



Shenzhen Huaxia Testing Technology Co., Ltd

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## Appendix A

### GSM&WCDMA&LTE Test Data

## 1 Conducted Output Power and Effective (Isotropic) Radiated Power

Note:

$$1. \text{ERP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBd)}$$

$$\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$$

$$\text{EIRP} = \text{ERP} + 2.15\text{dB}$$

$$2. \text{Antenna Gain: GSM850: 0.6dBi, GSM1900: 0.8dBi}$$

$$\text{WCDMA Band 2: 0.8dBi, WCDMA Band 5: 0.5dBi,}$$

$$\text{FDD-LTE Band 2: 0.7dBi,}$$

$$\text{FDD-LTE Band 4: 1.8dBi,}$$

$$\text{FDD-LTE Band 5: 1.0dBi,}$$

$$\text{FDD-LTE Band 12: 0.5dBi,}$$

### GSM

#### Test Result

Test Band	Test Mode	Test Channel	Measured (dbm)	ERP (dbm)	Limit (dbm)	Verdict
GSM850	GSM/TM1	LCH	32.41	30.86	38.5	PASS
		MCH	32.43	30.88	38.5	PASS
		HCH	32.52	30.97	38.5	PASS
	GSM/TM2	LCH	28.13	26.58	38.5	PASS
		MCH	28.21	26.66	38.5	PASS
		HCH	28.16	26.61	38.5	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	EIRP(dbm)	Limit(dbm)	Verdict
GSM1900	GSM/TM1	LCH	29.33	30.13	33	PASS
		MCH	29.91	30.71	33	PASS
		HCH	30.11	30.91	33	PASS
	GSM/TM2	LCH	27.23	28.03	33	PASS
		MCH	26.79	27.59	33	PASS
		HCH	26.78	27.58	33	PASS

**WCDMA**

**Test Result**

Test Band	Test Mode	Test Channel	Measured (dbm)	ERP (dbm)	Limit (dbm)	Verdict
WCDMA850	UMTS/TM1	LCH	22.81	21.16	38.5	PASS
		MCH	23.83	22.18	38.5	PASS
		HCH	22.94	21.29	38.5	PASS
Test Band	Test Mode	Test Channel	Measured (dbm)	EIRP (dbm)	Limit (dbm)	Verdict
WCDMA1900	UMTS/TM1	LCH	22.54	23.34	33	PASS
		MCH	23.07	23.87	33	PASS
		HCH	22.84	23.64	33	PASS

**LTE Band 2**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	Channel Bandwidth: 1.4 MHz				
		RB Configuration Size	Offset	Average Power [dBm]	E.i.r.p [dBm]	Verdict
QPSK	LCH	1	0	20.69	21.39	PASS
		1	3	20.71	21.41	PASS
		1	5	20.67	21.37	PASS
		3	0	20.37	21.07	PASS
		3	2	20.36	21.06	PASS
		3	3	20.37	21.07	PASS
		6	0	19.61	20.31	PASS
	MCH	1	0	20.98	21.68	PASS
		1	3	21.03	21.73	PASS
		1	5	20.99	21.69	PASS
		3	0	20.37	21.07	PASS
		3	2	20.38	21.08	PASS
		3	3	20.37	21.07	PASS
		6	0	19.95	20.65	PASS
16QAM	LCH	1	0	21.09	21.79	PASS
		1	3	21.08	21.78	PASS
		1	5	21.1	21.8	PASS
		3	0	20.32	21.02	PASS
		3	2	20.36	21.06	PASS
		3	3	20.37	21.07	PASS
		6	0	20.09	20.79	PASS
	MCH	1	0	19.75	20.45	PASS
		1	3	19.74	20.44	PASS
		1	5	19.69	20.39	PASS
		3	0	19.37	20.07	PASS
		3	2	19.32	20.02	PASS
		3	3	19.31	20.01	PASS
		6	0	18.67	19.37	PASS

	HCH	3	0	19.87	20.57	PASS
		3	2	19.86	20.56	PASS
		3	3	19.79	20.49	PASS
		6	0	19.03	19.73	PASS
		1	0	20.17	20.87	PASS
		1	3	20.11	20.81	PASS
		1	5	20.08	20.78	PASS
		3	0	19.89	20.59	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.57	21.27	PASS
		1	7	20.67	21.37	PASS
		1	14	20.56	21.26	PASS
		8	0	19.59	20.29	PASS
		8	4	19.62	20.32	PASS
		8	7	19.67	20.37	PASS
		15	0	19.62	20.32	PASS
	MCH	1	0	21.06	21.76	PASS
		1	7	21.05	21.75	PASS
		1	14	20.89	21.59	PASS
		8	0	20.06	20.76	PASS
		8	4	20.12	20.82	PASS
		8	7	20.07	20.77	PASS
		15	0	20.02	20.72	PASS
16QAM	HCH	1	0	21.09	21.79	PASS
		1	7	21.08	21.78	PASS
		1	14	21.04	21.74	PASS
		8	0	20.07	20.77	PASS
		8	4	20.03	20.73	PASS
		8	7	20.07	20.77	PASS
		15	0	20.05	20.75	PASS
		1	0	20.17	20.87	PASS

	MCH	1	7	20.15	20.85	PASS
		1	14	20.13	20.83	PASS
		8	0	19.46	20.16	PASS
		8	4	19.47	20.17	PASS
		8	7	19.42	20.12	PASS
		15	0	18.67	19.37	PASS
	HCH	1	0	20.14	20.84	PASS
		1	7	20.09	20.79	PASS
		1	14	20.07	20.77	PASS
		8	0	19.43	20.13	PASS
		8	4	19.47	20.17	PASS
		8	7	19.46	20.16	PASS
		15	0	18.96	19.66	PASS
	HCH	1	0	20.25	20.95	PASS
		1	7	20.19	20.89	PASS
		1	14	20.17	20.87	PASS
		8	0	19.48	20.18	PASS
		8	4	19.49	20.19	PASS
		8	7	19.43	20.13	PASS
		15	0	19.43	20.13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.68	21.38	PASS
		1	12	20.65	21.35	PASS
		1	24	20.59	21.29	PASS
		12	0	19.67	20.37	PASS
		12	6	19.64	20.34	PASS
		12	13	19.61	20.31	PASS
		25	0	19.61	20.31	PASS
QPSK	MCH	1	0	21.12	21.82	PASS
		1	12	21.09	21.79	PASS
		1	24	21.07	21.77	PASS
		12	0	20.05	20.75	PASS
		12	6	20.1	20.8	PASS
		12	13	20.03	20.73	PASS
		25	0	20.02	20.72	PASS

	HCH	1	0	21.23	21.93	PASS
		1	12	21.19	21.89	PASS
		1	24	21.18	21.88	PASS
		12	0	20.14	20.84	PASS
		12	6	20.12	20.82	PASS
		12	13	20.08	20.78	PASS
		25	0	20.07	20.77	PASS
	LCH	1	0	19.93	20.63	PASS
		1	12	19.89	20.59	PASS
		1	24	19.96	20.66	PASS
		12	0	19.46	20.16	PASS
		12	6	19.45	20.15	PASS
		12	13	19.37	20.07	PASS
		25	0	18.78	19.48	PASS
	MCH	1	0	20.43	21.13	PASS
		1	12	20.41	21.11	PASS
		1	24	20.35	21.05	PASS
		12	0	19.49	20.19	PASS
		12	6	19.49	20.19	PASS
		12	13	19.41	20.11	PASS
		25	0	18.97	19.67	PASS
	HCH	1	0	20.27	20.97	PASS
		1	12	20.25	20.95	PASS
		1	24	20.16	20.86	PASS
		12	0	19.49	20.19	PASS
		12	6	19.48	20.18	PASS
		12	13	19.43	20.13	PASS
		25	0	19.33	20.03	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	Channel Bandwidth: 10 MHz				
		RB Configuration Size	Offset	Average Power [dBm]	E.i.r.p [dBm]	Verdict
QPSK	LCH	1	0	20.69	21.39	PASS
		1	24	20.65	21.35	PASS
		1	49	20.54	21.24	PASS
		25	0	19.67	20.37	PASS
		25	12	19.63	20.33	PASS
		25	25	19.71	20.41	PASS



	MCH	50	0	19.73	20.43	PASS
		1	0	21.14	21.84	PASS
		1	24	21.13	21.83	PASS
		1	49	21.08	21.78	PASS
		25	0	20.02	20.72	PASS
		25	12	19.98	20.68	PASS
		25	25	20.04	20.74	PASS
		50	0	20.07	20.77	PASS
	HCH	1	0	21.23	21.93	PASS
		1	24	21.19	21.89	PASS
		1	49	21.14	21.84	PASS
		25	0	20.05	20.75	PASS
		25	12	20.06	20.76	PASS
		25	25	20.07	20.77	PASS
		50	0	20.09	20.79	PASS
		1	0	20.27	20.97	PASS
16QAM	LCH	1	24	20.26	20.96	PASS
		1	49	20.19	20.89	PASS
		25	0	19.44	20.14	PASS
		25	12	19.46	20.16	PASS
		25	25	19.49	20.19	PASS
		50	0	18.74	19.44	PASS
	MCH	1	0	20.13	20.83	PASS
		1	24	20.12	20.82	PASS
		1	49	20.06	20.76	PASS
		25	0	19.47	20.17	PASS
		25	12	19.46	20.16	PASS
		25	25	19.41	20.11	PASS
		50	0	19.11	19.81	PASS
		1	0	20.35	21.05	PASS
HCH	HCH	1	24	20.31	21.01	PASS
		1	49	20.27	20.97	PASS
		25	0	19.43	20.13	PASS
		25	12	19.49	20.19	PASS
		25	25	19.46	20.16	PASS
		50	0	19.42	20.12	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	Channel Bandwidth: 15 MHz			
		RB Configuration Size	Offset	Average Power [dBm]	E.i.r.p [dBm]
QPSK	LCH	1	0	20.71	21.41
		1	37	20.68	21.38
		1	74	20.56	21.26
		37	0	19.78	20.48
		37	18	19.87	20.57
		37	38	19.83	20.53
		75	0	19.84	20.54
	MCH	1	0	21.12	21.82
		1	37	21.11	21.81
		1	74	21.06	21.76
		37	0	20.06	20.76
		37	18	20.12	20.82
		37	38	20.06	20.76
		75	0	20.11	20.81
16QAM	LCH	1	0	21.19	21.89
		1	37	21.19	21.89
		1	74	21.16	21.86
		37	0	20.22	20.92
		37	18	20.21	20.91
		37	38	20.23	20.93
		75	0	20.21	20.91
	MCH	1	0	20.35	21.05
		1	37	20.34	21.04
		1	74	20.26	20.96
		37	0	19.45	20.15
		37	18	19.47	20.17
		37	38	19.49	20.19
		75	0	18.81	19.51



	HCH	37	38	19.42	20.12	PASS
		75	0	19.09	19.79	PASS
		1	0	20.45	21.15	PASS
		1	37	20.44	21.14	PASS
		1	74	20.47	21.17	PASS
		37	0	19.33	20.03	PASS
		37	18	19.47	20.17	PASS
		37	38	19.47	20.17	PASS
		75	0	19.15	19.85	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	Channel Bandwidth: 20 MHz				
		RB Configuration Size	Offset	Average Power [dBm]	E.i.r.p [dBm]	Verdict
QPSK	LCH	1	0	21.13	21.83	PASS
		1	49	20.78	21.48	PASS
		1	99	20.67	21.37	PASS
		50	0	20.17	20.87	PASS
		50	25	20.08	20.78	PASS
		50	50	19.79	20.49	PASS
		100	0	19.81	20.51	PASS
	MCH	1	0	21.24	21.94	PASS
		1	49	21.16	21.86	PASS
		1	99	21.12	21.82	PASS
		50	0	20.42	21.12	PASS
		50	25	20.06	20.76	PASS
		50	50	20.07	20.77	PASS
		100	0	20.25	20.95	PASS
16QAM	HCH	1	0	21.19	21.89	PASS
		1	49	21.16	21.86	PASS
		1	99	21.08	21.78	PASS
		50	0	20.13	20.83	PASS
		50	25	20.1	20.8	PASS
		50	50	20.08	20.78	PASS
		100	0	20.1	20.8	PASS
	LCH	1	0	20.11	20.81	PASS
		1	49	20.21	20.91	PASS
		1	99	20.09	20.79	PASS



	MCH	50	0	19.47	20.17	PASS
		50	25	19.44	20.14	PASS
		50	50	19.41	20.11	PASS
		100	0	18.85	19.55	PASS
		1	0	20.29	20.99	PASS
		1	49	20.26	20.96	PASS
		1	99	20.18	20.88	PASS
		50	0	19.44	20.14	PASS
		50	25	19.43	20.13	PASS
		50	50	19.45	20.15	PASS
	HCH	100	0	19.06	19.76	PASS
		1	0	20.48	21.18	PASS
		1	49	20.45	21.15	PASS
		1	99	20.44	21.14	PASS
		50	0	19.47	20.17	PASS
		50	25	19.46	20.16	PASS
		50	50	19.42	20.12	PASS
		100	0	19.39	20.09	PASS

**LTE Band 4**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.97	22.77	PASS
		1	3	20.87	22.67	PASS
		1	5	20.81	22.61	PASS
		3	0	20.37	22.17	PASS
		3	2	20.35	22.15	PASS
		3	3	20.33	22.13	PASS
		6	0	20.12	21.92	PASS
	MCH	1	0	21.02	22.82	PASS
		1	3	20.98	22.78	PASS
		1	5	20.89	22.69	PASS
		3	0	20.46	22.26	PASS
		3	2	20.44	22.24	PASS
		3	3	20.42	22.22	PASS
		6	0	20.14	21.94	PASS
16QAM	LCH	1	0	20.34	22.14	PASS
		1	3	20.32	22.12	PASS
		1	5	20.23	22.03	PASS
		3	0	20.29	22.09	PASS
		3	2	20.23	22.03	PASS
		3	3	20.18	21.98	PASS
		6	0	19.67	21.47	PASS
	MCH	1	0	20.06	21.86	PASS
		1	3	19.98	21.78	PASS
		1	5	19.93	21.73	PASS
		3	0	19.64	21.44	PASS
		3	2	19.65	21.45	PASS
		3	3	19.57	21.37	PASS
		6	0	18.97	20.77	PASS

	HCH	1	5	20.03	21.83	PASS
		3	0	19.76	21.56	PASS
		3	2	19.74	21.54	PASS
		3	3	19.54	21.34	PASS
		6	0	19.06	20.86	PASS
		1	0	19.37	21.17	PASS
		1	3	19.34	21.14	PASS
		1	5	19.32	21.12	PASS
		3	0	19.15	20.95	PASS
		3	2	19.16	20.96	PASS
		3	3	19.14	20.94	PASS
		6	0	19.14	20.94	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
	LCH	1	0	20.42	22.22	PASS
		1	7	20.37	22.17	PASS
		1	14	20.31	22.11	PASS
		8	0	19.89	21.69	PASS
		8	4	19.81	21.61	PASS
		8	7	19.83	21.63	PASS
		15	0	19.78	21.58	PASS
	MCH	1	0	21.09	22.89	PASS
		1	7	21.06	22.86	PASS
		1	14	21.03	22.83	PASS
		8	0	20.03	21.83	PASS
		8	4	20.06	21.86	PASS
		8	7	20.12	21.92	PASS
		15	0	20.13	21.93	PASS
	HCH	1	0	20.49	22.29	PASS
		1	7	20.43	22.23	PASS
		1	14	20.23	22.03	PASS
		8	0	20.12	21.92	PASS
		8	4	20.21	22.01	PASS
		8	7	20.26	22.06	PASS
		15	0	20.31	22.11	PASS

16QAM	LCH	1	0	20.27	22.07	PASS
		1	7	20.23	22.03	PASS
		1	14	20.31	22.11	PASS
		8	0	19.47	21.27	PASS
		8	4	19.42	21.22	PASS
		8	7	19.48	21.28	PASS
		15	0	19.14	20.94	PASS
	MCH	1	0	20.03	21.83	PASS
		1	7	20.16	21.96	PASS
		1	14	20.08	21.88	PASS
		8	0	19.44	21.24	PASS
		8	4	19.41	21.21	PASS
		8	7	19.42	21.22	PASS
		15	0	18.93	20.73	PASS
	HCH	1	0	20.17	21.97	PASS
		1	7	20.32	22.12	PASS
		1	14	20.21	22.01	PASS
		8	0	19.45	21.25	PASS
		8	4	19.48	21.28	PASS
		8	7	19.48	21.28	PASS
		15	0	19.32	21.12	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.57	22.37	PASS
		1	12	20.54	22.34	PASS
		1	24	20.49	22.29	PASS
		12	0	19.47	21.27	PASS
		12	6	19.37	21.17	PASS
		12	13	19.41	21.21	PASS
		25	0	19.37	21.17	PASS
	MCH	1	0	21.06	22.86	PASS
		1	12	21.03	22.83	PASS
		1	24	20.97	22.77	PASS



	HCH	12	13	19.94	21.74	PASS
		25	0	19.98	21.78	PASS
		1	0	20.43	22.23	PASS
		1	12	20.54	22.34	PASS
		1	24	20.65	22.45	PASS
		12	0	19.58	21.38	PASS
		12	6	19.61	21.41	PASS
		12	13	19.58	21.38	PASS
		25	0	19.67	21.47	PASS
		1	0	20.14	21.94	PASS
16QAM	LCH	1	12	20.23	22.03	PASS
		1	24	20.12	21.92	PASS
		12	0	19.44	21.24	PASS
		12	6	19.41	21.21	PASS
		12	13	19.42	21.22	PASS
		25	0	19.05	20.85	PASS
		1	0	20.23	22.03	PASS
	MCH	1	12	20.16	21.96	PASS
		1	24	20.17	21.97	PASS
		12	0	19.46	21.26	PASS
		12	6	19.48	21.28	PASS
		12	13	19.43	21.23	PASS
		25	0	19.03	20.83	PASS
		1	0	20.21	22.01	PASS
	HCH	1	12	20.32	22.12	PASS
		1	24	20.16	21.96	PASS
		12	0	19.35	21.15	PASS
		12	6	19.38	21.18	PASS
		12	13	19.21	21.01	PASS
		25	0	18.91	20.71	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.57	22.37	PASS
		1	24	20.54	22.34	PASS
		1	49	20.49	22.29	PASS



	MCH	25	0	19.73	21.53	PASS
		25	12	19.65	21.45	PASS
		25	25	19.64	21.44	PASS
		50	0	19.76	21.56	PASS
		1	0	20.47	22.27	PASS
		1	24	20.43	22.23	PASS
		1	49	20.38	22.18	PASS
		25	0	19.37	21.17	PASS
	HCH	25	12	19.32	21.12	PASS
		25	25	19.69	21.49	PASS
		50	0	19.96	21.76	PASS
		1	0	20.51	22.31	PASS
		1	24	20.87	22.67	PASS
		1	49	20.79	22.59	PASS
		25	0	19.66	21.46	PASS
		25	12	19.87	21.67	PASS
16QAM	LCH	25	25	19.91	21.71	PASS
		50	0	20.24	22.04	PASS
		1	0	20.17	21.97	PASS
		1	24	20.11	21.91	PASS
		1	49	20.16	21.96	PASS
		25	0	19.44	21.24	PASS
		25	12	19.42	21.22	PASS
	MCH	25	25	19.37	21.17	PASS
		50	0	18.96	20.76	PASS
		1	0	20.14	21.94	PASS
		1	24	20.13	21.93	PASS
		1	49	20.32	22.12	PASS
		25	0	19.41	21.21	PASS
		25	12	19.42	21.22	PASS
	HCH	25	25	19.32	21.12	PASS
		50	0	18.96	20.76	PASS
		1	0	20.41	22.21	PASS
		1	24	20.4	22.2	PASS
		1	49	20.31	22.11	PASS
		25	0	19.48	21.28	PASS
		25	12	19.49	21.29	PASS



		25	25	19.45	21.25	PASS
		50	0	18.83	20.63	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	20.59	22.39	PASS
		1	37	20.54	22.34	PASS
		1	74	20.43	22.23	PASS
		37	0	19.56	21.36	PASS
		37	18	19.67	21.47	PASS
		37	38	19.72	21.52	PASS
		75	0	19.67	21.47	PASS
	MCH	1	0	20.51	22.31	PASS
		1	37	20.65	22.45	PASS
		1	74	20.45	22.25	PASS
		37	0	19.87	21.67	PASS
		37	18	19.93	21.73	PASS
		37	38	19.79	21.59	PASS
		75	0	20.02	21.82	PASS
16QAM	HCH	1	0	20.57	22.37	PASS
		1	37	20.55	22.35	PASS
		1	74	20.49	22.29	PASS
		37	0	19.45	21.25	PASS
		37	18	19.49	21.29	PASS
		37	38	19.53	21.33	PASS
		75	0	19.58	21.38	PASS
	LCH	1	0	20.21	22.01	PASS
		1	37	20.19	21.99	PASS
		1	74	20.36	22.16	PASS
		37	0	19.45	21.25	PASS
		37	18	19.48	21.28	PASS
		37	38	19.47	21.27	PASS
		75	0	19.06	20.86	PASS
	MCH	1	0	20.23	22.03	PASS
		1	37	20.31	22.11	PASS
		1	74	20.19	21.99	PASS

		37	0	19.42	21.22	PASS
		37	18	19.48	21.28	PASS
		37	38	19.33	21.13	PASS
		75	0	19.12	20.92	PASS
HCH		1	0	20.13	21.93	PASS
		1	37	20.26	22.06	PASS
		1	74	20.18	21.98	PASS
		37	0	19.34	21.14	PASS
		37	18	19.42	21.22	PASS
		37	38	19.27	21.07	PASS
		75	0	18.96	20.76	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.37	23.17	PASS
		1	49	21.15	22.95	PASS
		1	99	20.97	22.77	PASS
		50	0	20.47	22.27	PASS
		50	25	20.34	22.14	PASS
		50	50	19.95	21.75	PASS
		100	0	20.41	22.21	PASS
	MCH	1	0	21.27	23.07	PASS
		1	49	21.04	22.84	PASS
		1	99	20.98	22.78	PASS
		50	0	20.41	22.21	PASS
		50	25	20.21	22.01	PASS
		50	50	19.92	21.72	PASS
		100	0	20.16	21.96	PASS
	HCH	1	0	21.14	22.94	PASS
		1	49	20.91	22.71	PASS
		1	99	20.93	22.73	PASS
		50	0	20.37	22.17	PASS
		50	25	19.92	21.72	PASS
		50	50	20.06	21.86	PASS
		100	0	20.12	21.92	PASS
16QAM	LCH	1	0	19.95	21.75	PASS



		1	49	19.89	21.69	PASS
		1	99	19.87	21.67	PASS
		50	0	19.46	21.26	PASS
		50	25	19.47	21.27	PASS
		50	50	19.45	21.25	PASS
		100	0	19.47	21.27	PASS
	MCH	1	0	19.81	21.61	PASS
		1	49	19.77	21.57	PASS
		1	99	19.81	21.61	PASS
		50	0	19.45	21.25	PASS
		50	25	19.44	21.24	PASS
		50	50	19.32	21.12	PASS
		100	0	18.79	20.59	PASS
		1	0	20.47	22.27	PASS
	HCH	1	49	20.46	22.26	PASS
		1	99	20.41	22.21	PASS
		50	0	19.35	21.15	PASS
		50	25	19.43	21.23	PASS
		50	50	19.41	21.21	PASS
		100	0	18.89	20.69	PASS

**LTE Band 5**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	Channel Bandwidth: 1.4 MHz				
		RB Configuration Size	Offset	Average Power [dBm]	ERP [dBm]	Verdict
QPSK	LCH	1	0	21.81	20.66	PASS
		1	3	21.76	20.61	PASS
		1	5	21.73	20.58	PASS
		3	0	20.75	19.6	PASS
		3	2	20.65	19.5	PASS
		3	3	20.51	19.36	PASS
		6	0	20.44	19.29	PASS
	MCH	1	0	21.74	20.59	PASS
		1	3	21.71	20.56	PASS
		1	5	21.79	20.64	PASS
		3	0	20.87	19.72	PASS
		3	2	20.63	19.48	PASS
		3	3	20.57	19.42	PASS
		6	0	20.54	19.39	PASS
16QAM	LCH	1	0	21.37	20.22	PASS
		1	3	21.39	20.24	PASS
		1	5	21.34	20.19	PASS
		3	0	20.61	19.46	PASS
		3	2	20.62	19.47	PASS
		3	3	20.56	19.41	PASS
		6	0	20.42	19.27	PASS
	MCH	1	0	20.86	19.71	PASS
		1	3	20.79	19.64	PASS
		1	5	20.74	19.59	PASS
		3	0	20.18	19.03	PASS
		3	2	20.06	18.91	PASS
		3	3	19.89	18.74	PASS
		6	0	19.79	18.64	PASS

	HCH	1	5	20.88	19.73	PASS
		3	0	20.21	19.06	PASS
		3	2	20.16	19.01	PASS
		3	3	19.87	18.72	PASS
		6	0	19.57	18.42	PASS
		1	0	20.52	19.37	PASS
		1	3	20.47	19.32	PASS
		1	5	20.36	19.21	PASS
		3	0	19.98	18.83	PASS
		3	2	19.87	18.72	PASS
		3	3	19.72	18.57	PASS
		6	0	19.34	18.19	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
LCH	LCH	1	0	21.72	20.57	PASS
		1	7	21.65	20.5	PASS
		1	14	21.53	20.38	PASS
		8	0	20.78	19.63	PASS
		8	4	20.79	19.64	PASS
		8	7	20.67	19.52	PASS
		15	0	20.81	19.66	PASS
QPSK	MCH	1	0	21.78	20.63	PASS
		1	7	21.63	20.48	PASS
		1	14	21.59	20.44	PASS
		8	0	20.73	19.58	PASS
		8	4	20.69	19.54	PASS
		8	7	20.58	19.43	PASS
		15	0	20.74	19.59	PASS
HCH	HCH	1	0	21.79	20.64	PASS
		1	7	21.69	20.54	PASS
		1	14	21.74	20.59	PASS
		8	0	20.77	19.62	PASS
		8	4	20.79	19.64	PASS
		8	7	20.75	19.6	PASS
		15	0	20.81	19.66	PASS

16QAM	LCH	1	0	20.93	19.78	PASS
		1	7	20.97	19.82	PASS
		1	14	20.87	19.72	PASS
		8	0	19.95	18.8	PASS
		8	4	19.94	18.79	PASS
		8	7	19.83	18.68	PASS
		15	0	19.96	18.81	PASS
	MCH	1	0	20.87	19.72	PASS
		1	7	20.79	19.64	PASS
		1	14	20.73	19.58	PASS
		8	0	19.93	18.78	PASS
		8	4	19.96	18.81	PASS
		8	7	19.89	18.74	PASS
		15	0	19.67	18.52	PASS
	HCH	1	0	20.94	19.79	PASS
		1	7	20.98	19.83	PASS
		1	14	20.87	19.72	PASS
		8	0	19.84	18.69	PASS
		8	4	19.93	18.78	PASS
		8	7	19.97	18.82	PASS
		15	0	19.91	18.76	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.76	20.61	PASS
		1	12	21.68	20.53	PASS
		1	24	21.58	20.43	PASS
		12	0	20.72	19.57	PASS
		12	6	20.68	19.53	PASS
		12	13	20.65	19.5	PASS
		25	0	20.67	19.52	PASS
	MCH	1	0	21.79	20.64	PASS
		1	12	21.74	20.59	PASS
		1	24	21.65	20.5	PASS
		12	0	20.78	19.63	PASS
		12	6	20.67	19.52	PASS



	HCH	12	13	20.63	19.48	PASS
		25	0	20.72	19.57	PASS
		1	0	21.85	20.7	PASS
		1	12	21.87	20.72	PASS
		1	24	21.78	20.63	PASS
		12	0	20.87	19.72	PASS
		12	6	20.79	19.64	PASS
		12	13	20.74	19.59	PASS
		25	0	20.81	19.66	PASS
		1	0	20.98	19.83	PASS
16QAM	LCH	1	12	20.87	19.72	PASS
		1	24	20.91	19.76	PASS
		12	0	19.85	18.7	PASS
		12	6	19.83	18.68	PASS
		12	13	19.99	18.84	PASS
		25	0	19.72	18.57	PASS
		1	0	20.93	19.78	PASS
	MCH	1	12	20.96	19.81	PASS
		1	24	20.97	19.82	PASS
		12	0	19.54	18.39	PASS
		12	6	19.93	18.78	PASS
		12	13	19.91	18.76	PASS
		25	0	19.67	18.52	PASS
		1	0	20.95	19.8	PASS
	HCH	1	12	20.91	19.76	PASS
		1	24	20.89	19.74	PASS
		12	0	19.95	18.8	PASS
		12	6	19.93	18.78	PASS
		12	13	19.89	18.74	PASS
		25	0	19.79	18.64	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.77	20.62	PASS
		1	24	21.73	20.58	PASS
		1	49	21.69	20.54	PASS

		25	0	20.72	19.57	PASS
		25	12	20.65	19.5	PASS
		25	25	20.71	19.56	PASS
		50	0	20.69	19.54	PASS
	MCH	1	0	21.84	20.69	PASS
		1	24	21.94	20.79	PASS
		1	49	21.73	20.58	PASS
		25	0	20.88	19.73	PASS
	HCH	25	12	20.68	19.53	PASS
		25	25	20.61	19.46	PASS
		50	0	20.75	19.6	PASS
		1	0	21.79	20.64	PASS
	LCH	1	24	21.76	20.61	PASS
		1	49	21.68	20.53	PASS
		25	0	20.76	19.61	PASS
		25	12	20.56	19.41	PASS
	16QAM	25	25	20.67	19.52	PASS
		50	0	20.75	19.6	PASS
		1	0	20.91	19.76	PASS
		1	24	20.94	19.79	PASS
	MCH	1	49	20.96	19.81	PASS
		25	0	19.85	18.7	PASS
		25	12	19.81	18.66	PASS
		25	25	19.93	18.78	PASS
	HCH	50	0	19.76	18.61	PASS
		1	0	20.95	19.8	PASS
		1	24	20.87	19.72	PASS
		1	49	20.81	19.66	PASS
		25	0	19.93	18.78	PASS
		25	12	19.95	18.8	PASS
		25	25	19.86	18.71	PASS
		50	0	19.76	18.61	PASS
		1	0	20.93	19.78	PASS
		1	24	20.97	19.82	PASS
		1	49	20.87	19.72	PASS
		25	0	19.86	18.71	PASS
		25	12	19.98	18.83	PASS



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		25	25	19.92	18.77	PASS
		50	0	19.81	18.66	PASS

**LTE Band 12**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.46	19.81	PASS
		1	3	21.44	19.79	PASS
		1	5	21.4	19.75	PASS
		3	0	20.74	19.09	PASS
		3	2	20.72	19.07	PASS
		3	3	20.66	19.01	PASS
		6	0	20.4	18.75	PASS
	MCH	1	0	21.43	19.78	PASS
		1	3	21.38	19.73	PASS
		1	5	21.44	19.79	PASS
		3	0	20.63	18.98	PASS
		3	2	20.56	18.91	PASS
		3	3	20.75	19.1	PASS
		6	0	20.42	18.77	PASS
16QAM	LCH	1	0	21.03	19.38	PASS
		1	3	21.04	19.39	PASS
		1	5	21.02	19.37	PASS
		3	0	20.78	19.13	PASS
		3	2	20.61	18.96	PASS
		3	3	20.53	18.88	PASS
		6	0	19.97	18.32	PASS
	MCH	1	0	20.54	18.89	PASS
		1	3	20.46	18.81	PASS
		1	5	20.43	18.78	PASS
		3	0	19.85	18.2	PASS
		3	2	19.73	18.08	PASS
		3	3	19.55	17.9	PASS
		6	0	19.46	17.81	PASS



		1	5	20.56	18.91	PASS
		3	0	19.87	18.22	PASS
		3	2	19.85	18.2	PASS
		3	3	19.54	17.89	PASS
		6	0	19.22	17.57	PASS
	HCH	1	0	20.18	18.53	PASS
		1	3	20.16	18.51	PASS
		1	5	20.01	18.36	PASS
		3	0	19.66	18.01	PASS
		3	2	19.54	17.89	PASS
		3	3	19.41	17.76	PASS
		6	0	19.01	17.36	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.39	19.74	PASS
		1	7	21.31	19.66	PASS
		1	14	21.23	19.58	PASS
		8	0	20.46	18.81	PASS
		8	4	20.48	18.83	PASS
		8	7	20.43	18.78	PASS
		15	0	20.48	18.83	PASS
	MCH	1	0	21.44	19.79	PASS
		1	7	21.32	19.67	PASS
		1	14	21.25	19.6	PASS
		8	0	20.4	18.75	PASS
		8	4	20.35	18.7	PASS
		8	7	20.25	18.6	PASS
		15	0	20.4	18.75	PASS
	HCH	1	0	21.48	19.83	PASS
		1	7	21.36	19.71	PASS
		1	14	21.4	19.75	PASS
		8	0	20.47	18.82	PASS
		8	4	20.47	18.82	PASS
		8	7	20.44	18.79	PASS



		15	0	20.49	18.84	PASS
16QAM	LCH	1	0	20.72	19.07	PASS
		1	7	20.67	19.02	PASS
		1	14	20.54	18.89	PASS
		8	0	19.93	18.28	PASS
		8	4	19.92	18.27	PASS
		8	7	19.92	18.27	PASS
		15	0	19.71	18.06	PASS
		1	0	20.53	18.88	PASS
16QAM	MCH	1	7	20.46	18.81	PASS
		1	14	20.39	18.74	PASS
		8	0	19.82	18.17	PASS
		8	4	19.74	18.09	PASS
		8	7	19.58	17.93	PASS
		15	0	19.35	17.7	PASS
		1	0	20.73	19.08	PASS
		1	7	20.66	19.01	PASS
16QAM	HCH	1	14	20.56	18.91	PASS
		8	0	19.84	18.19	PASS
		8	4	19.91	18.26	PASS
		8	7	19.85	18.2	PASS
		15	0	19.59	17.94	PASS
		1	0	20.73	19.08	PASS
		1	7	20.66	19.01	PASS
		1	14	20.56	18.91	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	21.52	19.87	PASS
		1	12	21.49	19.84	PASS
		1	24	21.43	19.78	PASS
		12	0	20.49	18.84	PASS
		12	6	20.45	18.8	PASS
		12	13	20.43	18.78	PASS
		25	0	20.41	18.76	PASS
		1	0	21.44	19.79	PASS
QPSK	MCH	1	12	21.35	19.7	PASS
		1	24	21.29	19.64	PASS
		12	0	20.44	18.79	PASS
		1	0	21.44	19.79	PASS



	HCH	12	6	20.4	18.75	PASS
		12	13	20.35	18.7	PASS
		25	0	20.35	18.7	PASS
		1	0	21.43	19.78	PASS
		1	12	21.37	19.72	PASS
		1	24	21.33	19.68	PASS
		12	0	20.35	18.7	PASS
		12	6	20.27	18.62	PASS
16QAM	LCH	12	13	20.22	18.57	PASS
		25	0	20.27	18.62	PASS
		1	0	20.72	19.07	PASS
		1	12	20.66	19.01	PASS
		1	24	20.6	18.95	PASS
		12	0	19.83	18.18	PASS
		12	6	19.87	18.22	PASS
	MCH	12	13	19.94	18.29	PASS
		25	0	19.81	18.16	PASS
		1	0	20.71	19.06	PASS
		1	12	20.65	19	PASS
		1	24	20.51	18.86	PASS
		12	0	19.83	18.18	PASS
		12	6	19.72	18.07	PASS
	HCH	12	13	19.75	18.1	PASS
		25	0	19.51	17.86	PASS
		1	0	20.83	19.18	PASS
		1	12	20.75	19.1	PASS
		1	24	20.67	19.02	PASS
		12	0	19.75	18.1	PASS
		12	6	19.84	18.19	PASS
		12	13	19.75	18.1	PASS
		25	0	19.64	17.99	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	Channel Bandwidth: 10 MHz				
		RB Configuration Size	Offset	Average Power [dBm]	ERP [dBm]	Verdict
QPSK	LCH	1	0	21.62	19.97	PASS
		1	24	21.52	19.87	PASS
		1	49	21.43	19.78	PASS
		25	0	20.87	19.22	PASS
		25	12	20.61	18.96	PASS
		25	25	20.56	18.91	PASS
		50	0	20.68	19.03	PASS
	MCH	1	0	21.49	19.84	PASS
		1	24	21.46	19.81	PASS
		1	49	21.36	19.71	PASS
		25	0	20.71	19.06	PASS
		25	12	20.34	18.69	PASS
		25	25	20.31	18.66	PASS
		50	0	20.36	18.71	PASS
16QAM	LCH	1	0	21.61	19.96	PASS
		1	24	21.43	19.78	PASS
		1	49	21.42	19.77	PASS
		25	0	20.62	18.97	PASS
		25	12	20.34	18.69	PASS
		25	25	20.05	18.4	PASS
		50	0	20.36	18.71	PASS
	MCH	1	0	20.66	19.01	PASS
		1	24	20.59	18.94	PASS
		1	49	20.5	18.85	PASS
		25	0	19.82	18.17	PASS
		25	12	19.98	18.33	PASS
		25	25	19.97	18.32	PASS
		50	0	19.43	17.78	PASS



HCH	25	25	19.76	18.11	PASS
	50	0	19.47	17.82	PASS
	1	0	20.75	19.1	PASS
	1	24	20.91	19.26	PASS
	1	49	20.89	19.24	PASS
	25	0	19.94	18.29	PASS
	25	12	19.84	18.19	PASS
	25	25	19.74	18.09	PASS
	50	0	19.43	17.78	PASS

## 2 Peak-Average Ratio

GSM

### Test Result

Test Band	Test Mode	Test Channel	Measured (db)	Limit (db)	Verdict
GSM1900	GSM/TM1	LCH	2.63	13	PASS
		MCH	2.71	13	PASS
		HCH	2.72	13	PASS
	GSM/TM2	LCH	2.72	13	PASS
		MCH	2.74	13	PASS
		HCH	2.71	13	PASS

**WCDMA**

**Test Result**

Test Band	Test Mode	Test Channel	Measured(db)	Limit (db)	Verdict
WCDMA1700	UMTS/TM1	LCH	3.12	13	PASS
		MCH	3.06	13	PASS
		HCH	3.14	13	PASS
Test Band	Test Mode	Test Channel	Measured(db)	Limit (db)	Verdict
WCDMA1900	UMTS/TM1	LCH	3.08	13	PASS
		MCH	3.06	13	PASS
		HCH	3.13	13	PASS

**LTE Band 2**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	Channel Bandwidth: 1.4 MHz				Verdict
		RB Configuration Size	RB Configuration Offset	Peak-to-Average Ratio (dB)	Limit (dB)	
QPSK	LCH	1	0	5.02	<13	PASS
		1	3	4.99	<13	PASS
		1	5	5.12	<13	PASS
		3	0	5.07	<13	PASS
		3	2	5.06	<13	PASS
		3	3	5.03	<13	PASS
		6	0	5.53	<13	PASS
	MCH	1	0	4.78	<13	PASS
		1	3	4.85	<13	PASS
		1	5	4.92	<13	PASS
		3	0	4.83	<13	PASS
		3	2	4.85	<13	PASS
		3	3	4.88	<13	PASS
		6	0	5.38	<13	PASS
16QAM	LCH	1	0	4.69	<13	PASS
		1	3	4.51	<13	PASS
		1	5	4.61	<13	PASS
		3	0	4.55	<13	PASS
		3	2	4.57	<13	PASS
		3	3	4.53	<13	PASS
		6	0	5.09	<13	PASS
	MCH	1	0	6	<13	PASS
		1	3	5.81	<13	PASS
		1	5	6.02	<13	PASS
		3	0	5.08	<13	PASS
		3	2	5.09	<13	PASS
		3	3	4.98	<13	PASS
		6	0	6.28	<13	PASS

		3	0	4.86	<13	PASS
		3	2	4.86	<13	PASS
		3	3	4.9	<13	PASS
		6	0	6.26	<13	PASS
HCH		1	0	5.62	<13	PASS
		1	3	5.41	<13	PASS
		1	5	5.56	<13	PASS
		3	0	4.56	<13	PASS
		3	2	4.55	<13	PASS
		3	3	4.54	<13	PASS
		6	0	6.06	<13	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.93	<13	PASS
		1	7	4.92	<13	PASS
		1	14	5.05	<13	PASS
		8	0	5.7	<13	PASS
		8	4	5.65	<13	PASS
		8	7	5.6	<13	PASS
		15	0	5.58	<13	PASS
	MCH	1	0	4.92	<13	PASS
		1	7	4.76	<13	PASS
		1	14	4.86	<13	PASS
		8	0	5.54	<13	PASS
		8	4	5.54	<13	PASS
		8	7	5.57	<13	PASS
		15	0	5.53	<13	PASS
	HCH	1	0	4.7	<13	PASS
		1	7	4.54	<13	PASS
		1	14	4.4	<13	PASS
		8	0	5.35	<13	PASS
		8	4	5.35	<13	PASS
		8	7	5.34	<13	PASS
		15	0	5.36	<13	PASS
16QAM	LCH	1	0	5.7	<13	PASS

		1	7	5.91	<13	PASS
		1	14	5.82	<13	PASS
		8	0	5.62	<13	PASS
		8	4	5.62	<13	PASS
		8	7	5.71	<13	PASS
		15	0	6.47	<13	PASS
	MCH	1	0	5.71	<13	PASS
		1	7	5.64	<13	PASS
		1	14	5.74	<13	PASS
		8	0	5.52	<13	PASS
		8	4	5.51	<13	PASS
		8	7	5.56	<13	PASS
		15	0	6.24	<13	PASS
	HCH	1	0	5.6	<13	PASS
		1	7	5.54	<13	PASS
		1	14	5.31	<13	PASS
		8	0	5.34	<13	PASS
		8	4	5.34	<13	PASS
		8	7	5.33	<13	PASS
		15	0	6.21	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.29	<13	PASS
		1	12	5.28	<13	PASS
		1	24	5.36	<13	PASS
		12	0	5.65	<13	PASS
		12	6	5.71	<13	PASS
		12	13	5.68	<13	PASS
		25	0	5.86	<13	PASS
	MCH	1	0	5.12	<13	PASS
		1	12	4.9	<13	PASS
		1	24	5.12	<13	PASS
		12	0	5.51	<13	PASS
		12	6	5.49	<13	PASS
		12	13	5.52	<13	PASS
		25	0	5.75	<13	PASS



	HCH	1	0	5.22	<13	PASS
		1	12	4.84	<13	PASS
		1	24	4.65	<13	PASS
		12	0	5.48	<13	PASS
		12	6	5.44	<13	PASS
		12	13	5.29	<13	PASS
		25	0	5.6	<13	PASS
		1	0	5.79	<13	PASS
	LCH	1	12	5.85	<13	PASS
		1	24	5.9	<13	PASS
		12	0	5.69	<13	PASS
		12	6	5.68	<13	PASS
		12	13	5.72	<13	PASS
		25	0	6.56	<13	PASS
		1	0	5.64	<13	PASS
		1	12	5.6	<13	PASS
	MCH	1	24	5.74	<13	PASS
		12	0	5.52	<13	PASS
		12	6	5.53	<13	PASS
		12	13	5.46	<13	PASS
		25	0	6.41	<13	PASS
		1	0	5.86	<13	PASS
		1	12	5.42	<13	PASS
		1	24	5.4	<13	PASS
	HCH	12	0	5.47	<13	PASS
		12	6	5.49	<13	PASS
		12	13	5.26	<13	PASS
		25	0	6.32	<13	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.08	<13	PASS
		1	24	4.97	<13	PASS
		1	49	5.14	<13	PASS
		25	0	5.43	<13	PASS
		25	12	5.42	<13	PASS



		25	25	5.36	<13	PASS
		50	0	5.44	<13	PASS
	MCH	1	0	4.84	<13	PASS
		1	24	4.7	<13	PASS
		1	49	5.16	<13	PASS
		25	0	5.24	<13	PASS
		25	12	5.25	<13	PASS
		25	25	5.28	<13	PASS
		50	0	5.32	<13	PASS
	HCH	1	0	5.03	<13	PASS
		1	24	4.79	<13	PASS
		1	49	4.58	<13	PASS
		25	0	5.33	<13	PASS
		25	12	5.25	<13	PASS
		25	25	5.07	<13	PASS
		50	0	5.34	<13	PASS
		1	0	5.95	<13	PASS
16QAM	LCH	1	24	5.97	<13	PASS
		1	49	6.18	<13	PASS
		25	0	5.44	<13	PASS
		25	12	5.44	<13	PASS
		25	25	5.43	<13	PASS
		50	0	6.5	<13	PASS
		1	0	5.67	<13	PASS
	MCH	1	24	5.47	<13	PASS
		1	49	6.01	<13	PASS
		25	0	5.24	<13	PASS
		25	12	5.22	<13	PASS
		25	25	5.28	<13	PASS
		50	0	6.36	<13	PASS
		1	0	5.88	<13	PASS
HCH	HCH	1	24	5.5	<13	PASS
		1	49	5.48	<13	PASS
		25	0	5.25	<13	PASS
		25	12	5.3	<13	PASS
		25	25	5.07	<13	PASS
		50	0	6.34	<13	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	Channel Bandwidth: 15 MHz				Verdict
		RB Configuration	Size	Offset	Peak-to-Average Ratio [dB]	
QPSK	LCH	1	0	0	5.87	<13 PASS
		1	37	0	5.17	<13 PASS
		1	74	0	7.23	<13 PASS
		37	0	0	5.76	<13 PASS
		37	18	0	5.73	<13 PASS
		37	38	0	5.76	<13 PASS
		75	0	0	5.8	<13 PASS
	MCH	1	0	0	5.78	<13 PASS
		1	37	0	4.69	<13 PASS
		1	74	0	7.44	<13 PASS
		37	0	0	5.77	<13 PASS
		37	18	0	5.75	<13 PASS
		37	38	0	5.71	<13 PASS
		75	0	0	5.7	<13 PASS
16QAM	LCH	1	0	0	5.97	<13 PASS
		1	37	0	5.02	<13 PASS
		1	74	0	7.97	<13 PASS
		37	0	0	5.67	<13 PASS
		37	18	0	5.63	<13 PASS
		37	38	0	5.62	<13 PASS
		75	0	0	5.65	<13 PASS
	MCH	1	0	0	6.86	<13 PASS
		1	37	0	6.26	<13 PASS
		1	74	0	7.81	<13 PASS
		37	0	0	5.79	<13 PASS
		37	18	0	5.78	<13 PASS
		37	38	0	5.76	<13 PASS
		75	0	0	6.91	<13 PASS

		37	38	5.78	<13	PASS
		75	0	6.94	<13	PASS
HCH		1	0	7.12	<13	PASS
		1	37	5.76	<13	PASS
		1	74	7.43	<13	PASS
		37	0	5.63	<13	PASS
		37	18	5.68	<13	PASS
		37	38	5.67	<13	PASS
		75	0	6.9	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	8.11	<13	PASS
		1	49	4.41	<13	PASS
		1	99	8.16	<13	PASS
		50	0	5.68	<13	PASS
		50	25	5.61	<13	PASS
		50	50	5.93	<13	PASS
		100	0	5.76	<13	PASS
	MCH	1	0	8.17	<13	PASS
		1	49	4.07	<13	PASS
		1	99	8.11	<13	PASS
		50	0	5.58	<13	PASS
		50	25	5.59	<13	PASS
		50	50	5.98	<13	PASS
		100	0	5.81	<13	PASS
	HCH	1	0	8.31	<13	PASS
		1	49	4.3	<13	PASS
		1	99	8.41	<13	PASS
		50	0	5.6	<13	PASS
		50	25	5.62	<13	PASS
		50	50	5.91	<13	PASS
		100	0	5.71	<13	PASS
16QAM	LCH	1	0	8.16	<13	PASS
		1	49	4.98	<13	PASS
		1	99	8.05	<13	PASS



		50	0	5.68	<13	PASS
		50	25	5.66	<13	PASS
		50	50	5.97	<13	PASS
		100	0	6.86	<13	PASS
MCH		1	0	8.14	<13	PASS
		1	49	4.73	<13	PASS
		1	99	8.03	<13	PASS
		50	0	5.62	<13	PASS
		50	25	5.67	<13	PASS
		50	50	5.95	<13	PASS
		100	0	6.73	<13	PASS
		1	0	8.32	<13	PASS
HCH		1	49	4.73	<13	PASS
		1	99	8.12	<13	PASS
		50	0	5.6	<13	PASS
		50	25	5.62	<13	PASS
		50	50	5.93	<13	PASS
		100	0	6.76	<13	PASS

**LTE Band 4**
**Test Result**

Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.58	<13	PASS
		1	3	4.39	<13	PASS
		1	5	4.57	<13	PASS
		3	0	4.43	<13	PASS
		3	2	4.43	<13	PASS
		3	3	4.41	<13	PASS
		6	0	4.98	<13	PASS
	MCH	1	0	4.06	<13	PASS
		1	3	3.94	<13	PASS
		1	5	4.06	<13	PASS
		3	0	3.96	<13	PASS
		3	2	3.99	<13	PASS
		3	3	3.99	<13	PASS
		6	0	4.48	<13	PASS
16QAM	LCH	1	0	4.67	<13	PASS
		1	3	4.49	<13	PASS
		1	5	4.52	<13	PASS
		3	0	4.59	<13	PASS
		3	2	4.55	<13	PASS
		3	3	4.5	<13	PASS
		6	0	4.95	<13	PASS
	MCH	1	0	5.55	<13	PASS
		1	3	5.39	<13	PASS
		1	5	5.34	<13	PASS
		3	0	4.51	<13	PASS
		3	2	4.39	<13	PASS
		3	3	4.41	<13	PASS
		6	0	5.81	<13	PASS

	HCH	1	5	5.01	<13	PASS
		3	0	3.96	<13	PASS
		3	2	3.92	<13	PASS
		3	3	4	<13	PASS
		6	0	5.22	<13	PASS
		1	0	5.38	<13	PASS
		1	3	5.28	<13	PASS
		1	5	5.53	<13	PASS
		3	0	4.5	<13	PASS
		3	2	4.45	<13	PASS
		3	3	4.54	<13	PASS
		6	0	5.78	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.37	<13	PASS
		1	7	4.34	<13	PASS
		1	14	4.27	<13	PASS
		8	0	5.12	<13	PASS
		8	4	5.19	<13	PASS
		8	7	5.12	<13	PASS
		15	0	5.12	<13	PASS
QPSK	MCH	1	0	3.78	<13	PASS
		1	7	3.94	<13	PASS
		1	14	4.01	<13	PASS
		8	0	4.63	<13	PASS
		8	4	4.64	<13	PASS
		8	7	4.59	<13	PASS
		15	0	4.61	<13	PASS
QPSK	HCH	1	0	4.55	<13	PASS
		1	7	4.41	<13	PASS
		1	14	4.46	<13	PASS
		8	0	5.12	<13	PASS
		8	4	5.08	<13	PASS
		8	7	5.13	<13	PASS
		15	0	5.15	<13	PASS

16QAM	LCH	1	0	5.16	<13	PASS
		1	7	5.14	<13	PASS
		1	14	5.17	<13	PASS
		8	0	5.16	<13	PASS
		8	4	5.04	<13	PASS
		8	7	5.02	<13	PASS
		15	0	5.91	<13	PASS
	MCH	1	0	4.66	<13	PASS
		1	7	4.74	<13	PASS
		1	14	4.87	<13	PASS
		8	0	4.66	<13	PASS
		8	4	4.57	<13	PASS
		8	7	4.6	<13	PASS
		15	0	5.41	<13	PASS
	HCH	1	0	5.42	<13	PASS
		1	7	5.23	<13	PASS
		1	14	5.27	<13	PASS
		8	0	5.1	<13	PASS
		8	4	5.14	<13	PASS
		8	7	5.14	<13	PASS
		15	0	5.89	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.66	<13	PASS
		1	12	4.47	<13	PASS
		1	24	4.44	<13	PASS
		12	0	5.11	<13	PASS
		12	6	5.11	<13	PASS
		12	13	5.02	<13	PASS
		25	0	5.29	<13	PASS
	MCH	1	0	3.97	<13	PASS
		1	12	4.09	<13	PASS
		1	24	4.43	<13	PASS
		12	0	4.55	<13	PASS
		12	6	4.57	<13	PASS

	HCH	12	13	4.69	<13	PASS
		25	0	4.82	<13	PASS
		1	0	4.94	<13	PASS
		1	12	4.69	<13	PASS
		1	24	4.81	<13	PASS
		12	0	5.14	<13	PASS
		12	6	5.13	<13	PASS
		12	13	5.08	<13	PASS
		25	0	5.33	<13	PASS
		1	0	5.23	<13	PASS
16QAM	LCH	1	12	5.16	<13	PASS
		1	24	5.04	<13	PASS
		12	0	5.1	<13	PASS
		12	6	5.08	<13	PASS
		12	13	5.01	<13	PASS
		25	0	6.02	<13	PASS
		1	0	4.61	<13	PASS
	MCH	1	12	4.81	<13	PASS
		1	24	5.07	<13	PASS
		12	0	4.54	<13	PASS
		12	6	4.55	<13	PASS
		12	13	4.73	<13	PASS
		25	0	5.67	<13	PASS
		1	0	5.26	<13	PASS
	HCH	1	12	5.25	<13	PASS
		1	24	5.46	<13	PASS
		12	0	5.16	<13	PASS
		12	6	5.16	<13	PASS
		12	13	5.1	<13	PASS
		25	0	5.96	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.54	<13	PASS
		1	24	4.07	<13	PASS
		1	49	3.89	<13	PASS



		25	0	4.82	<13	PASS
		25	12	4.78	<13	PASS
		25	25	4.56	<13	PASS
		50	0	4.78	<13	PASS
	MCH	1	0	3.73	<13	PASS
		1	24	3.87	<13	PASS
		1	49	4.29	<13	PASS
		25	0	4.42	<13	PASS
	HCH	25	12	4.34	<13	PASS
		25	25	4.39	<13	PASS
		50	0	4.66	<13	PASS
		1	0	4.79	<13	PASS
	LCH	1	24	4.5	<13	PASS
		1	49	4.47	<13	PASS
		25	0	4.89	<13	PASS
		25	12	4.91	<13	PASS
	16QAM	25	25	4.73	<13	PASS
		50	0	4.86	<13	PASS
		1	0	5.33	<13	PASS
		1	24	5.03	<13	PASS
	MCH	1	49	4.82	<13	PASS
		25	0	4.8	<13	PASS
		25	12	4.77	<13	PASS
		25	25	4.56	<13	PASS
	HCH	50	0	5.89	<13	PASS
		1	0	4.64	<13	PASS
		1	24	4.78	<13	PASS
		1	49	5.3	<13	PASS
		25	0	4.33	<13	PASS
		25	12	4.35	<13	PASS
		25	25	4.46	<13	PASS
		50	0	5.64	<13	PASS
		1	0	5.52	<13	PASS
		1	24	5.24	<13	PASS
		1	49	5.5	<13	PASS
		25	0	4.85	<13	PASS
		25	12	4.91	<13	PASS



		25	25	4.68	<13	PASS
		50	0	5.93	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.48	<13	PASS
		1	37	4.02	<13	PASS
		1	74	6.84	<13	PASS
		37	0	5.17	<13	PASS
		37	18	5.21	<13	PASS
		37	38	5.18	<13	PASS
		75	0	5.2	<13	PASS
	MCH	1	0	5.19	<13	PASS
		1	37	3.92	<13	PASS
		1	74	7.26	<13	PASS
		37	0	5.14	<13	PASS
		37	18	5.16	<13	PASS
		37	38	5.12	<13	PASS
		75	0	5.11	<13	PASS
16QAM	HCH	1	0	5.38	<13	PASS
		1	37	4.64	<13	PASS
		1	74	6.56	<13	PASS
		37	0	5.18	<13	PASS
		37	18	5.11	<13	PASS
		37	38	5.14	<13	PASS
		75	0	5.13	<13	PASS
	LCH	1	0	6.17	<13	PASS
		1	37	4.88	<13	PASS
		1	74	7.17	<13	PASS
		37	0	5.19	<13	PASS
		37	18	5.22	<13	PASS
		37	38	5.21	<13	PASS
		75	0	6.37	<13	PASS
	MCH	1	0	5.67	<13	PASS
		1	37	4.96	<13	PASS
		1	74	7.06	<13	PASS



	HCH	37	0	5.15	<13	PASS
		37	18	5.15	<13	PASS
		37	38	5.17	<13	PASS
		75	0	6.19	<13	PASS
		1	0	6.32	<13	PASS
		1	37	5.37	<13	PASS
		1	74	6.9	<13	PASS
		37	0	5.14	<13	PASS
		37	18	5.13	<13	PASS
		37	38	5.14	<13	PASS
		75	0	6.31	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	8.47	<13	PASS
		1	49	3.7	<13	PASS
		1	99	8.14	<13	PASS
		50	0	5.65	<13	PASS
		50	25	5.6	<13	PASS
		50	50	5.87	<13	PASS
		100	0	5.84	<13	PASS
	MCH	1	0	8.4	<13	PASS
		1	49	3.82	<13	PASS
		1	99	8.42	<13	PASS
		50	0	5.56	<13	PASS
		50	25	5.51	<13	PASS
		50	50	5.83	<13	PASS
		100	0	5.73	<13	PASS
	HCH	1	0	8.25	<13	PASS
		1	49	4.47	<13	PASS
		1	99	8.32	<13	PASS
		50	0	5.63	<13	PASS
		50	25	5.67	<13	PASS
		50	50	6.03	<13	PASS
		100	0	5.72	<13	PASS
16QAM	LCH	1	0	8.33	<13	PASS



		1	49	4.46	<13	PASS
		1	99	8.03	<13	PASS
		50	0	5.68	<13	PASS
		50	25	5.64	<13	PASS
		50	50	5.89	<13	PASS
		100	0	6.75	<13	PASS
	MCH	1	0	8.29	<13	PASS
		1	49	4.55	<13	PASS
		1	99	8.22	<13	PASS
		50	0	5.56	<13	PASS
		50	25	5.55	<13	PASS
		50	50	5.83	<13	PASS
		100	0	6.63	<13	PASS
	HCH	1	0	8.2	<13	PASS
		1	49	5.25	<13	PASS
		1	99	8.26	<13	PASS
		50	0	5.63	<13	PASS
		50	25	5.65	<13	PASS
		50	50	6	<13	PASS
		100	0	6.76	<13	PASS

### 3 Occupied Bandwidth

#### GSM

##### Test Result

Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
GSM850	GSM/TM1	LCH	246.39	311.34	PASS
		MCH	246.88	316.87	PASS
		HCH	244.32	314.28	PASS
	GSM/TM2	LCH	244.93	314.28	PASS
		MCH	247.55	314.45	PASS
		HCH	246.47	302.91	PASS

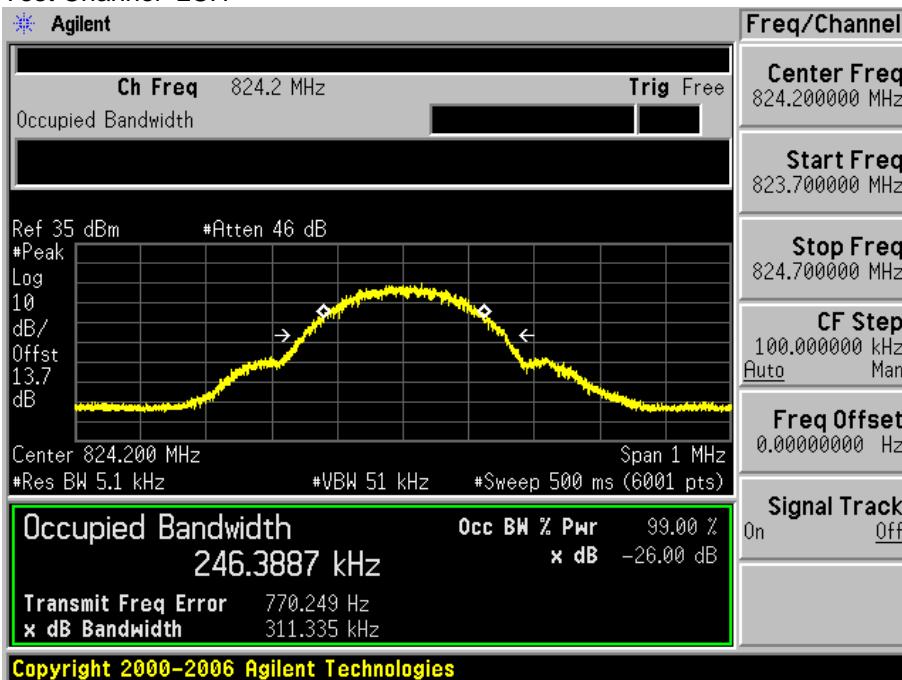
Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
GSM1900	GSM/TM1	LCH	244.99	316.09	PASS
		MCH	245.78	314.62	PASS
		HCH	246.35	312.46	PASS
	GSM/TM2	LCH	253.28	323.99	PASS
		MCH	253.53	320.67	PASS
		HCH	252.35	320.93	PASS

**Test Graphs:**

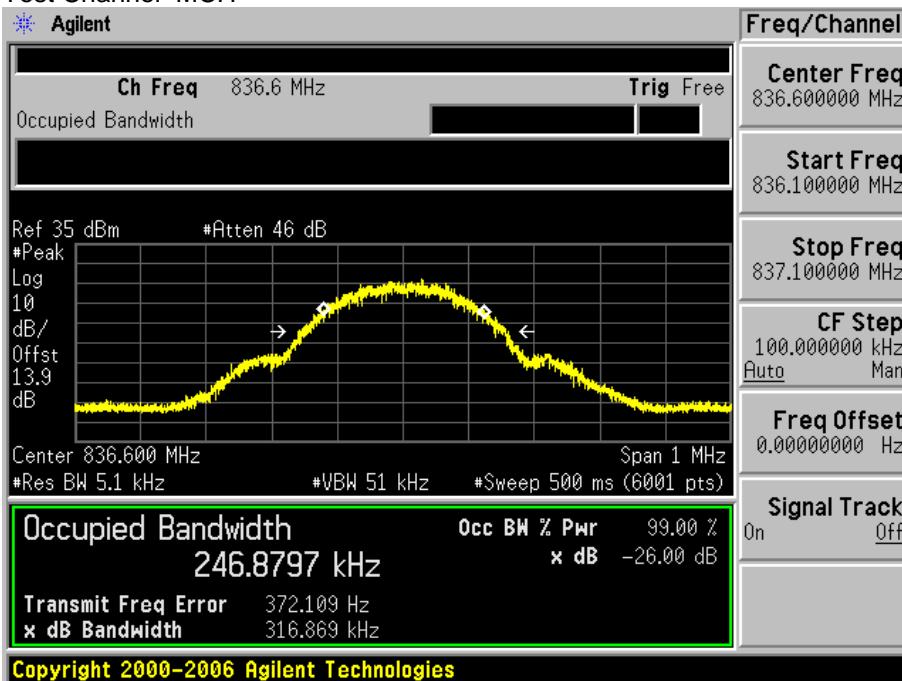
Test Band=GSM850

Test Mode=GSM/TM1

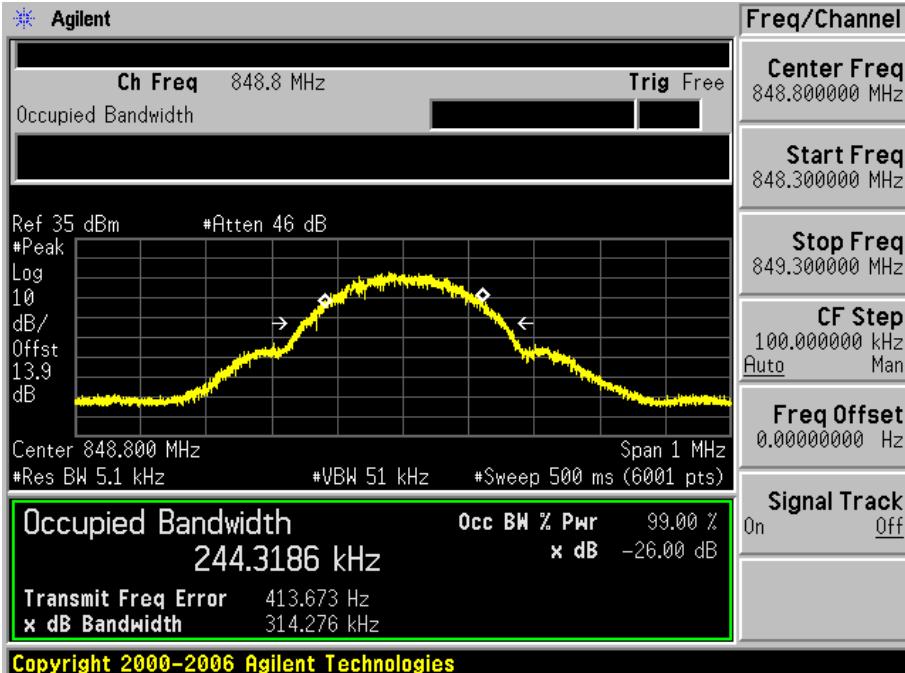
Test Channel=LCH



Test Channel=MCH

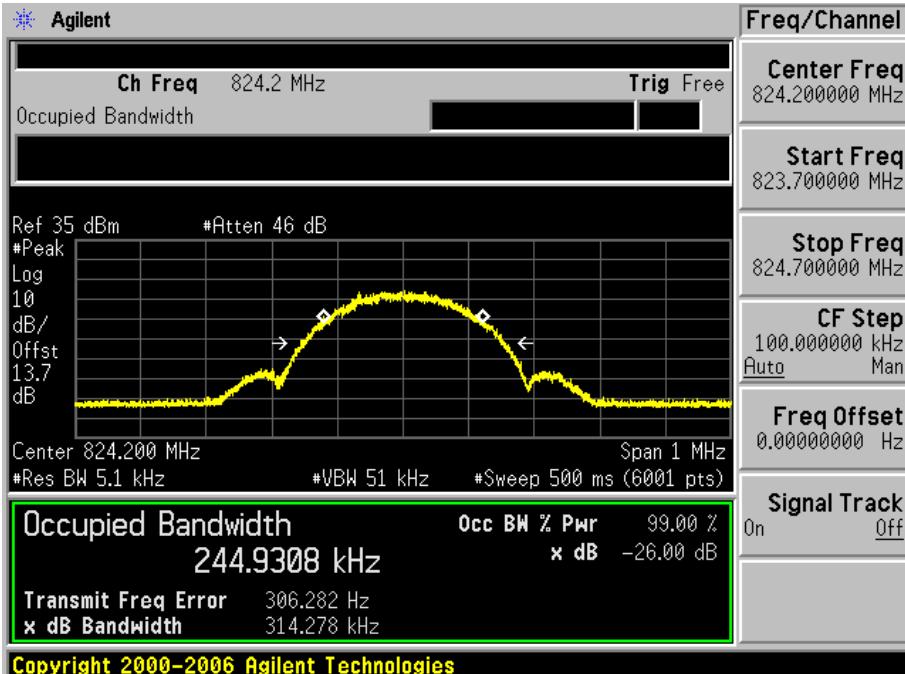


Test Channel=HCH

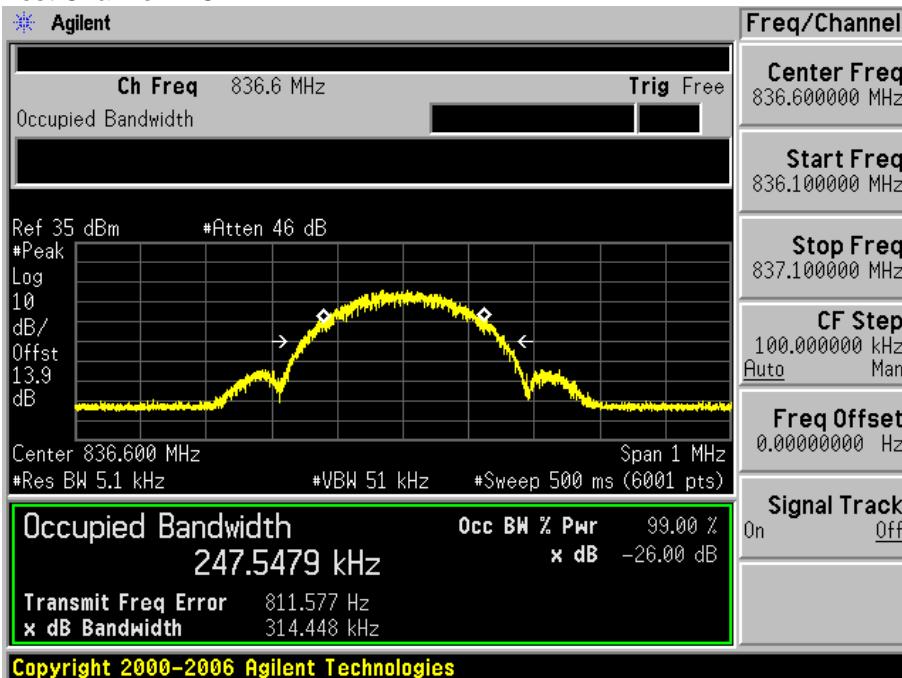


Test Mode=GSM/TM2

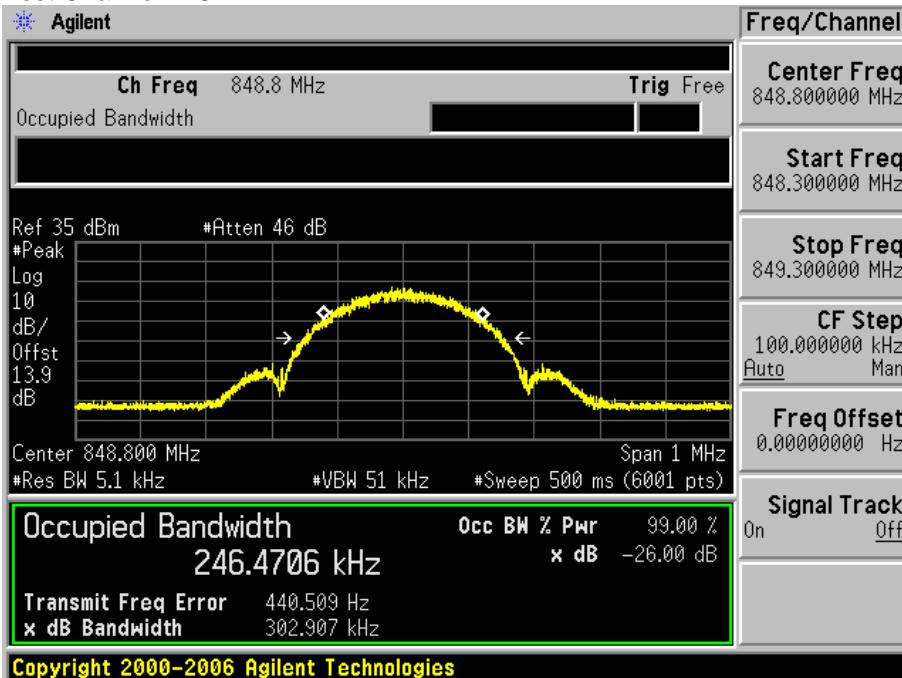
Test Channel=LCH



## Test Channel=MCH



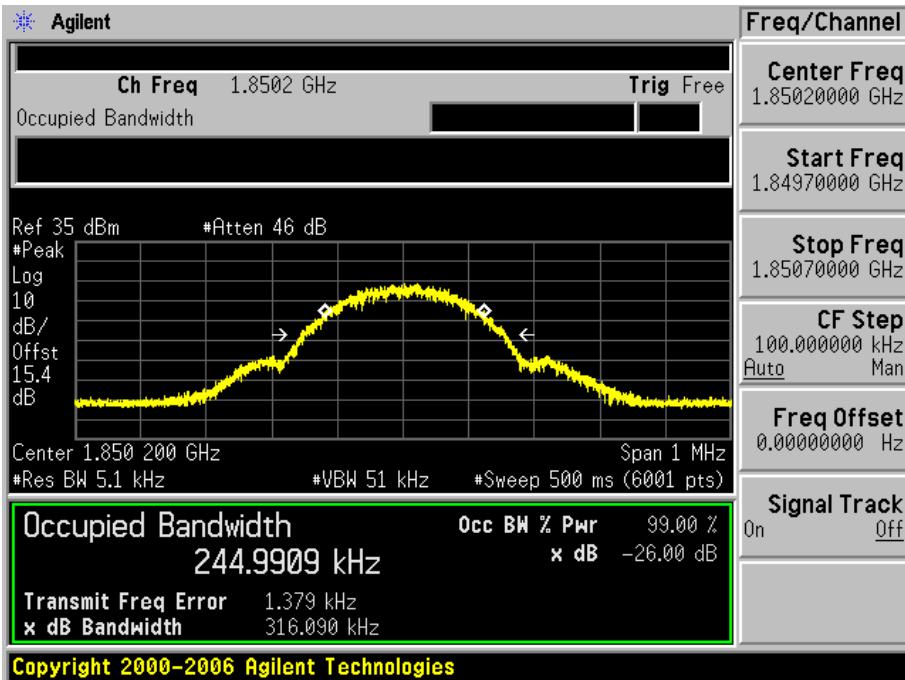
## Test Channel=HCH



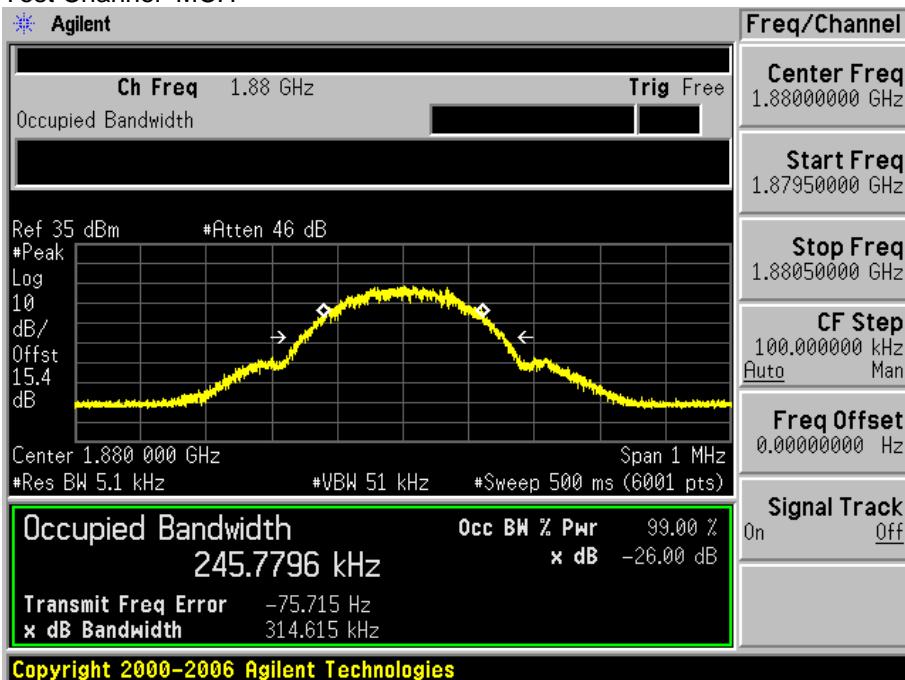
Test Band=GSM1900

Test Mode=GSM/TM1

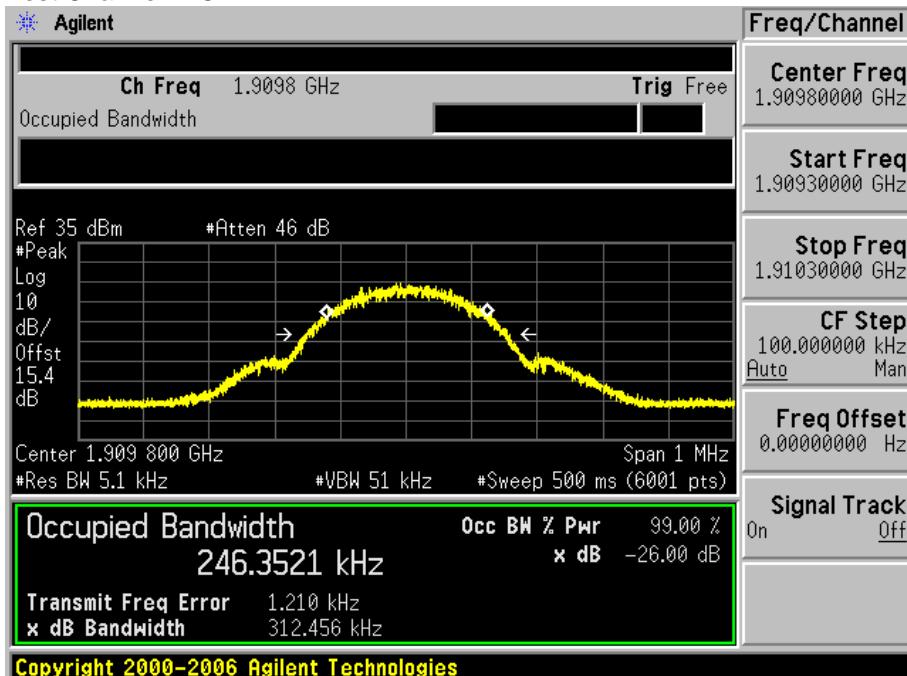
Test Channel=LCH



Test Channel=MCH

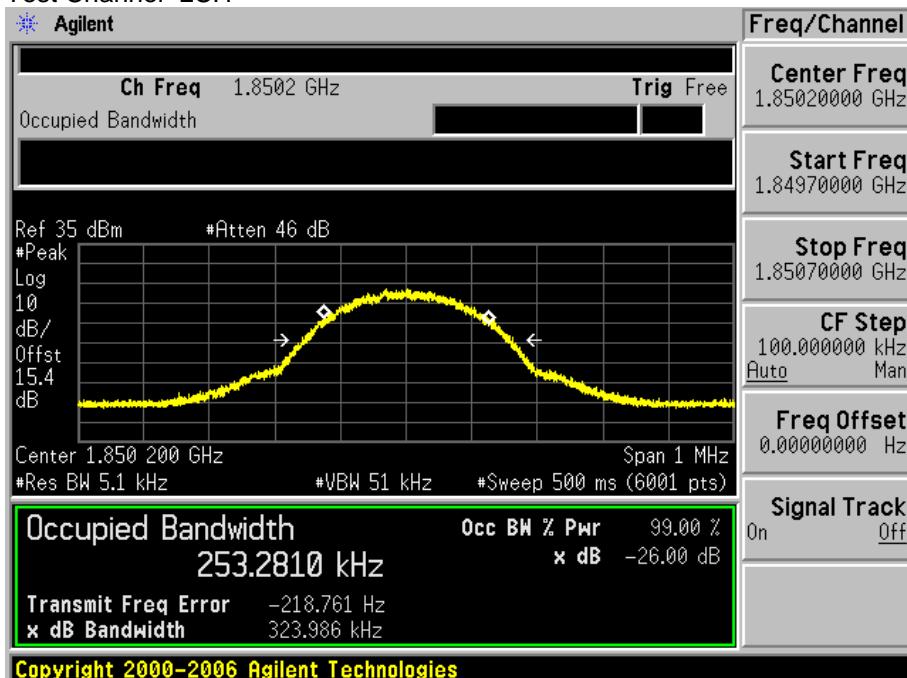


Test Channel=HCH

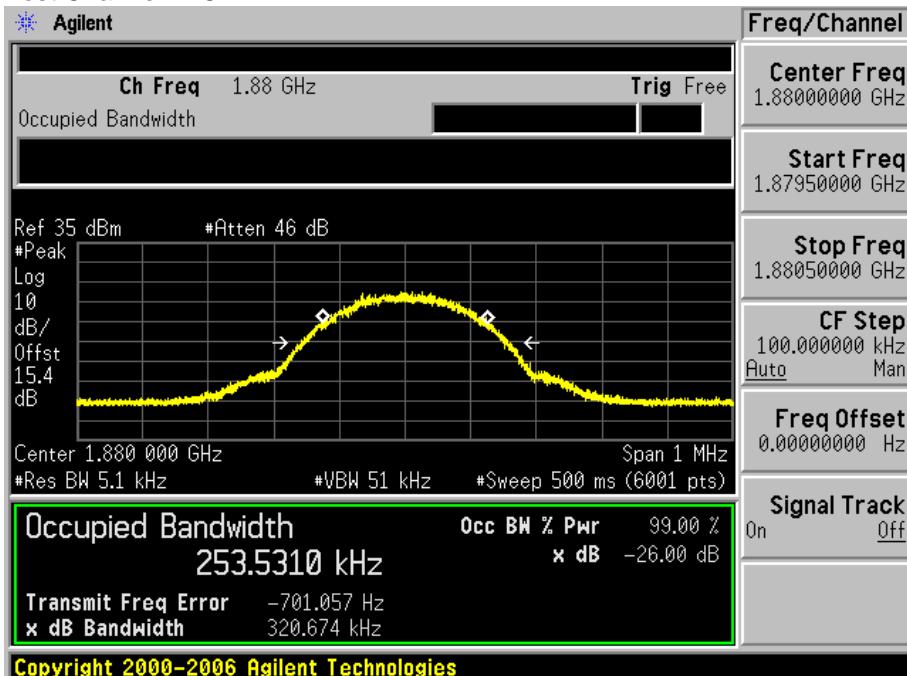


Test Mode=GSM/TM2

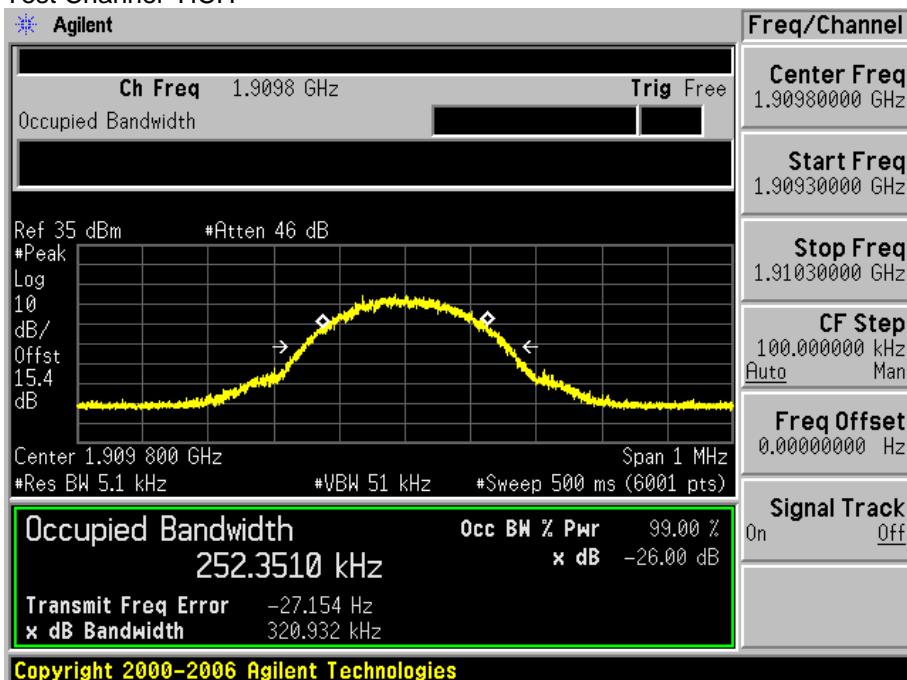
Test Channel=LCH



Test Channel=MCH



Test Channel=HCH



**WCDMA****Test Result**

Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
WCDMA850	UMTS/TM1	LCH	4159.2	4706	PASS
		MCH	4174.8	4703	PASS
		HCH	4180.3	4737	PASS

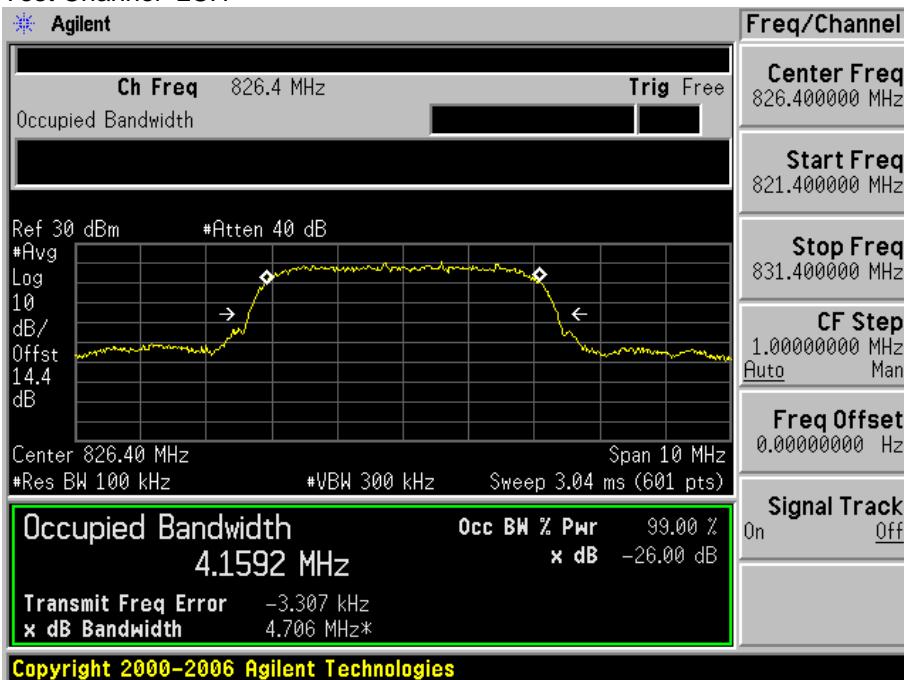
Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
WCDMA1900	UMTS/TM1	LCH	4162.2	4745	PASS
		MCH	4189.2	4741	PASS
		HCH	4176.0	4770	PASS

**Test Graphs:**

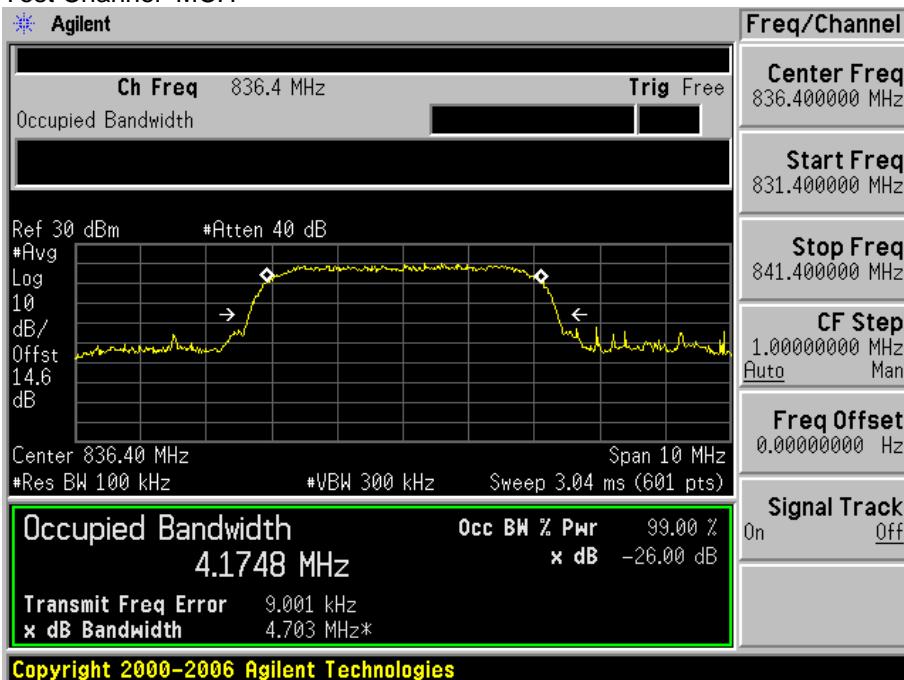
Test Band=WCDMA850

Test Mode=UMTS/TM1

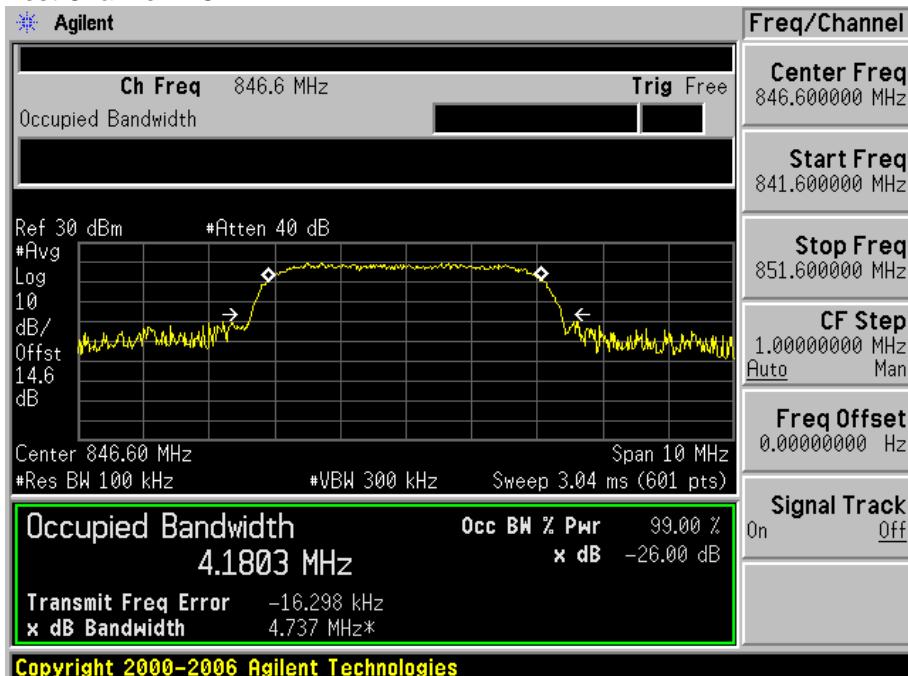
Test Channel=LCH



Test Channel=MCH



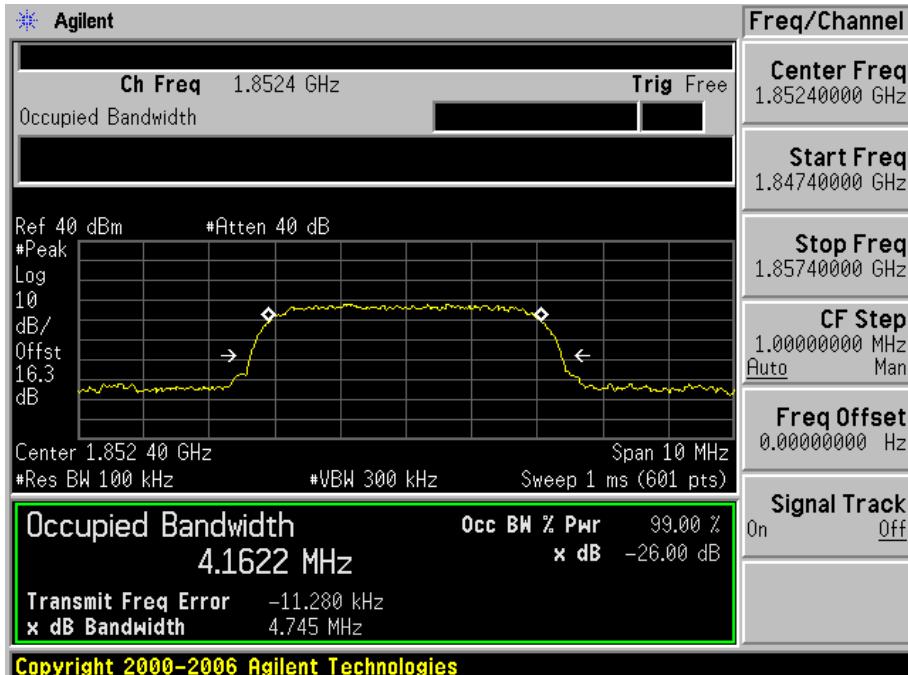
Test Channel=HCH



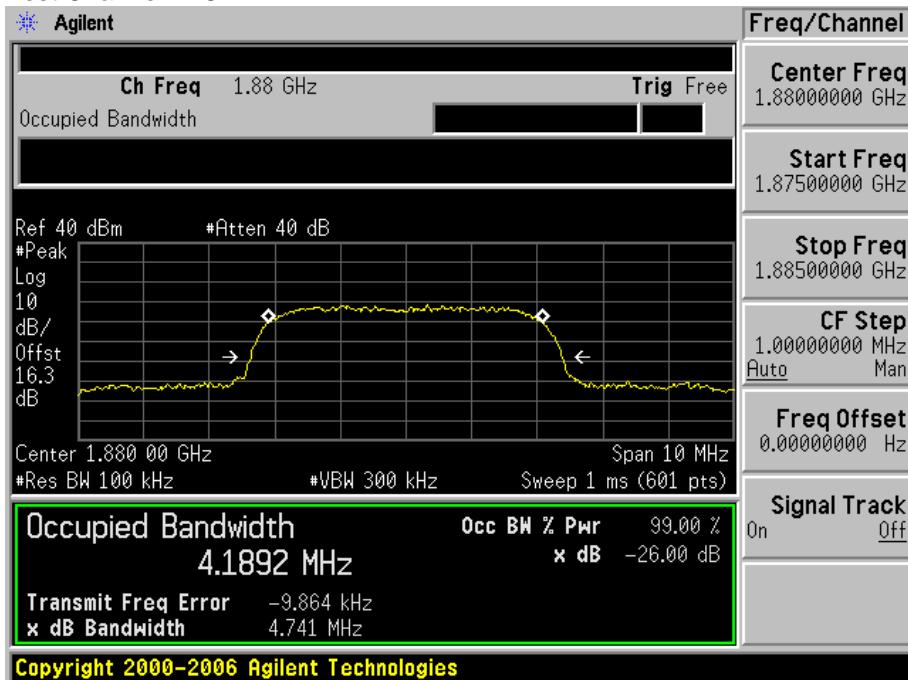
Test Band=WCDMA1900

Test Mode=UMTS/TM1

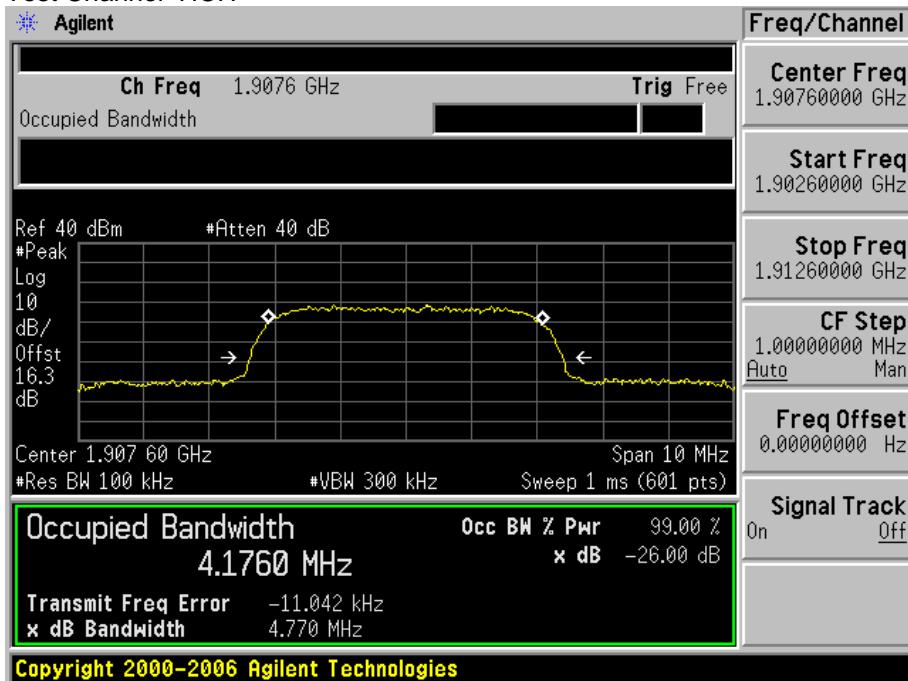
Test Channel=LCH



## Test Channel=MCH



## Test Channel=HCH



**LTE Band 2**
**Test Result**
**Channel Bandwidth: 1.4 MHz**

Modulation	Channel	Channel Bandwidth: 1.4 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	6	0	0	1.0705	1.234	PASS
	MCH	6	0	0	1.0742	1.236	PASS
	HCH	6	0	0	1.0730	1.229	PASS
16QAM	LCH	6	0	0	1.0795	1.262	PASS
	MCH	6	0	0	1.0785	1.273	PASS
	HCH	6	0	0	1.0780	1.264	PASS

**Channel Bandwidth: 3 MHz**

Modulation	Channel	Channel Bandwidth: 3 MHz				Verdict	
		RB Configuration		Size	Offset		
QPSK	LCH	15	0	0	2.6711	2.859	PASS
	MCH	15	0	0	2.6759	2.850	PASS
	HCH	15	0	0	2.6757	2.840	PASS
16QAM	LCH	15	0	0	2.6728	2.843	PASS
	MCH	15	0	0	2.6711	2.842	PASS
	HCH	15	0	0	2.6696	2.851	PASS

**Channel Bandwidth: 5 MHz**

Modulation	Channel	Channel Bandwidth: 5 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	25	0	0	4.4822	5.033	PASS
	MCH	25	0	0	4.4850	5.051	PASS
	HCH	25	0	0	4.4775	5.052	PASS
16QAM	LCH	25	0	0	4.4745	5.030	PASS
	MCH	25	0	0	4.4709	4.987	PASS
	HCH	25	0	0	4.4703	4.922	PASS

**Channel Bandwidth: 10 MHz**

Modulation	Channel	Channel Bandwidth: 10 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	50	0	0	8.9742	9.978	PASS
	MCH	50	0	0	8.9694	9.822	PASS
	HCH	50	0	0	8.9742	9.863	PASS
16QAM	LCH	50	0	0	8.9407	9.785	PASS
	MCH	50	0	0	8.9512	9.821	PASS
	HCH	50	0	0	8.9347	9.817	PASS

**Channel Bandwidth: 15 MHz**

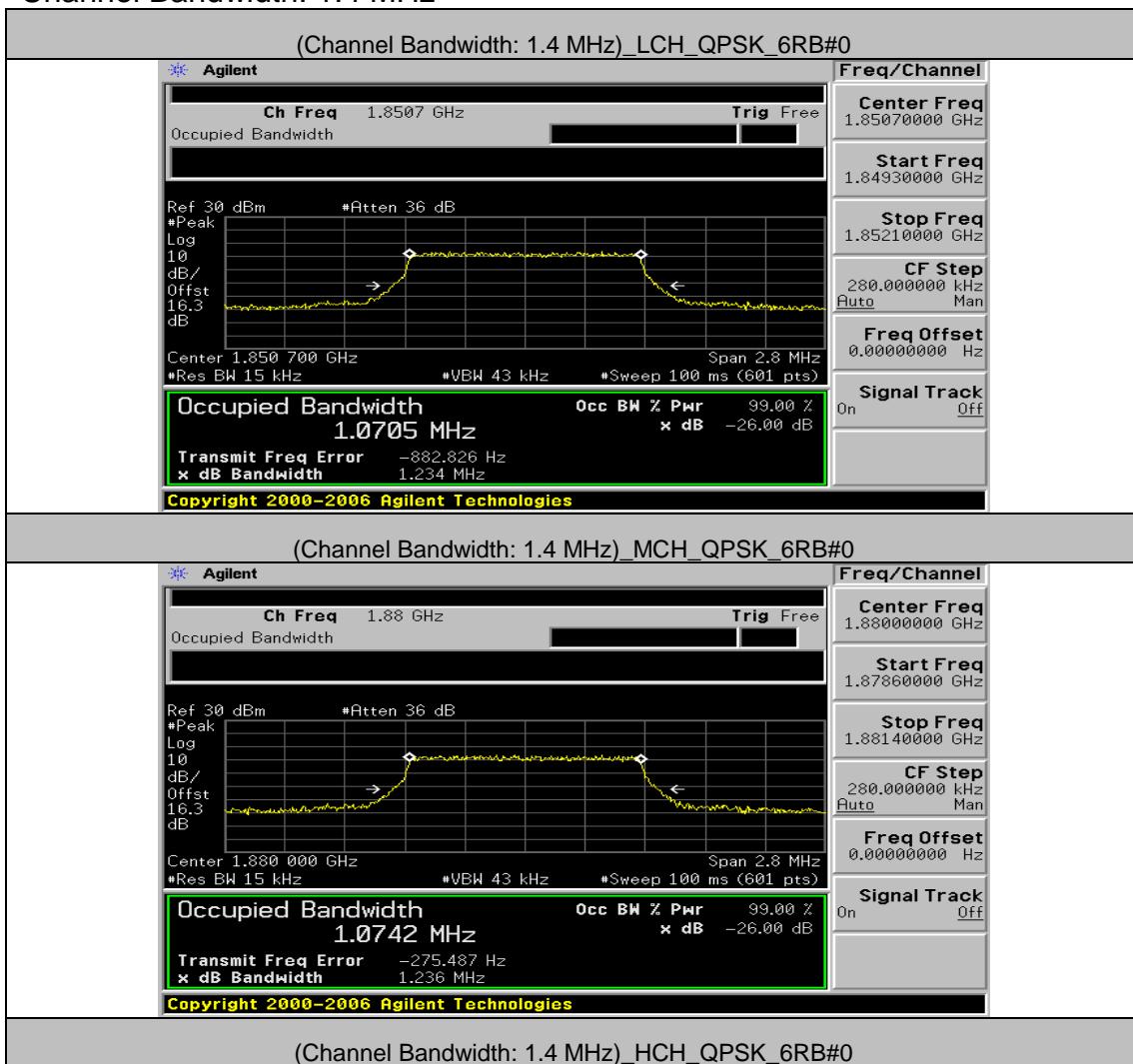
Modulation	Channel	Channel Bandwidth: 15 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	75	0	0	13.4292	14.736	PASS
	MCH	75	0	0	13.4118	14.670	PASS
	HCH	75	0	0	13.3954	14.657	PASS
16QAM	LCH	75	0	0	13.4500	14.796	PASS
	MCH	75	0	0	13.4051	14.694	PASS
	HCH	75	0	0	13.4107	14.633	PASS

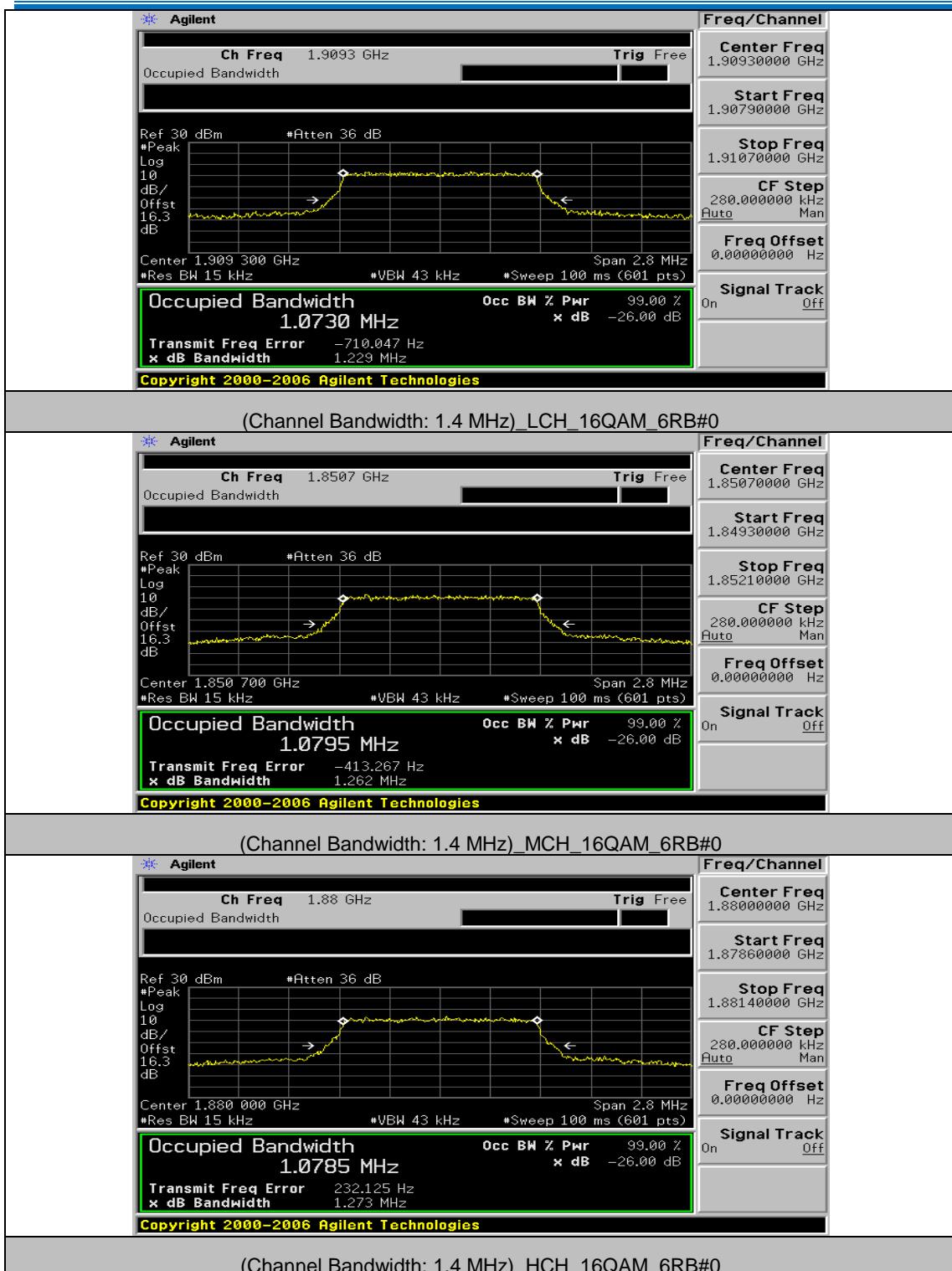
Channel Bandwidth: 20 MHz

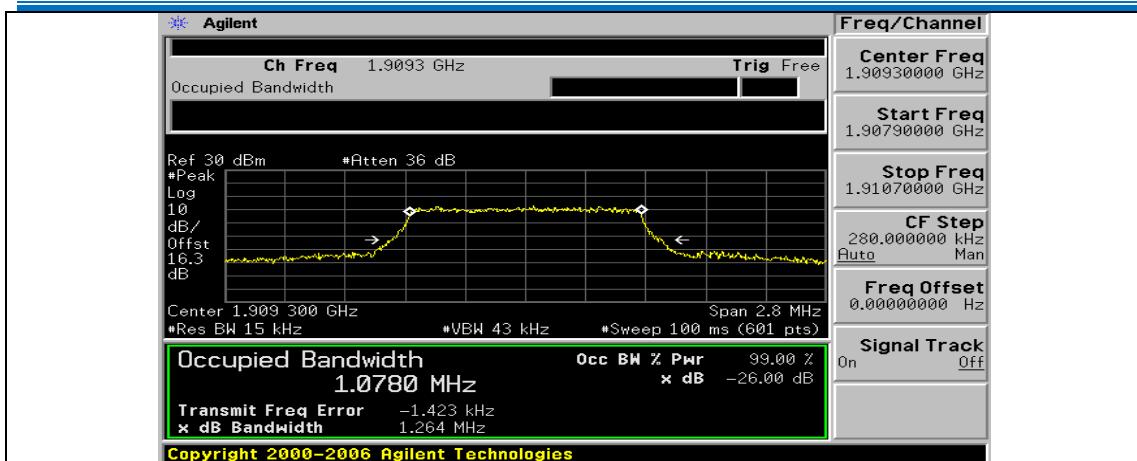
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.8456	19.171	PASS
	MCH	100	0	17.8584	19.217	PASS
	HCH	100	0	17.8201	19.164	PASS
16QAM	LCH	100	0	17.8671	19.302	PASS
	MCH	100	0	17.8441	19.334	PASS
	HCH	100	0	17.8008	19.313	PASS

### Test Graphs:

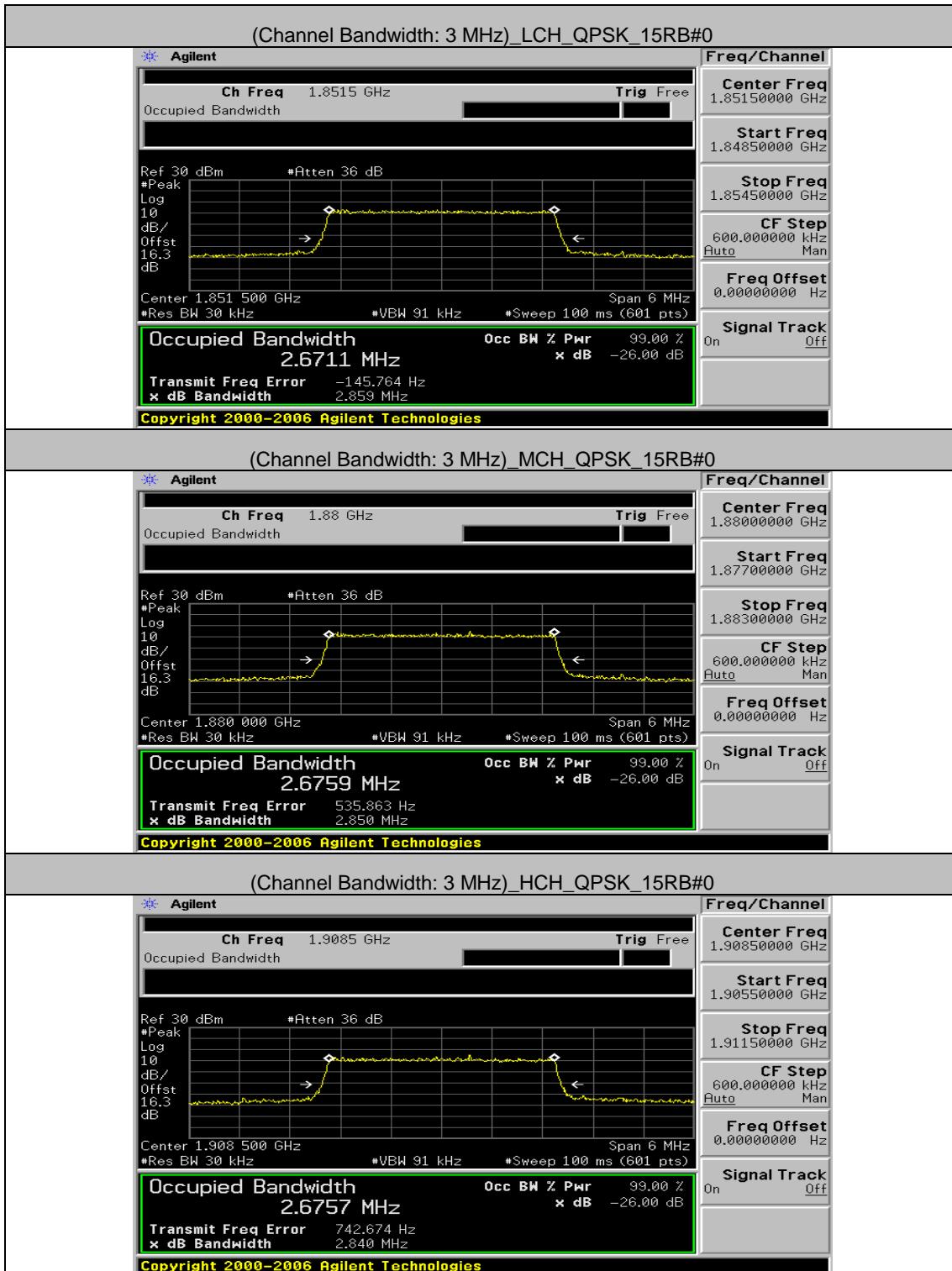
Channel Bandwidth: 1.4 MHz

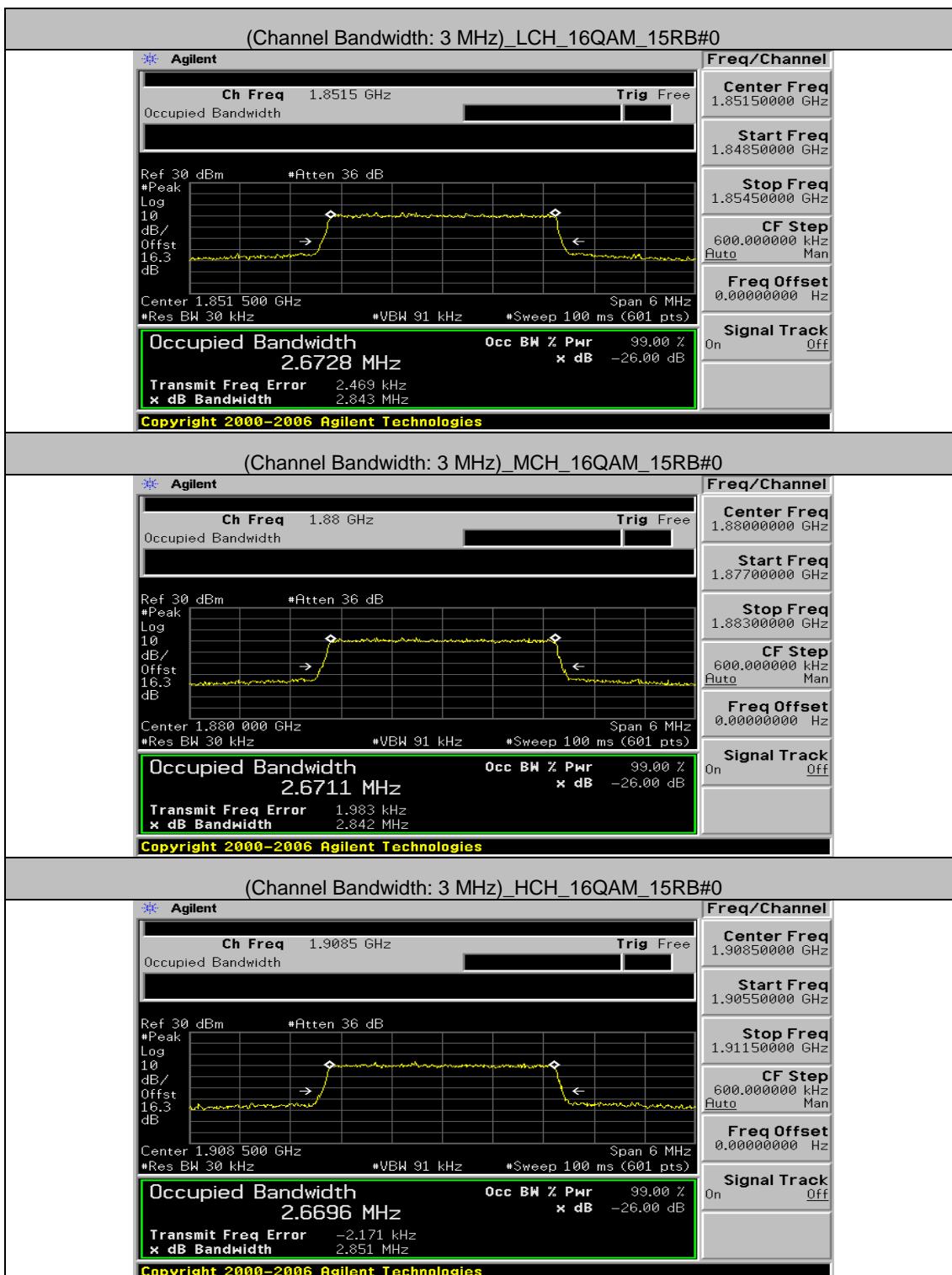




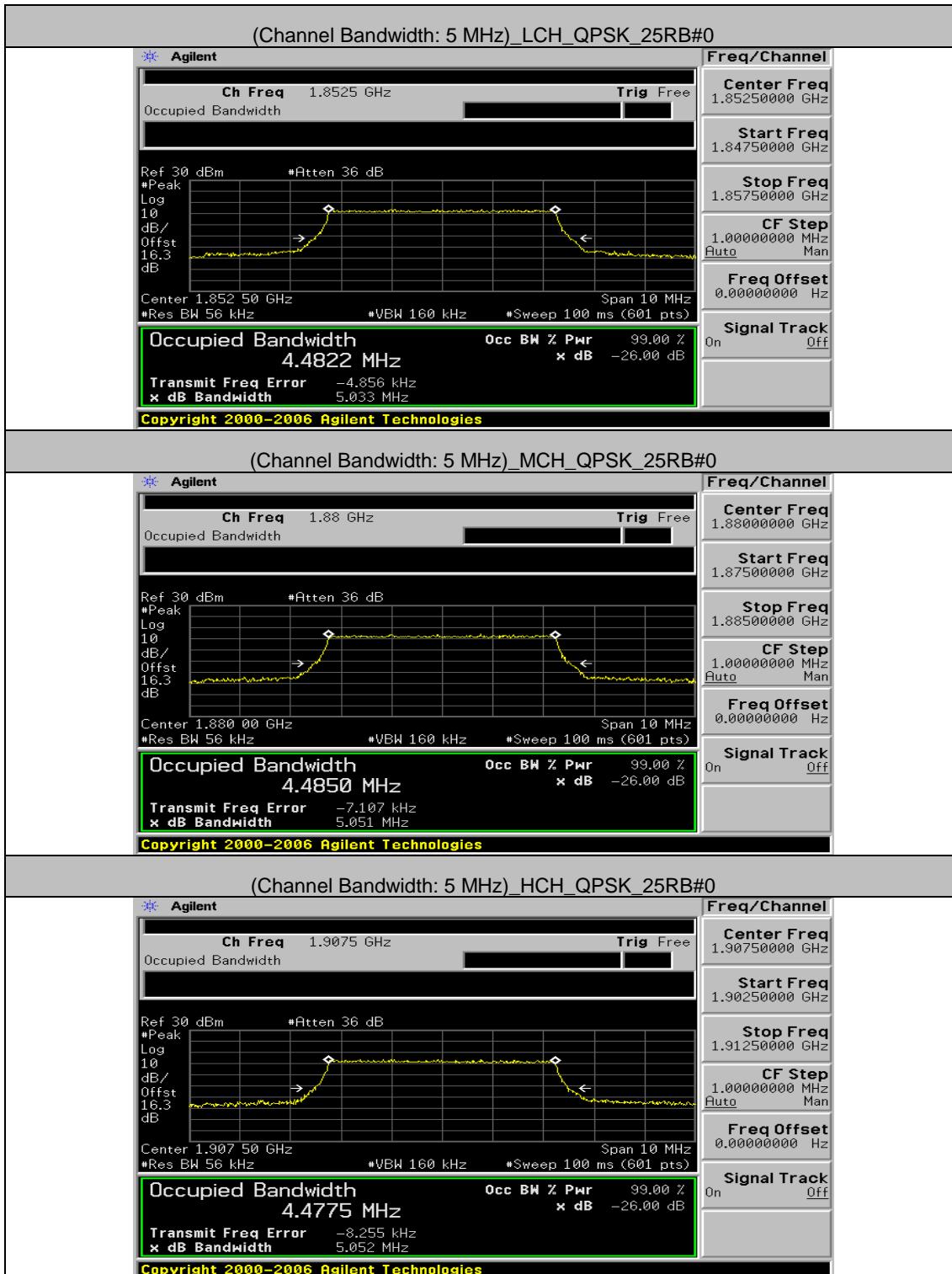


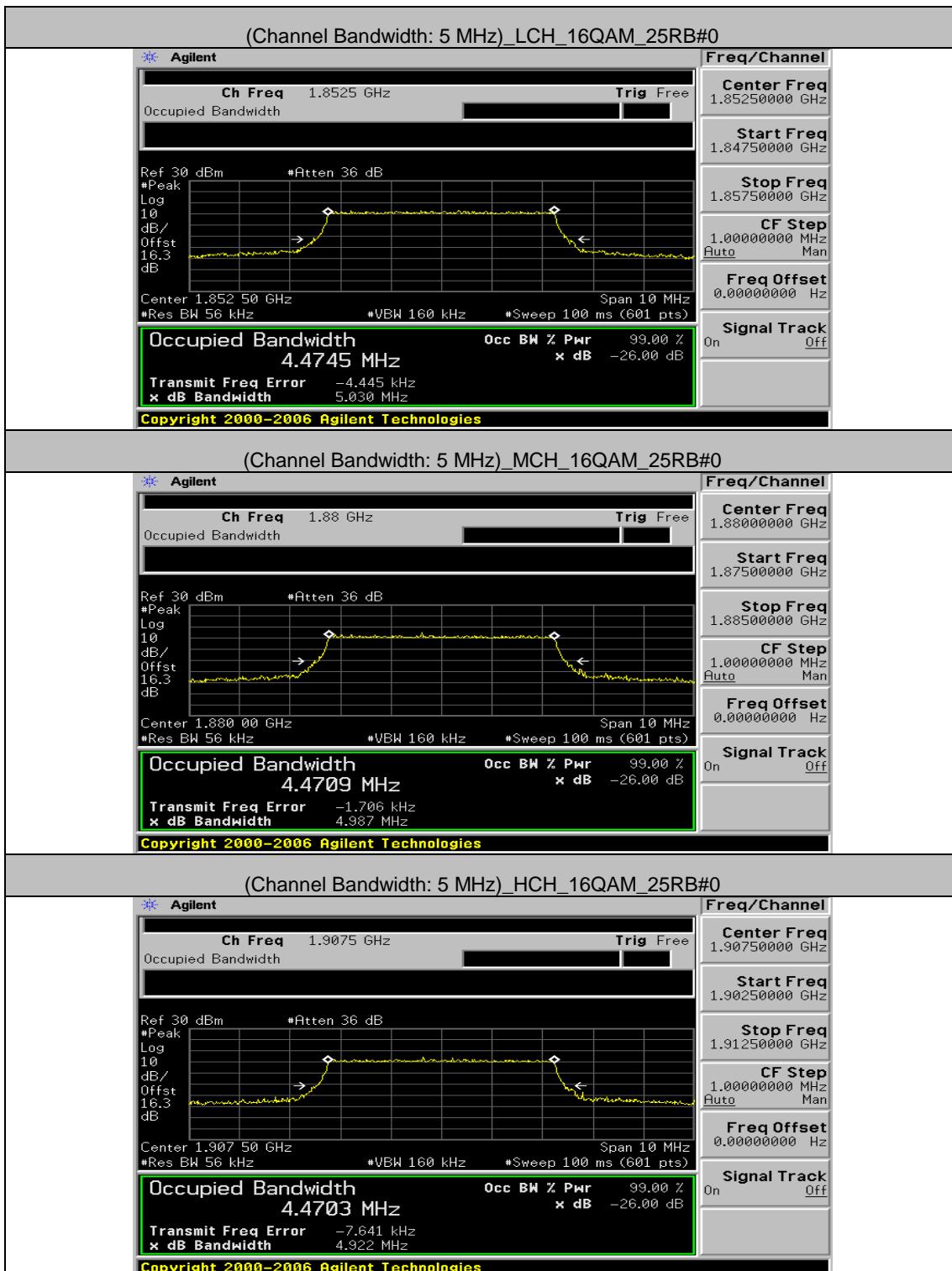
## Channel Bandwidth: 3 MHz



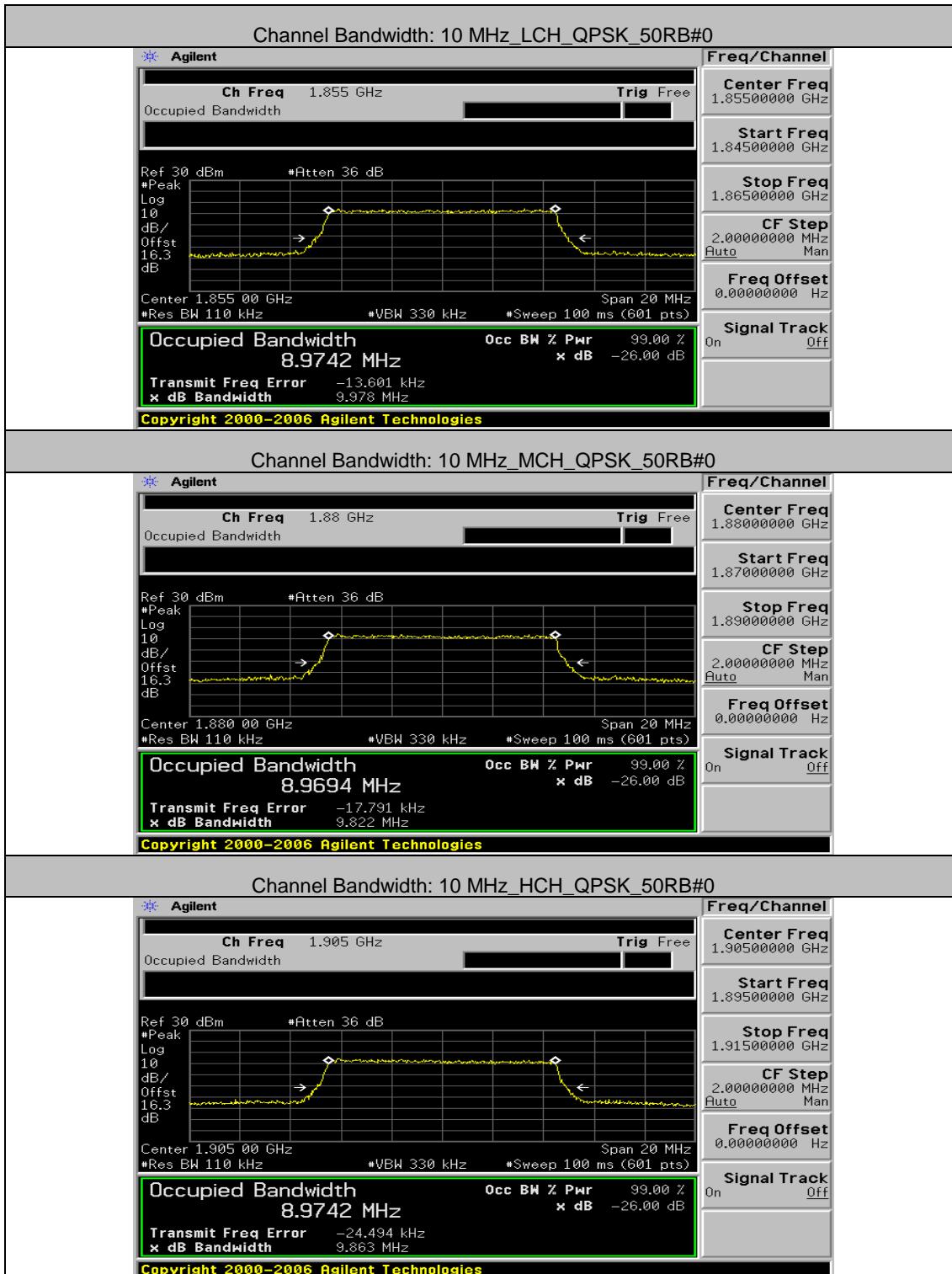


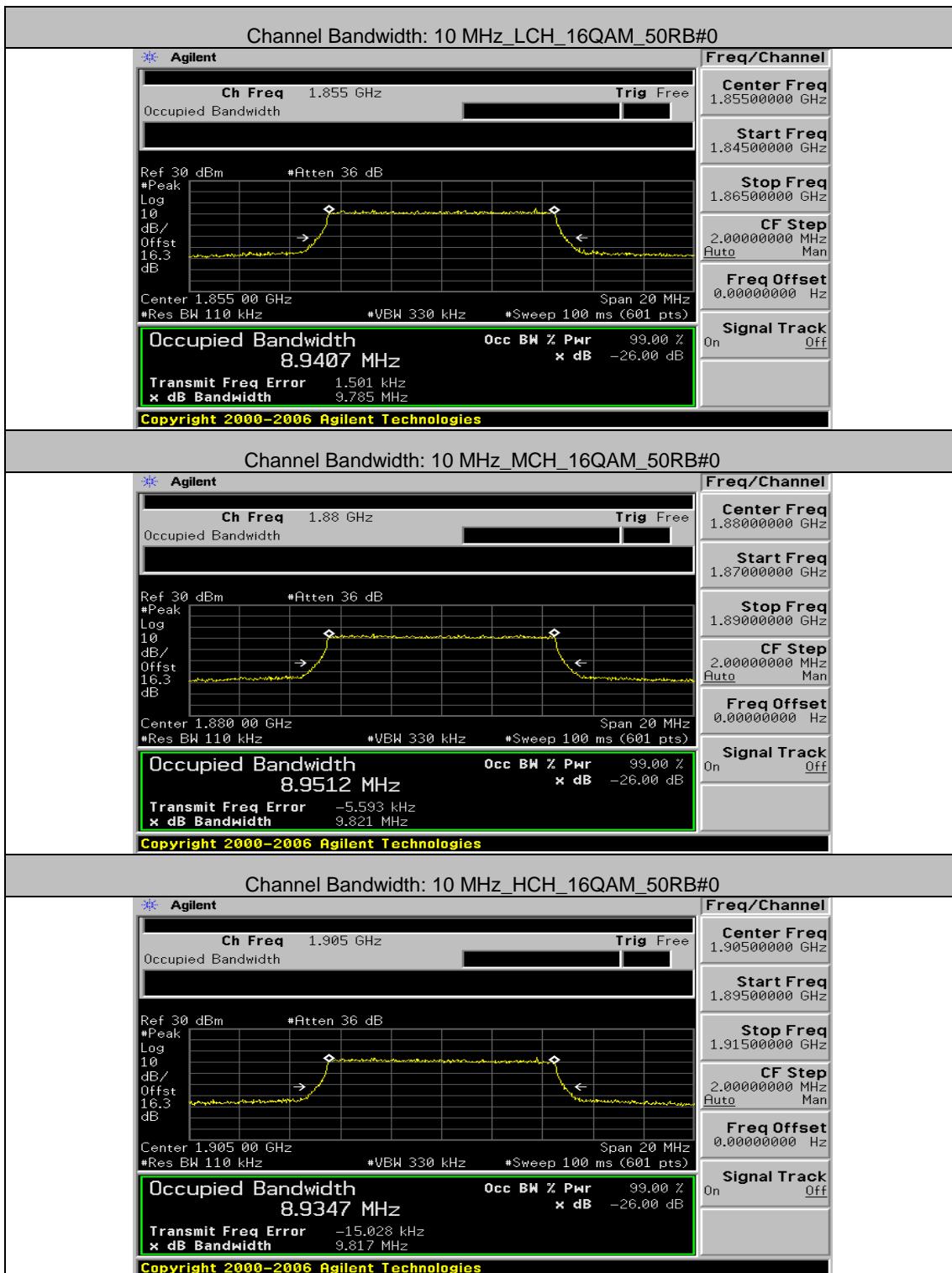
## Channel Bandwidth: 5 MHz



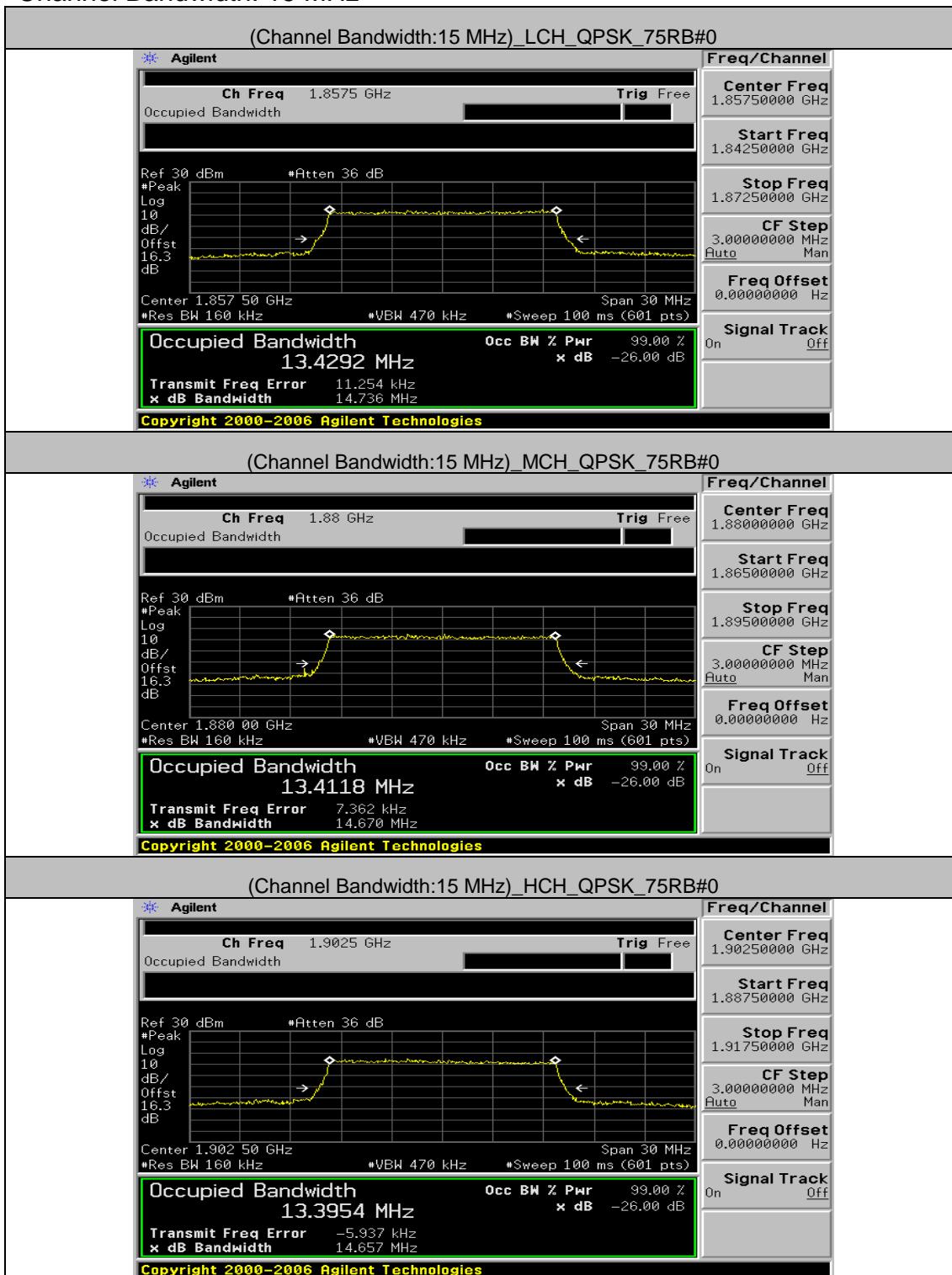


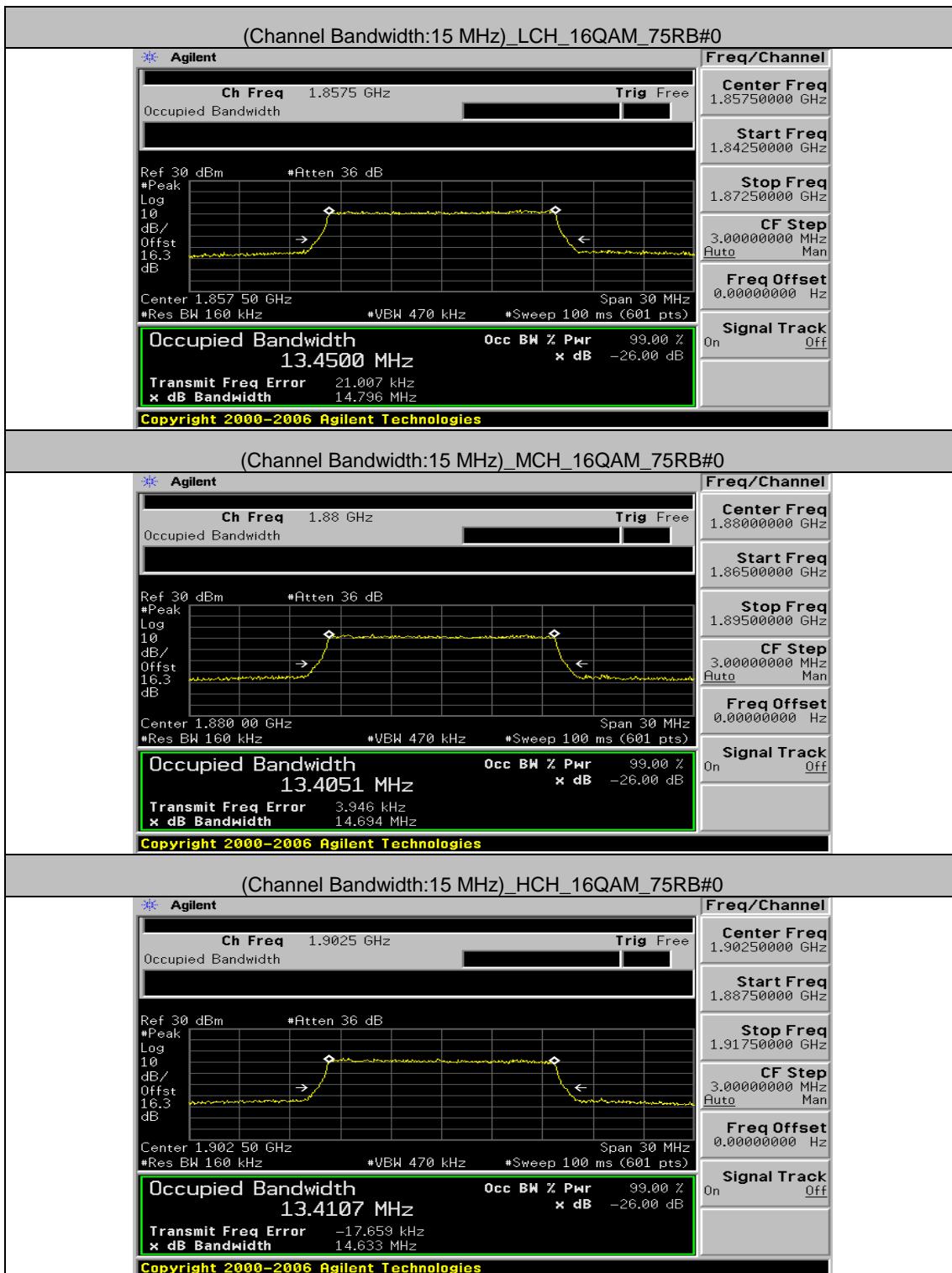
Channel Bandwidth: 10 MHz



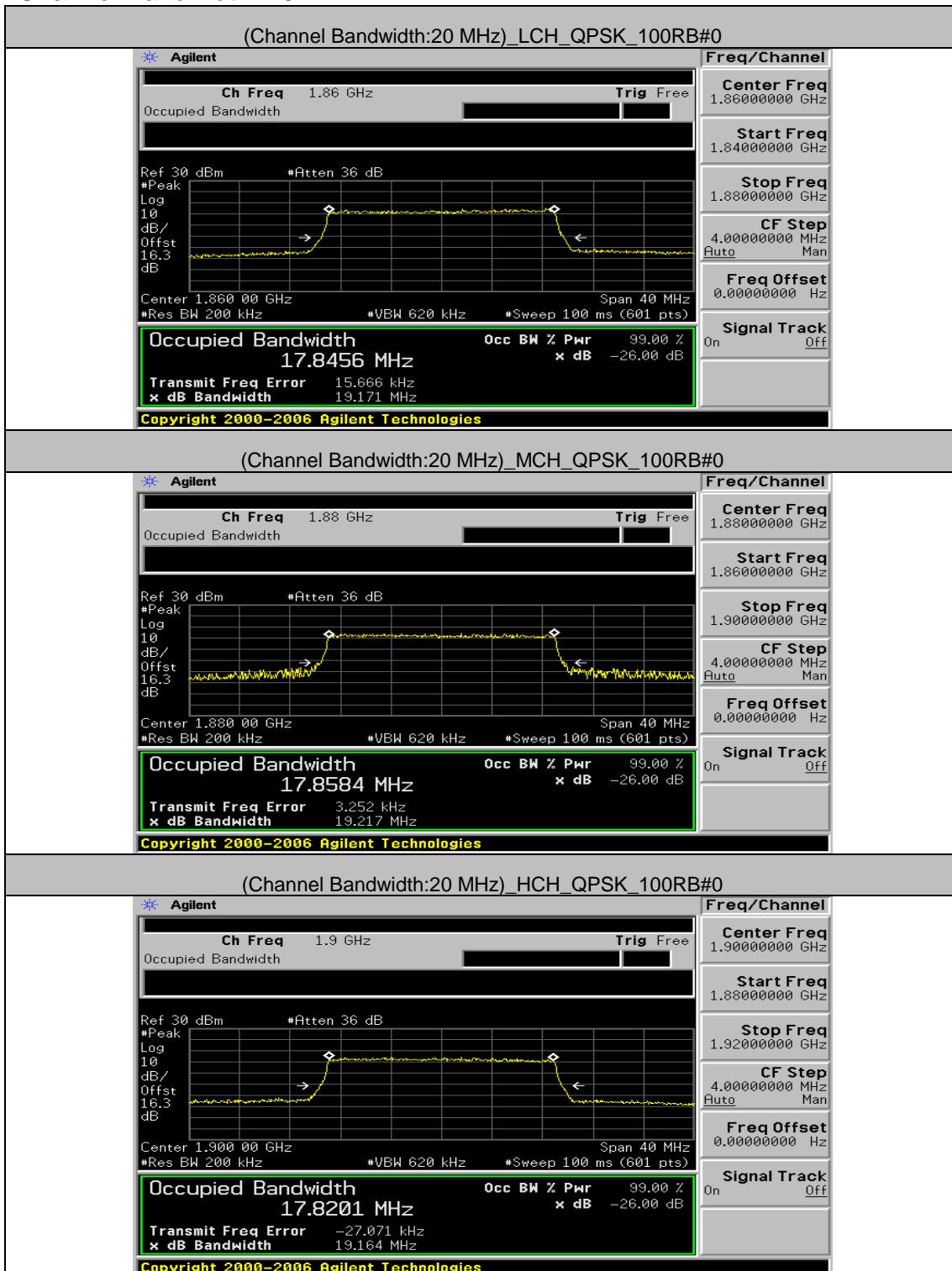


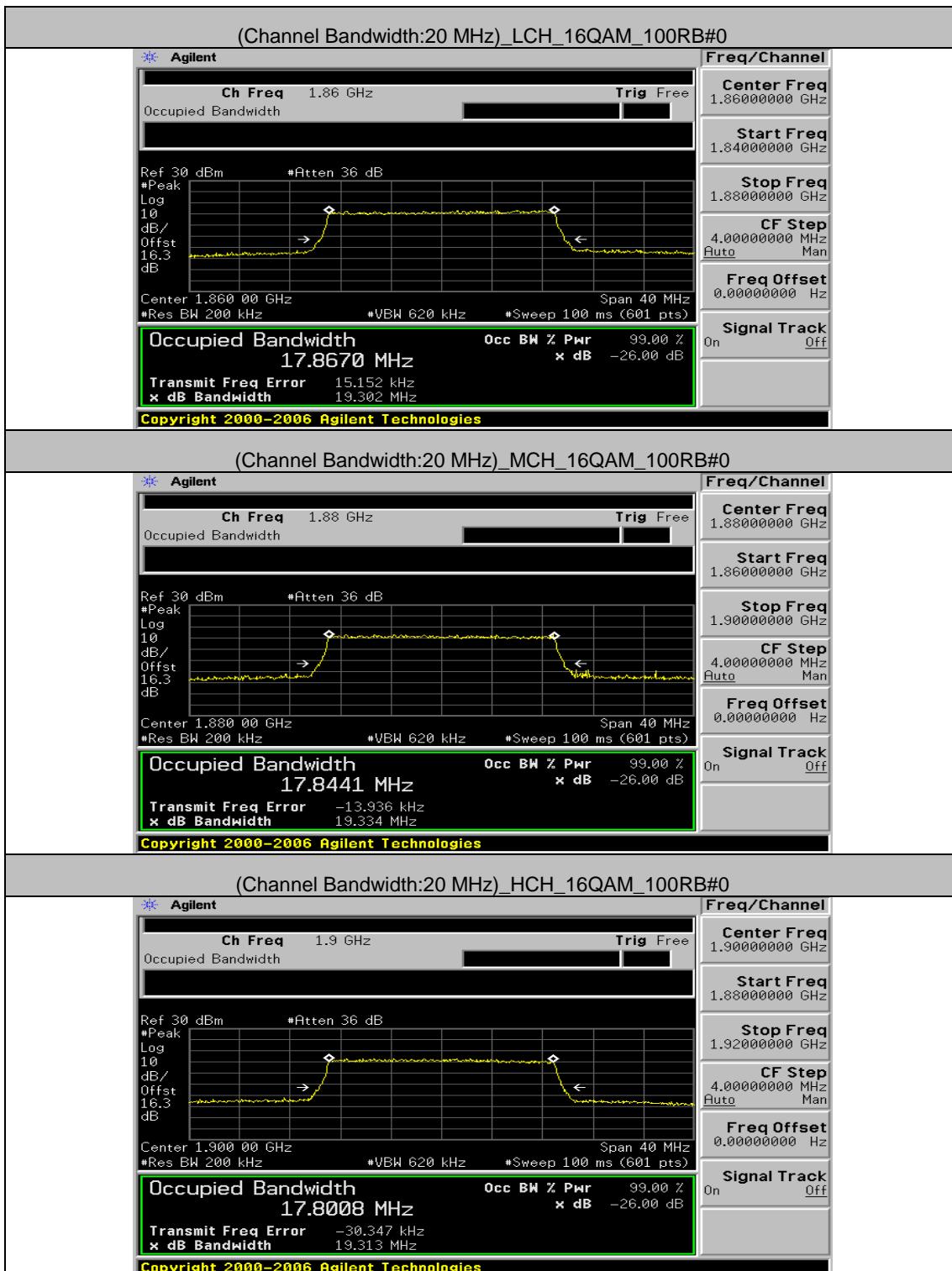
## Channel Bandwidth: 15 MHz





Channel Bandwidth: 20 MHz





**LTE Band 4**
**Test Result**
**Channel Bandwidth: 1.4 MHz**

Modulation	Channel	Channel Bandwidth: 1.4 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	6	0	0	1.0717	1.235	PASS
	MCH	6	0	0	1.0720	1.232	PASS
	HCH	6	0	0	1.0726	1.242	PASS
16QAM	LCH	6	0	0	1.0779	1.254	PASS
	MCH	6	0	0	1.0788	1.256	PASS
	HCH	6	0	0	1.0776	1.265	PASS

**Channel Bandwidth: 3 MHz**

Modulation	Channel	Channel Bandwidth: 3 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	15	0	0	2.6788	2.860	PASS
	MCH	15	0	0	2.6732	2.855	PASS
	HCH	15	0	0	2.6773	2.866	PASS
16QAM	LCH	15	0	0	2.6630	2.852	PASS
	MCH	15	0	0	2.6686	2.838	PASS
	HCH	15	0	0	2.6712	2.865	PASS

**Channel Bandwidth: 5 MHz**

Modulation	Channel	Channel Bandwidth: 5 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	25	0	0	4.4838	5.064	PASS
	MCH	25	0	0	4.4822	5.000	PASS
	HCH	25	0	0	4.4800	5.083	PASS
16QAM	LCH	25	0	0	4.4766	4.909	PASS
	MCH	25	0	0	4.4729	5.015	PASS
	HCH	25	0	0	4.4746	5.020	PASS

**Channel Bandwidth: 10 MHz**

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9640	9.873	PASS
	MCH	50	0	8.9434	9.836	PASS
	HCH	50	0	8.9627	9.861	PASS
16QAM	LCH	50	0	8.9415	9.960	PASS
	MCH	50	0	8.9315	9.915	PASS
	HCH	50	0	8.9669	9.750	PASS

**Channel Bandwidth: 15 MHz**

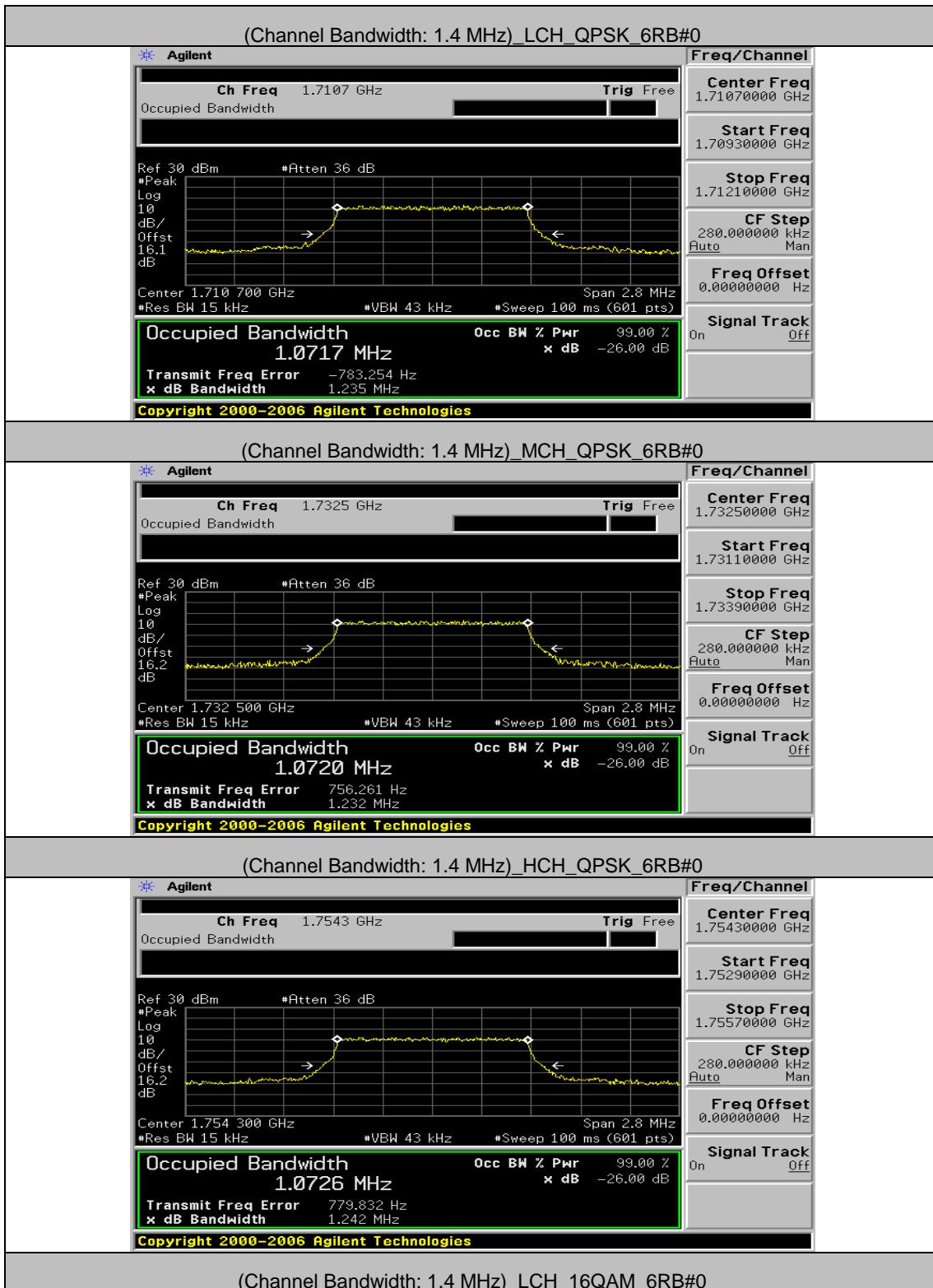
Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.4416	14.742	PASS
	MCH	75	0	13.3901	14.666	PASS
	HCH	75	0	13.4261	14.781	PASS
16QAM	LCH	75	0	13.4248	14.699	PASS
	MCH	75	0	13.3871	14.715	PASS
	HCH	75	0	13.4201	14.762	PASS

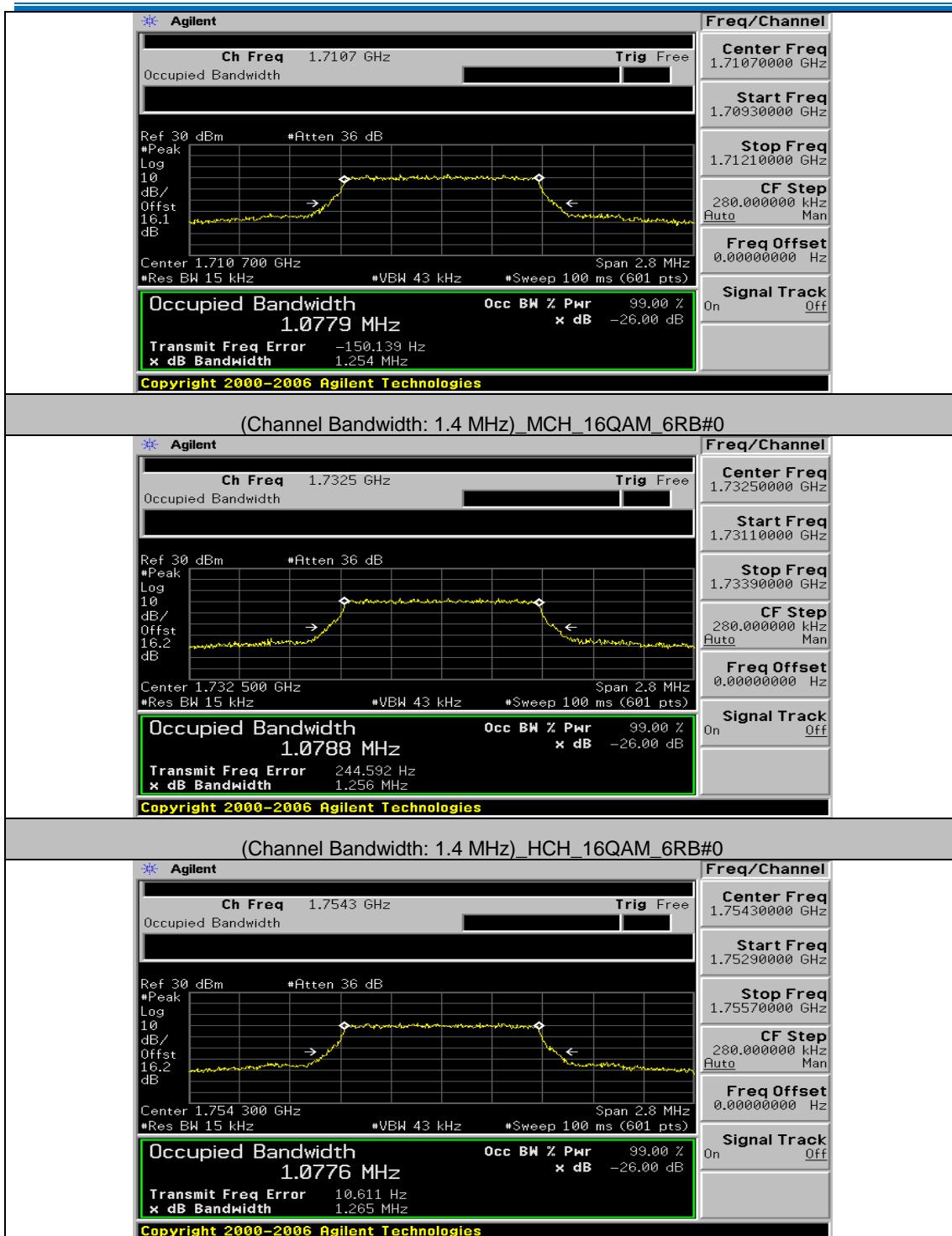
**Channel Bandwidth: 20 MHz**

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.8725	19.280	PASS
	MCH	100	0	17.7794	18.946	PASS
	HCH	100	0	17.8729	19.230	PASS
16QAM	LCH	100	0	17.8833	19.229	PASS
	MCH	100	0	17.8035	19.262	PASS
	HCH	100	0	17.8637	19.323	PASS

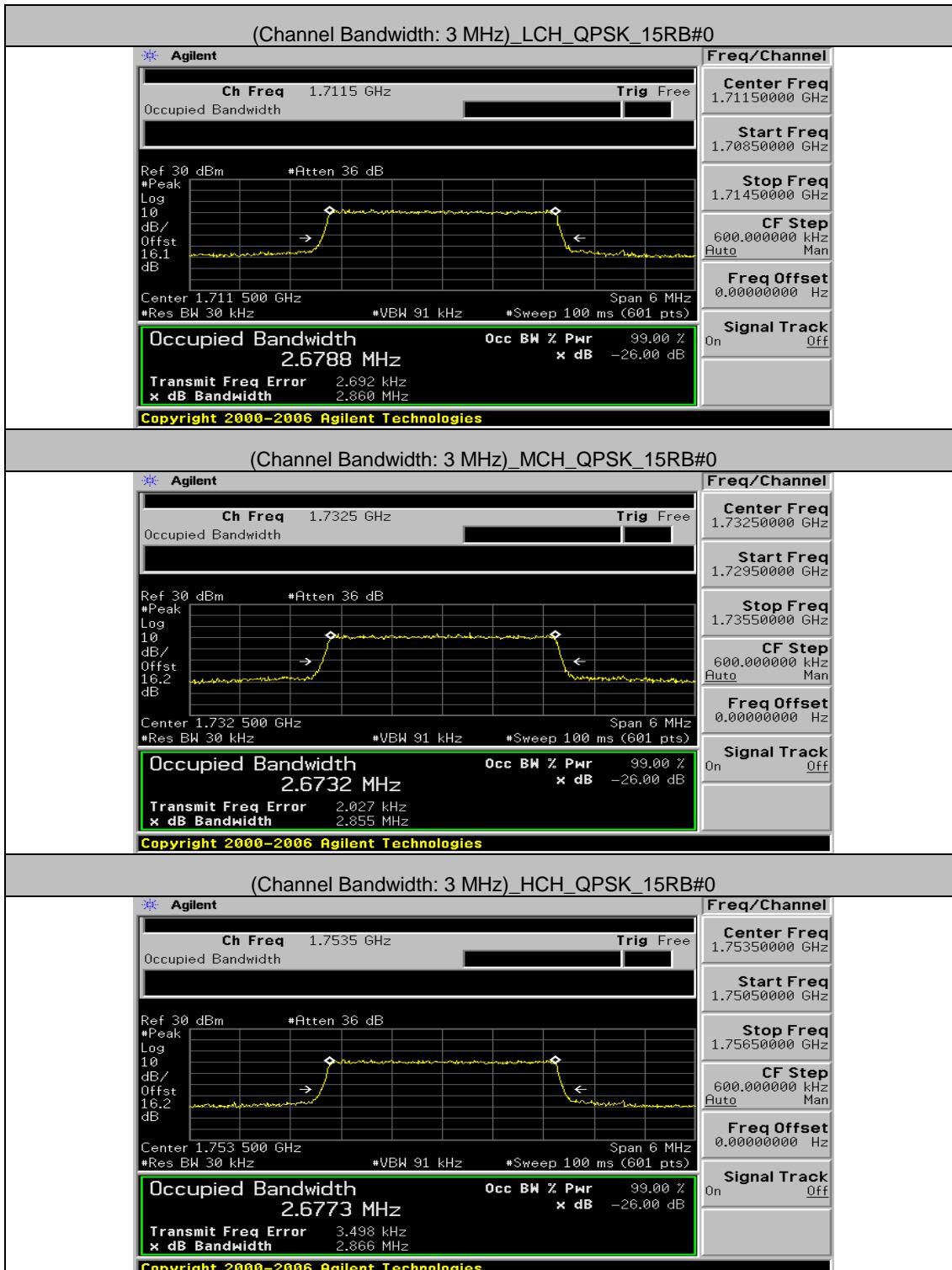
**Test Graphs:**

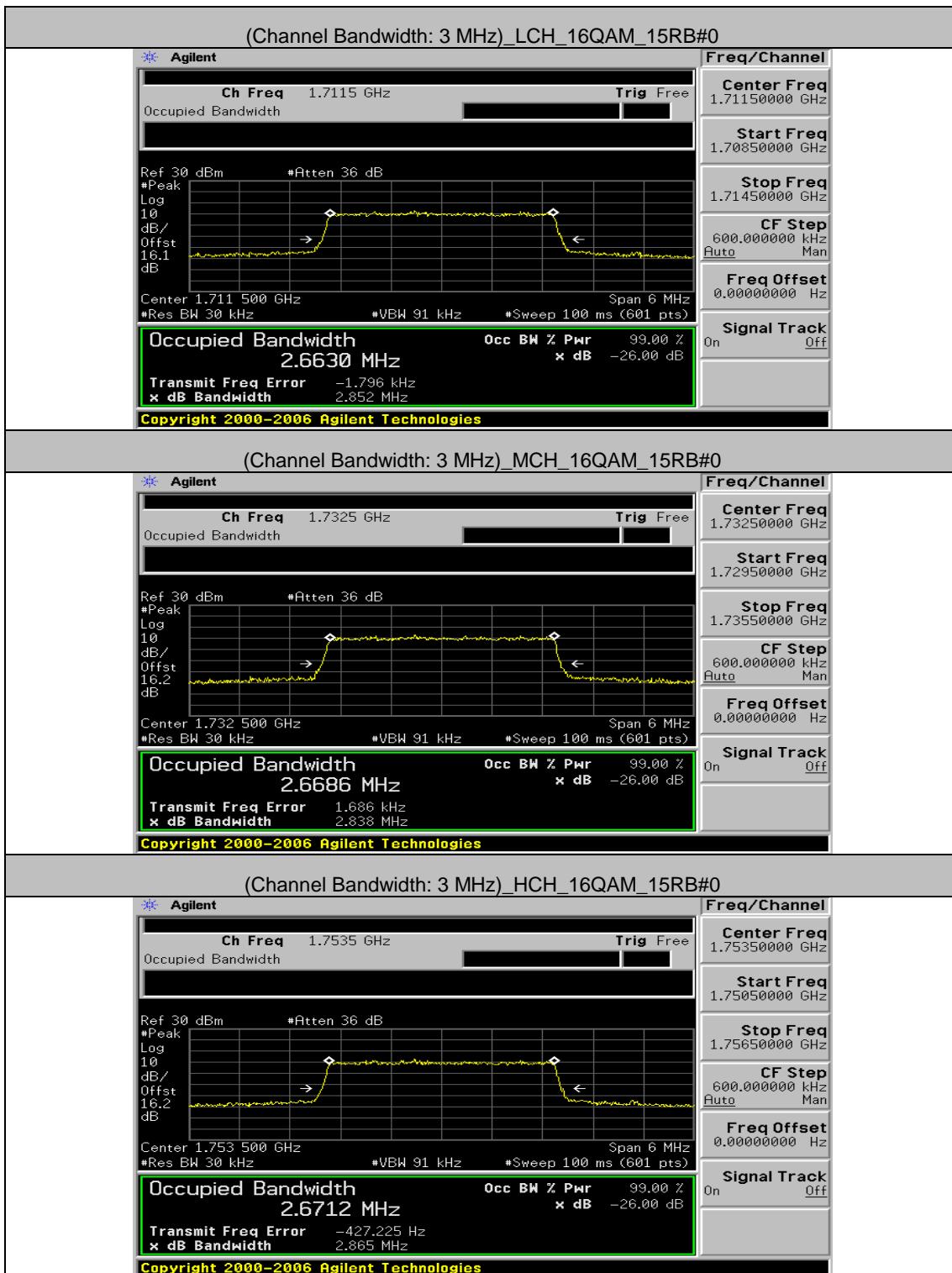
Channel Bandwidth: 1.4 MHz



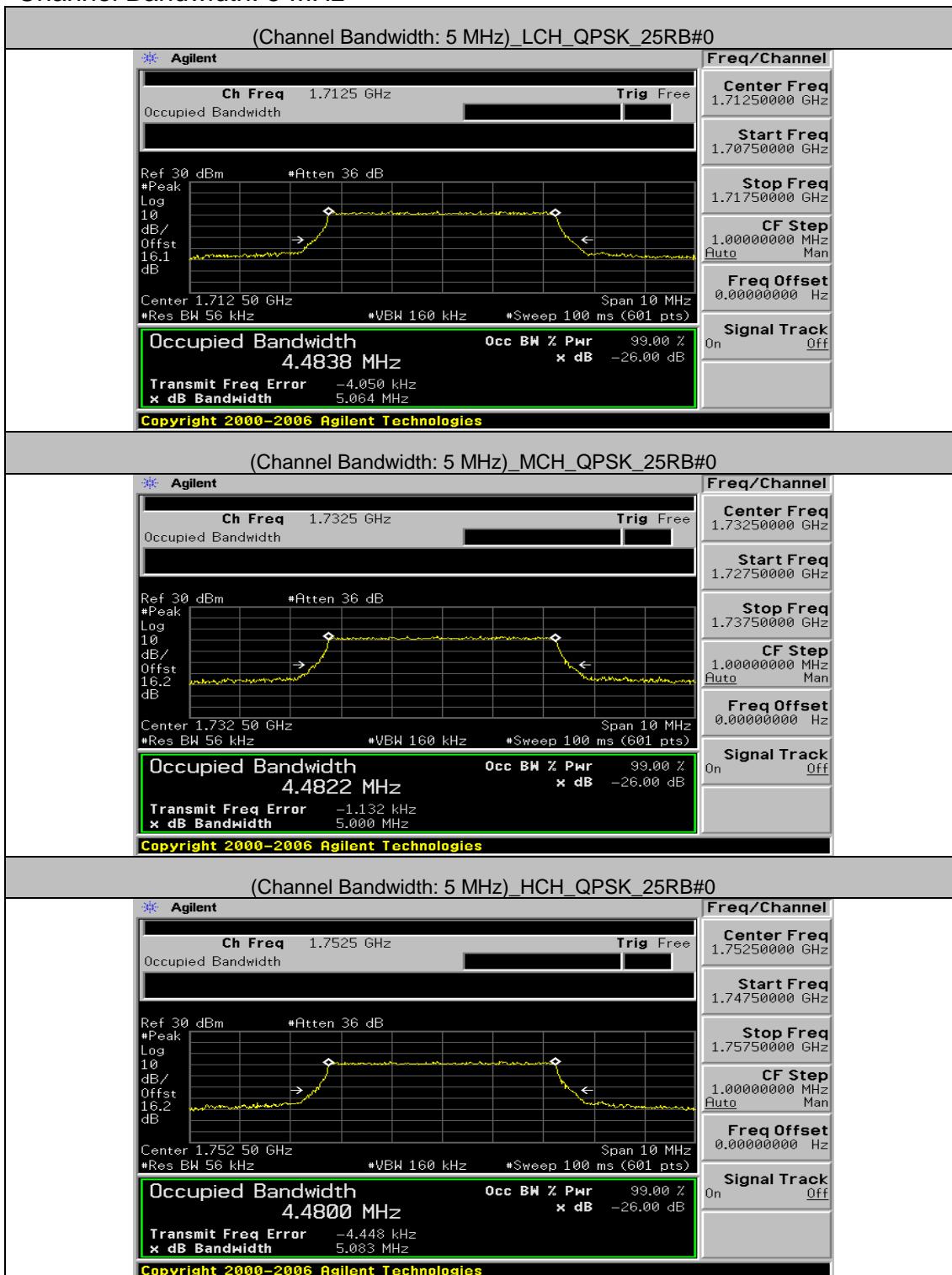


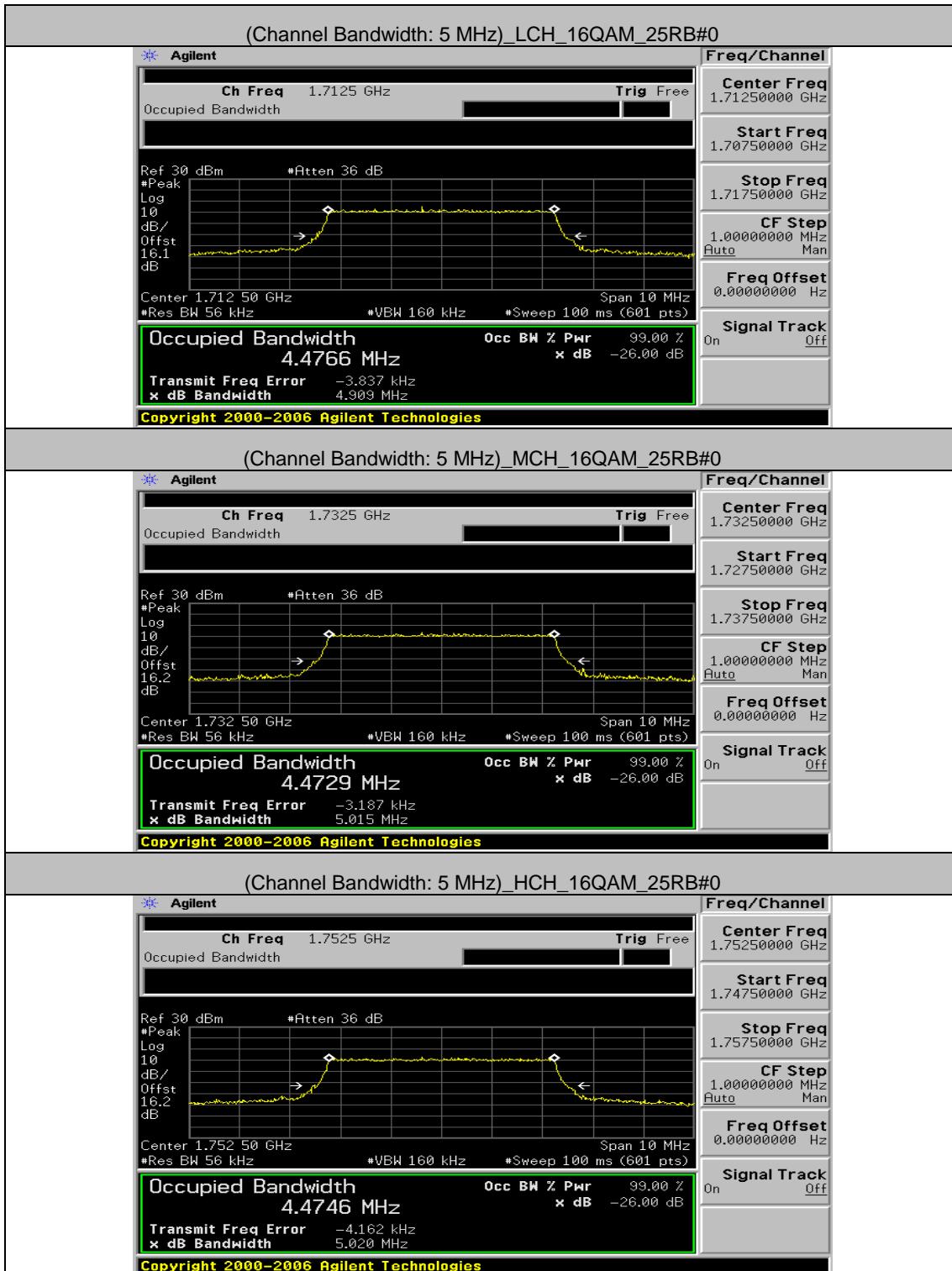
Channel Bandwidth: 3 MHz



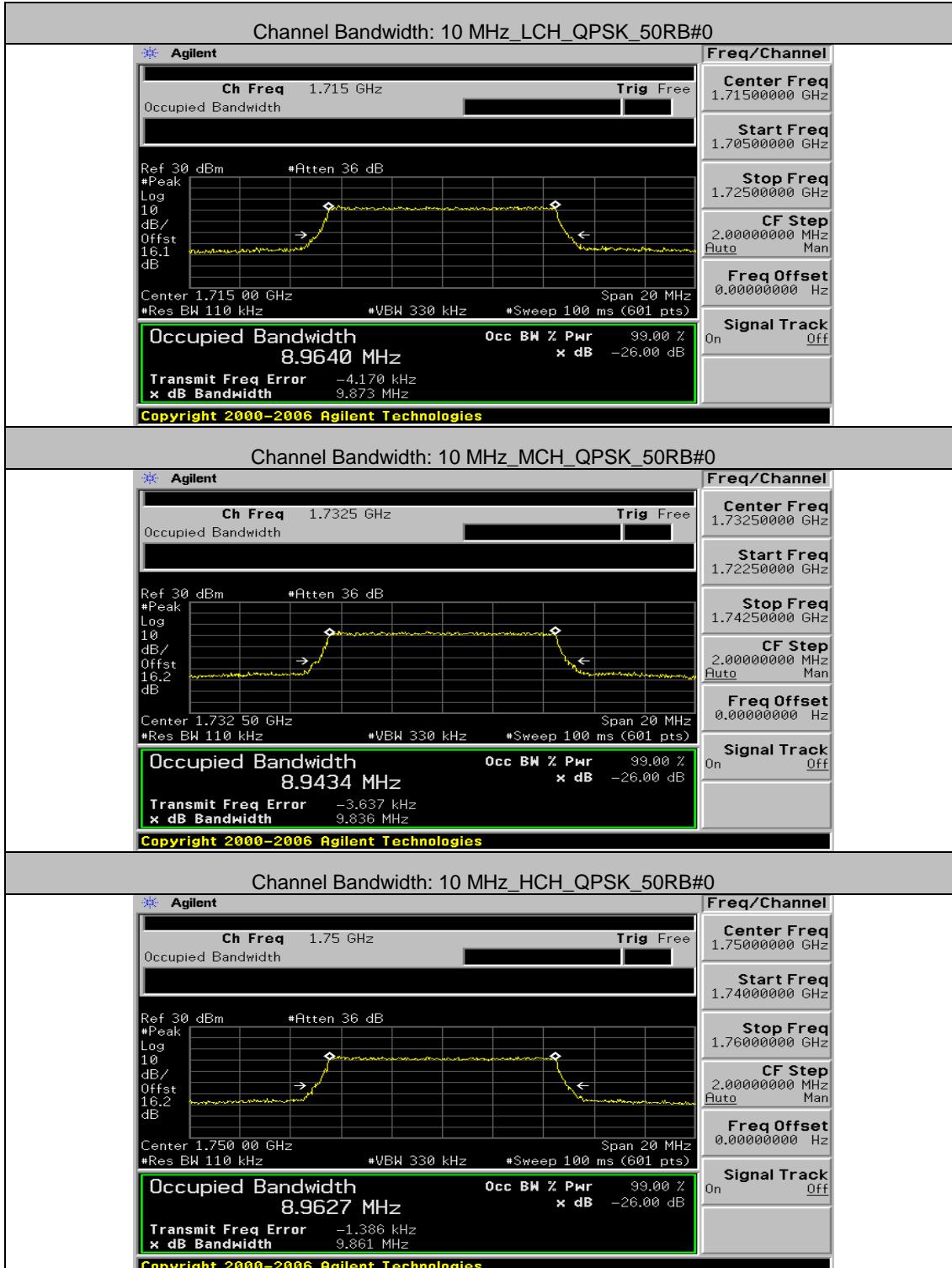


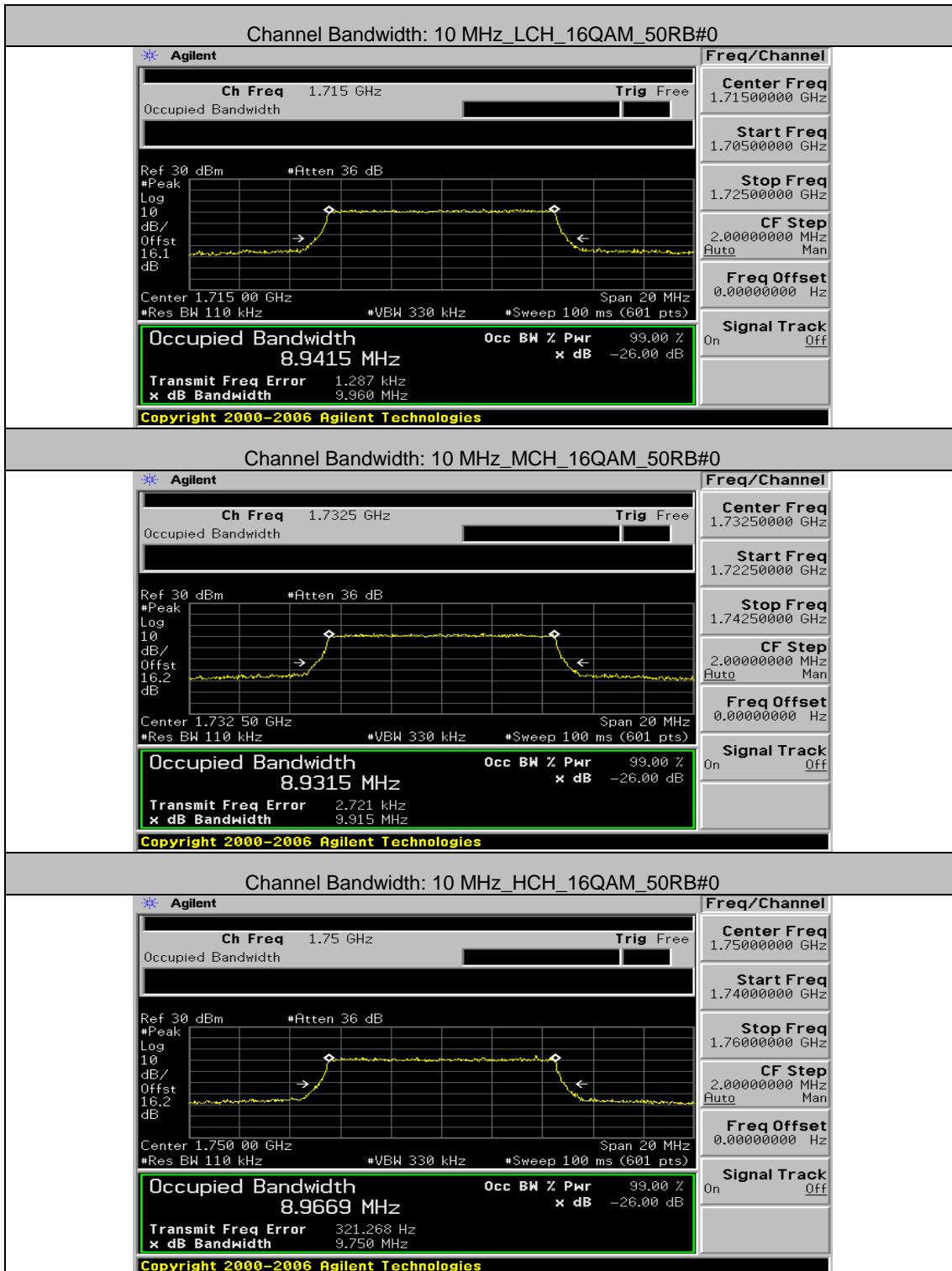
Channel Bandwidth: 5 MHz



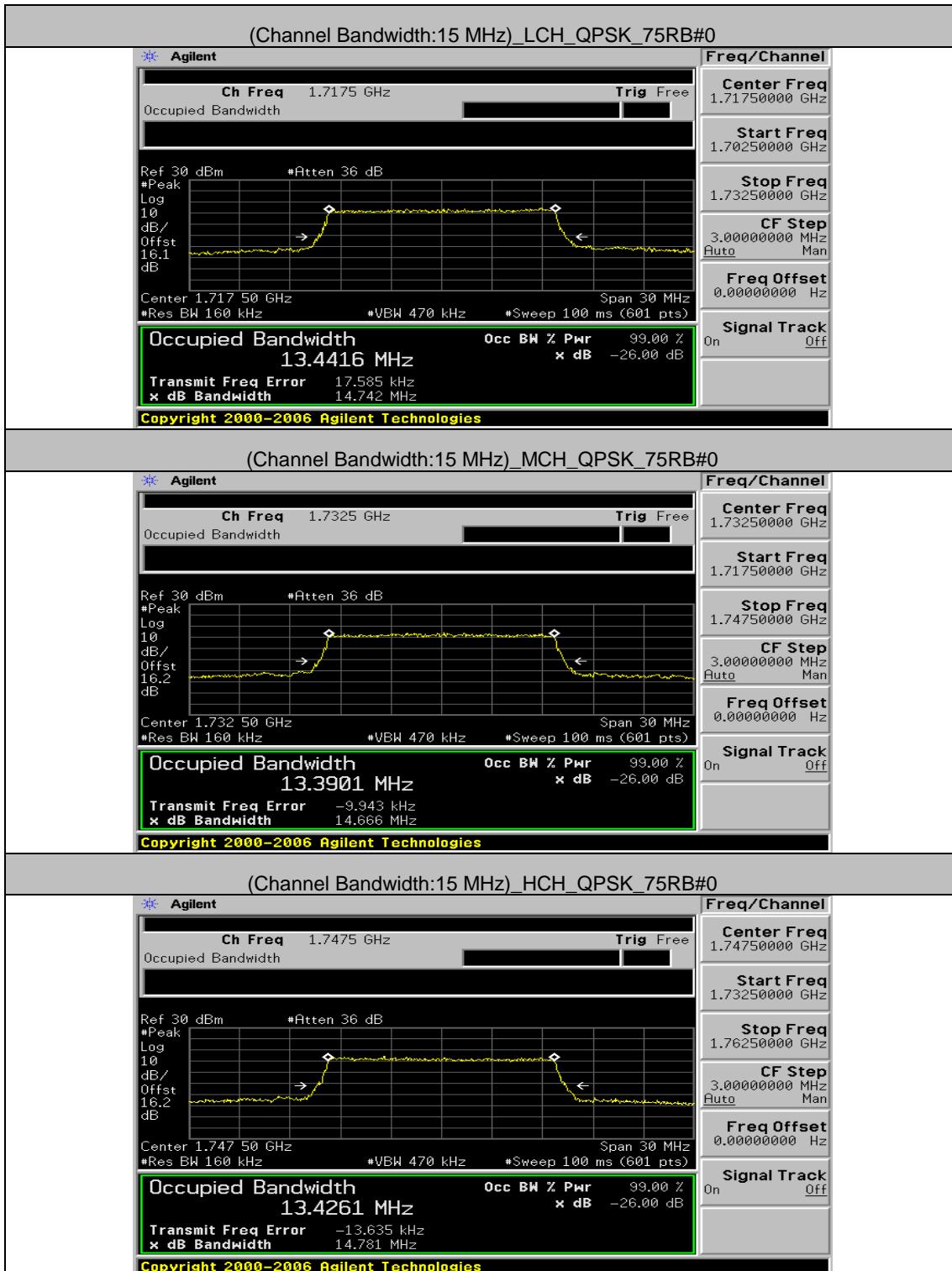


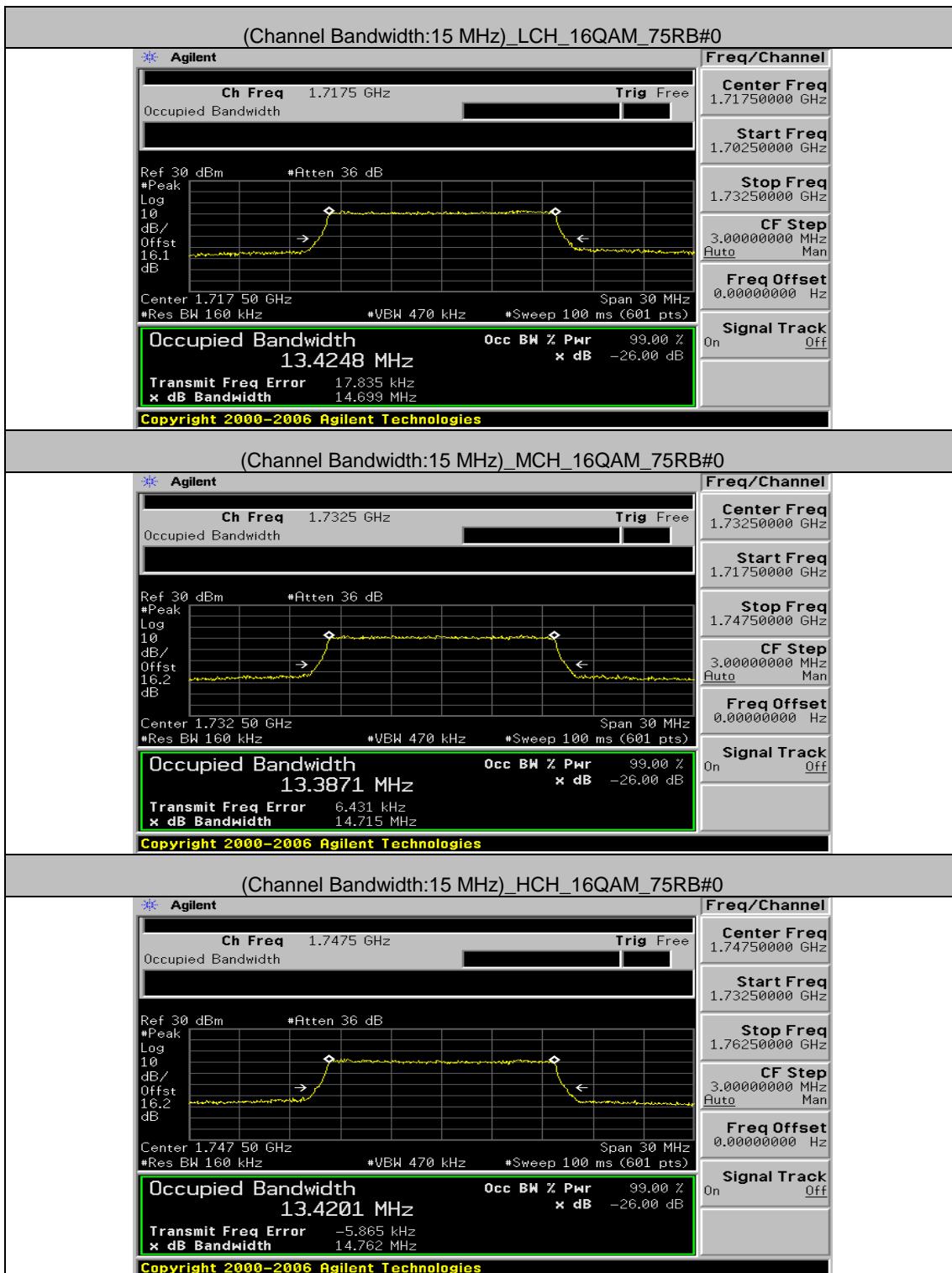
Channel Bandwidth: 10 MHz



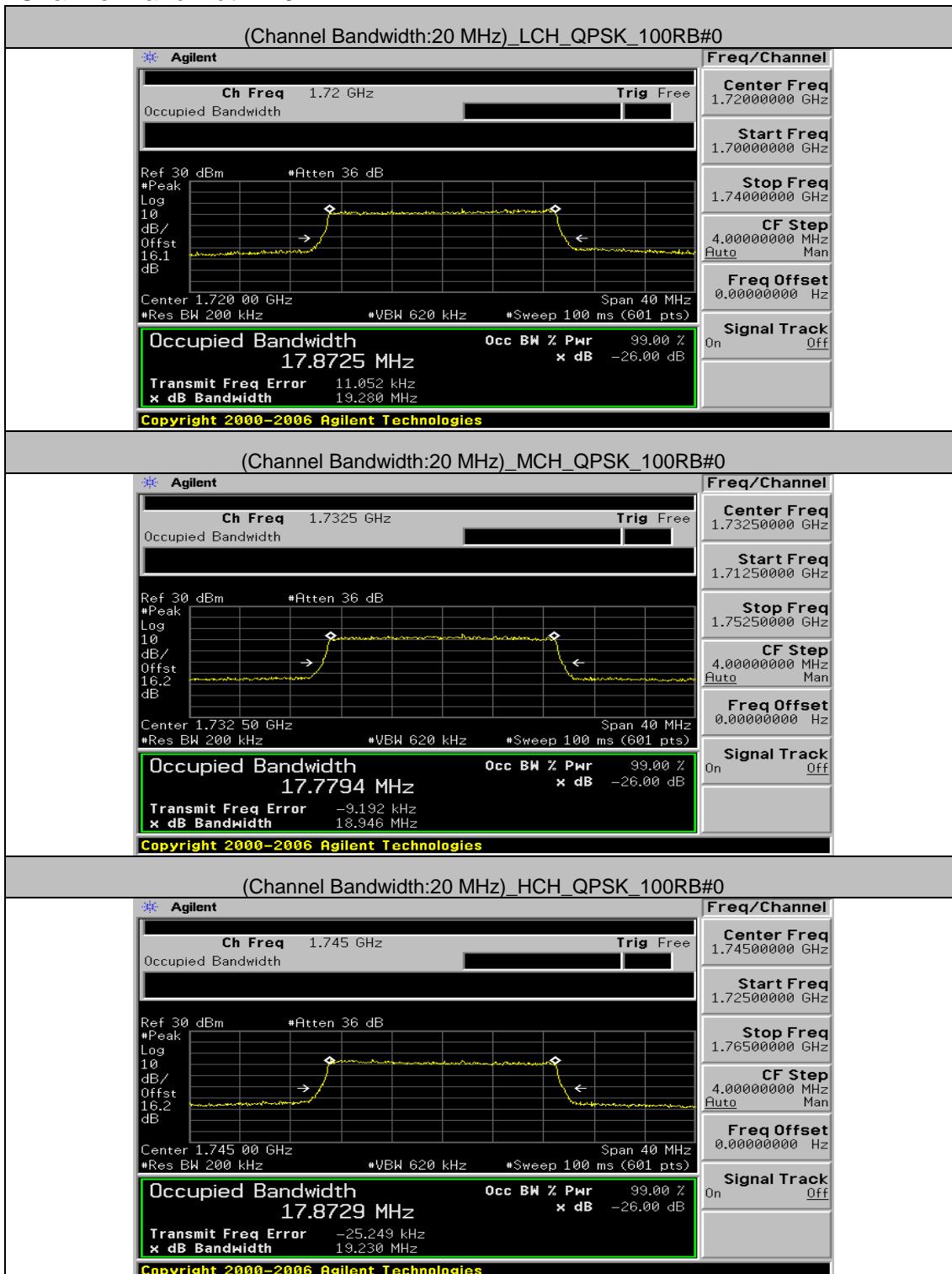


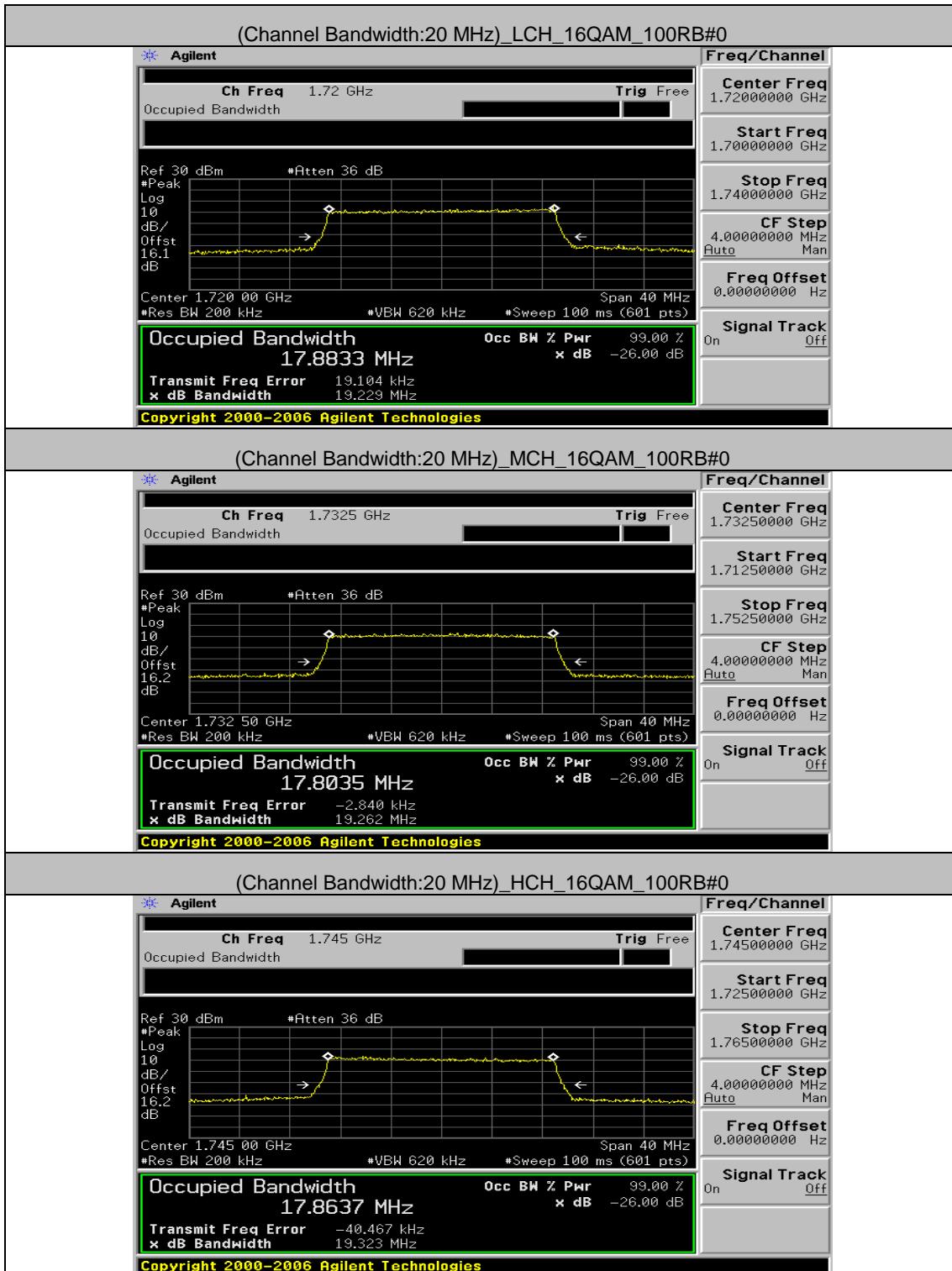
## Channel Bandwidth: 15 MHz





Channel Bandwidth: 20 MHz





**LTE Band 5**
**Test Result**
**Channel Bandwidth: 1.4 MHz**

Modulation	Channel	Channel Bandwidth: 1.4 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	6	0	0	1.0744	1.244	PASS
	MCH	6	0	0	1.0774	1.253	PASS
	HCH	6	0	0	1.0731	1.240	PASS
16QAM	LCH	6	0	0	1.0816	1.267	PASS
	MCH	6	0	0	1.0778	1.269	PASS
	HCH	6	0	0	1.0797	1.268	PASS

**Channel Bandwidth: 3 MHz**

Modulation	Channel	Channel Bandwidth: 3 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	15	0	0	2.6743	2.838	PASS
	MCH	15	0	0	2.6776	2.854	PASS
	HCH	15	0	0	2.6752	2.862	PASS
16QAM	LCH	15	0	0	2.6662	2.837	PASS
	MCH	15	0	0	2.6699	2.853	PASS
	HCH	15	0	0	2.6711	2.876	PASS

**Channel Bandwidth: 5 MHz**

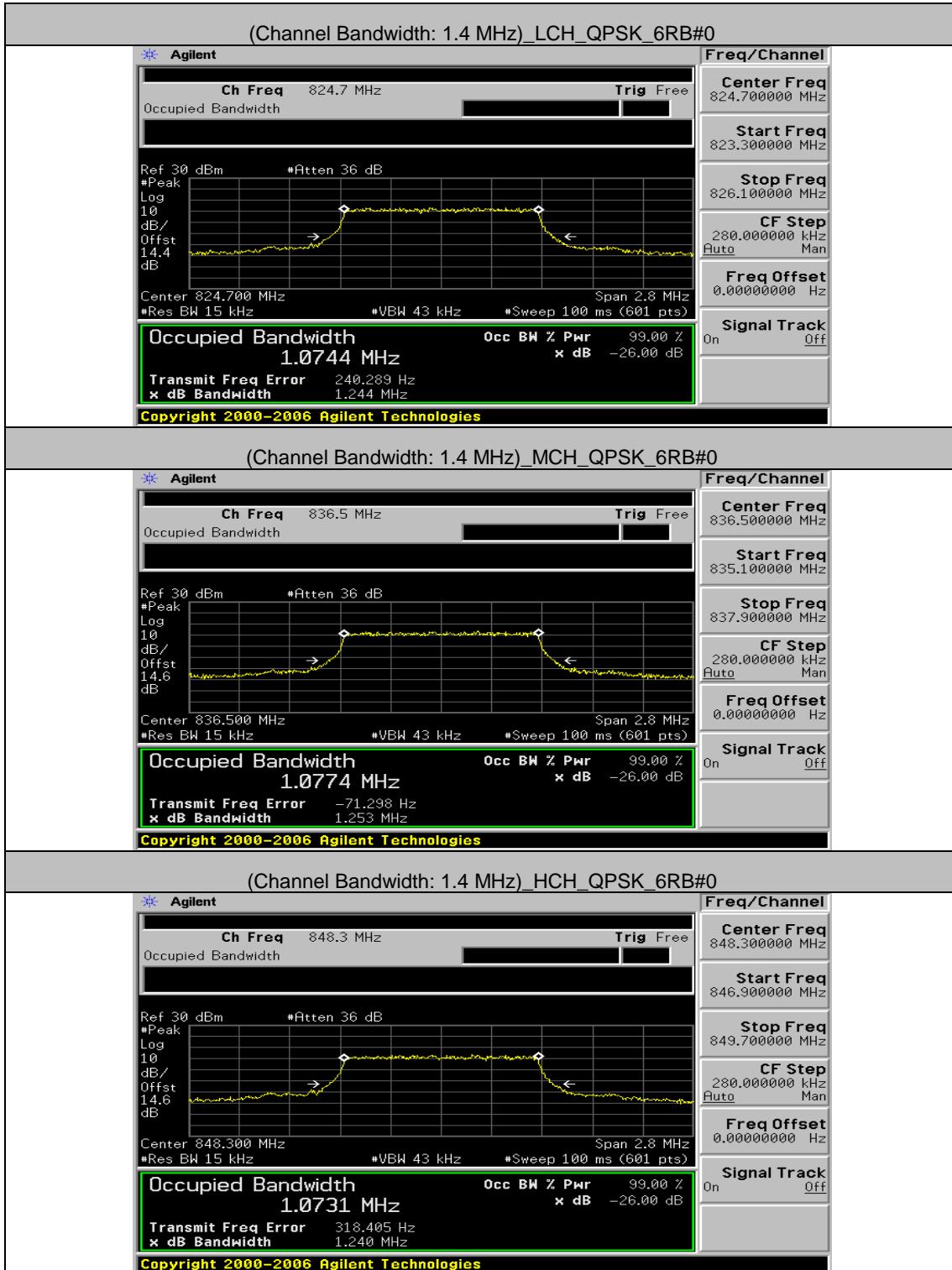
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4775	5.040	PASS
	MCH	25	0	4.4963	5.098	PASS
	HCH	25	0	4.4916	5.079	PASS
16QAM	LCH	25	0	4.4737	4.997	PASS
	MCH	25	0	4.4784	5.035	PASS
	HCH	25	0	4.4755	4.994	PASS

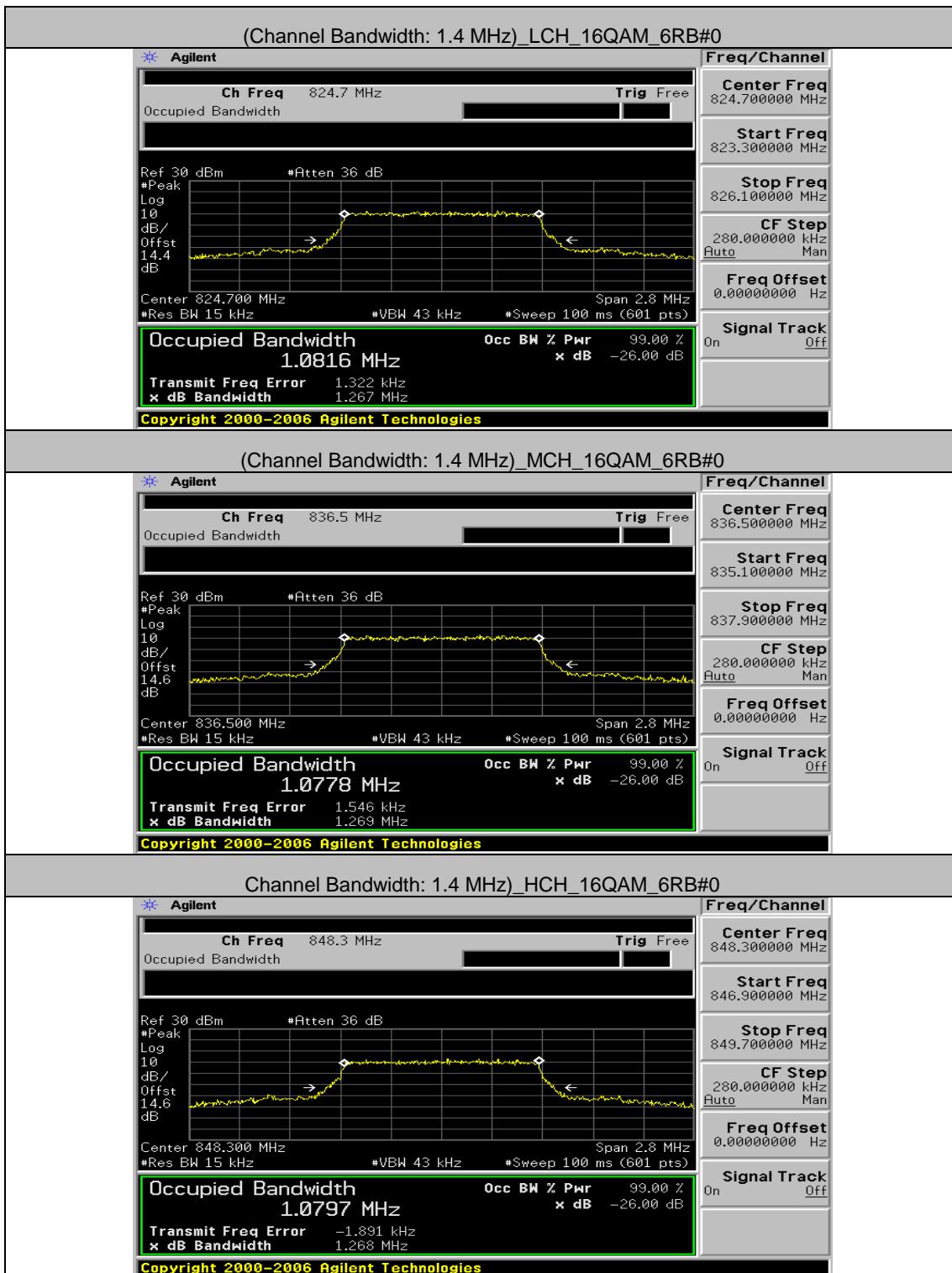
**Channel Bandwidth: 10 MHz**

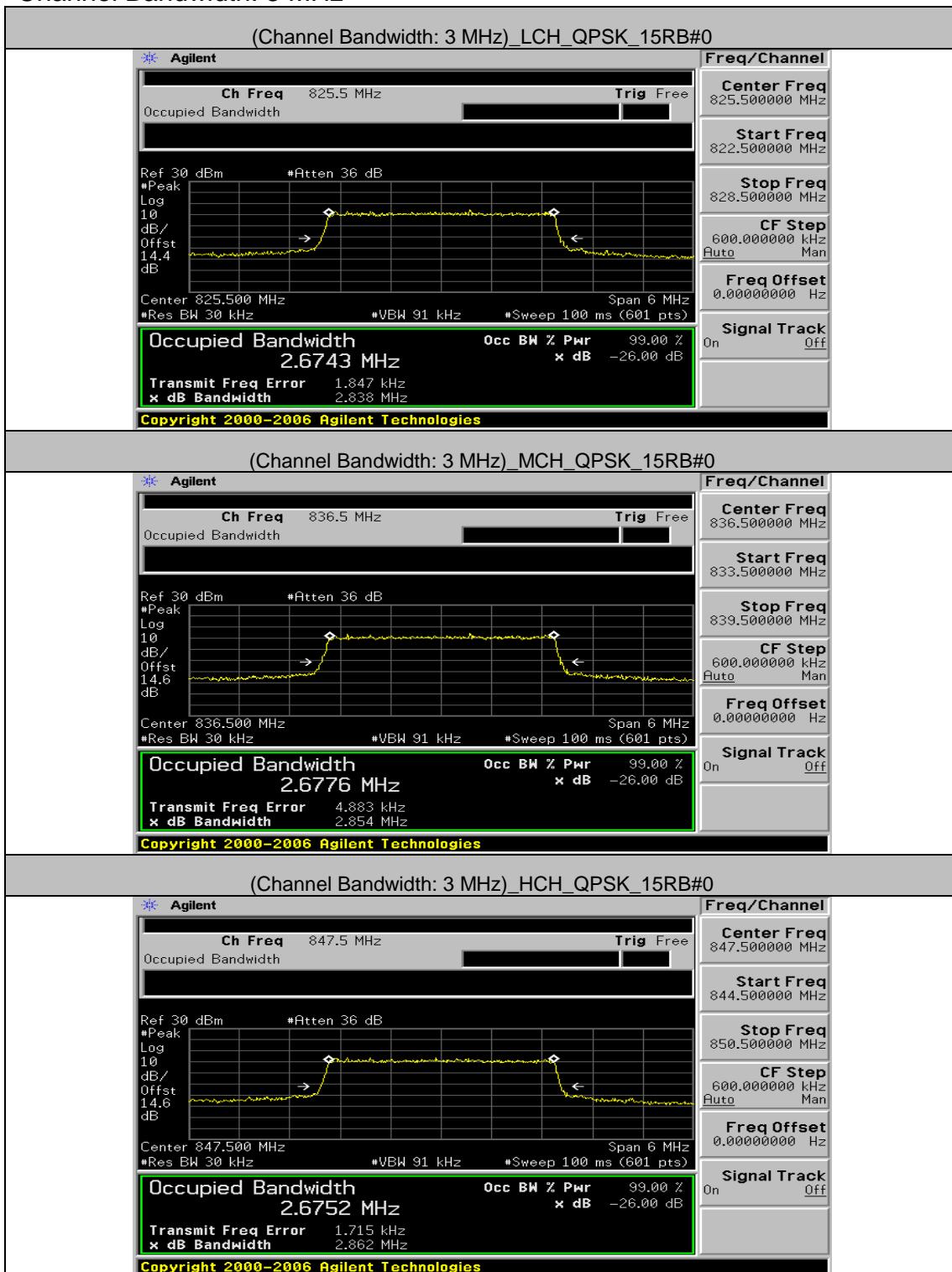
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9426	10.013	PASS
	MCH	50	0	8.9429	9.957	PASS
	HCH	50	0	8.9406	9.892	PASS
16QAM	LCH	50	0	8.9380	9.831	PASS
	MCH	50	0	8.9344	9.662	PASS
	HCH	50	0	8.9299	9.851	PASS

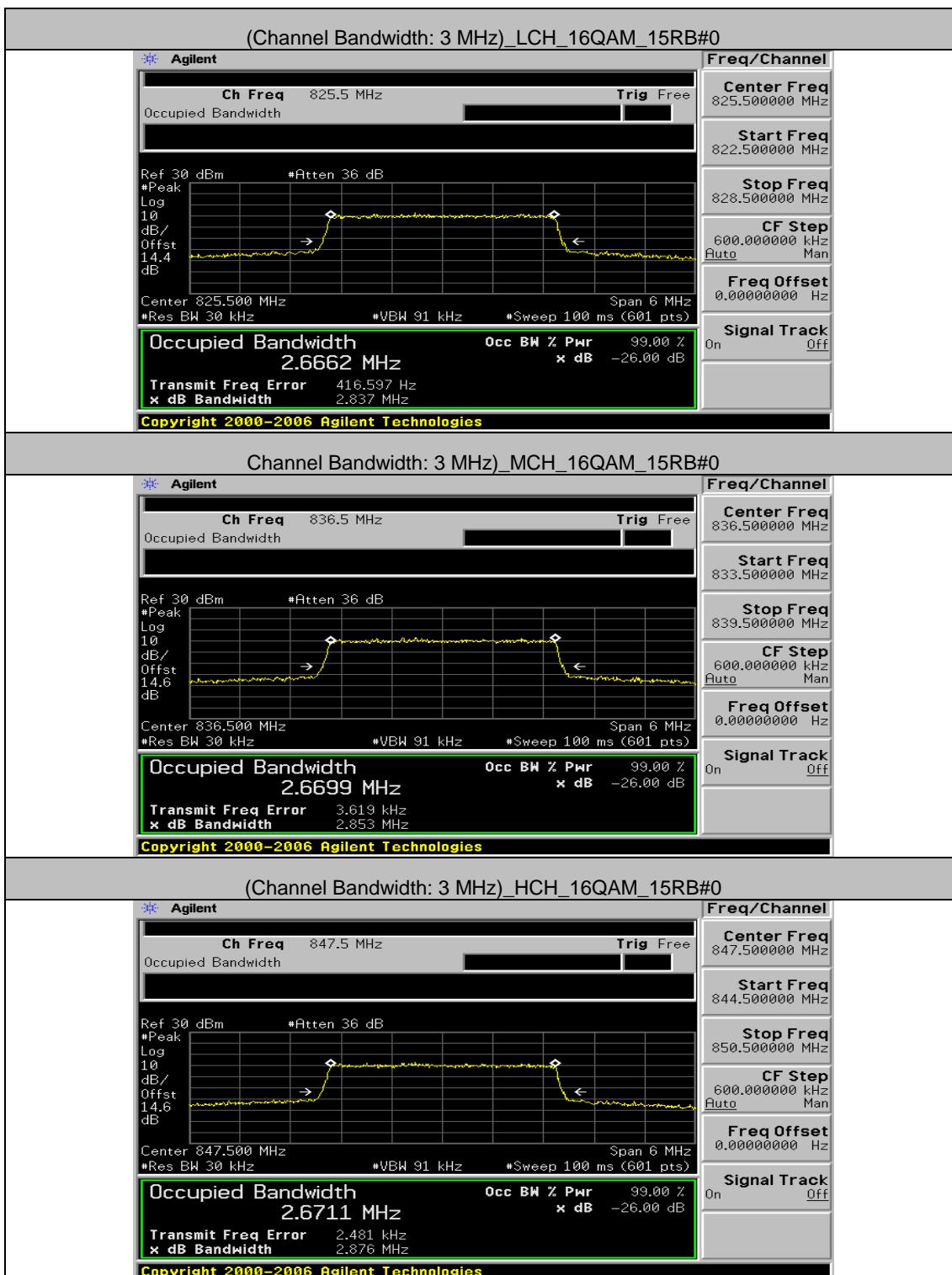
**Test Graphs:**

Channel Bandwidth: 1.4 MHz

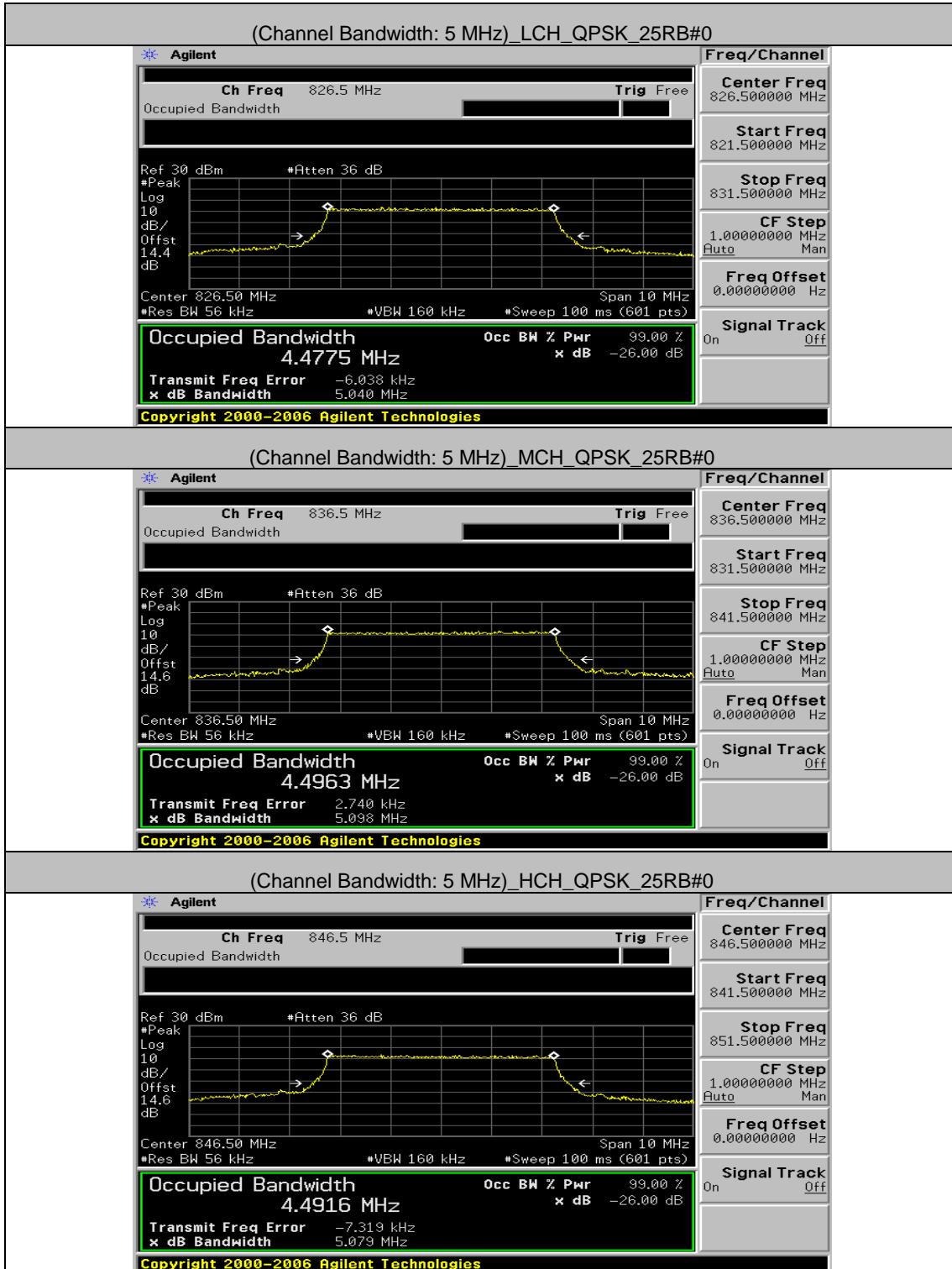


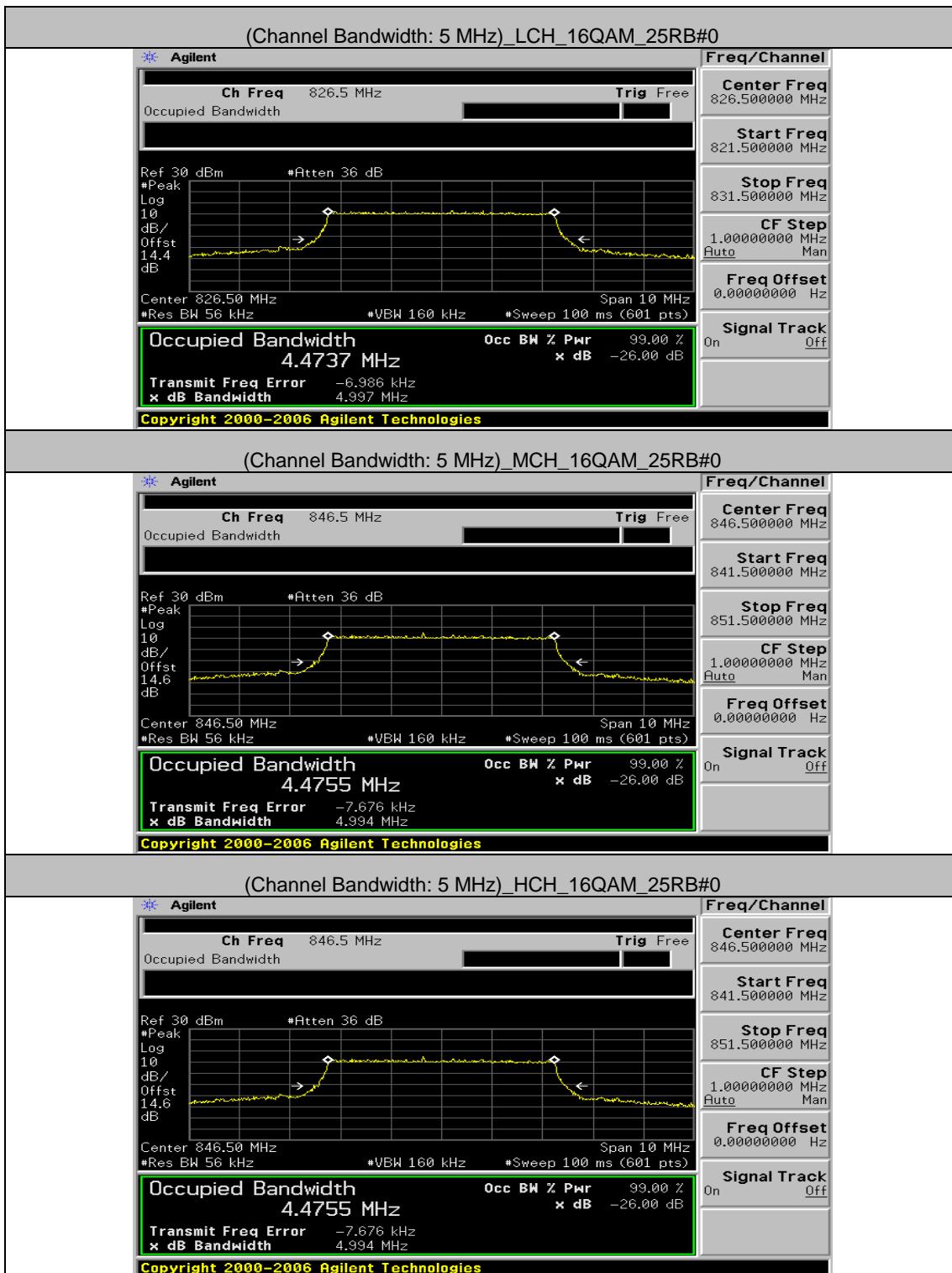


**Channel Bandwidth: 3 MHz**


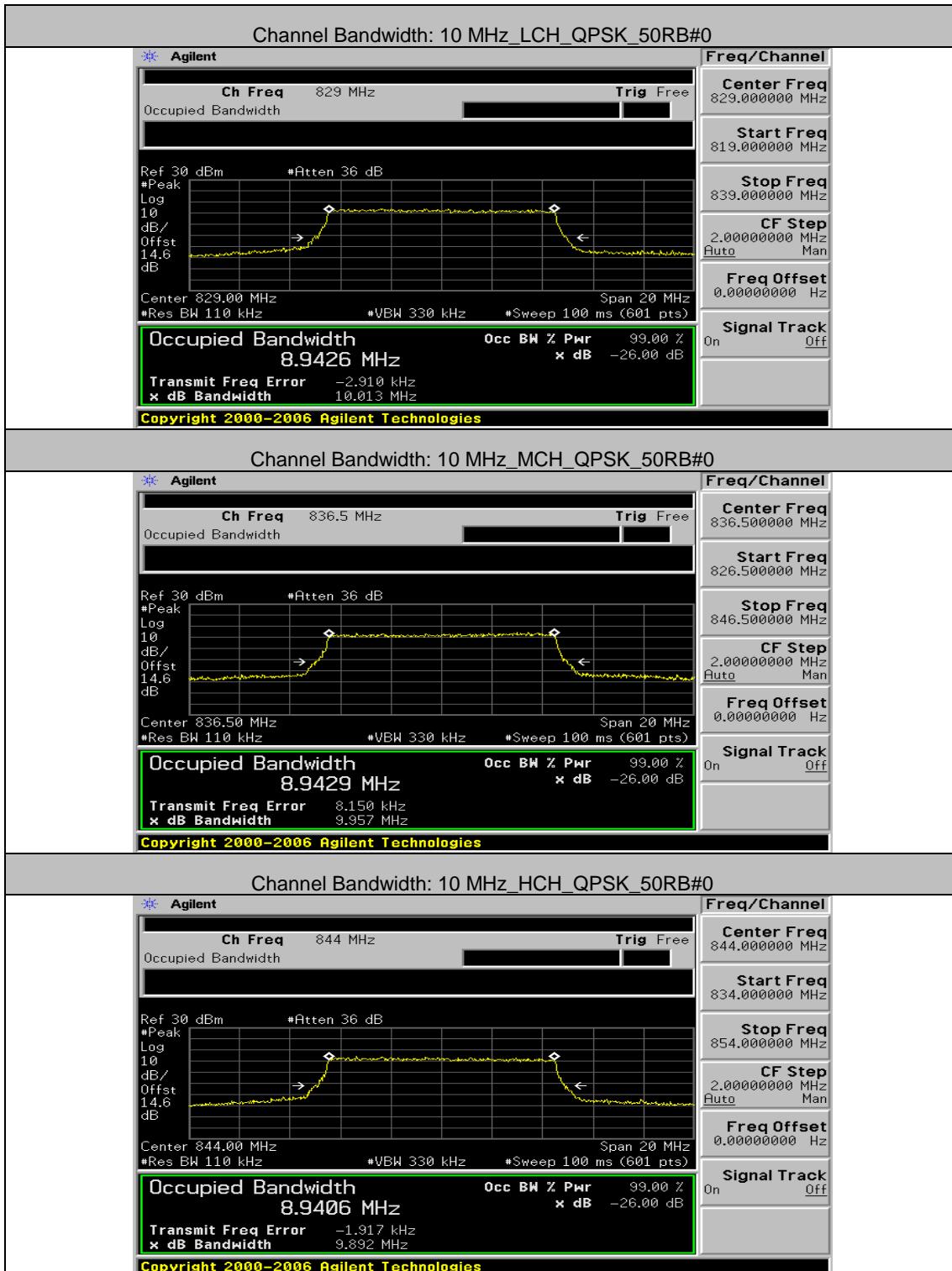


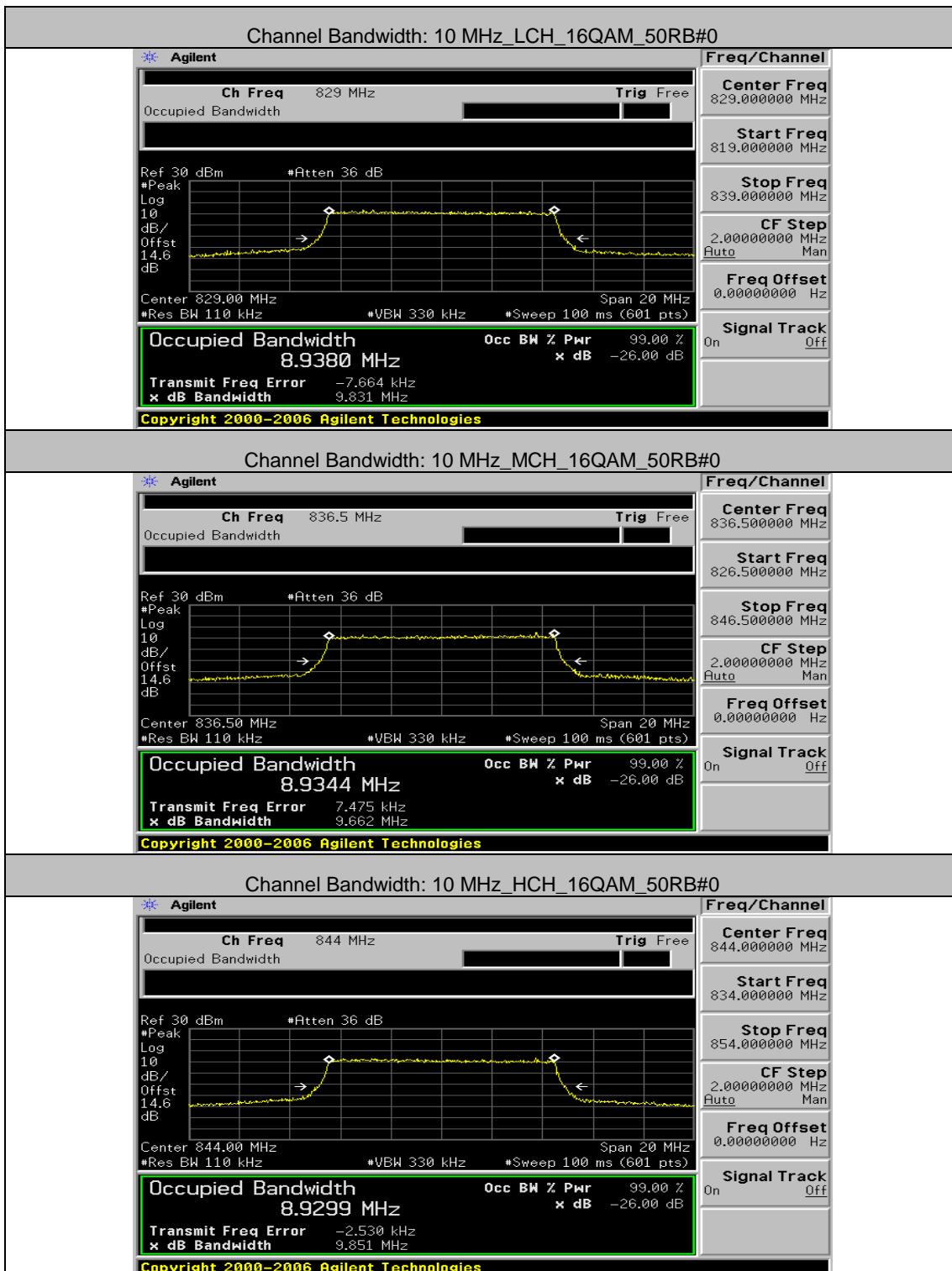
## Channel Bandwidth: 5 MHz





Channel Bandwidth: 10 MHz





**LTE Band 12**
**Test Result**
**Channel Bandwidth: 1.4 MHz**

Modulation	Channel	Channel Bandwidth: 1.4 MHz				Verdict	
		RB Configuration	Size	Offset	Occupied Bandwidth (MHz)		
QPSK	LCH	6	0	0	1.0764	1.241	PASS
	MCH	6	0	0	1.0749	1.243	PASS
	HCH	6	0	0	1.0738	1.232	PASS
16QAM	LCH	6	0	0	1.0777	1.260	PASS
	MCH	6	0	0	1.0784	1.253	PASS
	HCH	6	0	0	1.0753	1.253	PASS

**Channel Bandwidth: 3 MHz**

Modulation	Channel	Channel Bandwidth: 3 MHz				Verdict	
		RB Configuration		Size	Offset		
QPSK	LCH	15	0	0	2.6679	2.862	PASS
	MCH	15	0	0	2.6672	2.844	PASS
	HCH	15	0	0	2.6731	2.832	PASS
16QAM	LCH	15	0	0	2.6766	2.853	PASS
	MCH	15	0	0	2.6783	2.863	PASS
	HCH	15	0	0	2.6776	2.865	PASS

**Channel Bandwidth: 5 MHz**

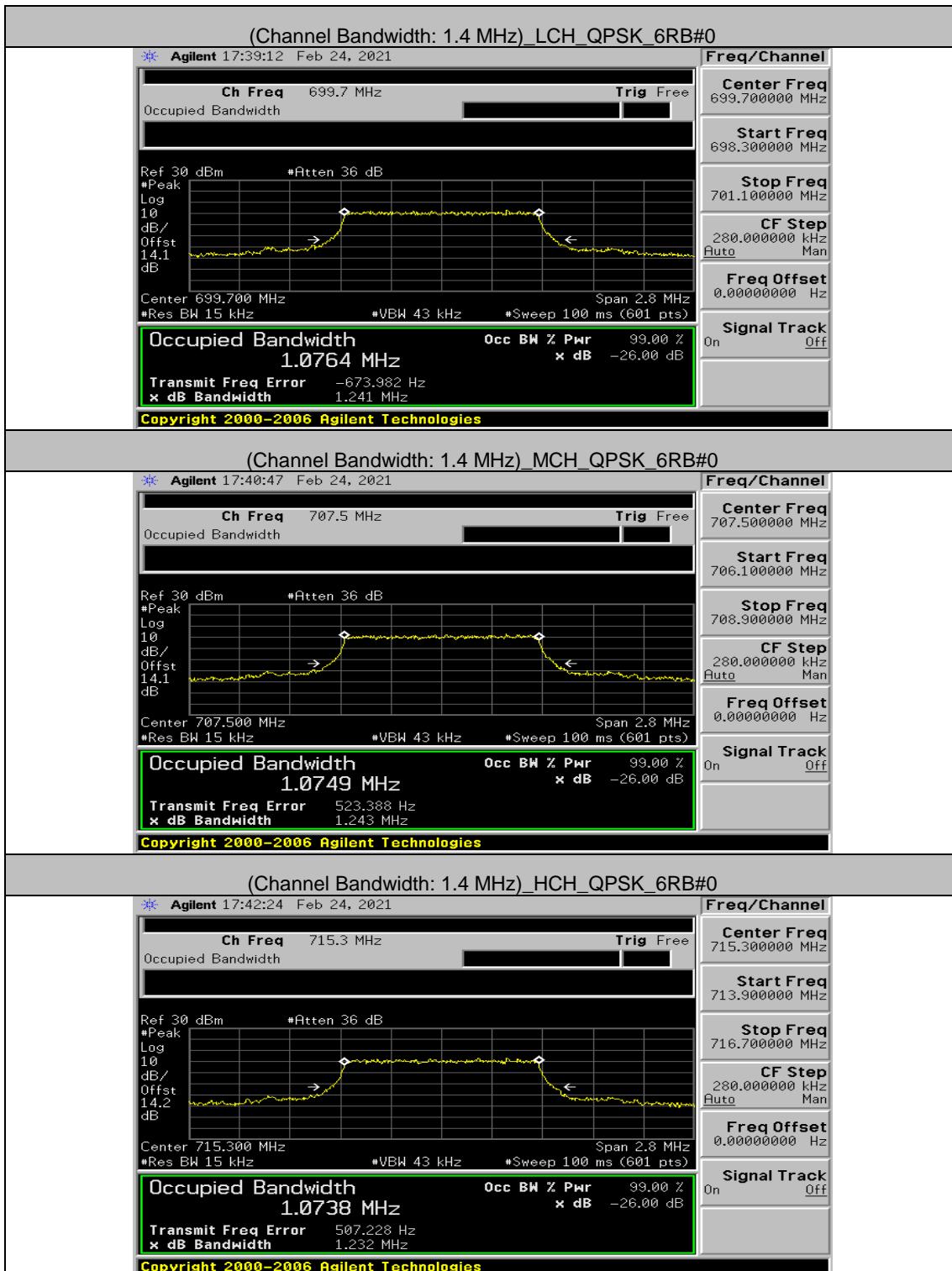
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4887	5.068	PASS
	MCH	25	0	4.4950	5.095	PASS
	HCH	25	0	4.4979	5.071	PASS
16QAM	LCH	25	0	4.4714	4.959	PASS
	MCH	25	0	4.4704	4.970	PASS
	HCH	25	0	4.4707	4.986	PASS

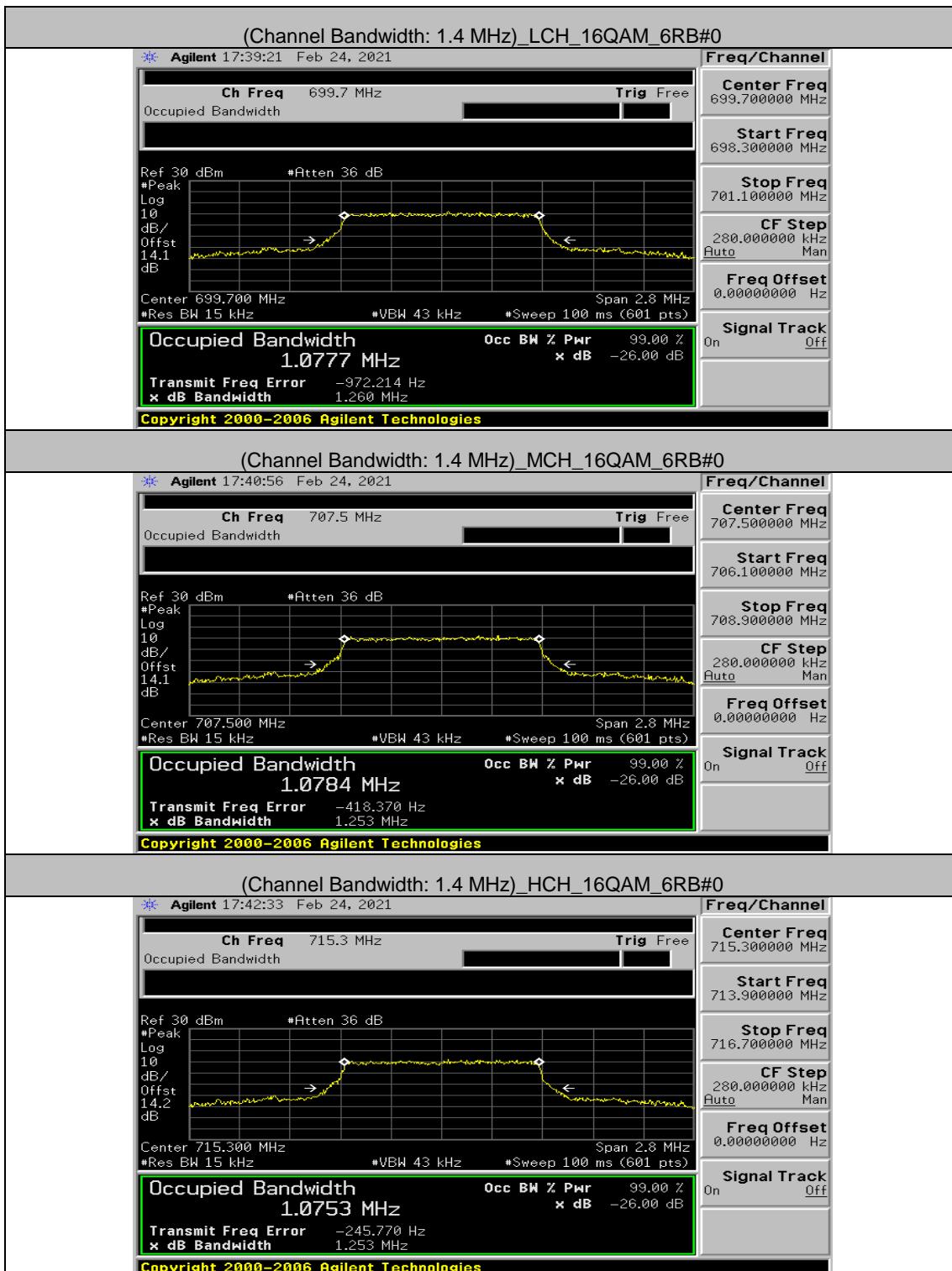
**Channel Bandwidth: 10 MHz**

Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9930	9.918	PASS
	MCH	50	0	8.9466	9.804	PASS
	HCH	50	0	8.9357	9.857	PASS
16QAM	LCH	50	0	8.9593	9.969	PASS
	MCH	50	0	8.9354	9.716	PASS
	HCH	50	0	8.9353	9.852	PASS

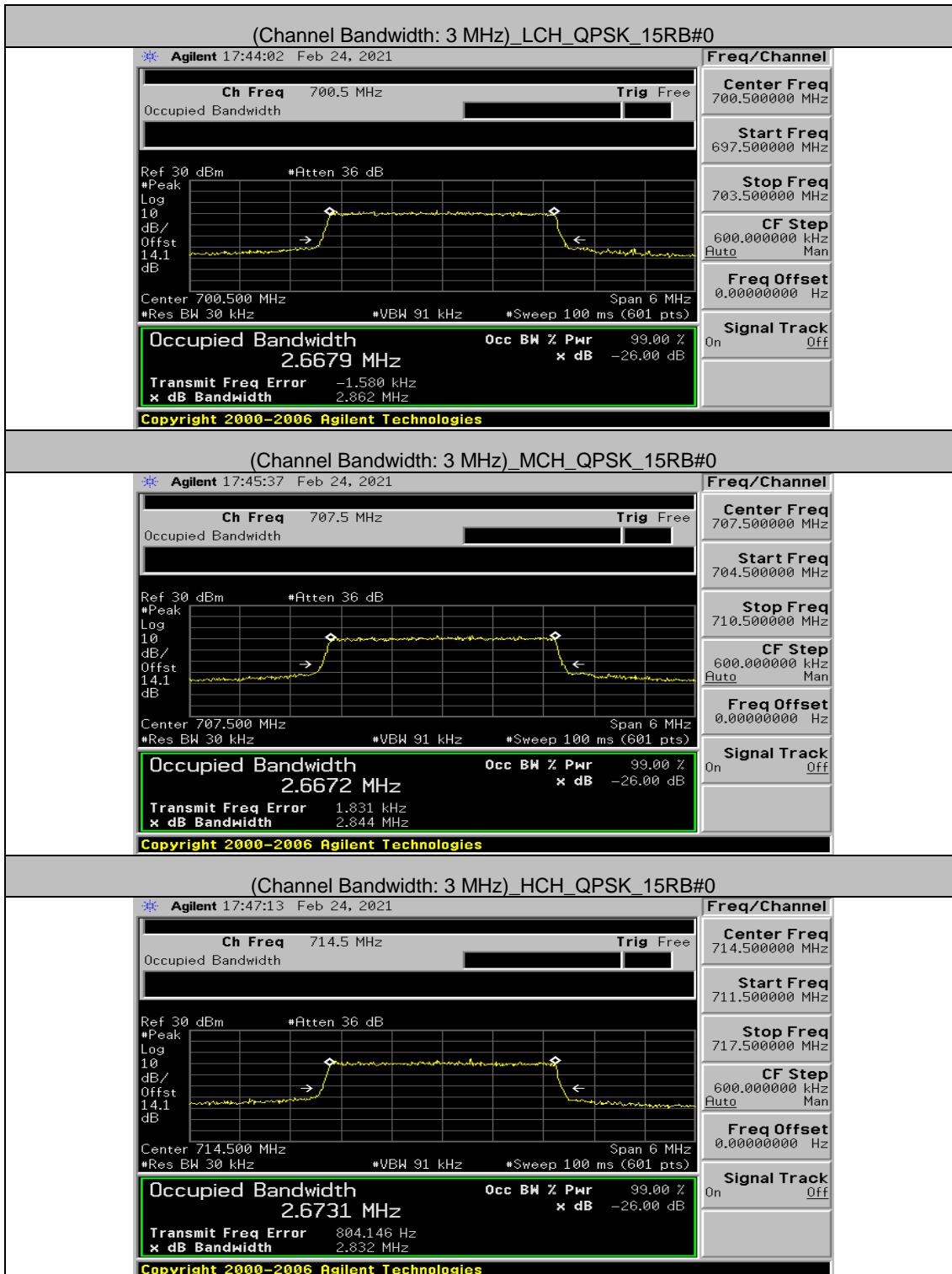
**Test Graphs:**

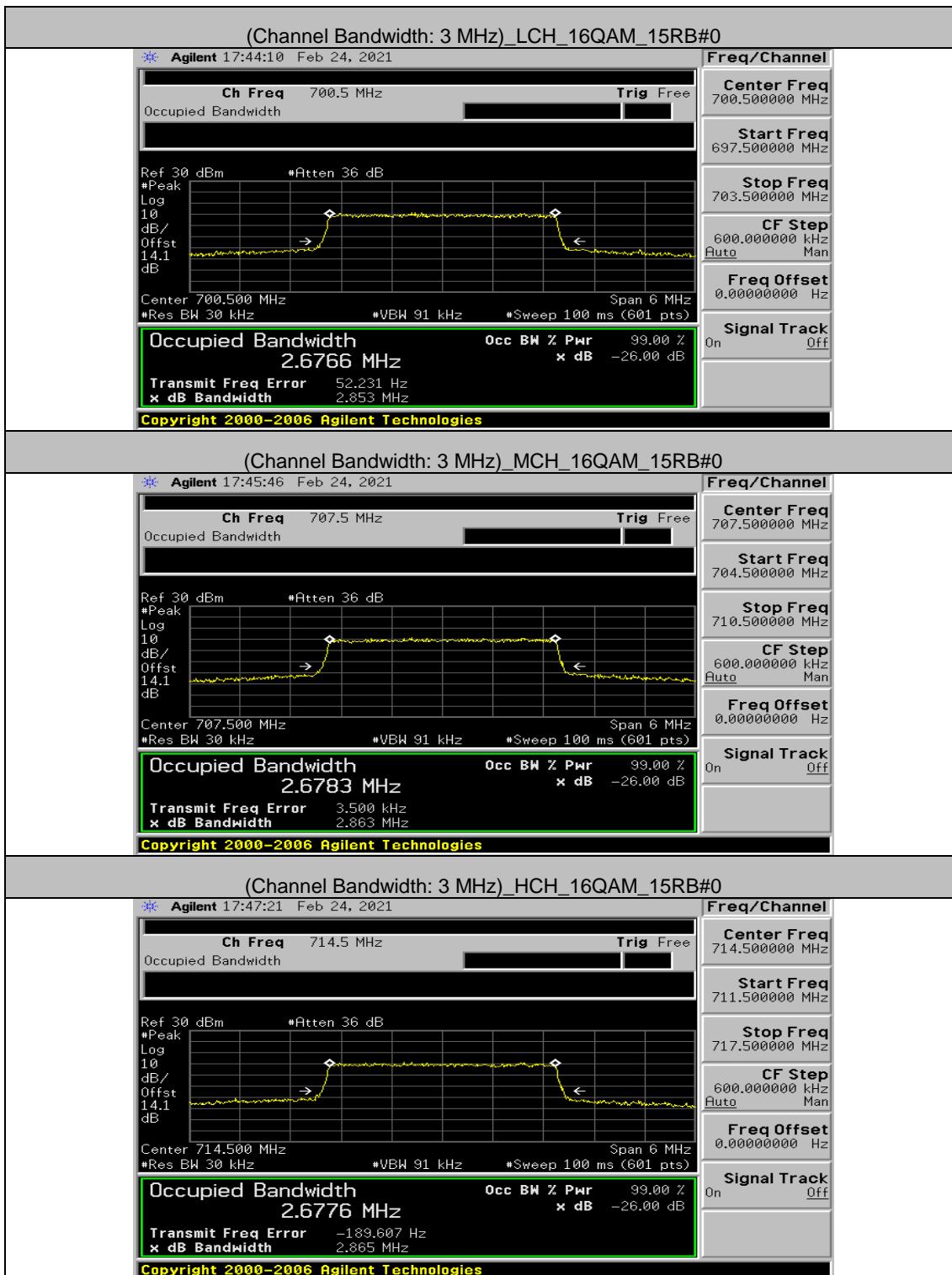
Channel Bandwidth: 1.4 MHz

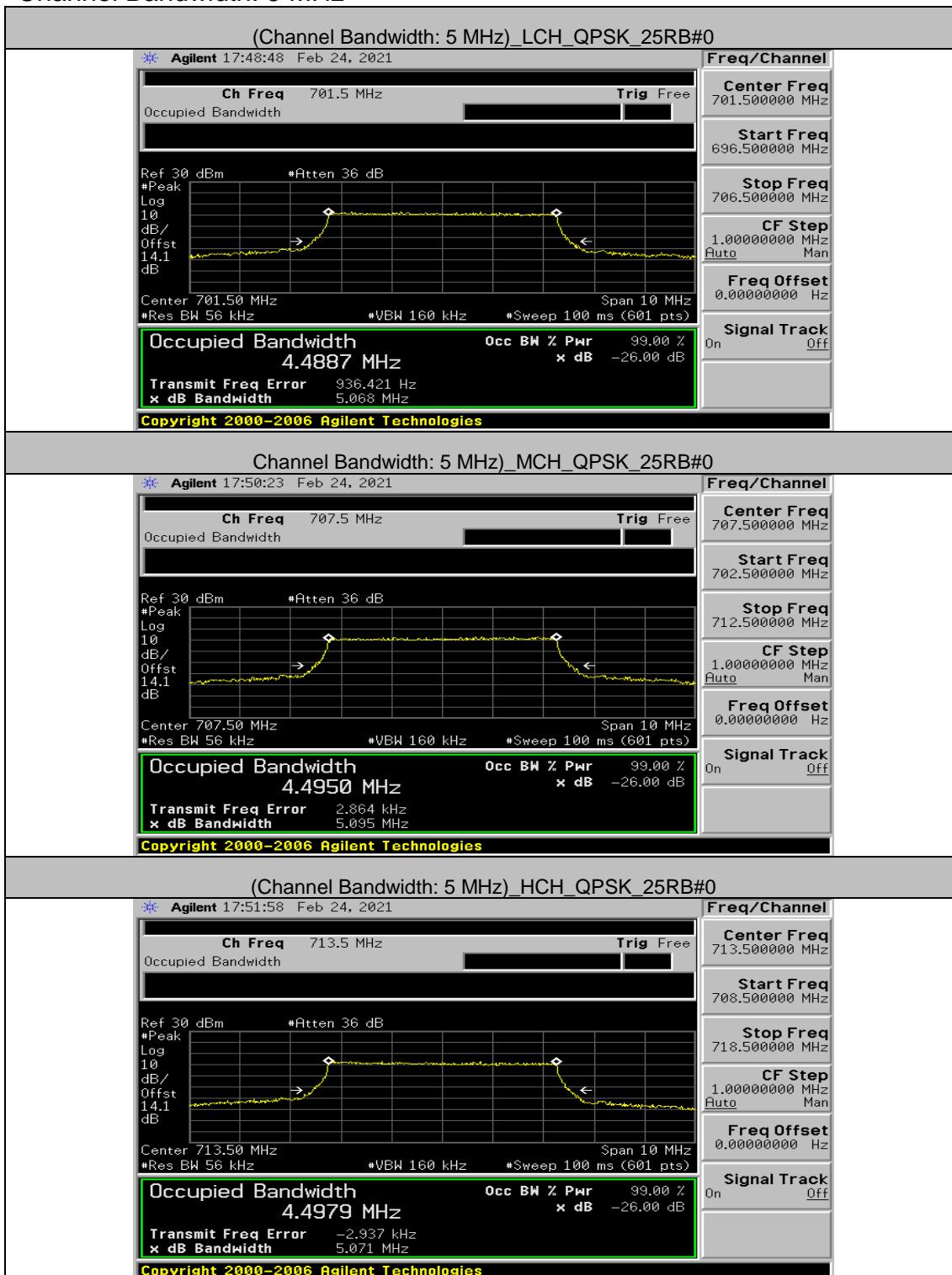


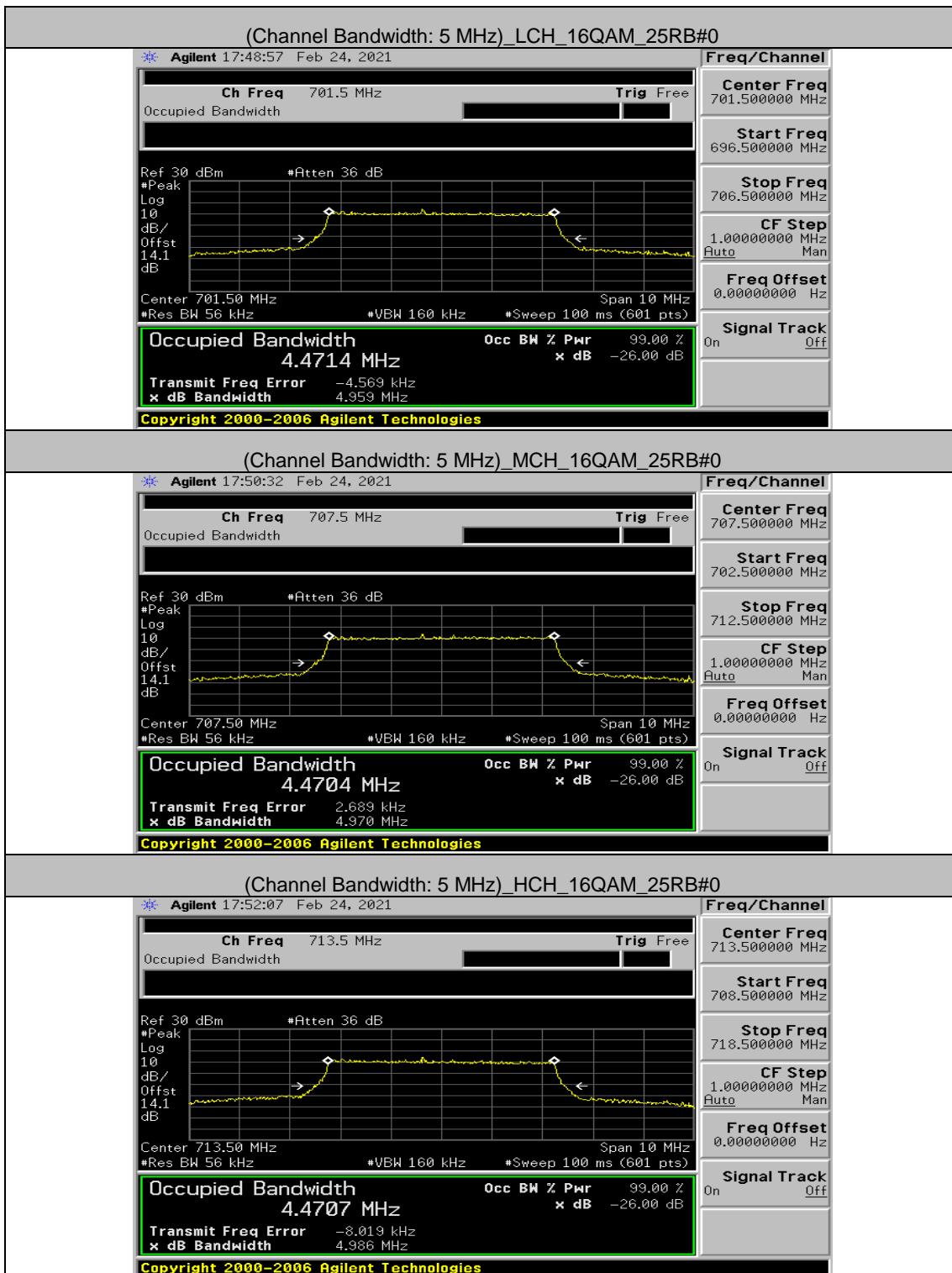


## Channel Bandwidth: 3 MHz

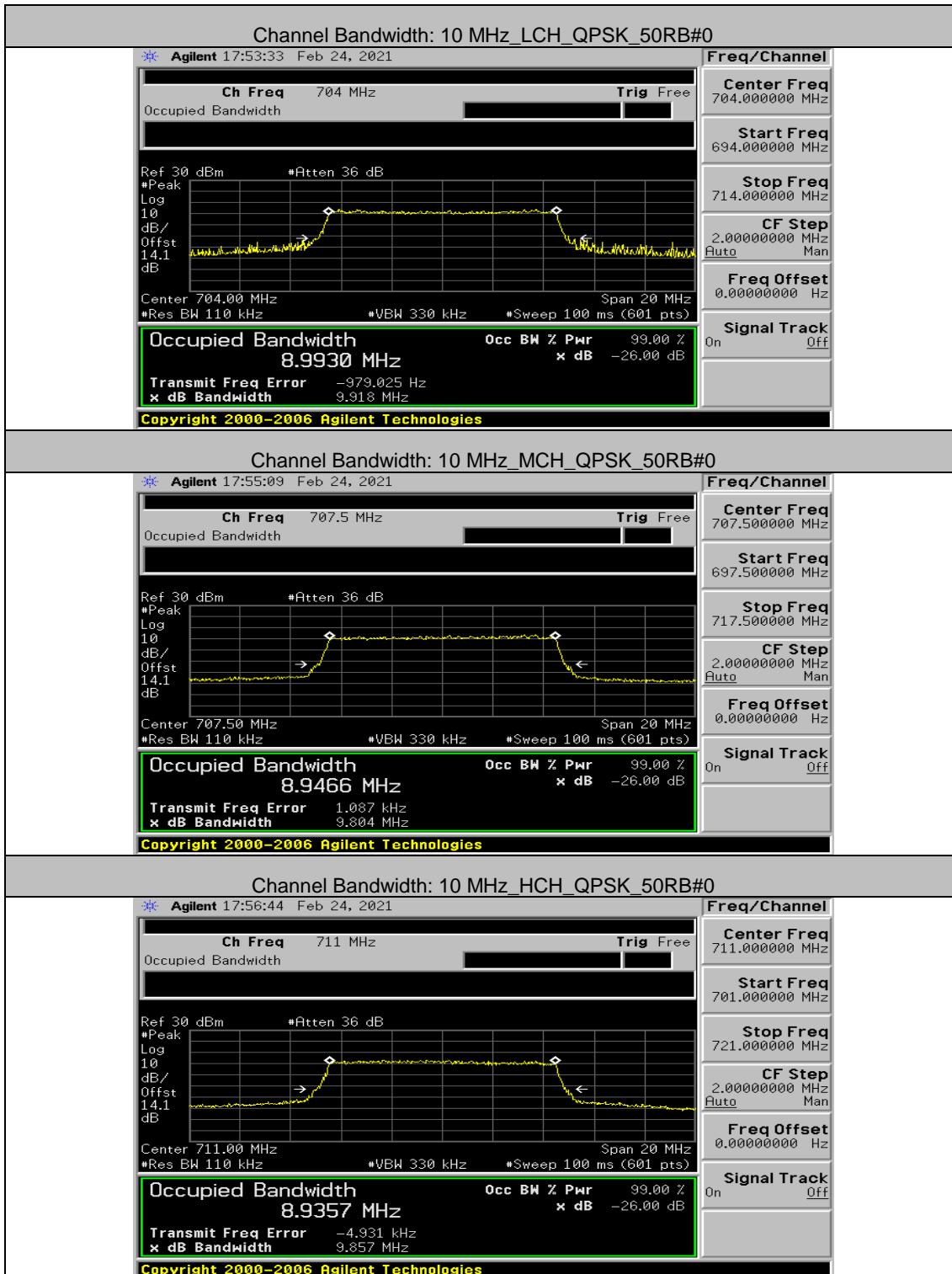


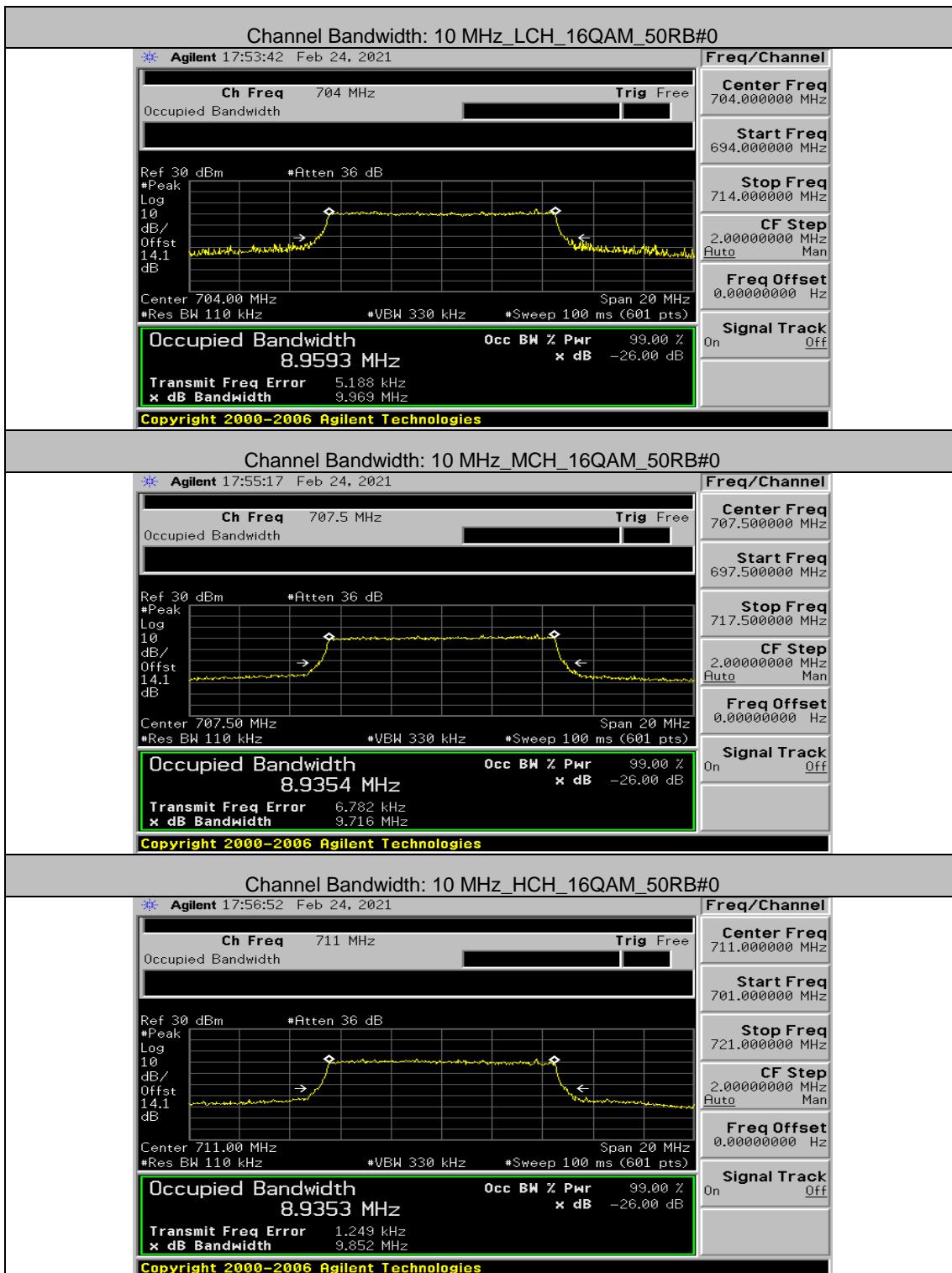


**Channel Bandwidth: 5 MHz**




## Channel Bandwidth: 10 MHz





## 4 Band Edge at Antenna Terminals

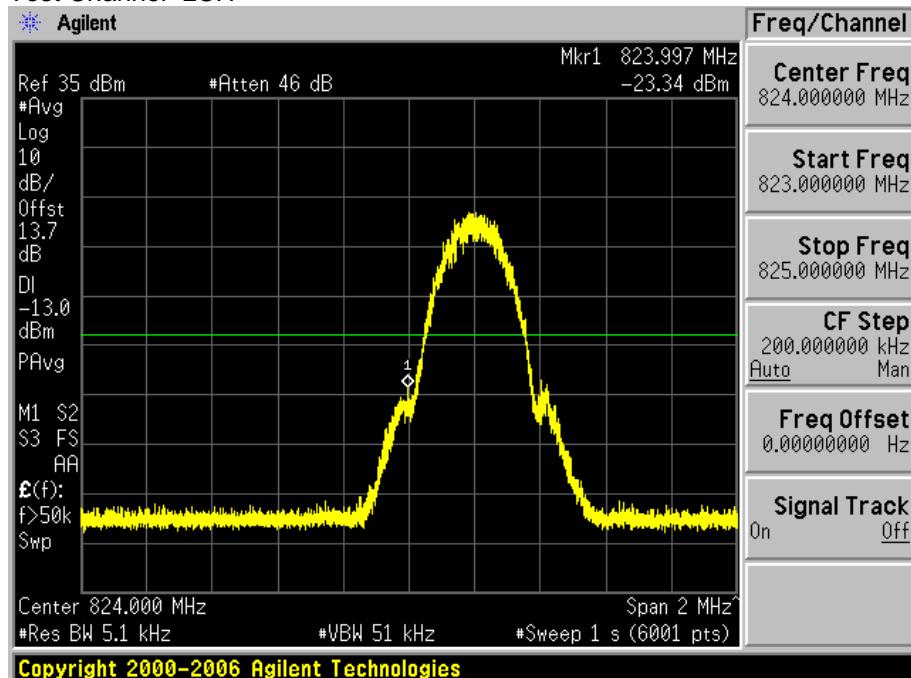
**GSM**

**Test Graphs:**

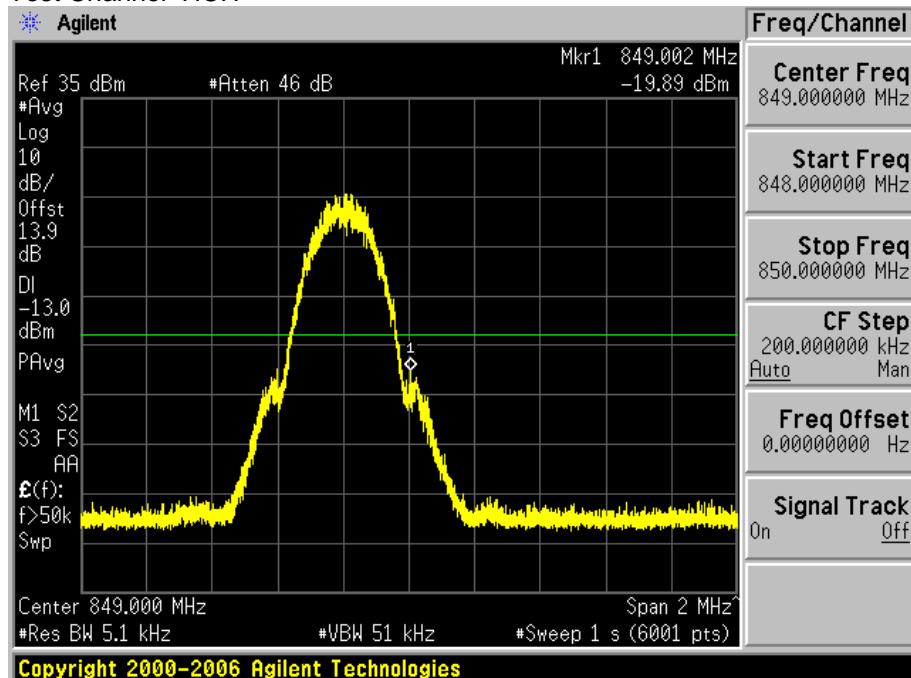
Test Band=GSM850

Test Mode=GSM/TM1

Test Channel=LCH

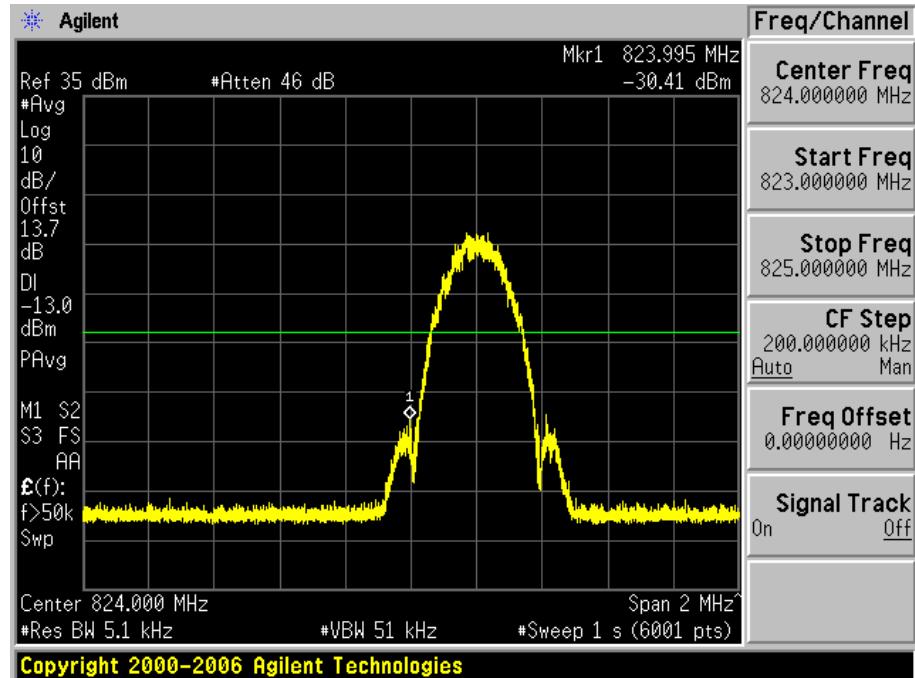


Test Channel=HCH

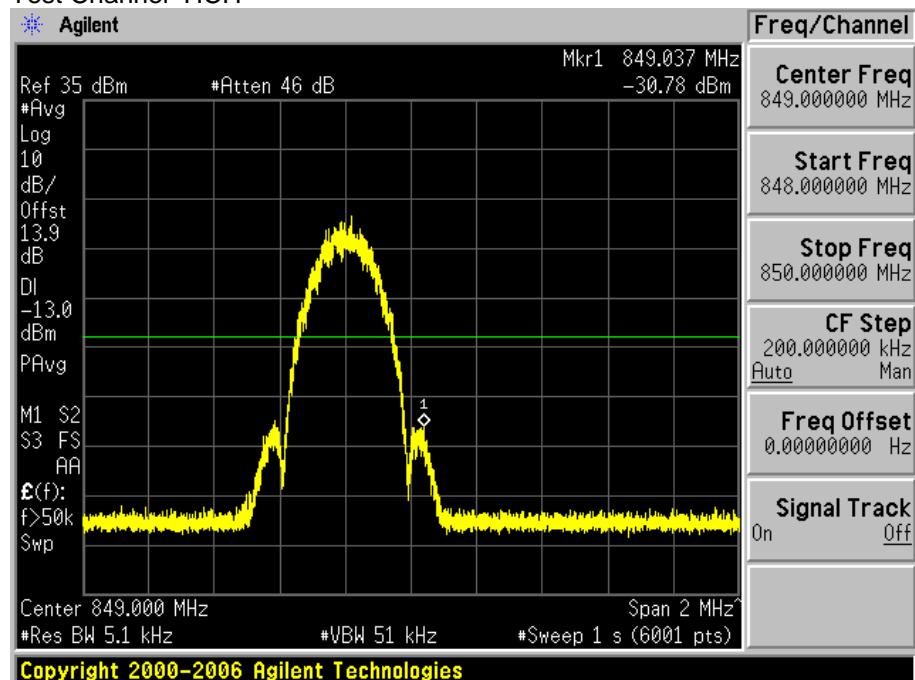


Test Mode=GSM/TM2

Test Channel=LCH



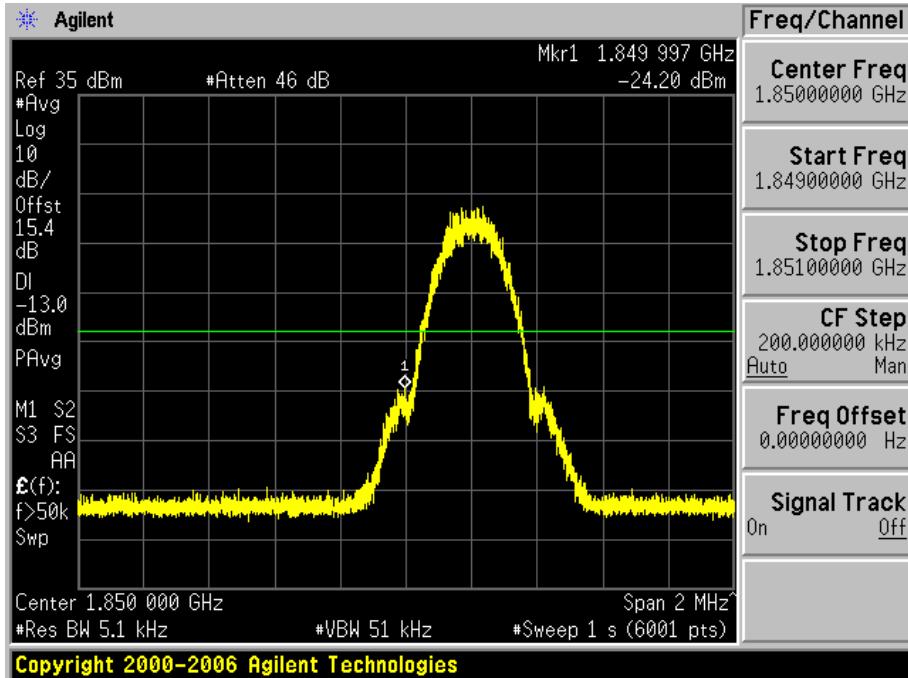
Test Channel=HCH



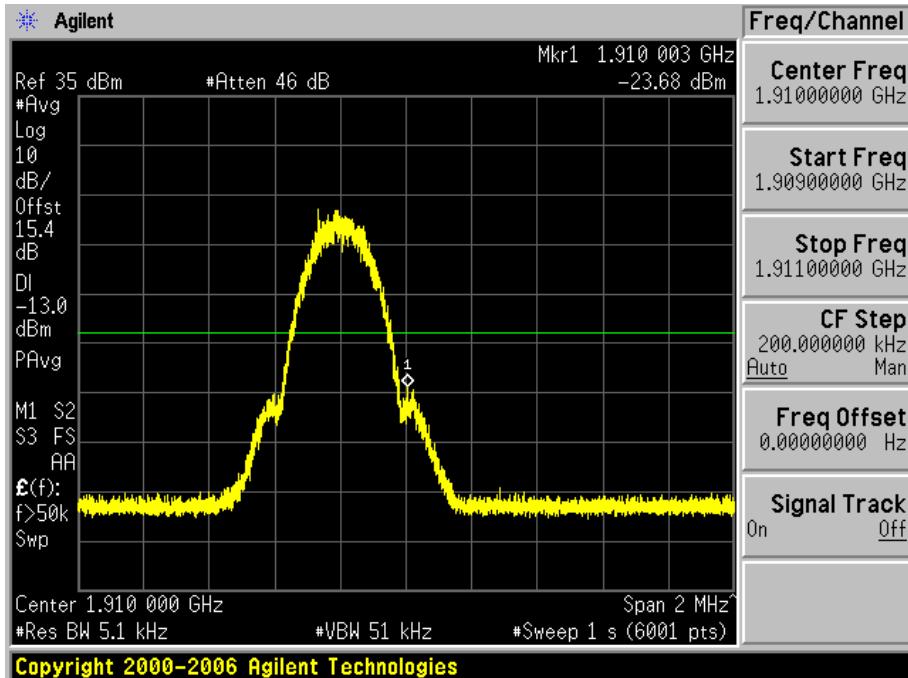
Test Band=GSM1900

Test Mode=GSM/TM1

Test Channel=LCH

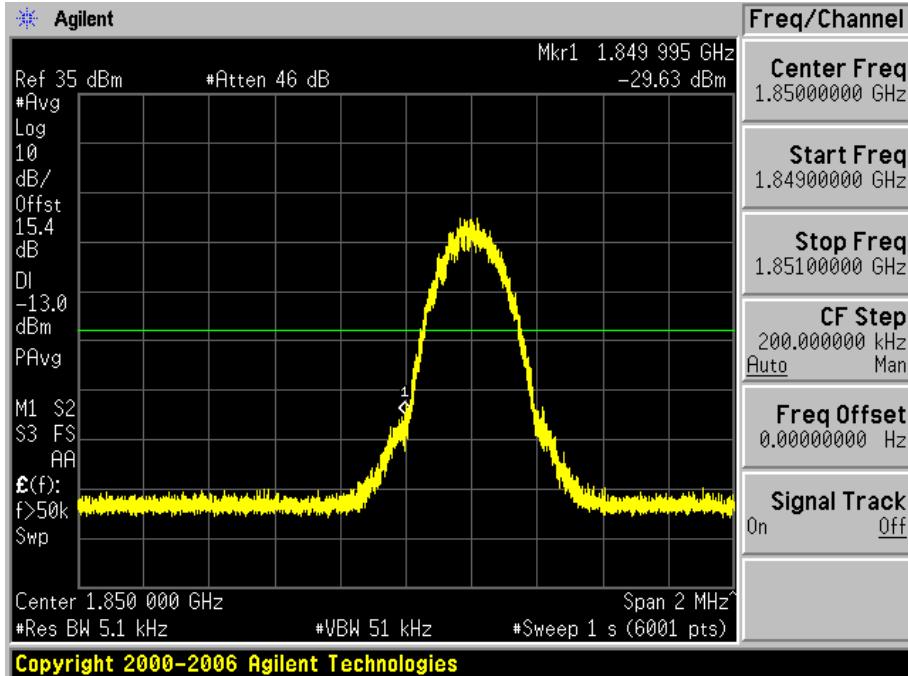


Test Channel=HCH

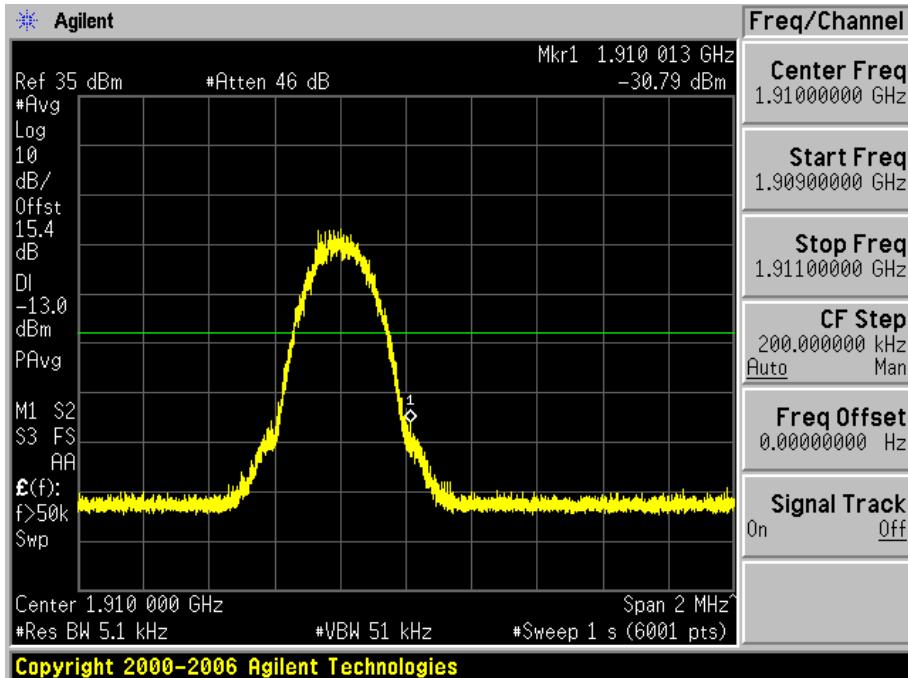


Test Mode=GSM/TM2

Test Channel=LCH



Test Channel=HCH



## WCDMA

### Test Graphs:

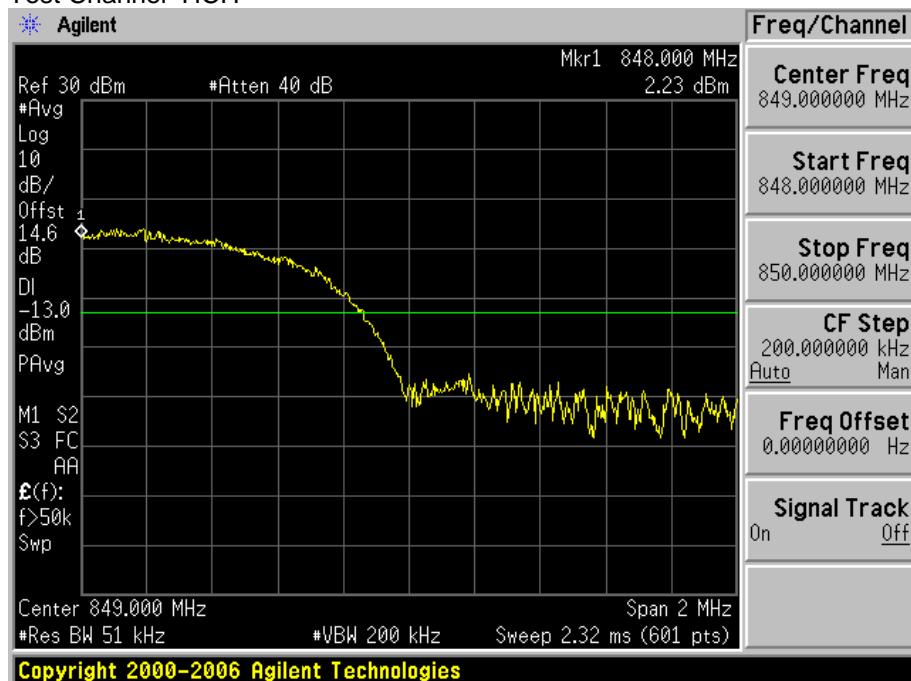
Test Band=WCDMA850

Test Mode=UMTS/TM1

Test Channel=LCH



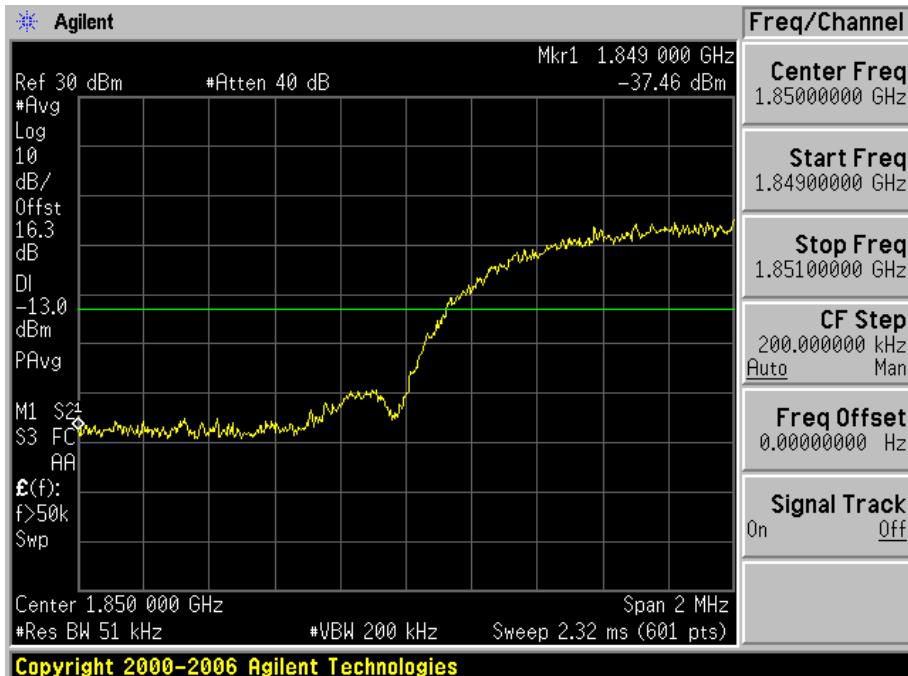
Test Channel=HCH



Test Band=WCDMA1900

Test Mode=UMTSTM1

Test Channel=LCH

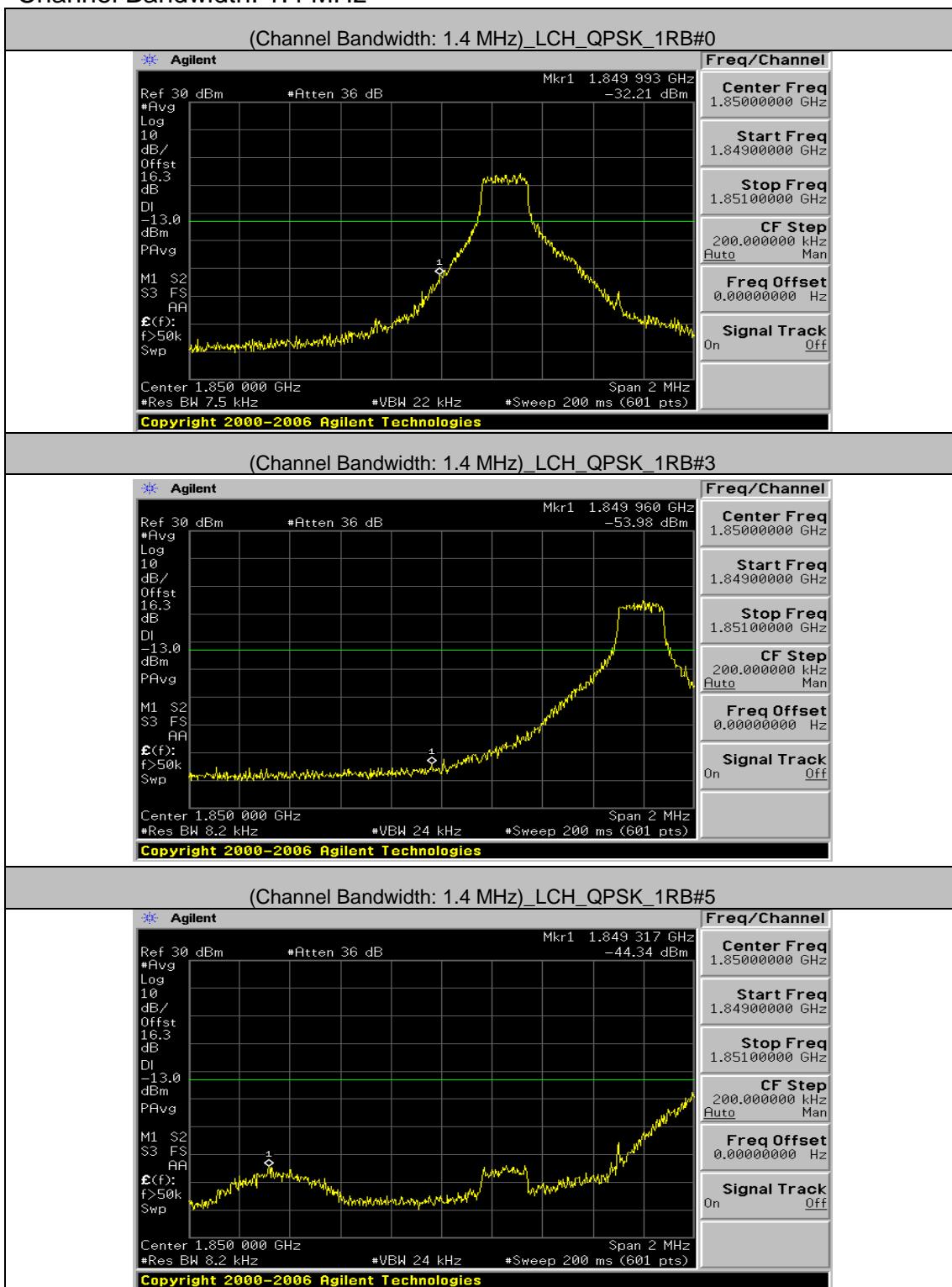


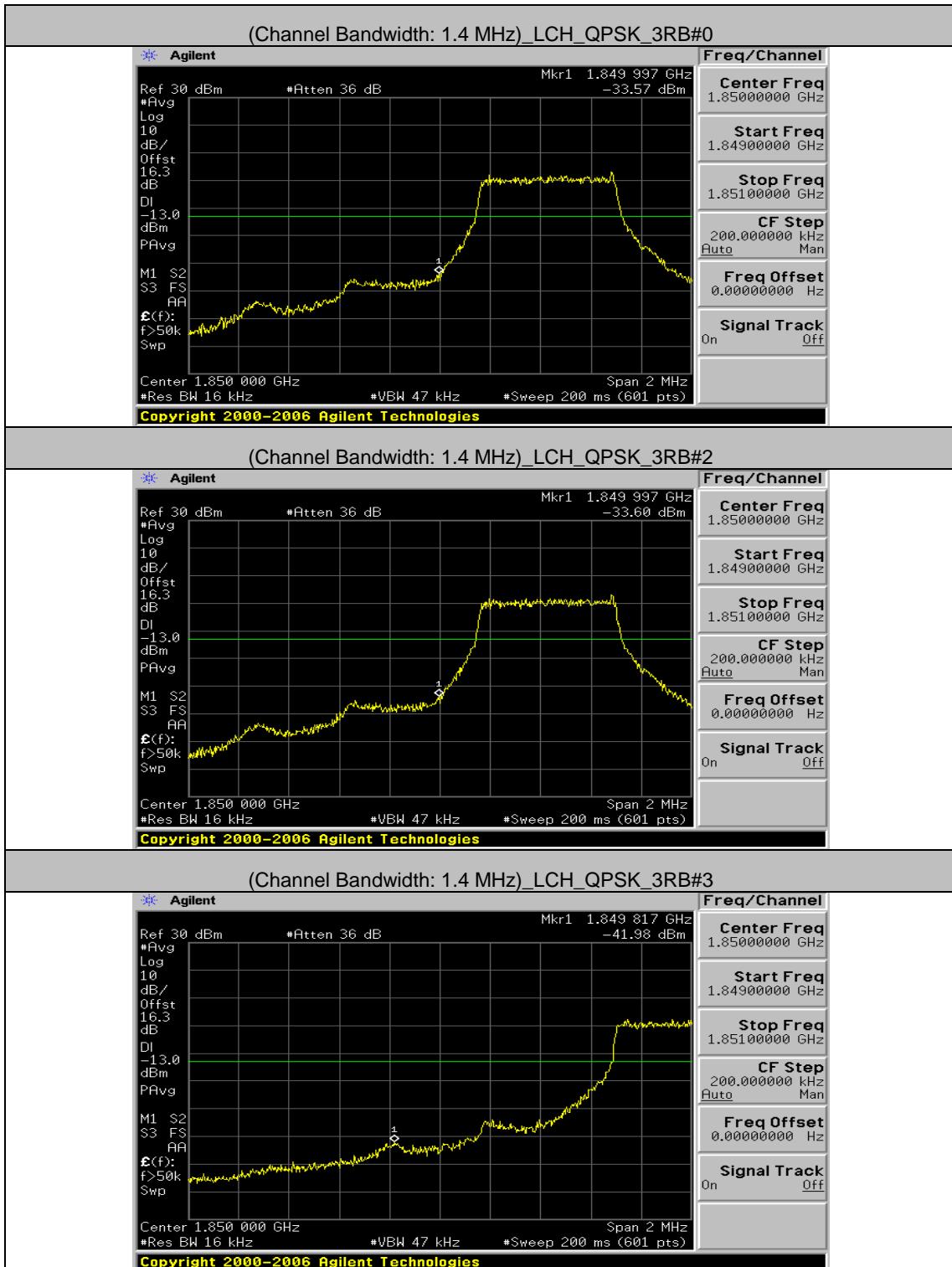
Test Channel=HCH

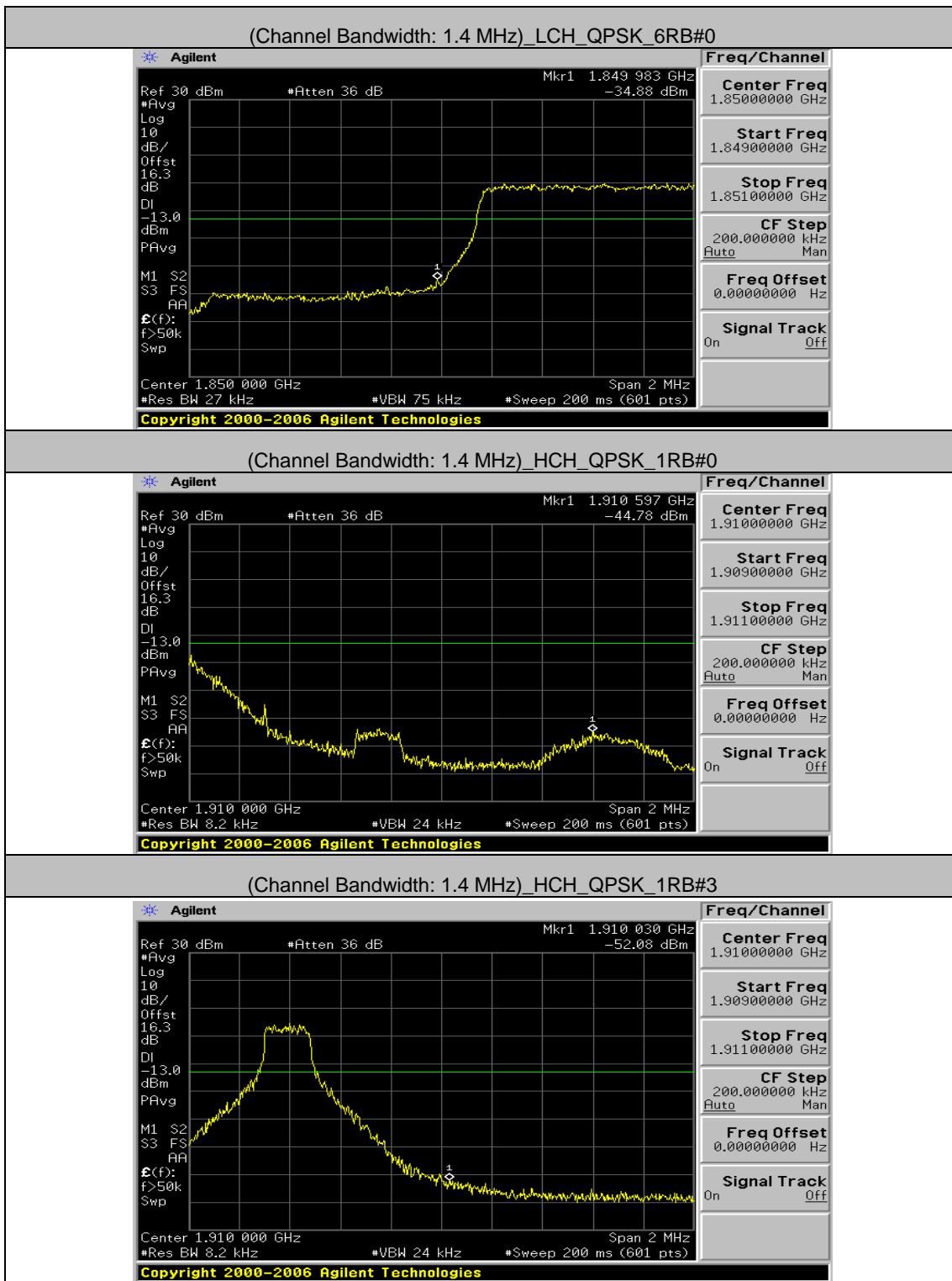


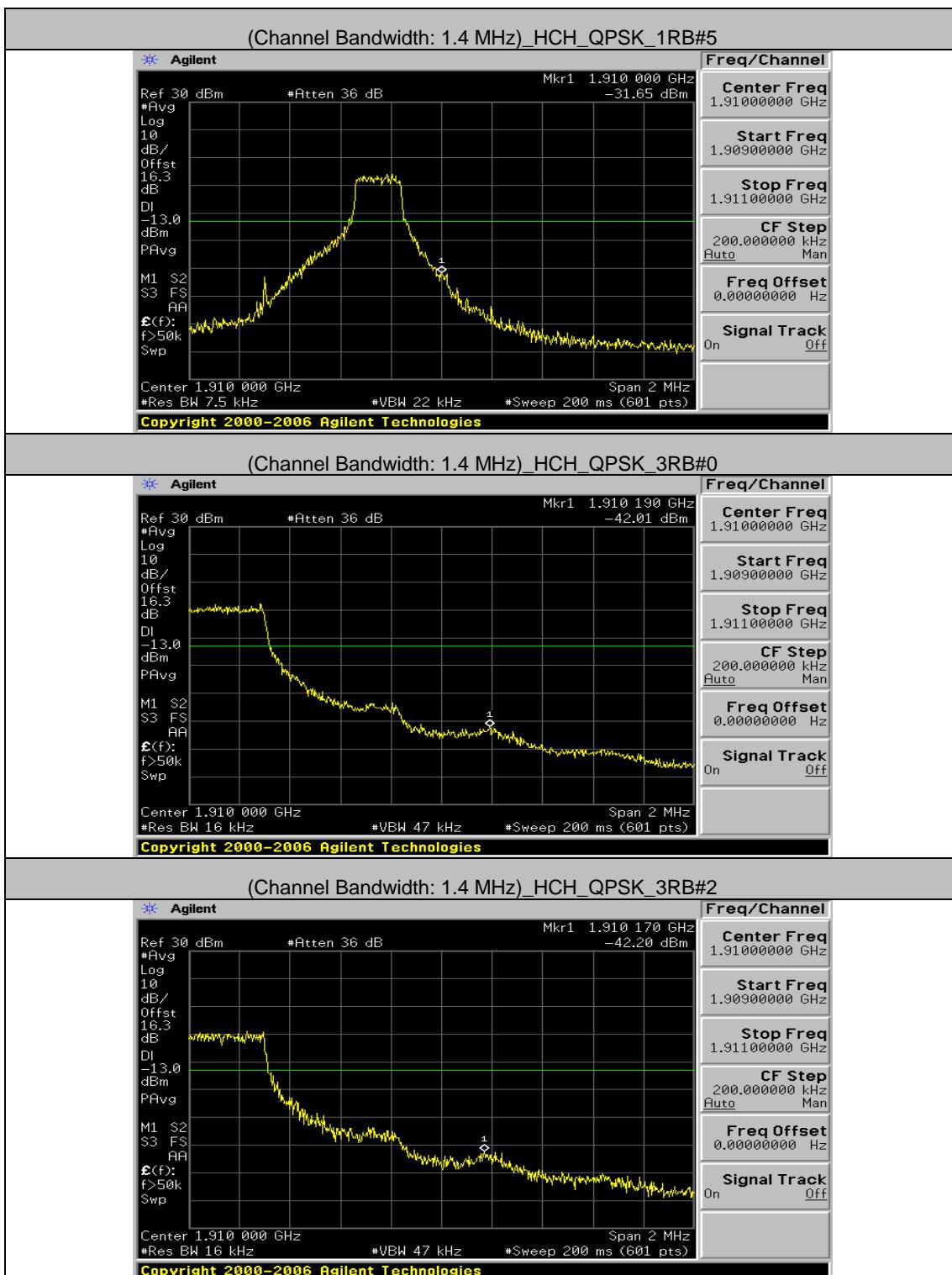
**LTE Band 2**
**Test Graphs:**

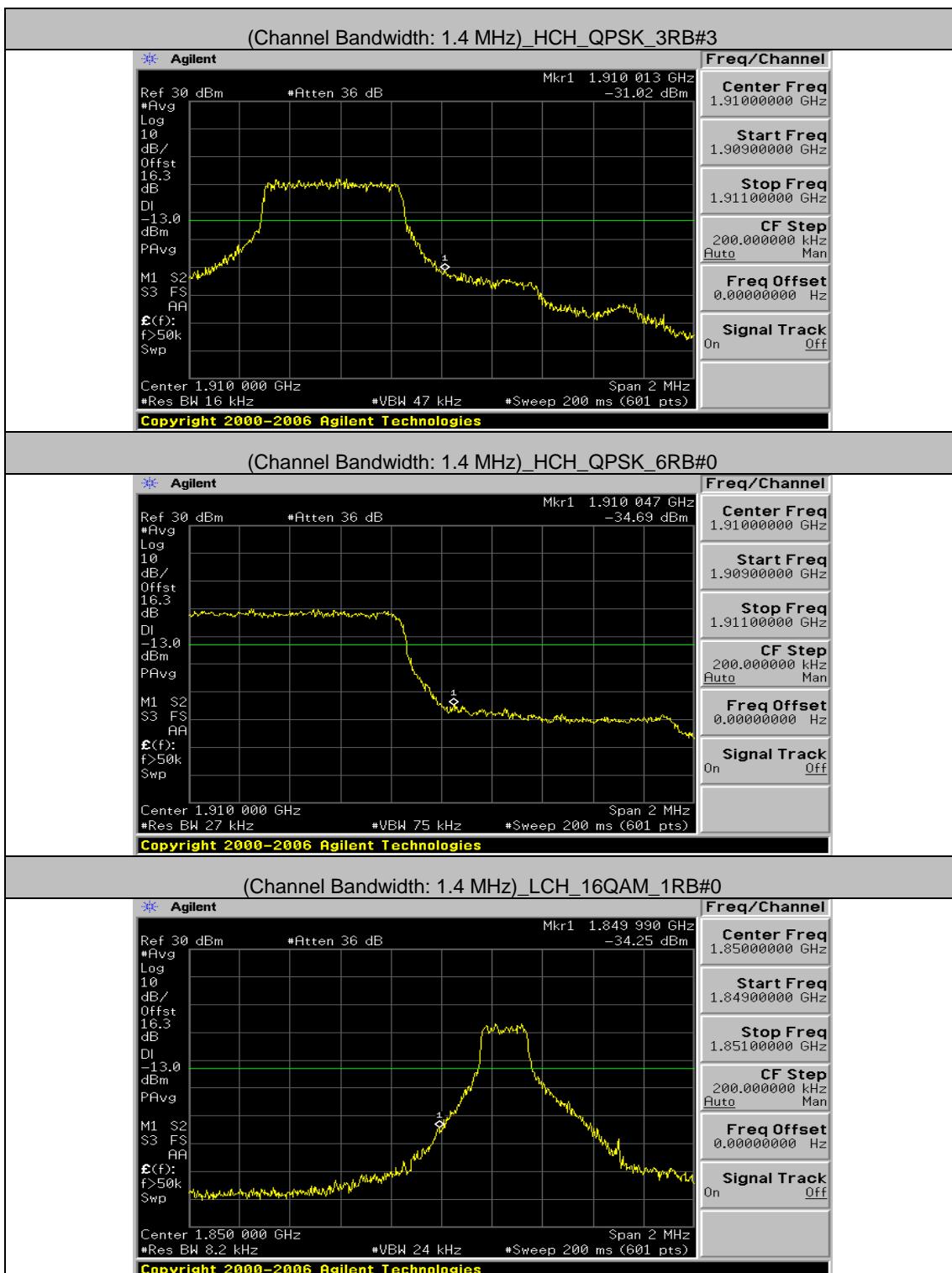
Channel Bandwidth: 1.4 MHz

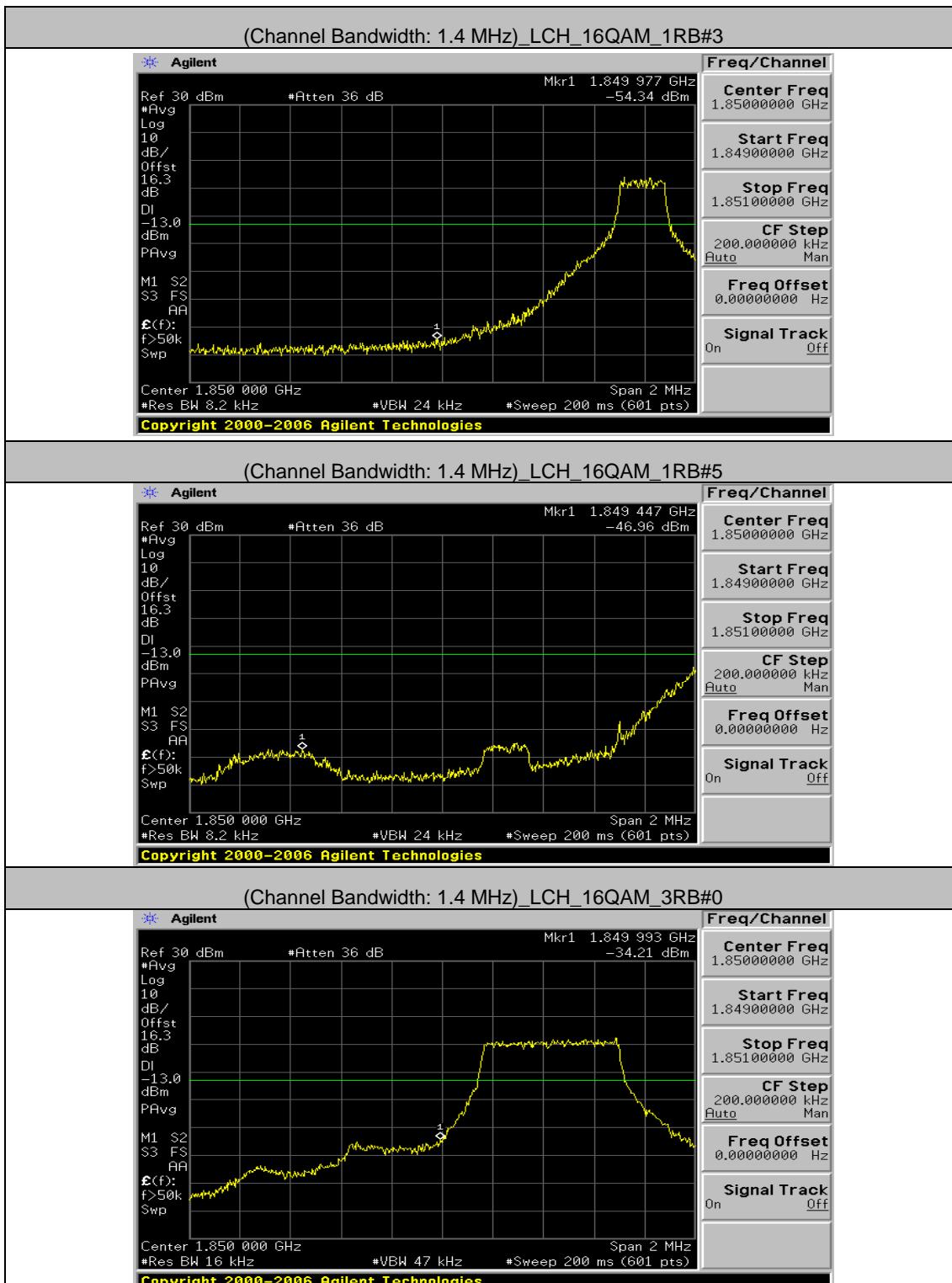


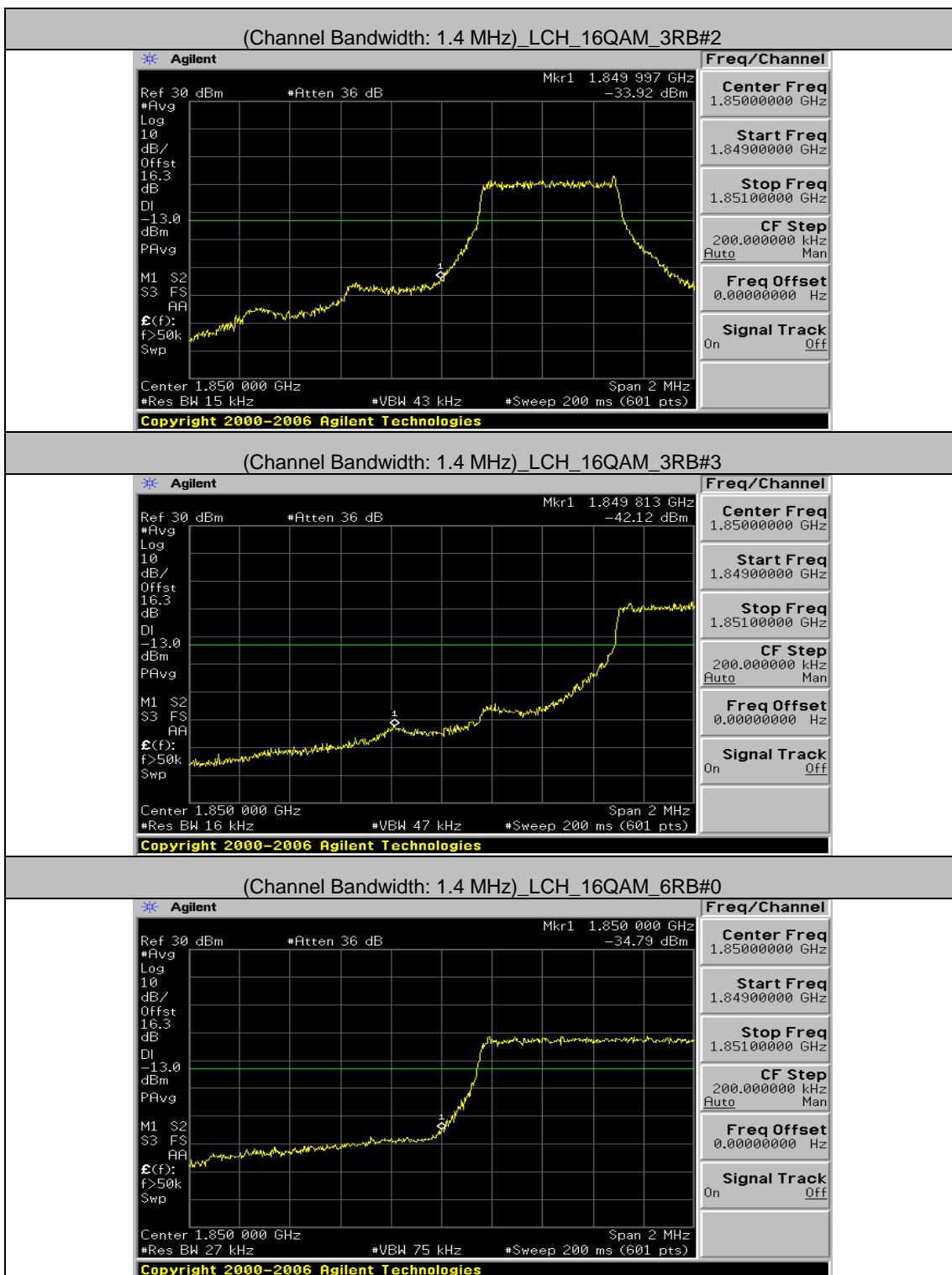


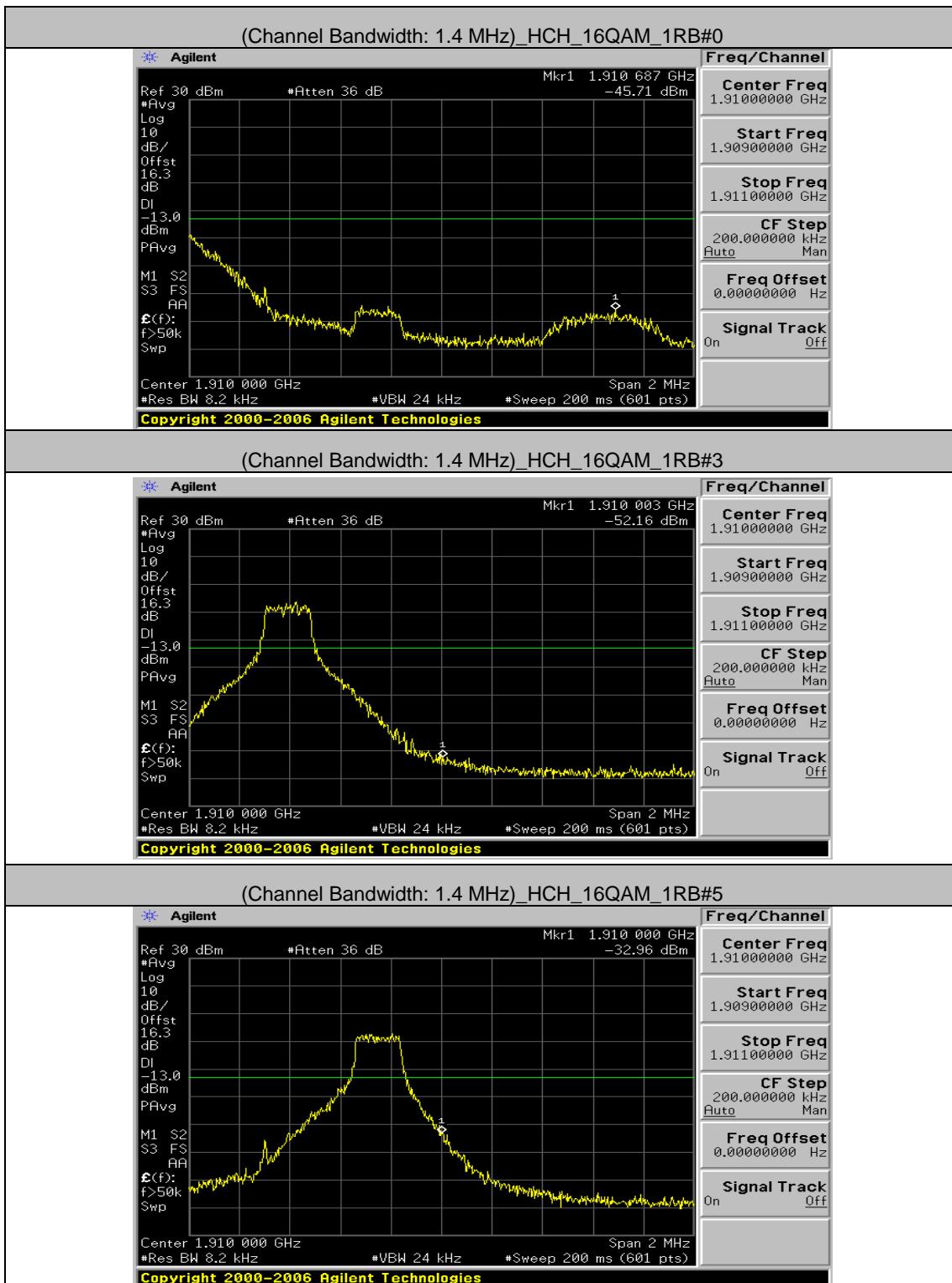


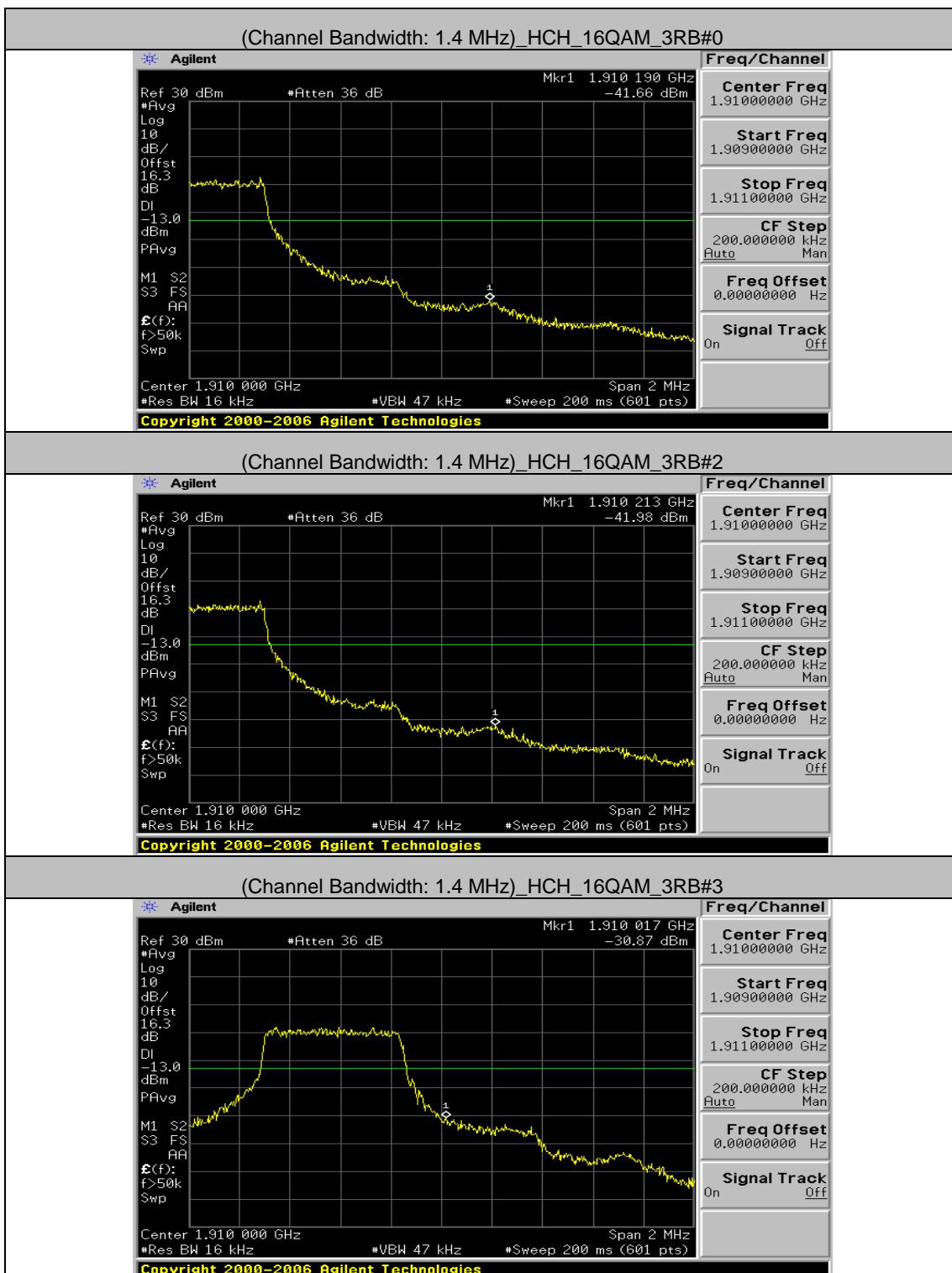


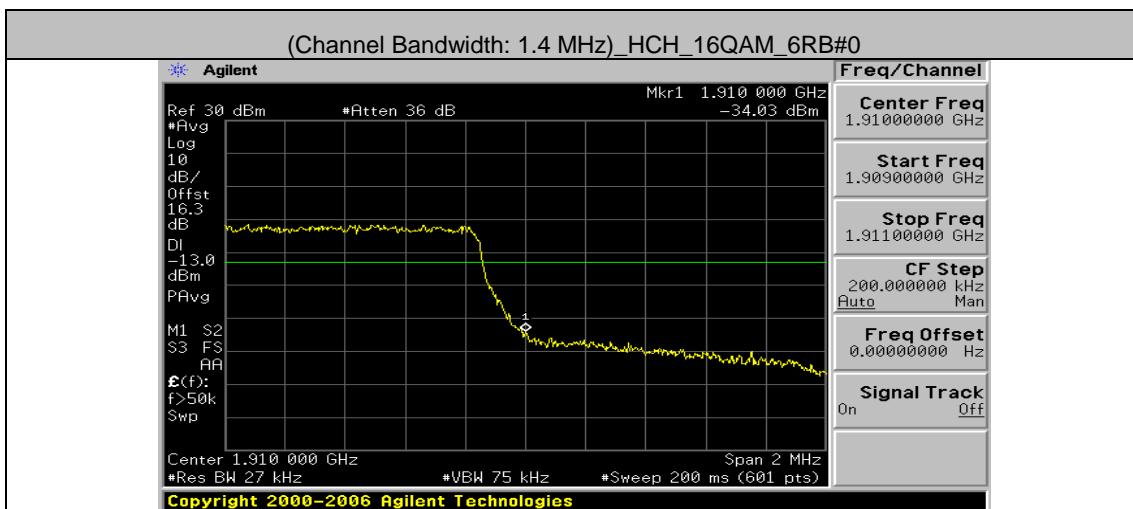




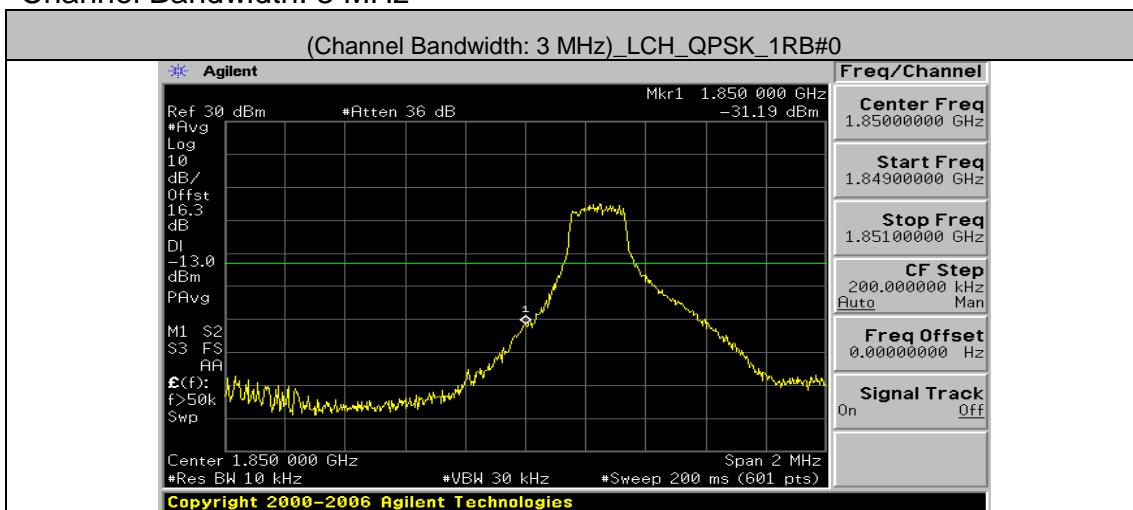








### Channel Bandwidth: 3 MHz



### (Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_1RB#7

