



Shenzhen CTL Testing Technology Co., Ltd.

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Appendix K

Product Name: Siyata SD7

Model: SD7



1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

Test Band: 17 5MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	23.45	23.33	23.28	-2.52	-0.37	20.93	20.81	20.76	34.77	PASS
		13	23.45	23.34	23.73	-2.52	-0.37	20.93	20.82	21.21	34.77	PASS
		24	23.27	23.45	23.88	-2.52	-0.37	20.75	20.93	21.36	34.77	PASS
	12	0	22.34	22.22	22.40	-2.52	-0.37	19.82	19.70	19.88	34.77	PASS
		6	22.37	22.25	22.63	-2.52	-0.37	19.85	19.73	20.11	34.77	PASS
		13	22.24	22.29	22.73	-2.52	-0.37	19.72	19.77	20.21	34.77	PASS
16QAM	25	0	22.30	22.23	22.53	-2.52	-0.37	19.78	19.71	20.01	34.77	PASS
			22.50	22.40	22.13	-2.52	-0.37	19.98	19.88	19.61	34.77	PASS
			22.42	22.47	22.59	-2.52	-0.37	19.90	19.95	20.07	34.77	PASS
	1	13	22.42	22.47	22.59	-2.52	-0.37	19.90	19.95	20.07	34.77	PASS
		24	22.26	22.70	22.69	-2.52	-0.37	19.74	20.18	20.17	34.77	PASS
		0	21.31	21.21	21.41	-2.52	-0.37	18.79	18.69	18.89	34.77	PASS
	12	6	21.33	21.27	21.65	-2.52	-0.37	18.81	18.75	19.13	34.77	PASS
		13	21.19	21.32	21.76	-2.52	-0.37	18.67	18.80	19.24	34.77	PASS
		25	21.29	21.21	21.56	-2.52	-0.37	18.77	18.69	19.04	34.77	PASS

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)
3) ERP = Conducted output power + Antenna gain (dBd)

Test Band: 17 10MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	23.45	23.34	23.43	-2.52	-0.37	20.93	20.82	20.91	34.77	PASS
		25	23.21	23.19	23.25	-2.52	-0.37	20.69	20.67	20.73	34.77	PASS
		49	23.53	23.62	23.81	-2.52	-0.37	21.01	21.10	21.29	34.77	PASS
	25	0	22.30	22.27	22.26	-2.52	-0.37	19.78	19.75	19.74	34.77	PASS
		13	22.26	22.28	22.35	-2.52	-0.37	19.74	19.76	19.83	34.77	PASS
		25	22.26	22.36	22.50	-2.52	-0.37	19.74	19.84	19.98	34.77	PASS
16QAM	50	0	22.28	22.28	22.36	-2.52	-0.37	19.76	19.76	19.84	34.77	PASS
			22.42	22.40	22.71	-2.52	-0.37	19.90	19.88	20.19	34.77	PASS
			22.19	22.31	22.72	-2.52	-0.37	19.67	19.79	20.20	34.77	PASS
	1	25	22.19	22.31	22.72	-2.52	-0.37	19.67	19.79	20.20	34.77	PASS
		49	22.58	22.86	23.30	-2.52	-0.37	20.06	20.34	20.78	34.77	PASS
		0	21.37	21.24	21.23	-2.52	-0.37	18.85	18.72	18.71	34.77	PASS
	25	13	21.29	21.26	21.35	-2.52	-0.37	18.77	18.74	18.83	34.77	PASS
		25	21.40	21.41	21.53	-2.52	-0.37	18.88	18.89	19.01	34.77	PASS
		50	21.31	21.31	21.35	-2.52	-0.37	18.79	18.79	18.83	34.77	PASS

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)
3) ERP = Conducted output power + Antenna gain (dBd)



2. Frequency stability

2.1 Test Result

Test Band: 17 5MHz Bandwidth (Frequency Error VS . Voltage)												
Test Mode	RB Allocation		Test Temp.	Test Volt.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	25	0	NT	LV	0.042 9	6.566 0	7.152 6	0.0001	0.0092	-0.0100	2.50	PASS
				NV	0.085 8	6.680 5	6.909 4	0.0001	0.0094	-0.0097	2.50	PASS
				HV	- 0.100 1	6.437 3	- 7.824 9	-0.0001	0.0091	-0.0110	2.50	PASS
16QAM	25	0	NT	LV	3.662 1	3.261 6	- 1.902 6	0.0052	0.0046	-0.0027	2.50	PASS
				NV	2.989 8	2.532 0	- 3.004 1	0.0042	0.0036	-0.0042	2.50	PASS
				HV	2.045 6	3.075 6	- 3.633 5	0.0029	0.0043	-0.0051	2.50	PASS

Test Band: 17 5MHz Bandwidth (Frequency Error VS . Temperature)												
Test Mode	RB Allocation		Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	25	0	NV	-30.00	- 0.157 4	6.609 0	- 0.228 9	-0.0002	0.0093	-0.0003	2.50	PASS
				-20.00	0.801 1	6.151 2	0.457 8	-0.0011	0.0087	0.0006	2.50	PASS
				-10.00	0.443 5	5.779 3	0.128 7	0.0006	0.0081	0.0002	2.50	PASS
				0.00	- 0.944 1	6.709 1	- 0.386 2	-0.0013	0.0094	-0.0005	2.50	PASS
				10.00	0.844 0	6.094 0	0.200 3	-0.0012	0.0086	0.0003	2.50	PASS
				20.00	- 0.929 8	5.464 6	- 0.100 1	-0.0013	0.0077	-0.0001	2.50	PASS
				30.00	- 1.416 2	5.636 2	- 1.230 2	-0.0020	0.0079	-0.0017	2.50	PASS
				40.00	- 1.974 1	6.094 0	- 1.115 8	-0.0028	0.0086	-0.0016	2.50	PASS
				50.00	- 1.201 6	5.450 2	- 0.772 5	-0.0017	0.0077	-0.0011	2.50	PASS
16QAM	25	0	NV	-30.00	0.414	1.559	-	0.0006	0.0022	-0.0055	2.50	PASS



					8	3	3.891 0					
				-20.00	1.058 6	2.274 5	- 4.077 0	0.0015	0.0032	-0.0057	2.50	PASS
				-10.00	- 0.200 3	2.503 4	- 3.991 1	-0.0003	0.0035	-0.0056	2.50	PASS
				0.00	- 0.414 8	2.474 8	- 5.450 2	-0.0006	0.0035	-0.0076	2.50	PASS
				10.00	- 0.186 0	1.545 0	- 5.292 9	-0.0003	0.0022	-0.0074	2.50	PASS
				20.00	- 0.915 5	1.058 6	- 5.164 1	-0.0013	0.0015	-0.0072	2.50	PASS
				30.00	- 1.530 6	1.015 7	- 1.330 4	-0.0022	0.0014	-0.0019	2.50	PASS
				40.00	- 1.459 1	0.758 2	- 0.300 4	-0.0021	0.0011	-0.0004	2.50	PASS
				50.00	- 2.389 0	1.373 3	- 1.645 1	-0.0034	0.0019	0.0023	2.50	PASS

Test Band: 17_10MHz Bandwidth (Frequency Error VS . Voltage)												
Test Mode	RB Allocation		Test Temp.	Test Volt.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	50	0	NT	LV	- 3.547 7	- 0.658 0	- 4.706 4	-0.0050	-0.0009	-0.0066	2.50	PASS
				NV	- 4.391 7	2.460 5	- 5.064 0	-0.0062	0.0035	-0.0071	2.50	PASS
				HV	- 5.793 6	6.566 0	- 4.134 2	-0.0082	0.0092	-0.0058	2.50	PASS
16QAM	50	0	NT	LV	1.144 4	4.563 3	1.716 6	0.0016	0.0064	0.0024	2.50	PASS
				NV	- 1.616 5	3.991 1	2.417 6	-0.0023	0.0056	0.0034	2.50	PASS
				HV	- 1.945 5	3.619 2	1.359 0	-0.0027	0.0051	0.0019	2.50	PASS



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Test Band: 17 10MHz Bandwidth (Frequency Error VS . Temperature)												
Test Mode	RB Allocation		Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	50	0	NV	-30.00	- 5.822 2	6.451 6	- 3.790 9	-0.0082	0.0091	-0.0053	2.50	PASS
				-20.00	- 7.467 3	6.423 0	- 0.844 0	-0.0105	0.0090	-0.0012	2.50	PASS
				-10.00	- 5.407 3	5.621 9	1.387 6	-0.0076	0.0079	0.0020	2.50	PASS
				0.00	- 0.643 7	4.835 1	1.630 8	-0.0009	0.0068	0.0023	2.50	PASS
				10.00	- 0.572 2	4.377 4	1.244 5	-0.0008	0.0062	0.0018	2.50	PASS
				20.00	- 1.101 5	3.504 8	0.472 1	-0.0016	0.0049	0.0007	2.50	PASS
				30.00	- 1.316 1	2.646 4	- 0.286 1	-0.0019	0.0037	-0.0004	2.50	PASS
				40.00	- 1.287 5	1.916 9	- 1.502 0	-0.0018	0.0027	-0.0021	2.50	PASS
				50.00	- 2.059 9	1.916 9	- 0.286 1	-0.0029	0.0027	-0.0004	2.50	PASS
16QAM	50	0	NV	-30.00	- 3.190 0	2.474 8	- 0.500 7	-0.0045	0.0035	-0.0007	2.50	PASS
				-20.00	- 4.262 9	2.675 1	0.958 4	-0.0060	0.0038	0.0013	2.50	PASS
				-10.00	- 4.148 5	2.846 7	0.872 6	-0.0059	0.0040	0.0012	2.50	PASS
				0.00	- 4.849 4	2.660 8	1.573 6	-0.0068	0.0037	0.0022	2.50	PASS
				10.00	- 5.478 9	2.603 5	1.201 6	-0.0077	0.0037	0.0017	2.50	PASS
				20.00	- 5.822 2	2.574 9	1.559 3	-0.0082	0.0036	0.0022	2.50	PASS
				30.00	- 6.051 1	2.160 1	1.902 6	-0.0085	0.0030	0.0027	2.50	PASS
				40.00	- 6.065 4	1.902 6	1.101 5	-0.0086	0.0027	0.0015	2.50	PASS
				50.00	- 6.938 0	1.988 4	1.387 6	-0.0098	0.0028	0.0020	2.50	PASS

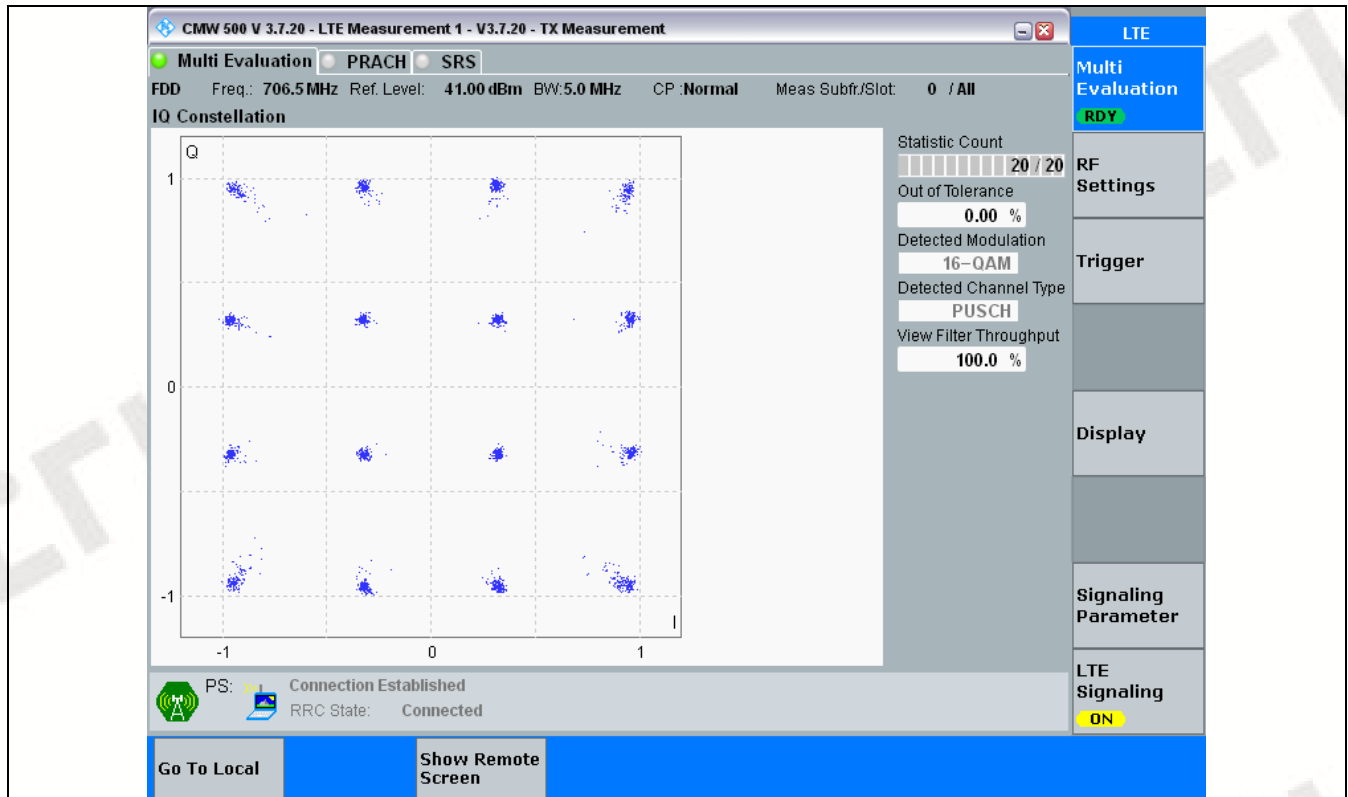


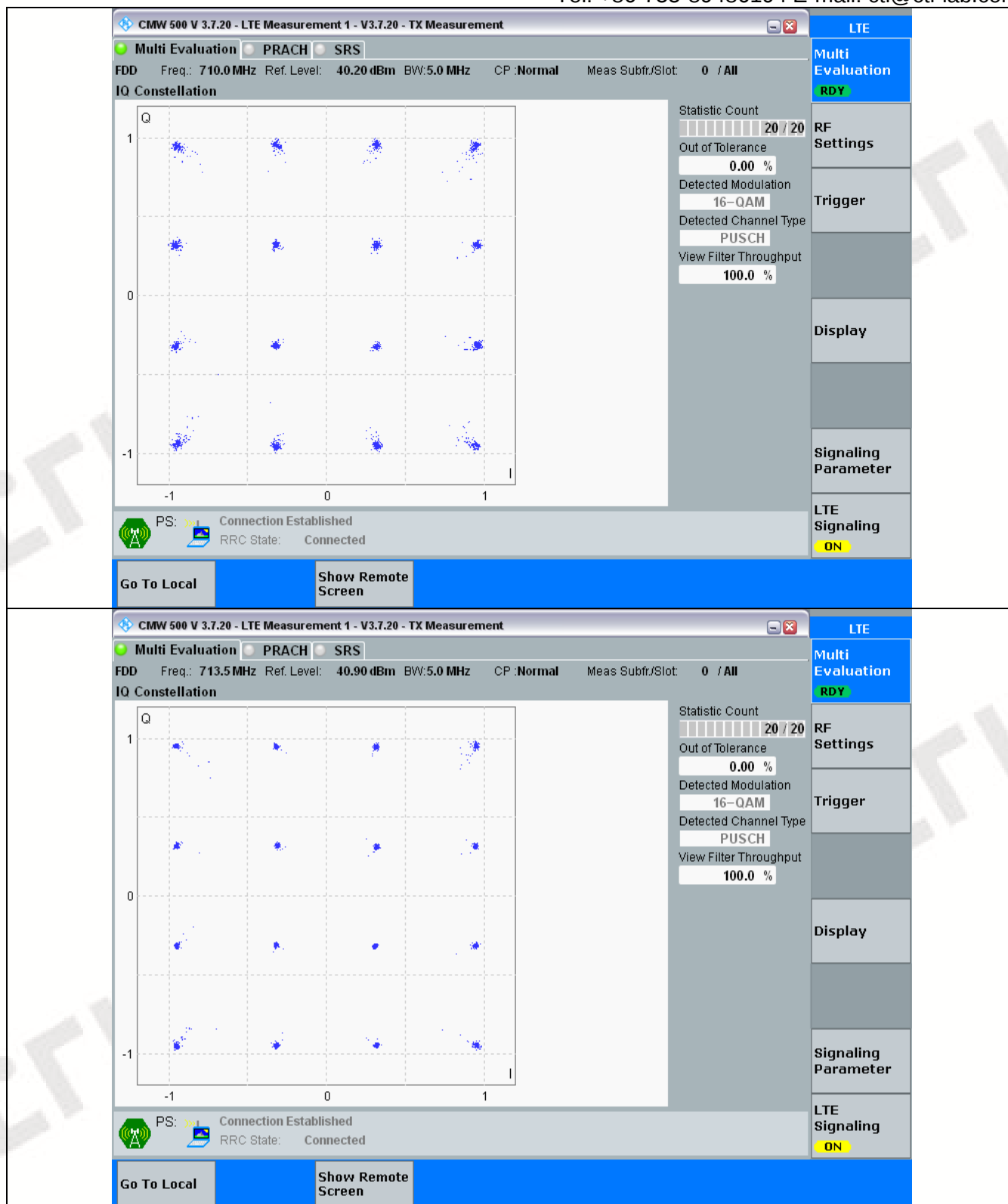
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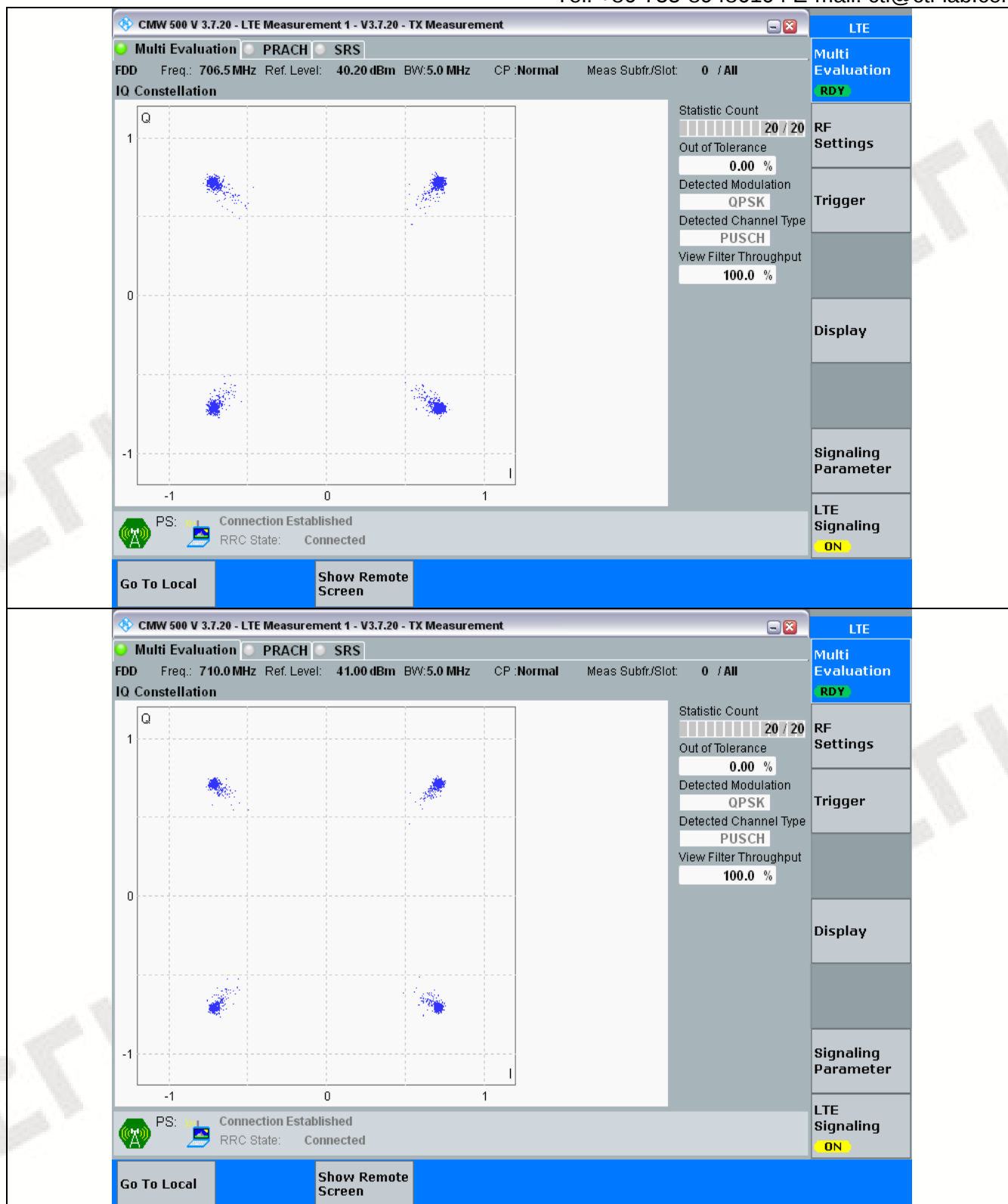
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3. Modulation Characteristics

3.1 Test Graph



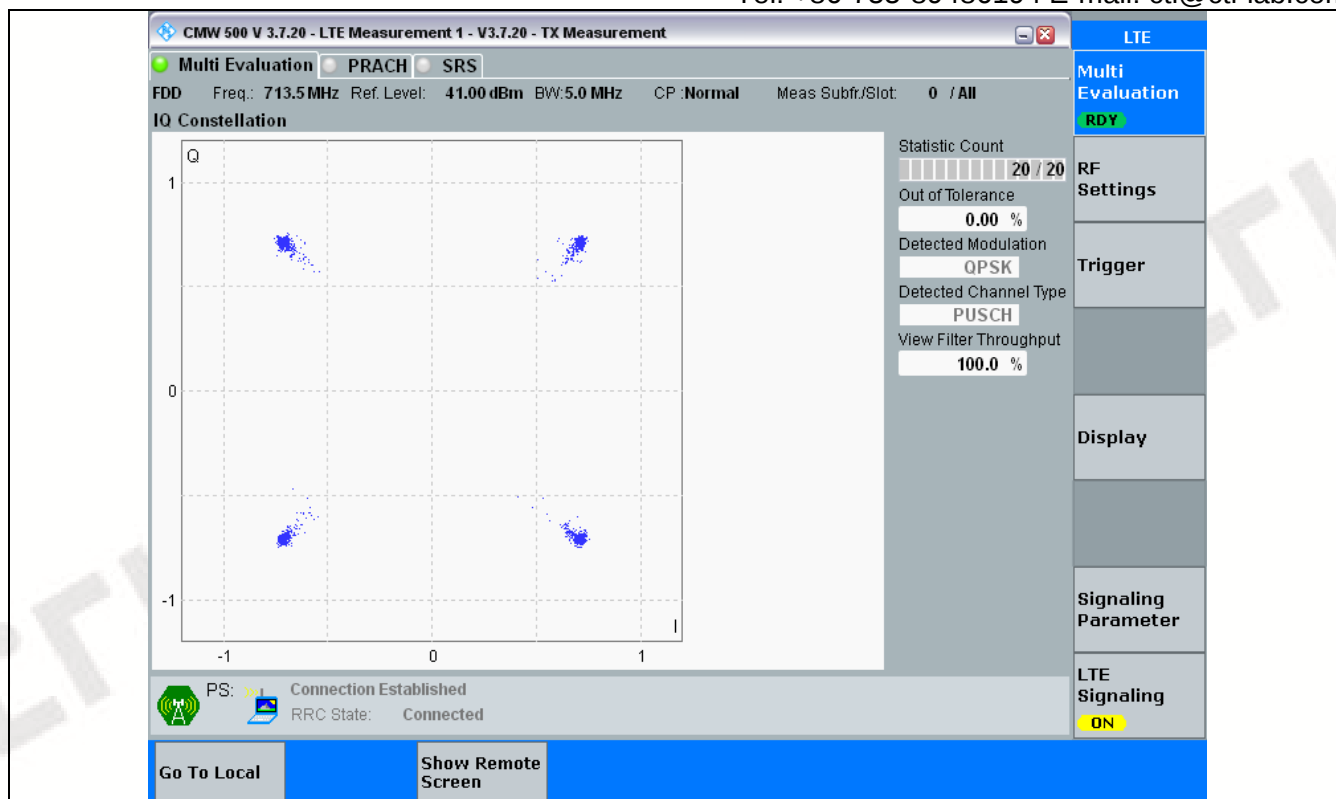






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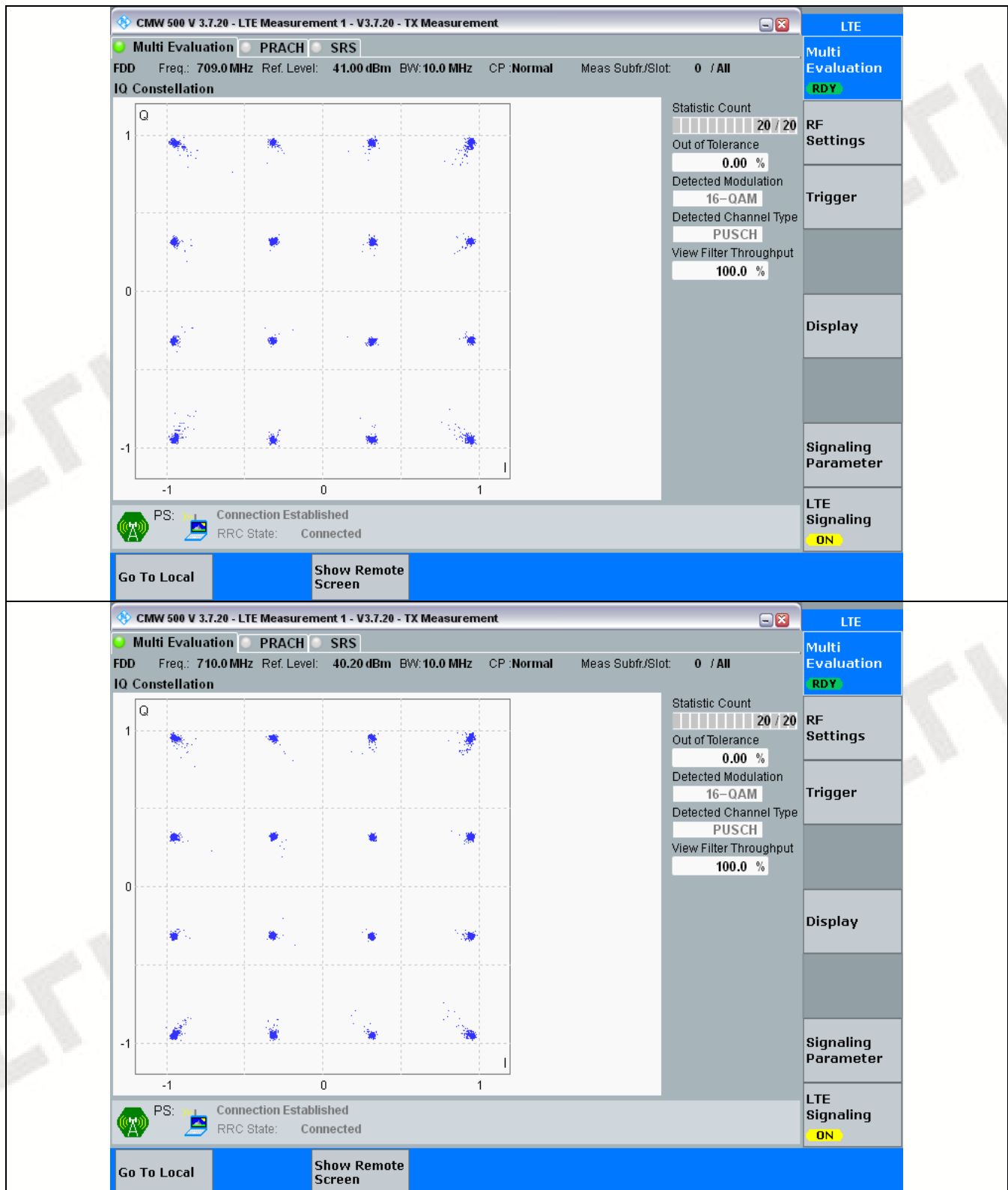


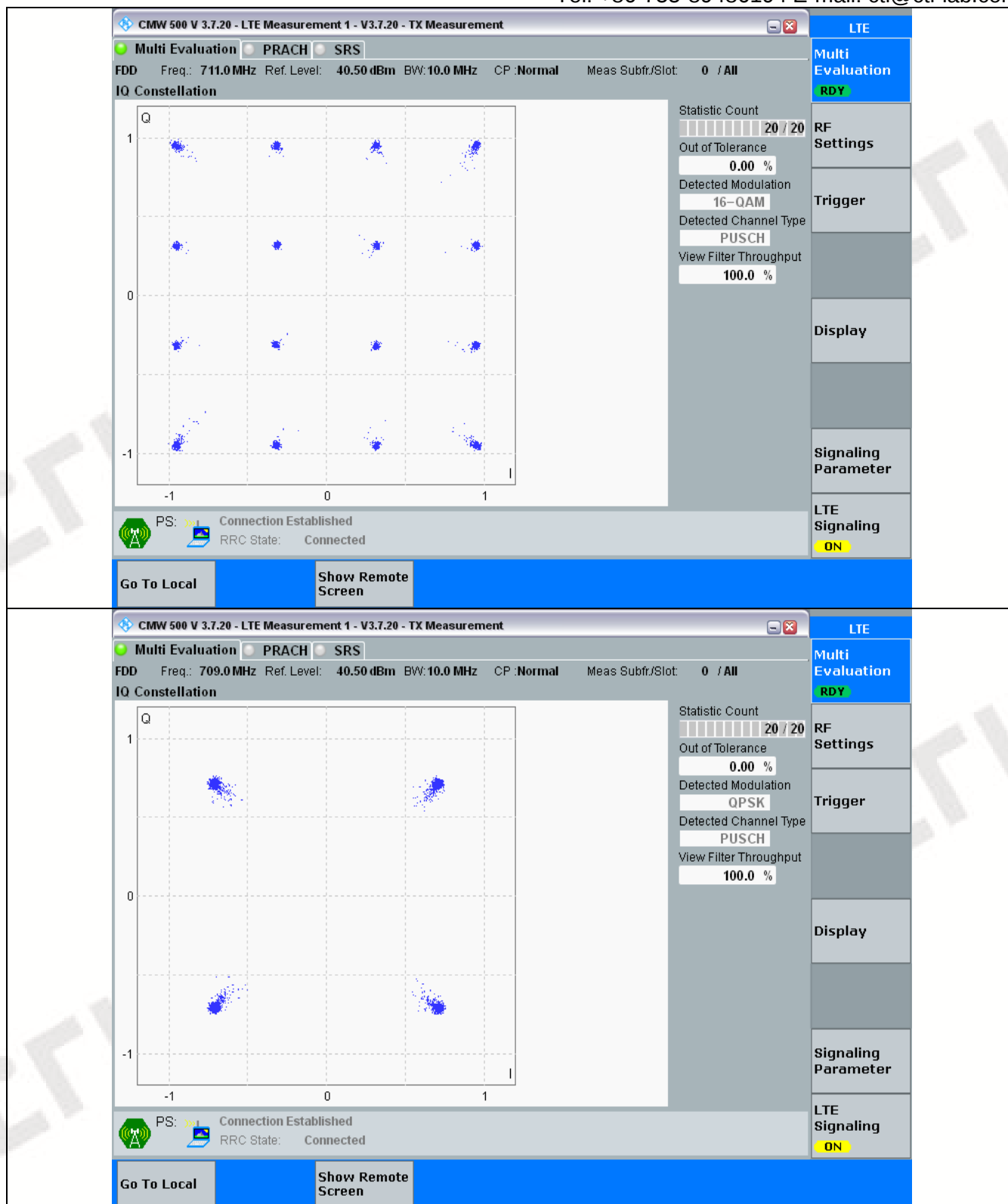


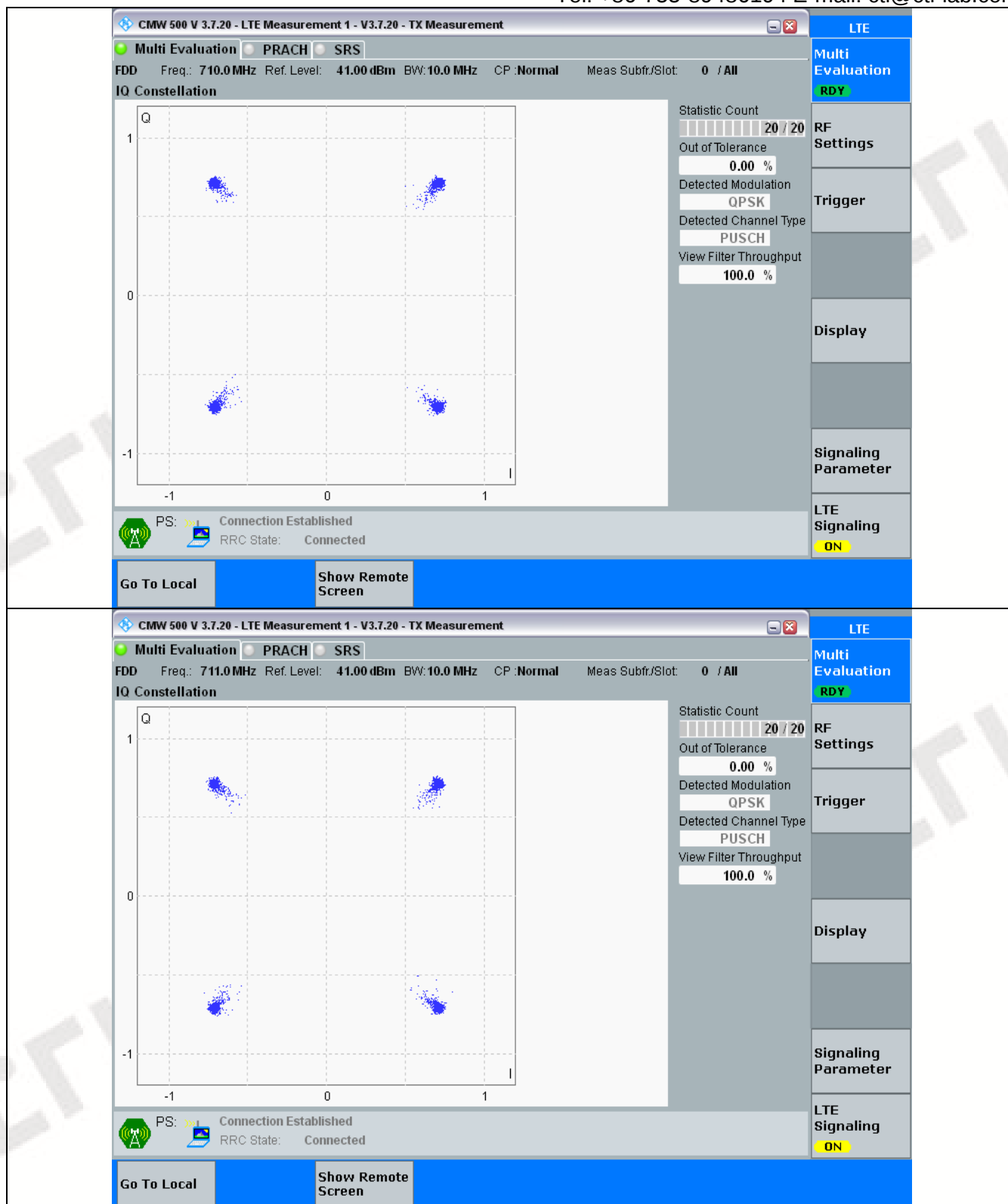
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3.1 Test Graph







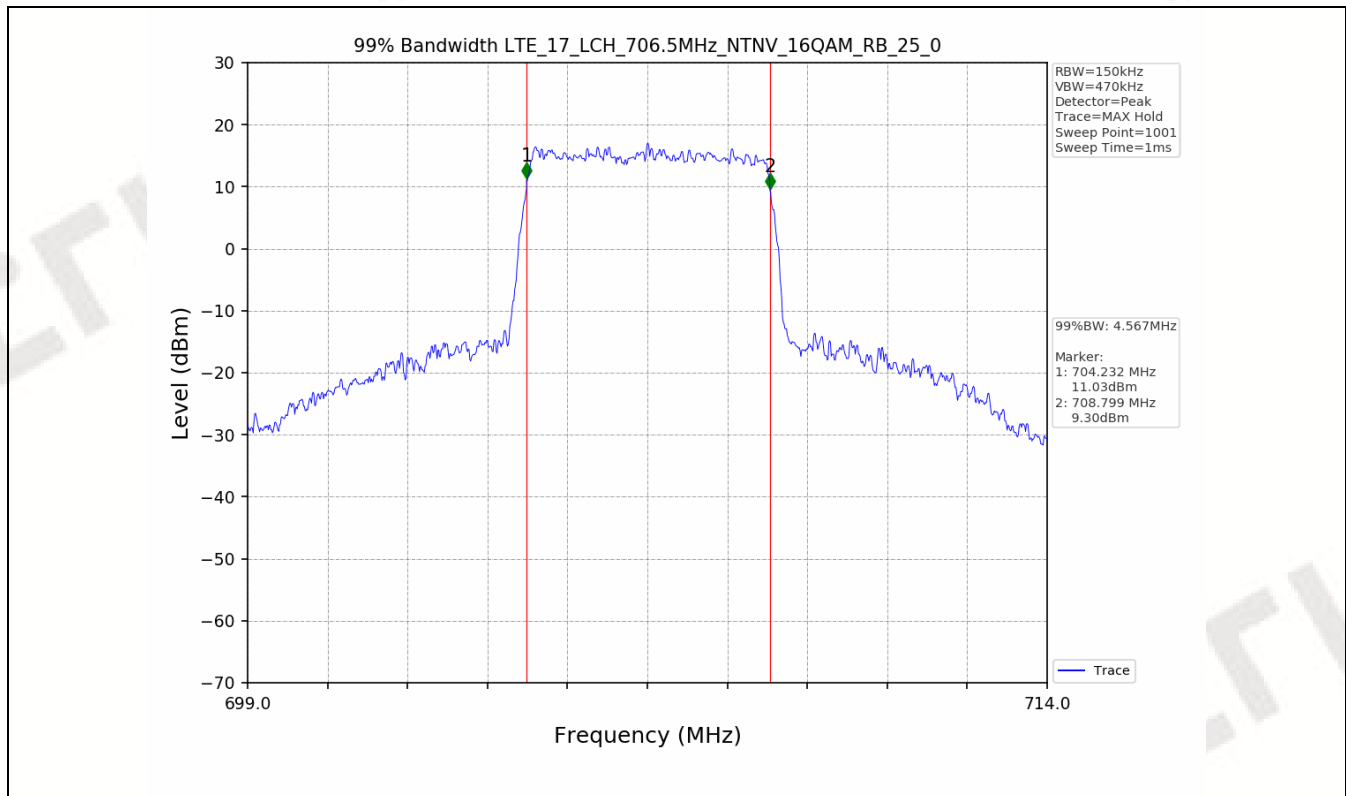


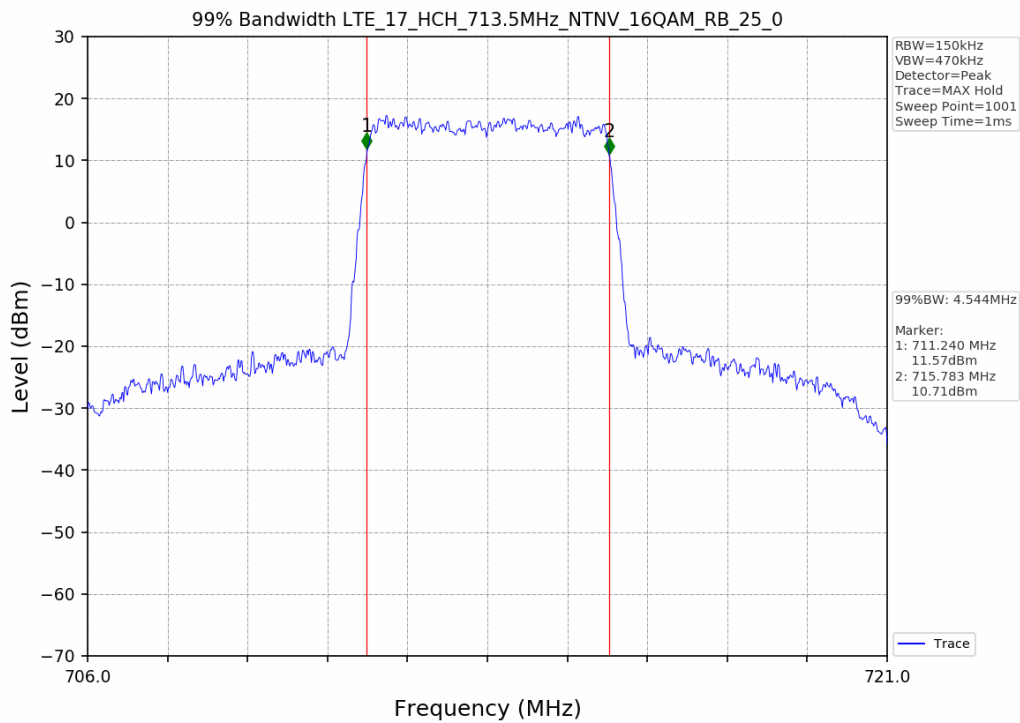
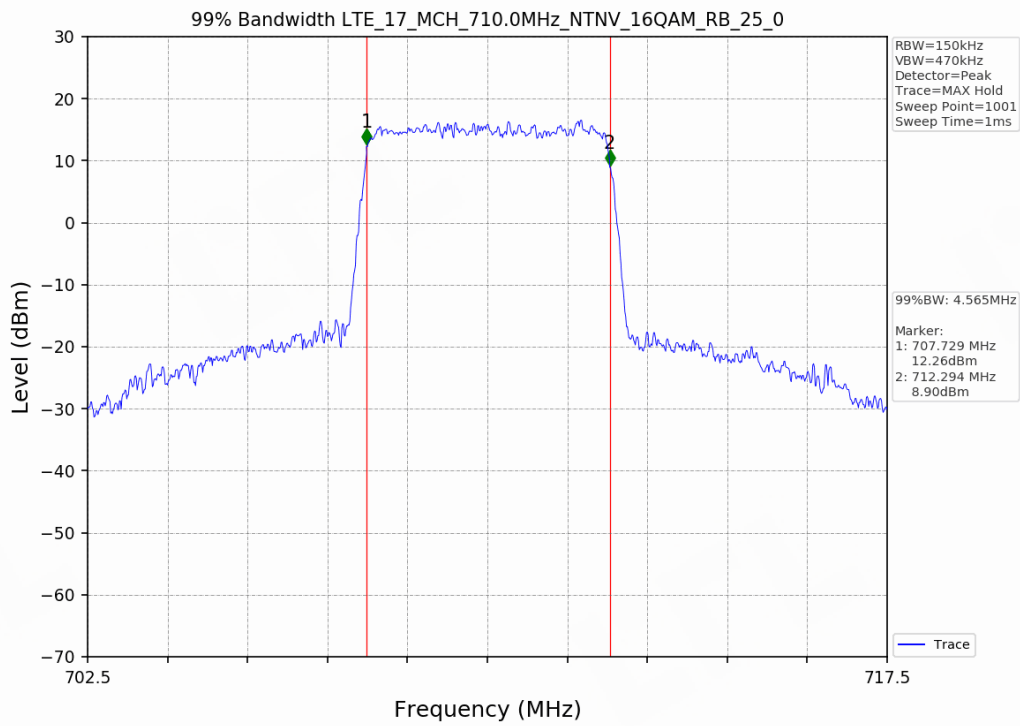
4. 99% & 26dB Bandwidth

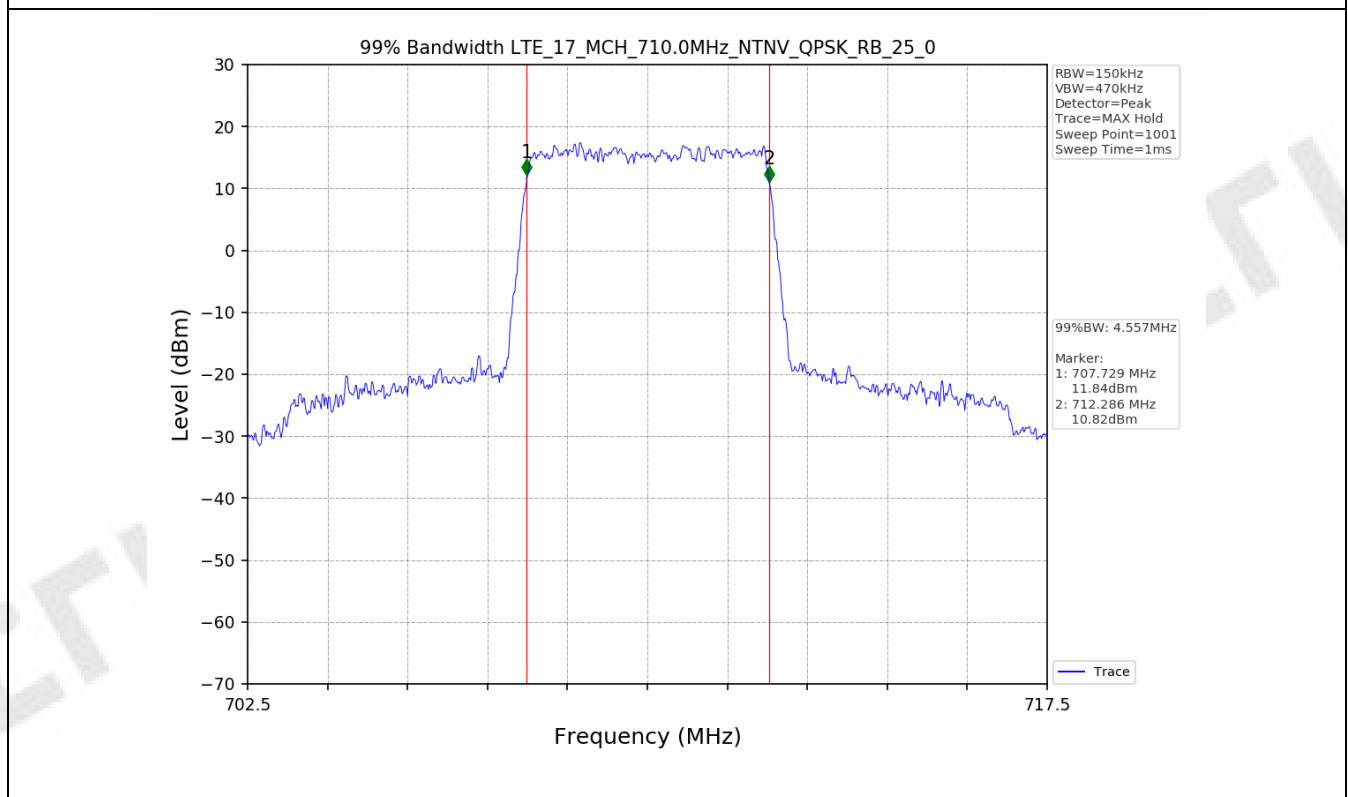
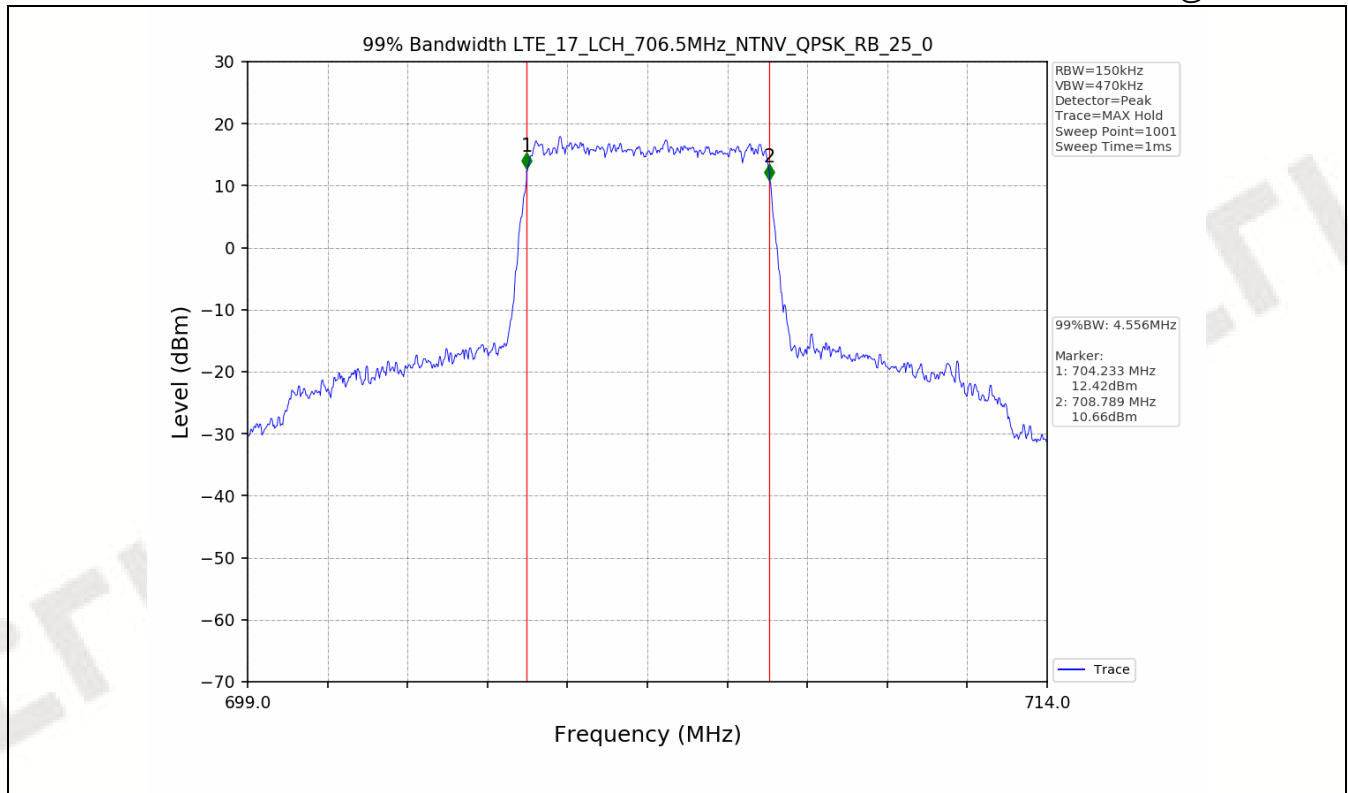
4.1 Test Result

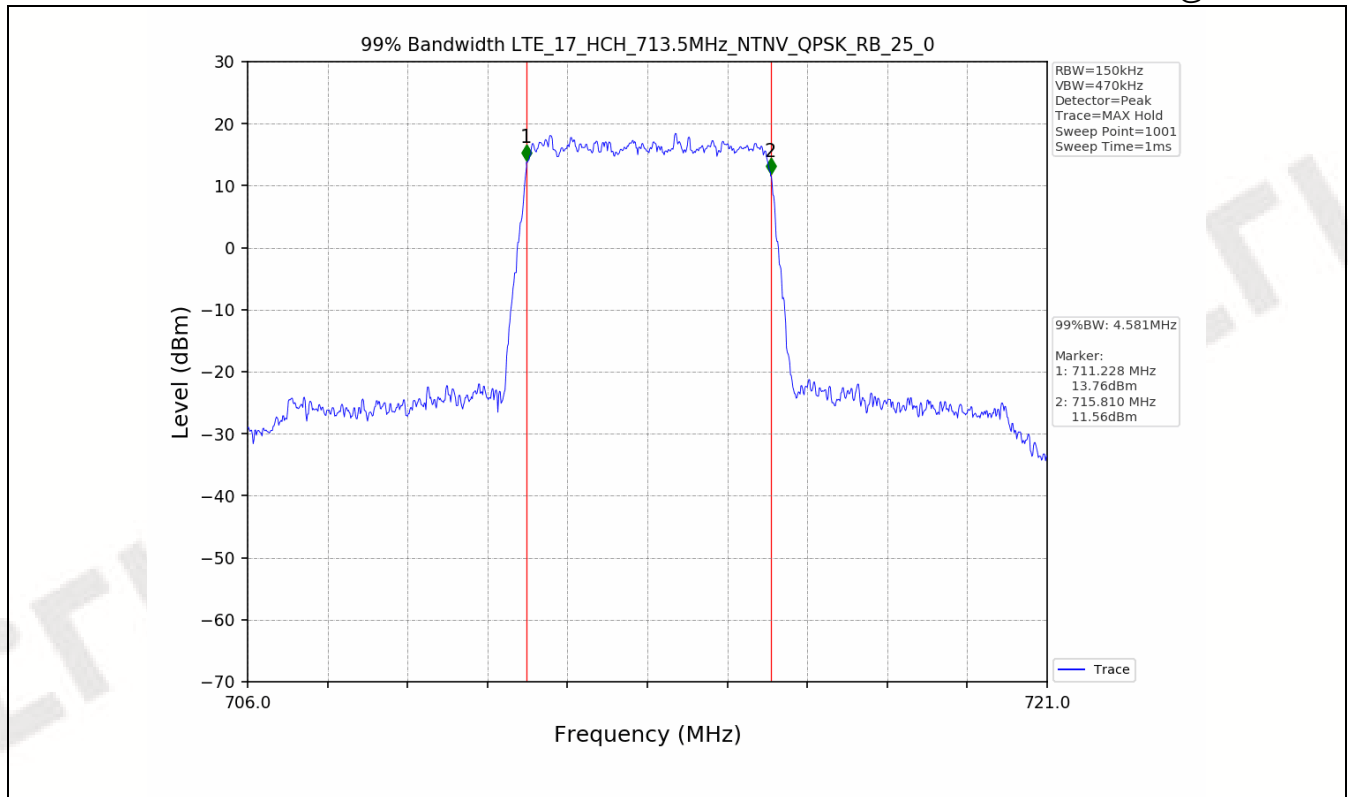
Test Band: 17_5MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	25	0	4.556	4.557	4.581	N/A	PASS
16QAM	25	0	4.567	4.565	4.544	N/A	PASS

4.2 Test Graph





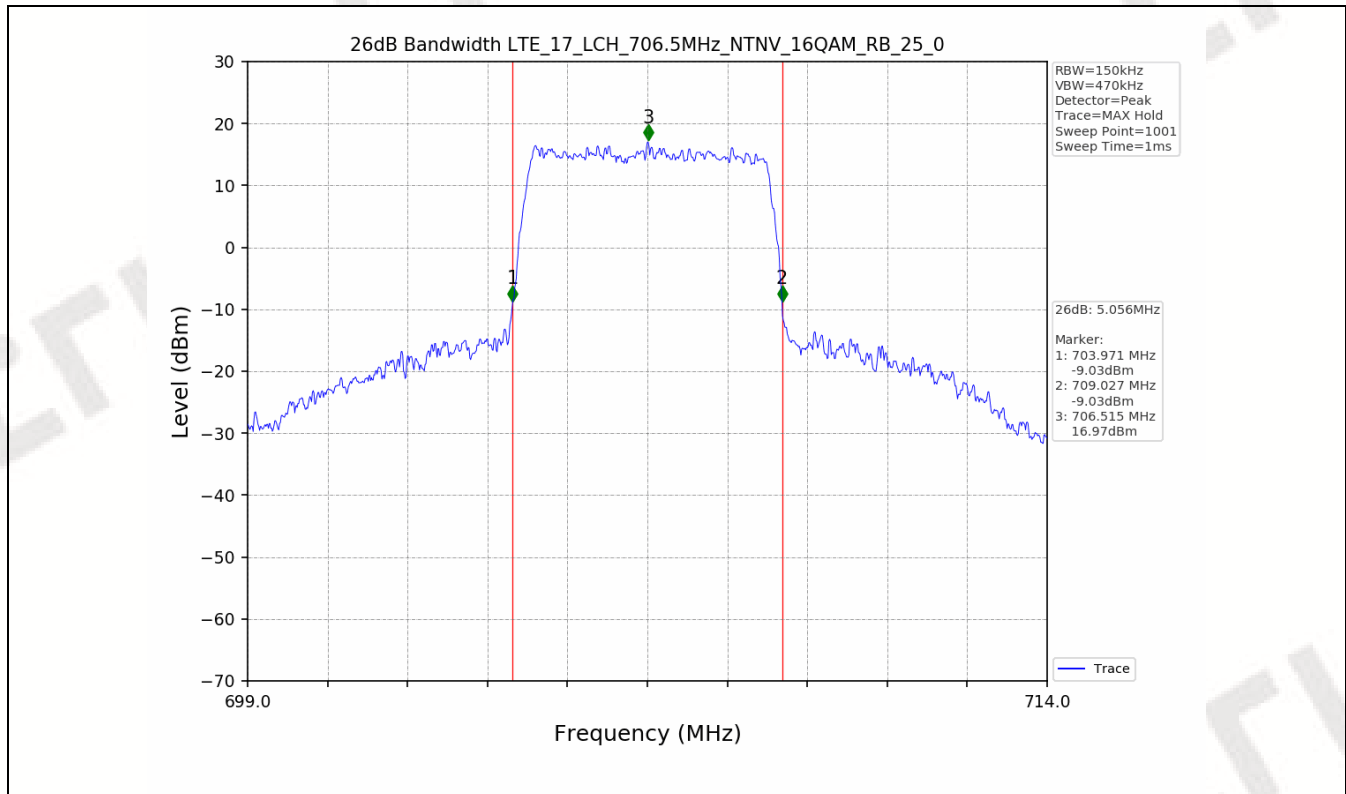


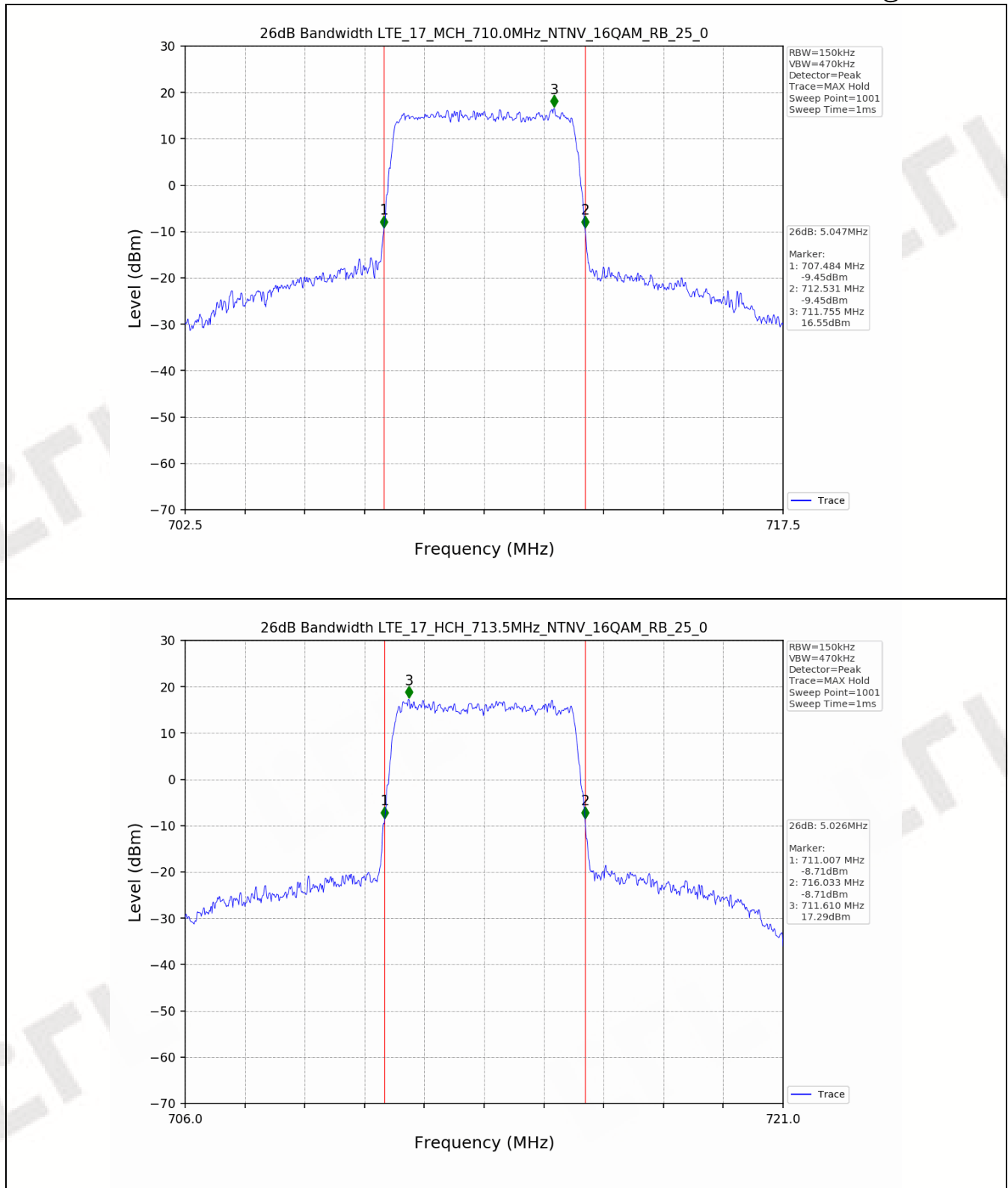


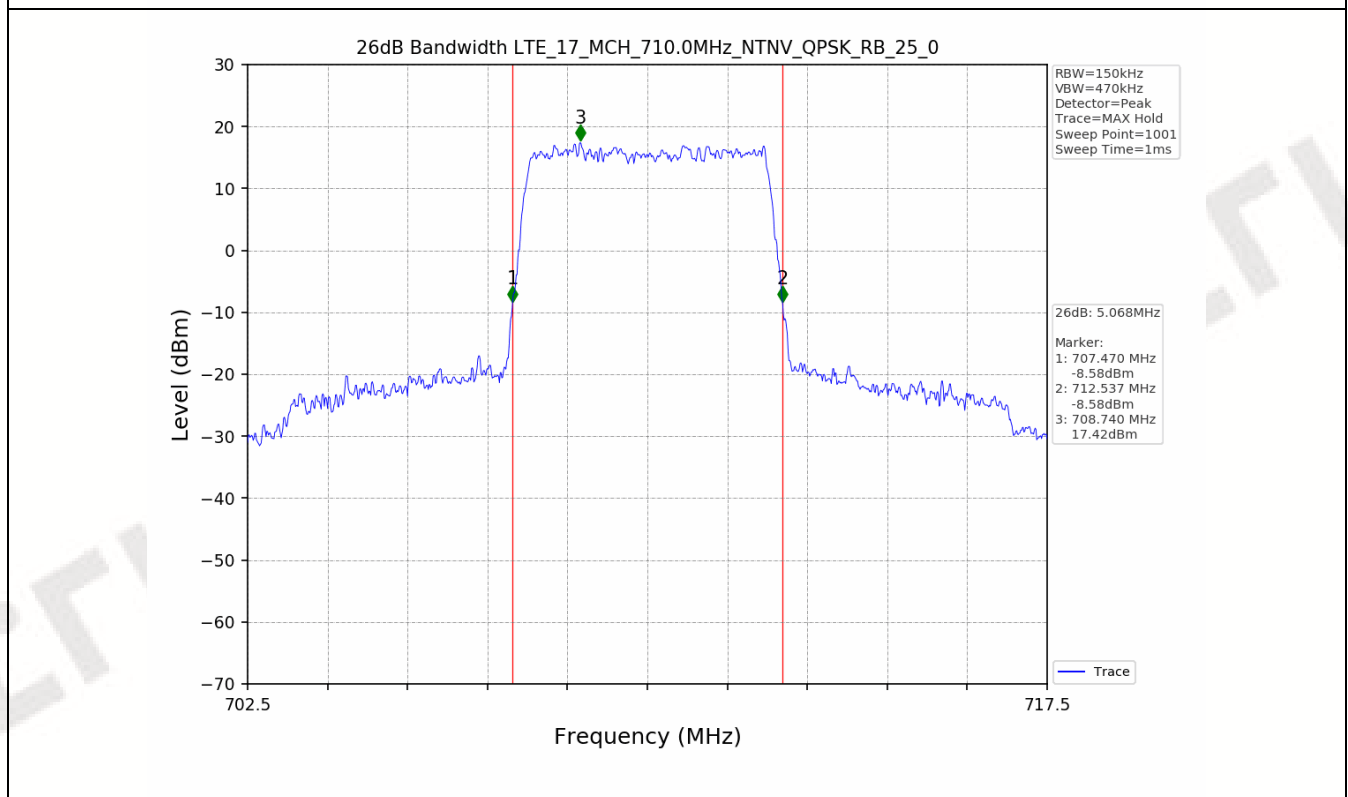
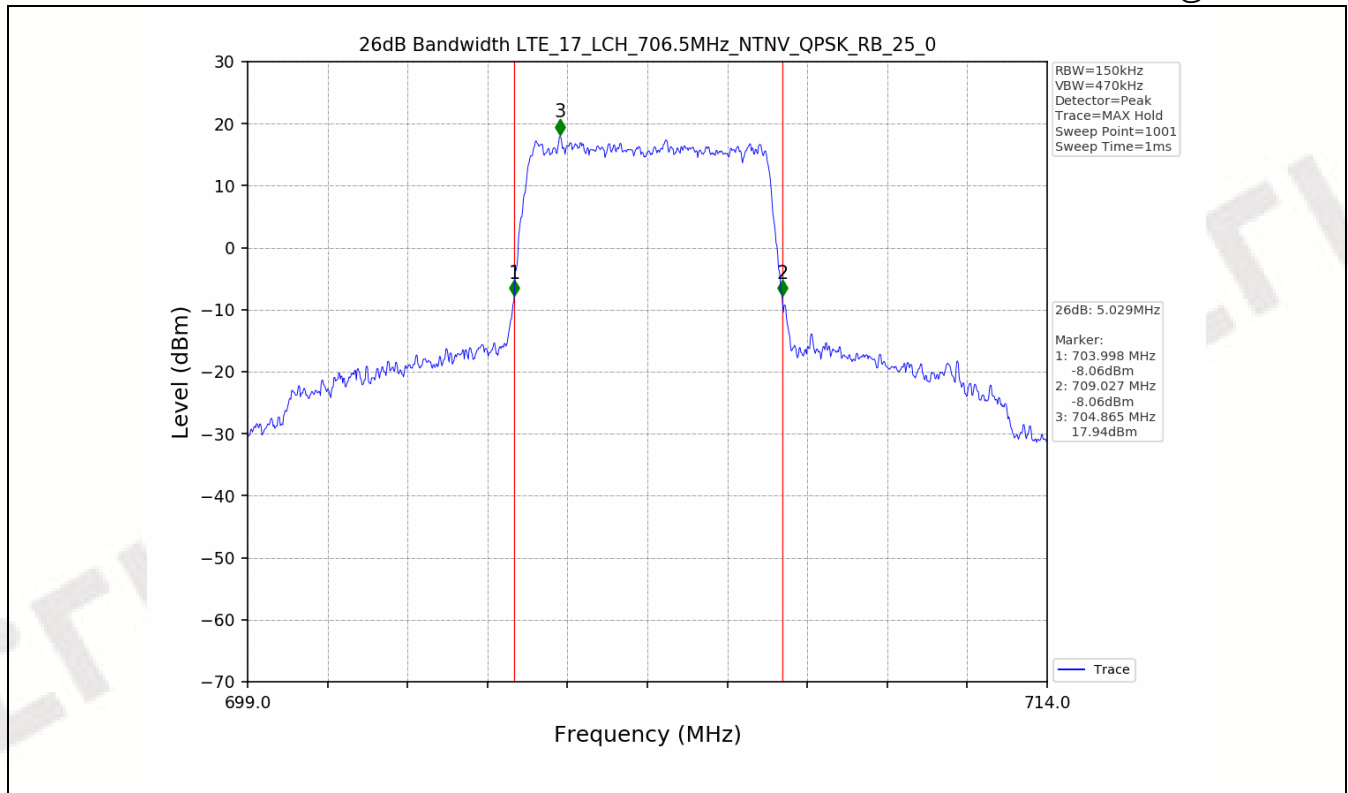


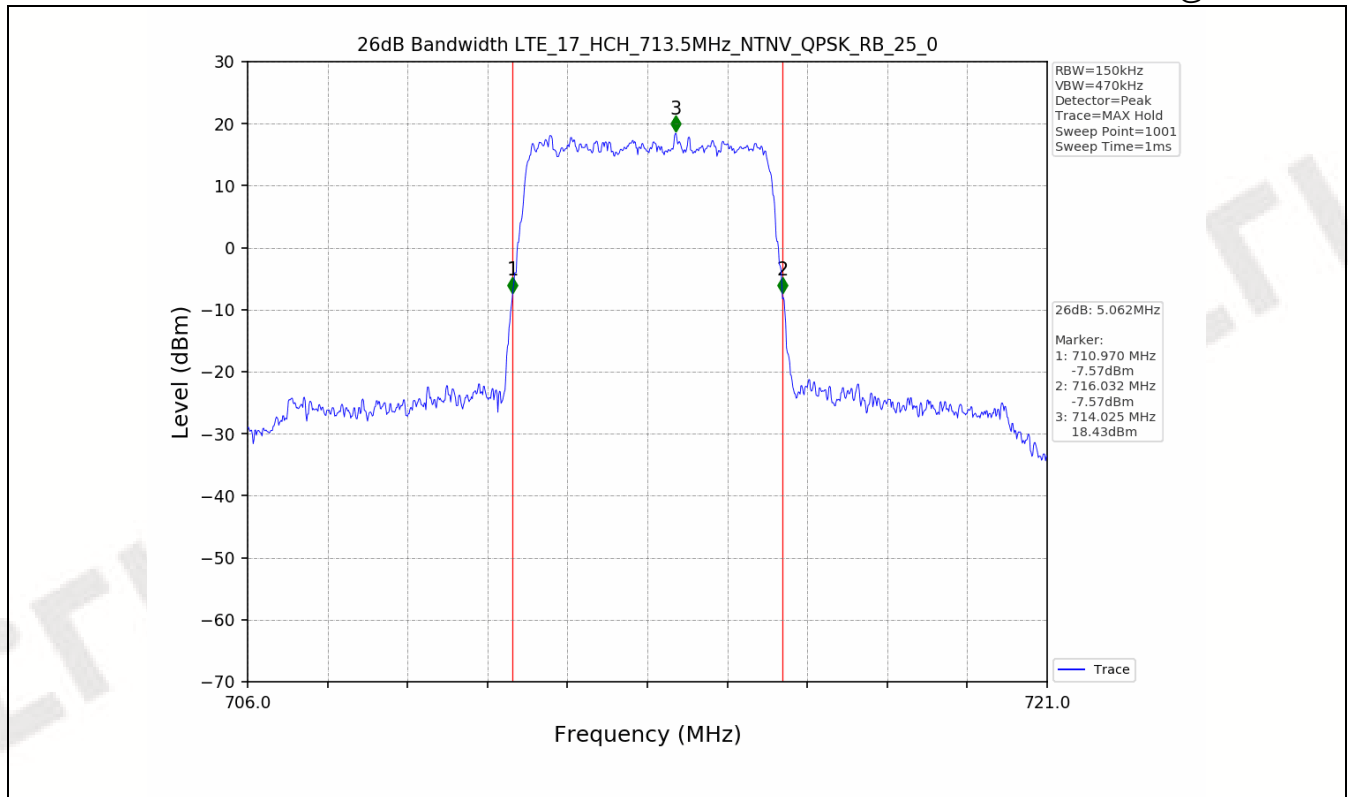
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Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
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16QAM	25	0	5.056	5.047	5.026	N/A	PASS

4.2 Test Graph





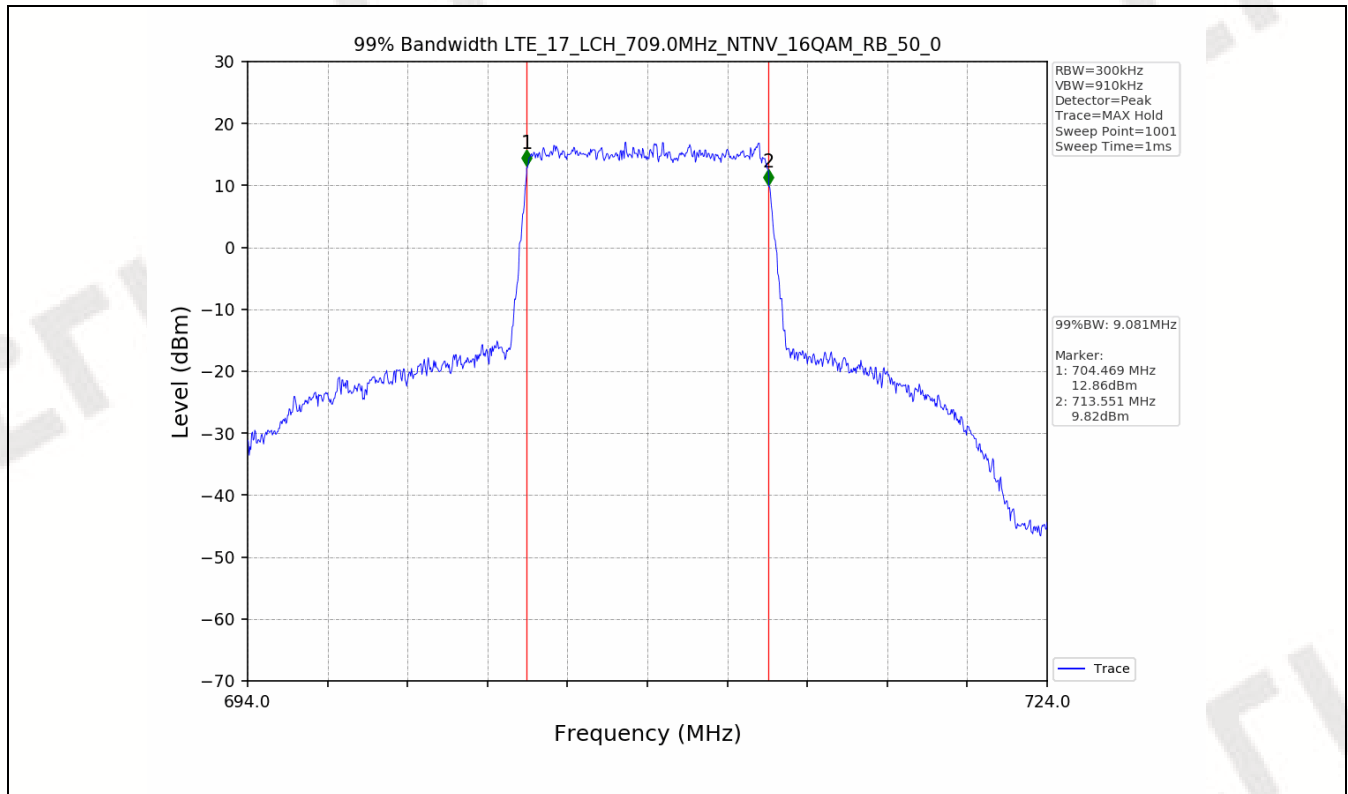


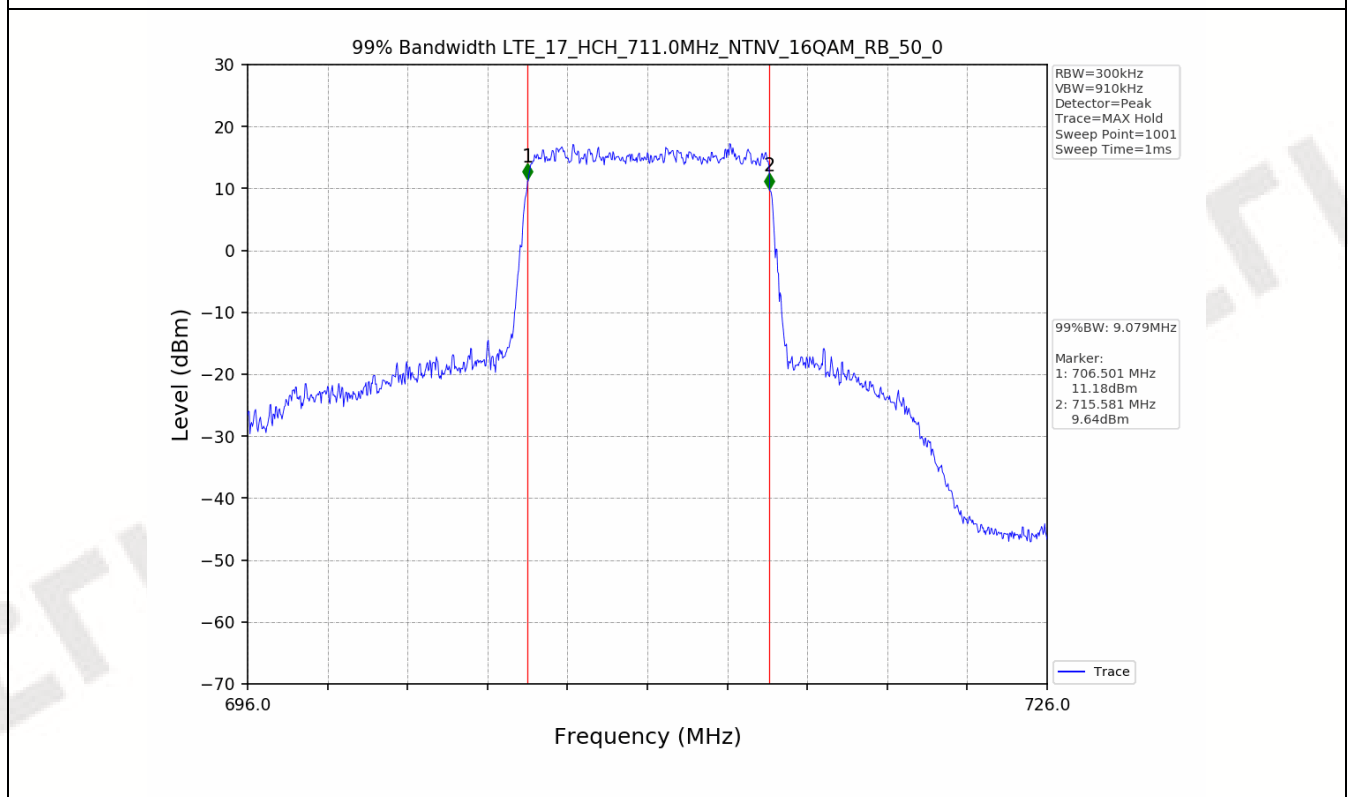
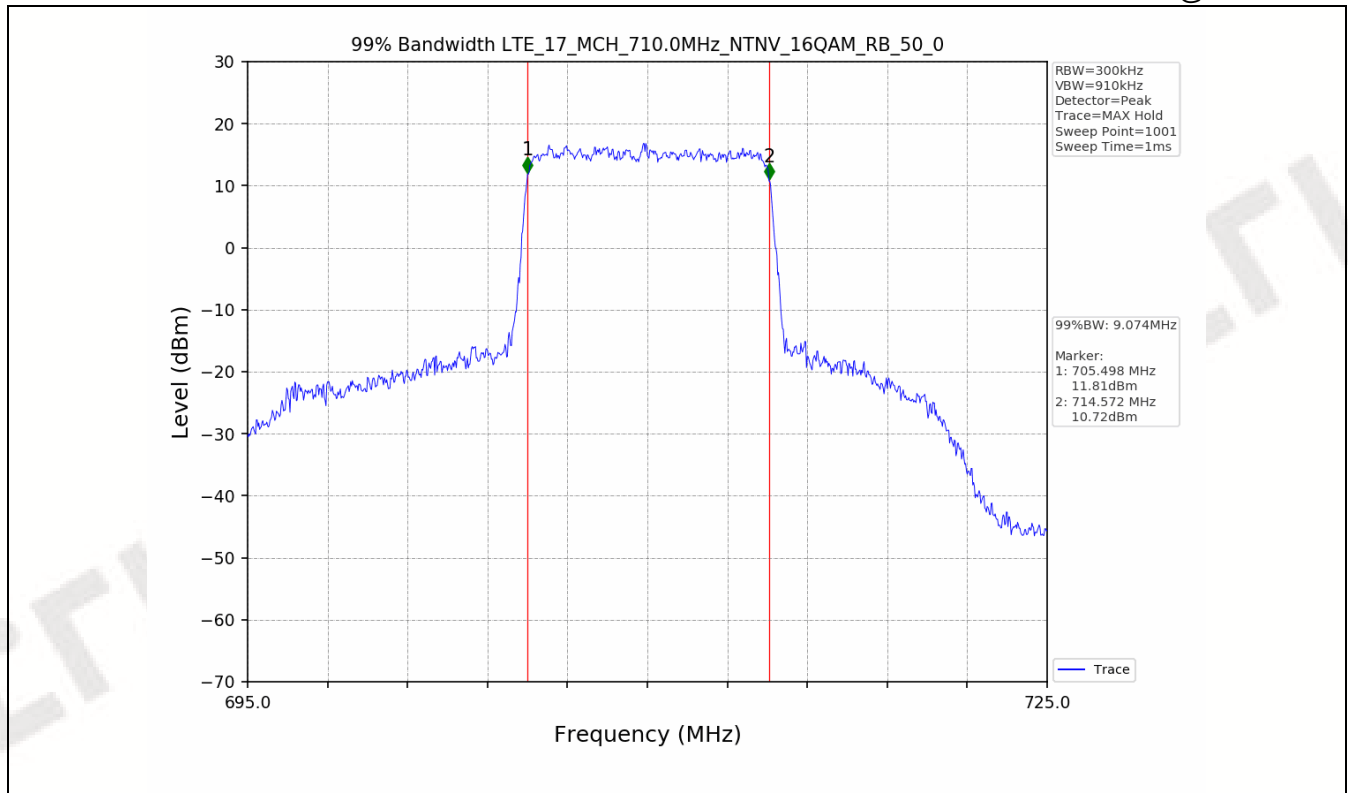


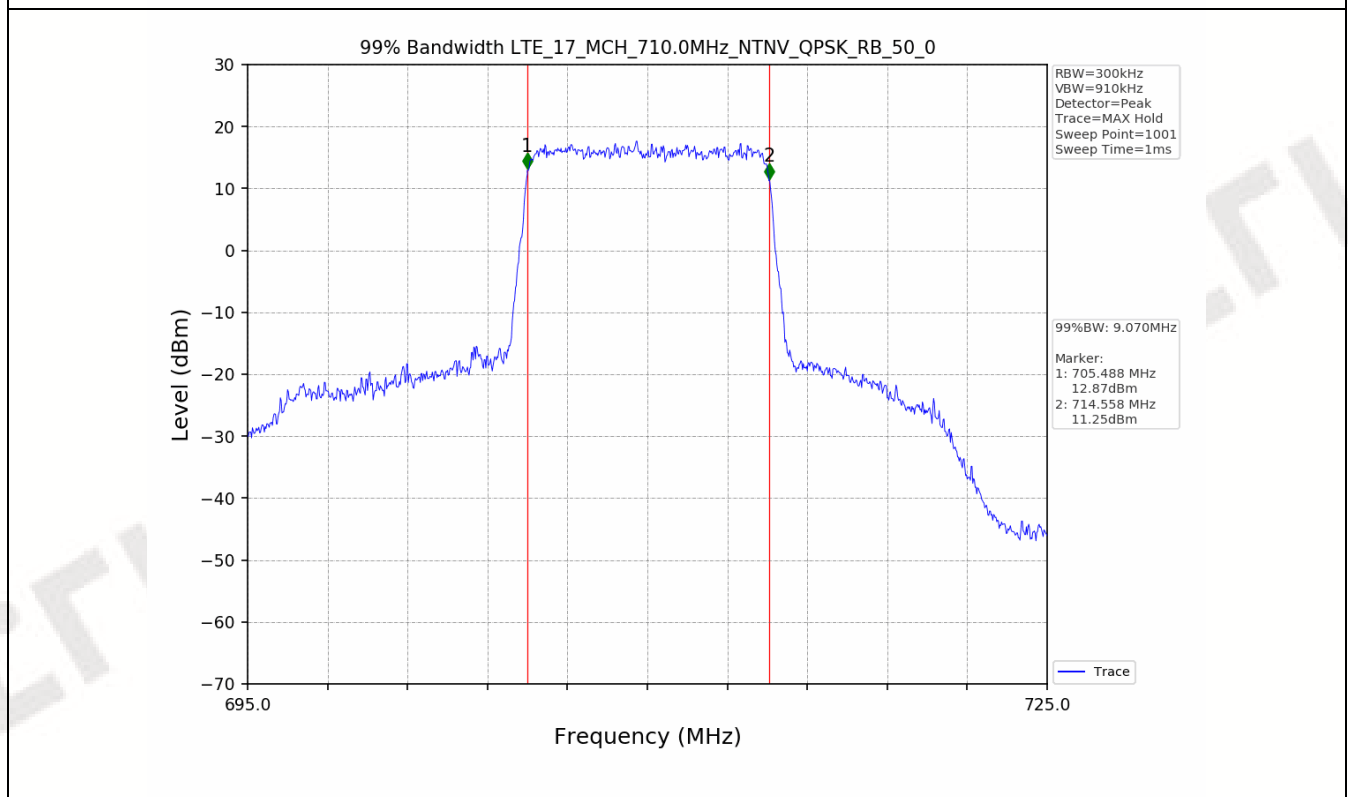
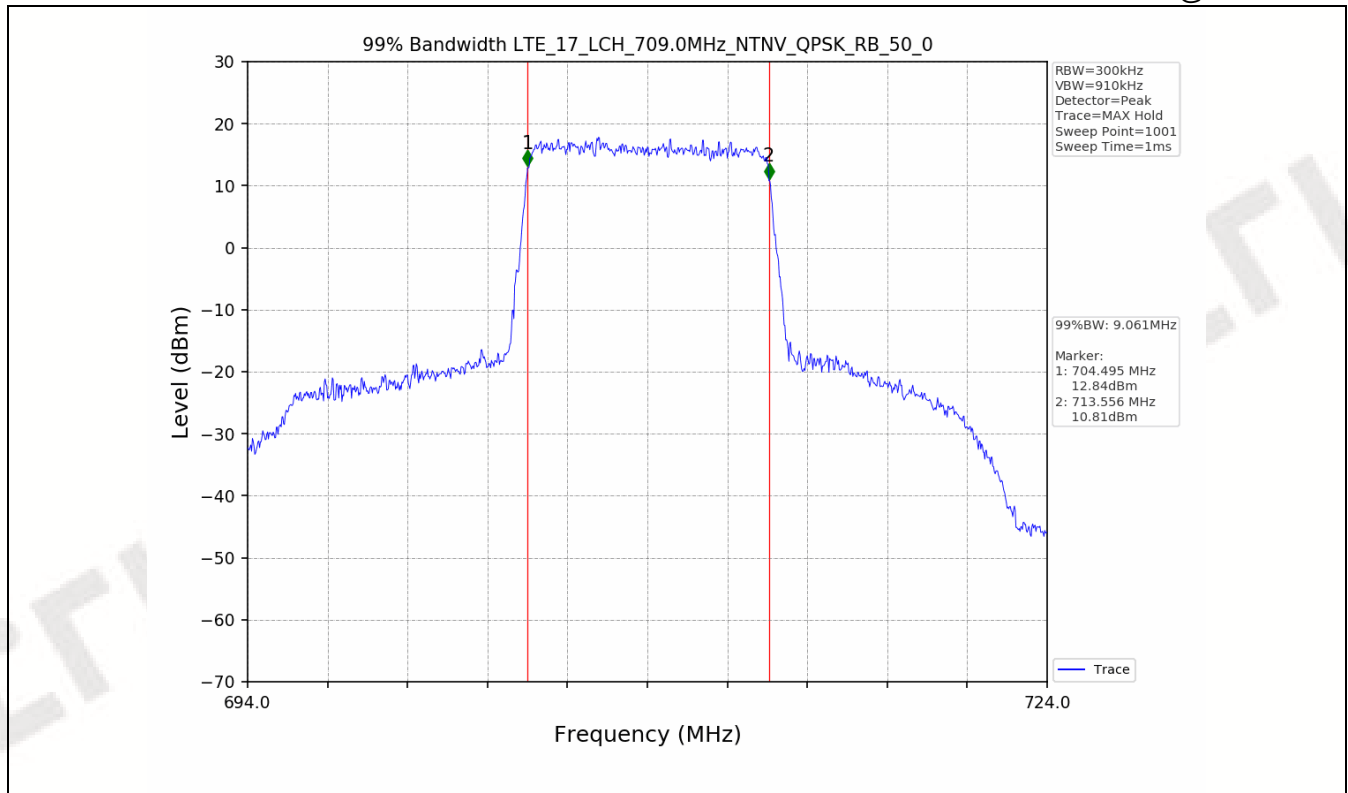


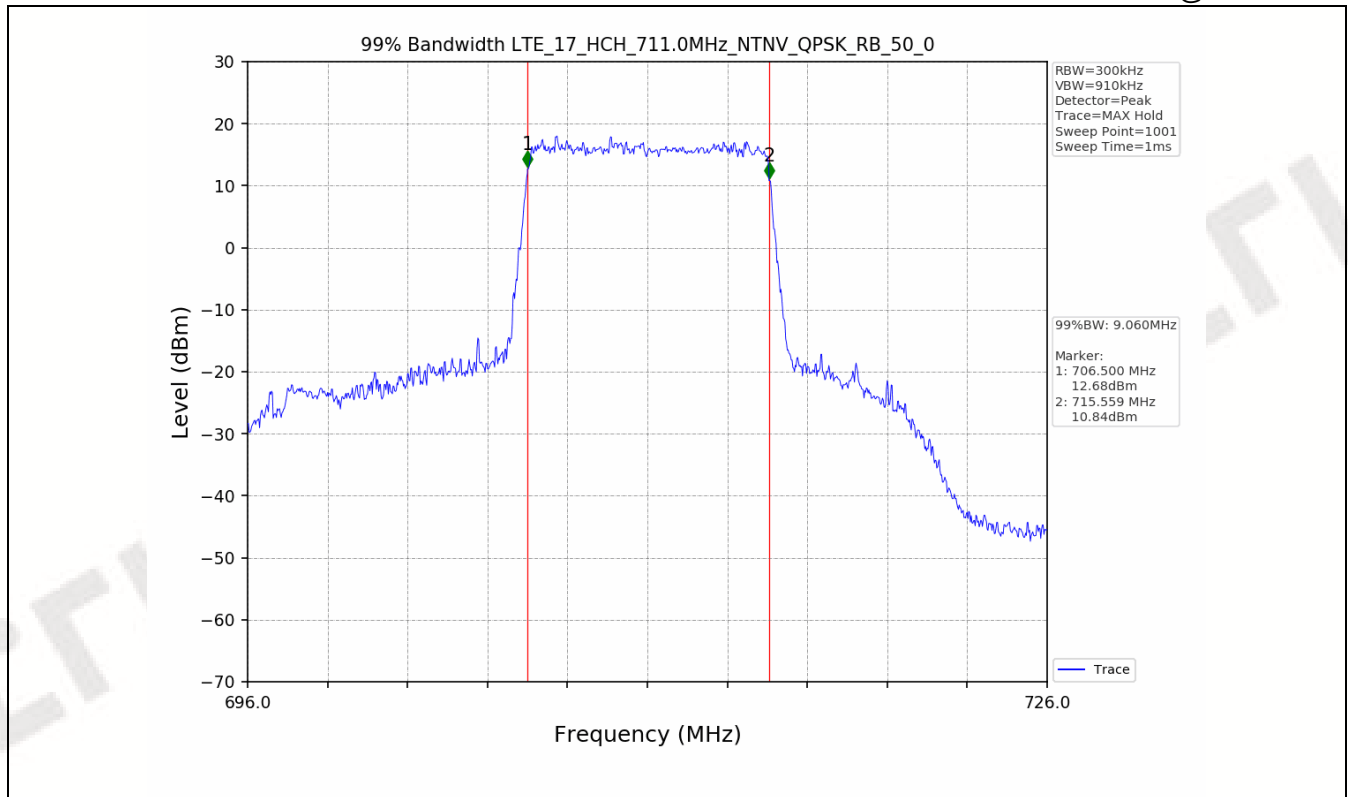
Test Band: 17 10MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	9.061	9.070	9.060	N/A	PASS
16QAM	50	0	9.081	9.074	9.079	N/A	PASS

4.2 Test Graph





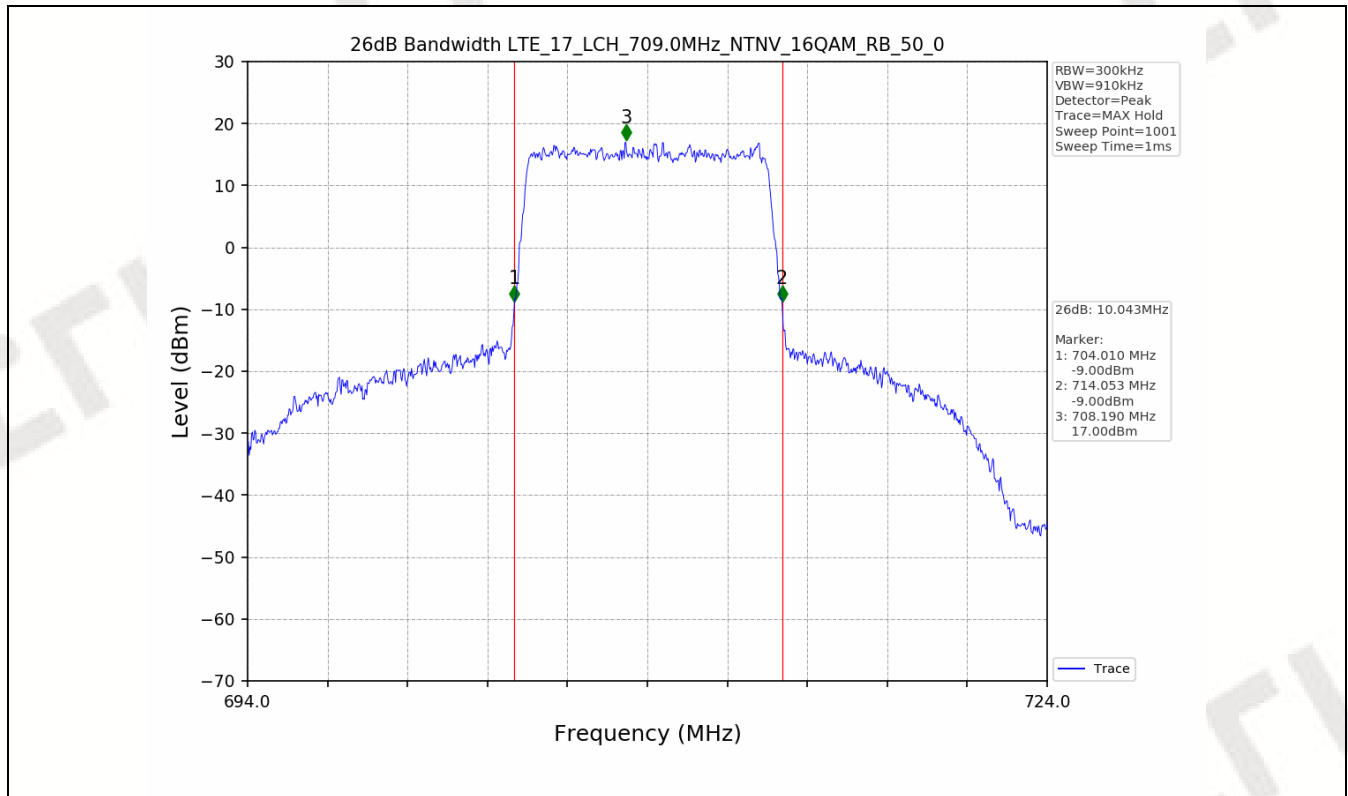


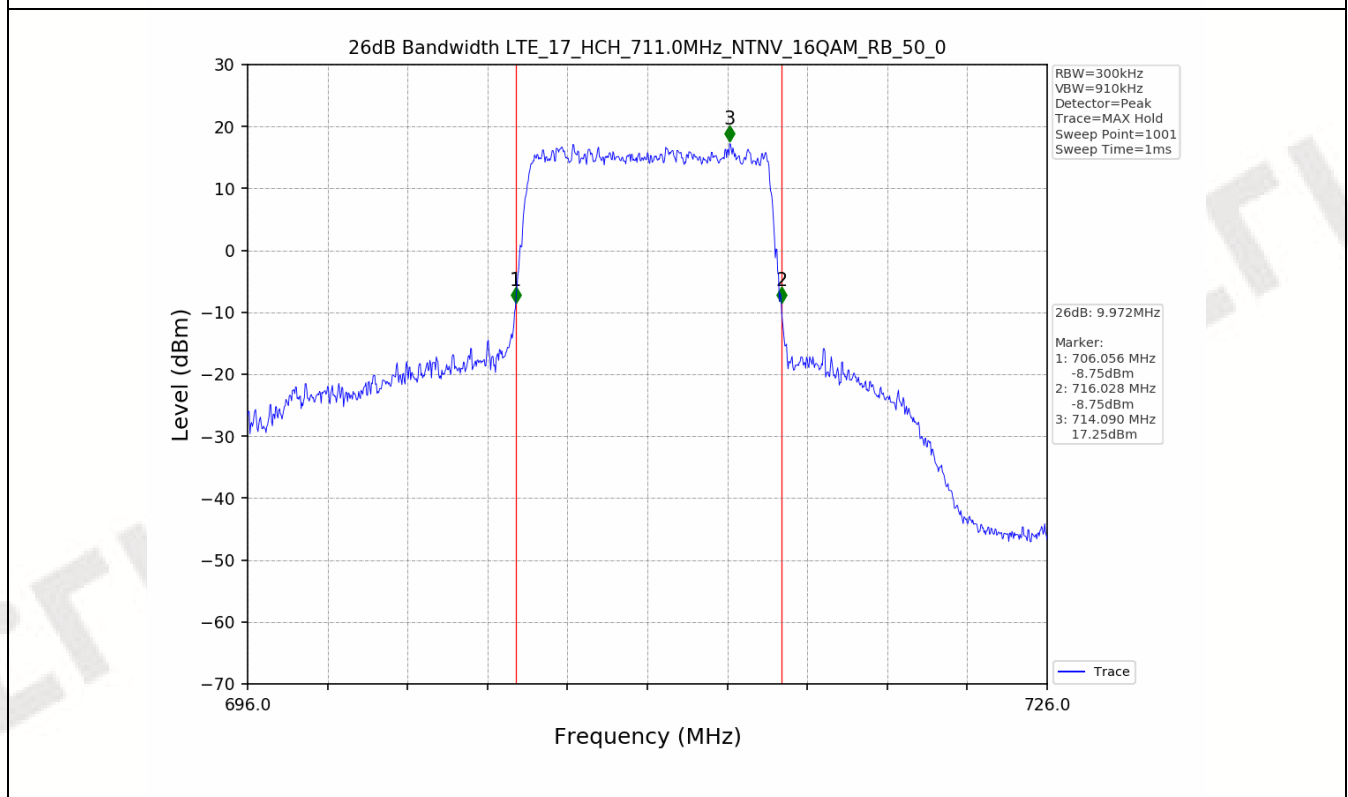
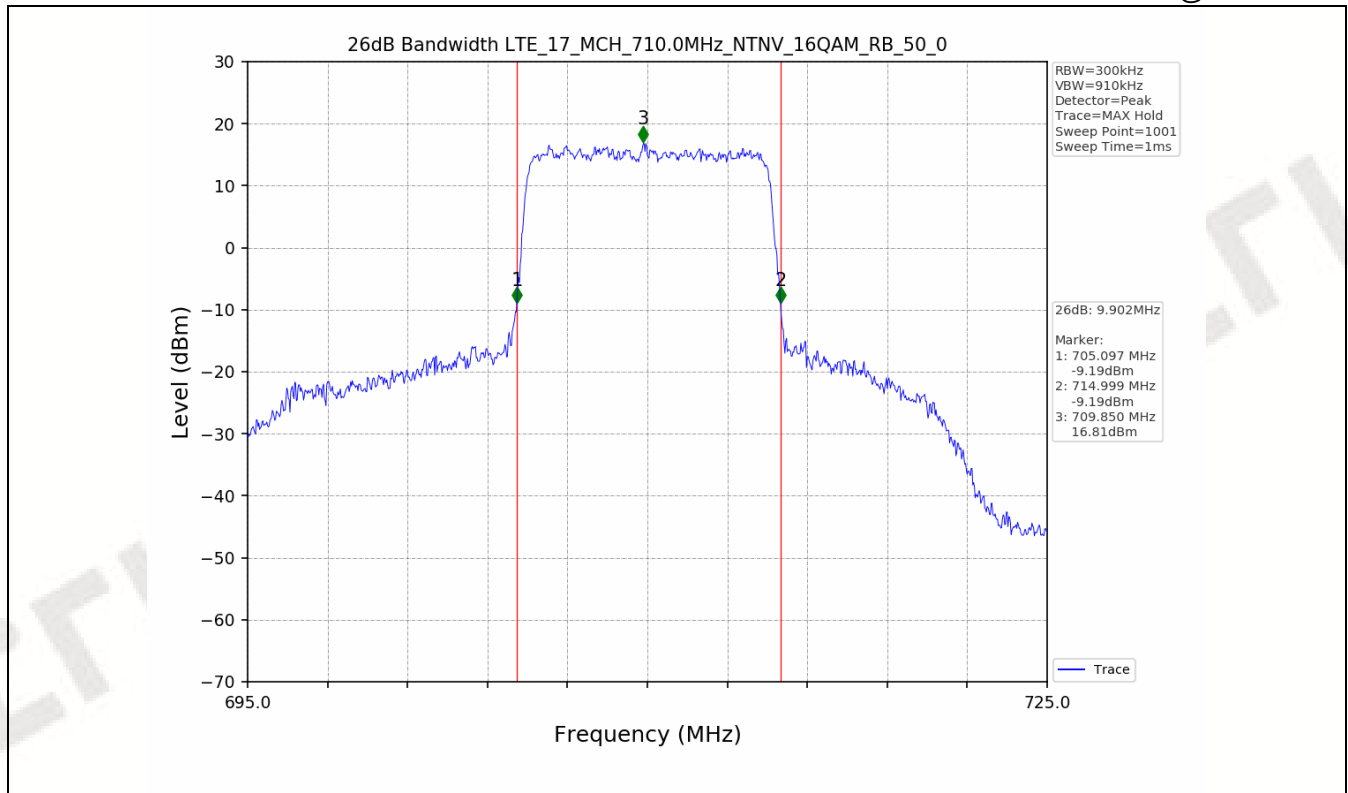


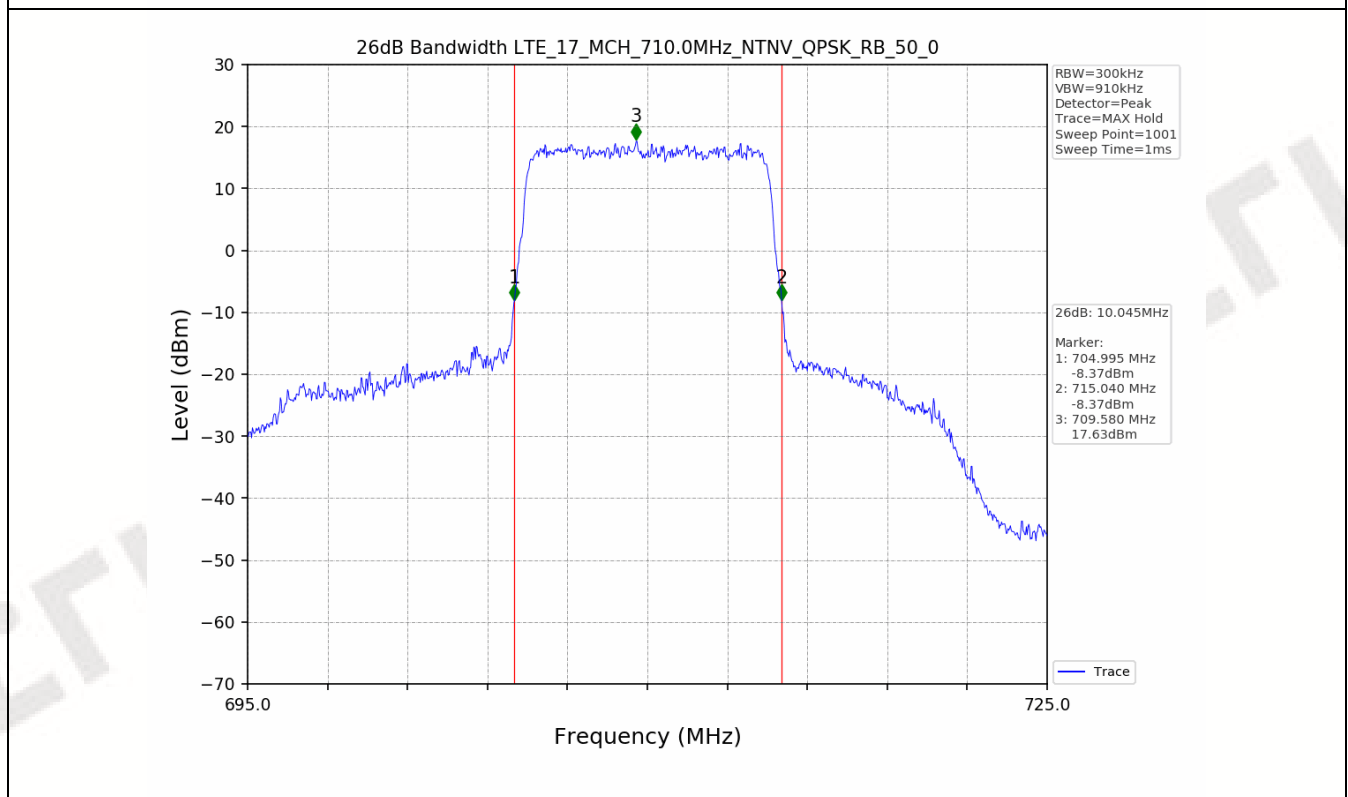
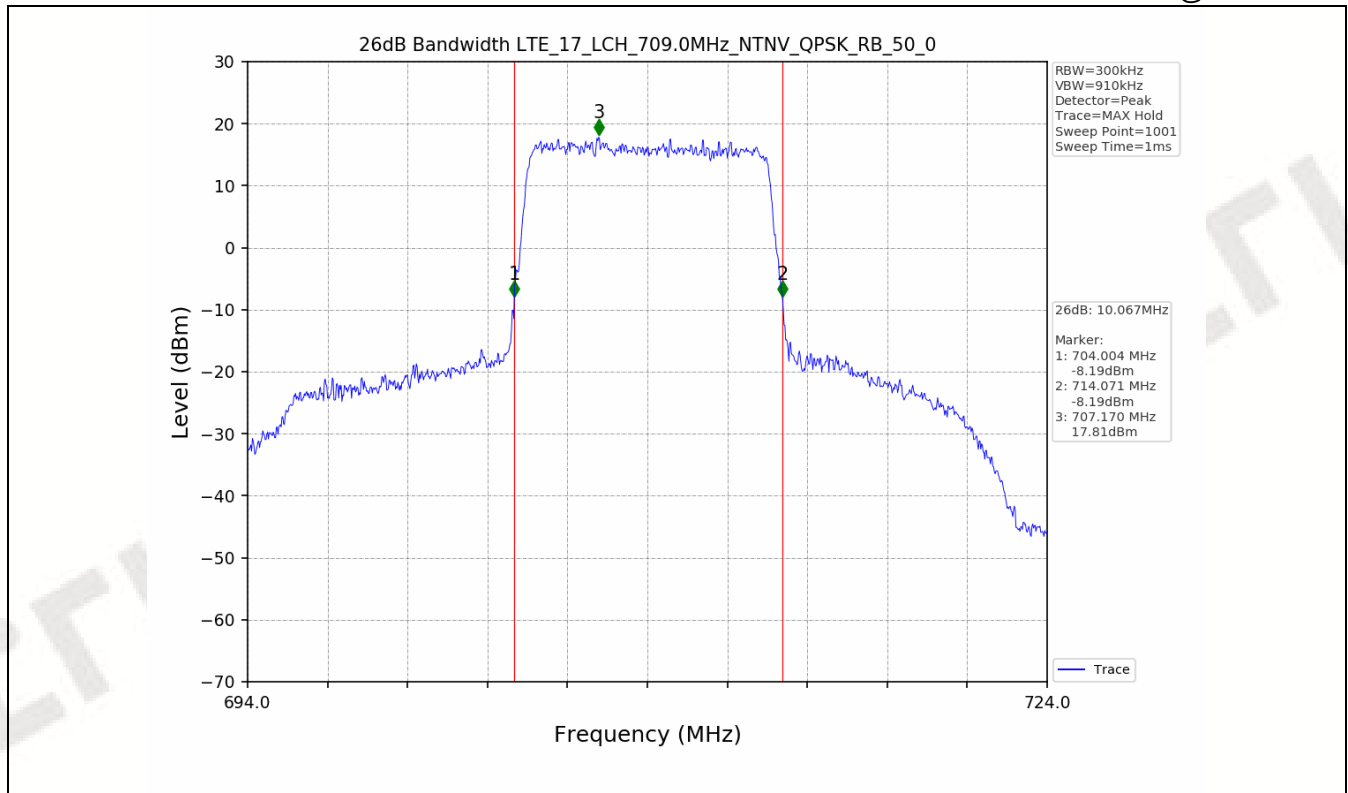


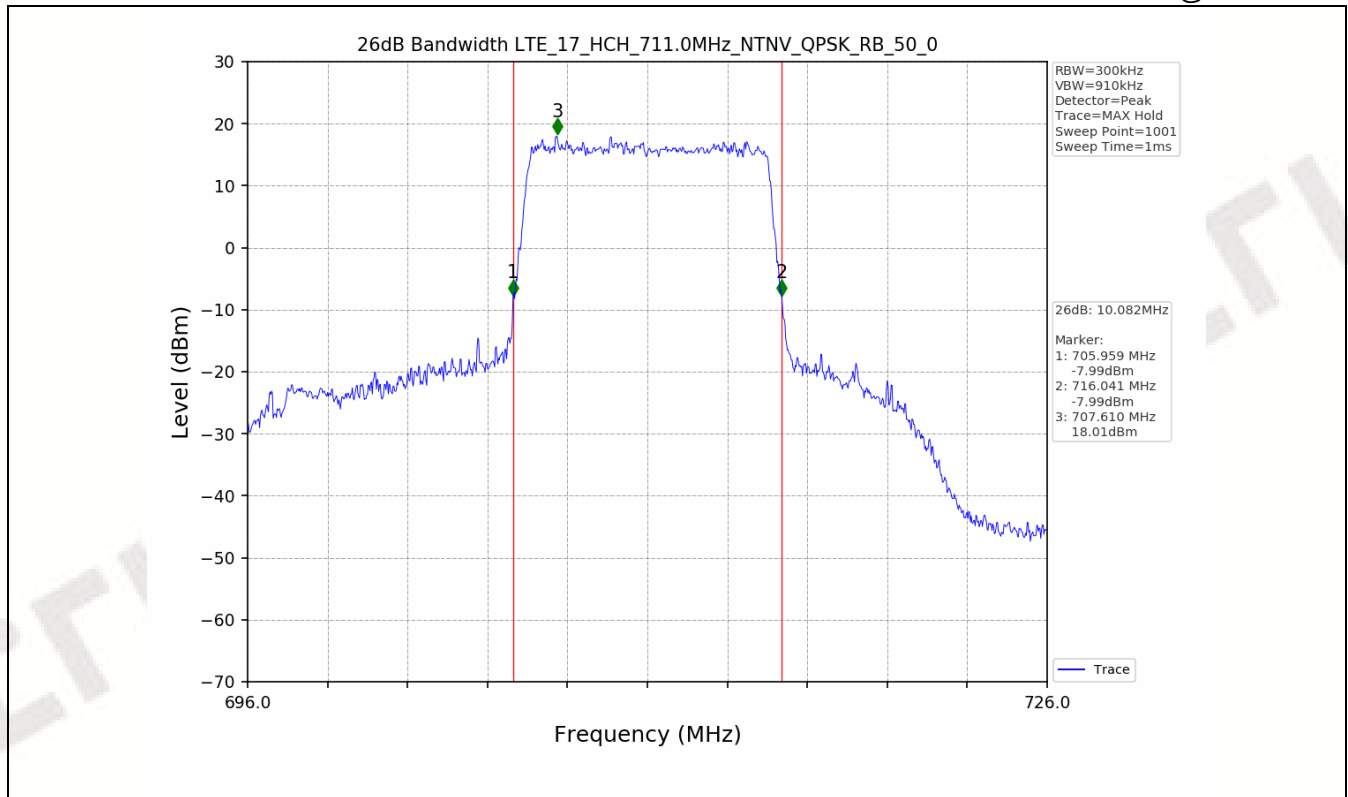
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Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	10.067	10.045	10.082	N/A	PASS
16QAM	50	0	10.043	9.902	9.972	N/A	PASS

4.2 Test Graph









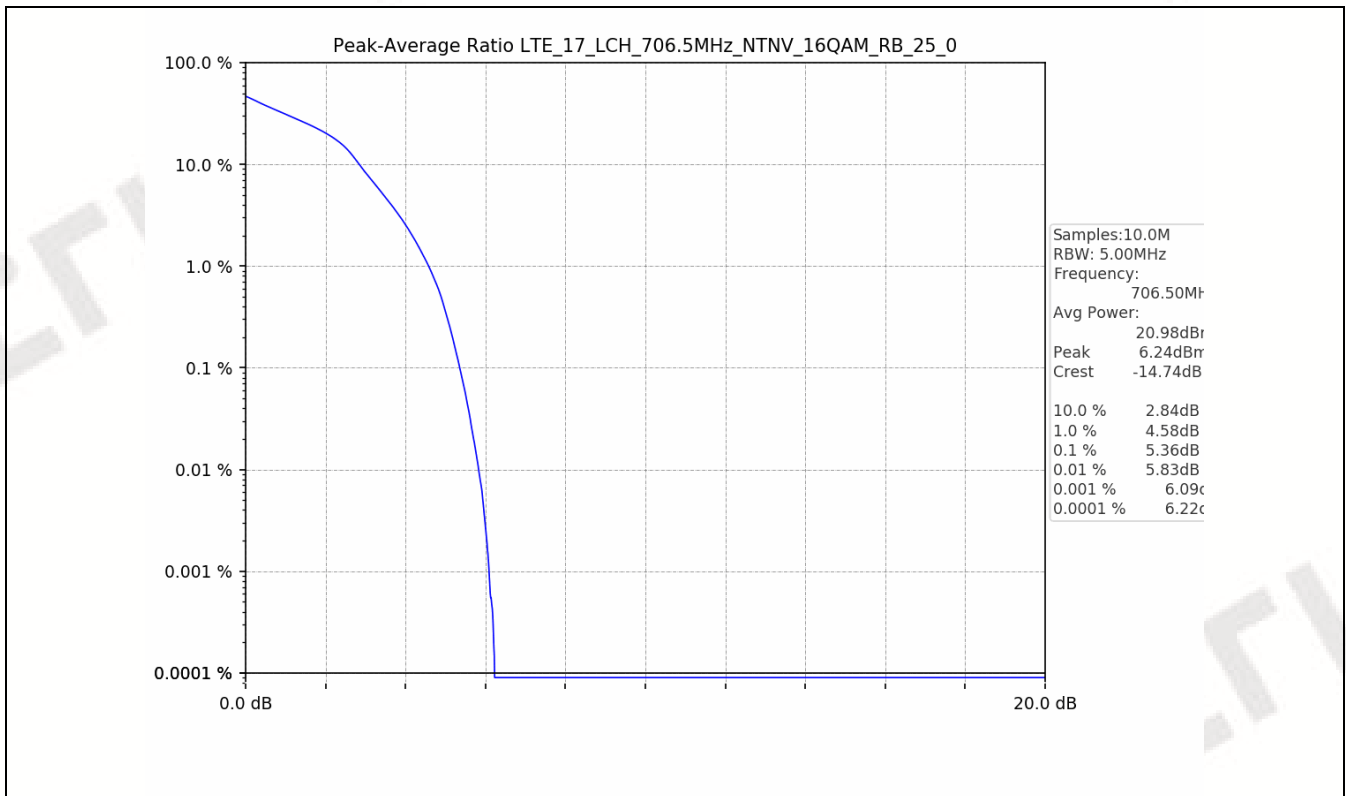


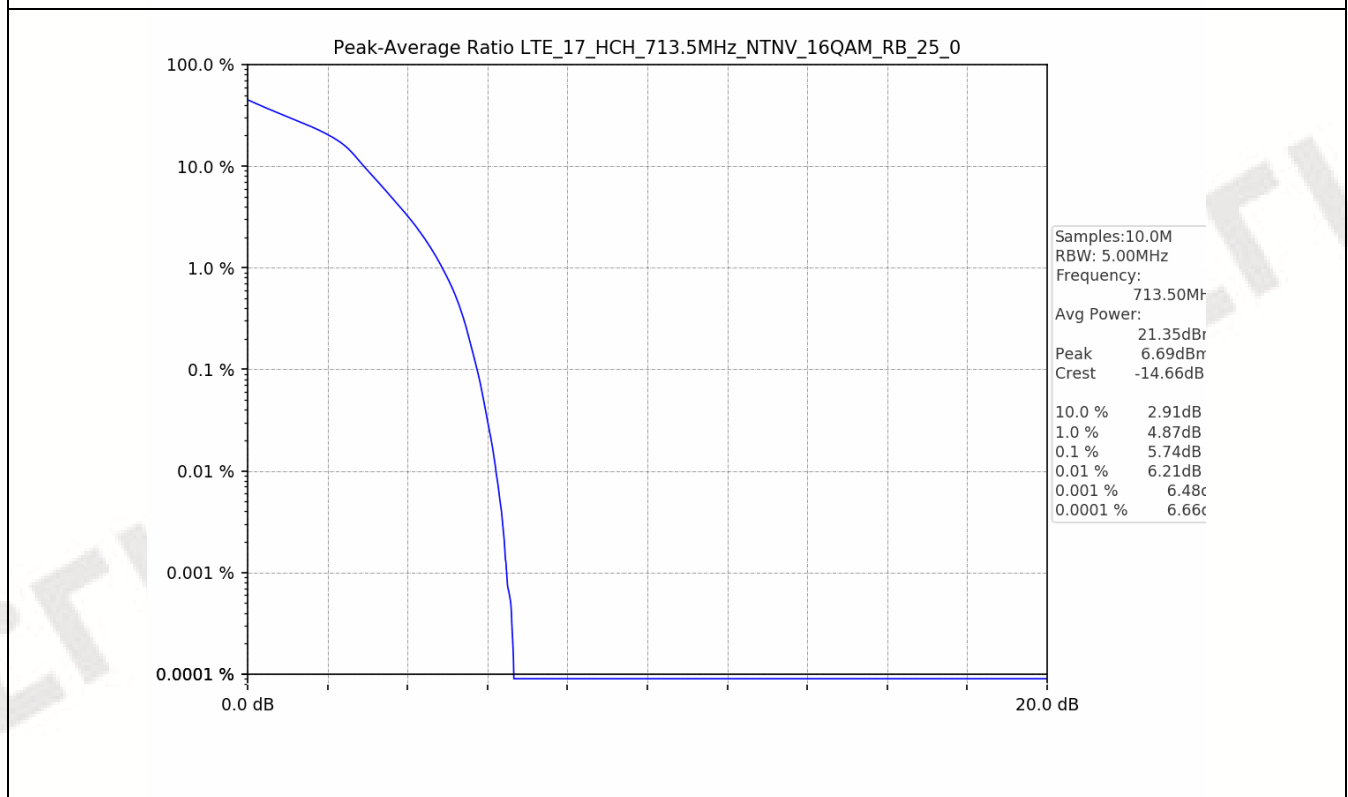
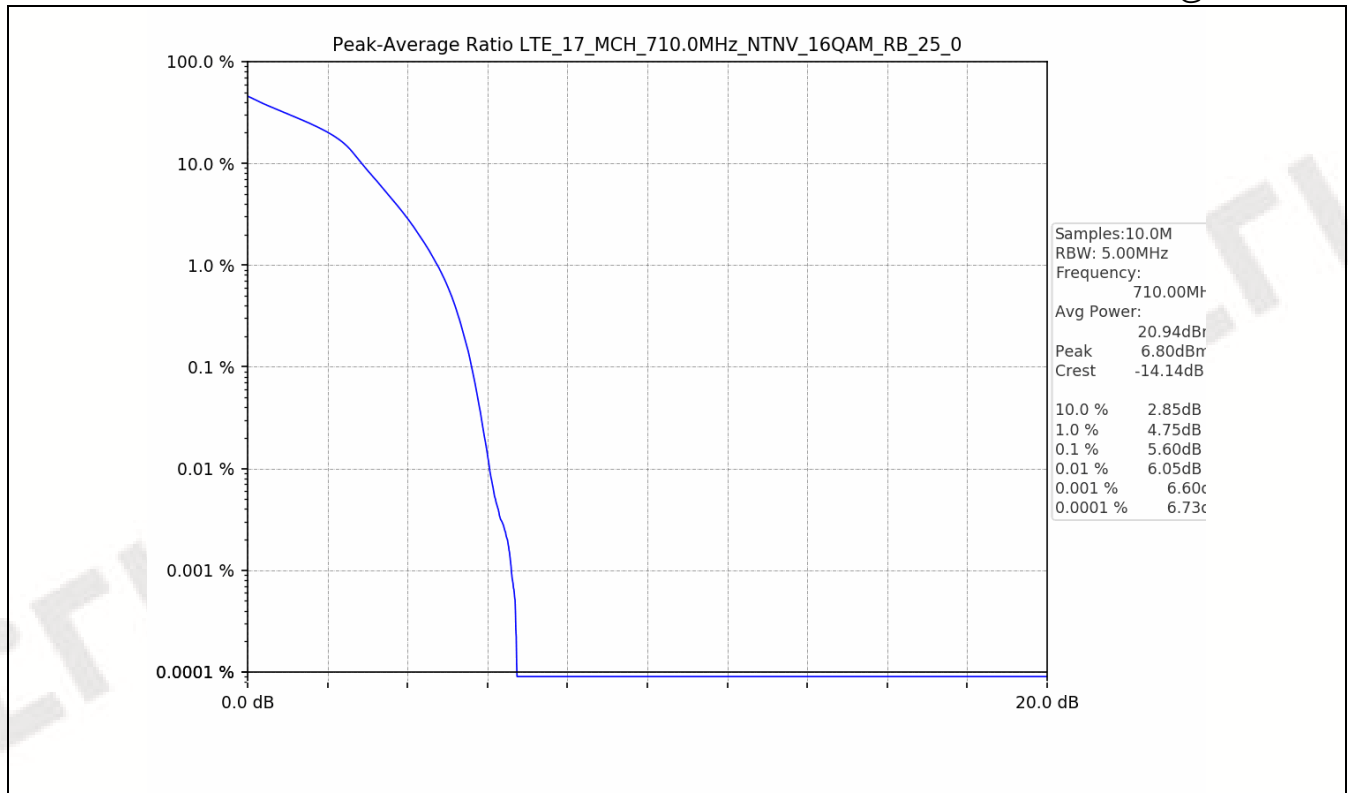
5. Peak-Average Ratio

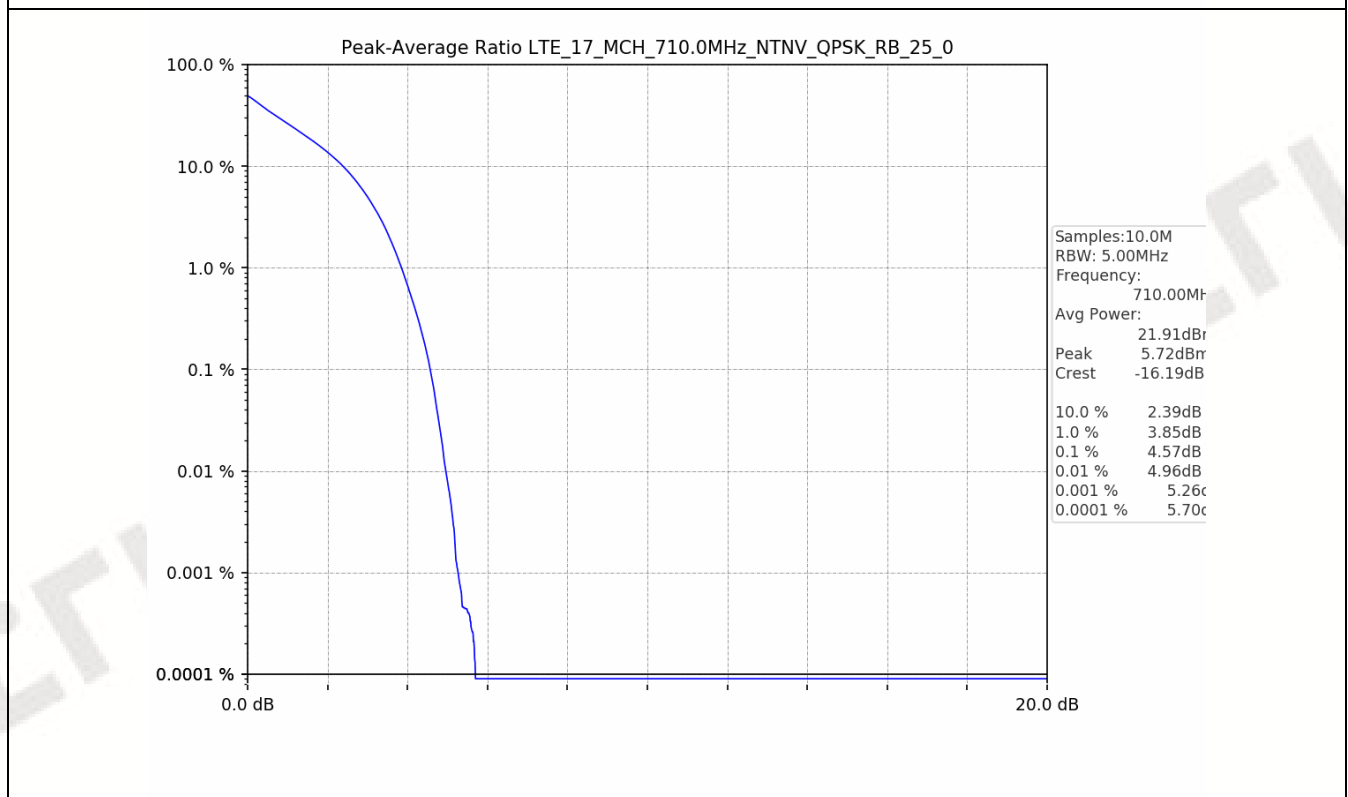
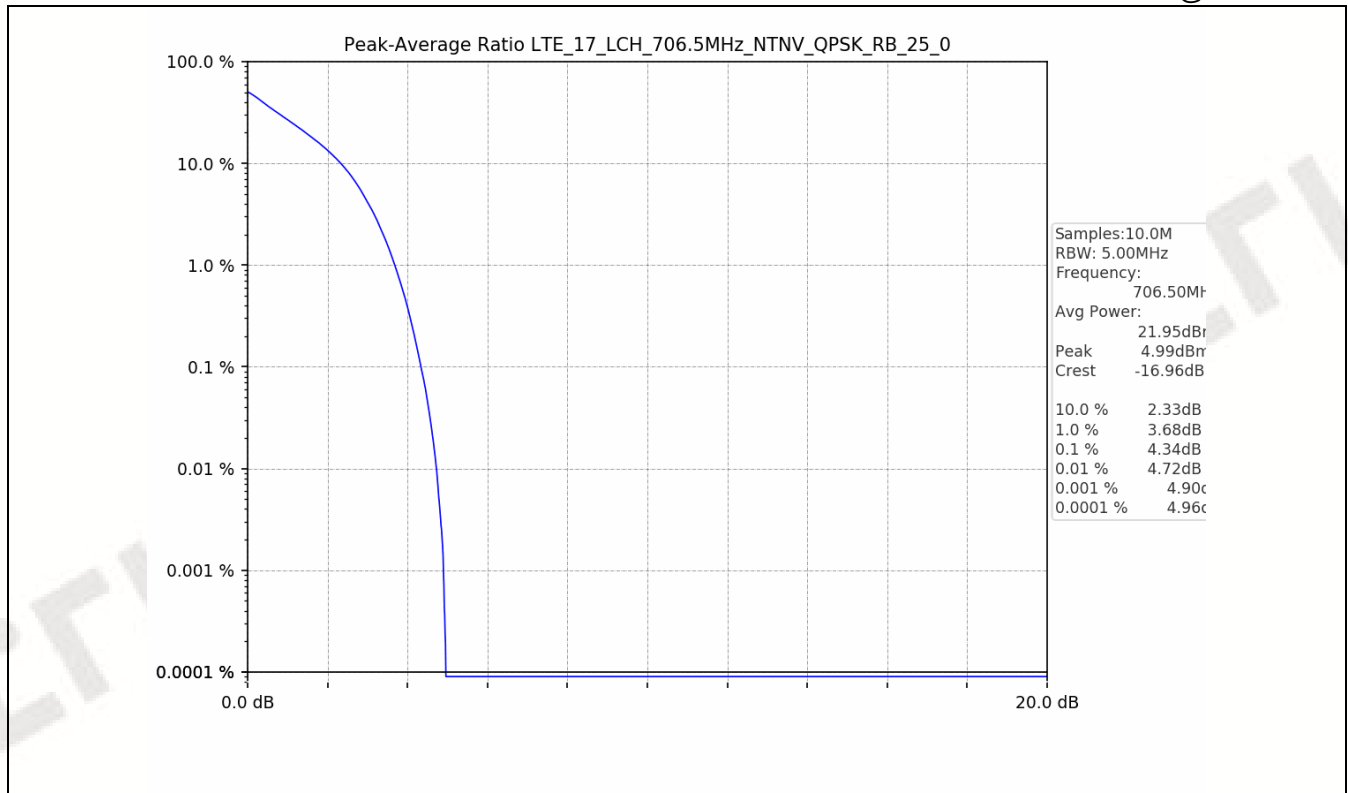
5.1 Test Result

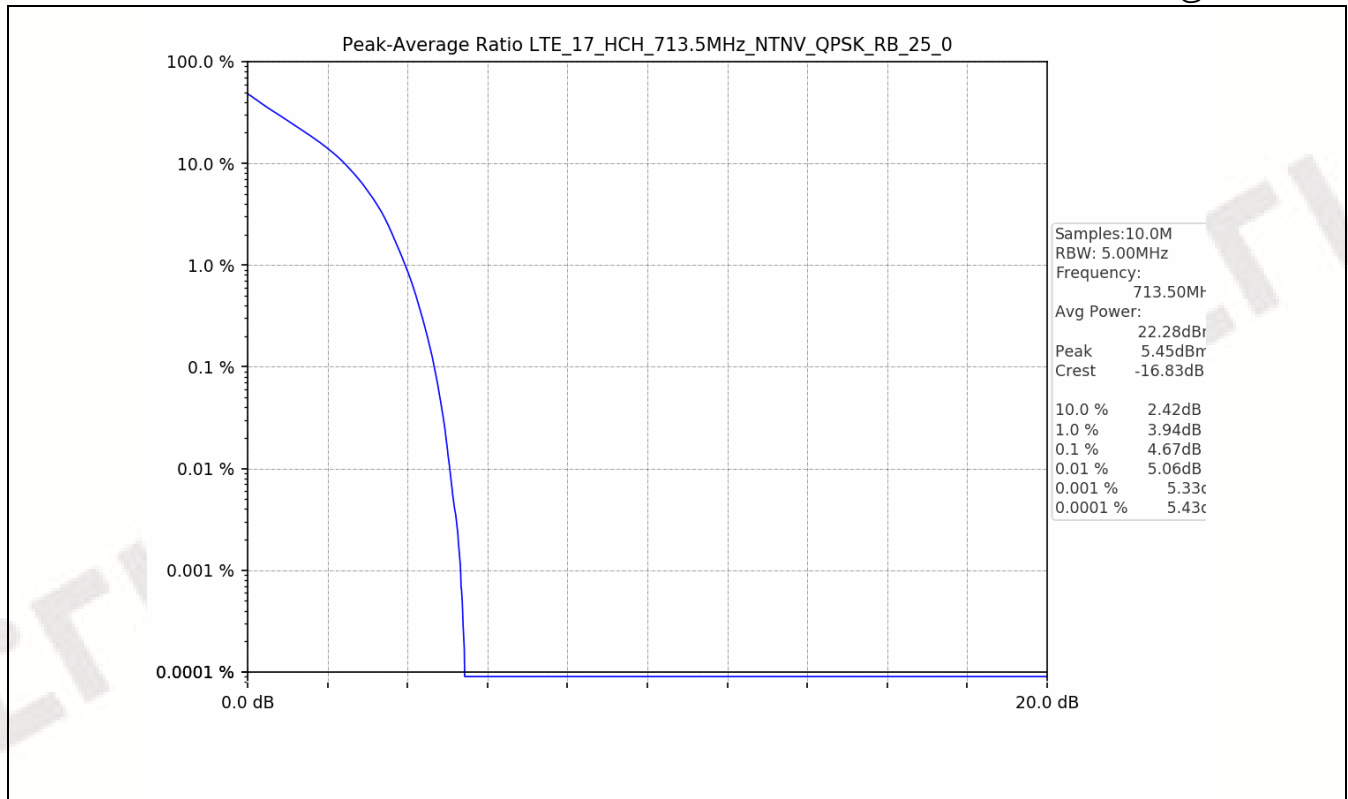
Test Band: 17_ 5MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	25	0	4.34	4.57	4.67	13	PASS
16QAM	25	0	5.36	5.60	5.74	13	PASS

5.2 Test Graph





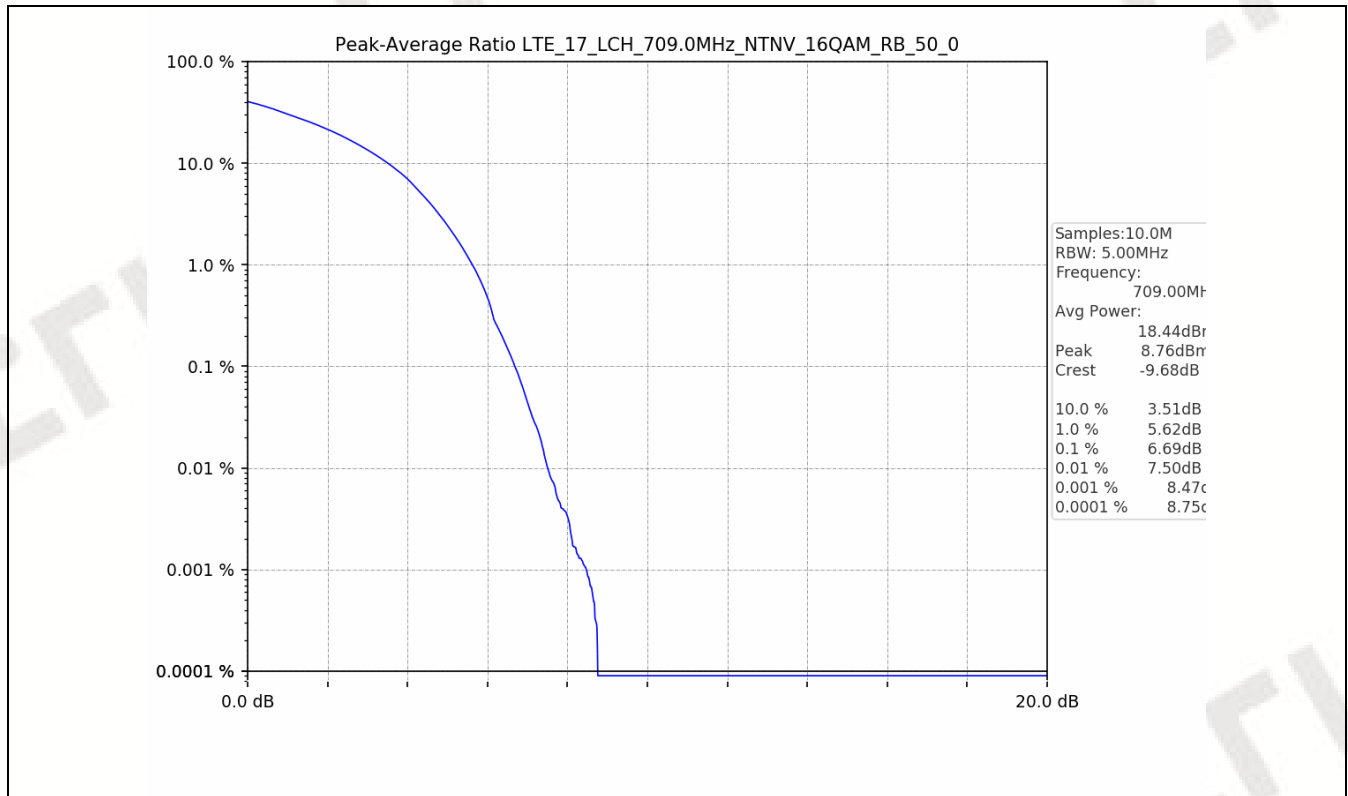


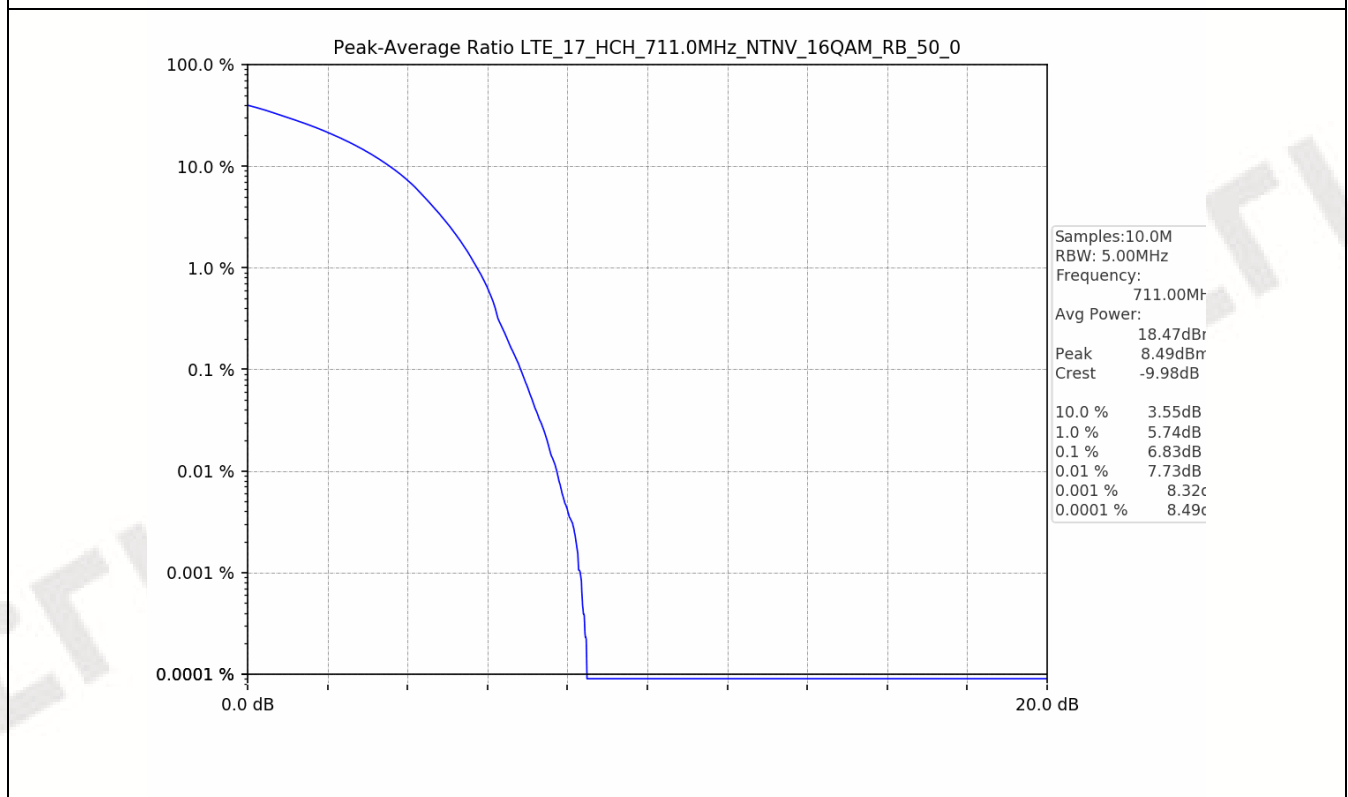
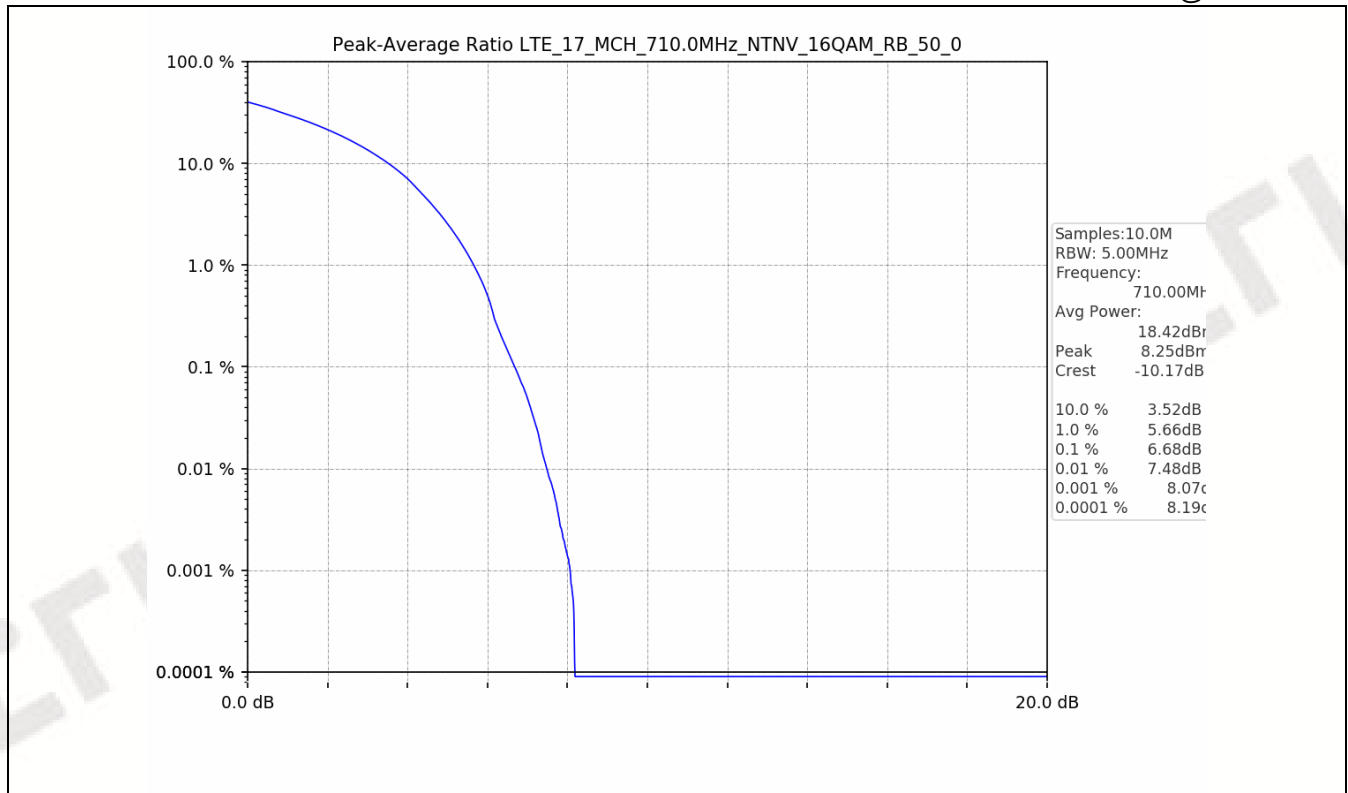


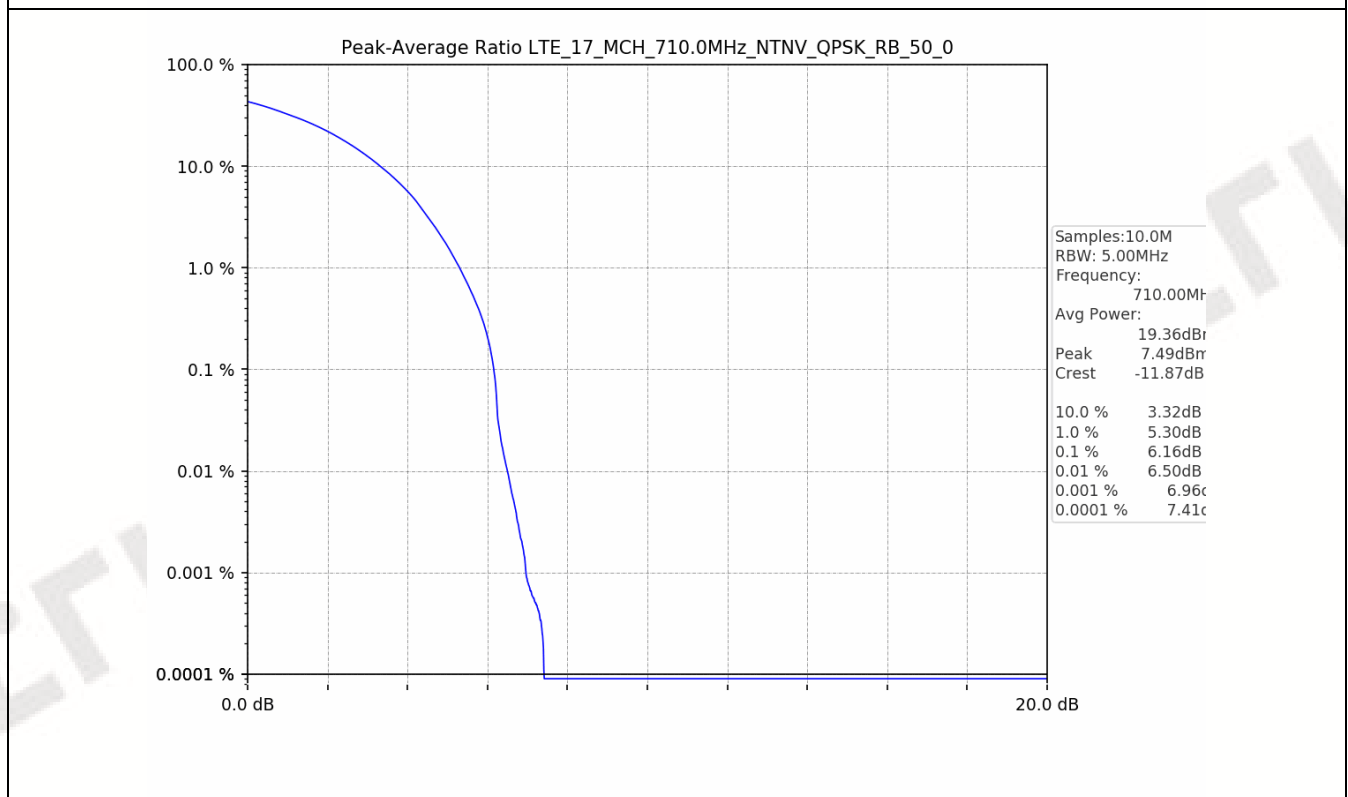
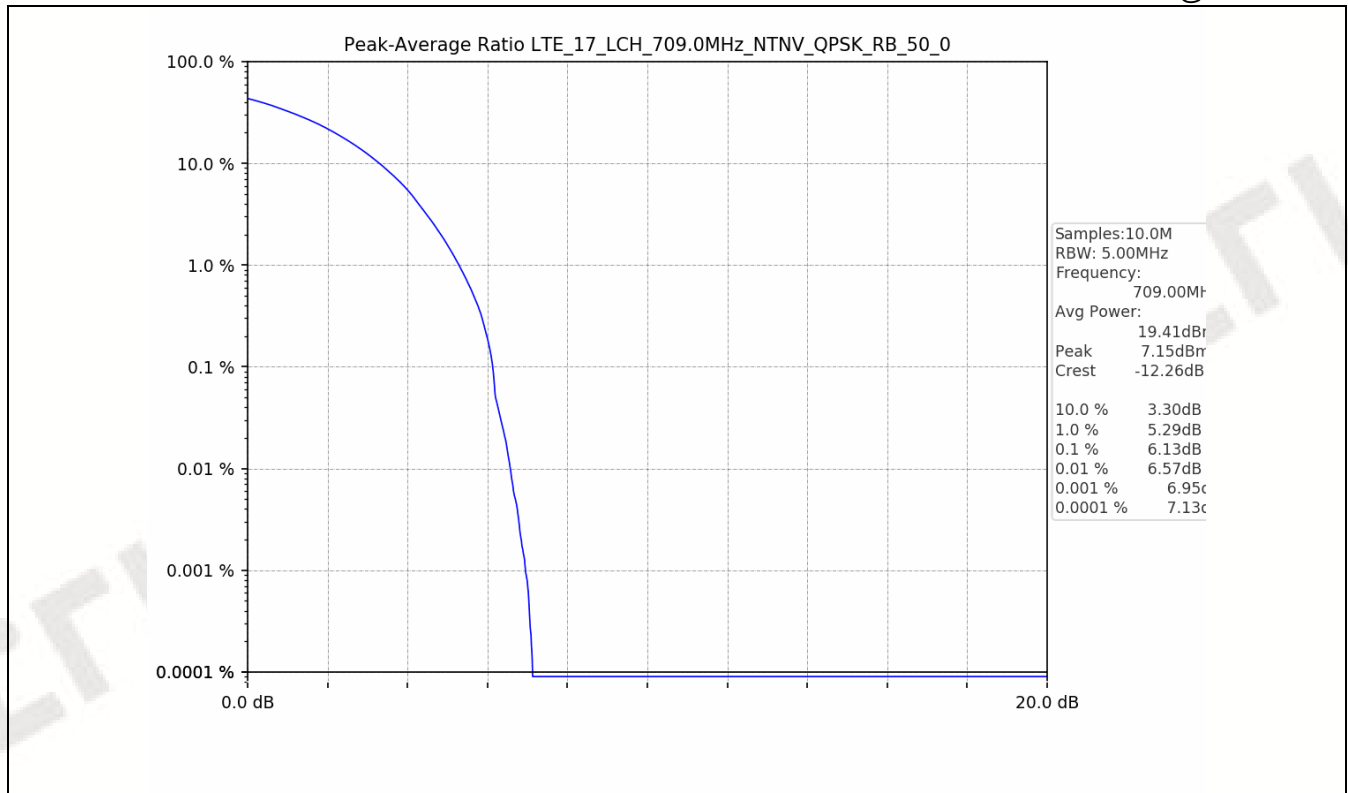


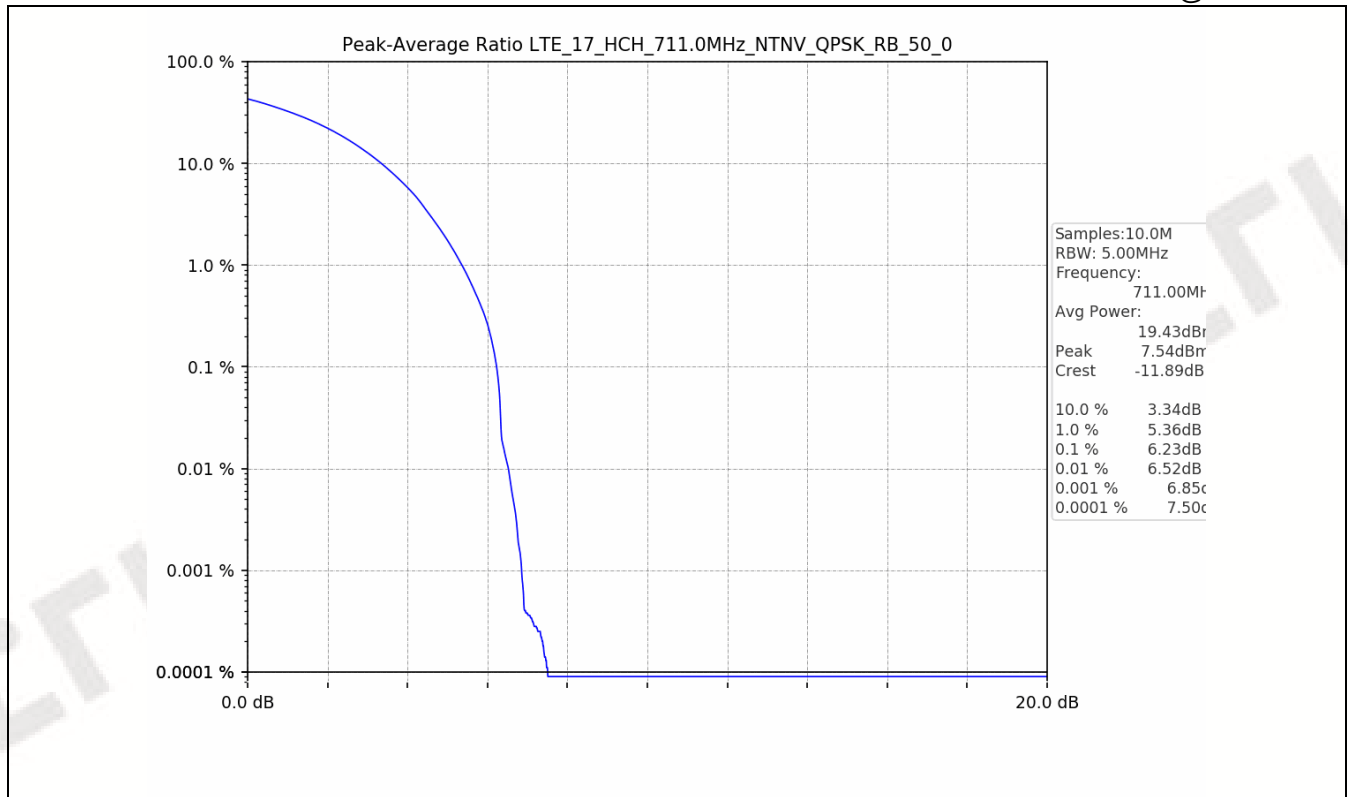
Test Band: 17 10MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	6.13	6.16	6.23	13	PASS
16QAM	50	0	6.69	6.68	6.83	13	PASS

5.2 Test Graph





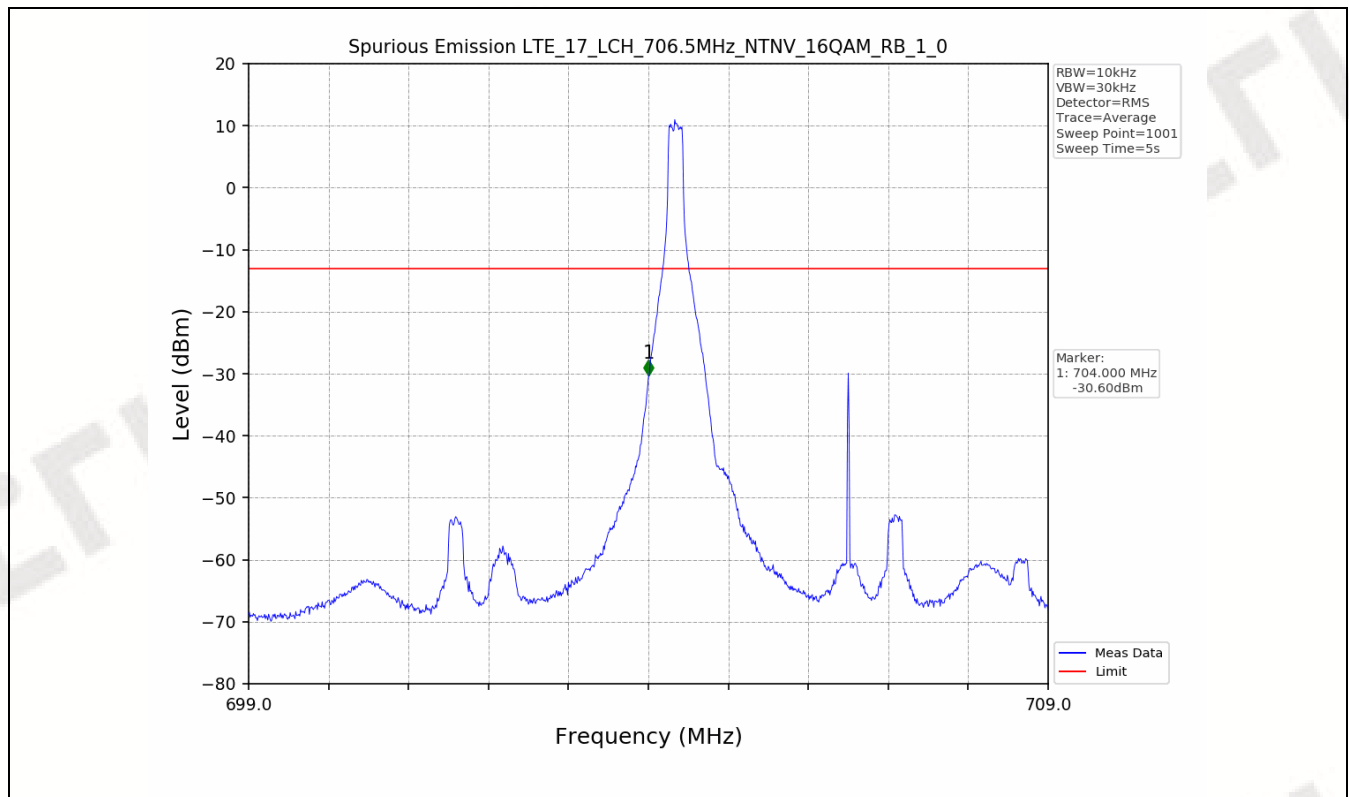


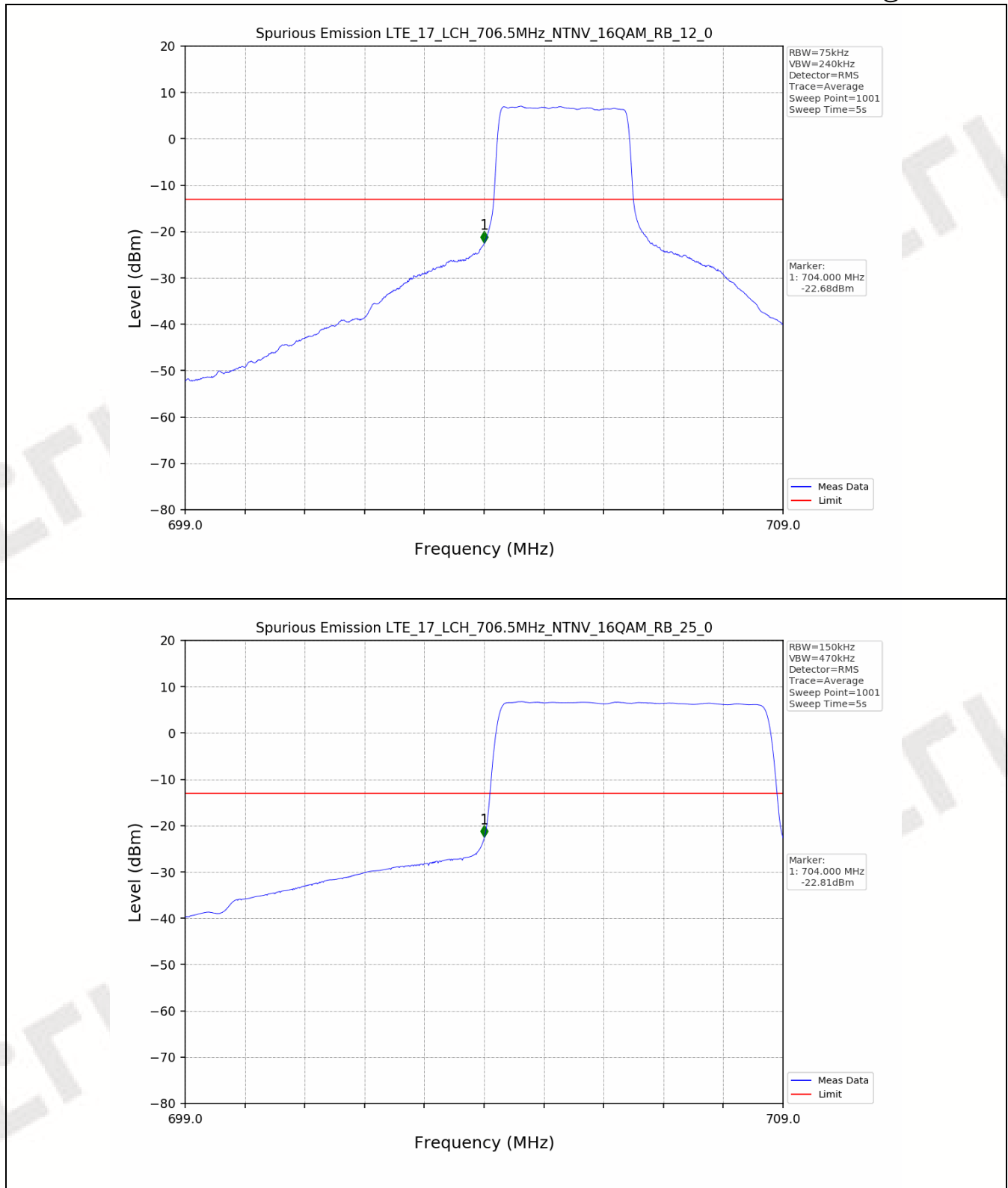


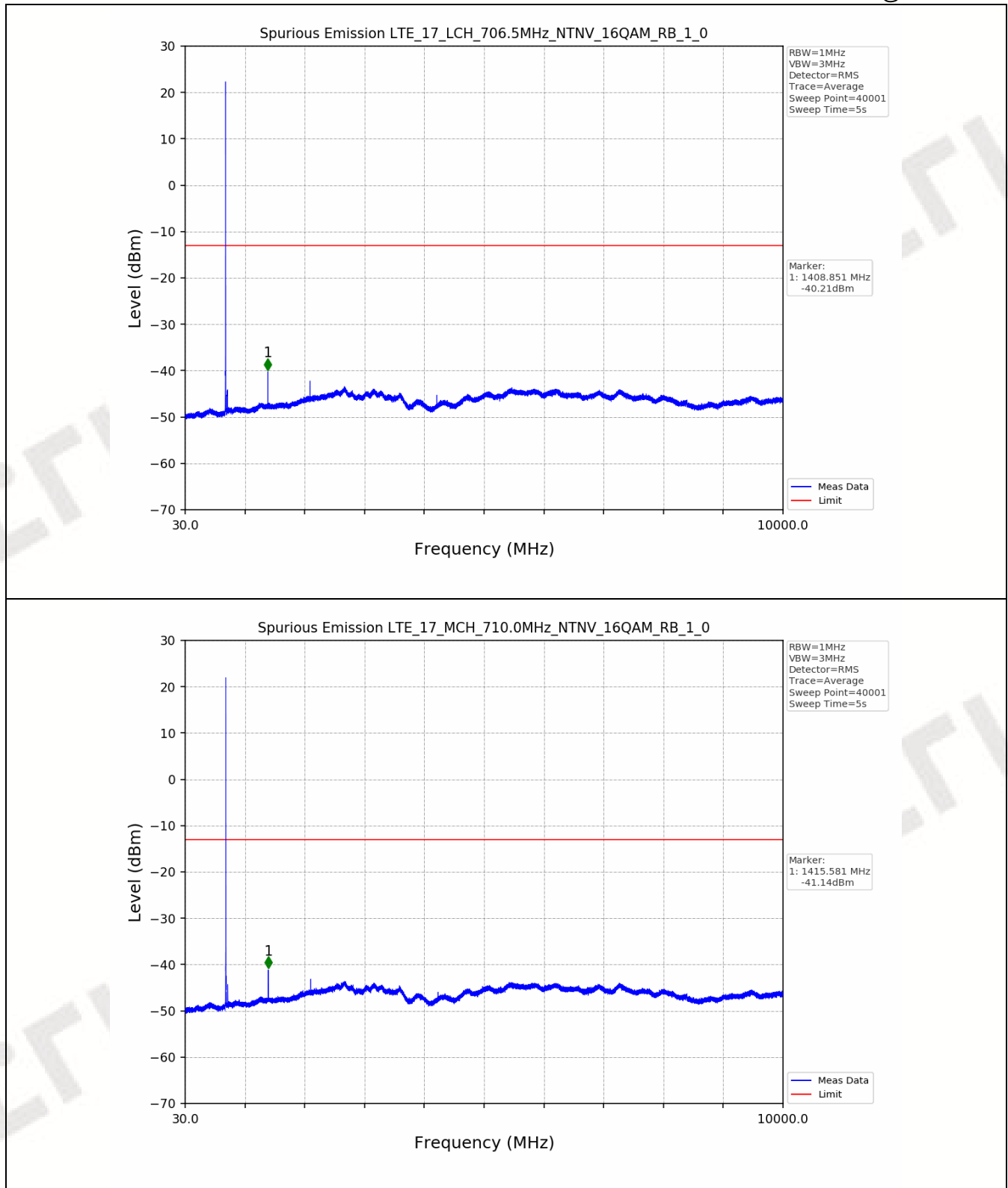


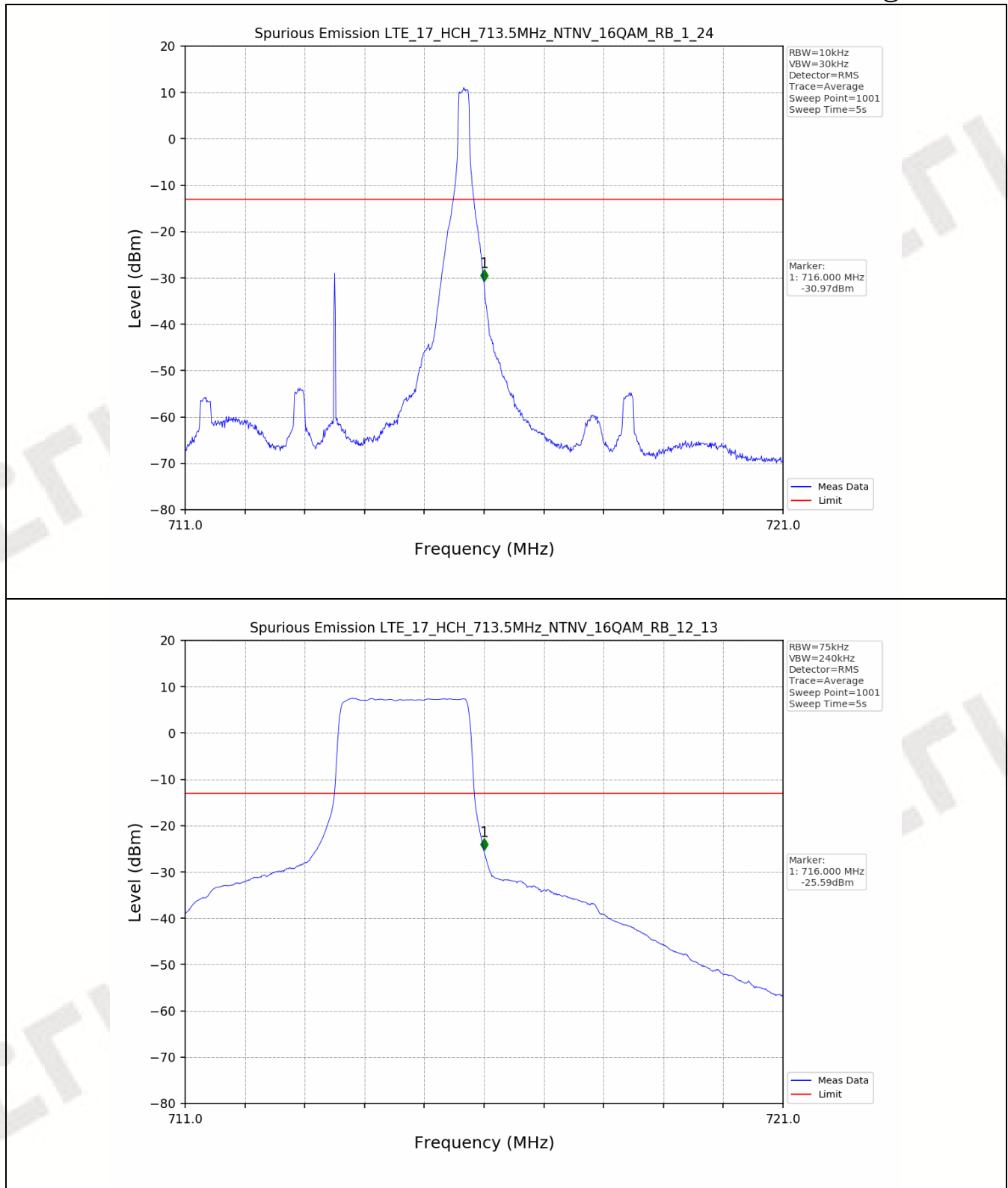
6. Spurious Emission

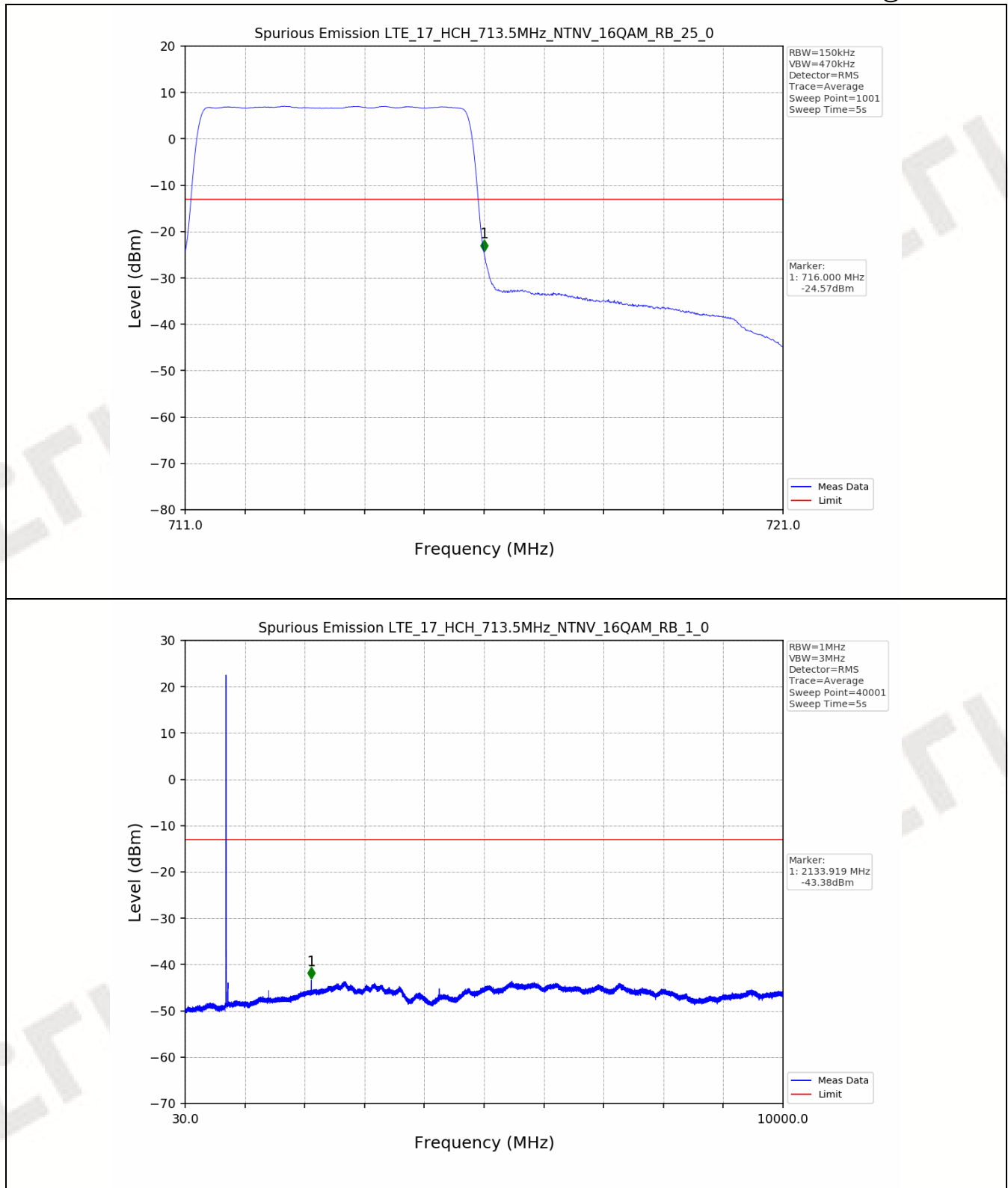
6.1 Test Graph

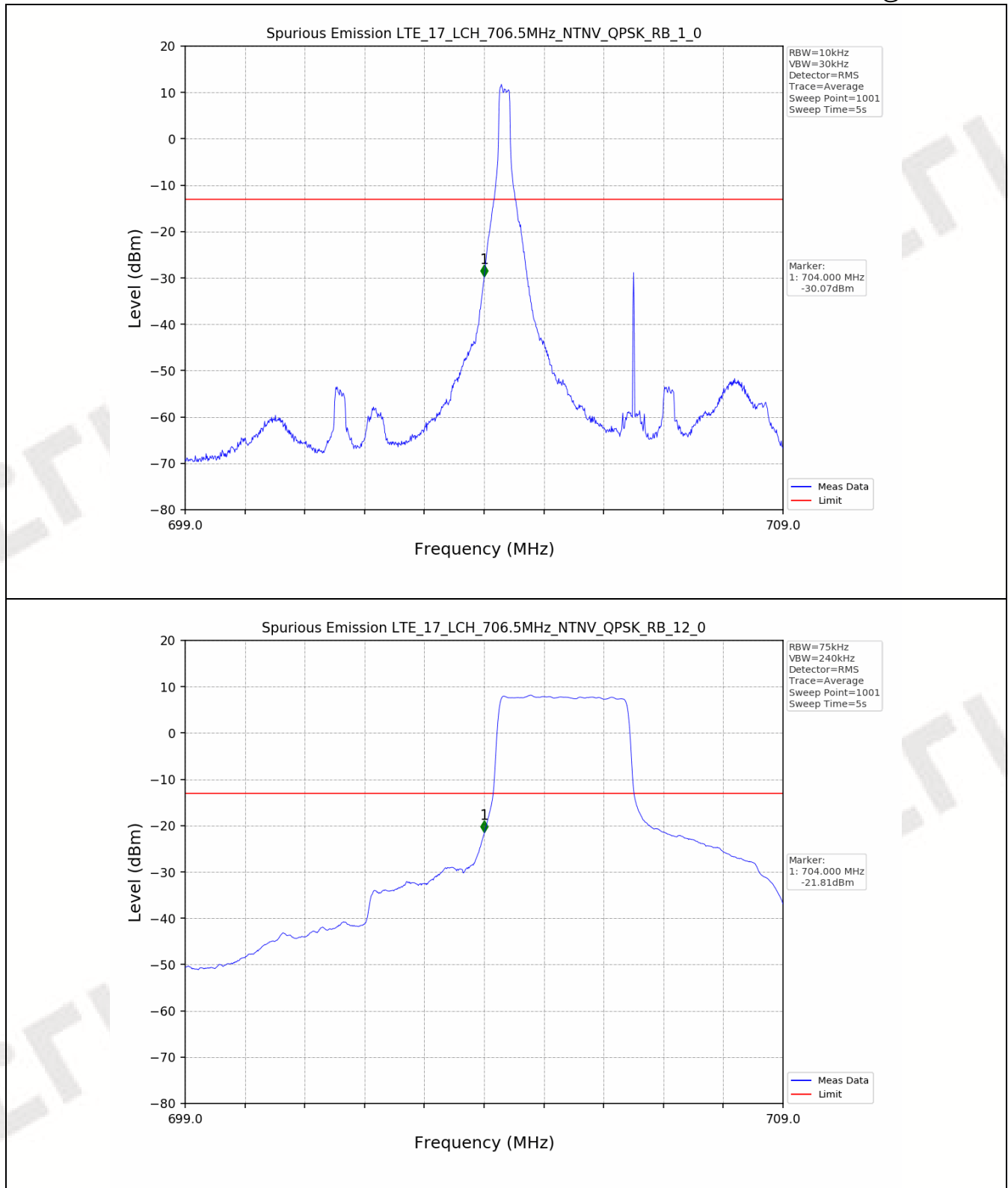


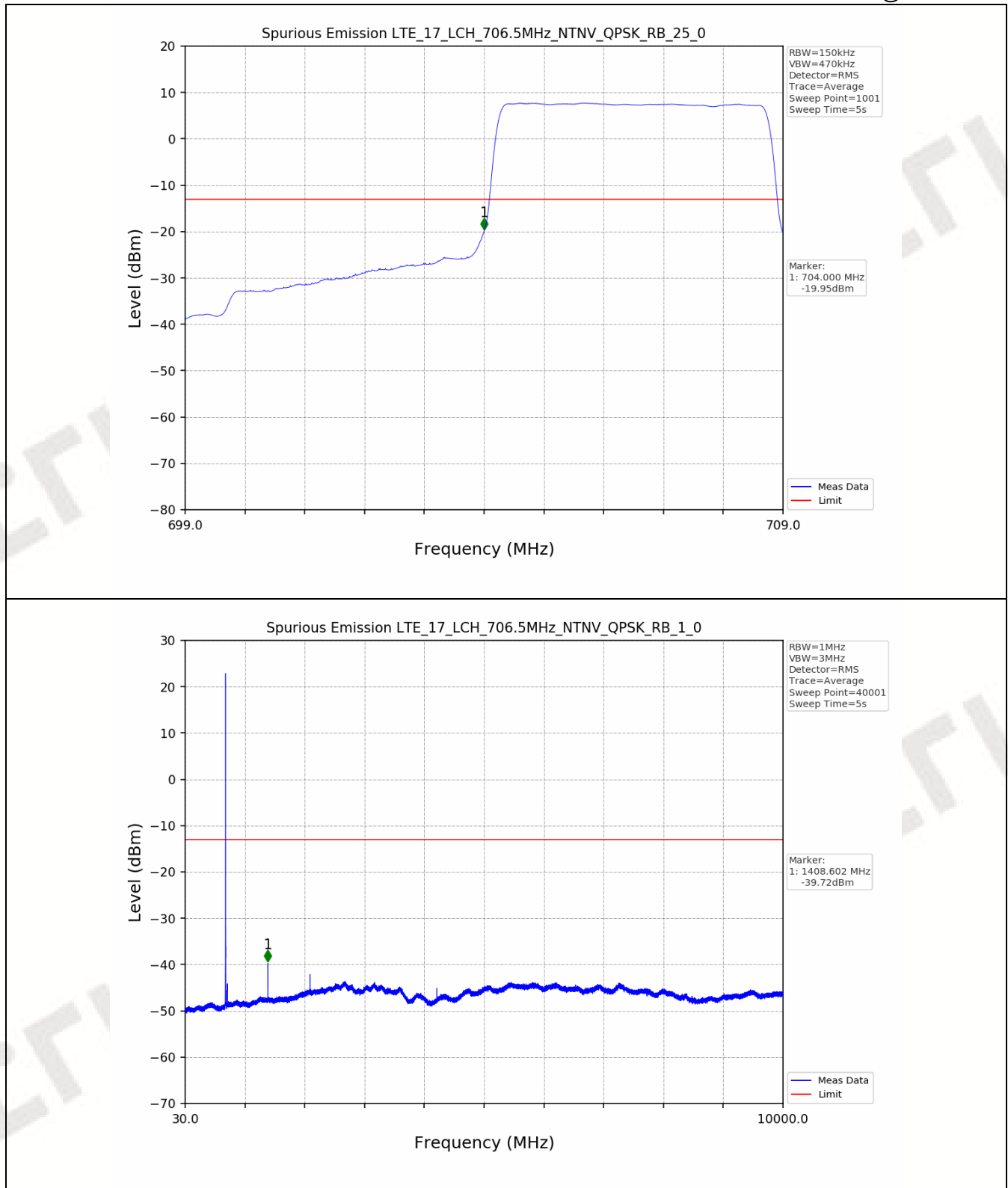


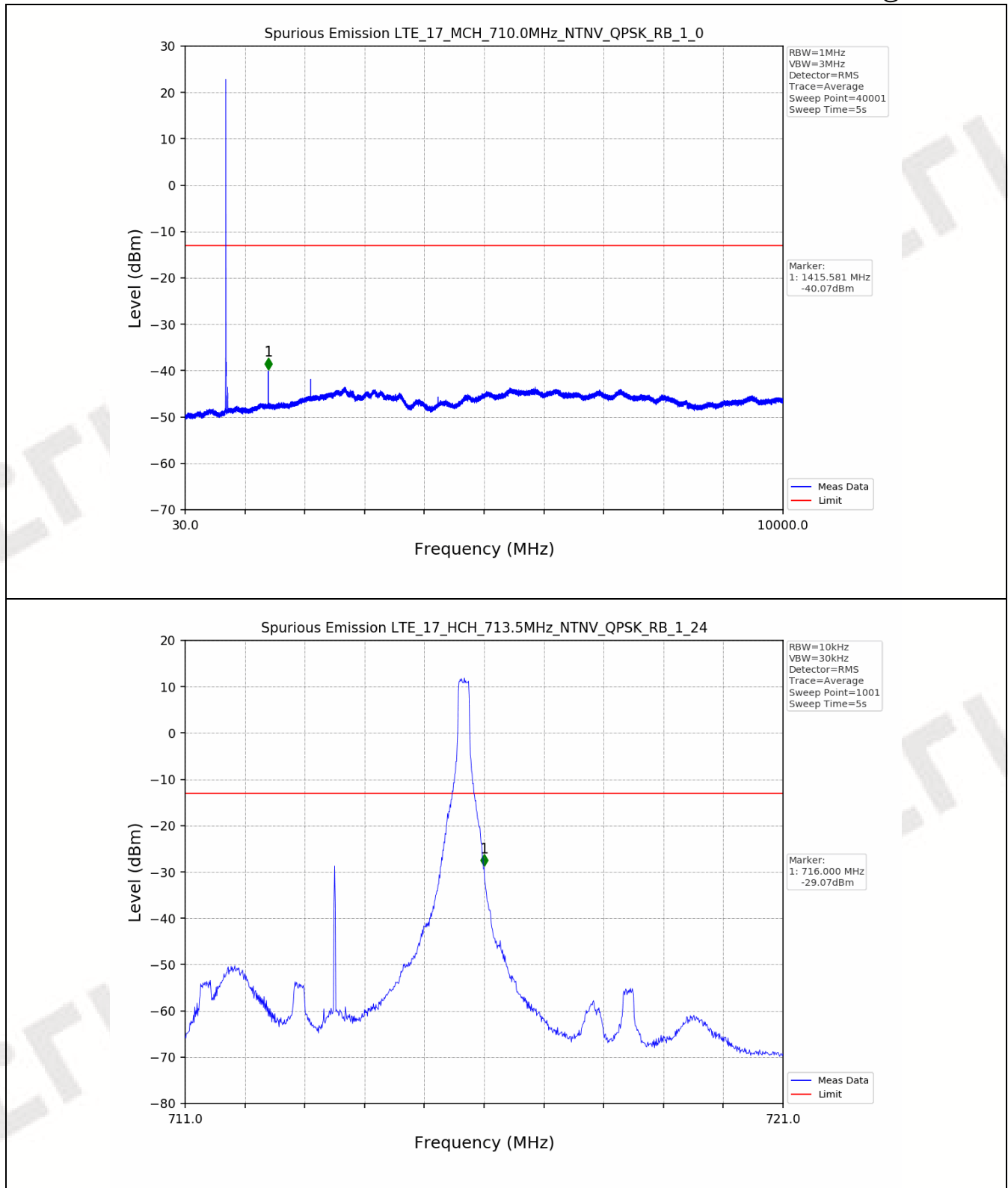


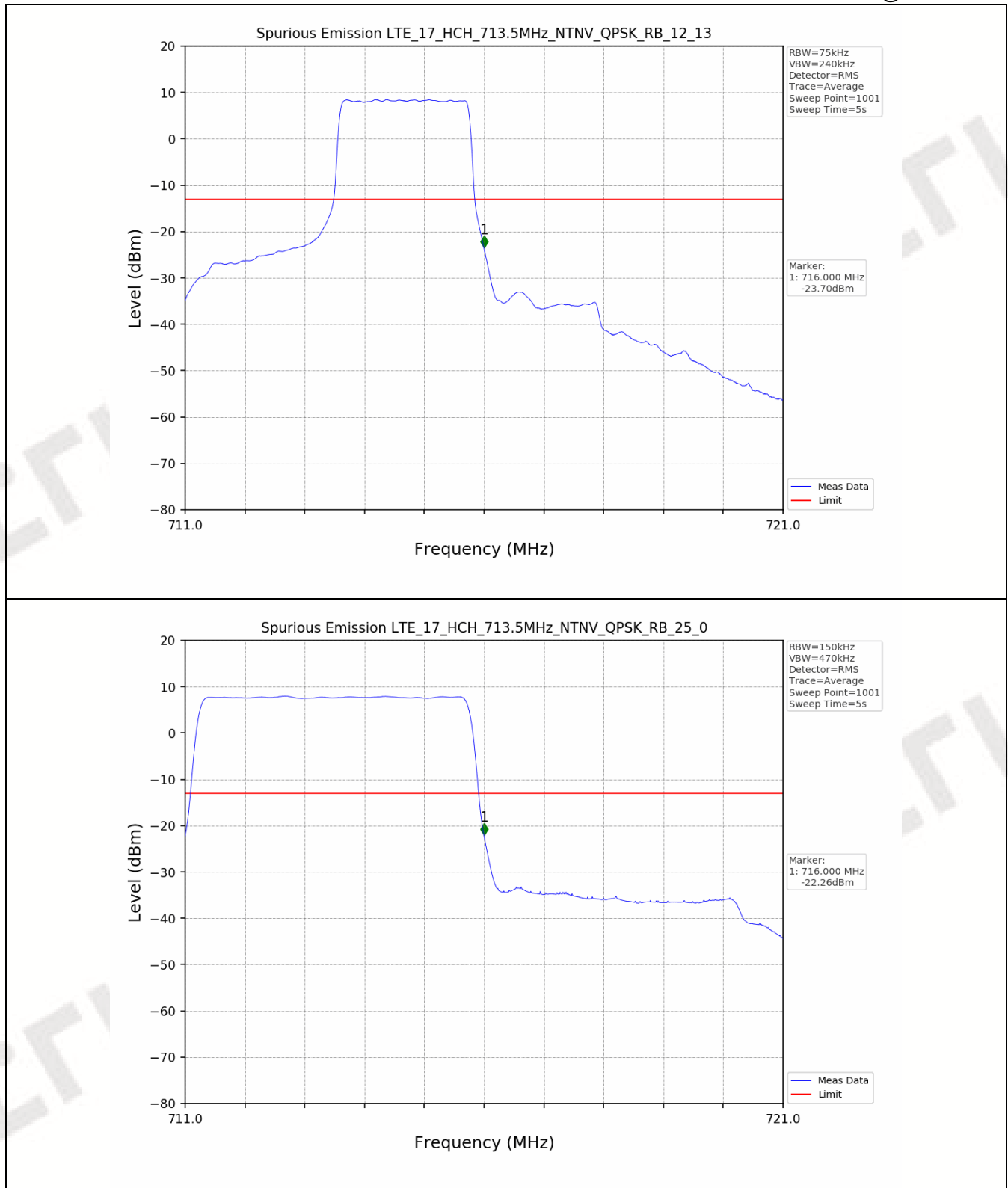


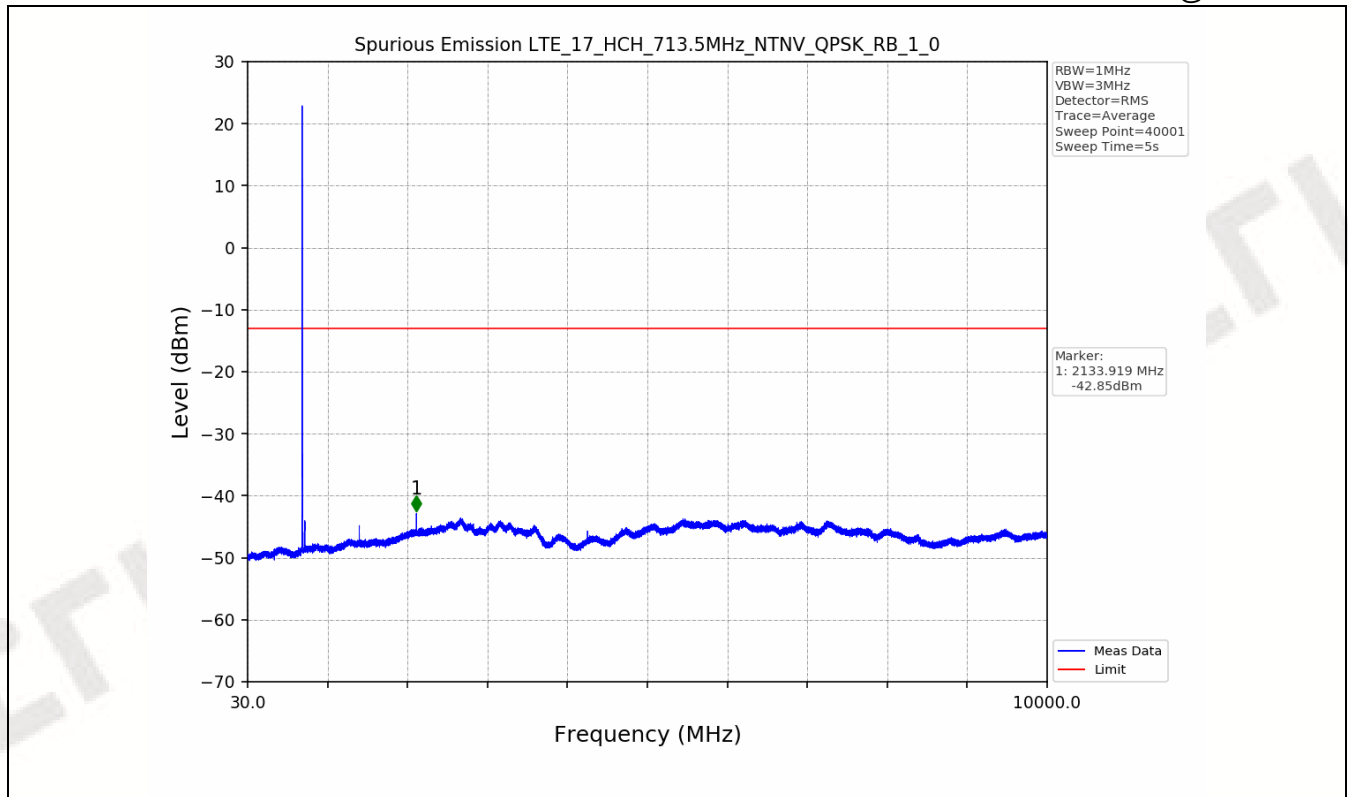














6.1 Test Graph

