Appendix E: Test Data for E-UTRA Band 7

Product Name: Brama L
Trade Mark: N/A
Test Model: ID

Environmental Conditions

Temperature:	22.9° 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	21.15	21.20	PASS
		1	12	21.14	21.16	PASS
		1	24	21.93	20.97	PASS
		12	0	21.22	21.26	PASS
		12	6	21.24	21.25	PASS
		12	13	21.09	21.08	PASS
		25	0	21.22	21.21	PASS
	MCH	1	0	22.95	22.06	PASS
		1	12	22.70	22.07	PASS
		1	24	22.96	21.88	PASS
		12	0	21.93	22.82	PASS
		12	6	21.92	21.00	PASS
		12	13	21.82	22.94	PASS
		25	0	21.88	22.88	PASS
	HCH	1	0	22.02	21.11	PASS
		1	12	22.06	21.00	PASS
		1	24	22.16	22.95	PASS
		12	0	21.05	22.09	PASS
		12	6	21.08	22.10	PASS
		12	13	21.01	22.05	PASS
		25	0	21.09	22.11	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	21.06	22.21	PASS
		1	24	20.98	22.38	PASS
		1	49	21.21	22.29	PASS
		25	0	22.22	22.23	PASS
		25	12	22.25	22.23	PASS
		25	25	22.17	22.24	PASS
		50	0	22.21	22.19	PASS
	MCH	1	0	23.01	21.77	PASS
		1	24	22.60	22.17	PASS
		1	49	23.06	22.15	PASS
		25	0	21.86	22.88	PASS
		25	12	22.04	21.05	PASS
		25	25	22.03	21.06	PASS
		50	0	21.91	22.91	PASS
	HCH	1	0	22.23	21.15	PASS
		1	24	22.02	22.96	PASS
		1	49	22.02	22.91	PASS
		25	0	21.16	22.25	PASS
		25	12	21.16	22.22	PASS
		25	25	21.16	22.17	PASS
		50	0	21.13	22.17	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	21.80	22.13	PASS
		1	37	21.74	22.02	PASS
		1	74	21.03	22.34	PASS
		37	0	22.13	22.09	PASS
		37	18	22.09	22.16	PASS
		37	38	22.39	22.35	PASS
		75	0	22.05	21.04	PASS
	MCH	1	0	22.79	21.76	PASS
		1	37	22.11	21.66	PASS
		1	74	22.78	20.99	PASS
		37	0	21.76	20.99	PASS
		37	18	21.71	21.74	PASS
		37	38	21.03	21.70	PASS
		75	0	21.79	22.73	PASS
	HCH	1	0	21.67	21.06	PASS
		1	37	21.65	22.80	PASS
		1	74	21.91	22.83	PASS
		37	0	22.84	22.82	PASS
		37	18	21.06	21.09	PASS
		37	38	22.84	22.85	PASS
		75	0	21.07	22.02	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	21.65	22.73	PASS
		1	49	21.15	21.88	PASS
		1	99	22.85	22.21	PASS
		50	0	22.87	21.42	PASS
		50	25	21.91	21.88	PASS
		50	50	21.43	21.93	PASS
		100	0	21.16	21.19	PASS
	MCH	1	0	22.59	20.98	PASS
		1	49	21.85	21.72	PASS
		1	99	22.97	22.04	PASS
		50	0	21.47	22.46	PASS
		50	25	21.84	22.86	PASS
		50	50	21.83	22.86	PASS
		100	0	21.60	22.61	PASS
	HCH	1	0	21.96	21.06	PASS
		1	49	21.47	22.56	PASS
		1	99	21.51	22.54	PASS
		50	0	22.93	22.02	PASS
		50	25	22.87	22.02	PASS
		50	50	22.92	22.00	PASS
		100	0	22.89	21.96	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	5.06	<13	PASS
	MCH	4.86	<13	PASS
	HCH	4.58	<13	PASS
16QAM	LCH	5.87	<13	PASS
	MCH	5.61	<13	PASS
	HCH	5.46	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.1	<13	PASS
	MCH	4.81	<13	PASS
	HCH	4.6	<13	PASS
16QAM	LCH	5.89	<13	PASS
	MCH	5.64	<13	PASS
	HCH	5.5	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.43	<13	PASS
	MCH	5.15	<13	PASS
	HCH	4.97	<13	PASS
16QAM	LCH	6.07	<13	PASS
	MCH	5.82	<13	PASS
	HCH	5.69	<13	PASS

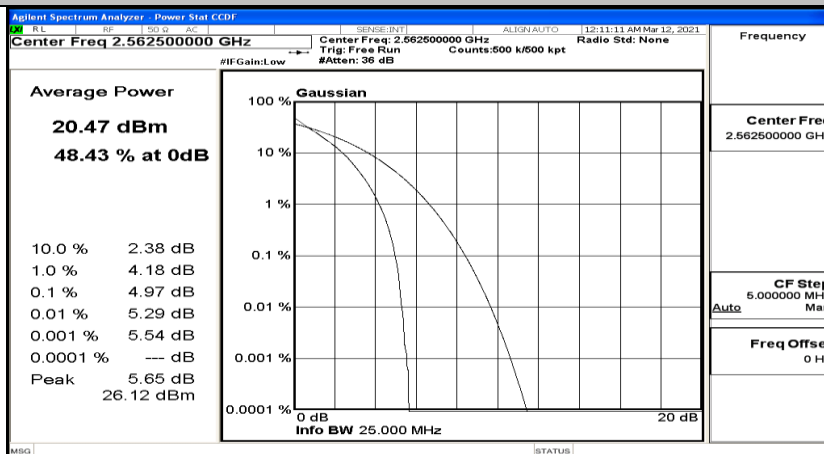| Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.3	<13	PASS
	MCH	5.12	<13	PASS
	HCH	5.06	<13	PASS
16QAM	LCH	6.07	<13	PASS
	MCH	5.91	<13	PASS
	HCH	5.82	<13	PASS
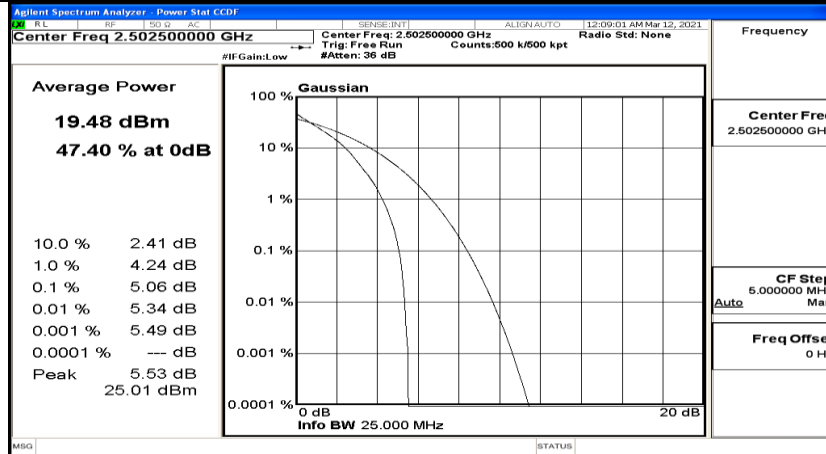
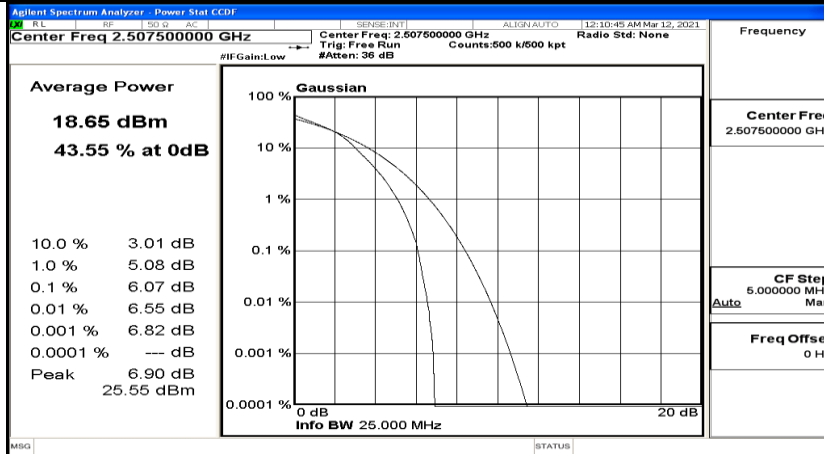| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK |
|---|

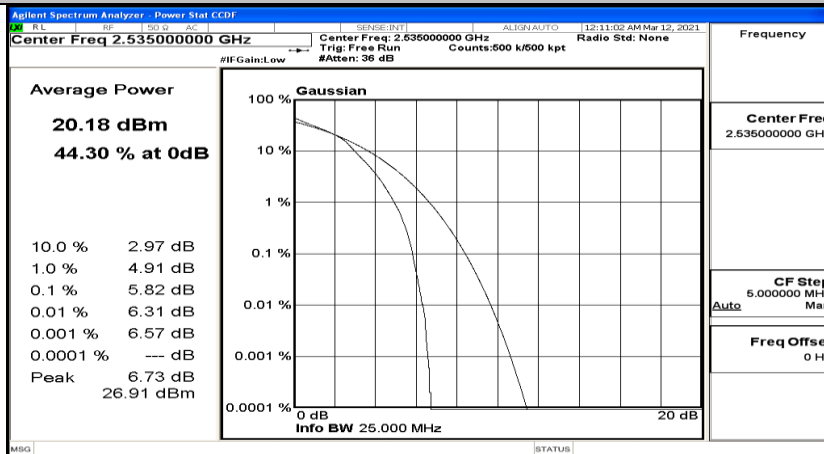| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK |
|---|

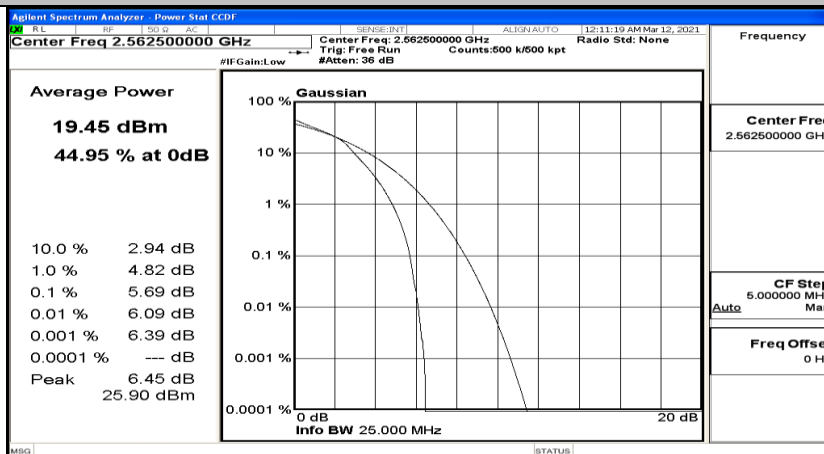| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK |
|---|

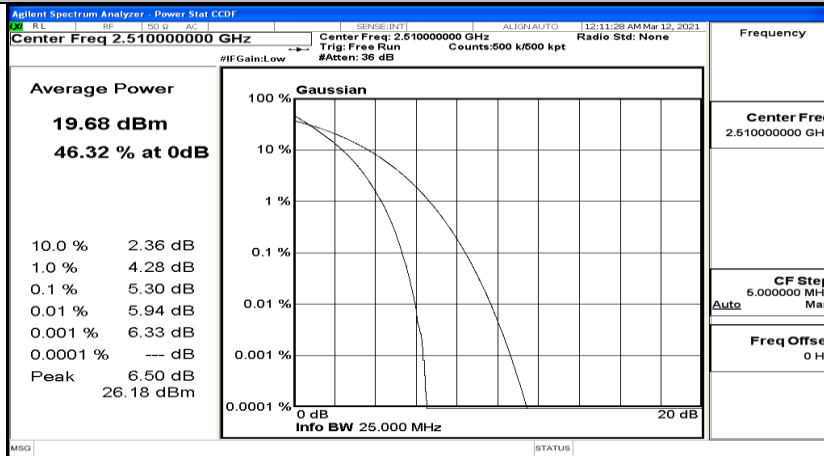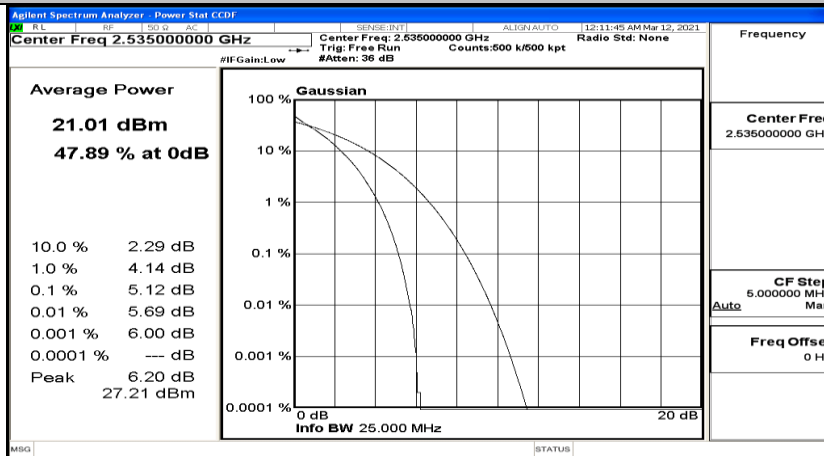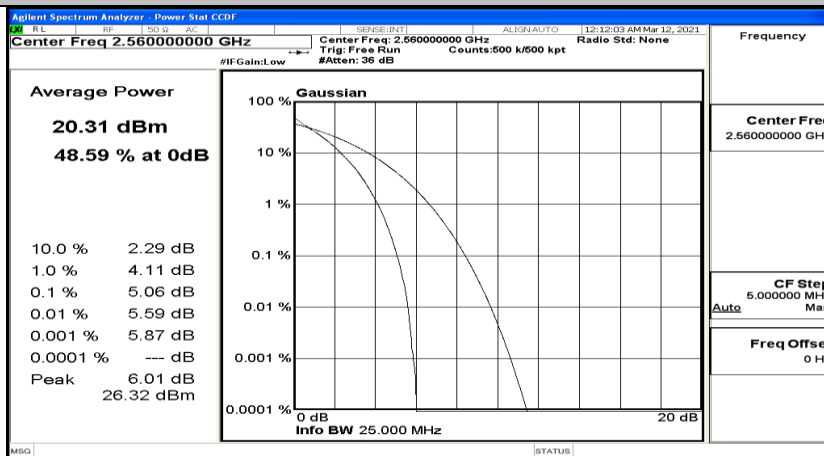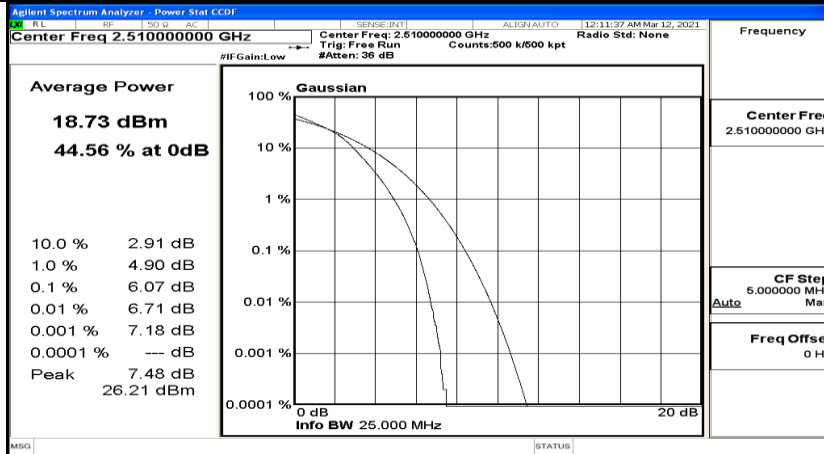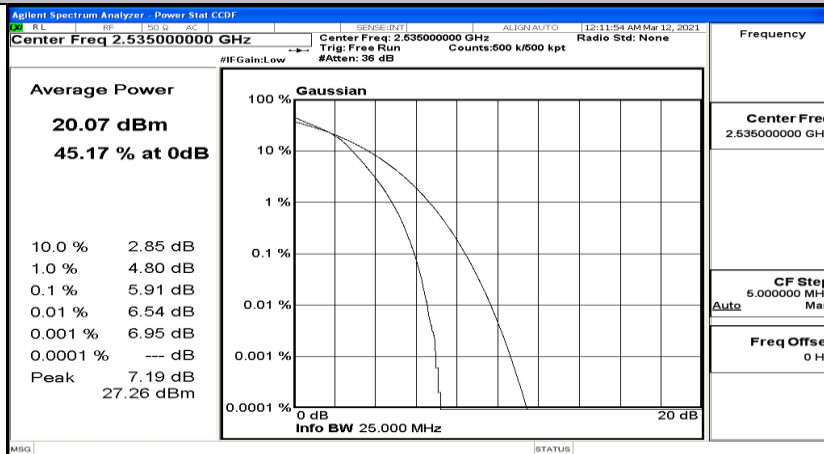| Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM |
|---|
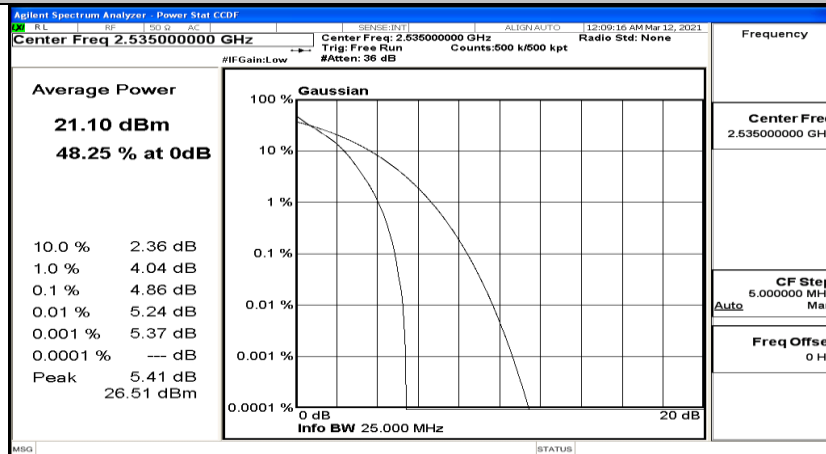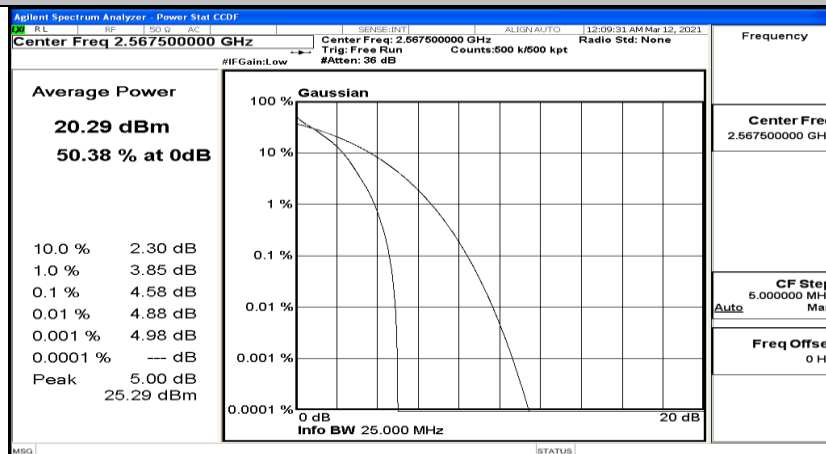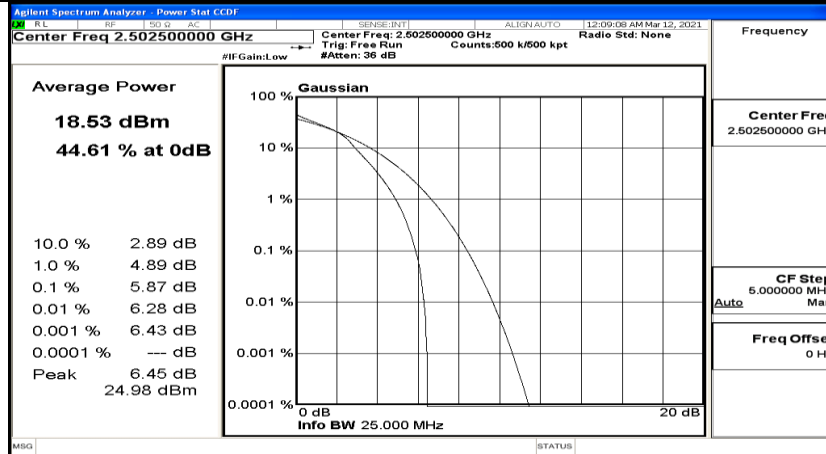
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM
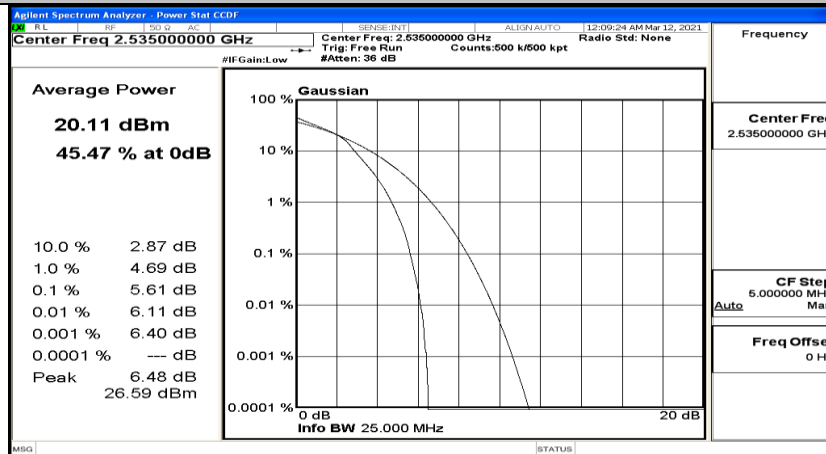
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM
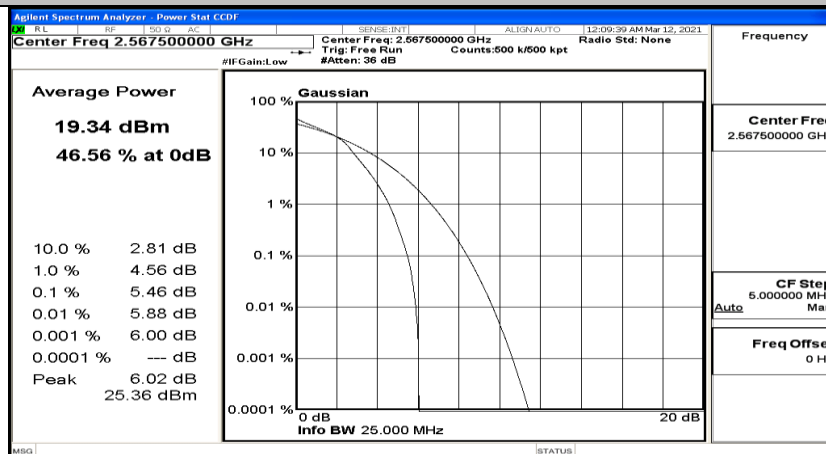
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK
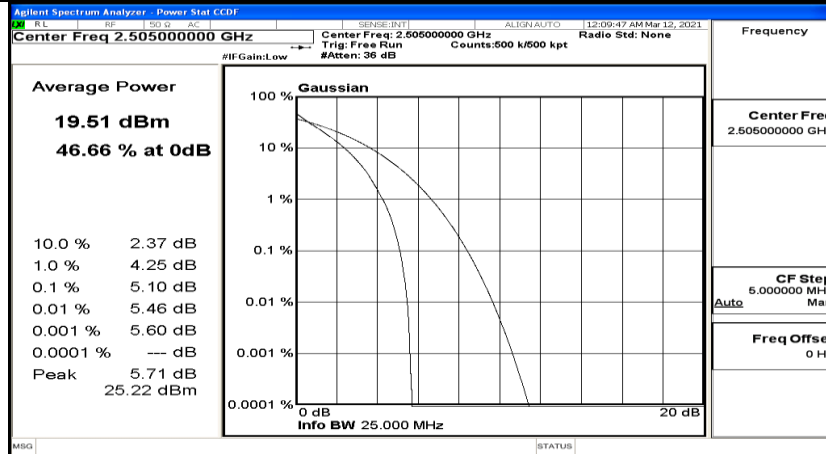
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK
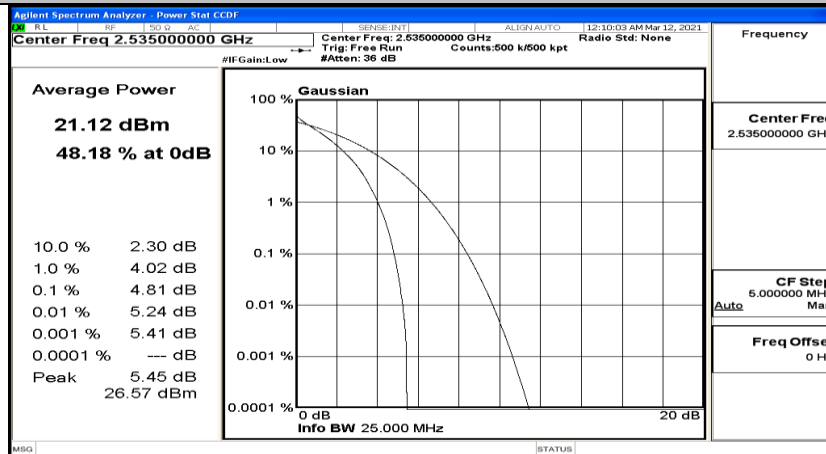
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK
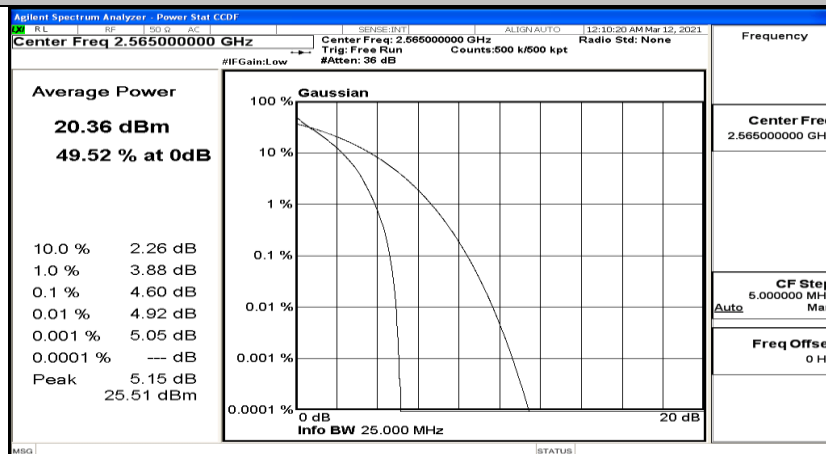
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM
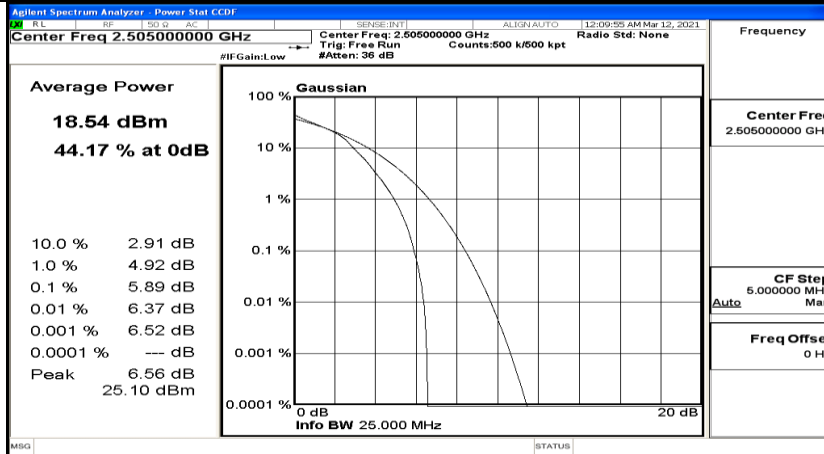
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM
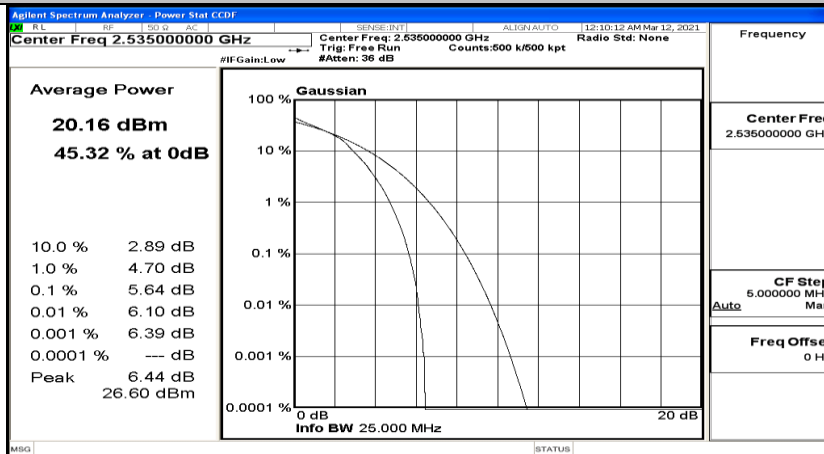
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM
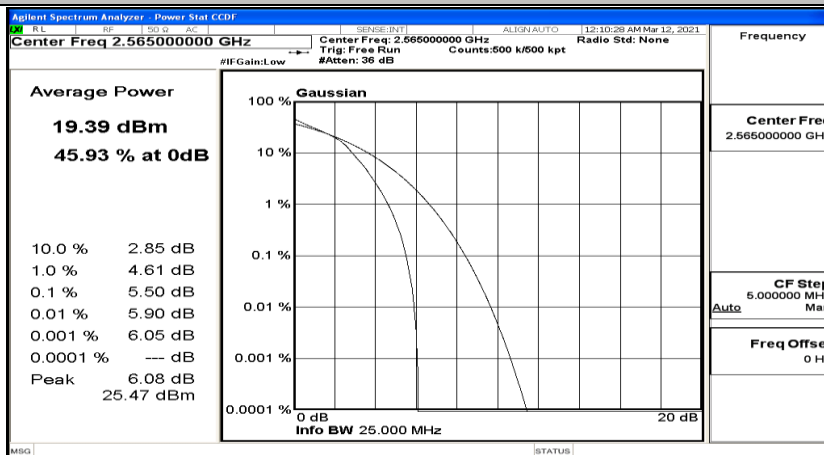
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK
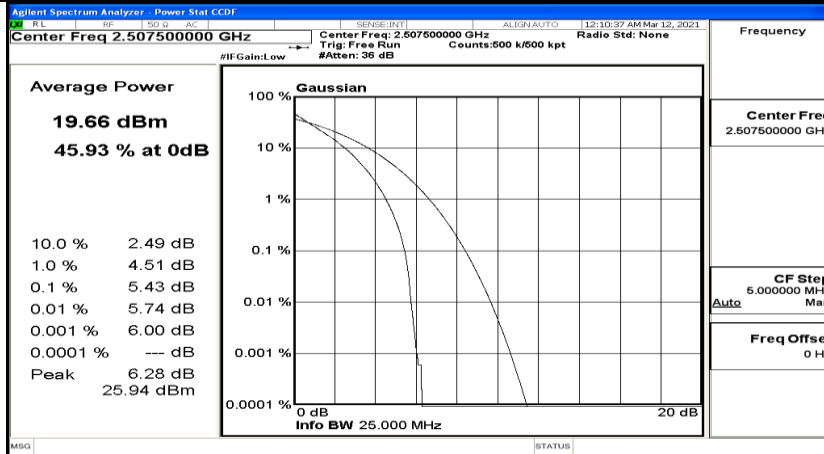
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK
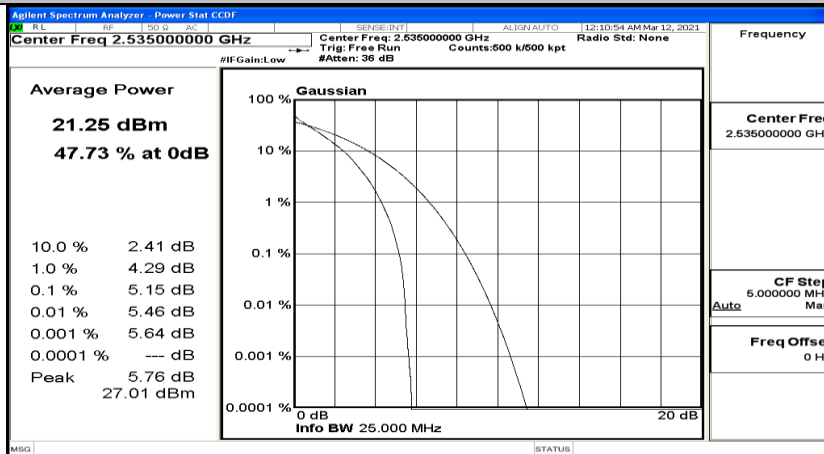
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK

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
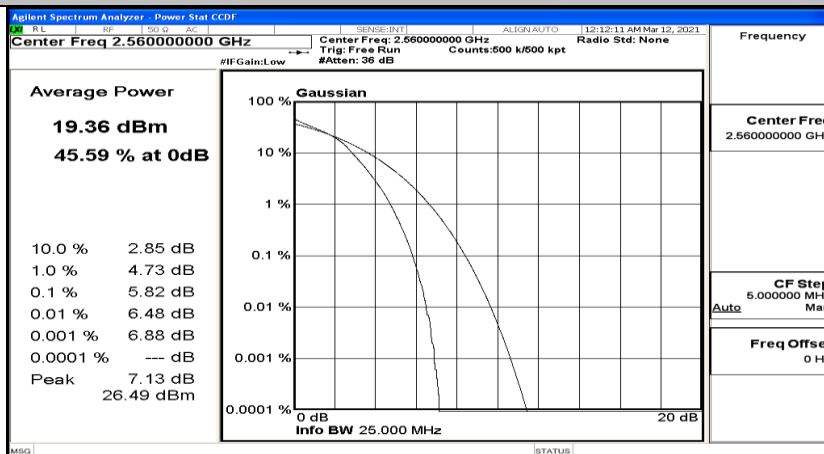
E.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4774	4.715	PASS
QPSK	MCH	4.4654	4.717	PASS
QPSK	HCH	4.4787	4.741	PASS
16QAM	LCH	4.4753	4.764	PASS
16QAM	MCH	4.4771	4.726	PASS
16QAM	HCH	4.4814	4.747	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9597	9.347	PASS
QPSK	MCH	8.9309	9.348	PASS
QPSK	HCH	8.9376	9.405	PASS
16QAM	LCH	8.9388	9.351	PASS
16QAM	MCH	8.9334	9.384	PASS
16QAM	HCH	8.9414	9.312	PASS

EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.406	14.10	PASS
QPSK	MCH	13.379	14.01	PASS
QPSK	HCH	13.416	13.94	PASS
16QAM	LCH	13.400	14.01	PASS
16QAM	MCH	13.391	13.94	PASS
16QAM	HCH	13.408	13.98	PASS

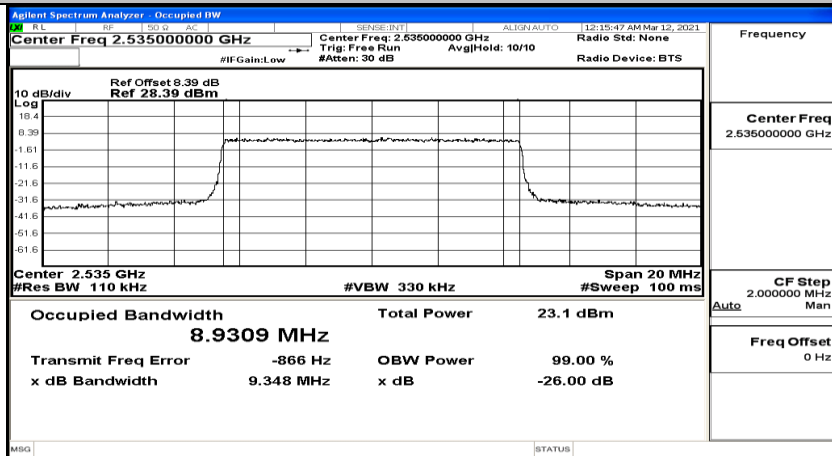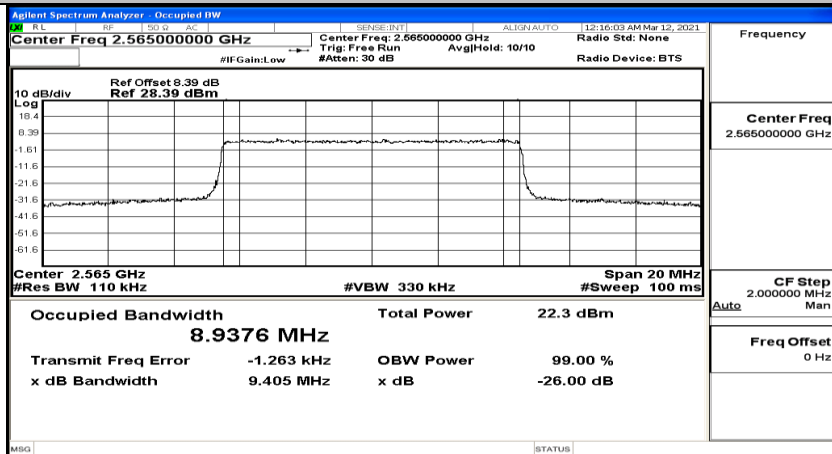| EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.864	18.55	PASS
QPSK	MCH	17.824	18.60	PASS
QPSK	HCH	17.868	18.57	PASS
16QAM	LCH	17.874	18.60	PASS
16QAM	MCH	17.847	18.59	PASS
16QAM	HCH	17.868	18.64	PASS

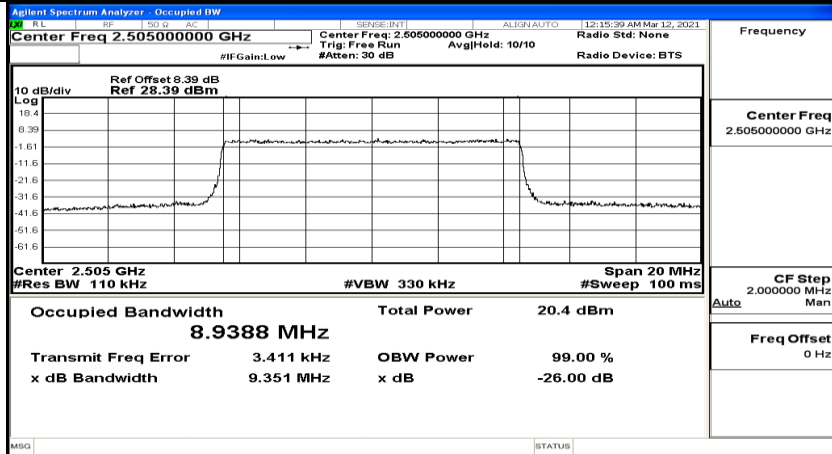| EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK |
|---|
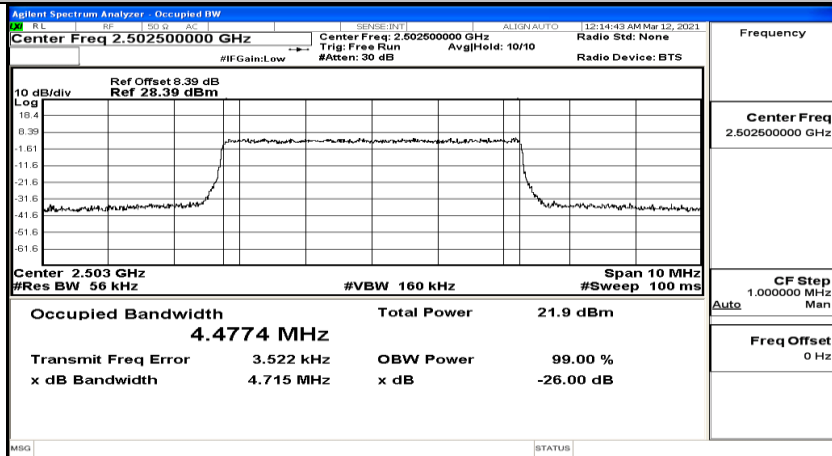
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK
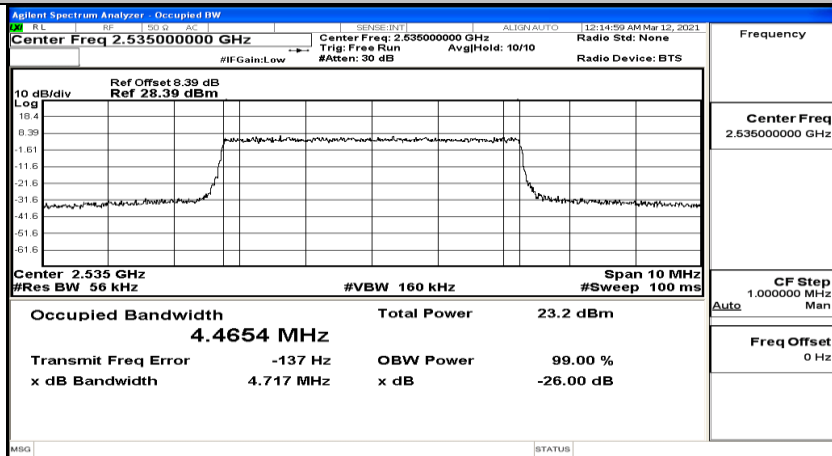
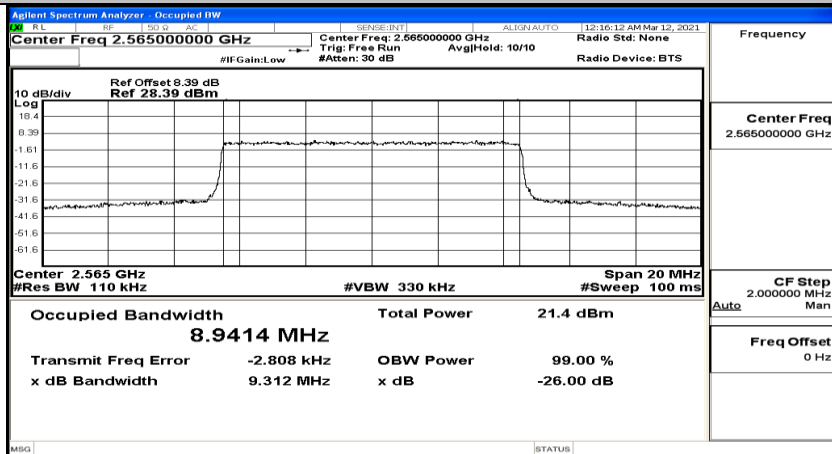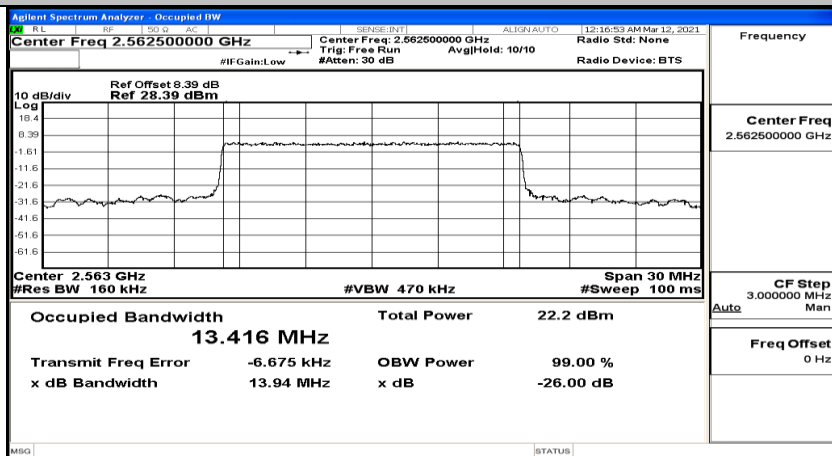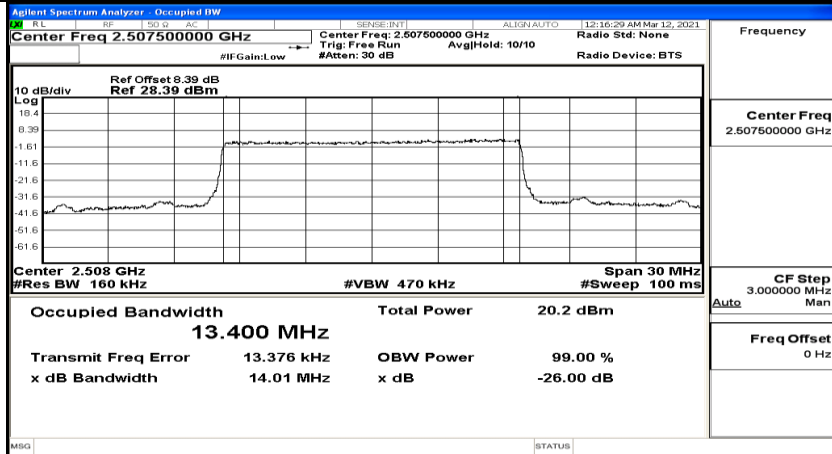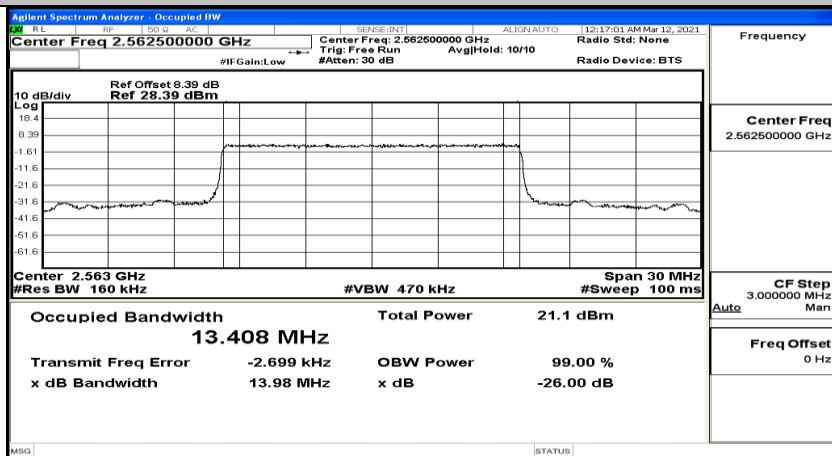| EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK |
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Page 15 of 89
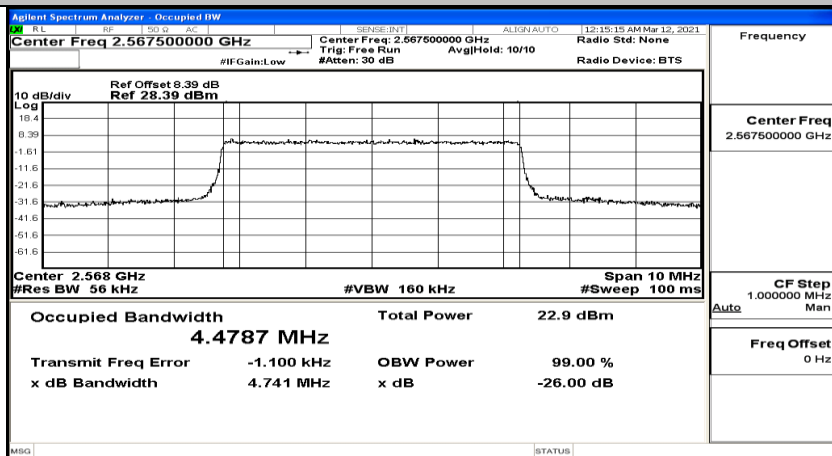
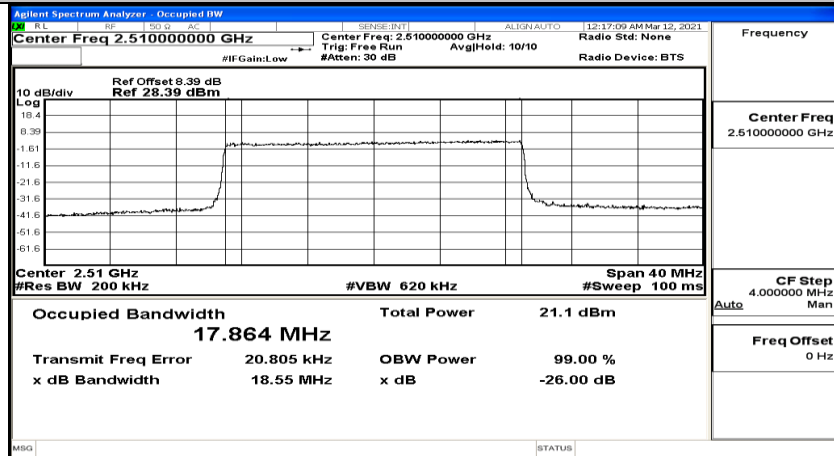| EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM |
|---|
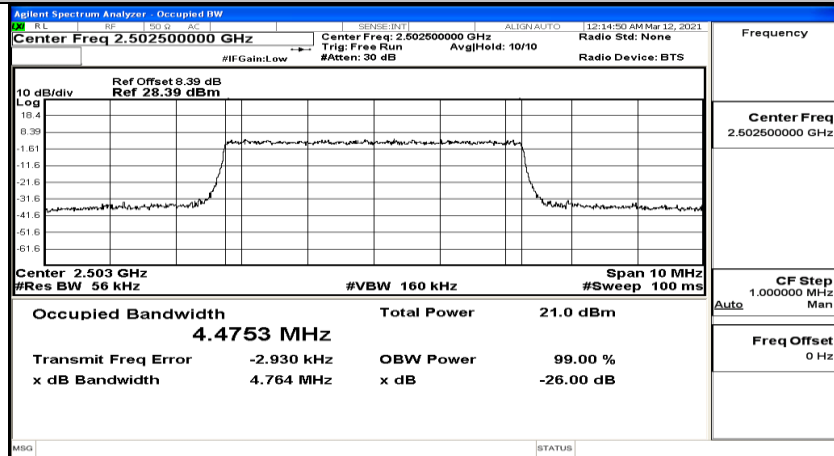
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM

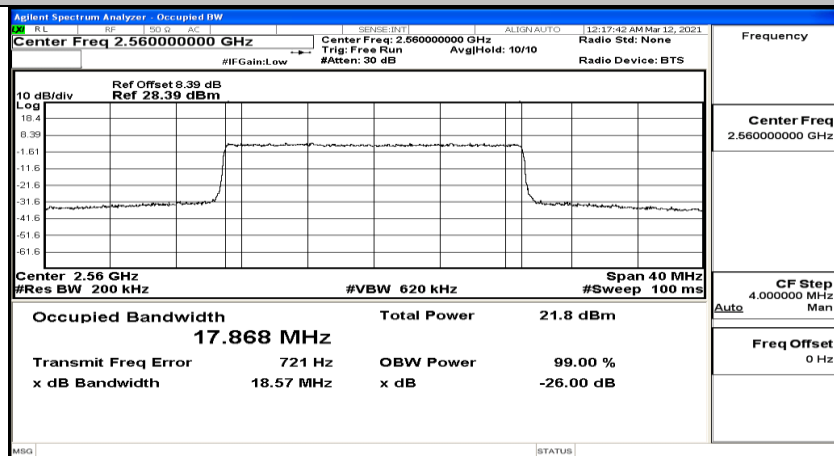| EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM |
|---|

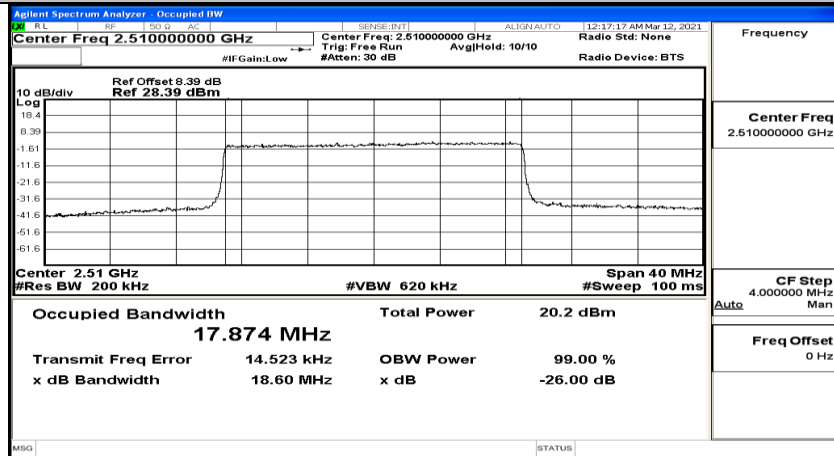| EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK |
|---|
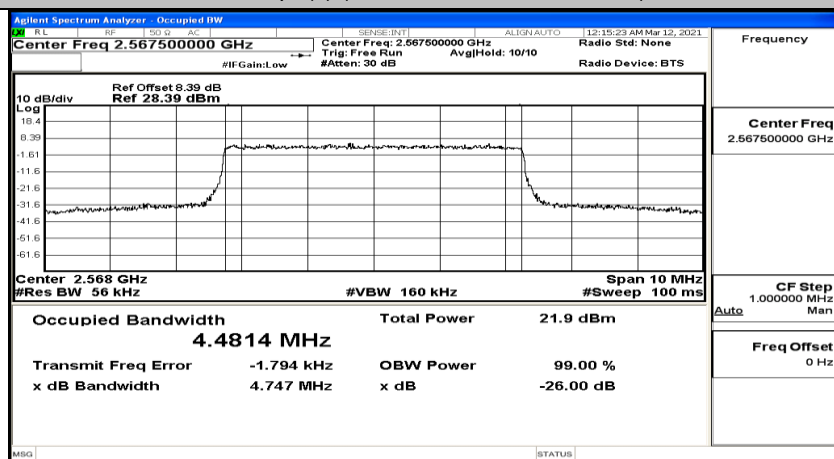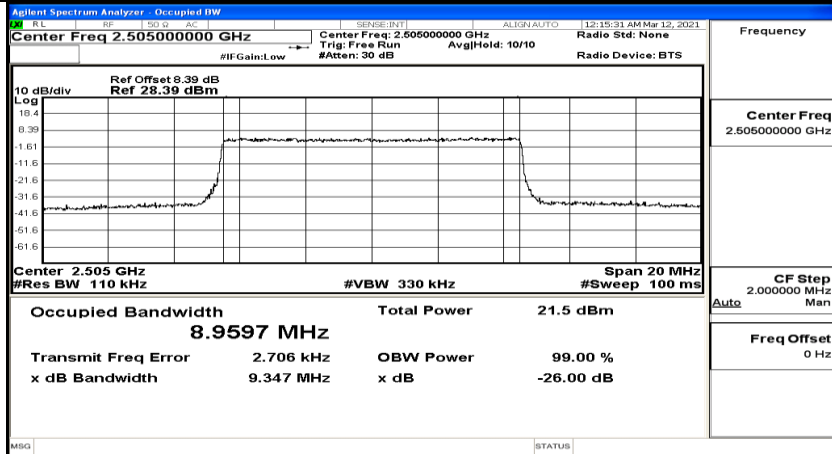
Occupied Bandwidth		Total Power	21.5 dBm
	8.9597 MHz		
Transmit Freq Error	2.706 kHz	OBW Power	99.00 %
x dB Bandwidth	9.347 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	23.1 dBm
	8.9309 MHz		
Transmit Freq Error	-866 Hz	OBW Power	99.00 %
x dB Bandwidth	9.348 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	22.3 dBm
	8.9376 MHz		
Transmit Freq Error	-1.263 kHz	OBW Power	99.00 %
x dB Bandwidth	9.405 MHz	x dB	-26.00 dB

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

EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM
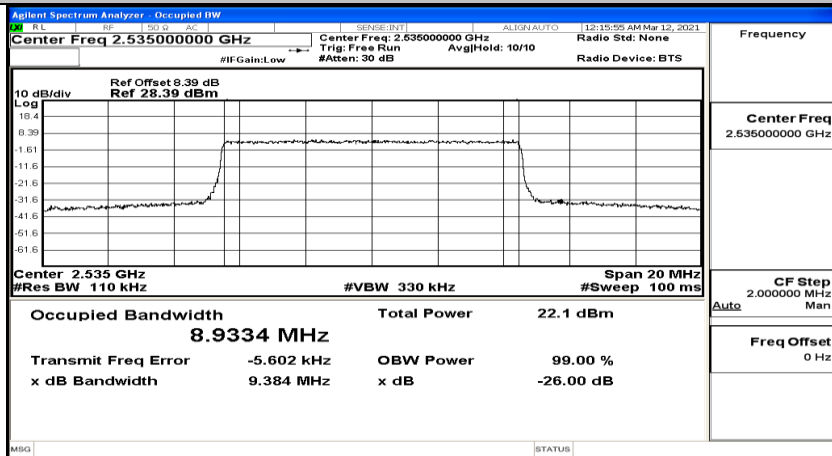
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK
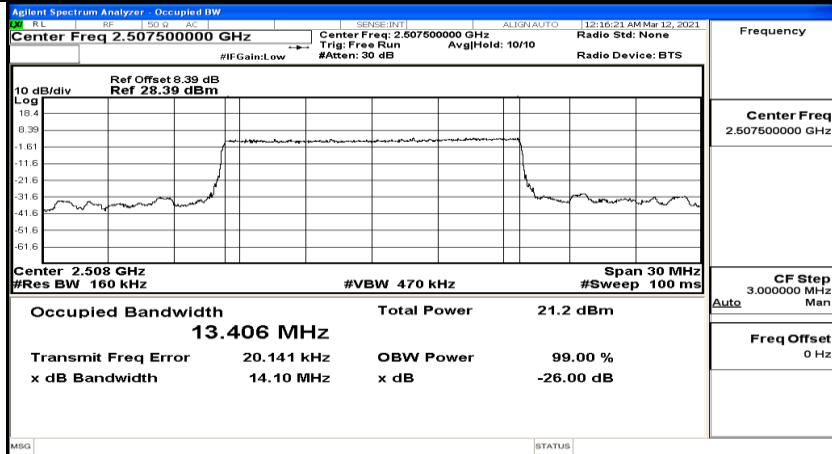
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK
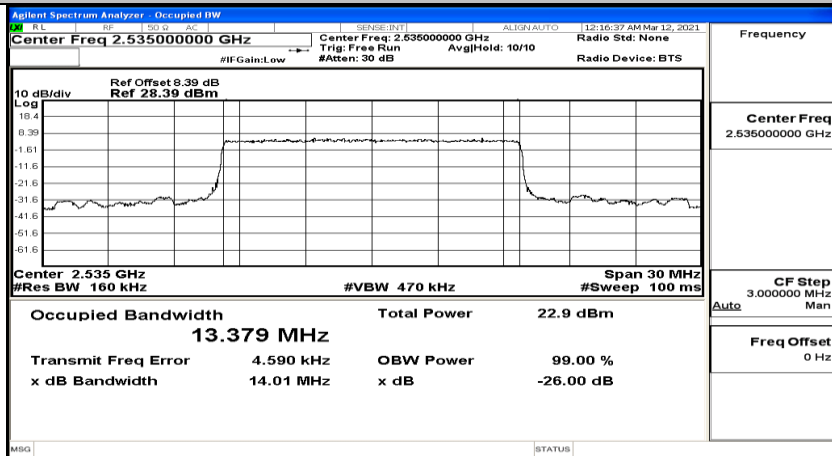
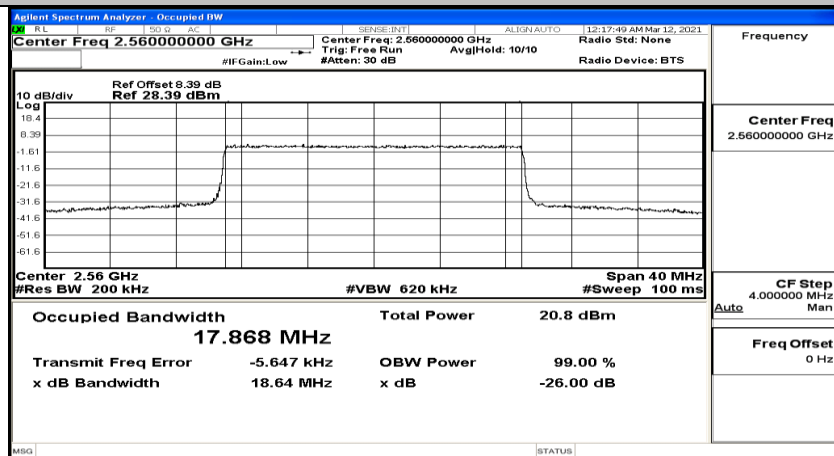| EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK |
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EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM

Occupied Bandwidth		Total Power	20.2 dBm
13.400 MHz			
Transmit Freq Error	13.376 kHz	OBW Power	99.00 %
x dB Bandwidth	14.01 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	21.9 dBm
13.391 MHz			
Transmit Freq Error	4.426 kHz	OBW Power	99.00 %
x dB Bandwidth	13.94 MHz	x dB	-26.00 dB

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

Occupied Bandwidth		Total Power	21.1 dBm
13.408 MHz			
Transmit Freq Error	-2.699 kHz	OBW Power	99.00 %
x dB Bandwidth	13.98 MHz	x dB	-26.00 dB
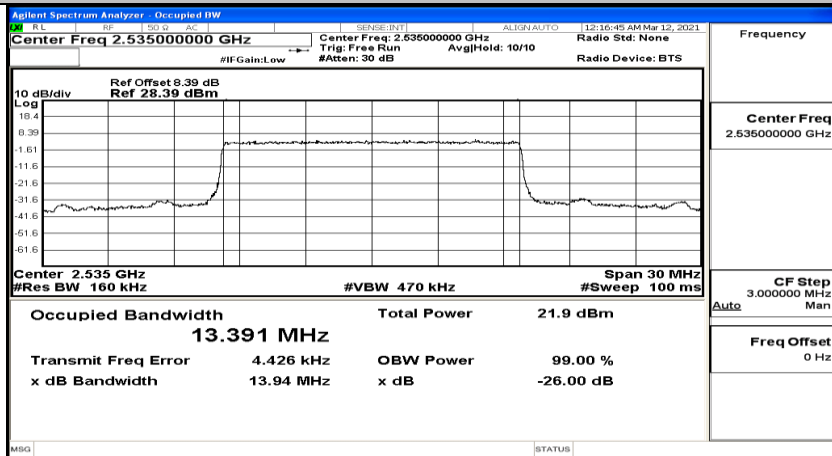
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK

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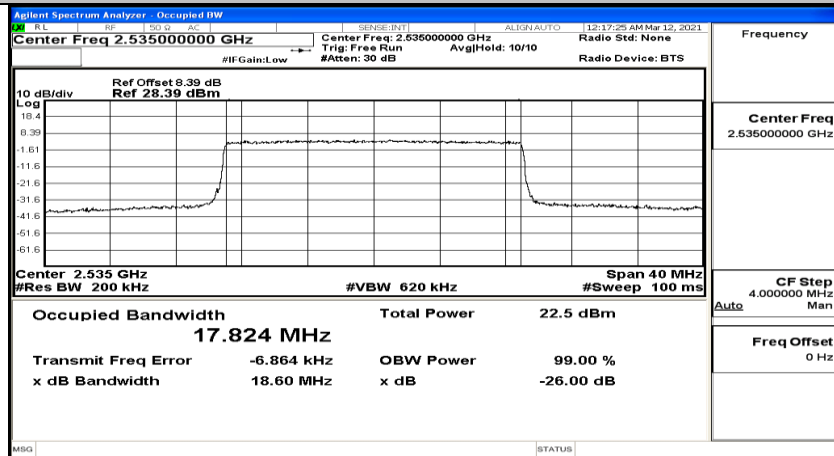
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK

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

EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM
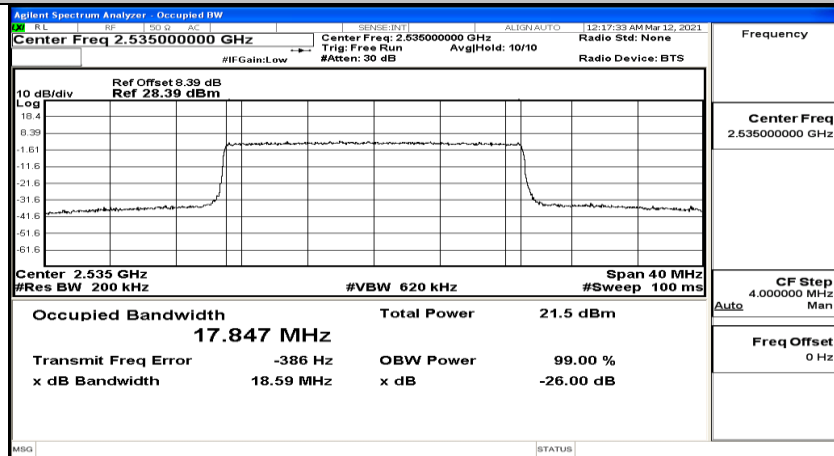
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

E.4 Band Edge

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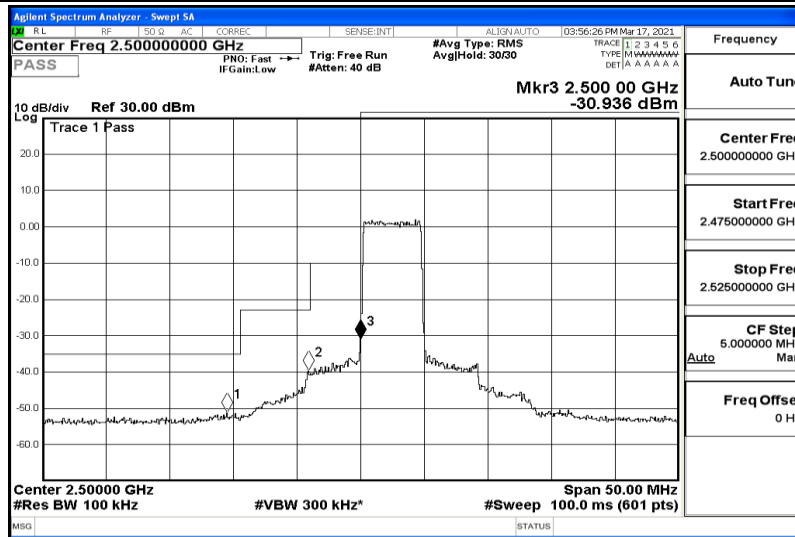
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK
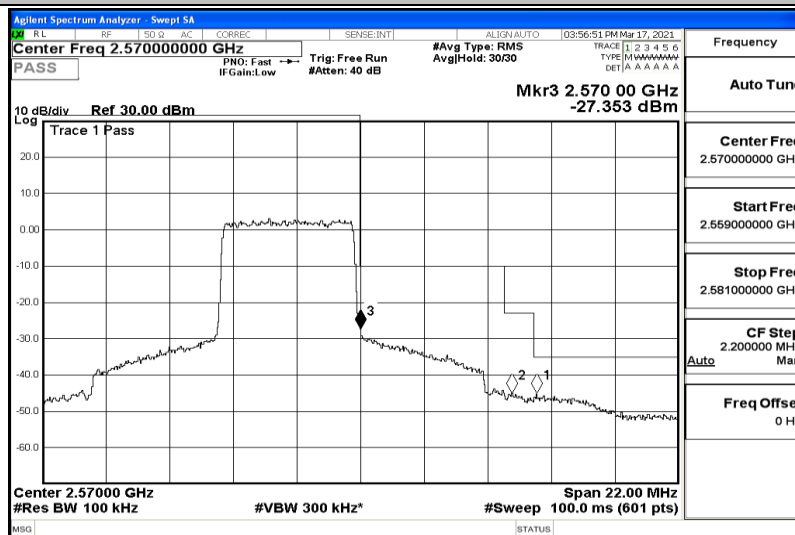
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM
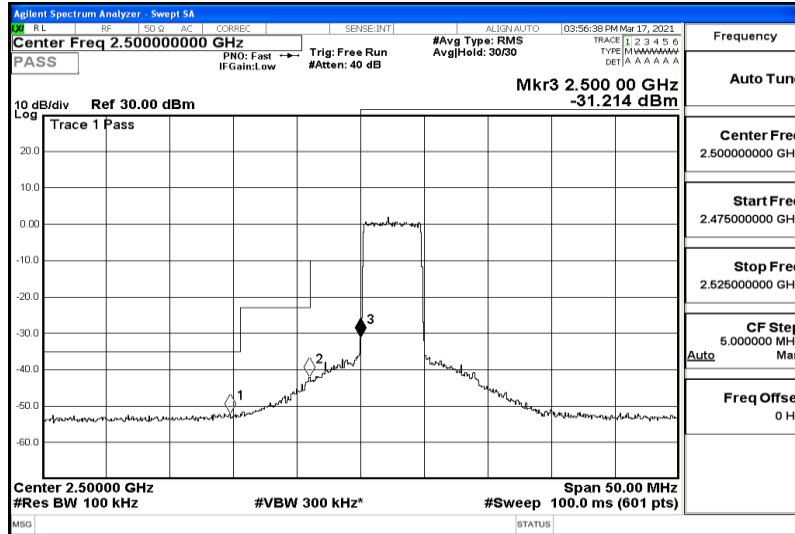
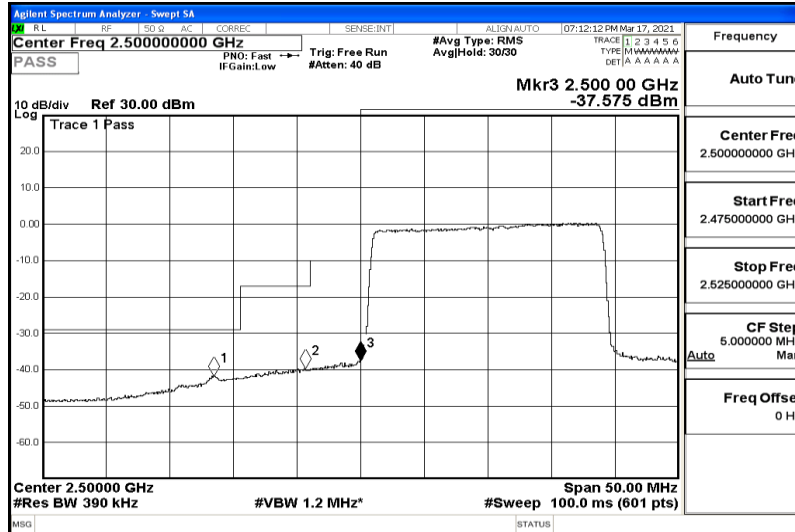**Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM**
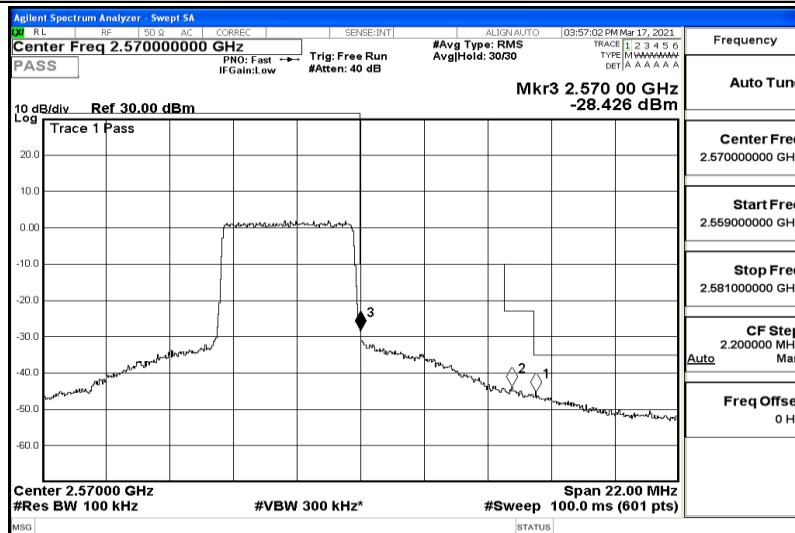
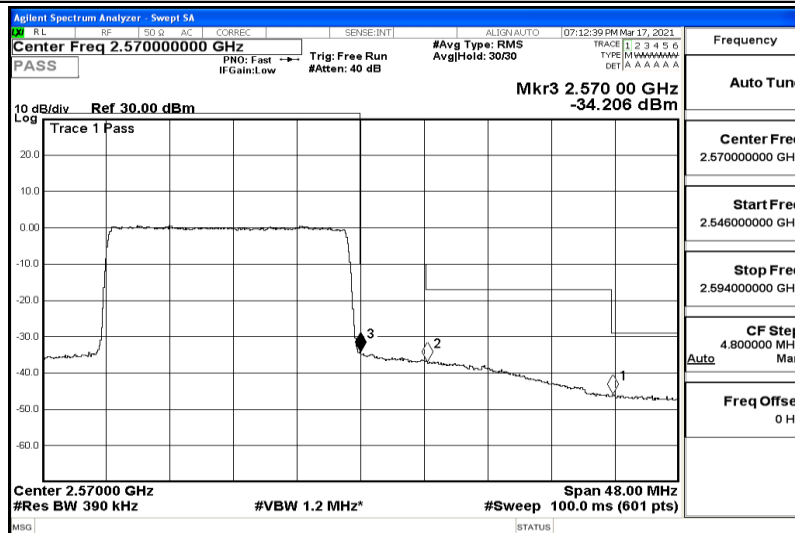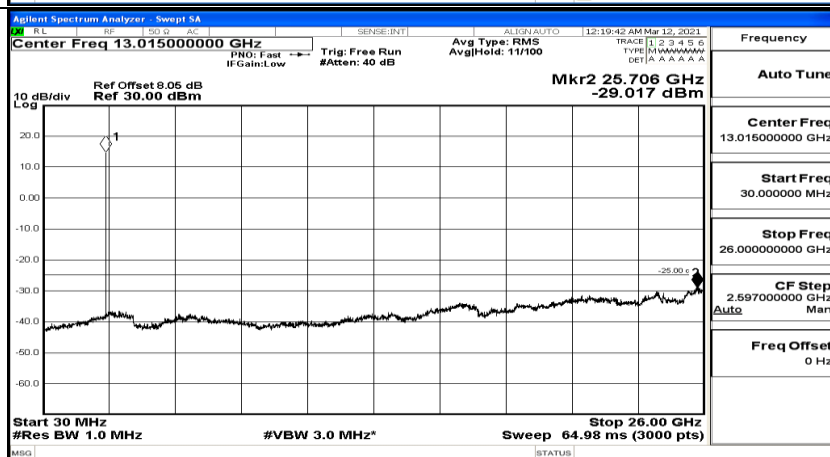**Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK**
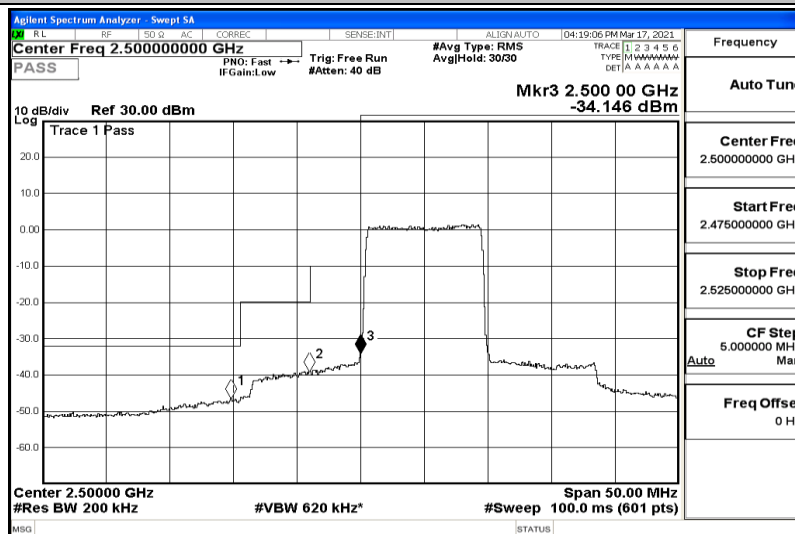
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK
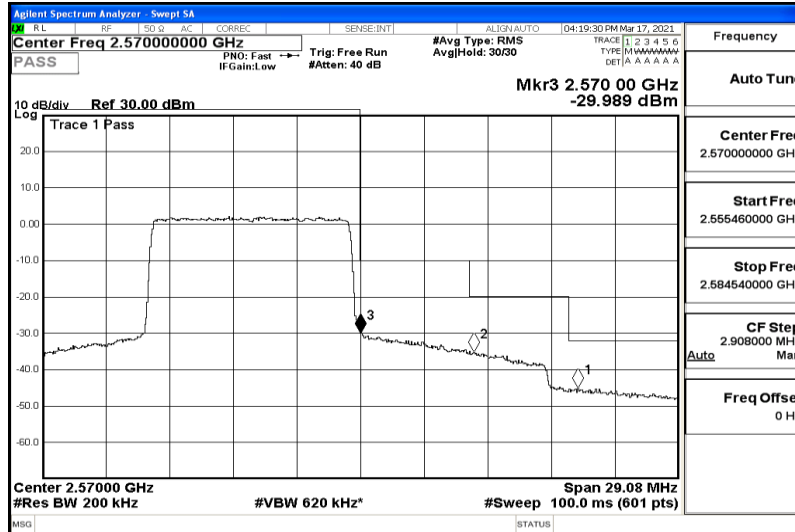
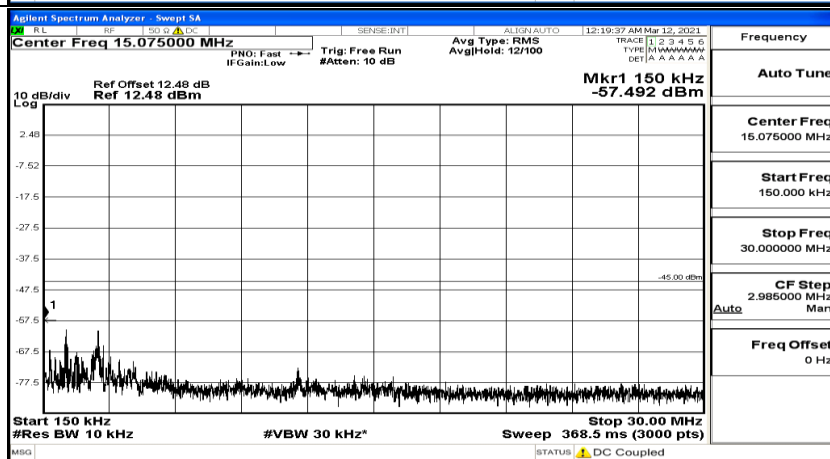Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM
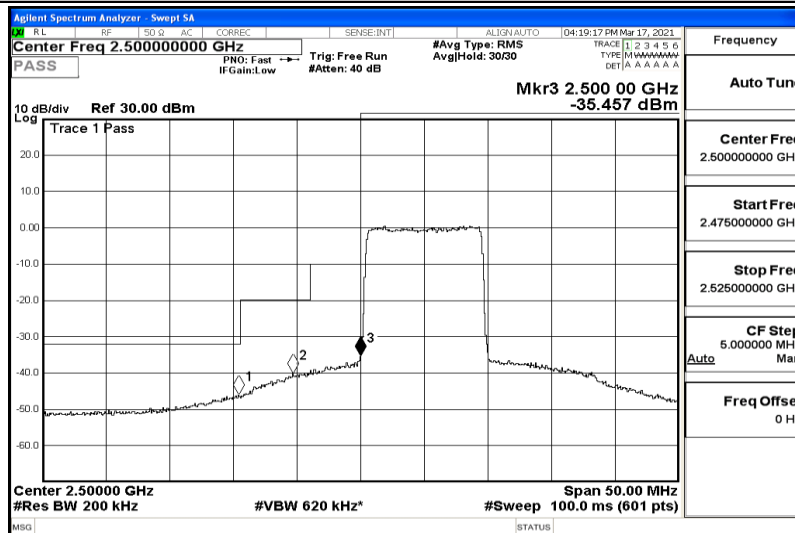
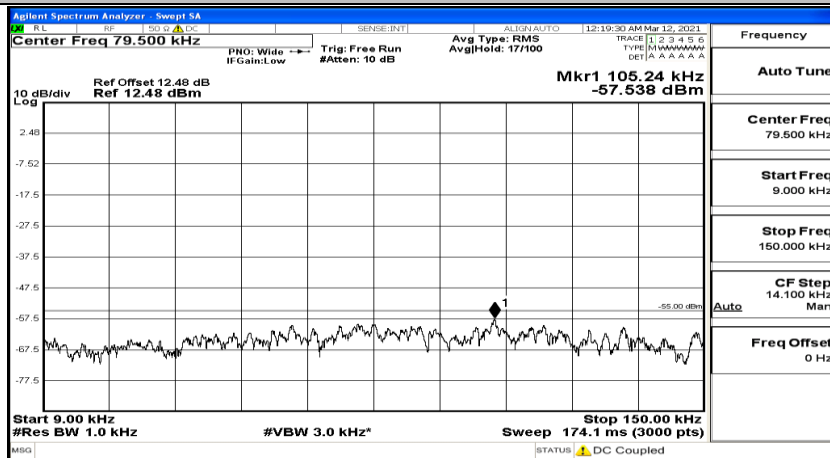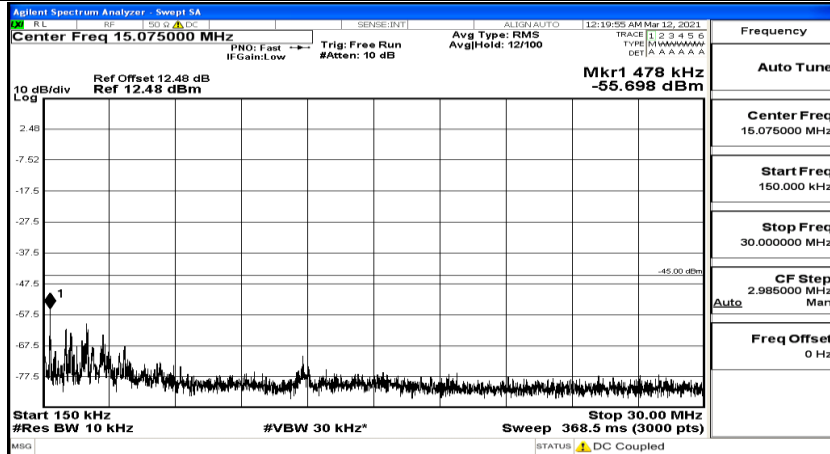Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

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Page 25 of 89
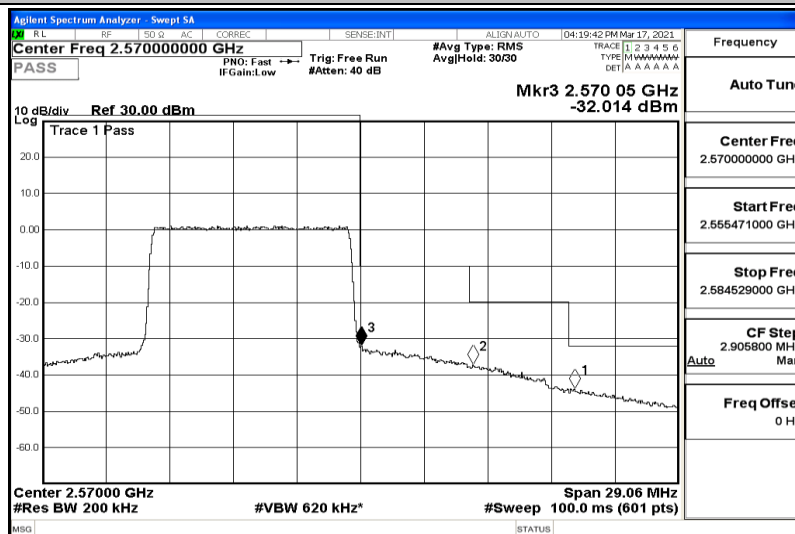
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK
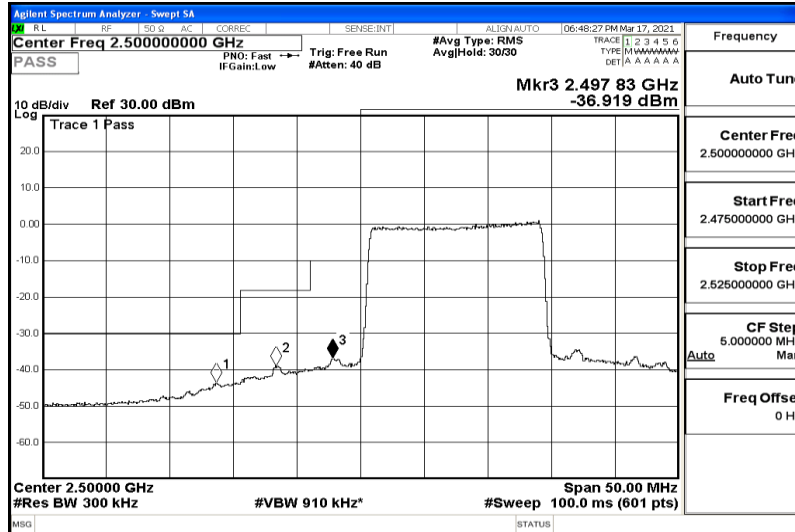
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK
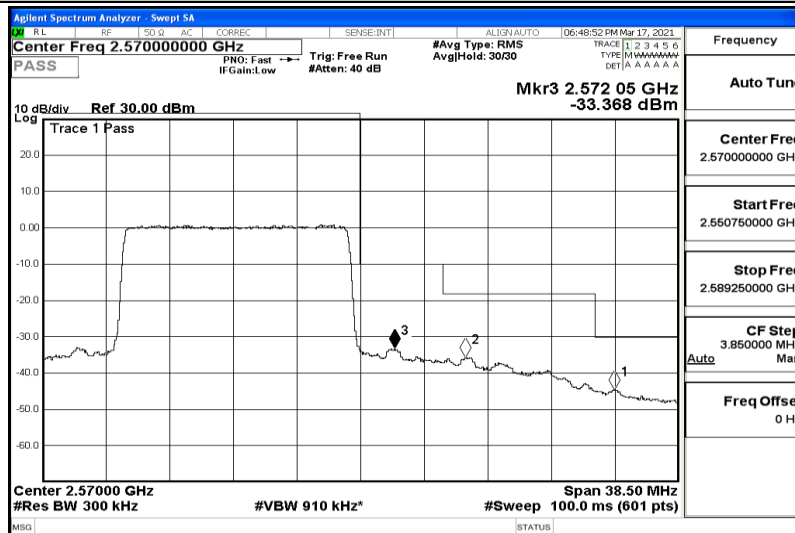
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM
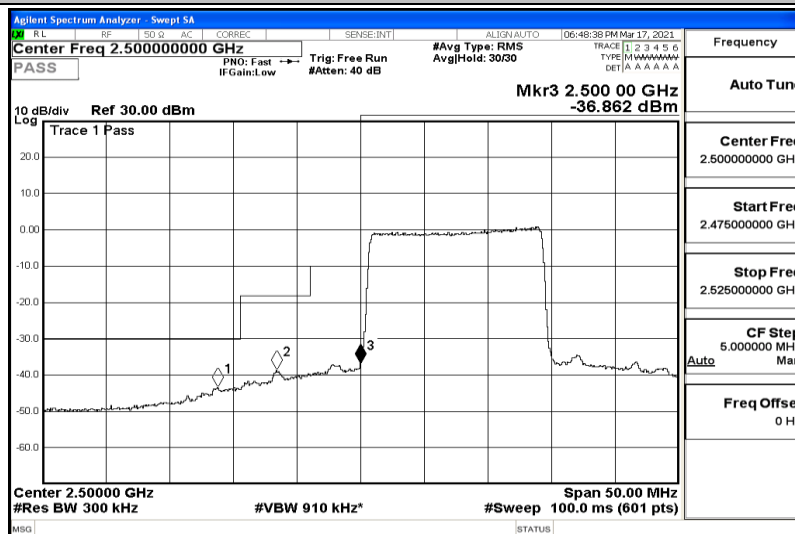
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM
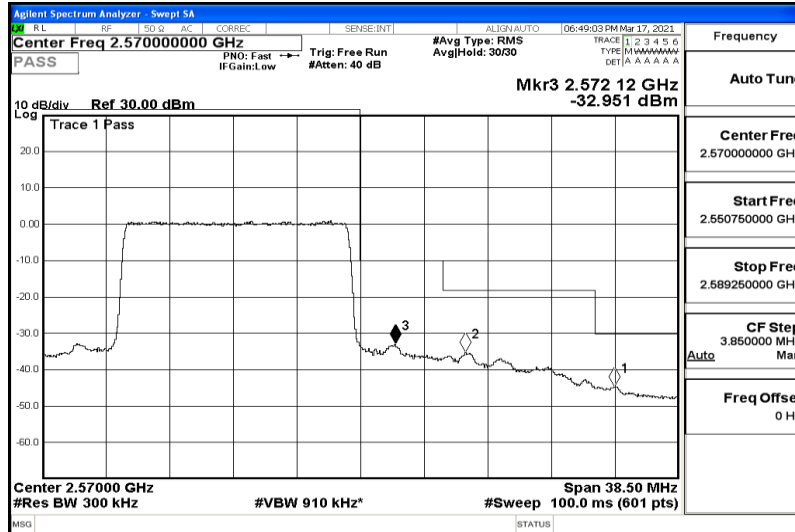
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK
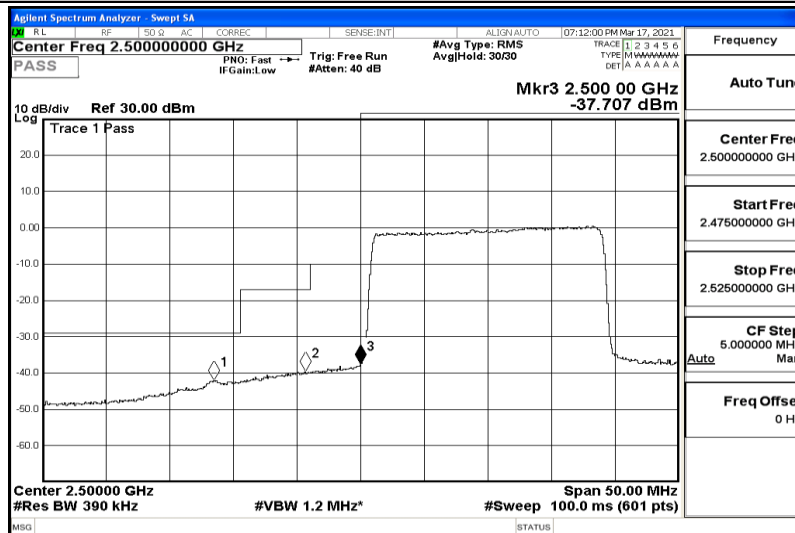
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK
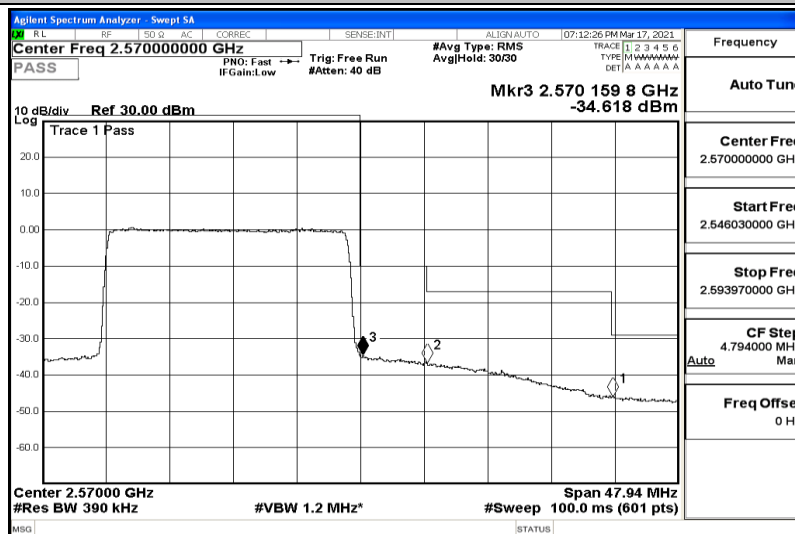
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Page 27 of 89

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

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

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Page 28 of 89

E.5 Conducted Spurious Emission

Channel Bandwidth: 5 MHz

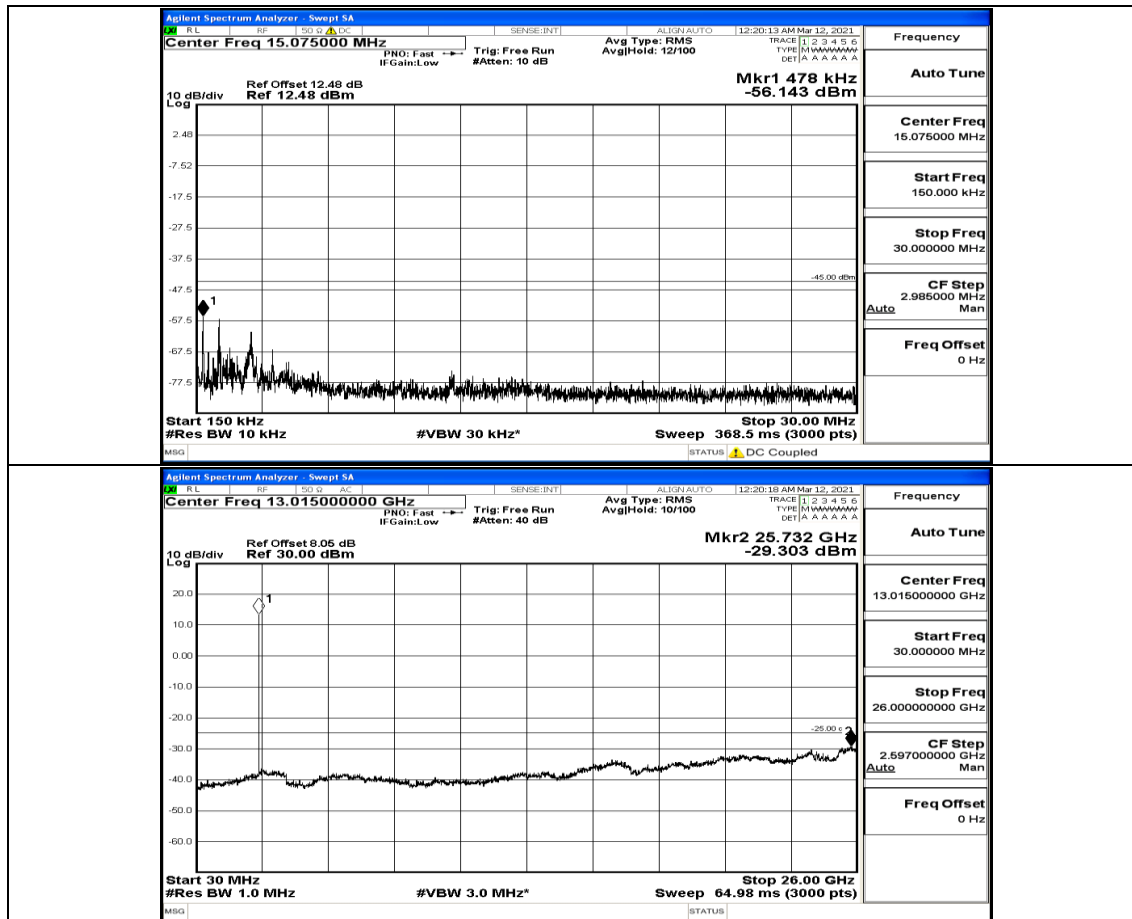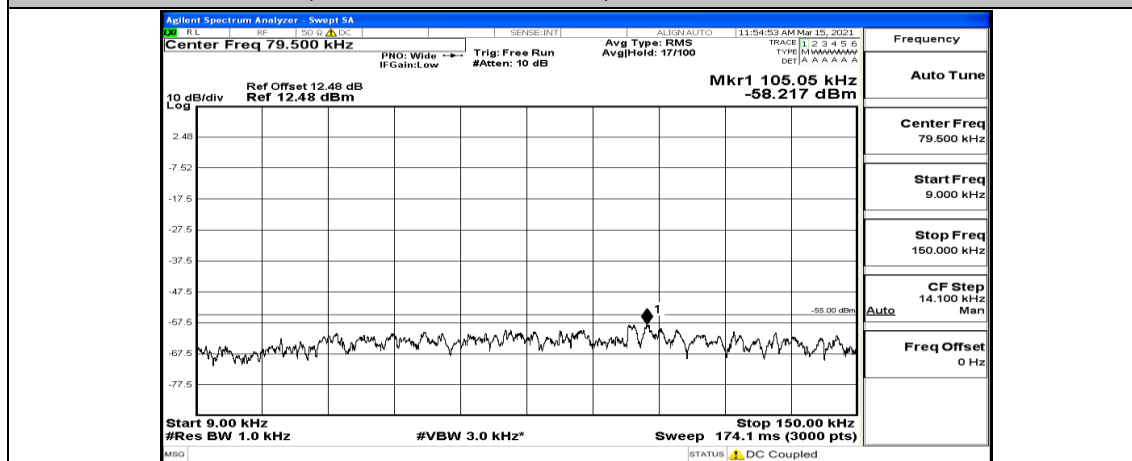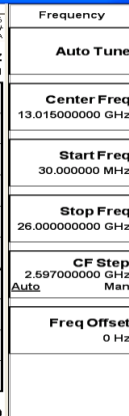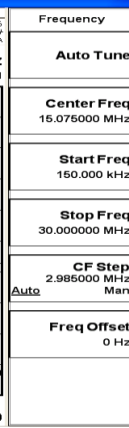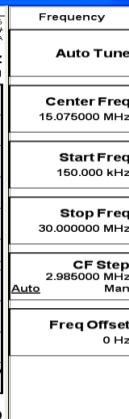| (Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0 |
| --- |

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

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Page 29 of 89

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

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Page 30 of 89
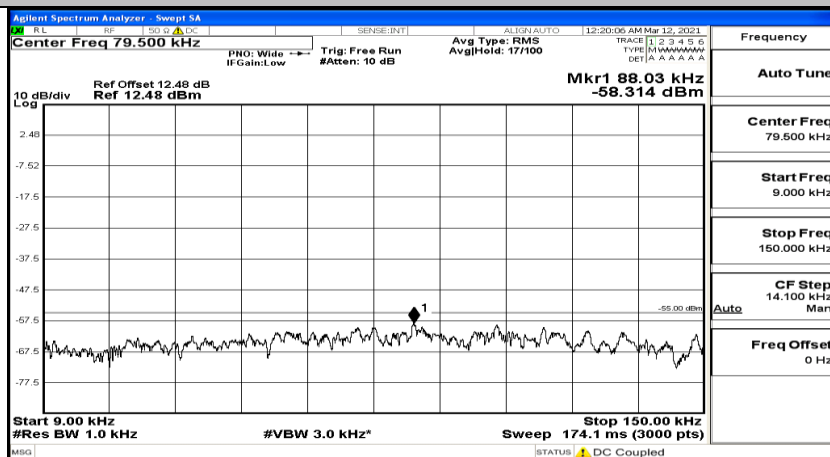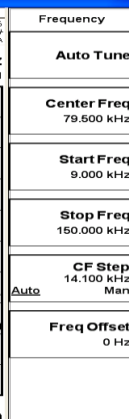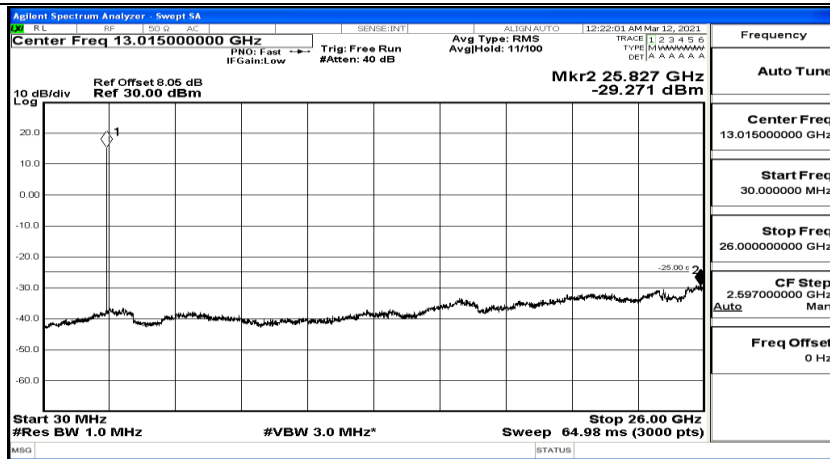
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

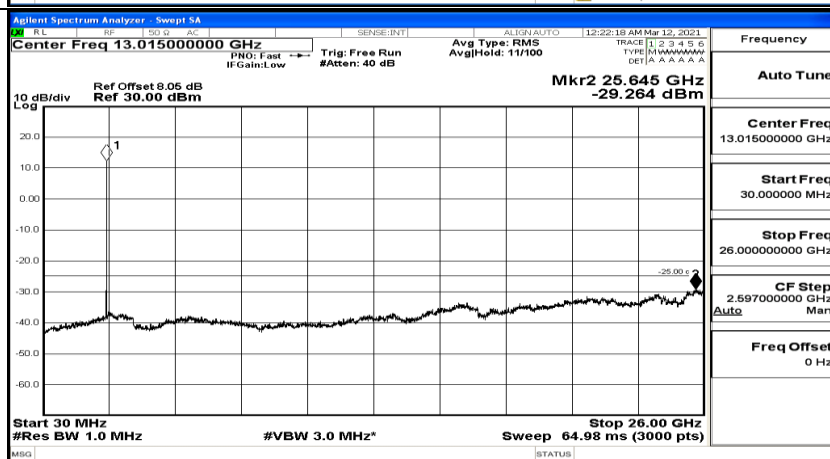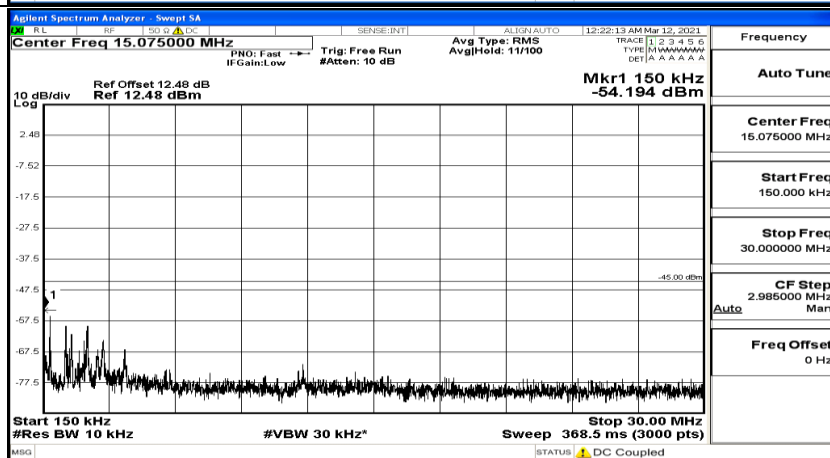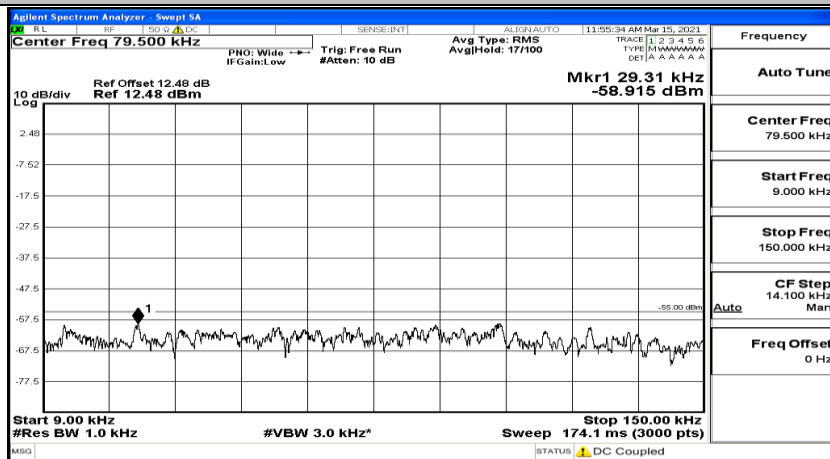*This report shall not be reproduced except in full, without the written approval of Shenzhen LCS Compliance Testing Laboratory Ltd.*

Page 32 of 89
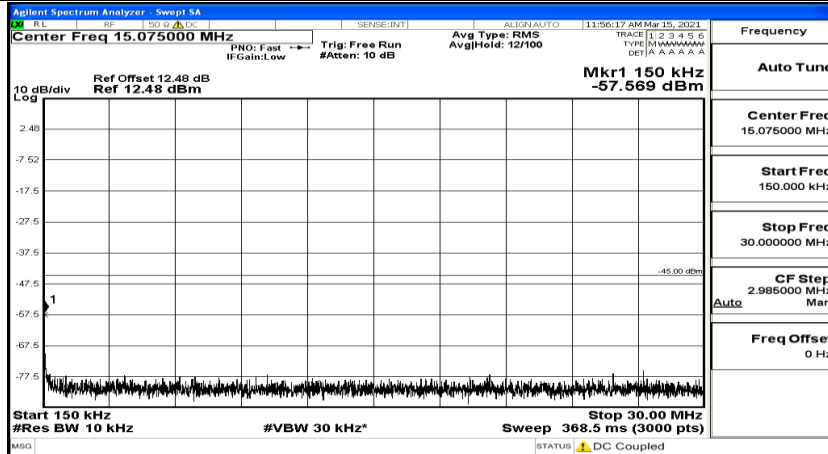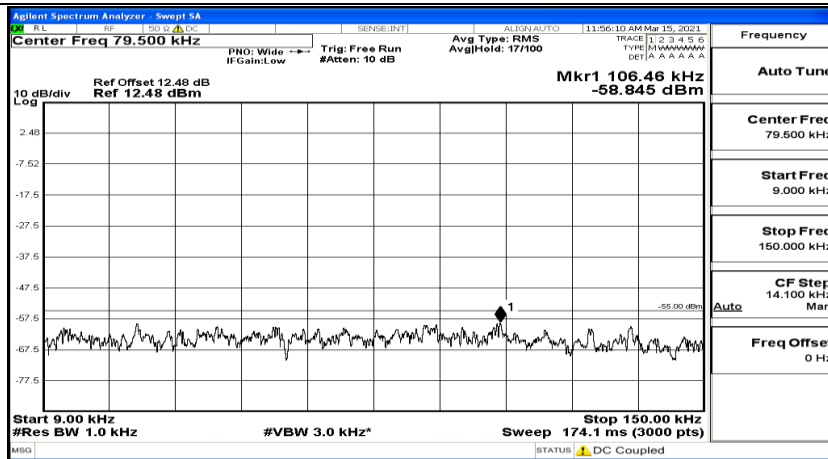
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

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Page 34 of 89

(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

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Page 35 of 89

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

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Page 36 of 89

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

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Page 37 of 89

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

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Page 38 of 89