

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

Test Band: 4 1.4MHz 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	23.14	19.82	23.51	/	2.53	25.67	22.35	26.04	30.00	PASS	
		2	23.14	19.81	23.33	/	2.53	25.67	22.34	25.86	30.00	PASS	
		5	23.24	19.84	23.35	/	2.53	25.77	22.37	25.88	30.00	PASS	
	3	0	23.10	19.78	23.46	/	2.53	25.63	22.31	25.99	30.00	PASS	
		2	23.15	19.86	23.35	/	2.53	25.68	22.39	25.88	30.00	PASS	
		3	23.21	19.83	23.33	/	2.53	25.74	22.36	25.86	30.00	PASS	
	6	0	22.15	18.74	22.48	/	2.53	24.68	21.27	25.01	30.00	PASS	
			22.18	18.80	22.85	/	2.53	24.71	21.33	25.38	30.00	PASS	
	16QAM	1	2	22.17	18.78	22.72	/	2.53	24.7	21.31	25.25	30.00	PASS
5			22.33	18.91	22.68	/	2.53	24.86	21.44	25.21	30.00	PASS	
0			22.22	18.96	22.64	/	2.53	24.75	21.49	25.17	30.00	PASS	
3		2	22.27	19.07	22.55	/	2.53	24.8	21.6	25.08	30.00	PASS	
		3	22.31	19.09	22.49	/	2.53	24.84	21.62	25.02	30.00	PASS	
		6	0	20.96	17.87	21.72	/	2.53	23.49	20.4	24.25	30.00	PASS
Note: 1) dBd = dBi - 2.15 2) EIRP = Conducted output power + Antenna gain (dBi)													

Test Band: 4 3MHz 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	23.30	19.71	23.60	/	2.53	25.83	22.24	26.13	30.00	PASS	
		7	23.37	19.90	23.41	/	2.53	25.9	22.43	25.94	30.00	PASS	
		14	23.34	20.00	23.11	/	2.53	25.87	22.53	25.64	30.00	PASS	
	8	0	22.20	18.66	22.63	/	2.53	24.73	21.19	25.16	30.00	PASS	
		4	22.30	18.72	22.52	/	2.53	24.83	21.25	25.05	30.00	PASS	
		7	22.33	18.73	22.42	/	2.53	24.86	21.26	24.95	30.00	PASS	
	15	0	22.29	18.67	22.49	/	2.53	24.82	21.2	25.02	30.00	PASS	
			22.28	18.77	23.21	/	2.53	24.81	21.3	25.74	30.00	PASS	
	16QAM	1	7	22.52	18.96	23.16	/	2.53	25.05	21.49	25.69	30.00	PASS
14			22.50	18.84	22.83	/	2.53	25.03	21.37	25.36	30.00	PASS	
0			20.99	17.82	21.96	/	2.53	23.52	20.35	24.49	30.00	PASS	
8		4	21.08	17.98	21.88	/	2.53	23.61	20.51	24.41	30.00	PASS	
		7	21.15	17.98	21.75	/	2.53	23.68	20.51	24.28	30.00	PASS	
		15	0	21.11	17.90	21.77	/	2.53	23.64	20.43	24.3	30.00	PASS
Note: 1) dBd = dBi - 2.15 2) EIRP = Conducted output power + Antenna gain (dBi)													

Test Band: 4 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	23.75	19.96	23.92	/	2.53	26.28	22.49	26.45	30.00	PASS	
		13	23.62	20.16	23.76	/	2.53	26.15	22.69	26.29	30.00	PASS	
		24	23.72	20.40	23.31	/	2.53	26.25	22.93	25.84	30.00	PASS	
	12	0	22.35	18.59	22.68	/	2.53	24.88	21.12	25.21	30.00	PASS	
		6	22.51	18.82	22.73	/	2.53	25.04	21.35	25.26	30.00	PASS	
		13	22.56	18.98	22.55	/	2.53	25.09	21.51	25.08	30.00	PASS	
	25	0	22.45	18.73	22.63	/	2.53	24.98	21.26	25.16	30.00	PASS	
			22.59	18.84	22.62	/	2.53	25.12	21.37	25.15	30.00	PASS	
		13	22.79	18.98	22.66	/	2.53	25.32	21.51	25.19	30.00	PASS	
16QAM	1	24	22.91	19.32	22.27	/	2.53	25.44	21.85	24.8	30.00	PASS	
		12	0	21.18	17.67	21.80	/	2.53	23.71	20.2	24.33	30.00	PASS
			6	21.35	17.91	21.84	/	2.53	23.88	20.44	24.37	30.00	PASS
	13		21.41	17.87	21.68	/	2.53	23.94	20.4	24.21	30.00	PASS	
	25	0	21.24	17.84	21.70	/	2.53	23.77	20.37	24.23	30.00	PASS	

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

Test Band: 4 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	23.23	20.26	23.21	/	2.53	25.76	22.79	25.74	30.00	PASS	
		25	23.45	20.07	23.77	/	2.53	25.98	22.6	26.3	30.00	PASS	
		49	22.77	21.24	23.27	/	2.53	25.3	23.77	25.8	30.00	PASS	
	25	0	21.98	18.26	22.09	/	2.53	24.51	20.79	24.62	30.00	PASS	
		13	22.20	18.81	22.67	/	2.53	24.73	21.34	25.2	30.00	PASS	
		25	22.04	19.11	22.39	/	2.53	24.57	21.64	24.92	30.00	PASS	
	50	0	21.95	18.68	22.50	/	2.53	24.48	21.21	25.03	30.00	PASS	
			22.62	18.98	22.14	/	2.53	25.15	21.51	24.67	30.00	PASS	
		25	22.67	18.83	23.00	/	2.53	25.2	21.36	25.53	30.00	PASS	
16QAM	1	49	21.70	19.64	22.77	/	2.53	24.23	22.17	25.3	30.00	PASS	
		25	0	21.28	17.45	20.81	/	2.53	23.81	19.98	23.34	30.00	PASS
			13	21.43	17.81	21.50	/	2.53	23.96	20.34	24.03	30.00	PASS
	25		21.01	17.99	21.51	/	2.53	23.54	20.52	24.04	30.00	PASS	
	50	0	21.90	20.37	21.73	/	2.53	24.43	22.9	24.26	30.00	PASS	

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

Test Band: 4 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	23.60	20.86	21.96	/	2.53	26.13	23.39	24.49	30.00	PASS	
		38	23.26	20.03	23.19	/	2.53	25.79	22.56	25.72	30.00	PASS	
		74	21.44	21.48	23.46	/	2.53	23.97	24.01	25.99	30.00	PASS	
	36	0	22.45	18.78	21.24	/	2.53	24.98	21.31	23.77	30.00	PASS	
		18	22.23	18.76	21.85	/	2.53	24.76	21.29	24.38	30.00	PASS	
		39	21.22	19.32	22.53	/	2.53	23.75	21.85	25.06	30.00	PASS	
	75	0	21.66	18.88	21.96	/	2.53	24.19	21.41	24.49	30.00	PASS	
			22.83	20.52	20.94	/	2.53	25.36	23.05	23.47	30.00	PASS	
		38	22.99	19.60	22.17	/	2.53	25.52	22.13	24.7	30.00	PASS	
16QAM	1	74	20.78	20.83	22.63	/	2.53	23.31	23.36	25.16	30.00	PASS	
		36	0	23.51	21.78	23.93	/	2.53	26.04	24.31	26.46	30.00	PASS
			18	-20.71	21.83	23.88	/	2.53	-18.18	24.36	26.41	30.00	PASS
	39		-46.14	-24.39	23.86	/	2.53	-43.61	-21.86	26.39	30.00	PASS	
	75	0	-28.06	21.70	23.94	/	2.53	-25.53	24.23	26.47	30.00	PASS	

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

Test Band: 4 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	22.13	22.16	22.26	/	2.53	24.66	24.69	24.79	30.00	PASS
		50	22.62	22.68	22.73	/	2.53	25.15	25.21	25.26	30.00	PASS
		99	22.24	22.22	22.35	/	2.53	24.77	24.75	24.88	30.00	PASS
	50	0	21.41	21.52	21.63	/	2.53	23.94	24.05	24.16	30.00	PASS
		25	21.47	21.57	21.62	/	2.53	24	24.1	24.15	30.00	PASS
		50	21.47	21.51	21.55	/	2.53	24	24.04	24.08	30.00	PASS
16QAM	100	0	21.48	21.52	21.58	/	2.53	24.01	24.05	24.11	30.00	PASS
			22.47	20.86	19.57	/	2.53	25	23.39	22.1	30.00	PASS
	1	50	21.85	19.31	21.60	/	2.53	24.38	21.84	24.13	30.00	PASS
		99	19.28	21.01	22.78	/	2.53	21.81	23.54	25.31	30.00	PASS
		50	0	22.47	22.53	/	/	2.53	25	25.06	/	30.00
	25		22.59	-30.07	/	/	2.53	25.12	-27.54	/	30.00	PASS
	50		22.52	-47.03	/	/	2.53	25.05	-44.5	/	30.00	PASS
	100	0	22.61	18.96	/	/	2.53	25.14	21.49	/	30.00	PASS

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

2. Frequency stability

2.1 Test Result

Test Band: 4 _ 1.4MHz 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	6	0	NT	LV	3.5477	-1.2302	-	10.1709	0.0021	-0.0007	-0.0058	2.50	PASS
				NV	-6.5231	-5.0640	-1.9455	-0.0038	-0.0029	-0.0011	2.50	PASS	
				HV	-	10.5000	-3.8338	-2.0170	-0.0061	-0.0022	-0.0011	2.50	PASS
16QAM	6	0	NT	LV	-1.0586	8.1539	-5.8508	-0.0006	0.0047	-0.0033	2.50	PASS	
				NV	4.2486	-	14.8630	0.1001	0.0025	-0.0086	0.0001	2.50	PASS
				HV	4.3917	-	12.8031	-5.3358	0.0026	-0.0074	-0.0030	2.50	PASS

Test Band: 4 _ 1.4MHz 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	6	0	NV	-30.00	-4.6349	1.3733	-6.4230	-0.0027	0.0008	-0.0037	2.50	PASS		
				-20.00	6.5374	-	16.2077	-4.0340	0.0038	-0.0094	-0.0023	2.50	PASS	
				-10.00	-1.5450	-3.2330	-1.6308	-0.0009	-0.0019	-0.0009	2.50	PASS		
				0.00	-	15.2206	5.4646	14.7486	-0.0089	0.0032	-0.0084	2.50	PASS	
				10.00	-	16.0074	-2.3890	13.3467	-0.0094	-0.0014	-0.0076	2.50	PASS	
				20.00	12.3024	-4.9210	2.6608	-0.0072	-0.0028	0.0015	2.50	PASS		
				30.00	-8.5545	-5.8794	-0.7439	-0.0050	-0.0034	-0.0004	2.50	PASS		
				40.00	-6.6376	-	17.9958	11.3010	-0.0039	-0.0104	-0.0064	2.50	PASS	
				50.00	-6.8378	-	14.9918	-2.7037	-0.0040	-0.0087	-0.0015	2.50	PASS	
16QAM	6	0	NV	-30.00	-	11.8017	-0.0858	1.2445	-0.0069	0.0000	0.0007	2.50	PASS	
				-20.00	-	12.4598	6.3086	11.2724	-0.0073	0.0036	-0.0064	2.50	PASS	
				-10.00	-	11.2152	-	12.7602	-7.0667	-0.0066	-0.0074	-0.0040	2.50	PASS
				0.00	-	11.4155	7.9536	3.8195	-0.0067	0.0046	0.0022	2.50	PASS	
				10.00	0.5865	-9.3842	-	17.2520	0.0003	-0.0054	-0.0098	2.50	PASS	
				20.00	7.3957	-3.5048	-	12.0878	0.0043	-0.0020	-0.0069	2.50	PASS	
				30.00	-	23.7465	7.0810	29.2540	-0.0139	0.0041	-0.0167	2.50	PASS	
				40.00	7.3385	-	14.5197	11.5013	0.0043	-0.0084	-0.0066	2.50	PASS	
				50.00	-8.3971	-	12.1736	-6.7806	-0.0049	-0.0070	-0.0039	2.50	PASS	

Test Band: 4 _ 3MHz 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	15	0	NT	LV	-5.5504	-2.6608	9.5558	-0.0032	-0.0015	0.0054	2.50	PASS
				NV	1.1873	-7.9679	2.4462	0.0007	-0.0046	0.0014	2.50	PASS
				HV	-	-	-2.0885	-0.0061	-0.0096	-0.0012	2.50	PASS
16QAM	15	0	NT	LV	7.7963	10.8004	-7.1383	0.0046	0.0062	-0.0041	2.50	PASS
				NV	9.6273	1.7452	-	0.0056	0.0010	-0.0092	2.50	PASS
				HV	-	-2.5892	-0.3719	-0.0059	-0.0015	-0.0002	2.50	PASS

Test Band: 4 3MHz 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	15	0	NV	-30.00	-	-	-1.8740	-0.0075	-0.0101	-0.0011	2.50	PASS
				-20.00	-4.6492	-	-2.0885	-0.0027	-0.0075	-0.0012	2.50	PASS
				-10.00	-1.9169	-3.6764	-4.2486	-0.0011	-0.0021	-0.0024	2.50	PASS
				0.00	0.6151	9.5844	-3.5906	0.0004	0.0055	-0.0020	2.50	PASS
				10.00	-7.4673	-	-4.8637	-0.0044	-0.0060	-0.0028	2.50	PASS
				20.00	-0.5007	4.9782	-7.0238	-0.0003	0.0029	-0.0040	2.50	PASS
				30.00	-0.1431	-	-4.3201	-0.0001	-0.0063	-0.0025	2.50	PASS
				40.00	-	4.5919	-6.6805	-0.0077	0.0027	-0.0038	2.50	PASS
				50.00	-	-6.6805	-8.8406	-0.0062	-0.0039	-0.0050	2.50	PASS
16QAM	15	0	NV	-30.00	8.2827	-	-0.1860	0.0048	-0.0101	-0.0001	2.50	PASS
				-20.00	3.1328	-	-	0.0018	-0.0069	-0.0095	2.50	PASS
				-10.00	-0.7725	-3.7909	-9.5844	-0.0005	-0.0022	-0.0055	2.50	PASS
				0.00	-8.7547	-4.1628	6.8235	-0.0051	-0.0024	0.0039	2.50	PASS
				10.00	-	-9.1124	-9.8991	-0.0092	-0.0053	-0.0056	2.50	PASS
				20.00	-	7.0238	6.2942	-0.0060	0.0041	0.0036	2.50	PASS
				30.00	7.5245	-	-4.0770	0.0044	-0.0081	-0.0023	2.50	PASS
				40.00	4.7207	10.9148	-	0.0028	0.0063	-0.0072	2.50	PASS
				50.00	-8.0967	1.0872	-0.5865	-0.0047	0.0006	-0.0003	2.50	PASS

Test Band: 4 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	-7.7391	-4.3774	0.7439	-0.0045	-0.0025	0.0004	2.50	PASS
				NV	3.4332	-	-	0.0020	-0.0071	-0.0061	2.50	PASS
				HV	-2.0885	-6.1512	-	-0.0012	-0.0036	-0.0071	2.50	PASS
16QAM	25	0	NT	LV	-1.6022	5.9509	-8.3828	-0.0009	0.0034	-0.0048	2.50	PASS
				NV	-4.4775	-8.1682	2.1744	-0.0026	-0.0047	0.0012	2.50	PASS
				HV	-	-0.1717	-	-0.0100	-0.0001	-0.0061	2.50	PASS

Test Band: 4 _ 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	-0.9155	3.1185	-5.4359	-0.0005	0.0018	-0.0031	2.50	PASS	
				-20.00	-0.3862	-6.7234	-3.3188	-0.0002	-0.0039	-0.0019	2.50	PASS	
				-10.00	-2.4033	-6.9094	-4.2629	-0.0014	-0.0040	-0.0024	2.50	PASS	
				0.00	-6.4516	5.3215	-2.2173	-0.0038	0.0031	-0.0013	2.50	PASS	
				10.00	-7.1383	-3.7909	-	-0.0042	-0.0022	-0.0100	2.50	PASS	
				20.00	-5.7650	-7.3242	-	-0.0034	-0.0042	-0.0073	2.50	PASS	
				30.00	-6.6805	-8.2684	-8.4257	-0.0039	-0.0048	-0.0048	2.50	PASS	
				40.00	-1.7023	-5.0211	-0.4148	-0.0010	-0.0029	-0.0002	2.50	PASS	
				50.00	-4.4918	-5.1928	-4.7779	-0.0026	-0.0030	-0.0027	2.50	PASS	
16QAM	25	0	NV	-30.00	-6.1798	-	3.9625	-0.0036	-0.0066	0.0023	2.50	PASS	
				-20.00	-8.3113	11.5156	2.3603	-9.9850	-0.0049	0.0014	-0.0057	2.50	PASS
				-10.00	-3.5334	0.1717	-	10.7288	-0.0021	0.0001	-0.0061	2.50	PASS
				0.00	0.3719	-3.4046	2.0313	0.0002	-0.0020	0.0012	2.50	PASS	
				10.00	-	-5.0640	-2.1315	-0.0080	-0.0029	-0.0012	2.50	PASS	
				20.00	13.7329	-8.3685	-6.3229	0.0020	-0.0048	-0.0036	2.50	PASS	
				30.00	-3.7336	-	-6.1798	-0.0022	-0.0069	-0.0035	2.50	PASS	
				40.00	-3.6049	2.6608	-	-0.0021	0.0015	-0.0059	2.50	PASS	
				50.00	-4.9353	-	-4.7064	-0.0029	-0.0061	-0.0027	2.50	PASS	

Test Band: 4 _ 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	-6.3515	-1.8597	-8.1110	-0.0037	-0.0011	-0.0046	2.50	PASS
				NV	-2.2745	-6.1369	-7.5960	-0.0013	-0.0035	-0.0043	2.50	PASS
				HV	-9.1839	-6.4802	-4.9210	-0.0054	-0.0037	-0.0028	2.50	PASS
16QAM	50	0	NT	LV	-6.0081	-8.1682	-4.4346	-0.0035	-0.0047	-0.0025	2.50	PASS
				NV	-8.5402	-3.4189	-4.1056	-0.0050	-0.0020	-0.0023	2.50	PASS
				HV	-7.6962	-1.1015	-4.3488	-0.0045	-0.0006	-0.0025	2.50	PASS

Test Band: 4 _ 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	-2.5606	-8.5688	-4.9210	-0.0015	-0.0049	-0.0028	2.50	PASS
				-20.00	-2.7323	-8.0395	-6.8808	-0.0016	-0.0046	-0.0039	2.50	PASS
				-10.00	-	-9.3555	-7.7248	-0.0067	-0.0054	-0.0044	2.50	PASS
				0.00	11.5442	-2.8753	-1.6737	-0.0029	-0.0017	-0.0010	2.50	PASS
				10.00	-7.7248	-5.0211	-5.3501	-0.0045	-0.0029	-0.0031	2.50	PASS
				20.00	-6.9809	-1.9741	-6.2799	-0.0041	-0.0011	-0.0036	2.50	PASS

				30.00	-0.4435	-1.8740	-4.2629	-0.0003	-0.0011	-0.0024	2.50	PASS
				40.00	-4.6062	-5.7364	-5.8079	-0.0027	-0.0033	-0.0033	2.50	PASS
				50.00	-8.0967	-8.8120	-6.9237	-0.0047	-0.0051	-0.0040	2.50	PASS
16QAM	50	0	NV	-30.00	-4.2629	-8.9693	-4.9639	-0.0025	-0.0052	-0.0028	2.50	PASS
				-20.00	-8.1825	0.5579	-5.7220	-0.0048	0.0003	-0.0033	2.50	PASS
				-10.00	-5.5933	-8.8692	-5.9795	-0.0033	-0.0051	-0.0034	2.50	PASS
				0.00	-	-8.0109	-	-0.0060	-0.0046	-0.0063	2.50	PASS
				10.00	10.2997	-	11.0865	-	-	-	2.50	PASS
				20.00	-3.2902	-1.9169	0.0143	-0.0019	-0.0011	0.0000	2.50	PASS
				30.00	-2.8181	-2.4319	-3.9053	-0.0016	-0.0014	-0.0022	2.50	PASS
				40.00	-5.6648	1.5736	-5.2786	-0.0033	0.0009	-0.0030	2.50	PASS
				50.00	-3.1185	-8.9121	-7.4244	-0.0018	-0.0051	-0.0042	2.50	PASS
				50.00	-7.3099	0.7153	-8.0109	-0.0043	0.0004	-0.0046	2.50	PASS

Test Band: 4_ 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	0.7296	0.0715	-2.7609	0.0004	0.0000	-0.0016	2.50	PASS
				NV	-3.2902	-7.1383	-2.9325	-0.0019	-0.0041	-0.0017	2.50	PASS
				HV	-8.0109	2.4891	-2.9755	-0.0047	0.0014	-0.0017	2.50	PASS
16QAM	75	0	NT	LV	-8.9836	-5.2500	-2.1601	-0.0052	-0.0030	-0.0012	2.50	PASS
				NV	-7.3957	-4.8780	-8.5974	-0.0043	-0.0028	-0.0049	2.50	PASS
				HV	-2.5320	-2.6321	-	-0.0015	-0.0015	-0.0064	2.50	PASS

Test Band: 4_ 15MHz Bandwidth (Frequency Error VS. Temperature)

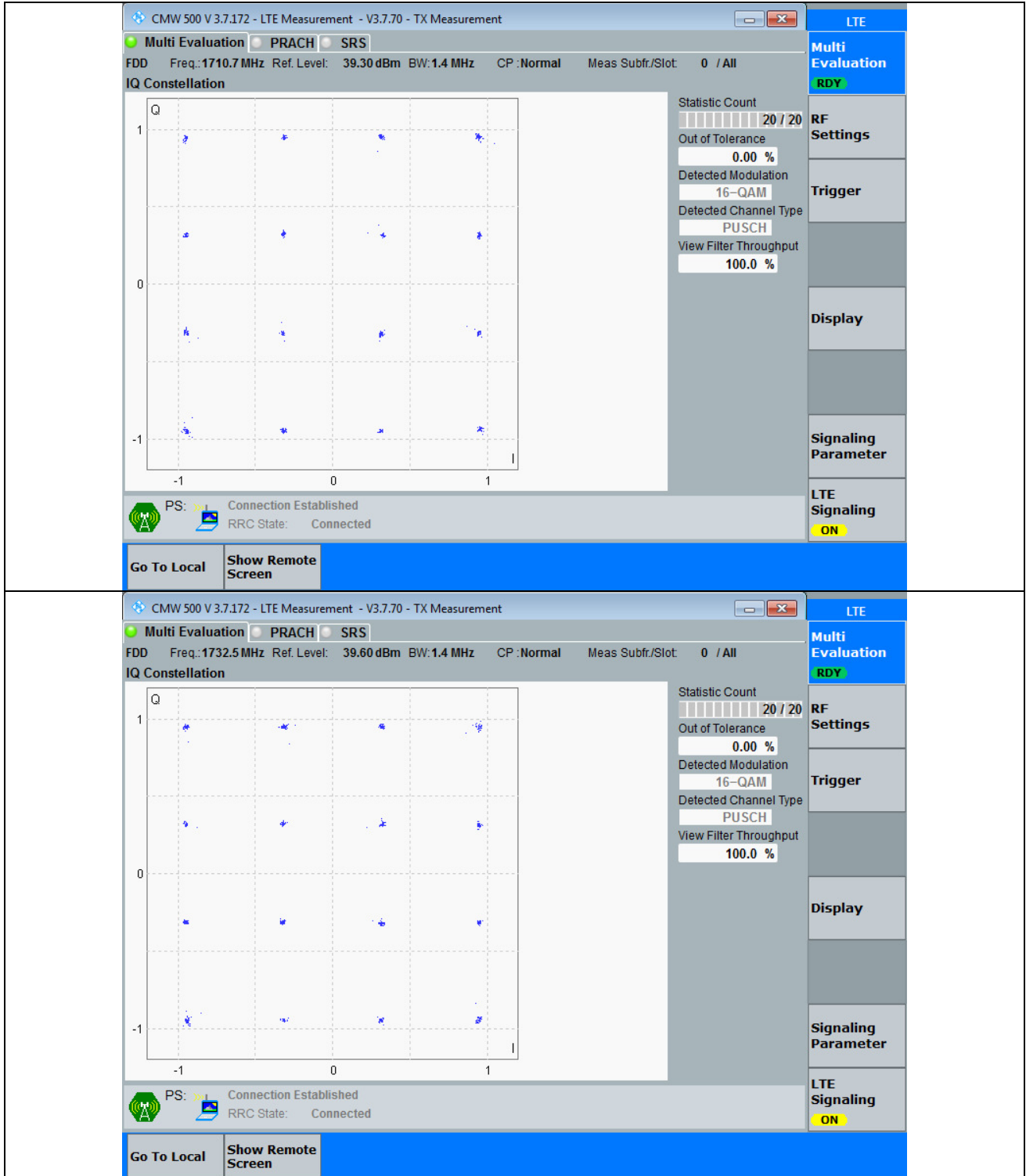
Test Mode	RB Allocation		Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	75	0	NV	-30.00	-4.3774	3.1042	-3.3903	-0.0025	0.0018	-0.0019	2.50	PASS
				-20.00	-4.1628	-1.4019	-2.1315	-0.0024	-0.0008	-0.0012	2.50	PASS
				-10.00	-3.0184	-7.6962	-2.8038	-0.0018	-0.0044	-0.0016	2.50	PASS
				0.00	-4.7493	-2.5320	-2.5606	-0.0028	-0.0015	-0.0015	2.50	PASS
				10.00	-3.9768	-4.8923	-6.9523	-0.0023	-0.0028	-0.0040	2.50	PASS
				20.00	-5.7650	-7.4816	-	-0.0034	-0.0043	-0.0058	2.50	PASS
				30.00	5.3215	-1.1015	-9.5701	0.0031	-0.0006	-0.0055	2.50	PASS
				40.00	1.9312	-1.6451	-	0.0011	-0.0009	-0.0061	2.50	PASS
				50.00	-4.7207	-5.2357	-9.1553	-0.0027	-0.0030	-0.0052	2.50	PASS
16QAM	75	0	NV	-30.00	-	-2.4748	-1.0300	-0.0074	-0.0014	-0.0006	2.50	PASS
				-20.00	12.6743	-6.6805	-6.8808	-0.0071	-0.0039	-0.0039	2.50	PASS
				-10.00	-3.7479	-5.1212	-6.3372	-0.0022	-0.0030	-0.0036	2.50	PASS
				0.00	-5.3358	-0.9441	-6.5374	-0.0031	-0.0005	-0.0037	2.50	PASS
				10.00	-4.9782	-4.4489	-4.0483	-0.0029	-0.0026	-0.0023	2.50	PASS
				20.00	-6.4087	2.7037	-7.7534	-0.0037	0.0016	-0.0044	2.50	PASS
				30.00	-7.7677	-2.4748	-7.9107	-0.0045	-0.0014	-0.0045	2.50	PASS
				40.00	-8.7833	-2.4462	-3.4904	-0.0051	-0.0014	-0.0020	2.50	PASS
				50.00	-8.3542	-3.5620	-	-0.0049	-0.0021	-0.0065	2.50	PASS

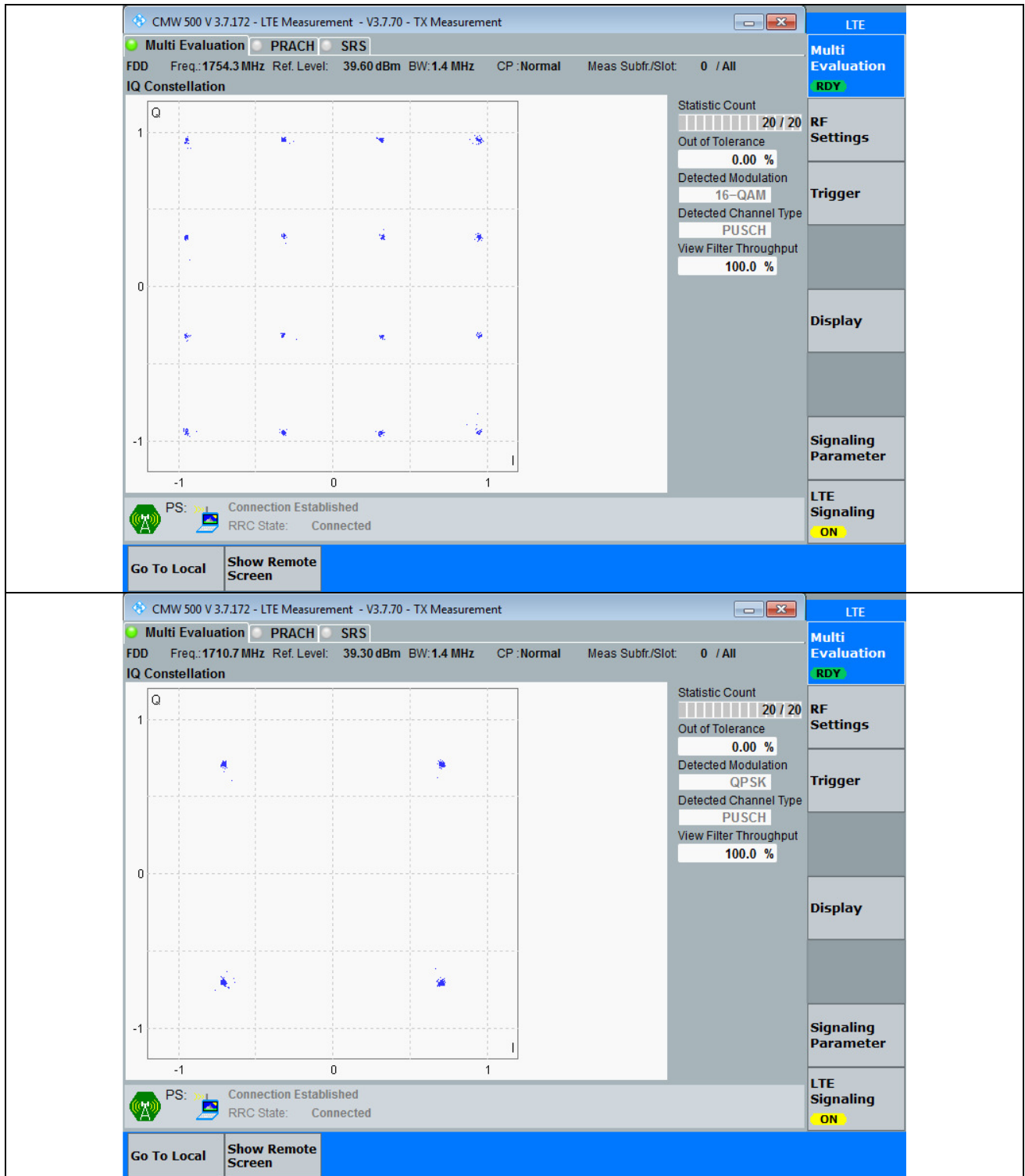
Test Band: 4_ 20MHz Bandwidth (Frequency Error VS. Voltage)												
Test Mode	RB Allocation		Test Temp.	Test Volt.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
	Size	Offset			LCH	MCH	HCH	LCH	MCH	HCH		
QPSK	100	0	NT	LV	-1.8168	-1.9312	-5.2071	-0.0011	-0.0011	-0.0030	2.50	PASS
				NV	-2.7466	-2.5177	-7.8249	-0.0016	-0.0015	-0.0045	2.50	PASS
				HV	-6.3515	-3.2473	-3.7336	-0.0037	-0.0019	-0.0021	2.50	PASS
16QAM	100	0	NT	LV	-3.9482	-7.1096	-1.9026	-0.0023	-0.0041	-0.0011	2.50	PASS
				NV	-7.4244	-4.8923	-3.8195	-0.0043	-0.0028	-0.0022	2.50	PASS
				HV	-6.1226	-1.6880	-4.5776	-0.0036	-0.0010	-0.0026	2.50	PASS

Test Band: 4_ 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	-6.0081	-6.2227	-1.4019	-0.0035	-0.0036	-0.0008	2.50	PASS	
				-20.00	-	12.4454	-3.3617	4.7493	-0.0072	-0.0019	0.0027	2.50	PASS
				-10.00	-5.7364	-6.2942	0.5293	-0.0033	-0.0036	0.0003	2.50	PASS	
				0.00	-6.6948	-3.0756	-4.5204	-0.0039	-0.0018	-0.0026	2.50	PASS	
				10.00	-	11.9734	-5.7364	-6.0654	-0.0070	-0.0033	-0.0035	2.50	PASS
				20.00	-	10.5715	1.4734	-3.8910	-0.0061	0.0009	-0.0022	2.50	PASS
				30.00	-3.8052	-2.9755	-4.9782	-0.0022	-0.0017	-0.0029	2.50	PASS	
				40.00	-6.8808	-3.0613	2.6035	-0.0040	-0.0018	0.0015	2.50	PASS	
				50.00	-5.1785	0.6008	-0.3576	-0.0030	0.0003	-0.0002	2.50	PASS	
16QAM	100	0	NV	-30.00	-6.7806	-3.9768	-	-0.0039	-0.0023	-0.0060	2.50	PASS	
				-20.00	-9.4986	-7.2813	-3.5763	-0.0055	-0.0042	-0.0020	2.50	PASS	
				-10.00	-4.4060	-2.2888	1.5020	-0.0026	-0.0013	0.0009	2.50	PASS	
				0.00	-5.5361	-6.9809	-3.7479	-0.0032	-0.0040	-0.0021	2.50	PASS	
				10.00	-7.7248	-4.8351	-6.2084	-0.0045	-0.0028	-0.0036	2.50	PASS	
				20.00	-9.7418	-0.5579	-2.0313	-0.0057	-0.0003	-0.0012	2.50	PASS	
				30.00	-2.7037	-6.1512	-3.2616	-0.0016	-0.0036	-0.0019	2.50	PASS	
				40.00	-	10.5715	0.8011	-5.1498	-0.0061	0.0005	-0.0030	2.50	PASS
				50.00	-	10.9863	-6.1083	-1.0014	-0.0064	-0.0035	-0.0006	2.50	PASS

3. Modulation Characteristics

3.1 Test Graph



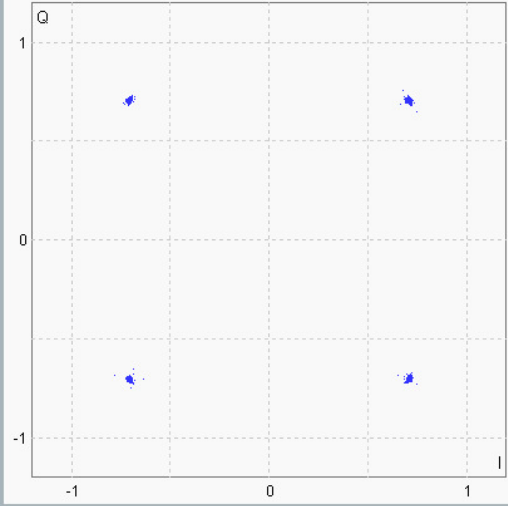


CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 40.50 dBm BW: 1.4 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

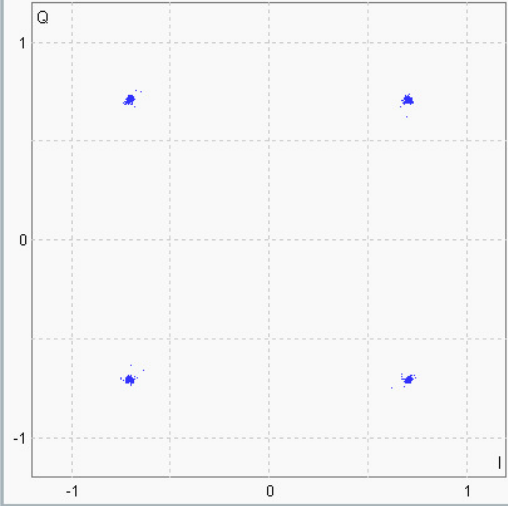
LTE Signaling
ON

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

Multi Evaluation PRACH SRS

FDD Freq.: 1754.3 MHz Ref. Level: 40.60 dBm BW: 1.4 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

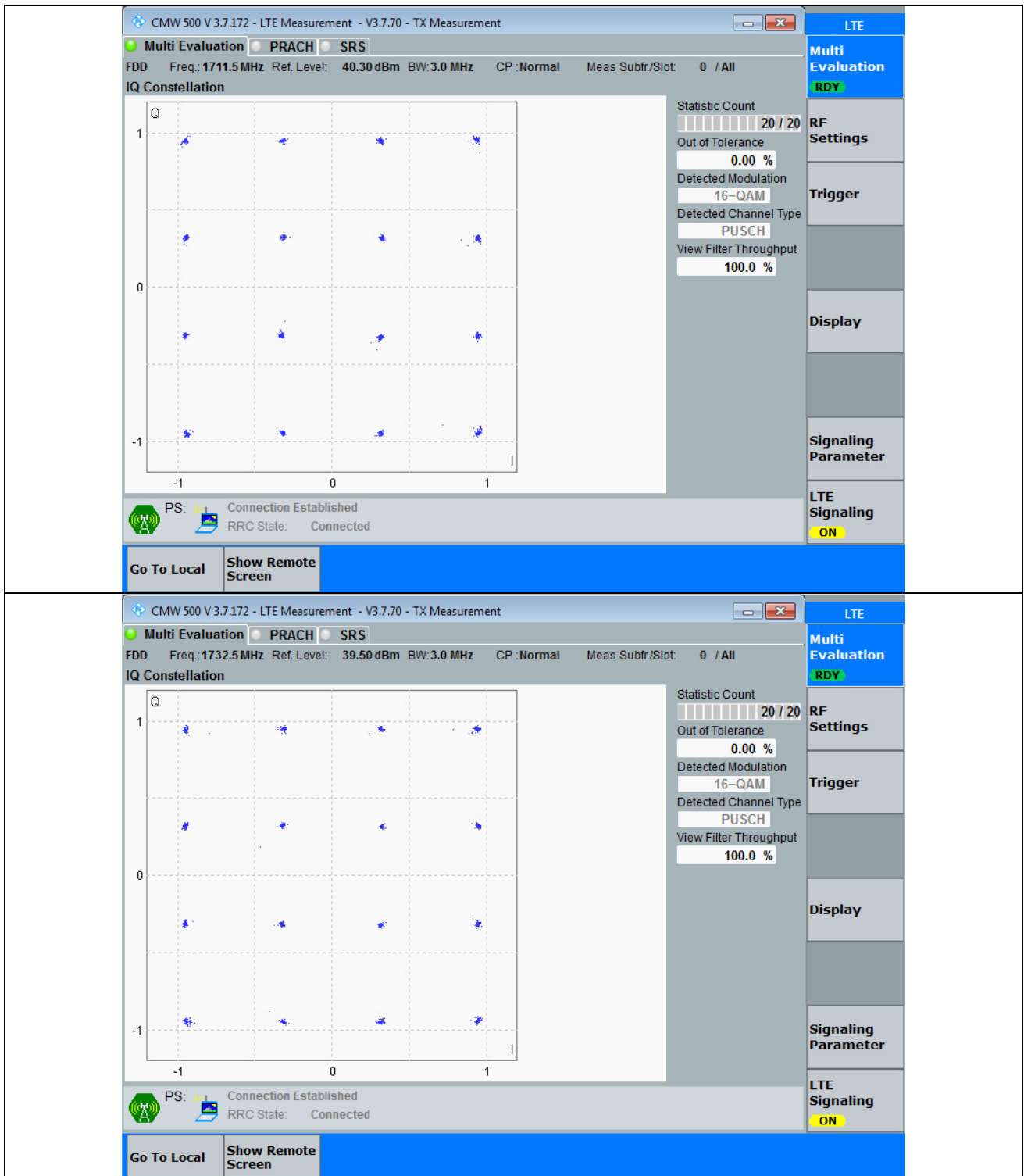
Trigger

Display

Signaling Parameter

LTE Signaling
ON

3.1 Test Graph

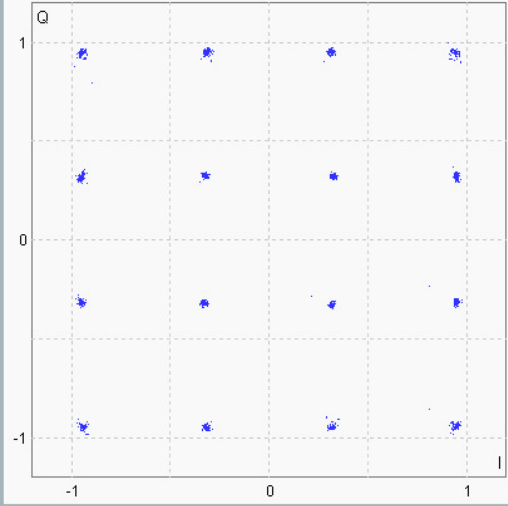


CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

Multi Evaluation PRACH SRS

FDD Freq.: 1753.5 MHz Ref. Level: 39.60 dBm BW: 3.0 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 %

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

PS: Connection Established RRC State: Connected

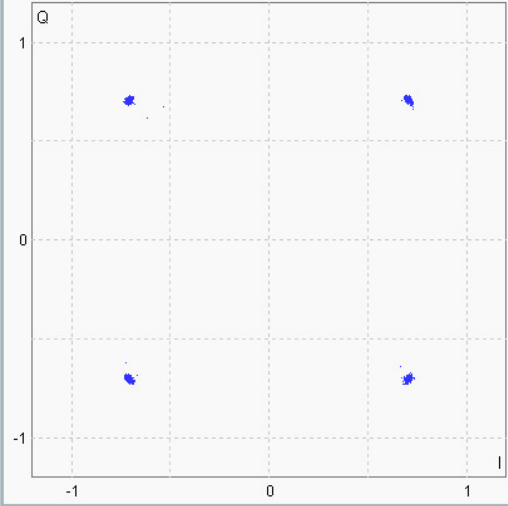
Go To Local
Show Remote Screen

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

Multi Evaluation PRACH SRS

FDD Freq.: 1711.5 MHz Ref. Level: 39.40 dBm BW: 3.0 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

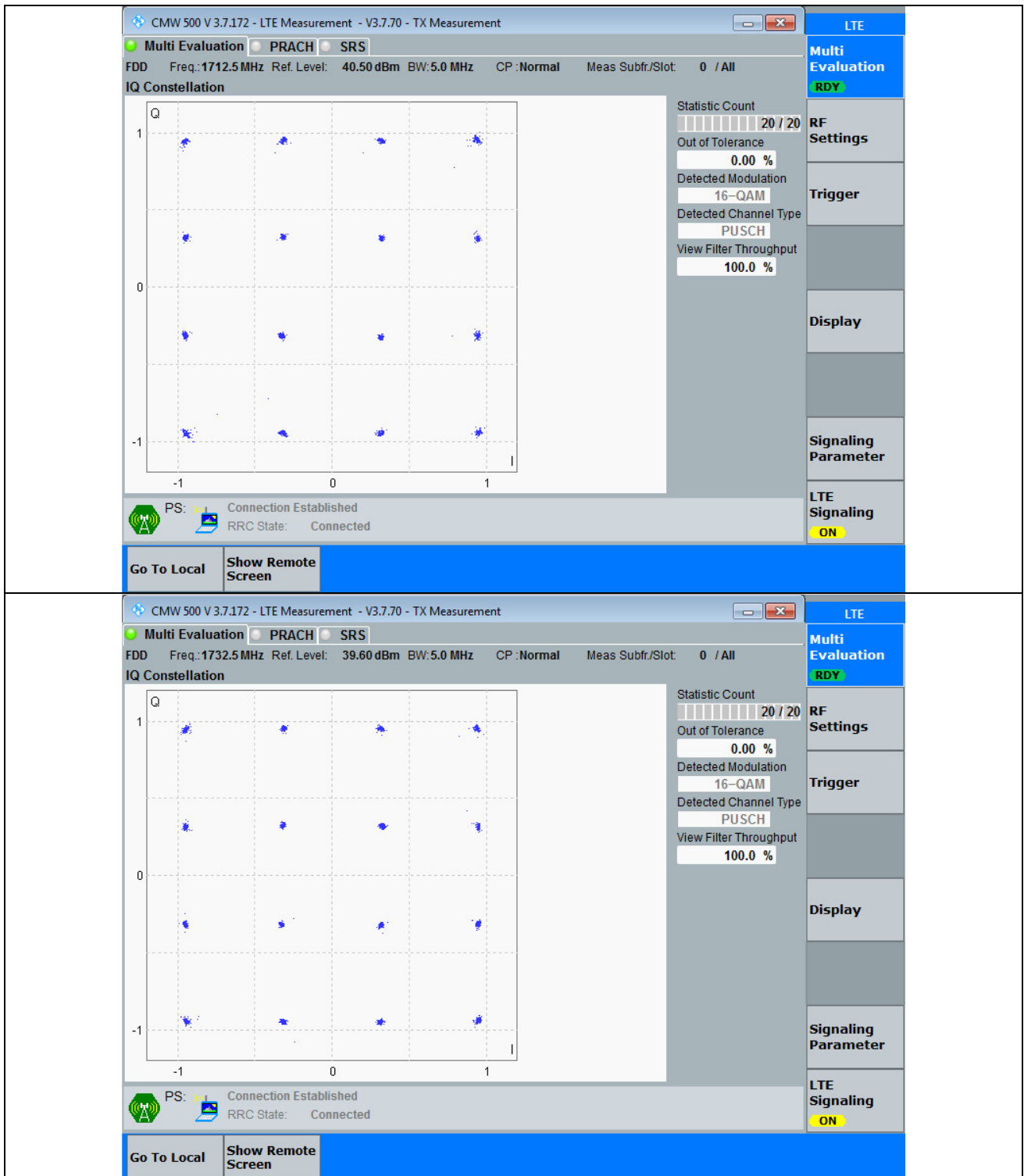
View Filter Throughput
100.0 %

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

PS: Connection Established RRC State: Connected

Go To Local
Show Remote Screen

3.1 Test Graph



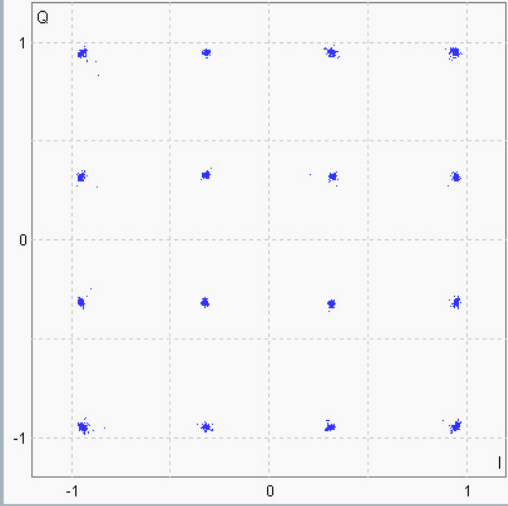
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

Multi Evaluation
 PRACH
 SRS

Multi Evaluation

FDD Freq.: 1752.5 MHz Ref. Level: 39.70 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
 0.00 %

Detected Modulation
 16-QAM

Detected Channel Type
 PUSCH

View Filter Throughput
 100.0 %

RF Settings

PS: Connection Established
 RRC State: Connected

LTE Signaling

Go To Local
Show Remote Screen

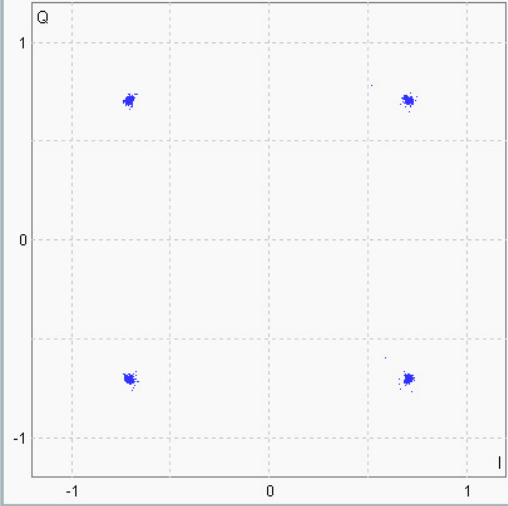
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

Multi Evaluation
 PRACH
 SRS

Multi Evaluation

FDD Freq.: 1712.5 MHz Ref. Level: 39.50 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
 0.00 %

Detected Modulation
 QPSK

Detected Channel Type
 PUSCH

View Filter Throughput
 100.0 %

RF Settings

PS: Connection Established
 RRC State: Connected

LTE Signaling

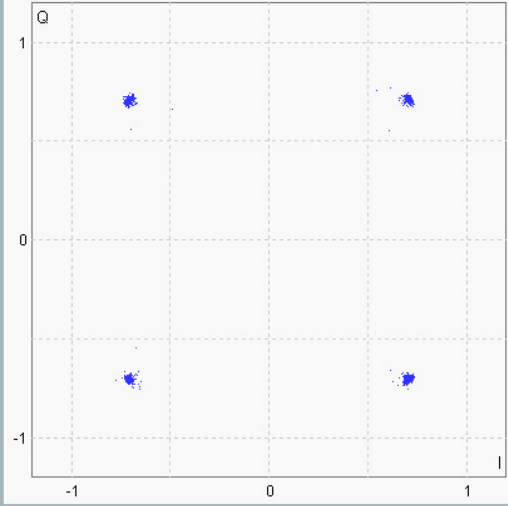
Go To Local
Show Remote Screen

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

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 40.60 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

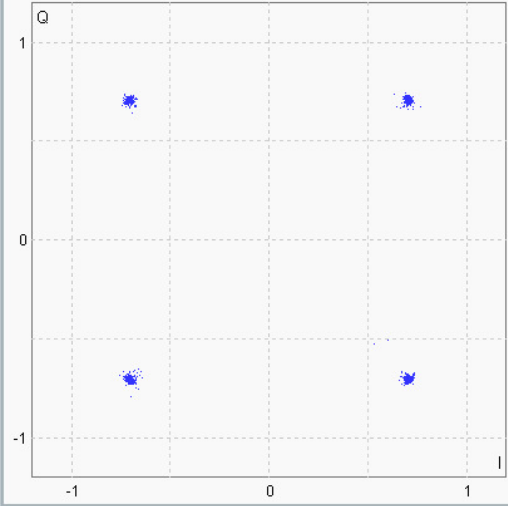
LTE Signaling ON

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

Multi Evaluation PRACH SRS

FDD Freq.: 1752.5 MHz Ref. Level: 40.70 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

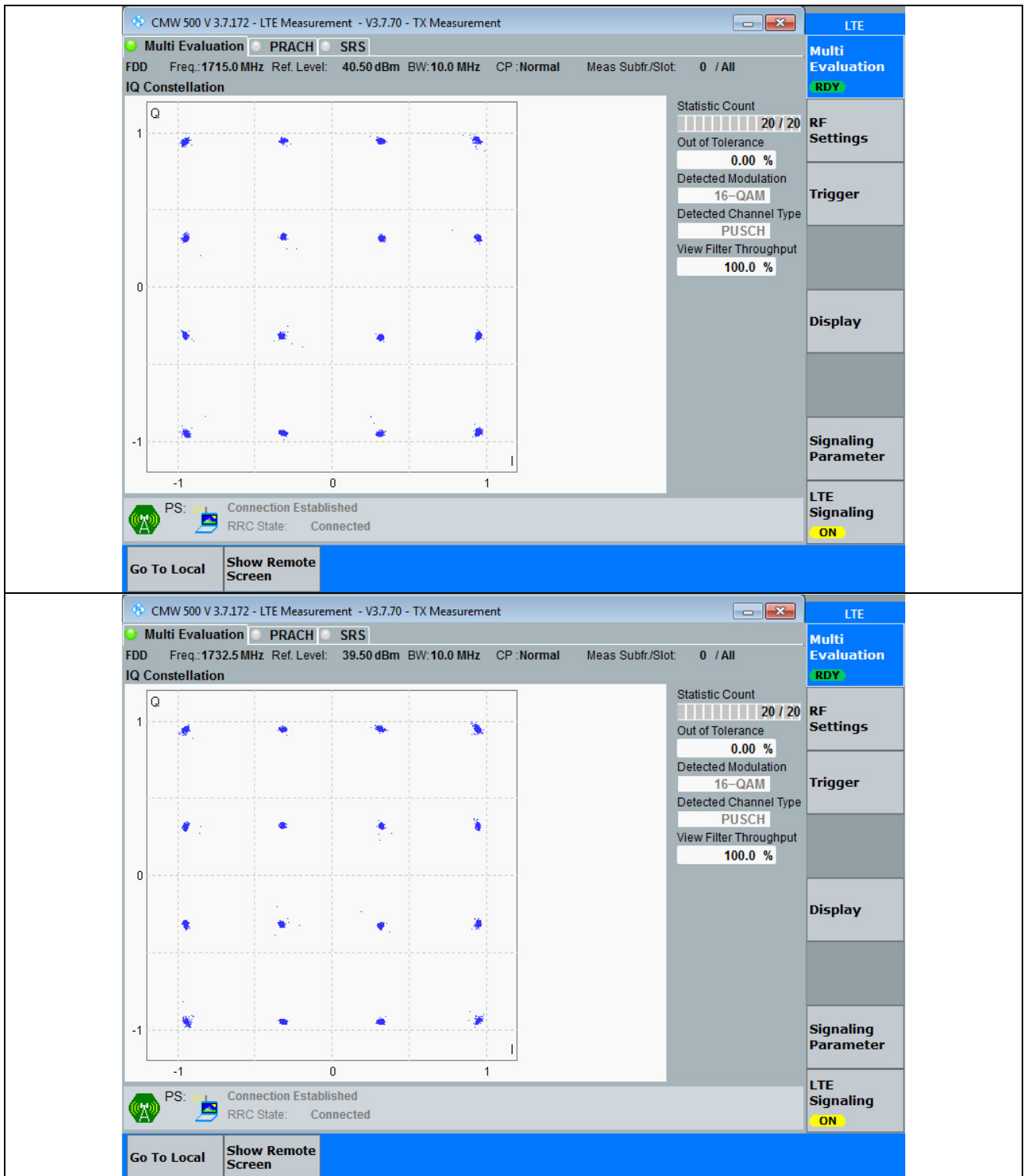
Trigger

Display

Signaling Parameter

LTE Signaling ON

3.1 Test Graph



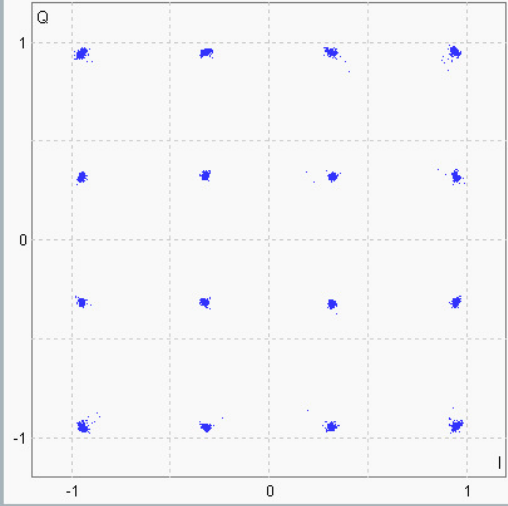
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1750.0 MHz Ref. Level: 39.70 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
0.00 %

Detected Modulation
16-QAM

Detected Channel Type
PUSCH

View Filter Throughput
100.0 %

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling

PS: Connection Established
RRC State: Connected

Go To Local Show Remote Screen

LTE Signaling
ON

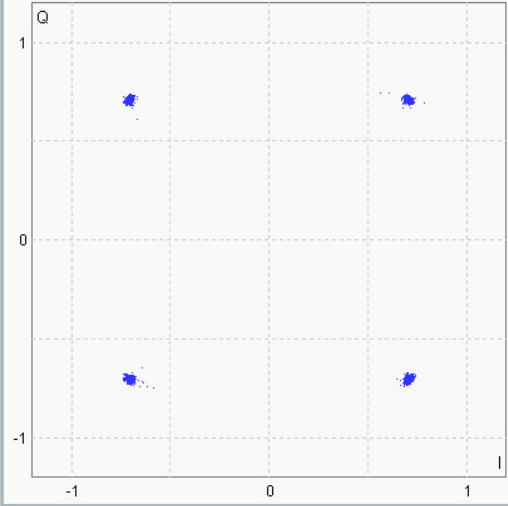
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1715.0 MHz Ref. Level: 39.50 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
0.00 %

Detected Modulation
QPSK

Detected Channel Type
PUSCH

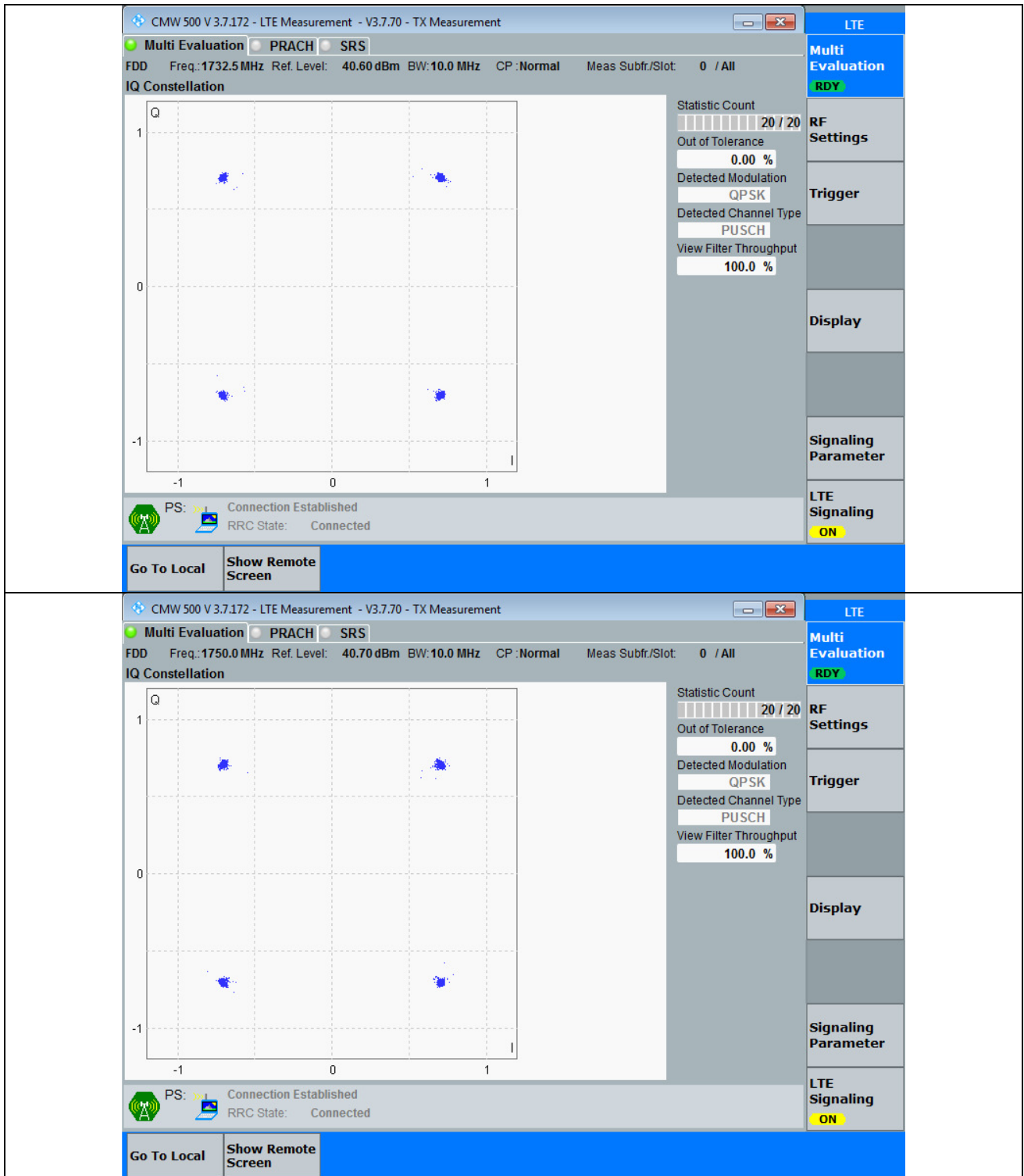
View Filter Throughput
100.0 %

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling

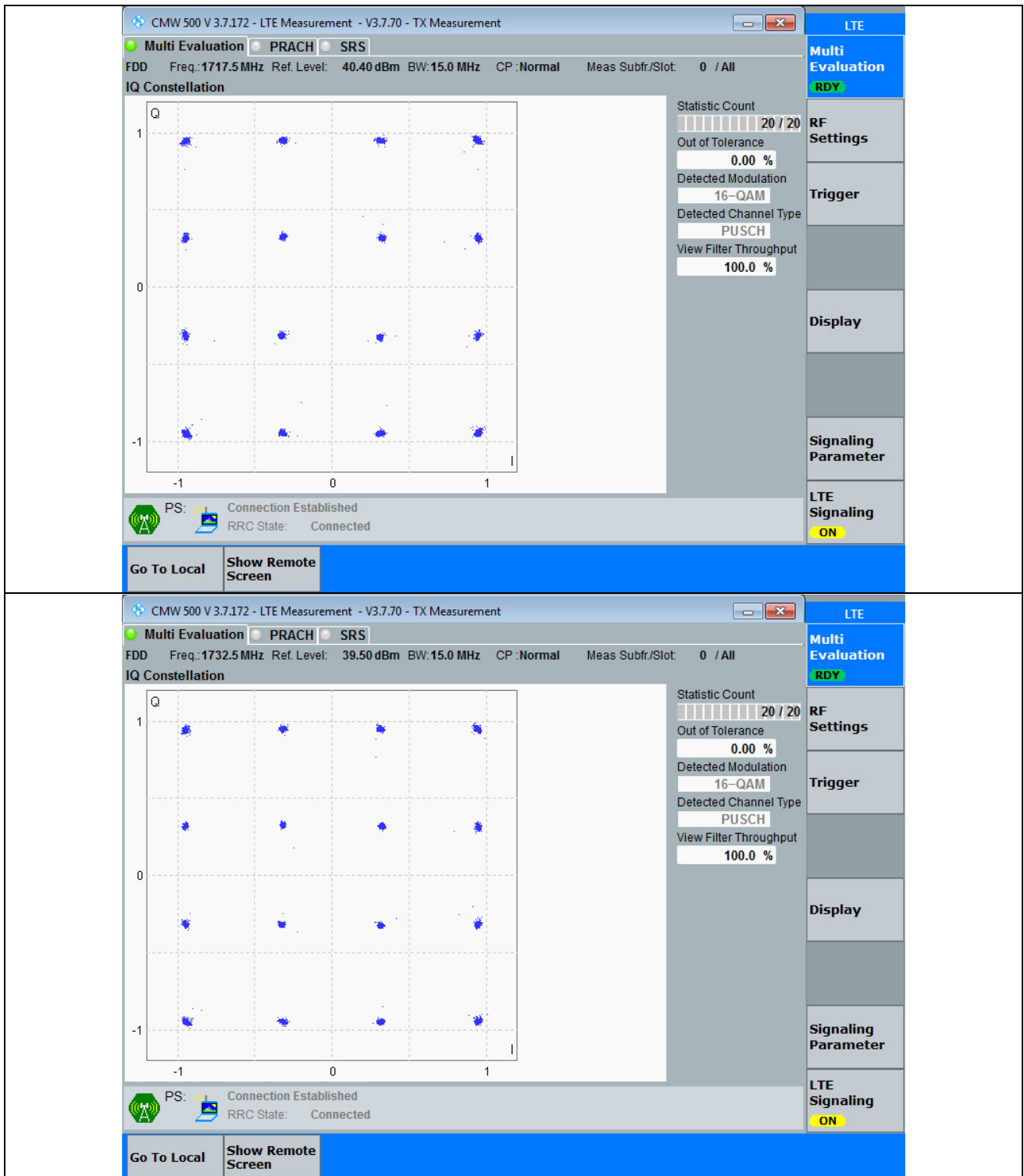
PS: Connection Established
RRC State: Connected

Go To Local Show Remote Screen

LTE Signaling
ON



3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1747.5 MHz Ref. Level: 39.60 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

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

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1717.5 MHz Ref. Level: 39.50 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

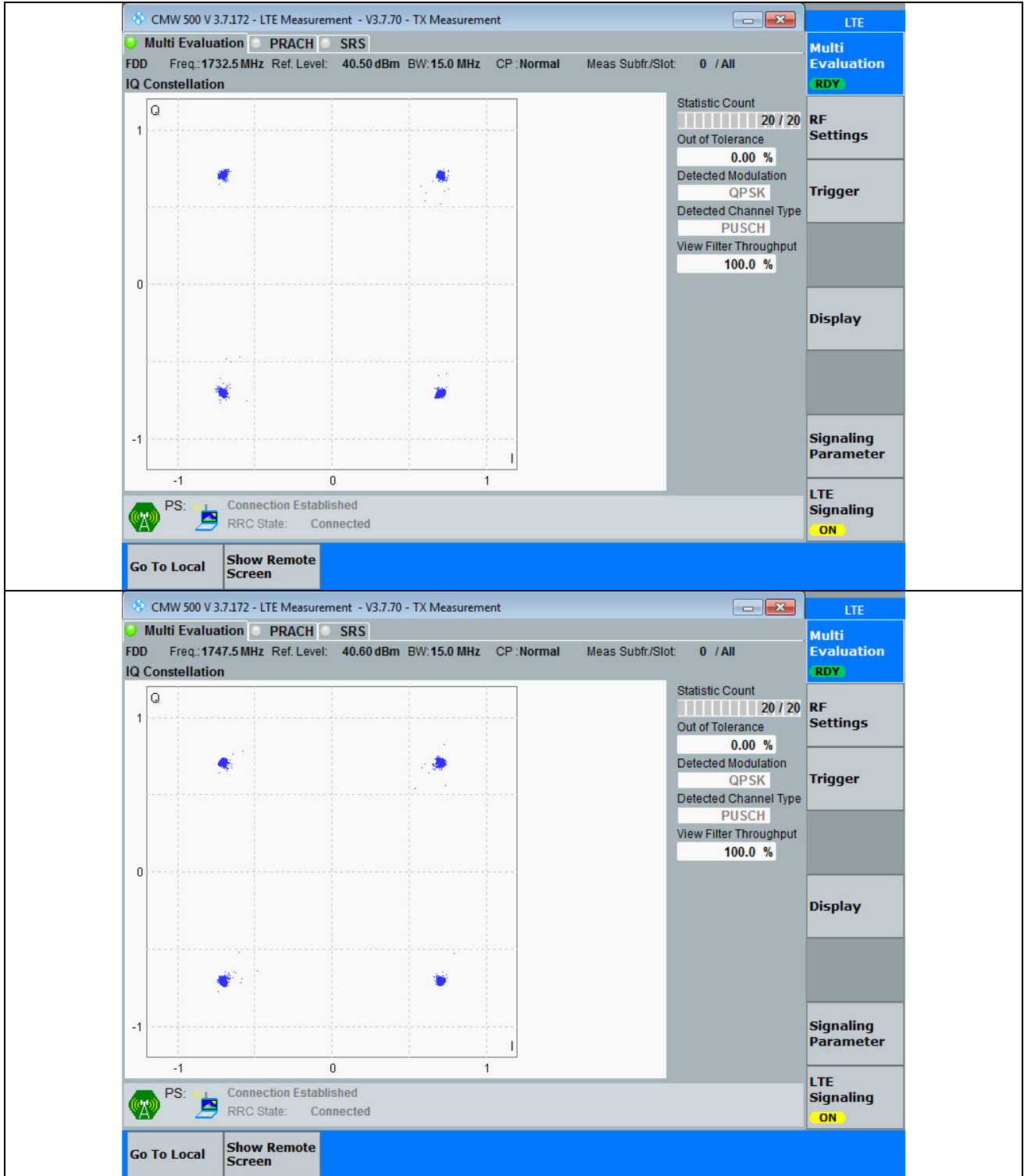
IQ Constellation

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

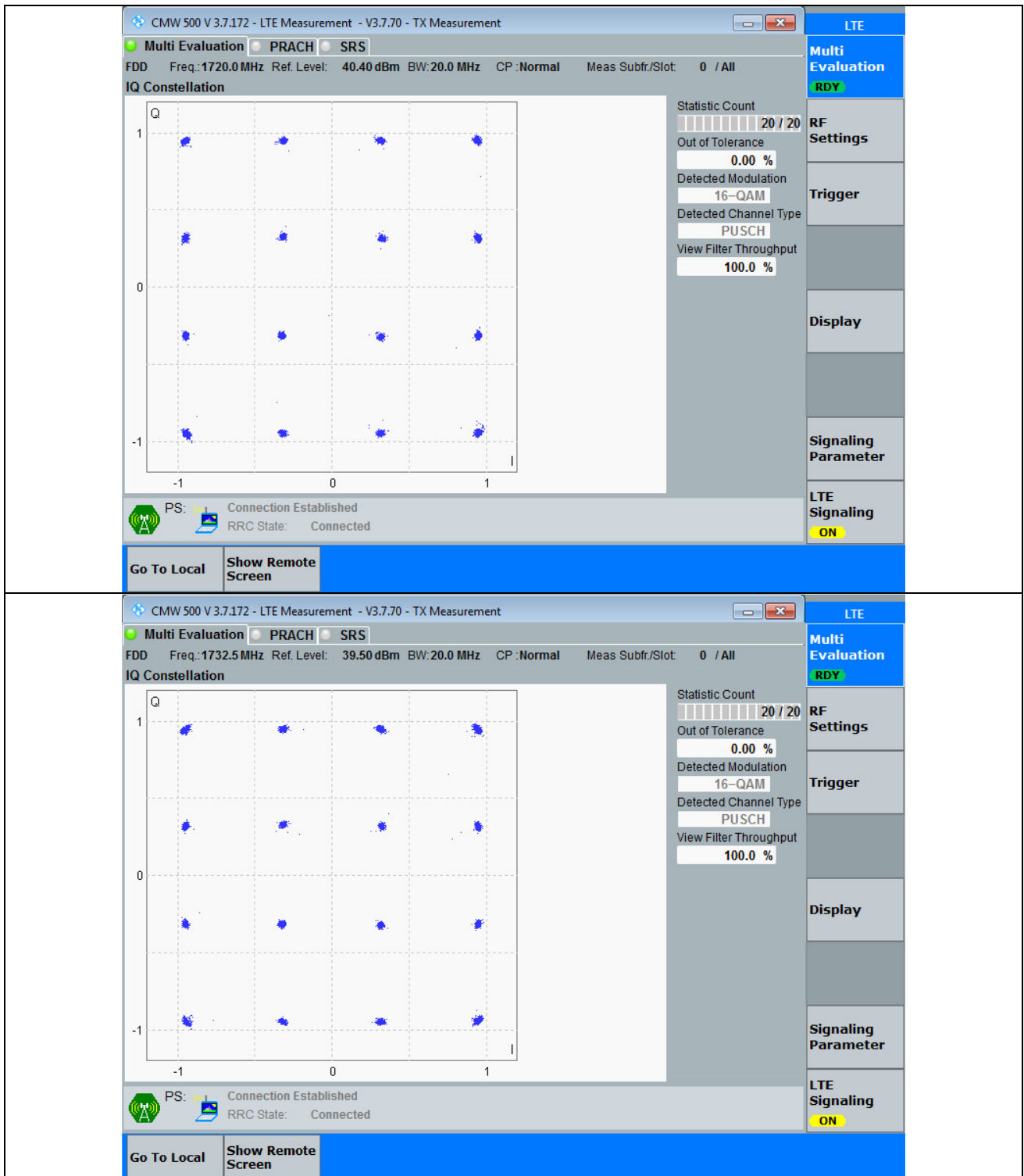
PS: ● Connection Established
 RRC State: Connected

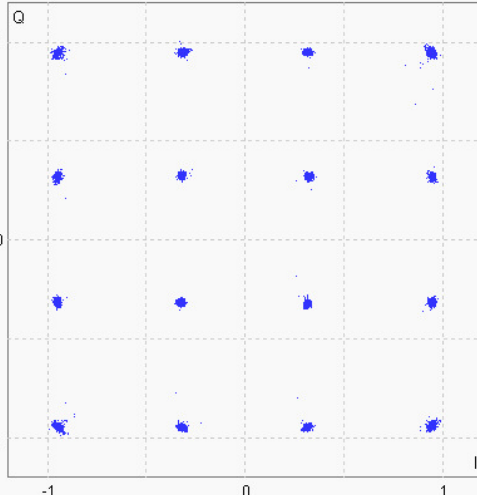
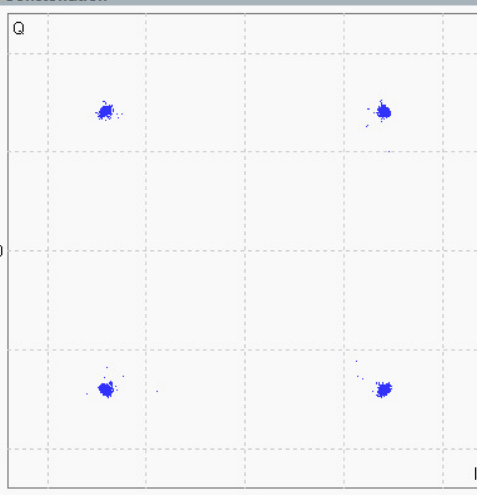
RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen



3.1 Test Graph



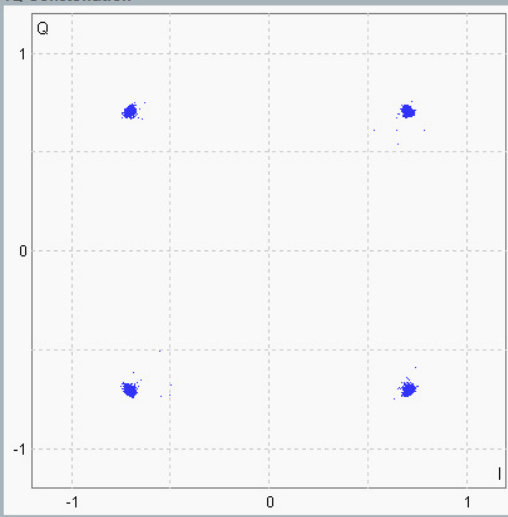
<p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1745.0 MHz Ref. Level: 39.60 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: 16-QAM Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p>	<p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p>
<p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1720.0 MHz Ref. Level: 39.40 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p>	<p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p>

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

Multi Evaluation PRACH SRS

FDD Freq.: 1732.5 MHz Ref. Level: 40.50 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

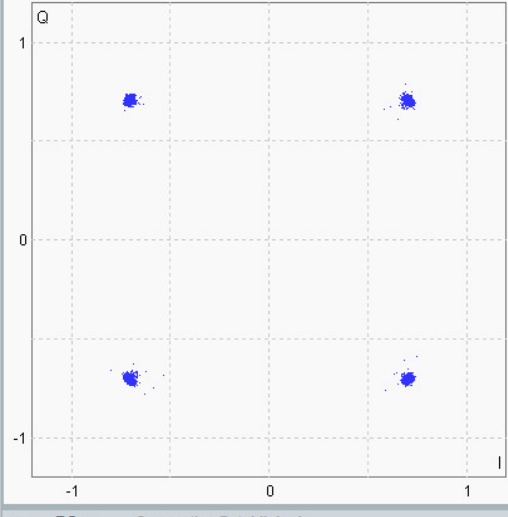
LTE Signaling ON

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

Multi Evaluation PRACH SRS

FDD Freq.: 1745.0 MHz Ref. Level: 40.60 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

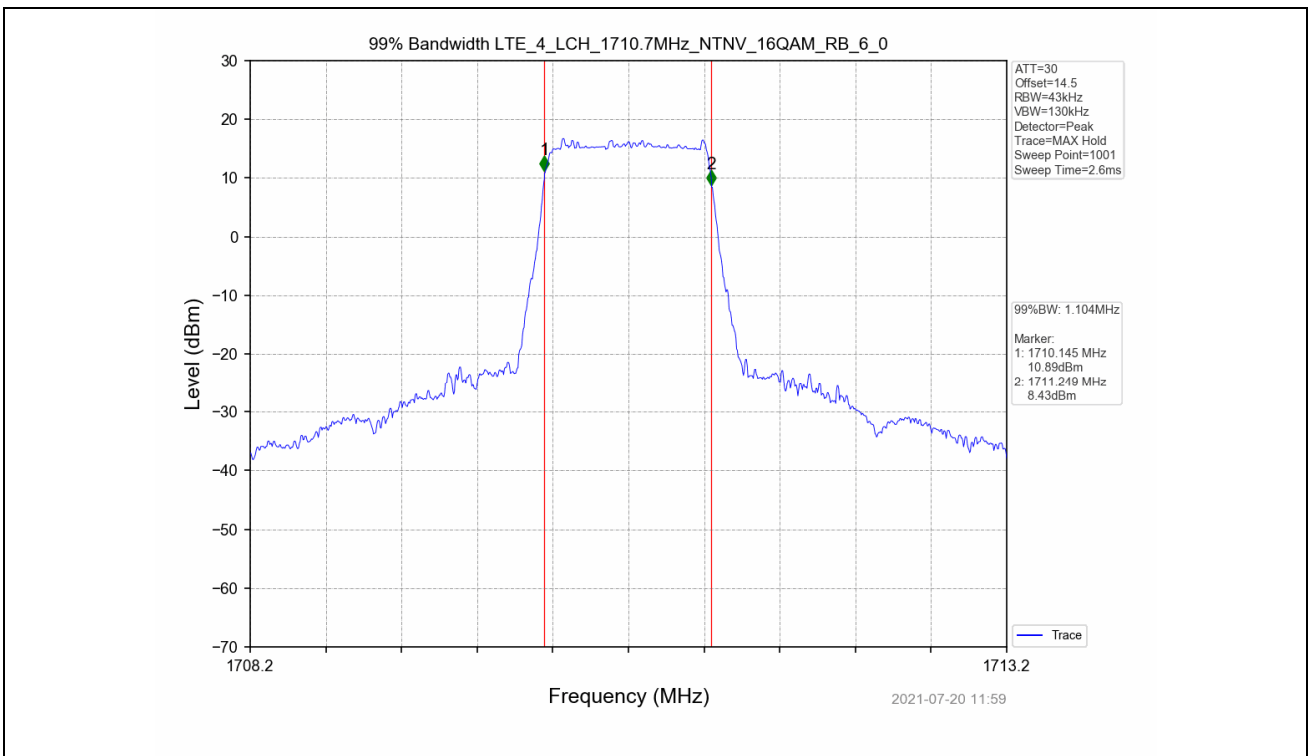
LTE Signaling ON

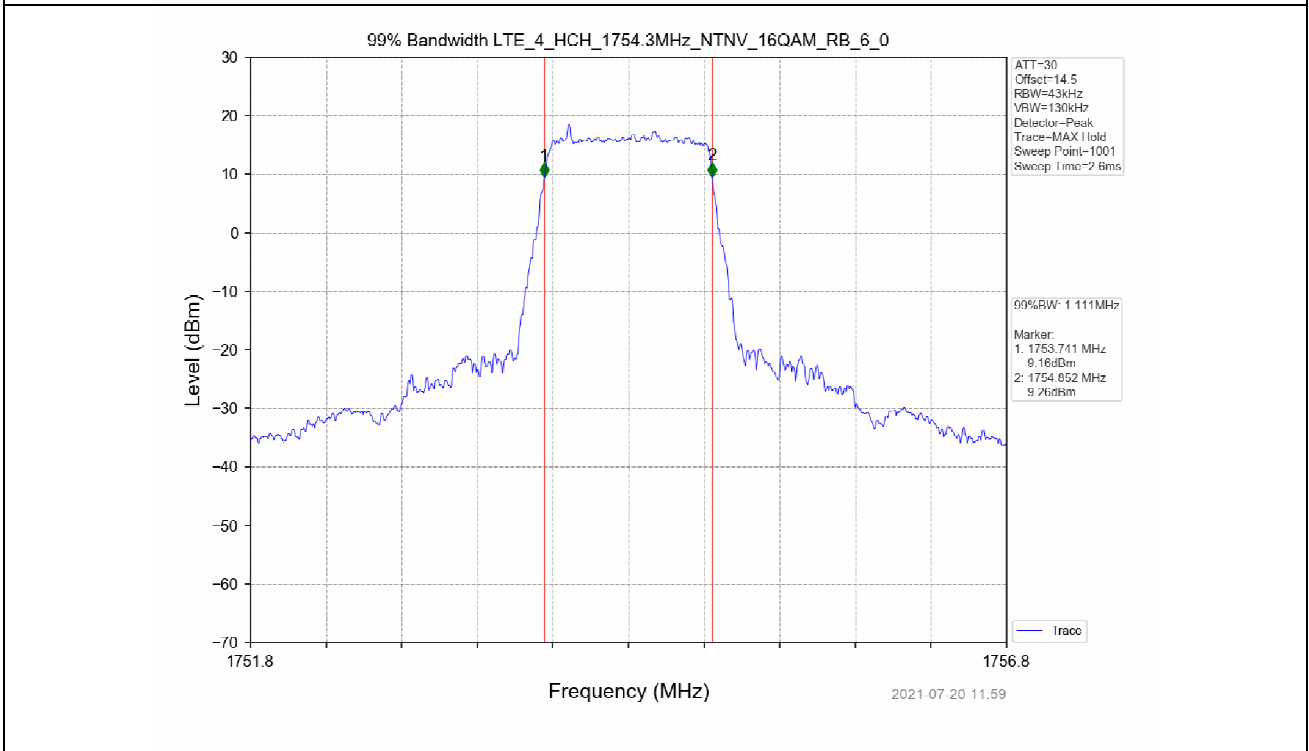
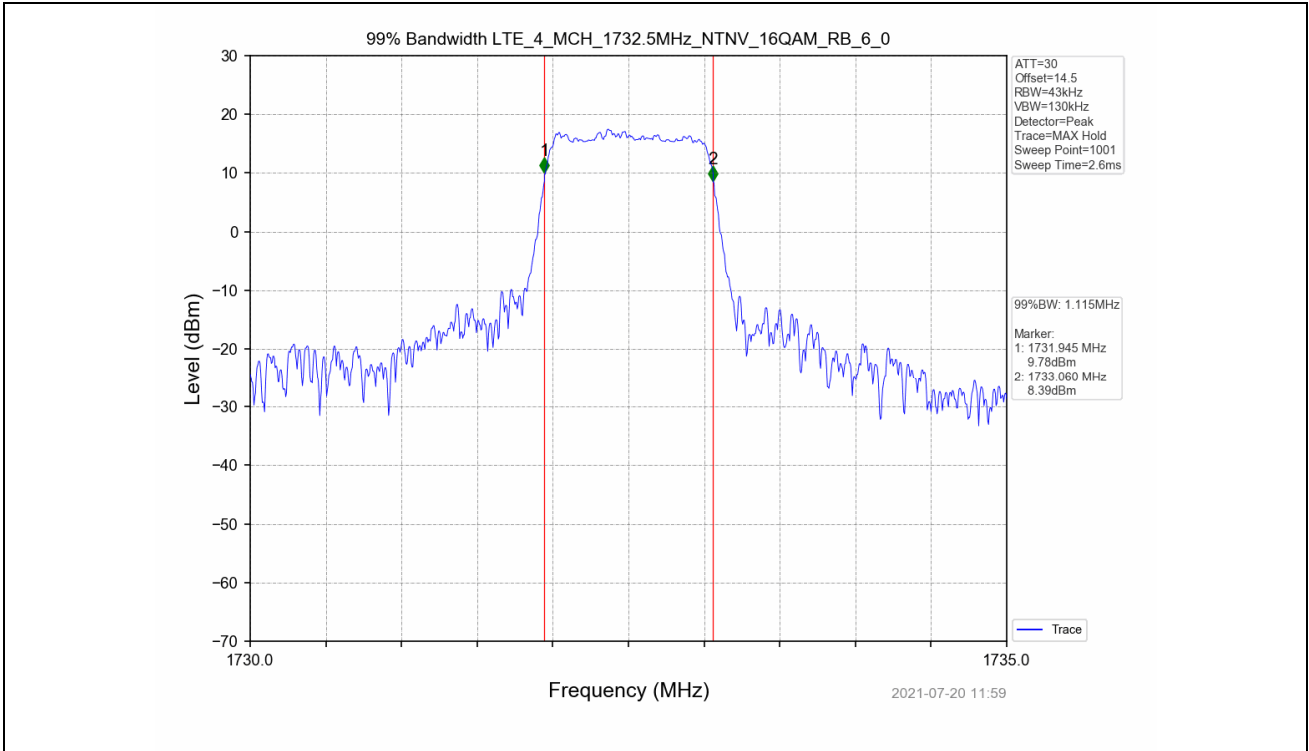
4. 99% & 26dB Bandwidth

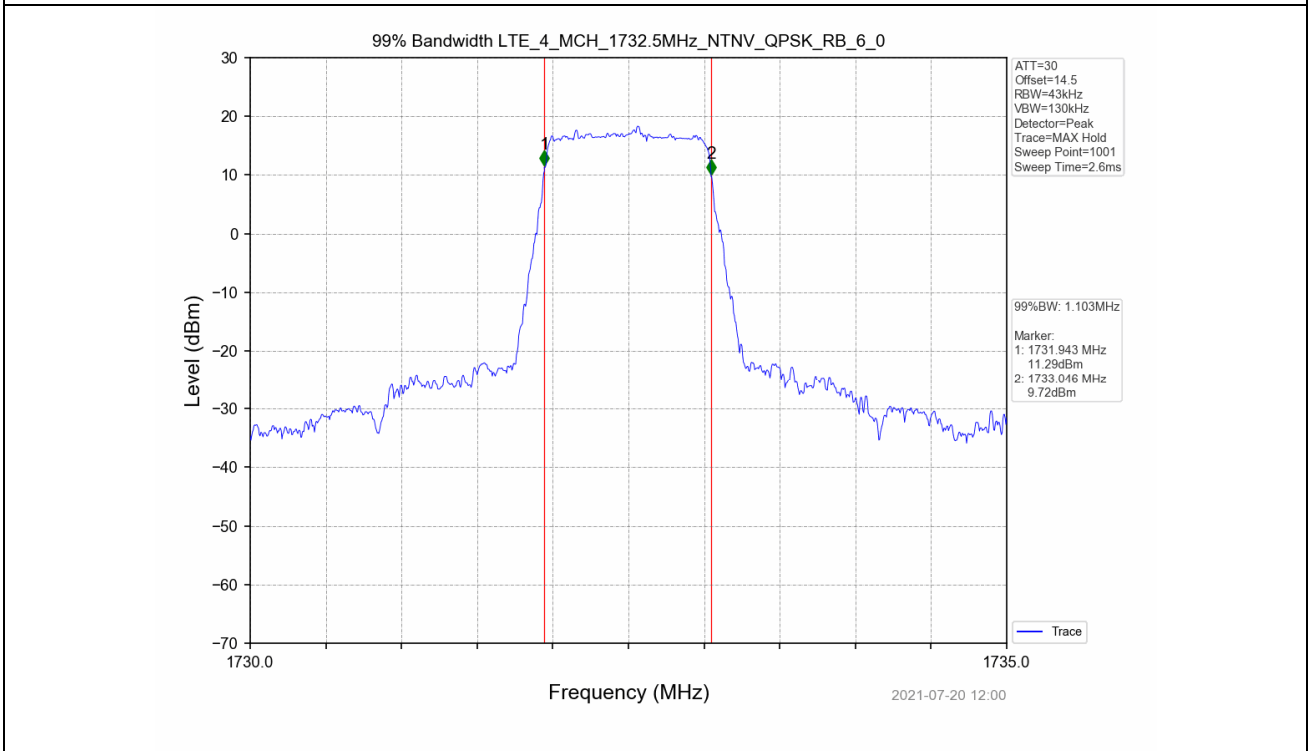
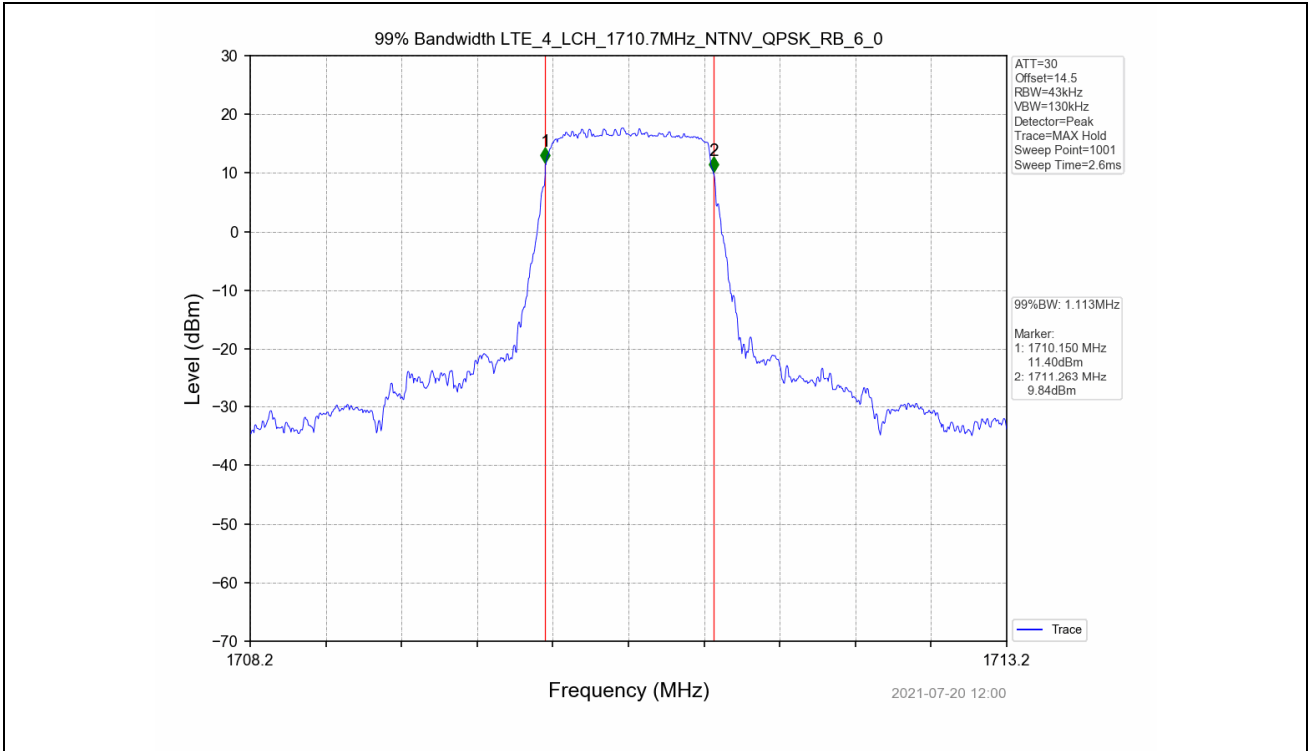
4.1 Test Result

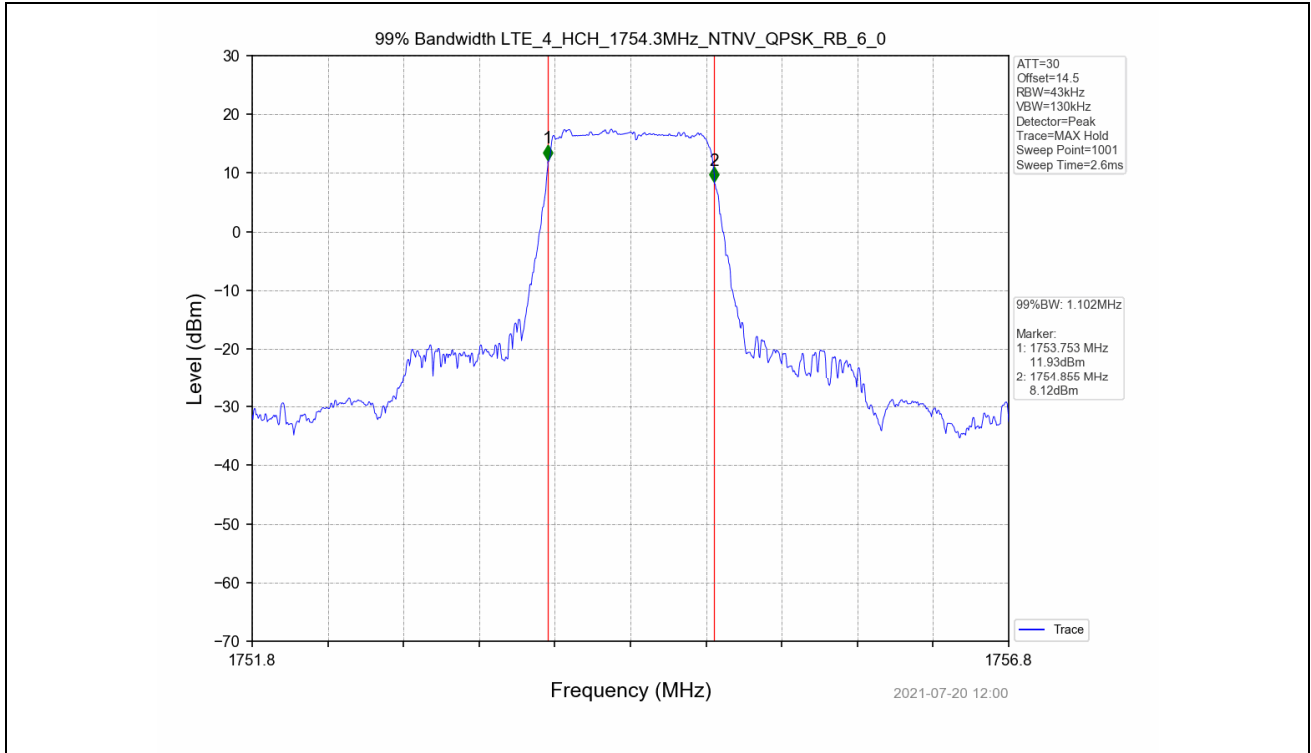
Test Band: 4 _ 1.4MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	6	0	1.113	1.103	1.102	N/A	PASS
16QAM	6	0	1.104	1.115	1.111	N/A	PASS

4.2 Test Graph



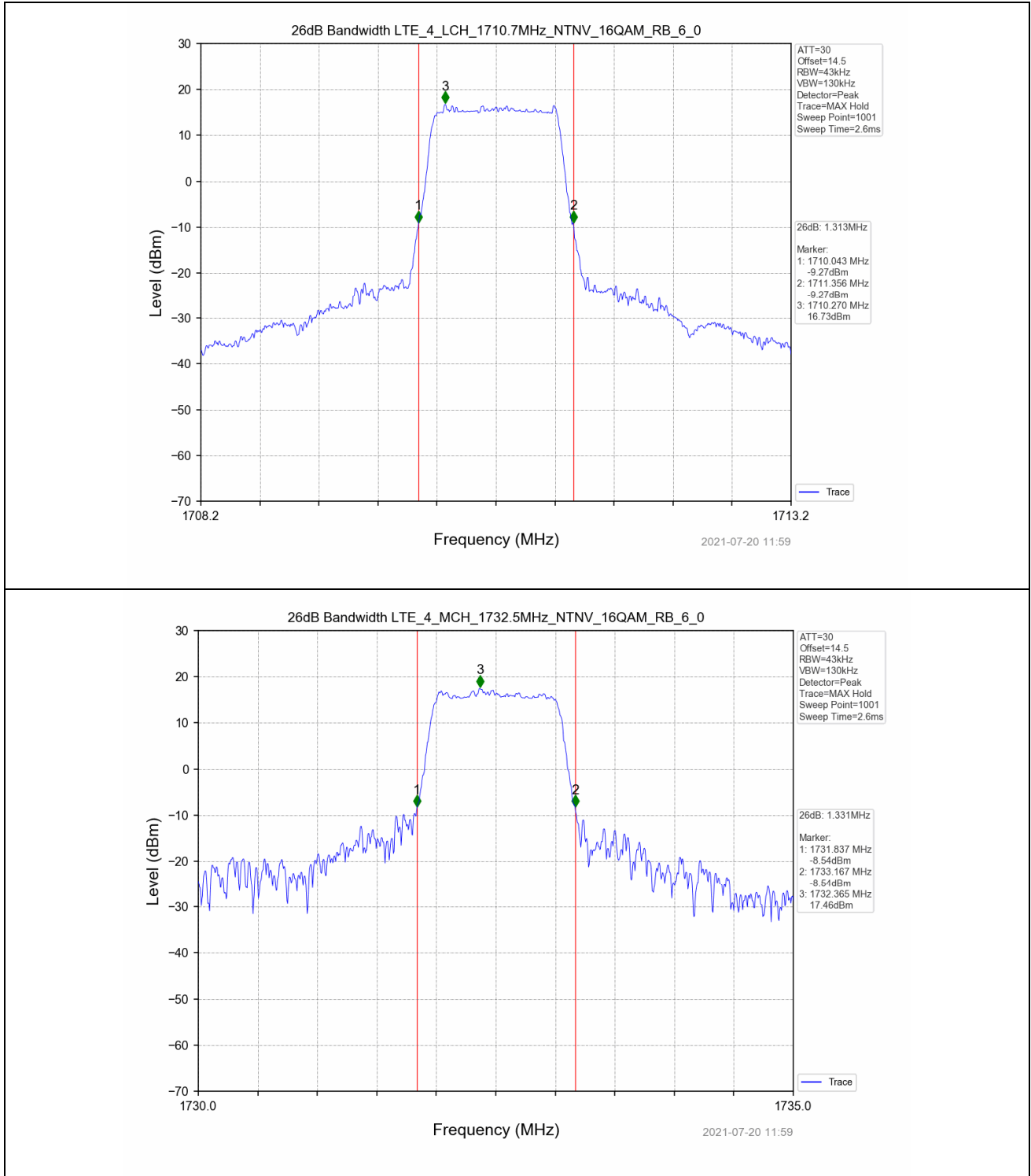


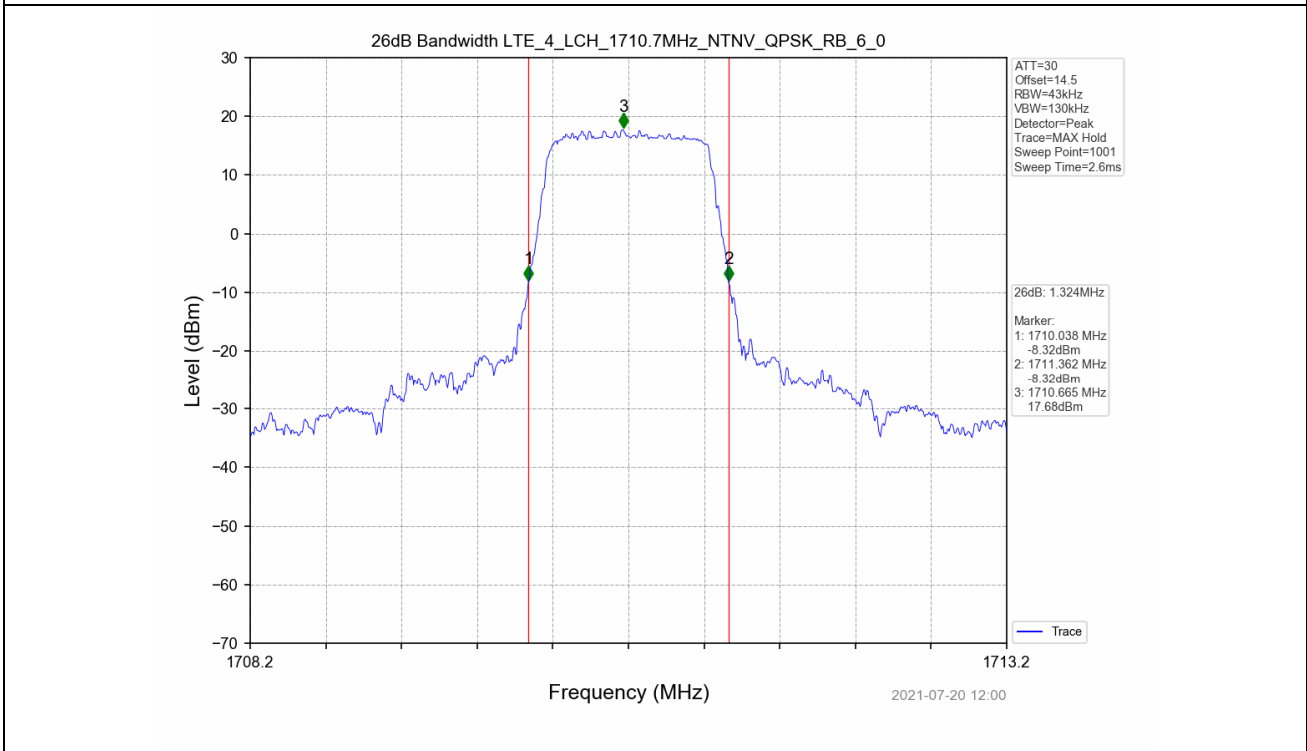
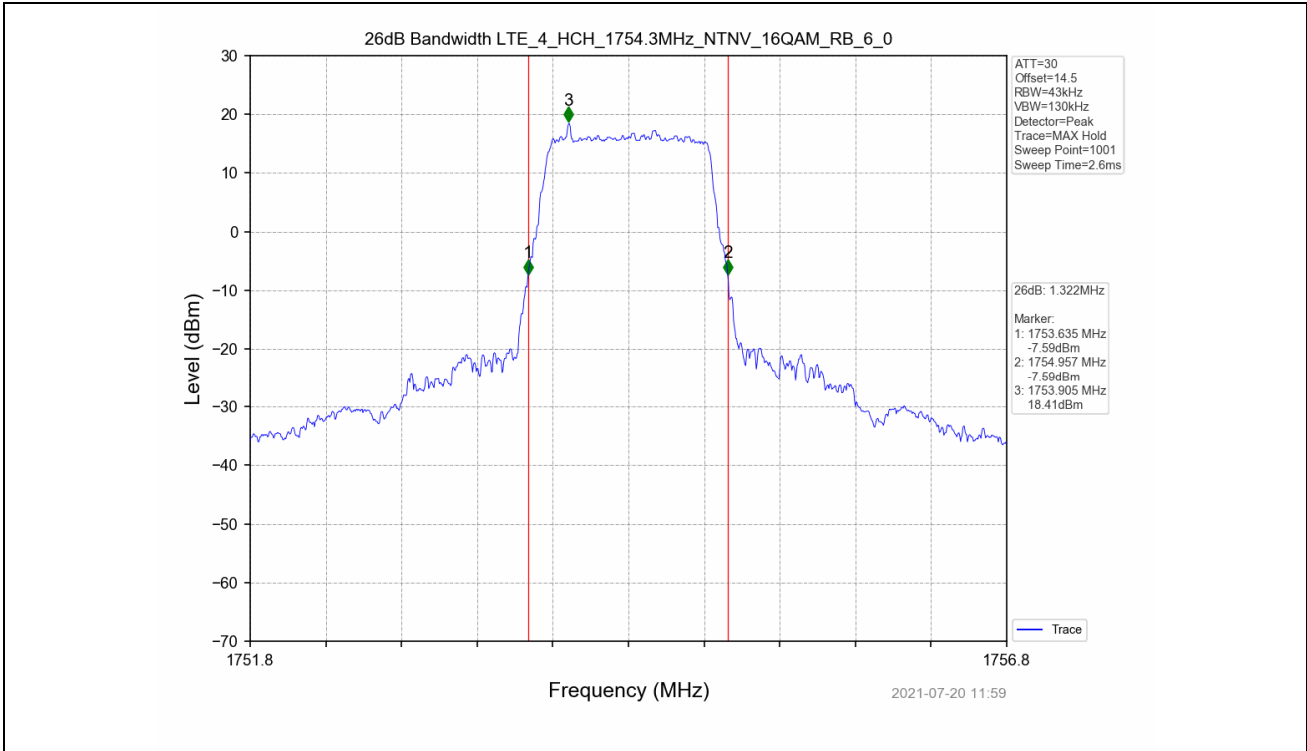


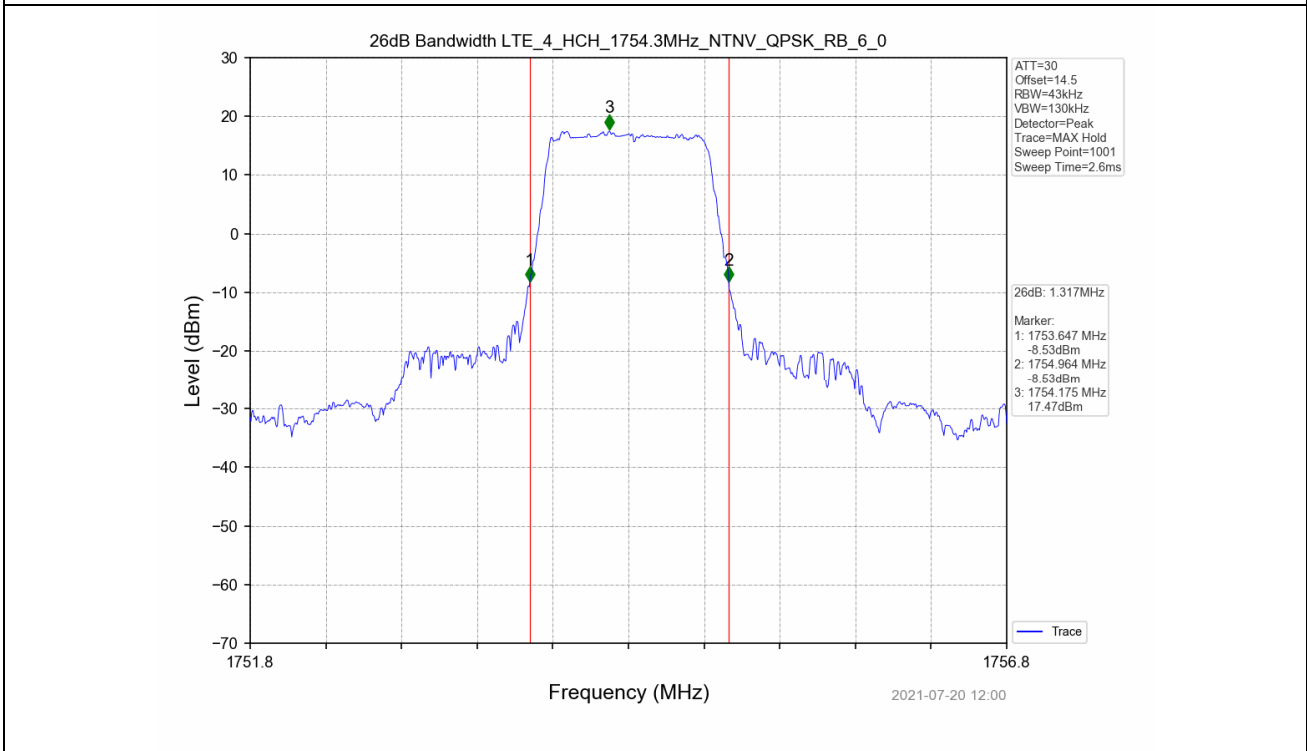
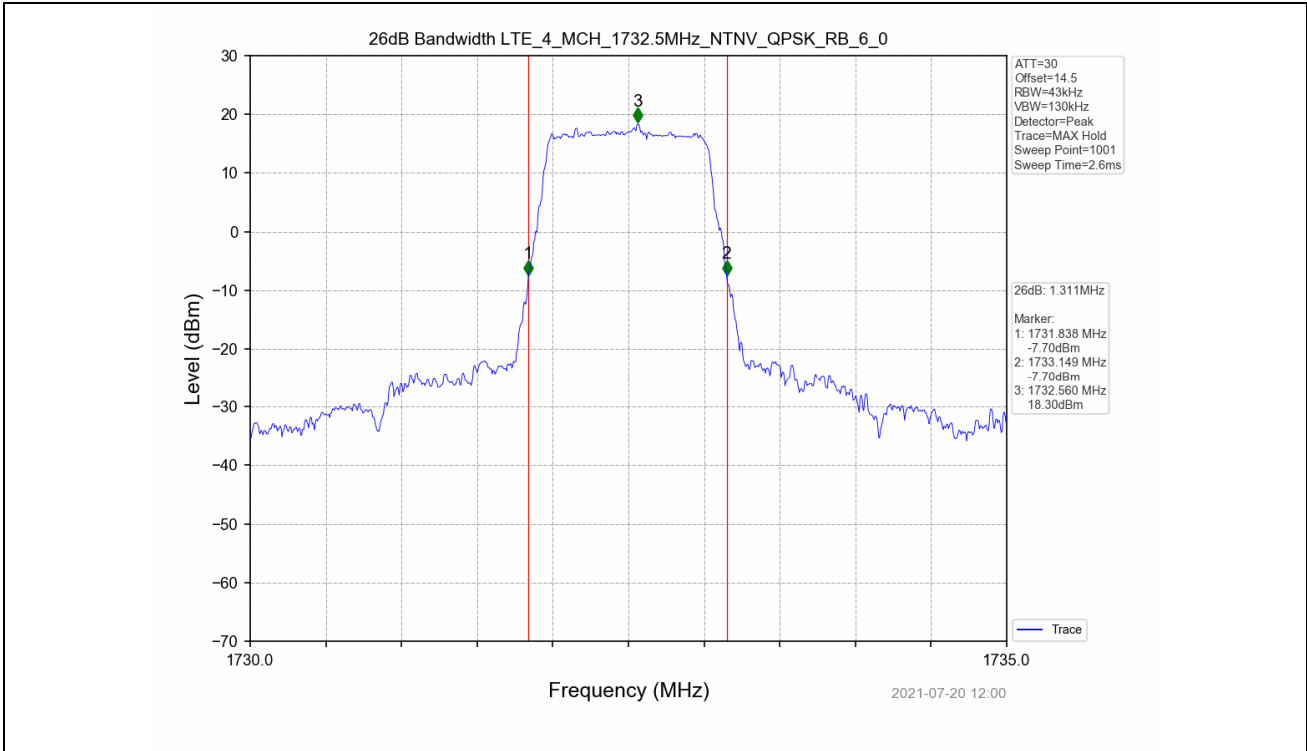


Test Band: 4 1.4MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	6	0	1.324	1.311	1.317	N/A	PASS
16QAM	6	0	1.313	1.331	1.322	N/A	PASS

4.2 Test Graph

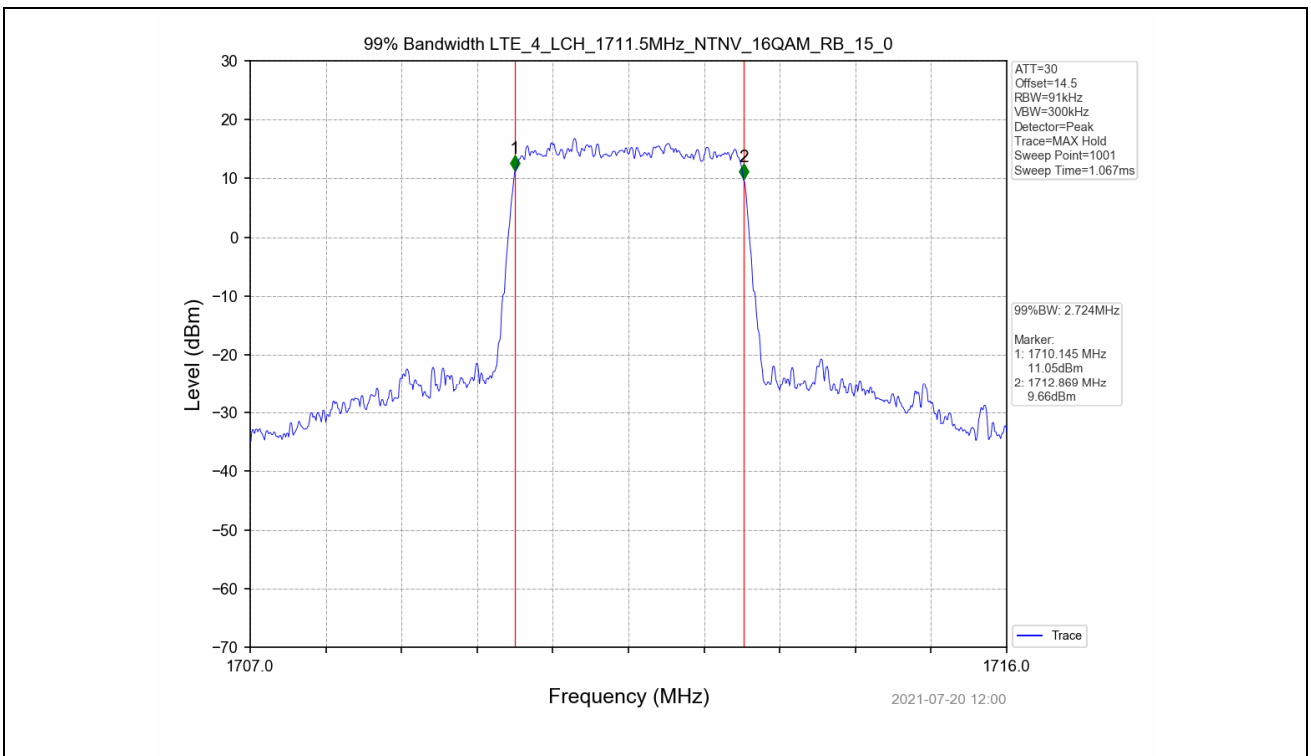


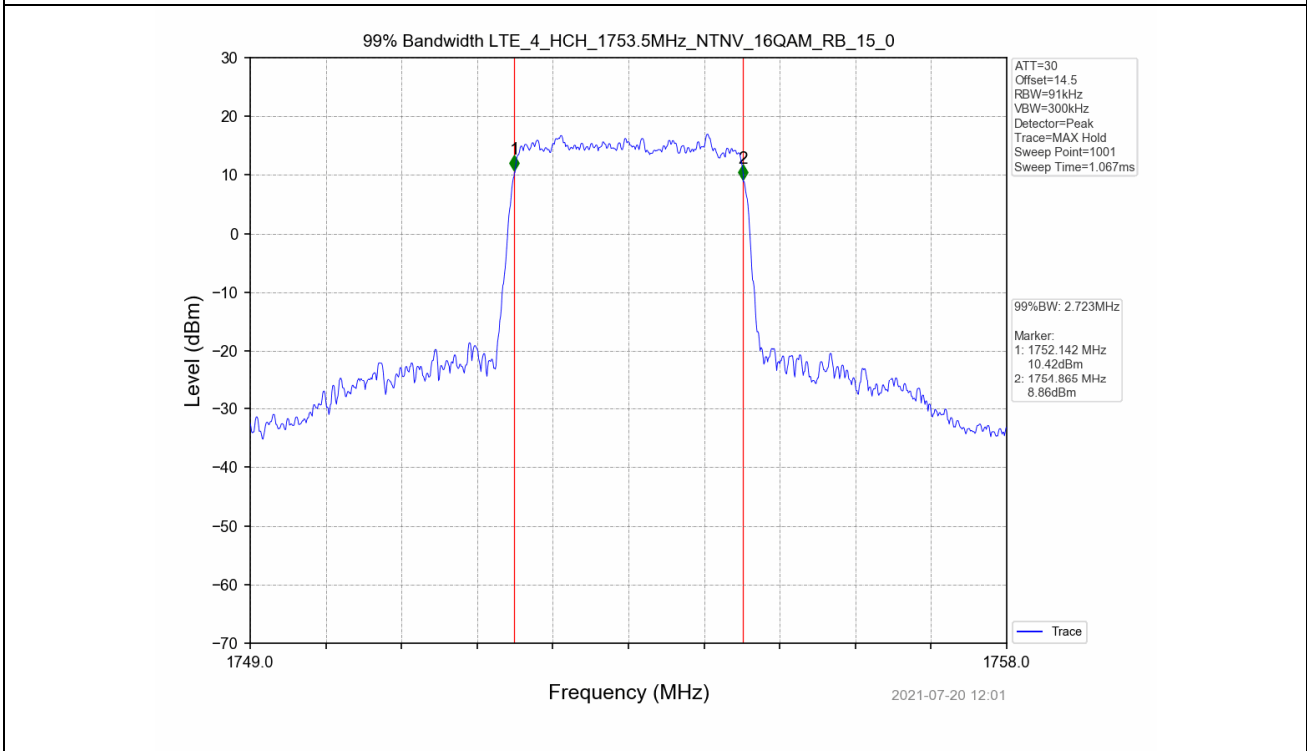
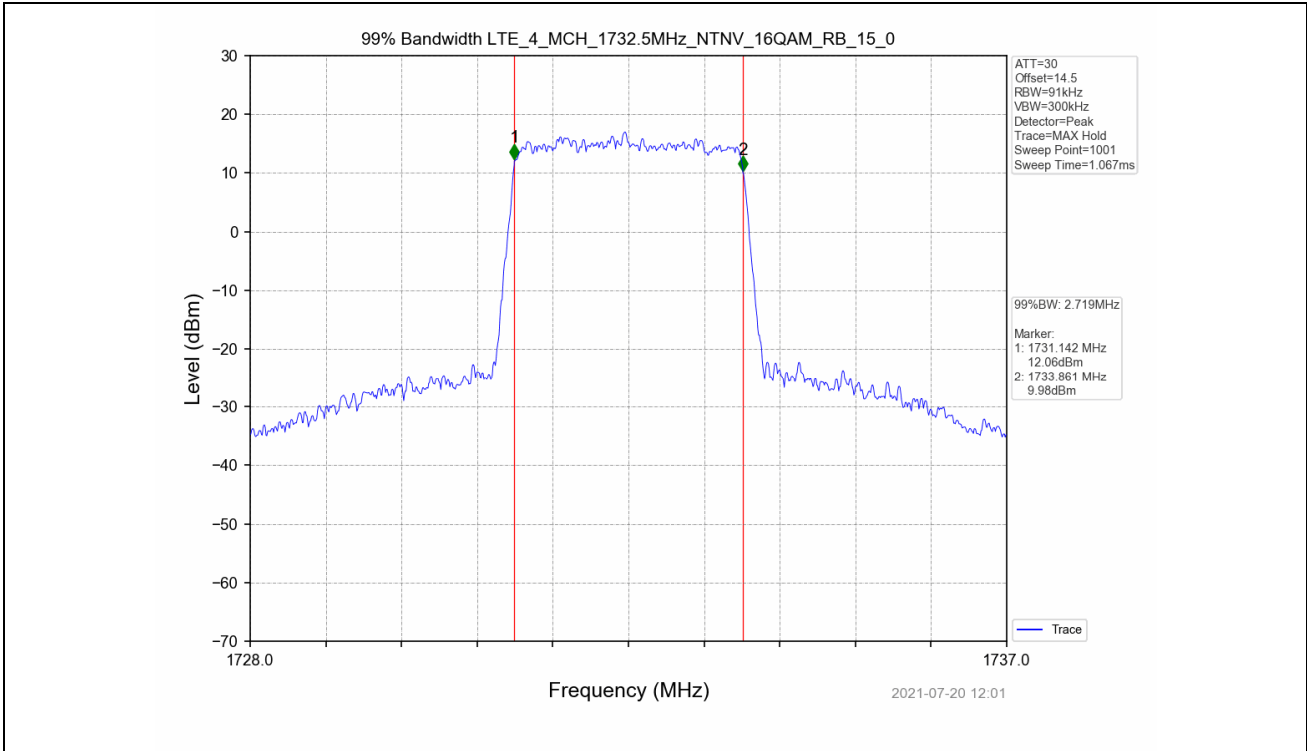


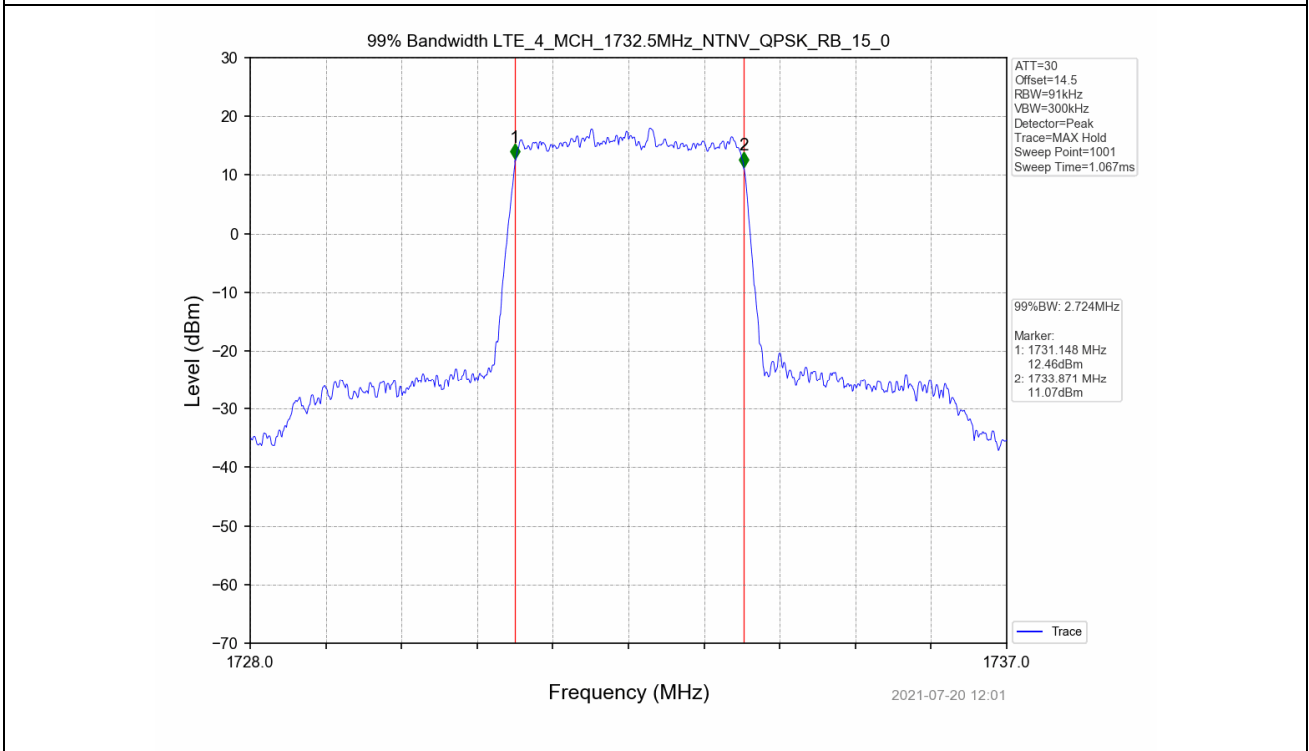
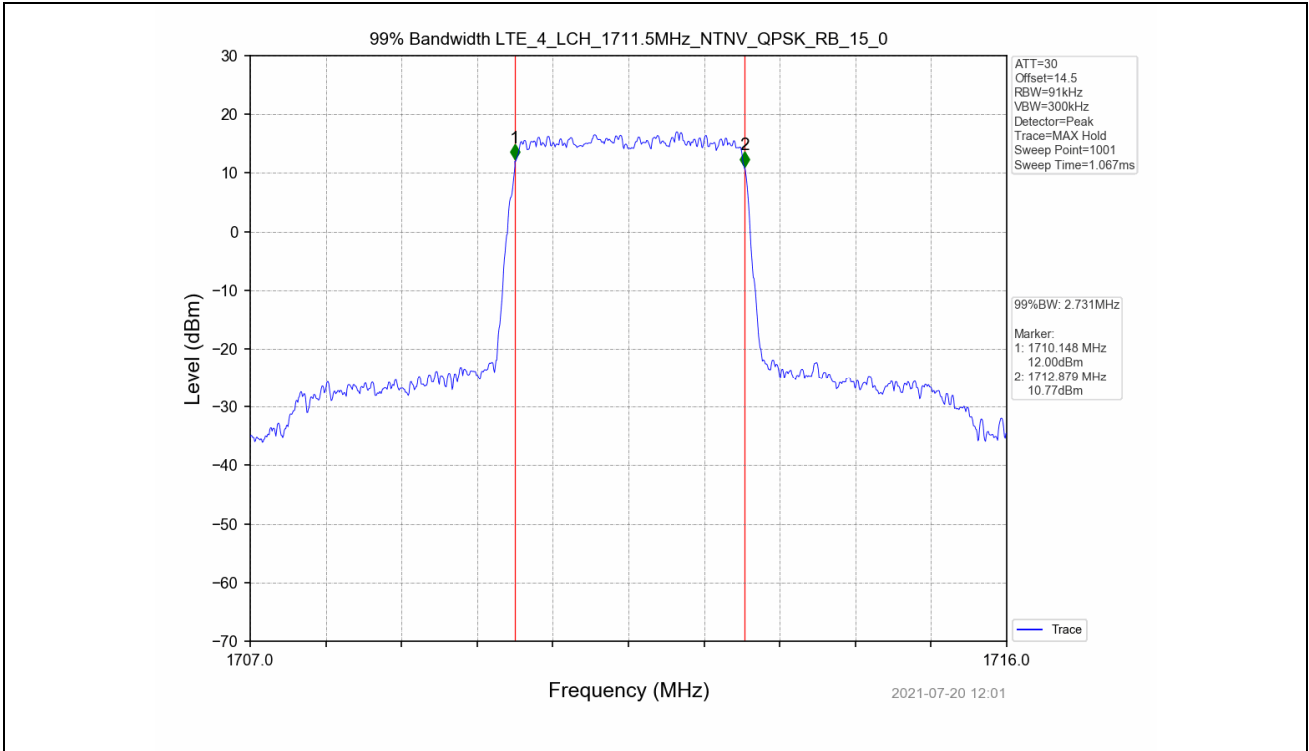


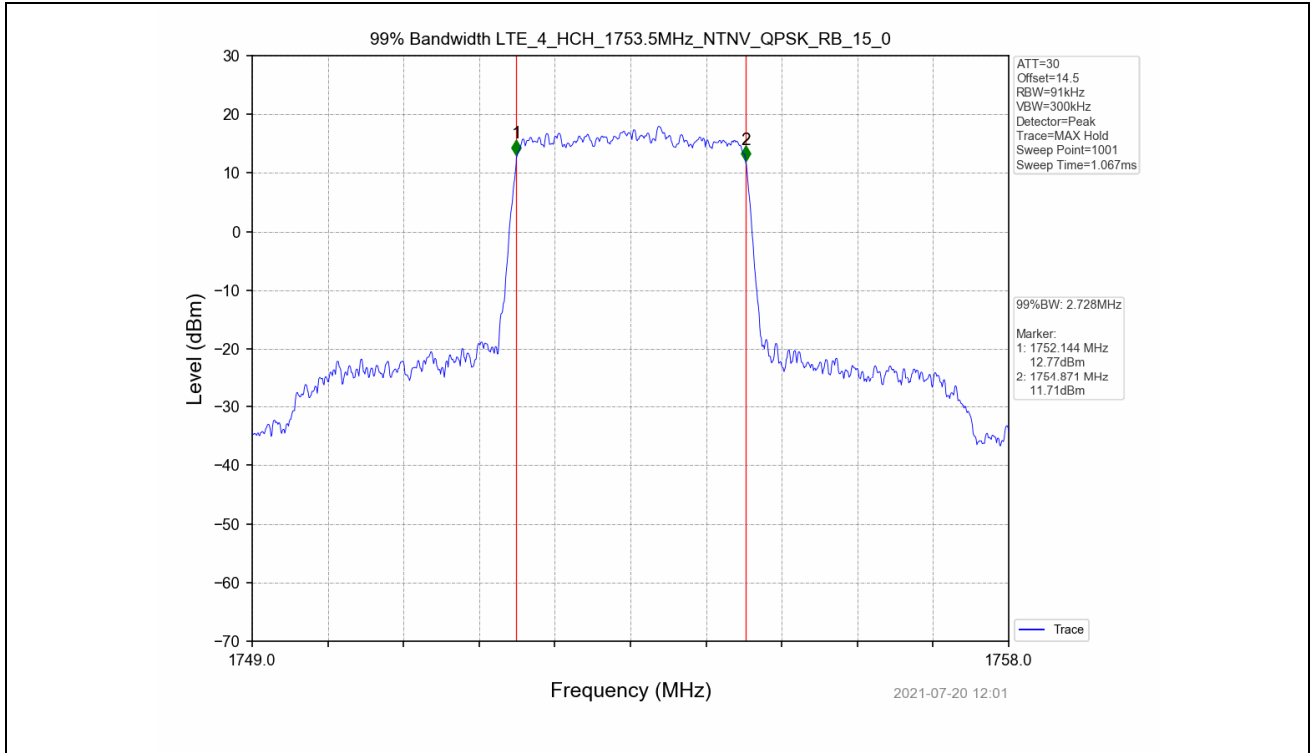
Test Band: 4_ 3MHz Bandwidth							
Test Mode	RB Allocation		99% Occupied Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	15	0	2.731	2.724	2.728	N/A	PASS
16QAM	15	0	2.724	2.719	2.723	N/A	PASS

4.2 Test Graph









Test Band: 4 3MHz Bandwidth							
Test Mode	RB Allocation		26dB Bandwidth (MHz)			Limit	Verdict
	Size	Offset	LCH	MCH	HCH		
QPSK	15	0	2.996	2.985	2.974	N/A	PASS
16QAM	15	0	2.972	2.990	2.990	N/A	PASS

4.2 Test Graph

