

Appendix B: Test Data for E-UTRA Band 4

Product Name: Personal Mobile Alarm System

Trade Mark: N/A

Test Model: EV-07B-LTE

Environmental Conditions

Temperature:	22.6° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Wang.Chuang

B.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)

Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.97	23.10	PASS
		1	3	22.95	23.09	PASS
		1	5	22.92	23.11	PASS
		3	0	22.96	22.20	PASS
		3	2	22.93	22.14	PASS
		3	3	23.00	22.17	PASS
		6	0	21.93	21.12	PASS
	MCH	1	0	22.27	22.94	PASS
		1	3	22.24	22.95	PASS
		1	5	22.23	23.03	PASS
		3	0	22.23	20.99	PASS
		3	2	22.28	21.07	PASS
		3	3	22.20	20.99	PASS
		6	0	21.22	20.18	PASS
	HCH	1	0	22.60	22.56	PASS
		1	3	22.53	22.65	PASS
		1	5	22.55	22.56	PASS
		3	0	22.68	22.01	PASS
		3	2	22.73	21.99	PASS
		3	3	22.65	22.01	PASS
		6	0	21.84	20.74	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.88	23.02	PASS
		1	7	22.92	23.02	PASS
		1	14	22.93	23.01	PASS
		8	0	21.89	20.98	PASS
		8	4	21.94	21.01	PASS
		8	7	21.94	20.91	PASS
		15	0	21.98	21.01	PASS
	MCH	1	0	22.20	22.17	PASS
		1	7	22.17	22.25	PASS
		1	14	22.18	22.32	PASS
		8	0	21.20	20.27	PASS
		8	4	21.24	20.21	PASS
		8	7	21.17	20.26	PASS
		15	0	21.30	20.32	PASS
	HCH	1	0	22.84	22.83	PASS
		1	7	22.74	22.75	PASS
		1	14	22.78	22.74	PASS
		8	0	21.76	20.87	PASS
		8	4	21.80	20.91	PASS
		8	7	21.75	20.85	PASS
		15	0	21.75	20.76	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.89	22.93	PASS
		1	12	22.84	22.96	PASS
		1	24	22.75	22.79	PASS
		12	0	21.99	21.29	PASS
		12	6	22.01	21.23	PASS
		12	13	21.94	21.19	PASS
		25	0	21.96	21.17	PASS
	MCH	1	0	22.12	22.04	PASS
		1	12	22.19	22.22	PASS
		1	24	22.26	22.20	PASS
		12	0	21.14	20.51	PASS
		12	6	21.24	20.51	PASS
		12	13	21.34	20.51	PASS
		25	0	21.28	20.41	PASS
	HCH	1	0	22.89	21.25	PASS
		1	12	22.85	21.20	PASS
		1	24	22.77	21.11	PASS
		12	0	21.83	21.01	PASS
		12	6	21.79	20.96	PASS
		12	13	21.73	20.92	PASS
		25	0	21.75	21.06	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.91	22.96	PASS
		1	24	22.73	22.78	PASS
		1	49	22.50	22.54	PASS
		25	0	21.90	21.03	PASS
		25	12	21.75	20.91	PASS
		25	25	21.59	20.76	PASS
		50	0	21.70	20.85	PASS
	MCH	1	0	22.06	22.06	PASS
		1	24	22.13	22.19	PASS
		1	49	22.33	22.45	PASS
		25	0	21.19	20.21	PASS
		25	12	21.20	20.33	PASS
		25	25	21.32	20.46	PASS
		50	0	21.28	20.39	PASS
	HCH	1	0	22.86	22.18	PASS
		1	24	22.88	22.19	PASS
		1	49	22.67	22.09	PASS
		25	0	21.93	20.98	PASS
		25	12	21.79	20.97	PASS
		25	25	21.74	20.87	PASS
		50	0	21.80	20.98	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.86	22.92	PASS
		1	37	22.63	22.66	PASS
		1	74	22.25	22.24	PASS
		37	0	21.78	20.95	PASS
		37	18	21.62	20.78	PASS
		37	38	21.56	20.60	PASS
		75	0	21.68	20.73	PASS
	MCH	1	0	22.05	22.04	PASS
		1	37	22.15	22.20	PASS
		1	74	22.46	22.56	PASS
		37	0	21.13	20.29	PASS
		37	18	21.23	20.38	PASS
		37	38	21.39	20.49	PASS
		75	0	21.24	20.33	PASS
	HCH	1	0	22.74	21.82	PASS
		1	37	22.97	22.16	PASS
		1	74	22.77	22.05	PASS
		37	0	21.86	21.01	PASS
		37	18	21.85	21.01	PASS
		37	38	21.86	21.00	PASS
		75	0	21.69	20.85	PASS

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.03	21.96	PASS
		1	49	22.62	21.62	PASS
		1	99	22.32	21.23	PASS
		50	0	21.76	20.76	PASS
		50	25	21.55	20.63	PASS
		50	50	21.31	20.41	PASS
		100	0	21.52	20.58	PASS
	MCH	1	0	22.31	21.41	PASS
		1	49	22.33	21.38	PASS
		1	99	22.76	21.87	PASS
		50	0	21.22	20.19	PASS
		50	25	21.21	20.27	PASS
		50	50	21.38	20.50	PASS
		100	0	21.31	20.29	PASS
	HCH	1	0	22.45	21.54	PASS
		1	49	23.00	22.08	PASS
		1	99	22.85	21.93	PASS
		50	0	21.71	20.68	PASS
		50	25	21.74	20.90	PASS
		50	50	21.84	20.92	PASS
		100	0	21.59	20.80	PASS

A.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.77	<13	PASS
	MCH	5.39	<13	PASS
	HCH	5.58	<13	PASS
16QAM	LCH	6.59	<13	PASS
	MCH	6.36	<13	PASS
	HCH	6.56	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.75	<13	PASS
	MCH	5.48	<13	PASS
	HCH	5.78	<13	PASS
16QAM	LCH	6.72	<13	PASS
	MCH	6.43	<13	PASS
	HCH	6.46	<13	PASS

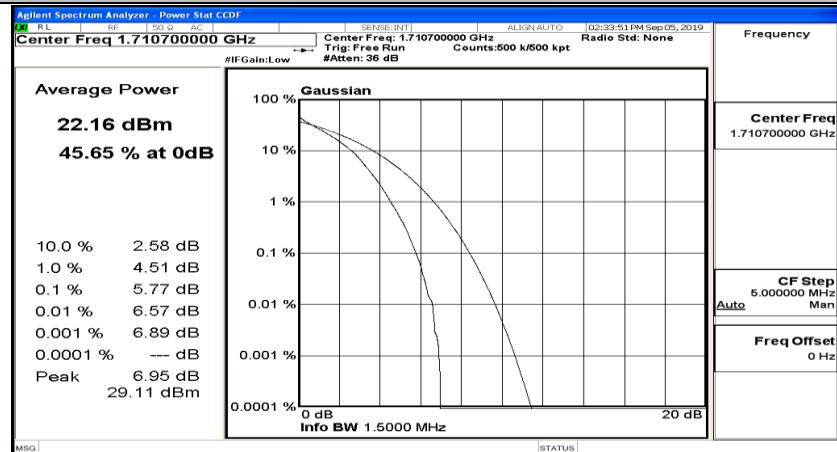
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.66	<13	PASS
	MCH	5.43	<13	PASS
	HCH	5.6	<13	PASS
16QAM	LCH	6.48	<13	PASS
	MCH	6.27	<13	PASS
	HCH	6.39	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.67	<13	PASS
	MCH	5.48	<13	PASS
	HCH	5.67	<13	PASS
16QAM	LCH	6.35	<13	PASS
	MCH	6.22	<13	PASS
	HCH	6.4	<13	PASS

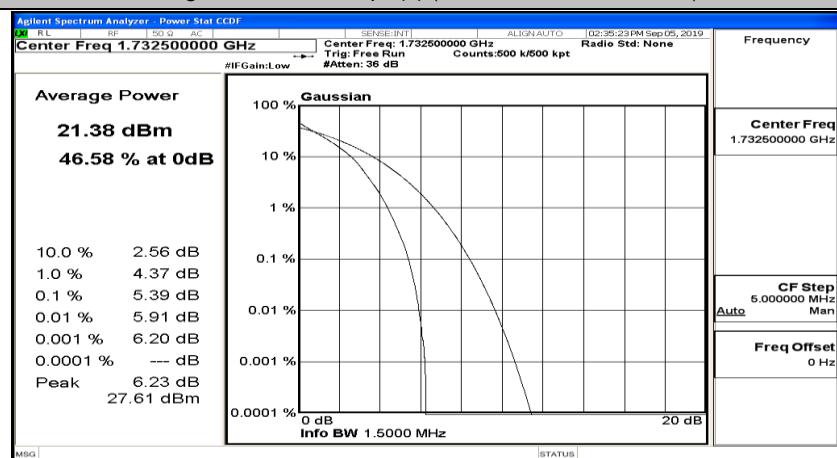
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.91	<13	PASS
	MCH	4.88	<13	PASS
	HCH	4.97	<13	PASS
16QAM	LCH	6.24	<13	PASS
	MCH	6.2	<13	PASS
	HCH	6.37	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.66	<13	PASS
	MCH	5.6	<13	PASS
	HCH	5.75	<13	PASS
16QAM	LCH	6.75	<13	PASS
	MCH	6.75	<13	PASS
	HCH	6.7	<13	PASS

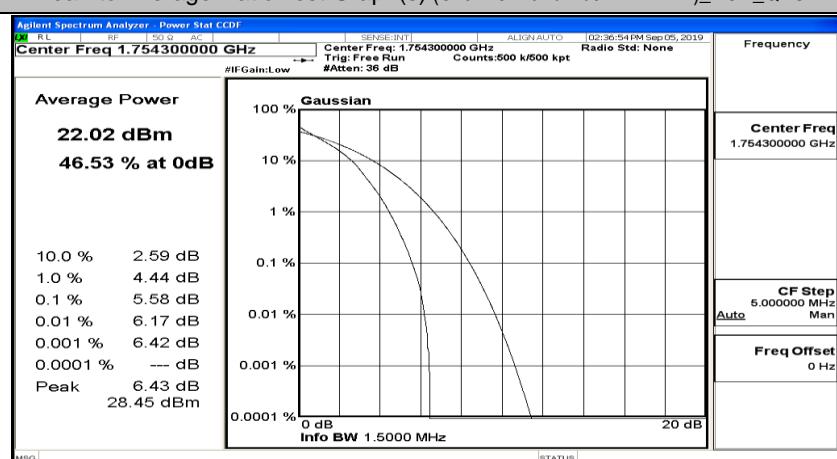
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



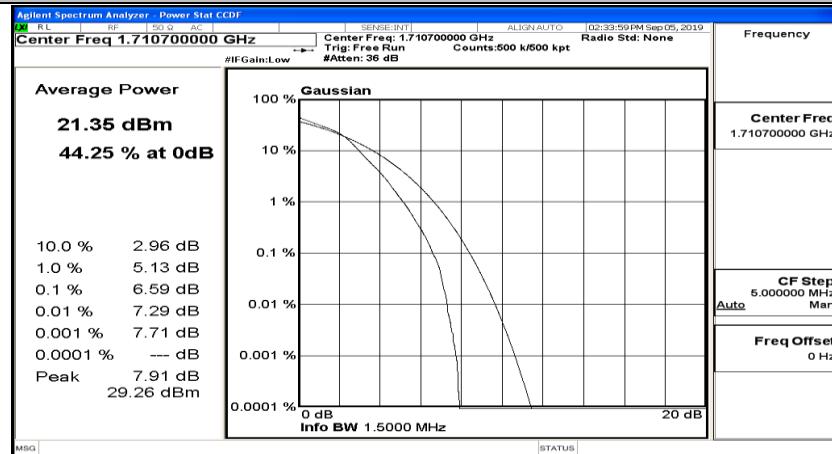
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



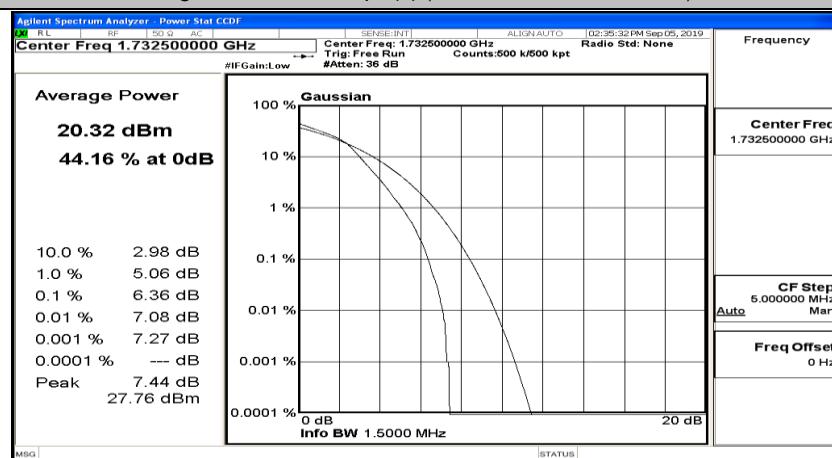
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



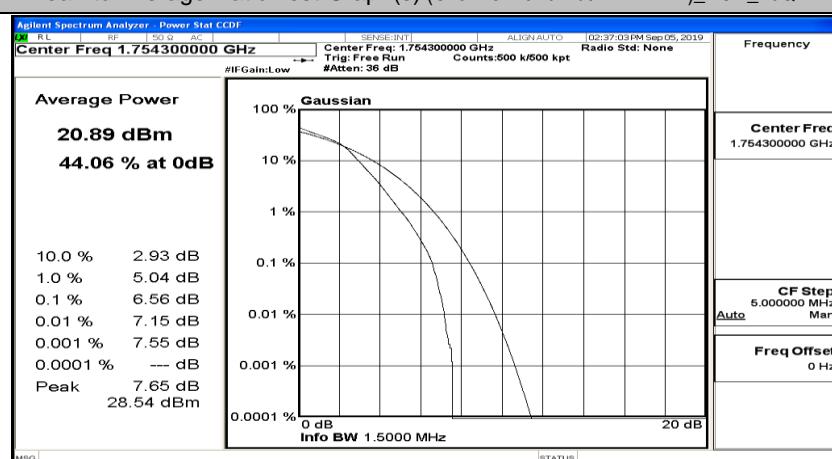
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



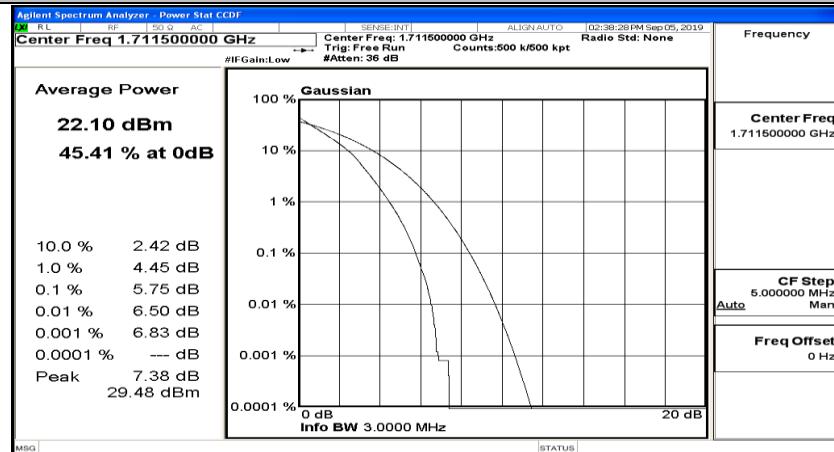
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



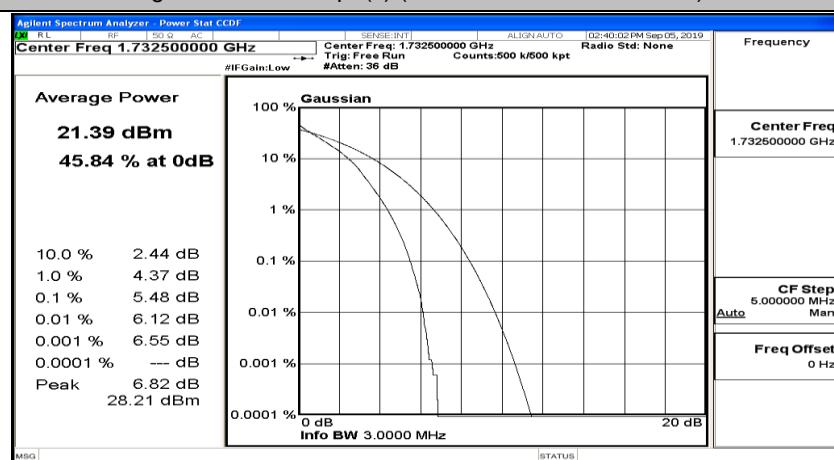
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



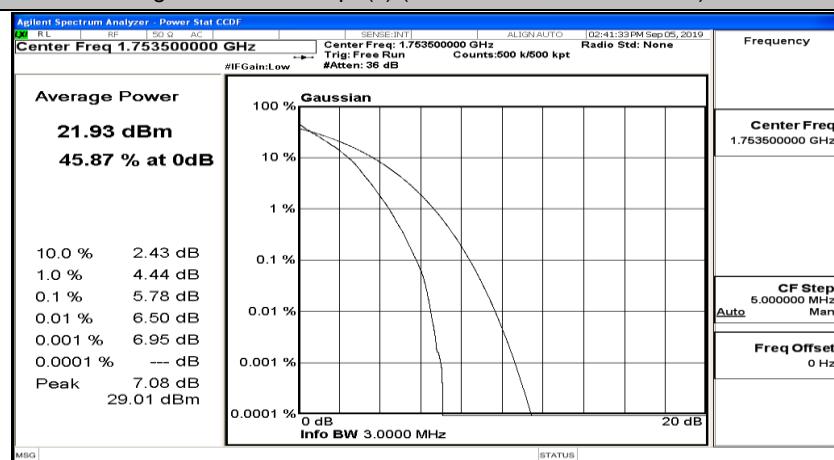
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



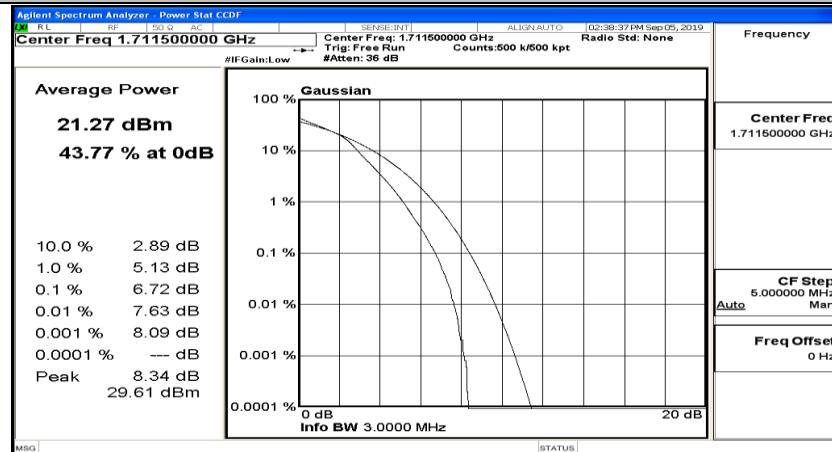
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



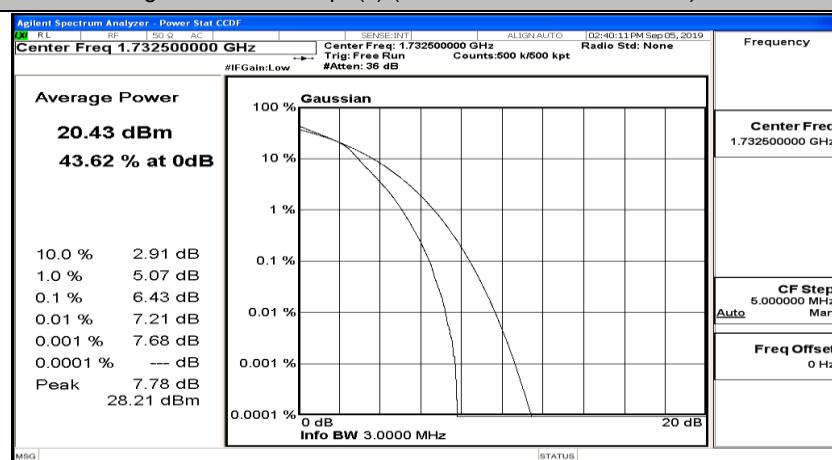
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



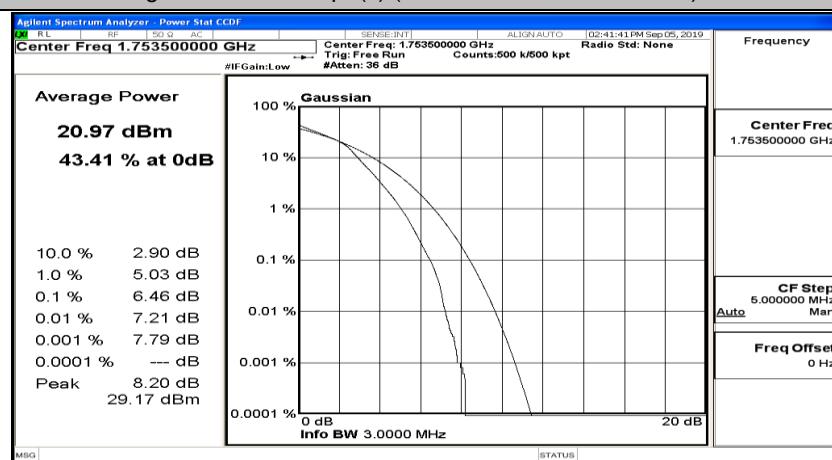
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



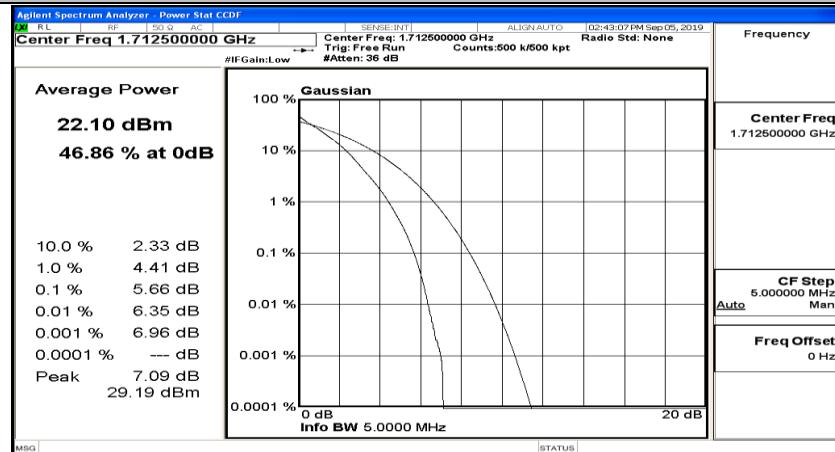
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



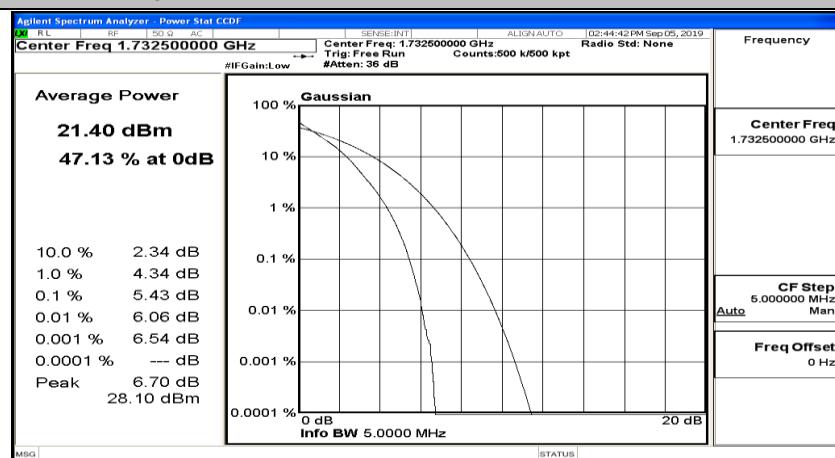
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



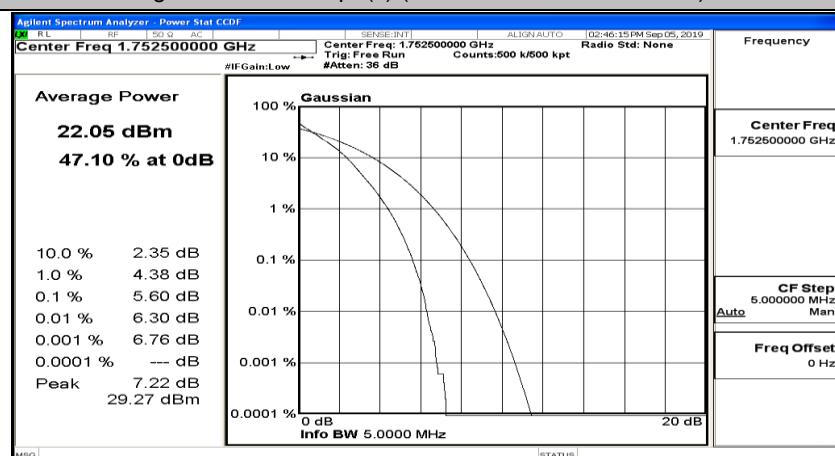
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



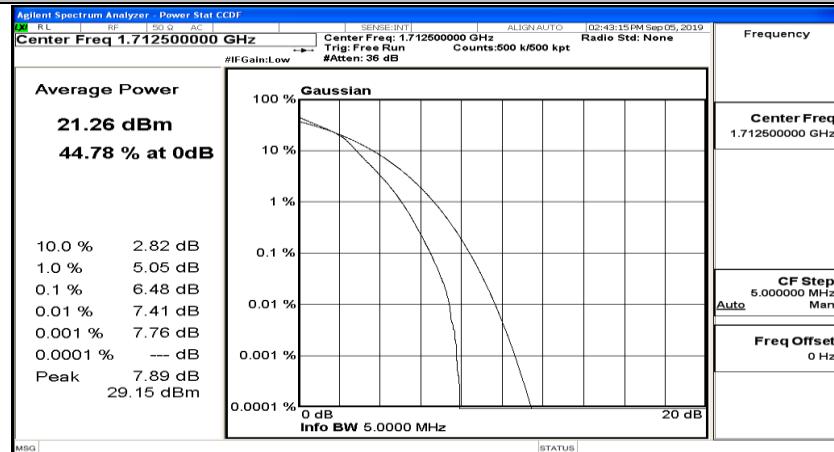
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



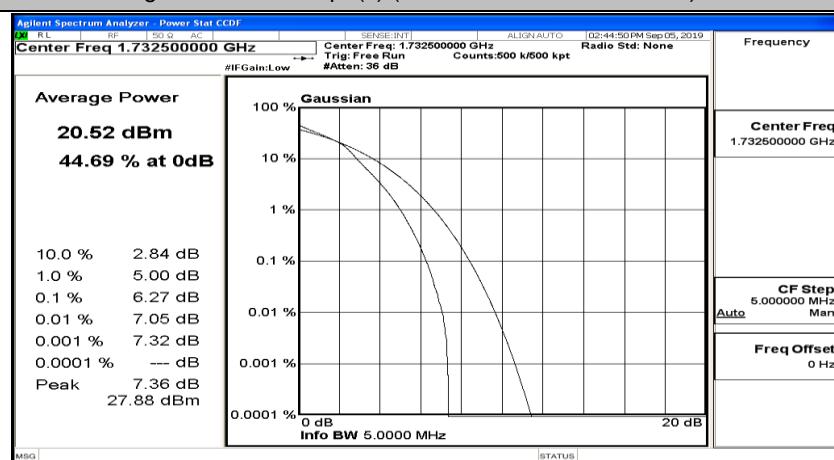
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



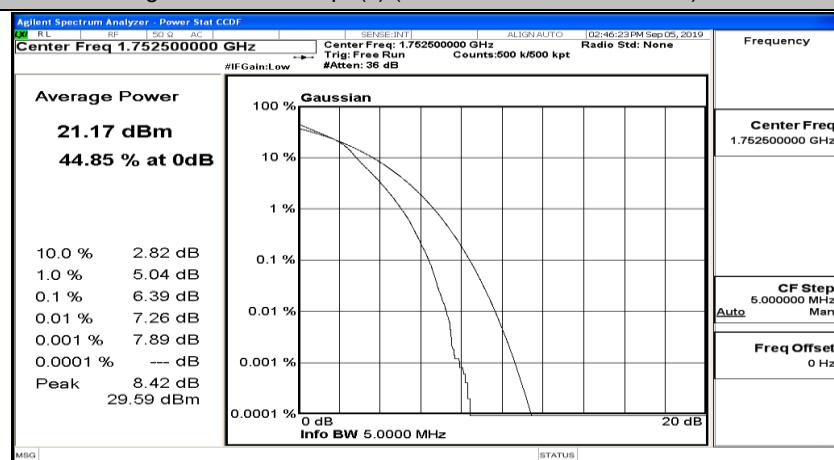
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



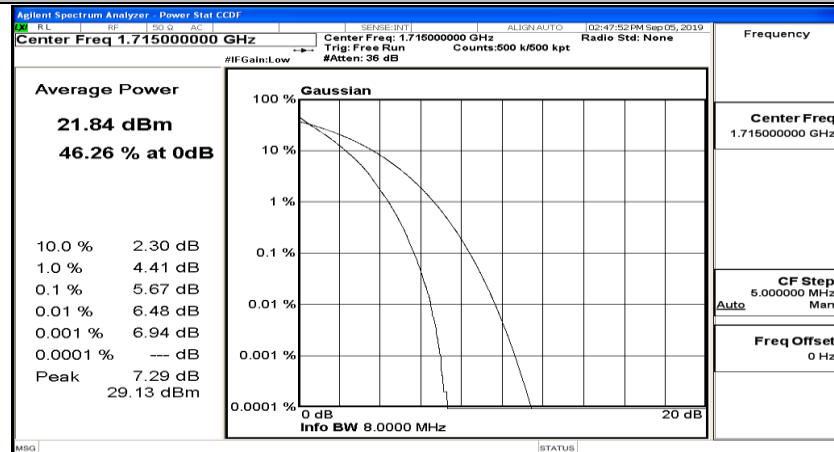
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



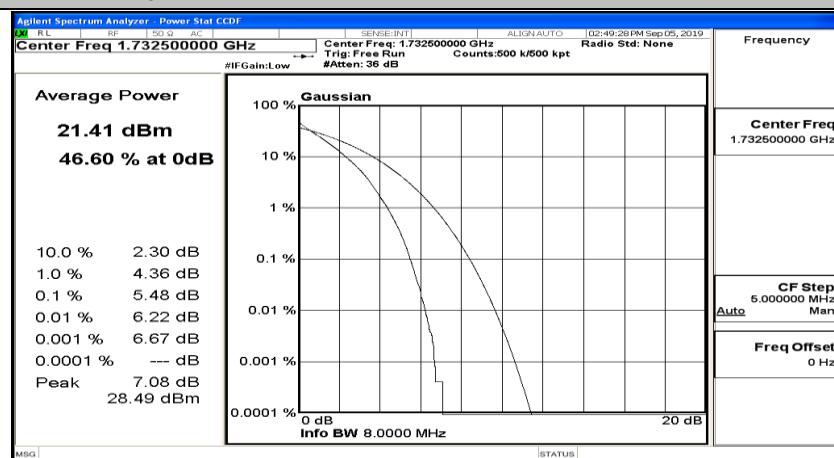
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



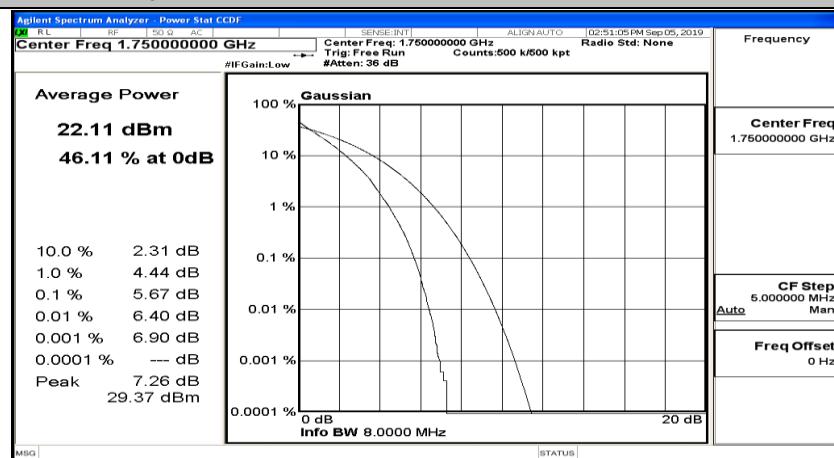
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



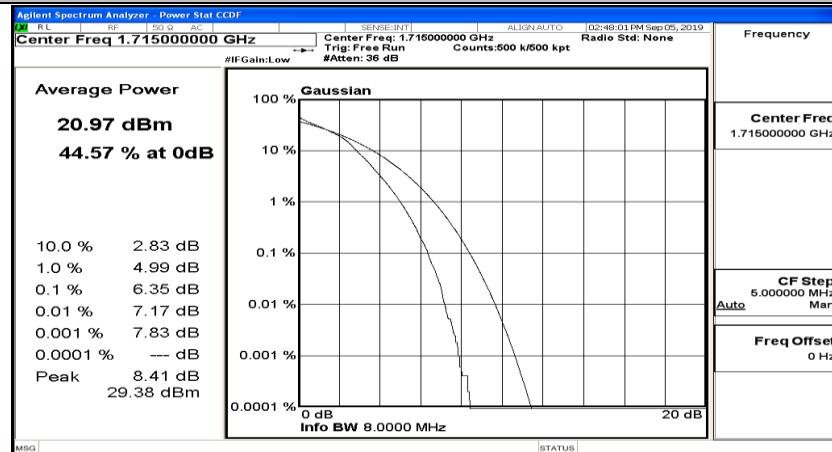
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



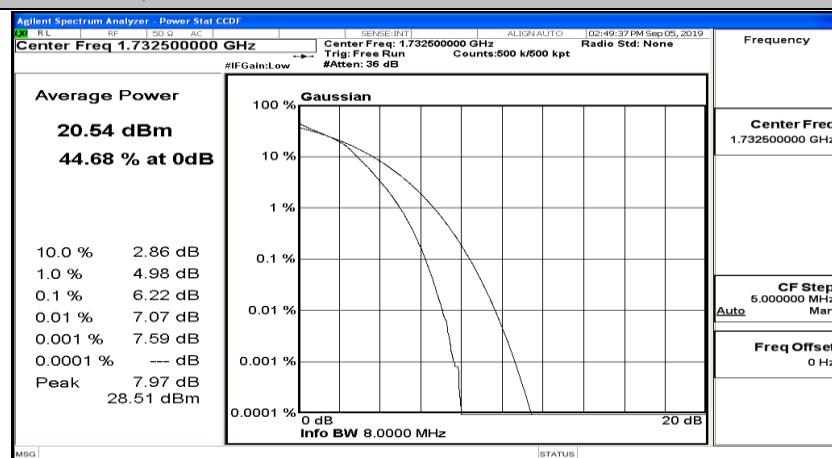
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



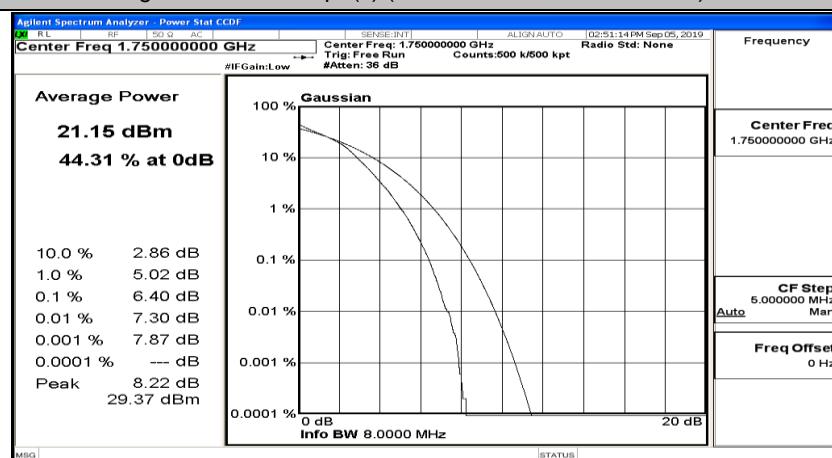
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



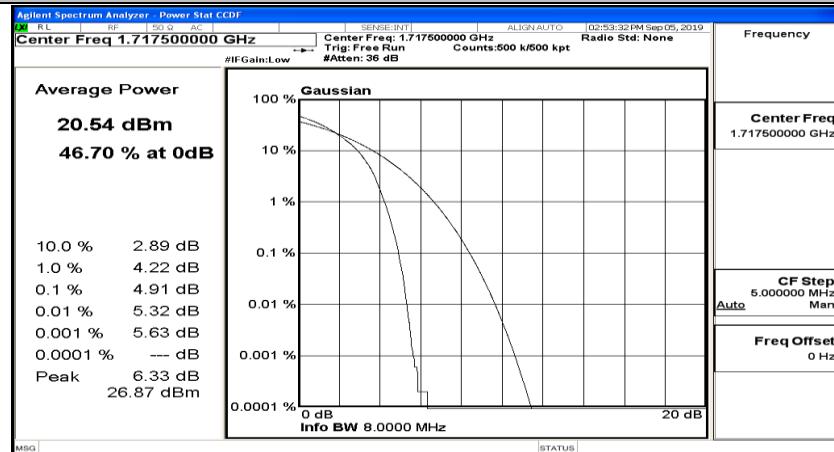
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



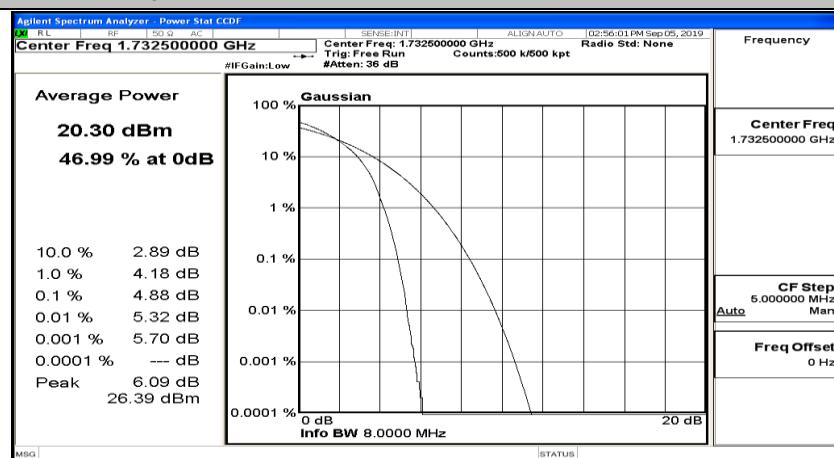
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



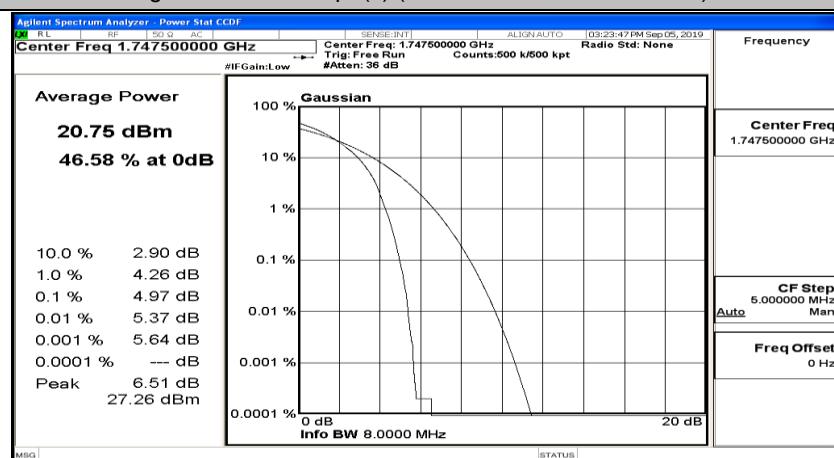
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



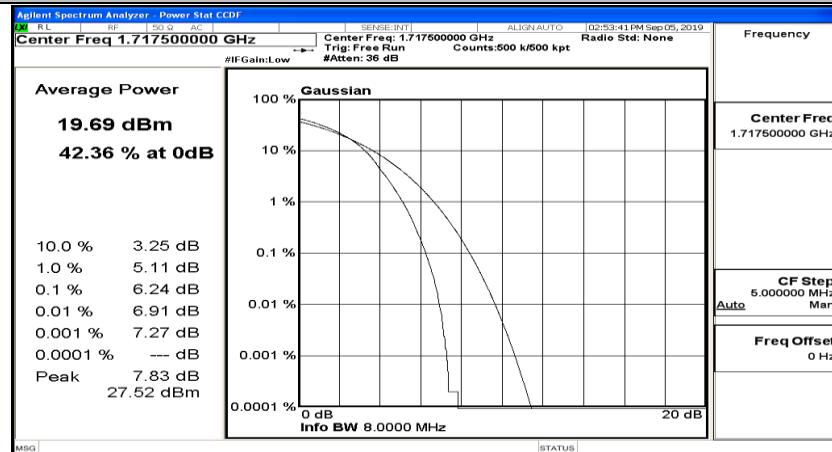
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



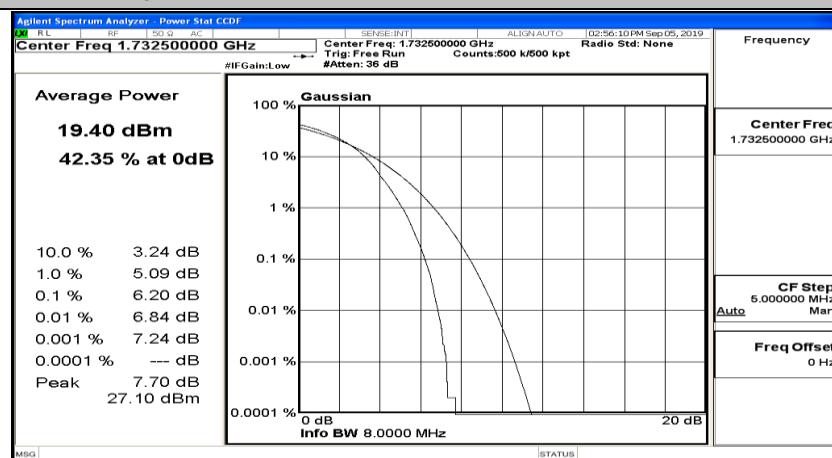
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



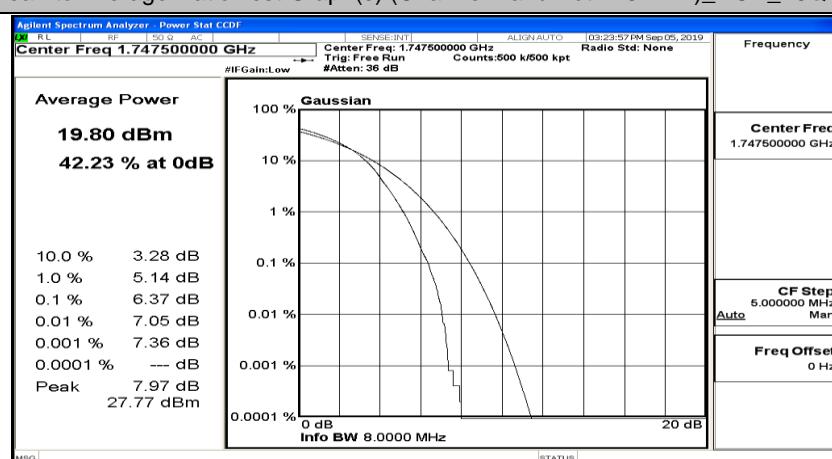
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



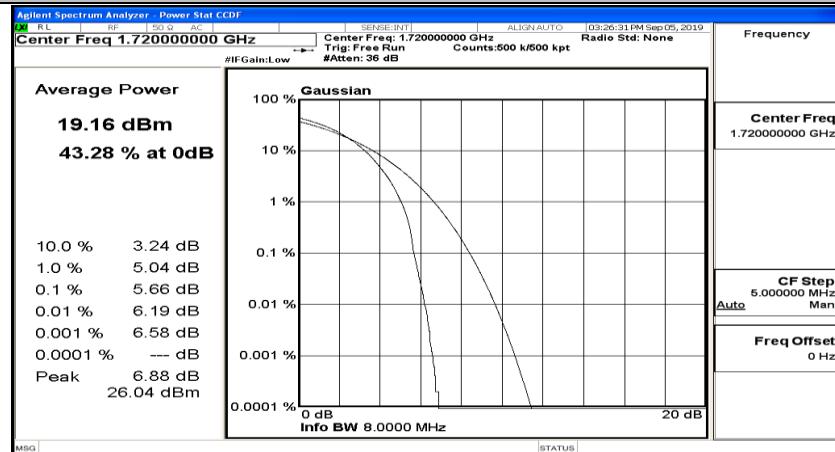
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



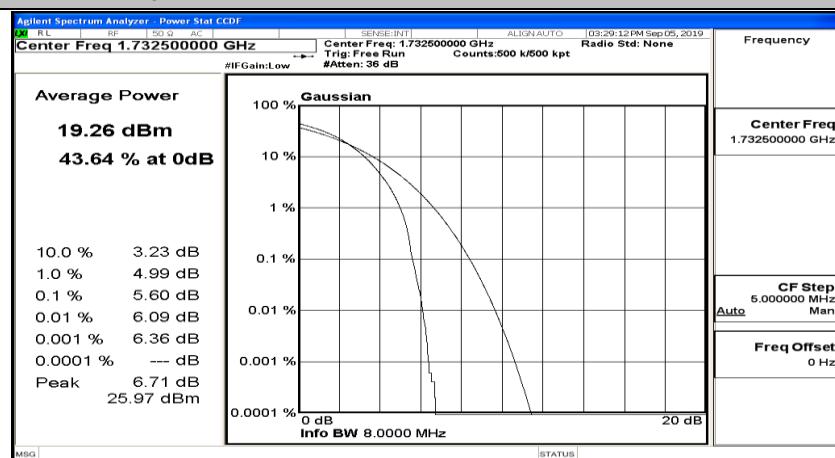
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



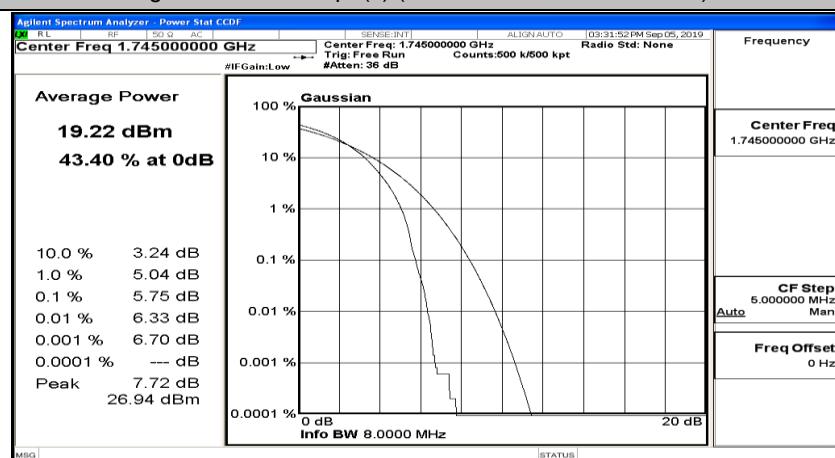
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



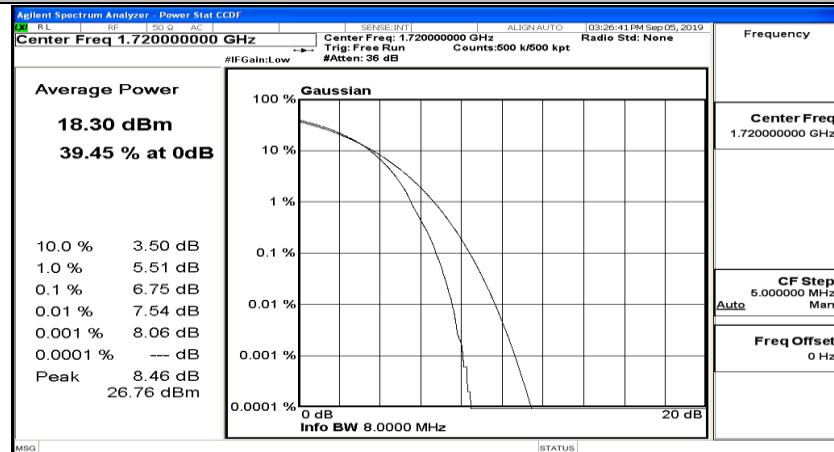
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



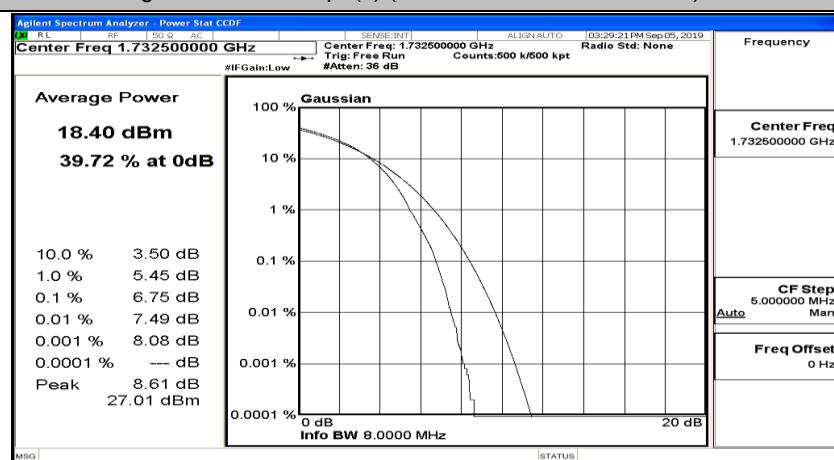
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



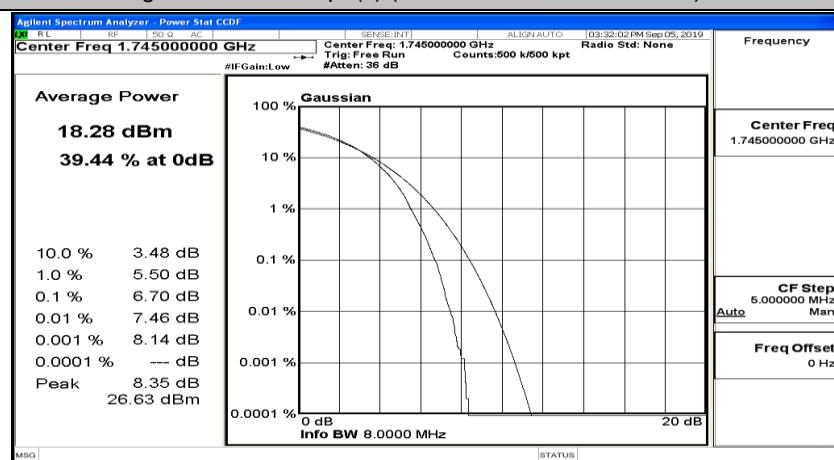
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM



B.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0766	1.225	PASS
	MCH	1.0772	1.221	PASS
	HCH	1.0788	1.205	PASS
16QAM	LCH	1.0809	1.204	PASS
	MCH	1.0780	1.228	PASS
	HCH	1.0774	1.264	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6834	2.953	PASS
	MCH	2.6818	2.954	PASS
	HCH	2.6869	2.950	PASS
16QAM	LCH	2.6863	2.966	PASS
	MCH	2.6888	2.966	PASS
	HCH	2.6883	2.978	PASS

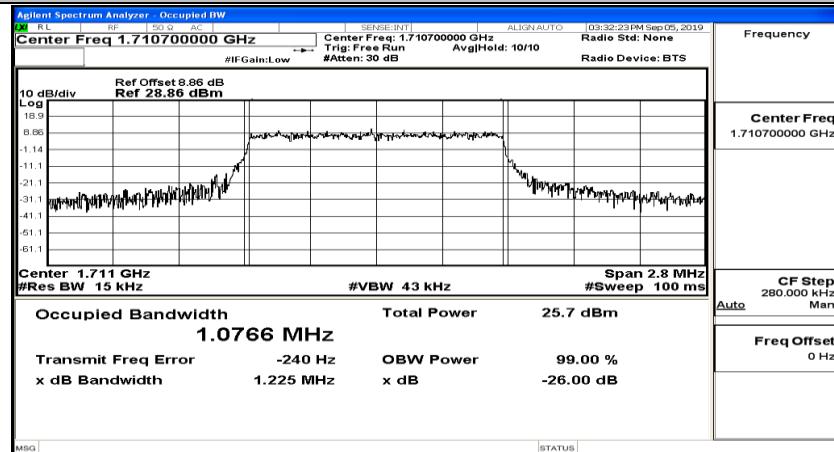
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4647	4.807	PASS
	MCH	4.4702	4.777	PASS
	HCH	4.4723	4.855	PASS
16QAM	LCH	4.4605	4.798	PASS
	MCH	4.4739	4.810	PASS
	HCH	4.4767	4.894	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9342	9.502	PASS
	MCH	8.9277	9.474	PASS
	HCH	8.9294	9.536	PASS
16QAM	LCH	8.9305	9.489	PASS
	MCH	8.9249	9.477	PASS
	HCH	8.9314	9.601	PASS

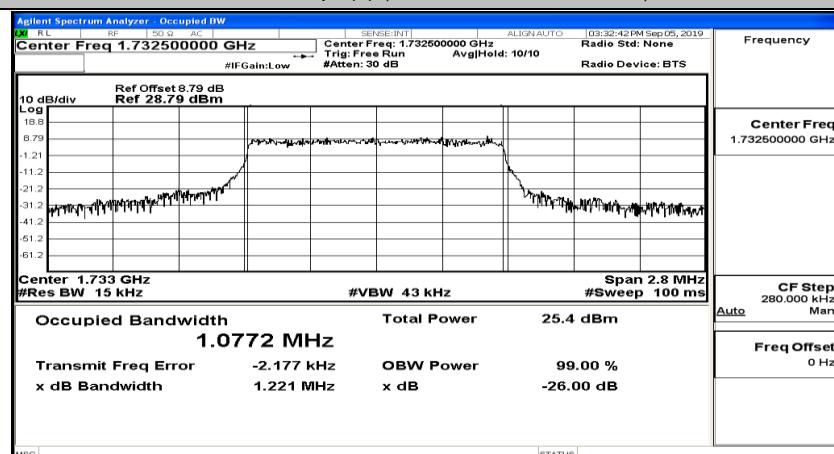
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.405	14.02	PASS
	MCH	13.365	14.15	PASS
	HCH	13.393	14.15	PASS
16QAM	LCH	13.396	14.10	PASS
	MCH	13.376	13.98	PASS
	HCH	13.392	14.13	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.878	18.75	PASS
	MCH	17.818	18.59	PASS
	HCH	17.898	18.80	PASS
16QAM	LCH	17.870	18.73	PASS
	MCH	17.841	18.64	PASS
	HCH	17.898	18.94	PASS

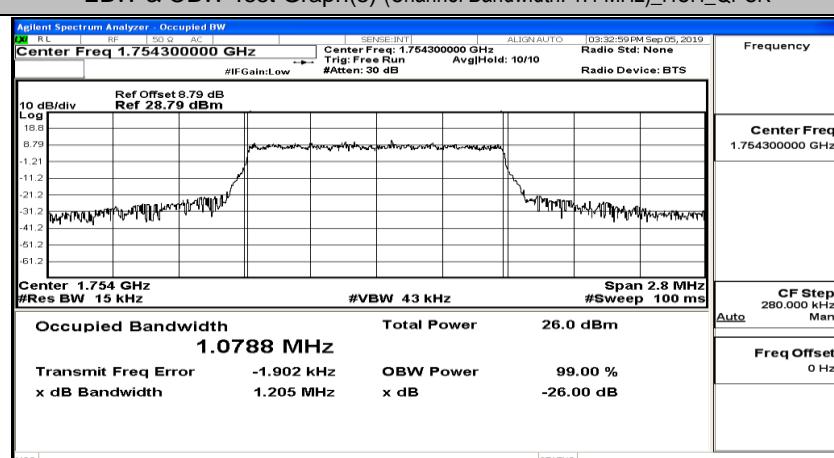
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



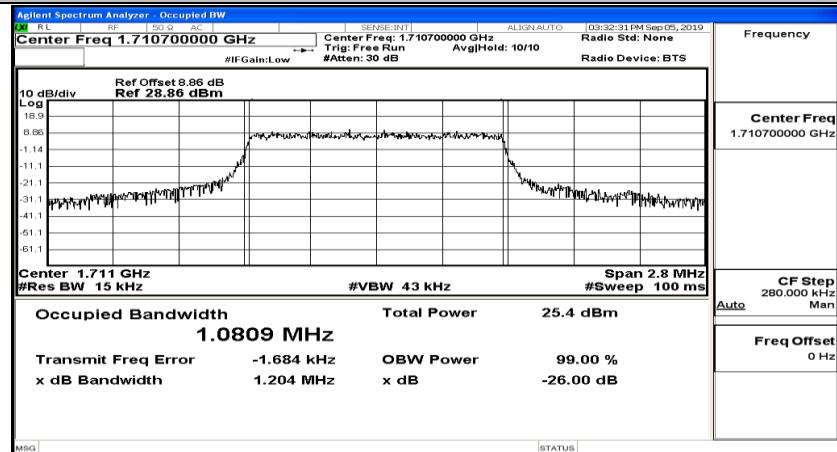
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



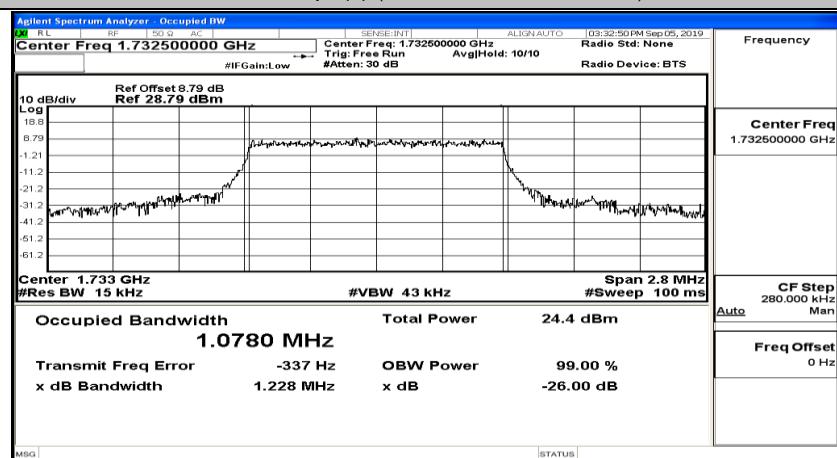
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



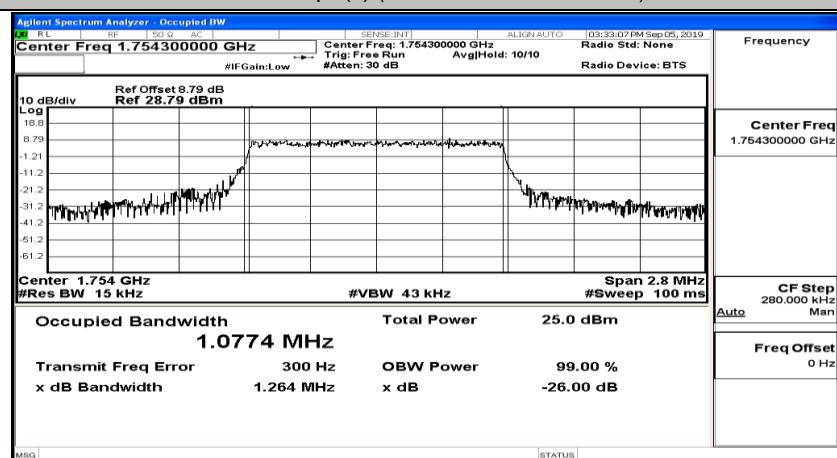
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



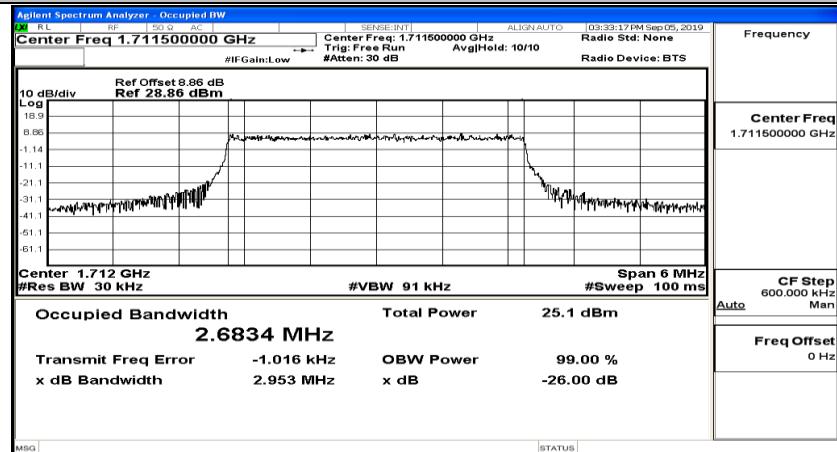
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



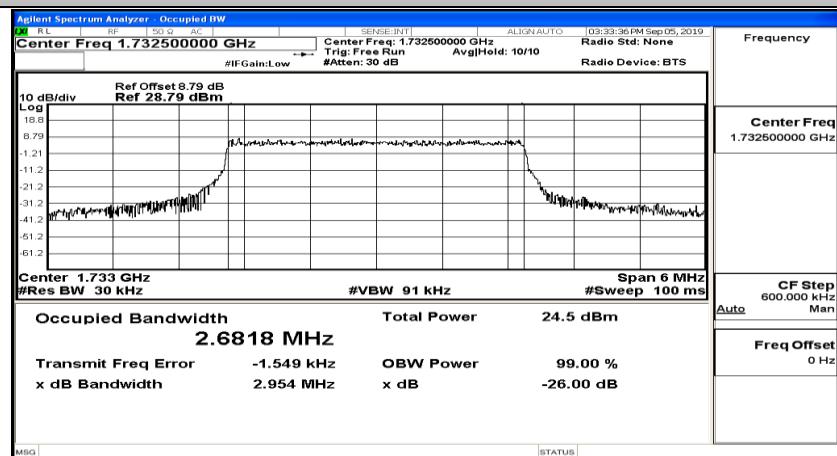
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



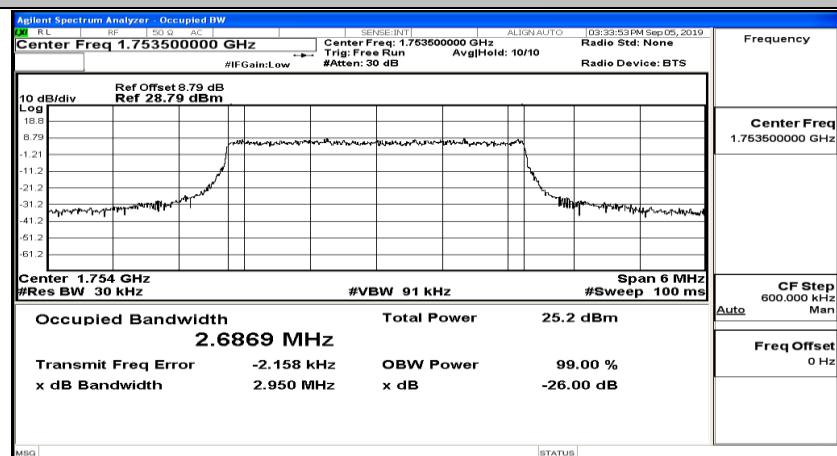
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



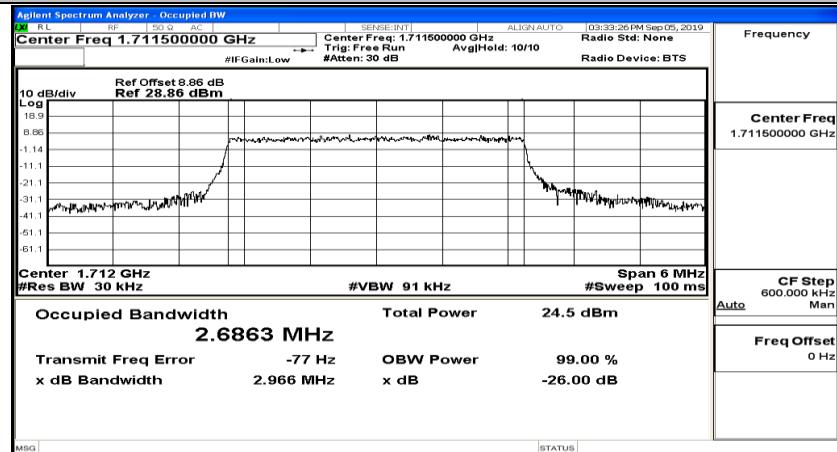
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



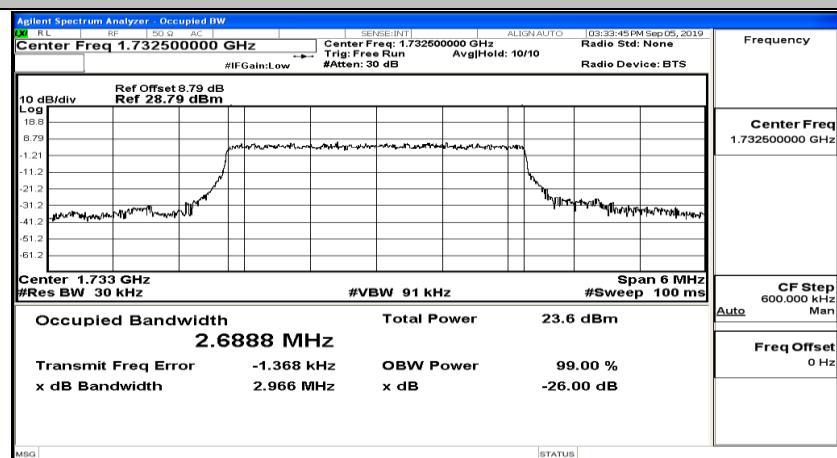
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



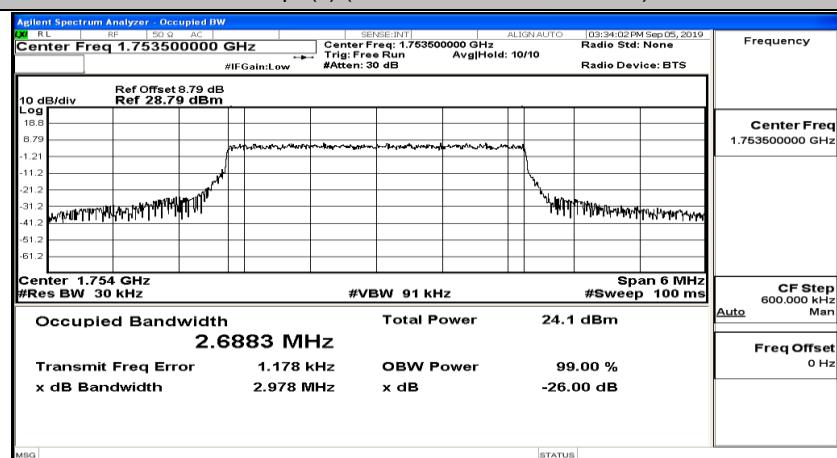
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



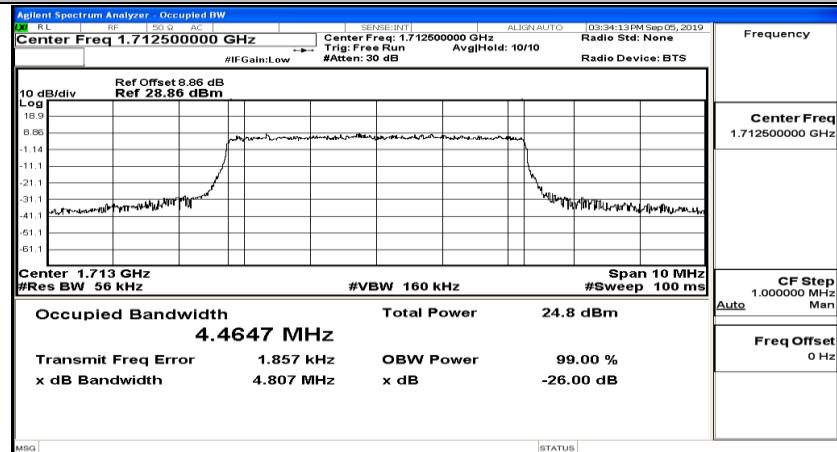
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



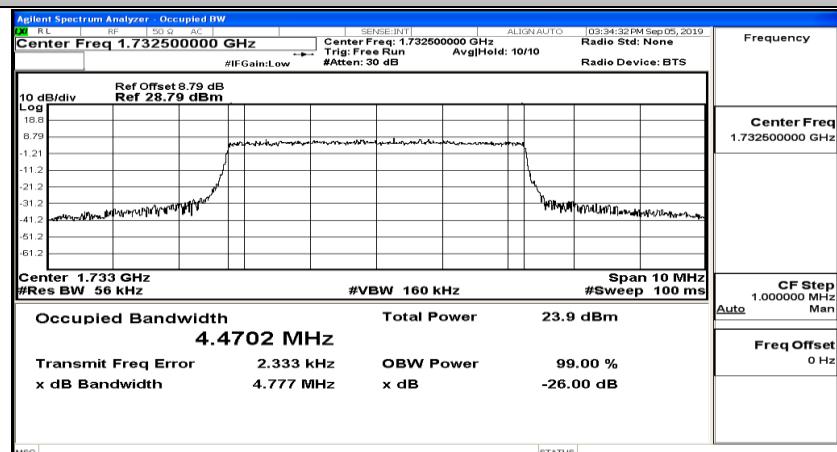
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



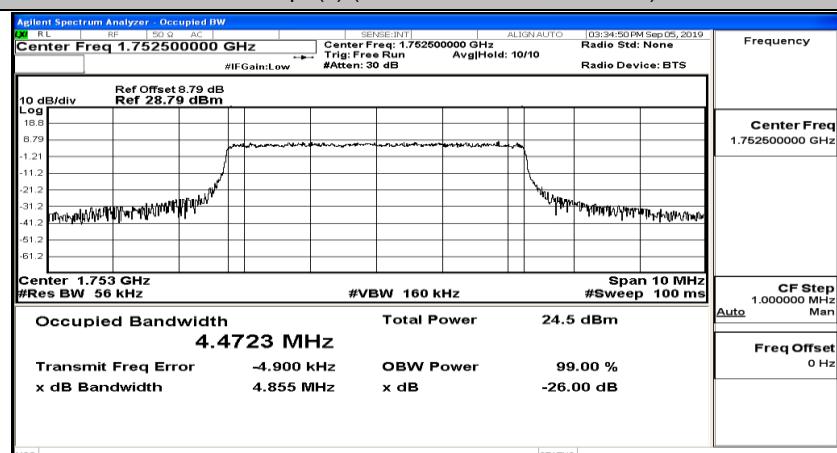
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



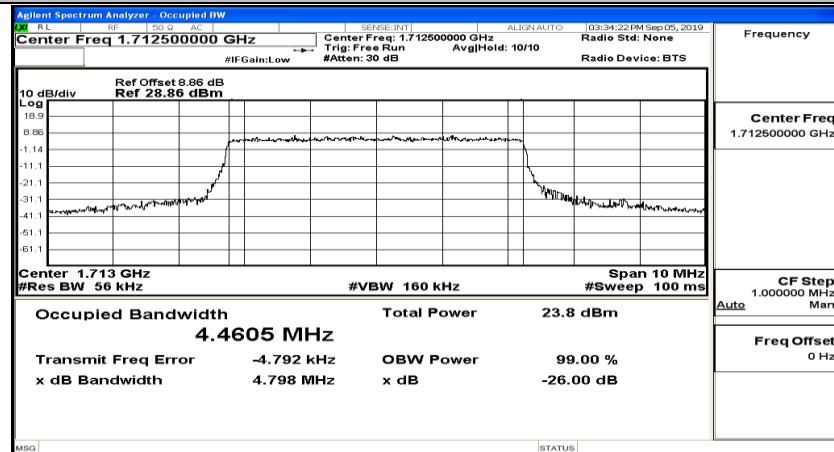
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



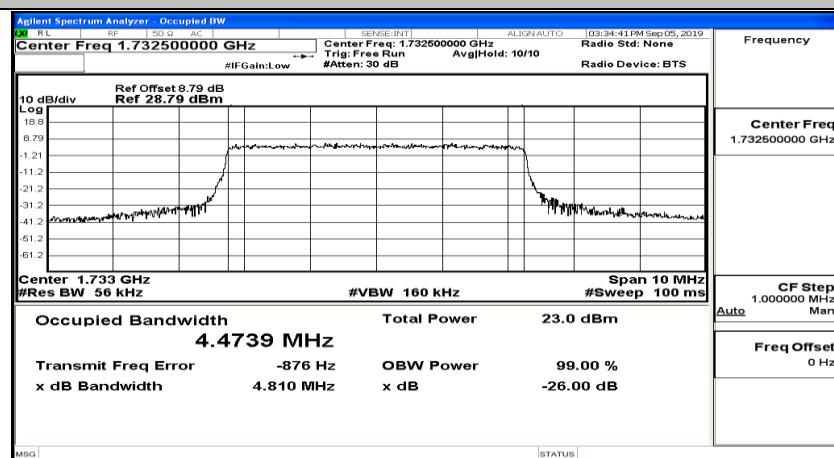
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



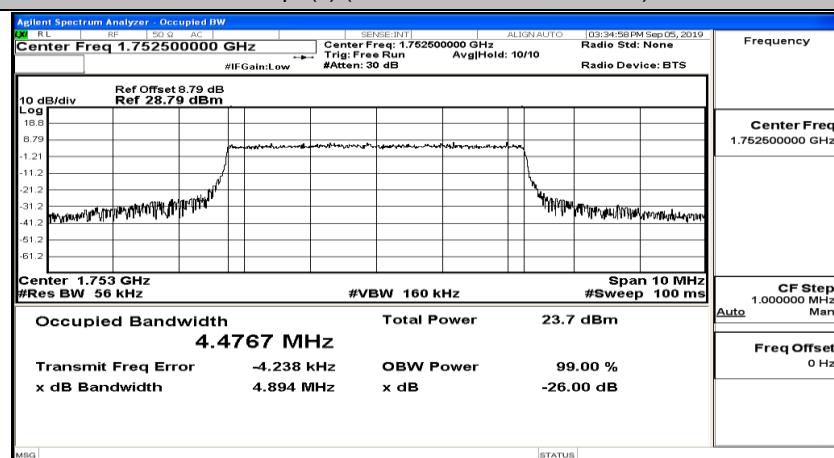
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



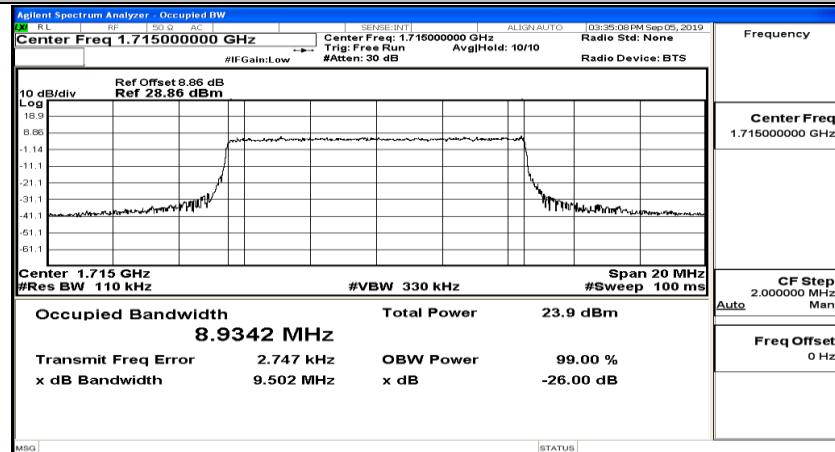
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



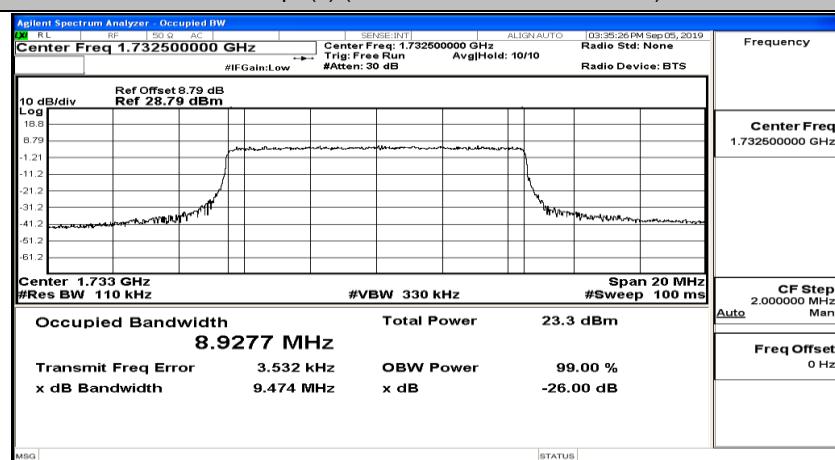
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



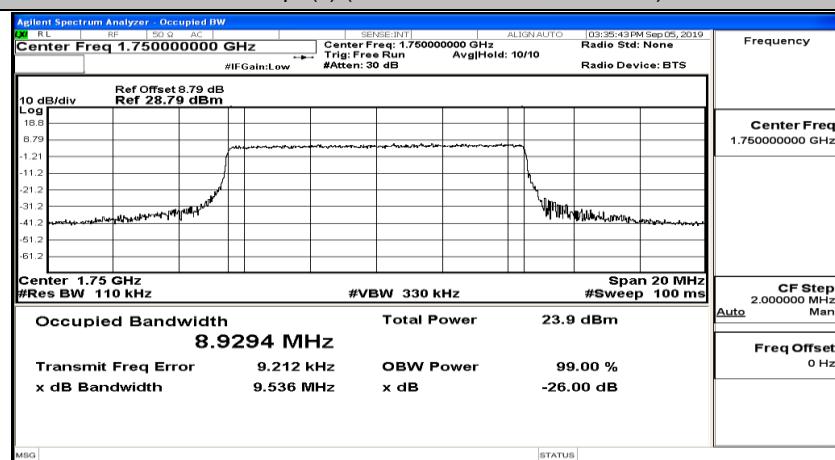
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



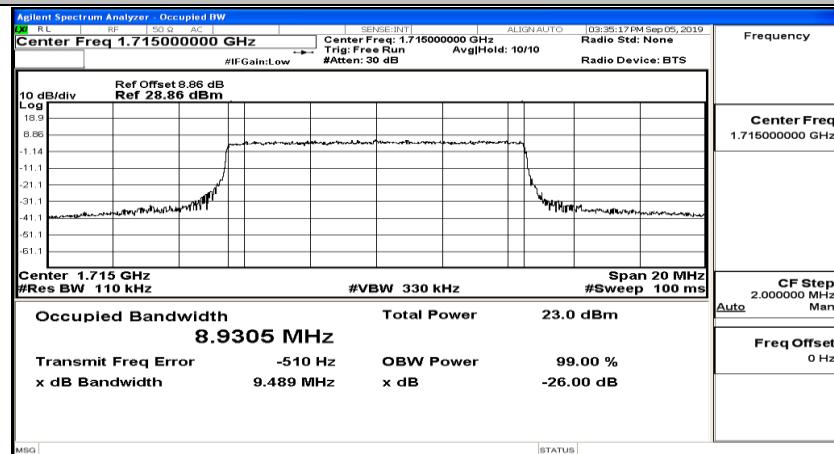
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



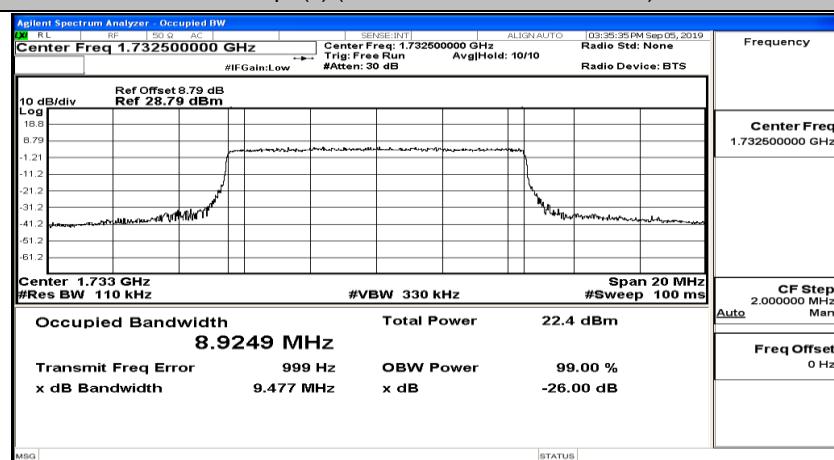
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



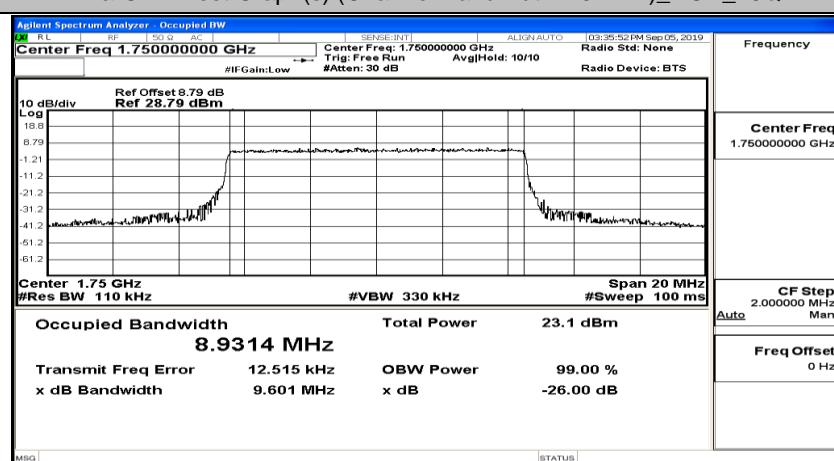
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



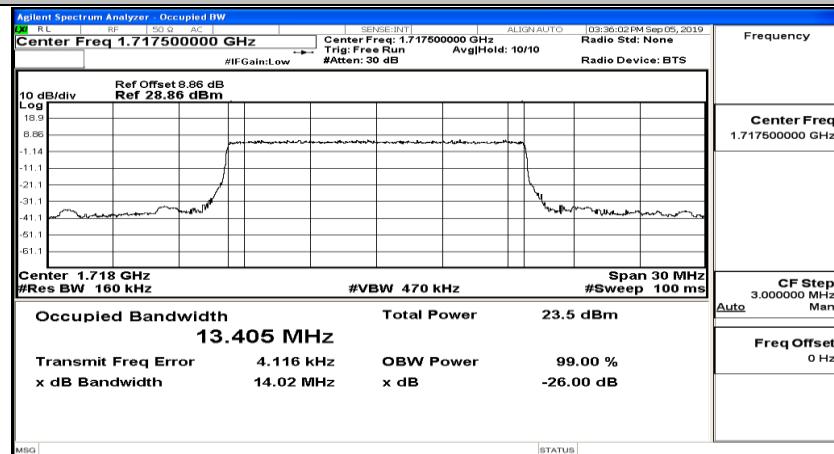
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



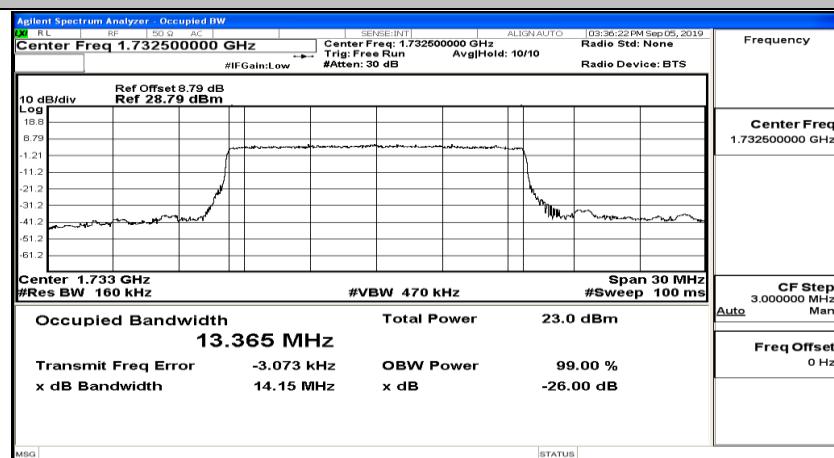
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



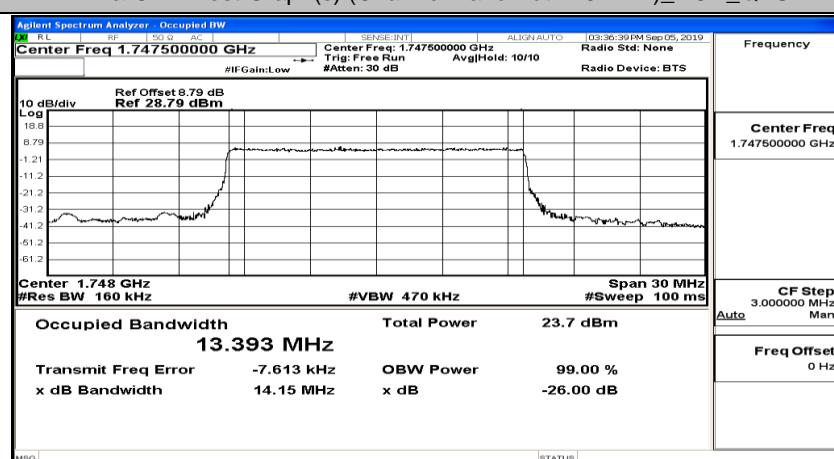
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



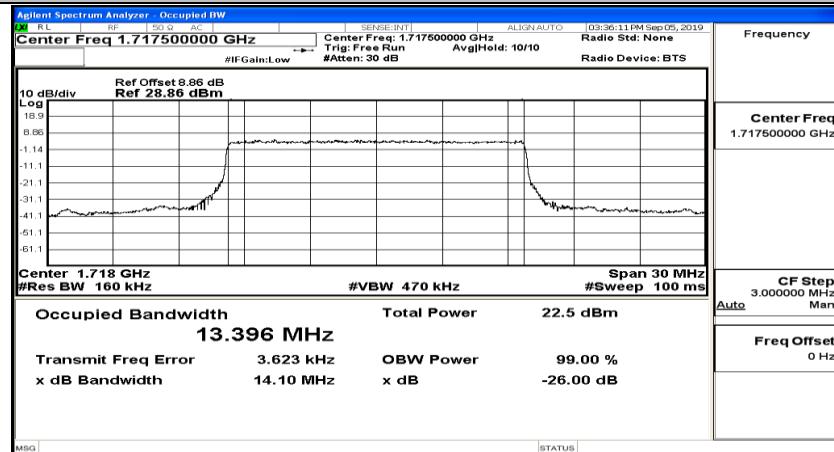
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



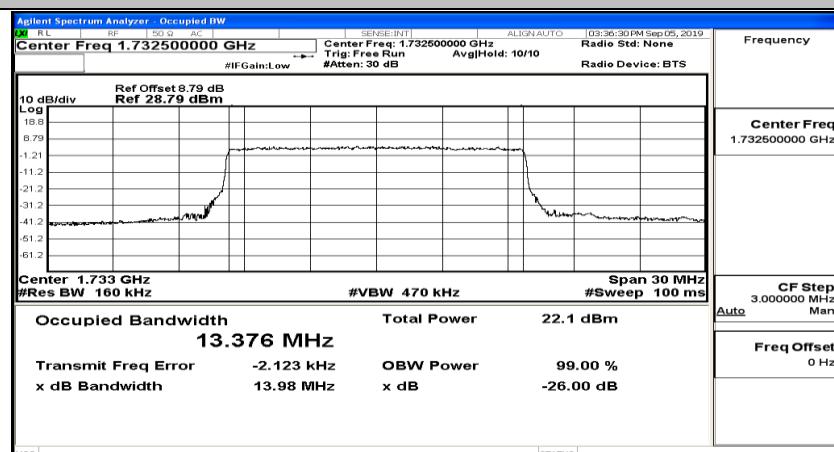
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



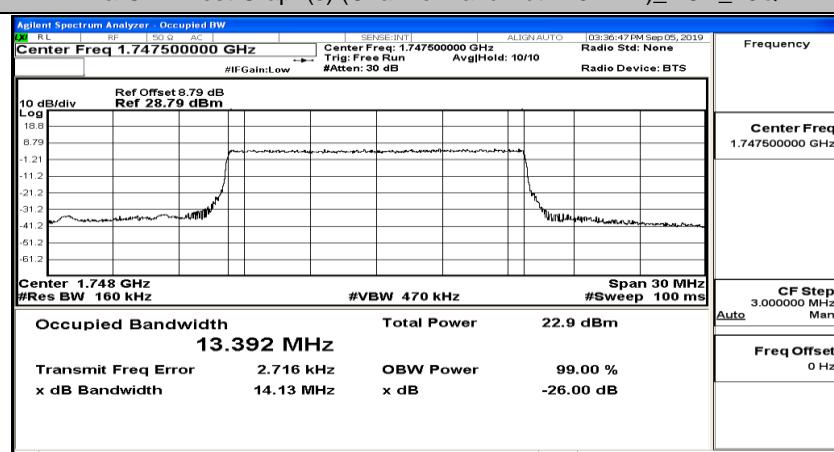
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



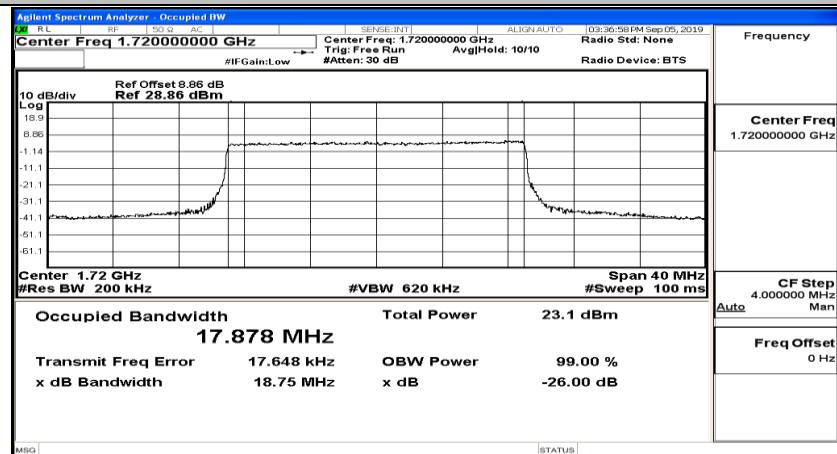
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



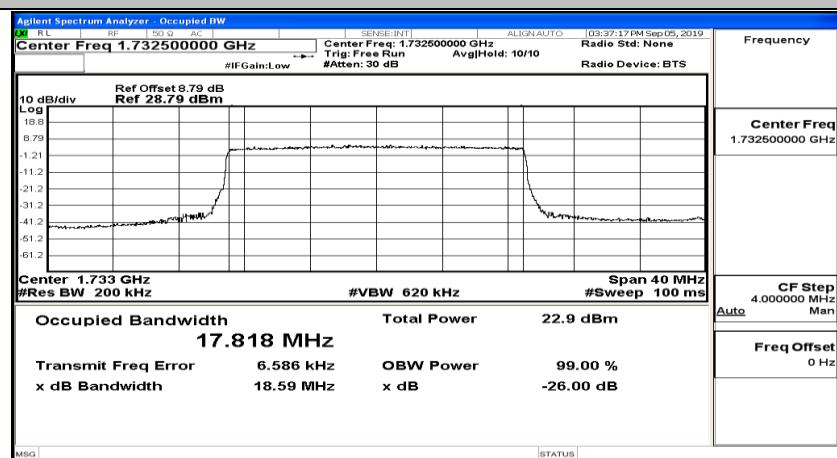
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



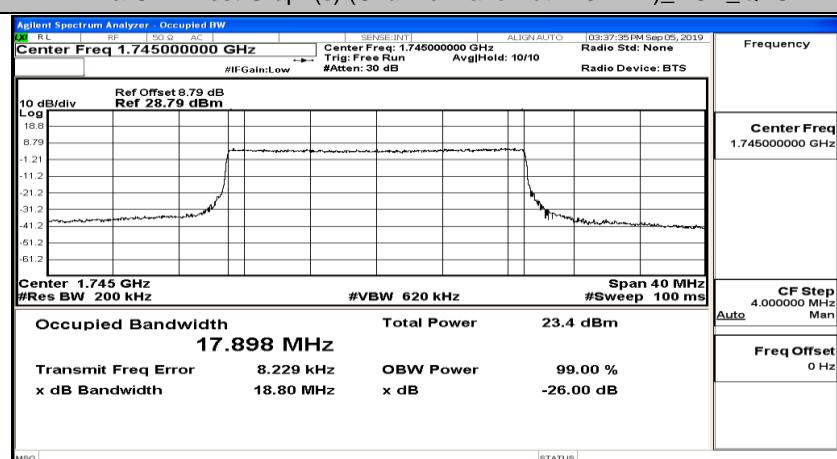
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



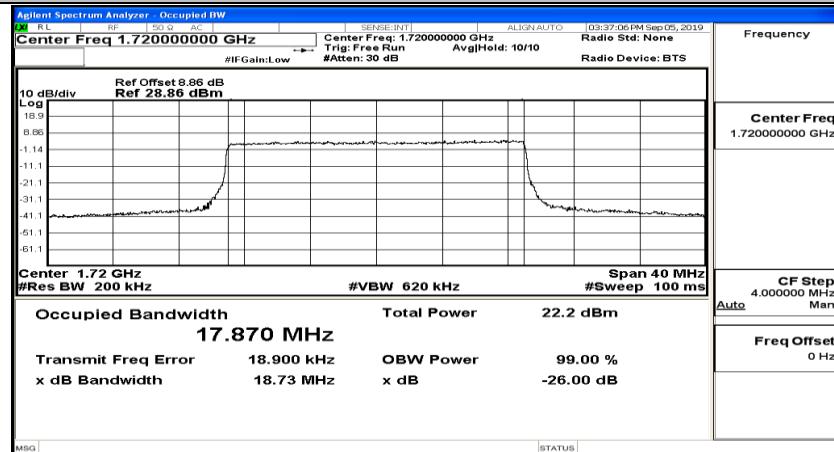
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



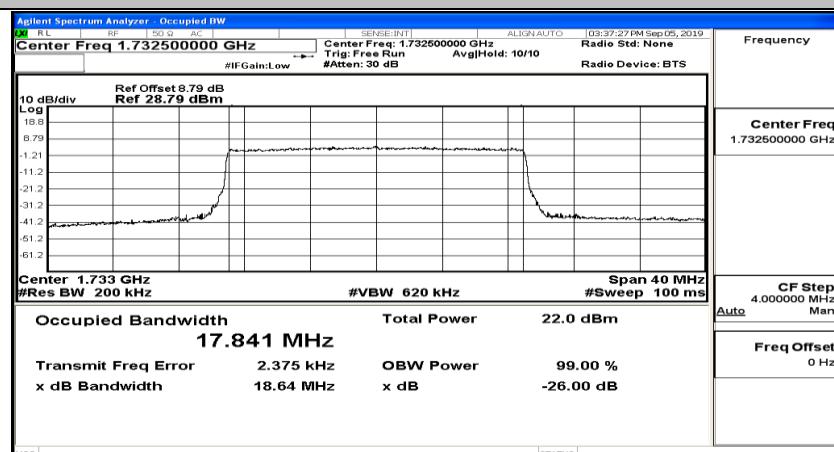
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

