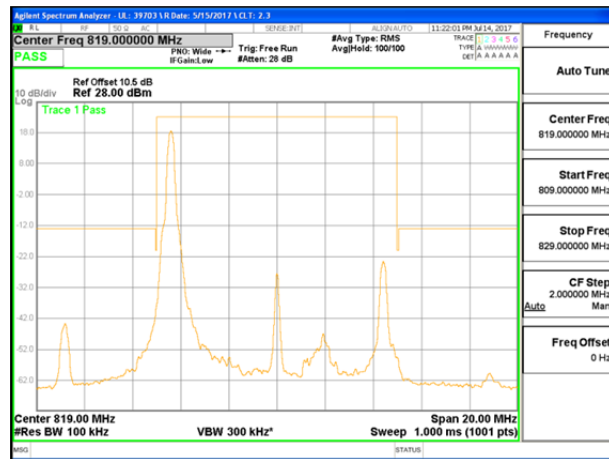
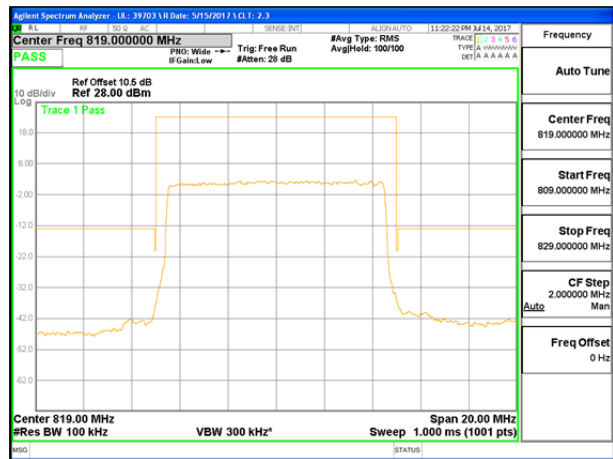
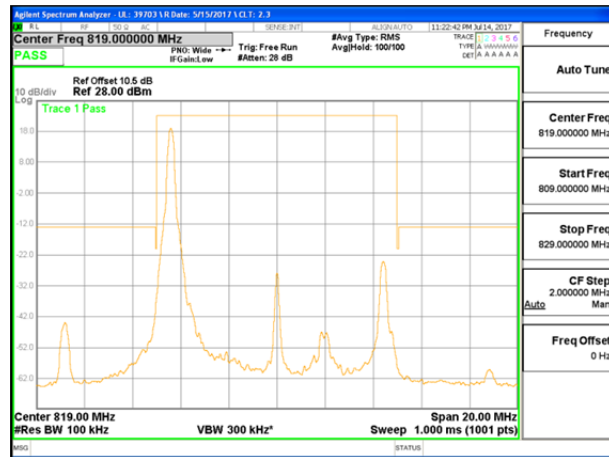




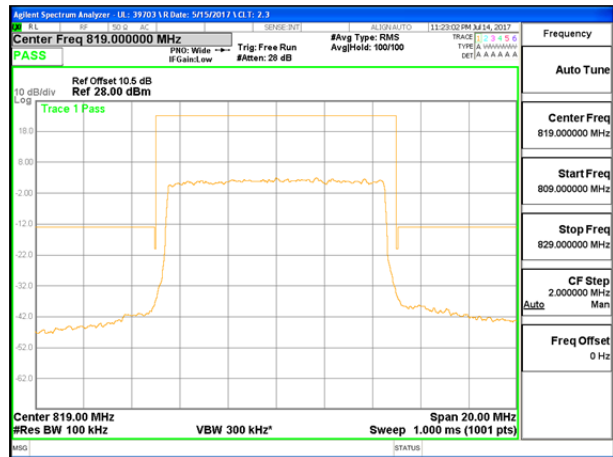
LTE B26 10 MHz QPSK Low Channel 1RB



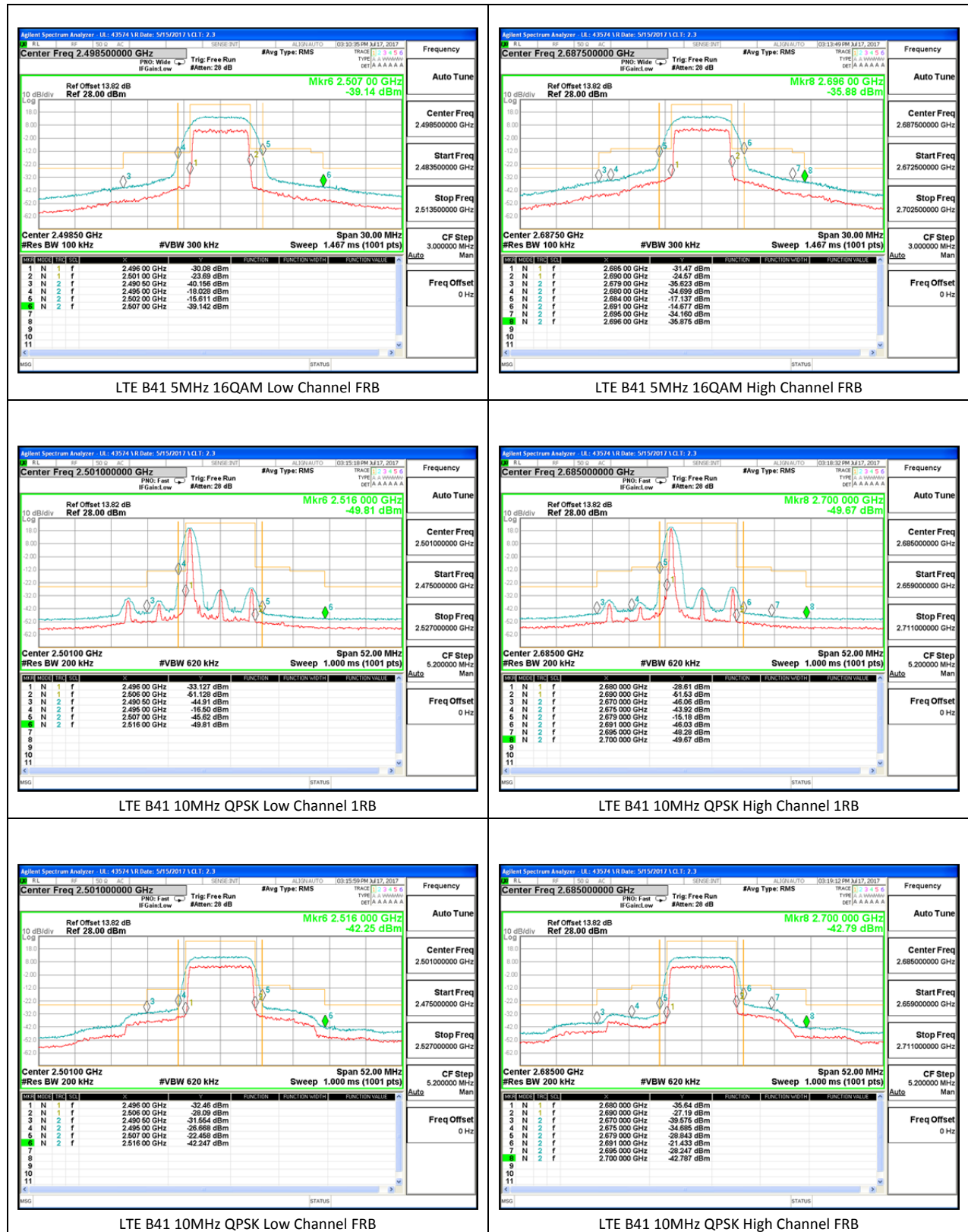
LTE B26 10 MHz QPSK Low Channel FRB

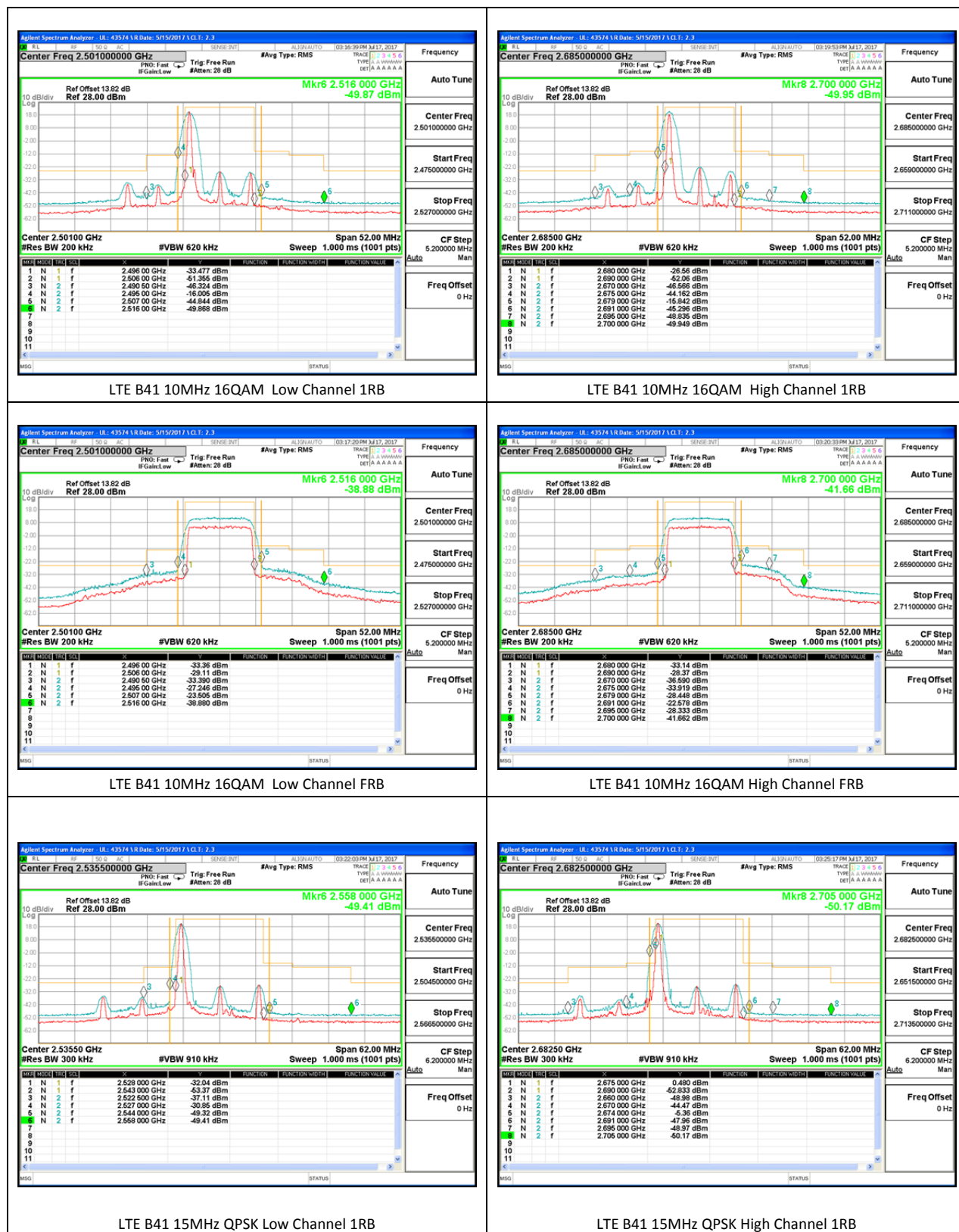


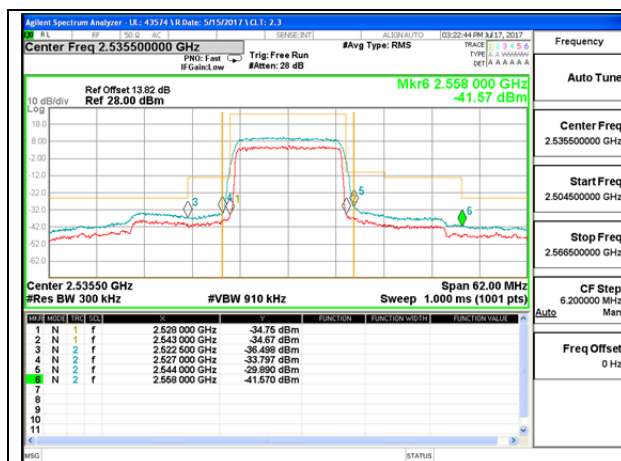
LTE B26 10 MHz 16QAM Low Channel 1RB



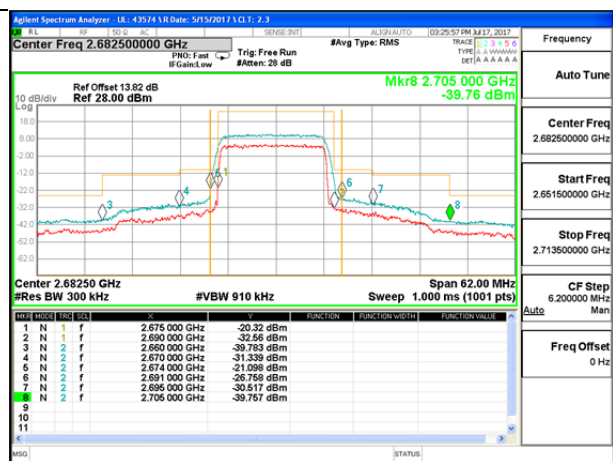
LTE B26 10 MHz 16QAM Low Channel FRB



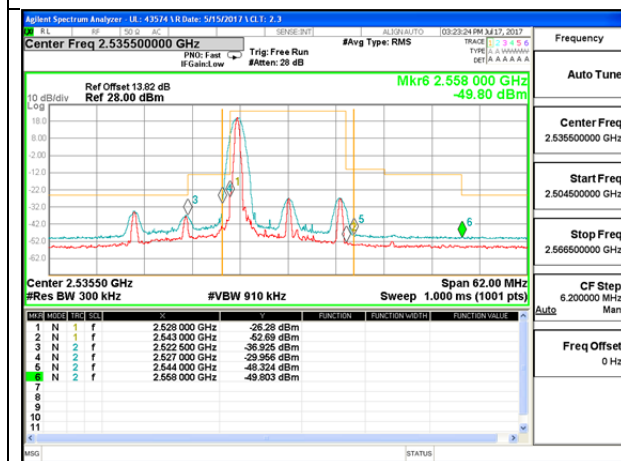




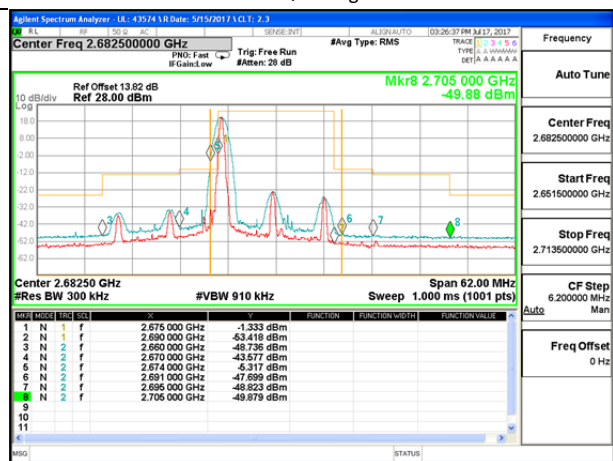
LTE B41 15MHz QPSK Low Channel FRB



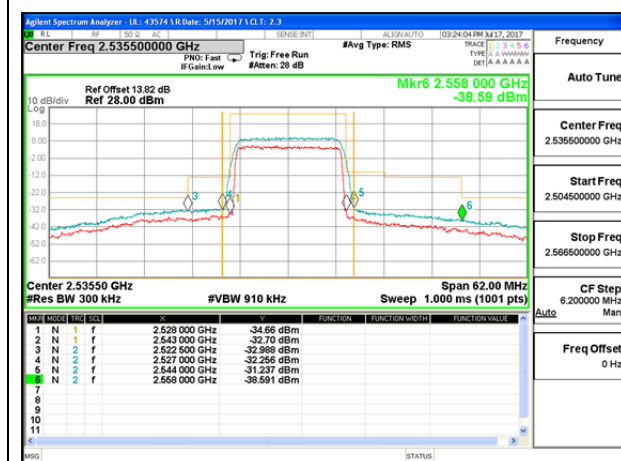
LTE B41 15MHz QPSK High Channel FRB



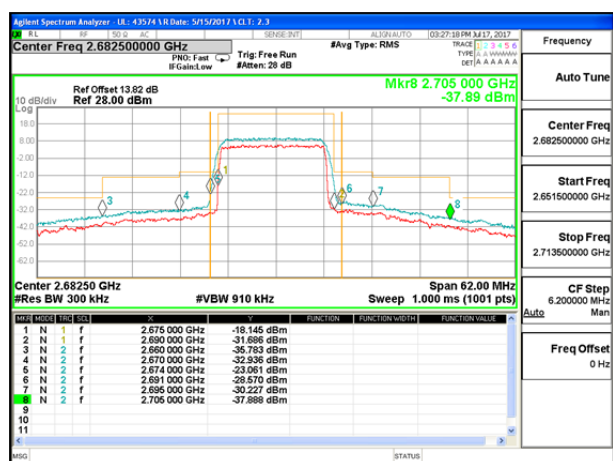
LTE B41 15MHz 16QAM Low Channel 1RB



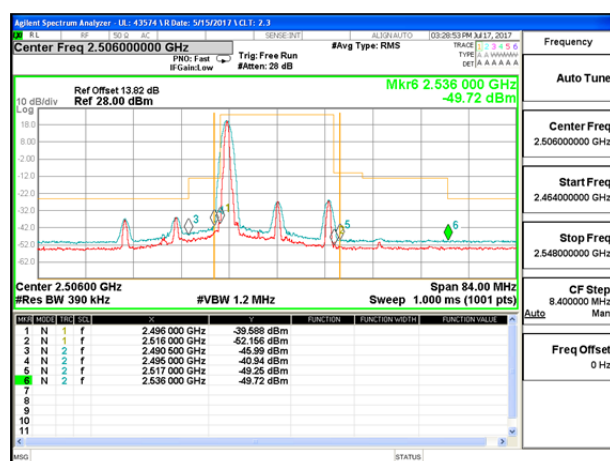
LTE B41 15MHz 16QAM High Channel 1RB



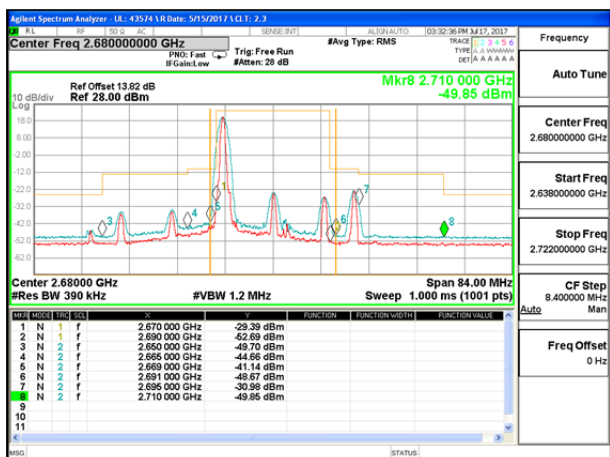
LTE B41 15MHz 16QAM Low Channel FRB



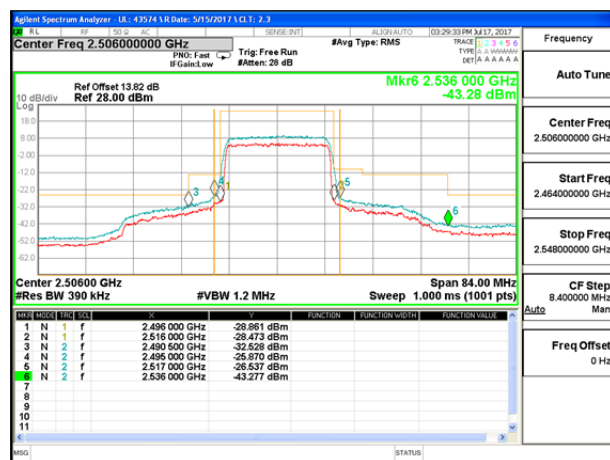
LTE B41 15MHz 16QAM High Channel FRB



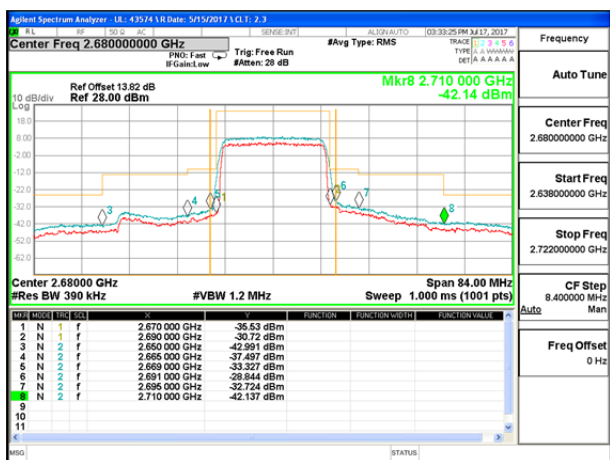
LTE B41 20MHz QPSK Low Channel 1RB



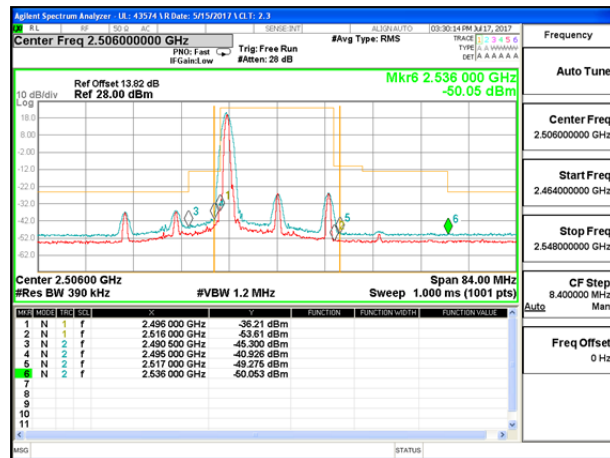
LTE B41 20MHz QPSK High Channel 1RB



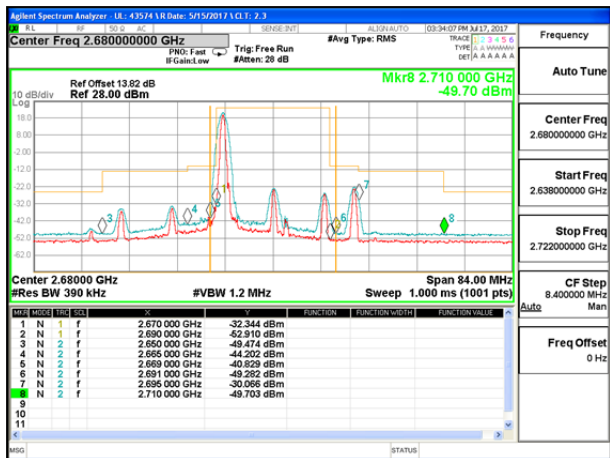
LTE B41 20MHz QPSK Low Channel FRB



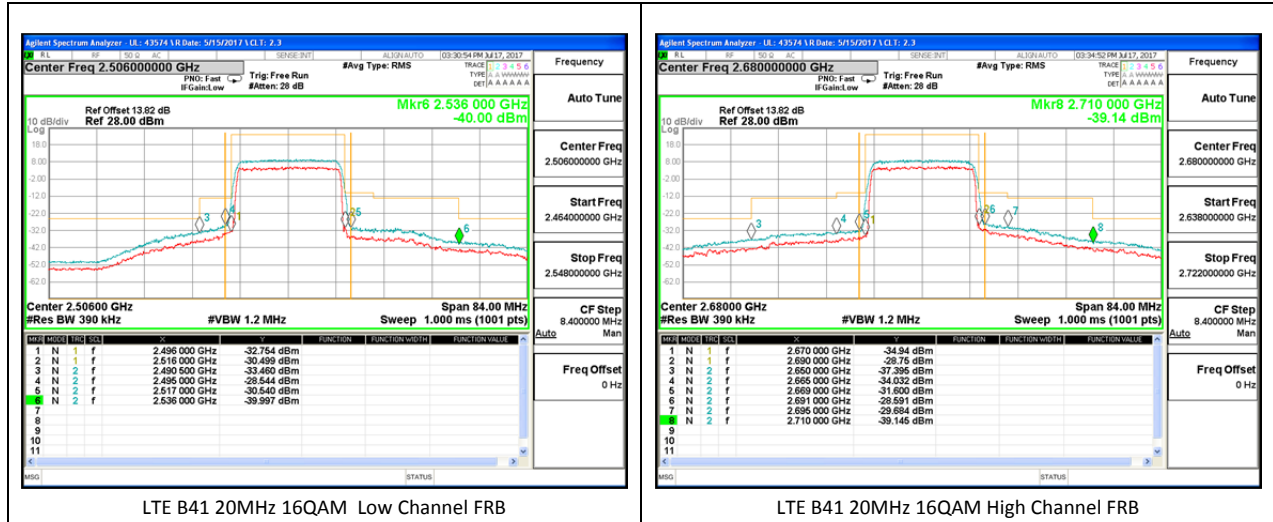
LTE B41 20MHz QPSK High Channel FRB



LTE B41 20MHz 16QAM Low Channel 1RB



LTE B41 20MHz 16QAM High Channel 1RB



16. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53 and §90.691

FCC 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.

Part 27: (m)(4) (4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

TEST PROCEDURE

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

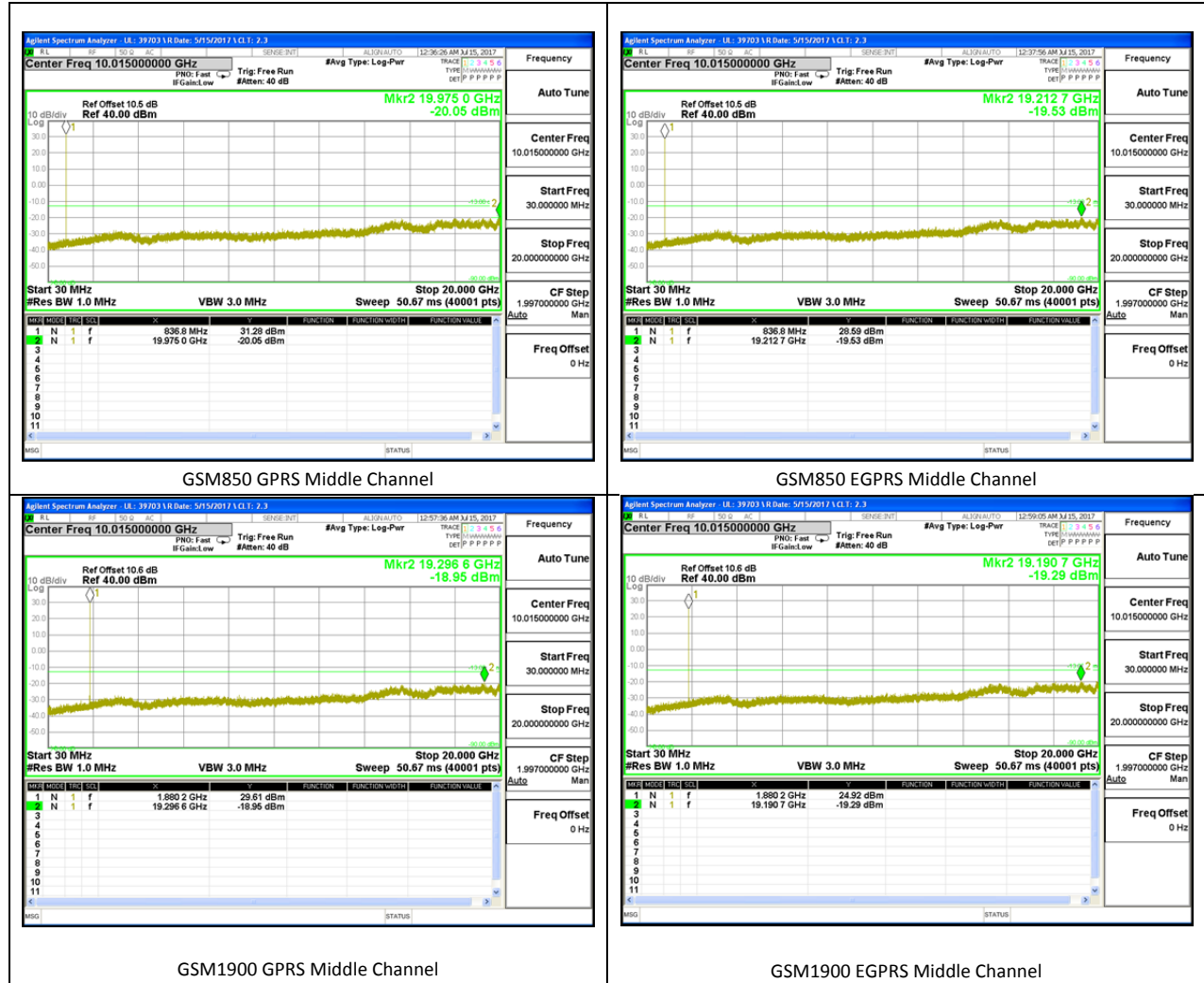
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in a maximum hold mode using a peak detector to ensure that the worst-case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

RESULTS

16.1. OUT OF BAND EMISSIONS RESULT AND PLOTS

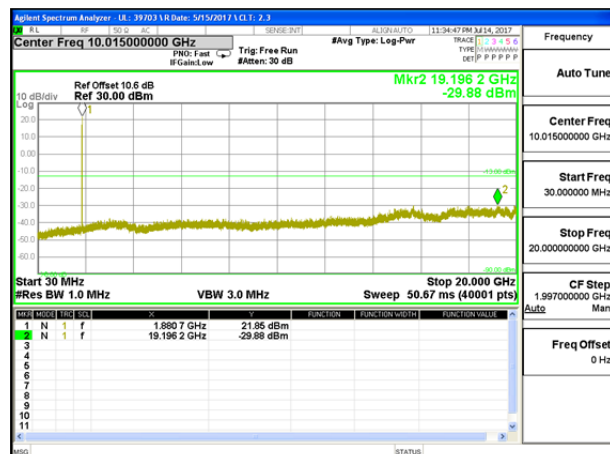
GSM

Band	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
GSM 850	GPRS	824.2	-19.313	-13	-6.313
		836.6	-20.052	-13	-7.052
		848.8	-19.819	-13	-6.819
	EGPRS	824.2	-19.734	-13	-6.734
		836.6	-19.53	-13	-6.53
		848.8	-19.34	-13	-6.34
GSM 1900	GPRS	1850.2	-19.313	-13	-6.313
		1880	-20.052	-13	-7.052
		1909.8	-19.819	-13	-6.819
	EGPRS	1850.2	-19.734	-13	-6.734
		1880	-19.53	-13	-6.53
		1909.8	-19.34	-13	-6.34

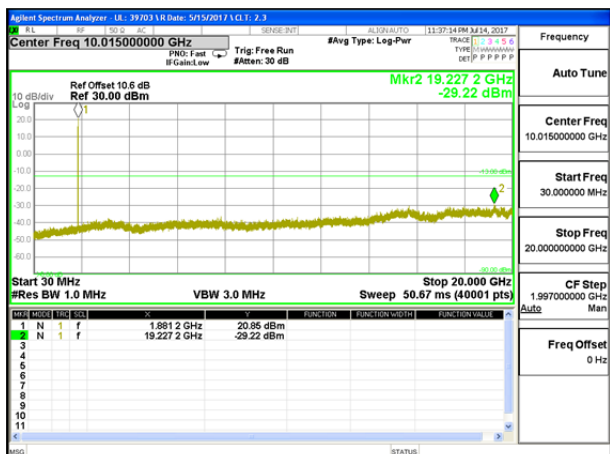


WCDMA

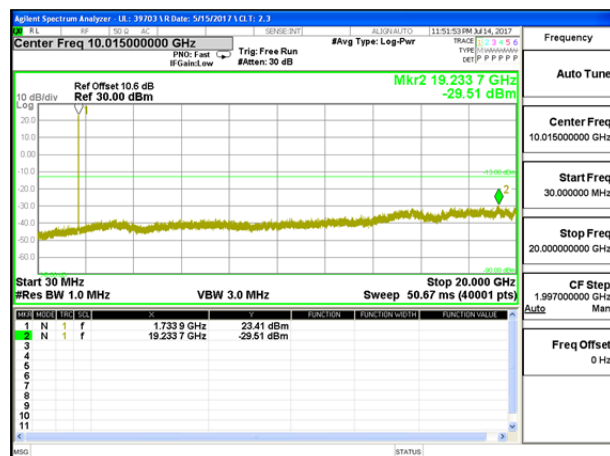
Band	Mode	f (MHz)	Spur (dBm)	99% BW (MHz)	Delta (dB)
Band 2	REL99	1852.4	-29.496	-13	-16.496
		1880	-29.882	-13	-16.882
		1907.6	-29.299	-13	-16.299
	HSDPA	1852.4	-29.22	-13	-16.22
		1880	-29.221	-13	-16.221
		1907.6	-29.857	-13	-16.857
Band 4	REL99	1712.4	-29.445	-13	-16.445
		1732.6	-29.509	-13	-16.509
		1752.6	-30.005	-13	-17.005
	HSDPA	1712.4	-30.044	-13	-17.044
		1732.6	-30.141	-13	-17.141
		1752.6	-28.629	-13	-15.629
Band 5	REL99	826.4	-30.374	-13	-17.374
		836.6	-29.998	-13	-16.998
		846.6	-29.567	-13	-16.567
	HSDPA	826.4	-30.148	-13	-17.148
		836.6	-30.12	-13	-17.12
		846.6	-28.22	-13	-15.22



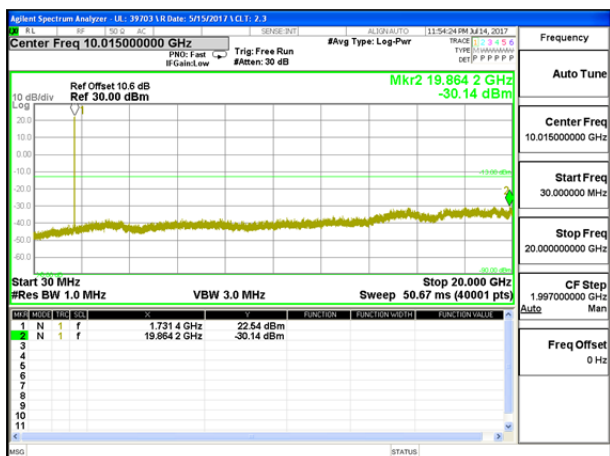
B2 REL99 Middle Channel



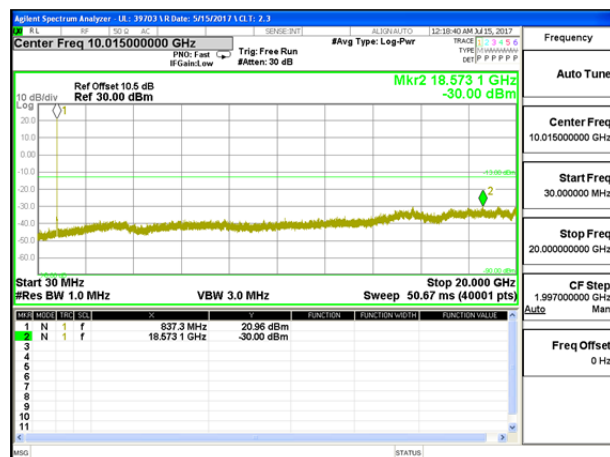
B2 HSDPA Middle Channel



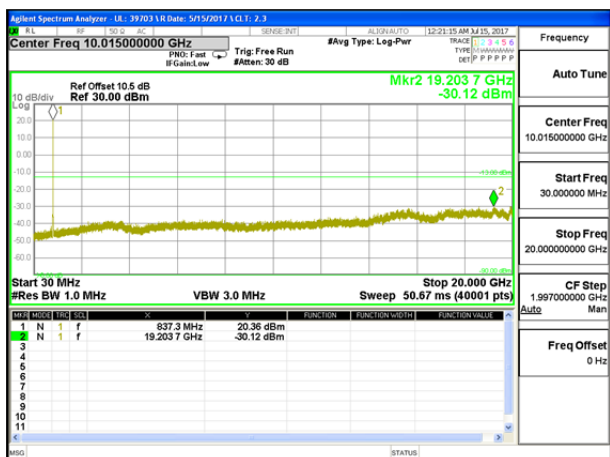
B4 REL99 Middle Channel



B4 HSDPA Middle Channel



B5 REL99 Middle Channel

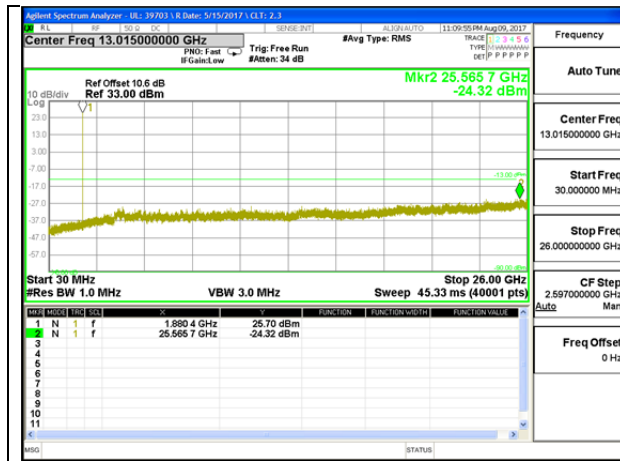


B5 HSDPA Middle Channel

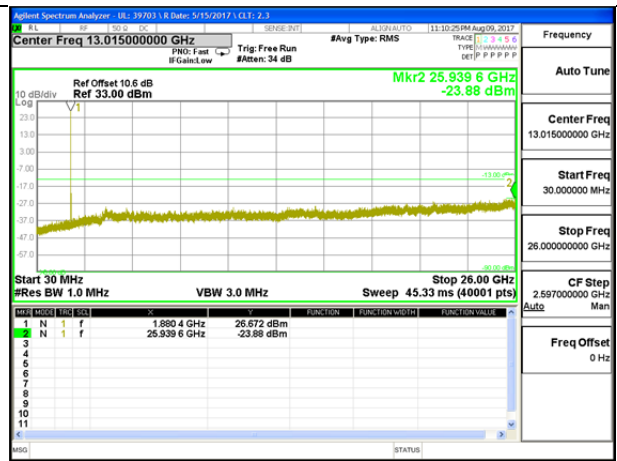
LTE Band 2

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE2	1.4	QPSK	1850.7	-23.66	-13	-10.66
			1880	-24.32	-13	-11.32
			1909.3	-23.92	-13	-10.92
		16QAM	1850.7	-23.4	-13	-10.4
			1880	-23.88	-13	-10.88
			1909.3	-23.9	-13	-10.9
	3	QPSK	1851.5	-24.15	-13	-11.15
			1880	-23.99	-13	-10.99
			1908.5	-24.18	-13	-11.18
		16QAM	1851.5	-23.59	-13	-10.59
			1880	-24.01	-13	-11.01
			1908.5	-24.19	-13	-11.19
	5	QPSK	1852.5	-24.17	-13	-11.17
			1880	-24.02	-13	-11.02
			1907.5	-23.48	-13	-10.48
		16QAM	1852.5	-23.51	-13	-10.51
			1880	-24.13	-13	-11.13
			1907.5	-24.55	-13	-11.55
	10	QPSK	1855	-23.64	-13	-10.64
			1880	-24.28	-13	-11.28
			1905	-23.99	-13	-10.99
		16QAM	1855	-23.39	-13	-10.39
			1880	-23.85	-13	-10.85
			1905	-23.75	-13	-10.75

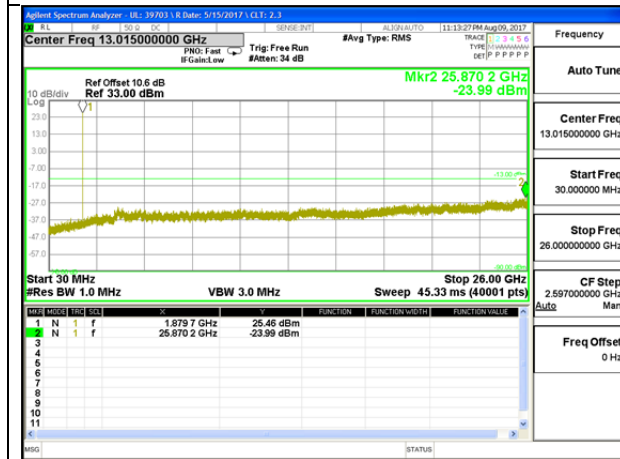
Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE2	15	QPSK	1857.5	-24.1	-13	-11.1
			1880	-24.65	-13	-11.65
			1902.5	-24.19	-13	-11.19
		16QAM	1857.5	-24.4	-13	-11.4
			1880	-23.02	-13	-10.02
			1902.5	-24.05	-13	-11.05
	20	QPSK	1860	-23.53	-13	-10.53
			1880	-24.3	-13	-11.3
			1900	-24.33	-13	-11.33
		16QAM	1860	-23.9	-13	-10.9
			1880	-23.9	-13	-10.9
			1900	-23.95	-13	-10.95



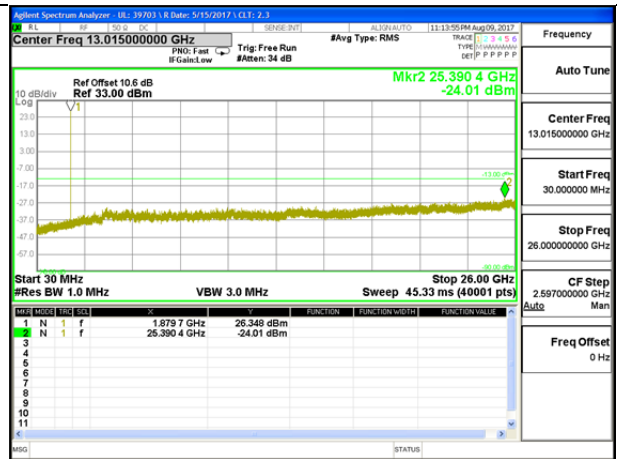
LTE B2 1.4MHz QPSK Middle Channel



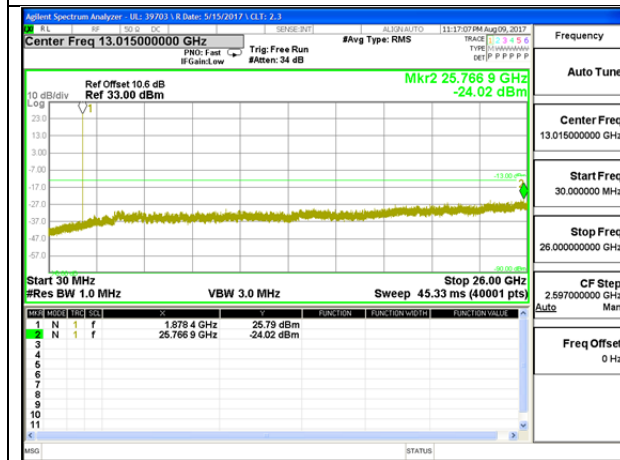
LTE B2 1.4MHz 16QAM Middle Channel



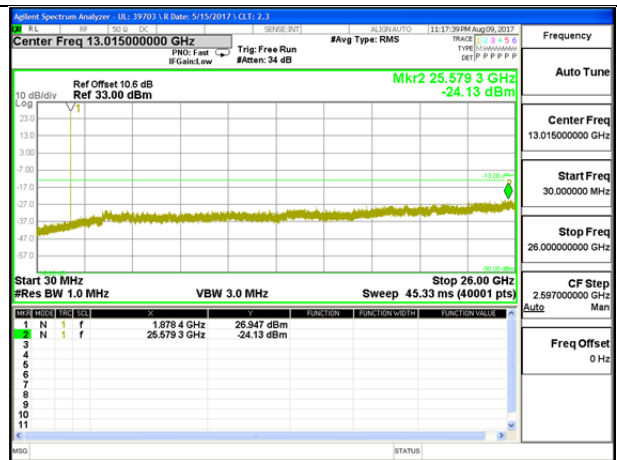
LTE B2 3MHz QPSK Middle Channel



LTE B2 3MHz 16QAM Middle Channel



LTE B2 5MHz QPSK Middle Channel



LTE B2 5MHz 16QAM Middle Channel