

## Appendix E: Test Data for E-UTRA Band 7

**Product Name:** Smart phone

**Trade Mark:** S SMOOTH

**Test Model:** SMOOTH 5.0

### Environmental Conditions

Temperature:	22.3° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

## E.1 Conducted Output Power

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	22.08	21.84	PASS
		1	12	21.84	21.62	PASS
		1	24	21.63	21.34	PASS
		12	0	21.22	20.28	PASS
		12	6	21.03	20.13	PASS
		12	13	20.99	20.00	PASS
		25	0	20.95	20.23	PASS
	MCH	1	0	22.85	21.47	PASS
		1	12	22.87	21.38	PASS
		1	24	22.78	21.41	PASS
		12	0	21.81	20.71	PASS
		12	6	21.72	20.64	PASS
		12	13	21.72	20.68	PASS
		25	0	21.69	20.93	PASS
	HCH	1	0	22.30	21.09	PASS
		1	12	22.35	21.23	PASS
		1	24	22.55	21.37	PASS
		12	0	21.17	20.22	PASS
		12	6	21.23	20.26	PASS
		12	13	21.46	20.36	PASS
		25	0	21.28	20.55	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	22.34	21.88	PASS
		1	24	21.83	21.47	PASS
		1	49	21.68	21.24	PASS
		25	0	21.13	20.19	PASS
		25	12	20.85	20.14	PASS
		25	25	20.68	19.90	PASS
		50	0	20.85	20.13	PASS
	MCH	1	0	22.76	22.26	PASS
		1	24	22.83	22.35	PASS
		1	49	22.63	22.24	PASS
		25	0	21.89	20.92	PASS
		25	12	21.86	20.91	PASS
		25	25	21.81	20.92	PASS
		50	0	21.71	20.94	PASS
	HCH	1	0	21.91	21.45	PASS
		1	24	22.18	21.76	PASS
		1	49	22.46	22.05	PASS
		25	0	21.09	20.16	PASS
		25	12	21.18	20.26	PASS
		25	25	21.30	20.43	PASS
		50	0	21.17	20.37	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.11	22.17	PASS
		1	37	21.60	21.69	PASS
		1	74	21.69	21.73	PASS
		37	0	20.95	20.16	PASS
		37	18	20.74	19.95	PASS
		37	38	20.77	19.87	PASS
		75	0	20.88	19.94	PASS
	MCH	1	0	22.69	22.62	PASS
		1	37	22.81	22.80	PASS
		1	74	22.57	22.52	PASS
		37	0	21.80	20.93	PASS
		37	18	21.79	20.87	PASS
		37	38	21.69	20.85	PASS
		75	0	21.73	20.87	PASS
	HCH	1	0	21.81	20.97	PASS
		1	37	22.00	21.17	PASS
		1	74	22.54	21.65	PASS
		37	0	20.88	19.90	PASS
		37	18	21.02	20.10	PASS
		37	38	21.28	20.31	PASS
		75	0	21.06	20.07	PASS

## 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	22.30	21.43	PASS
		1	49	21.71	20.90	PASS
		1	99	22.06	21.16	PASS
		50	0	20.90	20.08	PASS
		50	25	20.80	19.81	PASS
		50	50	20.76	19.87	PASS
		100	0	20.74	19.97	PASS
	MCH	1	0	22.77	21.56	PASS
		1	49	23.08	21.78	PASS
		1	99	22.63	21.43	PASS
		50	0	21.74	20.83	PASS
		50	25	21.78	20.78	PASS
		50	50	21.69	20.81	PASS
		100	0	21.72	20.77	PASS
	HCH	1	0	21.91	21.21	PASS
		1	49	21.77	21.17	PASS
		1	99	22.34	21.68	PASS
		50	0	20.81	19.90	PASS
		50	25	20.83	19.89	PASS
		50	50	21.18	20.13	PASS
		100	0	21.00	19.99	PASS

**E.2 Peak-to-Average Ratio**

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.28	<13	PASS
	MCH	5.47	<13	PASS
	HCH	5.46	<13	PASS
16QAM	LCH	5.99	<13	PASS
	MCH	6.27	<13	PASS
	HCH	6.14	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.4	<13	PASS
	MCH	5.54	<13	PASS
	HCH	5.41	<13	PASS
16QAM	LCH	6.09	<13	PASS
	MCH	6.24	<13	PASS
	HCH	6.15	<13	PASS

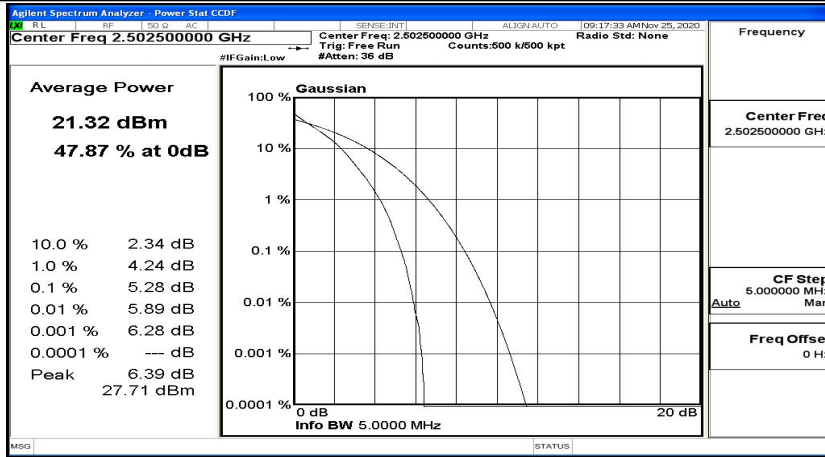
**Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)**

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.95	<13	PASS
	MCH	4.97	<13	PASS
	HCH	4.89	<13	PASS
16QAM	LCH	6.22	<13	PASS
	MCH	6.21	<13	PASS
	HCH	6.12	<13	PASS

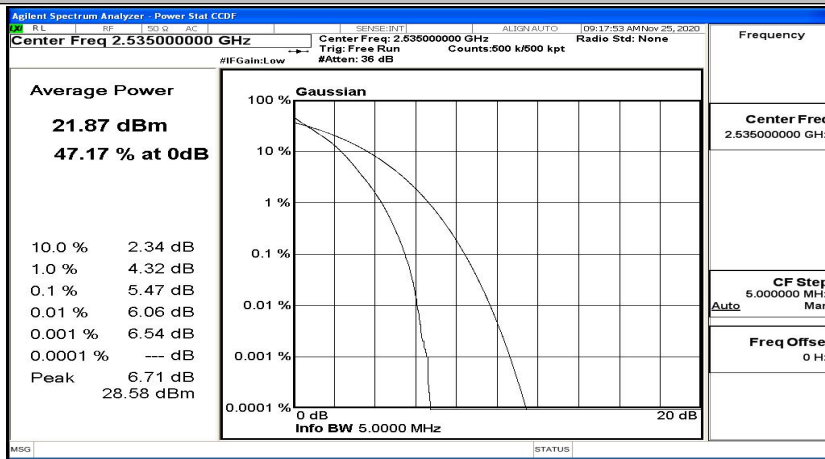
**Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)**

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.77	<13	PASS
	MCH	5.72	<13	PASS
	HCH	5.68	<13	PASS
16QAM	LCH	6.74	<13	PASS
	MCH	6.63	<13	PASS
	HCH	6.67	<13	PASS

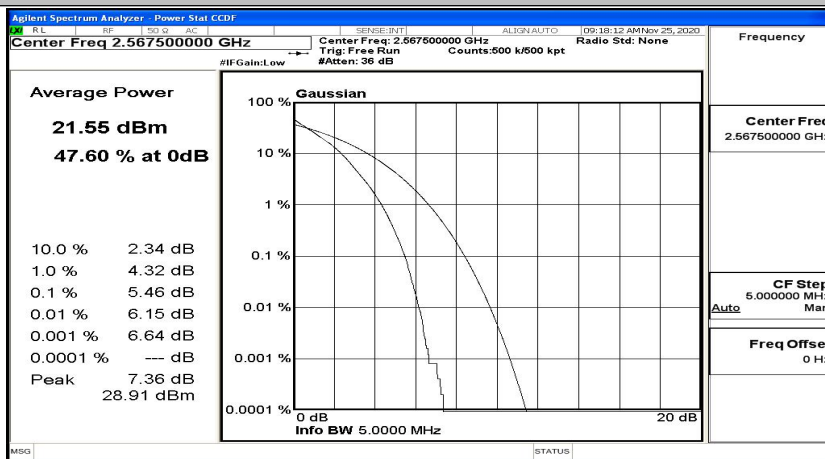
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



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

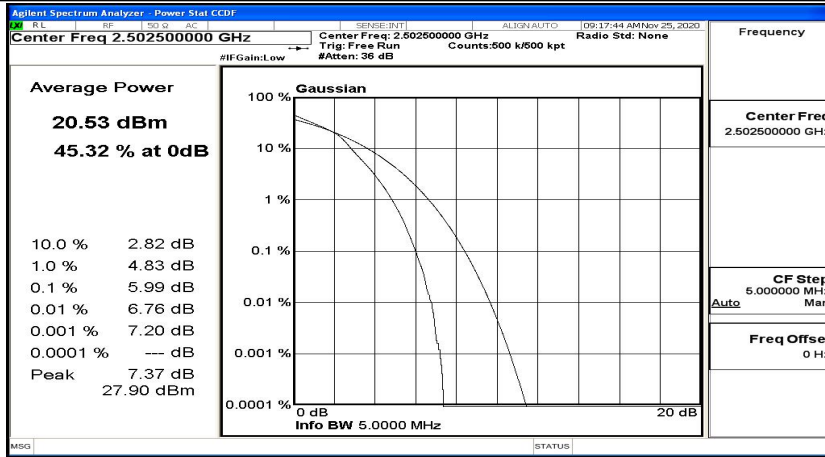


Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK

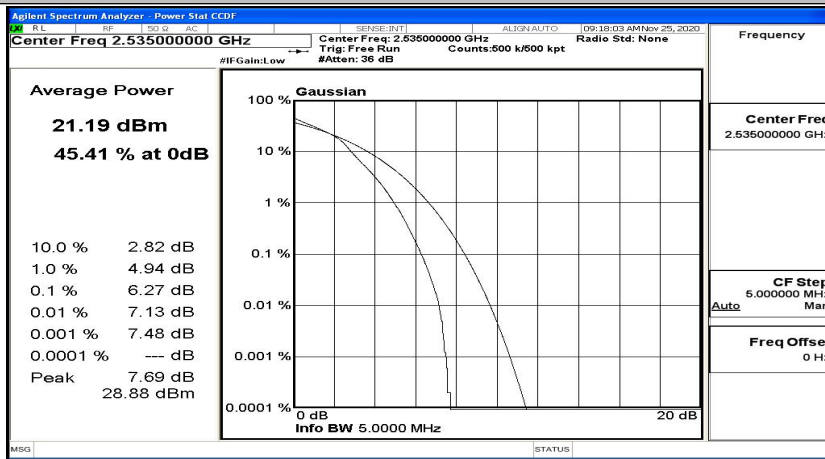




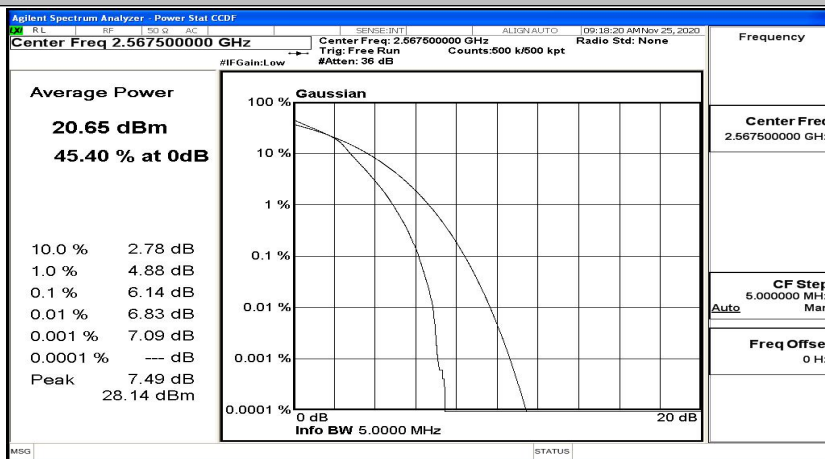
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



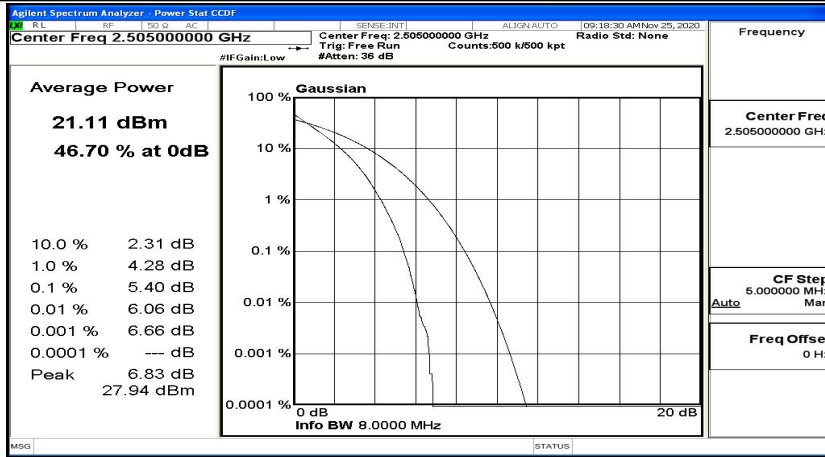
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



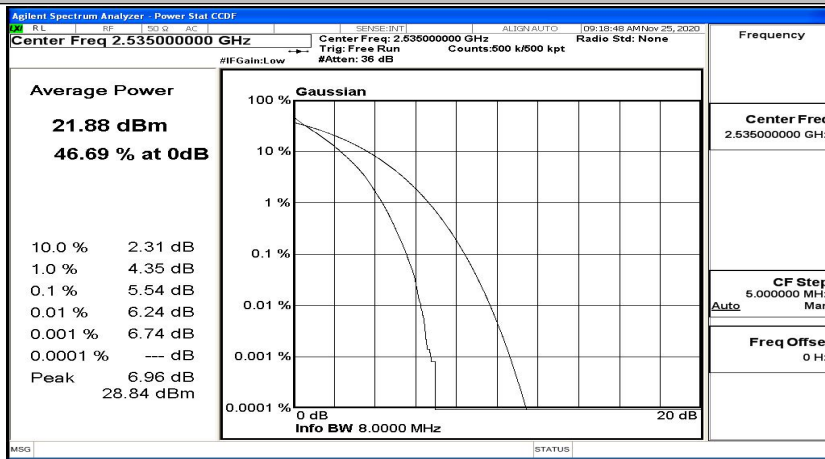
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



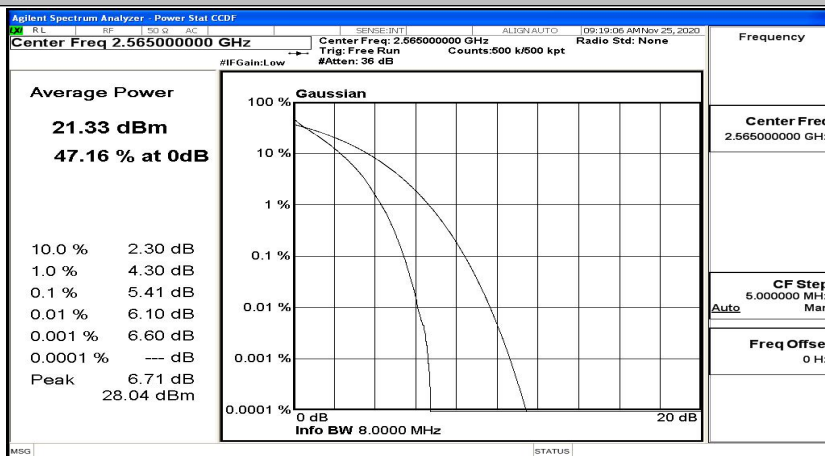
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



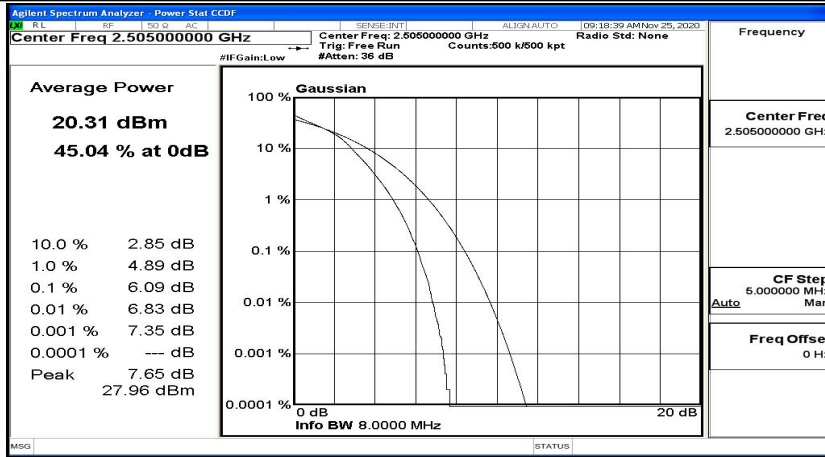
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



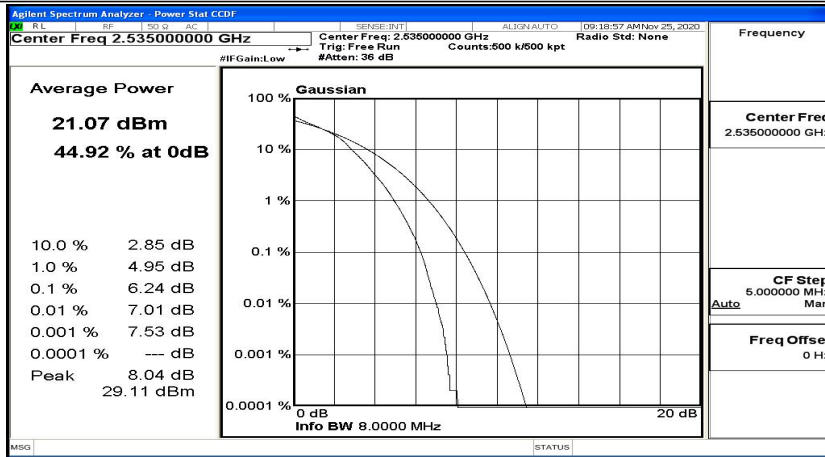
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



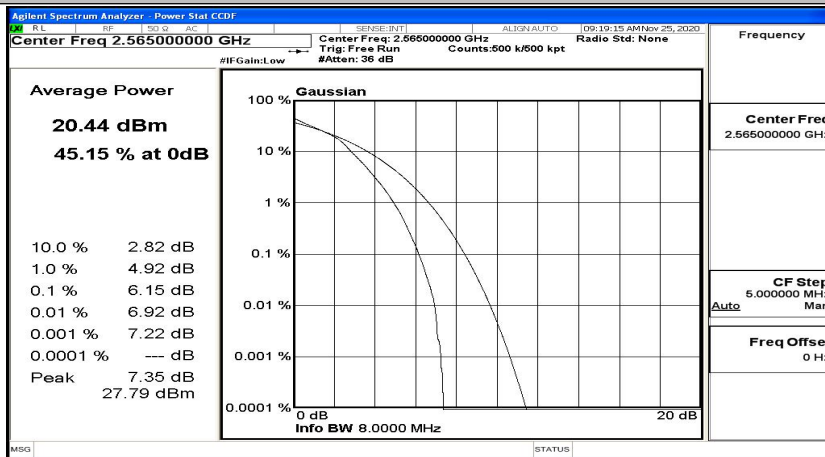
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



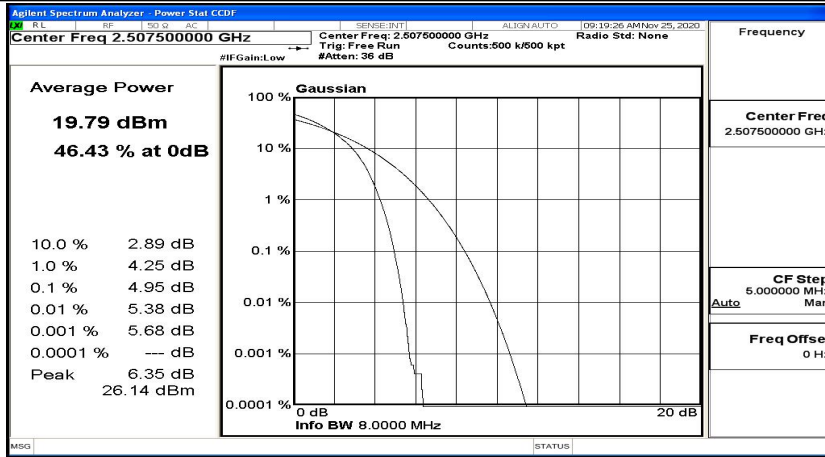
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



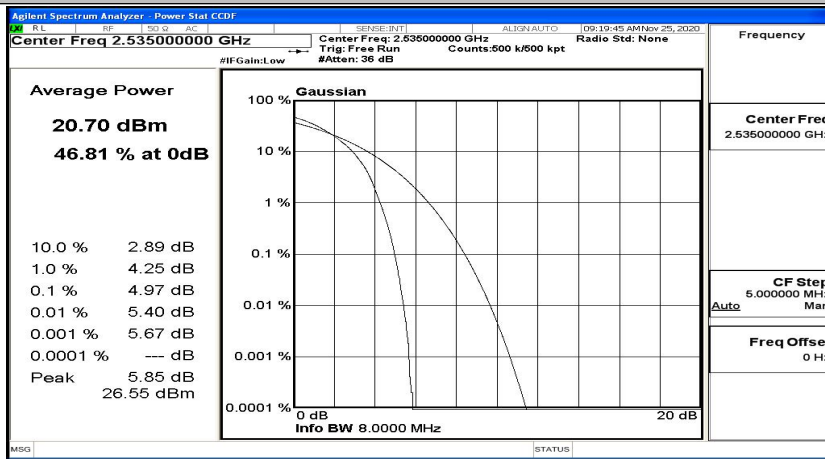
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



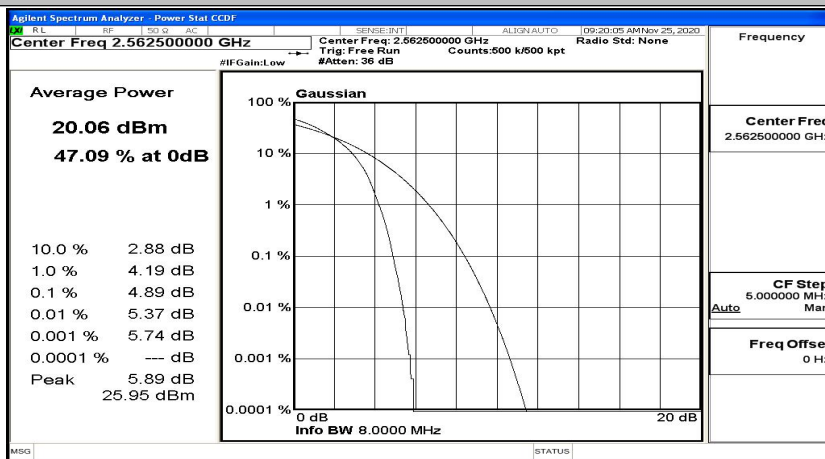
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 15 MHz)\_LCH\_QPSK



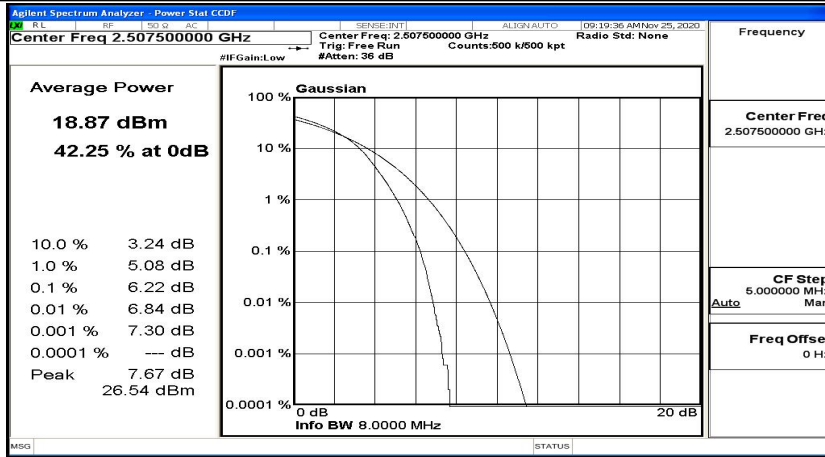
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 15 MHz)\_MCH\_QPSK



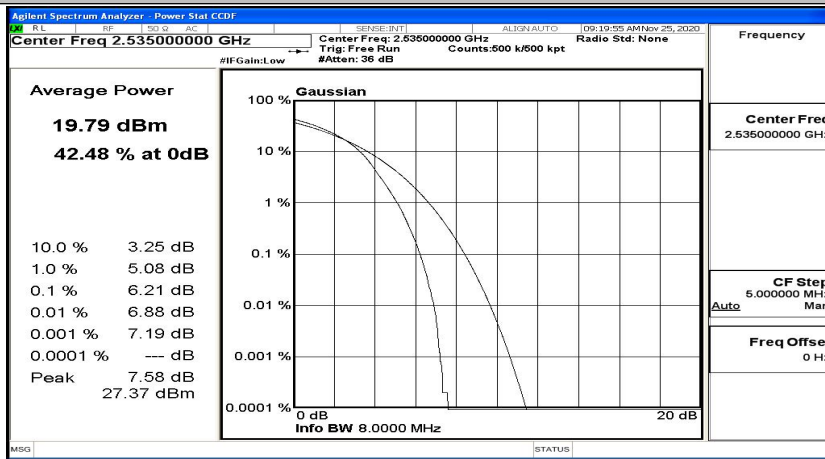
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 15 MHz)\_HCH\_QPSK



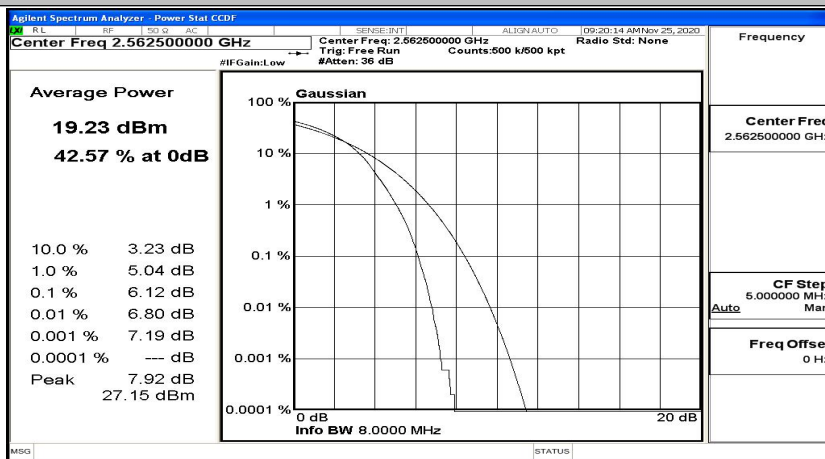
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



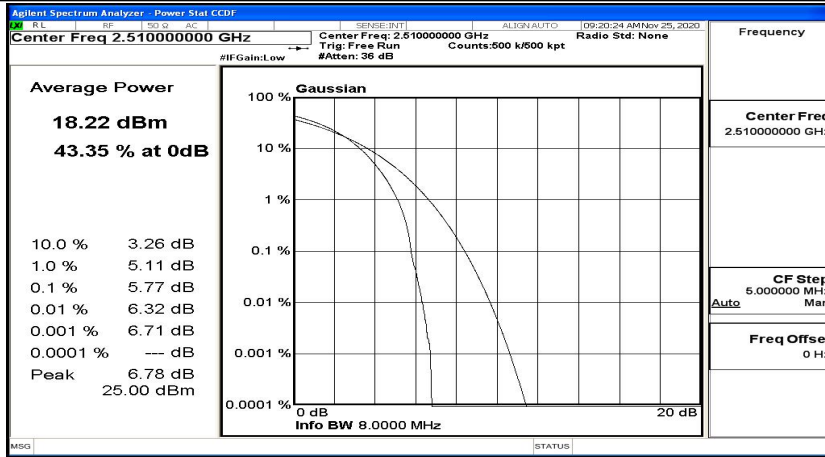
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



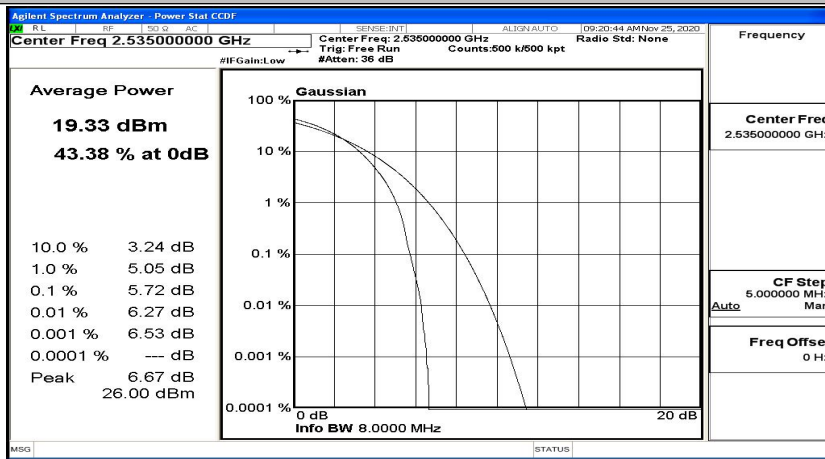
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



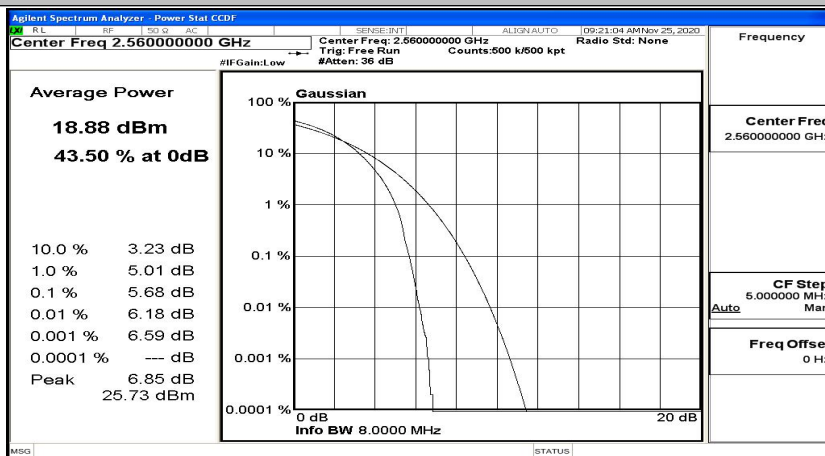
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



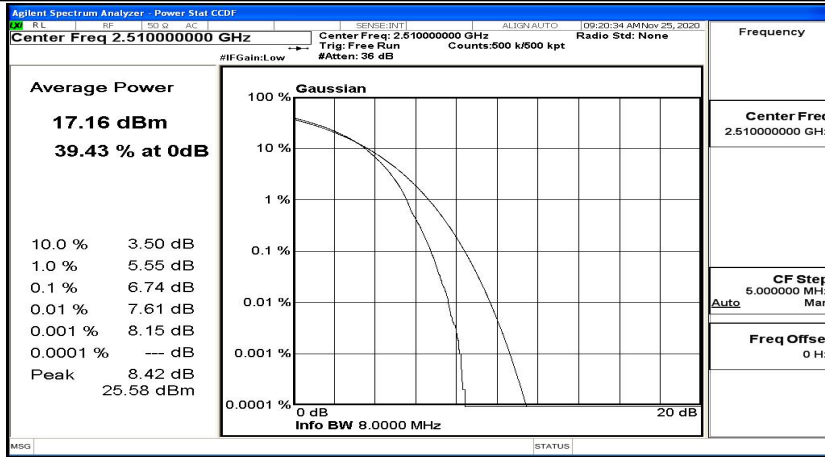
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



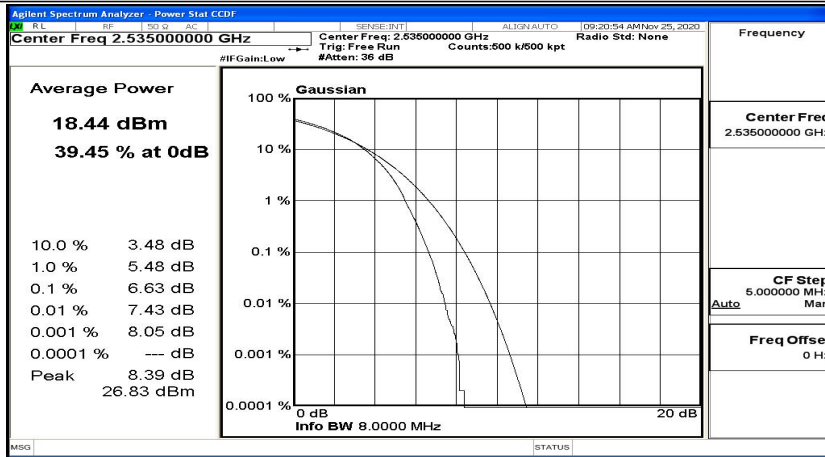
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



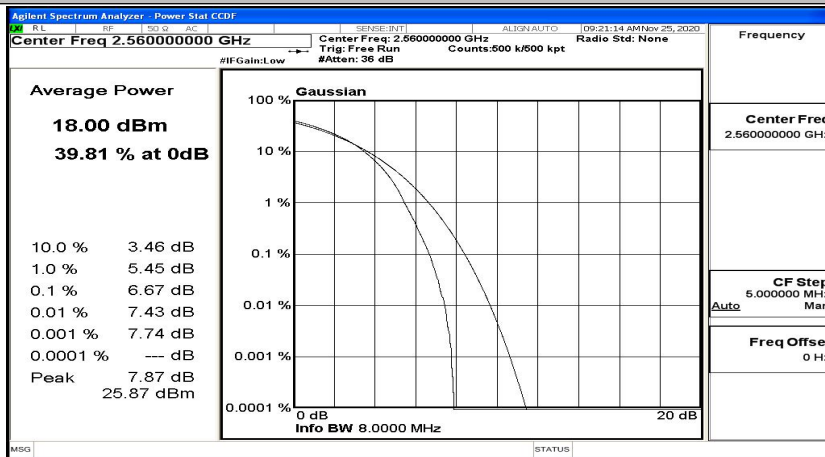
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



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



**E.3 26dB Bandwidth and Occupied Bandwidth**

<b>EBW &amp; OBW Test Result (Channel Bandwidth: 5 MHz)</b>				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4683	4.882	PASS
	MCH	4.4793	4.838	PASS
	HCH	4.4706	4.858	PASS
16QAM	LCH	4.4733	4.760	PASS
	MCH	4.4644	4.800	PASS
	HCH	4.4737	4.850	PASS

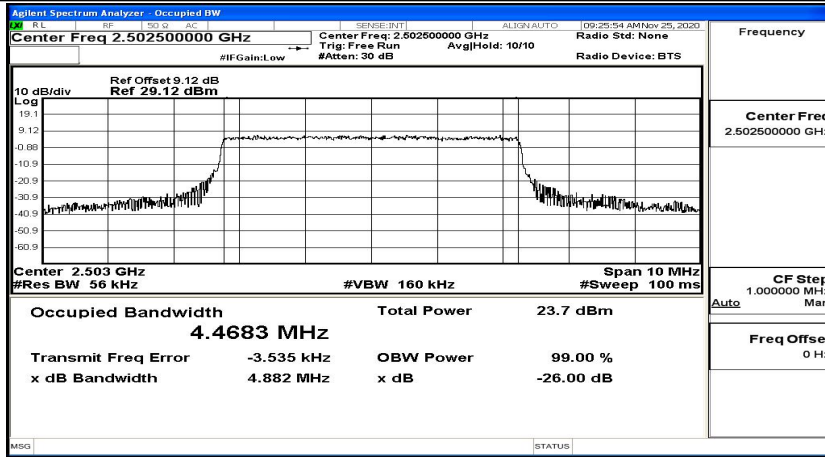
<b>EBW &amp; OBW Test Result (Channel Bandwidth: 10 MHz)</b>				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9427	9.478	PASS
	MCH	8.9257	9.505	PASS
	HCH	8.9288	9.485	PASS
16QAM	LCH	8.9384	9.477	PASS
	MCH	8.9457	9.502	PASS
	HCH	8.9255	9.565	PASS



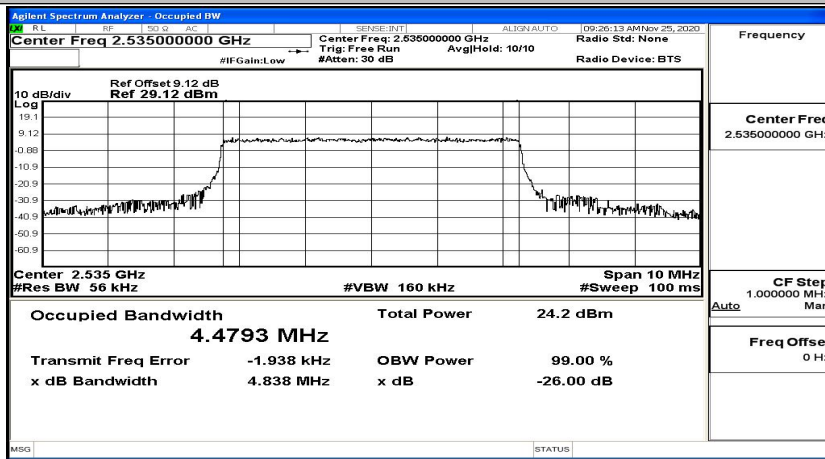
<b>EBW &amp; OBW Test Result (Channel Bandwidth: 15 MHz)</b>				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.398	14.06	PASS
	MCH	13.396	14.08	PASS
	HCH	13.381	14.01	PASS
16QAM	LCH	13.411	14.09	PASS
	MCH	13.396	14.17	PASS
	HCH	13.383	14.13	PASS

<b>EBW &amp; OBW Test Result (Channel Bandwidth: 20 MHz)</b>				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.916	18.78	PASS
	MCH	17.884	18.92	PASS
	HCH	17.857	18.67	PASS
16QAM	LCH	17.939	18.82	PASS
	MCH	17.863	18.94	PASS
	HCH	17.830	18.60	PASS

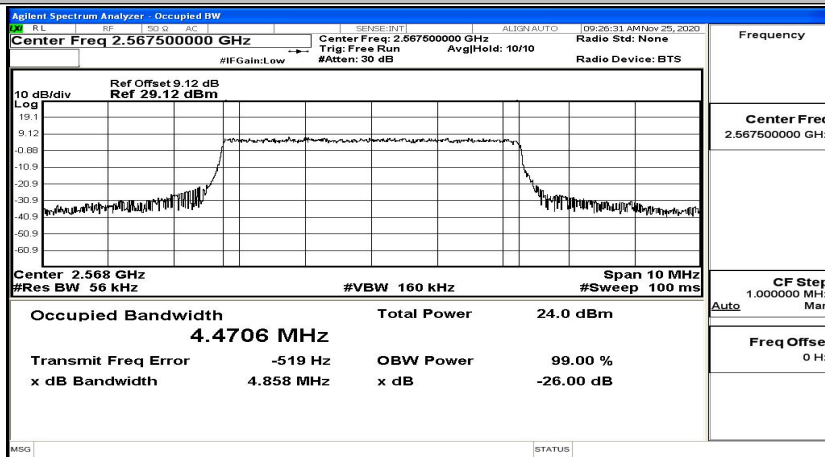
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



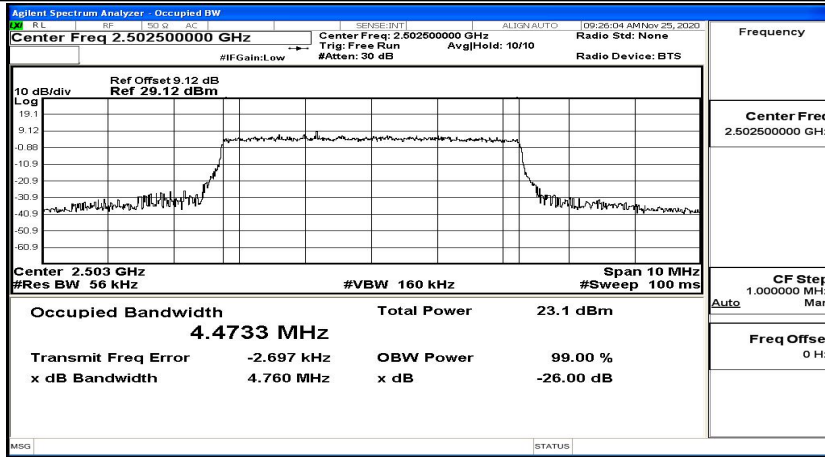
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



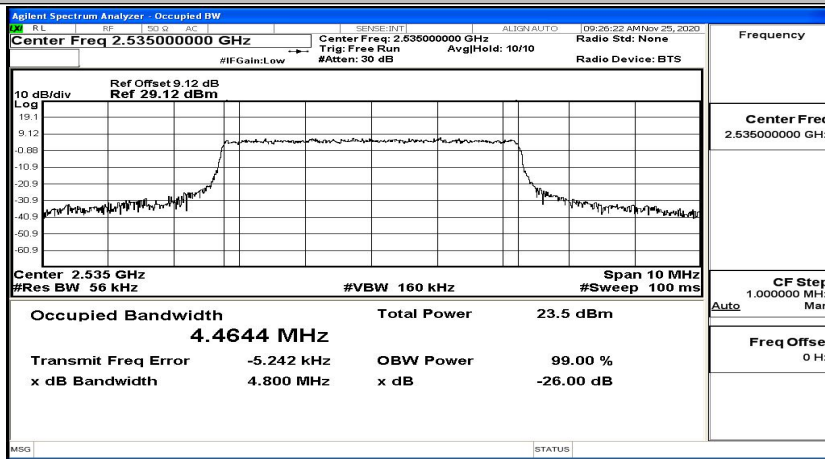
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



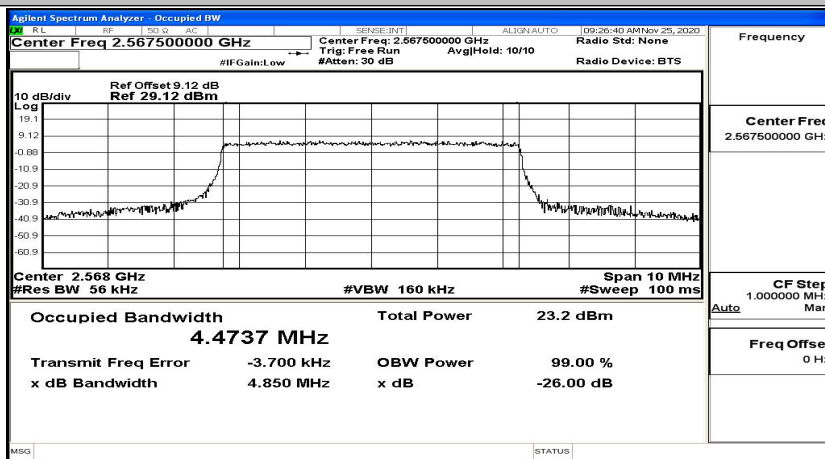
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



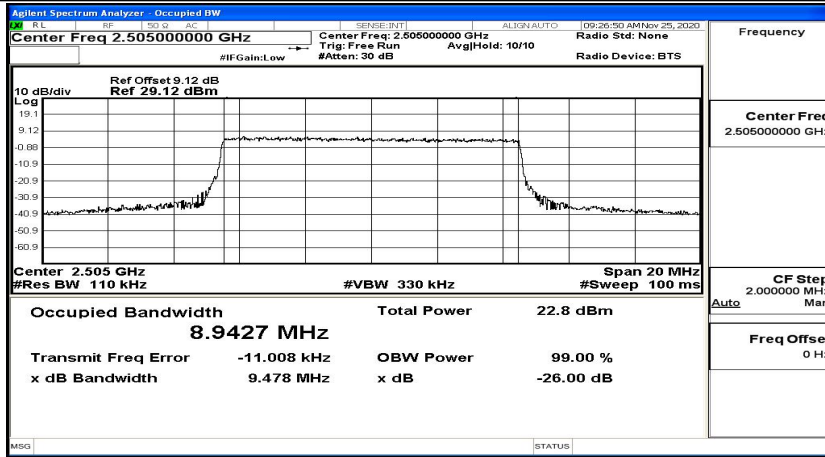
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



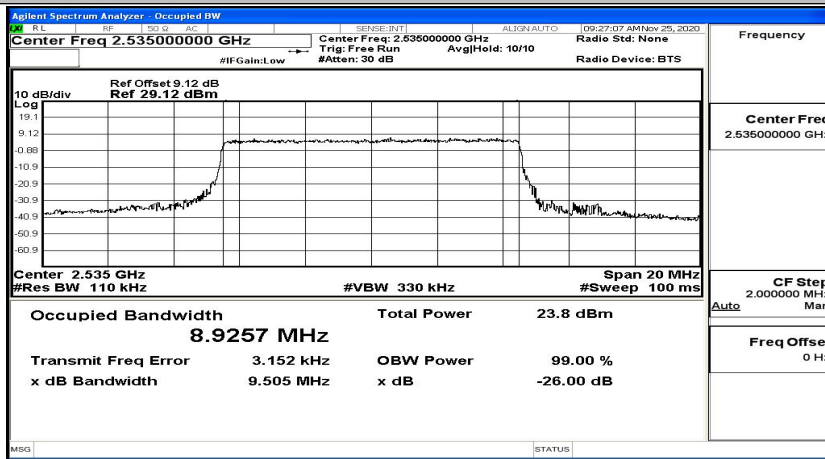
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



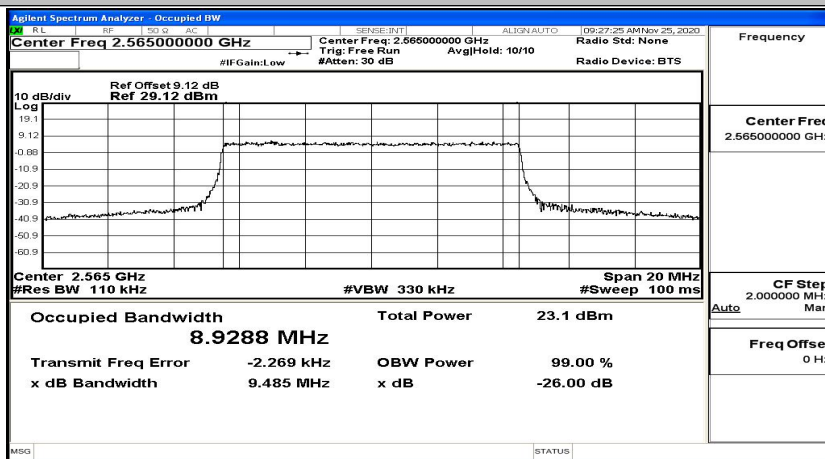
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



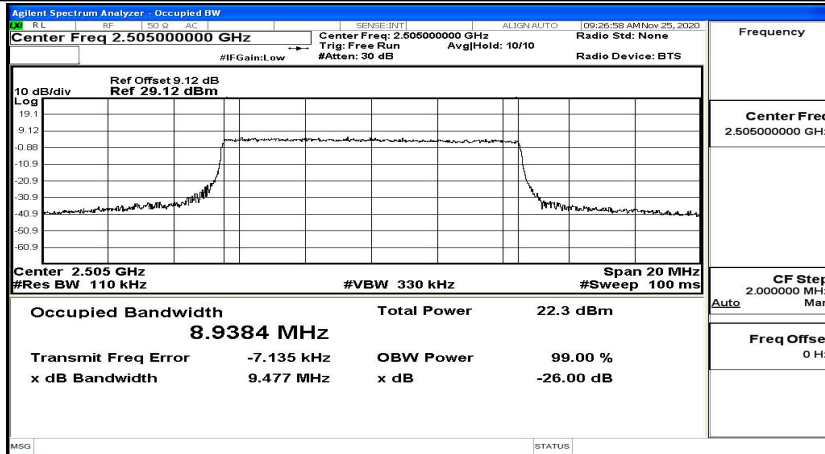
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



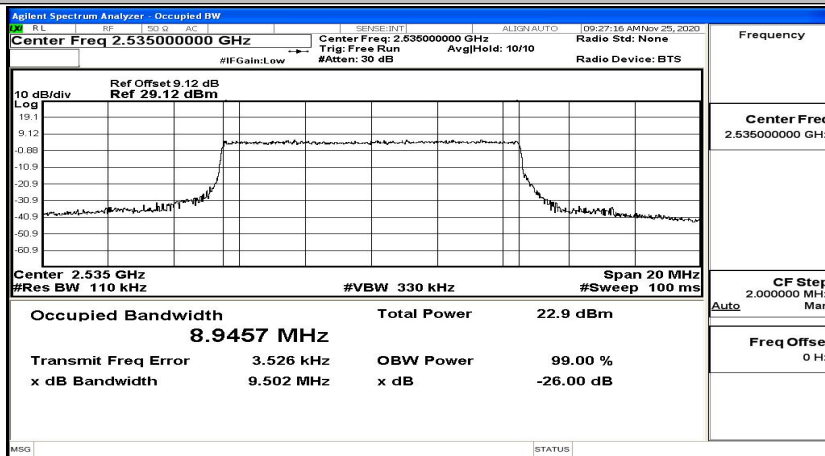
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



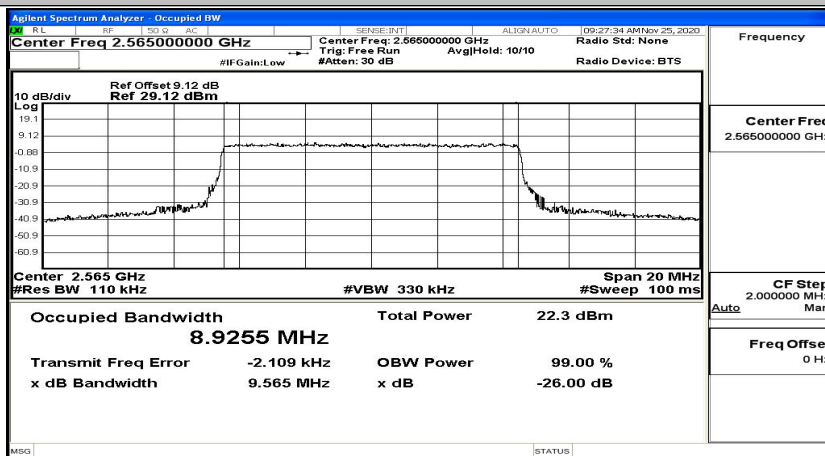
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



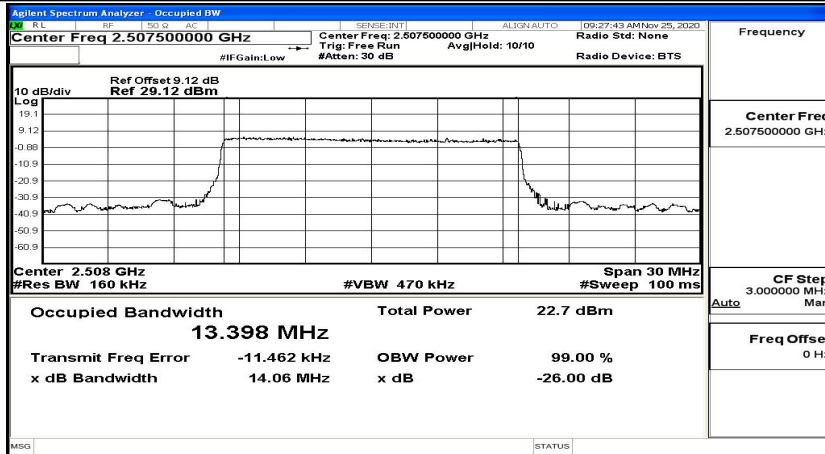
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



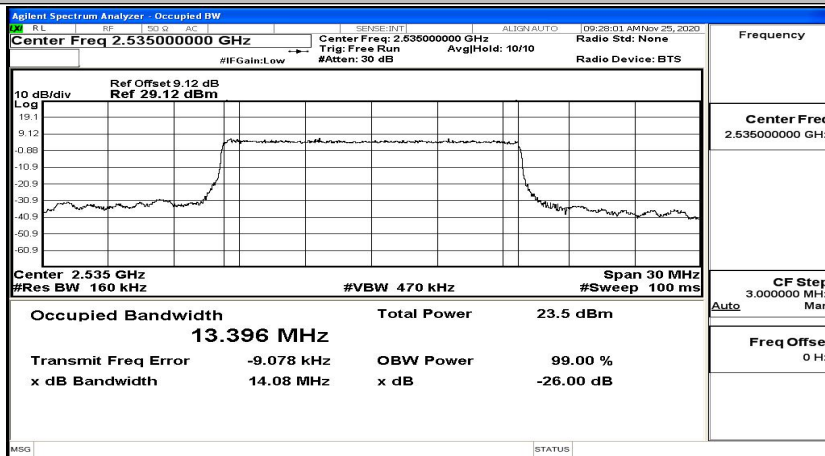
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



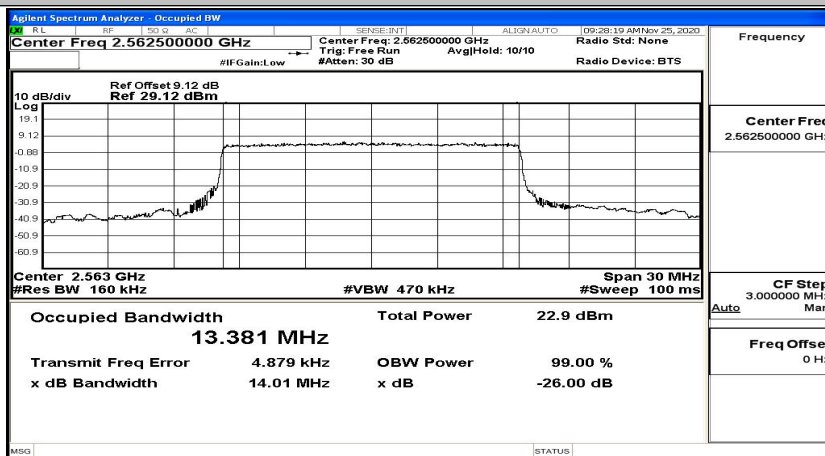
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



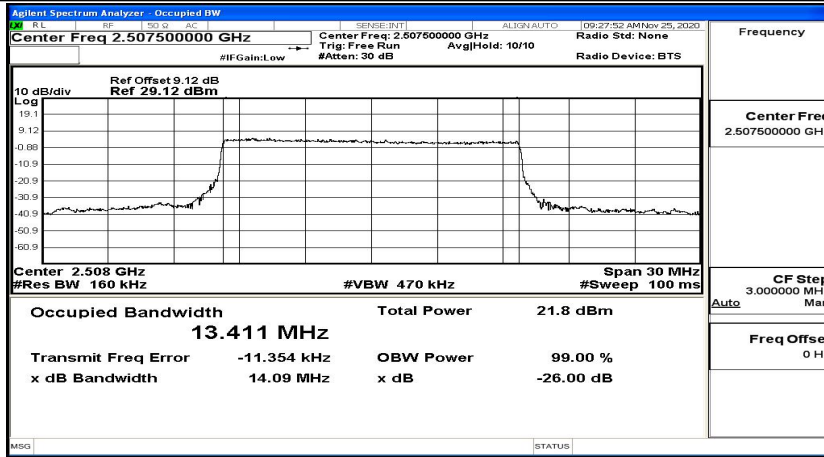
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



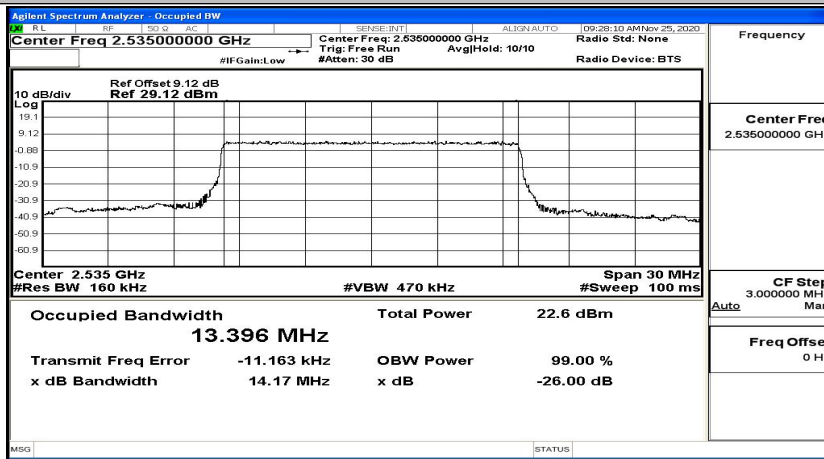
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



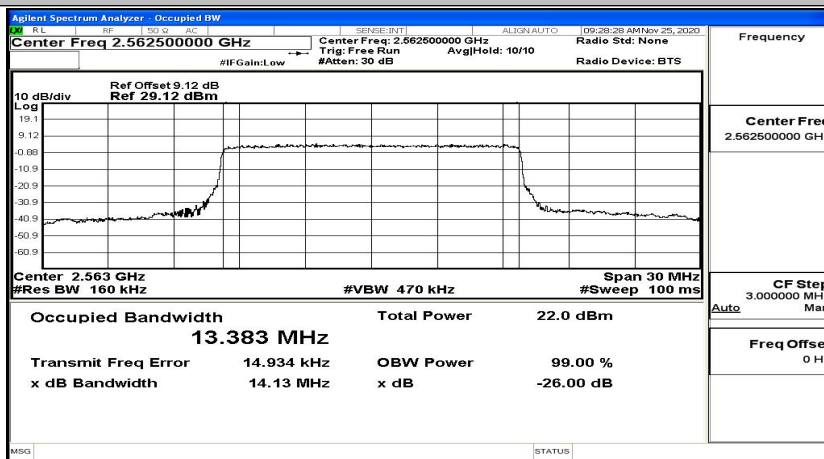
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



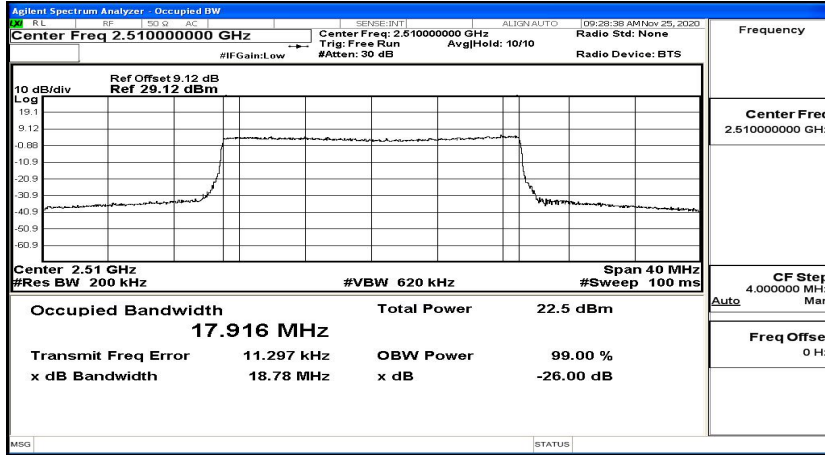
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



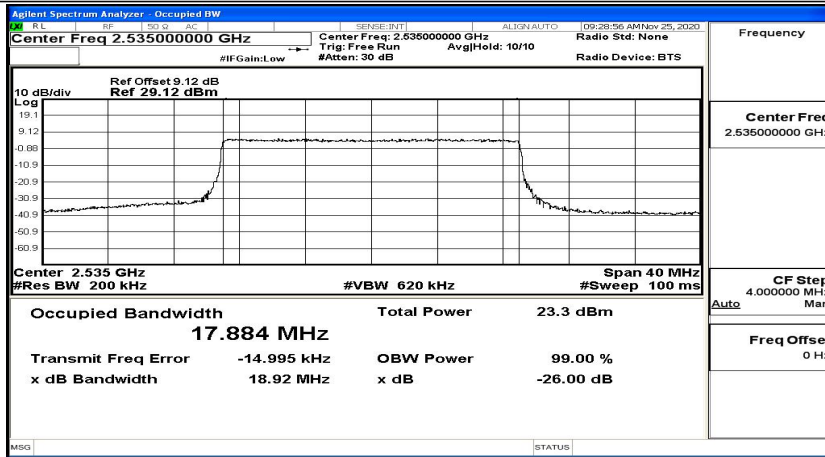
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



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

