Appendix B: Test Data for E-UTRA Band 4

Product Name: AW1-A

Trade Mark: COVERT

Test Model: 5466

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Wang Chuang

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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	22.12	21.43	PASS
		1	3	22.23	21.58	PASS
		1	5	22.11	21.45	PASS
		3	0	22.20	21.41	PASS
		3	2	22.20	21.40	PASS
		3	3	22.20	21.37	PASS
		6	0	21.17	20.13	PASS
	MCH	1	0	21.67	21.08	PASS
		1	3	21.81	21.19	PASS
		1	5	21.72	21.04	PASS
		3	0	21.75	20.78	PASS
		3	2	21.79	20.84	PASS
		3	3	21.76	20.83	PASS
		6	0	20.71	19.66	PASS
	HCH	1	0	21.75	20.98	PASS
		1	3	21.86	21.13	PASS
		1	5	21.77	20.98	PASS
		3	0	21.85	20.91	PASS
		3	2	21.88	20.93	PASS
		3	3	21.86	20.93	PASS
		6	0	20.82	19.89	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.10	21.49	PASS
		1	7	22.32	21.65	PASS
		1	14	22.04	21.41	PASS
		8	0	21.14	20.20	PASS
		8	4	21.16	20.22	PASS
		8	7	21.12	20.17	PASS
		15	0	21.10	20.06	PASS
	MCH	1	0	21.65	20.96	PASS
		1	7	21.97	21.15	PASS
		1	14	21.68	20.97	PASS
		8	0	20.72	19.75	PASS
		8	4	20.74	19.81	PASS
		8	7	20.68	19.76	PASS
		15	0	20.68	19.62	PASS
	HCH	1	0	21.74	21.11	PASS
		1	7	22.12	21.30	PASS
		1	14	21.80	21.15	PASS
		8	0	20.81	19.80	PASS
		8	4	20.85	19.81	PASS
		8	7	20.81	19.78	PASS
		15	0	20.78	19.77	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.06	21.53	PASS
		1	12	22.32	21.78	PASS
		1	24	21.90	21.40	PASS
		12	0	21.11	20.26	PASS
		12	6	21.15	20.33	PASS
		12	13	21.09	20.22	PASS
		25	0	21.13	20.20	PASS
	MCH	1	0	21.62	21.05	PASS
		1	12	21.86	21.46	PASS
		1	24	21.64	21.01	PASS
		12	0	20.78	19.94	PASS
		12	6	20.78	19.89	PASS
		12	13	20.64	19.74	PASS
		25	0	20.72	19.77	PASS
	HCH	1	0	21.71	20.75	PASS
		1	12	22.11	21.02	PASS
		1	24	21.72	20.71	PASS
		12	0	20.69	19.74	PASS
		12	6	20.84	19.87	PASS
		12	13	20.82	19.85	PASS
		25	0	20.79	19.78	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.05	21.44	PASS
		1	24	22.18	21.52	PASS
		1	49	21.89	21.20	PASS
		25	0	21.10	20.15	PASS
		25	12	21.10	20.08	PASS
		25	25	21.16	20.17	PASS
		50	0	21.10	20.10	PASS
	MCH	1	0	21.62	20.93	PASS
		1	24	21.84	21.12	PASS
		1	49	21.58	20.96	PASS
		25	0	20.88	19.93	PASS
		25	12	20.76	19.79	PASS
		25	25	20.62	19.64	PASS
		50	0	20.77	19.79	PASS
	HCH	1	0	21.68	21.19	PASS
		1	24	21.93	21.34	PASS
		1	49	21.70	21.11	PASS
		25	0	20.77	19.80	PASS
		25	12	20.82	19.84	PASS
		25	25	20.92	19.94	PASS
		50	0	20.87	19.87	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.10	21.35	PASS
		1	37	22.12	21.56	PASS
		1	74	21.72	21.05	PASS
		37	0	20.94	20.01	PASS
		37	18	21.03	20.03	PASS
		37	38	21.04	20.03	PASS
		75	0	21.07	20.02	PASS
	MCH	1	0	21.61	20.93	PASS
		1	37	21.81	21.15	PASS
		1	74	21.59	20.96	PASS
		37	0	20.88	19.83	PASS
		37	18	20.80	19.79	PASS
		37	38	20.67	19.65	PASS
		75	0	20.78	19.75	PASS
	HCH	1	0	21.58	20.99	PASS
		1	37	21.93	21.26	PASS
		1	74	21.69	20.94	PASS
		37	0	20.74	19.77	PASS
		37	18	20.83	19.88	PASS
		37	38	20.89	19.97	PASS
		75	0	20.84	19.85	PASS

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.07	21.27	PASS
		1	49	22.23	21.39	PASS
		1	99	21.76	20.91	PASS
		50	0	20.85	19.84	PASS
		50	25	21.00	19.97	PASS
		50	50	20.91	19.89	PASS
		100	0	20.89	19.87	PASS
	MCH	1	0	21.69	20.93	PASS
		1	49	21.95	21.14	PASS
		1	99	21.65	20.88	PASS
		50	0	20.87	19.83	PASS
		50	25	20.76	19.73	PASS
		50	50	20.53	19.51	PASS
		100	0	20.72	19.73	PASS
	HCH	1	0	21.58	21.00	PASS
		1	49	21.99	21.40	PASS
		1	99	21.65	21.01	PASS
		50	0	20.82	19.86	PASS
		50	25	20.84	19.85	PASS
		50	50	20.98	20.01	PASS
		100	0	20.89	19.94	PASS

B.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	5.42	<13	PASS
	MCH	5.5	<13	PASS
	HCH	4.43	<13	PASS
16QAM	LCH	6.33	<13	PASS
	MCH	6.41	<13	PASS
	HCH	5.33	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.35	<13	PASS
	MCH	5.53	<13	PASS
	HCH	4.85	<13	PASS
16QAM	LCH	6.29	<13	PASS
	MCH	6.49	<13	PASS
	HCH	5.64	<13	PASS

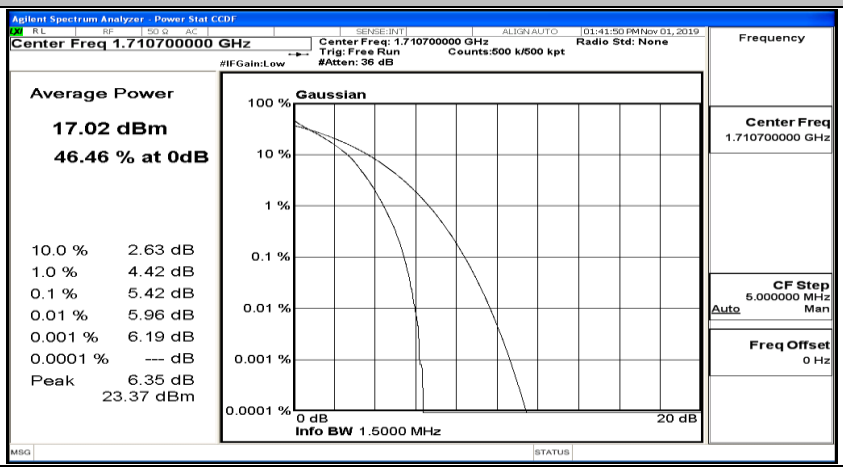
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.51	<13	PASS
	MCH	5.68	<13	PASS
	HCH	4.9	<13	PASS
16QAM	LCH	6.3	<13	PASS
	MCH	6.43	<13	PASS
	HCH	5.75	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.48	<13	PASS
	MCH	5.67	<13	PASS
	HCH	5.32	<13	PASS
16QAM	LCH	6.21	<13	PASS
	MCH	6.4	<13	PASS
	HCH	6.06	<13	PASS

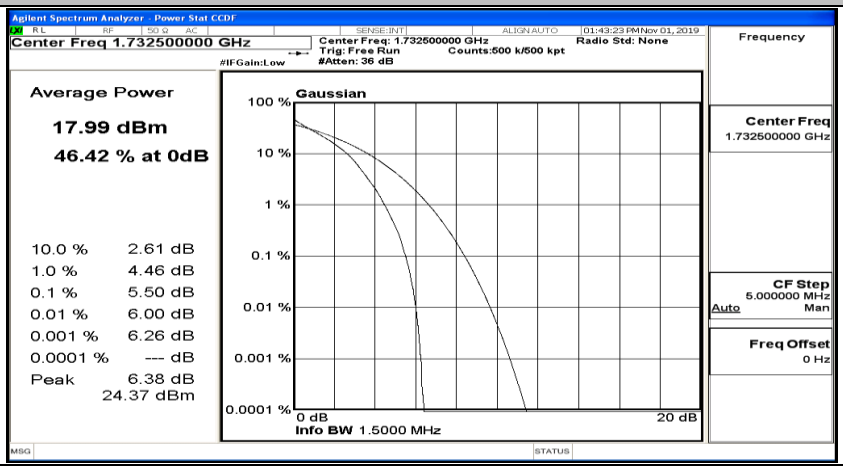
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.97	<13	PASS
	MCH	4.95	<13	PASS
	HCH	5.08	<13	PASS
16QAM	LCH	6.25	<13	PASS
	MCH	6.31	<13	PASS
	HCH	6.3	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.71	<13	PASS
	MCH	5.69	<13	PASS
	HCH	5.81	<13	PASS
16QAM	LCH	6.8	<13	PASS
	MCH	6.81	<13	PASS
	HCH	6.77	<13	PASS

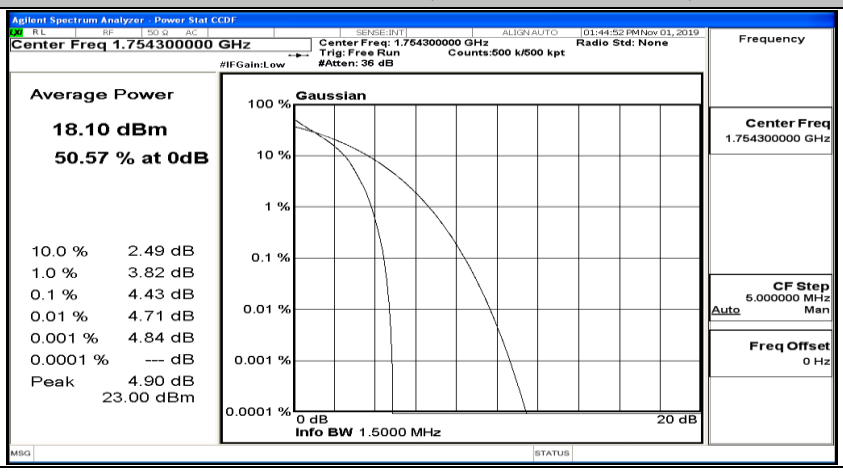
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



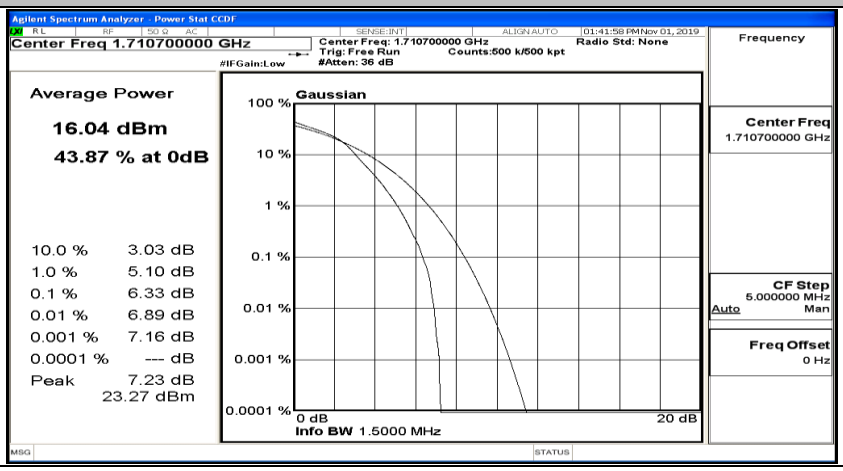
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



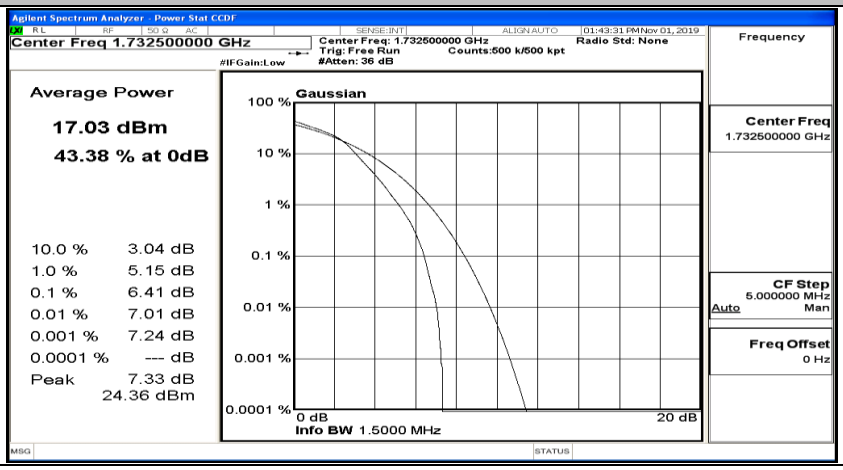
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



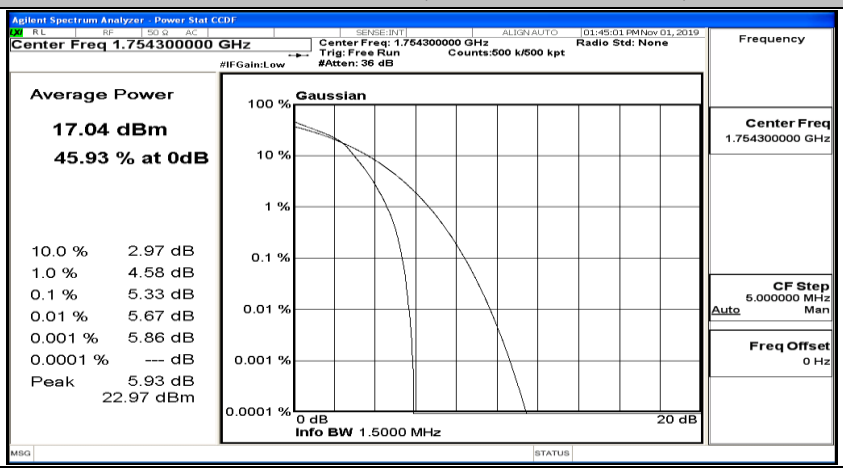
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



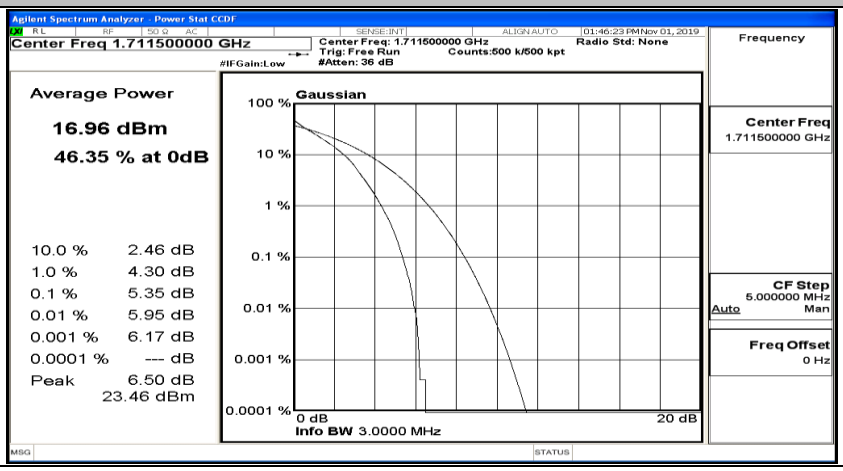
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



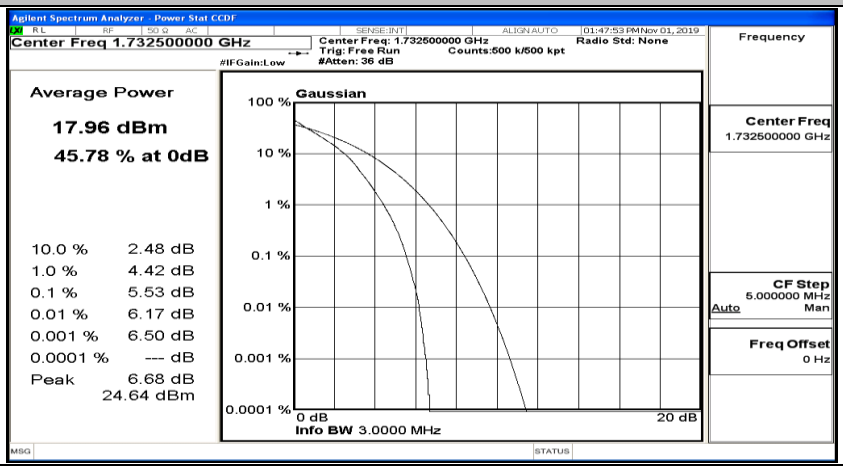
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



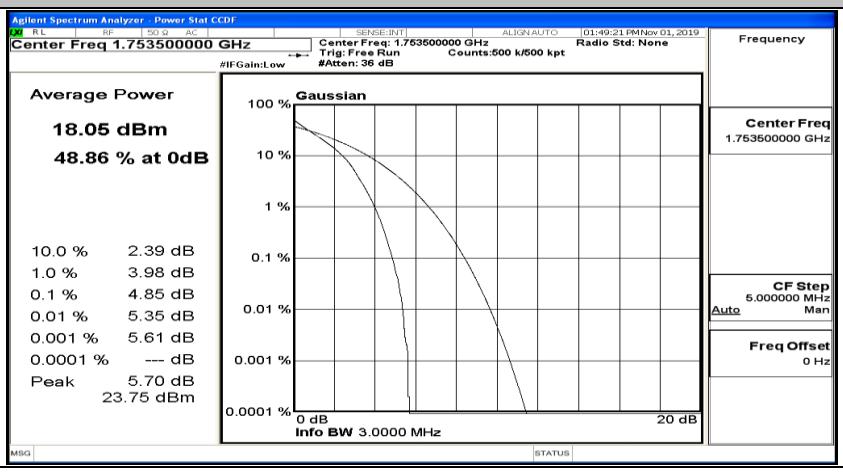
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



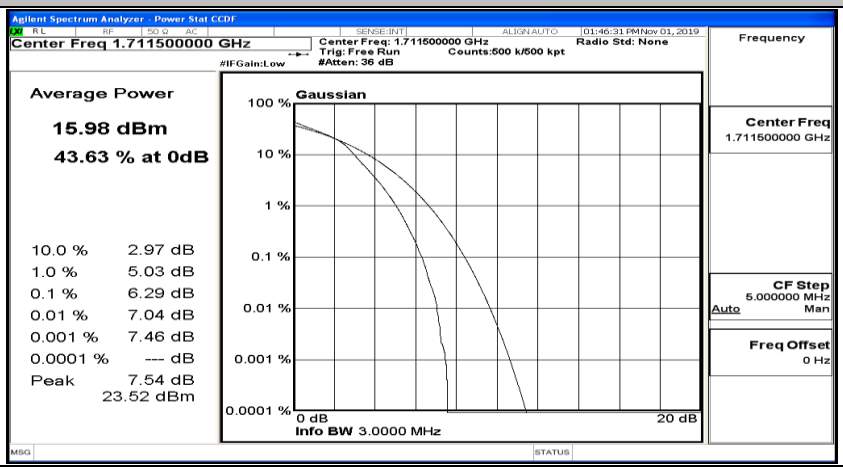
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



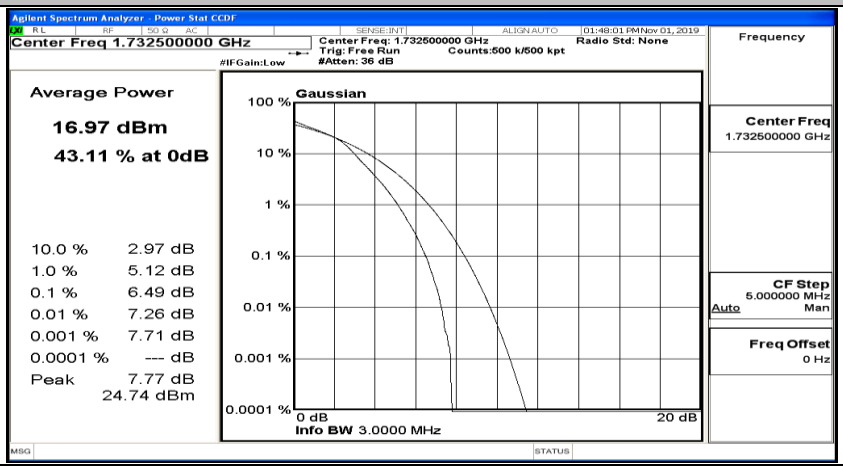
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



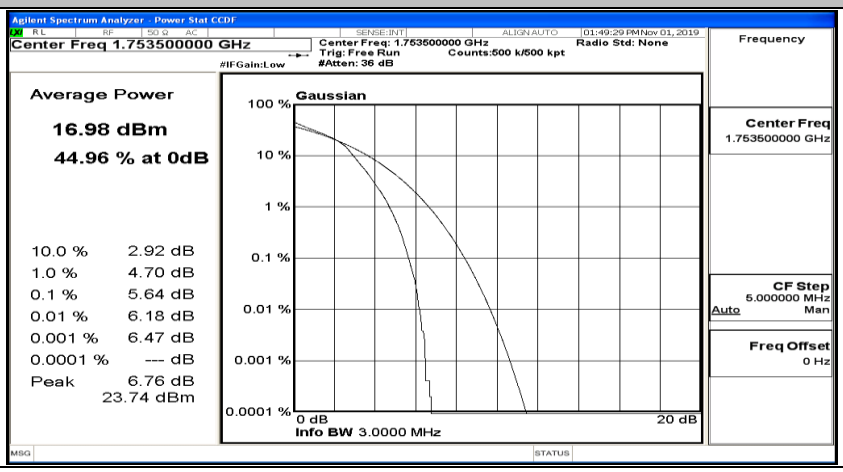
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



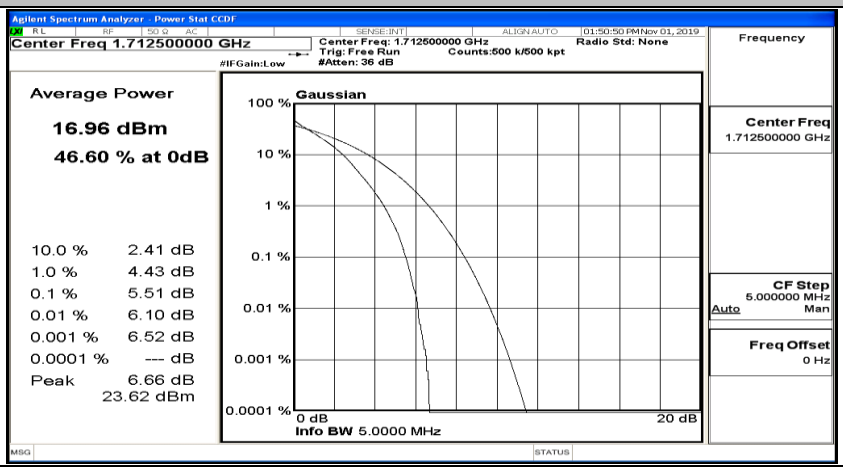
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



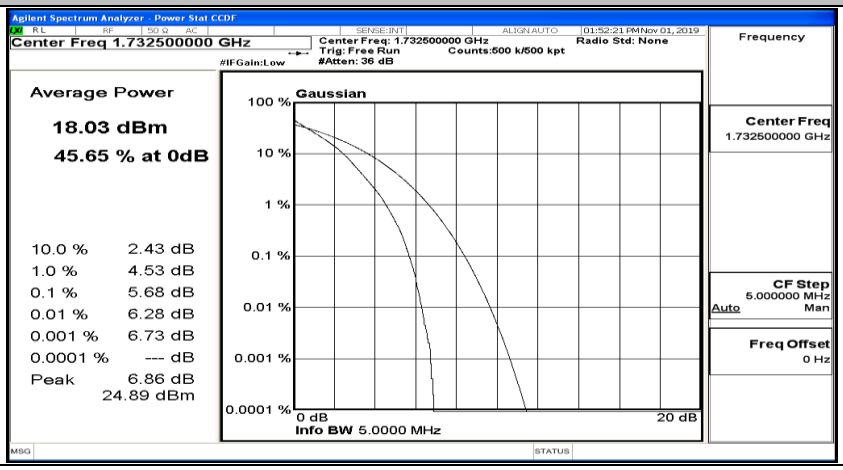
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



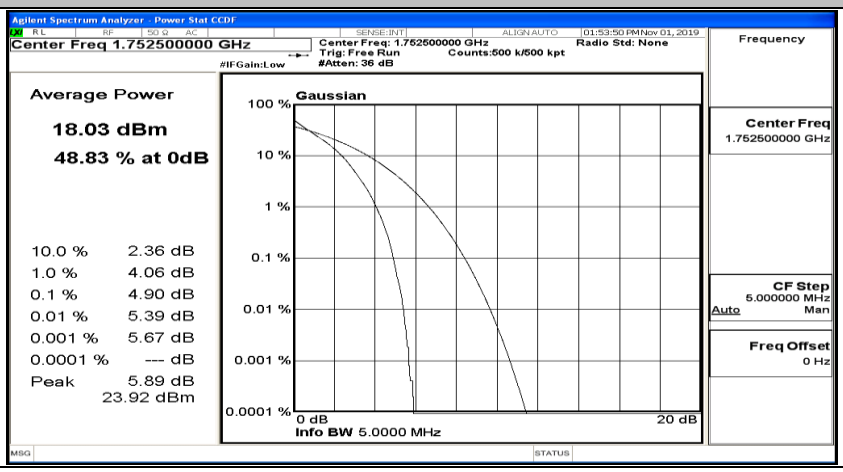
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



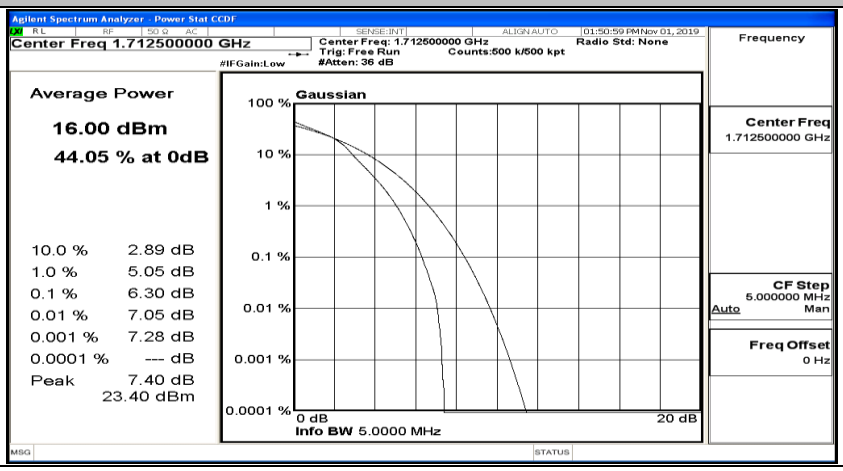
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



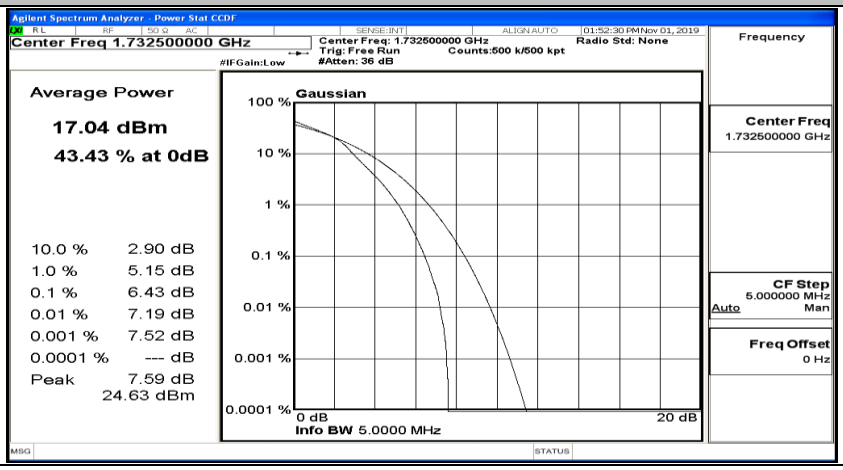
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



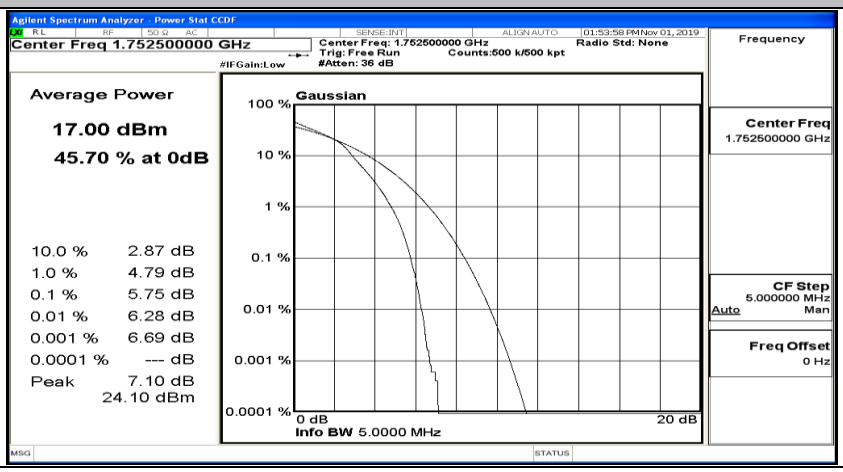
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



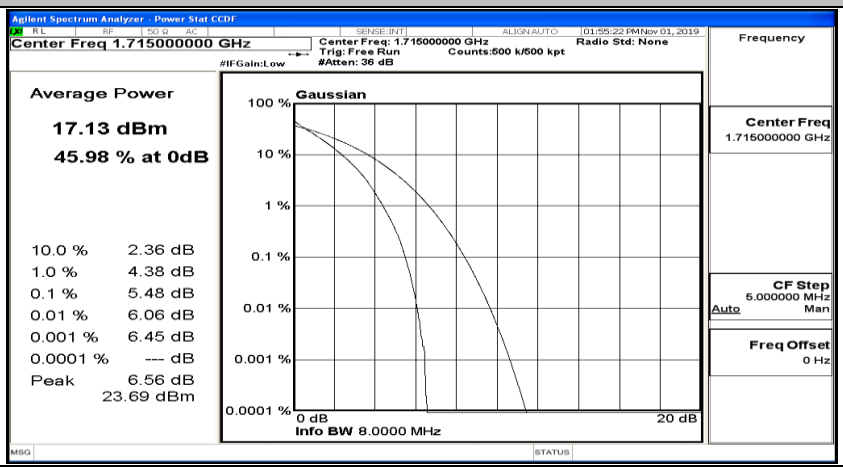
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



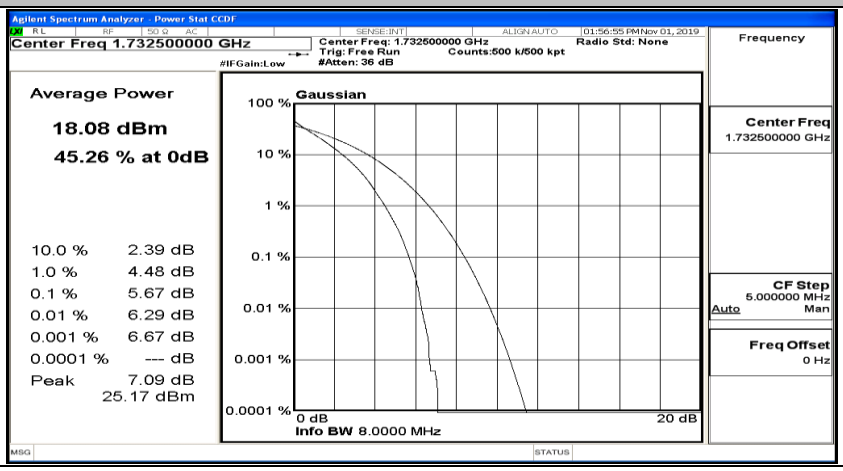
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



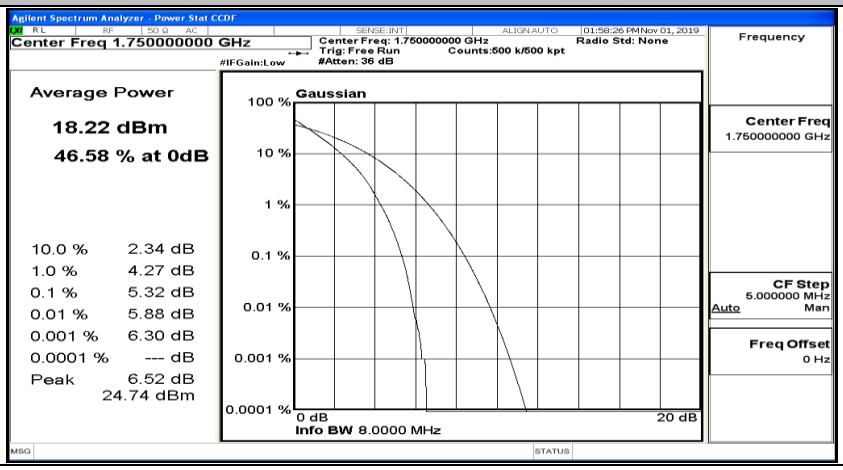
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



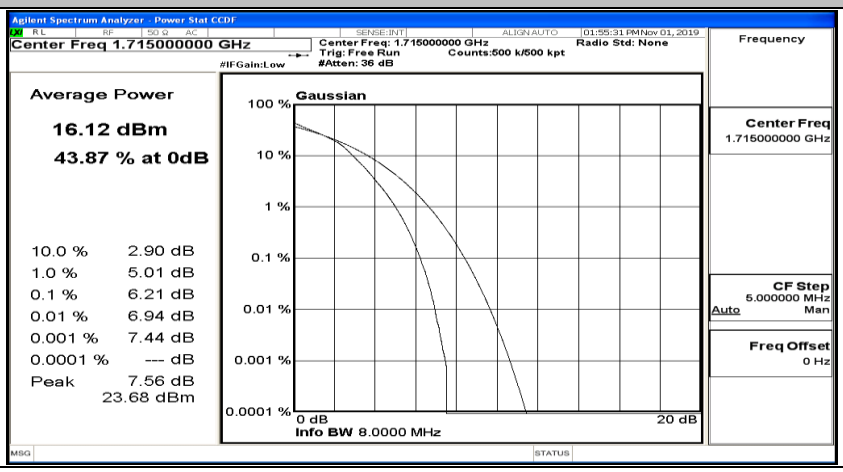
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



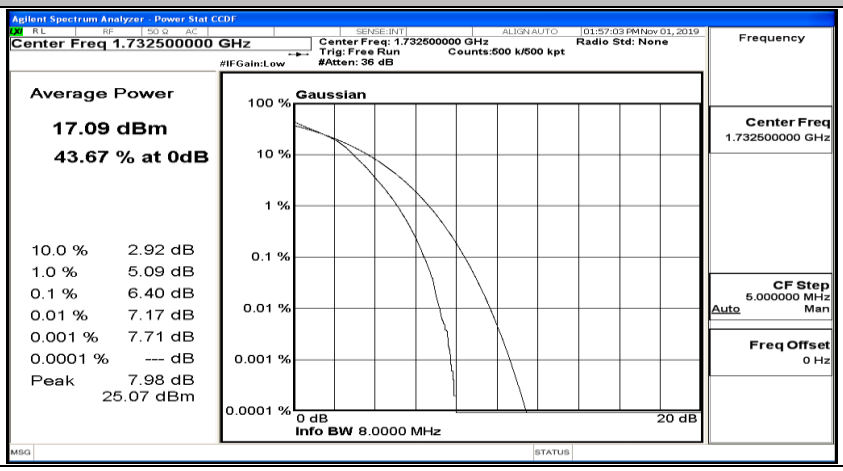
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



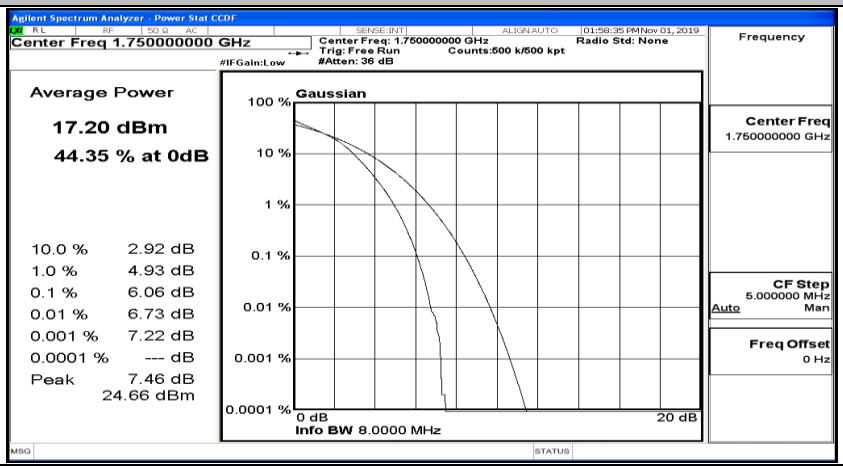
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



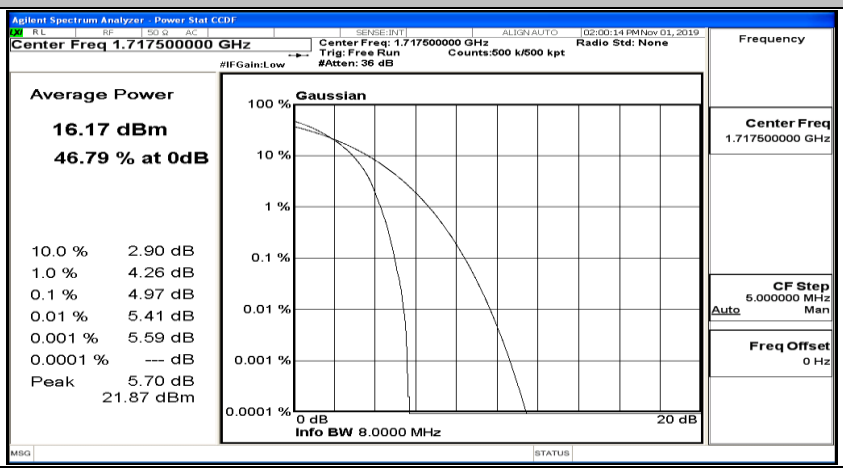
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



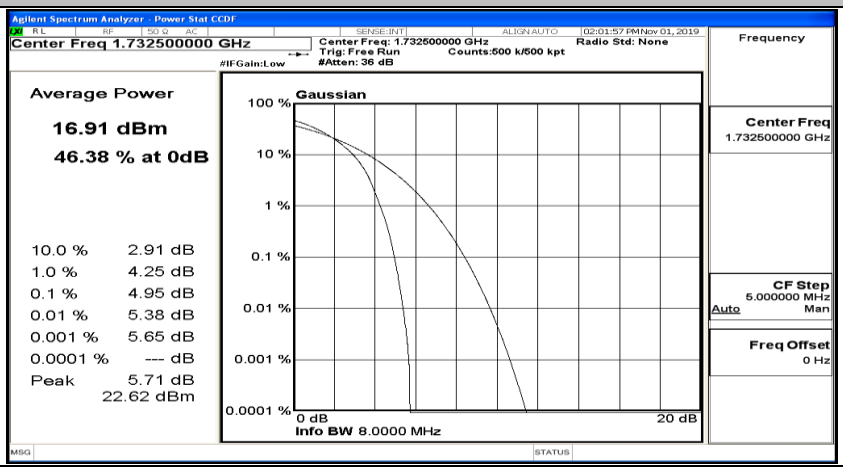
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



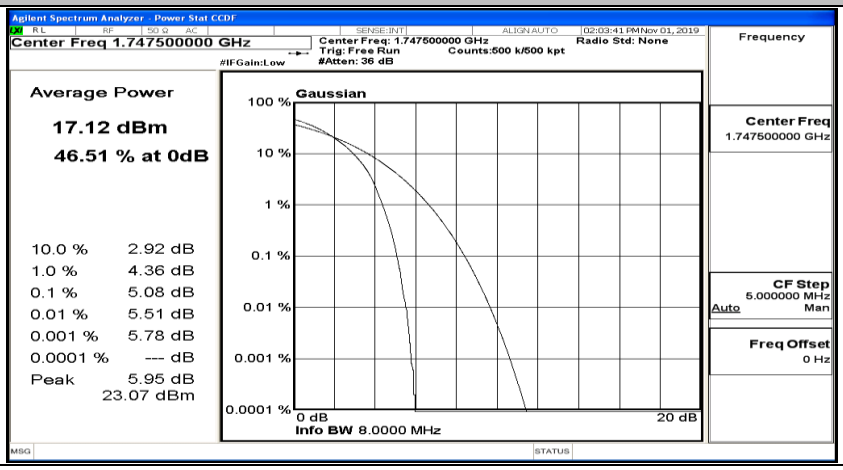
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



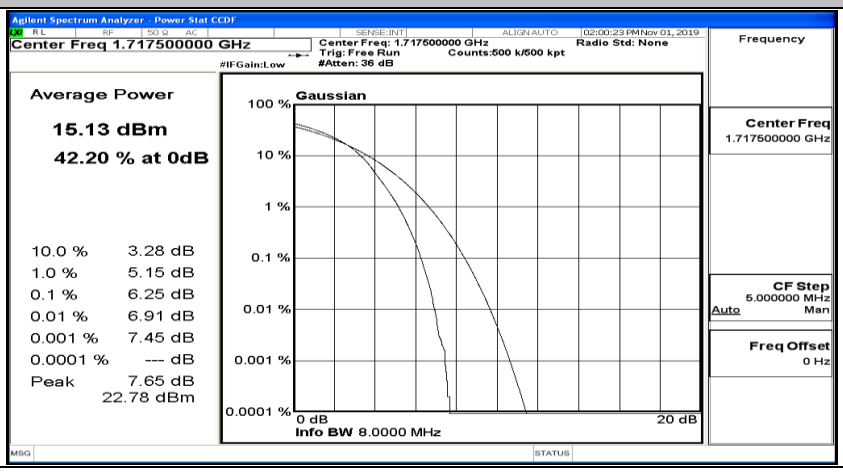
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



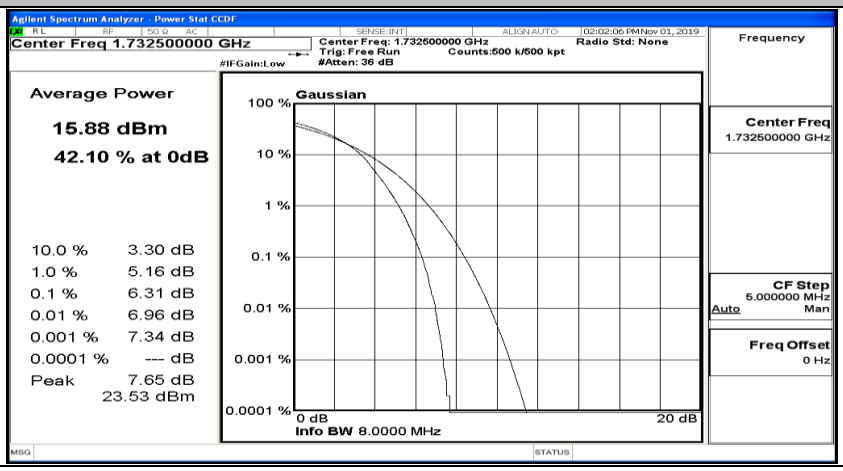
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



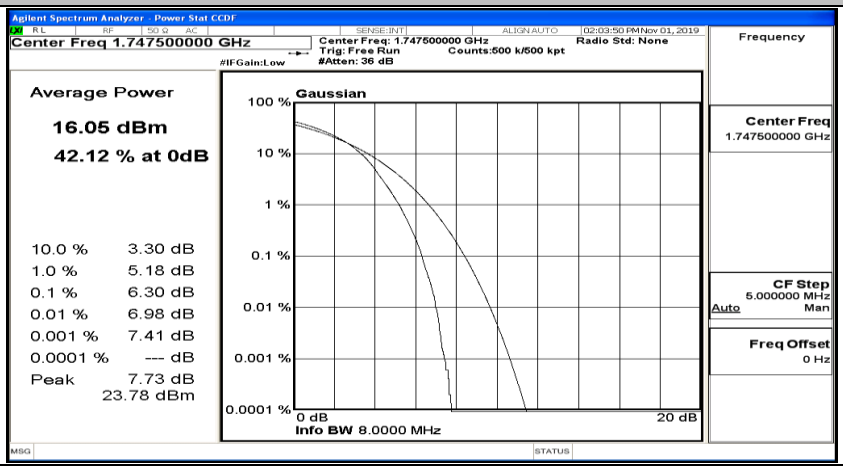
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



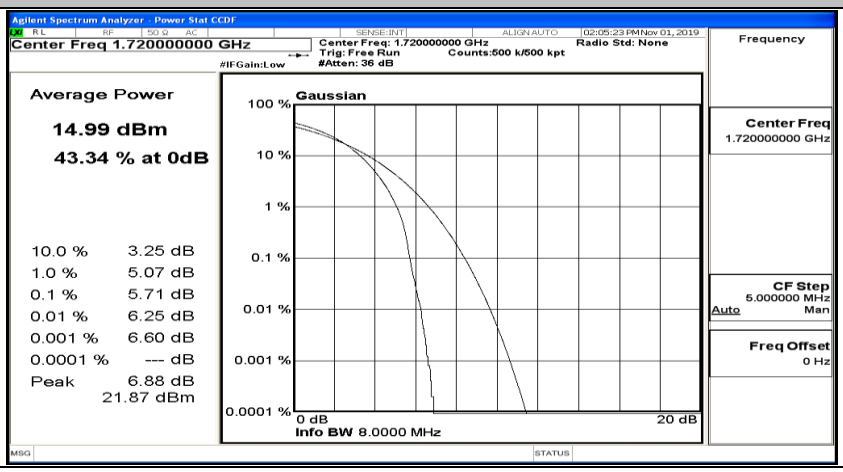
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



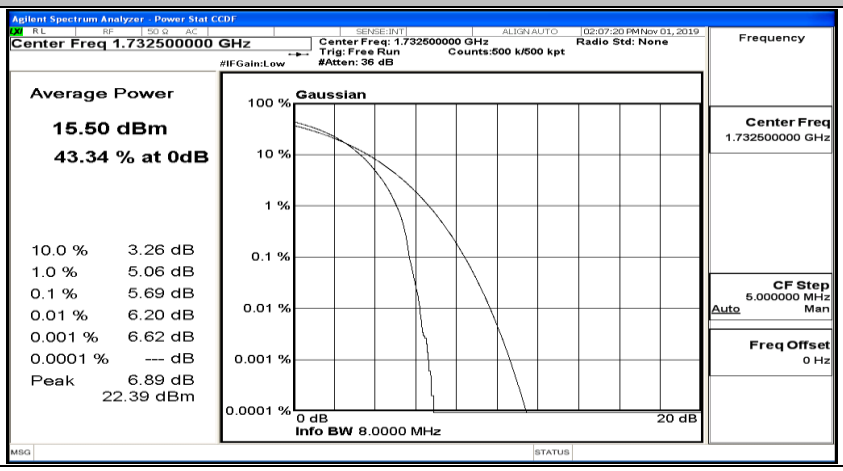
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



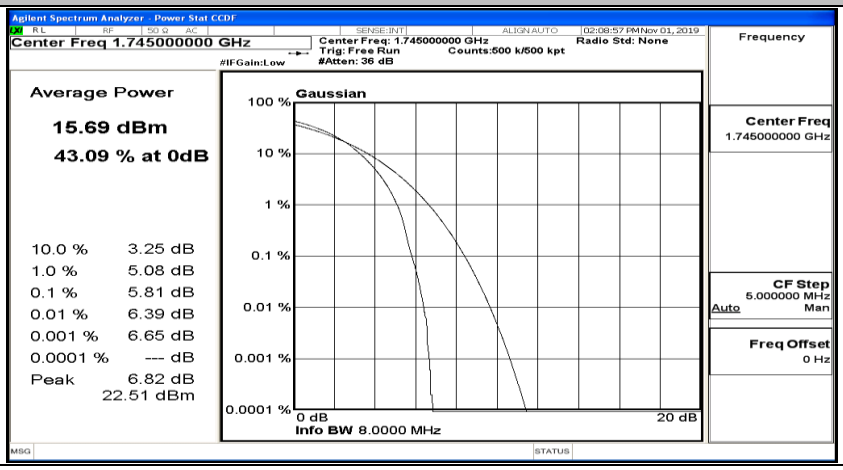
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



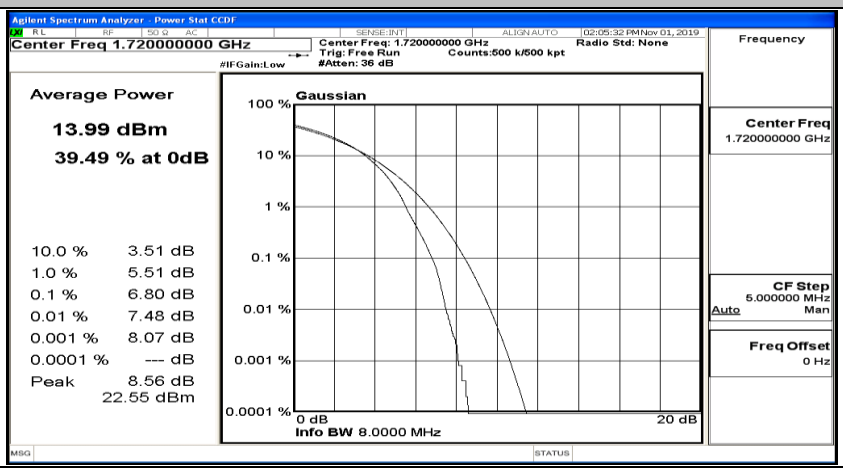
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



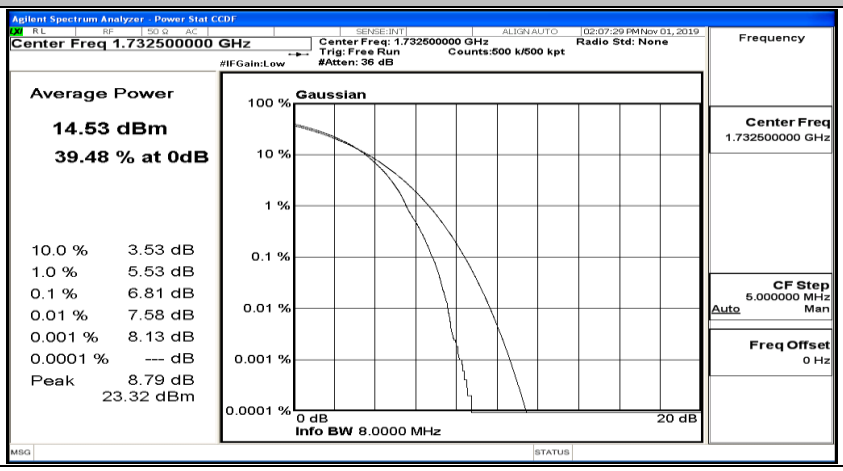
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



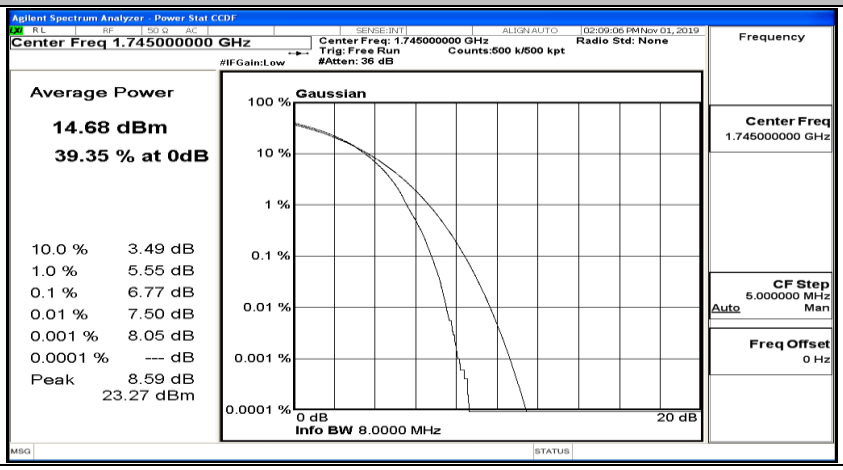
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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	1.0762	1.234	PASS
	MCH	1.0755	1.229	PASS
	HCH	1.0771	1.215	PASS
16QAM	LCH	1.0798	1.215	PASS
	MCH	1.0768	1.211	PASS
	HCH	1.0772	1.230	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6784	2.823	PASS
	MCH	2.6761	2.826	PASS
	HCH	2.6795	2.841	PASS
16QAM	LCH	2.6815	2.809	PASS
	MCH	2.6800	2.834	PASS
	HCH	2.6824	2.829	PASS

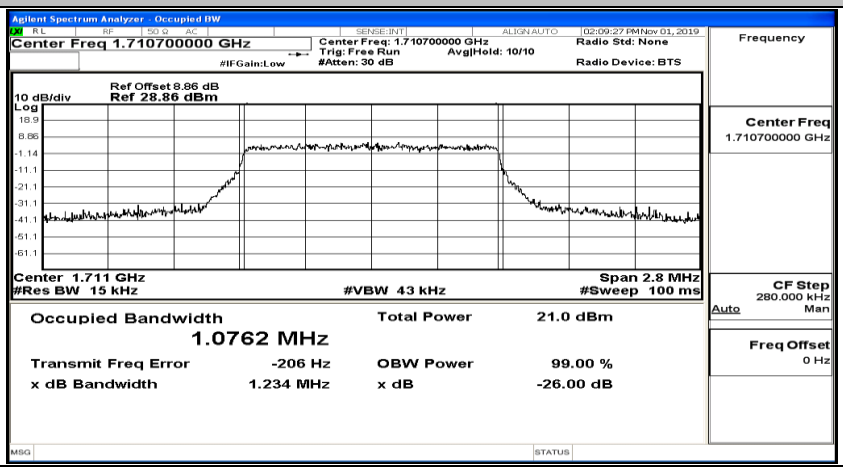
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4743	4.845	PASS
	MCH	4.4763	4.856	PASS
	HCH	4.4732	4.853	PASS
16QAM	LCH	4.4719	4.865	PASS
	MCH	4.4781	4.831	PASS
	HCH	4.4769	4.890	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9401	9.435	PASS
	MCH	8.9475	9.510	PASS
	HCH	8.9307	9.484	PASS
16QAM	LCH	8.9518	9.481	PASS
	MCH	8.9361	9.553	PASS
	HCH	8.9442	9.532	PASS

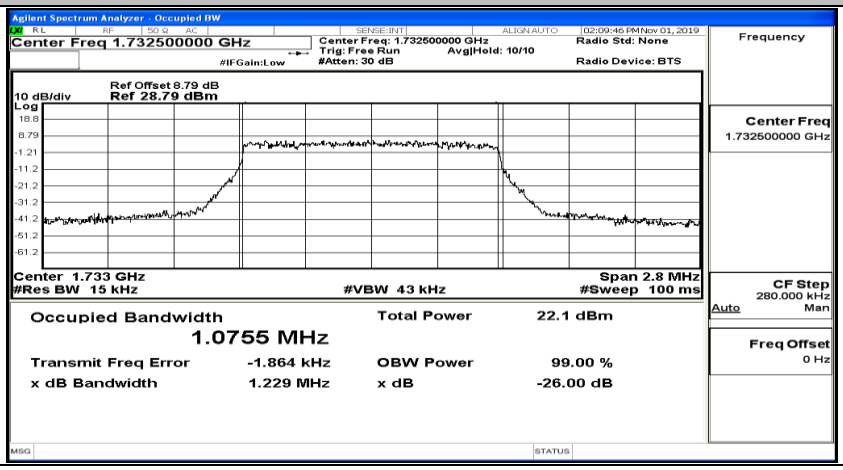
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.391	14.04	PASS
	MCH	13.401	14.08	PASS
	HCH	13.398	14.22	PASS
16QAM	LCH	13.388	14.08	PASS
	MCH	13.409	14.13	PASS
	HCH	13.412	14.10	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.844	18.68	PASS
	MCH	17.861	18.62	PASS
	HCH	17.880	18.72	PASS
16QAM	LCH	17.830	18.60	PASS
	MCH	17.876	18.65	PASS
	HCH	17.887	18.70	PASS

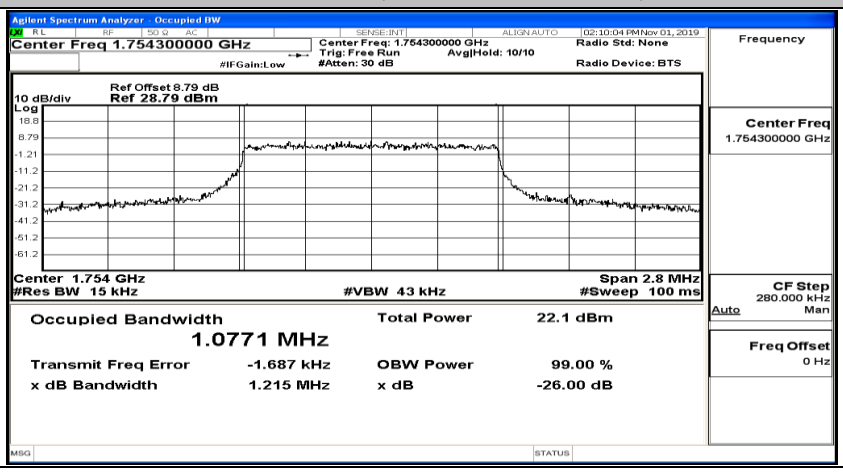
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



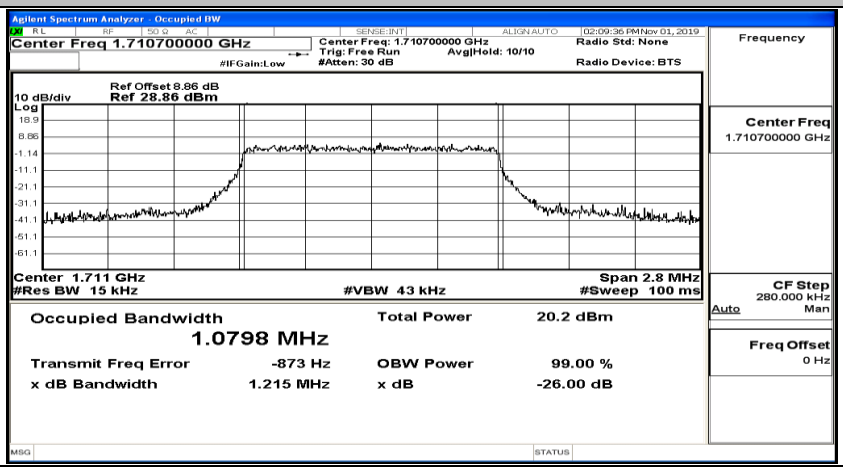
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



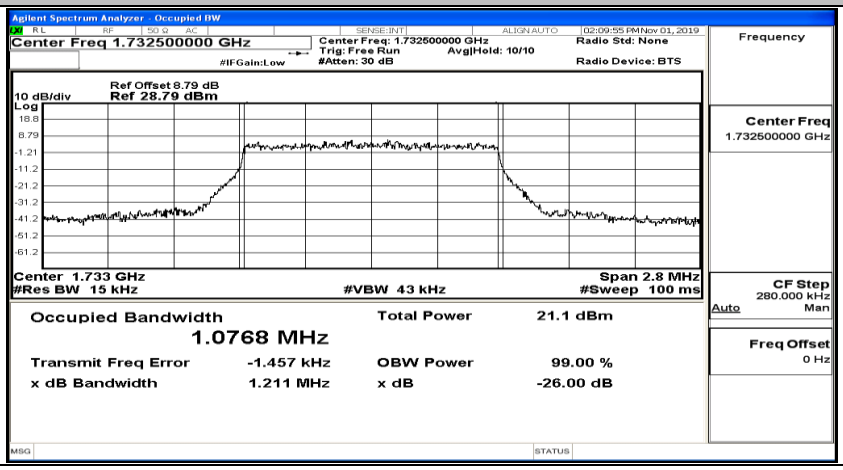
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



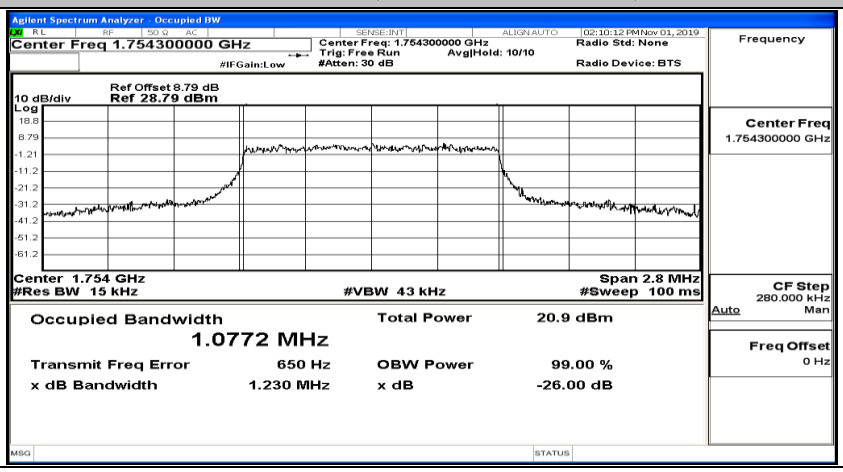
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



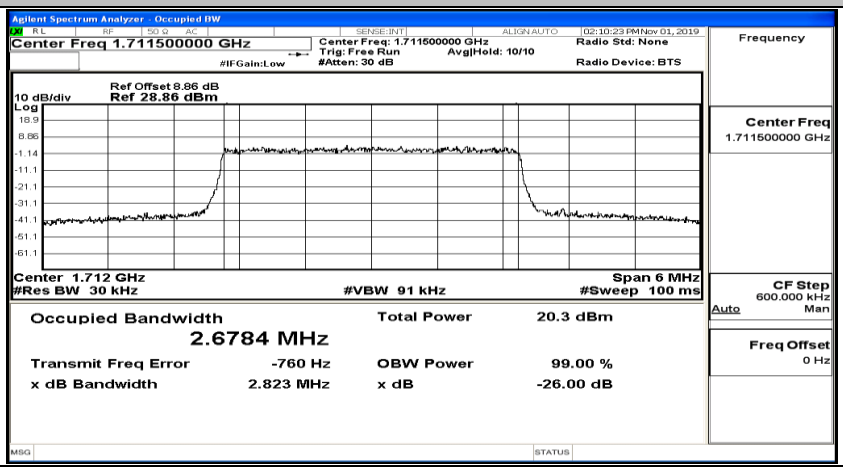
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



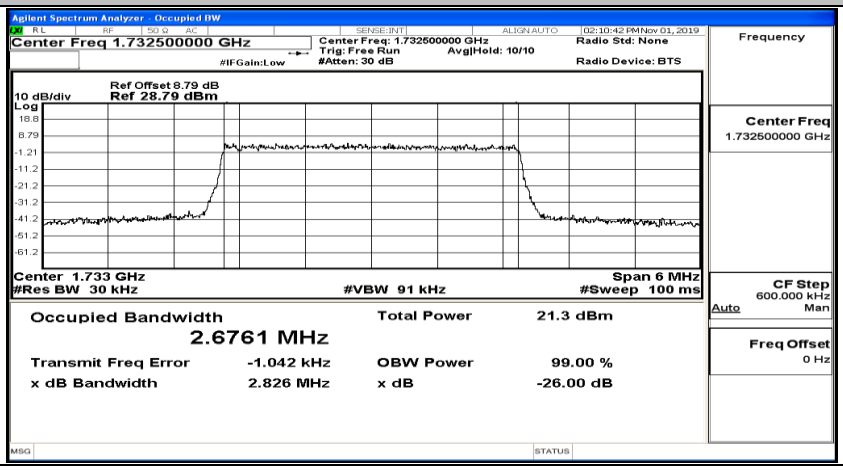
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



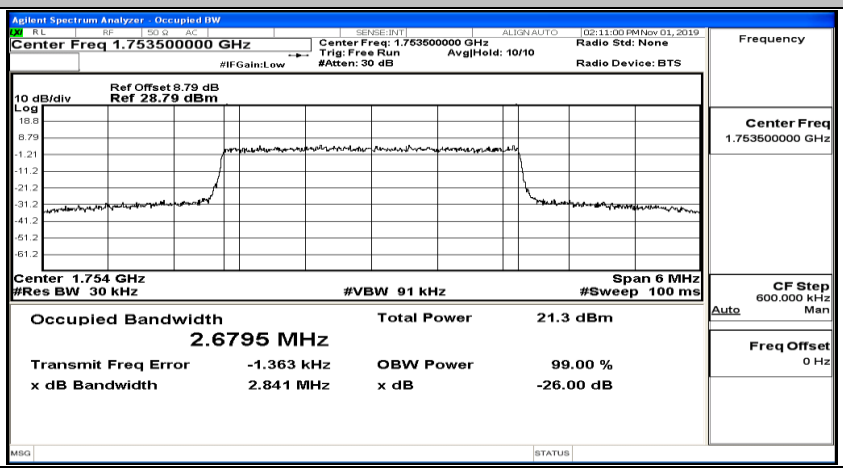
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



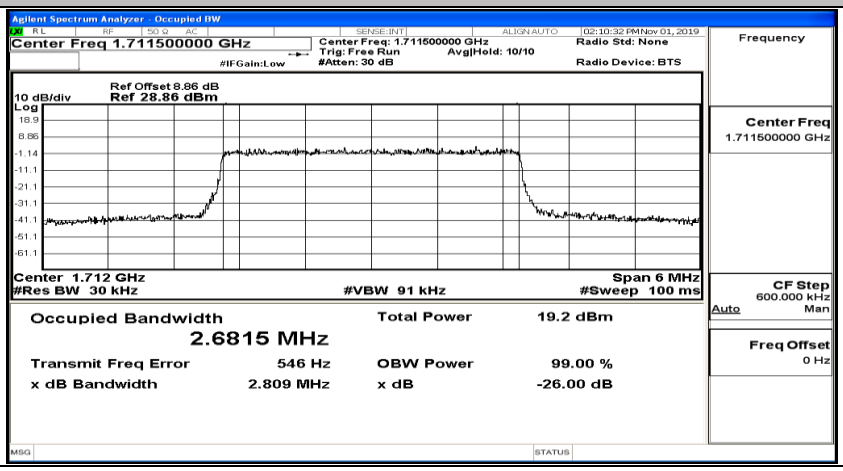
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



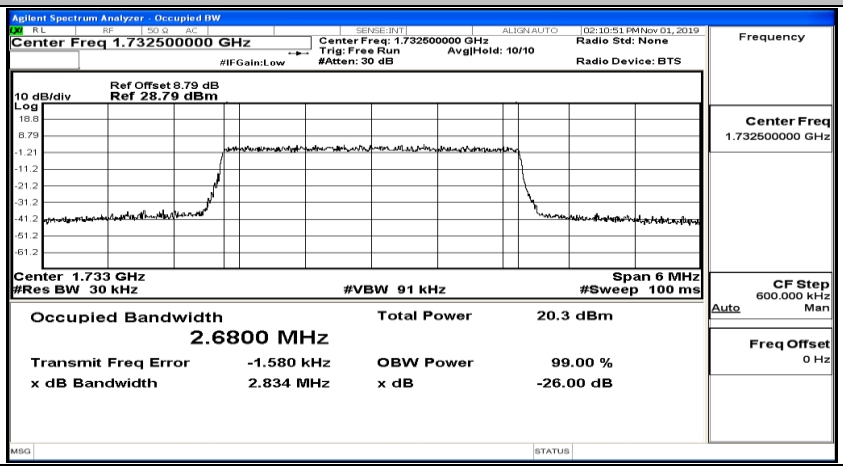
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



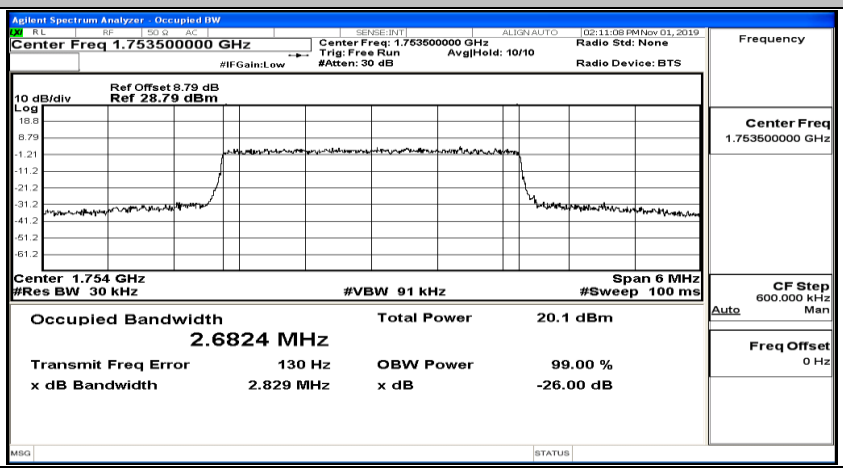
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



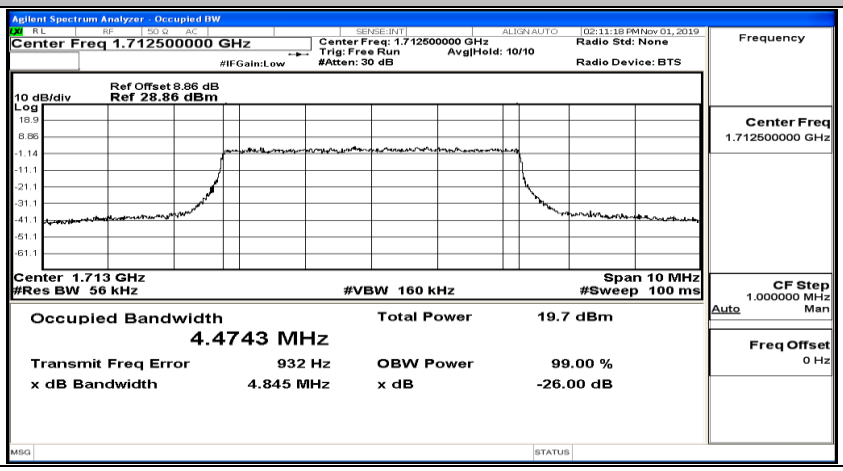
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



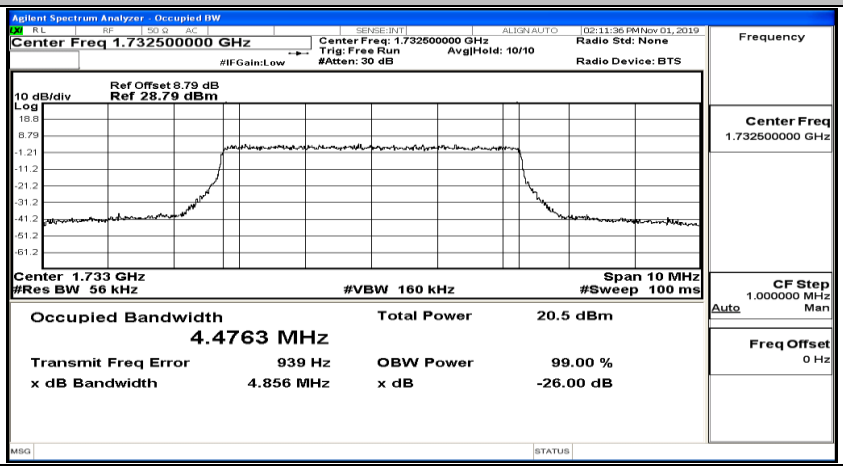
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



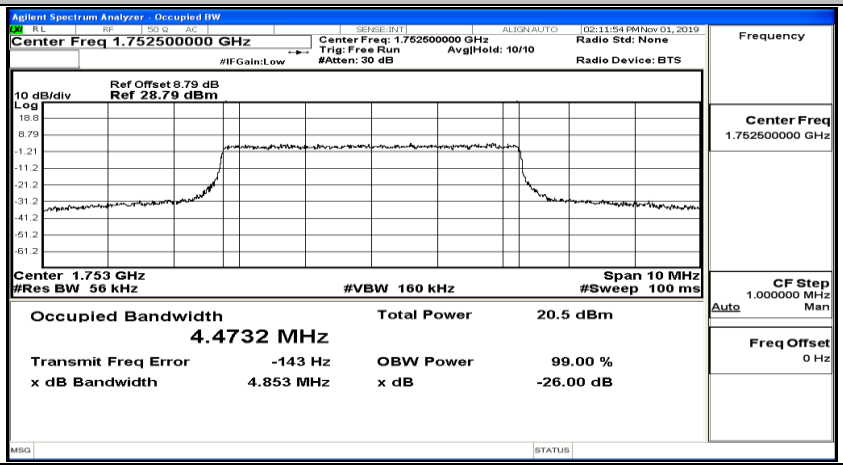
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



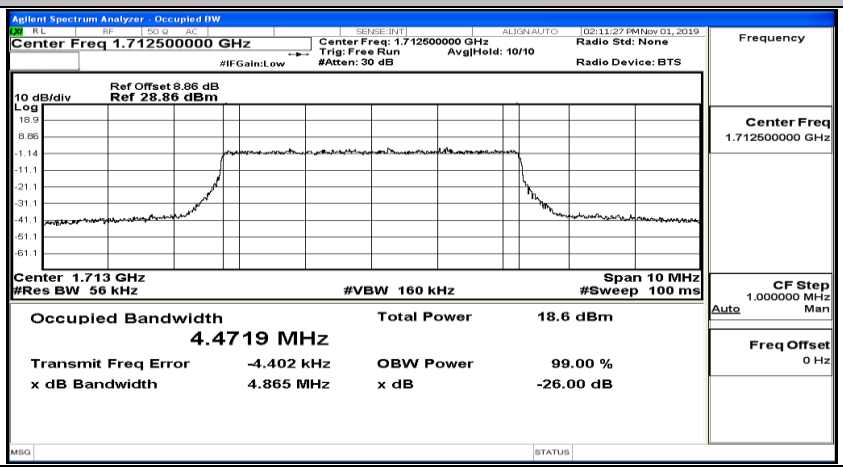
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



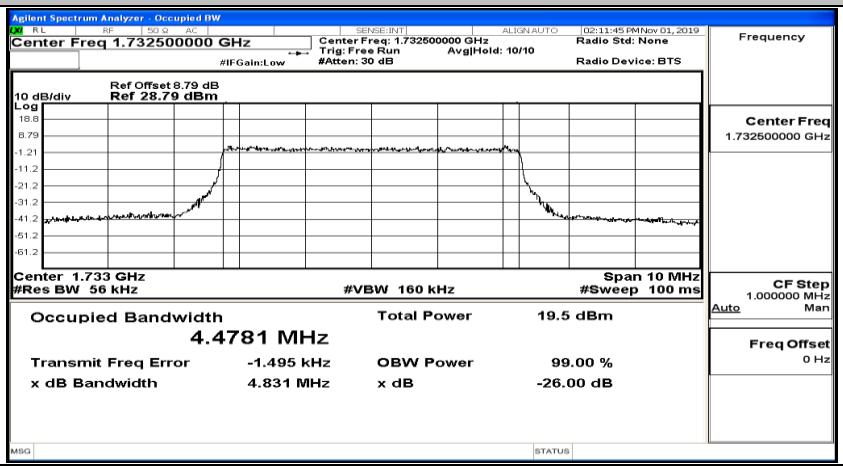
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



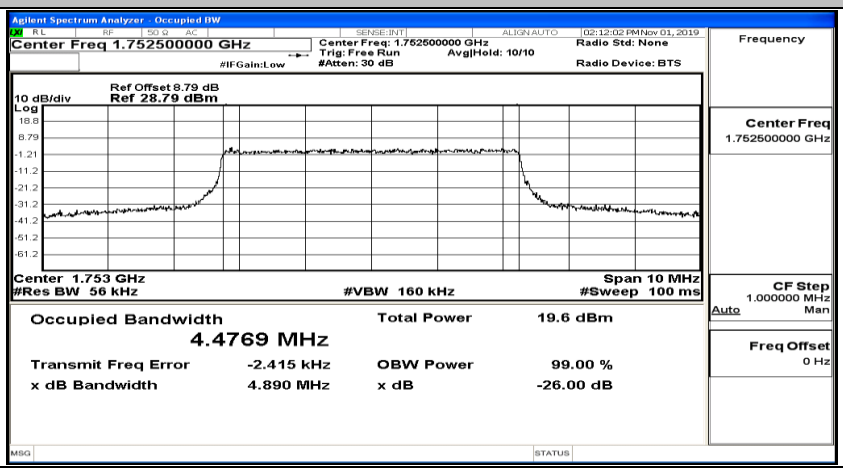
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



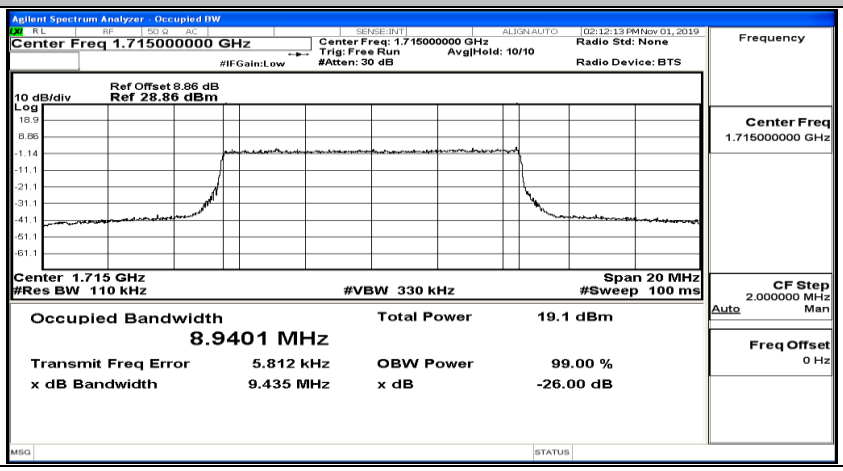
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



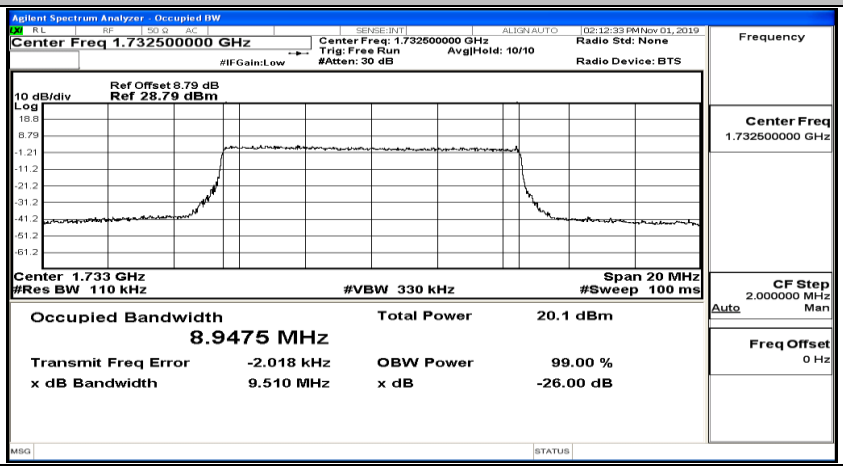
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



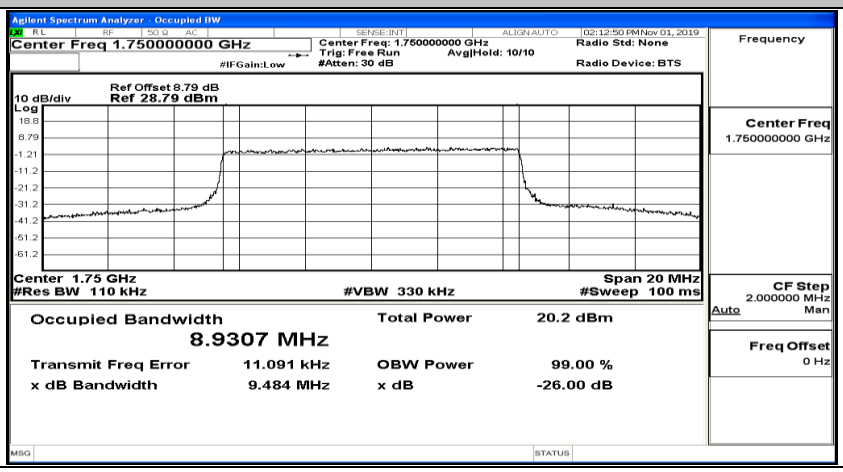
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



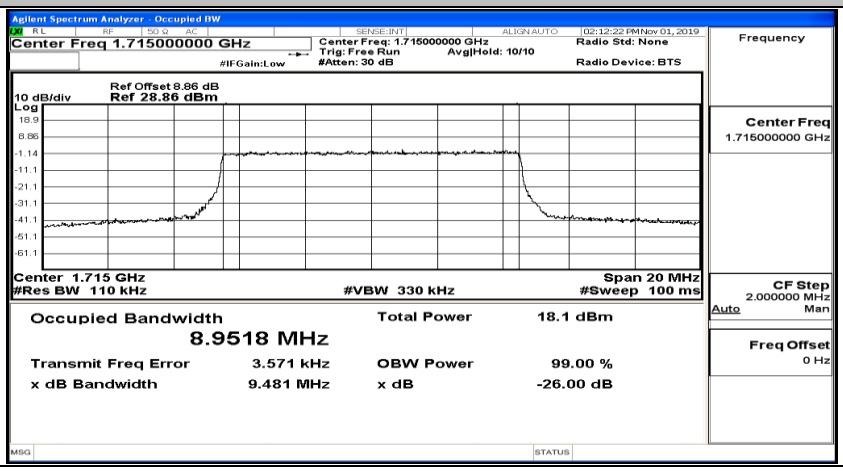
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



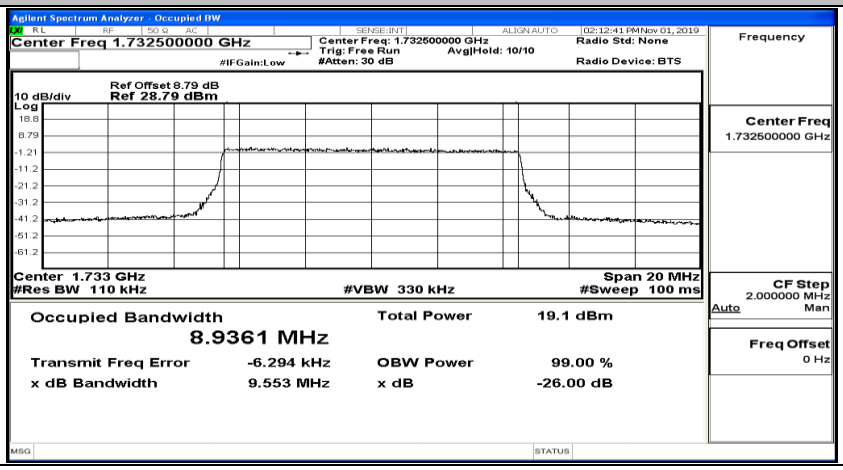
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



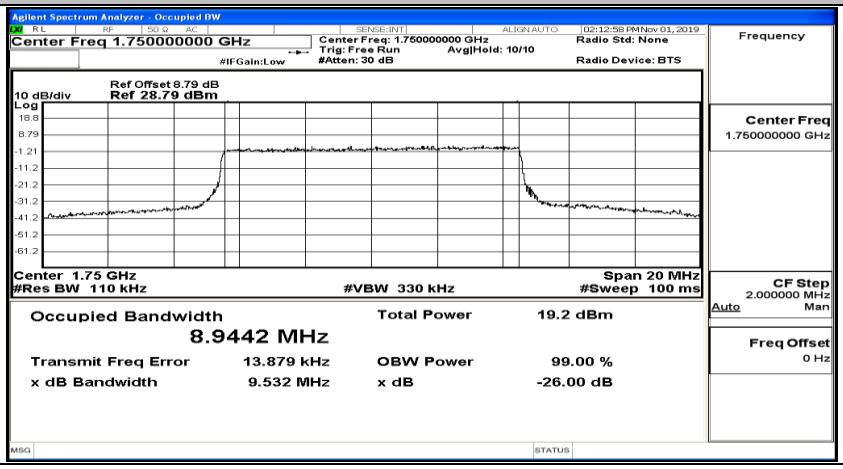
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



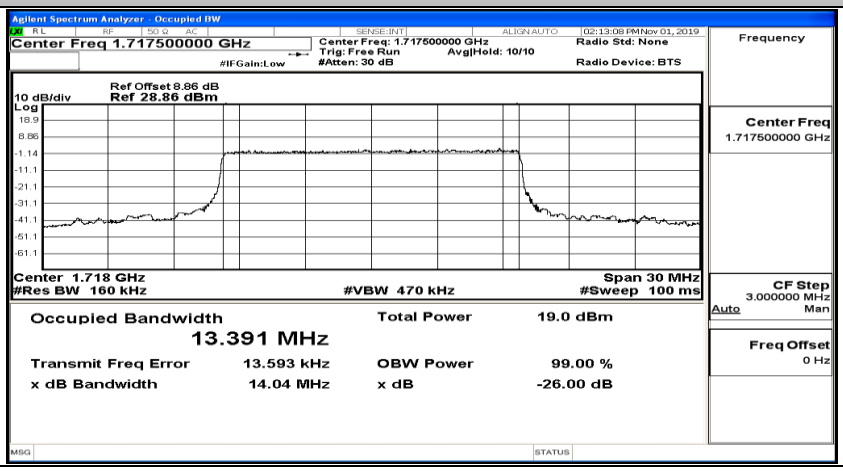
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



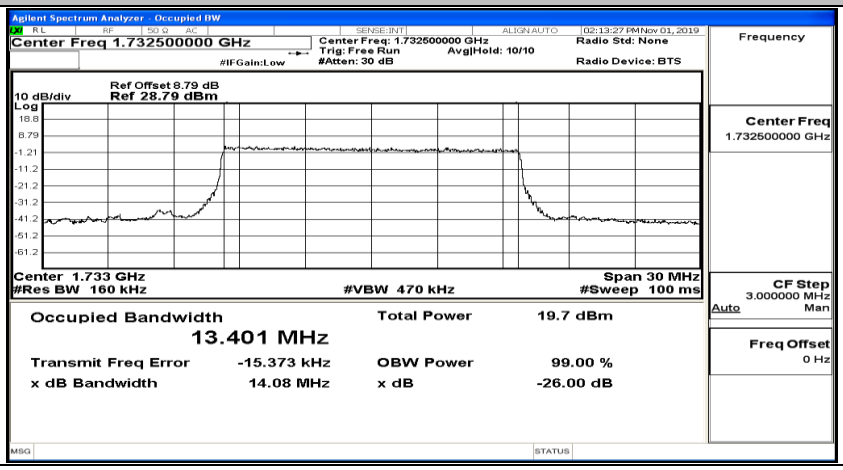
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



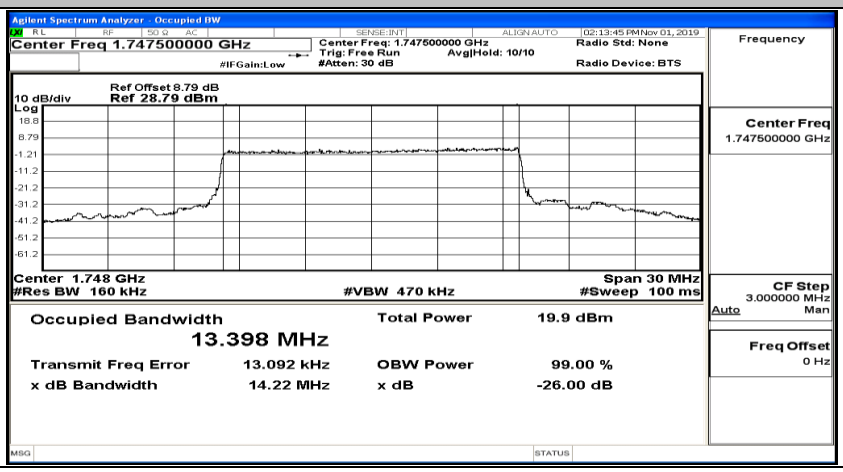
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



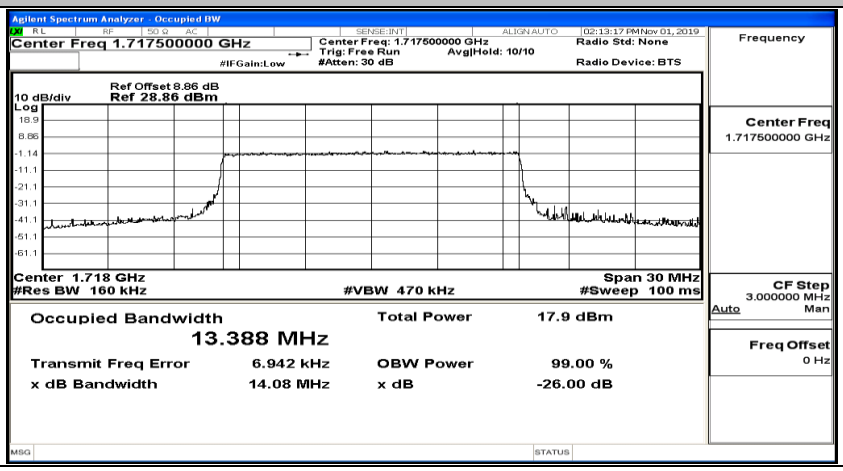
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



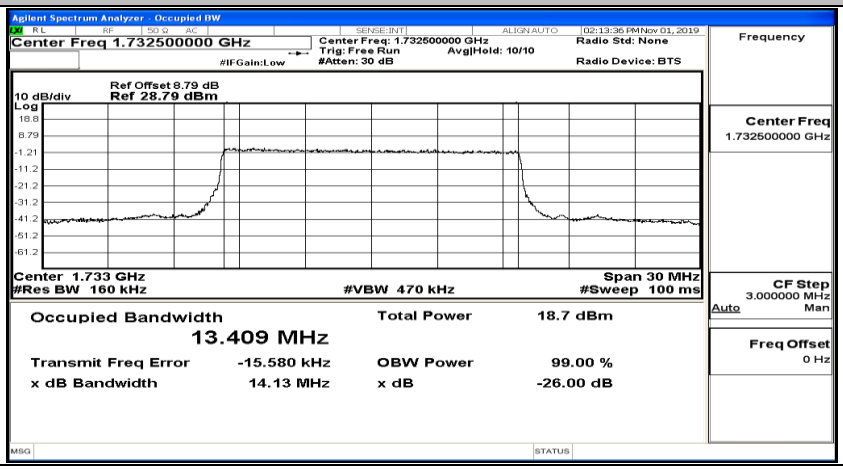
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



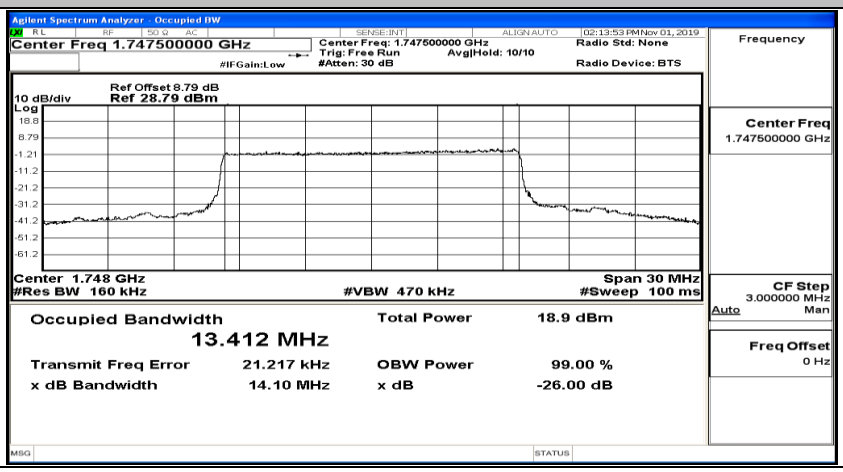
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



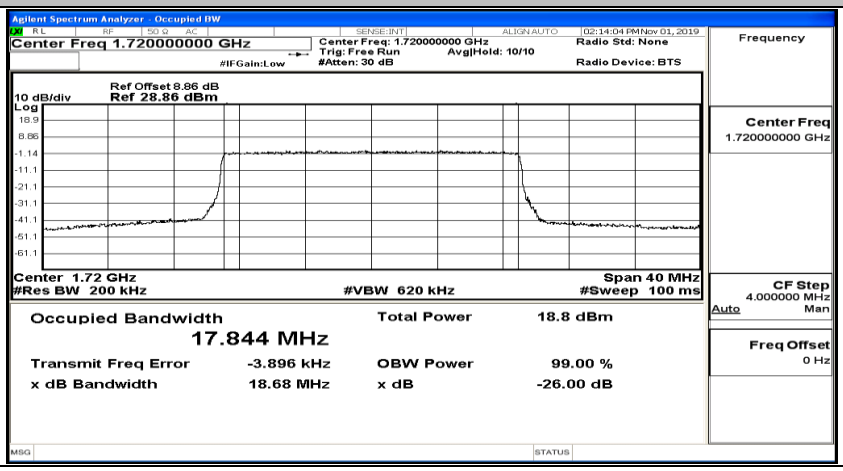
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



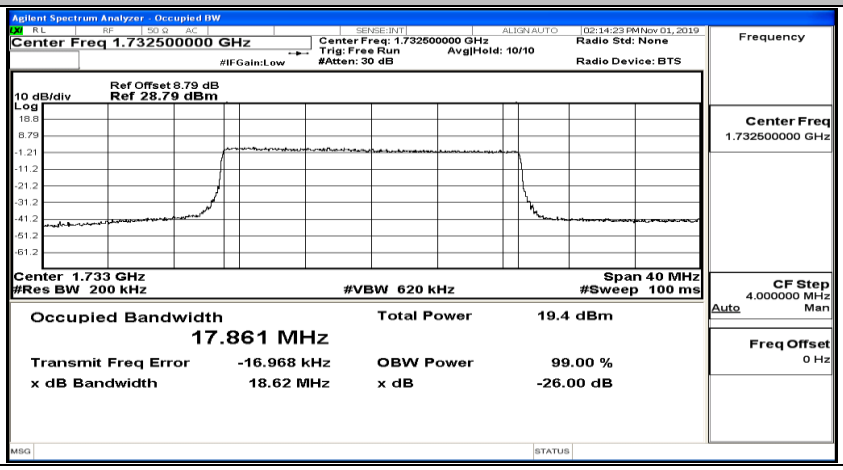
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



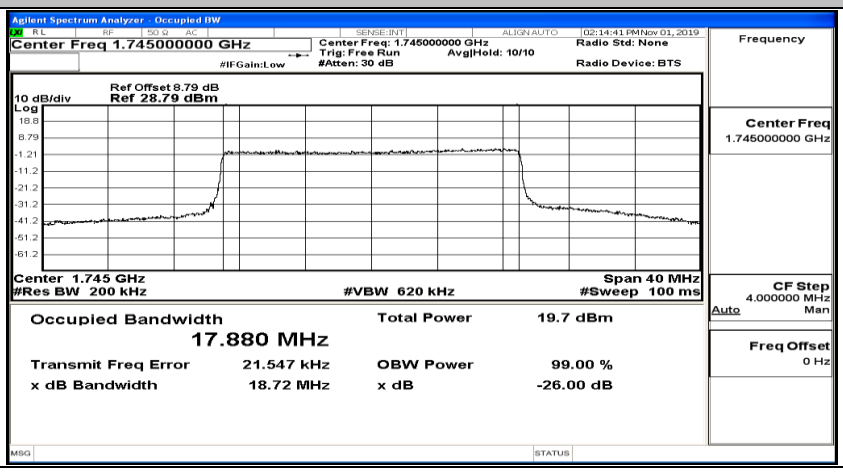
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



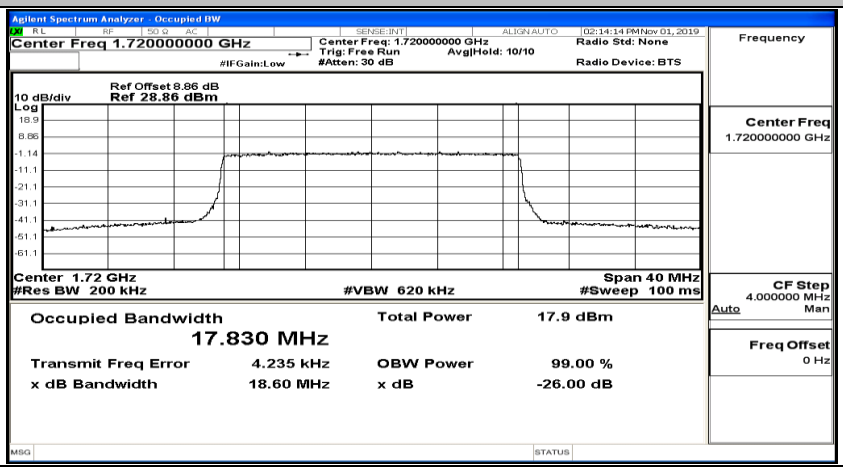
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



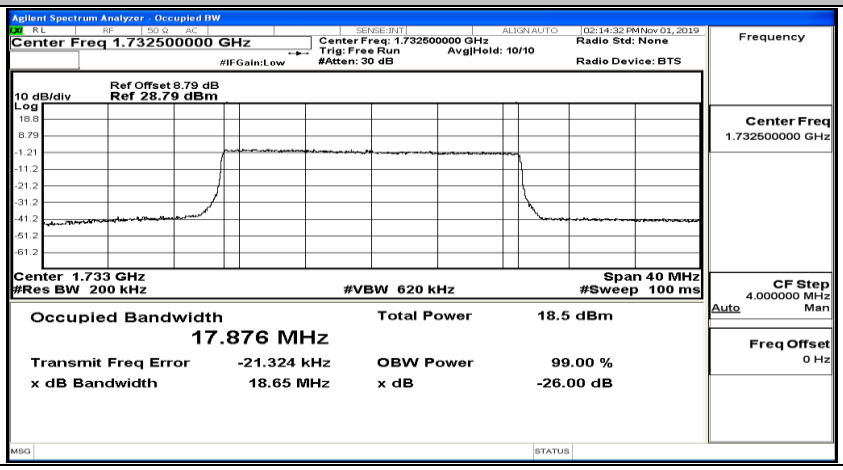
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



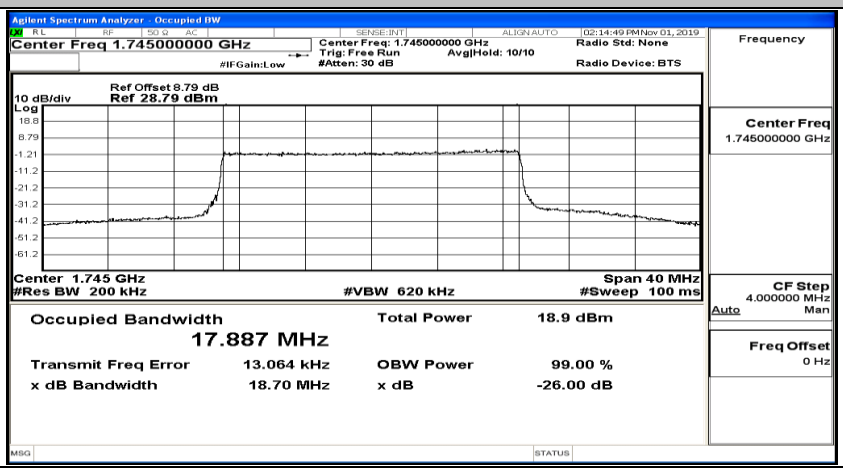
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

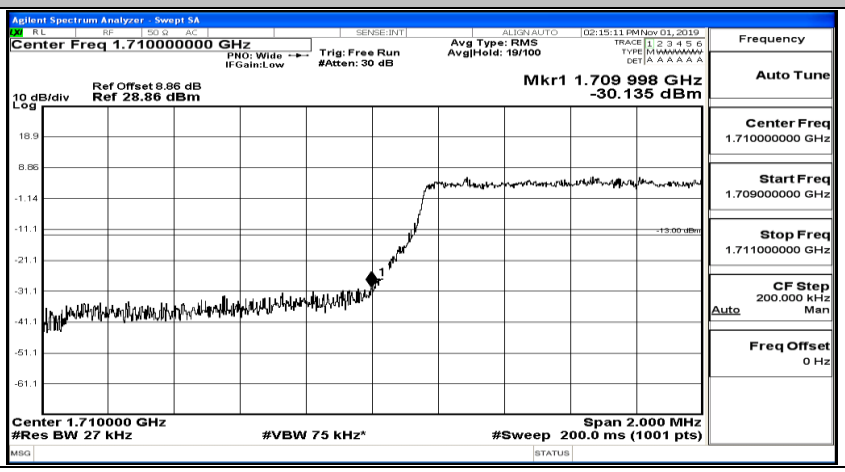


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

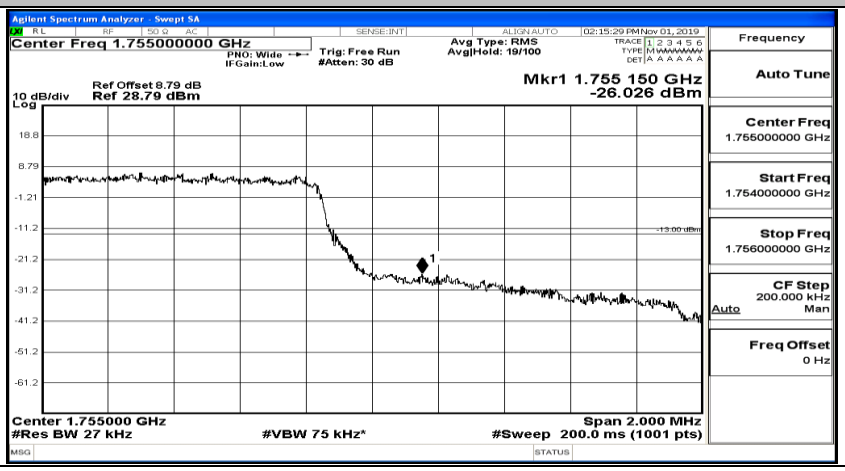


B.4 Band Edge

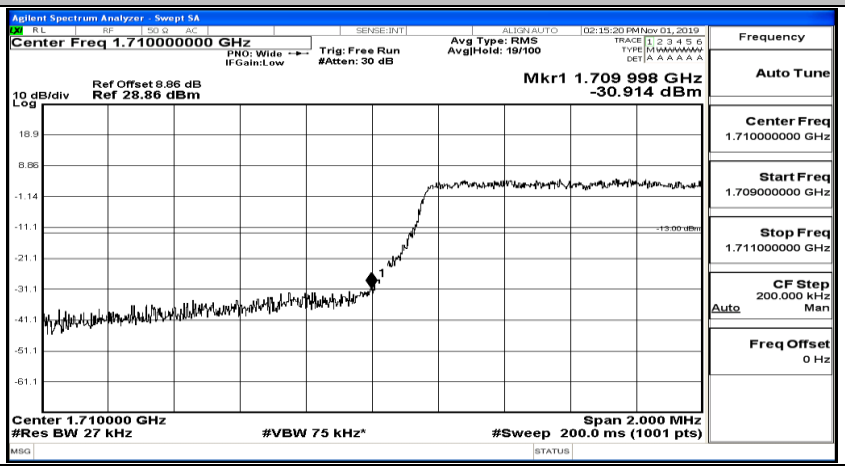
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



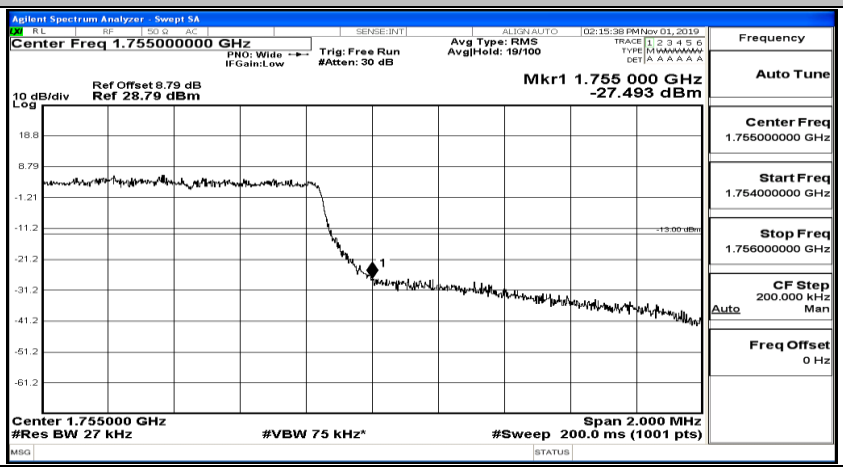
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



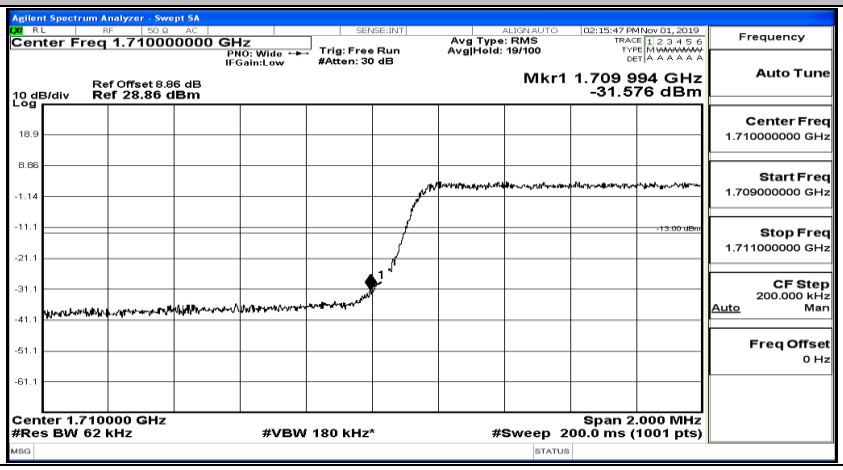
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



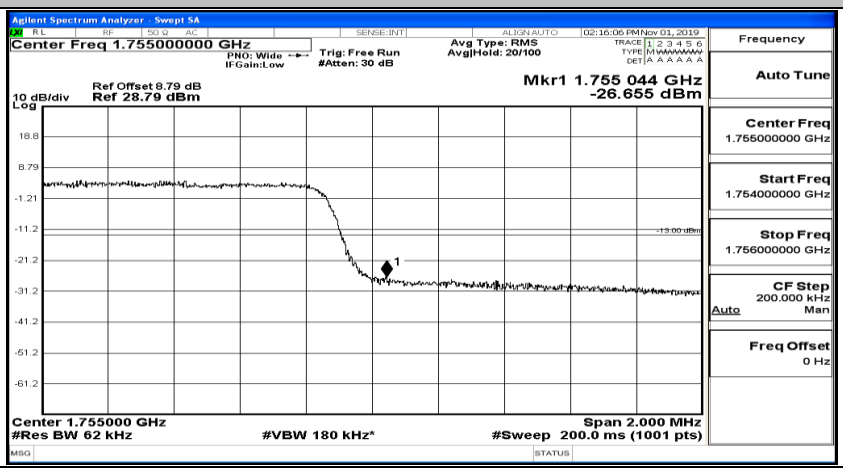
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



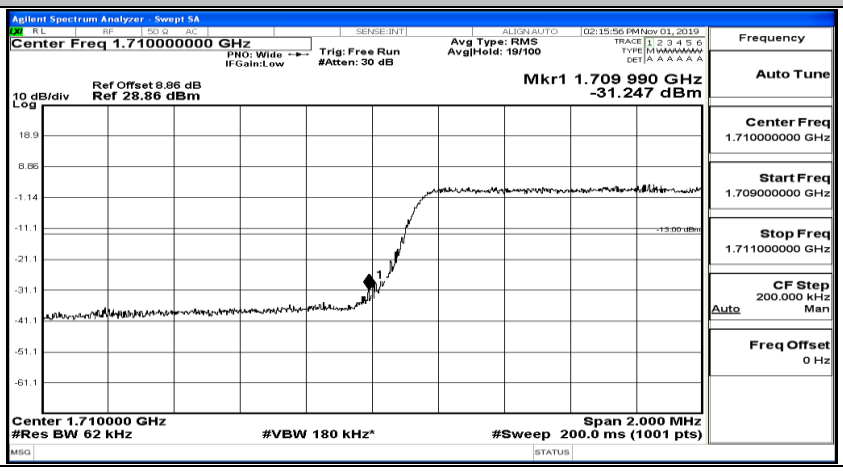
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



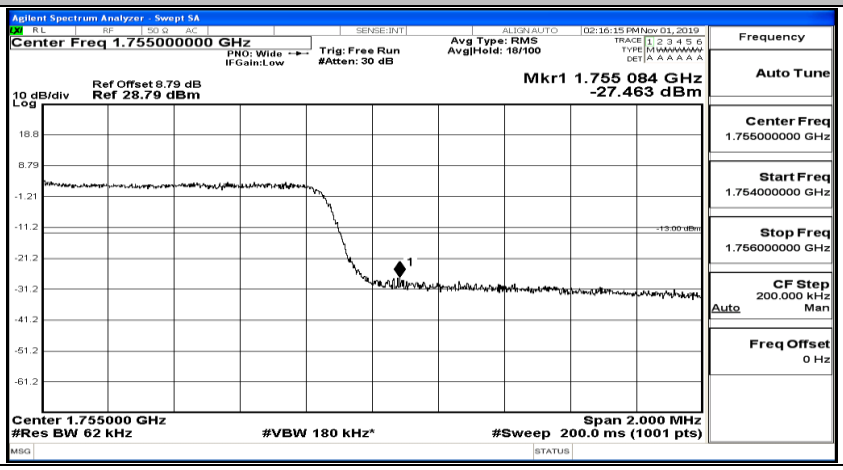
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



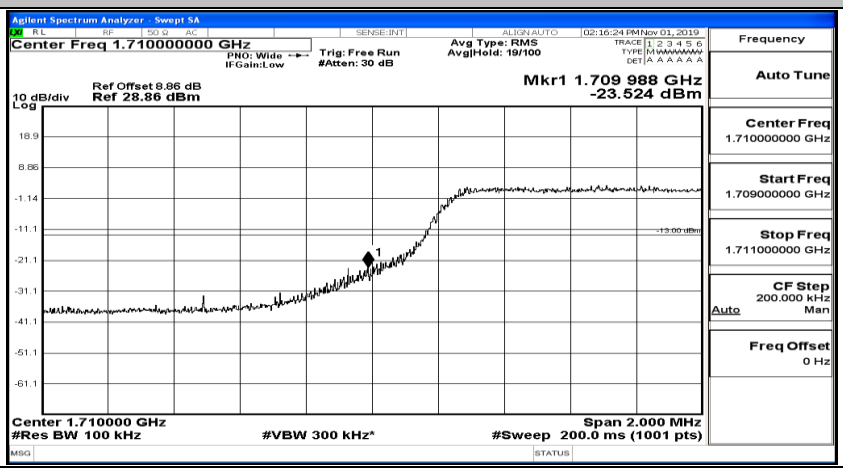
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



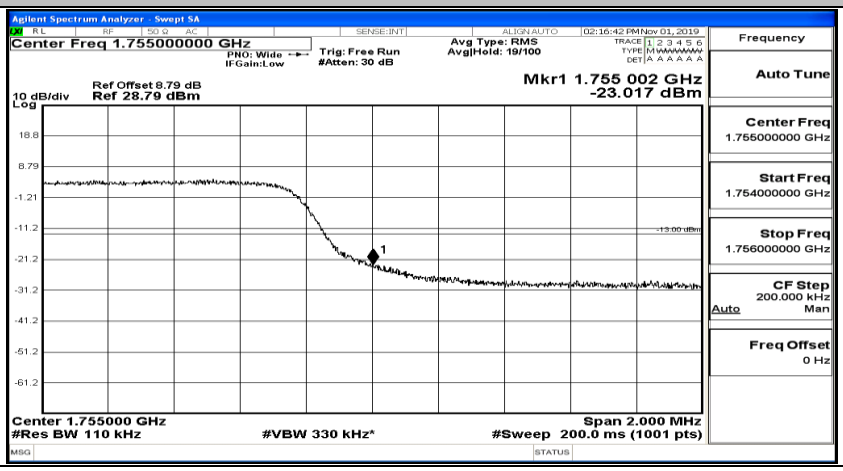
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



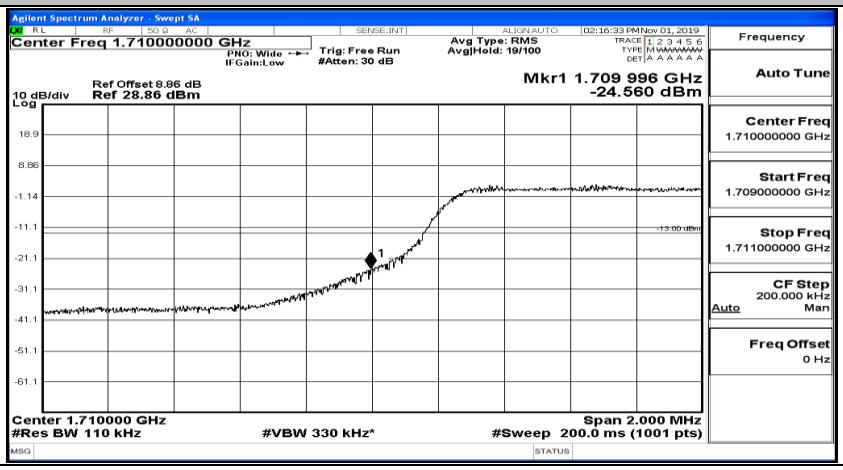
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



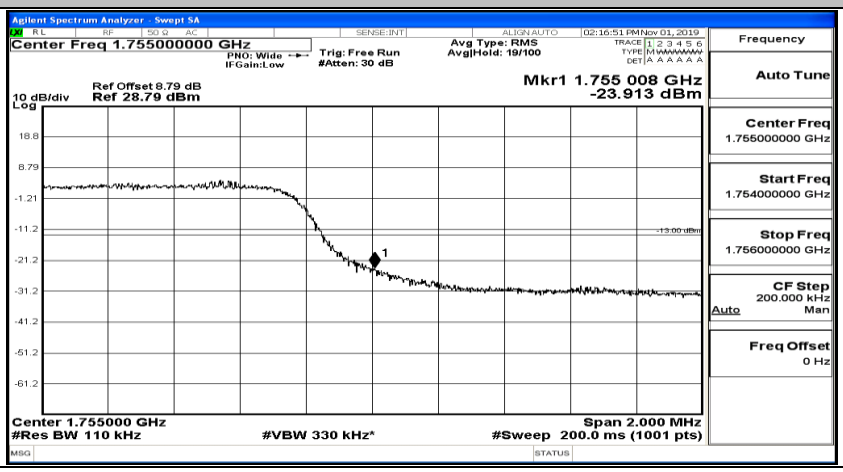
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



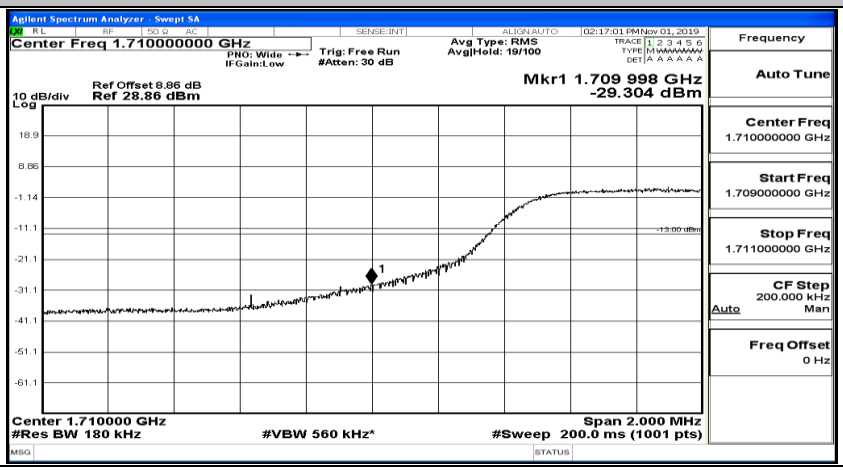
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



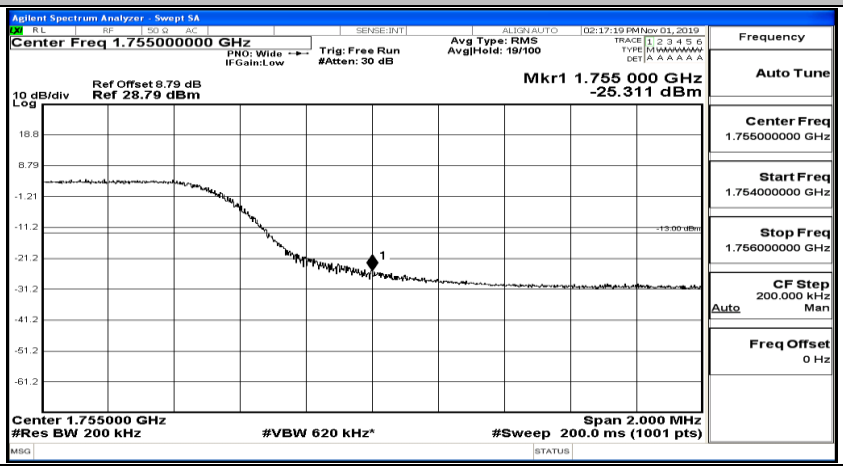
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



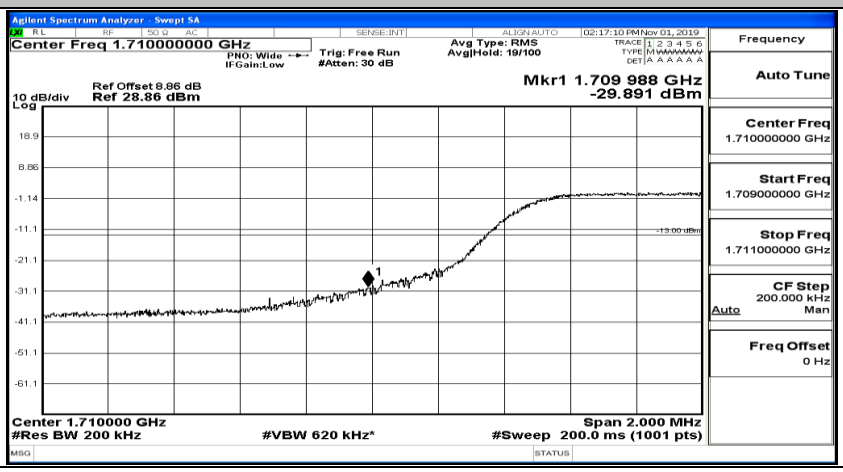
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



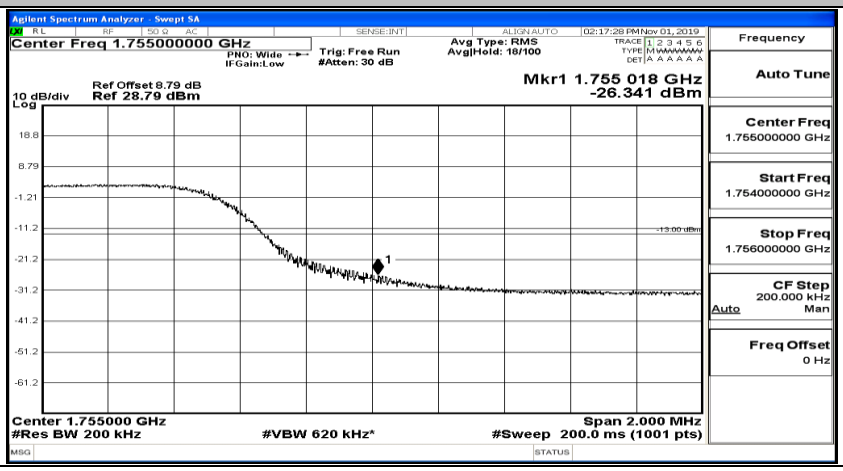
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



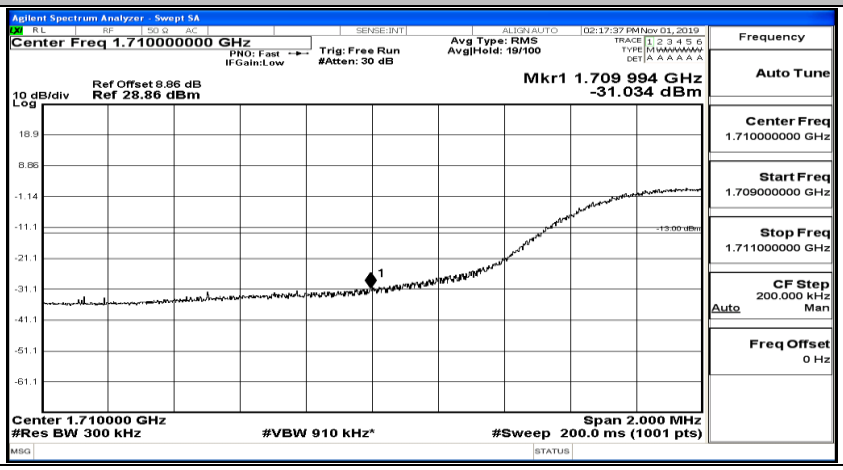
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



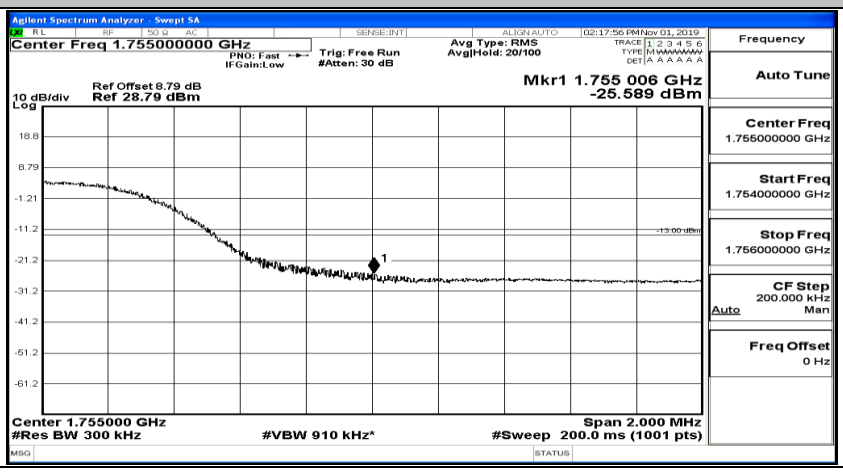
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



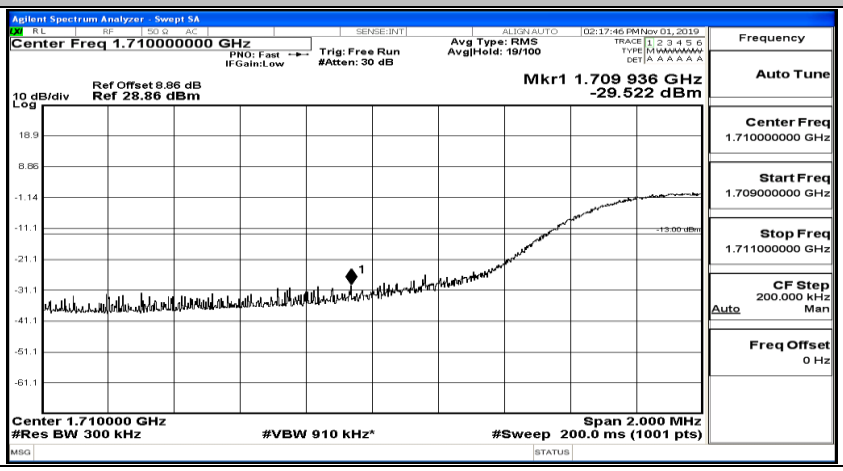
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



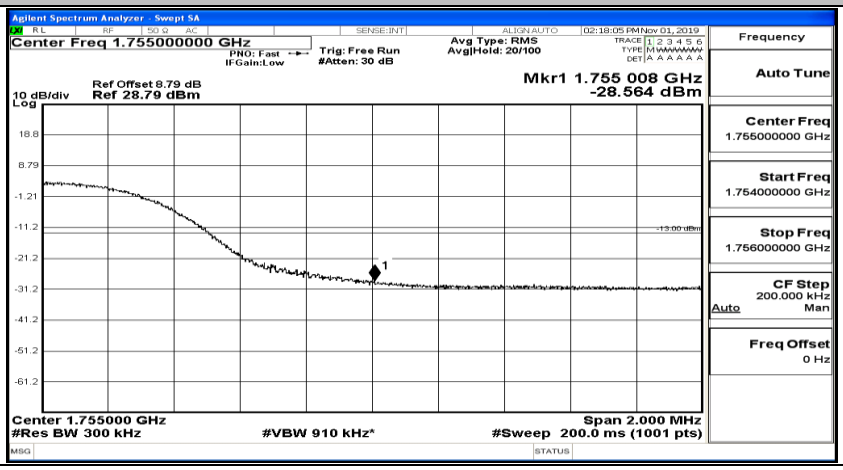
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



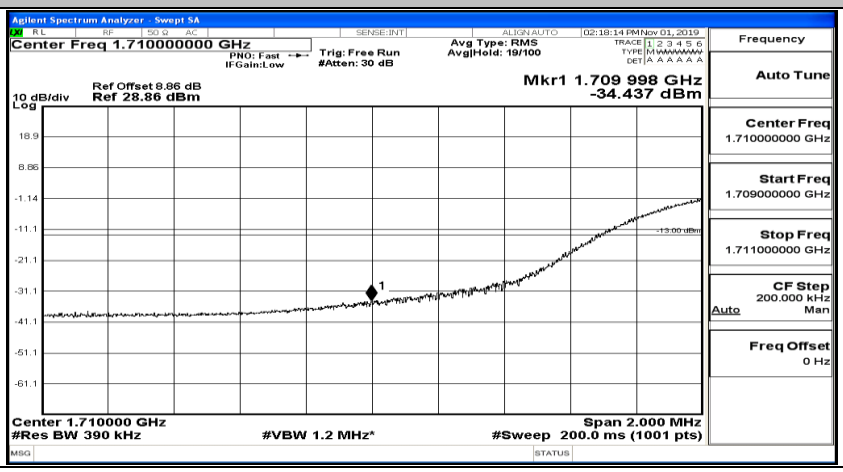
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



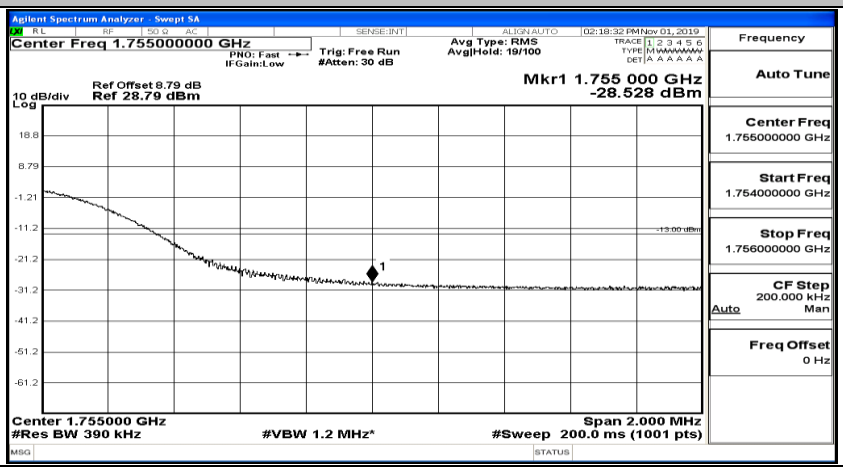
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



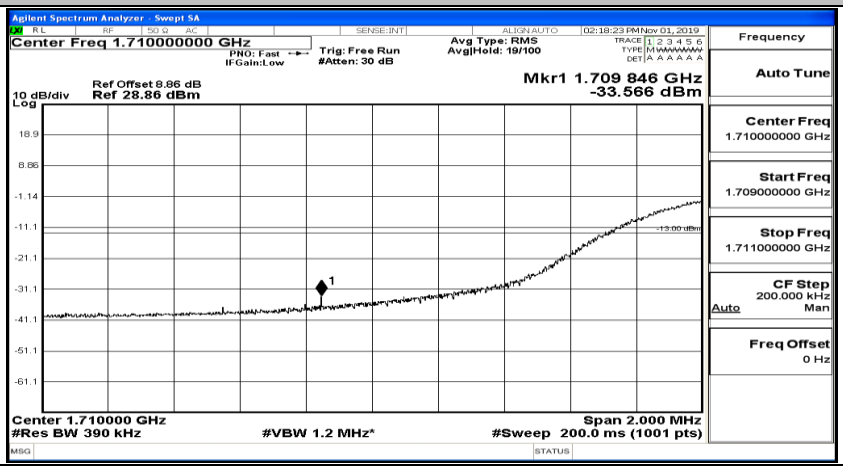
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



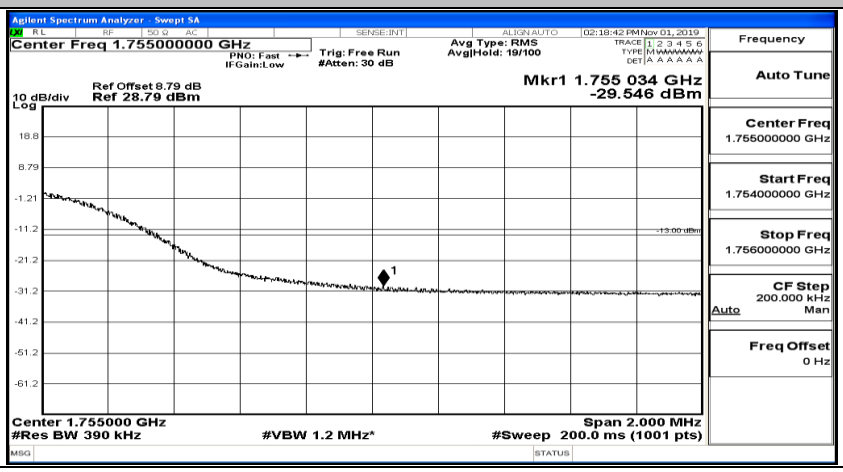
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM

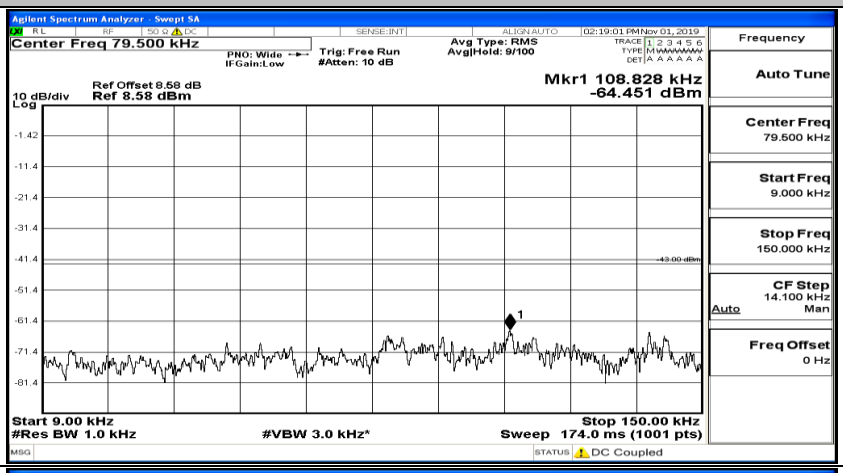


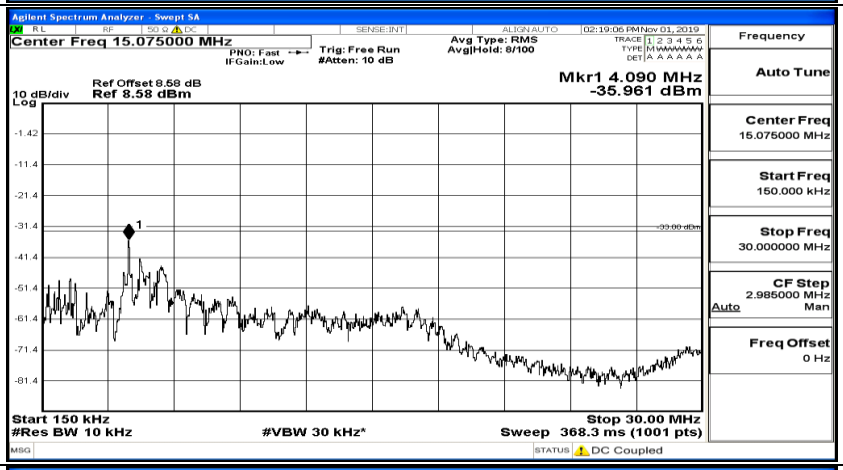
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

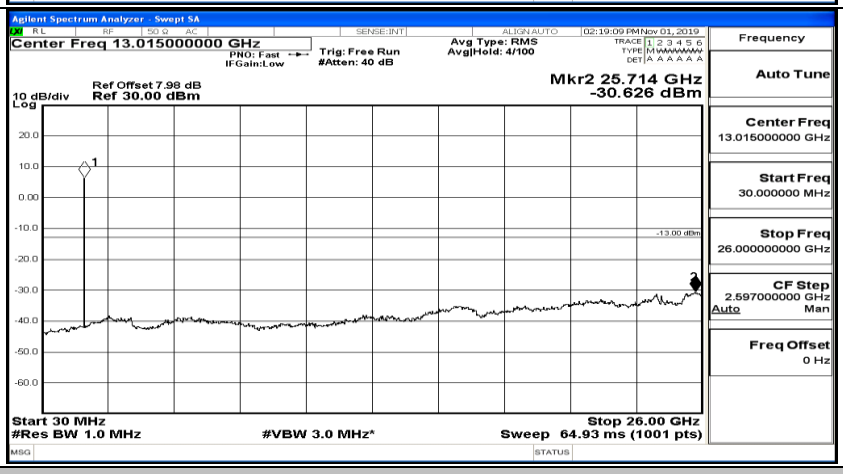


B.5 Conducted Spurious Emission

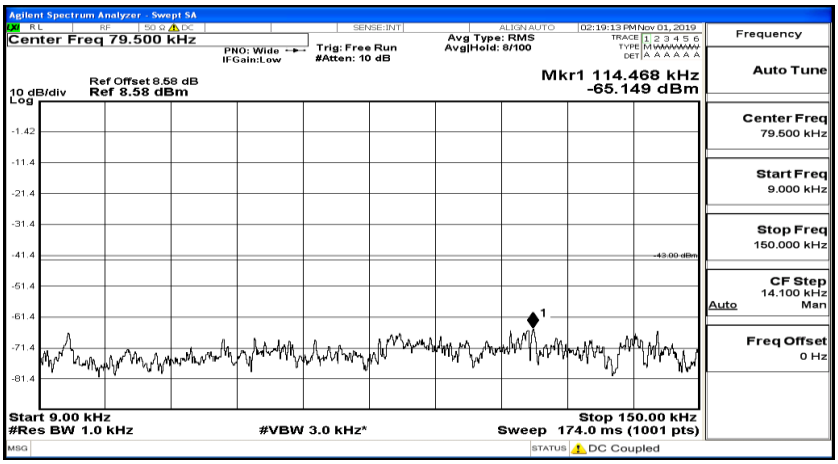
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

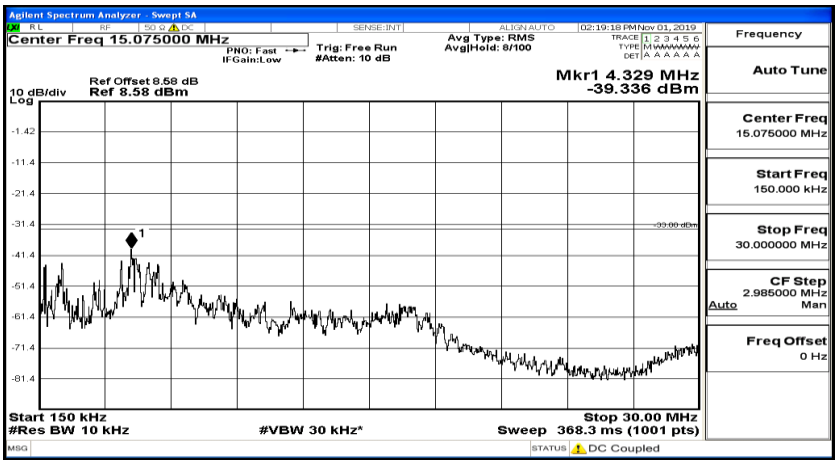


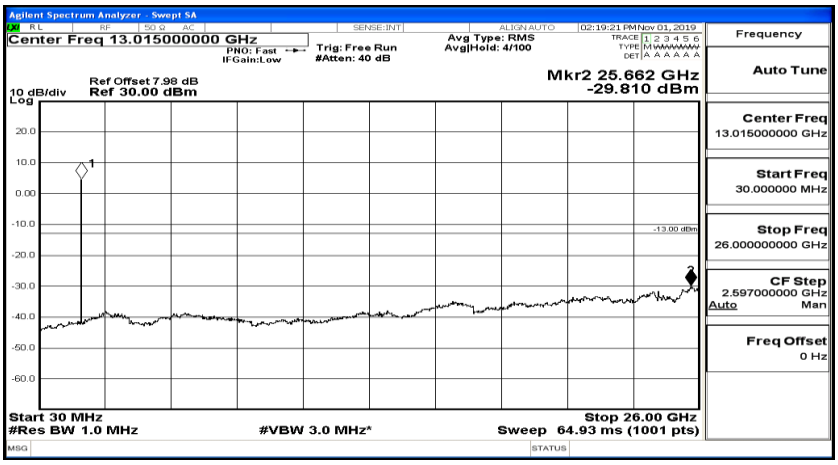




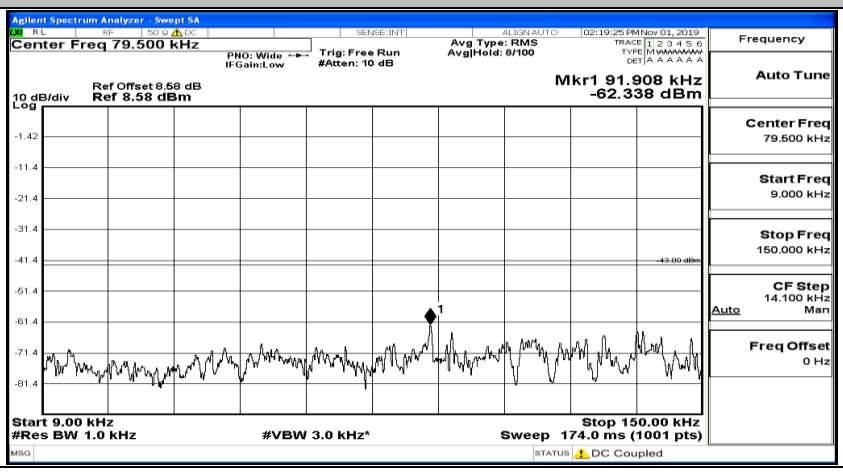
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

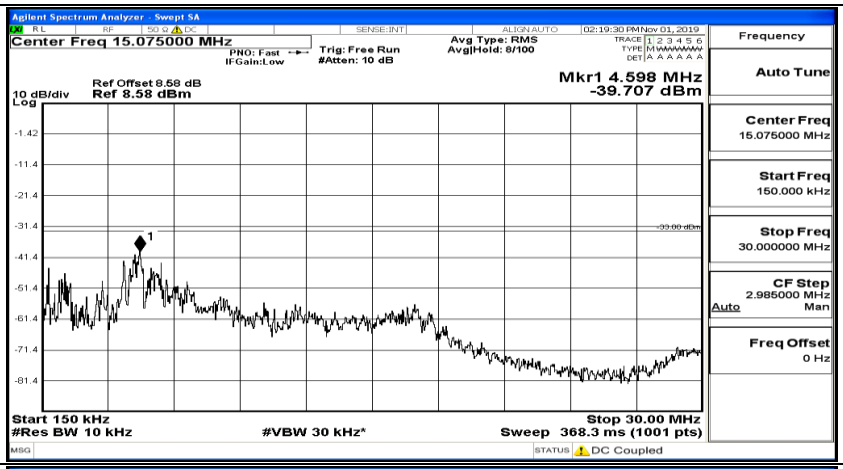




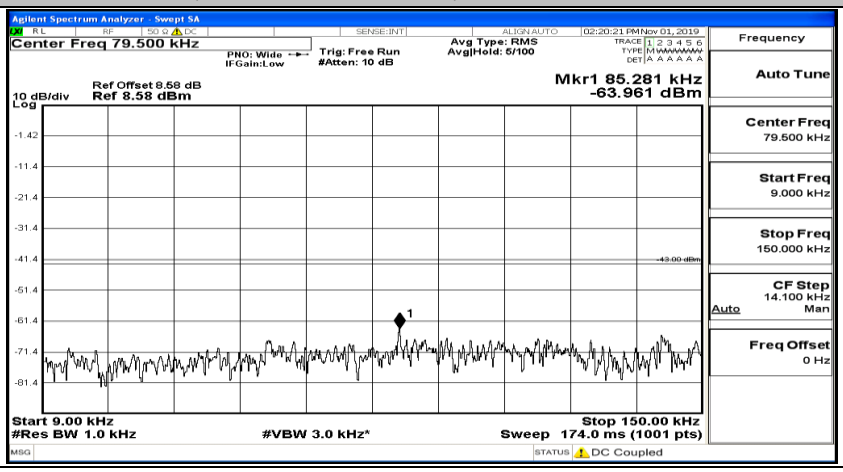


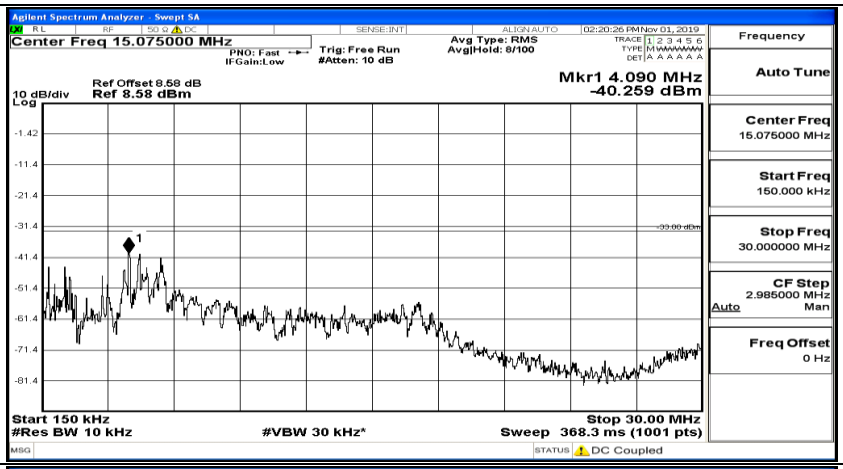
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

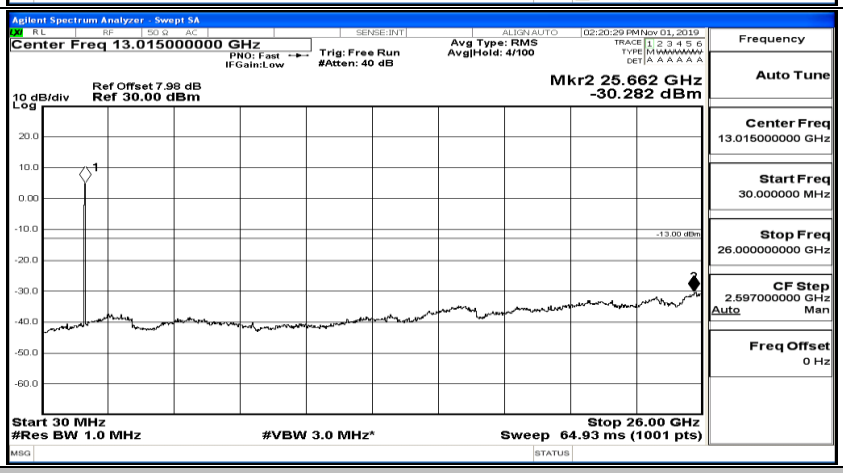




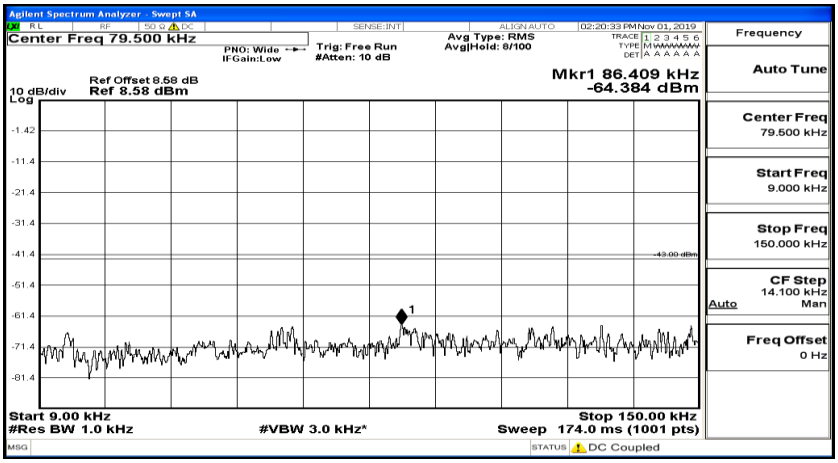
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

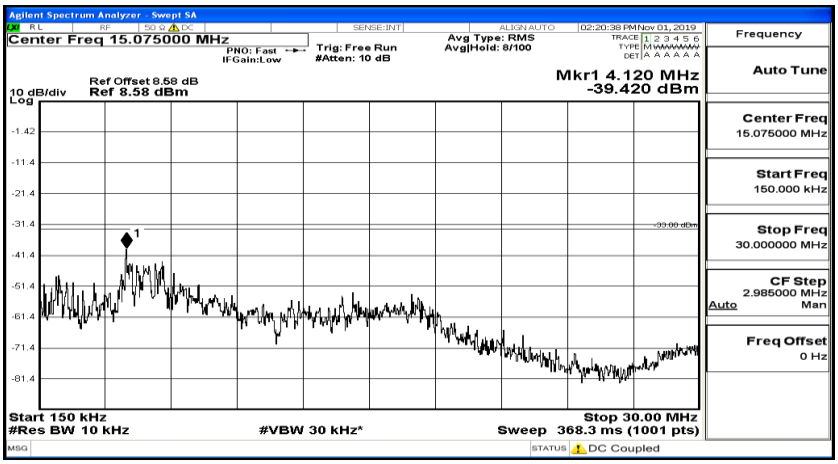


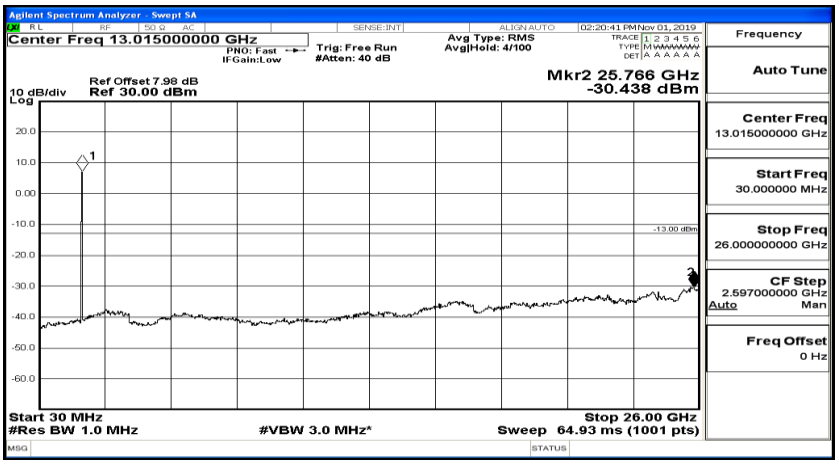




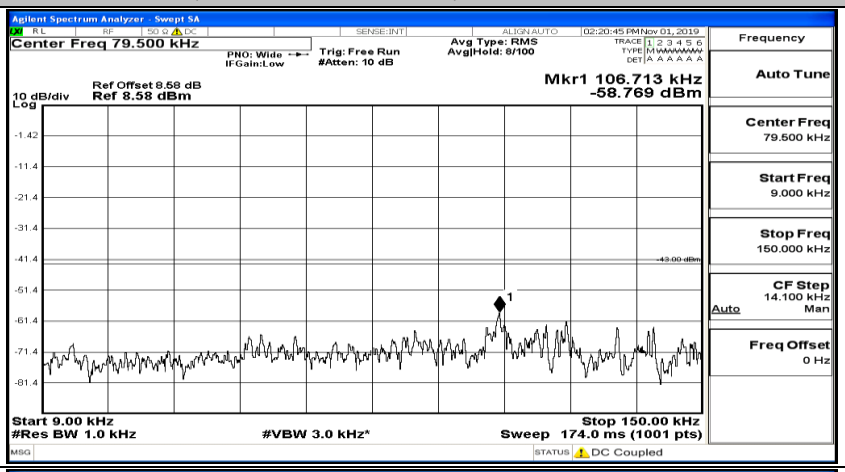
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

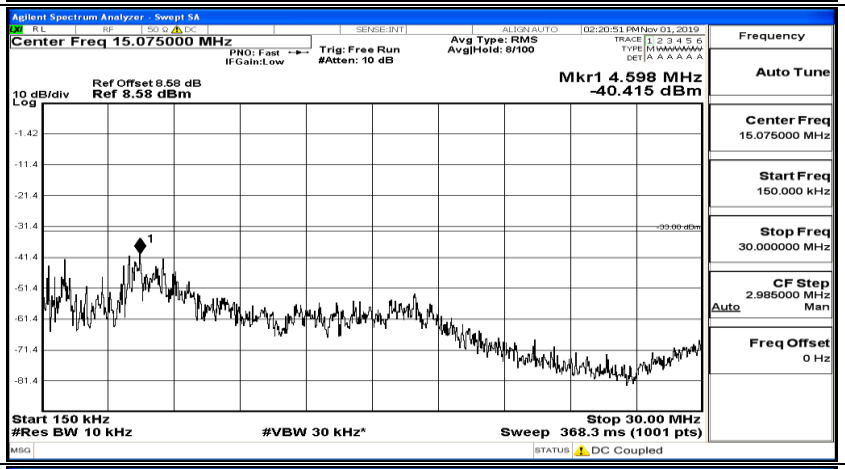


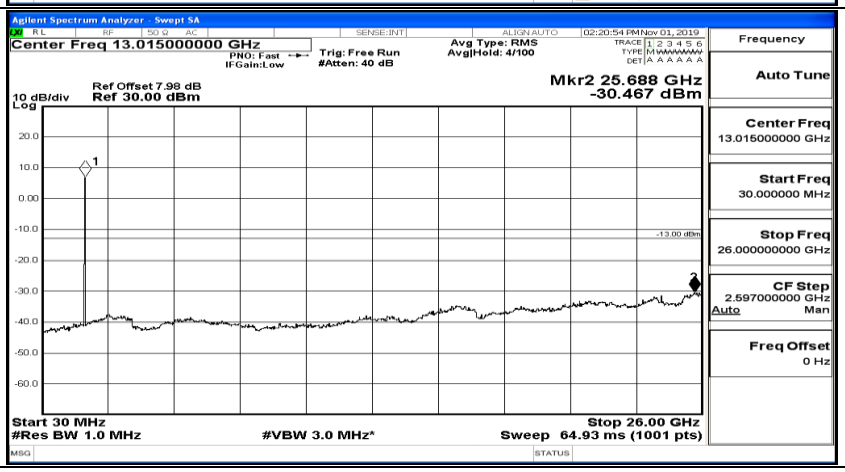




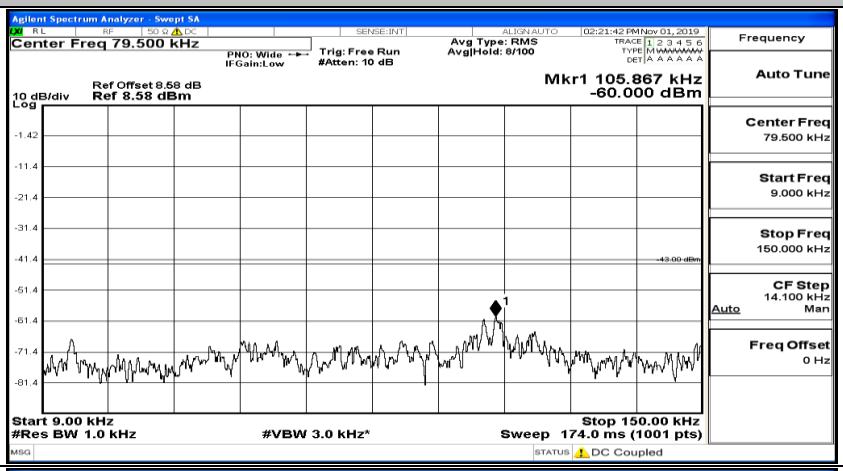
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

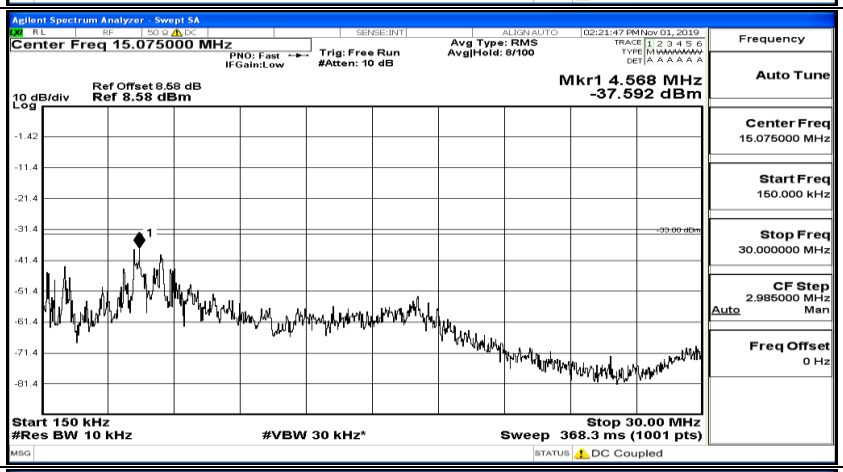


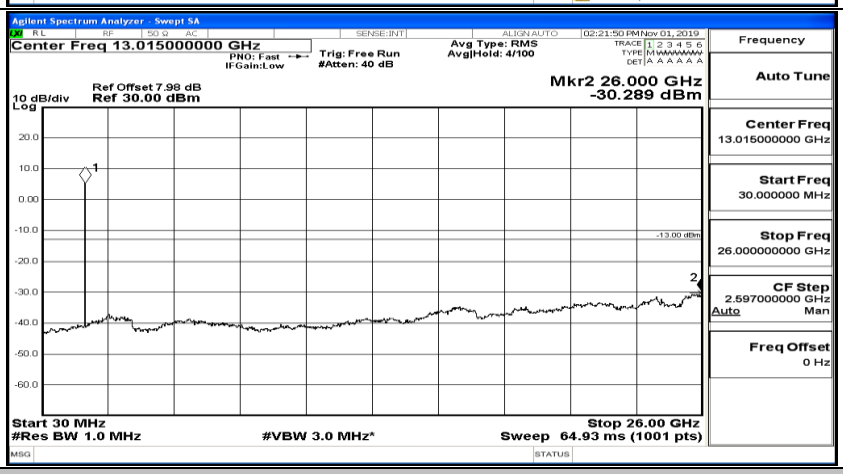




(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0







(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3