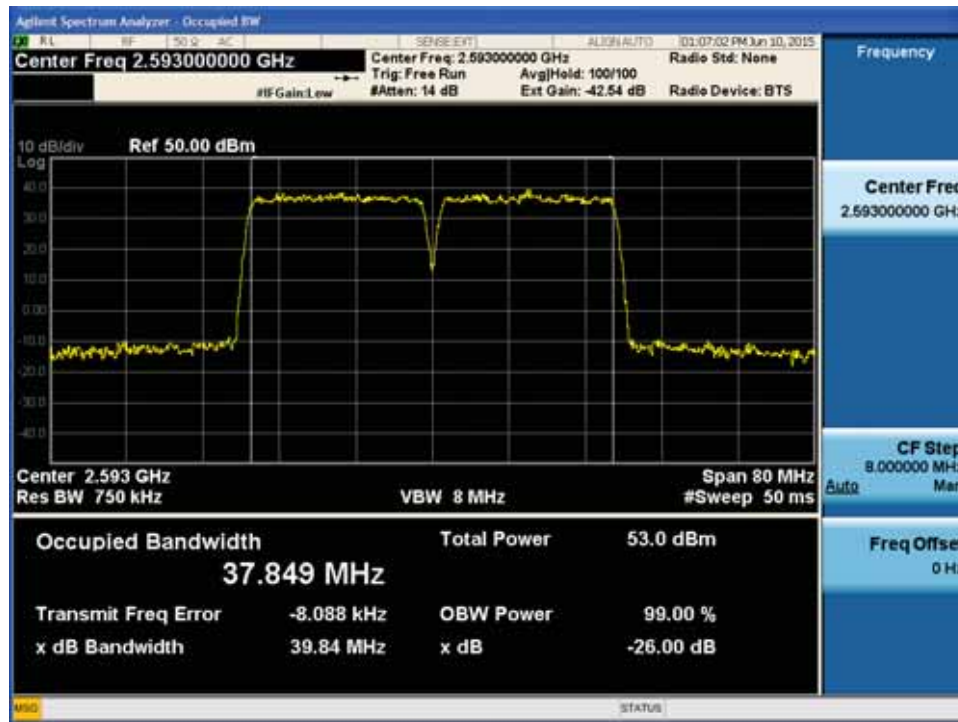
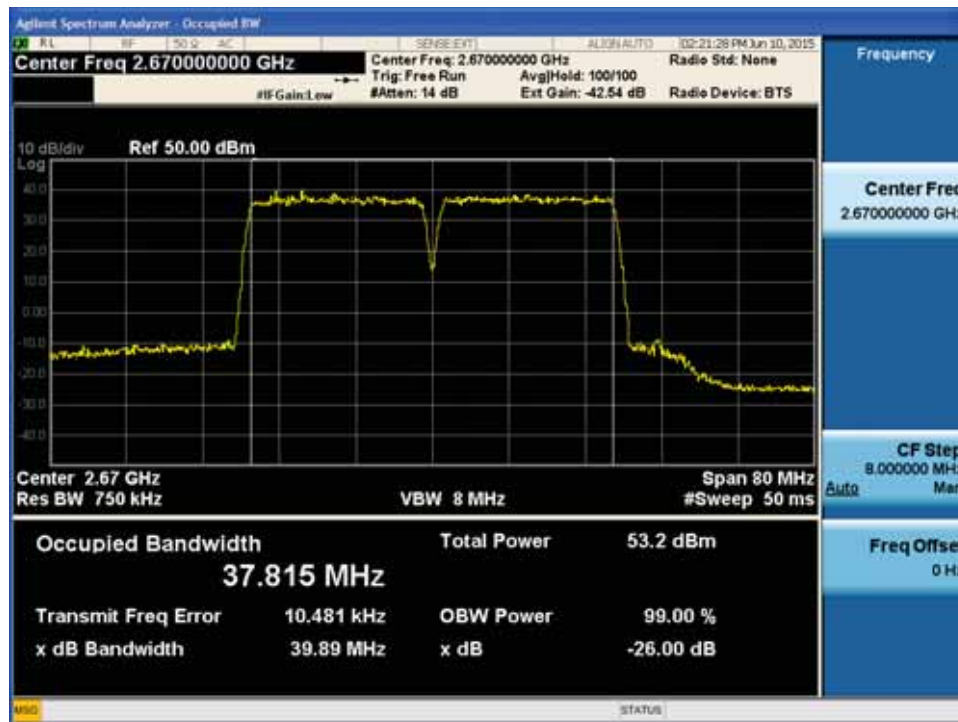


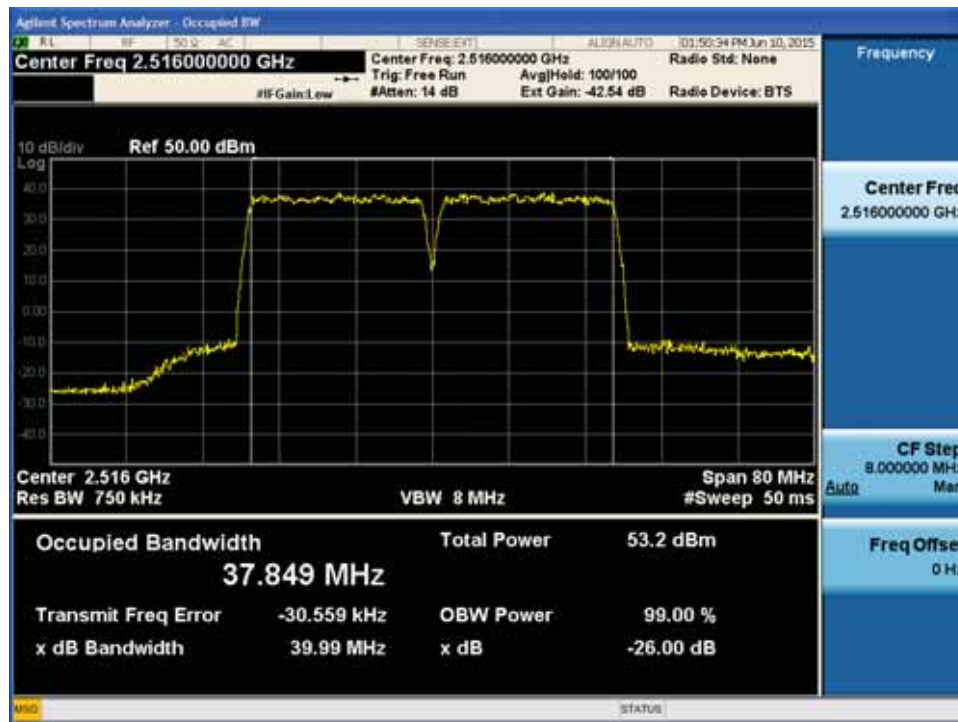
(16QAM Middle Channel)



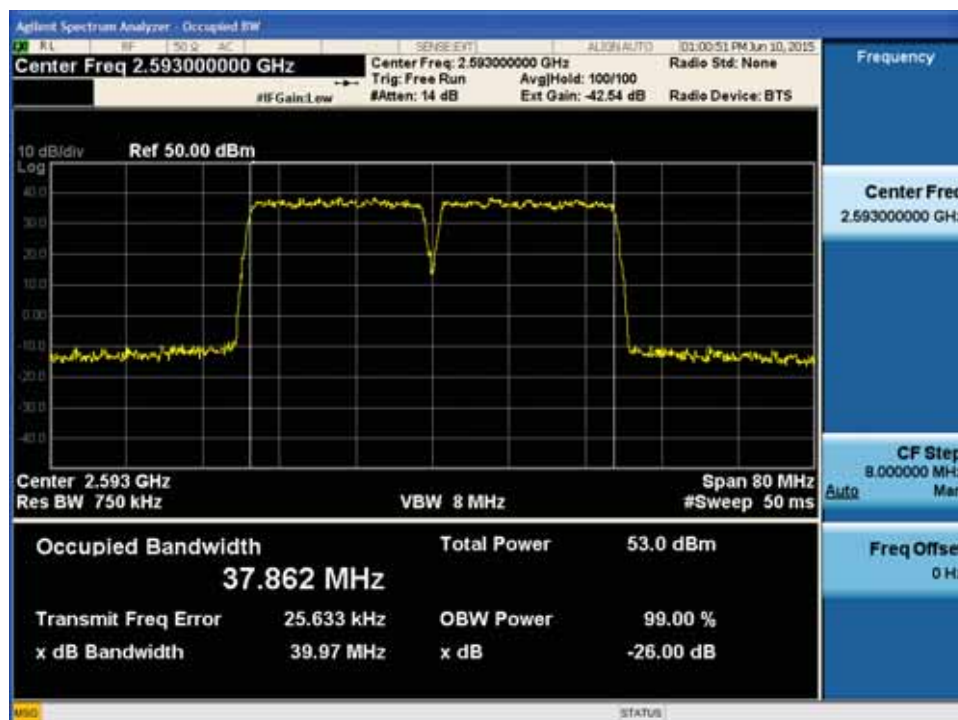
(16QAM High Channel)



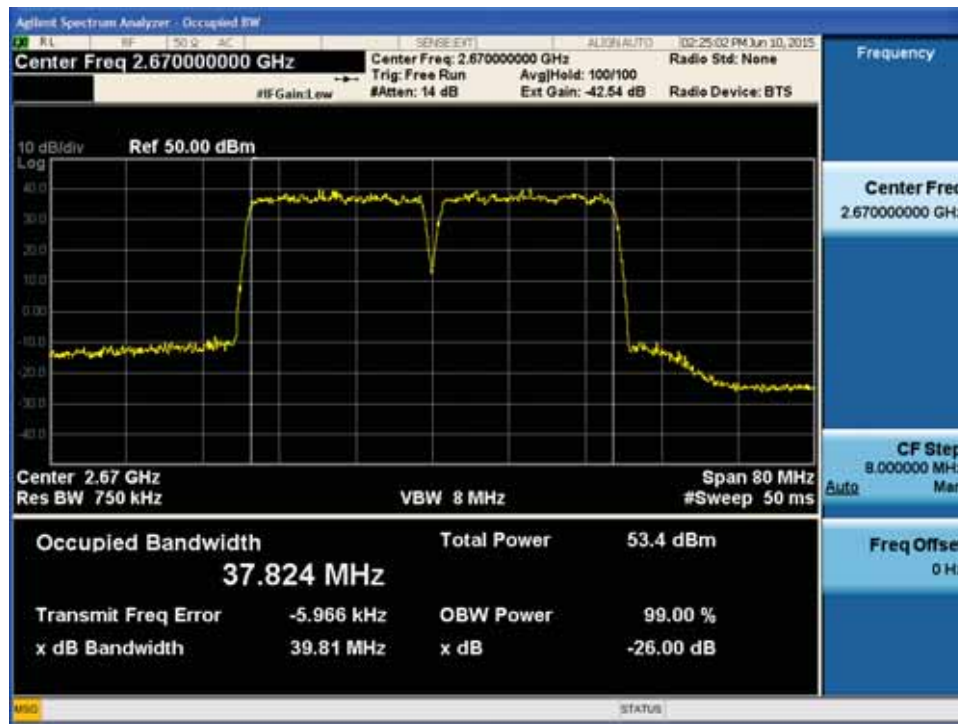
(64QAM Low Channel)



(64QAM Middle Channel)

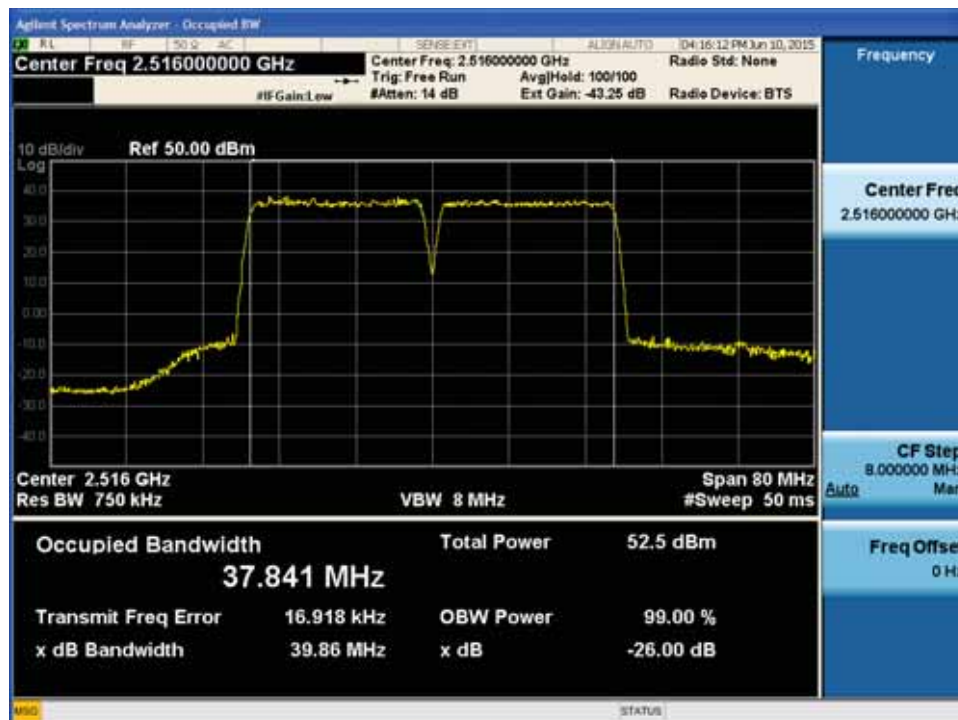


(64QAM High Channel)

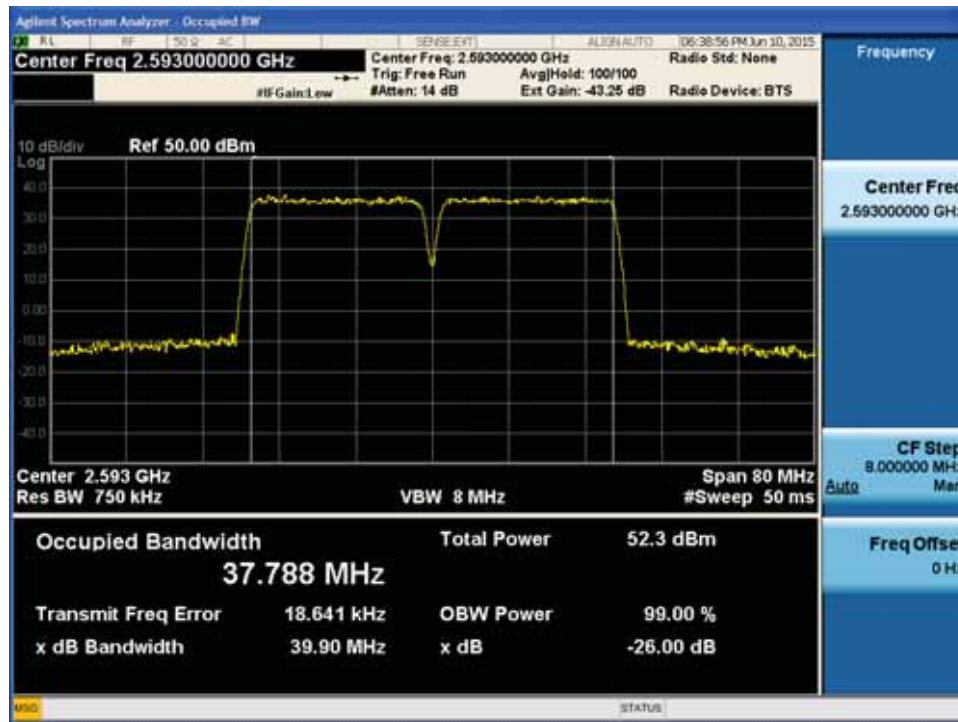


6.7.28. Test Plot at Output Port 8

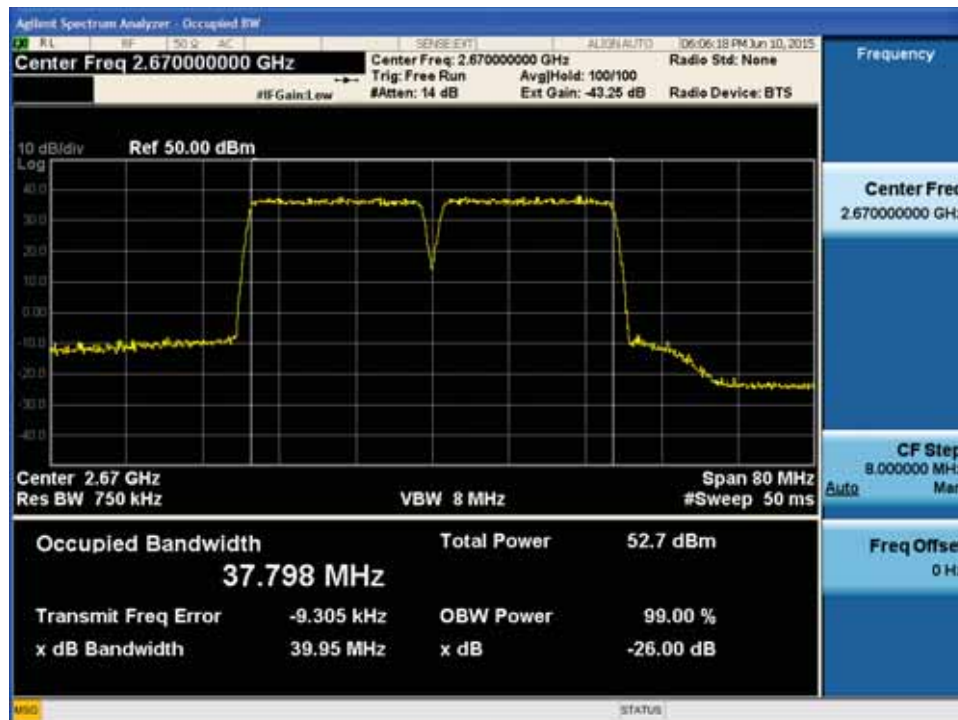
(QPSK Low Channel)



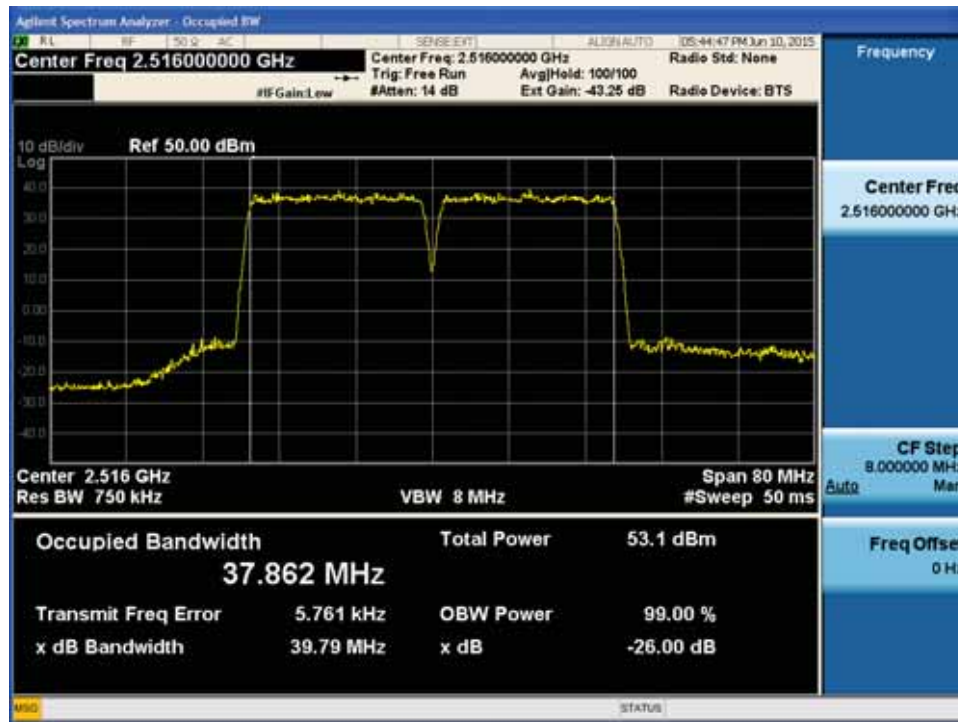
(QPSK Middle Channel)



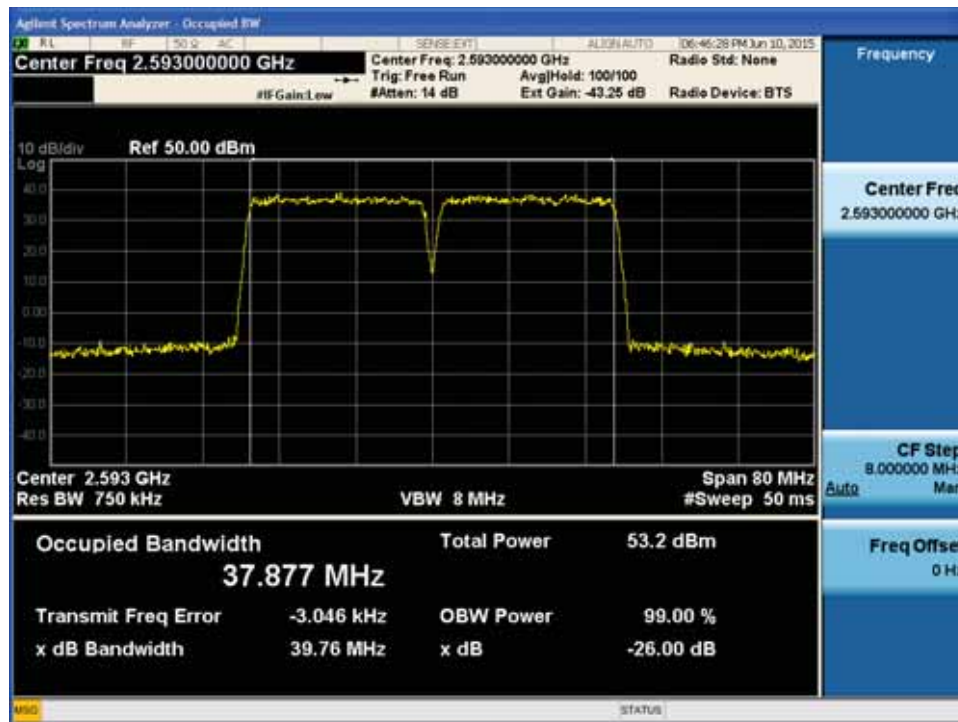
(QPSK High Channel)



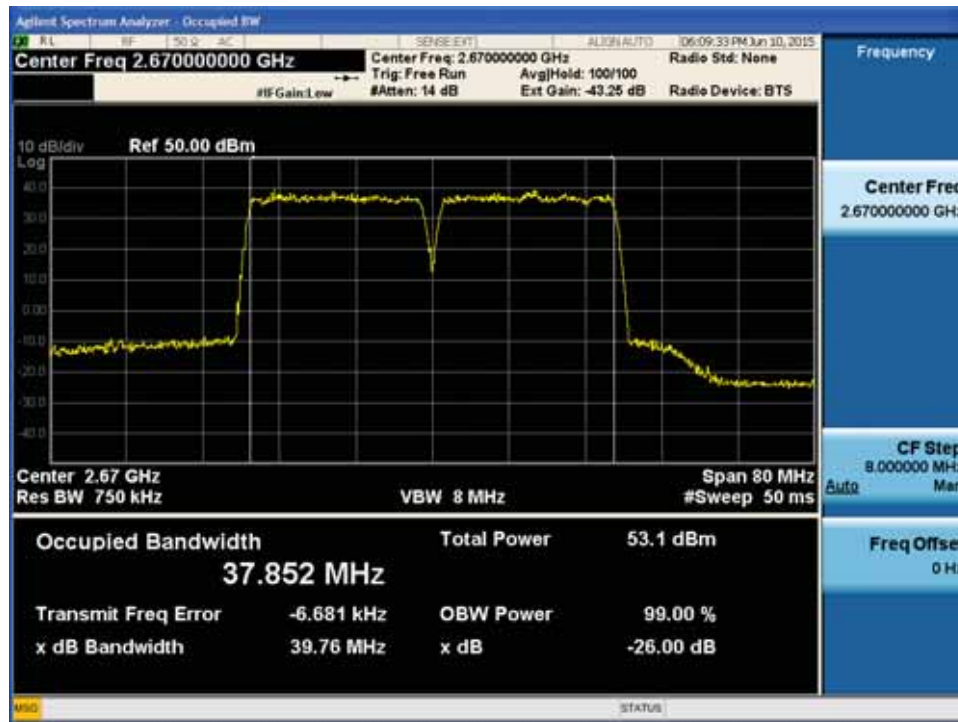
(16QAM Low Channel)



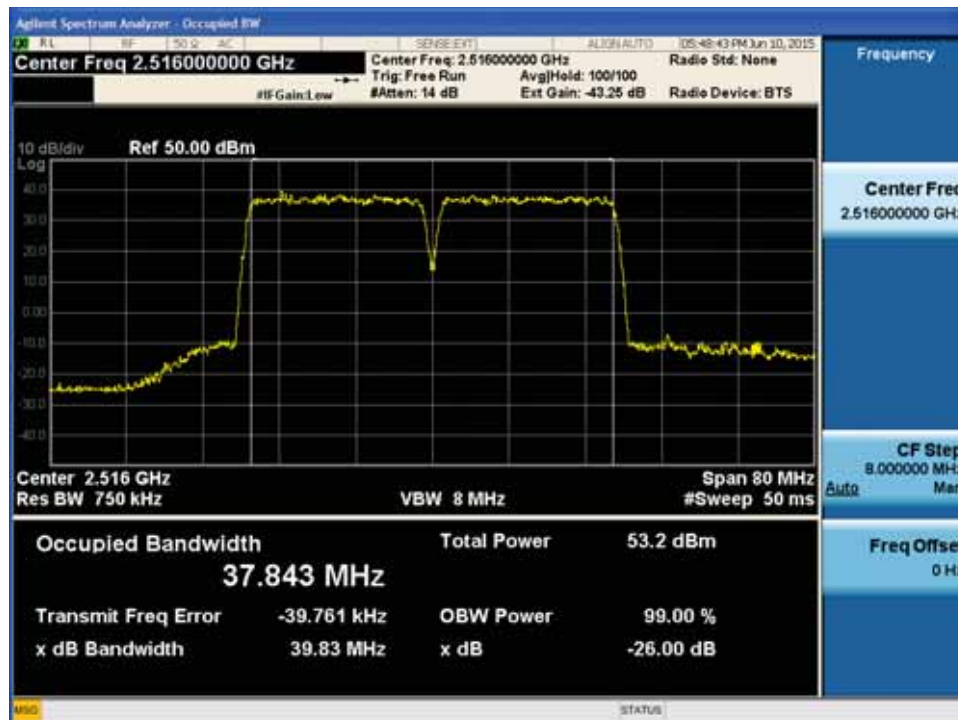
(16QAM Middle Channel)



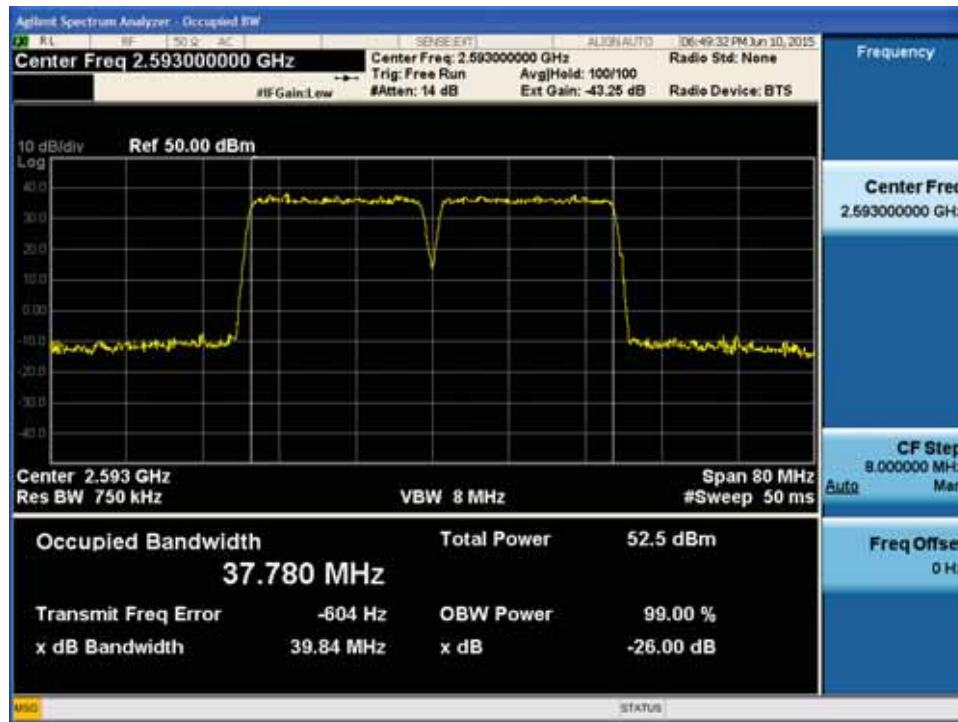
(16QAM High Channel)



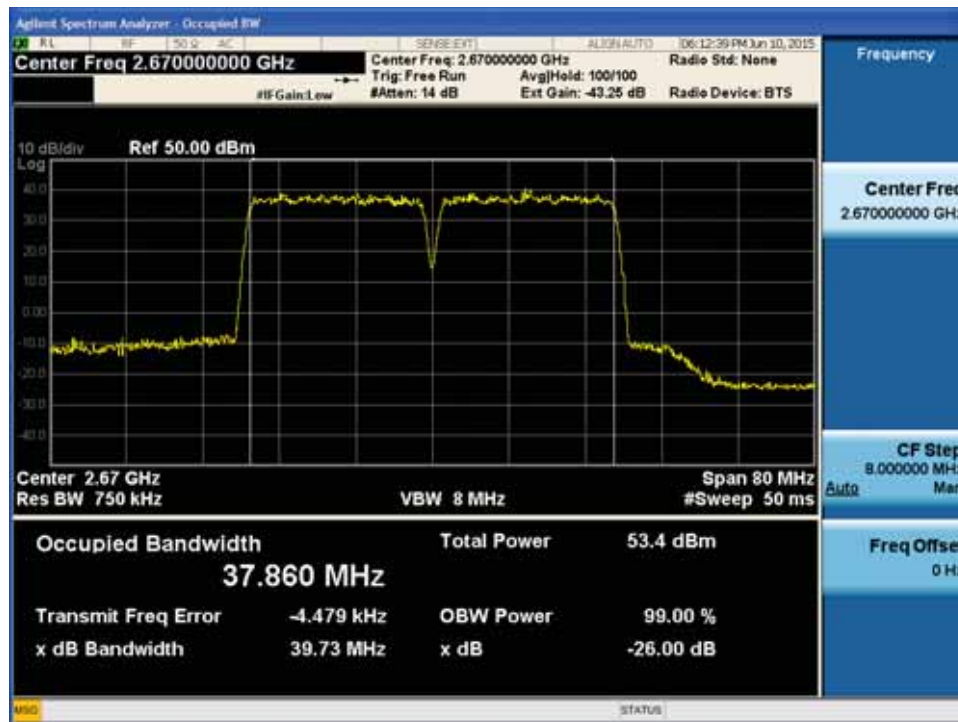
(64QAM Low Channel)



(64QAM Middle Channel)



(64QAM High Channel)



7. SPURIOUS EMISSION AT ANTENNA TERMINAL

7.1. Applicable Standard

CFR 47§2.1051, §27.53

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in §2.1051

§27.53(m) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts in accordance with the standards below. If a licensee has multiple contiguous channels, out-of-band emissions shall be measured from the upper and lower edges of the contiguous channels.

(2) For digital base stations, the attenuation shall be not less than $43 + 10 \log (P)$ dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

7.2. Test Equipment List and Details

Manufacturer	Model / Equipment	Serial No.	Calibration Interval	Calibration Due
Agilent	N9020A /Signal Analyzer	MY51110068	Annual	07/21/2014
Agilent	6674A / DC Power Supply	3501A00901	Annual	07/24/2014
WEINSCHEL	67-30-33 / Attenuator	CC7264	Annual	08/25/2014
WEINSCHEL	67-30-33 / Attenuator	CC7265	Annual	08/26/2014
WEINSCHEL	AF9003-69-31 / Attenuator	11787	Annual	10/24/2014
DYENT	DFSS60 / DC Power Supply	1003030-1	Annual	04/01/2014
WAINWRIGHT INSTRUMENT	WHK3.0/18G-10EF /HIGHPASS FILTE	8	Annual	06/23/2014

7.3. Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1MHz. Sufficient scans were taken to show

any out of band emissions up to 10th harmonic.

7.4. Test Result

: Pass

Notes: Due to 8x8 MIMO operation, limit is -22.03dBm ($-13\text{dBm} - 10 \cdot \log(8)$) per FCC KDB 662911D01v02r01. Above 3 GHz, in order to reduce the measurement instrumentation noise floor a high pass filter has been used to block the fundamental.

LTE20M(6.67W)

7.4.1. Test Data at Output Port 1

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-45.987	-46.063	-46.016
2593	-45.538	-45.94	-45.757
2680	-45.755	-45.364	-46.038

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-21.780	-21.264	-21.659
2593	-21.77	-21.836	-21.858
2680	-21.716	-22.102	-21.914

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.638	-28.611	-28.639
2593	-28.503	-28.502	-28.503
2680	-28.683	-28.708	-28.563

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-28.090	-29.003	-28.285
2680	-30.895	-29.358	-30.732

7.4.2. Test Data at Output Port 5

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-45.899	-45.844	-45.927
2593	-46.019	-46.019	-45.899
2680	-45.839	-45.988	-46.16

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-21.436	-21.751	-21.649
2593	-22.242	-21.904	-21.805
2680	-21.782	-21.815	-21.645

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.844	-28.746	-28.596
2593	-28.440	-28.709	-28.445
2680	-28.608	-28.540	-28.862

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-27.968	-29.437	-28.178
2680	-29.605	-32.190	-30.806

LTE20M(6.67W) 3 Carrier

7.4.3. Test Data at Output Port 1

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2526	-45.939	-45.929	-45.823
2593	-45.836	-45.834	-45.994
2660	-45.562	-45.879	-45.959

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2526	-22.129	-21.638	-21.635
2593	-21.922	-21.906	-21.996
2660	-21.897	-21.838	-21.641

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.627	-28.851	-28.479
2593	-28.776	-28.810	-28.687
2680	-28.872	-28.537	-28.634

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2526	-31.598	-31.715	-32.389
2660	-26.471	-29.605	-26.190

7.4.4. Test Data at Output Port 5

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2526	-45.290	-46.083	-46.077
2593	-44.953	-45.755	-45.995
2660	-45.867	-45.872	-45.709

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2526	-21.660	-21.638	-21.757
2593	-21.591	-21.992	-21.941
2660	-21.884	-21.979	-21.826

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.903	-28.879	-28.852
2593	-28.707	-28.783	-28.635
2680	-28.729	-28.676	-28.638

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2526	-29.445	-30.114	-29.465
2660	-24.660	-28.480	-26.766

LTE20M(10W)

7.4.5. Test Data at Output Port Port 1

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-46.278	-46.532	-46.526
2593	-46.315	-46.583	-46.627
2680	-46.810	-46.525	-46.621

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-22.619	-22.438	-22.629
2593	-22.387	-22.428	-22.415
2680	-22.452	-22.653	-22.569

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.681	-29.641	-29.580
2593	-29.599	-29.787	-29.468
2680	-29.603	-29.243	-29.392

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-27.528	-27.400	-26.894
2680	-24.883	-24.200	-25.216

7.4.6. Test Data at Output Port Port 2

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-45.901	-45.774	-46.137
2593	-46.137	-45.701	-46.135
2680	-45.980	-45.954	-46.290

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-21.990	-21.781	-22.074
2593	-21.864	-22.072	-22.135
2680	-21.905	-22.024	-22.061

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.968	-28.975	-29.166
2593	-28.859	-28.963	-28.671
2680	-29.072	-29.109	-29.104

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-28.254	-28.819	-27.715
2680	-27.602	-28.422	-28.789

7.4.7. Test Data at Output Port Port 3

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-44.440	-44.569	-44.379
2593	-44.612	-44.148	-44.691
2680	-44.480	-43.951	-44.436

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-20.372	-20.138	-20.498
2593	-20.472	-20.435	-20.035
2680	-20.367	-20.319	-20.263

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-27.366	-27.466	-27.382
2593	-27.175	-27.294	-27.422
2680	-27.399	-27.390	-27.013

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-27.931	-27.931	-27.931
2680	-27.553	-27.438	-27.888

7.4.8. Test Data at Output Port Port 4

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-47.293	-46.944	-47.096
2593	-47.050	-47.315	-46.909
2680	-47.149	-46.551	-47.079

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-23.263	-23.101	-23.192
2593	-23.294	-23.254	-23.185
2680	-23.198	-23.258	-23.080

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-30.143	-29.863	-30.051
2593	-29.844	-30.322	-30.162
2680	-30.288	-30.281	-30.079

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-26.919	-26.919	-26.919
2680	-27.640	-27.592	-28.431

7.4.9. Test Data at Output Port Port 5

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-45.091	-45.042	-45.189
2593	-44.742	-44.921	-44.883
2680	-45.185	-45.114	-45.020

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-20.574	-20.424	-20.383
2593	-20.314	-20.108	-20.596
2680	-20.634	-20.621	-20.084

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.837	-30.196	-29.987
2593	-30.175	-29.966	-30.226
2680	-29.931	-30.13	-30.214

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-25.991	-25.991	-25.991
2680	-29.152	-29.012	-29.799

7.4.10. Test Data at Output Port Port 6

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-43.925	-44.356	-44.407
2593	-44.205	-44.372	-44.314
2680	-44.250	-44.287	-43.98

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-20.250	-20.070	-20.306
2593	-20.206	-20.158	-19.844
2680	-19.921	-19.982	-19.801

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-27.221	-27.039	-26.961
2593	-26.837	-27.012	-26.921
2680	-27.102	-27.203	-27.230

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-26.083	-26.083	-26.083
2680	-27.427	-27.549	-27.531

7.4.11. Test Data at Output Port Port 7

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-46.196	-45.960	-46.052
2593	-46.032	-45.975	-45.983
2680	-46.137	-46.202	-45.896

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-22.159	-21.845	-22.213
2593	-21.999	-22.099	-22.169
2680	-22.192	-22.014	-22.123

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.154	-28.914	-29.183
2593	-28.899	-29.092	-28.964
2680	-29.175	-29.186	-29.189

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-26.899	-26.899	-26.899
2680	-26.383	-26.536	-26.543

7.4.12. Test Data at Output Port Port 8

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-45.474	-45.27	-45.438
2593	-45.106	-45.652	-45.427
2680	-45.349	-44.495	-45.204

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-21.076	-21.467	-21.244
2593	-21.443	-21.309	-21.423
2680	-20.746	-21.116	-21.209

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.311	-28.026	-28.560
2593	-28.353	-28.32	-28.439
2680	-28.304	-28.415	-28.355

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2506	-25.432	-25.432	-25.432
2680	-26.215	-26.05	-27.031

LTE20M(10W) 2 Carrier

7.4.13. Test Data at Output Port Port 1

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-46.362	-46.553	-46.629
2593	-46.195	-46.294	-46.098
2670	-46.309	-46.468	-46.674

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-22.505	-22.359	-22.353
2593	-22.565	-22.203	-22.362
2670	-22.402	-22.226	-22.740

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.497	-29.515	-29.687
2593	-29.584	-29.472	-29.284
2680	-29.585	-29.681	-29.578

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-29.482	-25.533	-28.477
2670	-27.967	-27.374	-27.594

7.4.14. Test Data at Output Port Port 2

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-45.756	-46.138	-45.900
2593	-46.028	-45.889	-46.055
2670	-46.028	-45.795	-46.391

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-21.700	-21.876	-22.146
2593	-22.079	-21.959	-22.145
2670	-21.979	-21.556	-21.952

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.185	-29.313	-28.959
2593	-28.914	-28.950	-28.959
2680	-29.265	-29.229	-29.048

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-27.704	-28.329	-25.616
2670	-27.402	-27.547	-27.918

7.4.15. Test Data at Output Port Port 3

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-44.667	-44.304	-44.651
2593	-44.728	-44.549	-44.327
2670	-44.304	-44.445	-44.148

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-20.414	-20.502	-20.365
2593	-20.472	-20.616	-20.386
2670	-20.608	-20.46	-20.521

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-27.485	-27.362	-27.226
2593	-27.359	-27.328	-27.239
2680	-27.478	-27.573	-27.123

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-27.569	-28.995	-28.677
2670	-28.302	-28.214	-28.891

7.4.16. Test Data at Output Port Port 4

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-46.977	-46.815	-47.181
2593	-46.663	-46.784	-47.035
2670	-47.093	-47.054	-47.149

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-23.243	-23.017	-23.136
2593	-22.982	-22.799	-23.217
2670	-23.054	-23.158	-23.079

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-30.002	-30.275	-30.155
2593	-29.901	-30.108	-30.106
2680	-30.033	-30.324	-30.38

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-26.218	-28.060	-26.919
2670	-26.801	-26.263	-26.475

7.4.17. Test Data at Output Port Port 5

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-45.04	-44.723	-45.199
2593	-44.884	-45.204	-44.930
2670	-44.900	-45.089	-44.994

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-20.160	-20.298	-20.555
2593	-20.681	-20.681	-20.688
2670	-20.520	-20.510	-20.556

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-30.064	-30.206	-30.058
2593	-29.789	-30.016	-30.112
2680	-29.946	-30.024	-30.029

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-25.991	-26.367	-26.543
2670	-26.074	-26.542	-27.281

7.4.18. Test Data at Output Port Port 6

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-44.297	-44.063	-44.274
2593	-44.333	-44.486	-44.037
2670	-44.109	-43.997	-44.24

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-20.117	-20.004	-20.124
2593	-19.684	-20.276	-20.194
2670	-19.628	-19.777	-20.135

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-27.013	-27.166	-27.259
2593	-26.915	-26.662	-26.957
2680	-27.192	-26.96	-26.783

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-26.131	-26.236	-26.083
2670	-26.106	-25.414	-25.068

7.4.19. Test Data at Output Port Port 7

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-46.133	-45.930	-46.458
2593	-45.916	-45.810	-46.200
2670	-46.405	-46.130	-46.196

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-22.020	-22.020	-22.160
2593	-22.079	-22.224	-22.170
2670	-22.099	-22.313	-22.165

3 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-29.119	-29.192	-29.147
2593	-28.968	-28.937	-28.658
2680	-29.252	-28.873	-29.135

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-27.276	-26.949	-26.899
2670	-26.500	-26.839	-27.697

7.4.20. Test Data at Output Port Port 8

30 MHz ~ 1 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-45.187	-45.26	-45.416
2593	-45.318	-45.329	-45.346
2670	-45.471	-45.181	-45.131

1 GHz ~ 26.5 GHz

Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2516	-21.439	-21.122	-21.253
2593	-21.197	-21.489	-21.176
2670	-21.143	-21.316	-21.186

3 GHz ~ 26.5 GHz

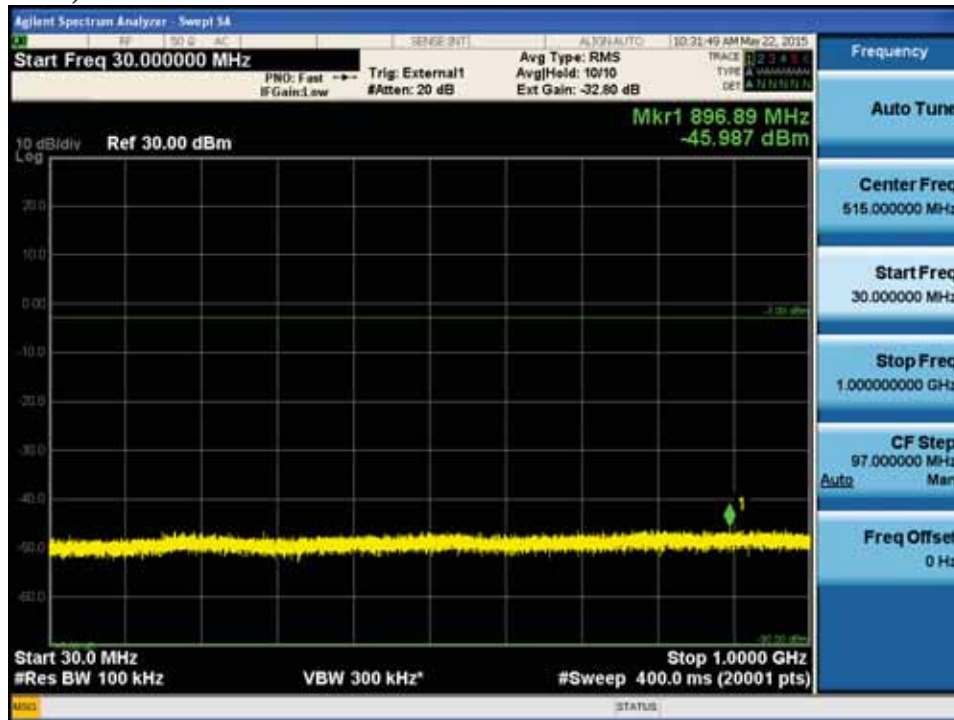
Frequency (MHz)	Spurious emission (dBm)		
	QPSK	16QAM	64QAM
2506	-28.215	-28.293	-28.499
2593	-28.365	-28.402	-28.377
2680	-28.218	-28.465	-28.256

Frequency (MHz)	Band edge (dBm)		
	QPSK	16QAM	64QAM
2516	-26.778	-26.953	-25.432
2670	-26.325	-26.875	-26.251

LTE20M(6.67W)

7.4.22. Test Data at Output Port 1

(QPSK Low Channel)



(30 MHz ~ 1 GHz)

(QPSK Low Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(QPSK Middle Channel)



(30 MHz ~ 1 GHz)

(QPSK Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(QPSK High Channel)



(30 MHz ~ 1 GHz)

(QPSK High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



(16QAM Low Channel)



(30 MHz ~ 1 GHz)

(16QAM Low Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(16QAM Middle Channel)



(30 MHz ~ 1 GHz)

(16QAM Middle Channel)

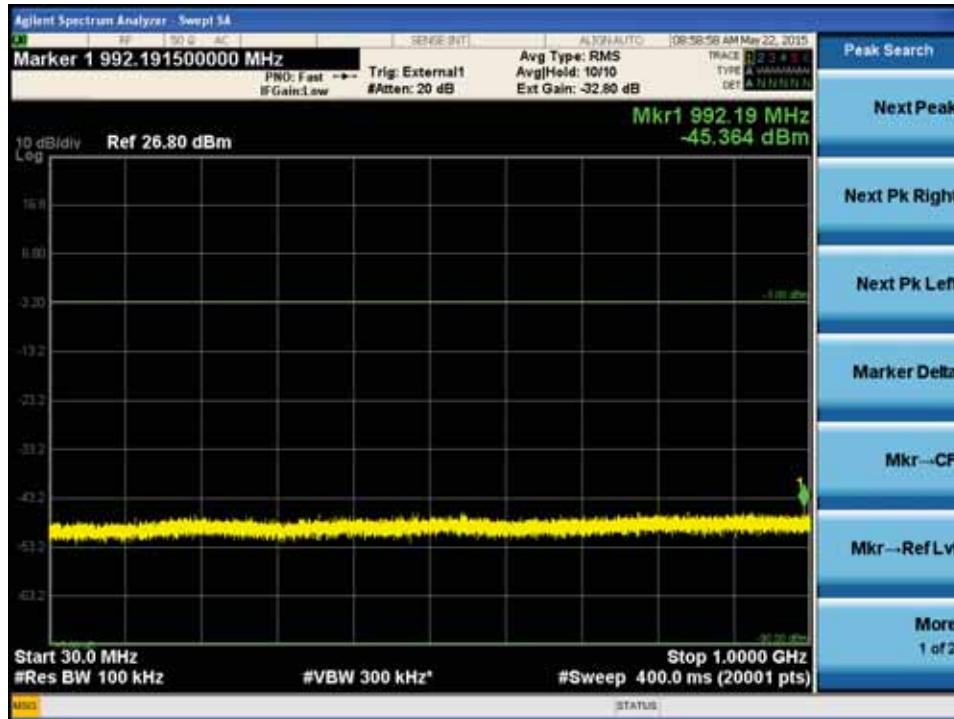


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(16QAM High Channel)



(30 MHz ~ 1 GHz)

(16QAM High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



(64QAM Low Channel)



(30 MHz ~ 1 GHz)

(64QAM Low Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(64QAM Middle Channel)



(30 MHz ~ 1 GHz)

(64QAM Middle Channel)

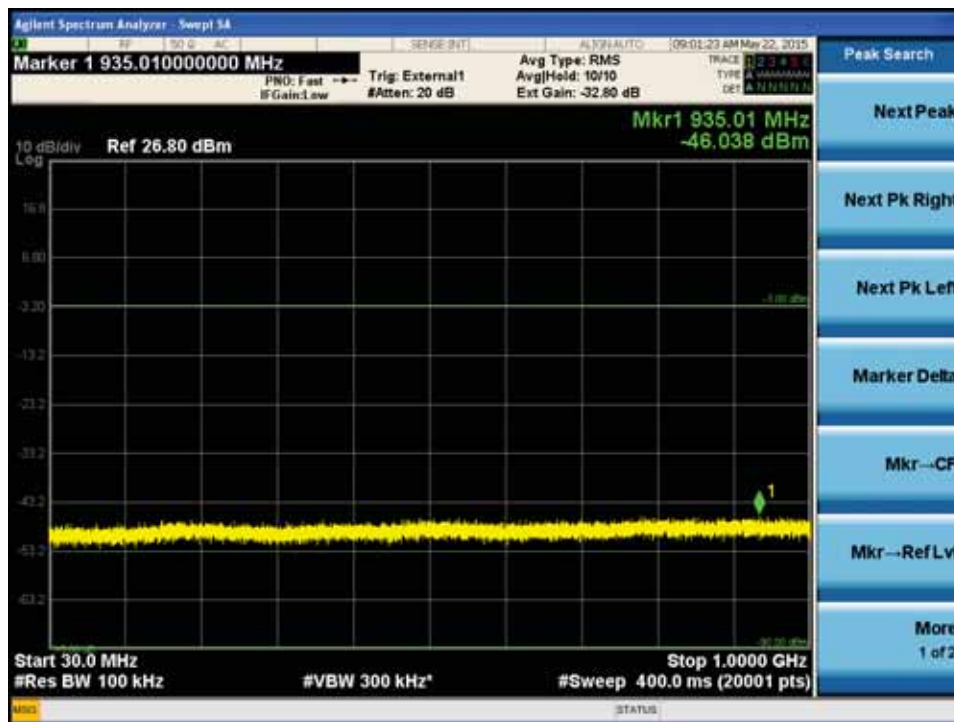


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(64QAM High Channel)



(30 MHz ~ 1 GHz)

(64QAM High Channel)



(1 GHz ~ 26.5 GHz)



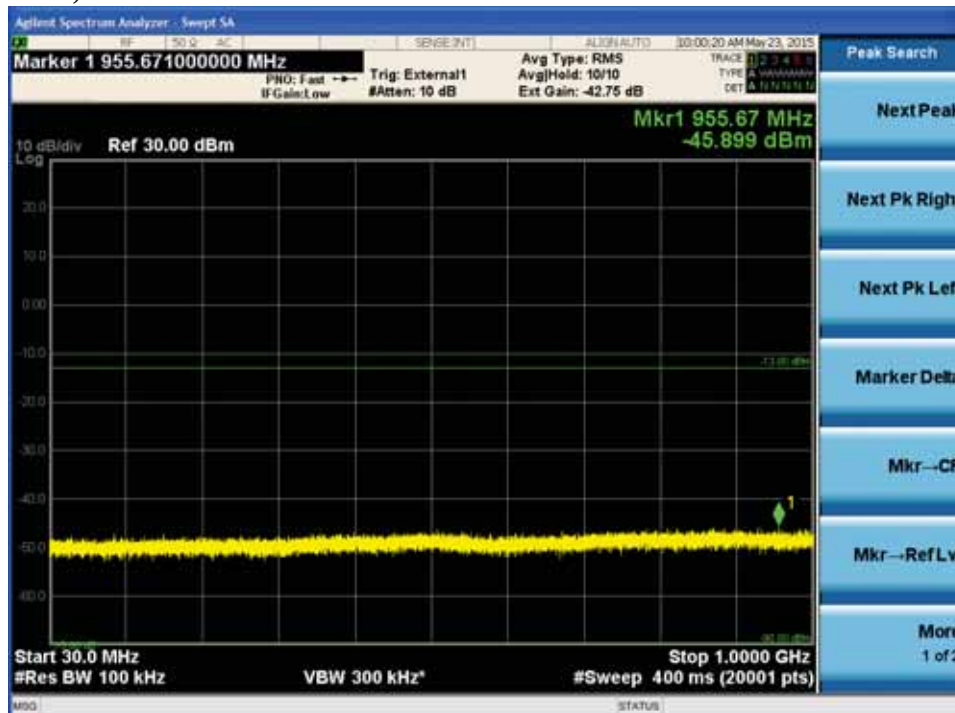
(3 GHz ~ 26.5 GHz)

(Band Edge High)



7.4.23. Test Data at Output Port 5

(QPSK Low Channel)



(30 MHz ~ 1 GHz)

(QPSK Low Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(QPSK Middle Channel)



(30 MHz ~ 1 GHz)

(QPSK Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(QPSK High Channel)



(30 MHz ~ 1 GHz)

(QPSK High Channel)



(1 GHz ~ 26.5 GHz)

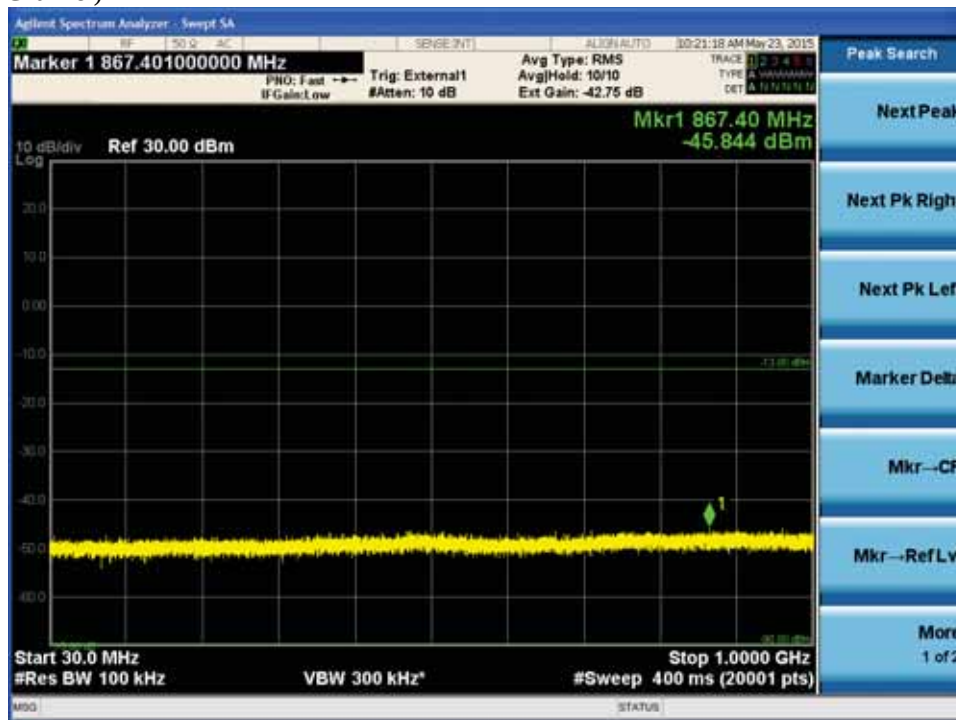


(3 GHz ~ 26.5 GHz)

(Band Edge High)



(16QAM Low Channel)



(30 MHz ~ 1 GHz)

(16QAM Low Channel)

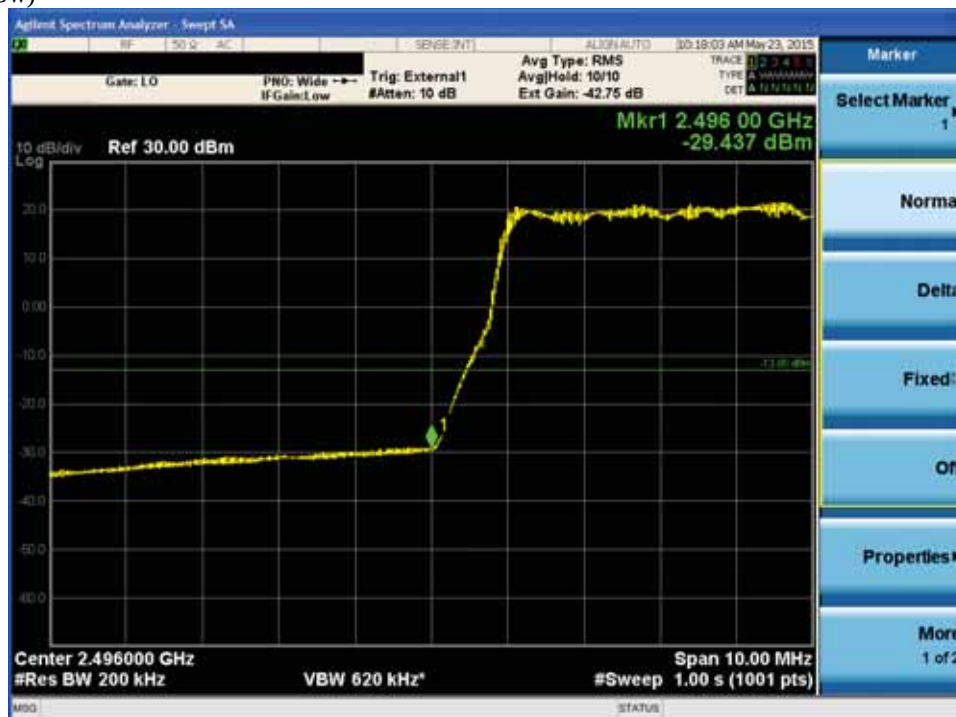


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(16QAM Middle Channel)



(30 MHz ~ 1 GHz)

(16QAM Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(16QAM High Channel)



(30 MHz ~ 1 GHz)

(16QAM High Channel)



(1 GHz ~ 26.5 GHz)

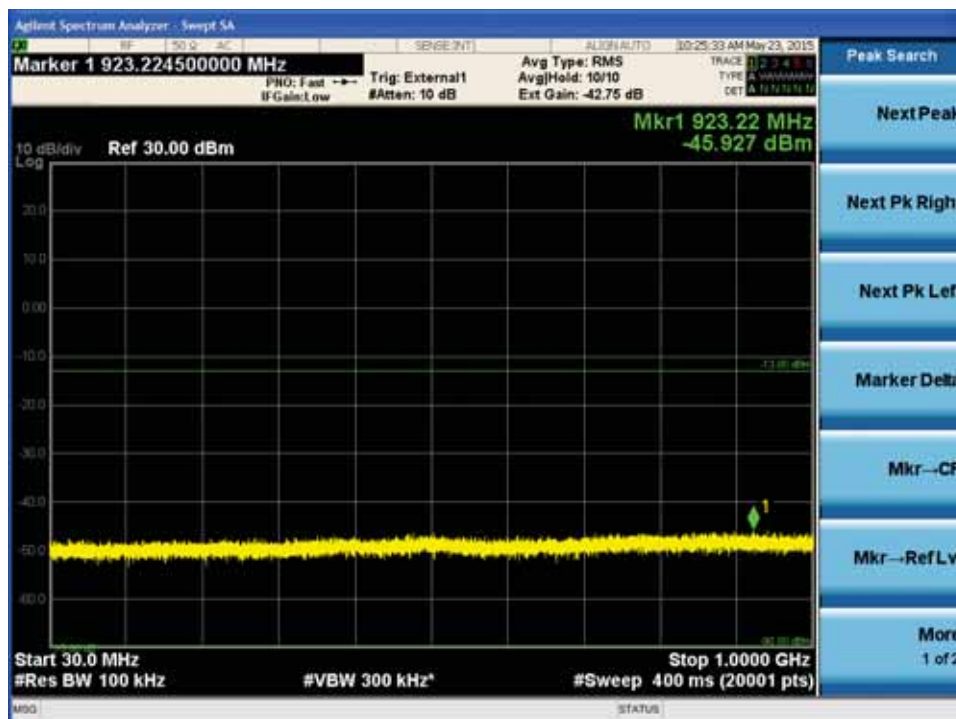


(3 GHz ~ 26.5 GHz)

(Band Edge High)



(64QAM Low Channel)



(30 MHz ~ 1 GHz)

(64QAM Low Channel)



(1 GHz ~ 26.5 GHz)

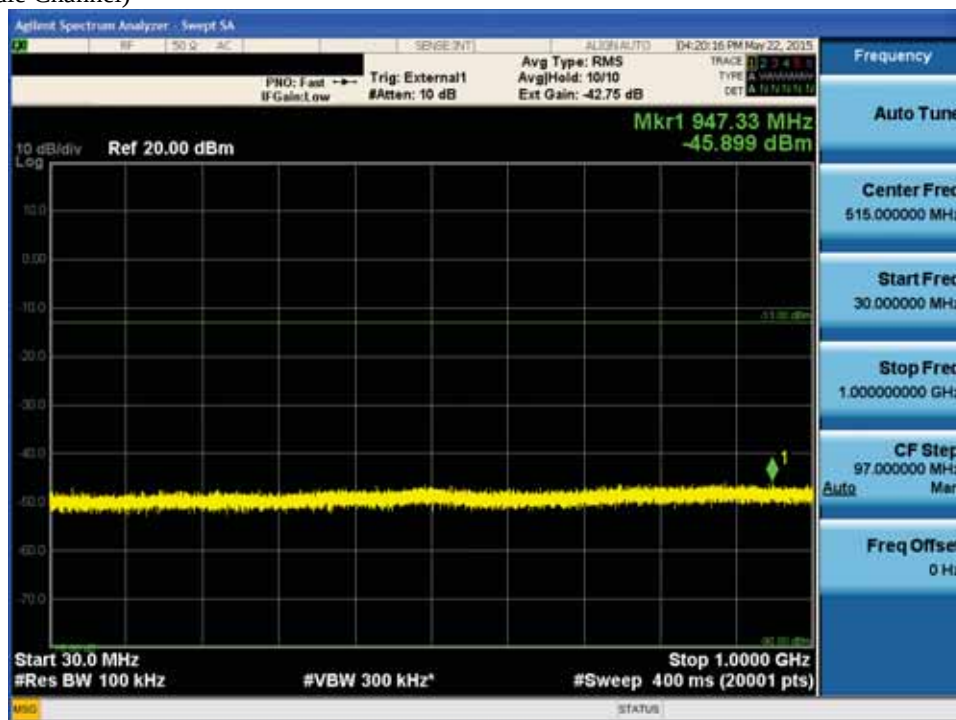


(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(64QAM Middle Channel)



(30 MHz ~ 1 GHz)

(64QAM Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(64QAM High Channel)



(30 MHz ~ 1 GHz)

(64QAM High Channel)

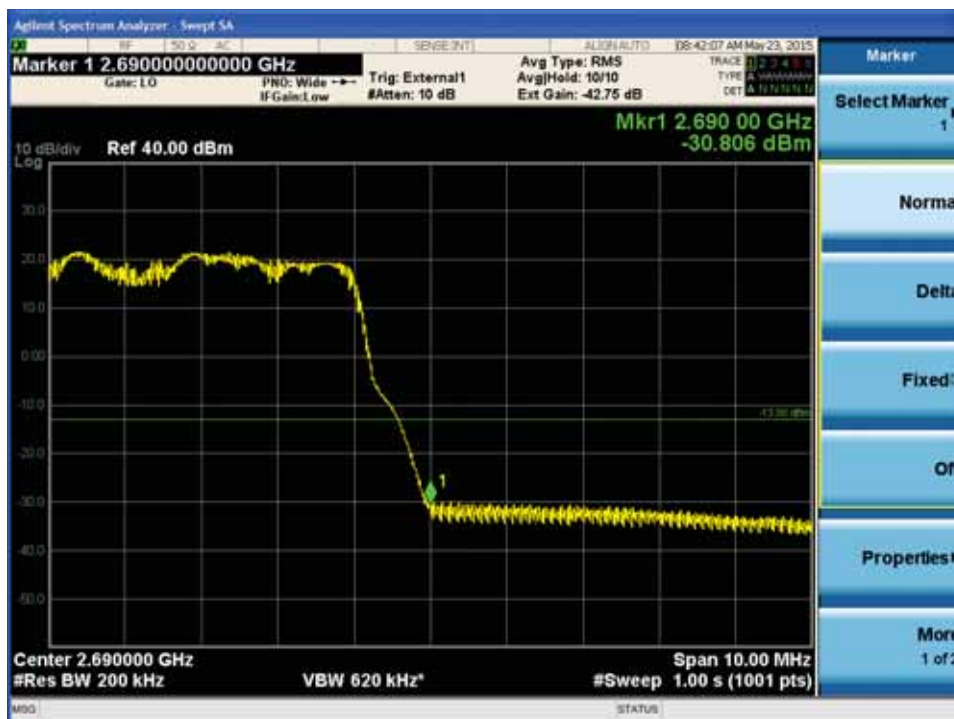


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



LTE20M(6.67W) 3 Carrier

7.4.24. Test Data at Output Port 1

(QPSK Low Channel)



(30 MHz ~ 1 GHz)

(QPSK Low Channel)

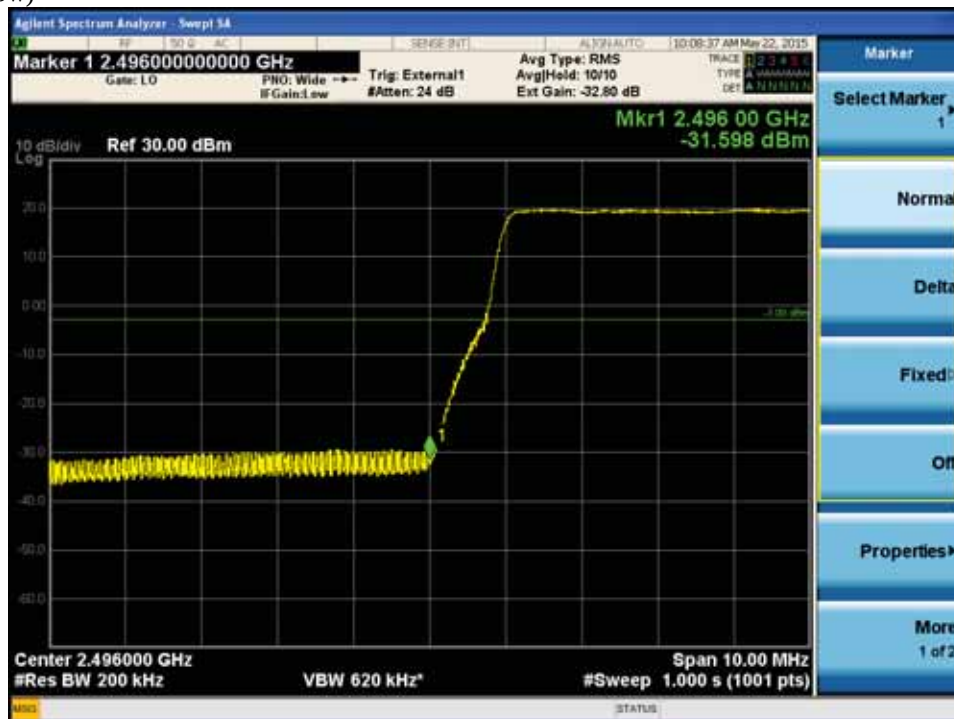


(1 GHz ~ 26.5 GHz)

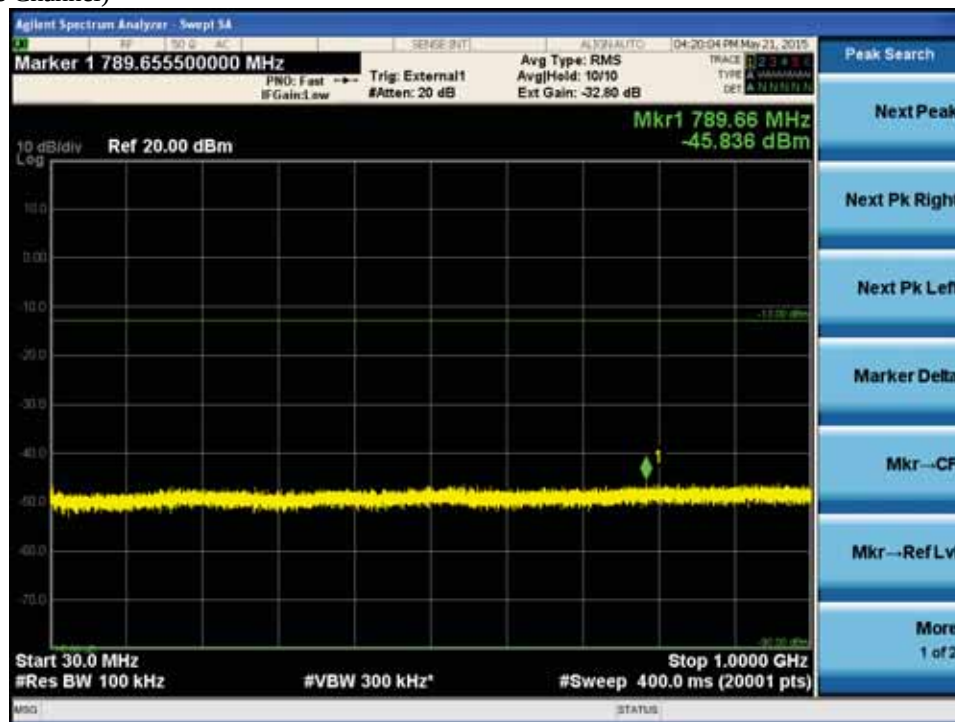


(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(QPSK Middle Channel)



(30 MHz ~ 1 GHz)

(QPSK Middle Channel)

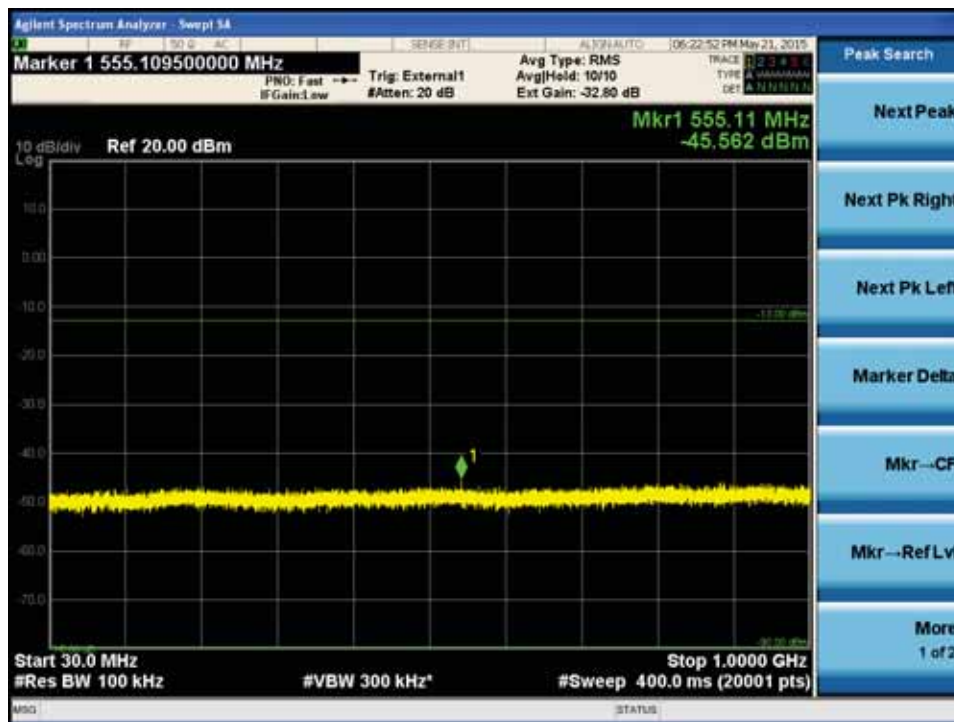


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(QPSK High Channel)



(30 MHz ~ 1 GHz)

(QPSK High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



(16QAM Low Channel)



(30 MHz ~ 1 GHz)

(16QAM Low Channel)

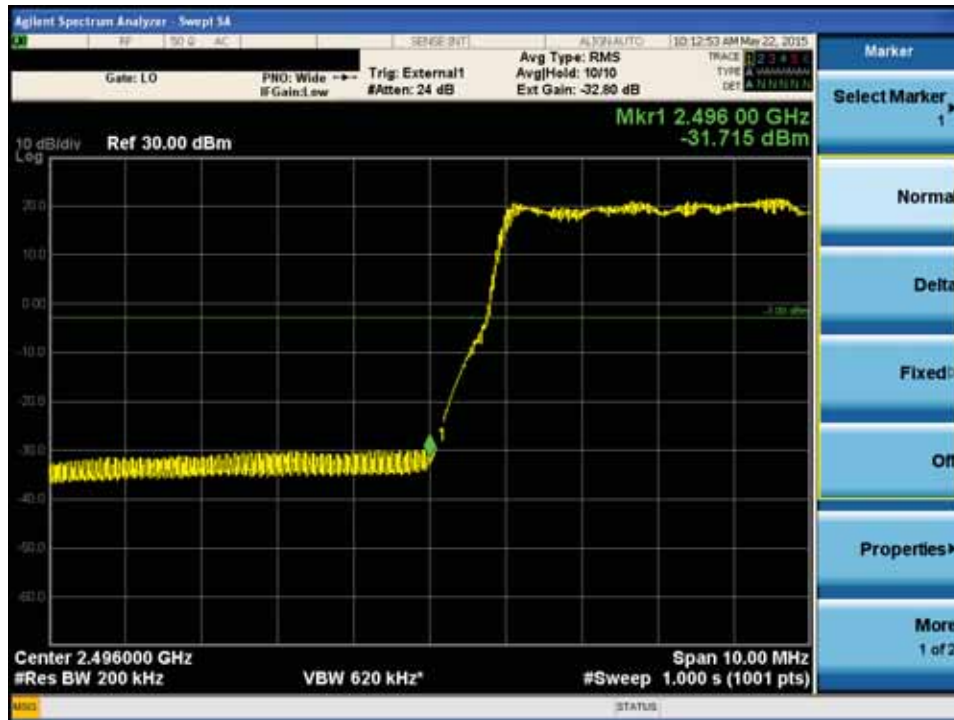


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(16QAM Middle Channel)



(30 MHz ~ 1 GHz)

(16QAM Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(16QAM High Channel)



(30 MHz ~ 1 GHz)

(16QAM High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



(64QAM Low Channel)



(30 MHz ~ 1 GHz)

(64QAM Low Channel)

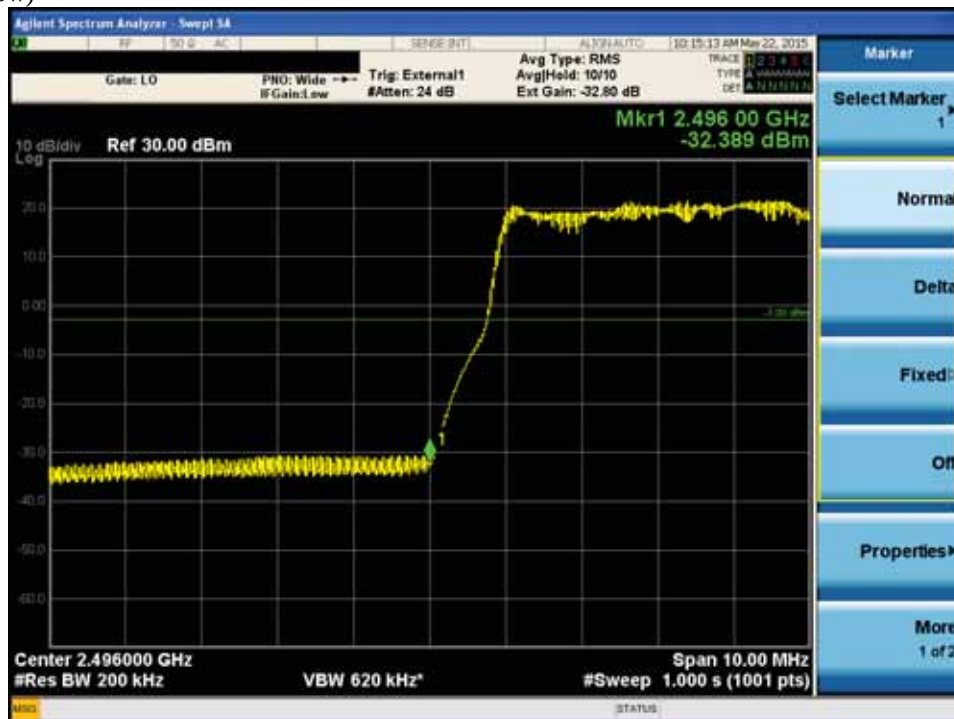


(1 GHz ~ 26.5 GHz)

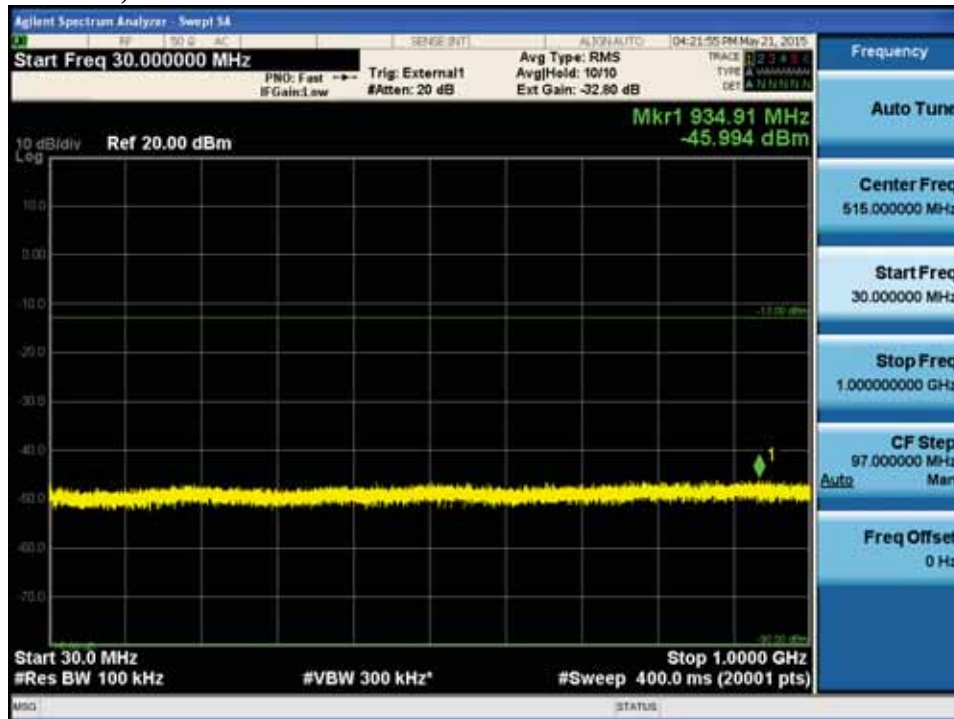


(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(64QAM Middle Channel)



(30 MHz ~ 1 GHz)

(64QAM Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(64QAM High Channel)



(30 MHz ~ 1 GHz)

(64QAM High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge High)



7.4.25. Test Data at Output Port 5
(QPSK Low Channel)



(30 MHz ~ 1 GHz)

(QPSK Low Channel)

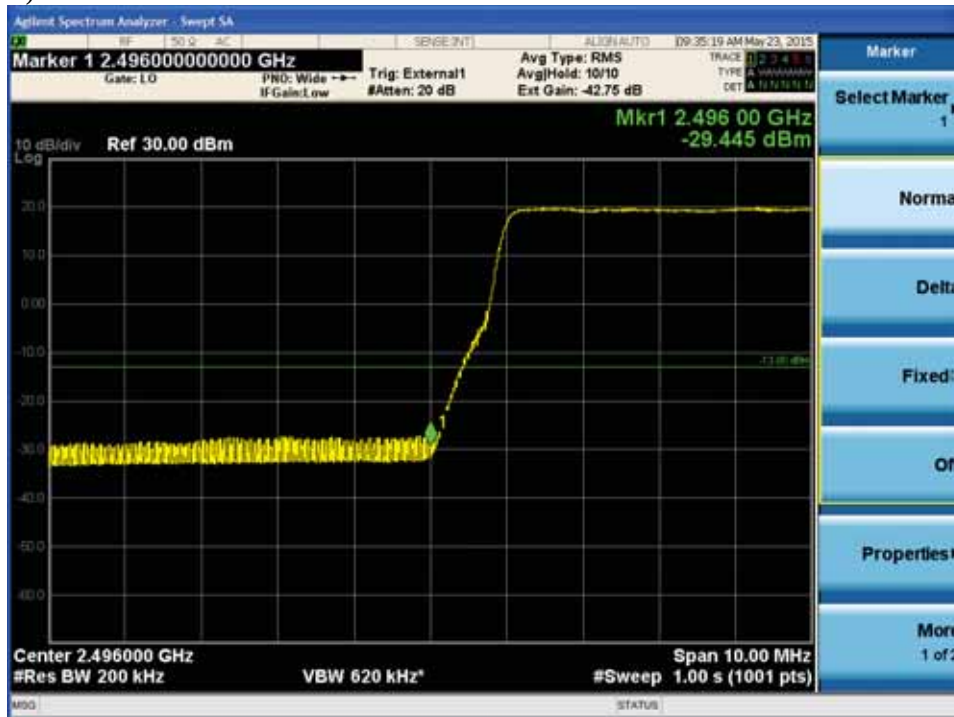


(1 GHz ~ 26.5 GHz)

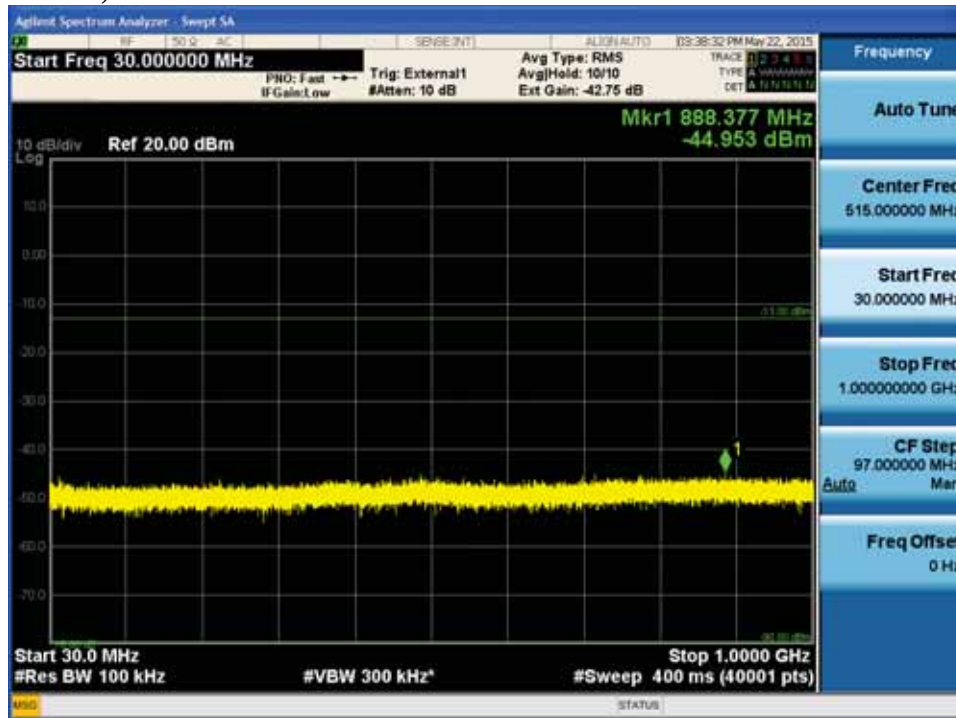


(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(QPSK Middle Channel)



(30 MHz ~ 1 GHz)

(QPSK Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(QPSK High Channel)



(30 MHz ~ 1 GHz)

(QPSK High Channel)



(1 GHz ~ 26.5 GHz)

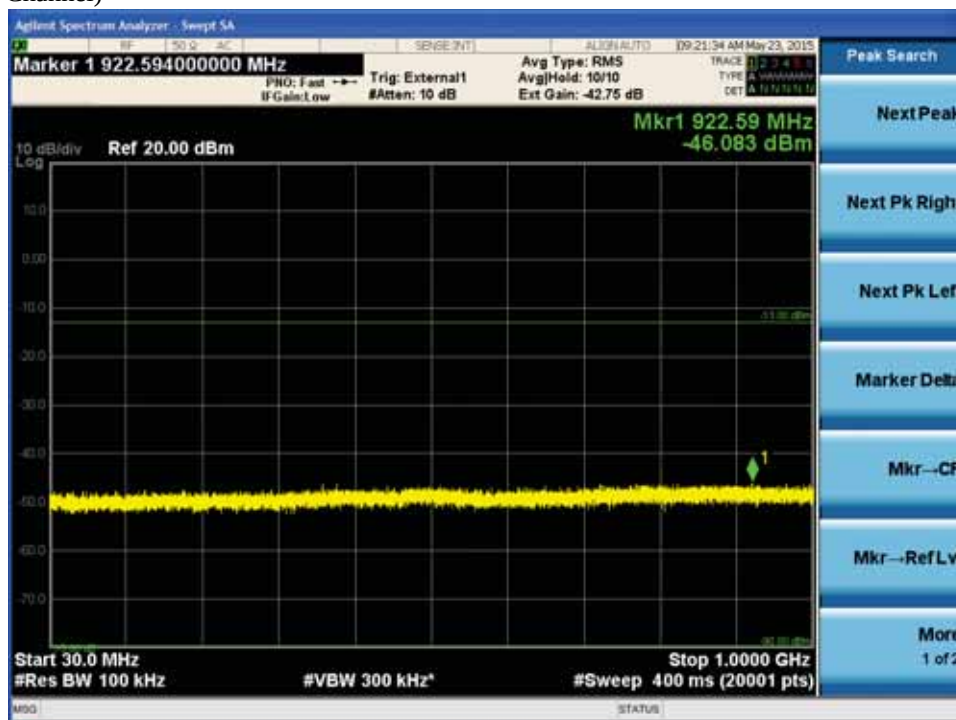


(3 GHz ~ 26.5 GHz)

(Band Edge High)



(16QAM Low Channel)



(30 MHz ~ 1 GHz)

(16QAM Low Channel)

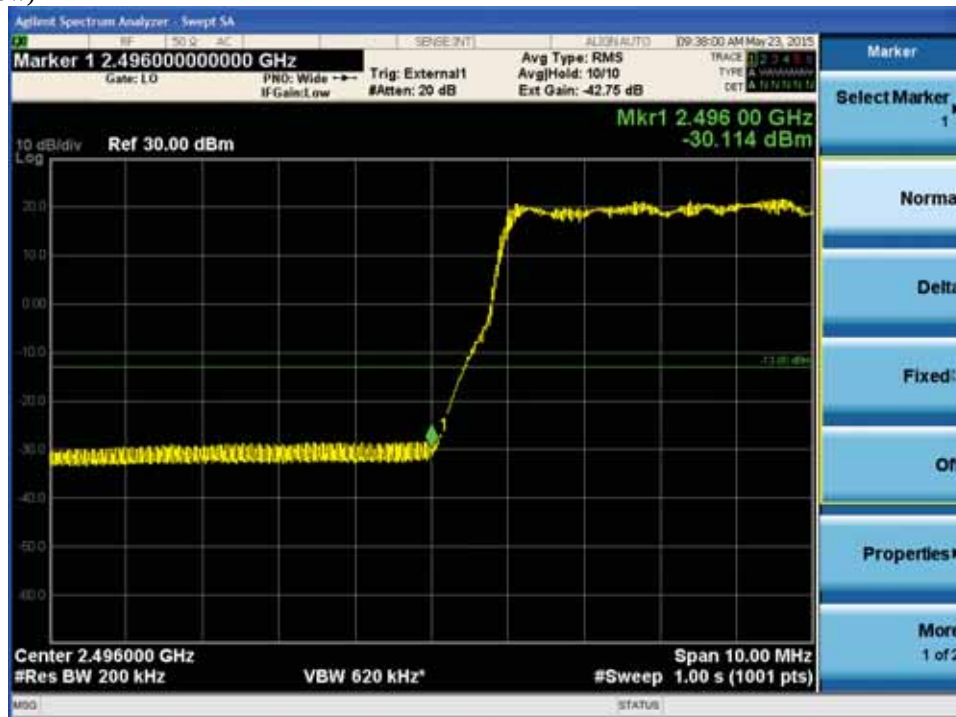


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(16QAM Middle Channel)



(30 MHz ~ 1 GHz)

(16QAM Middle Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(16QAM High Channel)



(30 MHz ~ 1 GHz)

(16QAM High Channel)



(1 GHz ~ 26.5 GHz)

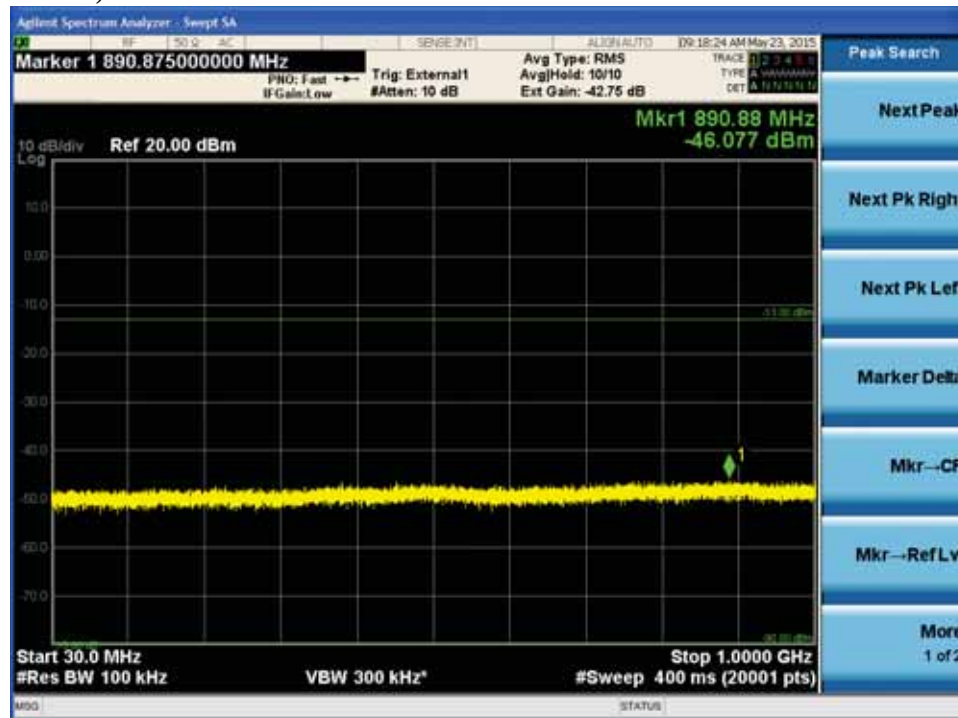


(3 GHz ~ 26.5 GHz)

(Band Edge High)



(64QAM Low Channel)



(30 MHz ~ 1 GHz)

(64QAM Low Channel)

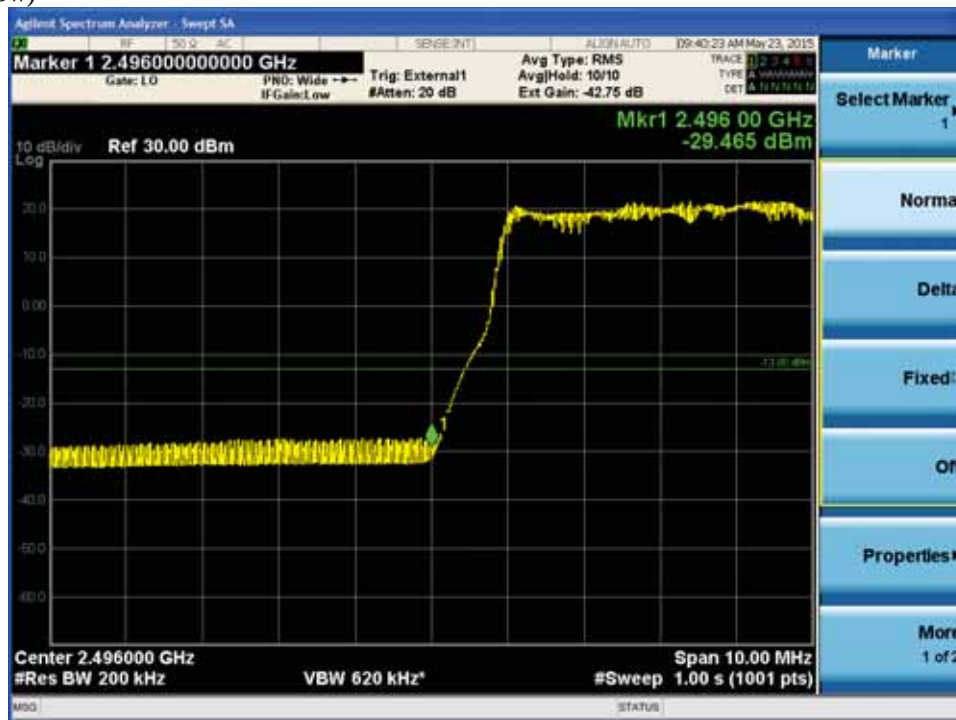


(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(64QAM Middle Channel)



(30 MHz ~ 1 GHz)

The screenshot displays the Agilent Spectrum Analyzer interface. The main plot shows a spectrum with a prominent peak at 25.863137500000 GHz, labeled as Marker 1. The peak level is -21.941 dBm. The plot is set to a logarithmic scale (Log) with a reference level of 20.00 dBm. The frequency range is from 1.00 GHz to 26.50 GHz, with a resolution bandwidth (RBW) of 1.0 MHz and a video bandwidth (VBW) of 3.0 MHz. The sweep time is 400 ms. The interface includes various control panels on the right for Peak Search, Next Peak, Next Pk Right, Next Pk Left, Marker Delta, Mkr--CF, and Mkr--Ref Lvl. The status bar at the bottom indicates the current frequency, RBW, VBW, and sweep time.

Agilent Spectrum Analyzer - Swept SA

Center Freq 14.75000000 GHz

PNO: Fast Trg: External1

W Gain: 1.0w #Atten: 2 dB

Avg Type: RMS

Avg Hold: 10/10

Ext Gain: -43.25 dB

04/02/09 PM Jun 12, 2015

TRACE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Frequency

Auto Tune

Center Freq 14.75000000 GHz

Start Freq 3.00000000 GHz

Stop Freq 26.50000000 GHz

CF Step 2.35000000 GHz

Auto Man

Freq Offset 0 Hz

10 dB/div Ref 30.00 dBm

Mkr1 25.8573 GHz -28.635 dBm

Start 3.00 GHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 26.50 GHz

#Sweep 400 ms (40001 pts)

MS3 Points changed; all traces cleared

(STATUS)

HCT CO., LTD

(64QAM High Channel)



(30 MHz ~ 1 GHz)

(64QAM High Channel)



(1 GHz ~ 26.5 GHz)



(3 GHz ~ 26.5 GHz)

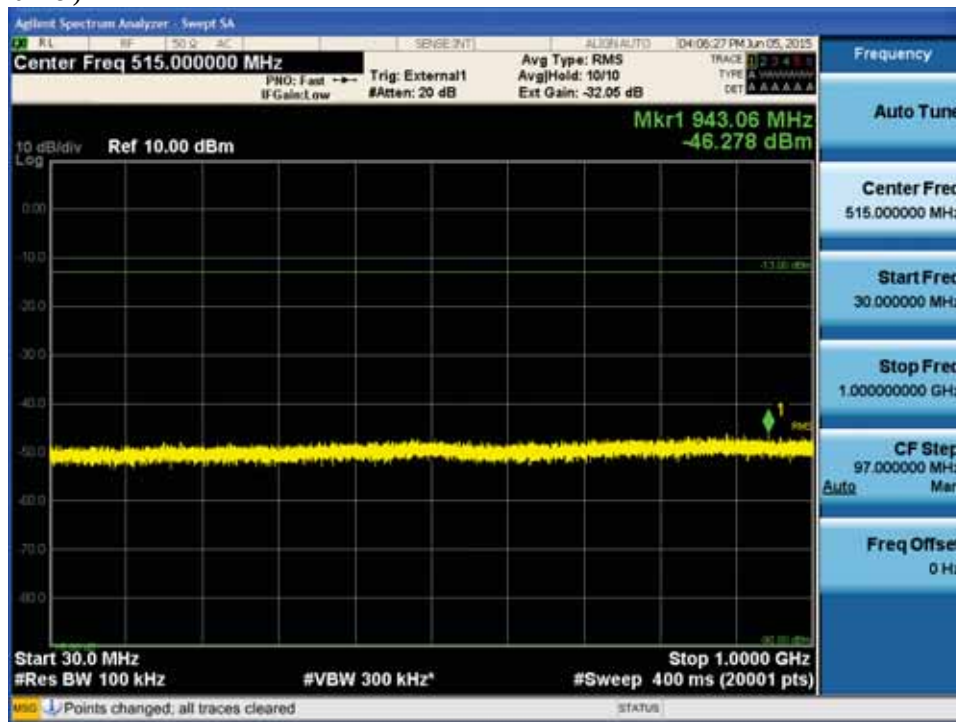
(Band Edge High)



LTE20M(10W)

7.4.26. Test Data at Output Port 1

(QPSK Low Channel)



(30 MHz ~ 1 GHz)

(QPSK Low Channel)



(1 GHz ~ 26.5 GHz)

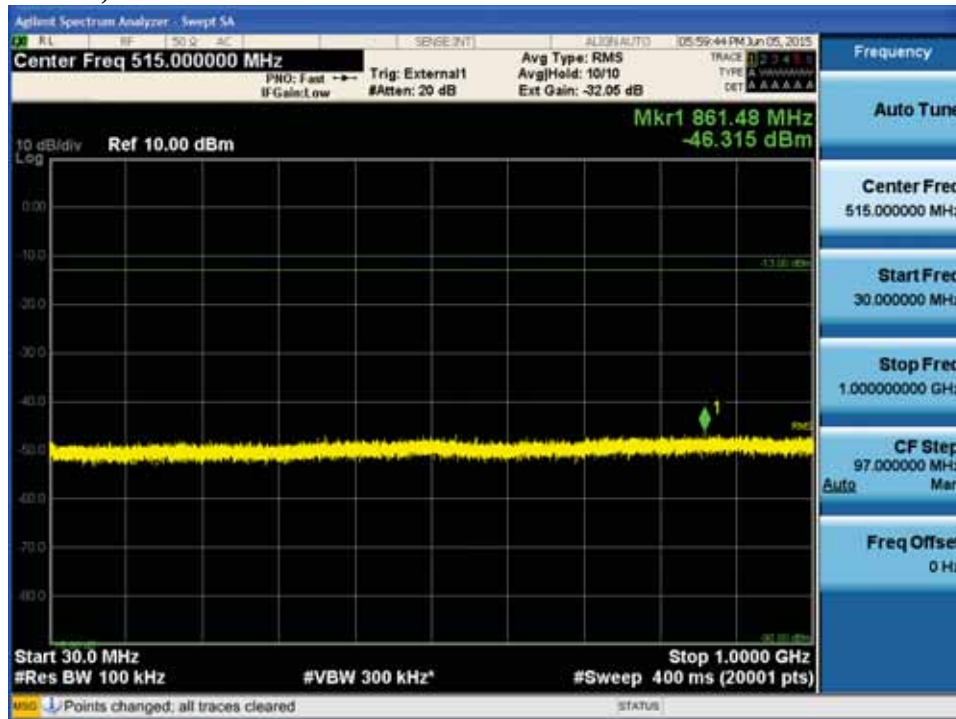


(3 GHz ~ 26.5 GHz)

(Band Edge Low)



(QPSK Middle Channel)



(30 MHz ~ 1 GHz)

(QPSK Middle Channel)



(1 GHz ~ 26.5 GHz)