Appendix I: Test Data for E-UTRA Band 71

Product Name: 4G Router/4G LTE/Wireless Router
Trade Mark: TODAAIR
Test Model: TD954G2

Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Tom.Liu

I.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	23.82	22.03	PASS
		1	12	23.73	22.77	PASS
		1	24	23.47	22.38	PASS
		12	0	23.94	22.93	PASS
		12	6	23.63	22.31	PASS
		12	13	23.86	22.23	PASS
		25	0	23.32	22.41	PASS
	MCH	1	0	23.99	22.56	PASS
		1	12	23.79	22.37	PASS
		1	24	23.59	22.74	PASS
		12	0	23.14	22.92	PASS
		12	6	23.86	22.21	PASS
		12	13	23.91	22.52	PASS
		25	0	23.34	22.69	PASS
	HCH	1	0	23.16	22.07	PASS
		1	12	23.33	22.79	PASS
		1	24	23.78	22.80	PASS
		12	0	23.53	22.04	PASS
		12	6	23.83	22.95	PASS
		12	13	23.85	22.94	PASS

		25	0	23.96	22.56	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	23.17	22.26	PASS
		1	24	23.63	22.00	PASS
		1	49	23.02	22.96	PASS
		25	0	23.54	22.53	PASS
		25	12	23.30	22.22	PASS
		25	25	23.25	22.17	PASS
		50	0	23.98	22.75	PASS
	MCH	1	0	23.94	22.46	PASS
		1	24	23.04	22.27	PASS
		1	49	23.07	22.34	PASS
		25	0	23.86	22.64	PASS
		25	12	23.64	22.14	PASS
		25	25	23.90	22.95	PASS
		50	0	23.67	22.68	PASS
	HCH	1	0	23.49	22.42	PASS
		1	24	23.11	22.95	PASS
		1	49	23.36	22.98	PASS
		25	0	23.88	22.31	PASS
		25	12	23.43	22.93	PASS
		25	25	23.83	22.81	PASS
		50	0	23.14	22.38	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	23.84	22.59	PASS
		1	37	23.84	22.81	PASS
		1	74	23.58	22.40	PASS
		37	0	23.63	22.62	PASS
		37	18	23.08	22.71	PASS
		37	38	23.62	22.73	PASS
		75	0	23.73	22.56	PASS
	MCH	1	0	23.80	22.04	PASS
		1	37	23.61	22.46	PASS
		1	74	24.00	22.20	PASS
		37	0	23.57	22.30	PASS

		37	18	23.25	22.63	PASS
		37	38	23.30	22.71	PASS
		75	0	23.70	22.36	PASS
	HCH	1	0	23.40	22.19	PASS
		1	37	23.80	22.56	PASS
		1	74	23.13	22.92	PASS
		37	0	23.82	22.13	PASS
		37	18	23.78	22.36	PASS
		37	38	23.99	22.58	PASS
		75	0	23.58	22.00	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	23.40	22.06	PASS
		1	49	23.28	22.70	PASS
		1	99	23.59	22.28	PASS
		50	0	23.18	22.03	PASS
		50	25	23.72	22.69	PASS
		50	50	23.86	22.32	PASS
		100	0	23.90	22.98	PASS
	MCH	1	0	23.74	22.39	PASS
		1	49	23.33	22.13	PASS
		1	99	23.12	22.36	PASS
		50	0	23.29	22.18	PASS
		50	25	23.04	22.07	PASS
		50	50	23.24	22.66	PASS
		100	0	24.00	22.33	PASS
	HCH	1	0	23.56	22.42	PASS
		1	49	23.53	22.17	PASS
		1	99	23.41	22.34	PASS
		50	0	23.86	22.21	PASS
		50	25	23.08	22.61	PASS
		50	50	23.11	22.95	PASS
		100	0	23.79	22.85	PASS

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I.2 Peak-to-Average Ratio

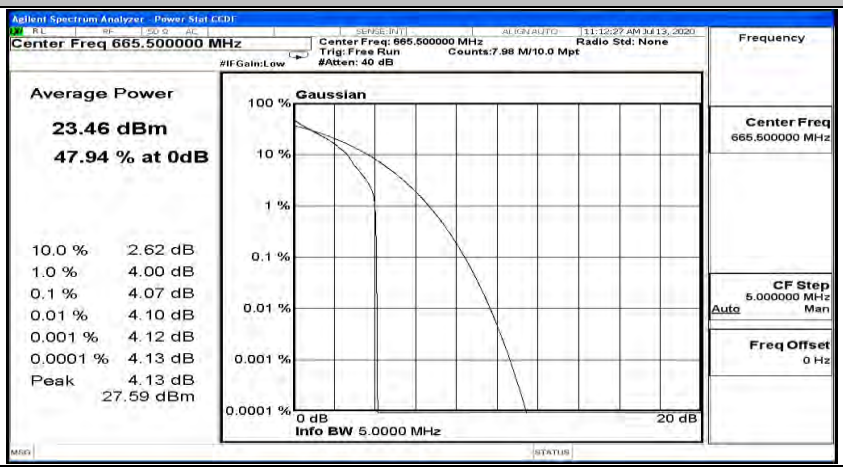
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.01	<13	PASS
	MCH	4.23	<13	PASS
	HCH	4.57	<13	PASS
16QAM	LCH	4.00	<13	PASS
	MCH	4.25	<13	PASS
	HCH	4.57	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.18	<13	PASS
	MCH	4.28	<13	PASS
	HCH	5.15	<13	PASS
16QAM	LCH	5.18	<13	PASS
	MCH	4.26	<13	PASS
	HCH	5.13	<13	PASS

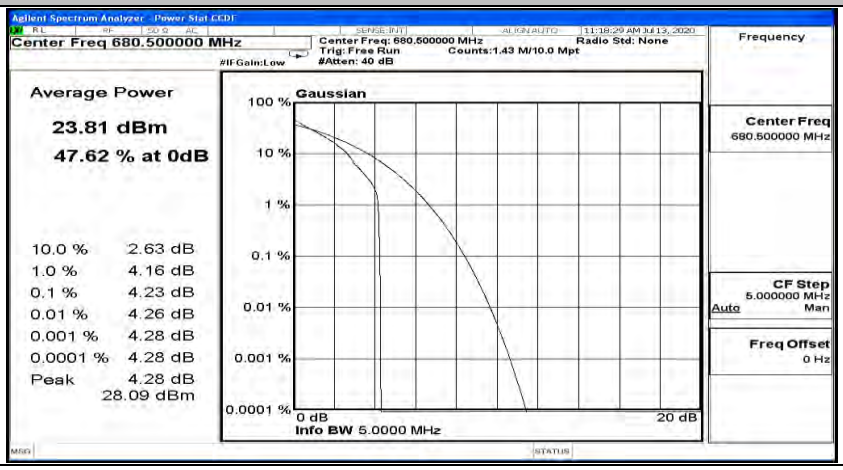
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.01	<13	PASS
	MCH	4.90	<13	PASS
	HCH	5.24	<13	PASS
16QAM	LCH	5.00	<13	PASS
	MCH	4.91	<13	PASS
	HCH	5.24	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.57	<13	PASS
	MCH	5.55	<13	PASS
	HCH	5.85	<13	PASS
16QAM	LCH	5.57	<13	PASS
	MCH	5.56	<13	PASS
	HCH	5.56	<13	PASS

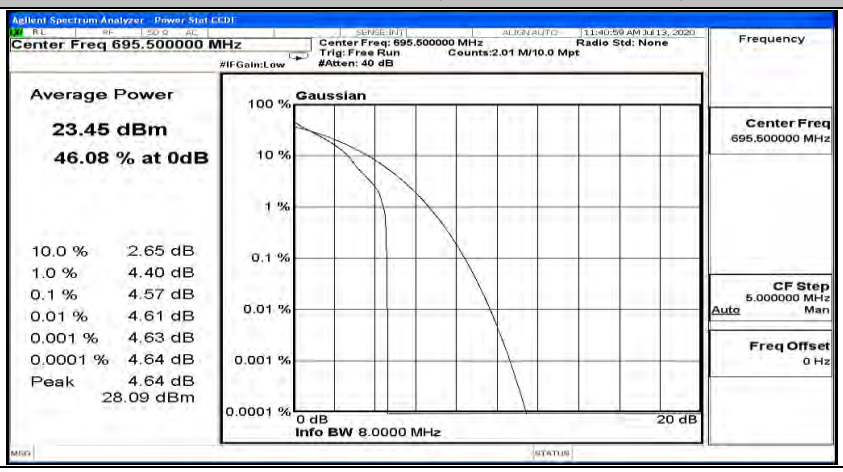
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



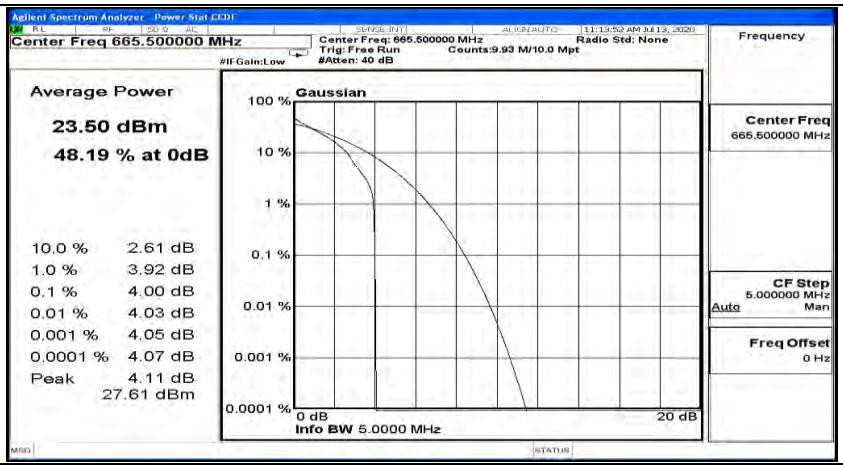
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



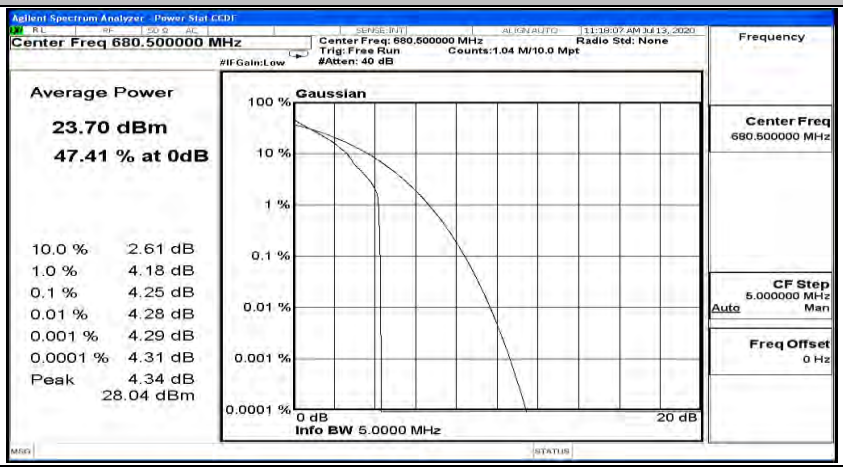
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



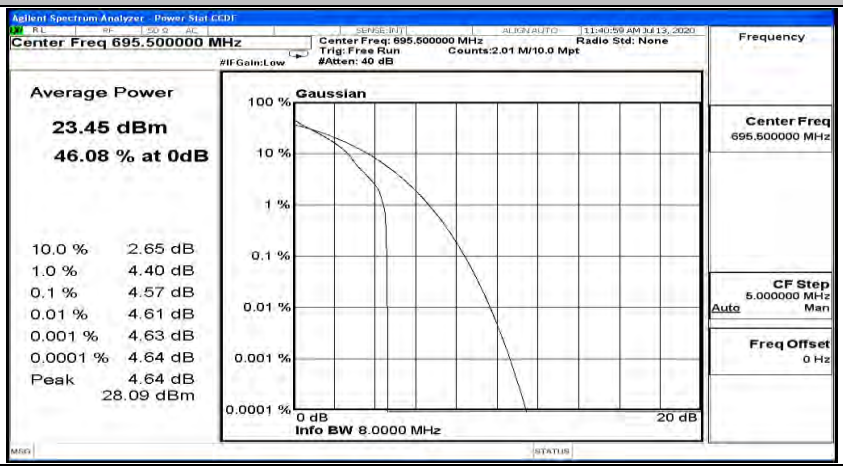
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



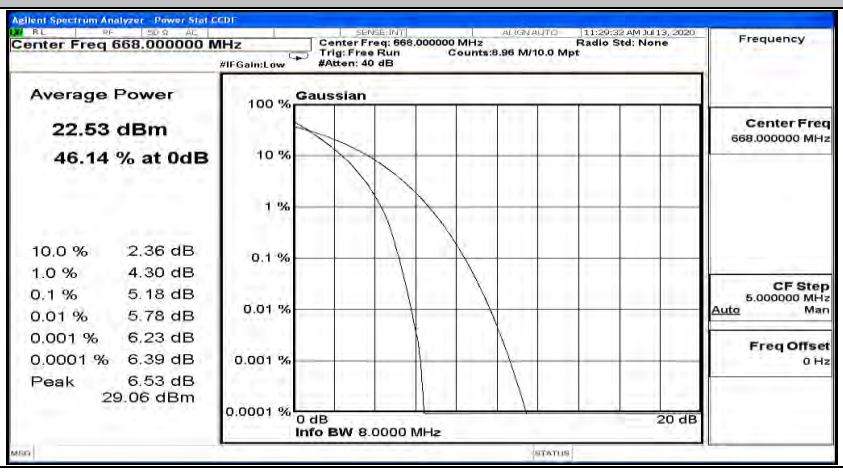
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



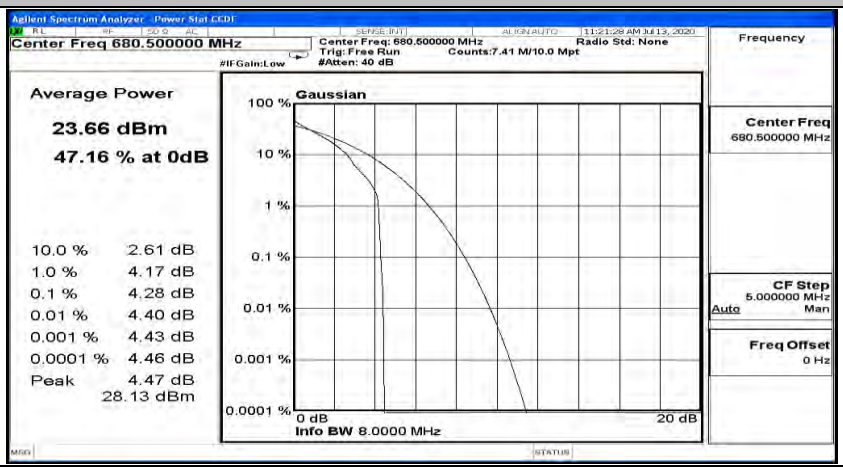
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



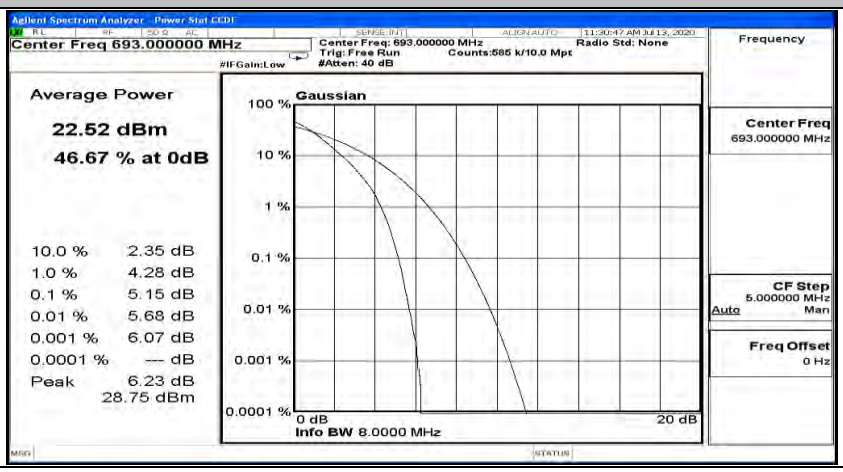
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



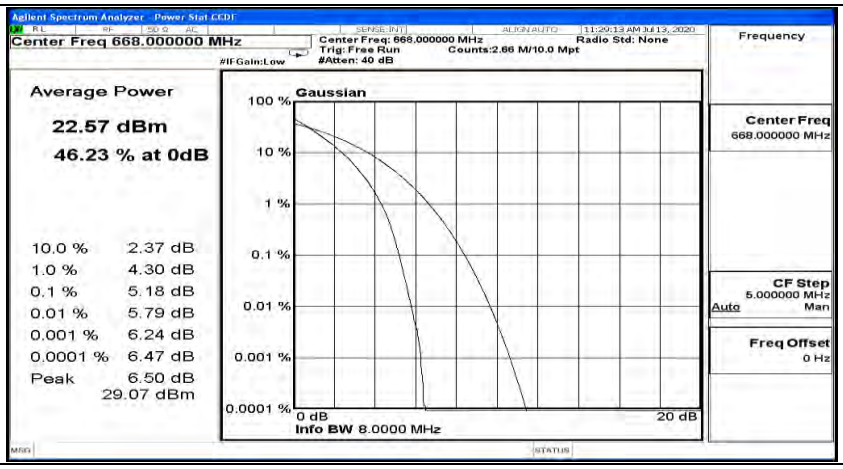
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



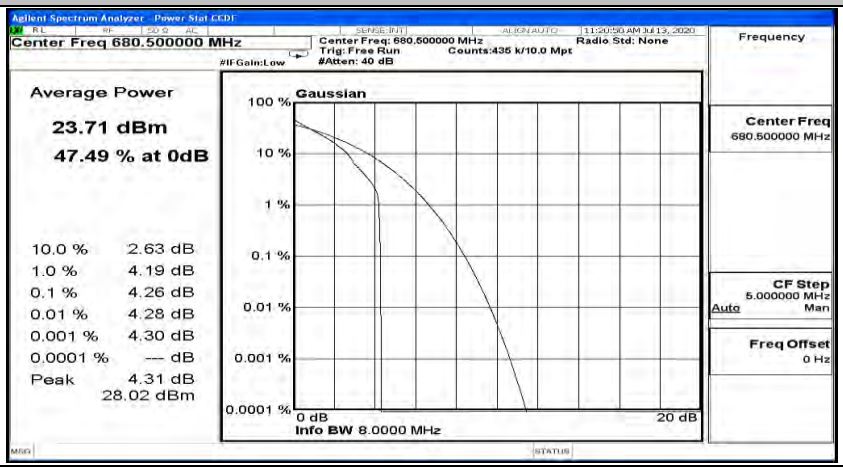
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



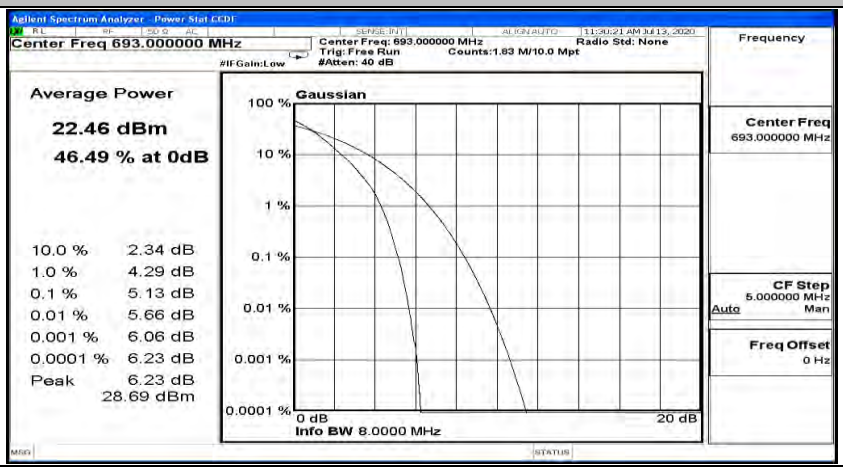
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



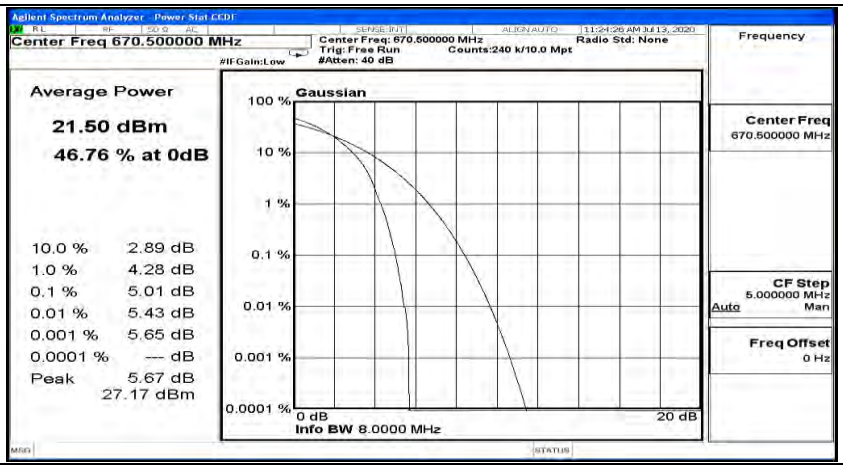
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



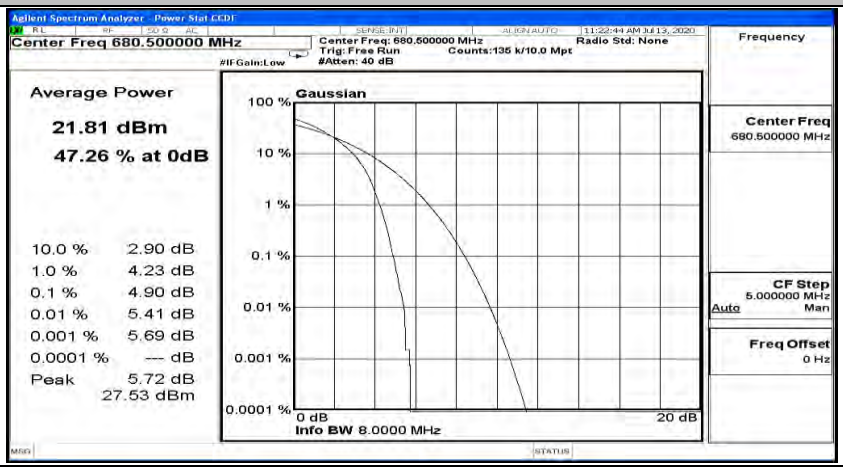
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



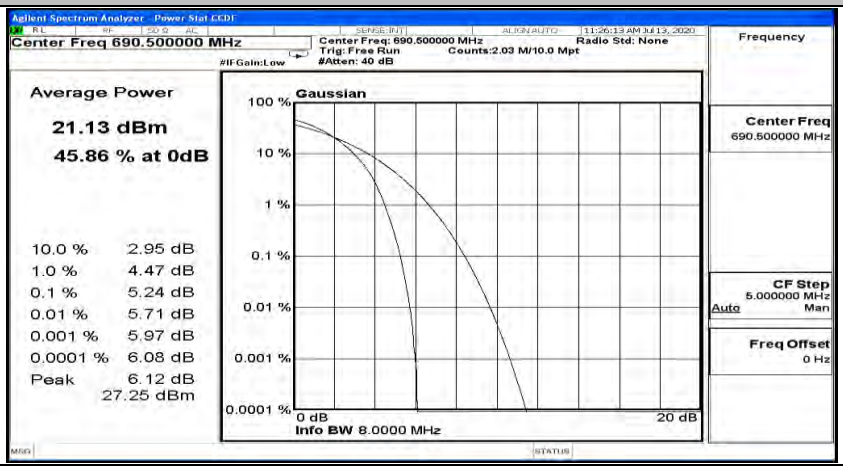
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



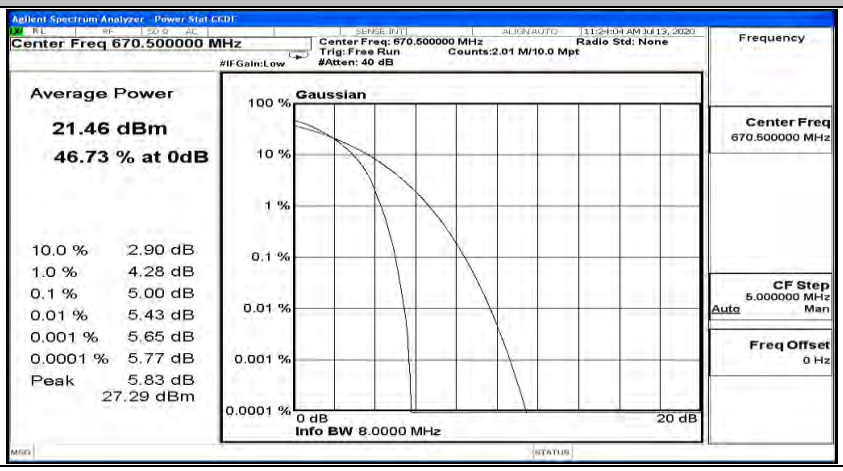
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



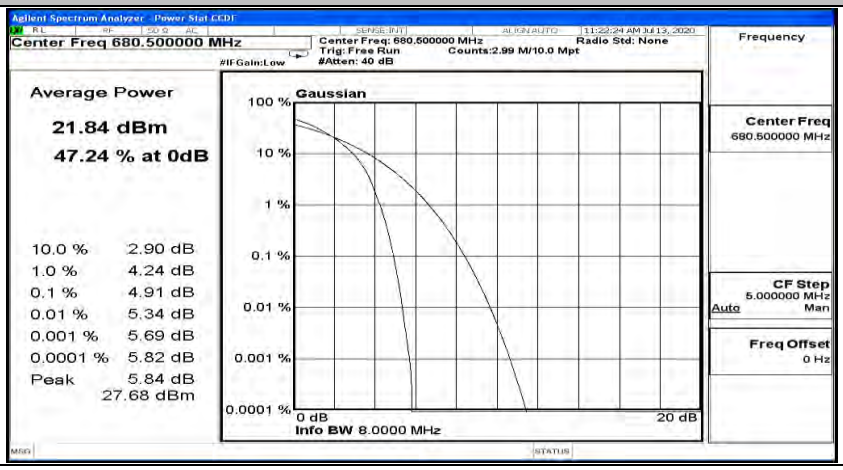
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



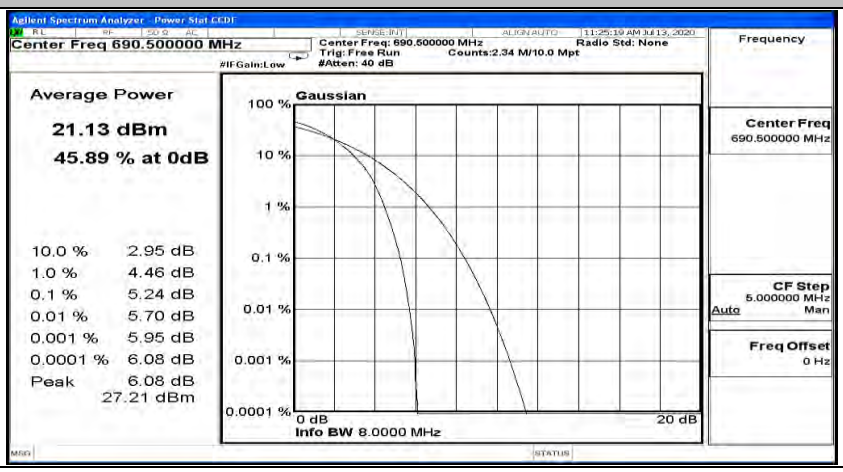
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



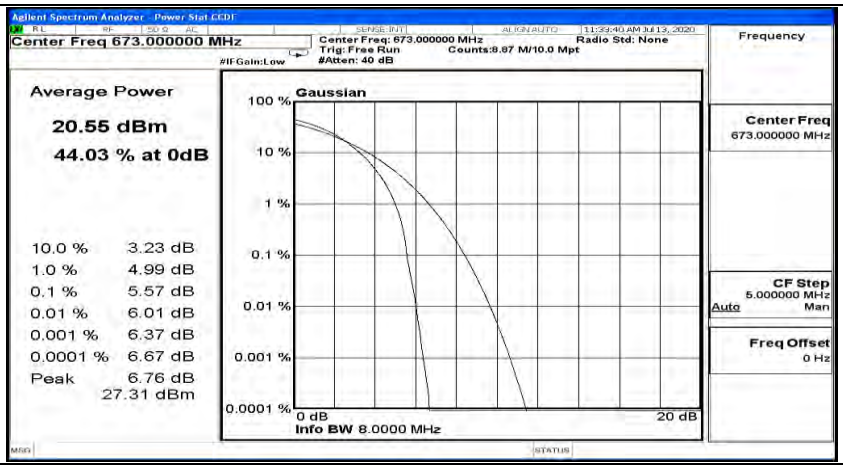
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



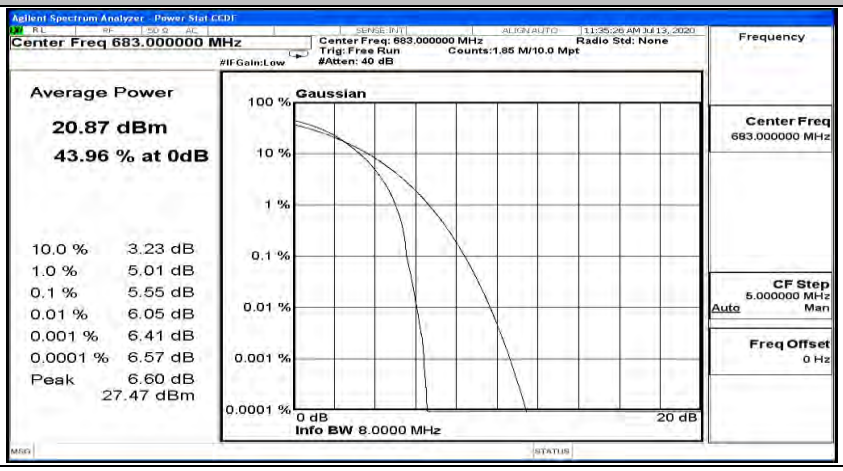
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



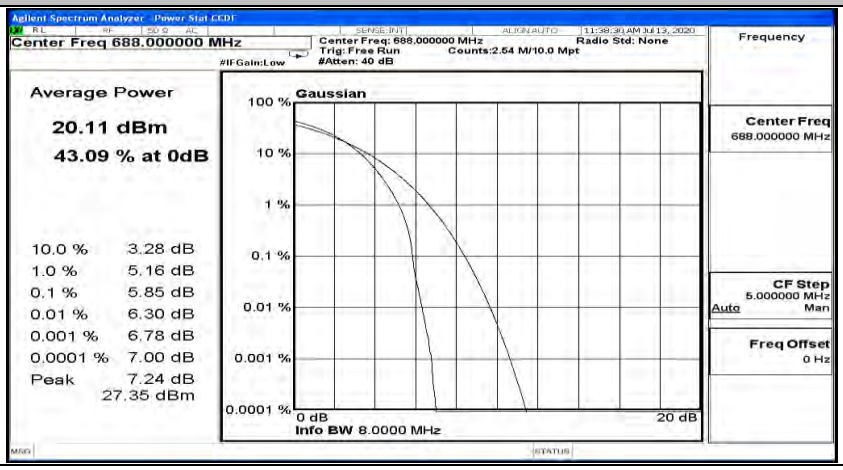
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



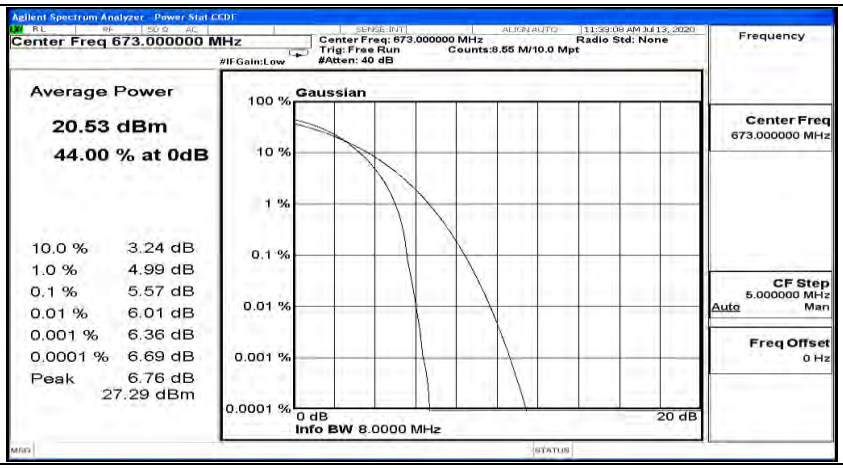
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



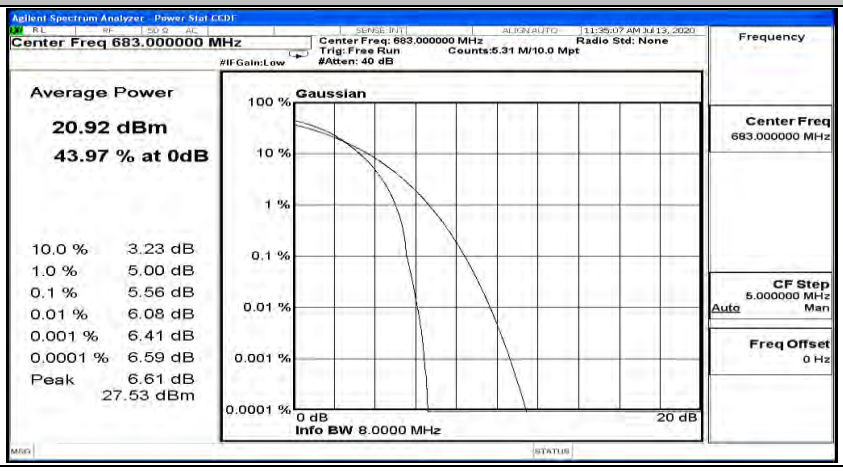
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



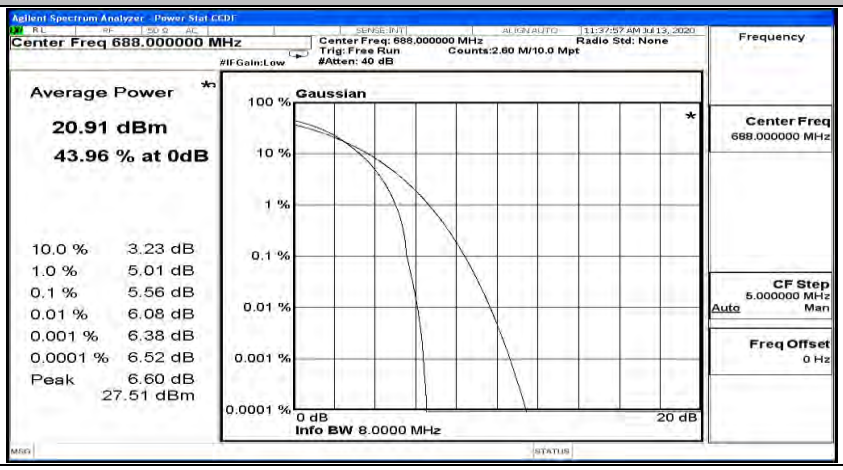
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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



I.3 26dB Bandwidth and Occupied Bandwidth

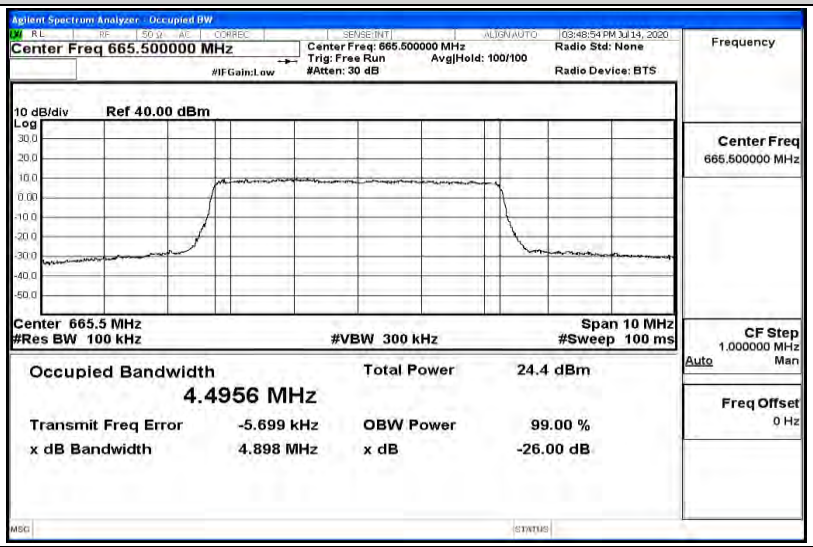
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4956	4.898	PASS
	MCH	4.5023	4.887	PASS
	HCH	4.4889	4.858	PASS
16QAM	LCH	4.4956	4.844	PASS
	MCH	4.4991	4.874	PASS
	HCH	4.4936	4.866	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9958	9.613	PASS
	MCH	8.9637	9.519	PASS
	HCH	8.9522	9.508	PASS
16QAM	LCH	8.9772	9.560	PASS
	MCH	8.9637	9.514	PASS
	HCH	8.9958	9.613	PASS

EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.445	14.33	PASS
	MCH	13.423	14.24	PASS
	HCH	13.477	14.25	PASS
16QAM	LCH	13.447	14.29	PASS
	MCH	13.425	14.26	PASS
	HCH	13.475	14.24	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.920	18.92	PASS
	MCH	17.861	18.91	PASS
	HCH	17.914	18.95	PASS
16QAM	LCH	17.911	18.95	PASS
	MCH	17.854	18.91	PASS
	HCH	17.922	18.96	PASS

Band71-5MHz-QPSK-133147-25RB#0-4.4956



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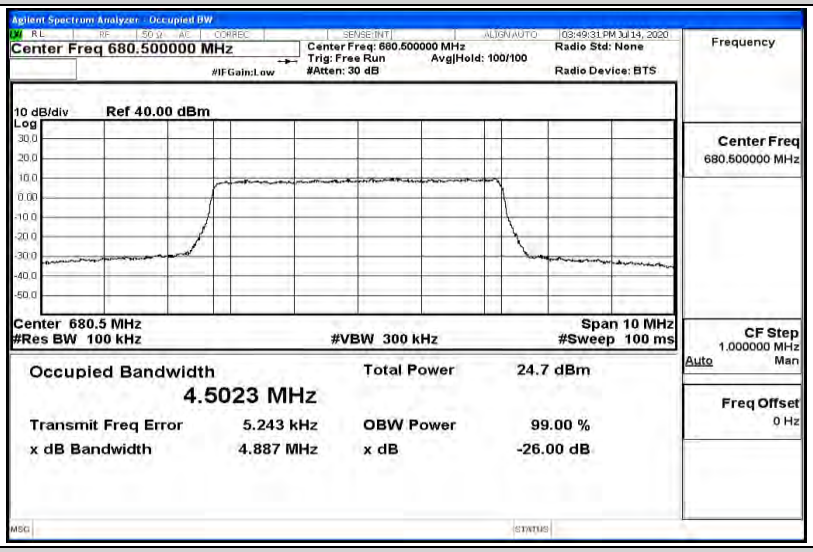

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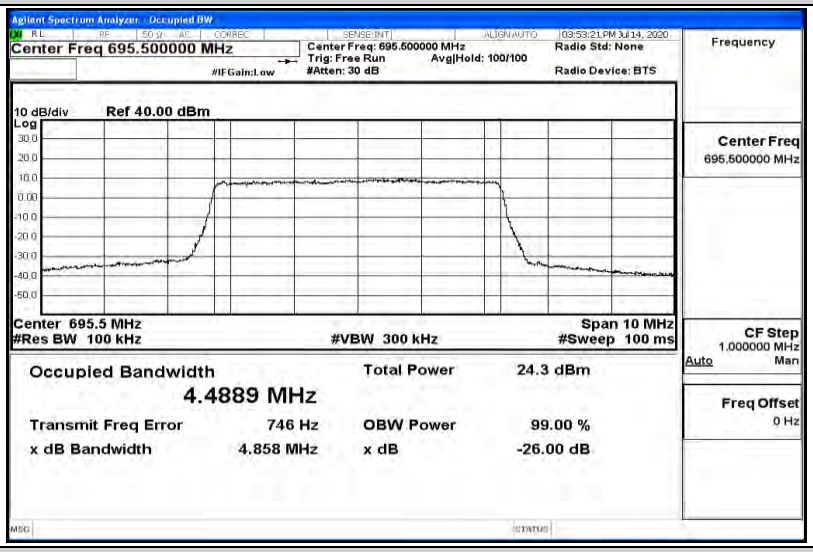
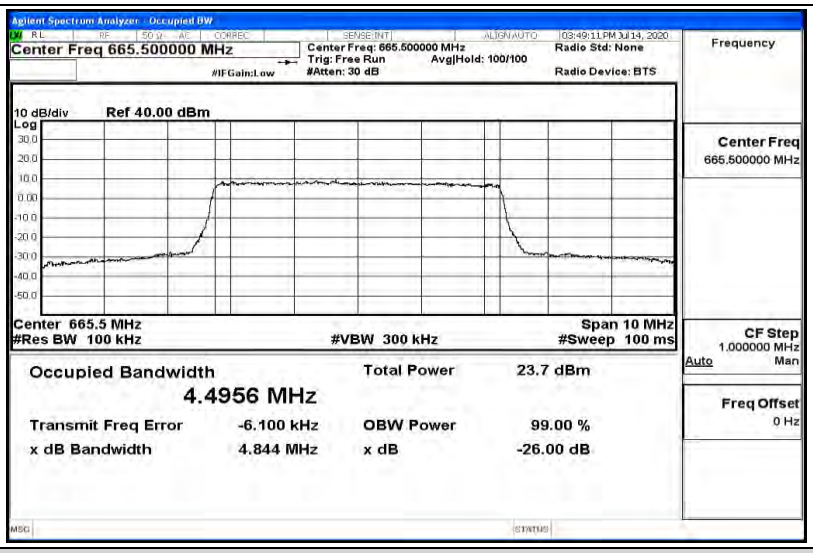


Band71-5MHz-16QAM-133147-25RB#0-4.4956



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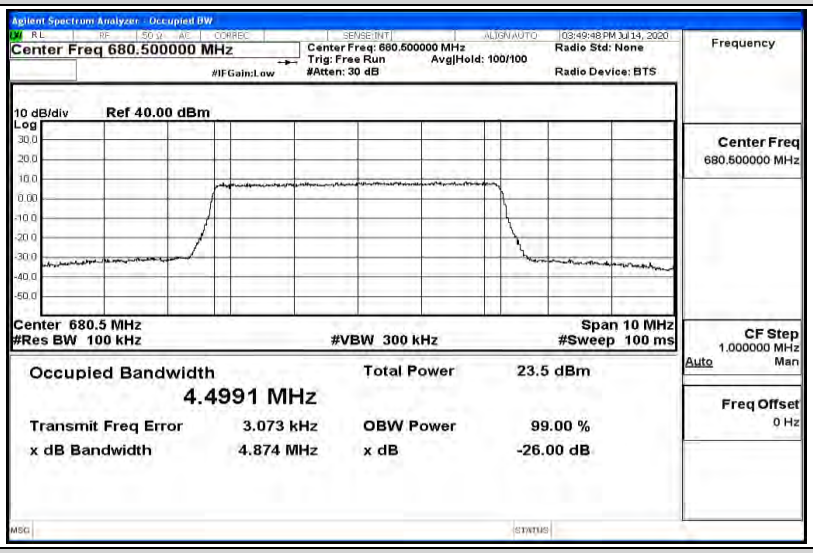
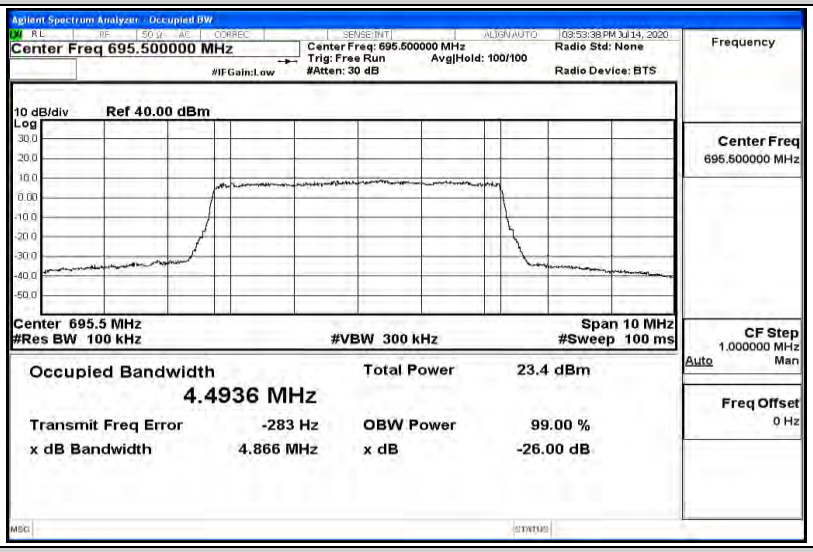
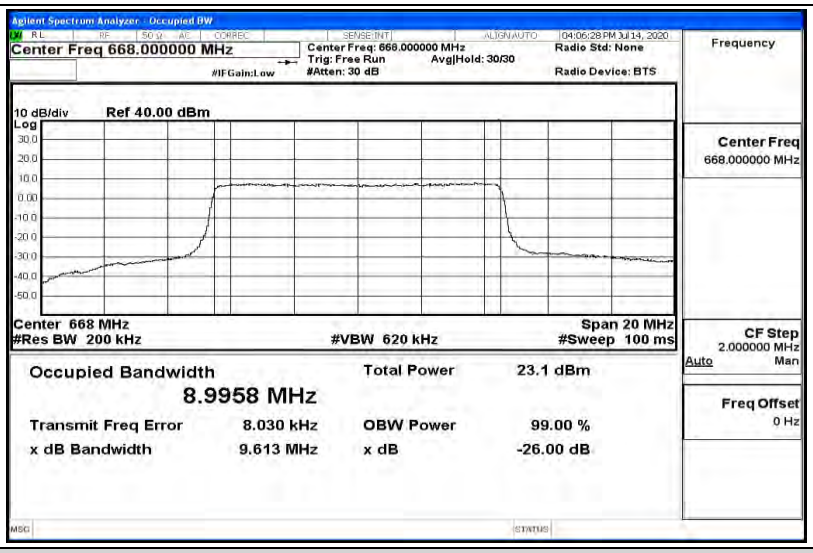


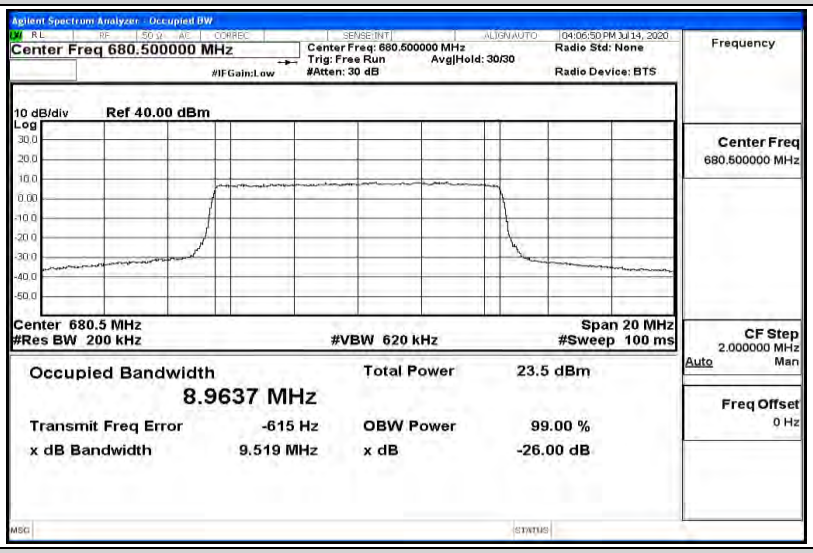
Band71-5MHz-16QAM-133447-25RB#0-4.4936



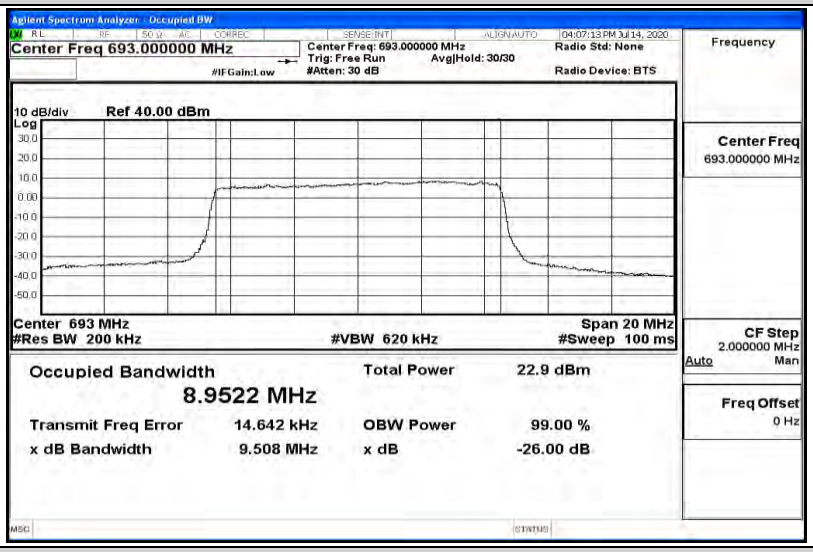
Band71-10MHz-QPSK-133172-50RB#0-8.9958



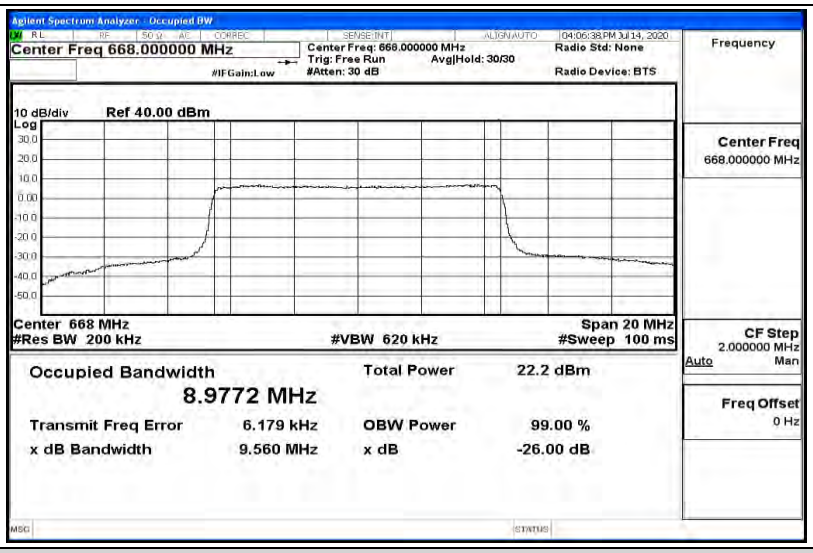
Band71-10MHz-QPSK-133297-50RB#0-8.9637



Band71-10MHz-QPSK-133422-50RB#0-8.9522



Band71-10MHz-16QAM-133172-50RB#0-8.9772



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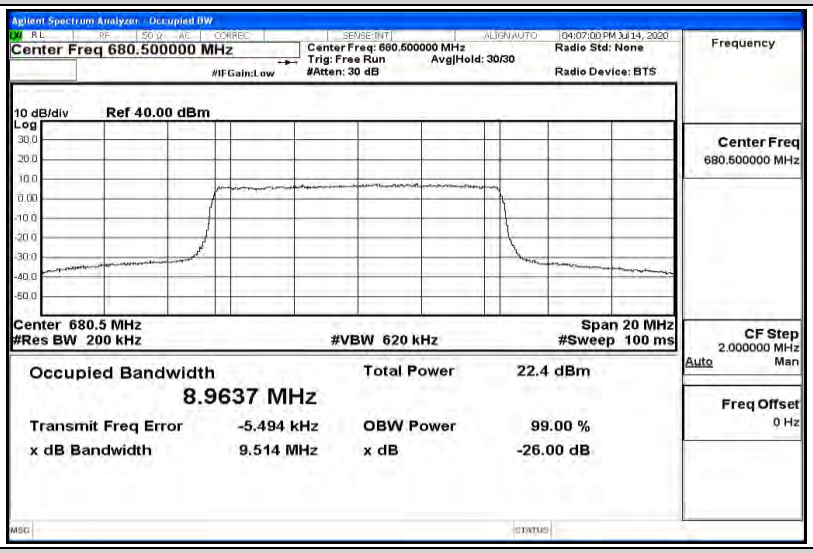

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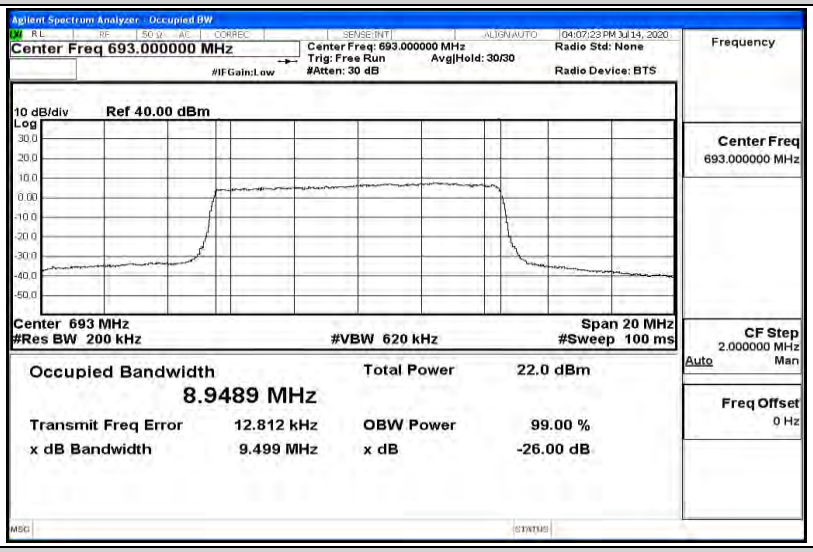
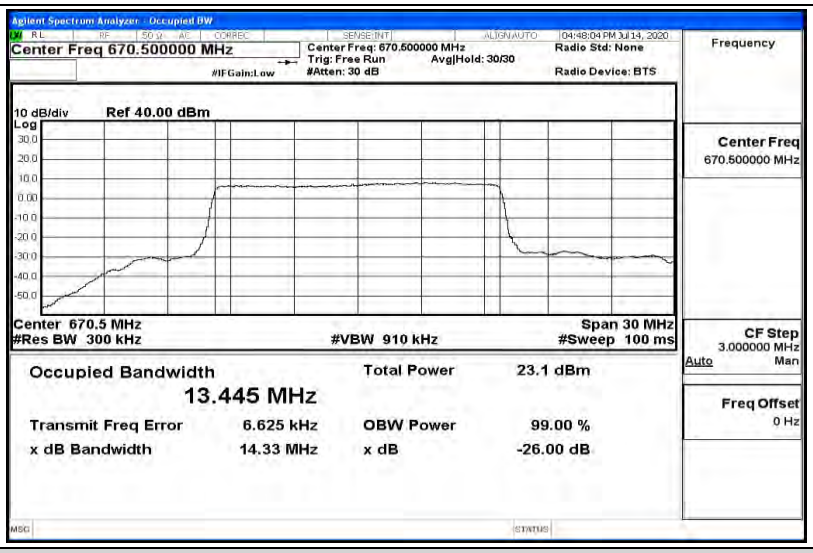


Band71-15MHz-QPSK-133197-75RB#0-13.445



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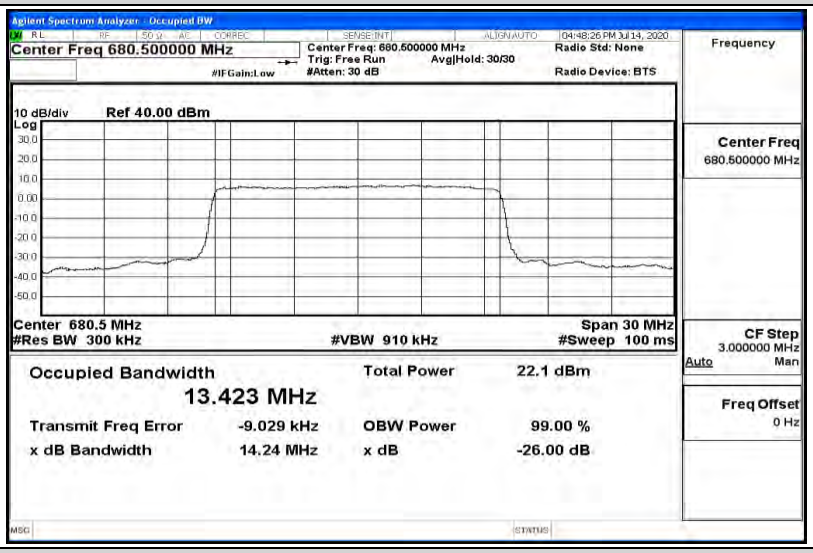
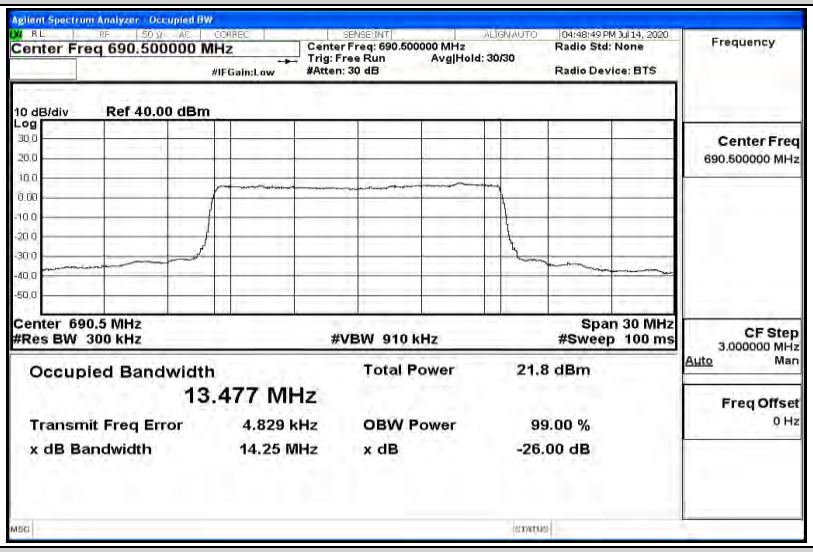


Band71-15MHz-QPSK-133397-75RB#0-13.477



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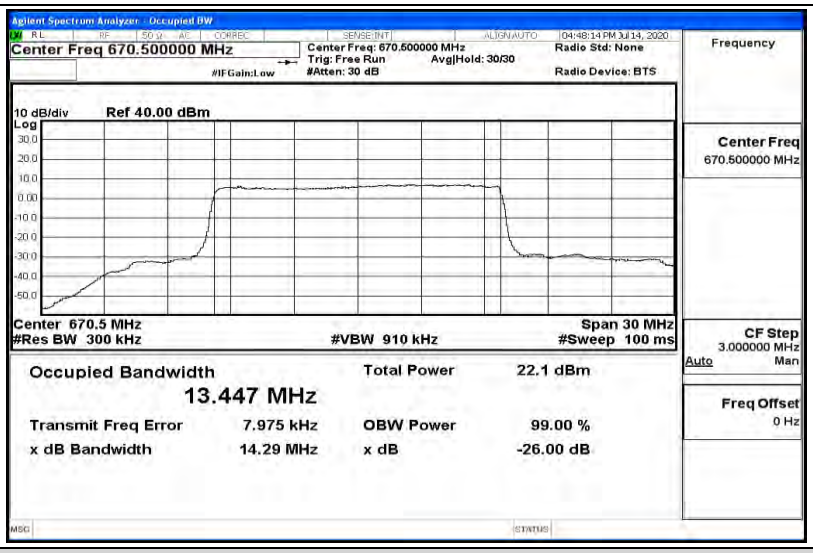
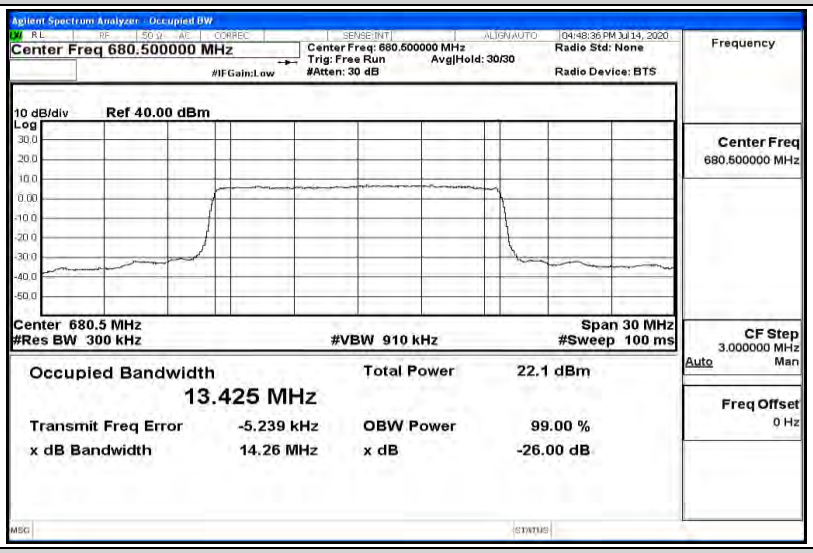
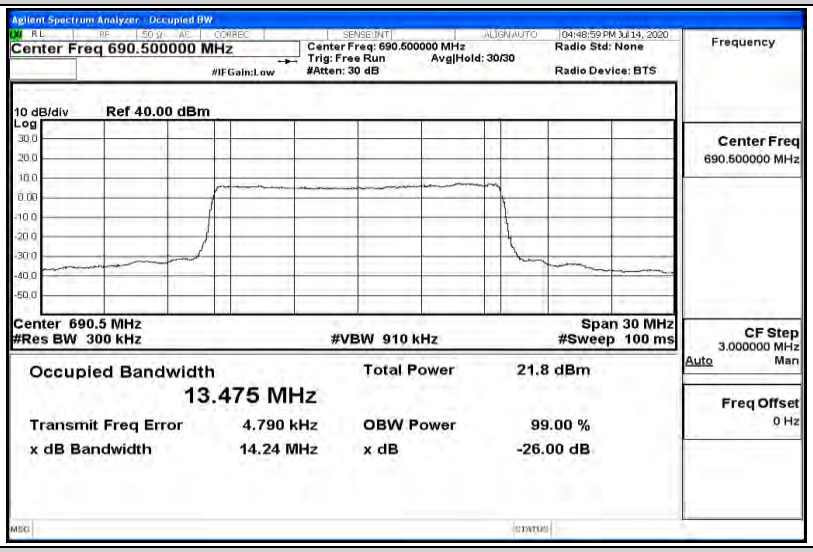


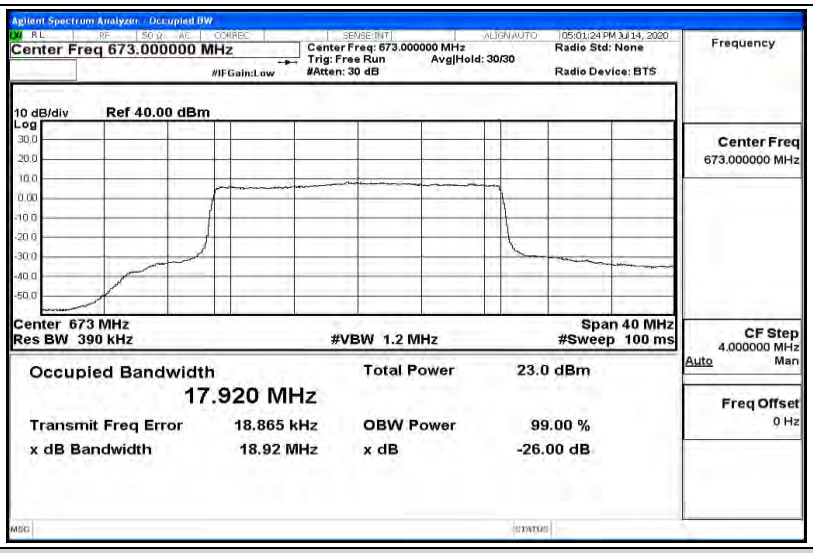
Band71-15MHz-16QAM-133297-75RB#0-13.425



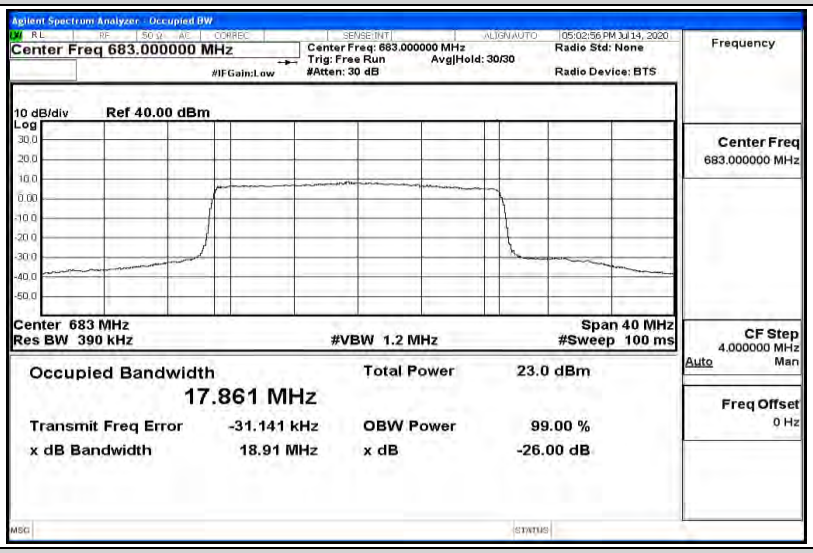
Band71-15MHz-16QAM-133397-75RB#0-13.475



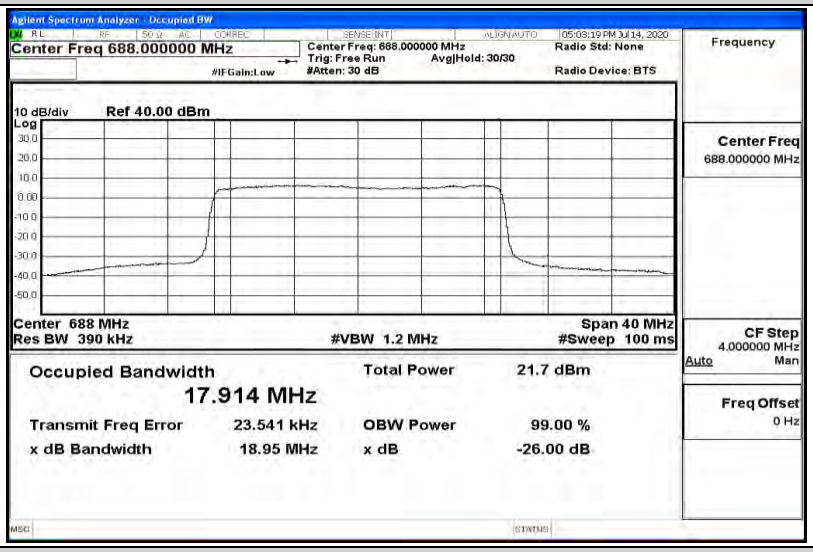
Band71-20MHz-QPSK-133222-100RB#0-17.920



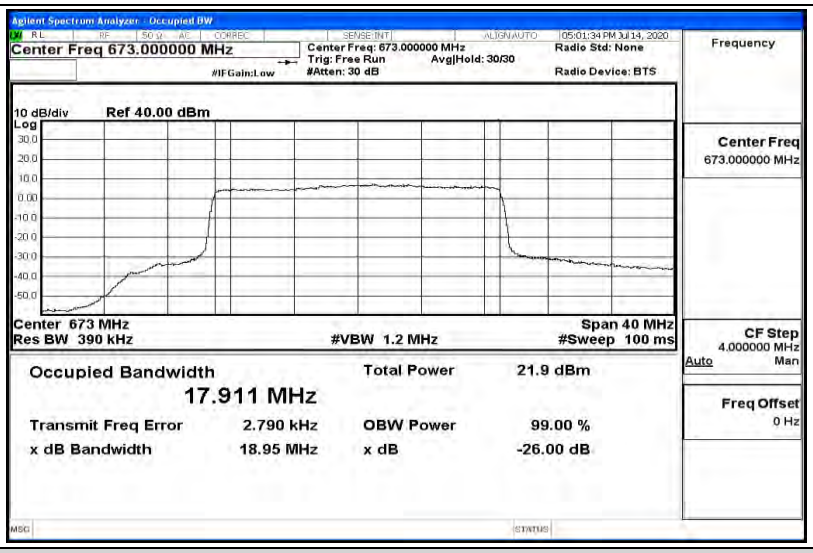
Band71-20MHz-QPSK-133322-100RB#0-17.861



Band71-20MHz-QPSK-133372-100RB#0-17.914



Band71-20MHz-16QAM-133222-100RB#0-17.911



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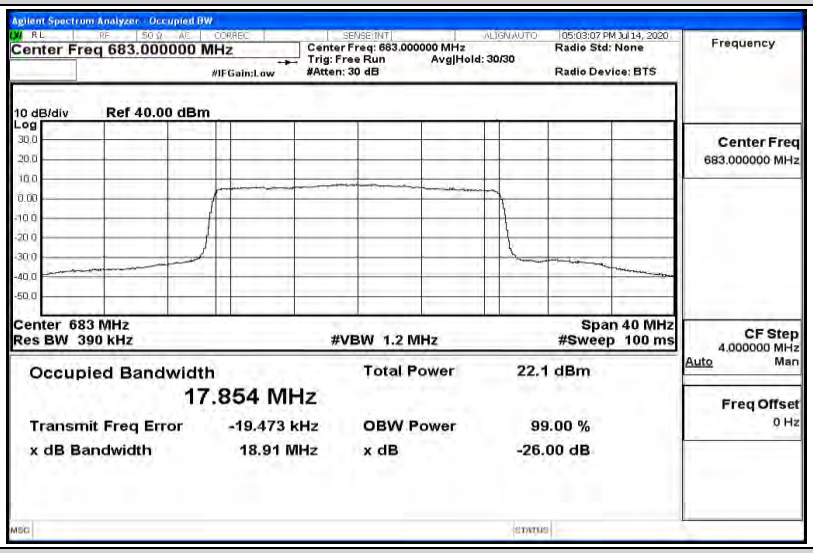
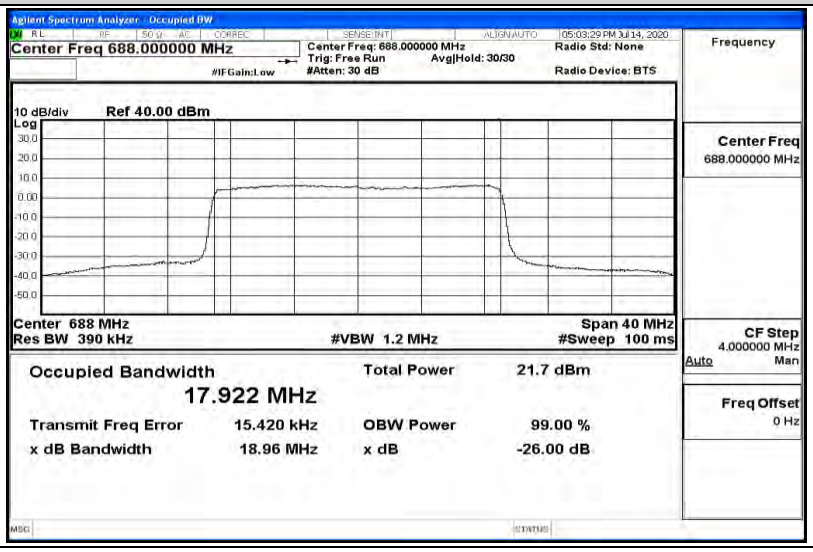
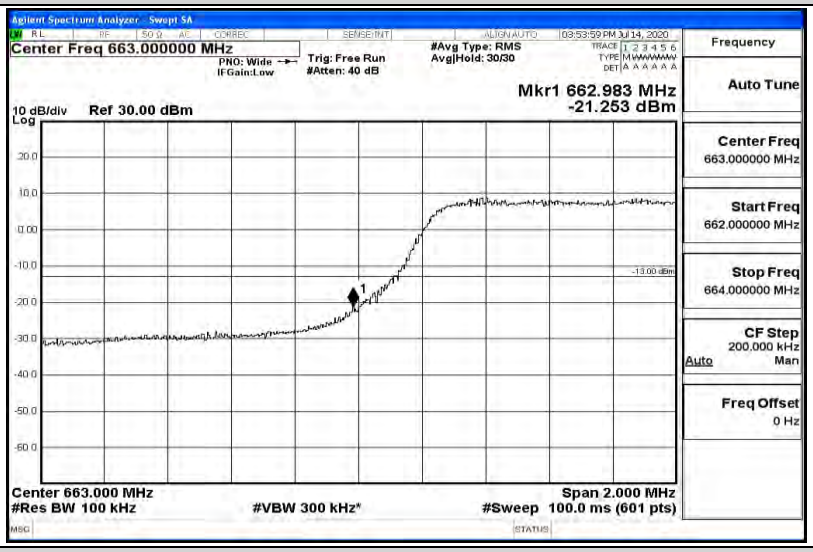


Band71-20MHz-16QAM-133372-100RB#0-17.922

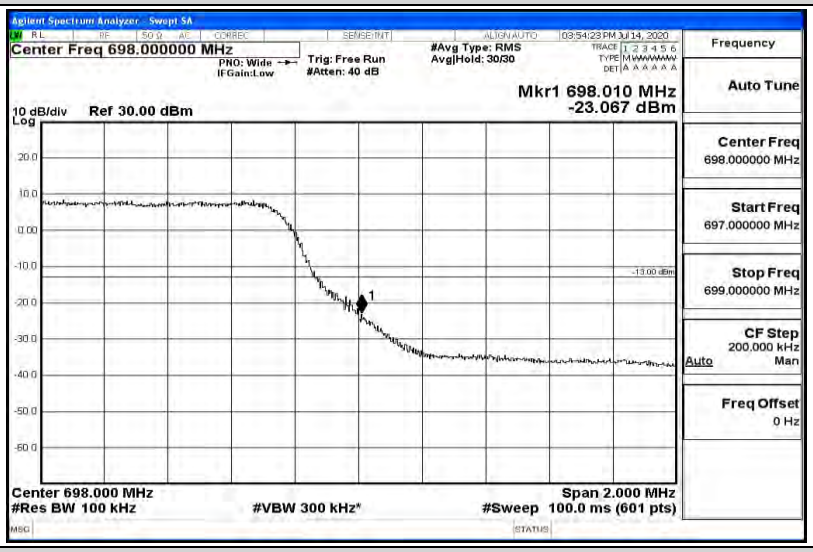


I.4 Band Edge

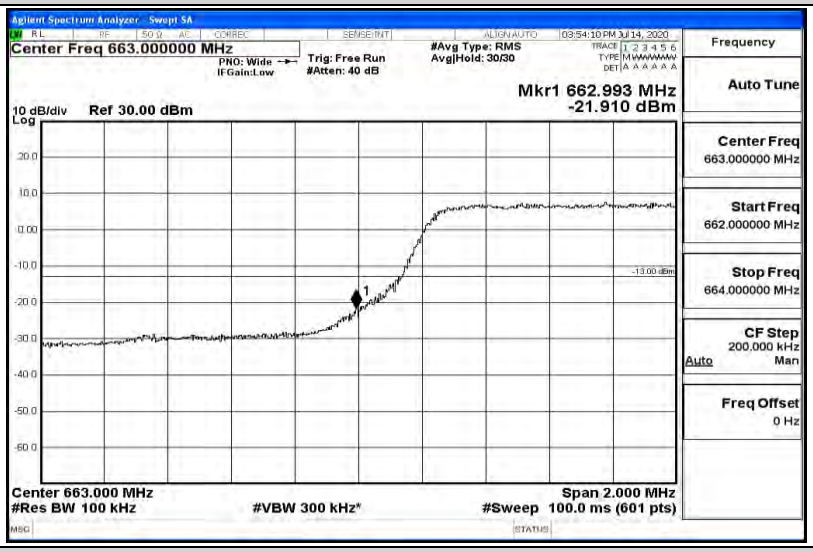
Band71-5MHz-QPSK-133147-25RB#0



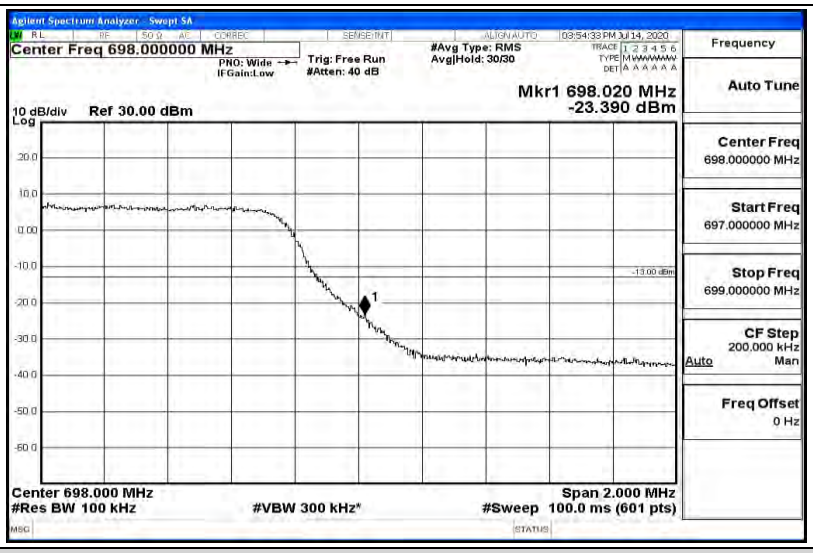
Band71-5MHz-QPSK-133447-25RB#0



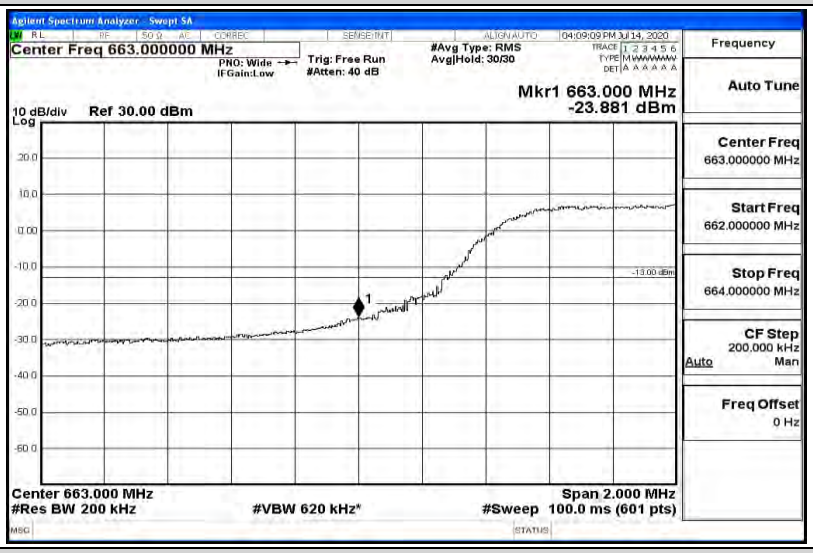
Band71-5MHz-16QAM-133147-25RB#0



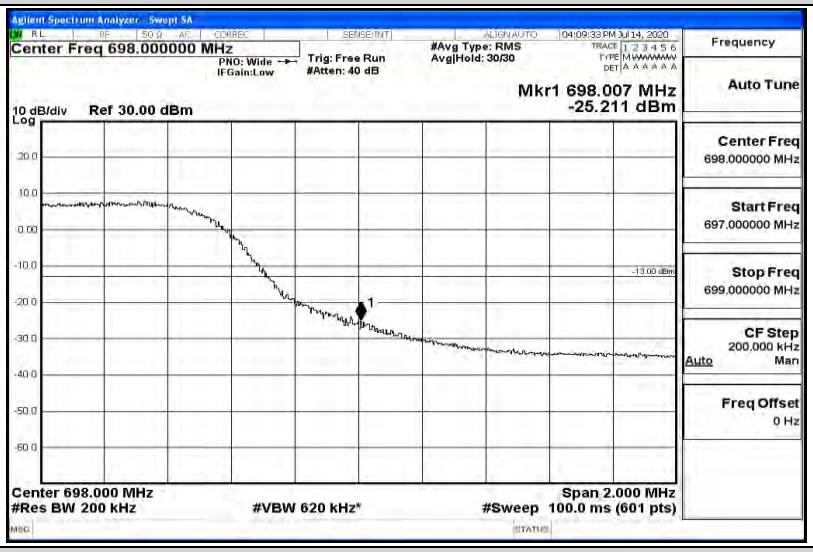
Band71-5MHz-16QAM-133447-25RB#0



Band71-10MHz-QPSK-133172-50RB#0



Band71-10MHz-QPSK-133422-50RB#0



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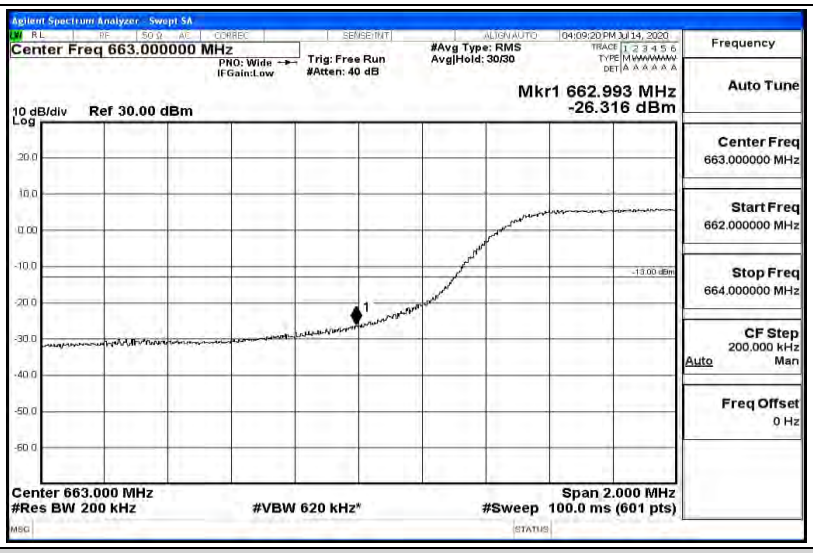
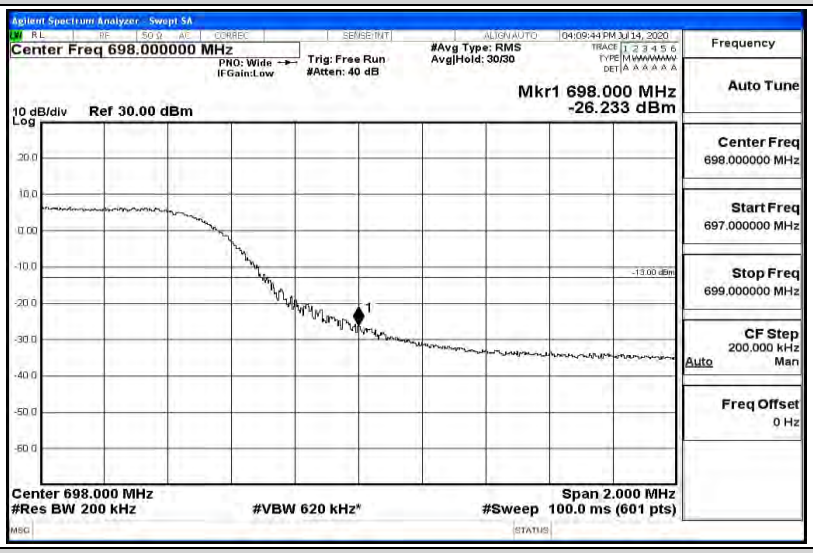
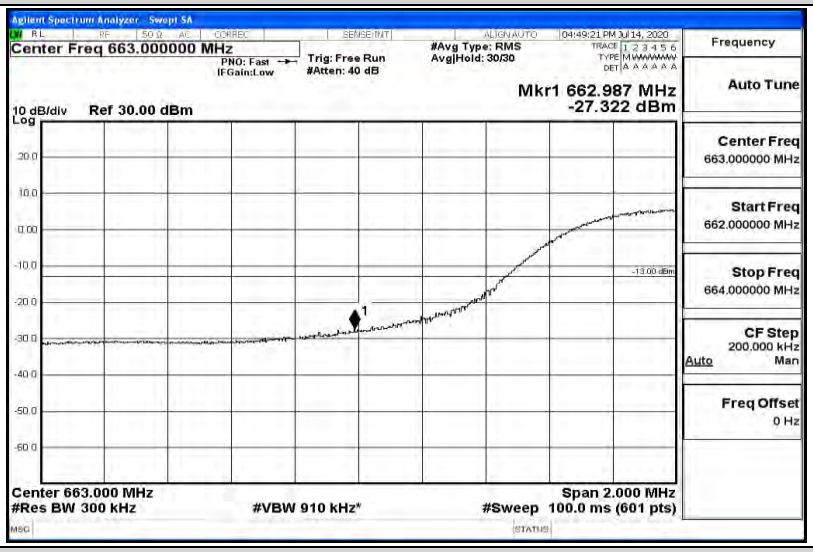


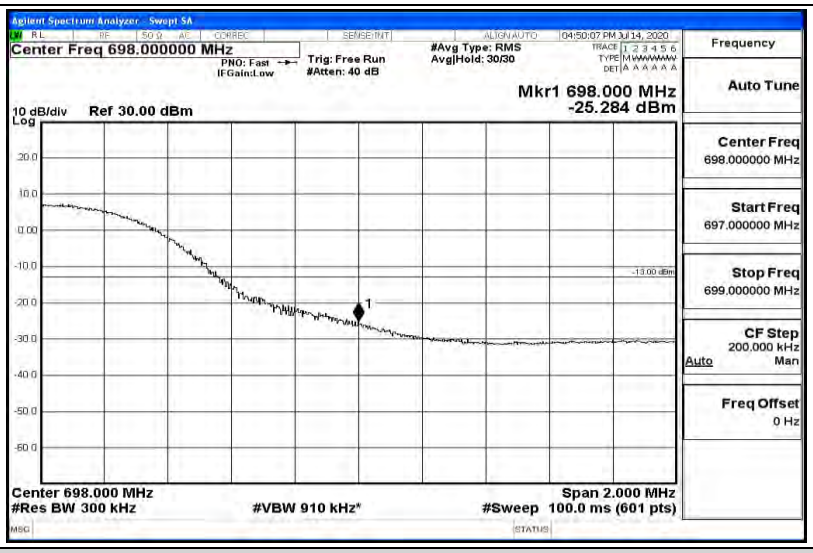
Band71-10MHz-16QAM-133422-50RB#0



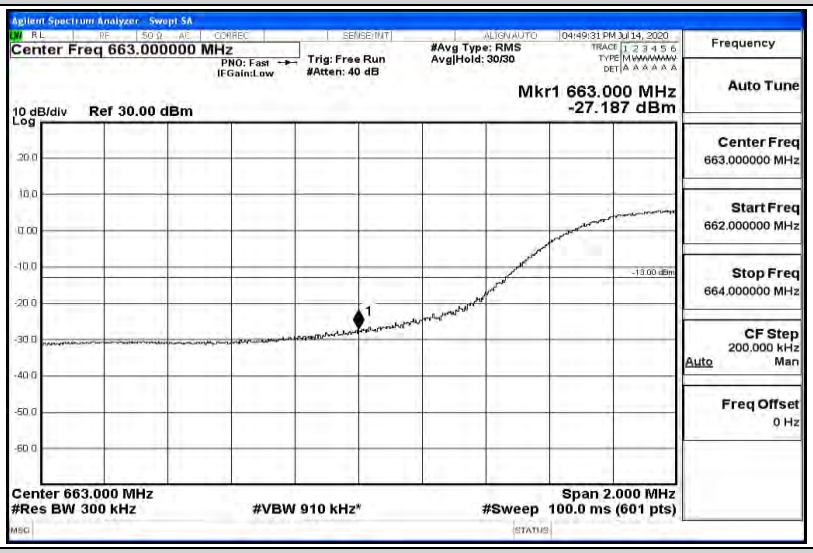
Band71-15MHz-QPSK-133197-75RB#0



Band71-15MHz-QPSK-133397-75RB#0



Band71-15MHz-16QAM-133197-75RB#0



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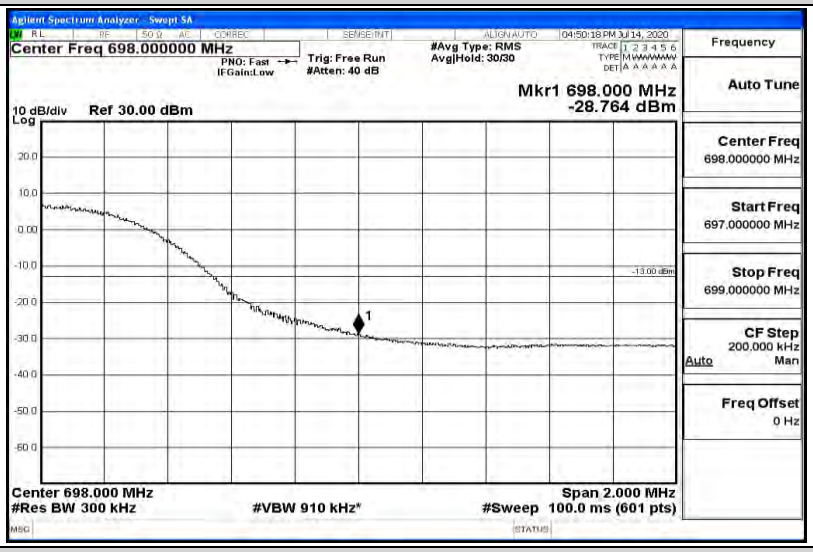
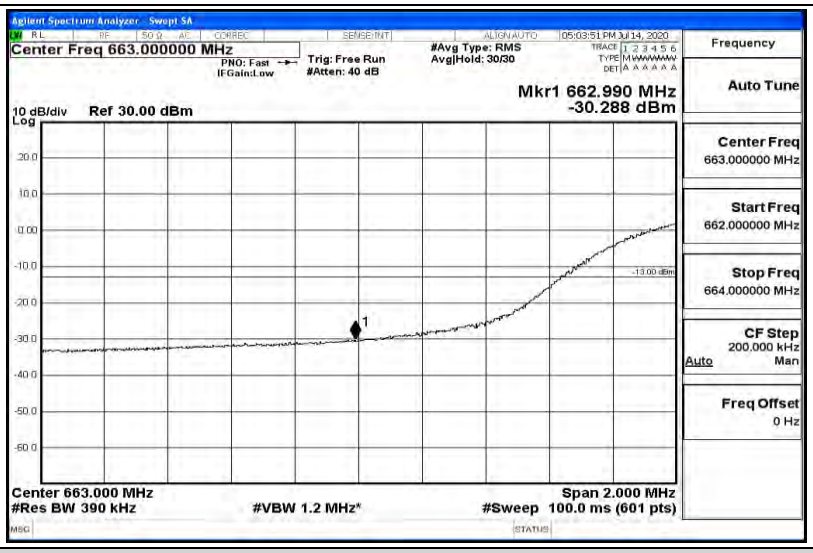
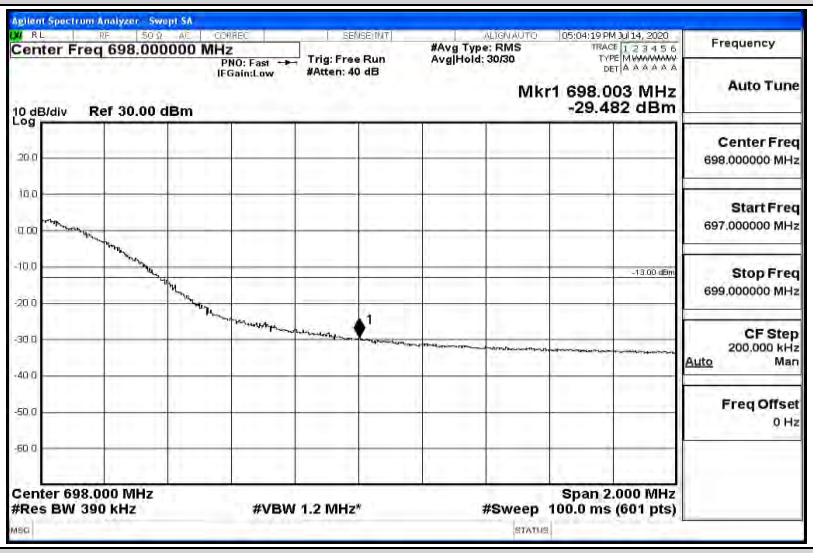


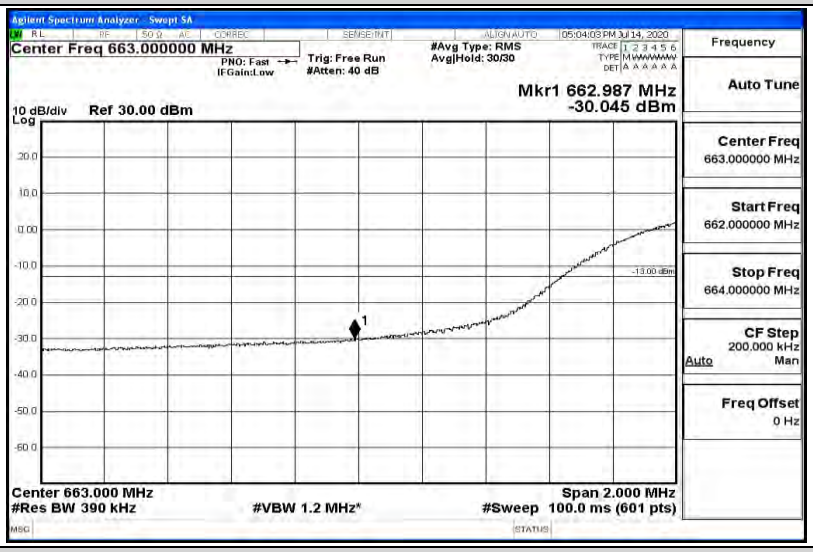
Band71-20MHz-QPSK-133222-100RB#0



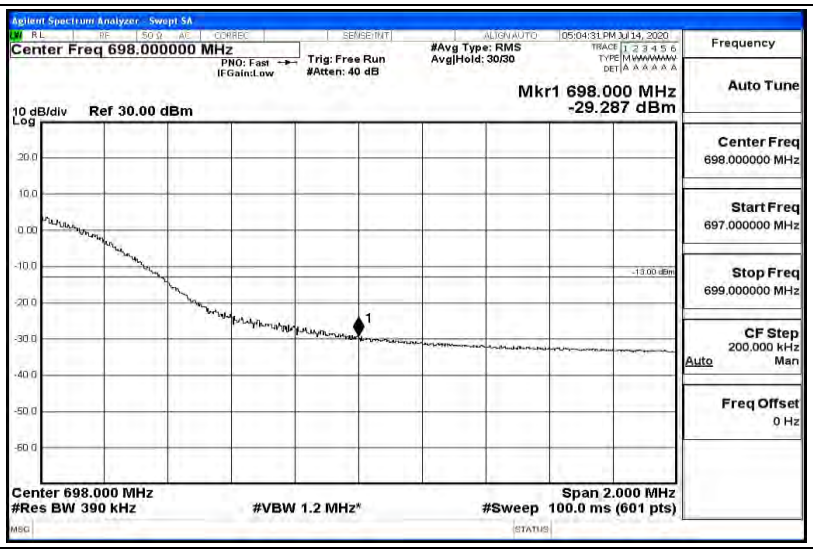
Band71-20MHz-QPSK-133372-100RB#0



Band71-20MHz-16QAM-133222-100RB#0



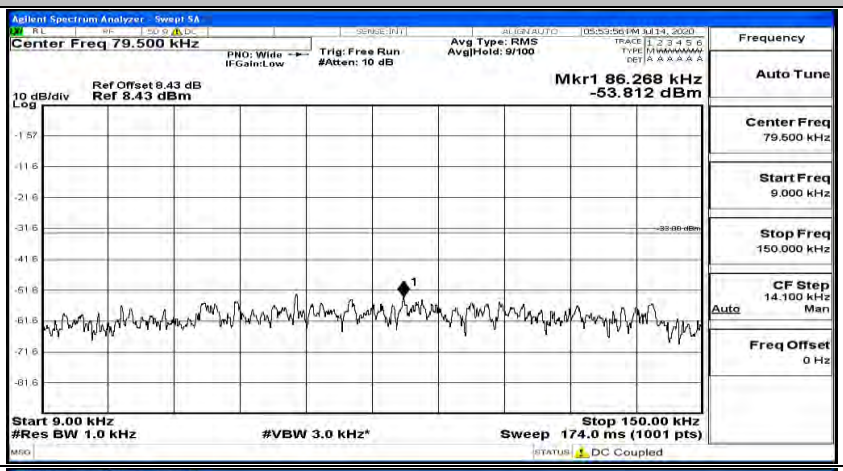
Band71-20MHz-16QAM-133372-100RB#0

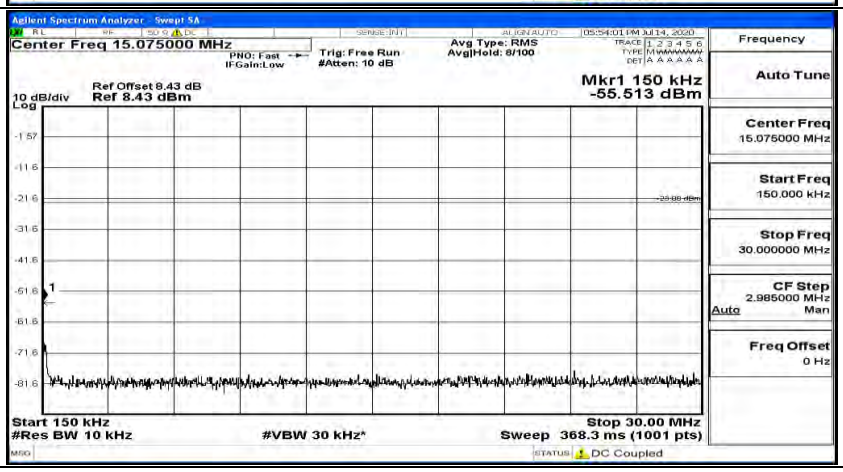


I.5 Conducted Spurious Emission

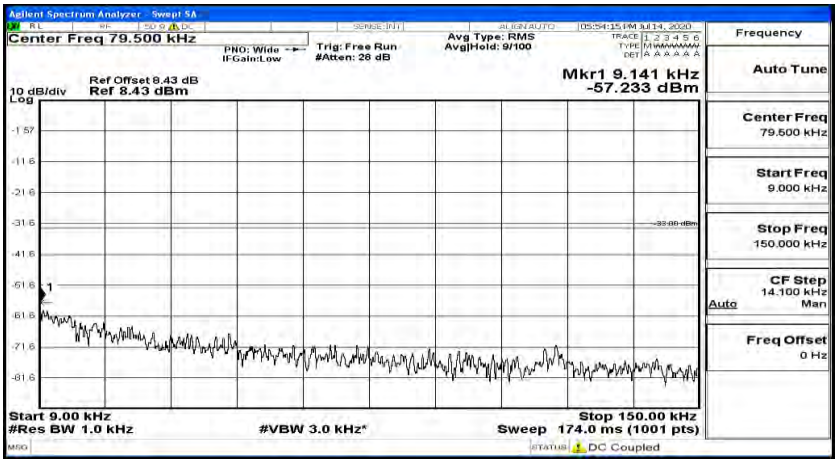
Channel Bandwidth: 5 MHz

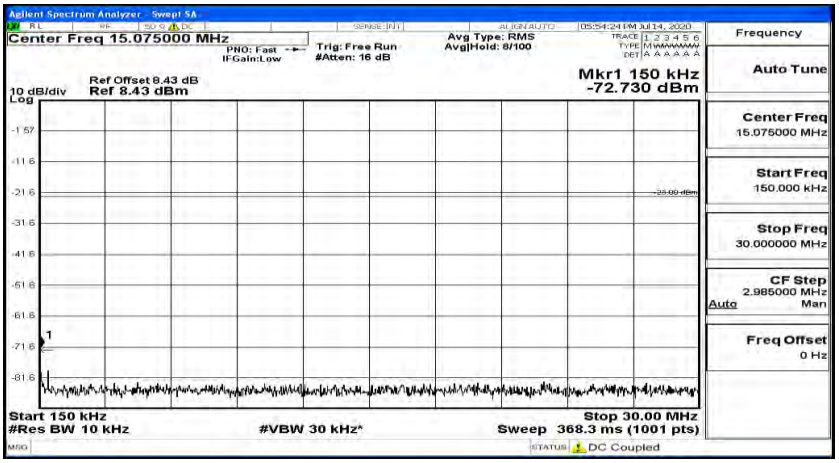
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



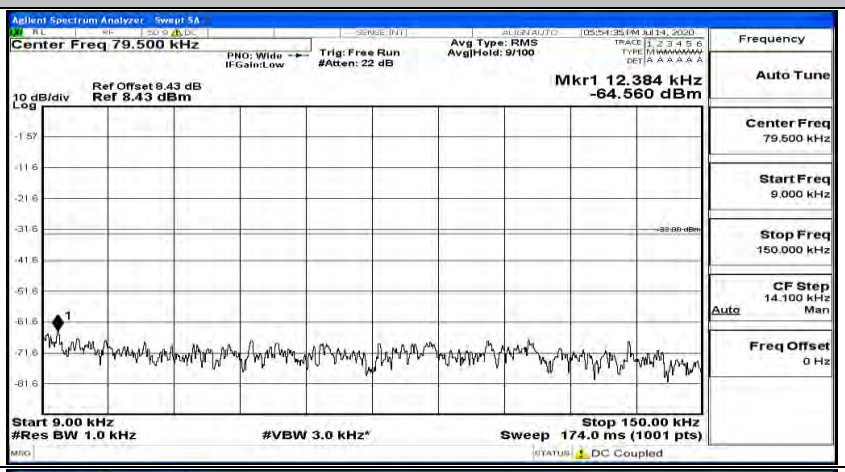


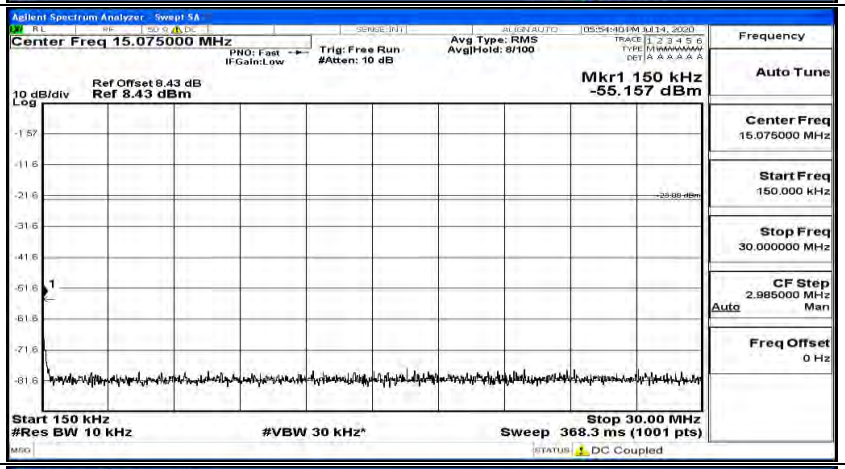
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#3



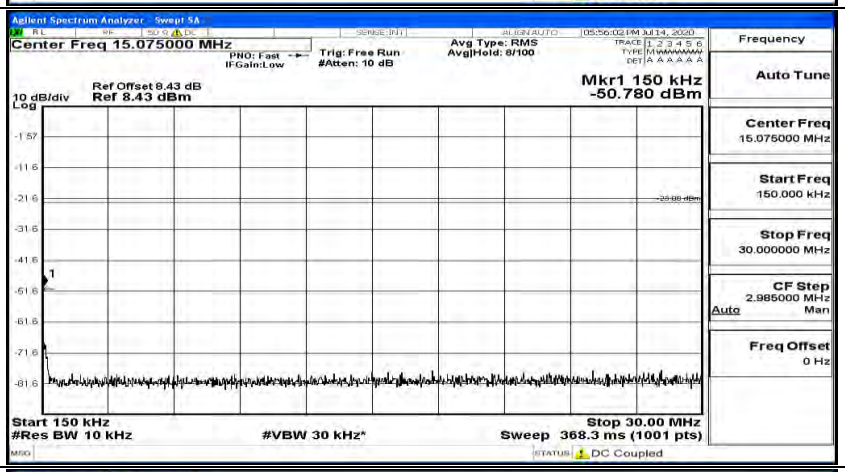


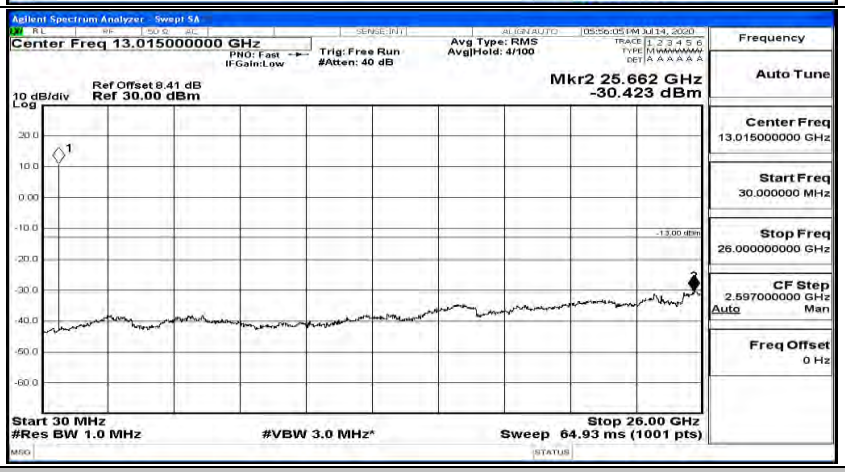
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#5



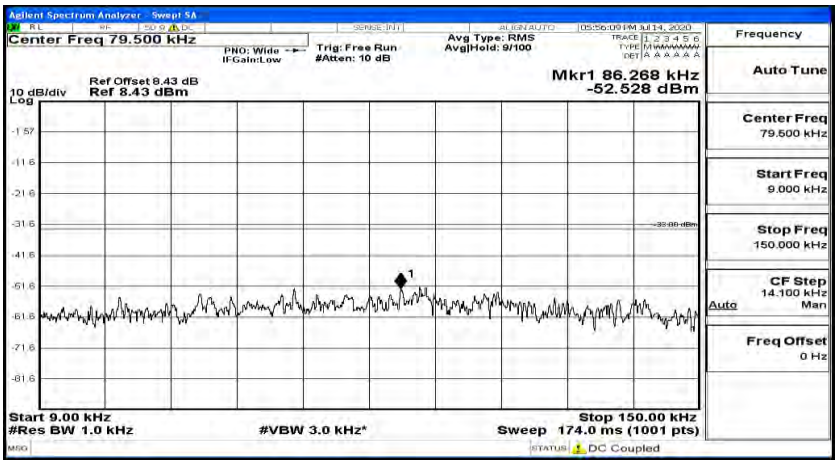


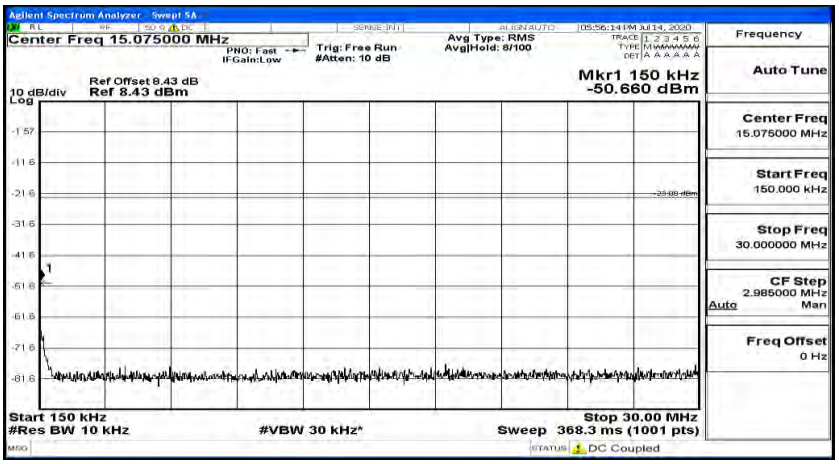
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



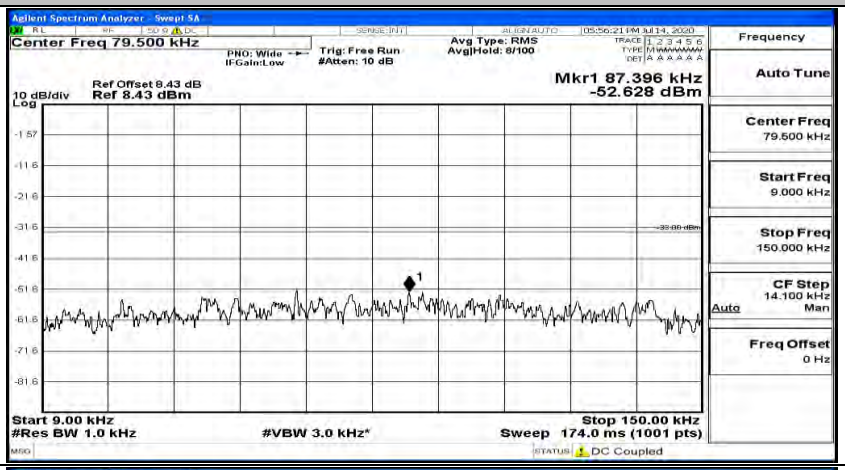


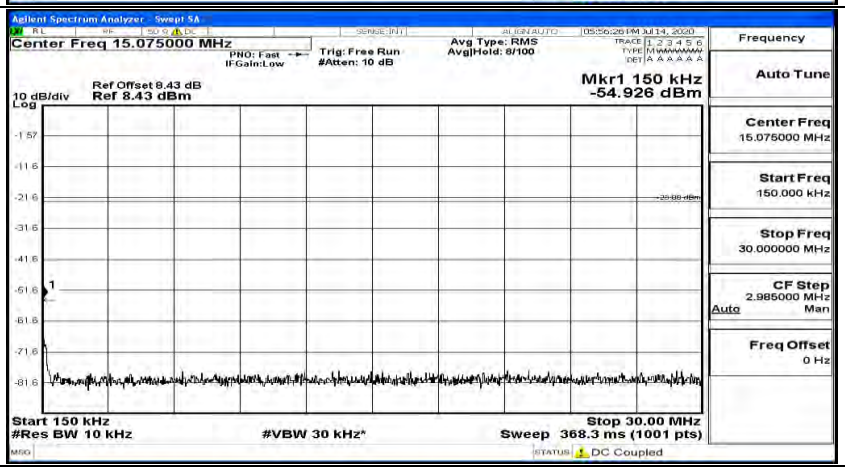
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#3

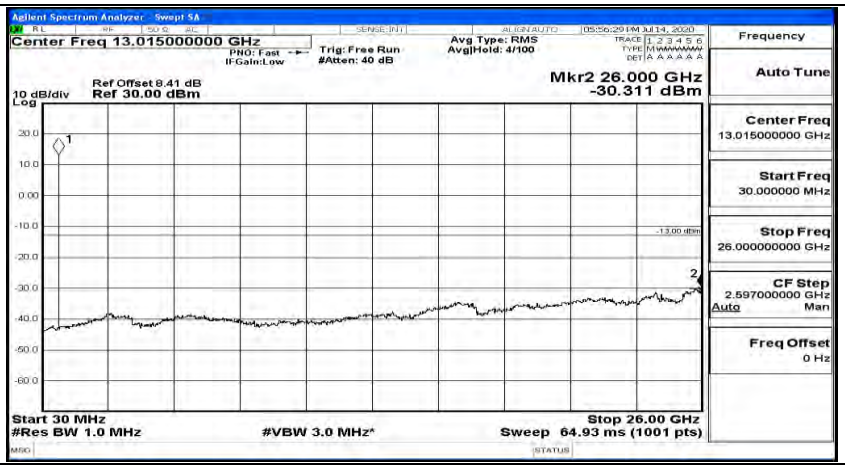




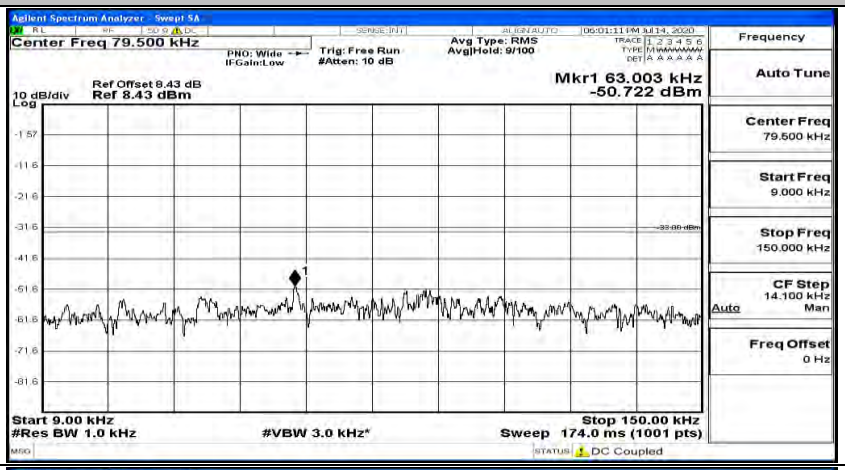
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#5

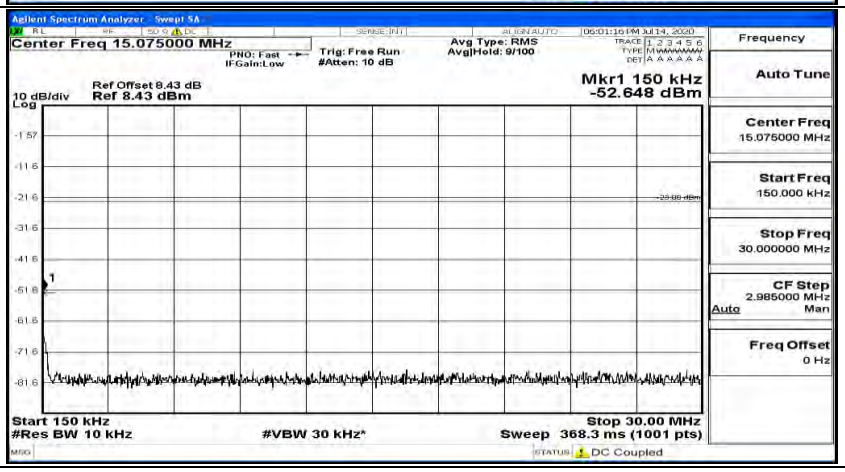




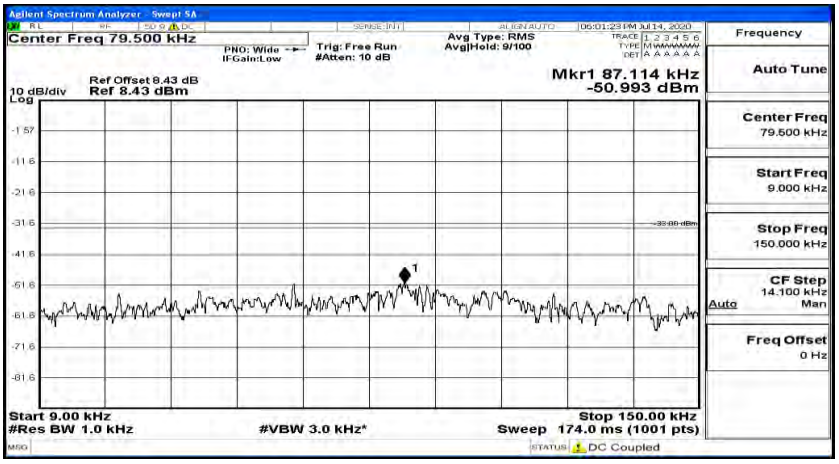


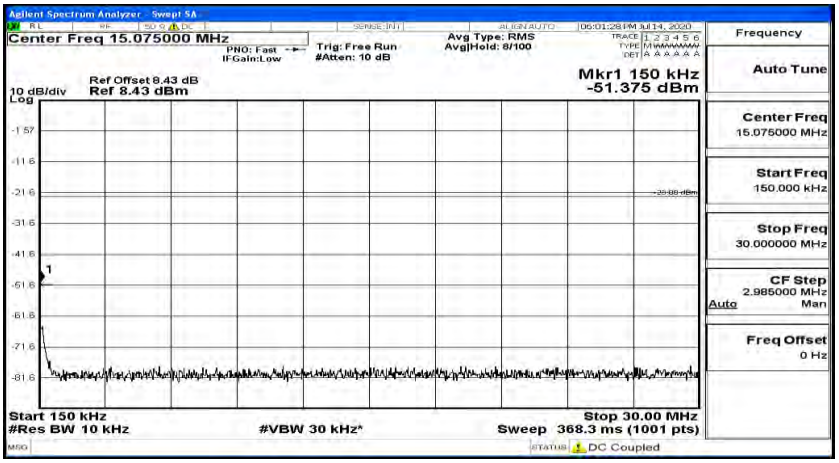
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



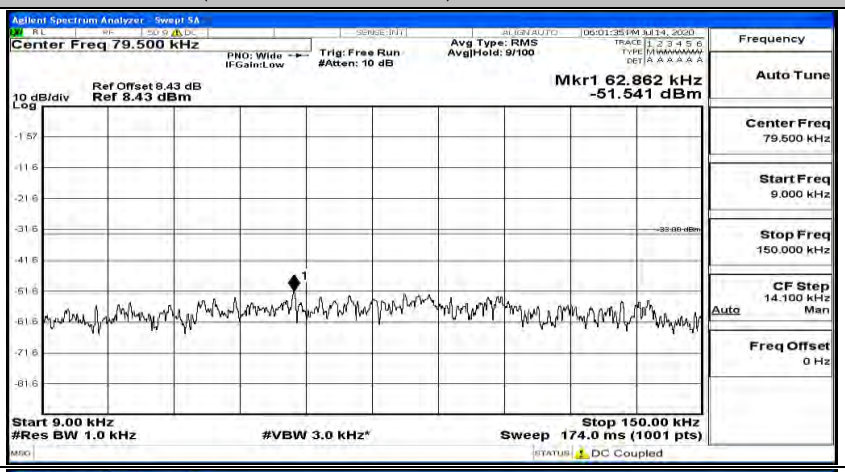


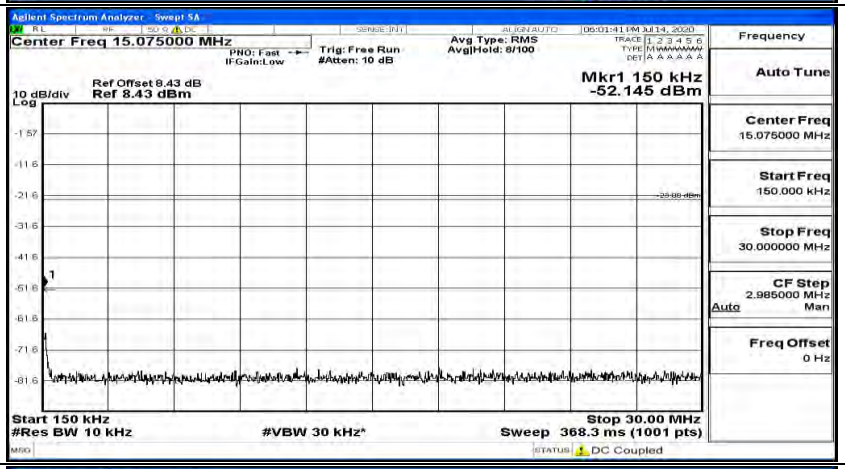
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#3



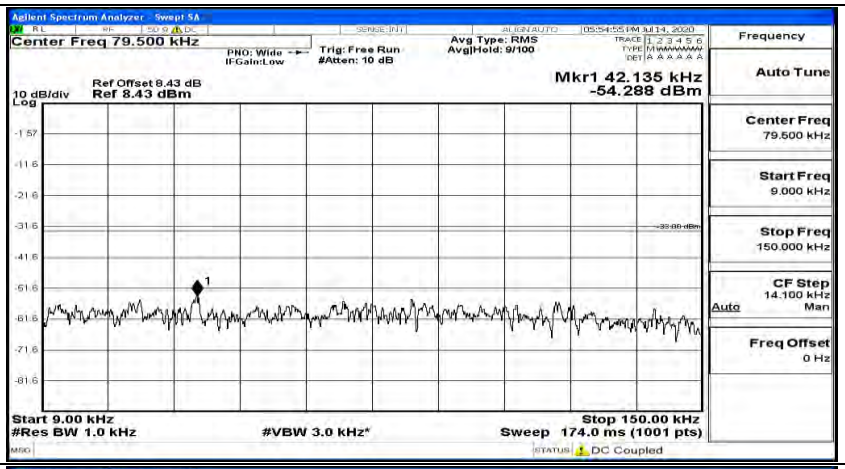


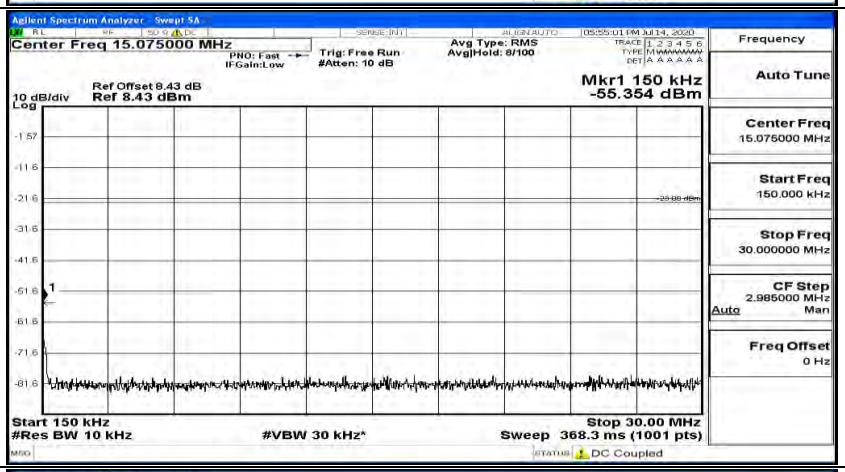
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#5



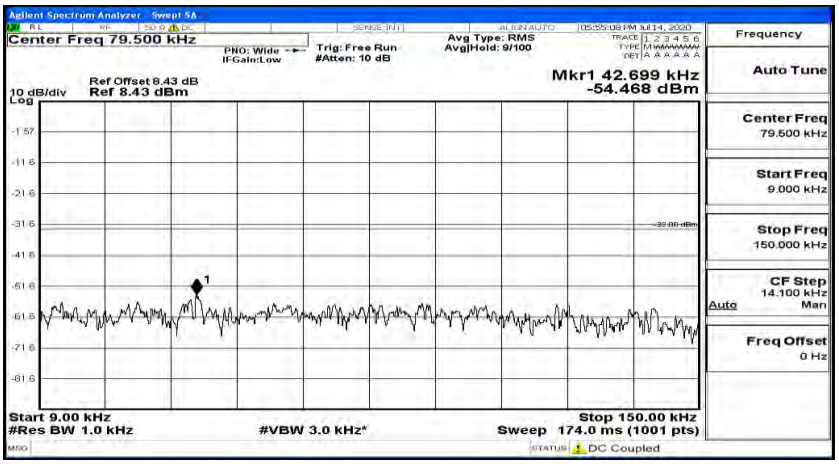


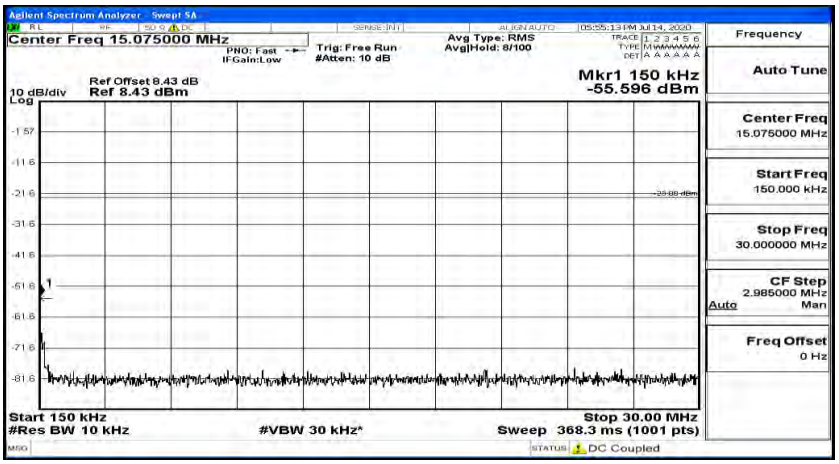
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



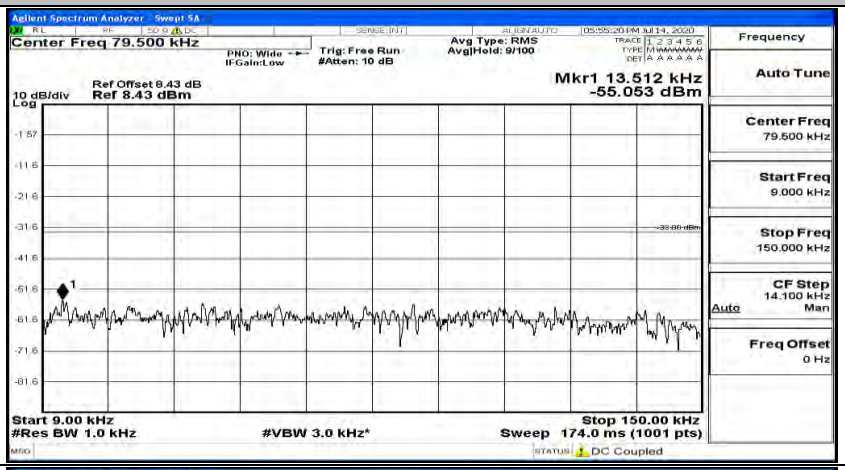


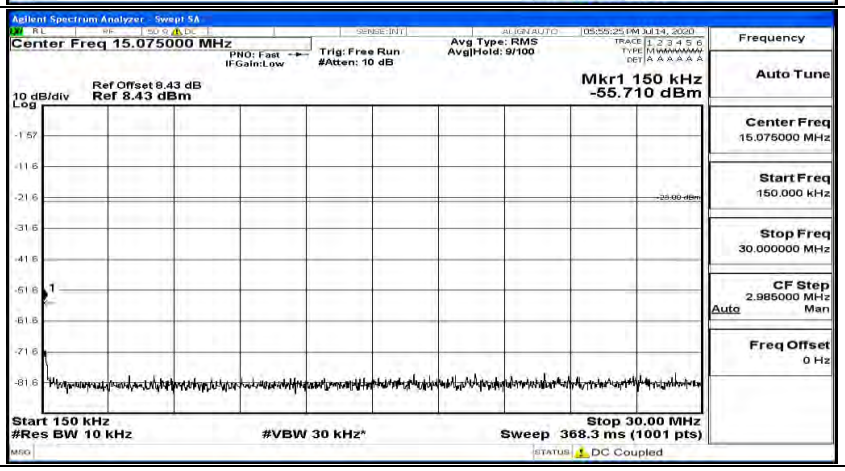
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#3

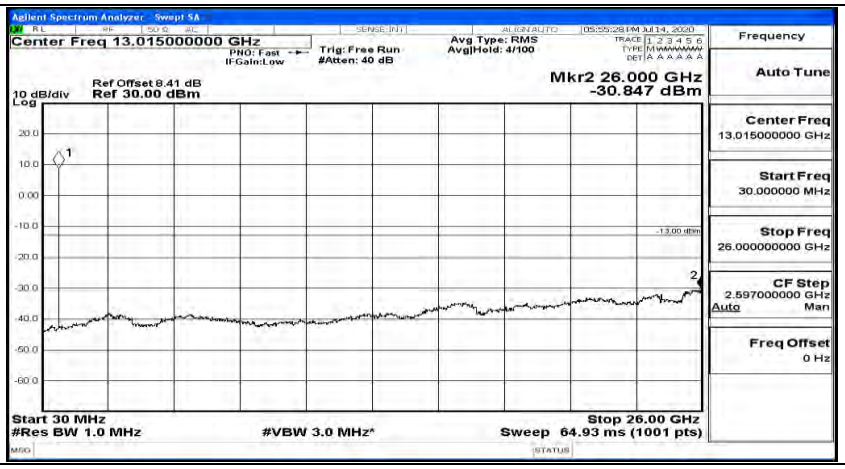




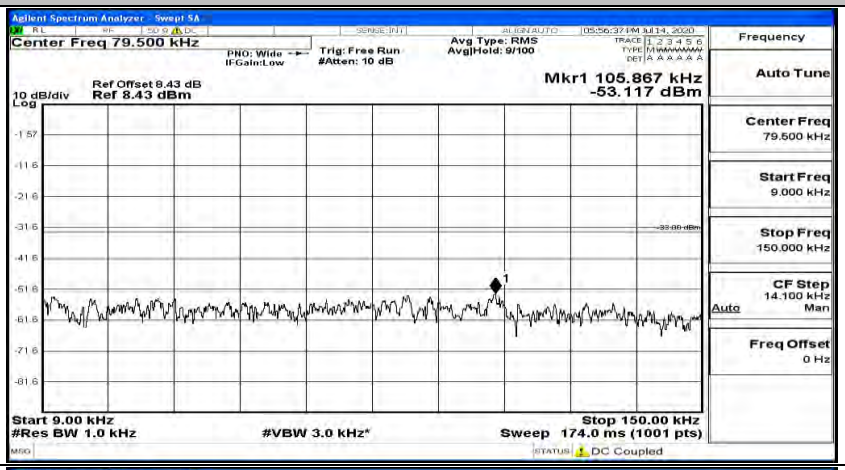
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#5

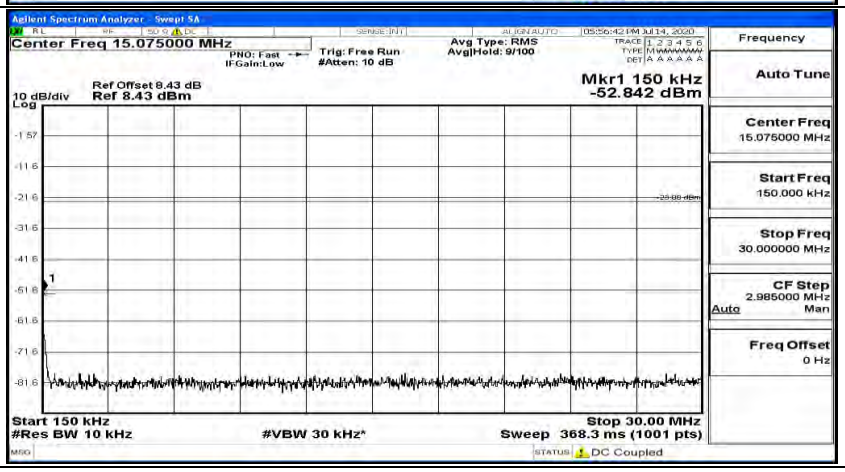




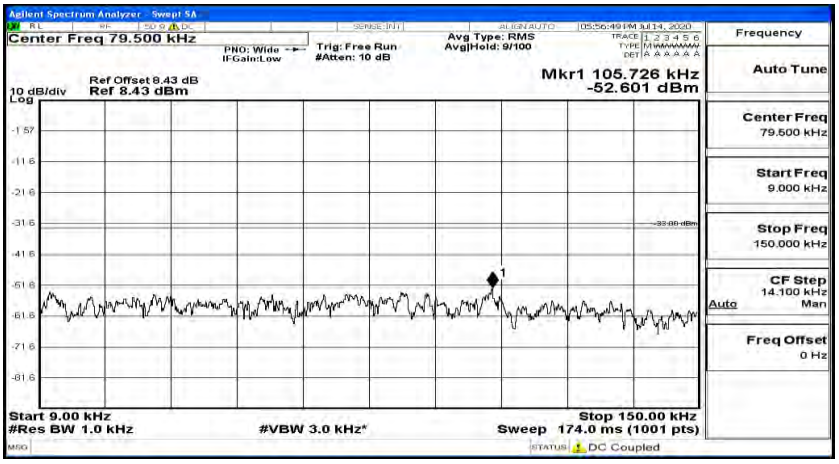


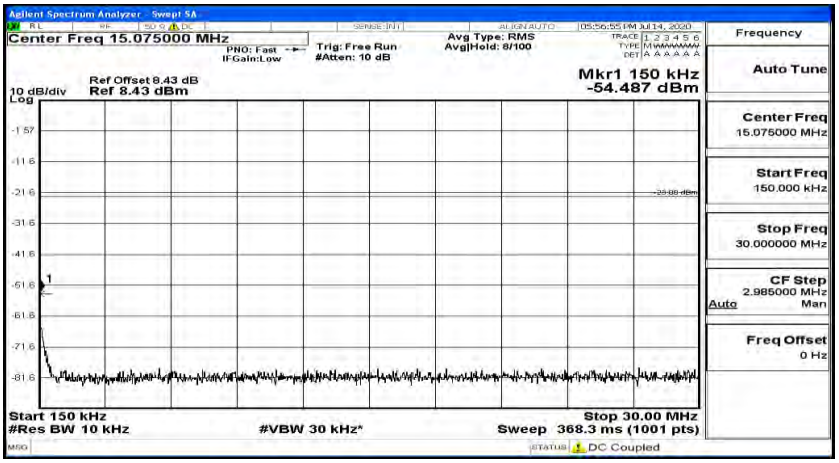
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



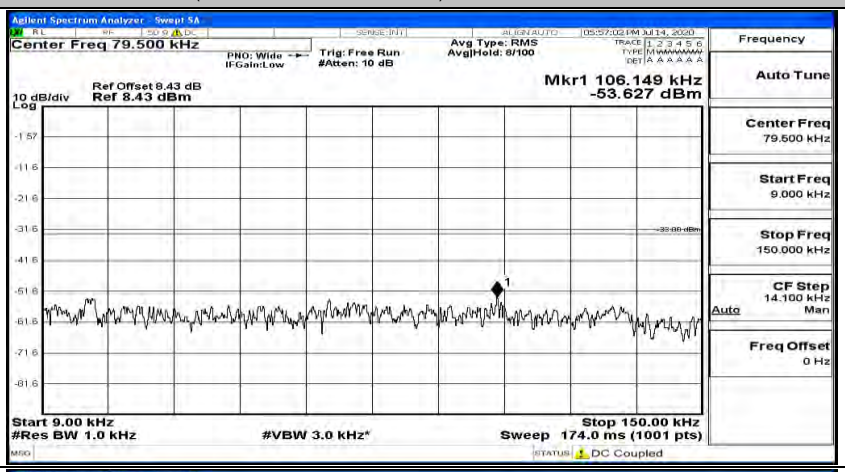


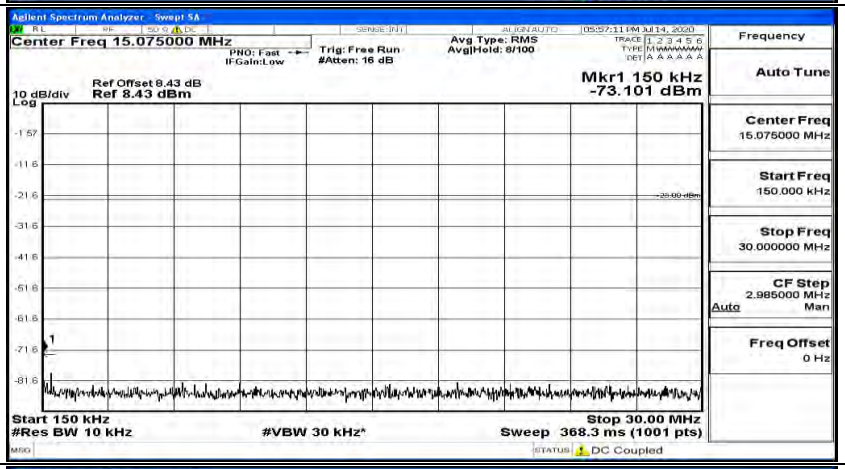
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#3

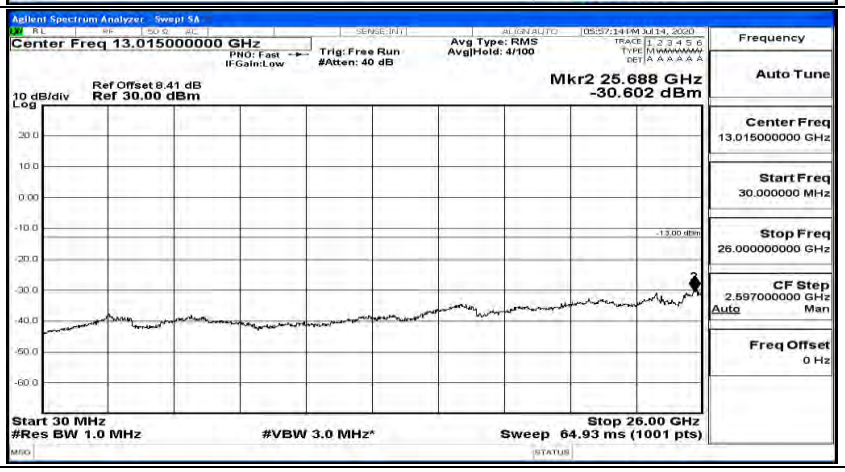




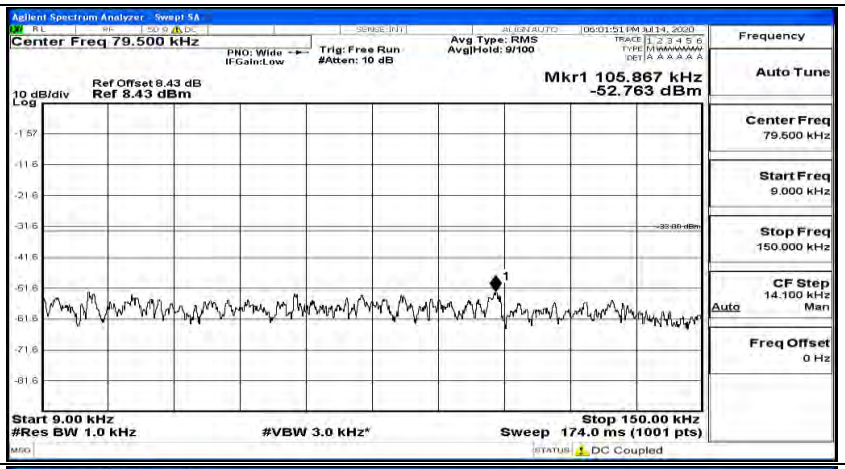
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#5

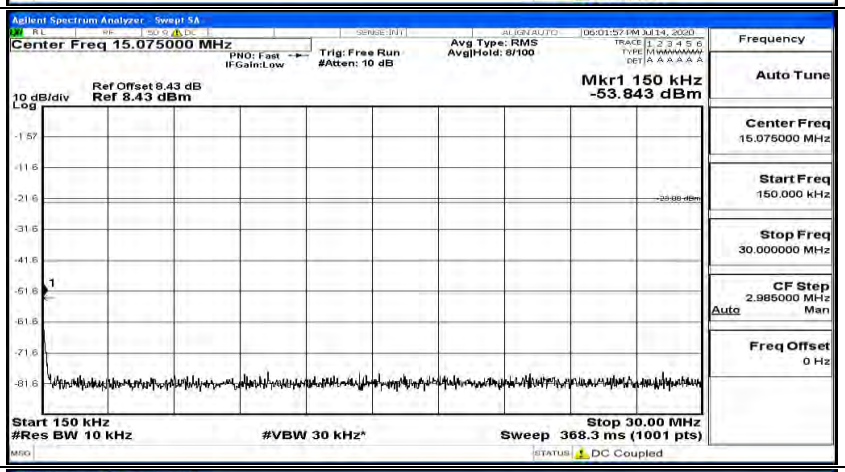


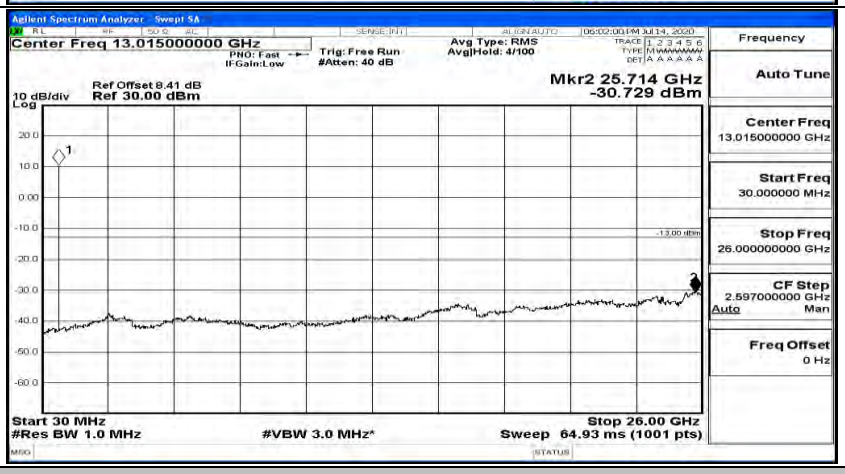




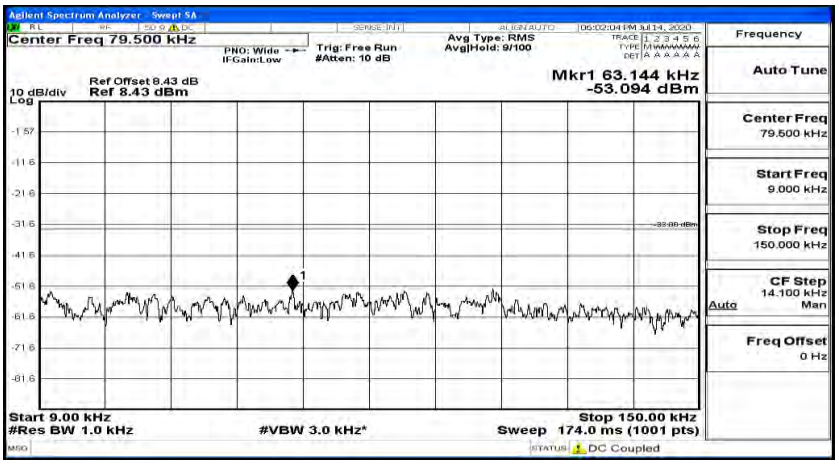
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

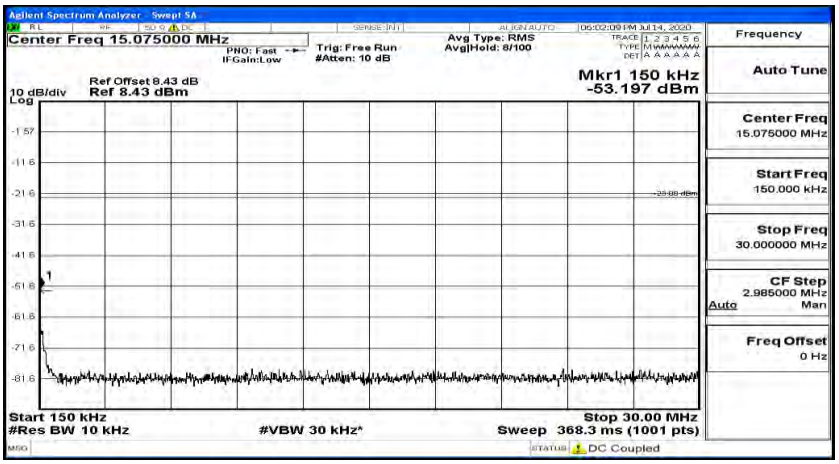


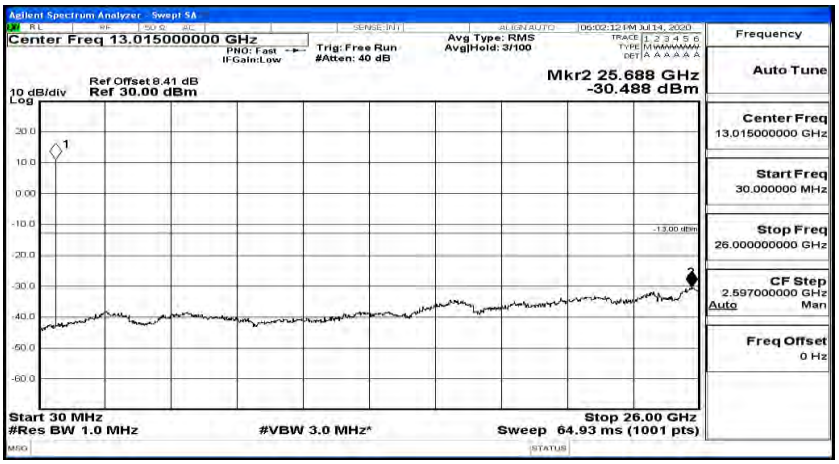




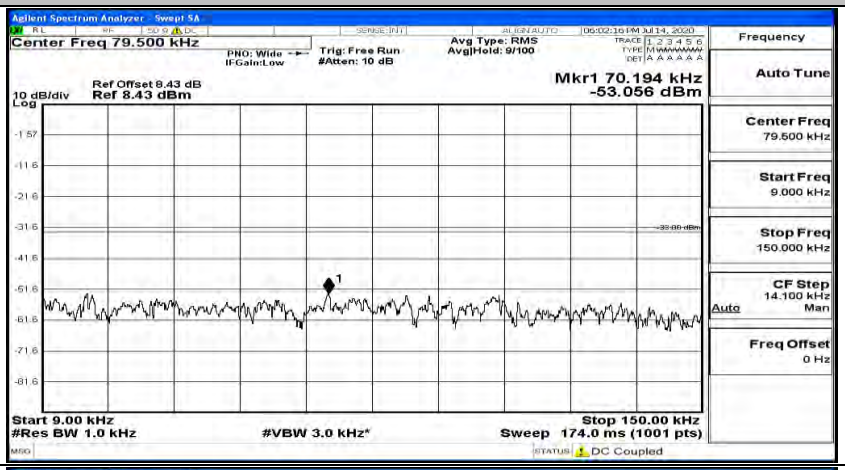
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#3

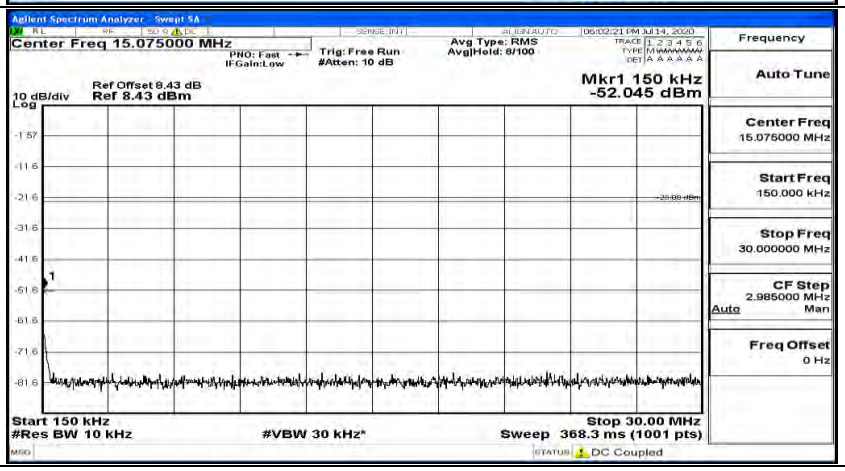






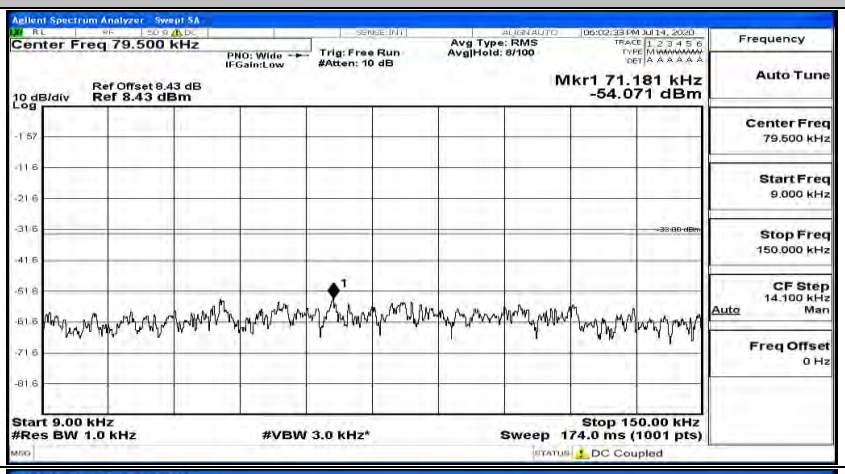
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#5

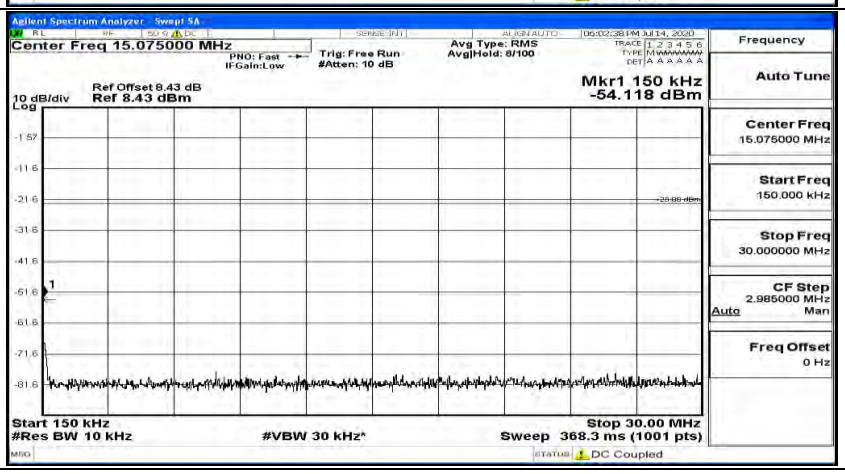




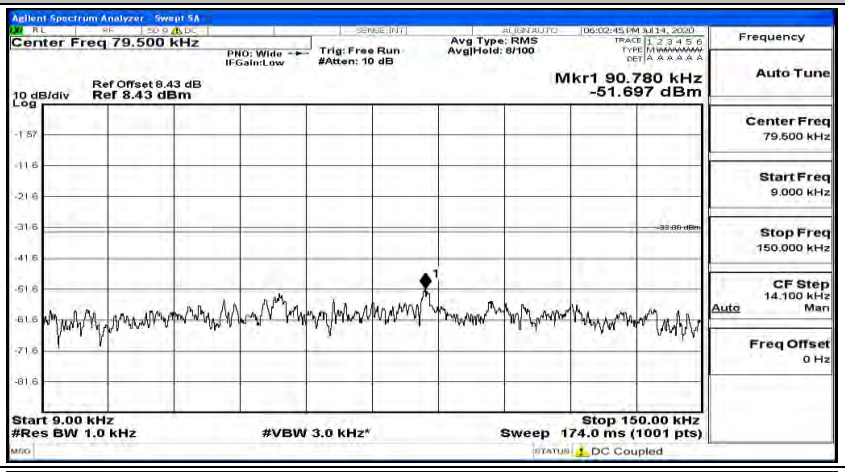
Channel Bandwidth: 10 MHz

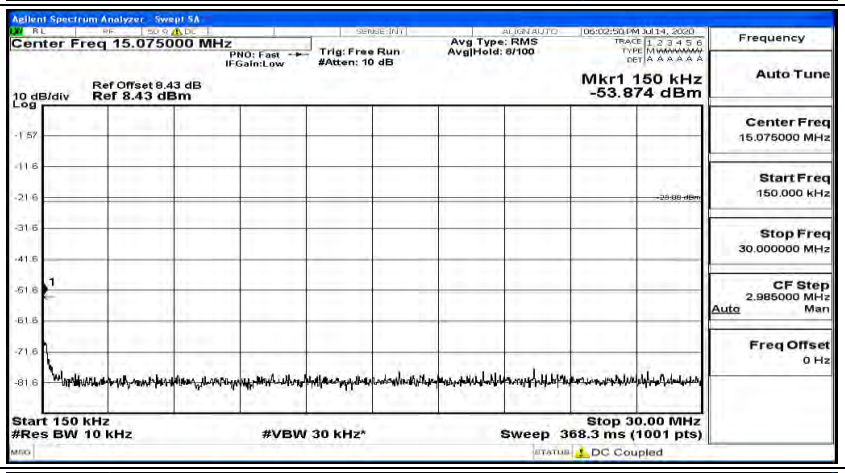
(Channel Bandwidth: 10 MHz)_LCH_QPSK_1RB#0



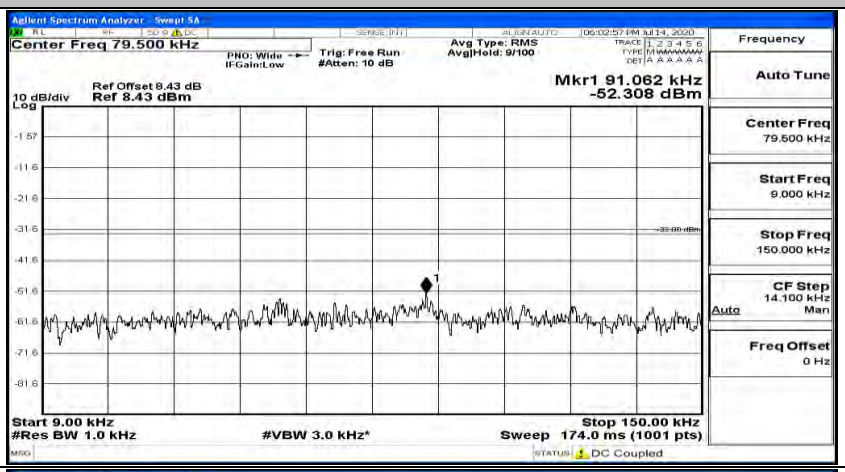


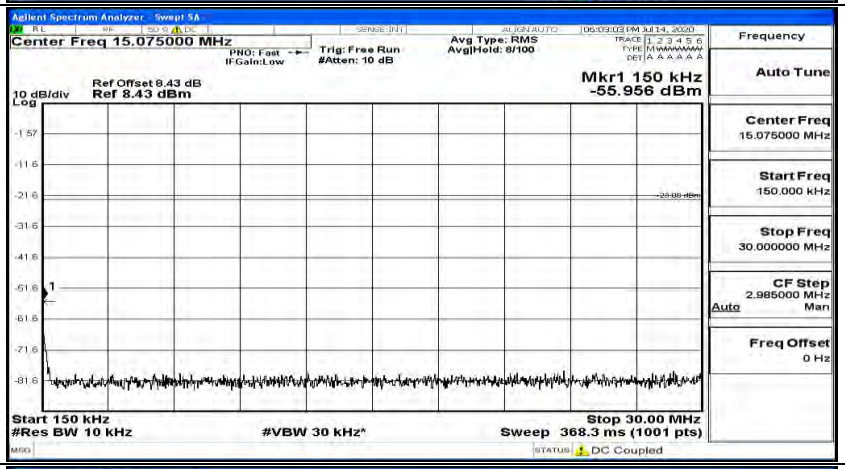
(Channel Bandwidth: 10 MHz)_LCH_QPSK_1RB#7



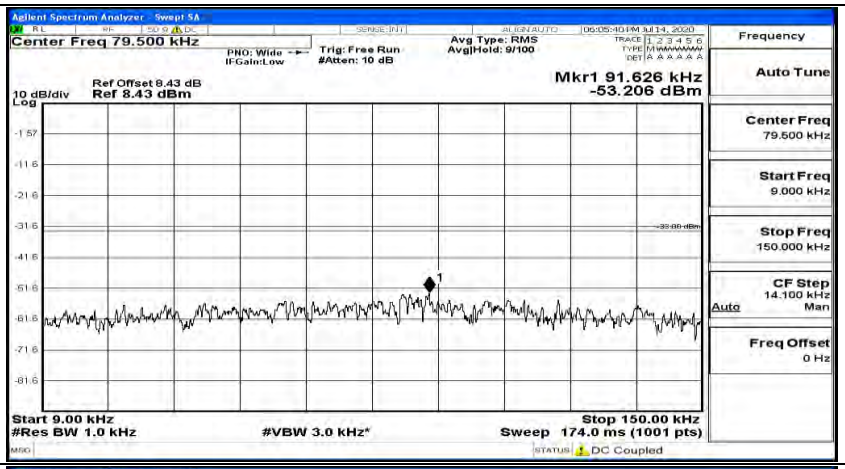


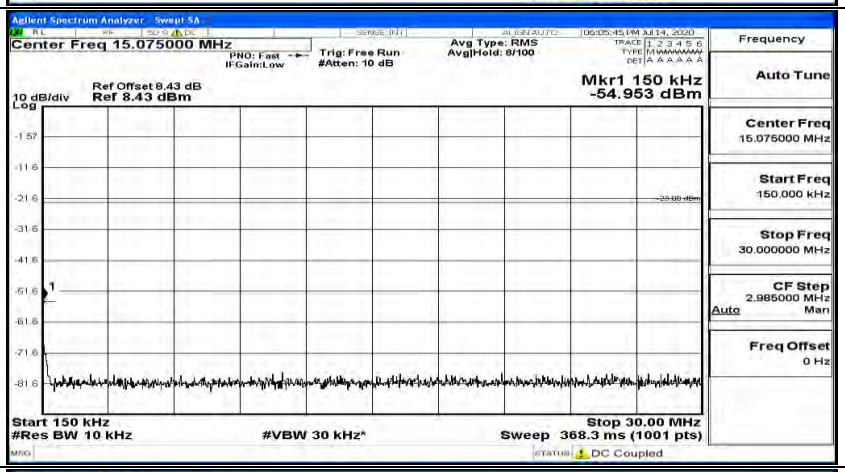
(Channel Bandwidth: 10 MHz)_LCH_QPSK_1RB#14

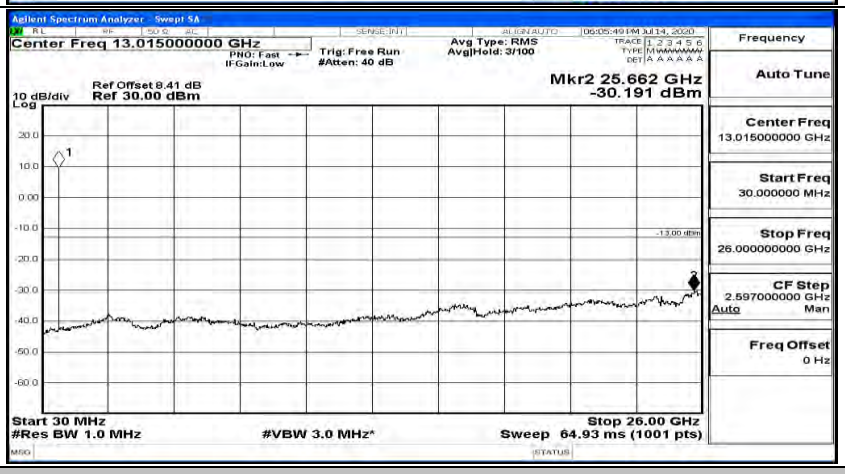
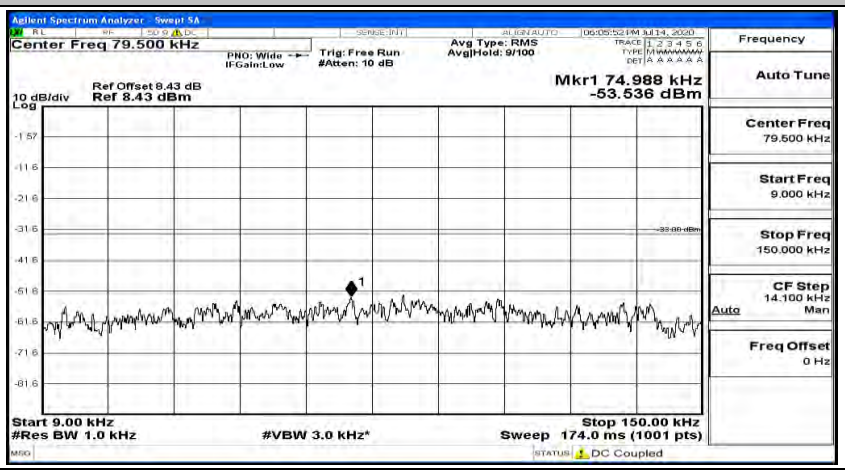




(Channel Bandwidth: 10 MHz)_MCH_QPSK_1RB#0







(Channel Bandwidth: 10 MHz)_MCH_QPSK_1RB#7