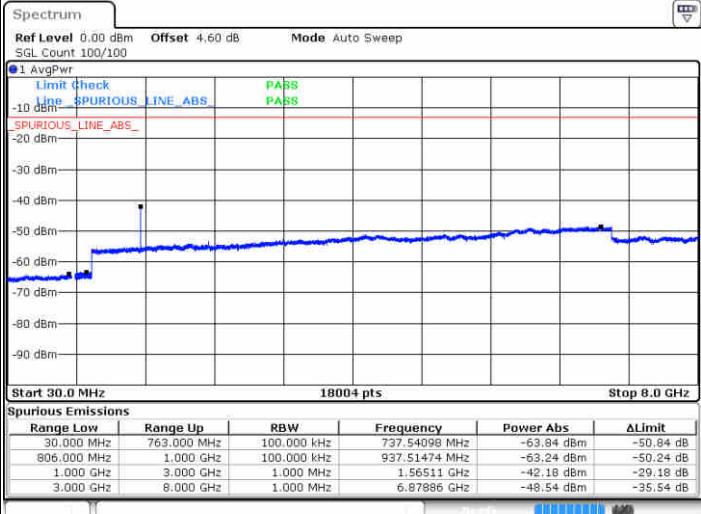
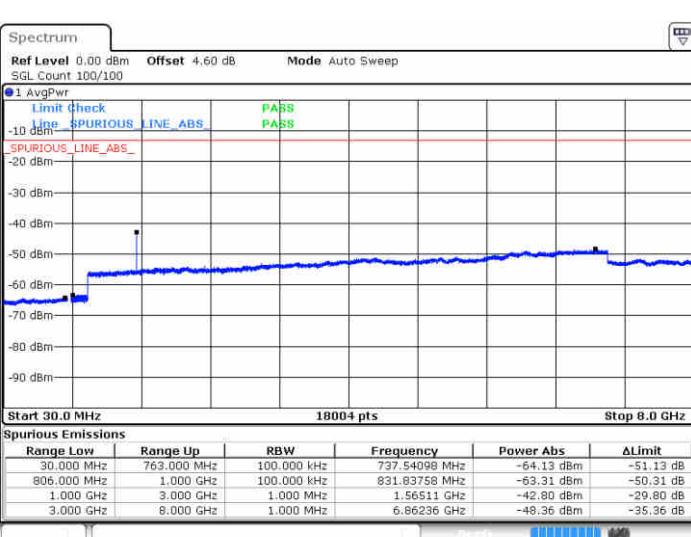




LTE Band 13 / 5MHz

Highest Channel / QPSK

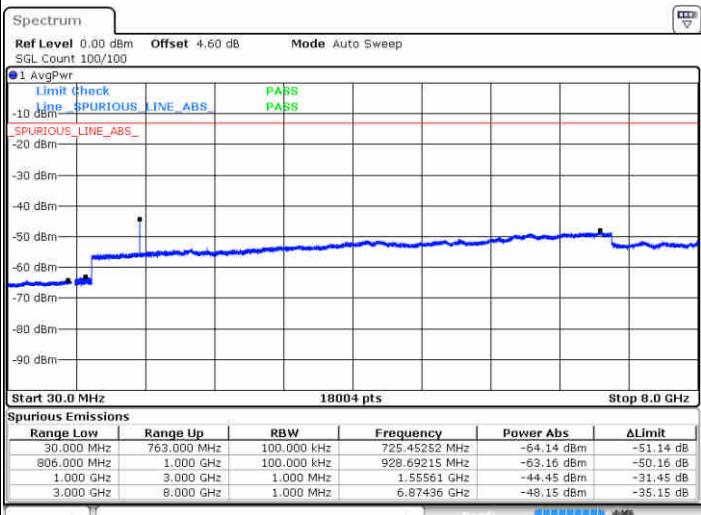
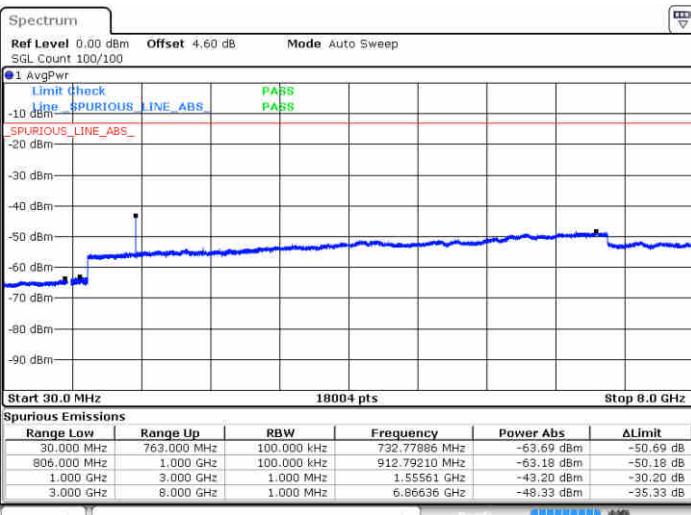
Highest Channel / 16QAM

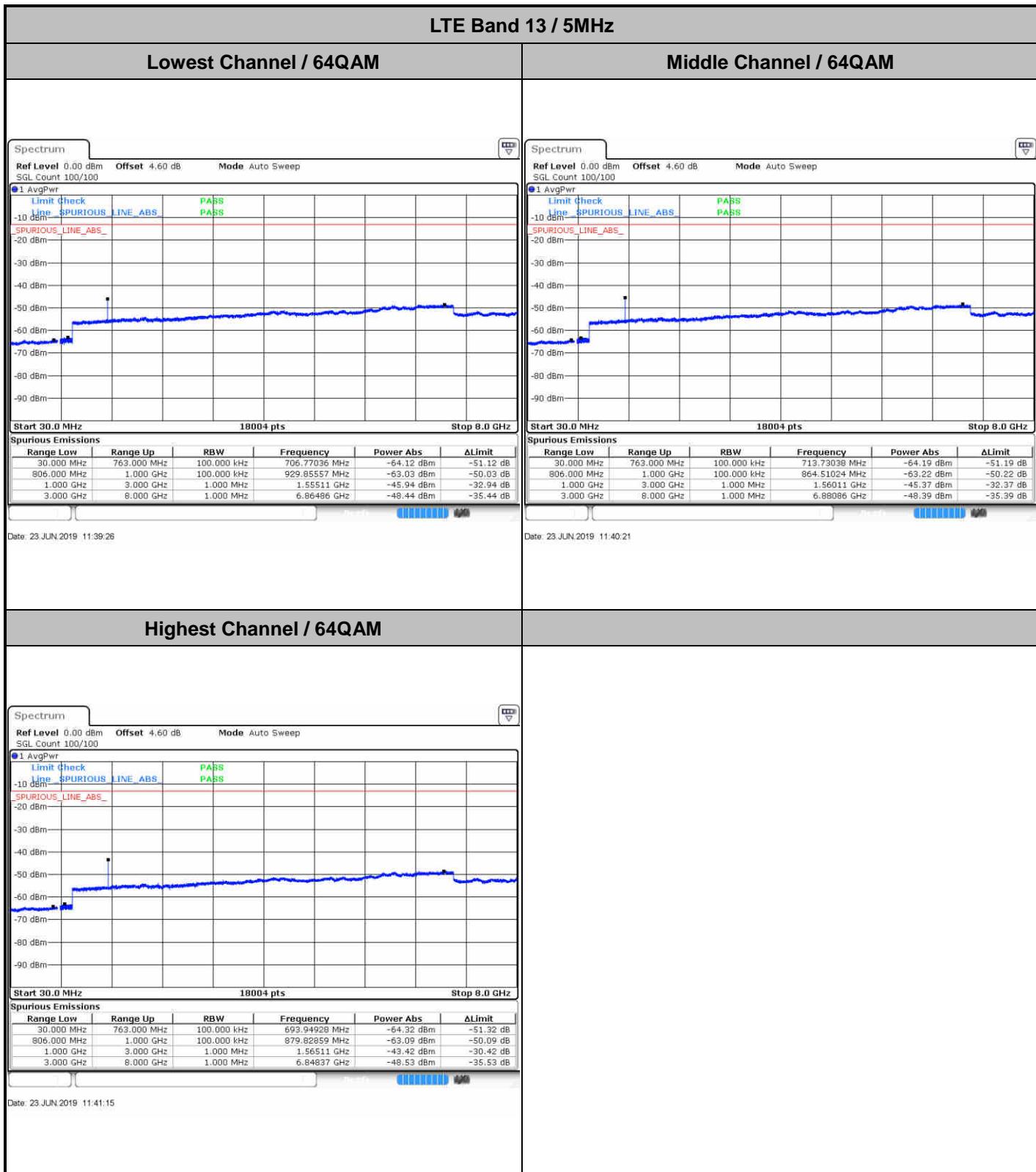


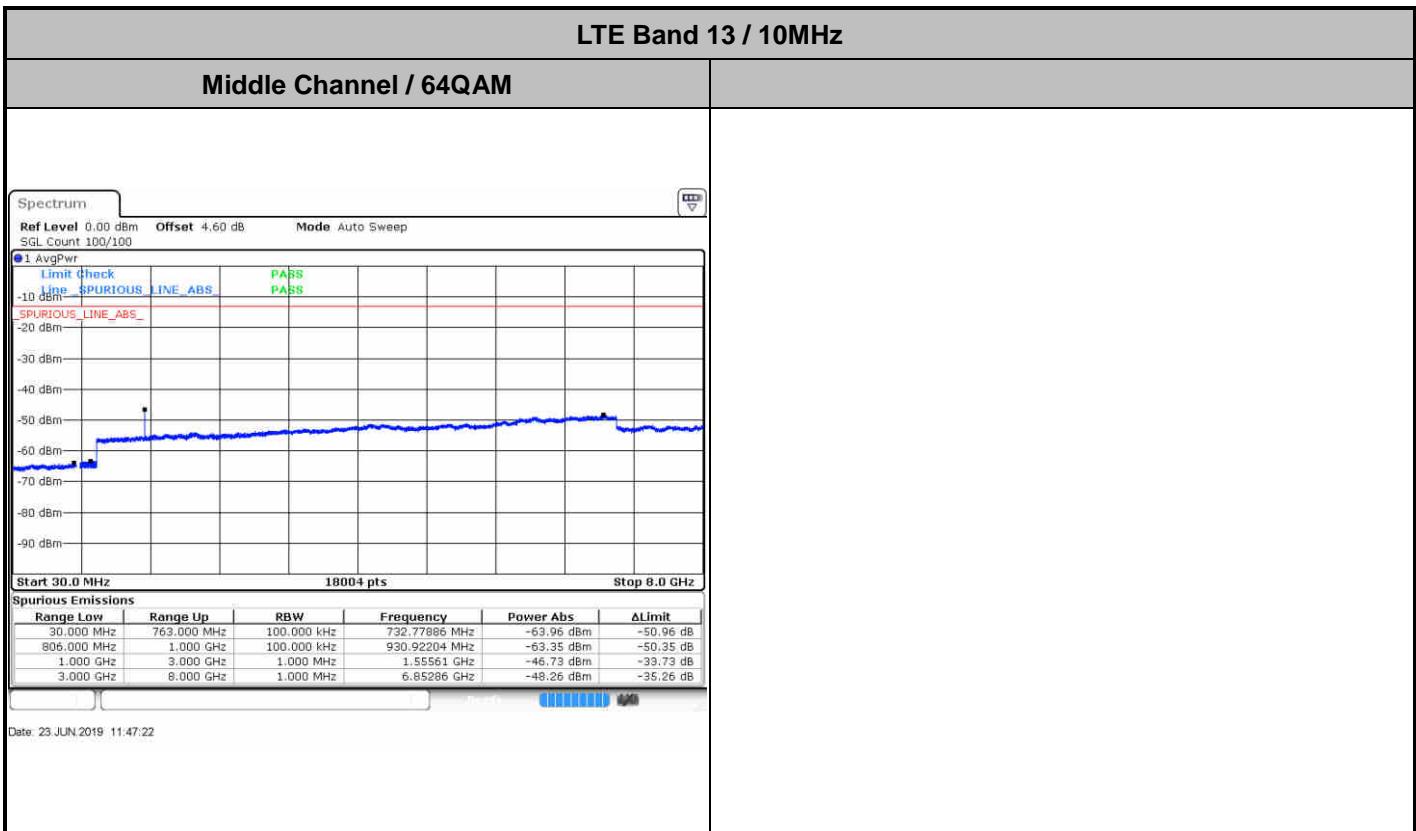
LTE Band 13 / 10MHz

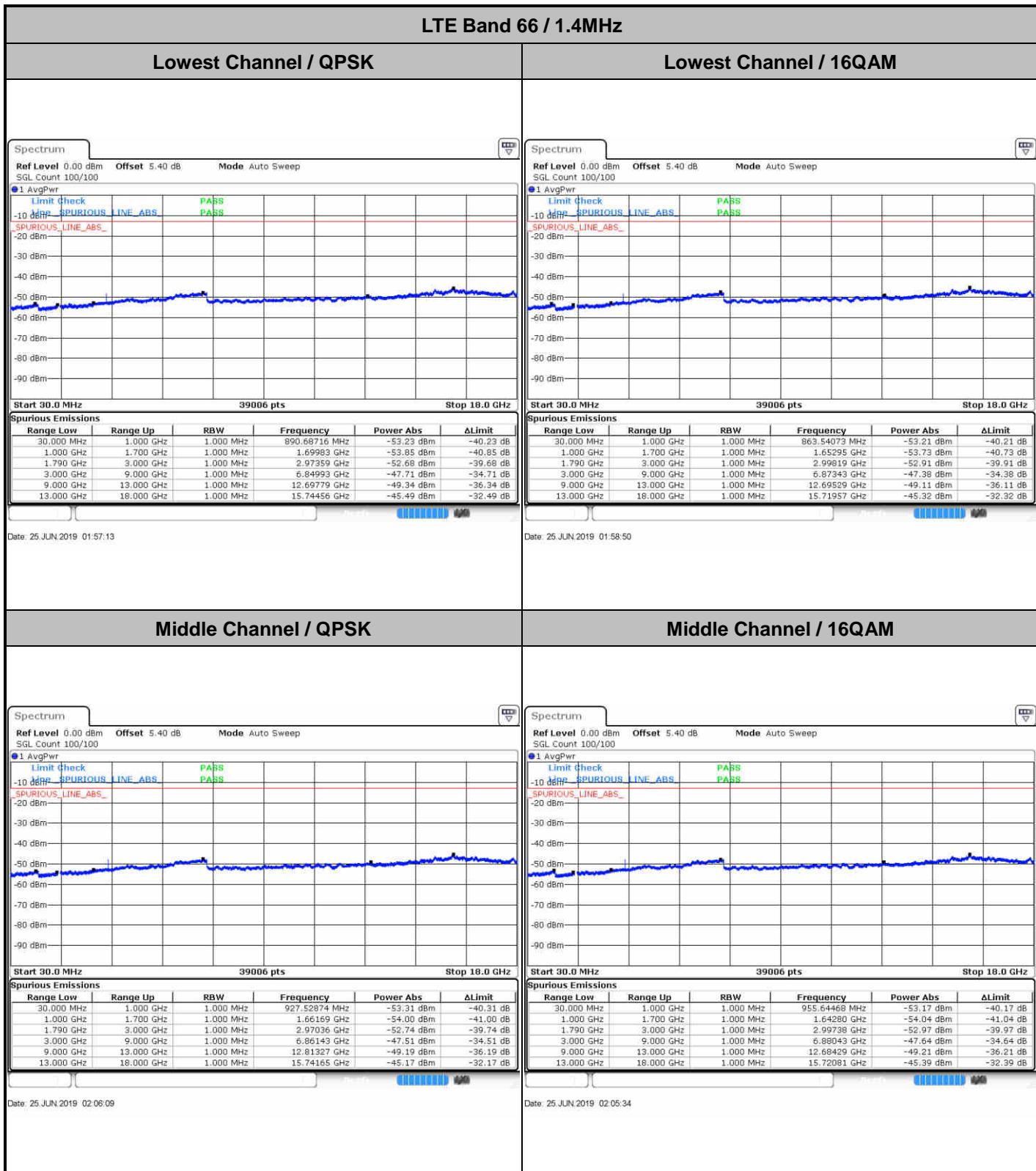
Middle Channel / QPSK

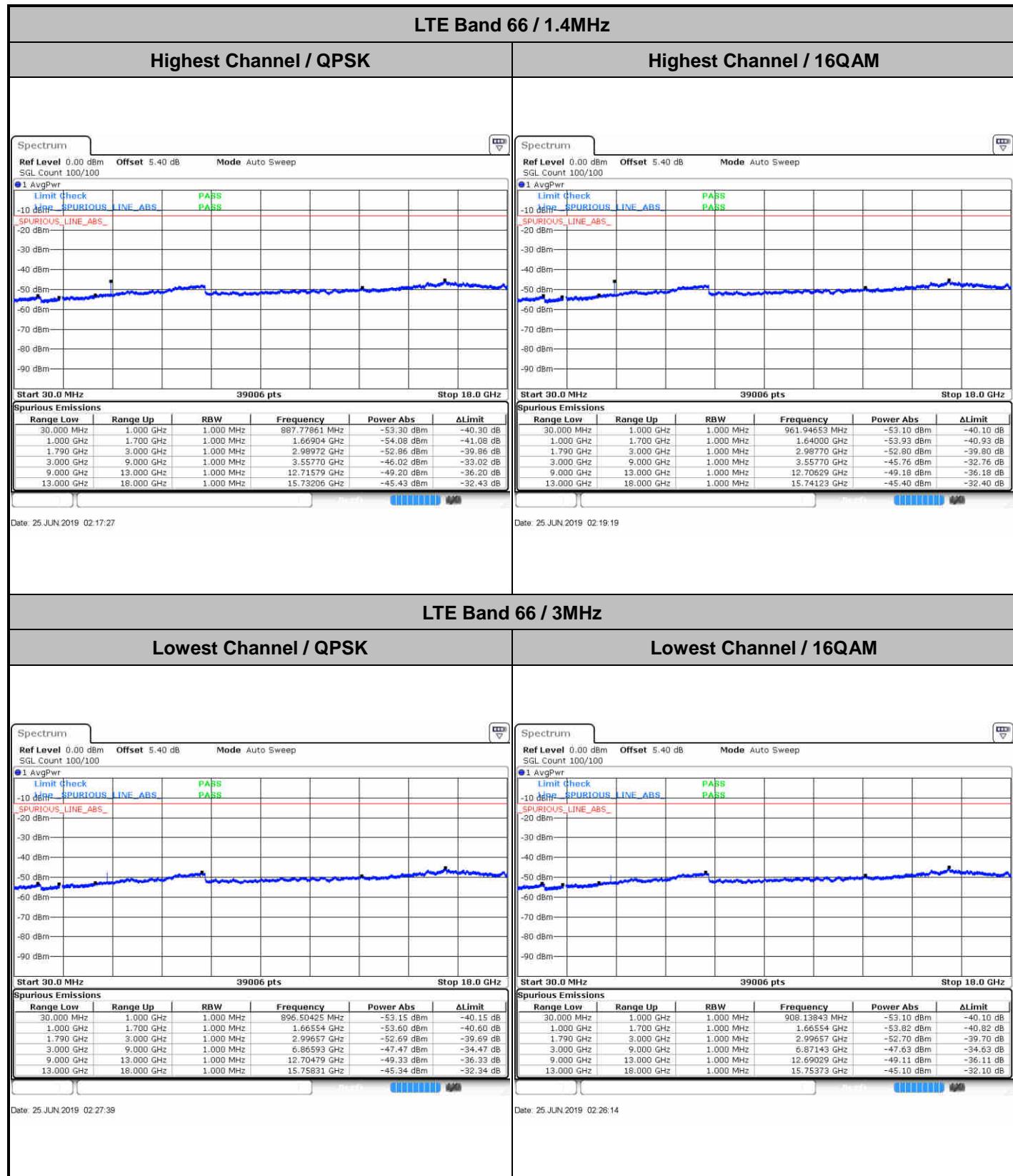
Middle Channel / 16QAM

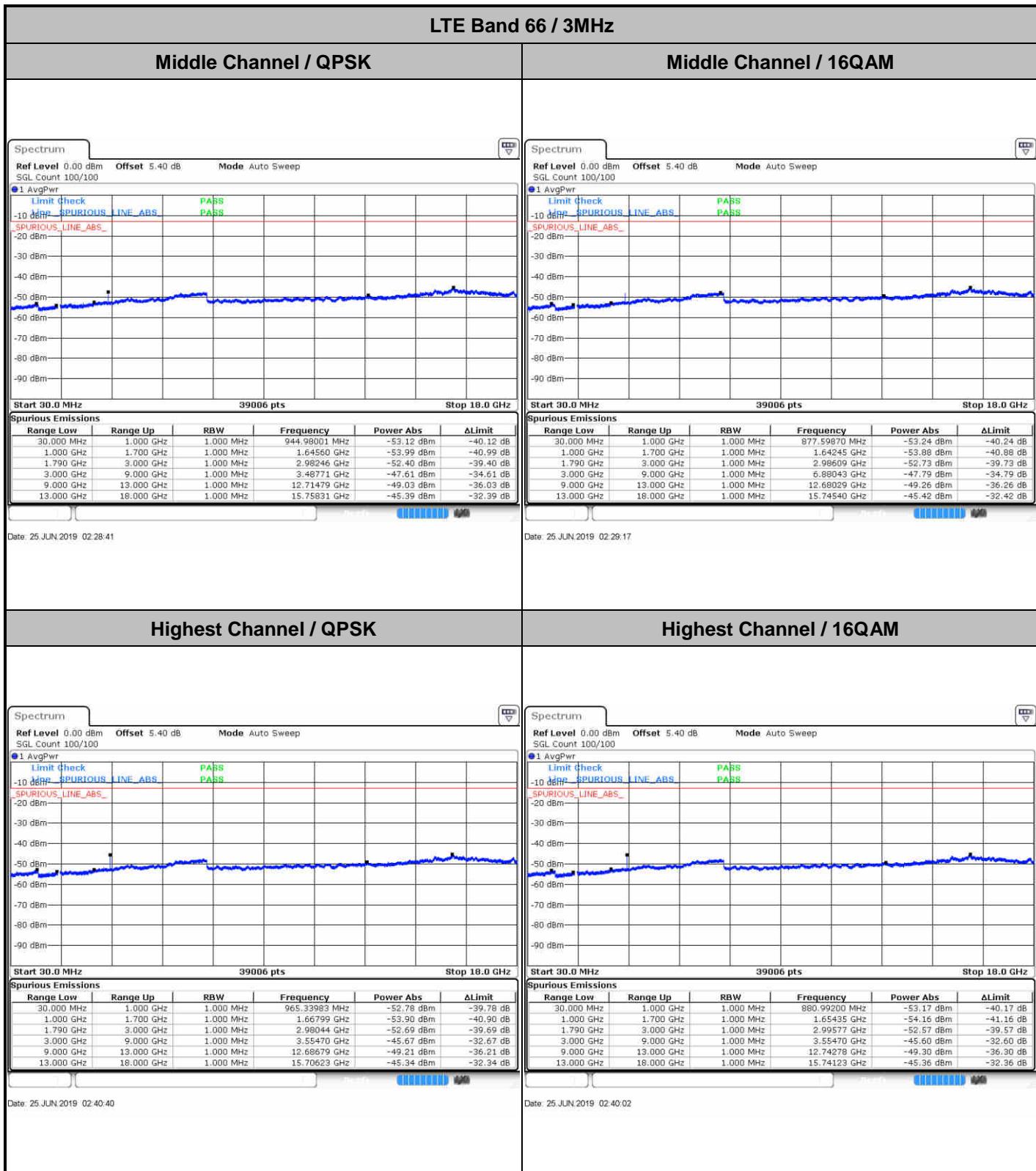


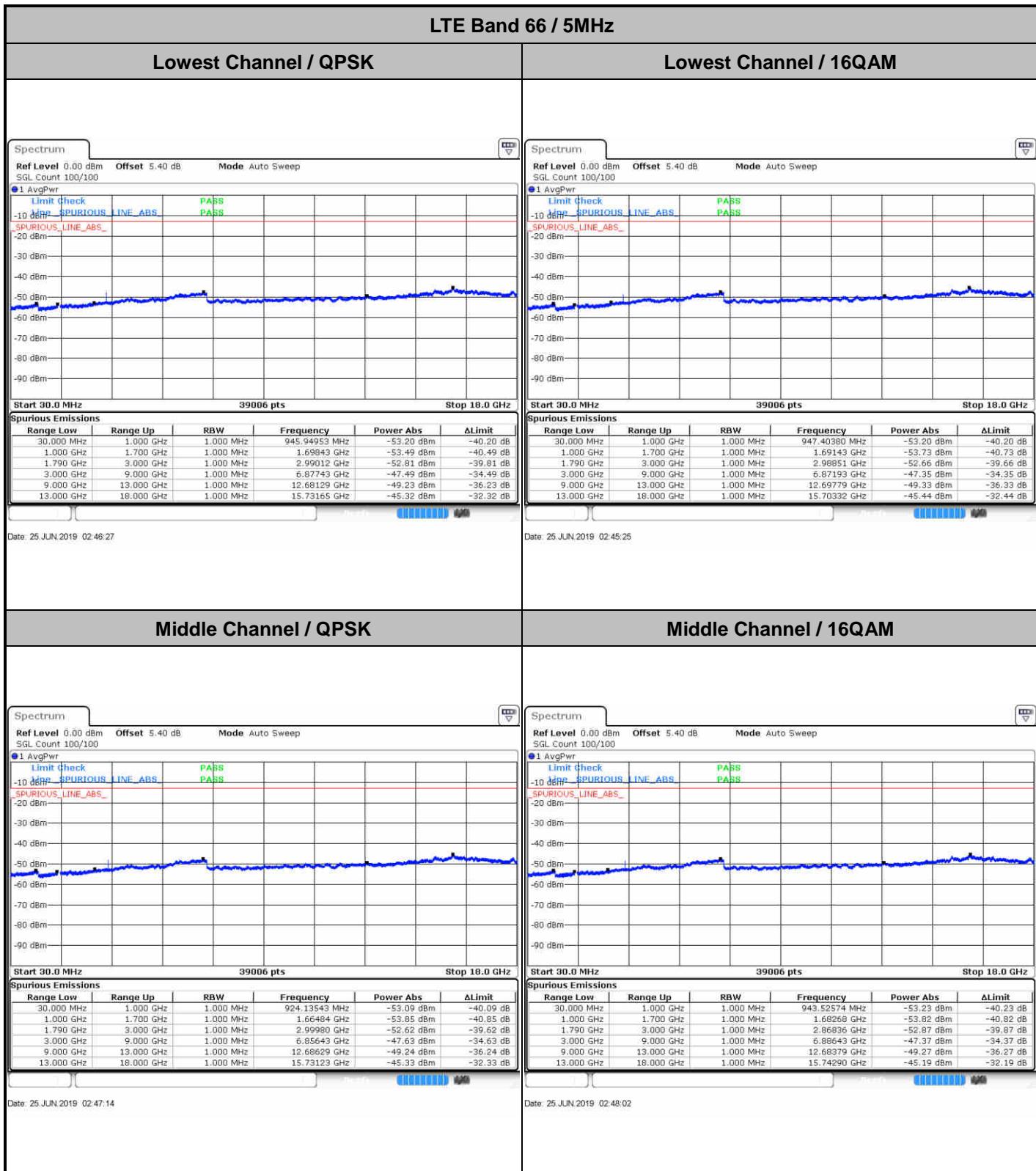










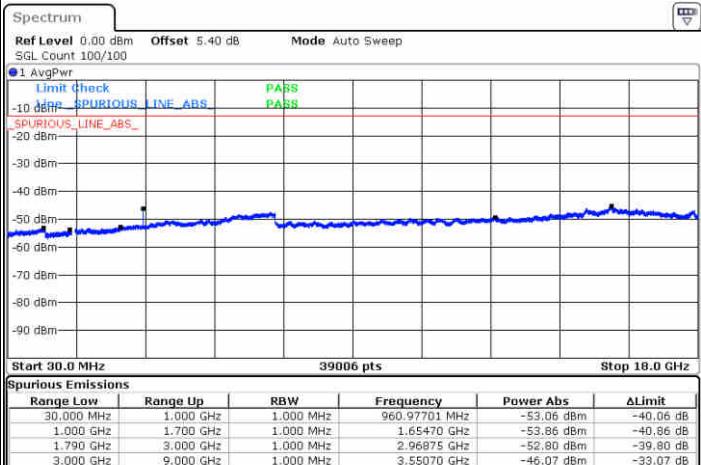
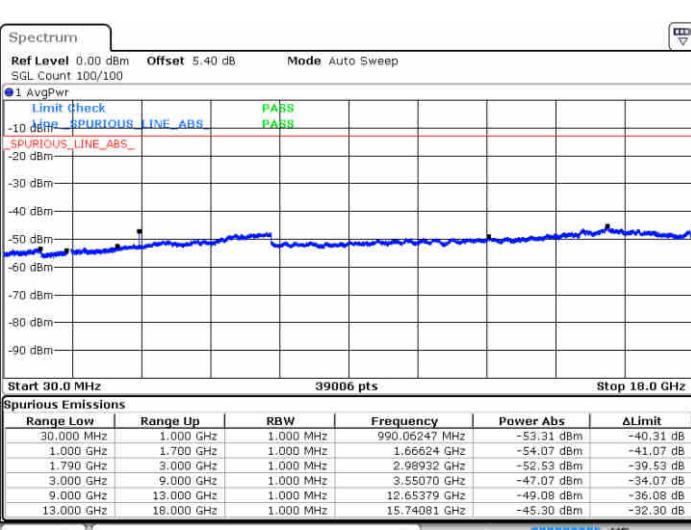




LTE Band 66 / 5MHz

Highest Channel / QPSK

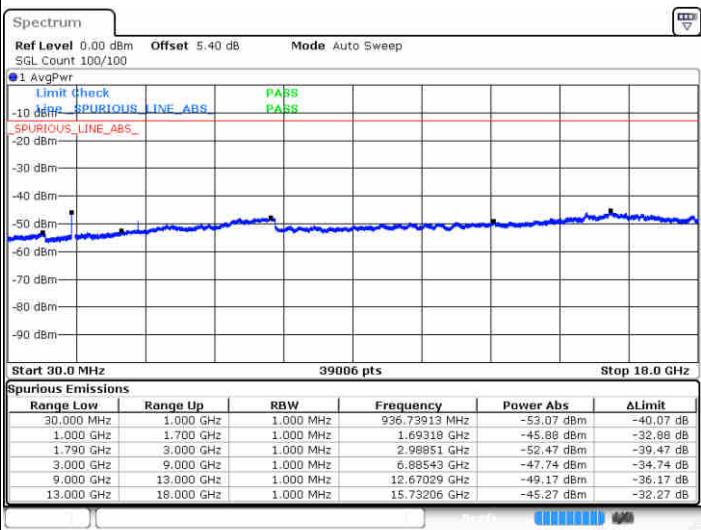
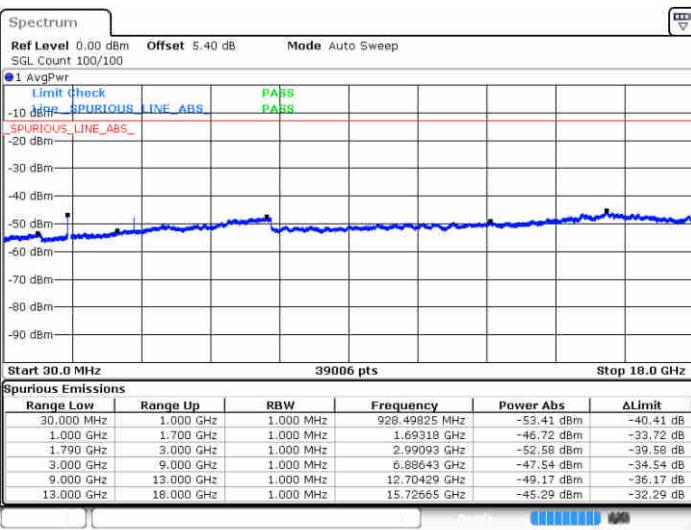
Highest Channel / 16QAM

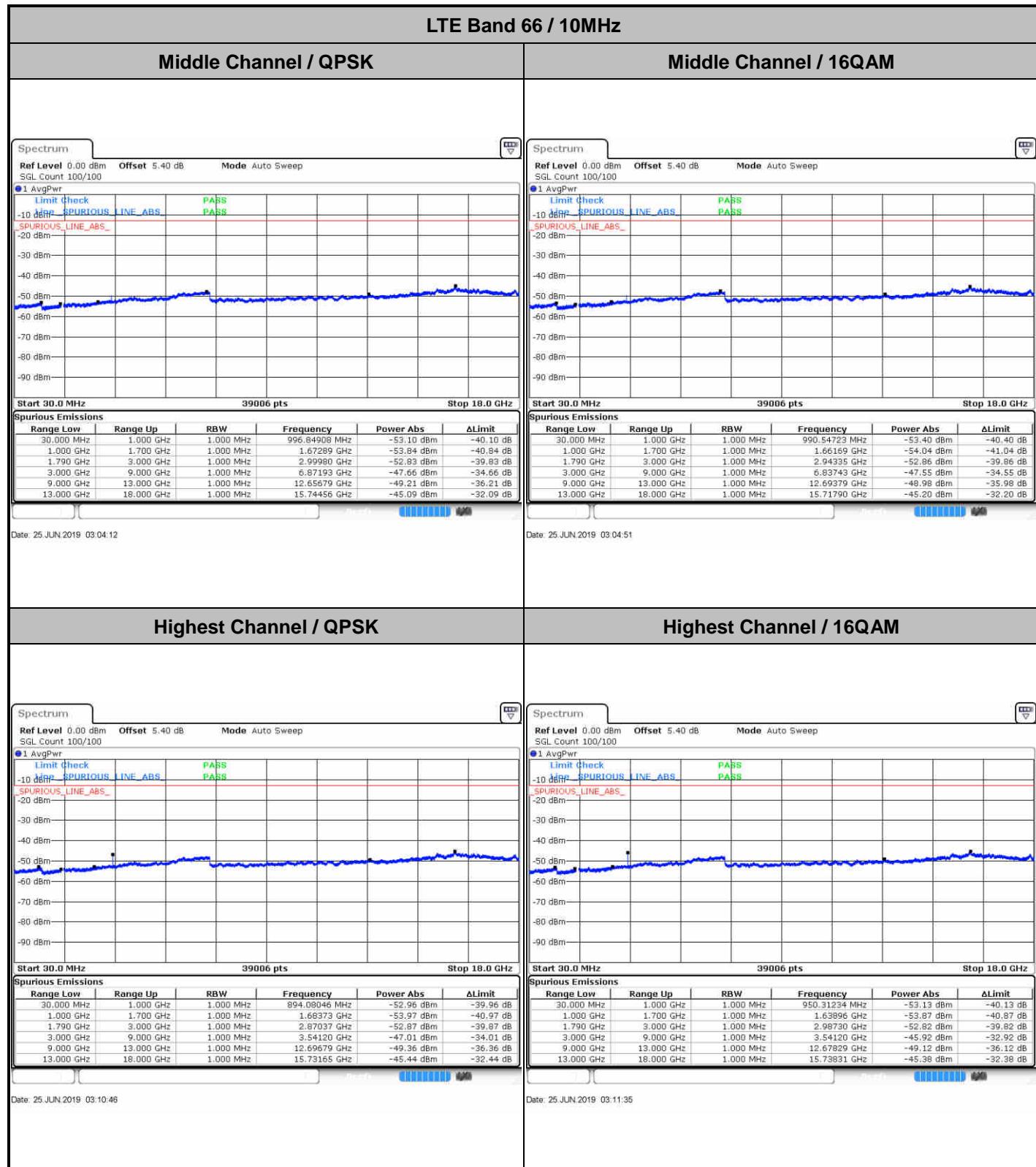


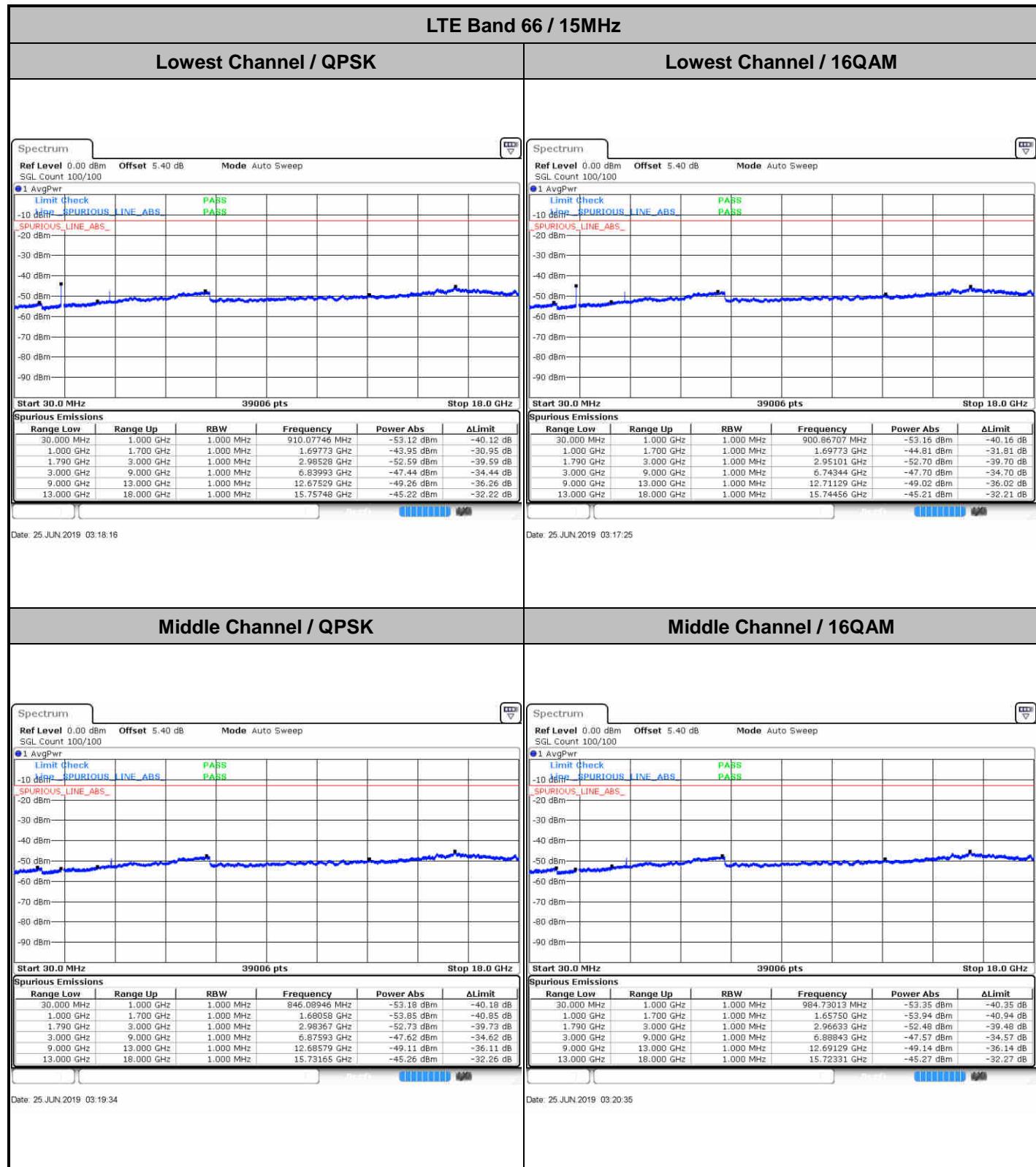
LTE Band 66 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM





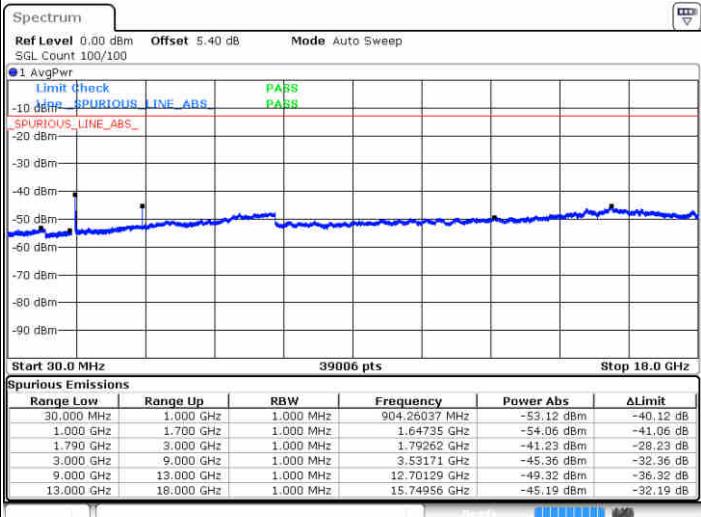
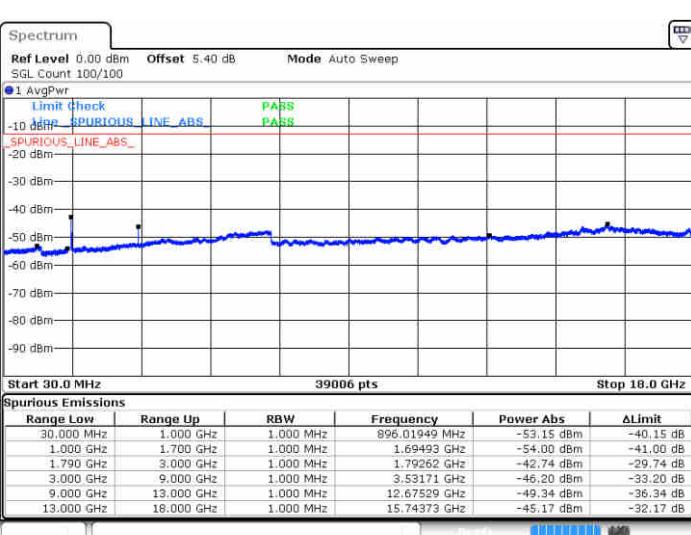




LTE Band 66 / 15MHz

Highest Channel / QPSK

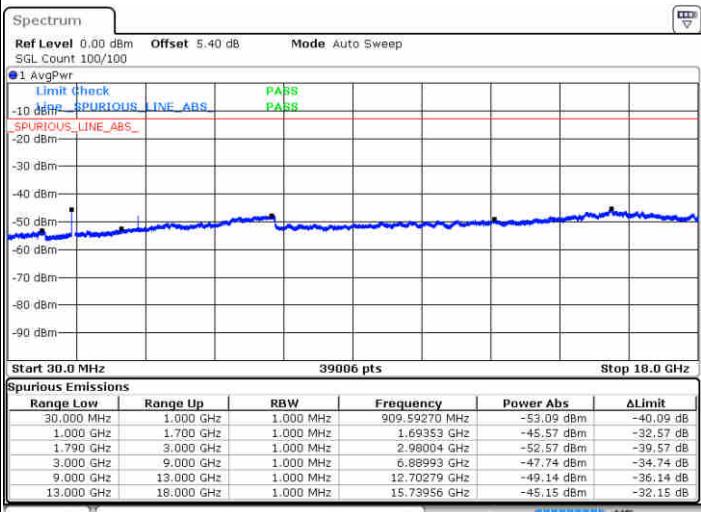
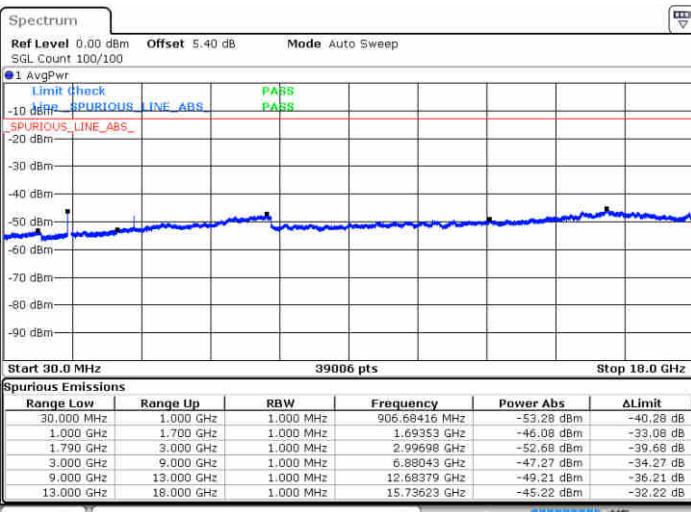
Highest Channel / 16QAM

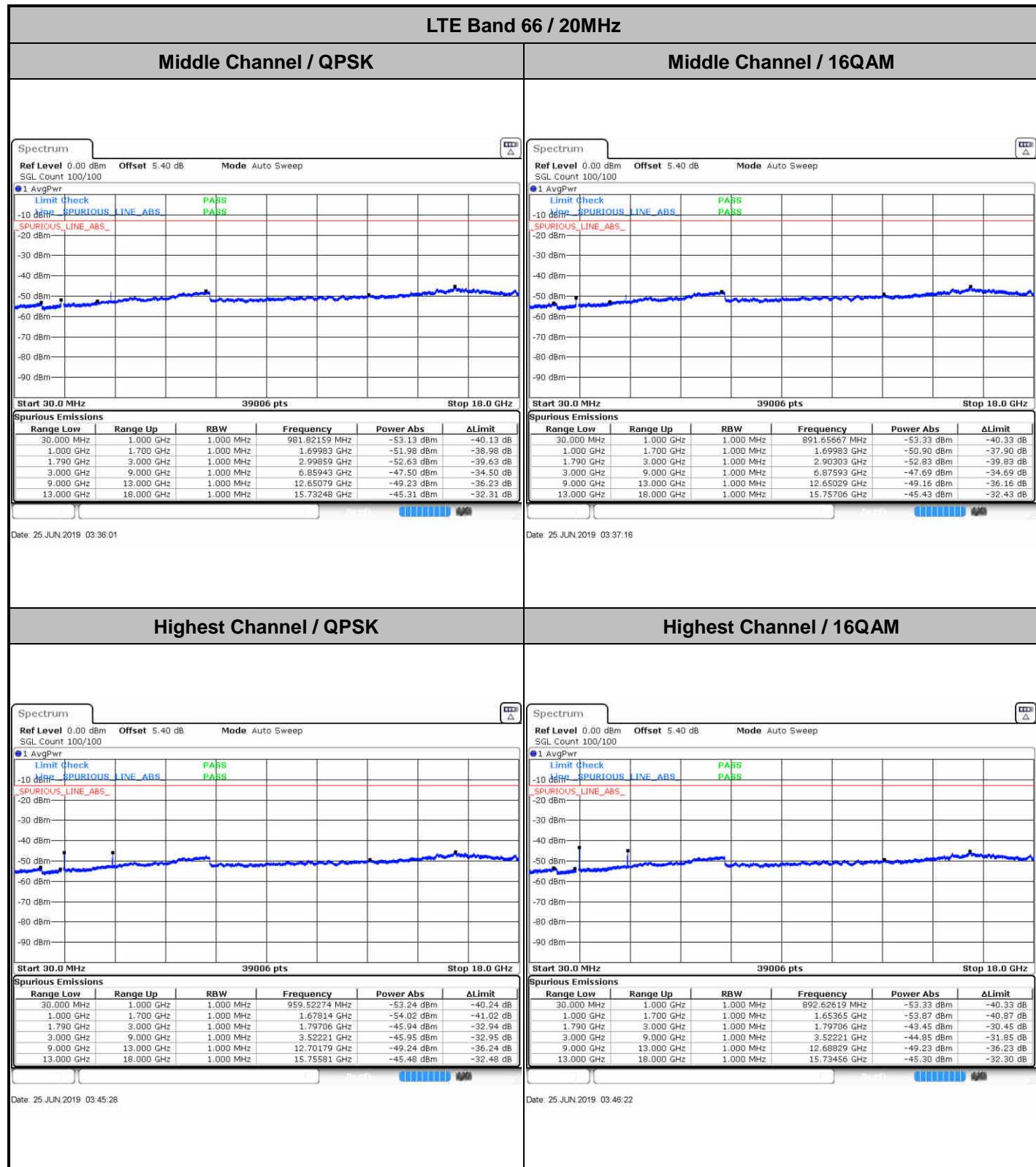


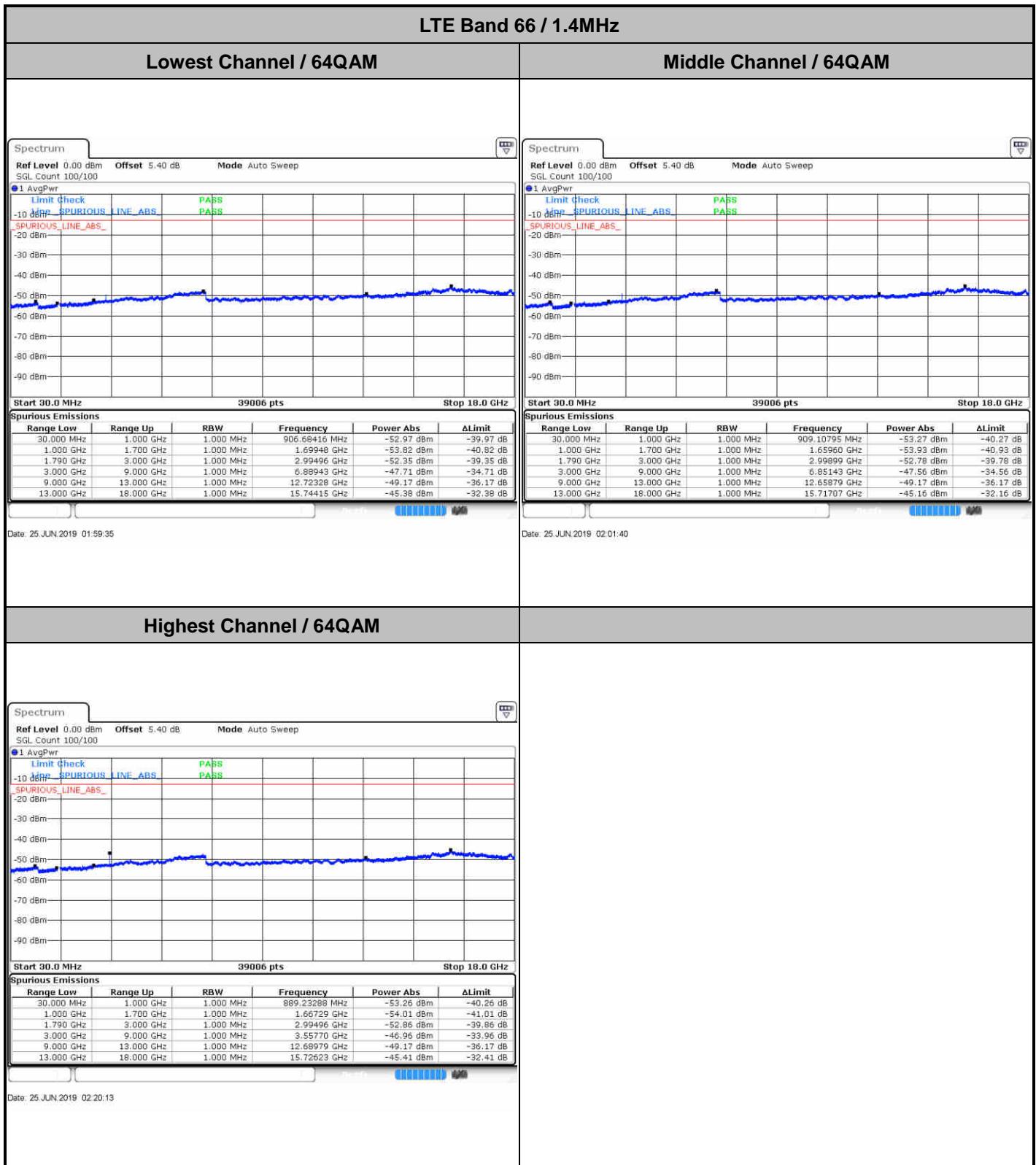
LTE Band 66 / 20MHz

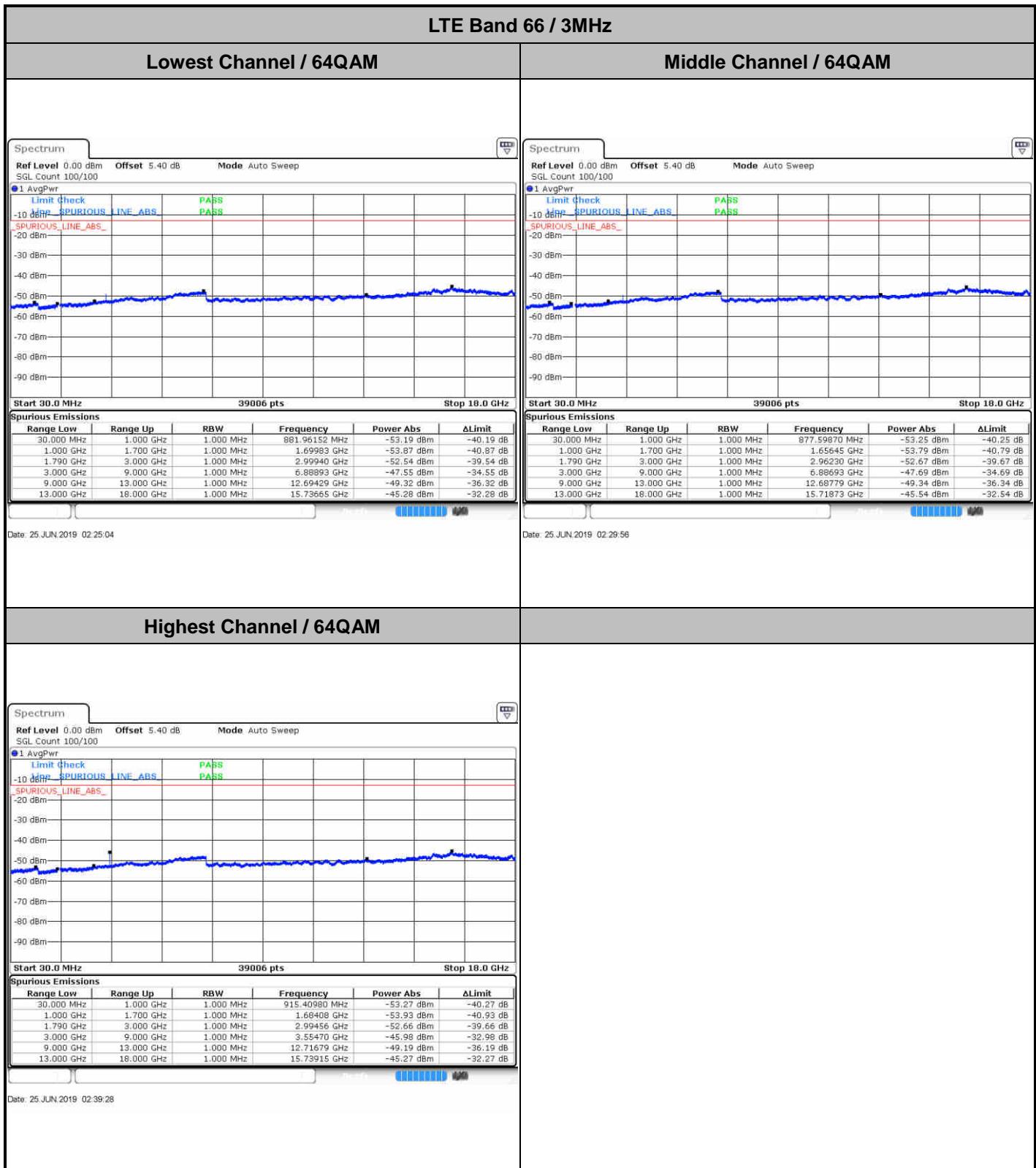
Lowest Channel / QPSK

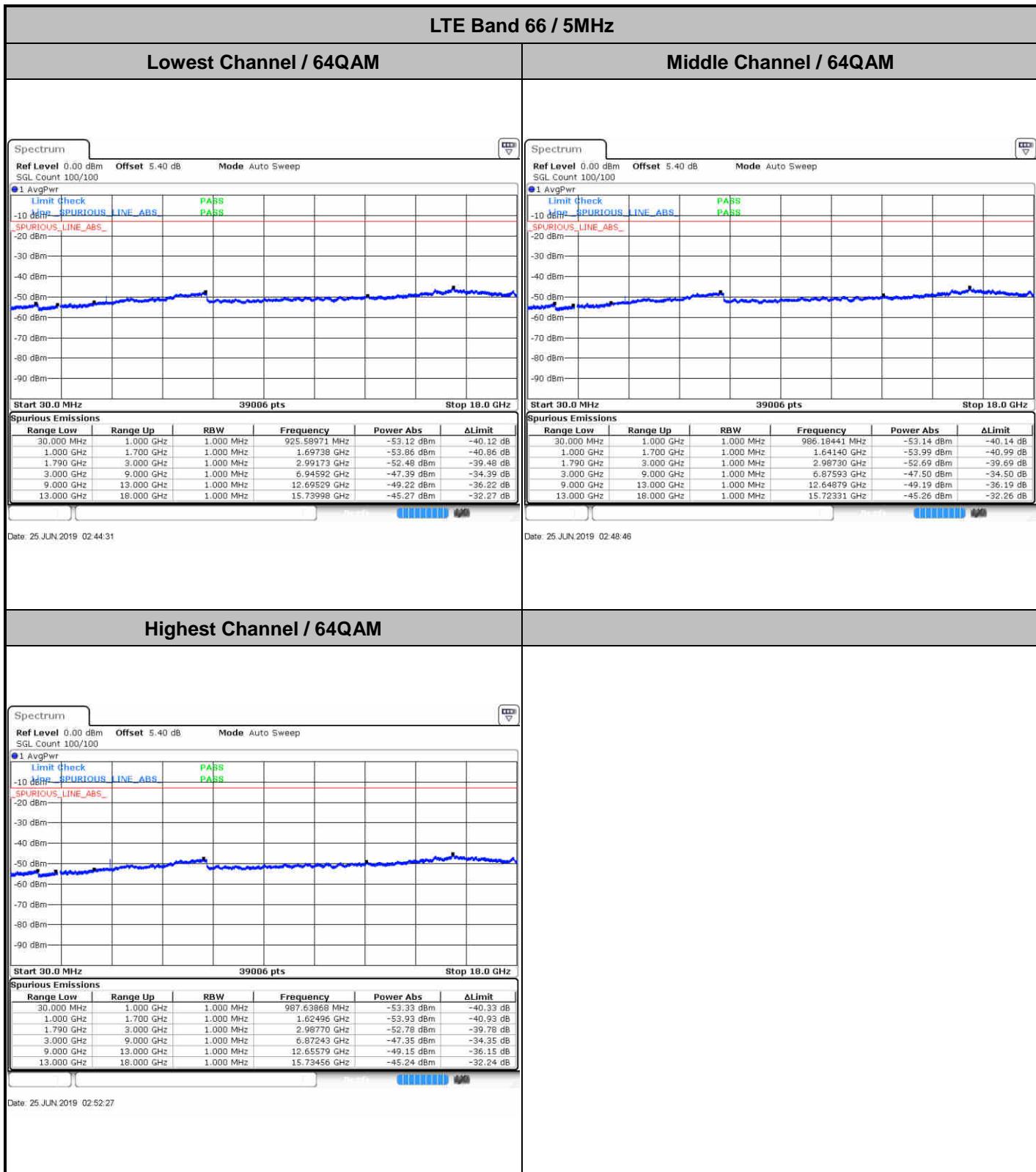
Lowest Channel / 16QAM











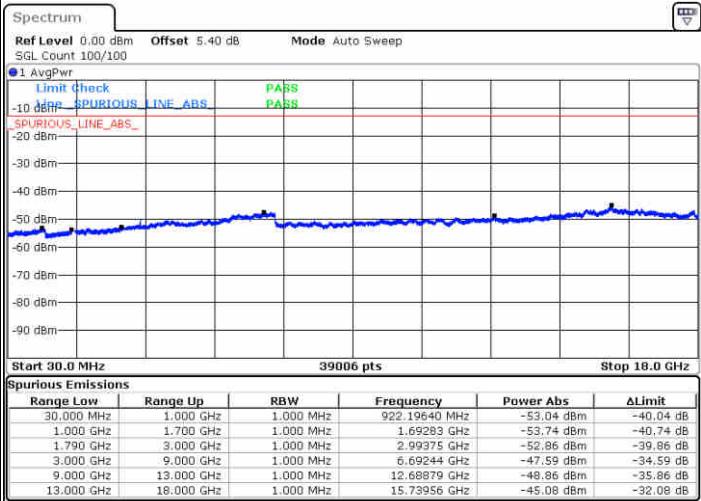
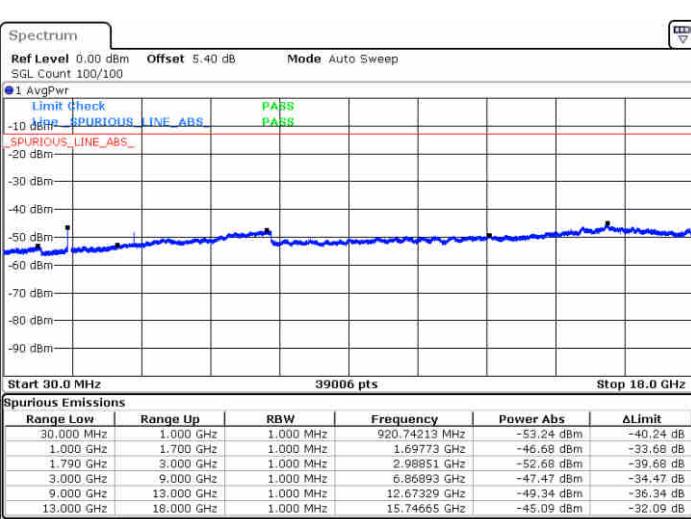




LTE Band 66 / 15MHz

Lowest Channel / 64QAM

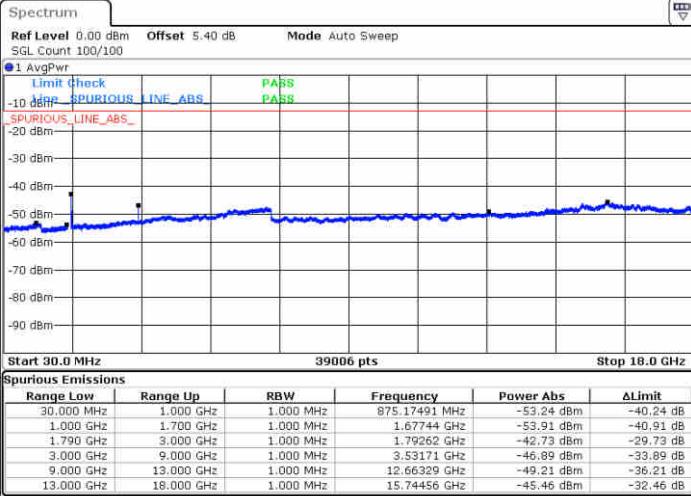
Middle Channel / 64QAM



Date: 25 JUN 2019 03:16:06

Date: 25 JUN 2019 03:21:13

Highest Channel / 64QAM



Date: 25 JUN 2019 03:27:22





Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0043	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0066	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0041	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0060	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0041	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0040	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0043	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 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 2 / 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	3702	-58.16	-13	-45.16	-70.42	2.641	14.90	H
	5553	-57.33	-13	-44.33	-69.19	2.94	14.80	H
	7404	-52.41	-13	-39.41	-62.18	3.39	13.16	H
	3702	-57.33	-13	-44.33	-69.59	2.64	14.90	V
	5553	-57.66	-13	-44.66	-69.52	2.94	14.80	V
	7404	-51.85	-13	-38.85	-61.62	3.39	13.16	V
Middle	3741	-59.41	-13	-46.41	-71.67	2.641	14.90	H
	5613	-52.09	-13	-39.09	-63.95	2.94	14.80	H
	7488	-51.99	-13	-38.99	-61.76	3.39	13.16	H
	3741	-58.83	-13	-45.83	-71.09	2.64	14.90	V
	5613	-50.51	-13	-37.51	-62.37	2.94	14.80	V
	7488	-51.53	-13	-38.53	-61.30	3.39	13.16	V
Highest	3783	-58.09	-13	-45.09	-70.35	2.641	14.90	H
	5673	-56.50	-13	-43.50	-68.36	2.94	14.80	H
	7560	-51.90	-13	-38.90	-61.67	3.39	13.16	H
	3783	-59.12	-13	-46.12	-71.38	2.64	14.90	V
	5673	-56.29	-13	-43.29	-68.15	2.94	14.80	V
	7560	-51.82	-13	-38.82	-61.59	3.39	13.16	V

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



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	-58.15	-13	-45.15	-68.89	2.604	13.34	H
	5133	-58.43	-13	-45.43	-68.94	3.011	13.52	H
	6840	-55.00	-13	-42.00	-65.20	3.271	13.47	H
	3423	-56.85	-13	-43.85	-67.59	2.604	13.34	V
	5133	-58.08	-13	-45.08	-68.59	3.011	13.52	V
	6840	-54.81	-13	-41.81	-65.01	3.271	13.47	V
Middle	3447	-57.95	-13	-44.95	-68.69	2.604	13.34	H
	5172	-58.46	-13	-45.46	-68.97	3.011	13.52	H
	6900	-54.61	-13	-41.61	-64.81	3.271	13.47	H
	3447	-54.78	-13	-41.78	-65.52	2.604	13.34	V
	5172	-58.90	-13	-45.90	-69.41	3.011	13.52	V
	6900	-54.10	-13	-41.10	-64.30	3.271	13.47	V
Highest	3471	-60.46	-13	-47.46	-71.20	2.604	13.34	H
	5208	-58.53	-13	-45.53	-69.04	3.011	13.52	H
	6948	-54.04	-13	-41.04	-64.24	3.271	13.47	H
	3471	-58.97	-13	-45.97	-69.71	2.604	13.34	V
	5208	-58.76	-13	-45.76	-69.27	3.011	13.52	V
	6948	-53.31	-13	-40.31	-63.51	3.271	13.47	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-68.87	-13	-55.87	-75.84	1.58	10.70	H
	2474	-63.40	-13	-50.40	-71.65	2.102	12.50	H
	3300	-64.29	-13	-51.29	-73.18	2.856	13.90	H
	1650	-68.77	-13	-55.77	-75.74	1.58	10.70	V
	2474	-64.19	-13	-51.19	-72.44	2.10	12.50	V
	3300	-64.16	-13	-51.16	-73.05	2.86	13.90	V
Middle	1664	-68.50	-13	-55.50	-75.47	1.58	10.70	H
	2496	-62.04	-13	-49.04	-70.29	2.102	12.50	H
	3330	-64.40	-13	-51.40	-73.29	2.856	13.90	H
	1664	-68.83	-13	-55.83	-75.80	1.58	10.70	V
	2496	-63.37	-13	-50.37	-71.62	2.10	12.50	V
	3330	-64.16	-13	-51.16	-73.05	2.86	13.90	V
Highest	1680	-69.12	-13	-56.12	-76.09	1.58	10.70	H
	2518	-61.74	-13	-48.74	-69.99	2.102	12.50	H
	3360	-64.60	-13	-51.60	-73.49	2.856	13.90	H
	1680	-69.09	-13	-56.09	-76.06	1.58	10.70	V
	2518	-62.90	-13	-49.90	-71.15	2.10	12.50	V
	3360	-64.50	-13	-51.50	-73.39	2.86	13.90	V

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



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	5004	-67.44	-25	-42.44	-77.65	3.03	13.24	H
	7504	-60.59	-25	-35.59	-70.04	3.56	13.01	H
	10000	-56.98	-25	-31.98	-66.50	3.92	13.44	H
	5004	-65.80	-25	-40.80	-76.01	3.03	13.24	V
	7504	-59.32	-25	-34.32	-68.77	3.56	13.01	V
	10000	-58.64	-25	-33.64	-68.16	3.92	13.44	V
Middle	5052	-66.94	-25	-41.94	-77.15	3.03	13.24	H
	7580	-60.83	-25	-35.83	-70.28	3.56	13.01	H
	10100	-57.37	-25	-32.37	-66.89	3.92	13.44	H
	5052	-65.67	-25	-40.67	-75.88	3.03	13.24	V
	7580	-56.91	-25	-31.91	-66.36	3.56	13.01	V
	10100	-58.13	-25	-33.13	-67.65	3.92	13.44	V
Highest	5104	-66.03	-25	-41.03	-76.24	3.03	13.24	H
	7652	-61.16	-25	-36.16	-70.61	3.56	13.01	H
	10200	-58.30	-25	-33.30	-67.82	3.92	13.44	H
	5104	-66.32	-25	-41.32	-76.53	3.03	13.24	V
	7652	-61.41	-25	-36.41	-70.86	3.56	13.01	V
	10200	-58.59	-25	-33.59	-68.11	3.92	13.44	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-68.29	-13	-55.29	-75.26	1.58	10.70	H
	2098	-67.15	-13	-54.15	-75.40	2.102	12.50	H
	2798	-65.11	-13	-52.11	-74.00	2.856	13.90	H
	3498	-63.93	-13	-50.93	-72.39	2.689	13.30	H
	1400	-69.04	-13	-56.04	-76.01	1.58	10.70	V
	2098	-67.27	-13	-54.27	-75.52	2.10	12.50	V
	2798	-65.08	-13	-52.08	-73.97	2.86	13.90	V
	3498	-64.46	-13	-51.46	-72.92	2.69	13.30	V
Middle	1406	-68.18	-13	-55.18	-75.15	1.58	10.70	H
	2110	-53.40	-13	-40.40	-61.65	2.102	12.50	H
	2812	-64.35	-13	-51.35	-73.24	2.856	13.90	H
	3516	-63.33	-13	-50.33	-71.79	2.689	13.30	H
	1406	-67.76	-13	-54.76	-74.73	1.58	10.70	V
	2110	-55.69	-13	-42.69	-63.94	2.10	12.50	V
	2812	-64.40	-13	-51.40	-73.29	2.86	13.90	V
	3516	-64.27	-13	-51.27	-72.73	2.69	13.30	V
Highest	1414	-68.80	-13	-55.80	-75.77	1.58	10.70	H
	2120	-67.98	-13	-54.98	-76.23	2.102	12.50	H
	2826	-64.30	-13	-51.30	-73.19	2.856	13.90	H
	3534	-63.99	-13	-50.99	-72.45	2.689	13.30	H
	1414	-69.25	-13	-56.25	-76.22	1.58	10.70	V
	2120	-68.22	-13	-55.22	-76.47	2.10	12.50	V
	2826	-64.35	-13	-51.35	-73.24	2.86	13.90	V
	3534	-64.26	-13	-51.26	-72.72	2.69	13.30	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554	-62.59	-13	-49.59	-65.22	1.09	5.87	H
	2332	-62.04	-13	-49.04	-64.44	1.37	5.92	H
	3108	-63.99	-13	-50.99	-67.88	1.64	7.68	H
	1554	-65.93	-13	-52.93	-68.56	1.09	5.87	V
	2332	-64.49	-13	-51.49	-66.89	1.37	5.92	V
	3108	-63.98	-13	-50.98	-67.87	1.64	7.68	V
Middle	1560	-63.74	-42.15	-21.59	-66.37	1.09	5.87	H
	2339.52	-63.74	-13	-50.74	-66.14	1.37	5.92	H
	3120	-64.48	-13	-51.48	-68.37	1.64	7.68	H
	1560	-66.31	-42.15	-24.16	-68.94	1.09	5.87	V
	2339.52	-65.00	-13	-52.00	-67.40	1.37	5.92	V
	3120	-64.67	-13	-51.67	-68.56	1.64	7.68	V
Highest	1564	-64.25	-42.15	-22.10	-66.88	1.09	5.87	H
	2348	-62.66	-13	-49.66	-65.06	1.37	5.92	H
	3132	-64.43	-13	-51.43	-68.32	1.64	7.68	H
	1564	-66.74	-42.15	-24.59	-69.37	1.09	5.87	V
	2347.02	-65.00	-13	-52.00	-67.40	1.37	5.92	V
	3132	-64.02	-13	-51.02	-67.91	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1556	-62.46	-13	-49.46	-65.09	1.09	5.87	H
	2332	-46.79	-13	-33.79	-49.19	1.37	5.92	H
	3108	-63.59	-13	-50.59	-67.48	1.64	7.68	H
	1556	-65.15	-13	-52.15	-67.78	1.09	5.87	V
	2332	-53.08	-13	-40.08	-55.48	1.37	5.92	V
	3108	-64.01	-13	-51.01	-67.90	1.64	7.68	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3423	-62.55	-13	-49.55	-73.29	2.604	13.34	H
	5133	-54.50	-13	-41.50	-65.01	3.011	13.52	H
	6840	-55.57	-13	-42.57	-65.77	3.271	13.47	H
	3423	-62.24	-13	-49.24	-72.98	2.604	13.34	V
	5133	-53.13	-13	-40.13	-63.64	3.011	13.52	V
	6840	-55.34	-13	-42.34	-65.54	3.271	13.47	V
Middle	3471	-63.36	-13	-50.36	-74.10	2.604	13.34	H
	5208	-56.40	-13	-43.40	-66.91	3.011	13.52	H
	6948	-54.51	-13	-41.51	-64.71	3.271	13.47	H
	3471	-63.31	-13	-50.31	-74.05	2.604	13.34	V
	5208	-55.71	-13	-42.71	-66.22	3.011	13.52	V
	6948	-53.96	-13	-40.96	-64.16	3.271	13.47	V
Highest	3522	-62.48	-13	-49.48	-73.22	2.604	13.34	H
	5283	-56.39	-13	-43.39	-66.90	3.011	13.52	H
	7044	-52.88	-13	-39.88	-63.08	3.271	13.47	H
	3522	-62.84	-13	-49.84	-73.58	2.604	13.34	V
	5283	-56.07	-13	-43.07	-66.58	3.011	13.52	V
	7044	-52.92	-13	-39.92	-63.12	3.271	13.47	V

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