Annex 1: Measurement diagrams to
T E S T R E P O R T
No.: 16-1-0050601T35a

According to:
FCC Regulations
Part 22, Part 27

for

peiker acustic GmbH & Co. KG

GSM/ WCDMA/ LTE Telematics ROW Module
V1233-0

FCC-ID: QWY-V1233-0

Laboratory Accreditation and Listings		
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1. Measurement diagrams LTE-mode

1.1. Power conducted LTE-Band 5

LTE-Band 5				QPSK-Modulation			16-QAM-Modulation						
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]	max- modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value
1.4 MHz	20407	824.7	1RB low	27,131	22,71	4,4206	27,2411	22,2698	4,9713	22,74	22,36	22,74	23,10
			1RB high	27,133	22,739	4,3938	27,082	22,363	4,719				
			50%RB mid	27,317	22,688	4,6291	27,2111	21,824	5,3871				
			100%RB	27,735	21,82	5,9149	27,7361	20,8906	6,8455				
	20525	836.5	1RB low	27,4	22,551	4,8496	27,6918	22,2594	5,4324	22,61	22,47		
			1RB high	27,487	22,605	4,8818	27,7685	22,465	5,3035				
			50%RB mid	27,76	22,546	5,2156	27,9043	22,0492	5,8551				
			100%RB	28,149	21,892	6,2566	28,0201	20,846	7,1741				
	20643	848.3	1RB low	27,247	22,398	4,8498	27,286	22,1387	5,1473	22,40	22,14		
			1RB high	27,258	22,309	4,9485	27,2909	22,0137	5,2772				
			50%RB mid	27,567	22,345	5,2224	27,5369	21,6204	5,9165				
			100%RB	27,692	21,23	6,4622	27,798	20,7886	7,0094				
3 MHz	20415	825.5	1RB low	27,228	22,945	4,2825	27,1829	22,4797	4,7032	22,95	22,48	22,95	
			1RB high	27,032	22,945	4,0874	26,972	22,4015	4,5705				
			50%RB mid	26,513	21,973	4,5395	27,0381	22,0729	4,9652				
			100%RB	27,735	21,779	5,9567	27,4043	20,824	6,5803				
	20525	836.5	1RB low	27,162	22,426	4,7359	27,4924	22,3912	5,1012	22,45	22,48		
			1RB high	27,28	22,449	4,8317	27,7121	22,4842	5,2279				
			50%RB mid	26,858	21,891	4,9671	27,5204	22,0551	5,4653				
			100%RB	28,117	21,889	6,2281	27,7574	20,9913	6,7661				
	20635	847.5	1RB low	26,754	22,392	4,3615	26,7864	21,9056	4,8808	22,43	21,99		
			1RB high	26,92	22,43	4,4902	27,2055	21,9932	5,2123				
			50%RB mid	26,467	21,339	5,1282	27,0284	21,714	5,3144				
			100%RB	27,296	21,349	5,9468	27,6589	20,8804	6,7785				
5 MHz	20425	826.5	1RB low	27,41	23,102	4,3076	27,3646	22,461	4,9036	23,10	22,46	23,10	
			1RB high	27,212	23,102	4,1098	27,241	22,443	4,798				
			50%RB mid	26,909	21,928	4,9808	27,1887	22,1068	5,0819				
			100%RB	27,381	21,929	5,4526	27,5214	20,9893	6,5321				
	20525	836.5	1RB low	27,158	22,562	4,5964	27,608	22,4258	5,1822	22,63	22,65		
			1RB high	27,31	22,63	4,6761	27,8346	22,6492	5,1854				
			50%RB mid	27,4	22,001	5,3992	27,6249	22,0476	5,5773				
			100%RB	28,851	22,027	6,8236	28,0775	21,1014	6,9761				
	20625	846.5	1RB low	26,588	22,464	4,1243	27,0655	22,5588	4,5067	22,46	22,56		
			1RB high	27,176	22,465	4,711	27,4225	22,0681	5,3544				
			50%RB mid	26,744	21,271	5,473	27,1031	21,5794	5,5237				
			100%RB	27,803	21,313	6,4898	27,6616	20,955	6,7066				
10 MHz	20450	829	1RB low	27,237	22,754	4,4824	27,2234	22,0425	5,1809	22,75	22,21	22,75	
			1RB high	27,208	22,512	4,6962	27,3592	22,2093	5,1499				
			50%RB mid	26,881	21,795	5,0854	26,4396	20,8568	5,5828				
			100%RB	27,987	21,804	6,183	28,2901	20,8244	7,4657				
	20525	836.5	1RB low	26,89	22,55	4,34	27,0844	22,3037	4,7807	22,55	22,30		
			1RB high	27,004	22,474	4,53	27,2019	22,1205	5,0814				
			50%RB mid	27,253	21,863	5,3894	26,8713	20,967	5,9043				
			100%RB	28,245	21,725	6,5194	27,8642	20,7411	7,1231				
	20600	844	1RB low	27,294	22,736	4,558	27,2373	22,2783	4,959	22,74	22,28		
			1RB high	27,103	22,478	4,6252	27,2178	21,968	5,2498				
			50%RB mid	26,832	21,666	5,1663	26,251	20,7641	5,4869				
			100%RB	28,113	21,565	6,5471	28,0607	20,7055	7,3552				

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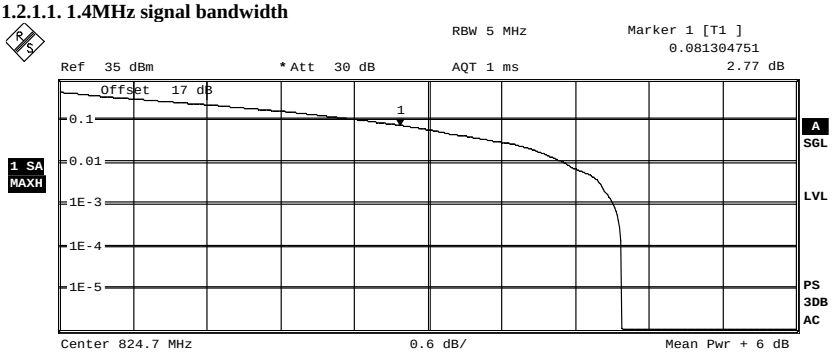
1.2. Power conducted LTE-Band 7

LTE-Band 7				QPSK-Modulation			16-QAM-Modulation			max. modulatio	max. modulatio	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		1RB low	26,024	22,006	4,018	26,0437	21,42	4,6237	26,921	27,18	27,18	27,69
			1RB high	26,297	22	4,2969	26,3313	21,4561	4,8752				
			50%RB mid	26,097	20,846	5,2511	26,2503	21,0711	5,1792				
			100%RB	26,864	20,949	5,9155	26,9212	19,9986	6,9226				
	21100		1RB low	26,527	22,092	4,4358	26,5778	21,8167	4,7611	27,18			
			1RB high	26,356	21,87	4,4861	26,488	21,6056	4,8824				
			50%RB mid	26,129	20,897	5,232	26,5441	21,1516	5,3925				
			100%RB	27,18	20,866	6,3148	27,0173	19,9804	7,0369				
	21425		1RB low	26,551	22,255	4,2957	26,6347	21,5242	5,1105	26,988			
			1RB high	26,882	22,112	4,77	26,4488	21,5806	4,8682				
			50%RB mid	26,292	21,047	5,2454	26,5356	21,337	5,1986				
			100%RB	26,988	21,012	5,9756	26,8883	20,1029	6,7854				
10 MHz	20800		1RB low	26,553	22,298	4,255	26,5471	22,0342	4,5129	27,21	27,336	27,34	
			1RB high	26,899	22,567	4,332	26,9796	22,0227	4,9569				
			50%RB mid	26,31	20,994	5,316	25,9412	20,0754	5,8658				
			100%RB	27,21	21,081	6,1288	27,201	20,0779	7,1231				
	21000		1RB low	26,626	22,364	4,2627	26,6858	21,9204	4,7654	27,189			
			1RB high	26,583	22,242	4,3412	26,5845	21,7299	4,8546				
			50%RB mid	26,182	20,914	5,2679	25,7827	20,0507	5,732				
			100%RB	27,121	21,004	6,1171	27,1892	19,9556	7,2336				
	21400		1RB low	26,578	22,39	4,1877	26,9322	22,0069	4,9253	27,336			
			1RB high	26,418	22,447	3,9709	26,8016	22,0247	4,7769				
			50%RB mid	26,43	22,1	4,328	26,1331	20,3596	5,7735				
			100%RB	26,886	21,158	5,728	27,3363	20,2847	7,0516				
15 MHz	2825		1RB low	26,587	22,045	4,5419	26,524	21,6186	4,9054	27,58	27,58	27,58	
			1RB high	26,841	22,194	4,6469	26,9557	21,875	5,0807				
			50%RB mid	26,482	21,011	5,471	26,9098	21,2054	5,7044				
			100%RB	27,58	21,1	6,48	27,3635	20,1063	7,2572				
	21100		1RB low	26,364	21,968	4,3963	26,44	21,6549	4,7851	27,27			
			1RB high	26,407	22,059	4,3476	26,441	21,5799	4,8611				
			50%RB mid	26,212	21,084	5,1277	26,5418	21,2047	5,3371				
			100%RB	27,27	20,967	6,3027	27,1199	19,9958	7,1241				
	21375		1RB low	26,88	22,06	4,8187	26,4318	21,7887	4,6431	27,238			
			1RB high	26,189	22,04	4,1489	26,343	21,5555	4,7875				
			50%RB mid	26,145	20,987	5,1581	26,5042	21,2149	5,2893				
			100%RB	27,238	20,956	6,2817	27,1858	20,0377	7,1481				
20 MHz	20850		1RB low	26,862	22,094	4,7681	26,6886	21,6584	5,0302	27,693	27,693	27,69	
			1RB high	27,188	22,393	4,7948	27,1543	21,7483	5,406				
			50%RB mid	26,624	21,089	5,5344	27,0833	21,1274	5,9559				
			100%RB	27,693	21,117	6,5765	27,152	20,0205	7,1315				
	21100		1RB low	26,537	22,288	4,249	26,5241	21,6663	4,8578	27,364			
			1RB high	26,426	22,117	4,3085	26,4656	21,7133	4,7523				
			50%RB mid	26,135	21,008	5,1276	26,5463	21,1325	5,4138				
			100%RB	27,364	20,944	6,4196	27,3274	19,9397	7,3877				
	21300		1RB low	26,512	22,268	4,2439	26,5142	21,6211	4,8931	27,388			
			1RB high	26,239	22,065	4,1743	26,3798	21,5757	4,8041				
			50%RB mid	26,088	20,936	5,1526	26,4429	21,0483	5,3946				
			100%RB	27,388	20,945	6,4428	27,3193	19,9573	7,362				

1.2.1. LTE Band 5

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

1.2.1.1. 1.4MHz signal bandwidth

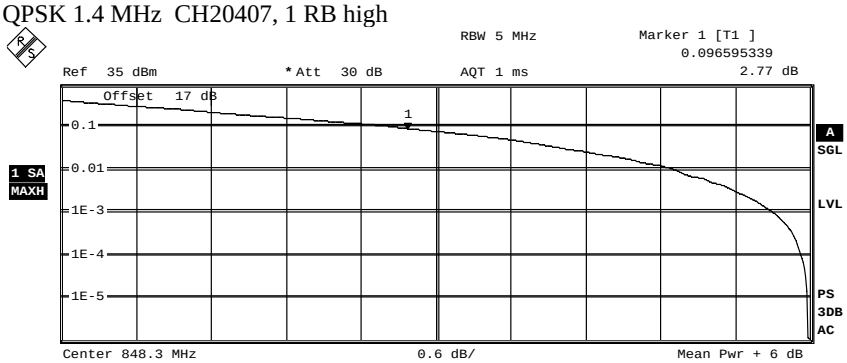


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	23.34 dBm
Peak	27.92 dBm
Crest	4.58 dB
10 %	2.54 dB
1 %	4.12 dB
.1 %	4.52 dB
.01 %	4.58 dB

Date: 18.MAY.2017 11:03:55

QPSK 1.4 MHz CH20407, 1 RB high

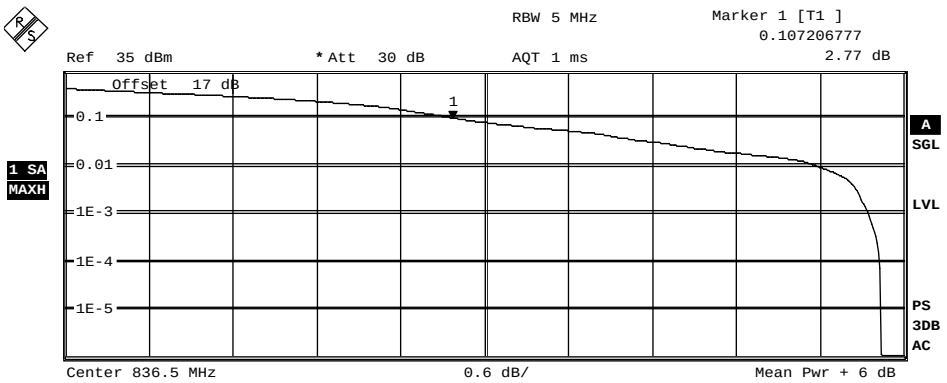


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.80 dBm
Peak	27.78 dBm
Crest	5.98 dB
10 %	2.72 dB
1 %	4.92 dB
.1 %	5.70 dB
.01 %	5.93 dB

Date: 18.MAY.2017 11:12:51

QPSK 1.4 MHz CH20643, 100% RB

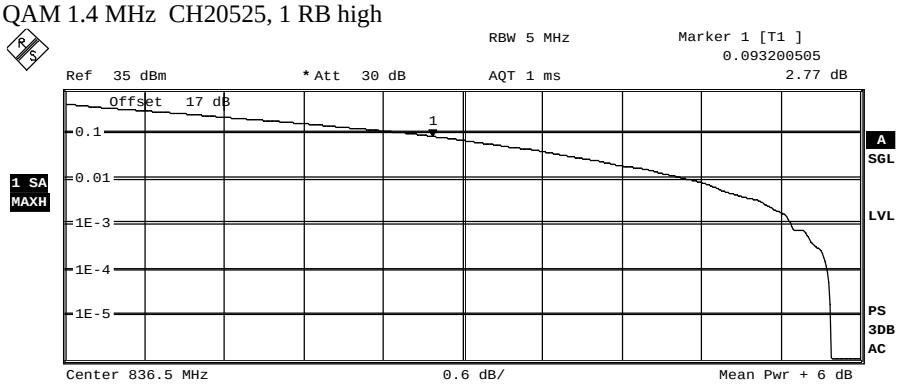


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.16 dBm
Peak	27.99 dBm
Crest	5.84 dB
10 %	2.84 dB
1 %	5.39 dB
.1 %	5.75 dB
.01 %	5.84 dB

Date: 18.MAY.2017 11:18:15

QAM 1.4 MHz CH20525, 1 RB high



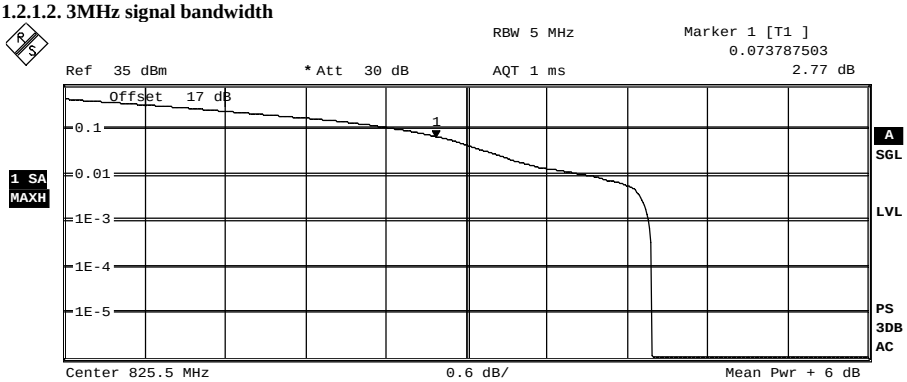
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.93 dBm
Peak	27.71 dBm
Crest	5.77 dB
10 %	2.69 dB
1 %	4.72 dB
.1 %	5.48 dB
.01 %	5.76 dB

Date: 18.MAY.2017 11:27:51

QAM 1.4 MHz CH20525, 100% RB

1.2.1.2. 3MHz signal bandwidth

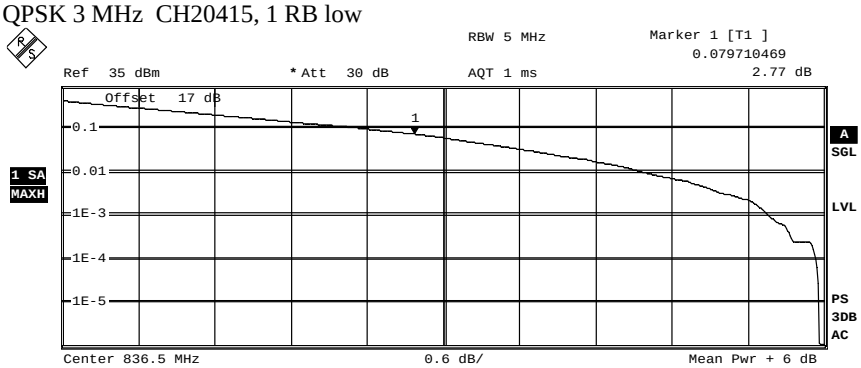


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	23.60 dBm
Peak	27.99 dBm
Crest	4.39 dB
10 %	2.55 dB
1 %	3.94 dB
.1 %	4.37 dB
.01 %	4.39 dB

Date: 18.MAY.2017 11:43:00

QPSK 3 MHz CH20415, 1 RB low

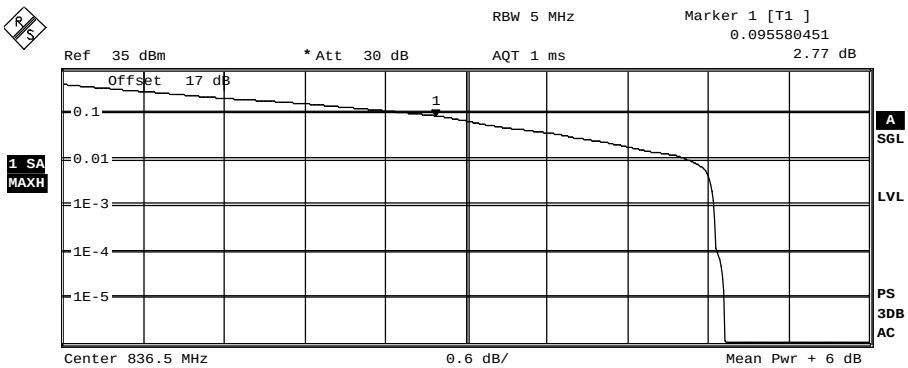


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.10 dBm
Peak	28.06 dBm
Crest	5.96 dB
10 %	2.45 dB
1 %	4.60 dB
.1 %	5.57 dB
.01 %	5.94 dB

Date: 18.MAY.2017 11:46:35

QPSK 3 MHz CH20525, 100% RB

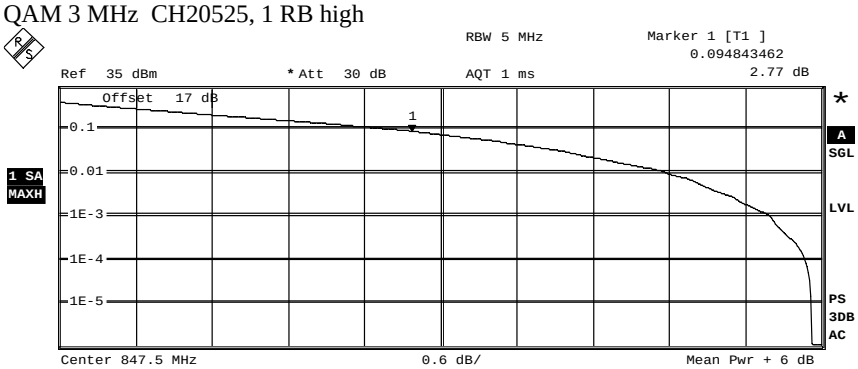


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	23.07 dBm
Peak	27.99 dBm
Crest	4.92 dB
10 %	2.71 dB
1 %	4.66 dB
.1 %	4.85 dB
.01 %	4.88 dB

Date: 18.MAY.2017 11:49:00

QAM 3 MHz CH20525, 1 RB high



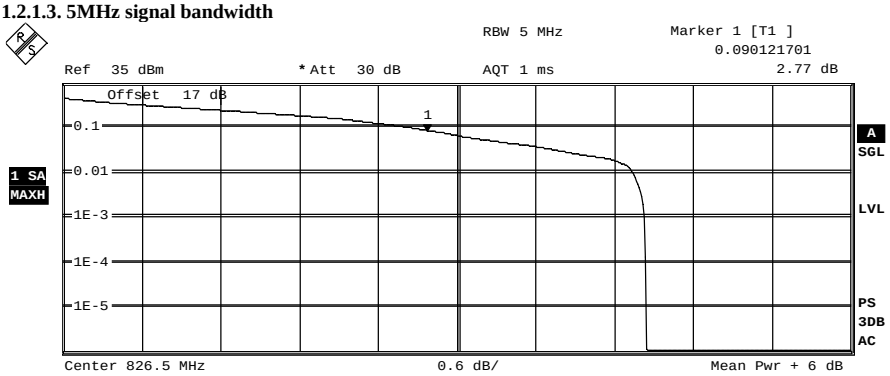
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.93 dBm
Peak	27.85 dBm
Crest	5.92 dB
10 %	2.69 dB
1 %	4.79 dB
.1 %	5.60 dB
.01 %	5.88 dB

Date: 18.MAY.2017 11:53:52

QAM 3 MHz CH20635, 100% RB

1.2.1.3. 5MHz signal bandwidth

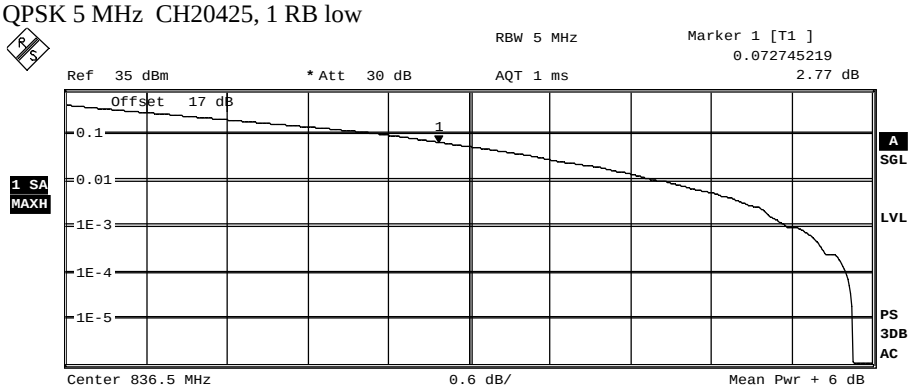


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	23.34 dBm
Peak	27.78 dBm
Crest	4.44 dB
10 %	2.68 dB
1 %	4.34 dB
.1 %	4.43 dB
.01 %	4.44 dB

Date: 18.MAY.2017 12:09:49

QPSK 5 MHz CH20425, 1 RB low

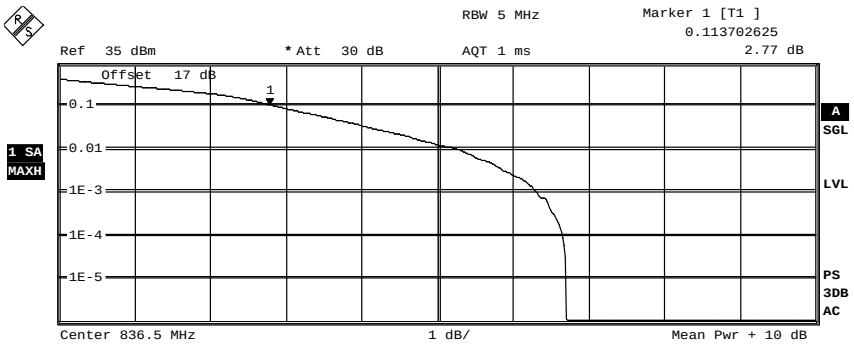


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.13 dBm
Peak	27.99 dBm
Crest	5.86 dB
10 %	2.44 dB
1 %	4.46 dB
.1 %	5.43 dB
.01 %	5.81 dB

Date: 18.MAY.2017 12:12:34

QPSK 5 MHz CH20525, 100% RB

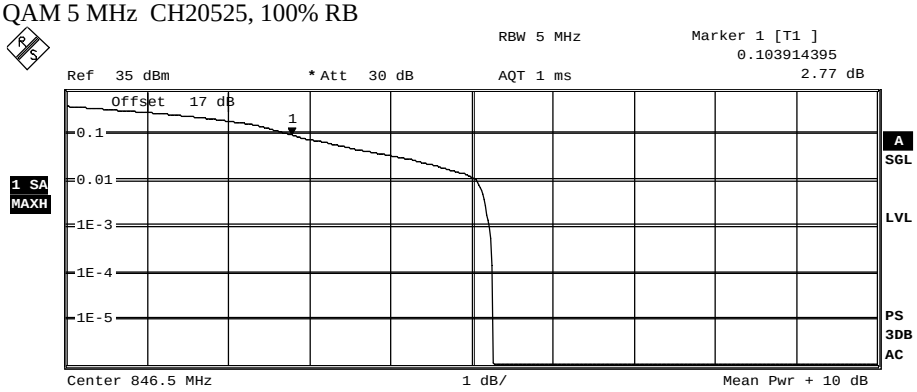


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	20.86 dBm
Peak	27.57 dBm
Crest	6.70 dB
10 %	2.92 dB
1 %	5.29 dB
.1 %	6.31 dB
.01 %	6.67 dB

Date: 18.MAY.2017 13:09:08

QAM 5 MHz CH20525, 100% RB



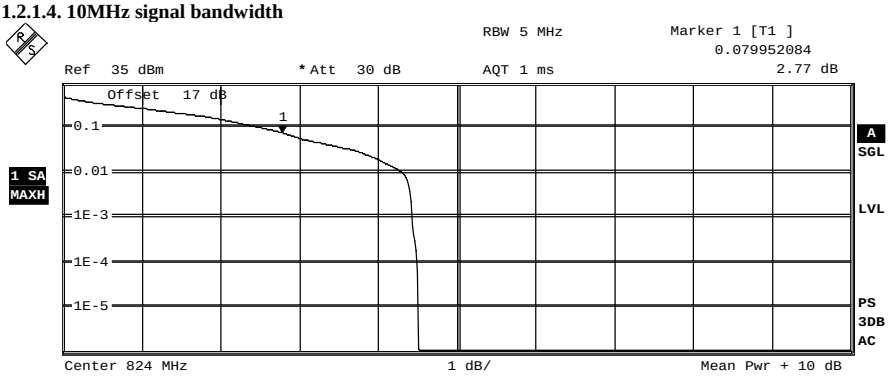
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.89 dBm
Peak	27.14 dBm
Crest	5.25 dB
10 %	2.80 dB
1 %	5.06 dB
.1 %	5.22 dB
.01 %	5.26 dB

Date: 18.MAY.2017 13:11:46

QAM 5 MHz CH20625, 1 RB low

1.2.1.4. 10MHz signal bandwidth

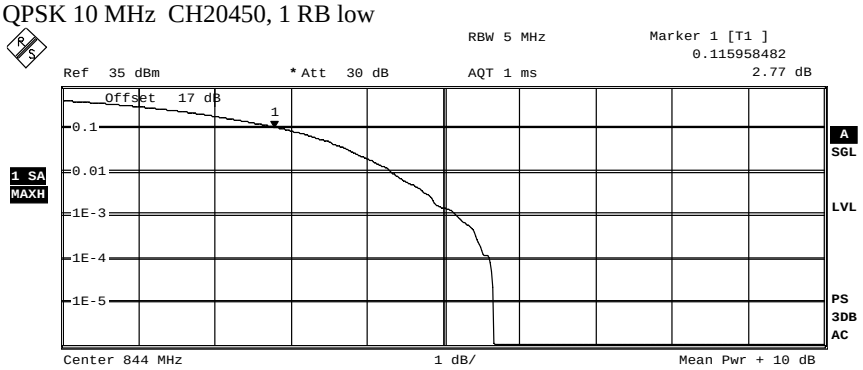


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.99 dBm
Peak	27.50 dBm
Crest	4.50 dB
10 %	2.55 dB
1 %	4.31 dB
.1 %	4.44 dB
.01 %	4.50 dB

Date: 18.MAY.2017 13:17:16

QPSK 10 MHz CH20450, 1 RB low

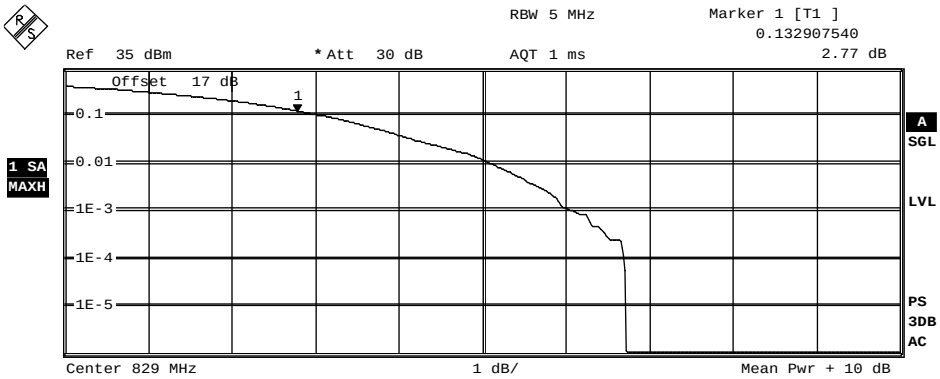


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	20.64 dBm
Peak	26.30 dBm
Crest	5.66 dB
10 %	2.93 dB
1 %	4.33 dB
.1 %	5.18 dB
.01 %	5.61 dB

Date: 18.MAY.2017 13:18:51

QPSK 10 MHz CH20600, 100%RB

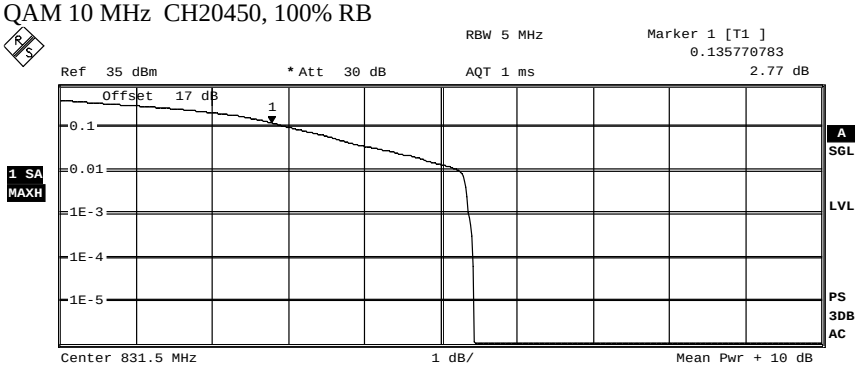


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	19.65 dBm
Peak	26.37 dBm
Crest	6.72 dB
10 %	3.16 dB
1 %	5.11 dB
.1 %	6.09 dB
.01 %	6.70 dB

Date: 18.MAY.2017 13:21:21

QAM 10 MHz CH20450, 100% RB



Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.00 dBm
Peak	27.43 dBm
Crest	5.43 dB
10 %	3.06 dB
1 %	5.26 dB
.1 %	5.37 dB
.01 %	5.43 dB

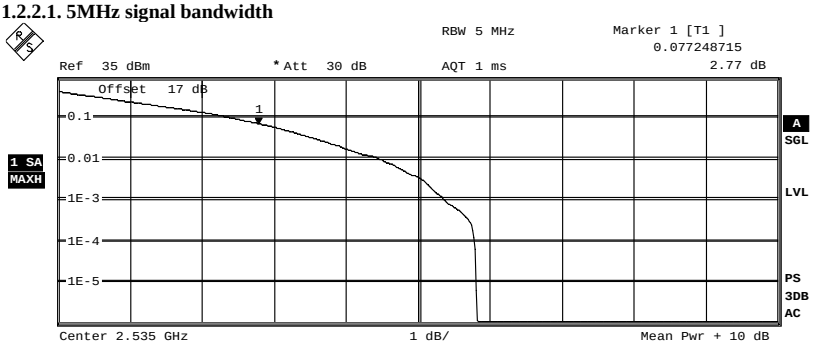
Date: 18.MAY.2017 13:23:48

QAM 10 MHz CH20525, 1 RB low

1.2.2. LTE Band 7

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

1.2.2.1. 5MHz signal bandwidth

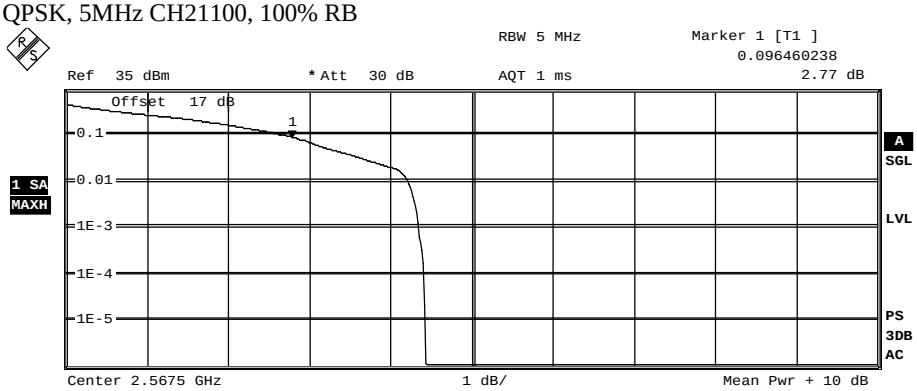


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.55 dBm
Peak	27.36 dBm
Crest	5.81 dB
10 %	2.48 dB
1 %	4.49 dB
.1 %	5.37 dB
.01 %	5.79 dB

Date: 18.MAY.2017 13:43:13

QPSK, 5MHz CH21100, 100% RB

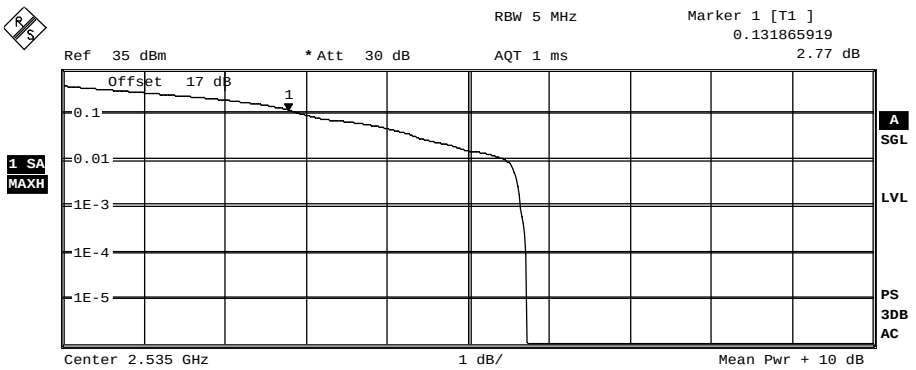


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.65 dBm
Peak	27.07 dBm
Crest	4.42 dB
10 %	2.74 dB
1 %	4.21 dB
.1 %	4.34 dB
.01 %	4.41 dB

Date: 18.MAY.2017 13:45:42

QPSK, 5MHz CH21425, 1 RB high

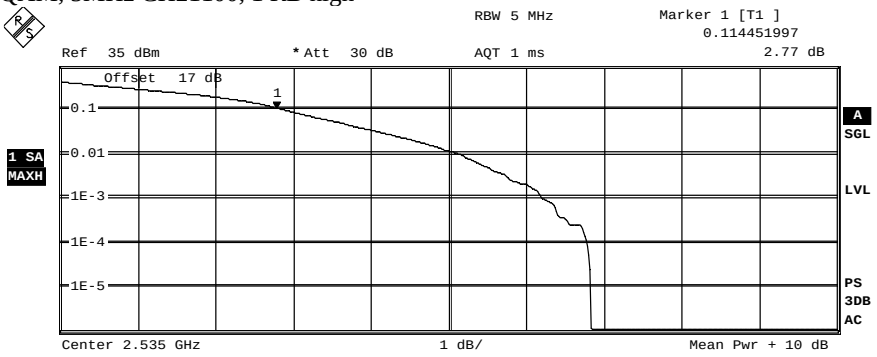


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.14 dBm
Peak	26.86 dBm
Crest	5.72 dB
10 %	3.01 dB
1 %	5.48 dB
.1 %	5.66 dB
.01 %	5.72 dB

Date: 18.MAY.2017 13:47:59

QAM, 5MHz CH21100, 1 RB high



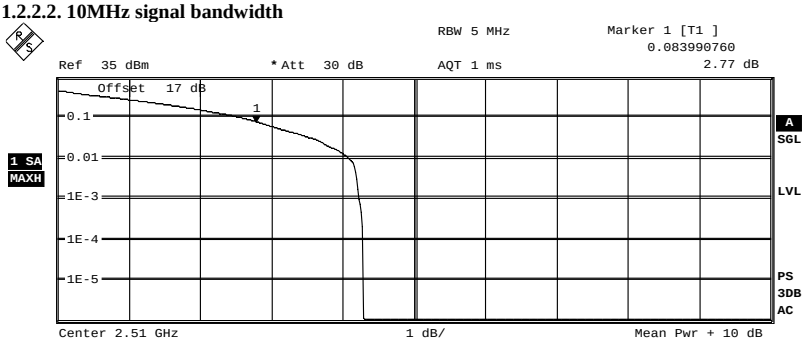
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	20.60 dBm
Peak	27.43 dBm
Crest	6.83 dB
10 %	2.90 dB
1 %	5.14 dB
.1 %	6.20 dB
.01 %	6.78 dB

Date: 18.MAY.2017 13:50:17

QAM, 5MHz CH21100, 100% RB

1.2.2.2. 10MHz signal bandwidth

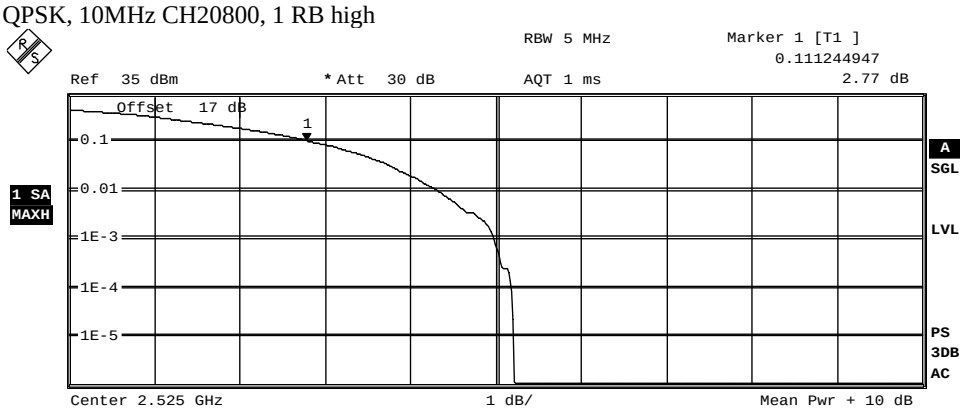


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.72 dBm
Peak	27.00 dBm
Crest	4.28 dB
10 %	2.61 dB
1 %	4.09 dB
.1 %	4.23 dB
.01 %	4.28 dB

Date: 18.MAY.2017 13:53:38

QPSK, 10MHz CH20800, 1 RB high

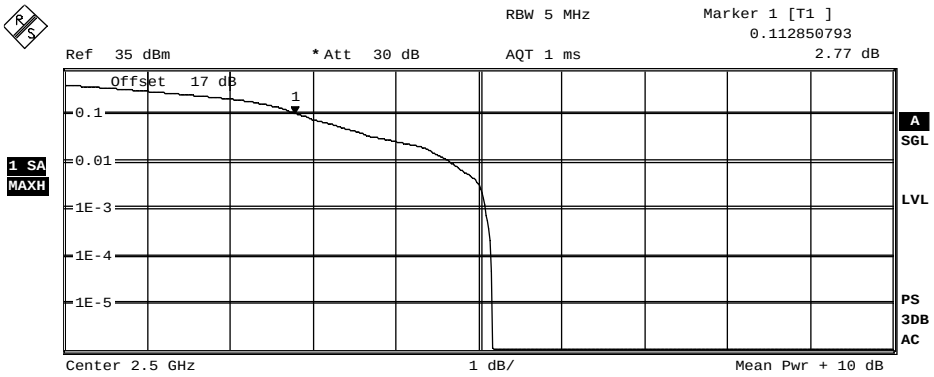


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	20.39 dBm
Peak	25.59 dBm
Crest	5.21 dB
10 %	2.88 dB
1 %	4.33 dB
.1 %	4.98 dB
.01 %	5.19 dB

Date: 18.MAY.2017 13:59:30

QPSK, 10MHz CH21000, 100% RB

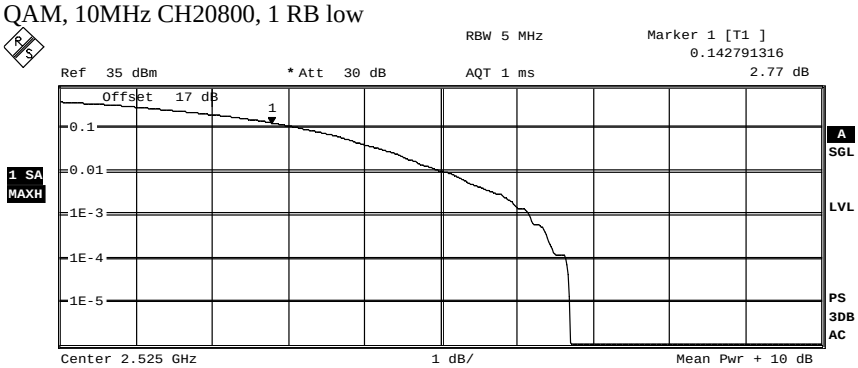


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.71 dBm
Peak	26.86 dBm
Crest	5.16 dB
10 %	2.87 dB
1 %	4.66 dB
.1 %	5.08 dB
.01 %	5.16 dB

Date: 18.MAY.2017 13:55:50

QAM, 10MHz CH20800, 1 RB low



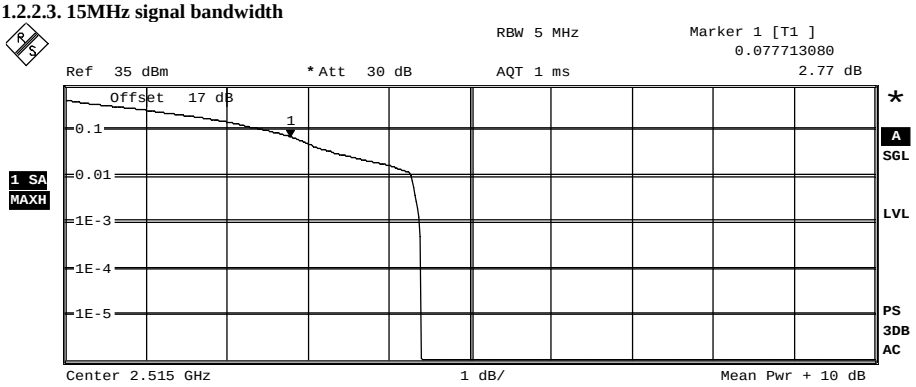
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	19.32 dBm
Peak	26.01 dBm
Crest	6.70 dB
10 %	3.22 dB
1 %	5.08 dB
.1 %	6.17 dB
.01 %	6.65 dB

Date: 18.MAY.2017 14:00:35

QAM, 10MHz CH21000, 100% RB

1.2.2.3. 15MHz signal bandwidth

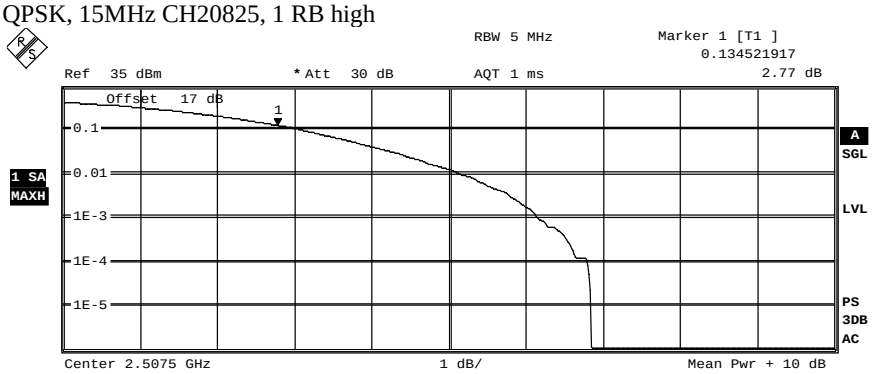


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.47 dBm
Peak	26.86 dBm
Crest	4.39 dB
10 %	2.53 dB
1 %	4.28 dB
.1 %	4.38 dB
.01 %	4.41 dB

Date: 18.MAY.2017 14:03:31

QPSK, 15MHz CH20825, 1 RB high

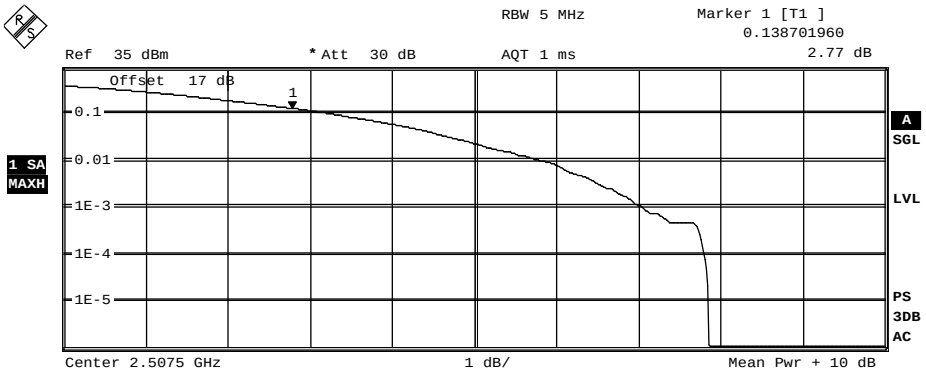


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	18.46 dBm
Peak	25.31 dBm
Crest	6.84 dB
10 %	3.14 dB
1 %	5.16 dB
.1 %	6.15 dB
.01 %	6.79 dB

Date: 18.MAY.2017 14:04:53

QPSK, 15MHz CH20825, 100% RB

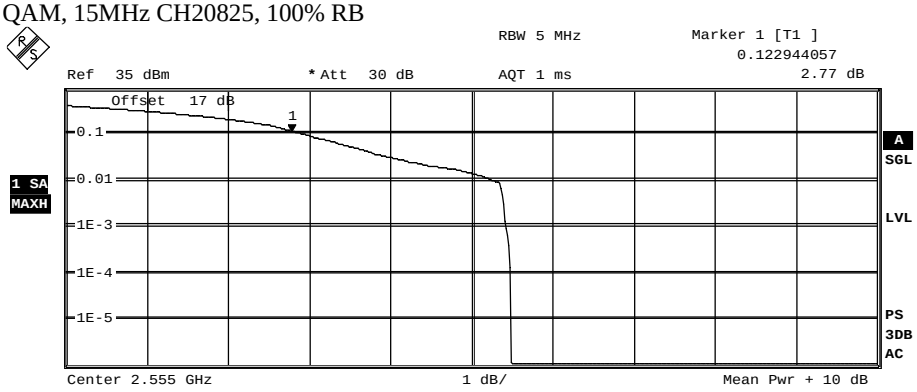


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	17.46 dBm
Peak	25.31 dBm
Crest	7.85 dB
10 %	3.32 dB
1 %	5.85 dB
.1 %	7.05 dB
.01 %	7.80 dB

Date: 18.MAY.2017 14:06:57

QAM, 15MHz CH20825, 100% RB



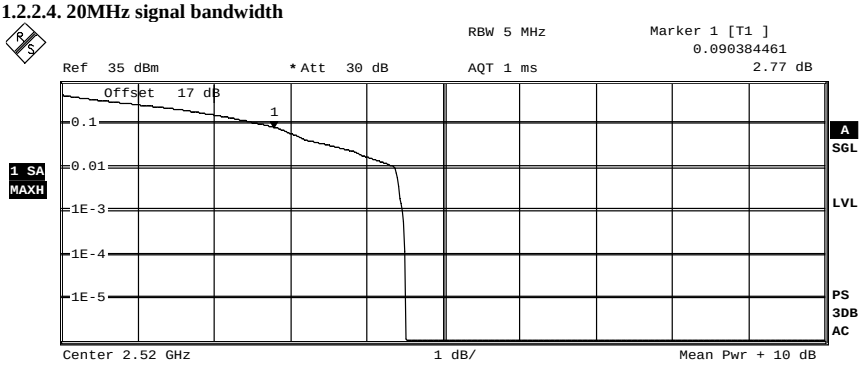
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.73 dBm
Peak	27.21 dBm
Crest	5.48 dB
10 %	2.96 dB
1 %	5.27 dB
.1 %	5.43 dB
.01 %	5.48 dB

Date: 18.MAY.2017 14:09:22

QAM, 15MHz CH21375, 1 RB low

1.2.2.4. 20MHz signal bandwidth

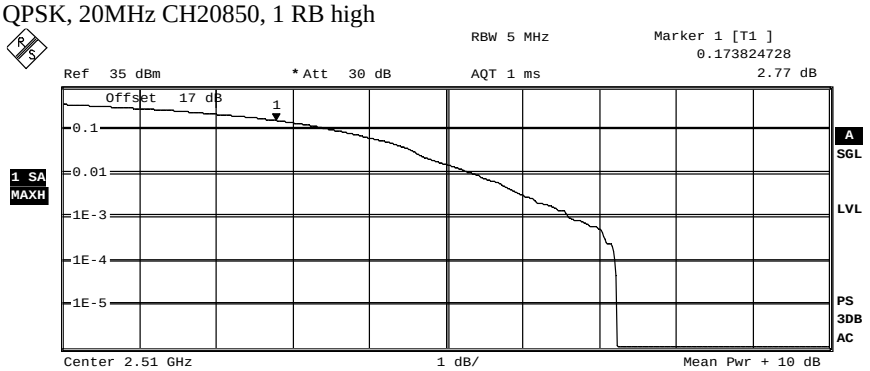


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	22.57 dBm
Peak	27.07 dBm
Crest	4.50 dB
10 %	2.68 dB
1 %	4.38 dB
.1 %	4.47 dB
.01 %	4.50 dB

Date: 18.MAY.2017 14:12:28

QPSK, 20MHz CH20850, 1 RB high

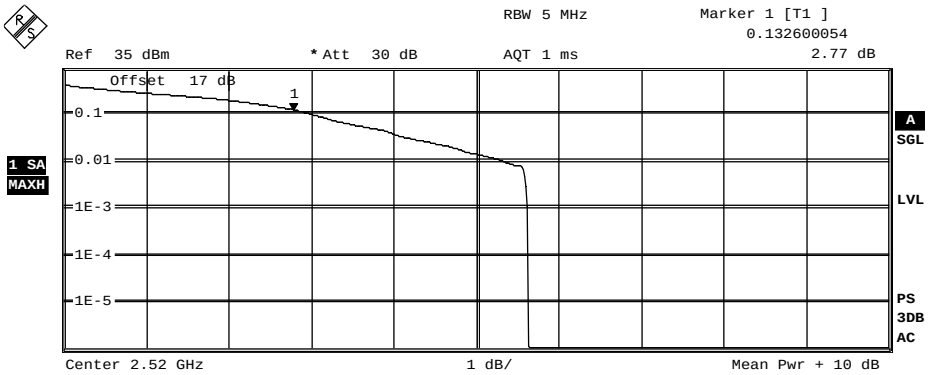


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	17.23 dBm
Peak	24.46 dBm
Crest	7.23 dB
10 %	3.59 dB
1 %	5.38 dB
.1 %	6.60 dB
.01 %	7.21 dB

Date: 18.MAY.2017 14:15:23

QPSK, 20MHz CH20850, 100% RB

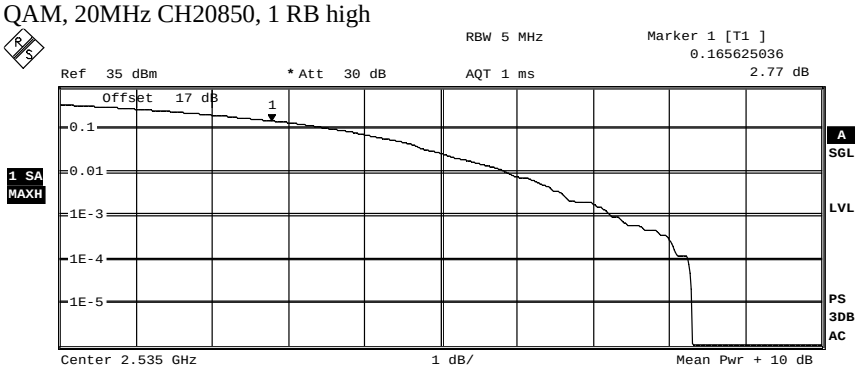


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	21.31 dBm
Peak	26.93 dBm
Crest	5.63 dB
10 %	3.04 dB
1 %	5.35 dB
.1 %	5.63 dB
.01 %	5.64 dB

Date: 18.MAY.2017 14:13:38

QAM, 20MHz CH20850, 1 RB high



Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	Trace 1
Mean	16.45 dBm
Peak	24.74 dBm
Crest	8.30 dB
10 %	3.69 dB
1 %	5.90 dB
.1 %	7.31 dB
.01 %	8.25 dB

Date: 18.MAY.2017 14:17:11

QAM, 20MHz CH21100, 100% RB

1.3. Spurious emissions radiated (LTE Band 5)
1.3.1. Magnetic field strength radiated (LTE Band 5)

Diagram No. 2.50_RSE_R_Ch20425_BW5_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band5 Ch:20425, BW:5MHz, RB: 1 High, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

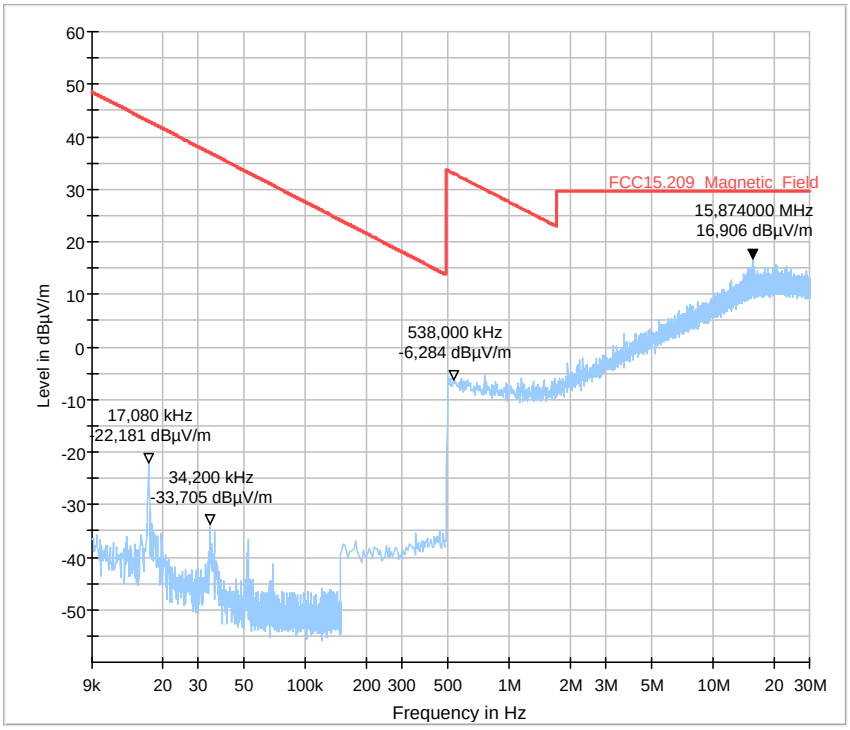


Diagram No. 2.50b_RSE_R_Ch20425_BW_5

	Date: 15.04.2017 Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30 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 15.225; RSS-Gen: Issue 3
Operator:	KIv
Operating Conditions	Humidity: 40%rH; Temperature: 21°C
Operating mode	LTE_5 Channel 20425
Power during tests:	12V DC
Comment 1:	Channel 20425
Comment 2:	EUT Standing

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum

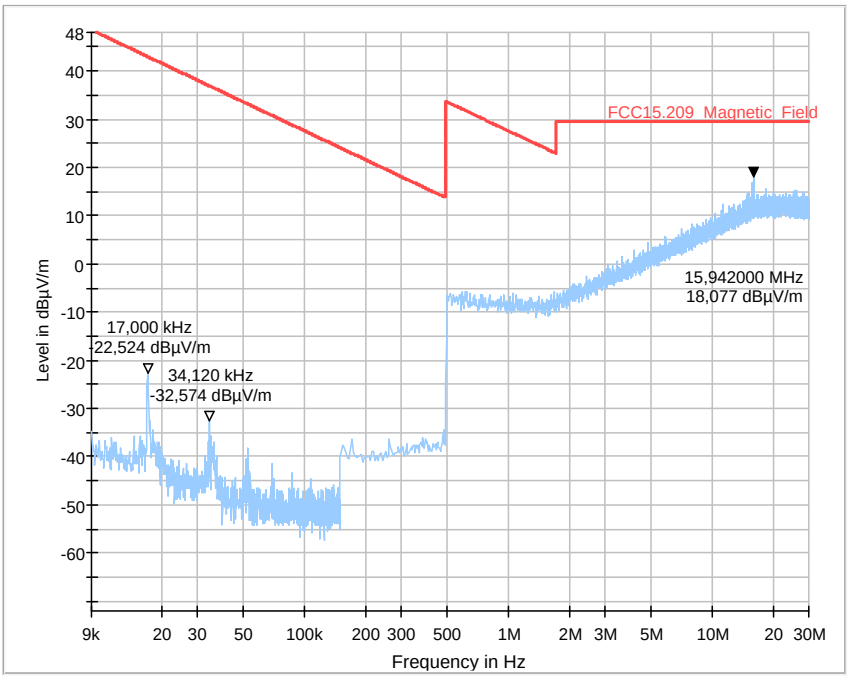


Diagram No. 2.51_RSE_R_Ch20525_BW5_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band5 Ch:20525, BW:5MHz, RB: 1 low, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

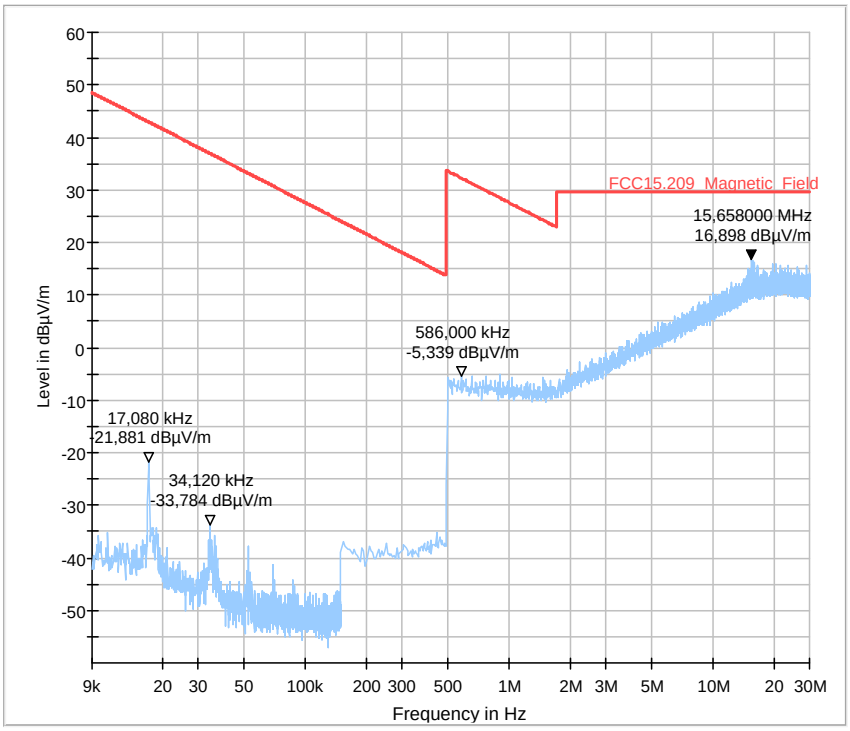


Diagram No. 2.51b_RSE_R_Ch20525_BW5

	Date: 15.04.2017 Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30 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 15.225; RSS-Gen: Issue 3
Operator:	KIv
Operating Conditions	Humidity: 40%rH; Temperature: 21°C
Operating mode	LTE_5 Channel 20525
Power during tests:	12V DC
Comment 1:	Channel 20525
Comment 2:	EUT Standing

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum

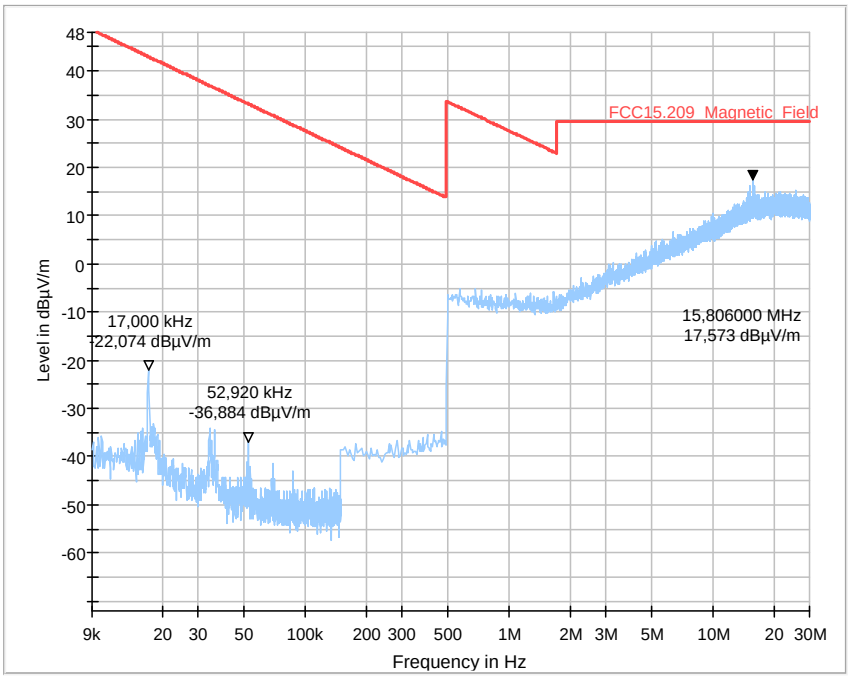


Diagram No. 2.52_RSE_R_Ch20600_BW10_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band5 Ch:20600, BW:10MHz, RB: 1 High, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

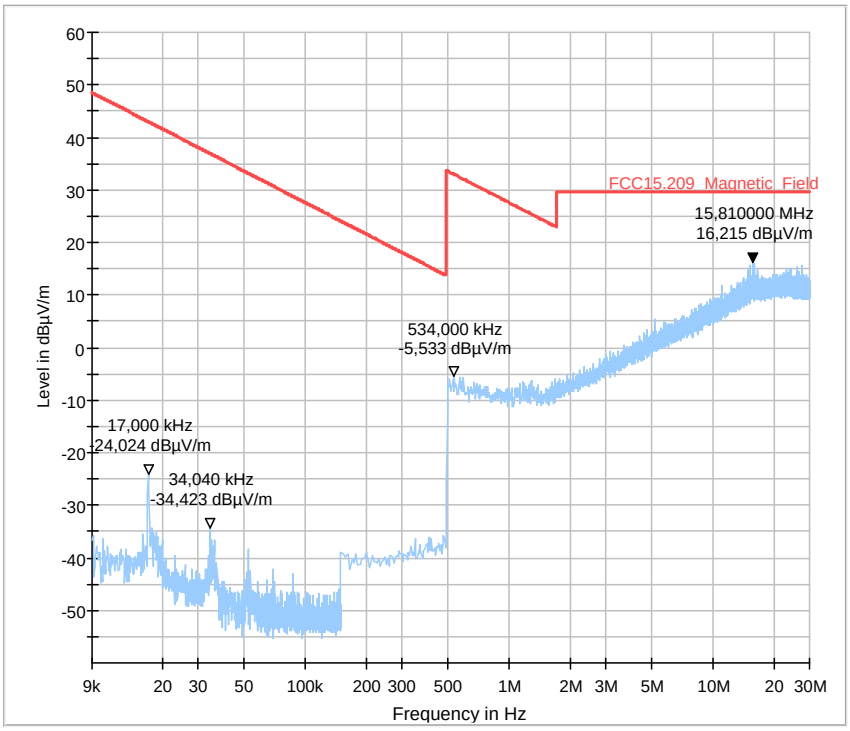


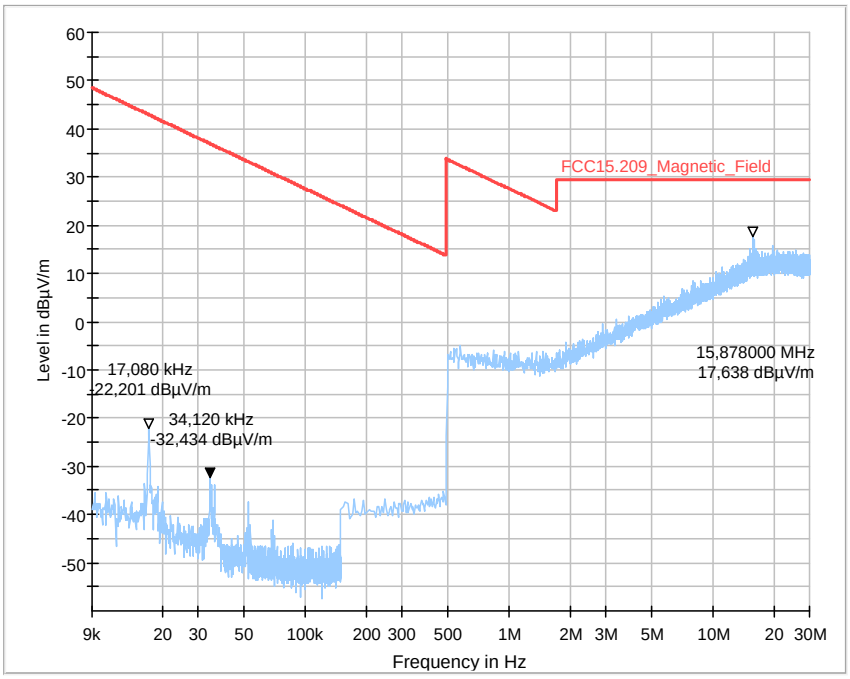
Diagram No. 2.52b_RSE_R_Ch20600_BW10

	Date: 17.04.2017 Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30 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 15.225; RSS-Gen: Issue 3
Operator:	AFr
Operating Conditions	Humidity: 40%rH; Temperature: 21°C
Operating mode	LTE_5 Channel 20600
Power during tests:	12V DC
Comment 1:	Channel 20600
Comment 2:	EUT Standing

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.3.2. Emissions above 30MHz (LTE Band 5)

8.50a_RSE_R_Ch20425_BW_5

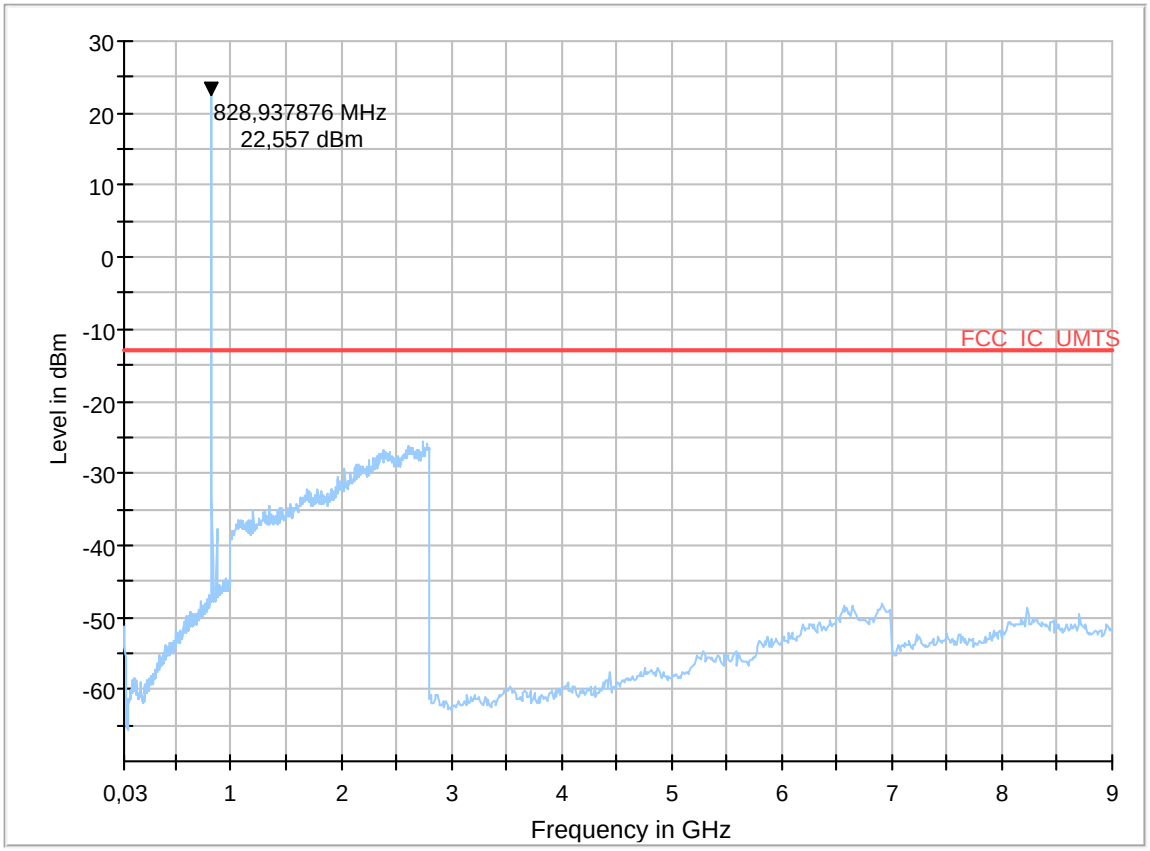
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



8.50b_RSE_R_Ch20425_BW_5

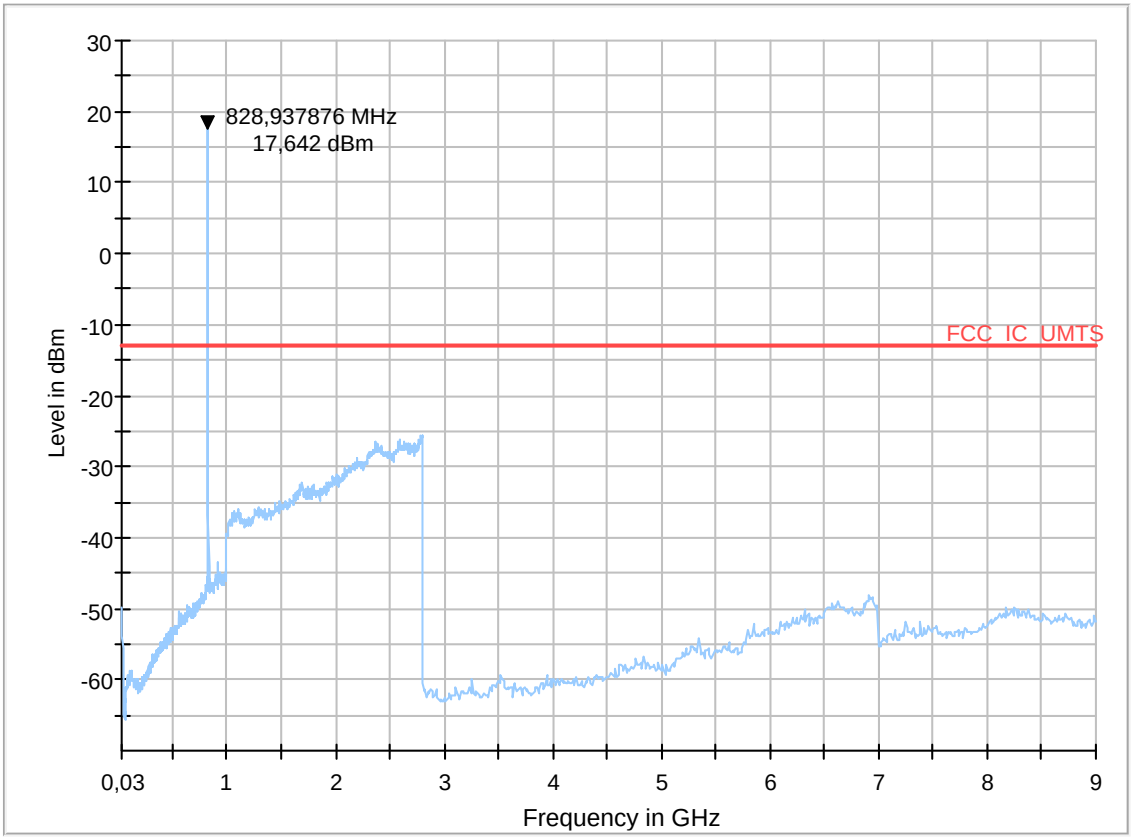
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



8.51a_RSE_R_Ch20525_BW5

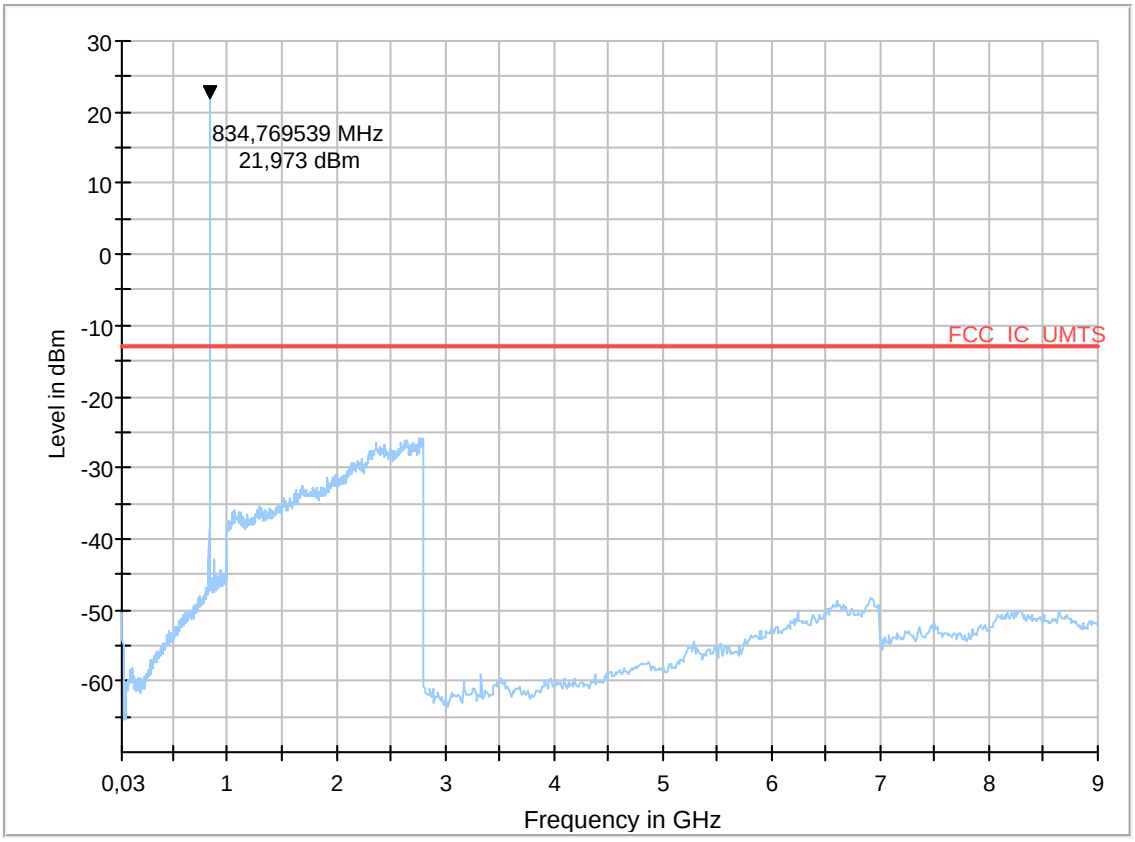
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20525
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



8.51b_RSE_R_Ch20525_BW5

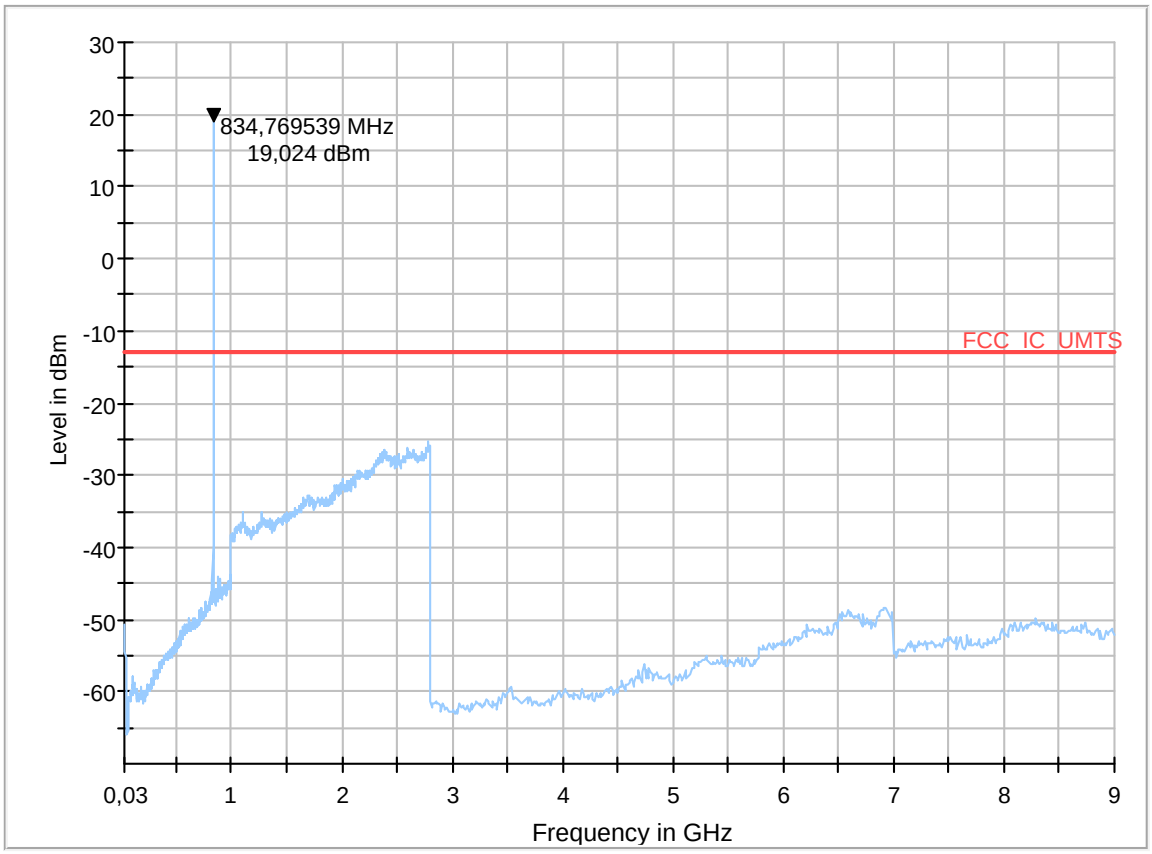
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20525
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



8.52a_RSE_R_Ch20600_BW10

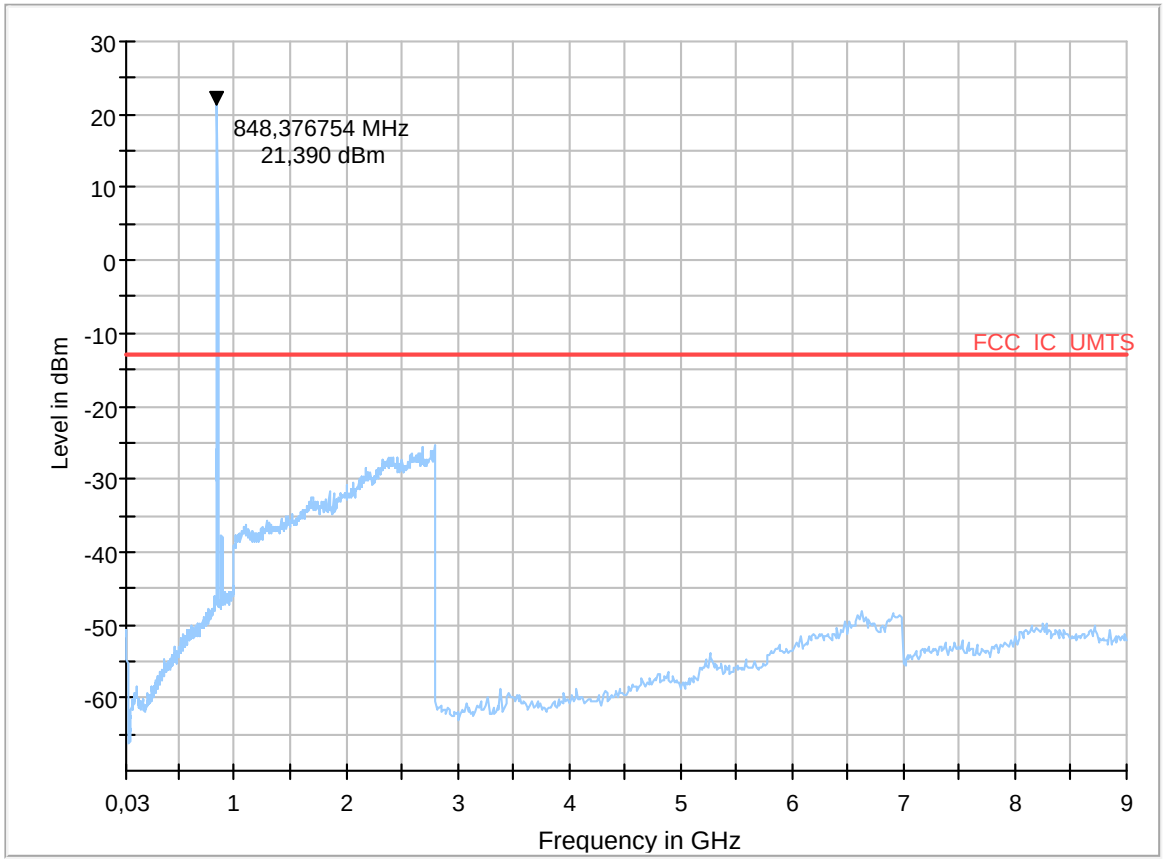
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20600 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Comment:	Position: Standing

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



8.52b_RSE_R_Ch20600_BW10

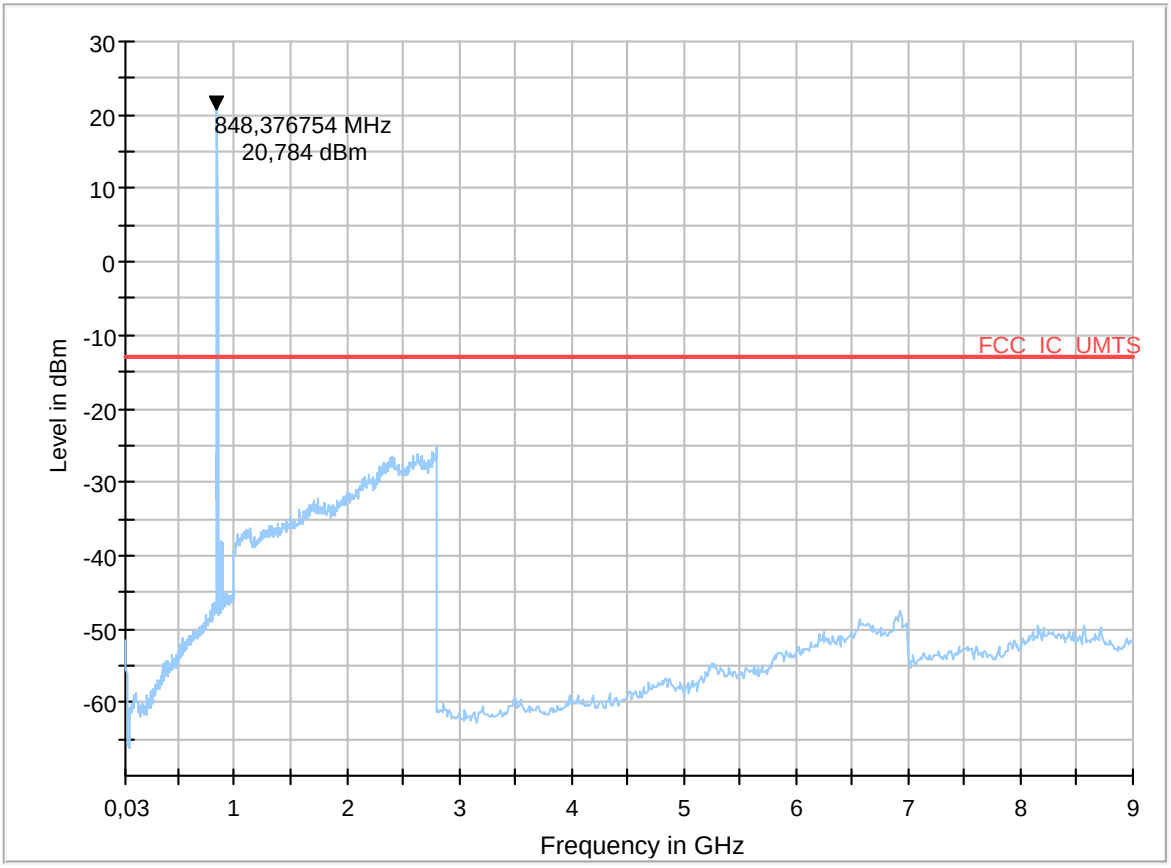
Common Information

Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20600 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Comment:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.4. Spurious emissions radiated (LTE Band 7)
1.4.1. Magnetic field strength radiated (LTE Band 7)

Diagram No. 2.53_RSE_R_Ch20850_BW_20_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:20850, BW:20MHz, RB: 1 High, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

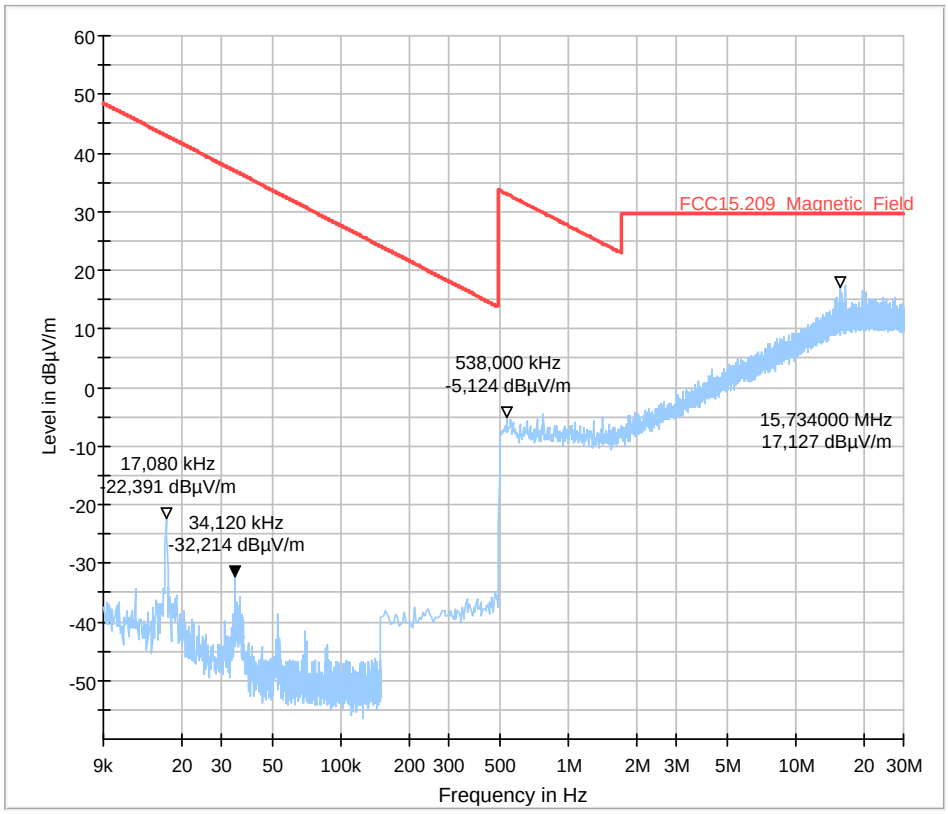


Diagram No. 2.53_RSE_R_Ch20850_BW_20

	Date: 18.04.2017 Page 1 of 5
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
EUT Position:	EUT Standing
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:20850, BW:20MHz, RB: 1 High, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

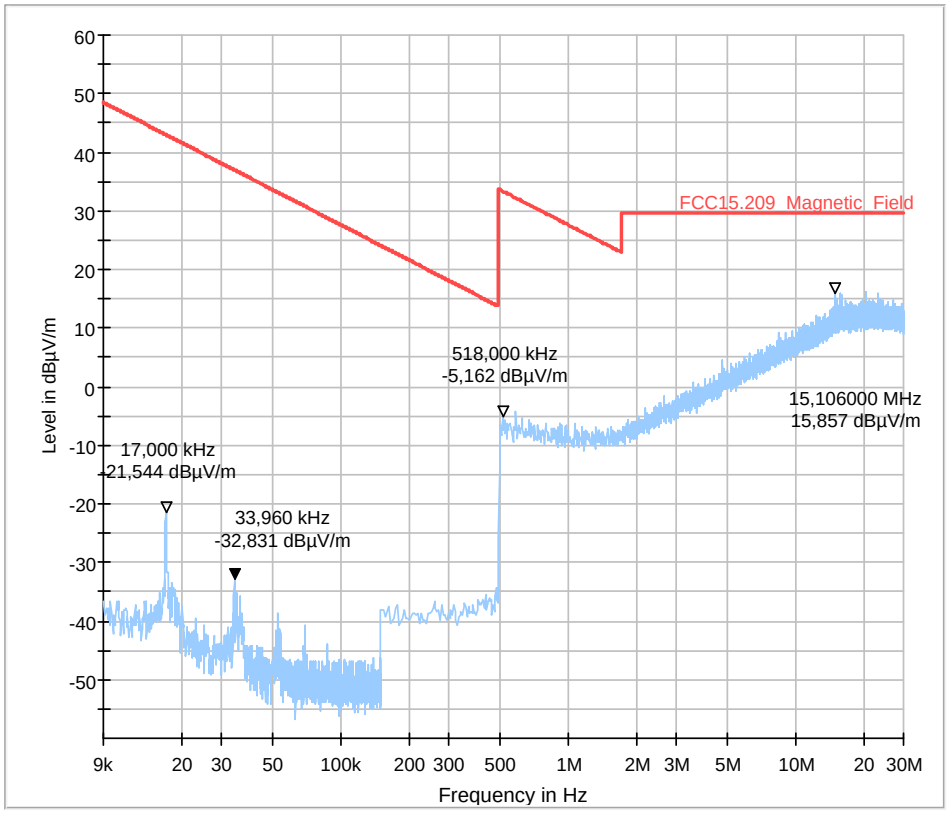


Diagram No. 2.54a_RSE_R_Ch21100_BW_20_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:21300, BW:20MHz, RB: 1 Low, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

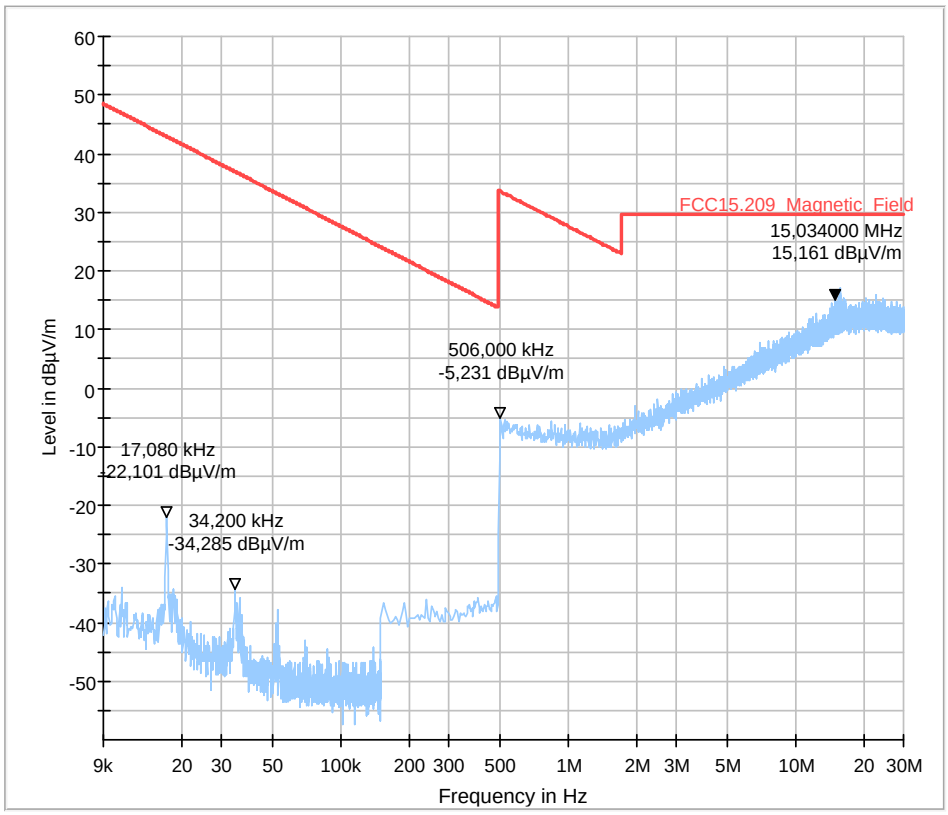


Diagram No. 2.54b_RSE_R_Ch21100_BW_20

	Date: 18.04.2017 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
EUT Position:	EUT Standing
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:21100, BW:20MHz, RB: 1 Low, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

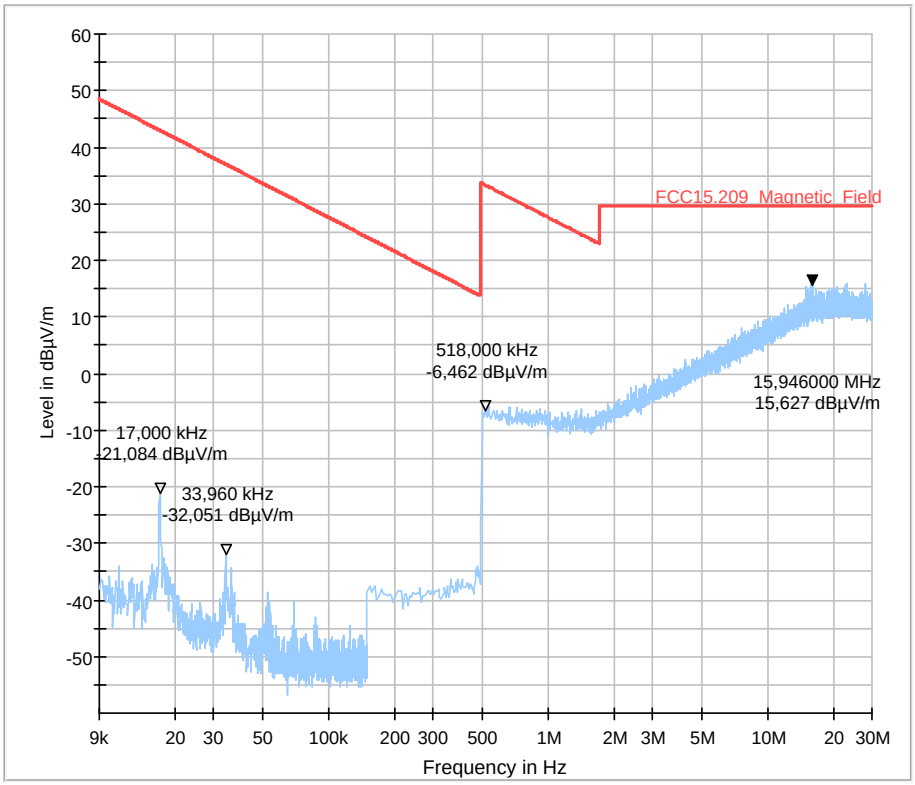


Diagram No. 2.55_RSE_R_Ch21300_BW_20_Laying

	Date: 18.04.2017 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
EUT Position:	EUT Laying
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:21300, BW:20MHz, RB: 1 Low, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum

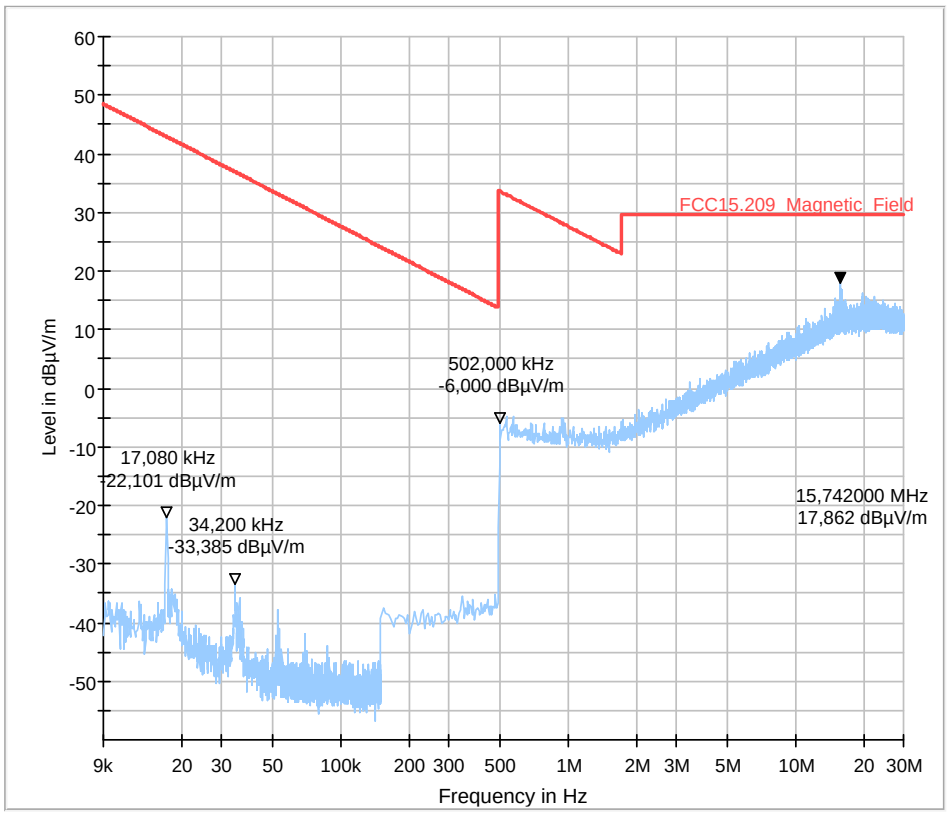


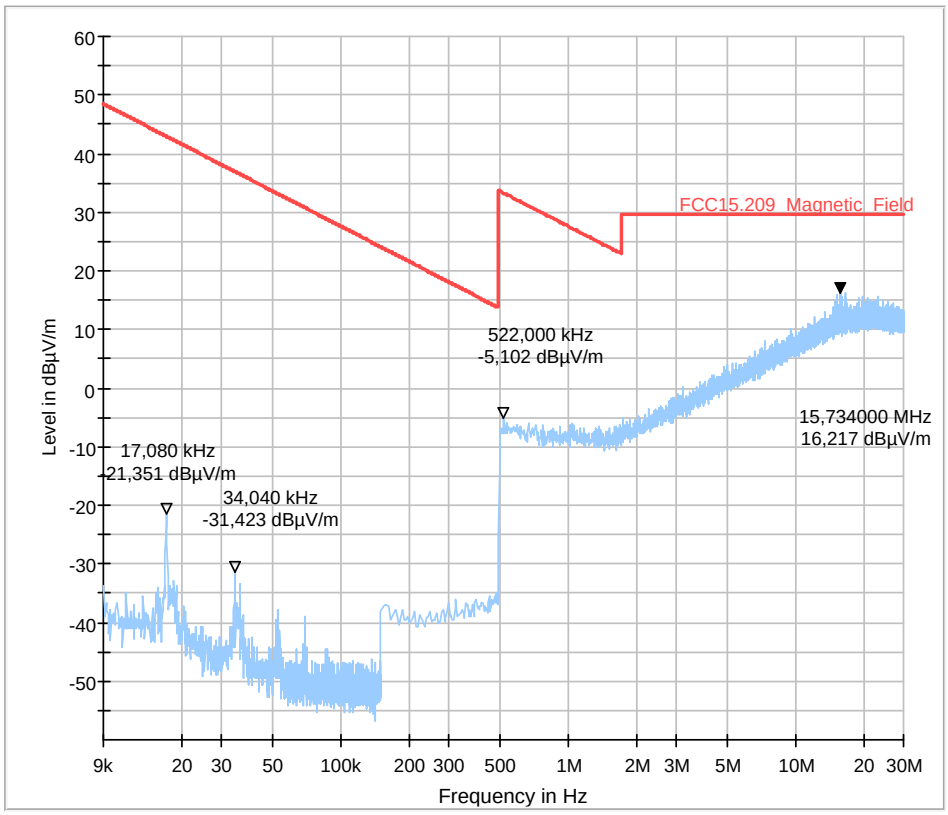
Diagram No. 2.55_RSE_R_Ch21300_BW_20

	Date: 18.04.2017 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
EUT Position:	EUT Standing
Operator:	Mah
Operating conditions:	Humidity: 35%rH; Temperature: 21°C
Power during tests:	12V DC
Comment 1:	LTE Band7 Ch:21300, BW:20MHz, RB: 1 Low, QPSK

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



1.4.2. Emissions above 30MHz (LTE Band 7)

8.53a_RSE_R_Ch20850_BW_20_2.8-20MHz

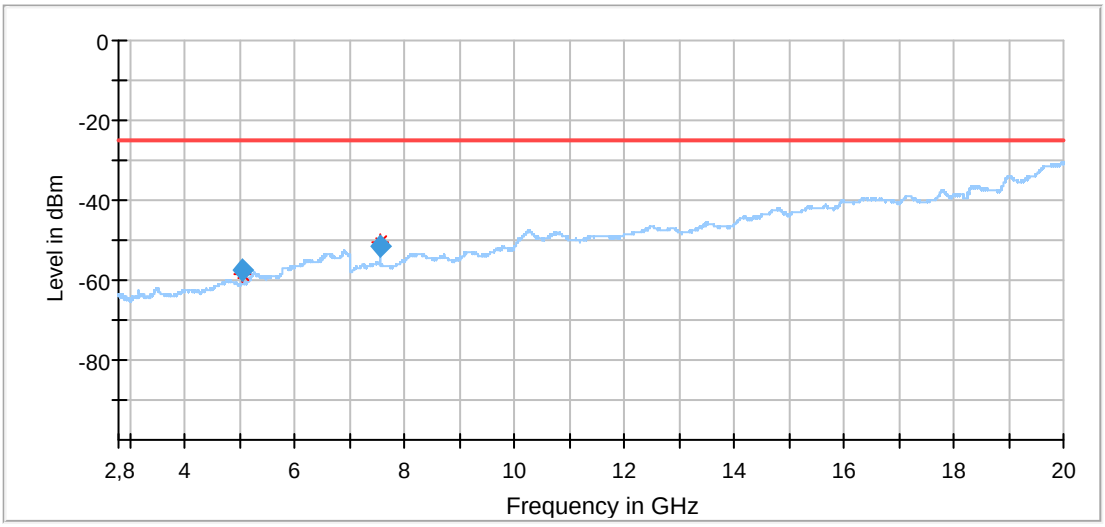
Common Information

Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53 / RSS-139
Operating Mode:	UE allocated channel 20850/ BW:20 / RB:1 / Position:high
Environmental Conditions:	Humidity: 35%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



Final_Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
5037.905811	-	32.70	1000.0	155.0	H	268.0	-91.1	17:13:04 - 21.04.2017
7556.763528	-	26.43	1000.0	155.0	H	-8.0	-83.5	17:10:47 - 21.04.2017

8.53a_RSE_R_Ch20850_BW_20_30-2.8MHz

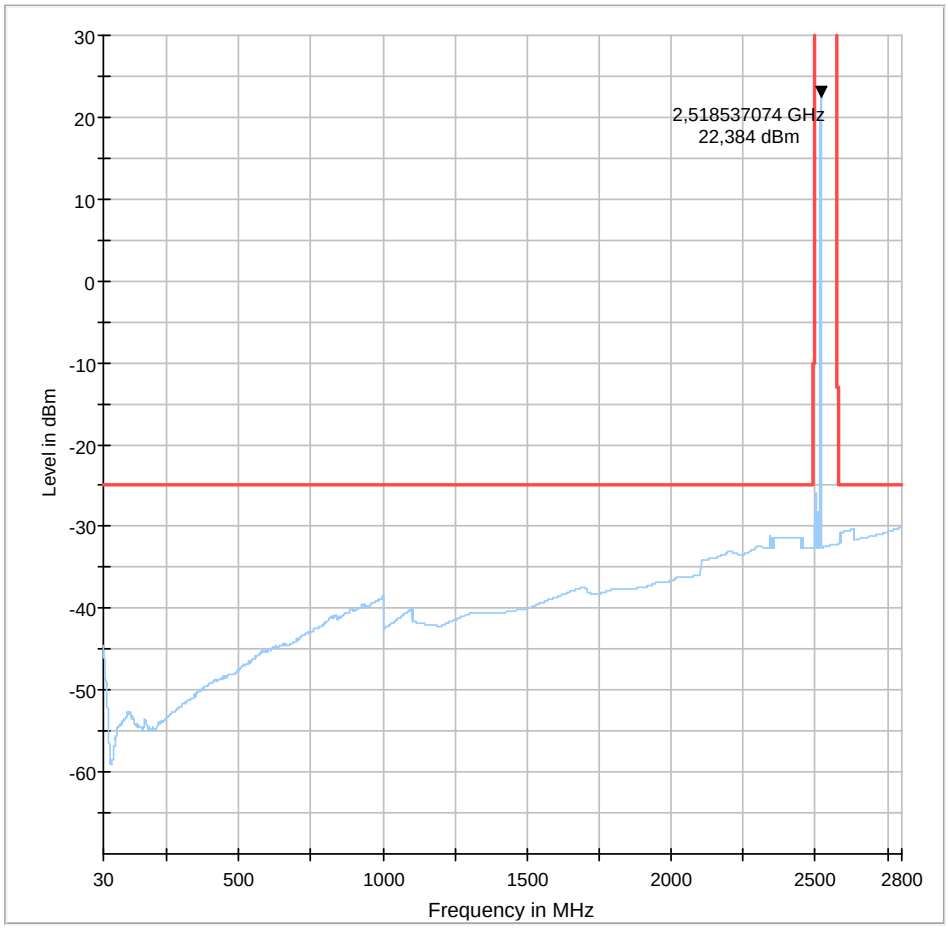
Common Information

Test Description:	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
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



8.53b_RSE_R_Ch20850_BW_20_2.8-20MHz

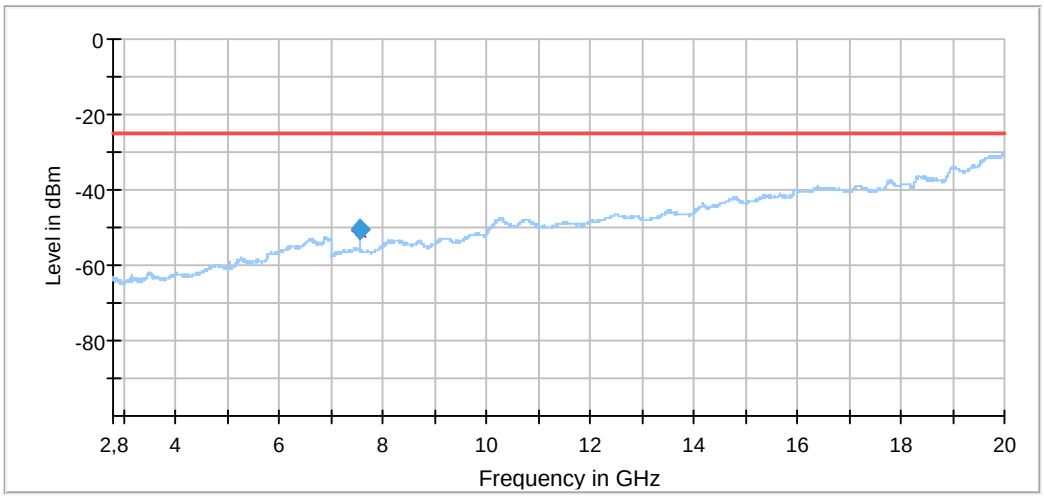
Common Information

Test Description:	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 (fc = 2510.0MHz), BW_20MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



Final_Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
7556.883768	-	25.30	1000.0	155.0	V	331.0	-83.5	22:21:00 - 17.04.2017

8.53b_RSE_R_Ch20850_BW_20_30-2.8MHz

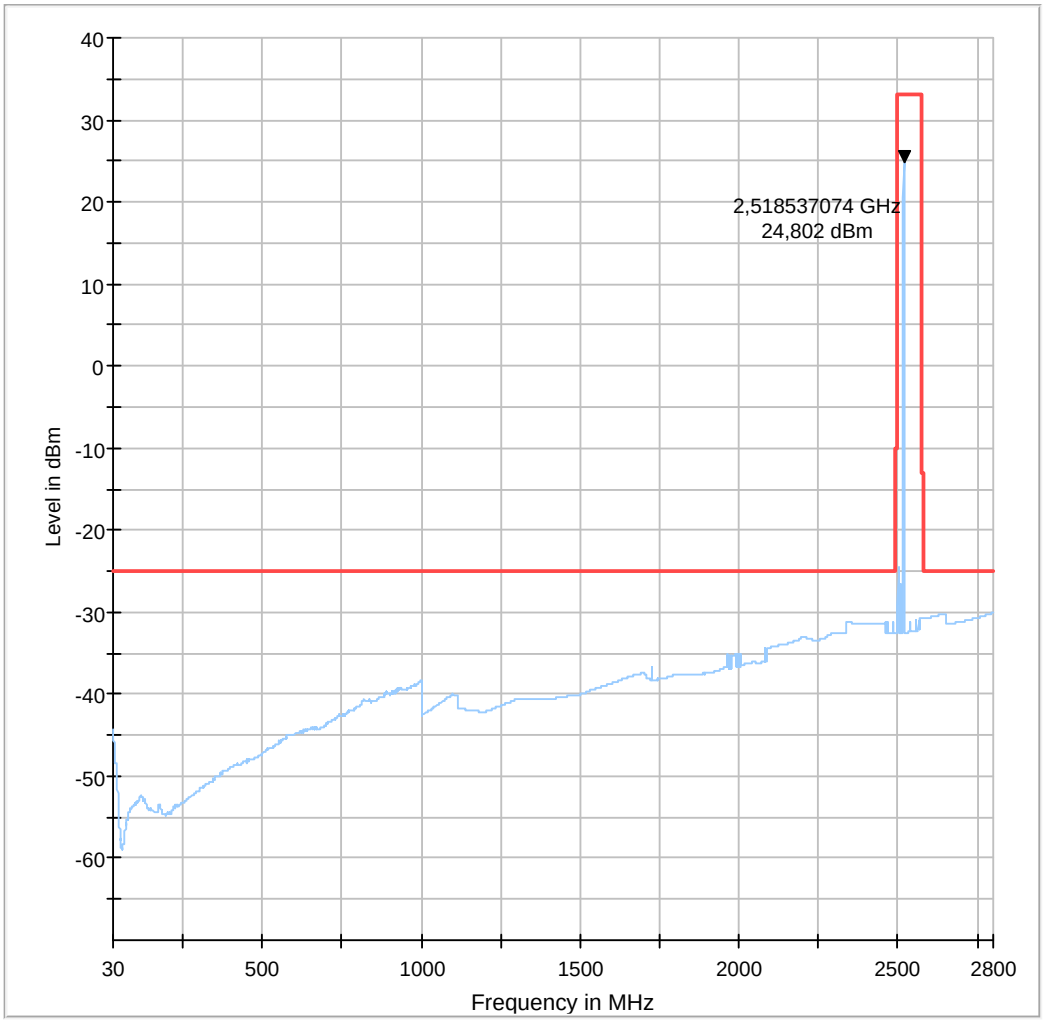
Common Information

Test Description:	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 (fc = 2510.0MHz), BW_20MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



8.54a_RSE_R_Ch21100_BW_20_2.8-20MHz

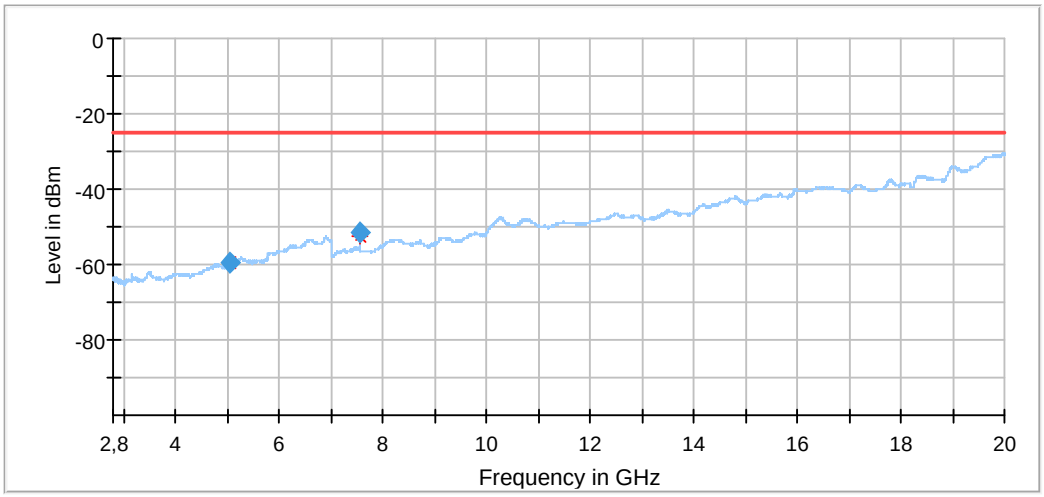
Common Information

Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53 / RSS-139
Operating Mode:	UE allocated channel 21100/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



Final_Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
5052.194388	-	34.25	1000.0	155.0	H	262.0	-91.1	18:16:18 - 21.04.2017
7578.246493	-	26.54	1000.0	155.0	H	-2.0	-83.6	18:14:00 - 21.04.2017

8.54a_RSE_R_Ch21100_BW_20_30-2.8MHz

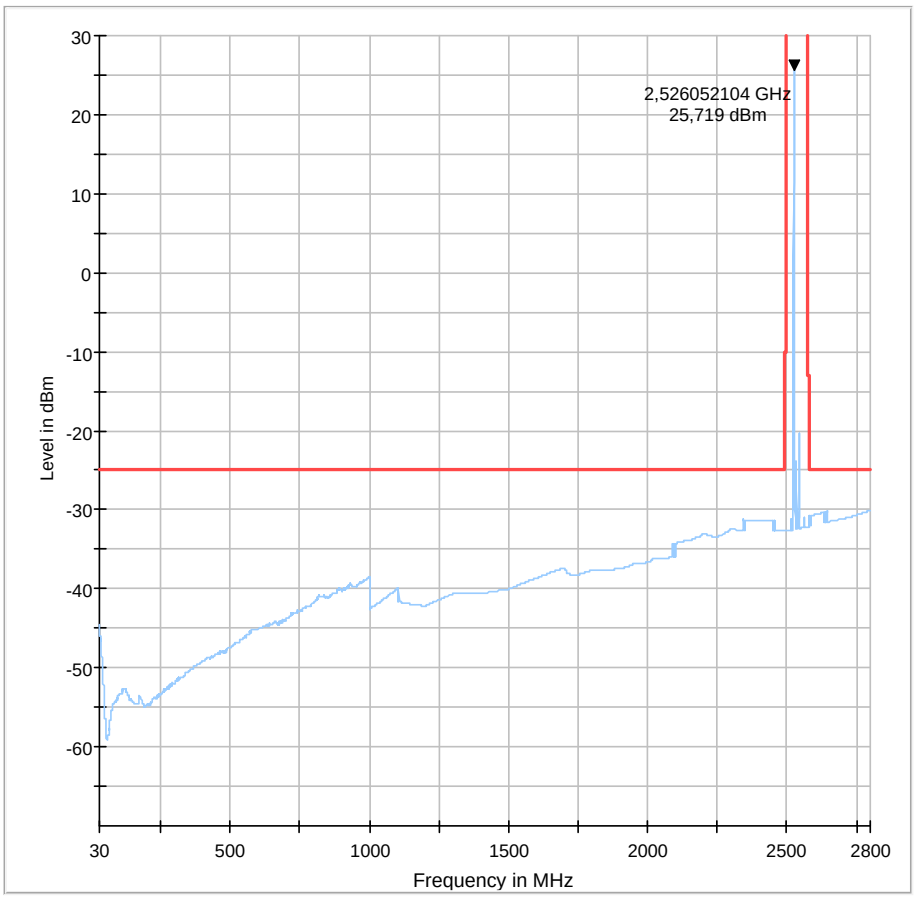
Common Information

Test Description:	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 21100/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



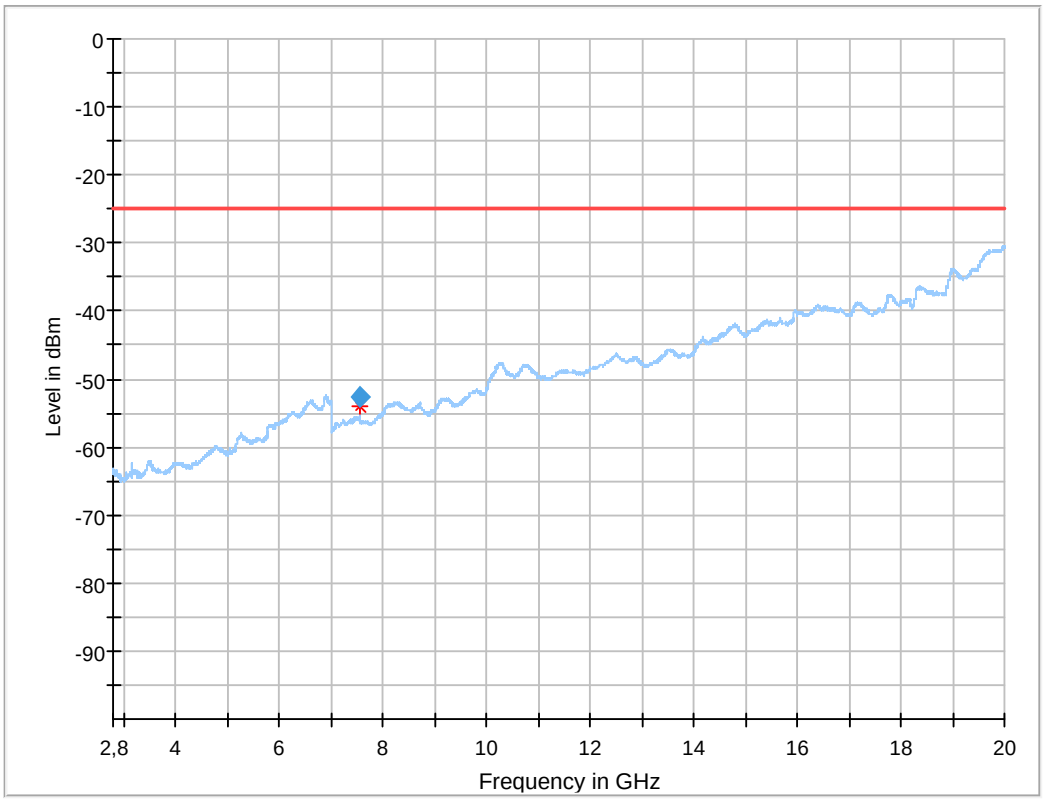
8.54b_RSE_R_Ch21100_BW_20_2.8-20MHz

Common Information

Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27
Operating Mode:	UE allocated channel 21100 (fc = 2535.0MHz), BW_20MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator Name:	RIs
Comment:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC



Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
7578.066133	-52.56	-25.00	27.56	1000.0	1000.000	155.0	V	331.0	-83.6

8.54b_RSE_R_Ch21100_BW_20_30-2.8MHz

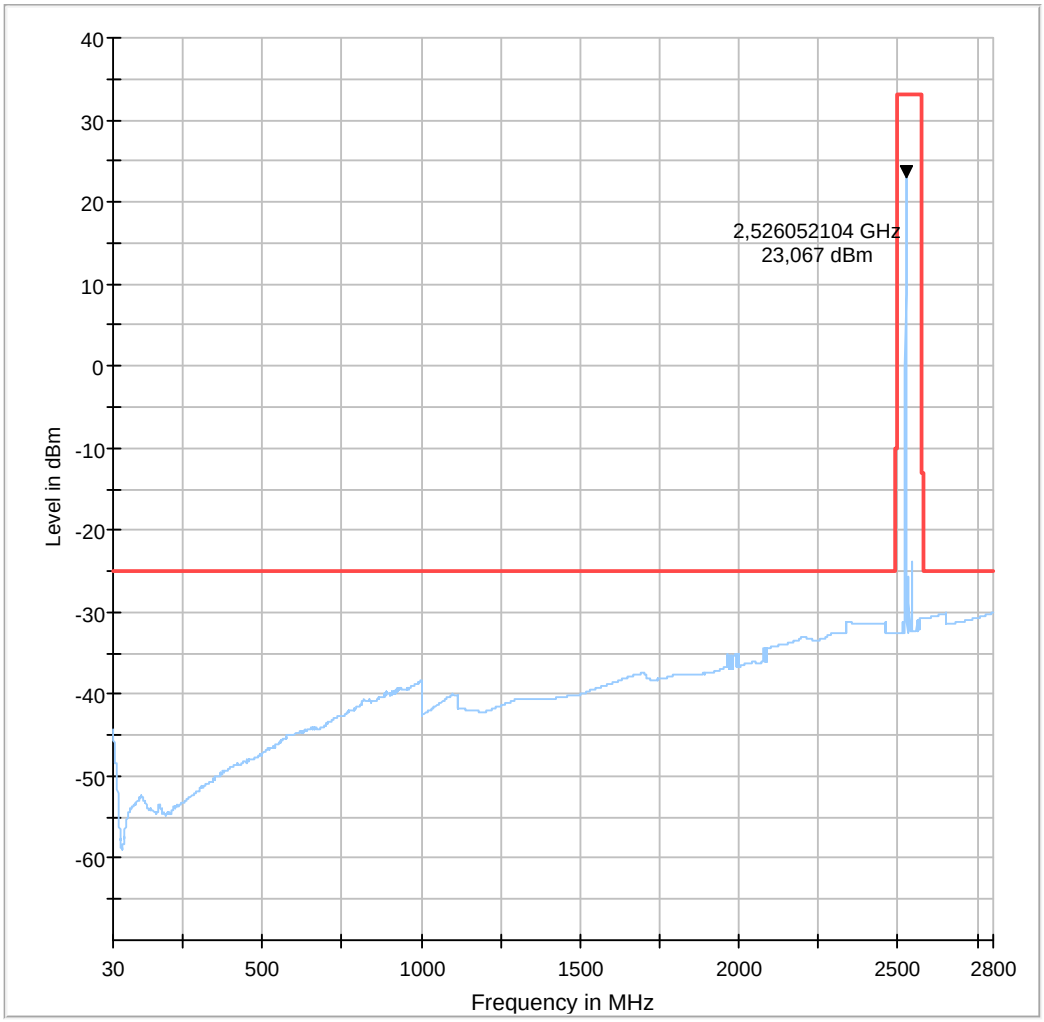
Common Information

Test Description:	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 21100/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



8.55a_RSE_R_Ch21300_BW_20_2.8-20MHz

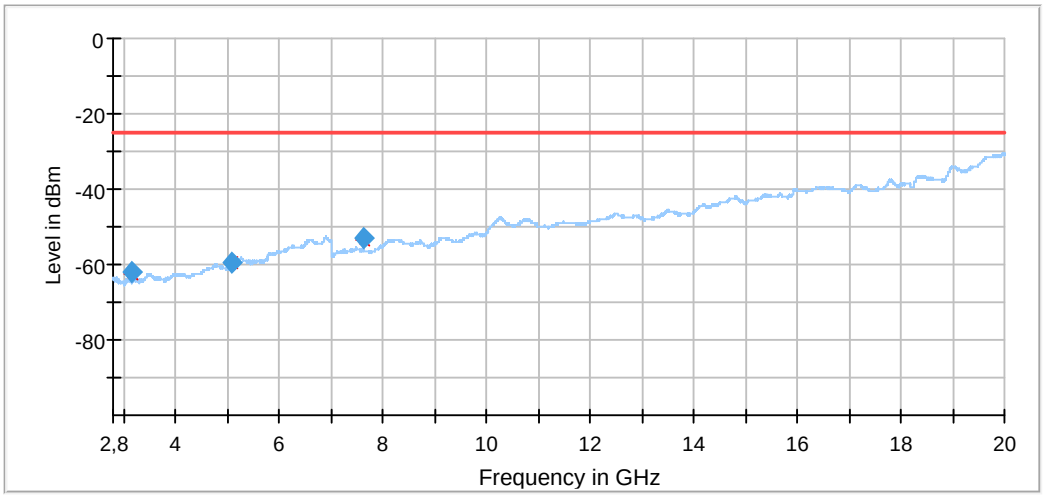
Common Information

Test Description:	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 21300/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



Final_Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
3180.010020	-	37.07	1000.0	155.0	H	37.0	-95.5	20:16:27 - 21.04.2017
5092.094189	-	34.31	1000.0	155.0	H	268.0	-90.9	20:18:48 - 21.04.2017
7638.186373	-	27.93	1000.0	155.0	H	-2.0	-84.0	20:14:36 - 21.04.2017

8.55a_RSE_R_Ch21300_BW_20_30-2.8MHz

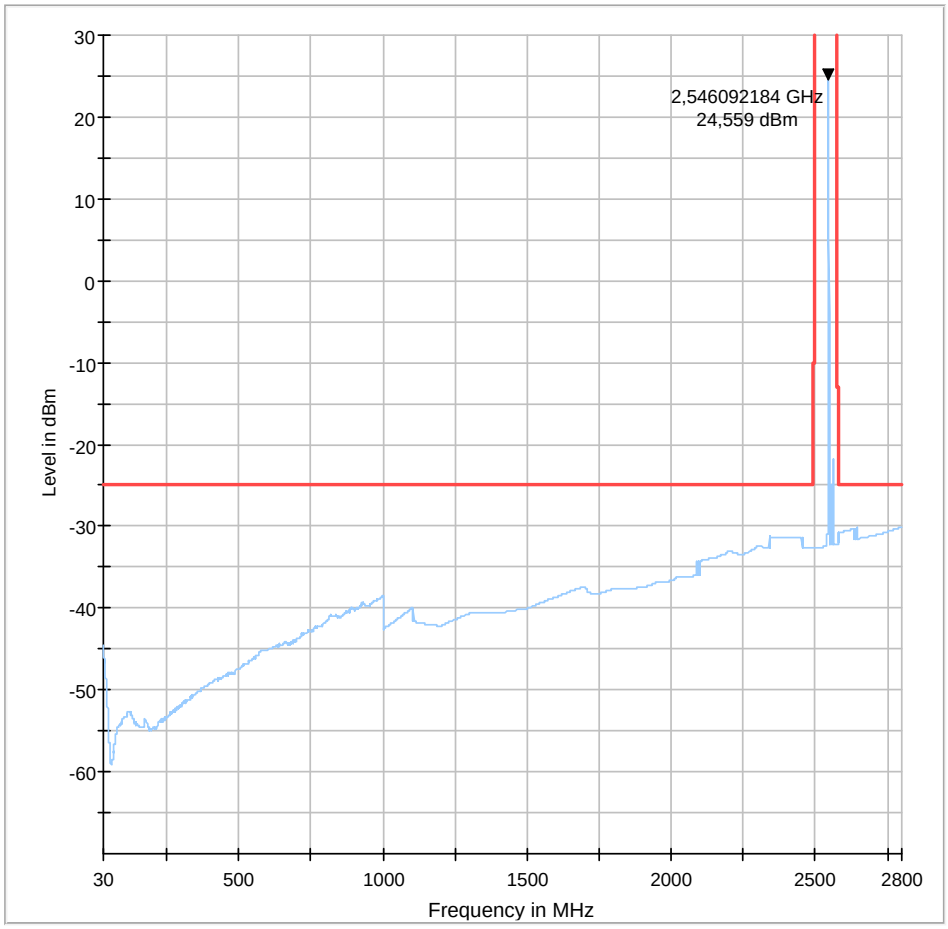
Common Information

Test Description:	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 21300/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



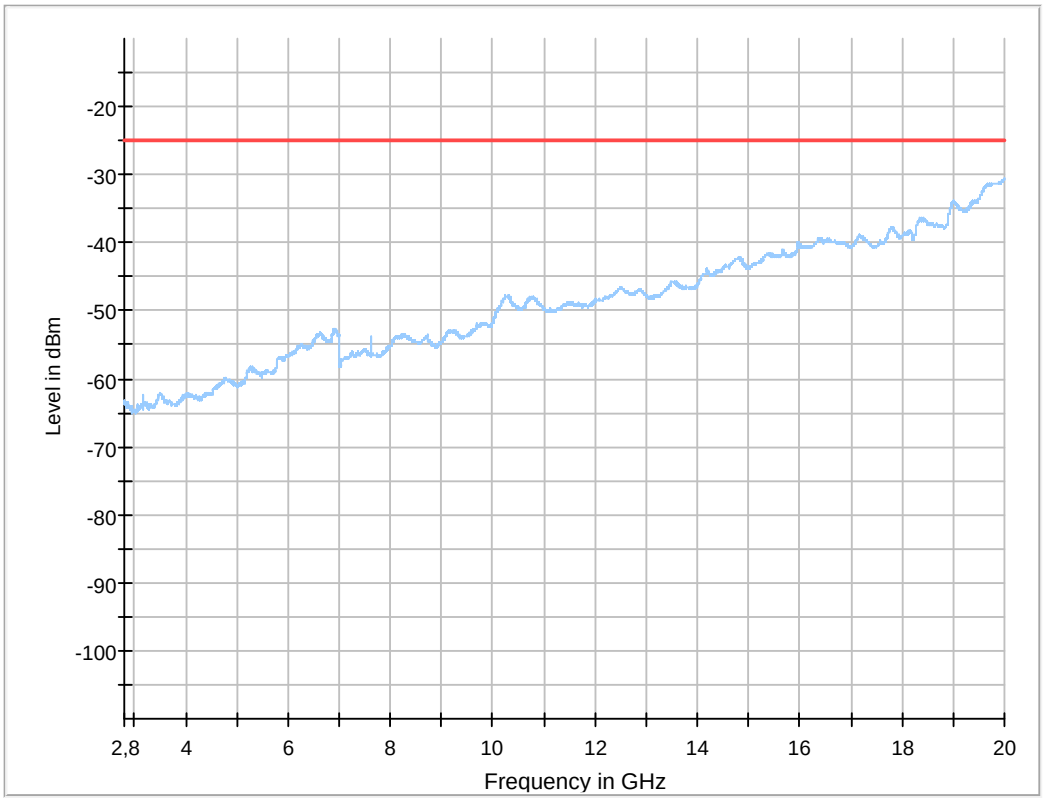
8.55_RSE_R_Ch21300_2.8-20GHz_BW_20b

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 21300/ BW: 20MHz/ RB: 1 Low
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Test SW Version:	EMC32 V9.26.0
Operator:	HLa/HEL
Remarks:	EUT - laying position
Comment:	2,8 GHz - 20 GHz

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC



8.55_RSE_R_Ch21300_BW_20

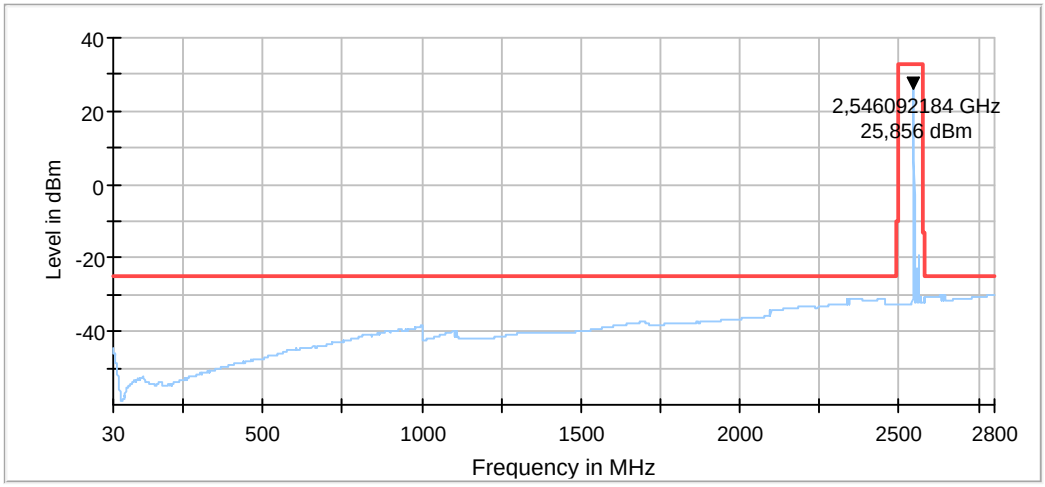
Common Information

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 21300/ BW: 20MHz/ RB: 1 Low
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Test SW Version:	EMC32 V9.26.0
Operator:	HLa/HEL
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC

Full Spectrum



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

1.5.1. Low Band-Edge

1.5.2. Channel 20425, QPSK, 1RBs

9.508b_BE_R_Ch20425_1RB_BW5_QPSK

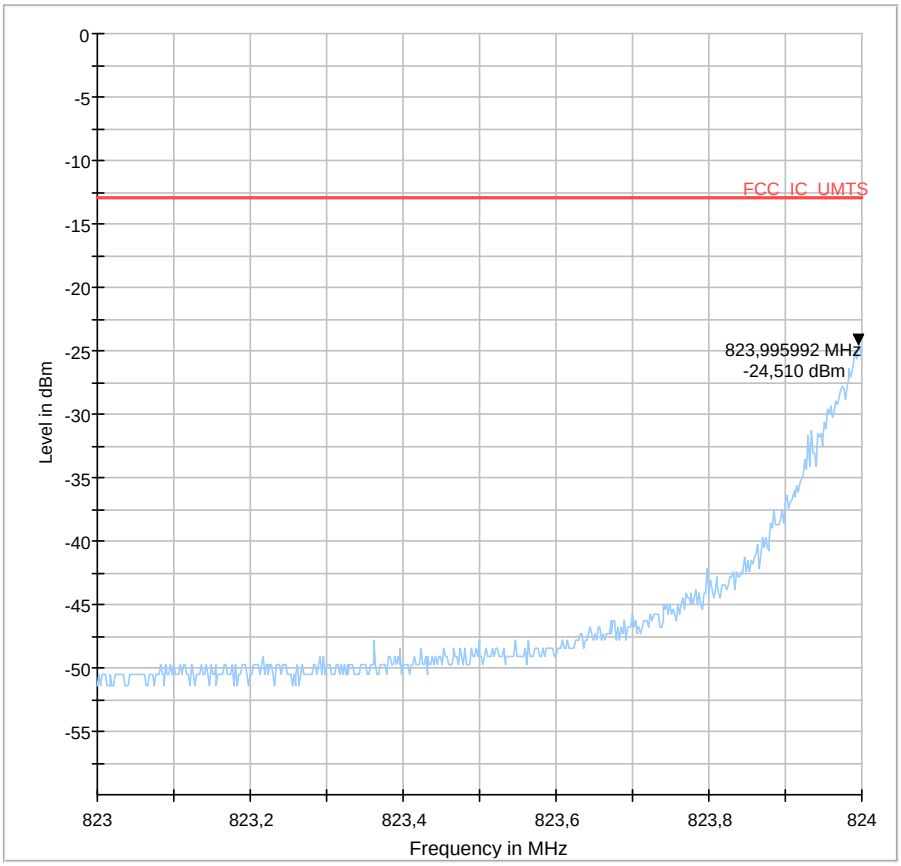
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.508a_BE_R_Ch20425_1RB_BW5_QPSK

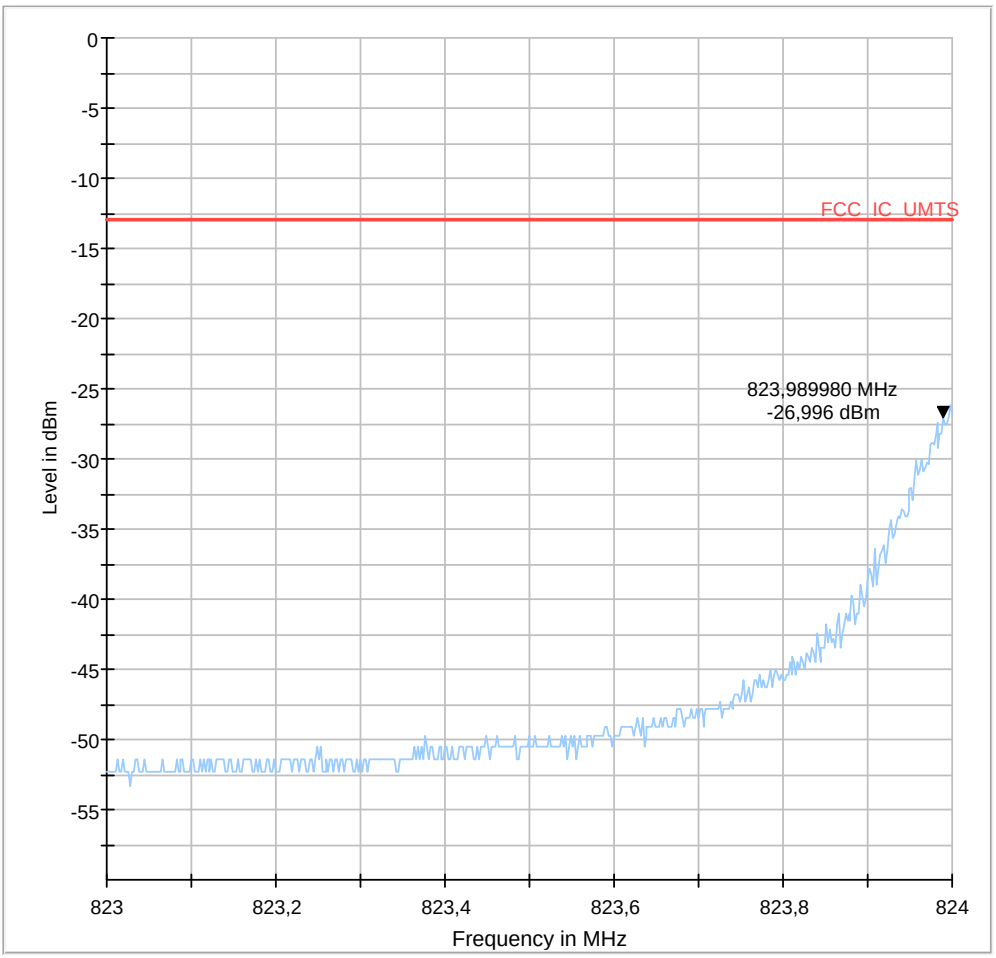
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.3. Channel 20425, 16-QAM, 1RBs

9.508b_BE_R_Ch20425_1RB_BW5_QAM

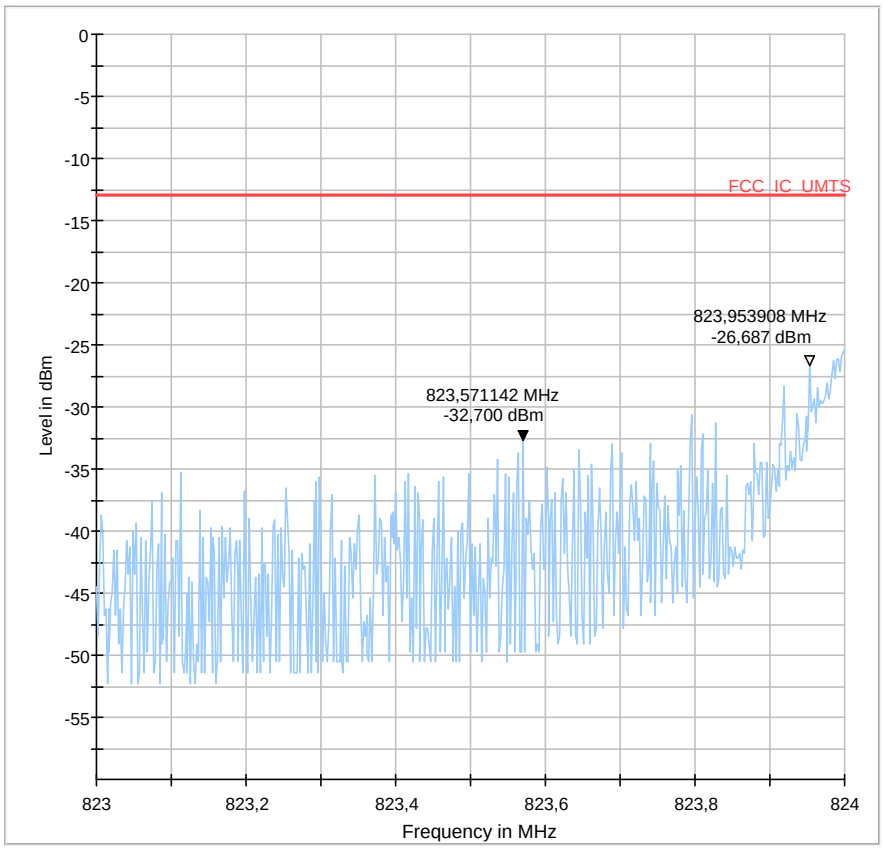
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.508a_BE_R_Ch20425_1RB_BW5_QAM

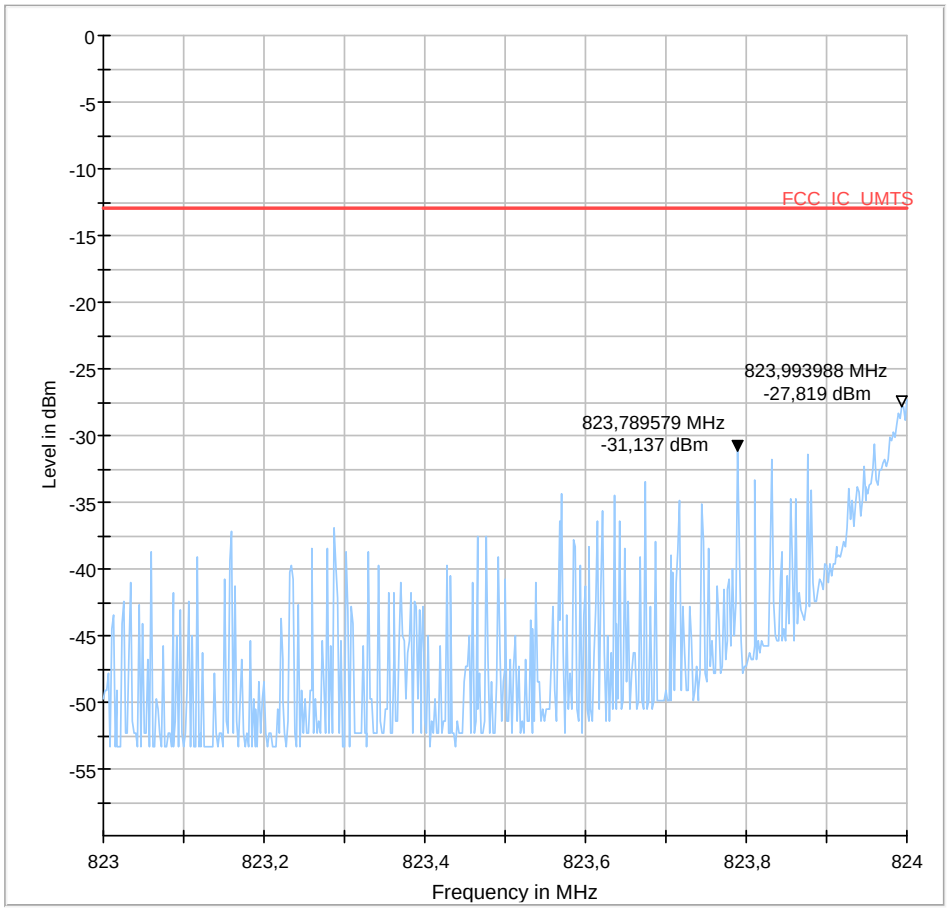
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.4. Channel 20425, QPSK, 50RBs

9.510a_BE_R_Ch20425_50RB_BW5_QPSK

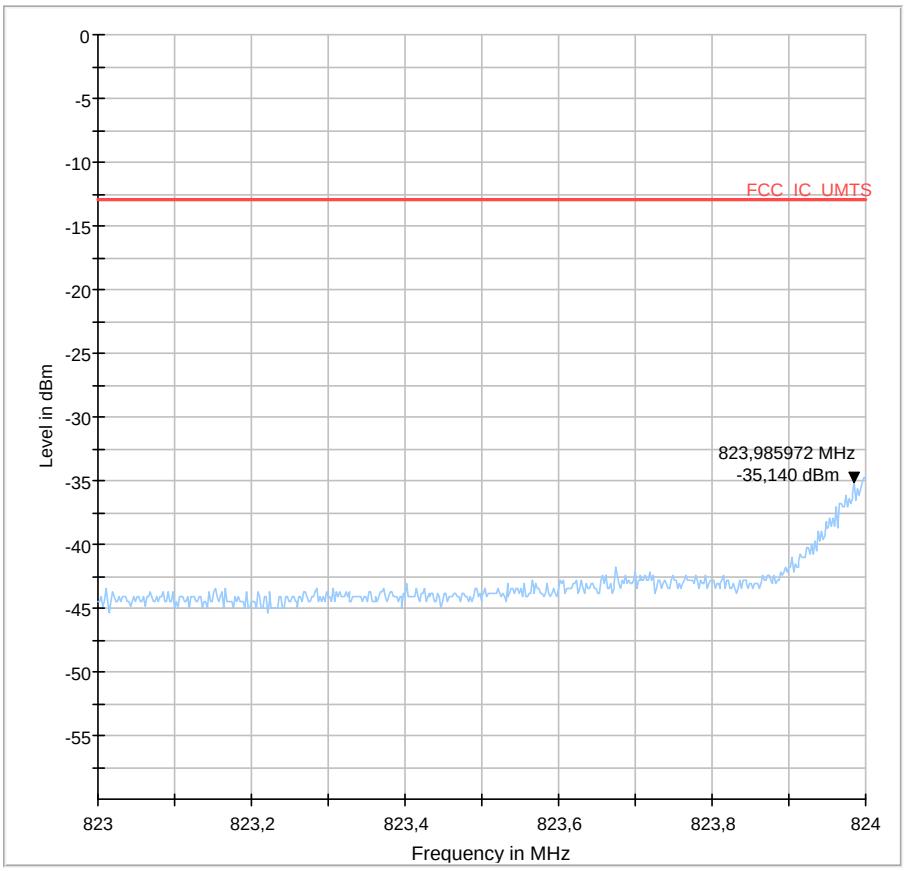
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.510b_BE_R_Ch20425_50RB_BW5_QPSK

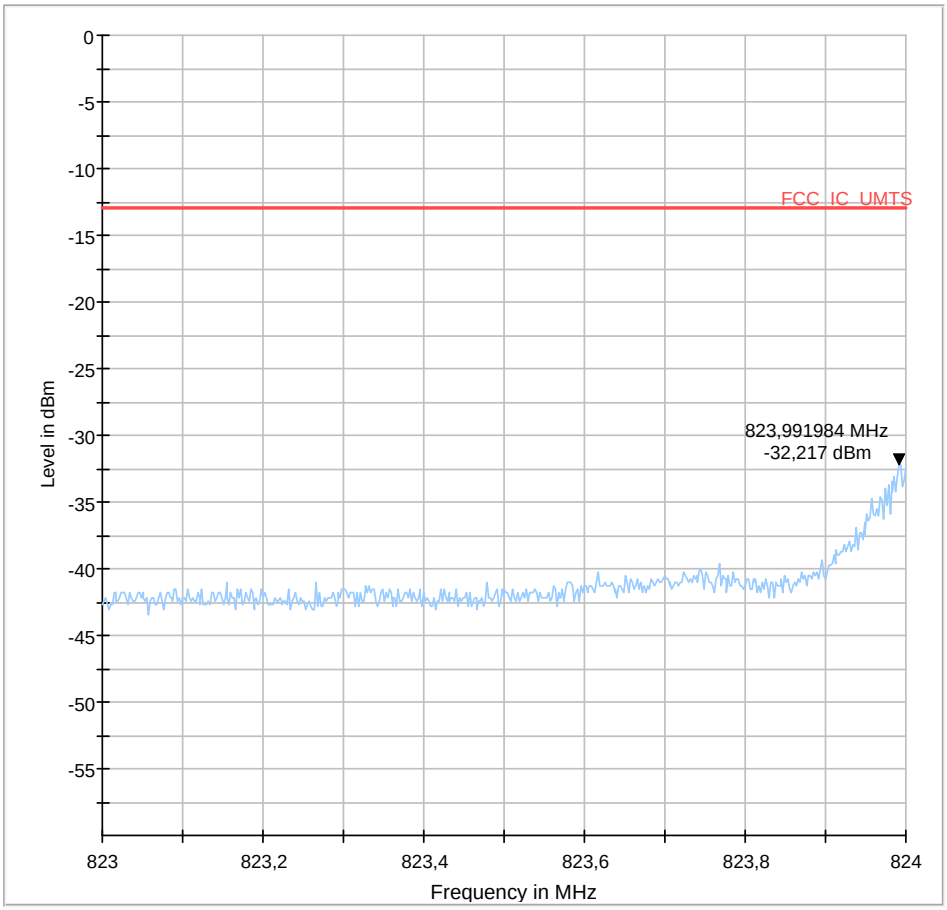
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.5. Channel 20425, 16-QAM, 50RBs

9.510a_BE_R_Ch20425_50RB_BW5_QAM

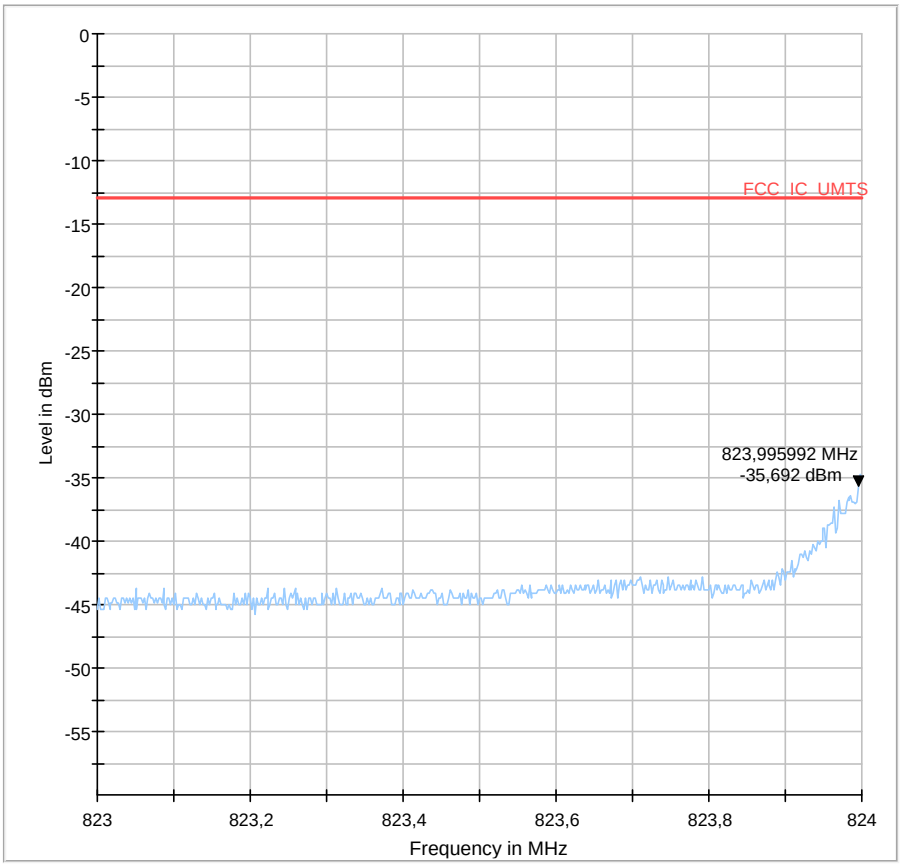
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.510b_BE_R_Ch20425_50RB_BW5_QAM

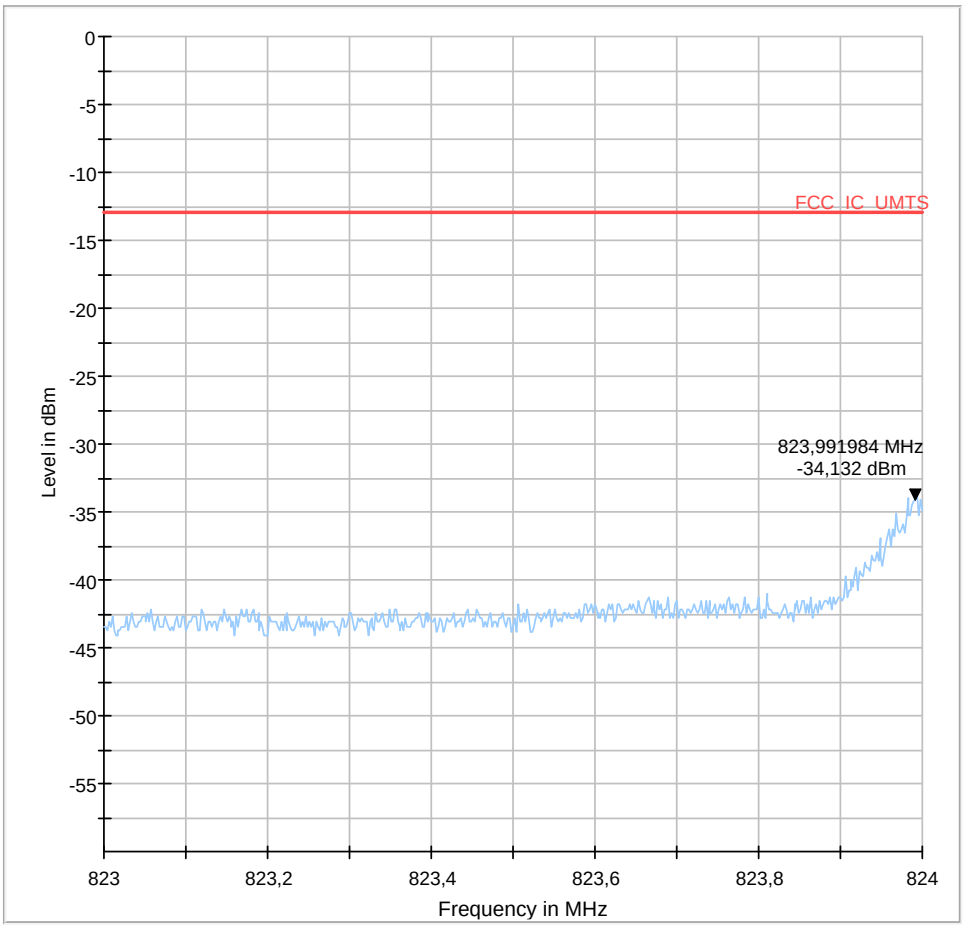
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
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
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.6. High Band-Edge

1.5.7. Channel 20643, QPSK, 1RBs

9.502a_BE_R_Ch20643_1RB_BW_10_QPSK

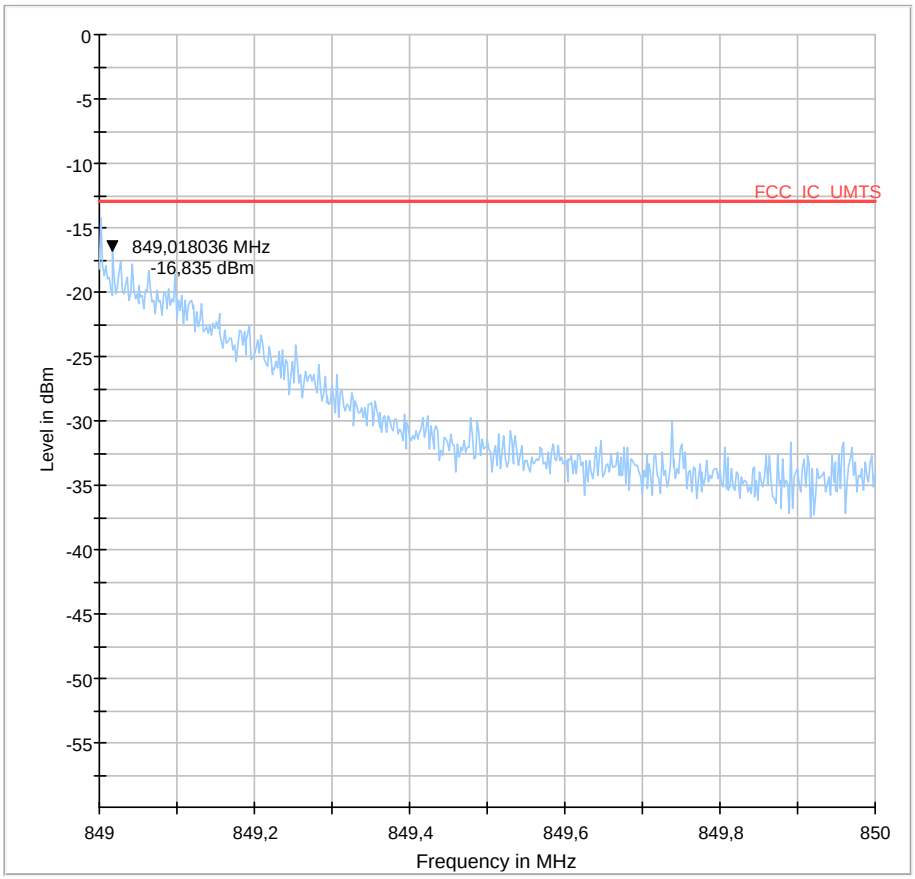
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 206043 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.502b_BE_R_Ch20643_1RB_BW_10_QPSK

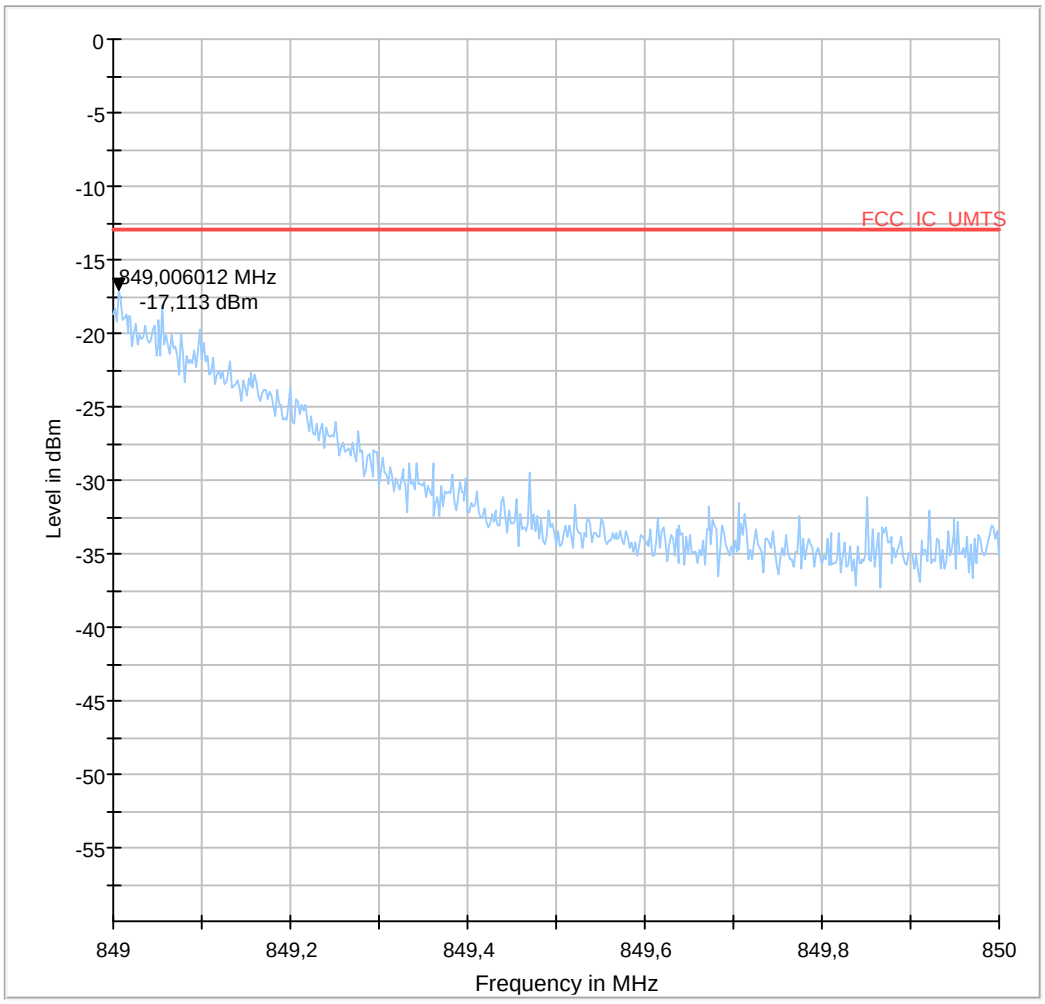
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.8. Channel 20643, 16-QAM, 1RBs

9.502a_BE_R_Ch20643_1RB_BW_10_QAM

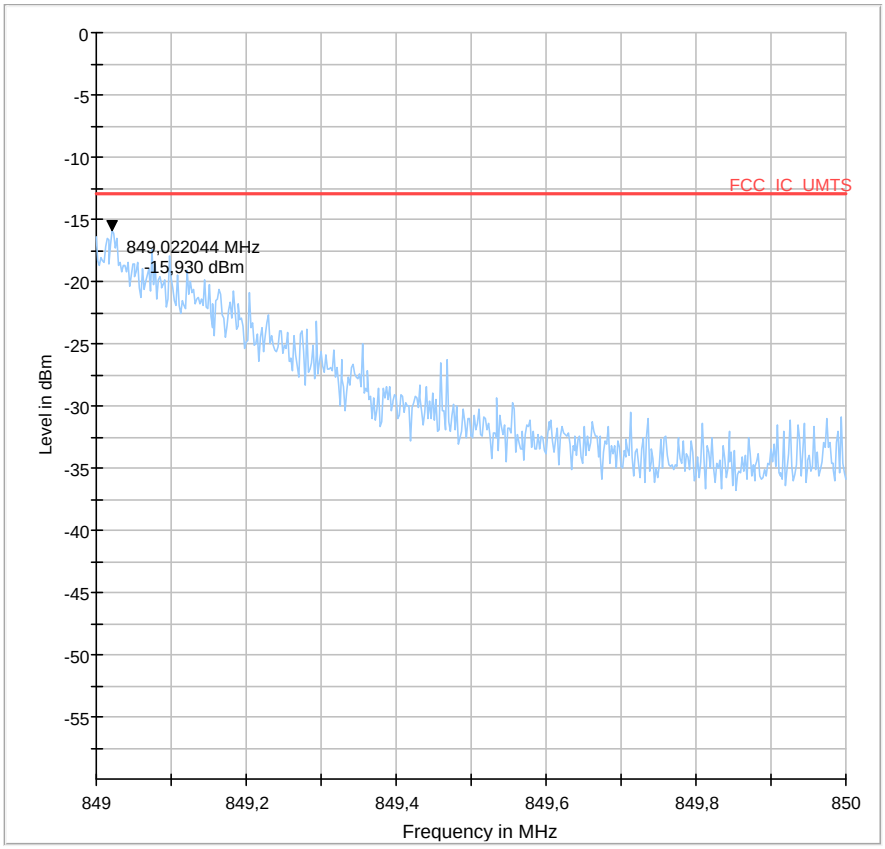
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.502b_BE_R_Ch20643_1RB_BW_BW_10_QAM

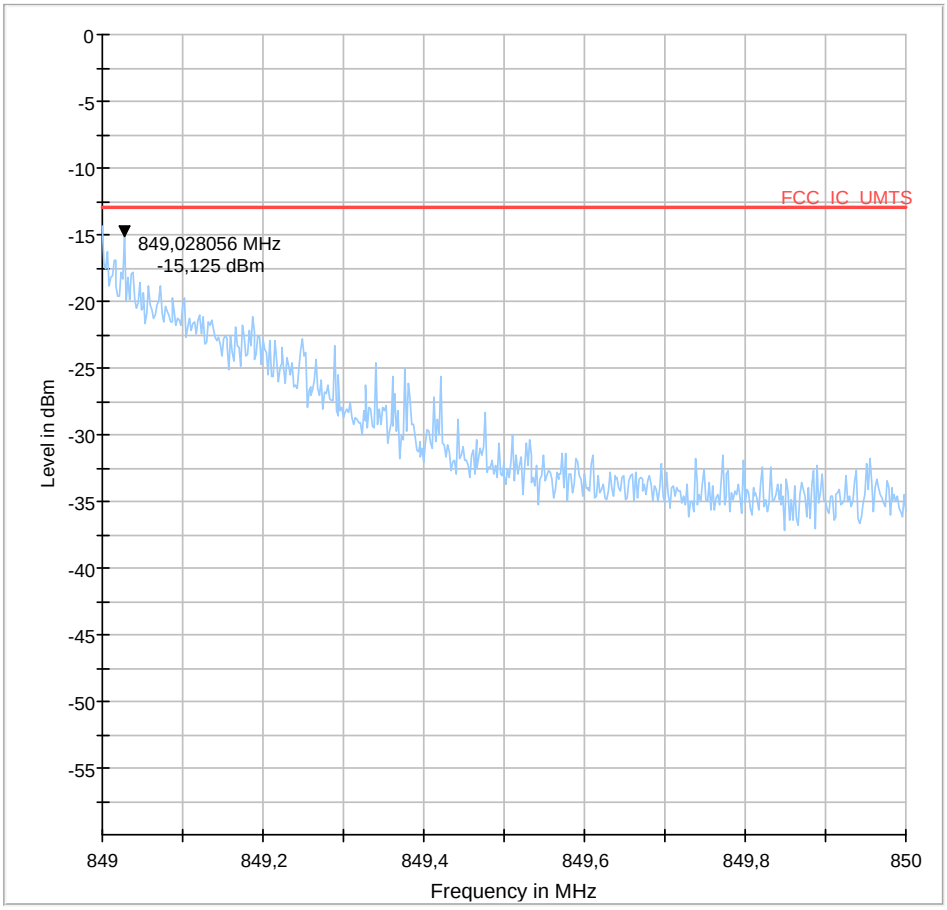
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



1.5.9. Channel 20643, QPSK, 6RBs

9.503a_BE_R_Ch20643_6RB_BW_10_QPSK

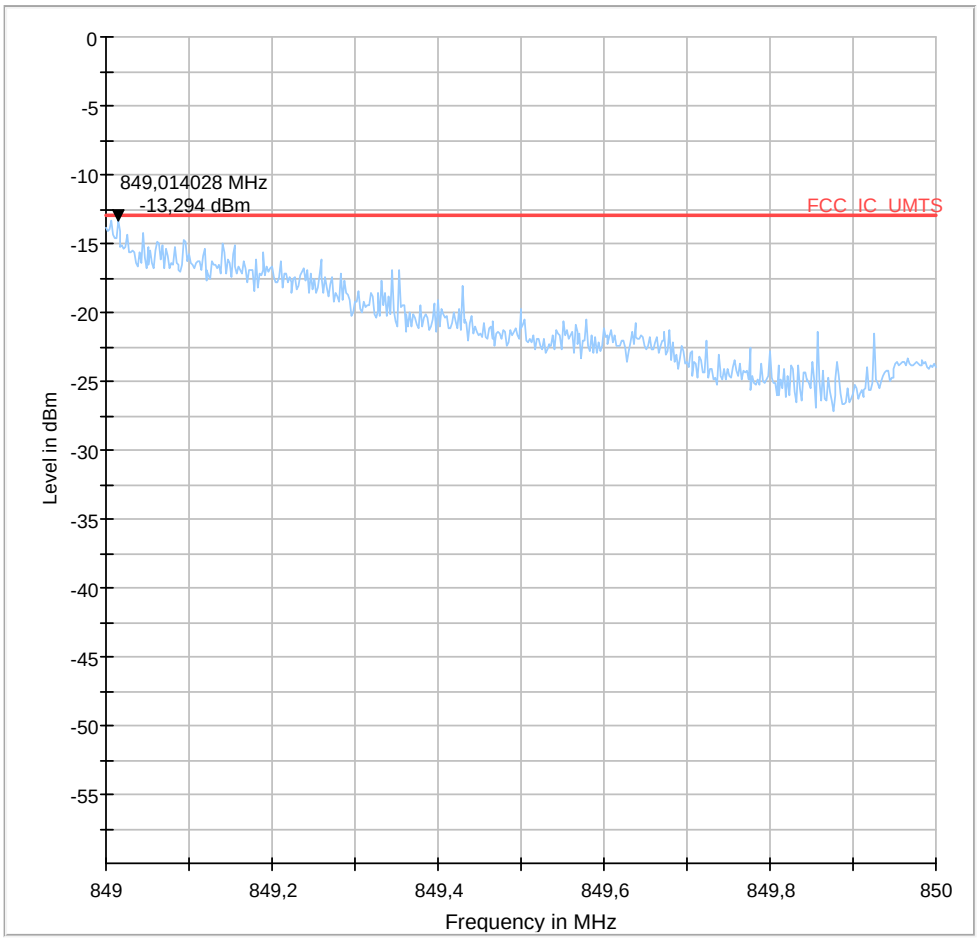
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



9.503b_BE_R_Ch20643_6RB_10_QPSK

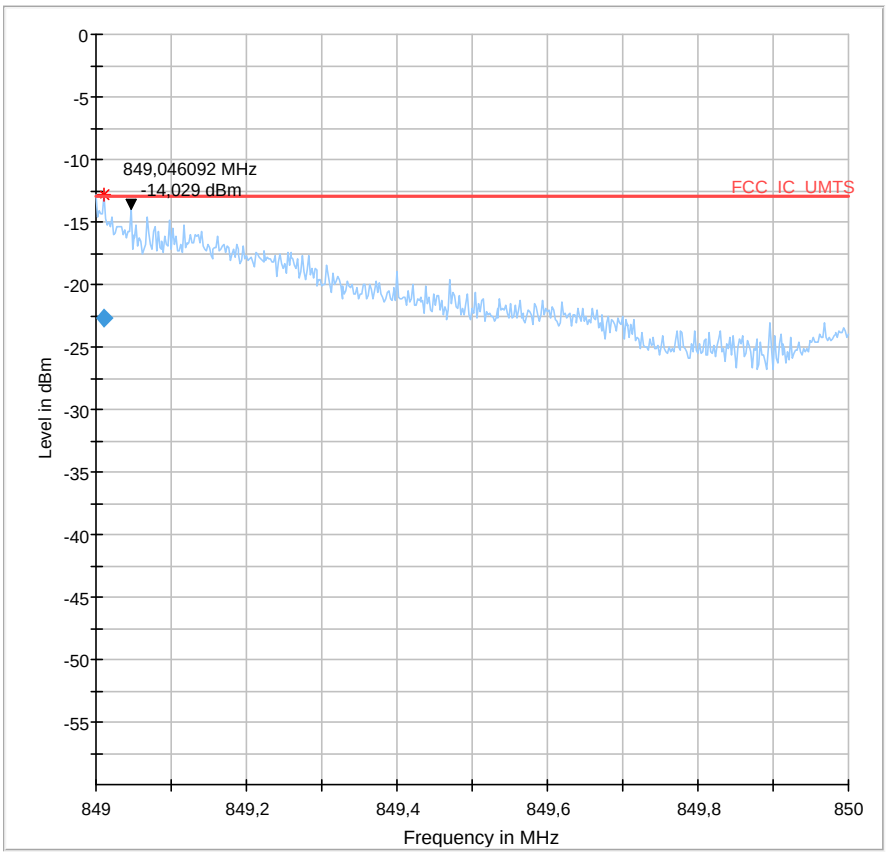
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.010020	-22.63	-13.00	9.63	100.0	100.000	V	73.0	0.0	-75.9

1.5.10. Channel 20643, 16-QAM, 6RBs

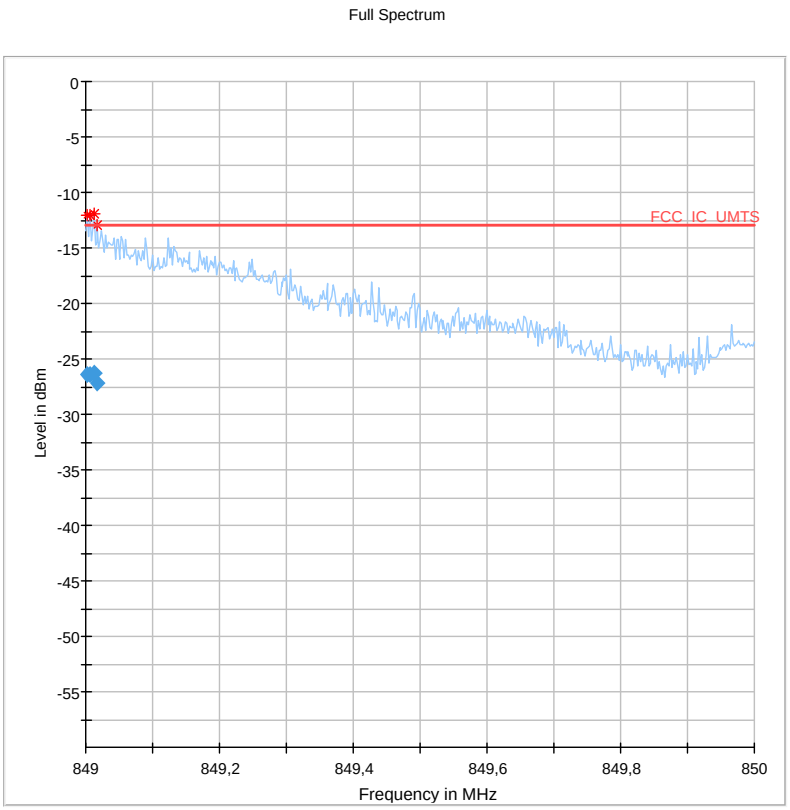
9.503a_BE_R_Ch20643_6RB_BW_10_QAM

Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.002004	-26.36	-13.00	13.36	100.0	100.000	H	276.0	0.0	-75.9
849.006012	-26.36	-13.00	13.36	100.0	100.000	H	-17.0	0.0	-75.9
849.012024	-26.31	-13.00	13.31	100.0	100.000	H	277.0	0.0	-75.9
849.018036	-27.22	-13.00	14.22	100.0	100.000	H	-11.0	0.0	-76.0

9.503b_BE_R_Ch20643_6RB_BW_10_QAM

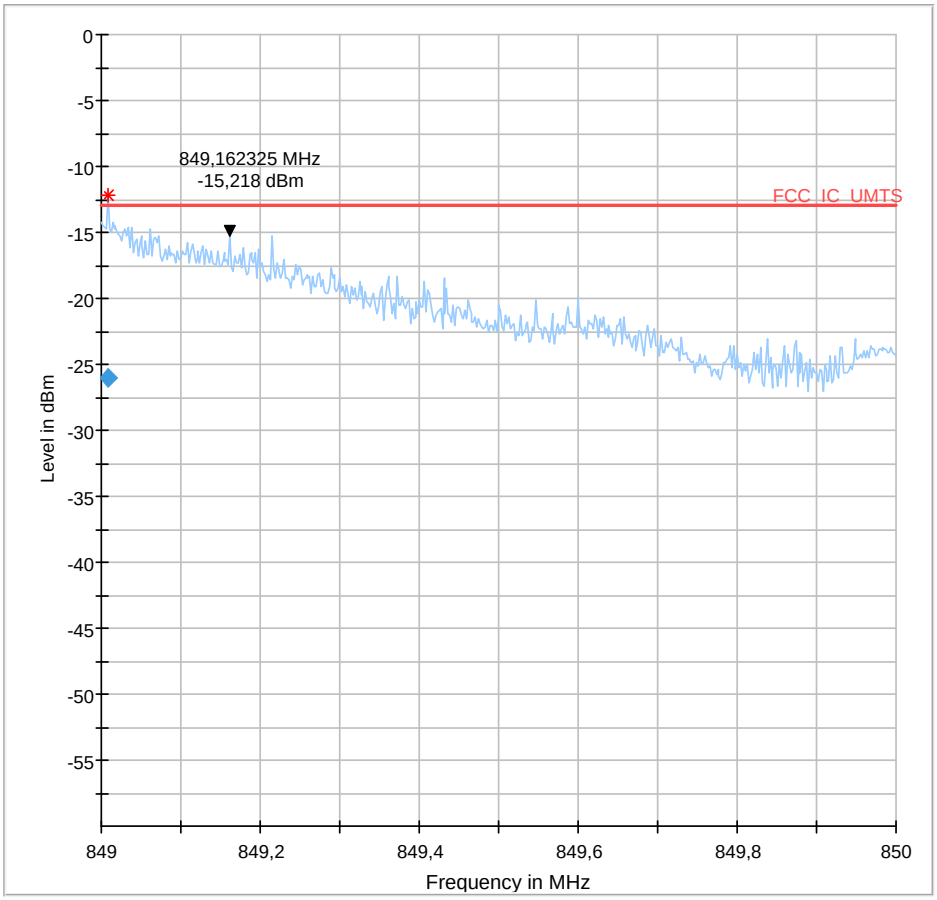
Common Information

Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1233-0
---	---
HW version:	V1233-0_Ver.1
SW version:	MPSS.TH.2.0.2-00220
Serial number:	004402580050122
Connected Interfaces:	Kathrein Cellular/GNSS antenna, Kathrein Cellular antenna, microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum

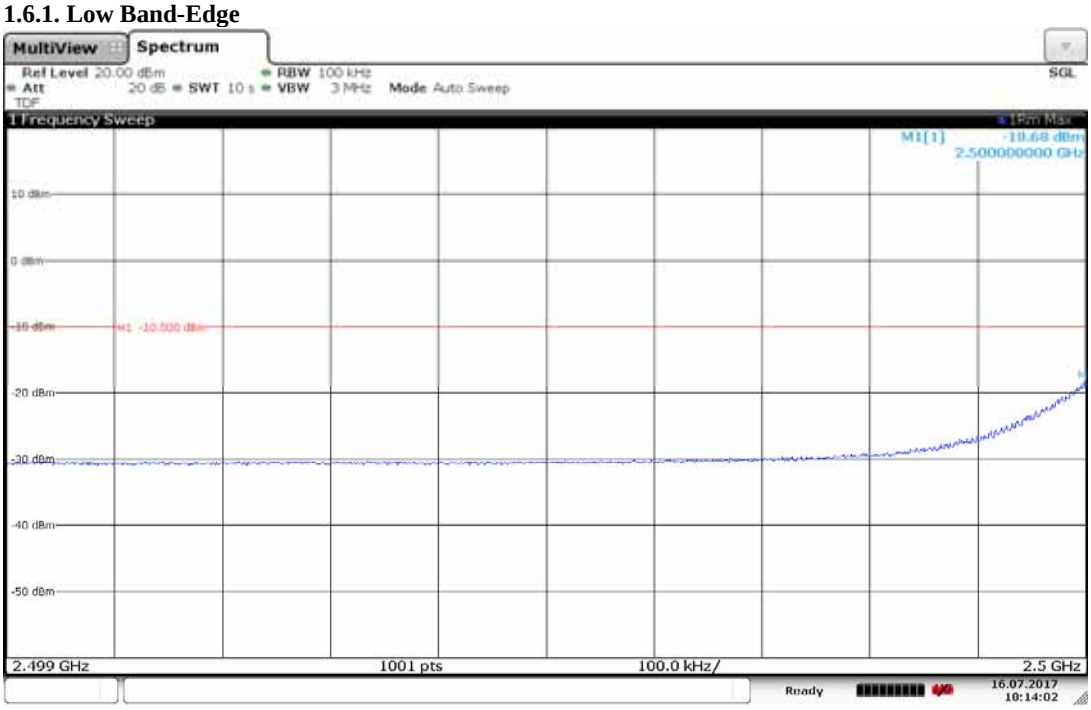


Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.008016	-26.03	-13.00	13.03	100.0	100.000	V	130.0	0.0	-75.9

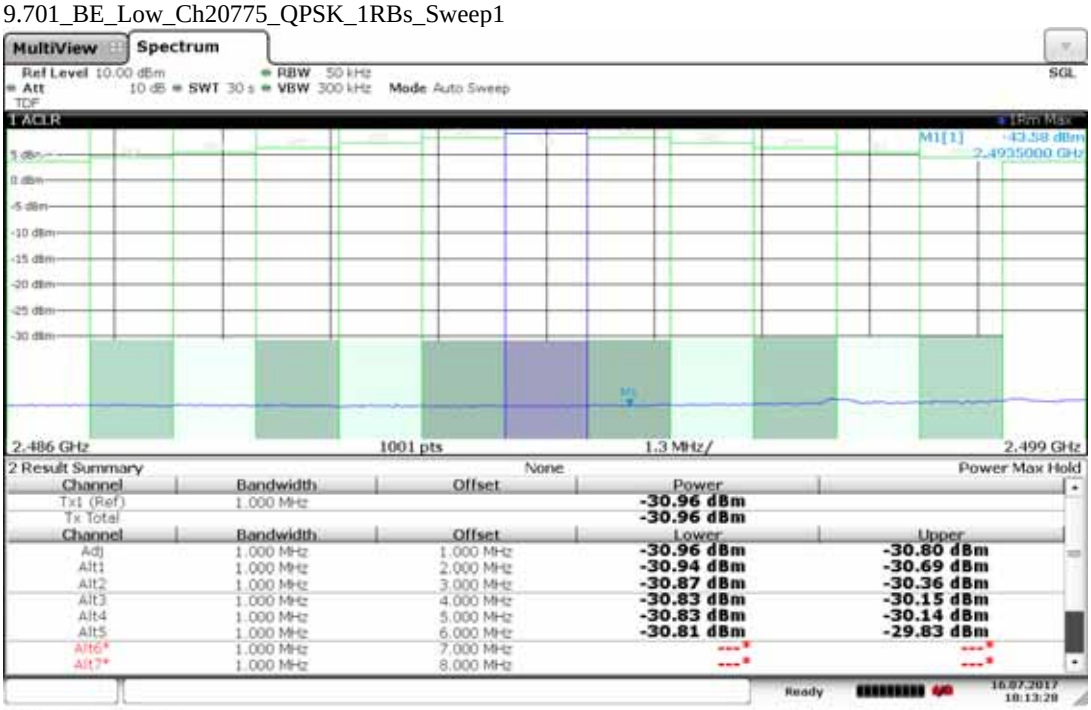
1.6. Radiated emissions – band-edge (LTE Band 7)

1.6.1. Low Band-Edge



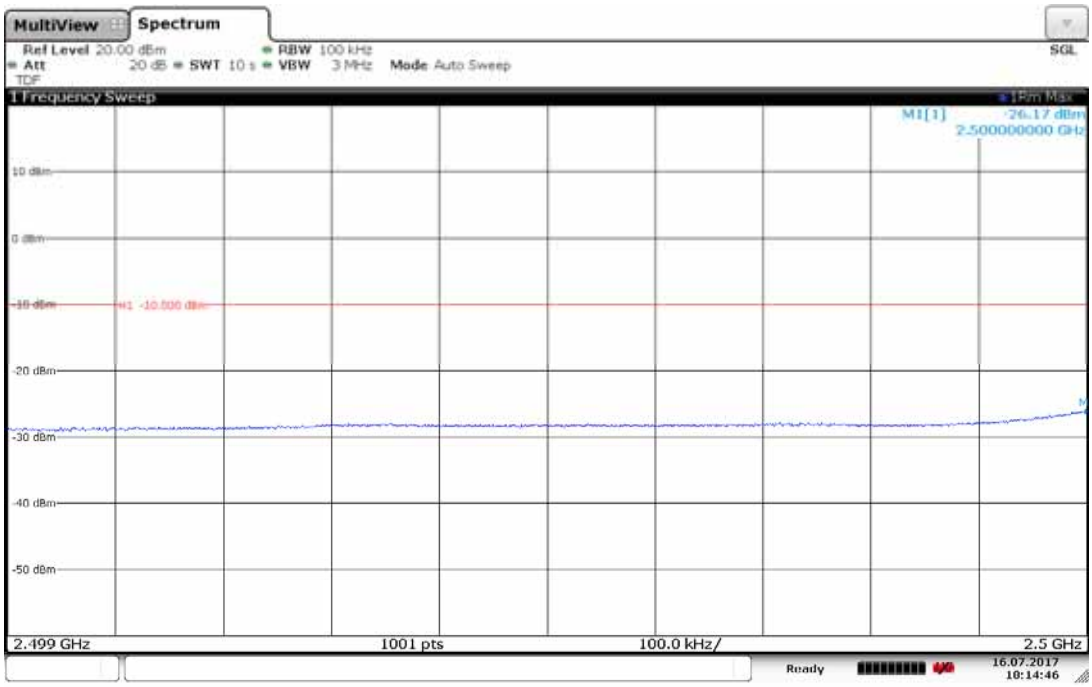
18:14:03 16.07.2017

9.701_BE_Low_Ch20775_QPSK_1RBs_Sweep1



18:13:29 16.07.2017

9.701_BE_Low_Ch20775_QPSK_1RBs_Sweep2

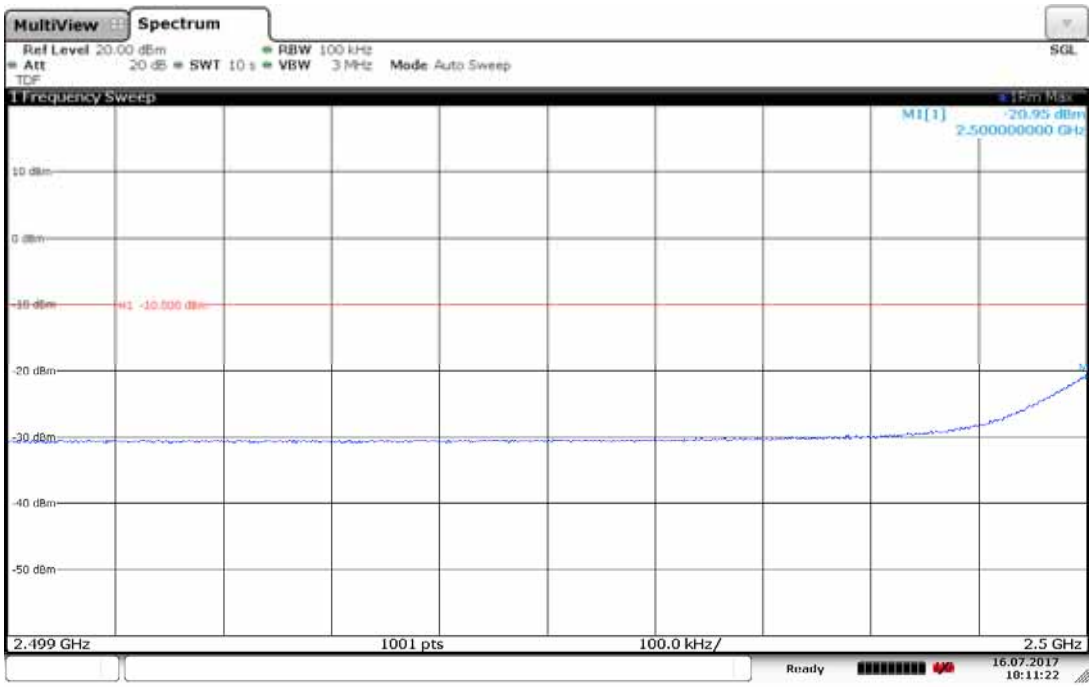


18:14:47 16.07.2017

9.702_BE_Low_Ch20775_QPSK_25RBs_Sweep1

18:15:43 16.07.2017

9.702_BE_Low_Ch20775_QPSK_25RBs_Sweep2

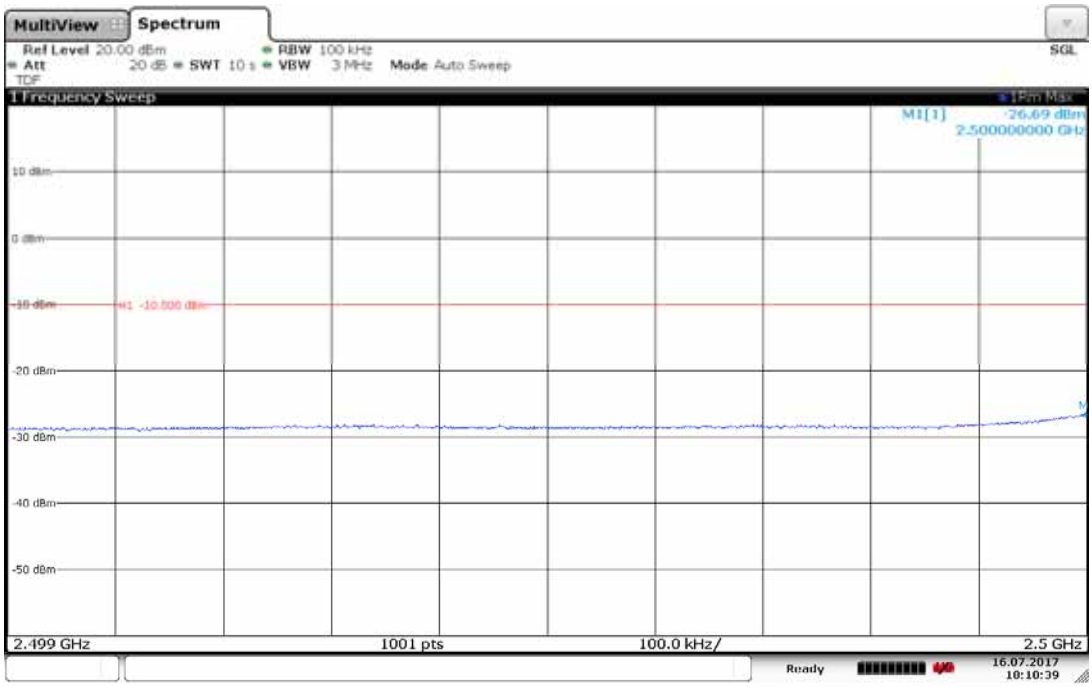


18:11:22 16.07.2017

9.703_BE_Low_Ch20775_16QAM_1RBs_Sveep1

18:12:33 16.07.2017

9.703_BE_Low_Ch20775_16QAM_1RBs_Sveep2

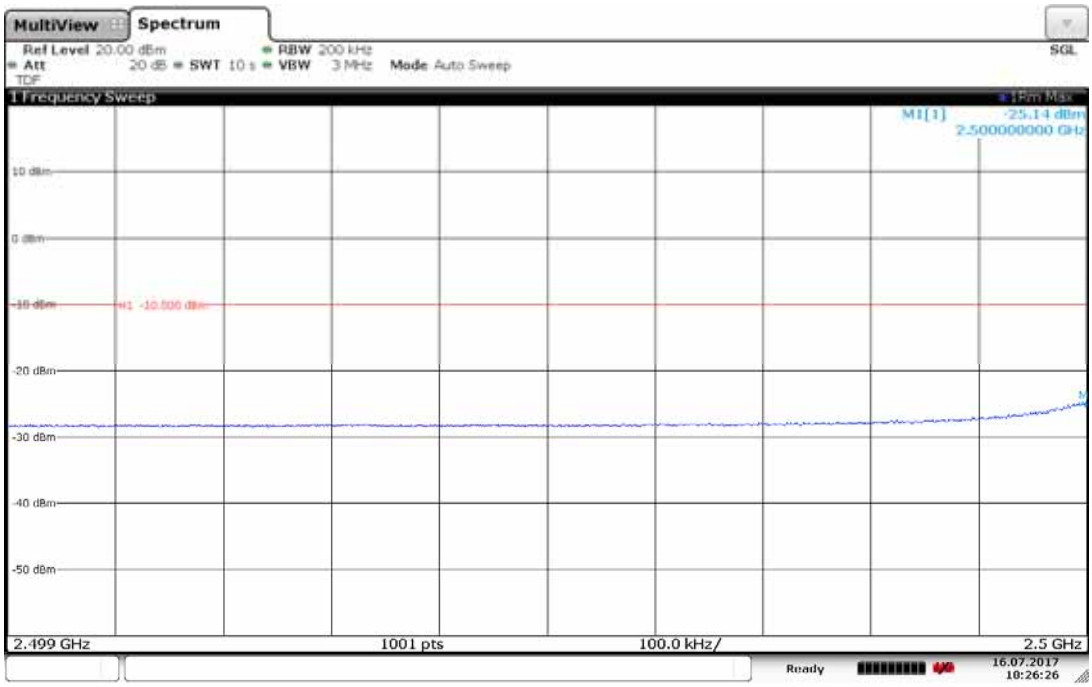


18:10:39 16.07.2017

9.704_BE_Low_Ch20775_16QAM_25RBs_Sveep1

18:09:54 16.07.2017

9.704_BE_Low_Ch20775_16QAM_25RBs_Sveep2

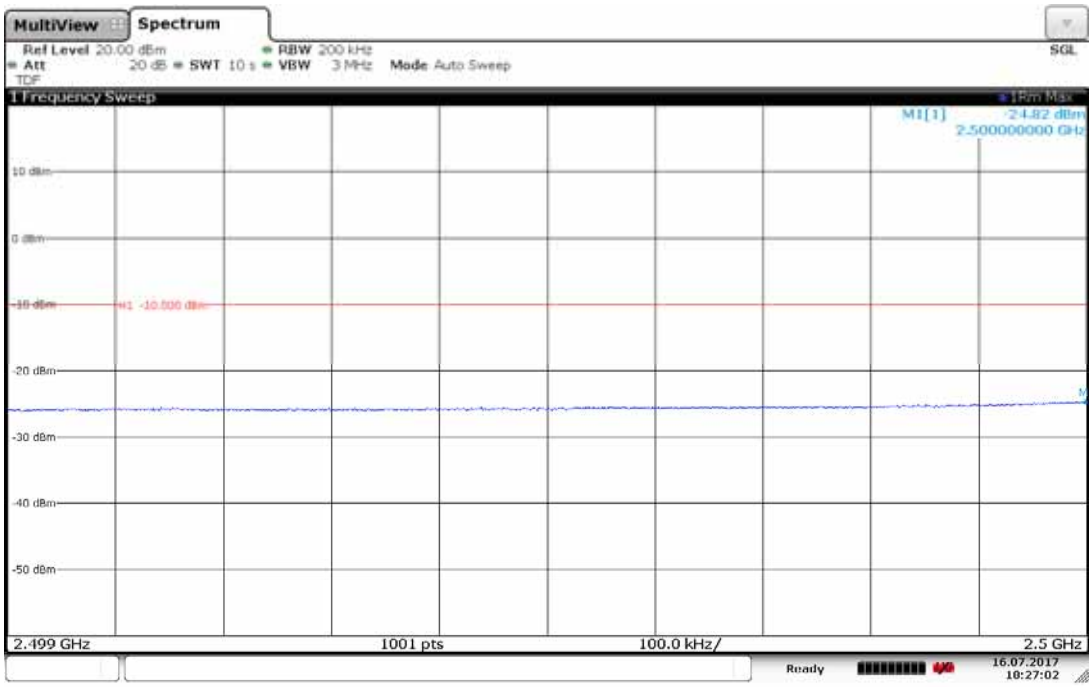


18:26:26 16.07.2017

9.705_BE_Low_Ch20800_QPSK_1RBs_Sweep1

18:21:10 16.07.2017

9.705_BE_Low_Ch20800_QPSK_1RBs_Sweep2

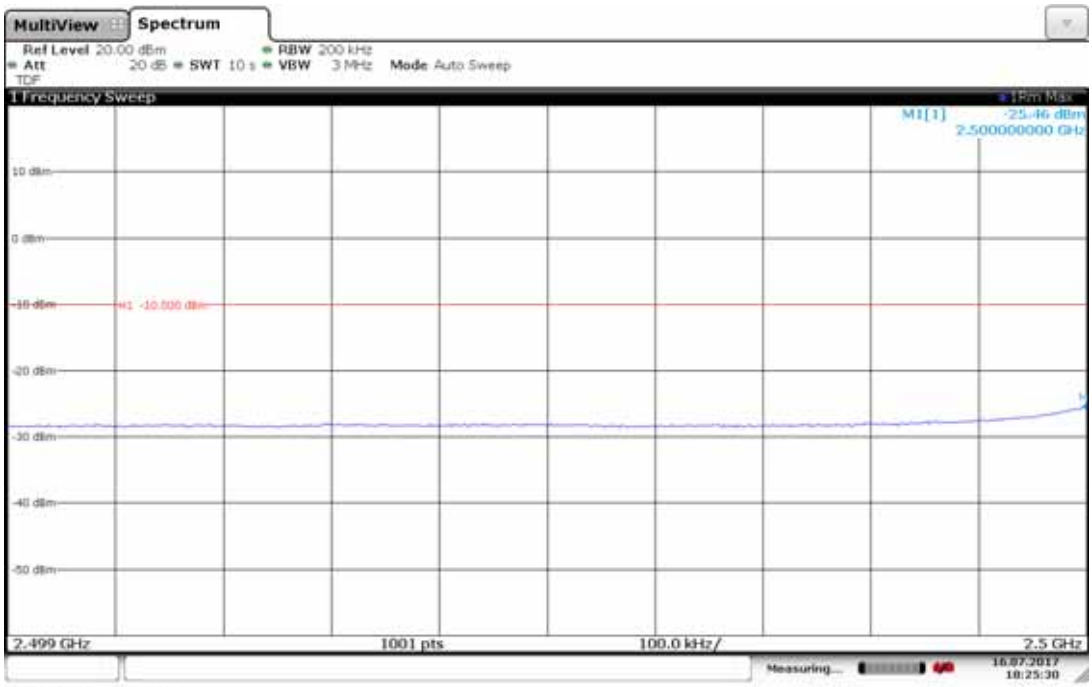


18:27:02 16.07.2017

9.706_BE_Low_Ch20800_QPSK_50RBs_Sweep1

18:18:21 16.07.2017

9.706_BE_Low_Ch20800_QPSK_50RBs_Sweep2

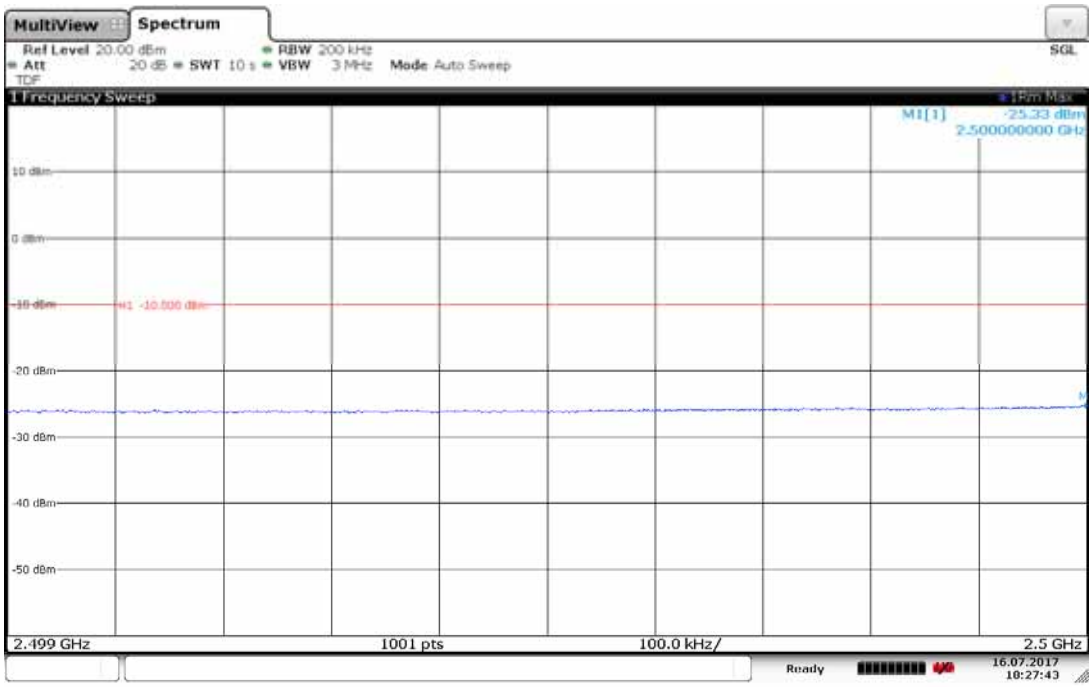


18:25:30 16.07.2017

9.707_BE_Low_Ch20800_16QAM_1RBs_Sveep1

18:22:46 16.07.2017

9.707_BE_Low_Ch20800_16QAM_1RBs_Sveep2

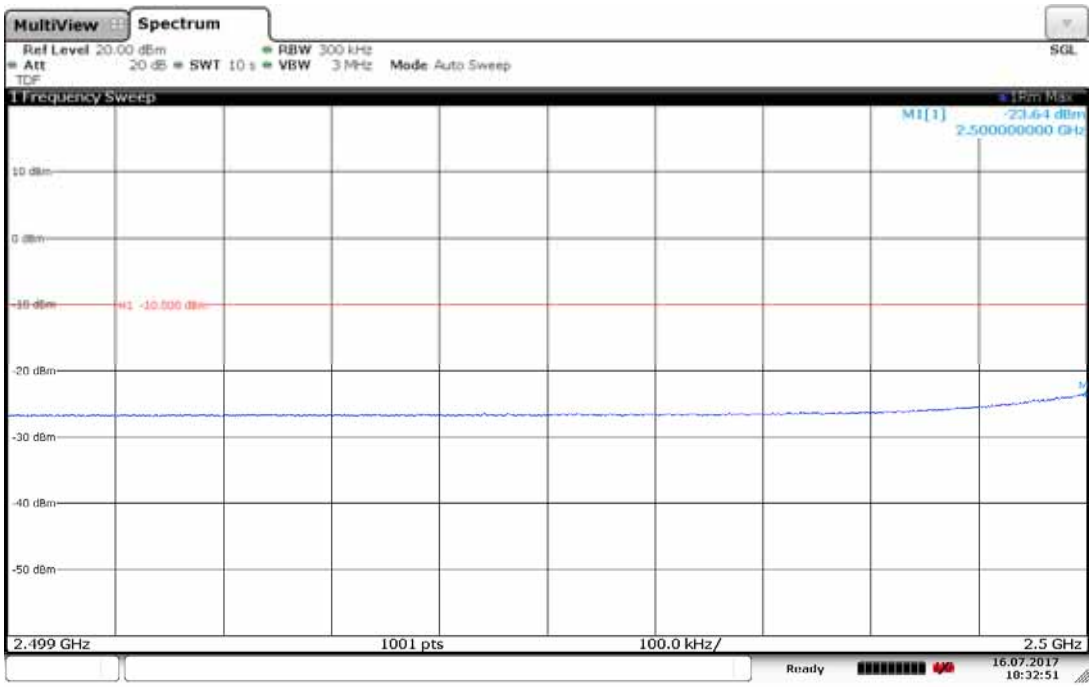


18:27:44 16.07.2017

9.708_BE_Low_Ch20800_16QAM_50RBs_Sveep1

18:28:43 16.07.2017

9.708_BE_Low_Ch20800_16QAM_50RBs_Sveep2

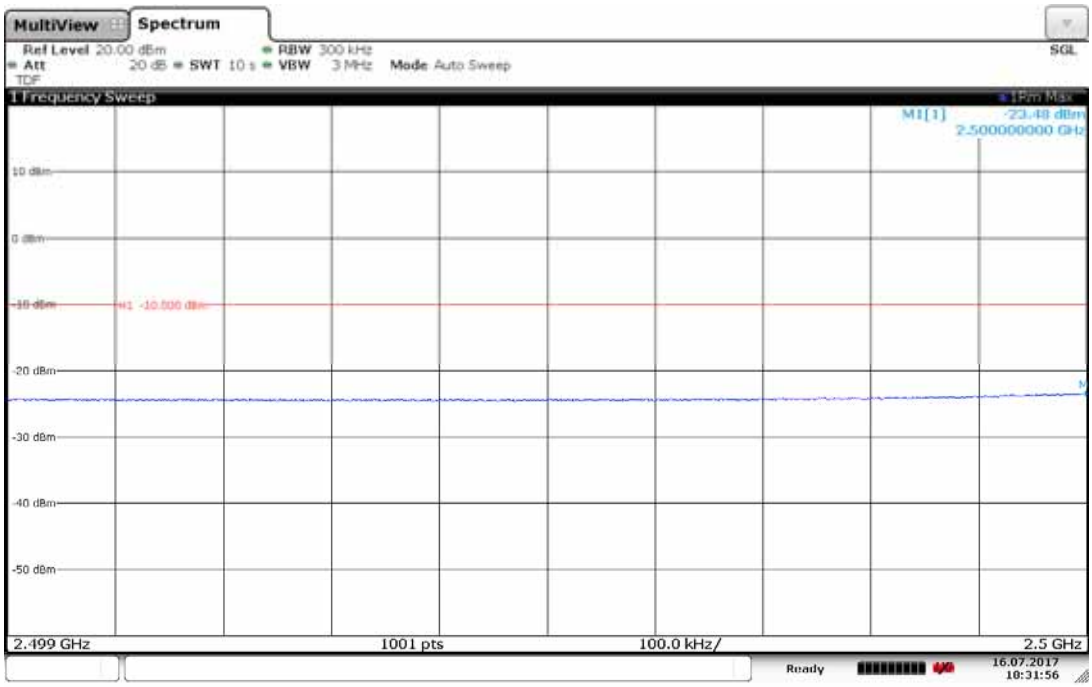


18:32:51 16.07.2017

9.709_BE_Low_Ch20825_QPSK_1RBs_Sweep1

18:37:42 16.07.2017

9.709_BE_Low_Ch20825_QPSK_1RBs_Sweep2

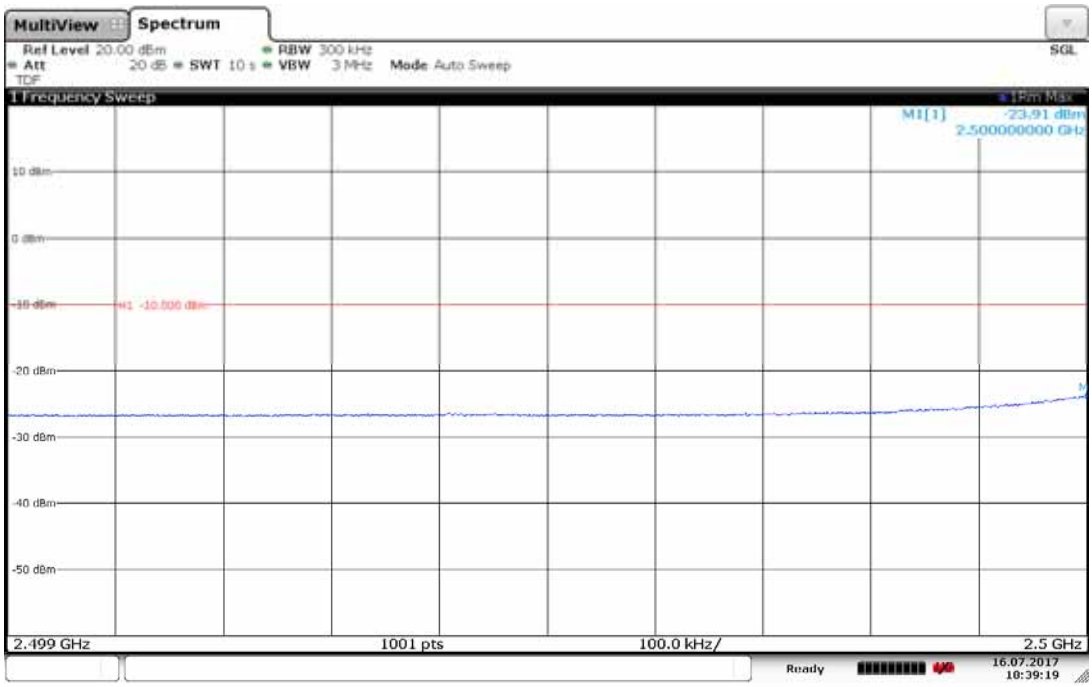


18:31:57 16.07.2017

9.710_BE_Low_Ch20825_QPSK_75RBs_Sweep1

18:31:00 16.07.2017

9.710_BE_Low_Ch20825_QPSK_75RBs_Sweep2

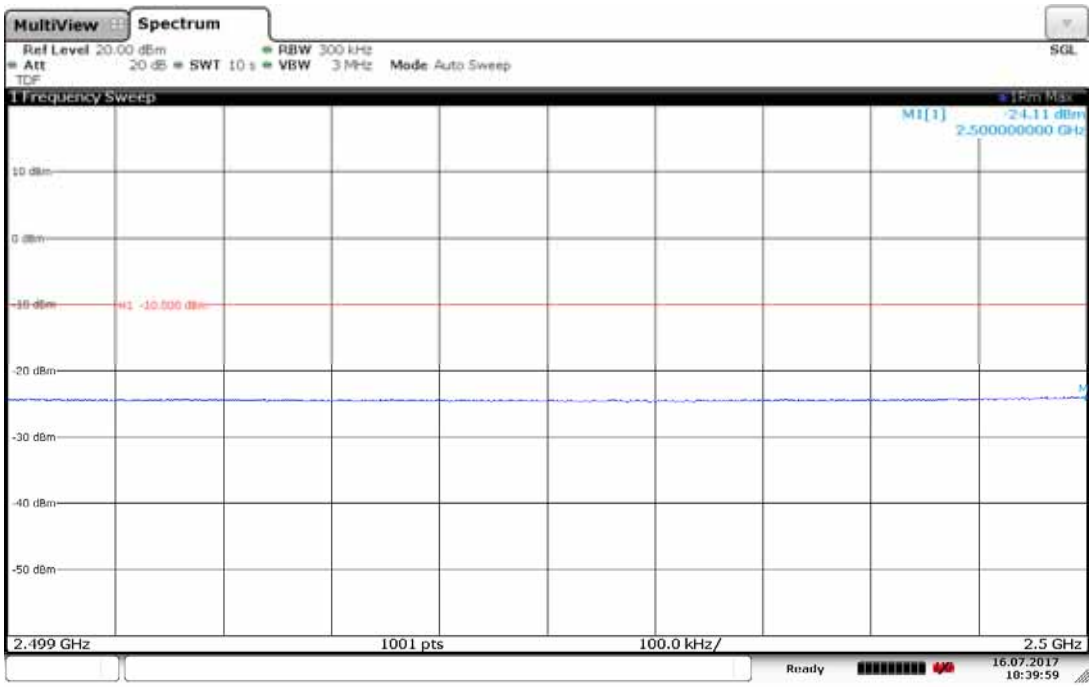


18:39:20 16.07.2017

9.711_BE_Low_Ch20825_16QAM_1RBs_Sveep1

18:38:40 16.07.2017

9.711_BE_Low_Ch20825_16QAM_1RBs_Sveep2

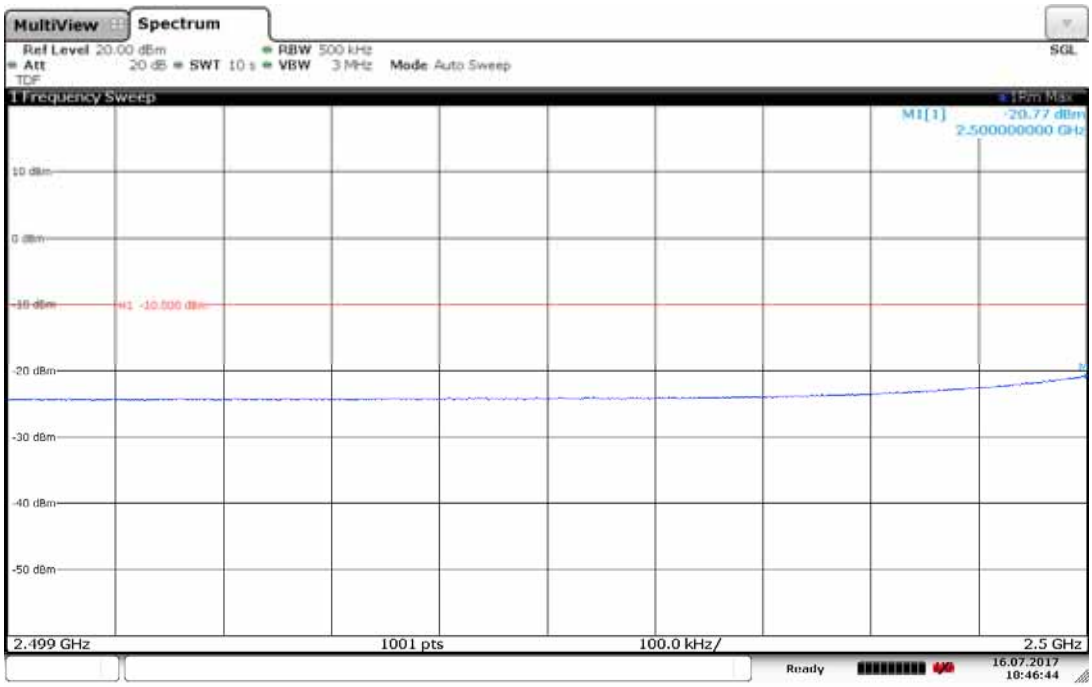


18:40:00 16.07.2017

9.712_BE_Low_Ch20825_16QAM_75RBs_Sveep1

18:40:50 16.07.2017

9.712_BE_Low_Ch20825_16QAM_75RBs_Sveep2

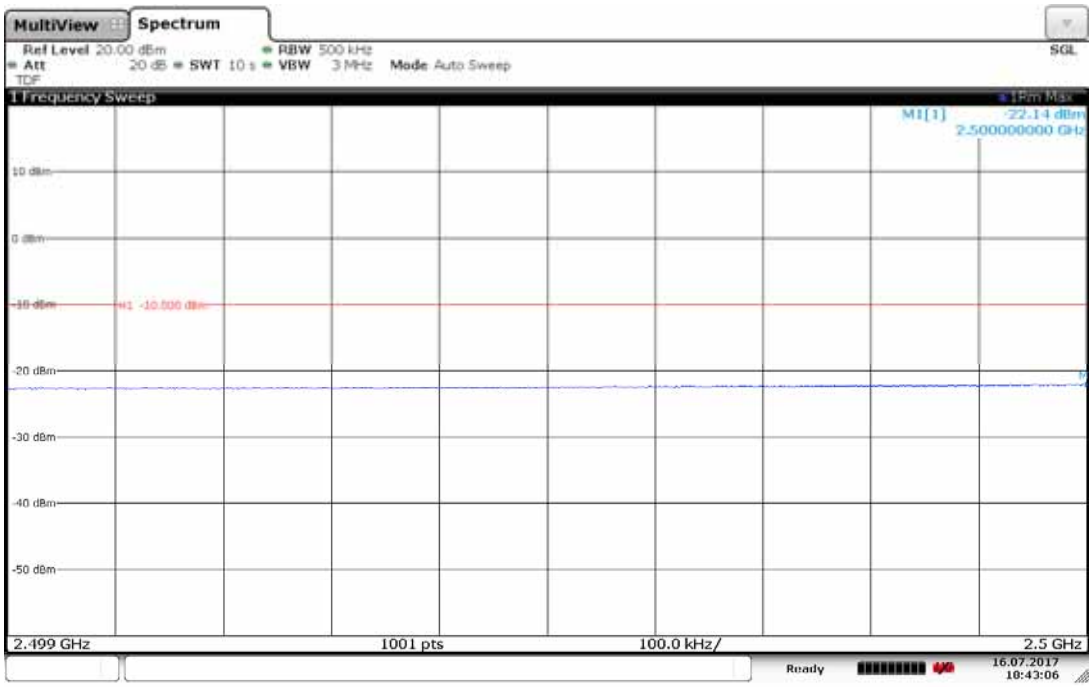


18:46:45 16.07.2017

9.713_BE_Low_Ch20850_QPSK_1RBs_Sweep1

18:45:56 16.07.2017

9.713_BE_Low_Ch20850_QPSK_1RBs_Sweep2

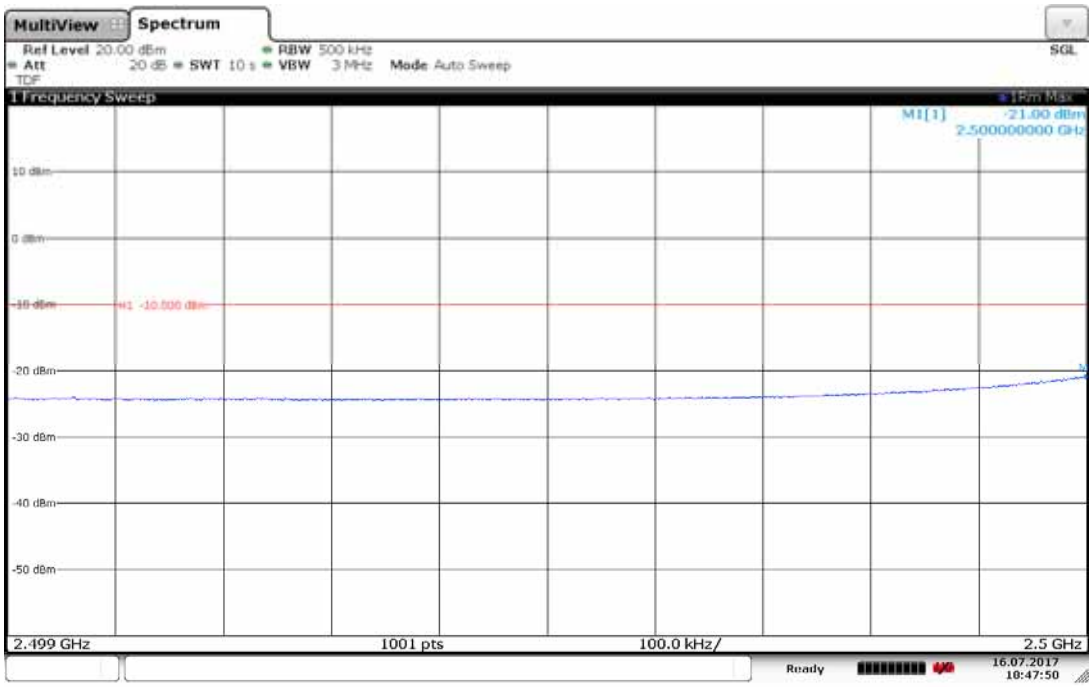


18:43:07 16.07.2017

9.714_BE_Low_Ch20850_QPSK_100RBs_Sweep1

18:44:43 16.07.2017

9.714_BE_Low_Ch20850_QPSK_100RBs_Sweep2

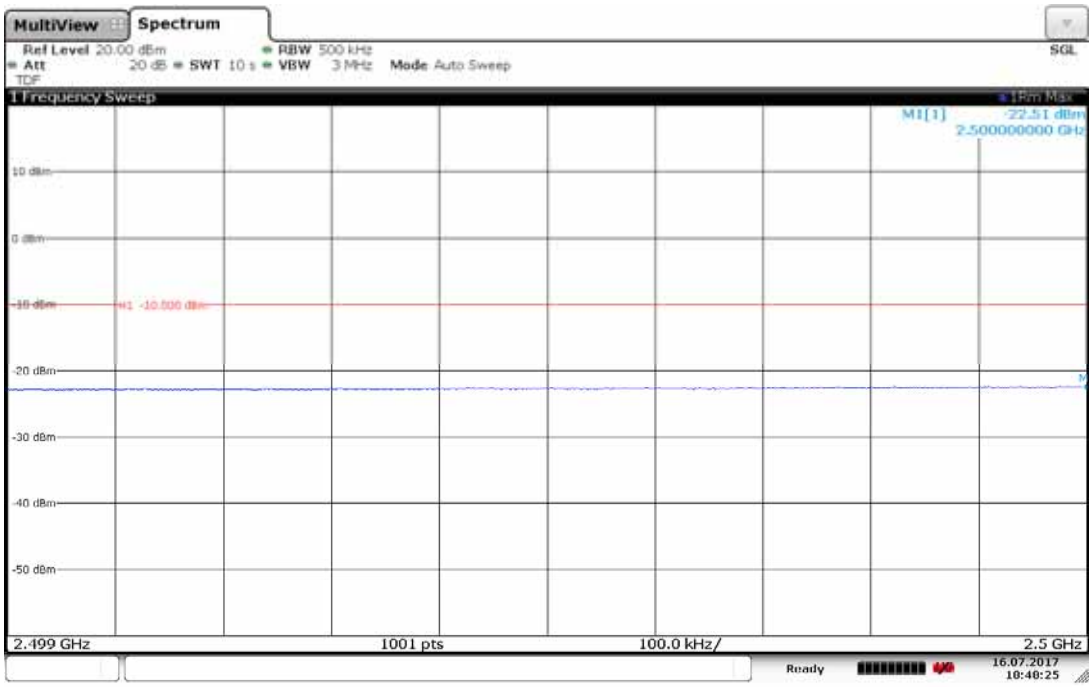


18:47:51 16.07.2017

9.715_BE_Low_Ch20850_16QAM_1RBs_Sveep1

18:50:34 16.07.2017

9.715_BE_Low_Ch20850_16QAM_1RBs_Sveep2



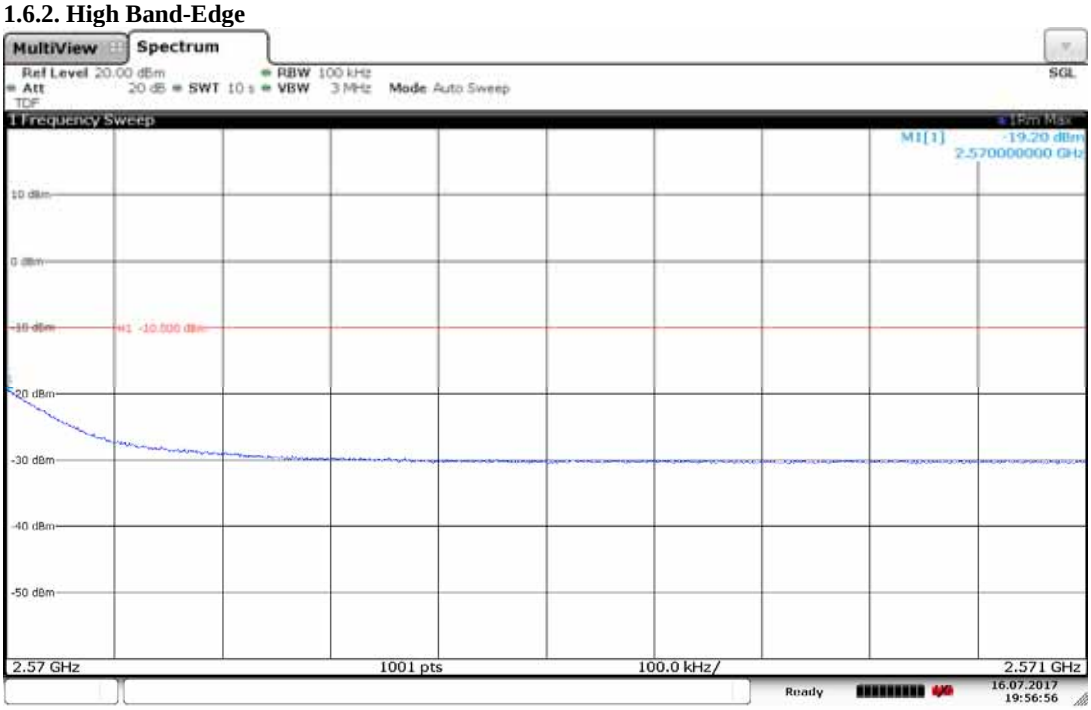
18:48:26 16.07.2017

9.716_BE_Low_Ch20850_16QAM_100RBs_Sveep1

18:49:40 16.07.2017

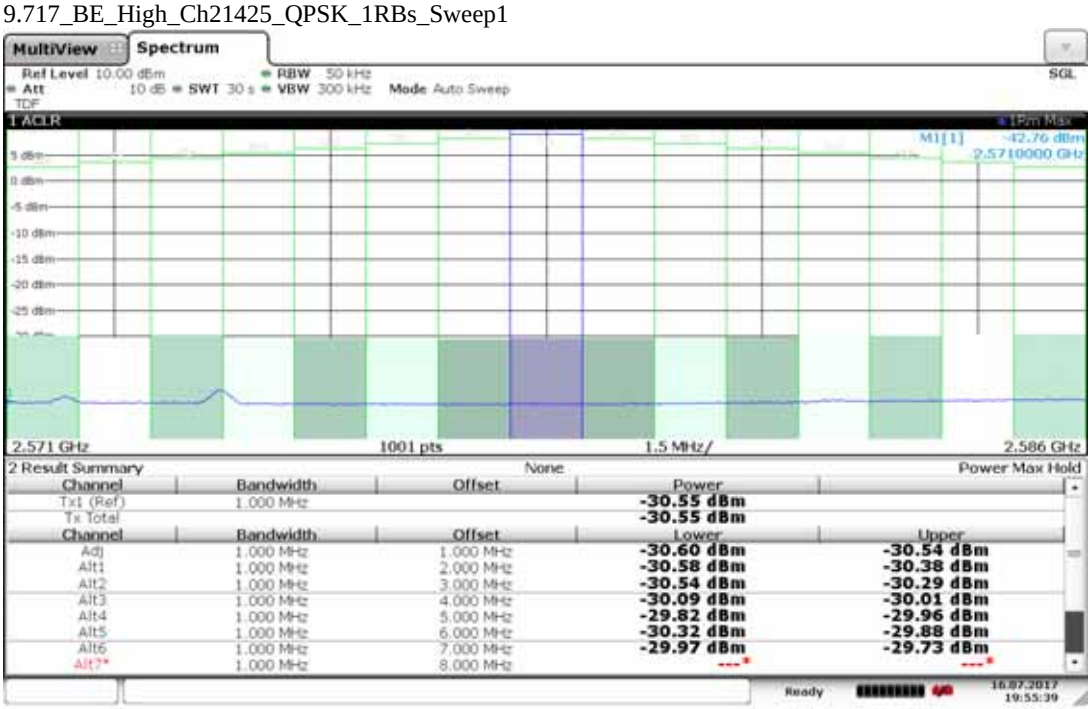
9.716_BE_Low_Ch20850_16QAM_100RBs_Sveep2

1.6.2. High Band-Edge



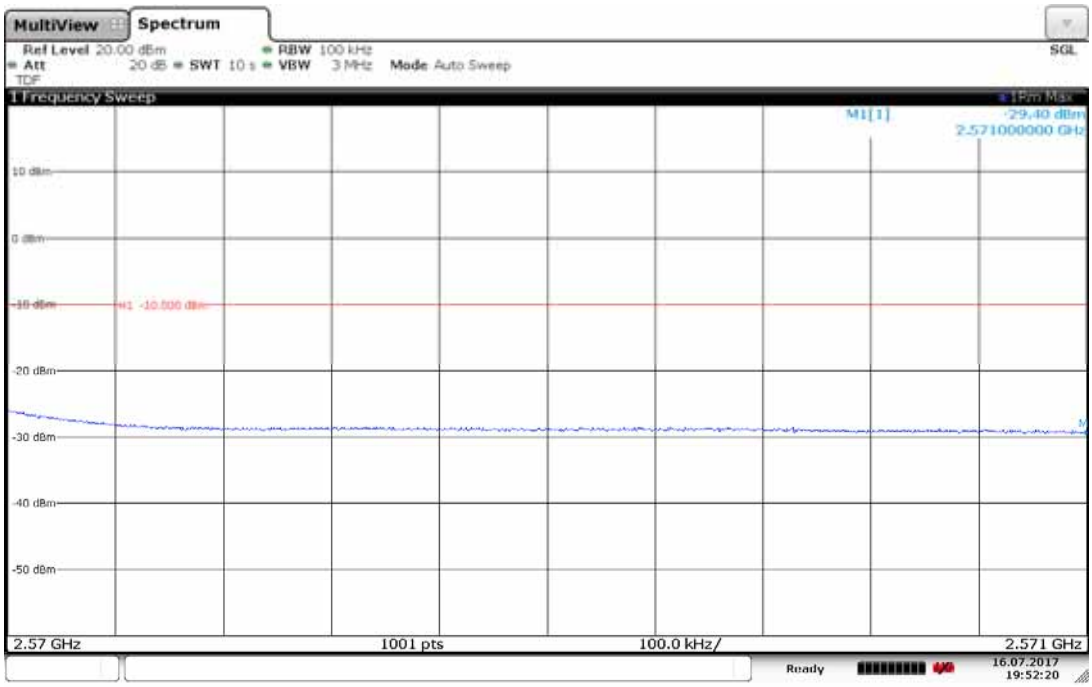
19:56:56 16.07.2017

9.717_BE_High_Ch21425_QPSK_1RBs_Sweep1



19:55:39 16.07.2017

9.717_BE_High_Ch21425_QPSK_1RBs_Sweep2

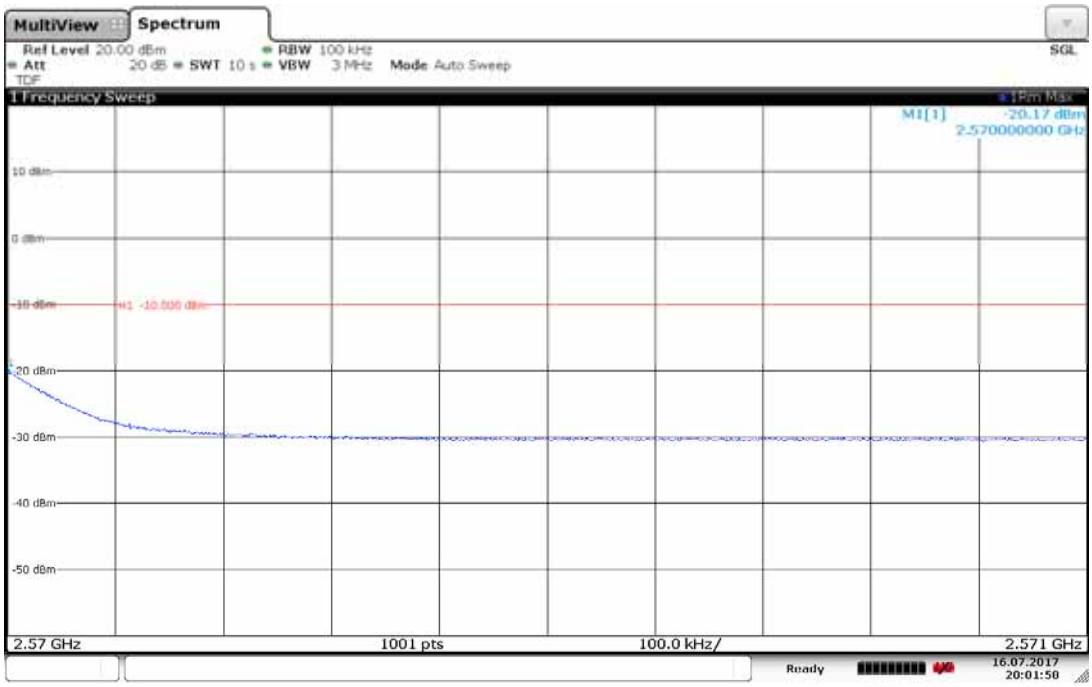


19:52:20 16.07.2017

9.718_BE_High_Ch21425_QPSK_25RBs_Sweep1

20:00:17 16.07.2017

9.718_BE_High_Ch21425_QPSK_25RBs_Sweep2

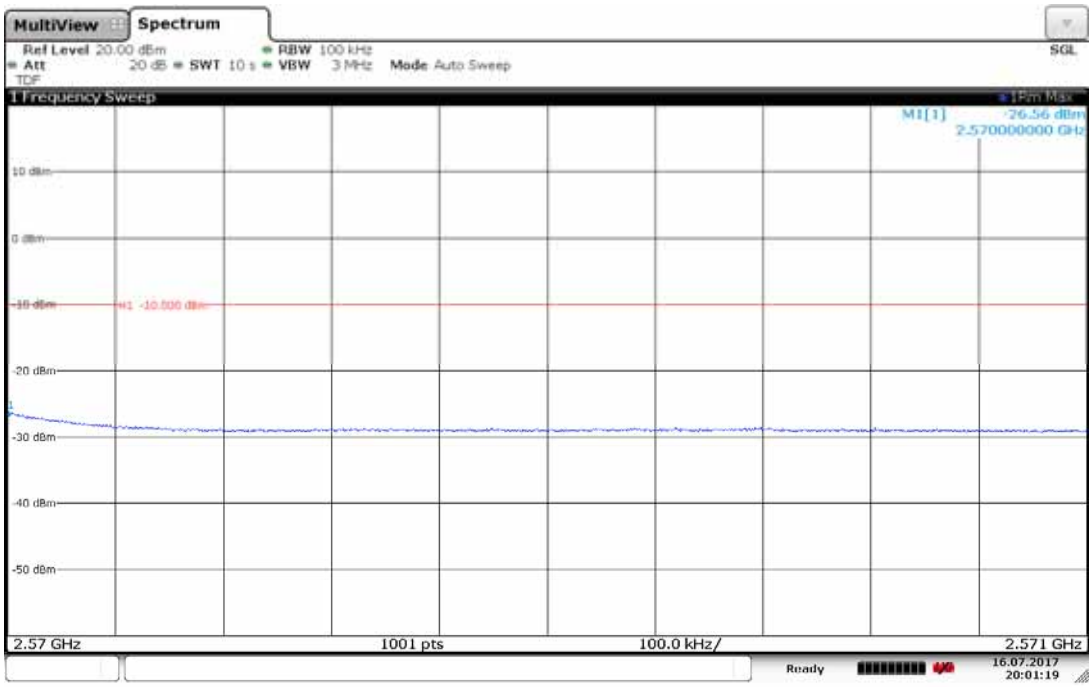


20:01:58 16.07.2017

9.719_BE_High_Ch21425_16QAM_1RBs_Sweep1

20:02:48 16.07.2017

9.719_BE_High_Ch21425_16QAM_1RBs_Sweep2

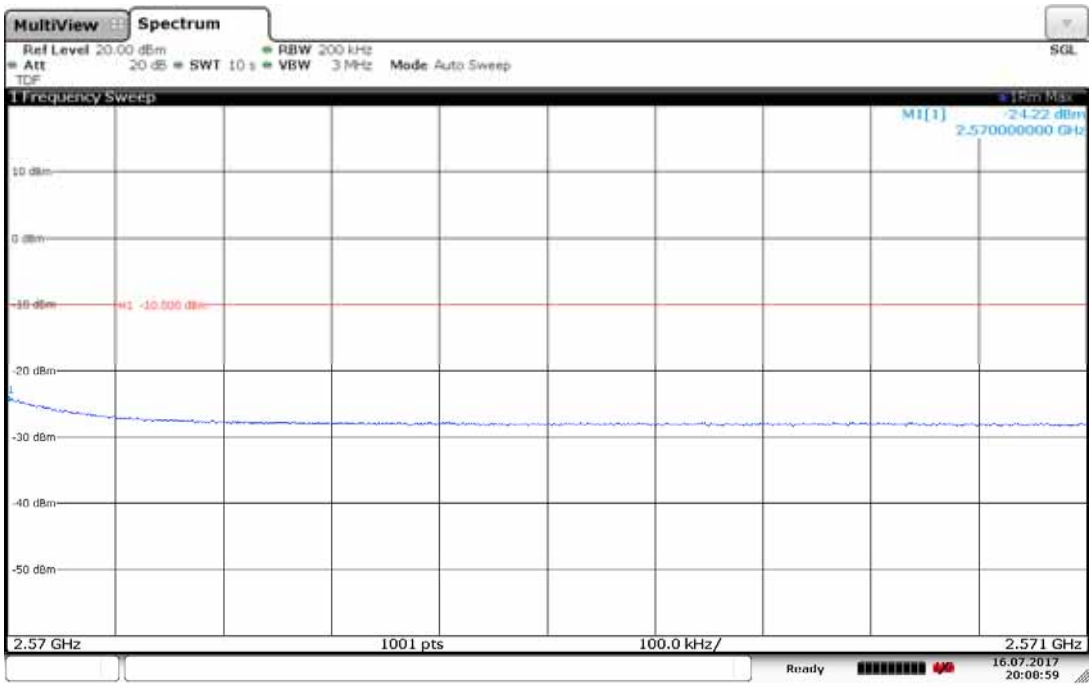


20:01:20 16.07.2017

9.720_BE_High_Ch21425_16QAM_25RBs_Sweep1

19:59:20 16.07.2017

9.720_BE_High_Ch21425_16QAM_25RBs_Sweep2

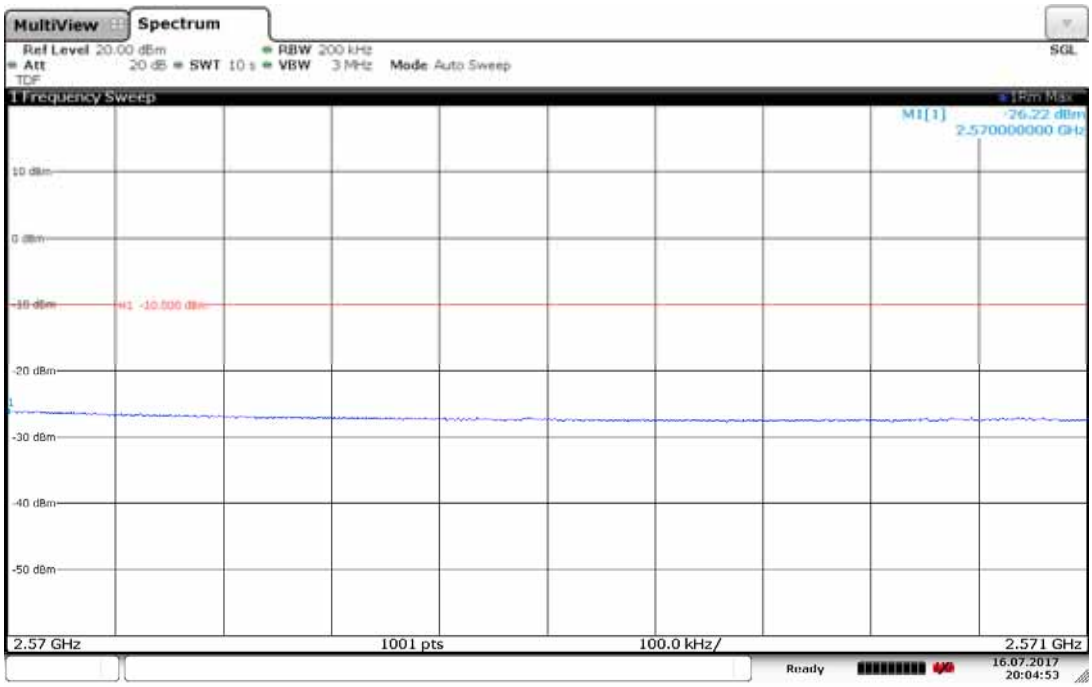


20:08:59 16.07.2017

9.721_BE_High_Ch21400_QPSK_1RBs_Sweep1

20:08:10 16.07.2017

9.721_BE_High_Ch21400_QPSK_1RBs_Sweep2

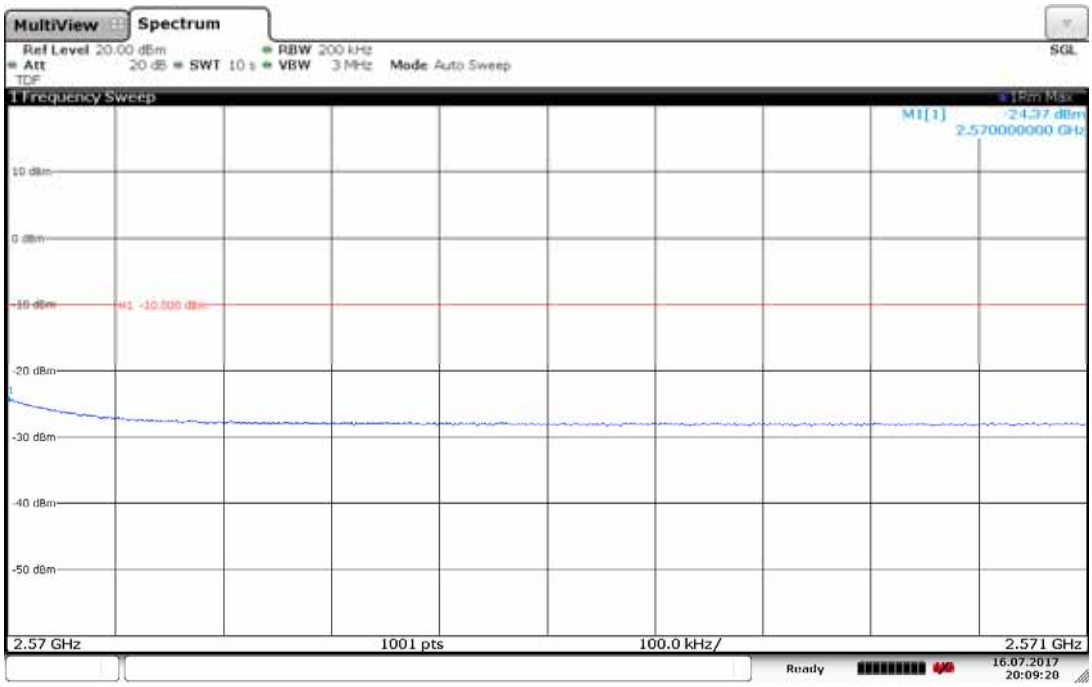


20:04:54 16.07.2017

9.722_BE_High_Ch21400_QPSK_50RBs_Sweep1

20:07:07 16.07.2017

9.722_BE_High_Ch21400_QPSK_50RBs_Sweep2



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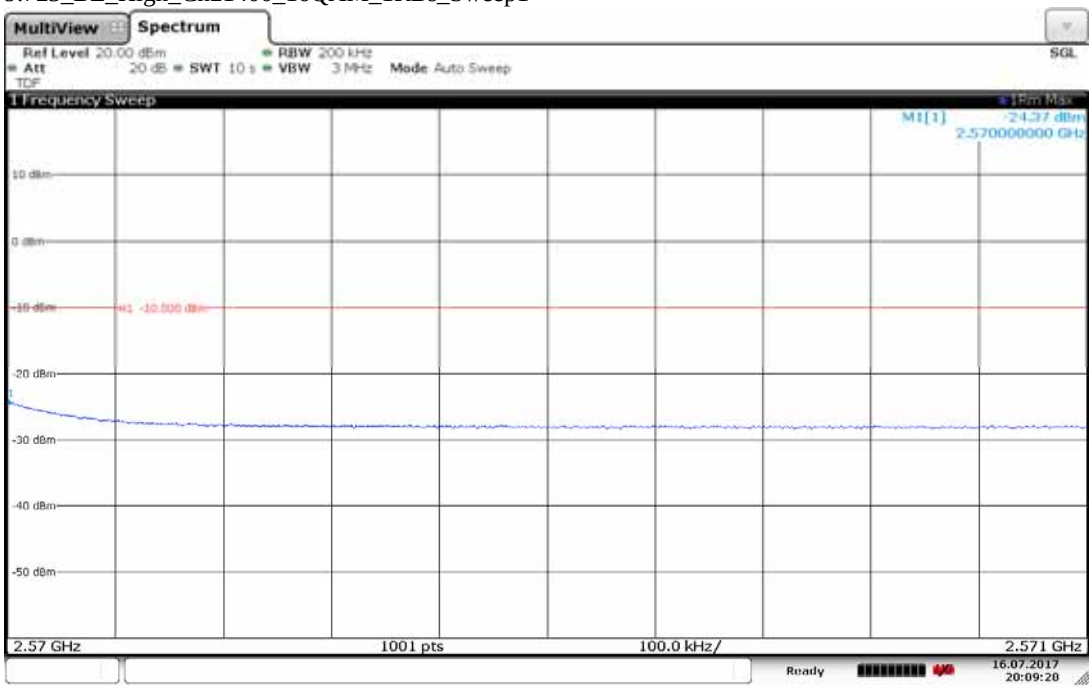
9.723_BE_High_Ch21400_16QAM_1RBs_Sweep1



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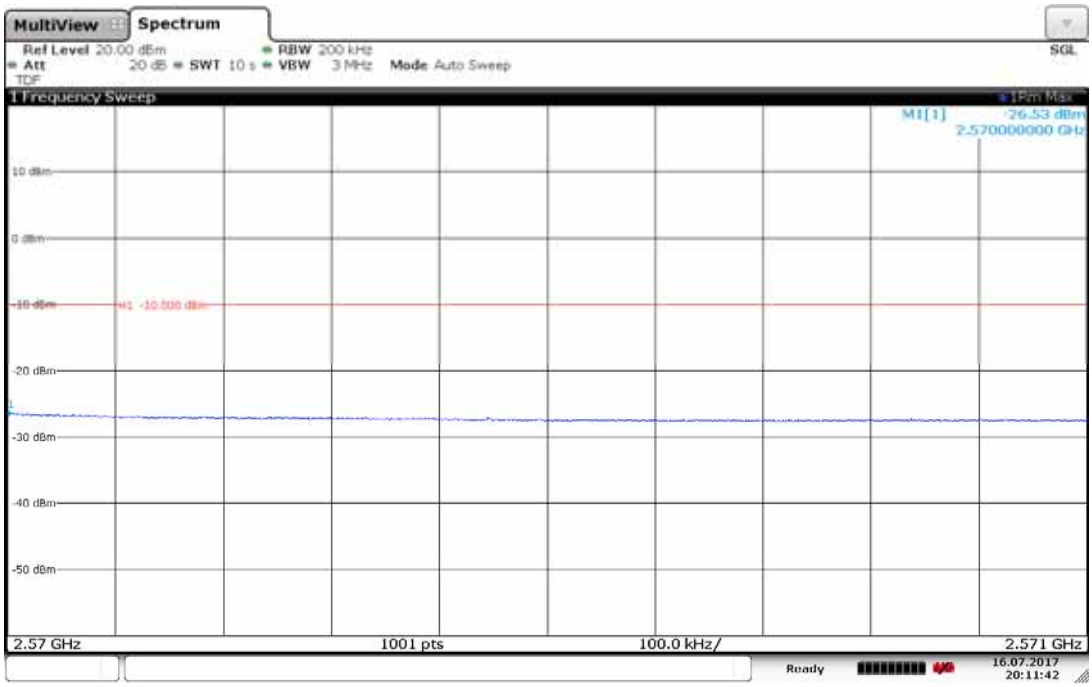
9.723_BE_High_Ch21400_16QAM_1RBs_Sweep2

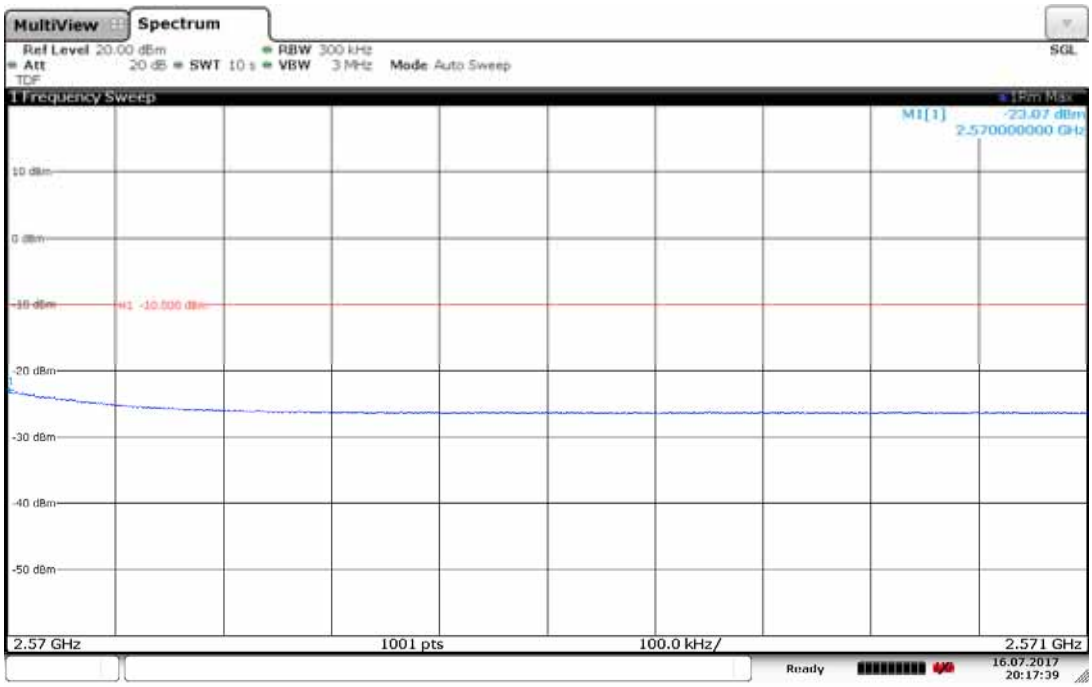


20:11:42 16.07.2017

9.724_BE_High_Ch21400_16QAM_50RBs_Sweep1

20:11:14 16.07.2017

9.724_BE_High_Ch21400_16QAM_50RBs_Sweep2

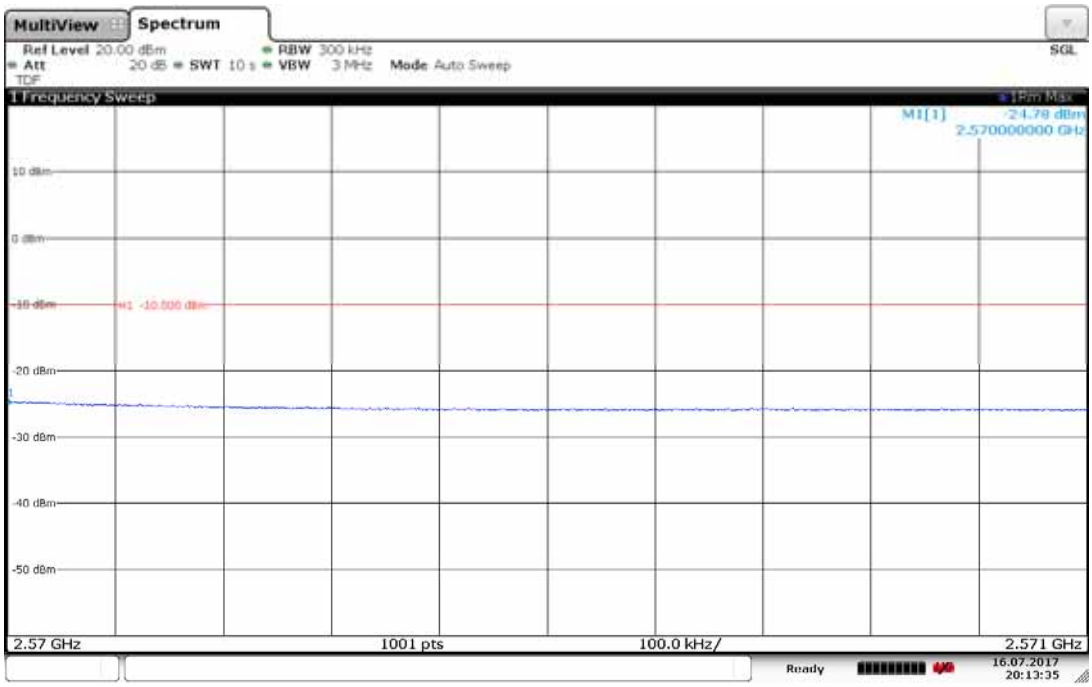


20:17:39 16.07.2017

9.725_BE_High_Ch21375_QPSK_1RBs_Sweep1

20:17:06 16.07.2017

9.725_BE_High_Ch21375_QPSK_1RBs_Sweep2



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9.726_BE_High_Ch21375_QPSK_75RBs_Sweep1

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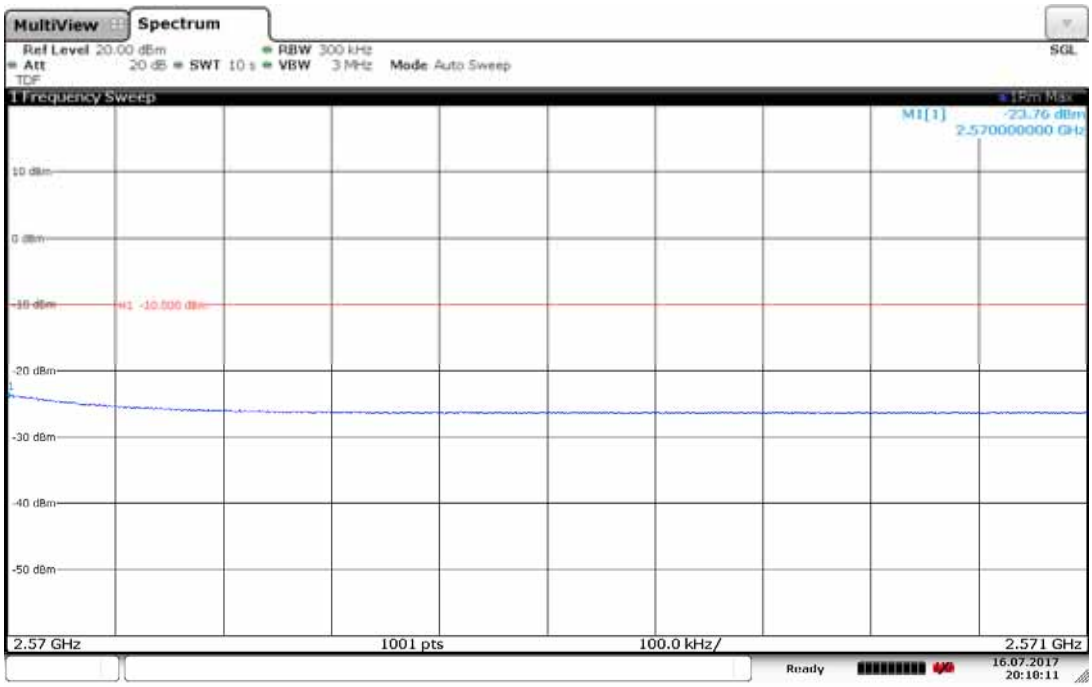
9.726_BE_High_Ch21375_QPSK_75RBs_Sweep2



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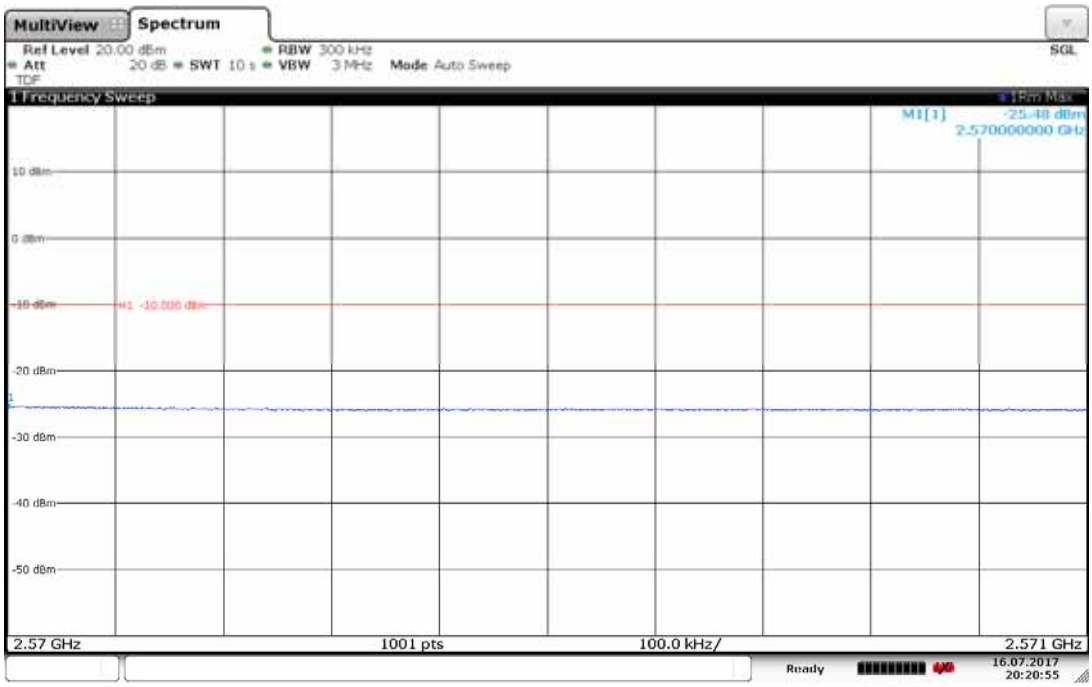
9.727_BE_High_Ch21375_16QAM_1RBs_Sweep1

20:19:18 16.07.2017

9.727_BE_High_Ch21375_16QAM_1RBs_Sweep2

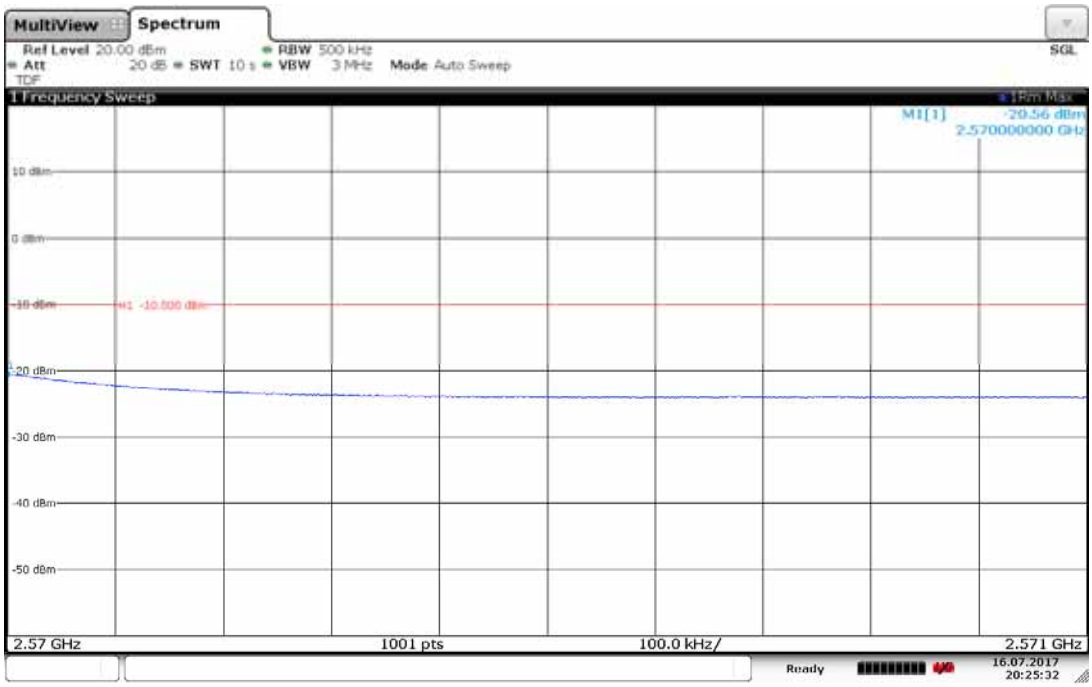


20:20:55 16.07.2017

9.728_BE_High_Ch21375_16QAM_75RBs_Sweep1

20:20:20 16.07.2017

9.728_BE_High_Ch21375_16QAM_75RBs_Sweep2



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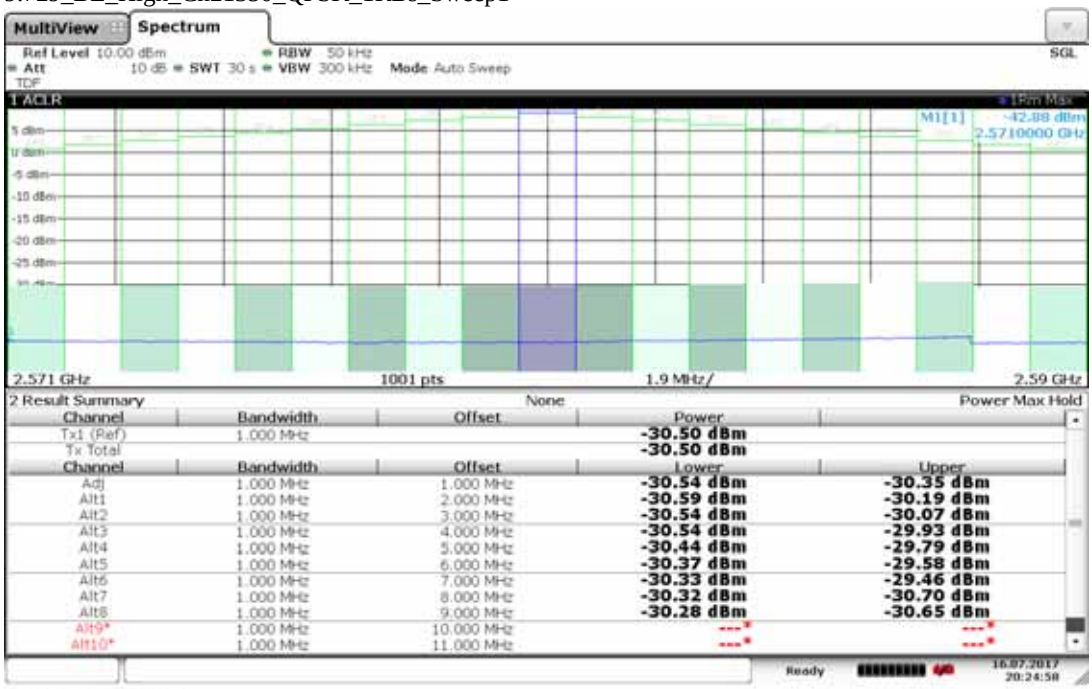
9.729_BE_High_Ch21350_QPSK_1RBs_Sweep1



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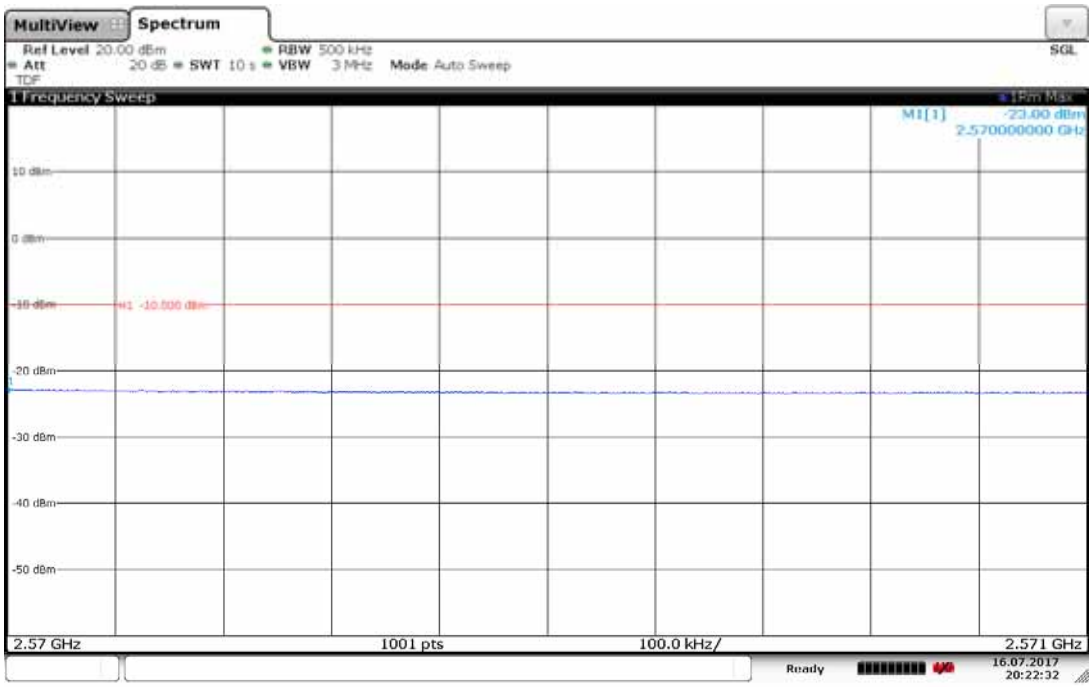
9.729_BE_High_Ch21350_QPSK_1RBs_Sweep2



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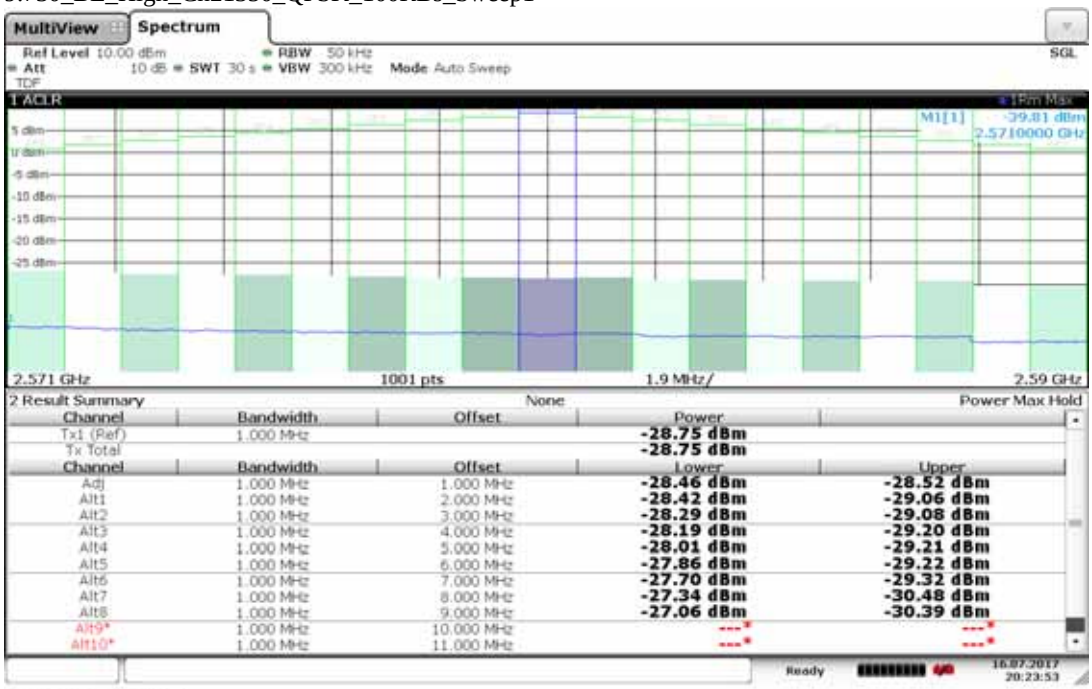
9.730_BE_High_Ch21350_QPSK_100RBs_Sweep1



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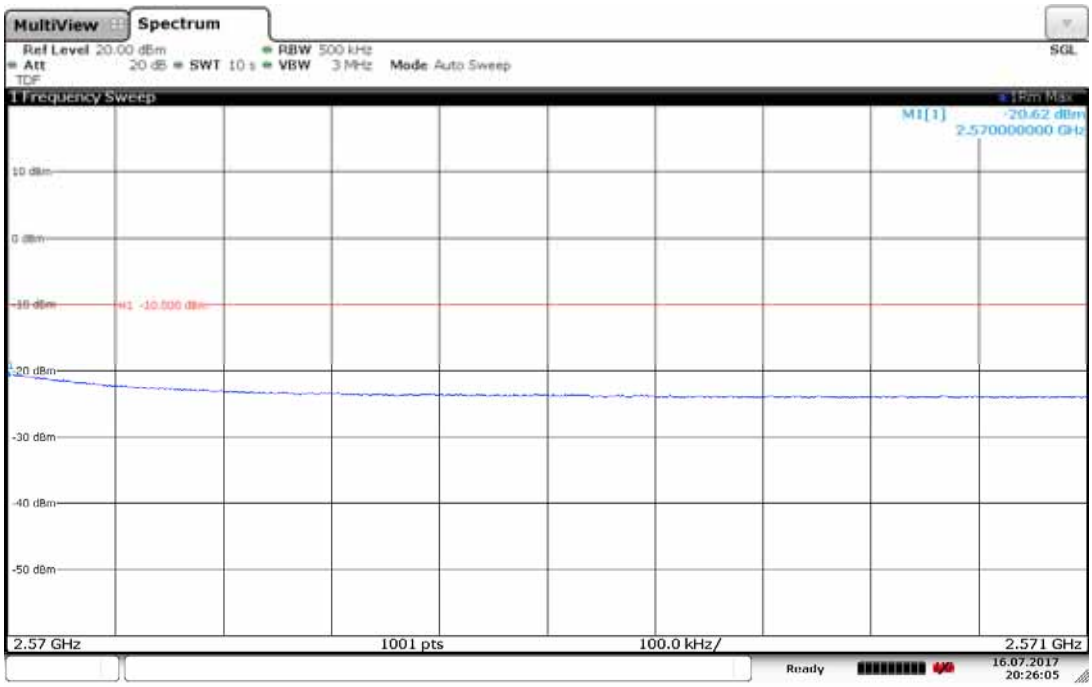
9.730_BE_High_Ch21350_QPSK_100RBs_Sweep2



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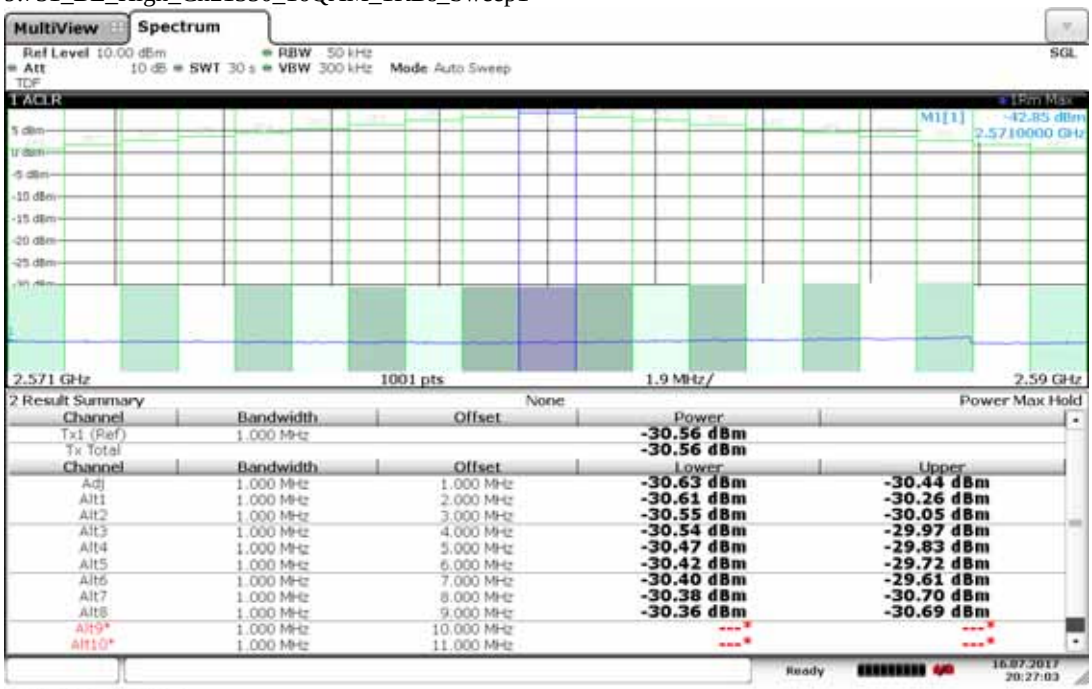
9.731_BE_High_Ch21350_16QAM_1RBs_Sweep1



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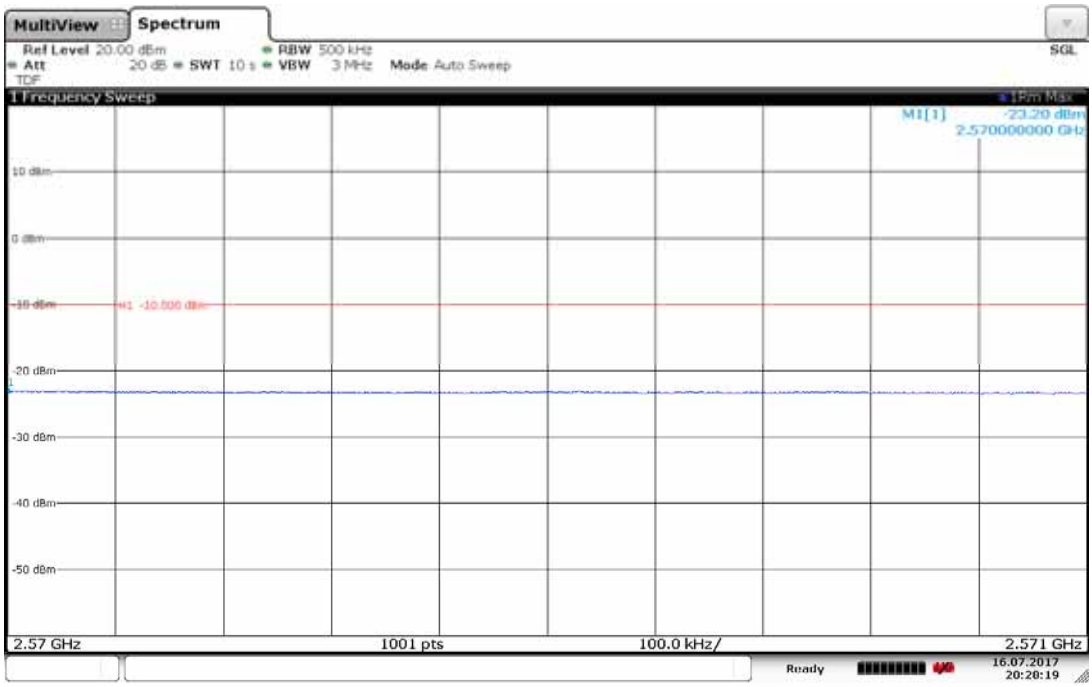
9.731_BE_High_Ch21350_16QAM_1RBs_Sweep2



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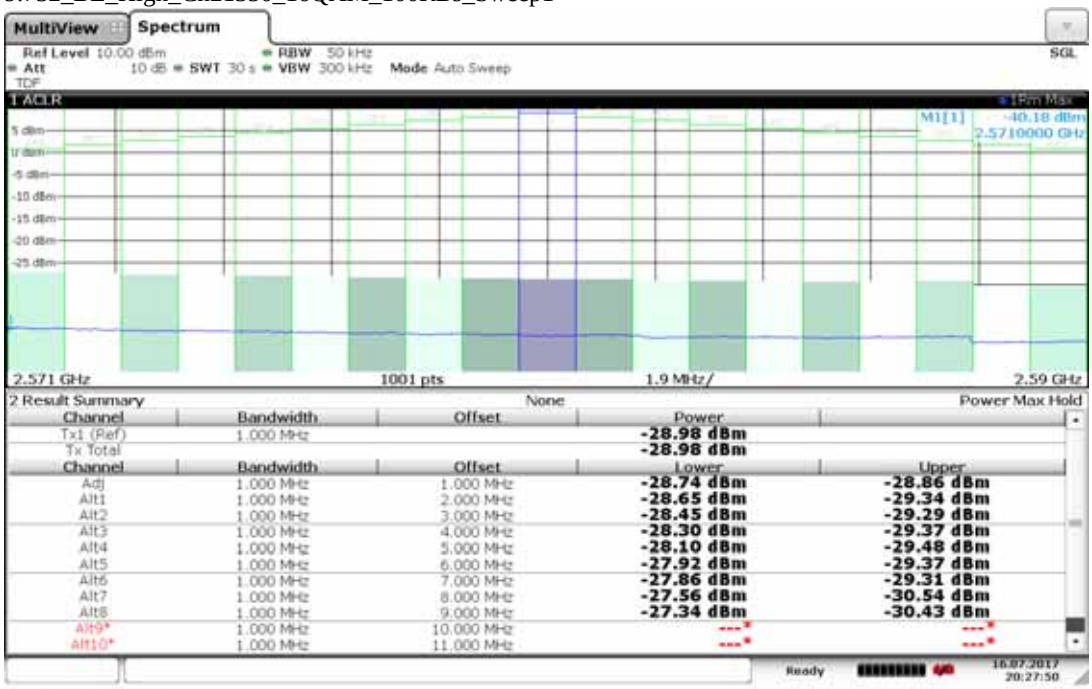
9.732_BE_High_Ch21350_16QAM_100RBs_Sweep1



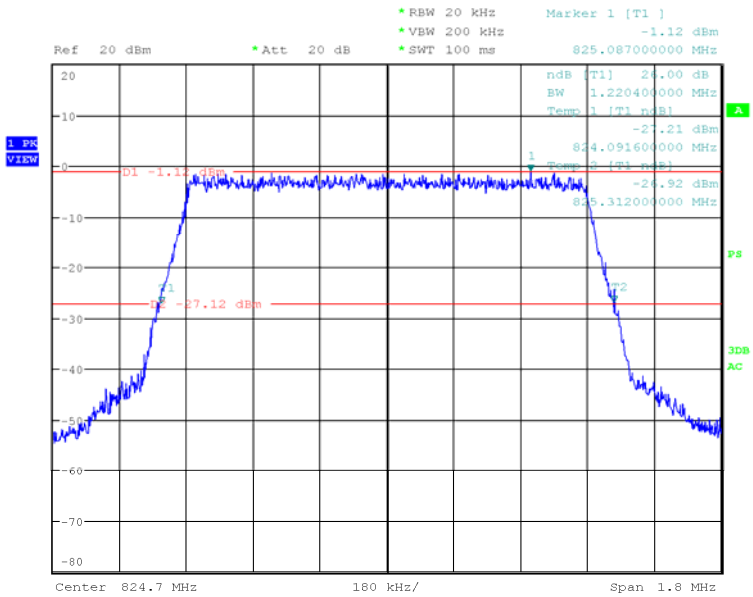
20:27:51 16.07.2017

9.732_BE_High_Ch21350_16QAM_100RBs_Sweep2

1.7. 26dBc Emission bandwidth

1.7.1. LTE Band 5
1.7.1.1. BW = 1.4MHz

QPSK-Modulation



Date: 19.APR.2017 10:08:49

Diagram 34_501_26 dB

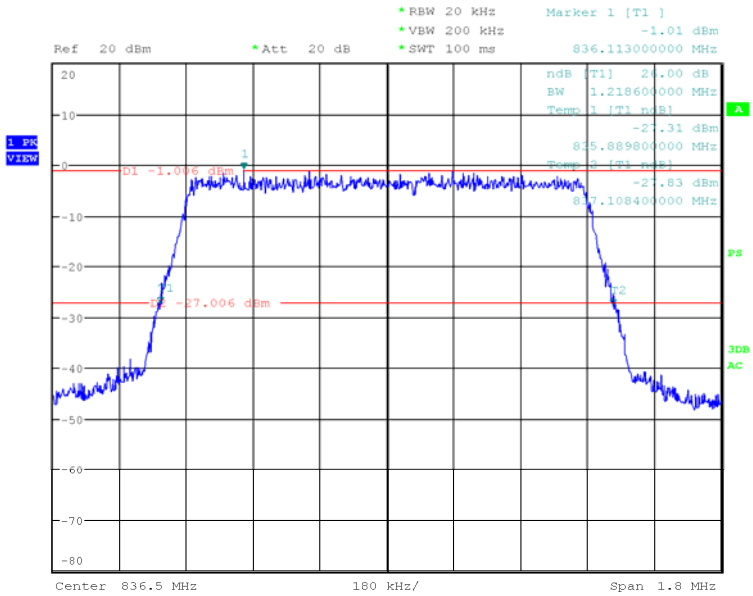


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Diagram 34_502_26 dB

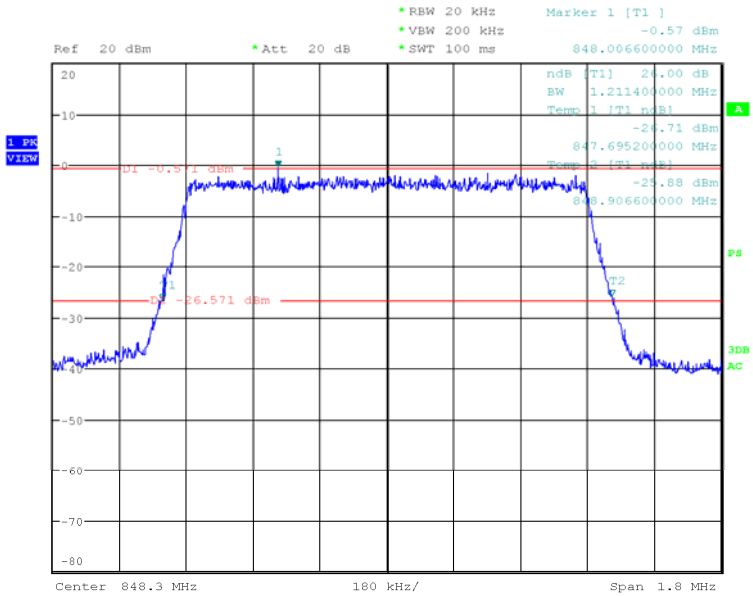

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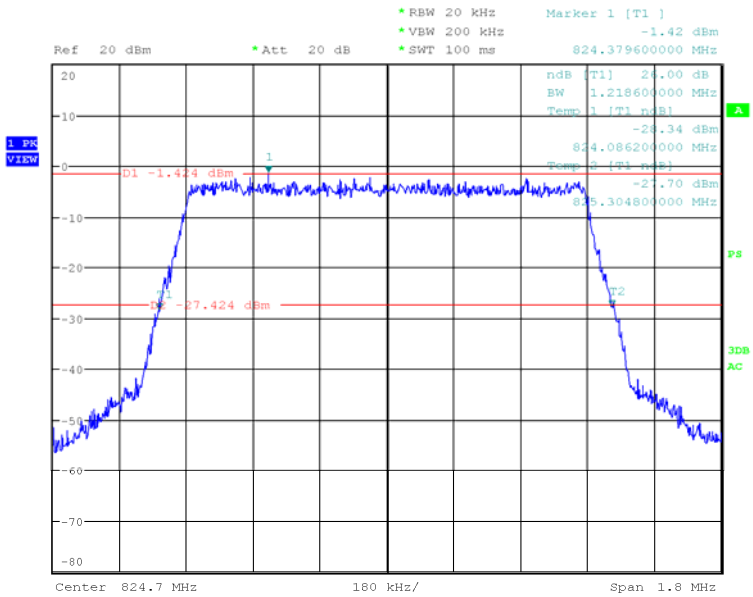
Diagram 34_503_26 dB

16-QAM-Modulation



Date: 19.APR.2017 10:38:11

Diagram 34_513_26 dB

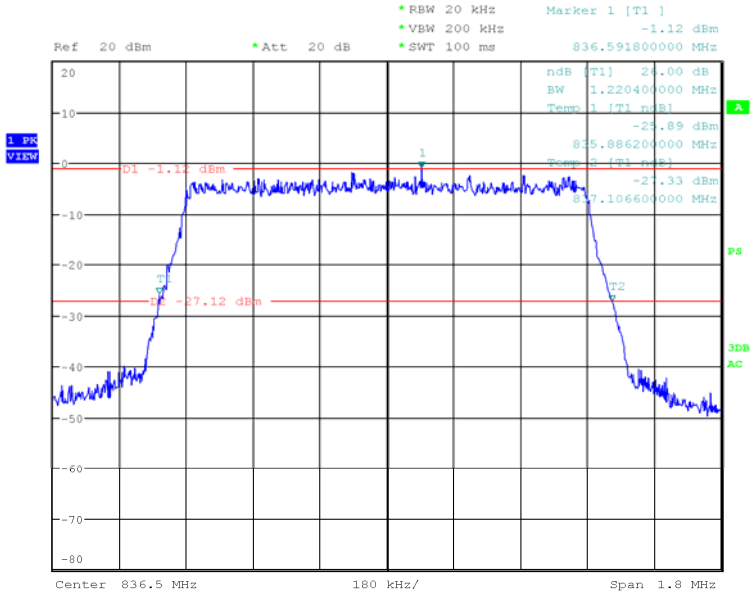


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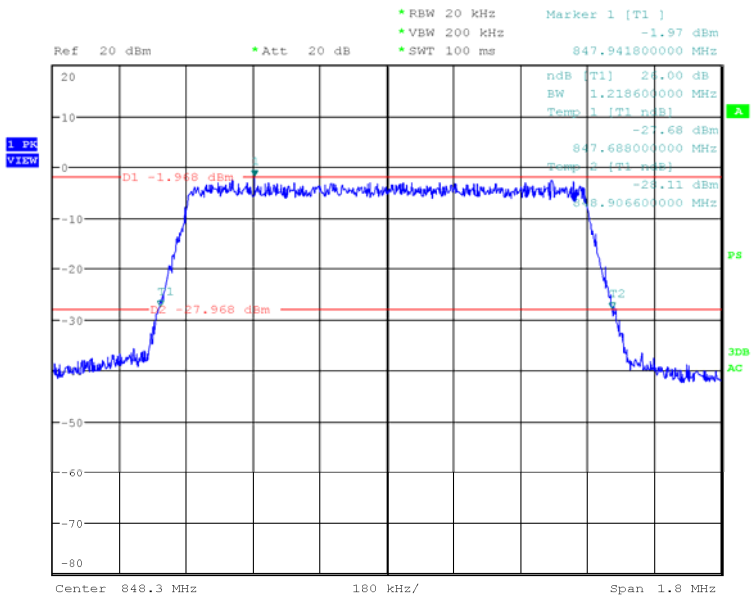
Diagram 34_514_26 dB

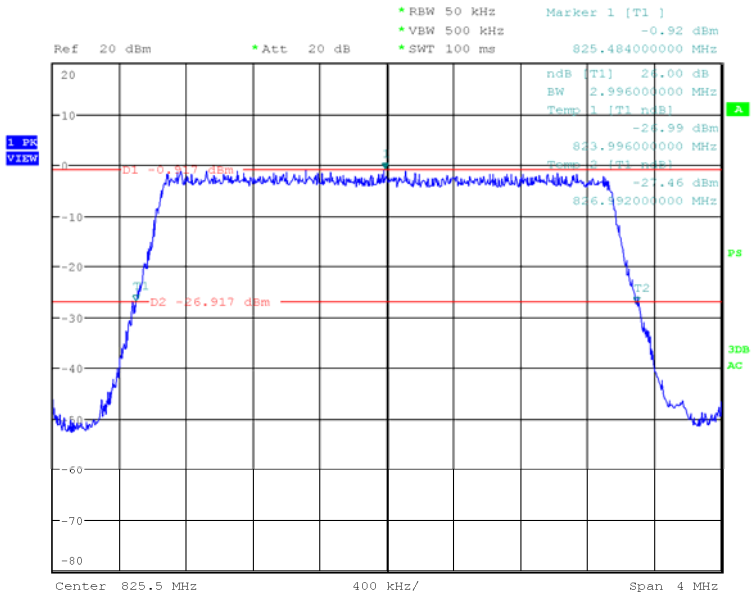


Date: 19.APR.2017 10:39:25

Diagram 34_515_26 dB

1.7.1.2. BW = 3MHz

QPSK-Modulation



Date: 19.APR.2017 10:18:53

Diagram 34_504_26 dB

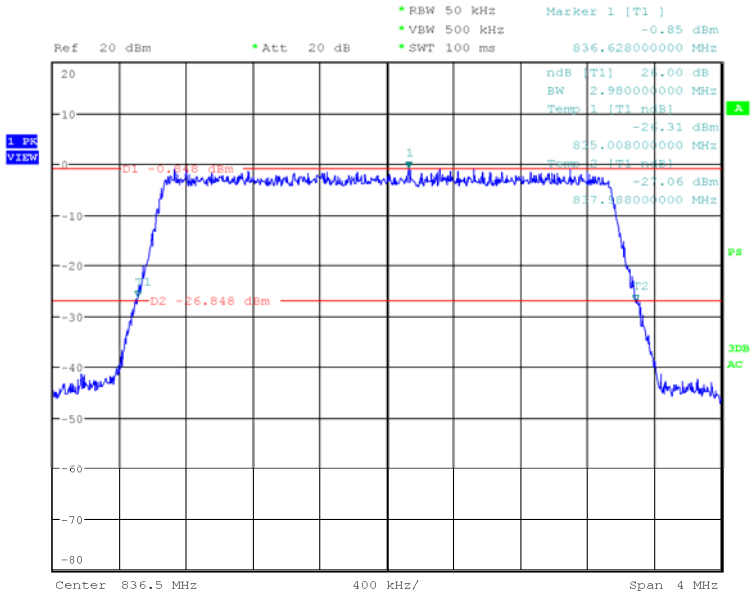


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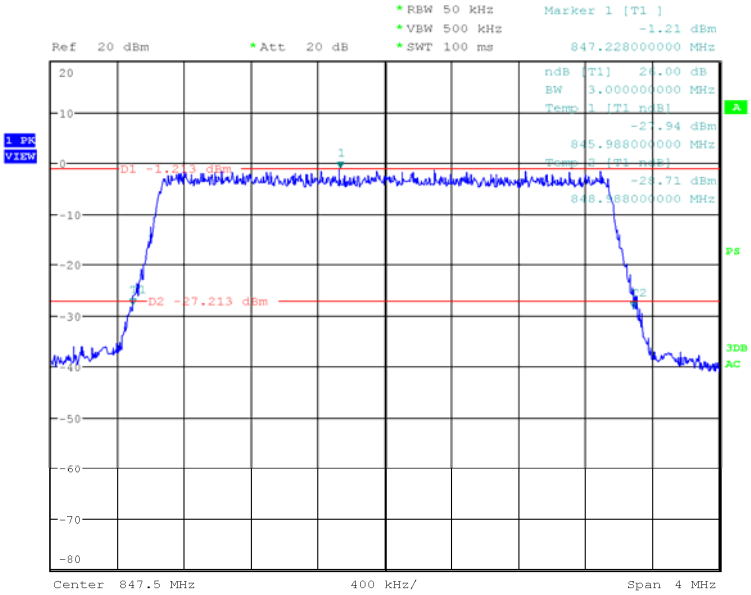
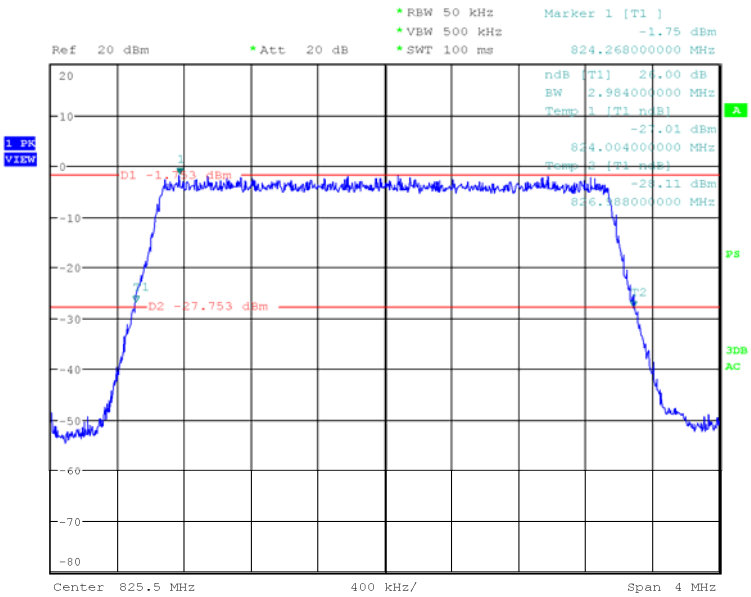
Diagram 34_505_26 dB



Date: 19.APR.2017 10:22:16

Diagram 34_506_26 dB

16-QAM-Modulation



Date: 19.APR.2017 10:41:09

Diagram 34_516_26 dB

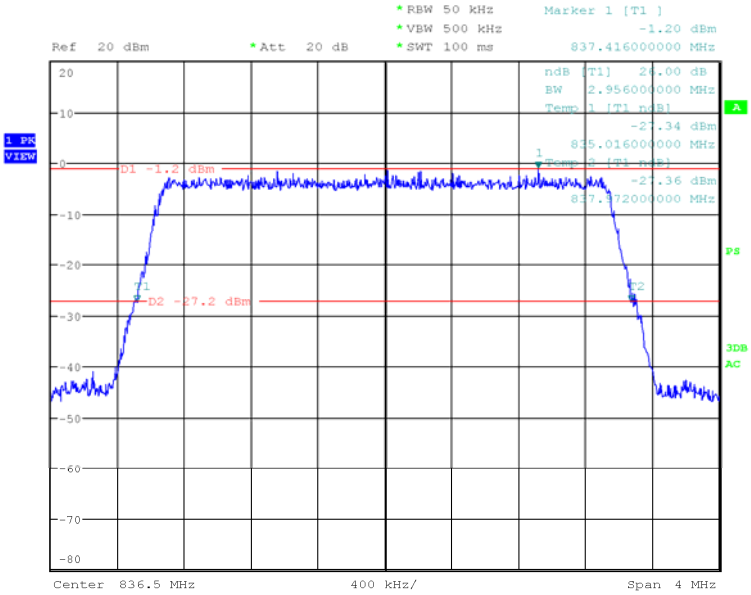


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Diagram 34_517_26 dB

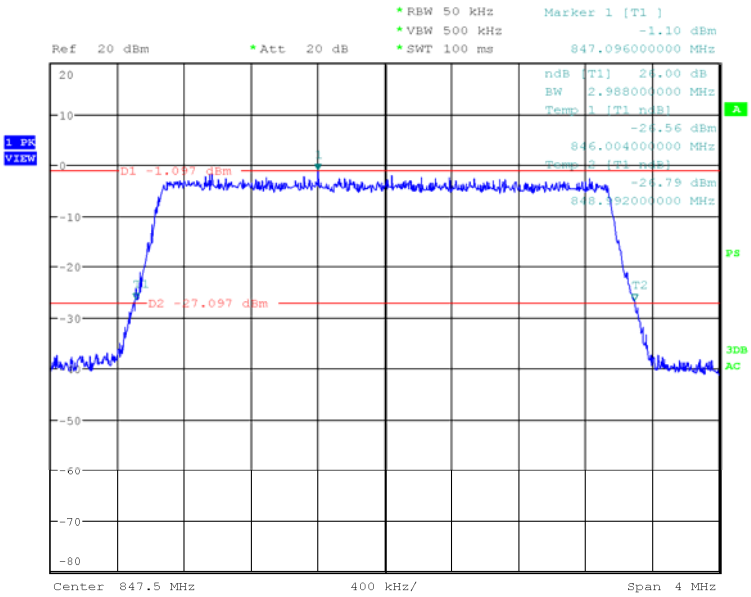

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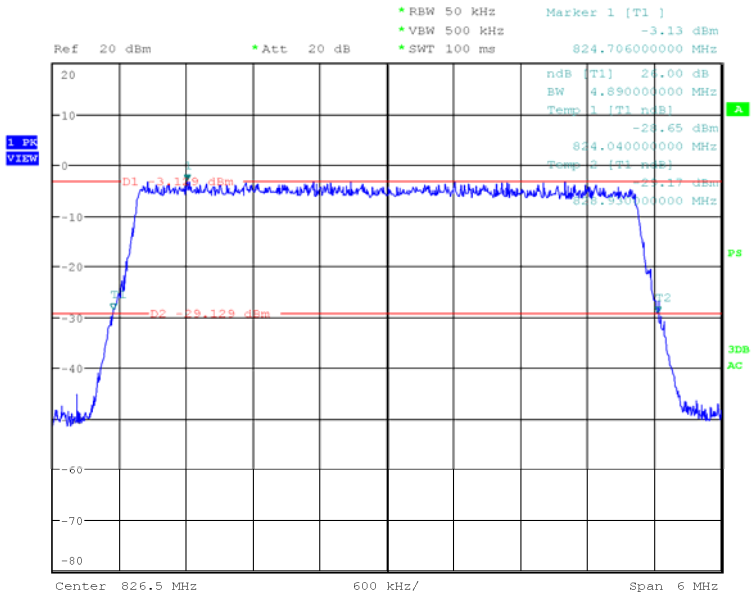
Diagram 34_518_26 dB

1.7.1.3. BW = 5MHz

QPSK-Modulation



Date: 19.APR.2017 10:33:44

Diagram 34_507_26 dB

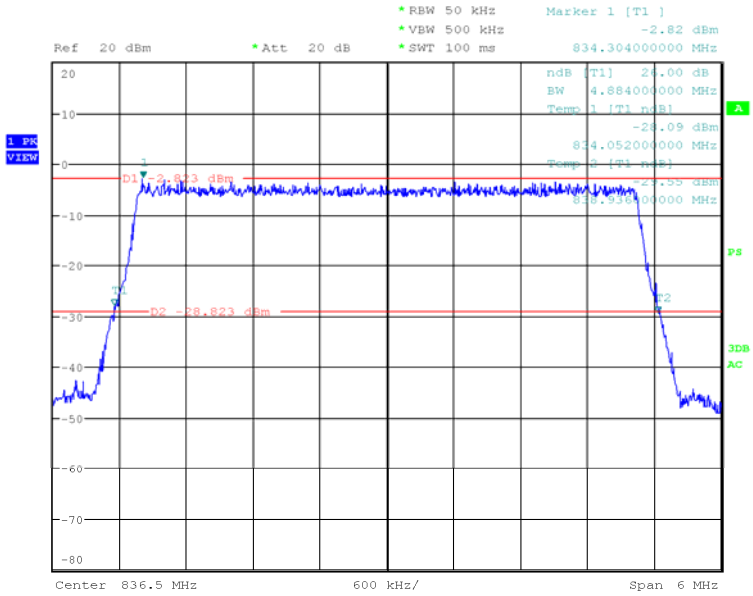


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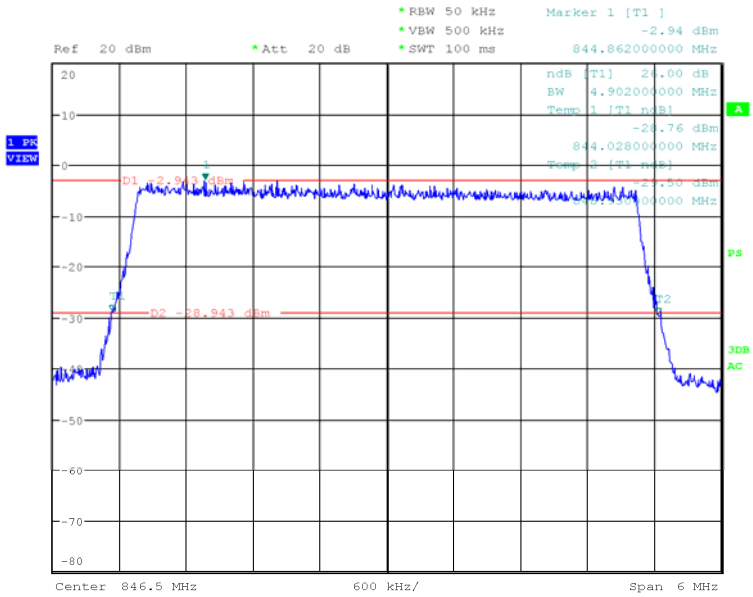
Diagram 34_508_26 dB



Date: 19.APR.2017 10:29:02

Diagram 34_509_26 dB

16-QAM-Modulation

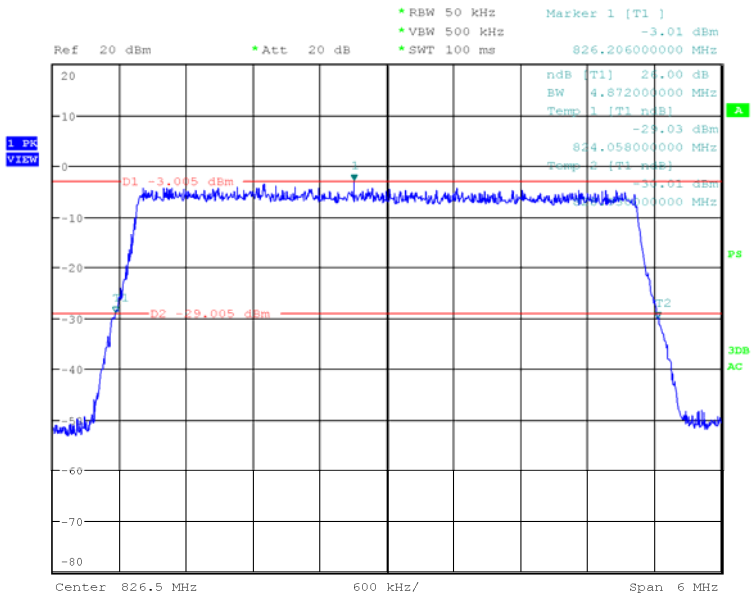


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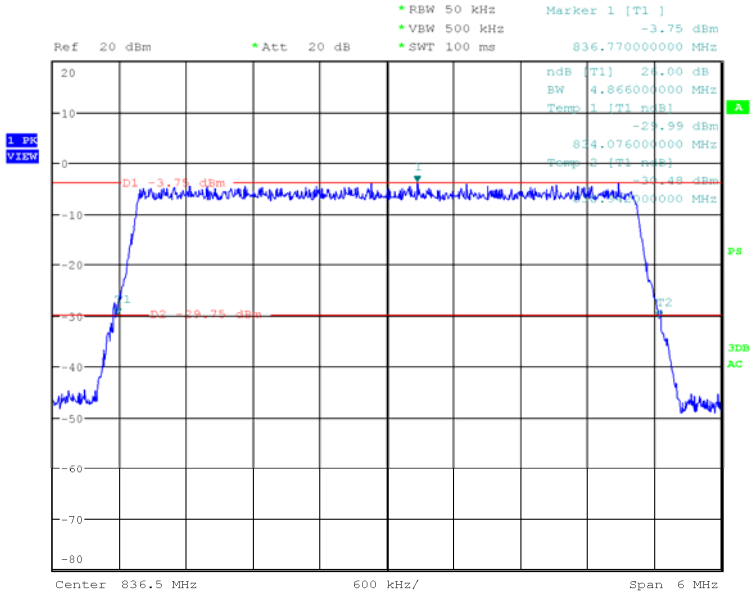
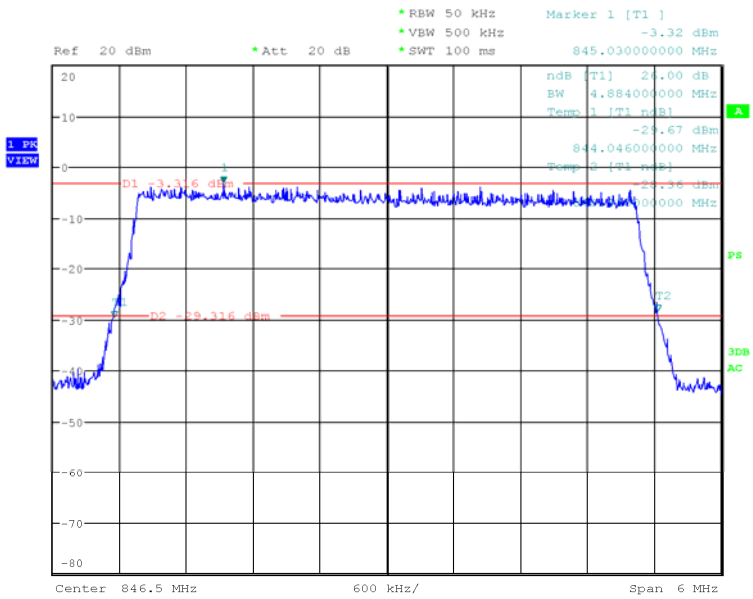
Diagram 34_519_26 dB



Date: 19.APR.2017 10:45:22

Diagram 34_520_26 dB

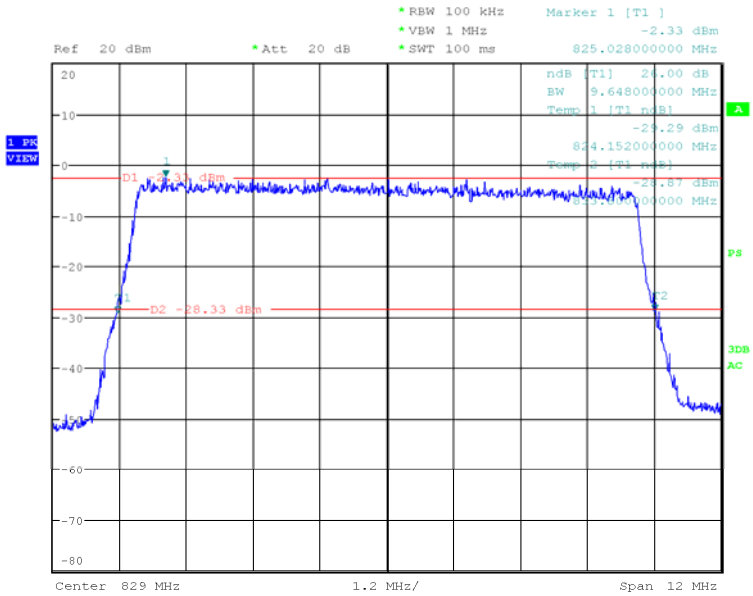


Date: 19.APR.2017 10:46:02

Diagram 34_521_26 dB

1.7.1.4. BW = 10MHz

QPSK-Modulation



Date: 19.APR.2017 10:30:31

Diagram 34_510_26 dB

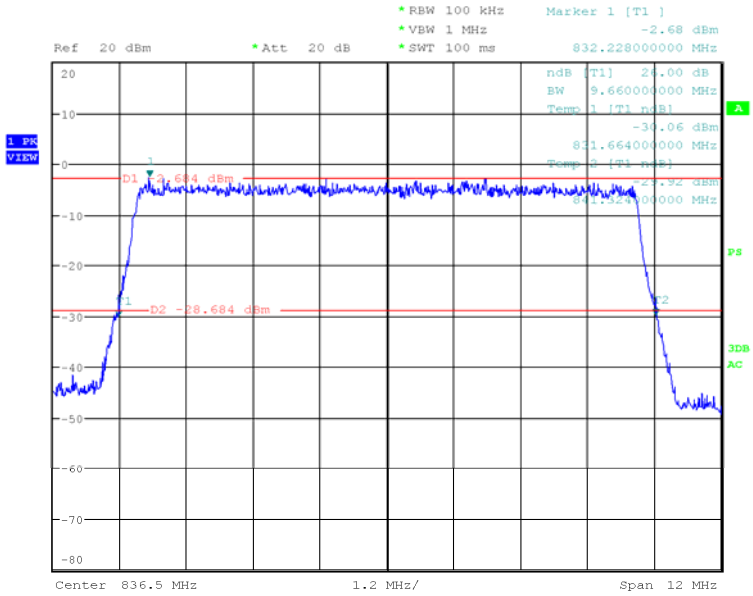


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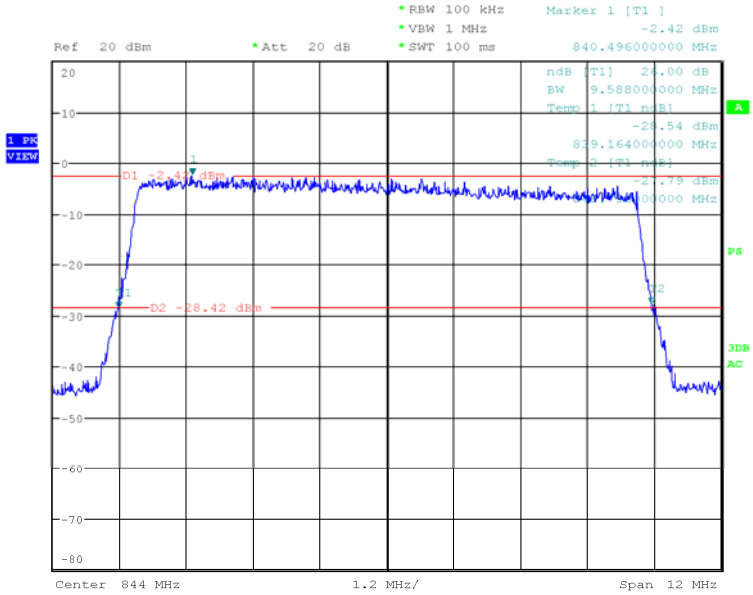
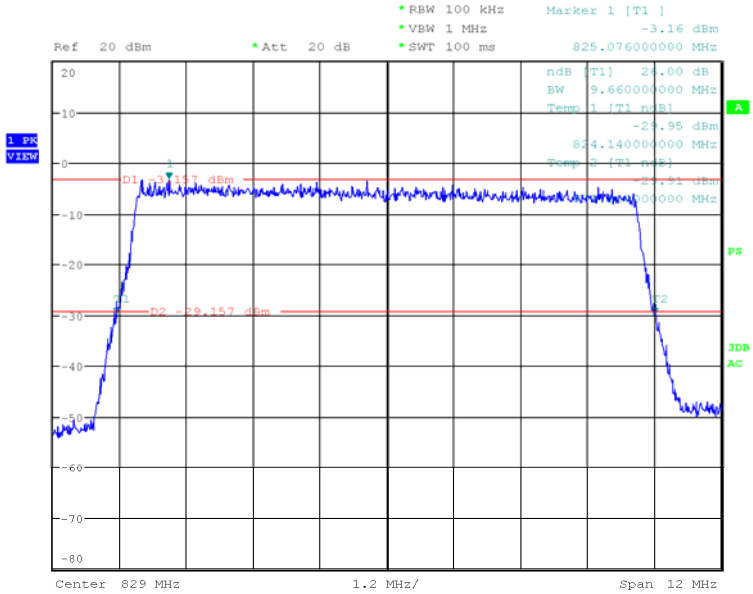
Diagram 34_511_26 dB



Date: 19.APR.2017 10:36:57

Diagram 34_512_26 dB

16-QAM-Modulation



Date: 19.APR.2017 10:47:39

Diagram 34_522_26 dB