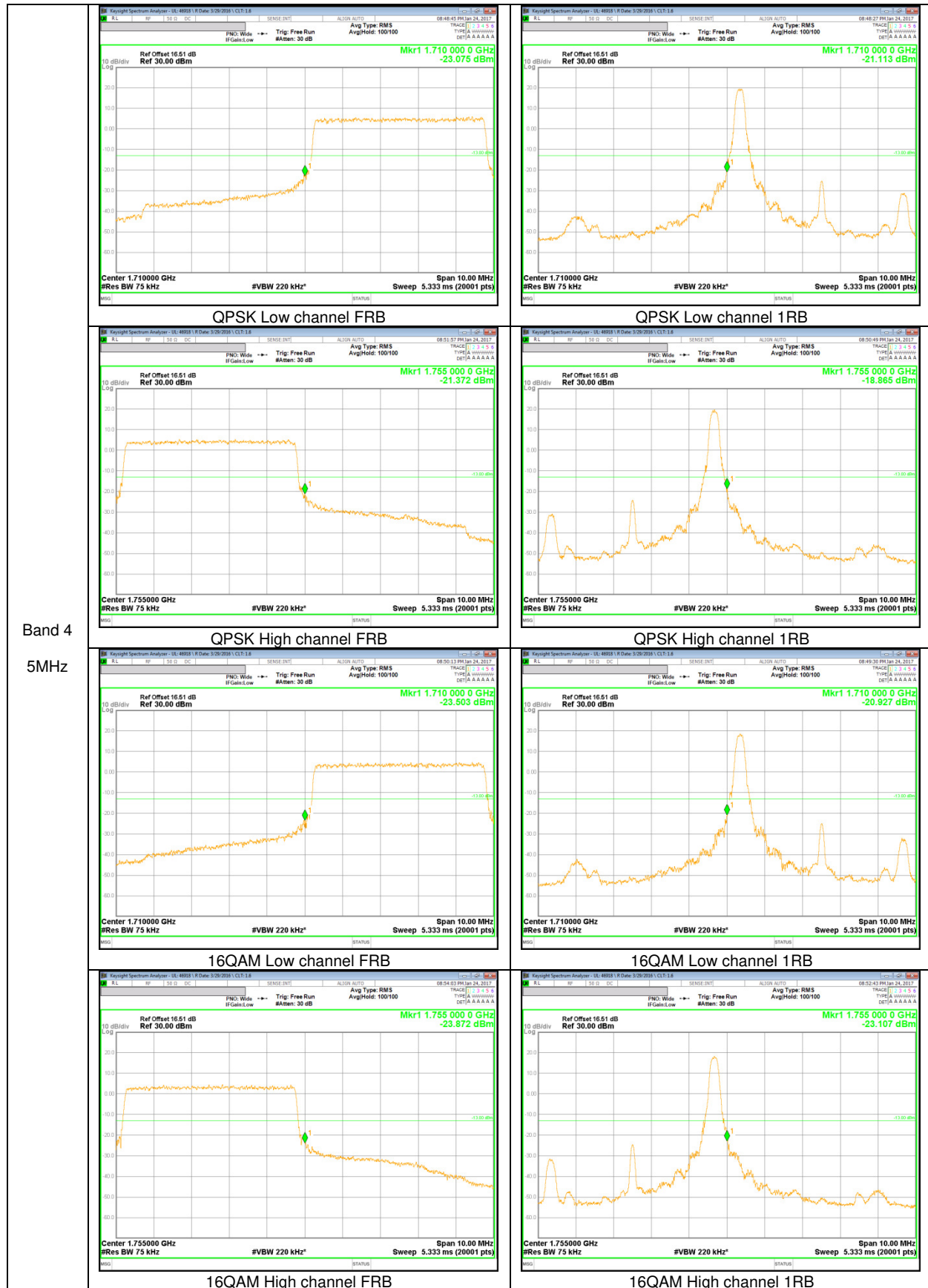
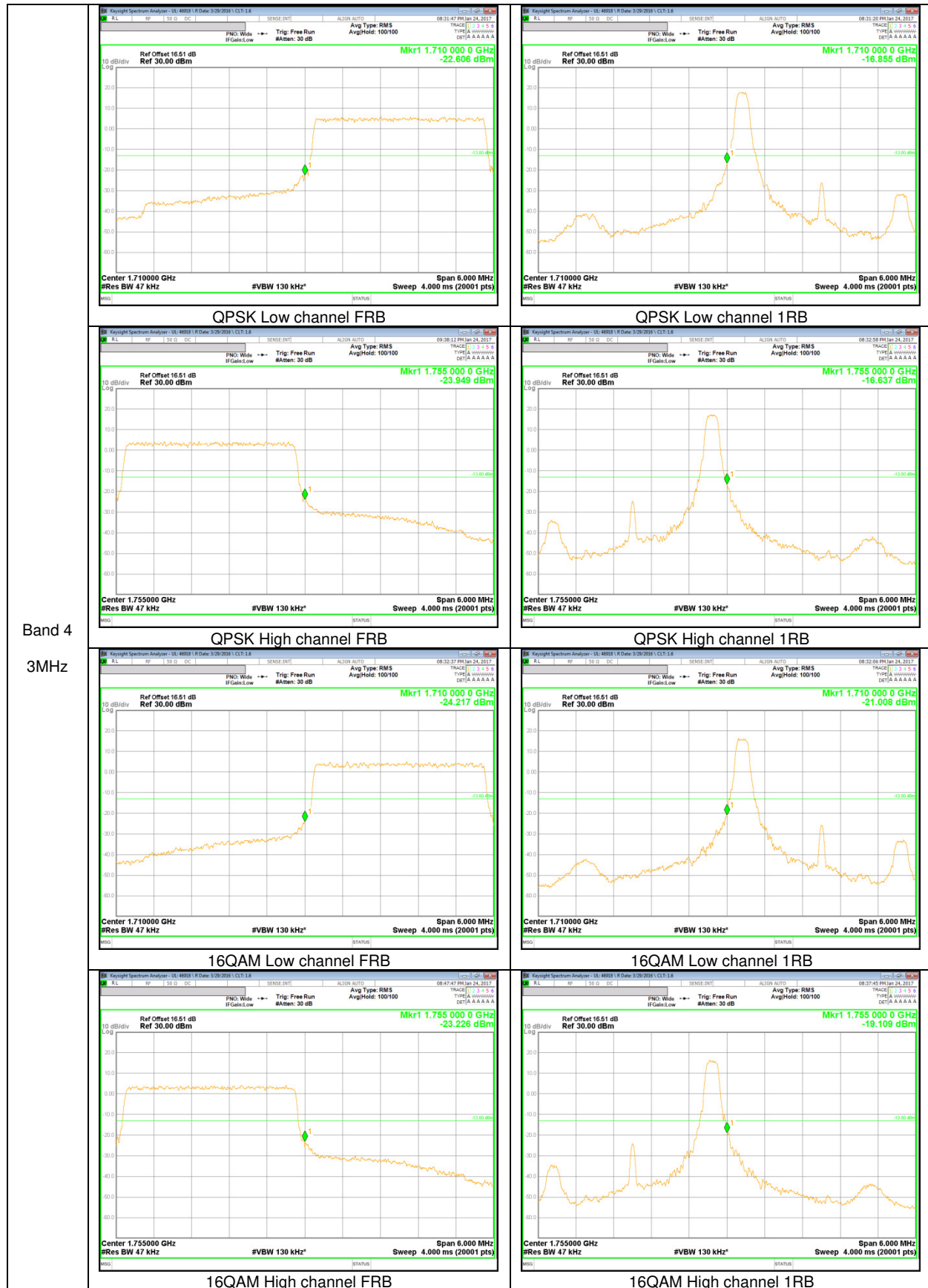
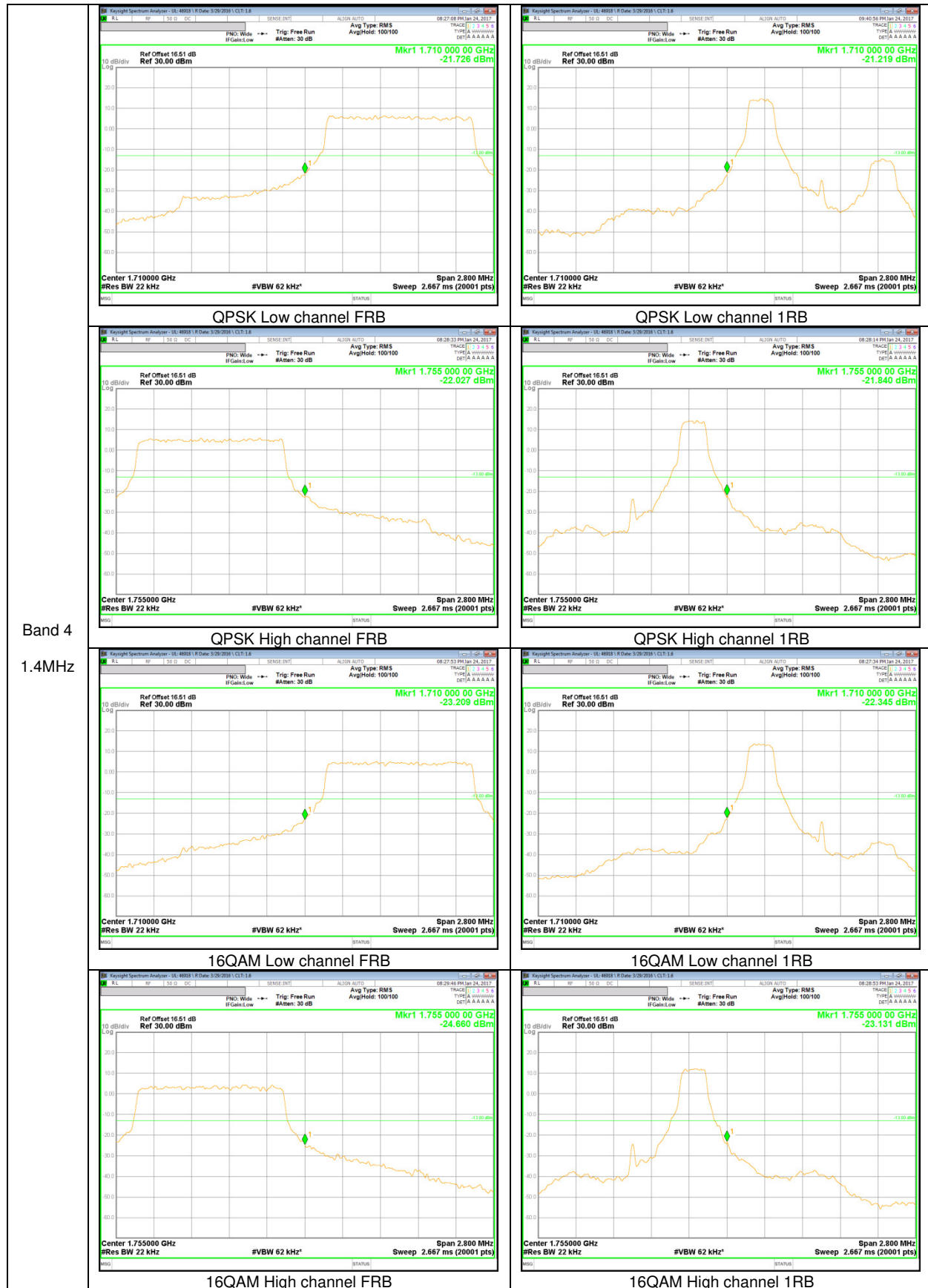


Band 4
 5MHz



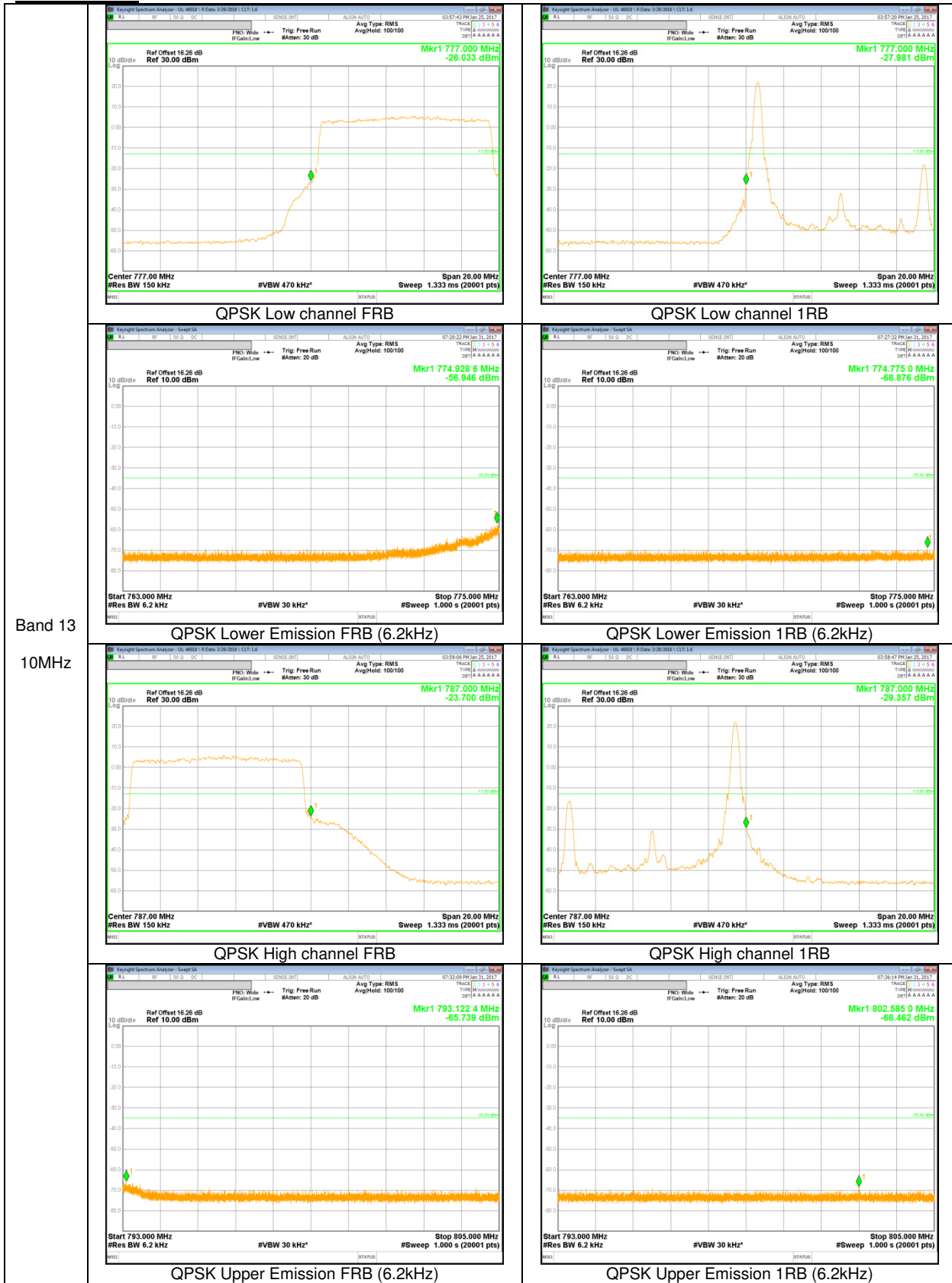


Band 4
3MHz

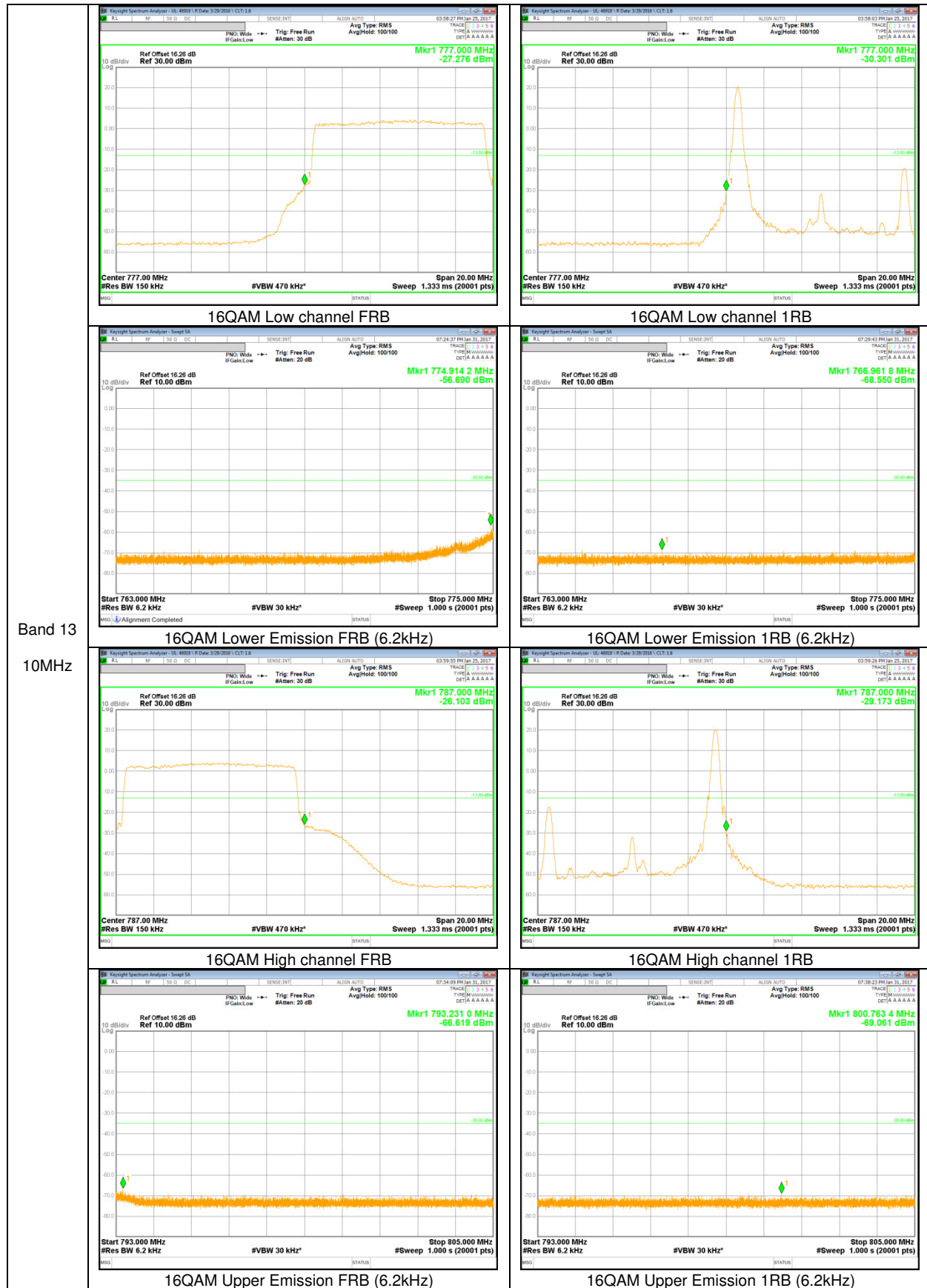


Band 4
1.4MHz

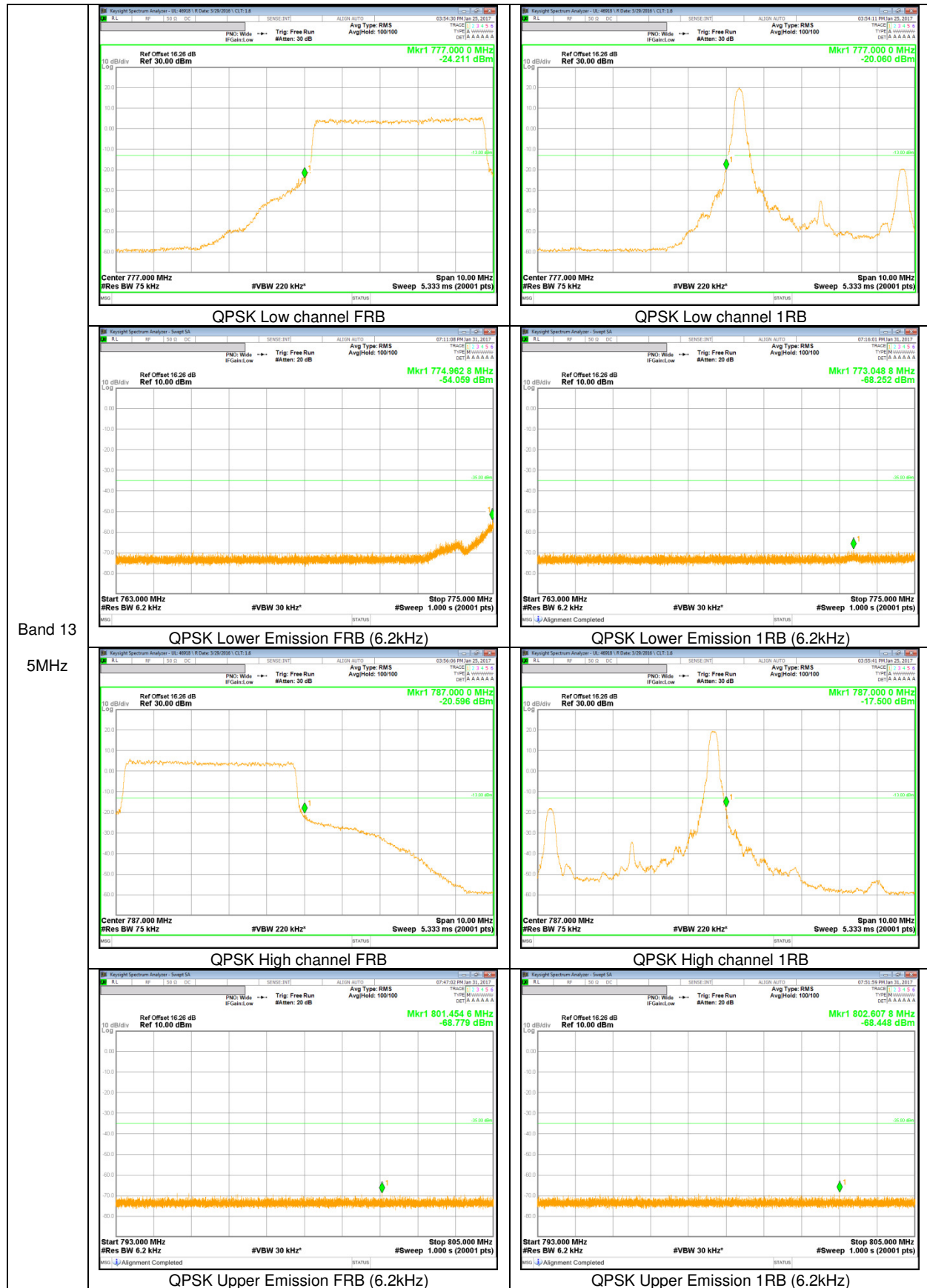
LTE Band 13



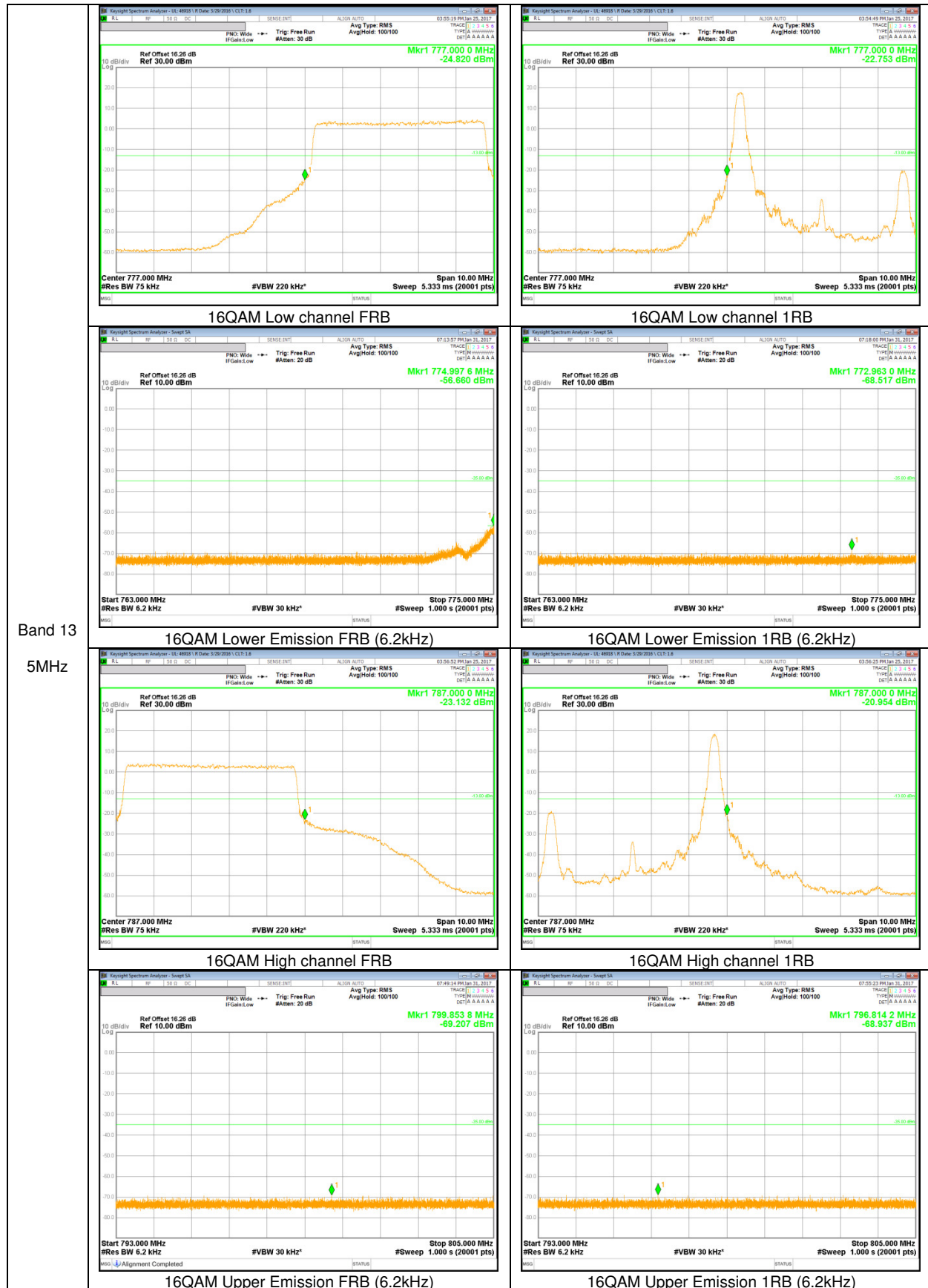
Band 13
10MHz



Band 13
10MHz



Band 13
5MHz



10.3. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §27.53

LIMITS

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

- a) Set the RBW = 100KHz for emission below 1GHz and 1MHz for emissions above 1GHz
(Tests were performed 1MHz[Worst case], to sweep 1 time for all frequency range)
- b) Set VBW $\geq 3 \times$ RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = auto couple;
- e) Detector = peak;
- f) Ensure that the number of measurement points = Max (40001);
- g) Trace mode = max hold;

RESULTS

10.3.1. OUT OF BAND EMISSIONS RESULT

LTE 4

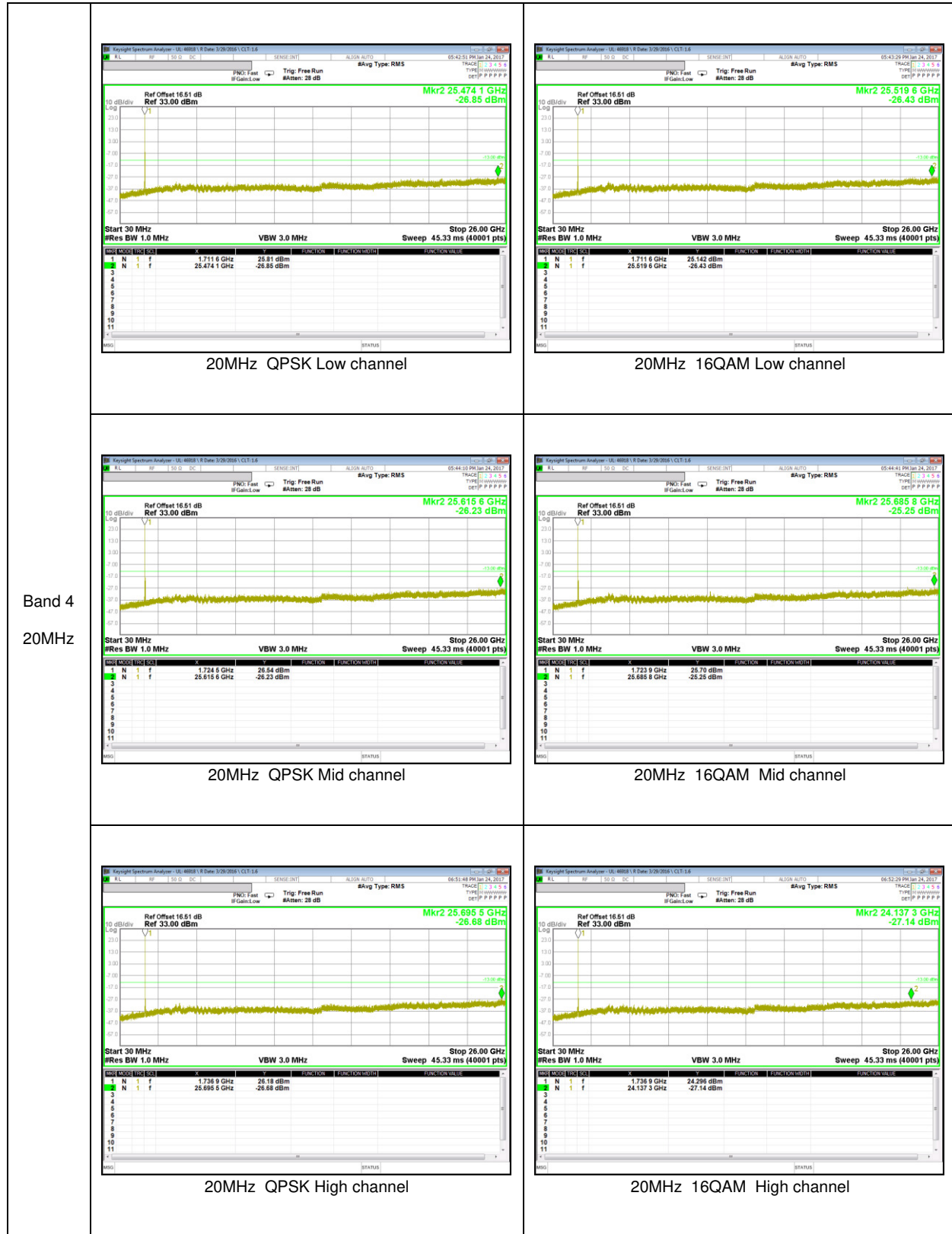
Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]
20 MHz	QPSK	1720.0	-26.85	-13.00
		1732.5	-26.23	
		1745.0	-26.68	
	16QAM	1720.0	-26.43	
		1732.5	-25.25	
		1745.0	-27.14	
15 MHz	QPSK	1717.5	-26.60	
		1732.5	-25.79	
		1747.5	-26.91	
	16QAM	1717.5	-26.91	
		1732.5	-26.19	
		1747.5	-26.33	
10 MHz	QPSK	1715.0	-26.61	
		1732.5	-25.99	
		1750.0	-26.29	
	16QAM	1715.0	-27.04	
		1732.5	-26.09	
		1750.0	-26.73	
5 MHz	QPSK	1712.5	-26.76	
		1732.5	-26.34	
		1752.5	-27.50	
	16QAM	1712.5	-27.28	
		1732.5	-26.95	
		1752.5	-26.51	
3 MHz	QPSK	1711.5	-26.73	
		1732.5	-27.01	
		1753.5	-27.12	
	16QAM	1711.5	-26.83	
		1732.5	-27.32	
		1753.5	-26.52	
1.4 MHz	QPSK	1710.7	-27.08	
		1732.5	-26.55	
		1754.3	-26.29	
	16QAM	1710.7	-26.98	
		1732.5	-26.50	
		1754.3	-27.55	

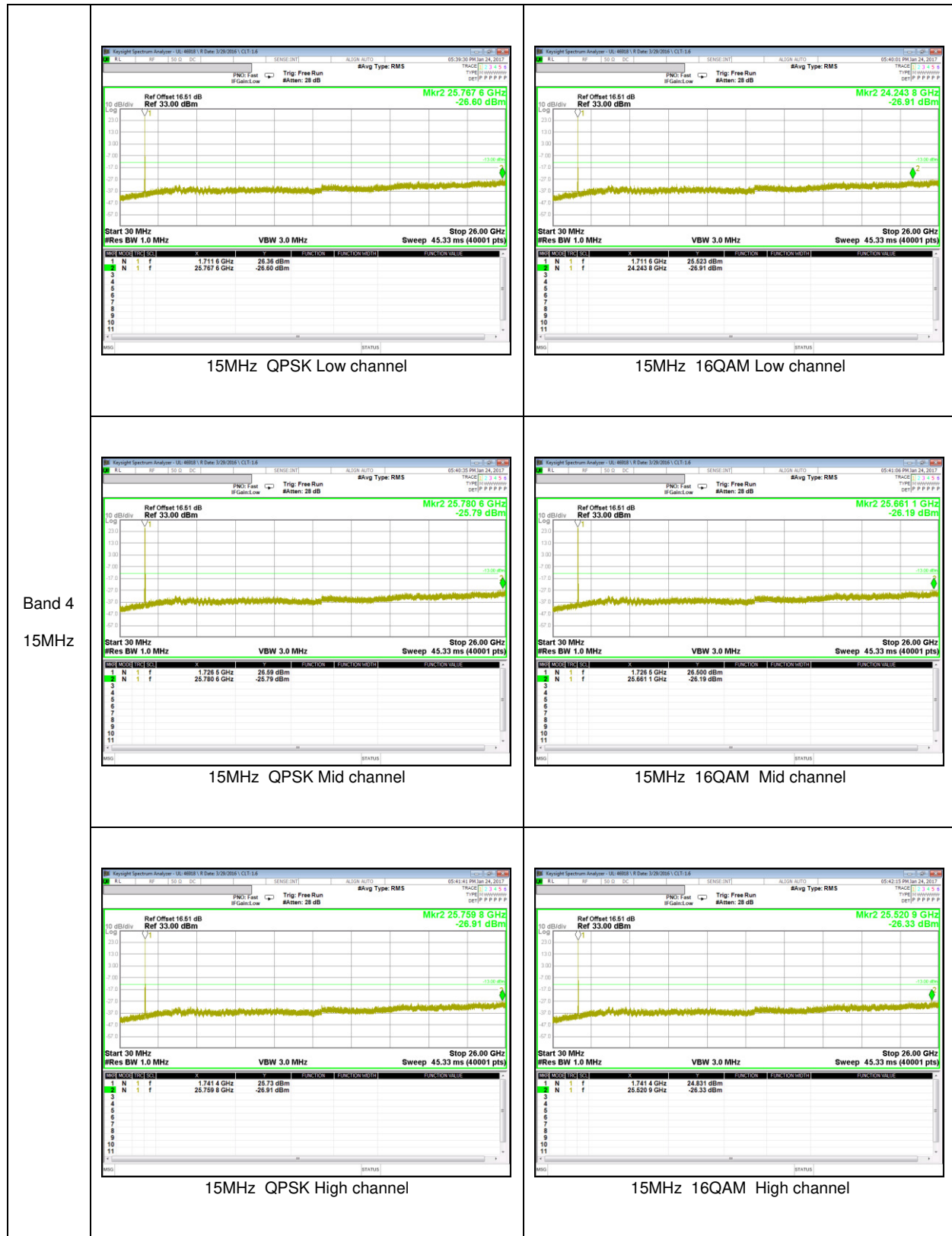
LTE 13

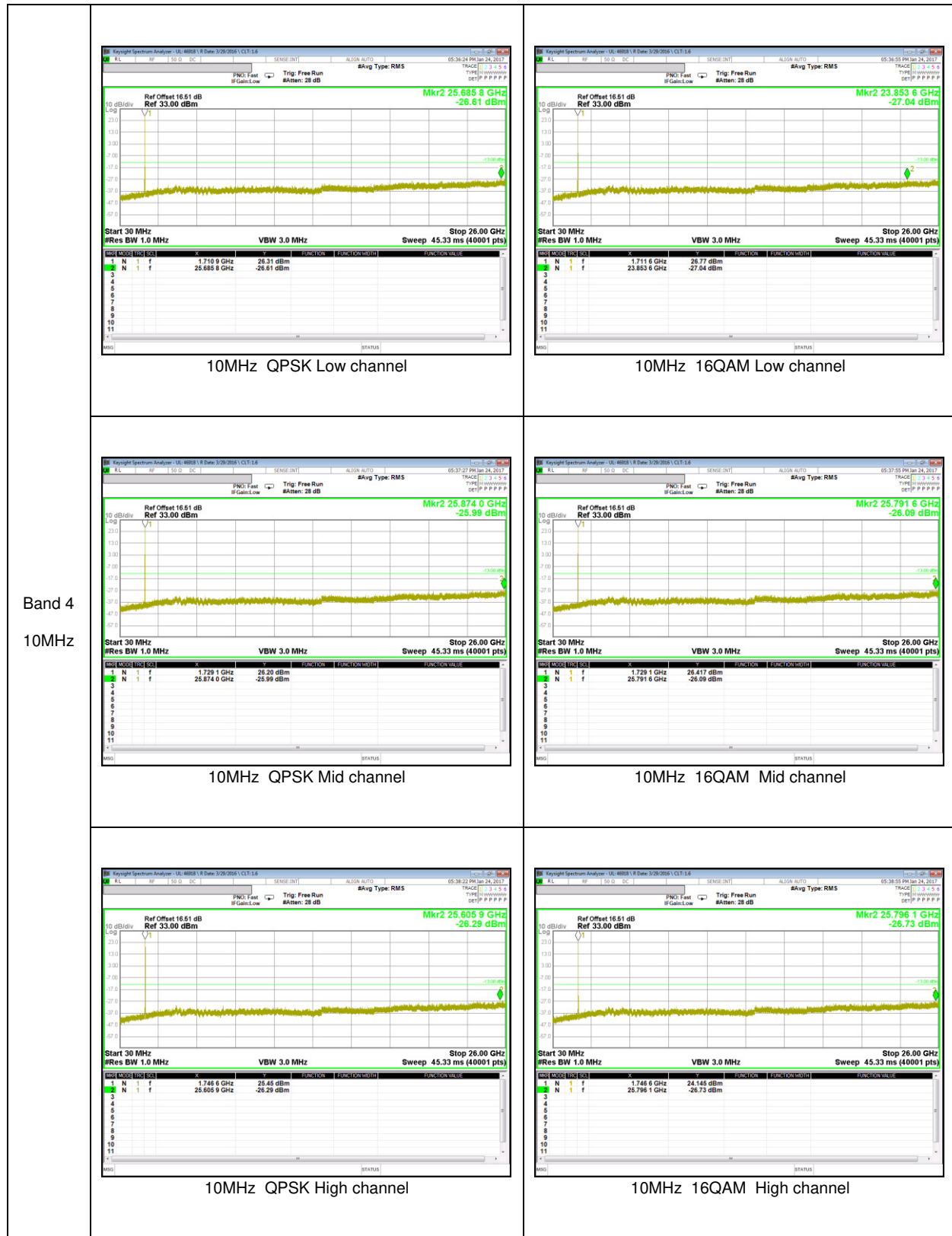
Bandwidth	Mode	f [MHz]	Spurious [dBm]	Limit [dBm]
10 MHz	QPSK	782.0	-27.42	-13.00
	16QAM	782.0	-26.80	
5 MHz	QPSK	779.5	-27.80	
		782.0	-26.69	
		784.5	-27.25	
	16QAM	779.5	-27.99	
		782.0	-27.89	
		784.5	-27.43	

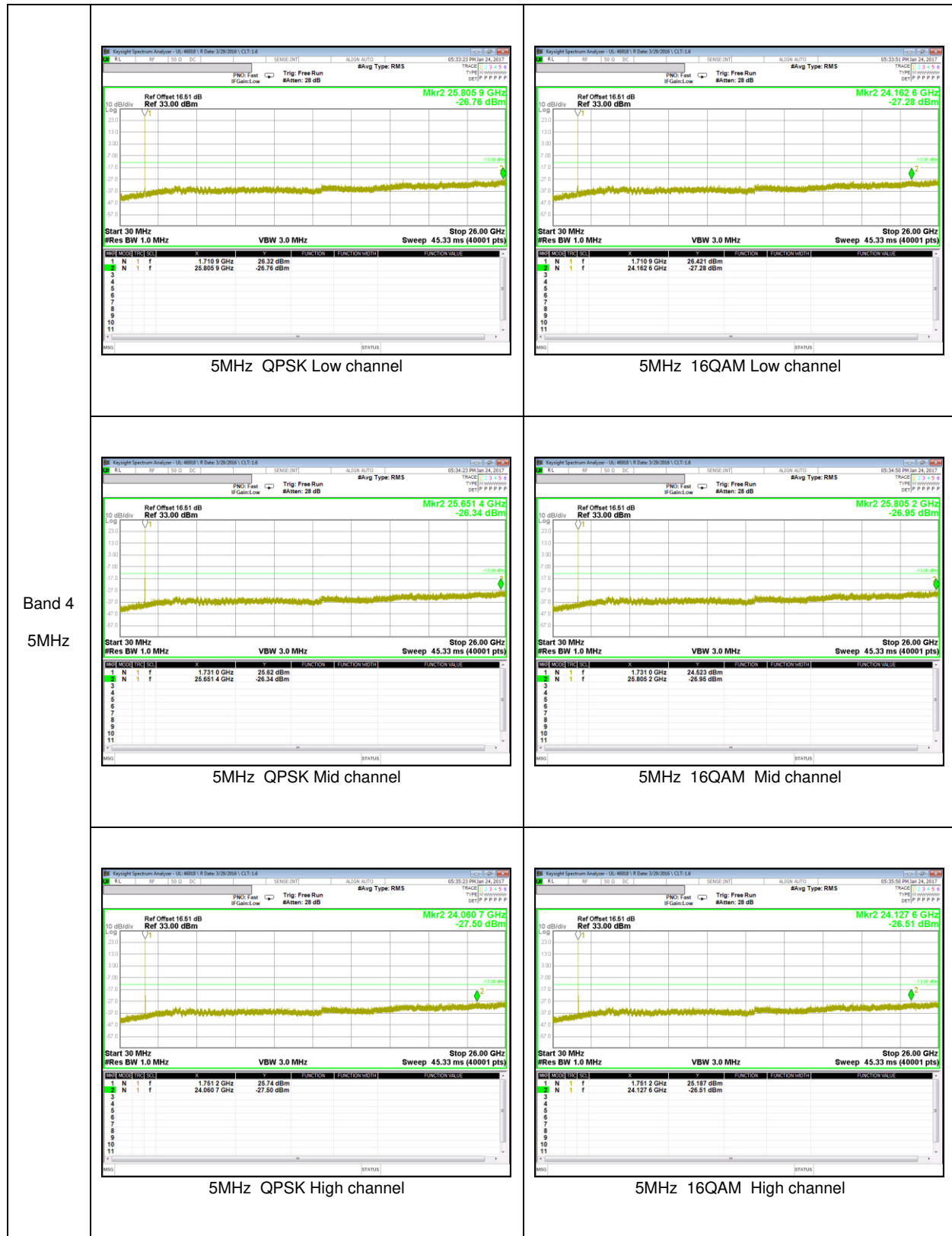
10.3.2. OUT OF BAND EMISSIONS PLOTS

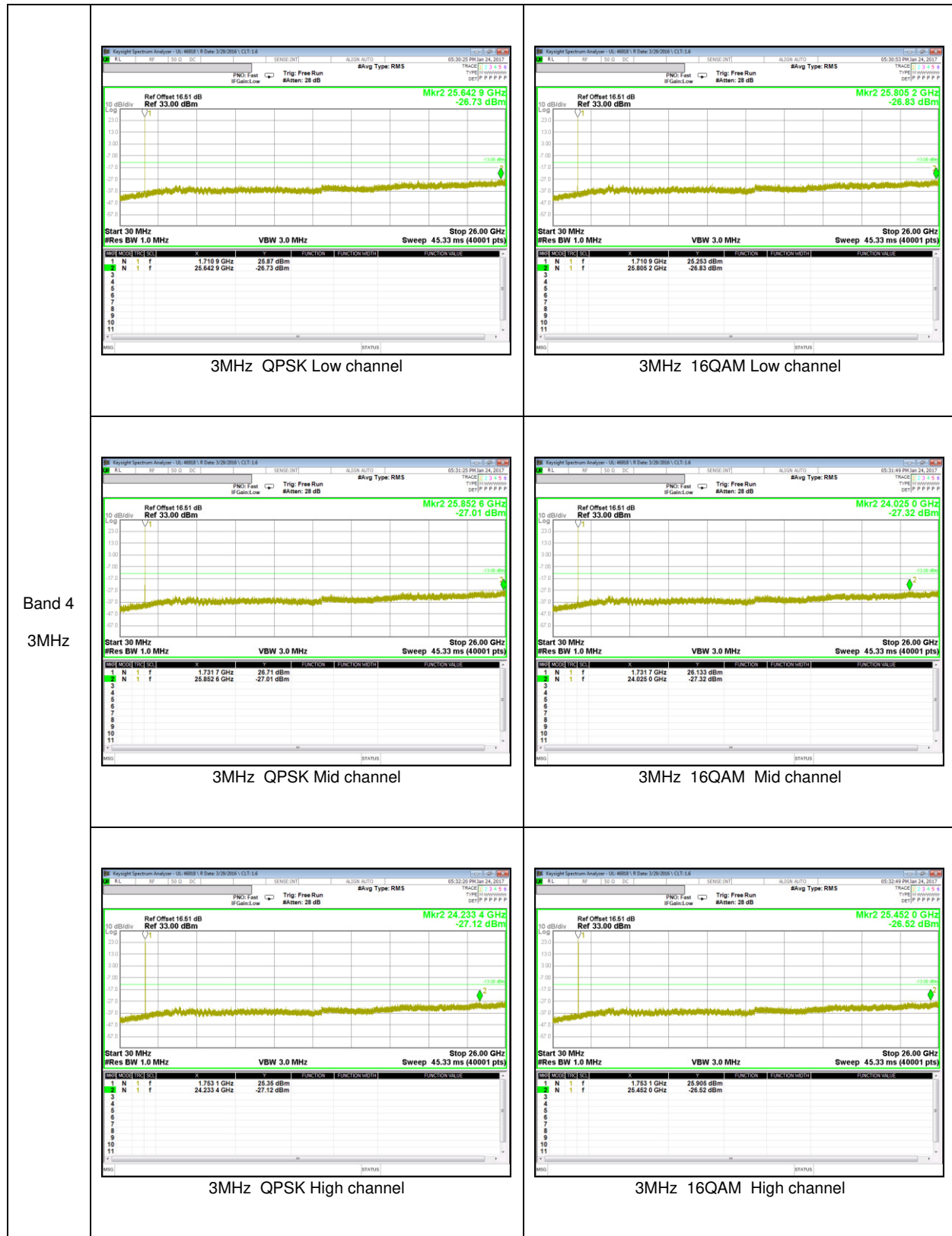
LTE Band 4

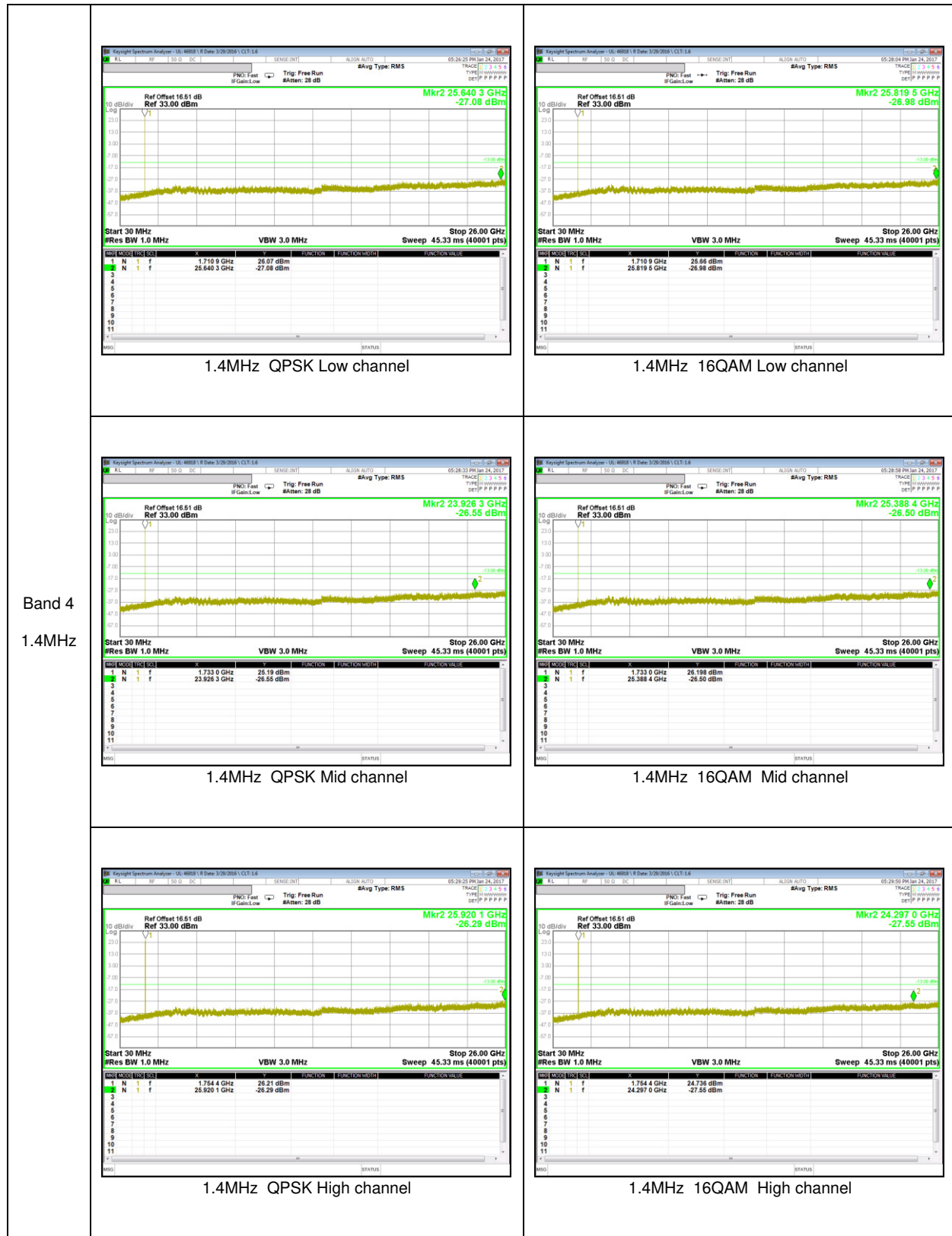












LTE Band 13

