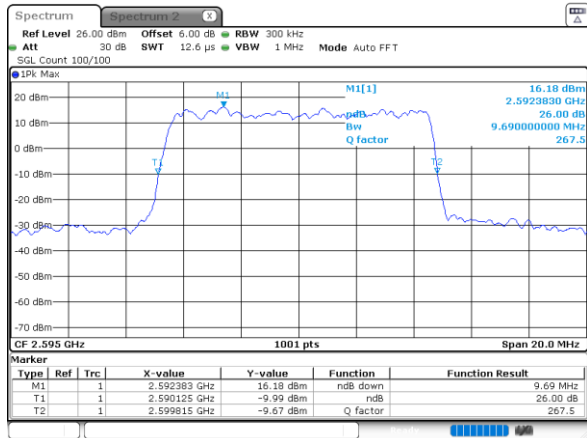




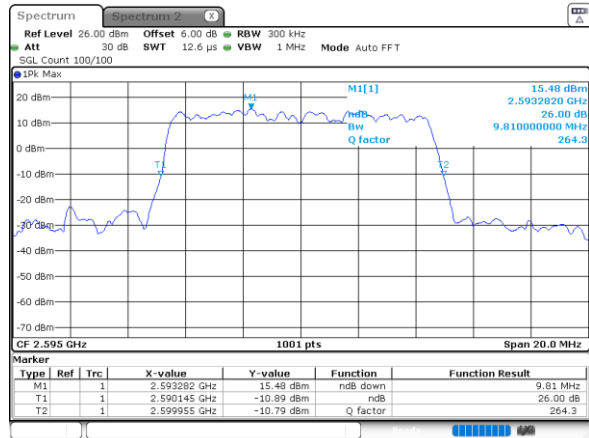
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 21.JUN.2024 01:27:42

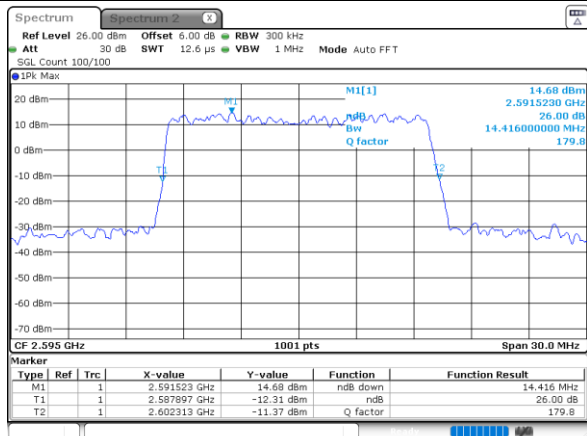
Middle Channel / 10MHz / 16QAM



Date: 21.JUN.2024 01:28:36

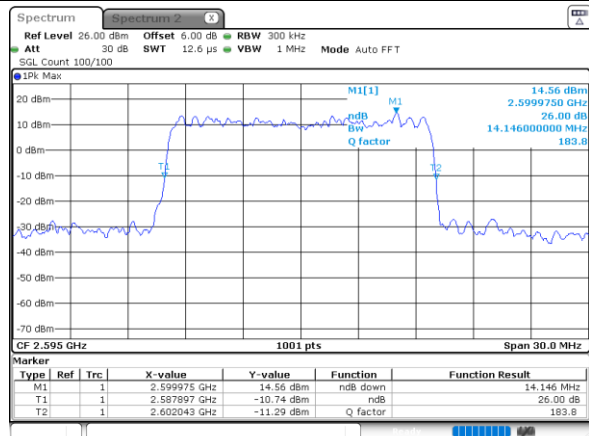
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 21.JUN.2024 01:30:18

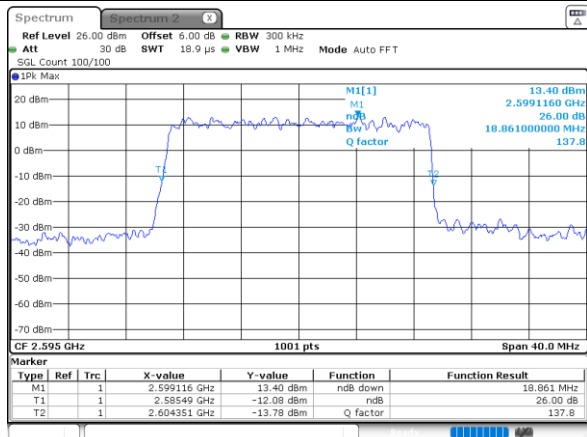
Middle Channel / 15MHz / 16QAM



Date: 21.JUN.2024 01:31:12

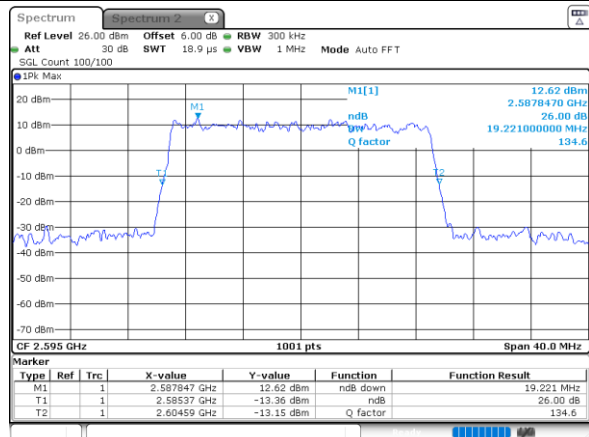
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 21.JUN.2024 01:34:33

Middle Channel / 20MHz / 16QAM

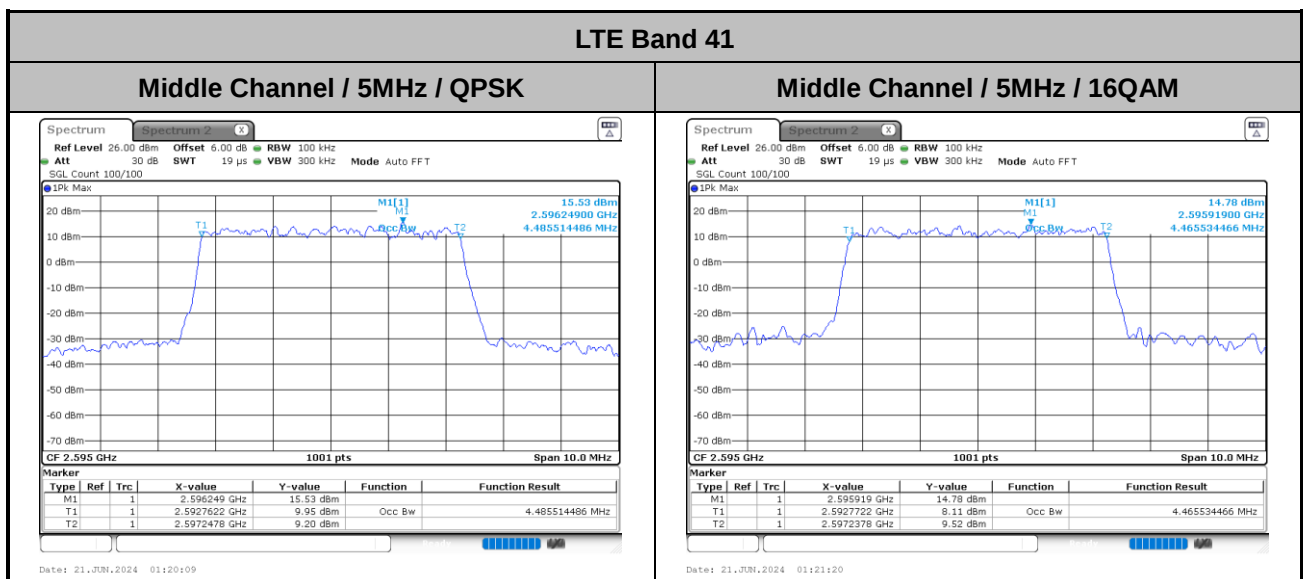


Date: 21.JUN.2024 01:35:25



Occupied Bandwidth

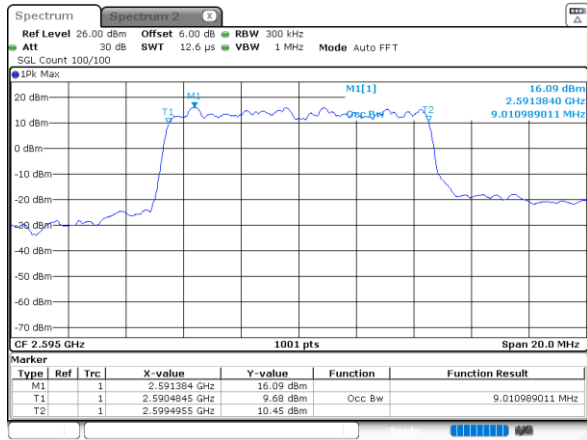
Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.47
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.40
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.98	17.82



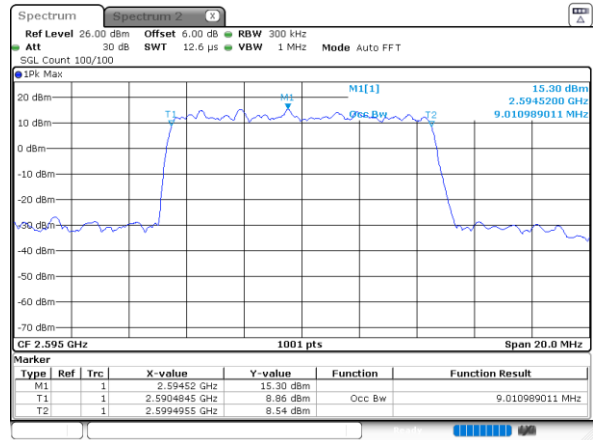


LTE Band 41

Middle Channel / 10MHz / QPSK

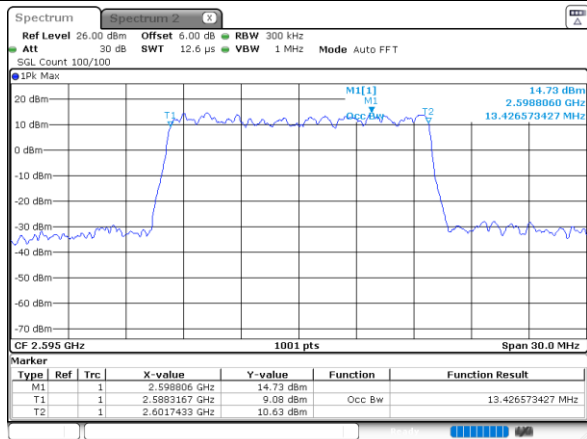


Middle Channel / 10MHz / 16QAM

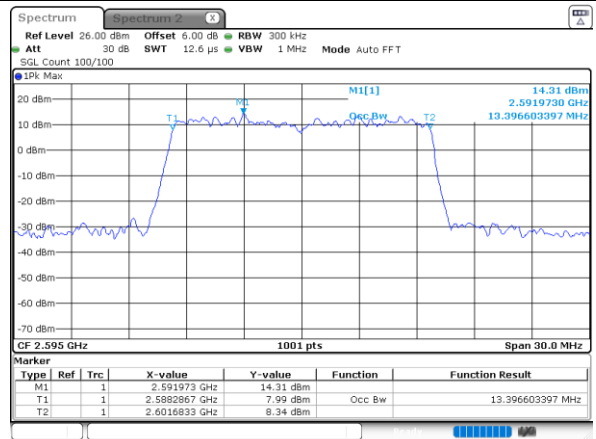


LTE Band 41

Middle Channel / 15MHz / QPSK

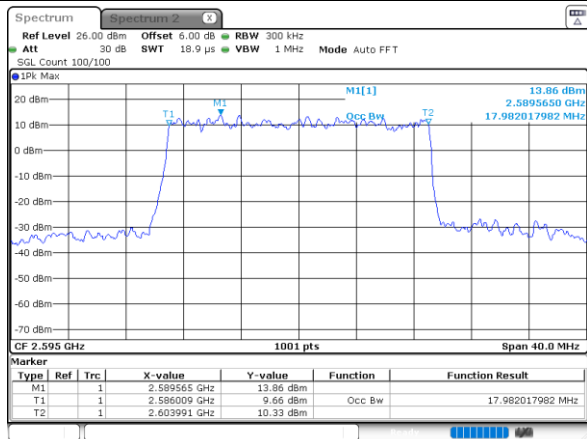


Middle Channel / 15MHz / 16QAM

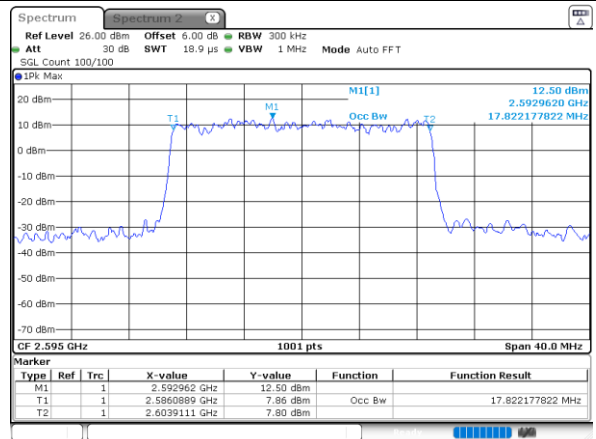


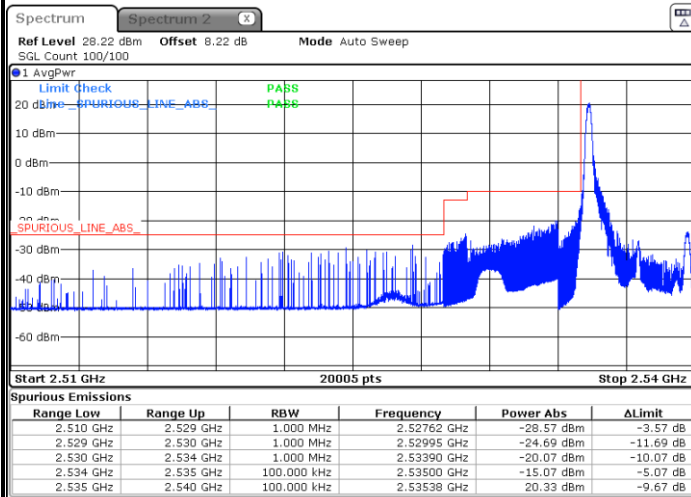
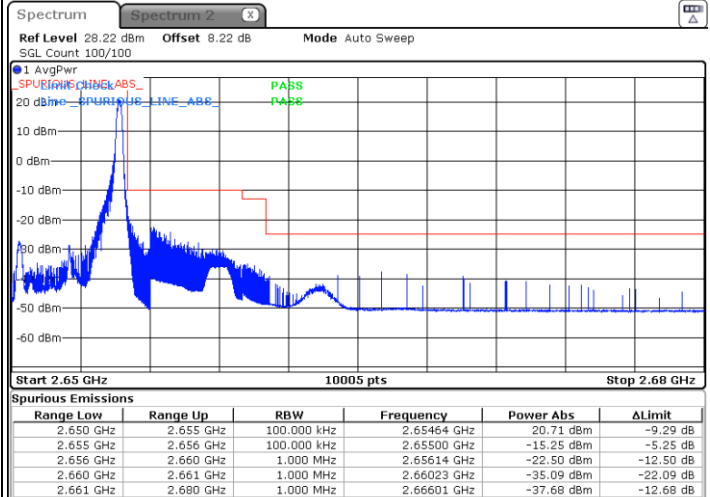
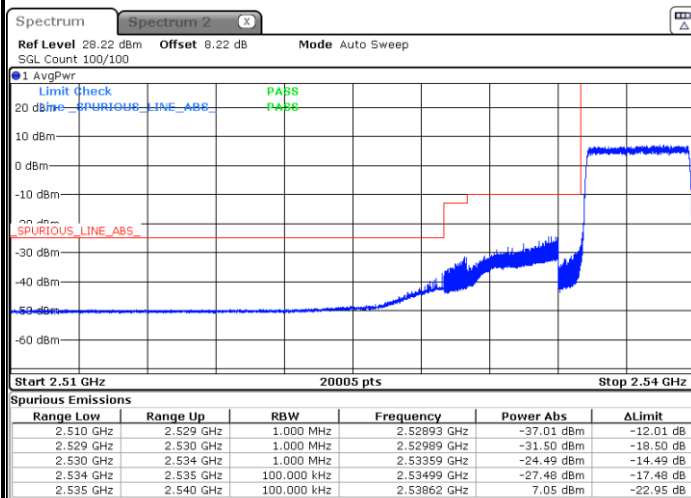
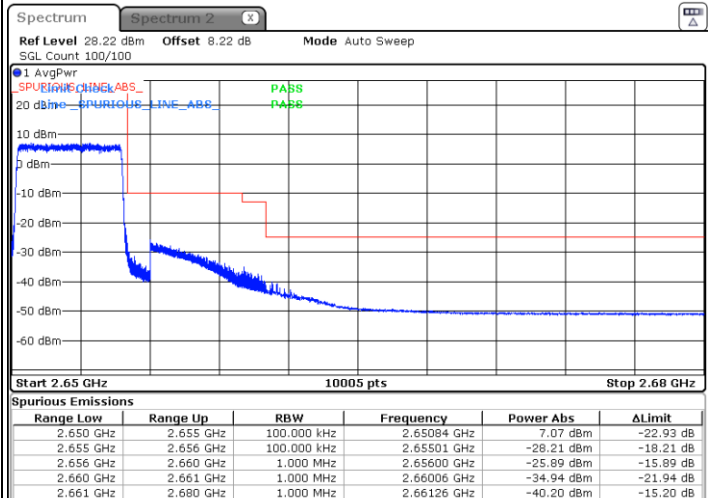
LTE Band 41

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

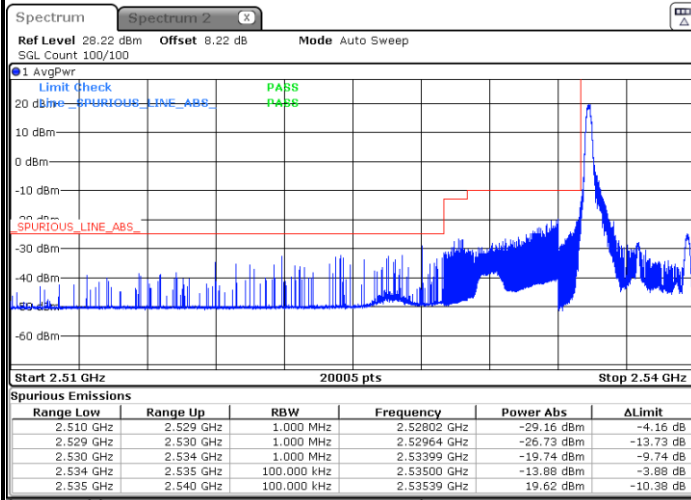


**Conducted Band Edge****LTE Band 41 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

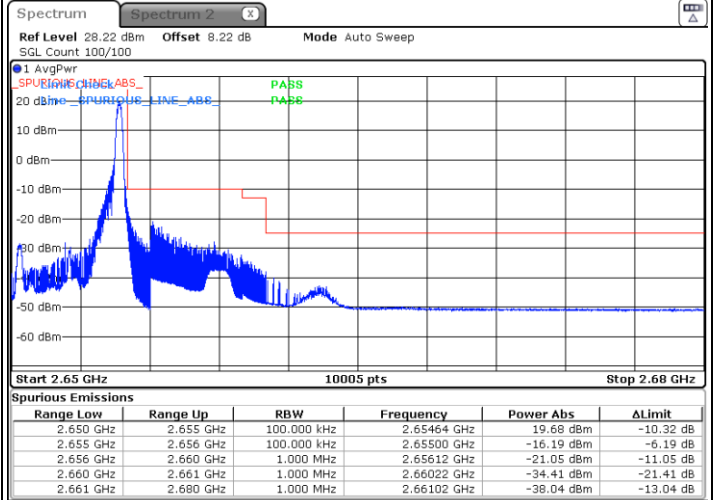


LTE Band 41 / 5MHz / 16QAM

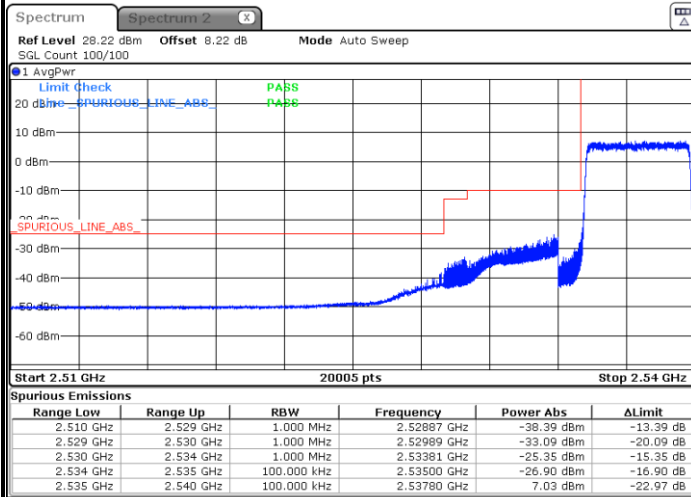
Lowest Band Edge / 1RB



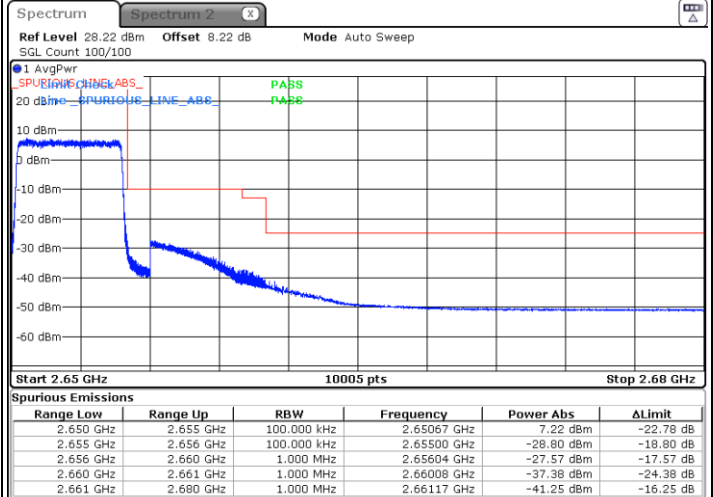
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



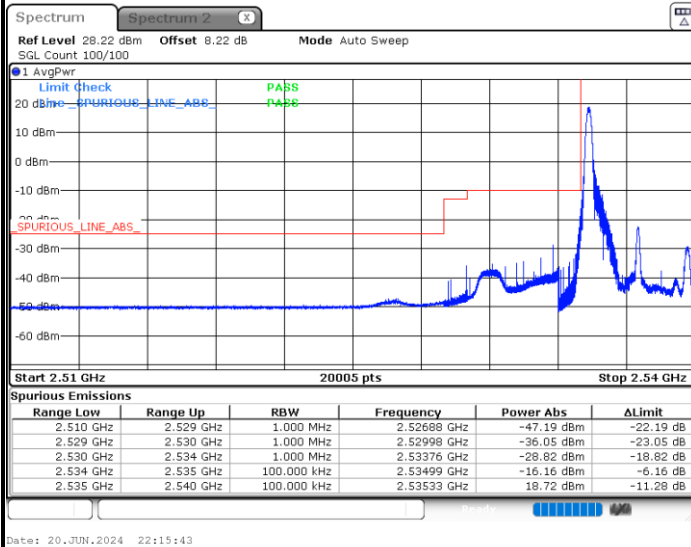
Highest Band Edge / Full RB



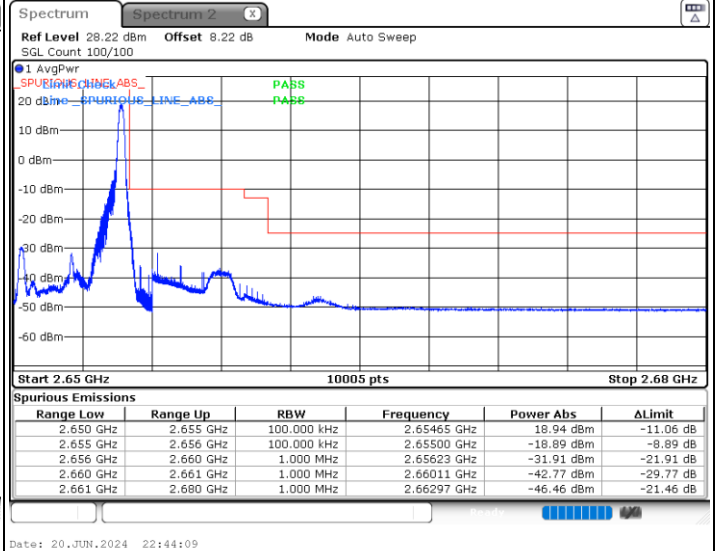


LTE Band 41 / 5MHz / 64QAM

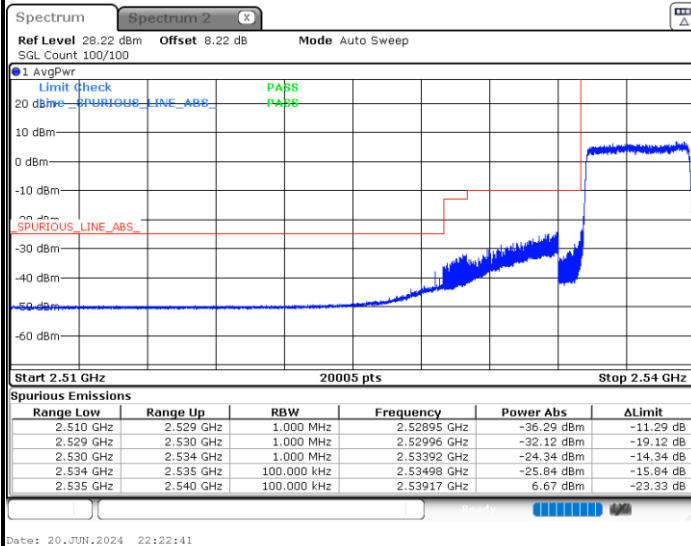
Lowest Band Edge / 1RB



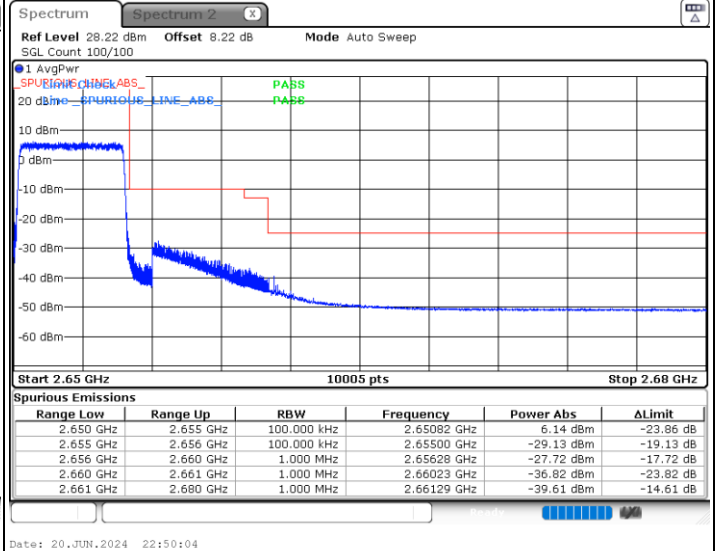
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



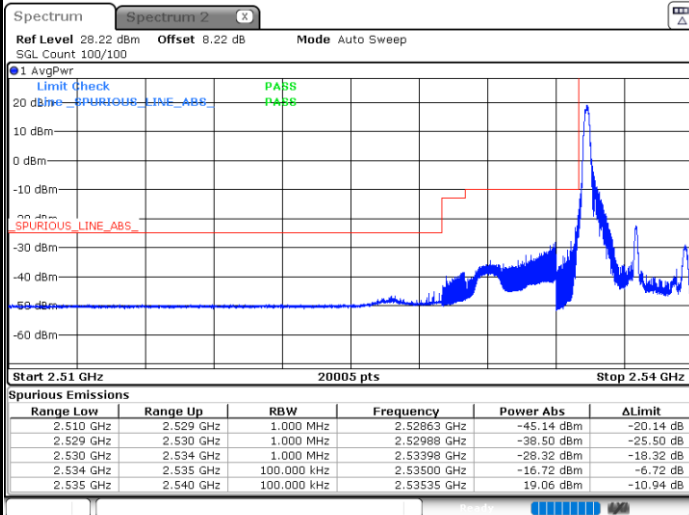
Highest Band Edge / Full RB





LTE Band 41 / 5MHz / 256QAM

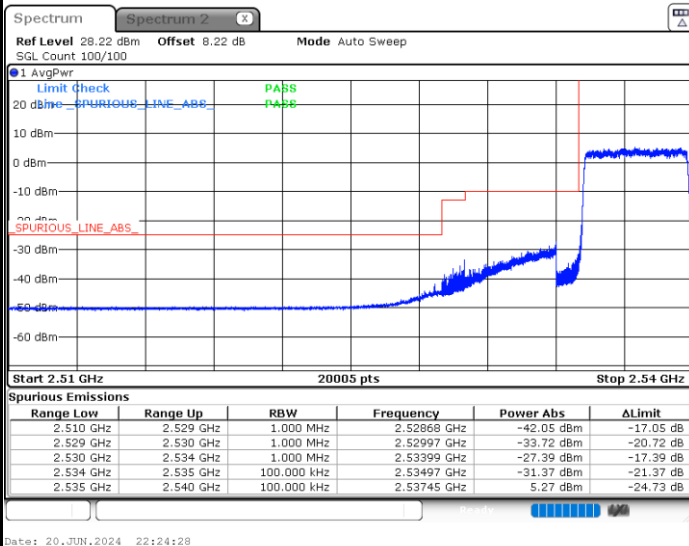
Lowest Band Edge / 1RB



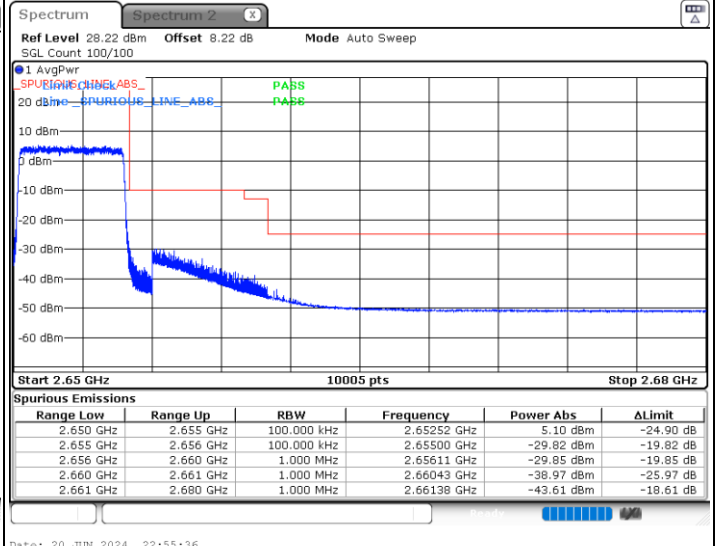
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



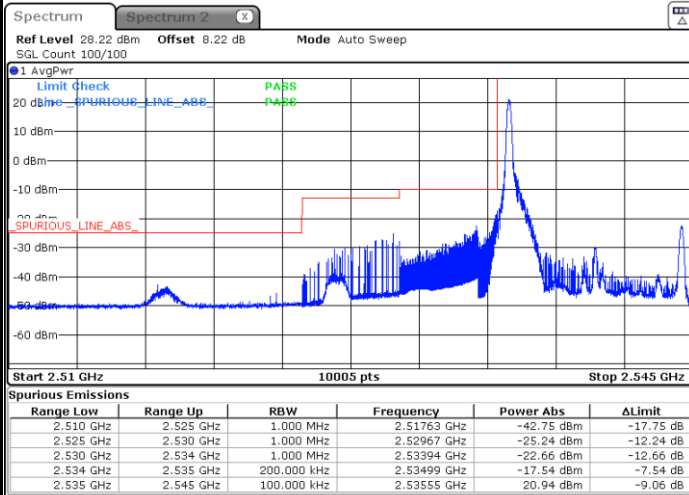
Highest Band Edge / Full RB



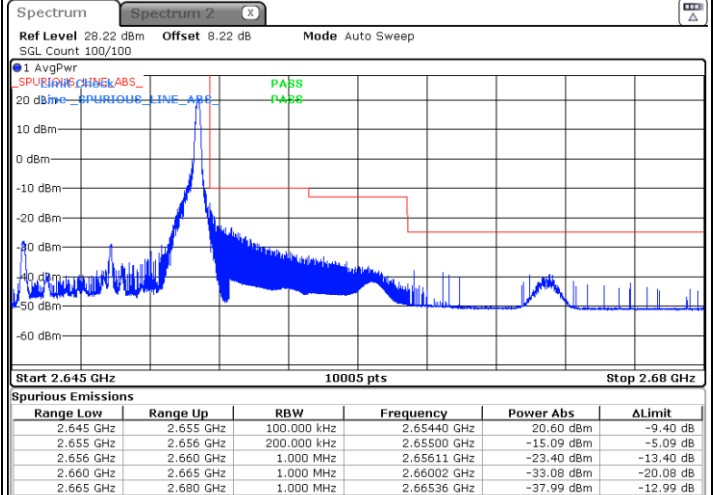


LTE Band 41 / 10MHz / QPSK

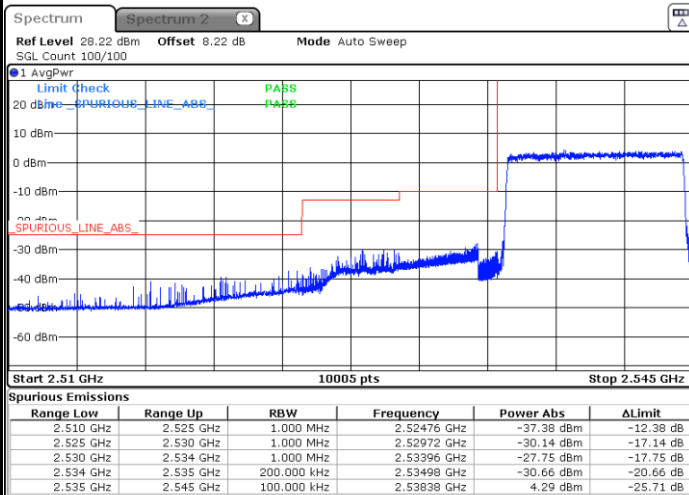
Lowest Band Edge / 1 RB



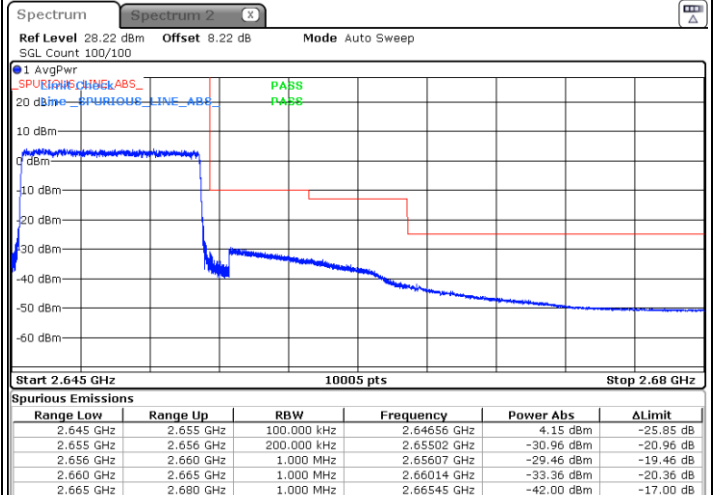
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



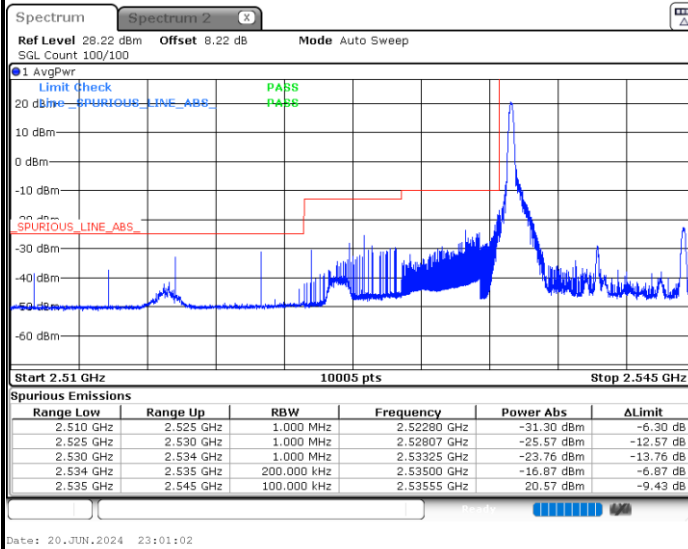
Highest Band Edge / Full RB



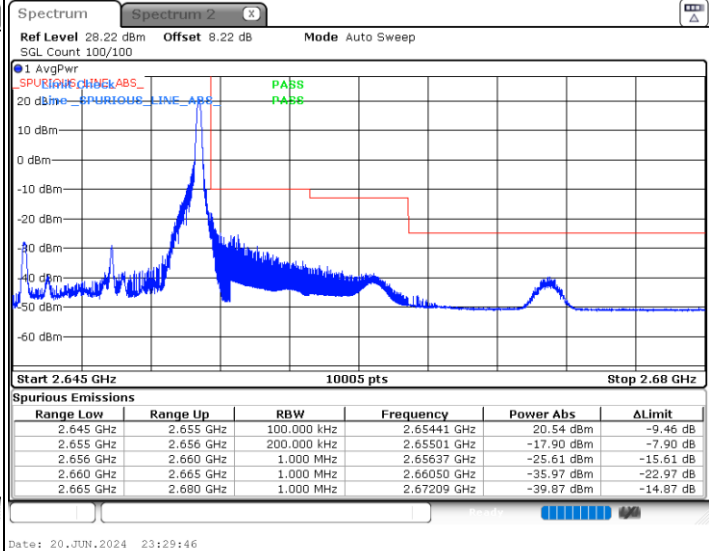


LTE Band 41 / 10MHz / 16QAM

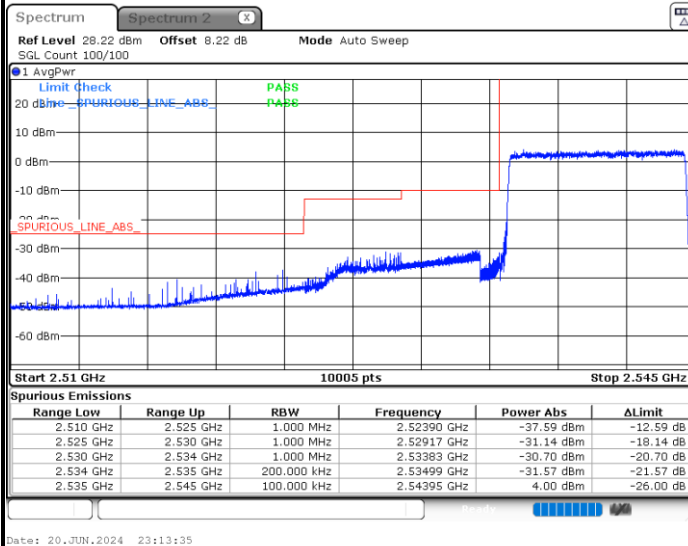
Lowest Band Edge / 1 RB



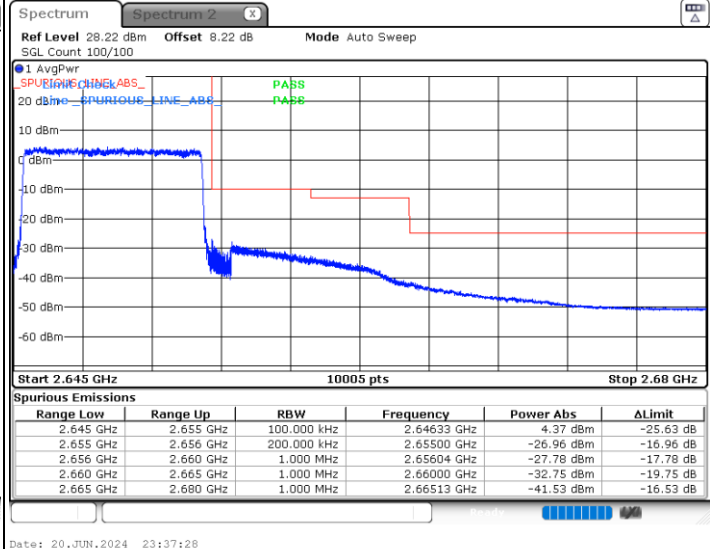
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



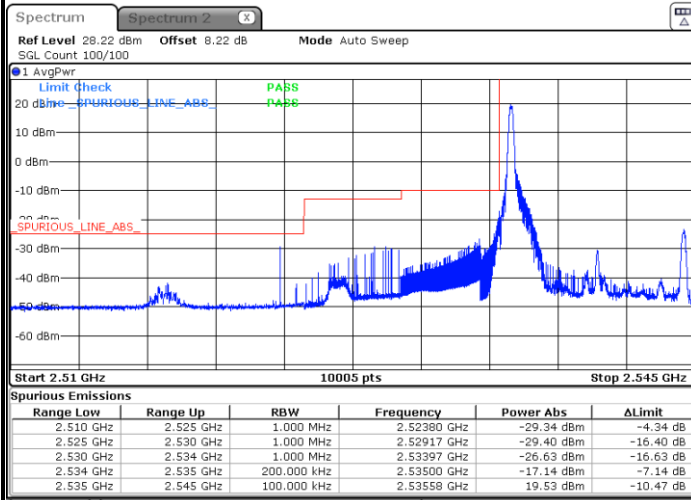
Highest Band Edge / Full RB



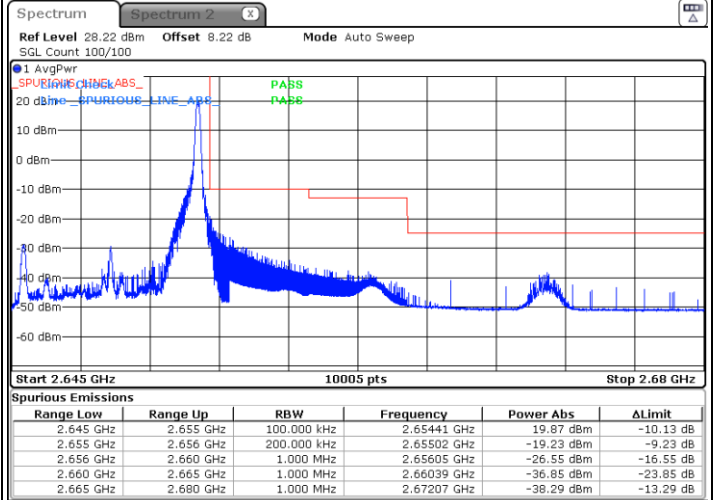


LTE Band 41 / 10MHz / 64QAM

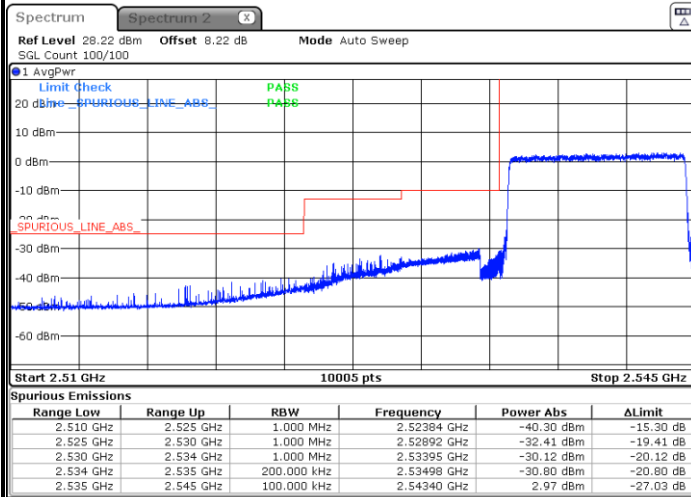
Lowest Band Edge / 1 RB



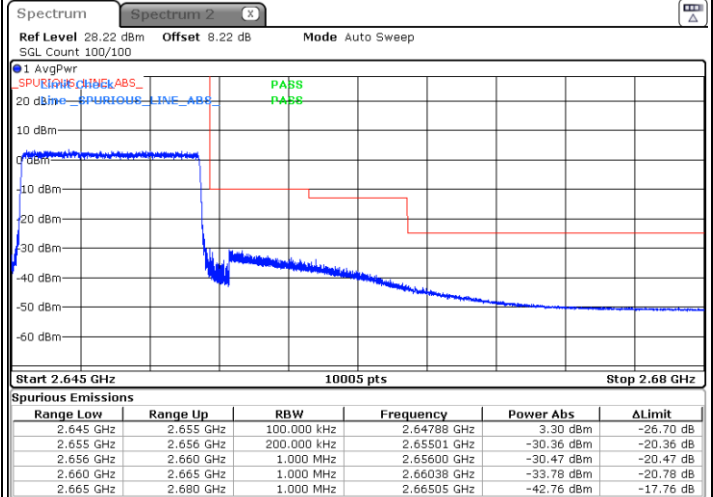
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



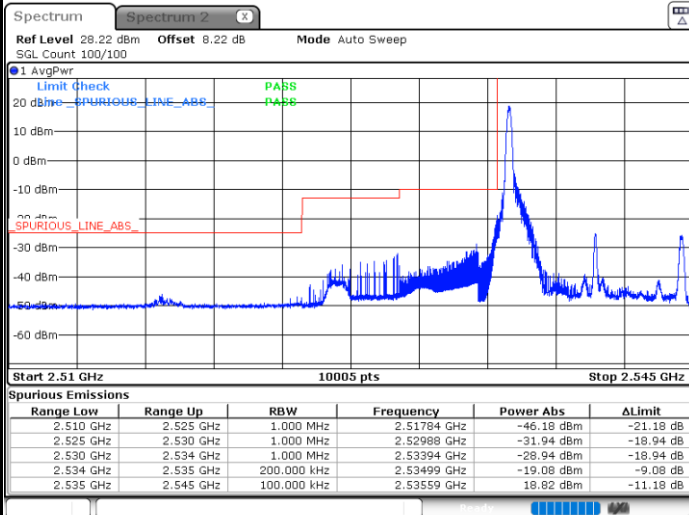
Highest Band Edge / Full RB



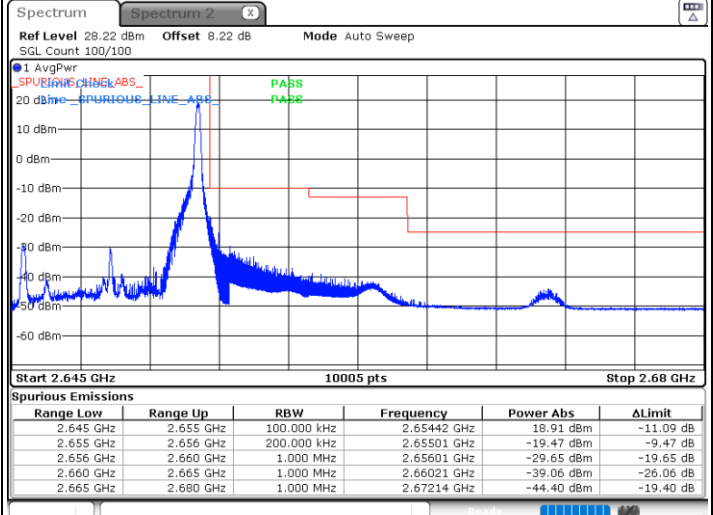


LTE Band 41 / 10MHz / 256QAM

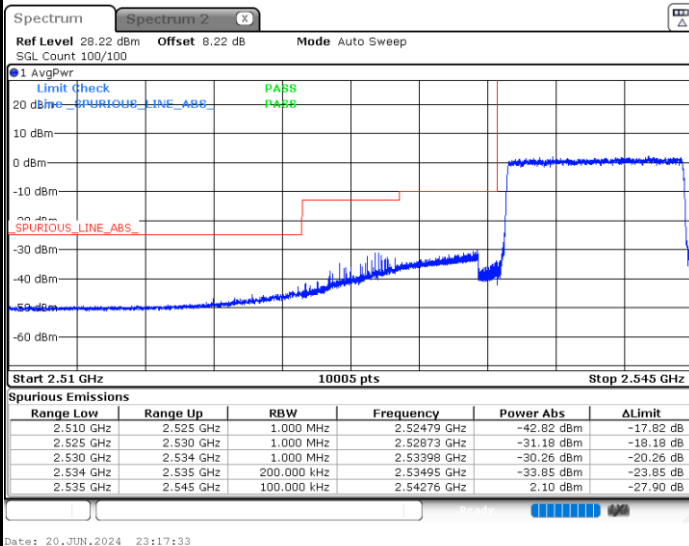
Lowest Band Edge / 1RB



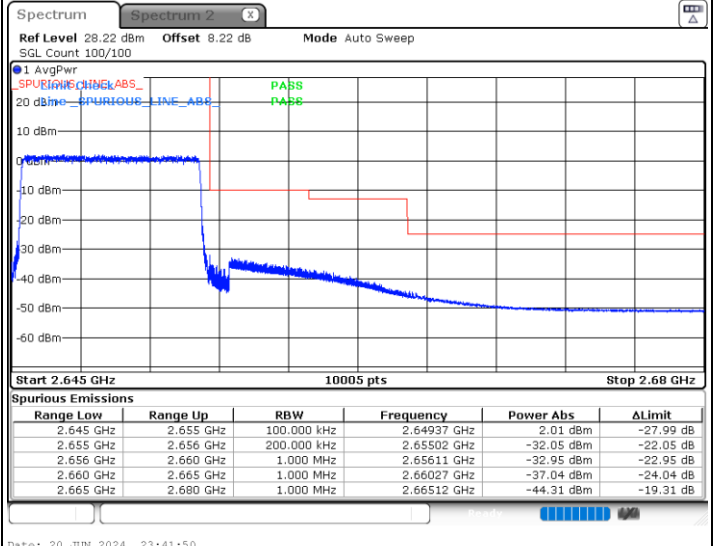
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



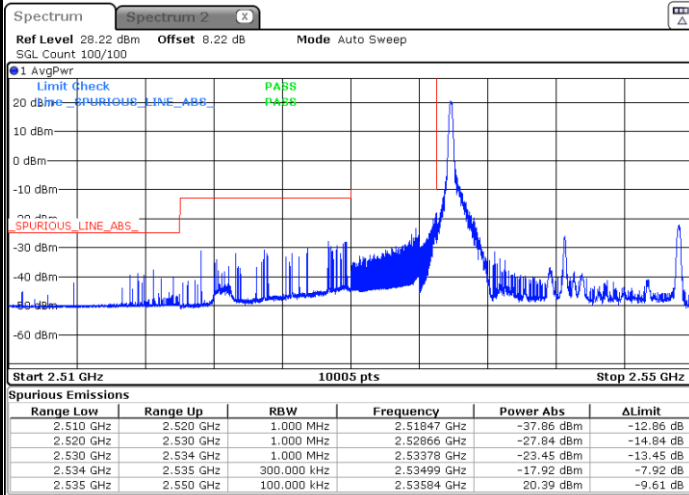
Highest Band Edge / Full RB



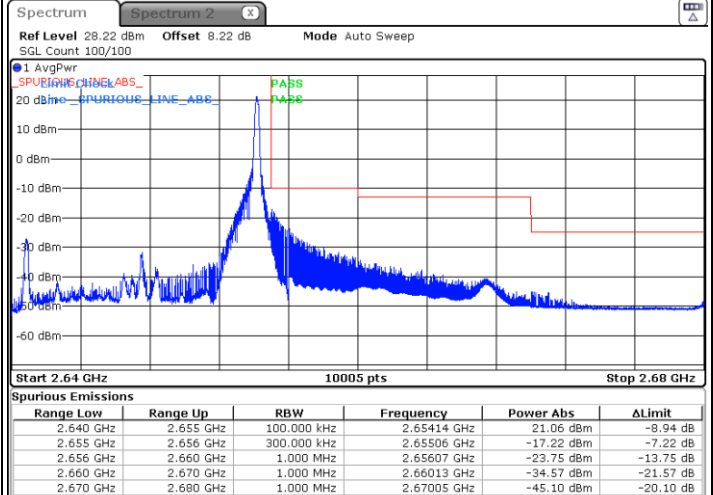


LTE Band 41 / 15MHz / QPSK

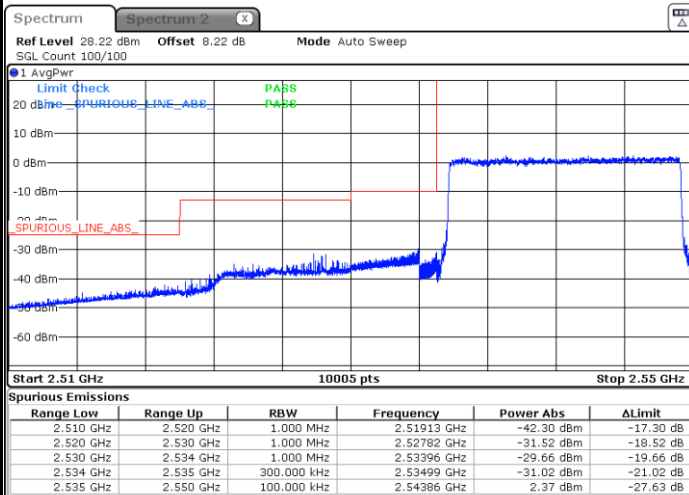
Lowest Band Edge / 1 RB



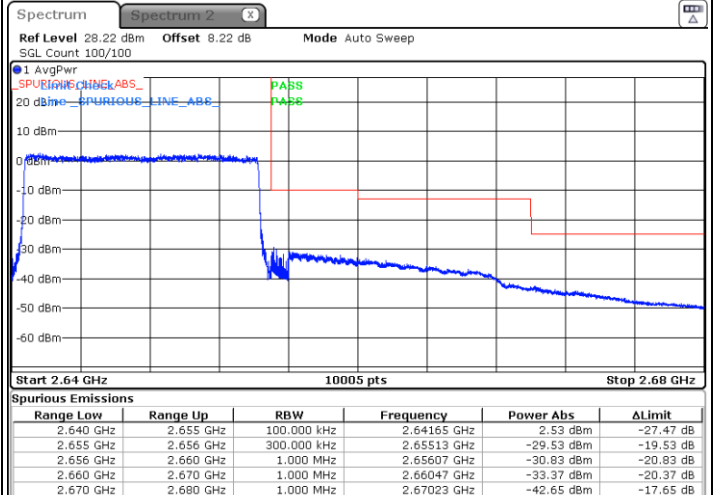
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



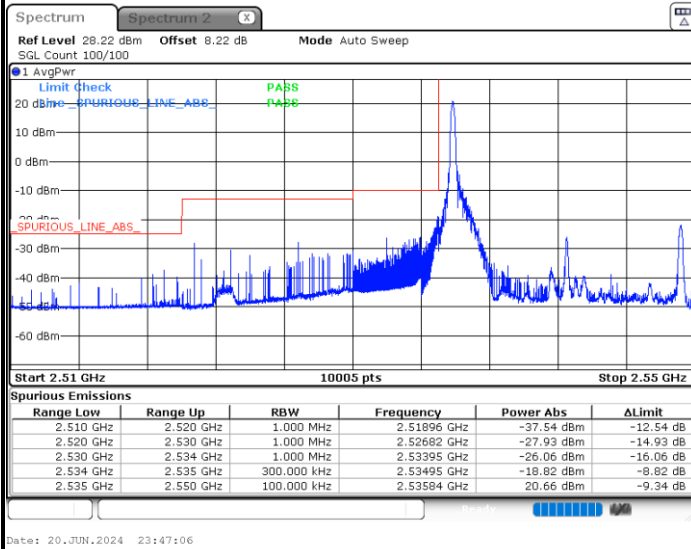
Highest Band Edge / Full RB



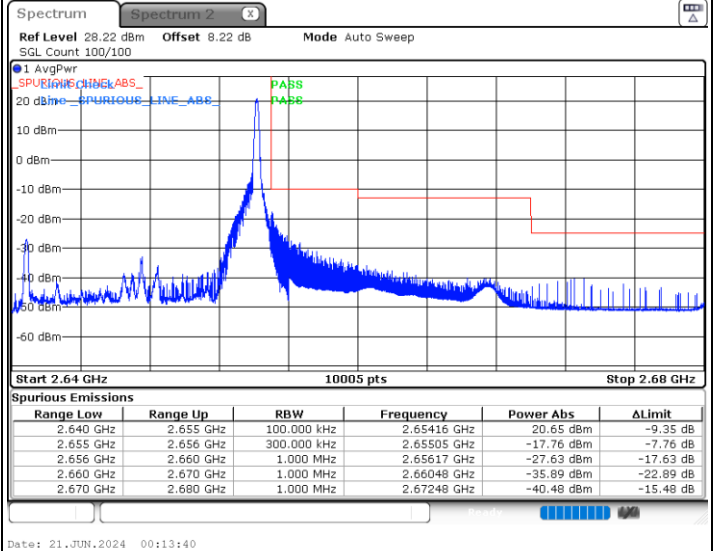


LTE Band 41 / 15MHz / 16QAM

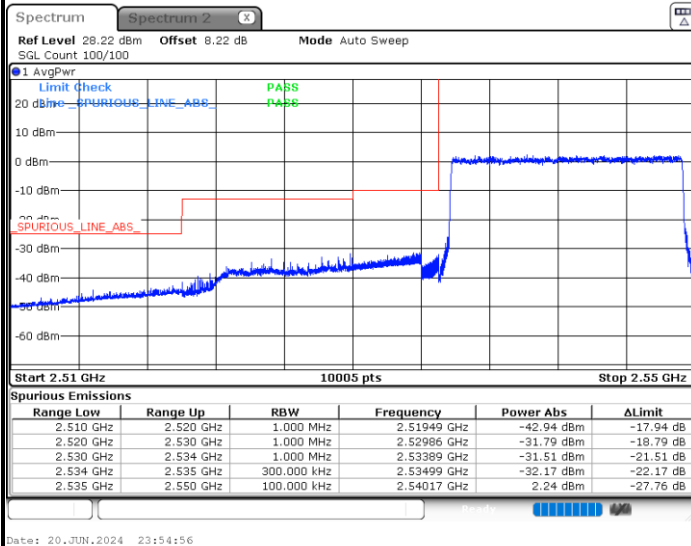
Lowest Band Edge / 1 RB



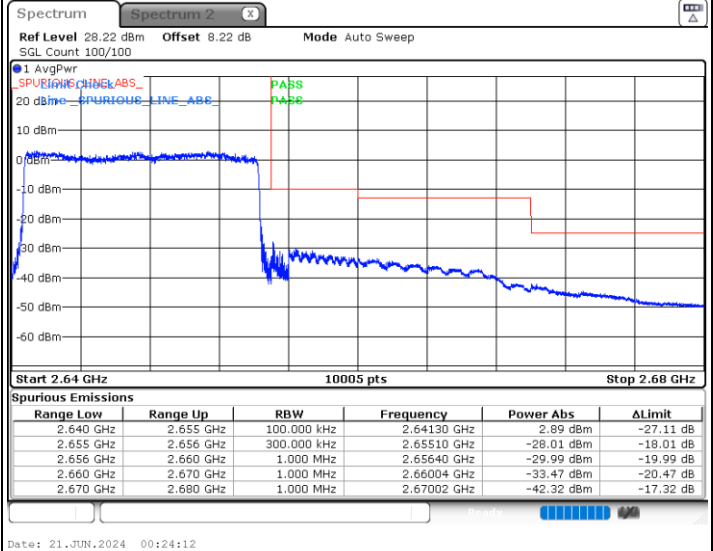
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



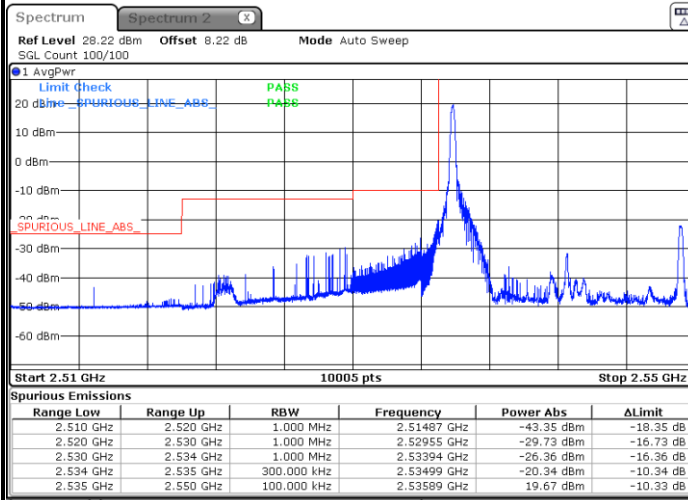
Highest Band Edge / Full RB



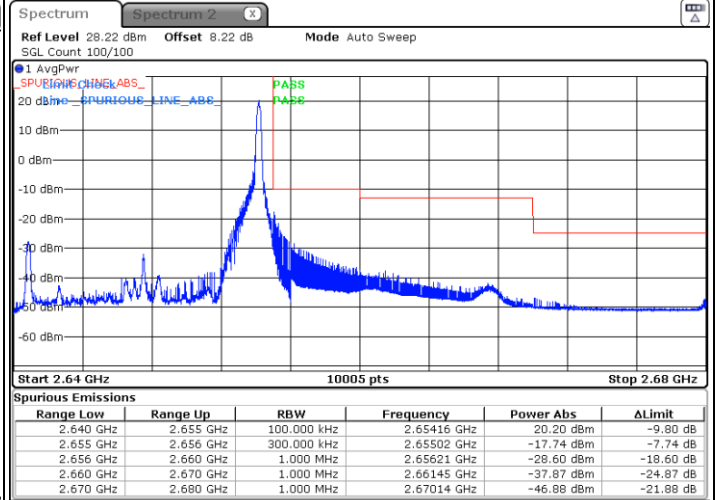


LTE Band 41 / 15MHz / 64QAM

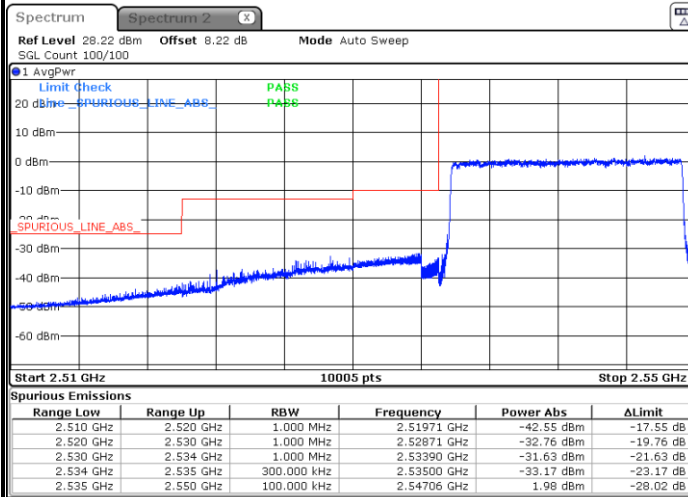
Lowest Band Edge / 1 RB



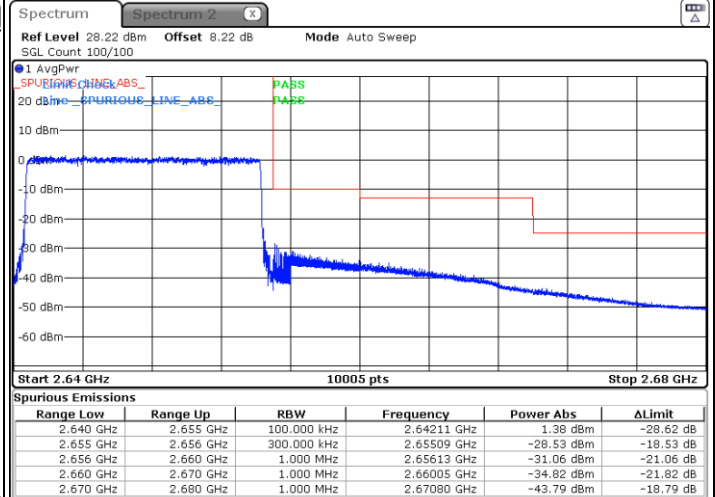
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



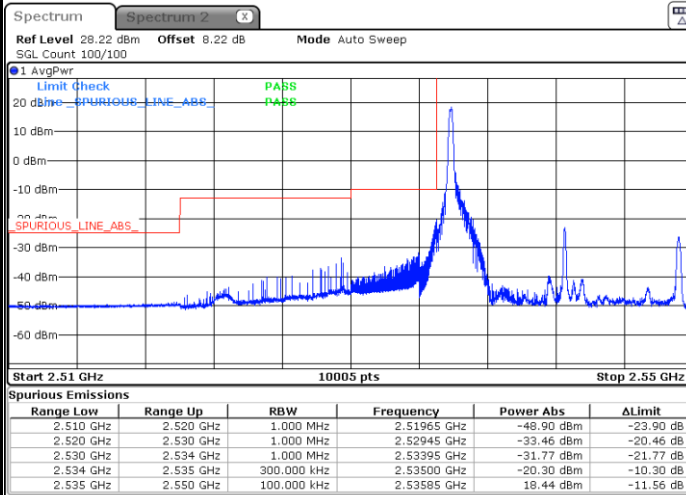
Highest Band Edge / Full RB



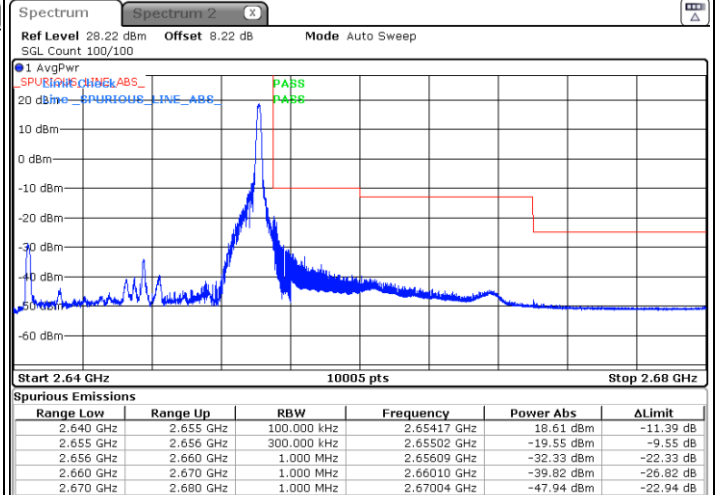


LTE Band 41 / 15MHz / 256QAM

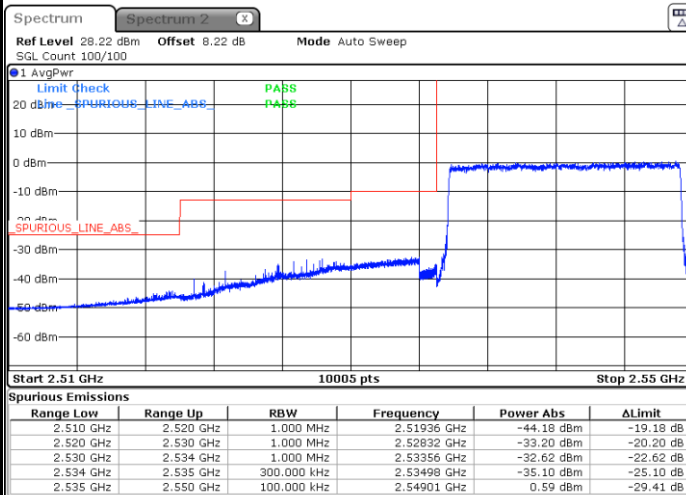
Lowest Band Edge / 1RB



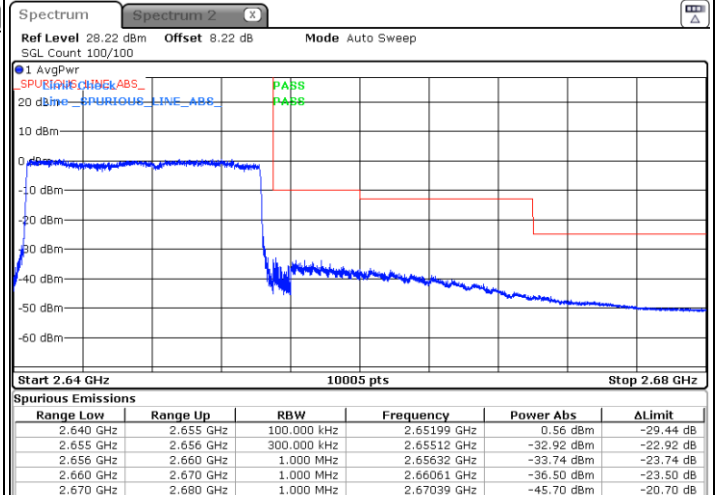
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



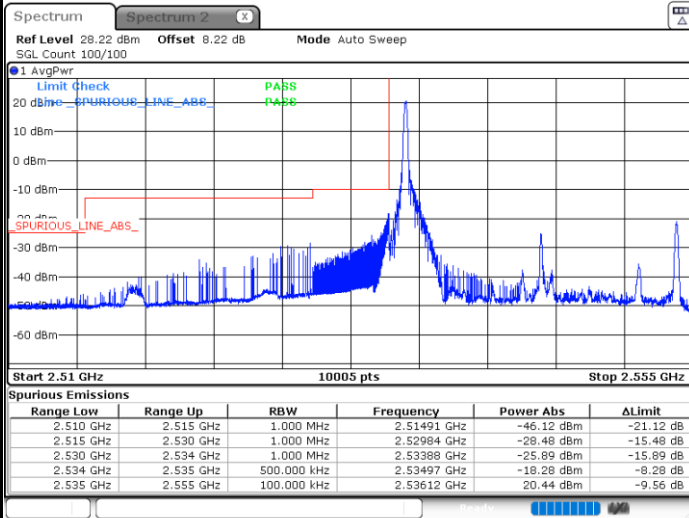
Highest Band Edge / Full RB



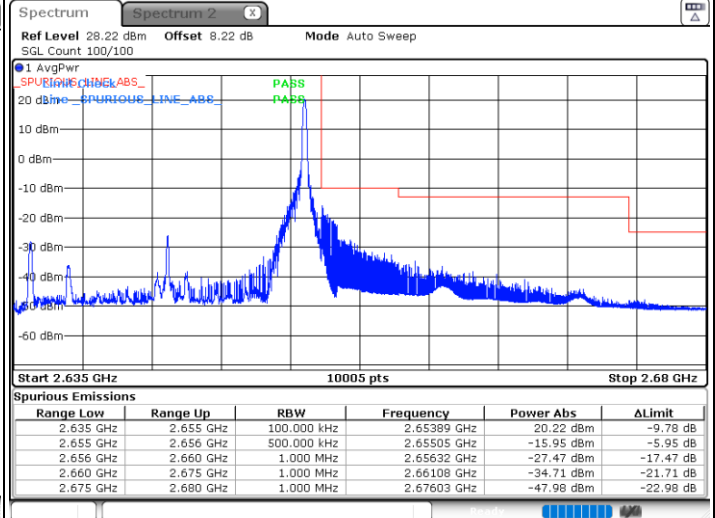


LTE Band 41 / 20MHz / QPSK

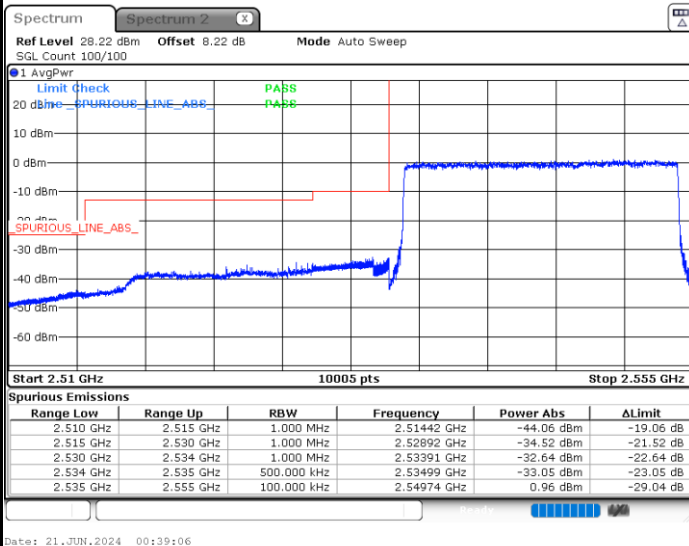
Lowest Band Edge / 1 RB



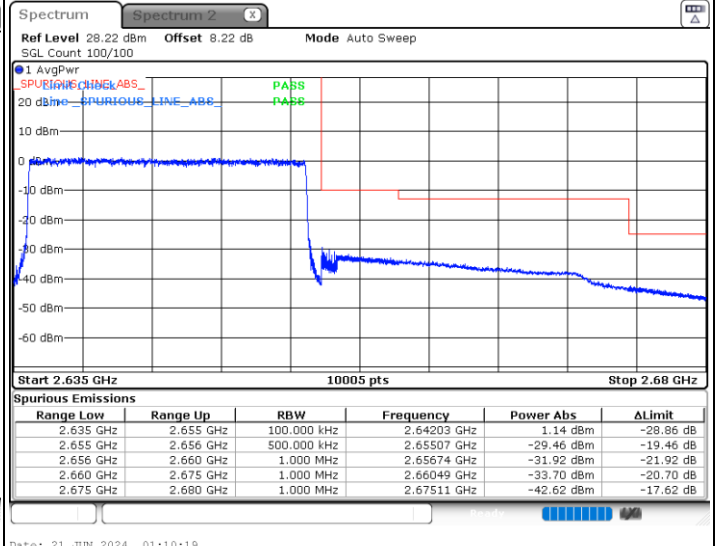
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



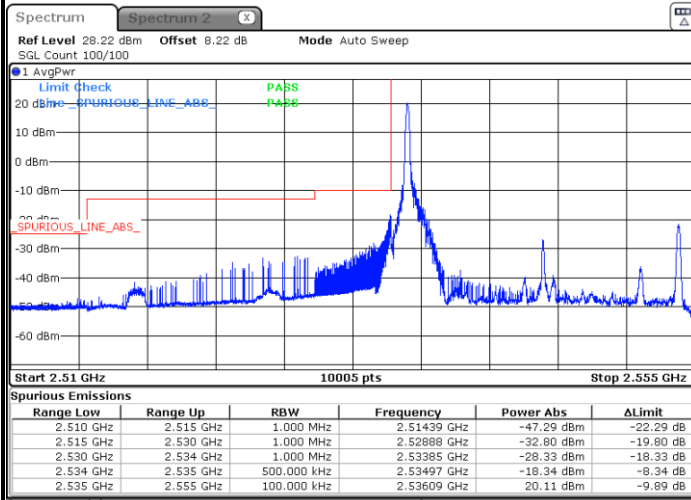
Highest Band Edge / Full RB



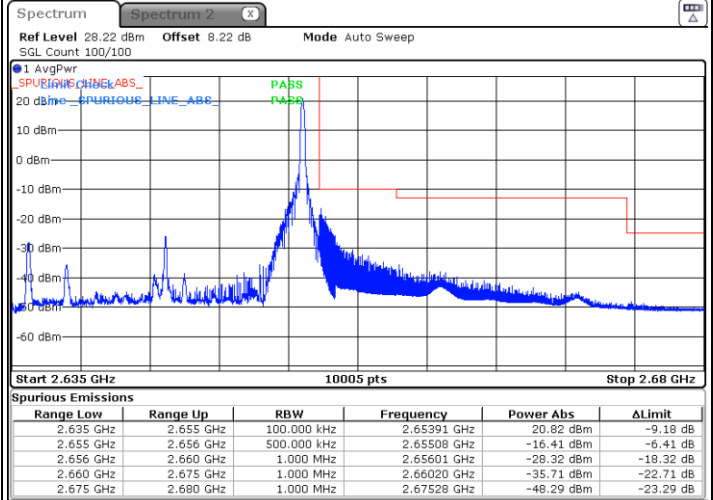


LTE Band 41 / 20MHz / 16QAM

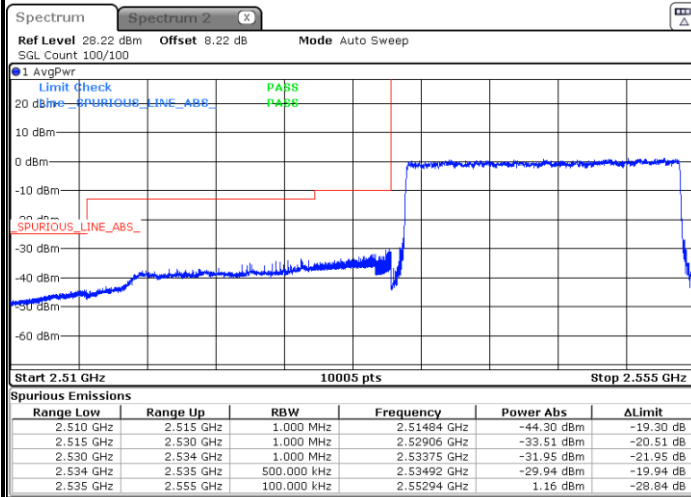
Lowest Band Edge / 1 RB



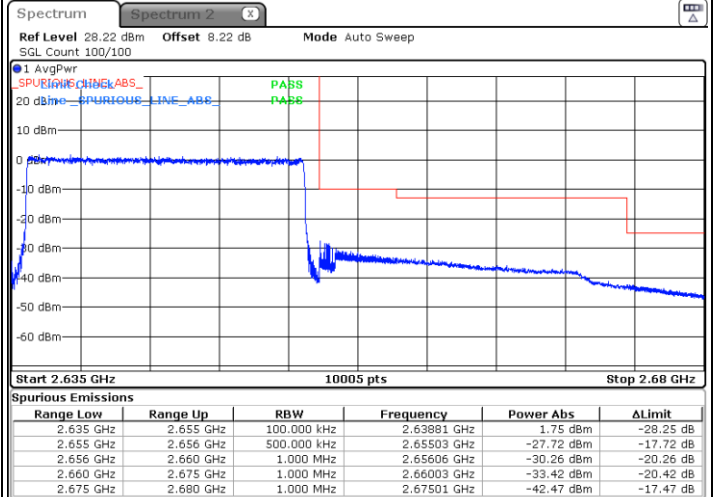
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



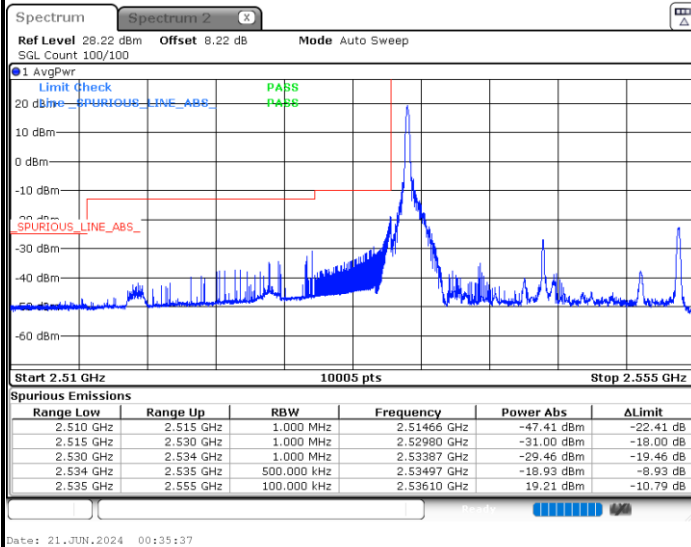
Highest Band Edge / Full RB



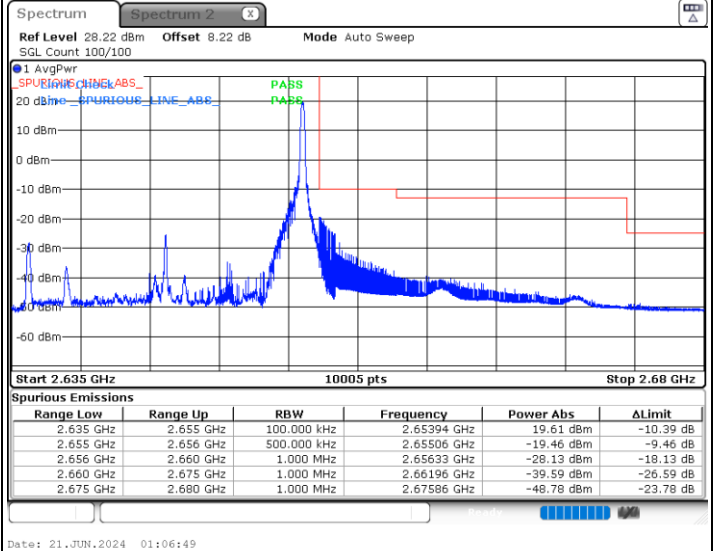


LTE Band 41 / 20MHz / 64QAM

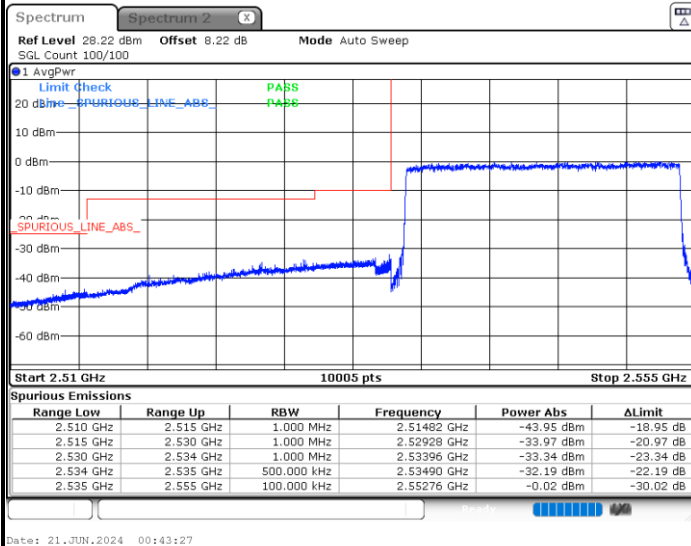
Lowest Band Edge / 1 RB



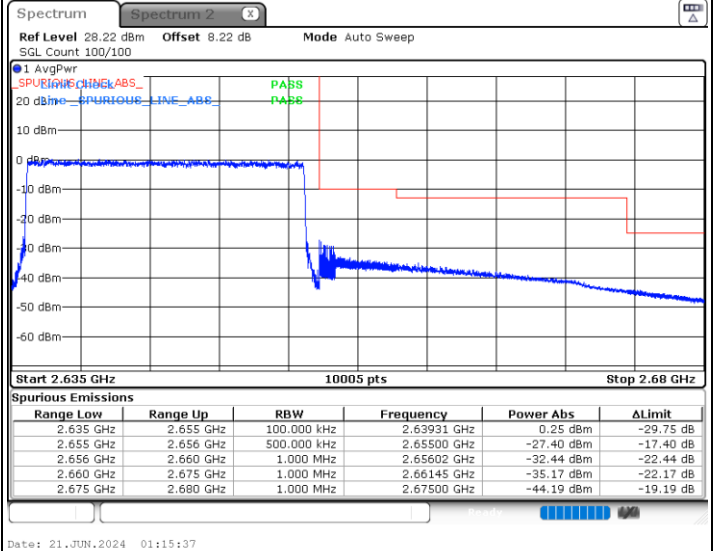
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



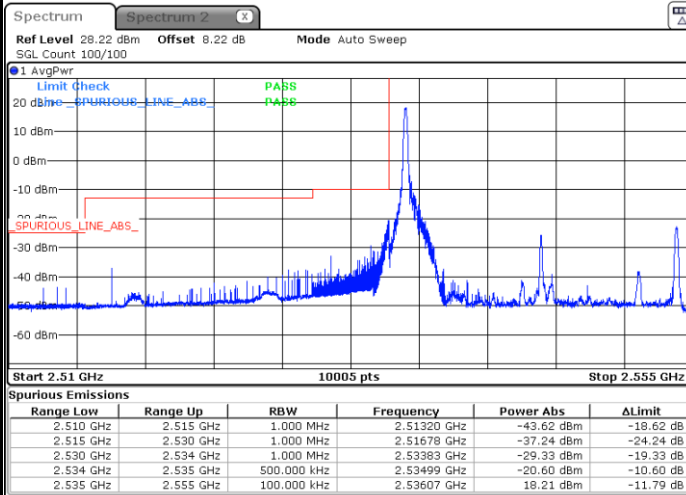
Highest Band Edge / Full RB



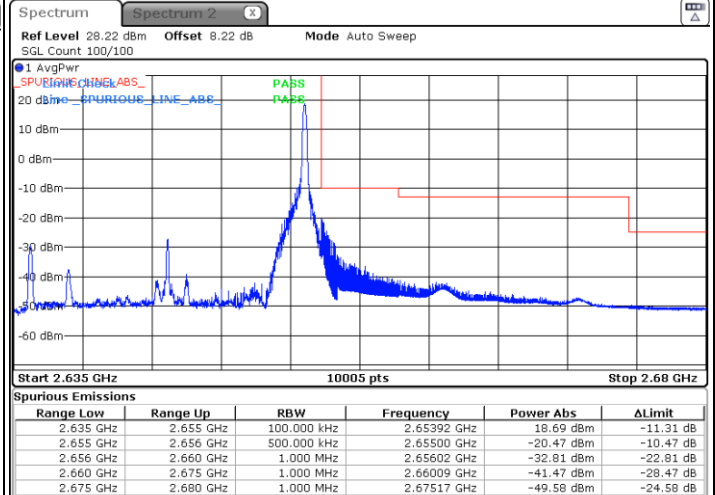


LTE Band 41 / 20MHz / 256QAM

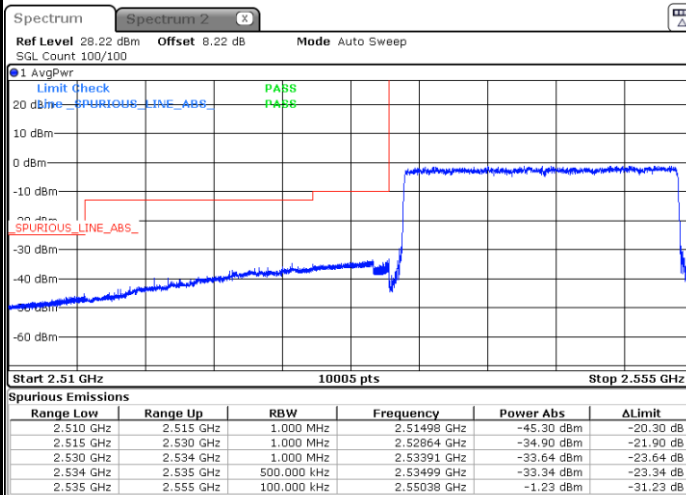
Lowest Band Edge / 1RB



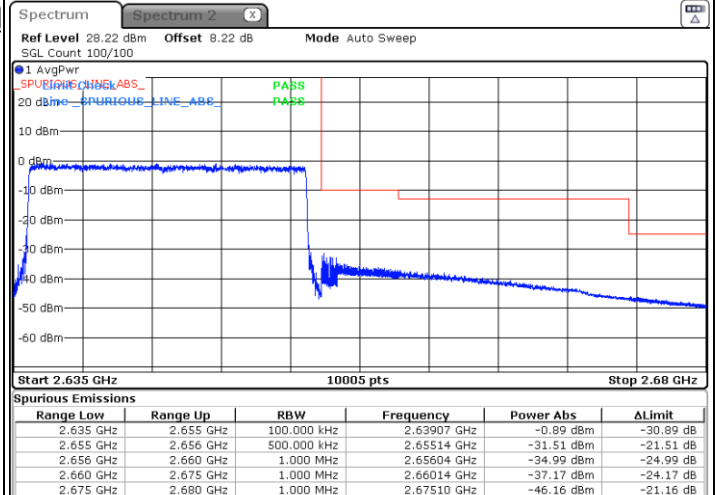
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

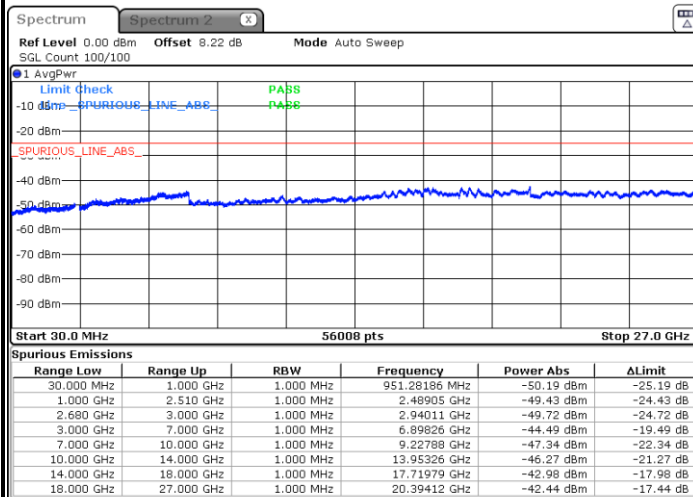




Conducted Spurious Emission

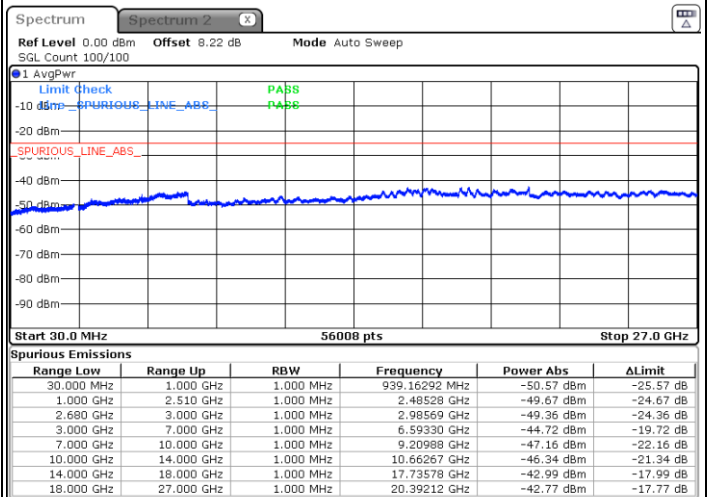
LTE Band 41 / 5MHz

Lowest Channel / QPSK



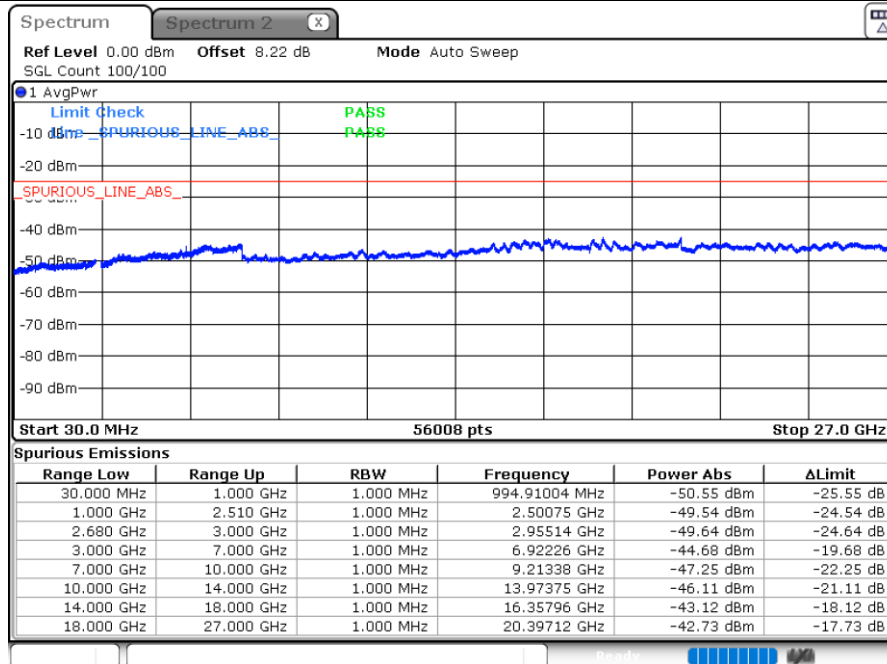
Date: 20.JUN.2024 22:27:44

Middle Channel / QPSK



Date: 20.JUN.2024 22:32:27

Highest Channel / QPSK

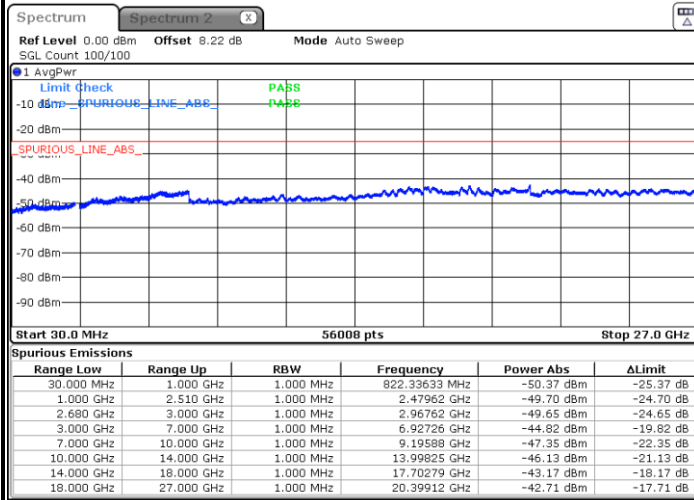


Date: 20.JUN.2024 22:41:22



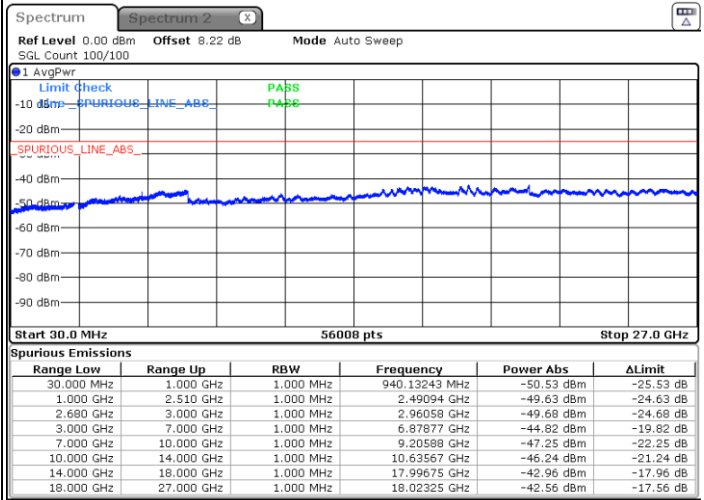
LTE Band 41 / 10MHz

Lowest Channel / QPSK



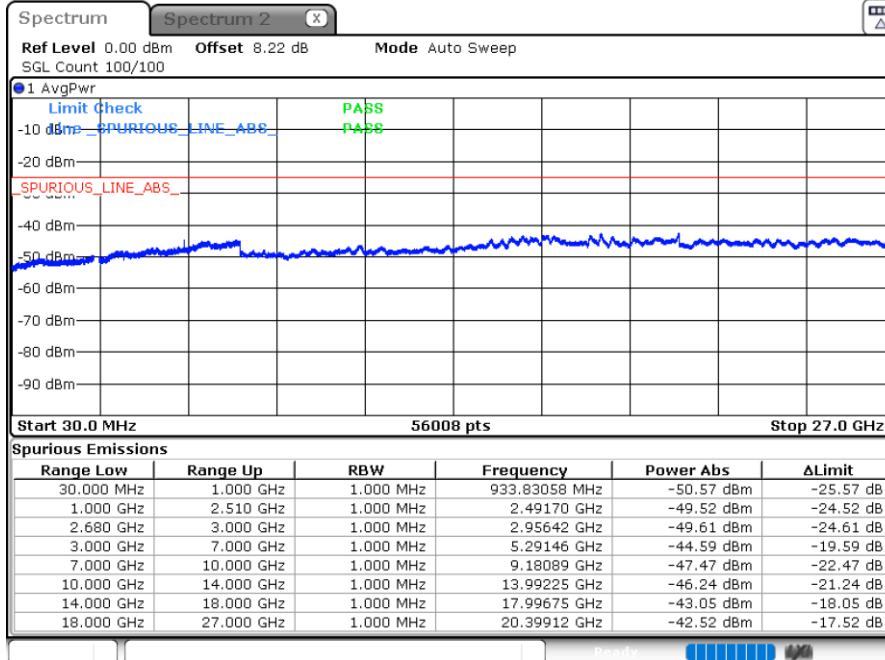
Date: 20.JUN.2024 23:19:53

Middle Channel / QPSK



Date: 20.JUN.2024 23:23:09

Highest Channel / QPSK

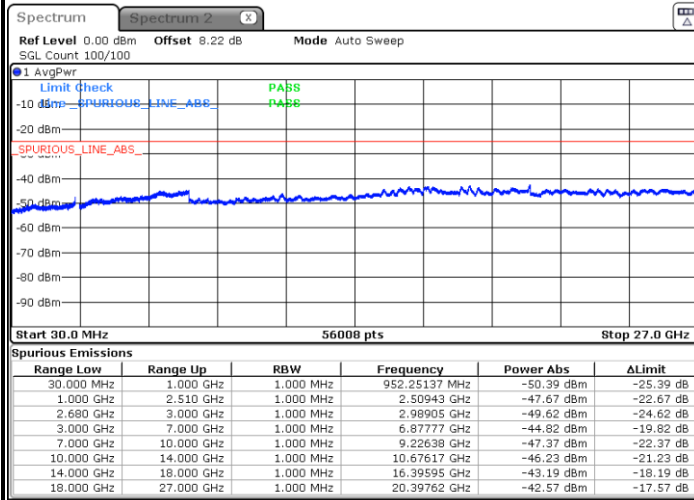


Date: 20.JUN.2024 23:25:29



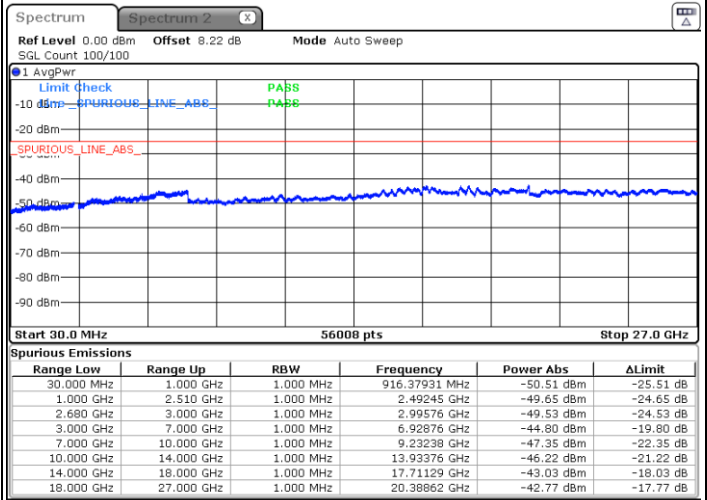
LTE Band 41 / 15MHz

Lowest Channel / QPSK



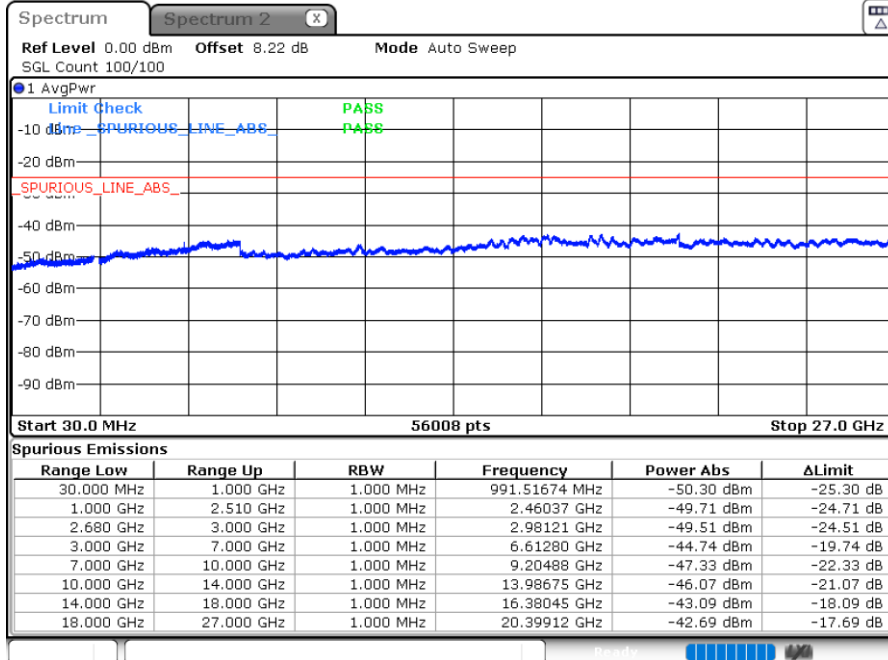
Date: 21.JUN.2024 00:02:38

Middle Channel / QPSK



Date: 21.JUN.2024 00:06:59

Highest Channel / QPSK

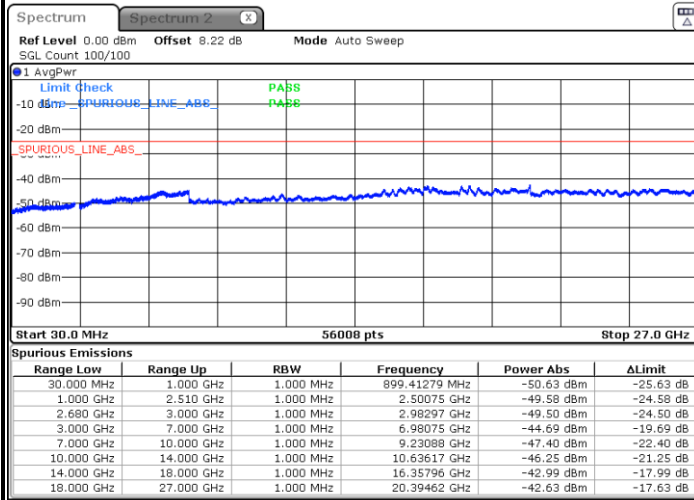


Date: 21.JUN.2024 00:09:19



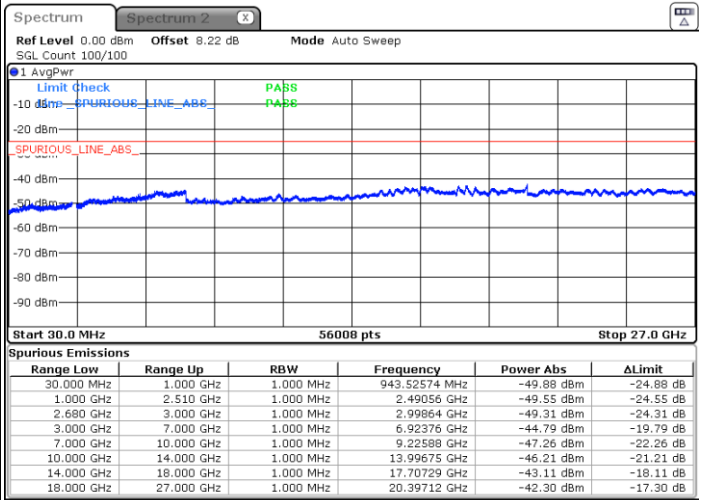
LTE Band 41 / 20MHz

Lowest Channel / QPSK



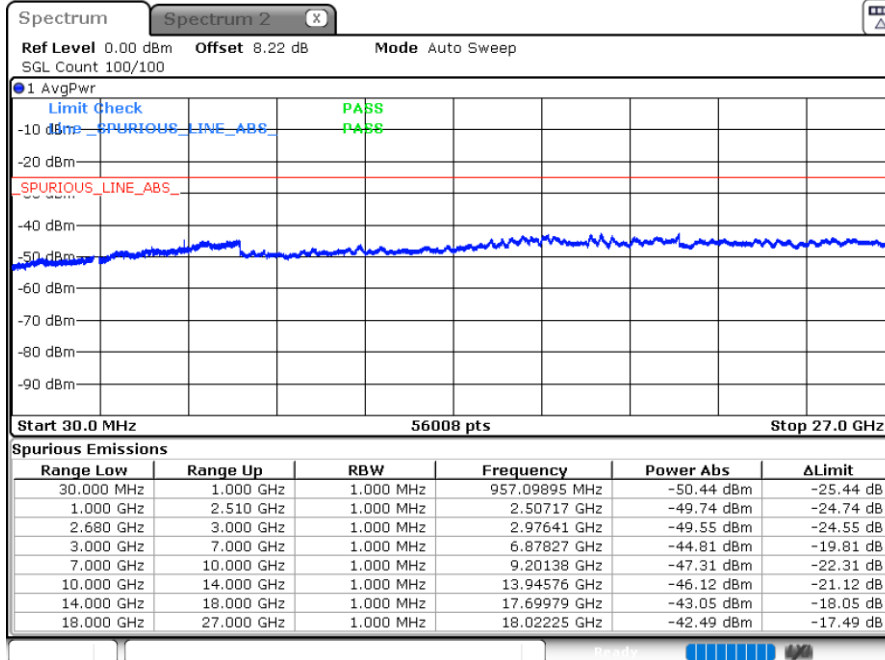
Date: 21.JUN.2024 00:47:34

Middle Channel / QPSK



Date: 21.JUN.2024 00:49:57

Highest Channel / QPSK



Date: 21.JUN.2024 00:52:17

**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	0.0013	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0034	
20	Normal Voltage	0.0021	
20	Minimum Voltage	0.0019	

Note:

1. Normal Voltage = 5V ; Minimum Voltage =4.6V. ; Maximum Voltage =5.5V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Bruce	Temperature :	23~25°C
		Relative Humidity :	41~42%

LTE Band 7 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5008	-61.71	-25	-36.71	-71.92	3.03	13.24	H
	7500	-63.08	-25	-38.08	-72.53	3.56	13.01	H
	10006	-61.30	-25	-36.30	-70.82	3.92	13.44	H
	12512	-58.76	-25	-33.76	-68.68	4.44	14.36	H
	15004	-59.26	-25	-34.26	-69.63	4.77	15.14	H
	5008	-62.57	-25	-37.57	-72.78	3.03	13.24	V
	7500	-63.29	-25	-38.29	-72.74	3.56	13.01	V
	10006	-61.65	-25	-36.65	-71.17	3.92	13.44	V
	12512	-59.65	-25	-34.65	-69.57	4.44	14.36	V
	15004	-56.35	-25	-31.35	-66.72	4.77	15.14	V
Middle	5050	-63.33	-25	-38.33	-73.54	3.03	13.24	H
	7584	-62.97	-25	-37.97	-72.42	3.56	13.01	H
	10104	-61.18	-25	-36.18	-70.70	3.92	13.44	H
	5050	-62.76	-25	-37.76	-72.97	3.03	13.24	V
	7584	-62.97	-25	-37.97	-72.42	3.56	13.01	V
	10104	-61.93	-25	-36.93	-71.45	3.92	13.44	V
Highest	5106	-64.10	-25	-39.10	-74.31	3.03	13.24	H
	7654	-62.93	-25	-37.93	-72.38	3.56	13.01	H
	10202	-61.54	-25	-36.54	-71.06	3.92	13.44	H
	5106	-64.06	-25	-39.06	-74.27	3.03	13.24	V
	7654	-62.25	-25	-37.25	-71.70	3.56	13.01	V
	10202	-61.78	-25	-36.78	-71.30	3.92	13.44	V



LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-68.04	-13	-55.04	-75.01	1.58	10.70	H
	2096	-52.13	-13	-39.13	-60.38	2.102	12.50	H
	2800	-56.73	-13	-43.73	-65.62	2.856	13.90	H
	3496	-56.53	-13	-43.53	-64.29	3.093	13.00	H
	1400	-67.67	-13	-54.67	-74.64	1.58	10.70	V
	2096	-50.61	-13	-37.61	-58.86	2.10	12.50	V
	2800	-59.05	-13	-46.05	-67.94	2.86	13.90	V
	3496	-58.74	-13	-45.74	-66.50	3.09	13.00	V
Middle	1408	-68.43	-13	-55.43	-75.40	1.58	10.70	H
	2112	-46.38	-13	-33.38	-54.63	2.102	12.50	H
	2816	-56.26	-13	-43.26	-65.15	2.856	13.90	H
	1408	-67.67	-13	-54.67	-74.64	1.58	10.70	V
	2112	-52.04	-13	-39.04	-60.29	2.10	12.50	V
	2816	-59.44	-13	-46.44	-68.33	2.86	13.90	V
Highest	1416	-67.60	-13	-54.60	-74.57	1.58	10.70	H
	2120	-44.13	-13	-31.13	-52.38	2.102	12.50	H
	2824	-53.84	-13	-40.84	-62.73	2.856	13.90	H
	3536	-51.46	-13	-38.46	-59.22	3.093	13.00	H
	1416	-66.84	-13	-53.84	-73.81	1.58	10.70	V
	2120	-50.89	-13	-37.89	-59.14	2.10	12.50	V
	2824	-56.30	-13	-43.30	-65.19	2.86	13.90	V
	3536	-55.13	-13	-42.13	-62.89	3.09	13.00	V

LTE Band 41 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4994	-63.74	-25	-38.74	-73.95	3.03	13.24	H
	7486	-63.41	-25	-38.41	-72.86	3.56	13.01	H
	9992	-61.54	-25	-36.54	-71.06	3.92	13.44	H
	4994	-64.08	-25	-39.08	-74.29	3.03	13.24	V
	7486	-63.07	-25	-38.07	-72.52	3.56	13.01	V
	9992	-61.73	-25	-36.73	-71.25	3.92	13.44	V
Middle	5162	-64.09	-25	-39.09	-74.30	3.03	13.24	H
	7752	-62.83	-25	-37.83	-72.28	3.56	13.01	H
	10342	-61.40	-25	-36.40	-70.92	3.92	13.44	H
	5162	-64.16	-25	-39.16	-74.37	3.03	13.24	V
	7752	-62.36	-25	-37.36	-71.81	3.56	13.01	V
	10342	-61.71	-25	-36.71	-71.23	3.92	13.44	V
Highest	5344	-64.63	-25	-39.63	-74.84	3.03	13.24	H
	8018	-63.03	-25	-38.03	-72.48	3.56	13.01	H
	10678	-60.88	-25	-35.88	-70.40	3.92	13.44	H
	5344	-65.05	-25	-40.05	-75.26	3.03	13.24	V
	8018	-63.01	-25	-38.01	-72.46	3.56	13.01	V
	10678	-61.10	-25	-36.10	-70.62	3.92	13.44	V

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