

## 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

Test Band: 7_ 5MHz Bandwidth													
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict	
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH			
QPSK	1	0	21.95	21.94	21.91	/	0.59	22.54	22.53	22.5	33.01	PASS	
		13	22.19	22.20	22.20	/	0.59	22.78	22.79	22.79	33.01	PASS	
		24	22.75	22.71	22.76	/	0.59	23.34	23.3	23.35	33.01	PASS	
	12	0	22.13	22.13	22.14	/	0.59	22.72	22.72	22.73	33.01	PASS	
		6	22.15	22.15	22.15	/	0.59	22.74	22.74	22.74	33.01	PASS	
		13	22.18	22.15	22.17	/	0.59	22.77	22.74	22.76	33.01	PASS	
	25	0	22.14	22.12	22.13	/	0.59	22.73	22.71	22.72	33.01	PASS	
	16QAM	1	0	20.55	20.56	20.54	/	0.59	21.14	21.15	21.13	33.01	PASS
			13	20.57	20.61	20.55	/	0.59	21.16	21.2	21.14	33.01	PASS
24			20.47	20.52	20.50	/	0.59	21.06	21.11	21.09	33.01	PASS	
12		0	19.85	19.86	19.83	/	0.59	20.44	20.45	20.42	33.01	PASS	
		6	19.88	19.86	19.90	/	0.59	20.47	20.45	20.49	33.01	PASS	
		13	19.94	19.91	19.94	/	0.59	20.53	20.5	20.53	33.01	PASS	
25		0	20.16	20.15	20.17	/	0.59	20.75	20.74	20.76	33.01	PASS	

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

Test Band: 7_ 10MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	22.55	22.51	22.53	/	0.59	23.14	23.1	23.12	33.01	PASS
		50	22.76	22.74	22.75	/	0.59	23.35	23.33	23.34	33.01	PASS
		99	23.32	23.31	23.33	/	0.59	23.91	23.9	23.92	33.01	PASS
	50	0	22.7	22.69	22.72	/	0.59	23.29	23.28	23.31	33.01	PASS
		25	22.74	22.76	22.72	/	0.59	23.33	23.35	23.31	33.01	PASS
		50	22.77	22.76	22.75	/	0.59	23.36	23.35	23.34	33.01	PASS
100	0	22.76	22.71	22.72	/	0.59	23.35	23.3	23.31	33.01	PASS	
16QAM	1	0	21.12	21.11	21.15	/	0.59	21.71	21.7	21.74	33.01	PASS
		50	21.15	21.2	21.17	/	0.59	21.74	21.79	21.76	33.01	PASS
		99	21.1	21.11	21.09	/	0.59	21.69	21.7	21.68	33.01	PASS
	50	0	20.4	20.41	20.45	/	0.59	20.99	21	21.04	33.01	PASS
		25	20.5	20.45	20.48	/	0.59	21.09	21.04	21.07	33.01	PASS
		50	20.48	20.53	20.52	/	0.59	21.07	21.12	21.11	33.01	PASS
100	0	20.15	20.19	20.14	/	0.59	20.74	20.78	20.73	33.01	PASS	

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

Test Band: 7 _ 15MHz Bandwidth													
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict	
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH			
QPSK	1	0	21.96	21.92	21.94	/	0.59	22.55	22.51	22.53	33.01	PASS	
		38	22.17	22.15	22.16	/	0.59	22.76	22.74	22.75	33.01	PASS	
		74	22.73	22.72	22.74	/	0.59	23.32	23.31	23.33	33.01	PASS	
	36	0	22.11	22.10	22.13	/	0.59	22.7	22.69	22.72	33.01	PASS	
		18	22.15	22.17	22.13	/	0.59	22.74	22.76	22.72	33.01	PASS	
		39	22.18	22.17	22.16	/	0.59	22.77	22.76	22.75	33.01	PASS	
	75	0	22.17	22.12	22.13	/	0.59	22.76	22.71	22.72	33.01	PASS	
	16QAM	1	0	20.53	20.52	20.56	/	0.59	21.12	21.11	21.15	33.01	PASS
			38	20.56	20.61	20.58	/	0.59	21.15	21.2	21.17	33.01	PASS
74			20.51	20.52	20.50	/	0.59	21.1	21.11	21.09	33.01	PASS	
36		0	19.81	19.82	19.86	/	0.59	20.4	20.41	20.45	33.01	PASS	
		18	19.91	19.86	19.89	/	0.59	20.5	20.45	20.48	33.01	PASS	
		39	19.89	19.94	19.93	/	0.59	20.48	20.53	20.52	33.01	PASS	
75		0	20.19	20.15	20.19	/	0.59	20.78	20.74	20.78	33.01	PASS	

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

Test Band: 7 _ 20MHz Bandwidth													
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict	
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH			
QPSK	1	0	21.90	21.91	21.91	/	0.59	22.49	22.5	22.5	33.01	PASS	
		25	22.19	22.16	22.19	/	0.59	22.78	22.75	22.78	33.01	PASS	
		49	22.74	22.72	22.75	/	0.59	23.33	23.31	23.34	33.01	PASS	
	25	0	22.14	22.11	22.15	/	0.59	22.73	22.7	22.74	33.01	PASS	
		13	22.11	22.17	22.12	/	0.59	22.7	22.76	22.71	33.01	PASS	
		25	22.17	22.21	22.18	/	0.59	22.76	22.8	22.77	33.01	PASS	
	50	0	22.12	22.16	22.13	/	0.59	22.71	22.75	22.72	33.01	PASS	
	16QAM	1	0	20.55	20.58	20.53	/	0.59	21.14	21.17	21.12	33.01	PASS
			25	20.57	20.56	20.60	/	0.59	21.16	21.15	21.19	33.01	PASS
49			20.47	20.52	20.48	/	0.59	21.06	21.11	21.07	33.01	PASS	
25		0	19.87	19.84	19.85	/	0.59	20.46	20.43	20.44	33.01	PASS	
		13	19.90	19.90	19.90	/	0.59	20.49	20.49	20.49	33.01	PASS	
		25	19.89	19.91	19.91	/	0.59	20.48	20.5	20.5	33.01	PASS	
50		0	20.15	20.14	20.19	/	0.59	20.74	20.73	20.78	33.01	PASS	

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

## 2. Frequency stability

## 2.1 Test Result

Test Band: 7 _ 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	3.4904	-3.3903	0.4721	0.0014	-0.0013	0.0002	2.50	PASS
				NV	3.0470	-1.3018	1.8454	0.0012	-0.0005	0.0007	2.50	PASS
				HV	4.2057	-3.7622	2.1744	0.0017	-0.0015	0.0008	2.50	PASS
16QAM	25	0	NT	LV	-0.1287	-3.8481	0.4578	-0.0001	-0.0015	0.0002	2.50	PASS
				NV	1.1444	-4.2915	-0.9871	0.0005	-0.0017	-0.0004	2.50	PASS
				HV	1.8740	-3.0327	-1.4591	0.0007	-0.0012	-0.0006	2.50	PASS

Test Band: 7 _ 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	2.5606	-2.6321	-1.7309	0.0010	-0.0010	-0.0007	2.50	PASS
				-20.00	1.5879	-3.9196	-1.5736	0.0006	-0.0015	-0.0006	2.50	PASS
				-10.00	1.9312	-2.1887	-1.6308	0.0008	-0.0009	-0.0006	2.50	PASS
				0.00	1.9455	-4.4632	1.4305	0.0008	-0.0018	0.0006	2.50	PASS
				10.00	0.8154	-3.1757	0.5722	0.0003	-0.0013	0.0002	2.50	PASS
				20.00	1.3733	-2.8038	-0.6866	0.0005	-0.0011	-0.0003	2.50	PASS
				30.00	2.2316	-2.1458	-1.2159	0.0009	-0.0008	-0.0005	2.50	PASS
				40.00	2.3460	-2.5177	0.1287	0.0009	-0.0010	0.0001	2.50	PASS
				50.00	0.8583	-2.9755	-0.5293	0.0003	-0.0012	-0.0002	2.50	PASS
16QAM	25	0	NV	-30.00	2.0027	-2.1458	-0.0286	0.0008	-0.0008	0.0000	2.50	PASS
				-20.00	3.6621	-2.2316	-1.1015	0.0015	-0.0009	-0.0004	2.50	PASS
				-10.00	3.2759	-5.1785	-0.3576	0.0013	-0.0020	-0.0001	2.50	PASS
				0.00	0.6437	-2.2173	-0.4005	0.0003	-0.0009	-0.0002	2.50	PASS
				10.00	0.0286	-1.6165	-0.5007	0.0000	-0.0006	-0.0002	2.50	PASS
				20.00	2.3317	-1.6308	-0.3862	0.0009	-0.0006	-0.0002	2.50	PASS
				30.00	1.7881	-2.2173	-1.6022	0.0007	-0.0009	-0.0006	2.50	PASS
				40.00	1.0300	-3.6621	0.4435	0.0004	-0.0014	0.0002	2.50	PASS
				50.00	3.4761	-2.0885	1.5450	0.0014	-0.0008	0.0006	2.50	PASS

Test Band: 7 _ 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	-3.1757	-2.3317	-4.0770	-0.0013	-0.0009	-0.0016	2.50	PASS
				NV	-1.6165	-2.0742	-4.3917	-0.0006	-0.0008	-0.0017	2.50	PASS
				HV	-3.6621	-2.6178	-4.5204	-0.0015	-0.0010	-0.0018	2.50	PASS
16QAM	50	0	NT	LV	-1.6594	-2.1458	-2.4176	-0.0007	-0.0008	-0.0009	2.50	PASS
				NV	-2.8324	-4.0197	-3.4189	-0.0011	-0.0016	-0.0013	2.50	PASS
				HV	-2.6321	-4.9496	-2.6464	-0.0011	-0.0020	-0.0010	2.50	PASS

Test Band: 7 _ 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	-4.8208	-2.9182	-2.6608	-0.0019	-0.0012	-0.0010	2.50	PASS
				-20.00	-5.2214	-2.8324	-2.0456	-0.0021	-0.0011	-0.0008	2.50	PASS
				-10.00	-5.1928	-4.2629	-2.4319	-0.0021	-0.0017	-0.0009	2.50	PASS
				0.00	-4.9496	-4.7064	-5.1785	-0.0020	-0.0019	-0.0020	2.50	PASS
				10.00	-4.9496	-3.4475	-4.8637	-0.0020	-0.0014	-0.0019	2.50	PASS
				20.00	-3.4332	-4.8780	-4.6778	-0.0014	-0.0019	-0.0018	2.50	PASS
				30.00	-2.4748	-3.2187	-4.6778	-0.0010	-0.0013	-0.0018	2.50	PASS
				40.00	-2.7323	-3.8767	-5.4502	-0.0011	-0.0015	-0.0021	2.50	PASS
				50.00	-1.5450	-3.9196	-4.9353	-0.0006	-0.0015	-0.0019	2.50	PASS
16QAM	50	0	NV	-30.00	-1.4448	-2.8324	-2.7323	-0.0006	-0.0011	-0.0011	2.50	PASS
				-20.00	-1.8168	-5.1069	-3.3617	-0.0007	-0.0020	-0.0013	2.50	PASS
				-10.00	-1.6165	-4.2915	-2.7895	-0.0006	-0.0017	-0.0011	2.50	PASS
				0.00	-1.9026	-3.9911	-3.8338	-0.0008	-0.0016	-0.0015	2.50	PASS
				10.00	-3.9339	-5.0926	-2.8038	-0.0016	-0.0020	-0.0011	2.50	PASS
				20.00	-3.4618	-4.1914	-4.1485	-0.0014	-0.0017	-0.0016	2.50	PASS
				30.00	-2.6751	-5.3501	-3.1042	-0.0011	-0.0021	-0.0012	2.50	PASS
				40.00	-1.9455	-4.9067	-2.3174	-0.0008	-0.0019	-0.0009	2.50	PASS
				50.00	-1.9026	-4.5347	-1.0586	-0.0008	-0.0018	-0.0004	2.50	PASS

Test Band: 7 _ 15MHz 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	75	0	NT	LV	1.8024	-3.5191	1.5163	0.0007	-0.0014	0.0006	2.50	PASS
				NV	1.3161	-4.1342	4.2915	0.0005	-0.0016	0.0017	2.50	PASS
				HV	-0.3147	-1.7309	1.6165	-0.0001	-0.0007	0.0006	2.50	PASS
16QAM	75	0	NT	LV	0.2003	-4.1914	2.5320	0.0001	-0.0017	0.0010	2.50	PASS
				NV	1.1873	-2.0742	3.9053	0.0005	-0.0008	0.0015	2.50	PASS
				HV	-0.1717	-1.4734	4.3488	-0.0001	-0.0006	0.0017	2.50	PASS

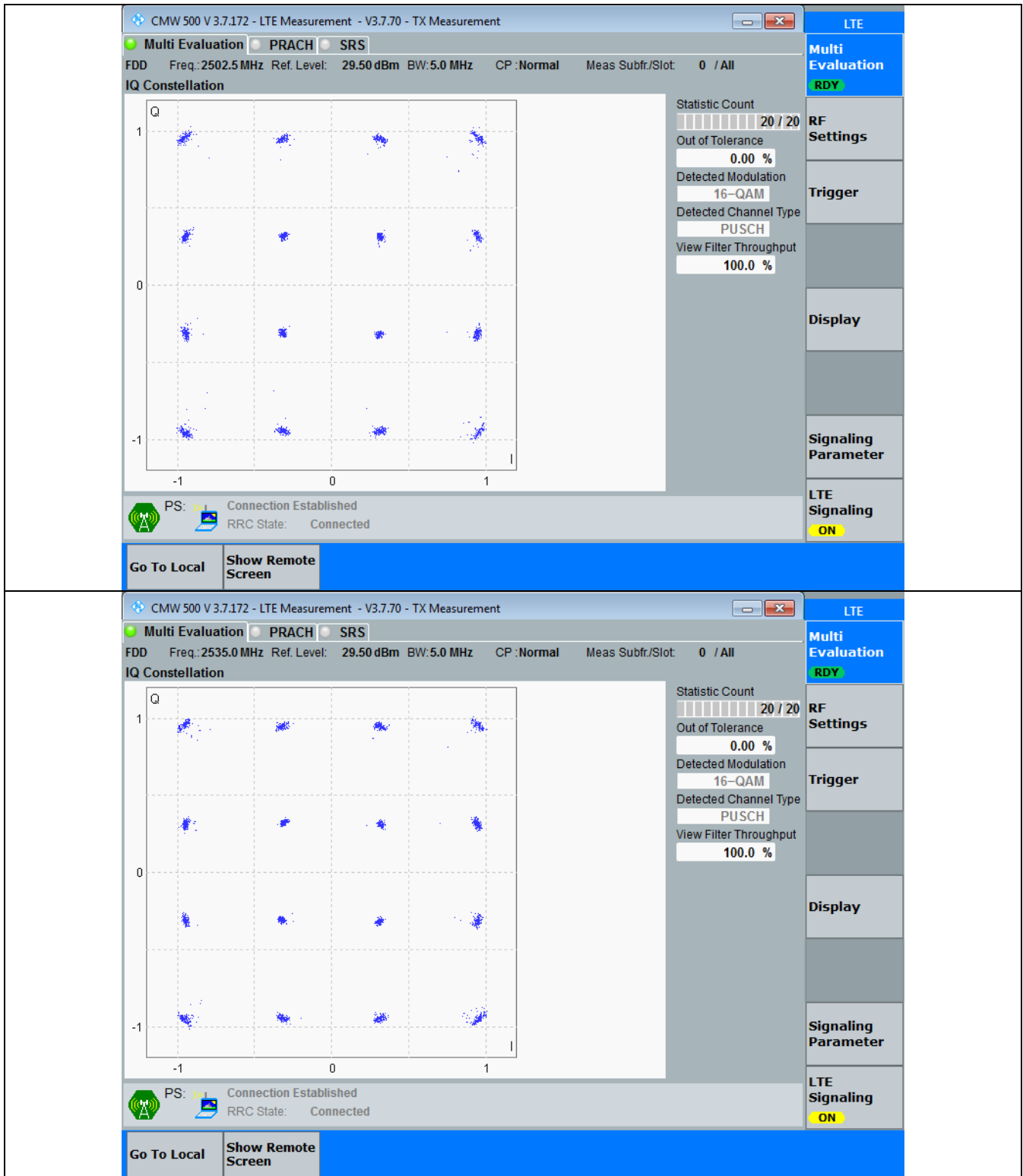
Test Band: 7 _ 15MHz Bandwidth (Frequency Error VS. Temperature)												
Test Mode	RB Allocation		Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	75	0	NV	-30.00	0.3147	-1.7595	3.2187	0.0001	-0.0007	0.0013	2.50	PASS
				-20.00	1.0300	-1.0872	3.0470	0.0004	-0.0004	0.0012	2.50	PASS
				-10.00	-0.8011	-2.9325	1.3876	-0.0003	-0.0012	0.0005	2.50	PASS
				0.00	1.0586	-4.3631	1.8740	0.0004	-0.0017	0.0007	2.50	PASS
				10.00	1.1015	-2.0742	2.7323	0.0004	-0.0008	0.0011	2.50	PASS
				20.00	0.0286	-3.7766	1.7881	0.0000	-0.0015	0.0007	2.50	PASS
				30.00	1.4162	-3.5763	1.0014	0.0006	-0.0014	0.0004	2.50	PASS
				40.00	0.0286	-3.4761	0.7582	0.0000	-0.0014	0.0003	2.50	PASS
				50.00	-0.5865	-0.6437	1.3018	-0.0002	-0.0003	0.0005	2.50	PASS
16QAM	75	0	NV	-30.00	1.8597	-1.3304	1.3018	0.0007	-0.0005	0.0005	2.50	PASS
				-20.00	3.1471	-2.2602	1.4019	0.0013	-0.0009	0.0005	2.50	PASS
				-10.00	2.5320	-1.2016	2.5034	0.0010	-0.0005	0.0010	2.50	PASS
				0.00	1.6594	-3.4332	1.8024	0.0007	-0.0014	0.0007	2.50	PASS
				10.00	2.3890	-3.8338	2.8324	0.0010	-0.0015	0.0011	2.50	PASS
				20.00	-0.0286	-5.1498	4.2200	0.0000	-0.0020	0.0016	2.50	PASS
				30.00	-0.2718	-4.7493	3.1471	-0.0001	-0.0019	0.0012	2.50	PASS
				40.00	-0.4864	-5.4789	1.0586	-0.0002	-0.0022	0.0004	2.50	PASS
				50.00	-1.1301	-5.2071	1.4162	-0.0005	-0.0021	0.0006	2.50	PASS

Test Band: 7 _ 20MHz 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	100	0	NT	LV	1.1444	-4.7350	-0.0143	0.0005	-0.0019	0.0000	2.50	PASS
				NV	1.4591	-2.6751	0.2718	0.0006	-0.0011	0.0001	2.50	PASS
				HV	2.9898	-3.9911	-0.1717	0.0012	-0.0016	-0.0001	2.50	PASS
16QAM	100	0	NT	LV	1.5163	-4.1199	0.4435	0.0006	-0.0016	0.0002	2.50	PASS
				NV	2.4748	-4.0483	0.4005	0.0010	-0.0016	0.0002	2.50	PASS
				HV	2.6751	-3.7050	0.3576	0.0011	-0.0015	0.0001	2.50	PASS

Test Band: 7 _ 20MHz 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	100	0	NV	-30.00	1.9455	1.2445	1.4162	0.0008	0.0005	0.0006	2.50	PASS
				-20.00	3.6907	-1.9455	0.2289	0.0015	-0.0008	0.0001	2.50	PASS
				-10.00	2.3174	-4.7350	0.6151	0.0009	-0.0019	0.0002	2.50	PASS
				0.00	1.8311	-3.1471	-0.3433	0.0007	-0.0012	-0.0001	2.50	PASS
				10.00	2.0599	-3.4761	1.9312	0.0008	-0.0014	0.0008	2.50	PASS
				20.00	2.3031	-4.1056	0.8154	0.0009	-0.0016	0.0003	2.50	PASS
				30.00	1.3304	-2.1887	0.9584	0.0005	-0.0009	0.0004	2.50	PASS
				40.00	1.5020	-4.9782	0.6437	0.0006	-0.0020	0.0003	2.50	PASS
				50.00	3.2473	-3.1900	0.3862	0.0013	-0.0013	0.0002	2.50	PASS
16QAM	100	0	NV	-30.00	3.9625	-3.1328	0.0000	0.0016	-0.0012	0.0000	2.50	PASS
				-20.00	3.3188	-2.5892	-0.1431	0.0013	-0.0010	-0.0001	2.50	PASS
				-10.00	3.6049	-2.9469	0.9871	0.0014	-0.0012	0.0004	2.50	PASS
				0.00	3.9768	-1.4448	1.6737	0.0016	-0.0006	0.0007	2.50	PASS
				10.00	1.3590	-1.8740	-0.1287	0.0005	-0.0007	-0.0001	2.50	PASS
				20.00	0.1431	-1.2159	-0.0715	0.0001	-0.0005	0.0000	2.50	PASS
				30.00	0.4148	-0.8154	1.3304	0.0002	-0.0003	0.0005	2.50	PASS
				40.00	1.1444	-1.3590	-1.1015	0.0005	-0.0005	-0.0004	2.50	PASS
				50.00	2.2316	-1.6451	0.6151	0.0009	-0.0006	0.0002	2.50	PASS

### 3. Modulation Characteristics

#### 3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2567.5 MHz Ref. Level: 29.50 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: 16-QAM  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2502.5 MHz Ref. Level: 29.40 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

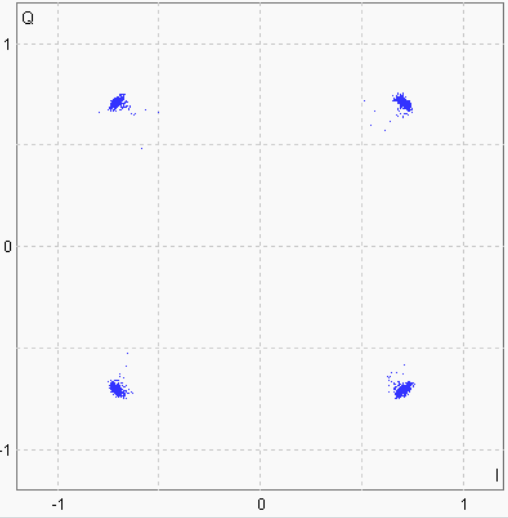


CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2535.0 MHz Ref. Level: 29.50 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

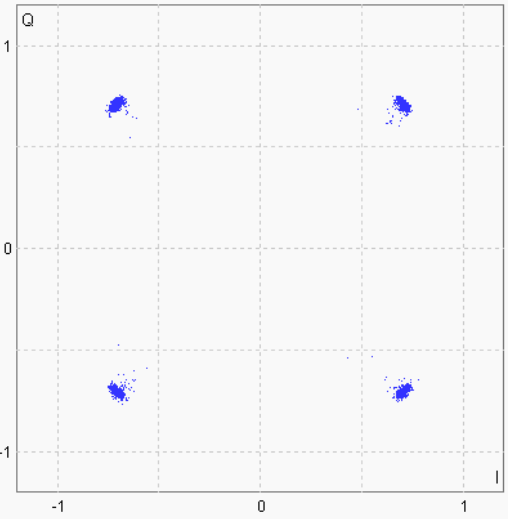
LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2567.5 MHz Ref. Level: 29.50 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



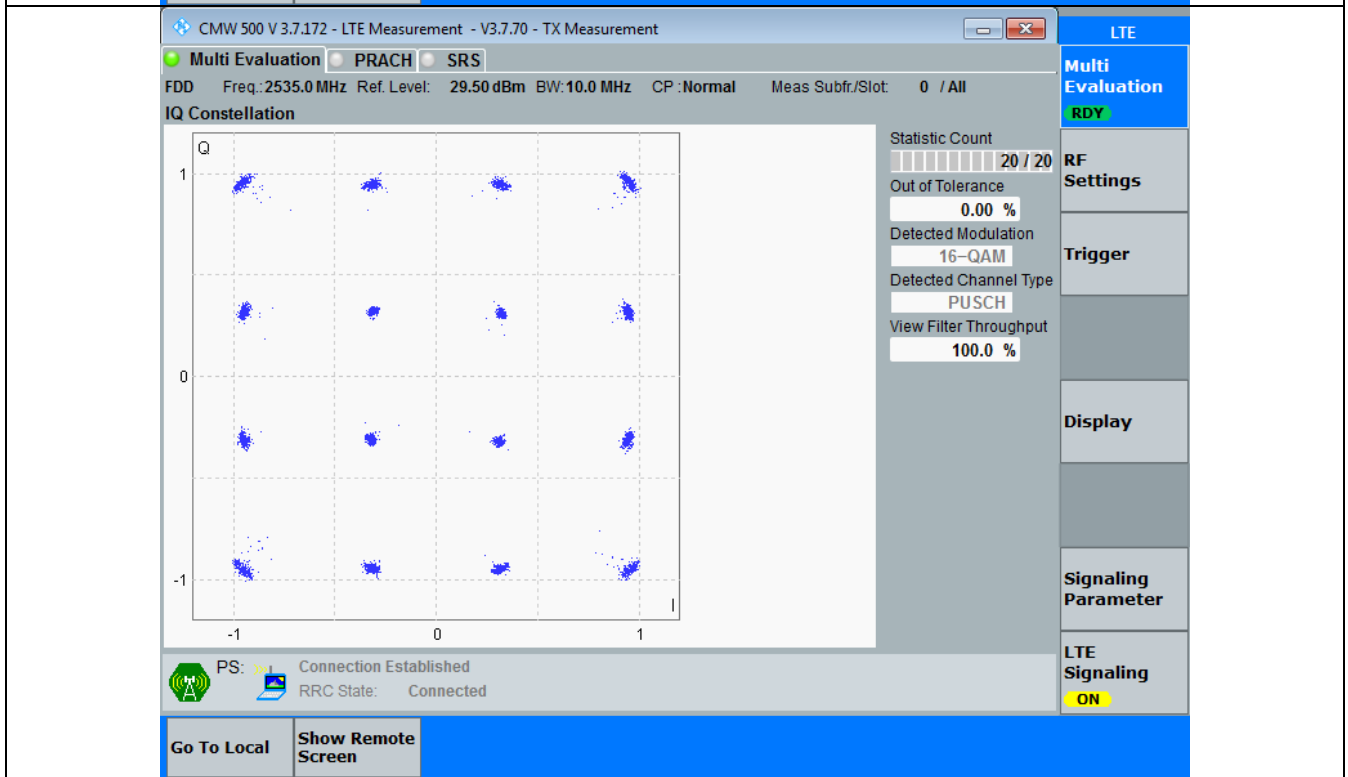
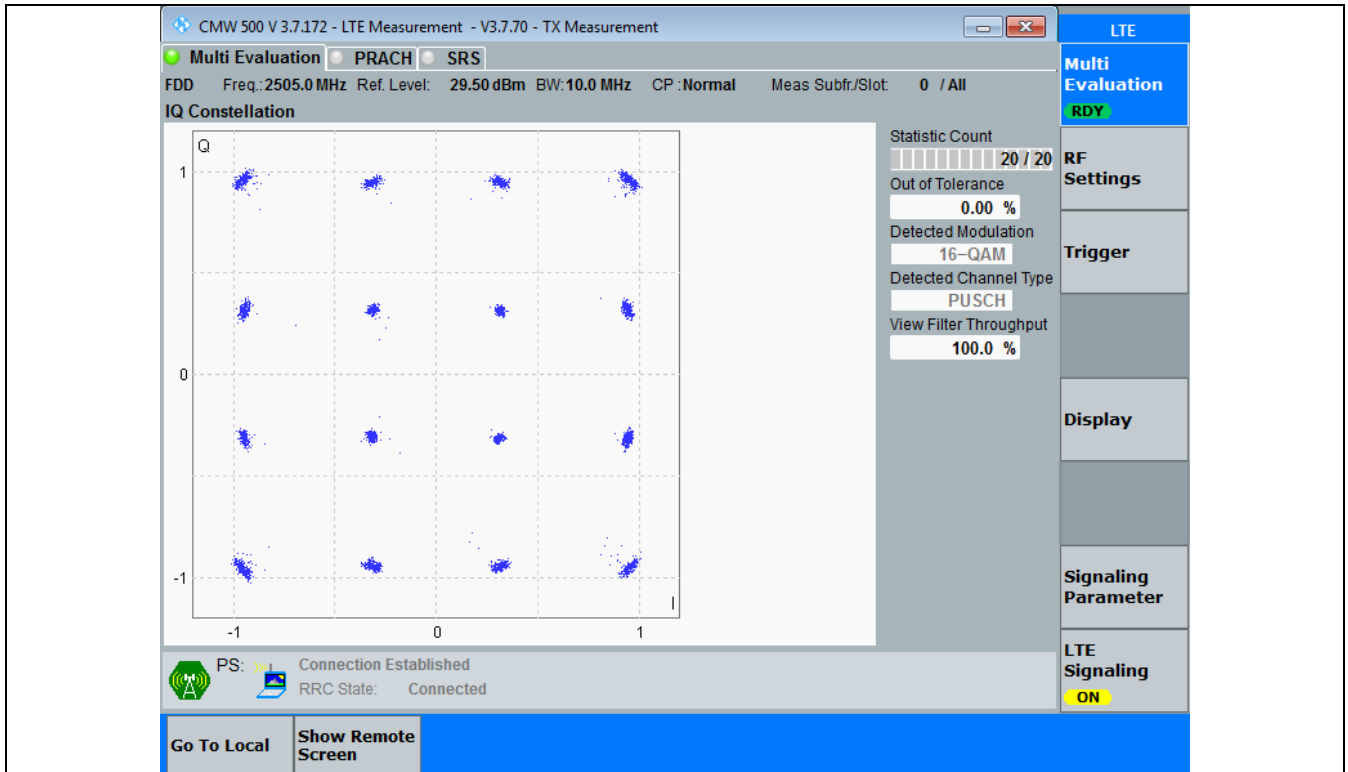
Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2565.0 MHz Ref. Level: 29.50 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: 16-QAM  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2505.0 MHz Ref. Level: 29.50 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

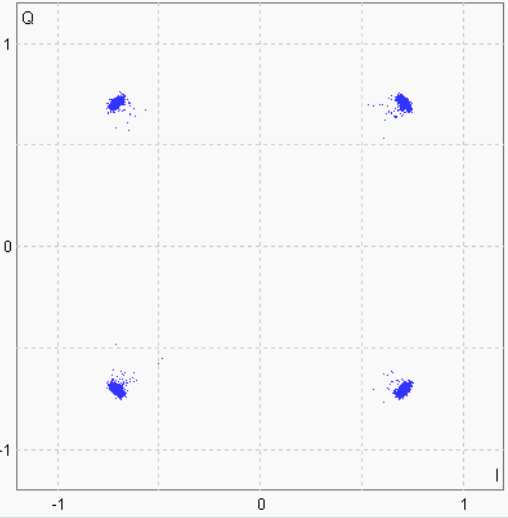
LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2535.0 MHz Ref. Level: 29.50 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

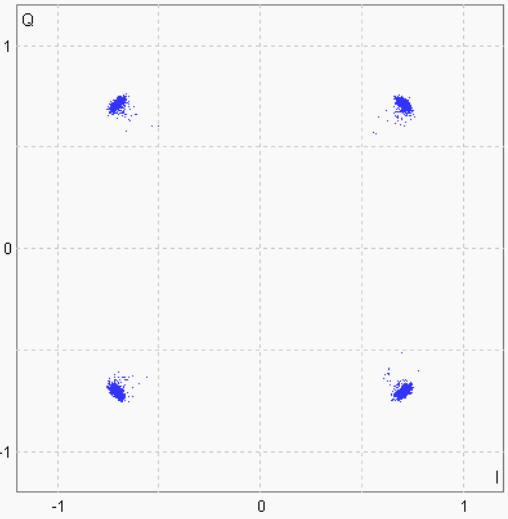
LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2565.0 MHz Ref. Level: 29.50 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY

RF Settings

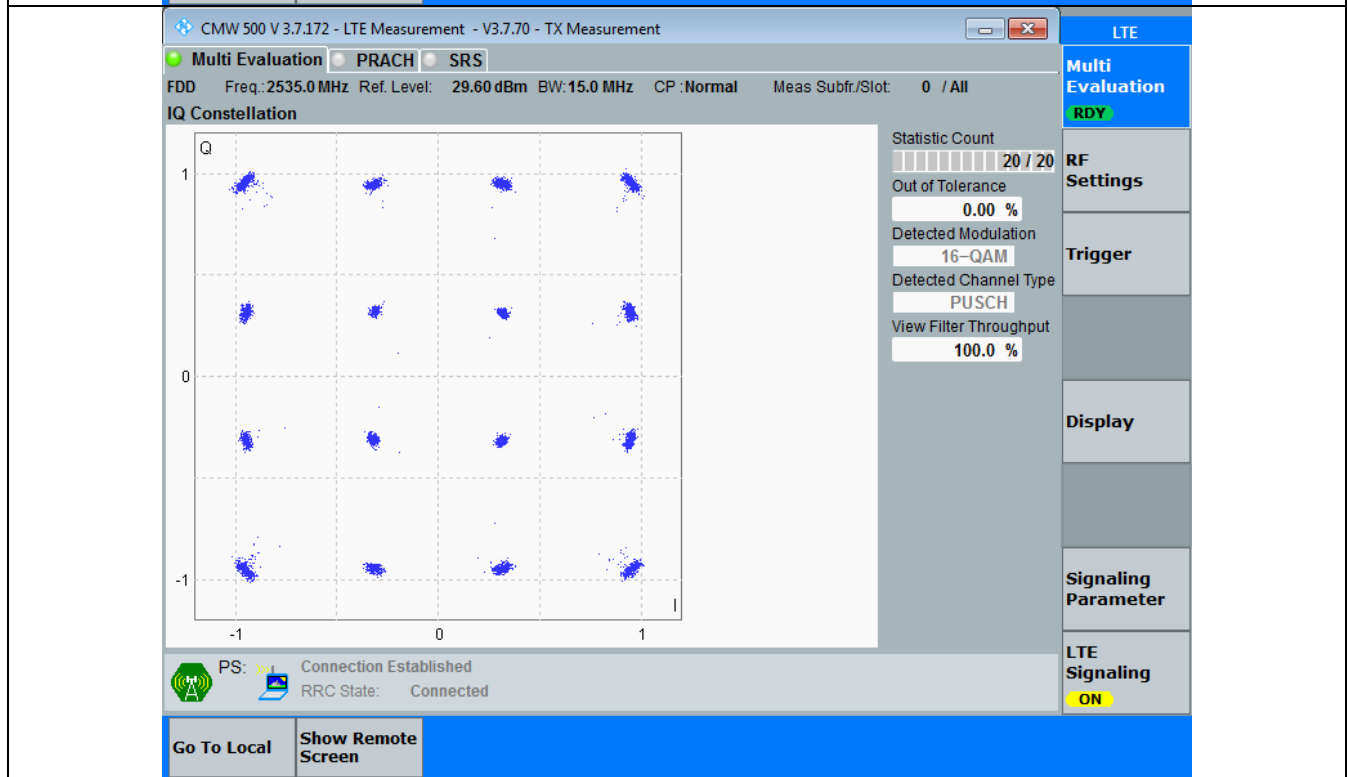
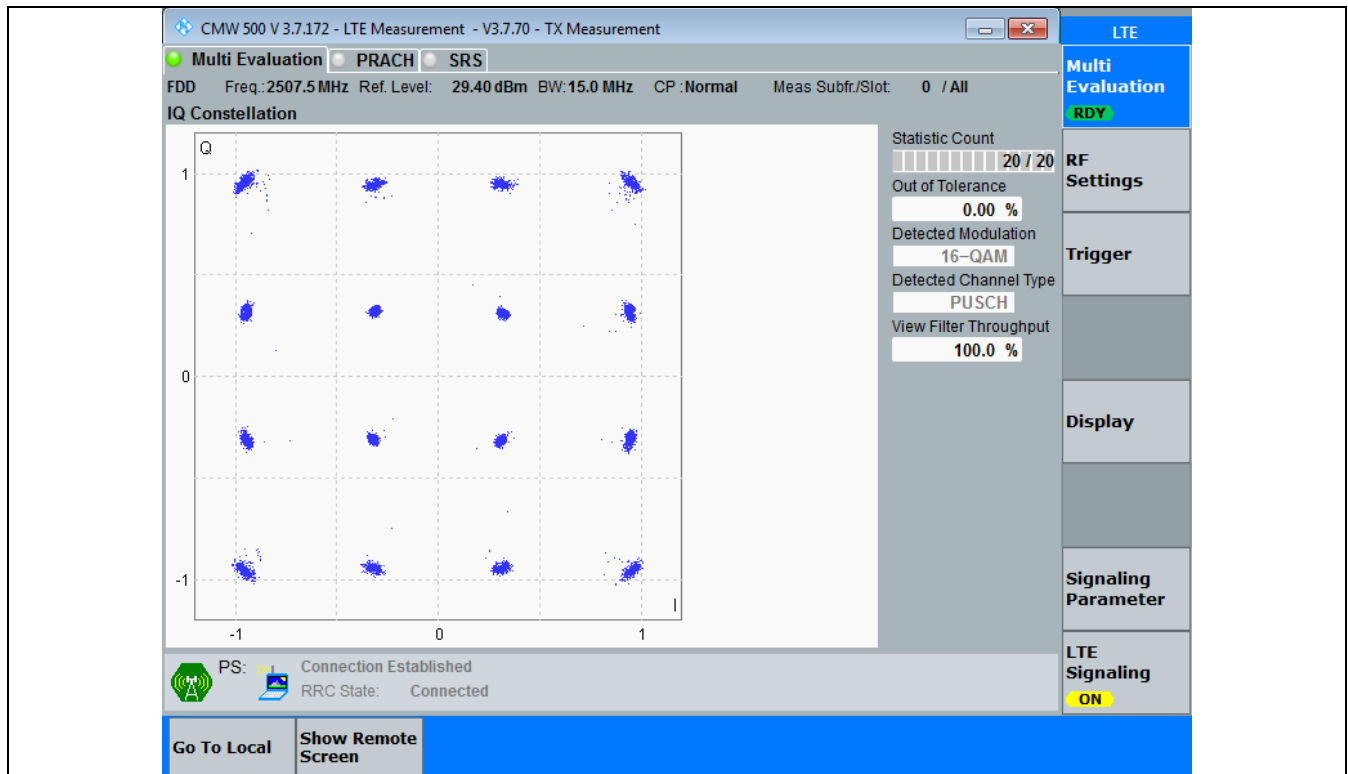
Trigger

Display

Signaling Parameter

LTE Signaling ON

3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2562.5 MHz Ref. Level: 29.40 dBm BW: 15.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: 16-QAM  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2507.5 MHz Ref. Level: 29.40 dBm BW: 15.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

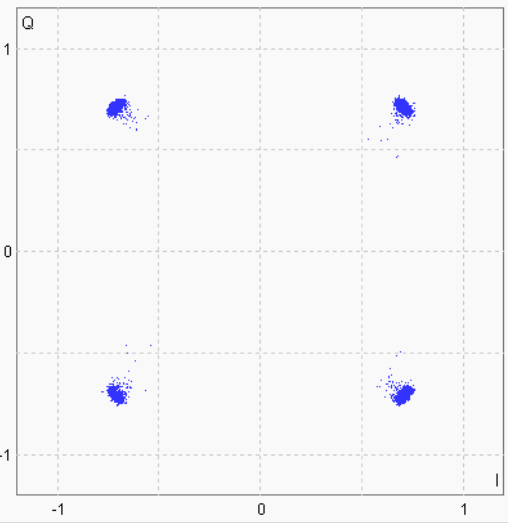
LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2535.0 MHz Ref. Level: 29.60 dBm BW: 15.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

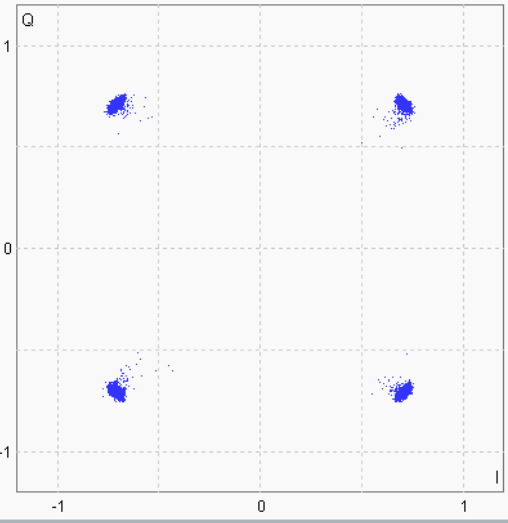
LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2562.5 MHz Ref. Level: 29.60 dBm BW: 15.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



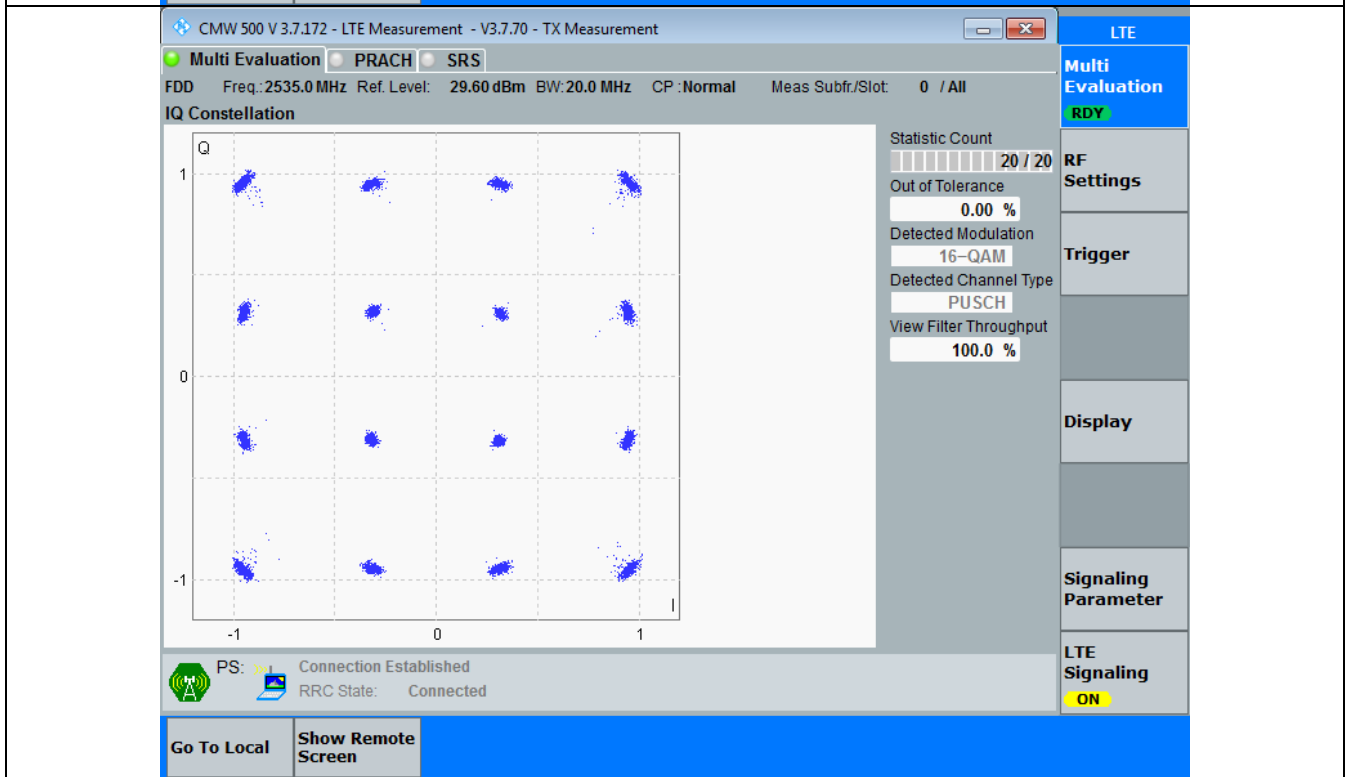
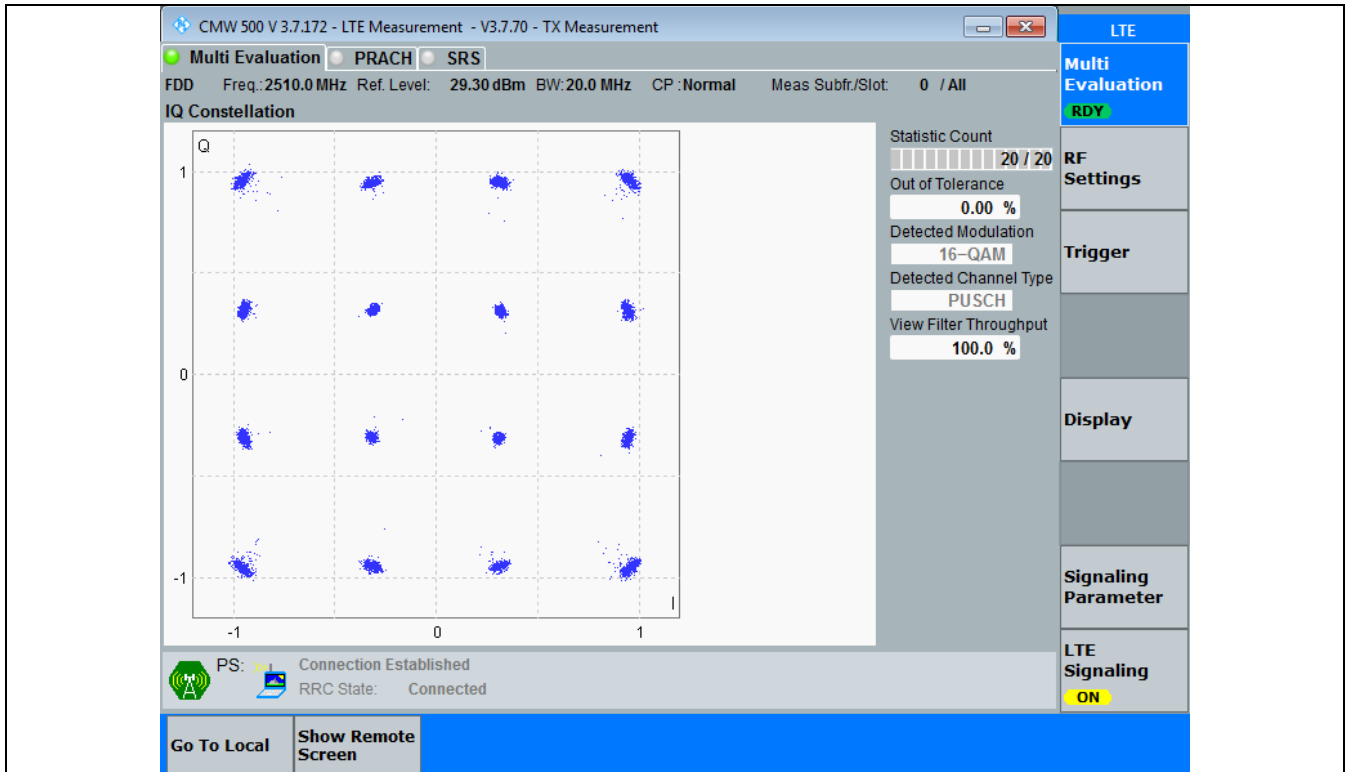
Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE  
 Multi Evaluation RDY  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling ON

3.1 Test Graph





CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2560.0 MHz Ref. Level: 29.50 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: 16-QAM  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 2510.0 MHz Ref. Level: 29.40 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

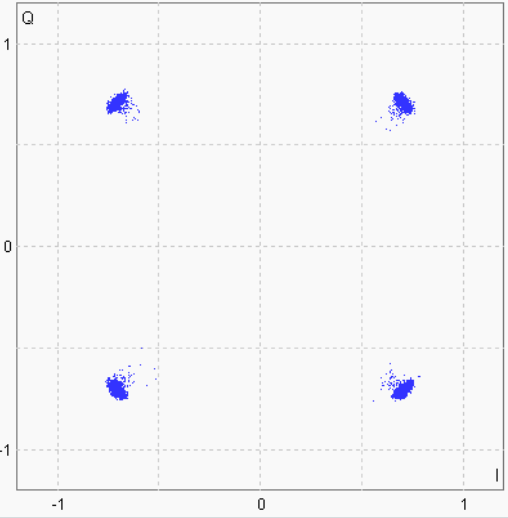
LTE Signaling ON

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation  PRACH  SRS

FDD Freq.: 2535.0 MHz Ref. Level: 29.60 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

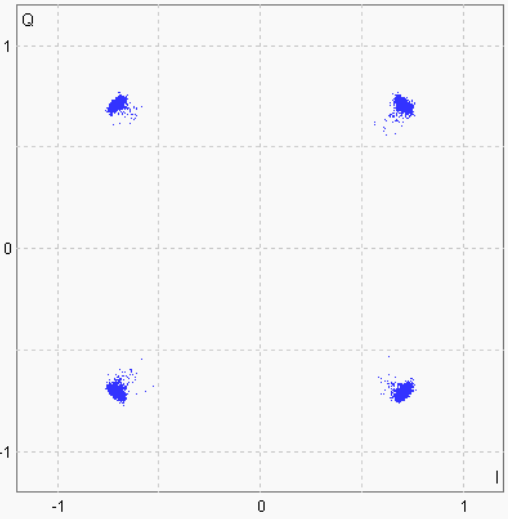
LTE  
 Multi Evaluation **RDY**  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling **ON**

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation  PRACH  SRS

FDD Freq.: 2560.0 MHz Ref. Level: 29.50 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

**IQ Constellation**



Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established  
 RRC State: Connected

Go To Local Show Remote Screen

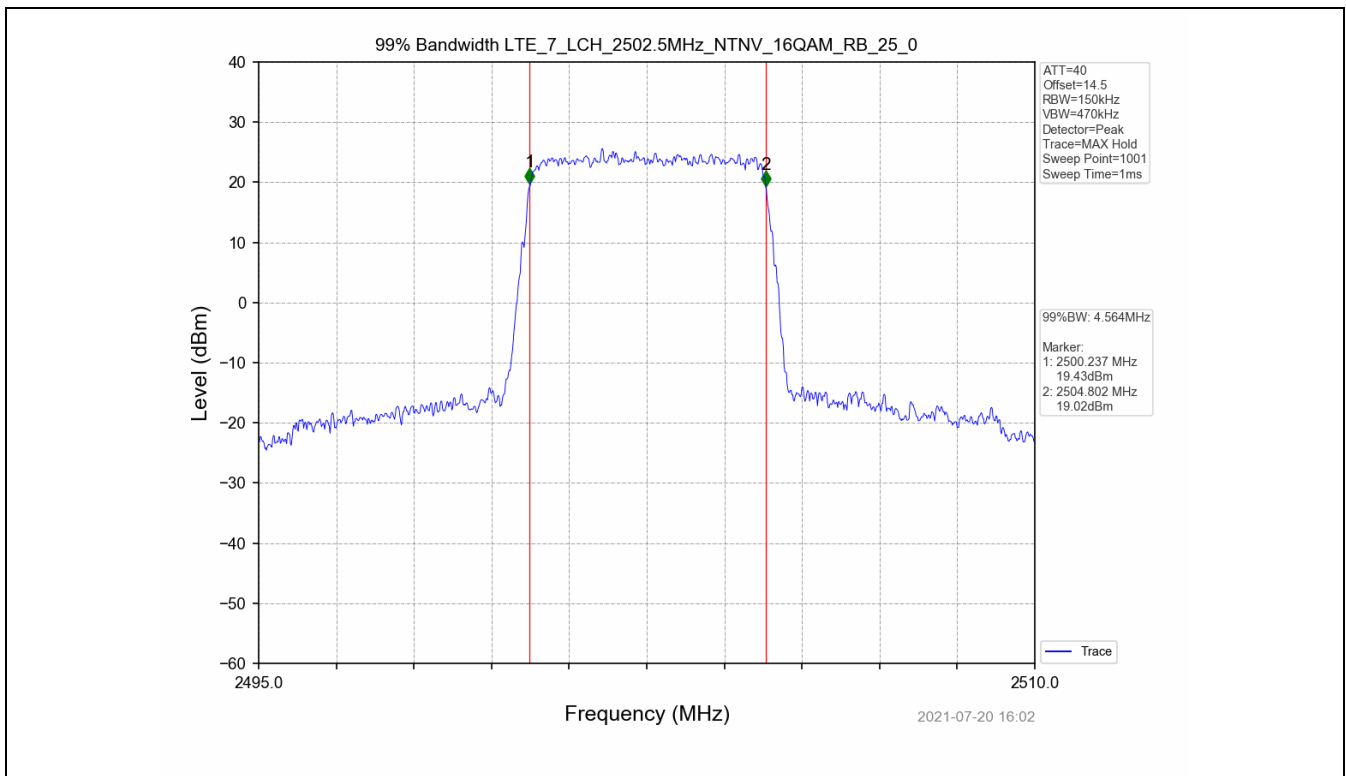
LTE  
 Multi Evaluation **RDY**  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
 LTE Signaling **ON**

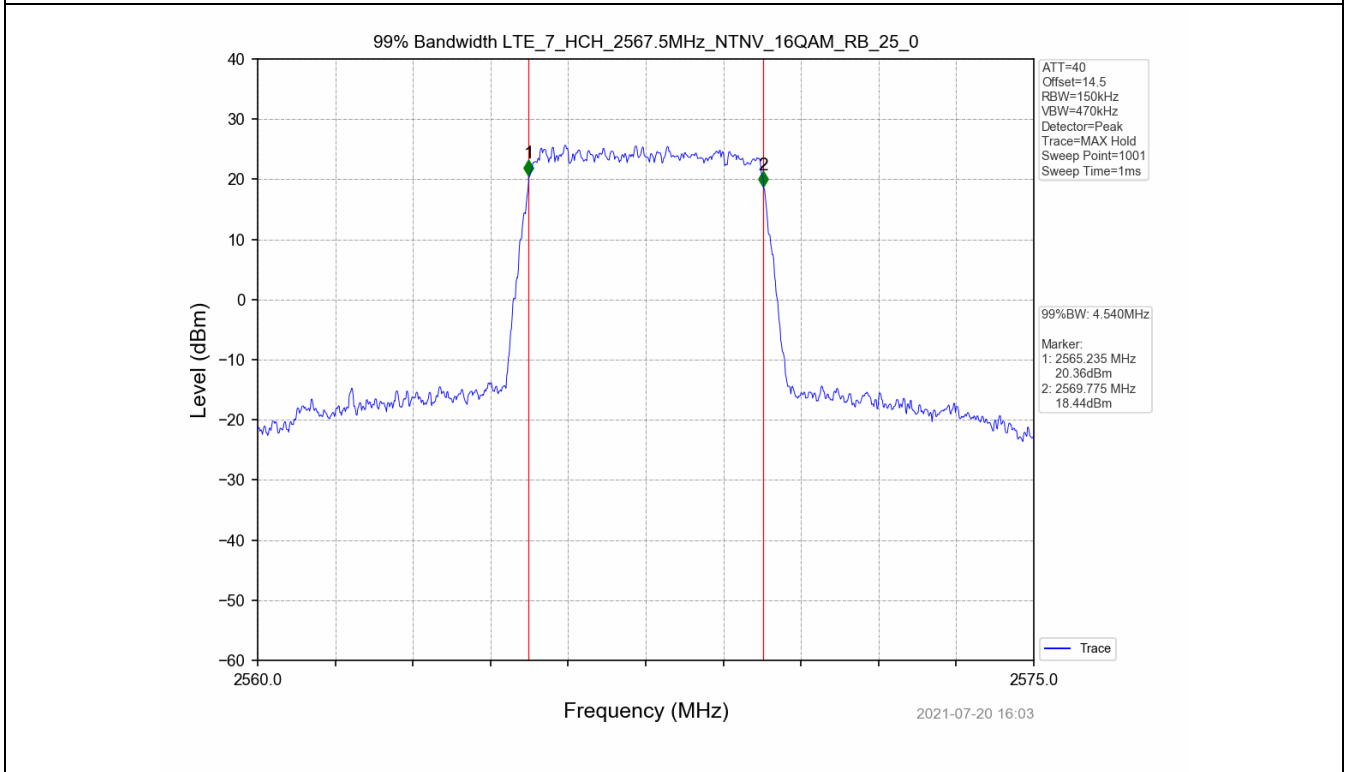
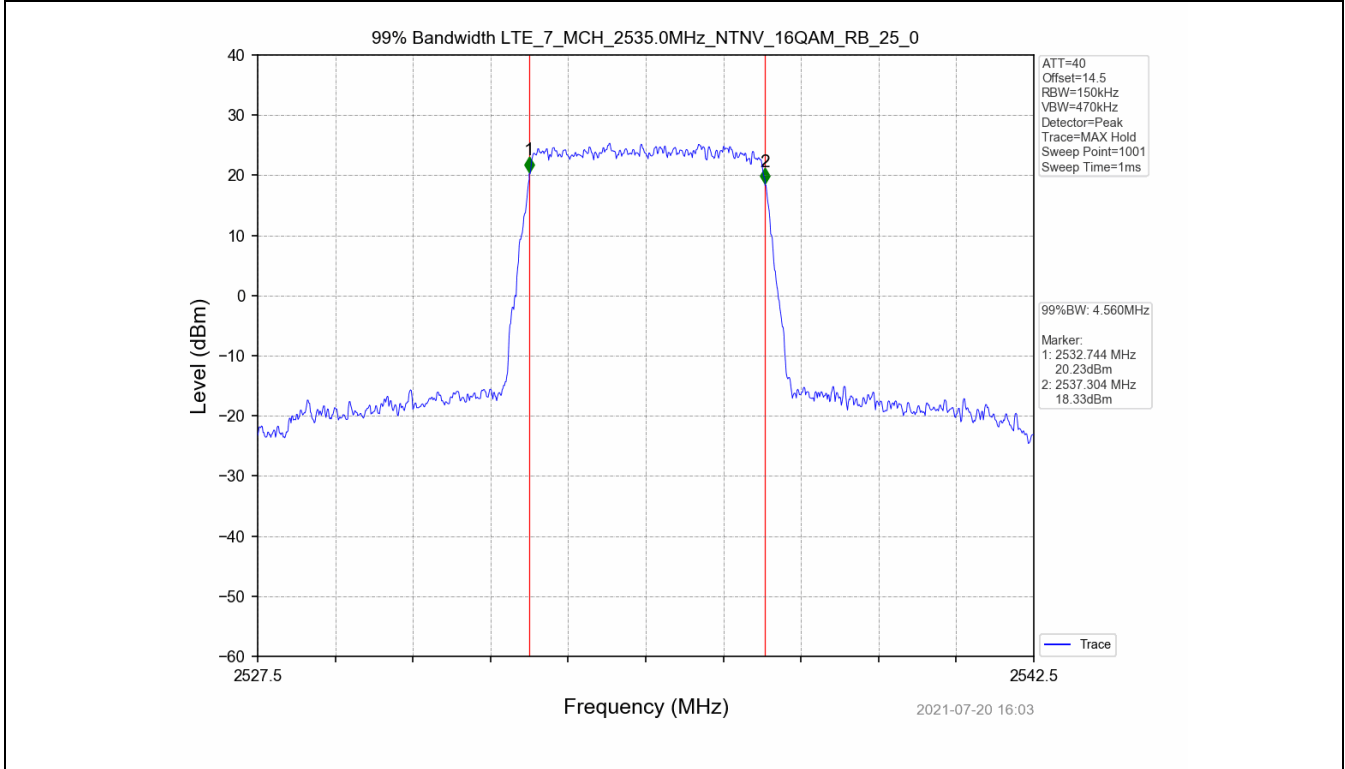
4. 99% & 26dB Bandwidth

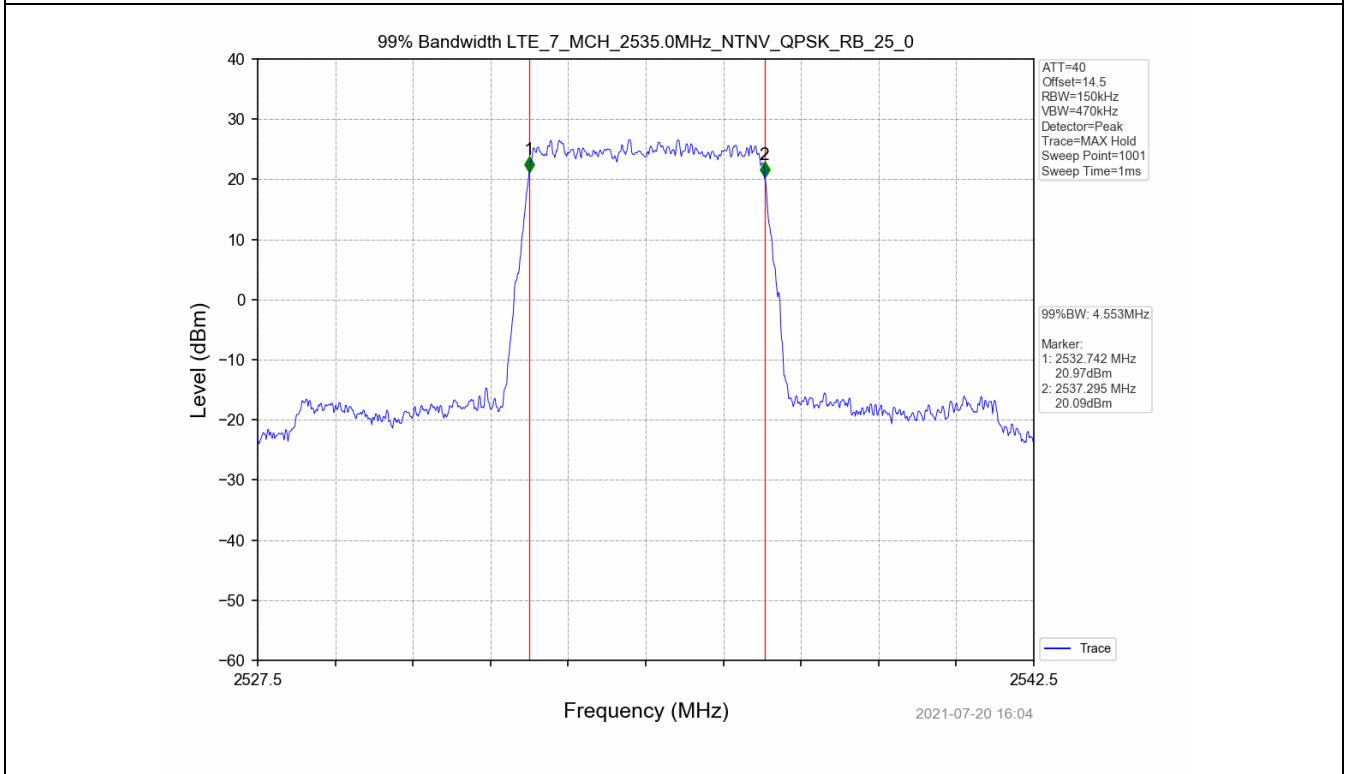
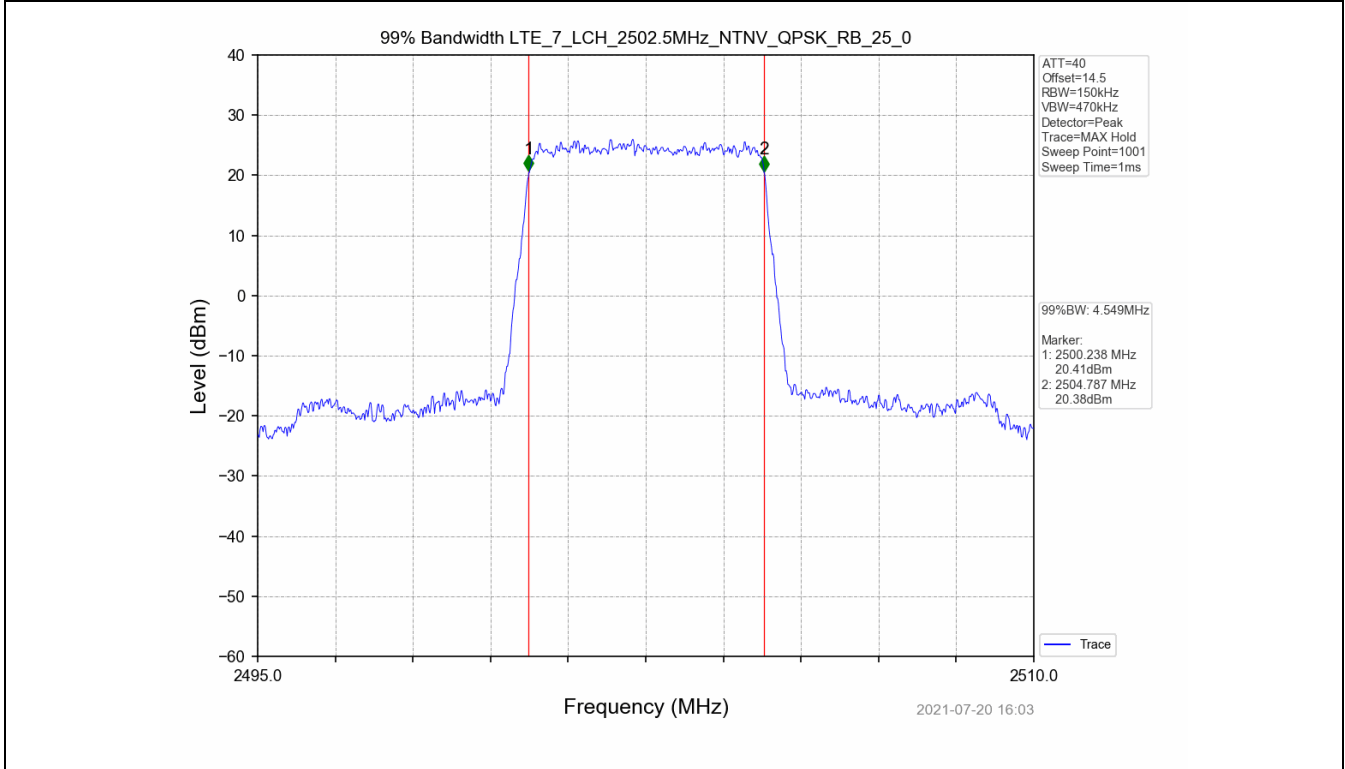
4.1 Test Result

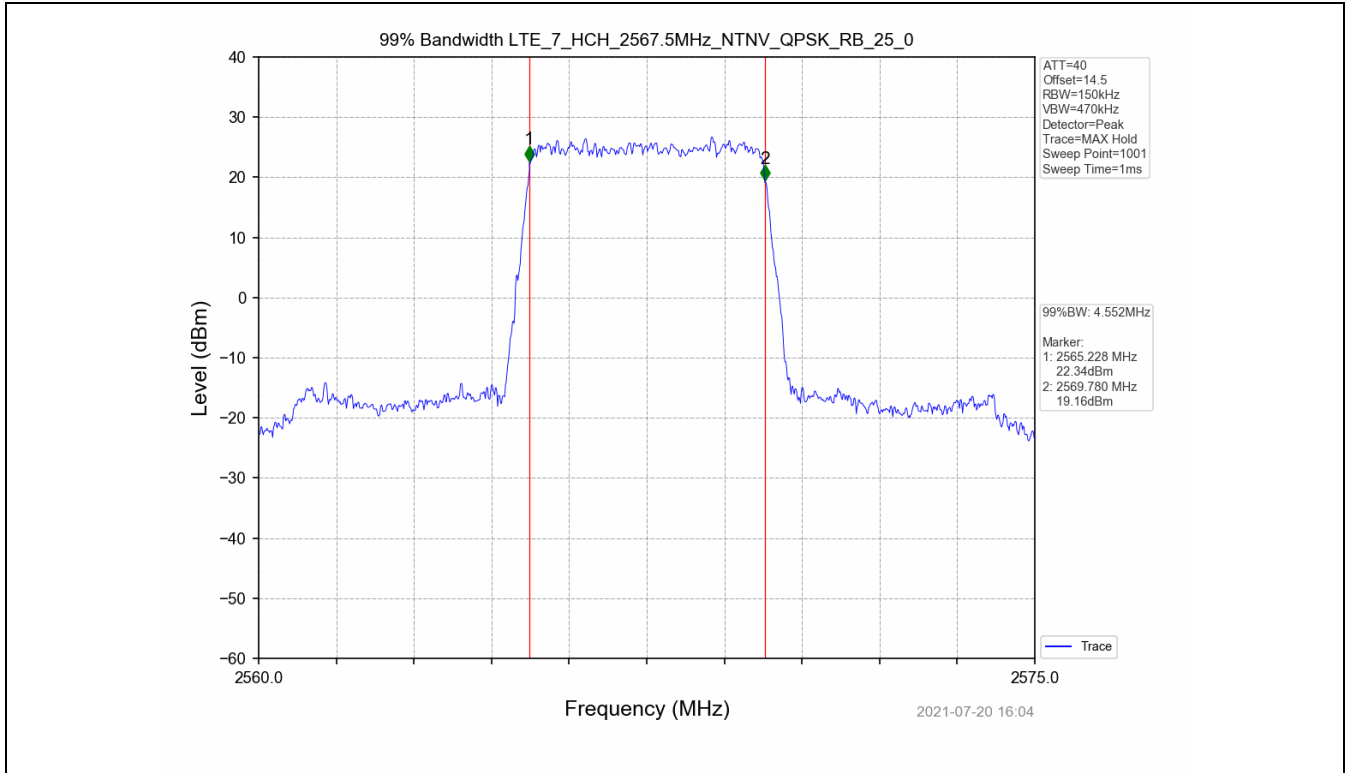
Test Band: 7 _ 5MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	25	0	4.549	4.553	4.552	N/A	PASS
16QAM	25	0	4.564	4.560	4.540	N/A	PASS

4.2 Test Graph



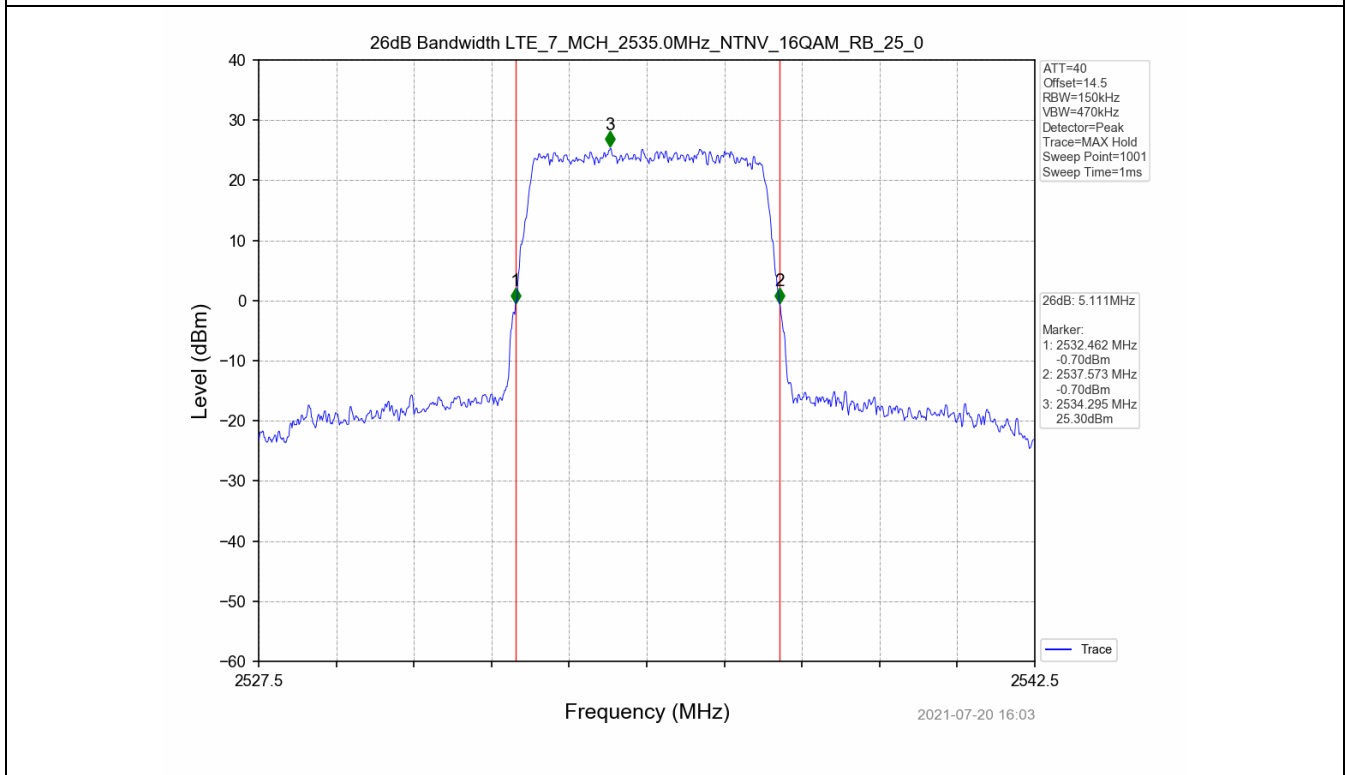
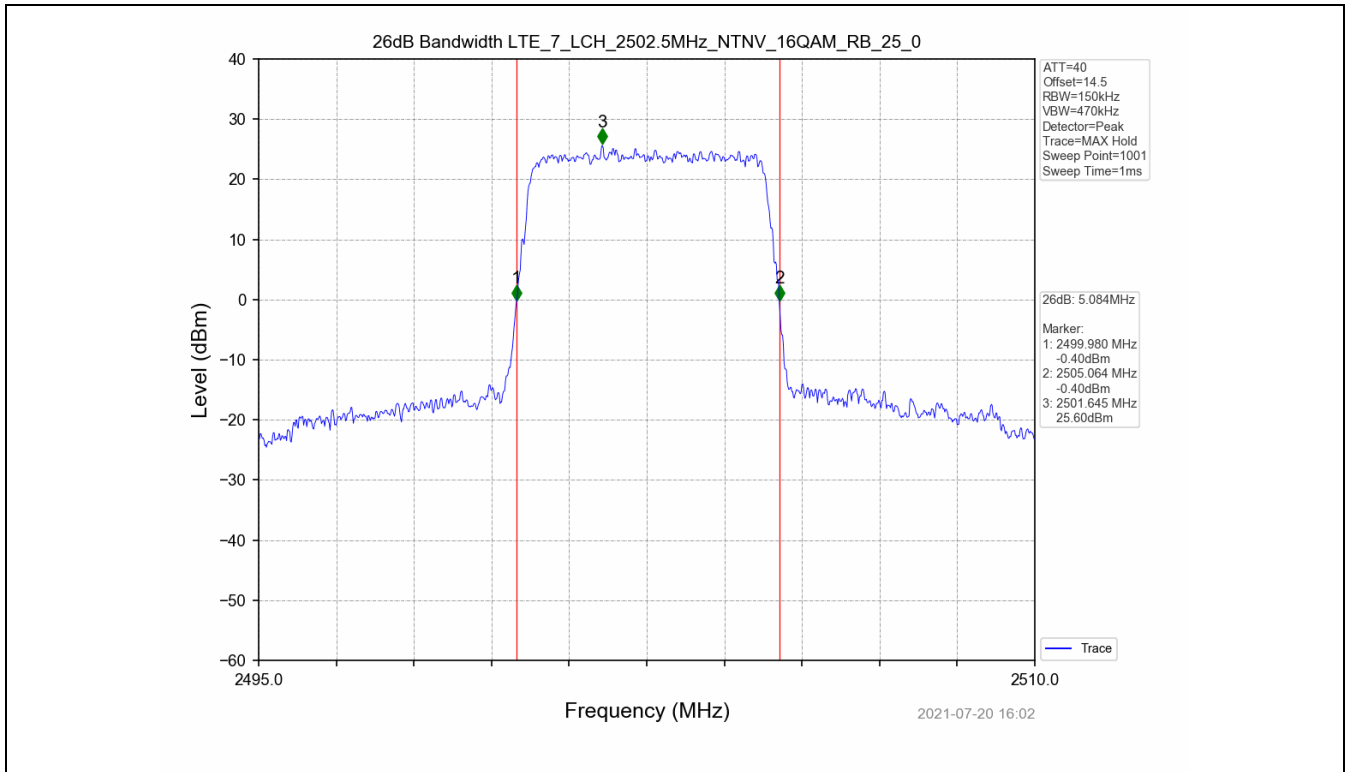


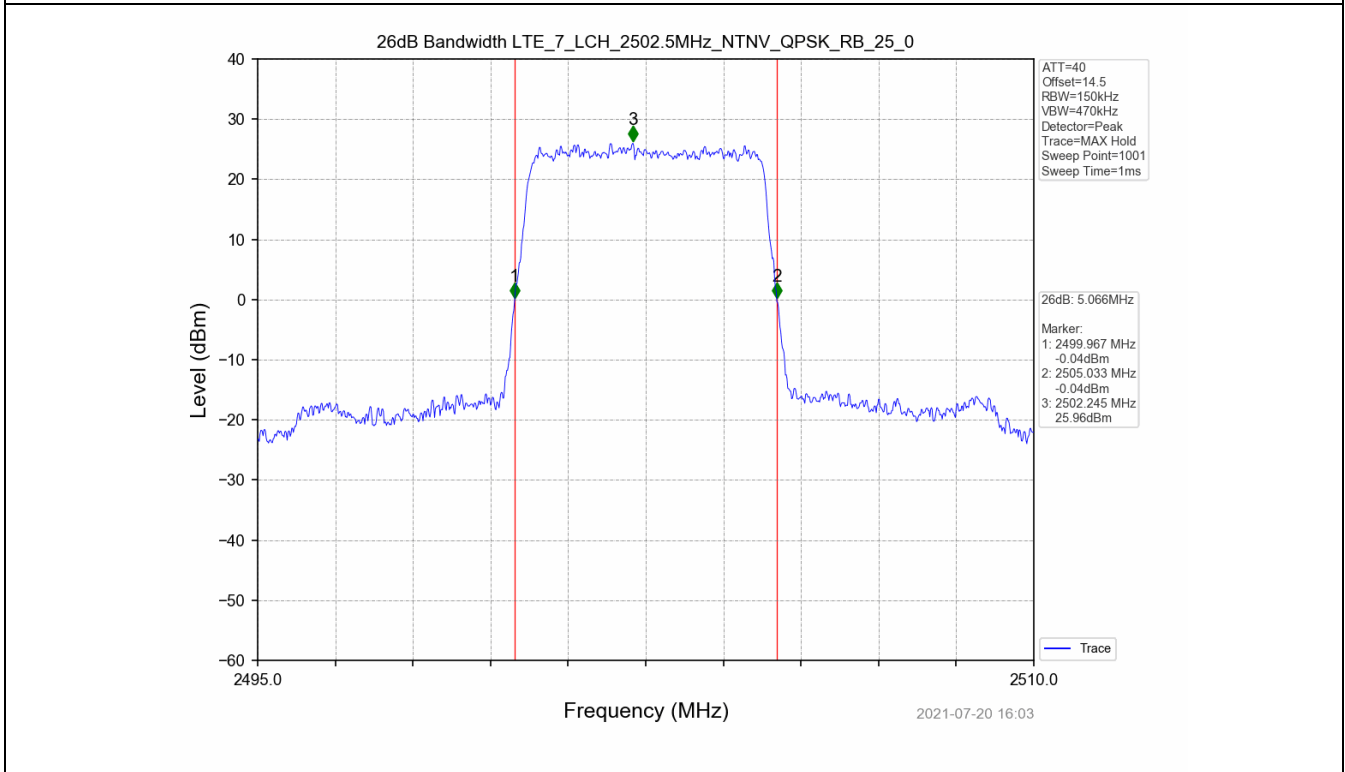
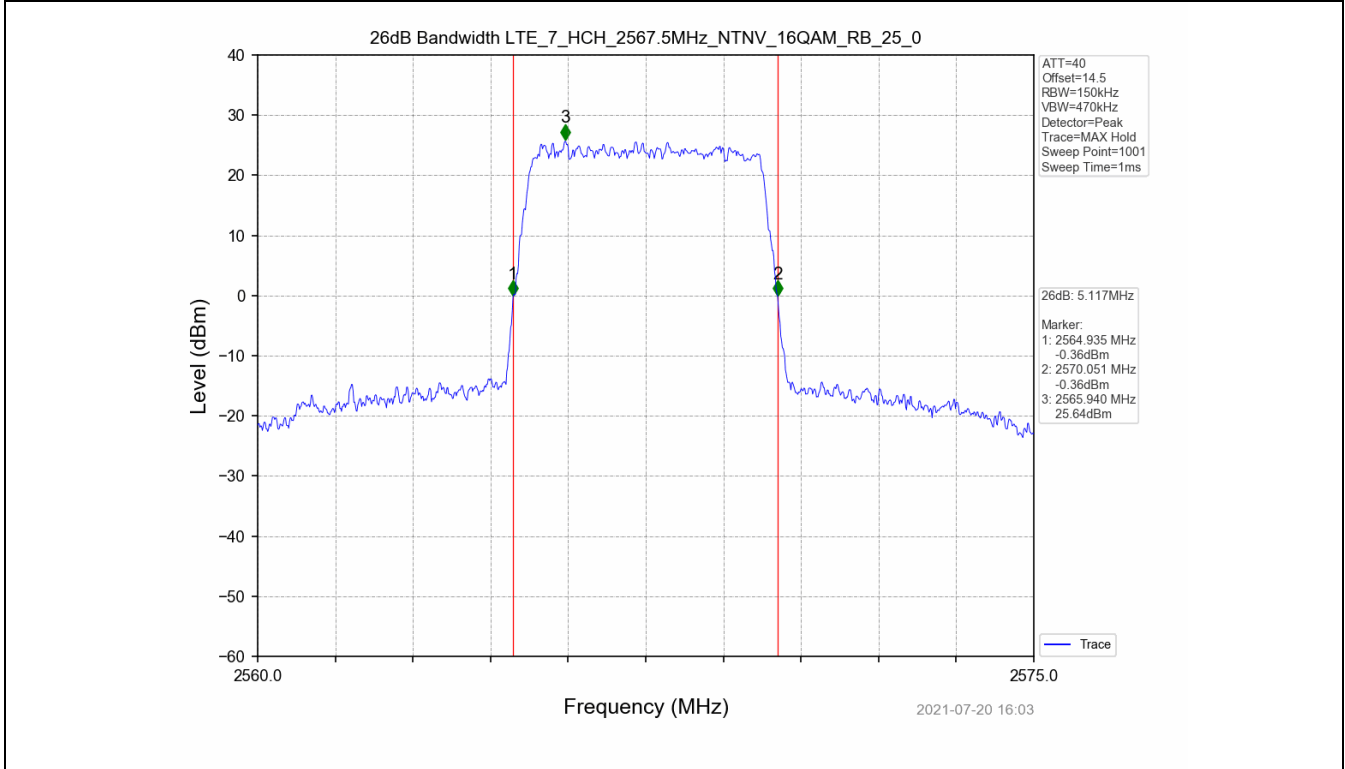




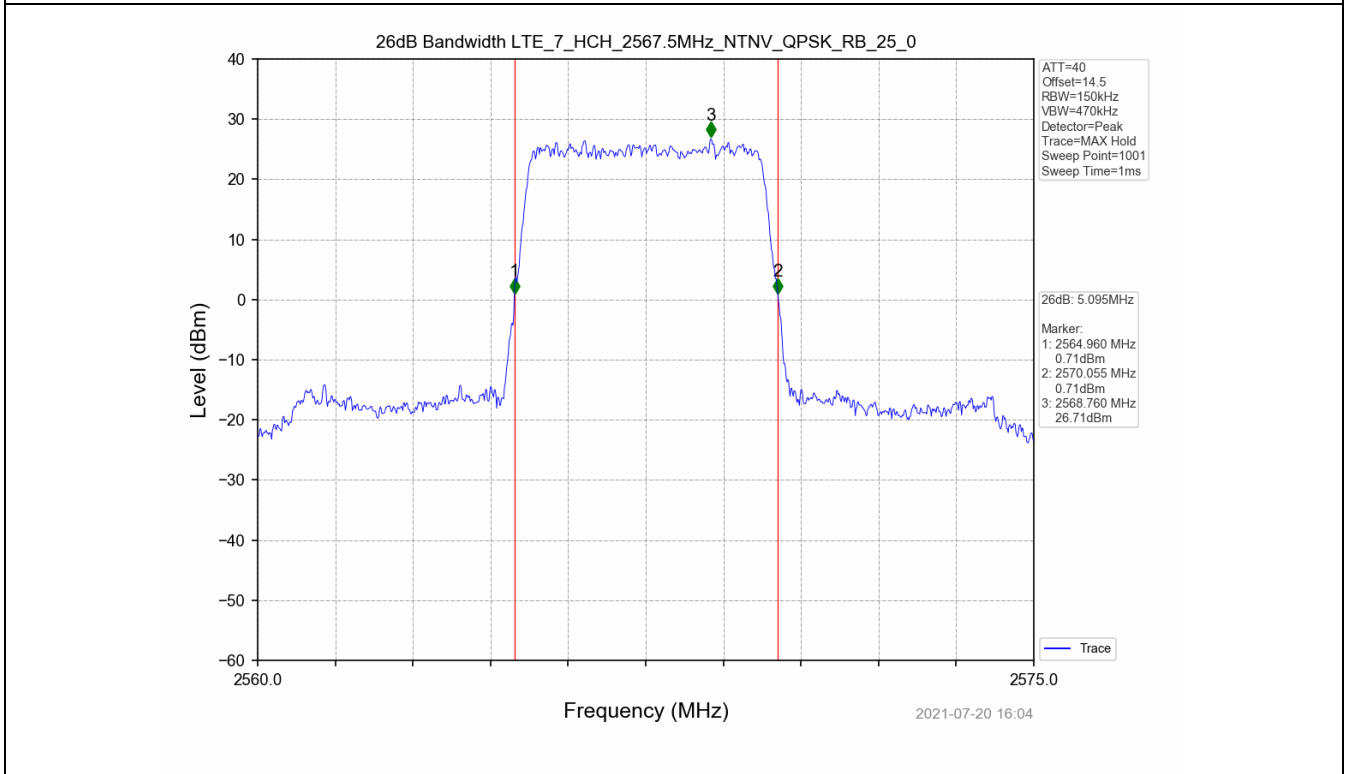
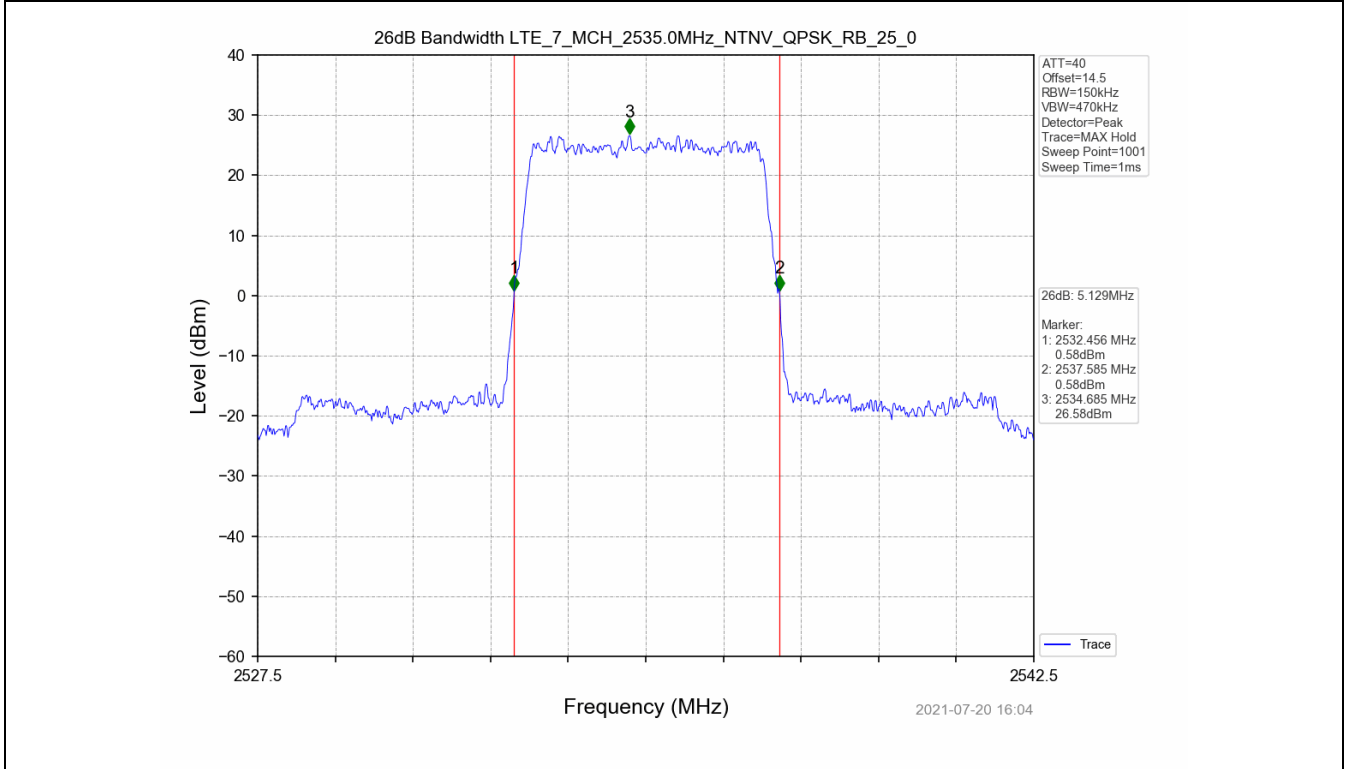
Test Band: 7 _ 5MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	25	0	5.066	5.129	5.095	N/A	PASS
16QAM	25	0	5.084	5.111	5.117	N/A	PASS

4.2 Test Graph



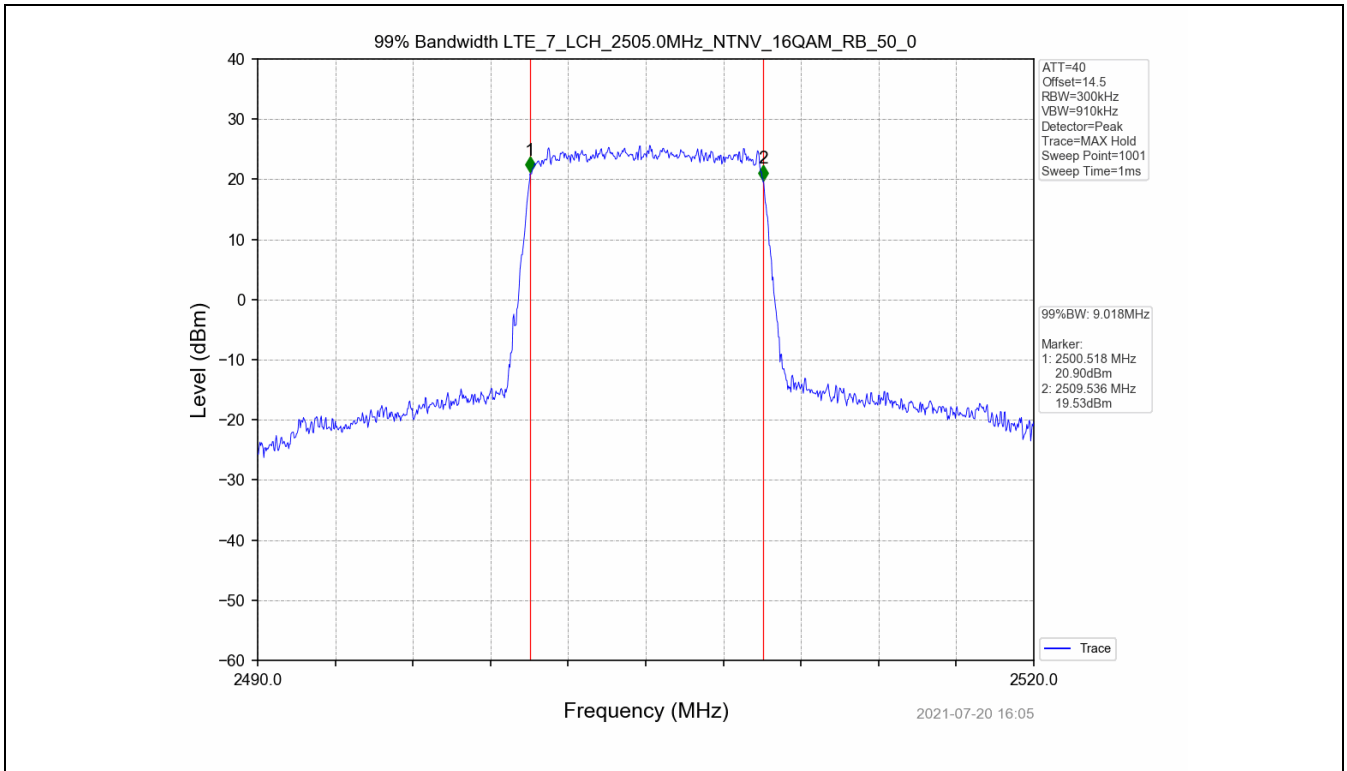


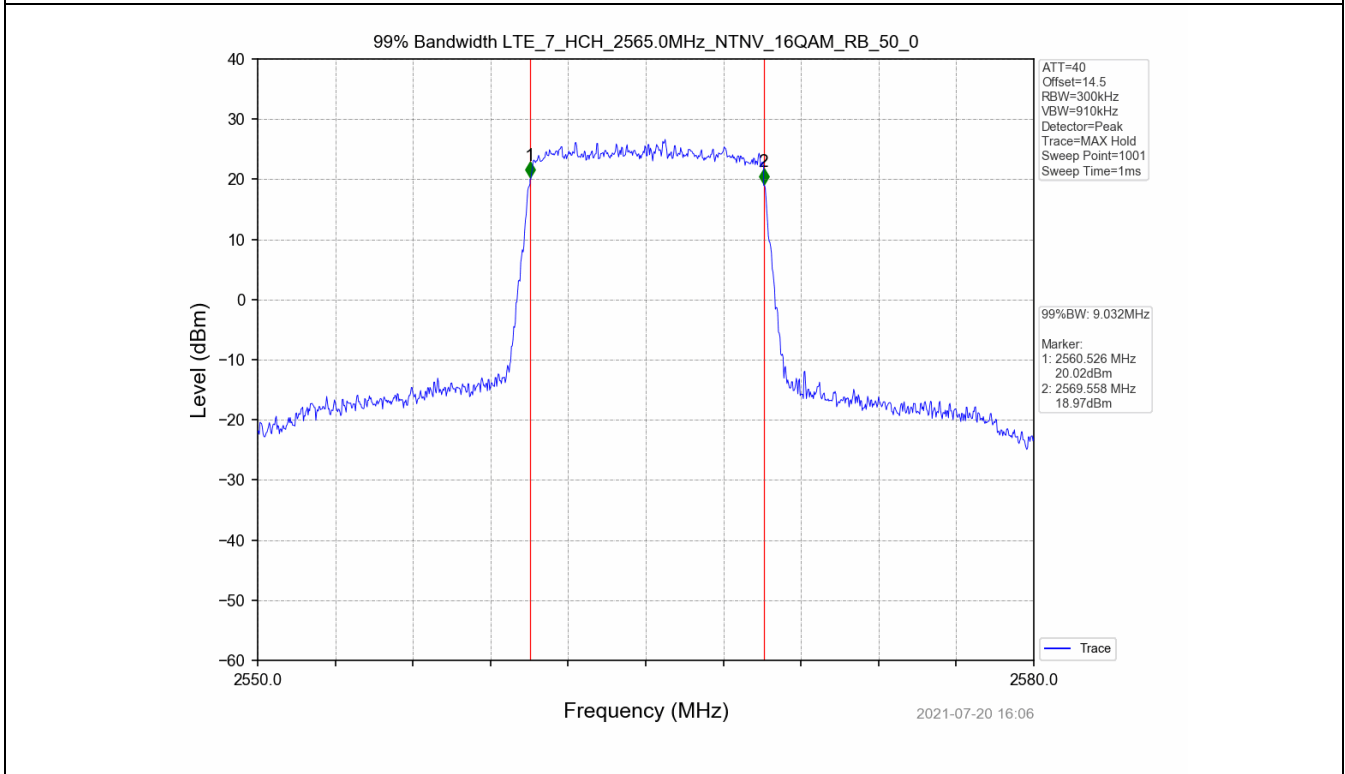
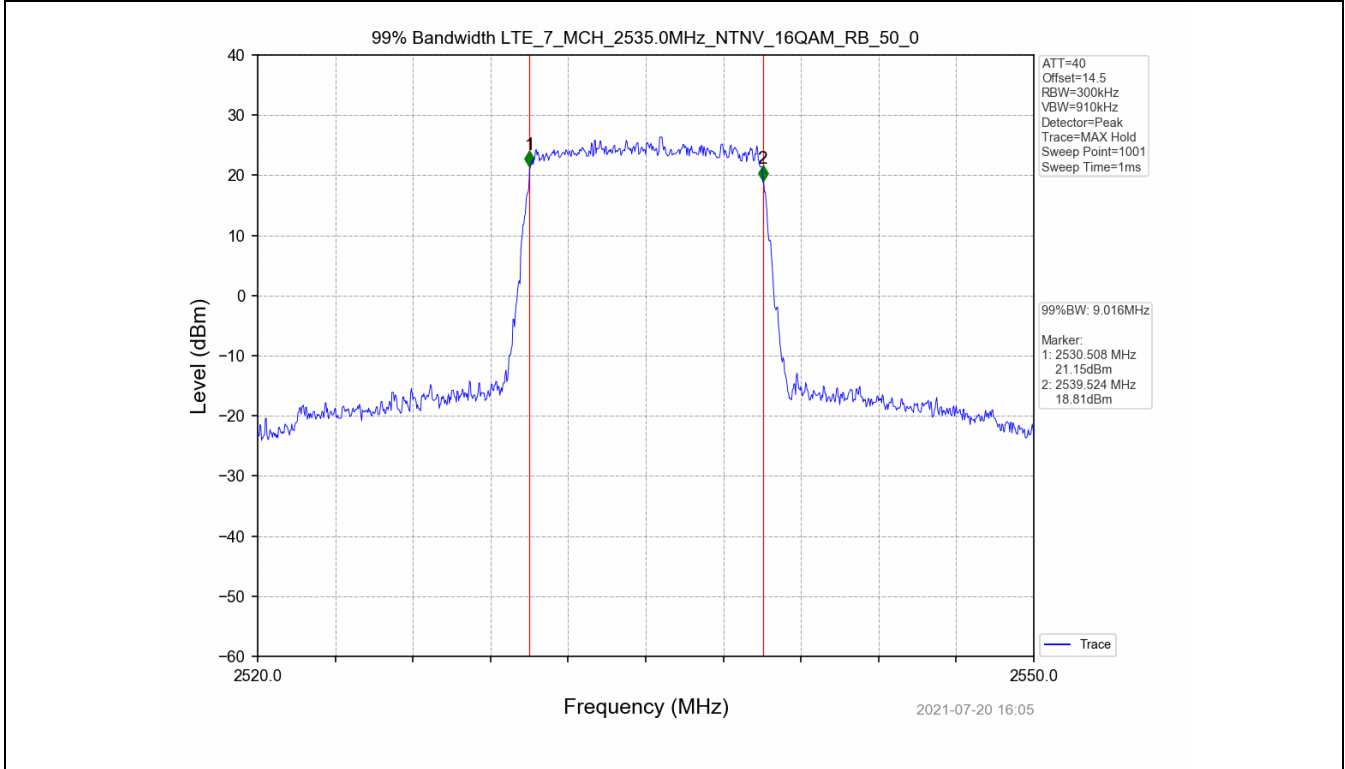


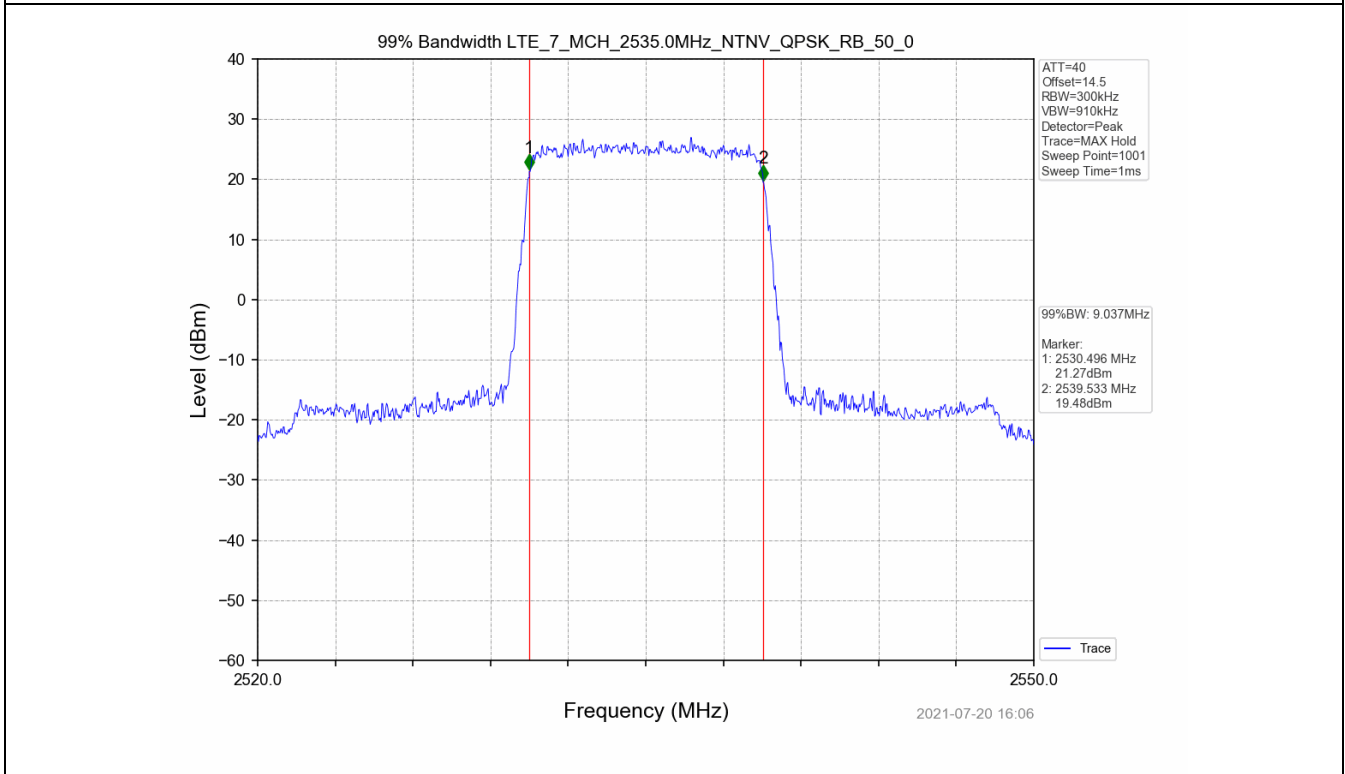
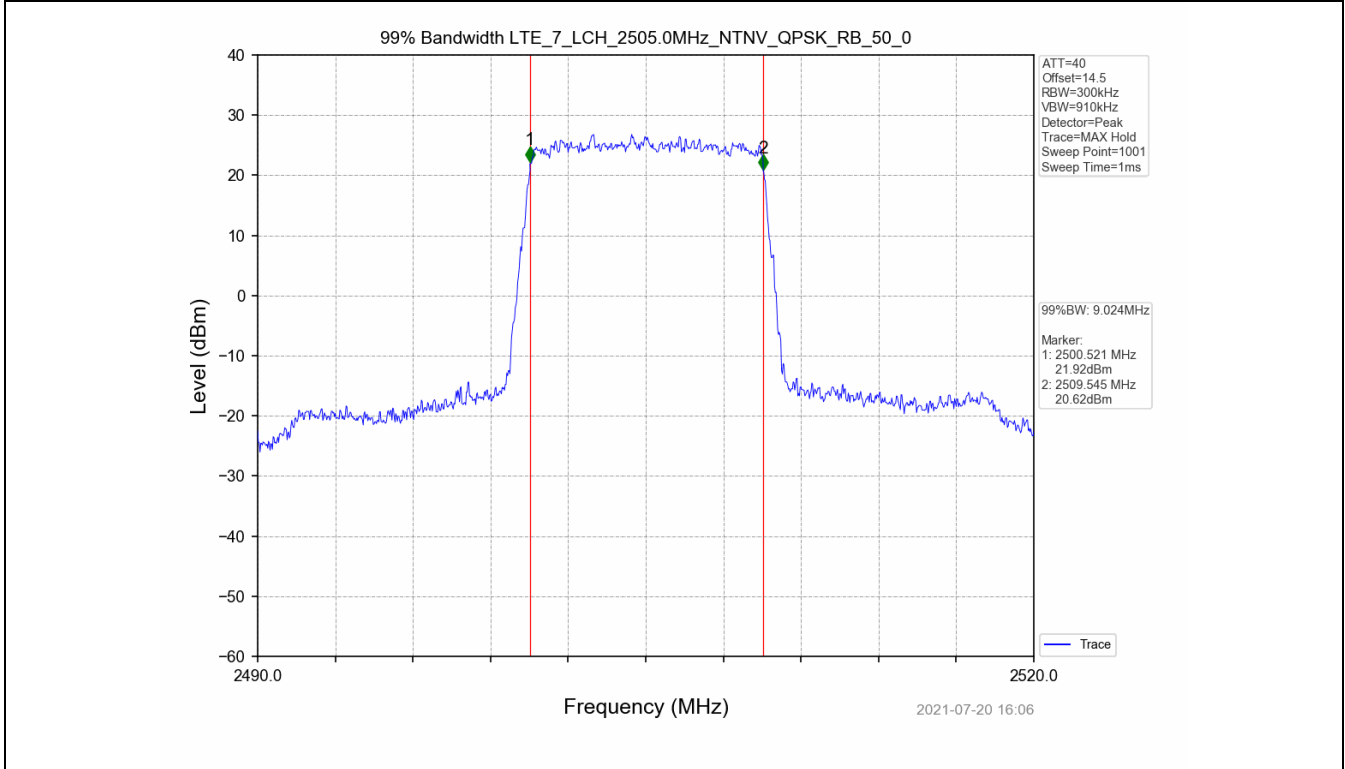


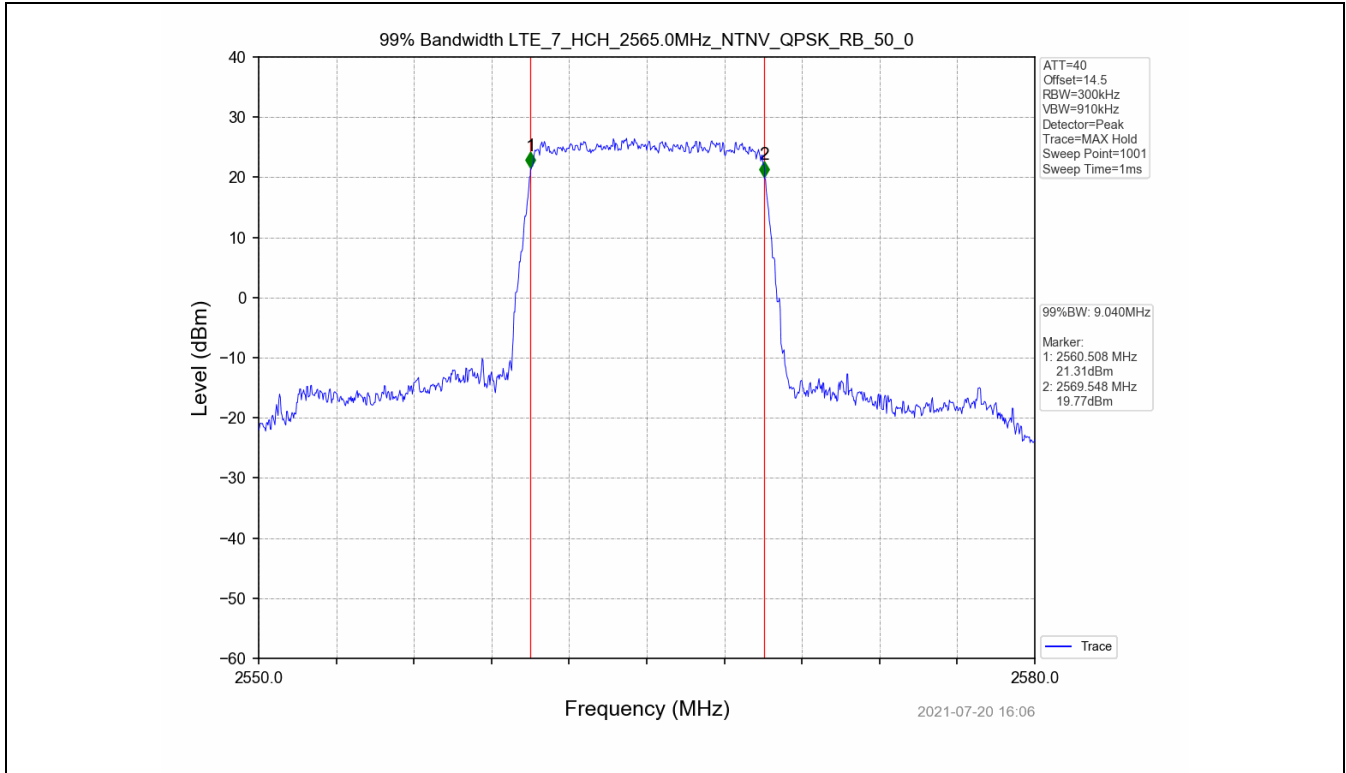
Test Band: 7 _ 10MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	9.024	9.037	9.040	N/A	PASS
16QAM	50	0	9.018	9.016	9.032	N/A	PASS

#### 4.2 Test Graph



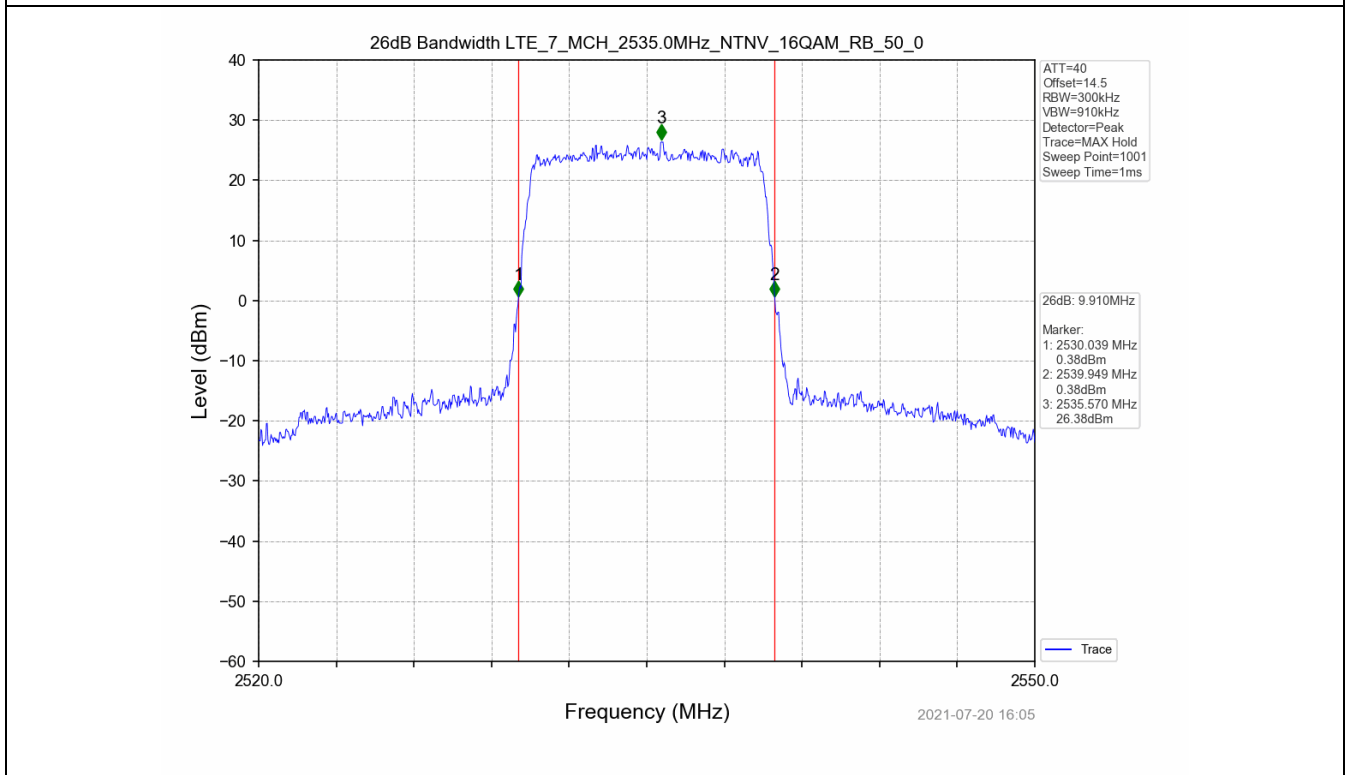
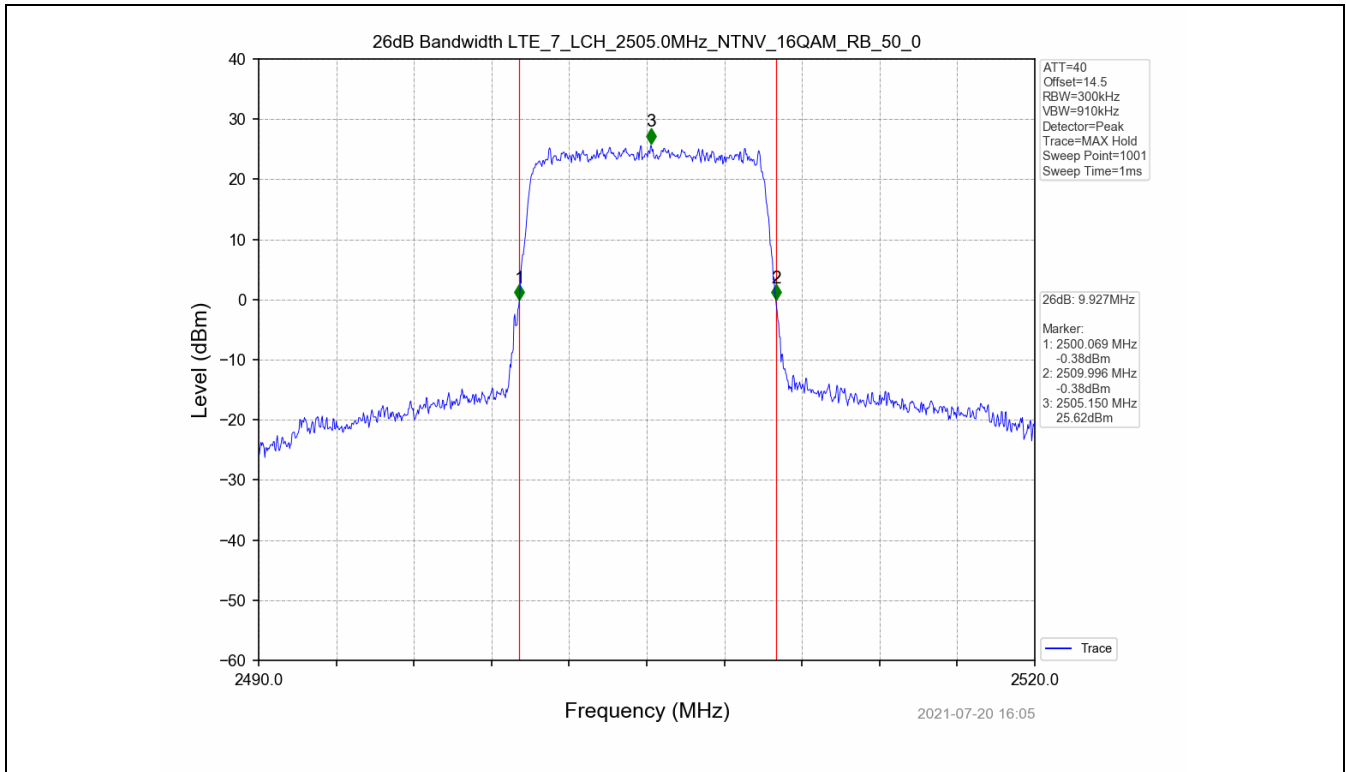


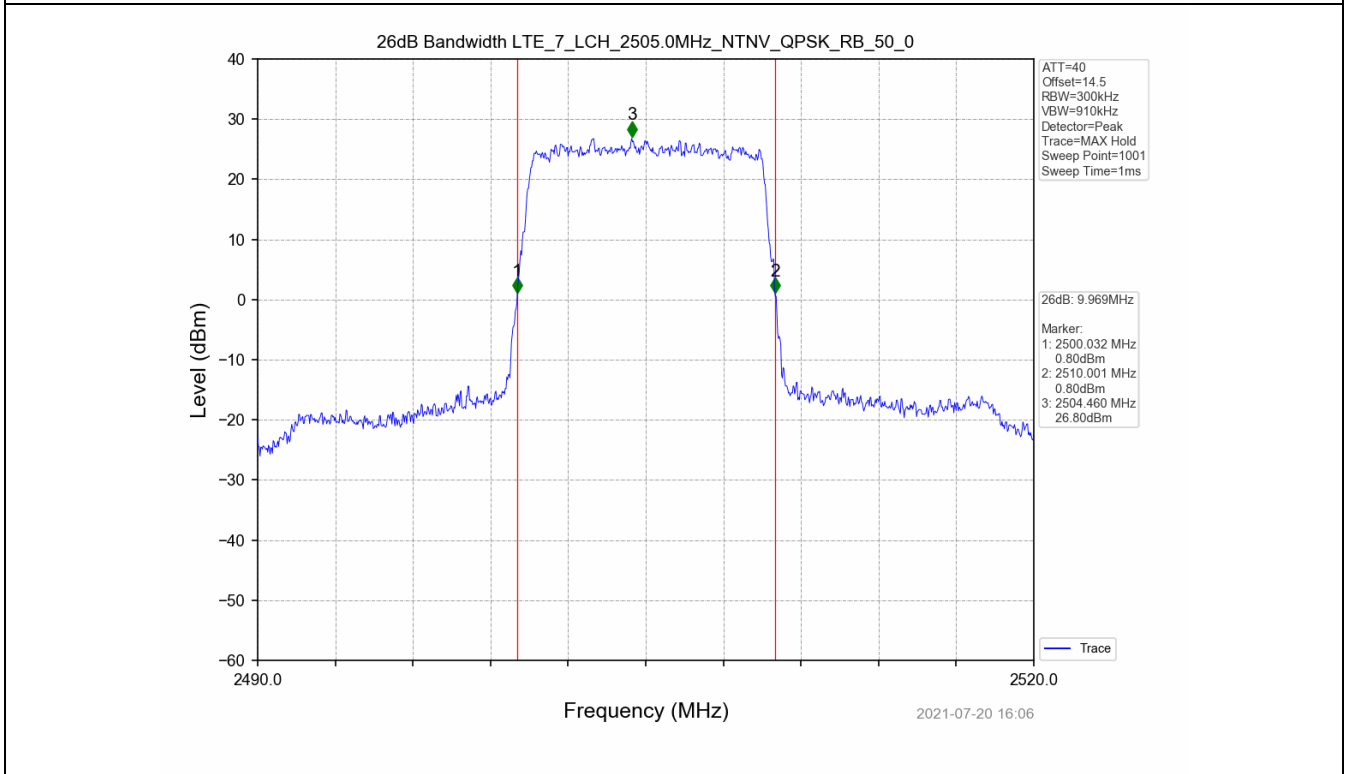
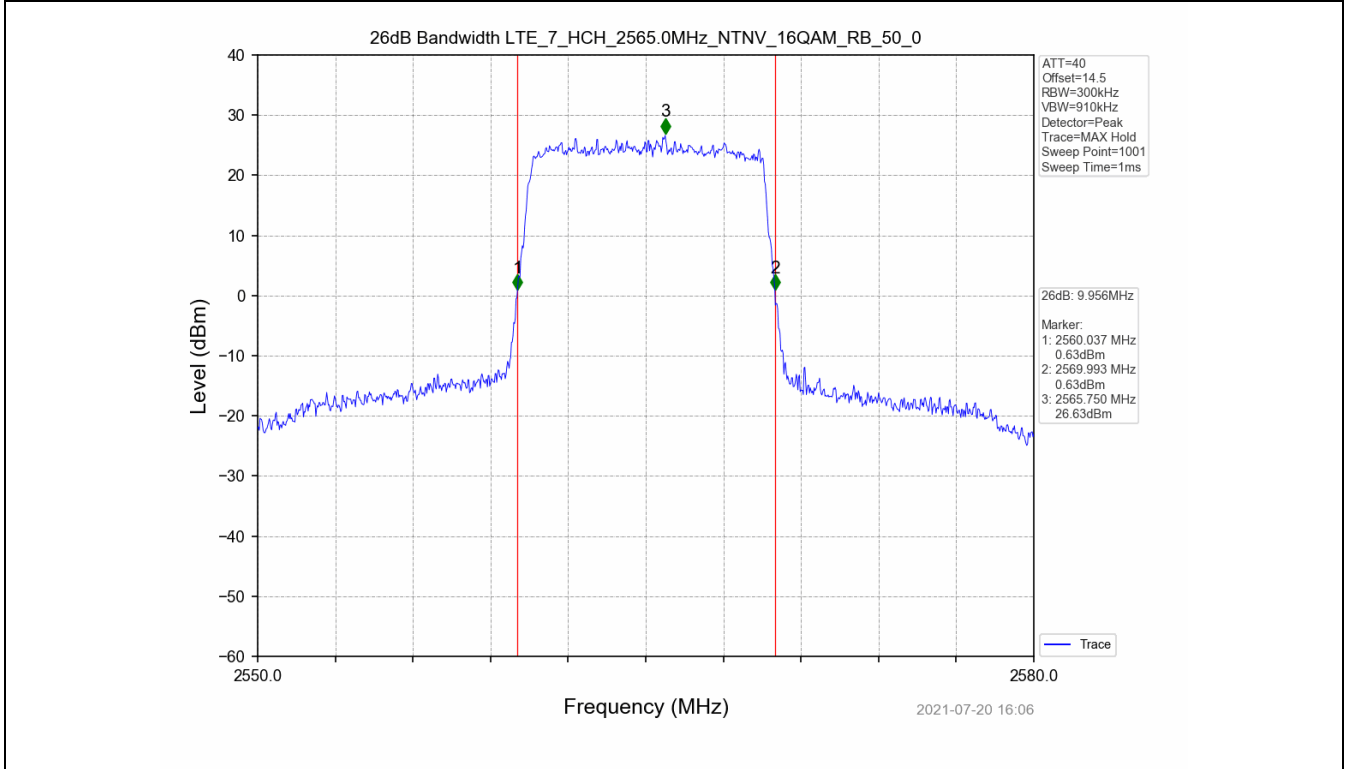


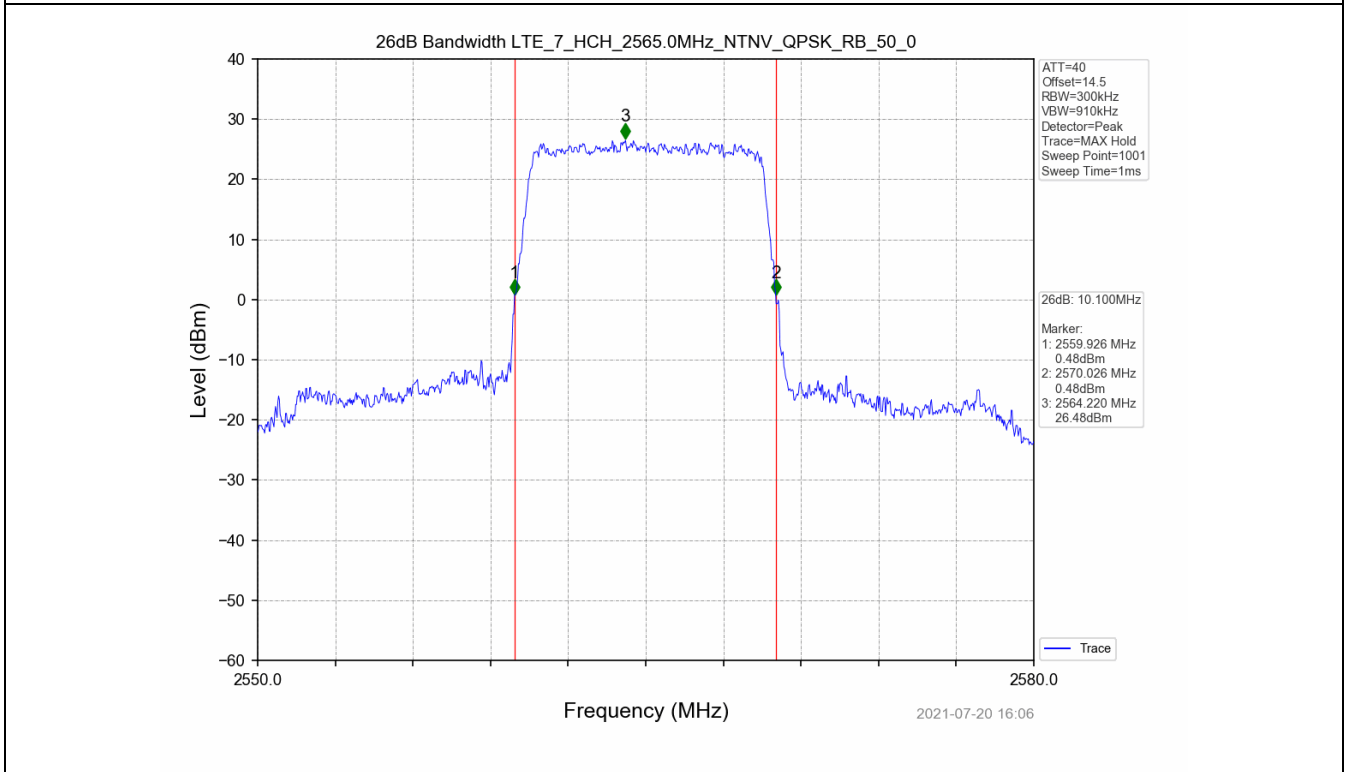
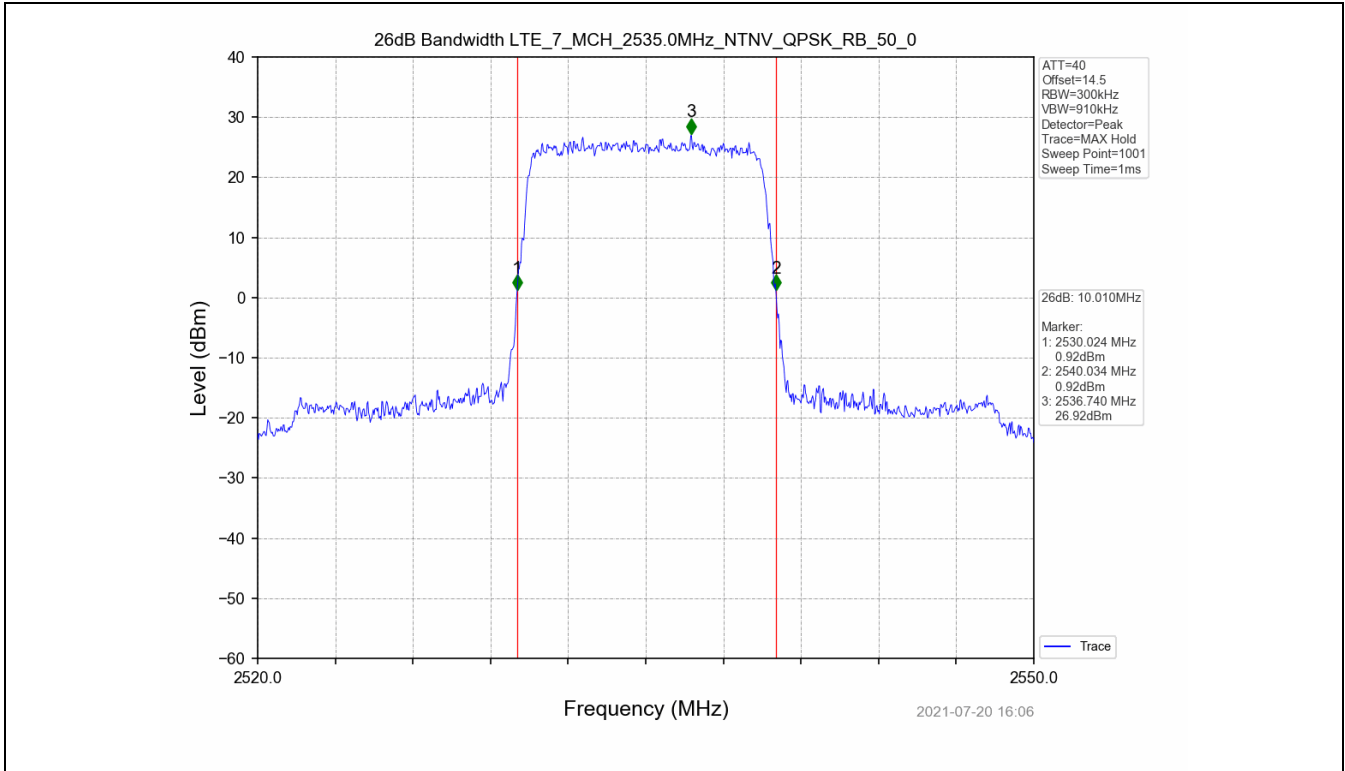


Test Band: 7 _ 10MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	9.969	10.010	10.100	N/A	PASS
16QAM	50	0	9.927	9.910	9.956	N/A	PASS

### 4.2 Test Graph



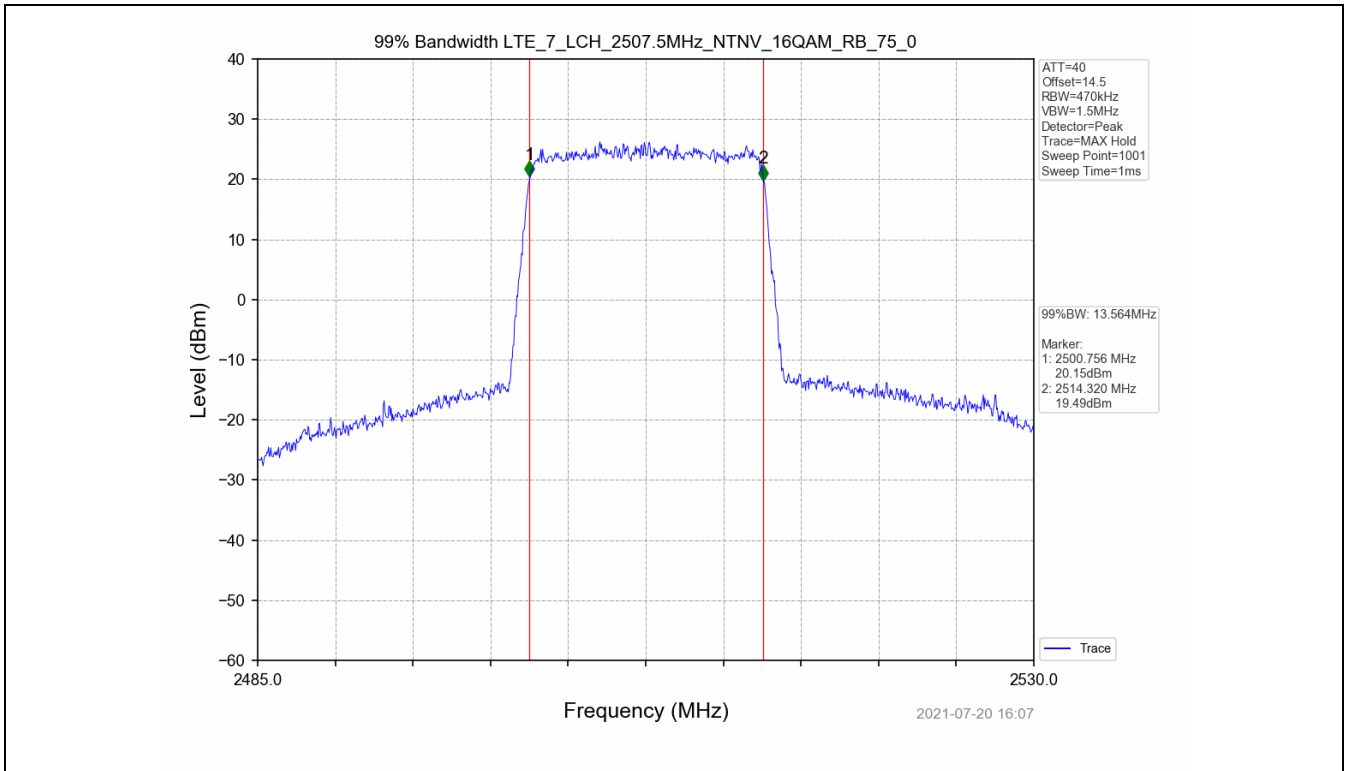


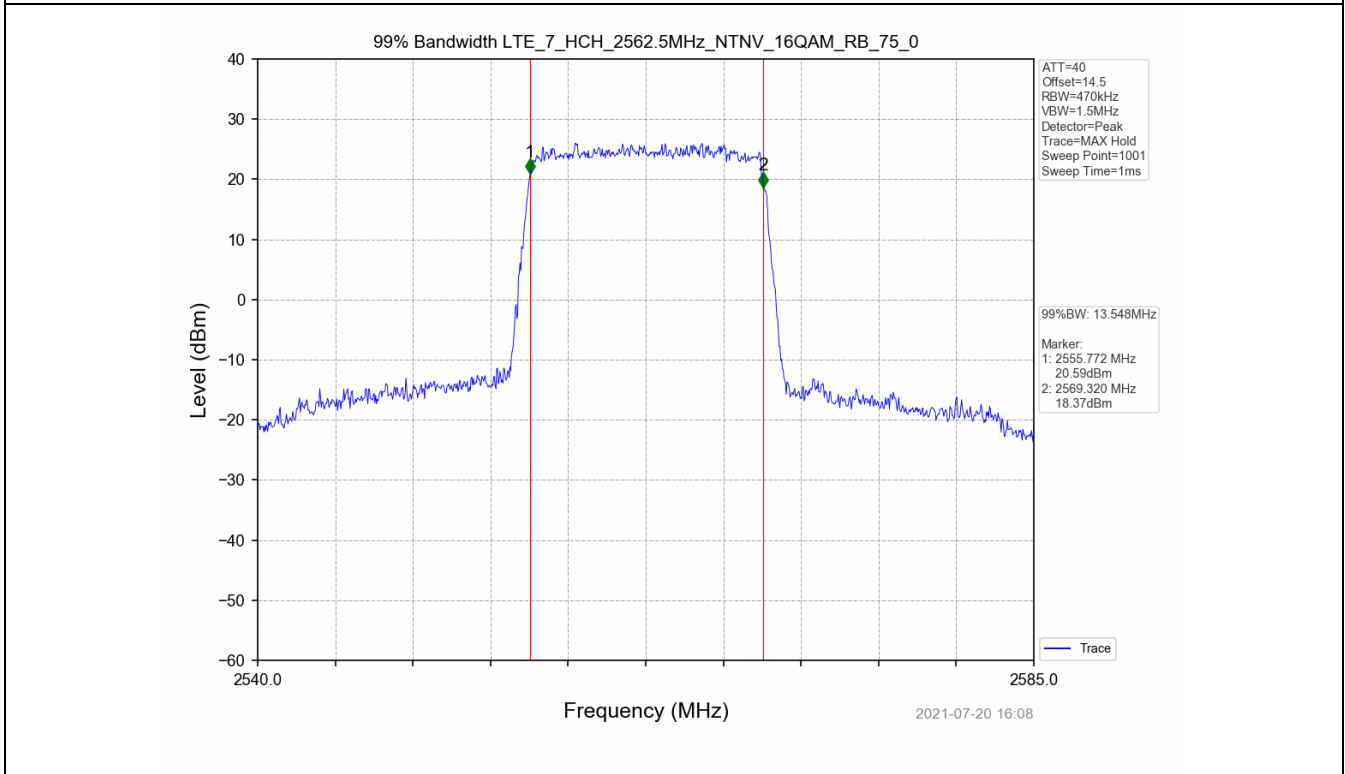
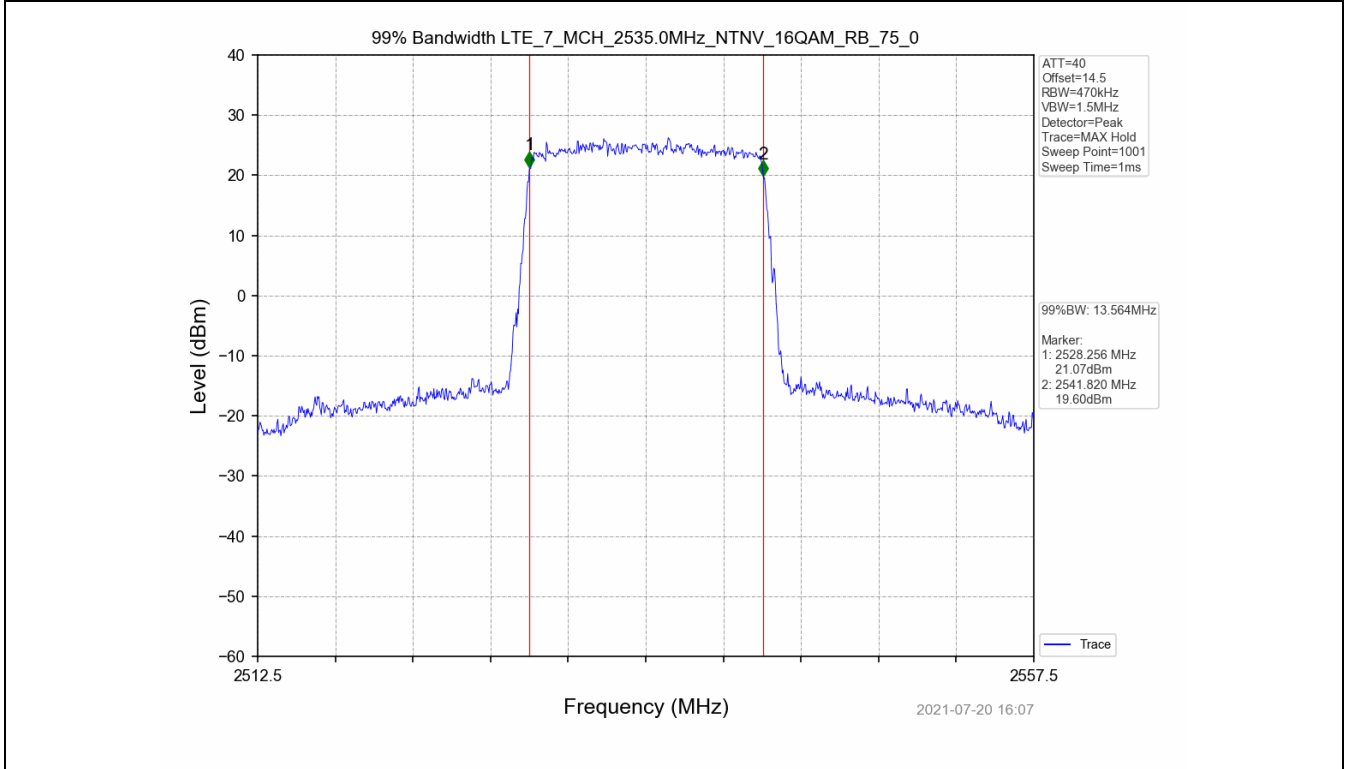


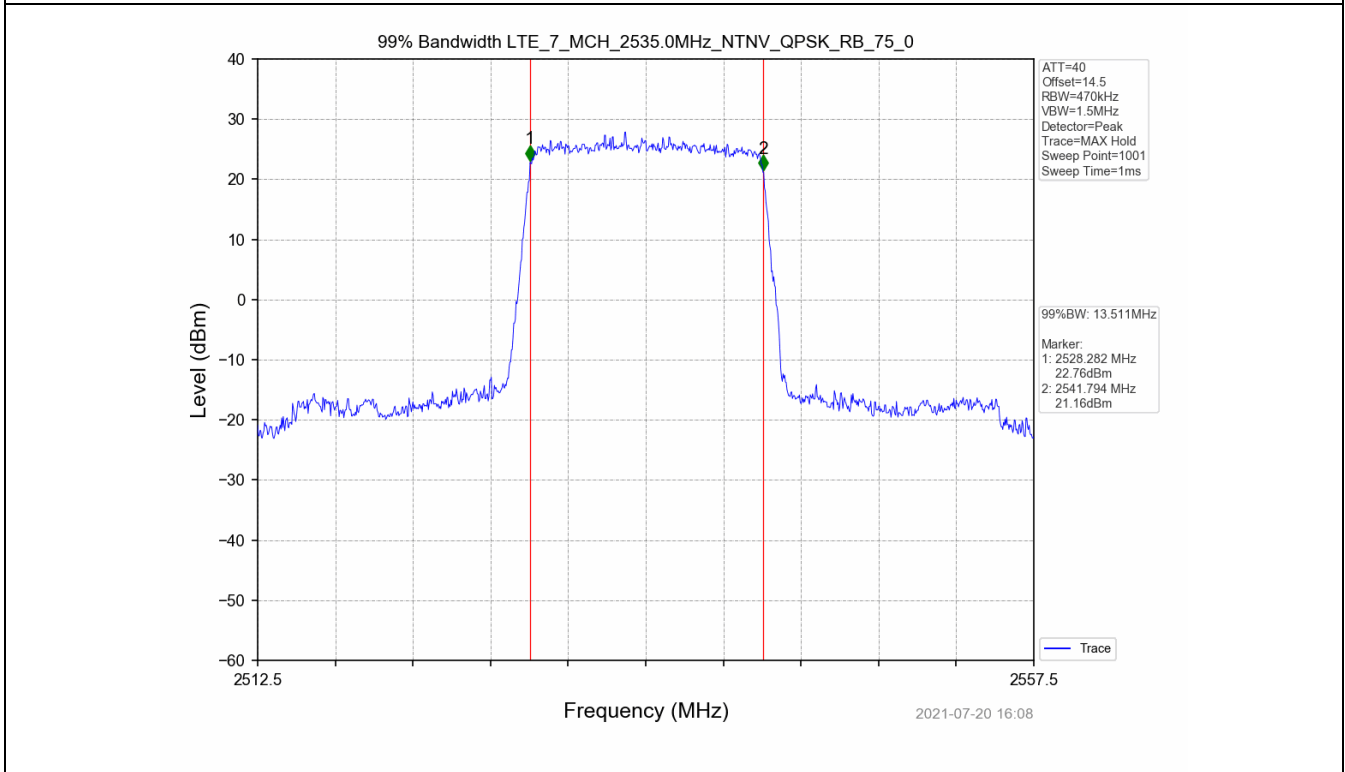
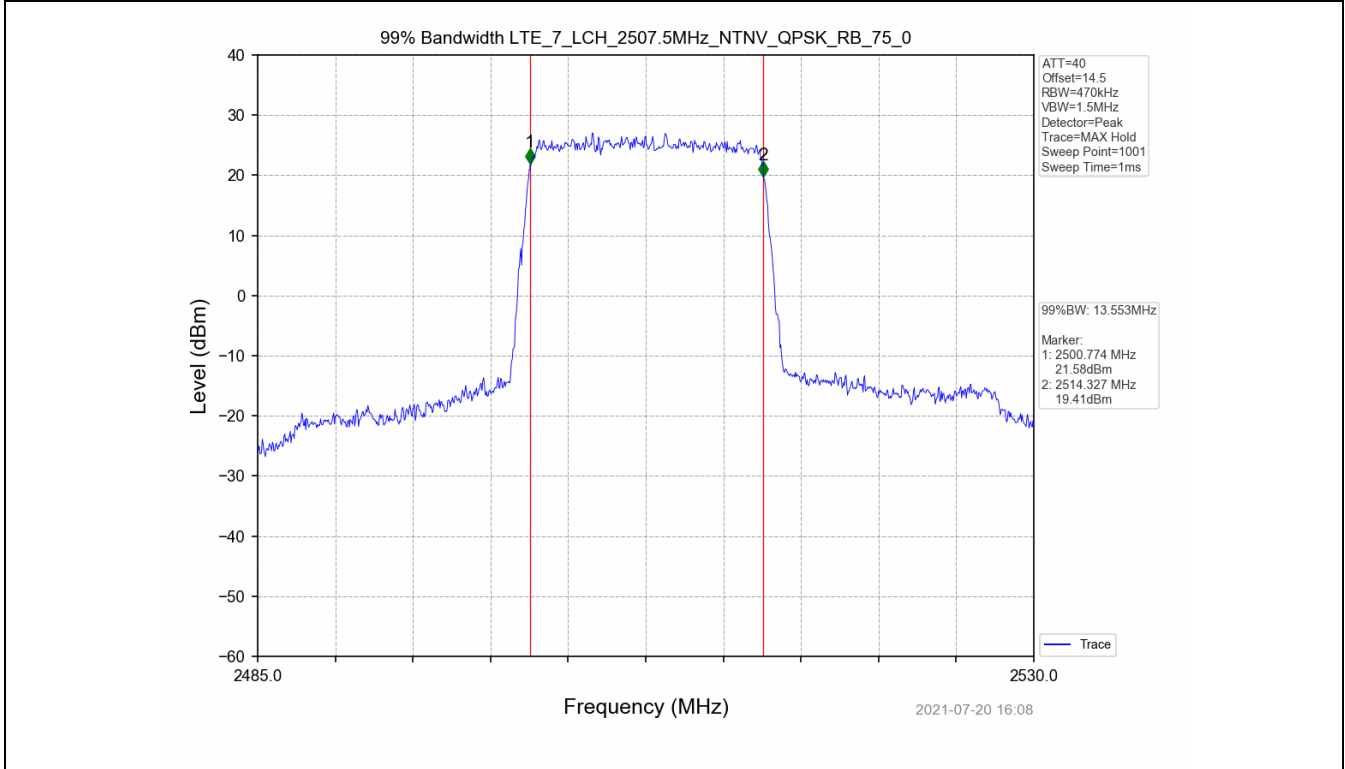


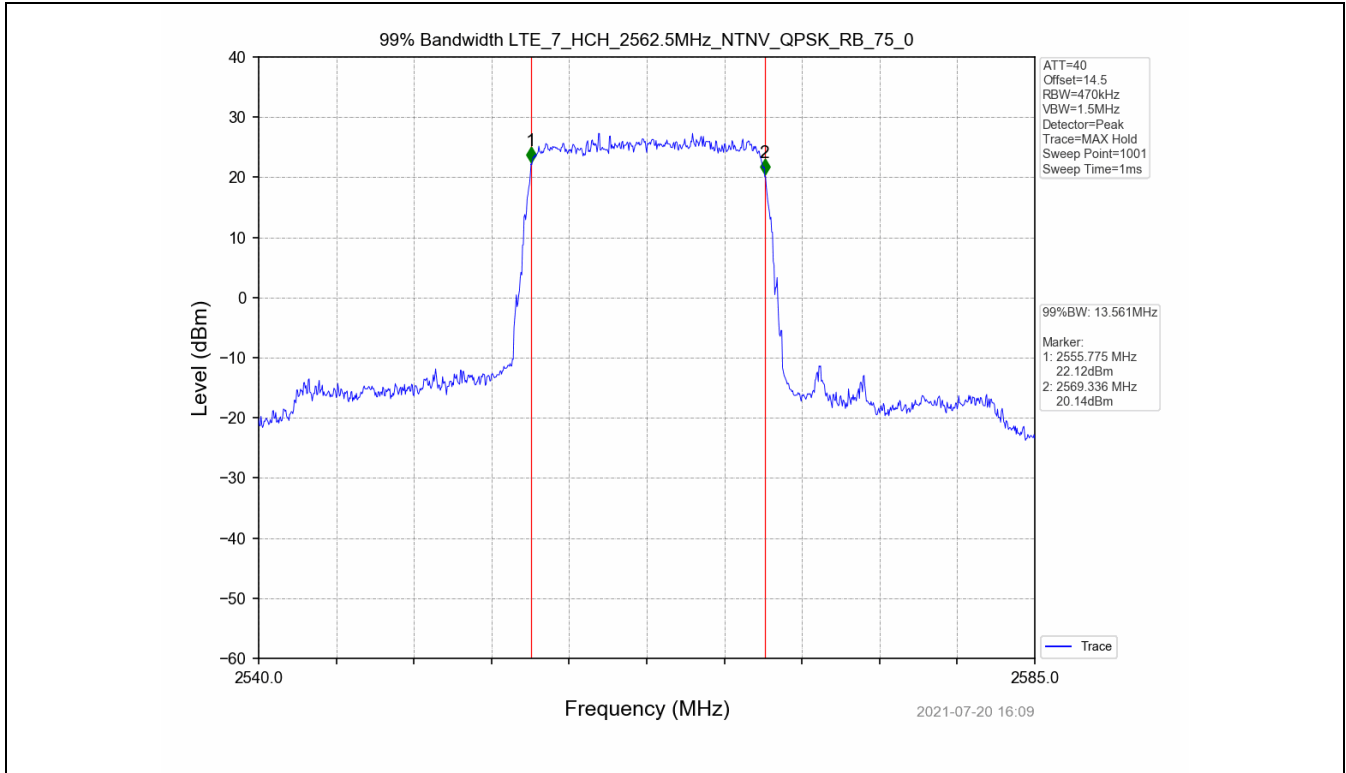
Test Band: 7 _ 15MHz Bandwidth							Limit	Verdict
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)					
	Size	Offset	LCH	MCH	HCH			
QPSK	75	0	13.553	13.511	13.561	N/A	PASS	
16QAM	75	0	13.564	13.564	13.548	N/A	PASS	

4.2 Test Graph



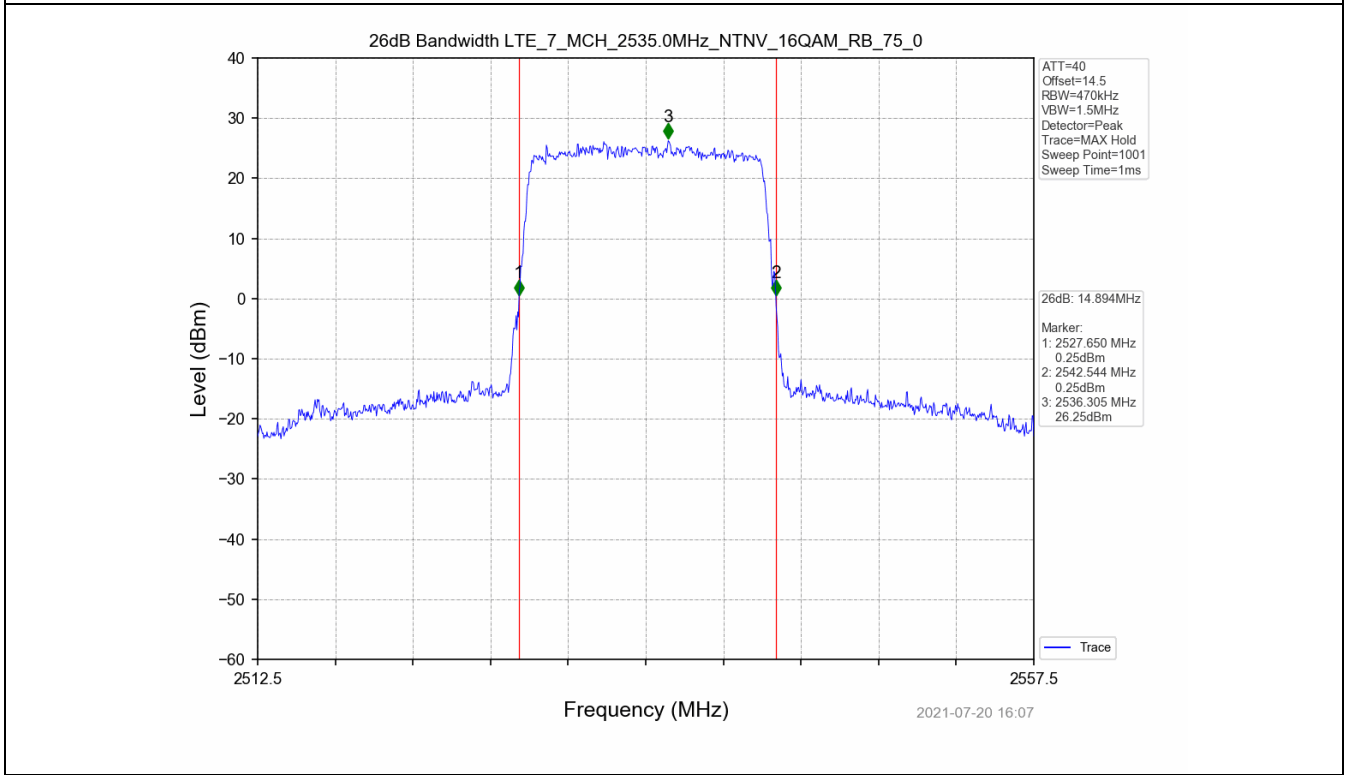
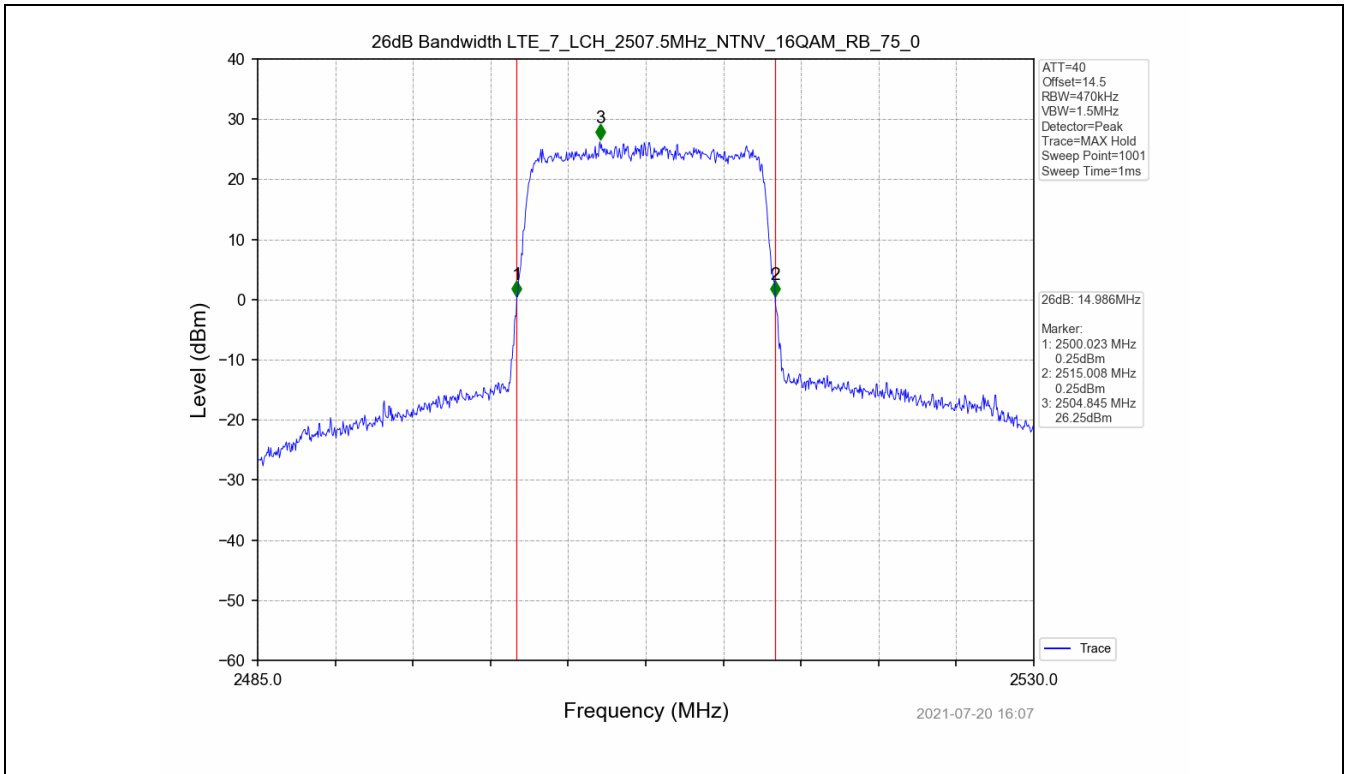


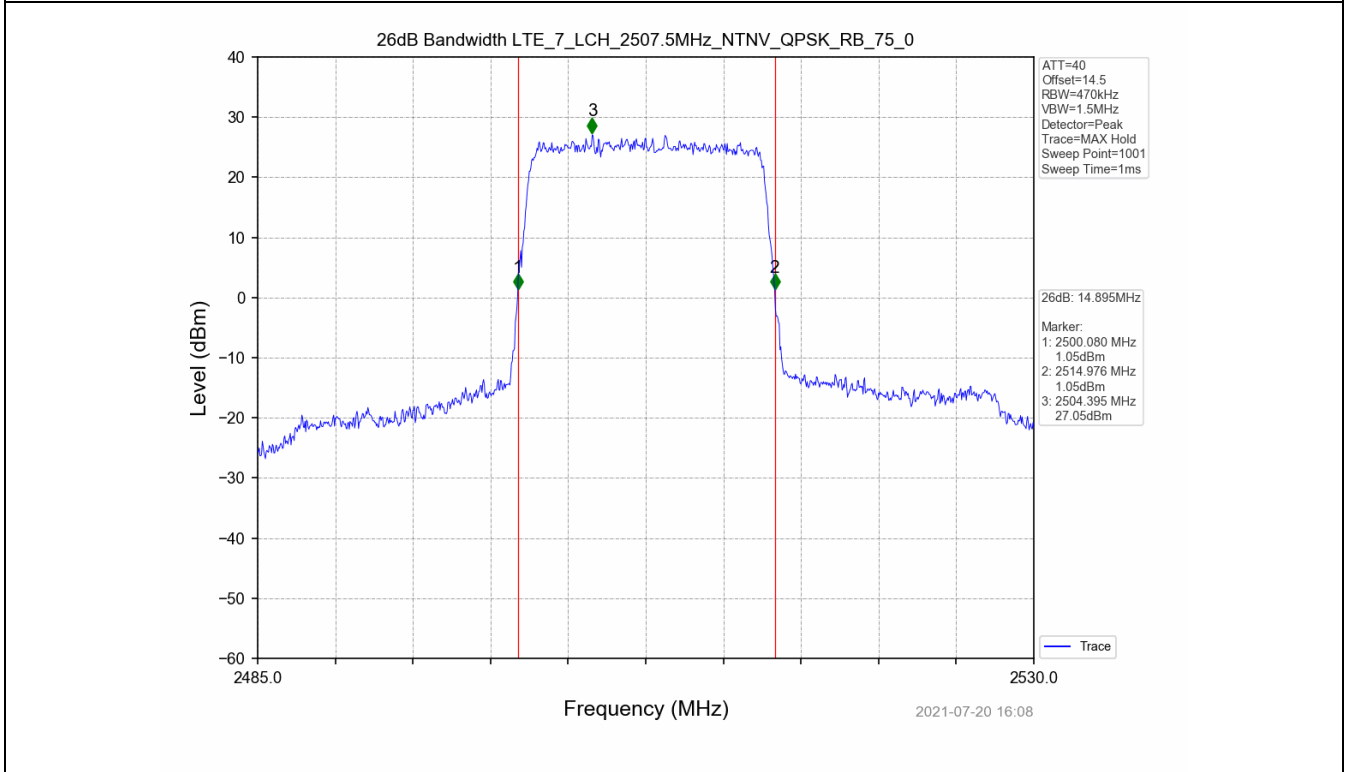
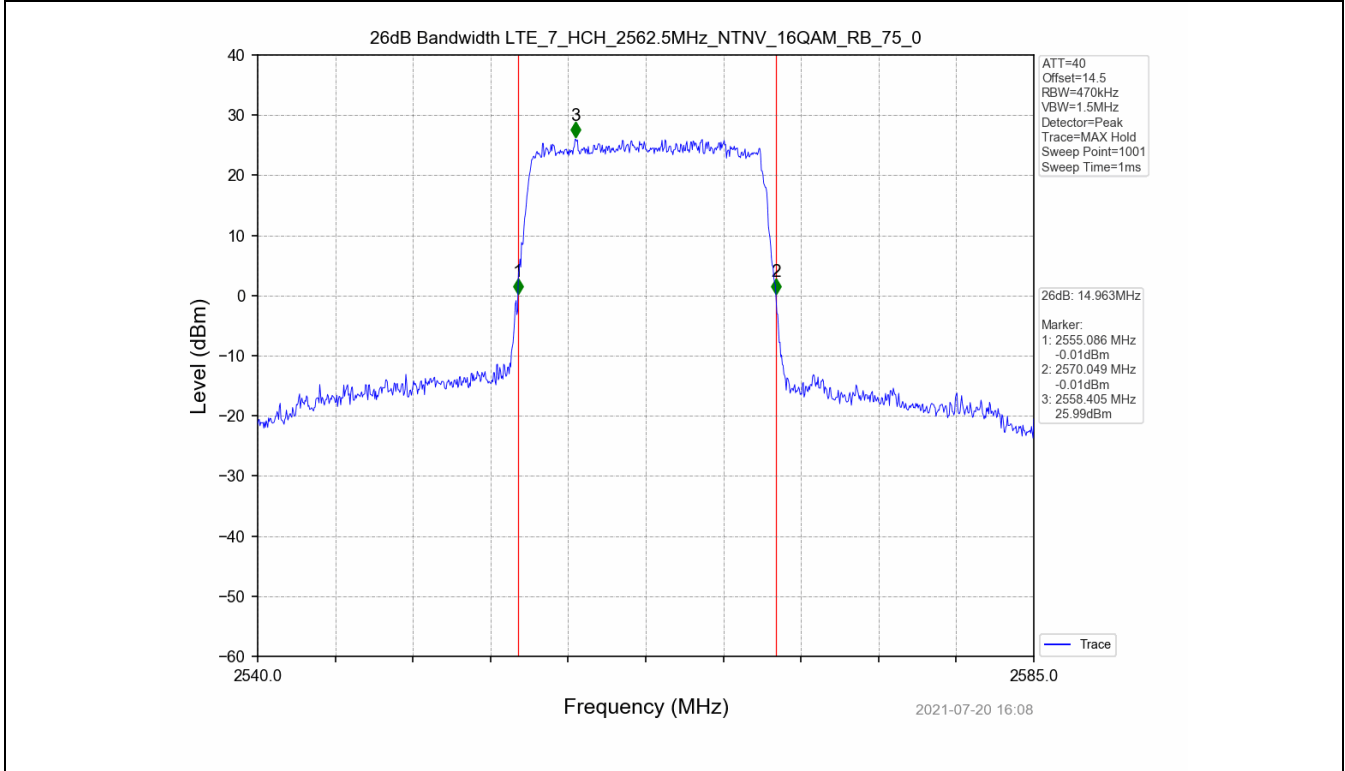


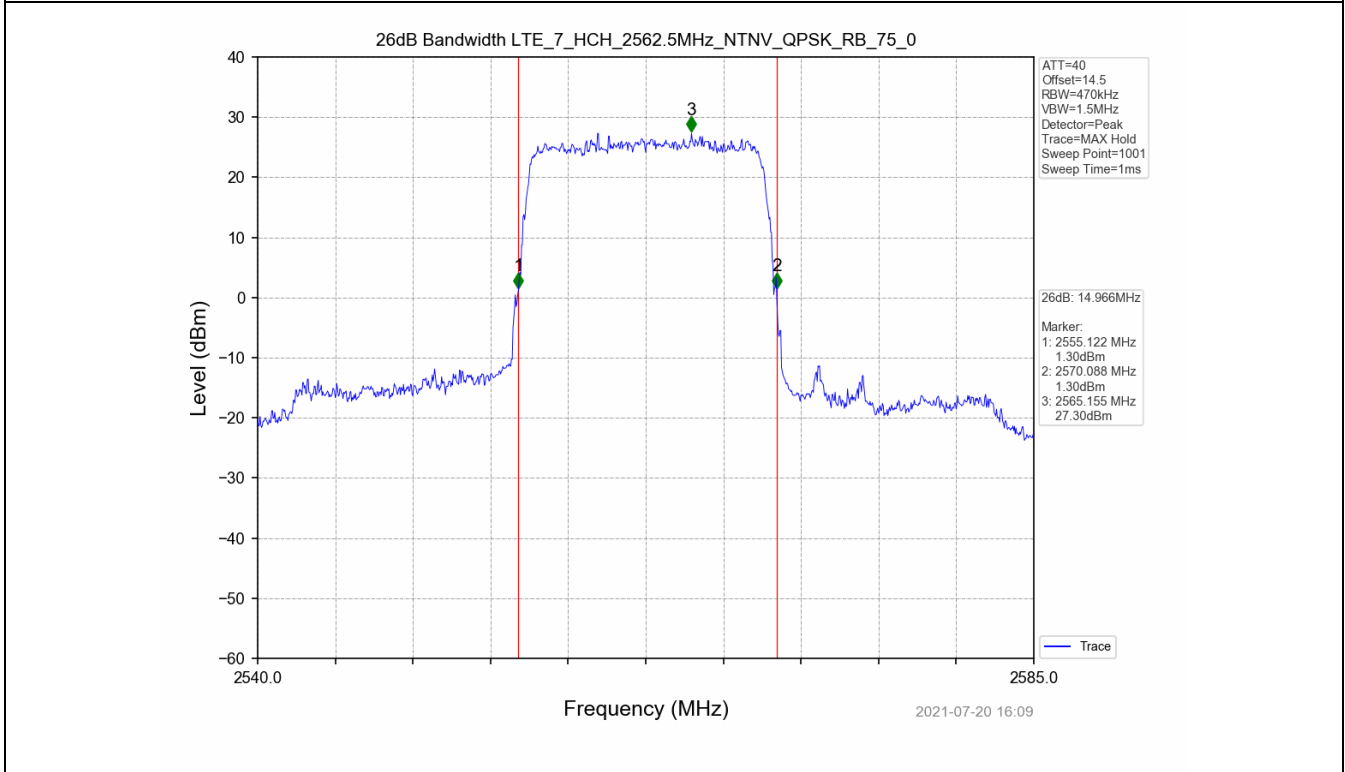
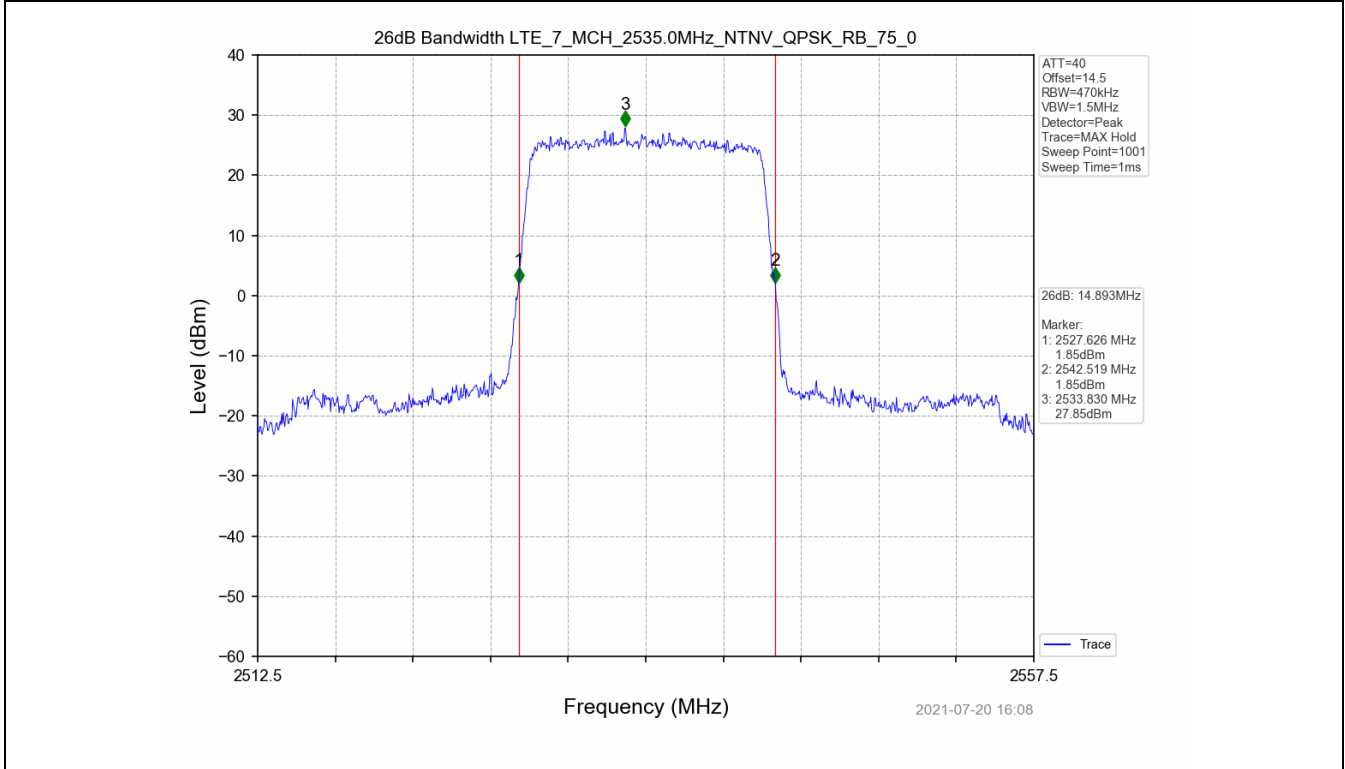


Test Band: 7 _ 15MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	75	0	14.895	14.893	14.966	N/A	PASS
16QAM	75	0	14.986	14.894	14.963	N/A	PASS

4.2 Test Graph

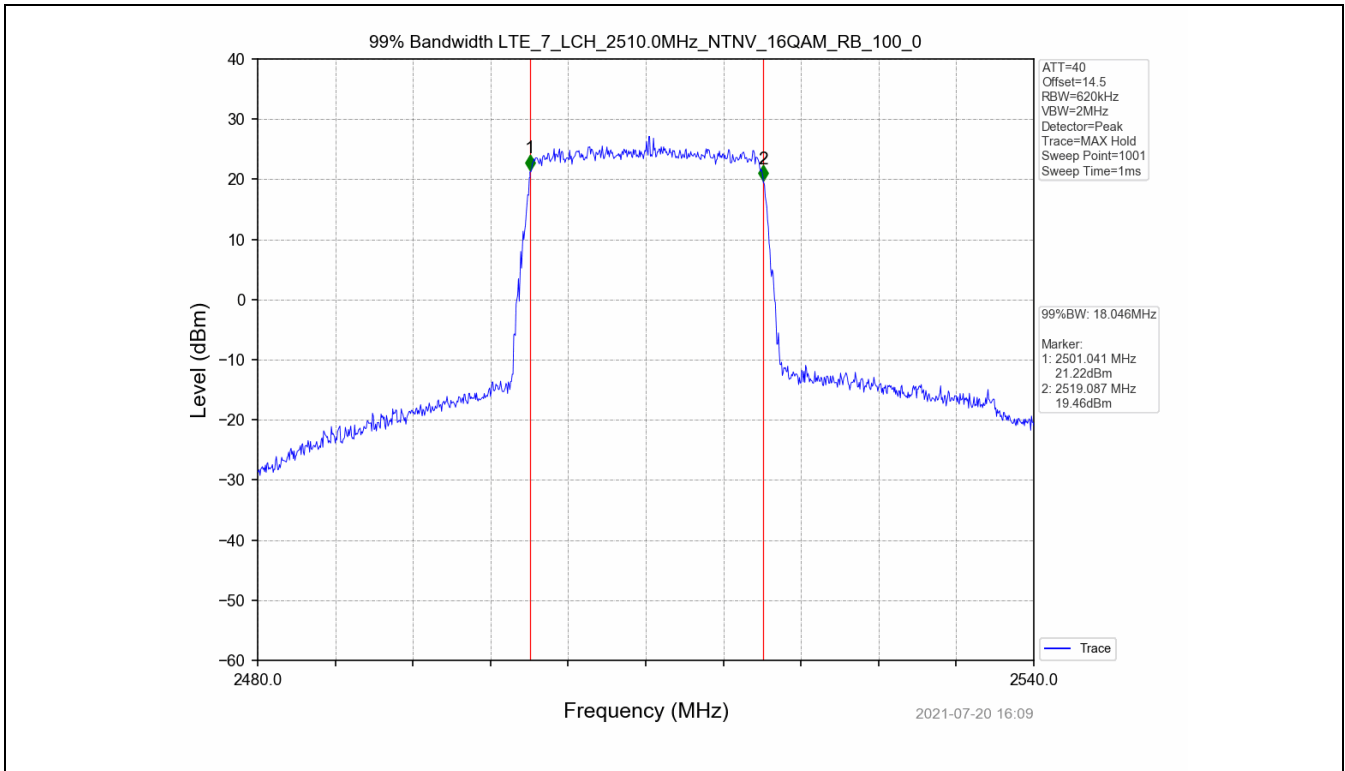




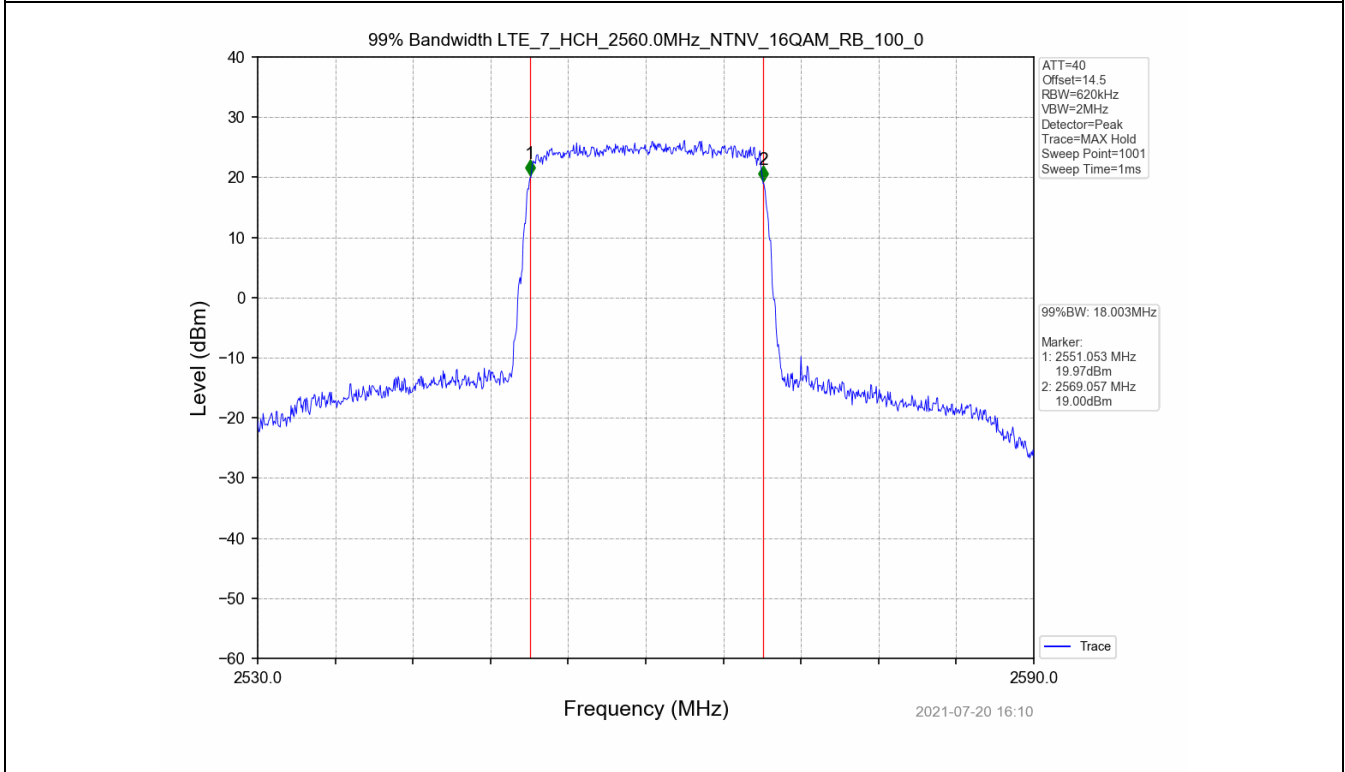
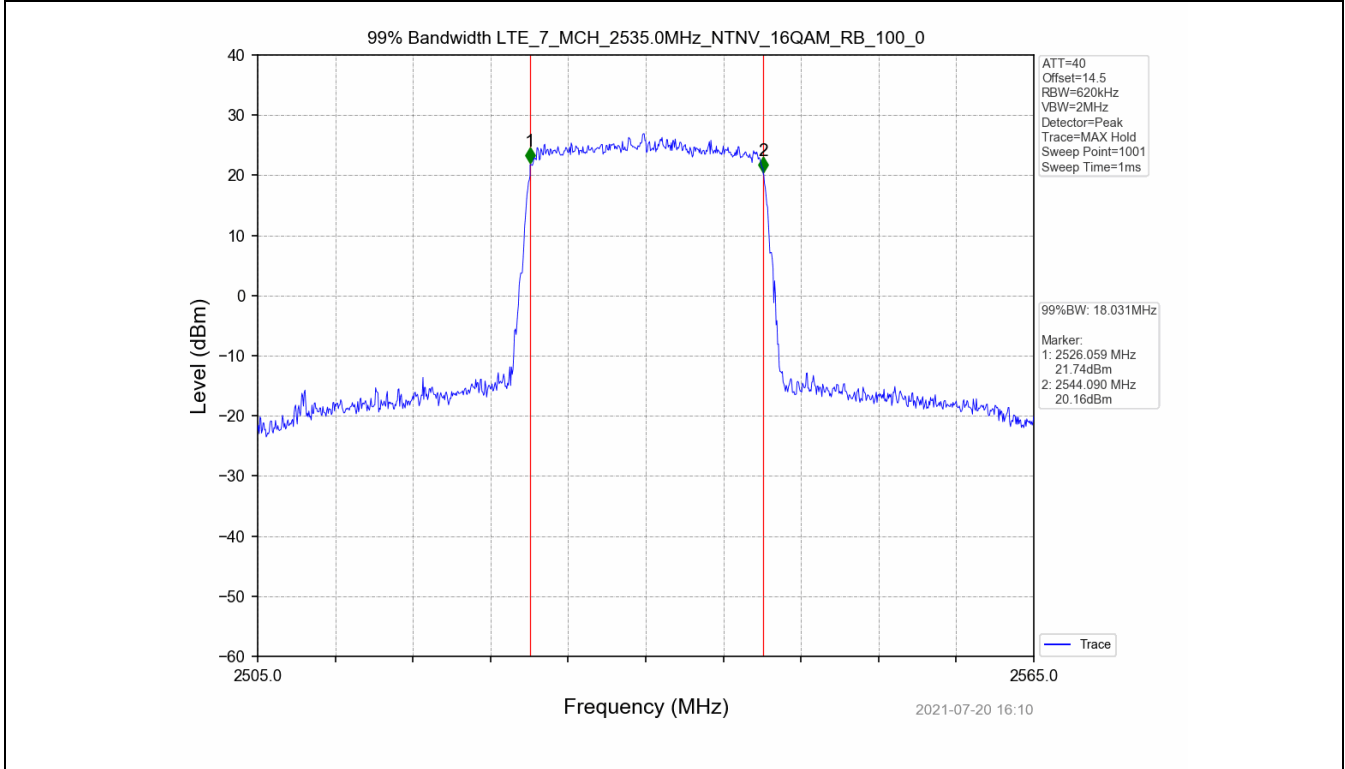


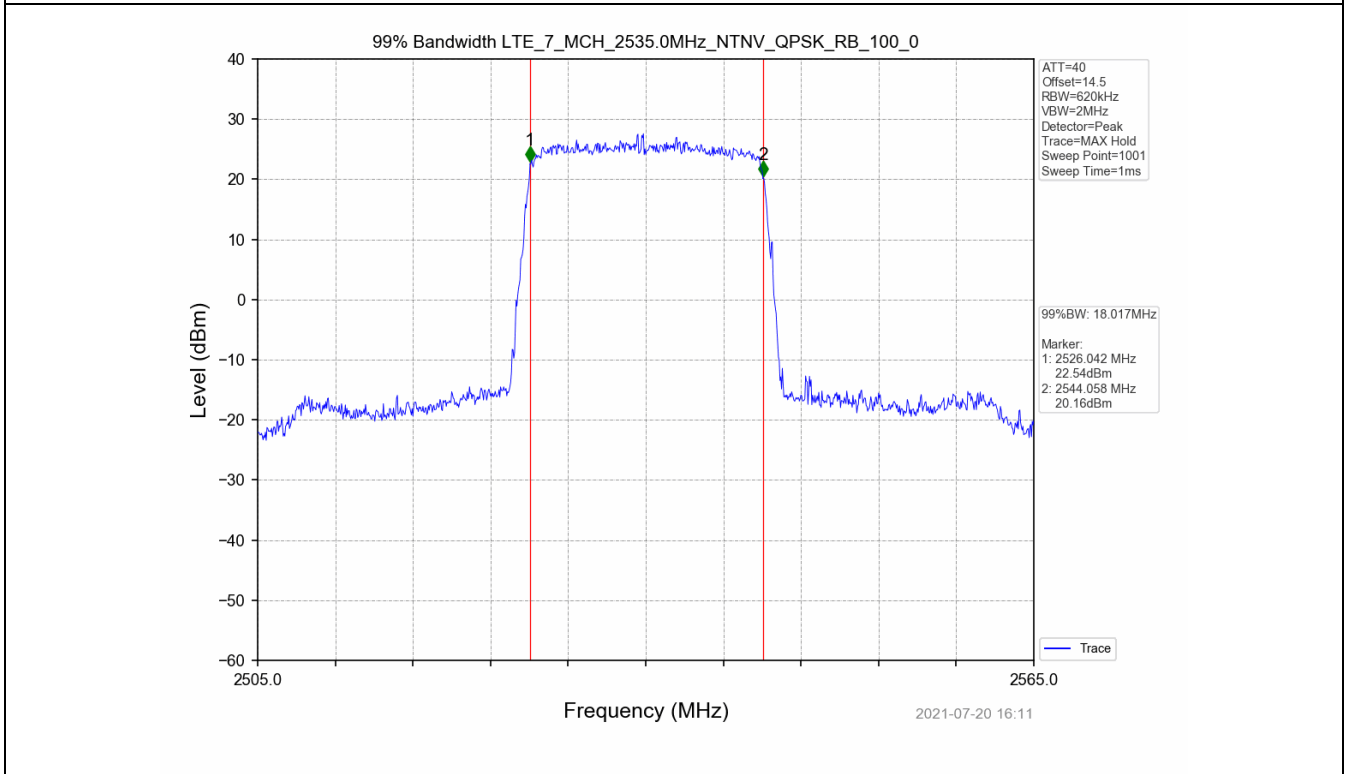
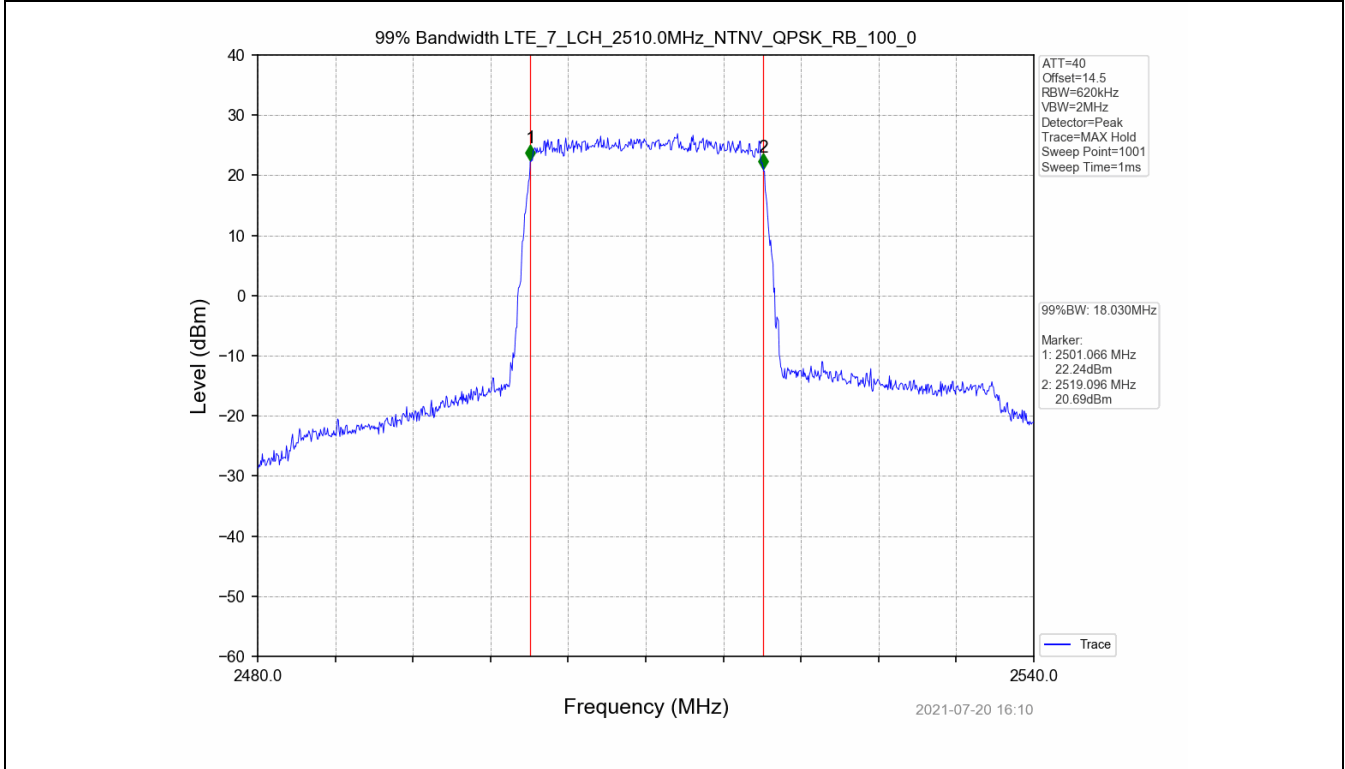
Test Band: 7 _ 20MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	100	0	18.030	18.017	18.046	N/A	PASS
16QAM	100	0	18.046	18.031	18.003	N/A	PASS

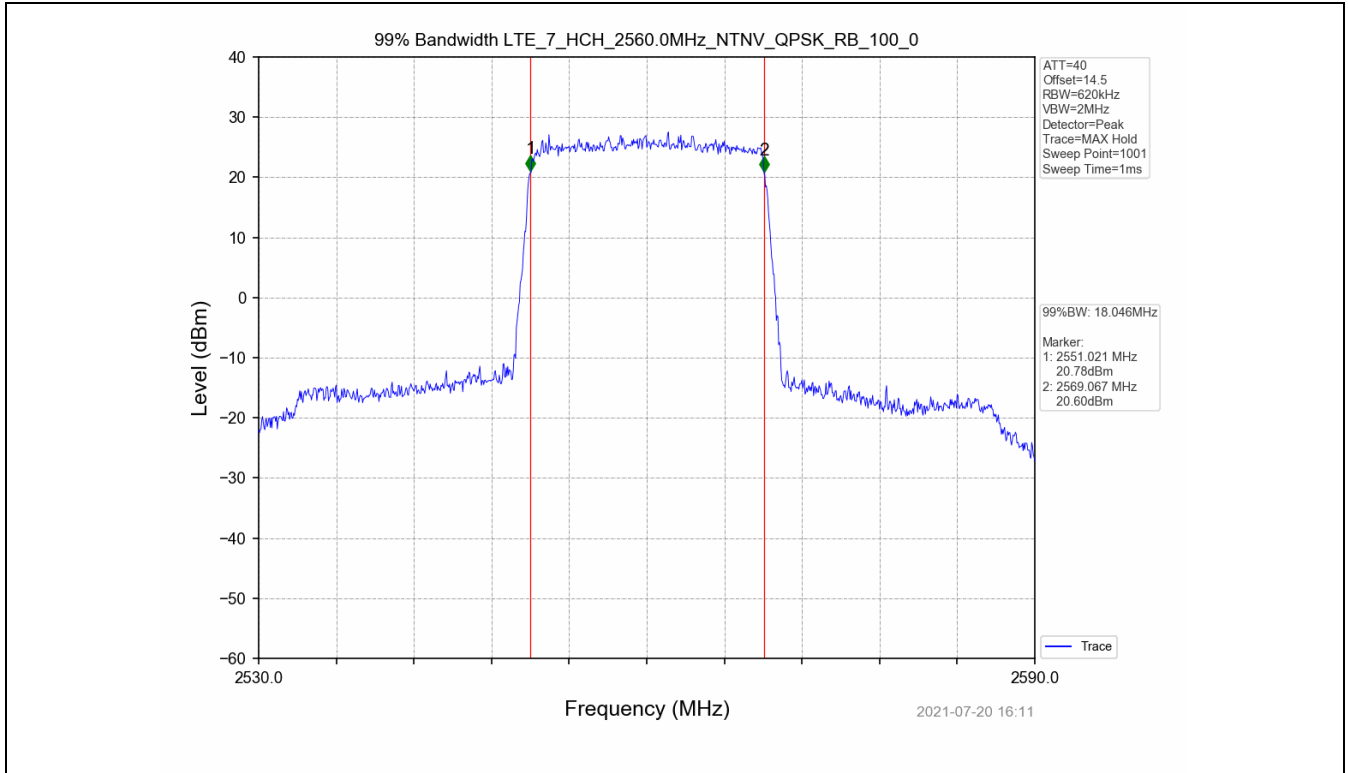
4.2 Test Graph





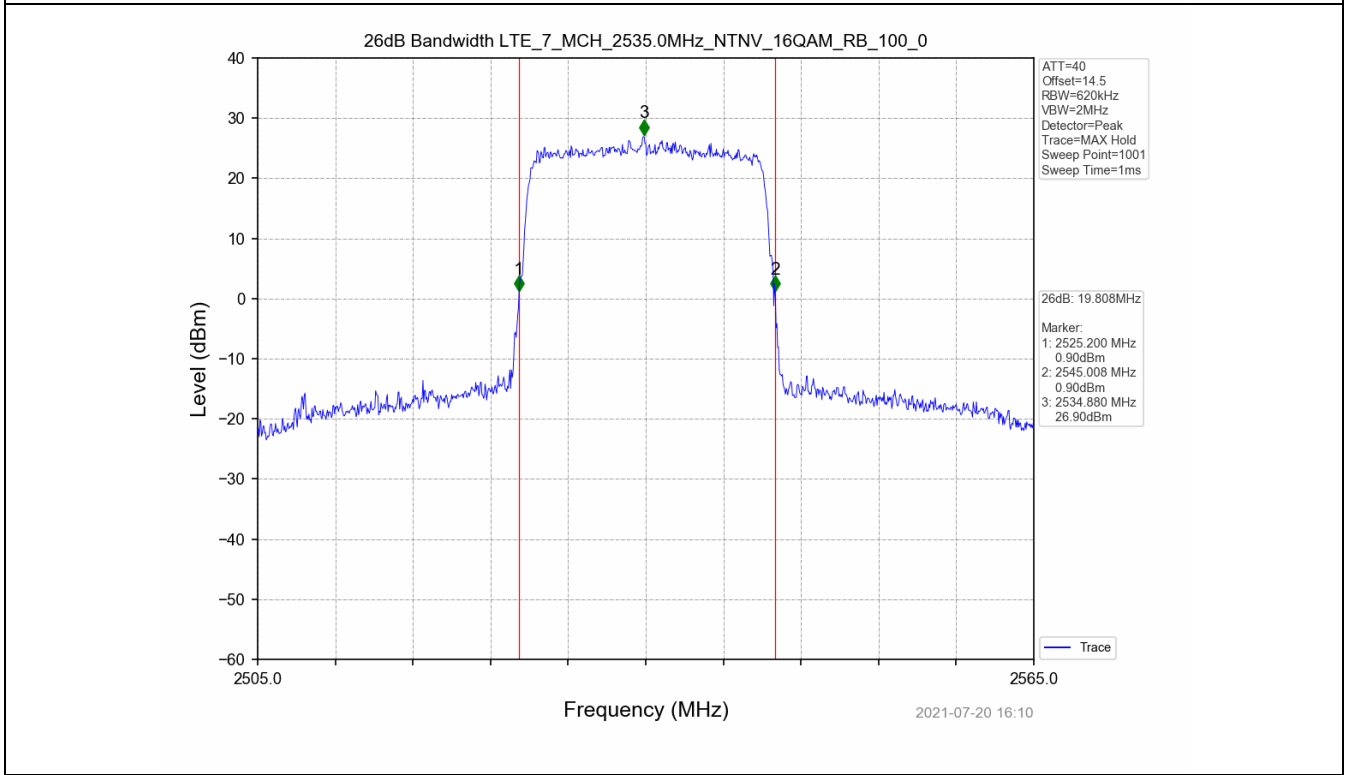
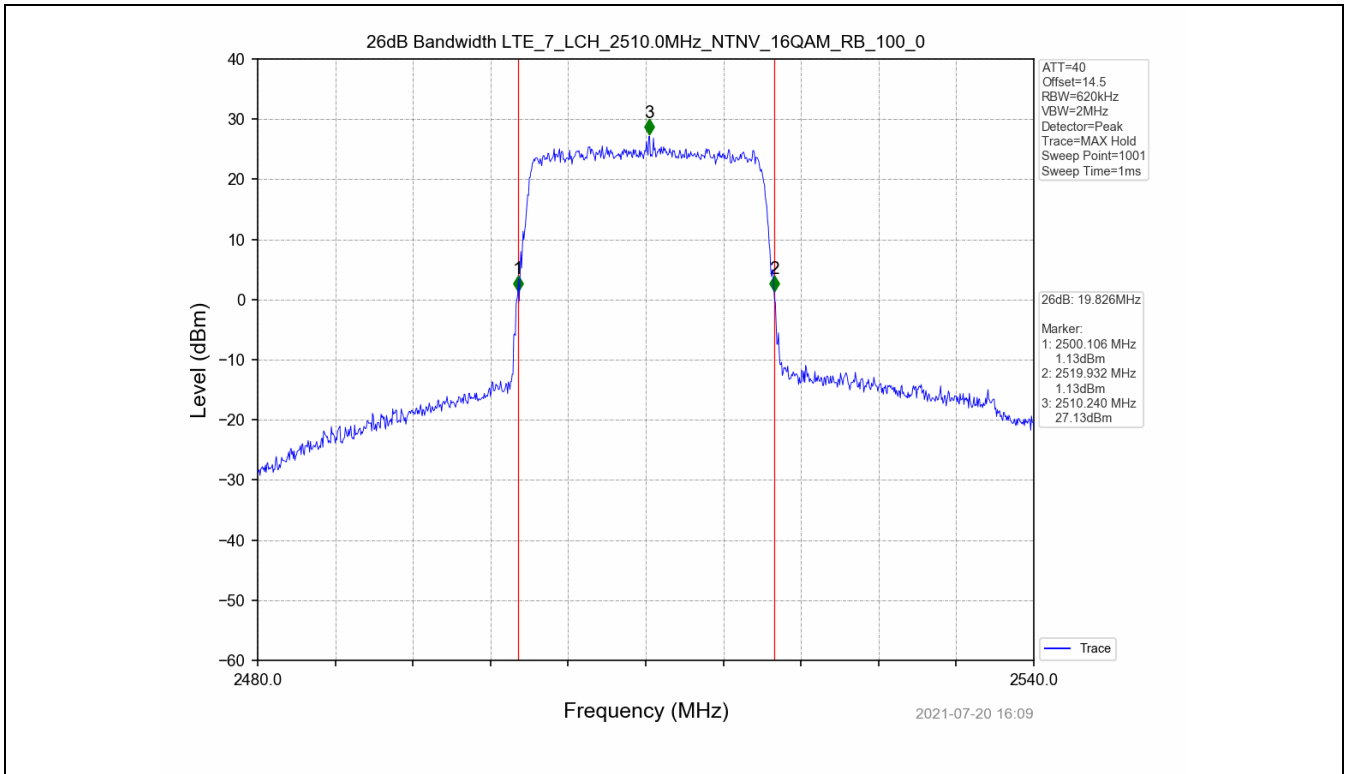


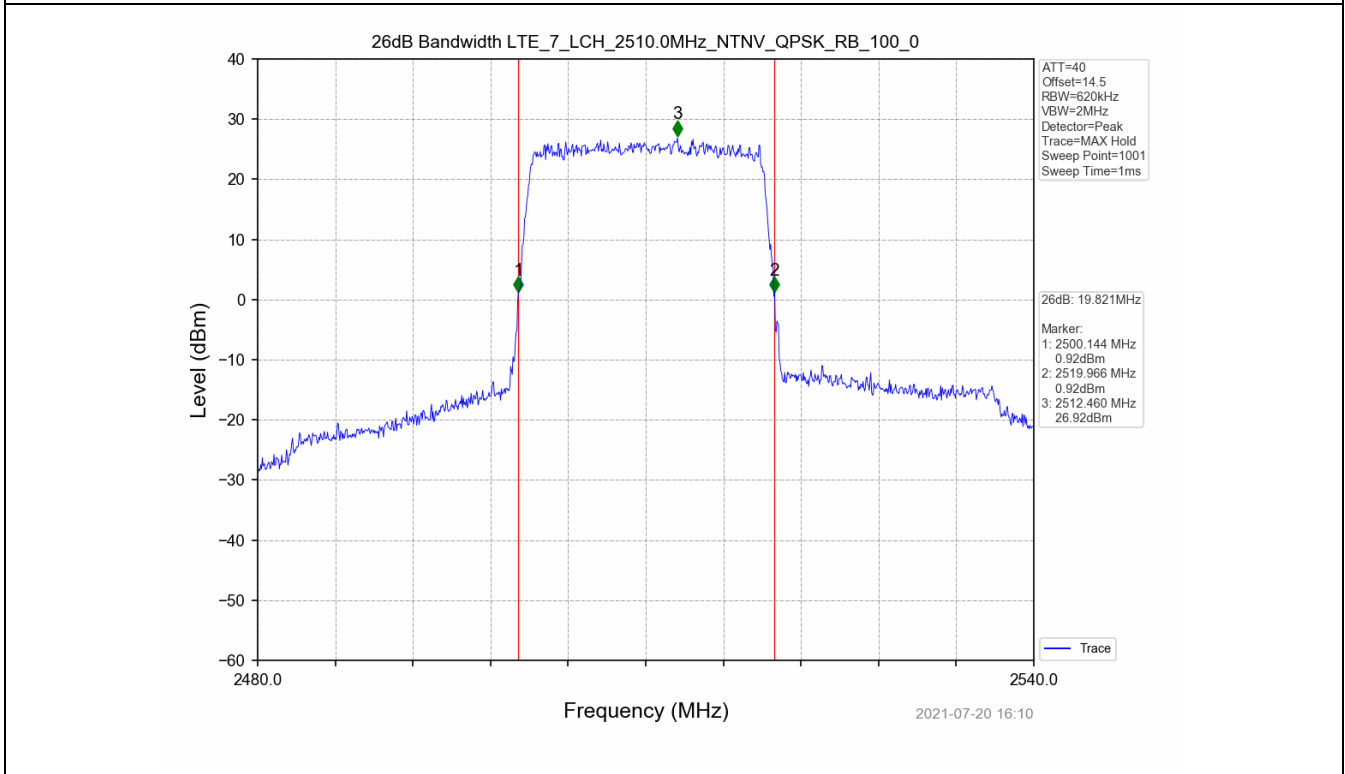
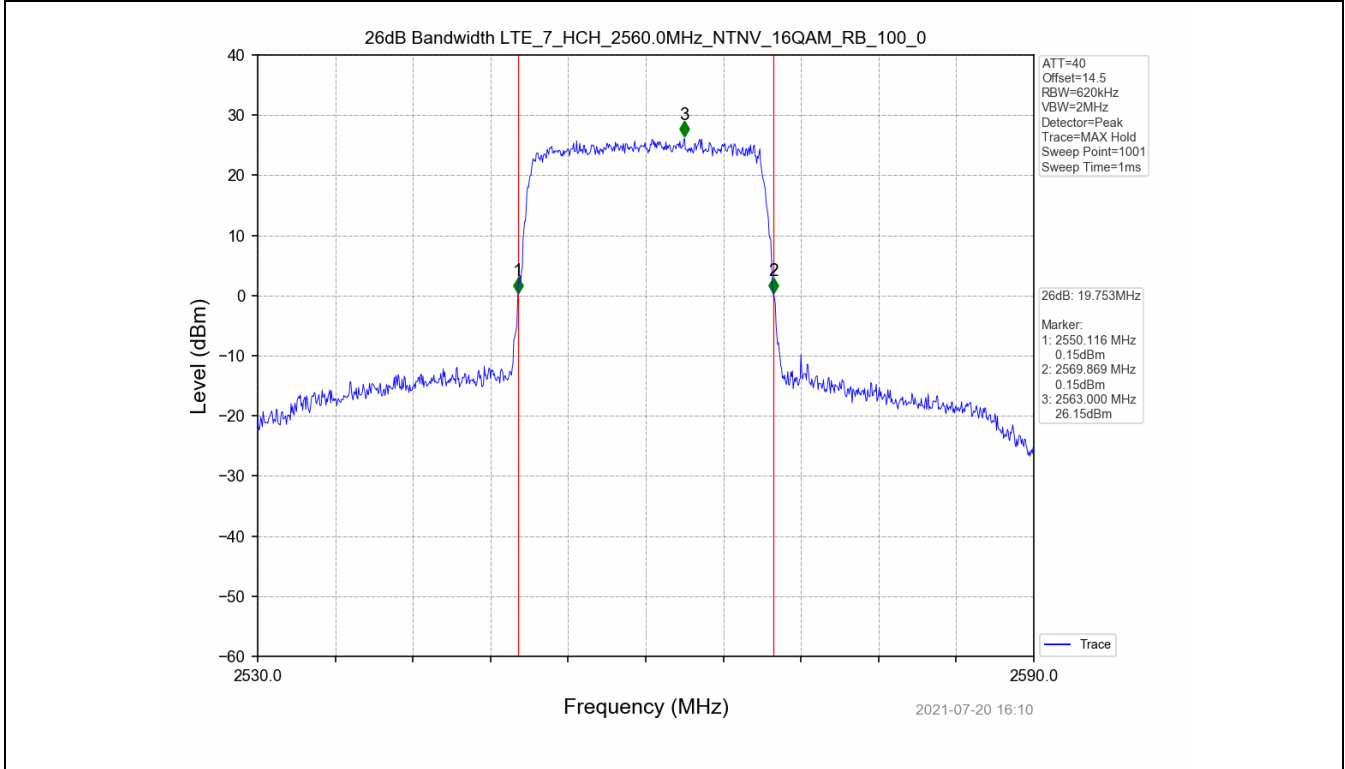


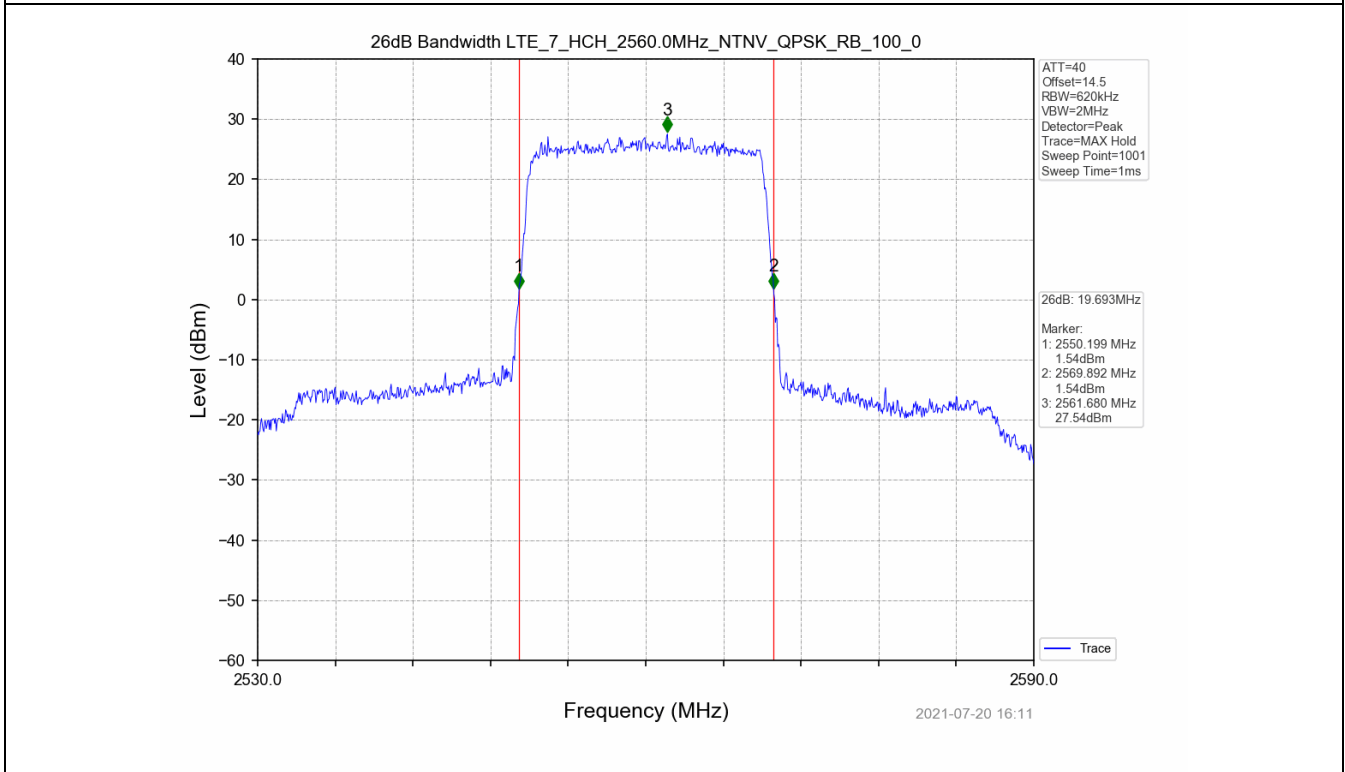
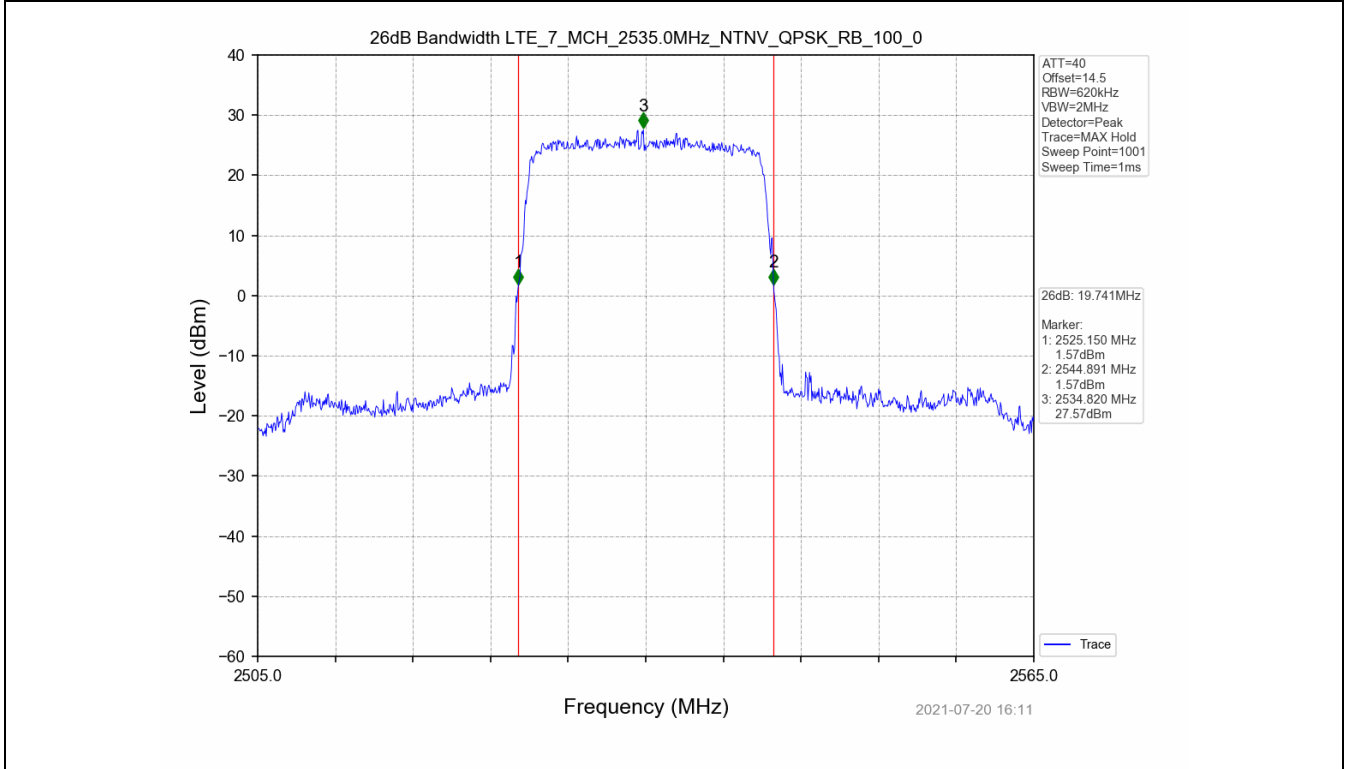


Test Band: 7 _ 20MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	100	0	19.821	19.741	19.693	N/A	PASS
16QAM	100	0	19.826	19.808	19.753	N/A	PASS

4.2 Test Graph





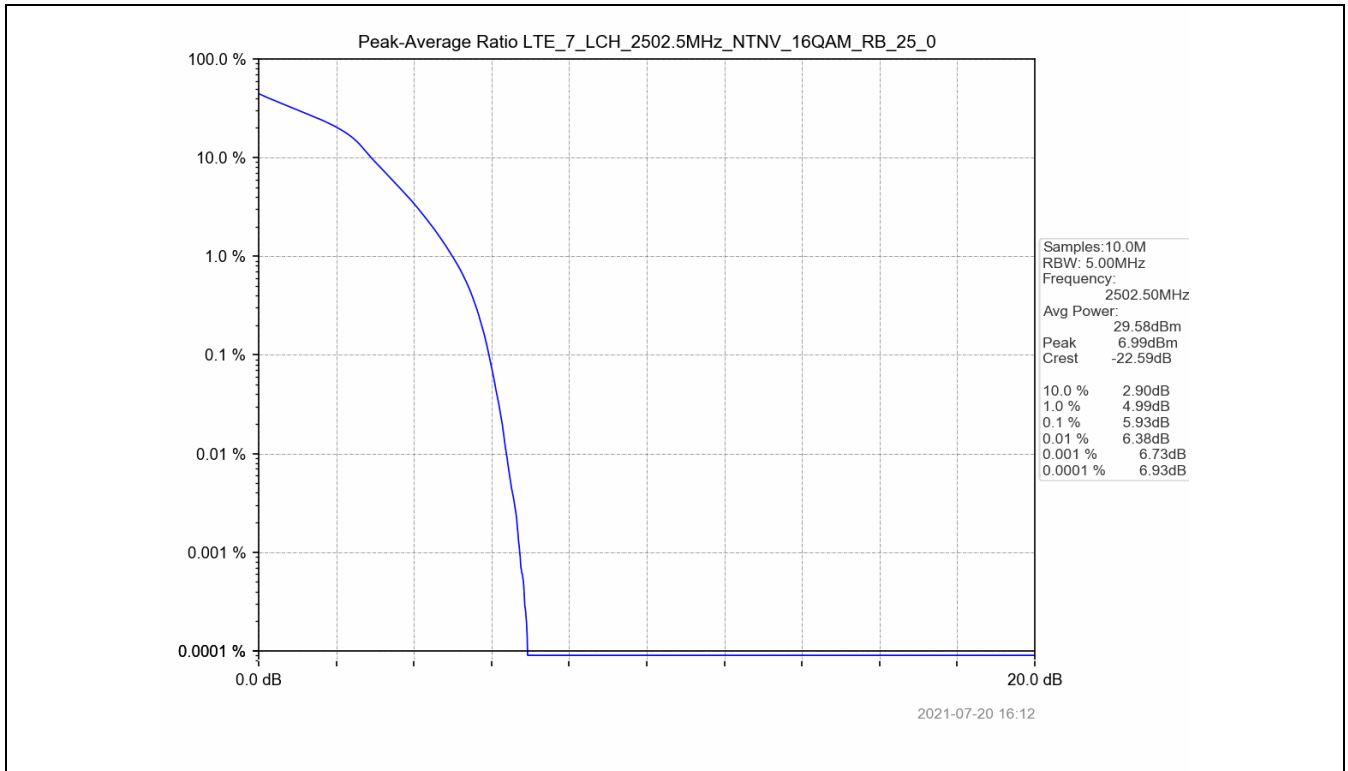


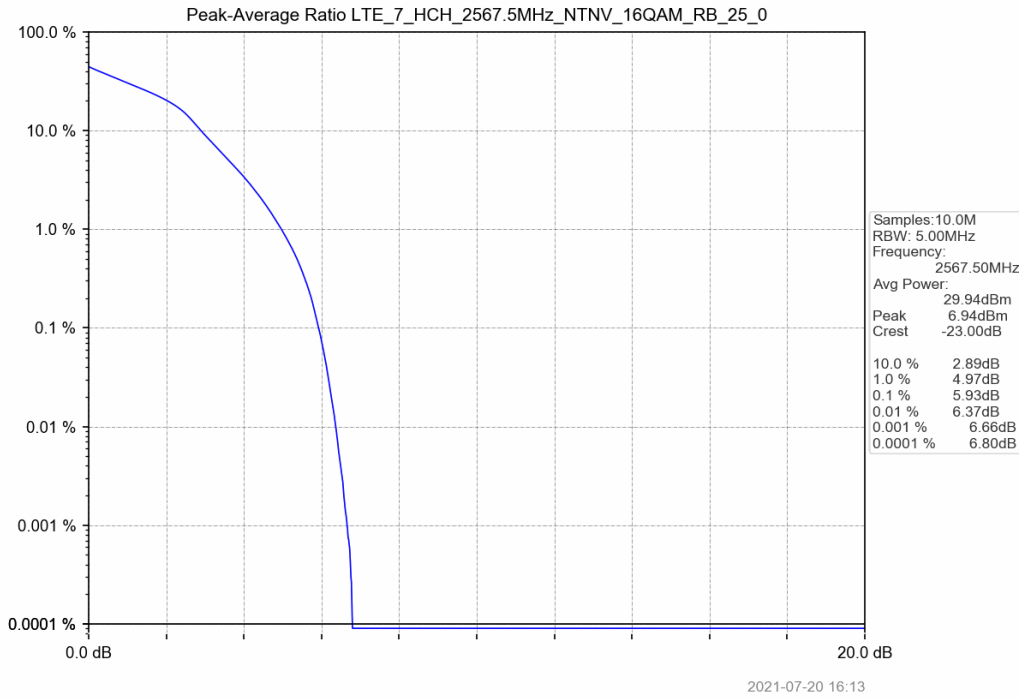
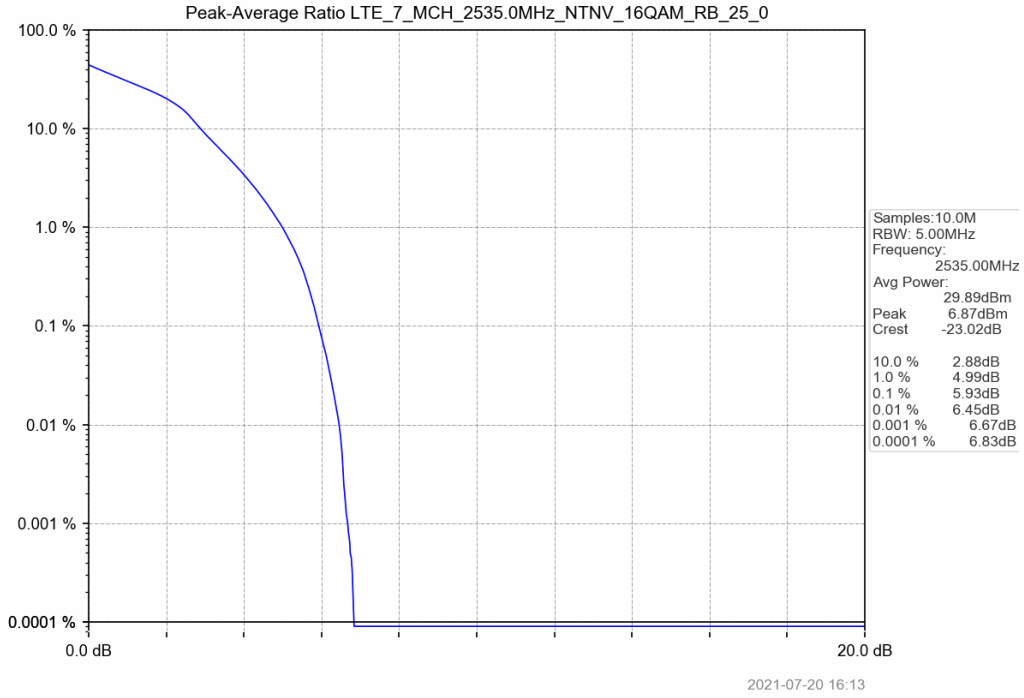
5. Peak-Average Ratio

5.1 Test Result

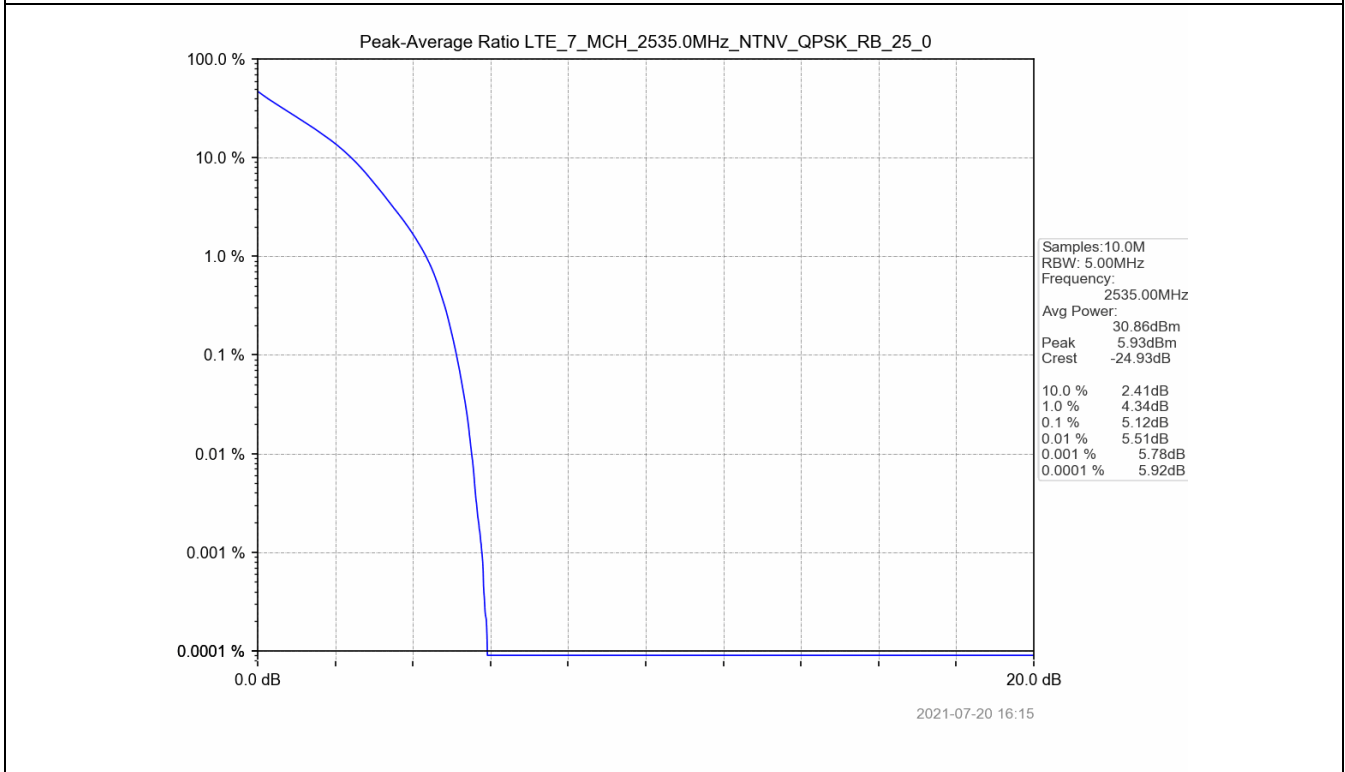
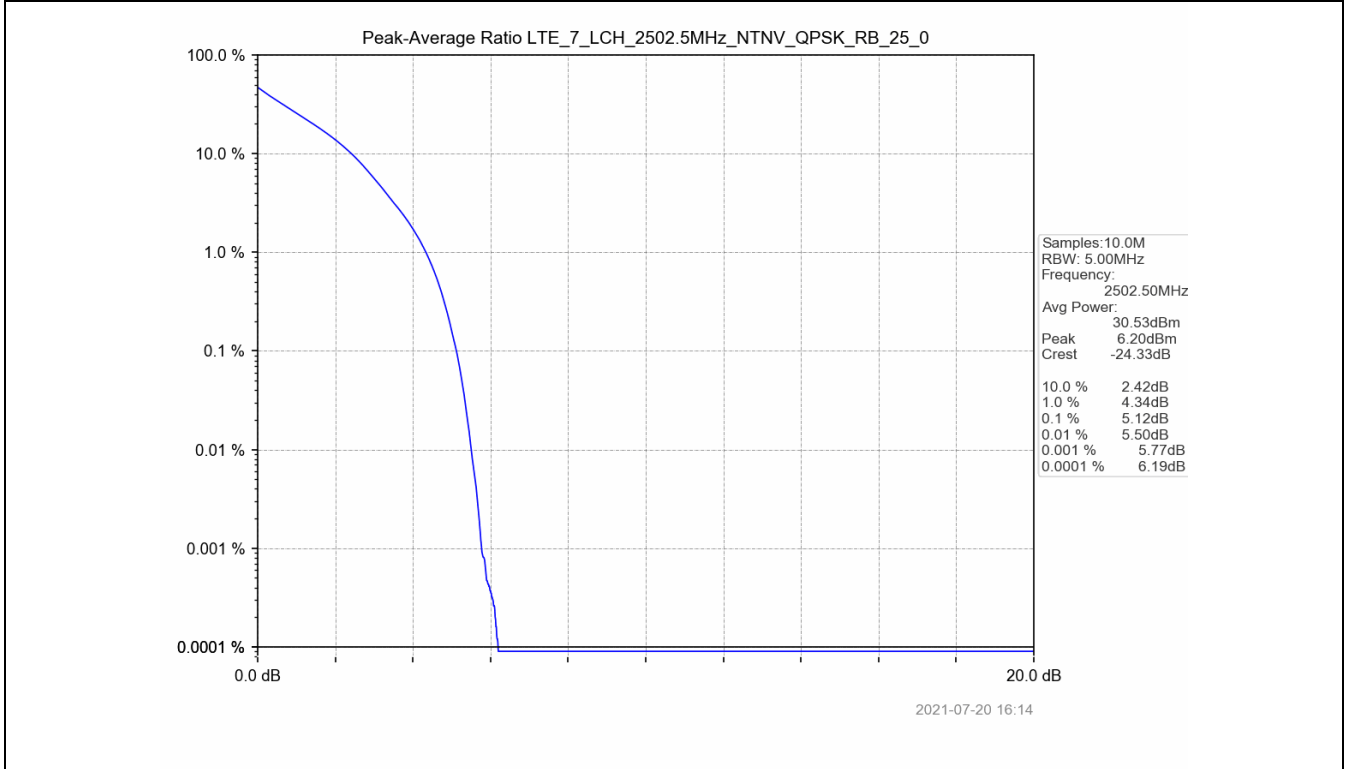
Test Band: 7 _ 5MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	25	0	5.12	5.12	5.13	13	PASS
16QAM	25	0	5.93	5.93	5.93	13	PASS

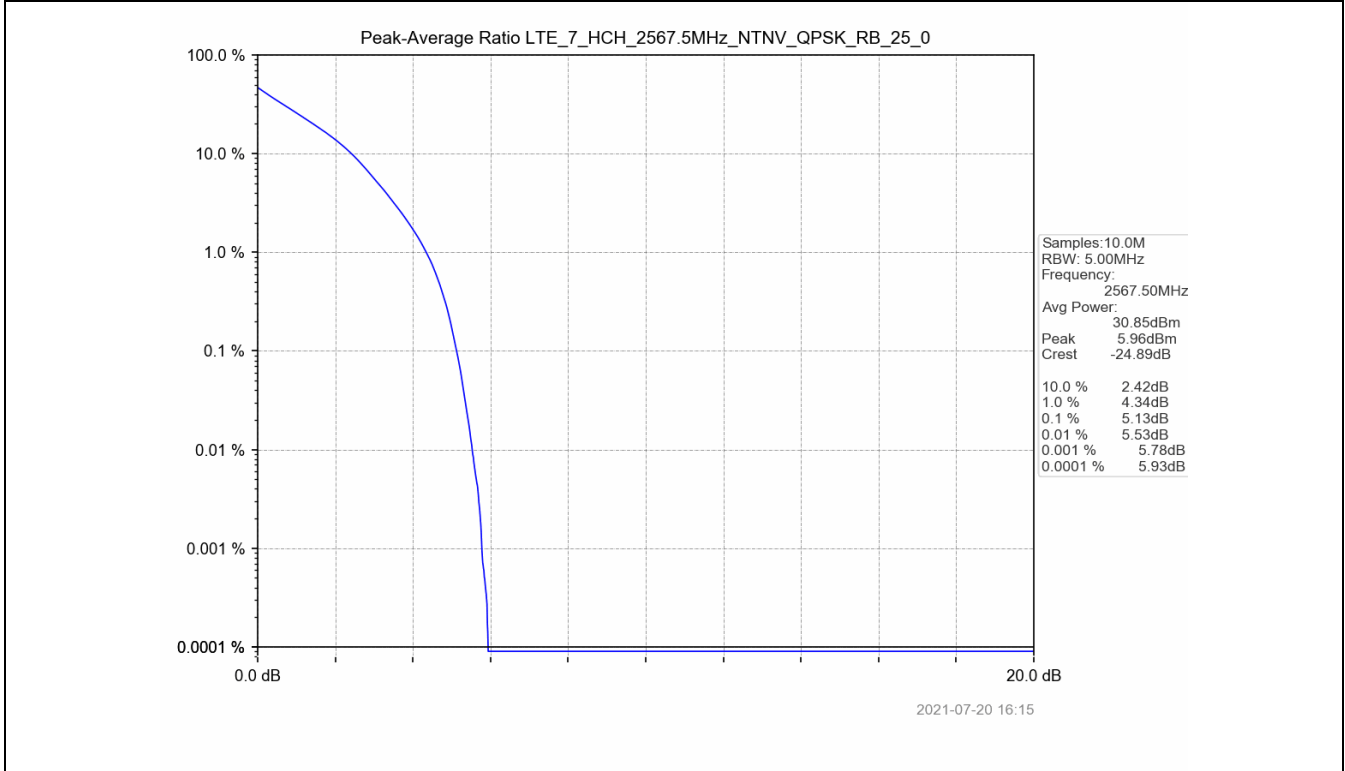
5.2 Test Graph





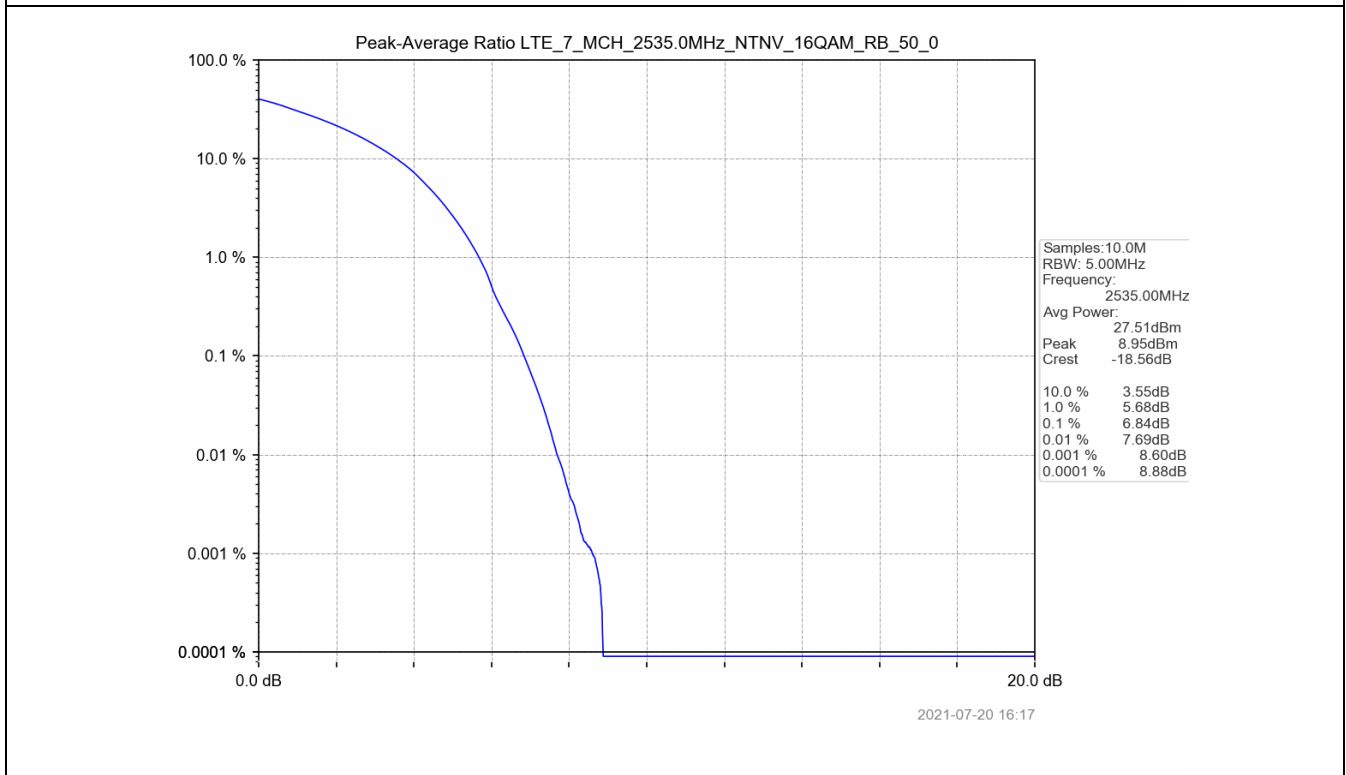
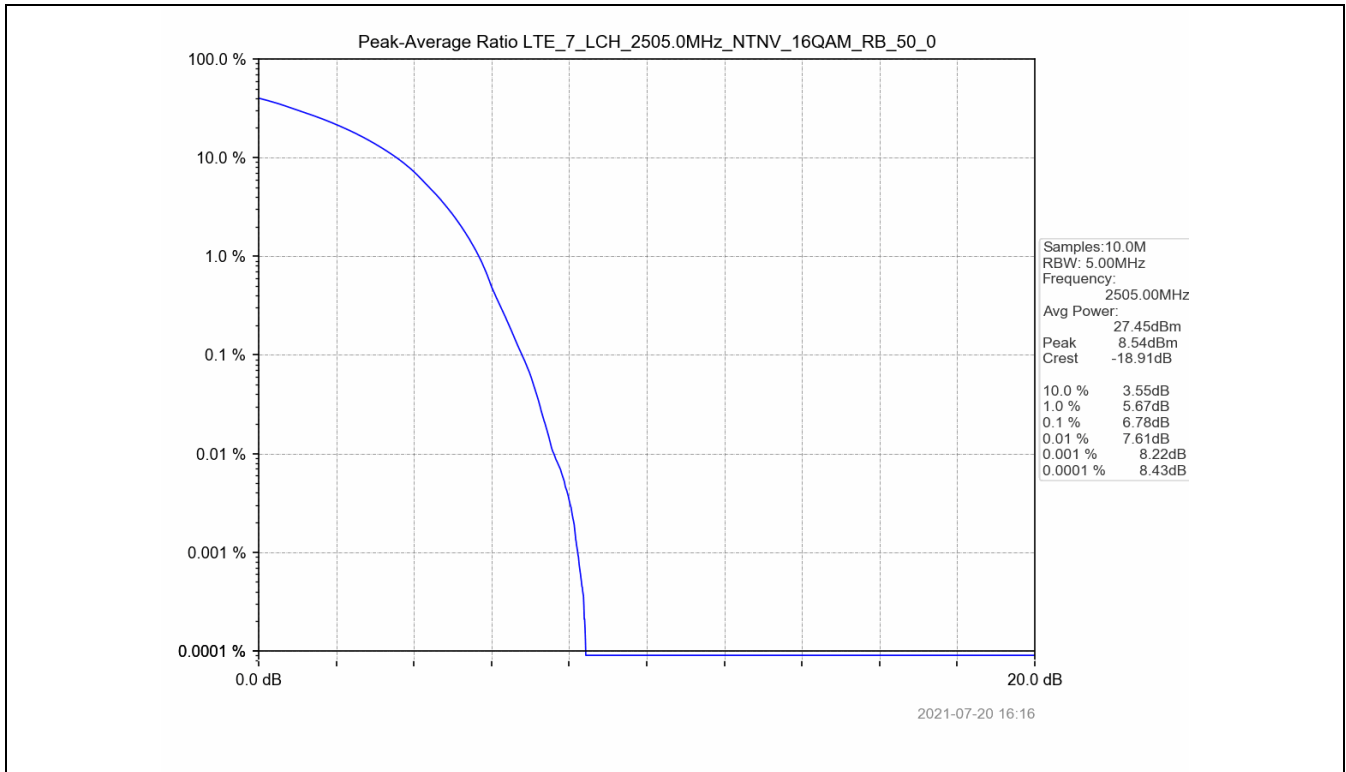


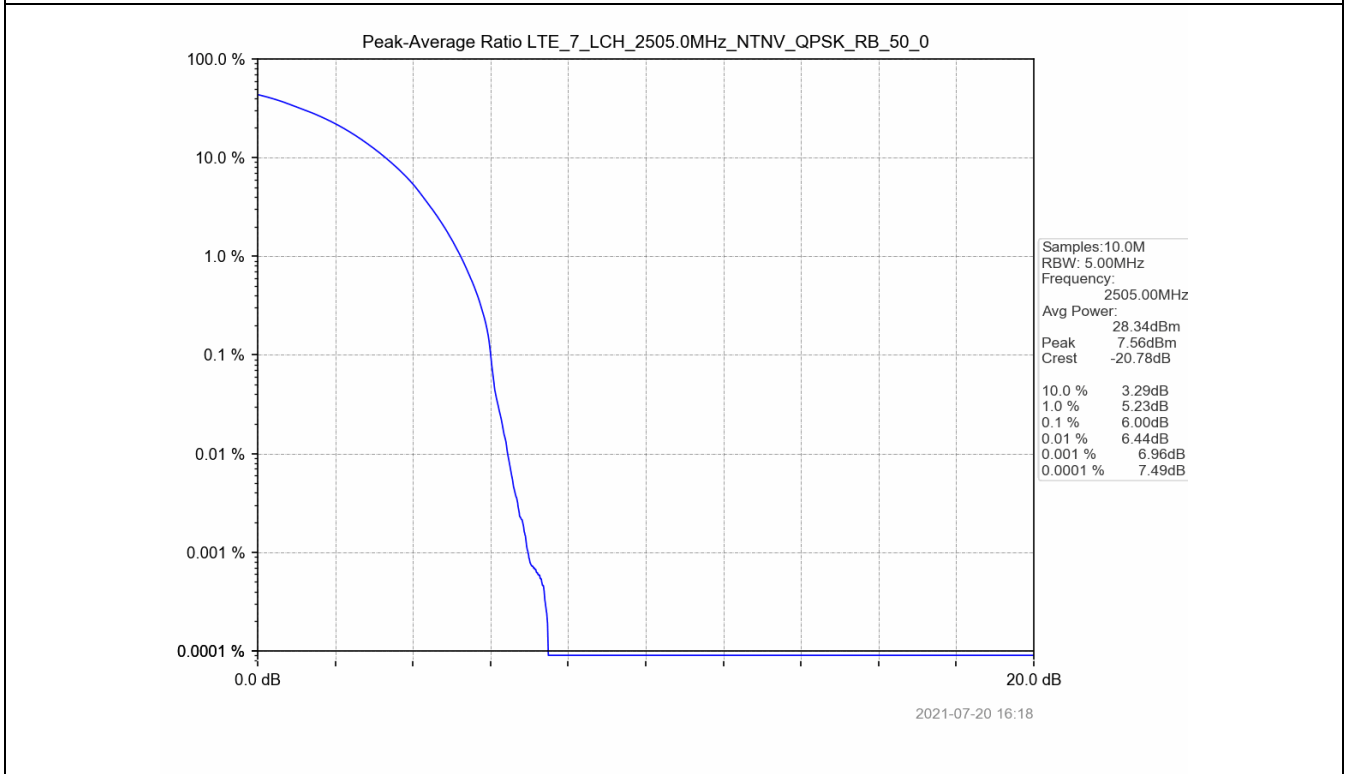
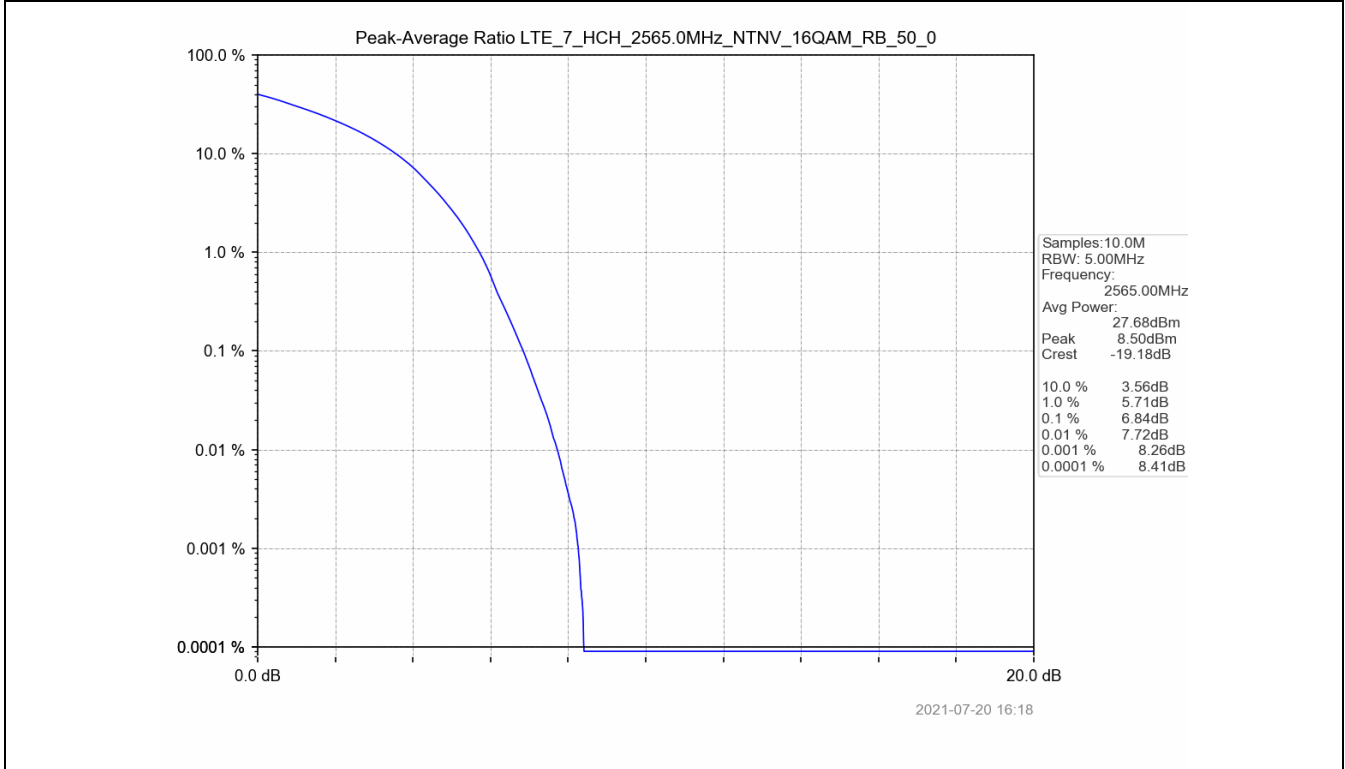


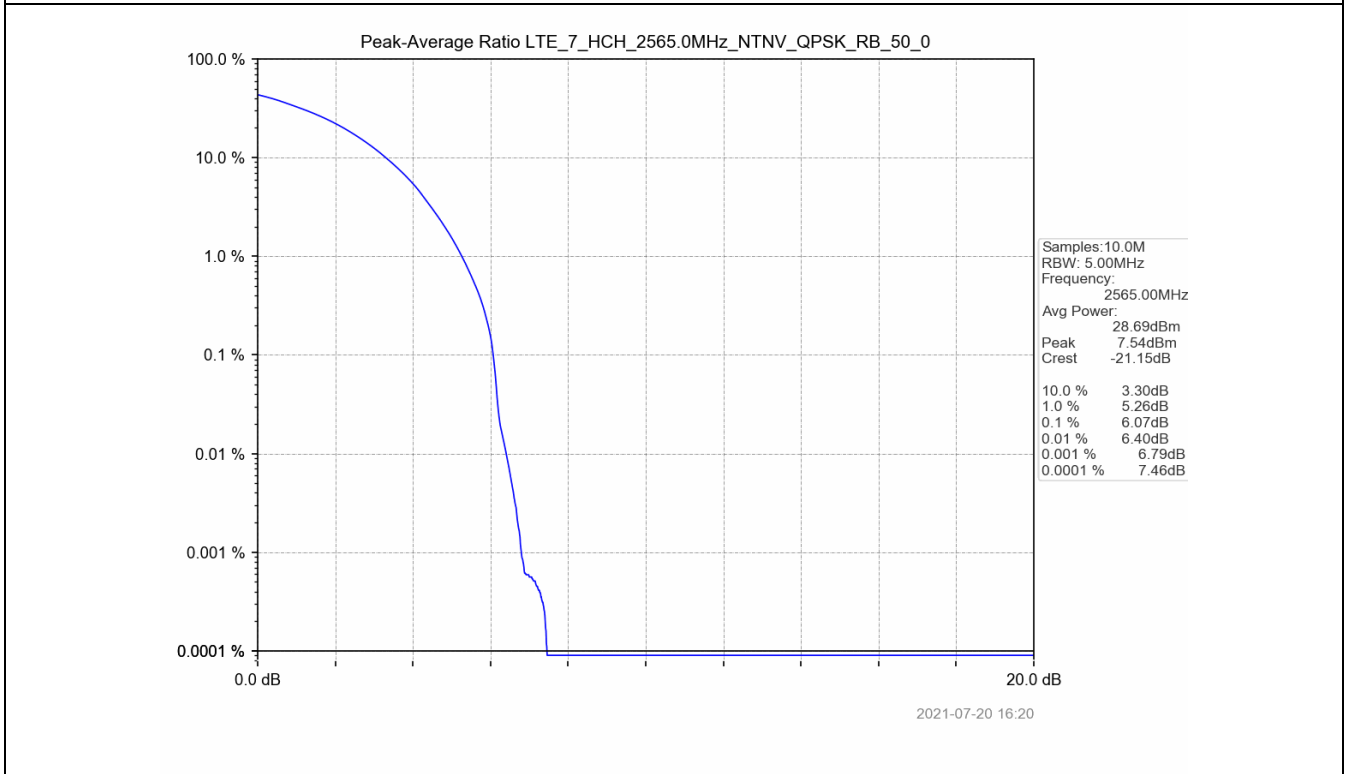
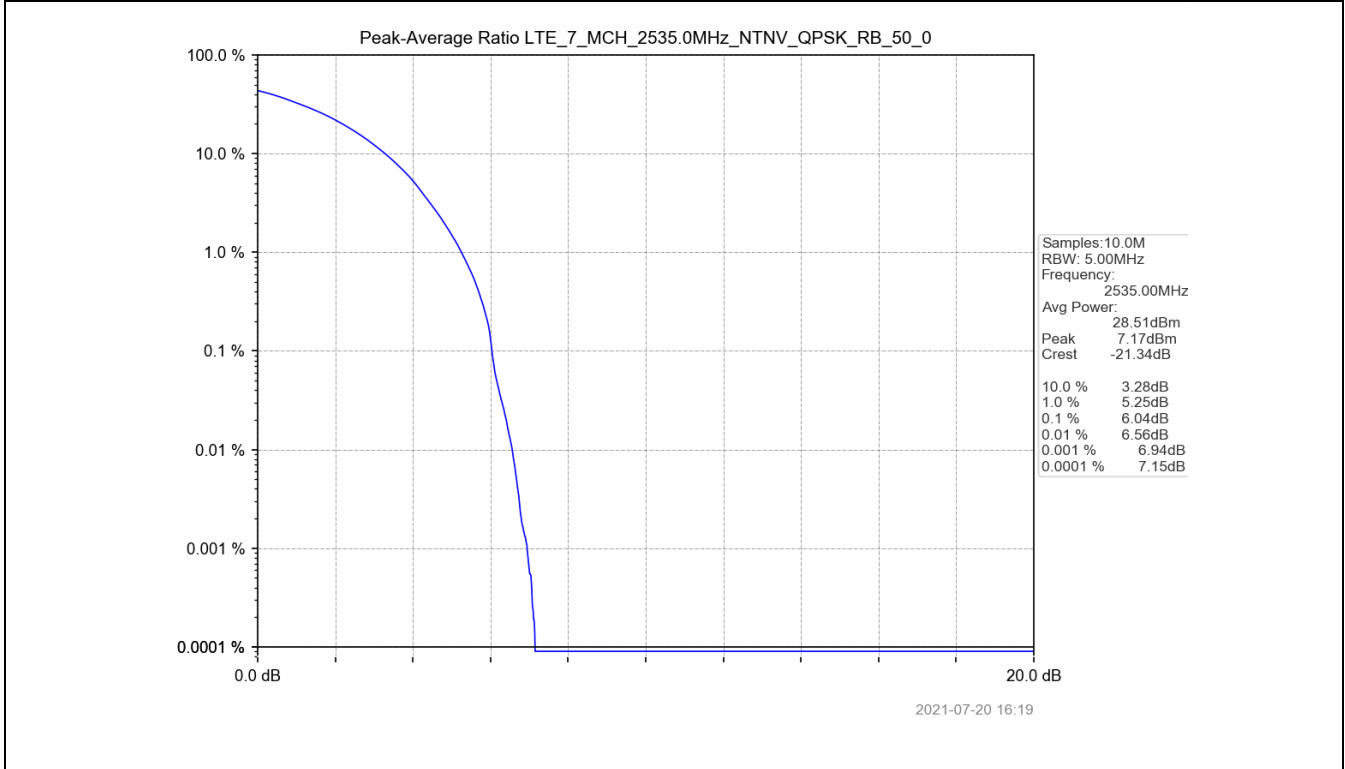


Test Band: 7 _ 10MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	50	0	6.00	6.04	6.07	13	PASS
16QAM	50	0	6.78	6.84	6.84	13	PASS

5.2 Test Graph

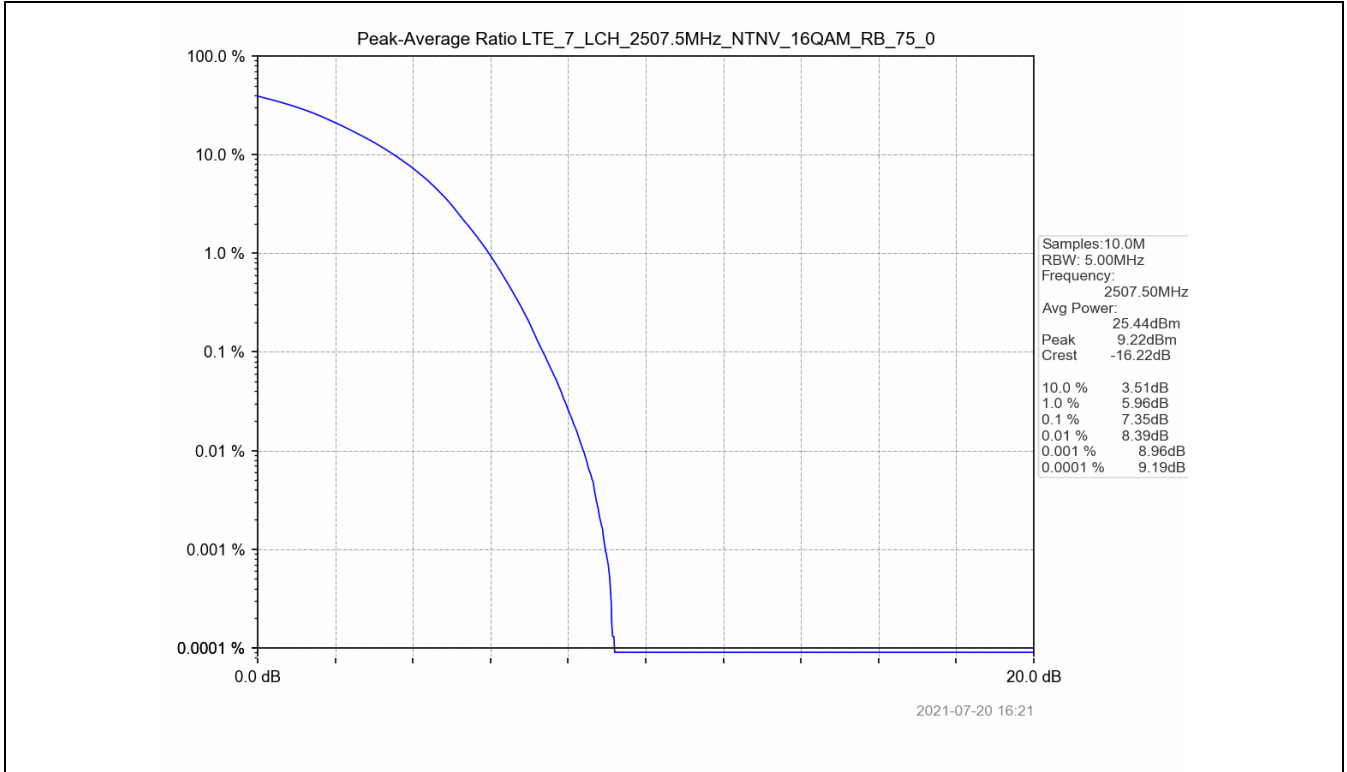


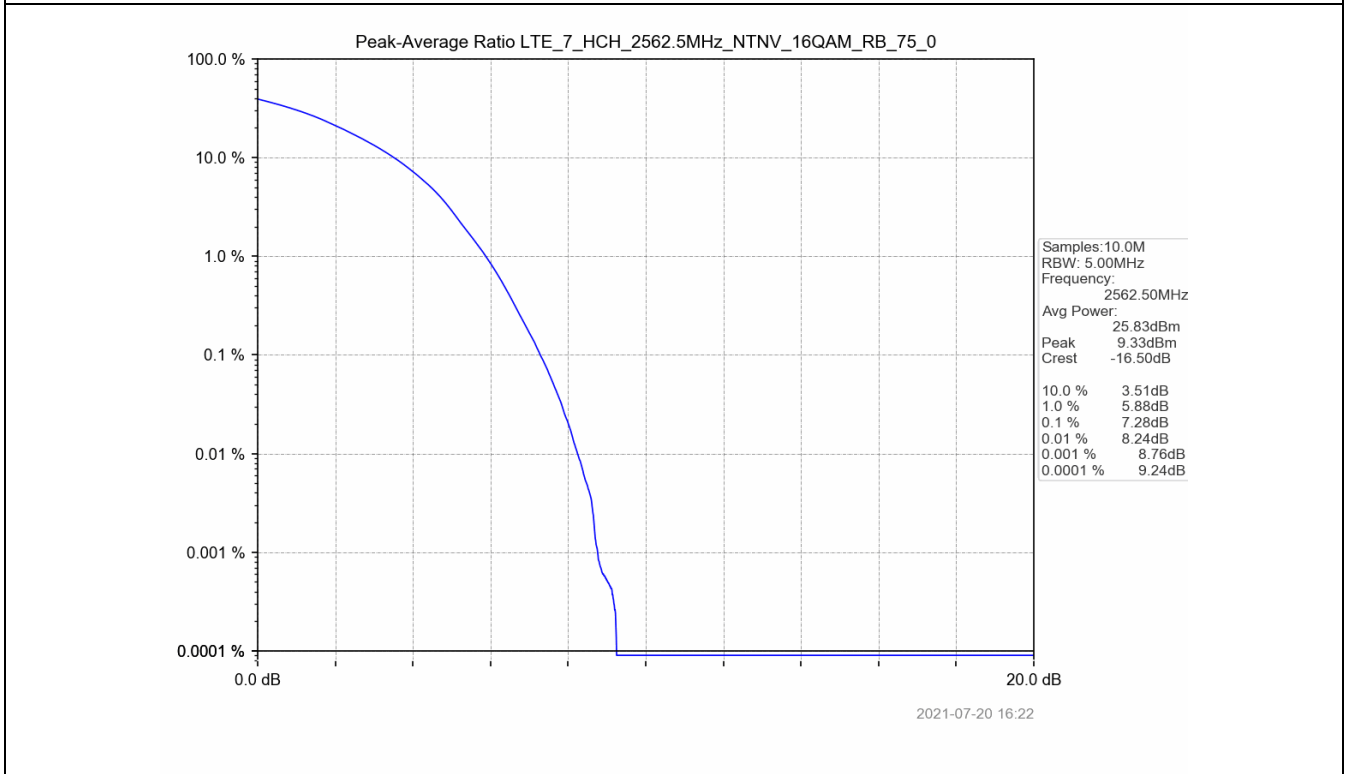
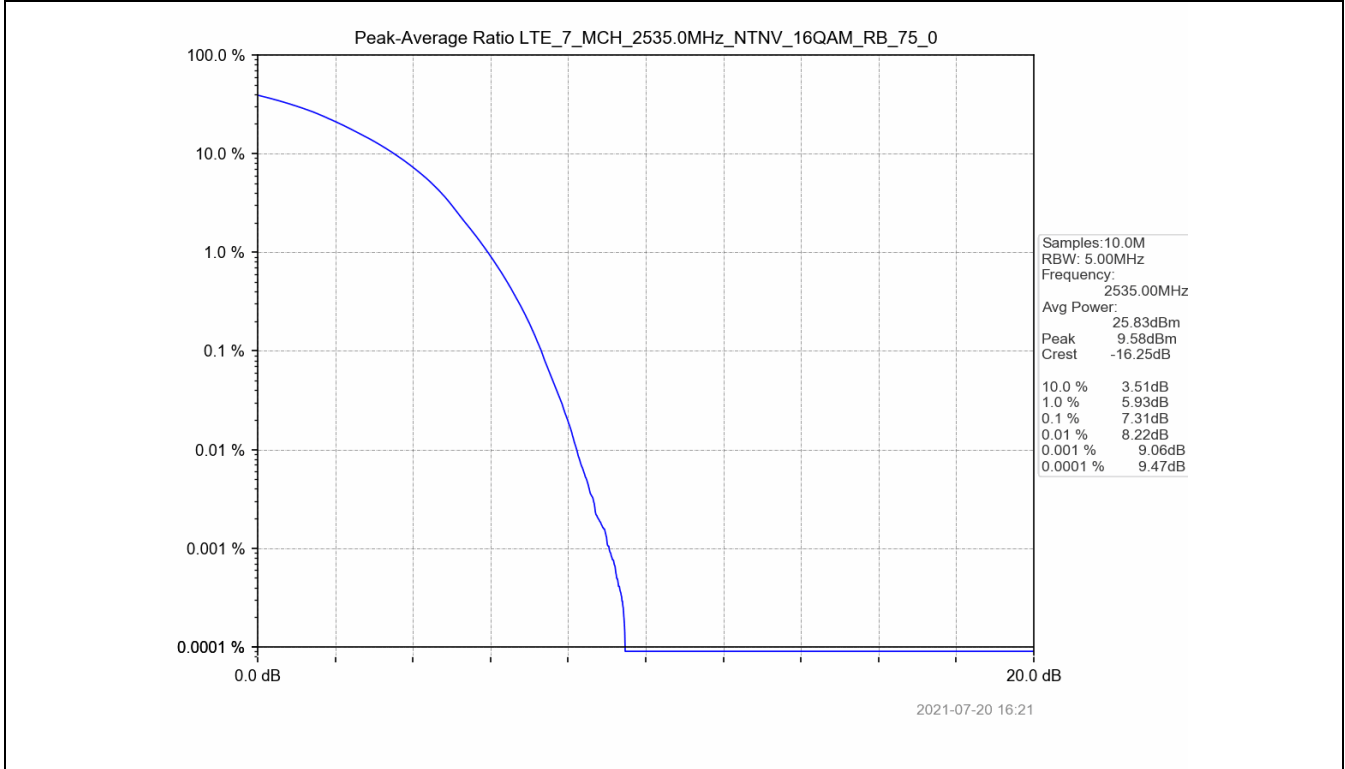


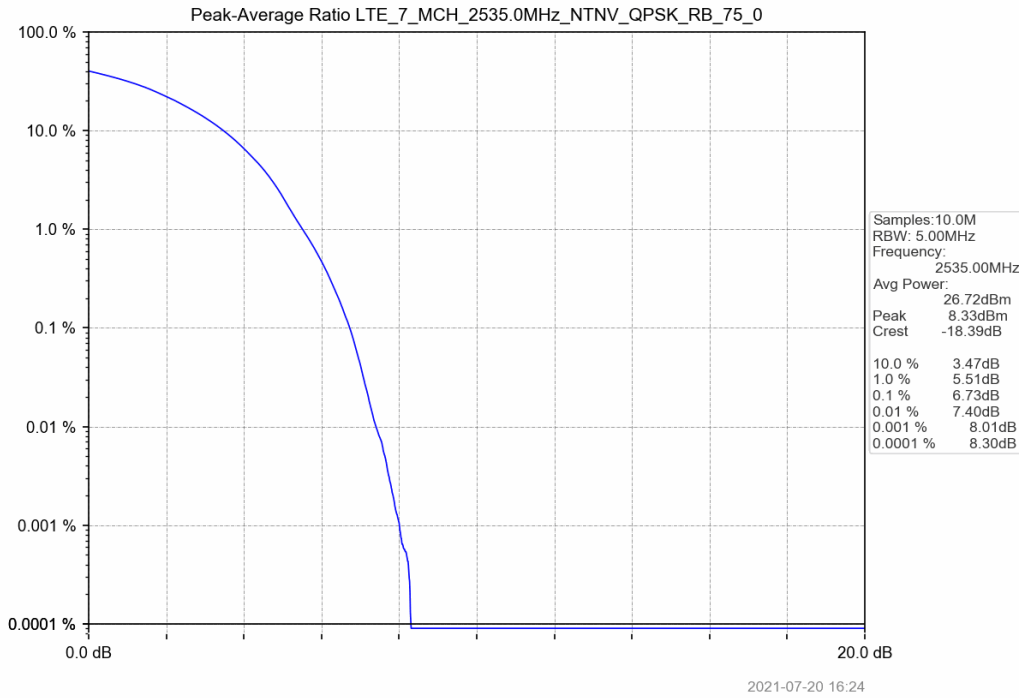
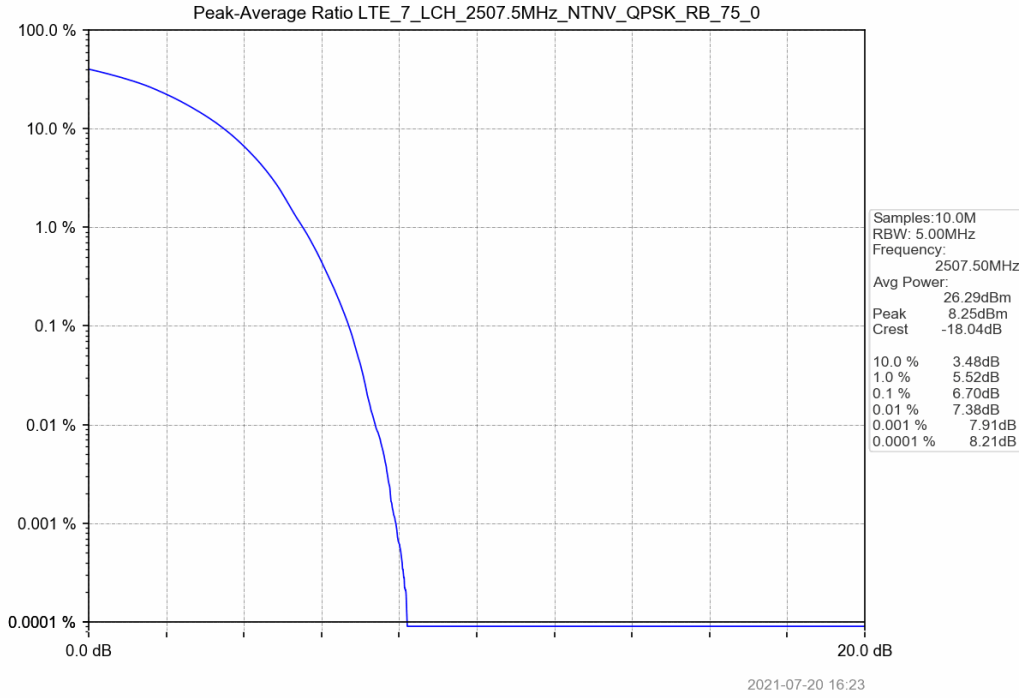


Test Band: 7 _ 15MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	75	0	6.70	6.73	6.76	13	PASS
16QAM	75	0	7.35	7.31	7.28	13	PASS

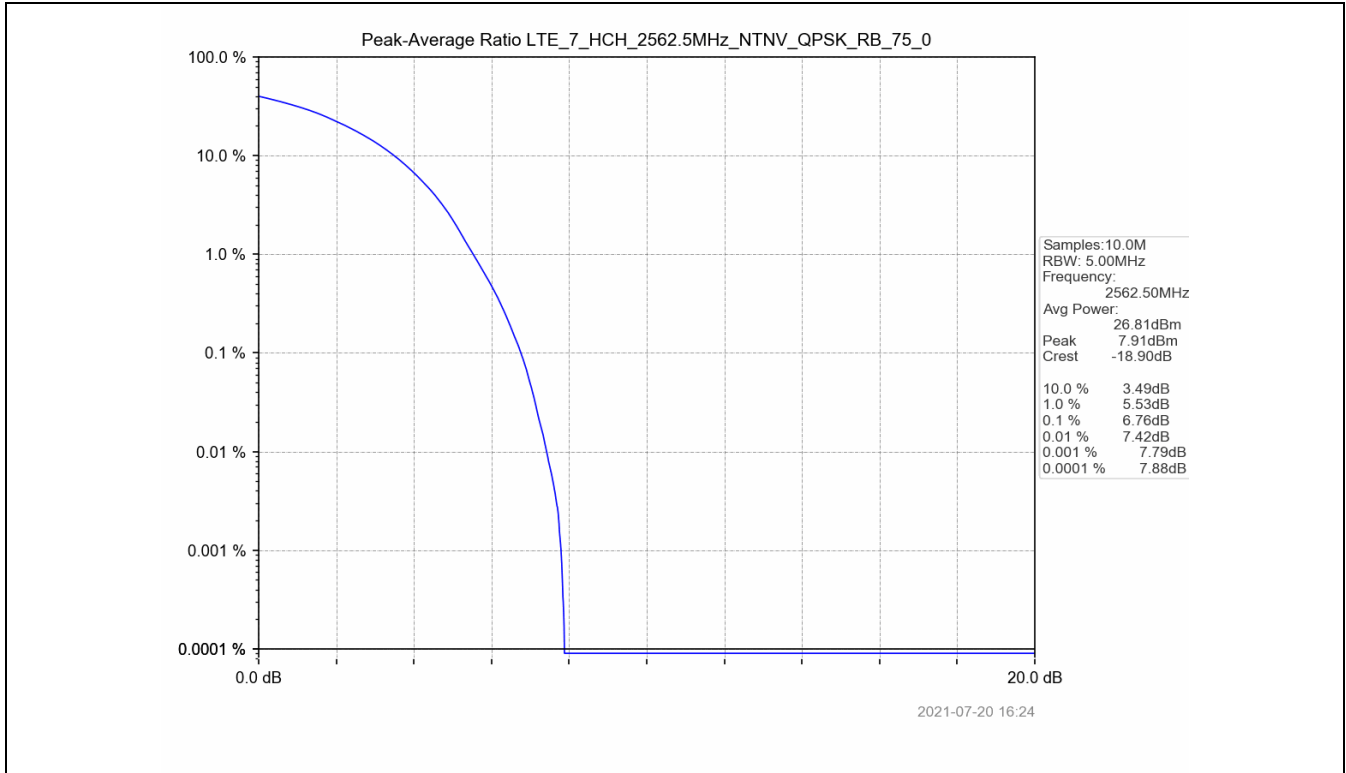
5.2 Test Graph





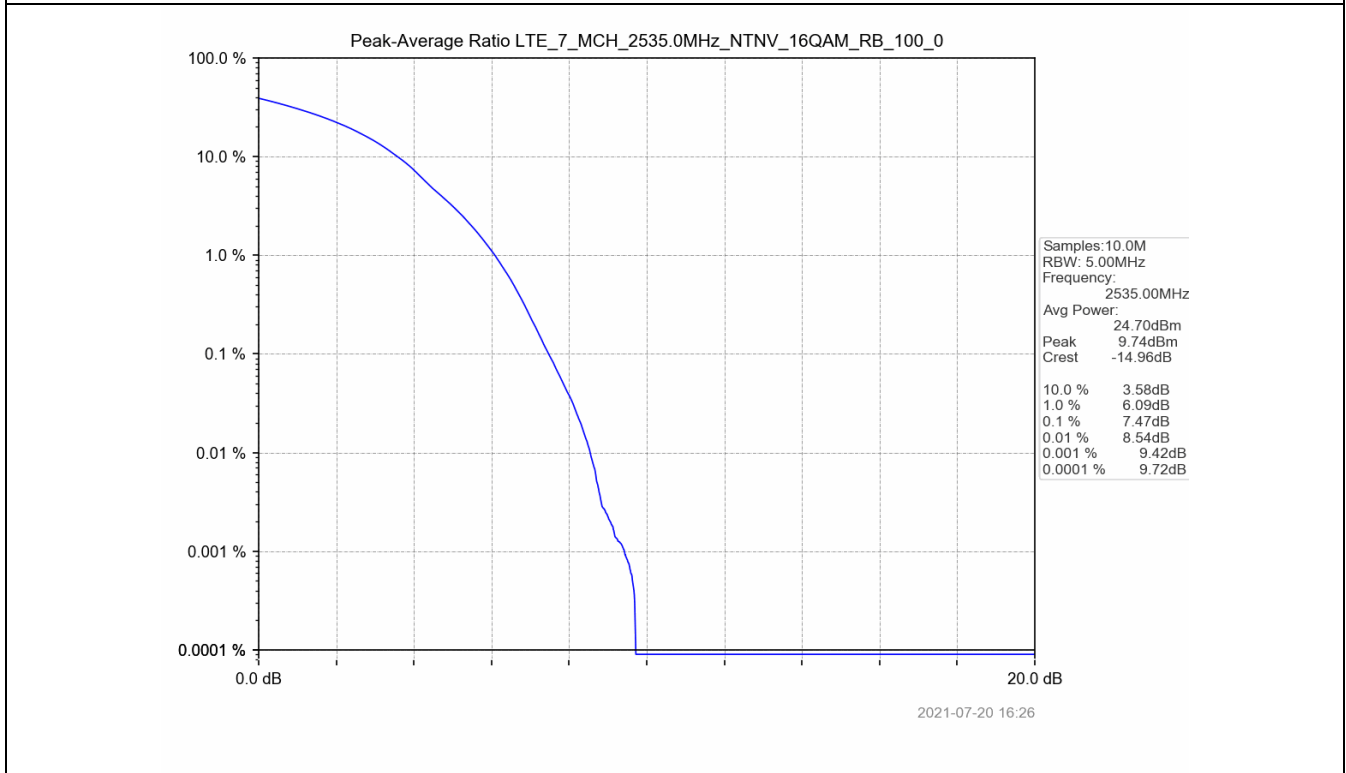
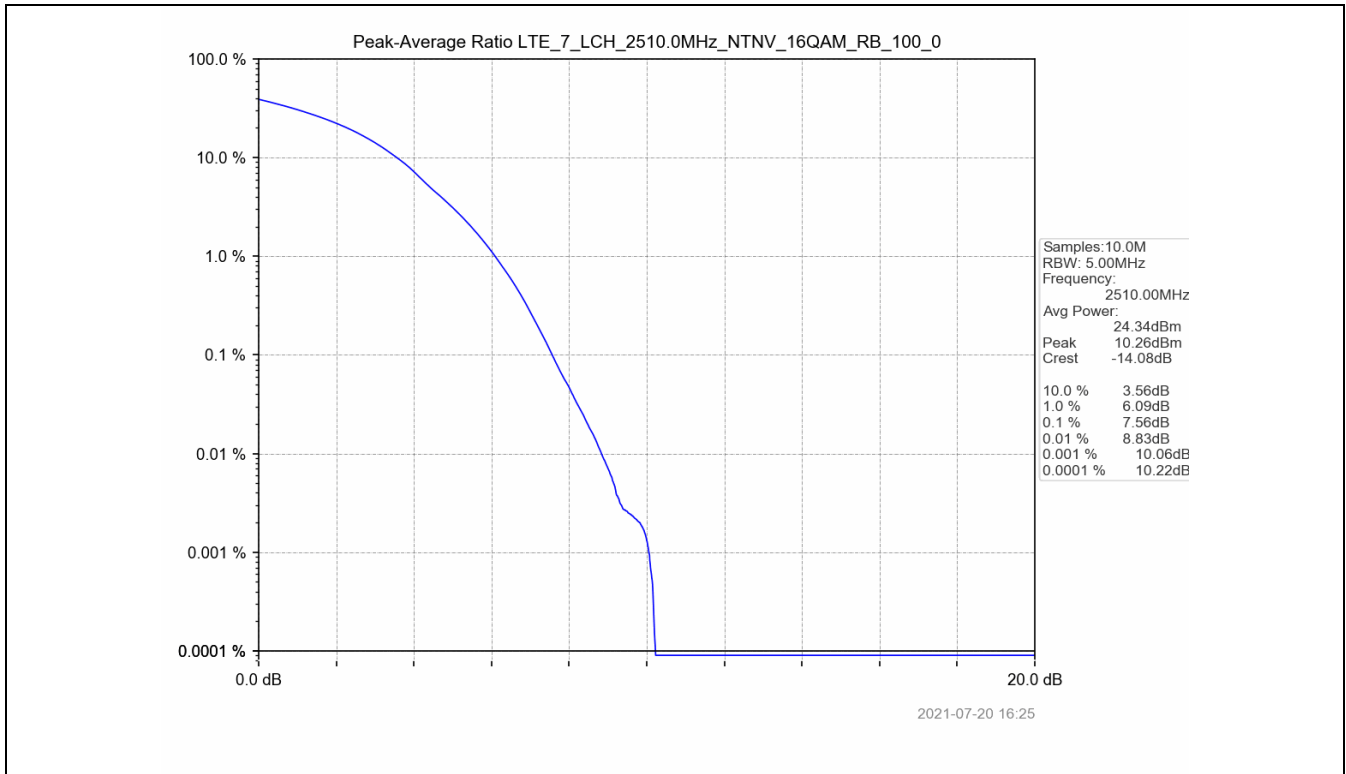


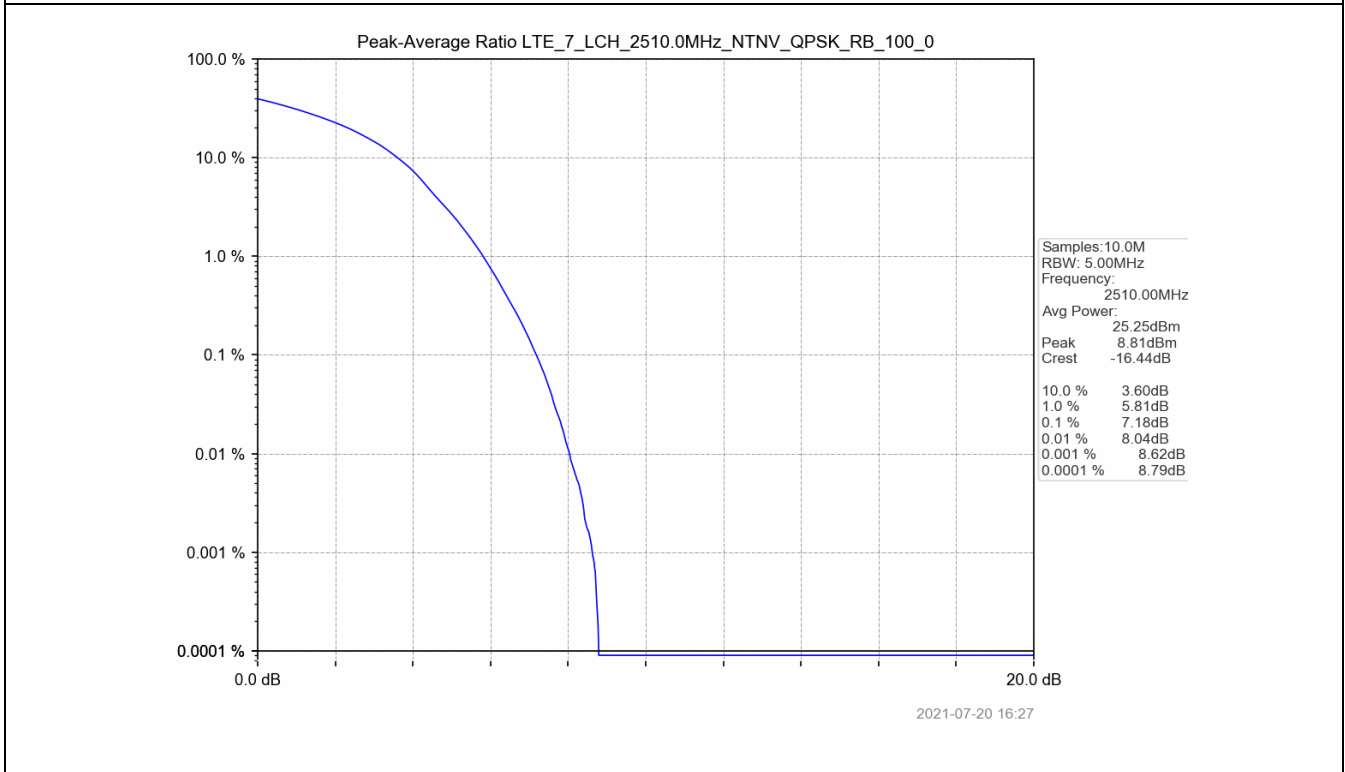
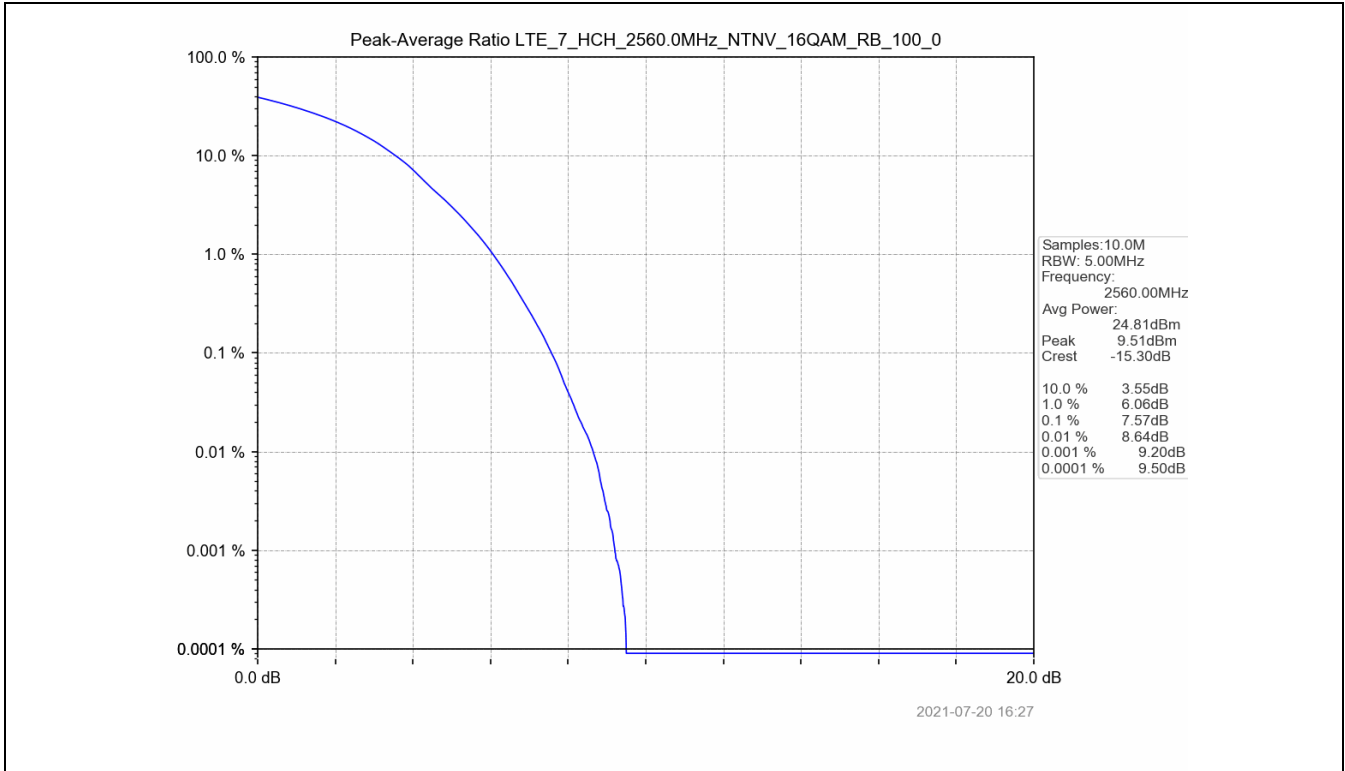


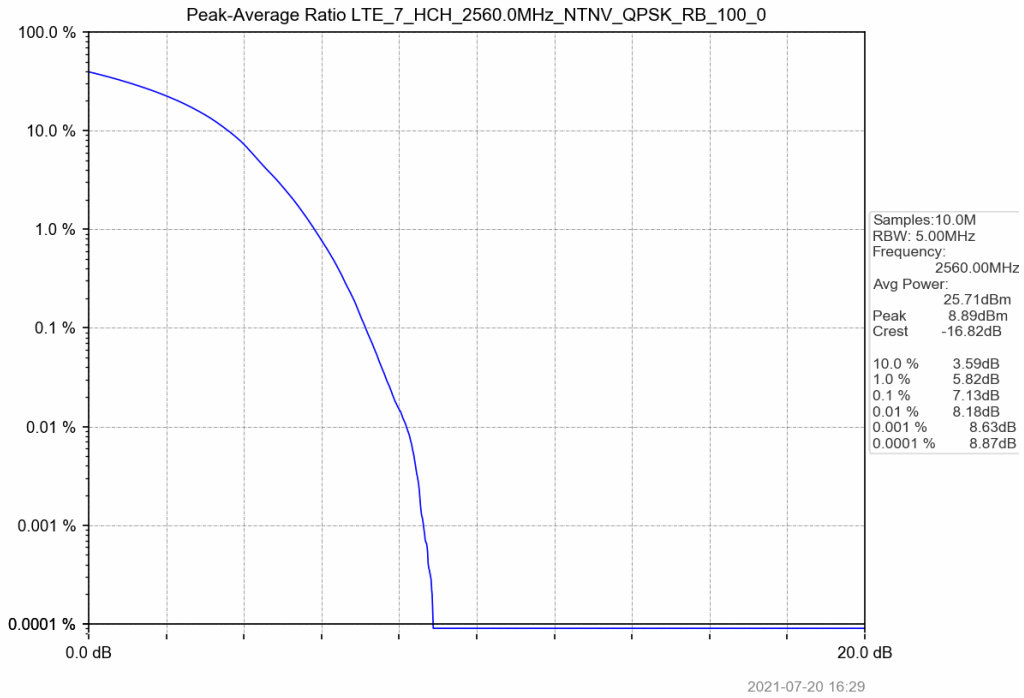
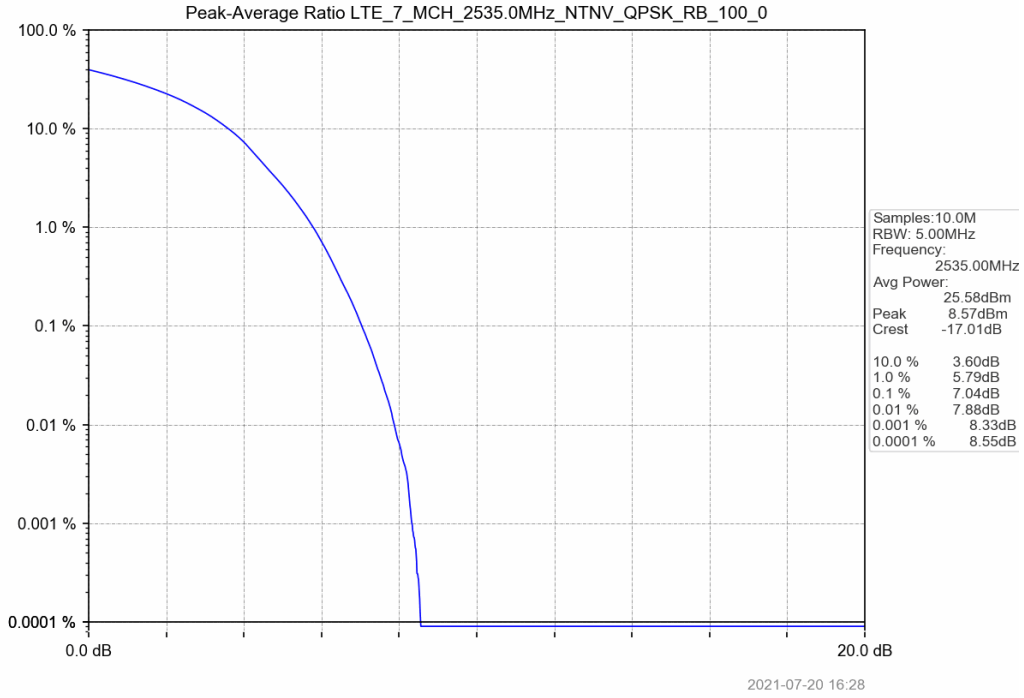


Test Band: 7 _ 20MHz Bandwidth							
Test Mode	RB Allocation		Test result (dB)			Limit (dB)	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	100	0	7.18	7.04	7.13	13	PASS
16QAM	100	0	7.56	7.47	7.57	13	PASS

5.2 Test Graph

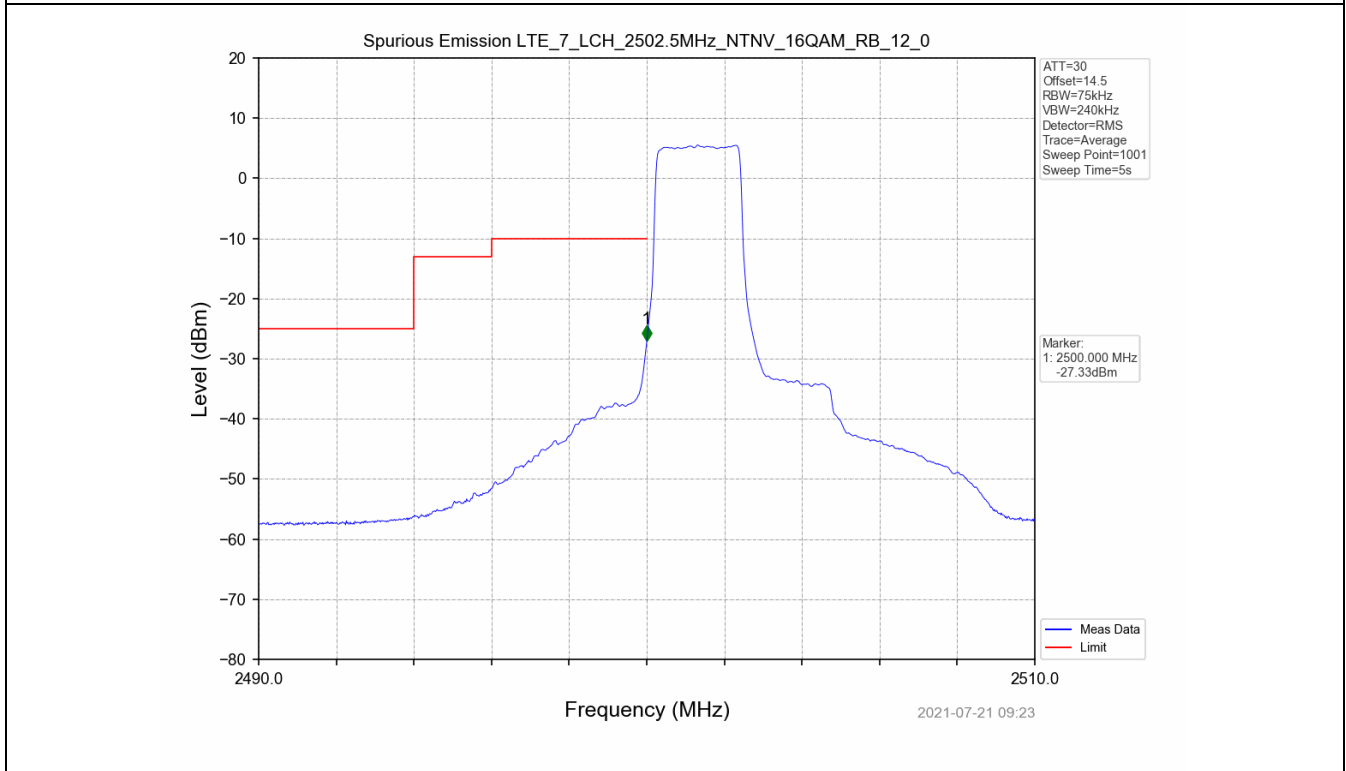
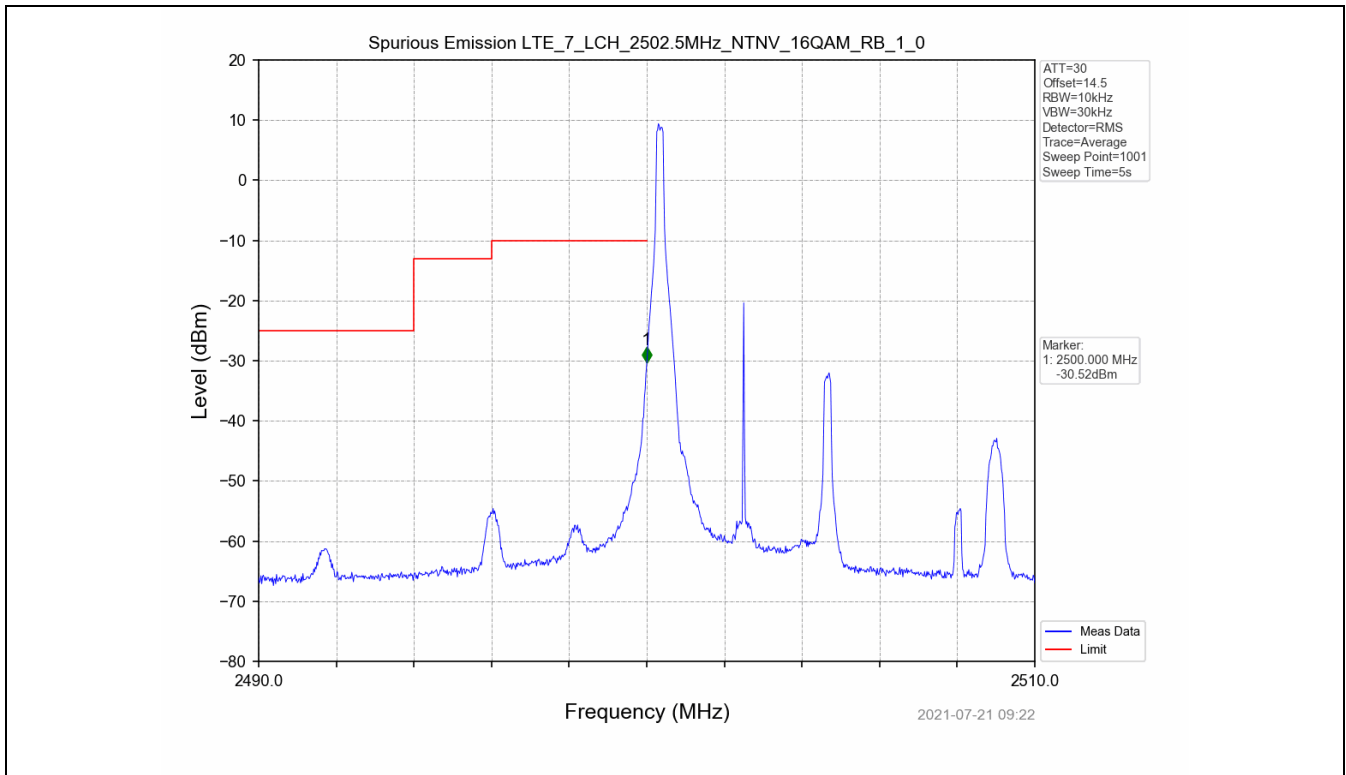


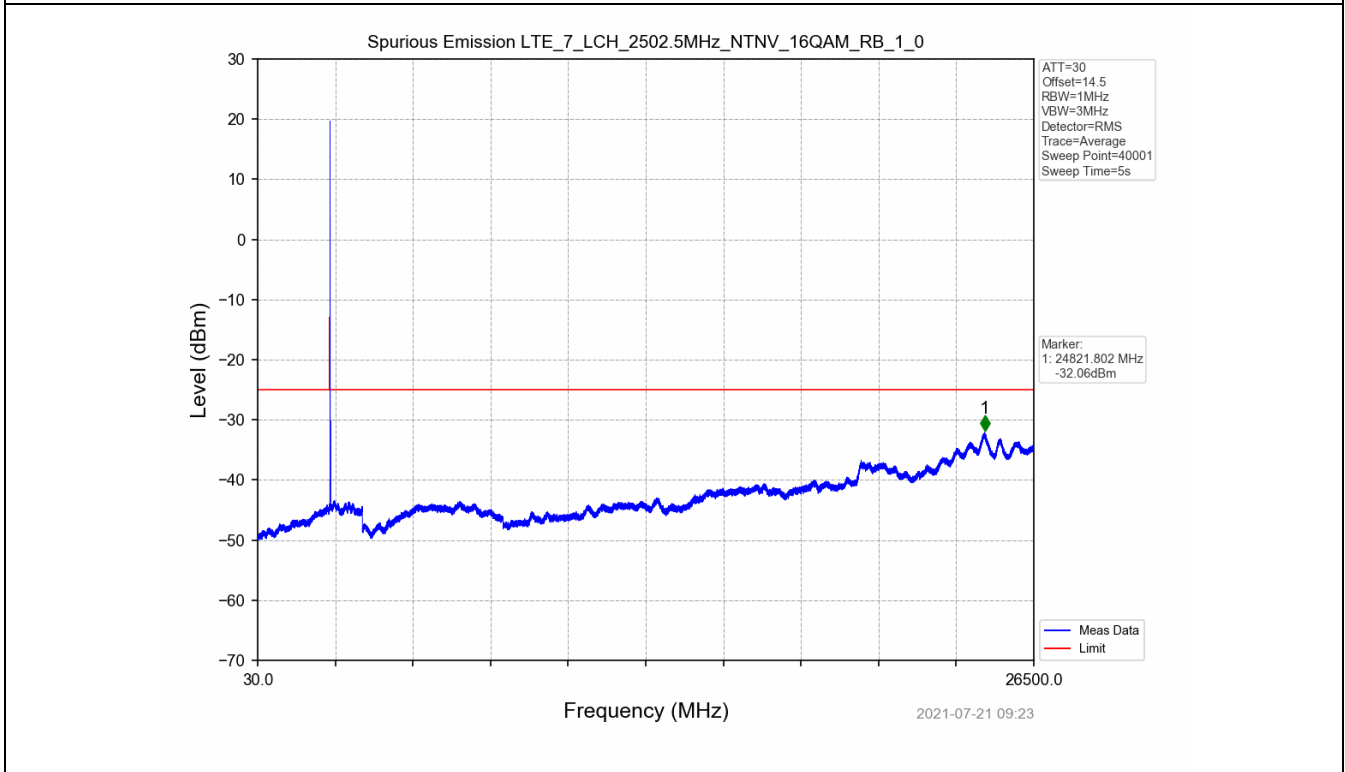
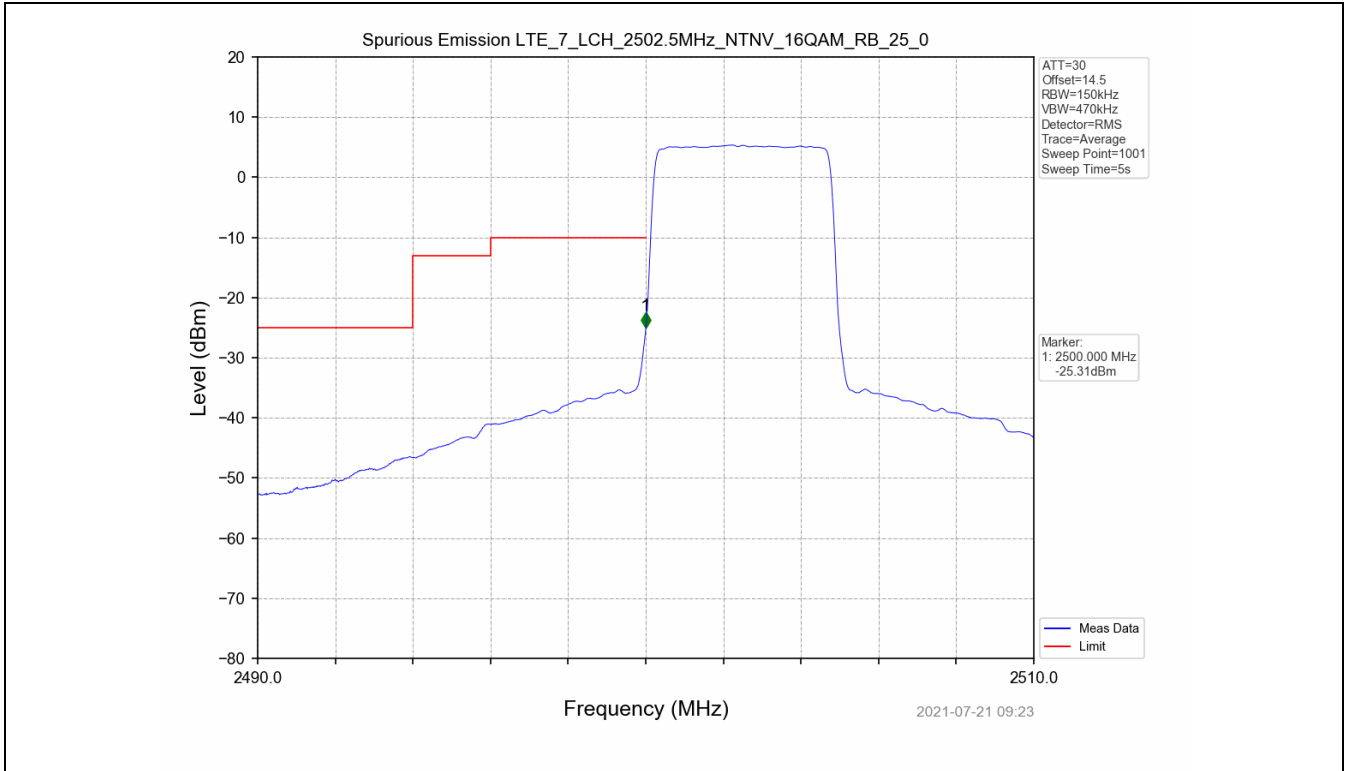


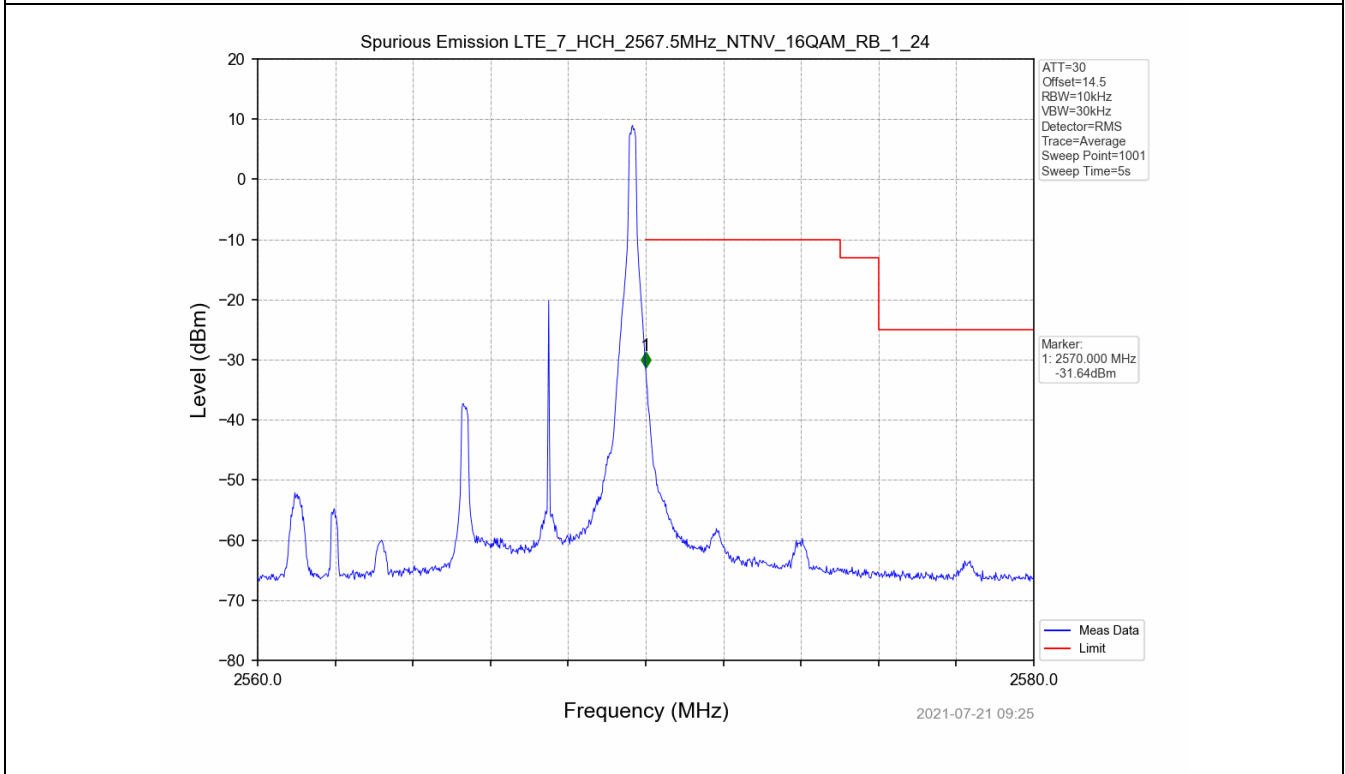
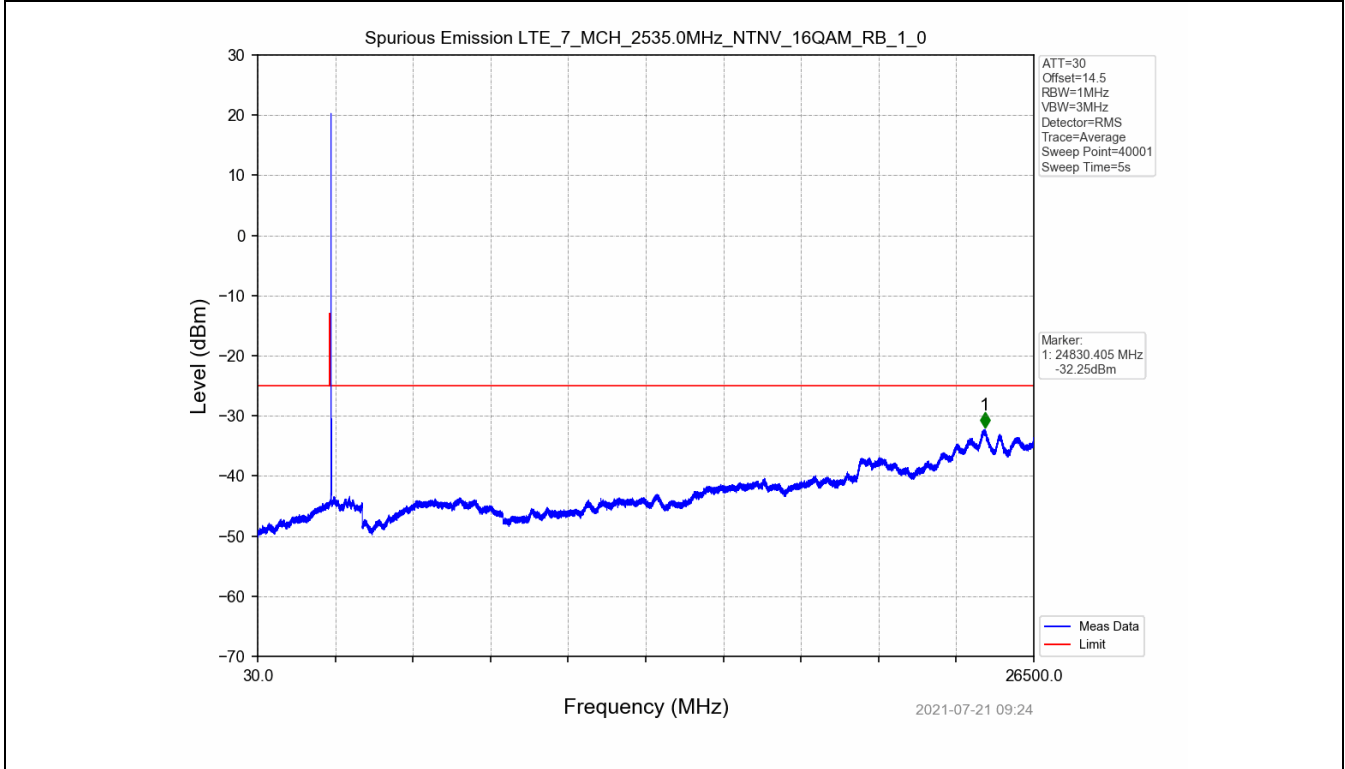


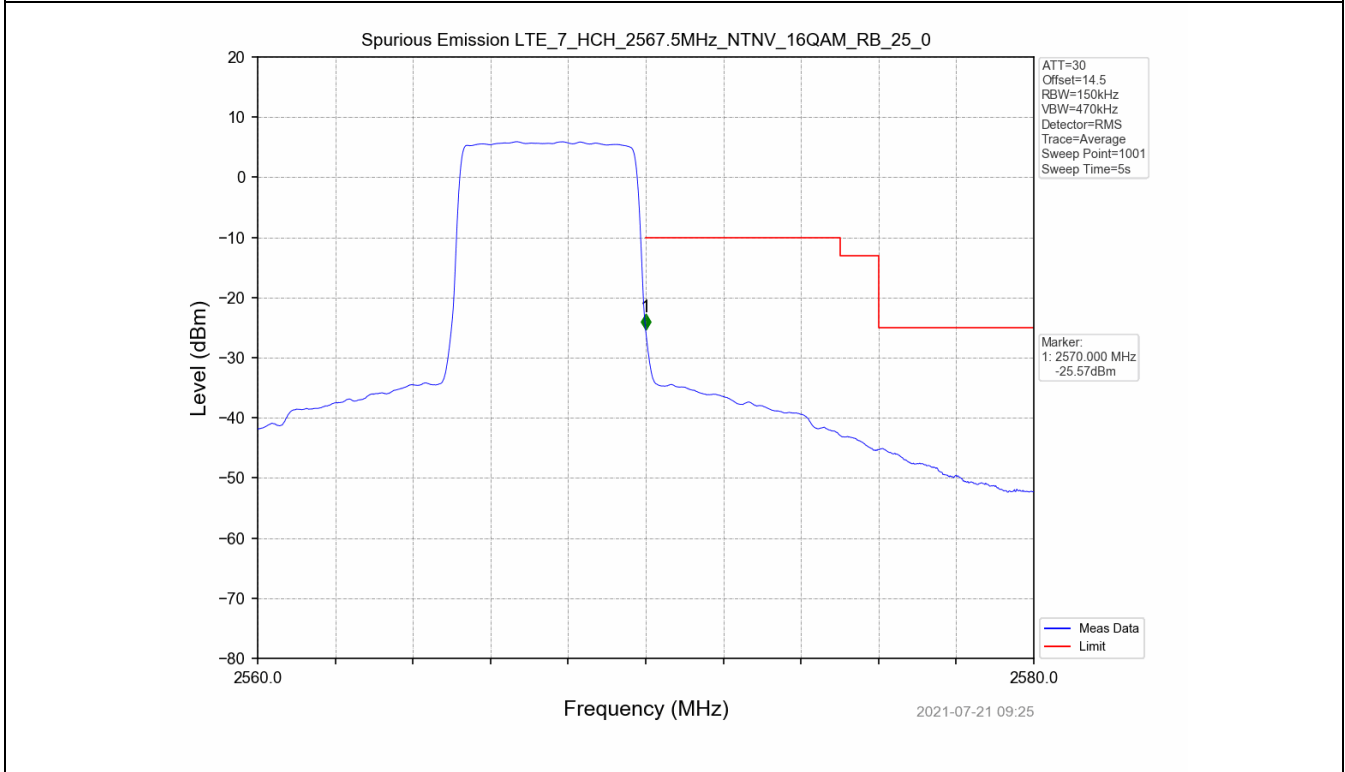
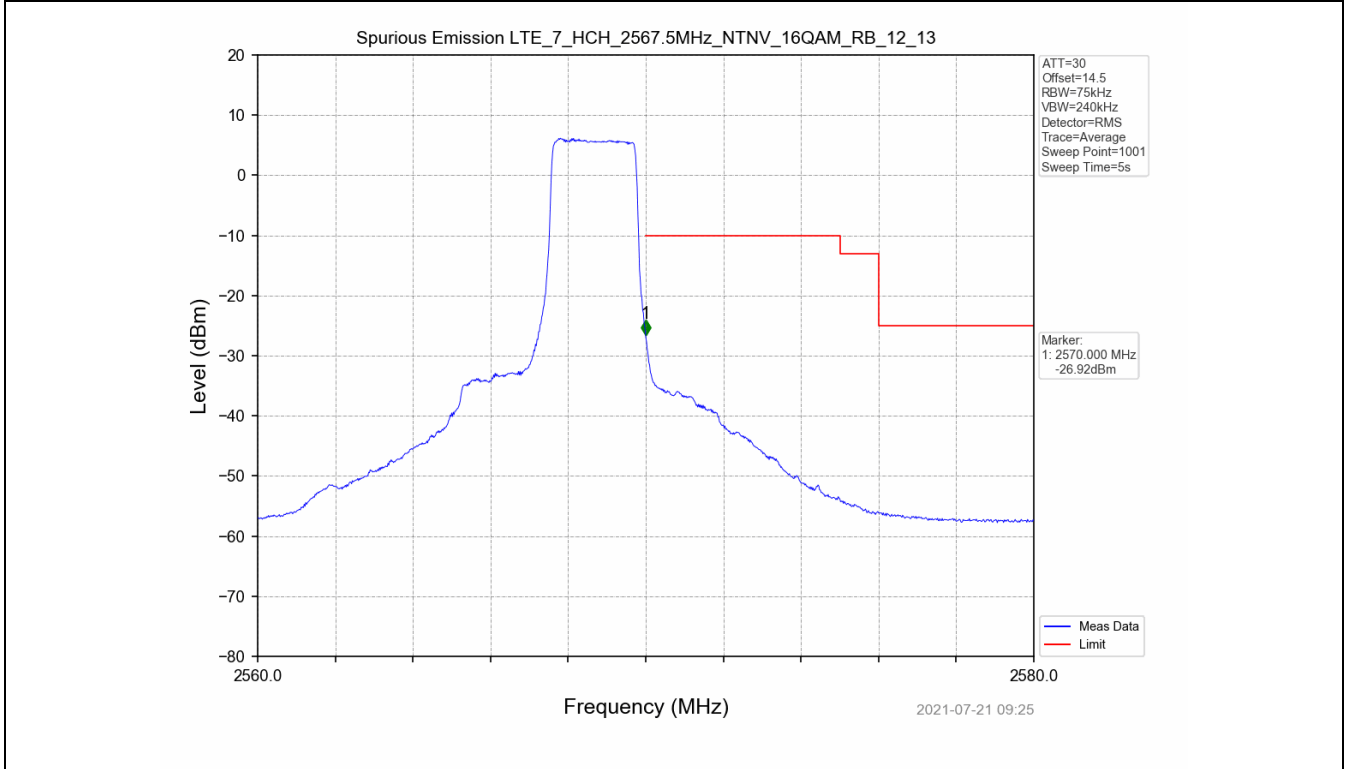
### 6. Spurious Emission

#### 6.1 Test Graph

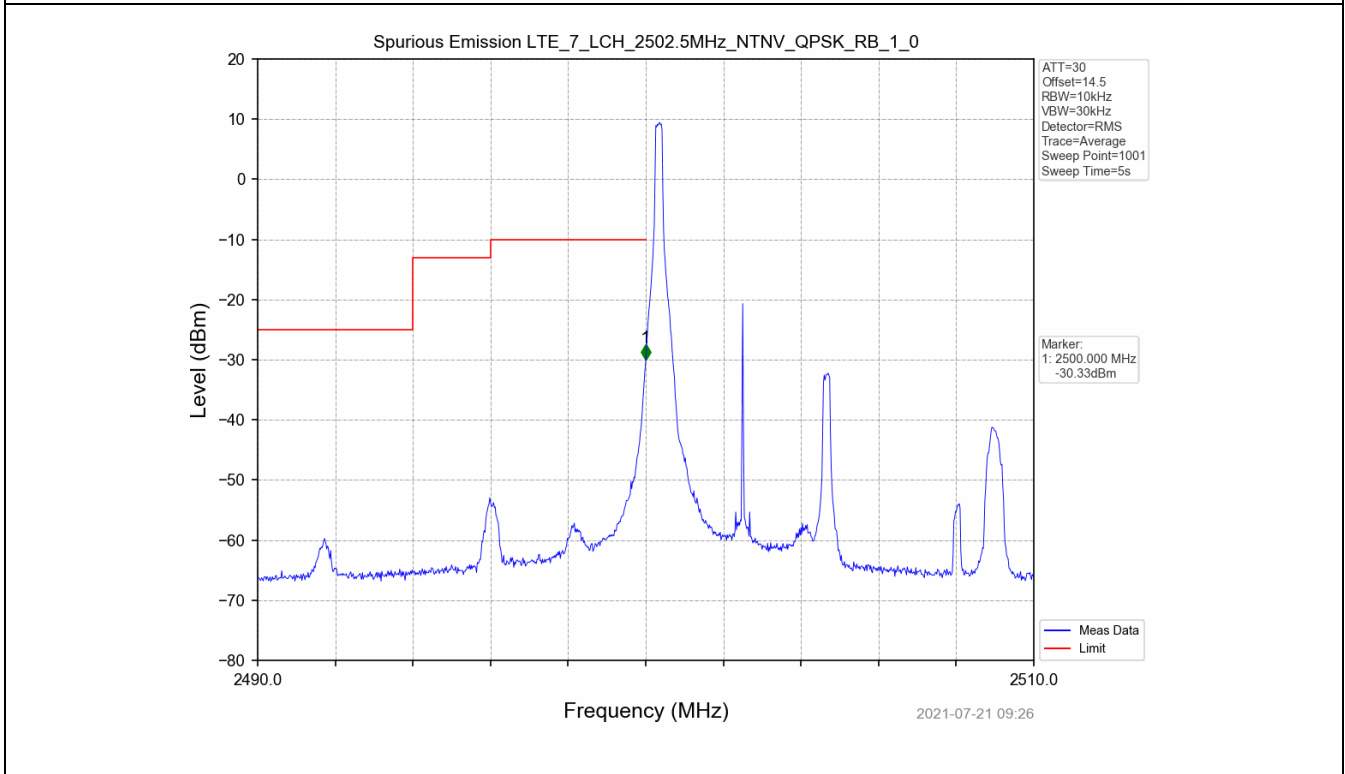
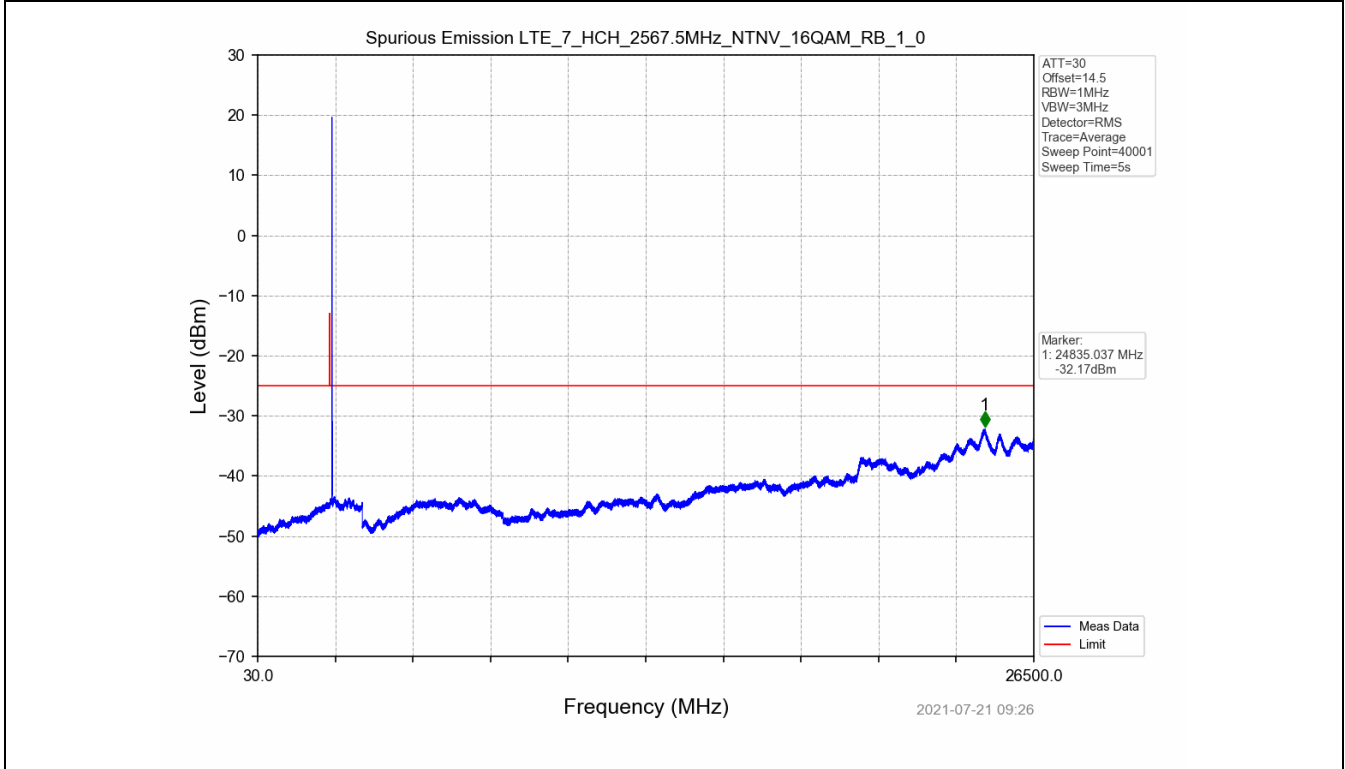


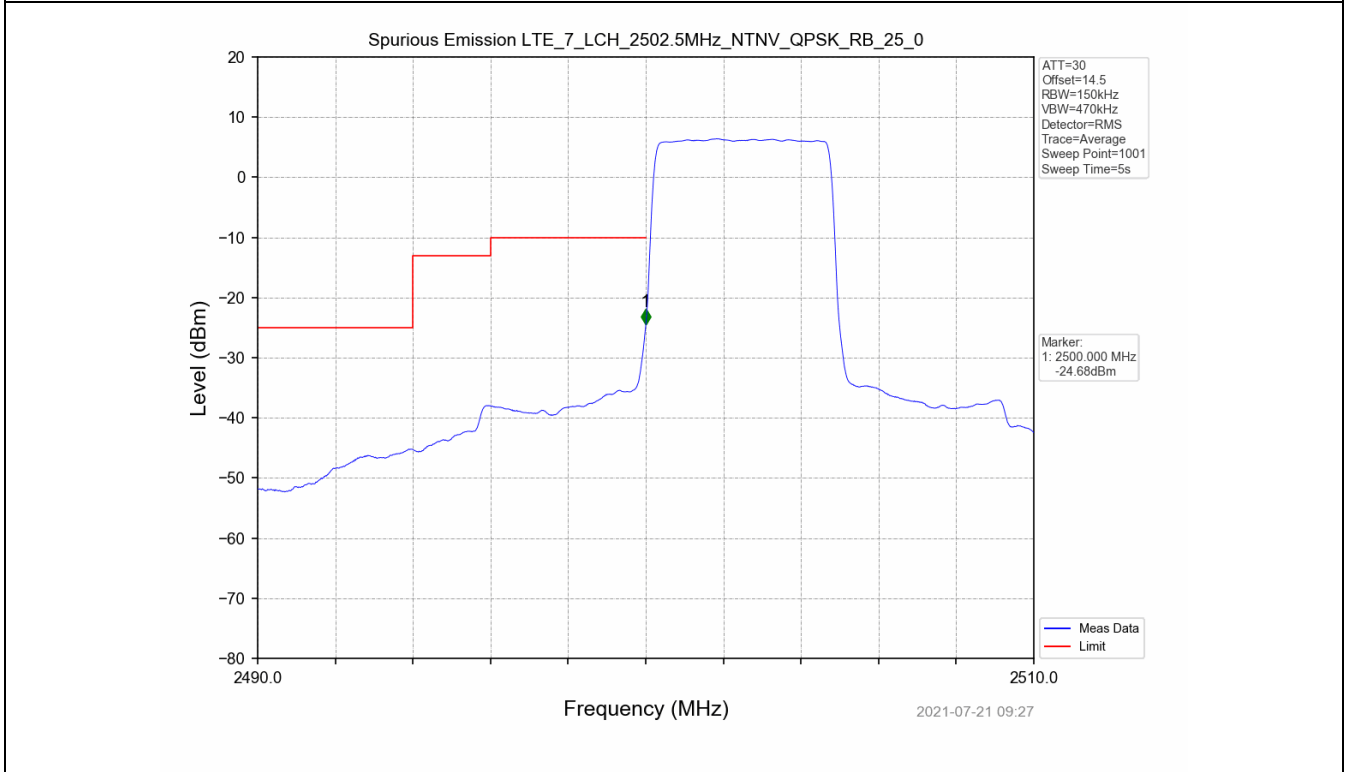
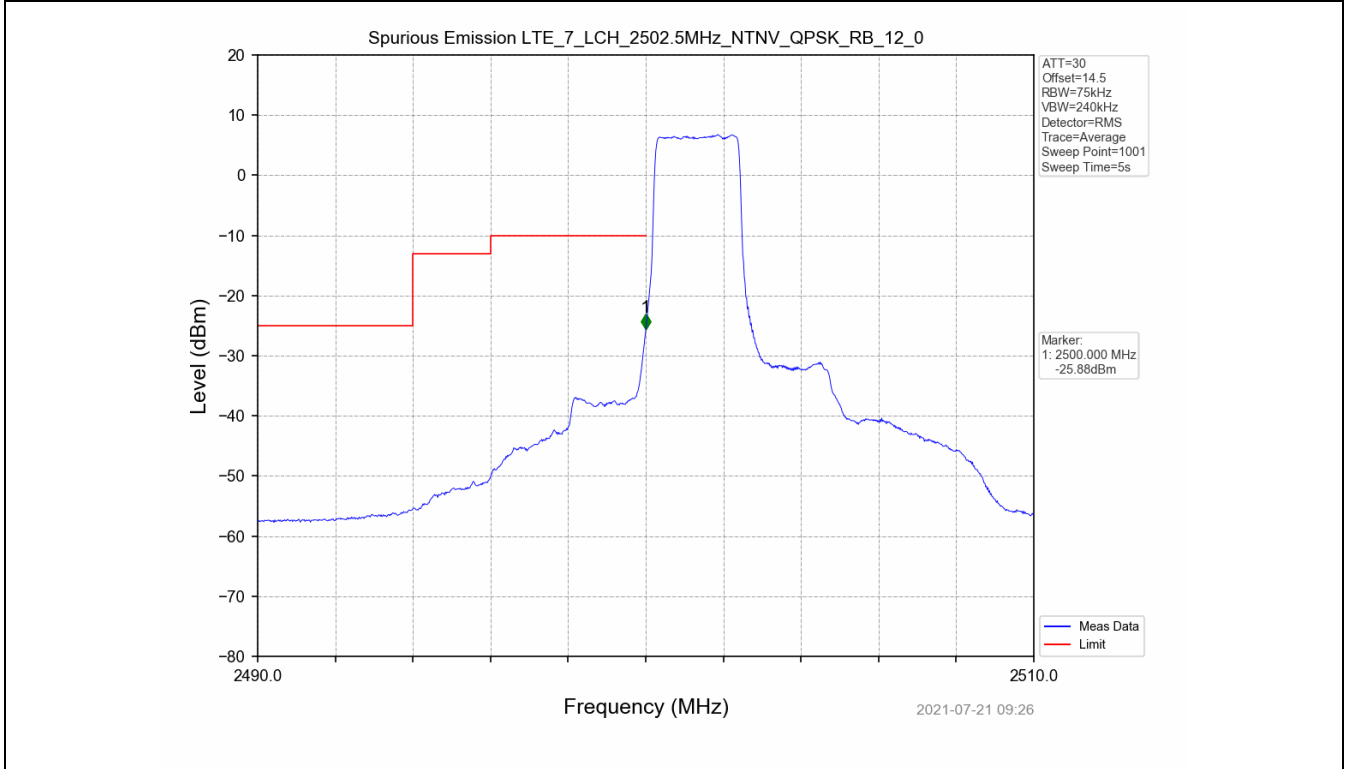


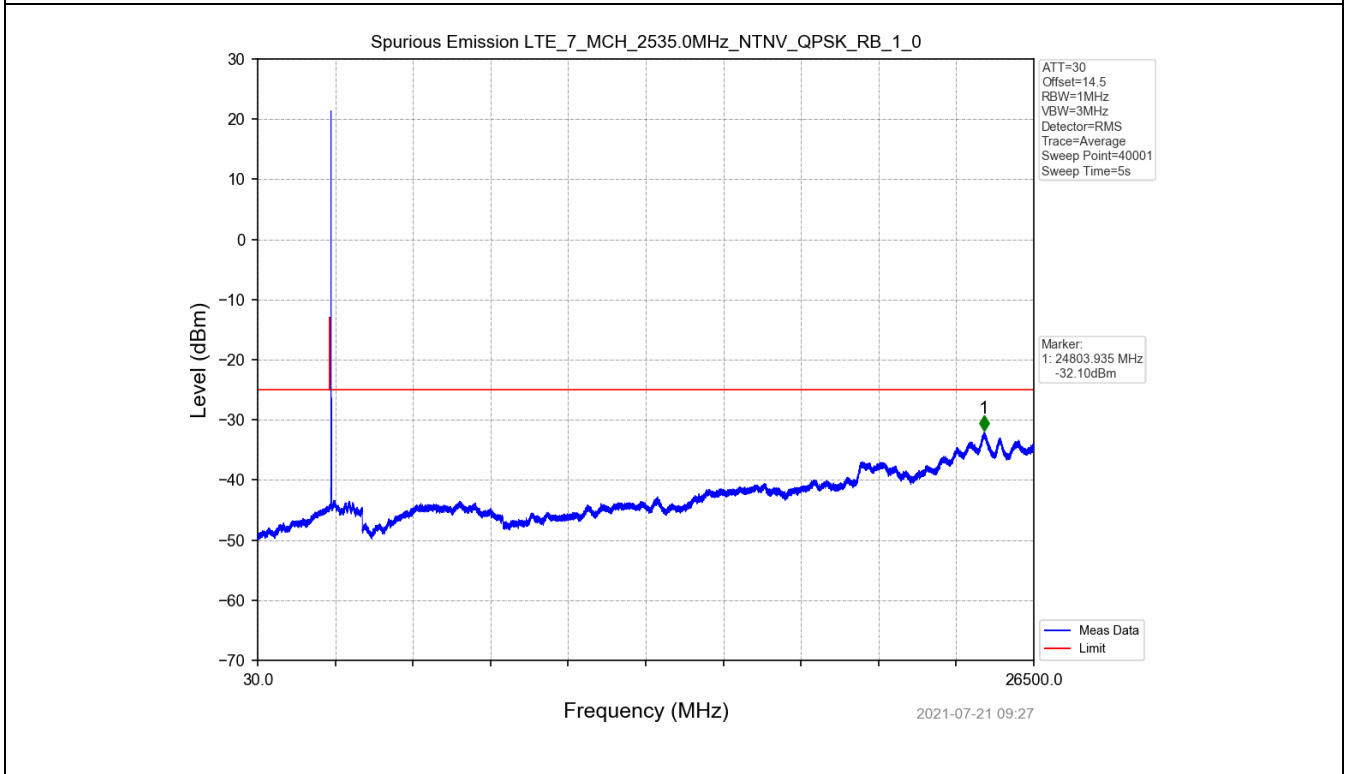
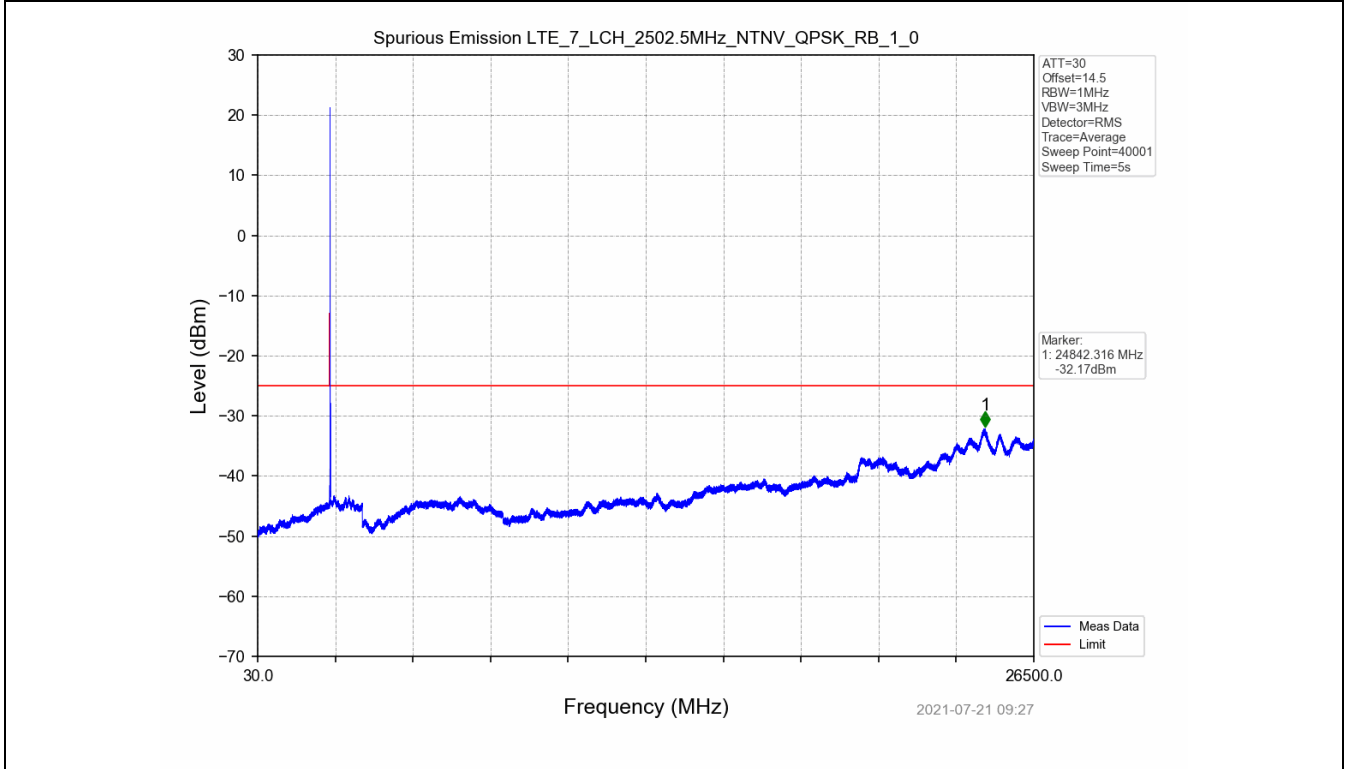


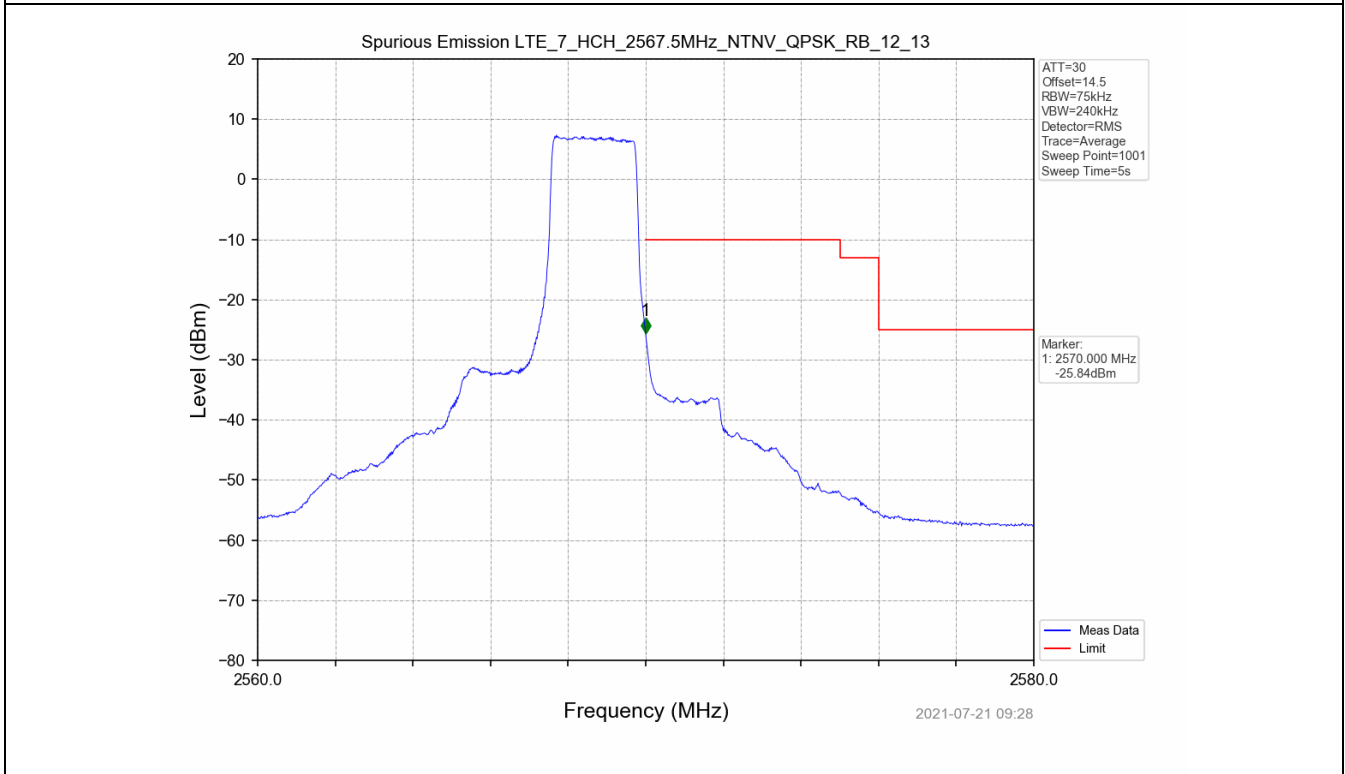
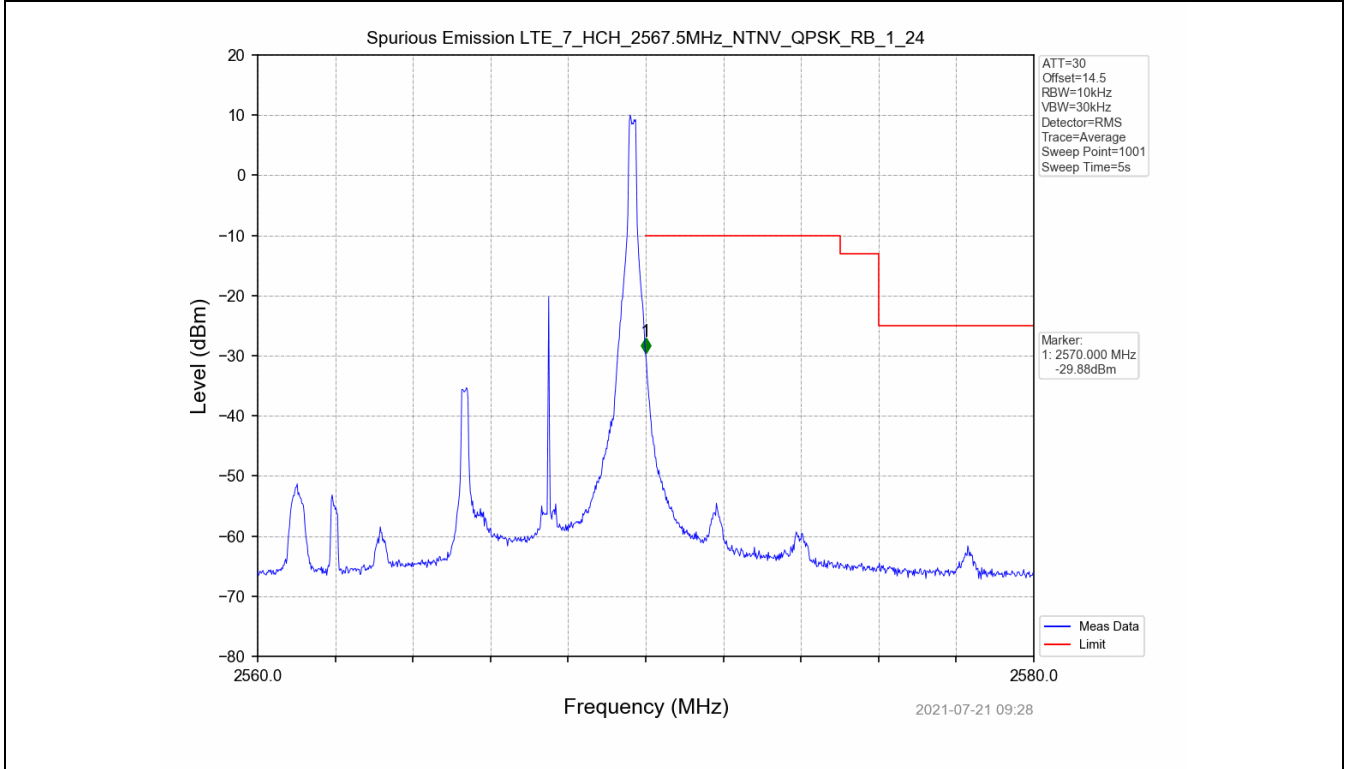


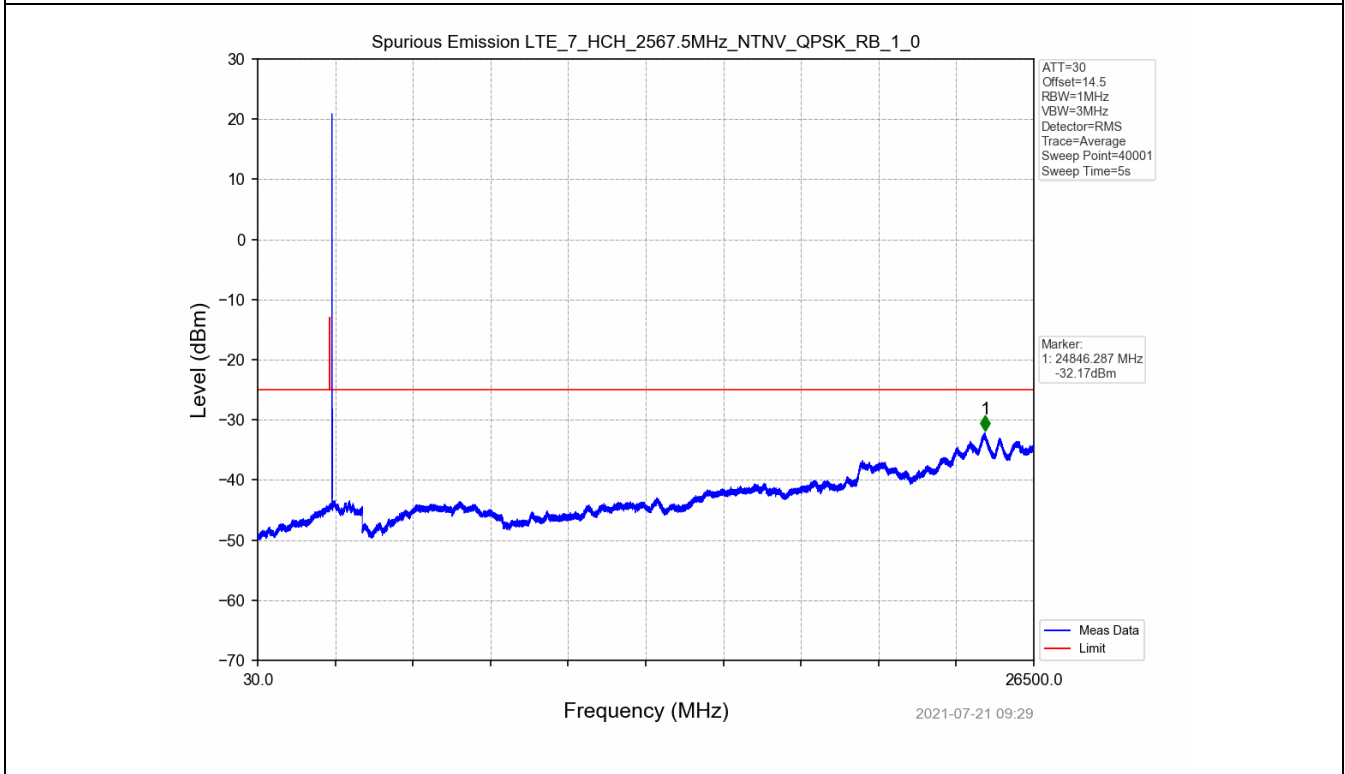
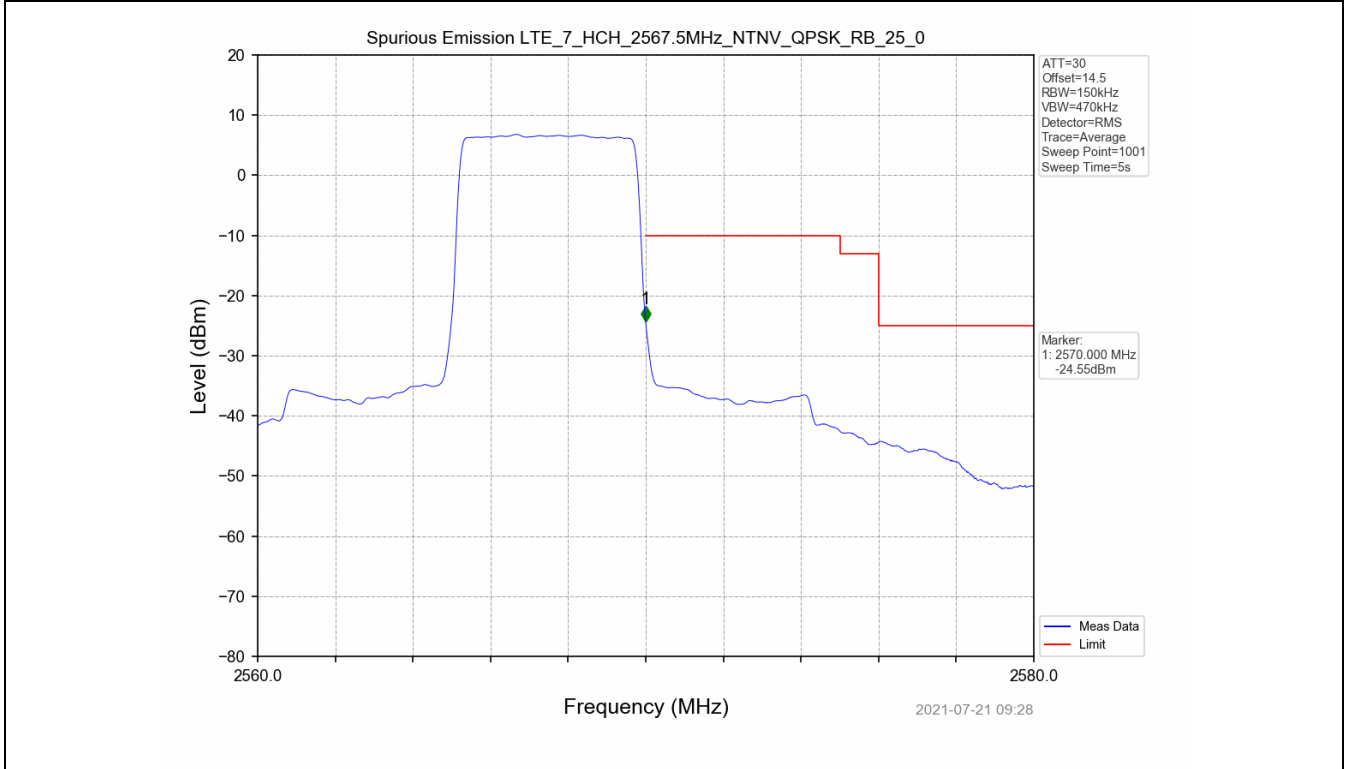




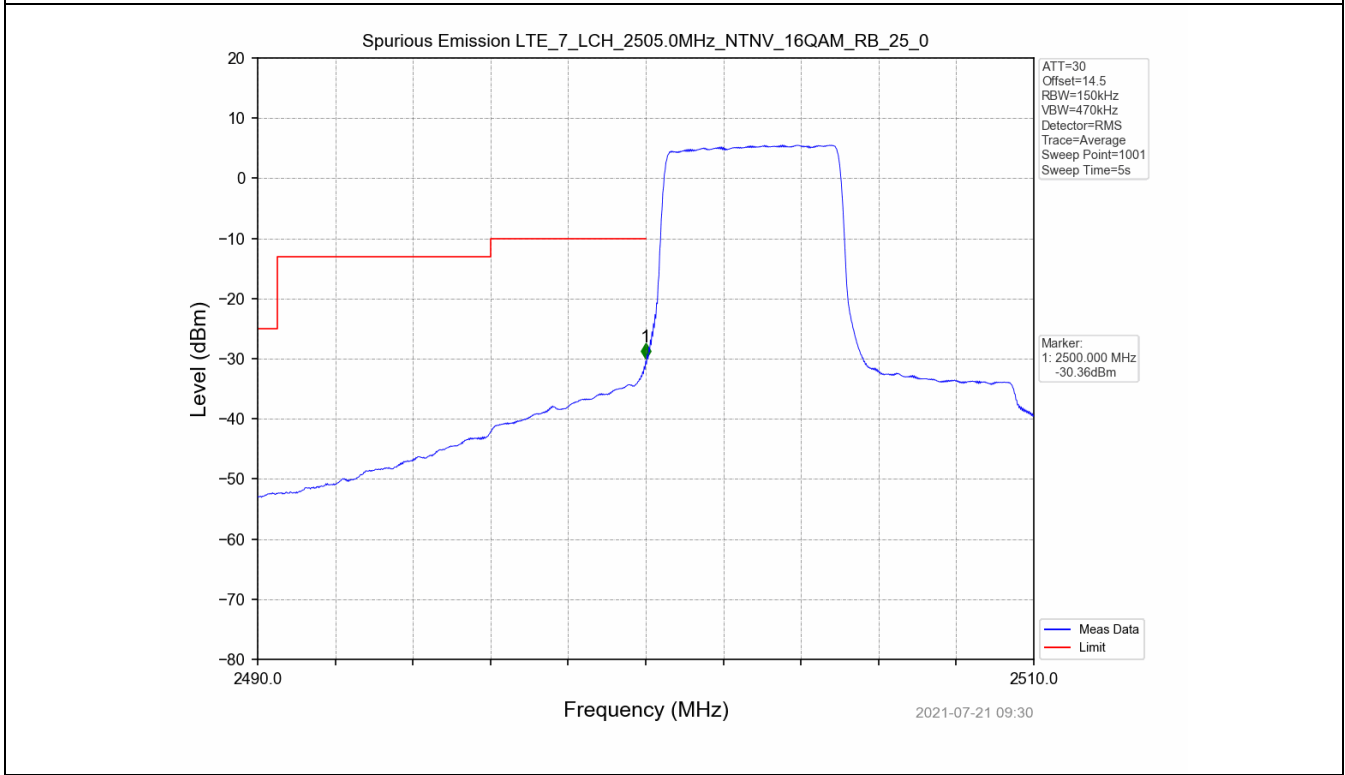
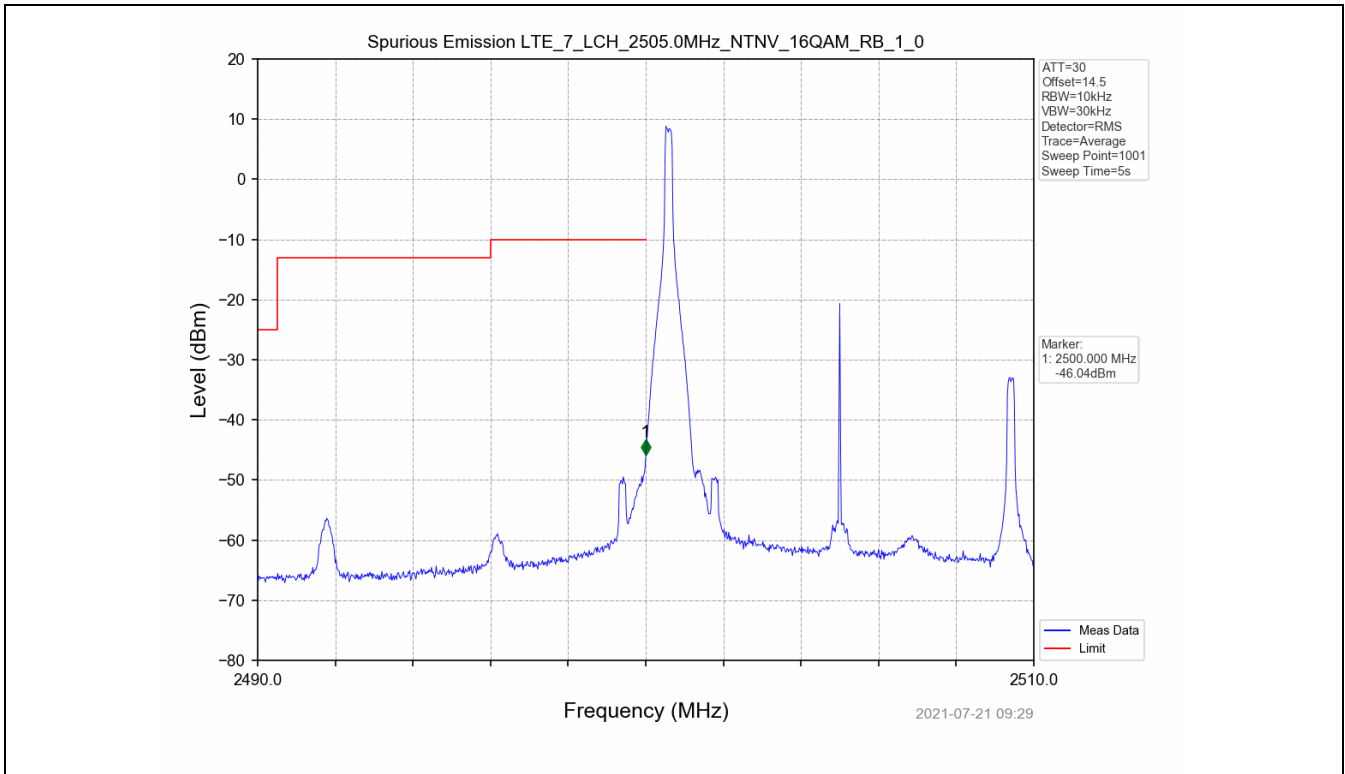


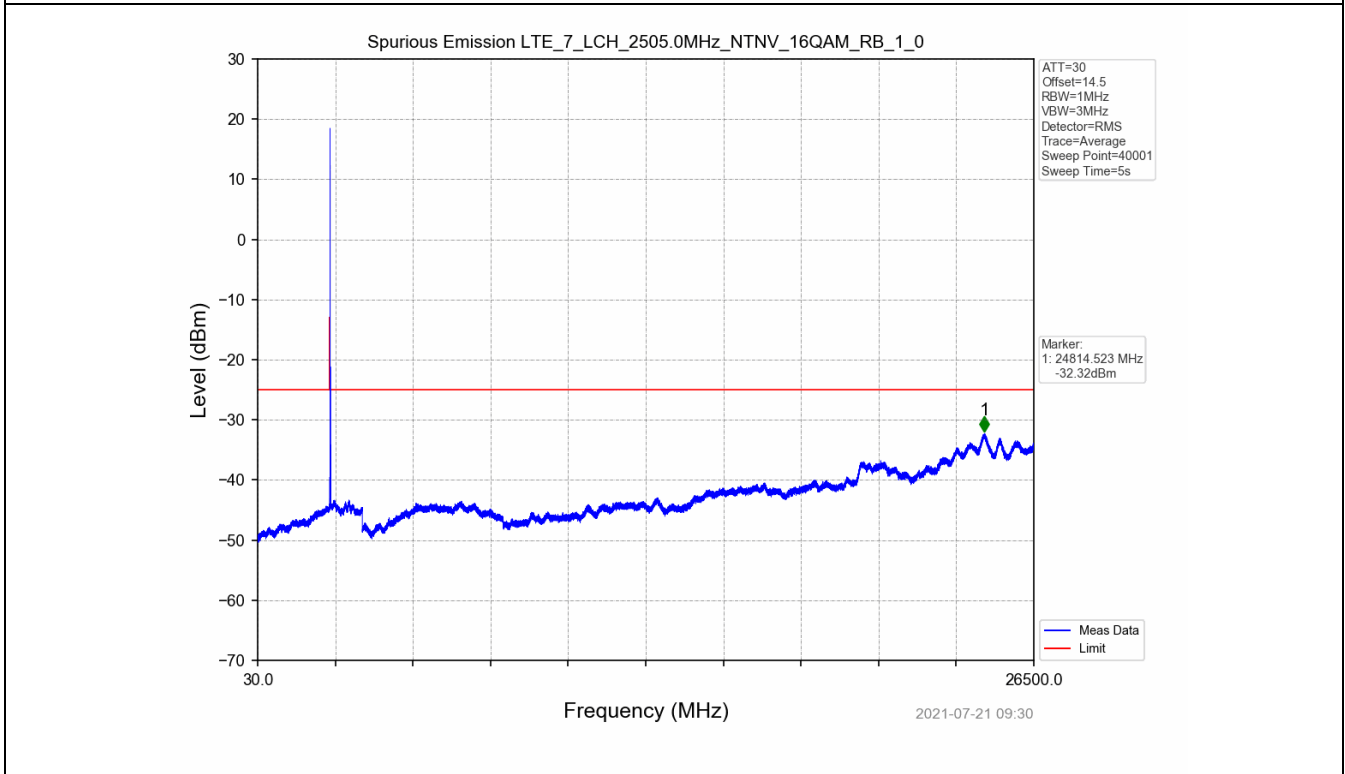
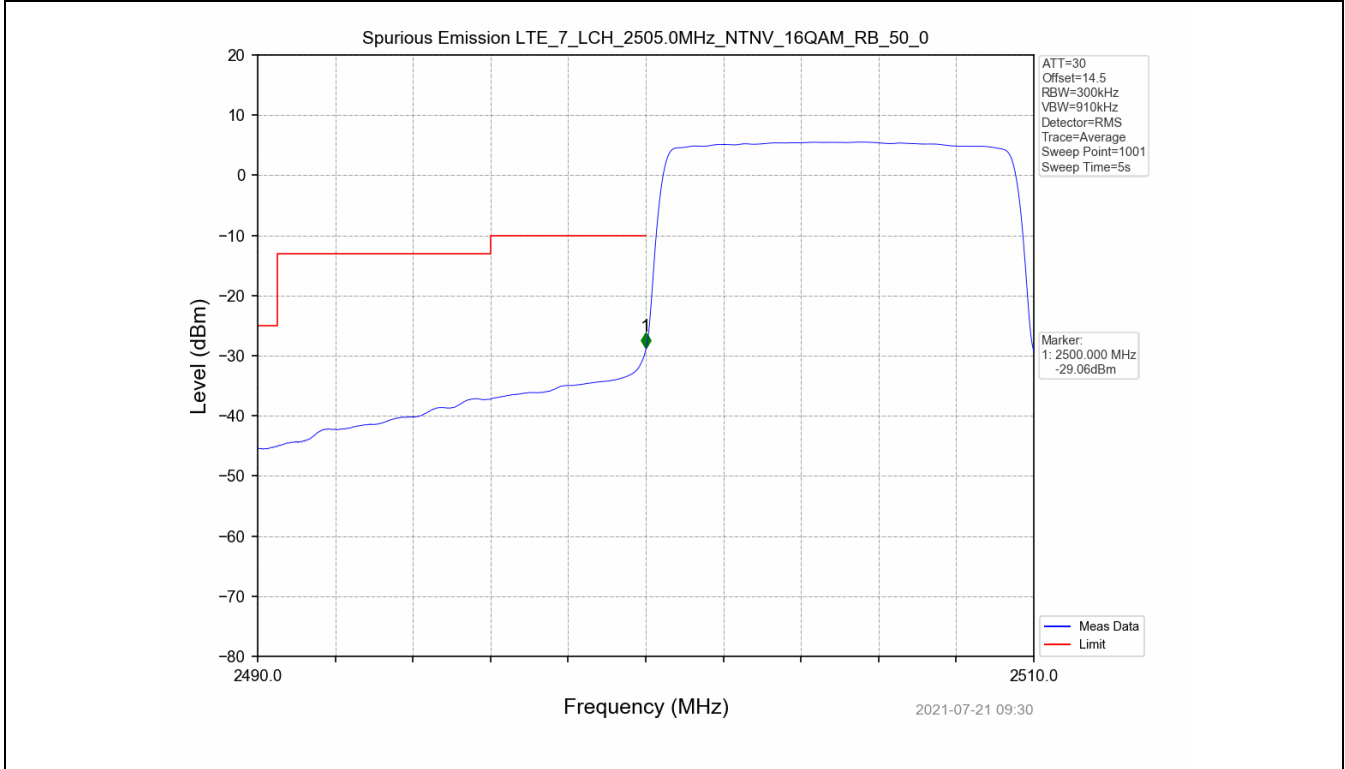


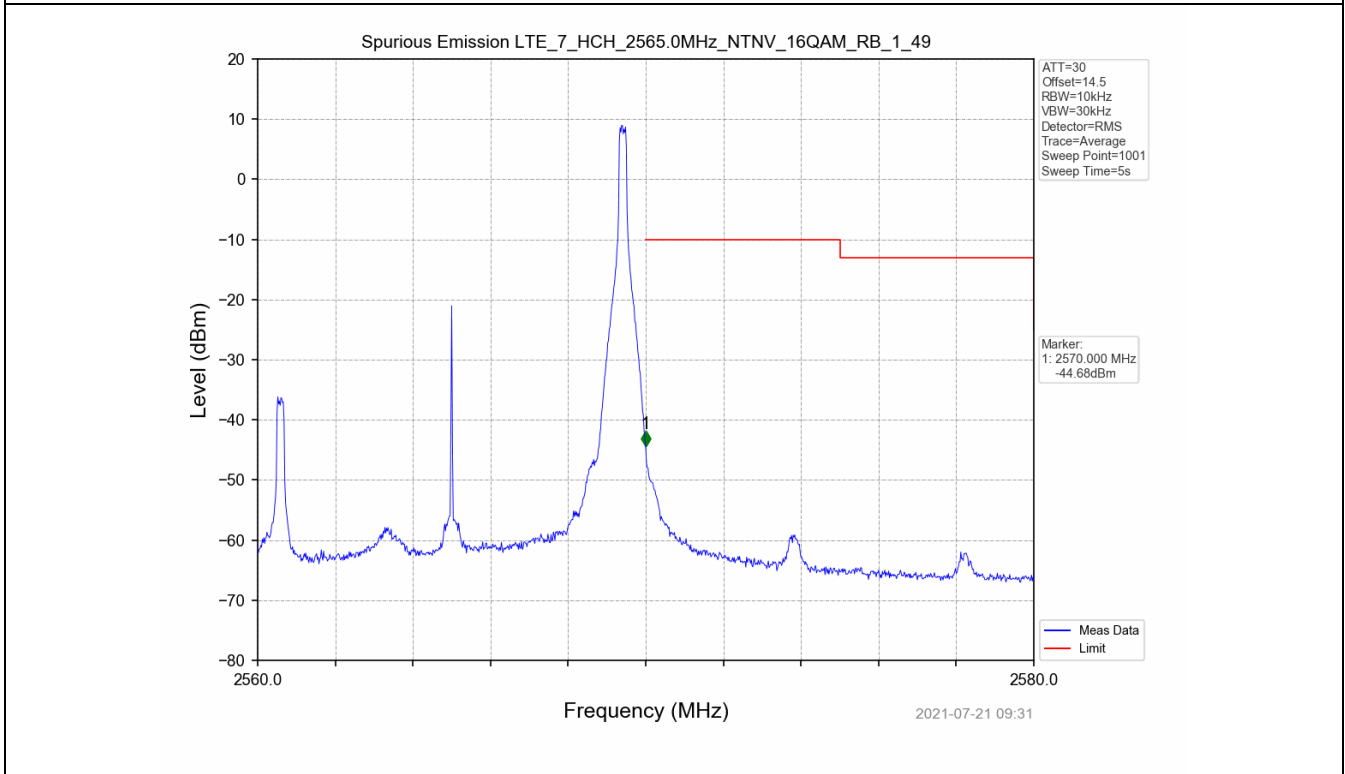
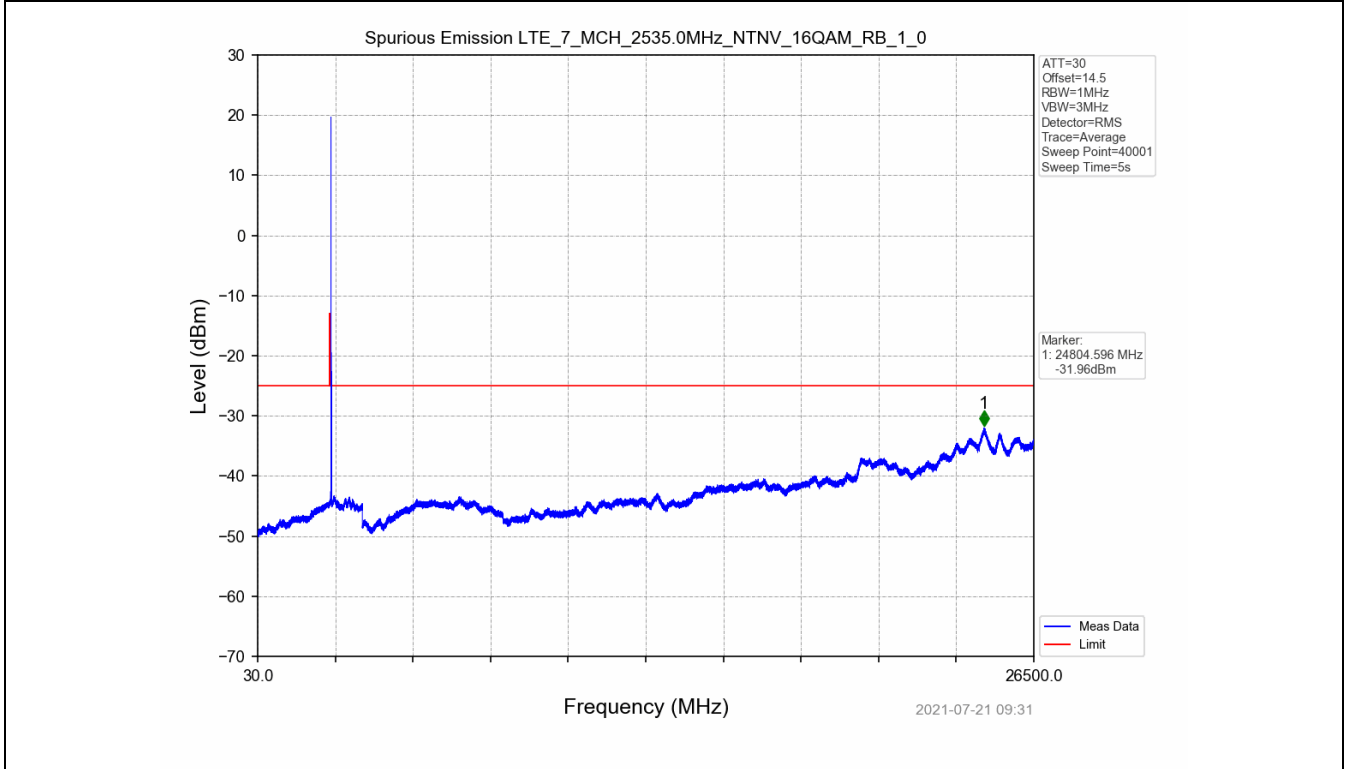




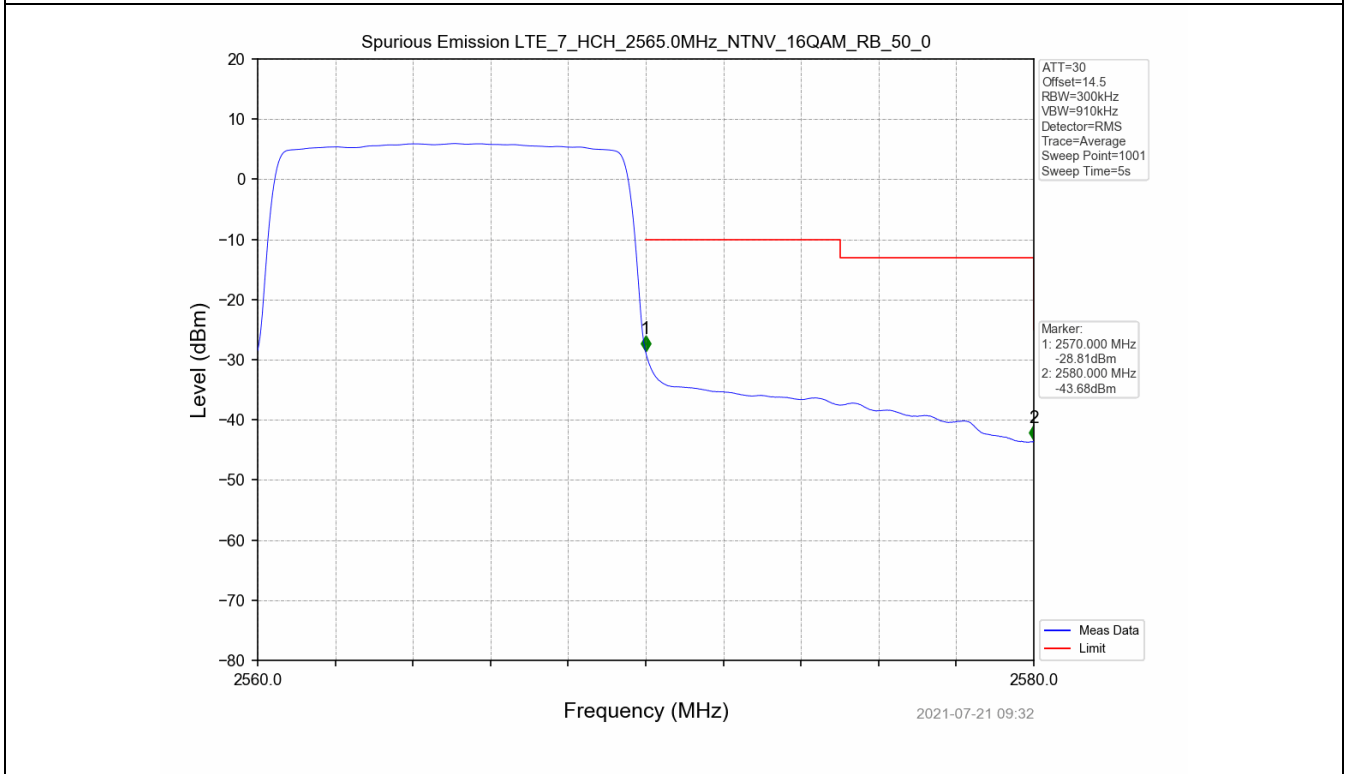
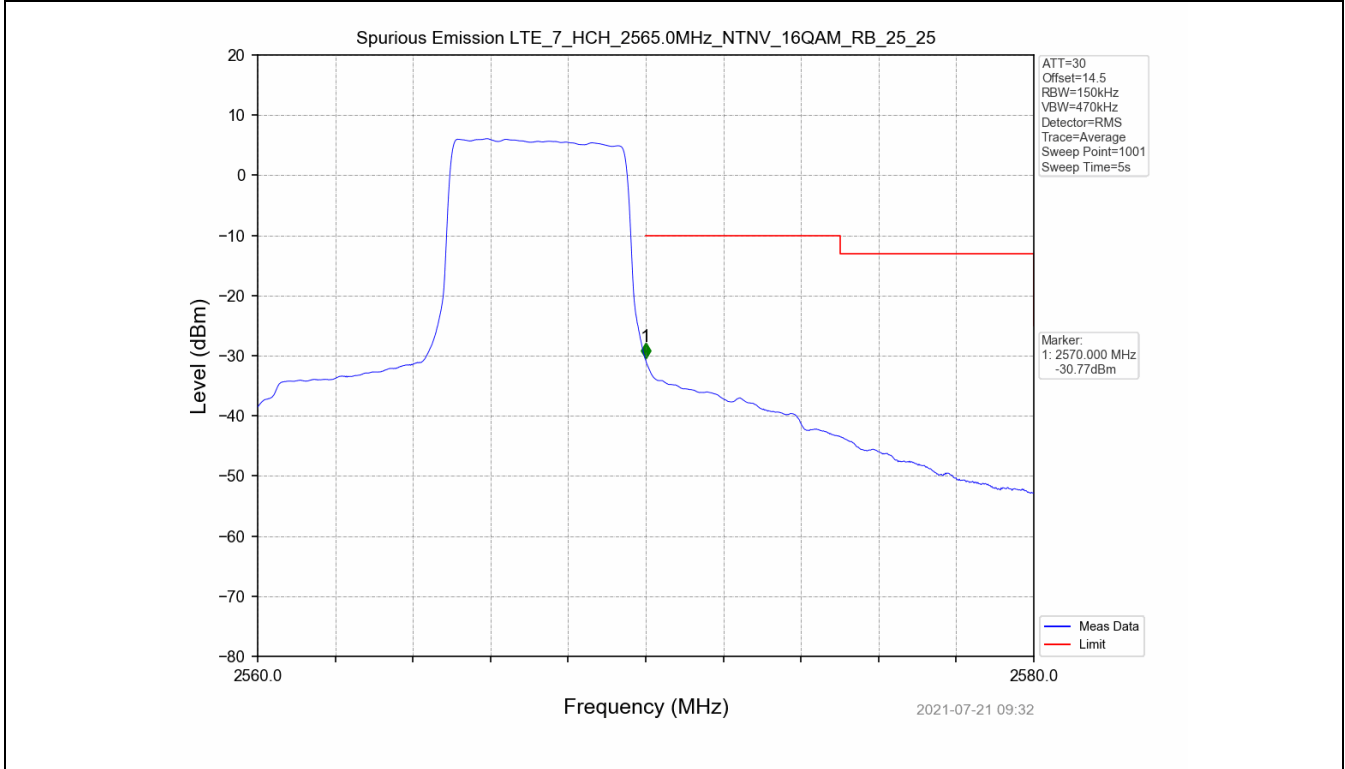
6.1 Test Graph

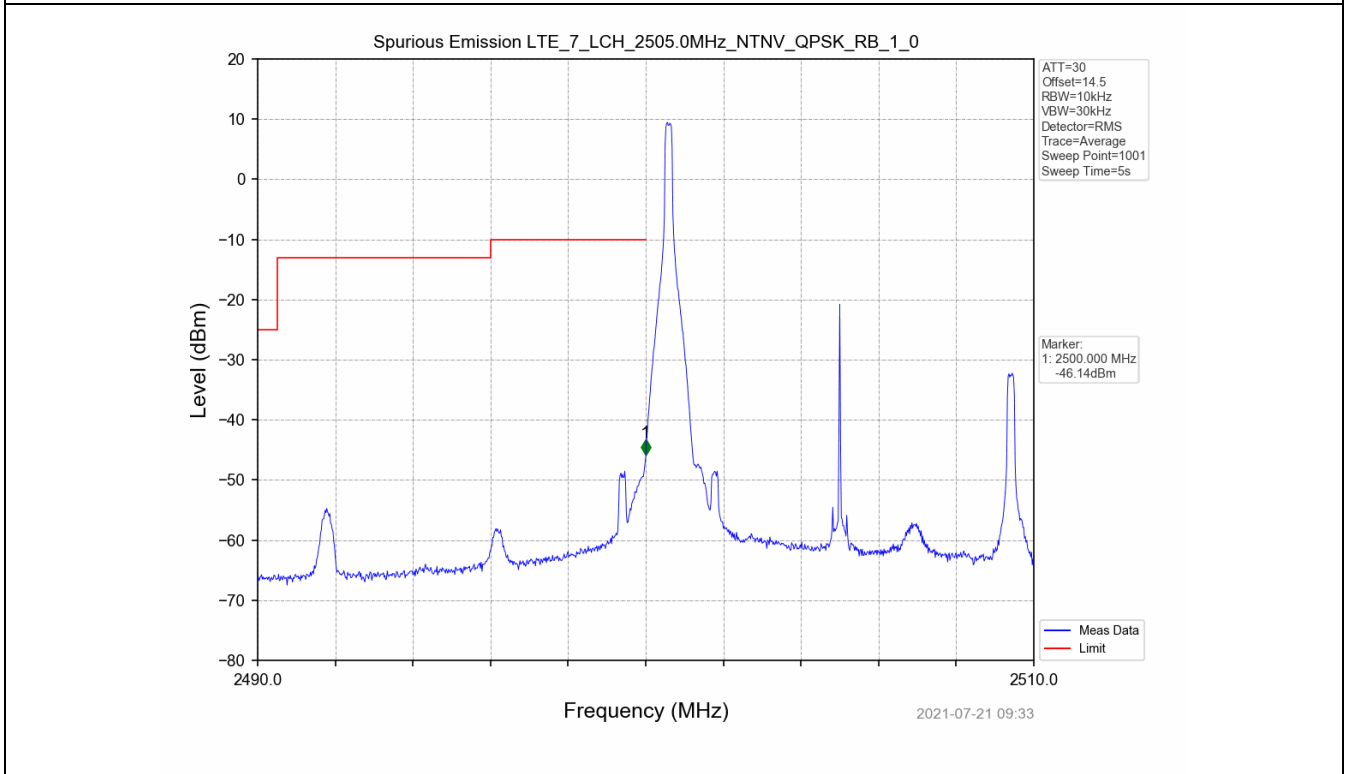
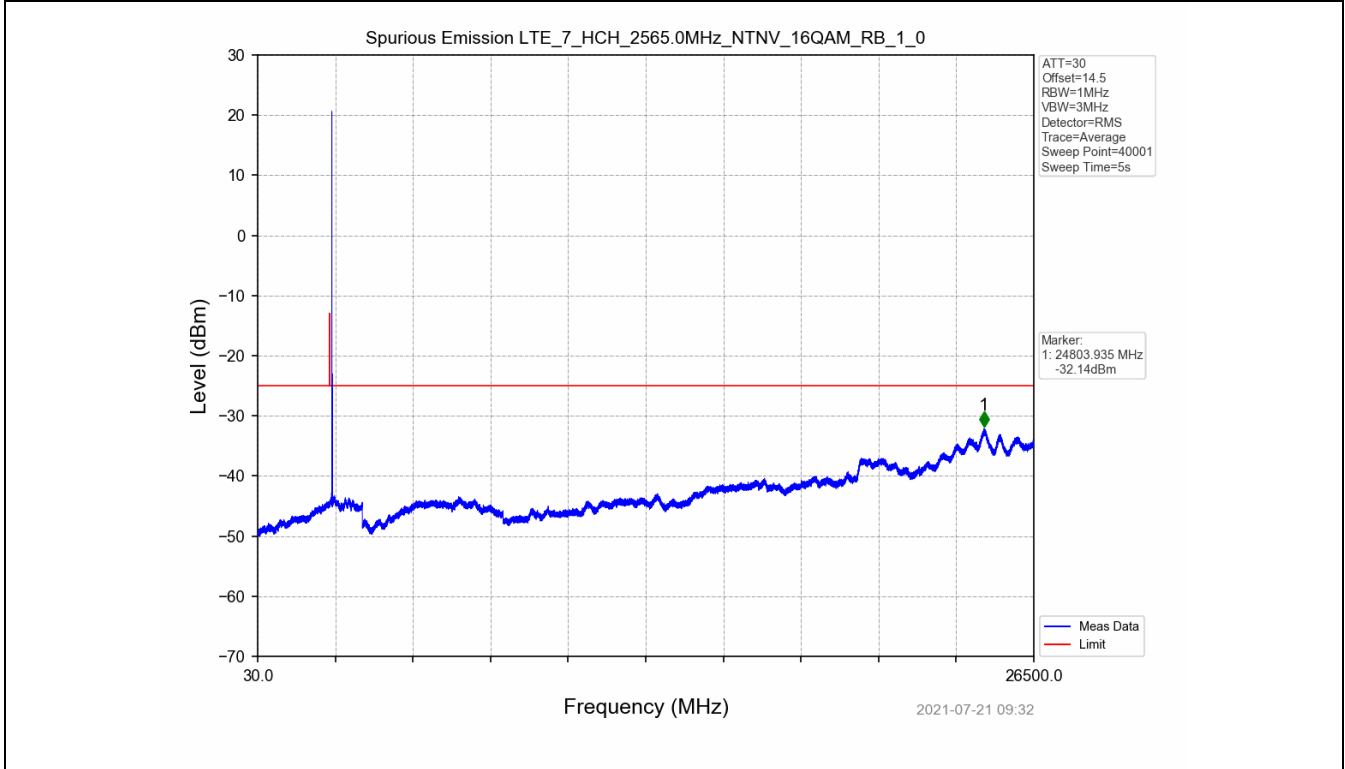


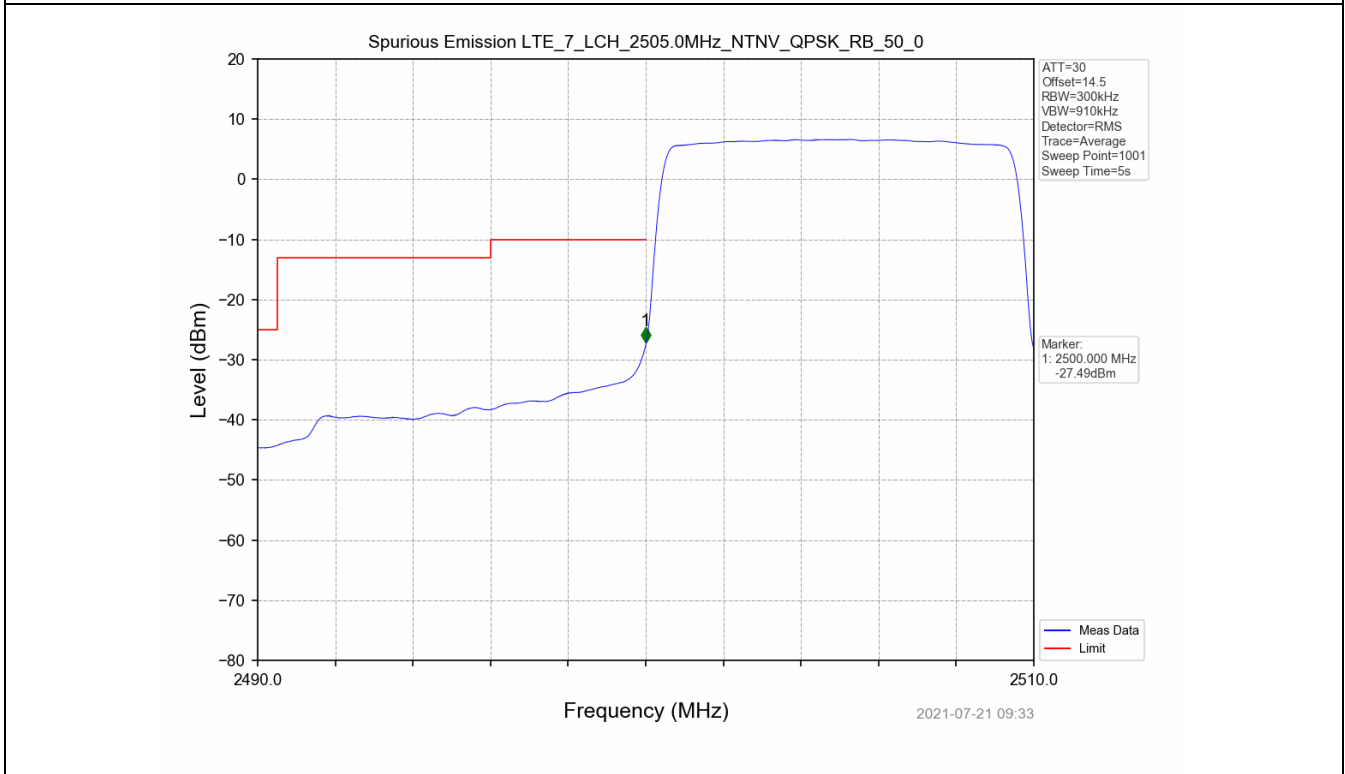
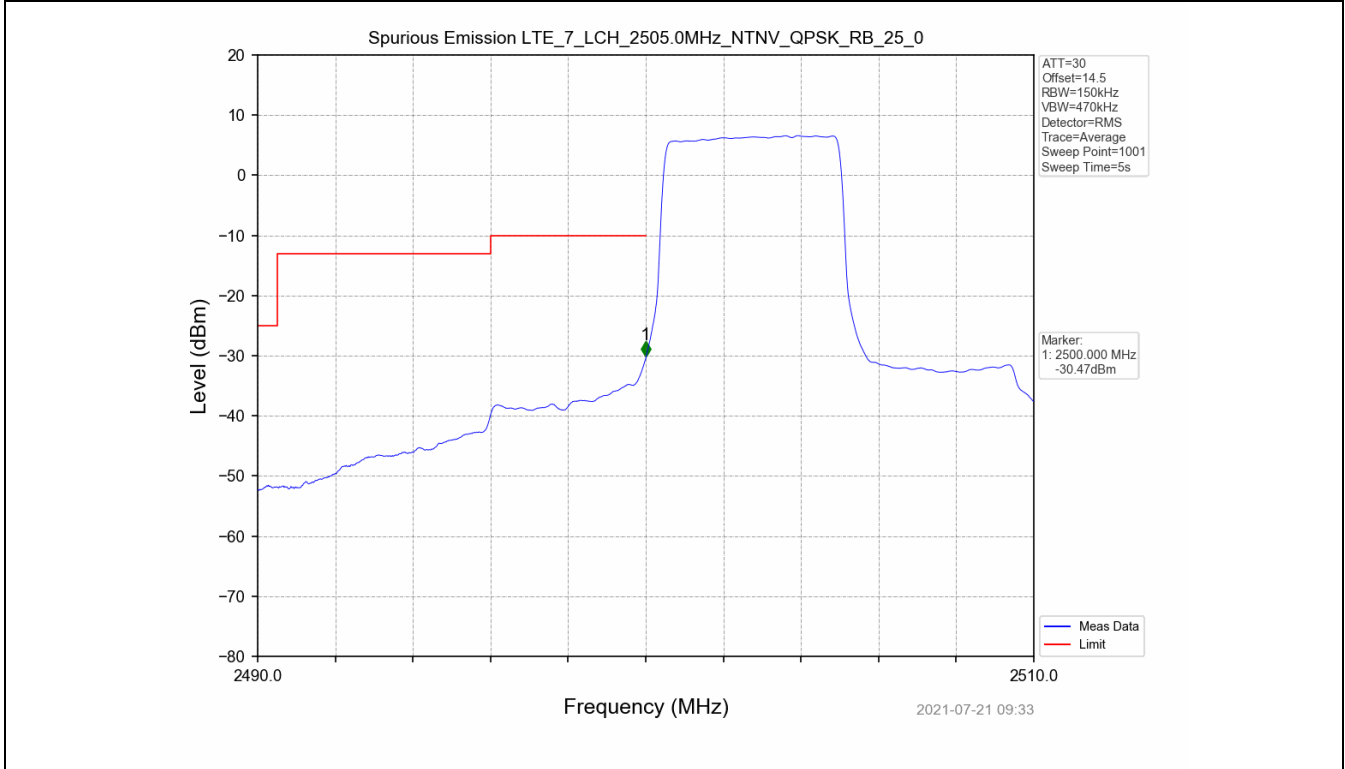


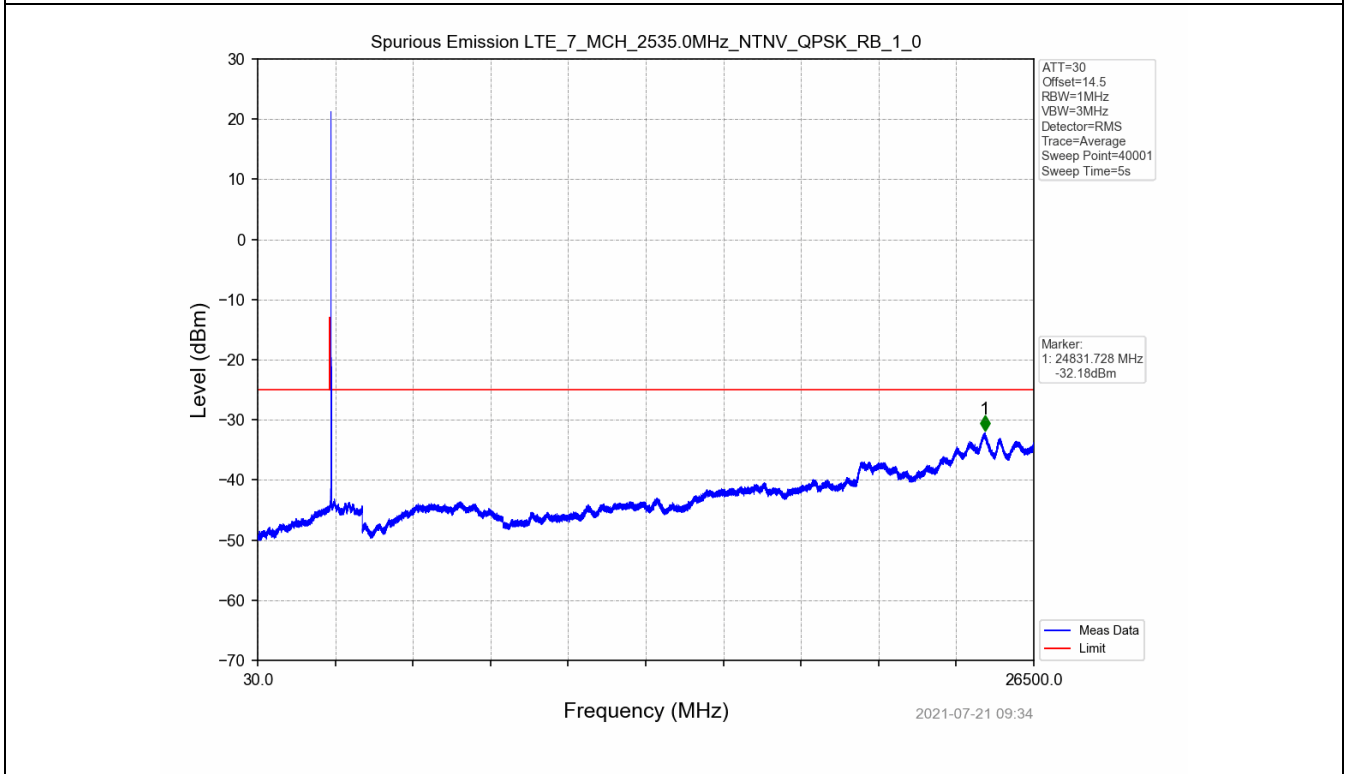
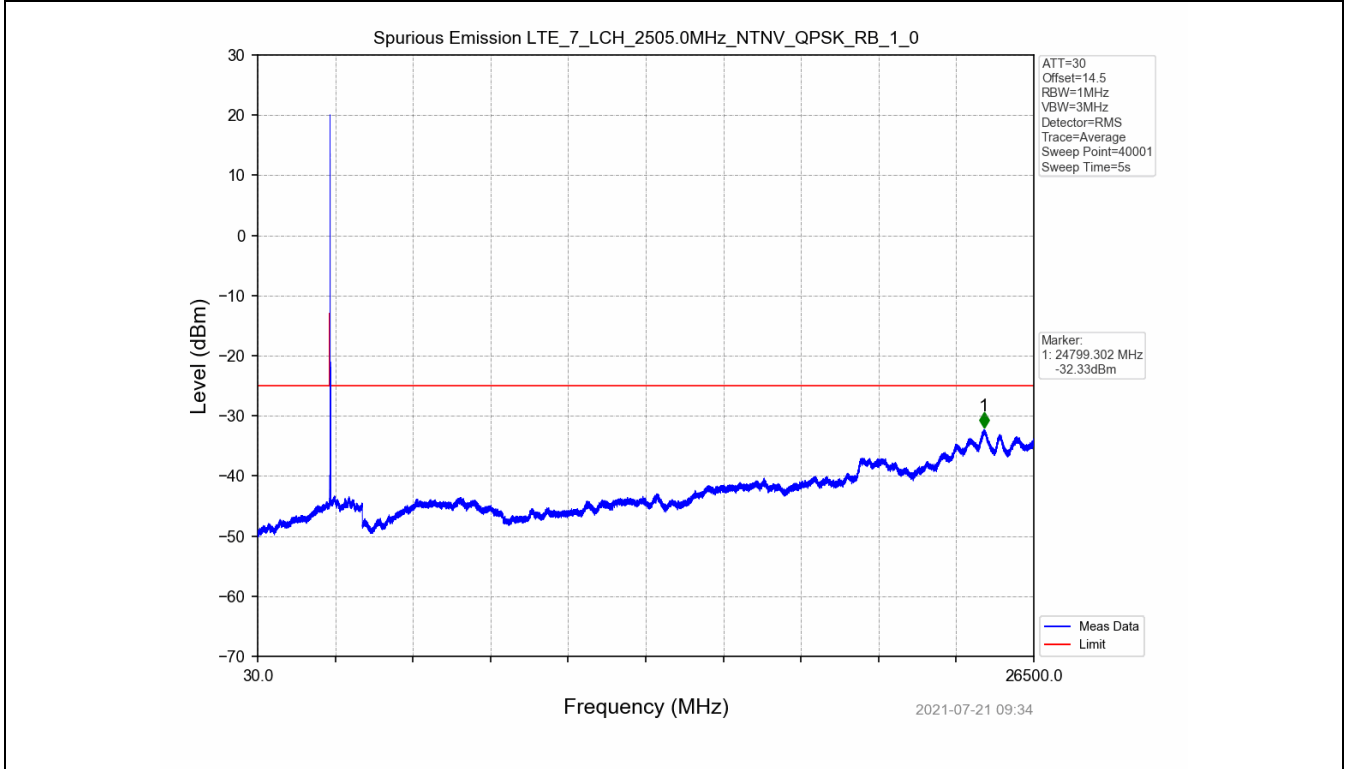


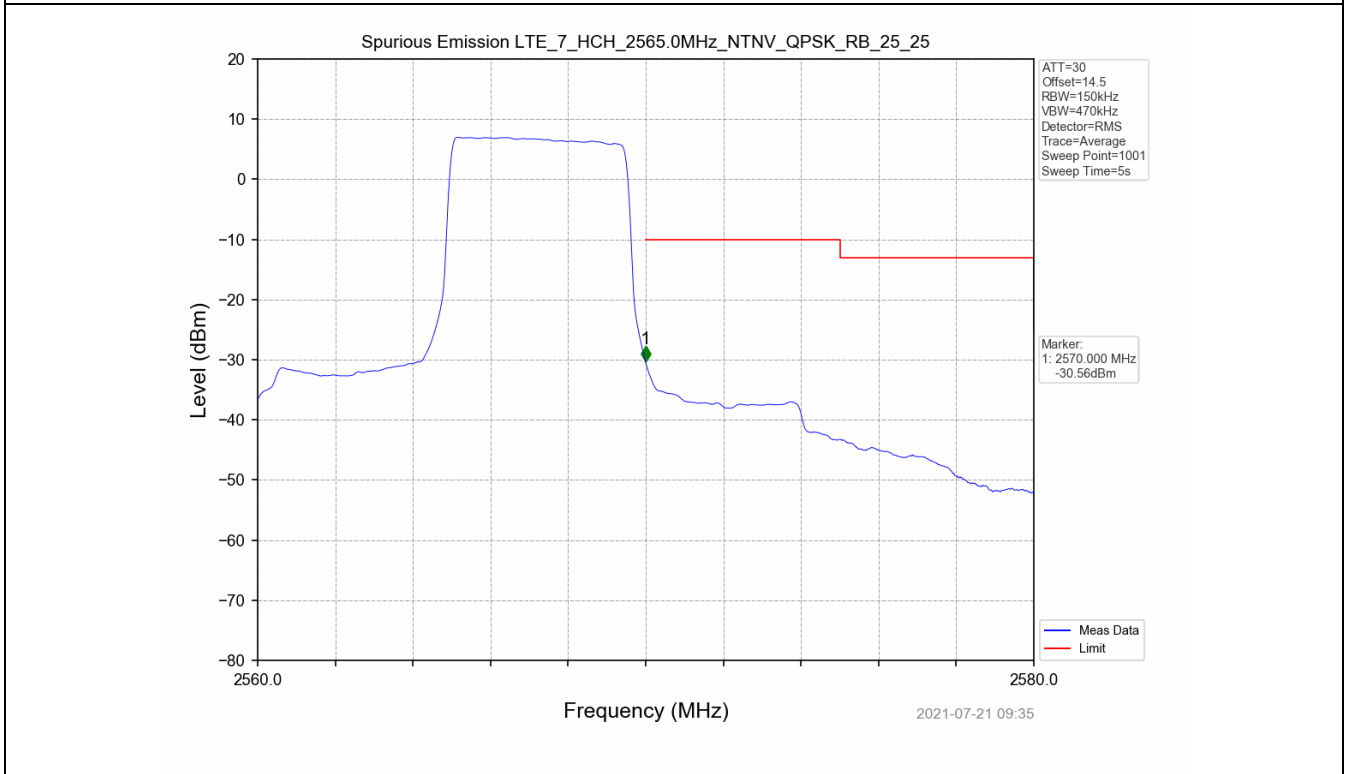
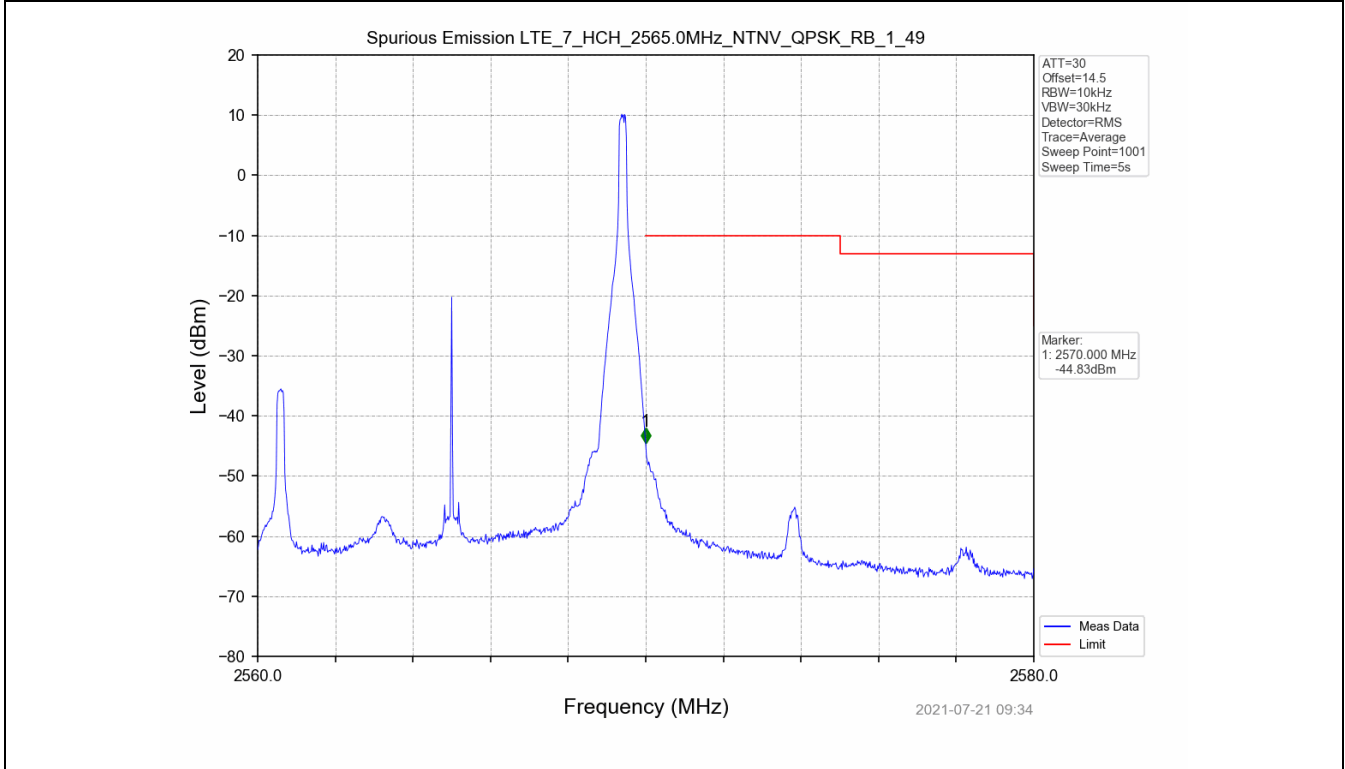


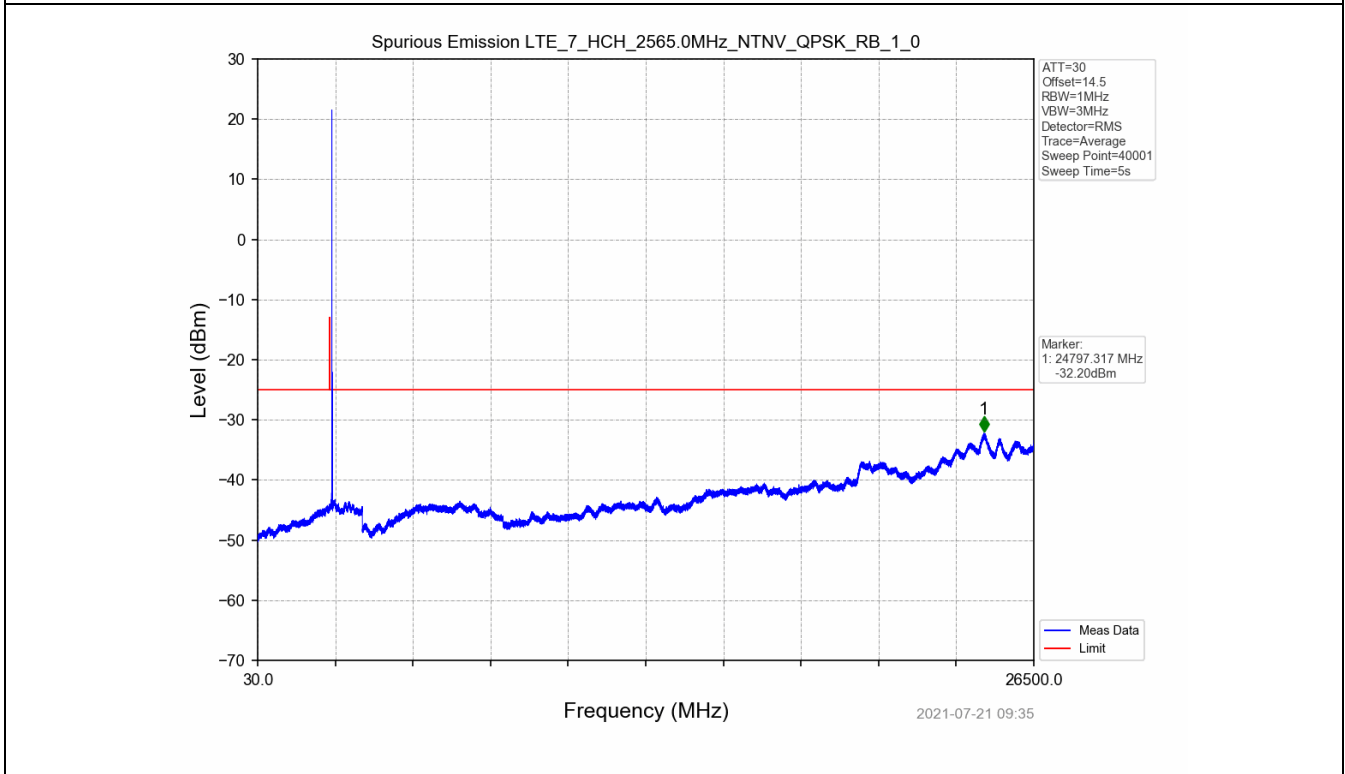
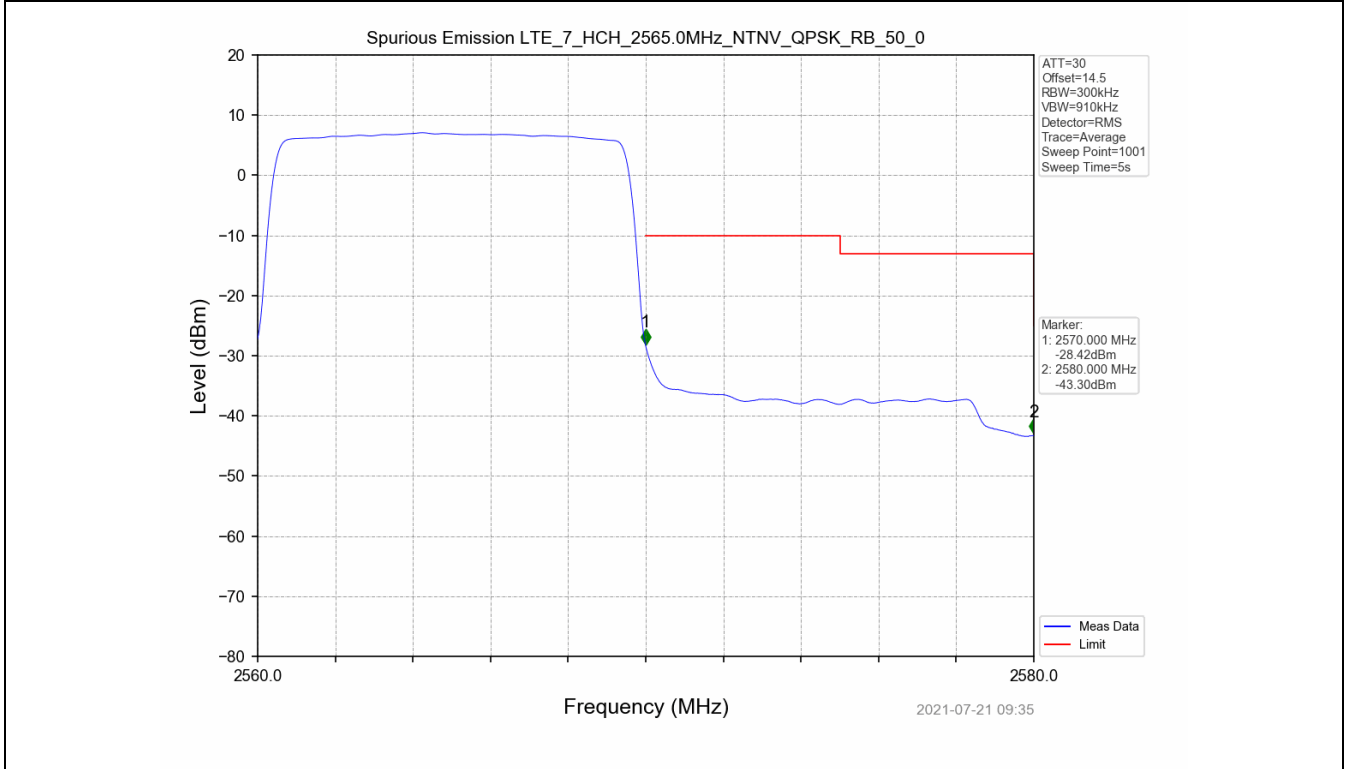




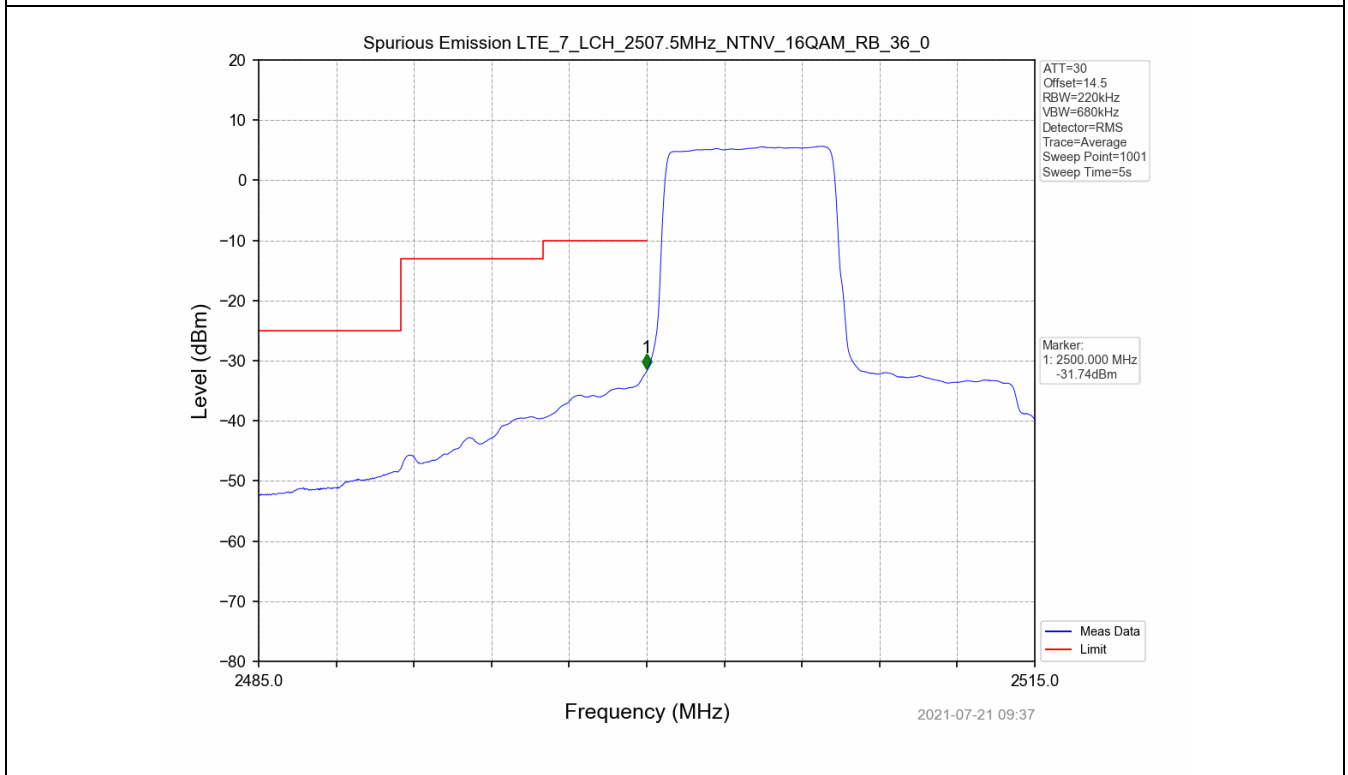
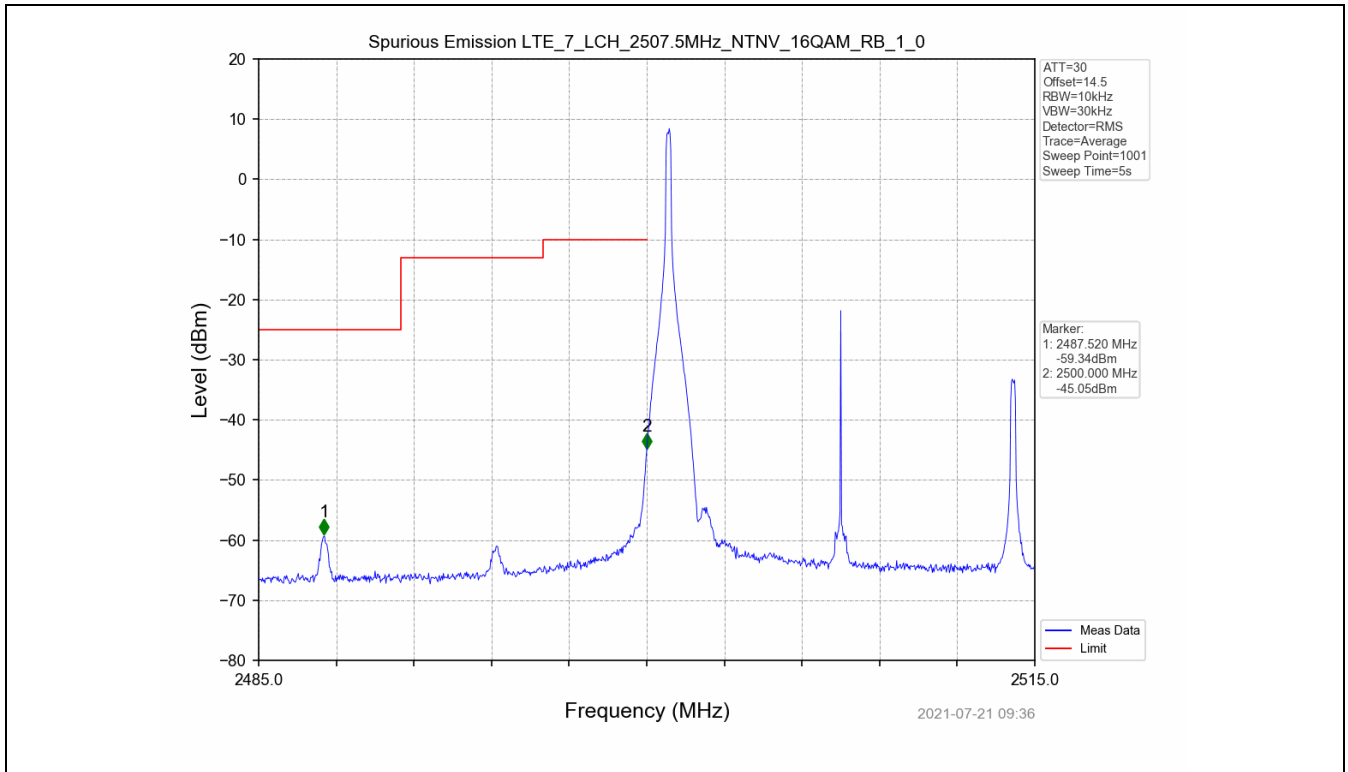


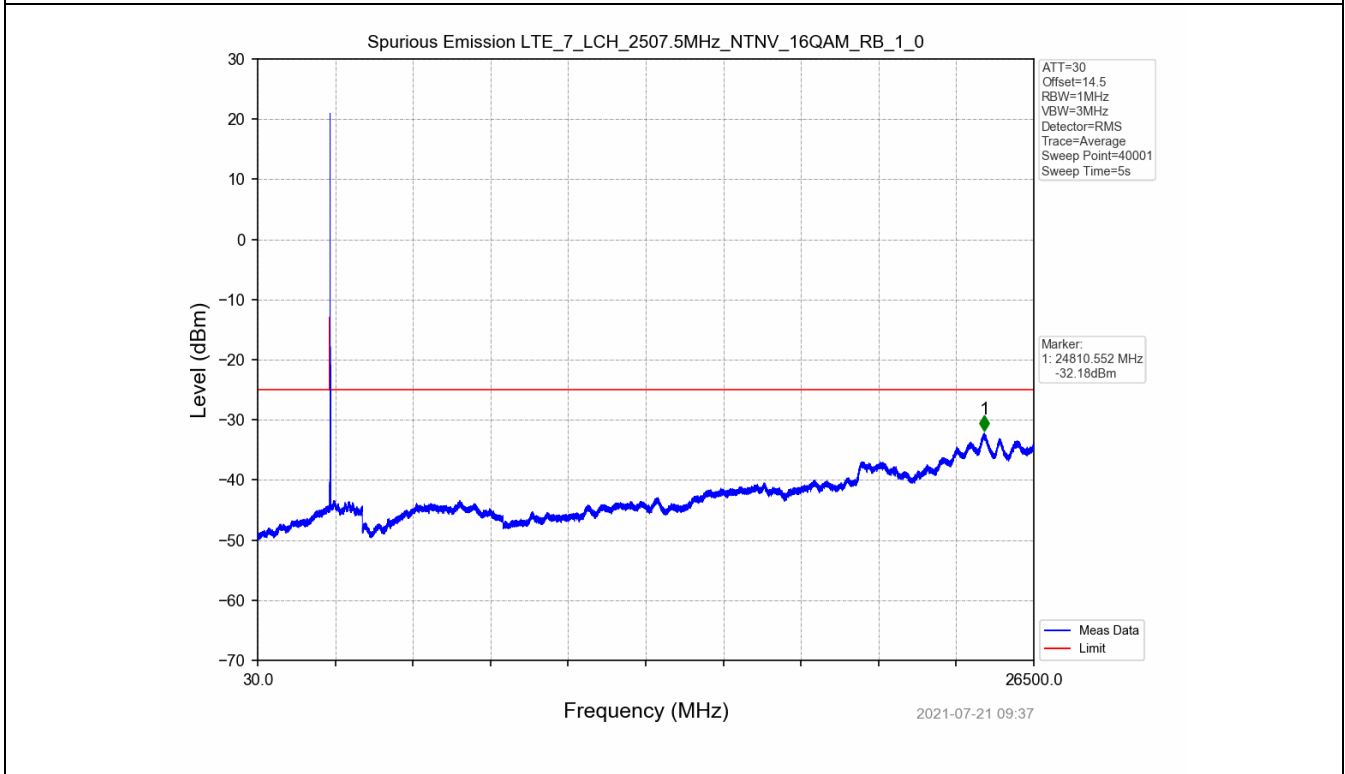
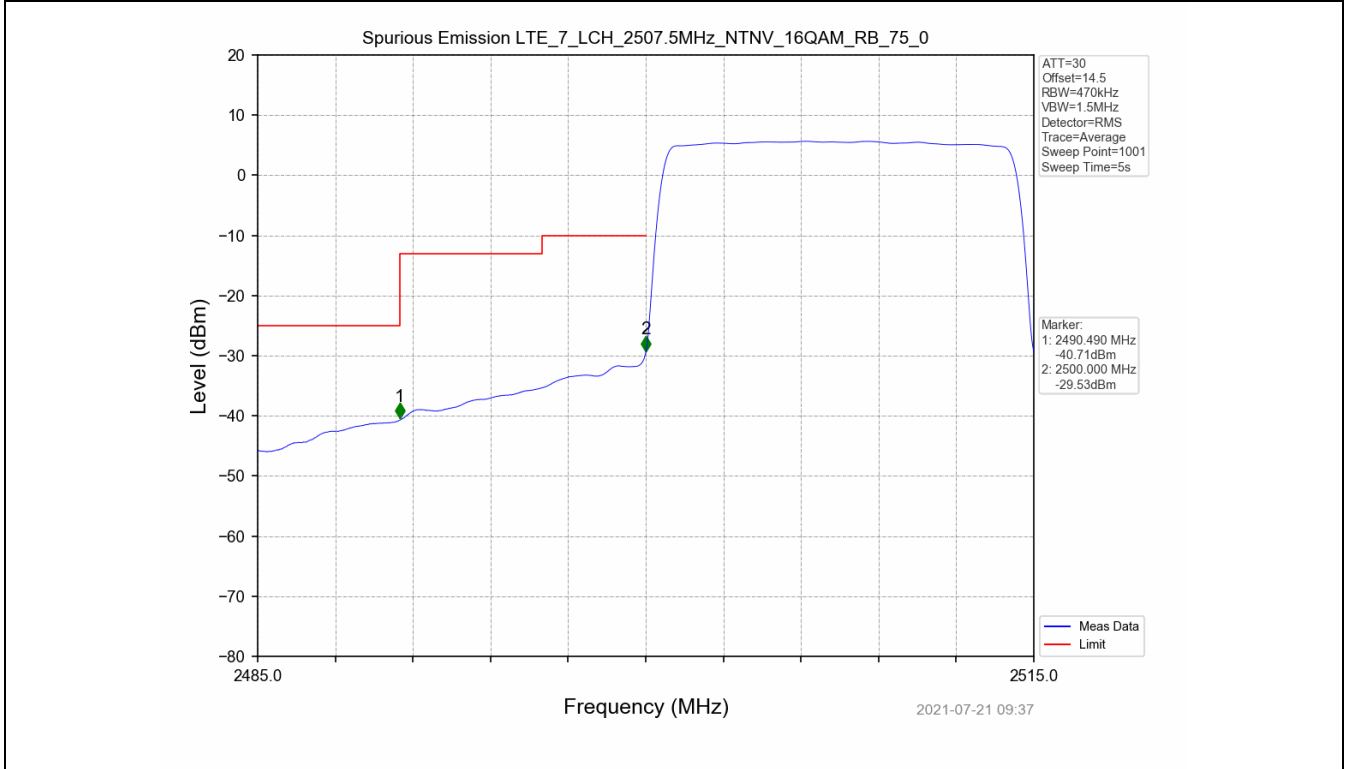




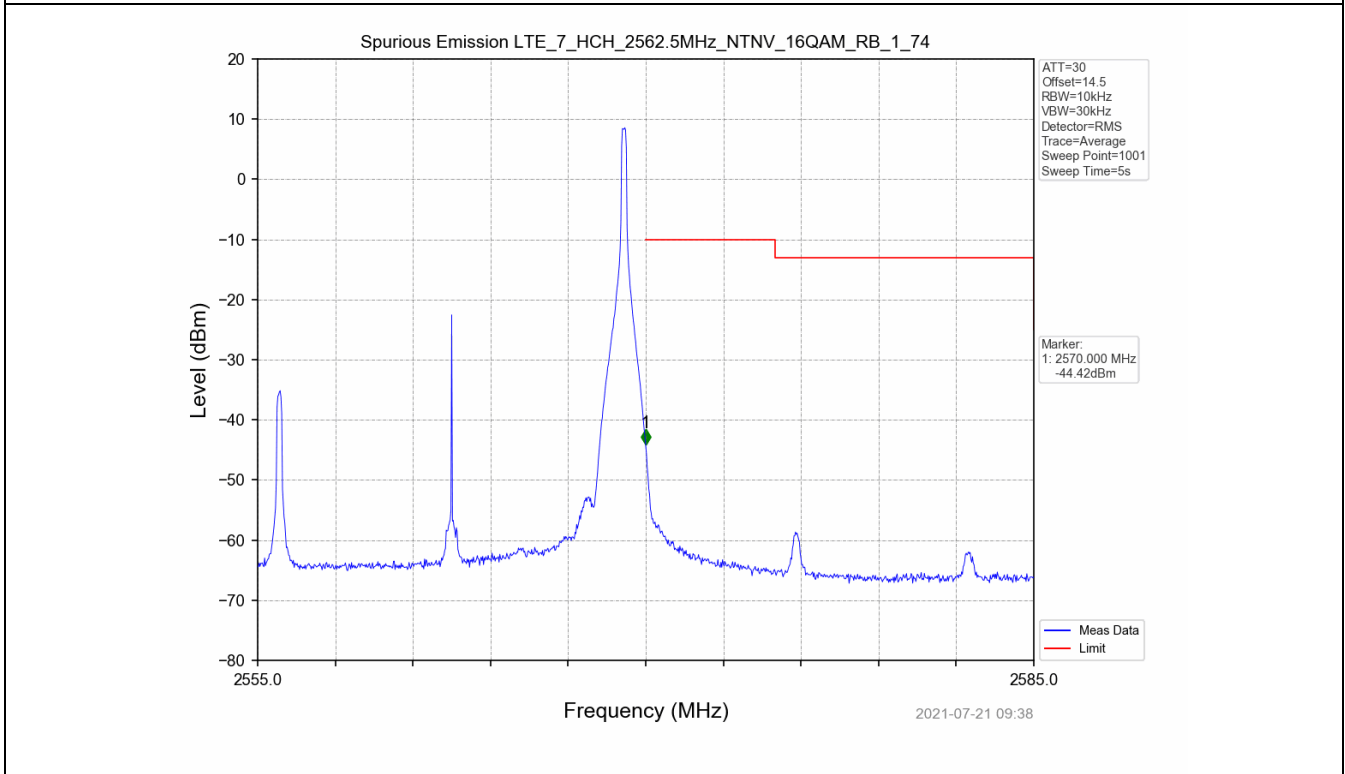
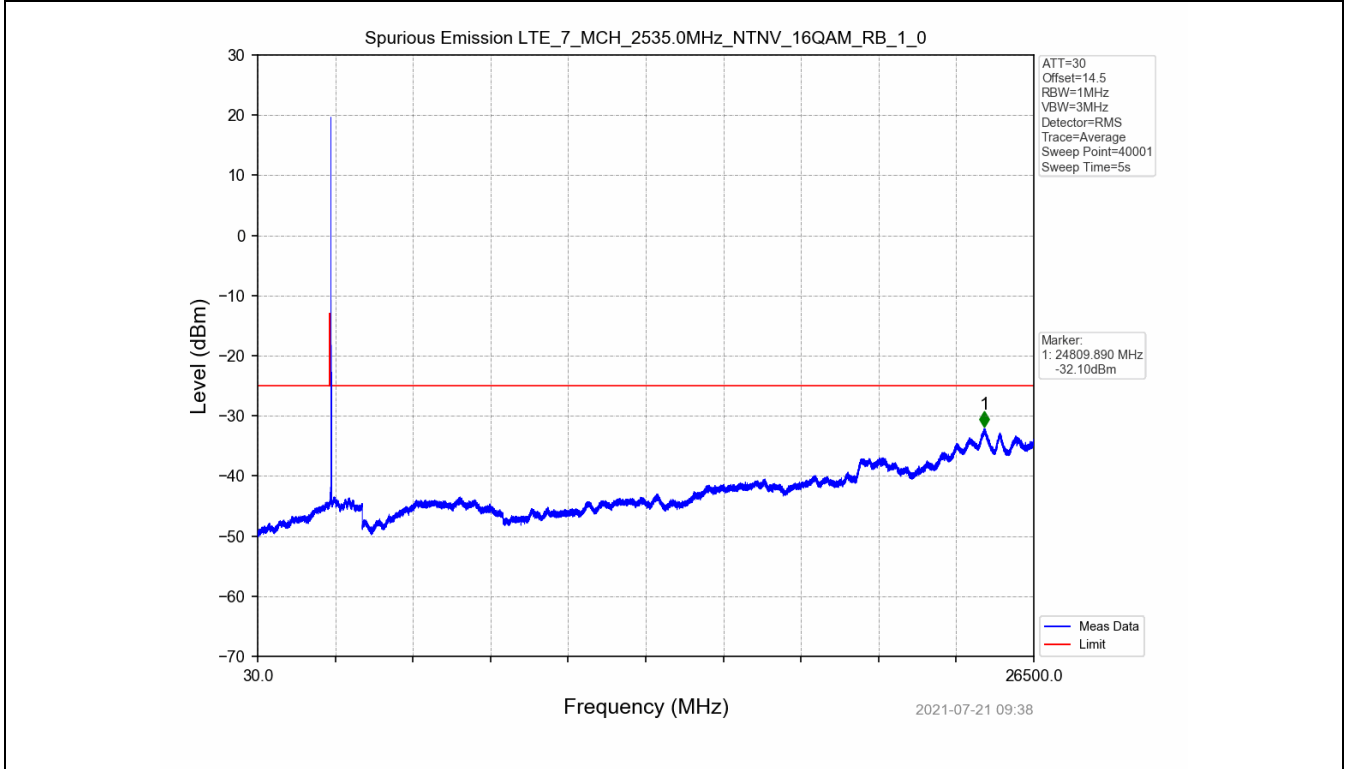


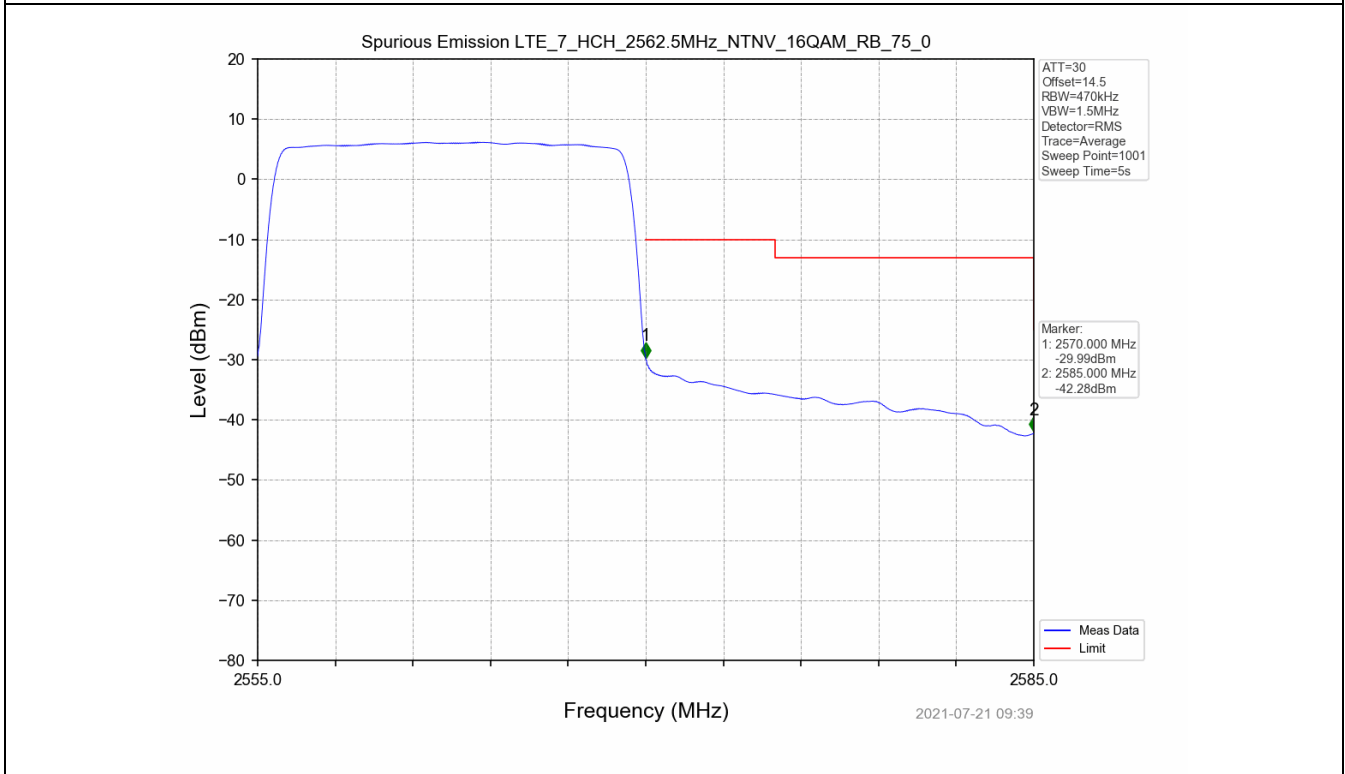
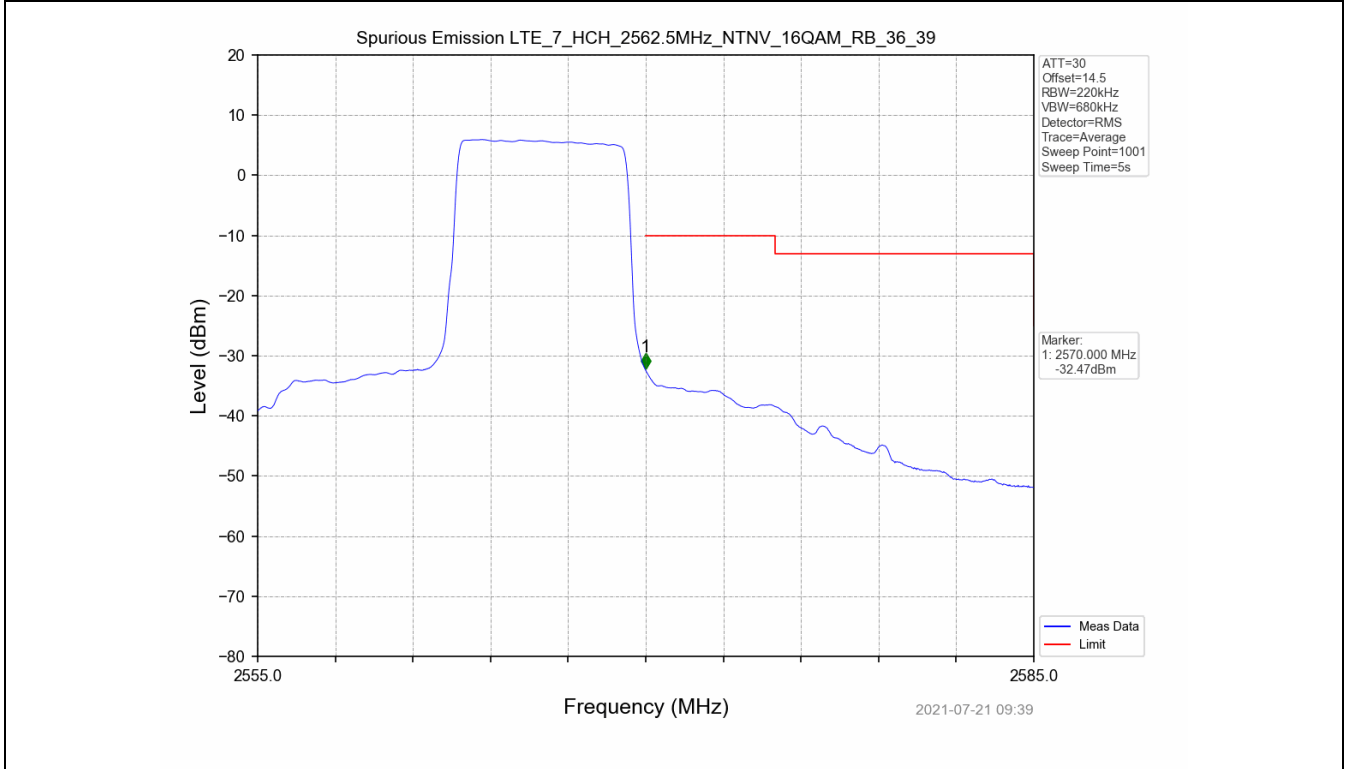
6.1 Test Graph

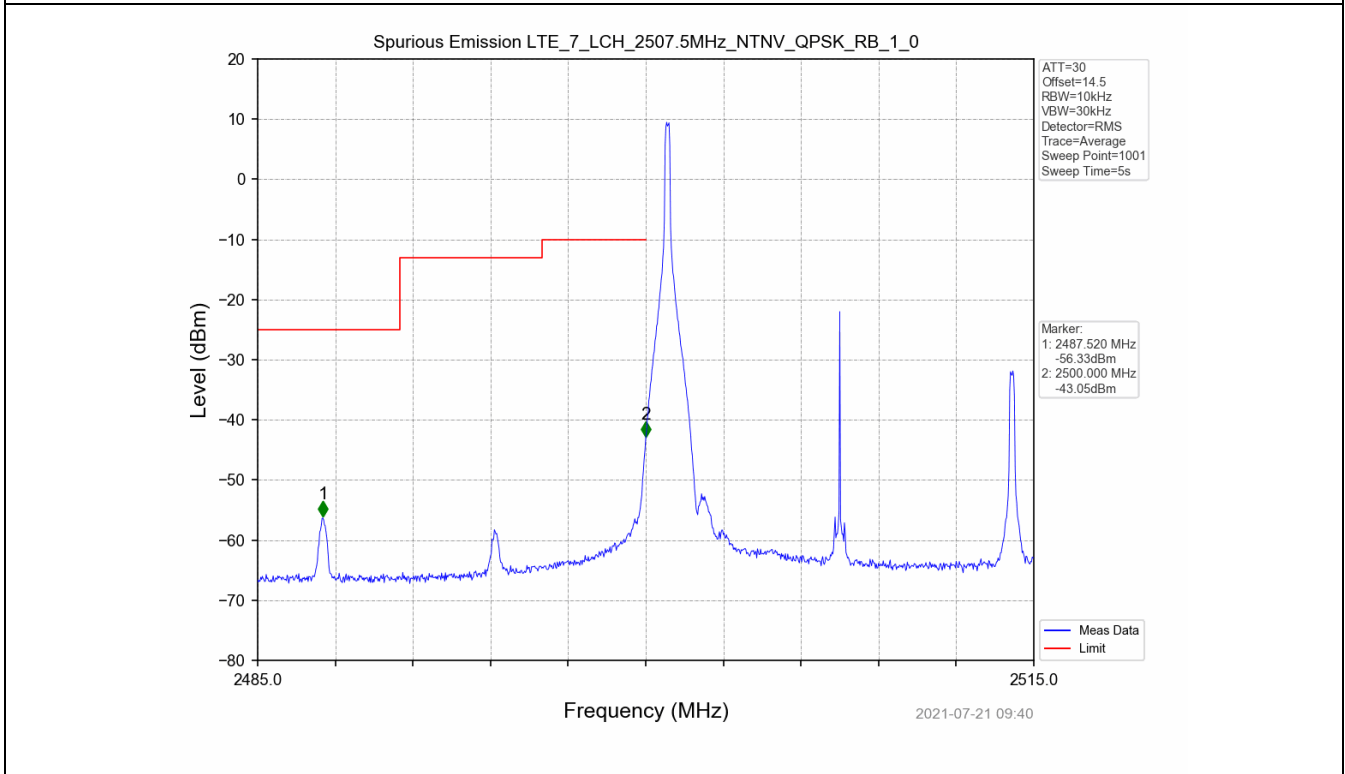
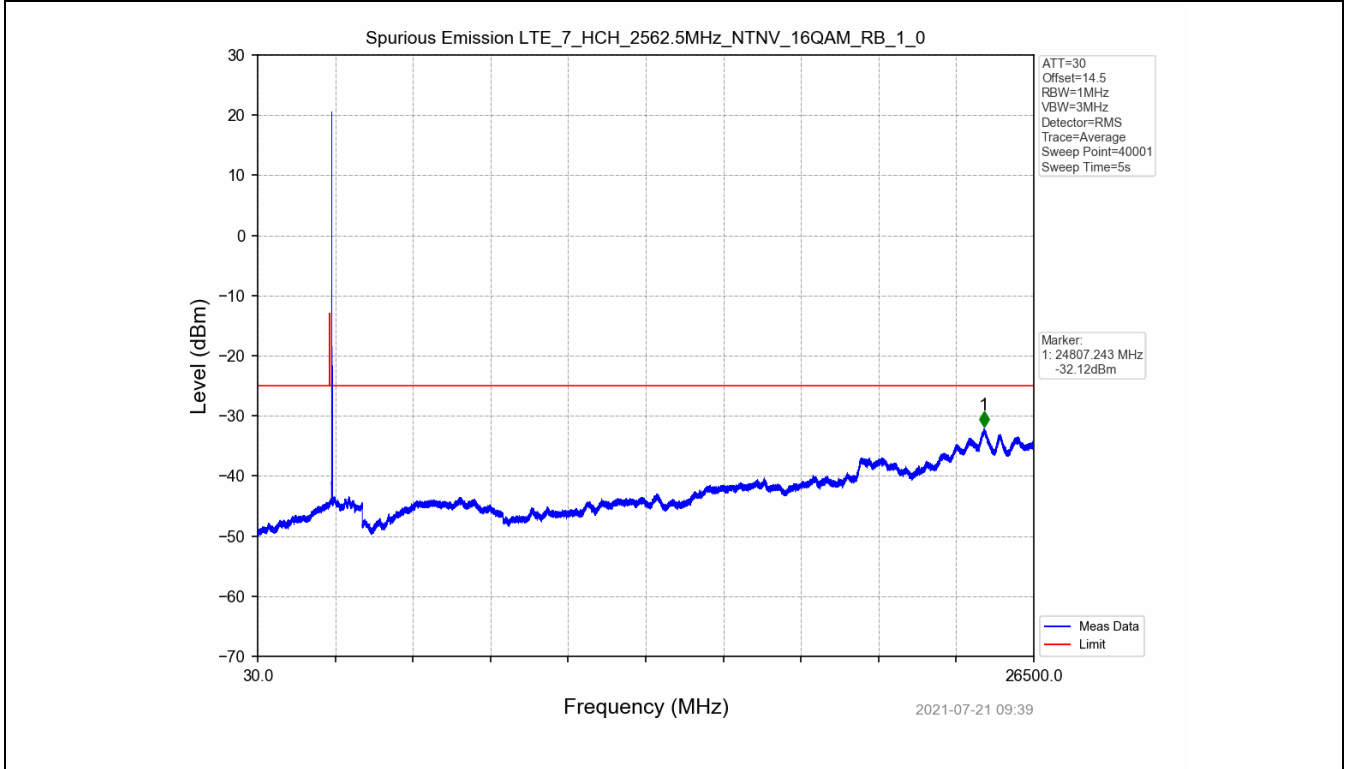


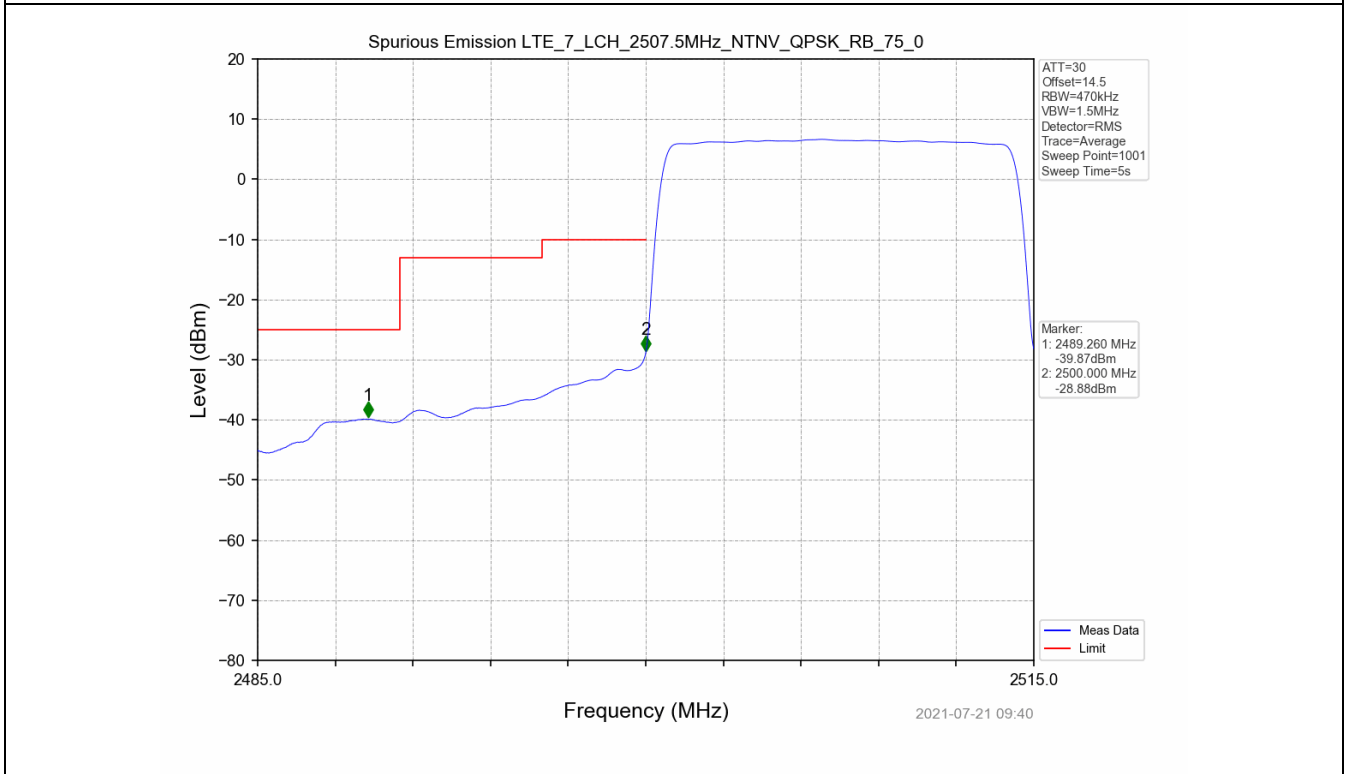
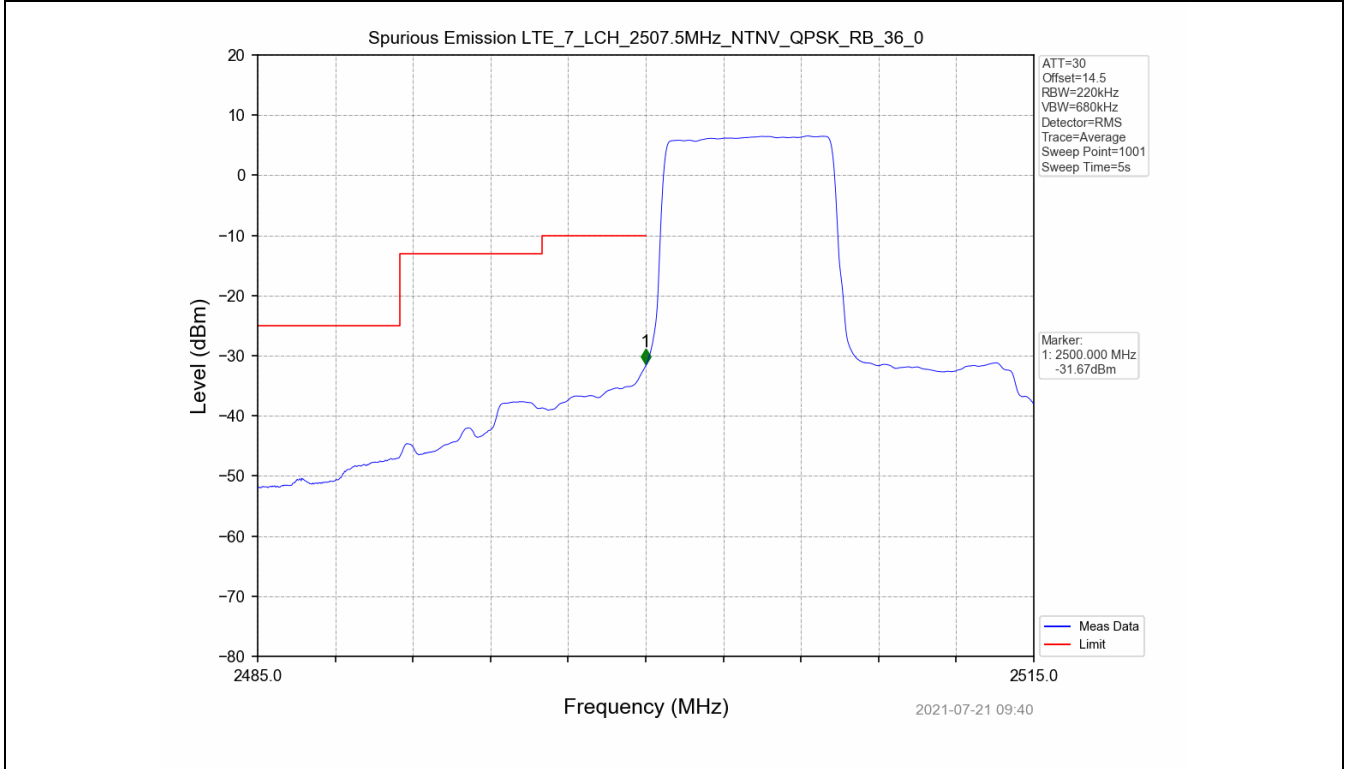


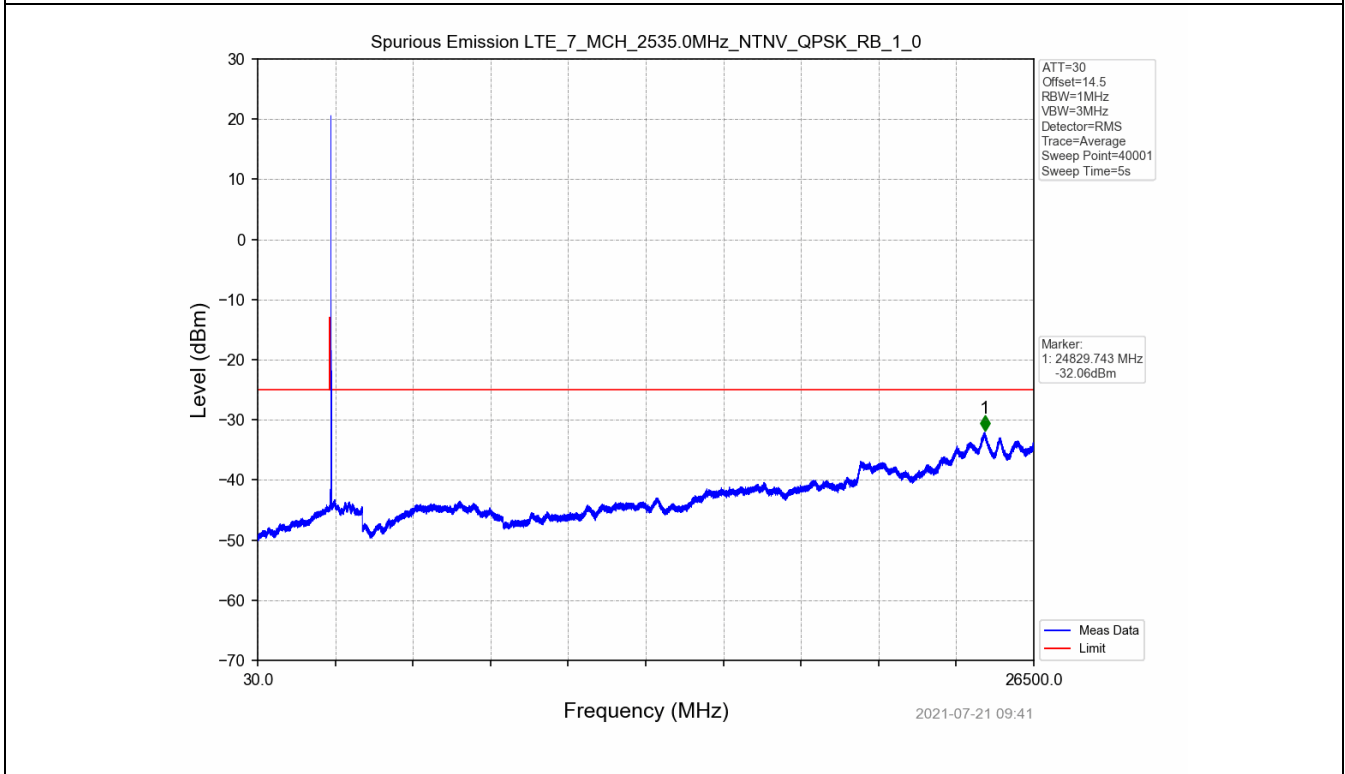
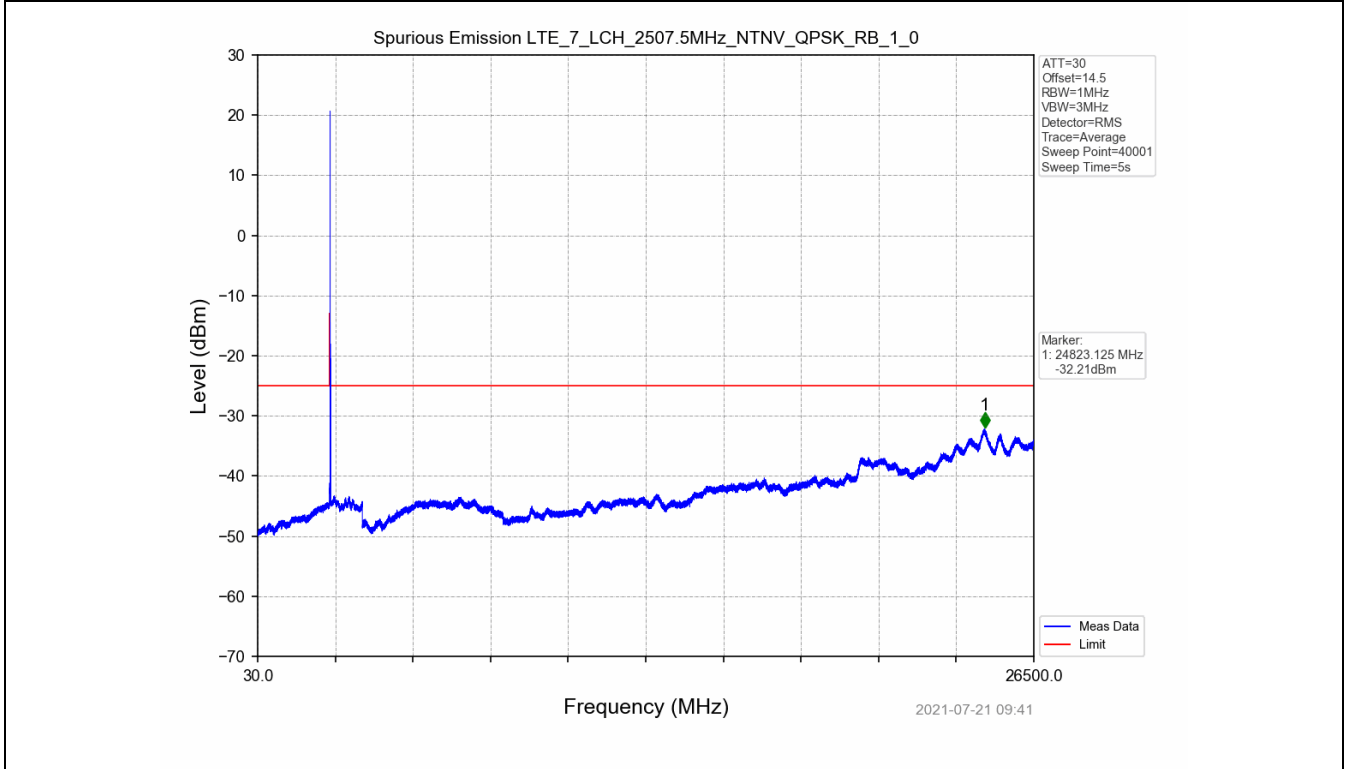


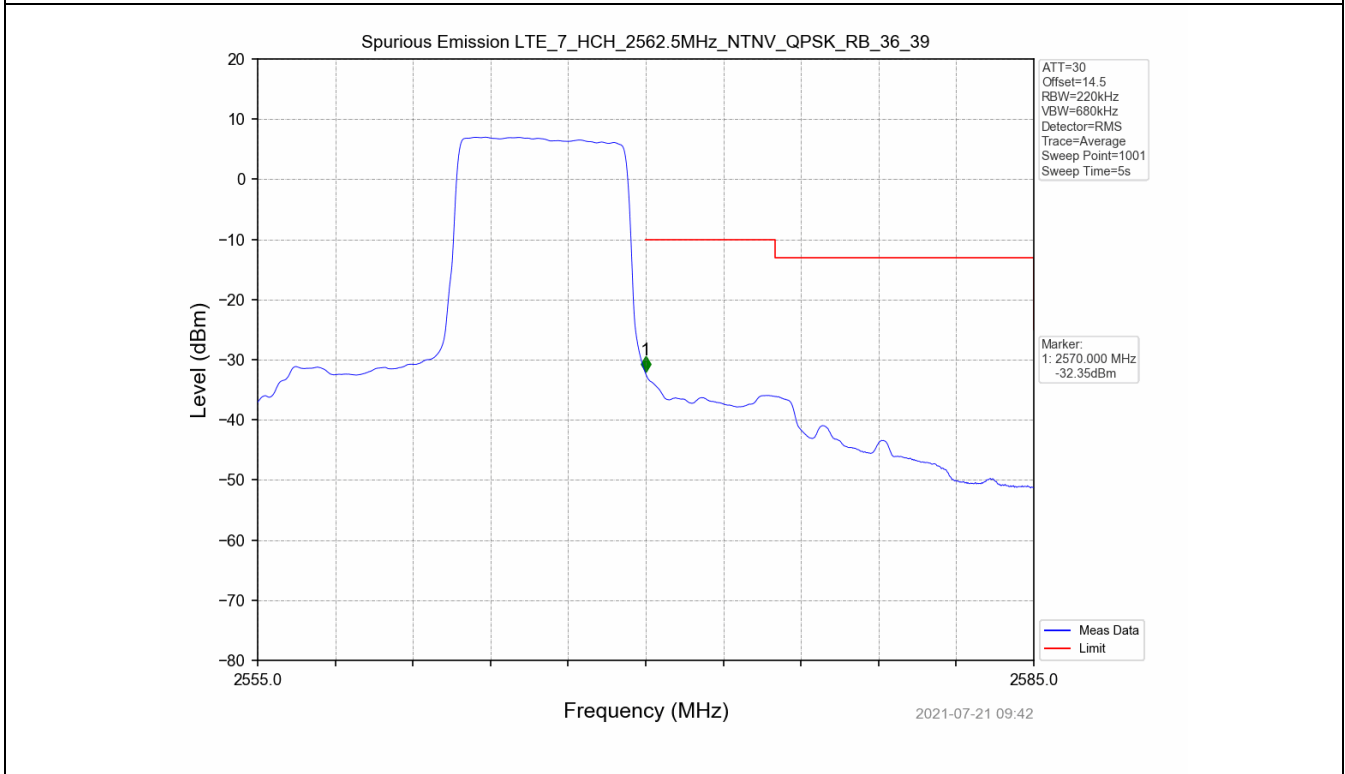
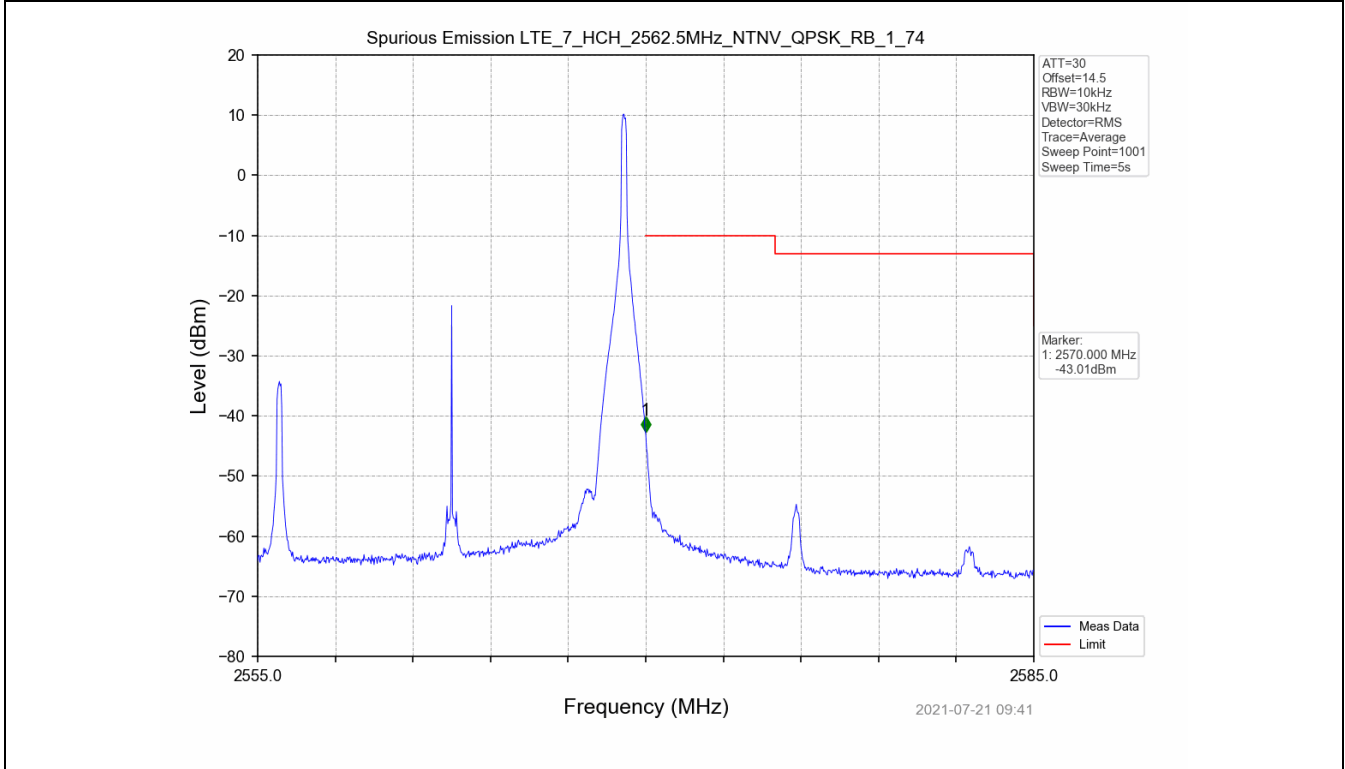


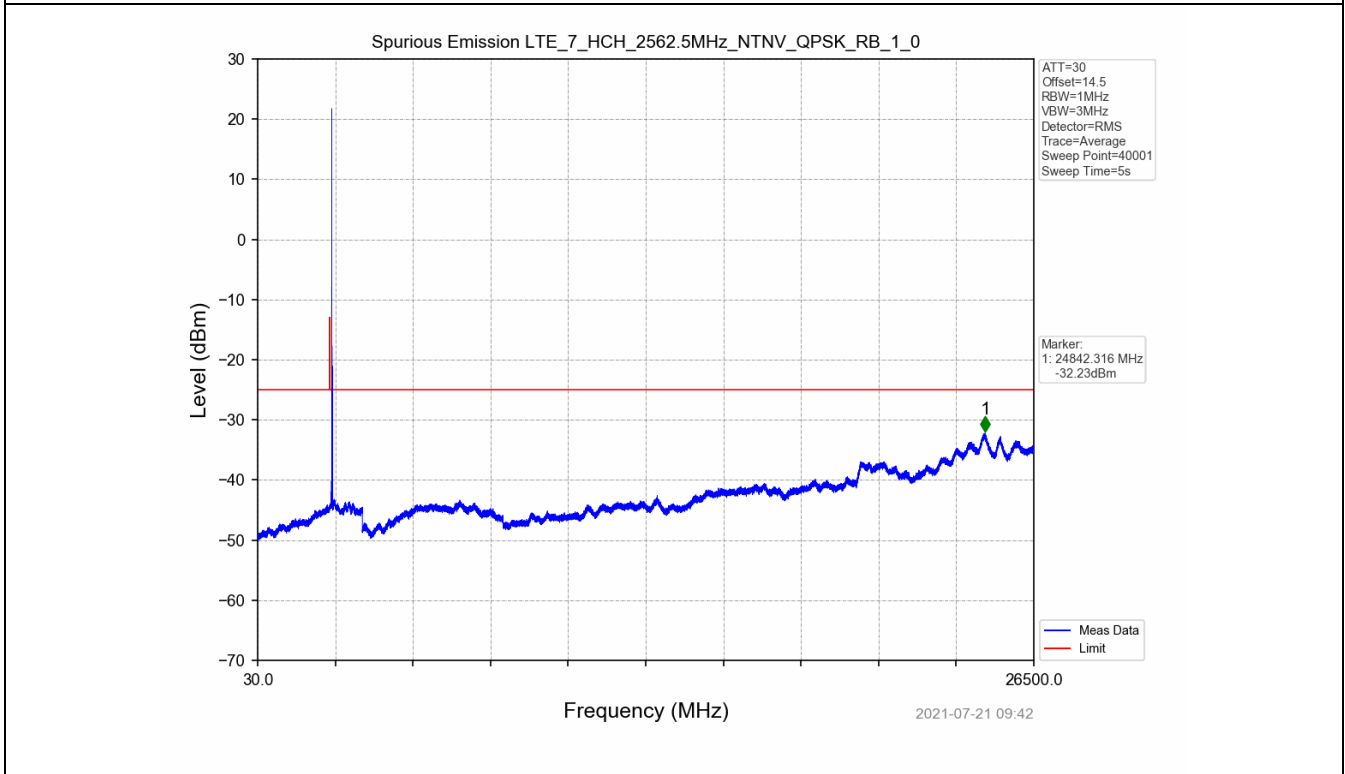
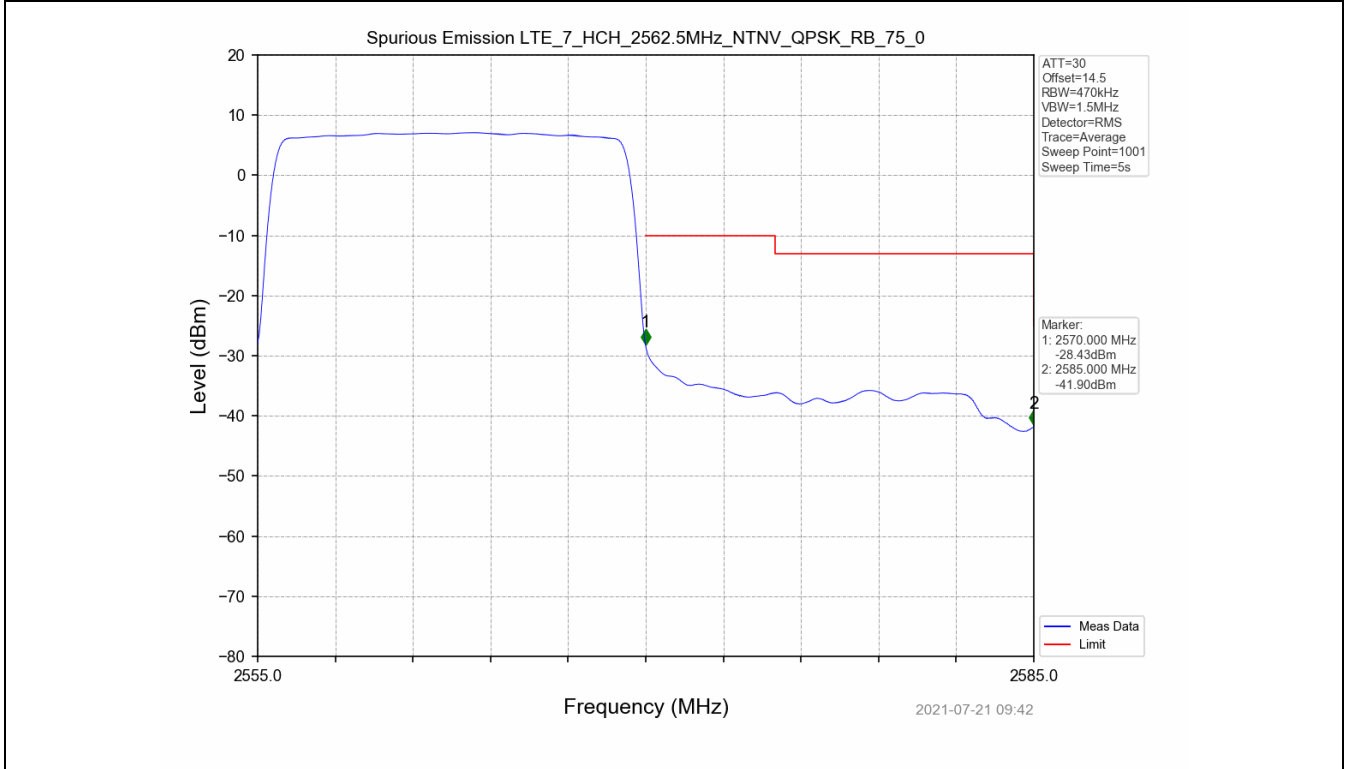












6.1 Test Graph

