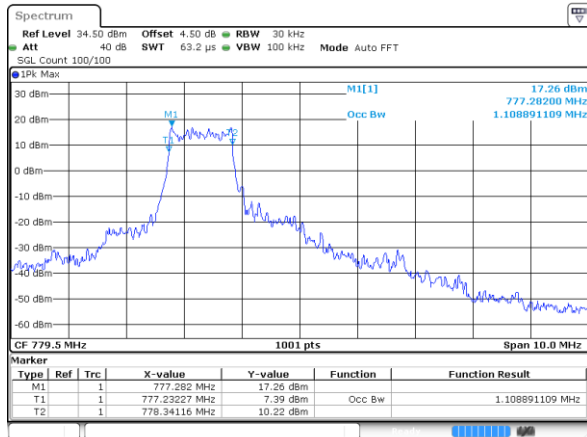


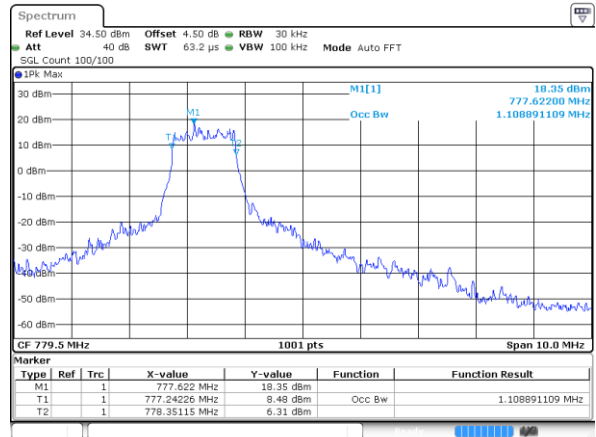


LTE Band 13

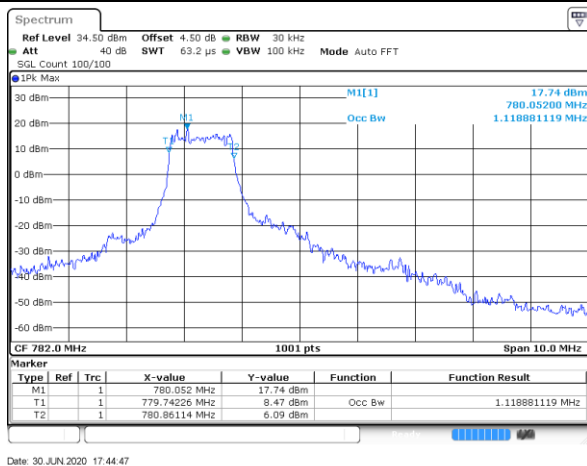
Lowest Channel / 5MHz / QPSK



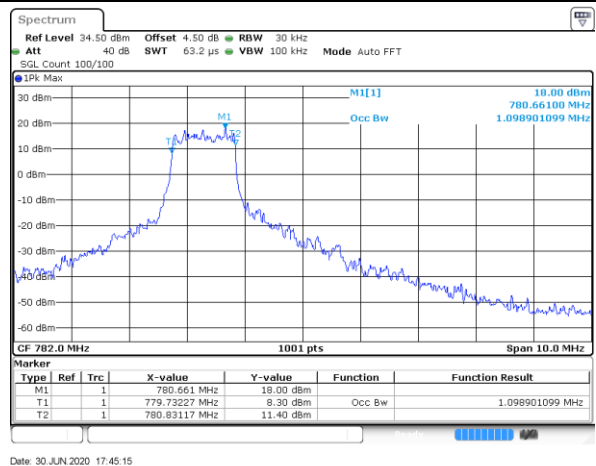
Lowest Channel / 5MHz / 16QAM



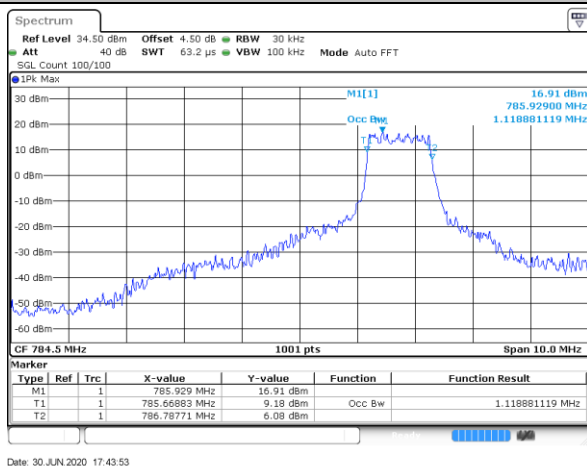
Middle Channel / 5MHz / QPSK



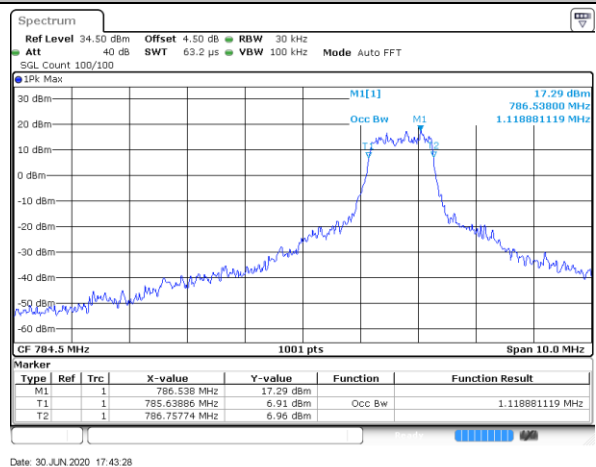
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

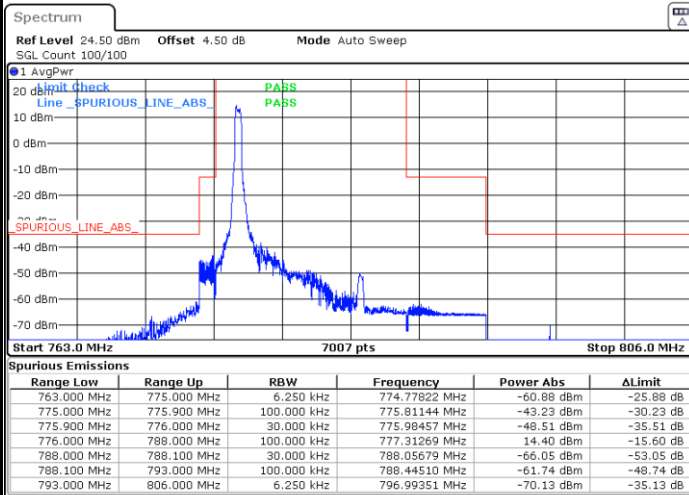




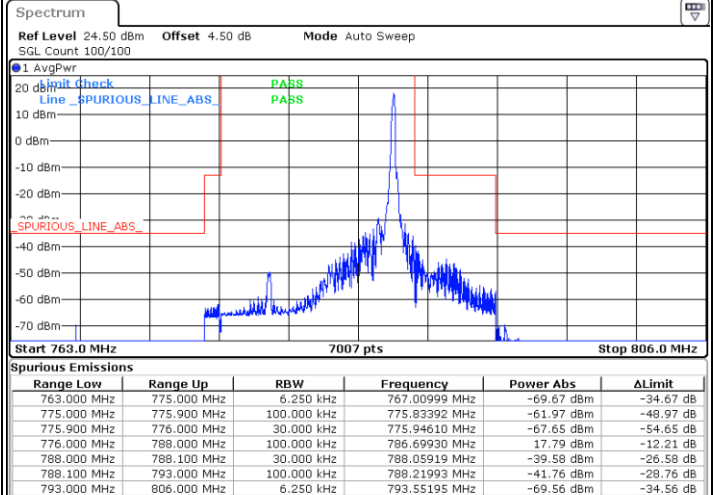
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

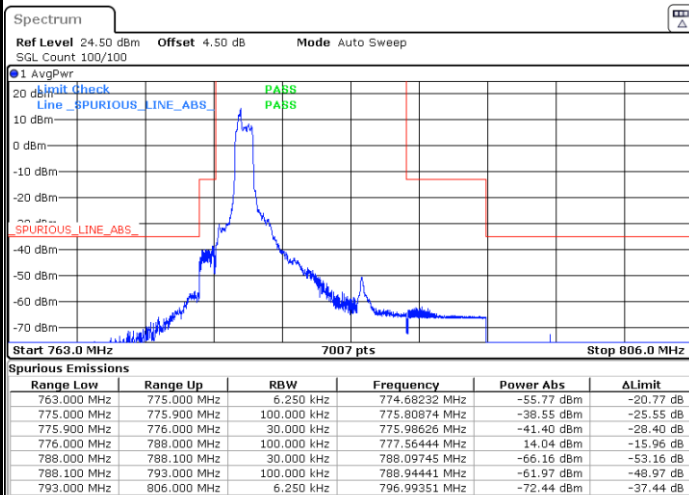
Lowest Band Edge / 1 RB



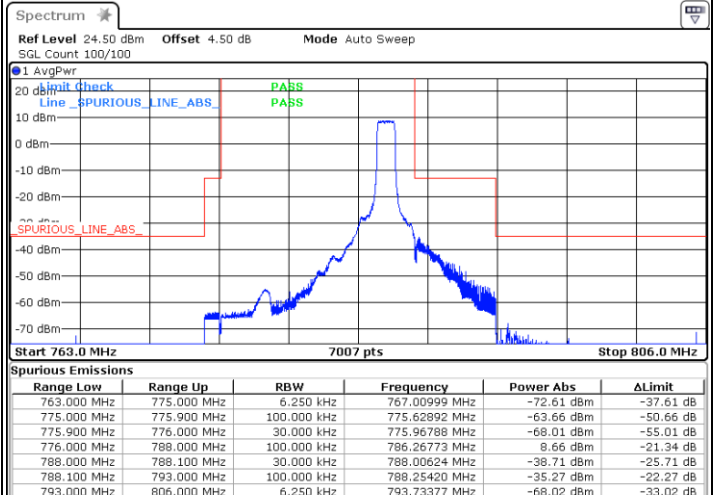
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



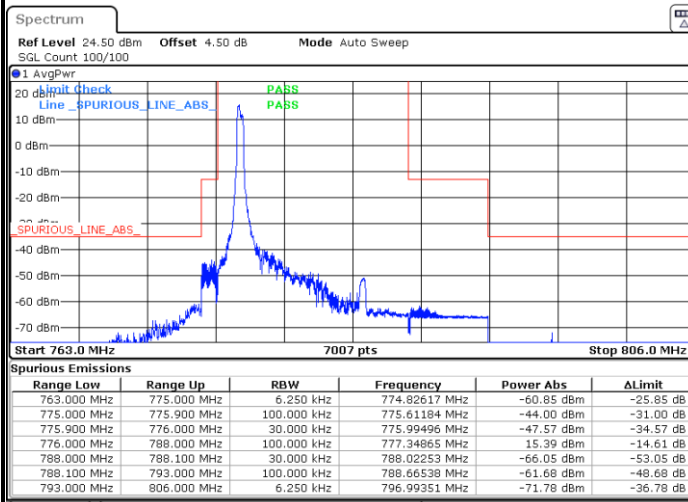
Highest Band Edge / Full RB





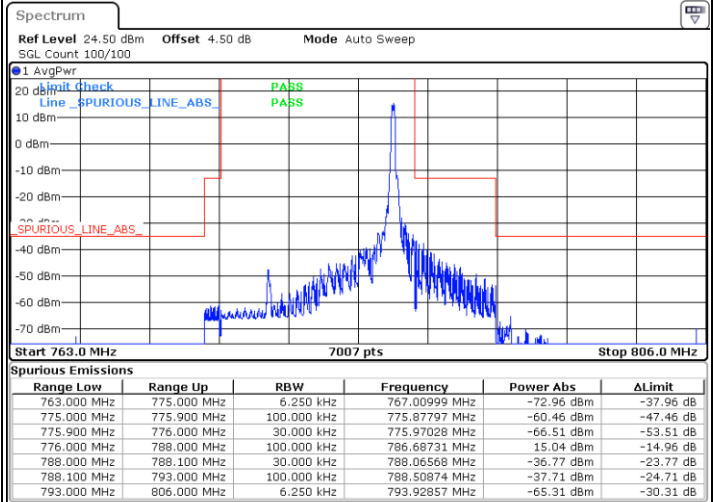
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



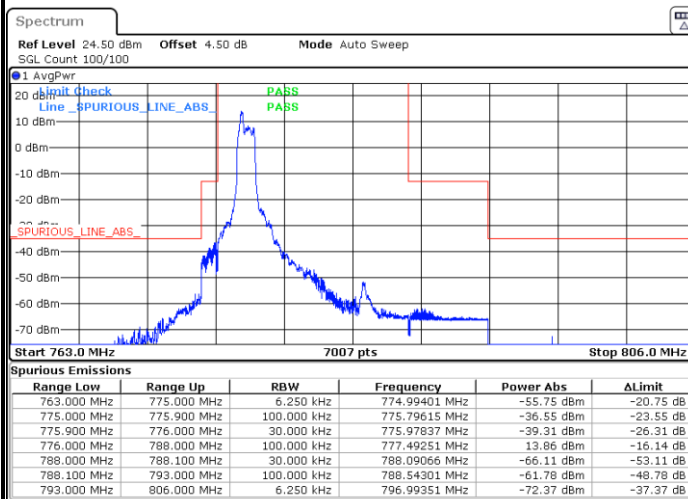
Date: 29 JUN 2020 14:23:50

Highest Band Edge / 1 RB



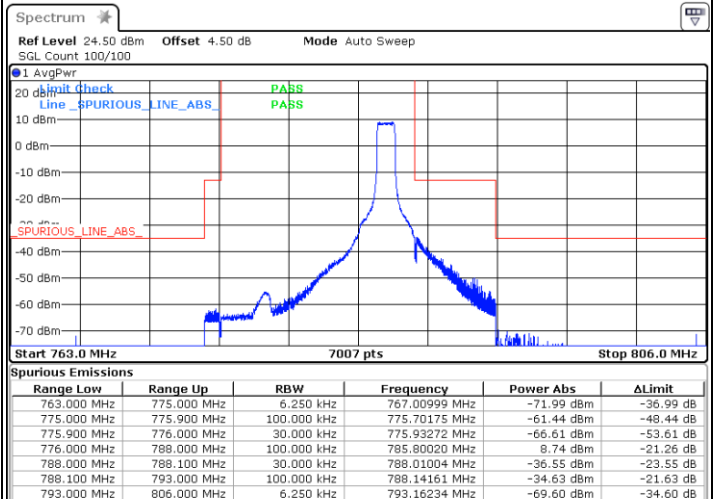
Date: 30 JUN 2020 17:36:17

Lowest Band Edge / Full RB



Date: 29 JUN 2020 14:25:20

Highest Band Edge / Full RB



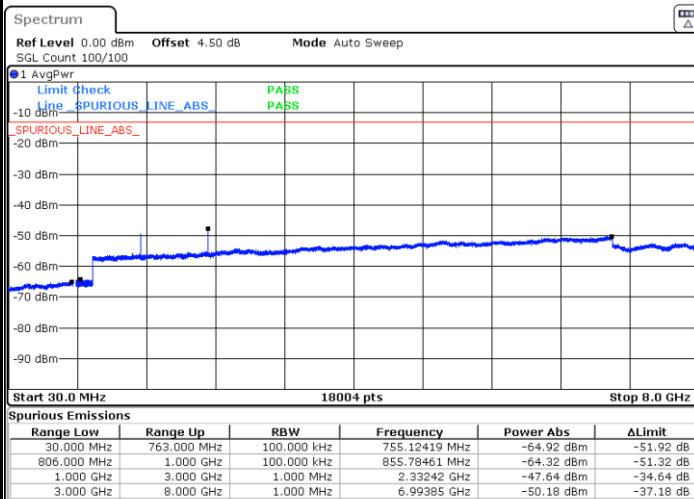
Date: 30 JUN 2020 17:42:48



Conducted Spurious Emission

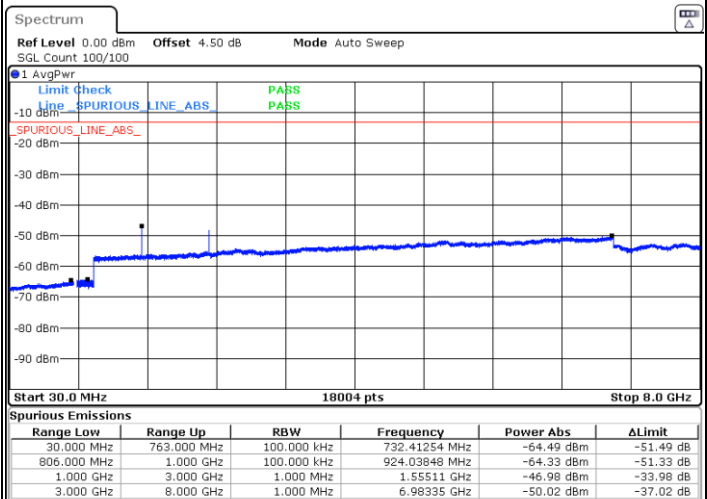
LTE Band 13 / 5MHz

Lowest Channel / QPSK



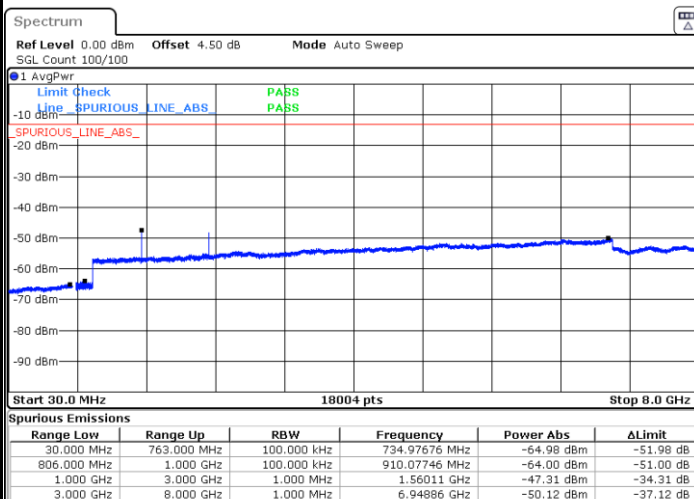
Date: 29 JUN 2020 14:22:31

Lowest Channel / 16QAM



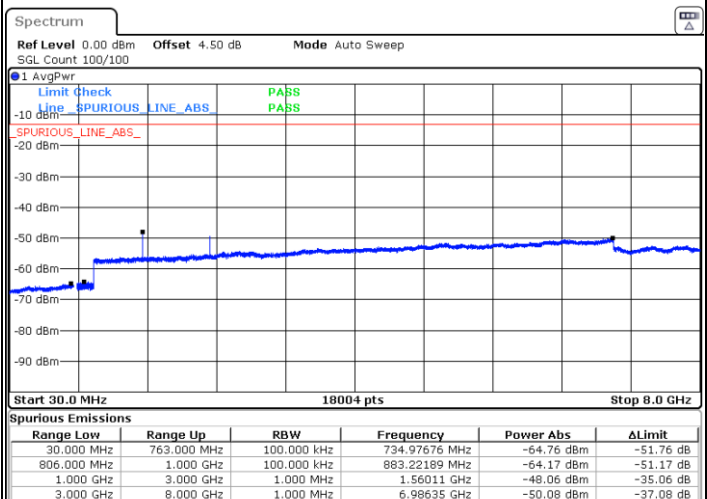
Date: 29 JUN 2020 14:20:44

Middle Channel / QPSK



Date: 29 JUN 2020 13:15:02

Middle Channel / 16QAM

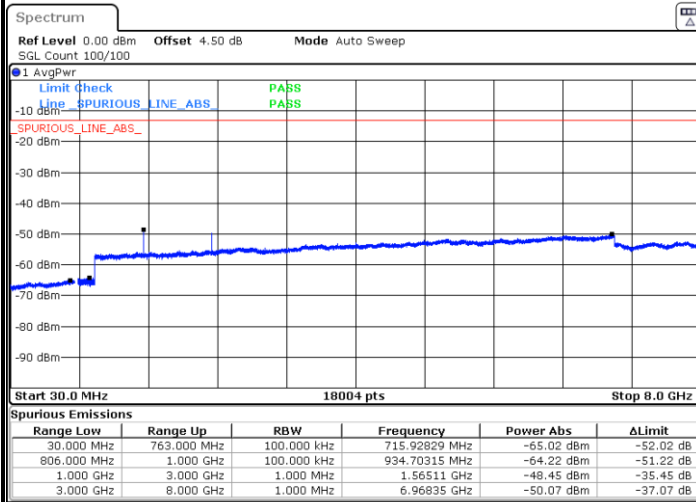


Date: 29 JUN 2020 13:15:25



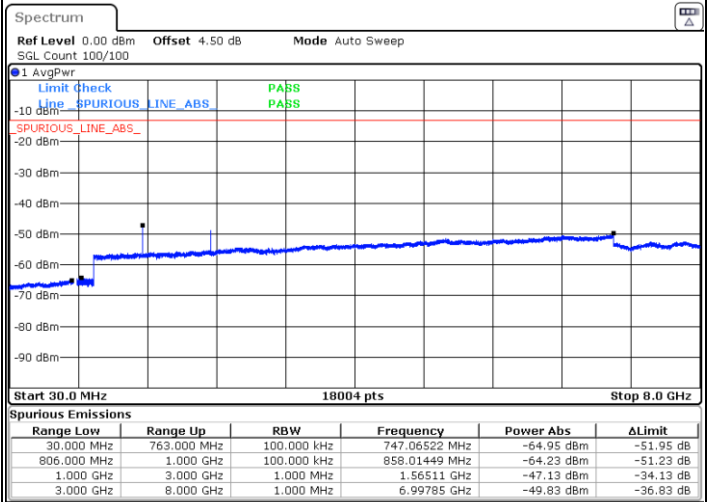
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 29 JUN 2020 14:41:03

Highest Channel / 16QAM



Date: 29 JUN 2020 14:40:23

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0038	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0039	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0012	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =12 V ; Battery End Point (BEP) =10 V ; Maximum Voltage =30 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

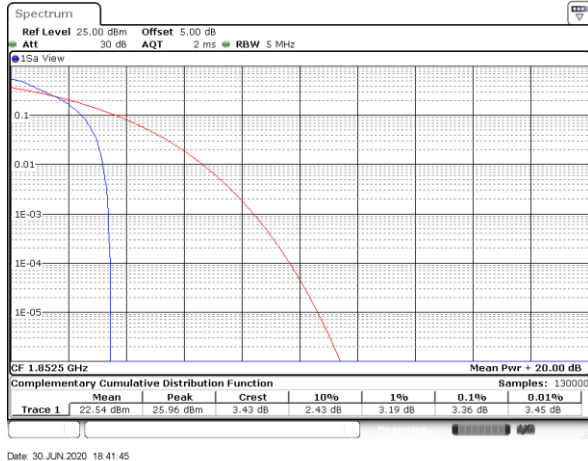
Peak-to-Average Ratio

Mode	LTE Band 25 / 5MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.36	3.77	5.86	5.39	PASS
Middle CH	4.78	3.25	3.59	3.39	
Highest CH	5.42	3.04	3.33	3.28	

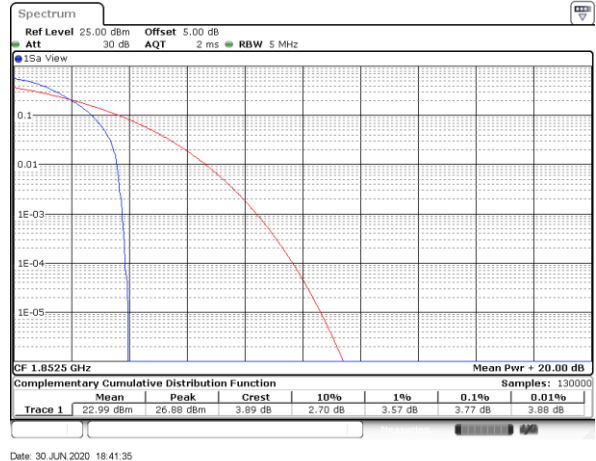


LTE Band 25 / 5MHz / QPSK

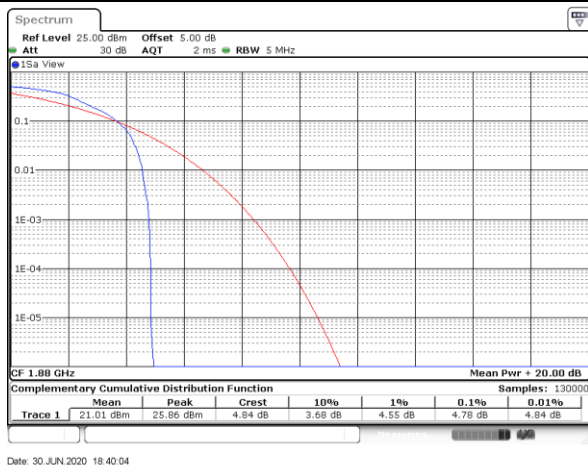
Lowest Channel / 1RB



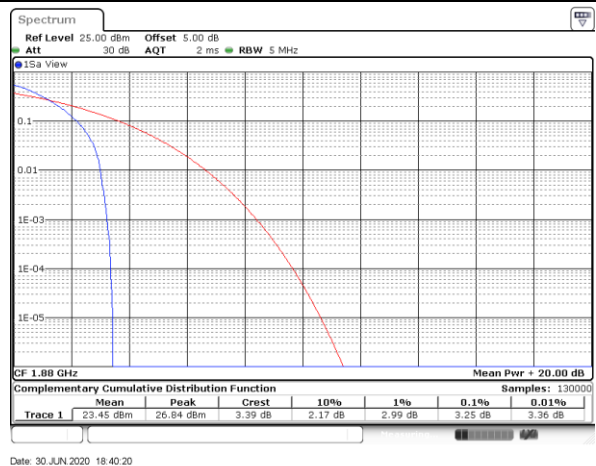
Lowest Channel / Full RB



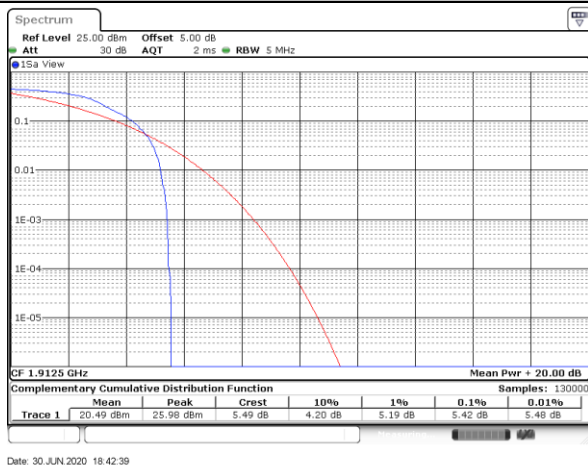
Middle Channel / 1RB



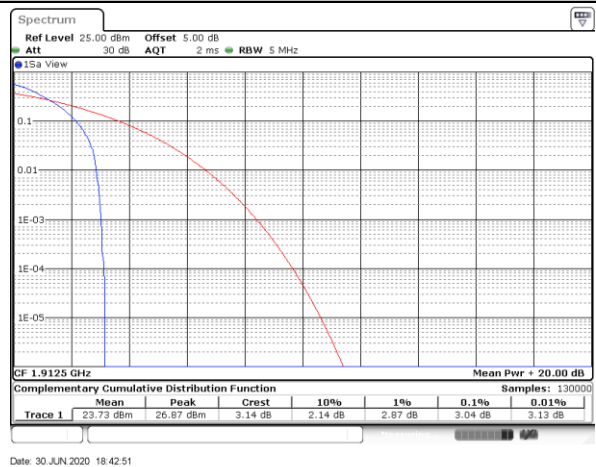
Middle Channel / Full RB



Highest Channel / 1RB



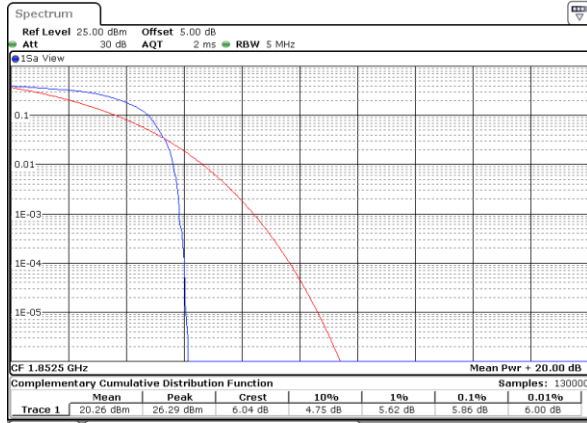
Highest Channel / Full RB



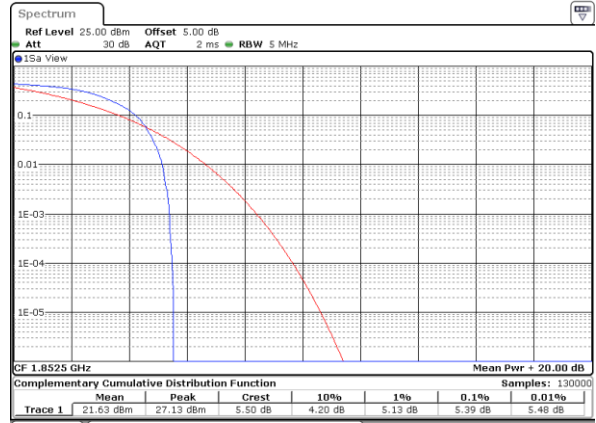


LTE Band 25 / 5MHz / 16QAM

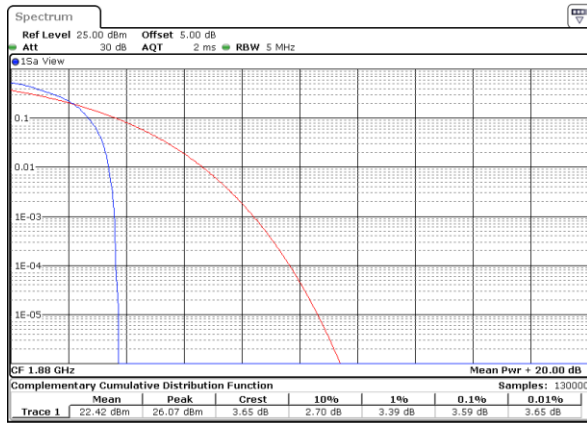
Lowest Channel / 1RB



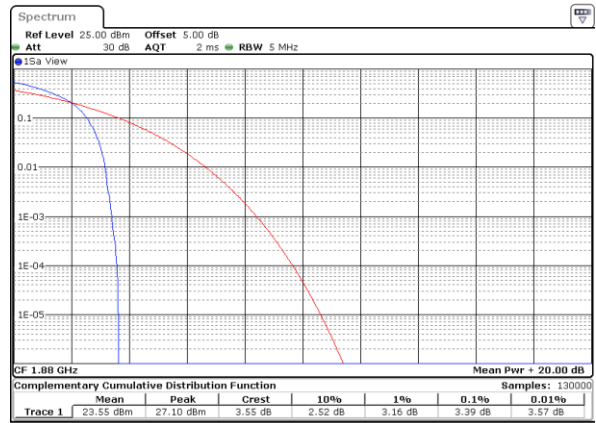
Lowest Channel / Full RB



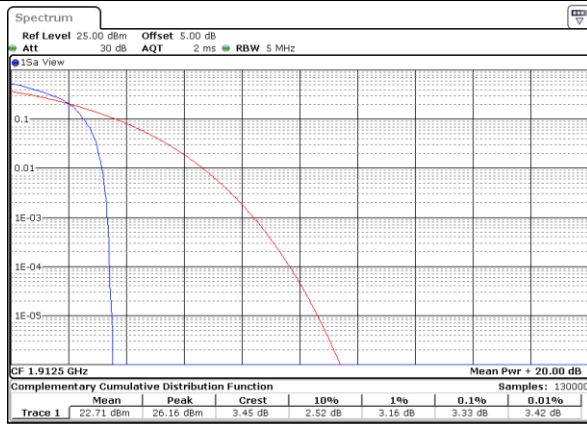
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





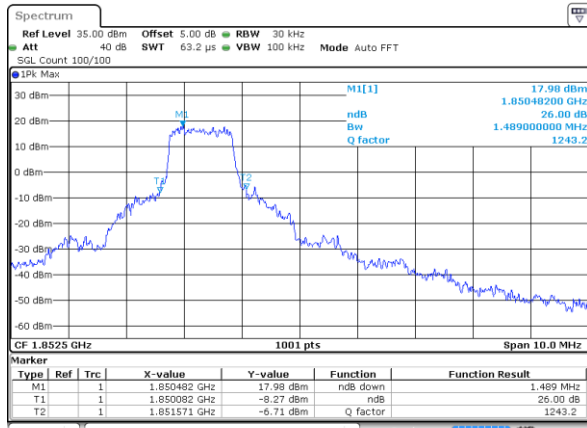
26dB Bandwidth

Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.49	1.90	-	-	-	-	-	-
Middle CH	-	-	-	-	1.39	1.73	-	-	-	-	-	-
Highest CH	-	-	-	-	1.59	1.61	-	-	-	-	-	-



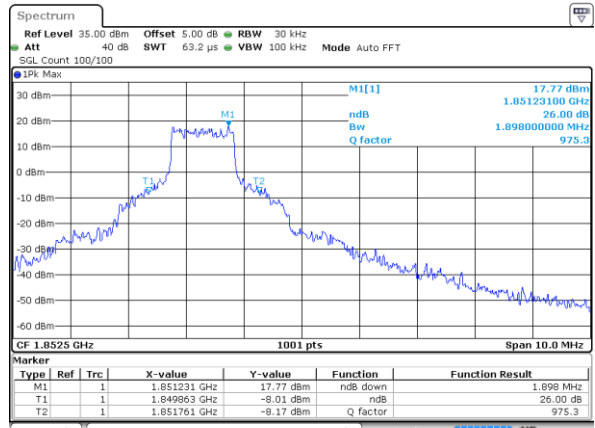
LTE Band 25

Lowest Channel / 5MHz / QPSK



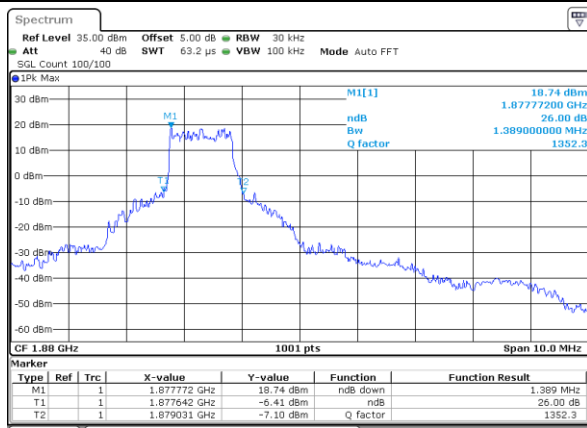
Date: 30 JUN 2020 17:48:57

Lowest Channel / 5MHz / 16QAM



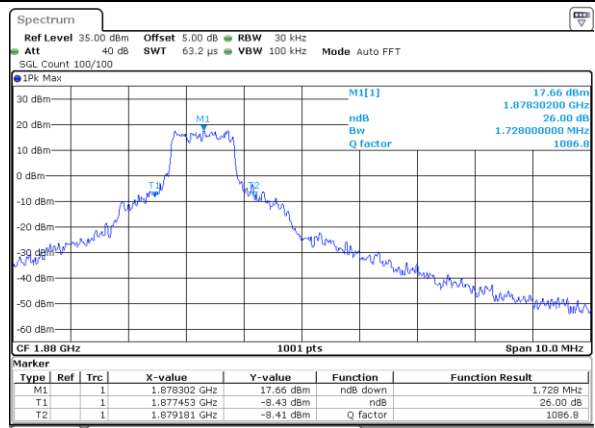
Date: 30 JUN 2020 17:49:38

Middle Channel / 5MHz / QPSK



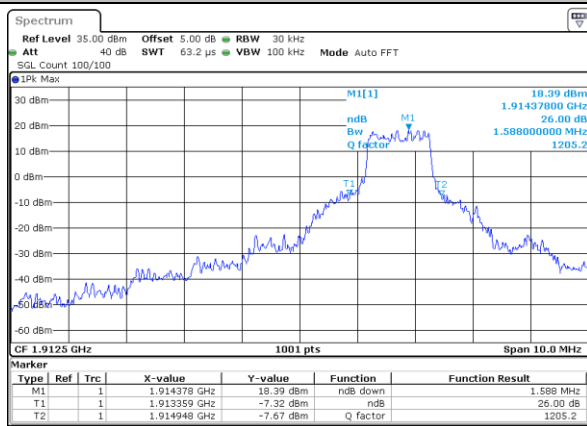
Date: 30 JUN 2020 17:50:48

Middle Channel / 5MHz / 16QAM



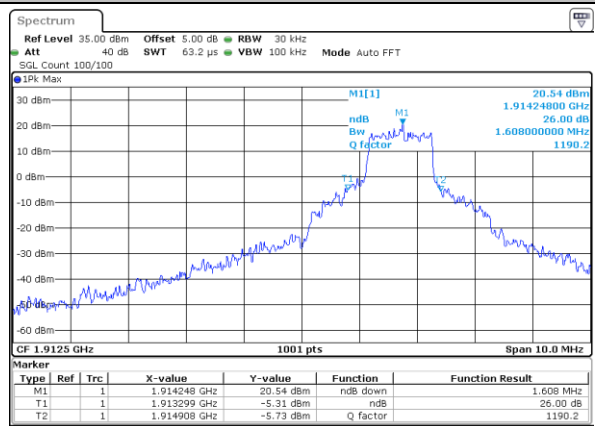
Date: 30 JUN 2020 17:50:18

Highest Channel / 5MHz / QPSK



Date: 30 JUN 2020 17:55:44

Highest Channel / 5MHz / 16QAM



Date: 30 JUN 2020 17:56:54



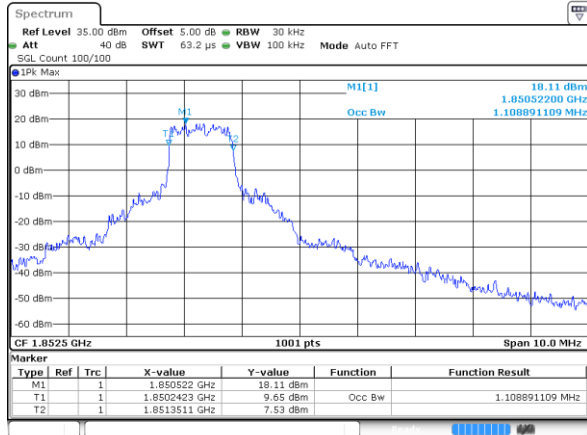
Occupied Bandwidth

Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.11	1.14	-	-	-	-	-	-
Middle CH	-	-	-	-	1.11	1.14	-	-	-	-	-	-
Highest CH	-	-	-	-	1.12	1.12	-	-	-	-	-	-

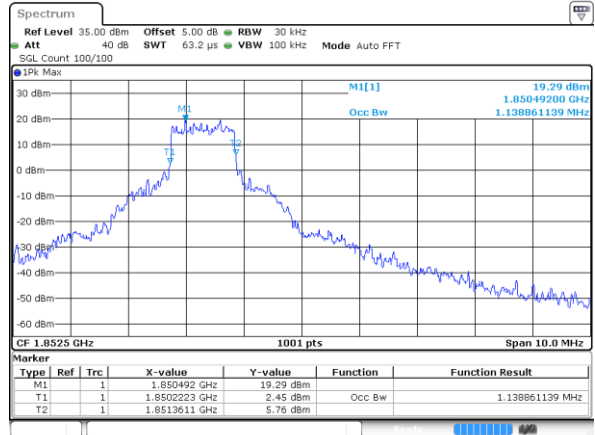


LTE Band 25

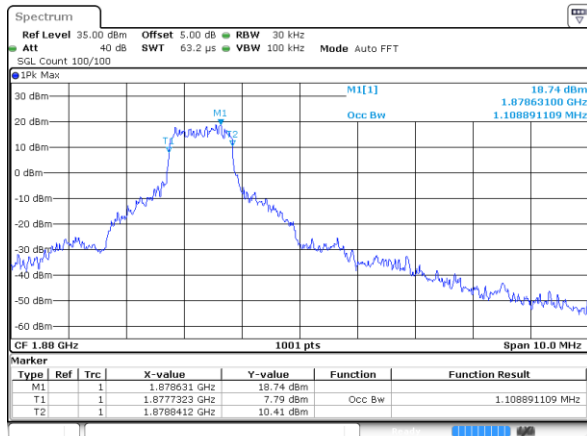
Lowest Channel / 5MHz / QPSK



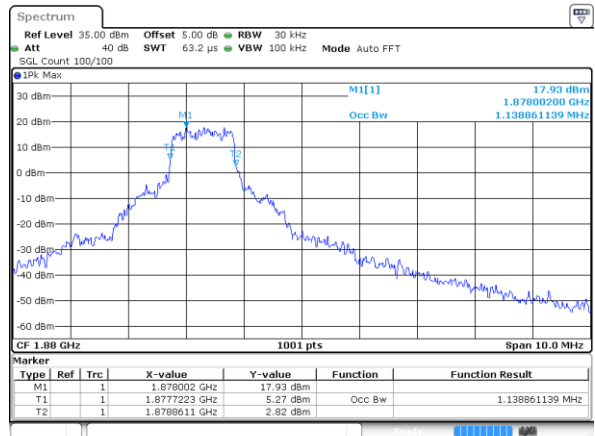
Lowest Channel / 5MHz / 16QAM



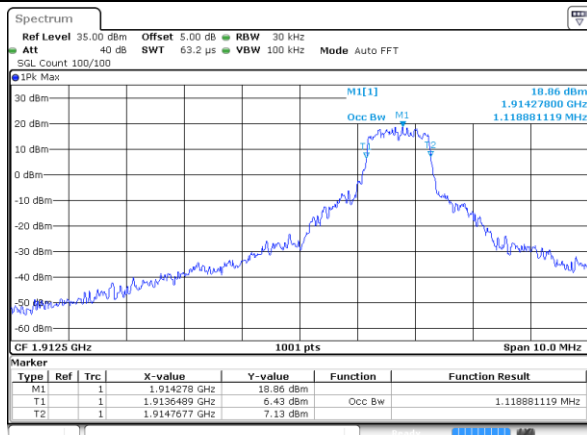
Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

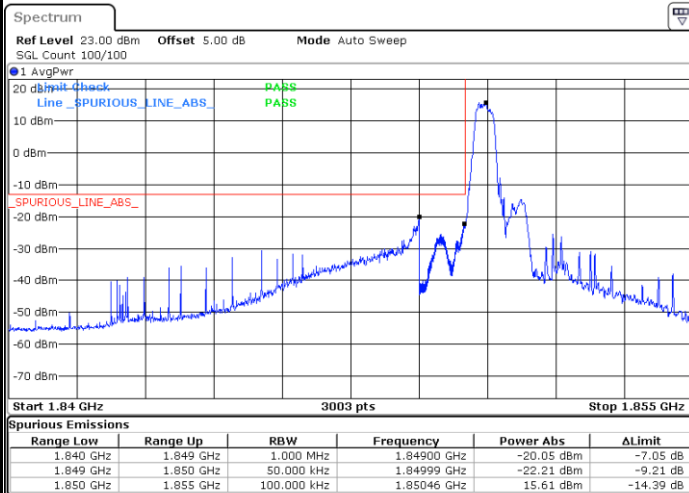




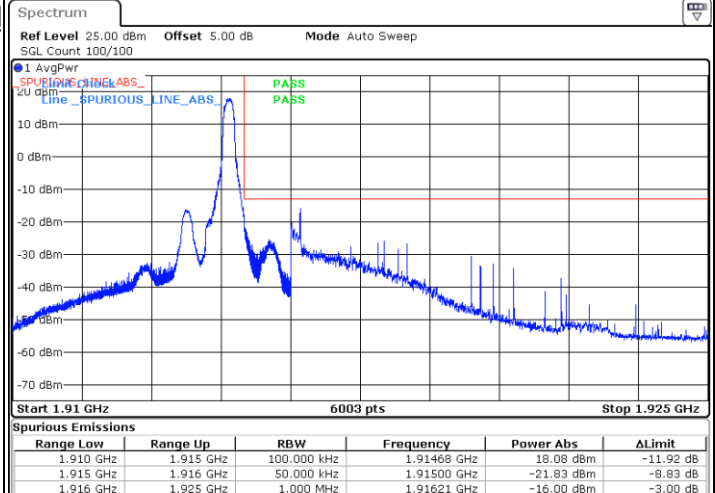
Conducted Band Edge

LTE Band 25 / 5MHz / QPSK

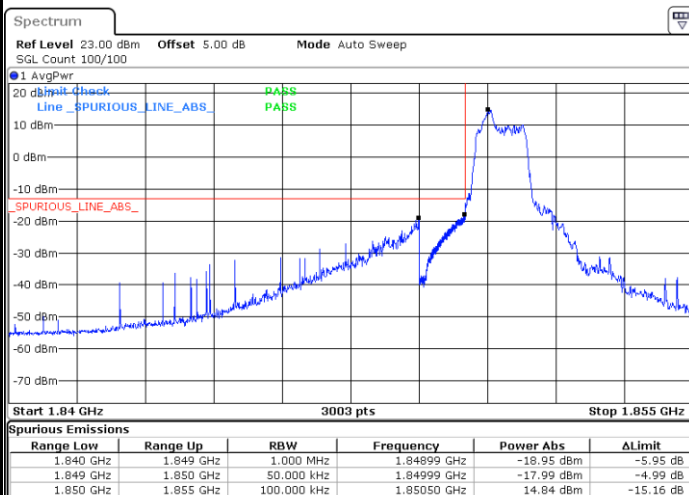
Lowest Band Edge / 1 RB



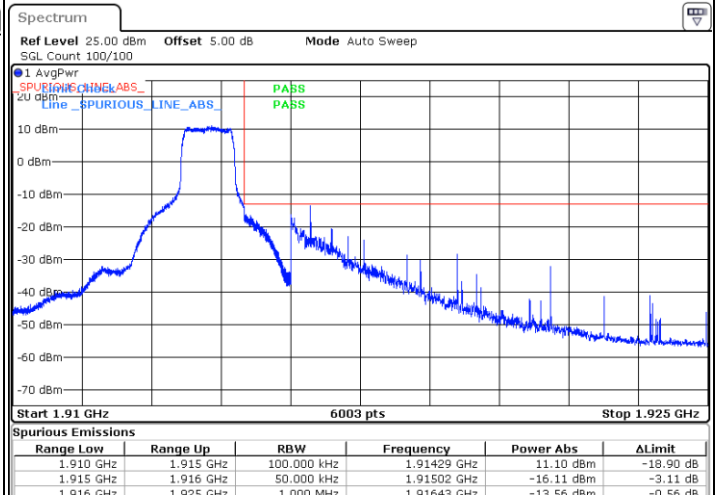
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



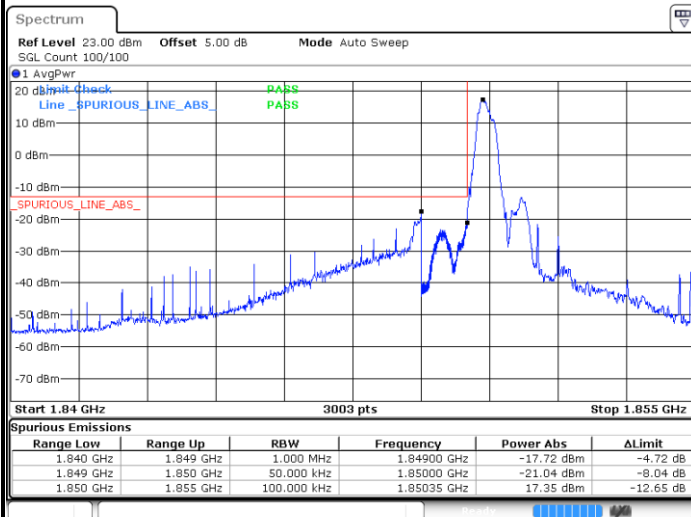
Highest Band Edge / Full RB





LTE Band 25 / 5MHz / 16QAM

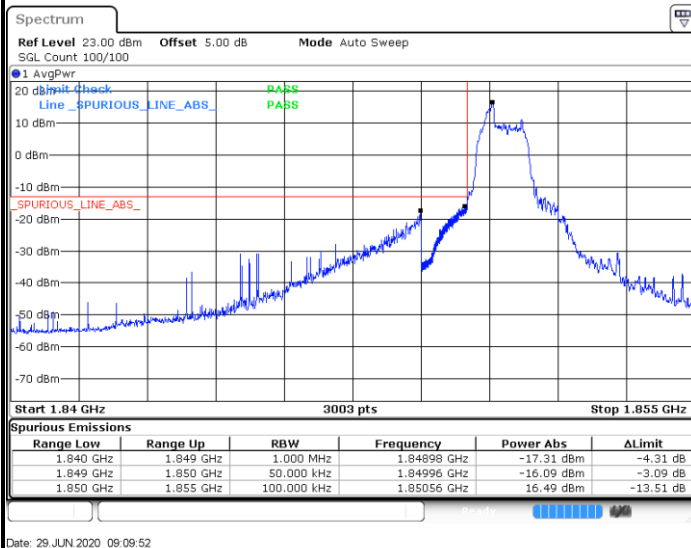
Lowest Band Edge / 1RB



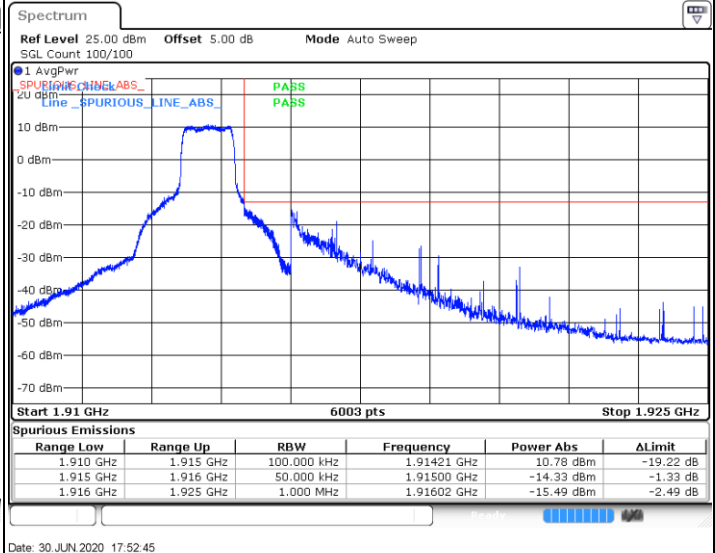
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

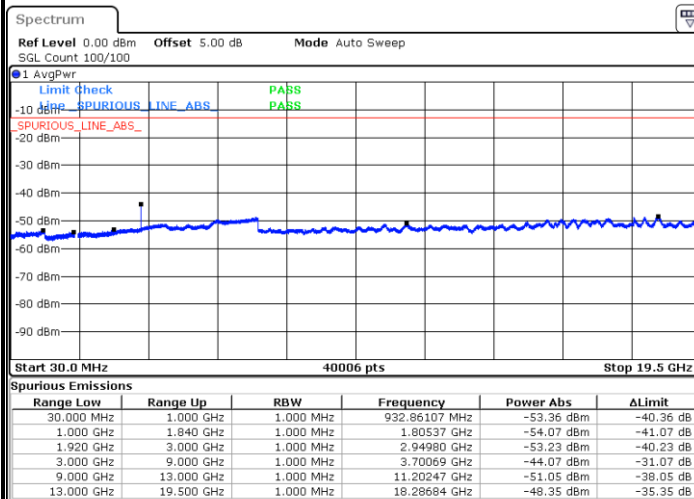




Conducted Spurious Emission

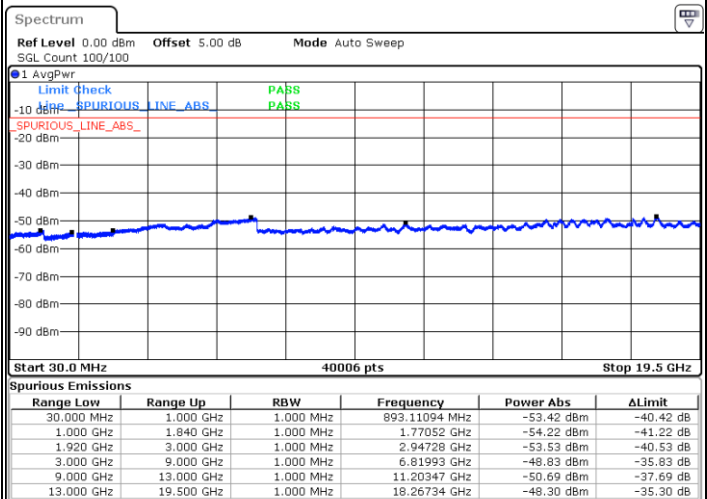
LTE Band 25 / 5MHz

Lowest Channel / QPSK



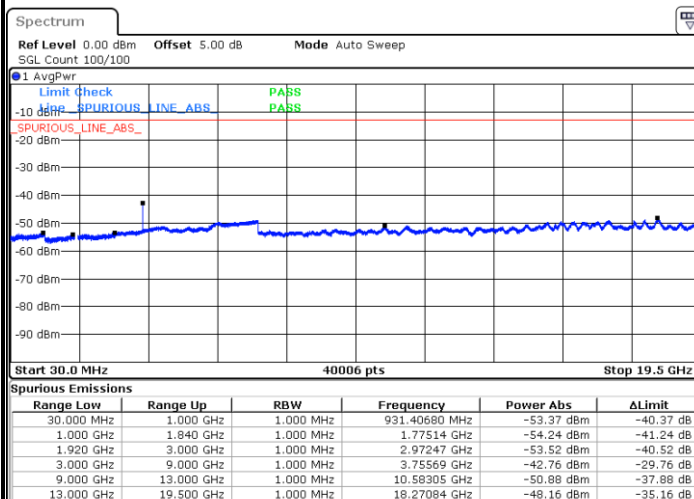
Date: 29 JUN 2020 09:11:18

Lowest Channel / 16QAM



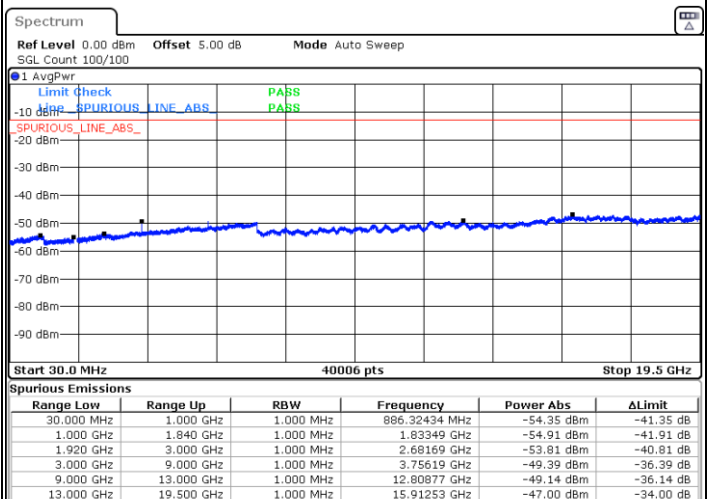
Date: 29 JUN 2020 09:12:58

Middle Channel / QPSK



Date: 29 JUN 2020 09:36:51

Middle Channel / 16QAM

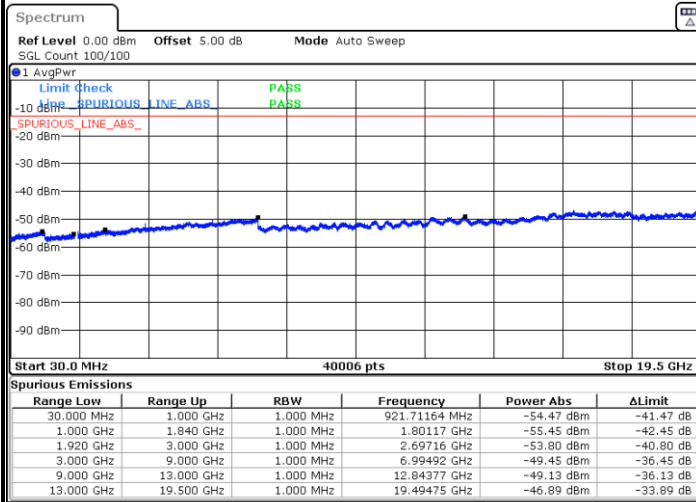


Date: 29 JUN 2020 10:15:54



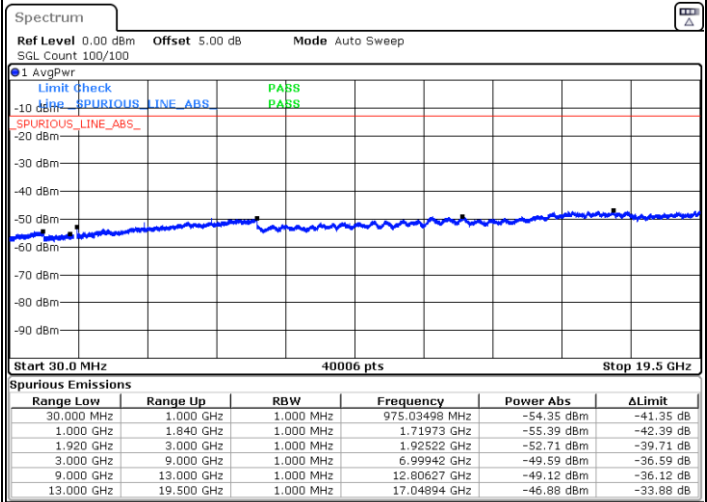
LTE Band 25 / 5MHz

Highest Channel / QPSK



Date: 29 JUN 2020 10:17:33

Highest Channel / 16QAM



Date: 29 JUN 2020 10:16:48

Frequency Stability

Test Conditions		LTE Band 25 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0042	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0053	

Note:

1. Normal Voltage =12 V ; Battery End Point (BEP) =10 V ; Maximum Voltage =30 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 4 / 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	3423	-56.15	-13	-43.15	-62.84	1.75	8.44	H
	5133	-45.10	-13	-32.10	-53.52	1.94	10.36	H
	6840	-51.02	-13	-38.02	-60.26	2.47	11.71	H
	3423	-46.61	-13	-33.61	-53.30	1.75	8.44	V
	5133	-39.52	-13	-26.52	-47.94	1.94	10.36	V
	6840	-50.48	-13	-37.48	-59.72	2.47	11.71	V
Middle	3447	-56.13	-13	-43.13	-62.82	1.75	8.44	H
	5172	-47.15	-13	-34.15	-55.57	1.94	10.36	H
	6900	-50.58	-13	-37.58	-59.82	2.47	11.71	H
	3447	-47.86	-13	-34.86	-54.55	1.75	8.44	V
	5172	-44.71	-13	-31.71	-53.13	1.94	10.36	V
	6900	-50.54	-13	-37.54	-59.78	2.47	11.71	V
Highest	3474	-55.18	-13	-42.18	-61.87	1.75	8.44	H
	5208	-48.18	-13	-35.18	-56.60	1.94	10.36	H
	6948	-50.73	-13	-37.73	-59.97	2.47	11.71	H
	3474	-48.13	-13	-35.13	-54.82	1.75	8.44	V
	5208	-44.53	-13	-31.53	-52.95	1.94	10.36	V
	6948	-50.43	-13	-37.43	-59.67	2.47	11.71	V

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



LTE Band 12 / 10MHz / 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	1400	-48.16	-13	-35.16	-51.40	1.11	6.50	H
	2100	-50.50	-13	-37.50	-53.12	1.43	6.20	H
	2798	-63.78	-13	-50.78	-68.22	1.71	8.30	H
	1400	-50.44	-13	-37.44	-53.68	1.11	6.50	V
	2100	-51.77	-13	-38.77	-54.39	1.43	6.20	V
	2798	-63.52	-13	-50.52	-67.96	1.71	8.30	V
Middle	1406	-47.13	-13	-34.13	-50.37	1.11	6.50	H
	2110	-50.21	-13	-37.21	-52.83	1.43	6.20	H
	2812	-63.40	-13	-50.40	-67.84	1.71	8.30	H
	1406	-51.30	-13	-38.30	-54.54	1.11	6.50	V
	2110	-51.38	-13	-38.38	-54.00	1.43	6.20	V
	2812	-63.37	-13	-50.37	-67.81	1.71	8.30	V
Highest	1414	-50.42	-13	-37.42	-53.66	1.11	6.50	H
	2120	-48.29	-13	-35.29	-50.91	1.43	6.20	H
	2826	-63.59	-13	-50.59	-68.03	1.71	8.30	H
	1414	-52.36	-13	-39.36	-55.60	1.11	6.50	V
	2120	-48.53	-13	-35.53	-51.15	1.43	6.20	V
	2826	-63.11	-13	-50.11	-67.55	1.71	8.30	V

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

LTE Band 13 / 5MHz / 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	1556	-53.21	-13	-40.21	-55.84	1.09	5.87	H
	2332	-52.11	-13	-39.11	-54.51	1.37	5.92	H
	3108	-63.36	-13	-50.36	-67.25	1.64	7.68	H
	1556	-54.23	-13	-41.23	-56.86	1.09	5.87	V
	2332	-55.27	-13	-42.27	-57.67	1.37	5.92	V
	3108	-62.52	-13	-49.52	-66.41	1.64	7.68	V
Middle	1560	-54.94	-42.15	-12.79	-57.57	1.09	5.87	H
	2340	-52.62	-13	-39.62	-55.02	1.37	5.92	H
	3120	-63.25	-13	-50.25	-67.14	1.64	7.68	H
	1560	-55.05	-42.15	-12.90	-57.68	1.09	5.87	V
	2340	-56.30	-13	-43.30	-58.70	1.37	5.92	V
	3120	-63.06	-13	-50.06	-66.95	1.64	7.68	V
Highest	1564	-57.51	-42.15	-15.36	-60.14	1.09	5.87	H
	2348	-51.10	-13	-38.10	-53.50	1.37	5.92	H
	3132	-63.29	-13	-50.29	-67.18	1.64	7.68	H
	1566	-56.74	-42.15	-14.59	-59.37	1.09	5.87	V
	2348	-56.52	-13	-43.52	-58.92	1.37	5.92	V
	3132	-62.95	-13	-49.95	-66.84	1.64	7.68	V

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

LTE Band 13 / 10MHz / 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)
Middle	1556	-51.15	-13	-38.15	-53.78	1.09	5.87	H
	2334	-51.42	-13	-38.42	-53.82	1.37	5.92	H
	3108	-63.08	-13	-50.08	-66.97	1.64	7.68	H
	1556	-52.62	-13	-39.62	-55.25	1.09	5.87	V
	2334	-53.42	-13	-40.42	-55.82	1.37	5.92	V
	3108	-62.76	-13	-49.76	-66.65	1.64	7.68	V

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



LTE Band 25 / 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	3705	-55.70	-13	-42.70	-61.96	1.843	8.10	H
	5553	-53.84	-13	-40.84	-62.15	2.19	10.50	H
	7404	-48.94	-13	-35.94	-57.86	2.58	11.50	H
	3705	-52.84	-13	-39.84	-59.10	1.84	8.10	V
	5556	-51.84	-13	-38.84	-60.15	2.19	10.50	V
	7404	-47.73	-13	-34.73	-56.65	2.58	11.50	V
Middle	3744	-56.53	-13	-43.53	-62.79	1.843	8.10	H
	5613	-53.57	-13	-40.57	-61.88	2.19	10.50	H
	7488	-48.79	-13	-35.79	-57.71	2.58	11.50	H
	3744	-52.19	-13	-39.19	-58.45	1.84	8.10	V
	5613	-53.87	-13	-40.87	-62.18	2.19	10.50	V
	7488	-47.92	-13	-34.92	-56.84	2.58	11.50	V
Highest	3792	-56.63	-13	-43.63	-62.89	1.843	8.10	H
	5688	-53.49	-13	-40.49	-61.80	2.19	10.50	H
	7584	-48.61	-13	-35.61	-57.53	2.58	11.50	H
	3792	-50.28	-13	-37.28	-56.54	1.84	8.10	V
	5688	-52.25	-13	-39.25	-60.56	2.19	10.50	V
	7584	-47.89	-13	-34.89	-56.81	2.58	11.50	V

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