

6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0









6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0









6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



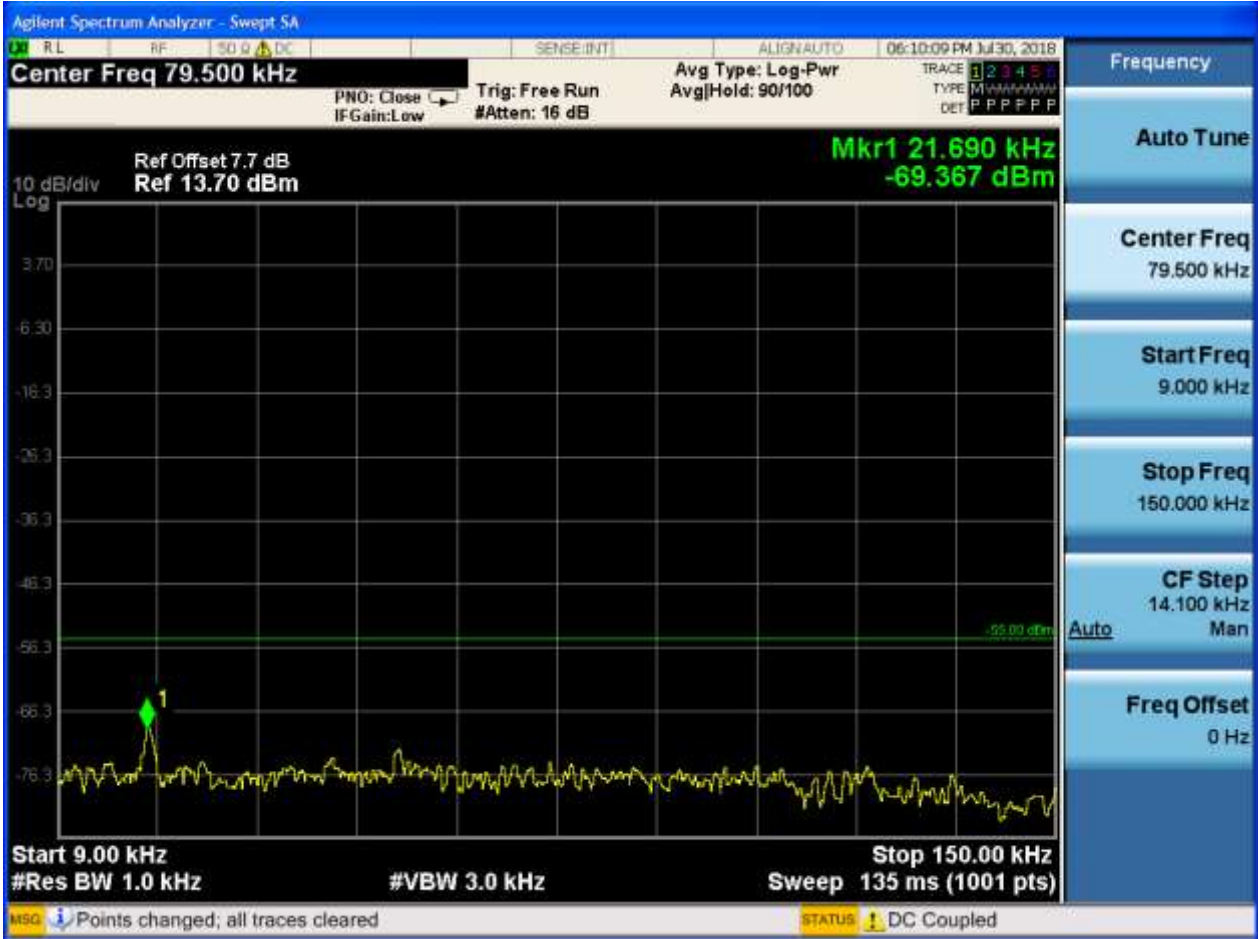






6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0



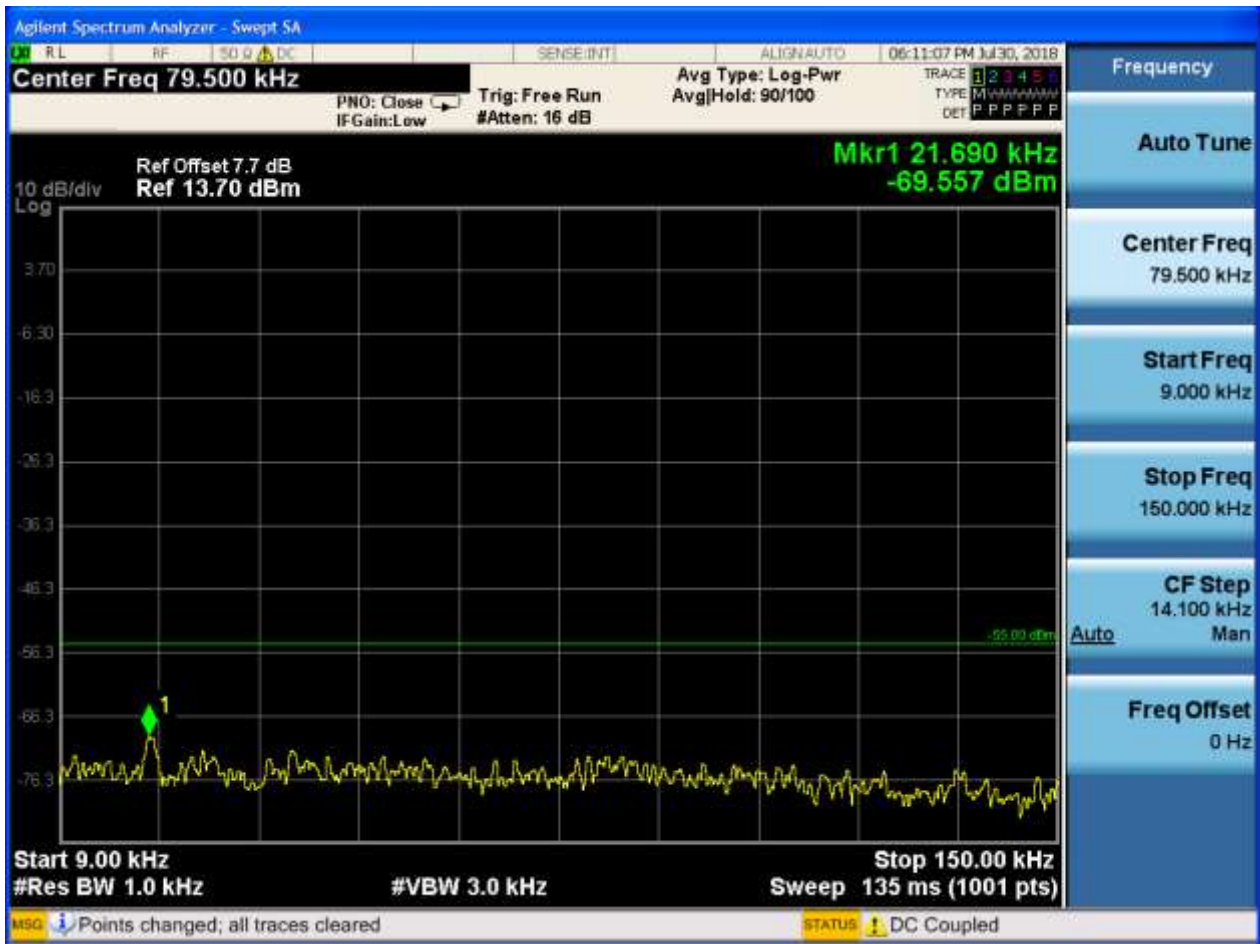




6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0









6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0







6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0









7Appendix_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, RBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, RBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

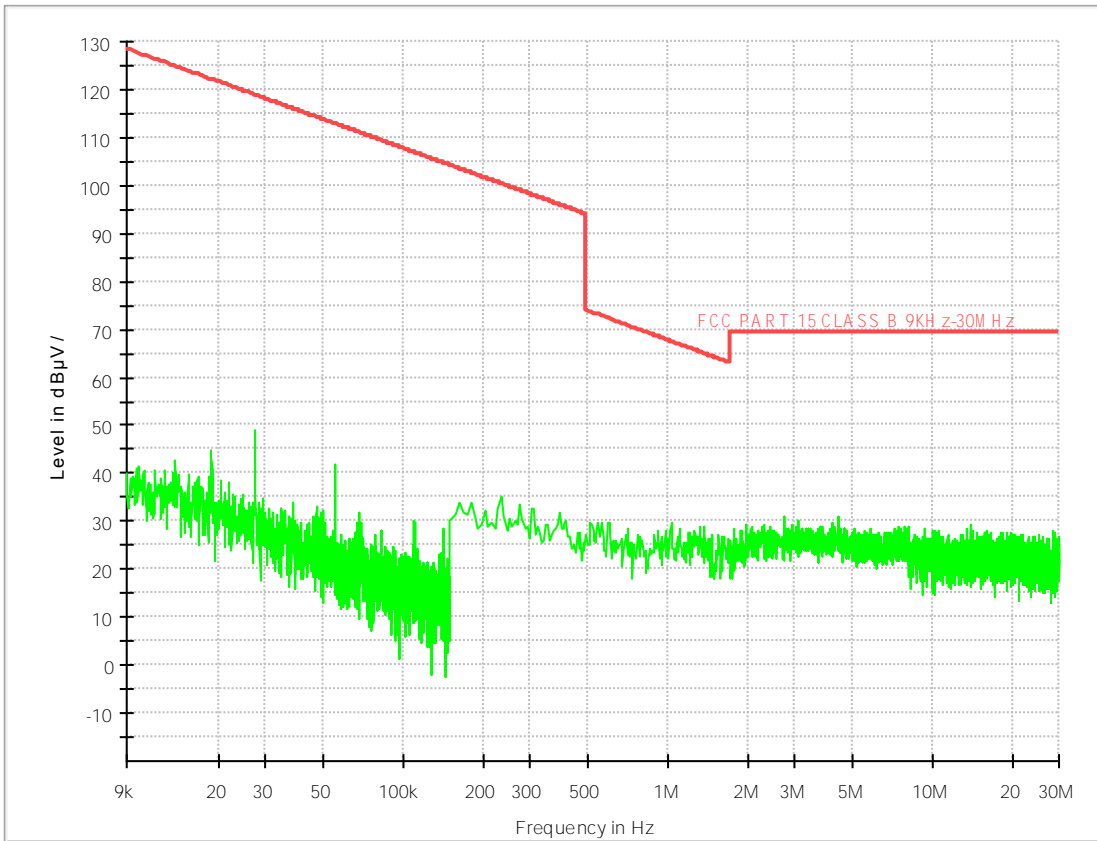
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

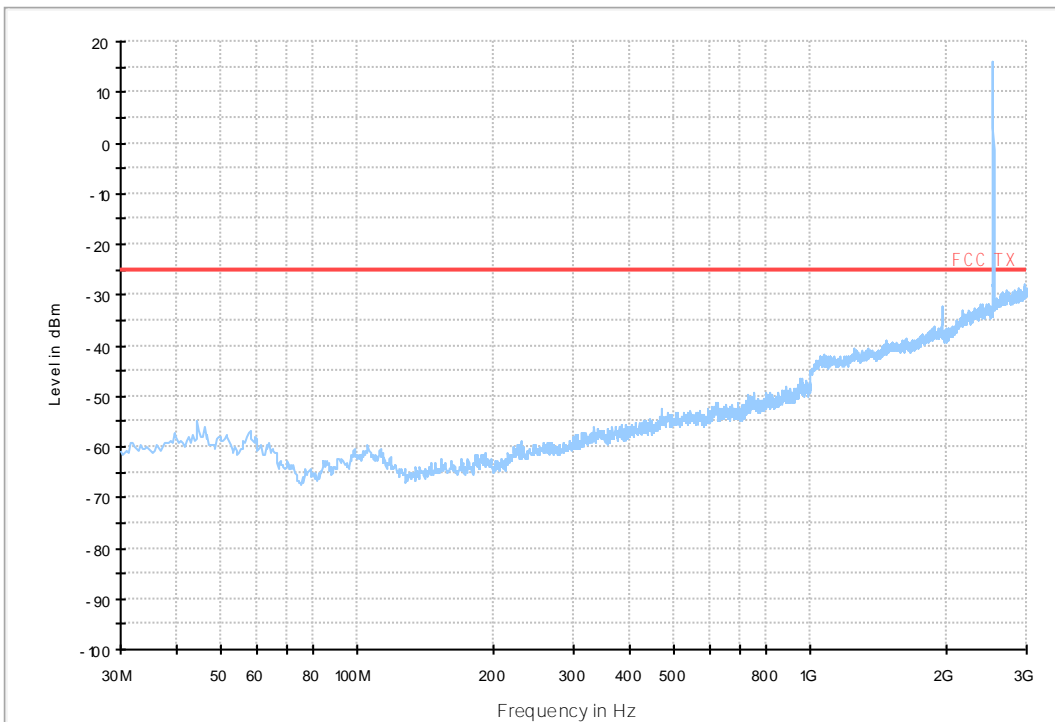
7.1 For LTE

7.1.1 Test Band = BAND7_ANT1

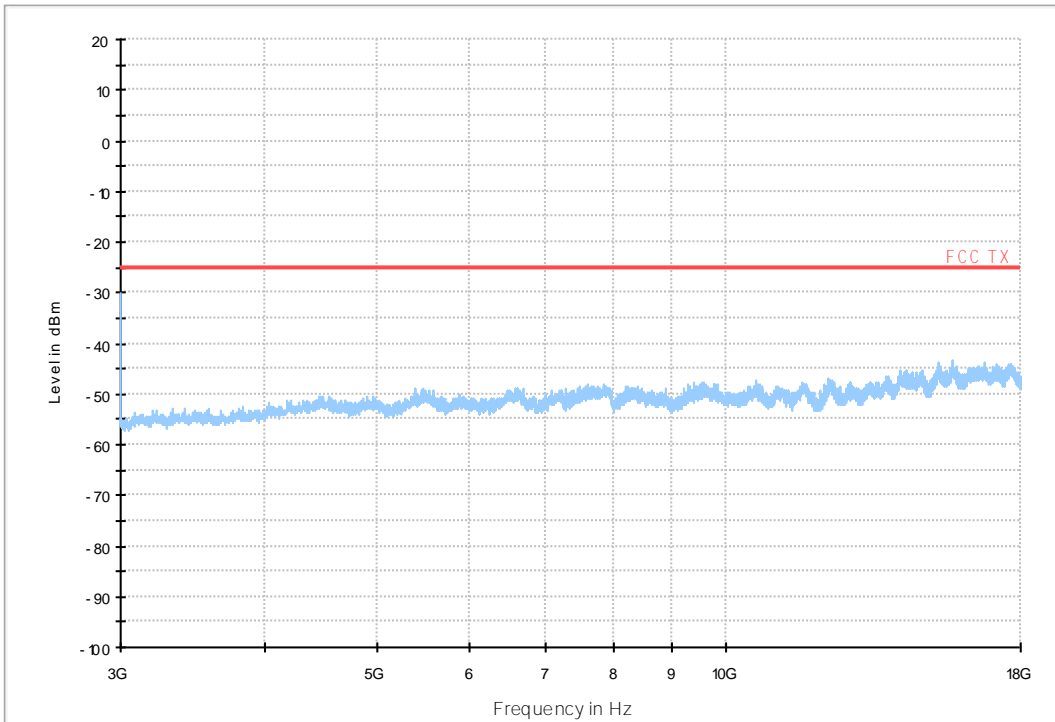
7.1.1.1 Test Bandwidth = 5



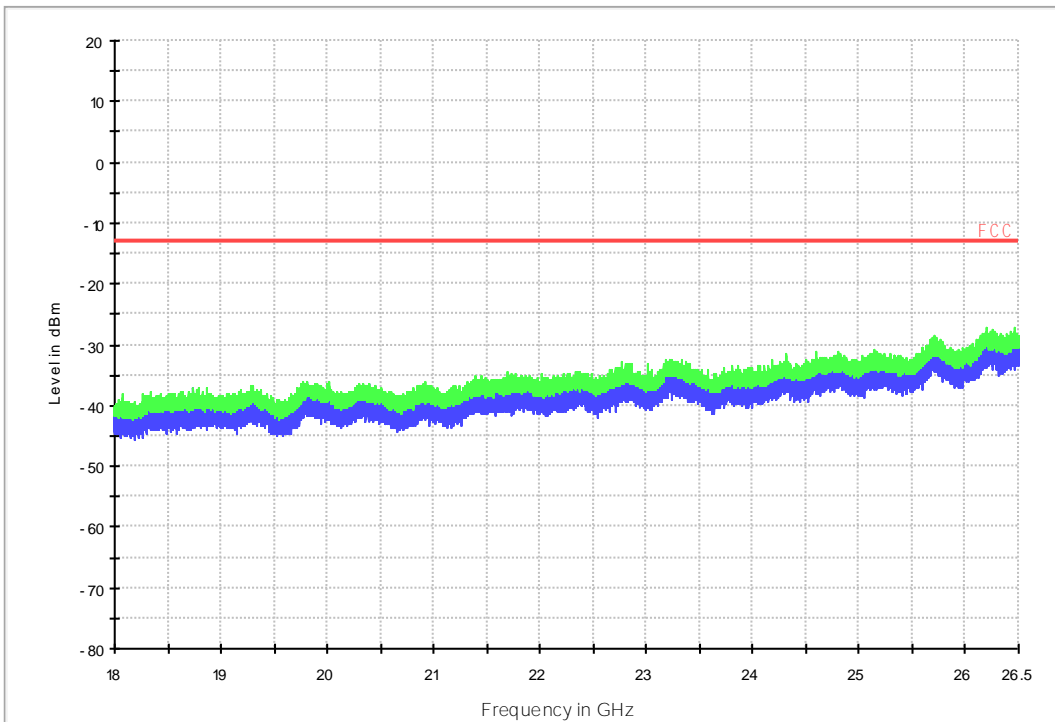
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



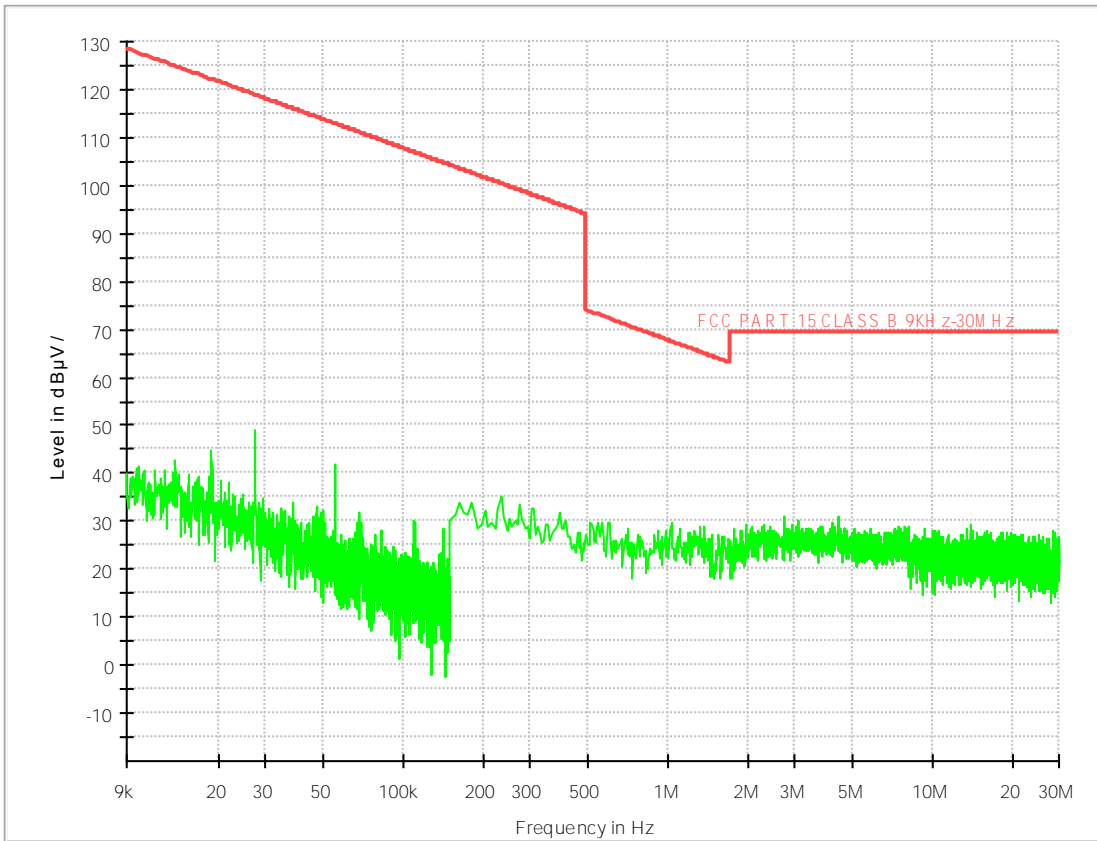
LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



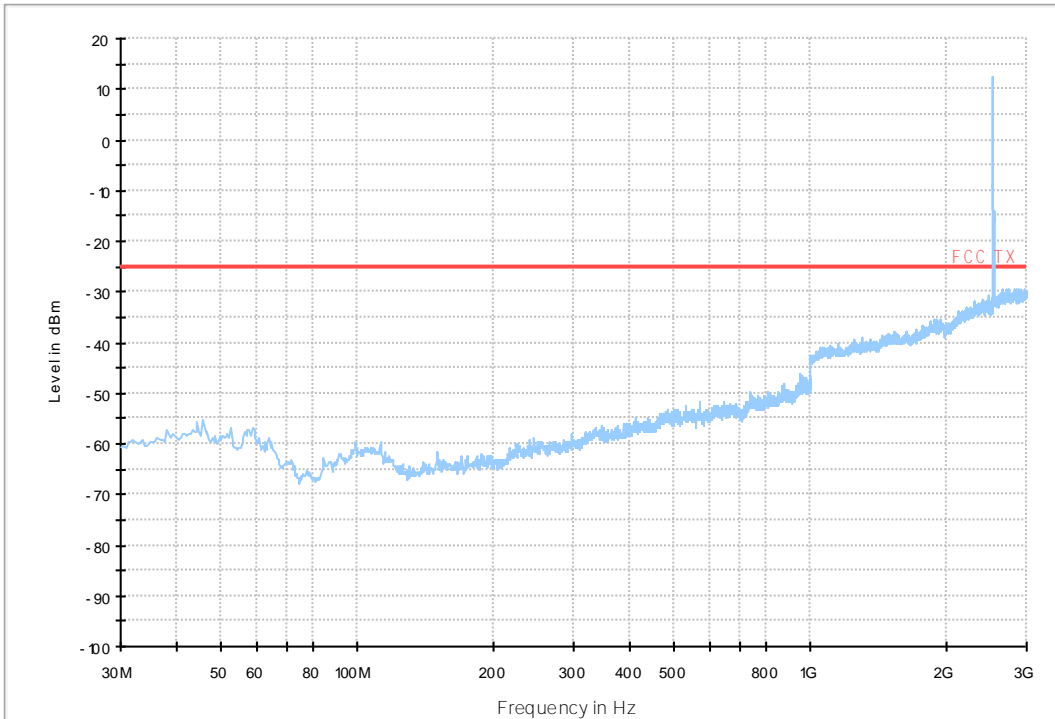
18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK



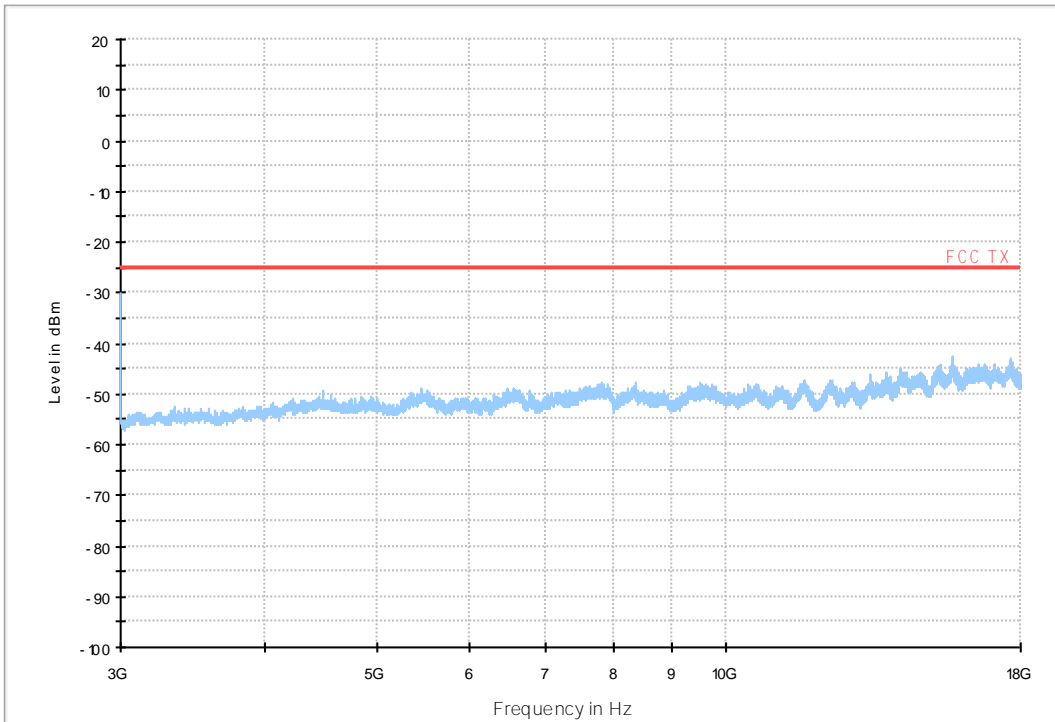
7.1.1.2 Test Bandwidth = 20



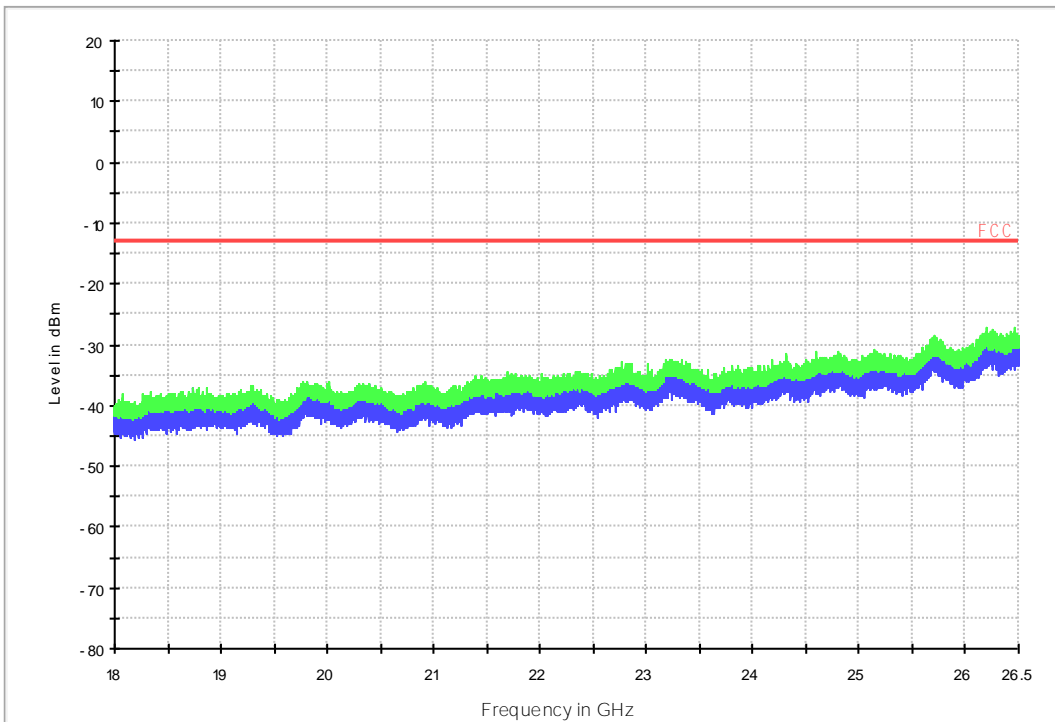
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit

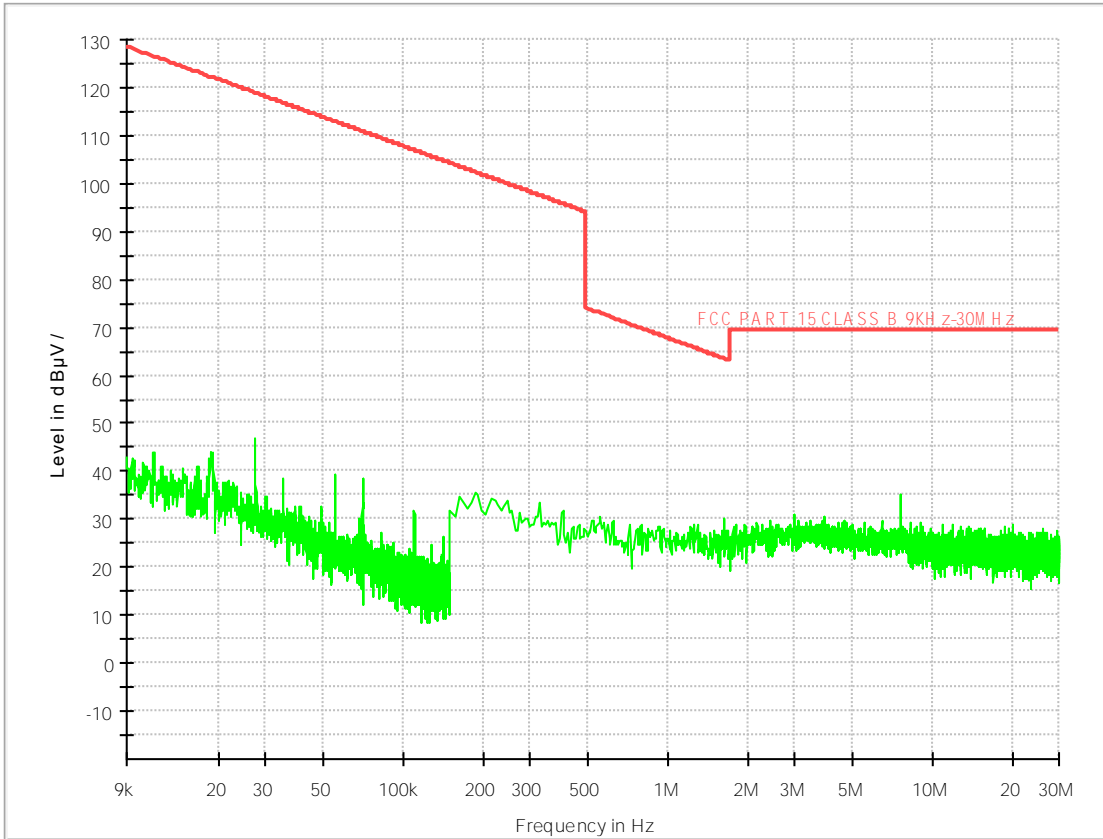


18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK

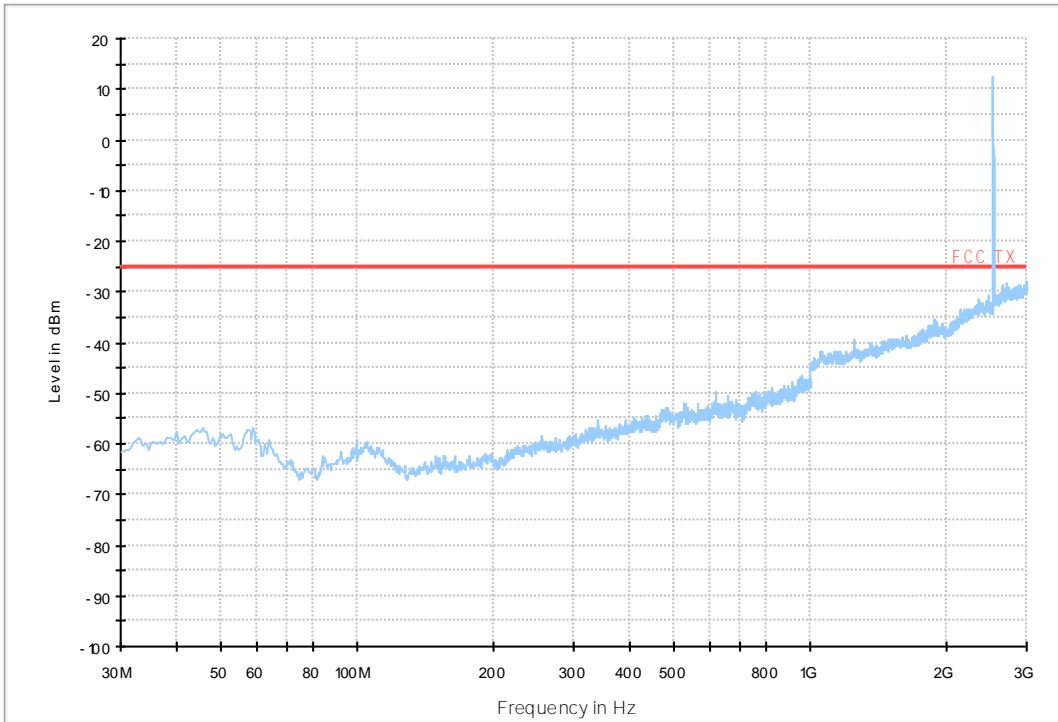


7.1.2 Test Band = BAND7_ANT2

7.1.2.1 Test Bandwidth = 5

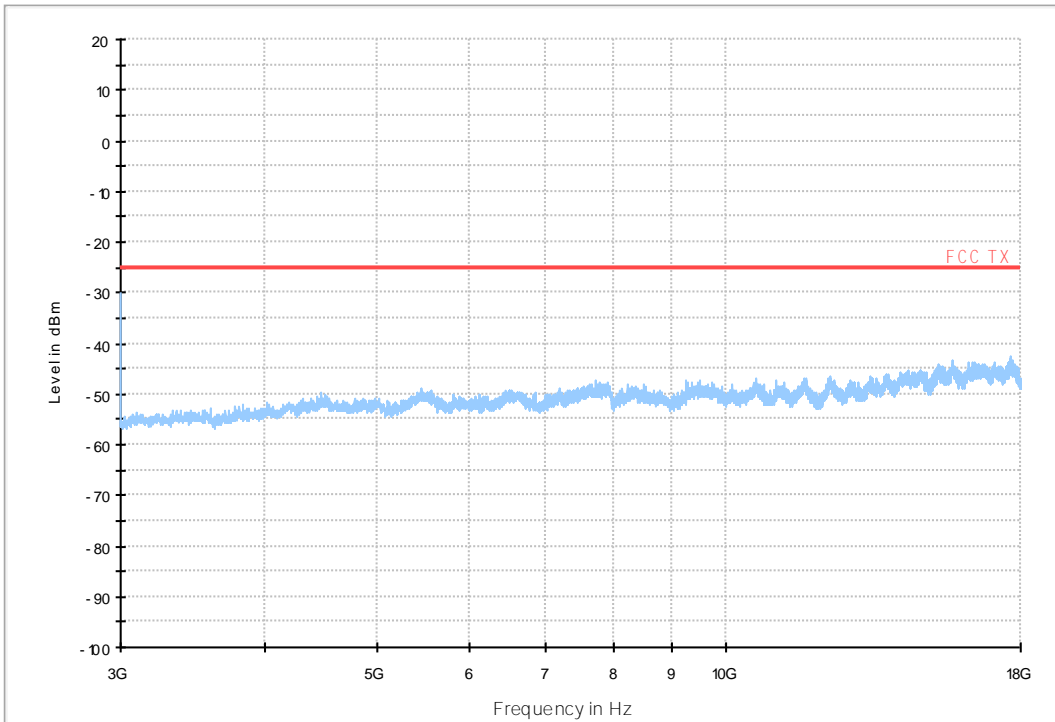


LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit

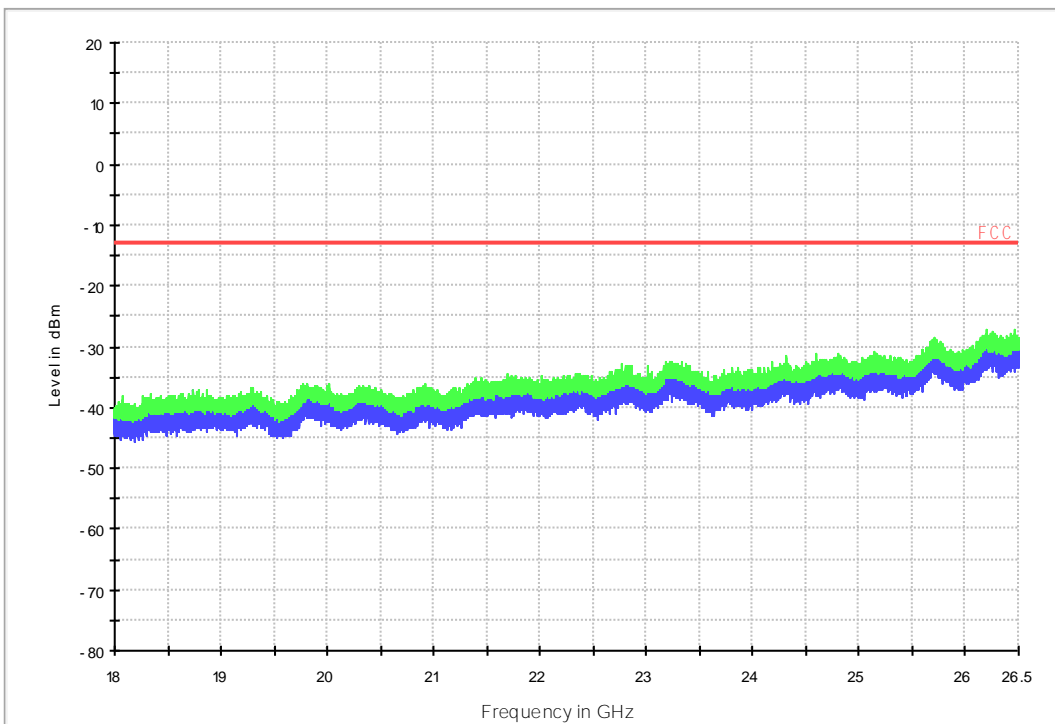




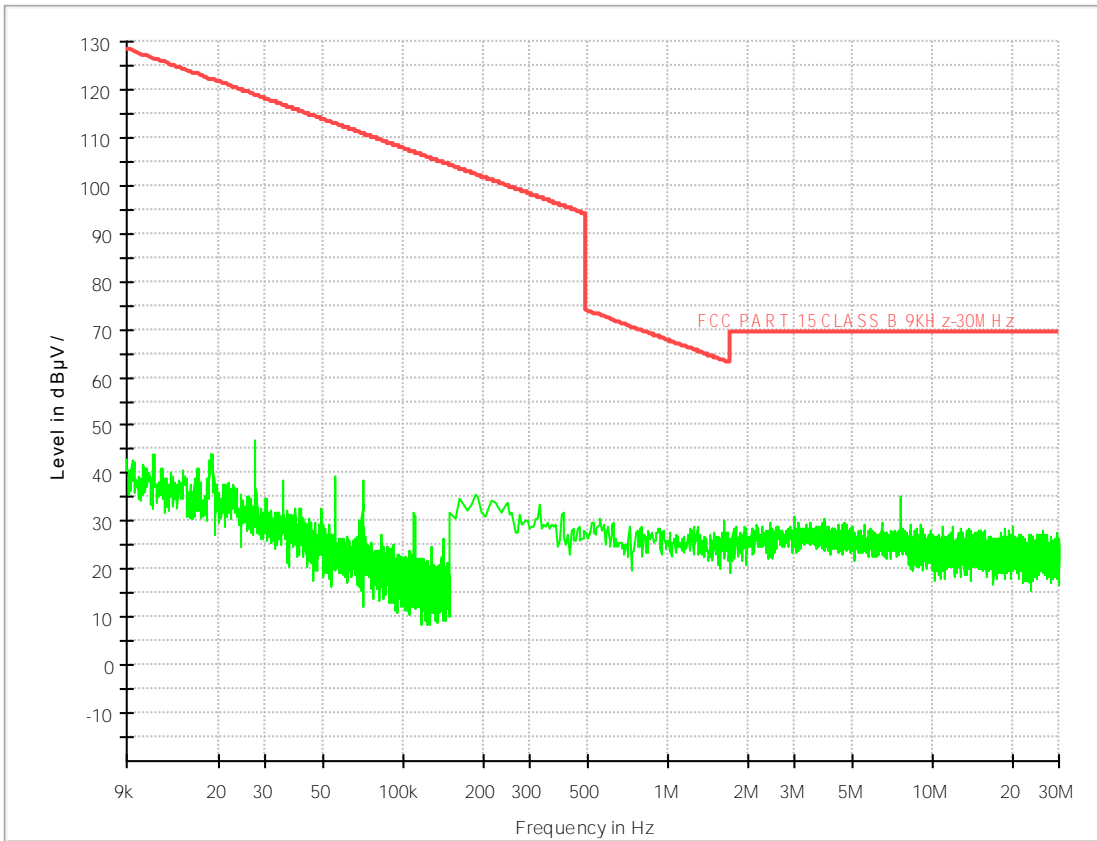
LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



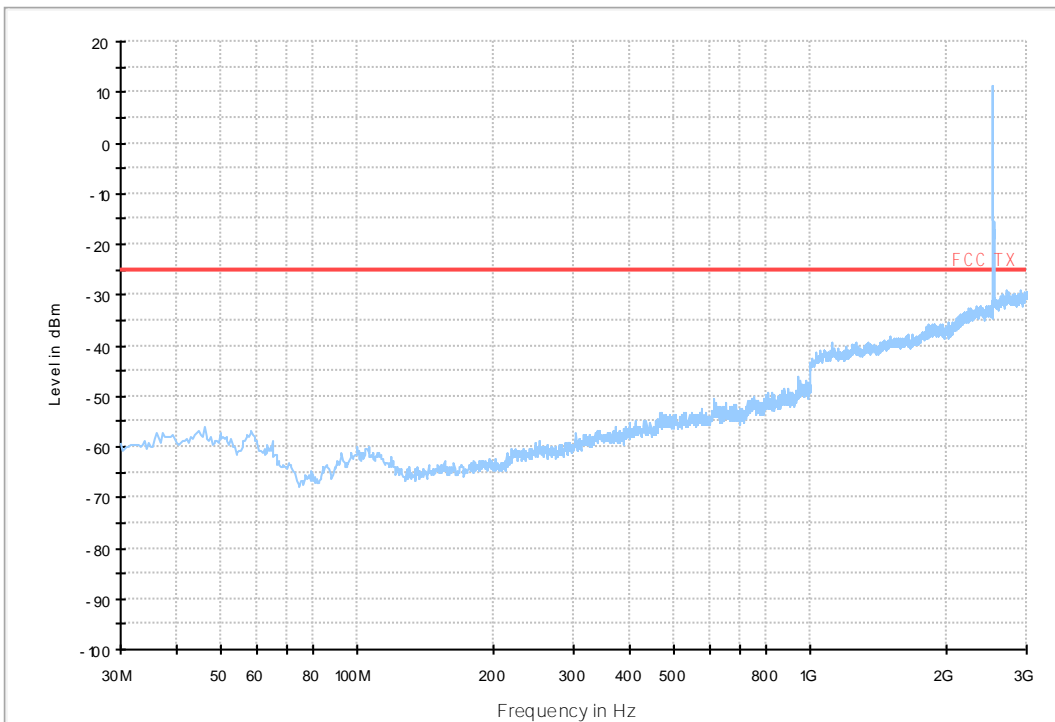
18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK



7.1.2.2 Test Bandwidth = 20

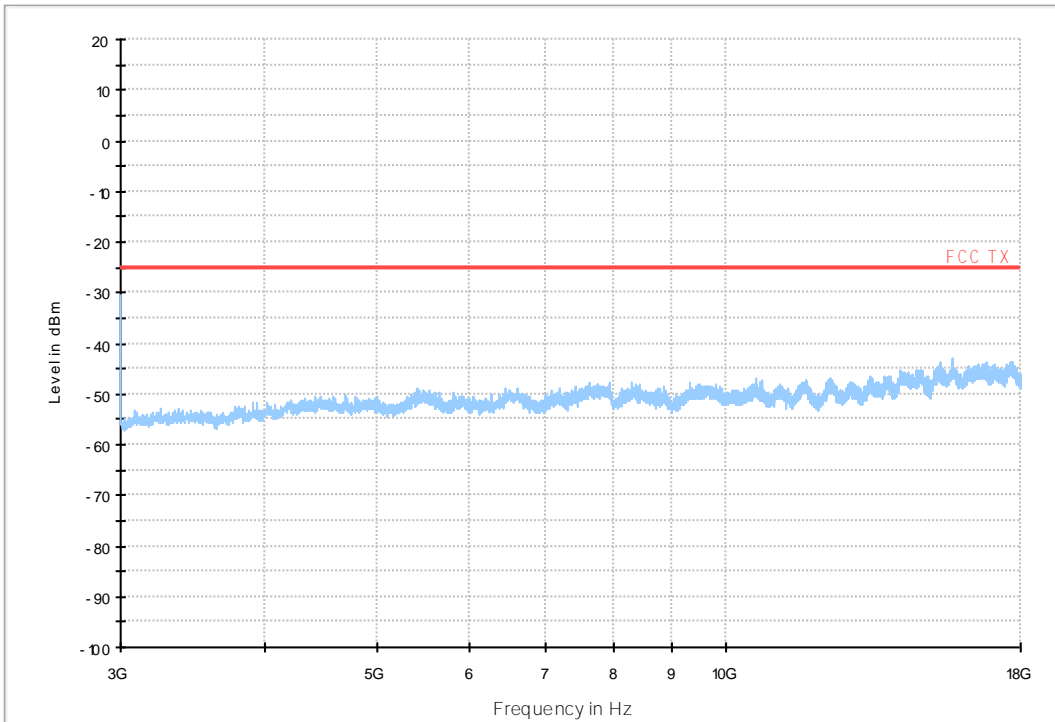


LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit

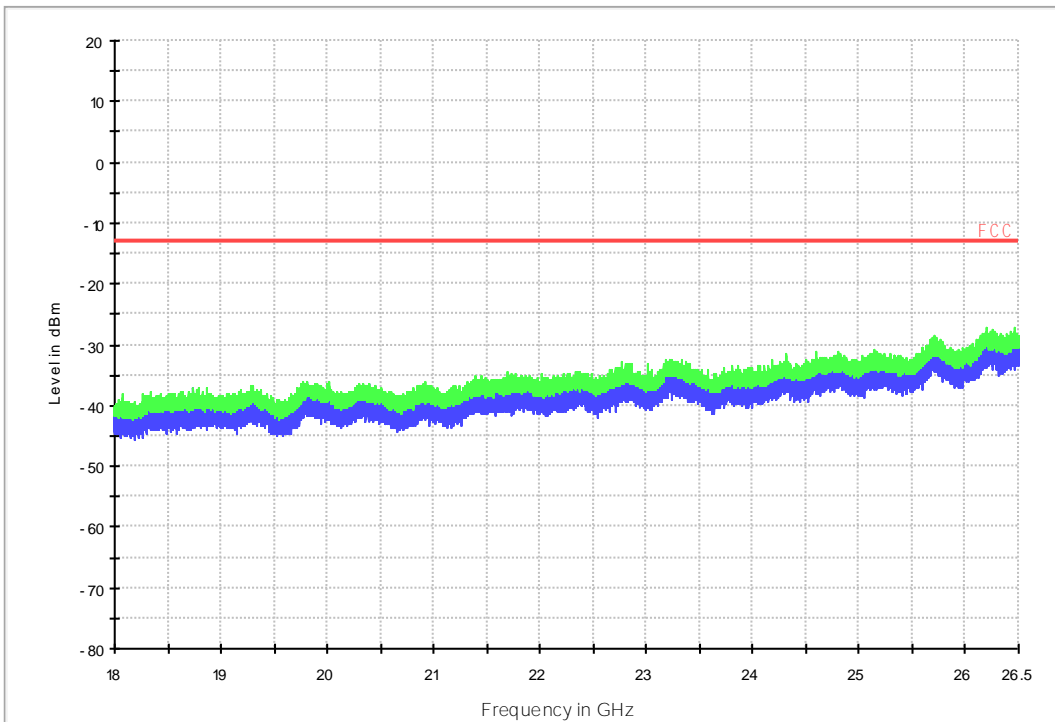




LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK





8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND7	LTE/TM1	5	LCH	TN	VL	-32.42	-0.01296	PASS
					VN	-1.56	-0.00062	PASS
					VH	-26.97	-0.01078	PASS
			MCH	TN	VL	-0.16	-0.00006	PASS
					VN	-2.98	-0.00118	PASS
					VH	-4.02	-0.00159	PASS
			HCH	TN	VL	-18.67	-0.00727	PASS
					VN	-0.57	-0.00022	PASS
					VH	-3.49	-0.00136	PASS
		10	LCH	TN	VL	-9.96	-0.00398	PASS
					VN	-15.05	-0.00601	PASS
					VH	-11.60	-0.00463	PASS
			MCH	TN	VL	-3.69	-0.00146	PASS
					VN	-3.59	-0.00142	PASS
					VH	-1.76	-0.00069	PASS
			HCH	TN	VL	-3.98	-0.00155	PASS
					VN	-6.15	-0.0024	PASS
					VH	-4.51	-0.00176	PASS
		15	LCH	TN	VL	-3.99	-0.00159	PASS
					VN	-1.26	-0.0005	PASS
					VH	-5.56	-0.00222	PASS
			MCH	TN	VL	-9.30	-0.00367	PASS
					VN	-1.49	-0.00059	PASS
					VH	-2.30	-0.00091	PASS
			HCH	TN	VL	-2.82	-0.0011	PASS
					VN	-2.09	-0.00082	PASS
					VH	-3.79	-0.00148	PASS
		20	LCH	TN	VL	-3.02	-0.0012	PASS
					VN	-3.88	-0.00155	PASS
			MCH	TN	VH	-1.26	-0.0005	PASS
					VL	-1.29	-0.00051	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					VN	-1.03	-0.00041	PASS		
					VH	-2.06	-0.00081	PASS		
					HCH	TN	VL	0.70	0.00027	PASS
							VN	0.40	0.00016	PASS
					VH	0.13	0.00005	PASS		
			LCH	TN	VL	-2.95	-0.00118	PASS		
					VN	-3.15	-0.00126	PASS		
					VH	-5.05	-0.00202	PASS		
			MCH	TN	VL	-1.04	-0.00041	PASS		
					VN	-1.65	-0.00065	PASS		
	VH	-16.94			-0.00668	PASS				
	HCH	TN	VL	-6.04	-0.00235	PASS				
			VN	-1.80	-0.0007	PASS				
			VH	-0.51	-0.0002	PASS				
	5	LCH	TN	VL	-9.63	-0.00384	PASS			
				VN	-8.93	-0.00356	PASS			
				VH	-5.49	-0.00219	PASS			
		MCH	TN	VL	-3.48	-0.00137	PASS			
				VN	-2.27	-0.0009	PASS			
				VH	-0.41	-0.00016	PASS			
		HCH	TN	VL	-3.73	-0.00145	PASS			
				VN	-10.34	-0.00403	PASS			
				VH	-2.27	-0.00088	PASS			
	10	LCH	TN	VL	-4.03	-0.00161	PASS			
				VN	-6.45	-0.00257	PASS			
				VH	-2.66	-0.00106	PASS			
		MCH	TN	VL	-2.03	-0.0008	PASS			
				VN	0.54	0.00021	PASS			
				VH	-7.25	-0.00286	PASS			
	HCH	TN	VL	-0.77	-0.0003	PASS				
			VN	-3.02	-0.00118	PASS				
			VH	-0.94	-0.00037	PASS				
	15	LCH	TN	VL	-1.29	-0.00051	PASS			
				VN	-2.73	-0.00109	PASS			
				VH	-1.29	-0.00051	PASS			
		MCH	TN	VL	-3.50	-0.00138	PASS			
				VN	-1.92	-0.00076	PASS			
				VH	-2.98	-0.00118	PASS			
		HCH	TN	VL	0.83	0.00032	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	0.63	0.00025	PASS
					VH	0.86	0.00034	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND7	LTE/TM1	5	LCH	VN	-30	-2.37	-0.00095	PASS
					-20	-1.69	-0.00068	PASS
					-10	-14.63	-0.00585	PASS
					0	-2.50	-0.001	PASS
					10	-3.68	-0.00147	PASS
					20	-1.79	-0.00072	PASS
					30	-4.79	-0.00191	PASS
					40	-15.49	-0.00619	PASS
			50	-34.55	-0.01381	PASS		
			MCH	VN	-30	-19.07	-0.00752	PASS
					-20	-27.08	-0.01068	PASS
					-10	-23.12	-0.00912	PASS
					0	-2.63	-0.00104	PASS
					10	-26.92	-0.01062	PASS
					20	-0.53	-0.00021	PASS
					30	-5.25	-0.00207	PASS
					40	0.19	0.00007	PASS
			50	-2.00	-0.00079	PASS		
			HCH	VN	-30	-2.35	-0.00092	PASS
					-20	-13.68	-0.00533	PASS
					-10	-1.86	-0.00072	PASS
					0	-29.18	-0.01137	PASS
					10	-1.20	-0.00047	PASS
					20	-3.26	-0.00127	PASS
		30			-0.41	-0.00016	PASS	
		40			-6.39	-0.00249	PASS	
		50	-1.80	-0.0007	PASS			
		10	LCH	VN	-30	-6.21	-0.00248	PASS
					-20	-3.35	-0.00134	PASS
					-10	-5.89	-0.00235	PASS
					0	-9.68	-0.00386	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					10	-3.13	-0.00125	PASS			
					20	-10.56	-0.00422	PASS			
					30	-10.90	-0.00435	PASS			
					40	-8.91	-0.00356	PASS			
					50	-6.91	-0.00276	PASS			
			MCH	VN	-30	-3.86	-0.00152	PASS			
					-20	-2.57	-0.00101	PASS			
					-10	-14.16	-0.00559	PASS			
					0	-2.68	-0.00106	PASS			
					10	-8.75	-0.00345	PASS			
					20	-3.09	-0.00122	PASS			
					30	-1.49	-0.00059	PASS			
					40	-1.14	-0.00045	PASS			
					50	-2.69	-0.00106	PASS			
					HCH	VN	-30	-1.72	-0.00067	PASS	
			-20	-2.55			-0.00099	PASS			
			-10	-3.26			-0.00127	PASS			
			0	-1.97			-0.00077	PASS			
			10	-1.63			-0.00064	PASS			
			20	-4.84			-0.00189	PASS			
			30	-6.38			-0.00249	PASS			
			40	-3.28			-0.00128	PASS			
			15			LCH	VN	-30	-2.22	-0.00089	PASS
								-20	-0.20	-0.00008	PASS
								-10	-2.62	-0.00104	PASS
								0	-1.93	-0.00077	PASS
								10	-2.36	-0.00094	PASS
								20	0.03	0.00001	PASS
								30	0.77	0.00031	PASS
						40	0.94	0.00037	PASS		
						50	-2.10	-0.00084	PASS		
						MCH	VN	-30	-1.76	-0.00069	PASS
								-20	-0.87	-0.00034	PASS
								-10	-0.96	-0.00038	PASS
								0	-7.77	-0.00307	PASS
			10	-1.44	-0.00057			PASS			
20	-0.34	-0.00013	PASS								
30	-0.90	-0.00036	PASS								



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					40	-10.60	-0.00418	PASS	
					50	-9.08	-0.00358	PASS	
			HCH	VN	-30	-1.37	-0.00053	PASS	
					-20	-0.74	-0.00029	PASS	
					-10	-4.81	-0.00188	PASS	
					0	-0.66	-0.00026	PASS	
					10	-5.72	-0.00223	PASS	
					20	-0.60	-0.00023	PASS	
					30	-2.88	-0.00112	PASS	
					40	-1.77	-0.00069	PASS	
					50	-0.26	-0.0001	PASS	
					LCH	VN	-30	-2.60	-0.00104
			-20	-1.80			-0.00072	PASS	
			-10	-2.36			-0.00094	PASS	
			0	0.13			0.00005	PASS	
		10	1.17	0.00047			PASS		
		20	-0.06	-0.00002			PASS		
		30	-1.66	-0.00066			PASS		
		40	-2.65	-0.00106			PASS		
		MCH	VN	-30	-3.02	-0.00119	PASS		
				-20	-3.08	-0.00121	PASS		
				-10	-0.57	-0.00022	PASS		
				0	-2.80	-0.0011	PASS		
				10	-3.20	-0.00126	PASS		
				20	-1.32	-0.00052	PASS		
				30	-2.75	-0.00108	PASS		
				40	-1.30	-0.00051	PASS		
		HCH	VN	-30	-3.06	-0.0012	PASS		
				-20	-0.97	-0.00038	PASS		
				-10	-2.35	-0.00092	PASS		
				0	-1.23	-0.00048	PASS		
				10	-2.25	-0.00088	PASS		
				20	-2.92	-0.00114	PASS		
				30	-0.82	-0.00032	PASS		
				40	-2.03	-0.00079	PASS		
		50	-2.53	-0.00099	PASS				
		LTE/TM2	5	LCH	VN	-30	-0.54	-0.00022	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
		10			-20	0.33	0.00013	PASS	
					-10	-0.94	-0.00038	PASS	
					0	-1.49	-0.0006	PASS	
					10	-31.23	-0.01248	PASS	
					20	0.04	0.00002	PASS	
					30	-0.51	-0.0002	PASS	
					40	-4.32	-0.00173	PASS	
					50	-31.29	-0.0125	PASS	
			MCH	VN	-30	0.47	0.00019	PASS	
					-20	-1.87	-0.00074	PASS	
					-10	-0.37	-0.00015	PASS	
					0	-1.33	-0.00052	PASS	
					10	-34.48	-0.0136	PASS	
					20	-30.96	-0.01221	PASS	
					30	-21.86	-0.00862	PASS	
					40	-0.57	-0.00022	PASS	
			HCH	VN	-30	-5.04	-0.00196	PASS	
					-20	-2.27	-0.00088	PASS	
					-10	-18.07	-0.00704	PASS	
					0	-19.68	-0.00767	PASS	
					10	-0.77	-0.0003	PASS	
					20	-0.39	-0.00015	PASS	
					30	-1.83	-0.00071	PASS	
					40	-0.56	-0.00022	PASS	
			10	LCH	VN	-30	-5.58	-0.00223	PASS
						-20	0.50	0.0002	PASS
						-10	-2.16	-0.00086	PASS
						0	0.89	0.00036	PASS
		10				-8.25	-0.00329	PASS	
		20				1.79	0.00071	PASS	
		30				-3.06	-0.00122	PASS	
		40				2.32	0.00093	PASS	
		50		-3.58	-0.00143	PASS			
		MCH		VN	-30	-14.85	-0.00586	PASS	
					-20	-2.50	-0.00099	PASS	
					-10	0.13	0.00005	PASS	
			0		-14.12	-0.00557	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	-0.21	-0.00008	PASS		
					20	-0.92	-0.00036	PASS		
					30	-0.70	-0.00028	PASS		
					40	-2.50	-0.00099	PASS		
					50	-2.35	-0.00093	PASS		
			HCH	VN	-30	-3.26	-0.00127	PASS		
					-20	-1.20	-0.00047	PASS		
					-10	0.23	0.00009	PASS		
					0	-0.09	-0.00004	PASS		
					10	-6.65	-0.00259	PASS		
					20	-0.89	-0.00035	PASS		
					30	-14.03	-0.00547	PASS		
					40	-2.36	-0.00092	PASS		
					50	-0.90	-0.00035	PASS		
					LCH	VN	-30	2.05	0.00082	PASS
							-20	-0.21	-0.00008	PASS
							-10	-0.40	-0.00016	PASS
							0	-0.10	-0.00004	PASS
							10	0.94	0.00037	PASS
							20	3.45	0.00138	PASS
		30	3.32	0.00132			PASS			
		40	2.66	0.00106			PASS			
		50	1.65	0.00066			PASS			
		MCH	VN	-30			-9.67	-0.00381	PASS	
				-20	-0.30	-0.00012	PASS			
				-10	-7.40	-0.00292	PASS			
				0	-4.39	-0.00173	PASS			
				10	-6.04	-0.00238	PASS			
				20	-1.12	-0.00044	PASS			
				30	-1.37	-0.00054	PASS			
				40	-3.38	-0.00133	PASS			
		HCH	VN	50	-1.86	-0.00073	PASS			
				-30	-2.39	-0.00093	PASS			
				-20	-2.50	-0.00098	PASS			
				-10	-2.13	-0.00083	PASS			
				0	-2.89	-0.00113	PASS			
				10	-1.23	-0.00048	PASS			
				20	-1.99	-0.00078	PASS			
		30	-0.73	-0.00028	PASS					
		15					-30	2.05	0.00082	PASS
-20	-0.21						-0.00008	PASS		
-10	-0.40						-0.00016	PASS		
0	-0.10						-0.00004	PASS		
10	0.94						0.00037	PASS		
							20	3.45	0.00138	PASS
							30	3.32	0.00132	PASS
							40	2.66	0.00106	PASS
							50	1.65	0.00066	PASS
							-30	-9.67	-0.00381	PASS
					-20	-0.30	-0.00012	PASS		
					-10	-7.40	-0.00292	PASS		
					0	-4.39	-0.00173	PASS		
					10	-6.04	-0.00238	PASS		
					20	-1.12	-0.00044	PASS		
					30	-1.37	-0.00054	PASS		
					40	-3.38	-0.00133	PASS		
					50	-1.86	-0.00073	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-1.96	-0.00076	PASS
					50	-2.22	-0.00087	PASS
		20	LCH	VN	-30	-2.07	-0.00082	PASS
					-20	1.23	0.00049	PASS
					-10	-4.09	-0.00163	PASS
					0	-2.13	-0.00085	PASS
					10	-1.54	-0.00061	PASS
					20	0.49	0.0002	PASS
					30	-1.67	-0.00067	PASS
					40	1.24	0.00049	PASS
					50	0.46	0.00018	PASS
					MCH	VN	-30	-0.62
			-20	-0.83			-0.00033	PASS
			-10	-1.93			-0.00076	PASS
			0	-1.54			-0.00061	PASS
			10	0.86			0.00034	PASS
			20	-1.32			-0.00052	PASS
			30	-0.89			-0.00035	PASS
			40	-1.00			-0.00039	PASS
			HCH	VN	50	0.47	0.00019	PASS
					-30	-0.97	-0.00038	PASS
					-20	0.90	0.00035	PASS
					-10	-0.90	-0.00035	PASS
					0	-1.30	-0.00051	PASS
					10	-1.03	-0.0004	PASS
					20	0.04	0.00002	PASS
		30			-0.46	-0.00018	PASS	
		40	0.62	0.00024	PASS			
					50	0.09	0.00004	PASS

END