Appendix C: Test Data for E-UTRA Band 12

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

C.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.51	22.98	PASS
		1	3	22.54	22.92	PASS
		1	5	22.61	22.94	PASS
		3	0	22.54	21.18	PASS
		3	2	22.51	21.22	PASS
		3	3	22.48	21.23	PASS
		6	0	21.51	20.38	PASS
	MCH	1	0	22.72	22.23	PASS
		1	3	22.68	22.11	PASS
		1	5	22.74	22.16	PASS
		3	0	22.58	21.28	PASS
		3	2	22.70	21.32	PASS
		3	3	22.64	21.33	PASS
		6	0	21.64	20.34	PASS
	HCH	1	0	22.75	22.91	PASS
		1	3	22.86	22.77	PASS
		1	5	22.93	22.76	PASS
		3	0	22.78	21.94	PASS
		3	2	22.80	21.77	PASS
		3	3	22.87	21.84	PASS
		6	0	21.63	20.62	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	22.57	22.33	PASS
		1	7	22.64	22.39	PASS
		1	14	22.54	22.19	PASS
		8	0	21.56	20.25	PASS
		8	4	21.55	20.32	PASS
		8	7	21.32	20.30	PASS
		15	0	21.57	20.46	PASS
	MCH	1	0	22.69	22.59	PASS
		1	7	22.70	22.45	PASS
		1	14	22.76	22.49	PASS
		8	0	21.60	20.53	PASS
		8	4	21.41	20.32	PASS
		8	7	21.73	20.33	PASS
		15	0	21.67	20.47	PASS
	HCH	1	0	22.86	23.06	PASS
		1	7	22.81	23.04	PASS
		1	14	22.93	22.86	PASS
		8	0	21.78	20.57	PASS
		8	4	21.79	20.63	PASS
		8	7	21.58	20.64	PASS
		15	0	21.69	20.55	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	22.40	22.29	PASS
		1	12	22.51	22.27	PASS
		1	24	22.57	22.30	PASS
		12	0	21.59	20.61	PASS
		12	6	21.48	20.57	PASS
		12	13	21.28	20.57	PASS
		25	0	21.30	20.51	PASS
	MCH	1	0	22.66	22.94	PASS
		1	12	22.79	22.84	PASS
		1	24	22.78	22.86	PASS
		12	0	21.75	20.80	PASS
		12	6	21.67	20.65	PASS
		12	13	21.51	20.66	PASS
		25	0	21.66	20.57	PASS
	HCH	1	0	22.78	21.10	PASS
		1	12	22.86	21.20	PASS
		1	24	22.89	21.00	PASS
		12	0	21.84	20.82	PASS
		12	6	21.82	20.70	PASS
		12	13	21.74	20.73	PASS
		25	0	21.77	20.82	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	22.40	22.16	PASS
		1	24	22.60	22.29	PASS
		1	49	22.58	22.19	PASS
		25	0	21.32	20.28	PASS
		25	12	21.46	20.56	PASS
		25	25	21.53	20.64	PASS
		50	0	21.62	20.74	PASS
	MCH	1	0	22.34	21.97	PASS
		1	24	22.57	22.25	PASS
		1	49	22.66	22.46	PASS
		25	0	21.56	20.54	PASS
		25	12	21.52	20.49	PASS
		25	25	21.58	20.42	PASS
		50	0	21.53	20.50	PASS
	HCH	1	0	22.71	22.15	PASS
		1	24	22.77	21.98	PASS
		1	49	22.95	22.13	PASS
		25	0	21.62	20.42	PASS
		25	12	21.56	20.55	PASS
		25	25	21.84	20.67	PASS
		50	0	21.49	20.50	PASS

C.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	5.58	<13	PASS
	MCH	5.68	<13	PASS
	HCH	5.59	<13	PASS
16QAM	LCH	6.52	<13	PASS
	MCH	6.64	<13	PASS
	HCH	6.58	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.55	<13	PASS
	MCH	5.67	<13	PASS
	HCH	5.7	<13	PASS
16QAM	LCH	6.59	<13	PASS
	MCH	6.7	<13	PASS
	HCH	6.5	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.43	<13	PASS
	MCH	5.67	<13	PASS
	HCH	5.5	<13	PASS
16QAM	LCH	6.4	<13	PASS
	MCH	6.48	<13	PASS
	HCH	6.4	<13	PASS

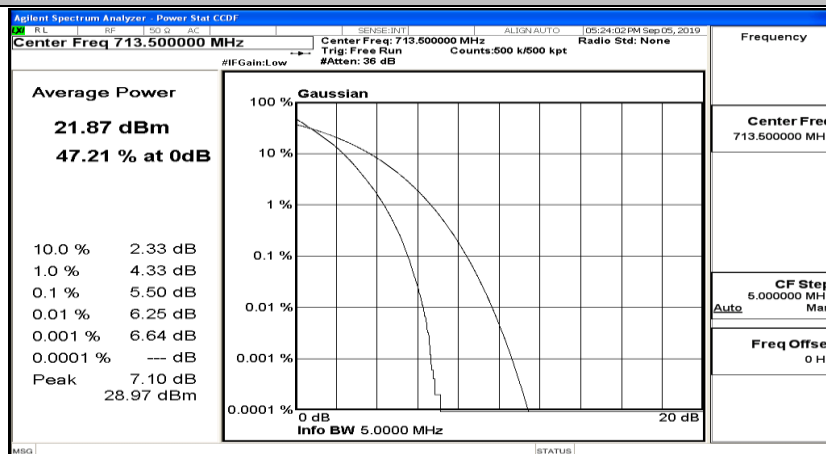| Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.5	<13	PASS
	MCH	5.77	<13	PASS
	HCH	5.63	<13	PASS
16QAM	LCH	6.35	<13	PASS
	MCH	6.52	<13	PASS
	HCH	6.39	<13	PASS
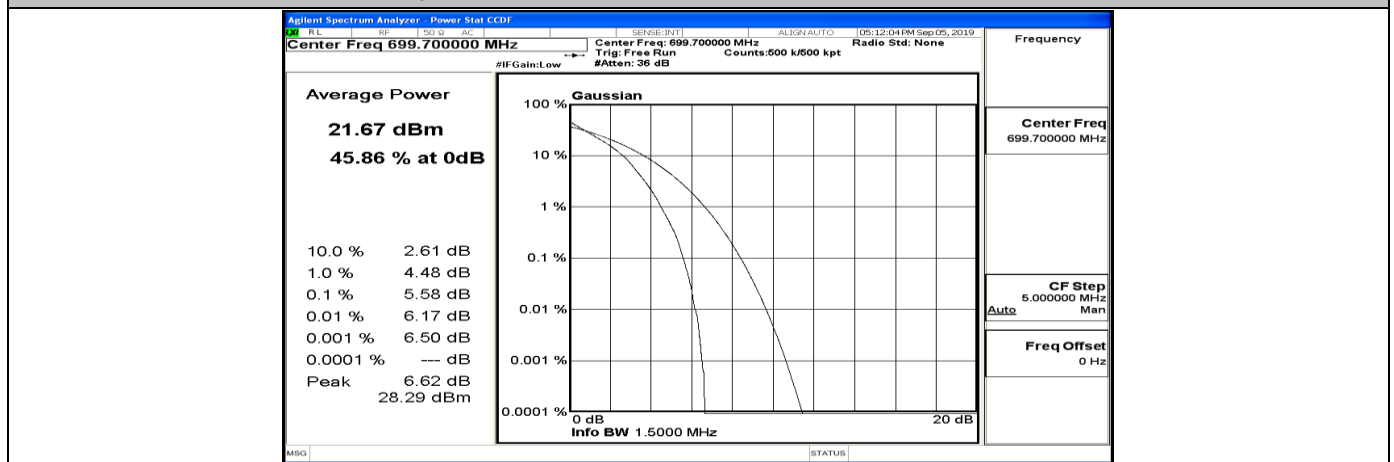
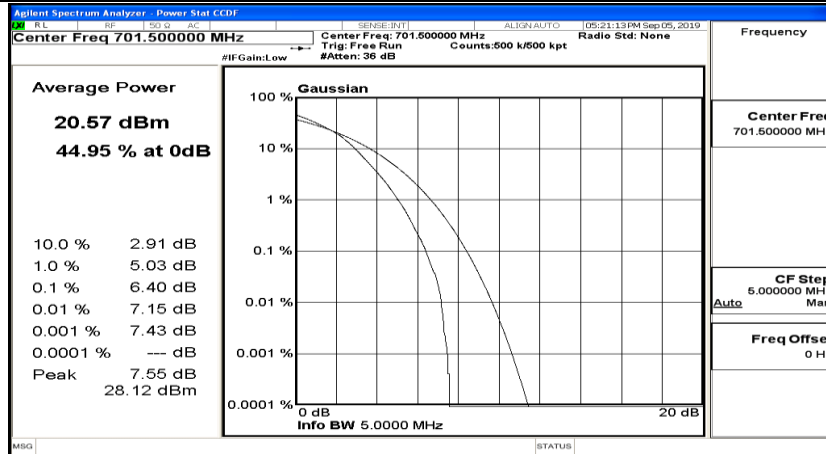| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK |
|---|

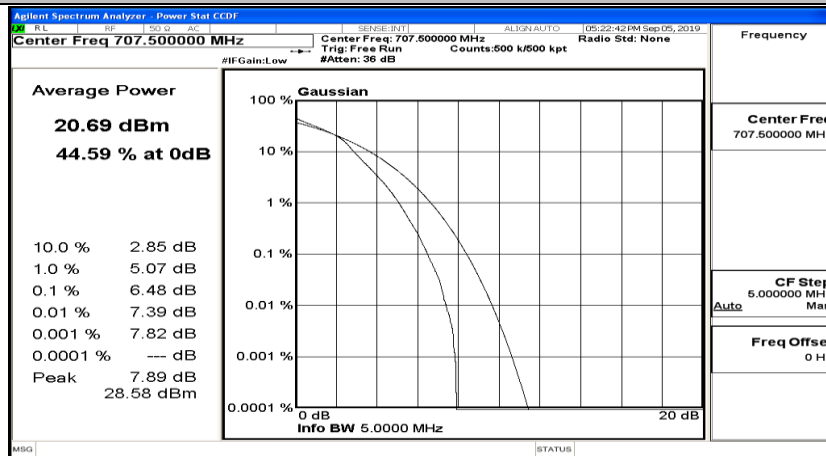| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK |
|---|

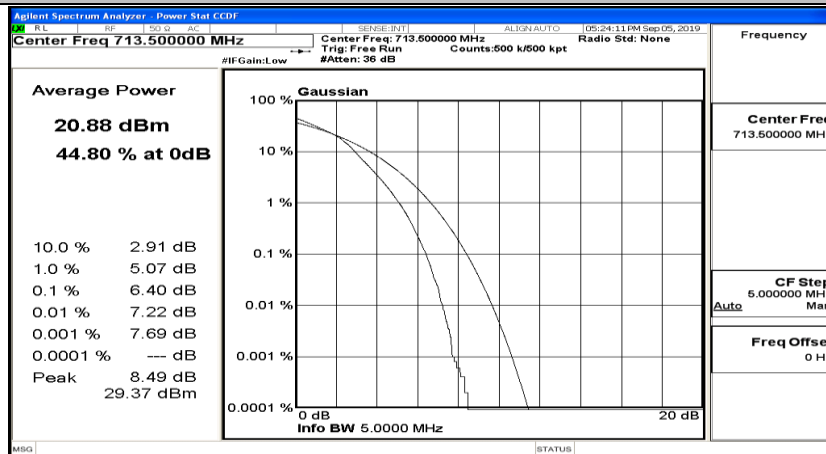| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK |
|---|

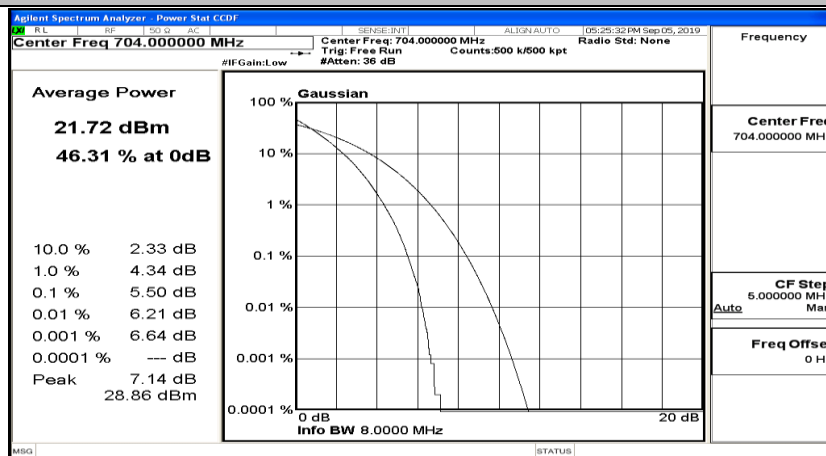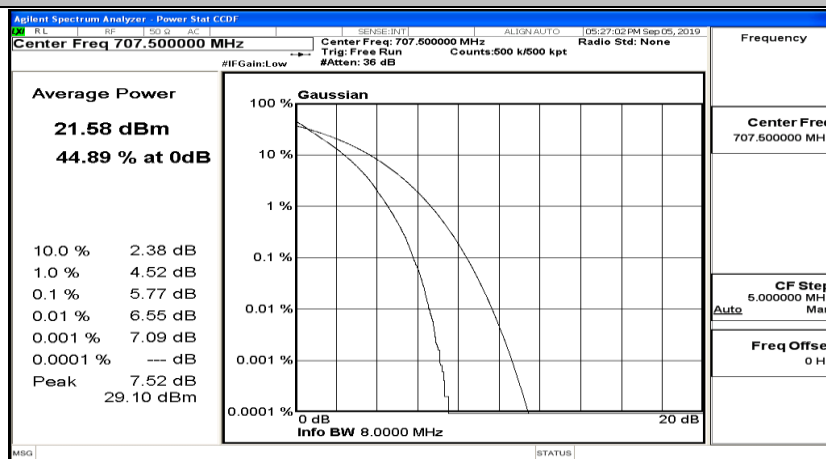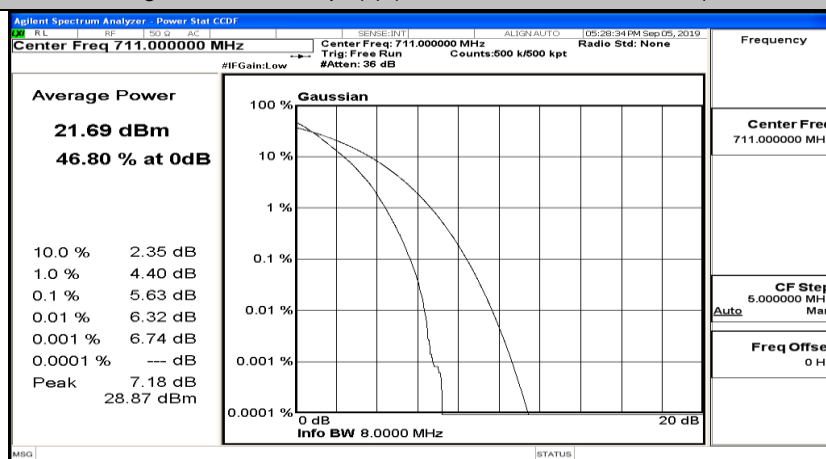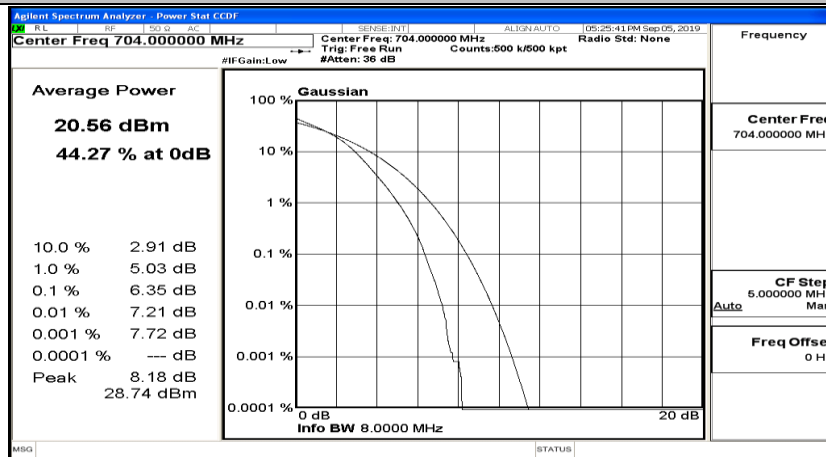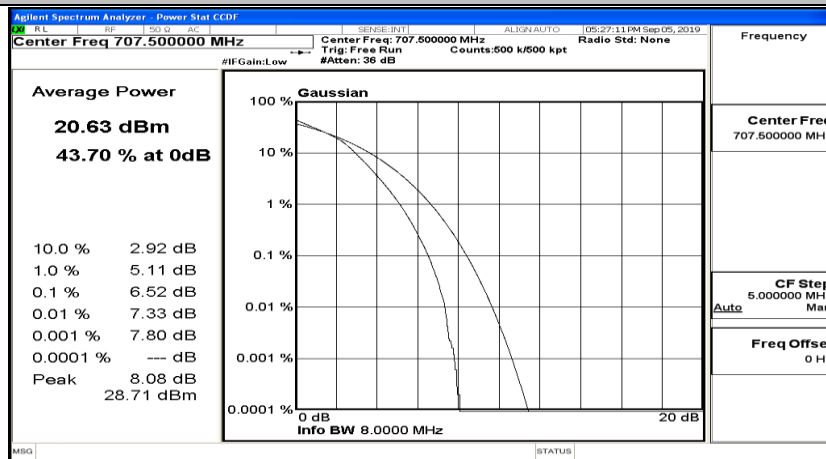| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM |
|---|
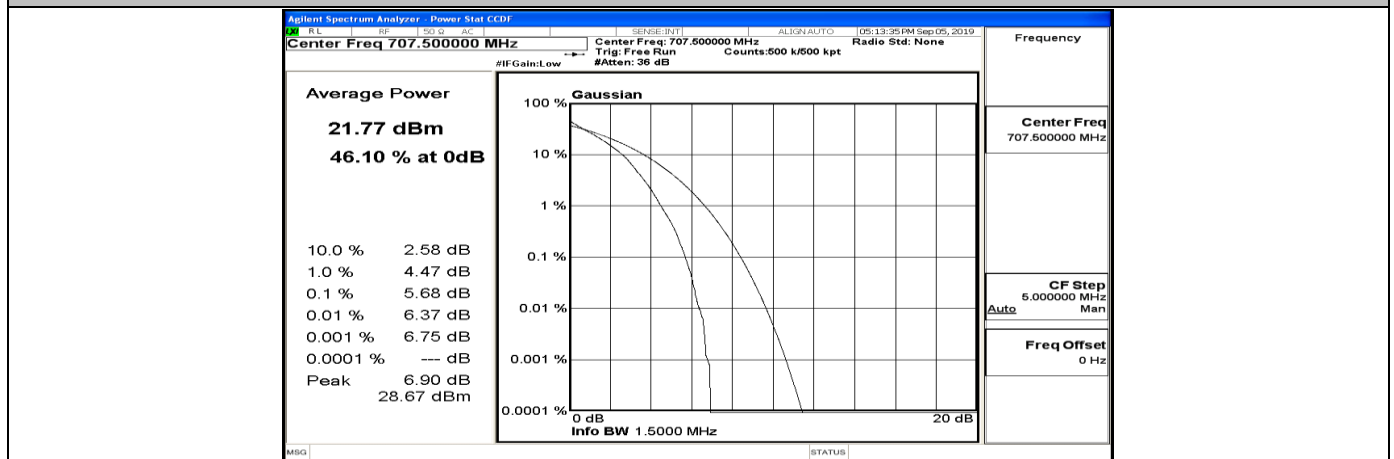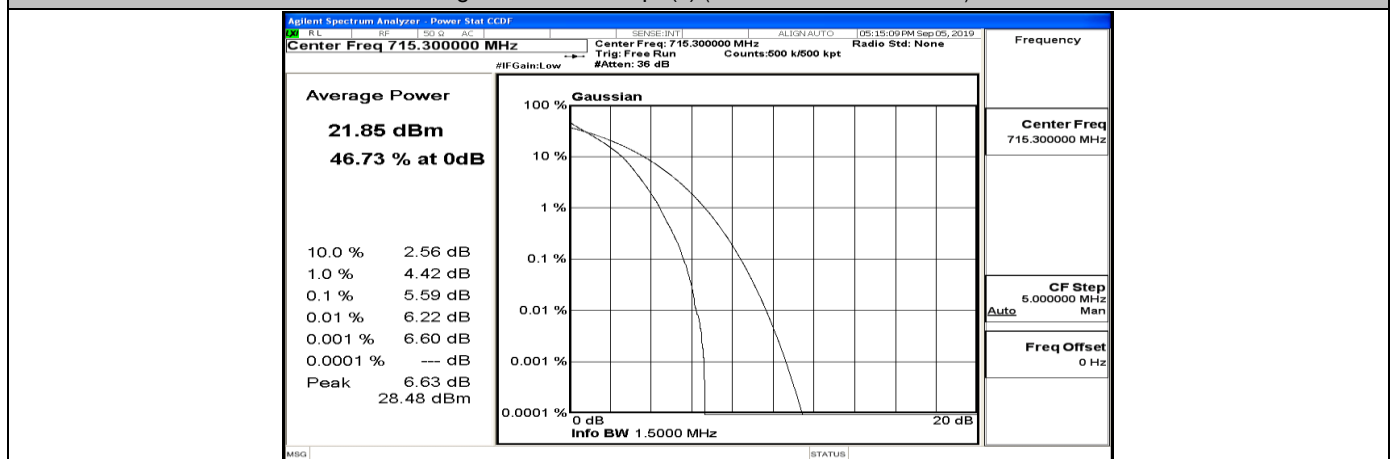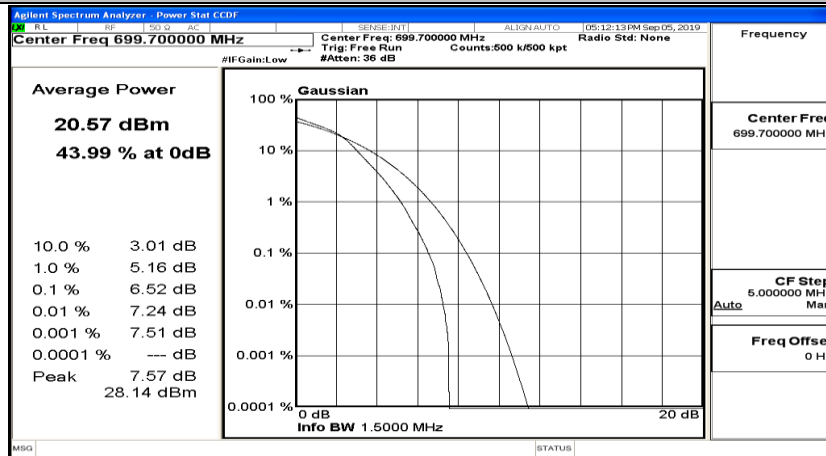
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM
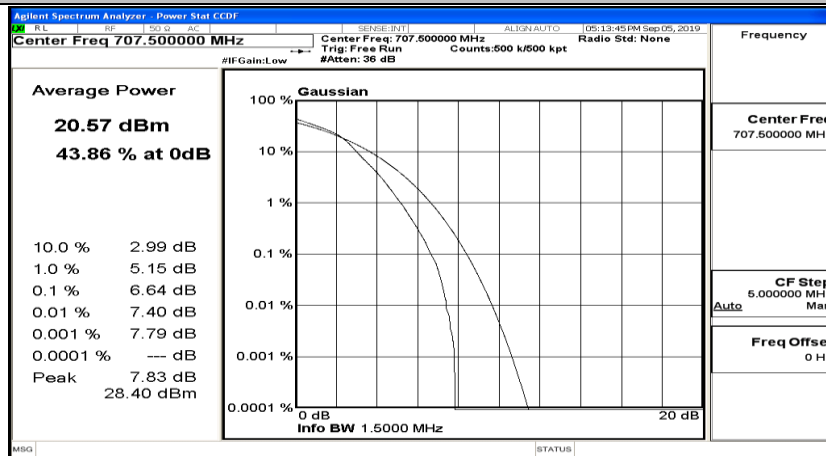
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM
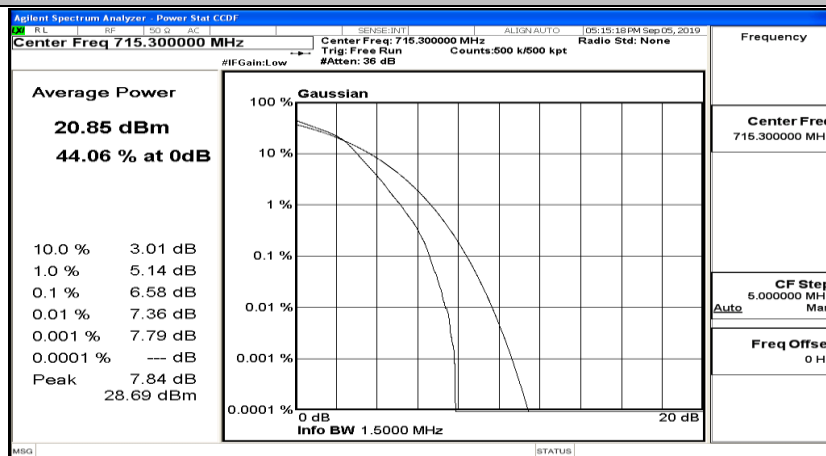
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK
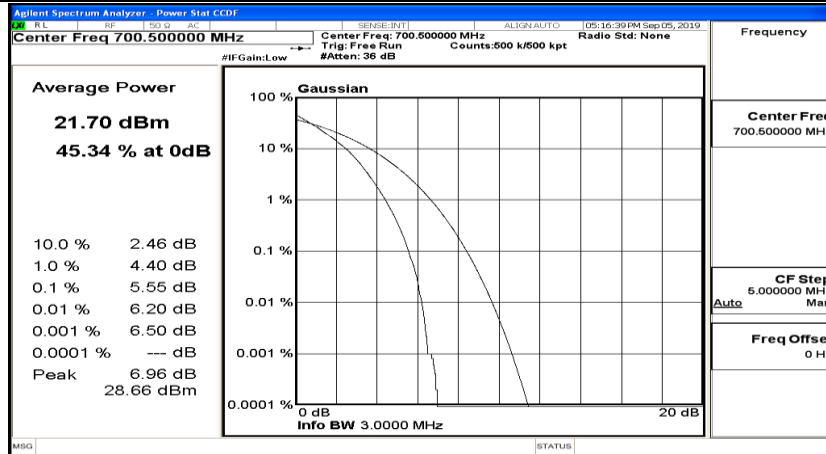
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK
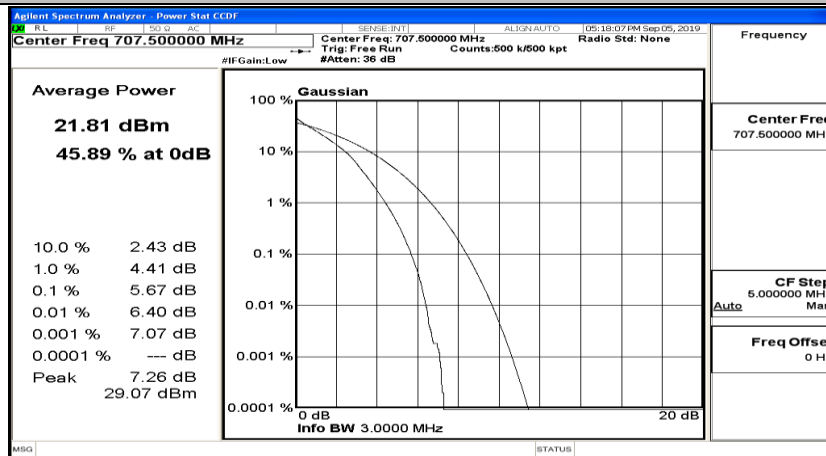
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK
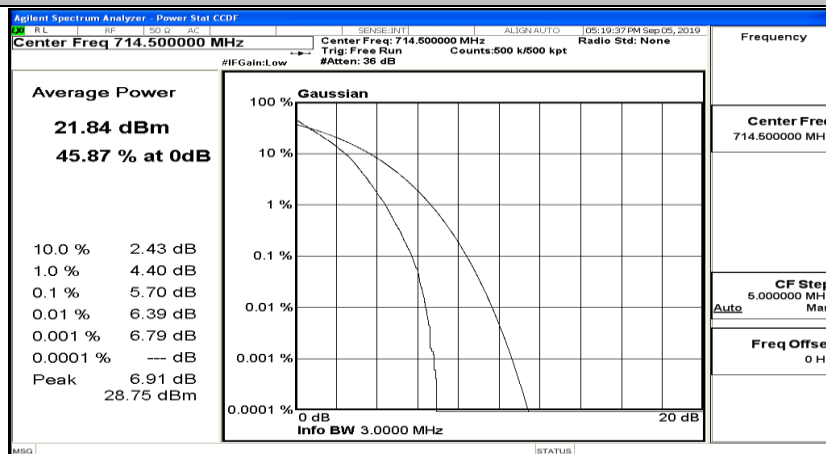
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM
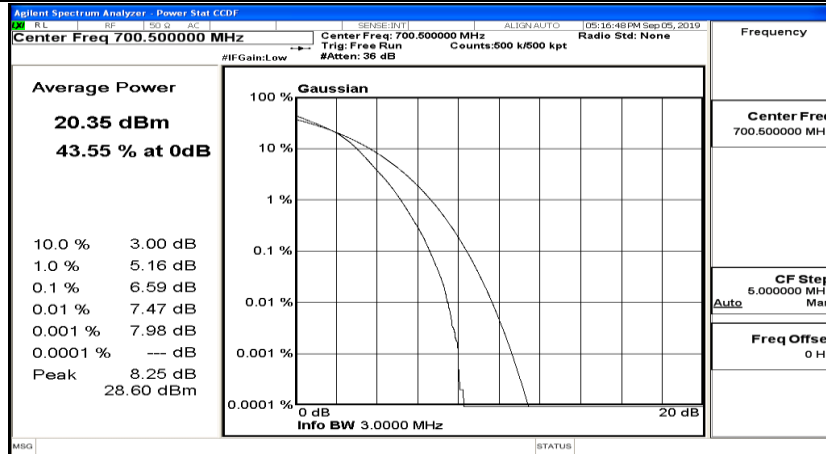
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM
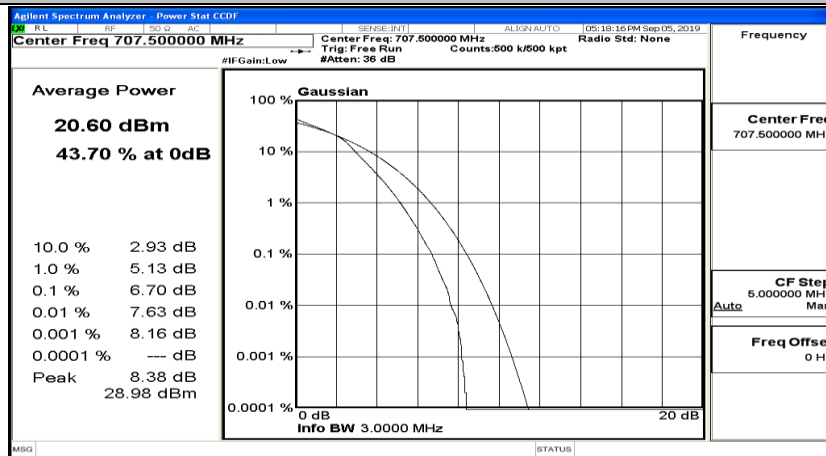
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM
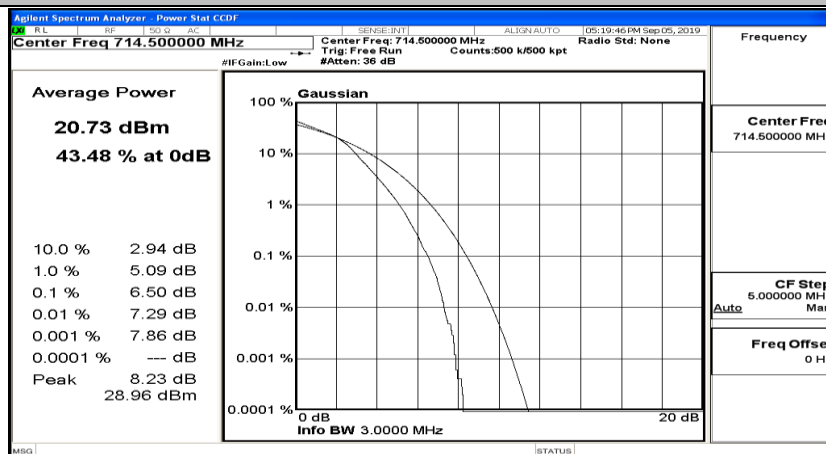
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK
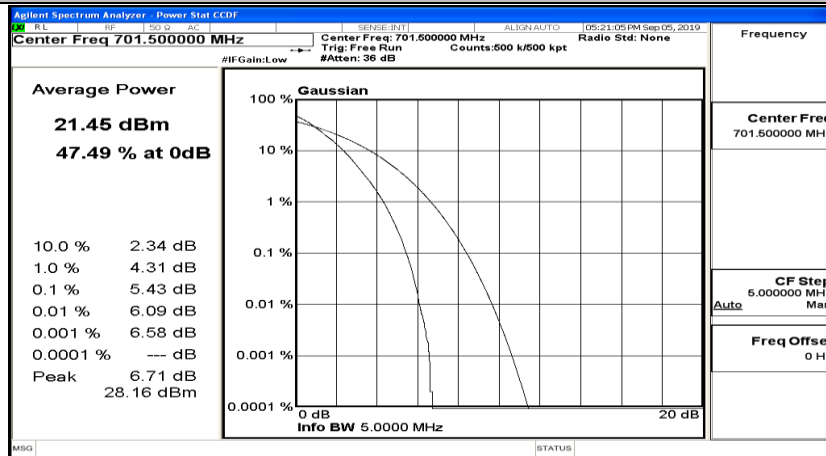
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK
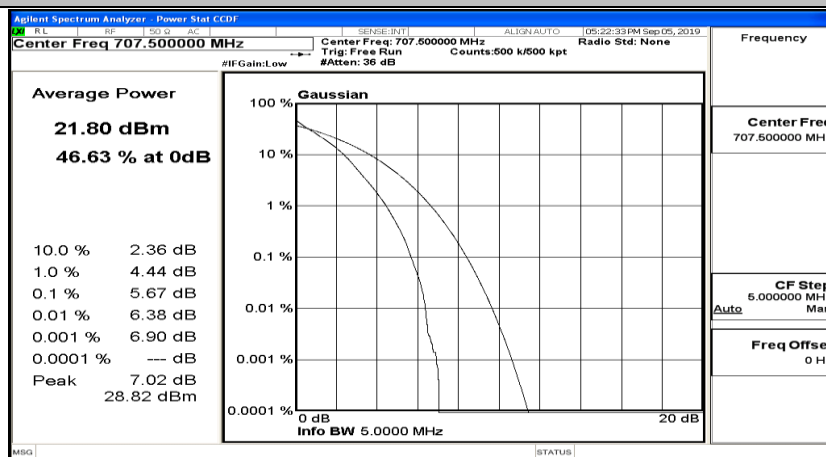
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK

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
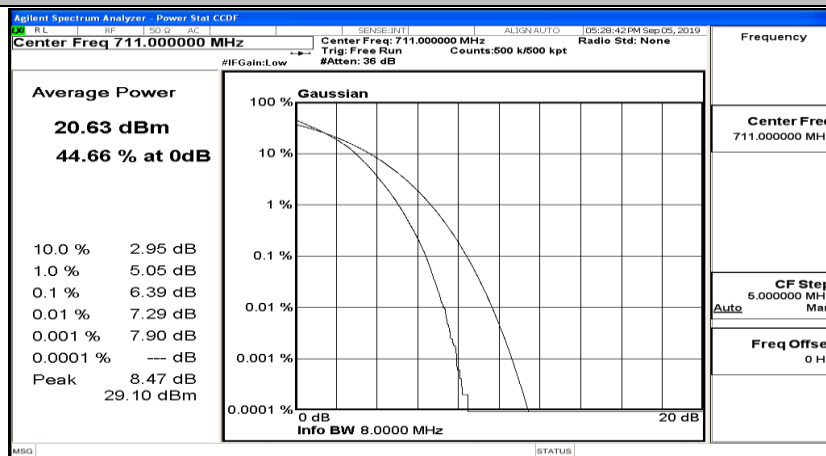
C.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0775	1.260	PASS
	MCH	1.0762	1.217	PASS
	HCH	1.0782	1.207	PASS
16QAM	LCH	1.0791	1.239	PASS
	MCH	1.0788	1.218	PASS
	HCH	1.0790	1.259	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6863	2.928	PASS
	MCH	2.6817	2.977	PASS
	HCH	2.6866	2.934	PASS
16QAM	LCH	2.6803	2.912	PASS
	MCH	2.6855	2.977	PASS
	HCH	2.6882	2.945	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4508	4.769	PASS
	MCH	4.4668	4.802	PASS
	HCH	4.4602	4.847	PASS
16QAM	LCH	4.4485	4.793	PASS
	MCH	4.4730	4.829	PASS
	HCH	4.4691	4.887	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9143	9.458	PASS
	MCH	8.9487	9.595	PASS
	HCH	8.9268	9.388	PASS
16QAM	LCH	8.9022	9.409	PASS
	MCH	8.9537	9.501	PASS
	HCH	8.9273	9.481	PASS

EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK
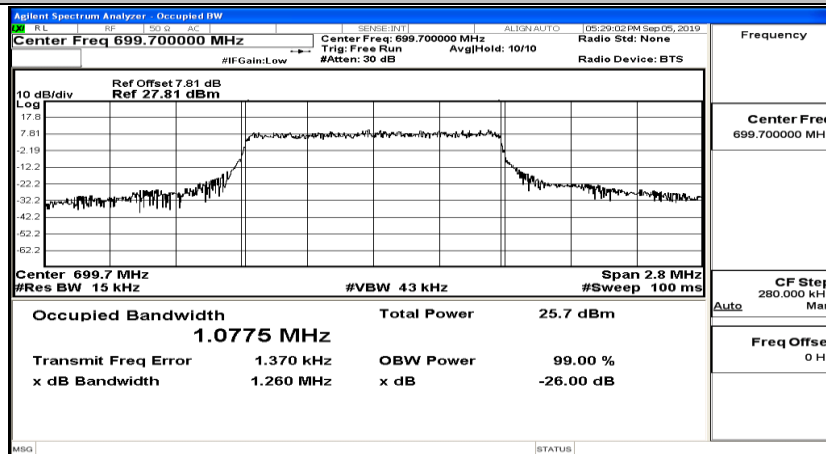
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK
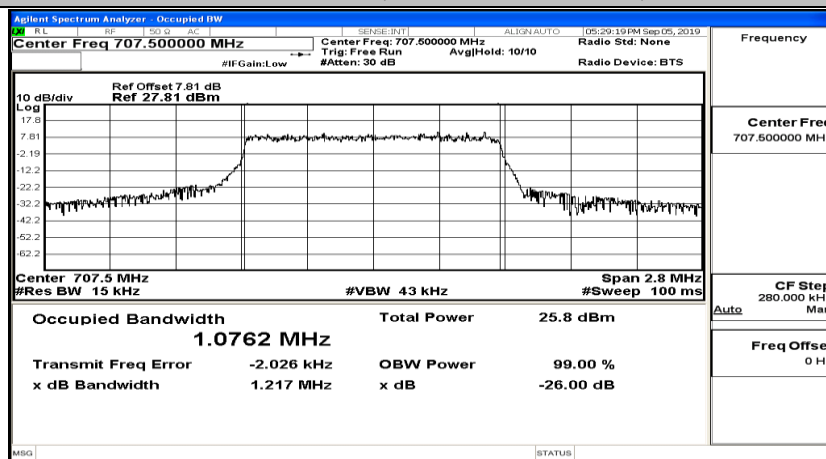
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK
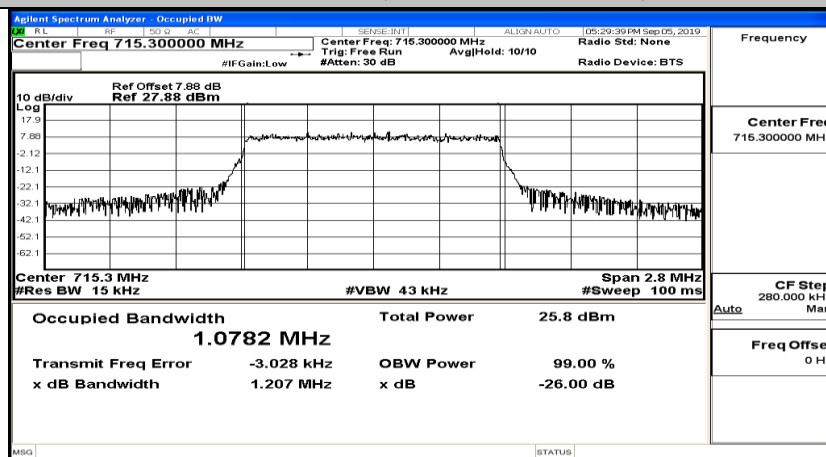
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM
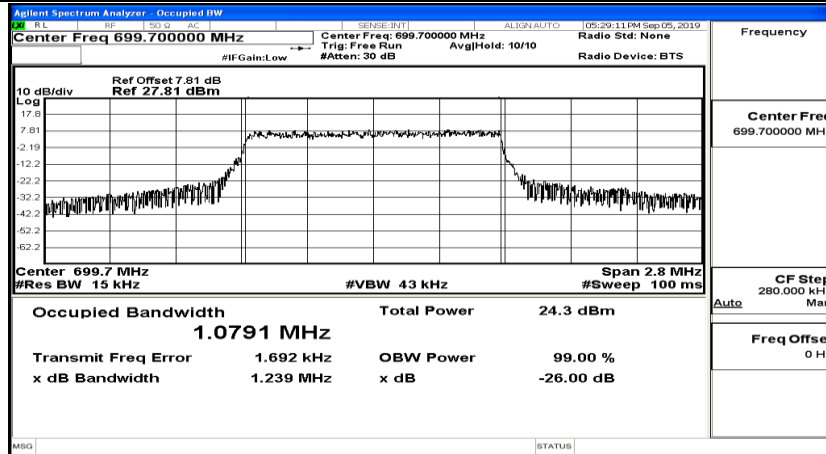
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM
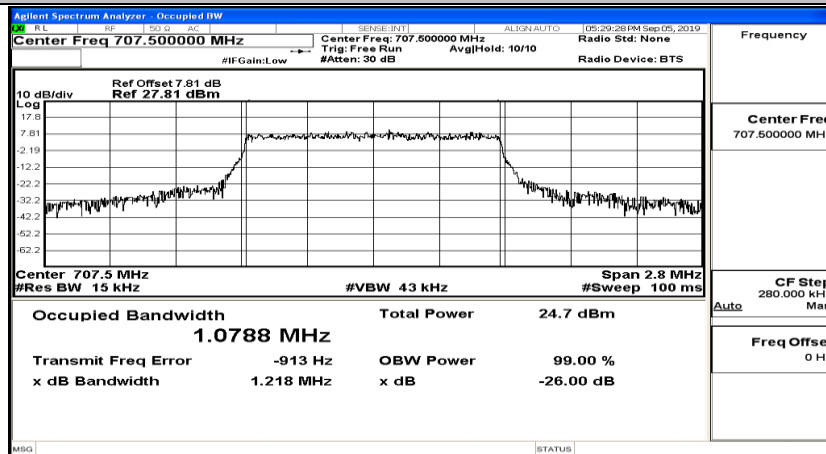
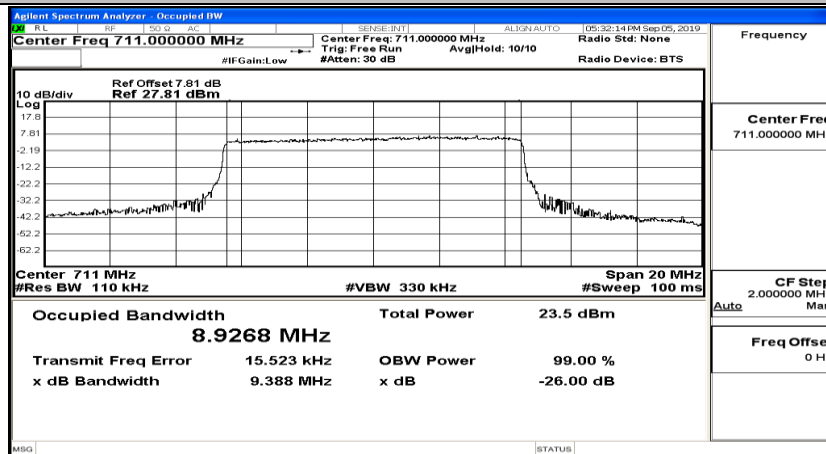| EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM |
|---|
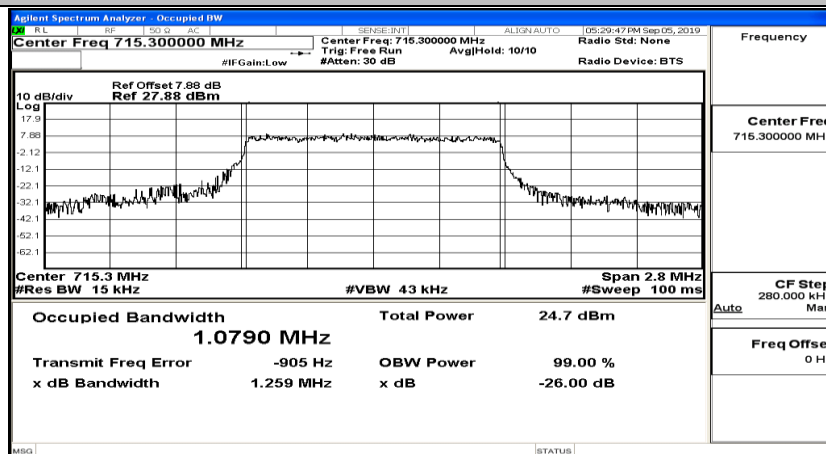
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK
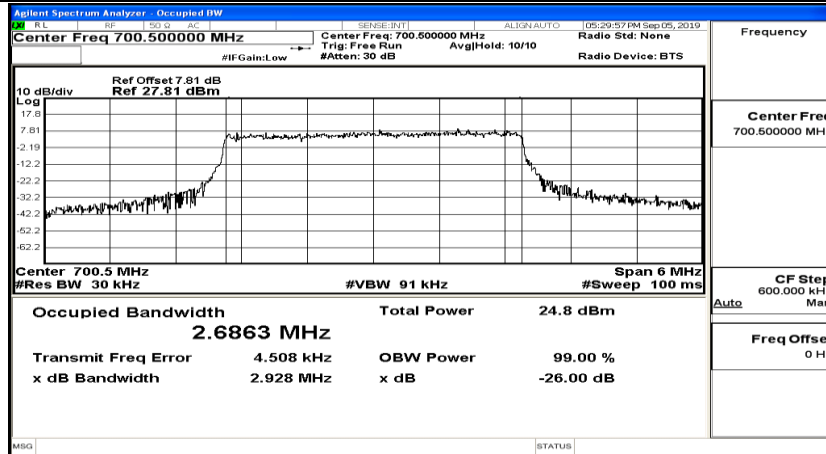
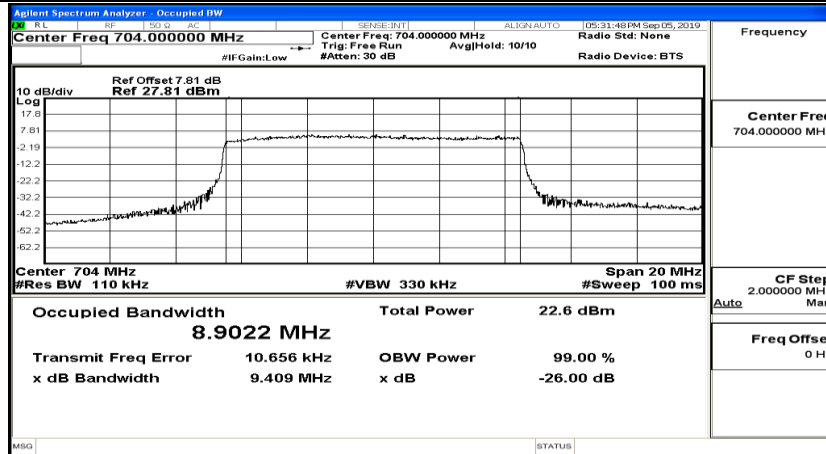
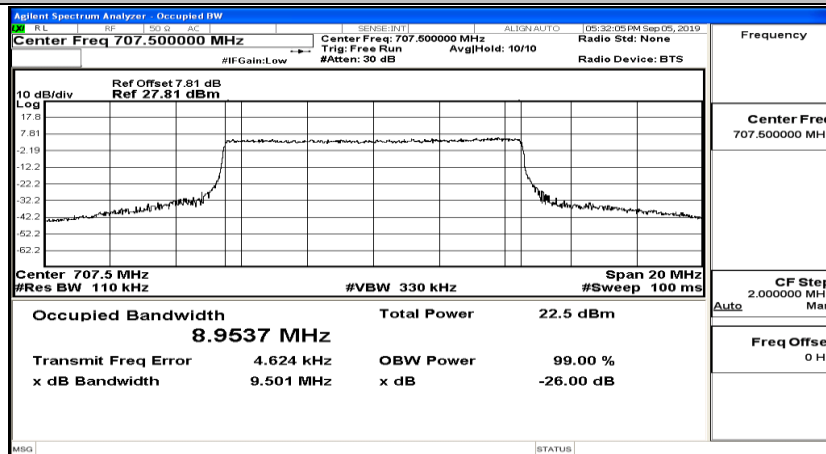## EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK
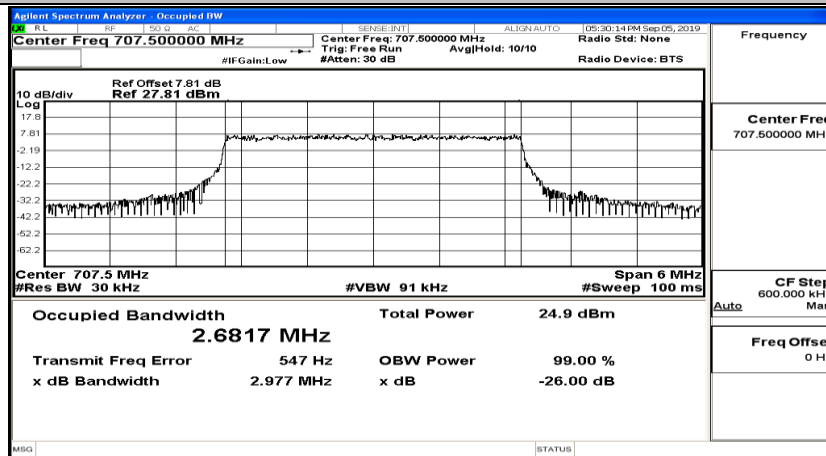
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK
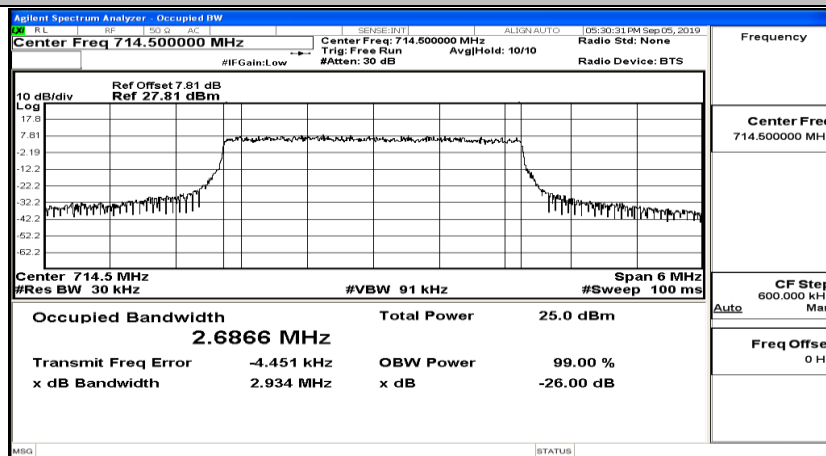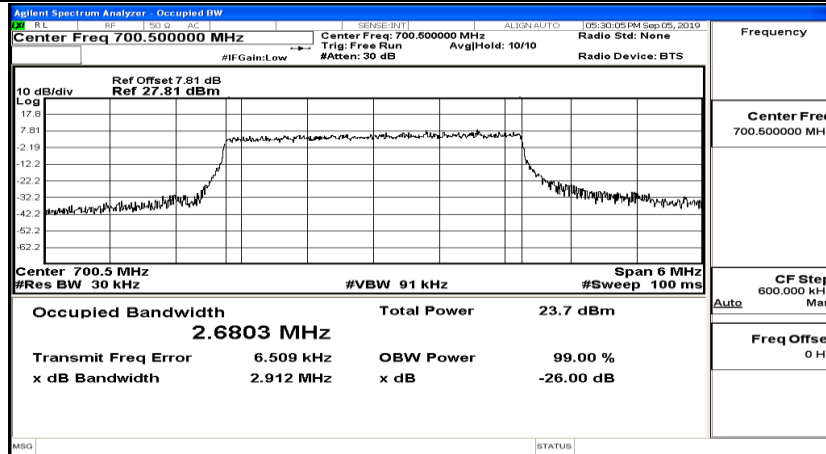
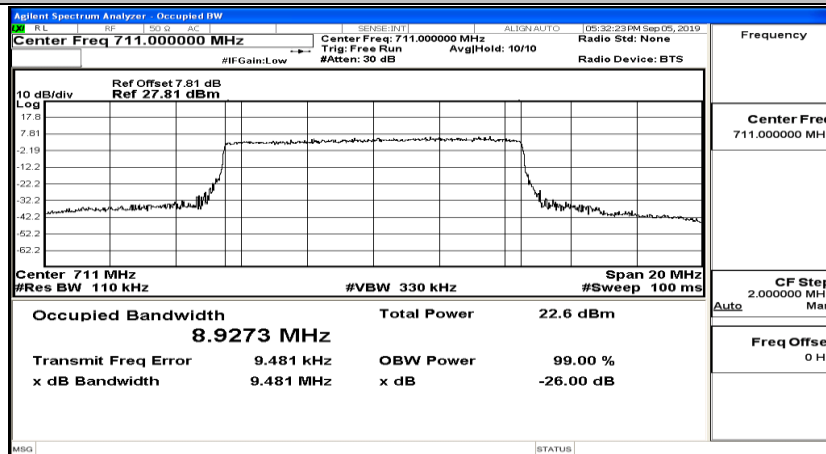| EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM |
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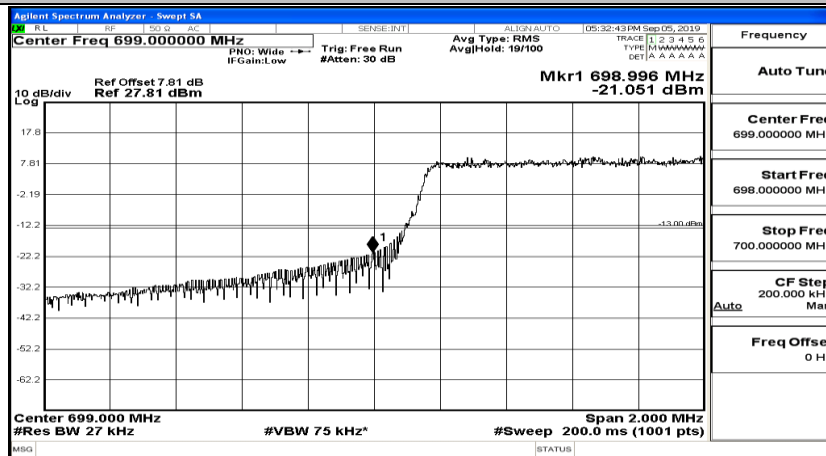| EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM |
|---|
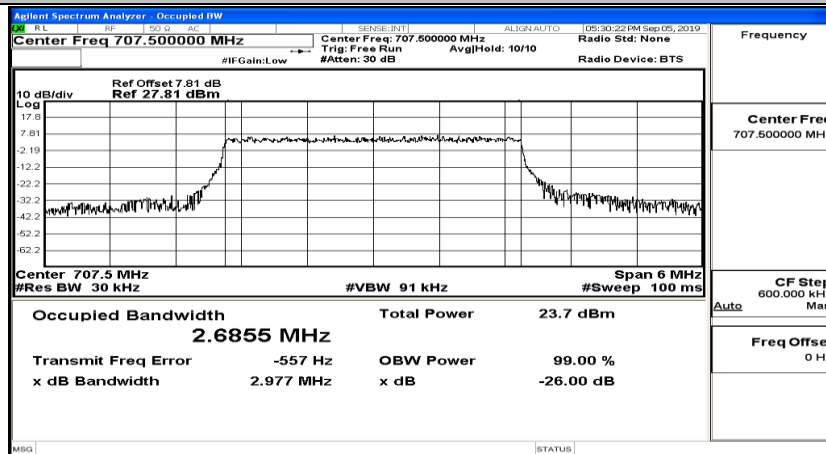
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM
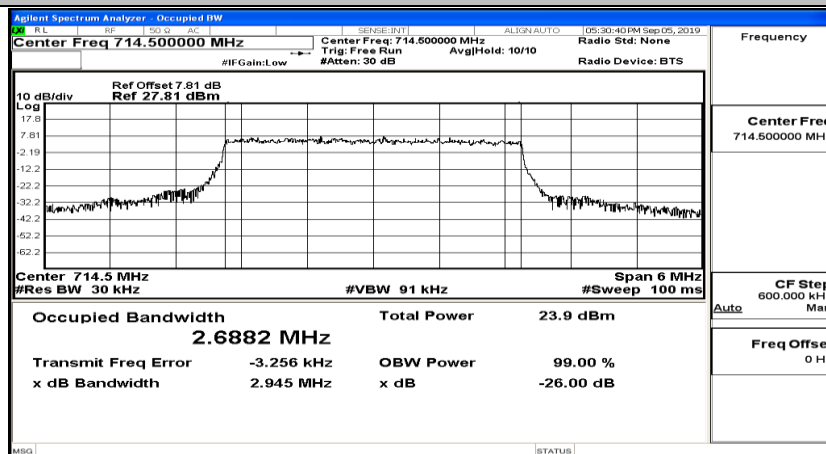
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK
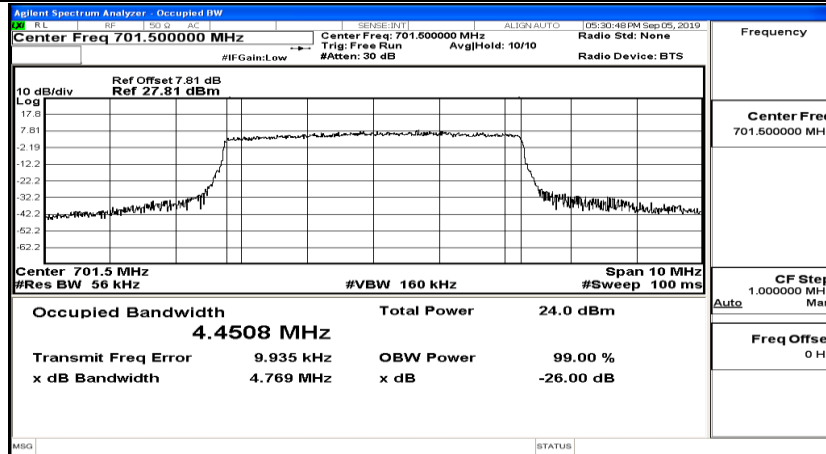
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK
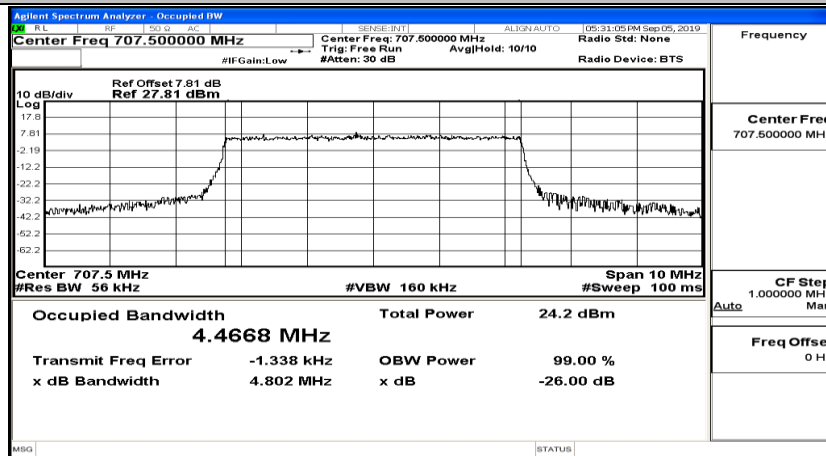
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK
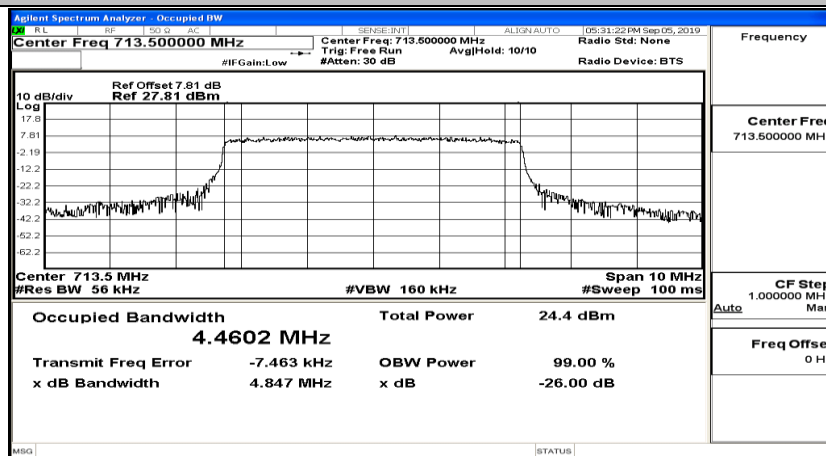
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM
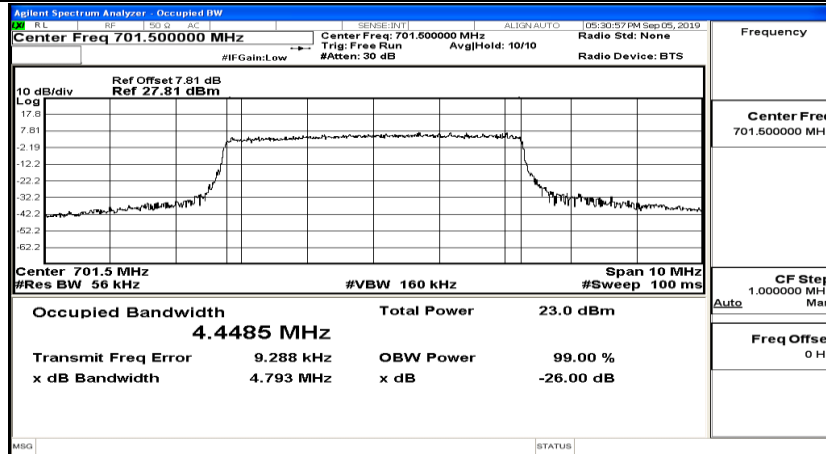
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM
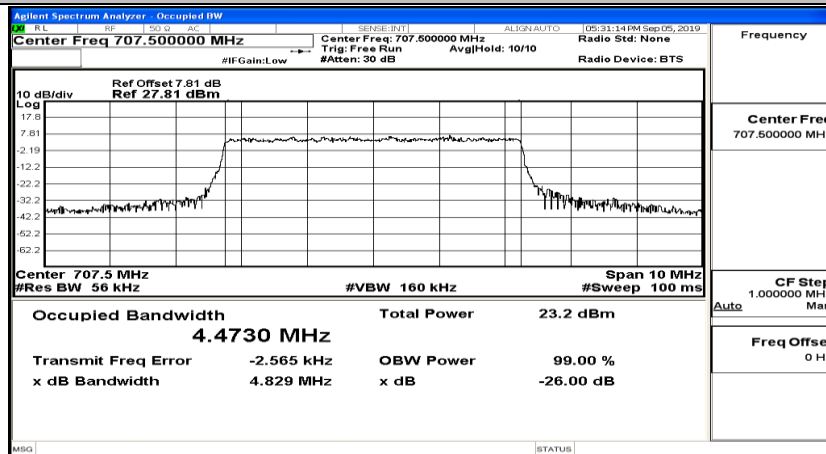
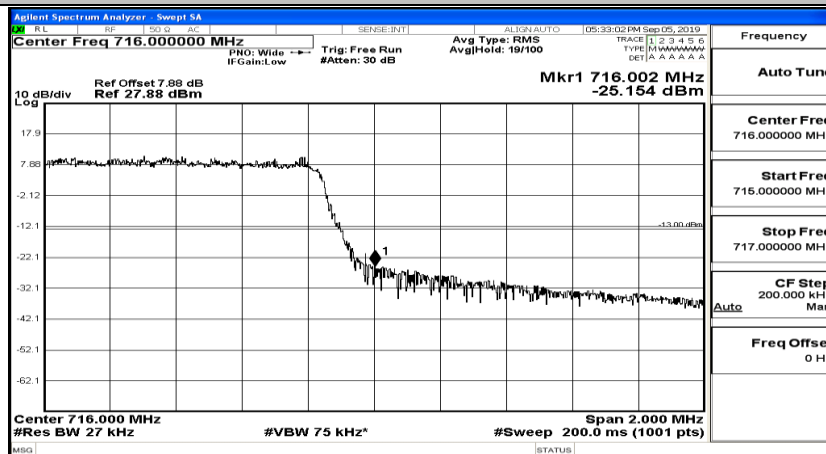| EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM |
|---|
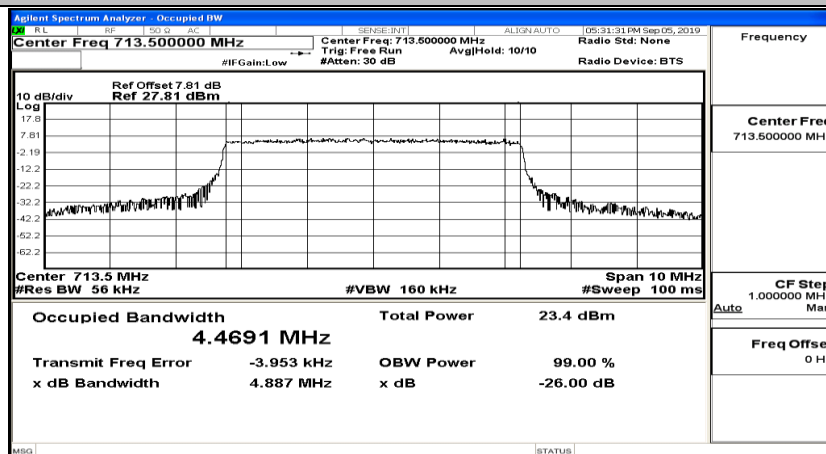
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK
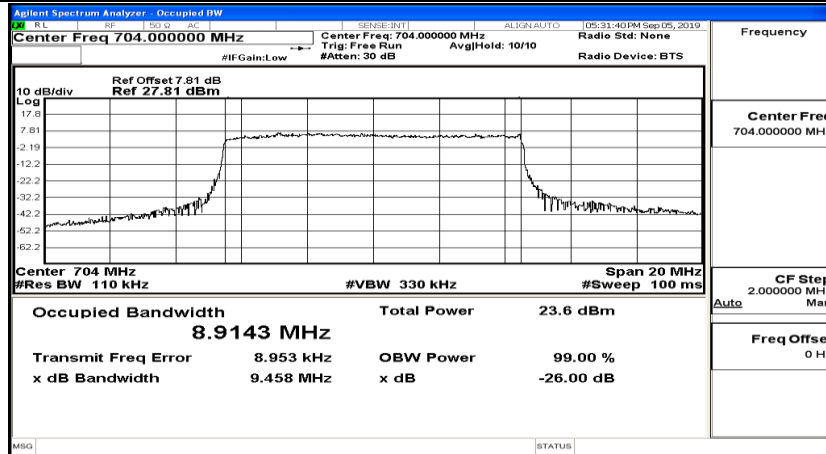
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK
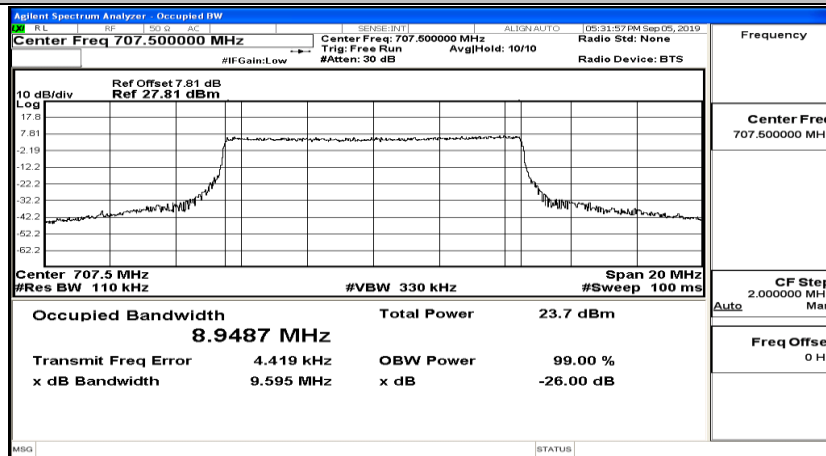
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK

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

Occupied Bandwidth		Total Power	22.6 dBm
	8.9022 MHz		
Transmit Freq Error	10.656 kHz	OBW Power	99.00 %
x dB Bandwidth	9.409 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	22.5 dBm
	8.9537 MHz		
Transmit Freq Error	4.624 kHz	OBW Power	99.00 %
x dB Bandwidth	9.501 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	22.6 dBm
	8.9273 MHz		
Transmit Freq Error	9.481 kHz	OBW Power	99.00 %
x dB Bandwidth	9.481 MHz	x dB	-26.00 dB

C.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
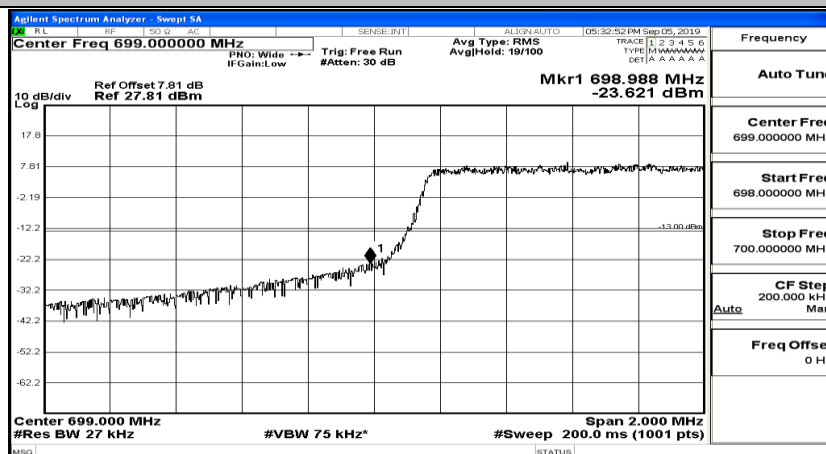
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM
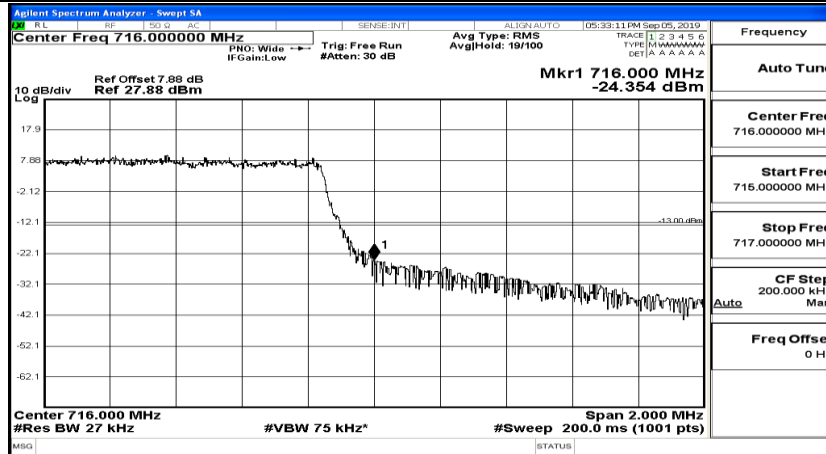
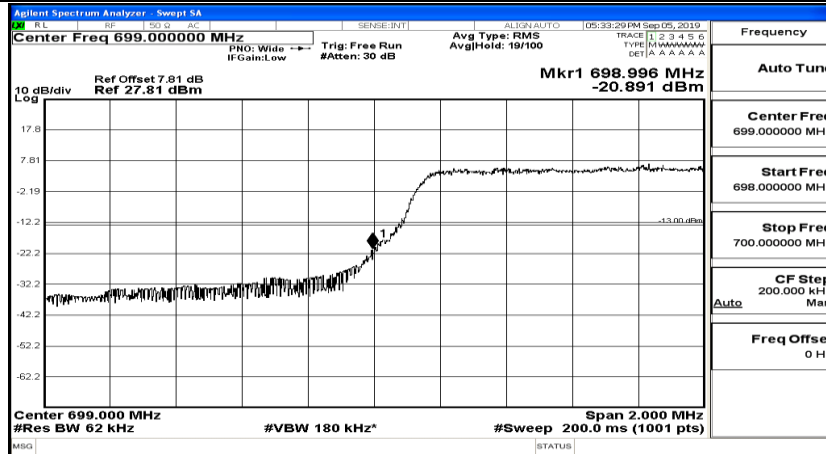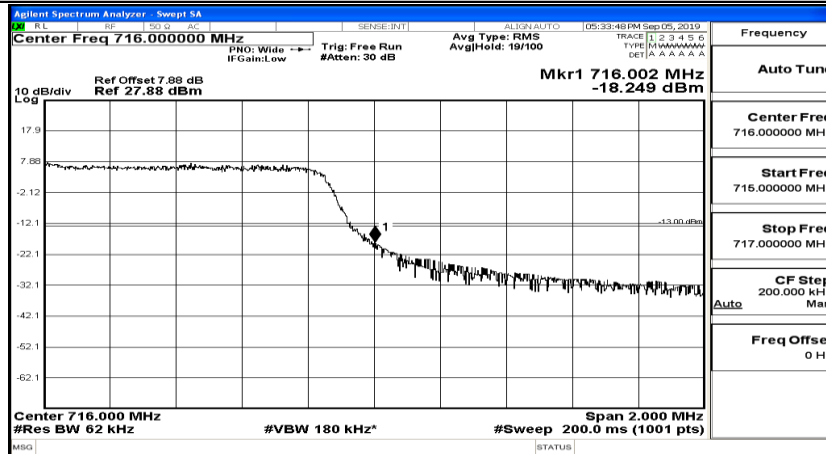| Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK |
|:--:|
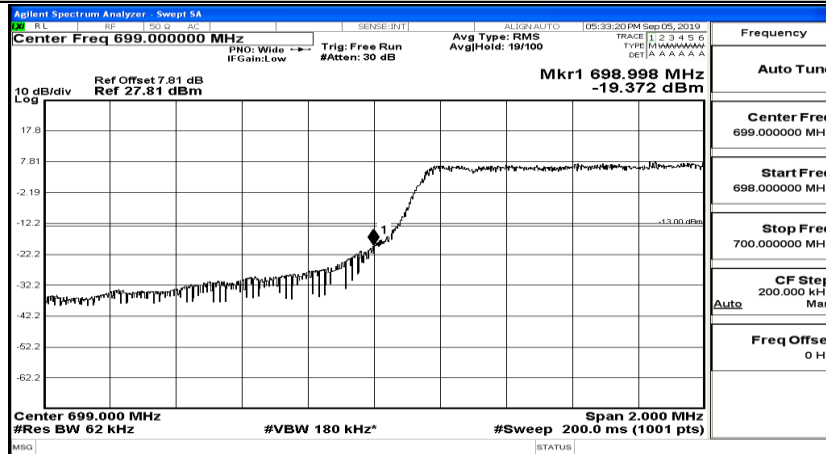
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK
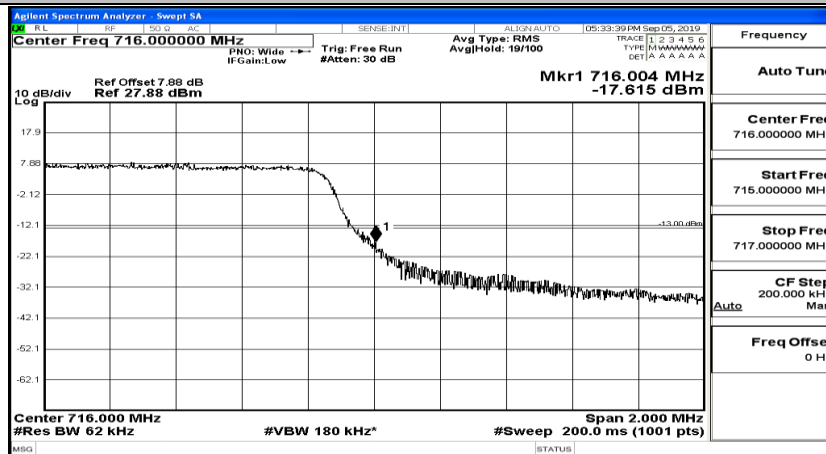
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM

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

Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK
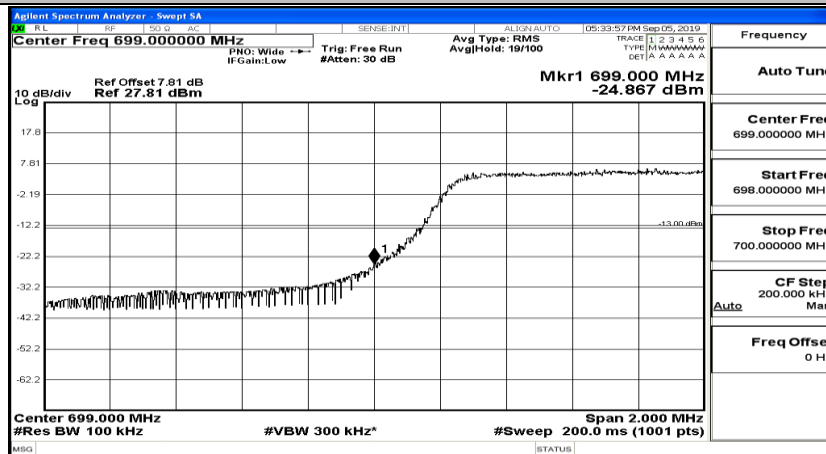
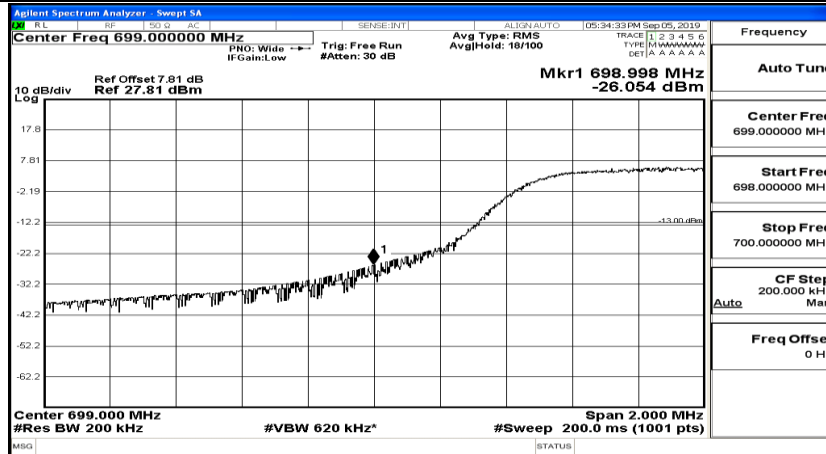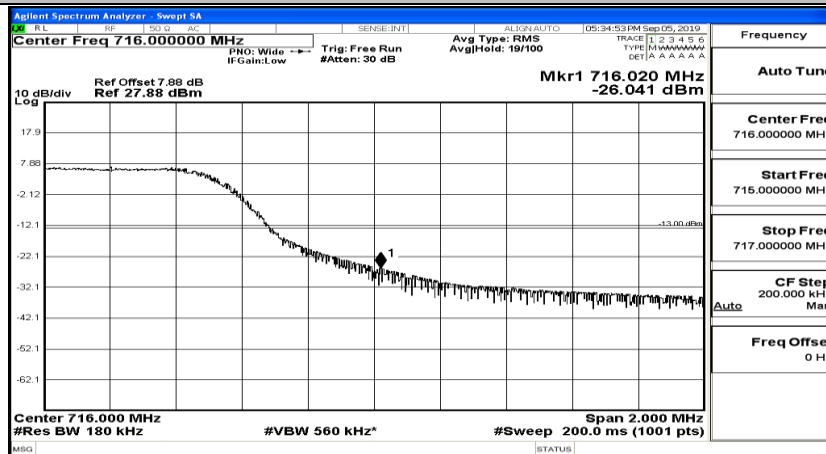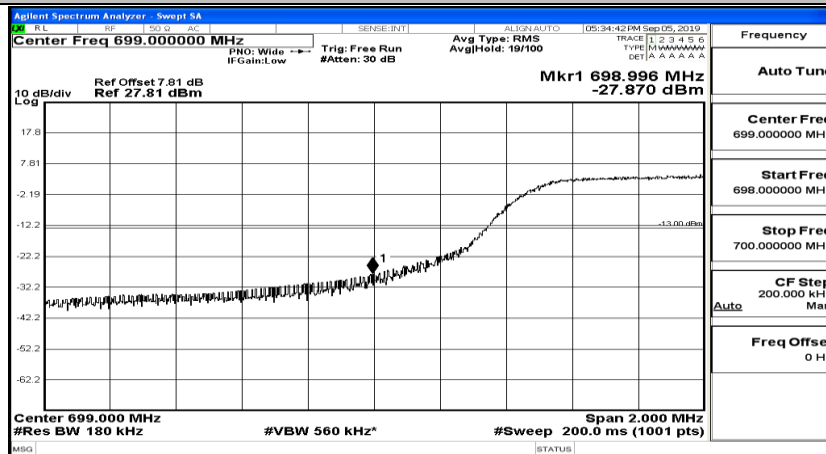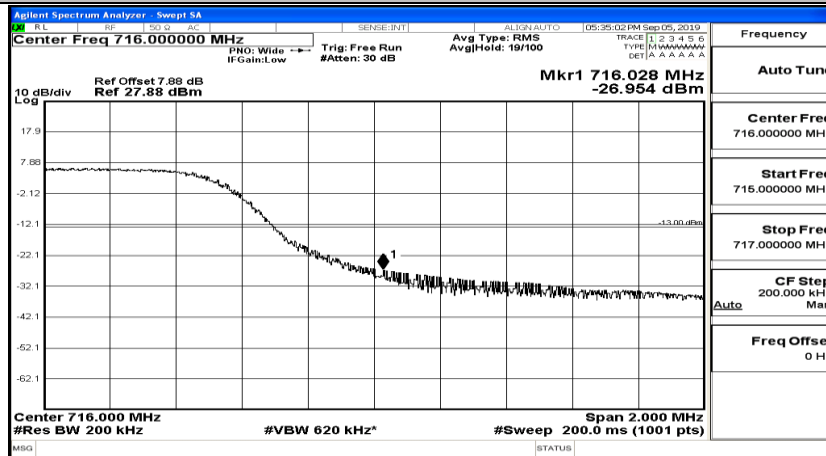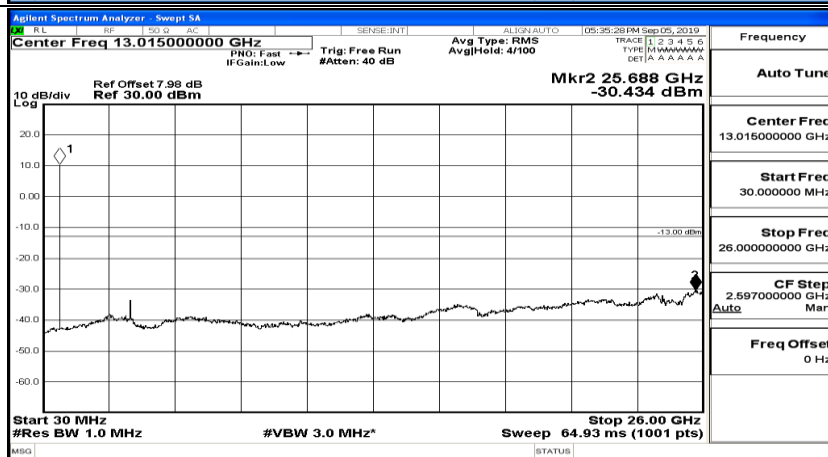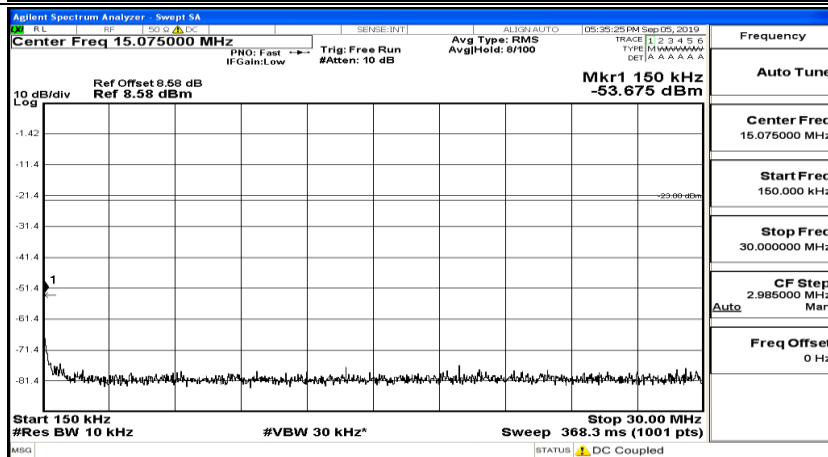| Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK |
|---|
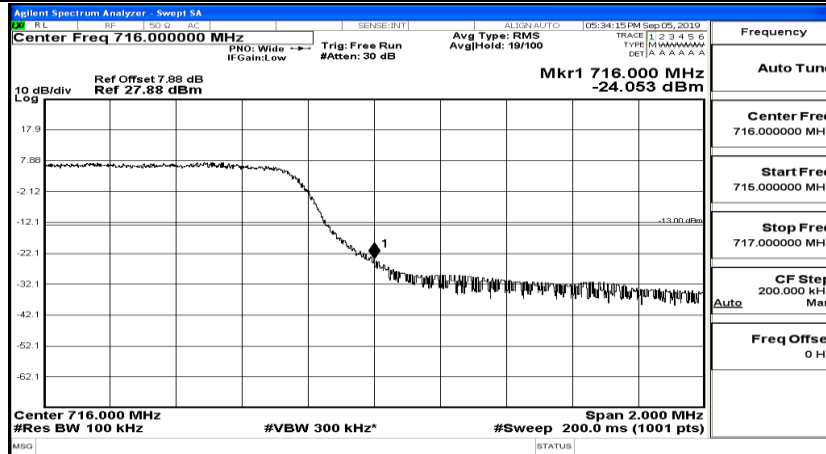
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM
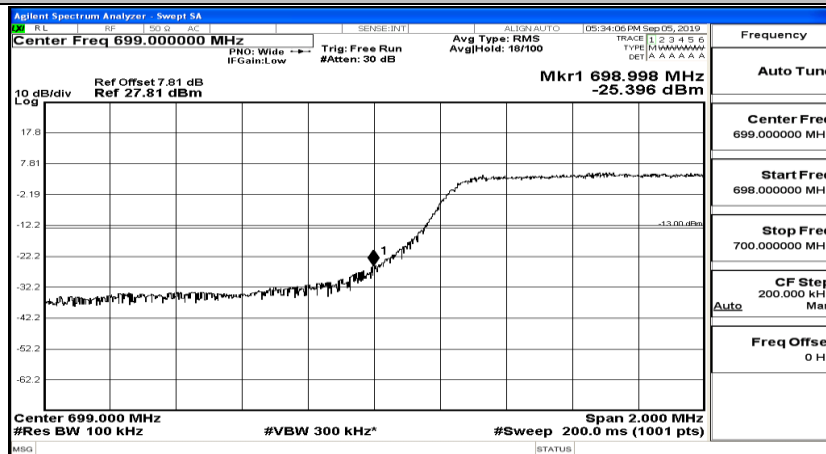
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM
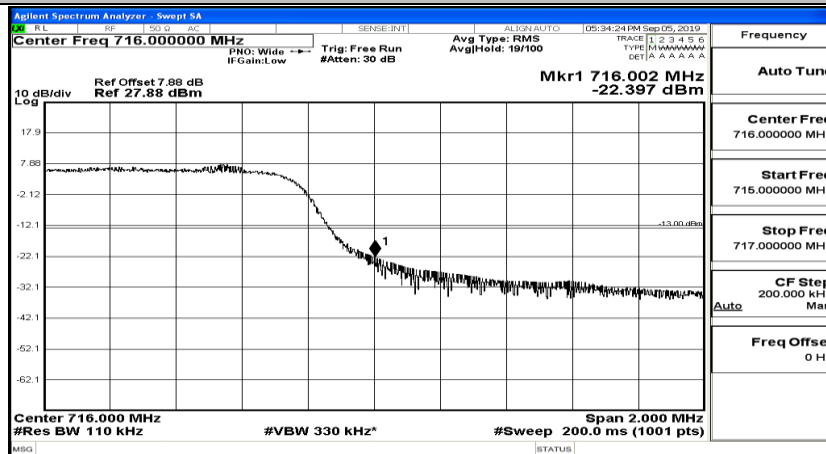
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK

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

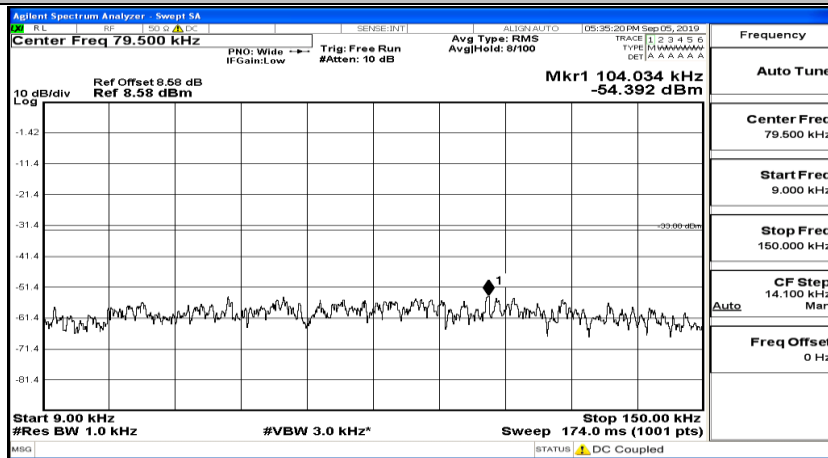| Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM |
| --- |

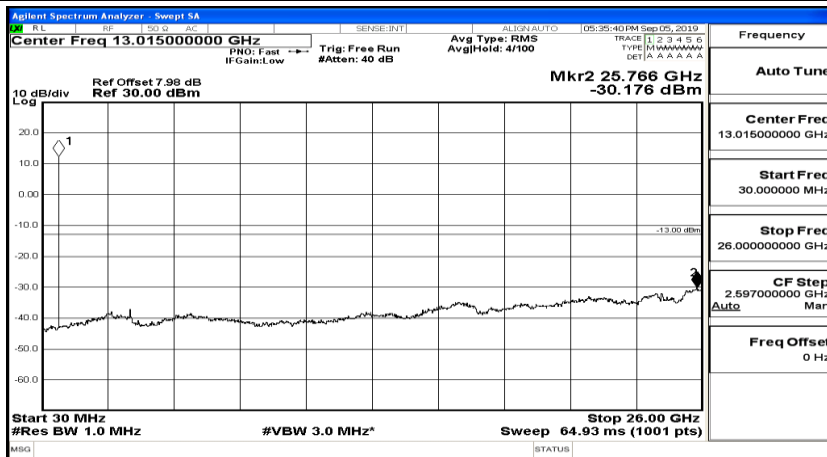Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

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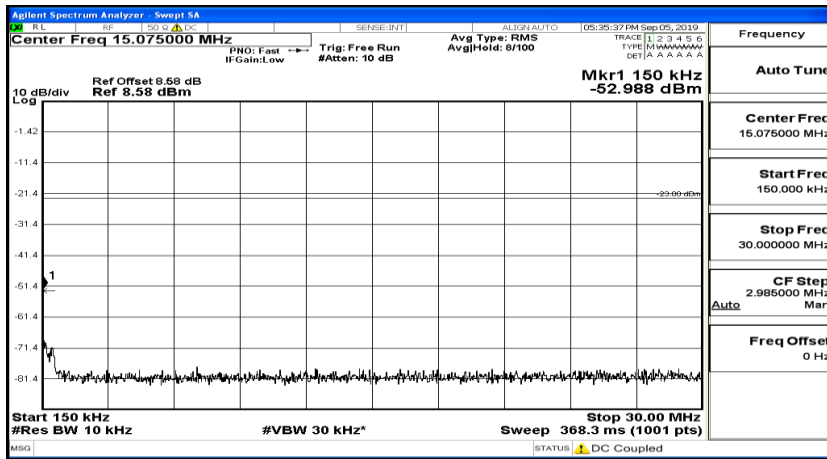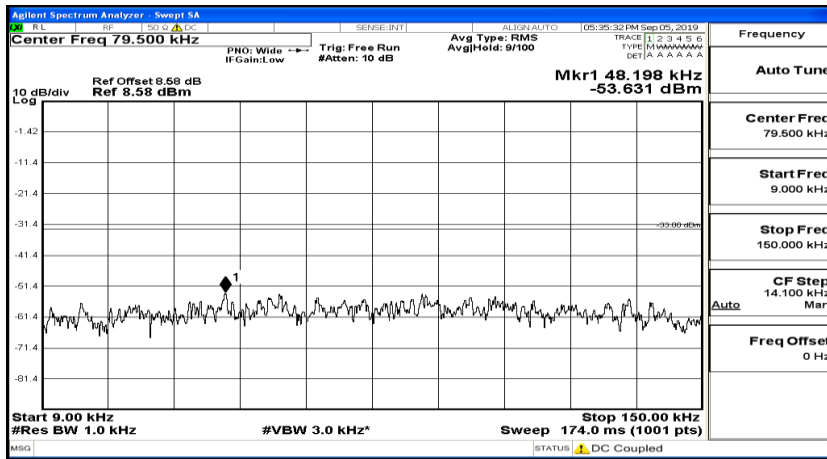
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C.5 Conducted Spurious Emission

Channel Bandwidth: 1.4 MHz

(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