

Annex 1: Measurement diagrams to  
**TEST REPORT**  
 No.:16-1-0001901T66a-A1







According to:  
**FCC Regulations**  
 Part 22, Part 24, Part 27

**ISED-Regulations**  
 RSS-132 Issue 3, RSS-133 Issue 6,  
 RSS-139 Issue 2, RSS-Gen Issue 4  
 RSS-130 Issue 1

for  
 peiker acoustic GmbH

**Telematic Device**  
**ATM-02-US-T1**

FCC: QWY-ATM2-T-11  
 ISED: 6588A-ATM2T11  
 PMN: ATM 02 Trunk version  
 HVIN: ATM-02-US-T1

Laboratory Accreditation and Listings		
 Deutsche Akkreditierungsstelle D-PL-12047-01-01  Accredited EMC-Test Laboratory	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions  Reg. No.: R-20013, C-20009, T-20006, G-20013
 AUTHORIZED RF LABORATORY	 Authorized™ Test Lab <small>Lab Code: 20011130-00</small>	 FEDERAL COMMUNICATIONS COMMISSION U.S.A. MRA US-EU 0003
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# 1. Measurement diagrams LTE-mode

## 1.1. Power conducted

### 1.1.1. Power conducted LTE-Band 2

LTE-Band 2				QPSK-Modulation			16-QAM-Modulation			max. modulation QPSK	max. modulation 16QAM	max. bandwidth	absolute max. value Channel/Bandwidth
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency (MHz)	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]				
1.4 MHz	18607	1850,7	1 RB low	24,7306	20,5344	4,1962	24,843	20,3271	4,5159	20,6143	20,3271	20,6143	
			1 RB high	24,722	20,4244	4,2976	24,7814	20,101	4,6804				
			50% RB mid	24,8667	20,6143	4,2524	24,8071	19,9611	4,846				
			100% RB	25,1407	19,4494	5,6913	24,8847	18,7043	6,1804				
	18900	1880	1 RB low	24,7541	19,9549	4,7992	24,9934	19,7694	5,224				
			1 RB high	24,7797	19,9237	4,856	24,925	19,7576	5,1674				
			50% RB mid	24,7807	19,9923	4,7884	24,8594	19,5854	5,274				
			100% RB	25,1039	18,8237	6,2802	24,8349	18,2248	6,6101				
	19193	1909,3	1 RB low	23,0228	18,3124	4,7104	23,3515	18,2332	5,1183				
			1 RB high	22,937	18,33	4,607	23,2606	18,3785	4,8821				
			50% RB mid	22,9904	18,3978	4,5926	23,2566	18,0773	5,1793				
			100% RB	23,1532	17,0459	6,1073	23,6375	16,7077	6,9298				
3 MHz	18615	1851,5	1 RB low	24,7603	20,9585	3,8018	24,7049	20,5958	4,1091	20,9585	20,5958	20,9585	
			1 RB high	24,8435	20,9161	3,9274	24,8543	20,5696	4,2847				
			50% RB mid	24,2018	19,6358	4,566	24,6738	19,8701	4,8037				
			100% RB	25,1634	19,5513	5,6121	24,9883	18,7569	6,2314				
	18900	1880	1 RB low	24,582	20,1665	4,4155	24,7184	19,9617	4,7567				
			1 RB high	24,5399	20,1601	4,3798	24,5729	19,8855	4,6874				
			50% RB mid	23,7851	19,0736	4,7115	24,6067	19,4587	5,148				
			100% RB	25,0485	19,0635	5,985	24,8007	18,2873	6,5134				
	19185	1908,5	1 RB low	22,7298	18,2068	4,523	23,1882	18,2926	4,8956				
			1 RB high	22,5292	18,1626	4,3666	22,9603	18,3527	4,6076				
			50% RB mid	21,958	17,258	4,7	22,958	17,8933	5,0647				
			100% RB	23,5202	17,3136	6,2066	23,5304	16,8189	6,7115				
5 MHz	18625	1852,5	1 RB low	24,8759	21,0422	3,8337	24,8596	20,6773	4,1823	21,0422	20,6773	21,0422	
			1 RB high	25,0419	20,9561	4,0858	24,9864	20,5106	4,4758				
			50% RB mid	24,8419	19,825	5,0169	24,9574	20,1639	4,7935				
			100% RB	25,5994	19,6773	5,9221	25,559	18,825	6,734				
	18900	1880	1 RB low	24,6044	20,2881	4,3163	24,6109	19,7281	4,8828				
			1 RB high	24,3927	20,0344	4,3583	24,4814	19,6079	4,8735				
			50% RB mid	24,3838	19,1097	5,2741	24,7026	19,4443	5,2583				
			100% RB	24,8376	19,0254	5,8122	25,2294	18,2784	6,951				
	19175	1907,5	1 RB low	22,8686	18,3745	4,4941	23,1263	18,4358	4,6905				
			1 RB high	22,6712	18,4355	4,2357	22,8533	18,2719	4,5814				
			50% RB mid	22,4465	17,208	5,2385	23,0054	17,7406	5,2648				
			100% RB	23,7061	17,1786	6,5275	23,6672	16,6273	7,0399				
10 MHz	18650	1855	1 RB low	25,0249	21,4871	3,5378	24,9636	21,0247	3,9389	21,4871	21,0247	21,4871	21,4871
			1 RB high	24,9266	20,6605	4,2661	24,9379	20,4352	4,5027				
			50% RB mid	24,4802	19,4608	5,0194	24,2503	18,5982	5,6521				
			100% RB	25,5545	19,5205	6,034	25,5166	18,6064	6,9102				
	18900	1880	1 RB low	24,8799	20,7229	4,157	24,68	20,1512	4,5288				
			1 RB high	24,3758	20,1779	4,1979	24,4977	19,9288	4,5689				
			50% RB mid	24,1276	19,122	5,0056	23,8975	18,3507	5,5468				
			100% RB	25,0964	18,9731	6,1233	25,3558	18,2404	7,1154				
	19150	1905	1 RB low	22,9017	18,5108	4,3909	23,3287	18,4553	4,8734				
			1 RB high	22,6449	18,419	4,2259	22,9524	18,1658	4,7866				
			50% RB mid	22,2083	17,072	5,1363	22,1953	16,6102	5,5851				
			100% RB	23,5663	17,2481	6,3182	23,9903	16,6991	7,2912				
15 MHz	18675	1857,5	1 RB low	25,1152	21,3032	3,812	25,0847	21,0051	4,0796	21,3032	21,0051	21,3032	
			1 RB high	25,0601	20,6868	4,3733	25,1562	20,38	4,7762				
			50% RB mid	24,5468	19,5607	4,9861	24,9376	19,6955	5,2421				
			100% RB	25,6868	19,5705	6,1163	25,591	18,6973	6,8937				
	18900	1880	1 RB low	24,4569	20,2123	4,2446	24,6104	19,7866	4,8238				
			1 RB high	24,4007	20,1498	4,2509	24,4433	19,6297	4,8136				
			50% RB mid	24,0553	19,1558	4,8995	24,6413	19,4646	5,1767				
			100% RB	25,4331	19,1396	6,2935	25,3251	18,2527	7,0724				
	19125	1902,5	1 RB low	23,484	19,1475	4,3365	23,7636	18,9611	4,8025				
			1 RB high	23,2653	19,3859	3,8794	23,3695	19,0083	4,3612				
			50% RB mid	23,1764	18,3709	4,8055	23,7197	18,619	5,1007				
			100% RB	24,4989	18,4341	6,0648	24,4295	17,3266	7,1029				
20 MHz	18700	1860	1 RB low	25,1876	21,324	3,8636	25,1323	20,8714	4,2609	21,324	20,8714	21,324	
			1 RB high	25,0913	20,5539	4,5374	25,0976	20,4795	4,6181				
			50% RB mid	24,5481	19,3279	5,2202	24,924	19,5284	5,3956				
			100% RB	25,3203	19,2906	6,0297	25,2106	18,4607	6,7499				
	18900	1880	1 RB low	24,4161	20,1379	4,2782	24,5167	19,7497	4,767				
			1 RB high	24,4886	20,3465	4,1421	24,5471	20,0154	4,5317				
			50% RB mid	23,9877	19,112	4,8757	24,678	19,3998	5,2782				
			100% RB	25,3712	19,3383	6,0329	25,0154	18,0852	6,9302				
	19100	1900	1 RB low	23,8936	19,544	4,3496	24,0401	18,8932	5,1469				
			1 RB high	23,2528	19,3166	3,9362	23,3423	19,0018	4,3405				
			50% RB mid	23,1162	18,1881	4,9281	23,5352	18,2883	5,2469				
			100% RB	24,2498	18,1029	6,1469	24,2682	17,2928	6,9754				

### 1.1.2. Power conducted LTE-Band 4

LTE-Band 4				QPSK-Modulation			16-QAM-Modulation			max. modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value				
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency [MHz]	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]								
1.4 MHz	19957	1710,7	1 RB low	25,6626	21,4682	4,1944	25,5775	20,9187	4,6588	21,4682	20,9187	21,4682					
			1 RB high	25,5969	21,2636	4,3333	25,5389	20,8498	4,6891								
			50% RB mid	25,6819	21,4064	4,2755	25,6675	20,6657	5,0018								
			100% RB	26,1376	20,2549	5,8827	26,1059	19,4585	6,6474								
	20175	1732,5	1 RB low	25,4875	20,9933	4,4942	25,5119	20,5039	5,008					20,9933	20,5948	21,4682	
			1 RB high	25,4053	20,8105	4,5948	25,4563	20,5948	4,8615								
			50% RB mid	25,5919	20,9878	4,6041	25,4401	20,3036	5,1365								
			100% RB	25,7274	19,8357	5,8917	25,6097	18,8643	6,7454								
	20393	1754,3	1 RB low	25,0023	20,6252	4,3771	25,1151	20,3802	4,7349					21,1312	20,3802	21,4682	
			1 RB high	25,0629	21,0927	3,9702	24,9675	20,3026	4,6649								
			50% RB mid	25,2923	21,1312	4,1611	25,0406	19,9886	5,052								
			100% RB	25,2001	19,5568	5,6433	25,1964	18,9071	6,2893								
3 MHz	19965	1711,5	1 RB low	25,617	21,5676	4,0494	25,6001	21,0926	4,5075	21,5676	21,2221	21,5676					
			1 RB high	25,5628	21,5324	4,0304	25,5962	21,2221	4,3741								
			50% RB mid	24,8966	20,3801	4,5165	25,5345	20,642	4,8925								
			100% RB	26,1013	20,3309	5,7704	26,0485	19,4348	6,6137								
	20175	1732,5	1 RB low	25,2281	20,9811	4,247	25,325	20,7867	4,5383					20,9963	20,7867	21,5676	
			1 RB high	25,2323	20,9963	4,236	25,2307	20,562	4,6687								
			50% RB mid	24,4479	19,85	4,5979	25,2323	20,1532	5,0791								
			100% RB	25,8418	19,8384	6,0034	25,757	18,943	6,814								
	20385	1753,5	1 RB low	24,9753	20,8976	4,0777	24,8769	20,1221	4,7548					21,1621	20,2629	21,5676	
			1 RB high	24,8929	21,1621	3,7308	24,8495	20,2629	4,5866								
			50% RB mid	24,338	19,8241	4,5139	24,8703	20,1428	4,7275								
			100% RB	25,511	19,8257	5,6853	25,246	18,6486	6,5974								
5 MHz	19975	1712,5	1 RB low	25,9108	22,0303	3,8805	25,8453	21,3158	4,5295	22,0303	21,32	22,0303					
			1 RB high	25,7152	21,6594	4,0558	25,7653	21,32	4,4453								
			50% RB mid	25,5552	20,5613	4,9939	25,7425	20,8388	4,9037								
			100% RB	25,9066	20,4037	5,5029	26,3725	19,7314	6,6411								
	20175	1732,5	1 RB low	25,3484	21,0902	4,2582	25,3214	20,5548	4,7666					21,0902	20,5548	22,0303	
			1 RB high	25,2014	20,9684	4,233	25,1855	20,3417	4,8438								
			50% RB mid	25,0953	19,9218	5,1735	25,4235	20,278	5,1455								
			100% RB	26,1789	19,8884	6,2905	25,9044	18,921	6,9834								
	20375	1752,5	1 RB low	25,145	21,0293	4,1157	25,0412	20,4325	4,6087					21,2111	20,4325	22,0303	
			1 RB high	24,8669	21,2111	3,6558	24,8012	20,339	4,4622								
			50% RB mid	24,8418	19,8846	4,9572	24,8626	19,9064	4,9562								
			100% RB	25,3212	19,8669	5,4543	25,4015	18,7221	6,6794								
10 MHz	20000	1715	1 RB low	25,8412	21,9378	3,9034	25,8453	21,4601	4,3852	21,9378	21,5811	21,9378					
			1 RB high	25,8259	21,9011	3,9248	25,9813	21,5811	4,4002								
			50% RB mid	25,3409	20,6349	4,706	25,3882	19,9389	5,4493								
			100% RB	26,5545	20,6302	5,9243	26,0028	19,7255	6,2773								
	20175	1732,5	1 RB low	25,2265	21,1277	4,0988	25,2784	20,7227	4,5557					21,4057	20,7893	21,9378	
			1 RB high	25,4891	21,4057	4,0834	25,3688	20,7893	4,5795								
			50% RB mid	24,8156	19,8591	4,9565	24,3455	18,905	5,4405								
			100% RB	26,044	19,9603	6,0837	25,9445	18,9398	7,0047								
	20350	1750	1 RB low	25,1214	20,8837	4,2377	25,2287	20,4361	4,7926					21,2025	21,0035	21,9378	
			1 RB high	24,8692	21,2025	3,6667	24,9994	21,0035	3,9959								
			50% RB mid	24,4423	19,56	4,8815	24,2084	18,7276	5,4808								
			100% RB	25,6443	19,6381	6,0062	25,2228	18,6579	6,5649								
15 MHz	20025	1717,5	1 RB low	25,3135	20,8712	4,4423	25,3967	20,5181	4,8786	20,9316	20,5181	20,9316					
			1 RB high	25,2714	20,9316	4,3398	25,2737	20,4789	4,7948								
			50% RB mid	24,978	19,9943	4,9837	25,4453	20,2024	5,2429								
			100% RB	26,0247	19,966	6,0587	26,0228	19,0245	6,9983								
	20175	1732,5	1 RB low	24,6658	20,4586	4,2072	24,6993	20,1262	4,5731					20,4586	20,1262	20,9316	
			1 RB high	24,5869	20,2184	4,3685	24,5482	19,7446	4,8036								
			50% RB mid	24,6059	19,8193	4,7866	25,2618	20,068	5,1938								
			100% RB	25,9663	19,6985	6,2678	25,5171	18,523	6,9941								
	20325	1747,5	1 RB low	24,4702	20,0234	4,4468	24,4638	19,5758	4,888					20,173	19,7336	20,9316	
			1 RB high	24,3616	20,173	4,1886	24,5674	19,7336	4,8338								
			50% RB mid	24,1961	19,2766	4,9195	24,8102	19,5436	5,2666								
			100% RB	25,516	19,0645	6,4515	25,2939	18,3173	6,9766								
20 MHz	20050	1720	1 RB low	25,3922	20,8776	4,5146	25,4401	20,6262	4,8139	20,9442	20,6262	20,9442					
			1 RB high	25,4376	20,9442	4,4934	25,3722	20,4277	4,9445								
			50% RB mid	24,9918	20,011	4,9808	25,5558	20,3425	5,2133								
			100% RB	26,1166	20,1114	6,0052	25,9586	19,134	6,8246								
	20175	1732,5	1 RB low	24,517	20,3428	4,1742	24,6675	19,9082	4,7593					20,3706	19,9084	20,9442	
			1 RB high	24,6487	20,3706	4,2781	24,8694	19,9084	4,961								
			50% RB mid	24,6672	19,7963	4,8709	24,9865	19,7397	5,2468								
			100% RB	25,606	19,3781	6,2279	25,6759	18,4011	7,2748								
	20300	1745	1 RB low	24,4366	20,1238	4,3128	24,4574	19,6412	4,8162					20,3145	19,7608	20,9442	
			1 RB high	24,4324	20,3145	4,1179	24,6477	19,7608	4,8869								
			50% RB mid	24,3265	19,3595	4,967	24,8212	19,4796	5,3416								
			100% RB	25,6538	19,3442	6,3096	25,4442	18,3054	7,1388								

### 1.1.3. Power conducted LTE-Band 5

LTE-Band 5				QPSK-Modulation			16-QAM-Modulation			max. modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency [MHz]	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]				
1.4 MHz	20407	824.7	1 RB low	25,7454	21,5853	4,1601	25,6365	20,7811	4,8554	21,85	20,95	21,85	
			1 RB high	26,046	21,8179	4,2281	25,8323	20,9465	4,8858				
			50% RB mid	26,1867	21,8465	4,3402	26,0485	20,8106	5,2379				
			100% RB	26,4967	20,5182	5,9785	25,7632	19,3357	6,4275				
	20525	836.5	1 RB low	26,0019	21,4947	4,5072	25,9883	20,6803	5,308	21,76	20,85		
			1 RB high	25,8572	21,5834	4,2738	25,8664	20,852	5,0144				
			50% RB mid	26,26	21,7608	4,4983	26,1522	20,5732	5,579				
			100% RB	26,7542	20,5928	6,1614	26,1274	19,4005	6,7269				
	20643	848.3	1 RB low	25,8499	21,5152	4,3347	26,0362	21,0922	4,944	21,79	21,23		
			1 RB high	25,5828	<b>21,5832</b>	3,9996	25,5755	21,0585	4,517				
			50% RB mid	26,0451	21,788	4,2571	26,15	21,2262	4,9238				
			100% RB	26,5018	20,7743	5,7275	26,1203	19,867	6,2533				
3 MHz	20415	825.5	1 RB low	25,8371	21,971	3,8661	25,7086	21,2177	4,4909	22,01	21,33	22,29	
			1 RB high	26,2591	22,0122	4,2469	26,0936	21,3278	4,7658				
			50% RB mid	25,2953	20,6531	4,6422	26,0599	21,1369	4,923				
			100% RB	26,3784	20,5571	5,8213	26,2672	19,7049	6,5623				
	20525	836.5	1 RB low	26,2624	22,1001	4,1623	26,1494	21,4207	4,7287	22,10	21,42		
			1 RB high	25,8332	21,7722	4,061	25,8156	20,9857	4,8299				
			50% RB mid	25,4021	20,7493	4,6528	26,009	20,9767	5,0323				
			100% RB	26,5329	20,5648	5,9681	26,3228	19,6336	6,6892				
	20635	847.5	1 RB low	26,0318	21,5781	4,4537	26,5354	21,4008	5,1346	22,08	21,60		
			1 RB high	25,7662	22,0768	3,6894	25,9089	21,6041	4,3048				
			50% RB mid	25,6419	20,9341	4,7078	26,3484	21,3039	5,0445				
			100% RB	26,6629	20,6731	5,9898	26,366	20,0359	6,3301				
5 MHz	20425	826.5	1 RB low	26,1988	22,1859	4,0129	25,9993	<b>21,8638</b>	4,1355	22,29	21,86	22,29	
			1 RB high	26,761	<b>22,289</b>	4,472	26,5585	21,4928	5,0657				
			50% RB mid	26,011	20,6717	5,3393	26,3909	21,2678	5,1231				
			100% RB	26,7171	20,6022	6,1149	26,8319	19,7747	7,0572				
	20525	836.5	1 RB low	26,4488	<b>21,9951</b>	4,4537	26,5022	21,2912	5,211	22,00	21,29		
			1 RB high	25,6464	21,45	4,1959	25,695	20,9812	4,7138				
			50% RB mid	25,9214	20,5889	5,3325	26,0873	21,0935	4,9938				
			100% RB	26,4717	20,4434	6,0283	26,3336	19,5093	6,8243				
	20625	846.5	1 RB low	26,2237	21,9969	4,2268	26,1706	21,3168	4,8538	22,24	21,63		
			1 RB high	25,8228	22,2365	3,5863	25,9365	21,6302	4,3063				
			50% RB mid	25,8834	20,5383	5,3451	26,4723	21,1351	5,3372				
			100% RB	26,7688	20,4832	6,2856	26,7291	19,6734	7,0557				
10 MHz	20450	829	1 RB low	25,9654	21,7841	4,1813	25,91	21,2268	4,6832	21,78	21,26	21,78	
			1 RB high	26,501	21,6279	4,8731	26,555	21,262	5,293				
			50% RB mid	26,1954	20,8482	5,3472	25,9567	20,0405	5,9162				
			100% RB	27,0625	20,6559	6,4066	27,2118	19,8771	7,3347				
	20525	836.5	1 RB low	26,0961	21,5703	4,5258	26,2011	21,0262	5,1749	21,57	21,03		
			1 RB high	25,5084	21,4193	4,0891	25,6054	20,8878	4,7176				
			50% RB mid	25,5524	20,2858	5,2666	25,44	19,6532	5,7868				
			100% RB	26,7596	20,3968	6,3628	26,6238	19,4162	7,2076				
	20600	844	1 RB low	25,4983	21,4658	4,0325	25,5678	21,1403	4,4275	21,61	21,20		
			1 RB high	25,5834	21,6103	3,9731	25,6747	21,204	4,4707				
			50% RB mid	26,0458	20,8583	5,1875	25,6154	20,045	5,5704				
			100% RB	26,9529	20,5585	6,3944	27,1087	19,6833	7,4254				

1.1.4. Power conducted LTE-Band 7

LTE-Band 7				QPSK-Modulation			16-QAM-Modulation			max. modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency [MHz]	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]				
5 MHz	20775		1 RB low	23,9085	20,5976	3,3109	24,1427	20,4161	3,7266	20,82	20,42	20,82	
			1 RB high	24,1674	20,8197	3,3477	24,1194	20,0346	4,0848				
			50% RB mid	23,7428	19,3661	4,3767	24,1777	20,0302	4,1475				
			100% RB	24,1892	19,5284	4,6608	24,4469	18,8236	5,6233				
	21100		1 RB low	24,1851	20,2538	3,9313	24,4486	20,0096	4,439	20,38	20,01		
			1 RB high	24,0142	20,38	3,6342	24,3443	19,952	4,3923				
			50% RB mid	23,9529	19,2816	4,6713	24,139	19,375	4,764				
			100% RB	24,3191	19,2183	5,1008	24,4953	18,5726	5,9227				
	21425		1 RB low	23,5708	20,3555	3,2153	24,0693	19,8992	4,1701	20,36	19,90		
			1 RB high	22,1146	20,3646	1,75	22,676	19,6382	3,0378				
			50% RB mid	22,9302	18,9854	3,9448	23,2761	19,3085	3,9676				
			100% RB	23,7364	18,9678	4,7686	24,1662	18,145	6,0212				
10 MHz	20800		1 RB low	24,4596	20,9805	3,4791	24,6025	20,5069	4,0956	21,30	20,54		
			1 RB high	24,8144	21,2952	3,5192	24,6959	20,5386	4,1573				
			50% RB mid	23,8545	19,3996	4,4549	23,9567	18,9355	5,0212				
			100% RB	25,2191	19,9283	5,2908	25,0832	18,9337	6,1495				
	21000		1 RB low	24,4979	20,6686	3,8293	24,7437	20,2974	4,4463	20,77	20,30		
			1 RB high	24,0204	20,7743	3,2461	24,0319	20,0727	3,9592				
			50% RB mid	23,7253	19,2732	4,4521	23,5989	18,6084	4,9905				
			100% RB	24,9957	19,2721	5,7236	25,0981	18,5345	6,5636				
	21400		1 RB low	24,241	20,5048	3,7362	24,4463	20,0384	4,4079	20,61	20,04		
			1 RB high	21,9871	20,6141	1,373	22,6335	20,0004	2,6331				
			50% RB mid	23,458	19,3027	4,1553	23,6121	18,6306	4,9815				
			100% RB	24,5963	19,4416	5,1547	24,7997	18,5968	6,2029				
15 MHz	2825		1 RB low	24,6383	21,2612	3,3771	24,4088	20,0583	4,3505	21,26	20,65		
			1 RB high	24,6746	20,7823	3,8923	25,0194	20,6473	4,3721				
			50% RB mid	24,1537	19,7239	4,4298	24,7474	20,1579	4,5895				
			100% RB	25,5008	19,7451	5,7557	25,1346	18,5015	6,6331				
	21100		1 RB low	24,4051	20,8178	3,5873	24,6793	20,5235	4,1558	20,82	20,52		
			1 RB high	24,2756	20,4266	3,849	24,3014	20,0294	4,272				
			50% RB mid	23,8998	19,1663	4,7335	24,3761	19,3333	5,0428				
			100% RB	25,515	19,2068	6,3082	25,4006	18,302	7,0986				
	21375		1 RB low	23,9787	20,4865	3,4922	23,8018	19,5497	4,2521	20,49	19,73		
			1 RB high	22,1589	20,3604	1,7985	22,6817	19,7278	2,9539				
			50% RB mid	23,431	18,9188	4,5122	23,9555	19,0753	4,8802				
			100% RB	24,7546	19,1594	5,5952	24,8534	18,221	6,6324				
20 MHz	2850		1 RB low	24,7255	21,1404	3,5851	24,7184	20,765	3,9534	21,14	20,77		
			1 RB high	24,8865	20,757	4,1295	25,088	20,677	4,411				
			50% RB mid	24,0721	19,4056	4,6665	24,7853	20,0505	4,7348				
			100% RB	25,9022	19,9871	5,9151	25,7412	19,3041	6,4371				
	21100		1 RB low	24,1796	20,5508	3,6288	24,5149	20,3826	4,1323	20,55	20,38		
			1 RB high	24,2355	20,523	3,7125	24,394	20,0423	4,3517				
			50% RB mid	24,1519	19,5903	4,5616	24,3363	19,3451	4,9912				
			100% RB	25,3303	19,2447	6,0856	25,1895	18,6979	6,4916				
	21300		1 RB low	23,8744	20,8272	3,0472	23,6214	19,7217	3,8997	20,83	19,72		
			1 RB high	22,1963	19,9375	2,2588	22,7952	19,7233	3,0719				
			50% RB mid	23,8105	19,323	4,4875	24,2929	19,5896	4,7033				
			100% RB	24,7372	18,8303	5,9069	24,8248	18,2891	6,5357				

### 1.1.5. Power conducted LTE-Band 12

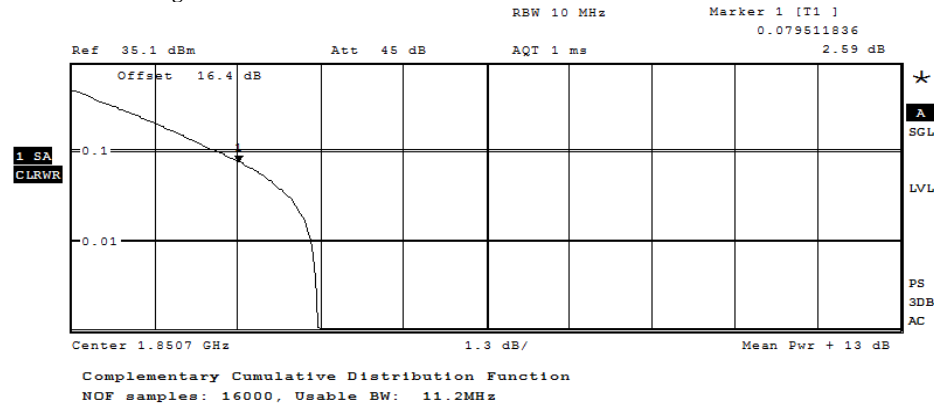
LTE-Band 12				QPSK-Modulation			16-QAM-Modulation			max. modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency [MHz]	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]				
1.4 MHz	23017	699.7	1 RB low	25,62	21,20	4,42	25,64	20,76	4,88	21,21	20,76	21,29	
			1 RB high	25,61	21,21	4,40	25,50	20,56	4,94				
			50% RB mid	25,78	21,14	4,64	25,72	20,23	5,50				
			100% RB	26,11	19,98	6,13	25,35	18,92	6,43				
	23095	707.5	1 RB low	25,82	21,12	4,70	25,80	20,35	5,45	21,29	20,74		
			1 RB high	25,90	21,29	4,61	25,75	20,74	5,01				
			50% RB mid	26,09	21,16	4,93	26,05	20,35	5,70				
			100% RB	26,48	20,03	6,45	26,17	19,22	6,95				
	23173	715.3	1 RB low	25,76	<b>21,09</b>	4,67	25,84	20,61	5,24	21,09	20,61		
			1 RB high	25,70	20,98	4,72	25,58	20,60	4,98				
			50% RB mid	25,89	20,98	4,92	25,85	20,27	5,58				
			100% RB	26,26	19,80	6,46	25,86	18,95	6,91				
3 MHz	23025	700.5	1 RB low	25,63	21,51	4,12	25,62	21,11	4,52	21,51	21,11	21,51	
			1 RB high	25,62	21,27	4,35	25,64	20,92	4,72				
			50% RB mid	25,01	20,12	4,89	25,03	19,43	5,59				
			100% RB	26,36	20,00	6,36	26,16	19,12	7,04				
	23095	707.5	1 RB low	25,57	21,11	4,46	25,66	20,85	4,81	21,11	20,85		
			1 RB high	25,57	21,09	4,48	25,69	20,82	4,86				
			50% RB mid	25,00	20,05	4,95	25,16	19,33	5,84				
			100% RB	26,71	20,08	6,64	26,21	19,15	7,06				
	23165	714.5	1 RB low	25,58	20,96	4,62	25,67	20,60	5,07	21,18	20,63		
			1 RB high	25,56	21,18	4,37	25,47	20,63	4,83				
			50% RB mid	24,93	19,90	5,03	24,94	19,11	5,83				
			100% RB	26,11	19,88	6,23	25,92	18,98	6,94				
5 MHz	23035	701.5	1 RB low	25,68	21,39	4,29	26,03	21,24	4,79	21,59	21,42	21,76	
			1 RB high	26,06	<b>21,59</b>	4,47	26,44	21,42	5,02				
			50% RB mid	25,24	20,16	5,08	25,54	18,46	7,08				
			100% RB	26,30	20,37	5,92	27,04	20,01	7,02				
	23095	707.5	1 RB low	25,70	21,28	4,42	26,65	21,73	4,92	21,28	21,73		
			1 RB high	25,55	21,08	4,48	26,42	21,28	5,14				
			50% RB mid	25,21	19,94	5,27	25,75	19,72	6,03				
			100% RB	25,25	19,57	5,68	26,91	19,91	7,00				
	23155	713.5	1 RB low	25,71	21,30	4,40	26,45	21,50	4,95	21,33	21,76		
			1 RB high	25,61	21,33	4,28	26,44	21,51	4,93				
			50% RB mid	25,21	19,90	5,31	25,86	19,74	6,12				
			100% RB	26,16	19,92	6,23	26,64	<b>21,76</b>	4,89				
10 MHz	23060	704	1 RB low	25,77	21,51	4,25	26,22	21,42	4,80	21,51	21,70	21,70	
			1 RB high	26,00	21,35	4,64	26,48	21,70	4,78				
			50% RB mid	25,62	20,13	5,49	26,05	19,83	6,22				
			100% RB	26,88	20,12	6,76	27,17	19,75	7,43				
	23095	707,5	1 RB low	25,75	<b>21,39</b>	4,36	26,27	21,46	4,81	21,39	21,63		
			1 RB high	25,62	21,24	4,39	26,44	21,63	4,81				
			50% RB mid	25,35	19,92	5,44	25,85	19,70	6,15				
			100% RB	26,41	19,98	6,43	26,83	19,58	7,25				
	23130	711	1 RB low	25,49	20,94	4,55	26,05	21,27	4,78	21,02	21,27		
			1 RB high	25,49	21,02	4,47	26,07	21,19	4,88				
			50% RB mid	25,34	19,84	5,50	25,63	19,42	6,21				
			100% RB	26,68	19,90	6,78	26,95	19,40	7,55				

## 1.2. PAPR-Value (CCDF plots)

### 1.2.1. LTE Band 2

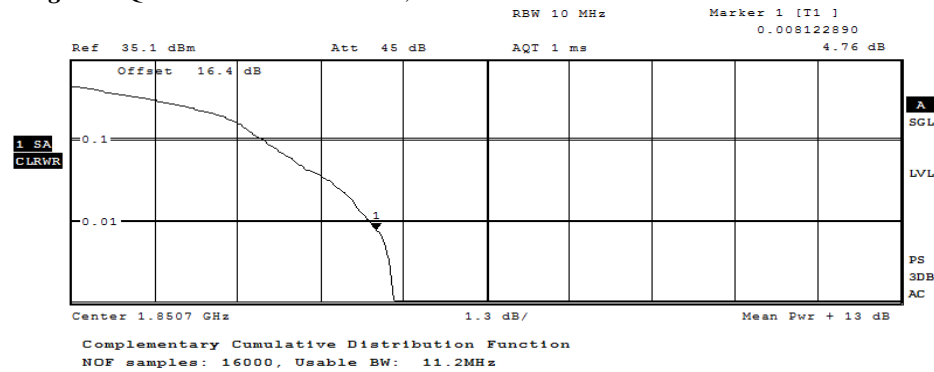
Worst-Case of each maximum Peak power value was tested with the CCDF method

#### 1.2.1.1. 1.4MHz signal bandwidth



Trace 1	
Mean	20.97 dBm
Peak	24.91 dBm
Crest	3.94 dB
10 %	2.29 dB
1 %	3.75 dB
.1 %	3.88 dB
.01 %	3.94 dB

Diagram: QPSK 1.4 MHz CH18607, 50% RB

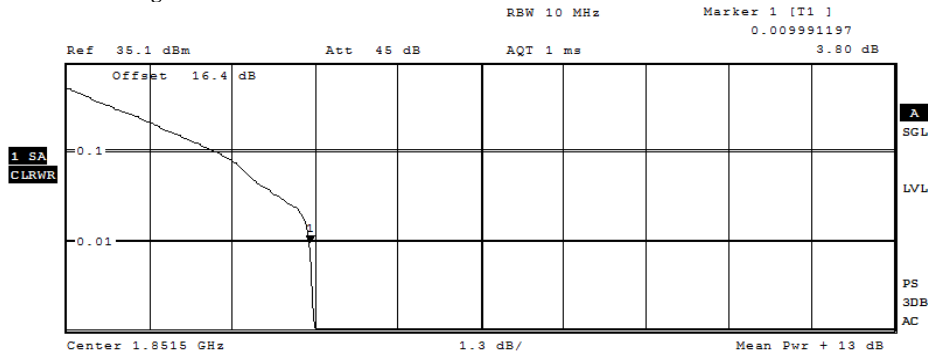


Trace 1	
Mean	19.55 dBm
Peak	24.70 dBm
Crest	5.14 dB
10 %	3.00 dB
1 %	4.67 dB
.1 %	5.06 dB
.01 %	5.15 dB

Diagram: 16QAM 1.4 MHz CH18607, 1RB low



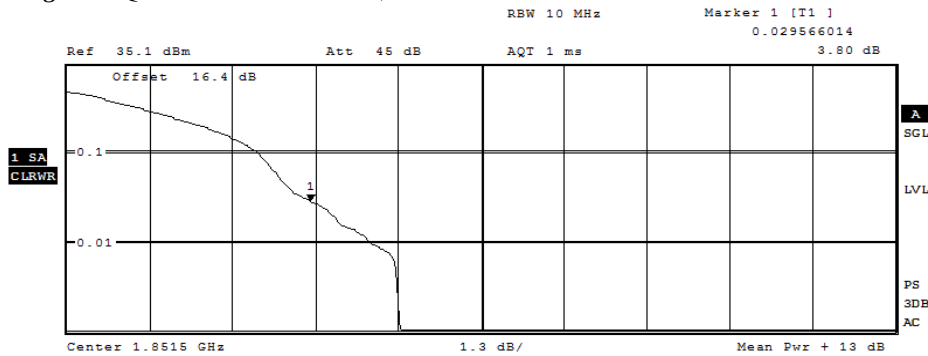
### 1.2.1.2. 3MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.75 dBm
Peak	24.70 dBm
Crest	3.95 dB
10 %	2.35 dB
1 %	3.81 dB
.1 %	3.90 dB
.01 %	3.96 dB

Diagram: QPSK 3 MHz CH18615,1 RB Low



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.28 dBm
Peak	24.63 dBm
Crest	5.35 dB
10 %	3.00 dB
1 %	4.77 dB
.1 %	5.25 dB
.01 %	5.29 dB

Diagram: 16QAM 3 MHz CH18615, 1RB low

1.2.1.3. 5MHz signal bandwidth

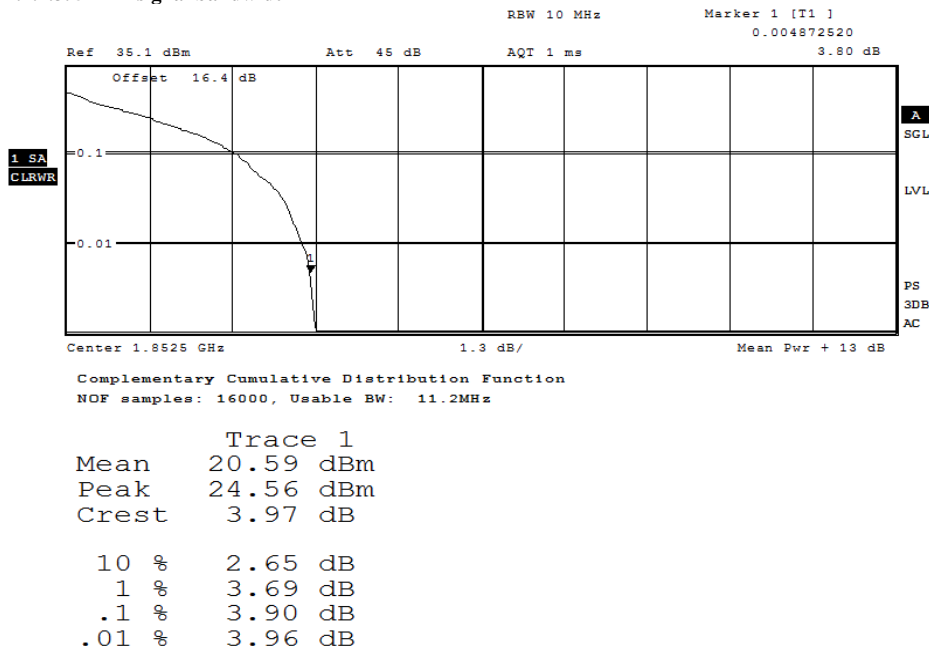


Diagram: QPSK 5 MHz CH18625, 1RB low

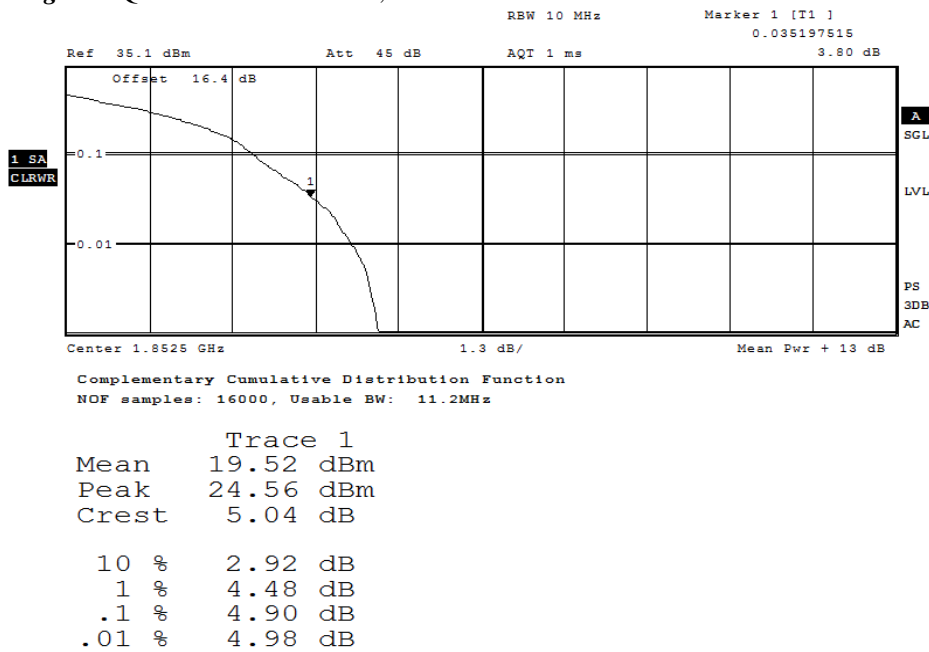
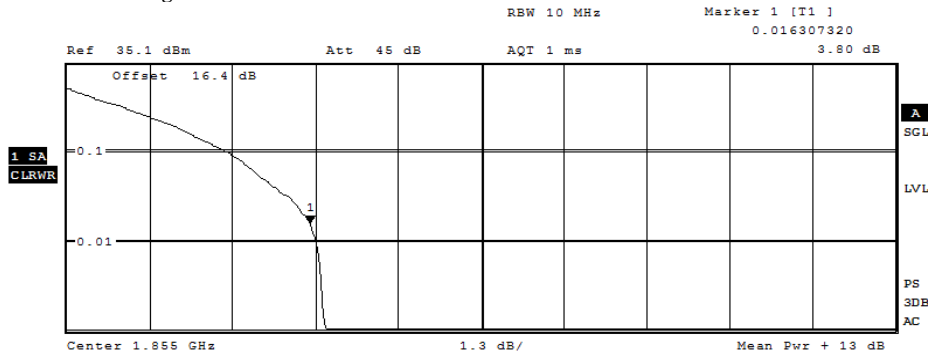


Diagram: 16QAM 5 MHz CH18625, 1RB low

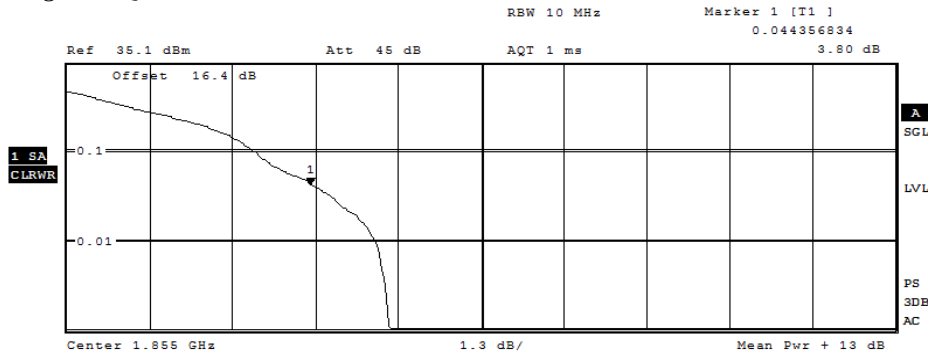
1.2.1.4. 10MHz signal bandwidth



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.14 dBm
Peak	24.29 dBm
Crest	4.16 dB
10 %	2.52 dB
1 %	3.92 dB
.1 %	4.06 dB
.01 %	4.13 dB

Diagram: QPSK 10 MHz CH18650, 1RB low

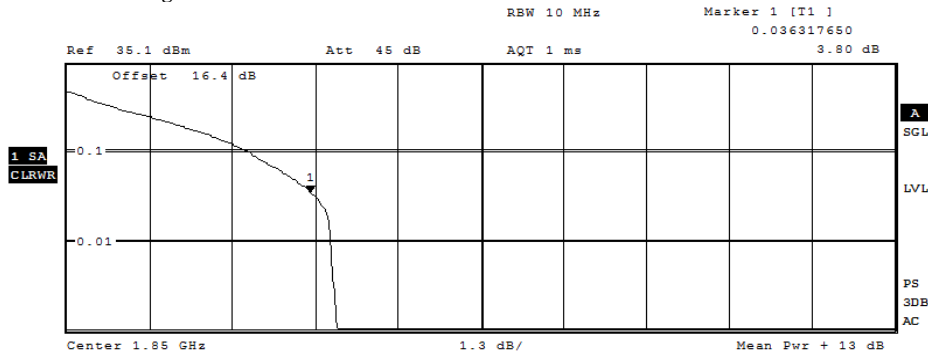


Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.21 dBm
Peak	24.37 dBm
Crest	5.16 dB
10 %	2.94 dB
1 %	4.83 dB
.1 %	5.06 dB
.01 %	5.13 dB

Diagram: 16QAM 10 MHz CH18650, 1RB low

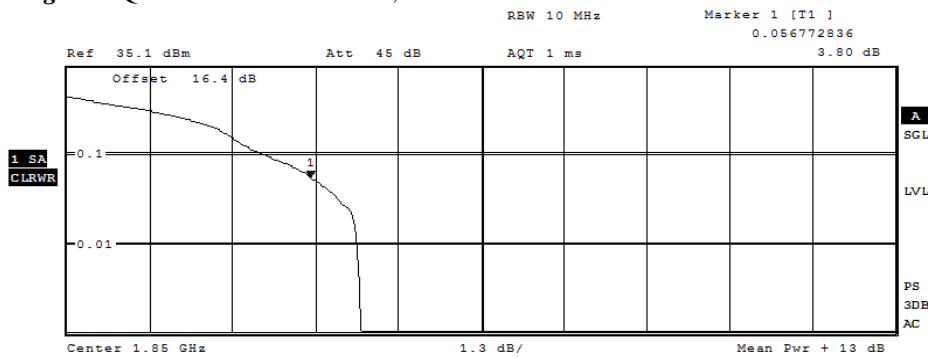
1.2.1.5. 15MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.95 dBm
Peak	24.20 dBm
Crest	4.25 dB
10 %	2.85 dB
1 %	4.15 dB
.1 %	4.23 dB
.01 %	4.25 dB

Diagram: QPSK 15 MHz CH18675, 1RB low

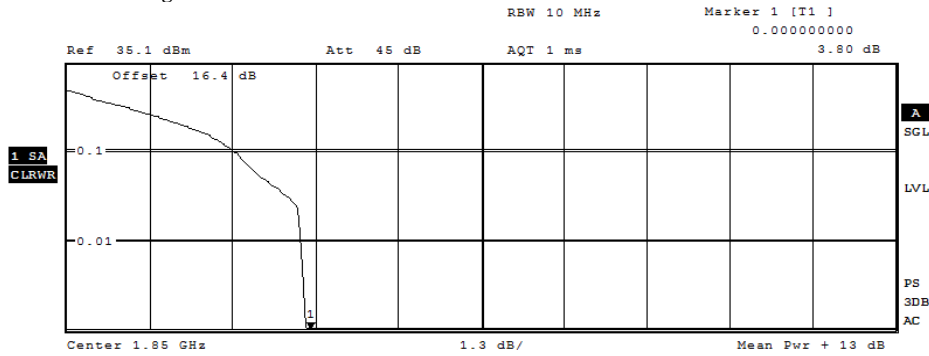


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.92 dBm
Peak	24.55 dBm
Crest	4.63 dB
10 %	3.10 dB
1 %	4.54 dB
.1 %	4.63 dB
.01 %	4.65 dB

Diagram: 16QAM 15 MHz CH18675, 1RB low

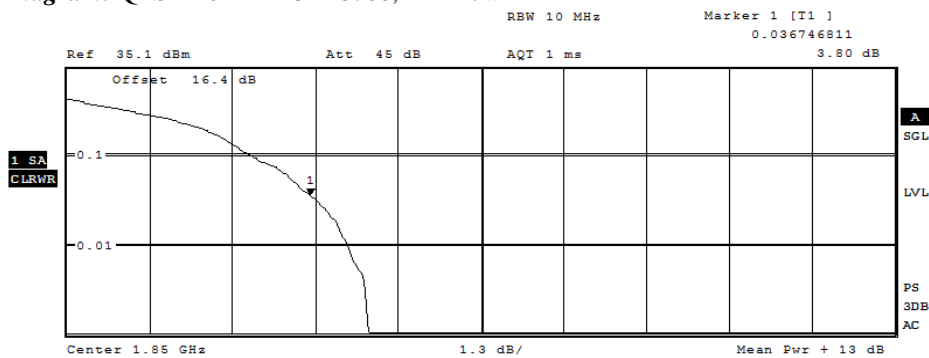
1.2.1.6. 20MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.08 dBm
Peak	24.83 dBm
Crest	3.75 dB
10 %	2.63 dB
1 %	3.67 dB
.1 %	3.75 dB
.01 %	3.77 dB

Diagram: QPSK 20 MHz CH18700, 1RB low



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

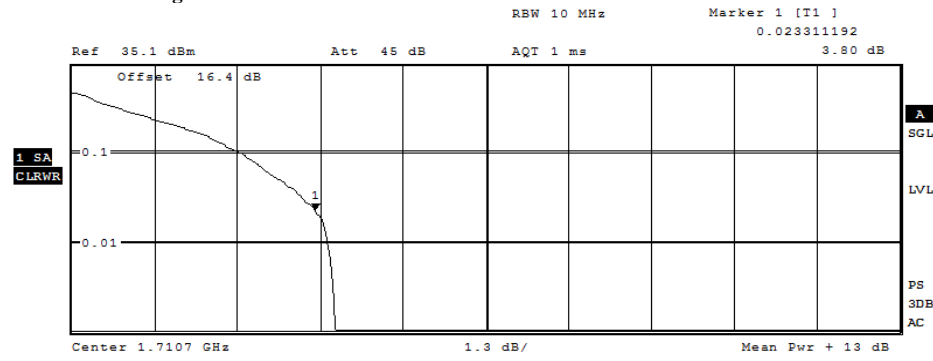
Trace 1	
Mean	19.70 dBm
Peak	24.48 dBm
Crest	4.78 dB
10 %	2.90 dB
1 %	4.42 dB
.1 %	4.75 dB
.01 %	4.79 dB

Diagram: 16QAM 20 MHz CH18900, 1RB high

### 1.2.2. LTE Band 4

Worst-Case of each maximum Peak power value was tested with the CCDF method

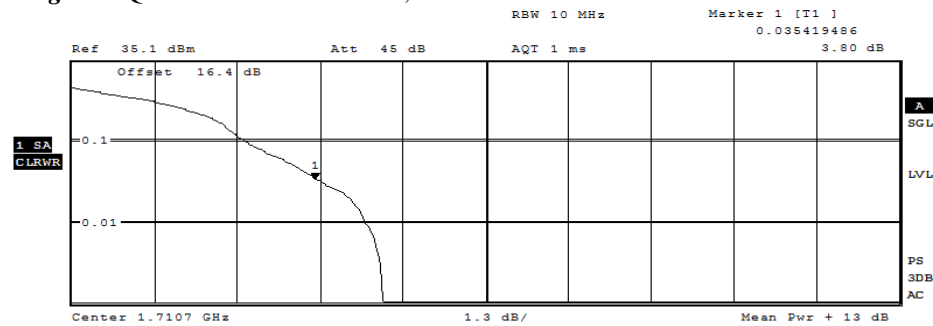
#### 1.2.2.1. 1.4MHz signal bandwidth



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.78 dBm
Peak	25.99 dBm
Crest	4.21 dB
10 %	2.65 dB
1 %	4.02 dB
.1 %	4.15 dB
.01 %	4.21 dB

Diagram: QPSK 1.4 MHz CH19975, 1RB.low

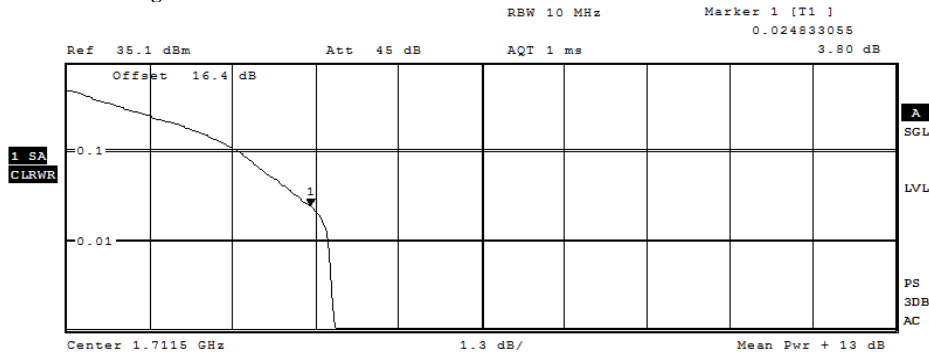


Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.82 dBm
Peak	25.85 dBm
Crest	5.03 dB
10 %	2.73 dB
1 %	4.63 dB
.1 %	4.90 dB
.01 %	4.98 dB

Diagram: 16QAM 1.4 MHz CH19975,1RB low

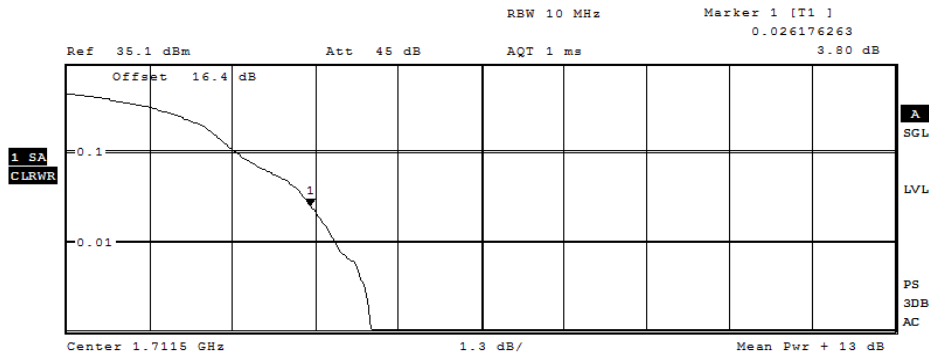
1.2.2.2. 3MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.56 dBm
Peak	25.78 dBm
Crest	4.22 dB
10 %	2.69 dB
1 %	4.10 dB
.1 %	4.21 dB
.01 %	4.23 dB

Diagram: QPSK 3 MHz CH19965, 1 RB low

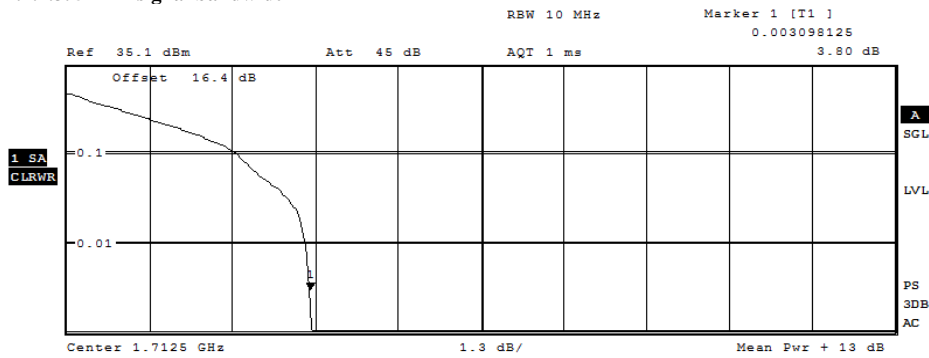


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.76 dBm
Peak	25.64 dBm
Crest	4.88 dB
10 %	2.67 dB
1 %	4.21 dB
.1 %	4.77 dB
.01 %	4.83 dB

Diagram: 16QAM 3 MHz CH19965, 1 RB low

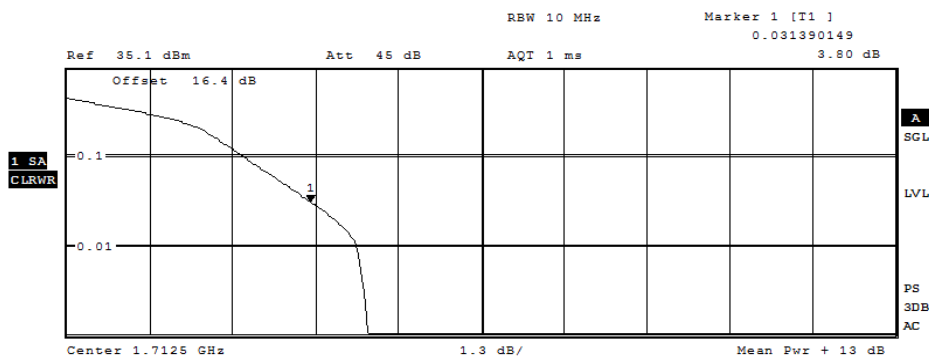
1.2.2.3. 5MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	22.14 dBm
Peak	26.07 dBm
Crest	3.93 dB
10 %	2.65 dB
1 %	3.75 dB
.1 %	3.85 dB
.01 %	3.90 dB

Diagram: QPSK 5 MHz CH19975, 1 RB high



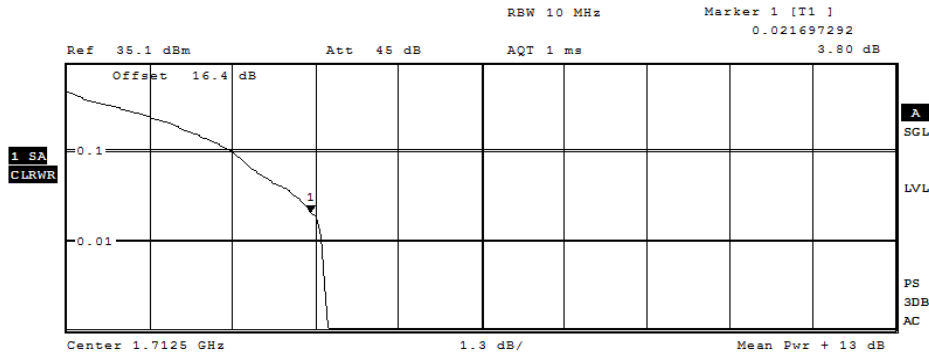
Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.91 dBm
Peak	25.72 dBm
Crest	4.80 dB
10 %	2.77 dB
1 %	4.54 dB
.1 %	4.73 dB
.01 %	4.79 dB

Diagram: 16QAM 5 MHz CH19975, 1 RB low



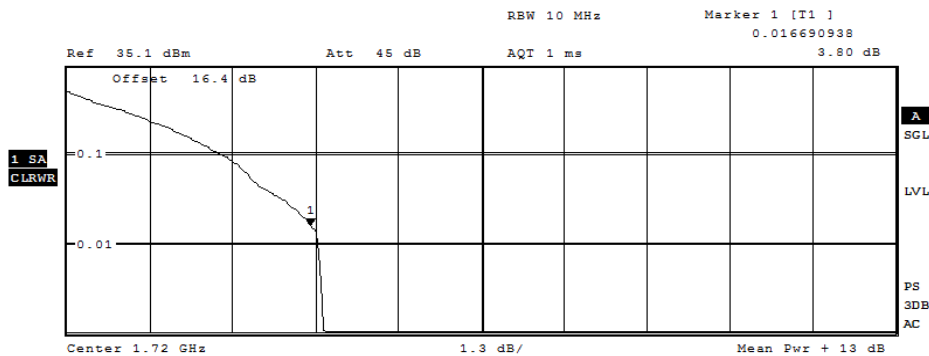
1.2.2.4. 10MHz signal bandwidth  
14,21



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.45 dBm
Peak	25.65 dBm
Crest	4.20 dB
10 %	2.58 dB
1 %	4.00 dB
.1 %	4.10 dB
.01 %	4.15 dB

Diagram: QPSK 10 MHz CH20000, 1 RB high

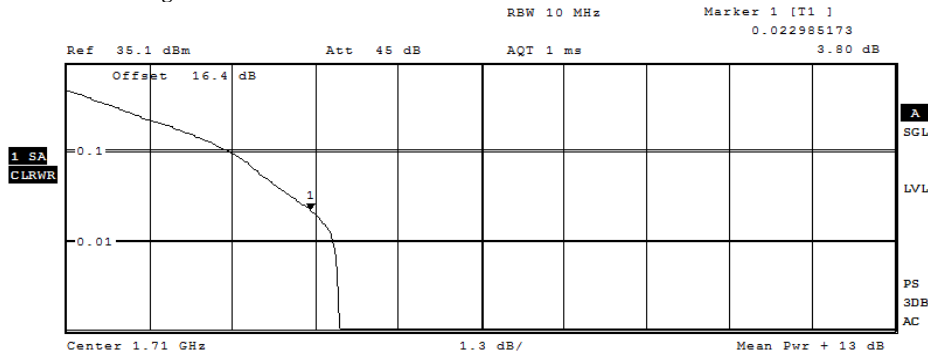


Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.77 dBm
Peak	25.82 dBm
Crest	4.05 dB
10 %	2.42 dB
1 %	3.94 dB
.1 %	4.04 dB
.01 %	4.06 dB

Diagram: 16QAM 10 MHz CH20000, 1 RB low

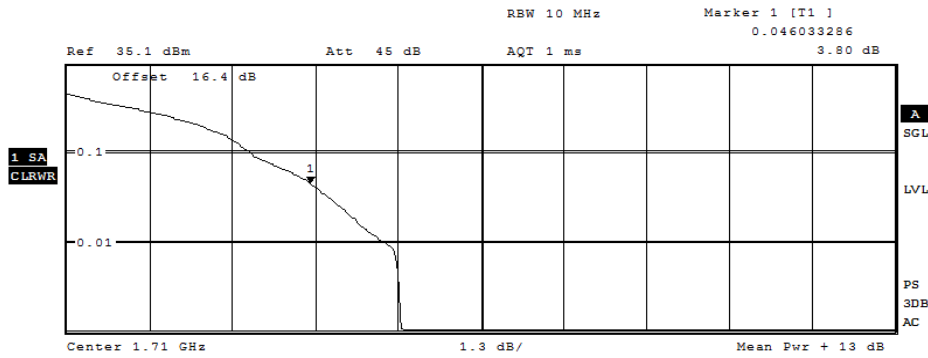
1.2.2.5. 15MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.06 dBm
Peak	25.42 dBm
Crest	4.36 dB
10 %	2.56 dB
1 %	4.19 dB
.1 %	4.29 dB
.01 %	4.31 dB

Diagram: QPSK 15 MHz CH20025, 1 RB low

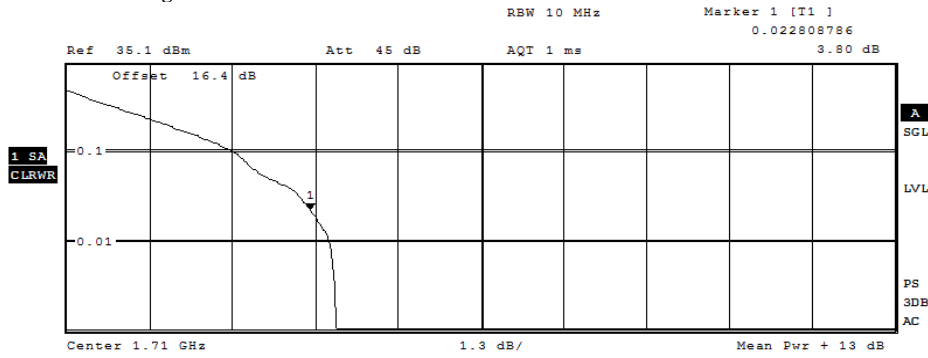


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.02 dBm
Peak	25.35 dBm
Crest	5.33 dB
10 %	2.88 dB
1 %	4.98 dB
.1 %	5.25 dB
.01 %	5.27 dB

Diagram: 16QAM 15 MHz CH20025, 1 RB low

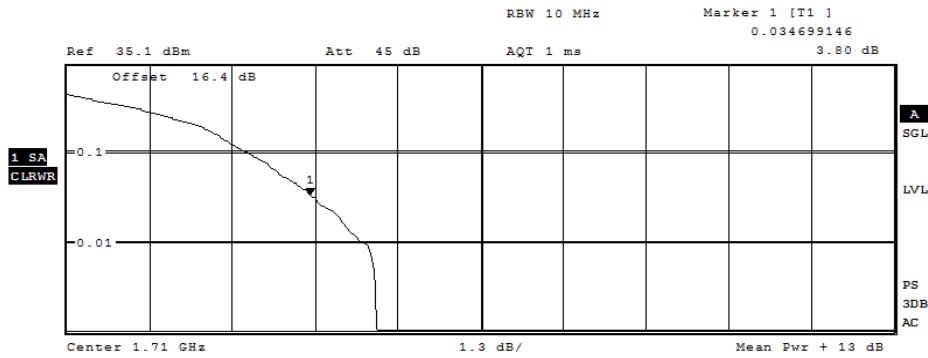
### 1.2.2.6. 20MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.05 dBm
Peak	25.35 dBm
Crest	4.30 dB
10 %	2.60 dB
1 %	4.13 dB
.1 %	4.23 dB
.01 %	4.29 dB

Diagram: QPSK 20 MHz CH20050, 1 RB high



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

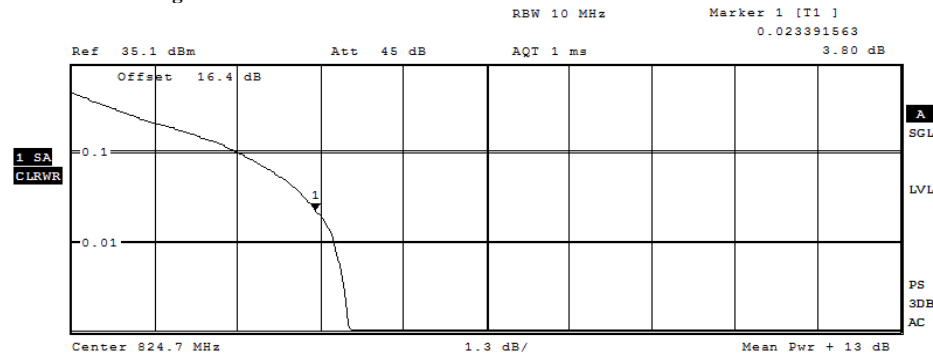
Trace 1	
Mean	20.47 dBm
Peak	25.35 dBm
Crest	4.88 dB
10 %	2.85 dB
1 %	4.67 dB
.1 %	4.88 dB
.01 %	4.90 dB

Diagram: 16QAM 20 MHz CH20050, 1 RB low

### 1.2.3. LTE Band 5

Worst-Case of each maximum Peak power value was tested with the CCDF method

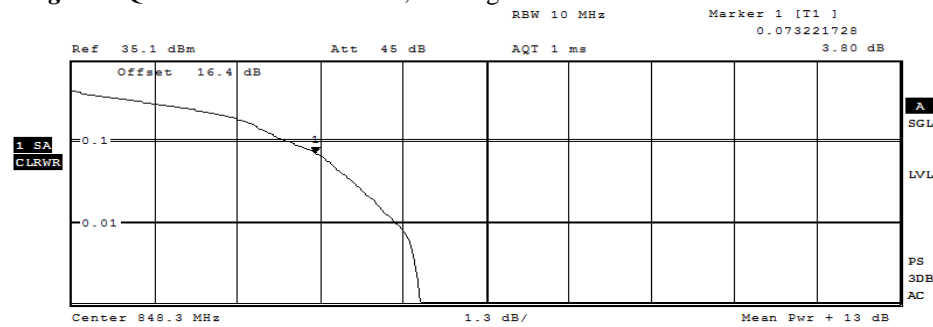
#### 1.2.3.1. 1.4MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.78 dBm
Peak	26.33 dBm
Crest	4.55 dB
10 %	2.63 dB
1 %	4.13 dB
.1 %	4.38 dB
.01 %	4.48 dB

Diagram: QPSK 1.4 MHz CH20407,1RB high

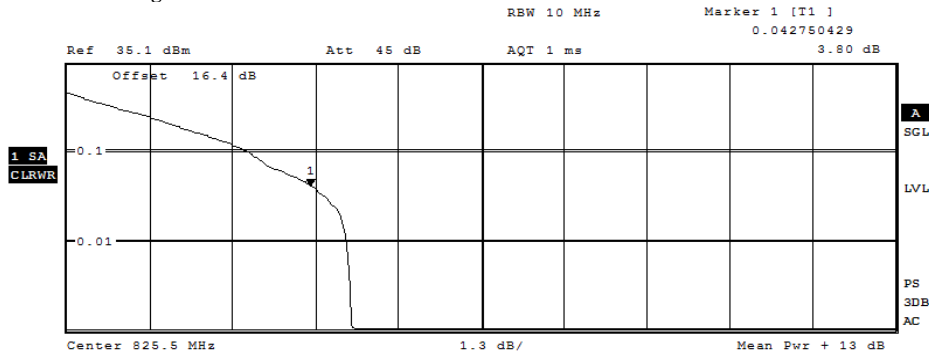


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.36 dBm
Peak	25.90 dBm
Crest	5.53 dB
10 %	3.42 dB
1 %	5.08 dB
.1 %	5.48 dB
.01 %	5.54 dB

Diagram: 16QAM 1.4 MHz CH20643,1RB low

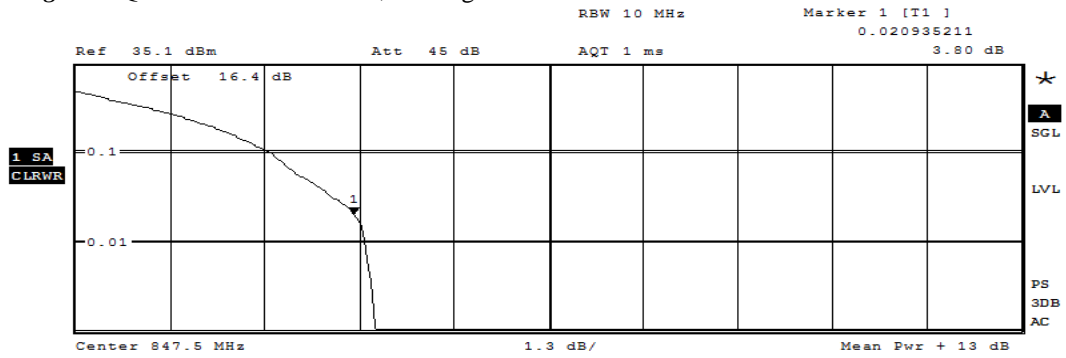
### 1.2.3.2. 3MHz signal bandwidth



Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	22.06 dBm
Peak	26.61 dBm
Crest	4.55 dB
10 %	2.83 dB
1 %	4.40 dB
.1 %	4.48 dB
.01 %	4.54 dB

Diagram: QPSK 3 MHz CH20415,1RB high

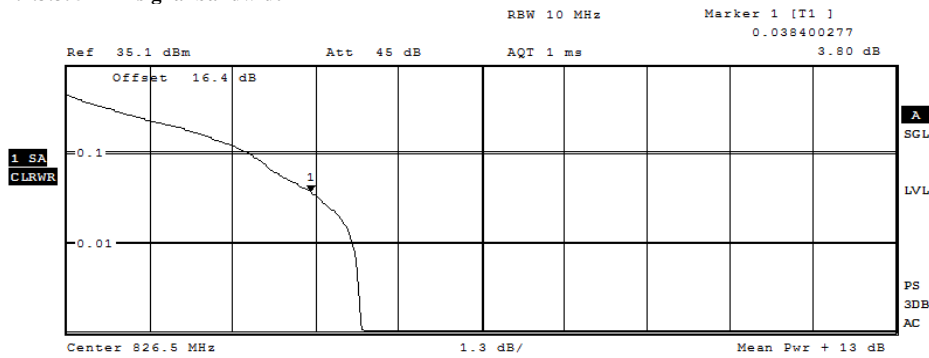


Complementary Cumulative Distribution Function  
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.47 dBm
Peak	25.68 dBm
Crest	4.21 dB
10 %	2.67 dB
1 %	3.98 dB
.1 %	4.13 dB
.01 %	4.19 dB

Diagram: 16QAM 3 MHz CH20635,1RB high

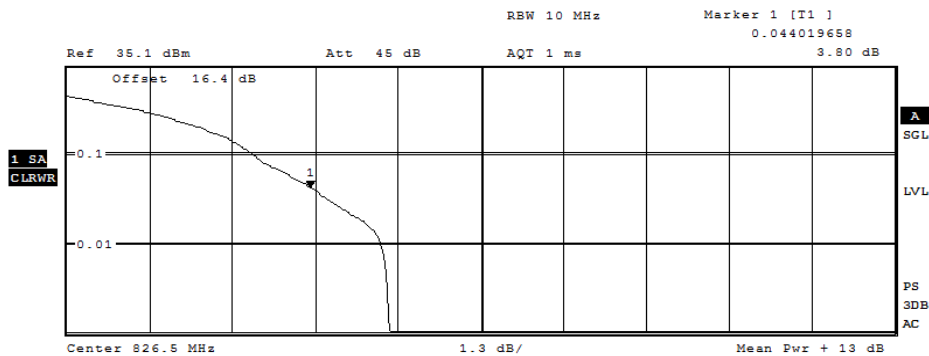
1.2.3.3. 5MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	21.89 dBm
Peak	26.67 dBm
Crest	4.78 dB
10 %	2.88 dB
1 %	4.48 dB
.1 %	4.63 dB
.01 %	4.71 dB

Diagram: QPSK 5MHz CH20425,1RB high

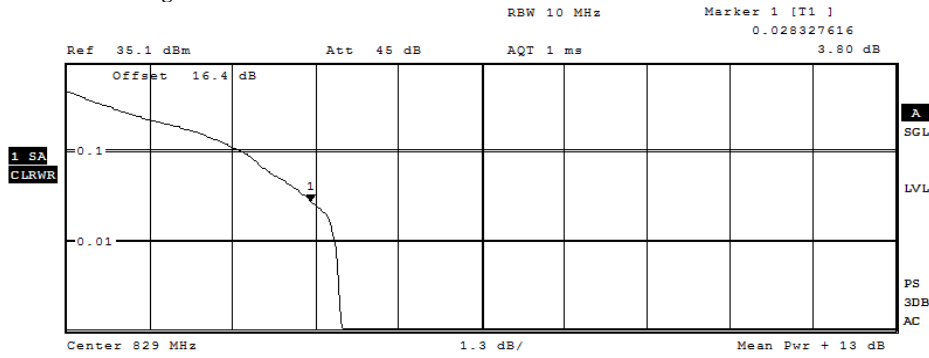


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.63 dBm
Peak	25.76 dBm
Crest	5.13 dB
10 %	2.92 dB
1 %	4.94 dB
.1 %	5.08 dB
.01 %	5.15 dB

Diagram: 16QAM 5MHz CH20425,1RB low

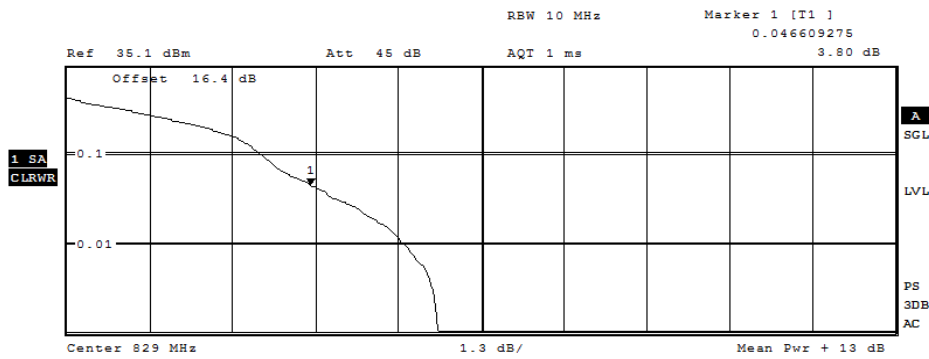
1.2.3.4. 10MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.91 dBm
Peak	25.32 dBm
Crest	4.41 dB
10 %	2.75 dB
1 %	4.21 dB
.1 %	4.31 dB
.01 %	4.35 dB

Diagram: QPSK 10MHz CH20450,1RB low



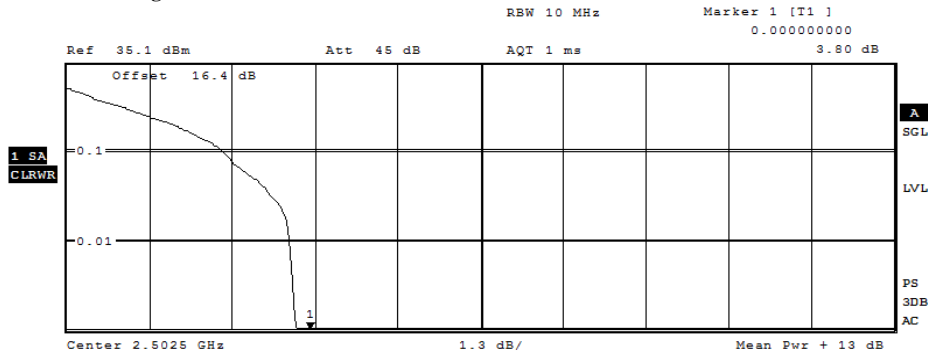
Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.54 dBm
Peak	26.52 dBm
Crest	5.98 dB
10 %	3.04 dB
1 %	5.29 dB
.1 %	5.83 dB
.01 %	5.92 dB

Diagram: 16QAM 10MHz CH20450,1RB high

### 1.2.4. LTE Band 7

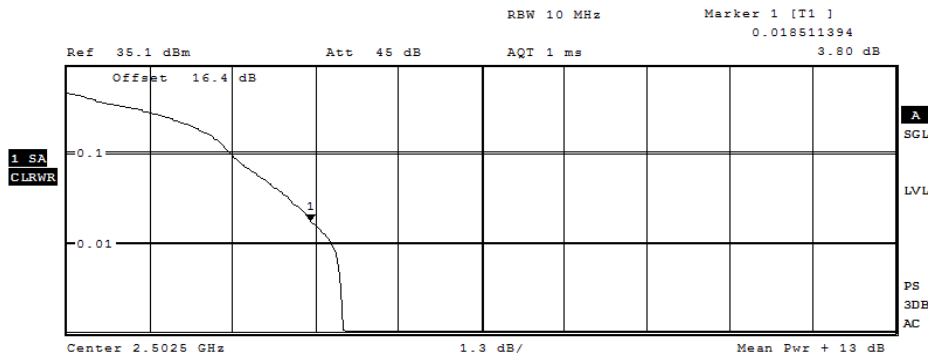
#### 1.2.4.1. 5MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.40 dBm
Peak	24.06 dBm
Crest	3.67 dB
10 %	2.46 dB
1 %	3.50 dB
.1 %	3.60 dB
.01 %	3.67 dB

Diagram: QPSK 5 MHz CH20775, 1RB low



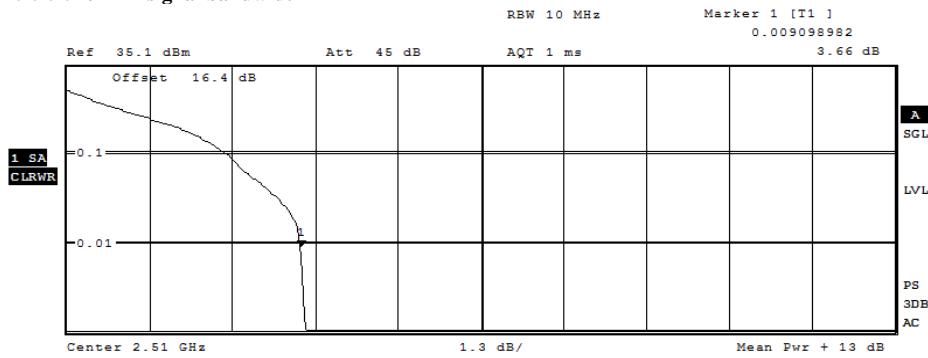
Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.72 dBm
Peak	24.13 dBm
Crest	4.42 dB
10 %	2.58 dB
1 %	4.15 dB
.1 %	4.35 dB
.01 %	4.42 dB

Diagram: 16QAM 5 MHz CH20775, 1RB low



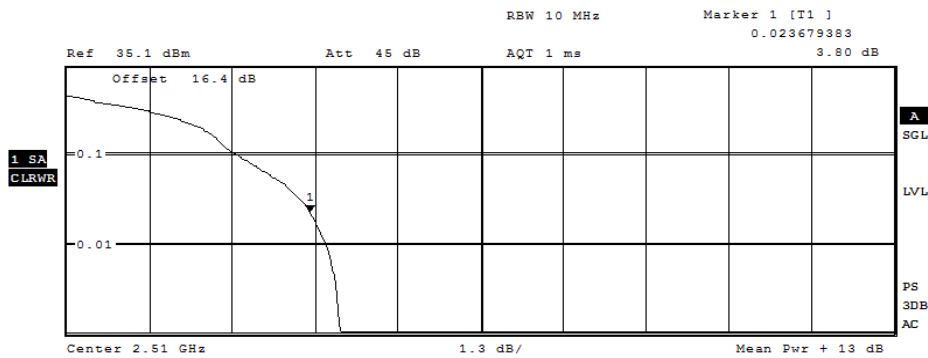
1.2.4.2. 10MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.13 dBm
Peak	23.94 dBm
Crest	3.81 dB
10 %	2.50 dB
1 %	3.67 dB
.1 %	3.75 dB
.01 %	3.79 dB

Diagram: QPSK 10 MHz CH20800, 1RB high

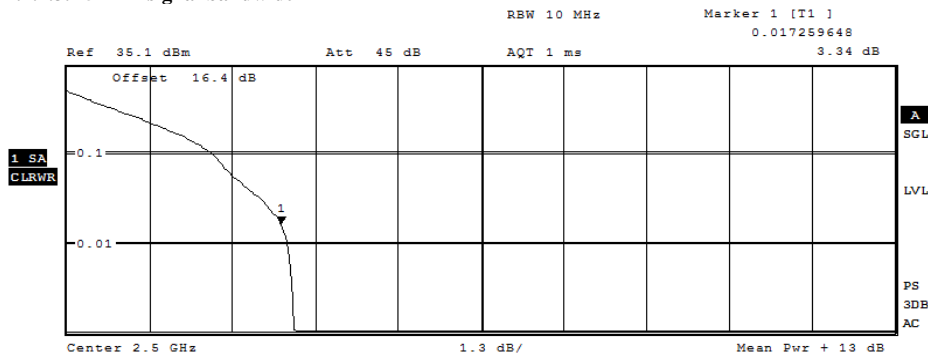


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.82 dBm
Peak	24.23 dBm
Crest	4.40 dB
10 %	2.67 dB
1 %	4.06 dB
.1 %	4.31 dB
.01 %	4.35 dB

Diagram: 16QAM 10 MHz CH20800, 1RB high

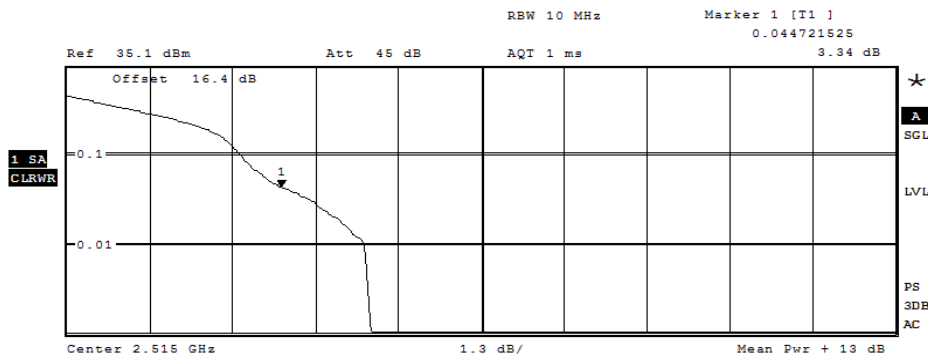
1.2.4.3. 15MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.56 dBm
Peak	24.20 dBm
Crest	3.65 dB
10 %	2.27 dB
1 %	3.46 dB
.1 %	3.58 dB
.01 %	3.65 dB

Diagram: QPSK 15 MHz CH20825, 1RB low

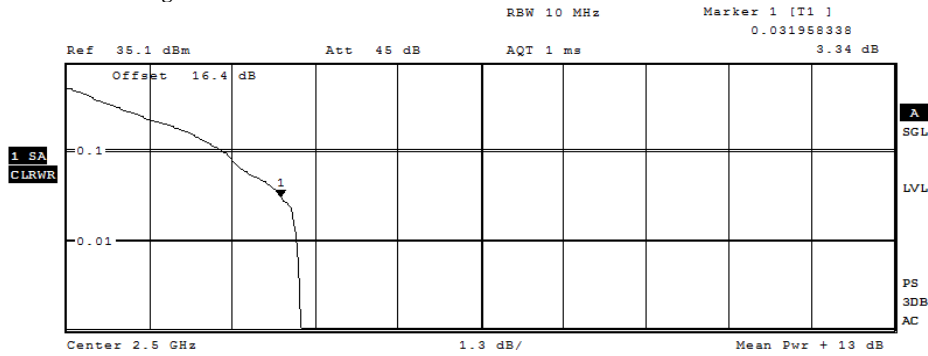


Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.37 dBm
Peak	24.23 dBm
Crest	4.86 dB
10 %	2.73 dB
1 %	4.65 dB
.1 %	4.77 dB
.01 %	4.83 dB

Diagram: 16QAM 15 MHz CH20825, 1RB high

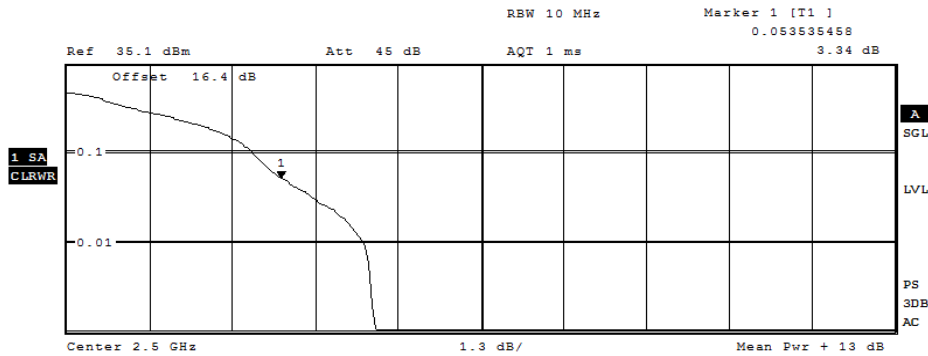
1.2.4.4. 20MHz signal bandwidth



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	20.24 dBm
Peak	23.99 dBm
Crest	3.75 dB
10 %	2.46 dB
1 %	3.60 dB
.1 %	3.69 dB
.01 %	3.69 dB

Diagram: QPSK 20 MHz CH20850, 1RB low



Complementary Cumulative Distribution Function  
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1	
Mean	19.13 dBm
Peak	24.06 dBm
Crest	4.93 dB
10 %	2.92 dB
1 %	4.65 dB
.1 %	4.83 dB
.01 %	4.88 dB

Diagram: 16QAM 20 MHz CH20850, 1RB low

### 1.2.5. LTE Band 12

#### 1.2.5.1. 1.4 MHz signal bandwidth

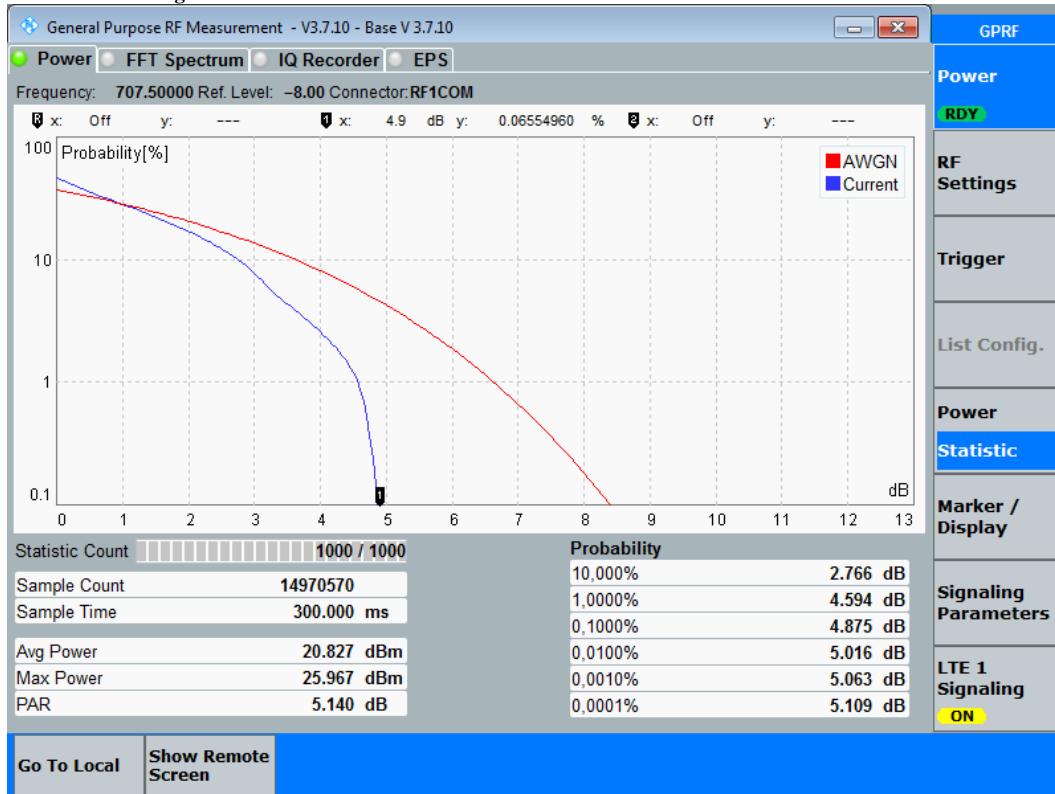


Diagram: QPSK 1.4 MHz CH23095, 1 RB high

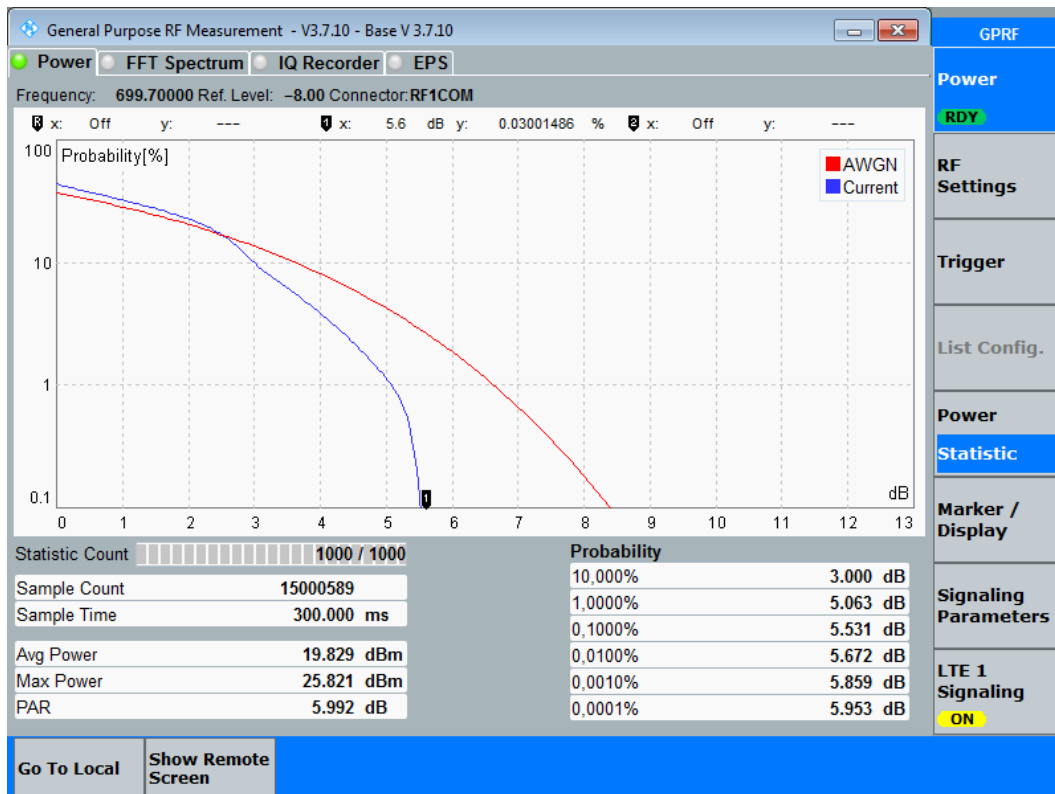


Diagram: 16QAM 1.4 MHz CH23017, 1 RB low

1.2.5.2. 4MHz signal bandwidth

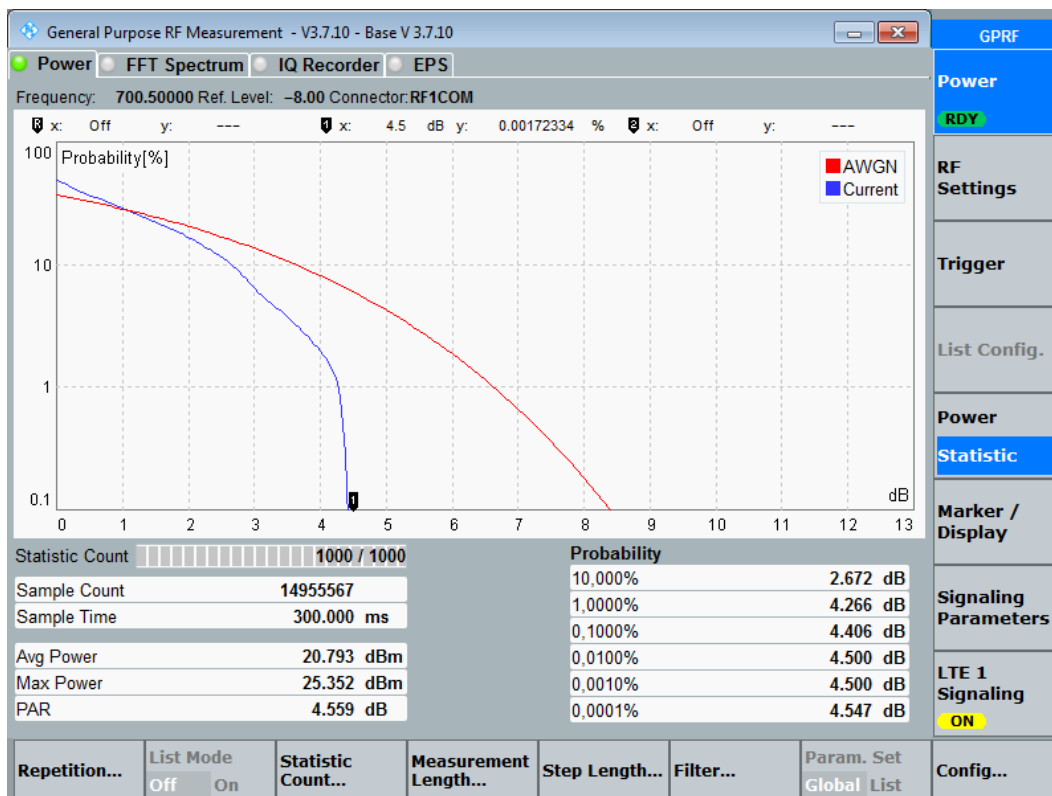


Diagram: QPSK 3 MHz CH23025, 1 RB low

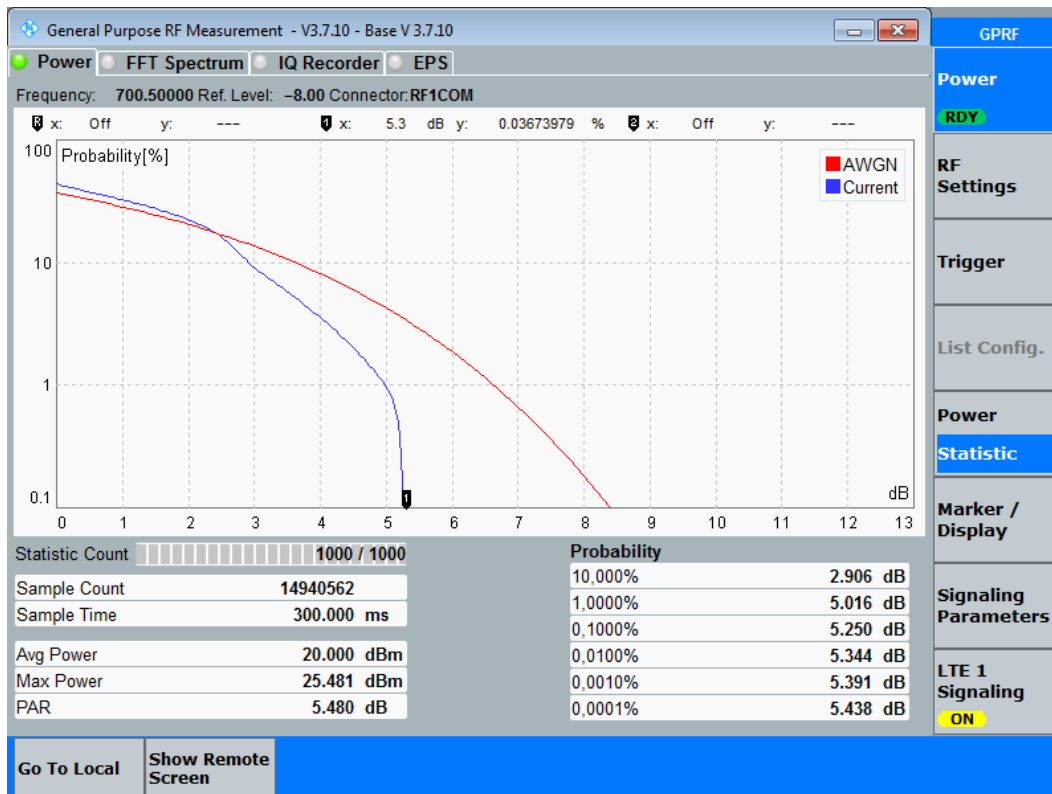


Diagram: 16QAM 3 MHz CH23025, 1 RB low

1.2.5.3. 5MHz signal bandwidth

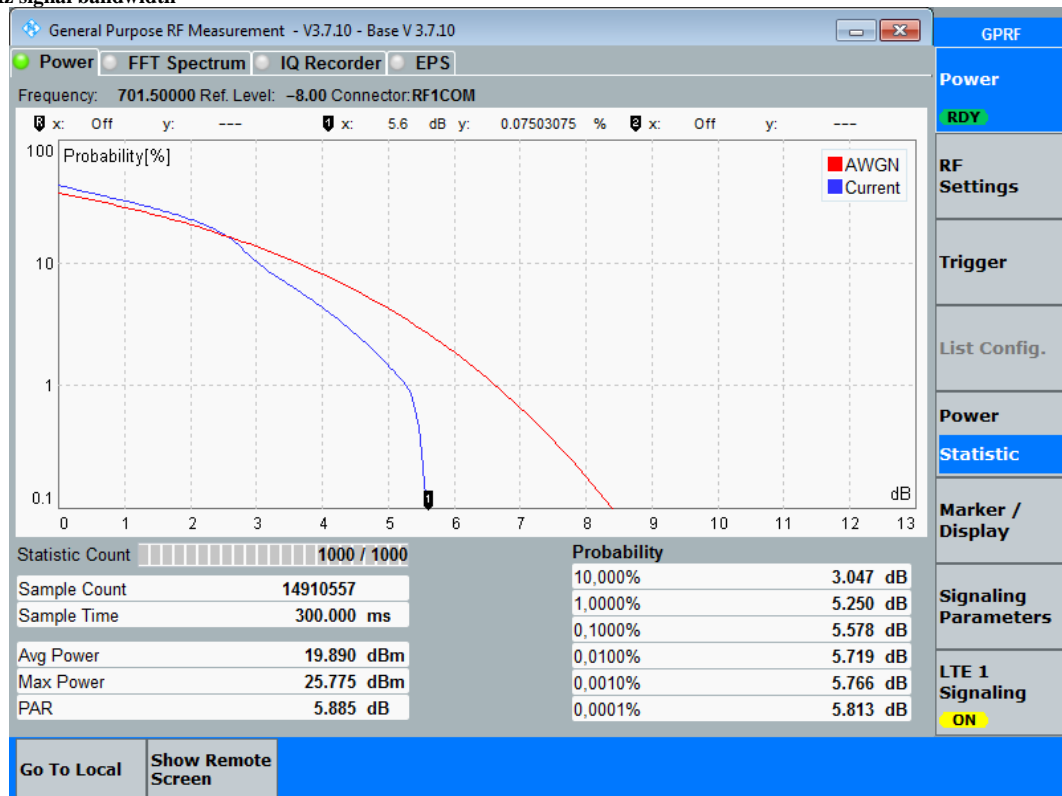


Diagram: QPSK 5 MHz CH23035, 1 RB high

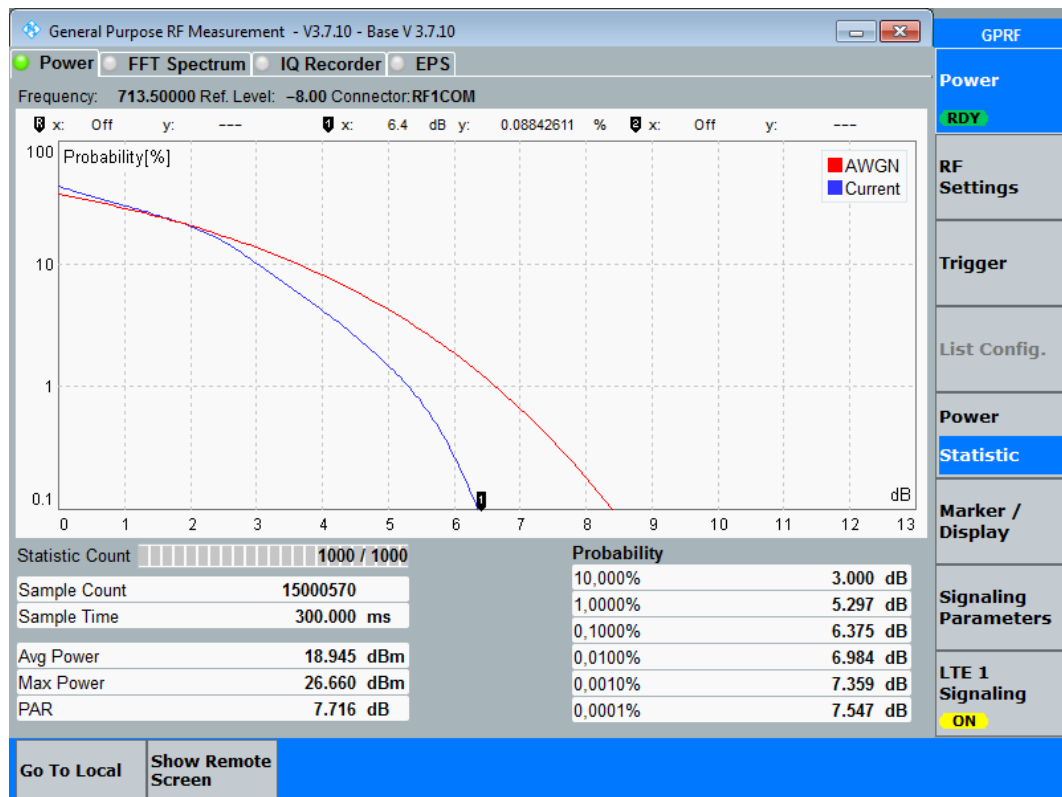


Diagram: 16QAM 5 MHz CH23155, 100% RB

1.2.5.4. 10MHz signal bandwidth

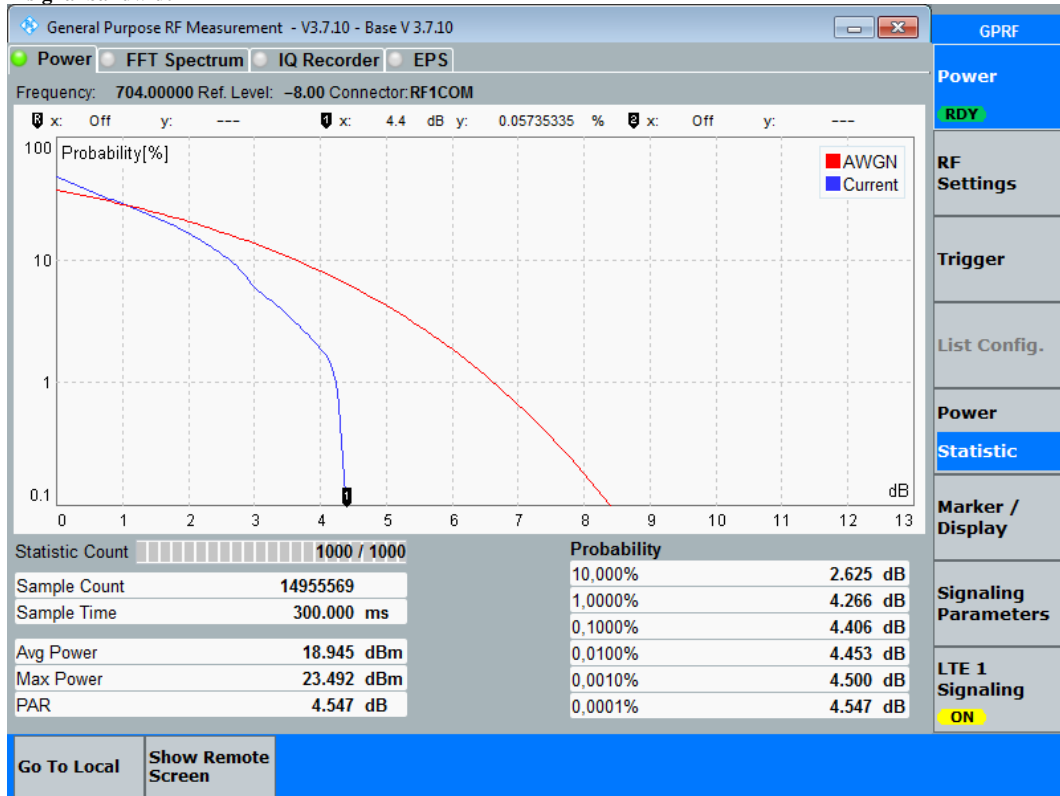


Diagram: QPSK 10 MHz CH23060, 1 RB low

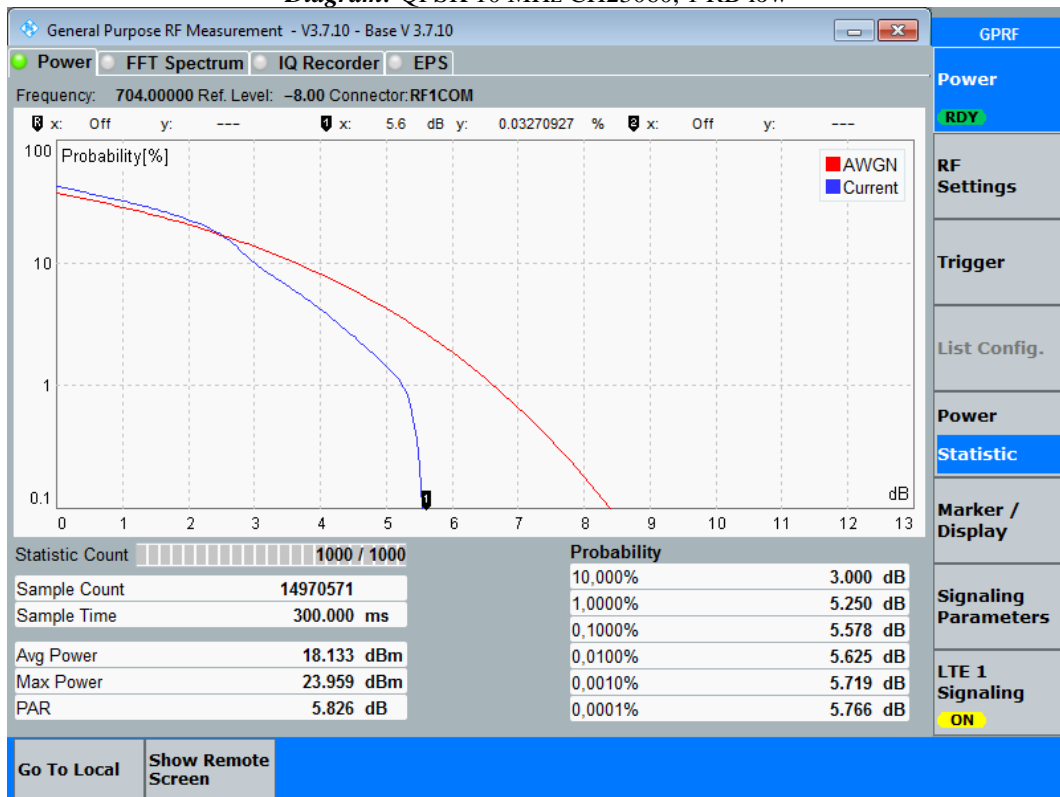


Diagram: 16QAM 10 MHz CH23060, 1 RB high

### 1.3. Spurious emissions radiated (LTE Band 2)

#### 1.3.1. Magnetic field strength radiated (LTE Band 2)

## Diagram No. '2.01a\_RMC\_LTE\_FDD2\_BW10\_RB1low\_CH18650\_laying

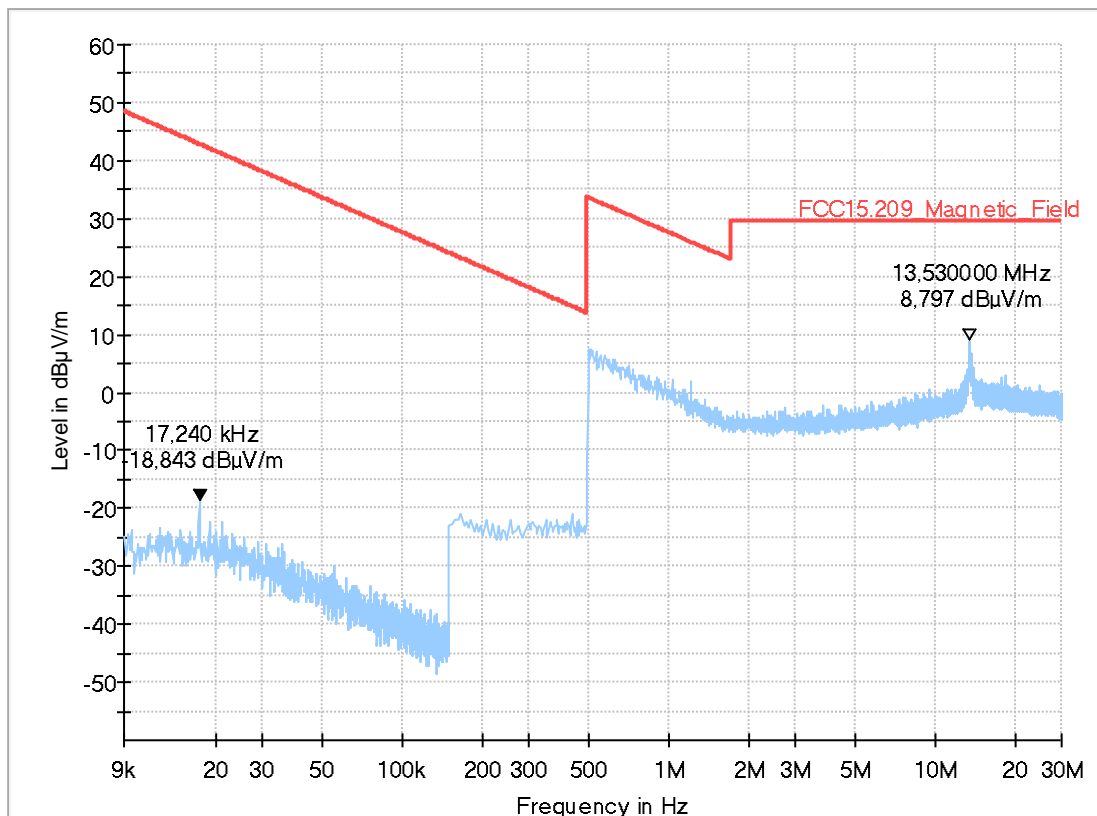
Date:	30.10.2017	Page 1 of 2
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	

Operator:	TFra
Operating conditions:	Humidity: 52%rH; Temperature: 22°C
Power during tests:	12V DC
Comment 1:	BW 10MHz, 1RBlow Modulation QPSK,CH 18650

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum





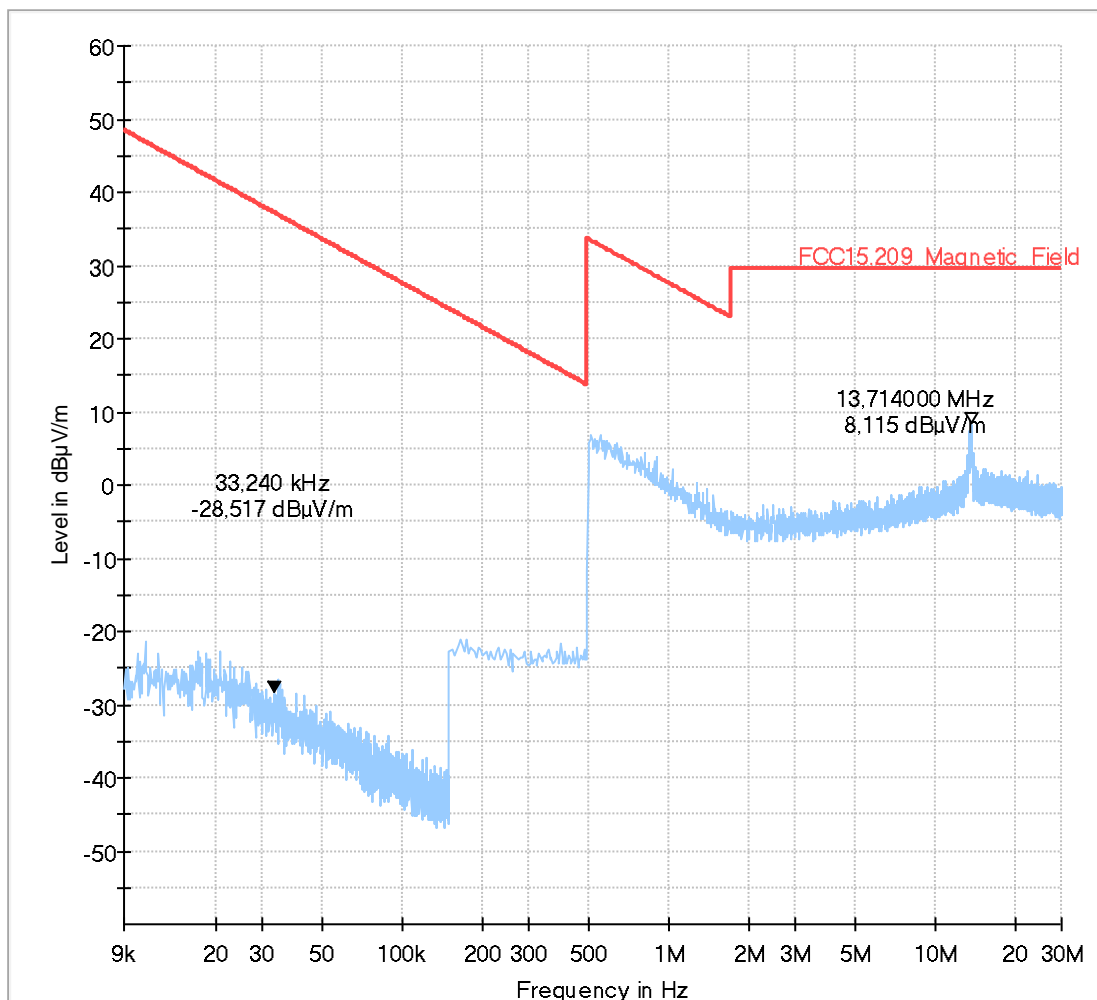
## 2.01b\_LTE\_FDD2\_BW10\_RB1low\_CH18650\_standing

### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	SLo
Operating conditions:	Humidity: 52%rH; Temperature: 22°C
Power during tests:	12V DC
Comment 1:	BW 10MHz, 1RB1low, Modulation QPSK, CH18650
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-



1.3.2. Emissions above 30MHz (LTE Band 2)

8.01a\_RSE\_LTE\_FDD2\_BW10\_RB1low\_QPSK\_CH18650\_laying

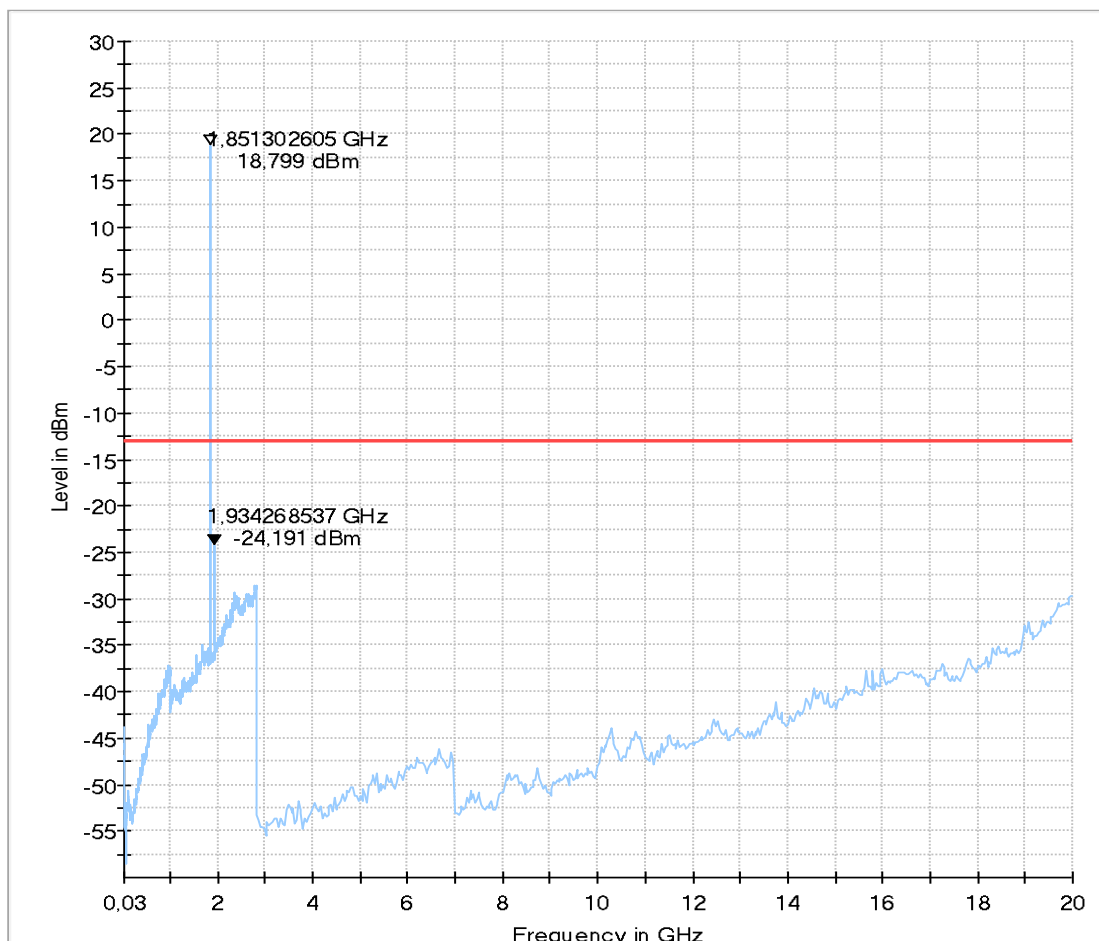
Common Information

Test Description:	Radiated Spurious Emissions LTE FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Operating Mode:	UE allocated channel 18650/ BW:10MHz / RB:1low / Position: QPSK
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	RIs
Remark:	EUT - laying position

EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



## 8.01b\_RSE\_LTE\_FDD2\_BW10\_RB1low\_QPSK\_CH18650\_standing

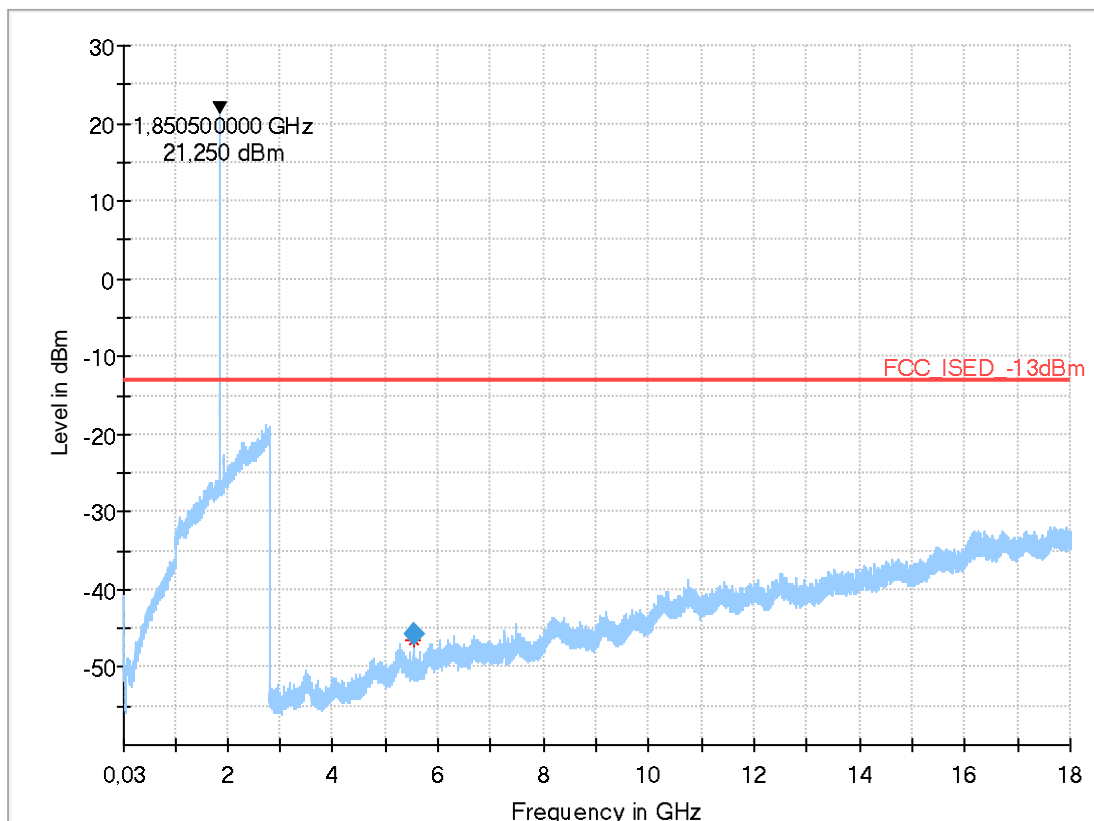
### Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Room
Test Standard:	FCC FCC Part 27.53(h) AWS emission limits / RSS-139, Issue 3
Antenna polarisation:	vertical / horizontal
Measurement software version:	EMC32 V9.26.0
Operation mode:	LTE_FDD2_BW10_RB1low_QPSK_CH18650
Operator Name:	MBe

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
5551.816667	-45.78	-13.00	32.78	100.0	1000.000	155.0	H	112.0	0.0	-89.9

(continuation of the "Final\_Result" table from column 17 ...)

Frequency (MHz)	Comment
5551.816667	10:31:52 - 13.11.2017

### 1.4. Spurious emissions radiated (LTE Band 4)

#### 1.4.1. Magnetic field strength radiated (LTE Band 4)

## Diagram No. 2.02a\_RMC\_LTE\_FDD4\_BW5\_RB1low\_CH19975\_laying

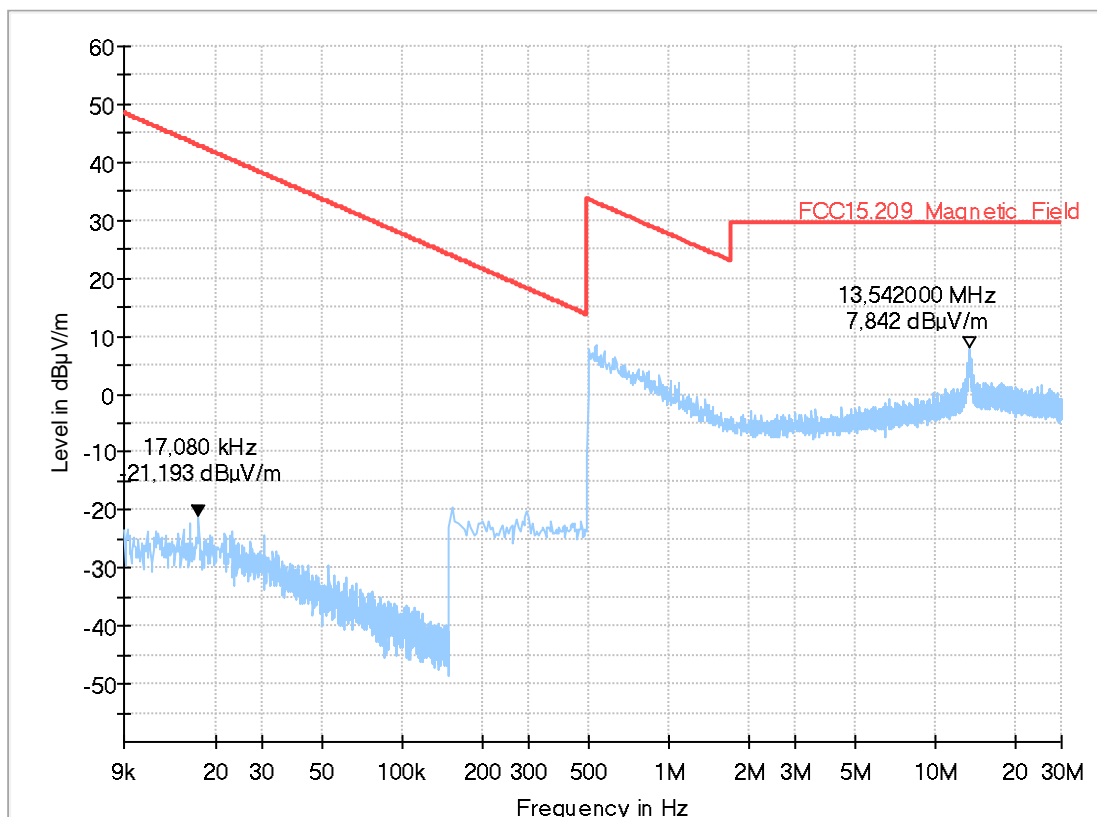
Date:	30.10.2017	Page 1 of 2
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	

Operator:	TFra
Operating conditions:	Humidity: 52%rH; Temperature: 22°C
Power during tests:	12V DC
Comment 1:	BW 5MHz, 1RBlow Modulation QPSK,CH 19975

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## '2.02b\_RMC\_LTE\_FDD4\_BW5\_RB1low\_QPSK\_CH19975\_standing

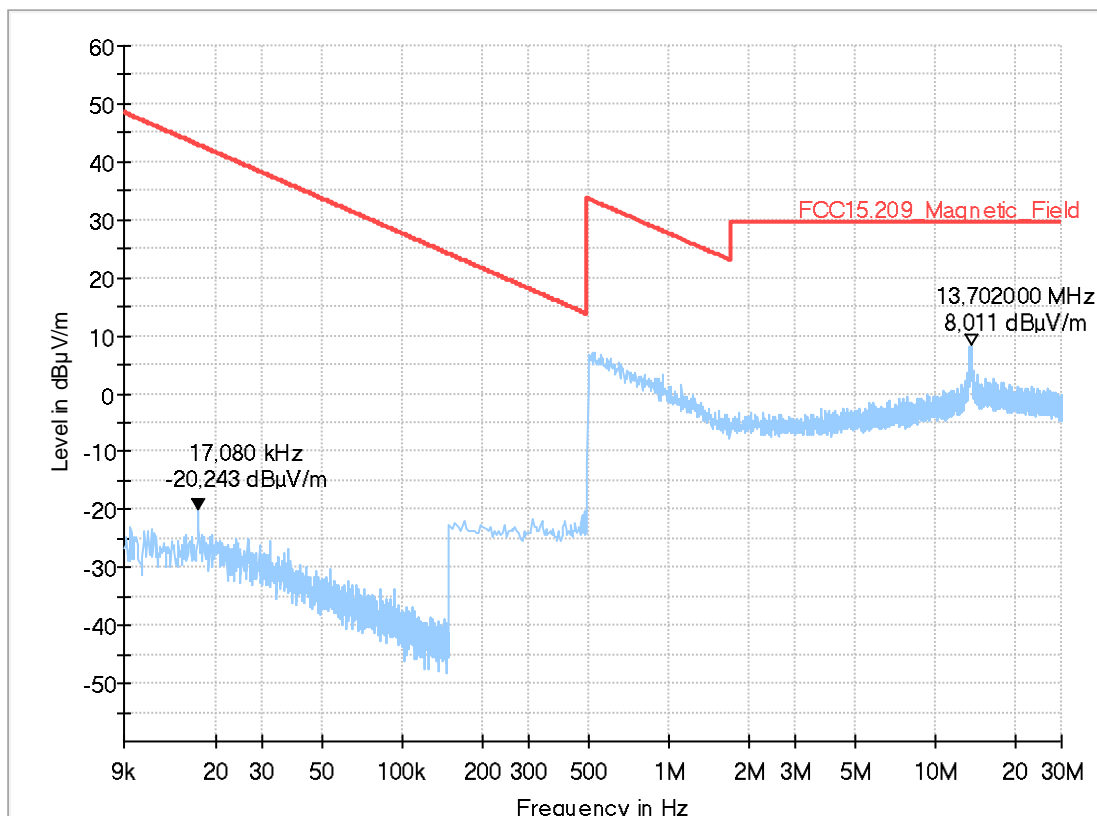
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 5MHz, 1RBlow, Modulation QPSK, CH19975
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



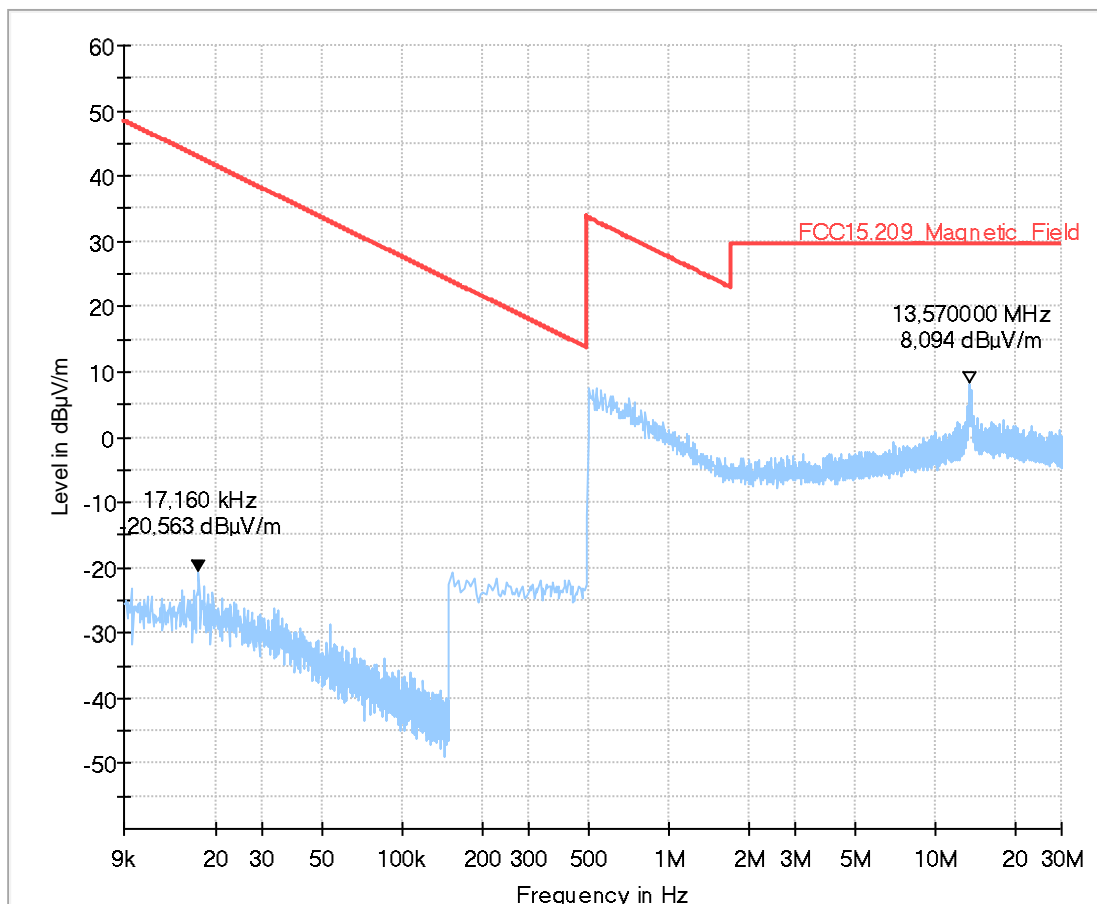
## Diagram No. 2.03a\_RMC\_LTE\_FDD4\_BW10\_RB1high\_CH20000\_laying

Date:	30.10.2017	Page 1 of 3
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	TFra	
Operating conditions:	TX-on	
Power during tests:	12V DC	
Comment 1:	BW 10MHz, 1RBhigh, Modulation 16-QAM, CH 20000	

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 2.03b\_RMC\_LTE\_FDD4\_BW10\_RB1high\_CH20000\_laying

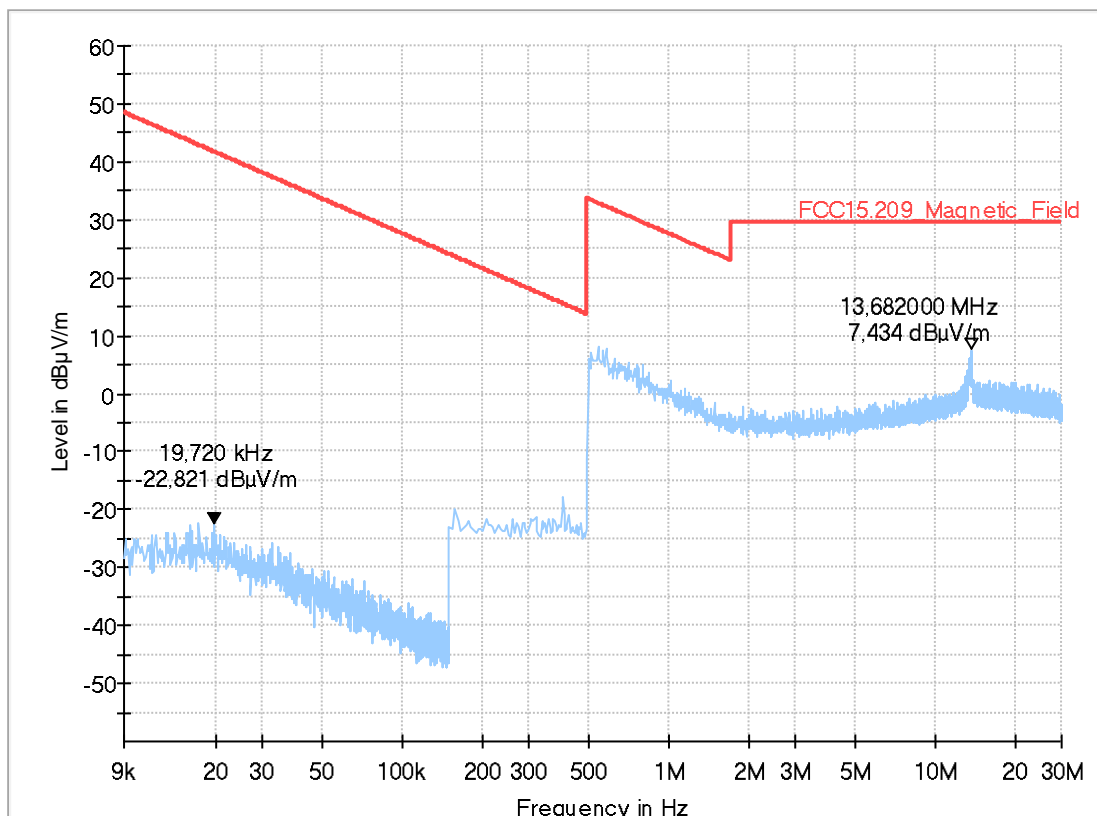
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 10MHz, 1RBhigh, Modulation 16QAM, CH20000
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



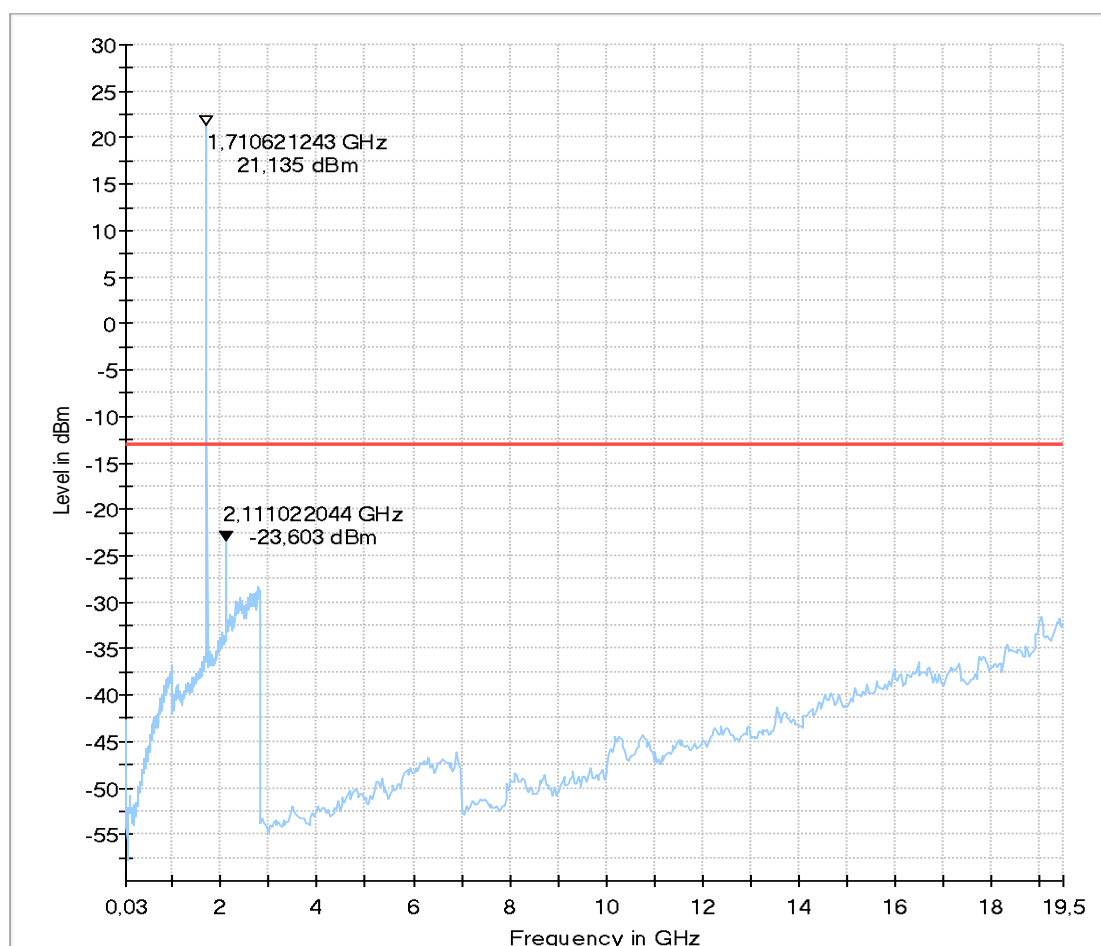
**1.4.2. Emissions above 30MHz (LTE Band 4)****8.02a\_RSE\_LTE\_FDD4\_BW5\_RB1low\_QPSK\_CH19975\_laying****Common Information**

Test Description:	Radiated Spurious Emissions LTEFDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Operating Mode:	UE allocated channel 19975/ BW:5MHz / RB:1low / Position: QPSK
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	RIs
Remark:	EUT - laying position

**EUT Information**

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum





## 8.02b\_RSE\_LTE\_FDD4\_BW5\_RB1low\_QPSK\_CH19975\_standing

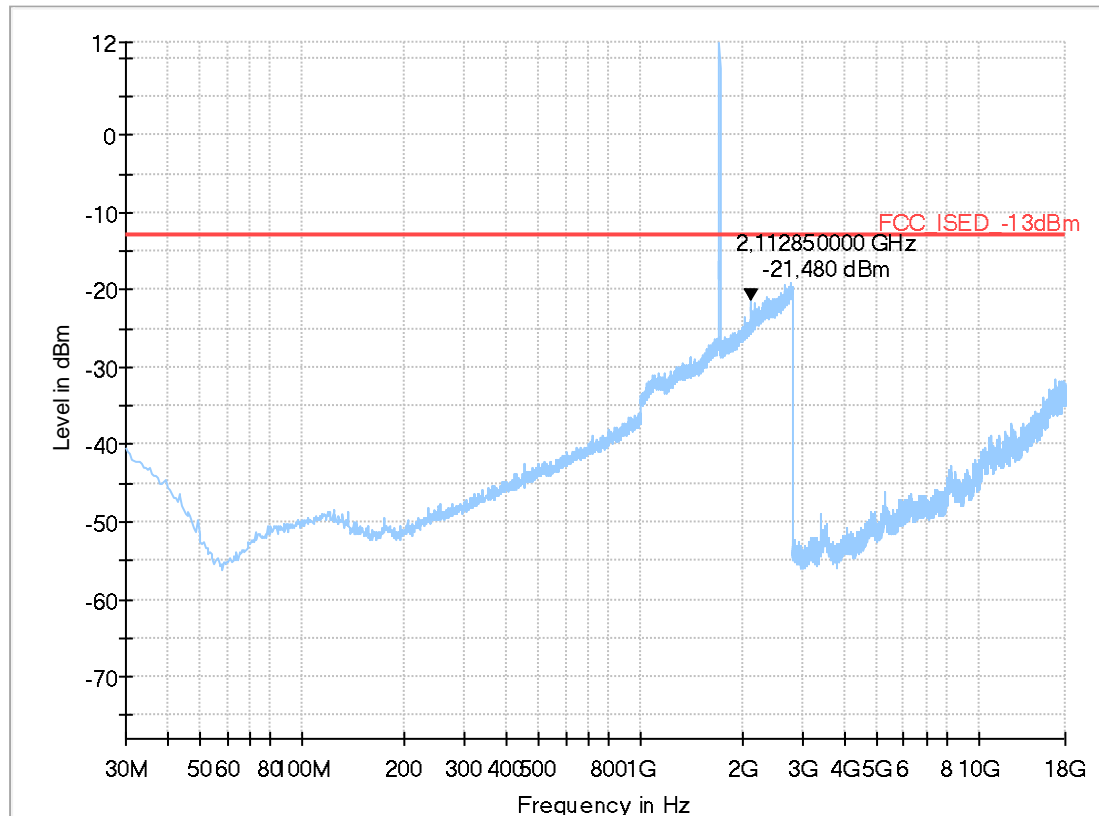
### Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Room
Test Standard:	FCC FCC Part 27.53(h) AWS emission limits / RSS-139, Issue 3
Antenna polarisation:	vertical
Measurement software version:	EMC32 V9.26.0
Operation mode:	LTE Band 4, channel no=19975 BW=5MHz RB=1low Modulation= QPSK
Operator Name:	SOz/SRa

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.03a\_RSE\_LTE\_FDD4\_BW10\_RB1high\_16-QAM\_CH20000\_laying

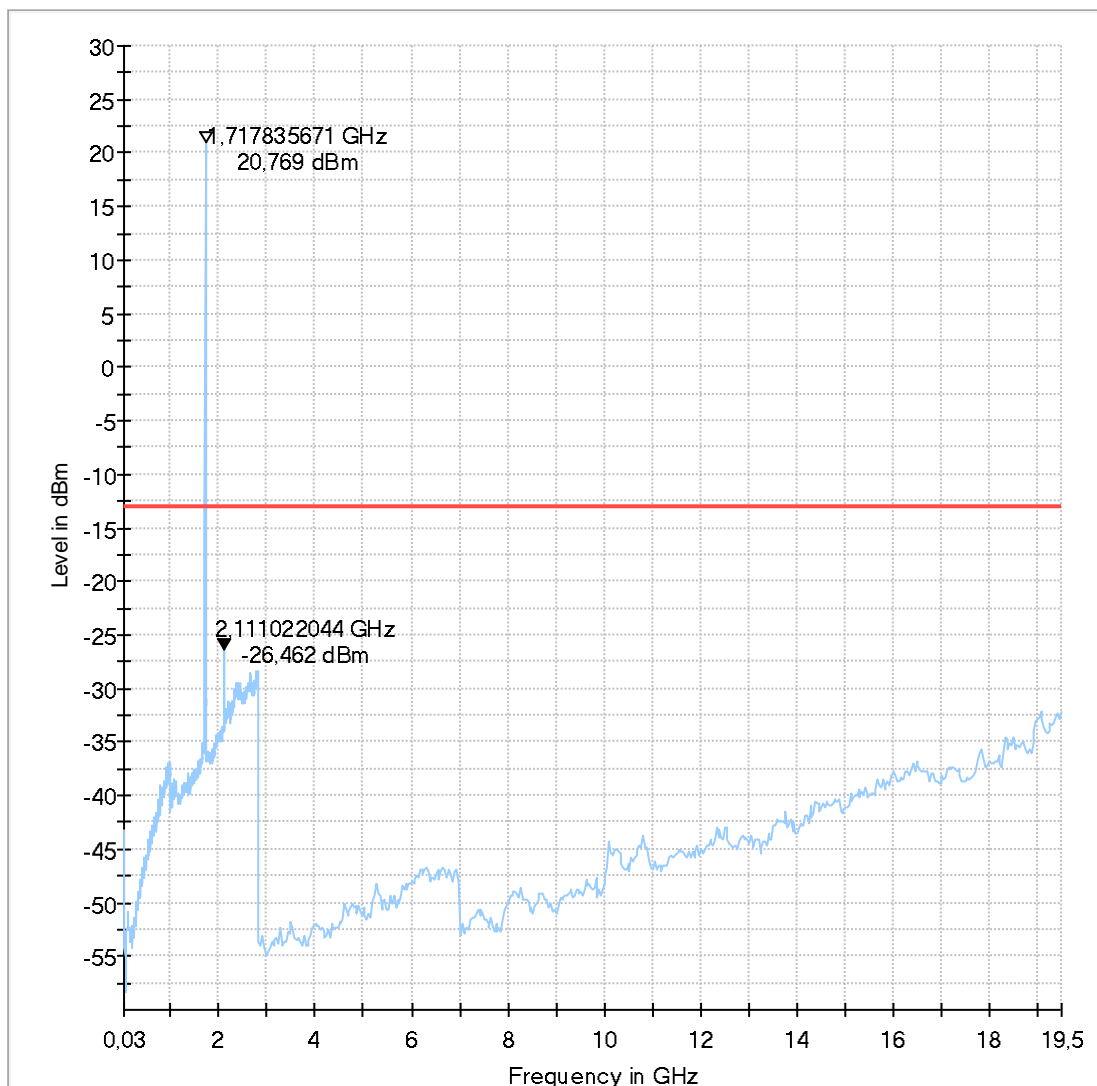
### Common Information

Test Description:	Radiated Spurious Emissions LTEFDD4
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Operating Mode:	UE allocated channel 20000/ BW:10MHz / RB:1low / Position: QAM
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	RIs
Remark:	EUT - laying position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.03b\_RSE\_LTE\_FDD4\_BW10\_RB1high\_16-QAM\_CH20000\_standing

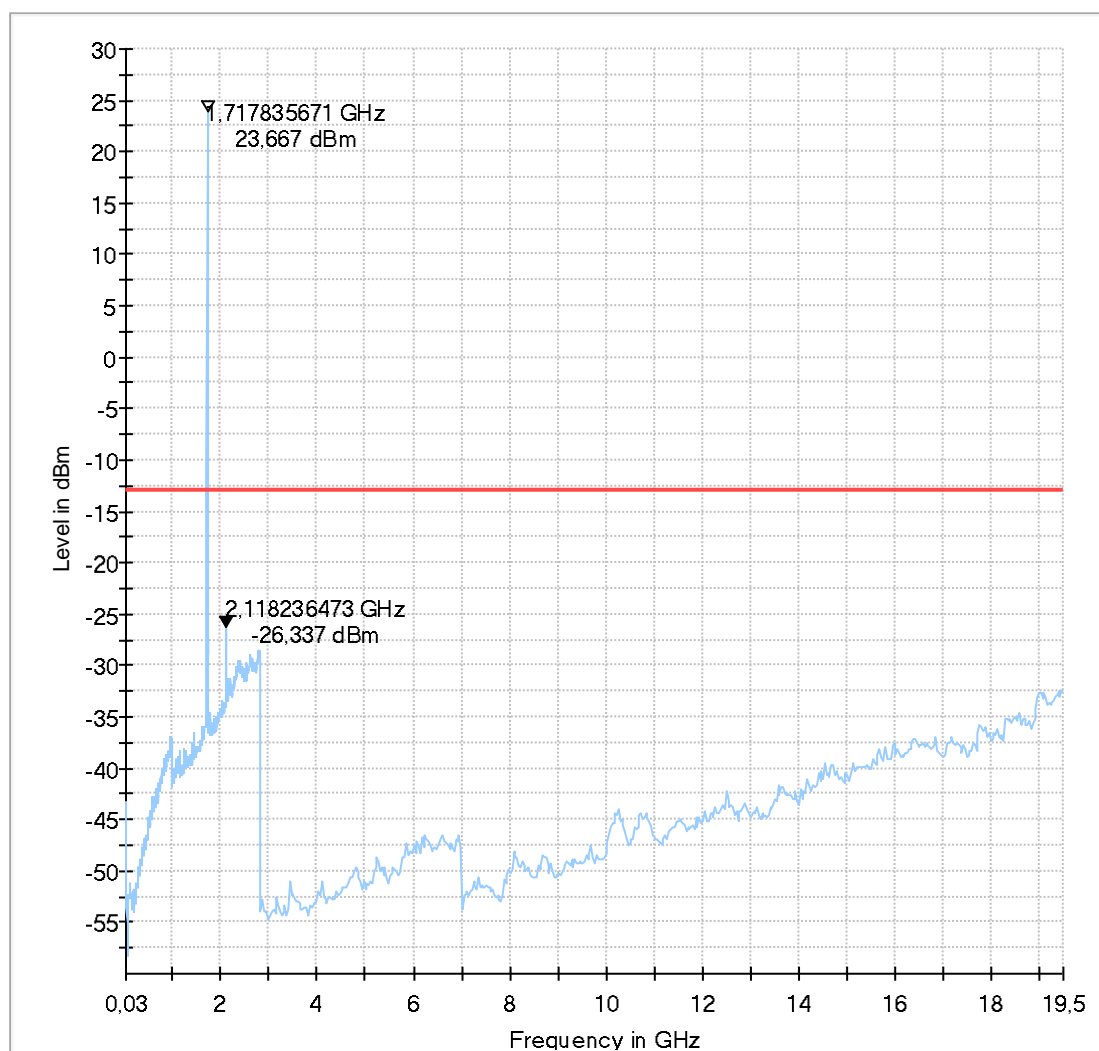
### Common Information

Test Description:	Radiated Spurious Emissions LTEFDD4
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Operating Mode:	UE allocated channel 20000/ BW:10MHz / RB:1high / Position: QAM
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	RIs
Remark:	EUT - standing position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 9.01\_LTE\_FDD4\_BW20\_RB1Low\_QPSK\_CH20050\_standing

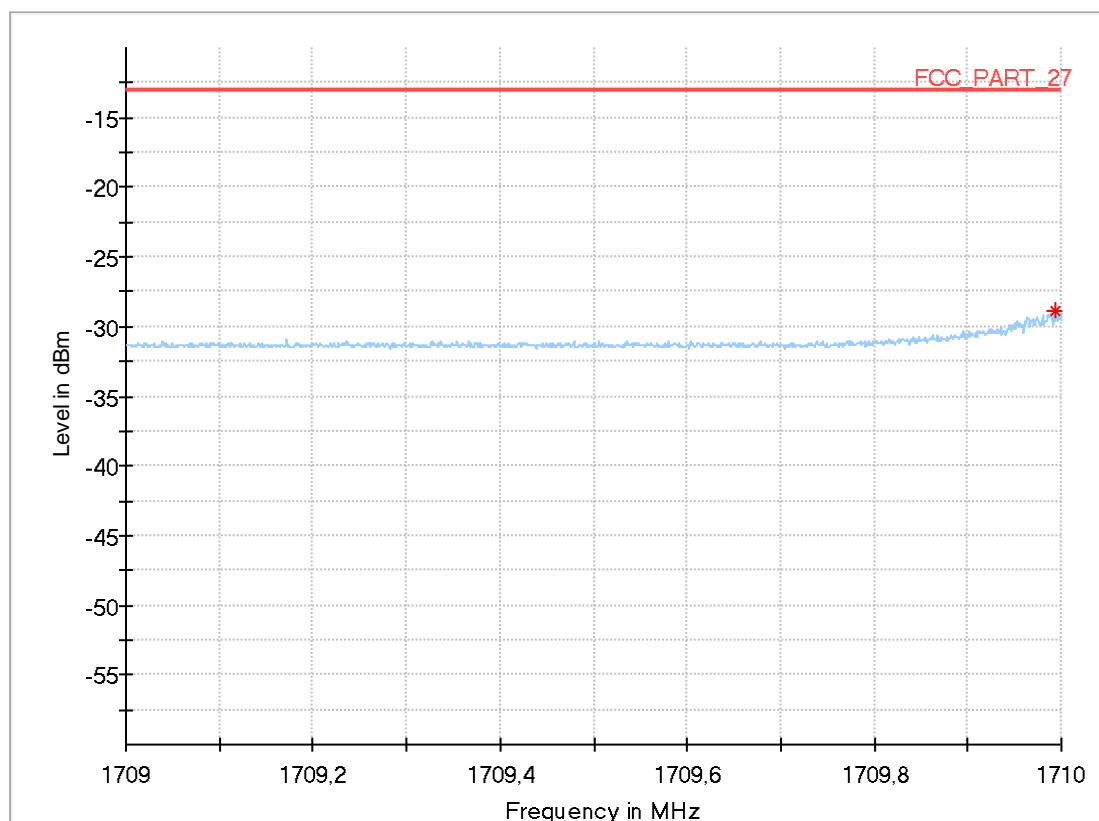
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD4
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Operating Mode:	LTE Band 4, channel no=20050 BW=20MHz RB=1low Modulation= QPSK
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	SOz/SRa
Comment:	Standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 9.02b\_BE\_LTE\_FDD4\_BW20\_RB1Low\_QPSK\_CH20050\_standing

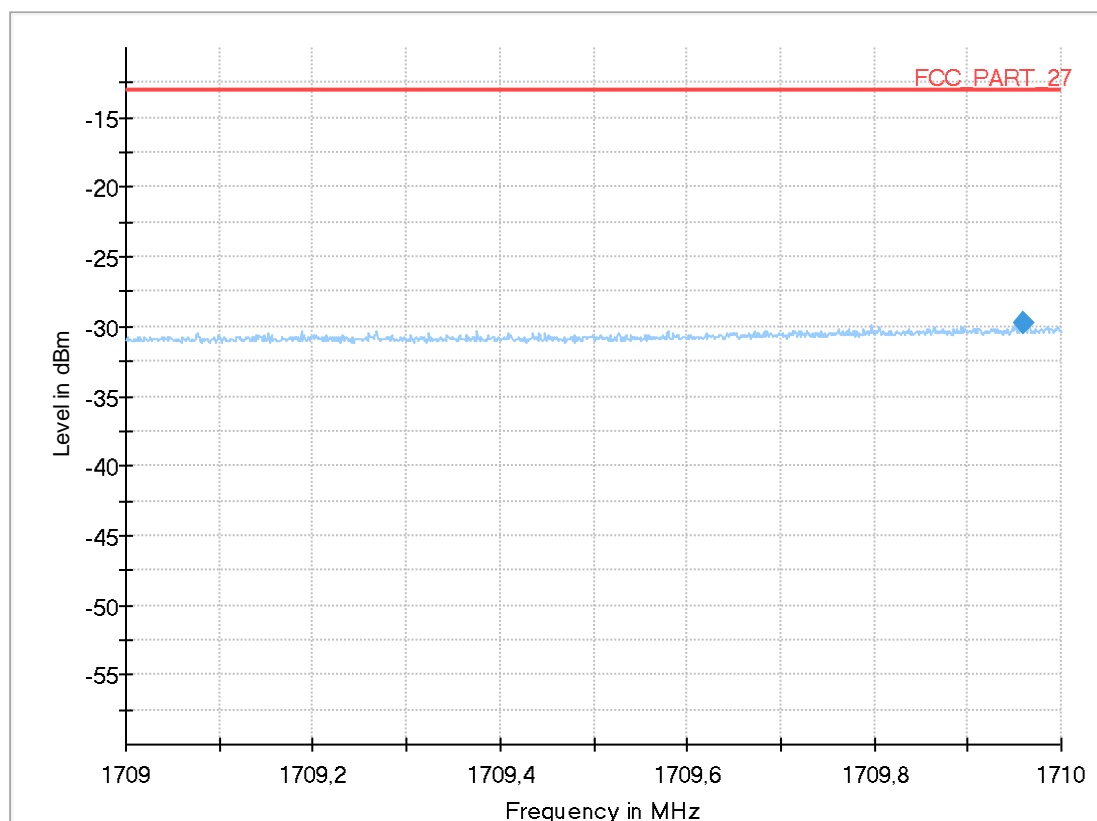
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD4
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Operating Mode:	LTE Band 4, channel no=20050 BW=20MHz RB=100 Modulation= QPSK
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	SOz/SRa
Comment:	Standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 9.03b\_BE\_LTE\_FDD4\_BW20\_RB1Low\_QAM\_CH20050\_standing

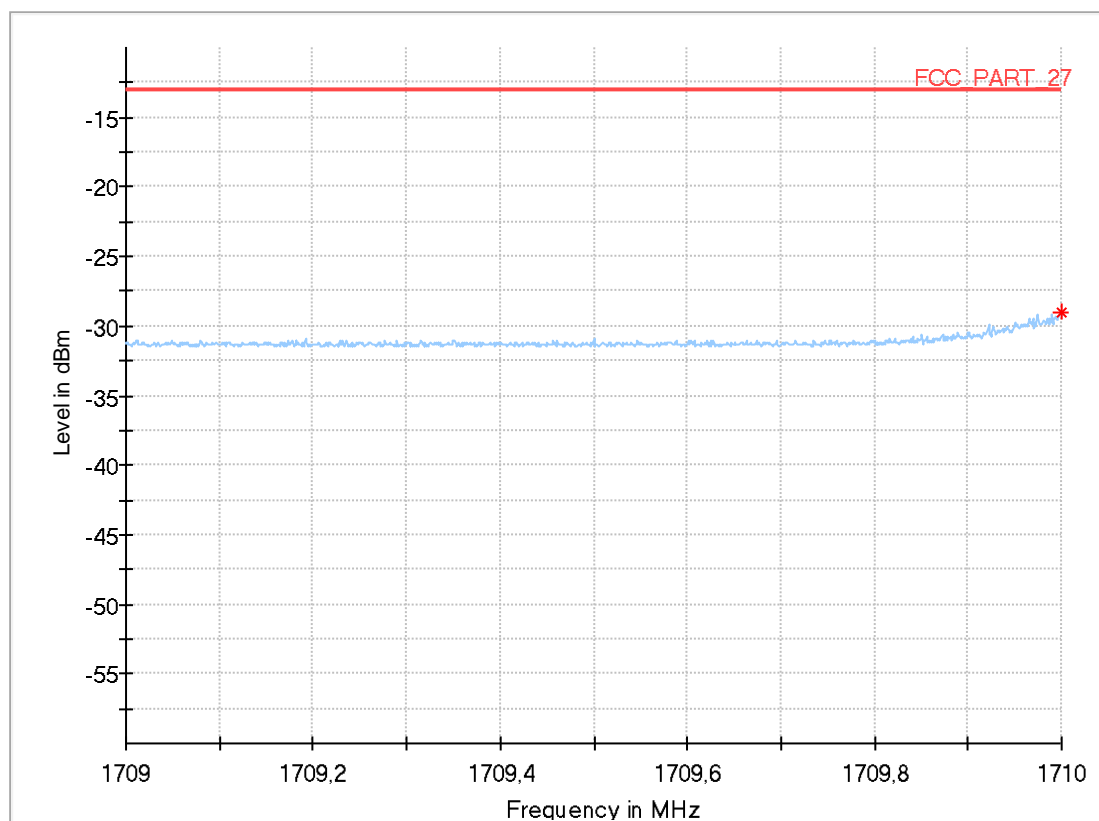
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD4
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Operating Mode:	LTE Band 4, channel no=20050 BW=20MHz RB=100 Modulation= QAM
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	SOz/SRa
Comment:	Standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	-----
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



### 1.5. Spurious emissions radiated (LTE Band 5)

#### 1.5.1. Magnetic field strength radiated (LTE Band 5)

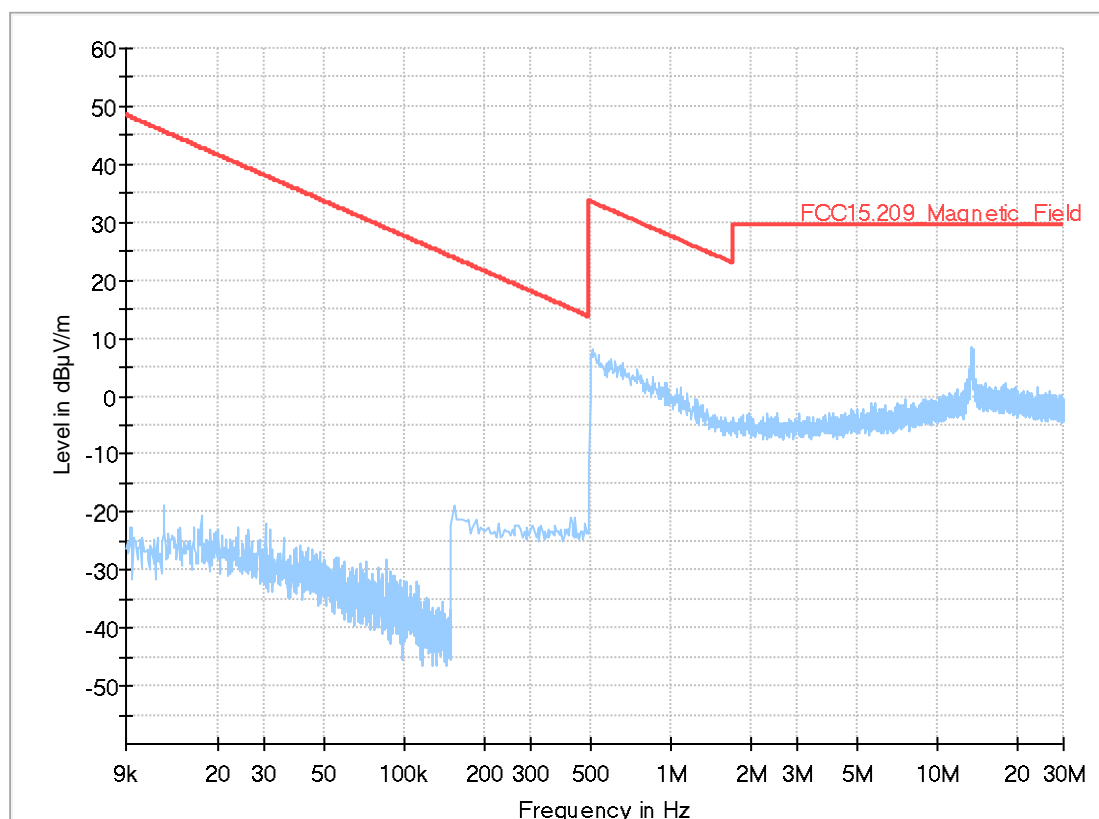
### Diagram No. 2.04a\_RMC\_LTE\_FDD5\_BW5\_RB1high\_CH20425\_laying

Date:	30.10.2017	Page 1 of 2
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	TFra	
Operating conditions:	Humidity: 52%rH; Temperature: 22°C	
Power during tests:	12V DC	
Comment 1:	BW 5MHz, 1RBhigh Modulation QPSK,CH 20425	

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 2.04b\_RMC\_LTE\_FDD5\_BW5\_RB1high\_CH20425\_standing

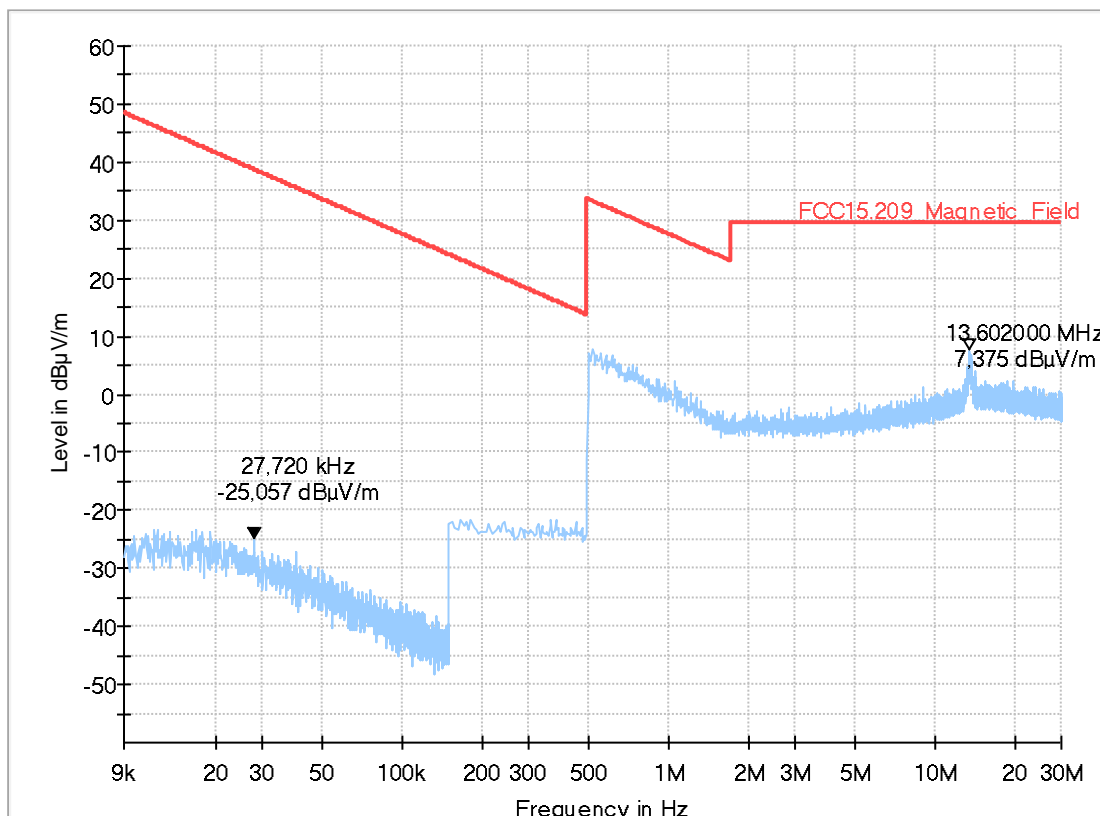
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 5MHz, 1RBhigh, Modulation QPSK, CH20425
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum





1.5.2. Emissions above 30MHz (LTE Band 5)

8.04a\_RSE\_LTE\_FDD5\_BW5\_RB1low\_QPSK\_CH20425\_laying

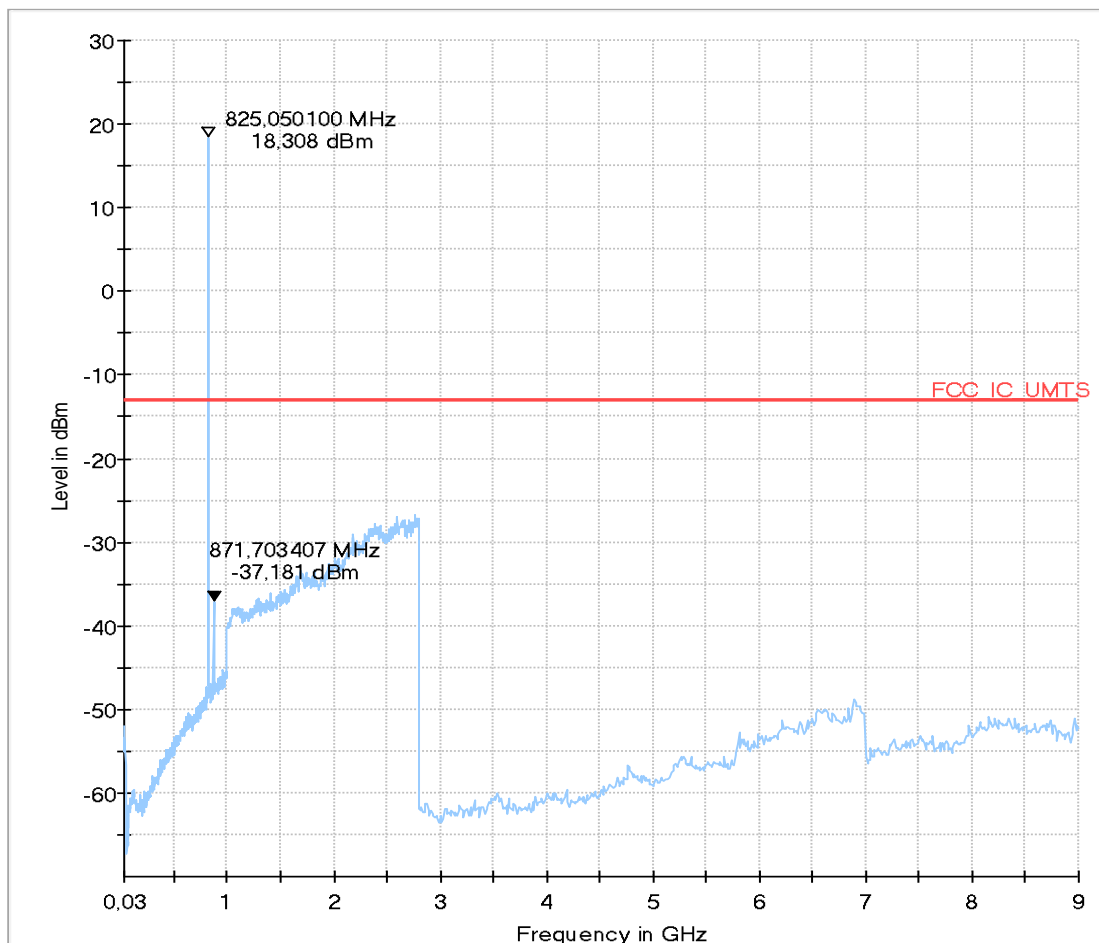
**Common Information**

Test Description:	Radiated Spurious Emissions LTE FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425/ BW:5MHz / RB:1 / Position: high
Environmental Conditions:	Humidity: 48%rH; Temperature: 20°C
Operator:	RIs
Remark:	EUT - laying position

**EUT Information**

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.04b\_RSE\_LTE\_FDD5\_BW5\_RB1low\_QPSK\_CH20425\_standing

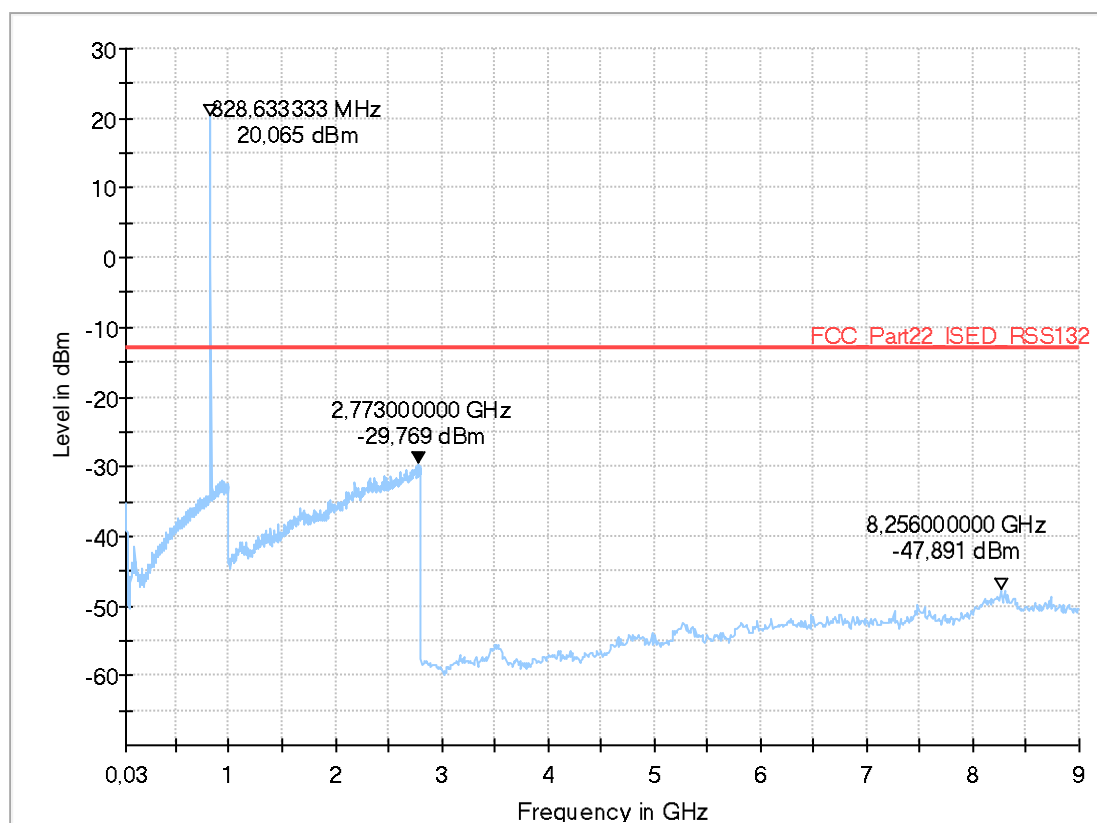
### Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	UE allocated channel 20425/ BW:5MHz / RB:1 / Position: low
Operator Name:	RIs

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



## 1.6. Spurious emissions radiated (LTE Band 7)

### 1.6.1. Magnetic field strength radiated (LTE Band 7)

#### Diagram No. 2.05a\_RMC\_LTE\_FDD7\_BW10\_RB1high\_CH20800\_laying

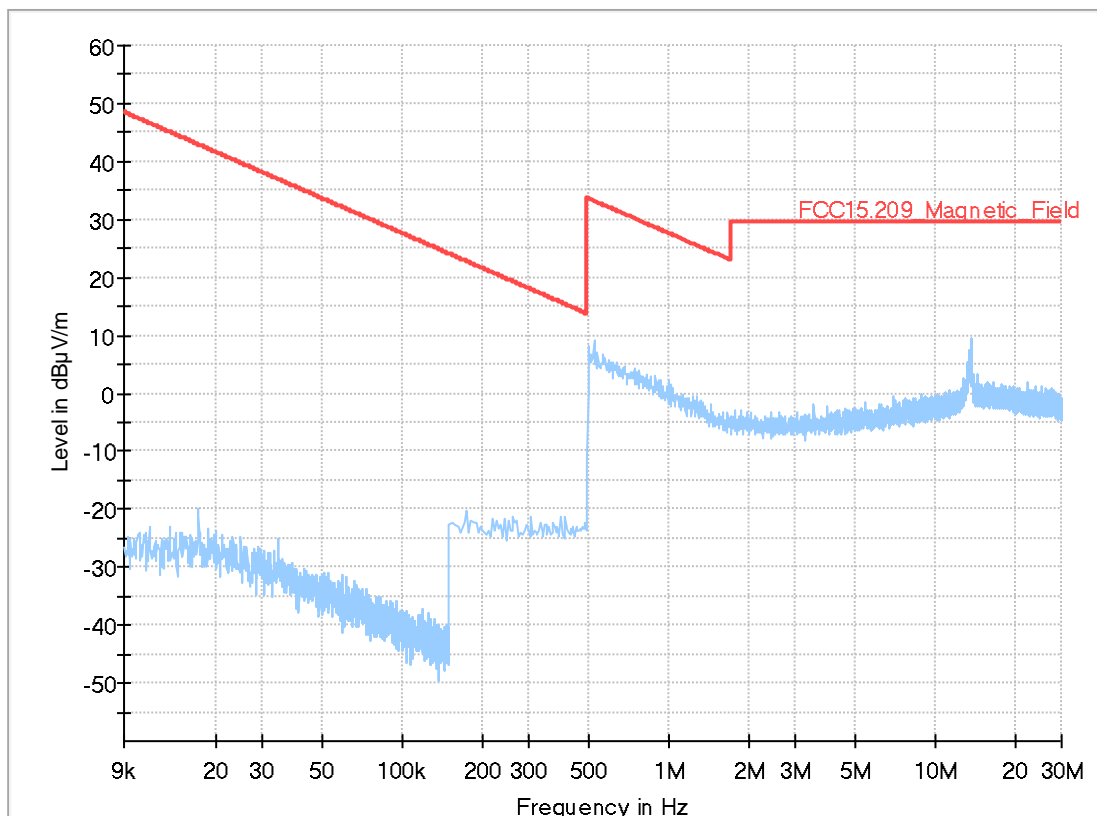
Test description:	Date: 30.10.2017 Page 1 of 2
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	TFra
Operating conditions:	Humidity: 52%rH; Temperature: 22°C
Power during tests:	12V DC
Comment 1:	BW 10MHz, 1RBhigh Modulation QPSK,CH 20800

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 2.05b\_RMC\_LTE\_FDD7\_BW10\_RB1high\_CH20800\_standing

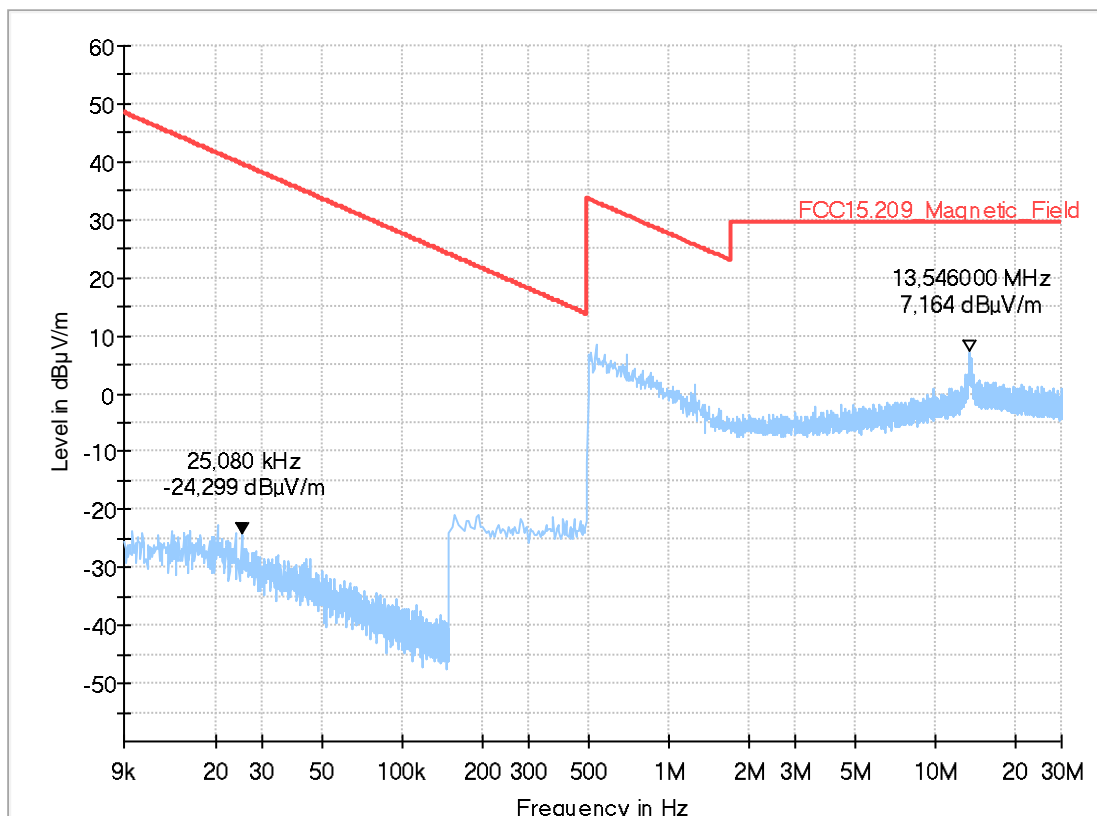
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 10MHz, RB1high, Modulation QPSK, CH20800
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



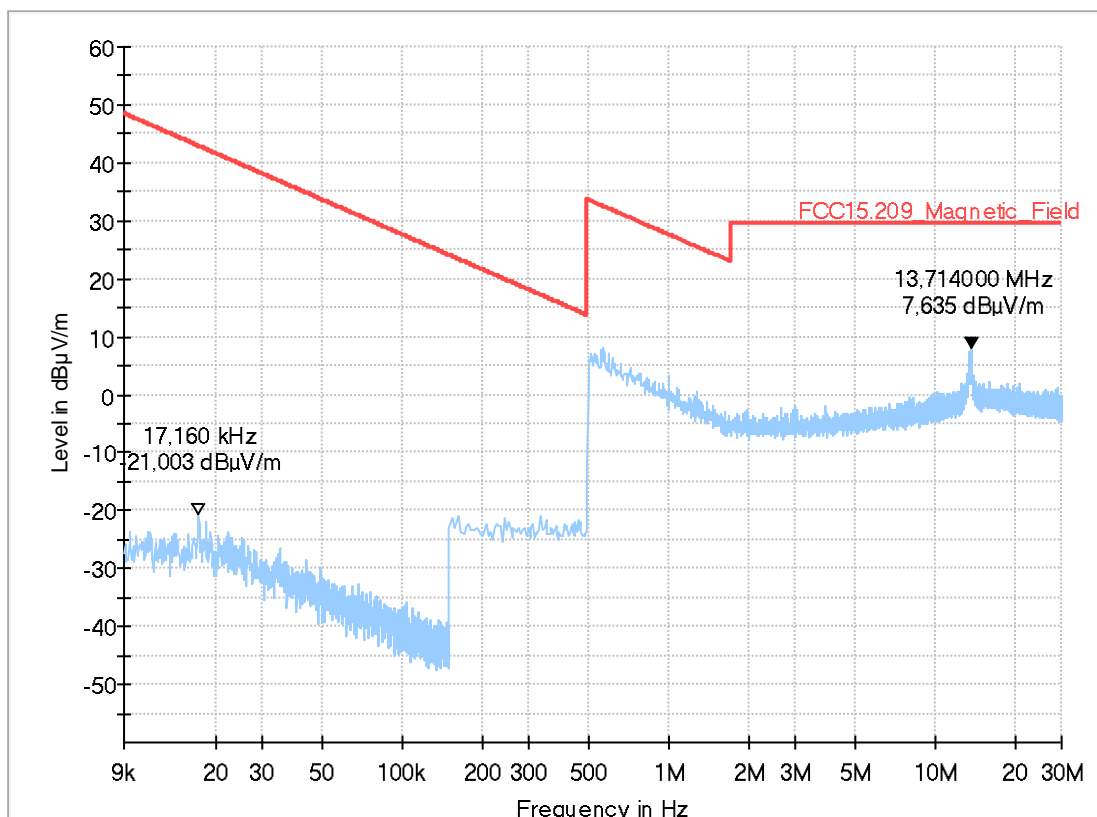
## Diagram No. 2.06a\_RMC\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_laying

<p>Date: 30.10.2017 Page 1 of 1</p> <p>Test description: Magnetic Field Strength Measurement related to 30/300 m distance</p> <p>Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance</p> <p>Version of Testsoftware: EMC32 V9.25.0</p> <p>Distance correction: used accord. table, pls. see test report</p> <p>Technical Data: Please see page 2 for detailed data of measurement setup</p> <p>Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation</p> <p>Used filter: bypass</p> <p>Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4</p>	<p>Operator: TFra</p> <p>Operating conditions: TX-on</p> <p>Power during tests: 12V DC</p> <p>Comment 1: BW 20MHz, 1RBlow, Modulation 16-QAM, CH 20850</p>
---	--

### EUT Information

<p>Manufacturer: peiker acoustic GmbH &amp; Co. KG a valeo Brand</p> <p>EUT: ATM-02-US-T1 (Sample 1010)</p> <hr/> <p>HW version: 103.004.004</p> <p>SW version: 001.009.015</p> <p>Serial number: 4326</p> <p>Connected Interfaces: Antenna (65206826326-03) + EMC Control Unit</p> <p>Power Supply: 12VDC</p> <p>Comments: -</p>
---

Full Spectrum



## 2.06b\_RMC\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_standing

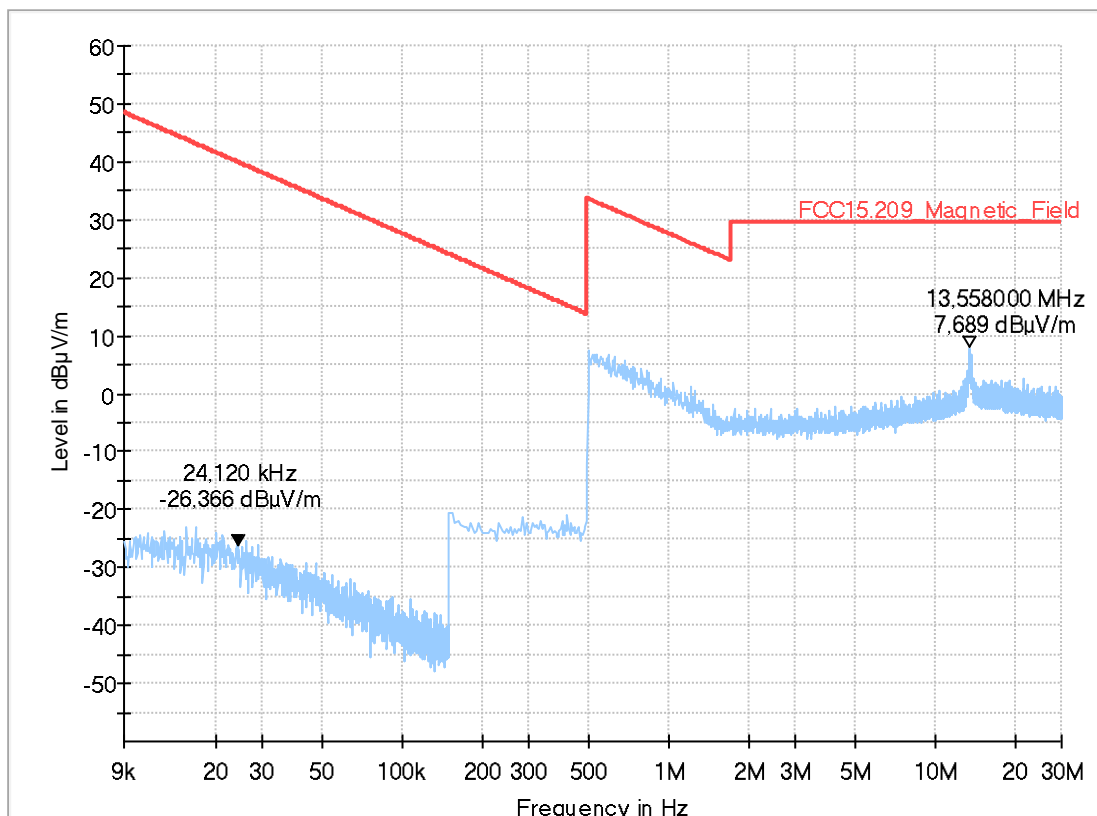
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 20MHz, RB1low, Modulation 16-QAM, CH20850
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.6.2. Emissions above 30MHz (LTE Band 7)

8.05a\_RSE\_LTE\_FDD7\_BW10\_RB1high\_QPSK\_CH20800\_30MHz\_2.8GHz-laying

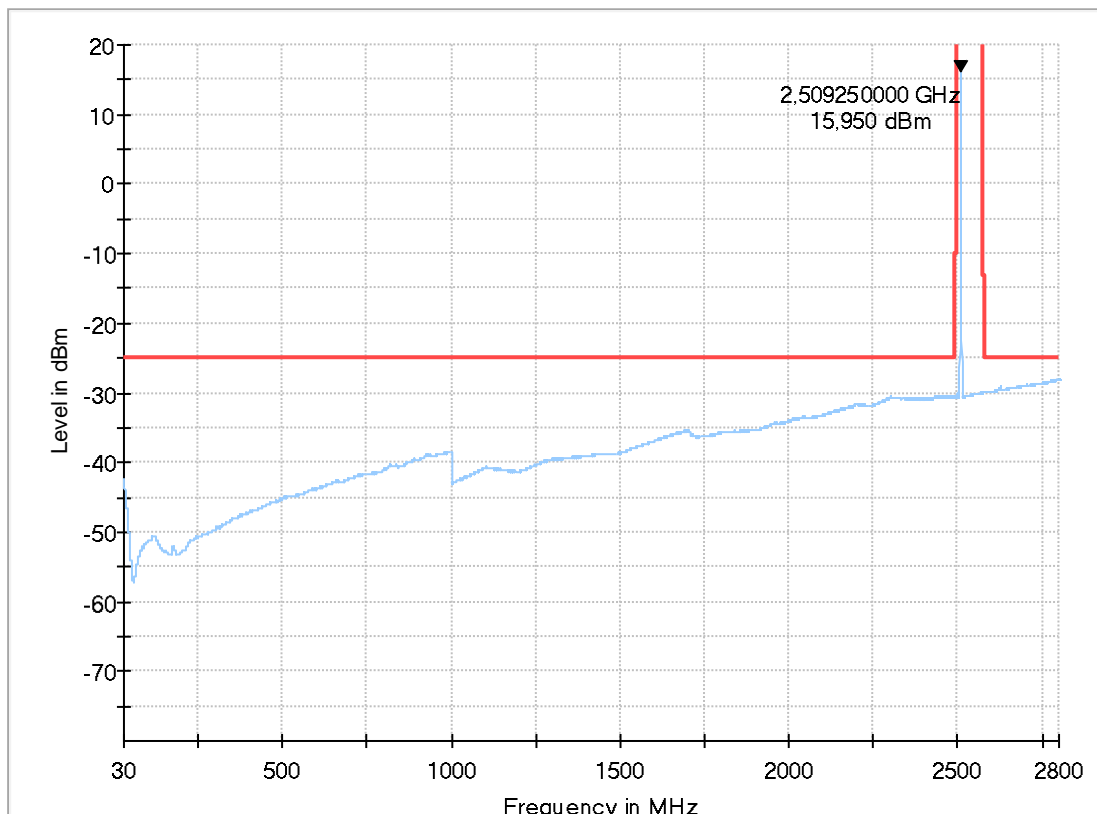
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20800/ BW: 10/ RB:1 / Position: High\modulation.QPSK
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	HEI
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.05b\_RSE\_LTE\_FDD7\_BW10\_RB1high\_QPSK\_CH20800\_30MHz\_2.8GHz -Standing

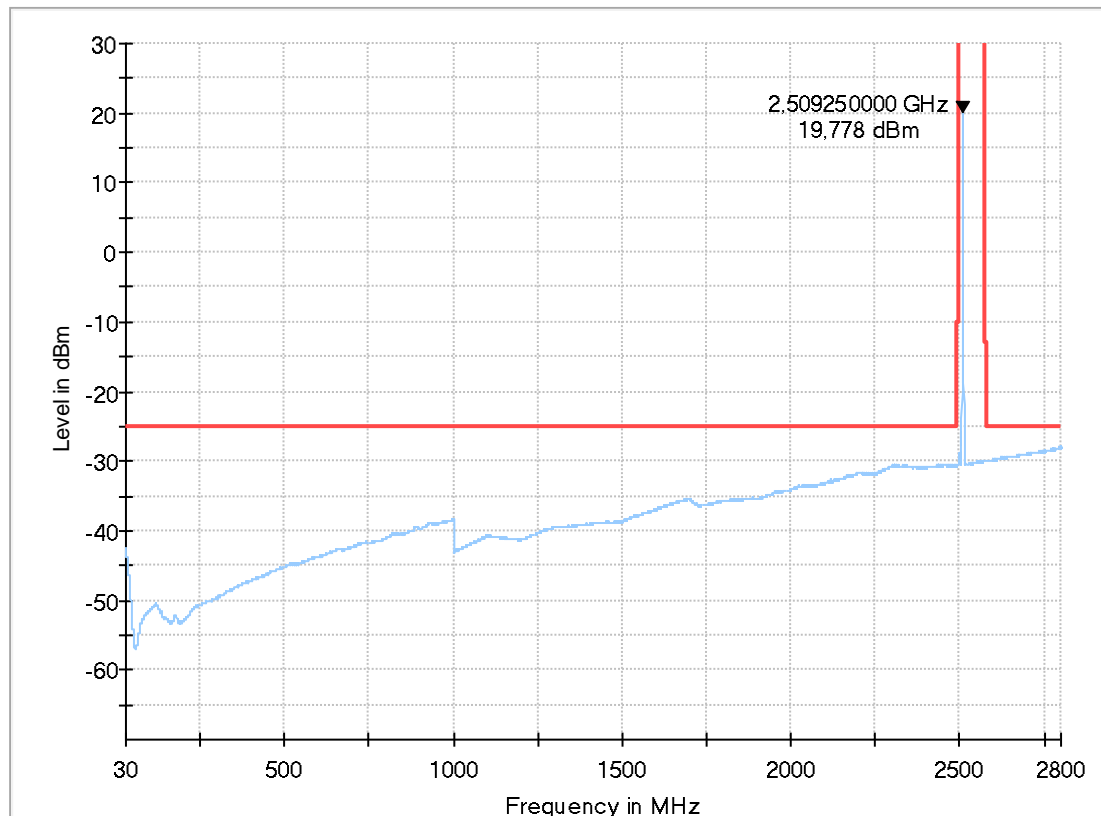
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20800/ BW: 10/ RB:1 / Position: High\modulation.QPSK
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	HEI
Remarks:	EUT - standing position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum





## 8.05a\_RSE\_LTE\_FDD7\_BW10\_RB1high\_QPSK\_CH20800\_2.8\_20G\_laying

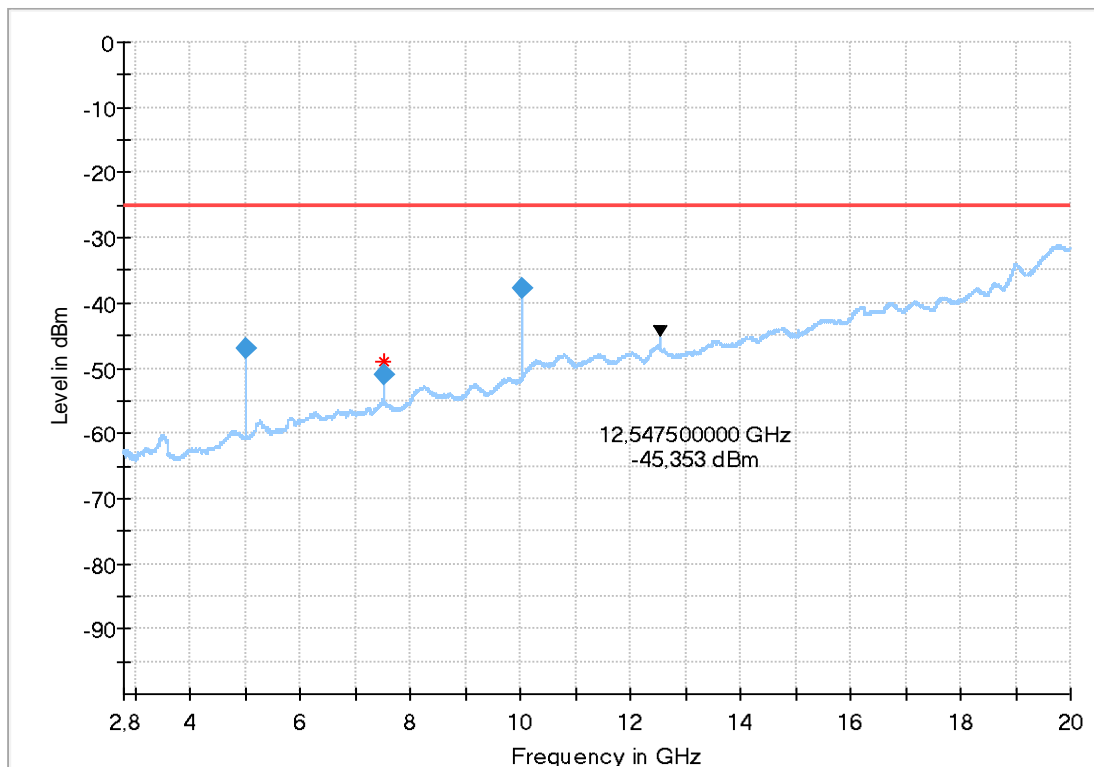
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20800/ BW: 10/ RB:1 / Position: High\modulation.QPSK
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	HEI
Remarks:	EUT - laying position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



### Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
5018.690000	-46.94	-25.00	21.94	1000.0	1000.000	155.0	V	215.0	0.0	-91.1
7528.210000	-51.12	-25.00	26.12	1000.0	1000.000	155.0	V	311.0	0.0	-83.4
10037.560000	-37.73	-25.00	12.73	1000.0	1000.000	155.0	V	1.0	0.0	-80.2

(continuation of the "Final\_Result" table from column 17 ...)

Frequency (MHz)	Comment
5018.690000	12:40:55 - 02.12.2017
7528.210000	12:43:56 - 02.12.2017
10037.560000	12:37:18 - 02.12.2017

## 8.05b\_RSE\_LTE\_FDD7\_BW10\_RB1high\_QPSK\_CH20800\_Standing

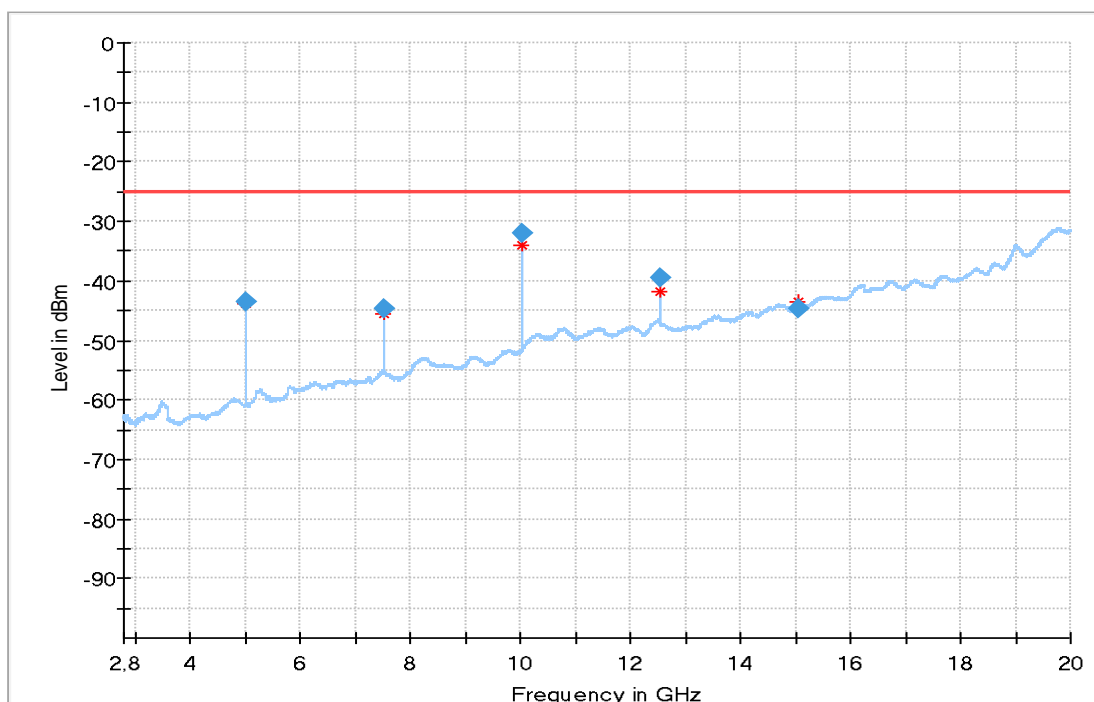
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20800/ BW: 10/ RB:1 / Position: High\modulation.QPSK
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	HEI
Remarks:	EUT - Istanding position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



### Final\_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
5018.840000	-43.38	-25.00	18.38	1000.0	1000.000	155.0	H	6.0	0.0	-91.1
7528.210000	-44.72	-25.00	19.72	1000.0	1000.000	155.0	H	298.0	0.0	-83.4
10037.650000	-32.05	-25.00	7.05	1000.0	1000.000	155.0	V	35.0	0.0	-80.2
12546.990000	-39.41	-25.00	14.41	1000.0	1000.000	155.0	V	26.0	0.0	-75.6
15056.420000	-44.76	-25.00	19.76	1000.0	1000.000	155.0	H	-4.0	0.0	-73.2

(continuation of the "Final\_Result" table from column 17 ...)

Frequency (MHz)	Comment
5018.840000	14:51:27 - 02.12.2017
7528.210000	14:58:24 - 02.12.2017
10037.650000	15:02:32 - 02.12.2017
12546.990000	15:05:22 - 02.12.2017
15056.420000	14:54:11 - 02.12.2017

## 8.06a\_RSE\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_30MHz- 2.8GHz\_laying

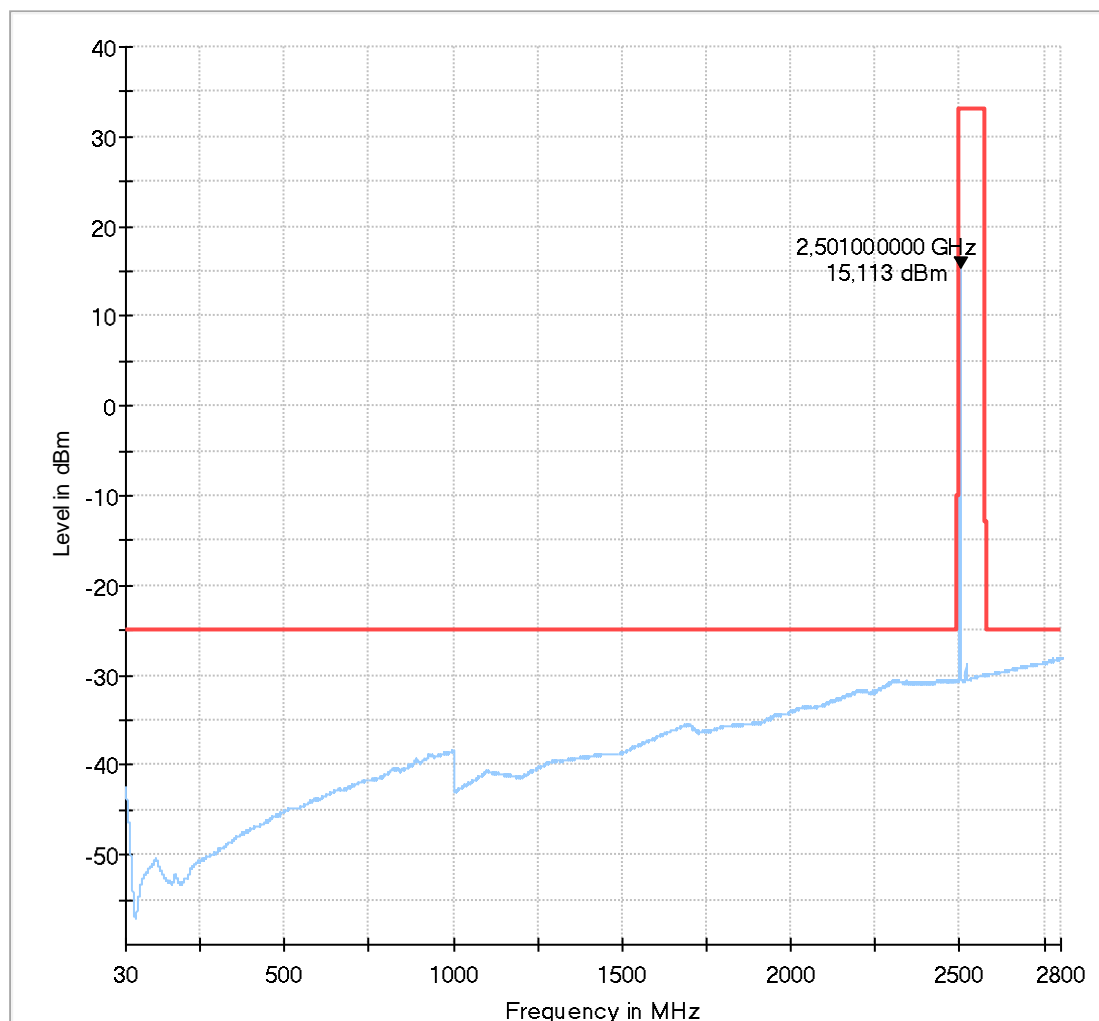
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850/ BW: 20/ RB:1 / Position:Low\modulation.16QAM
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	RI
Remarks:	EUT - laying position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	-----
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.06b\_RSE\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_30MHz\_2.8GHz\_standing

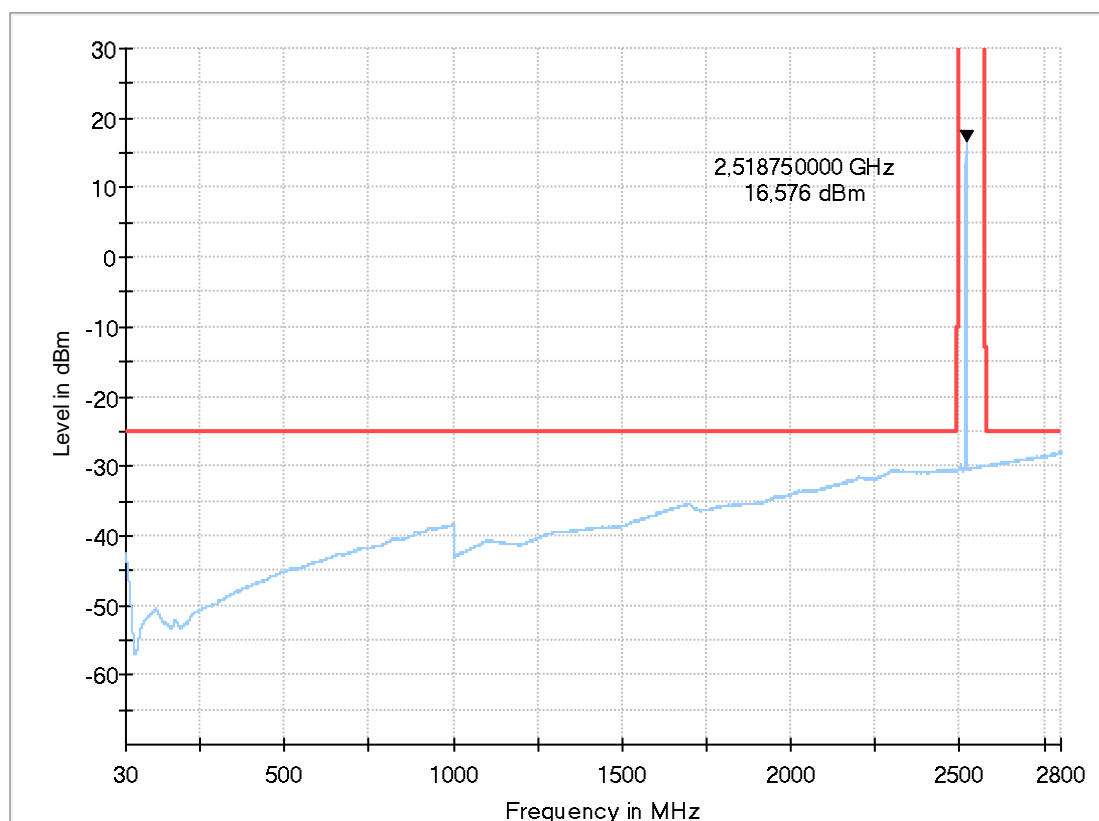
### Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850/ BW: 20/ RB:1 / Position: High\modulation.16QAM
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	HEI
Remarks:	EUT - standing position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 8.06a\_RSE\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_laying

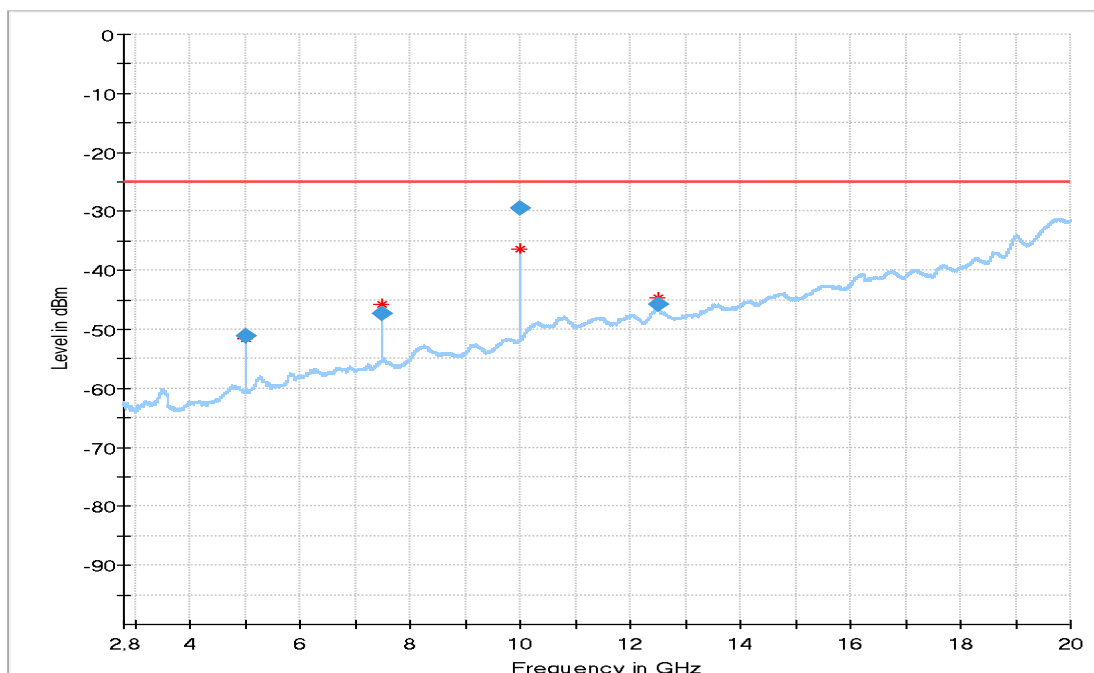
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850/ BW: 20/ RB:1 / Position:Low\modulation.16QAM
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	RIs
Kommentar:	EUT - laying position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



### Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
5002.159000	-51.19	-25.00	26.19	1000.0	1000.000	155.0	V	26.0	0.0	-91.2
7503.157250	-47.41	-25.00	22.41	1000.0	1000.000	155.0	H	18.0	0.0	-83.3
10004.332000	-29.50	-25.00	4.50	1000.0	1000.000	155.0	V	69.0	0.0	-80.7
12505.500000	-45.65	-25.00	20.65	1000.0	1000.000	155.0	V	283.0	0.0	-75.3

(continuation of the "Final\_Result" table from column 17 ...)

Frequency (MHz)	Comment
5002.159000	12:52:50 - 03.12.2017
7503.157250	12:50:03 - 03.12.2017
10004.332000	12:55:46 - 03.12.2017
12505.500000	12:59:33 - 03.12.2017

## 8.06b\_RSE\_LTE\_FDD7\_BW20\_RB1low\_16-QAM\_CH20850\_standing

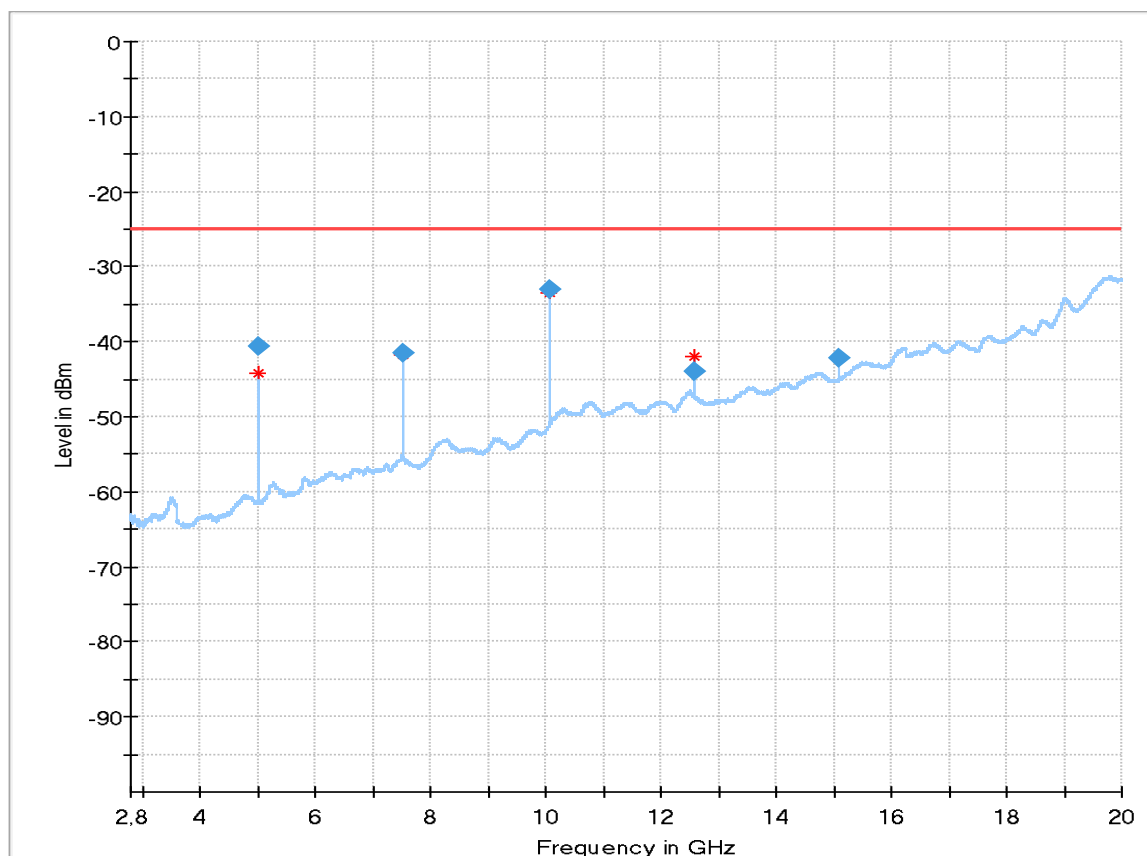
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDD7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850/ BW: 20/ RB:1 / Position:Low\modulation.16QAM
Environmental Conditions:	Humidity: 50%rH; Temperature: 25°C
Test SW Version:	EMC32 V9.26.0
Operator:	RIs
Kommentar:	EUT - standing position

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

Full Spectrum



**Final\_Result**

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
5028.900000	-40.57	-25.00	15.57	1000.0	1000.000	155.0	H	195.0	0.0	-91.1
7543.060000	-41.53	-25.00	16.53	1000.0	1000.000	155.0	H	87.0	0.0	-83.5
10057.530000	-33.10	-25.00	8.10	1000.0	1000.000	155.0	H	44.0	0.0	-79.9
12572.040000	-44.08	-25.00	19.08	1000.0	1000.000	155.0	H	175.0	0.0	-75.8
15086.520000	-42.23	-25.00	17.23	1000.0	1000.000	155.0	H	101.0	0.0	-73.1

(continuation of the "Final\_Result" table from column 17 ...)

Frequency (MHz)	Comment
5028.900000	08:28:59 - 06.03.2018
7543.060000	08:23:17 - 06.03.2018
10057.530000	08:20:23 - 06.03.2018
12572.040000	08:31:45 - 06.03.2018
15086.520000	08:25:57 - 06.03.2018

## 1.7. Spurious emissions radiated (LTE Band 12)

### 1.7.1. Magnetic field strength radiated(LTE Band 12)

#### Diagram No.

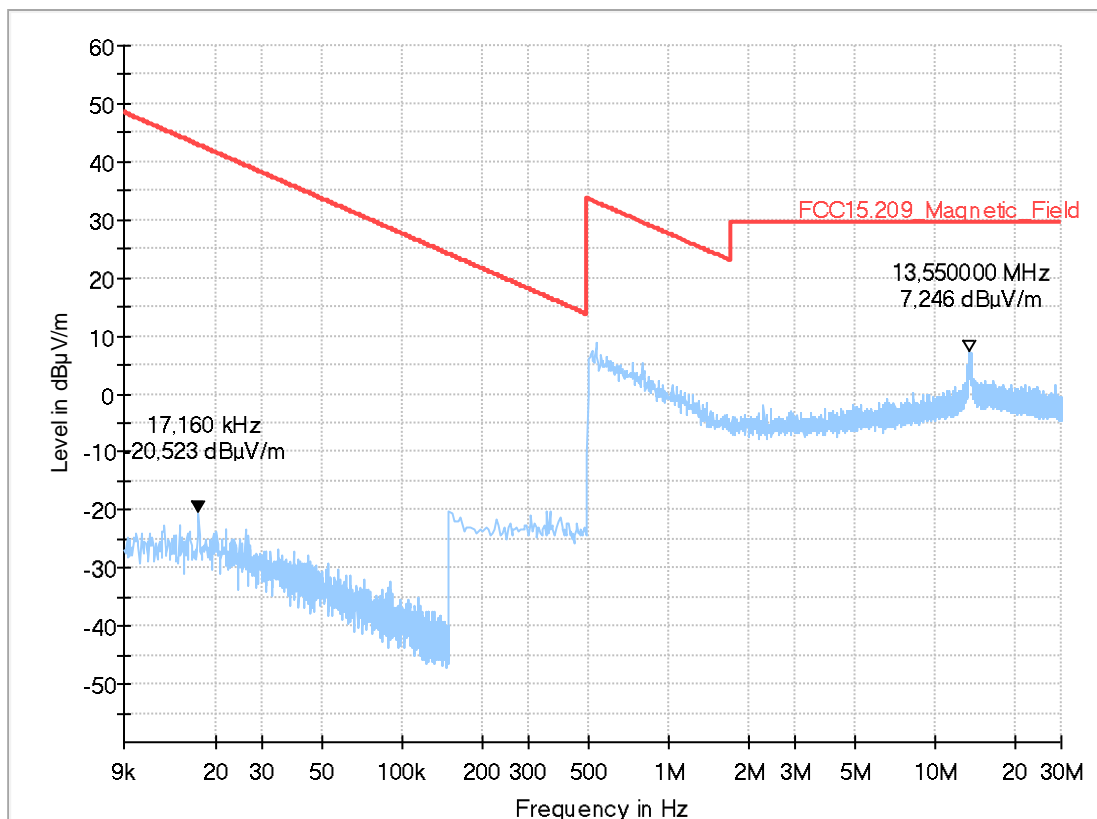
#### 2.07a\_RMC\_LTE\_FDD12\_BW5\_RB1high\_QPSK\_CH23035\_laying

Test description:	Date: 30.10.2017 Page 1 of 1
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFra
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	BW 5MHz, 1RBhigh, Modulation QPSK, CH 23035

#### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum





## 2.07b\_RMC\_LTE\_FDD12\_BW5\_RB1high\_QPSK\_CH23035\_standing

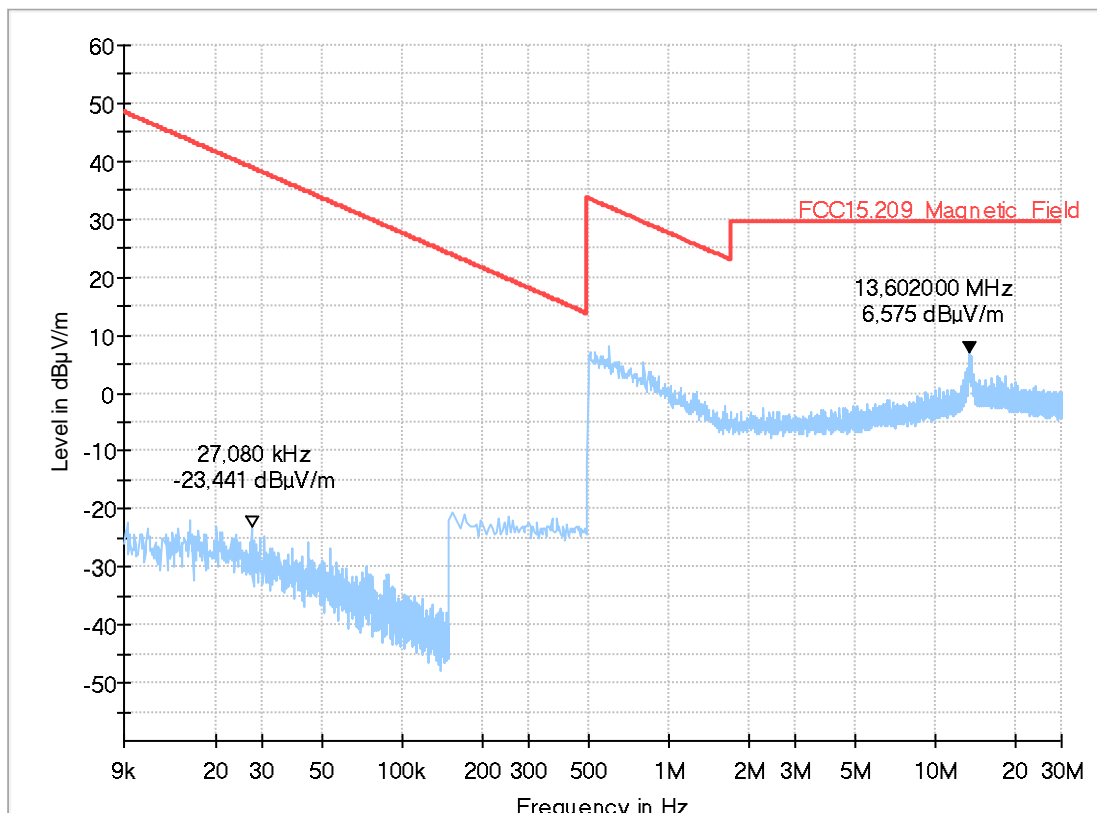
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 5MHz, 1RBhigh, Modulation QPSK, CH23035
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



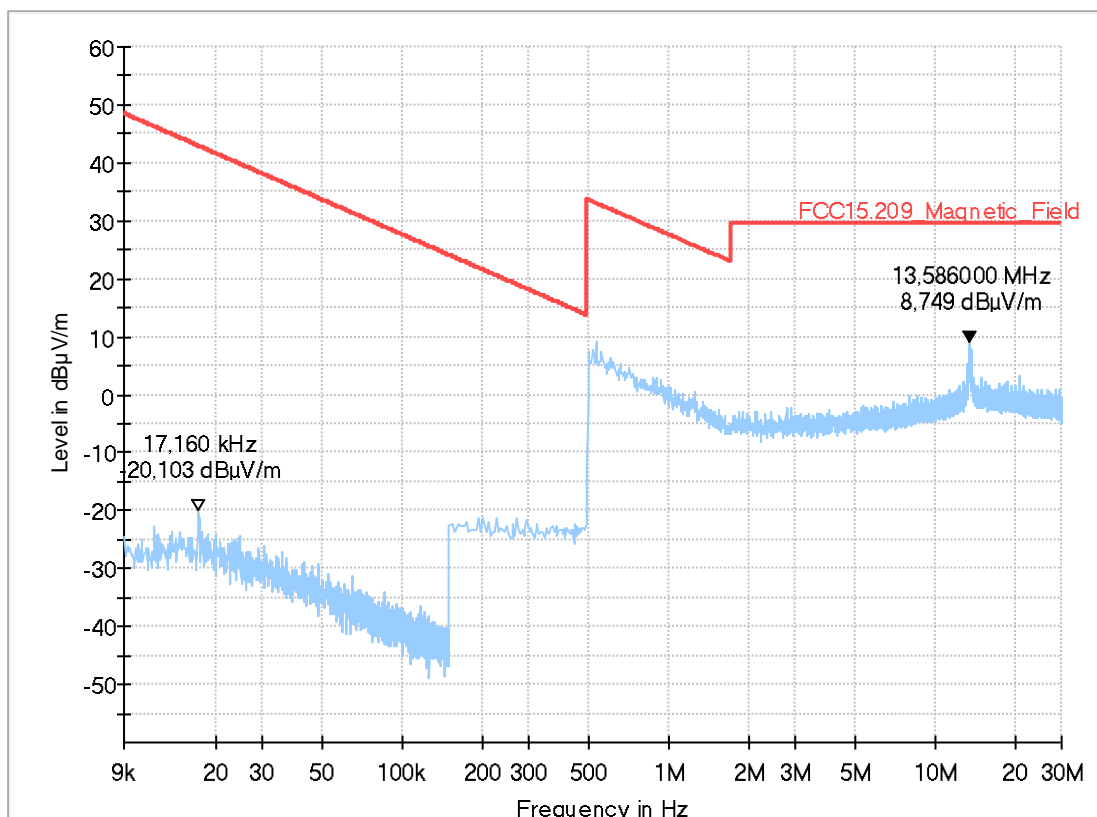
## Diagram No. 2.08a\_RMC\_LTE\_FDD12\_BW5\_RB100%\_16-QAM\_CH23155\_laying

Test description:	Date: 30.10.2017 Page 1 of 1
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFra
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	BW 5MHz, 25RBhigh, Modulation 16-QAM, CH 23155

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 2.08b\_RMC\_LTE\_FDD12\_BW5\_RB100%\_16-QAM\_CH23155\_standing

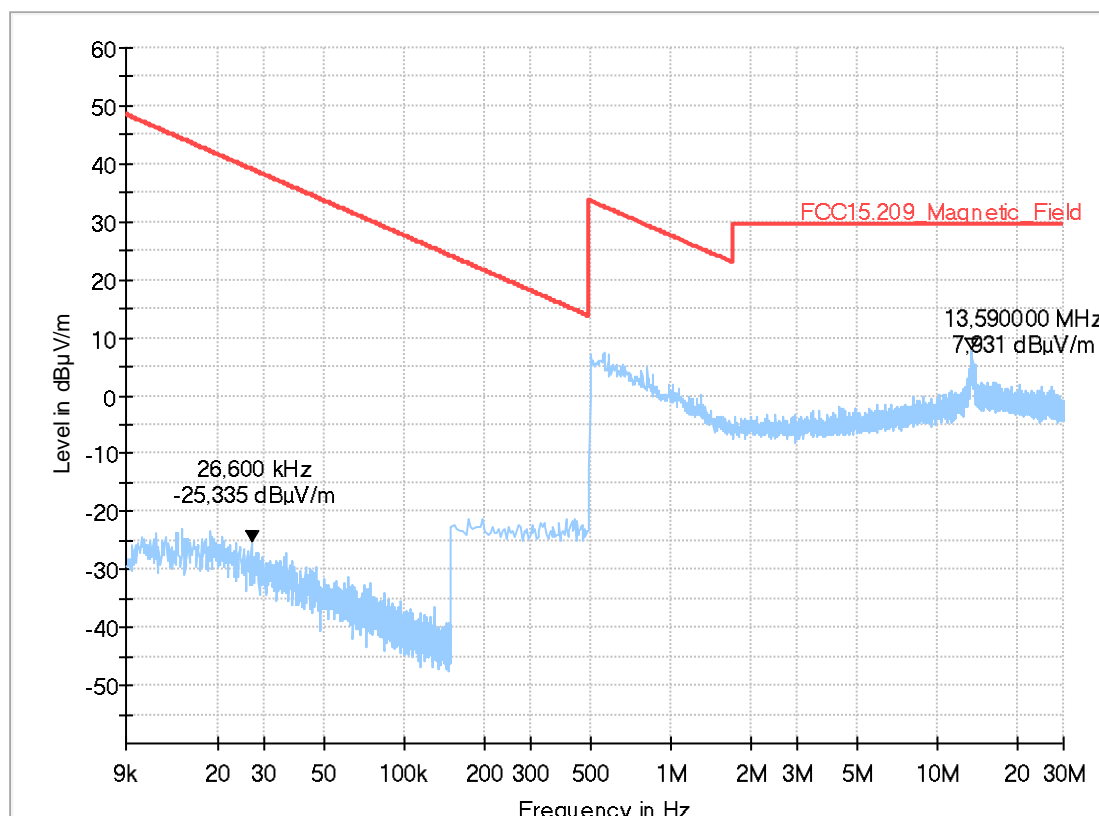
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	MBe
Operating conditions:	Humidity: 52%rH; Temperature: 20°C
Power during tests:	12V DC
Comment 1:	BW 5MHz, RB100%, Modulation 16-QAM, CH23155
Comment 2:	standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.7.2. Emissions above 30MHz (LTE Band 12)

Diagram

No.:8.07a\_RSE\_LTE\_FDD12\_BW5\_RB1high\_QPSK\_CH23035\_laying

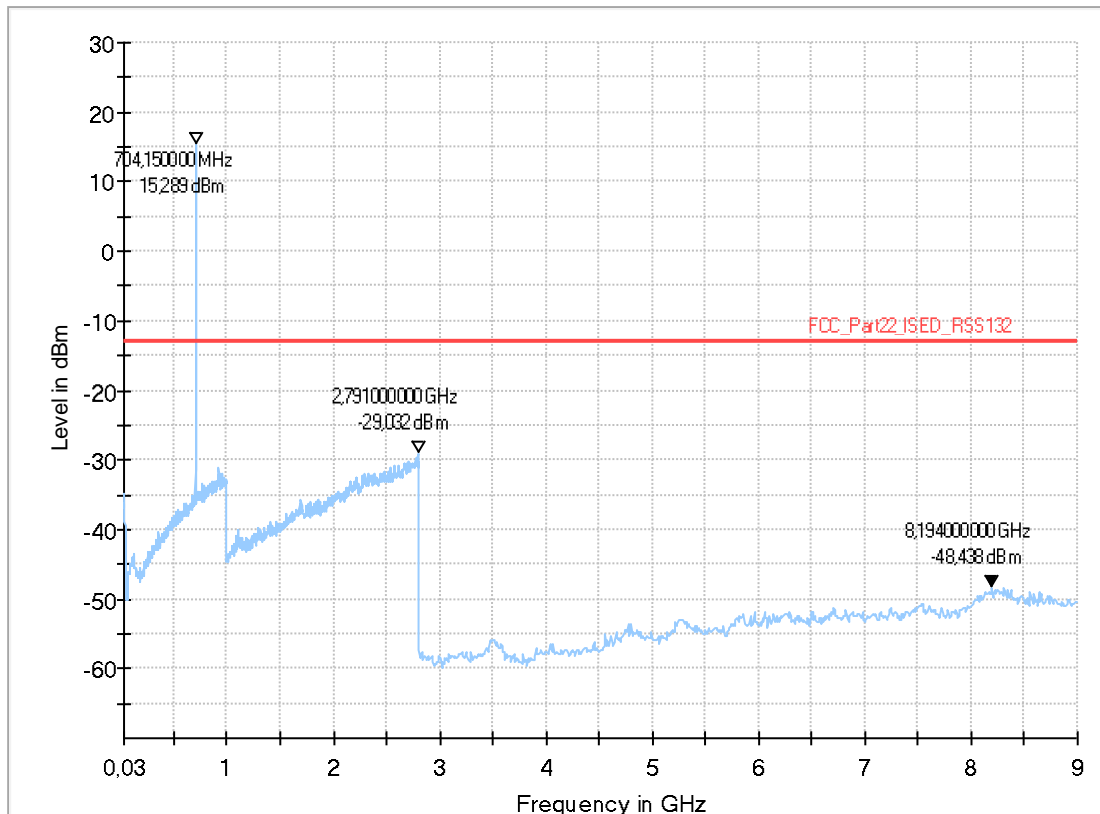
Common Information

Test Description:	Radiated Spurious Emissions LTE FDDXII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.26.0
Test Standard:	ETSI EN301908-1
Test Case:	TC4.2.2 TCH
Operating Mode:	UE allocated channel 23035 (fc =701,5 MHz); Channel Bandwidth: 5MHz; # RB: 1; RB Pos: high; Modulation: QPSK
Exclusion Band:	fc-25MHz < f < fc+25MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 20°C
Operator:	SLo
Comments:	DUT is laying

EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## Diagram

### No.:8.07b\_RSE\_LTE\_FDD12\_BW5\_RB1high\_QPSK\_CH23035\_standing

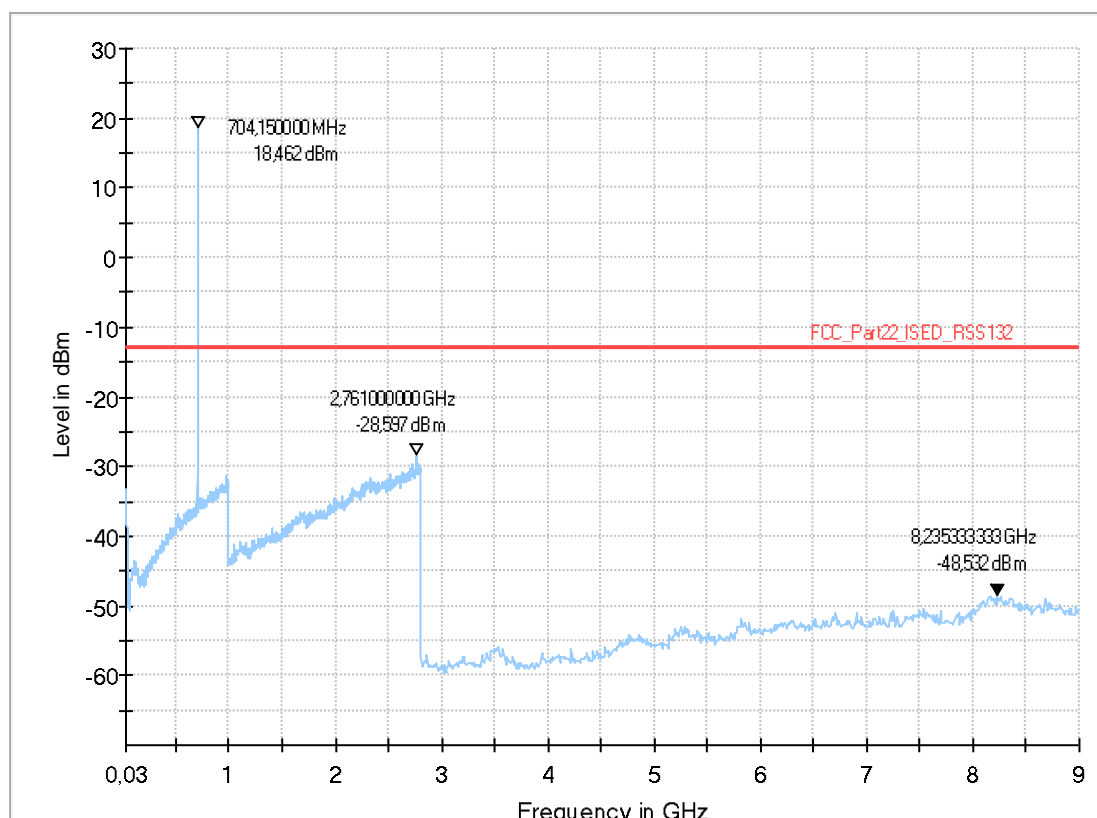
#### Common Information

Test Description:	Radiated Spurious Emissions LTE FDDXII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.26.0
Test Standard:	ETSI EN301908-1
Test Case:	TC4.2.2 TCH
Operating Mode:	UE allocated channel 23035 (fc =701,5 MHz); Channel Bandwidth: 5MHz; # RB: 1; RB Pos: high; Modulation: QPSK
Exclusion Band:	fc-25MHz < f < fc+25MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 20°C
Operator:	SLo
Comments:	DUT is standing

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC

#### Full Spectrum



## Diagram No.:8.08a\_RSE\_LTE\_FDD12\_BW5\_RB1low\_16-QAM\_CH23155\_laying

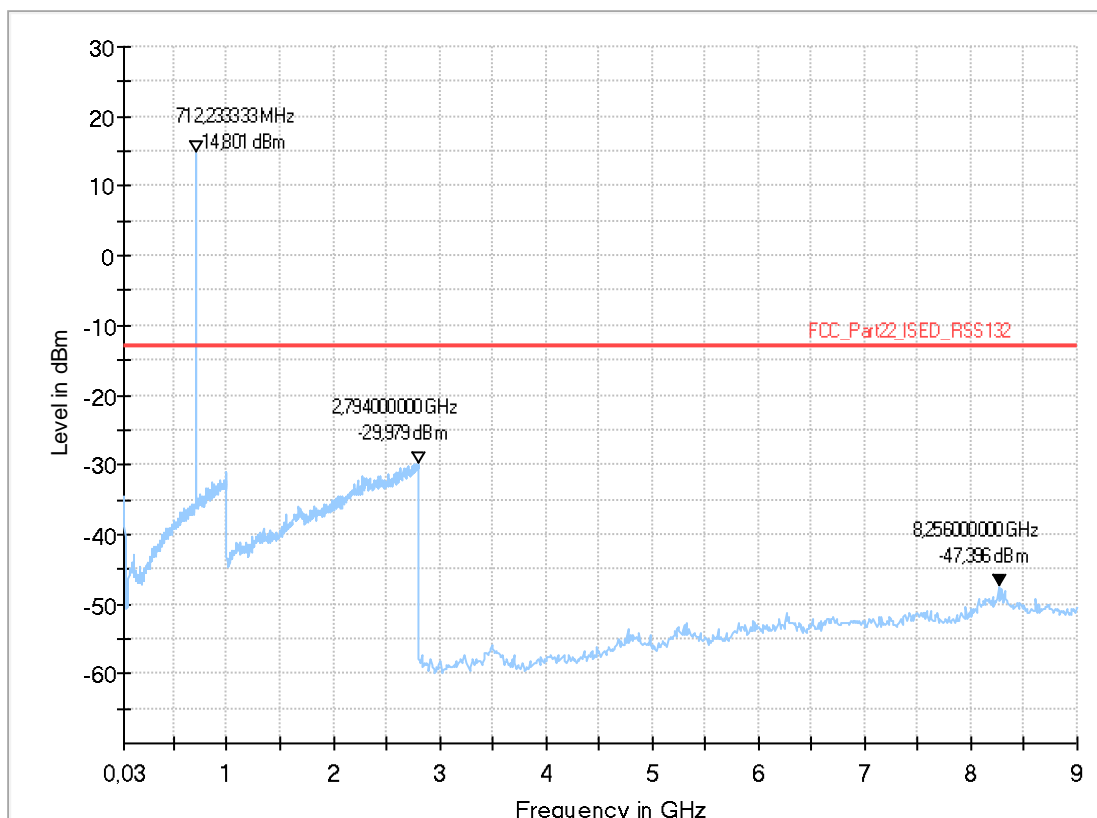
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDDXII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.26.0
Test Standard:	ETSI EN301908-1
Test Case:	TC4.2.2 TCH
Operating Mode:	UE allocated channel 23155 (fc =713,5 MHz); Channel Bandwidth: 5MHz; # RB: 1; RB Pos: low; Modulation: 16QAM
Exclusion Band:	fc-25MHz < f < fc+25MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 20°C
Operator:	SLo
Comments:	DUT is laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## Diagram No.:8.08b\_RSE\_LTE\_FDD12\_BW5\_RB1low\_16-QAM\_CH23155\_standing

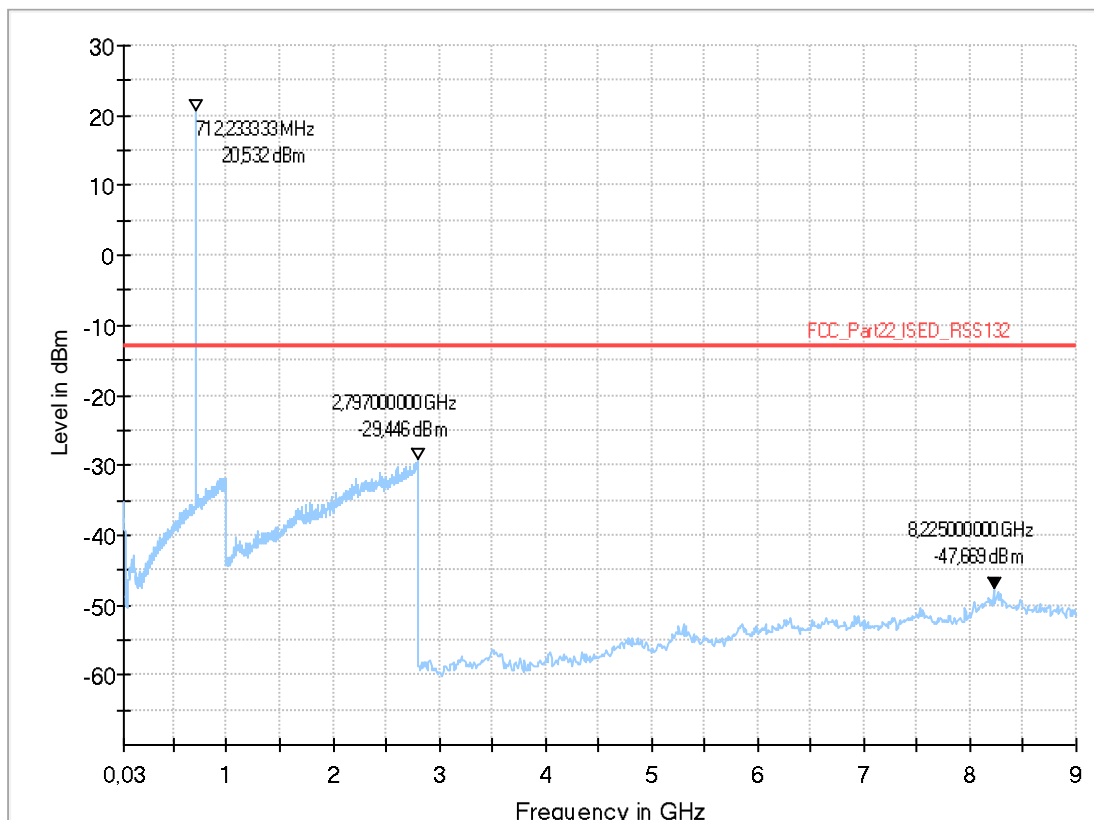
### Common Information

Test Description:	Radiated Spurious Emissions LTE FDDXII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR) - EMC32 V9.26.0
Test Standard:	ETSI EN301908-1
Test Case:	TC4.2.2 TCH
Operating Mode:	UE allocated channel 23155 (fc =713,5 MHz); Channel Bandwidth: 5MHz; # RB: 1; RB Pos: low; Modulation: 16QAM
Exclusion Band:	fc-25MHz < f < fc+25MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 20°C
Operator:	SLO
Comments:	DUT is standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG a valeo Brand
EUT:	ATM-02-US-T1 (Sample 1010)
-----	
HW version:	103.004.004
SW version:	001.009.015
Serial number:	4326
Connected Interfaces:	Antenna (65206826326-03) + EMC Control Unit
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 1.8. Radiated emissions – band-edge (LTE Band 2)

### 1.8.1. Low Band-Edge

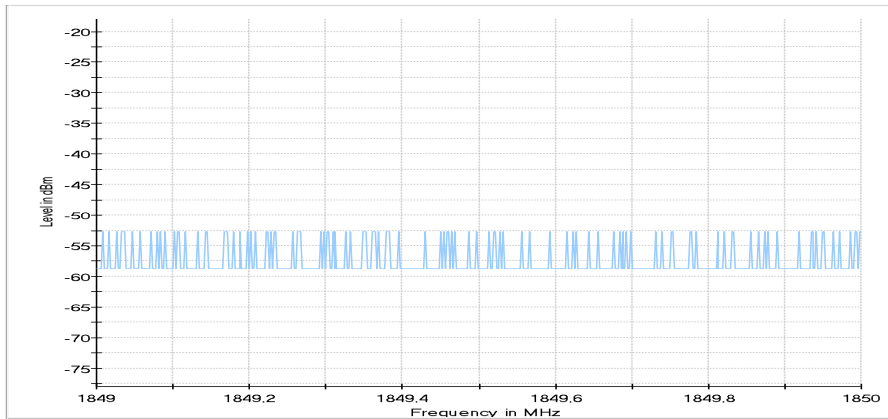


Diagram 1: 9.201a\_Ch\_18607\_BW1.4\_RB1\_low\_QPSK\_Laying

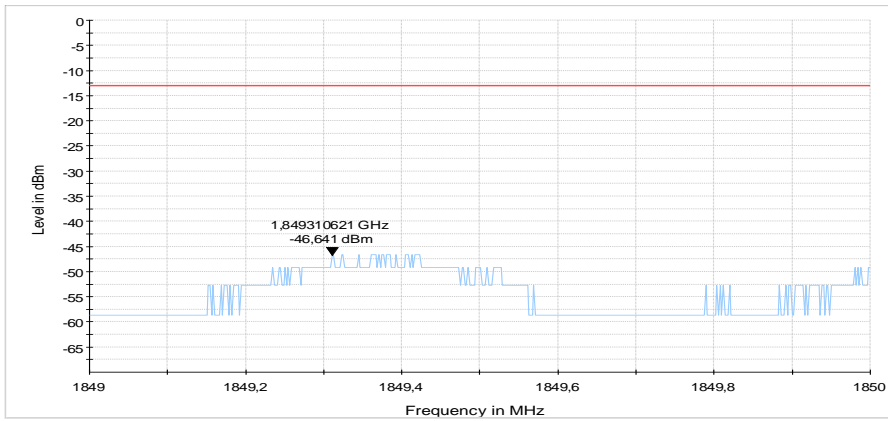


Diagram 2: 9.201a\_Ch\_18607\_BW1.4\_RB1\_low\_QPSK\_Standing

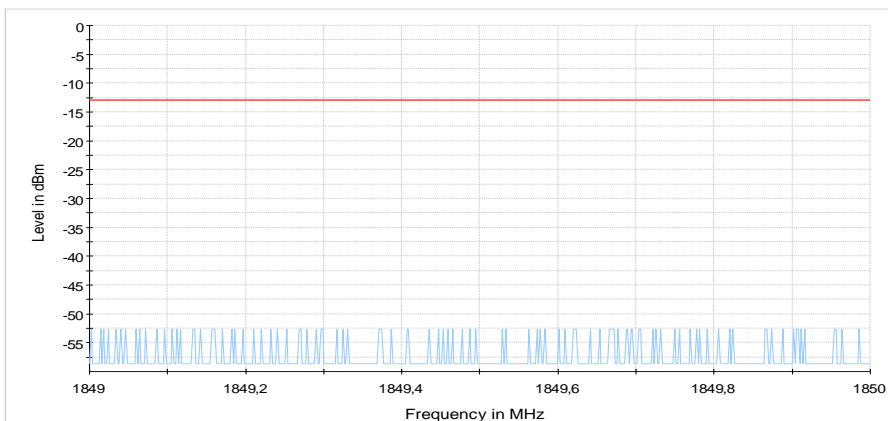
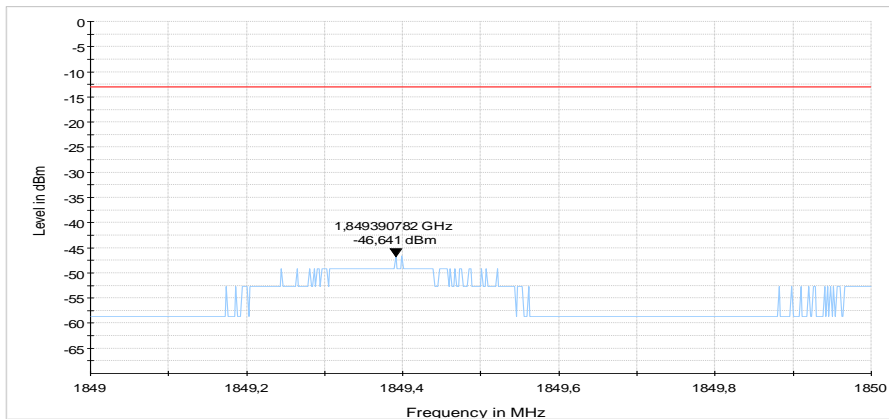
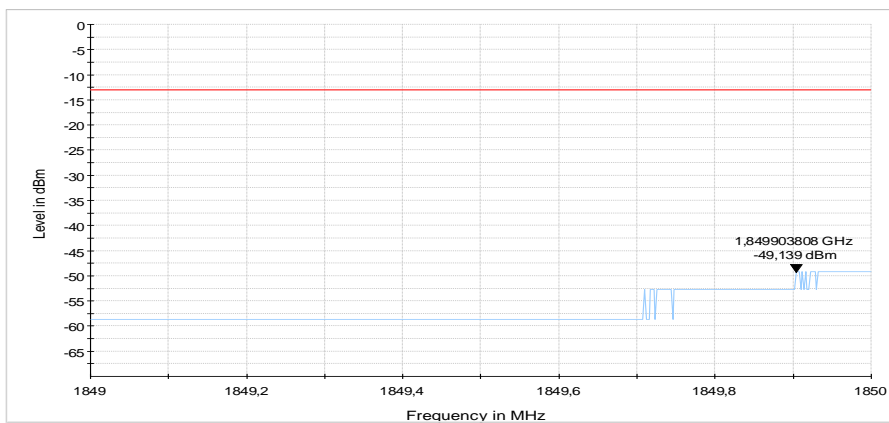
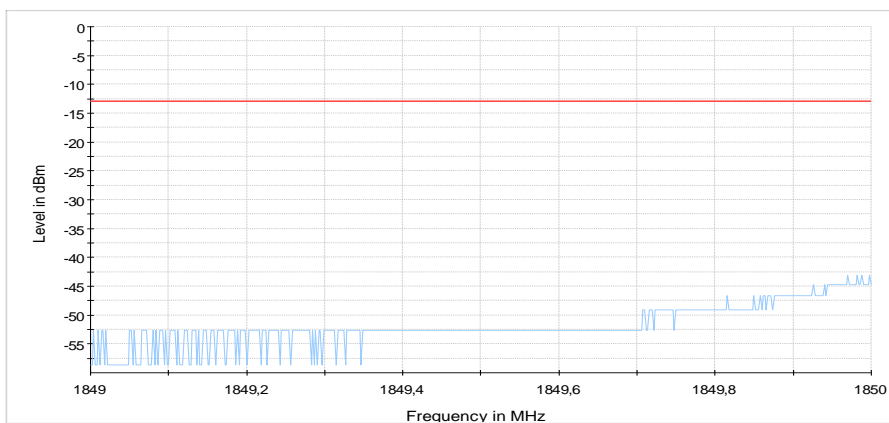
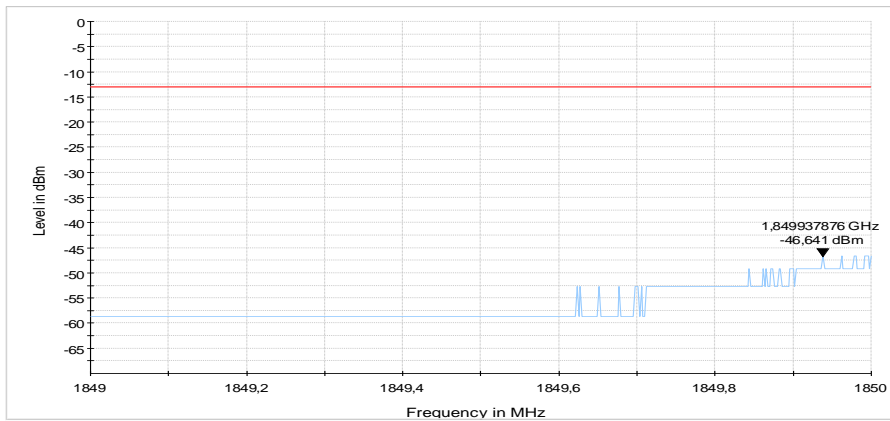


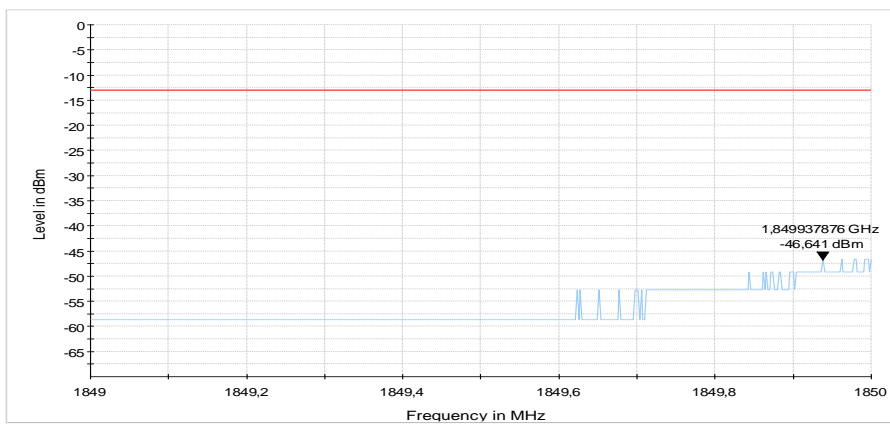
Diagram 3: 9.201b\_Ch\_18607\_BW1.4\_RB1\_low\_16QAM\_Laying



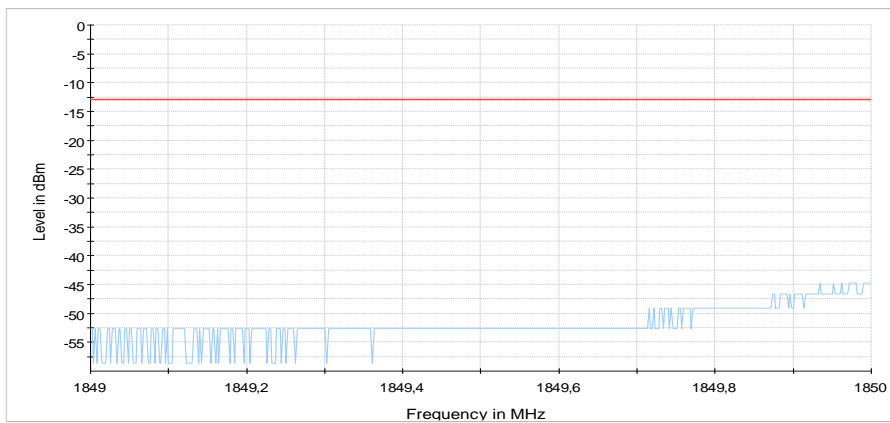
**Diagram 4: 9.201bCh\_18607\_BW1.4\_RB1\_low\_QAM\_Standing****Diagram 5: 9.202a\_Ch\_18607\_BW1.4\_RB6\_low\_QAM\_Standing****Diagram 6: 9.202a\_Ch\_18607\_BW1.4\_RB6\_low\_QPSK\_Laying**



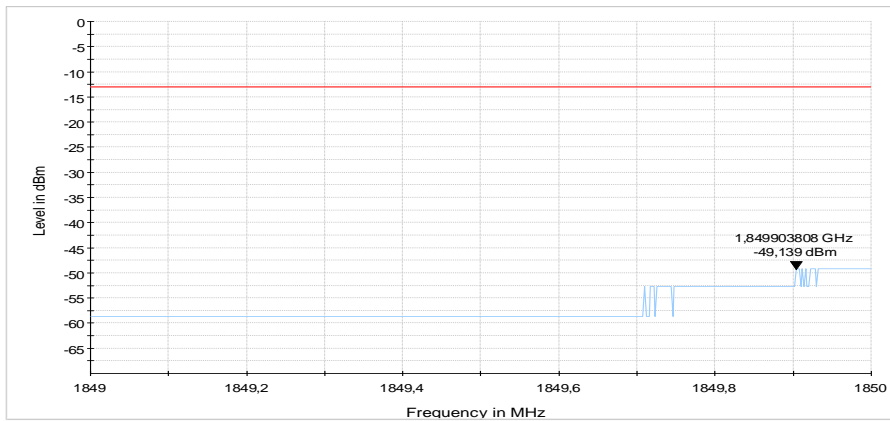
**Diagram 7: 9.202a\_Ch\_18607\_BW1.4\_RB6\_low\_QPSK\_Standing**



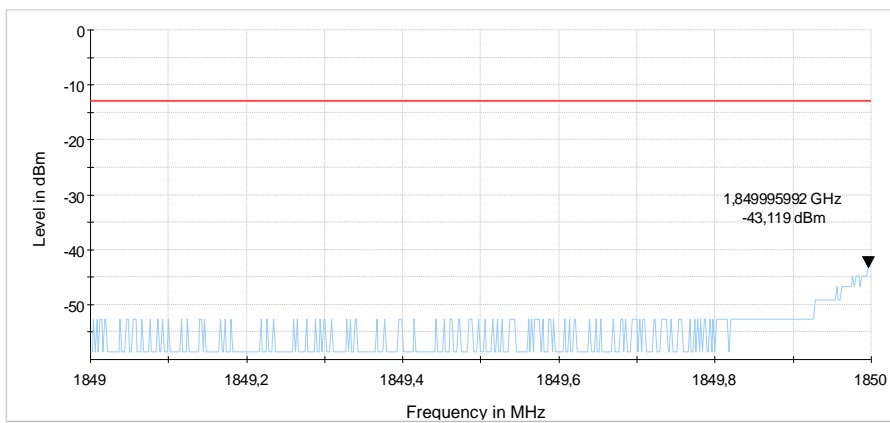
**Diagram 8: 9.202a\_Ch\_18607\_BW1.4\_RB6\_low\_QPSK\_Standing**



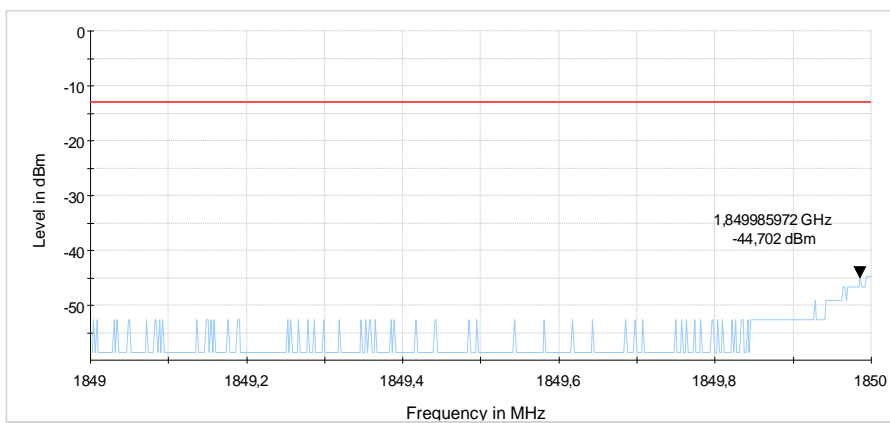
**Diagram 9: 9.202b\_Ch\_18607\_BW1.4\_RB6\_low\_16QAM\_Laying**



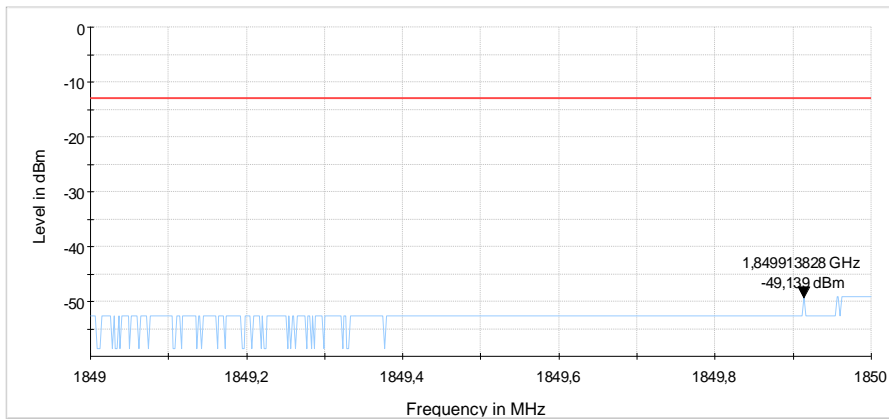
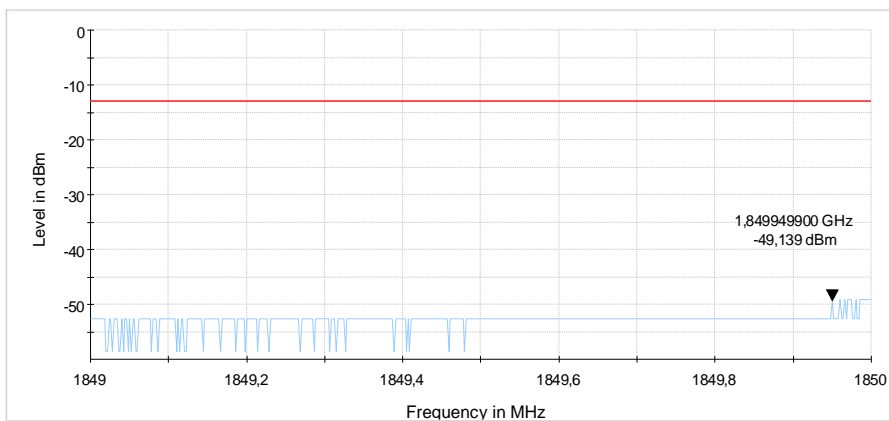
**Diagram 10: 9.202b\_Ch\_18607\_BW1.4\_RB6\_low\_QAM\_Standing**



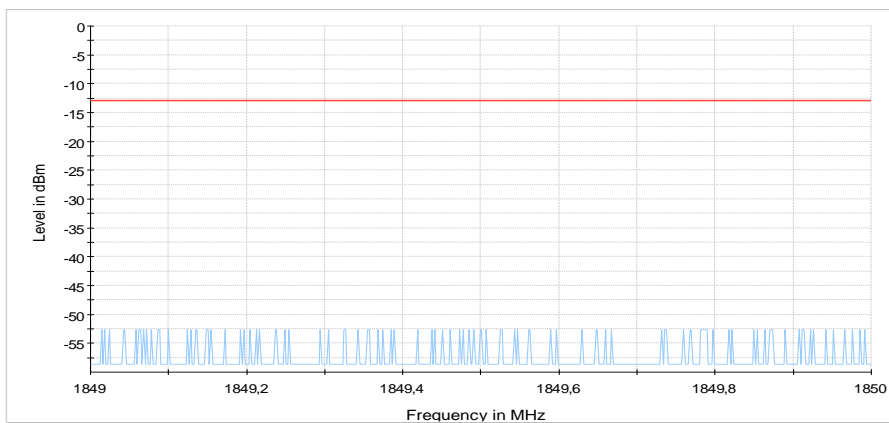
**Diagram 11: 9.203a\_Ch\_18615\_BW3\_RB1\_low\_QPSK\_Standing**

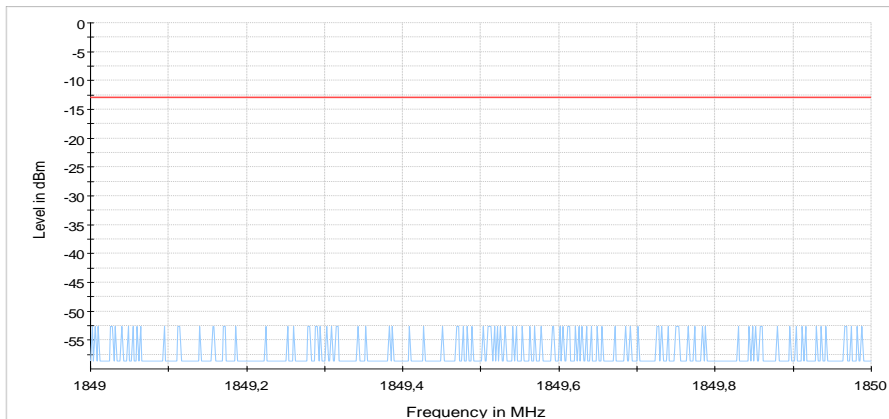
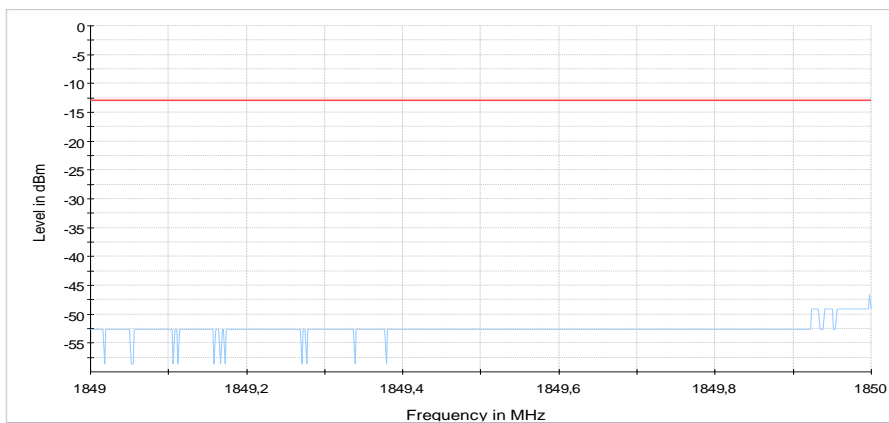
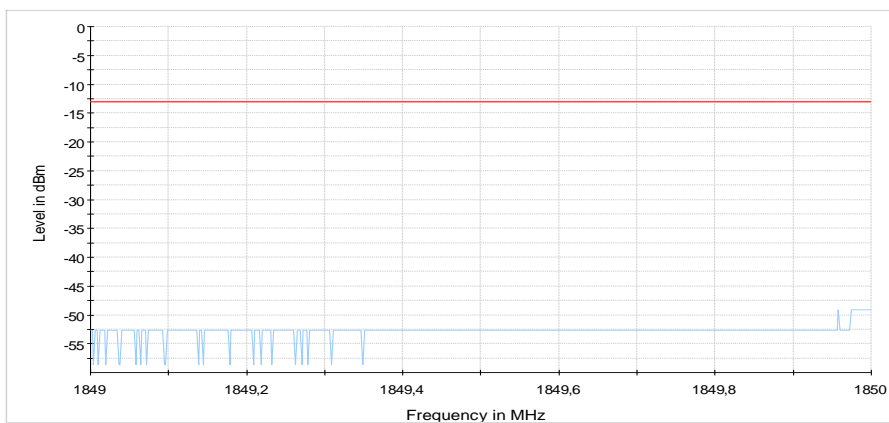


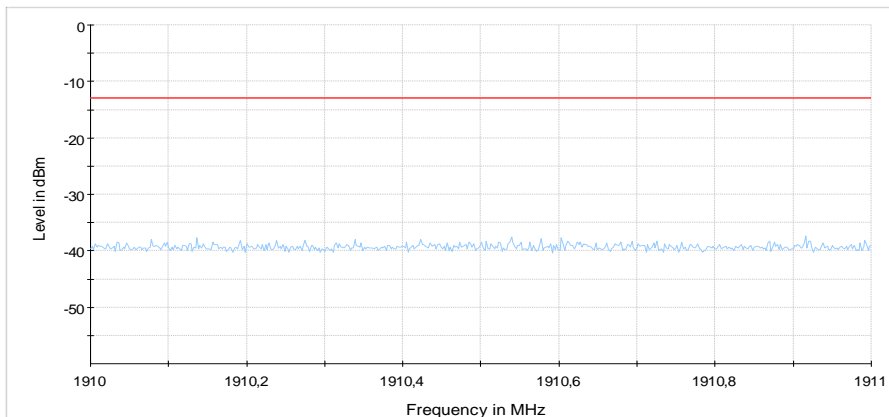
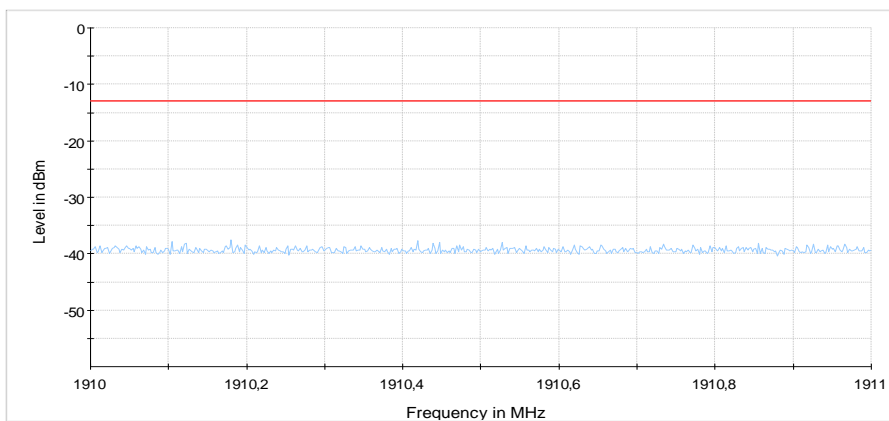
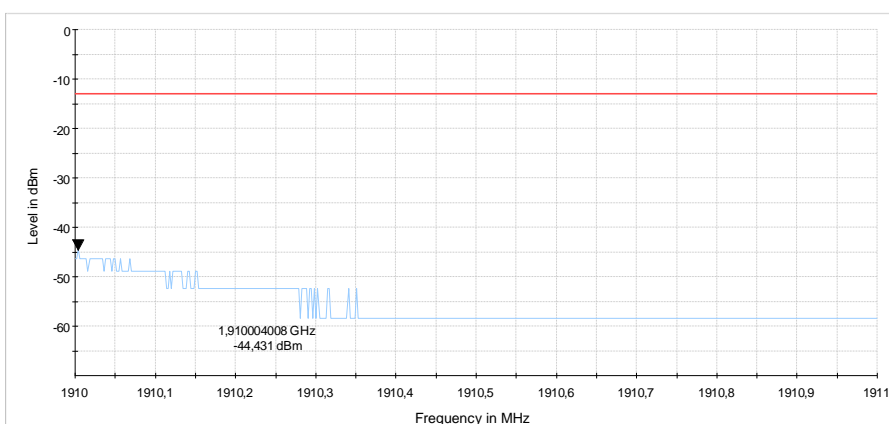
**Diagram 12: 9.203b\_Ch\_18615\_BW3\_RB1\_low\_16-QAM\_Standing**

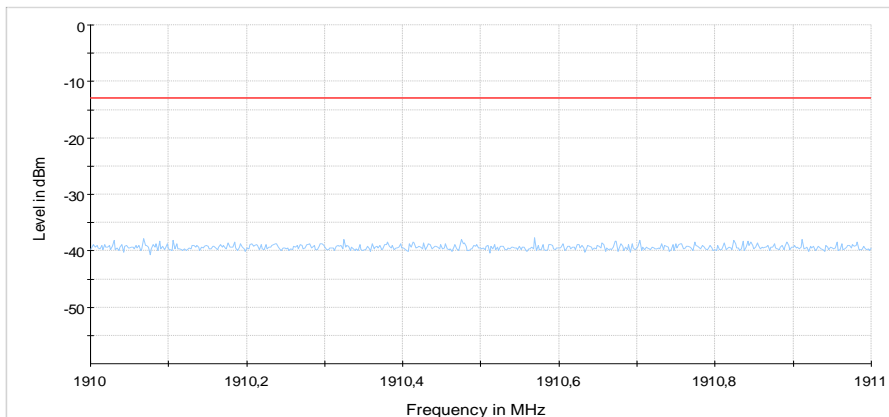
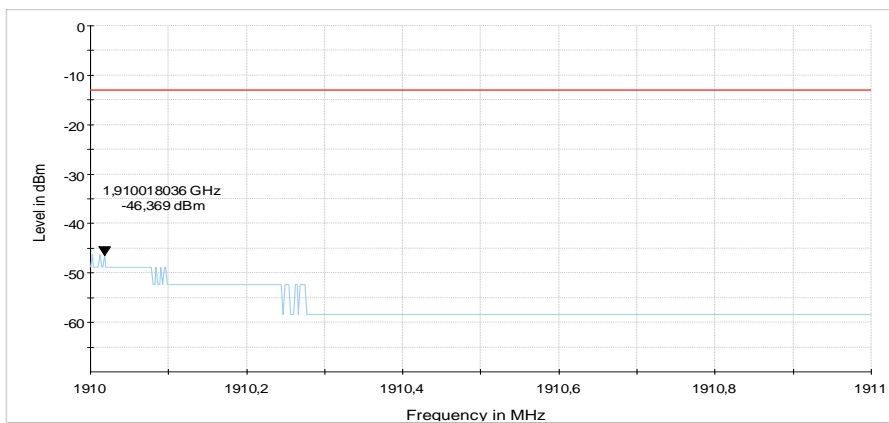
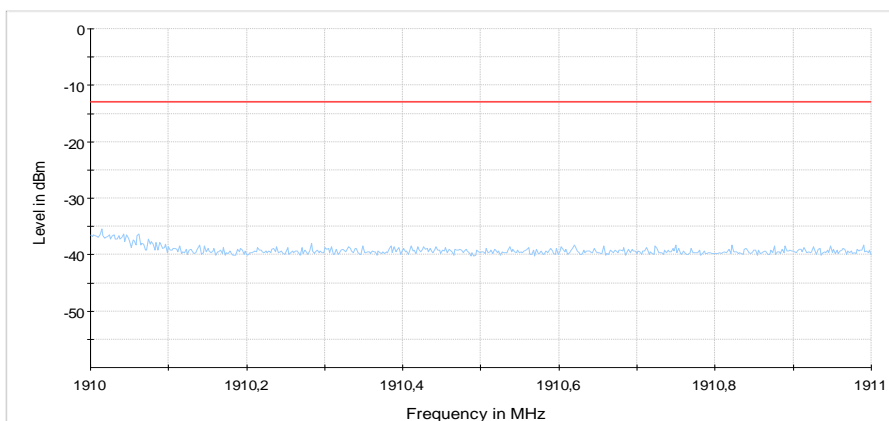
**Diagram 13: 9.204a\_Ch\_18615\_BW3\_RB15\_low\_QPSK\_Standing****Diagram 14: 9.204b\_Ch\_18615\_BW3\_RB15\_low\_16-QAM\_Standing**

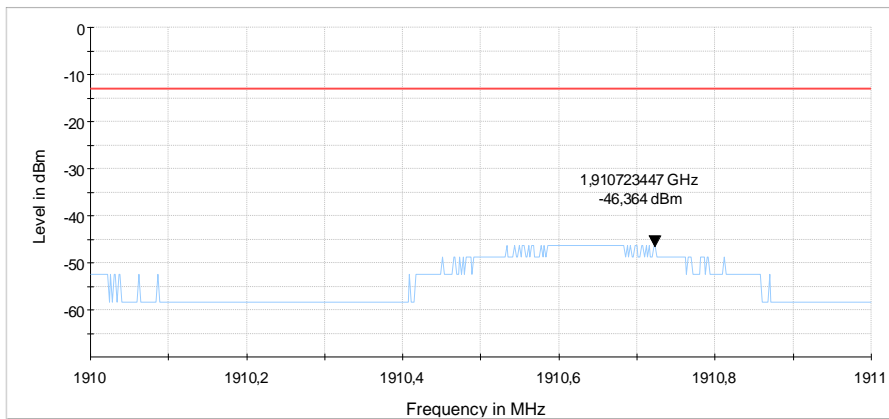
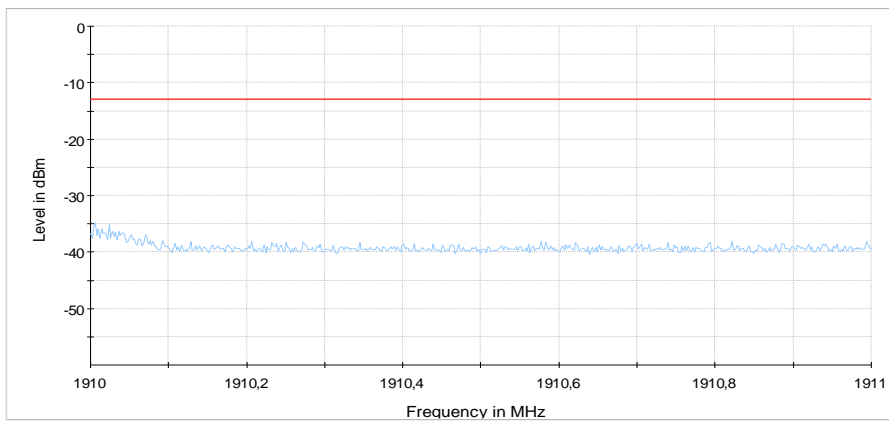
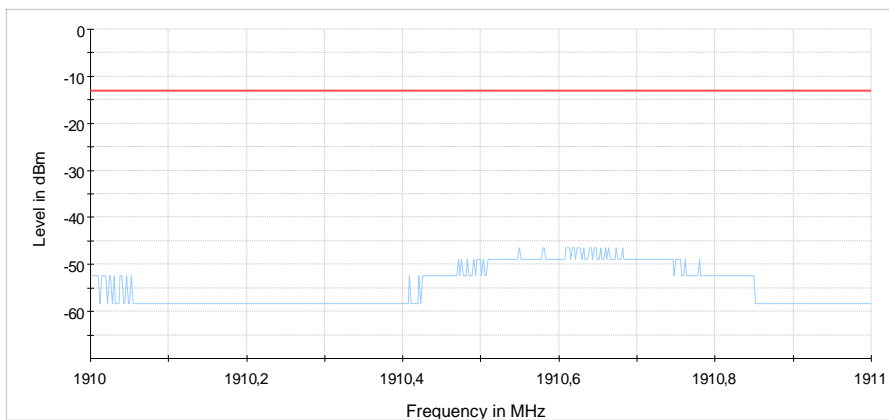
### 1.8.2. High Band-Edge

**Diagram 15: 9.203a\_Ch\_18615\_BW3\_RB1\_high\_QPSK\_Laying**

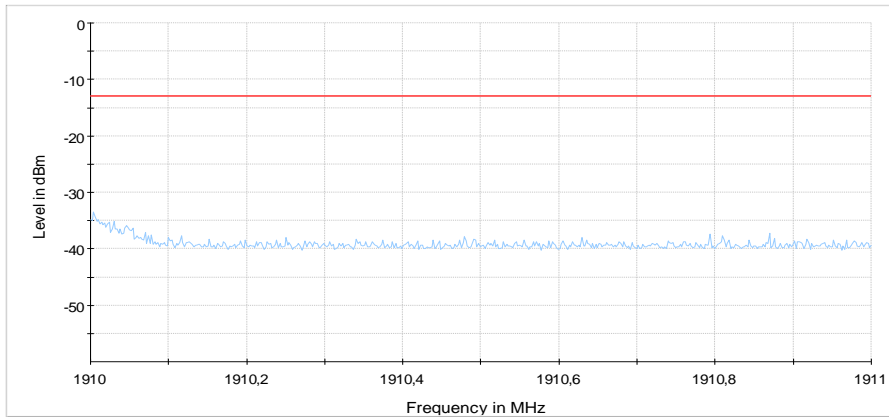
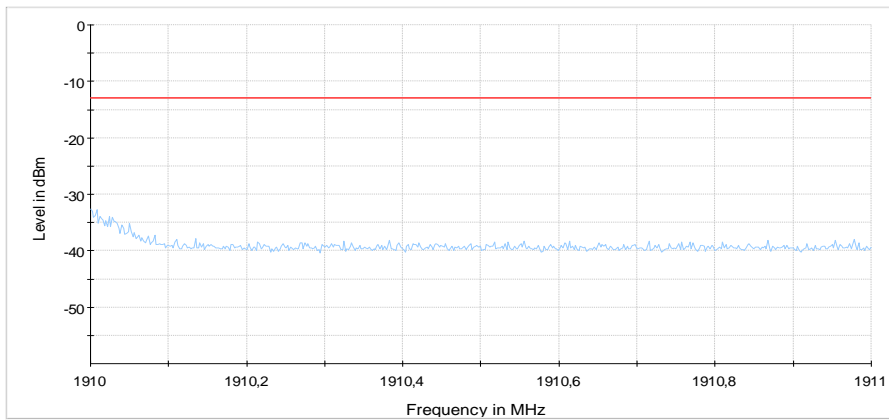
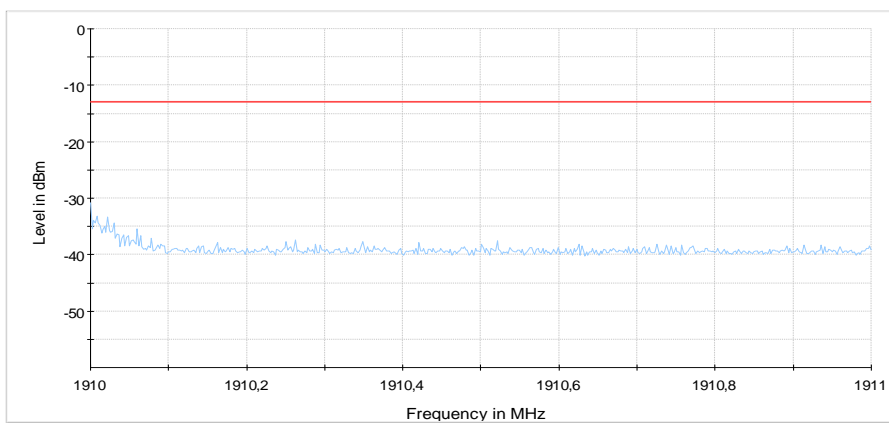
**Diagram 16: 9.203b\_Ch\_18615\_BW3\_RB1\_high\_16-QAM\_Laying****9.204a\_Ch\_18615\_BW3\_RB15\_high\_QPSK\_Laying****Diagram 17: 9.204b\_Ch\_18615\_BW3\_RB15\_high\_16-QAM\_Laying**

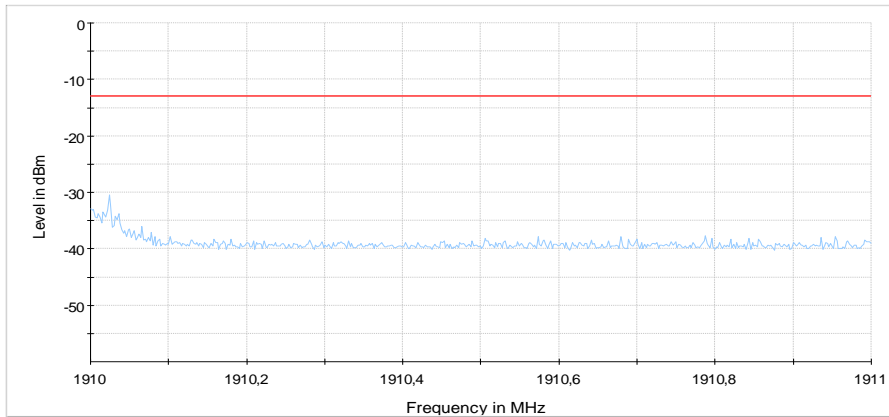
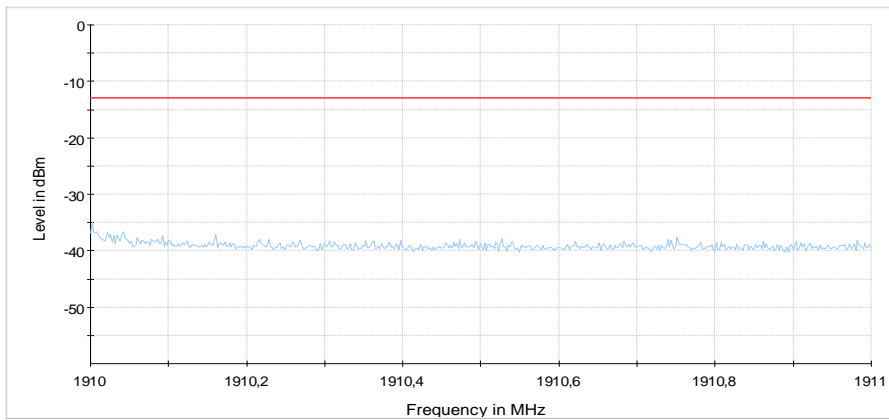
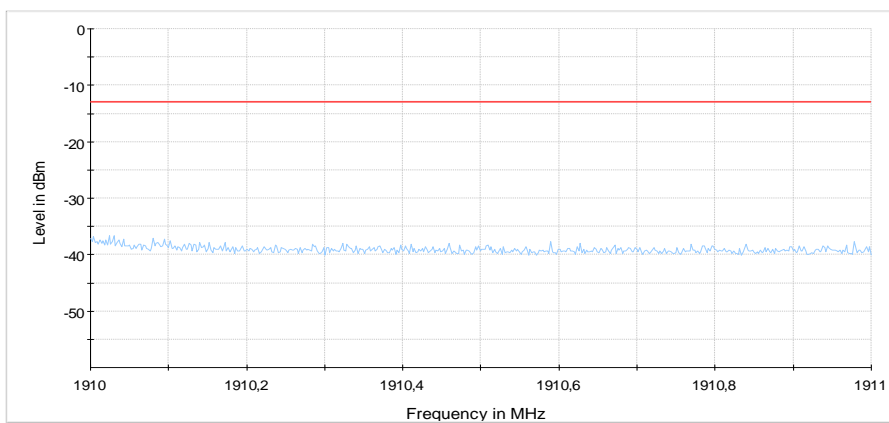
**Diagram 18: 9.204b\_Ch\_18615\_BW3\_RB15\_high\_QPSK\_Laying****Diagram 19: 9.213a\_Ch\_19193\_BW1.4\_RB6\_high\_QPSK\_Laying****Diagram 20: 9.213a\_Ch\_19193\_BW1.4\_RB6\_high\_QPSK\_Standing**

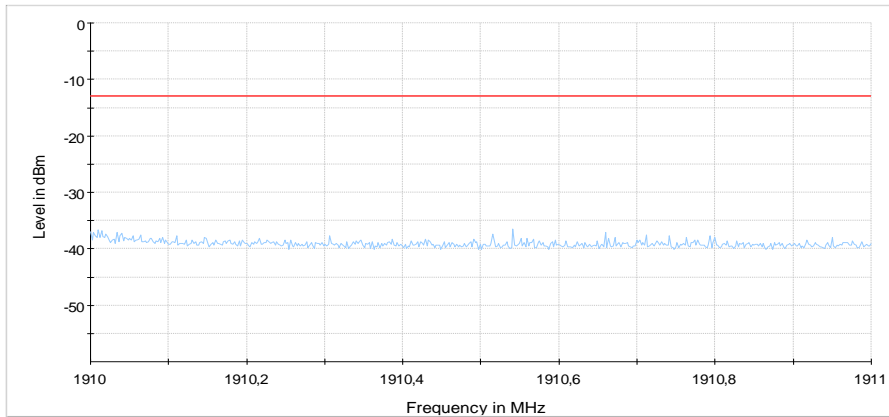
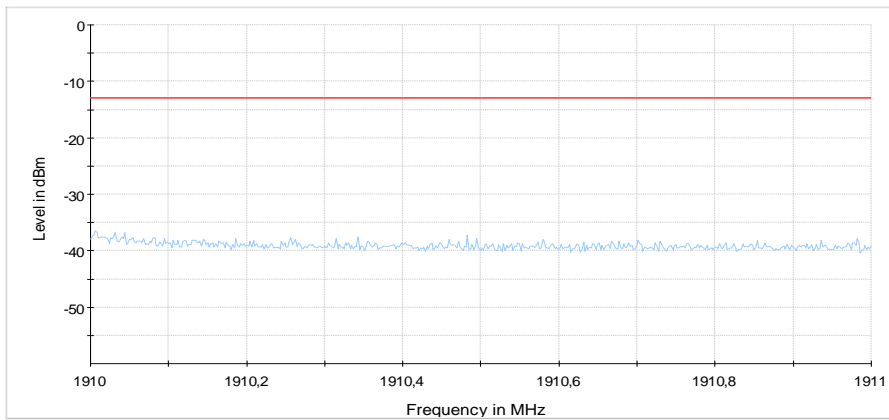
**Diagram 21: 9.213b\_Ch\_19193\_BW1.4\_RB6\_high\_16-QAM\_Laying****Diagram 22: 9.213b\_Ch\_19193\_BW1.4\_RB6\_high\_16-QAM\_Standing****Diagram 23: 9.214a\_Ch\_19193\_BW1.4\_RB1\_high\_QPSK\_Laying**

**Diagram 24: 9.214a\_Ch\_19193\_BW1.4\_RB1\_high\_QPSK\_Standing****Diagram 25: 9.214b\_Ch\_19193\_BW1.4\_RB1\_high\_16-QAM\_Laying****Diagram 26: 9.214b\_Ch\_19193\_BW1.4\_RB1\_high\_16-QAM\_Standing**



**Diagram 27: 9.215a\_Ch\_19185\_BW3\_RB1\_high\_QPSK\_Laying****Diagram 28: 9.215a\_Ch\_19185\_BW3\_RB1\_high\_QPSK\_Standing****Diagram 29: 9.215b\_Ch\_19185\_BW3\_RB1\_high\_16-QAM\_Laying**

**Diagram 30: 9.215b\_Ch\_19185\_BW3\_RB1\_high\_16-QAM\_Standing****Diagram 31: 9.216a\_Ch\_19185\_BW3\_RB15\_high\_QPSK\_Laying****Diagram 32: 9.216a\_Ch\_19185\_BW3\_RB15\_high\_QPSK\_Standing**

**Diagram 33: 9.216b\_Ch\_19185\_BW3\_RB15\_high\_16-QAM\_Laying****Diagram 34: 9.216b\_Ch\_19185\_BW3\_RB15\_high\_16-QAM\_Standing**

## 1.9. Radiated emissions – band-edge (LTE Band 4)

### 1.9.1. Low Band-Edge

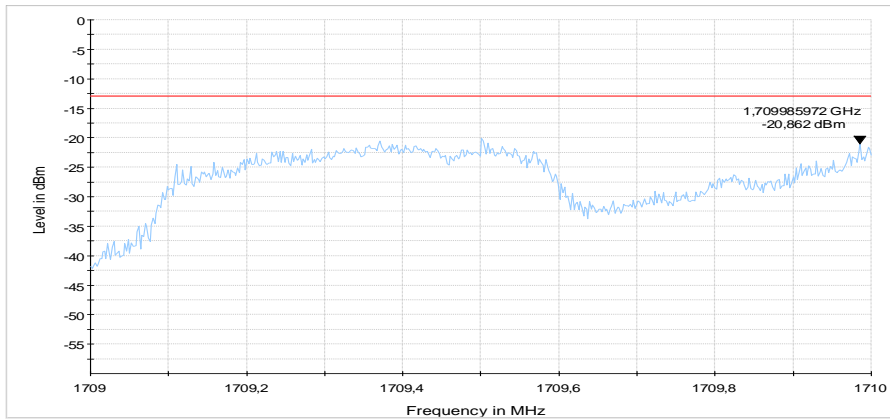


Diagram 35: 9.401a\_Ch\_19957\_BW1.4\_RB1\_low\_QPSK\_laying

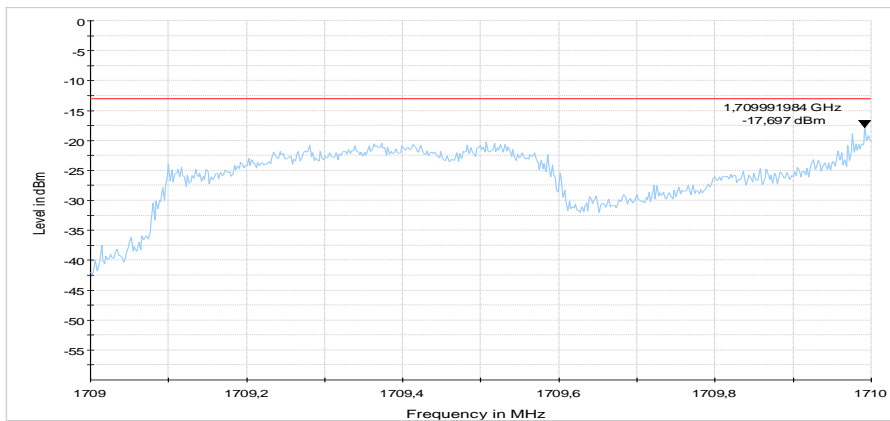


Diagram 36: 9.401a\_Ch\_19957\_BW1.4\_RB1\_low\_QPSK\_Standing

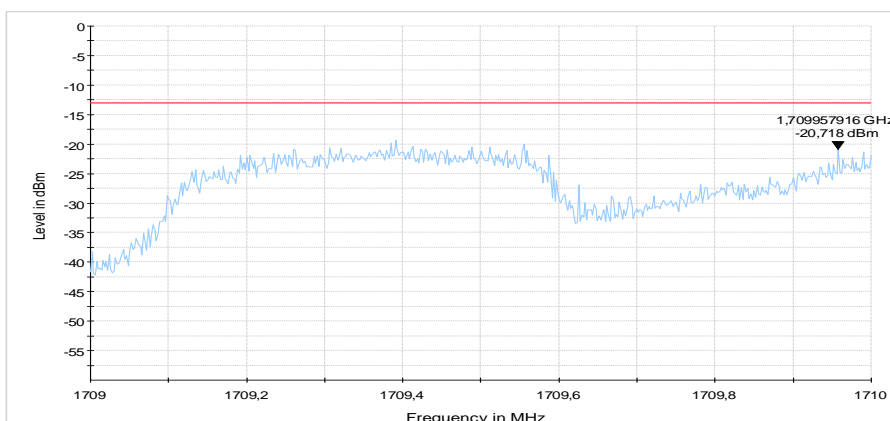
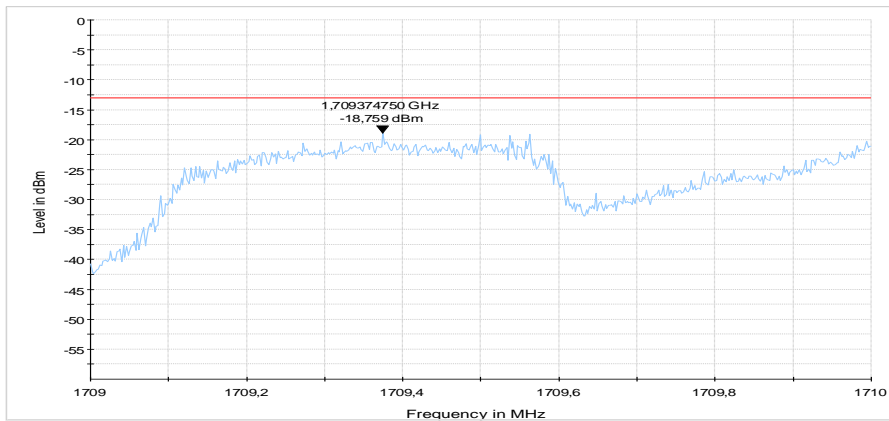
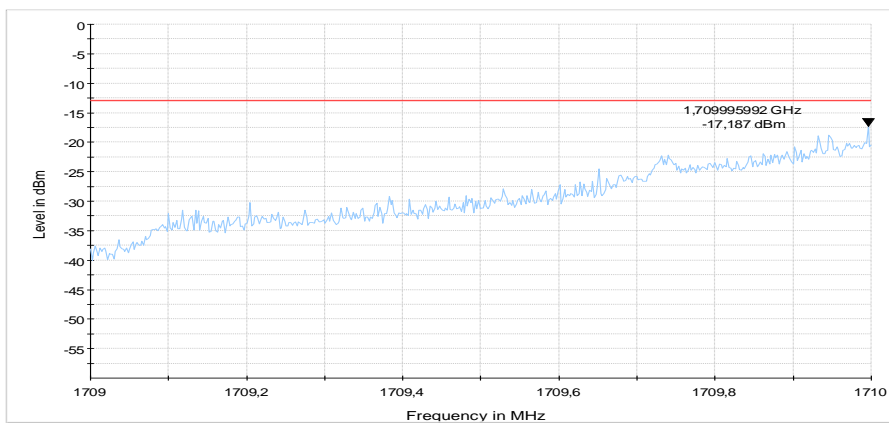
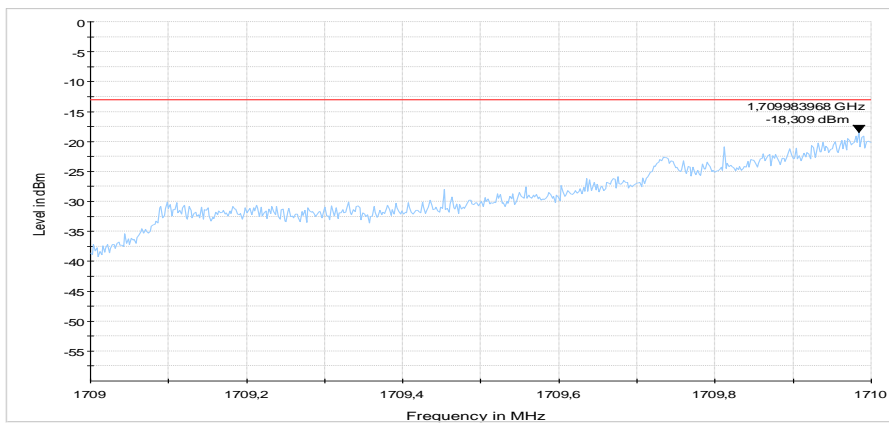
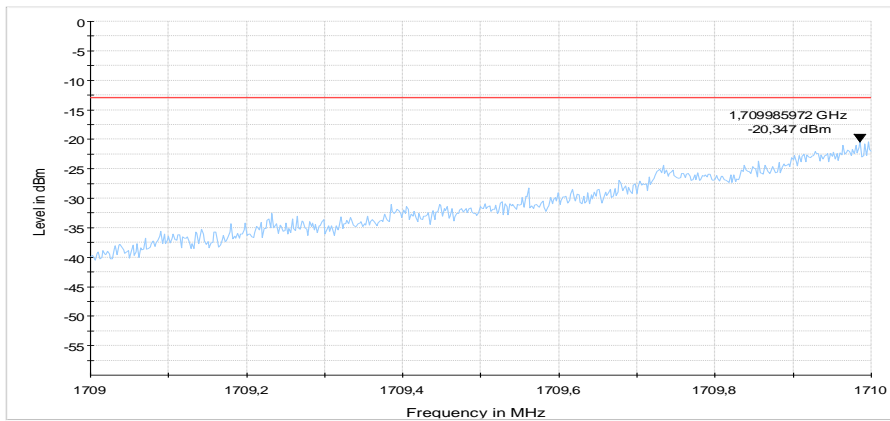
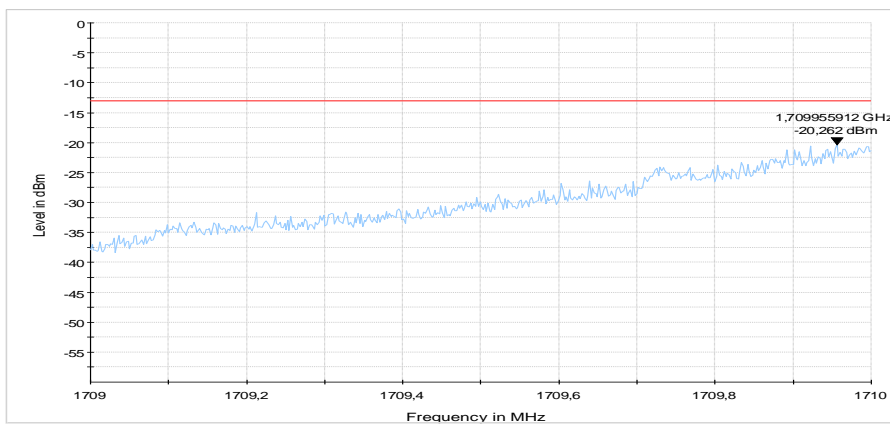


Diagram 37: 9.401b\_Ch\_19957\_BW1.4\_RB1\_low\_16QAM\_laying

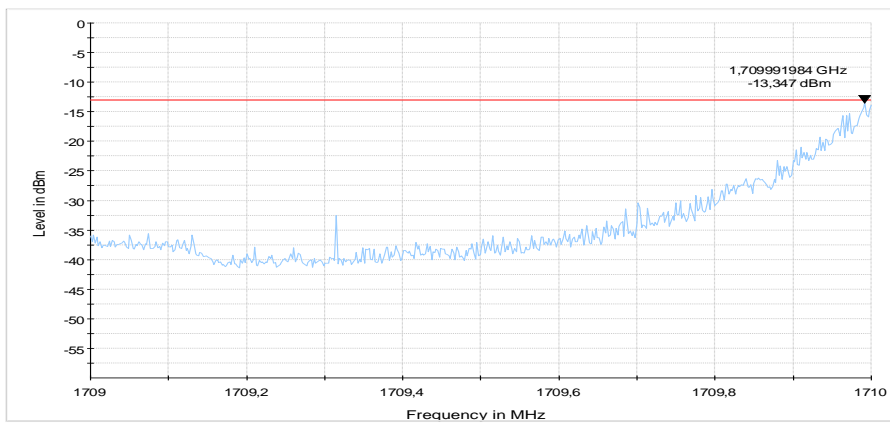
**Diagram 38: 9.401b\_Ch\_19957\_BW1.4\_RB1\_low\_16QAM\_Standing****Diagram 39: 9.402a\_Ch\_19957\_BW1.4\_RB6\_low\_QPSK\_laying****Diagram 40: 9.402a\_Ch\_19957\_BW1.4\_RB6\_low\_QPSK\_Standing**



**Diagram 41: 9.402b\_Ch\_19957\_BW1.4\_RB6\_low\_16QAM\_laying**



**Diagram 42: 9.402b\_Ch\_19957\_BW1.4\_RB6\_low\_16QAM\_Standing**



**Diagram 43: 9.403a\_Ch\_19965\_BW3\_RB1\_low\_QPSK\_laying**

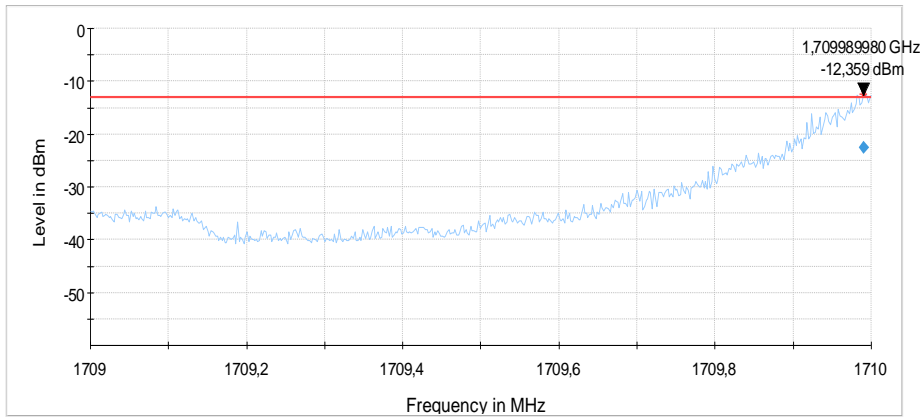


Diagram 44: 9.403a\_Ch\_19965\_BW3\_RB1\_low\_QPSK\_Standing

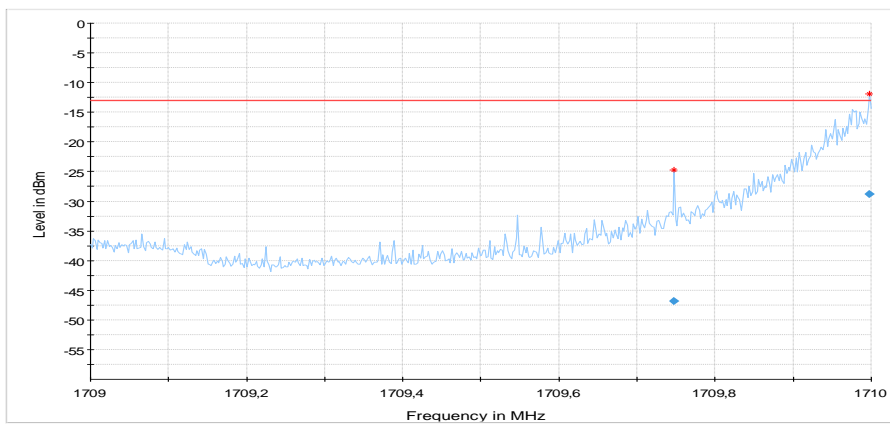


Diagram 45: 9.403b\_Ch\_19965\_BW3\_RB1\_low\_16QAM\_laying

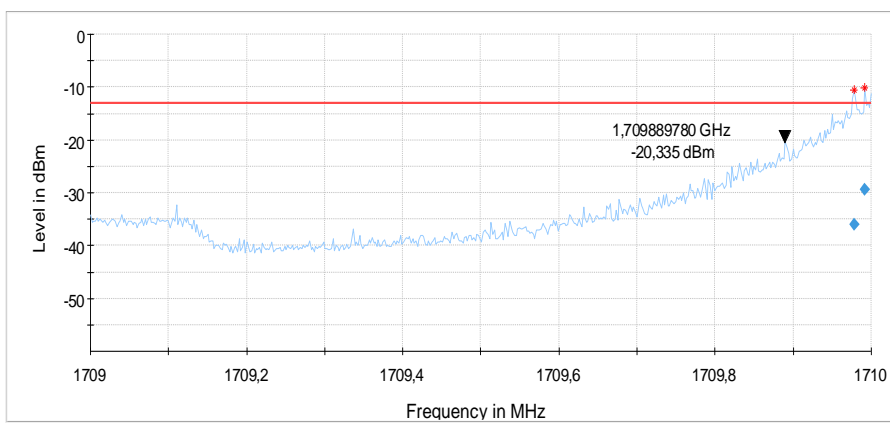
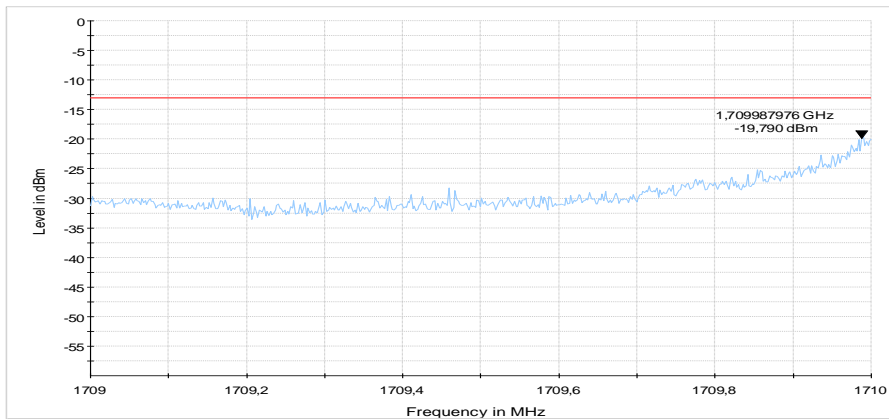
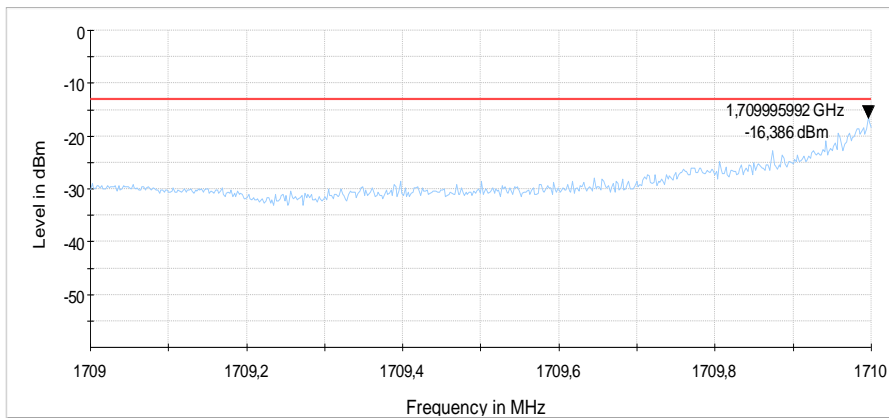
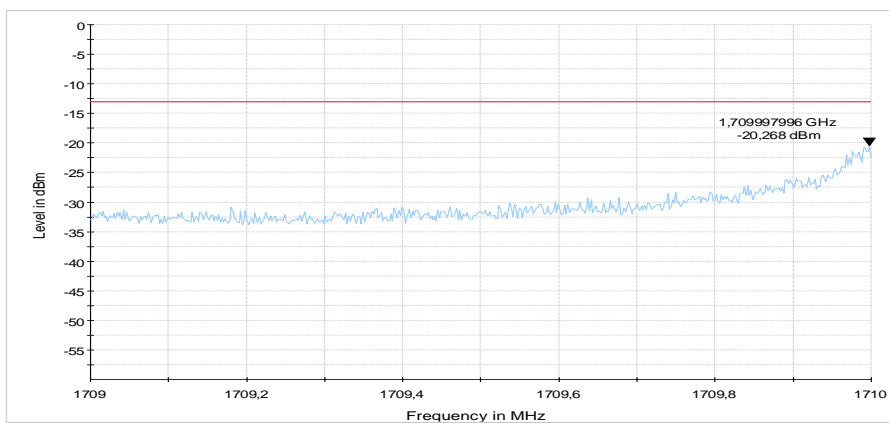
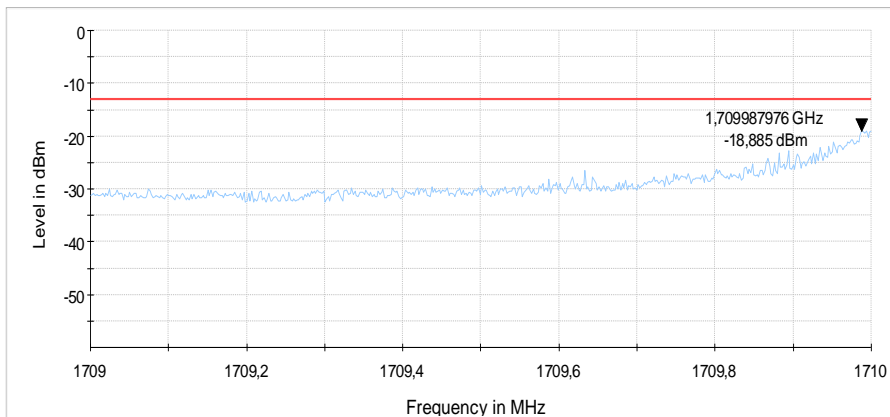


Diagram 46: 9.403b\_Ch\_19965\_BW3\_RB1\_low\_16QAM\_Standing

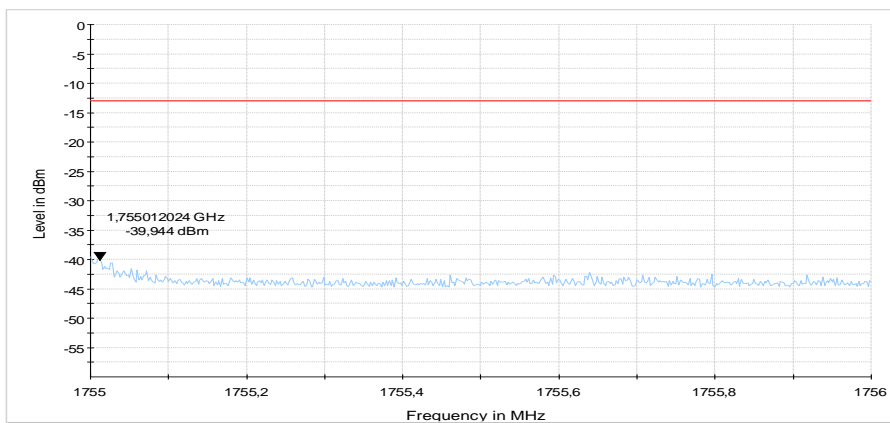
**Diagram 47: 9.404a\_Ch\_19965\_BW3\_RB15\_low\_QPSK\_laying****Diagram 48: 9.404a\_Ch\_19965\_BW3\_RB15\_low\_QPSK\_Standing****Diagram 49: 9.404b\_Ch\_19965\_BW3\_RB15\_low\_16QAM\_laying**



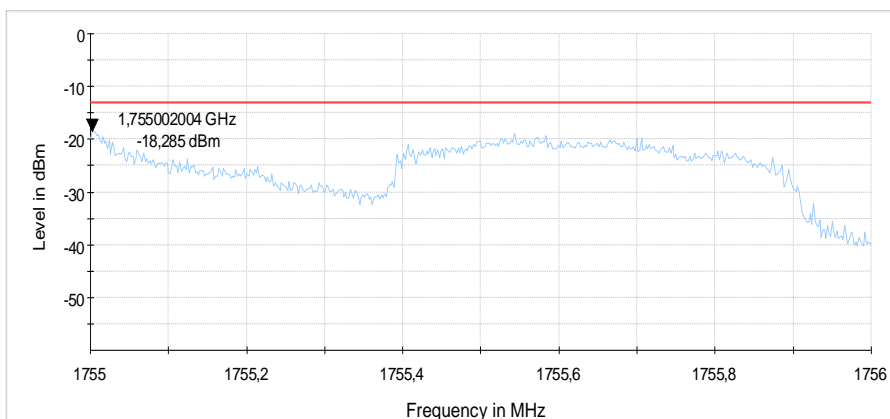


**Diagram 50: 9.404b\_Ch\_19965\_BW3\_RB15\_low\_16QAM\_Standing**

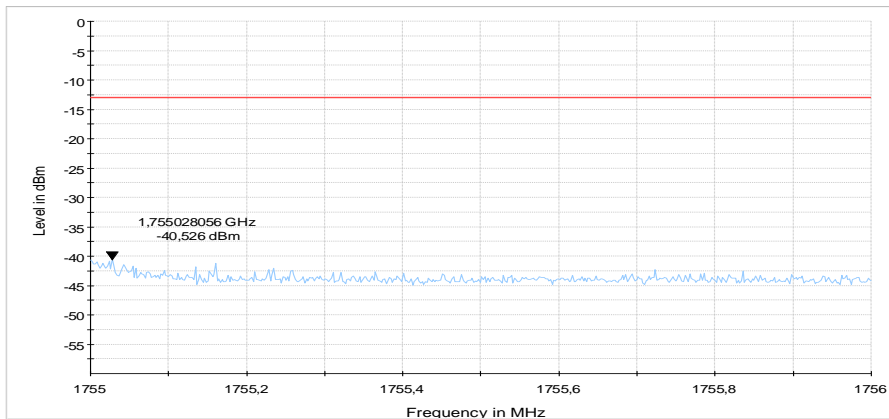
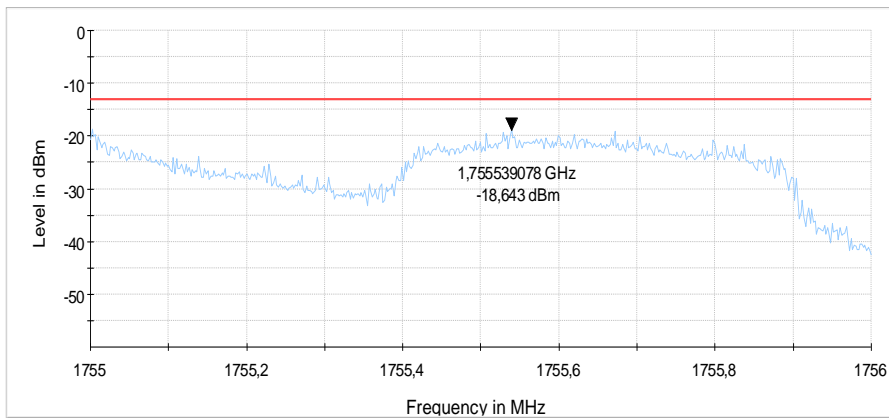
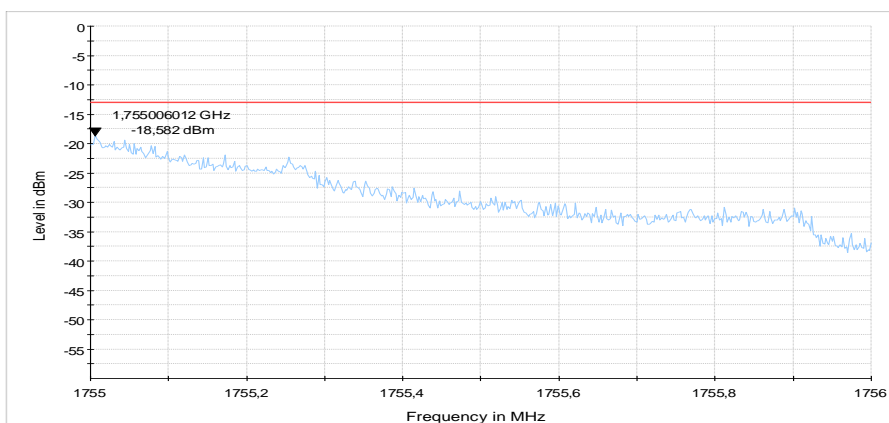
### 1.9.2. High Band-Edge

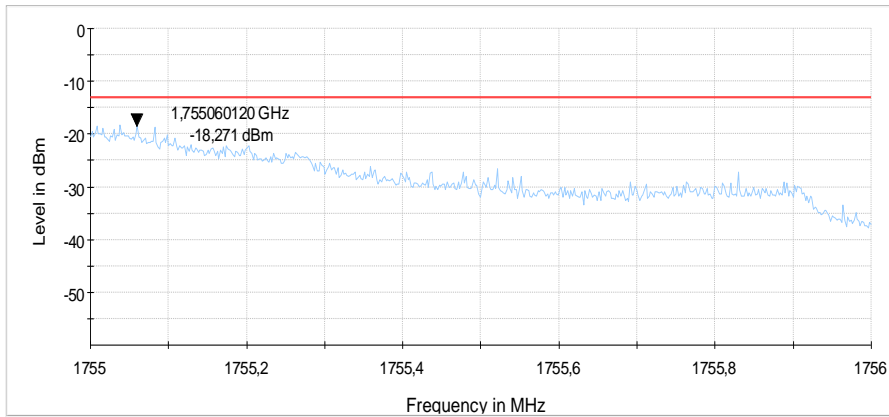
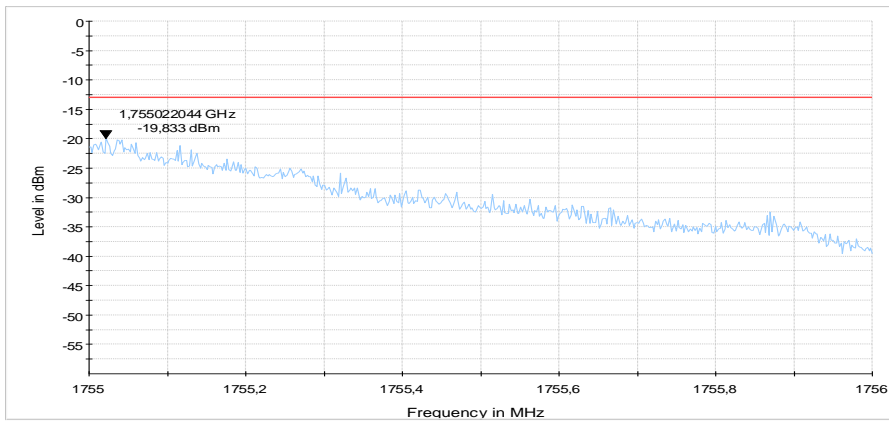


**Diagram 51: 9.413a\_Ch\_20393\_BW1.4\_RB1\_high\_QPSK\_laying**



**Diagram 52: 9.413a\_Ch\_20393\_BW1.4\_RB1\_high\_QPSK\_Standing**

**Diagram 53: 9.413b\_Ch\_20393\_BW1.4\_RB1\_high\_16QAM\_laying****Diagram 54: 9.413b\_Ch\_20393\_BW1.4\_RB1\_high\_16QAM\_Standing****Diagram 55: 9.414a\_Ch\_20393\_BW1.4\_RB6\_high\_QPSK\_laying**

**Diagram 56: 9.414a\_Ch\_20393\_BW1.4\_RB6\_high\_QPSK\_Standing****Diagram 57: 9.414b\_Ch\_20393\_BW1.4\_RB6\_high\_16QAM\_laying**

## 1.10. Radiated emissions – band-edge (LTE Band 5)

### 1.10.1. Low Band-Edge

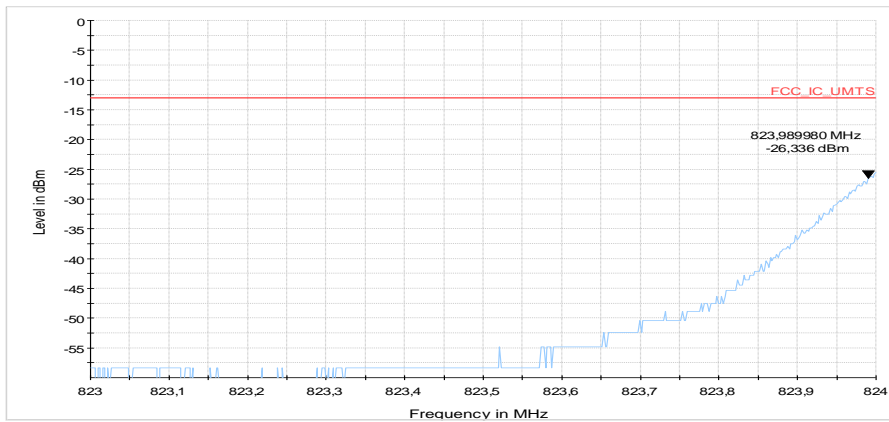


Diagram 58: 9.503a\_Ch\_20415\_BW3\_RB1\_low\_QPSK\_laying

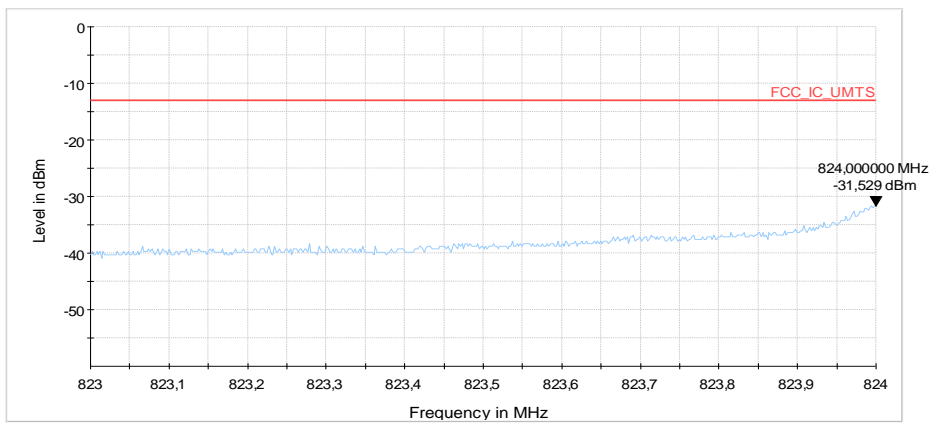


Diagram 59: 9.503a\_Ch\_20415\_BW3\_RB1\_low\_QPSK\_Standing

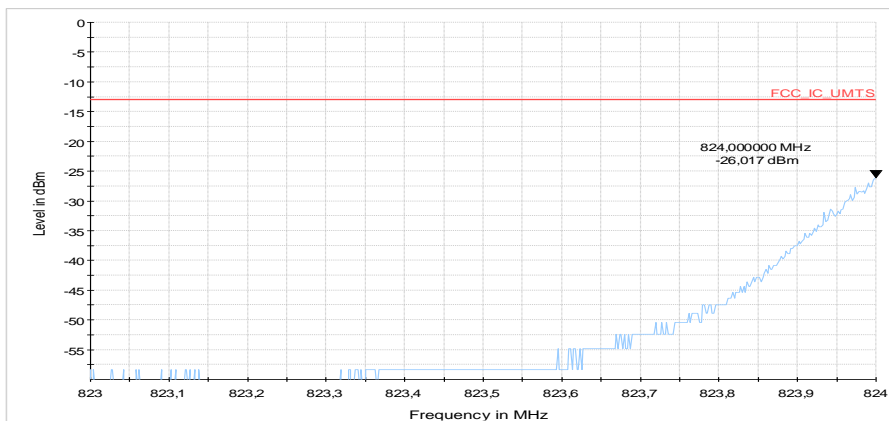
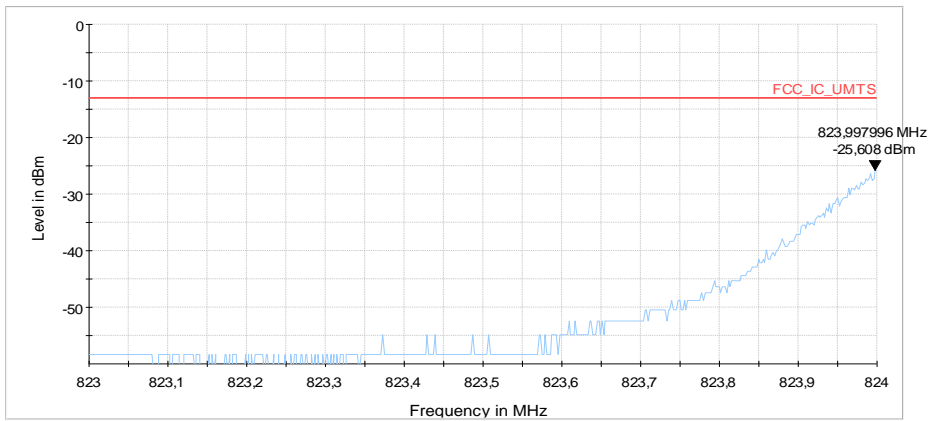
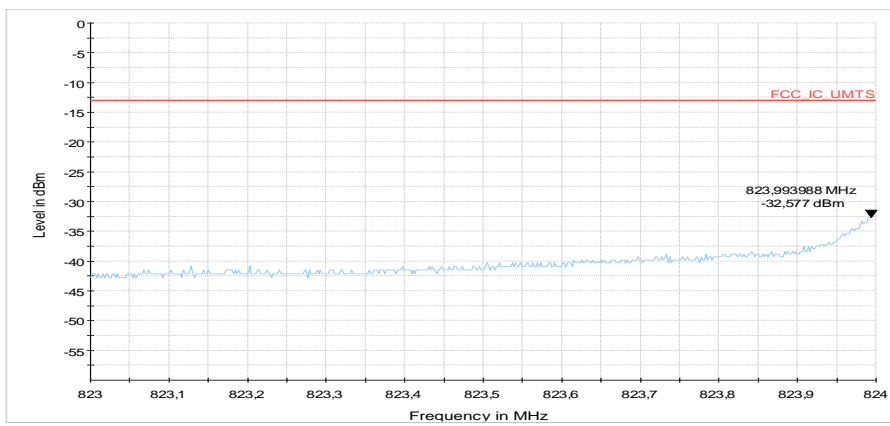


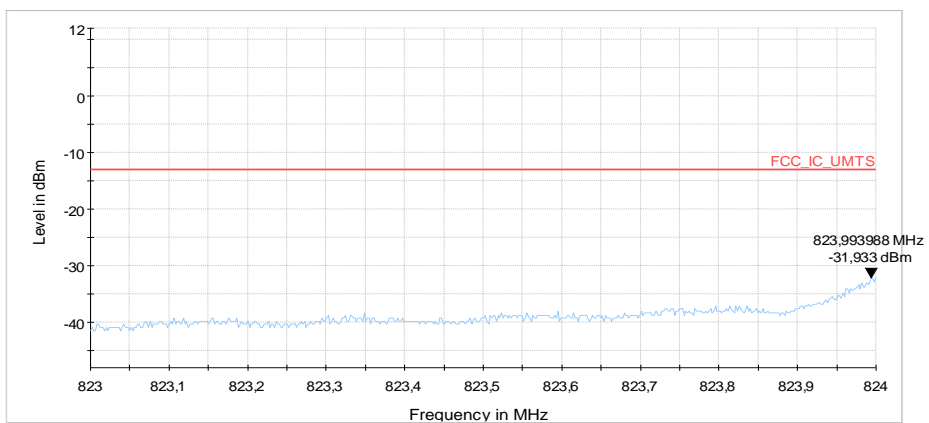
Diagram 60: 9.503b\_Ch\_20415\_BW3\_RB1\_low\_16QAM\_laying



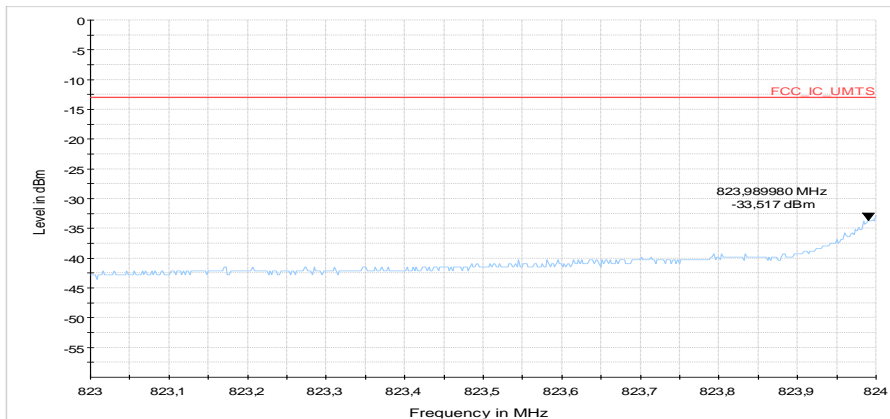
**Diagram 61: 9.503b\_Ch\_20415\_BW3\_RB1\_low\_16QAM\_Standing**



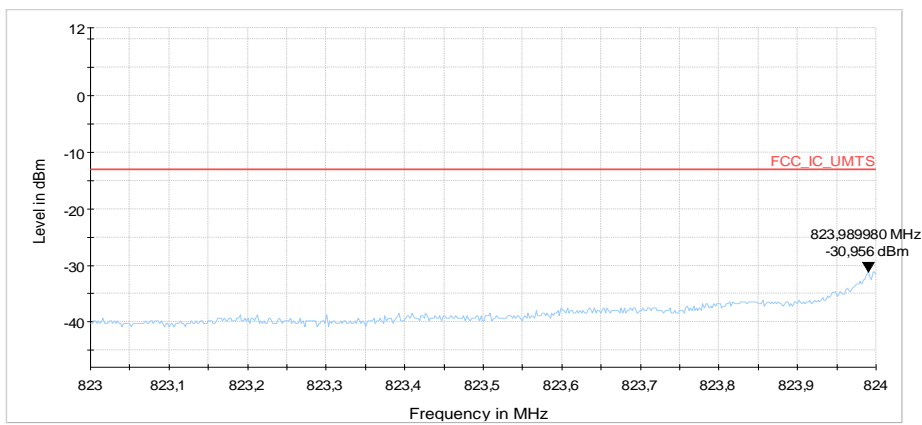
**Diagram 62: 9.504a\_Ch\_20415\_BW3\_RB15\_low\_QPSK\_laying**



**Diagram 63: 9.504a\_Ch\_20415\_BW3\_RB15\_low\_QPSK\_Standing**

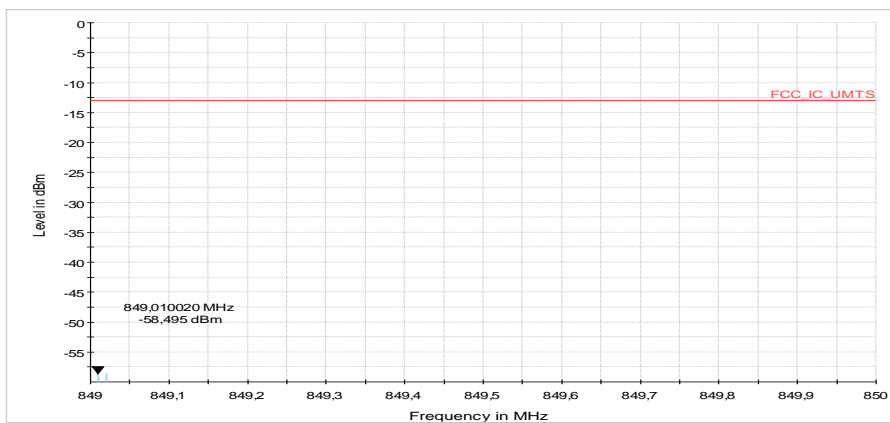


**Diagram 64: 9.504b\_Ch\_20415\_BW3\_RB15\_low\_16QAM\_laying**

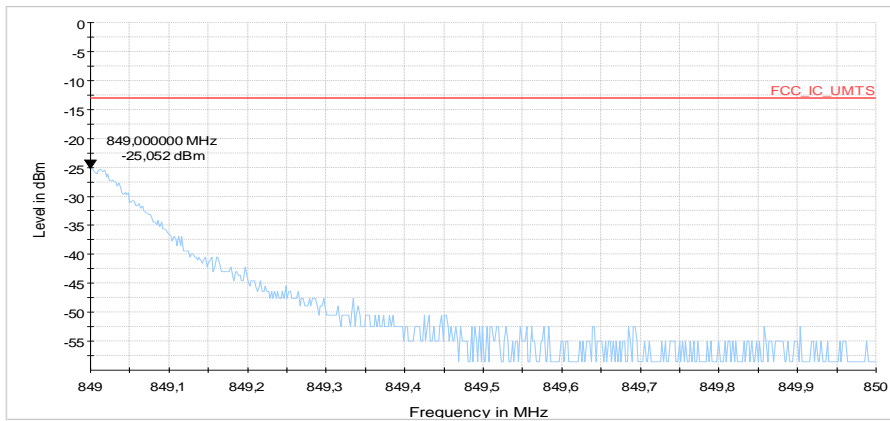


**Diagram 65: 9.504b\_Ch\_20415\_BW3\_RB15\_low\_16QAM\_Standing**

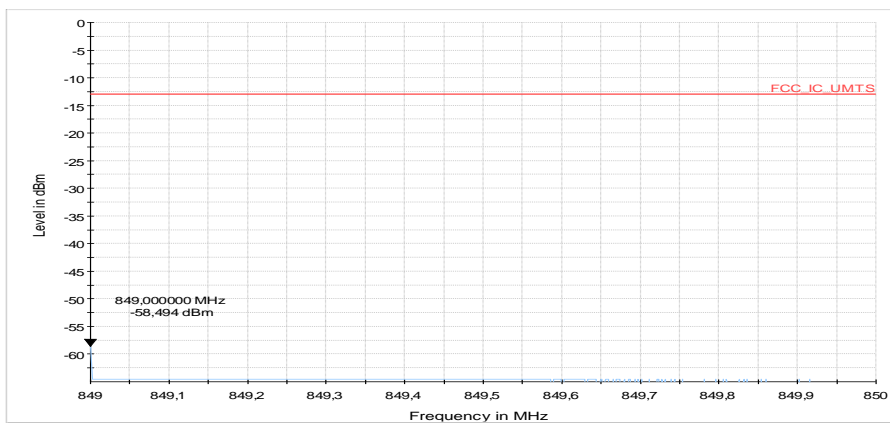
### 1.10.2. High Band-Edge



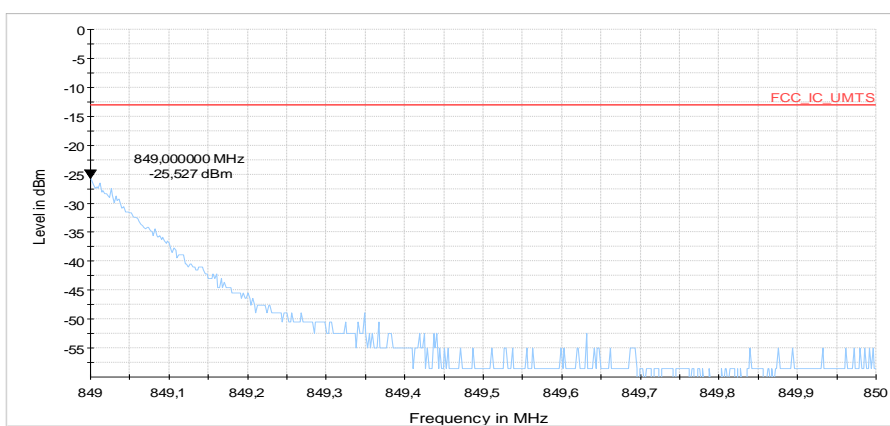
**Diagram 66: 9.512a\_Ch\_20635\_BW3\_RB1\_high\_QPSK\_laying**



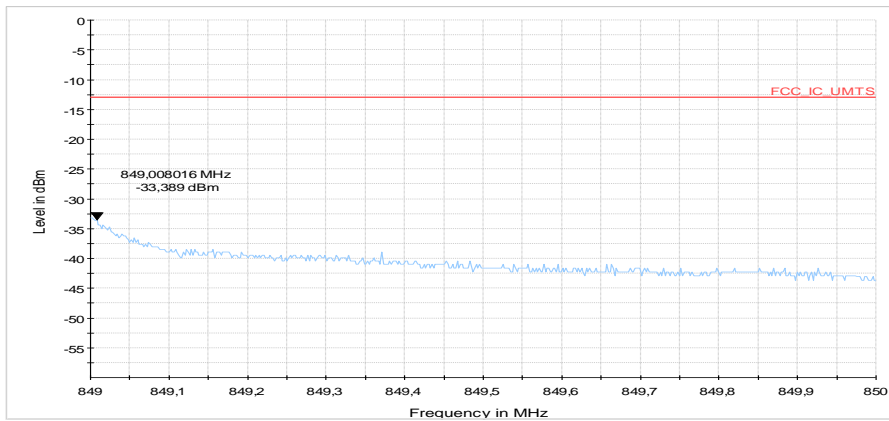
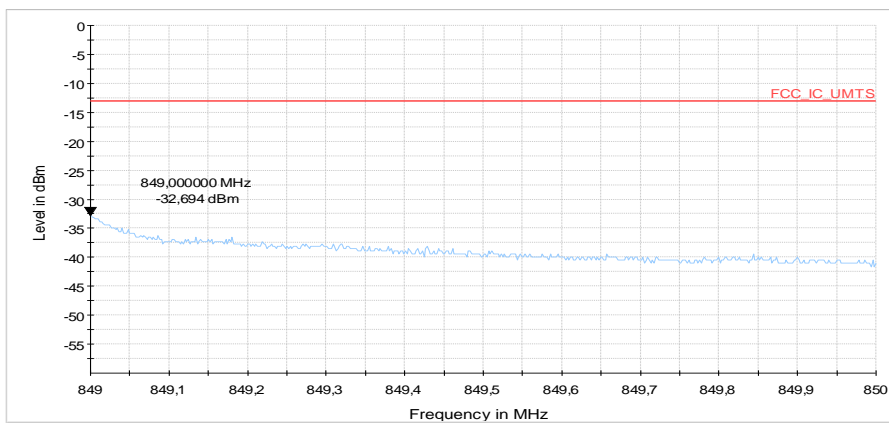
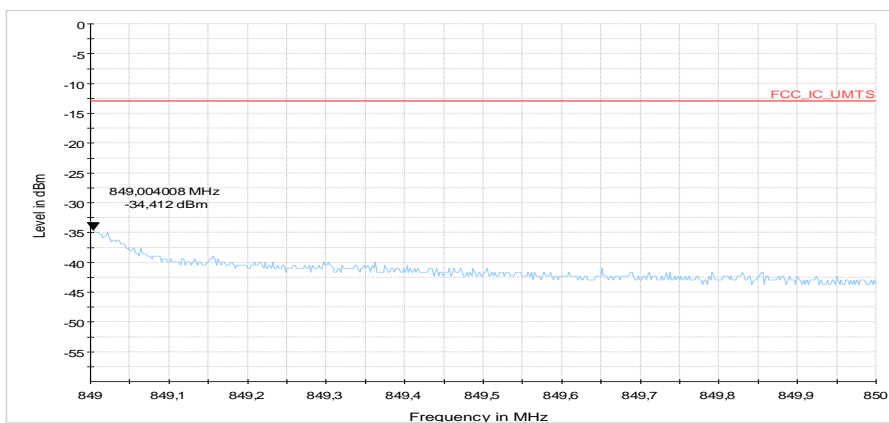
**Diagram 67: 9.512a\_Ch\_20635\_BW3\_RB1\_high\_QPSK\_Standing**



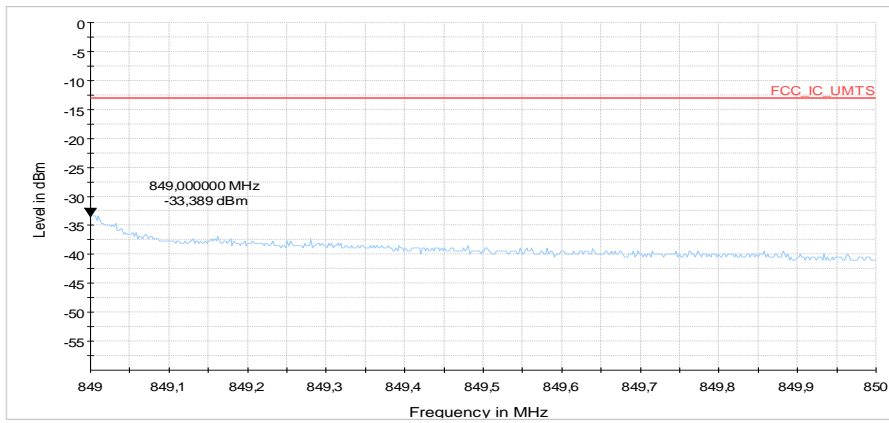
**Diagram 68: 9.512b\_Ch\_20635\_BW3\_RB1\_high\_16QAM\_laying**



**Diagram 69: 9.512b\_Ch\_20635\_BW3\_RB1\_high\_16QAM\_Standing**

**Diagram 70: 9.513a\_Ch\_20635\_BW3\_RB15\_high\_QPSK\_laying****Diagram 71: 9.513a\_Ch\_20635\_BW3\_RB15\_high\_QPSK\_Standing****Diagram 72: 9.513b\_Ch\_20635\_BW3\_RB15\_high\_16QAM\_laying**



**Diagram 73: 9.513b\_Ch\_20635\_BW3\_RB15\_high\_16QAM\_Standing**

### 1.11. Radiated emissions – band-edge (LTE Band 7)

#### 1.11.1. Low Band-Edge

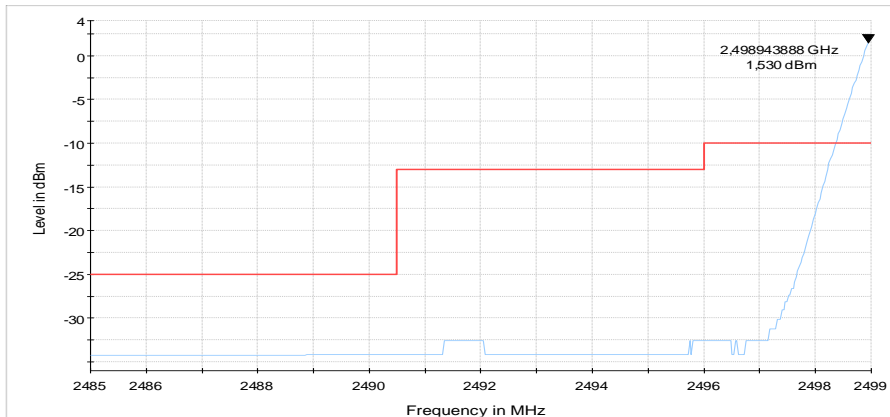


Diagram 74: 9.701a\_SW1\_BE\_LTE7\_1RB\_low\_CH20775\_QPSK\_Standing

Full Spectrum

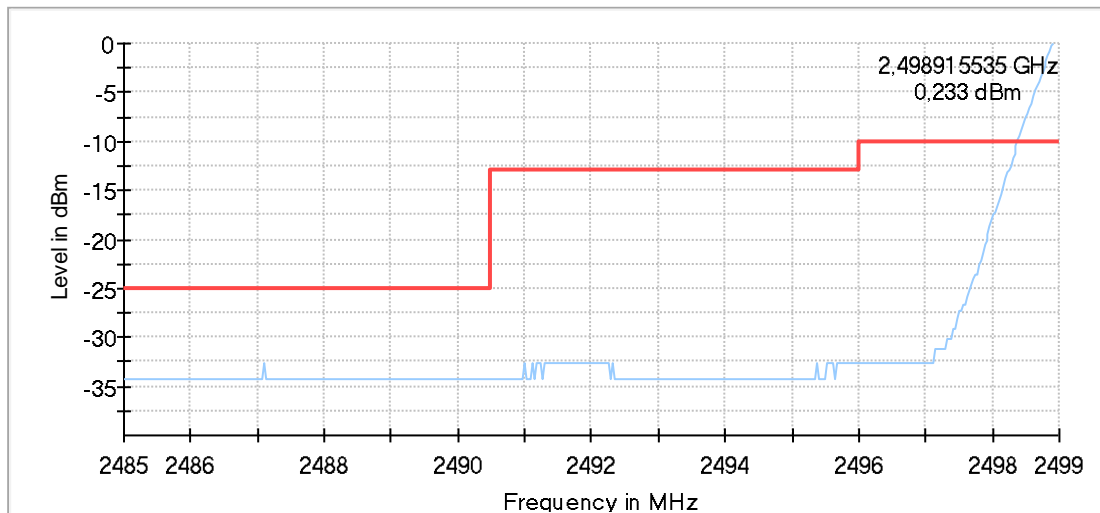


Diagram 75: 9.701a\_SW1\_BE\_LTE7\_1RB\_low\_CH20775\_QPSK\_laying

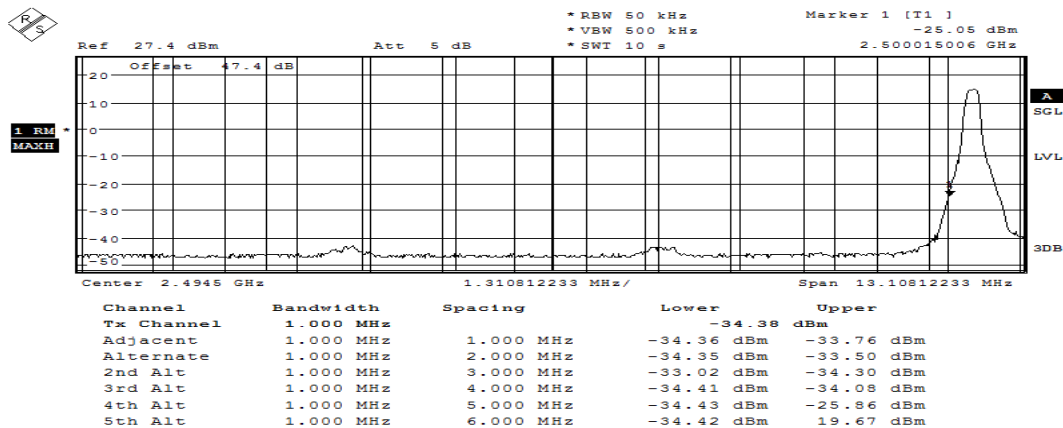


Diagram 76: 9.701a\_SW1\_BE\_LTE7\_1RB\_low\_CH20775\_QPSK\_Standing\_intBW

Full Spectrum

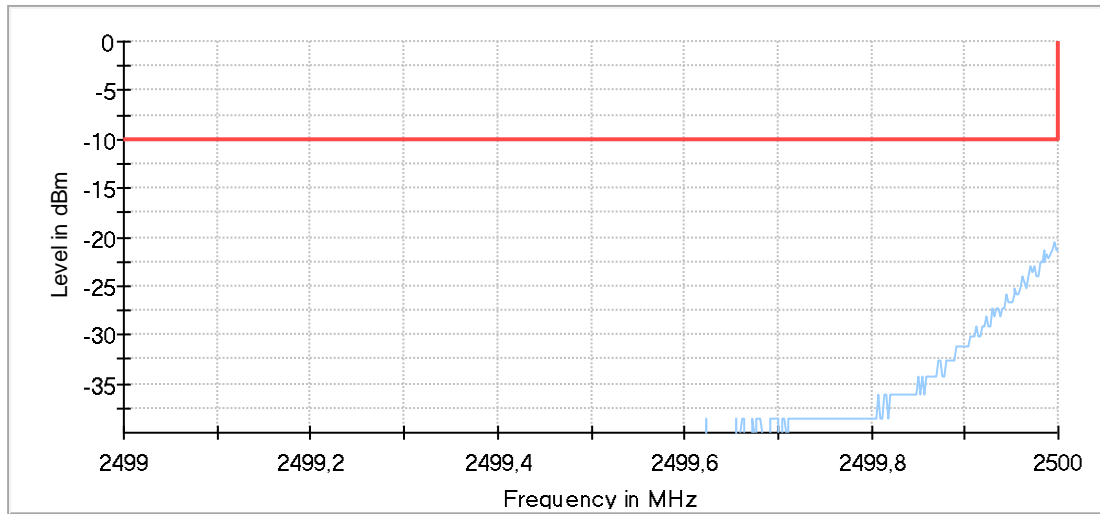
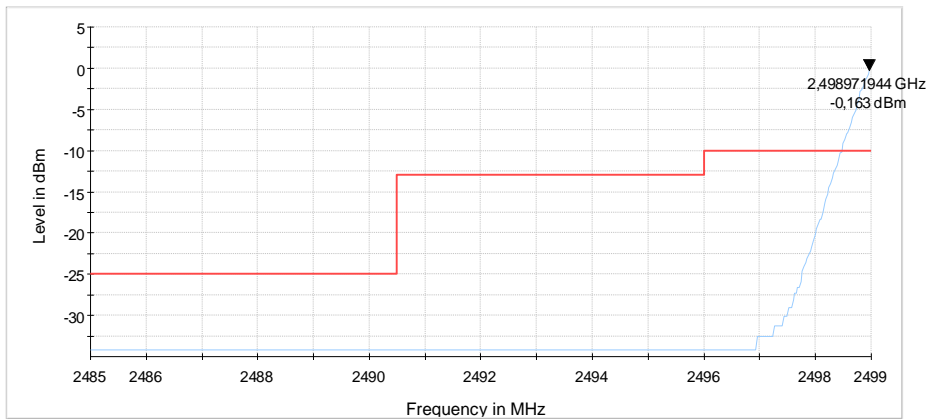
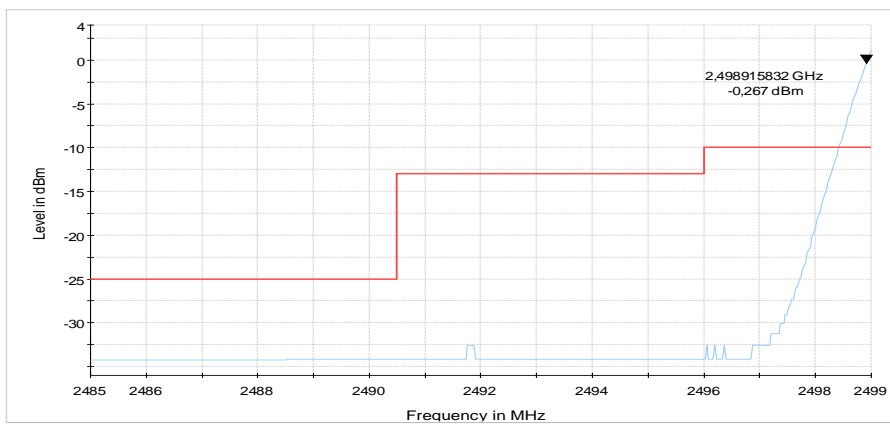


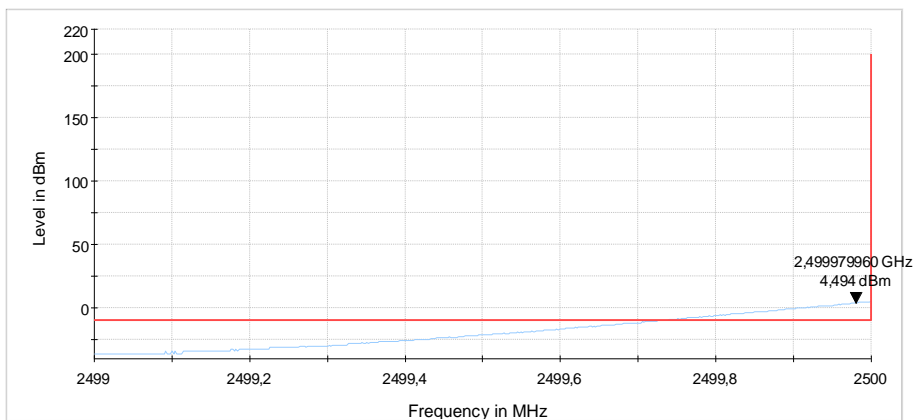
Diagram 77: 9.701a\_SW2\_BE\_LTE7\_1RB\_low\_CH20775\_QPSK\_Standing



**Diagram 78: 9.701b\_SW1\_BE\_LTE7\_1RB\_Low\_CH20775\_QAM\_Laying**



**Diagram 79: 9.701b\_SW1\_BE\_LTE7\_1RB\_low\_CH20775\_QAM\_Standing**



**Diagram 80: 9.701b\_SW2\_BE\_LTE7\_1RB\_Low\_CH20775\_QAM**

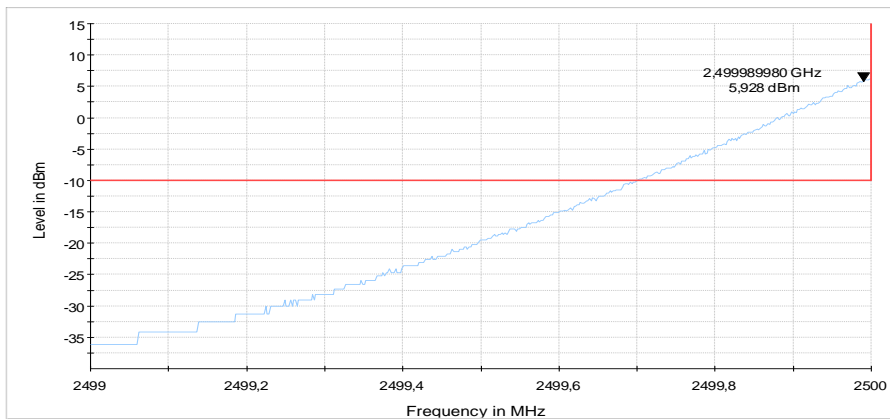


Diagram 81: 9.701b\_SW2\_BE\_LTE7\_1RB\_low\_CH20775\_QAM\_Standing

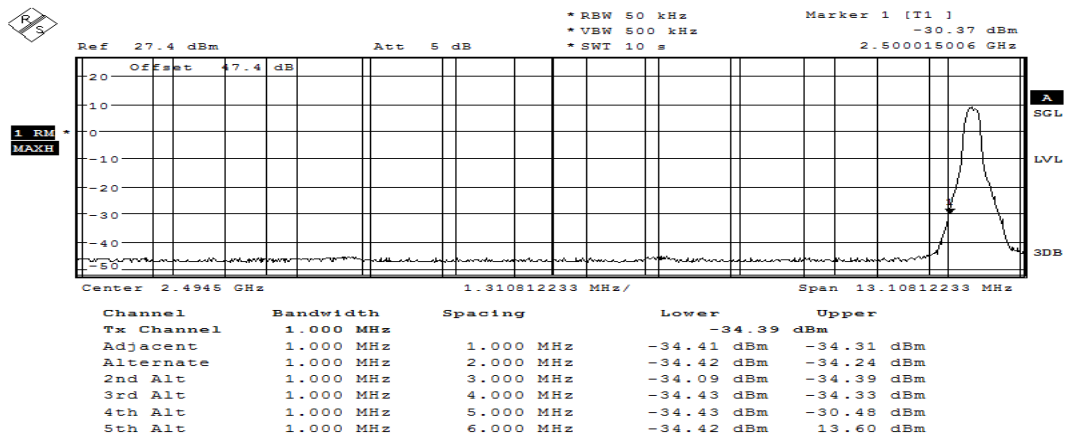
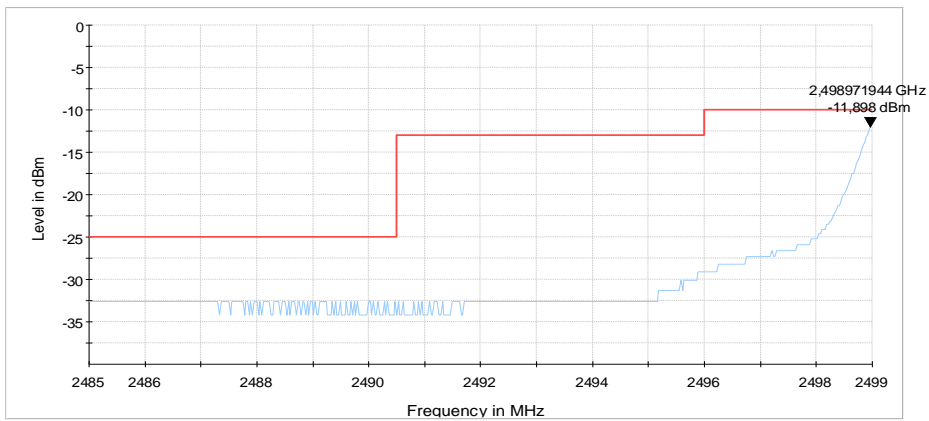
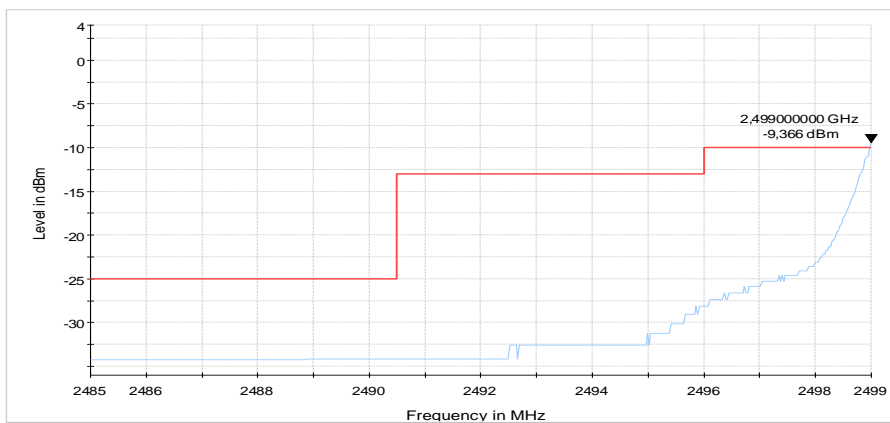


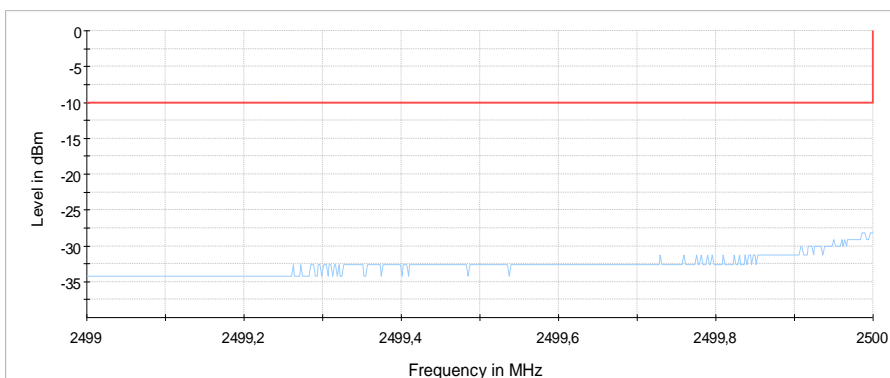
Diagram 82: 9.701b\_SW1\_BE\_LTE7\_1RB\_Low\_CH20775\_QAM\_Laying\_intBW



**Diagram 83: 9.702a\_SW1\_BE\_LTE7\_25RB\_Low\_CH20775\_QPSK-laying**



**Diagram 84: 9.702a\_SW1\_BE\_LTE7\_25RB\_low\_CH20775\_QPSK\_Standing**



**Diagram 85: 9.702a\_SW2\_BE\_LTE7\_25RB\_Low\_CH20775\_QPSK**

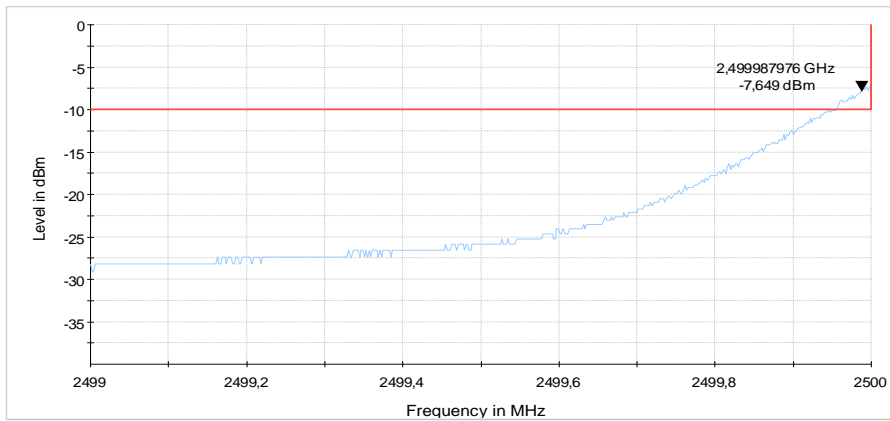


Diagram 86: 9.702a\_SW2\_BE\_LTE7\_25RB\_low\_CH20775\_QPSK\_Standing

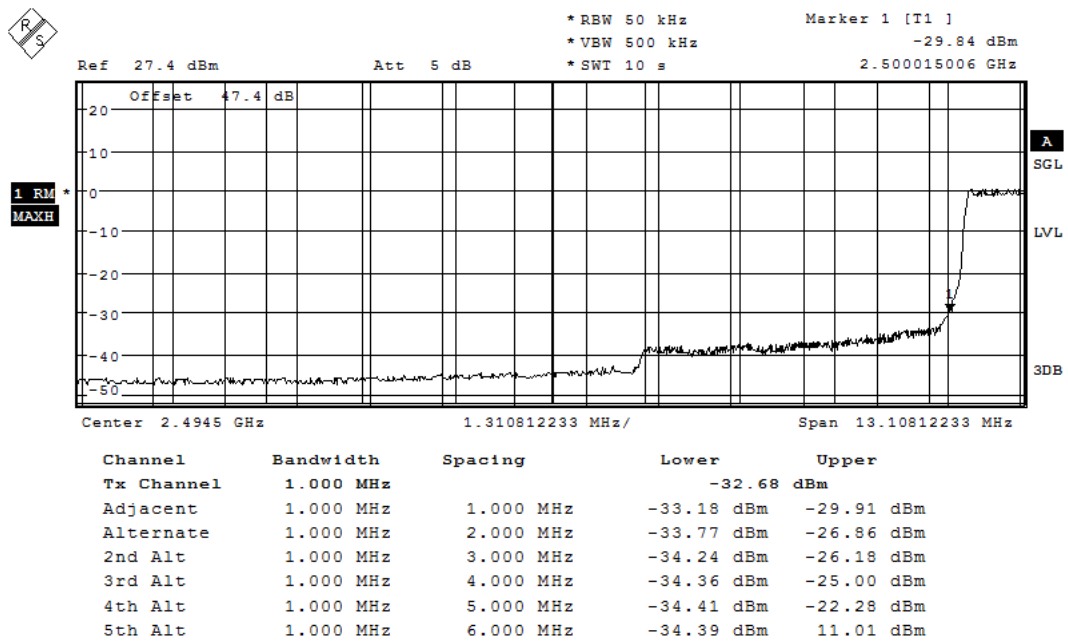
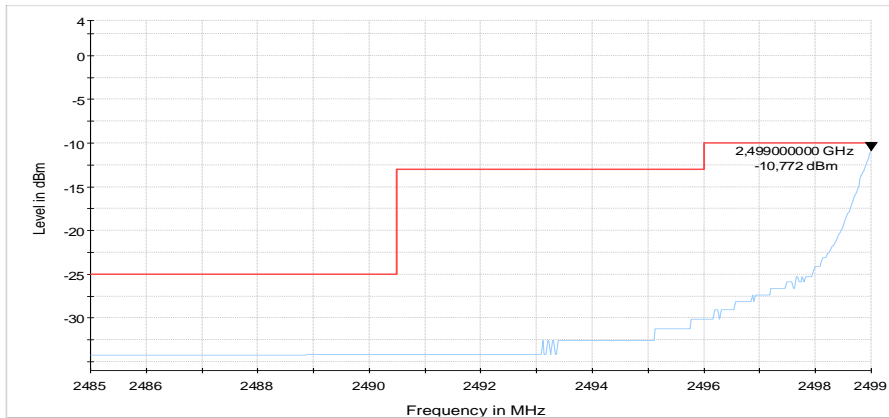
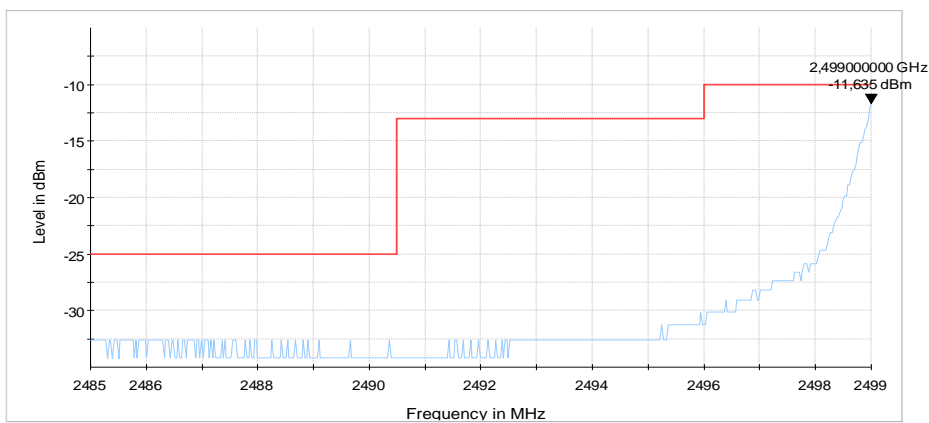
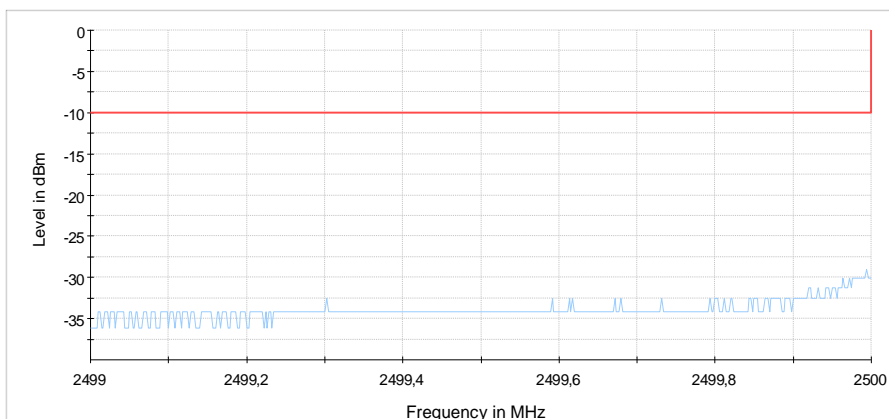
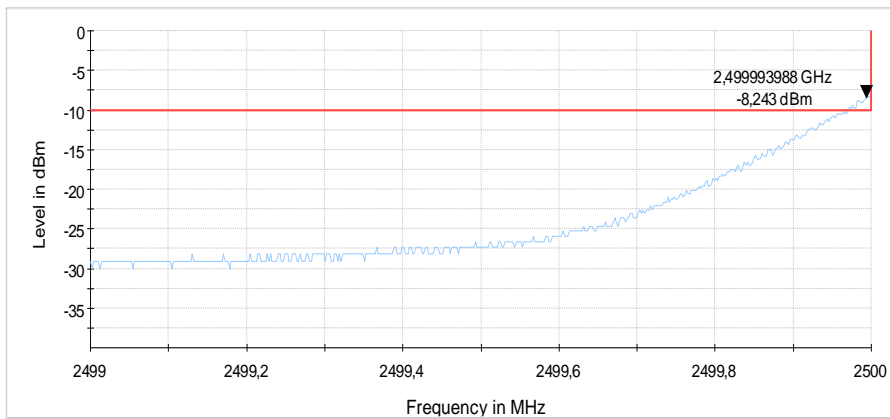


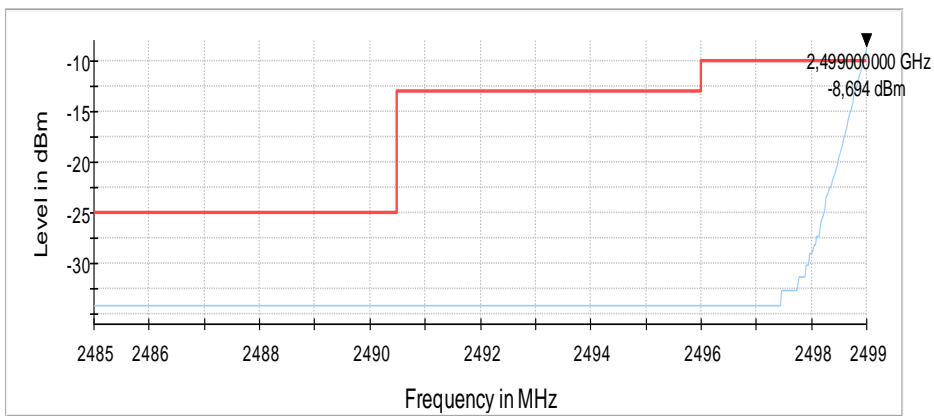
Diagram 87: 9.702a\_SW1\_BE\_LTE7\_25RB\_low\_CH20775\_QPSK\_Standing\_intBW

**Diagram 88: 9.702b\_SW1\_BE\_LTE7\_25RB\_low\_CH20775\_QAM\_Standing****Diagram 89: 9.702b\_SW1\_BE\_LTE7\_25RB\_Low\_CH20775\_QAM\_laying****Diagram 90: 9.702b\_SW2\_BE\_LTE7\_25RB\_Low\_CH20775\_QAM\_laying**

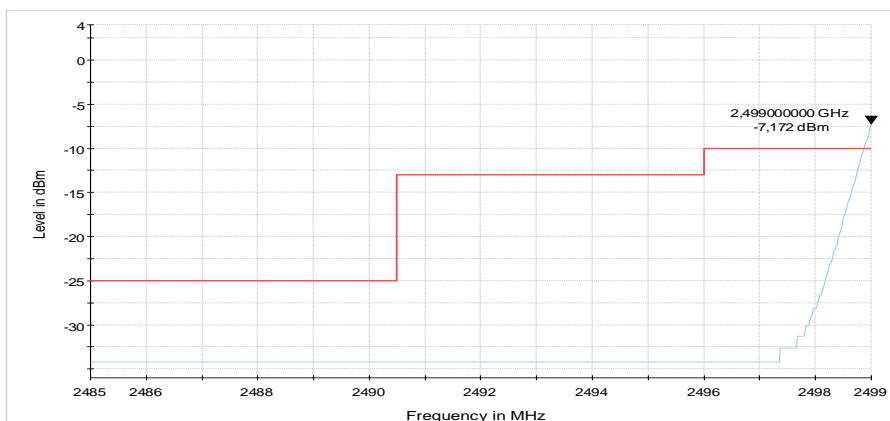




**Diagram 91: 9.702b\_SW2\_BE\_LTE7\_25RB\_low\_CH20775\_QAM\_Standing**



**Diagram 92: 9.705a\_SW1\_BE\_LTE7\_1RB\_Low\_CH20825\_QPSK\_laying**



**Diagram 93: 9.705a\_SW1\_BE\_LTE7\_1RB\_low\_CH20825\_QPSK\_Standing**

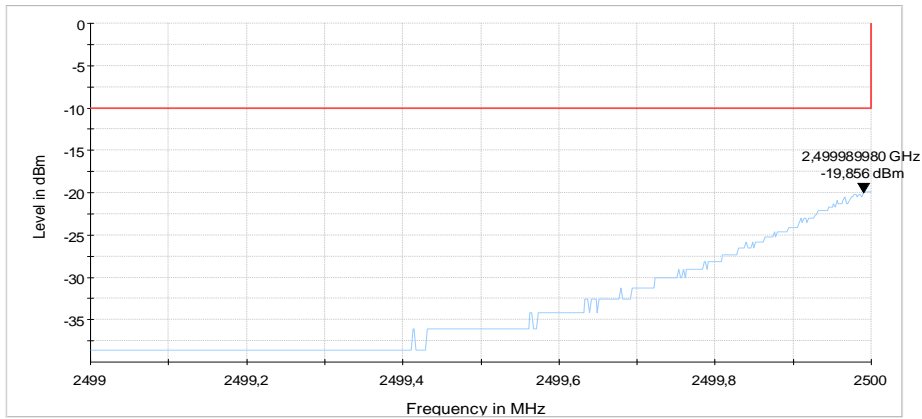


Diagram 94: 9.705a\_SW2\_BE\_LTE7\_1RB\_Low\_CH20825\_QPSK\_laying

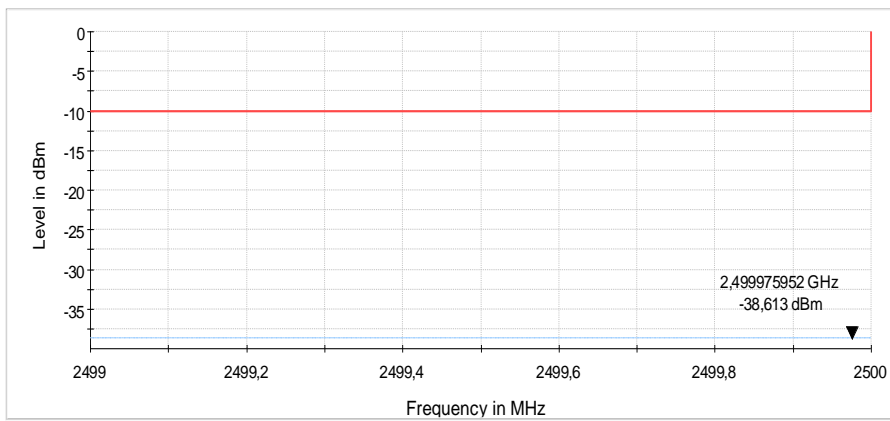


Diagram 95: 9.705a\_SW2\_BE\_LTE7\_1RB\_low\_CH20825\_QPSK\_Standing

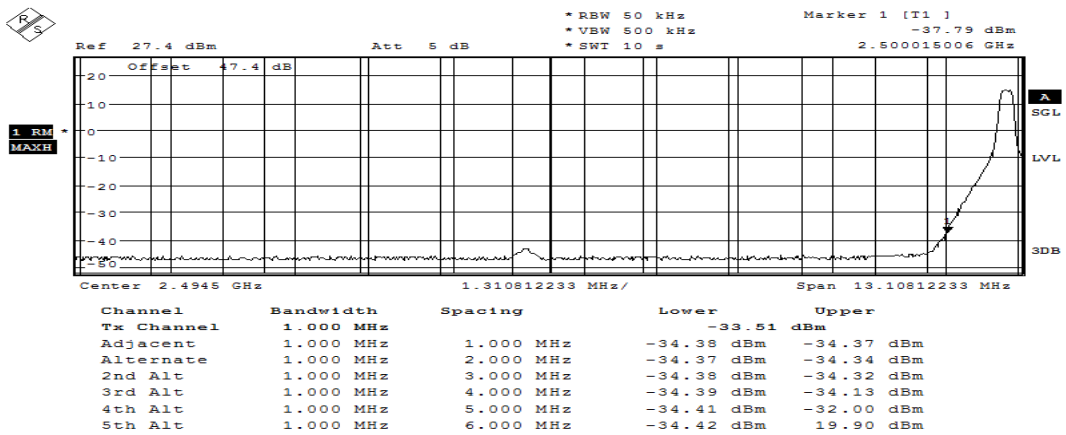
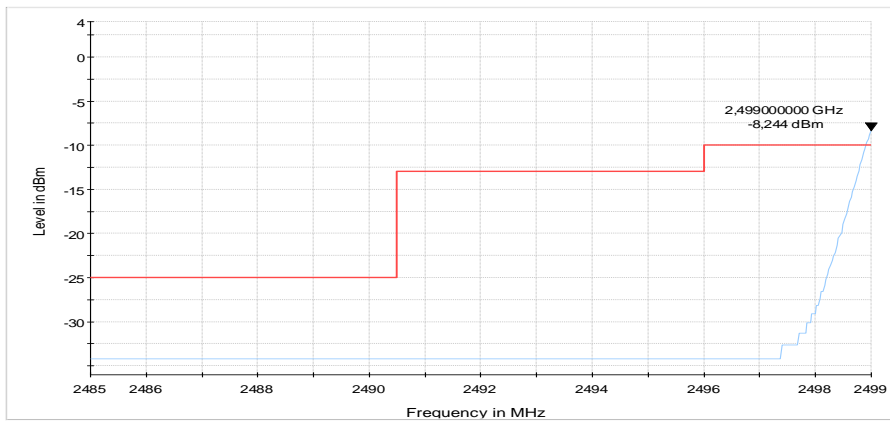
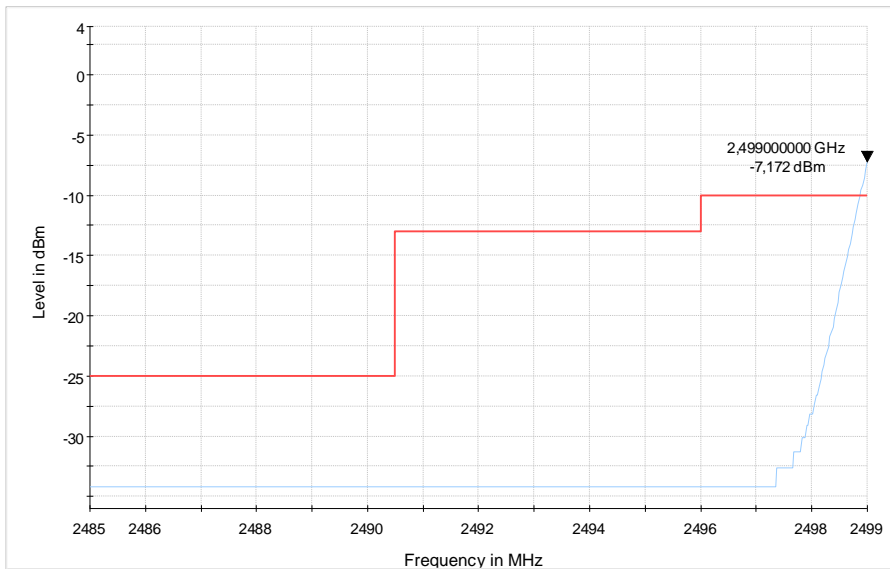


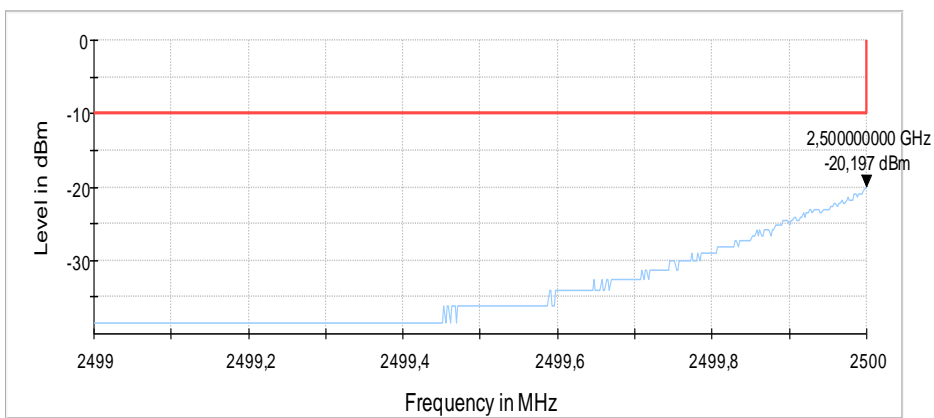
Diagram 96: 9.705a\_SW1\_BE\_LTE7\_1RB\_low\_CH20825\_QPSK\_Standing\_intBW



**Diagram 97: 9.705b\_SW1\_BE\_LTE7\_1RB\_low\_CH20825\_QAM\_Standing**



**Diagram 98: 9.705b\_SW1\_BE\_LTE7\_1RB\_low\_CH20825\_QAM\_laying**



**Diagram 99: 9.705b\_SW2\_BE\_LTE7\_1RB\_Low\_CH20825\_QAM\_laying**

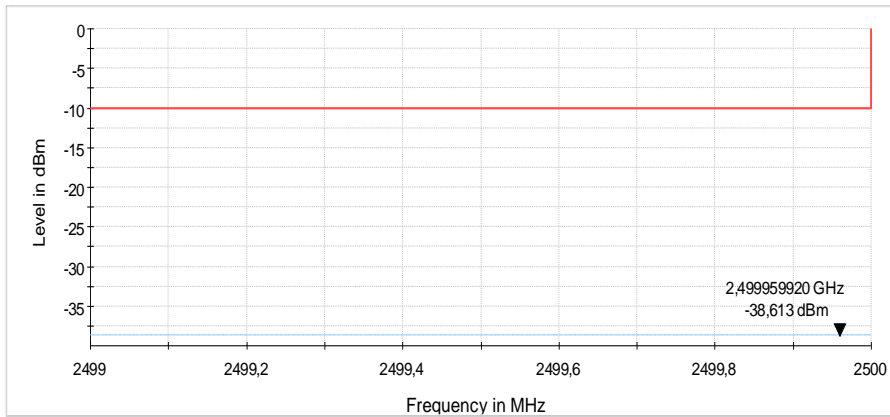


Diagram 100: 9.705b\_SW2\_BE\_LTE7\_1RB\_low\_CH20850\_QAM\_Standing

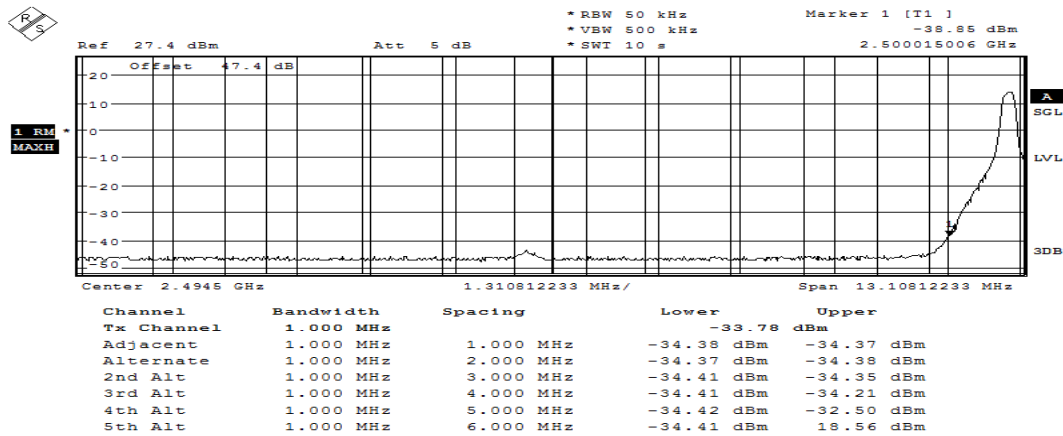


Diagram 101: 9.705b\_SW1\_BE\_LTE7\_1RB\_low\_CH20825\_QAM\_Standing\_intBW

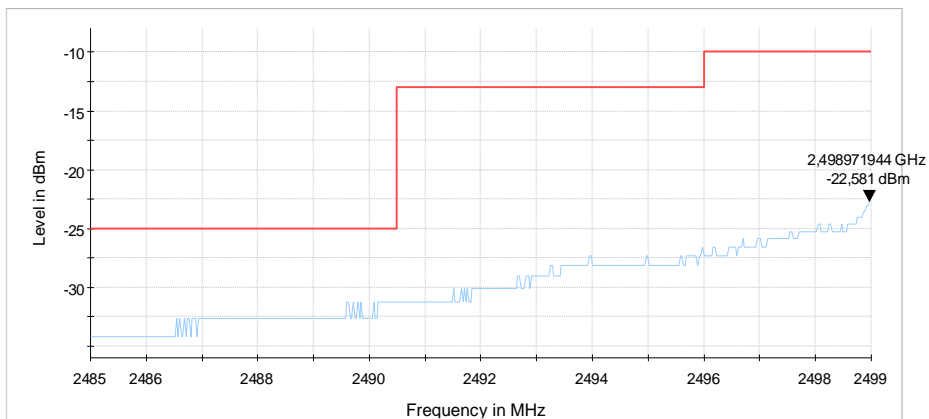
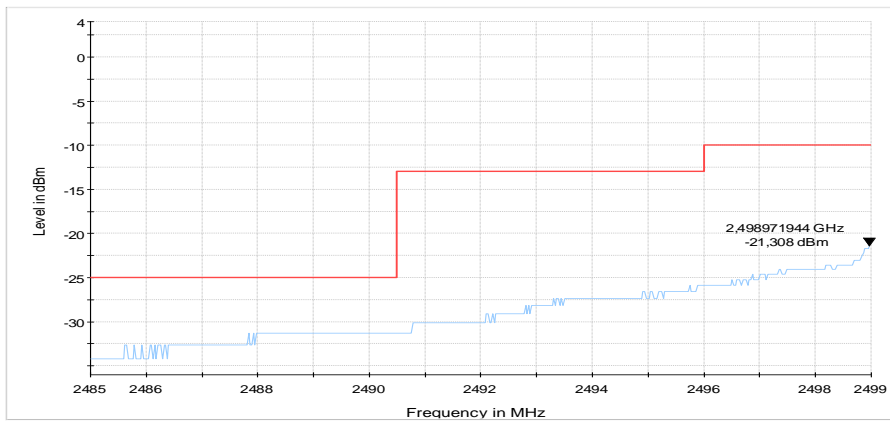
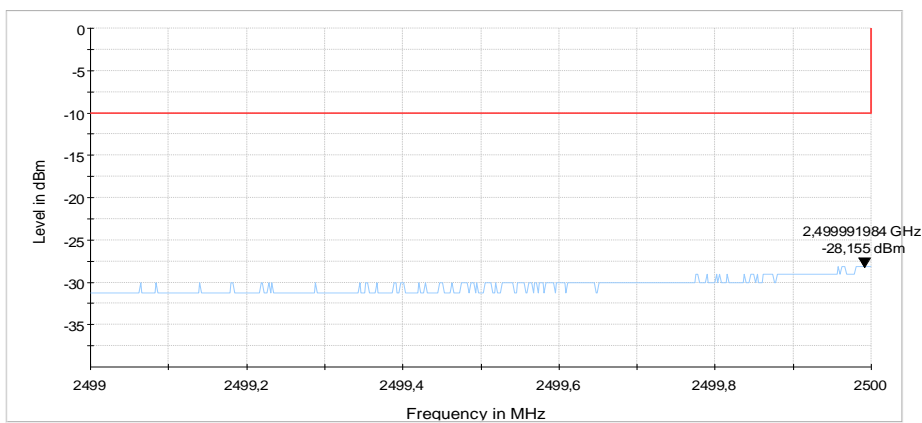


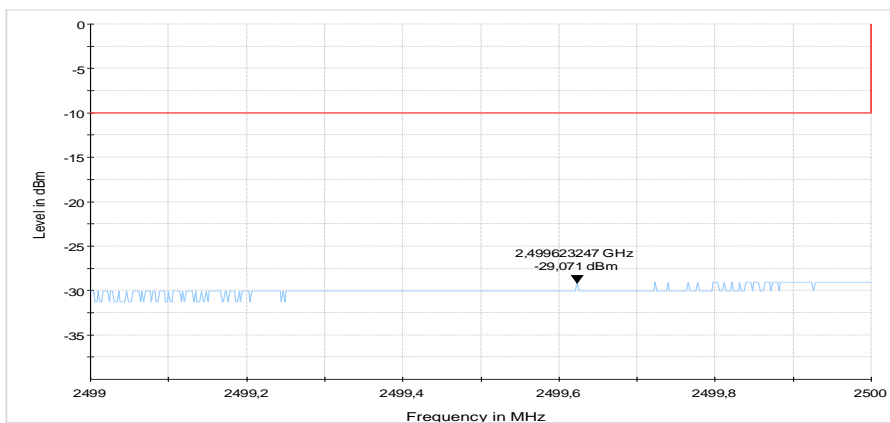
Diagram 102: 9.706a\_SW1\_BE\_LTE7\_75RB\_Low\_CH20825\_QPSK\_Laying



**Diagram 103: 9.706a\_SW1\_BE\_LTE7\_75RB\_low\_CH20825\_QPSK\_Standing**



**Diagram 104: 9.706a\_SW2\_BE\_LTE7\_75RB\_Low\_CH20825\_QPSK**



**Diagram 105: 9.706a\_SW2\_BE\_LTE7\_75RB\_low\_CH20850\_QPSK\_Standing**

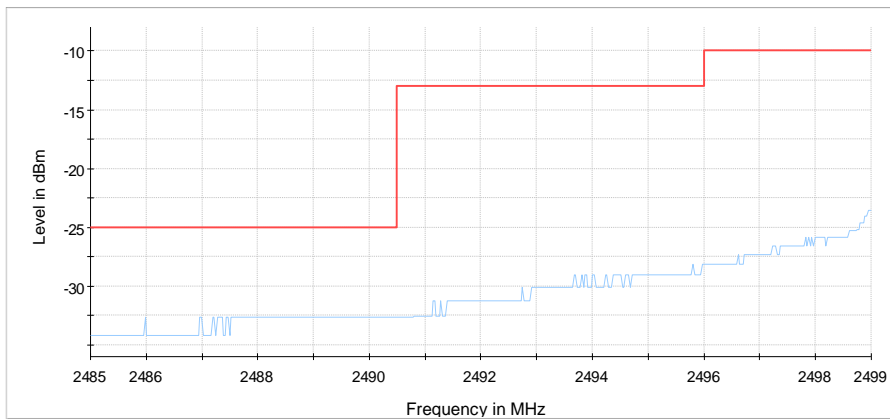


Diagram 106: 9.707b\_SW1\_BE\_LTE7\_75RB\_Low\_CH20825\_QAM\_laying

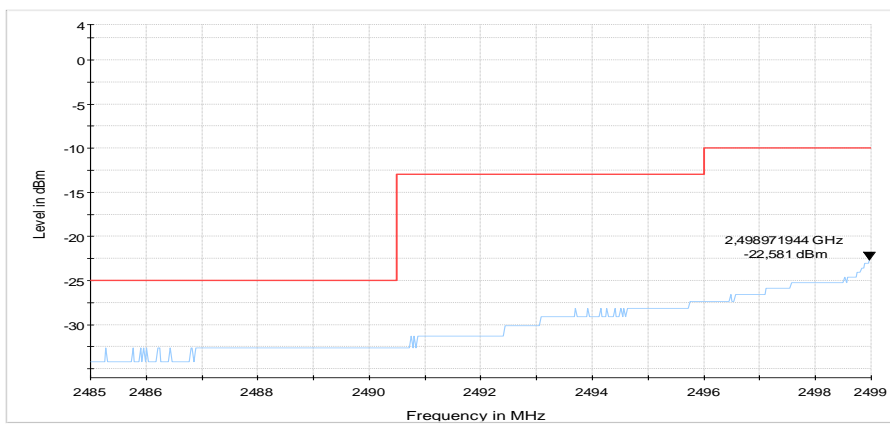


Diagram 107: 9.707b\_SW1\_BE\_LTE7\_75RB\_low\_CH20825\_QAM\_Standing

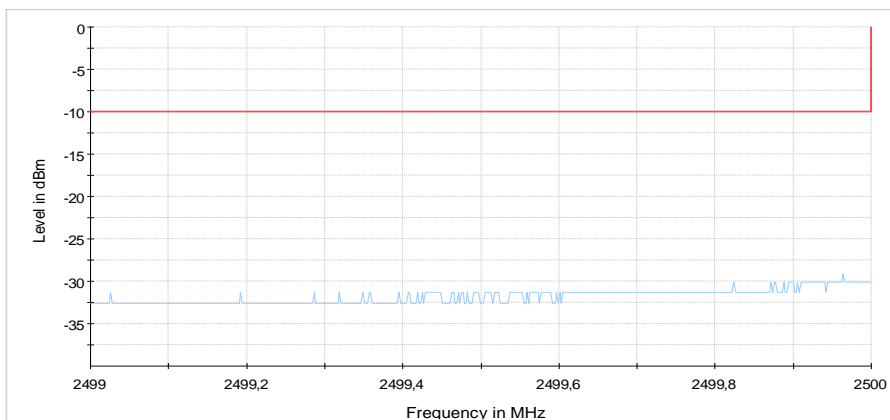
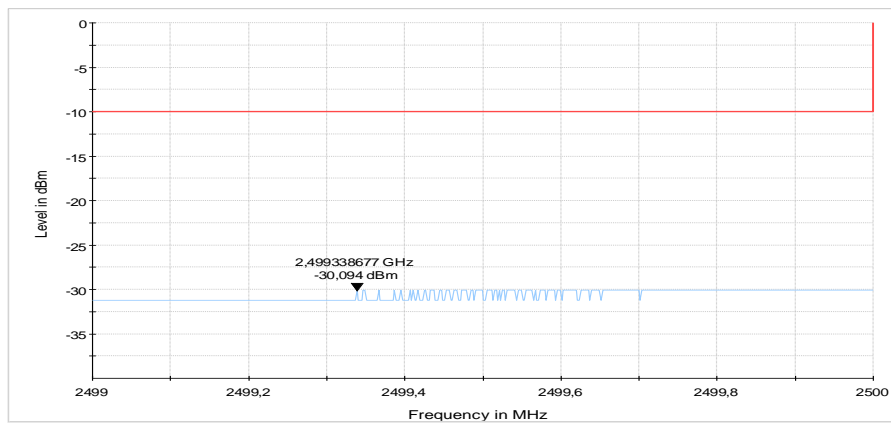
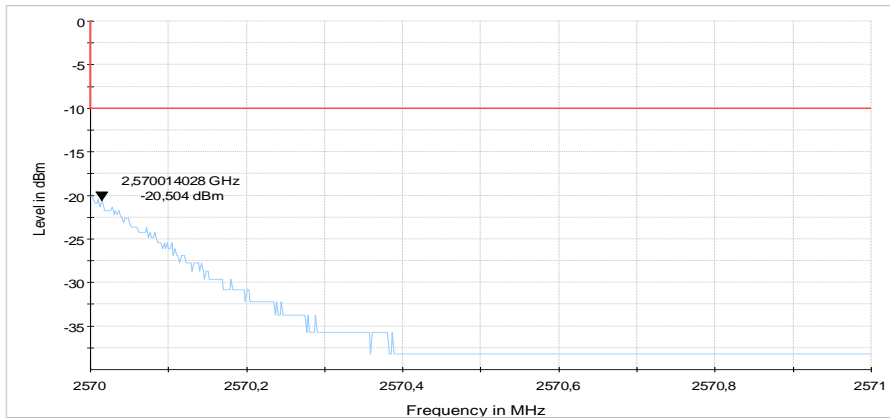


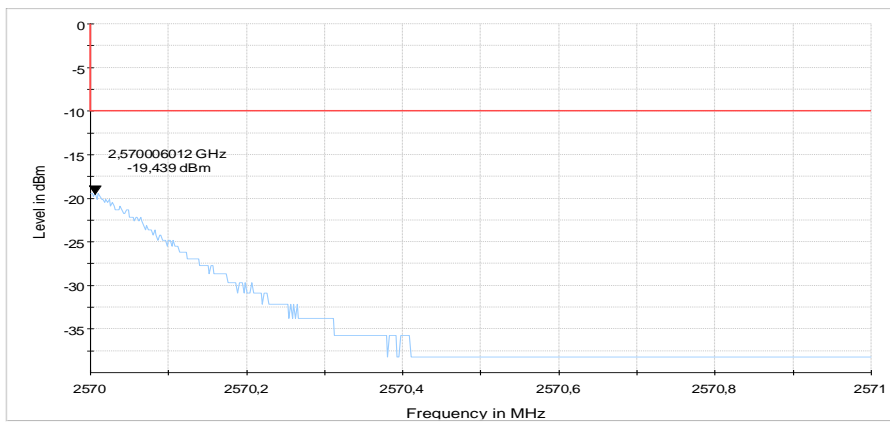
Diagram 108: 9.707b\_SW2\_BE\_LTE7\_75RB\_Low\_CH20825\_QAM\_laying

**Diagram 109: 9.707b\_SW2\_BE\_LTE7\_75RB\_low\_CH20850\_QAM\_Standing**

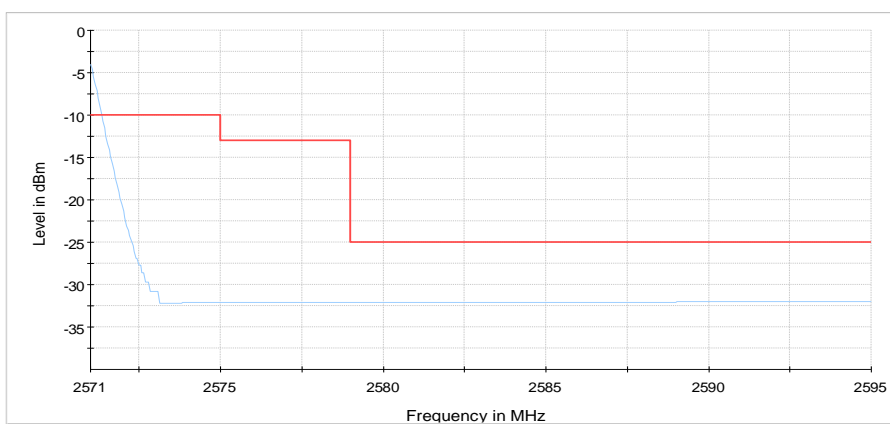
### 1.11.2. High Band-Edge



**Diagram 110: 9.712b\_SW2\_BE\_LTE7\_1RB\_Low\_CH21400\_QAM**



**Diagram 111: 9.712a\_SW2\_BE\_LTE7\_1RB\_Low\_CH21400\_QPSK**



**Diagram 112: 9.712a\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QPSK\_laying**



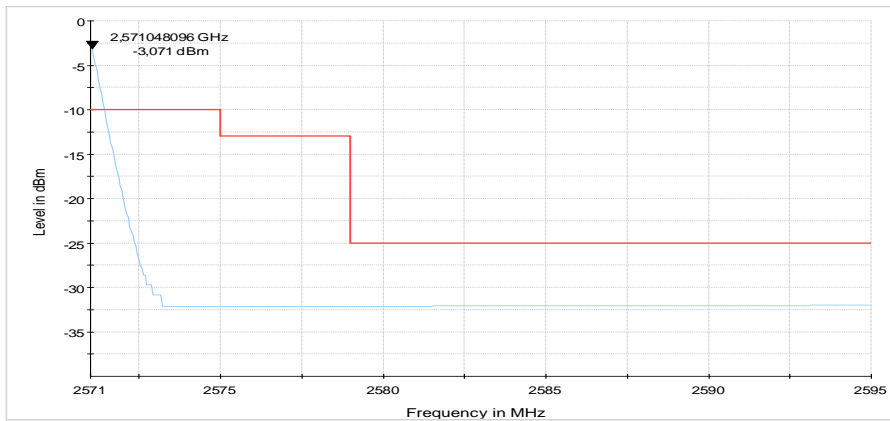


Diagram 113: 9.712a\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QPSK\_Standing

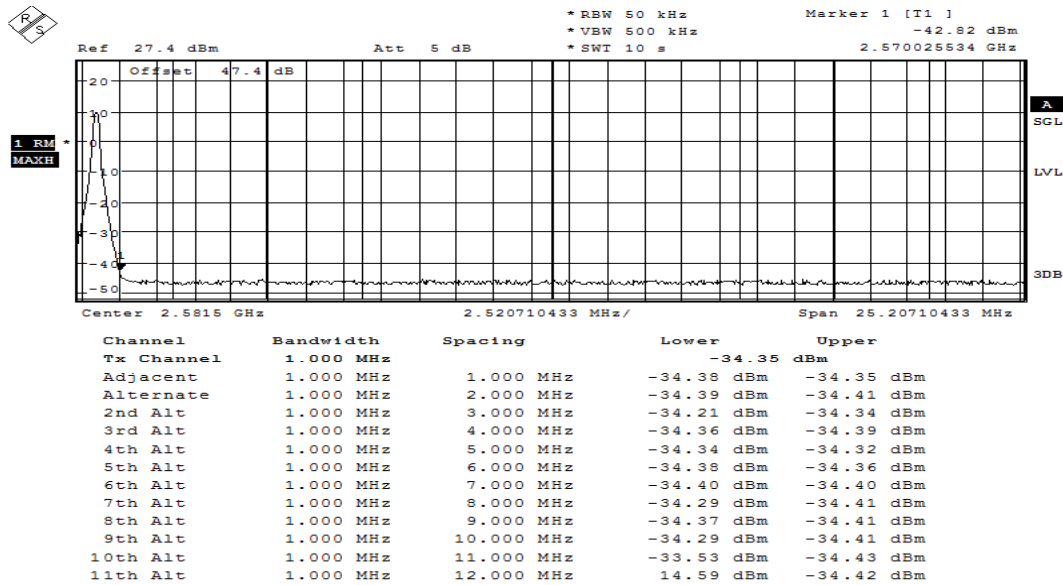


Diagram 114: 9.712a\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QPSK\_Laying\_intBW

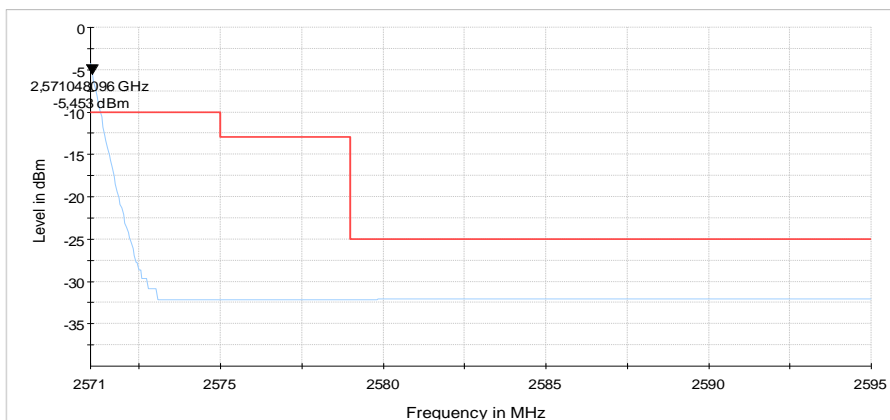


Diagram 115: 9.712b\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QAM\_laying

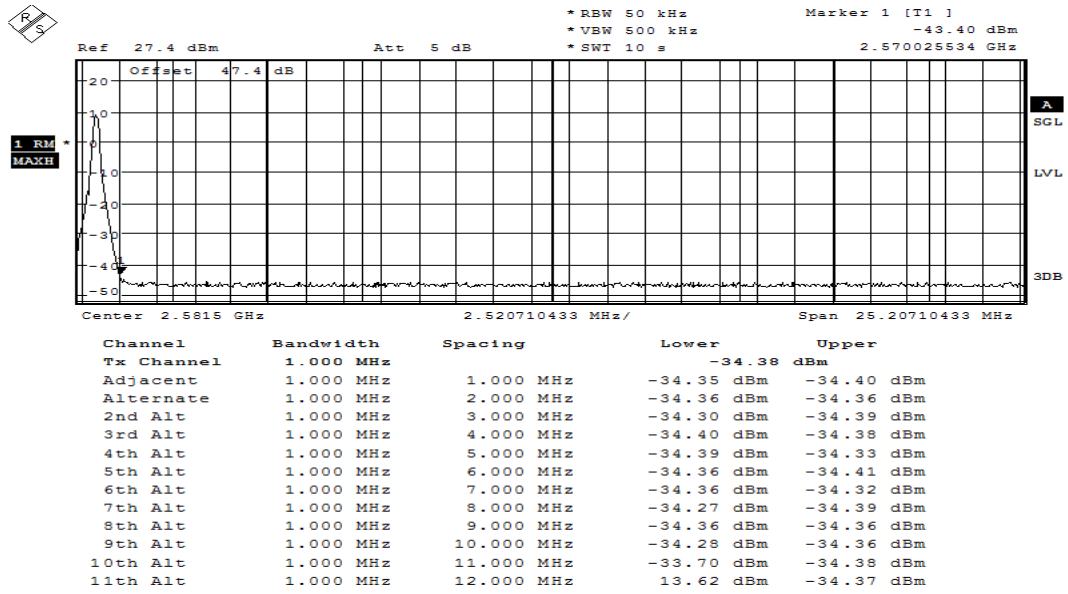


Diagram 116: 9.712b\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QAM\_Laying\_intBW

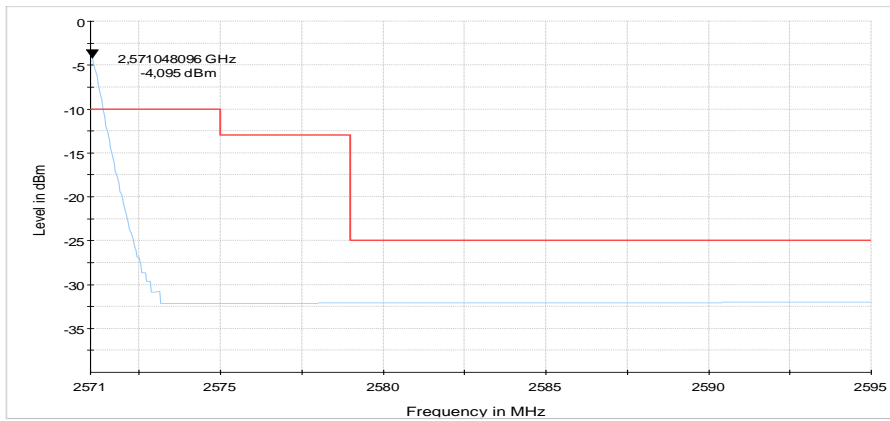


Diagram 117: 9.712b\_SW1\_BE\_LTE7\_1RB\_high\_CH21400\_QAM\_Standing

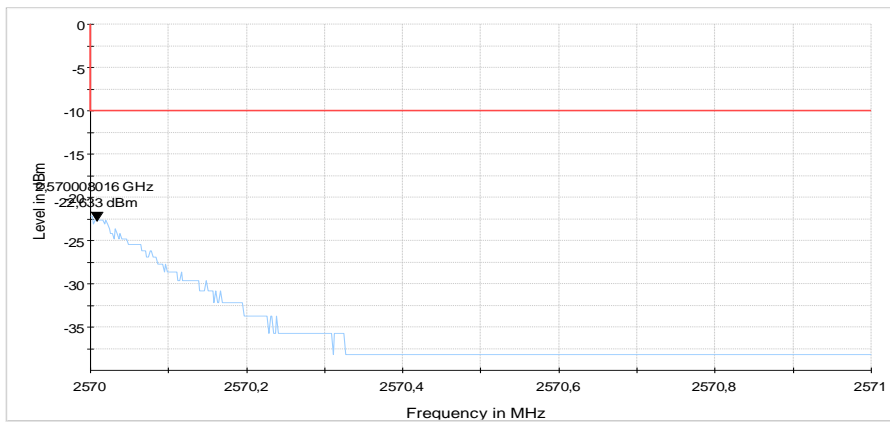
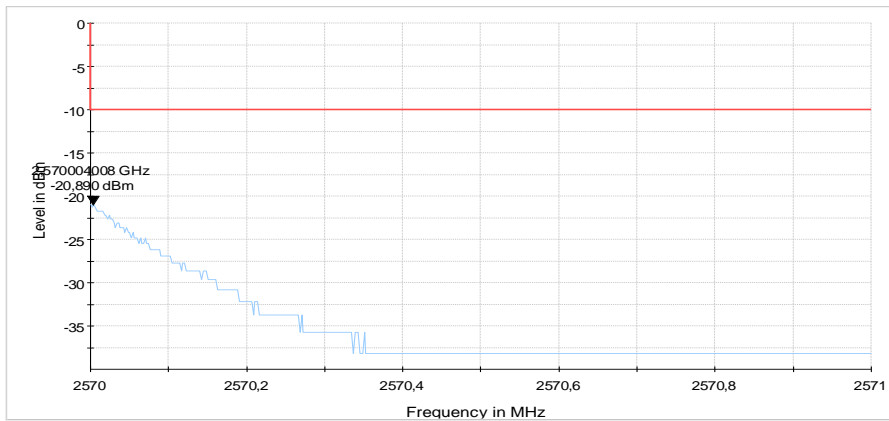
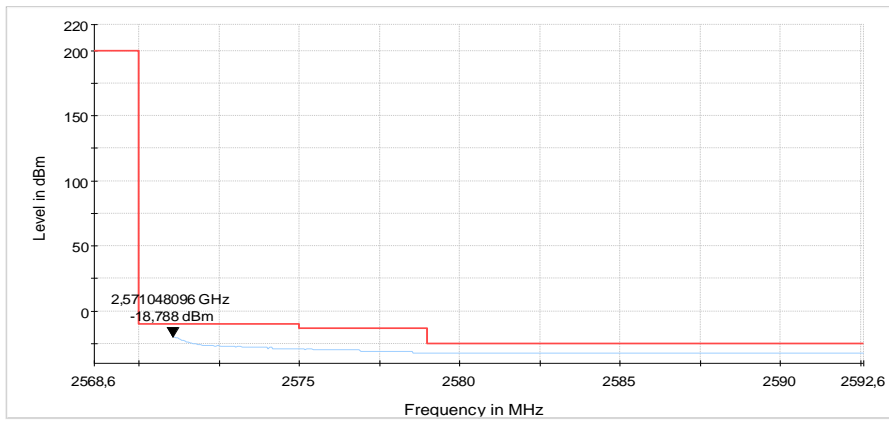
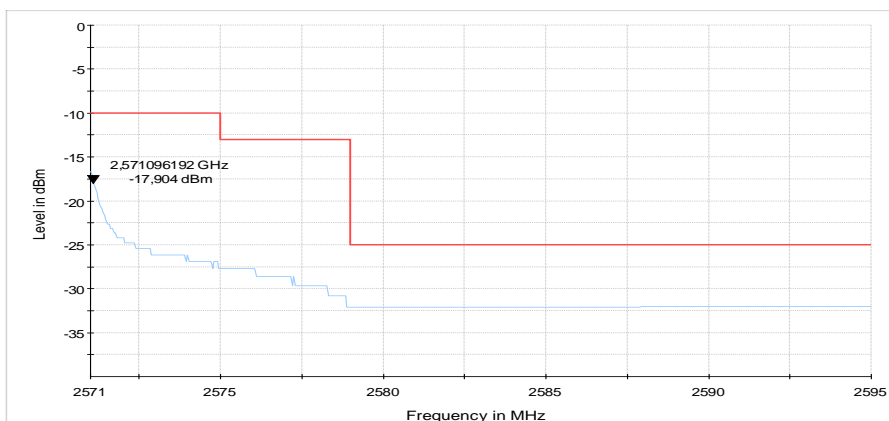
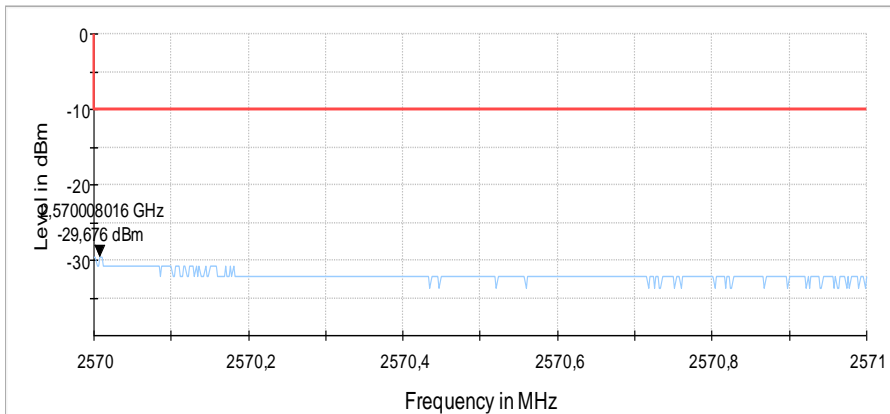
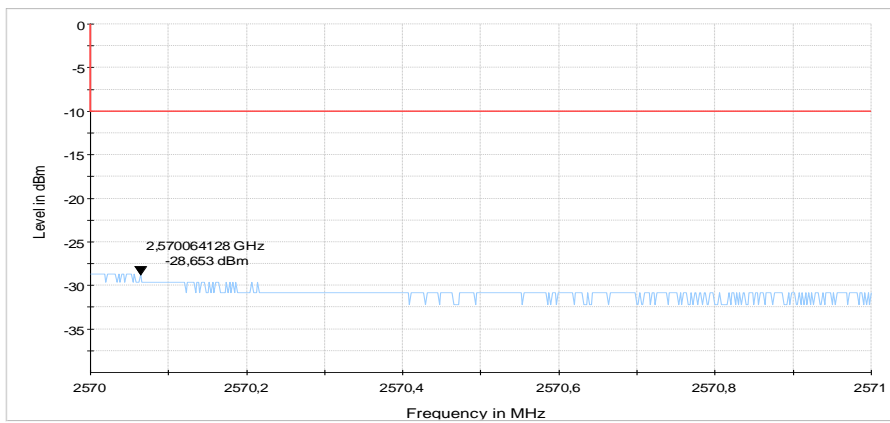


Diagram 118: 9.712b\_SW2\_BE\_LTE7\_1RB\_high\_CH21400\_QAM

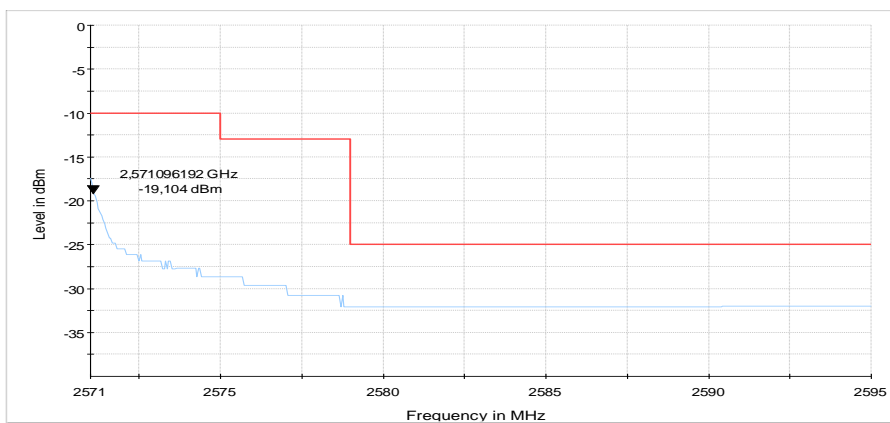
**Diagram 119: 9.712b\_SW2\_BE\_LTE7\_1RB\_high\_CH21400\_QPSK****Diagram 120: 9.713a\_SW1\_BE\_LTE7\_50RB\_high\_CH21400\_QPSK\_standing****Diagram 121: 9.713a\_SW1\_BE\_LTE7\_50RB\_high\_CH21400\_QPSK\_Laying**



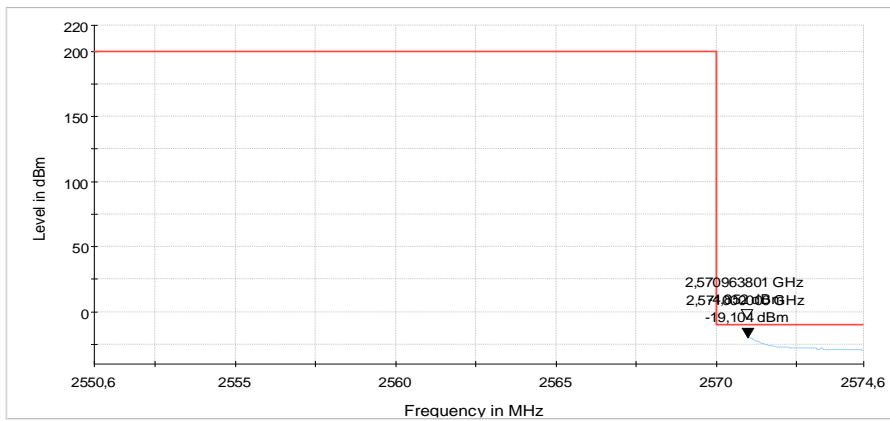
**Diagram 122: 9.713a\_SW2\_BE\_LTE7\_50RB\_high\_CH21400\_QPSK\_laying**



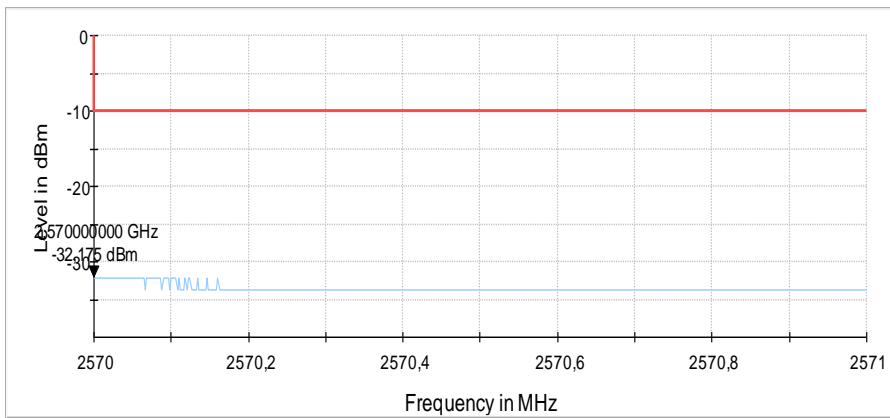
**Diagram 123: 9.713a\_SW2\_BE\_LTE7\_50RB\_High\_CH21400\_QPSK\_Standing**



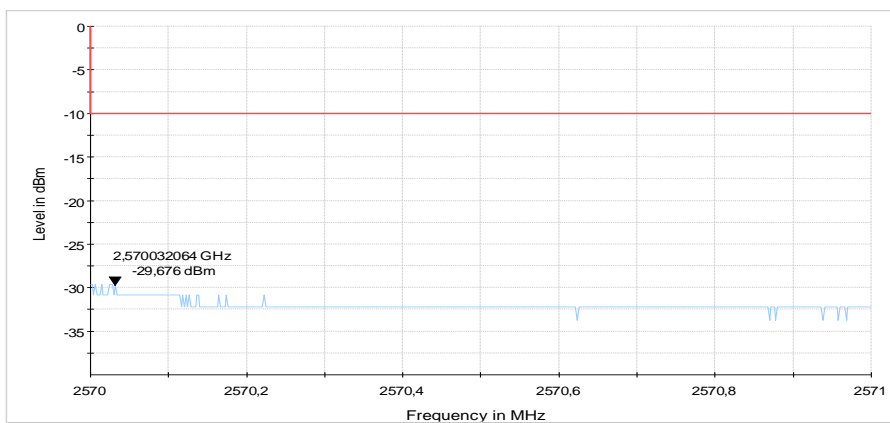
**Diagram 124: 9.713b\_SW1\_BE\_LTE7\_50RB\_high\_CH21400\_QAM\_Standing**



**Diagram 125: 9.713b\_SW1\_BE\_LTE7\_50RB\_high\_CH21400\_QAM\_Standing**



**Diagram 126: 9.713b\_SW2\_BE\_LTE7\_50RB\_high\_CH21400\_QAM**



**Diagram 127: 9.713b\_SW2\_BE\_LTE7\_50RB\_High\_CH21400\_QAM\_Standing**

## 1.12. Radiated emissions – band-edge (LTE Band 12)

### 1.12.1. Low Band-Edge

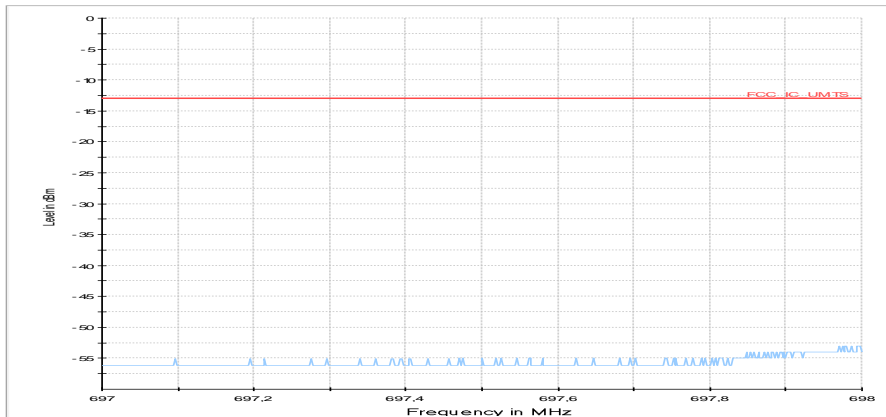


Diagram 128: 9.1203a\_Ch\_23025\_BW3\_RB1\_low\_QPSK\_Laying

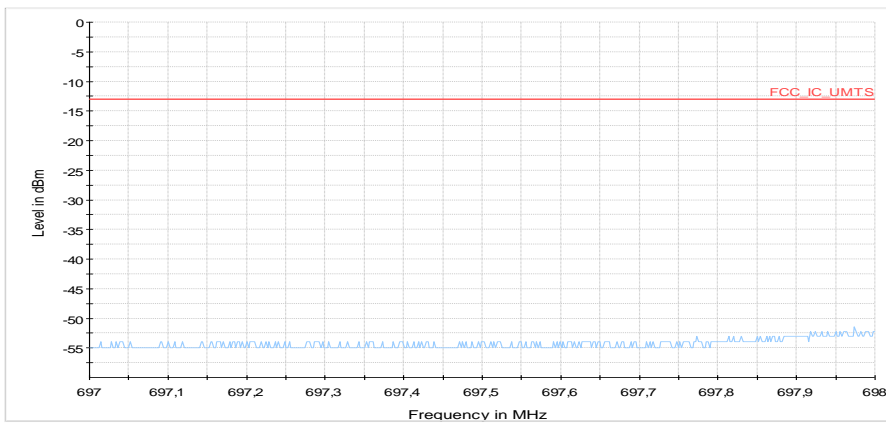


Diagram 129: 9.1203a\_Ch\_23025\_BW3\_RB1\_low\_QPSK\_Standing

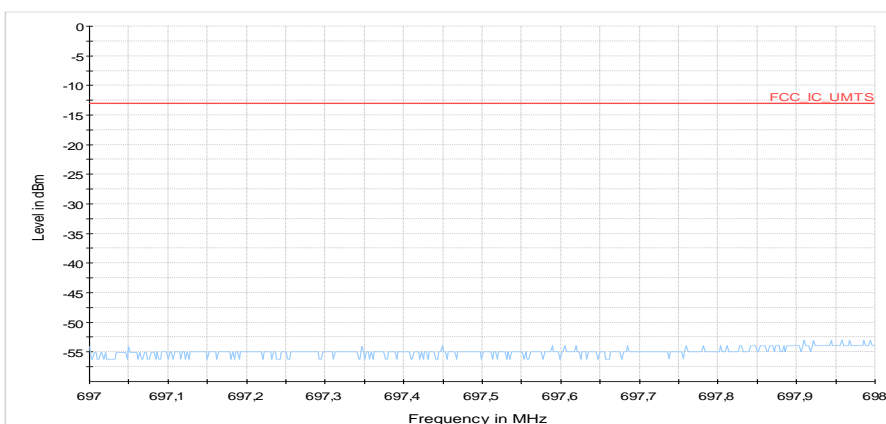
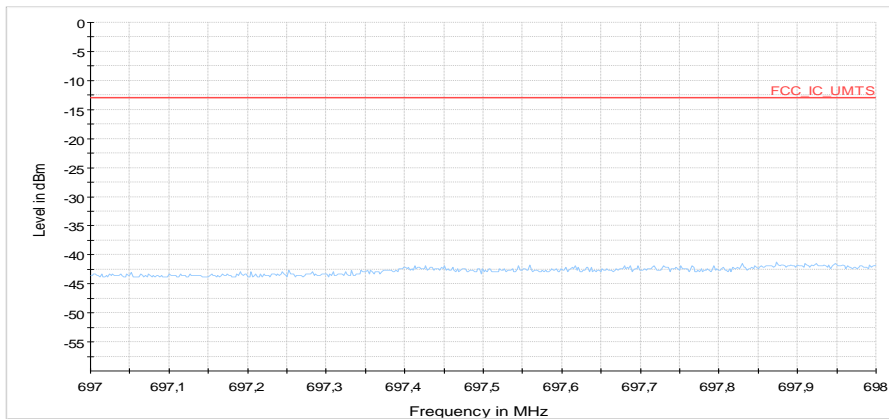
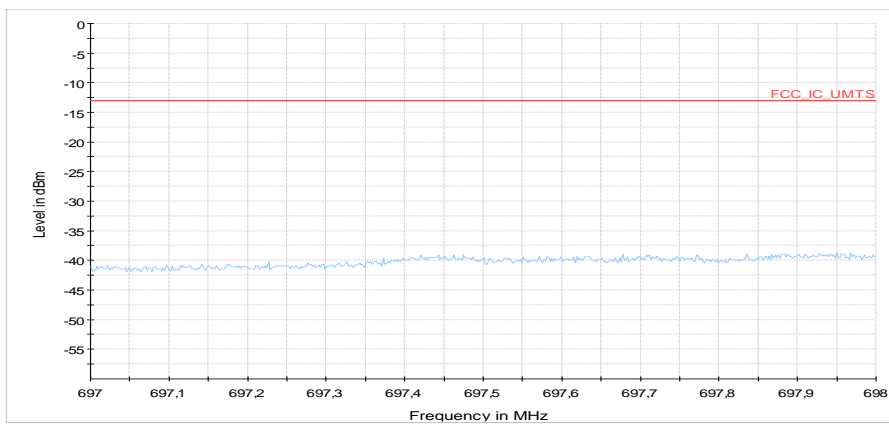
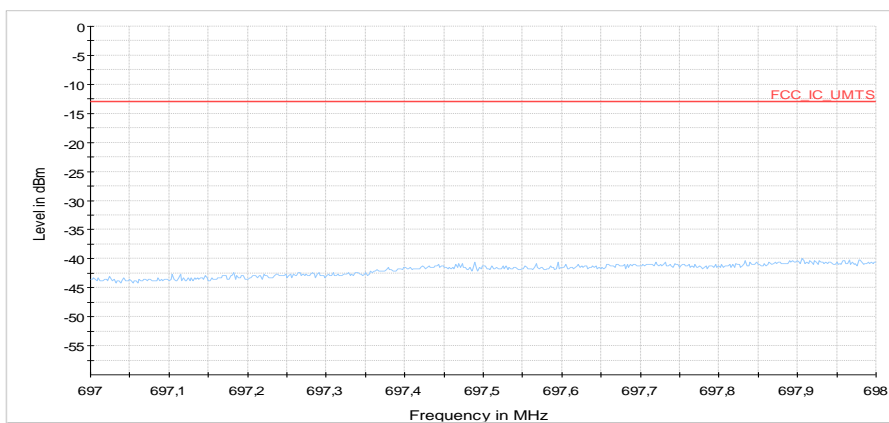
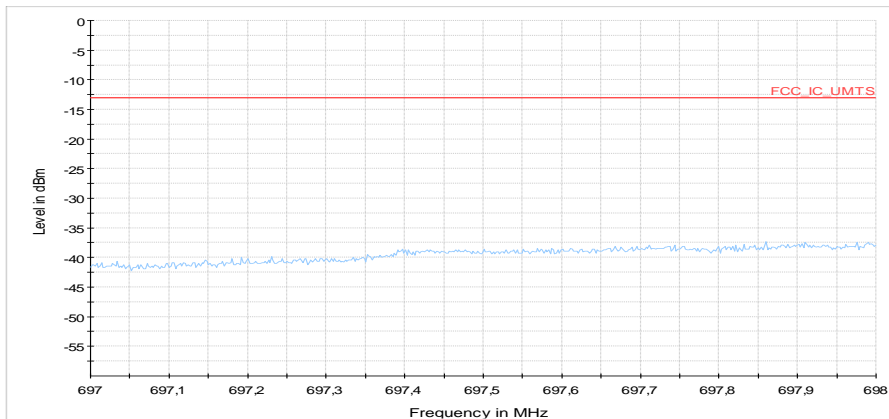
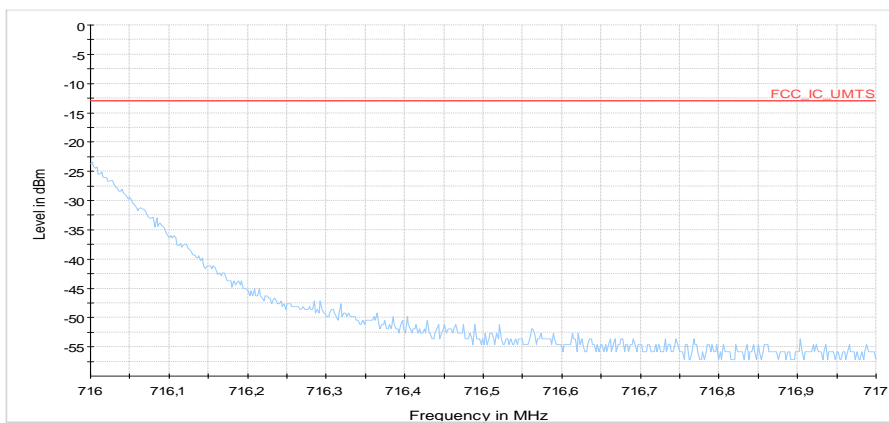
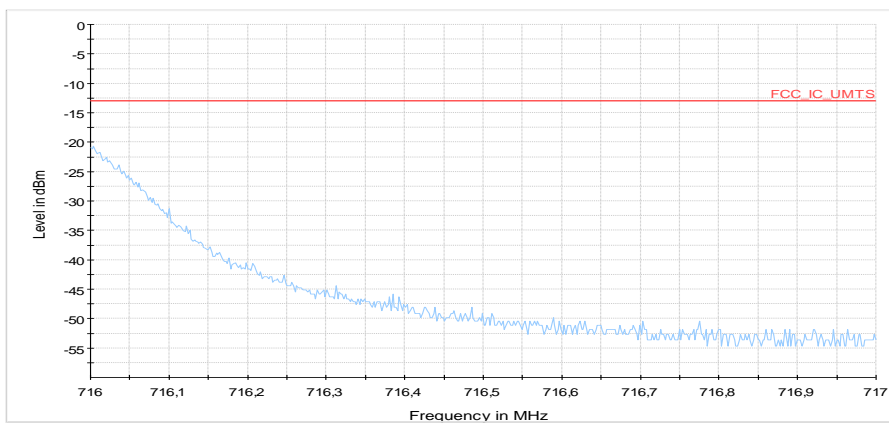
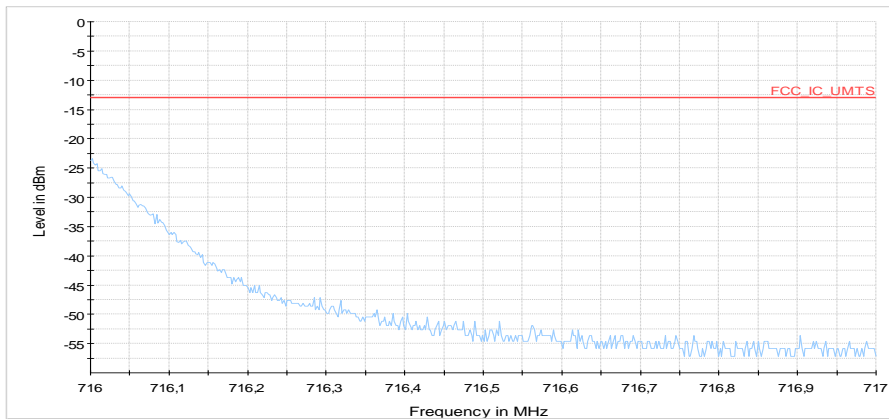
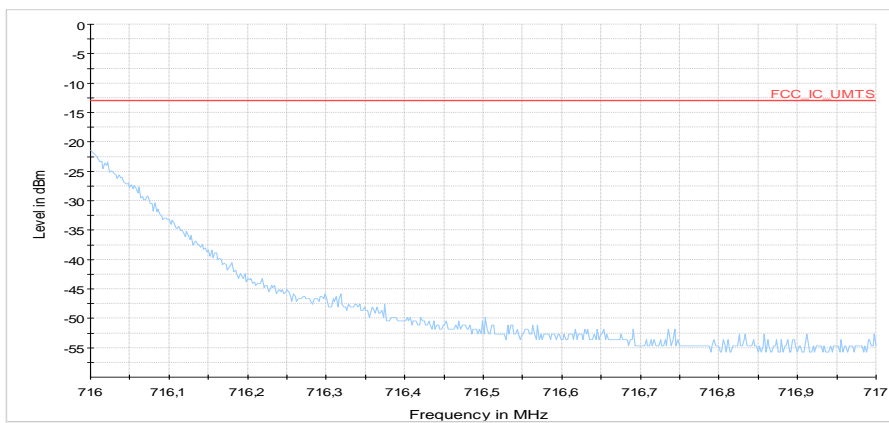
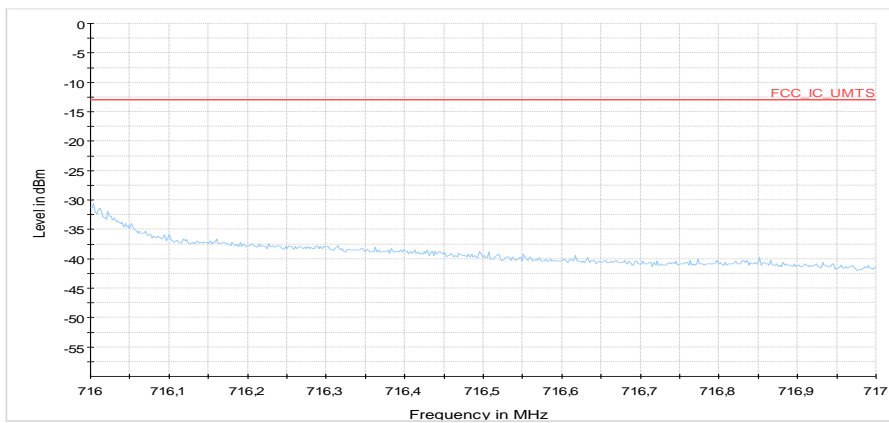


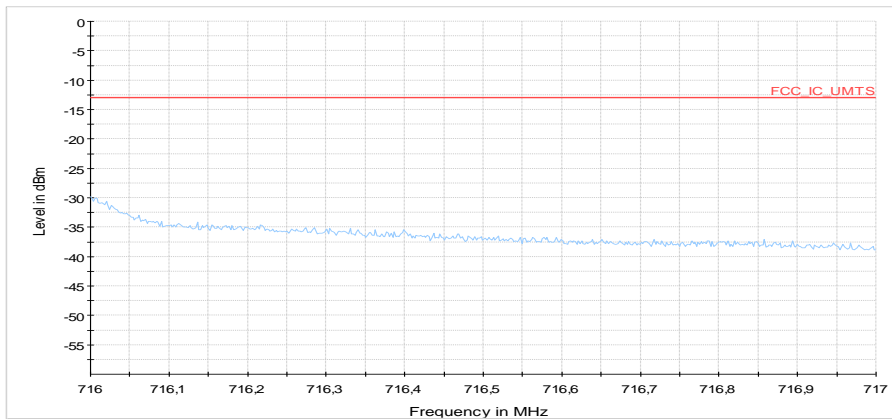
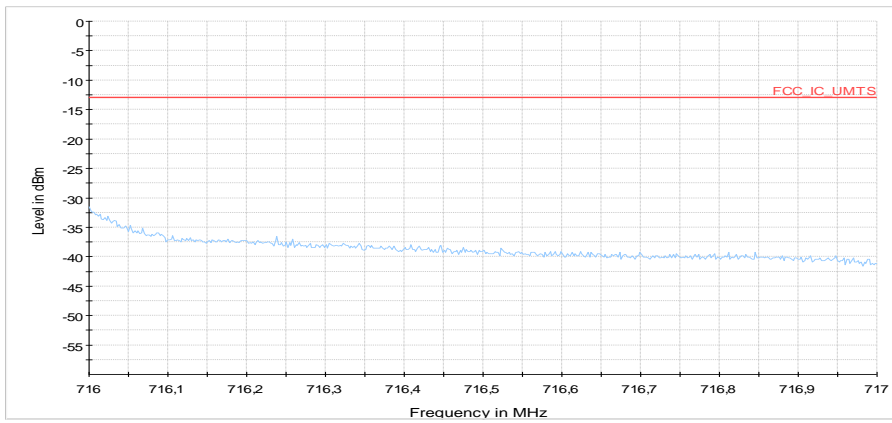
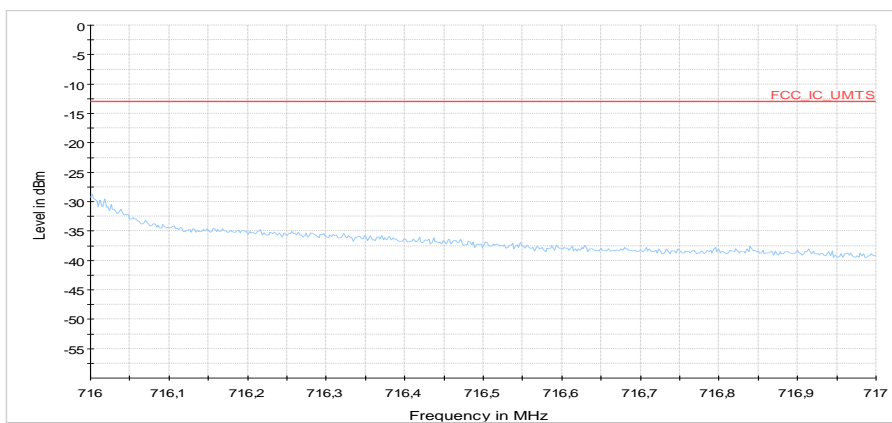
Diagram 130: 9.1203b\_Ch\_23025\_BW3\_RB1\_low\_16QAM\_Laying

**Diagram 131: 9.1204a\_Ch\_23025\_BW3\_RB15\_low\_QPSK\_Laying****Diagram 132: 9.1204a\_Ch\_23025\_BW3\_RB15\_low\_QPSK\_Standing****Diagram 133: 9.1204b\_Ch\_23025\_BW3\_RB15\_low\_16-QAM\_Laying**

**Diagram 134: 9.1204b\_Ch\_23025\_BW3\_RB15\_low\_16-QAM\_Standing****1.12.2. High Band-Edge****Diagram 135: 9.1210a\_Ch\_23165\_BW3\_RB1\_high\_QPSK\_Laying****Diagram 136: 9.1210a\_Ch\_23165\_BW3\_RB1\_high\_QPSK\_Standing**



**Diagram 137: 9.1211b\_Ch\_23165\_BW3\_RB1\_high\_16QAM\_Laying****Diagram 138: 9.1211b\_Ch\_23165\_BW3\_RB1\_high\_16QAM\_Standing****Diagram 139: 9.1212a\_Ch\_23165\_BW3\_RB15\_high\_QPSK\_Laying**

**Diagram 140: 9.1212a\_Ch\_23165\_BW3\_RB15\_high\_QPSK\_Standing****Diagram 141: 9.1212b\_Ch\_23165\_BW3\_RB15\_high\_16QAM\_Laying****Diagram 142: 9.1212b\_Ch\_23165\_BW3\_RB15\_heigh\_16QAM\_Standing**