

## Appendix B: Peak-to-Average Ratio

### LTE Band 7 Test Result

#### 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	3.38	<13	PASS
		1	12	3.57	<13	PASS
		1	24	3.81	<13	PASS
		12	0	4.42	<13	PASS
		12	6	4.43	<13	PASS
		12	13	4.66	<13	PASS
		25	0	4.99	<13	PASS
	MCH	1	0	4.11	<13	PASS
		1	12	4.26	<13	PASS
		1	24	4.37	<13	PASS
		12	0	5.01	<13	PASS
		12	6	5.07	<13	PASS
		12	13	5.18	<13	PASS
		25	0	5.42	<13	PASS
	HCH	1	0	4.65	<13	PASS
		1	12	4.77	<13	PASS
		1	24	4.88	<13	PASS
		12	0	5.3	<13	PASS
		12	6	5.28	<13	PASS
		12	13	5.39	<13	PASS
		25	0	5.57	<13	PASS
16QAM	LCH	1	0	4.13	<13	PASS
		1	12	4.4	<13	PASS
		1	24	4.67	<13	PASS
		12	0	5.3	<13	PASS
		12	6	5.31	<13	PASS
		12	13	5.47	<13	PASS
		25	0	5.69	<13	PASS
	MCH	1	0	4.75	<13	PASS
		1	12	5.07	<13	PASS

		1	24	5.24	<13	PASS
		12	0	5.77	<13	PASS
		12	6	5.83	<13	PASS
		12	13	5.99	<13	PASS
		25	0	6.08	<13	PASS
	HCH	1	0	5.25	<13	PASS
		1	12	5.33	<13	PASS
		1	24	5.48	<13	PASS
		12	0	6.11	<13	PASS
		12	6	6.11	<13	PASS
		12	13	6.2	<13	PASS
		25	0	6.14	<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	3.4	<13	PASS
		1	24	3.76	<13	PASS
		1	49	4.09	<13	PASS
		25	0	4.82	<13	PASS
		25	12	4.83	<13	PASS
		25	25	5.03	<13	PASS
		50	0	5.15	<13	PASS
	MCH	1	0	3.82	<13	PASS
		1	24	4.19	<13	PASS
		1	49	4.34	<13	PASS
		25	0	5.08	<13	PASS
		25	12	5.16	<13	PASS
		25	25	5.3	<13	PASS
		50	0	5.42	<13	PASS
	HCH	1	0	4.24	<13	PASS
		1	24	4.38	<13	PASS
		1	49	4.62	<13	PASS
		25	0	5.08	<13	PASS
		25	12	5.16	<13	PASS
		25	25	5.31	<13	PASS
		50	0	5.44	<13	PASS
16QAM	LCH	1	0	4.16	<13	PASS
		1	24	4.59	<13	PASS
		1	49	4.9	<13	PASS

		25	0	5.6	<13	PASS
		25	12	5.64	<13	PASS
		25	25	5.84	<13	PASS
		50	0	5.87	<13	PASS
	MCH	1	0	4.61	<13	PASS
		1	24	4.93	<13	PASS
		1	49	5.23	<13	PASS
		25	0	5.88	<13	PASS
		25	12	5.95	<13	PASS
		25	25	6.11	<13	PASS
		50	0	6.15	<13	PASS
	HCH	1	0	5.08	<13	PASS
		1	24	5.25	<13	PASS
		1	49	5.42	<13	PASS
		25	0	5.97	<13	PASS
		25	12	6.02	<13	PASS
		25	25	6.19	<13	PASS
		50	0	6.16	<13	PASS

### Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	8.82	<13	PASS
		1	37	3.9	<13	PASS
		1	74	9.91	<13	PASS
		37	0	4.53	<13	PASS
		37	18	5.07	<13	PASS
		37	38	4.69	<13	PASS
		75	0	4.97	<13	PASS
	MCH	1	0	8.68	<13	PASS
		1	37	4.29	<13	PASS
		1	74	9.55	<13	PASS
		37	0	4.55	<13	PASS
		37	18	5.24	<13	PASS
		37	38	4.74	<13	PASS
		75	0	5	<13	PASS
	HCH	1	0	8.39	<13	PASS
		1	37	4.28	<13	PASS
		1	74	9.73	<13	PASS
		37	0	4.41	<13	PASS

		37	18	5.17	<13	PASS
		37	38	4.72	<13	PASS
		75	0	4.97	<13	PASS
16QAM	LCH	1	0	8.83	<13	PASS
		1	37	4.64	<13	PASS
		1	74	10.56	<13	PASS
		37	0	5.67	<13	PASS
		37	18	5.82	<13	PASS
		37	38	5.88	<13	PASS
		75	0	6.05	<13	PASS
	MCH	1	0	8.31	<13	PASS
		1	37	5.08	<13	PASS
		1	74	10.48	<13	PASS
		37	0	5.72	<13	PASS
		37	18	6.06	<13	PASS
		37	38	5.96	<13	PASS
		75	0	6.17	<13	PASS
	HCH	1	0	8.59	<13	PASS
		1	37	5.13	<13	PASS
		1	74	9.73	<13	PASS
		37	0	5.58	<13	PASS
		37	18	5.88	<13	PASS
		37	38	5.9	<13	PASS
		75	0	6.04	<13	PASS

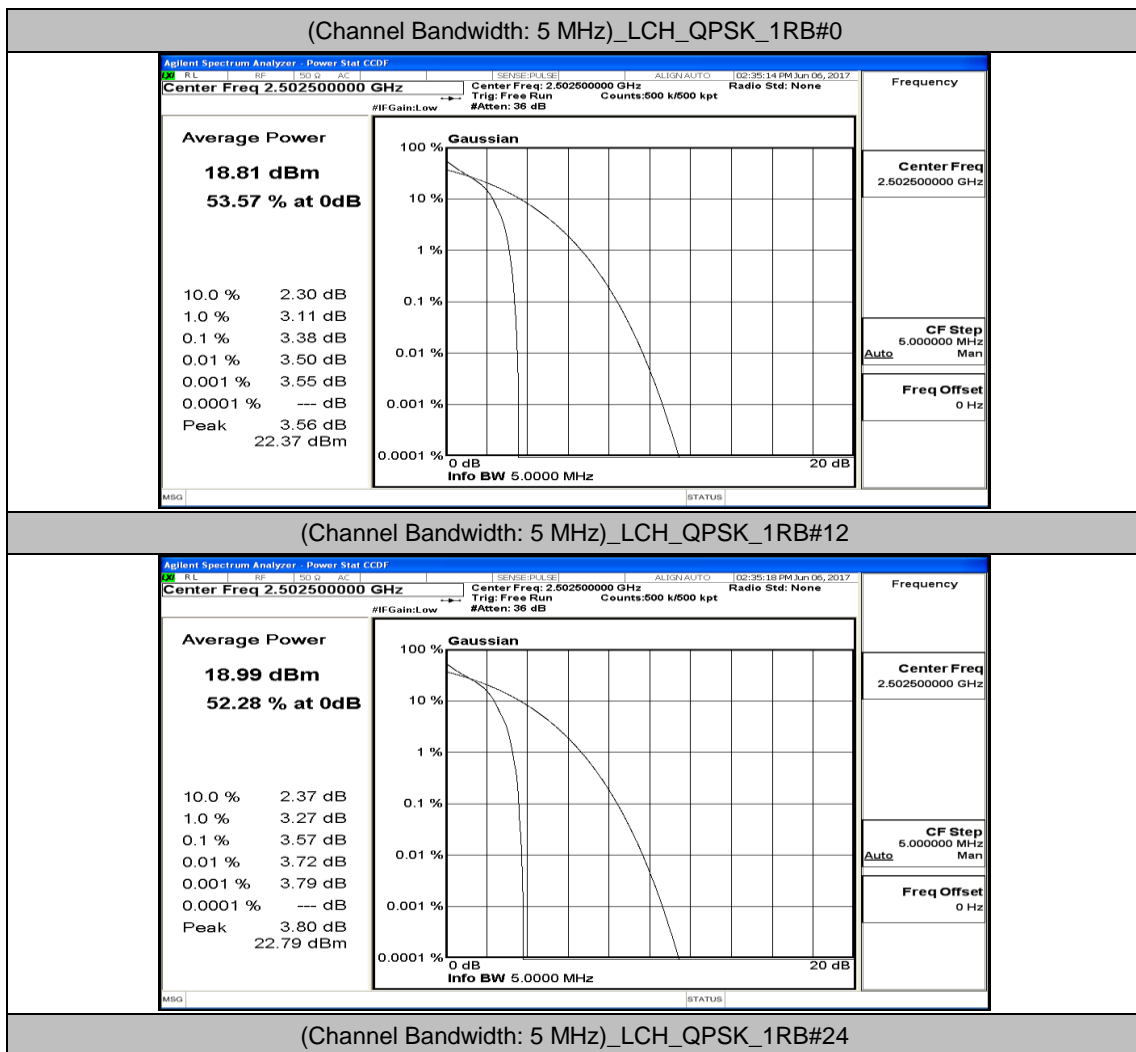
### Channel Bandwidth: 20 MHz

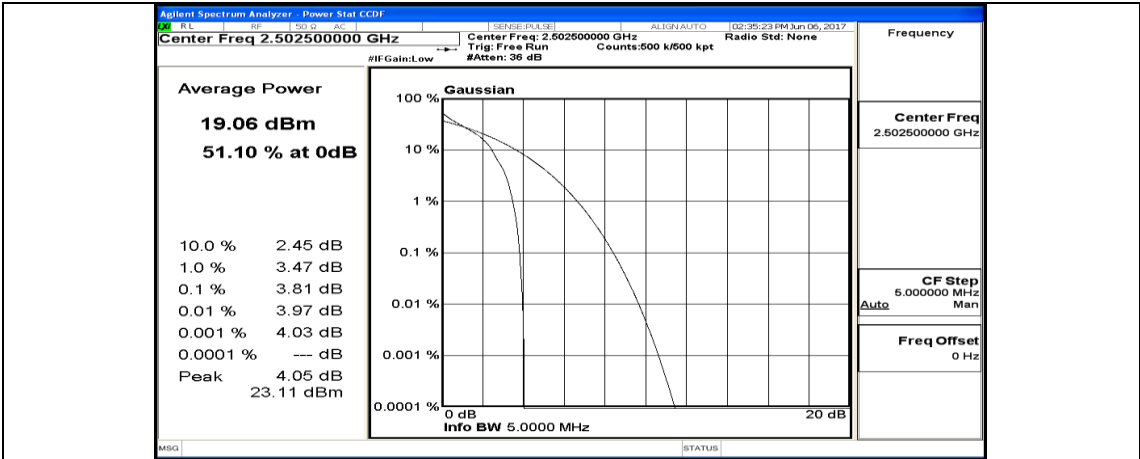
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	7.12	<13	PASS
		1	49	4.06	<13	PASS
		1	99	7.39	<13	PASS
		50	0	5.43	<13	PASS
		50	25	5.28	<13	PASS
		50	50	5.76	<13	PASS
		100	0	5.68	<13	PASS
	MCH	1	0	7.59	<13	PASS
		1	49	4.28	<13	PASS
		1	99	7.3	<13	PASS
		50	0	5.51	<13	PASS
		50	25	5.41	<13	PASS

		50	50	5.78	<13	PASS
		100	0	5.8	<13	PASS
	HCH	1	0	7.11	<13	PASS
		1	49	4.24	<13	PASS
		1	99	6.81	<13	PASS
		50	0	5.24	<13	PASS
		50	25	5.31	<13	PASS
		50	50	5.67	<13	PASS
		100	0	5.7	<13	PASS
16QAM	LCH	1	0	7.2	<13	PASS
		1	49	4.6	<13	PASS
		1	99	7.33	<13	PASS
		50	0	6.43	<13	PASS
		50	25	6.03	<13	PASS
		50	50	6.55	<13	PASS
		100	0	6.66	<13	PASS
	MCH	1	0	7.31	<13	PASS
		1	49	4.98	<13	PASS
		1	99	7.45	<13	PASS
		50	0	6.49	<13	PASS
		50	25	6.07	<13	PASS
		50	50	6.55	<13	PASS
		100	0	6.63	<13	PASS
	HCH	1	0	7.08	<13	PASS
		1	49	5.06	<13	PASS
		1	99	6.81	<13	PASS
		50	0	6.22	<13	PASS
		50	25	6.05	<13	PASS
		50	50	6.46	<13	PASS
		100	0	6.51	<13	PASS

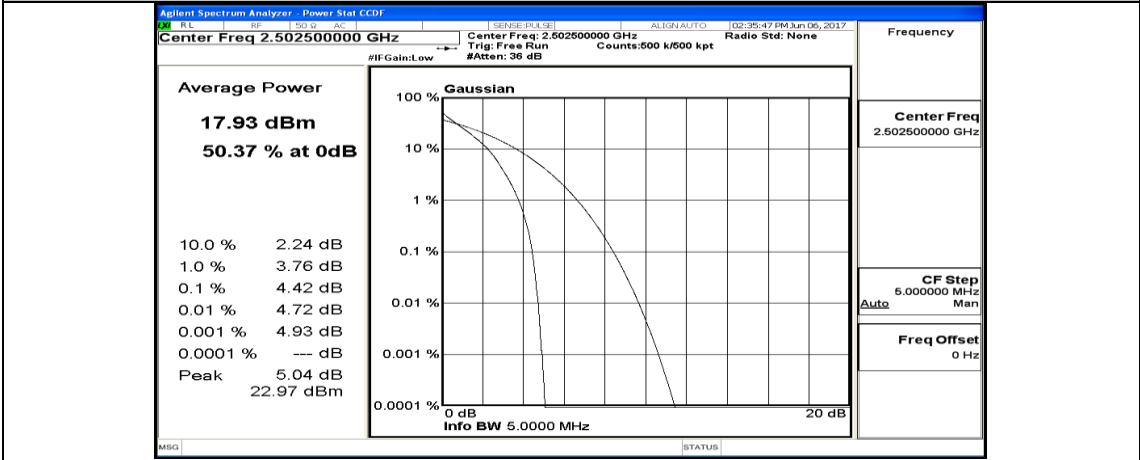
# Test Graphs

## Channel Bandwidth: 5 MHz

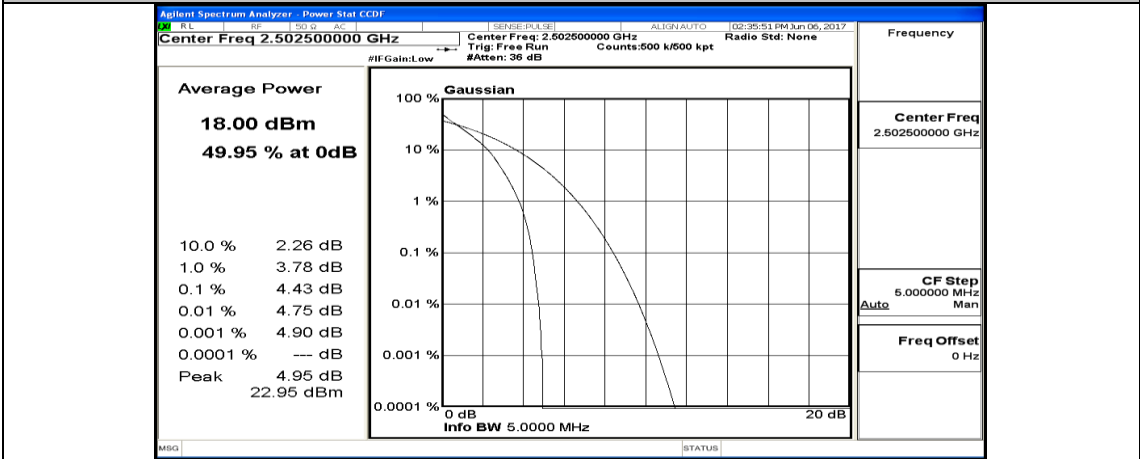




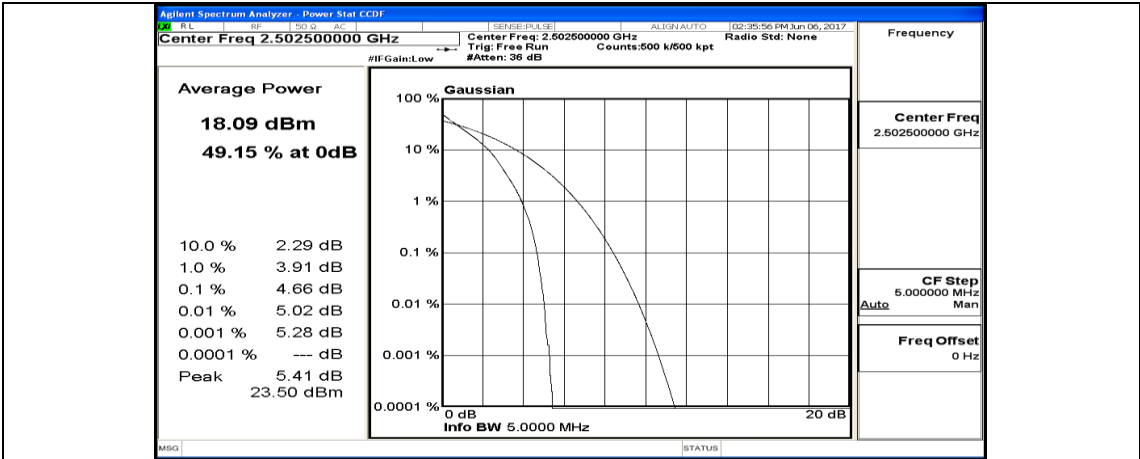
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#0



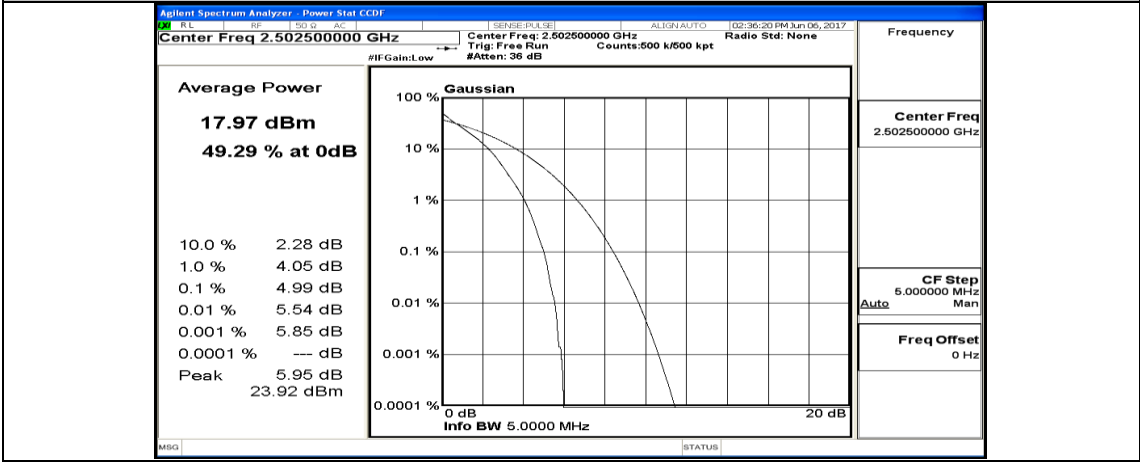
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#6



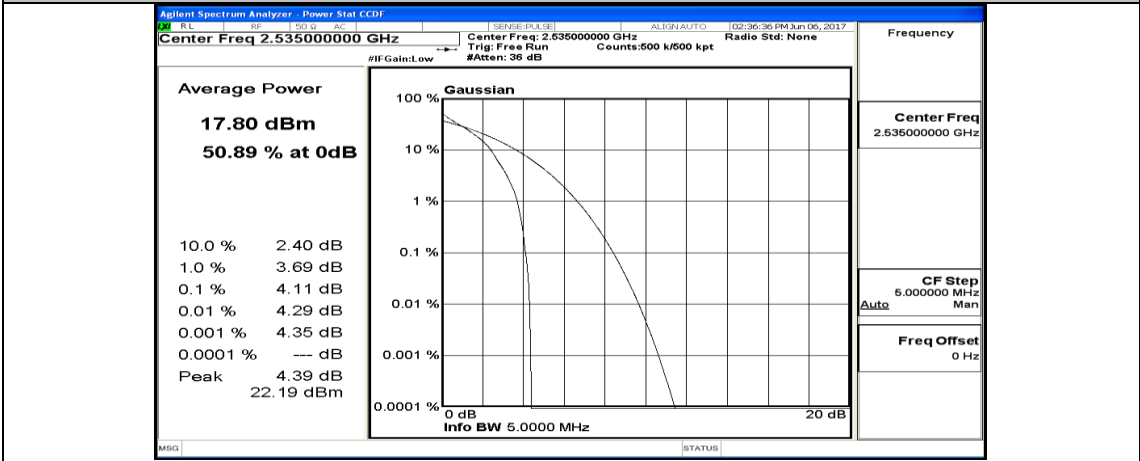
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#13



(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_25RB#0

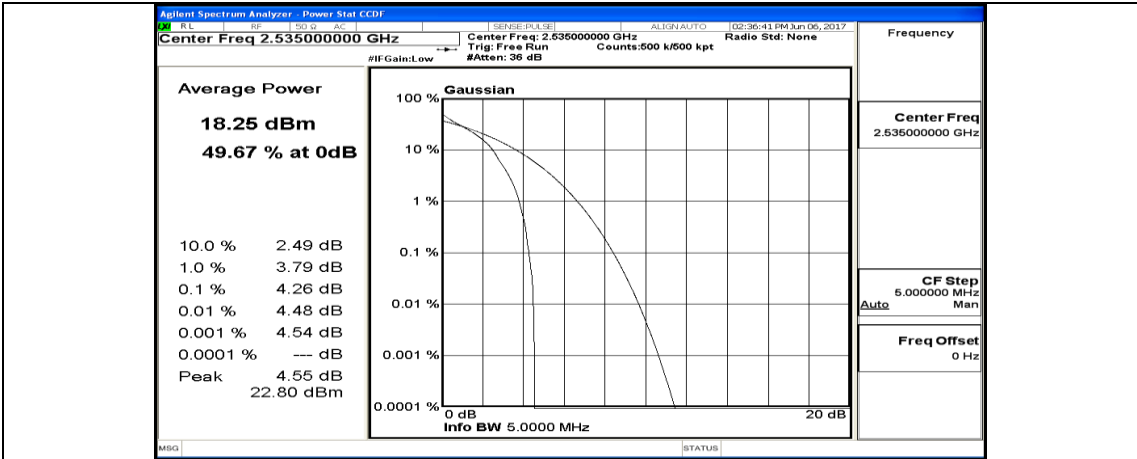


(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#0

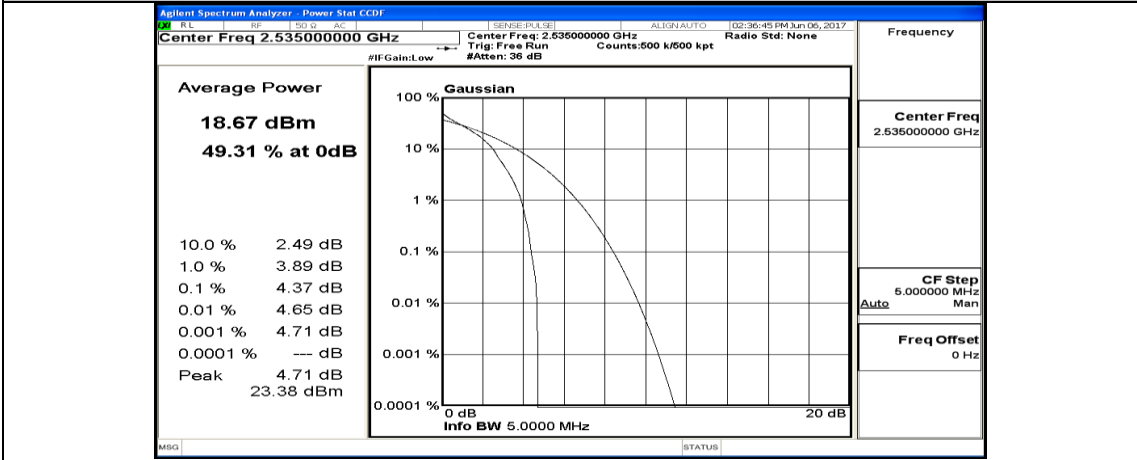


(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#12

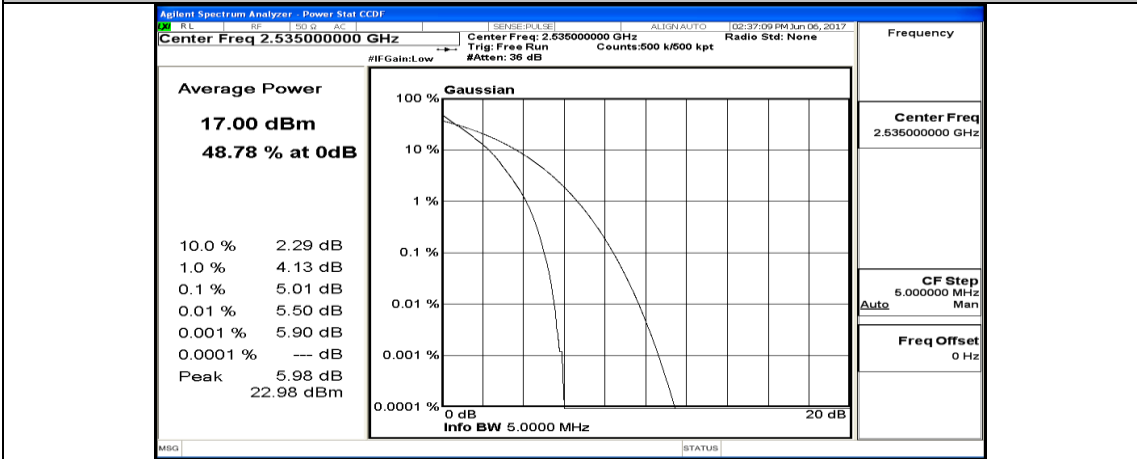




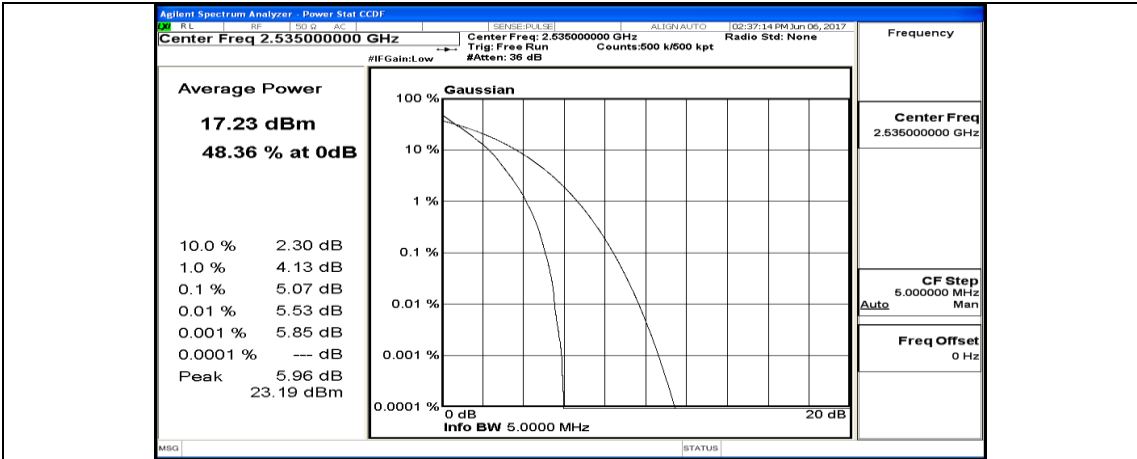
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#24



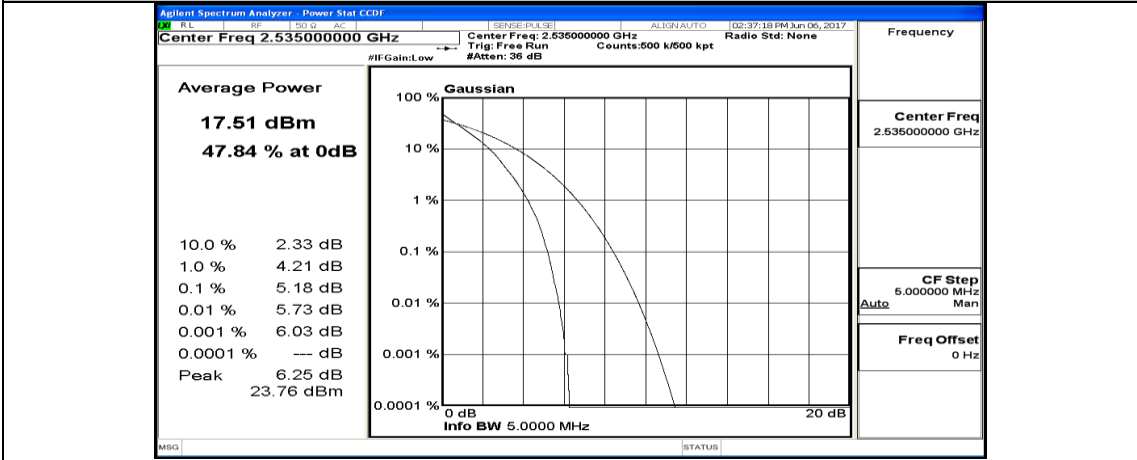
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#0



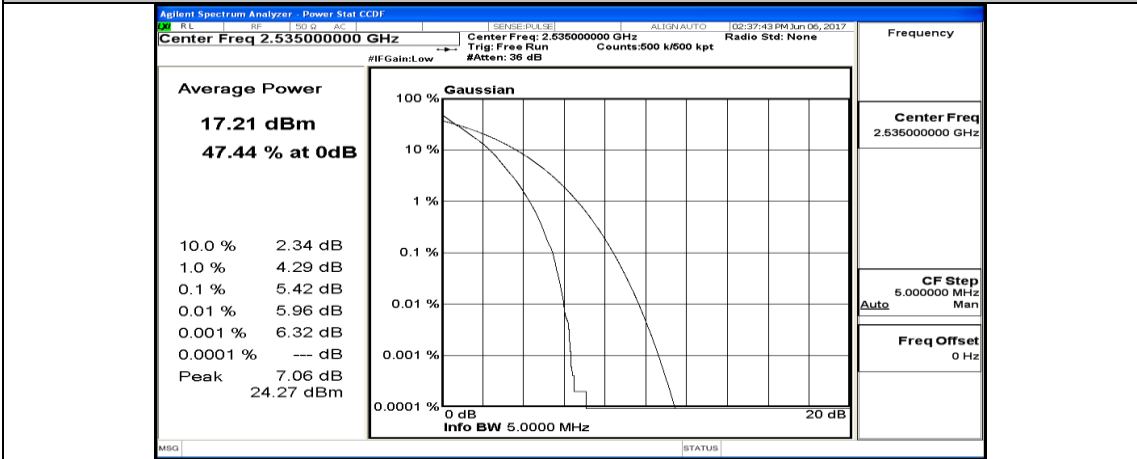
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#6



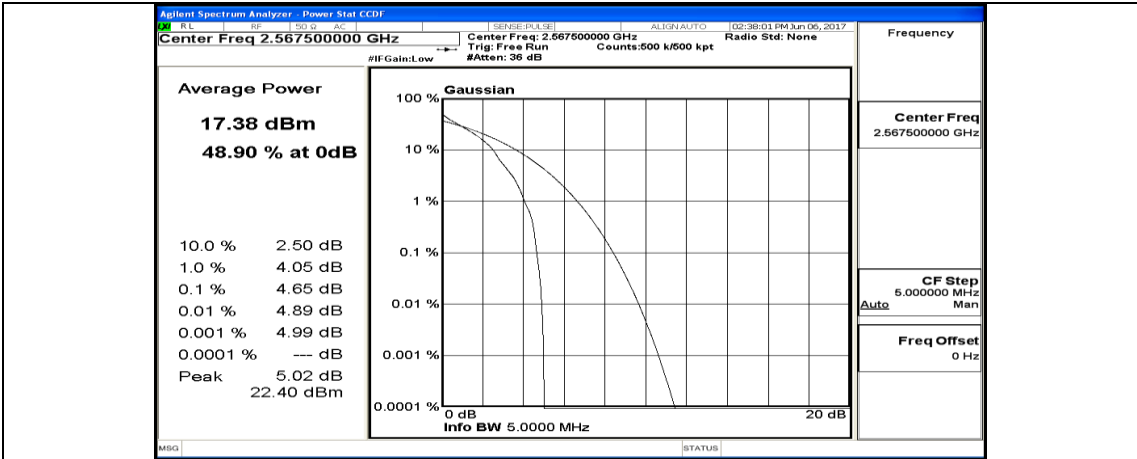
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#13



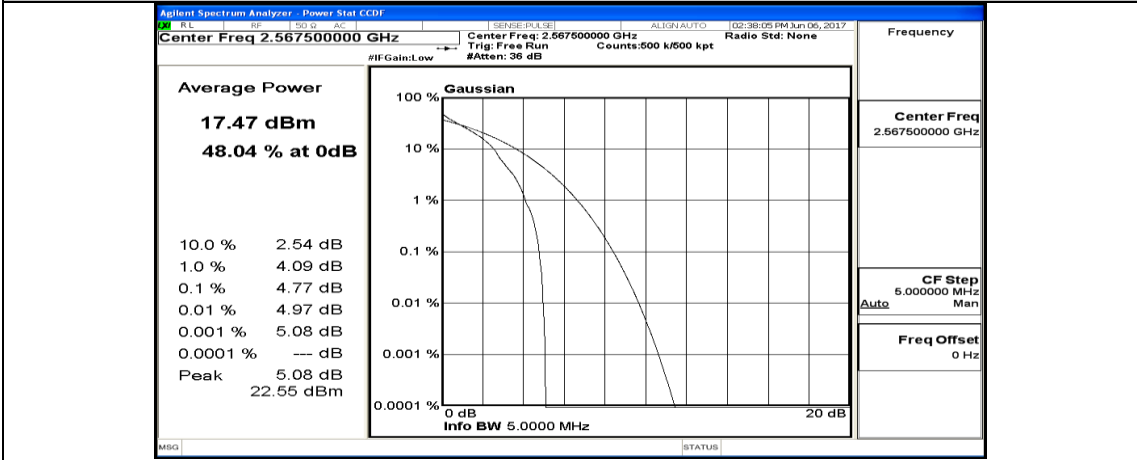
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_25RB#0



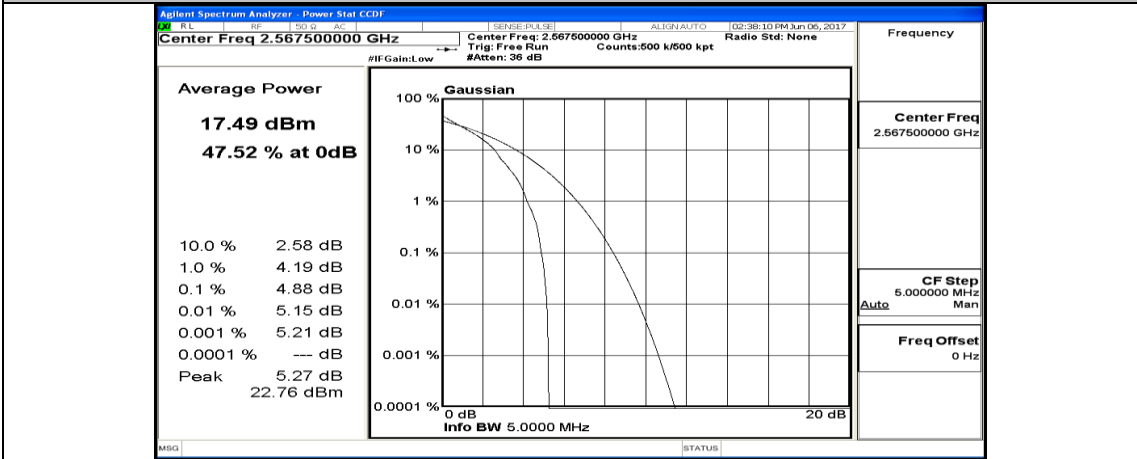
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#0



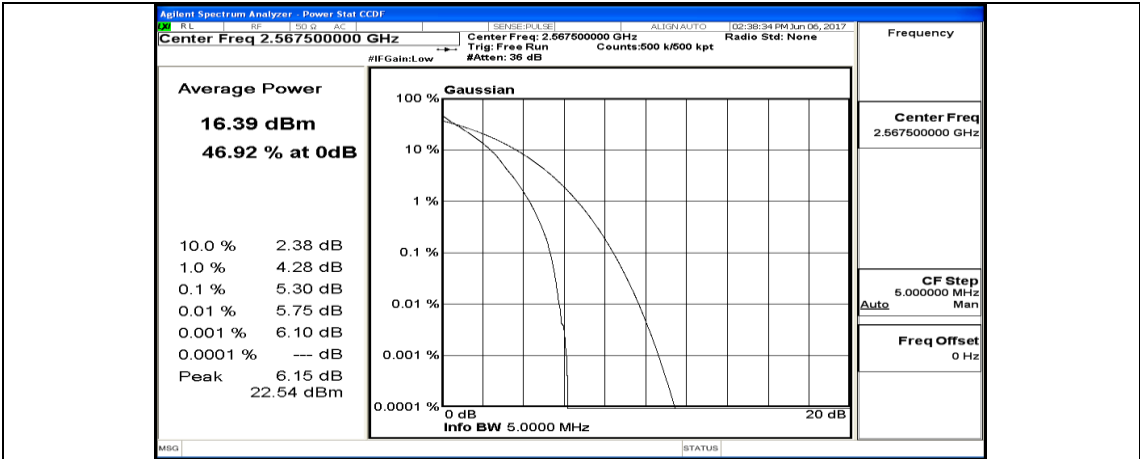
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#12



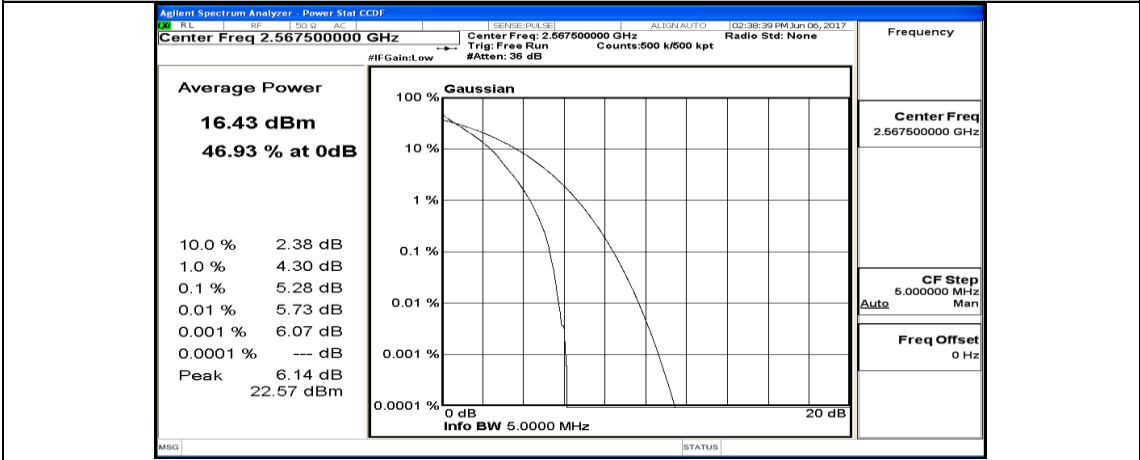
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#24



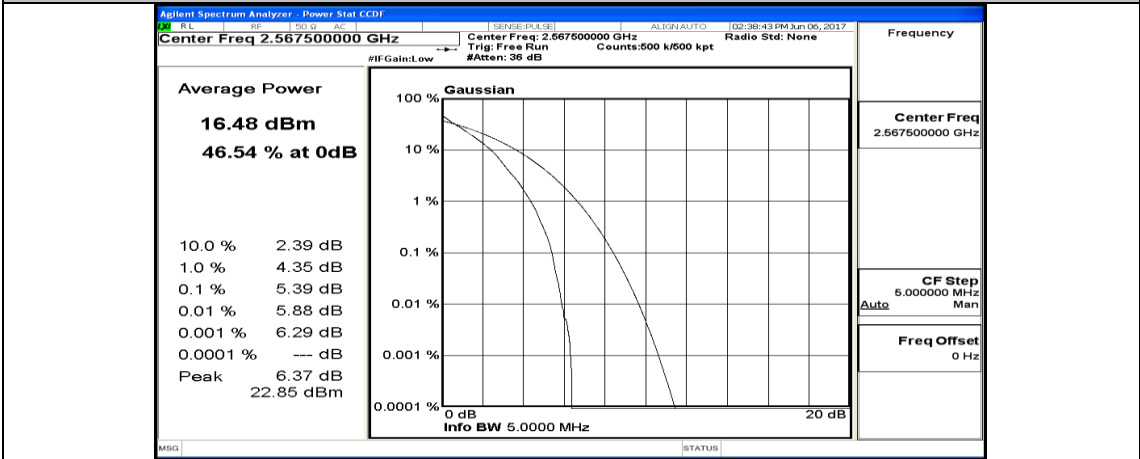
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_12RB#0



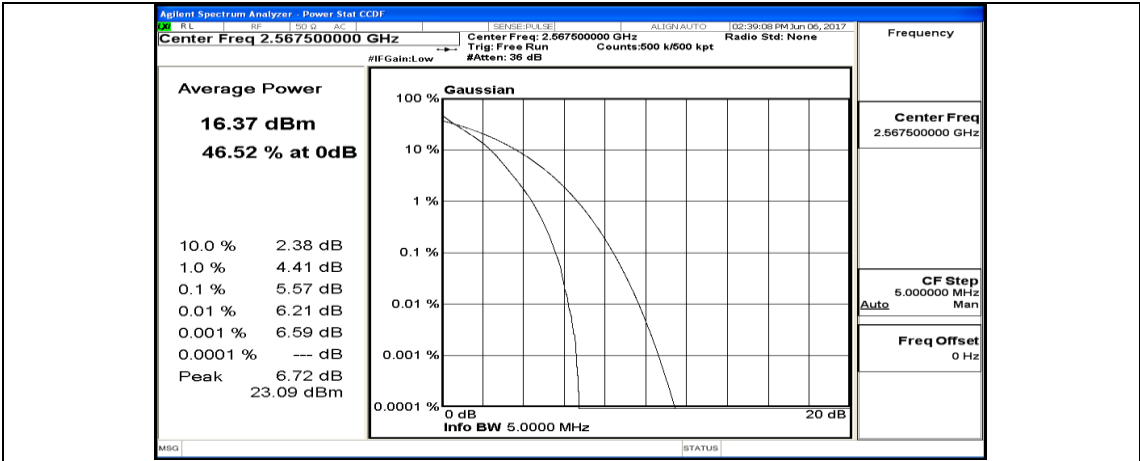
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_12RB#6



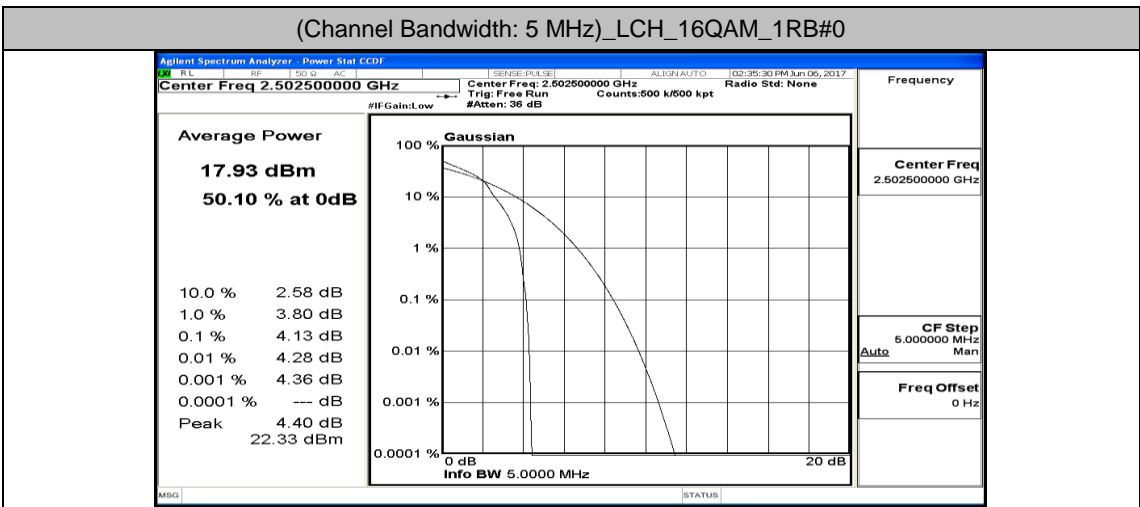
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_12RB#13



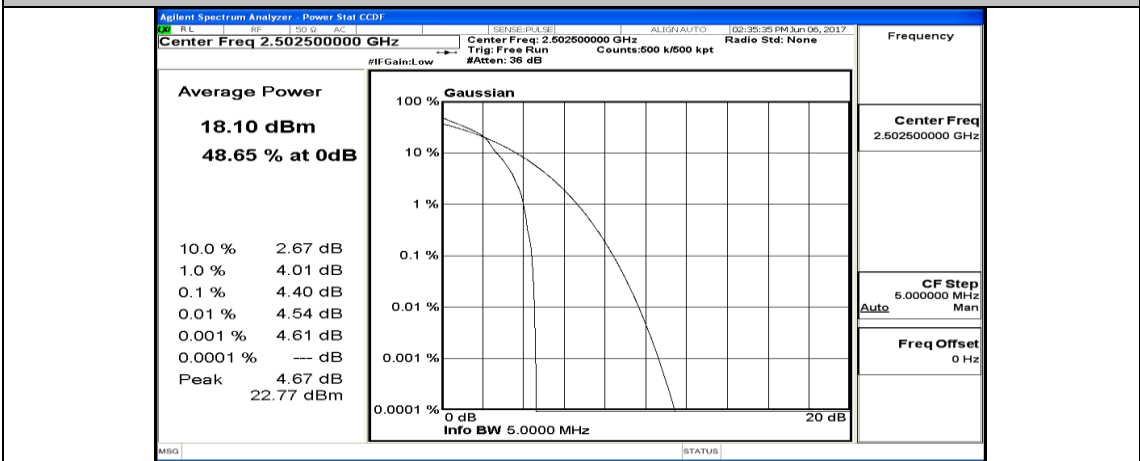
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_25RB#0



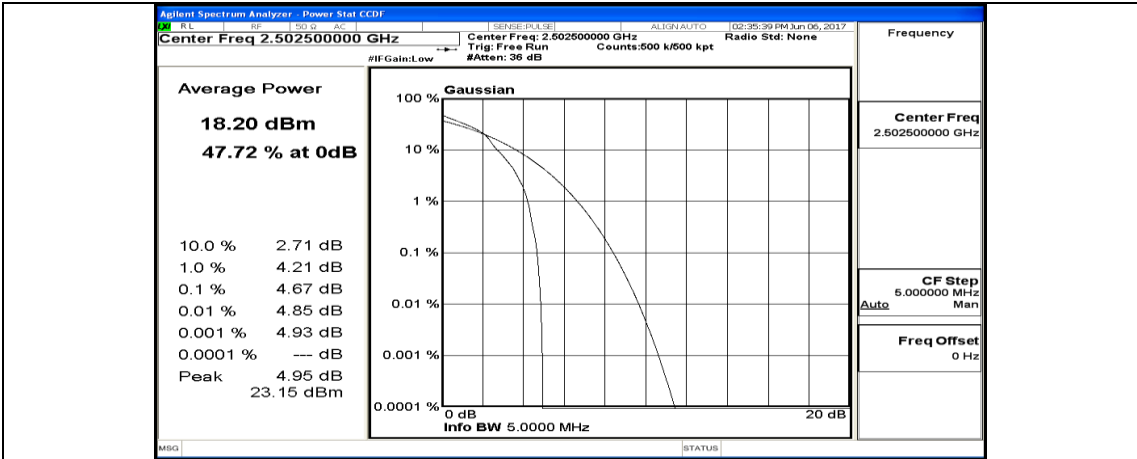
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#0



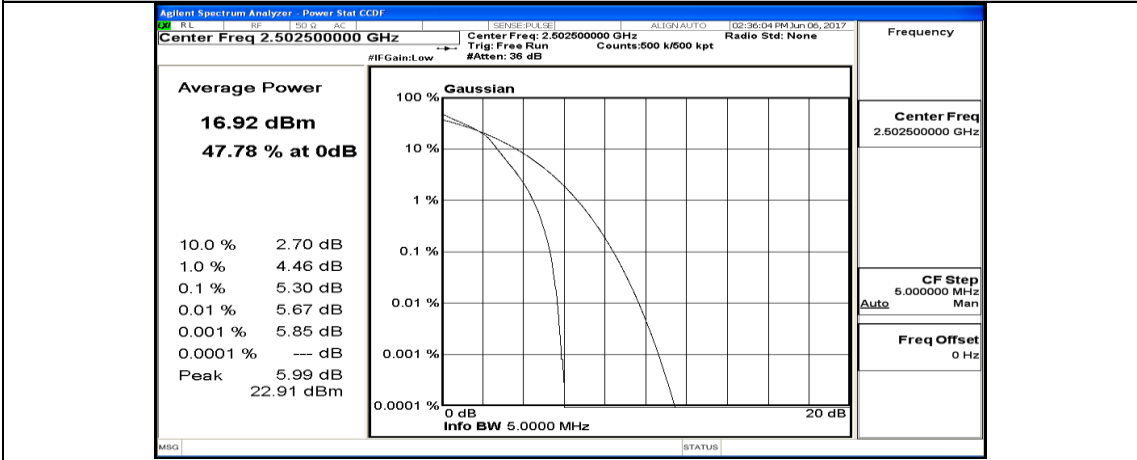
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#12



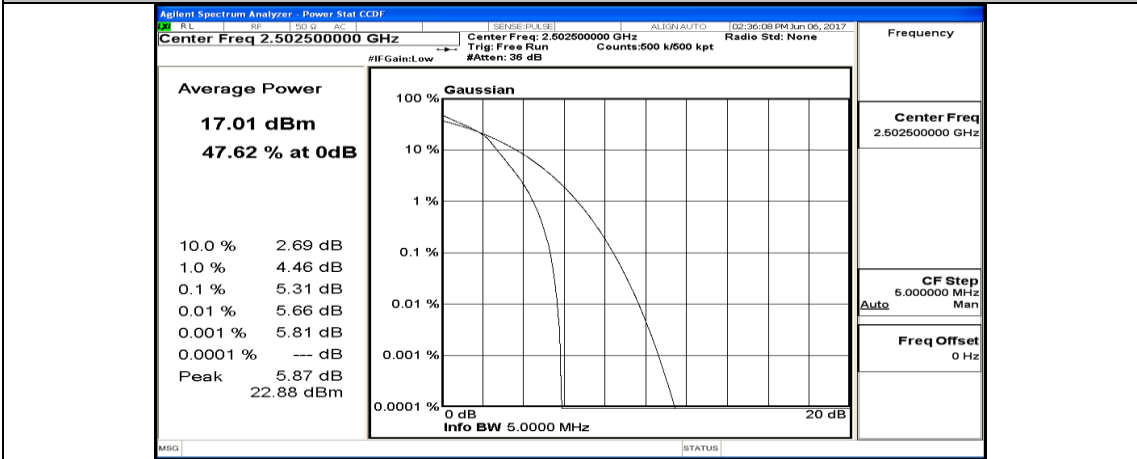
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#24



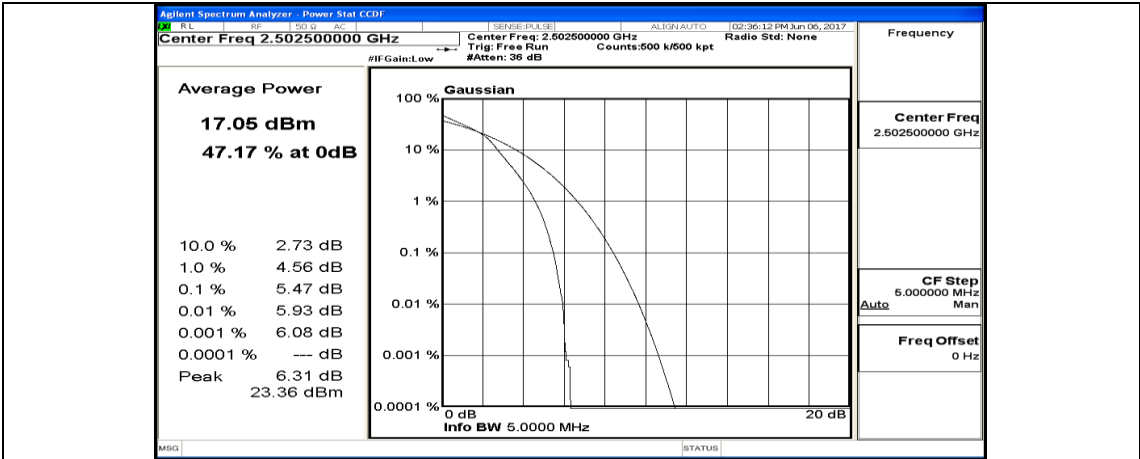
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_12RB#0



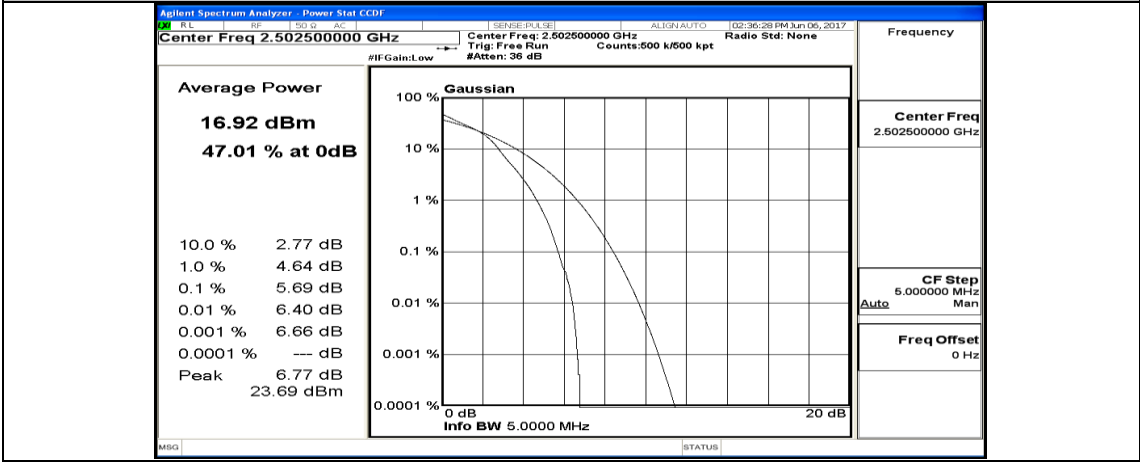
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_12RB#6



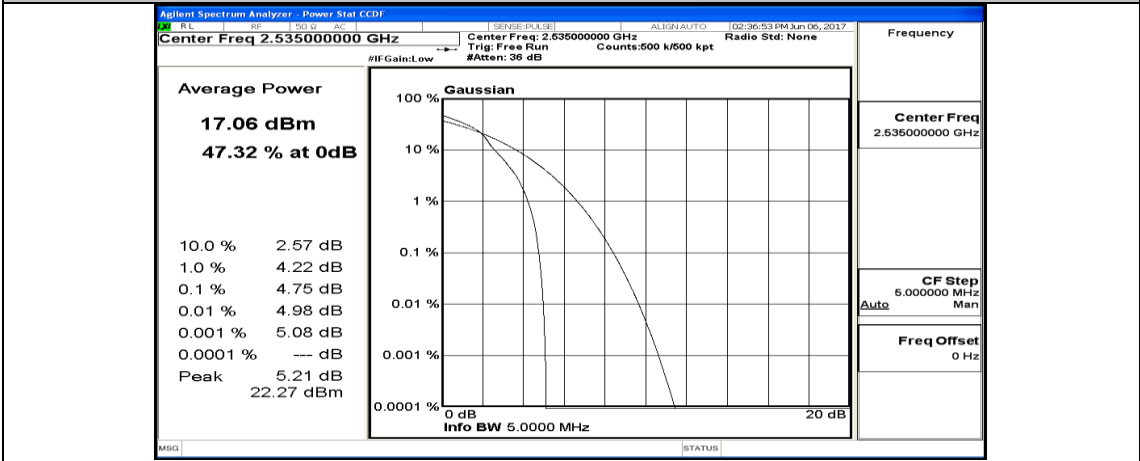
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_12RB#13



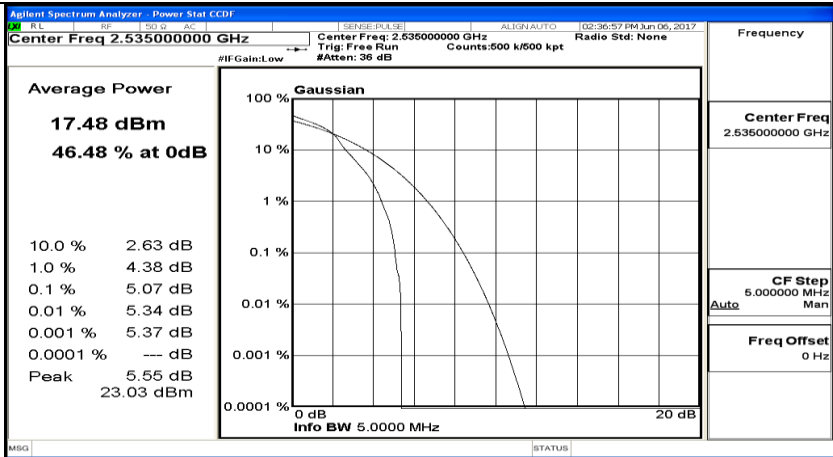
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_25RB#0



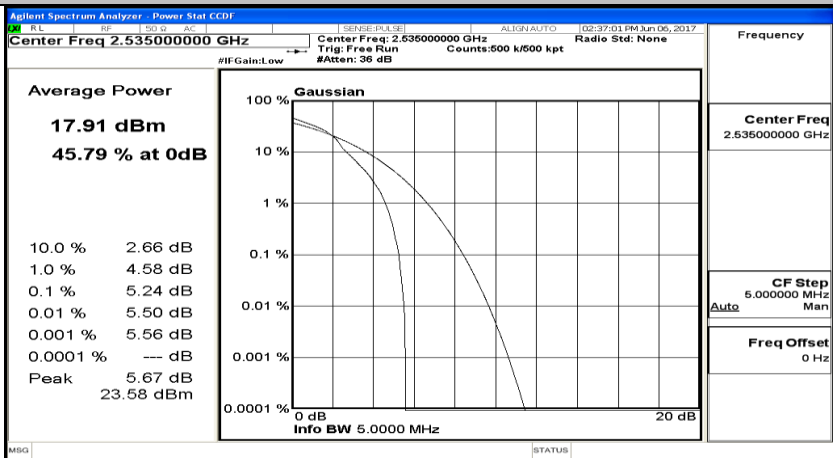
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#0



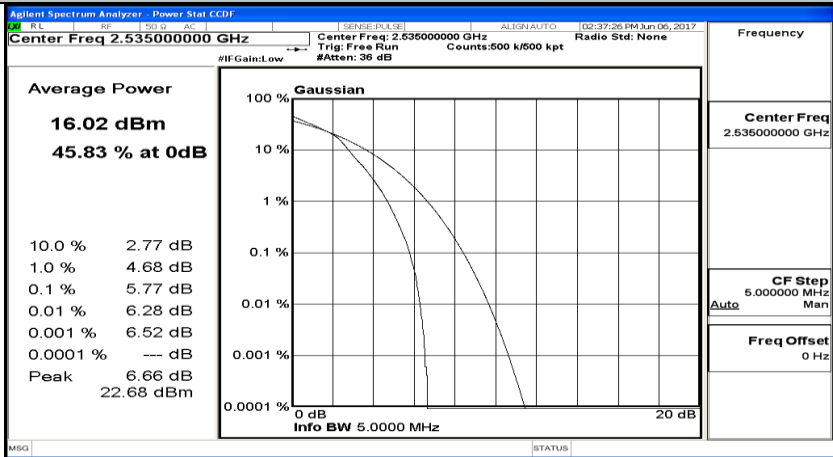
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#12



(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#24

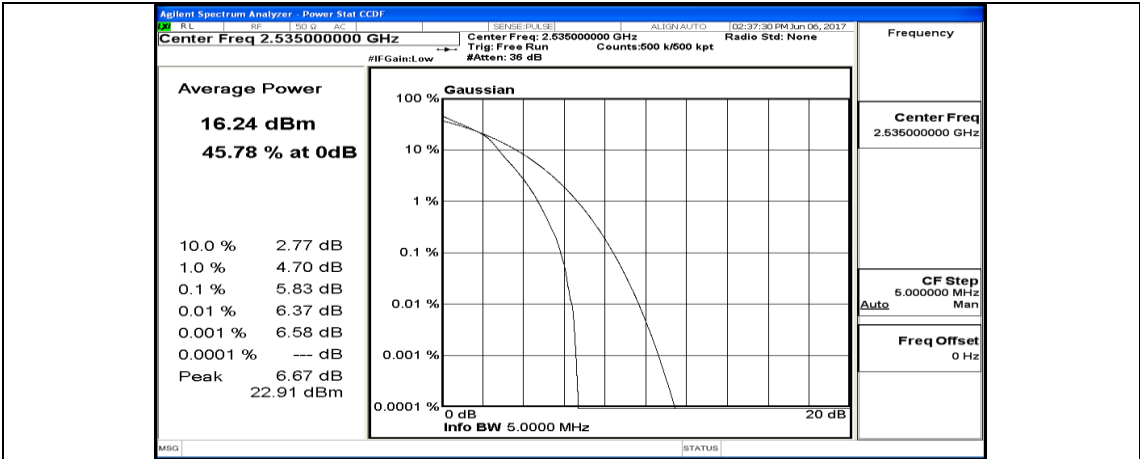


(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_12RB#0

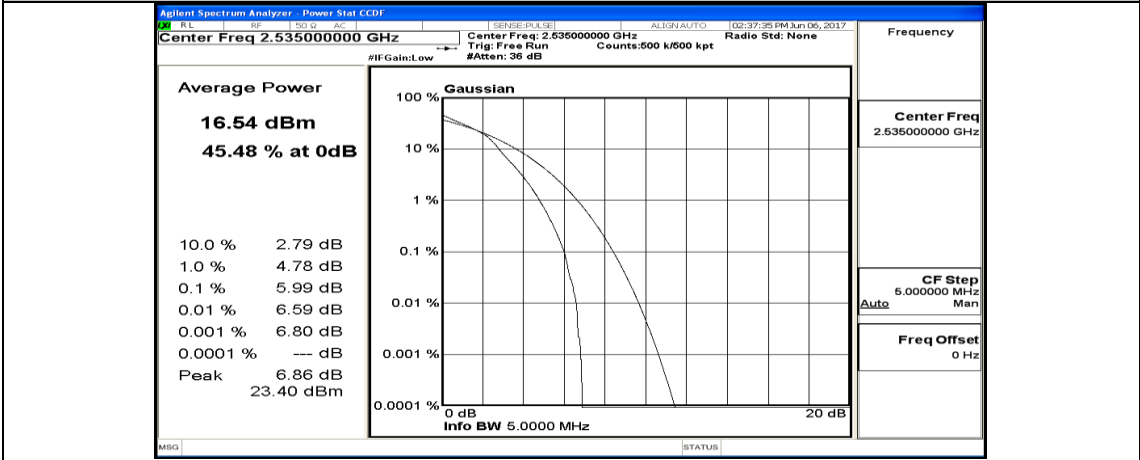


(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_12RB#6

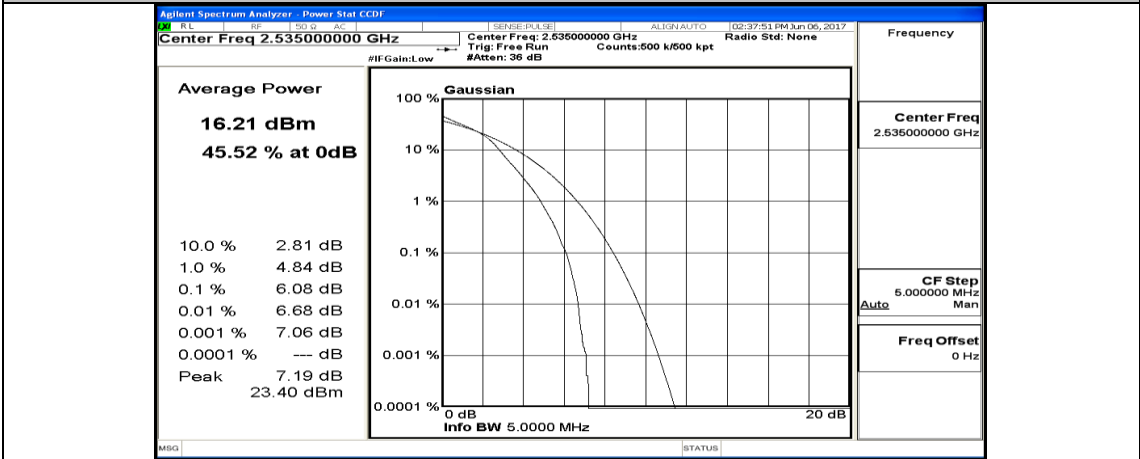




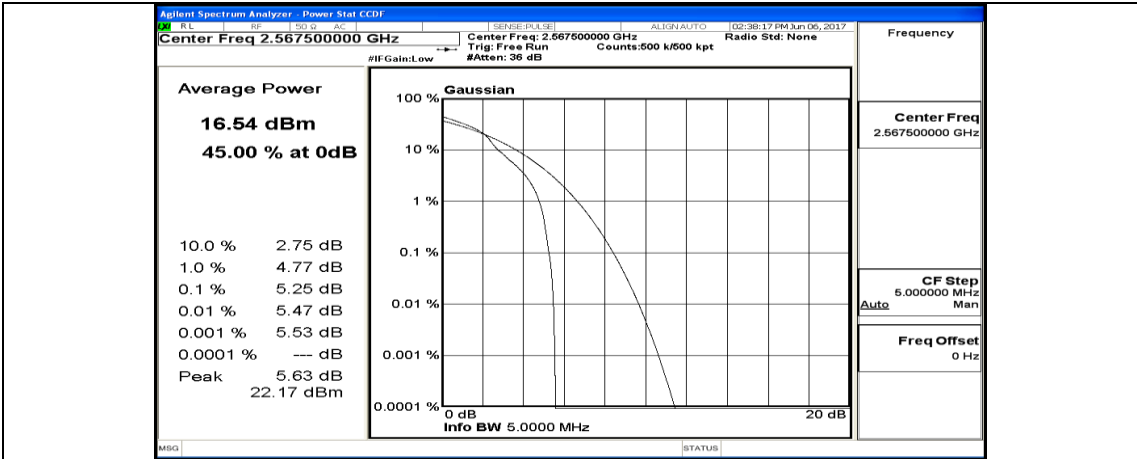
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_12RB#13



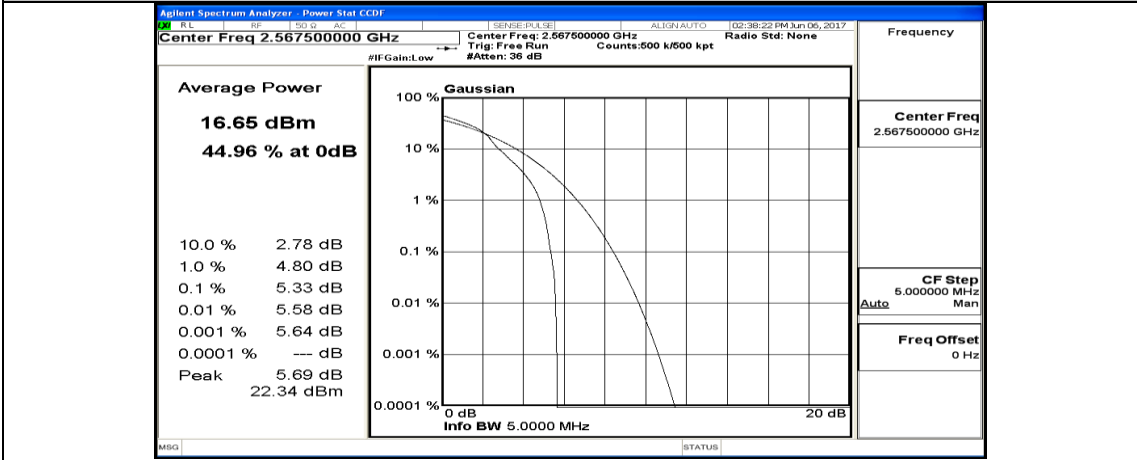
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_25RB#0



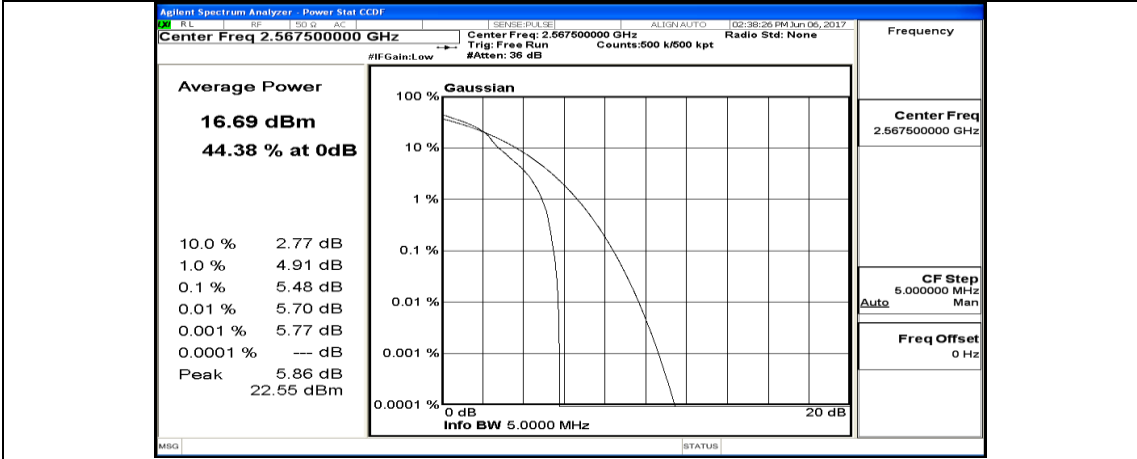
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#0



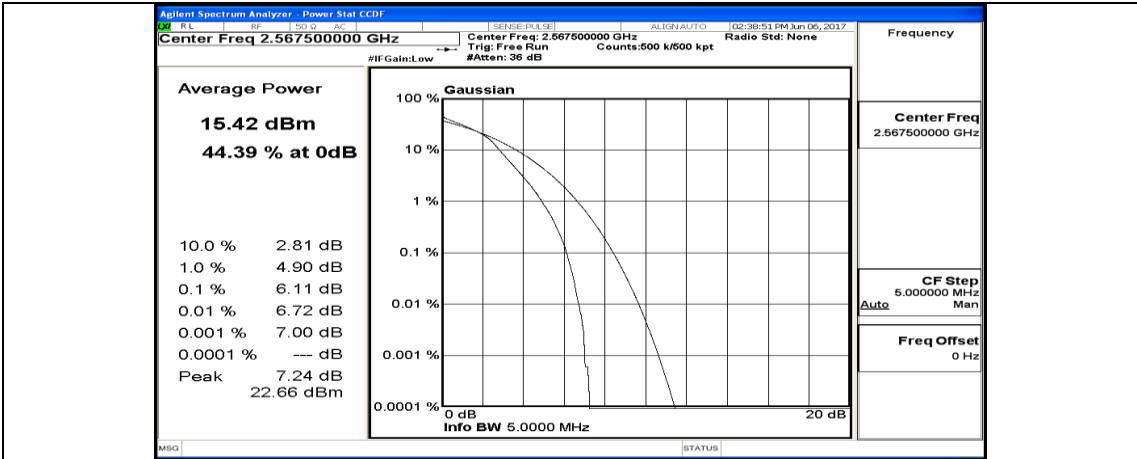
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#12



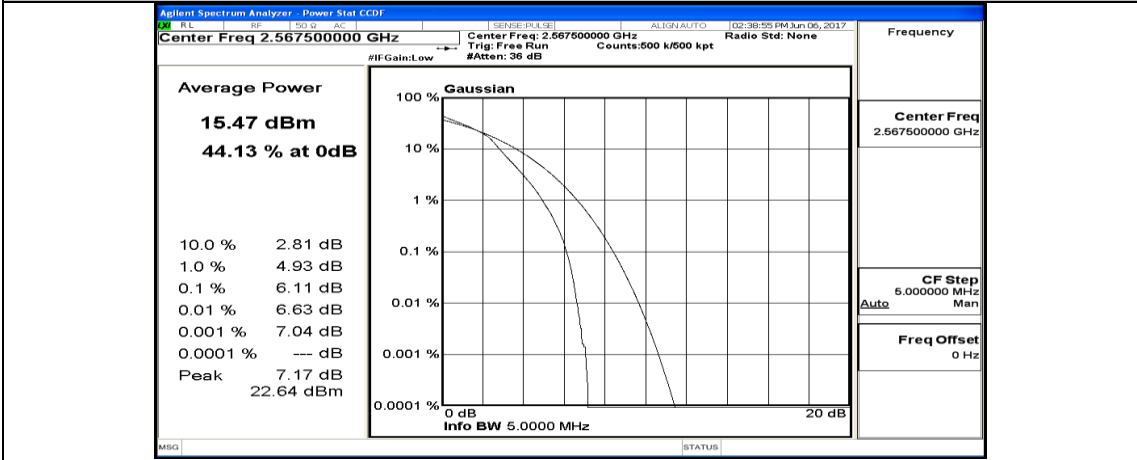
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#24



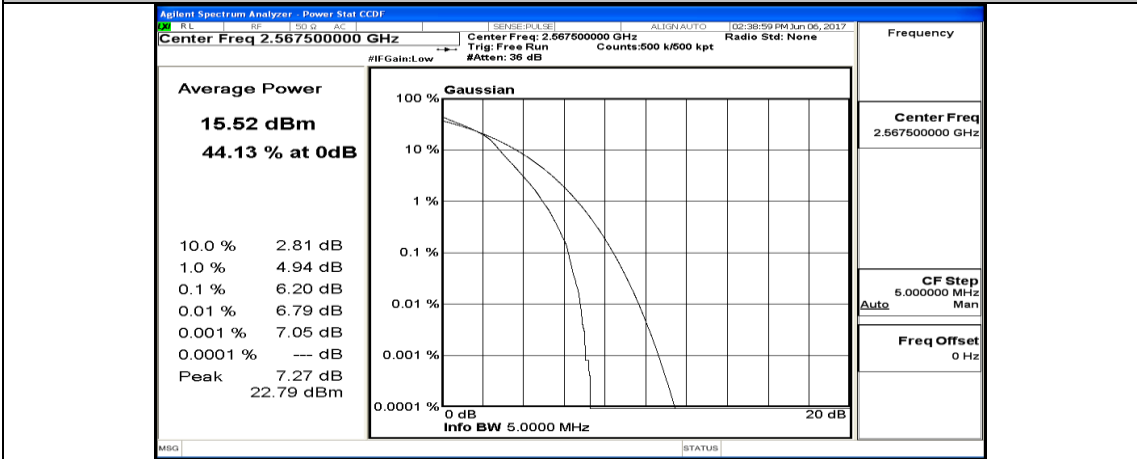
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#0



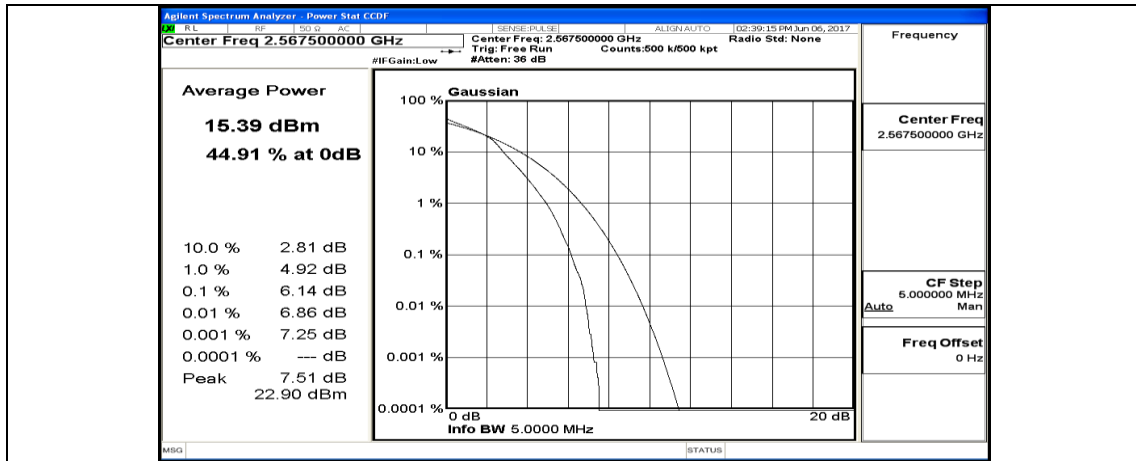
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#6



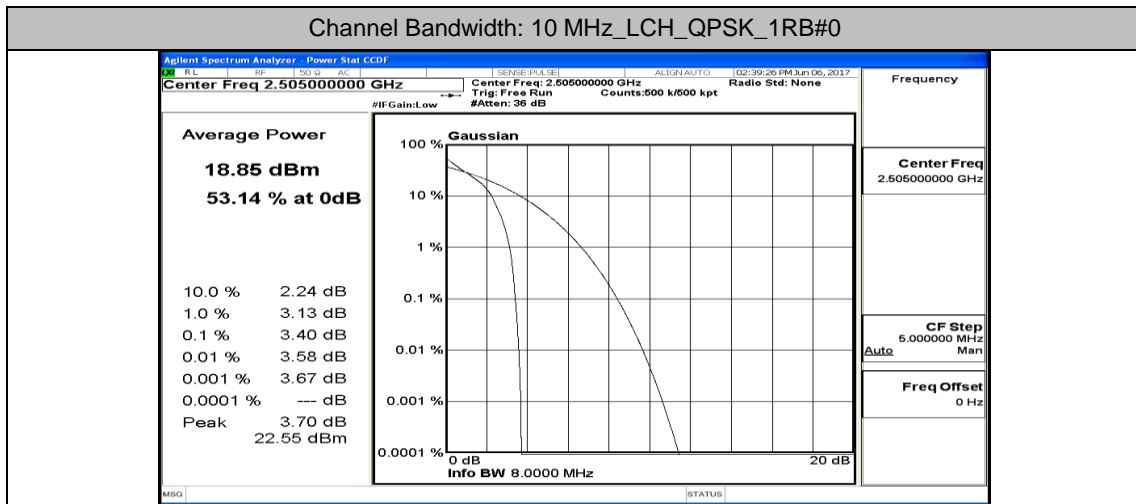
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#13



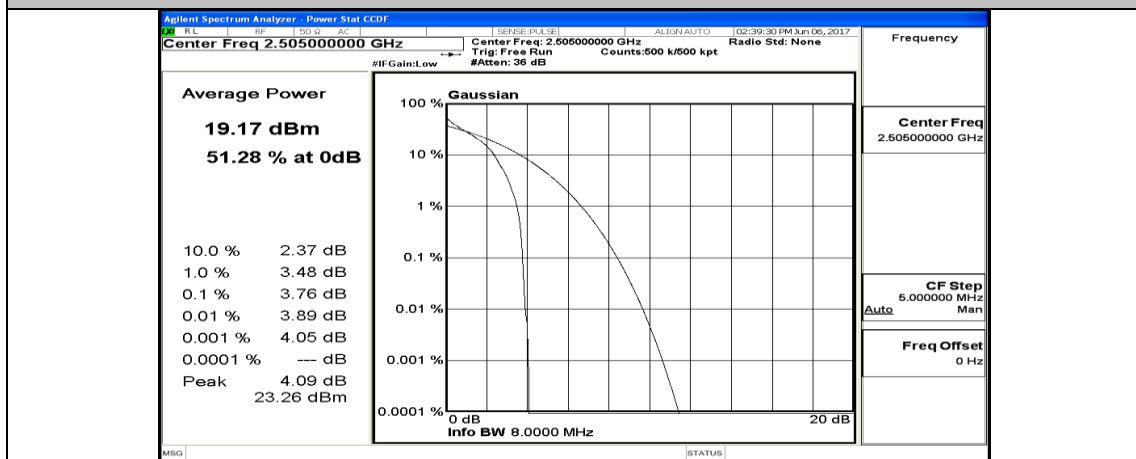
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_25RB#0



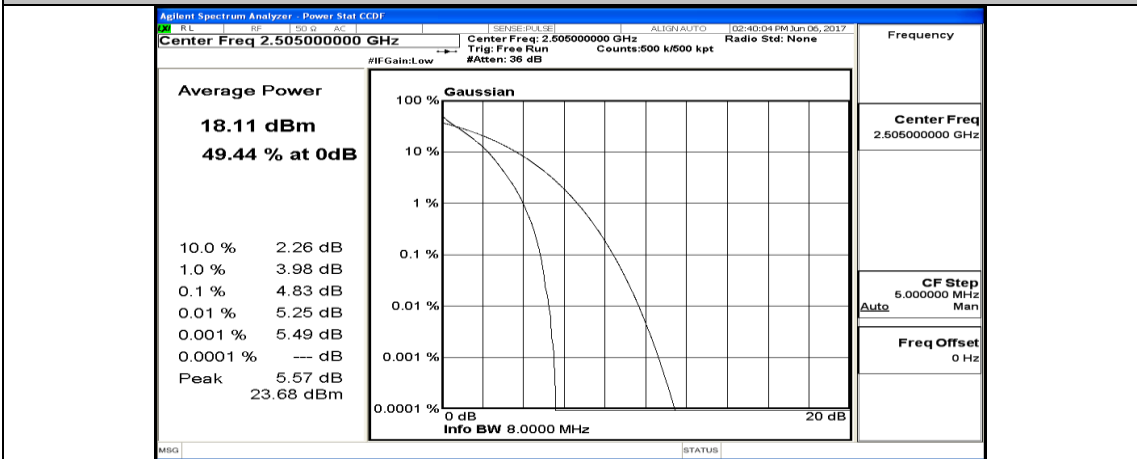
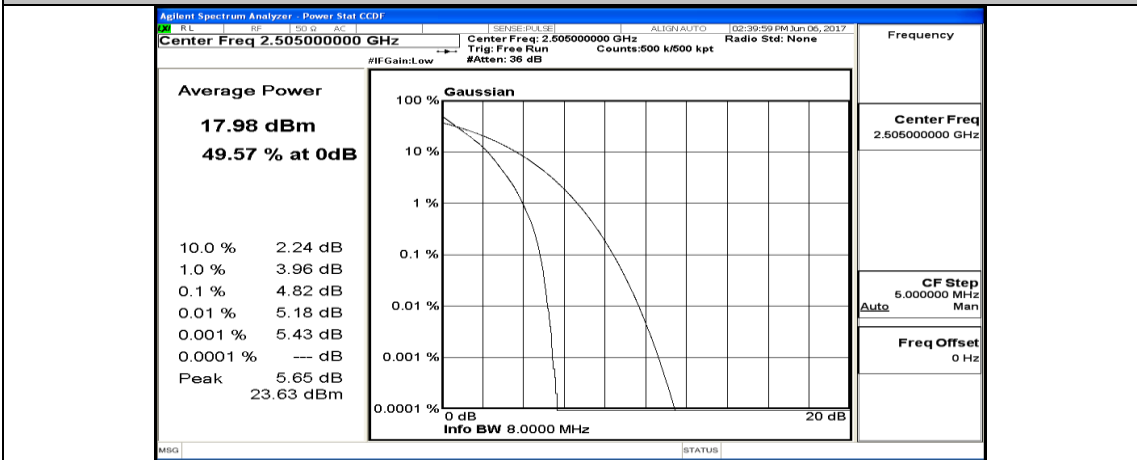
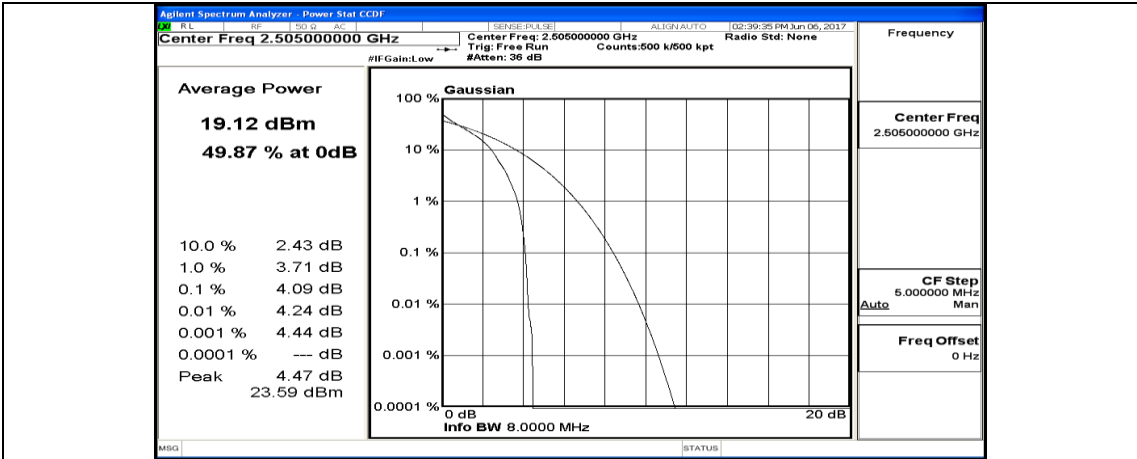
**Channel Bandwidth: 10 MHz**

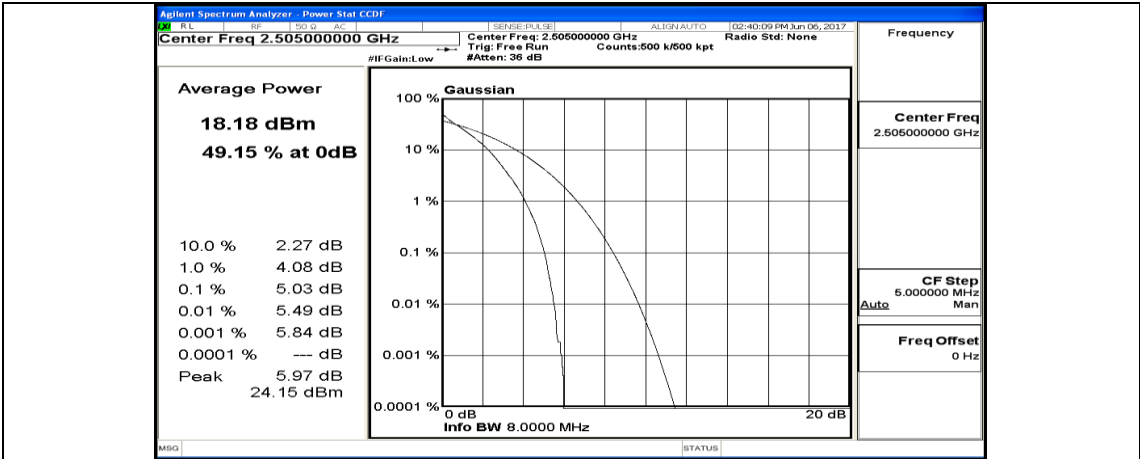


**Channel Bandwidth: 10 MHz\_LCH\_QPSK\_1RB#24**

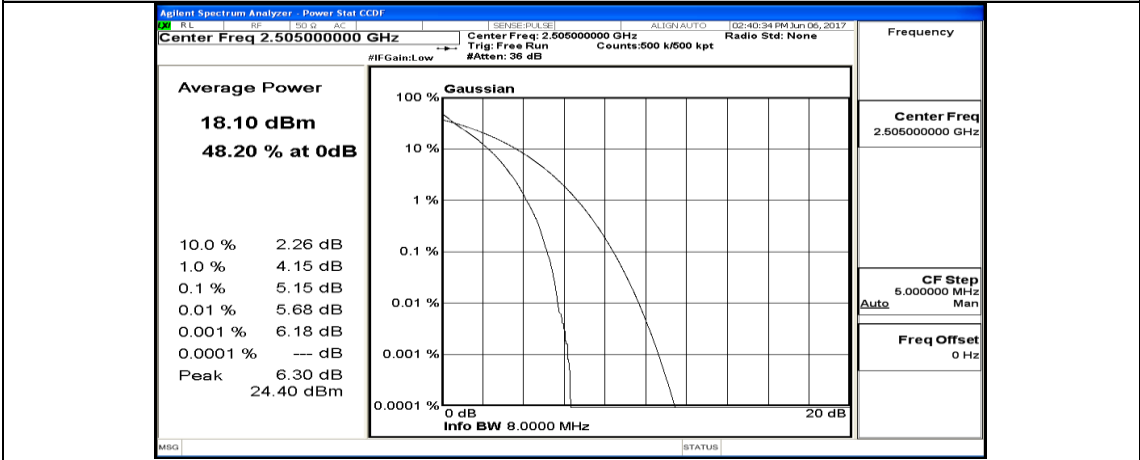


**Channel Bandwidth: 10 MHz\_LCH\_QPSK\_1RB#49**

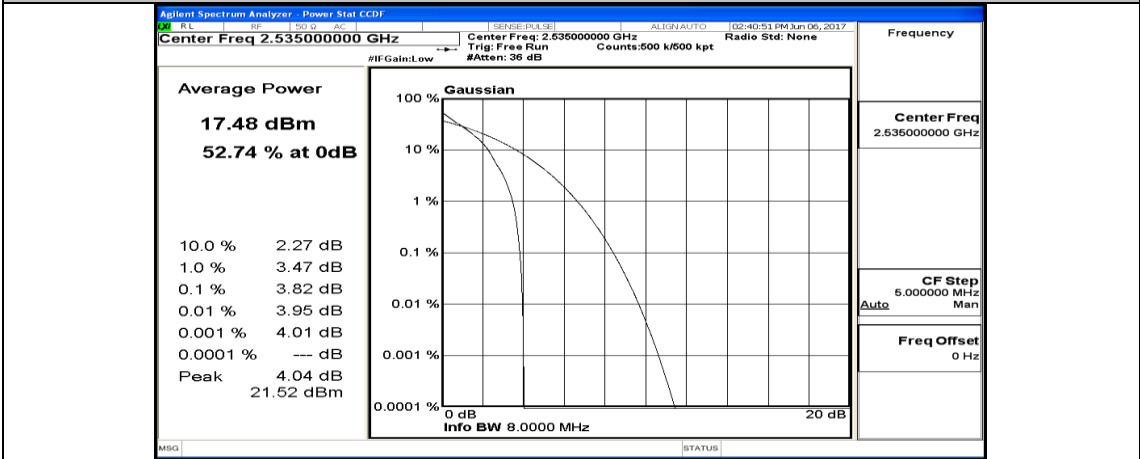




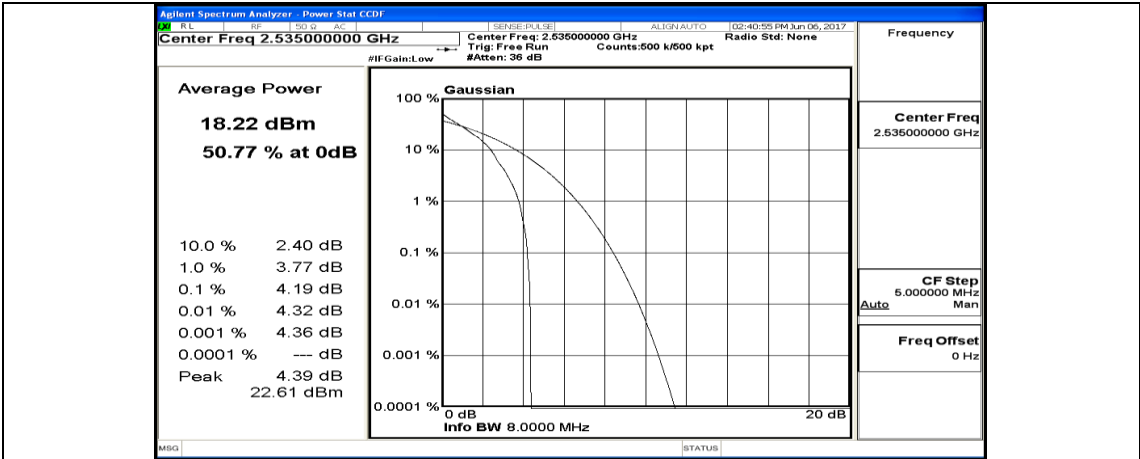
Channel Bandwidth: 10 MHz\_LCH\_QPSK\_50RB#0



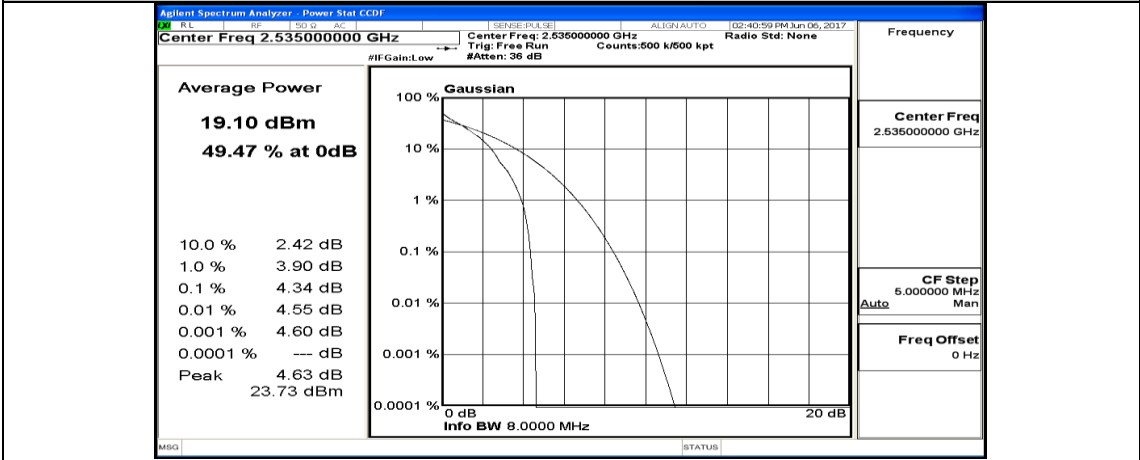
Channel Bandwidth: 10 MHz\_MCH\_QPSK\_1RB#0



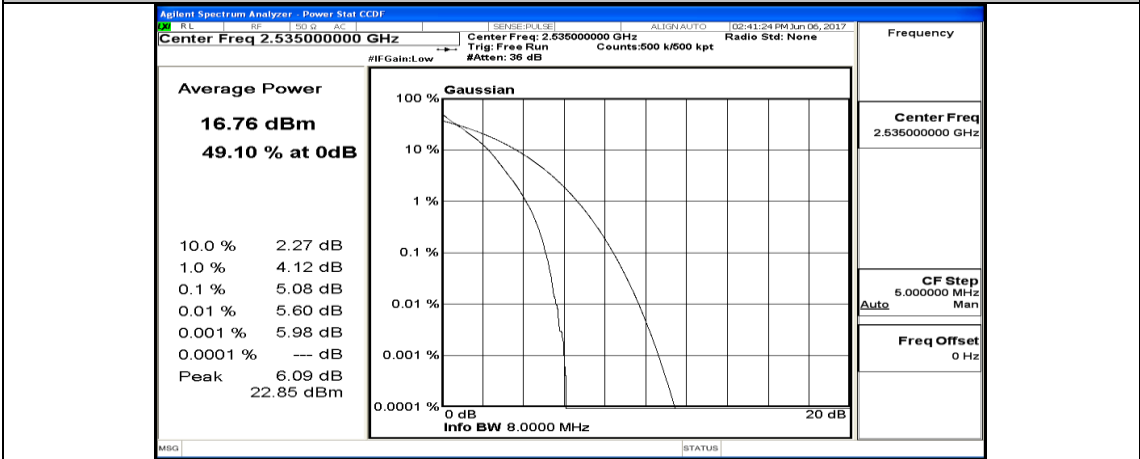
Channel Bandwidth: 10 MHz\_MCH\_QPSK\_1RB#24



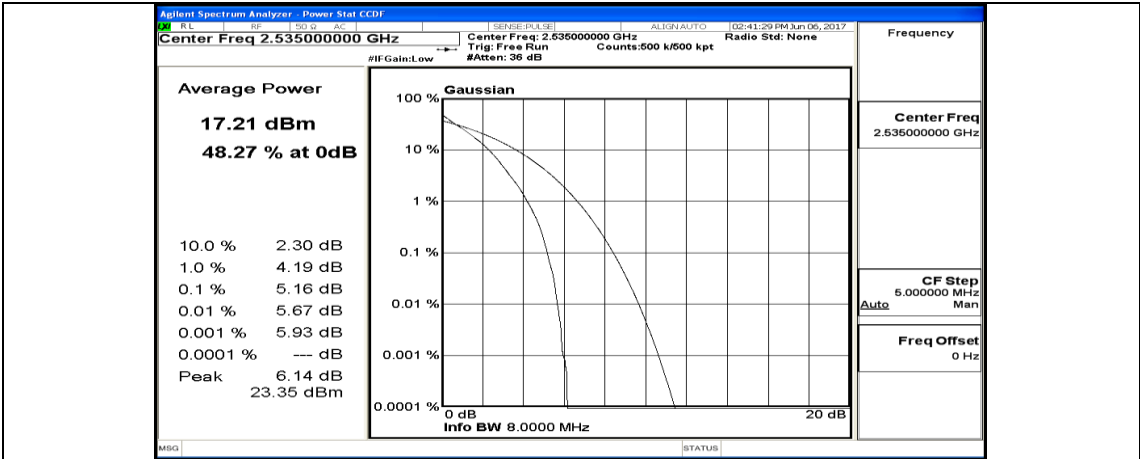
Channel Bandwidth: 10 MHz\_MCH\_QPSK\_1RB#49



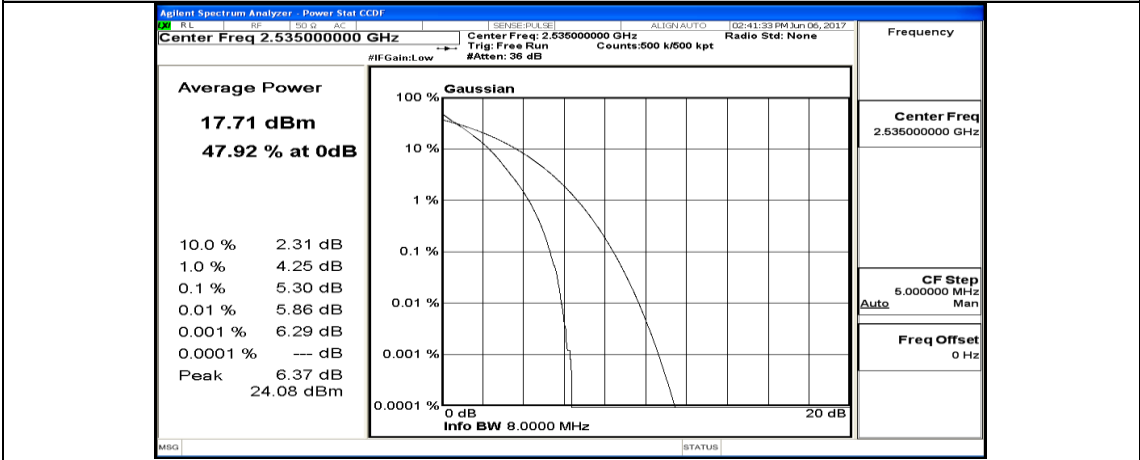
Channel Bandwidth: 10 MHz\_MCH\_QPSK\_25RB#0



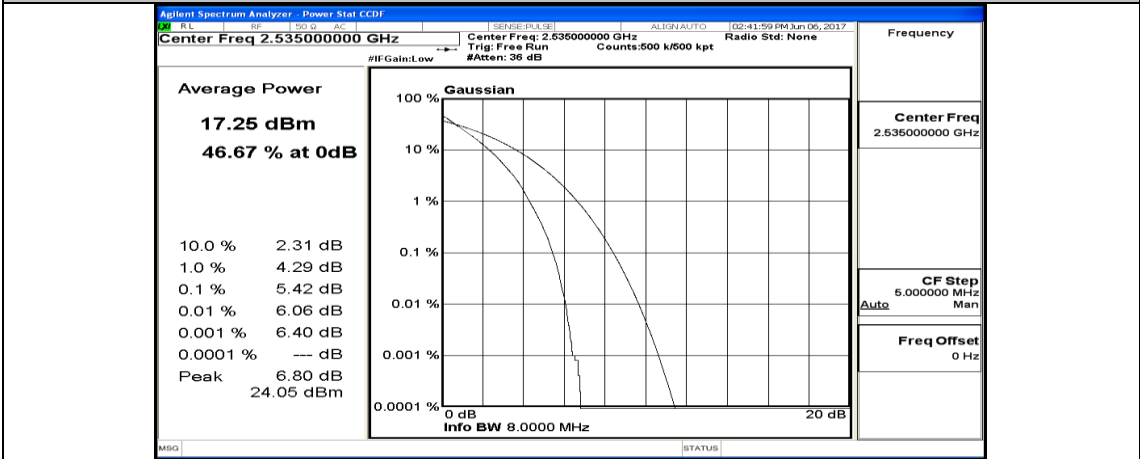
Channel Bandwidth: 10 MHz\_MCH\_QPSK\_25RB#12



Channel Bandwidth: 10 MHz\_MCH\_QPSK\_25RB#25

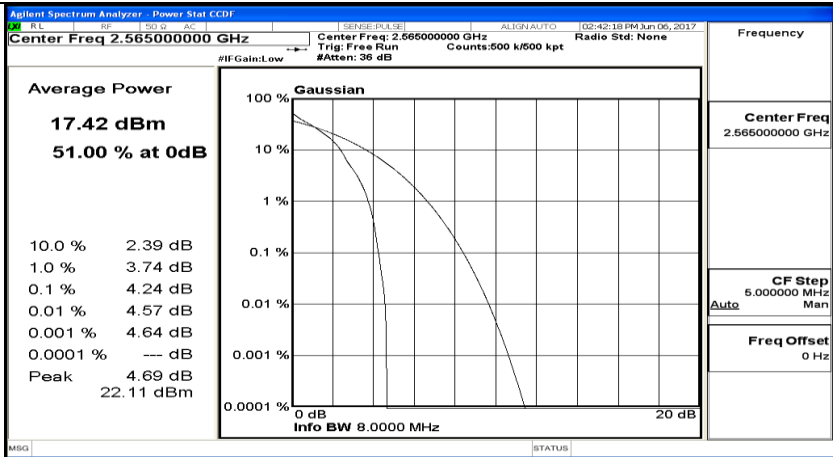


Channel Bandwidth: 10 MHz\_MCH\_QPSK\_50RB#0

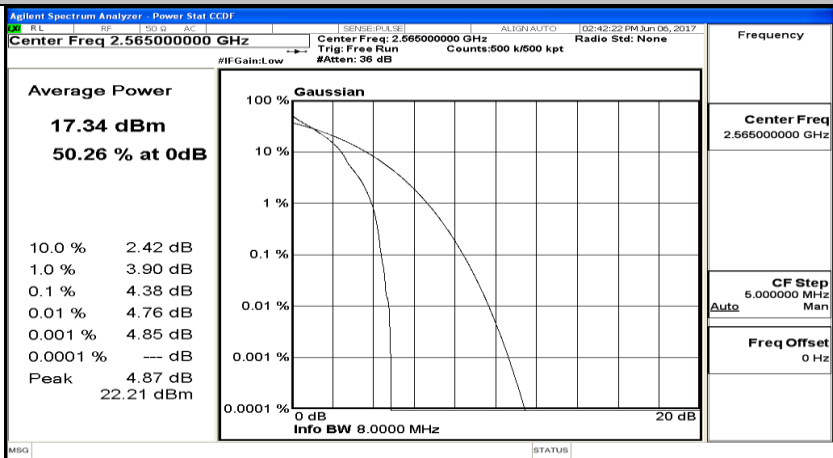


Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#0

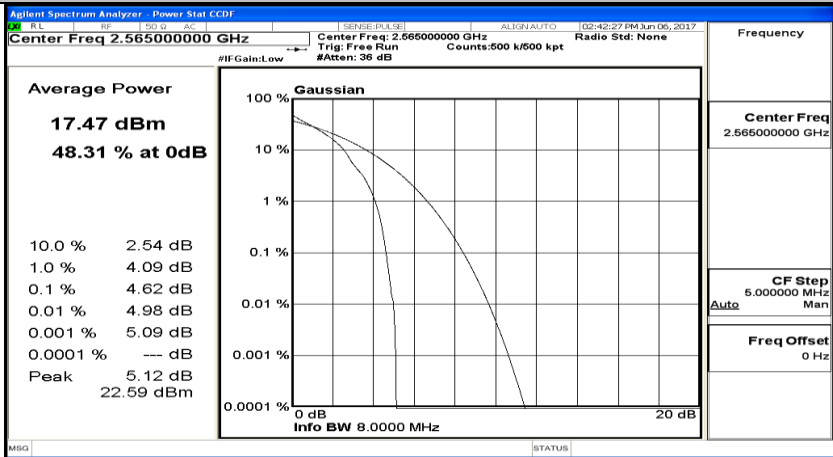




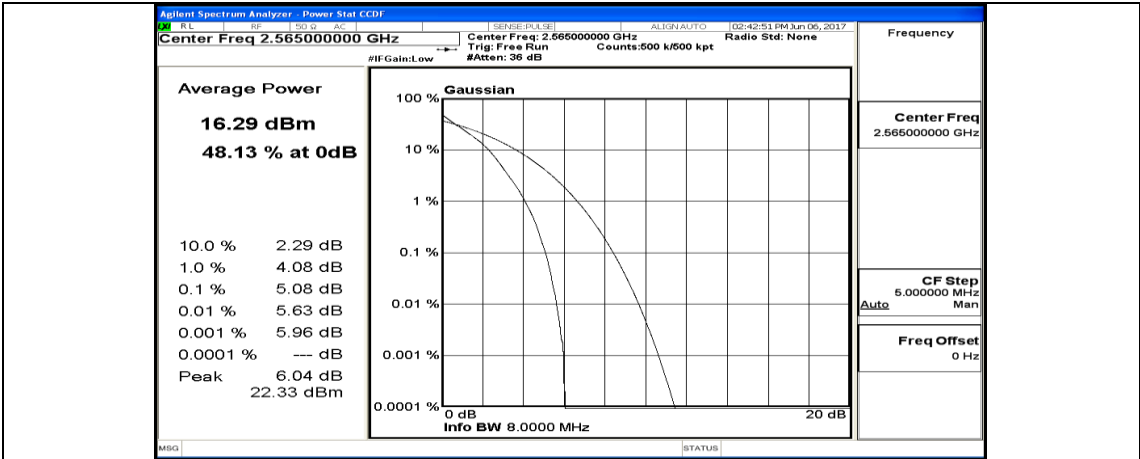
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#24



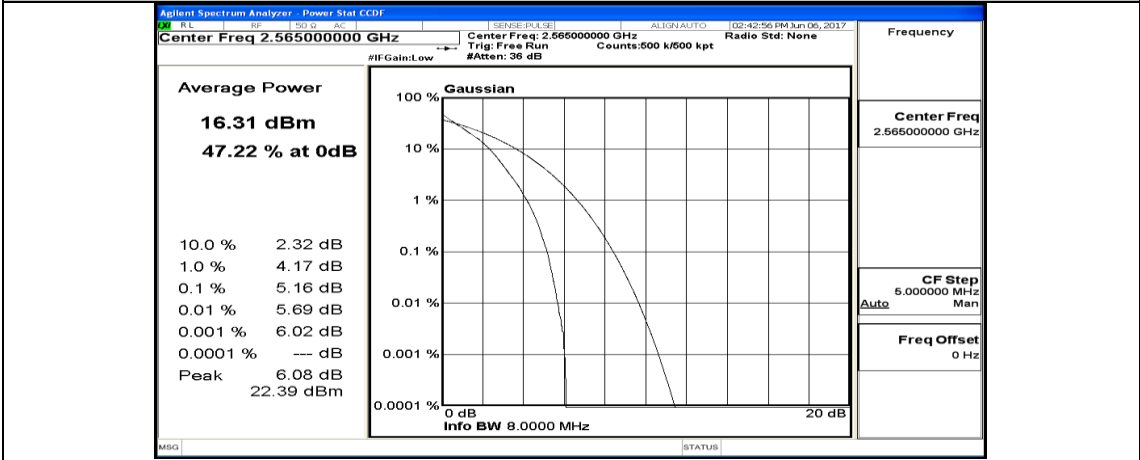
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#49



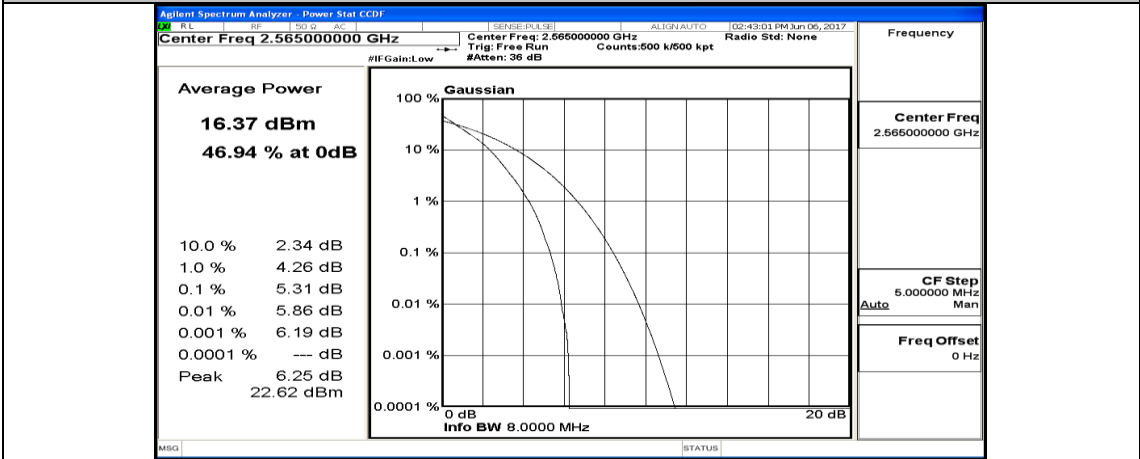
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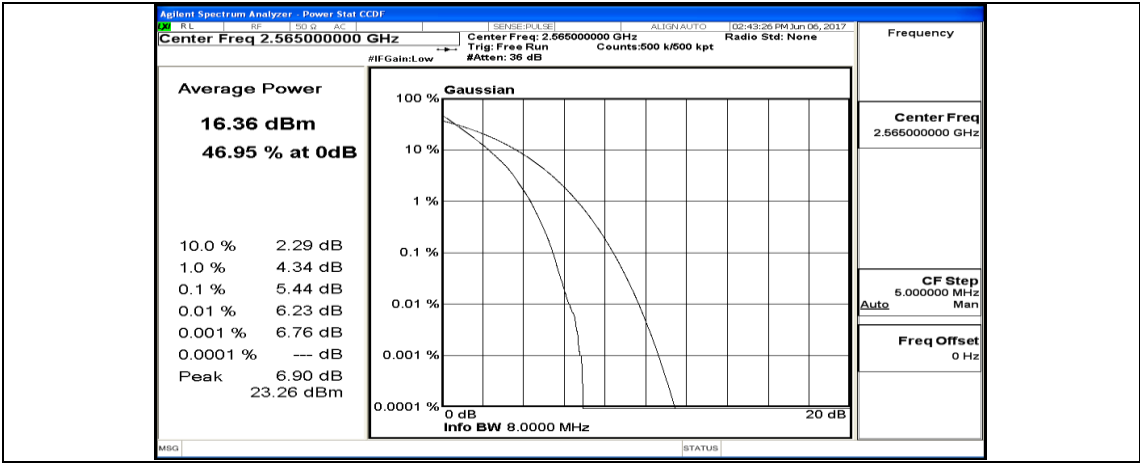
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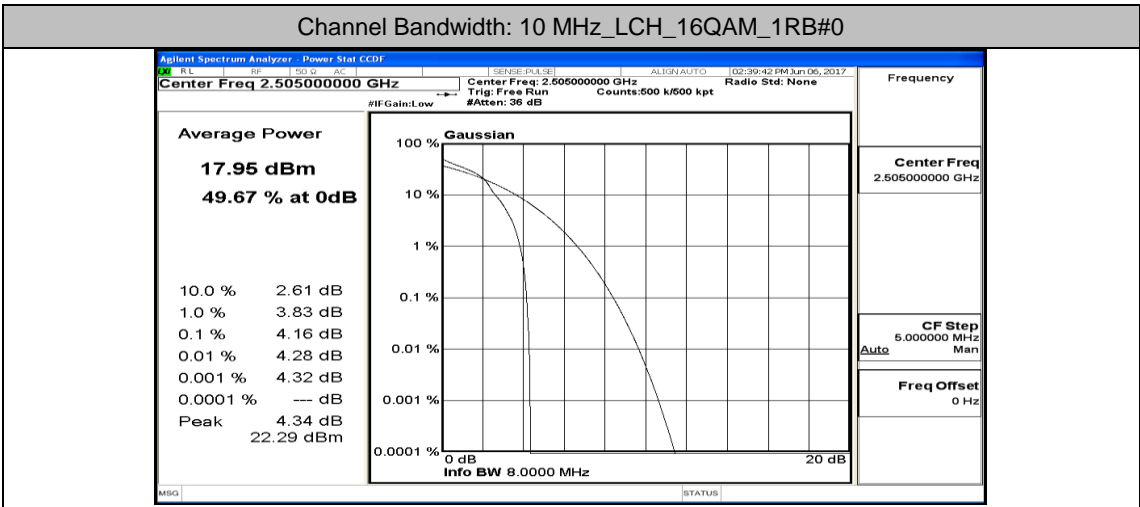
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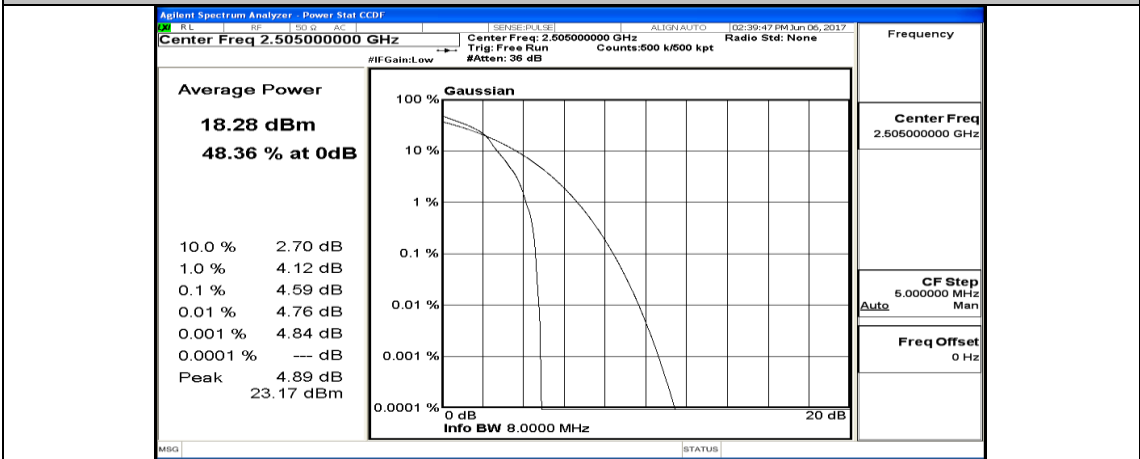
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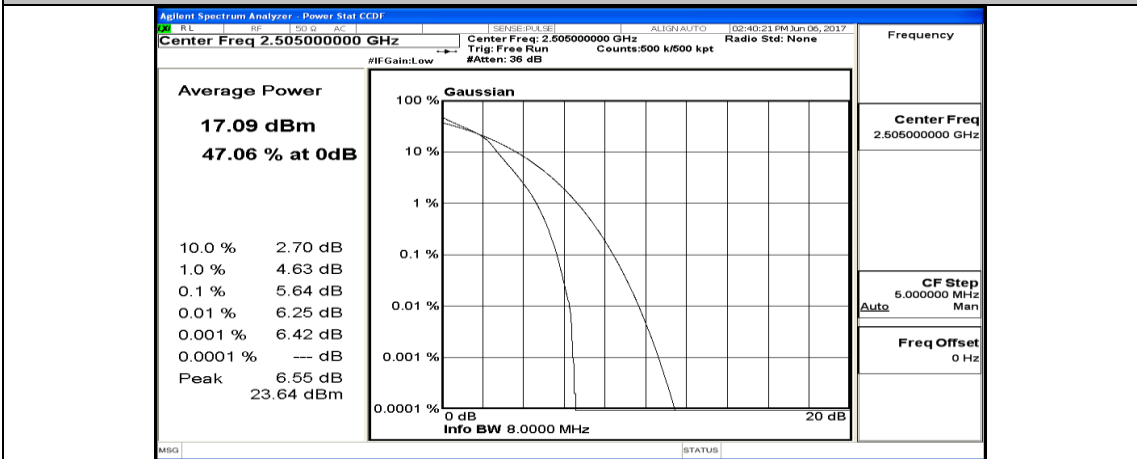
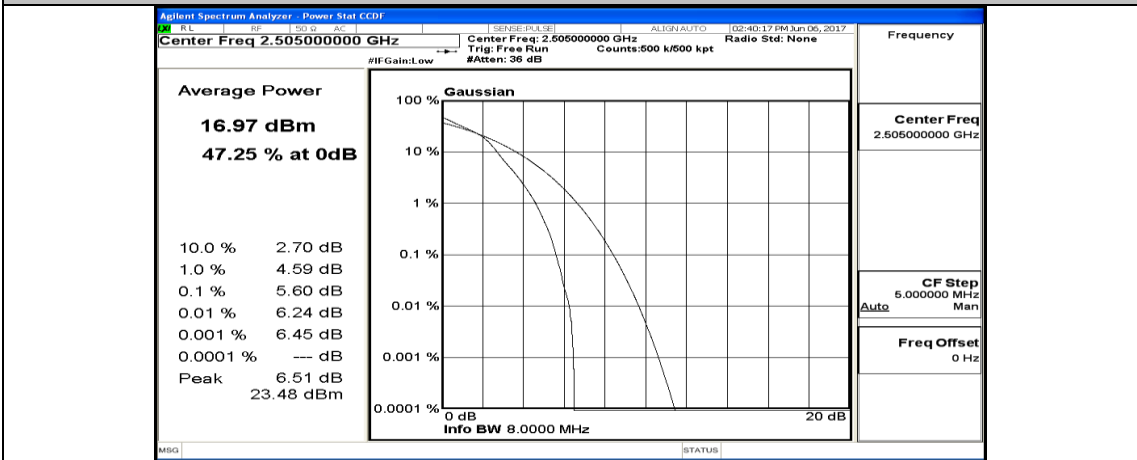
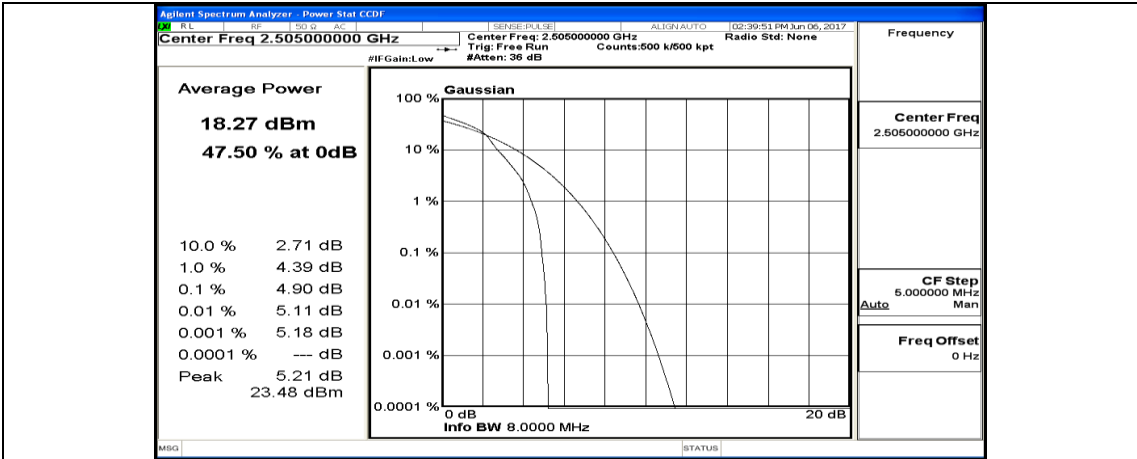
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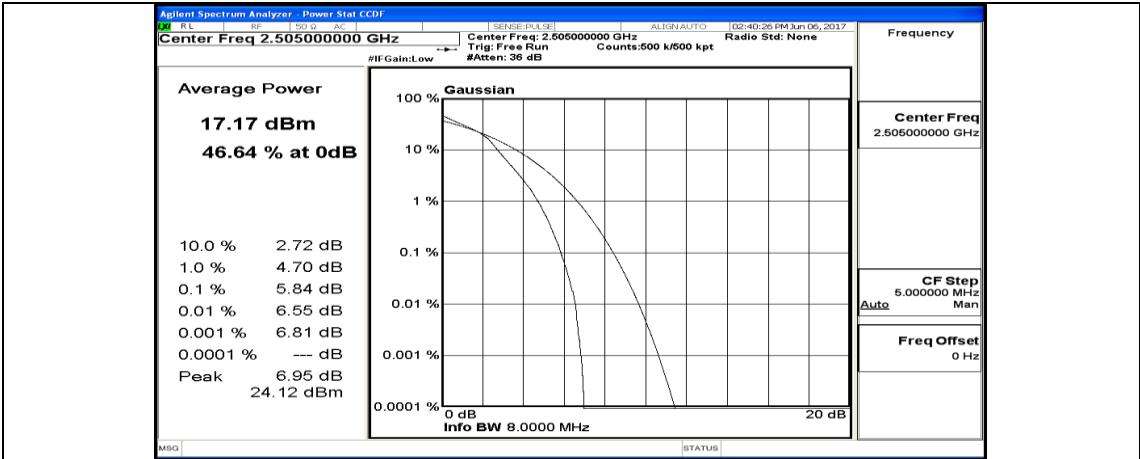


Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#24

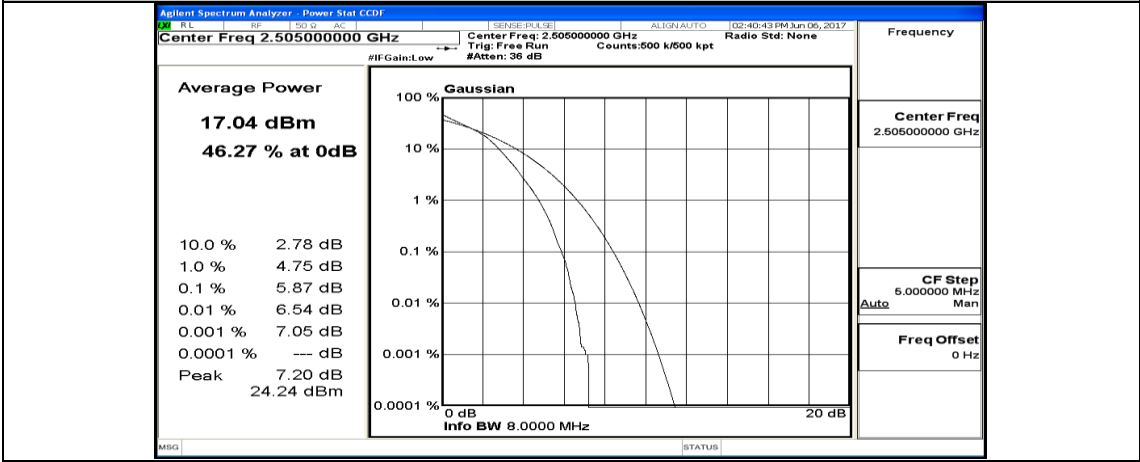


Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#49

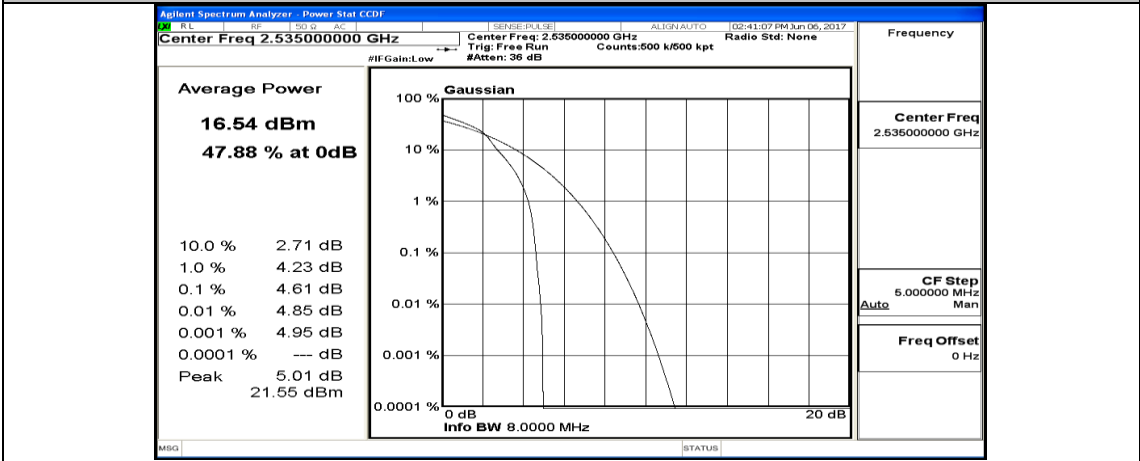




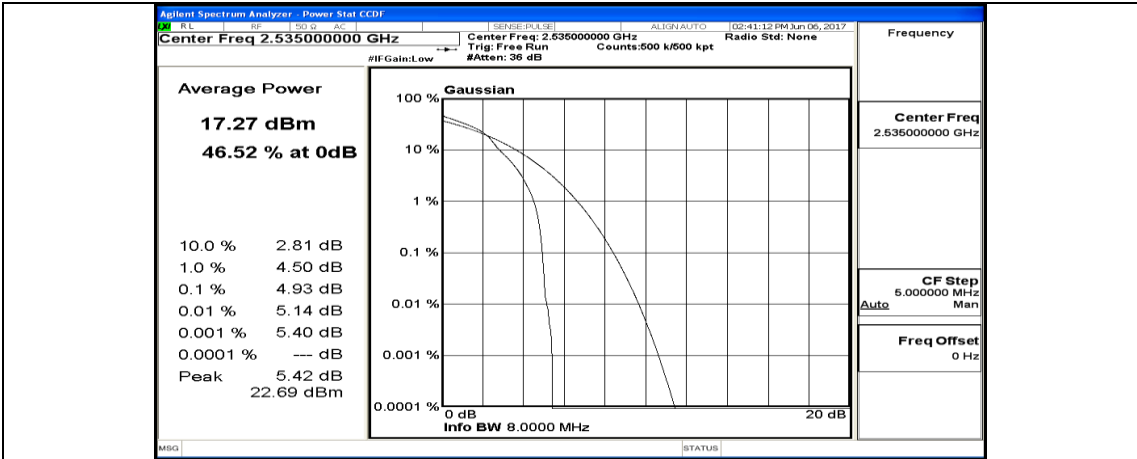
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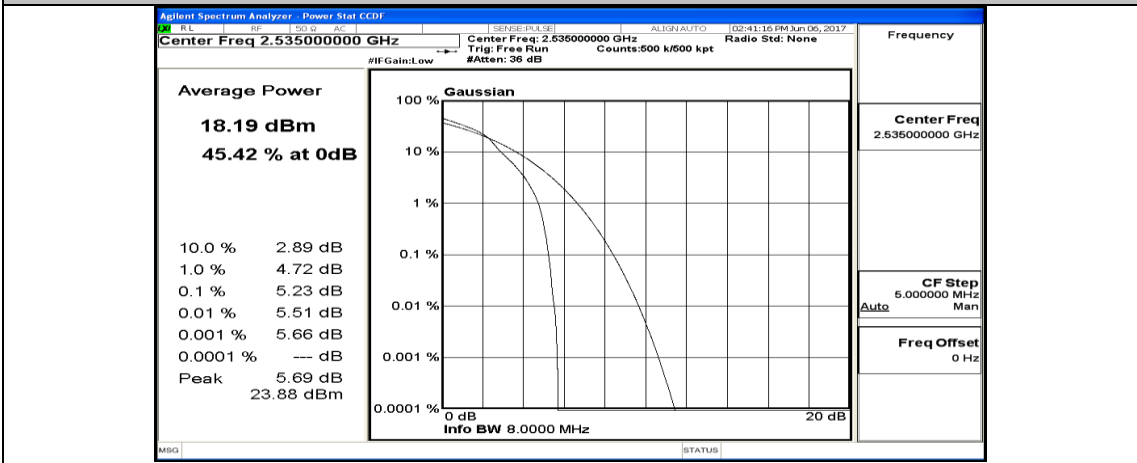
Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#0



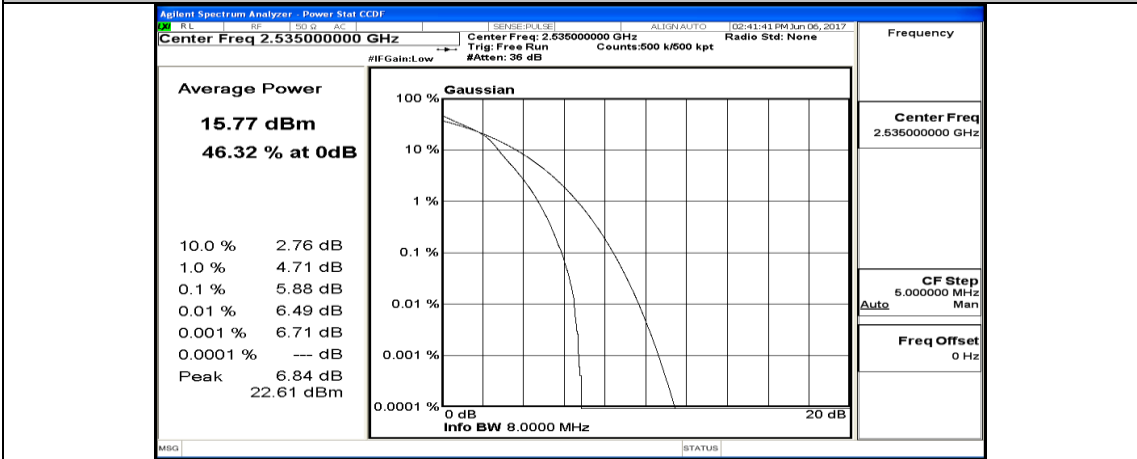
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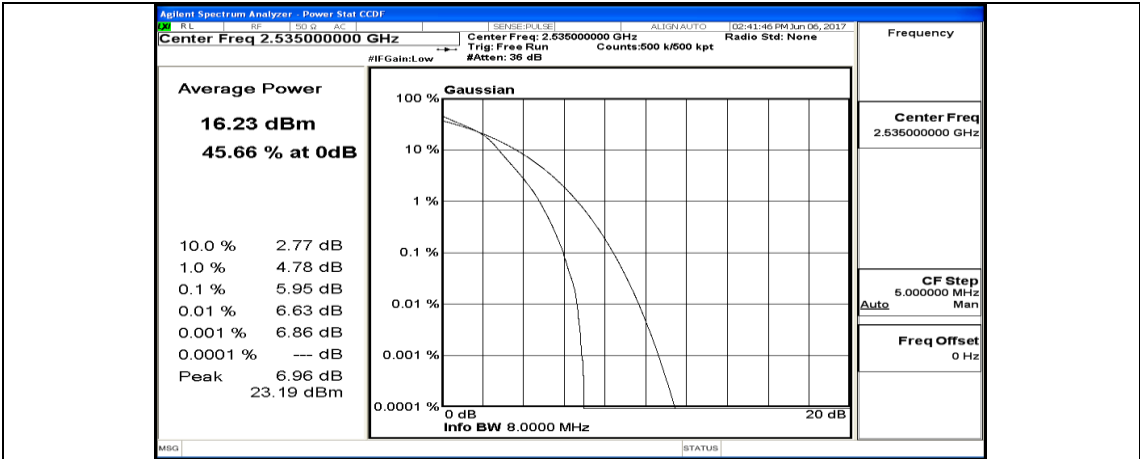
Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#49



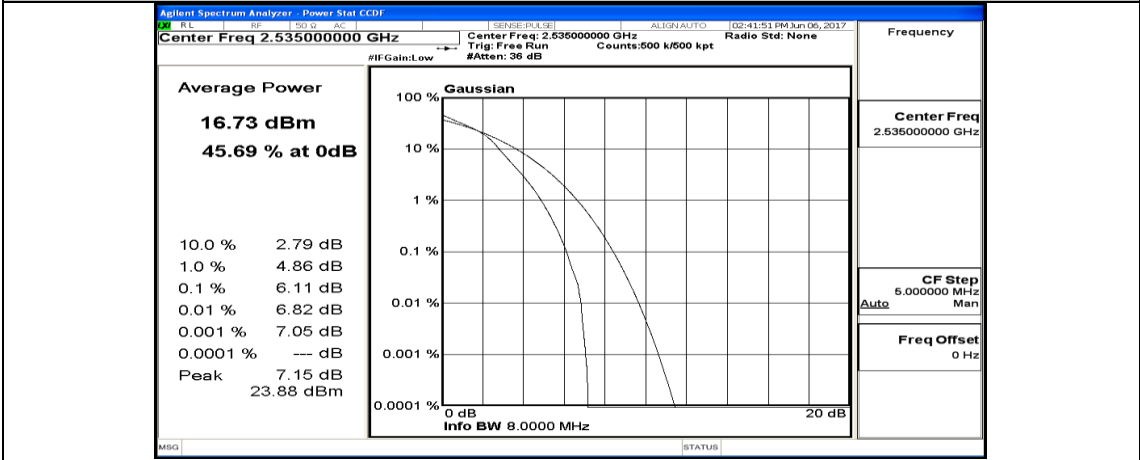
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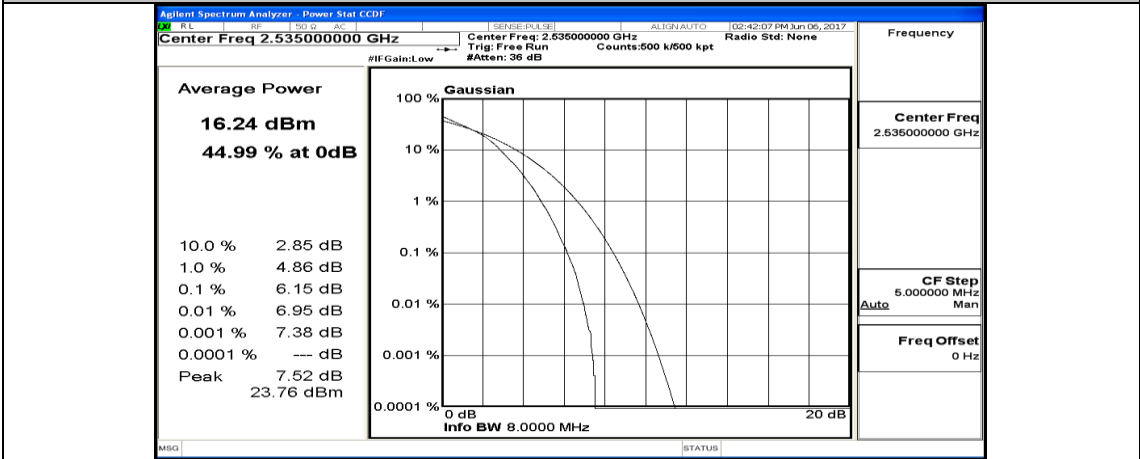
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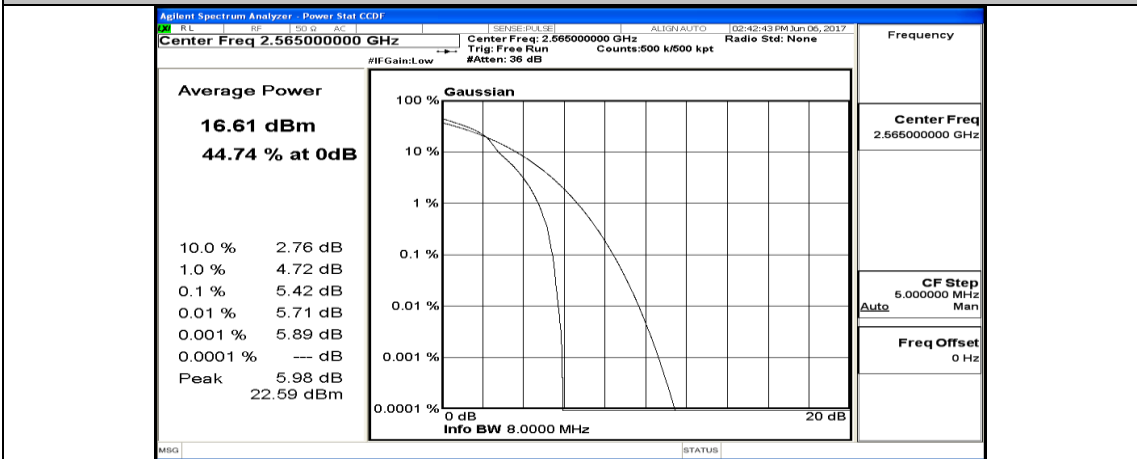
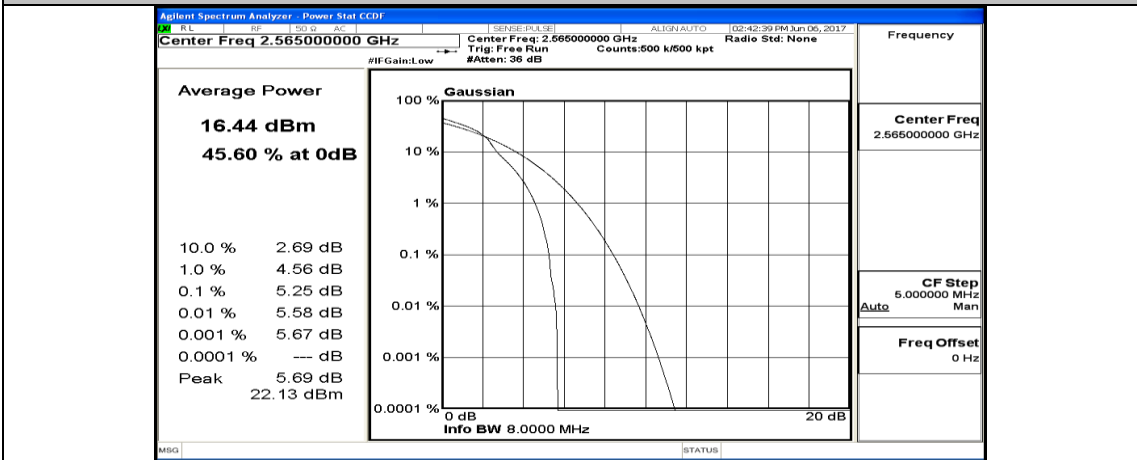
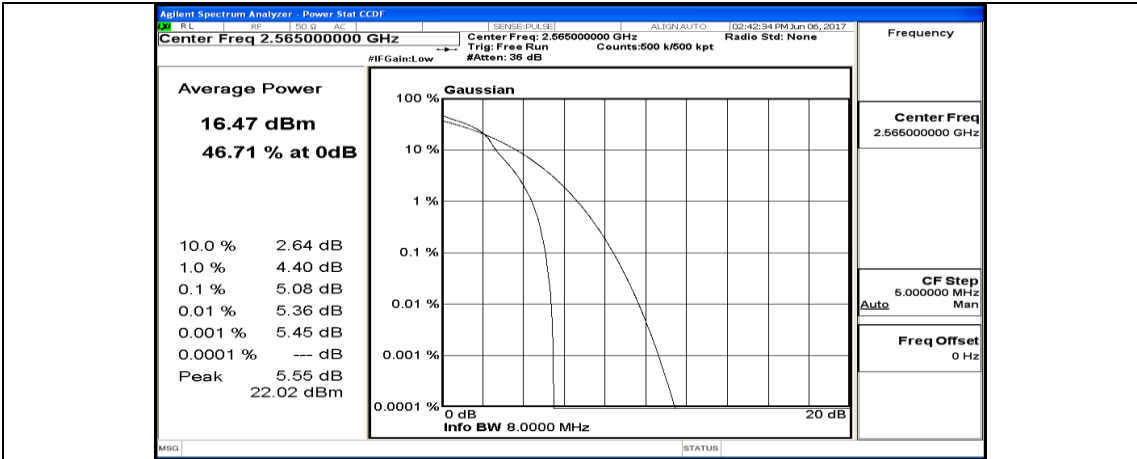
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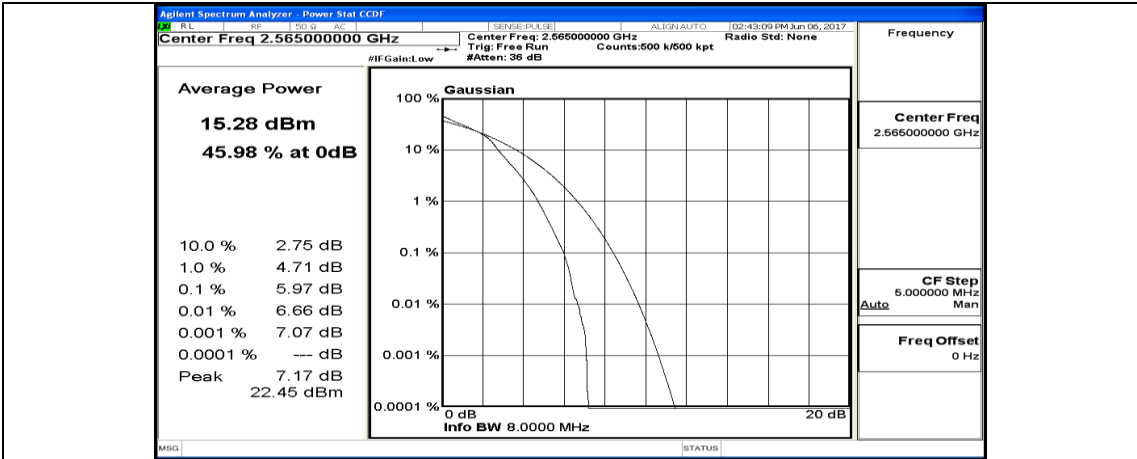
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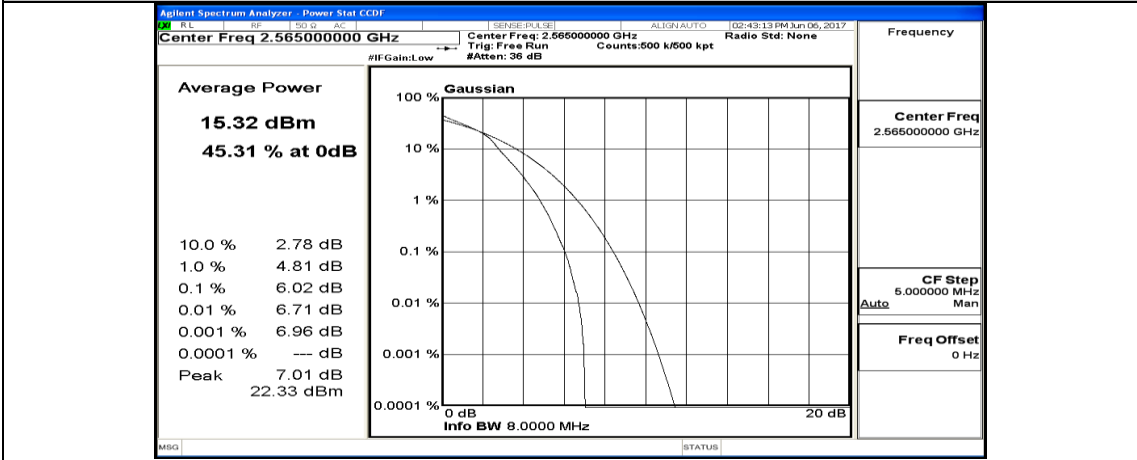
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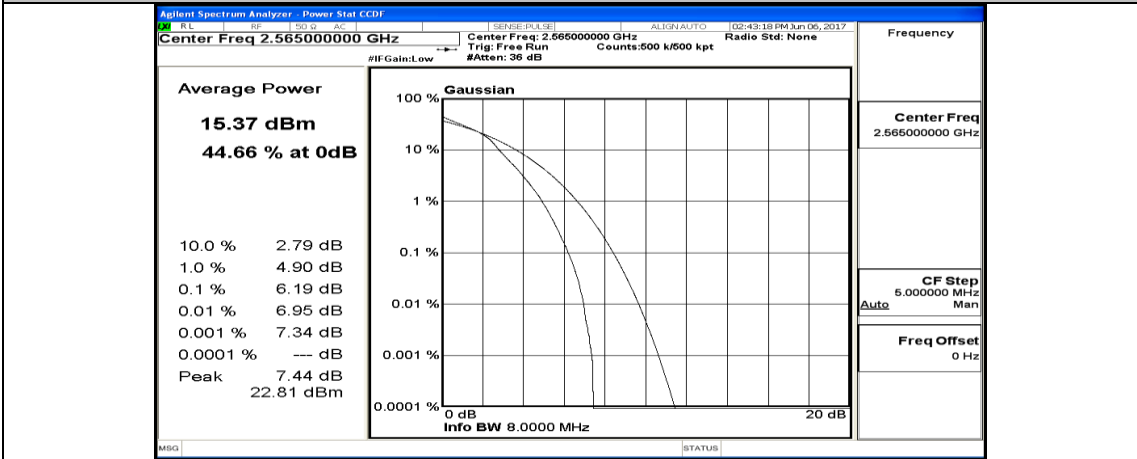




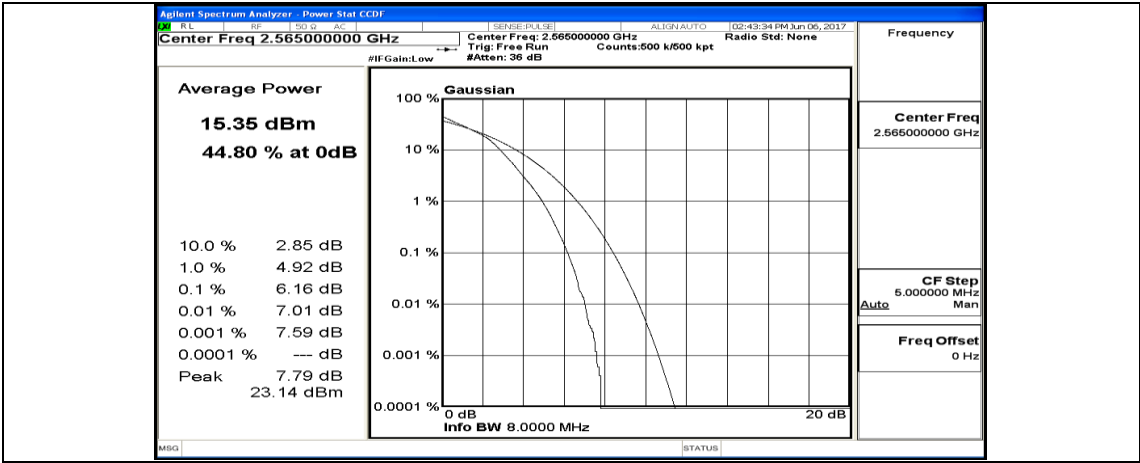
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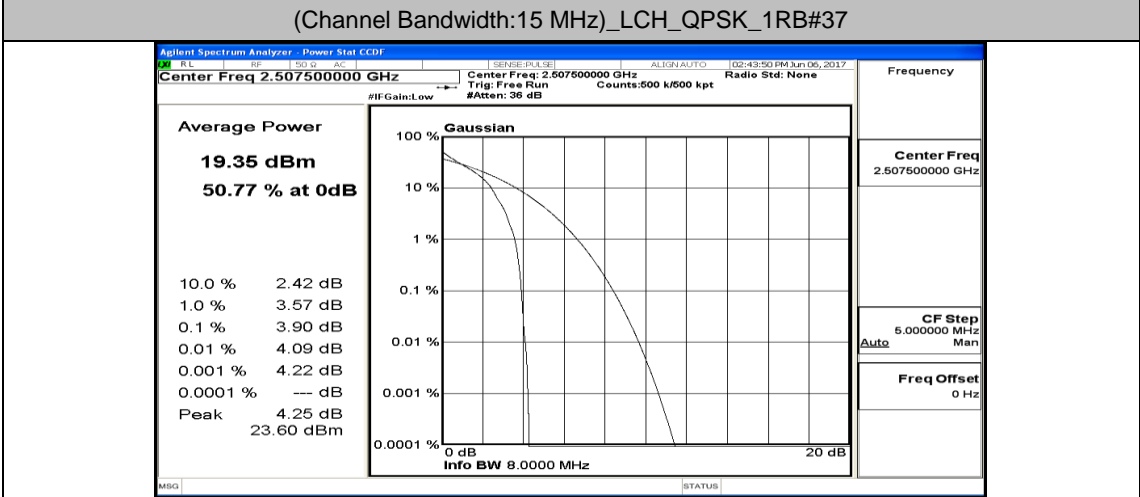
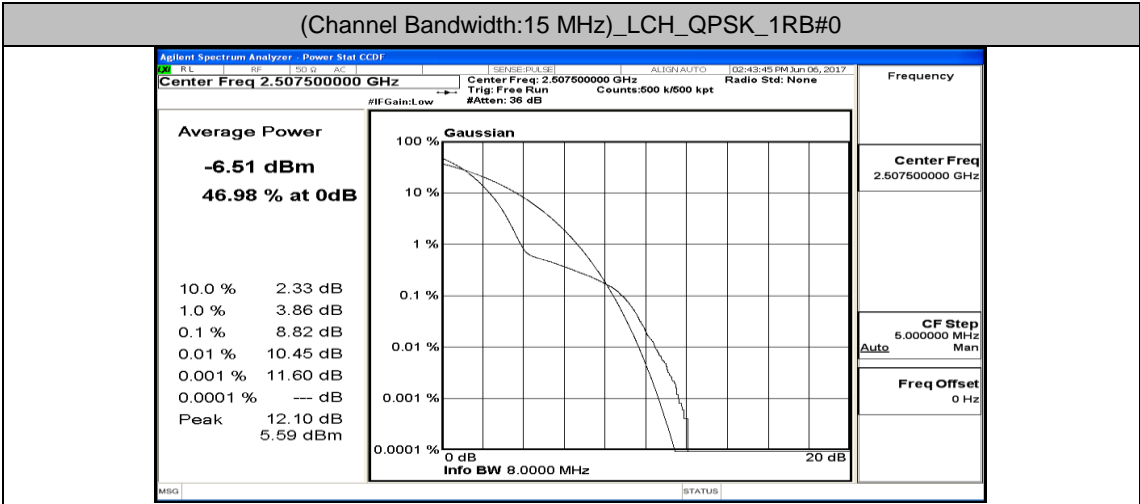
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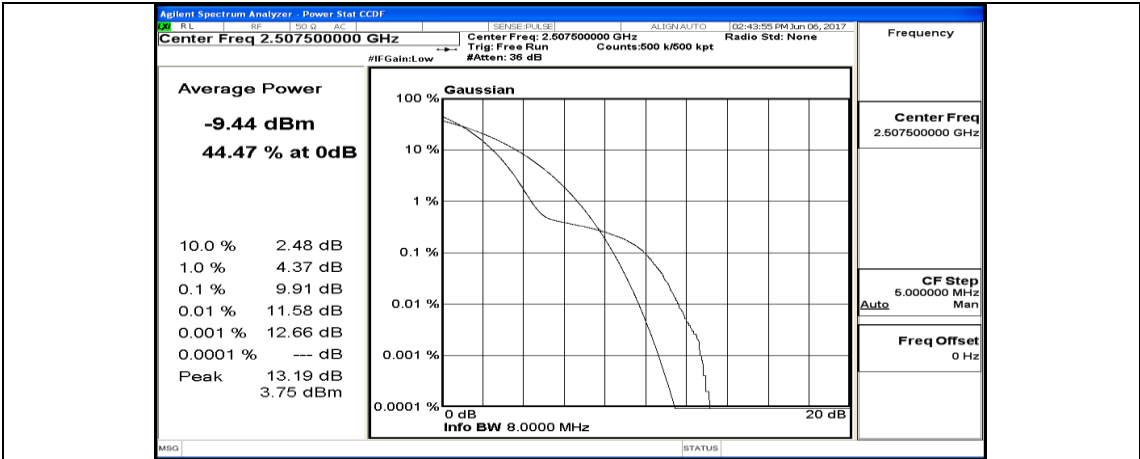
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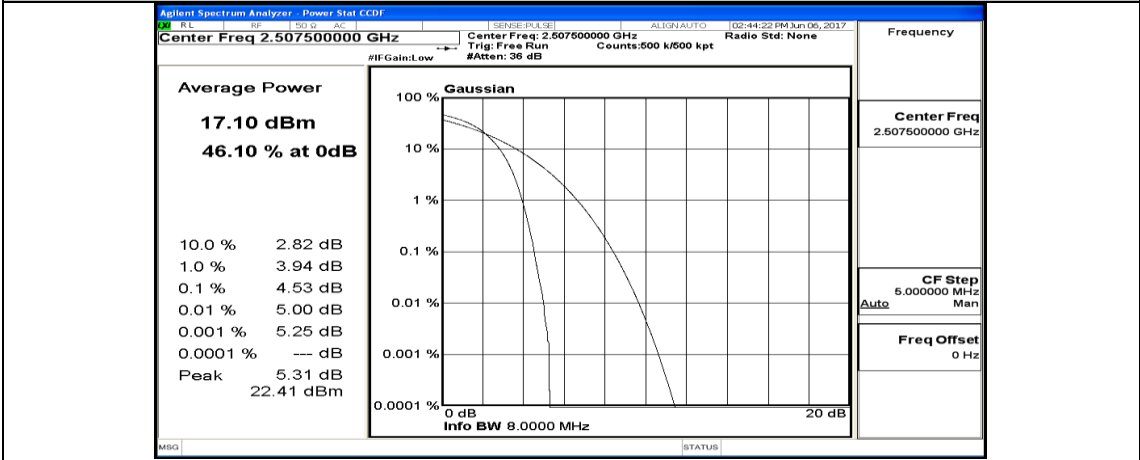
**Channel Bandwidth: 15 MHz**



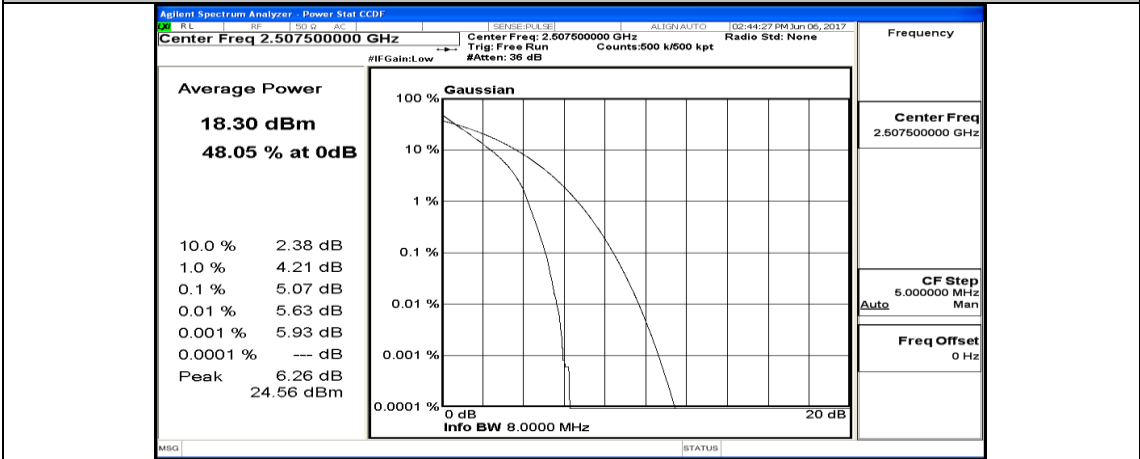
(Channel Bandwidth:15 MHz)\_LCH\_QPSK\_1RB#74



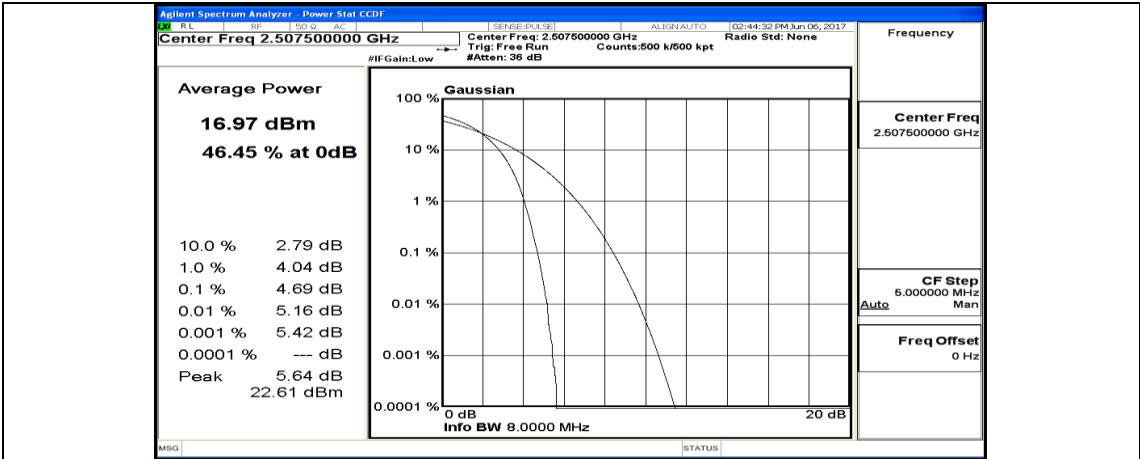
(Channel Bandwidth:15 MHz)\_LCH\_QPSK\_37RB#0



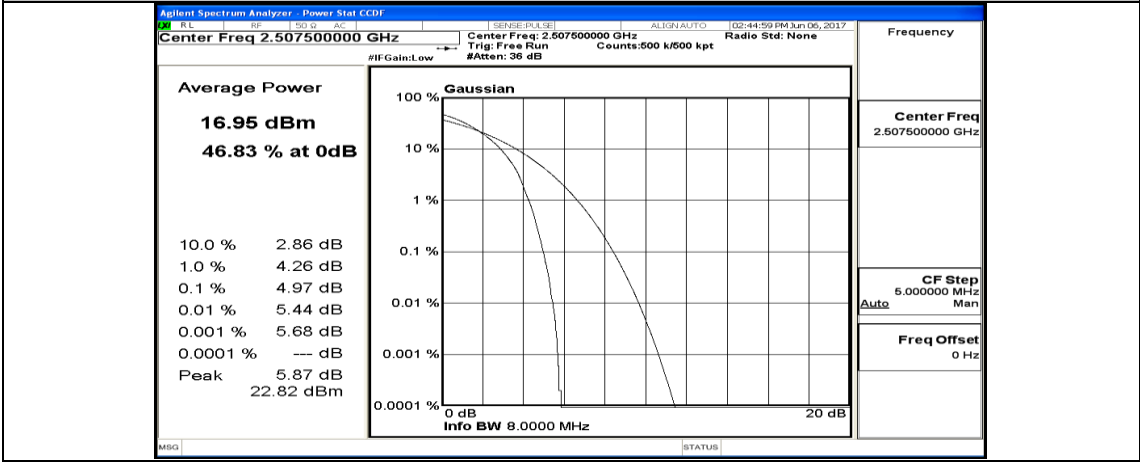
(Channel Bandwidth:15 MHz)\_LCH\_QPSK\_37RB#18



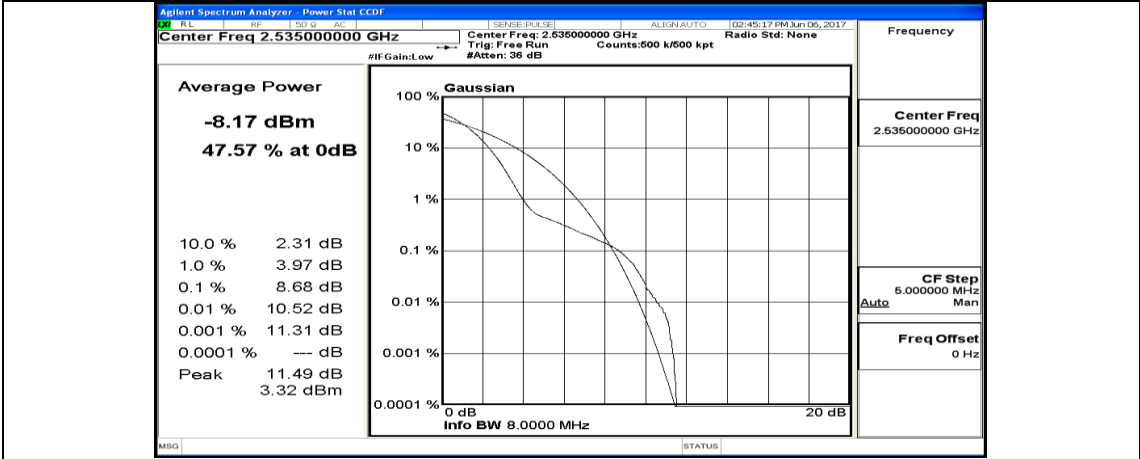
(Channel Bandwidth:15 MHz)\_LCH\_QPSK\_37RB#38



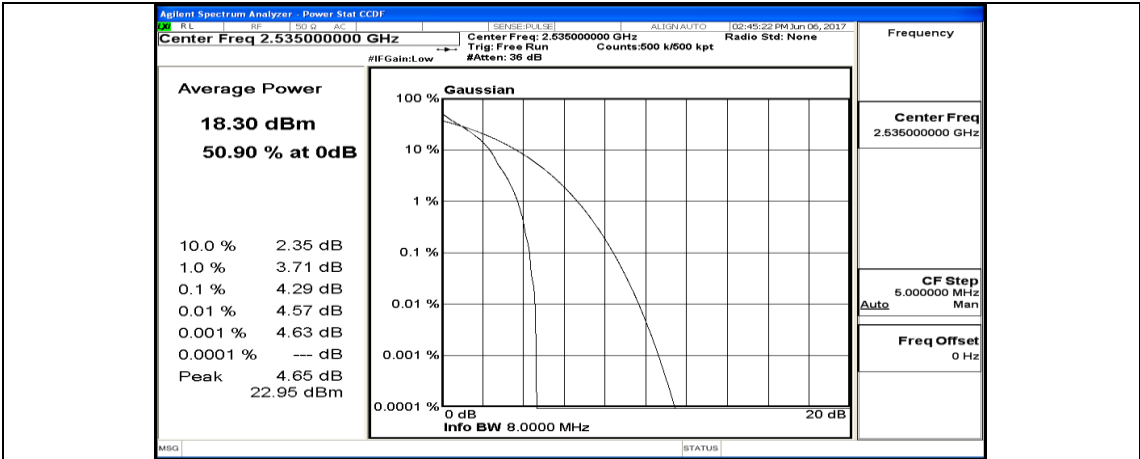
(Channel Bandwidth:15 MHz)\_LCH\_QPSK\_75RB#0



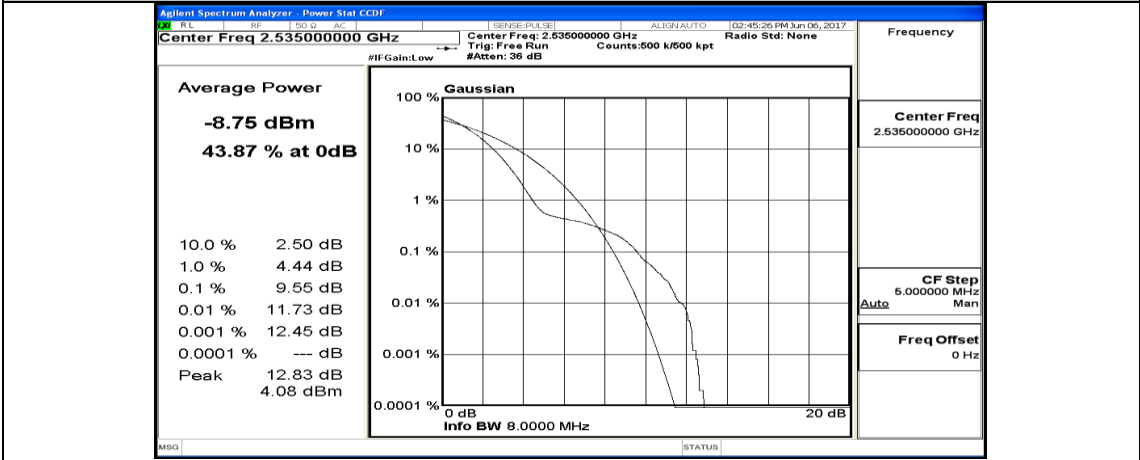
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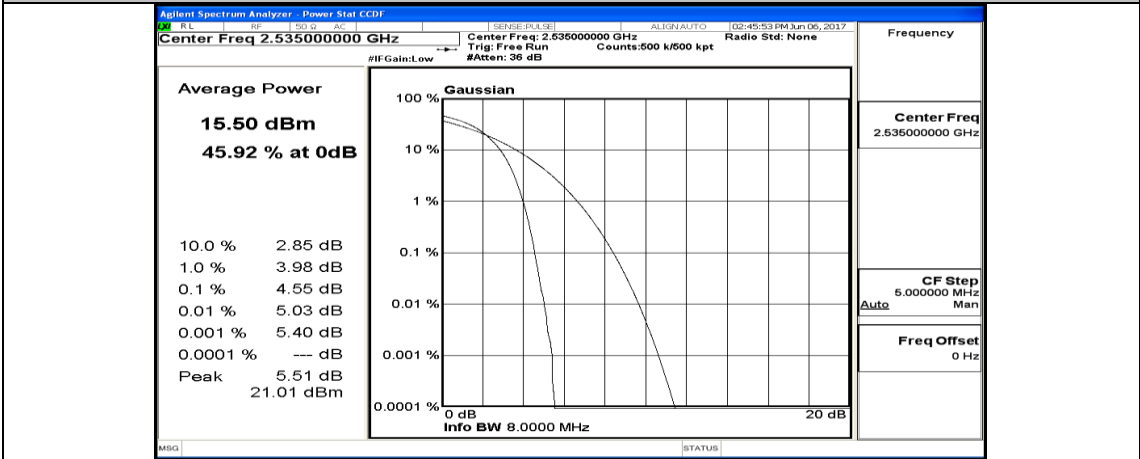
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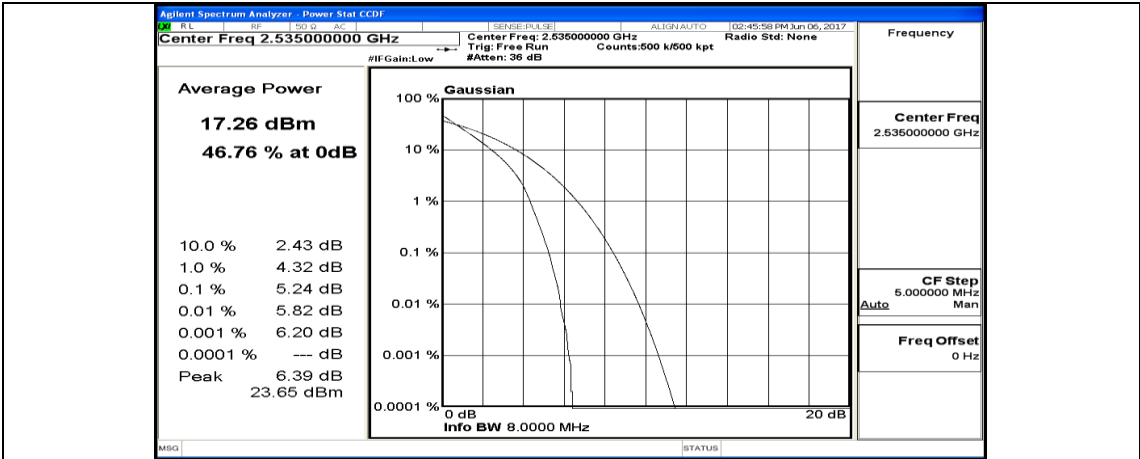
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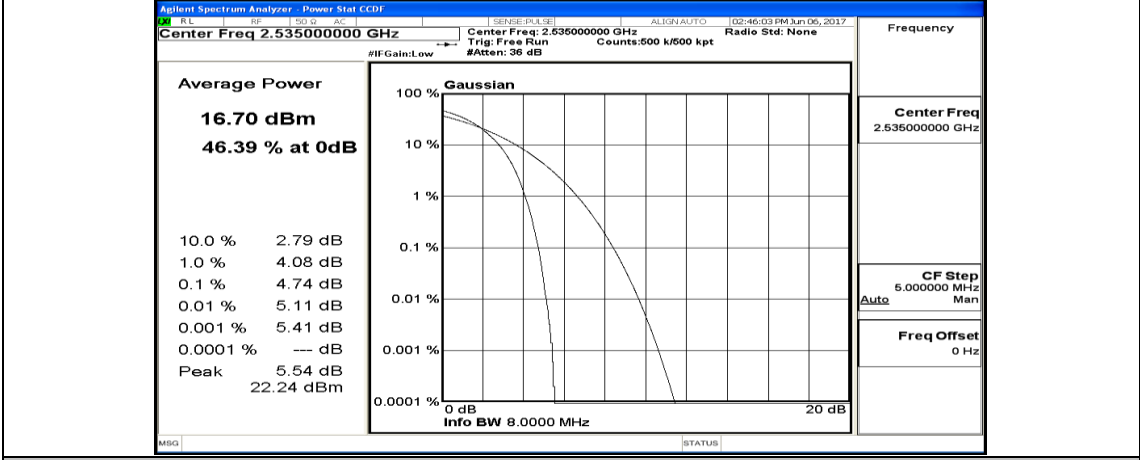
(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_37RB#0



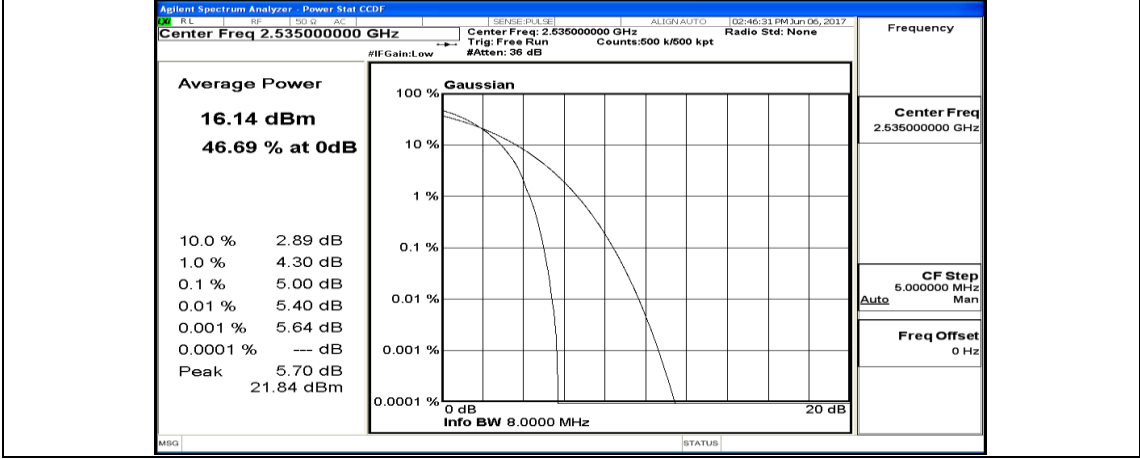
(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_37RB#18



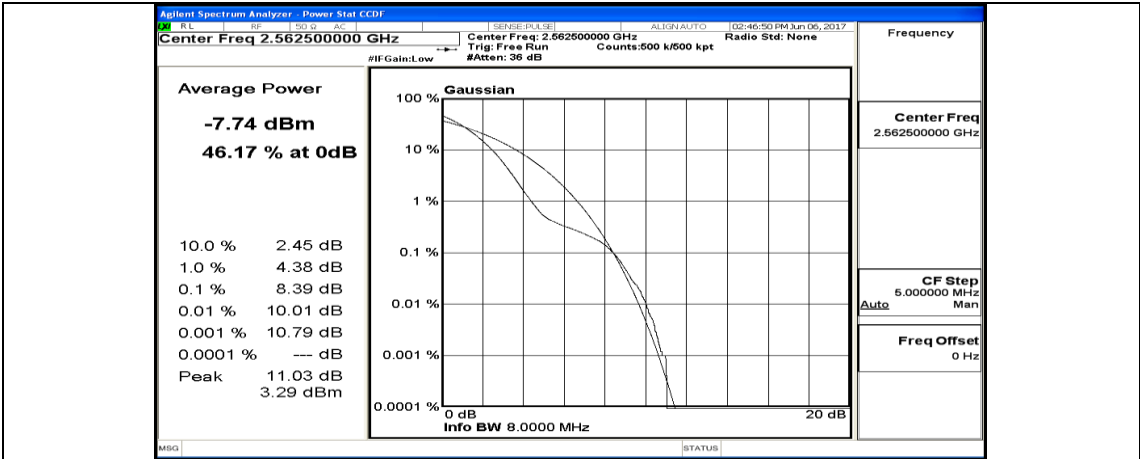
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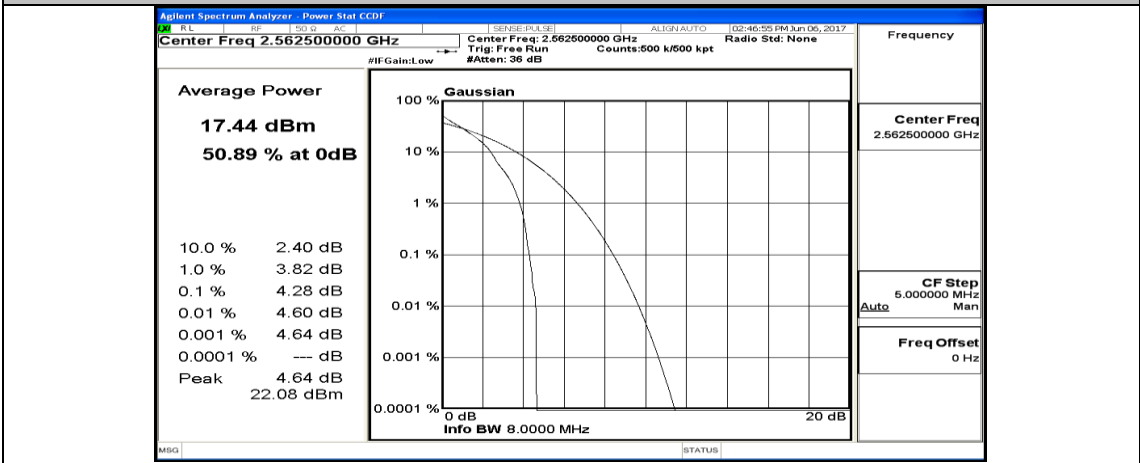
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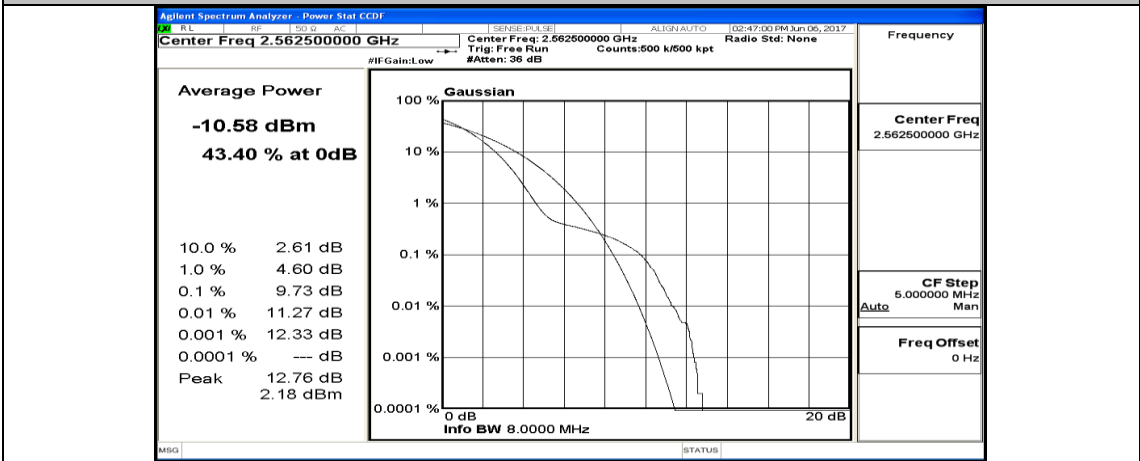
(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_1RB#0



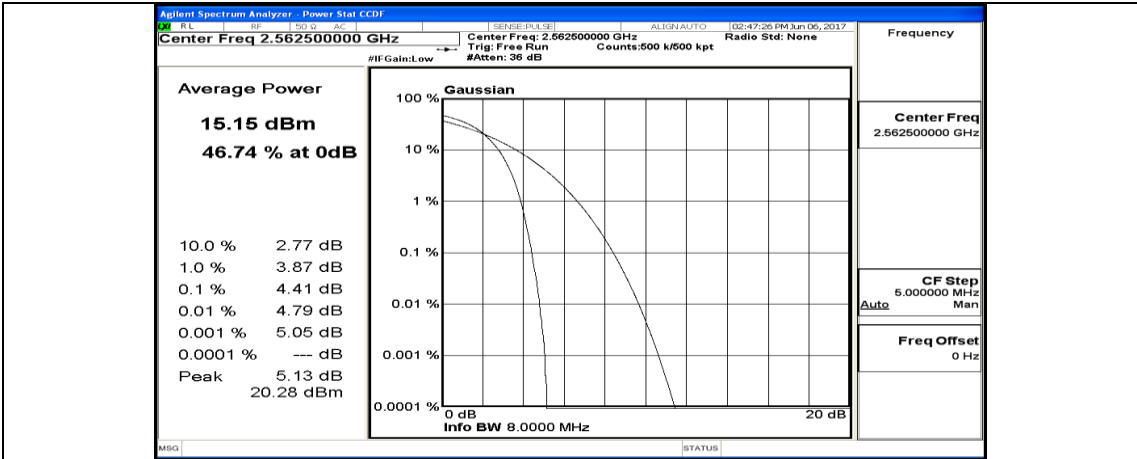
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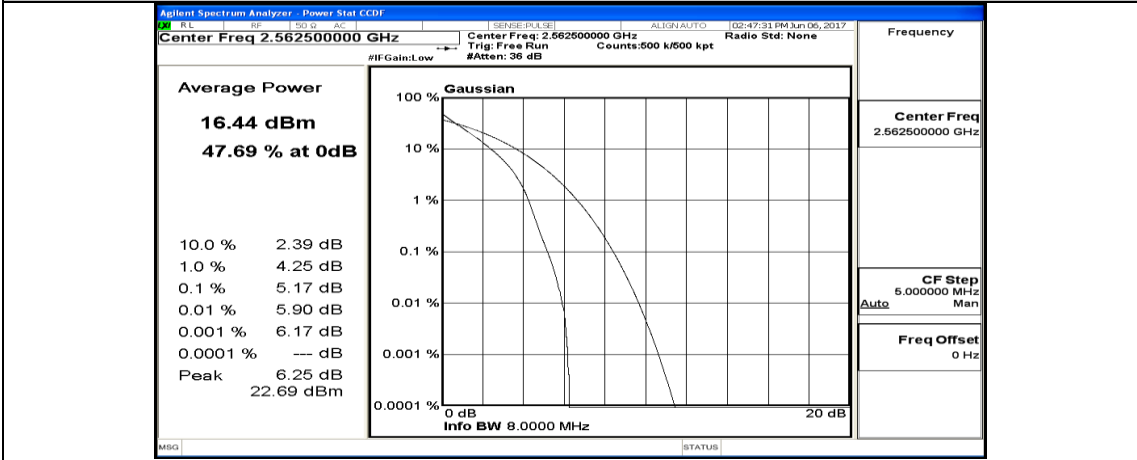
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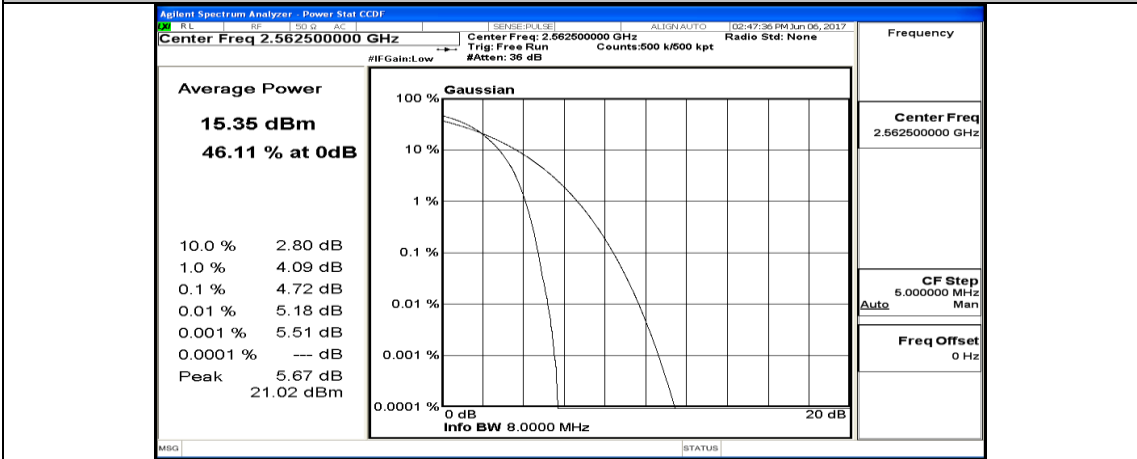
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(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_37RB#18

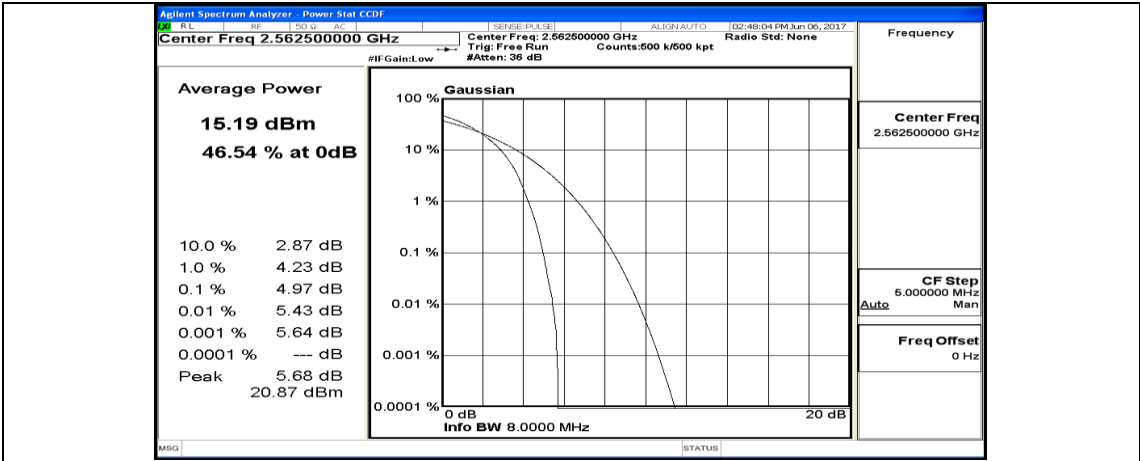


(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_37RB#38

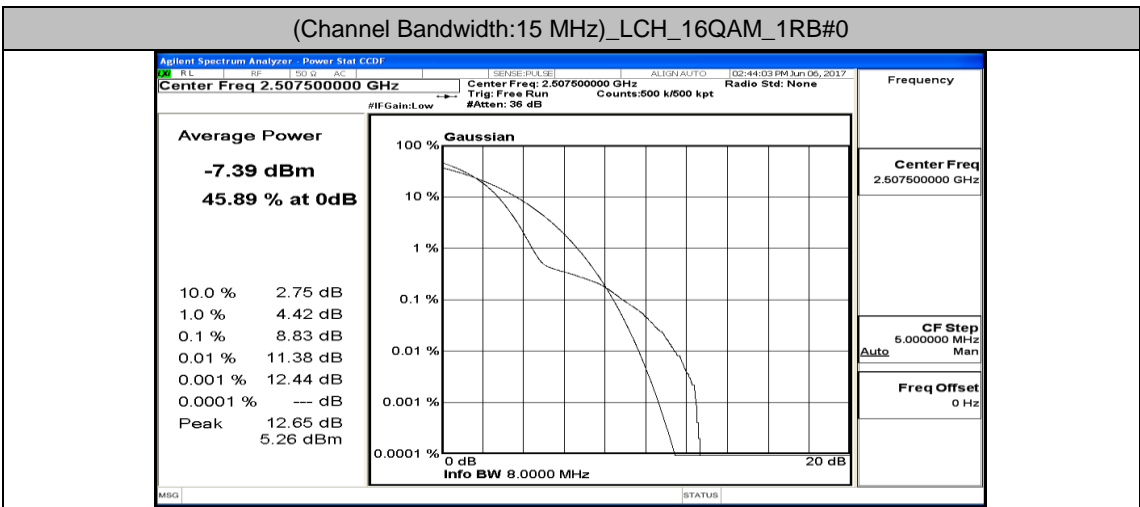


(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_75RB#0

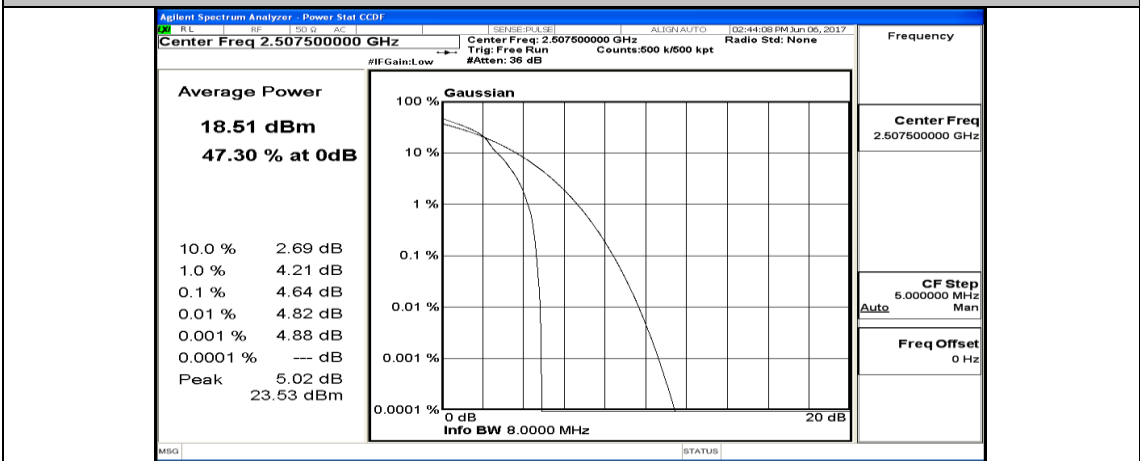




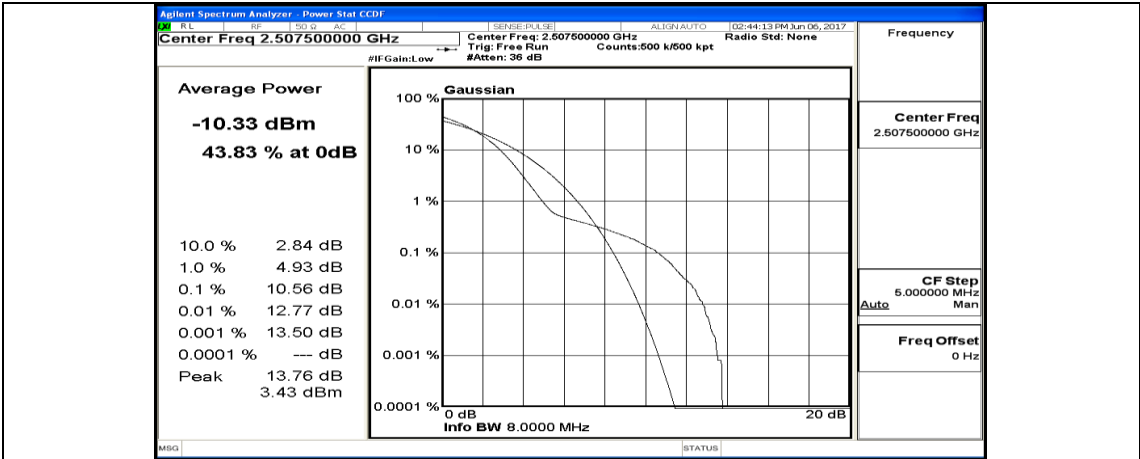
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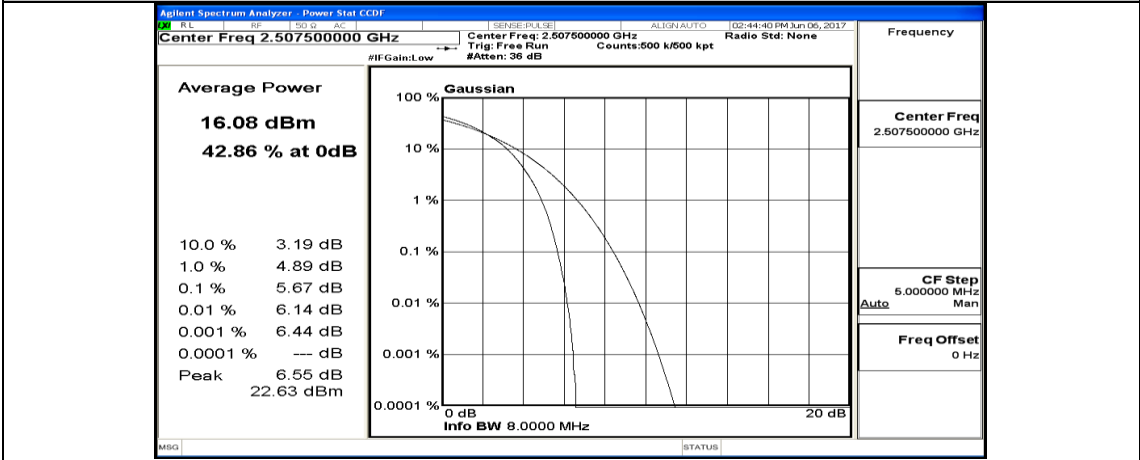
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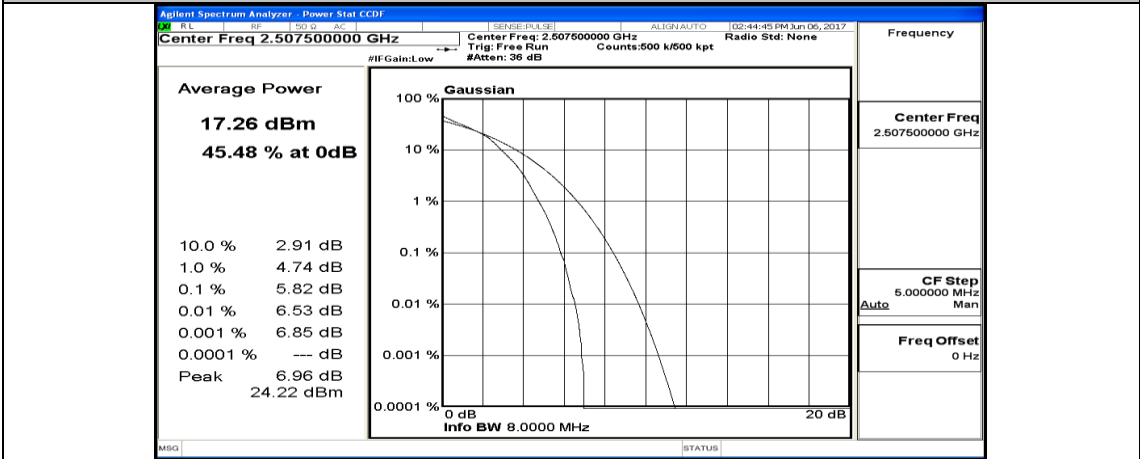
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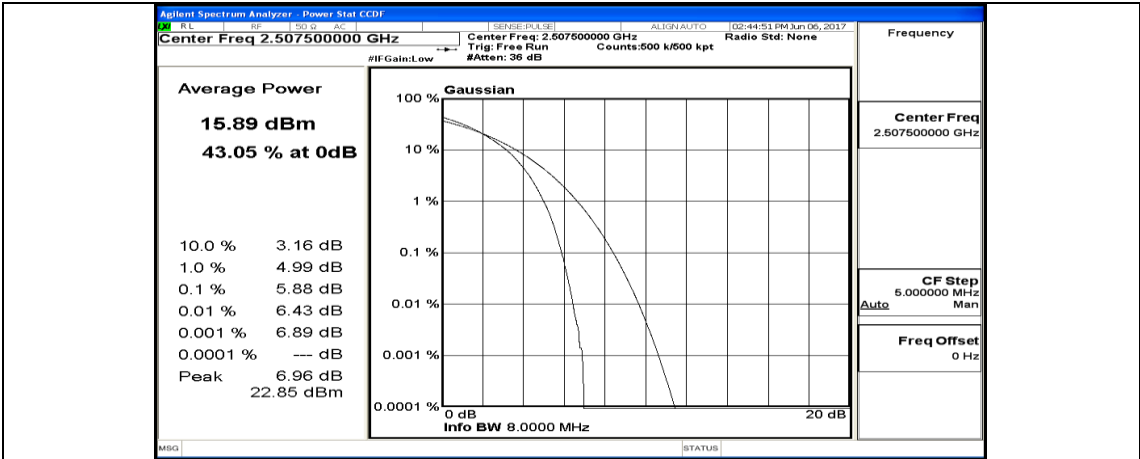
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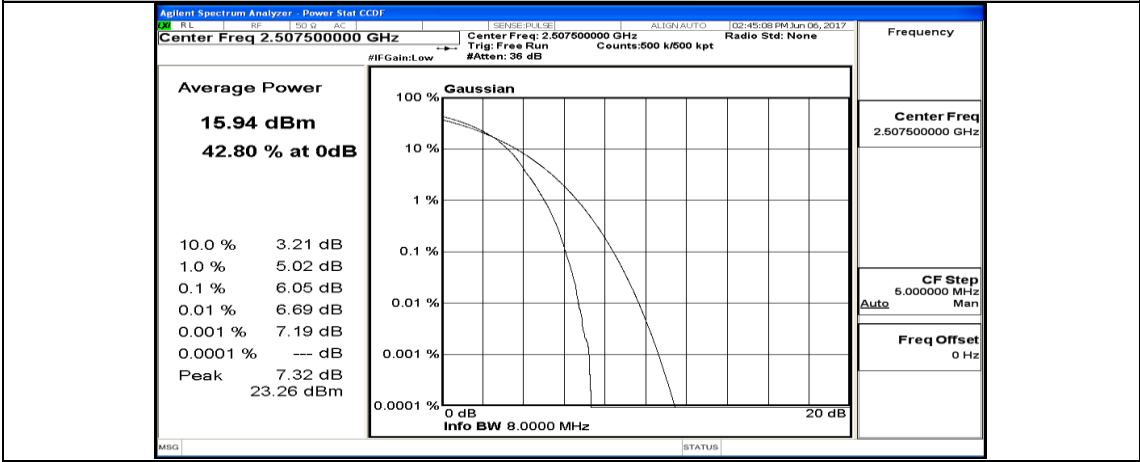
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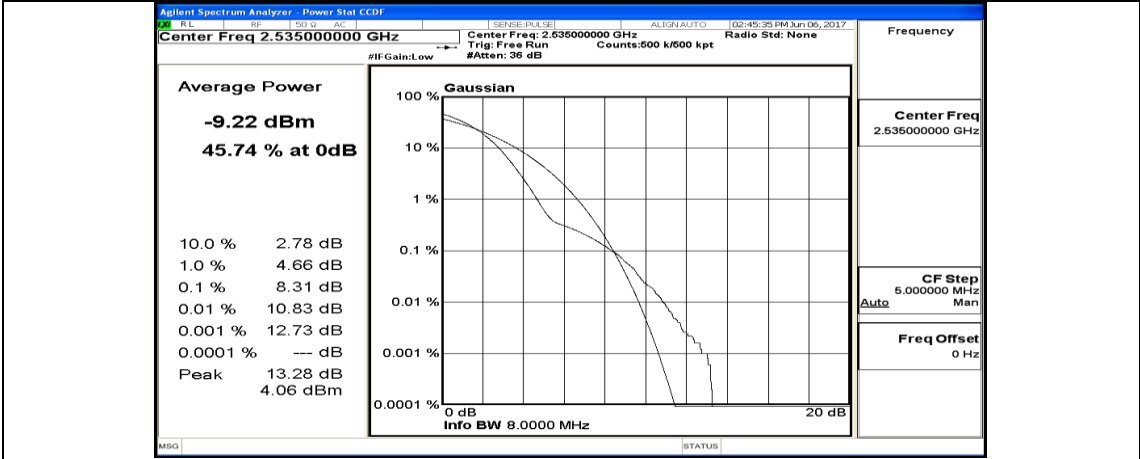
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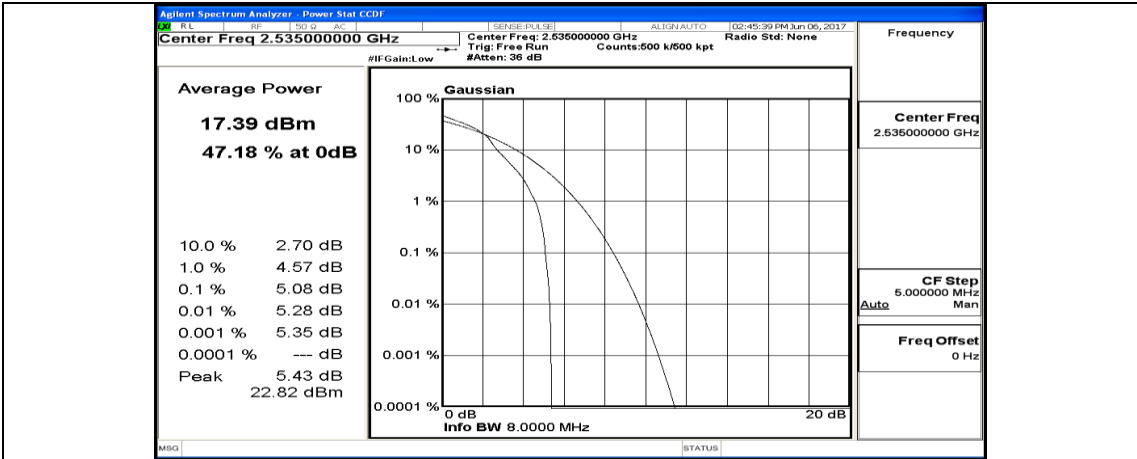
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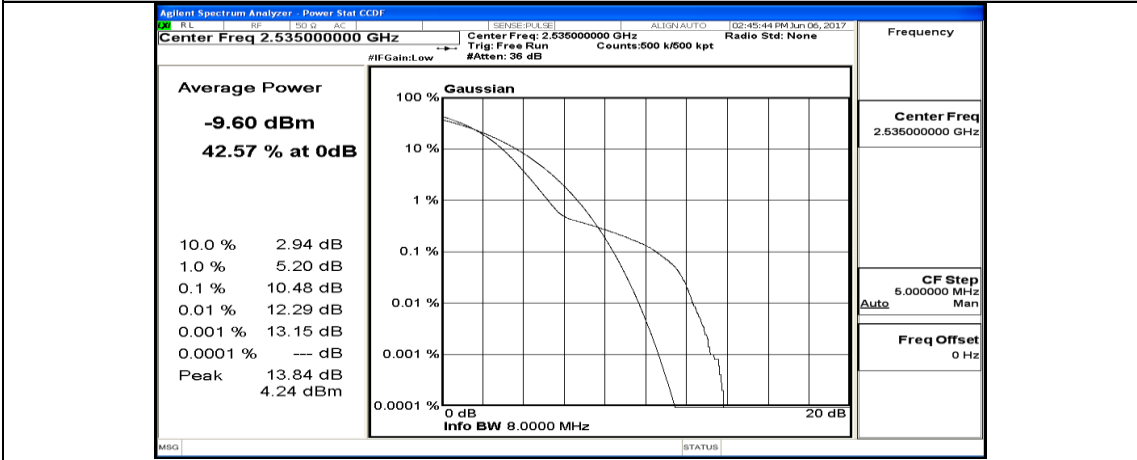
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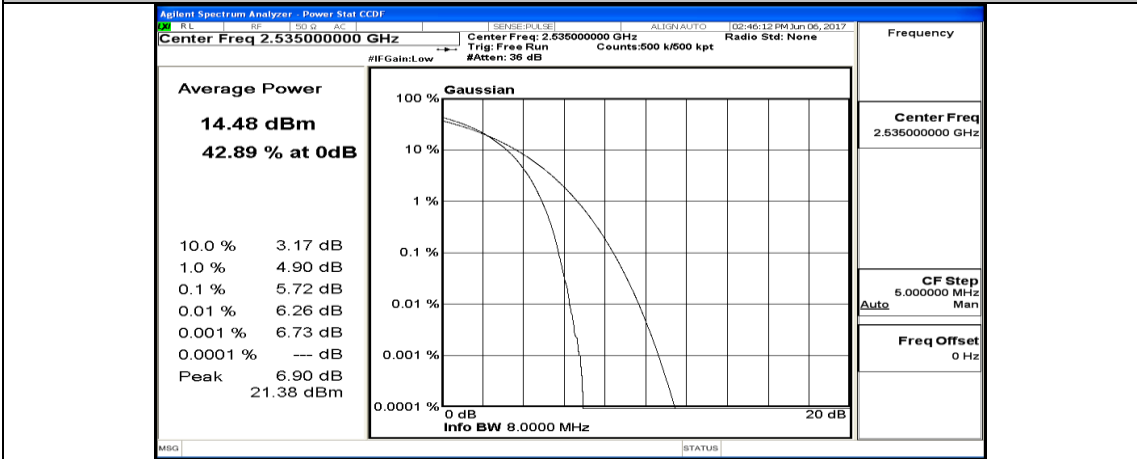
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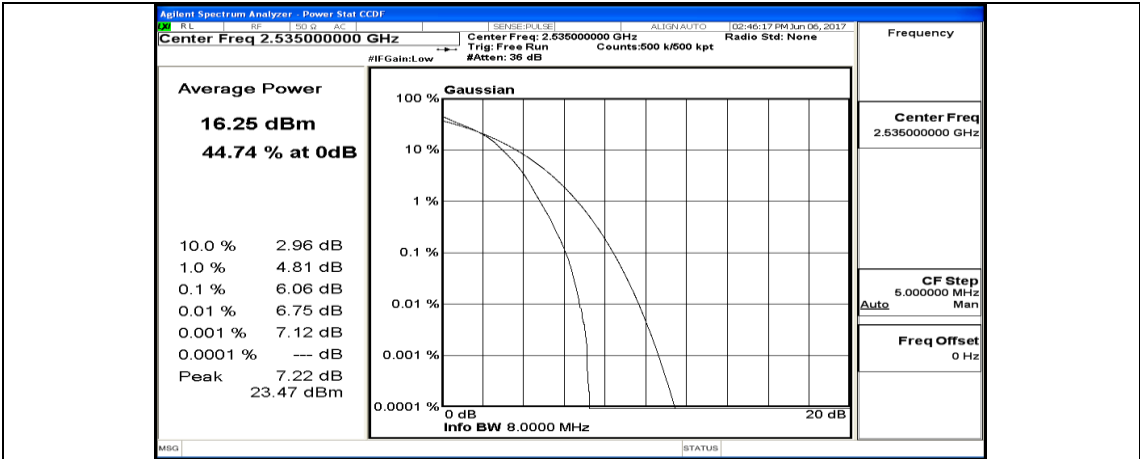
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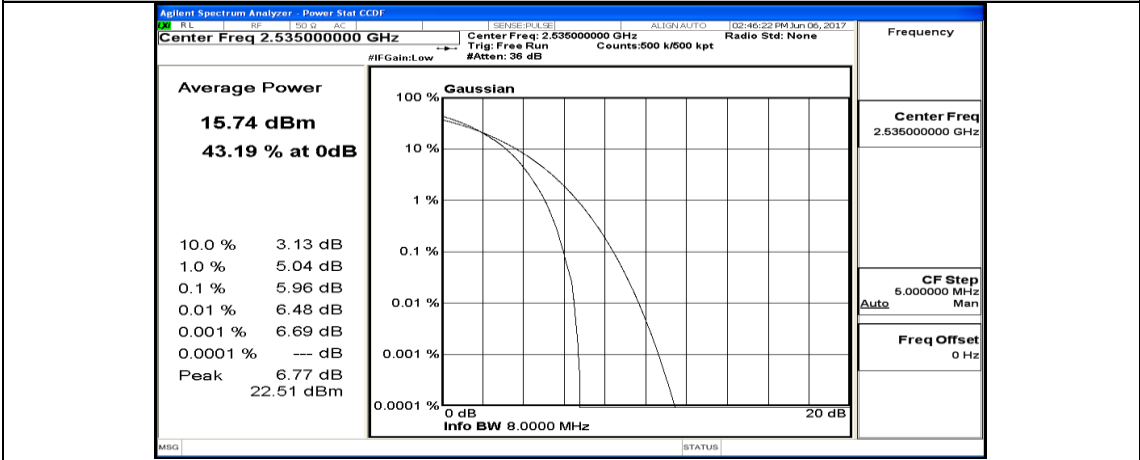
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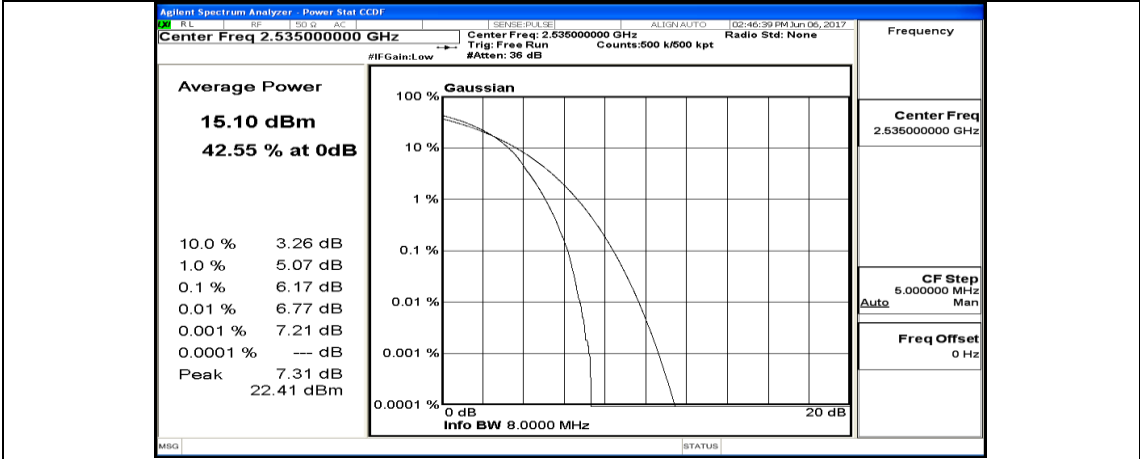
(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_37RB#18



(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_37RB#38



(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_75RB#0



(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#0