Appendix for Band 12

Appendix A: Average Power Output Data

Test Result

Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.08	PASS
		1	3	23.22	PASS
		1	5	23.11	PASS
		3	0	22.11	PASS
		3	2	22.14	PASS
		3	3	22.15	PASS
		6	0	22.14	PASS
	MCH	1	0	23.30	PASS
		1	3	23.43	PASS
		1	5	23.31	PASS
		3	0	22.35	PASS
		3	2	22.34	PASS
		3	3	22.35	PASS
		6	0	22.34	PASS
	HCH	1	0	23.24	PASS
		1	3	23.37	PASS
		1	5	23.18	PASS
		3	0	22.26	PASS
		3	2	22.26	PASS
		3	3	22.23	PASS
		6	0	22.27	PASS
16QAM	LCH	1	0	22.27	PASS
		1	3	22.48	PASS
		1	5	22.34	PASS
		3	0	22.22	PASS
		3	2	22.21	PASS
		3	3	22.23	PASS
		6	0	21.11	PASS
	MCH	1	0	22.61	PASS
		1	3	22.83	PASS
		1	5	22.60	PASS
		3	0	22.43	PASS

		3	2	22.42	PASS
		3	3	22.45	PASS
		6	0	21.49	PASS
	HCH	1	0	22.65	PASS
		1	3	22.73	PASS
		1	5	22.60	PASS
		3	0	22.26	PASS
		3	2	22.30	PASS
		3	3	22.30	PASS
		6	0	21.28	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.00	PASS
		1	7	23.21	PASS
		1	14	23.15	PASS
		8	0	22.15	PASS
		8	4	22.18	PASS
		8	7	22.22	PASS
		15	0	22.15	PASS
	MCH	1	0	23.25	PASS
		1	7	23.40	PASS
		1	14	23.24	PASS
		8	0	22.31	PASS
		8	4	22.32	PASS
		8	7	22.31	PASS
		15	0	22.29	PASS
	HCH	1	0	23.22	PASS
		1	7	23.39	PASS
		1	14	23.20	PASS
		8	0	22.30	PASS
		8	4	22.30	PASS
		8	7	22.29	PASS
		15	0	22.28	PASS
16QAM	LCH	1	0	22.28	PASS
		1	7	22.49	PASS
		1	14	22.43	PASS
		8	0	21.18	PASS
		8	4	21.24	PASS
		8	7	21.26	PASS
		15	0	21.07	PASS

	MCH	1	0	22.66	PASS
		1	7	22.86	PASS
		1	14	22.66	PASS
		8	0	21.35	PASS
		8	4	21.32	PASS
		8	7	21.31	PASS
		15	0	21.29	PASS
	HCH	1	0	22.49	PASS
		1	7	22.66	PASS
		1	14	22.48	PASS
		8	0	21.28	PASS
		8	4	21.30	PASS
		8	7	21.29	PASS
		15	0	21.31	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.18	PASS
		1	12	23.41	PASS
		1	24	23.33	PASS
		12	0	22.24	PASS
		12	6	22.28	PASS
		12	13	22.31	PASS
		25	0	22.18	PASS
	MCH	1	0	23.38	PASS
		1	12	23.50	PASS
		1	24	23.30	PASS
		12	0	22.37	PASS
		12	6	22.40	PASS
		12	13	22.35	PASS
		25	0	22.38	PASS
	HCH	1	0	23.38	PASS
		1	12	23.48	PASS
		1	24	23.30	PASS
		12	0	22.35	PASS
		12	6	22.36	PASS
		12	13	22.38	PASS
		25	0	22.34	PASS
16QAM	LCH	1	0	22.40	PASS
		1	12	22.65	PASS
		1	24	22.62	PASS

		12	0	21.24	PASS
		12	6	21.30	PASS
		12	13	21.41	PASS
		25	0	21.19	PASS
	MCH	1	0	22.71	PASS
		1	12	22.82	PASS
		1	24	22.59	PASS
		12	0	21.50	PASS
		12	6	21.50	PASS
		12	13	21.45	PASS
		25	0	21.39	PASS
	HCH	1	0	22.55	PASS
		1	12	22.70	PASS
		1	24	22.51	PASS
		12	0	21.34	PASS
		12	6	21.36	PASS
		12	13	21.38	PASS
		25	0	21.37	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.57	PASS
		1	24	23.29	PASS
		1	49	23.26	PASS
		25	0	22.69	PASS
		25	12	22.29	PASS
		25	25	22.36	PASS
		50	0	22.21	PASS
	MCH	1	0	23.26	PASS
		1	24	23.32	PASS
		1	49	23.24	PASS
		25	0	22.31	PASS
		25	12	22.51	PASS
		25	25	22.33	PASS
		50	0	22.37	PASS
	HCH	1	0	23.36	PASS
		1	24	23.32	PASS
		1	49	23.29	PASS
		25	0	22.31	PASS
		25	12	22.34	PASS
		25	25	22.33	PASS

		50	0	22.33	PASS
16QAM	LCH	1	0	22.37	PASS
		1	24	22.66	PASS
		1	49	22.59	PASS
		25	0	21.23	PASS
		25	12	21.32	PASS
		25	25	21.39	PASS
		50	0	21.22	PASS
	MCH	1	0	22.70	PASS
		1	24	22.78	PASS
		1	49	22.63	PASS
		25	0	21.38	PASS
		25	12	21.37	PASS
		25	25	21.33	PASS
		50	0	21.42	PASS
	HCH	1	0	22.65	PASS
		1	24	22.59	PASS
		1	49	22.58	PASS
		25	0	21.34	PASS
		25	12	21.30	PASS
		25	25	21.34	PASS
		50	0	21.36	PASS

Appendix B: Peak-to-Average Ratio

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.4	<13	PASS
		1	3	4.32	<13	PASS
		1	5	4.28	<13	PASS
		3	0	4.61	<13	PASS
		3	2	4.56	<13	PASS
		3	3	4.56	<13	PASS
		6	0	5.22	<13	PASS
	MCH	1	0	5.18	<13	PASS
		1	3	5.48	<13	PASS
		1	5	5.3	<13	PASS
		3	0	6.03	<13	PASS
		3	2	5.95	<13	PASS
		3	3	5.86	<13	PASS
		6	0	6.06	<13	PASS
	HCH	1	0	4.63	<13	PASS
		1	3	4.55	<13	PASS
		1	5	4.52	<13	PASS
		3	0	5.19	<13	PASS
		3	2	5.18	<13	PASS
		3	3	5.11	<13	PASS
		6	0	5.75	<13	PASS
16QAM	LCH	1	0	5.42	<13	PASS
		1	3	5.46	<13	PASS
		1	5	5.37	<13	PASS
		3	0	5.53	<13	PASS
		3	2	5.48	<13	PASS
		3	3	5.59	<13	PASS
		6	0	6.2	<13	PASS
	MCH	1	0	6.33	<13	PASS
		1	3	6.1	<13	PASS
		1	5	6.19	<13	PASS
		3	0	6.65	<13	PASS

		3	2	6.51	<13	PASS
		3	3	6.51	<13	PASS
		6	0	6.81	<13	PASS
	HCH	1	0	5.57	<13	PASS
		1	3	5.63	<13	PASS
		1	5	5.87	<13	PASS
		3	0	6.13	<13	PASS
		3	2	6.16	<13	PASS
		3	3	6.14	<13	PASS
		6	0	6.68	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	4.37	<13	PASS
		1	7	4.32	<13	PASS
		1	14	4.53	<13	PASS
		8	0	5.22	<13	PASS
		8	4	5.25	<13	PASS
		8	7	5.34	<13	PASS
		15	0	5.32	<13	PASS
	MCH	1	0	5.21	<13	PASS
		1	7	4.9	<13	PASS
		1	14	4.86	<13	PASS
		8	0	6.25	<13	PASS
		8	4	6.1	<13	PASS
		8	7	5.87	<13	PASS
		15	0	6.16	<13	PASS
	HCH	1	0	4.45	<13	PASS
		1	7	4.66	<13	PASS
		1	14	4.57	<13	PASS
		8	0	5.65	<13	PASS
		8	4	5.9	<13	PASS
		8	7	5.86	<13	PASS
		15	0	5.76	<13	PASS
16QAM	LCH	1	0	5.29	<13	PASS
		1	7	5.17	<13	PASS
		1	14	5.54	<13	PASS
		8	0	5.85	<13	PASS
		8	4	5.95	<13	PASS

		8	7	6.1	<13	PASS
		15	0	6.2	<13	PASS
	MCH	1	0	6.08	<13	PASS
		1	7	6.02	<13	PASS
		1	14	6.07	<13	PASS
		8	0	6.75	<13	PASS
		8	4	6.77	<13	PASS
		8	7	6.7	<13	PASS
		15	0	6.97	<13	PASS
	HCH	1	0	5.44	<13	PASS
		1	7	5.45	<13	PASS
		1	14	5.58	<13	PASS
		8	0	6.6	<13	PASS
		8	4	6.8	<13	PASS
		8	7	6.82	<13	PASS
		15	0	6.54	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.43	<13	PASS
		1	12	4.54	<13	PASS
		1	24	5.08	<13	PASS
		12	0	5.24	<13	PASS
		12	6	5.52	<13	PASS
		12	13	5.85	<13	PASS
		25	0	5.59	<13	PASS
	MCH	1	0	5.16	<13	PASS
		1	12	5.17	<13	PASS
		1	24	4.77	<13	PASS
		12	0	6.32	<13	PASS
		12	6	6.02	<13	PASS
		12	13	5.81	<13	PASS
		25	0	6.03	<13	PASS
	HCH	1	0	4.33	<13	PASS
		1	12	4.34	<13	PASS
		1	24	4.56	<13	PASS
		12	0	5.31	<13	PASS
		12	6	5.56	<13	PASS
		12	13	5.9	<13	PASS

		25	0	5.72	<13	PASS
16QAM	LCH	1	0	5.28	<13	PASS
		1	12	5.33	<13	PASS
		1	24	5.67	<13	PASS
		12	0	6.06	<13	PASS
		12	6	6.27	<13	PASS
		12	13	6.65	<13	PASS
		25	0	6.24	<13	PASS
	MCH	1	0	5.93	<13	PASS
		1	12	6.31	<13	PASS
		1	24	5.9	<13	PASS
		12	0	7.05	<13	PASS
		12	6	6.75	<13	PASS
		12	13	6.57	<13	PASS
		25	0	6.72	<13	PASS
	HCH	1	0	5.31	<13	PASS
		1	12	5.62	<13	PASS
		1	24	5.43	<13	PASS
		12	0	6.19	<13	PASS
		12	6	6.3	<13	PASS
		12	13	6.53	<13	PASS
		25	0	6.37	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.24	<13	PASS
		1	24	4.95	<13	PASS
		1	49	5.07	<13	PASS
		25	0	5.62	<13	PASS
		25	12	6.12	<13	PASS
		25	25	6.21	<13	PASS
		50	0	6.03	<13	PASS
	MCH	1	0	4.6	<13	PASS
		1	24	5.05	<13	PASS
		1	49	4.18	<13	PASS
		25	0	6.3	<13	PASS
		25	12	6.07	<13	PASS
		25	25	5.56	<13	PASS
		50	0	5.79	<13	PASS

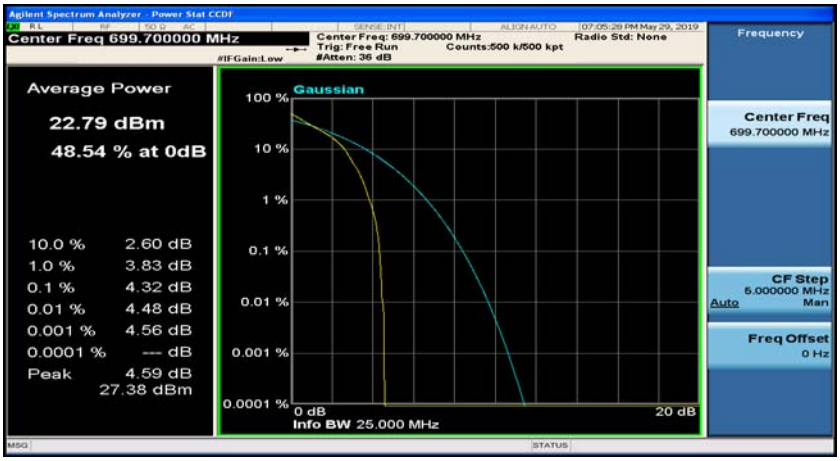
	HCH	1	0	5.24	<13	PASS
		1	24	4.32	<13	PASS
		1	49	4.63	<13	PASS
		25	0	5.66	<13	PASS
		25	12	5.38	<13	PASS
		25	25	5.58	<13	PASS
		50	0	5.64	<13	PASS
16QAM	LCH	1	0	5.16	<13	PASS
		1	24	5.81	<13	PASS
		1	49	6.05	<13	PASS
		25	0	6.29	<13	PASS
		25	12	6.93	<13	PASS
		25	25	7.12	<13	PASS
		50	0	6.66	<13	PASS
	MCH	1	0	5.72	<13	PASS
		1	24	6	<13	PASS
		1	49	5.16	<13	PASS
		25	0	7.12	<13	PASS
		25	12	6.84	<13	PASS
		25	25	6.5	<13	PASS
		50	0	6.54	<13	PASS
	HCH	1	0	5.97	<13	PASS
		1	24	5.44	<13	PASS
		1	49	5.53	<13	PASS
		25	0	6.67	<13	PASS
		25	12	6.32	<13	PASS
		25	25	6.31	<13	PASS
		50	0	6.45	<13	PASS

Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#0

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#2

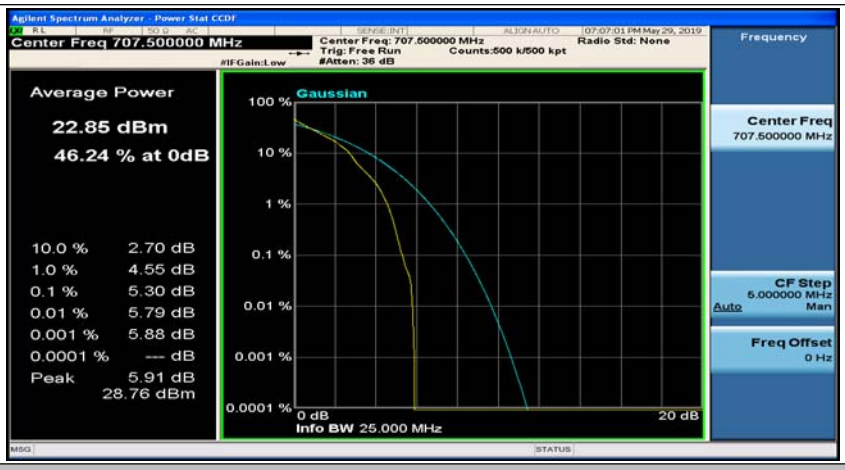
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#3

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_6RB#0

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_3RB#0

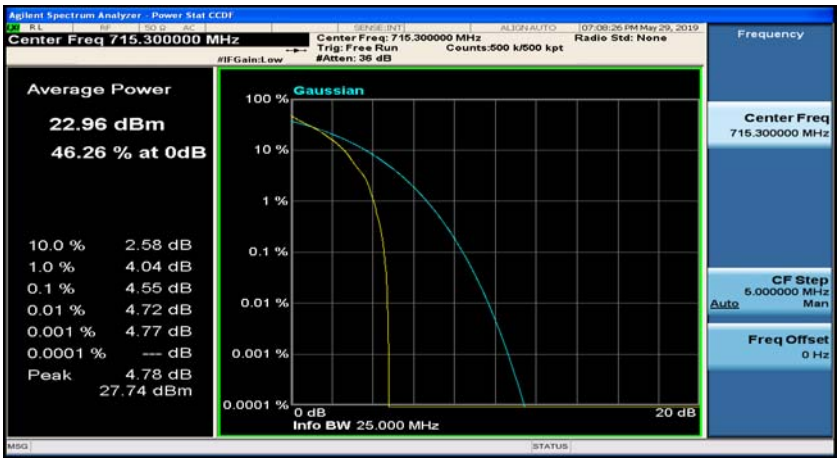
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_3RB#2

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_3RB#3

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_6RB#0

(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

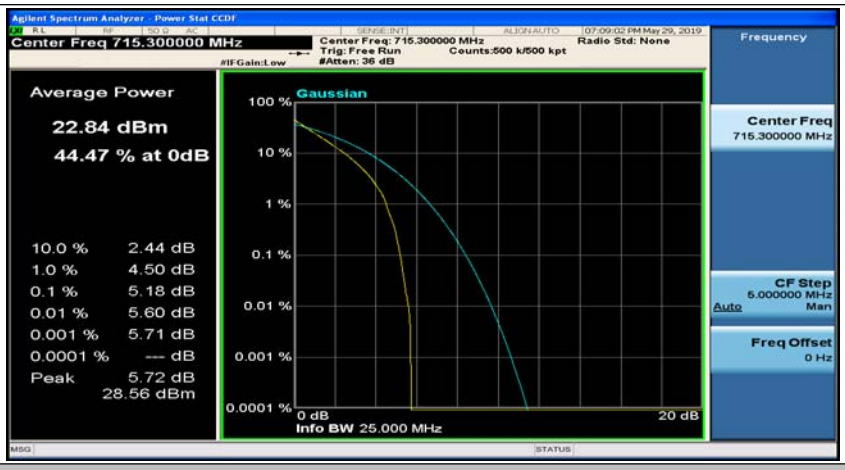
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#0

(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#2



(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#3

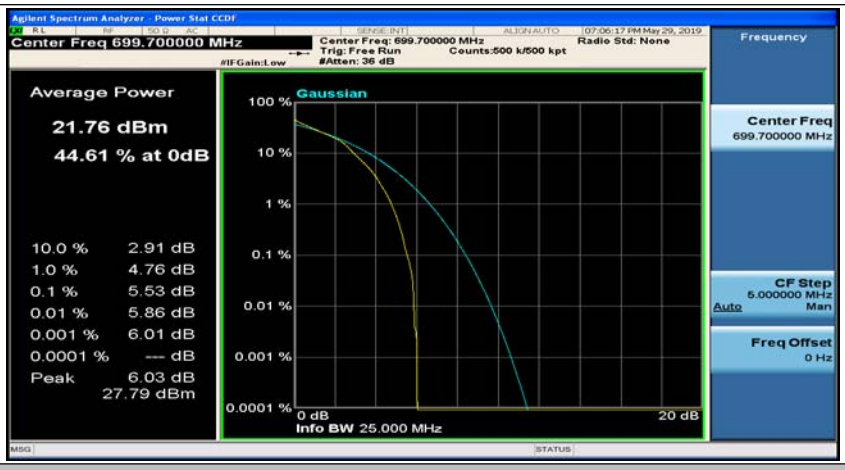
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0

(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0

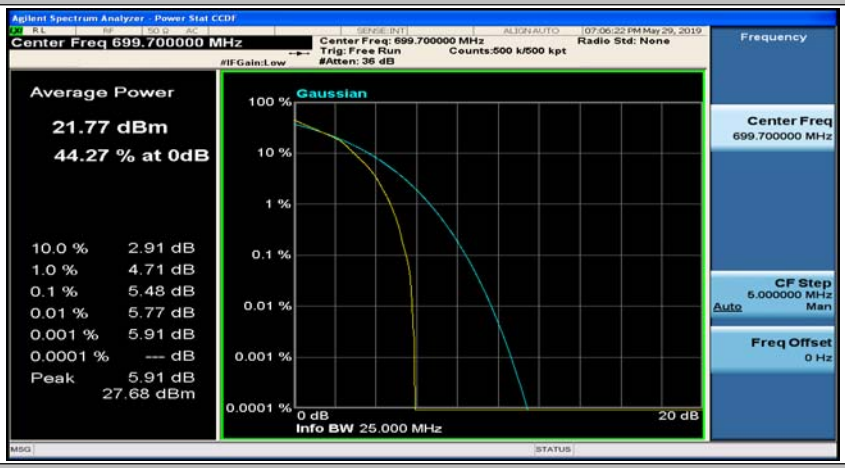
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#0



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#2



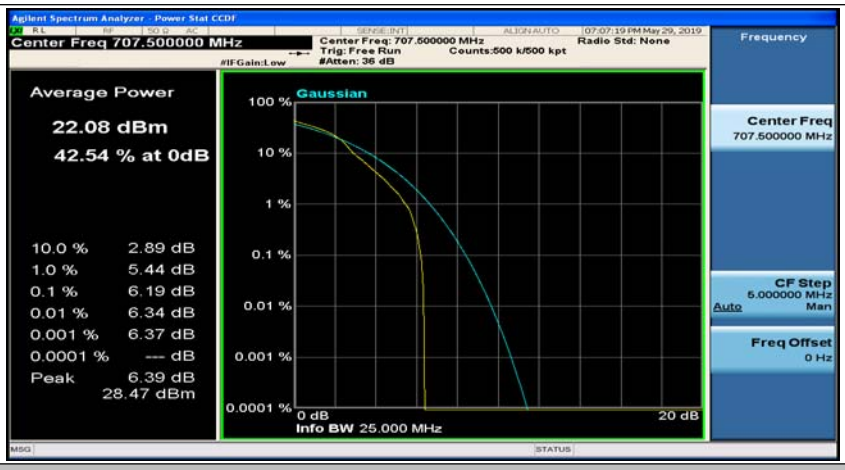
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#3

(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_6RB#0

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_3RB#0

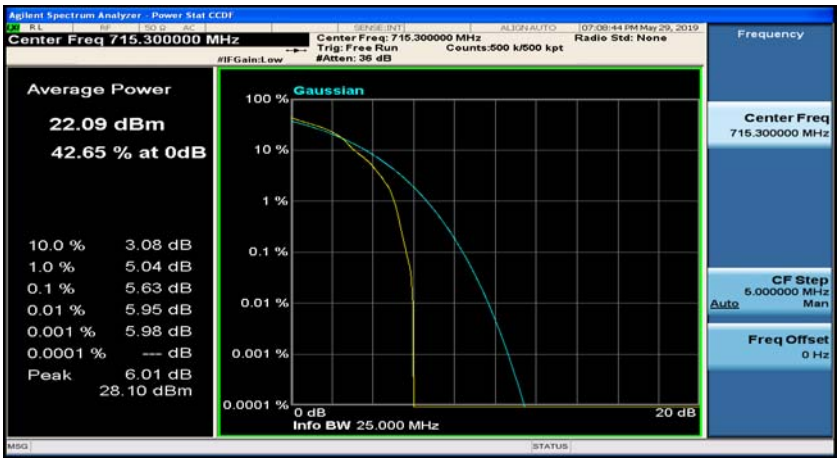
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_3RB#2

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_3RB#3

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0

(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0

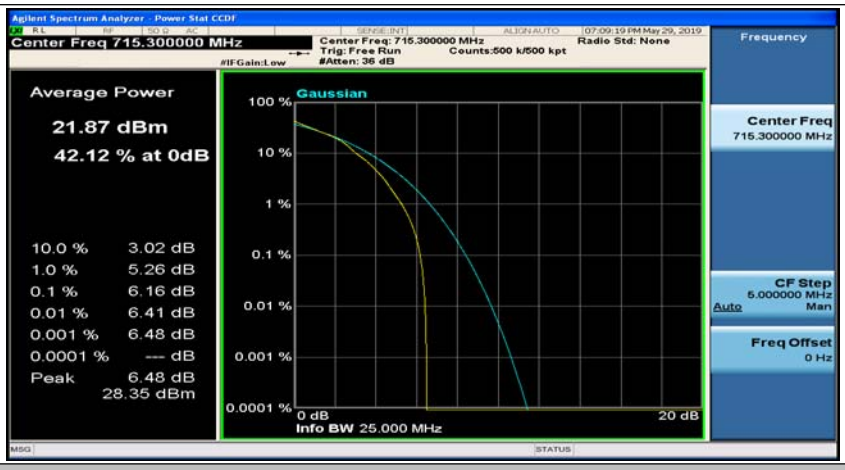
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



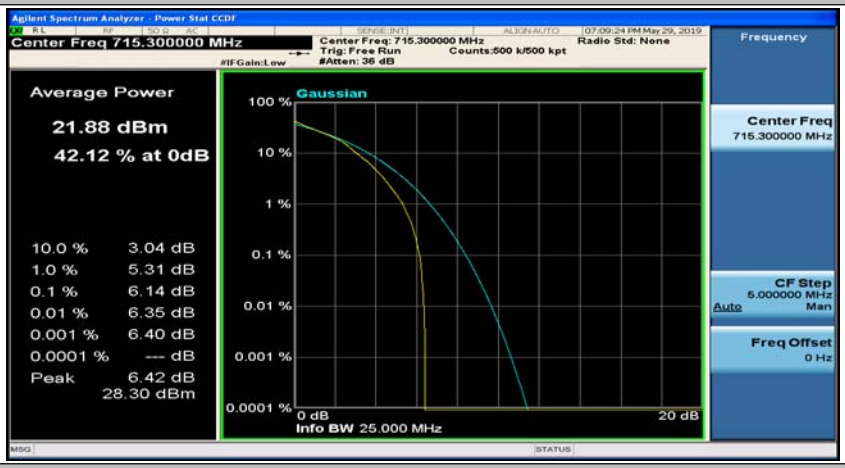
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#0

(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#2



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#3

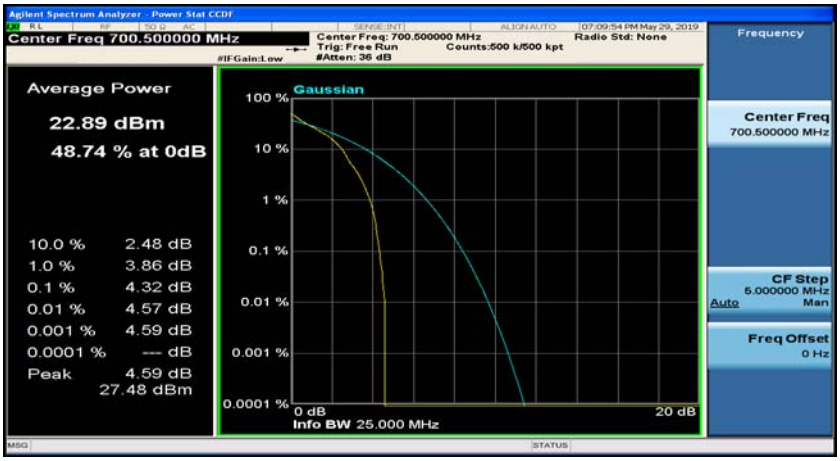


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0

Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14

(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#0

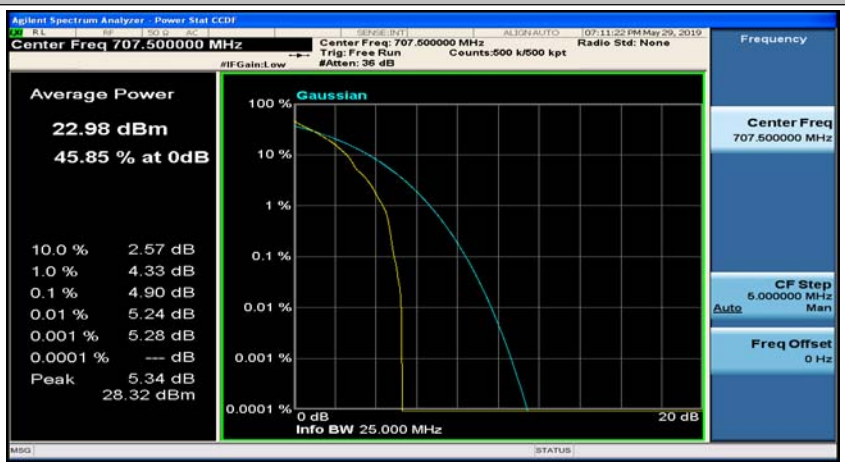
(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#4

(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#7

(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#0

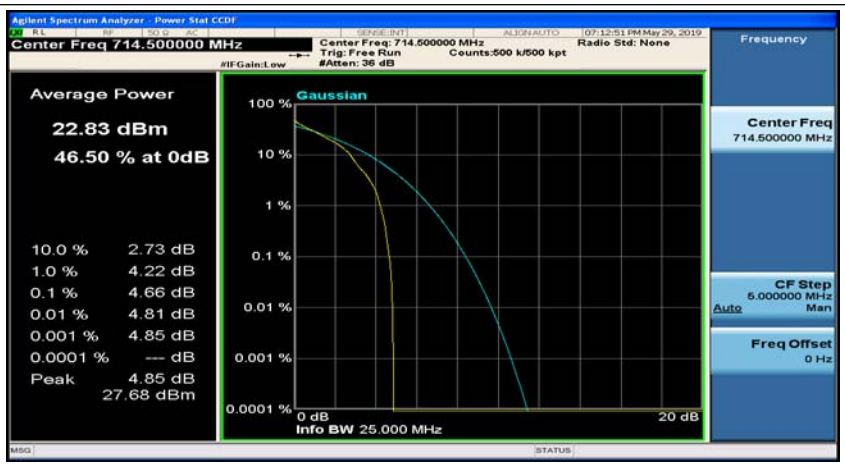
(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#4

(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#7

(Channel Bandwidth: 3 MHz)_MCH_QPSK_15RB#0

(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

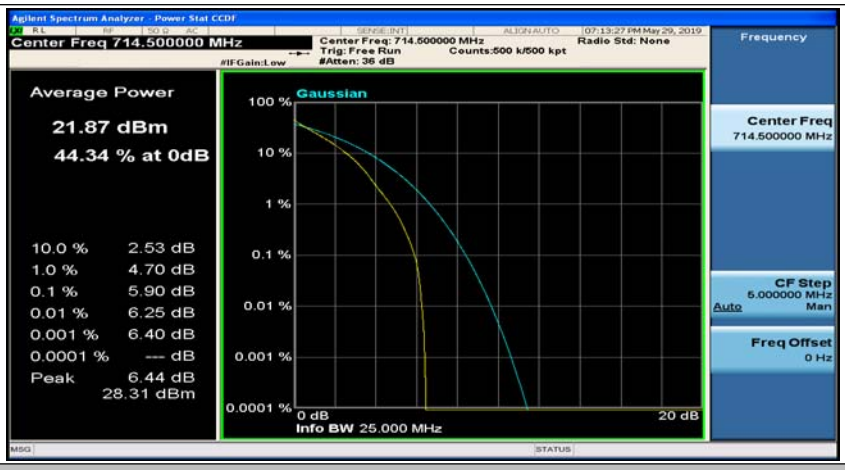
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14

(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#0

(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#4



(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#7

(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0

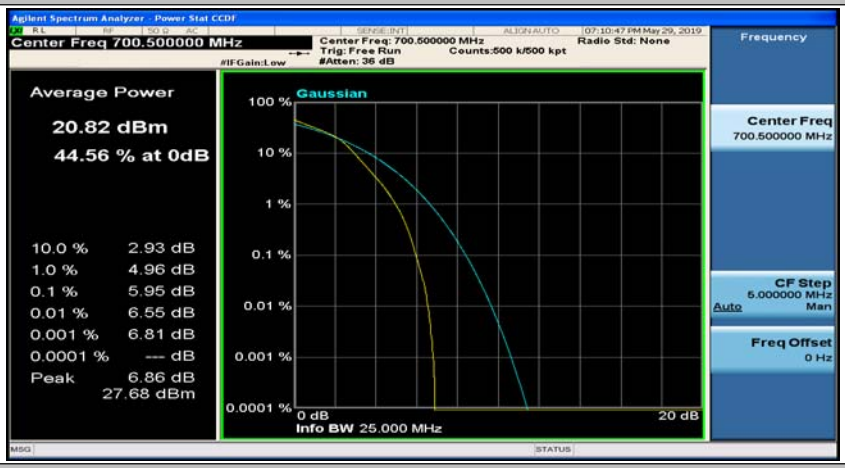
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0

(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7

(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14

(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#0

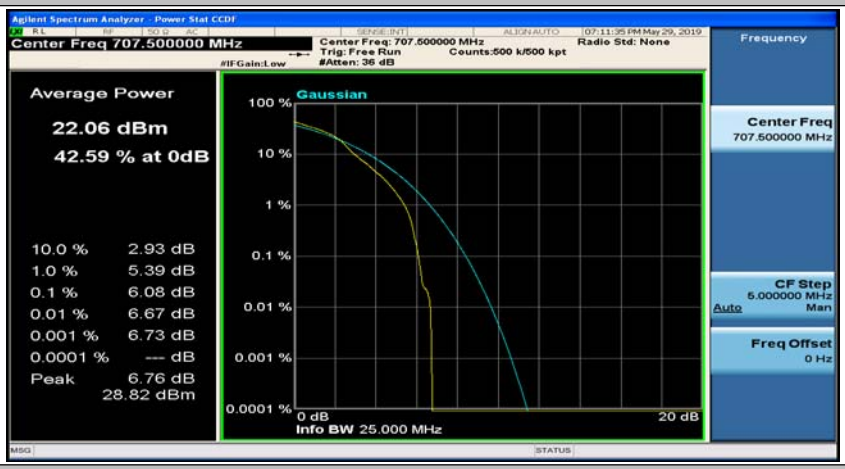
(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#4



(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#7

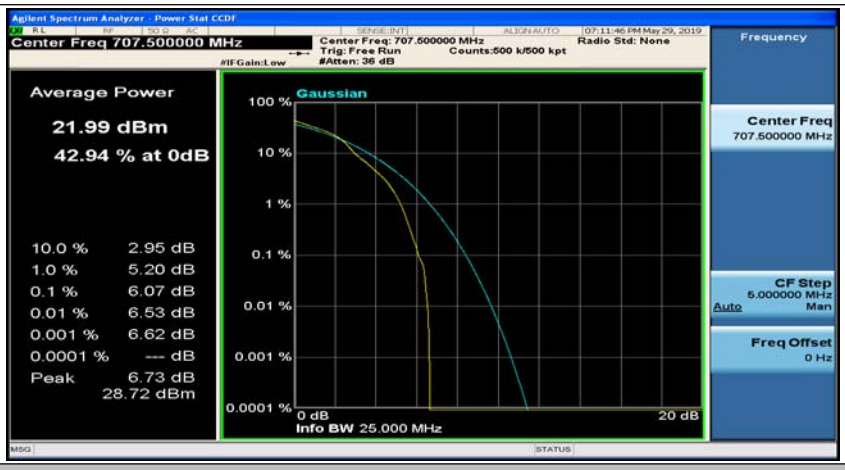
(Channel Bandwidth: 3 MHz)_LCH_16QAM_15RB#0

(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14



(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#0

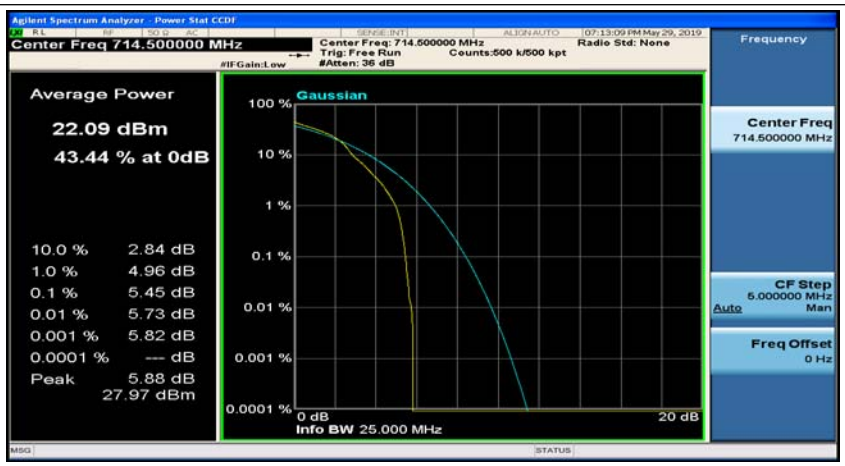
(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#4

(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#7

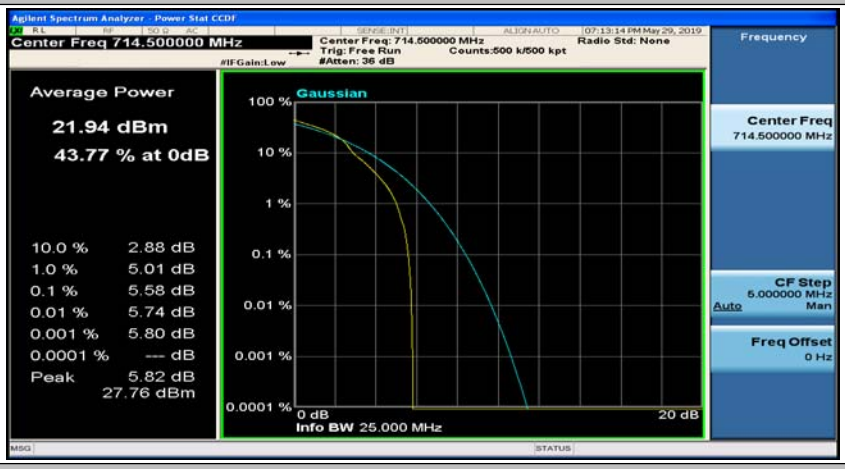
(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0

(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#14



(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#0

(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#4

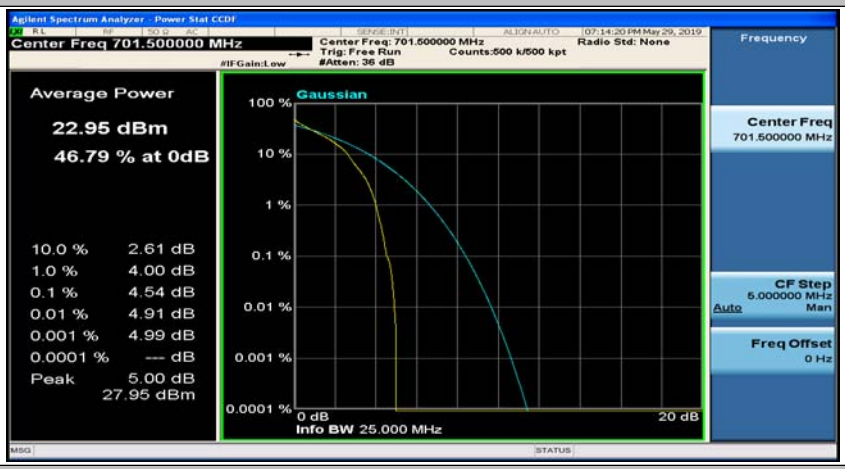
(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#7

(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0

Channel Bandwidth: 5 MHz

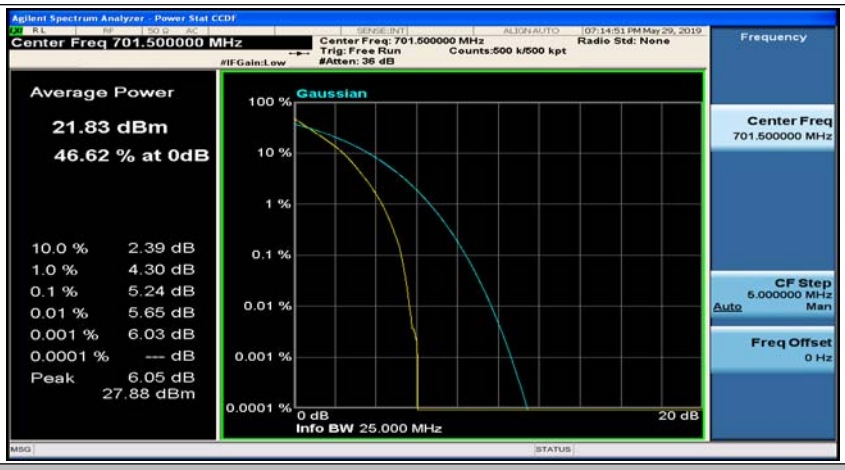
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0

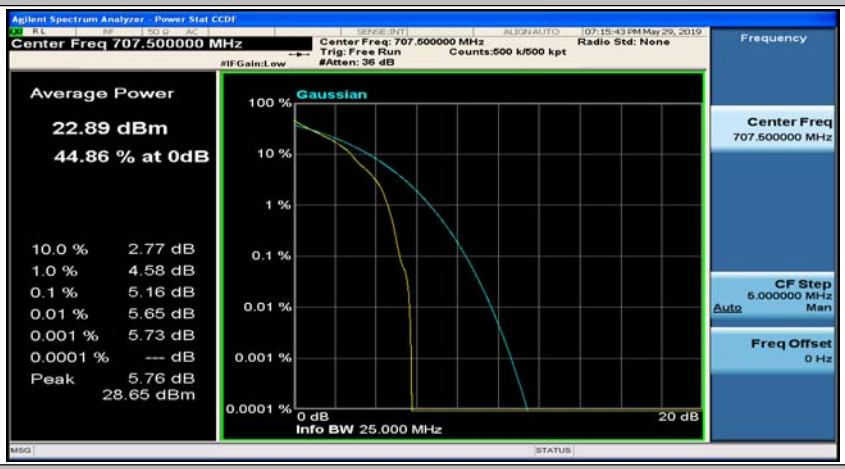


(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6

(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13

(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#0

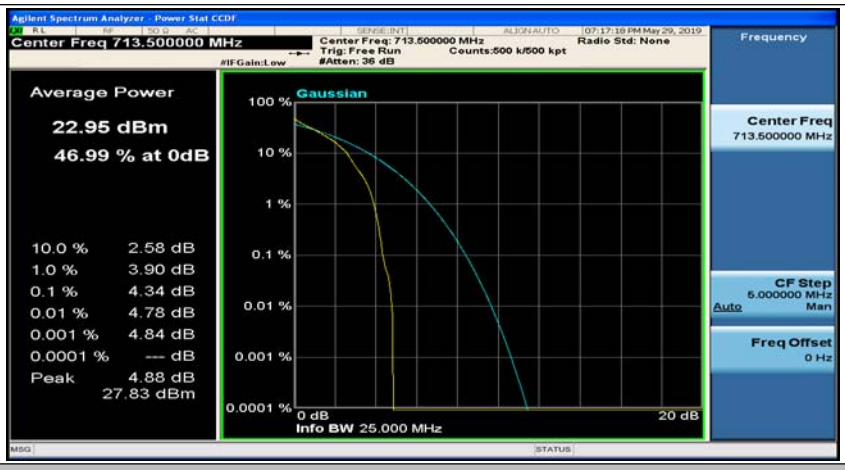
(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#6

(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#13

(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0

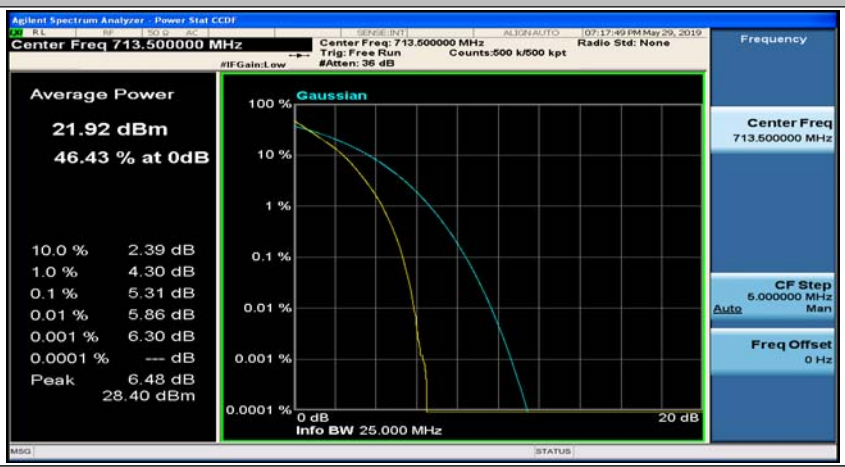
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

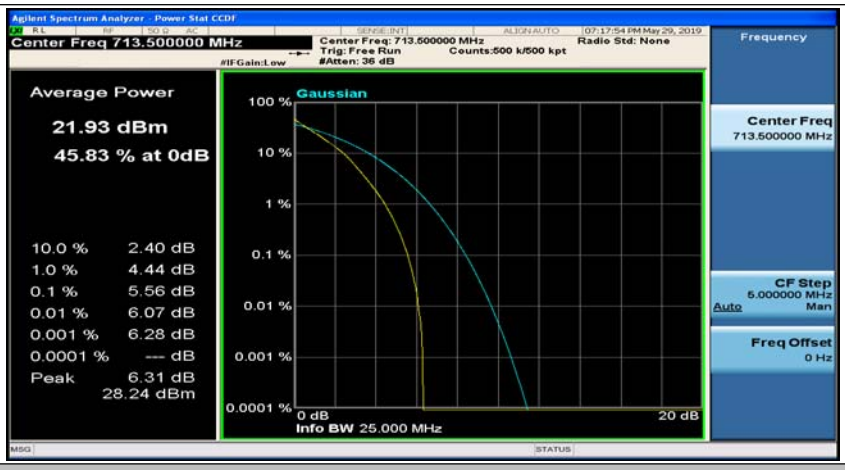


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#6



(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#13

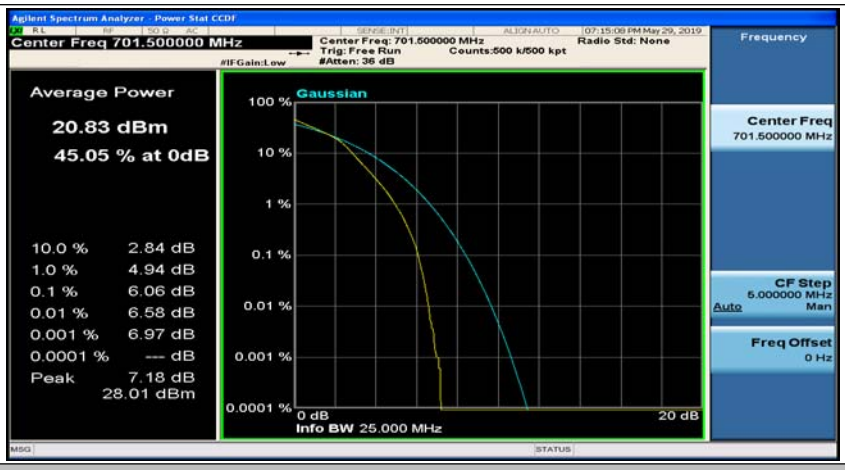
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0



(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#6

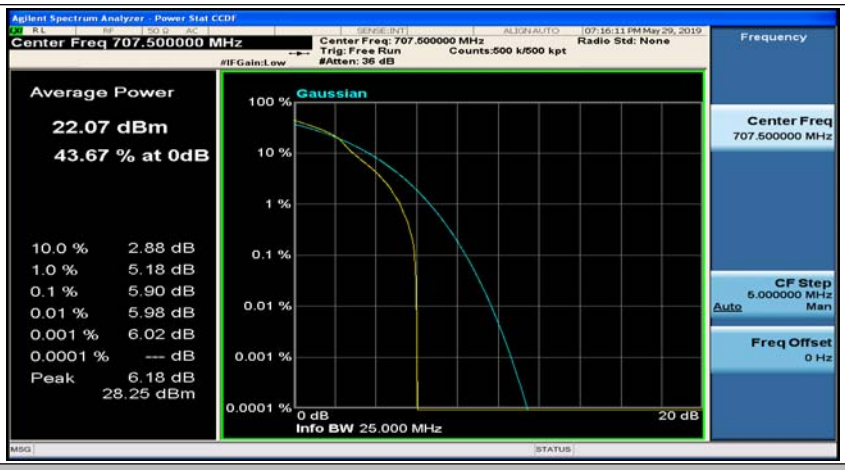
(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#13

(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0

(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#0

(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#6

(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#13

(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12