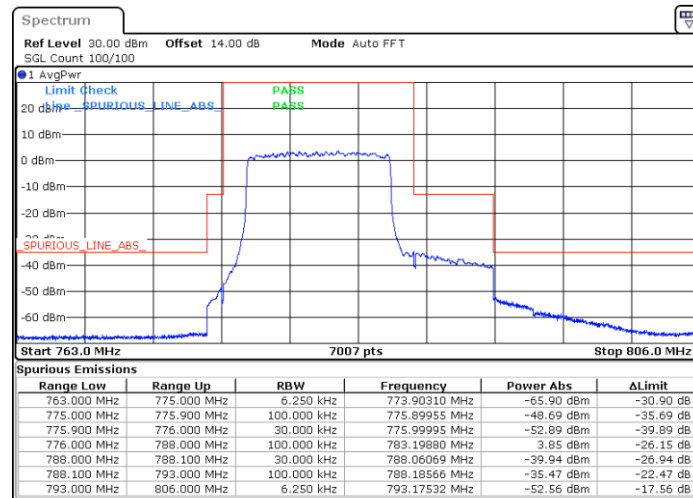
Date: 29.SEP.2025 21:06:34

Band Edge / 1RB



Date: 29.SEP.2025 21:07:15

Band Edge / Full RB



Date: 29.SEP.2025 21:05:53



LTE Band 66

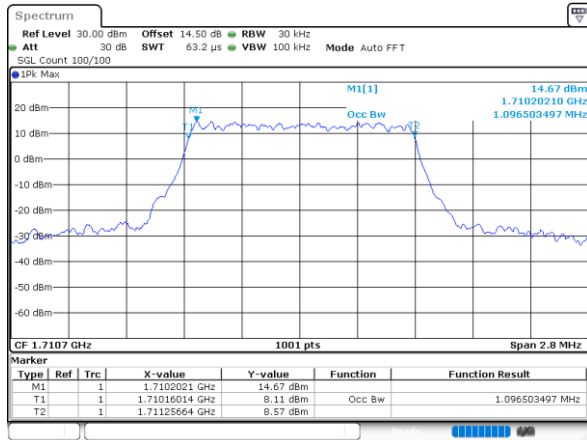
Occupied Bandwidth

Mode	LTE Band 66 : 99%OBW(MHz)					
BW	1M4MHz		3MHz		5MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.71	2.71	4.49	4.48
Middle CH	1.09	1.09	2.71	2.71	4.48	4.50
Highest CH	1.09	1.09	2.72	2.72	4.48	4.48
BW	10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	9.07	8.97	13.46	13.40	17.86	17.86
Middle CH	8.99	8.95	13.37	13.40	17.82	17.74
Highest CH	8.99	9.03	13.40	13.43	17.86	17.82

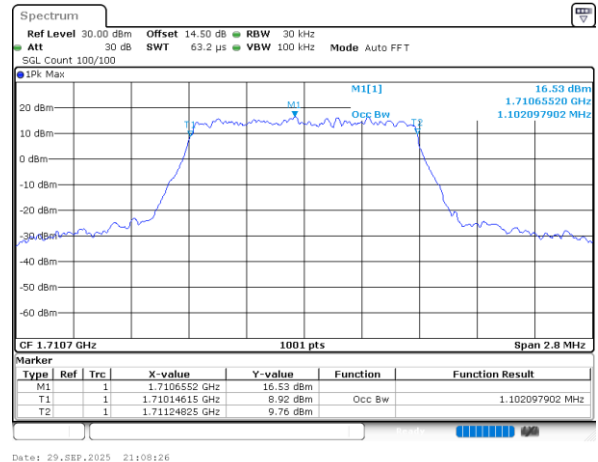


LTE Band 66

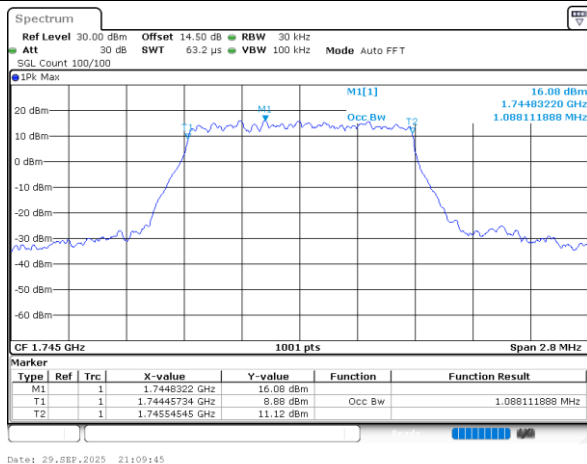
Lowest Channel / 1M4MHz / QPSK



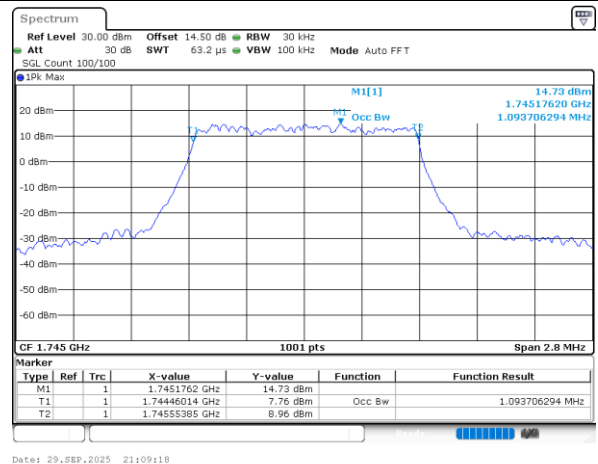
Lowest Channel / 1M4MHz / 16QAM



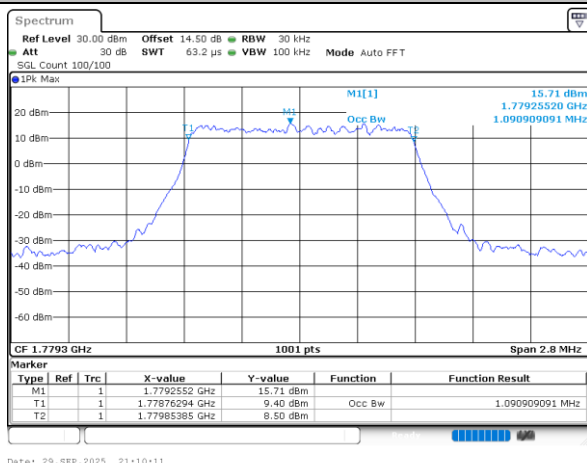
Middle Channel / 1M4MHz / QPSK



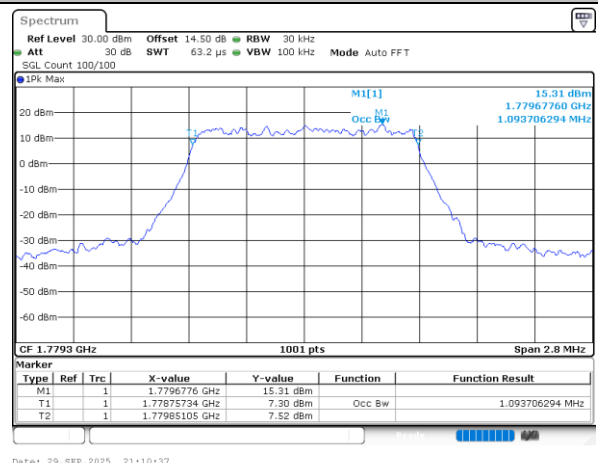
Middle Channel / 1M4MHz / 16QAM



Highest Channel / 1M4MHz / QPSK



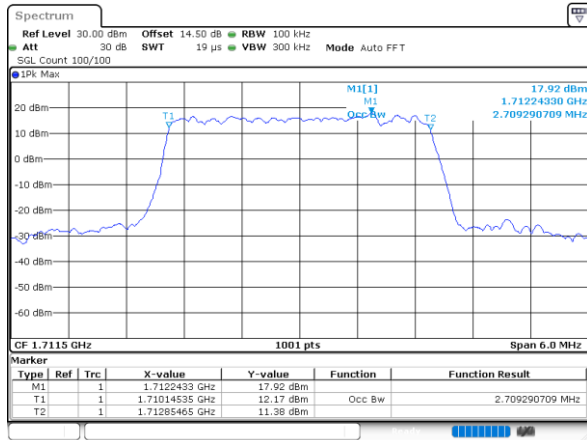
Highest Channel / 1M4MHz / 16QAM



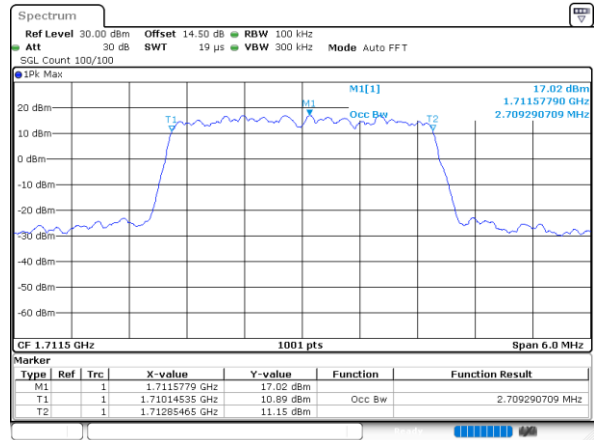


LTE Band 66

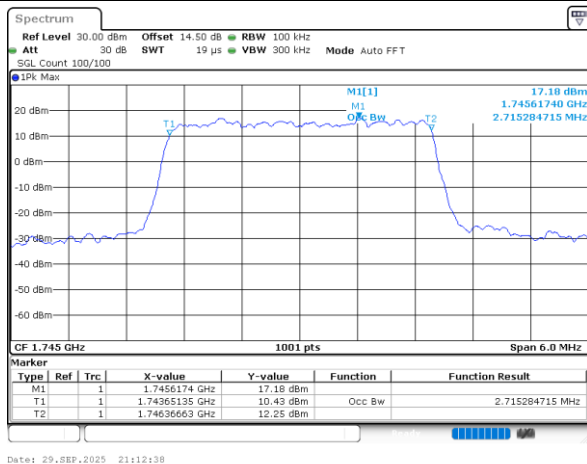
Lowest Channel / 3MHz / QPSK



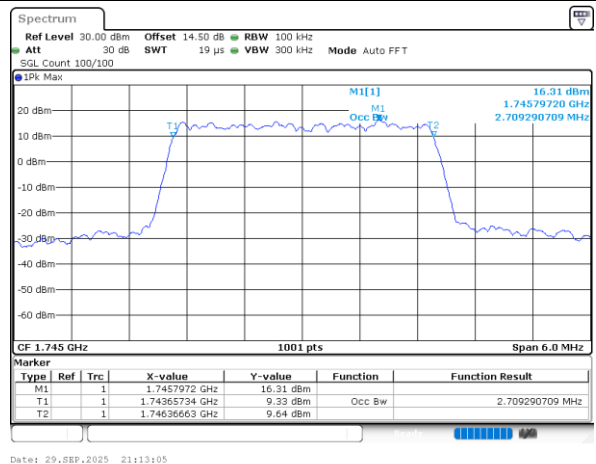
Lowest Channel / 3MHz / 16QAM



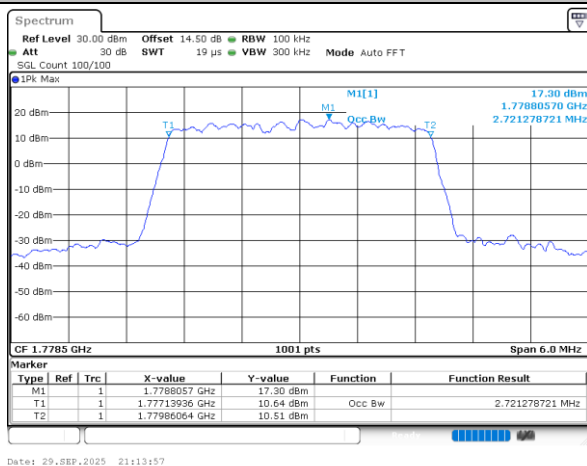
Middle Channel / 3MHz / QPSK



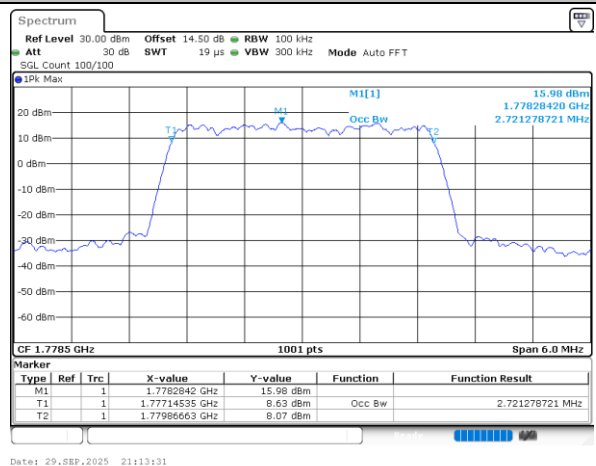
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



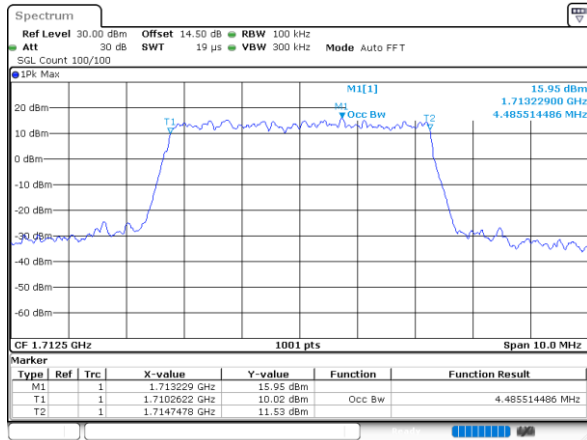
Highest Channel / 3MHz / 16QAM



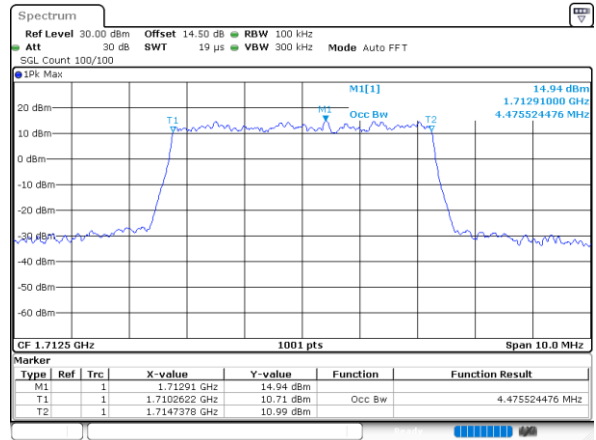


LTE Band 66

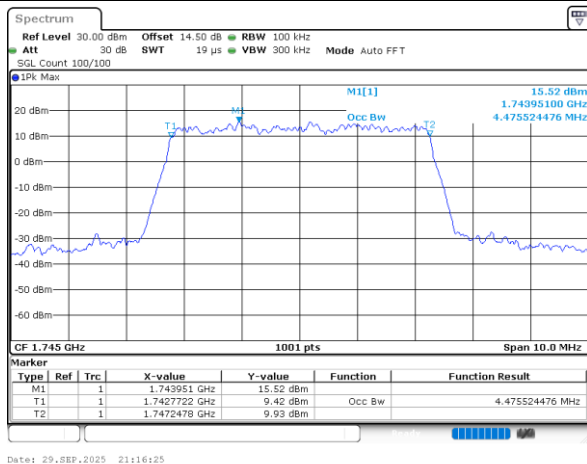
Lowest Channel / 5MHz / QPSK



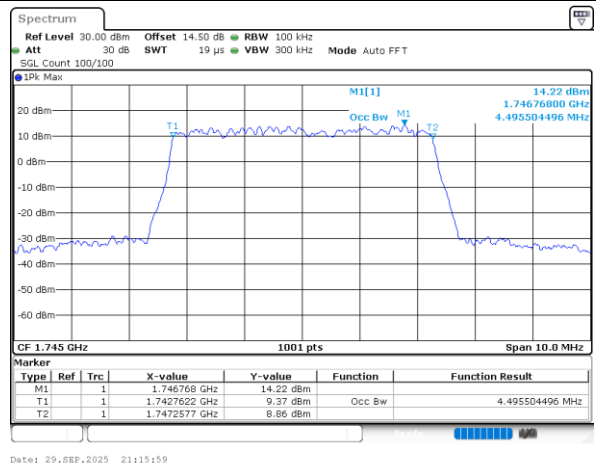
Lowest Channel / 5MHz / 16QAM



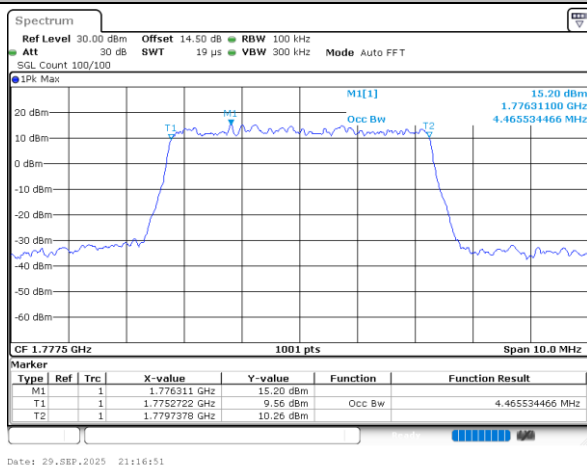
Middle Channel / 5MHz / QPSK



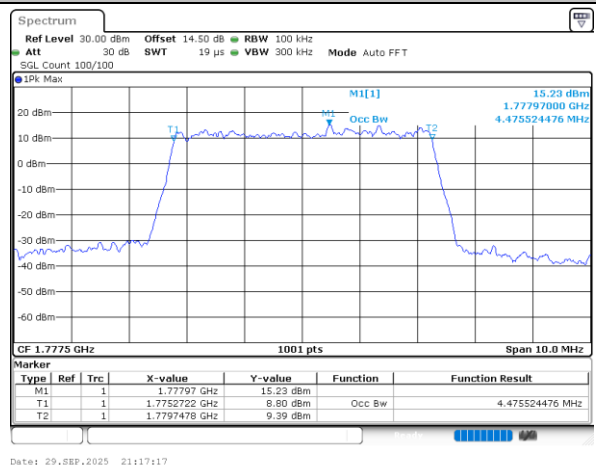
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



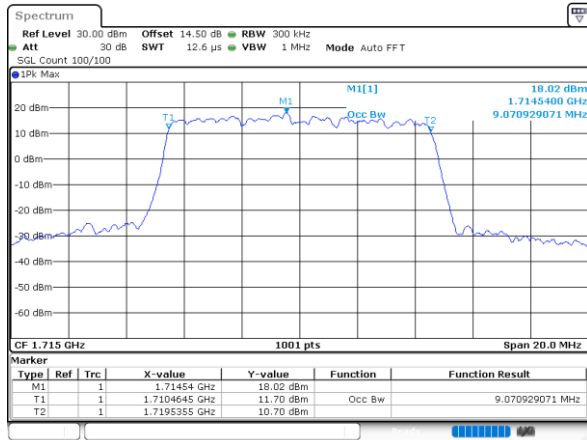
Highest Channel / 5MHz / 16QAM



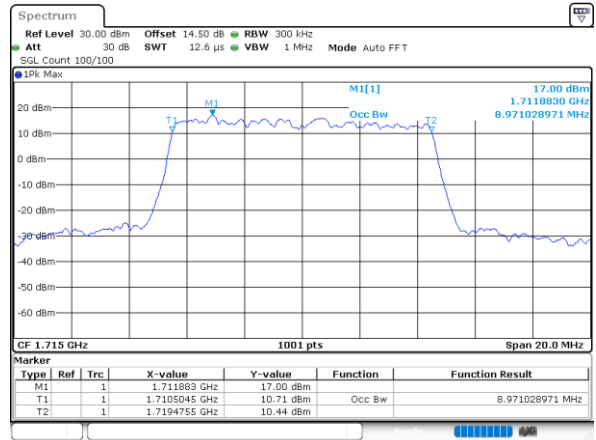


LTE Band 66

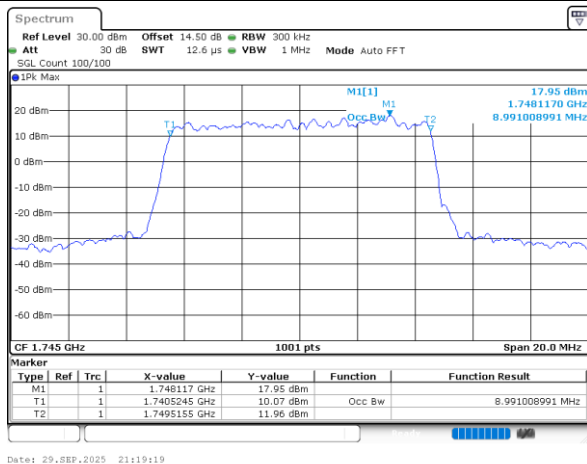
Lowest Channel / 10MHz / QPSK



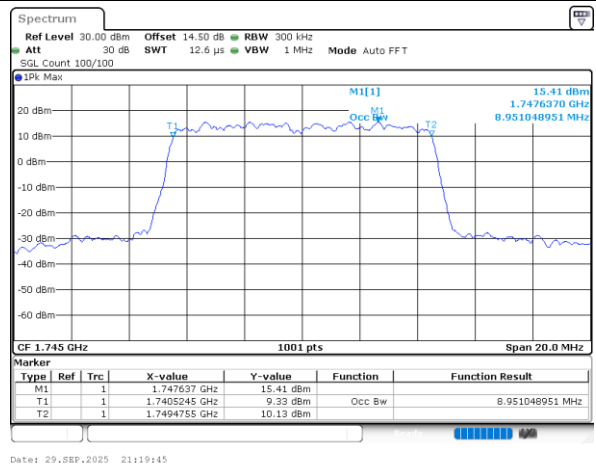
Lowest Channel / 10MHz / 16QAM



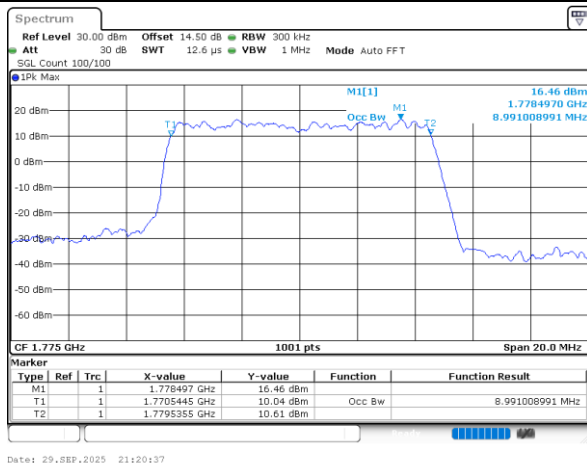
Middle Channel / 10MHz / QPSK



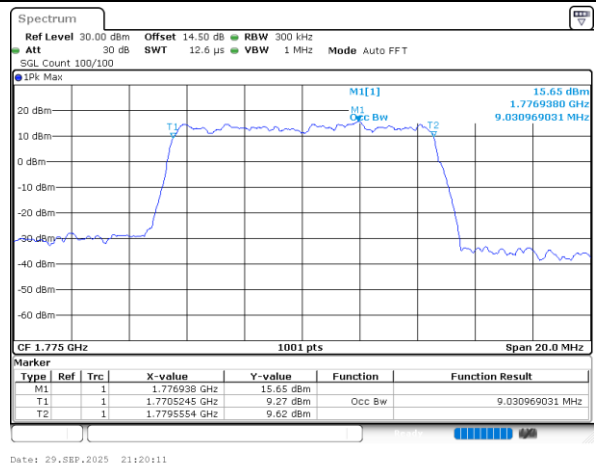
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



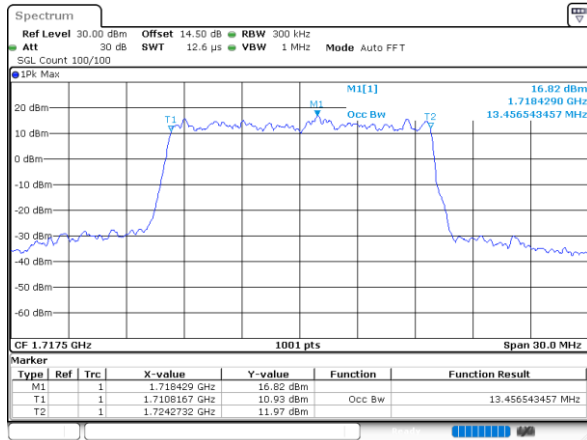
Highest Channel / 10MHz / 16QAM



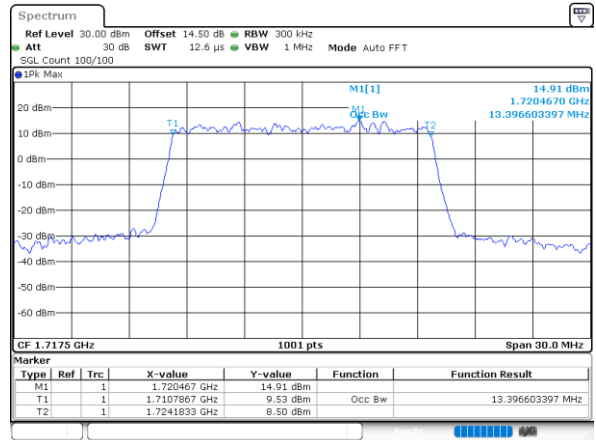


LTE Band 66

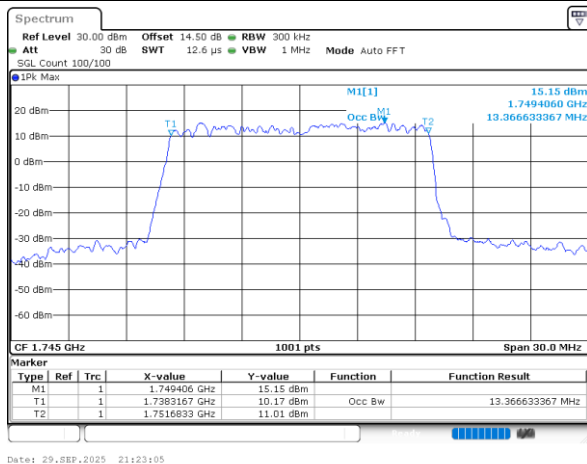
Lowest Channel / 15MHz / QPSK



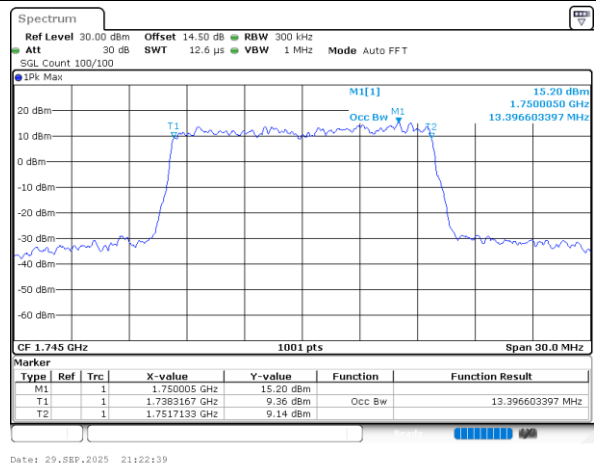
Lowest Channel / 15MHz / 16QAM



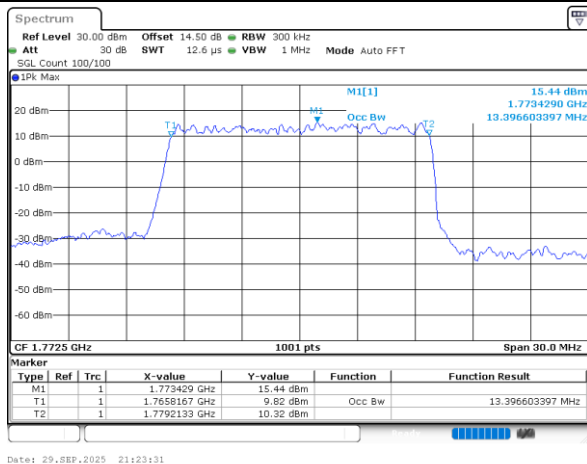
Middle Channel / 15MHz / QPSK



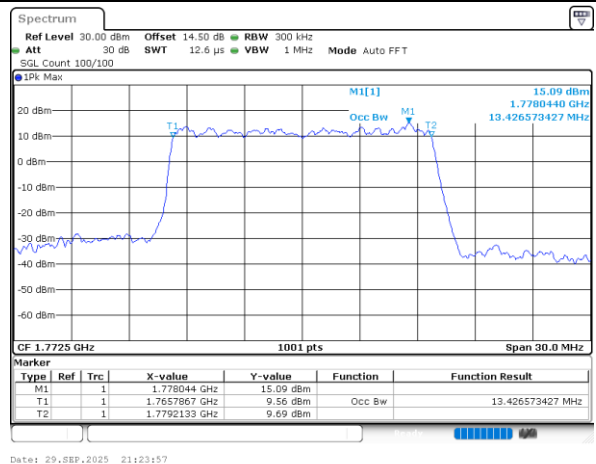
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



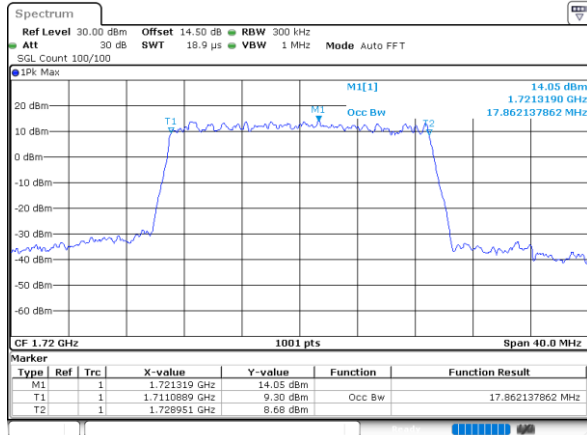
Highest Channel / 15MHz / 16QAM



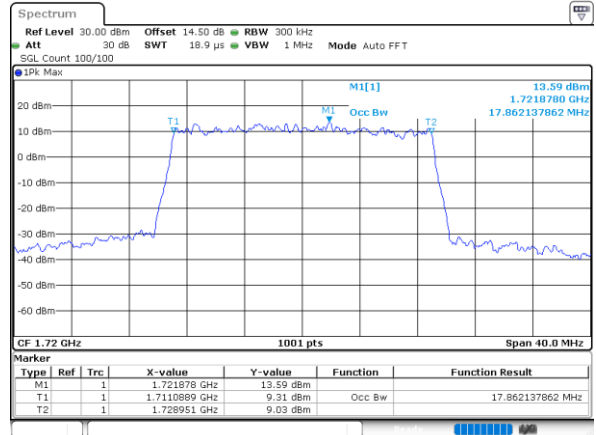


LTE Band 66

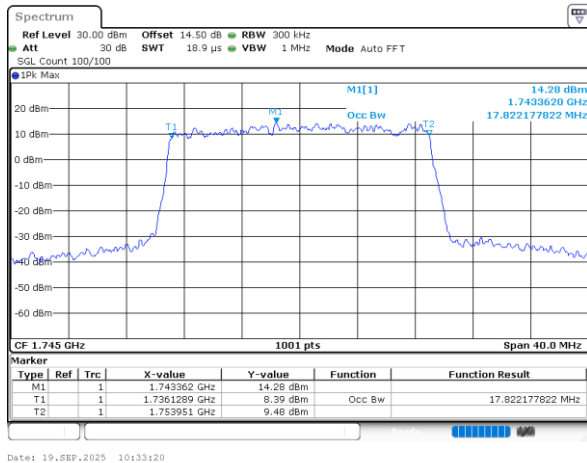
Lowest Channel / 20MHz / QPSK



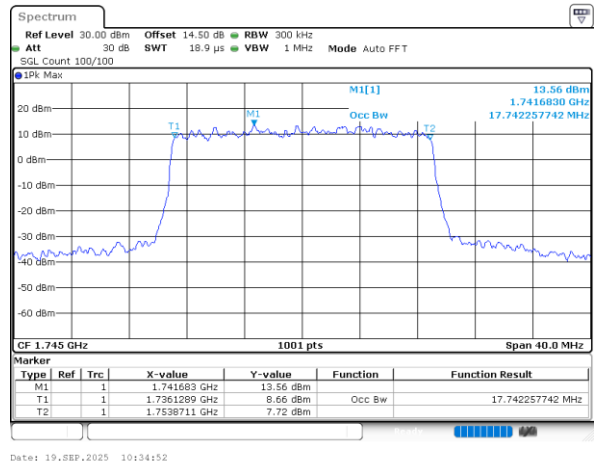
Lowest Channel / 20MHz / 16QAM



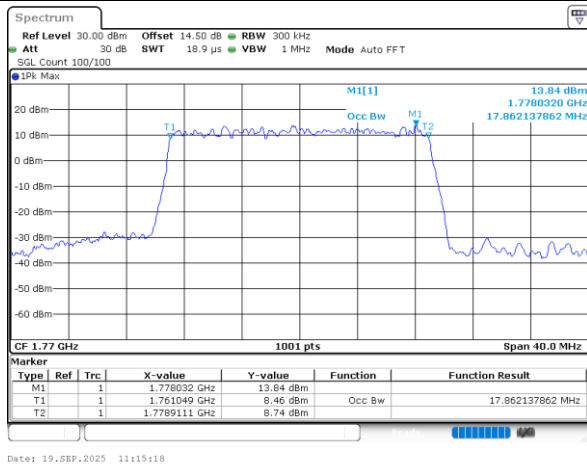
Middle Channel / 20MHz / QPSK



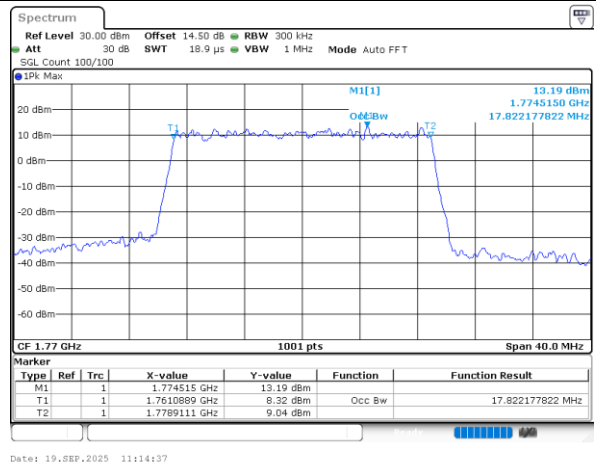
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM

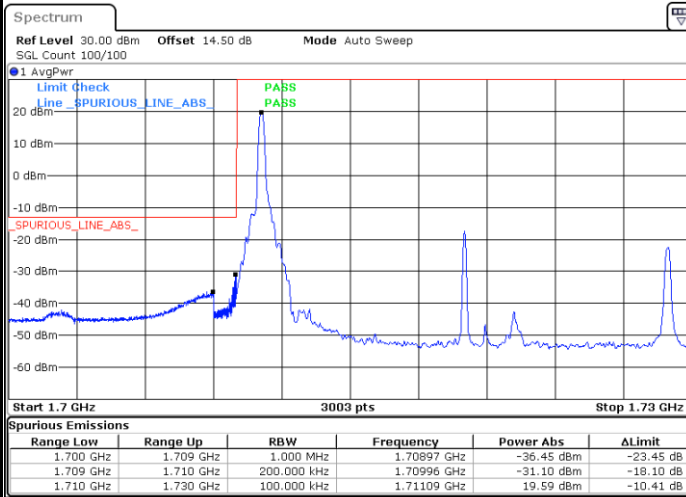




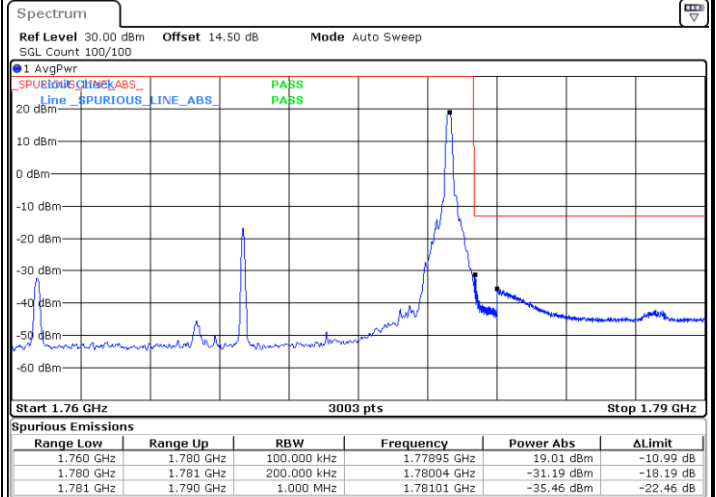
Conducted Band Edge

LTE Band 66 / 20MHz / 16QAM

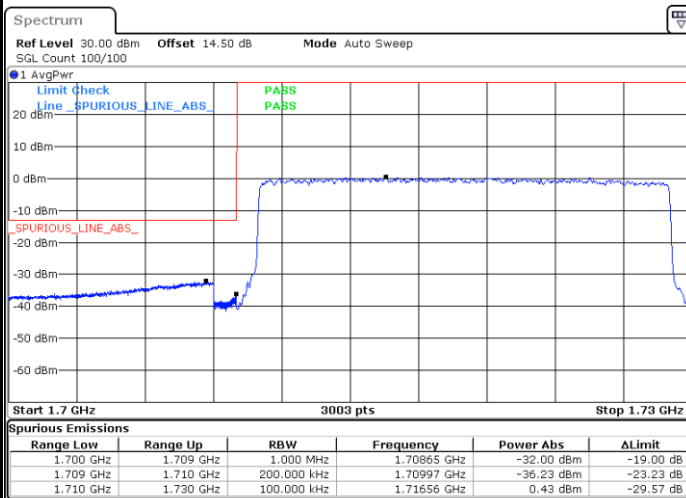
Lowest Band Edge / 1RB



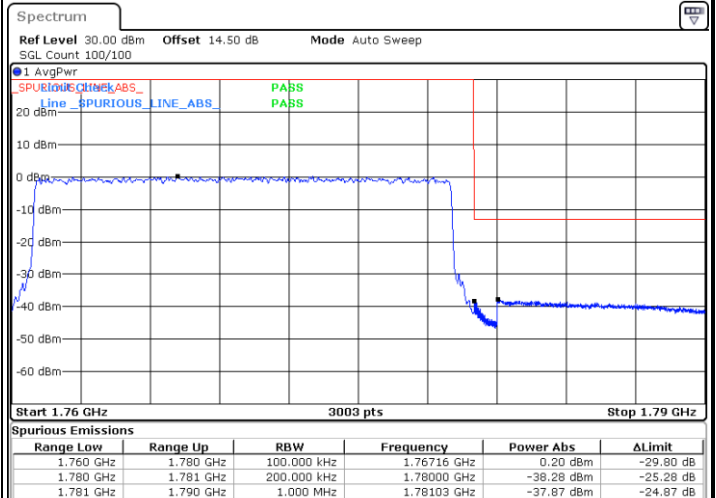
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jia Kuang	Temperature :	22~25°C
		Relative Humidity :	48~52%

LTE Band 2 / 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	3702	-54.04	-13	-41.04	-72.06	-60.80	5.82	12.58	H
	5553	-59.81	-13	-46.81	-81.73	-65.53	7.28	13.00	H
	7404	-55.44	-13	-42.44	-81.58	-58.60	8.32	11.48	H
	9255	-45.47	-13	-32.47	-76.57	-47.62	9.83	11.98	H
	3702	-59.14	-13	-46.14	-77.06	-65.90	5.82	12.58	V
	5553	-59.29	-13	-46.29	-81.39	-65.01	7.28	13.00	V
	7404	-55.46	-13	-42.46	-81.62	-58.62	8.32	11.48	V
	9255	-41.62	-13	-28.62	-71.88	-43.77	9.83	11.98	V
Middle	3742	-56.95	-13	-43.95	-75.04	-63.70	5.85	12.60	H
	5613	-59.05	-13	-46.05	-81.06	-64.85	7.30	13.10	H
	7484	-55.85	-13	-42.85	-81.80	-59.00	8.35	11.50	H
	9355	-49.07	-13	-36.07	-80.47	-51.22	9.85	12.00	H
	3742	-59.96	-13	-46.96	-77.97	-66.71	5.85	12.60	V
	5613	-59.50	-13	-46.50	-81.7	-65.30	7.30	13.10	V
	7484	-55.20	-13	-42.20	-81.14	-58.35	8.35	11.50	V
	9355	-45.80	-13	-32.80	-76.32	-47.95	9.85	12.00	V
Highest	3782	-55.53	-13	-42.53	-73.71	-62.27	5.88	12.62	H
	5673	-58.53	-13	-45.53	-81.43	-64.34	7.32	13.13	H
	7564	-55.76	-13	-42.76	-81.51	-58.92	8.38	11.54	H
	9455	-48.51	-13	-35.51	-80.08	-50.65	9.88	12.02	H
	3782	-59.43	-13	-46.43	-77.58	-66.17	5.88	12.62	V
	5673	-59.41	-13	-46.41	-81.79	-65.22	7.32	13.13	V
	7564	-54.48	-13	-41.48	-80.2	-57.64	8.38	11.54	V
	9455	-45.76	-13	-32.76	-76.28	-47.90	9.88	12.02	V

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



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	1649.18	-39.04	-13	-26.04	-48.55	-42.27	3.98	9.36	H
	2473.77	-50.51	-13	-37.51	-64.41	-54.06	4.85	10.55	H
	3298.36	-60.52	-13	-47.52	-76.58	-65.45	5.50	12.58	H
	1649.18	-46.56	-13	-33.56	-55.81	-49.79	3.98	9.36	V
	2473.77	-58.64	-13	-45.64	-72.51	-62.19	4.85	10.55	V
	3298.36	-61.96	-13	-48.96	-77.83	-66.89	5.50	12.58	V
Middle	1664	-38.25	-13	-25.25	-47.81	-41.50	4.00	9.40	H
	2496	-48.69	-13	-35.69	-62.54	-52.26	4.88	10.60	H
	3328	-60.62	-13	-47.62	-76.37	-65.55	5.52	12.60	H
	1664	-45.21	-13	-32.21	-54.37	-48.46	4.00	9.40	V
	2496	-55.76	-13	-42.76	-69.57	-59.33	4.88	10.60	V
	3328	-62.40	-13	-49.40	-77.91	-67.33	5.52	12.60	V
Highest	1679.18	-39.19	-13	-26.19	-48.80	-42.36	4.10	9.42	H
	2518.77	-45.37	-13	-32.37	-59.17	-48.95	4.90	10.63	H
	3358.36	-58.34	-13	-45.34	-74.07	-63.26	5.55	12.62	H
	1679.18	-46.74	-13	-33.74	-55.80	-49.91	4.10	9.42	V
	2518.77	-55.48	-13	-42.48	-69.24	-59.06	4.90	10.63	V
	3358.36	-62.50	-13	-49.50	-78.09	-67.42	5.55	12.62	V

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



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	1399	-39.55	-13	-26.55	-49.50	-42.78	3.98	9.36	H
	2098.5	-63.42	-13	-50.42	-76.25	-66.97	4.85	10.55	H
	2798	-62.22	-13	-49.22	-77.49	-67.15	5.50	12.58	H
	3497.5	-41.62	-13	-28.62	-58.60	-46.09	5.98	12.60	H
	1399	-47.59	-13	-34.59	-57.11	-50.82	3.98	9.36	V
	2098.5	-63.43	-13	-50.43	-76.21	-66.98	4.85	10.55	V
	2798	-61.36	-13	-48.36	-76.82	-66.29	5.50	12.58	V
	3497.5	-50.14	-13	-37.14	-67.09	-54.61	5.98	12.60	V
Middle	1406	-45.89	-13	-32.89	-55.97	-49.14	4.00	9.40	H
	2109	-62.93	-13	-49.93	-75.76	-66.50	4.88	10.60	H
	2812	-61.83	-13	-48.83	-77.13	-66.76	5.52	12.60	H
	3515	-46.33	-13	-33.33	-63.45	-50.80	6.00	12.62	H
	1406	-53.59	-13	-40.59	-63.23	-56.84	4.00	9.40	V
	2109	-63.08	-13	-50.08	-75.86	-66.65	4.88	10.60	V
	2812	-61.75	-13	-48.75	-77.24	-66.68	5.52	12.60	V
	3515	-54.37	-13	-41.37	-71.43	-58.84	6.00	12.62	V
Highest	1413	-41.57	-13	-28.57	-51.65	-44.74	4.10	9.42	H
	2119.5	-63.02	-13	-50.02	-76.17	-66.60	4.90	10.63	H
	2826	-61.91	-13	-48.91	-77.22	-66.83	5.55	12.62	H
	3532.5	-44.07	-13	-31.07	-61.33	-48.55	6.02	12.65	H
	1413	-49.28	-13	-36.28	-58.92	-52.45	4.10	9.42	V
	2119.5	-63.10	-13	-50.10	-76.21	-66.68	4.90	10.63	V
	2826	-61.61	-13	-48.61	-77.11	-66.53	5.55	12.62	V
	3532.5	-52.08	-13	-39.08	-69.25	-56.56	6.02	12.65	V

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



LTE Band 13 / 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	1554.5	-50.88	-13	-37.88	-60.43	-54.11	3.98	9.36	H
	2331.75	-60.29	-13	-47.29	-74.66	-63.84	4.85	10.55	H
	3109	-61.29	-13	-48.29	-77.67	-66.22	5.50	12.58	H
	1554.5	-60.38	-13	-47.38	-70.01	-63.61	3.98	9.36	V
	2331.75	-62.64	-13	-49.64	-77.01	-66.19	4.85	10.55	V
	3109	-61.26	-13	-48.26	-77.70	-66.19	5.50	12.58	V
Middle	1559.5	-58.19	-42.15	-16.04	-67.74	-61.44	4.00	9.40	H
	2339.25	-56.39	-13	-43.39	-70.71	-59.96	4.88	10.60	H
	3119	-61.09	-13	-48.09	-77.57	-66.02	5.52	12.60	H
	1559.5	-63.46	-42.15	-21.31	-73.09	-66.71	4.00	9.40	V
	2339.25	-56.29	-13	-43.29	-70.61	-59.86	4.88	10.60	V
	3119	-61.27	-13	-48.27	-77.79	-66.20	5.52	12.60	V
Highest	1564.5	-53.23	-42.15	-11.08	-62.78	-56.40	4.10	9.42	H
	2346.75	-62.54	-13	-49.54	-76.86	-66.12	4.90	10.63	H
	3129	-61.27	-13	-48.27	-77.75	-66.19	5.55	12.62	H
	1564.5	-62.05	-42.15	-19.90	-71.68	-65.22	4.10	9.42	V
	2346.75	-63.00	-13	-50.00	-77.32	-66.58	4.90	10.63	V
	3129	-61.52	-13	-48.52	-78.04	-66.44	5.55	12.62	V

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

LTE Band 13 / 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	1559.5	-60.93	-42.15	-18.78	-70.48	-64.18	4.00	9.40	H
	2339.25	-62.98	-13	-49.98	-77.30	-66.55	4.88	10.60	H
	3119	-61.56	-13	-48.56	-78.04	-66.49	5.52	12.60	H
	1559.5	-65.64	-42.15	-23.49	-75.27	-68.89	4.00	9.40	V
	2339.25	-62.54	-13	-49.54	-76.86	-66.11	4.88	10.60	V
	3119	-61.53	-13	-48.53	-78.05	-66.46	5.52	12.60	V

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



LTE Band 66 / 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	-59.57	-13	-46.57	-75.77	-66.45	5.60	12.48	H
	5133	-59.34	-13	-46.34	-80.99	-65.02	7.10	12.78	H
	6844	-57.37	-13	-44.37	-82.45	-60.76	8.38	11.77	H
	8555	-48.82	-13	-35.82	-76.90	-51.66	8.74	11.58	H
	3422	-61.27	-13	-48.27	-77.56	-68.15	5.60	12.48	V
	5133	-59.44	-13	-46.44	-81.31	-65.12	7.10	12.78	V
	6844	-56.41	-13	-43.41	-81.99	-59.80	8.38	11.77	V
	8555	-41.07	-13	-28.07	-68.58	-43.91	8.74	11.58	V
Middle	3472	-54.75	-13	-41.75	-71.42	-61.60	5.65	12.50	H
	5208	-59.94	-13	-46.94	-81.43	-65.61	7.13	12.80	H
	6944	-56.47	-13	-43.47	-81.94	-59.87	8.40	11.80	H
	8680	-41.60	-13	-28.60	-70.44	-44.45	8.75	11.60	H
	3472	-58.81	-13	-45.81	-75.5	-65.66	5.65	12.50	V
	5208	-60.21	-13	-47.21	-81.95	-65.88	7.13	12.80	V
	6944	-54.22	-13	-41.22	-80.16	-57.62	8.40	11.80	V
	8680	-36.20	-13	-23.20	-64.26	-39.05	8.75	11.60	V
Highest	3522	-52.84	-13	-39.84	-69.96	-59.68	5.68	12.52	H
	5283	-60.92	-13	-47.92	-82.35	-66.59	7.15	12.82	H
	7044	-56.20	-13	-43.20	-81.96	-59.63	8.42	11.85	H
	8805	-46.60	-13	-33.60	-76.23	-49.44	8.78	11.62	H
	3522	-57.31	-13	-44.31	-74.37	-64.15	5.68	12.52	V
	5283	-60.78	-13	-47.78	-82.34	-66.45	7.15	12.82	V
	7044	-54.83	-13	-41.83	-81.02	-58.26	8.42	11.85	V
	8805	-39.46	-13	-26.46	-68.07	-42.30	8.78	11.62	V

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