

## Appendix A: Test Data for E-UTRA Band 2

**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

## A.1 Conducted Output Power

### Test Result

Channel Bandwidth: 1.4 MHz

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.72	20.92	PASS
		1	3	21.74	21.16	PASS
		1	5	21.69	20.99	PASS
		3	0	21.79	20.98	PASS
		3	2	21.80	20.98	PASS
		3	3	21.77	20.92	PASS
		6	0	20.76	19.70	PASS
	MCH	1	0	22.54	21.97	PASS
		1	3	22.71	22.20	PASS
		1	5	22.68	22.07	PASS
		3	0	22.68	21.70	PASS
		3	2	22.67	21.76	PASS
		3	3	22.70	21.77	PASS
		6	0	21.68	20.58	PASS
	HCH	1	0	20.63	19.89	PASS
		1	3	20.76	20.14	PASS
		1	5	20.71	19.93	PASS
		3	0	20.68	19.78	PASS
		3	2	20.75	19.84	PASS
		3	3	20.75	19.82	PASS
		6	0	19.74	18.84	PASS

**Channel Bandwidth: 3 MHz**

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	21.74	21.06	PASS
		1	7	21.99	21.33	PASS
		1	14	21.70	21.01	PASS
		8	0	20.82	19.86	PASS
		8	4	20.83	19.92	PASS
		8	7	20.73	19.80	PASS
		15	0	20.79	19.73	PASS
	MCH	1	0	21.96	21.26	PASS
		1	7	22.21	21.50	PASS
		1	14	21.93	21.22	PASS
		8	0	21.00	20.05	PASS
		8	4	21.06	20.13	PASS
		8	7	20.99	20.08	PASS
		15	0	21.01	19.97	PASS
	HCH	1	0	21.18	20.60	PASS
		1	7	21.40	20.79	PASS
		1	14	21.11	20.46	PASS
		8	0	20.23	19.20	PASS
		8	4	20.25	19.19	PASS
		8	7	20.20	19.14	PASS
		15	0	20.16	19.16	PASS

**Channel Bandwidth: 5 MHz**

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.30	20.73	PASS
		1	12	21.74	21.14	PASS
		1	24	21.37	20.79	PASS
		12	0	20.49	19.65	PASS
		12	6	20.52	19.71	PASS
		12	13	20.45	19.65	PASS
		25	0	20.50	19.53	PASS
	MCH	1	0	21.91	21.25	PASS
		1	12	22.22	21.75	PASS
		1	24	21.85	21.28	PASS
		12	0	20.97	20.15	PASS
		12	6	21.07	20.25	PASS
		12	13	20.98	20.17	PASS
		25	0	21.04	20.04	PASS
	HCH	1	0	21.18	20.28	PASS
		1	12	21.51	20.49	PASS
		1	24	21.06	20.00	PASS
		12	0	20.23	19.26	PASS
		12	6	20.29	19.36	PASS
		12	13	20.25	19.24	PASS
		25	0	20.26	19.27	PASS

**Channel Bandwidth: 10 MHz**

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	21.38	20.67	PASS
		1	24	21.69	21.01	PASS
		1	49	21.56	20.91	PASS
		25	0	20.54	19.55	PASS
		25	12	20.56	19.56	PASS
		25	25	20.59	19.61	PASS
		50	0	20.53	19.60	PASS
	MCH	1	0	21.90	21.20	PASS
		1	24	22.13	21.42	PASS
		1	49	21.84	21.12	PASS
		25	0	21.03	20.06	PASS
		25	12	21.01	20.01	PASS
		25	25	21.04	20.05	PASS
		50	0	21.04	20.02	PASS
	HCH	1	0	21.41	20.81	PASS
		1	24	21.50	20.95	PASS
		1	49	21.05	20.45	PASS
		25	0	20.50	19.57	PASS
		25	12	20.34	19.38	PASS
		25	25	20.31	19.32	PASS
		50	0	20.41	19.41	PASS

**Channel Bandwidth: 15 MHz**

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	21.35	20.71	PASS
		1	37	21.85	21.08	PASS
		1	74	21.63	20.97	PASS
		37	0	20.54	19.54	PASS
		37	18	20.58	19.57	PASS
		37	38	20.66	19.63	PASS
		75	0	20.64	19.61	PASS
	MCH	1	0	21.88	21.26	PASS
		1	37	22.19	21.49	PASS
		1	74	21.78	21.04	PASS
		37	0	21.08	20.05	PASS
		37	18	21.09	20.05	PASS
		37	38	21.08	20.07	PASS
		75	0	21.08	20.05	PASS
	HCH	1	0	21.57	20.85	PASS
		1	37	21.62	20.94	PASS
		1	74	21.04	20.35	PASS
		37	0	20.71	19.68	PASS
		37	18	20.51	19.51	PASS
		37	38	20.36	19.40	PASS
		75	0	20.57	19.54	PASS

**Channel Bandwidth: 20 MHz**

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.40	20.68	PASS
		1	49	21.90	21.10	PASS
		1	99	21.77	21.00	PASS
		50	0	20.58	19.53	PASS
		50	25	20.66	19.67	PASS
		50	50	20.77	19.73	PASS
		100	0	20.71	19.64	PASS
	MCH	1	0	21.88	21.08	PASS
		1	49	22.26	21.45	PASS
		1	99	21.72	20.84	PASS
		50	0	20.96	19.89	PASS
		50	25	21.04	20.02	PASS
		50	50	21.04	19.99	PASS
		100	0	20.98	19.95	PASS
	HCH	1	0	21.73	21.06	PASS
		1	49	21.70	21.09	PASS
		1	99	21.06	20.42	PASS
		50	0	20.85	19.86	PASS
		50	25	20.55	19.57	PASS
		50	50	20.31	19.33	PASS
		100	0	20.62	19.59	PASS

## A.2 Peak-to-Average Ratio

### Test Result

#### Channel Bandwidth: 1.4 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.63	<13	PASS
	MCH	5.47	<13	PASS
	HCH	5.1	<13	PASS
16QAM	LCH	6.63	<13	PASS
	MCH	6.44	<13	PASS
	HCH	6.08	<13	PASS

#### Channel Bandwidth: 3 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.69	<13	PASS
	MCH	5.49	<13	PASS
	HCH	5.4	<13	PASS
16QAM	LCH	6.53	<13	PASS
	MCH	6.43	<13	PASS
	HCH	6.14	<13	PASS

#### Channel Bandwidth: 5 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.75	<13	PASS
	MCH	5.56	<13	PASS
	HCH	5.39	<13	PASS
16QAM	LCH	6.53	<13	PASS
	MCH	6.39	<13	PASS
	HCH	6.21	<13	PASS



### Channel Bandwidth: 10 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.78	<13	PASS
	MCH	5.59	<13	PASS
	HCH	5.67	<13	PASS
16QAM	LCH	6.47	<13	PASS
	MCH	6.3	<13	PASS
	HCH	6.37	<13	PASS

### Channel Bandwidth: 15 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.05	<13	PASS
	MCH	5.01	<13	PASS
	HCH	5.06	<13	PASS
16QAM	LCH	6.37	<13	PASS
	MCH	6.28	<13	PASS
	HCH	6.27	<13	PASS

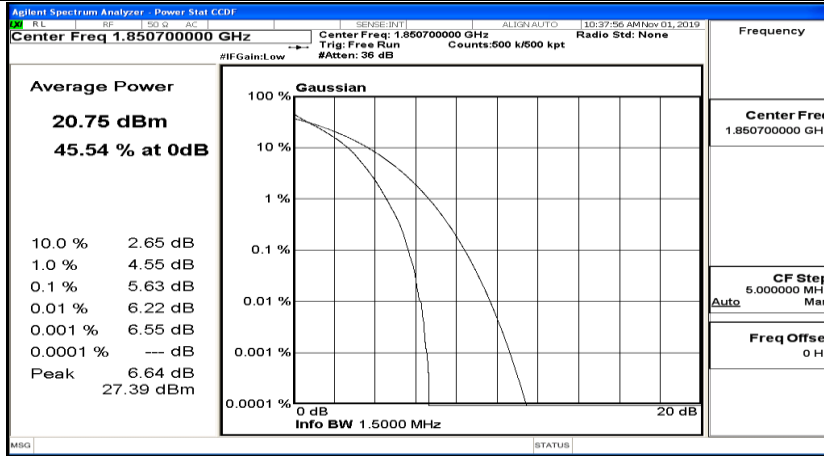
### Channel Bandwidth: 20 MHz

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.72	<13	PASS
	MCH	5.72	<13	PASS
	HCH	5.74	<13	PASS
16QAM	LCH	6.88	<13	PASS
	MCH	6.77	<13	PASS
	HCH	6.73	<13	PASS

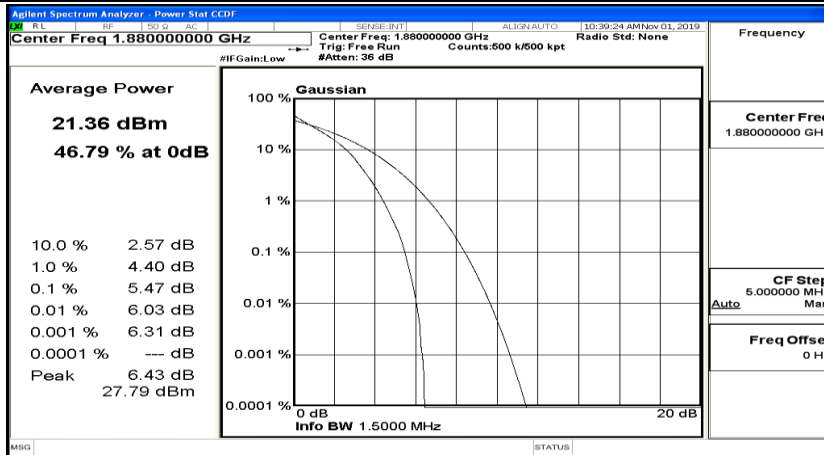
# Test Graphs

## Channel Bandwidth: 1.4 MHz

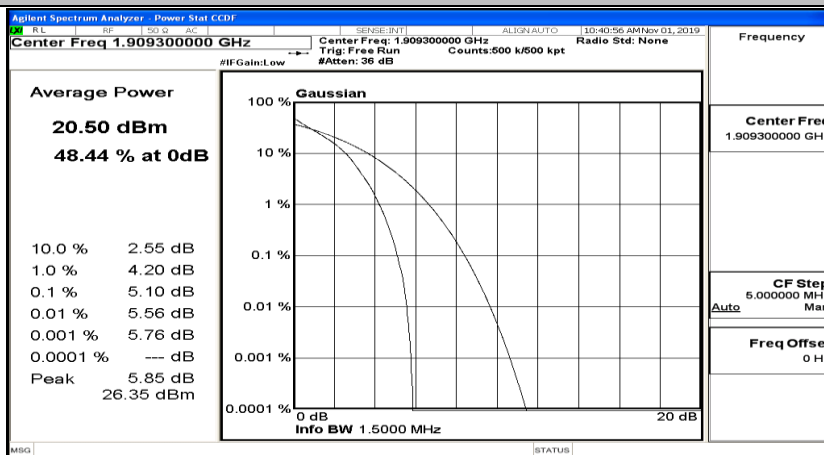
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK



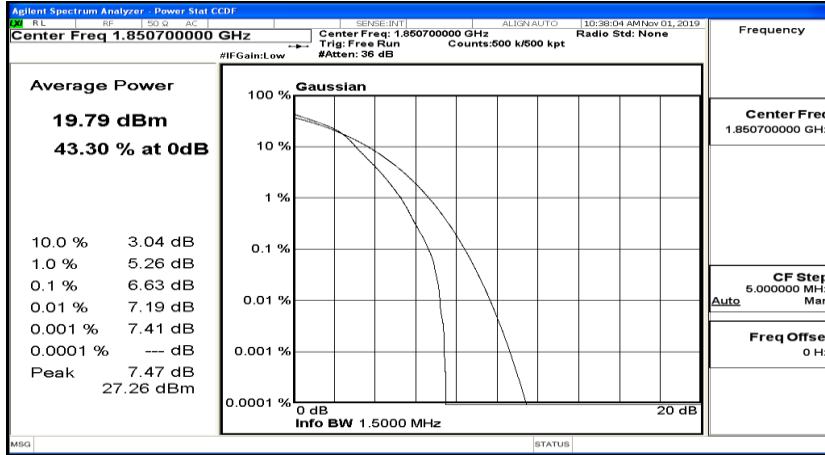
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK



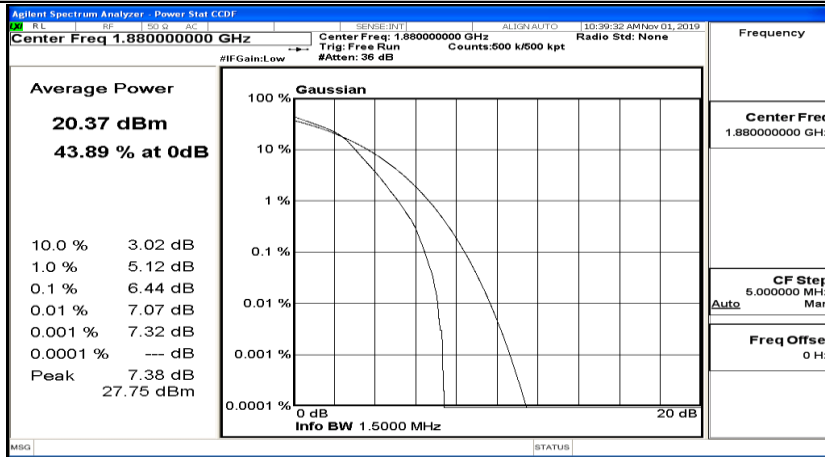
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK



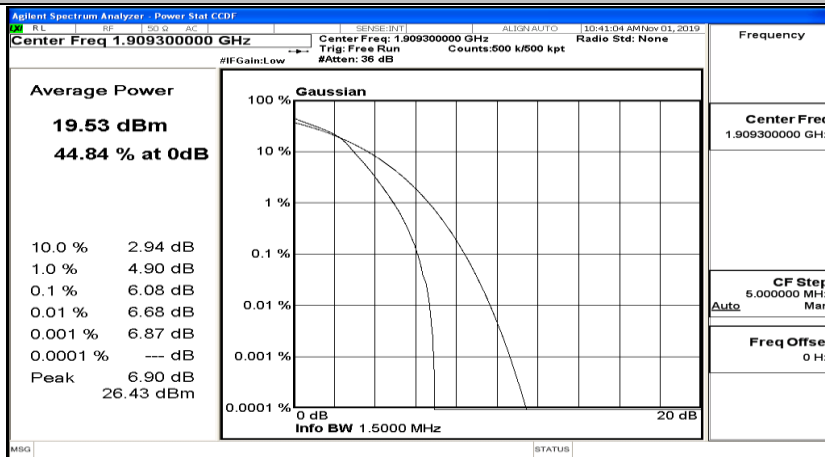
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_MCH\_16QAM

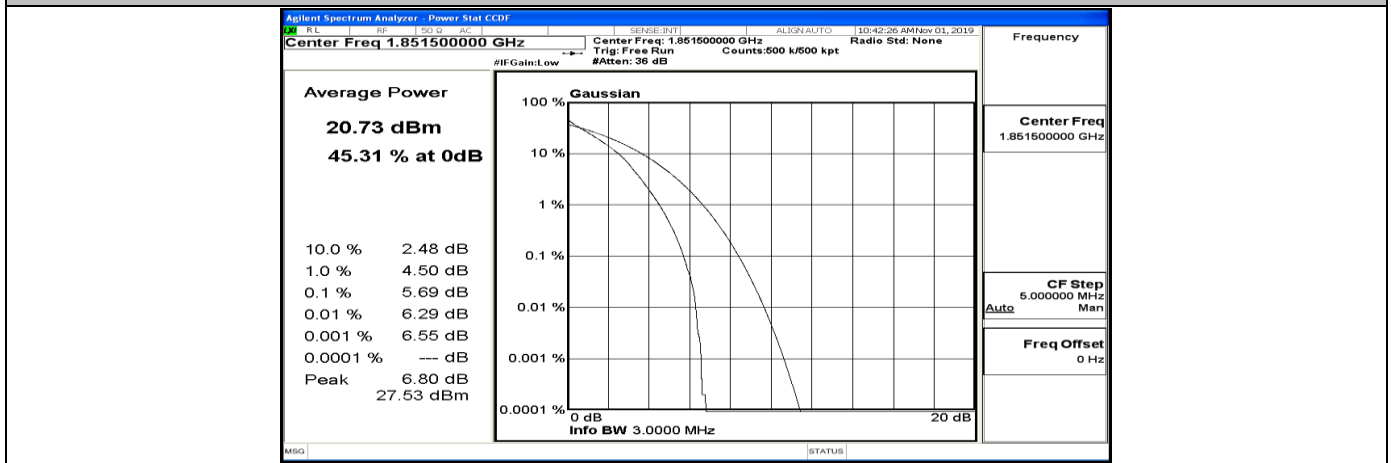


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM

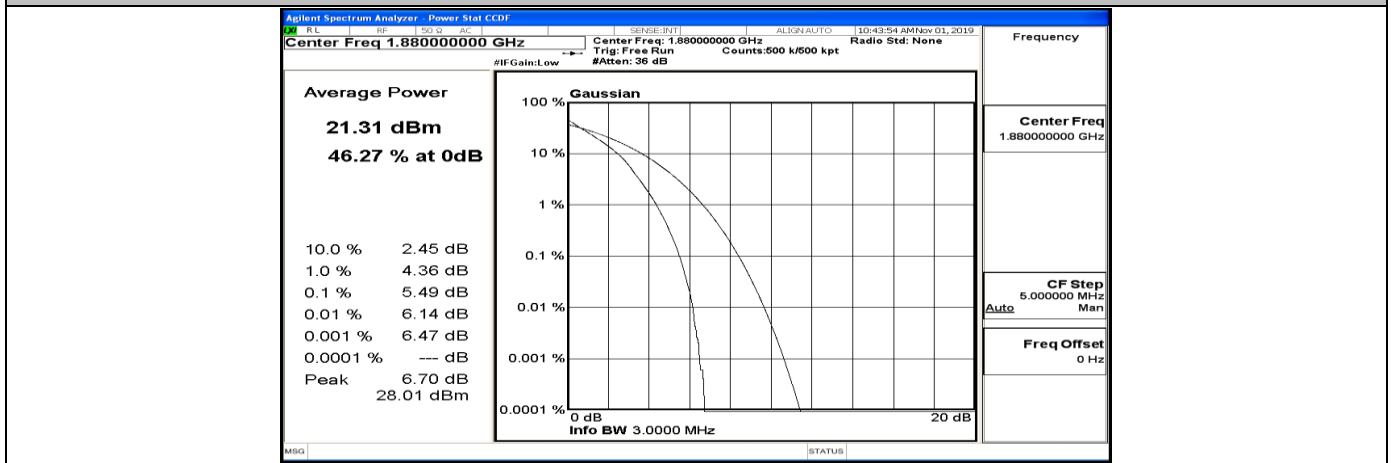


# Channel Bandwidth: 3 MHz

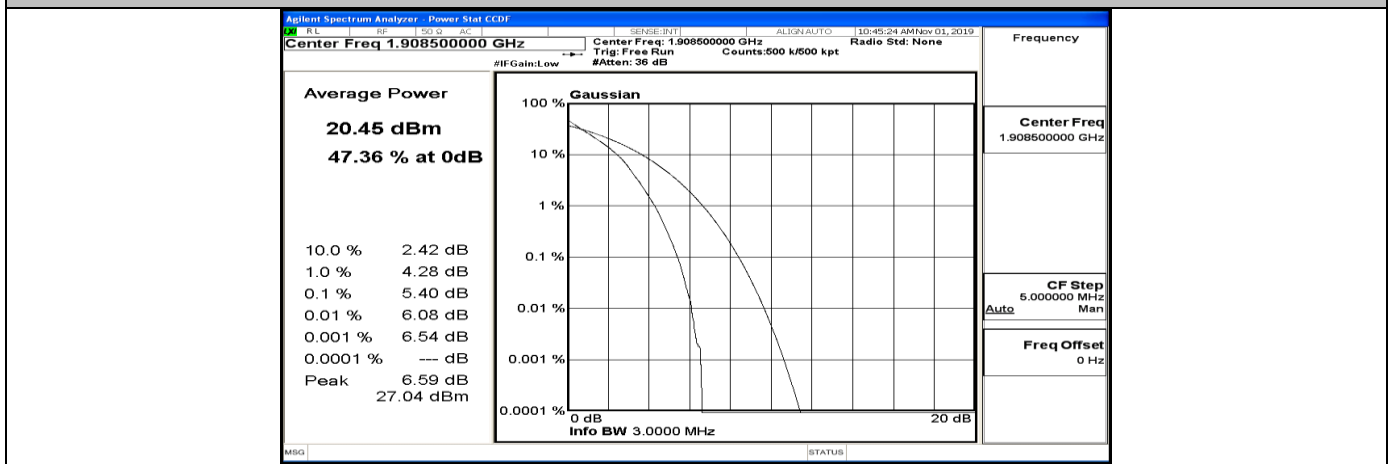
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_LCH\_QPSK



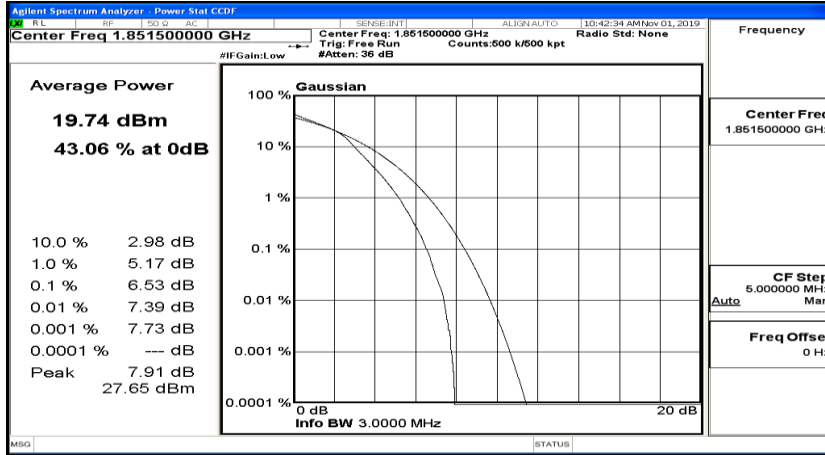
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_MCH\_QPSK



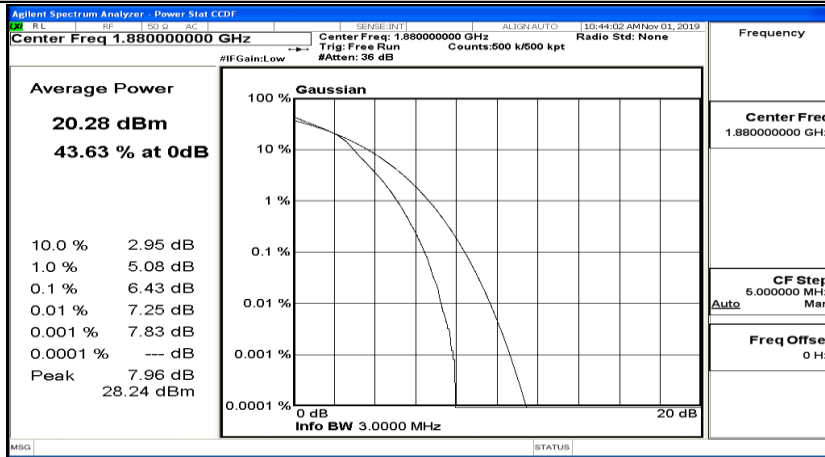
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_HCH\_QPSK



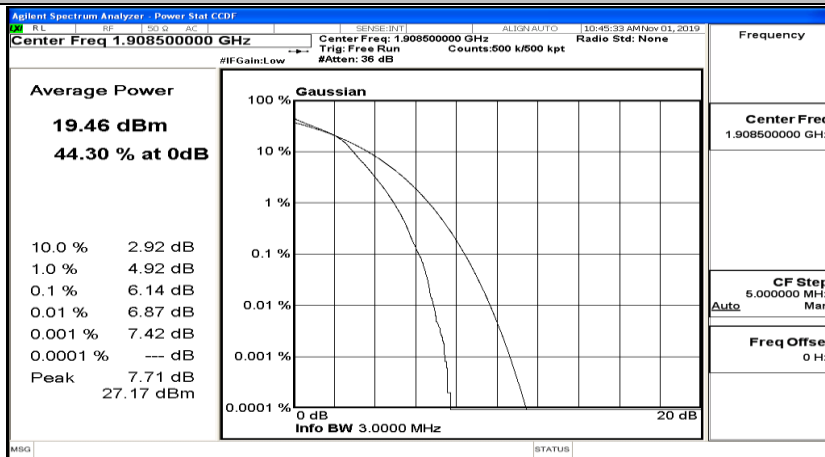
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_LCH\_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_MCH\_16QAM

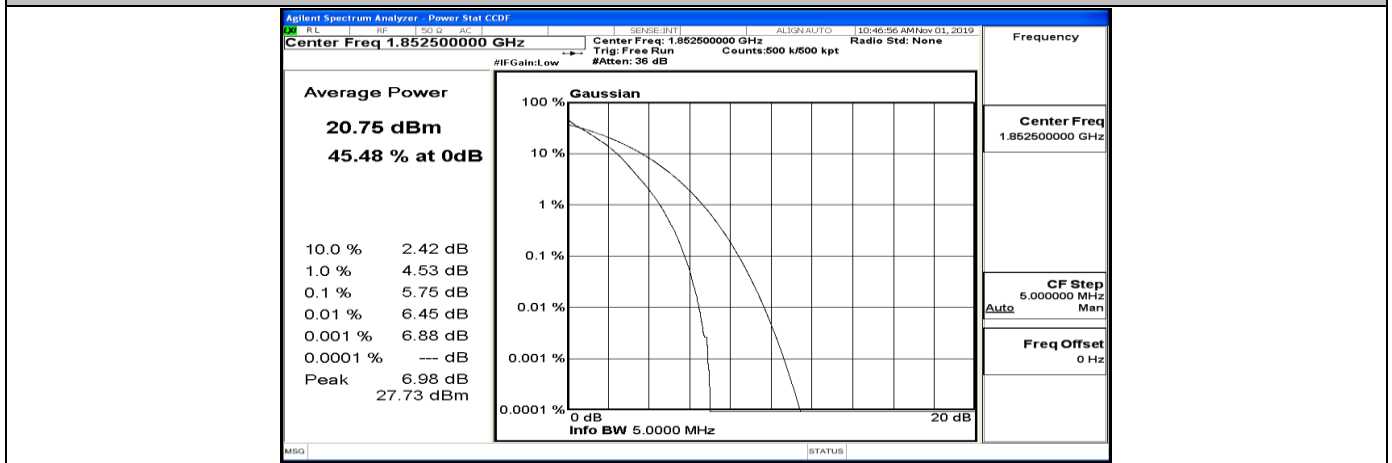


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)\_HCH\_16QAM

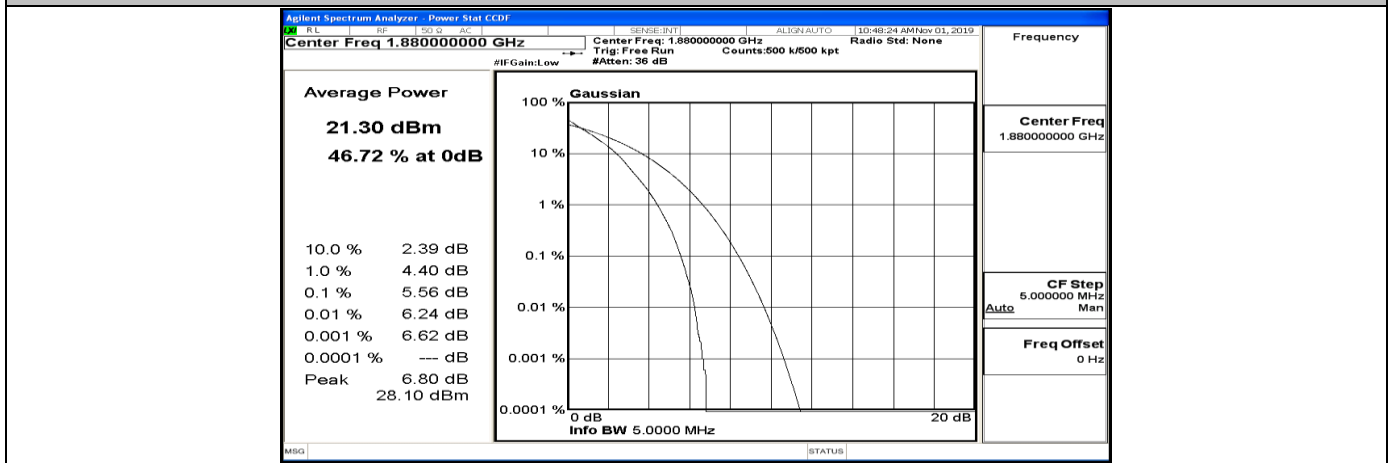


# Channel Bandwidth: 5 MHz

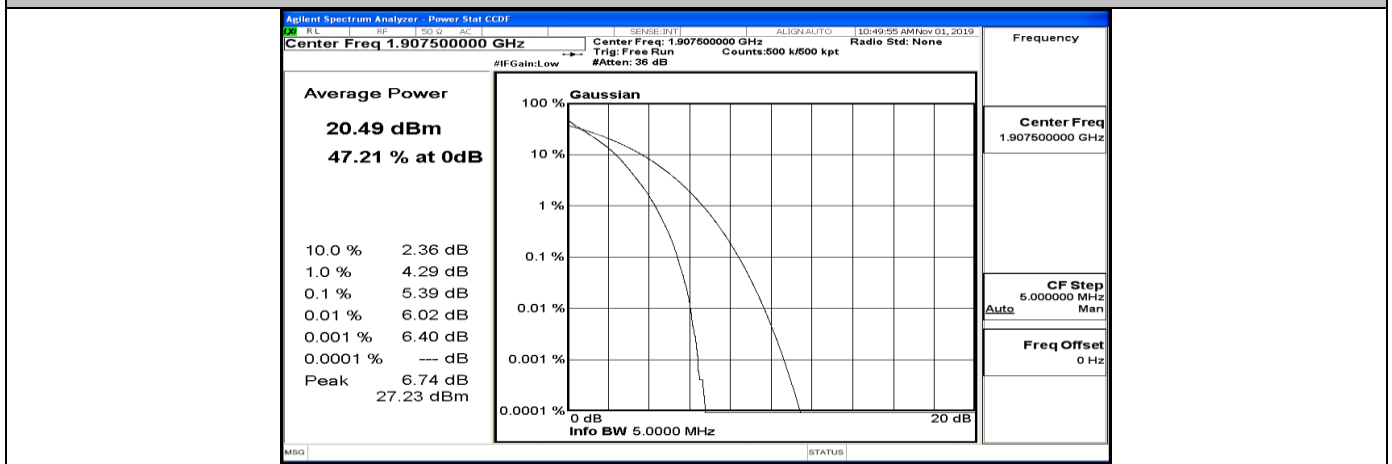
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



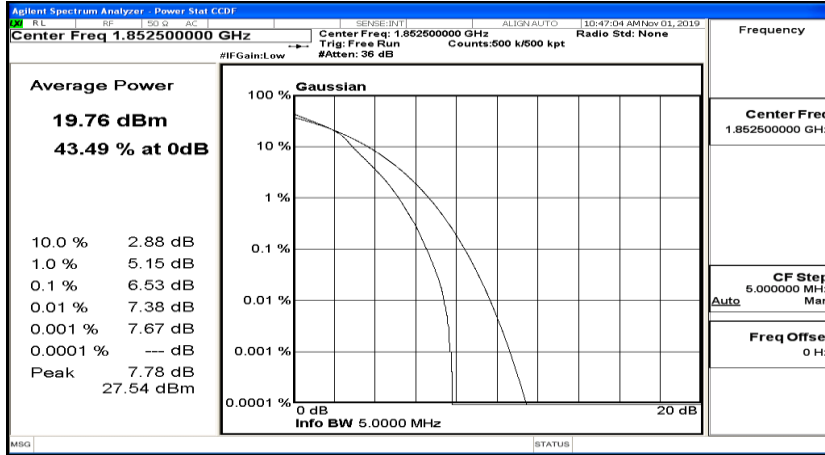
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



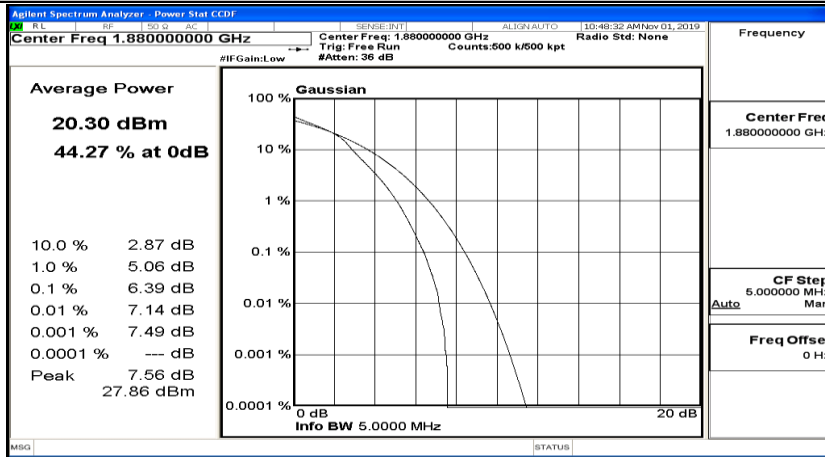
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



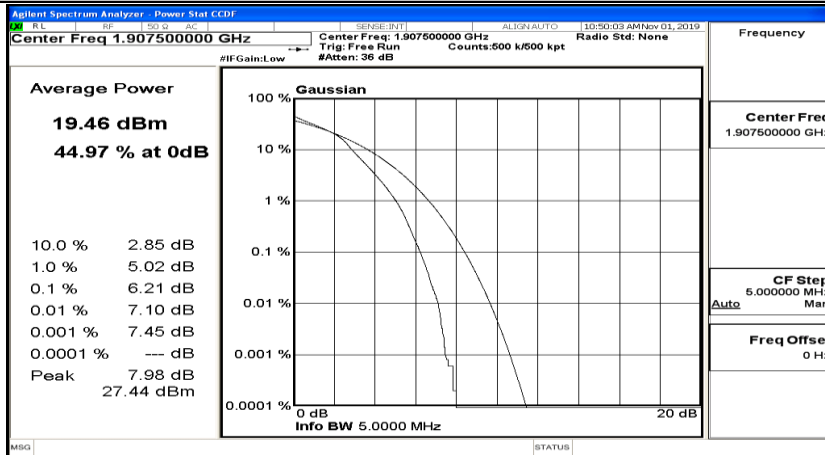
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM

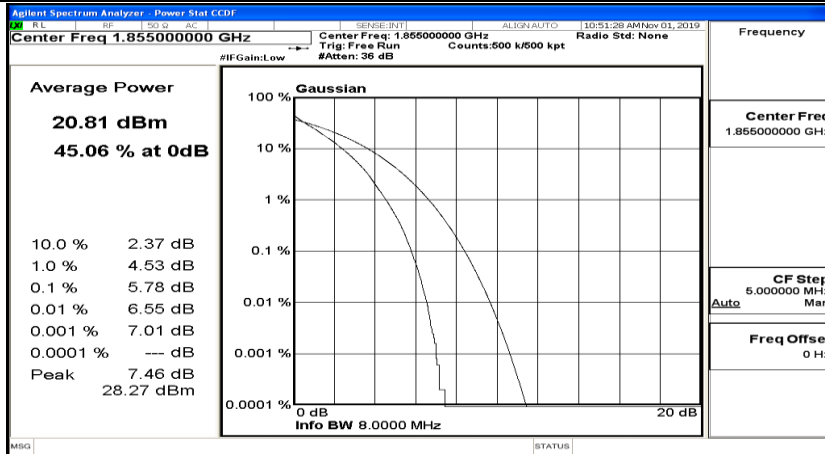


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM

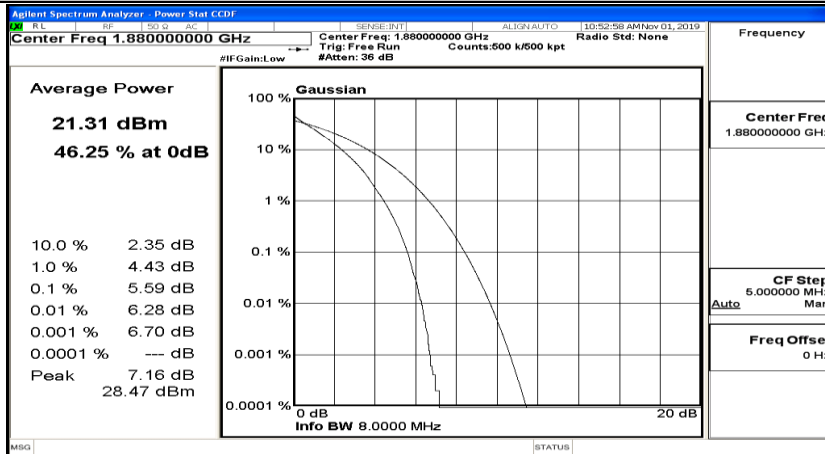


# Channel Bandwidth: 10 MHz

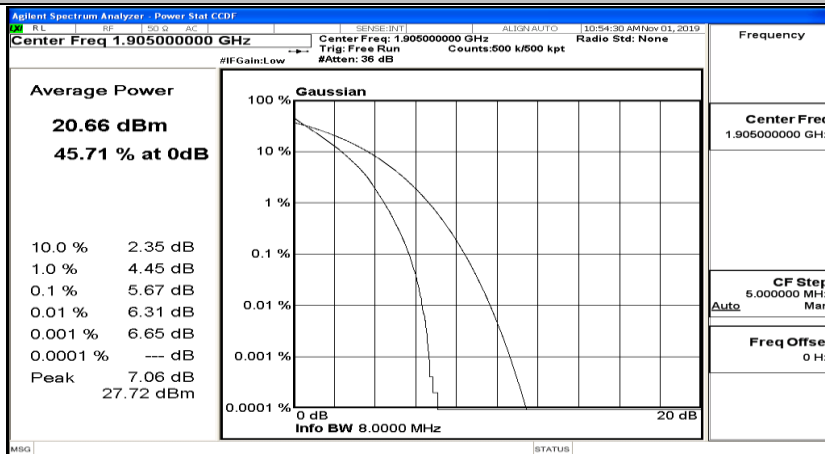
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK

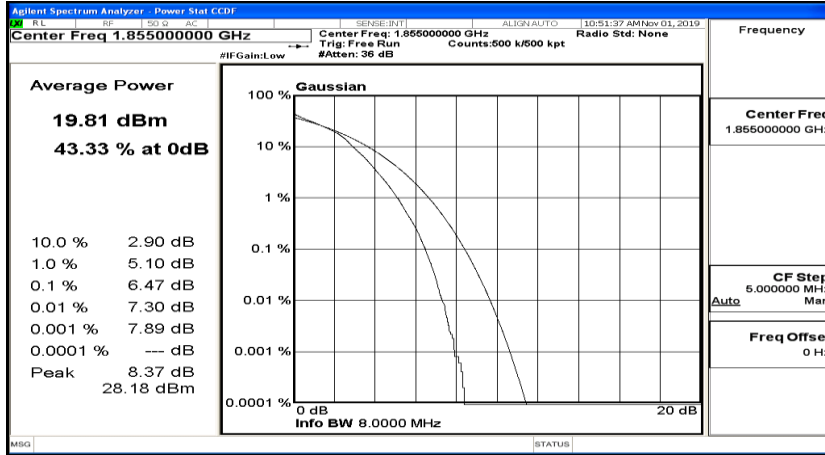


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK

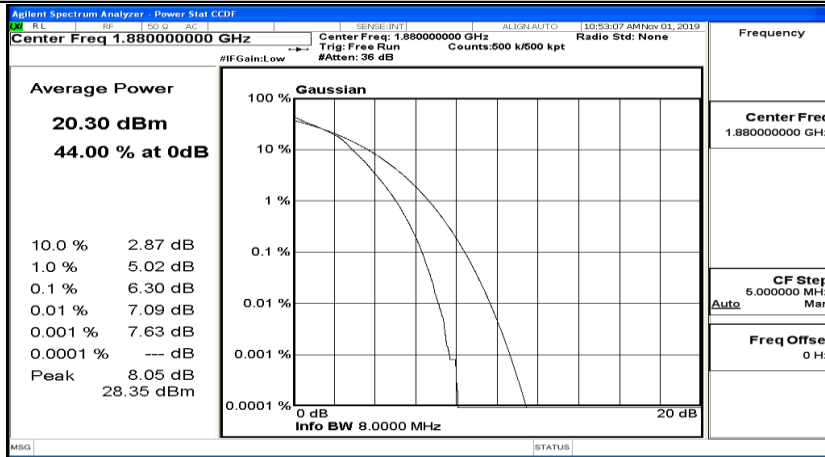




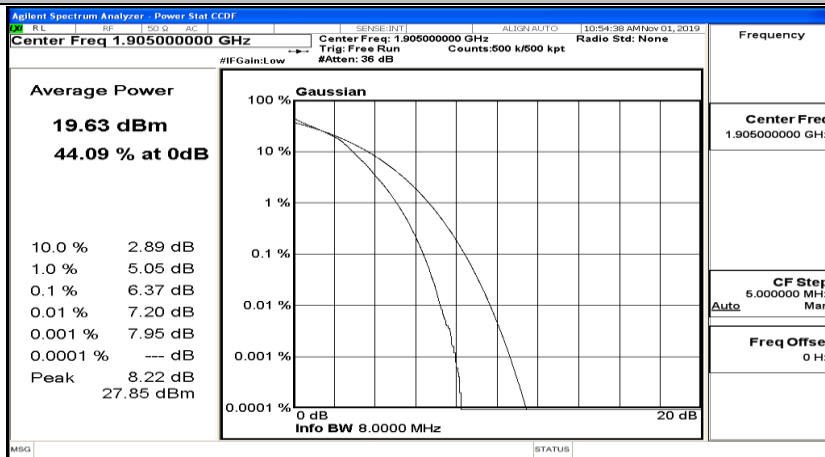
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM

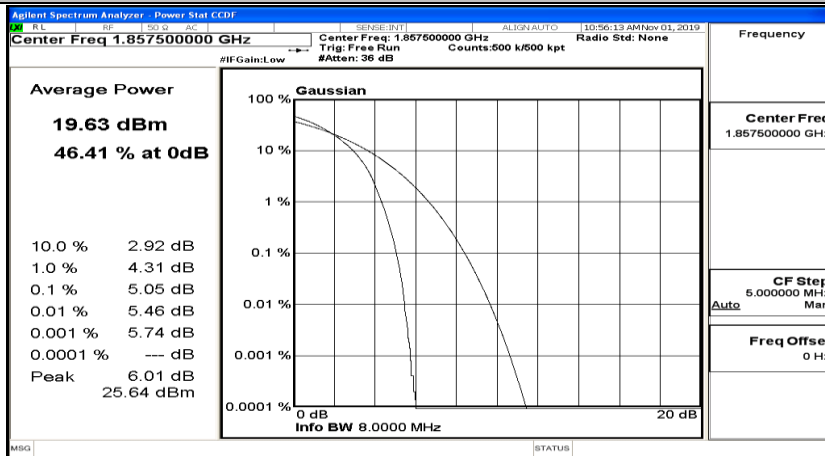


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM

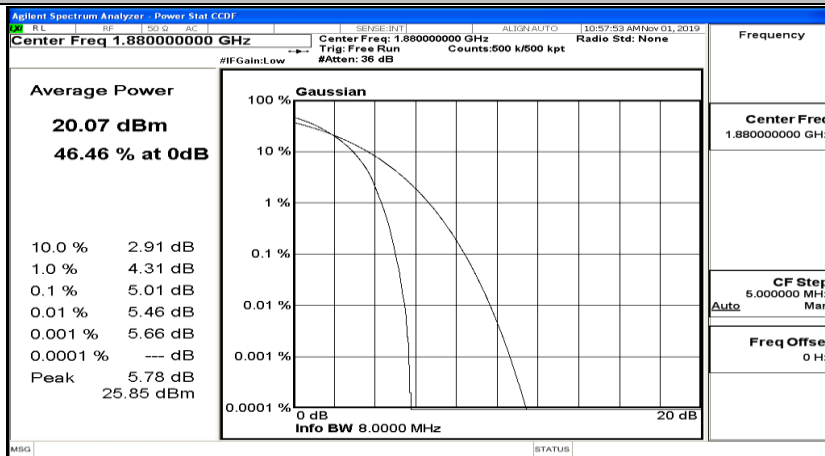


# Channel Bandwidth: 15 MHz

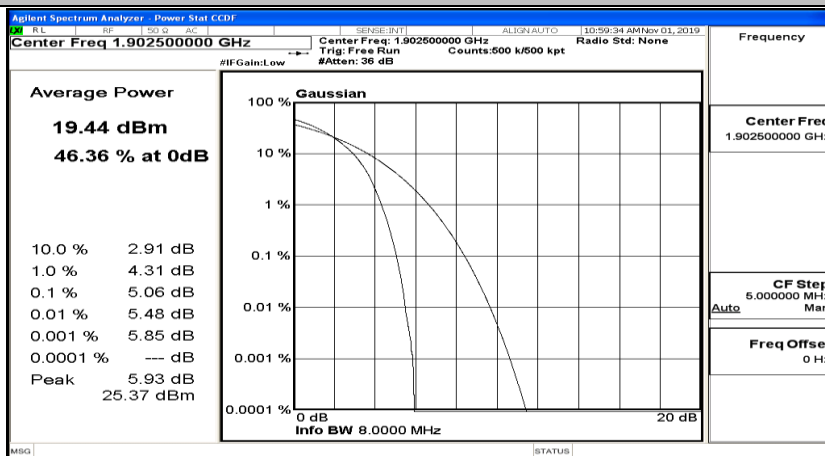
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



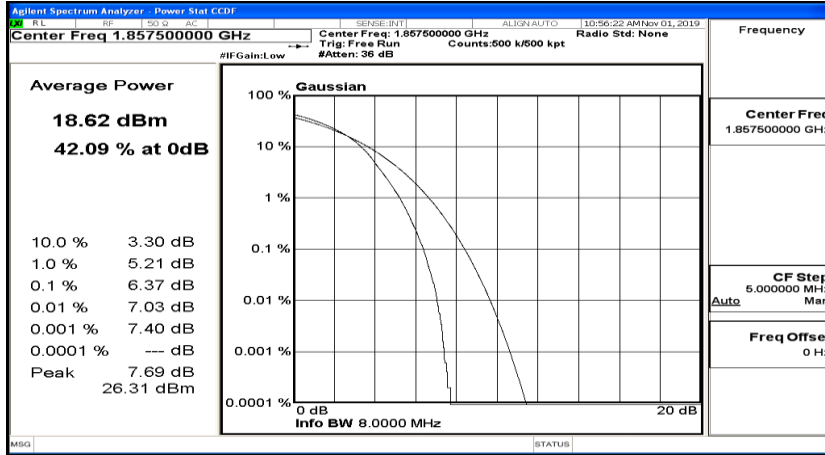
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



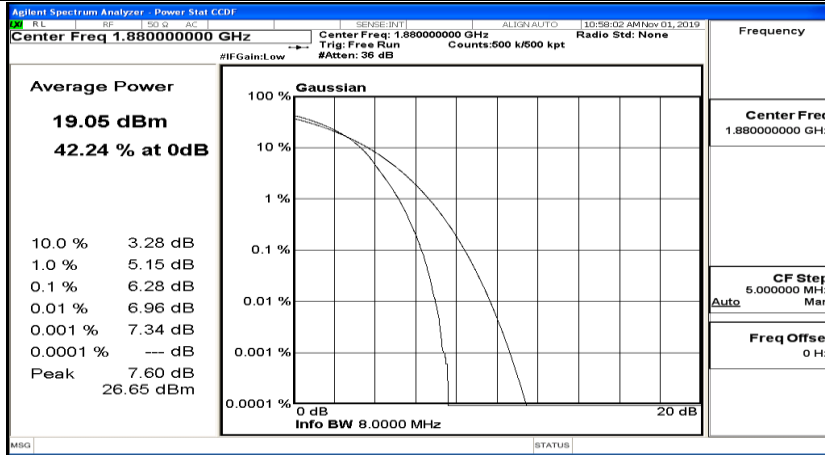
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



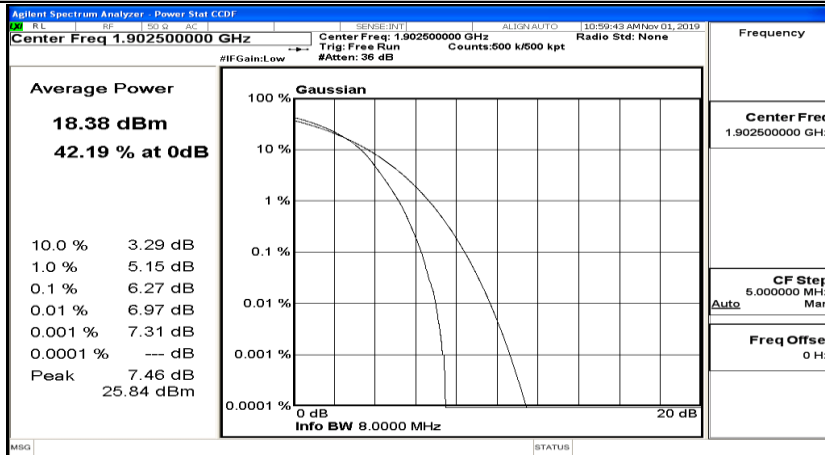
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM

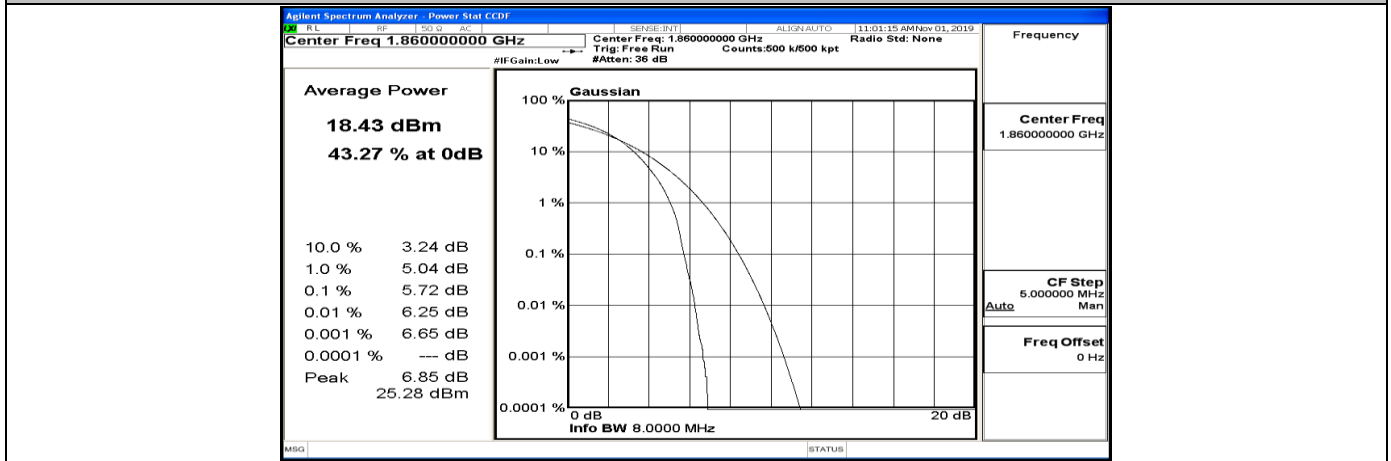


Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM

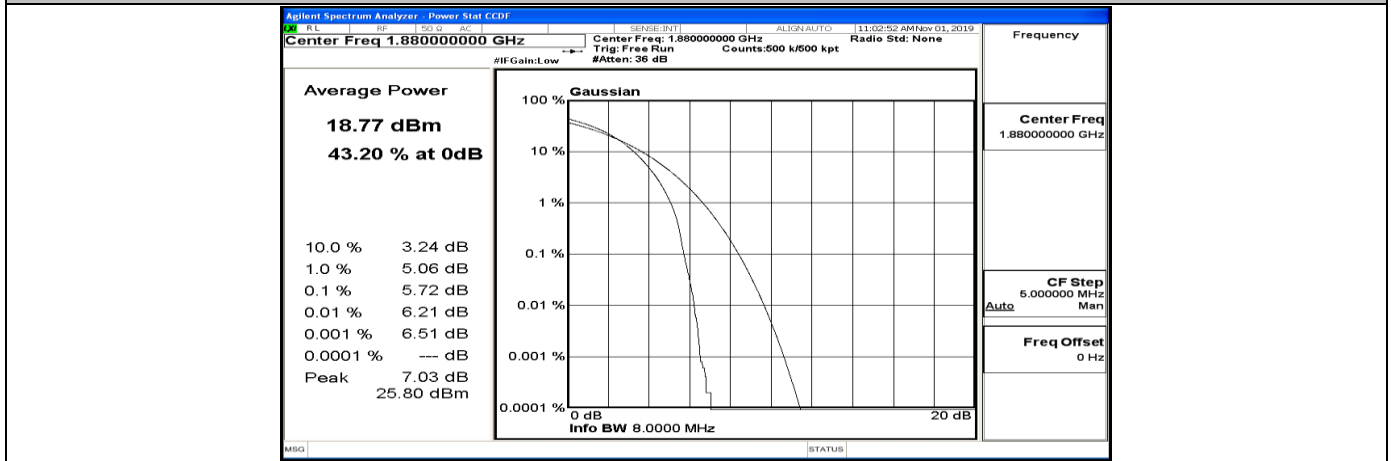


# Channel Bandwidth: 20 MHz

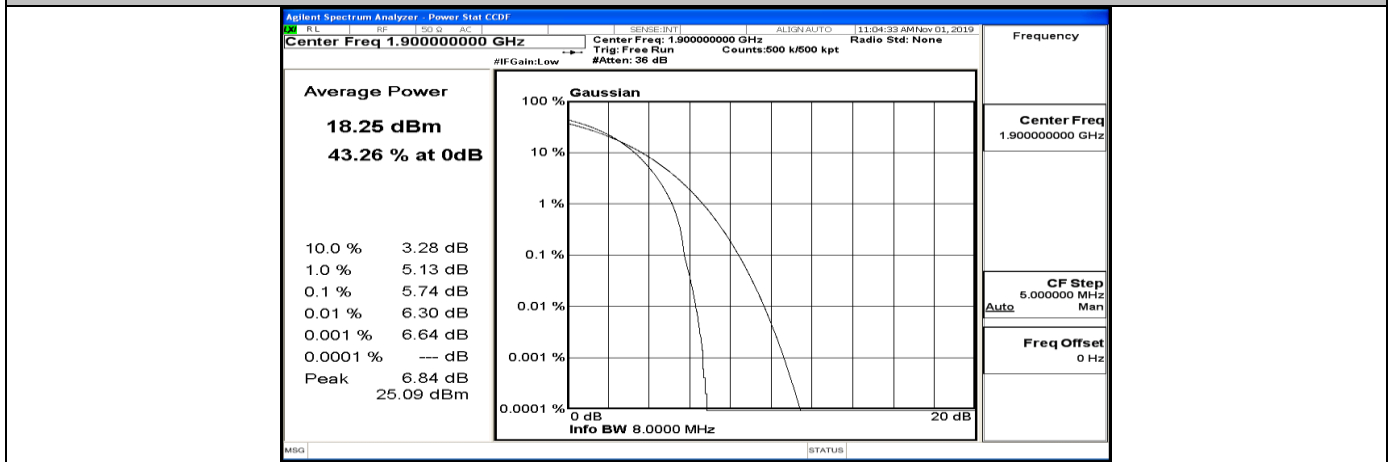
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



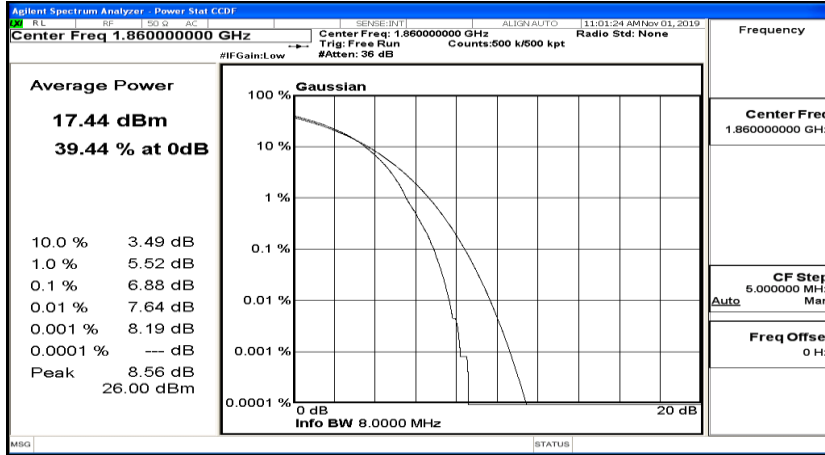
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



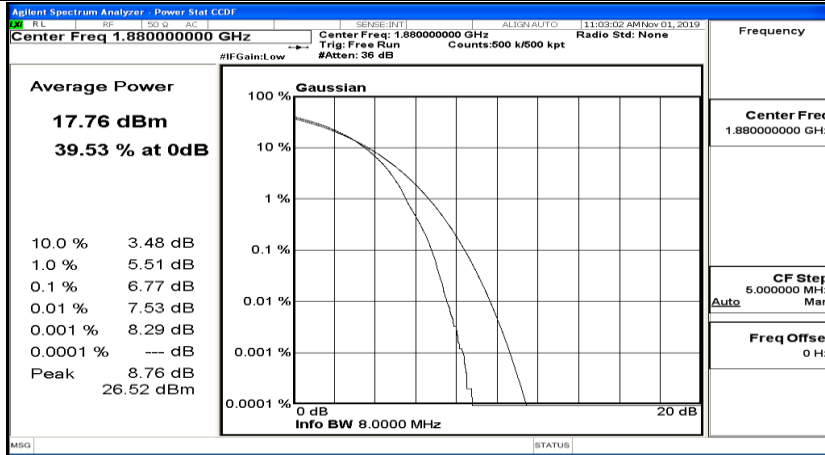
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



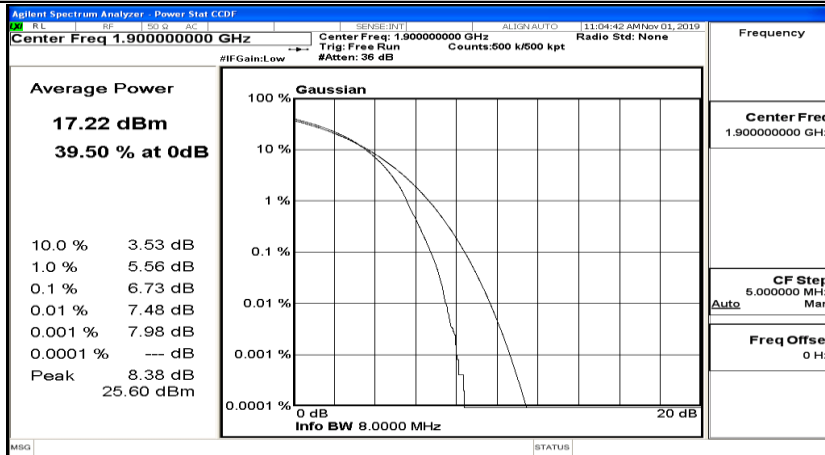
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



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



### A.3 26dB Bandwidth and Occupied Bandwidth

#### Test Result

#### Channel Bandwidth: 1.4 MHz

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0759	1.216	PASS
	MCH	1.0754	1.249	PASS
	HCH	1.0766	1.226	PASS
16QAM	LCH	1.0803	1.238	PASS
	MCH	1.0764	1.220	PASS
	HCH	1.0756	1.213	PASS

#### Channel Bandwidth: 3 MHz

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6798	2.826	PASS
	MCH	2.6800	2.831	PASS
	HCH	2.6794	2.828	PASS
16QAM	LCH	2.6768	2.823	PASS
	MCH	2.6838	2.830	PASS
	HCH	2.6824	2.822	PASS

#### Channel Bandwidth: 5 MHz

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4837	4.917	PASS
	MCH	4.4742	4.846	PASS
	HCH	4.4697	4.903	PASS
16QAM	LCH	4.4705	4.877	PASS
	MCH	4.4829	4.876	PASS
	HCH	4.4856	4.870	PASS

### Channel Bandwidth: 10 MHz

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9496	9.581	PASS
	MCH	8.9402	9.532	PASS
	HCH	8.9477	9.542	PASS
16QAM	LCH	8.9445	9.516	PASS
	MCH	8.9434	9.633	PASS
	HCH	8.9562	9.568	PASS

### Channel Bandwidth: 15 MHz

EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.398	14.12	PASS
	MCH	13.422	14.09	PASS
	HCH	13.424	14.01	PASS
16QAM	LCH	13.405	14.13	PASS
	MCH	13.418	14.03	PASS
	HCH	13.419	14.11	PASS

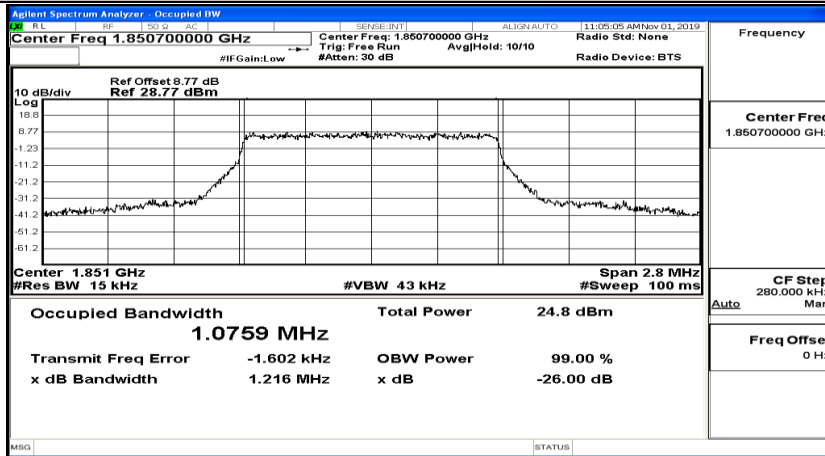
### Channel Bandwidth: 20 MHz

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.865	18.68	PASS
	MCH	17.877	18.65	PASS
	HCH	17.858	18.61	PASS
16QAM	LCH	17.868	18.67	PASS
	MCH	17.901	18.65	PASS
	HCH	17.863	18.56	PASS

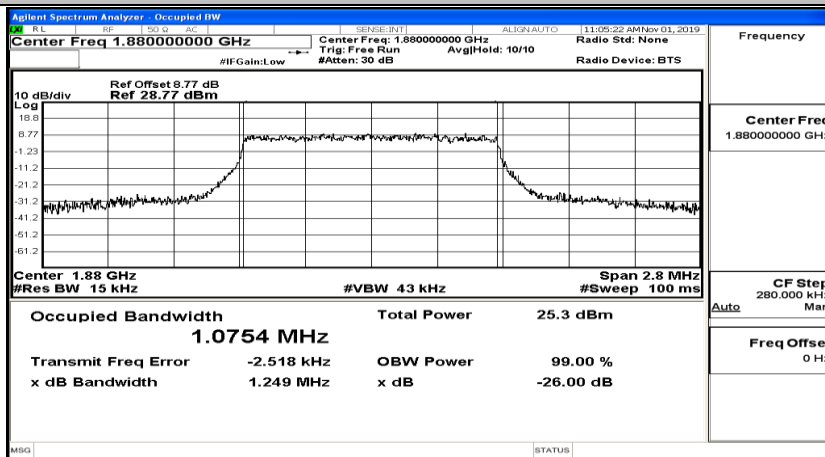
# Test Graphs

## Channel Bandwidth: 1.4 MHz

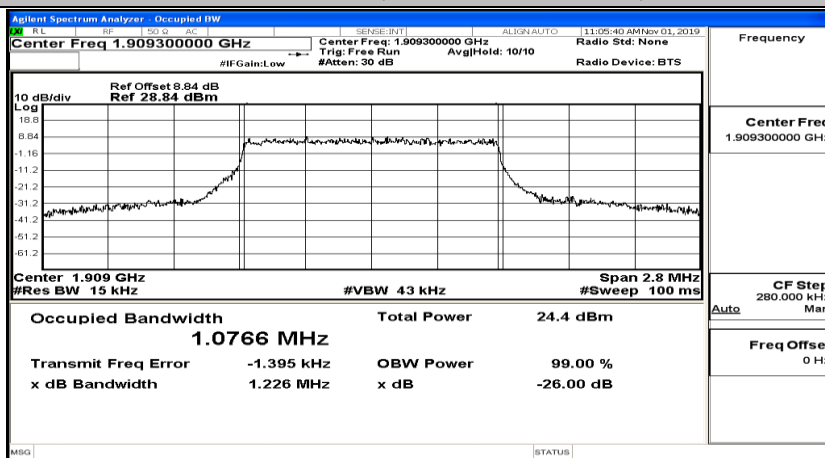
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK



EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK

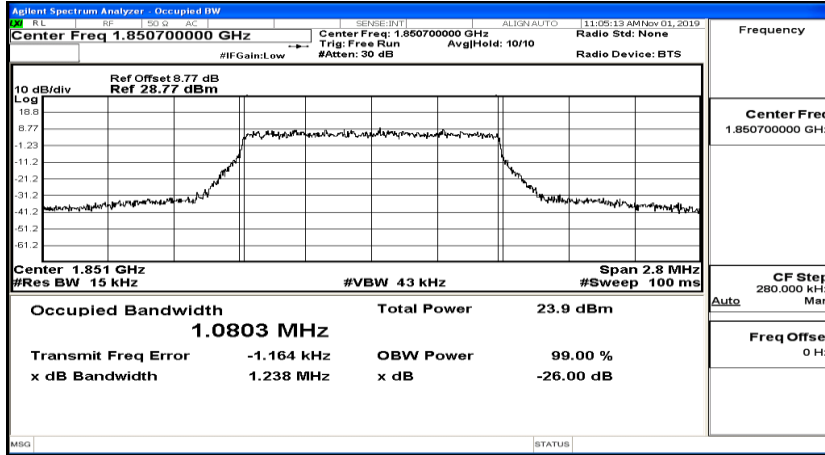


EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK

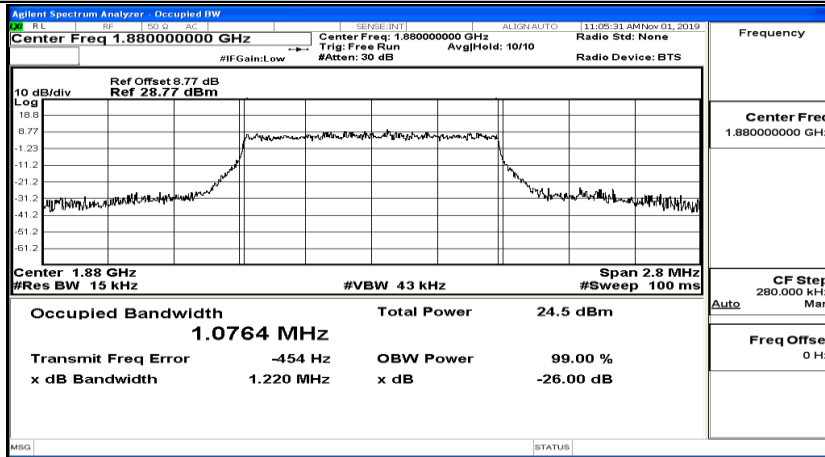




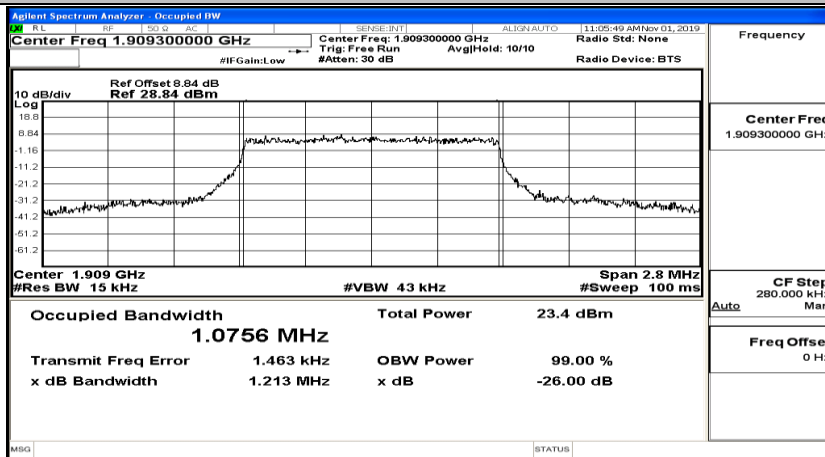
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz) LCH\_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz) MCH\_16QAM

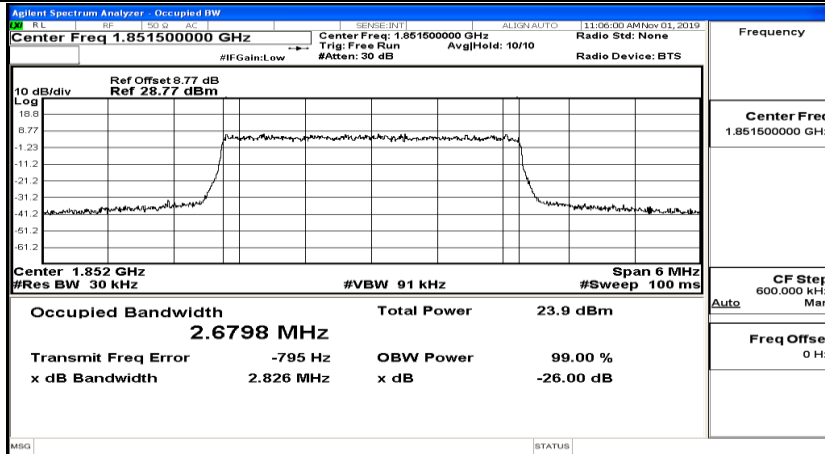


EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz) HCH\_16QAM

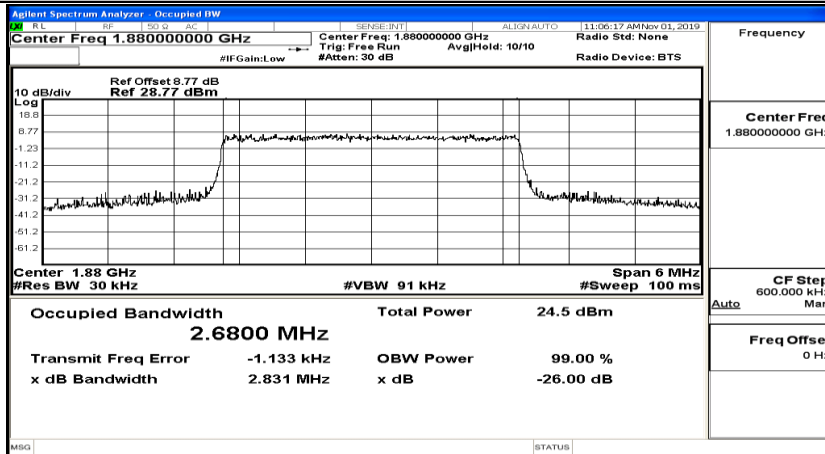


# Channel Bandwidth: 3 MHz

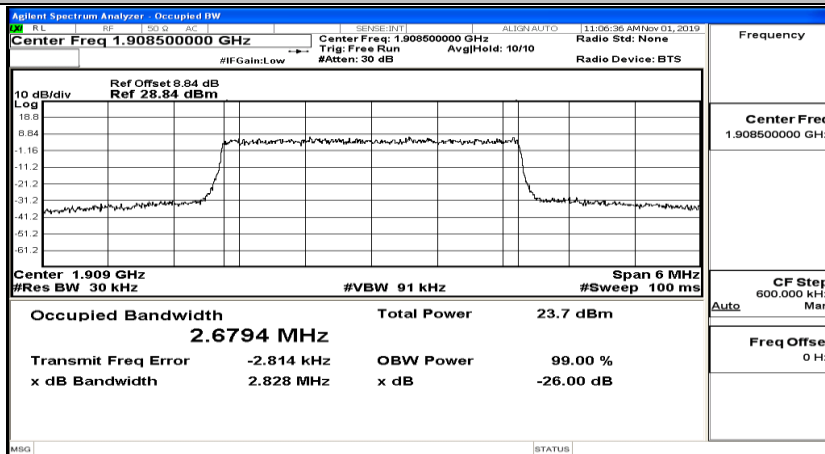
## EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_LCH\_QPSK



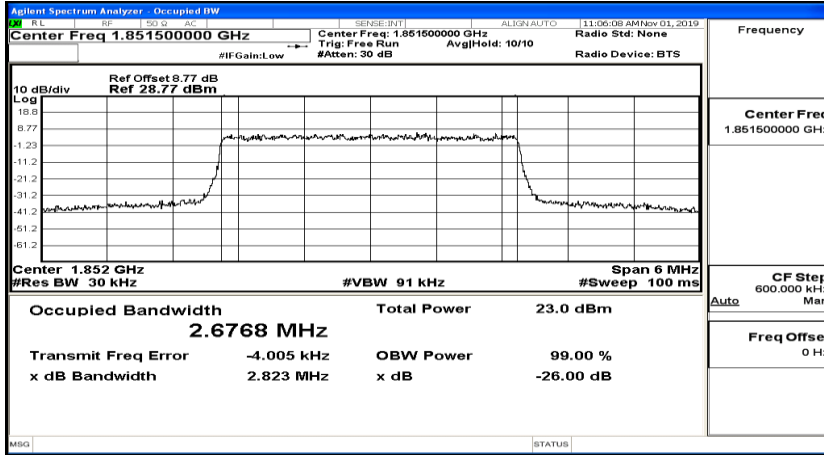
## EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_MCH\_QPSK



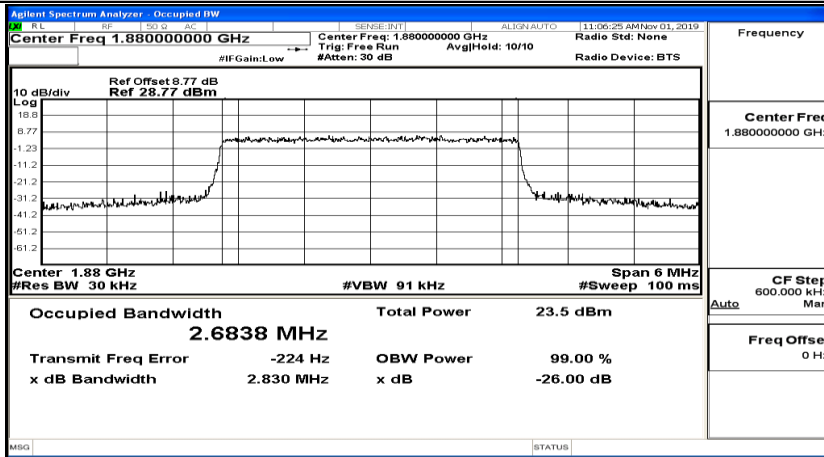
## EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_HCH\_QPSK



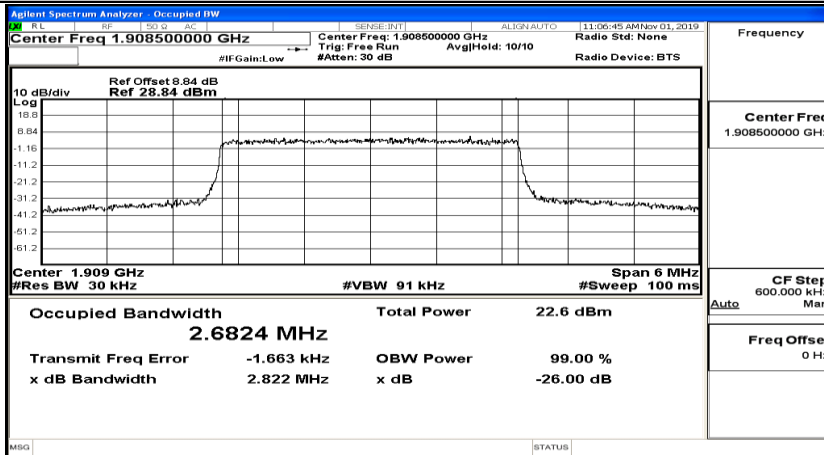
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_LCH\_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_MCH\_16QAM

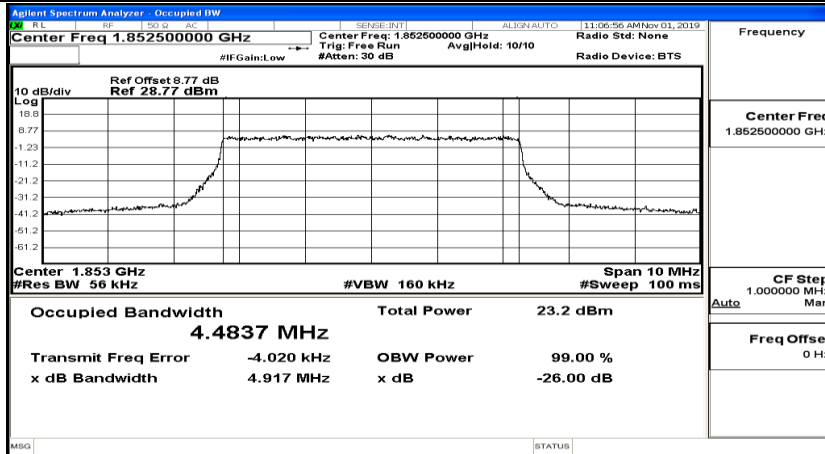


EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)\_HCH\_16QAM

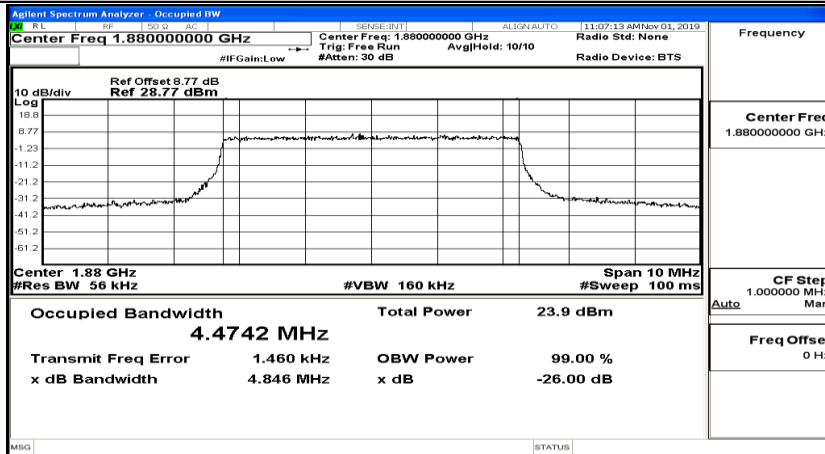


# Channel Bandwidth: 5 MHz

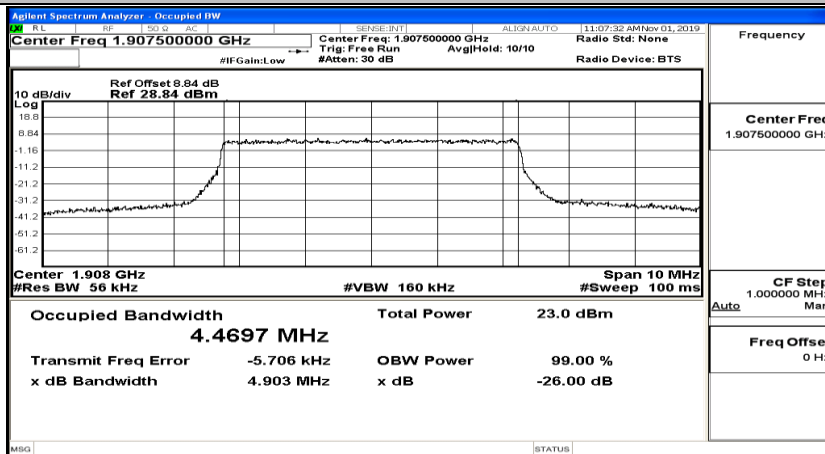
## EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



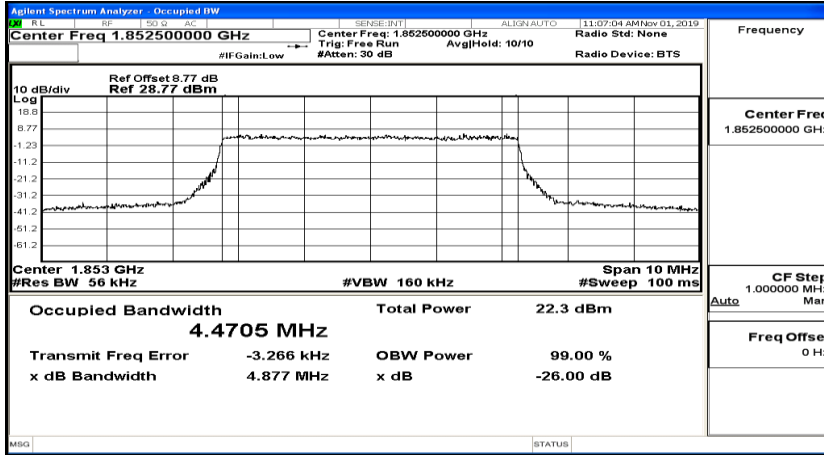
## EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



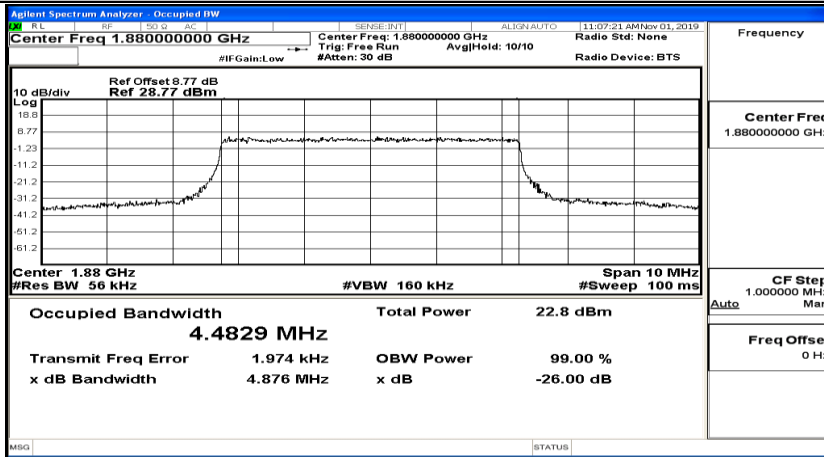
## EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



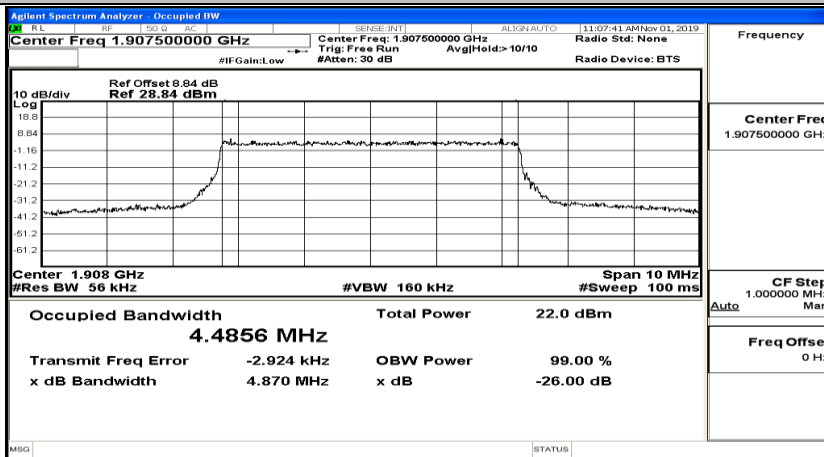
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM

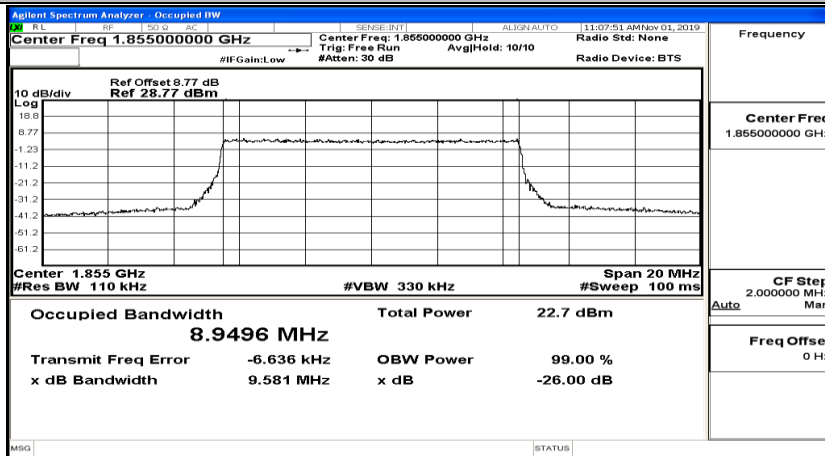


EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM

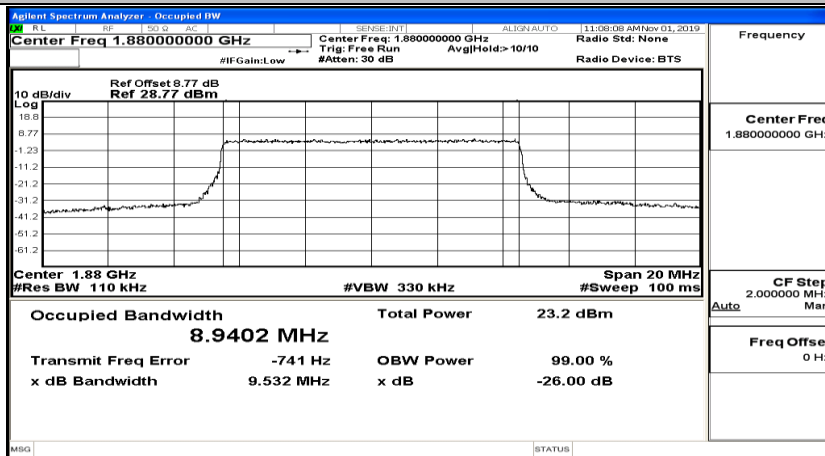


# Channel Bandwidth: 10 MHz

## 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

