

Annex 1: Measurement diagrams to
TEST REPORT
 No.: 16-1-0050601T35a

According to:
FCC Regulations
 Part 22, Part 27

for

peiker acoustic GmbH & Co. KG

GSM/ WCDMA/ LTE Telematics ROW Module
V1233-0

FCC-ID: QWY-V1233-0







Laboratory Accreditation and Listings		
 Deutsche Akkreditierungsstelle D-PL-12047-01-01 Accredited EMC-Test Laboratory	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-20013, C-20009, T-20006, G-20013
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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			max. modulation QPSK	max. modulation 16-QAM	max. channel	absolute max. value
channel bandwidth	ARFCN ch. no.	ARFCN-Frequency [MHz]	Resource block allocation	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]	Peak detektor [dBm]	RMS detektor [dBm]	PAR Faktor [dB]				
14 MHz	20407	824.7	1RB low	27,131	22,71	4,4206	27,2411	22,2698	4,9713	22,74	22,36	22,74	
			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				

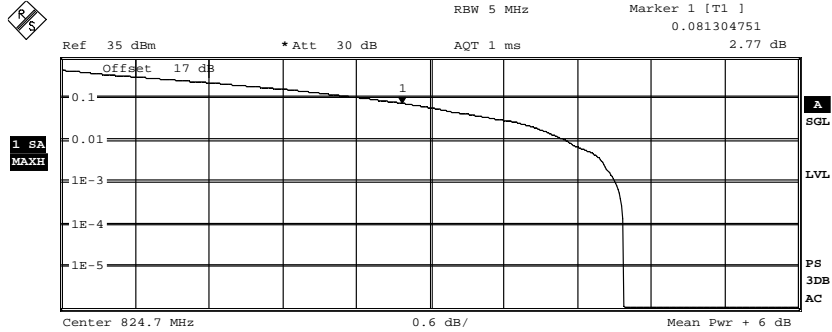
1.2. Power conducted LTE-Band 7

LTE-Band 7				QPSK-Modulation			16-QAM-Modulation			max. modulat.	max. modulat.	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			27,69
			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	27,18	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			
			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	27,336	27,34	
			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			
			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	27,58	27,58	
			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			
			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	27,693	27,69	
			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

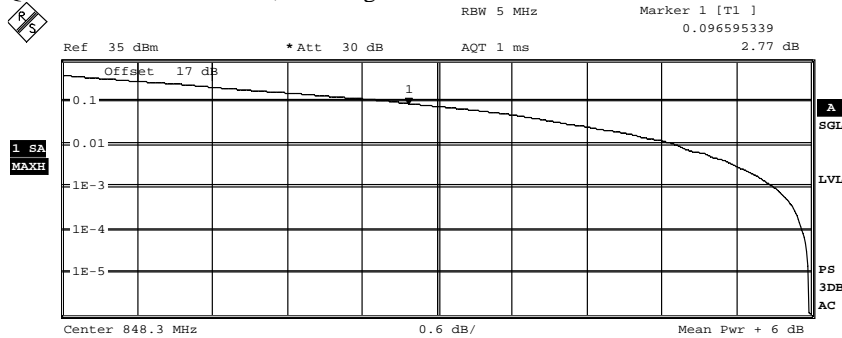


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

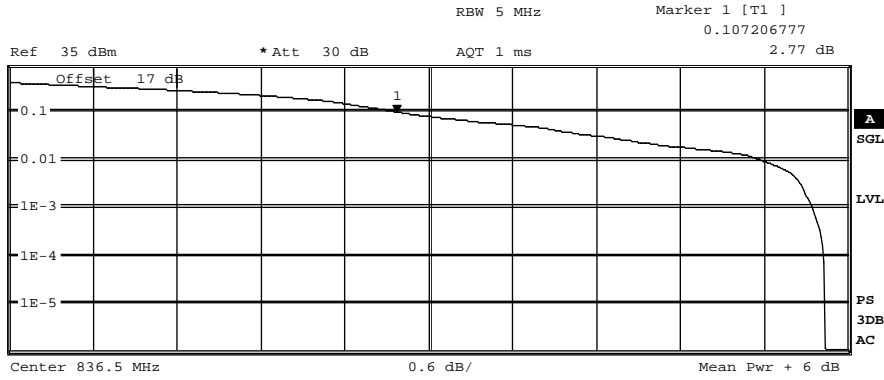


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

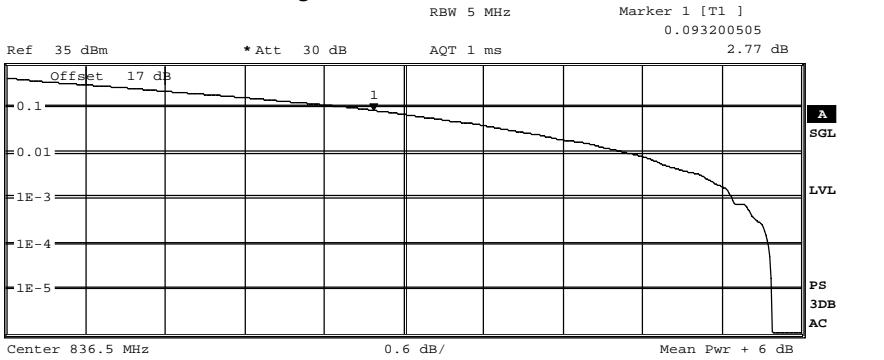


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	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



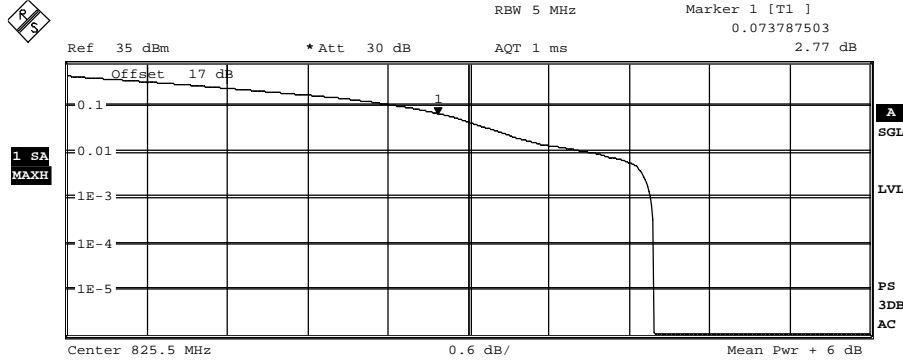
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	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

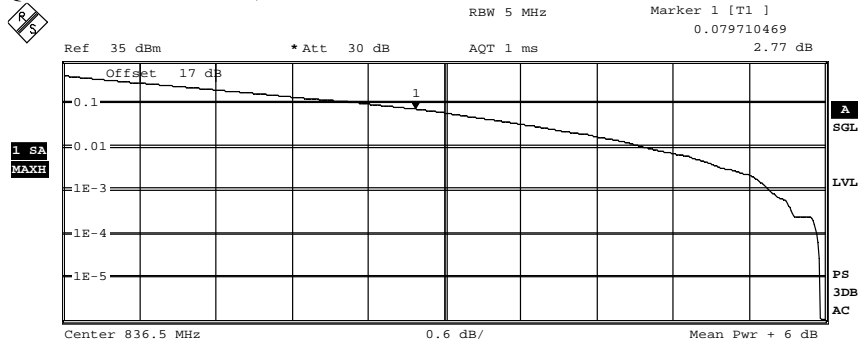


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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

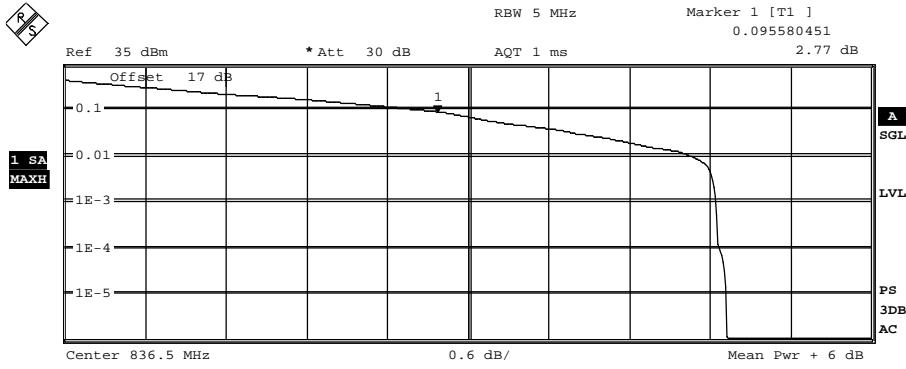


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



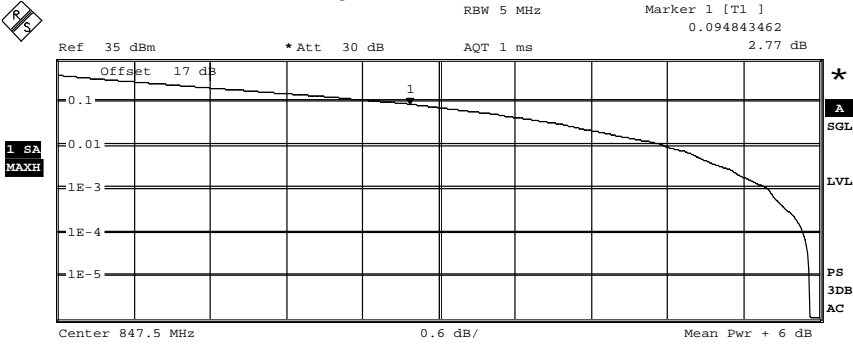
Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

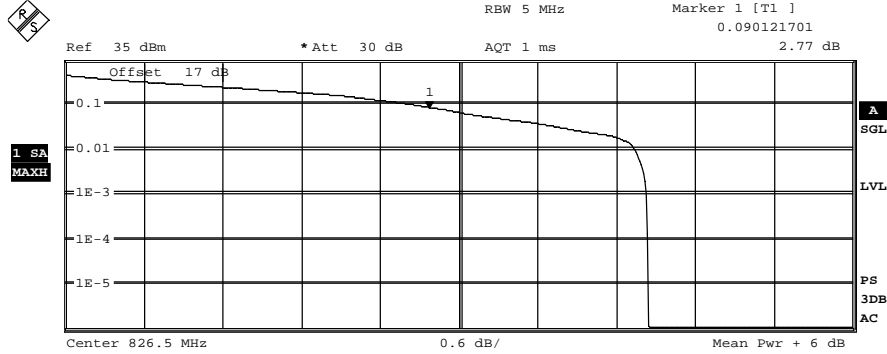
Trace 1
 Mean 21.93 dBm
 Peak 27.85 dBm
 Crest 5.92 dB

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

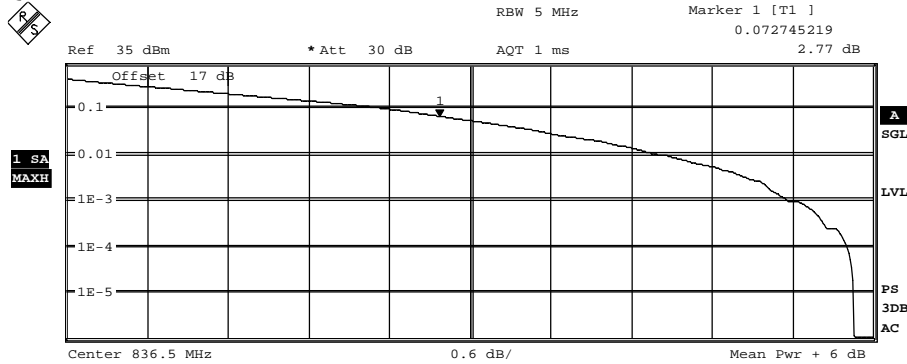


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	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

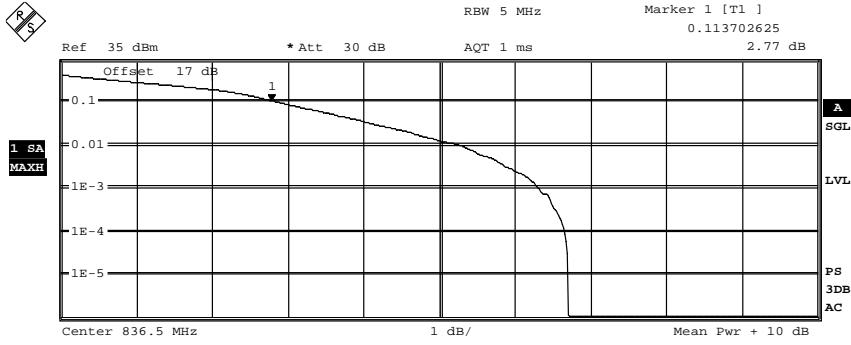


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

	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



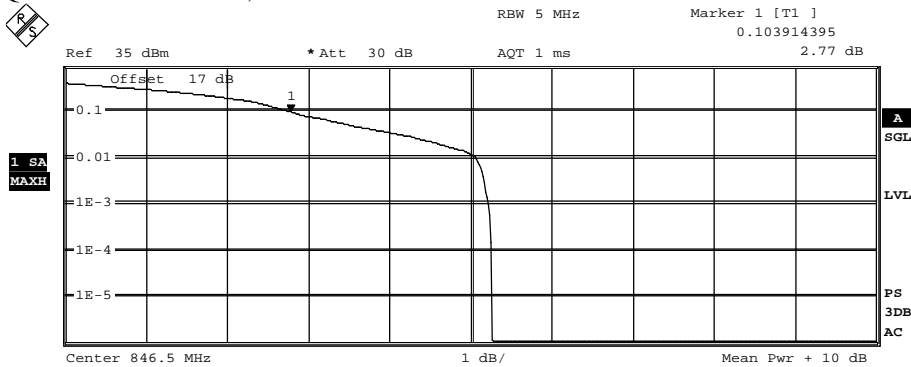
Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

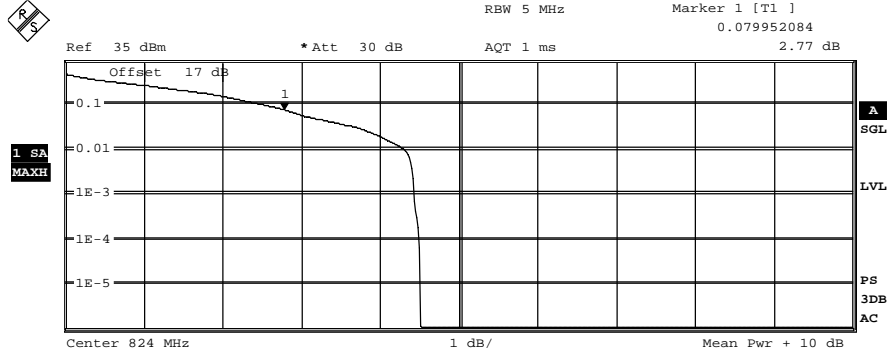
Trace 1
 Mean 21.89 dBm
 Peak 27.14 dBm
 Crest 5.25 dB

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

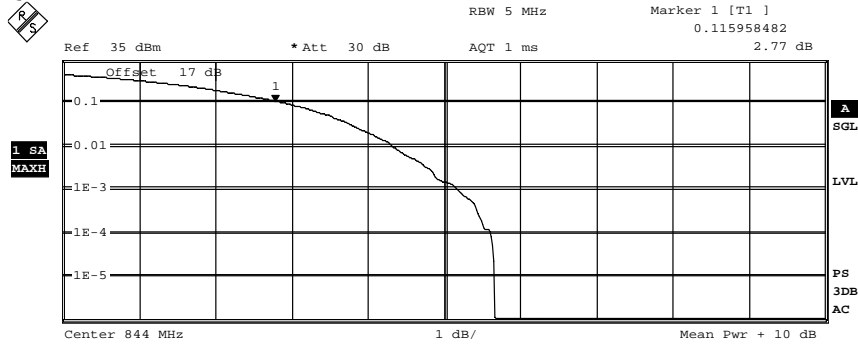


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

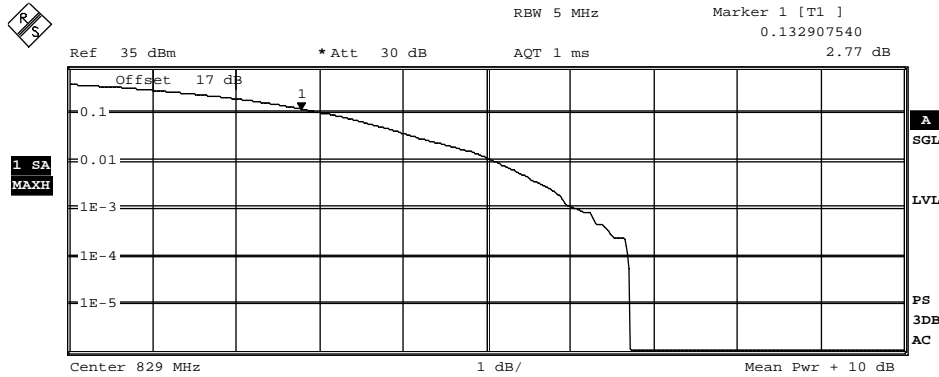


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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



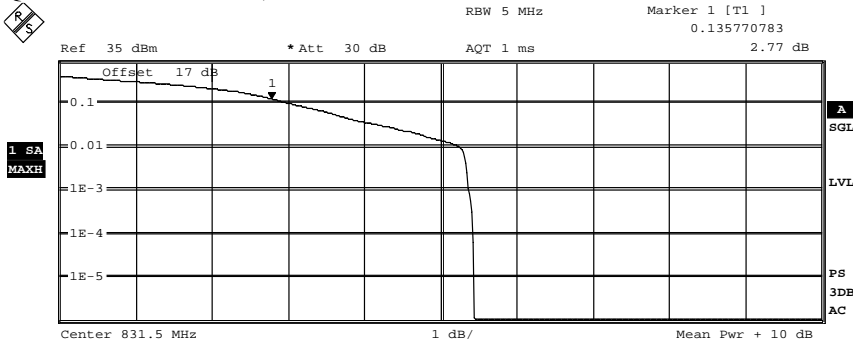
Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

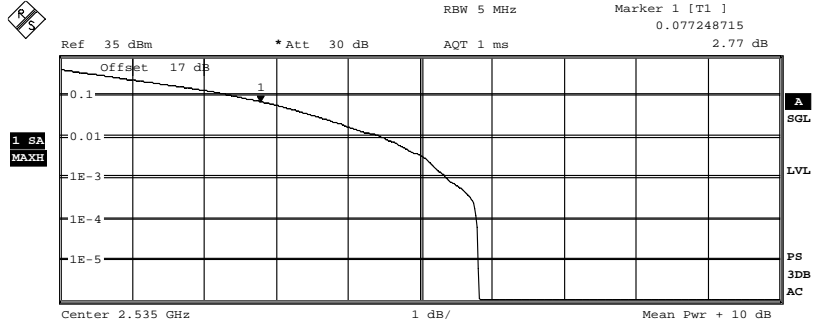
Date: 18.MAY.2017 13:23:48

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

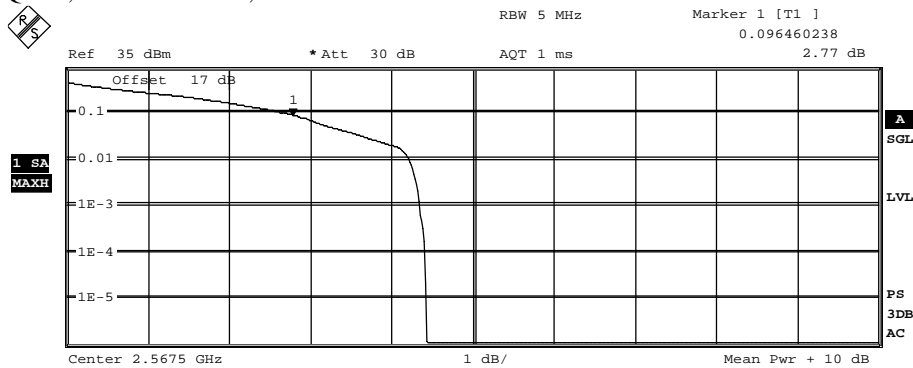


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

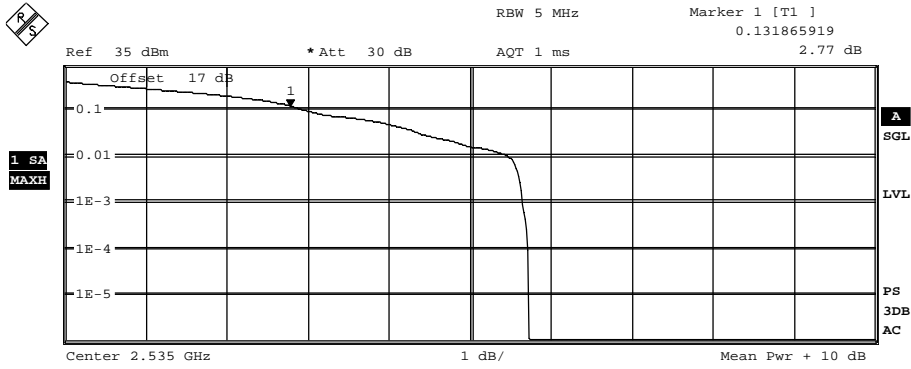


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

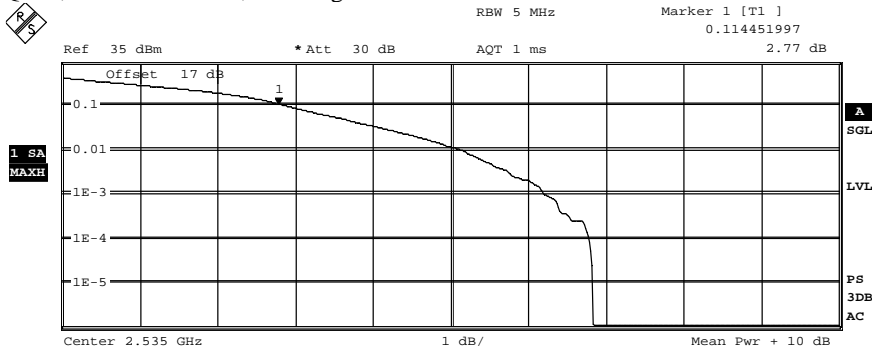


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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



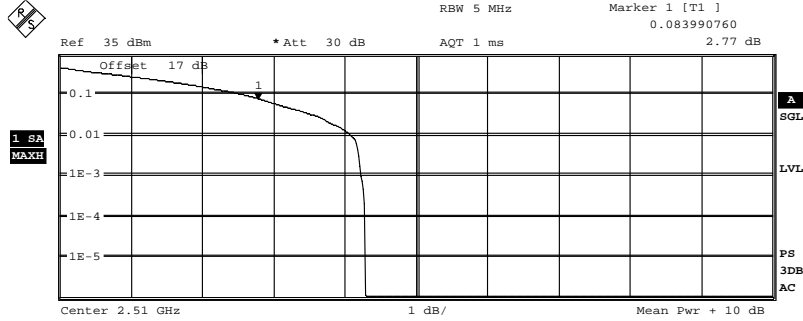
Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

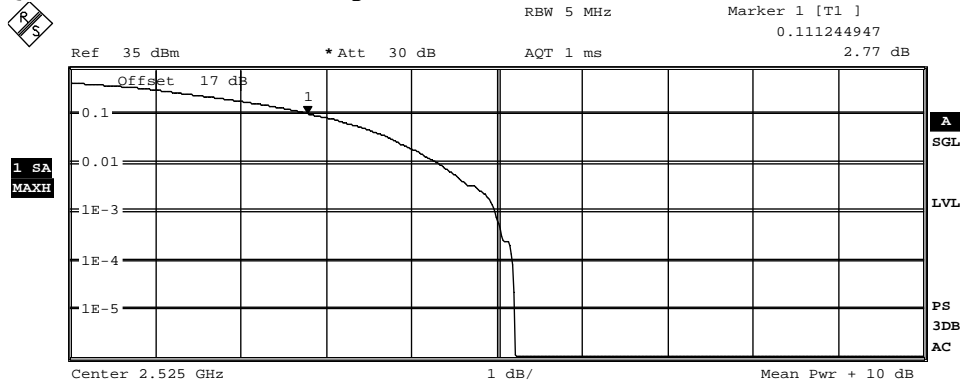


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

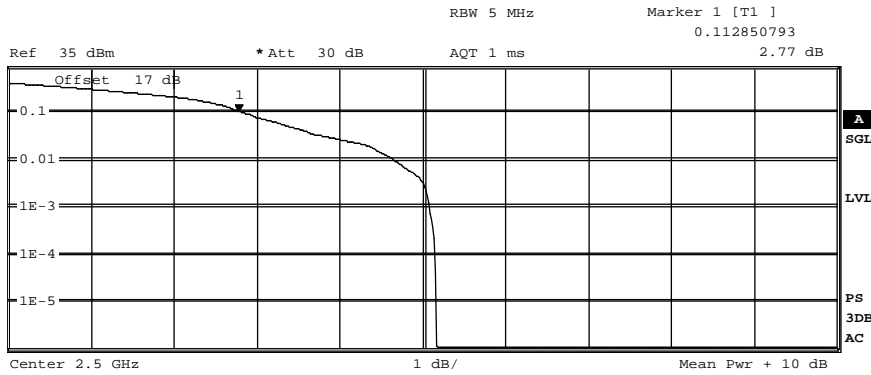


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

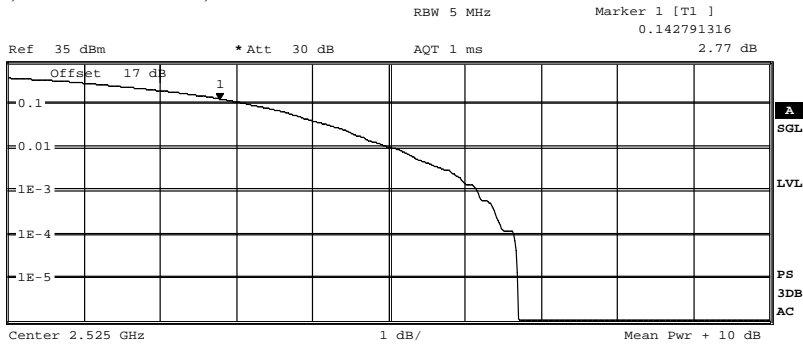


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



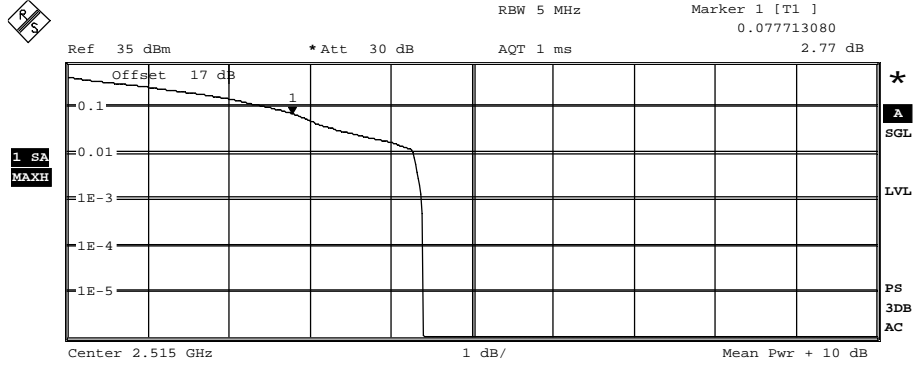
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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

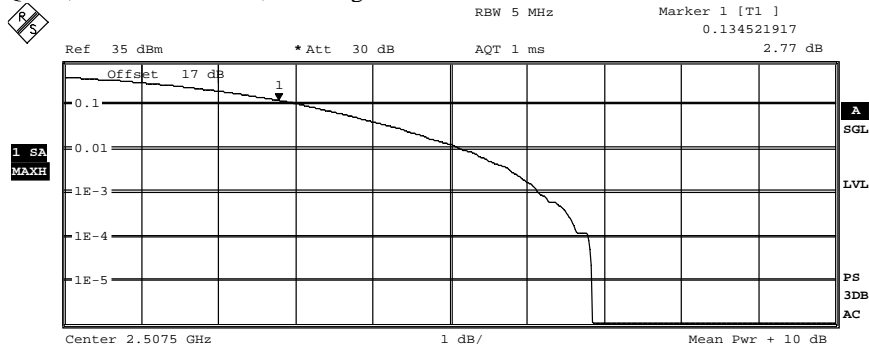


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

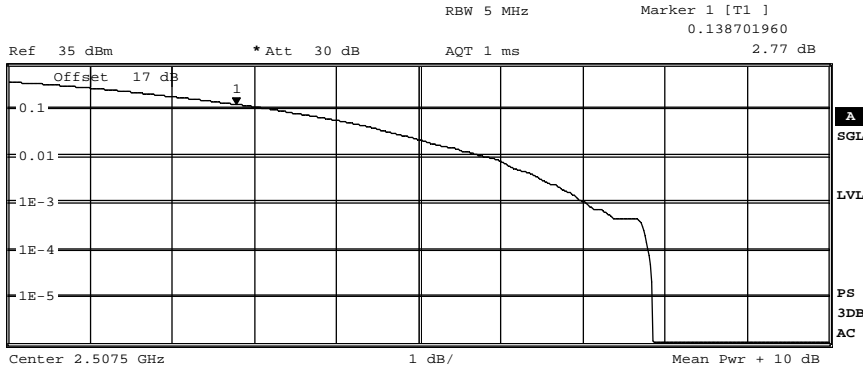


Complementary Cumulative Distribution Function
 NOF samples: 8000, Usable BW: 7.1MHz

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

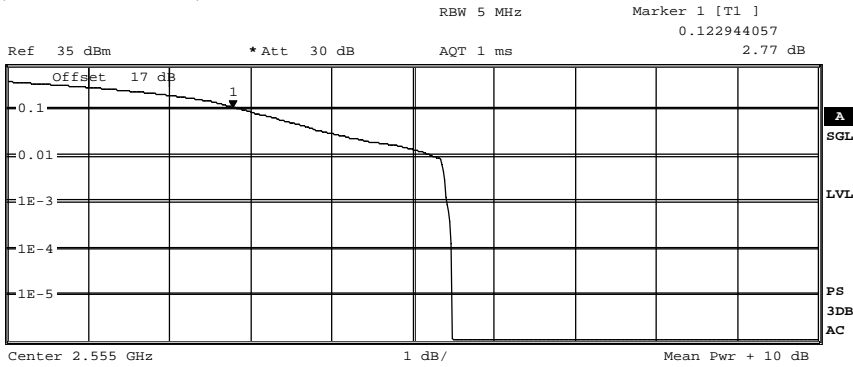


Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



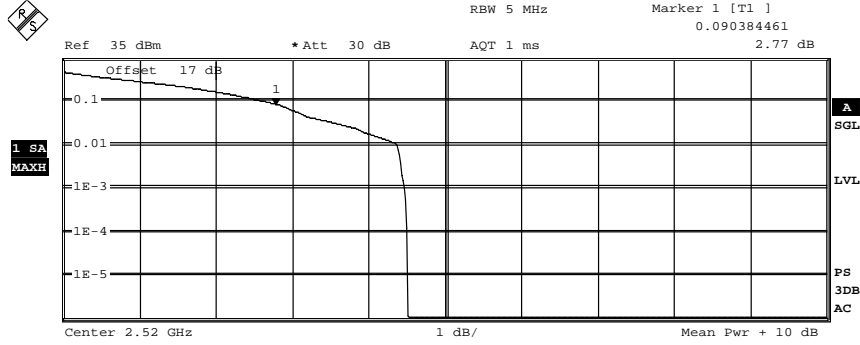
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



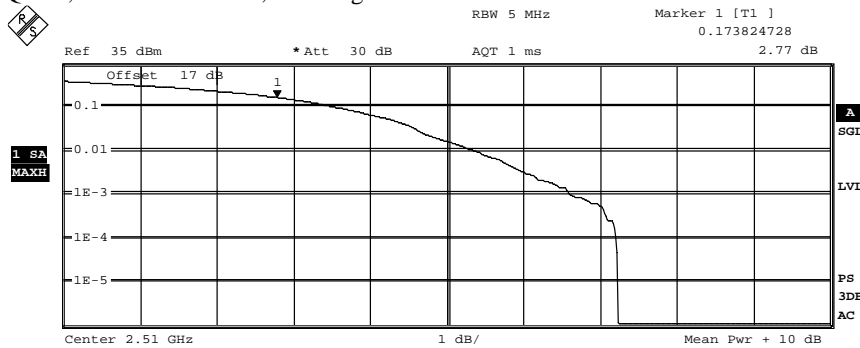
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



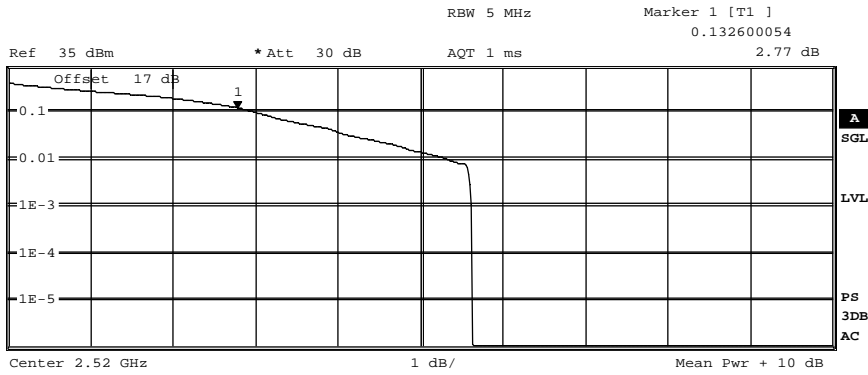
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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



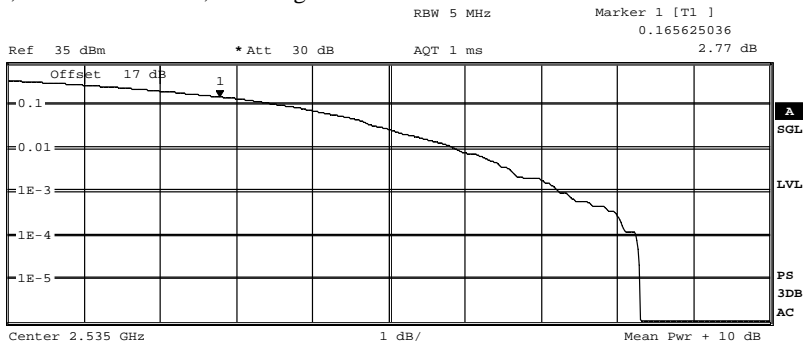
Complementary Cumulative Distribution Function
NOF samples: 8000, Usable BW: 7.1MHz

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

Test description:	Date: 18.04.2017 Page 1 of 3
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
EUT Position:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	EUT Laying
Operating conditions:	Mah
Power during tests:	Humidity: 35%rH; Temperature: 21°C
Comment 1:	12V DC
	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

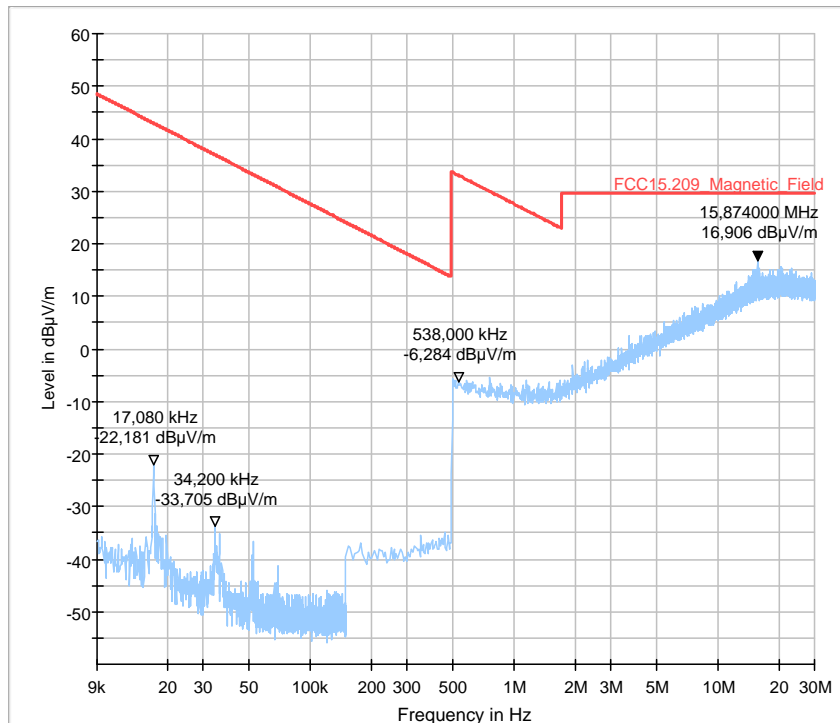


Diagram No. 2.50b_RSE_R_Ch20425_BW_5

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:	Klv
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

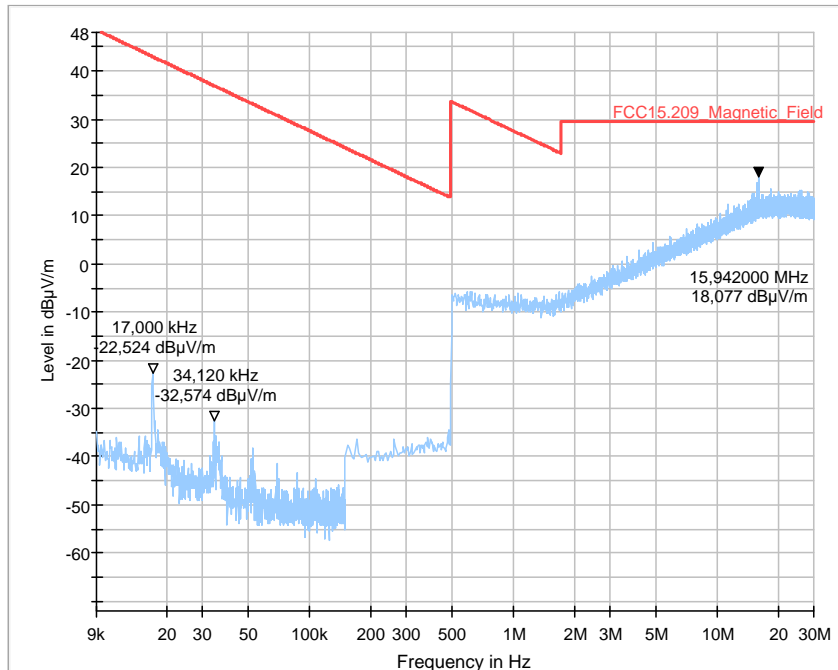


Diagram No. 2.51_RSE_R_Ch20525_BW5_Laying

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

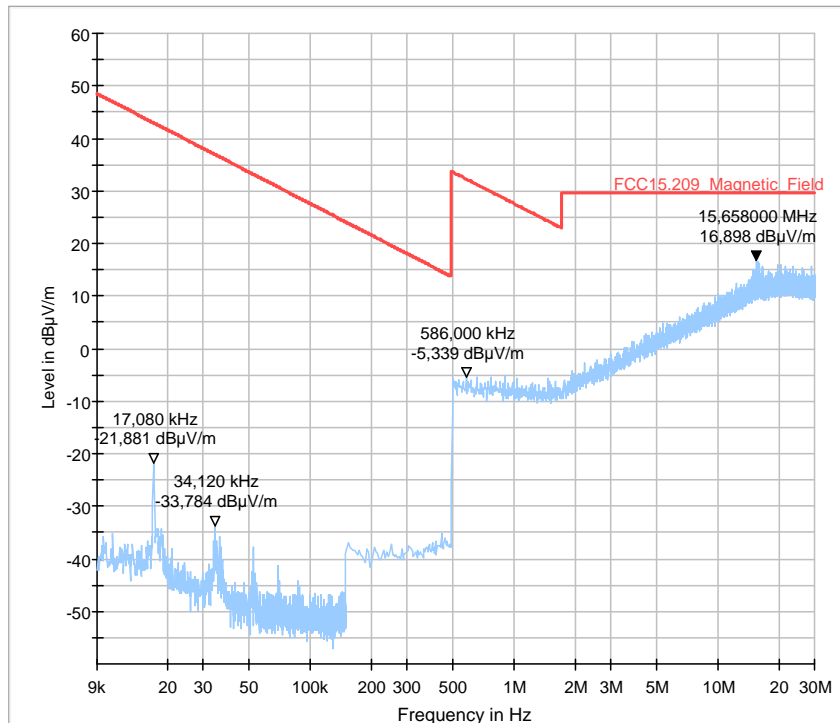


Diagram No. 2.51b_RSE_R_Ch20525_BW5

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:	Klv	
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

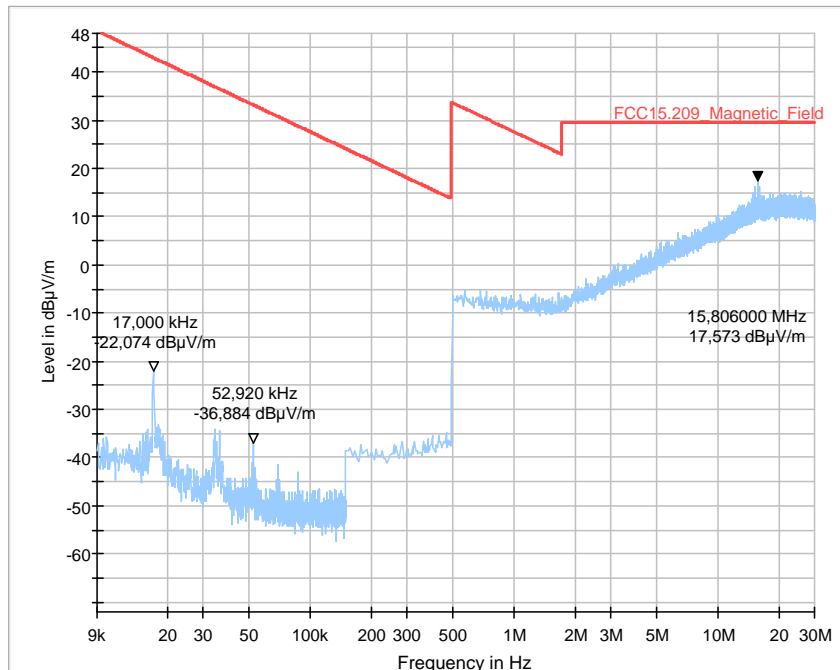


Diagram No. 2.52_RSE_R_Ch20600_BW10_Laying

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

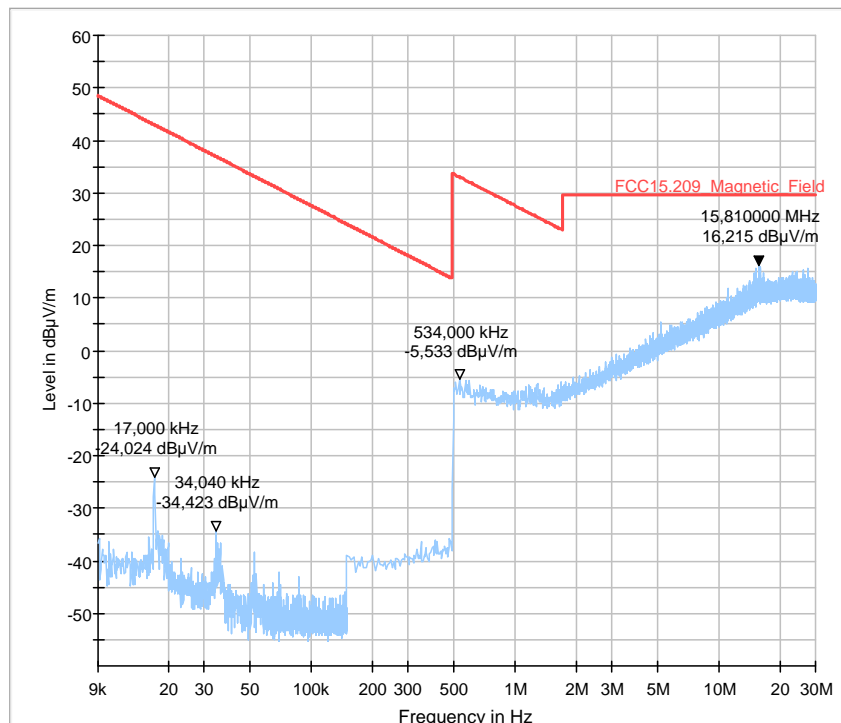


Diagram No. 2.52b_RSE_R_Ch20600_BW10

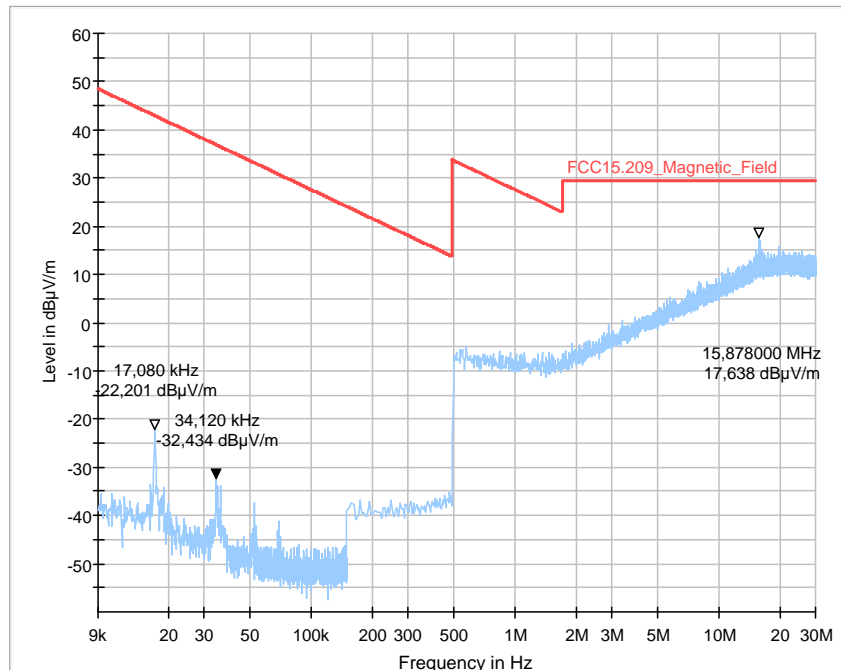
Date:	17.04.2017	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
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

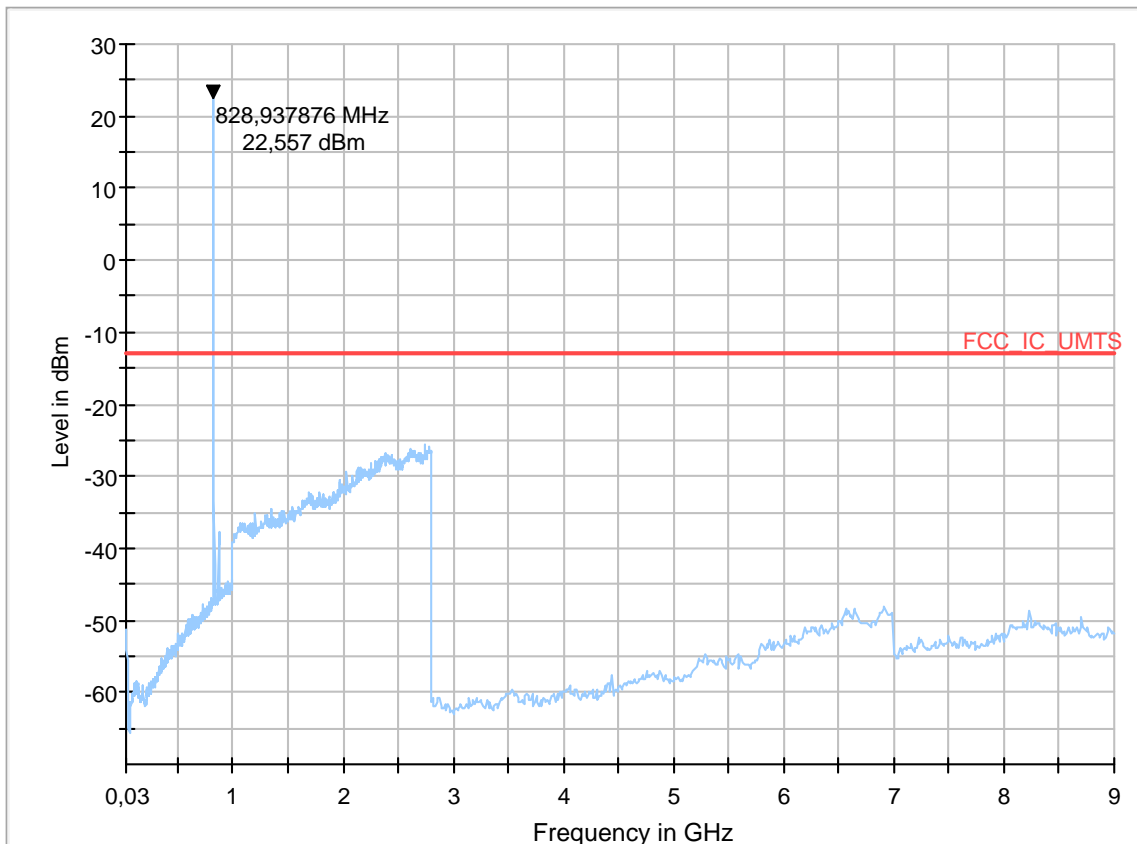
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing 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

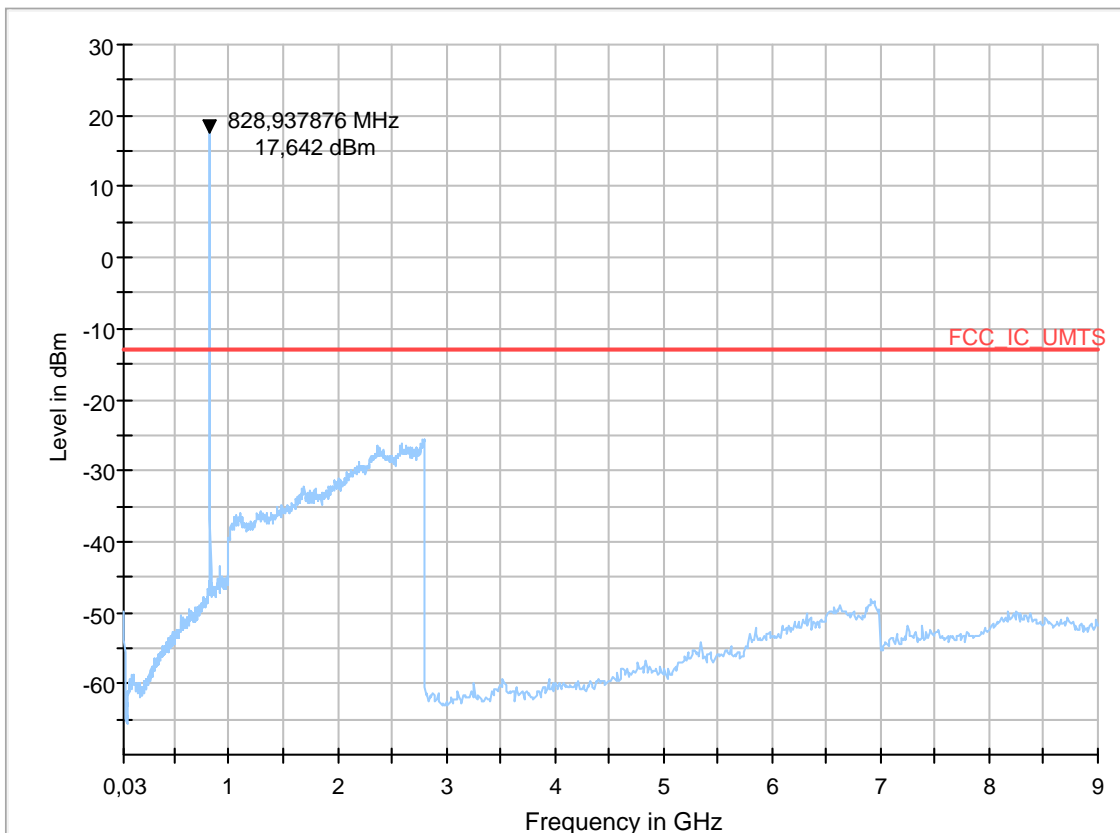
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - laying 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

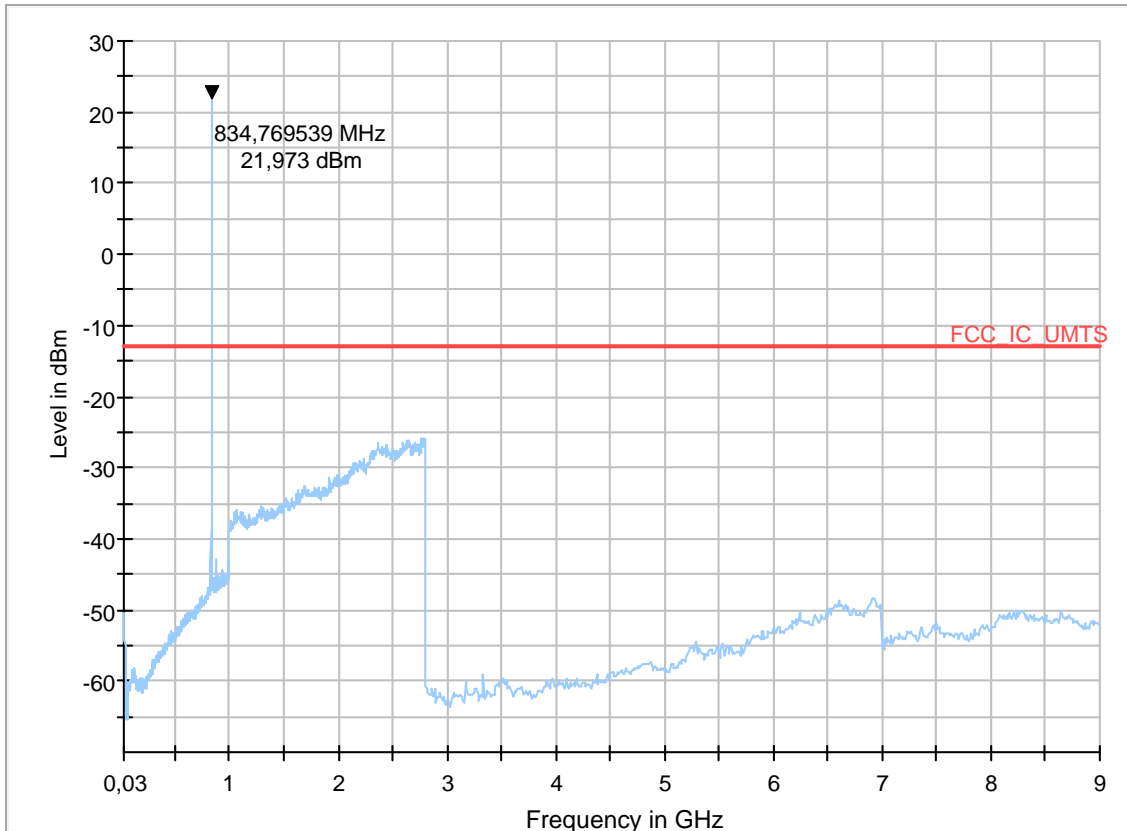
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20525
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Comment:	EUT - standing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

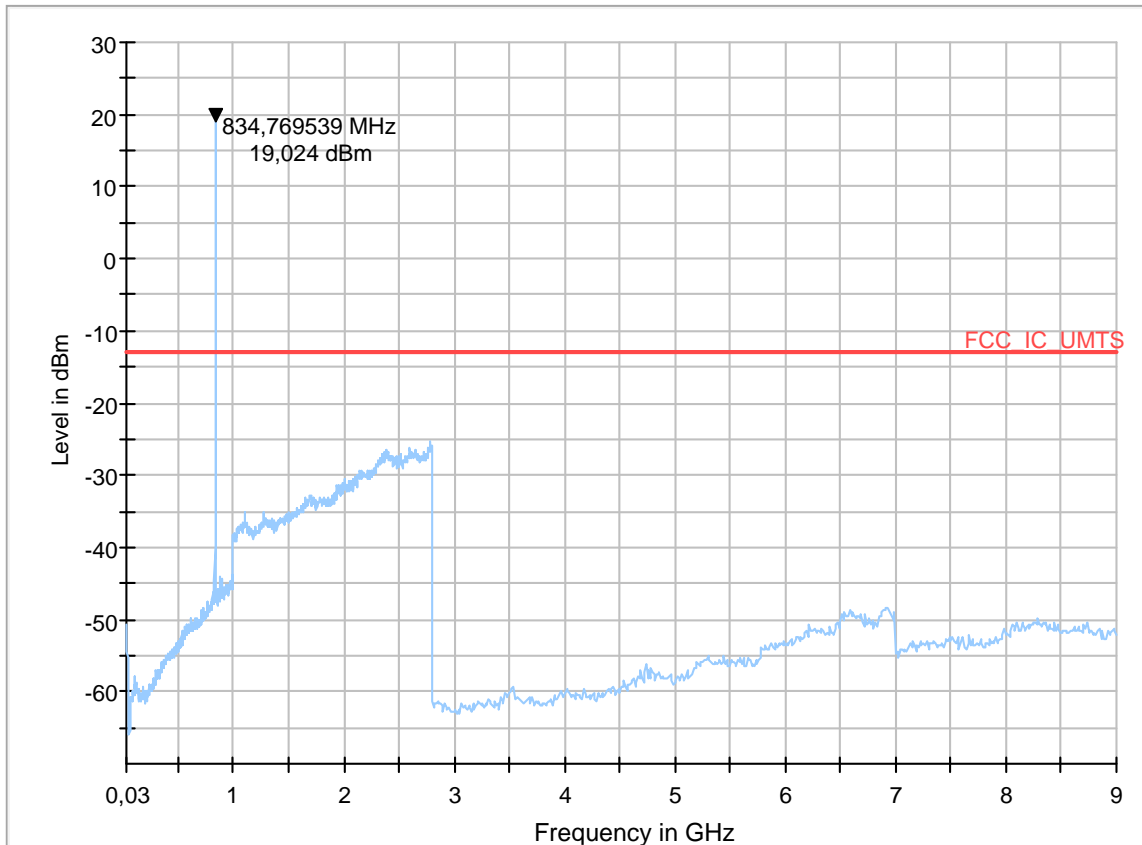
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20525
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RI5
Comment:	EUT - laying 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

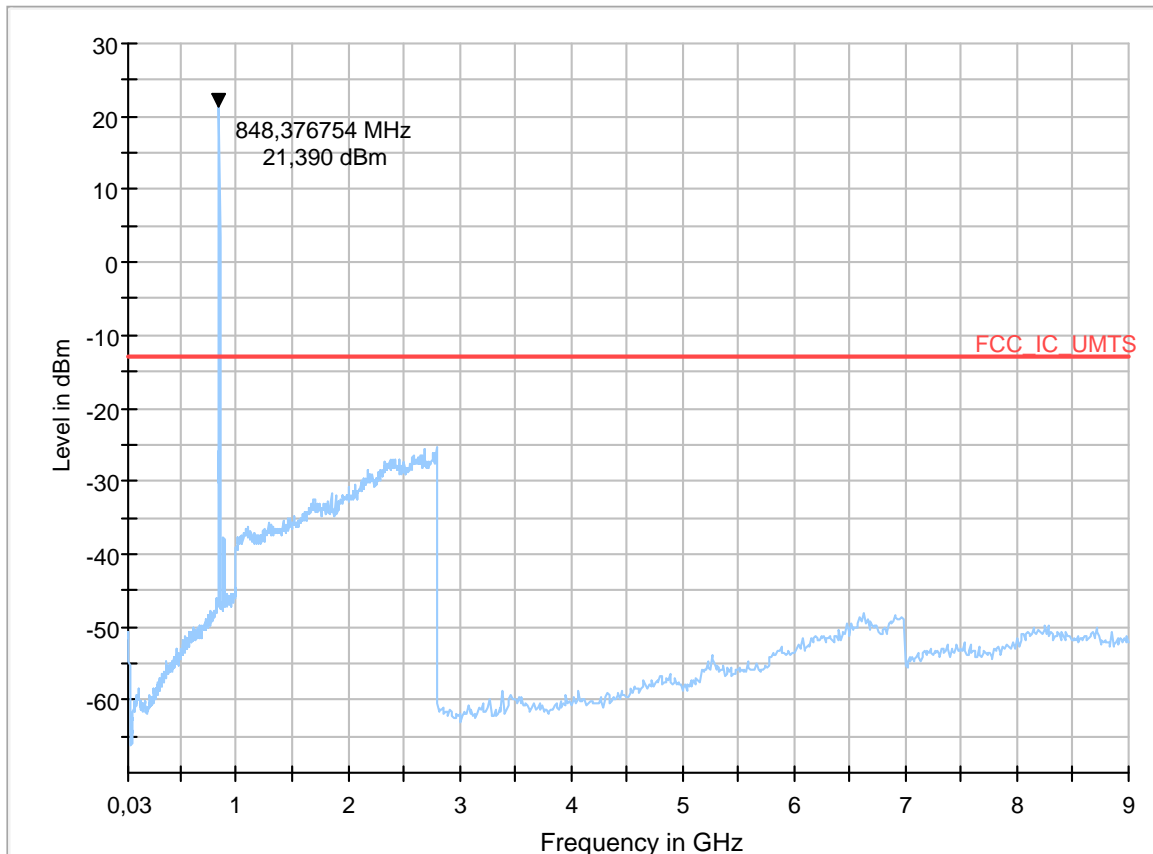
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20600 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator: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

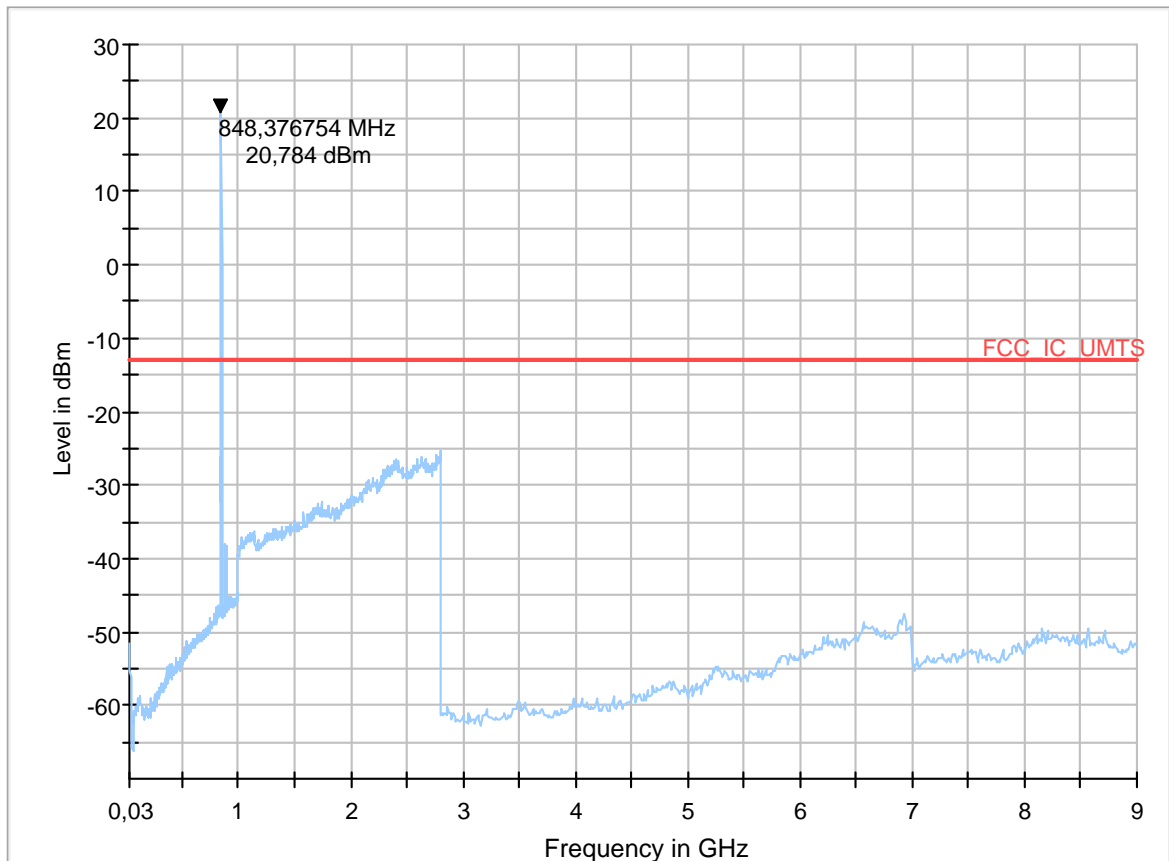
Test Description:	Radiated Spurious Emissions LTE 5
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20600 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator: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

Test description:	Date: 18.04.2017 Page 1 of 3
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
EUT Position:	FCC 15.209 § 15.209; RSS-Gen: Issue 4
Operator:	EUT Laying
Operating conditions:	Mah
Power during tests:	Humidity: 35%rH; Temperature: 21°C
Comment 1:	12V DC
	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

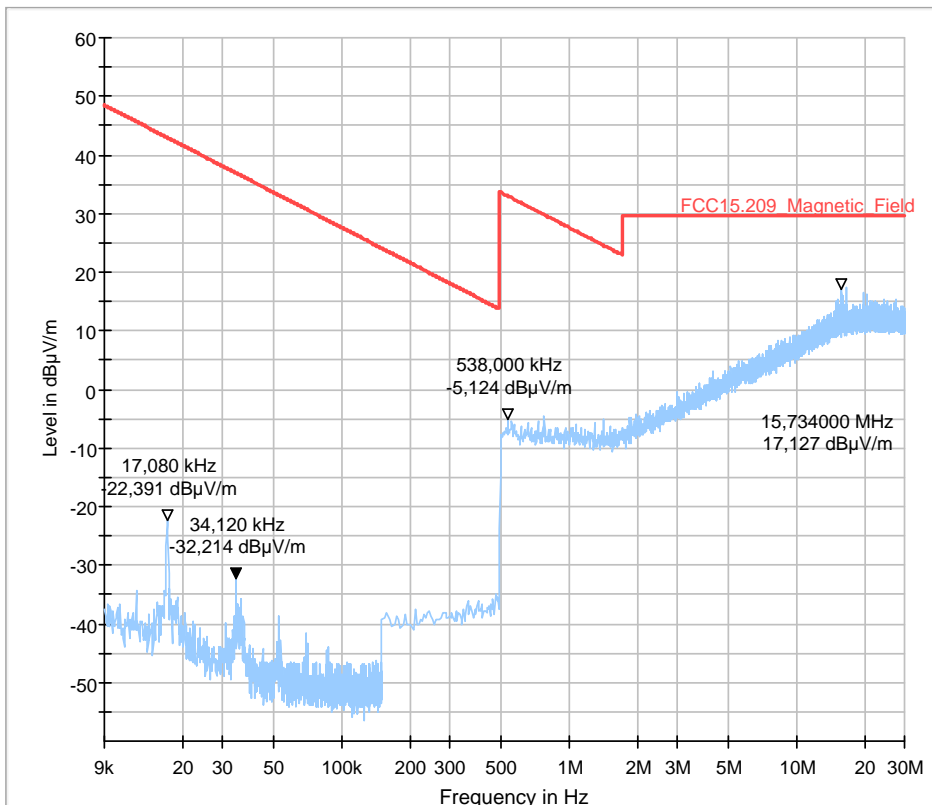


Diagram No. 2.53_RSE_R_Ch20850_BW_20

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

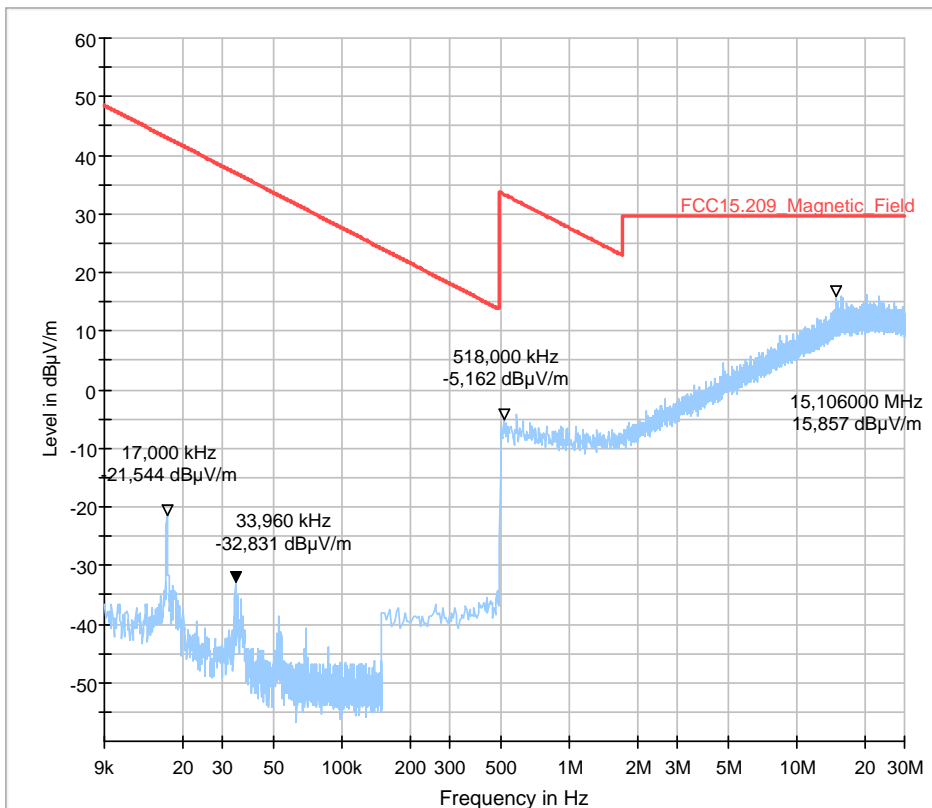


Diagram No. 2.54a_RSE_R_Ch21100_BW_20_Laying

Test description:	Date: 18.04.2017 Page 1 of 3
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
EUT Position:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	EUT Laying
Operating conditions:	Mah
Power during tests:	Humidity: 35%rH; Temperature: 21°C
Comment 1:	12V DC
	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

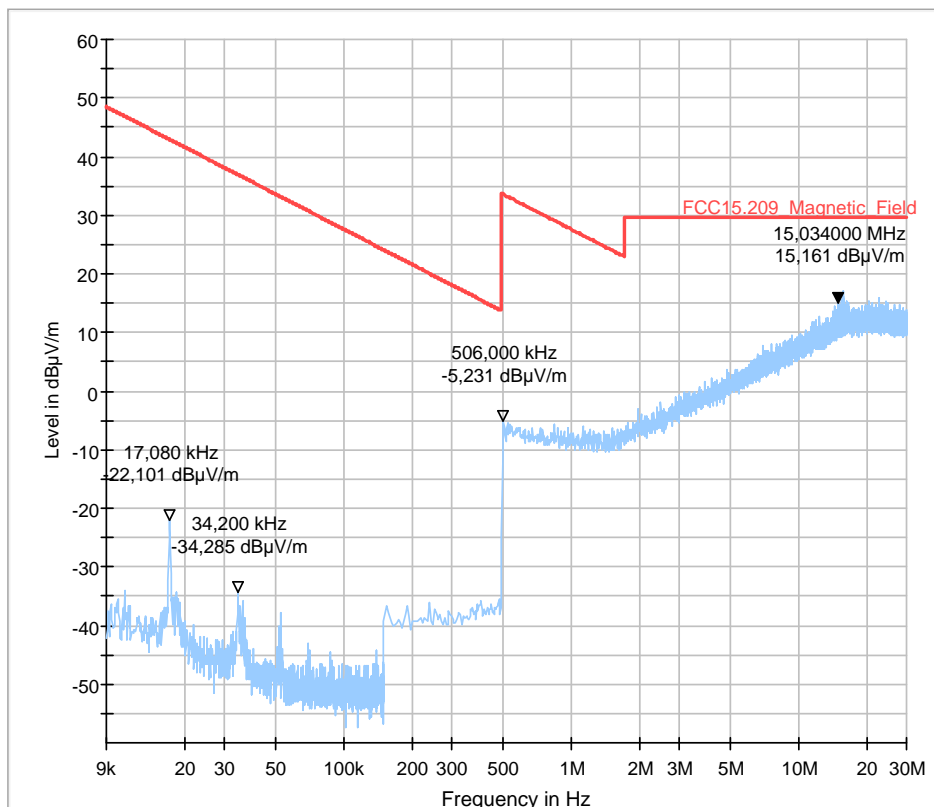


Diagram No. 2.54b_RSE_R_Ch21100_BW_20

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

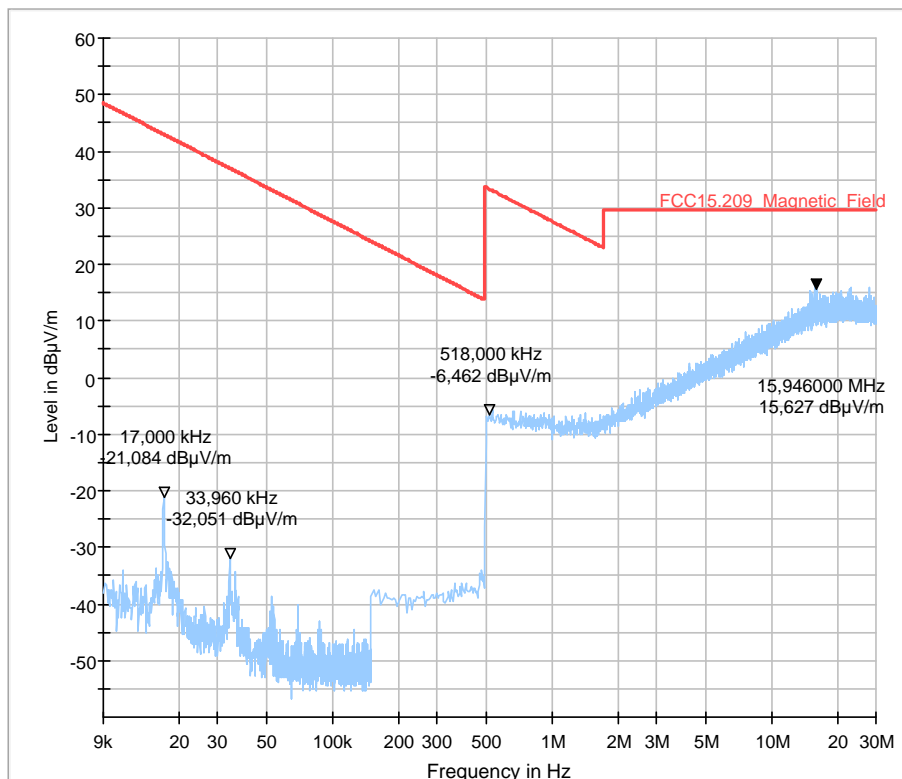


Diagram No. 2.55_RSE_R_Ch21300_BW_20_Laying

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

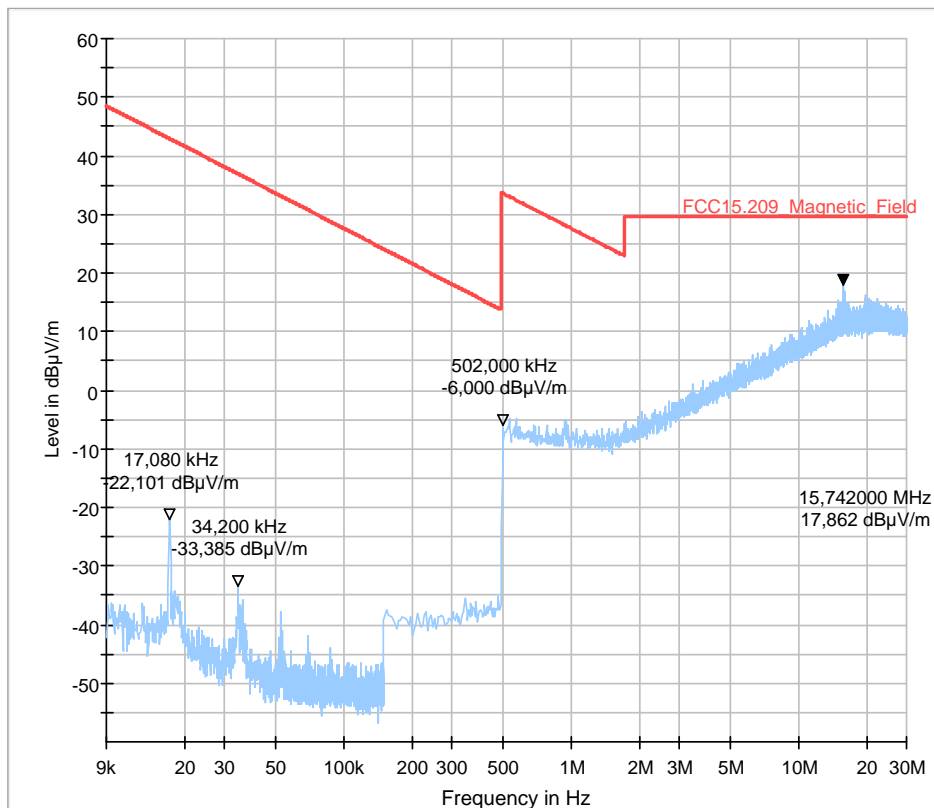


Diagram No. 2.55_RSE_R_Ch21300_BW_20

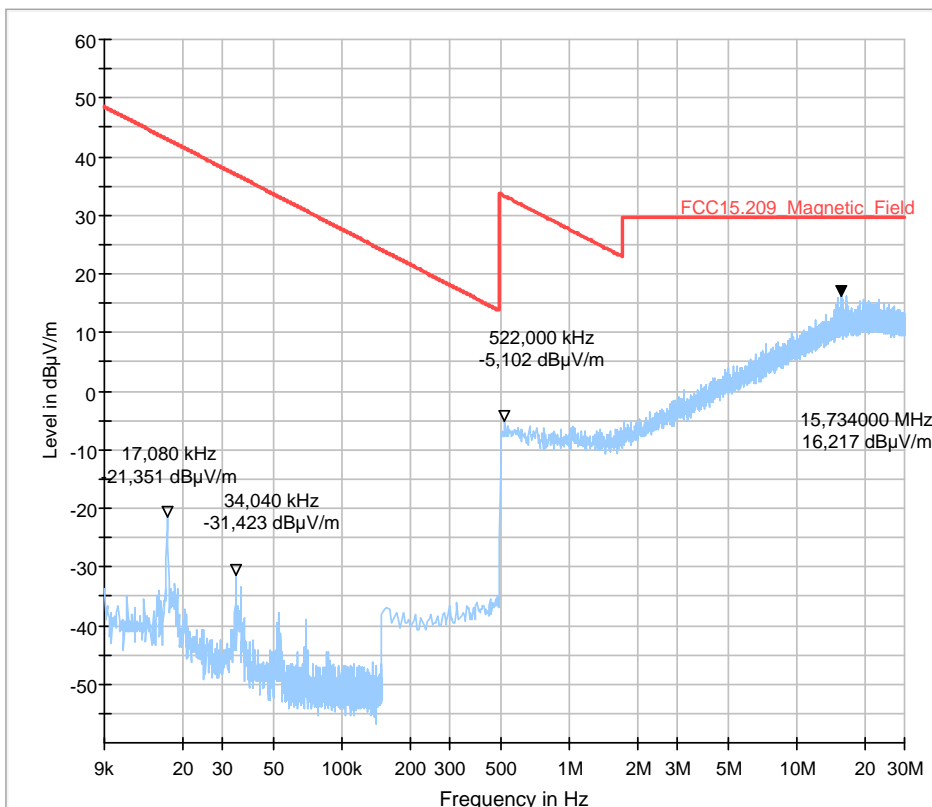
Date:	18.04.2017	Page 1 of 3
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test 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

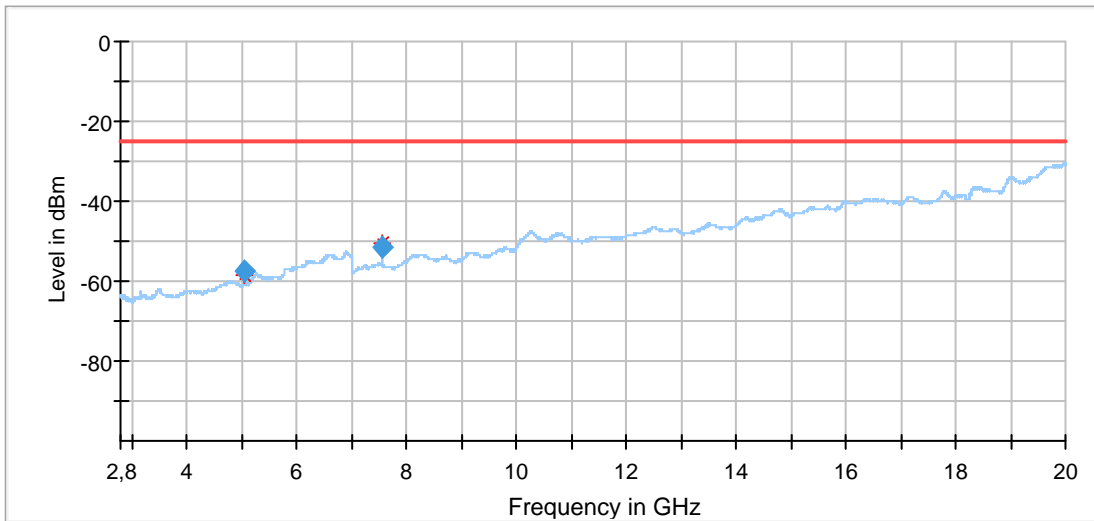
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53 / RSS-139
Operating Mode:	UE allocated channel 20850/ BW:20 / RB:1 / Position:high
Environmental Conditions:	Humidity: 35%rH; Temperature: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

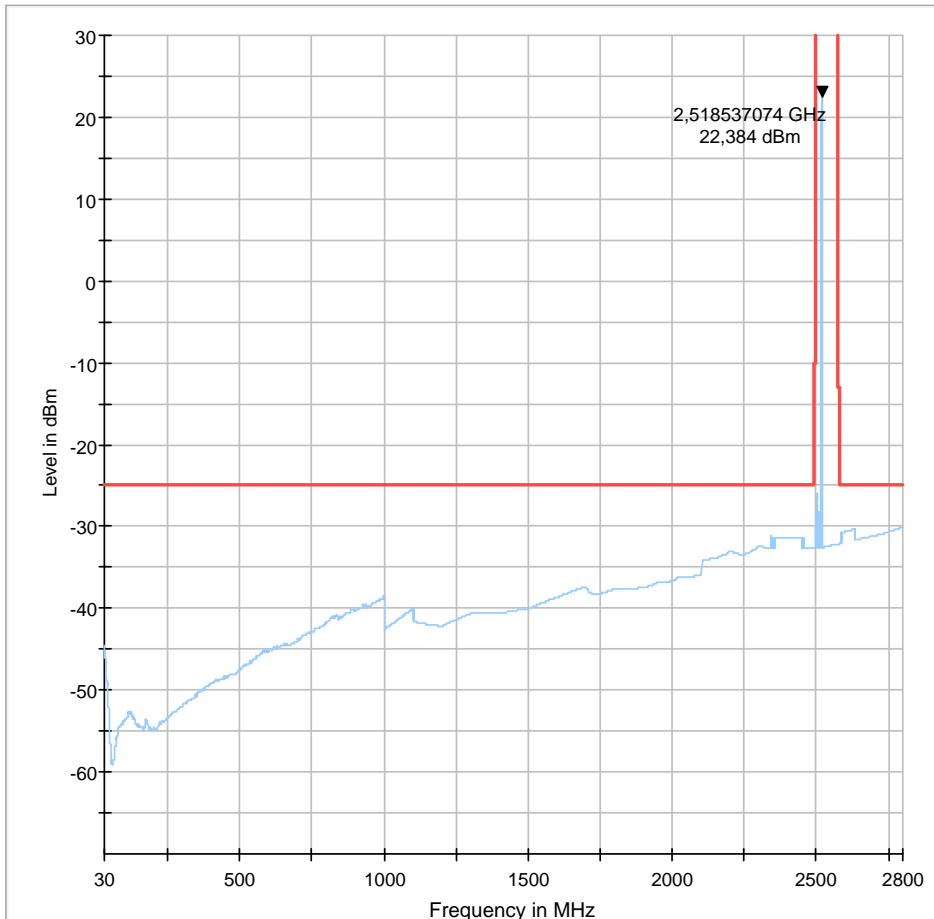
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850/ BW:20 / RB:1 / Position:high
Environmental Conditions:	Humidity: 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

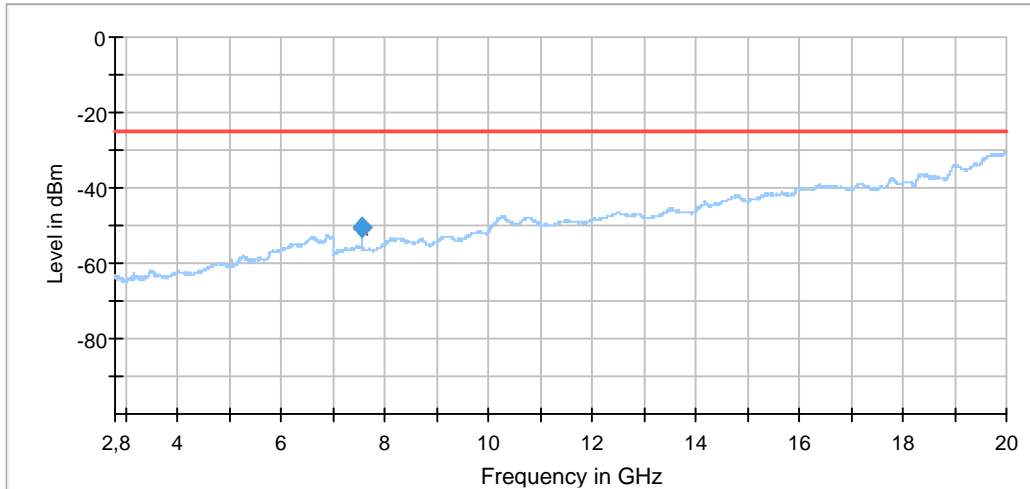
Test Description: Radiated Spurious Emissions LTE Band 7
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27.53(l)(4) Mobile stations limits
 Operating Mode: UE allocated channel 20850 (fc = 2510.0MHz), BW_20MHz, QPSK
 Environmental Conditions: Humidity: 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

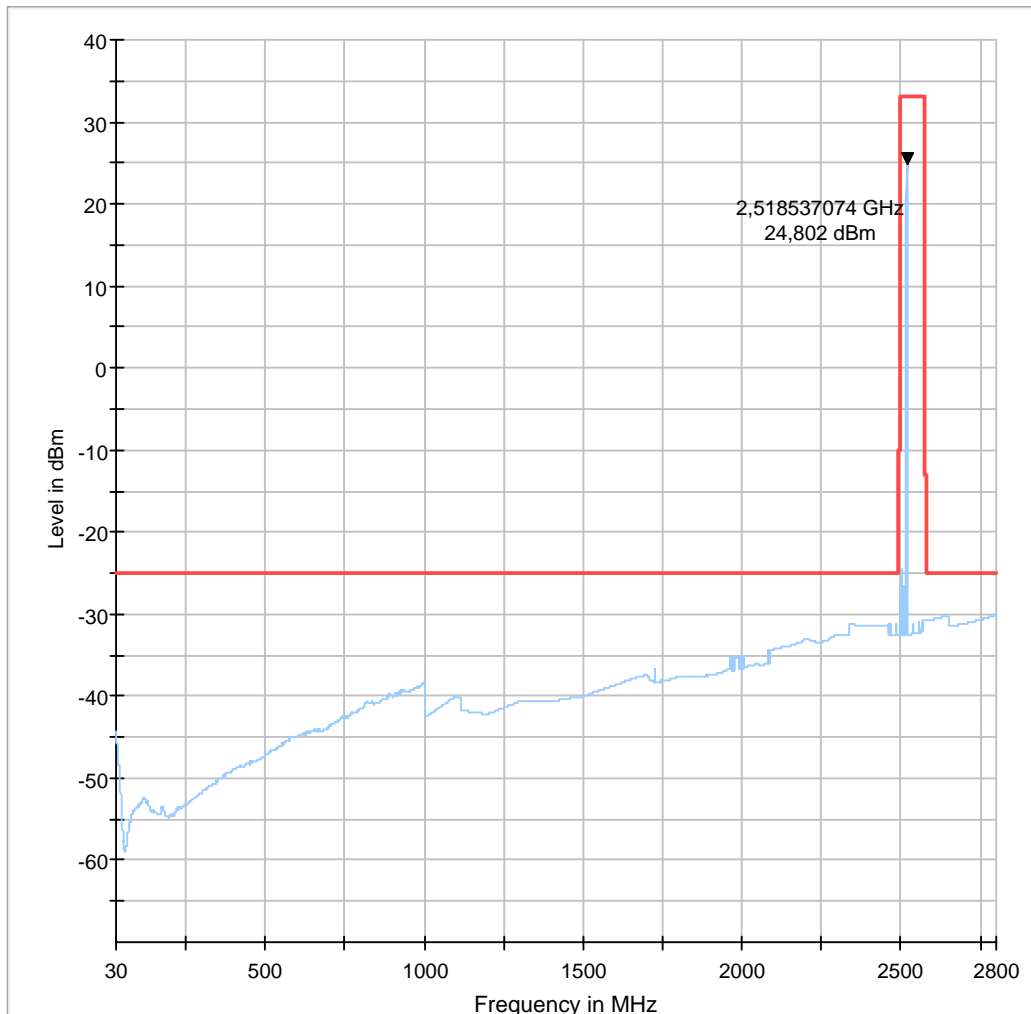
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 20850 (fc = 2510.0MHz), BW_20MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RI's
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acoustic 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

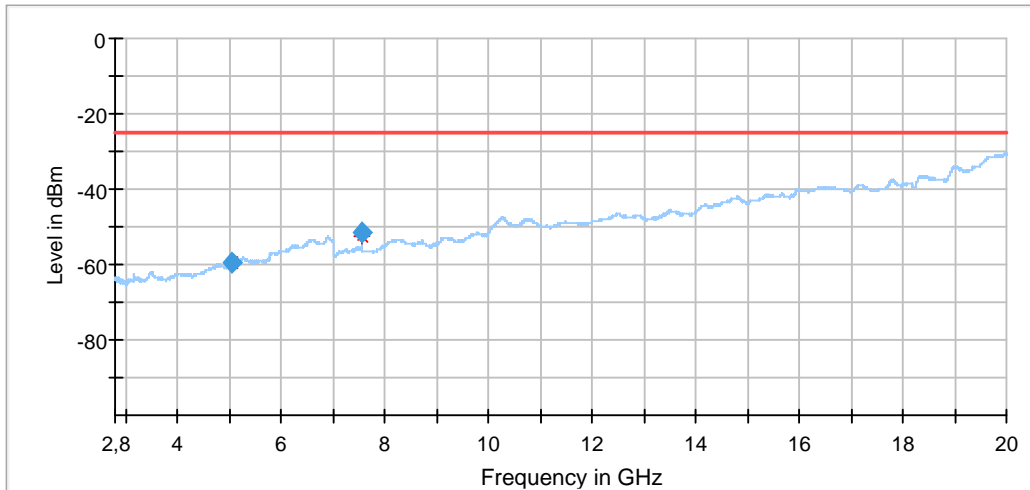
Test Description: Radiated Spurious Emissions LTE Band 7
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27.53 / RSS-139
 Operating Mode: UE allocated channel 21100/ BW:20 / RB:1 / Position:low
 Environmental Conditions: Humidity: 35%rH; Temperature: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

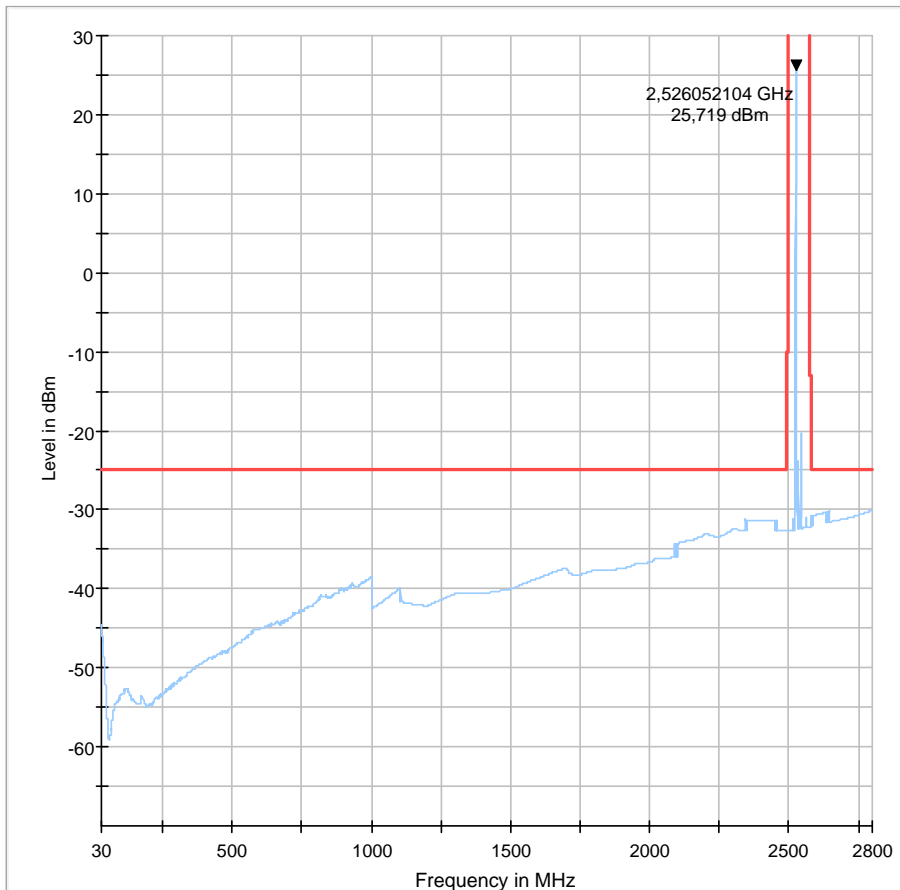
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 21100/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; 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

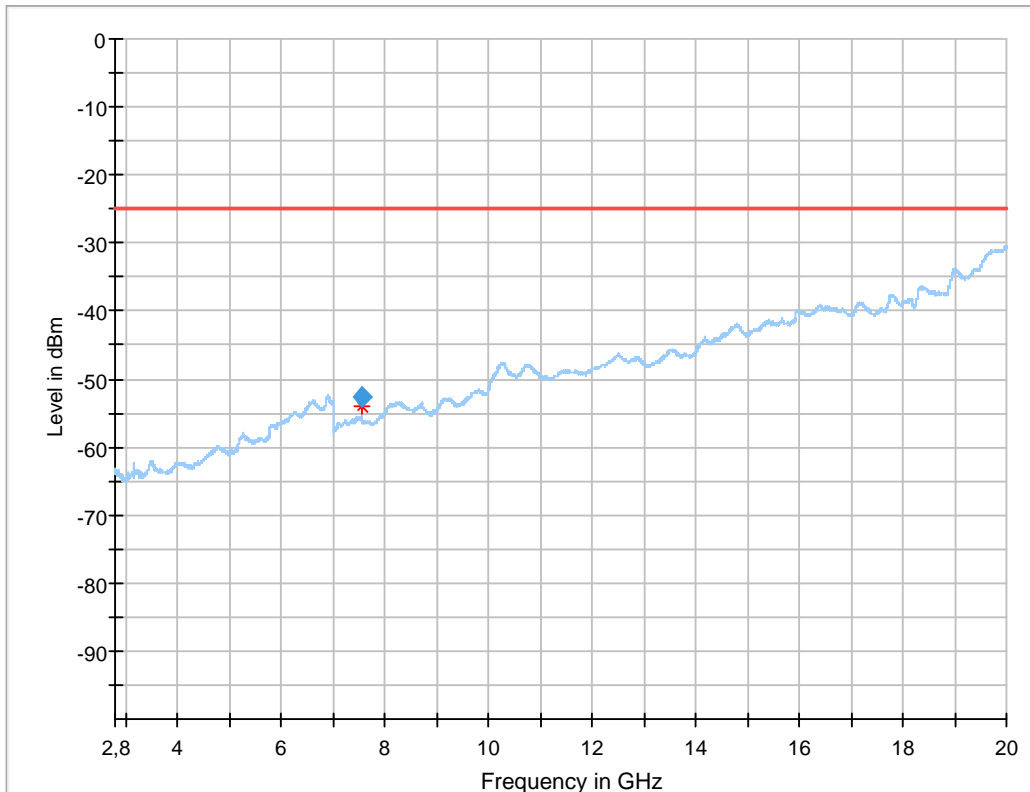
Common Information

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

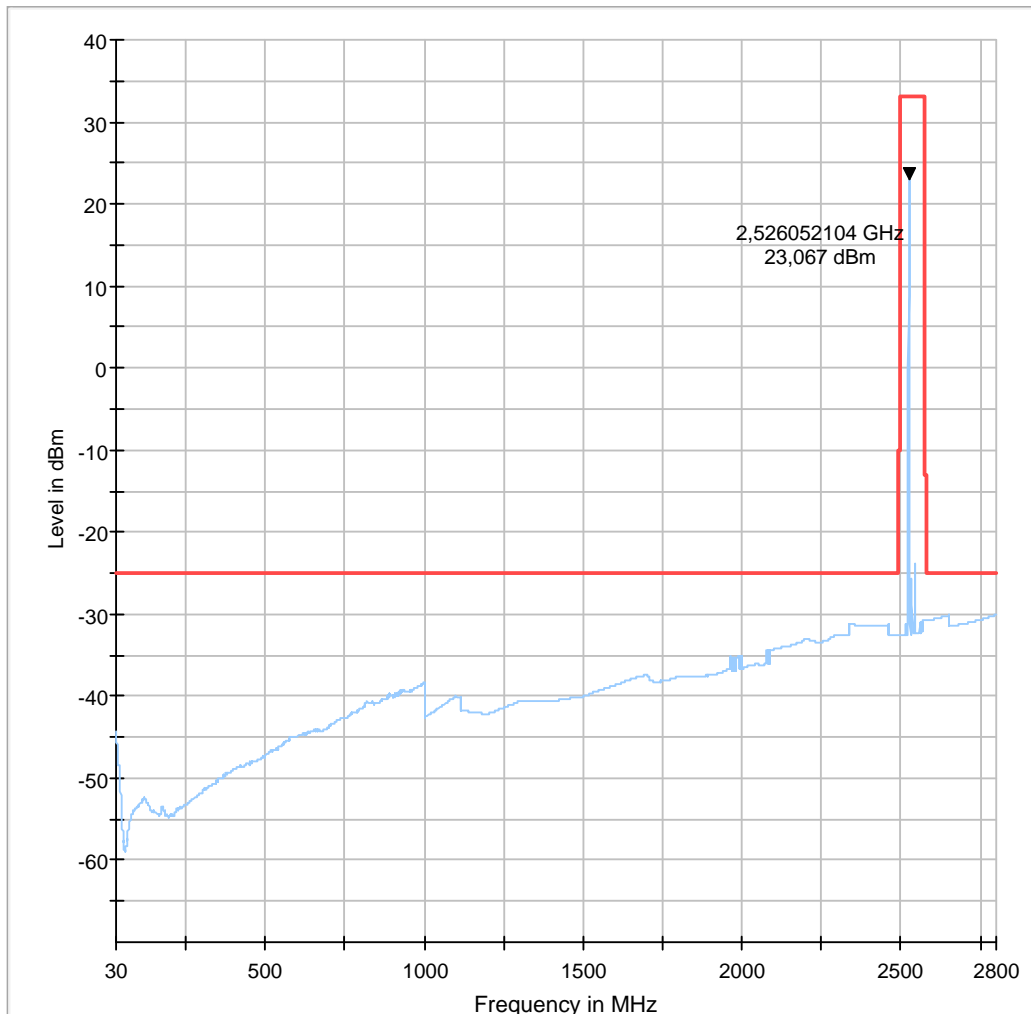
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 21100/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RI5
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acoustic 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

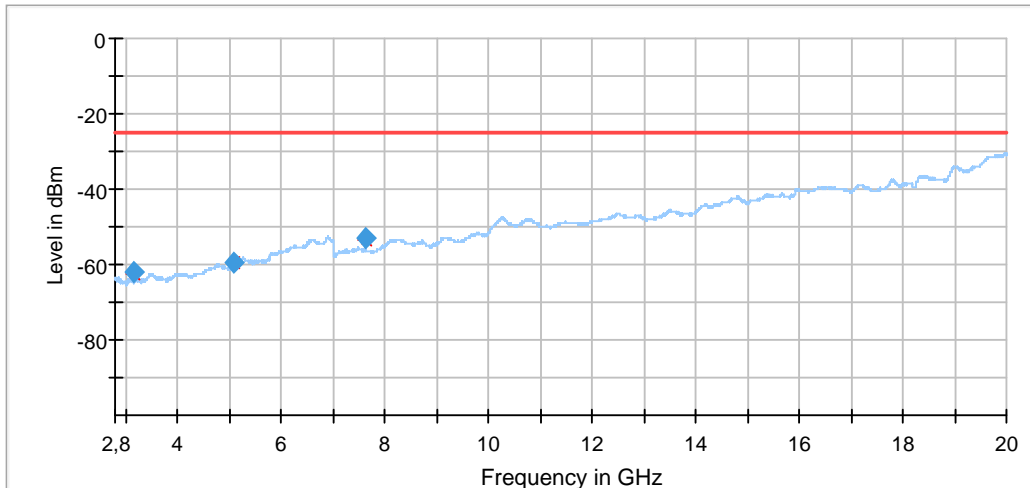
Test Description: Radiated Spurious Emissions LTE Band 7
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27.53(l)(4) Mobile stations limits
 Operating Mode: UE allocated channel 21300/ BW:20 / RB:1 / Position:low
 Environmental Conditions: Humidity: 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

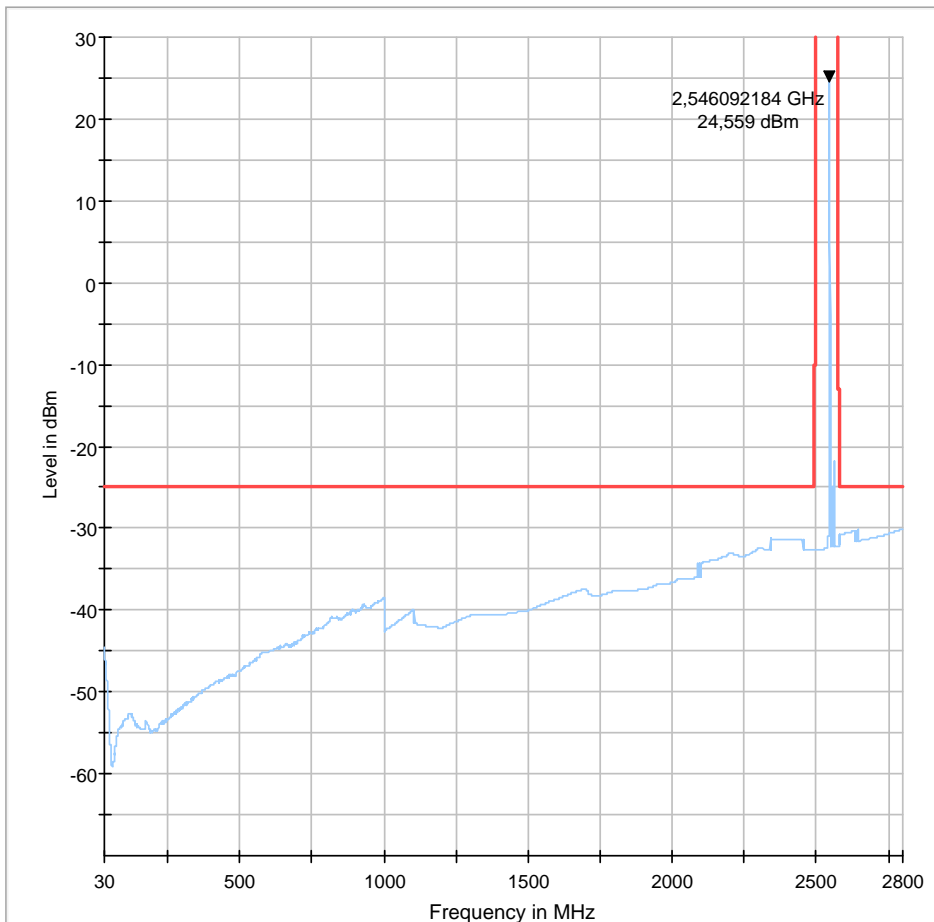
Test Description:	Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 21300/ BW:20 / RB:1 / Position:low
Environmental Conditions:	Humidity: 35%rH; 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

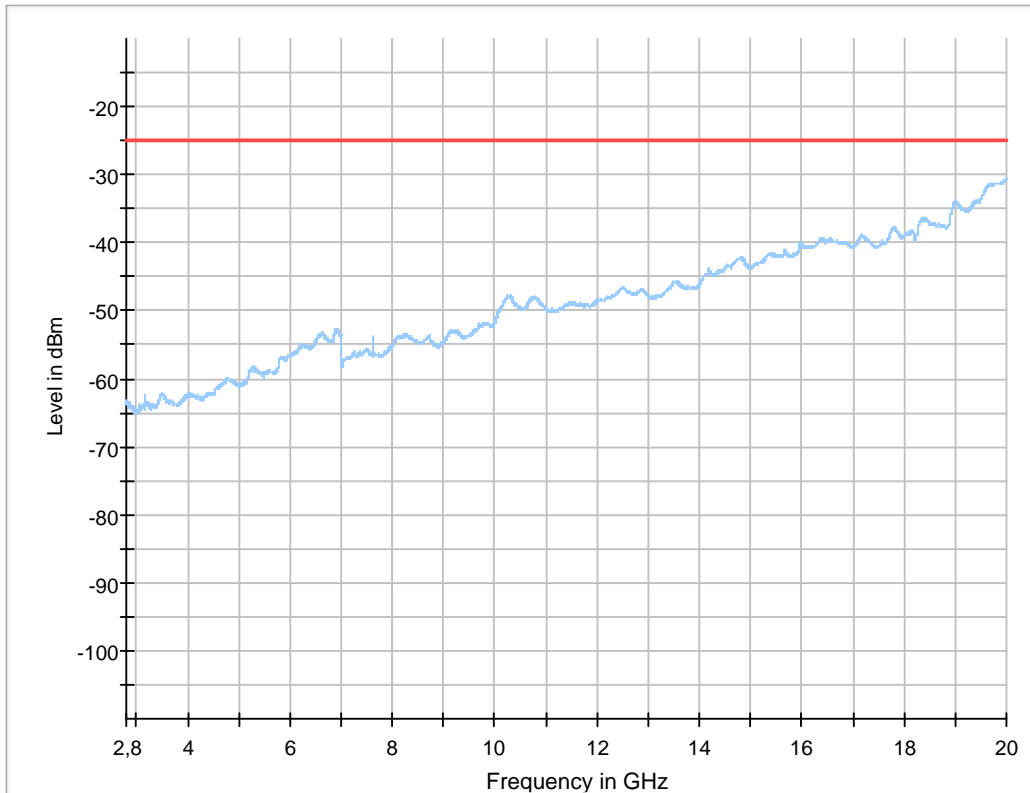
Common Information

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

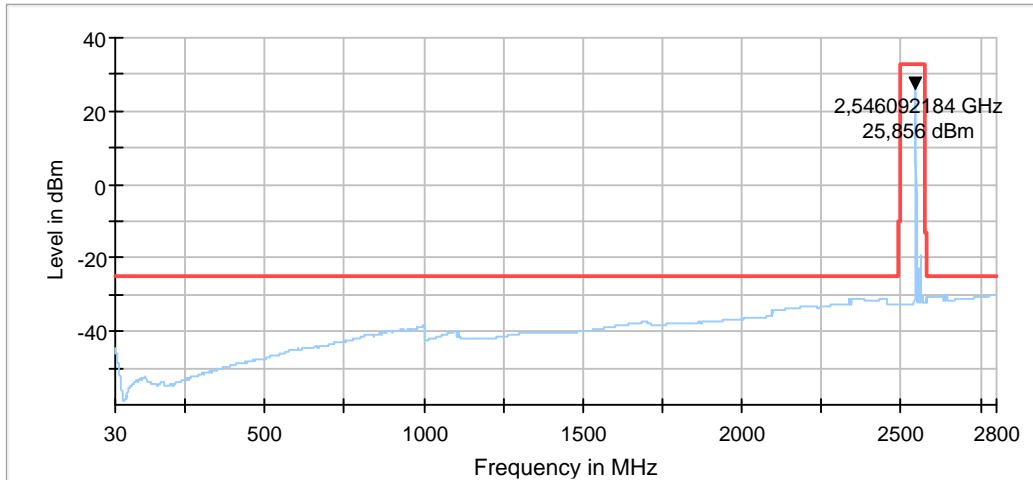
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 27.53(l)(4) Mobile stations limits
Operating Mode:	UE allocated channel 21300/ BW: 20MHz/ RB: 1 Low
Environmental Conditions:	Humidity: 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

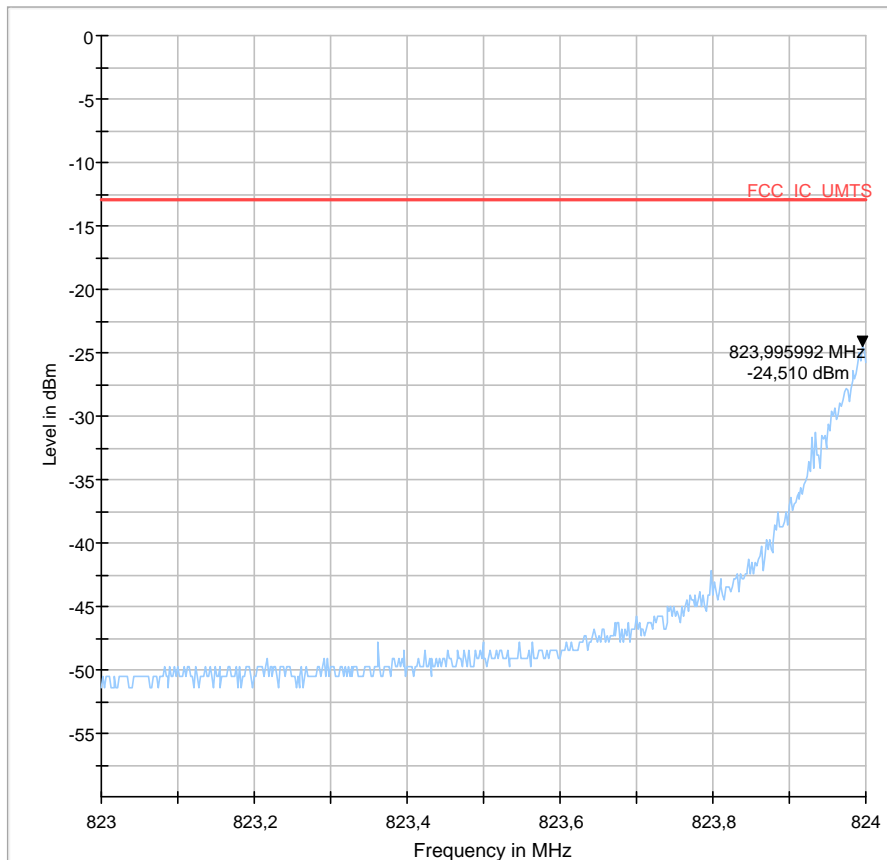
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
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

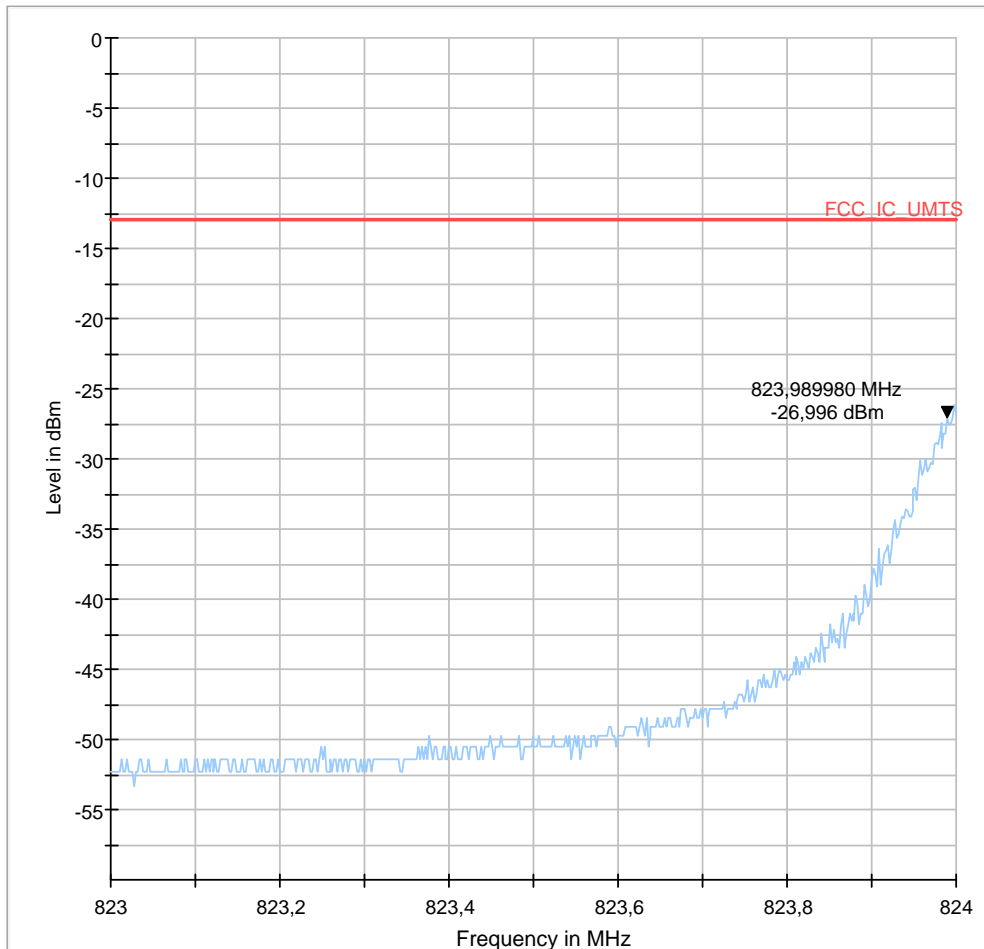
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RI's
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

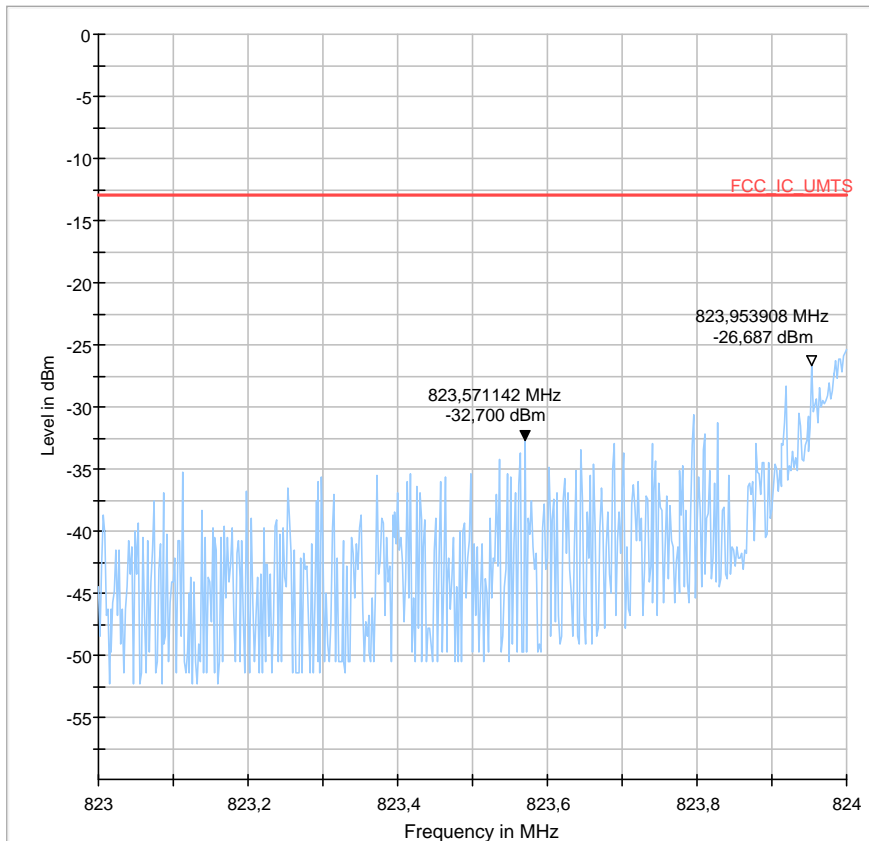
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - laying position

EUT Information

Manufacturer:	peiker acoustic 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

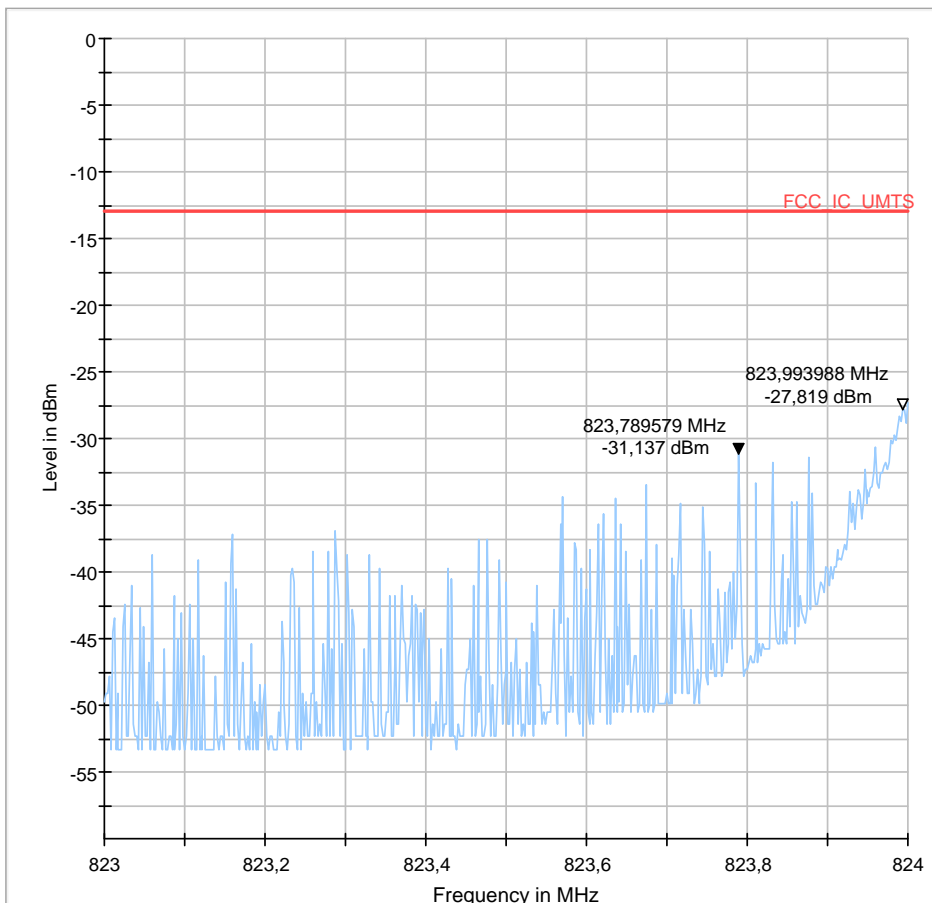
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
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

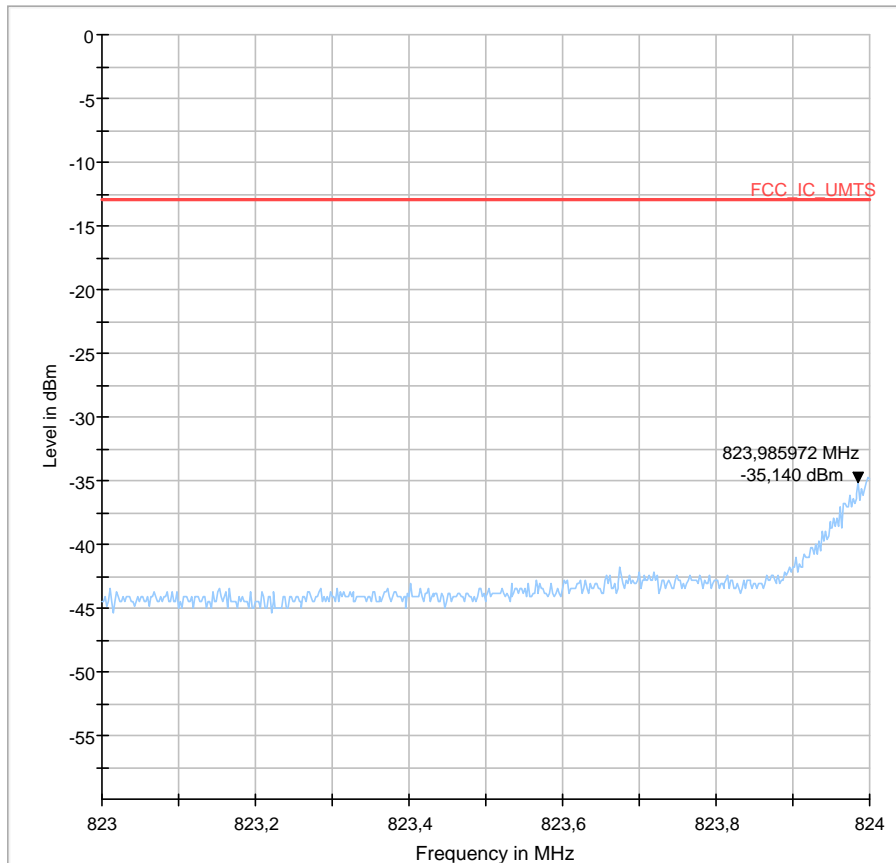
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
Remarks:	EUT - standing position

EUT Information

Manufacturer:	peiker acoustic 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

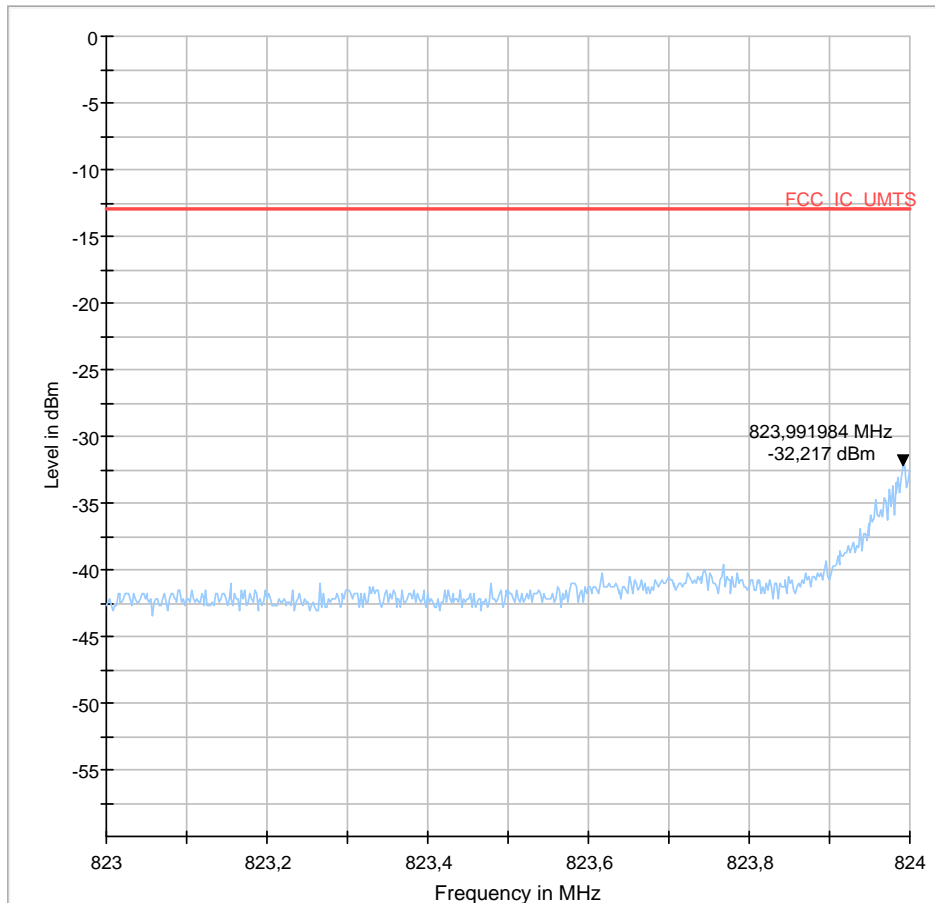
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
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

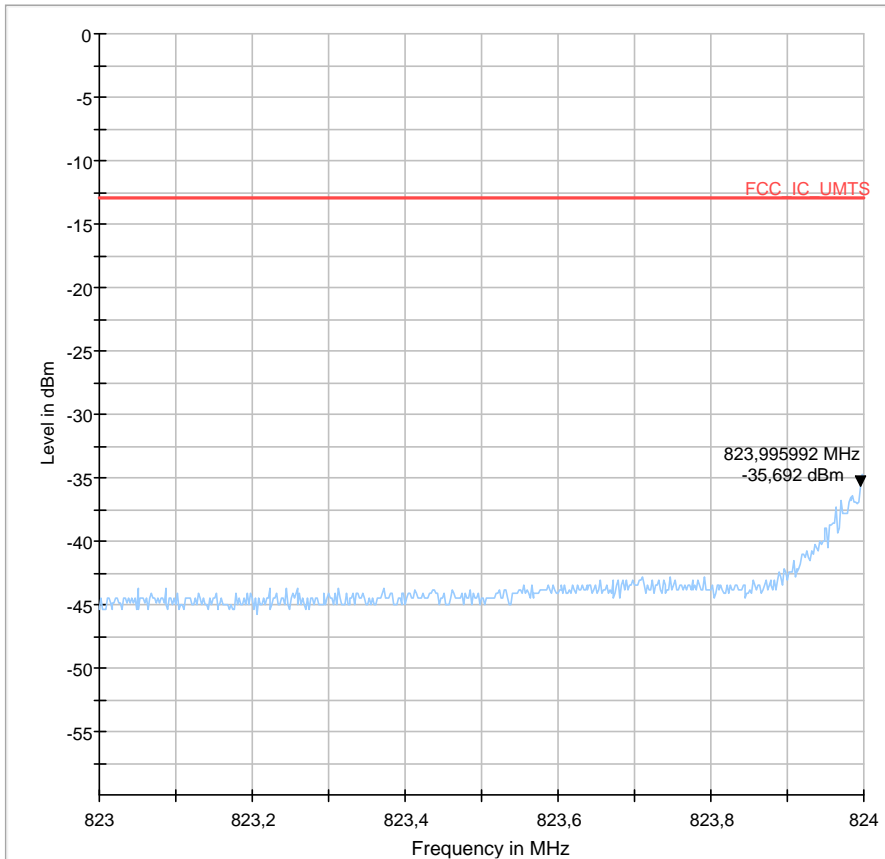
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RIs
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

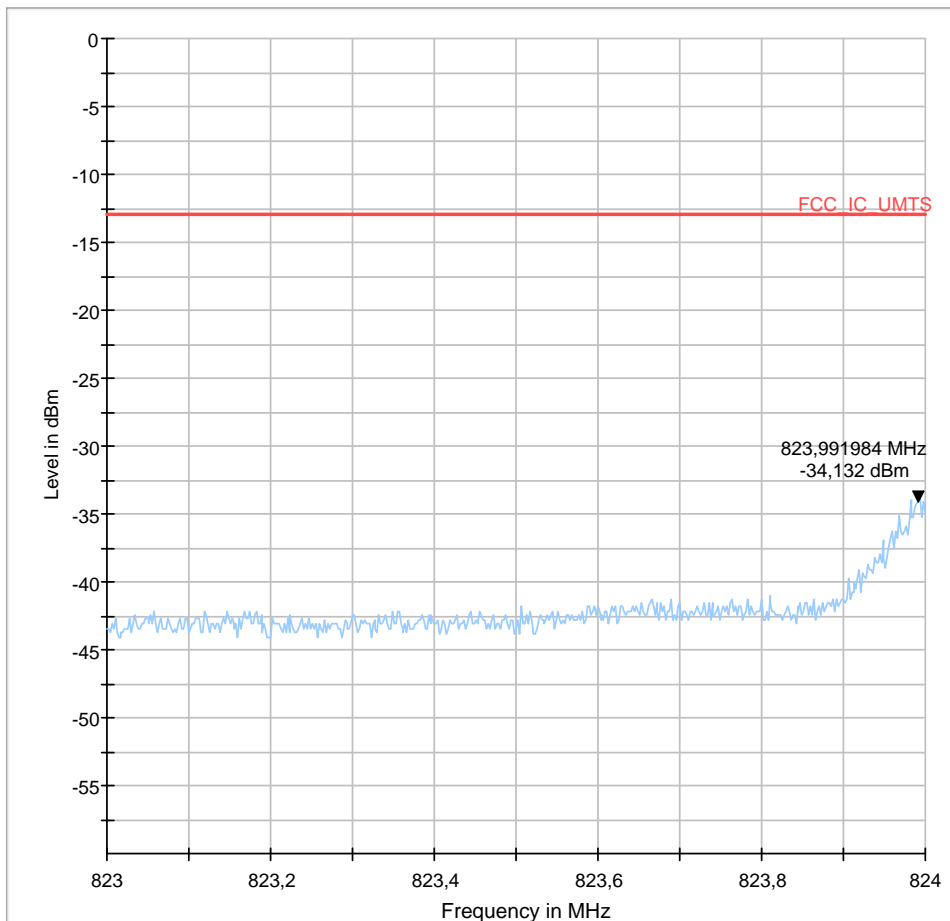
Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20425
Environmental Conditions:	Humidity: 46%rH; Temperature: 20°C
Operator:	RI
Remarks:	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

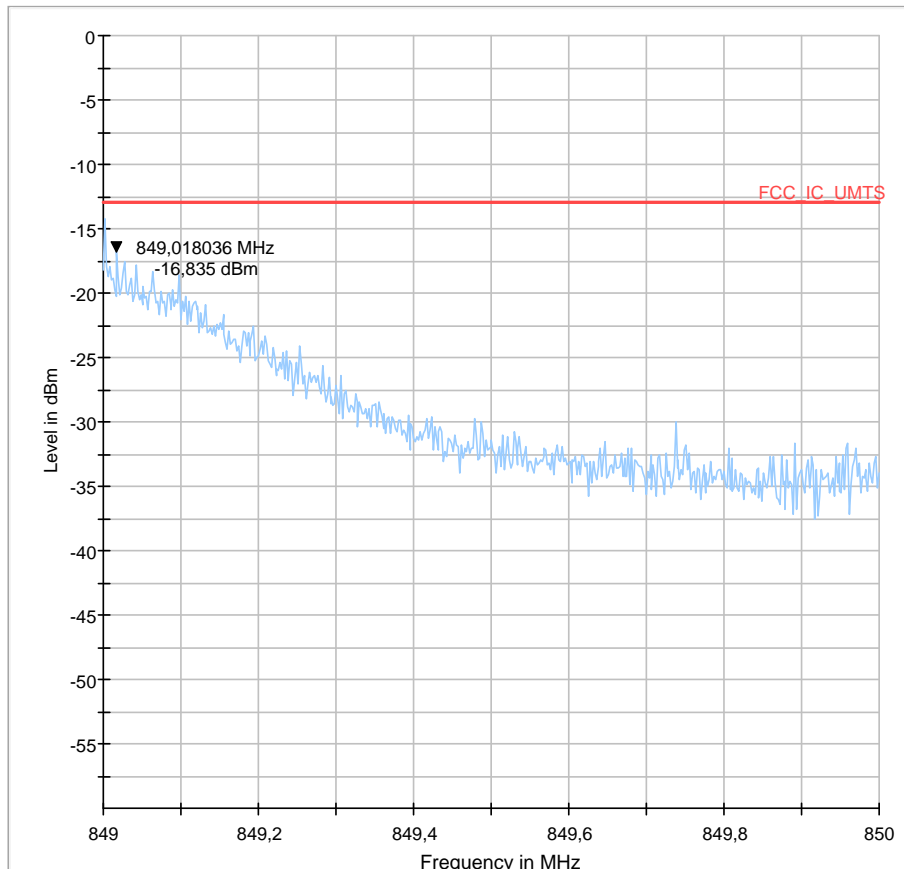
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 206043 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH;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

EUT Information

Manufacturer:	peiker acoustic 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

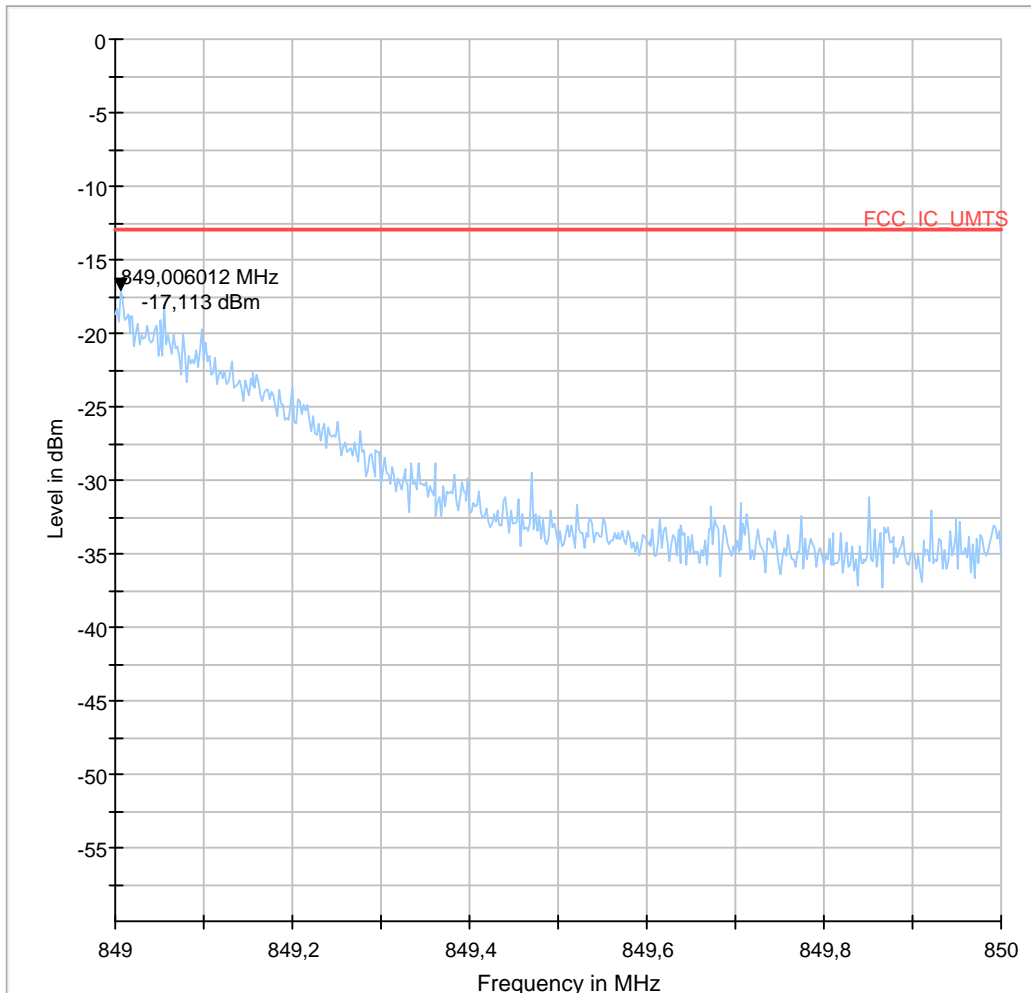
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH; Temperature: 22°C
Operator:	RI5
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

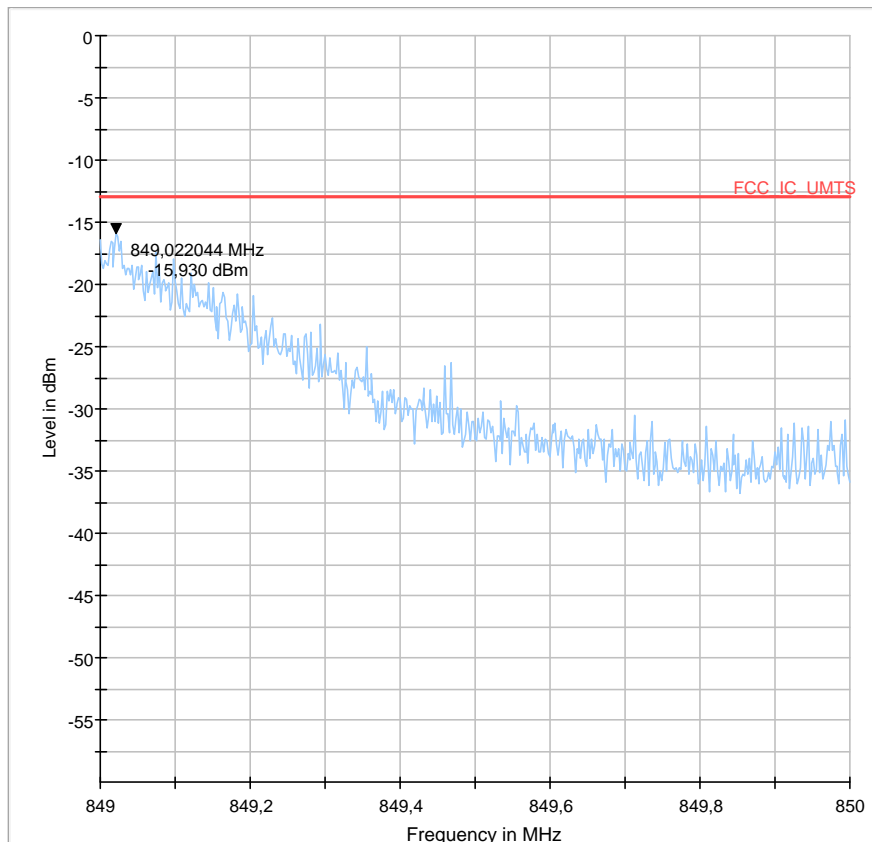
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH;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

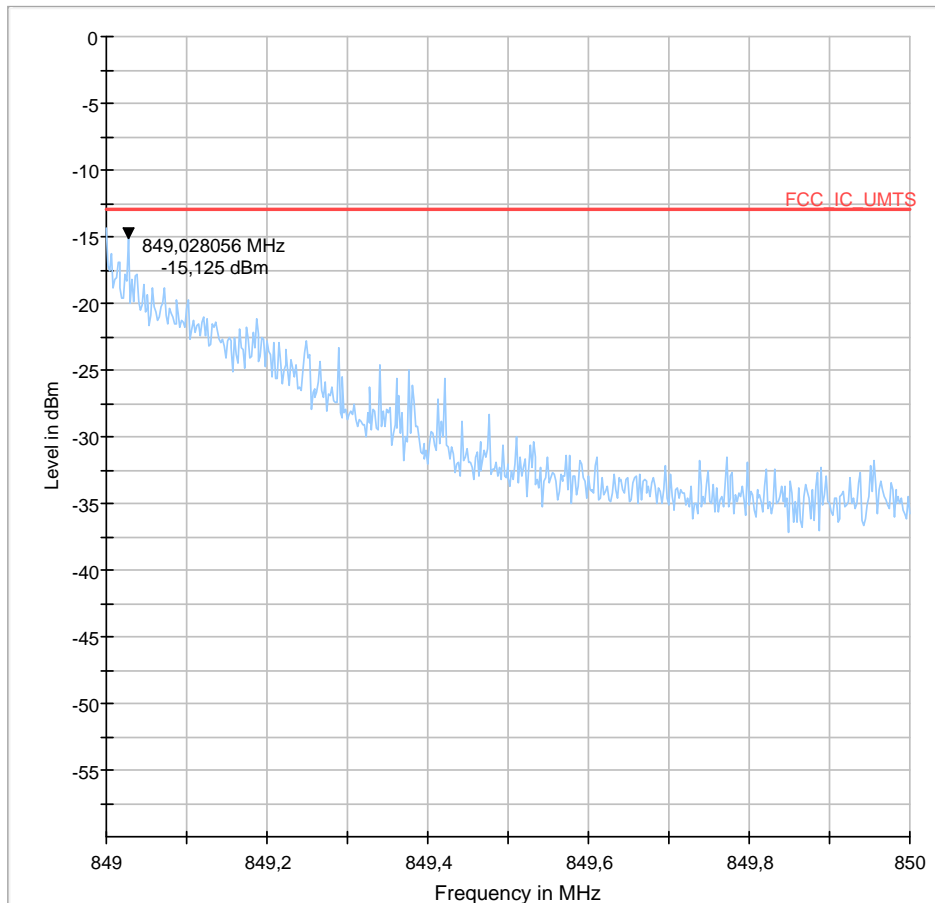
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH;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

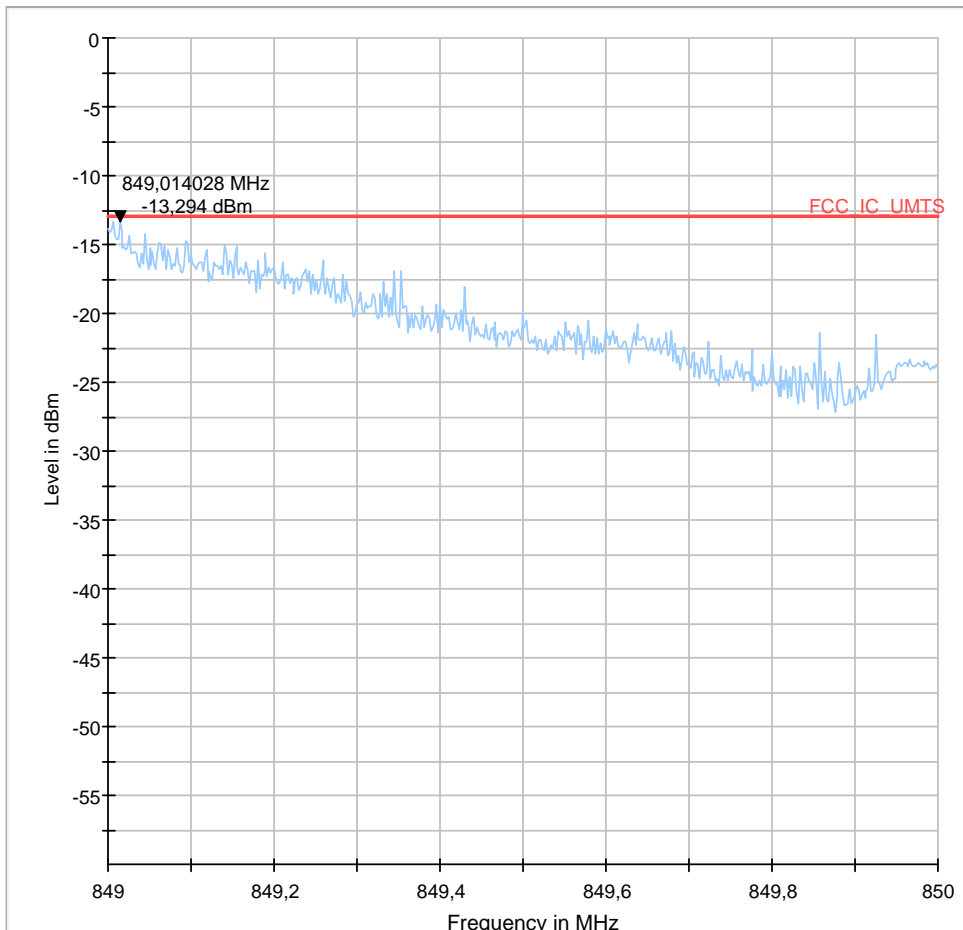
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
Environmental Conditions:	Humidity: 35%rH;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

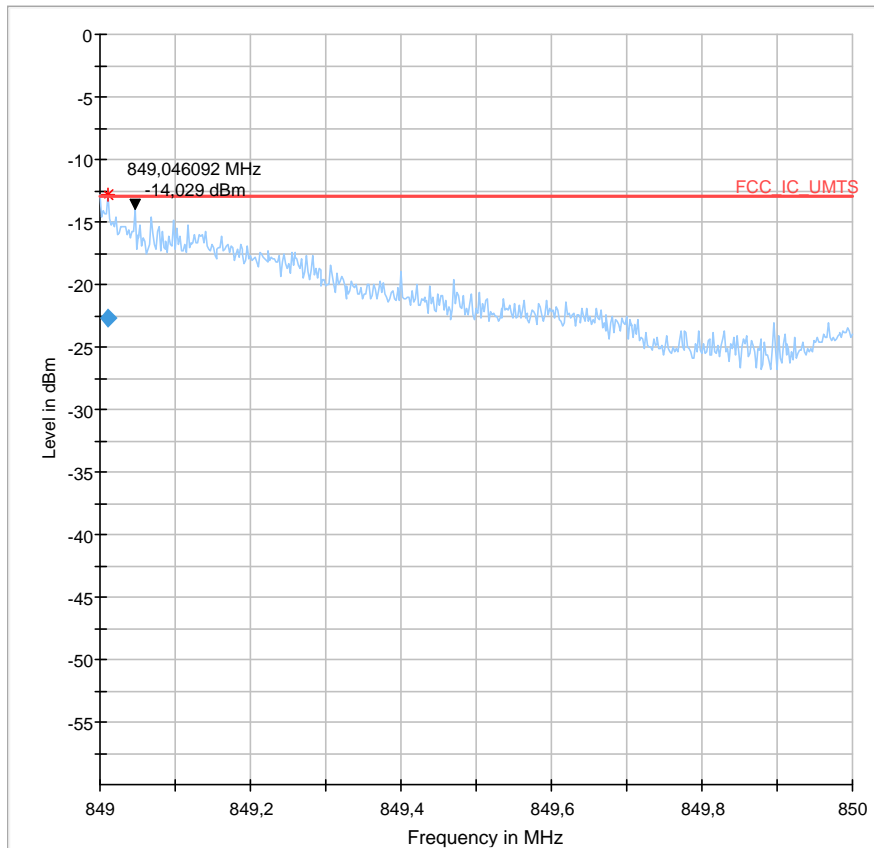
Test Description: Band-Edge High - Radiated Spurious Emissions LTE Band V
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 22.917(a)
 Operating Mode: UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QPSK
 Environmental Conditions: Humidity: 35%rH;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

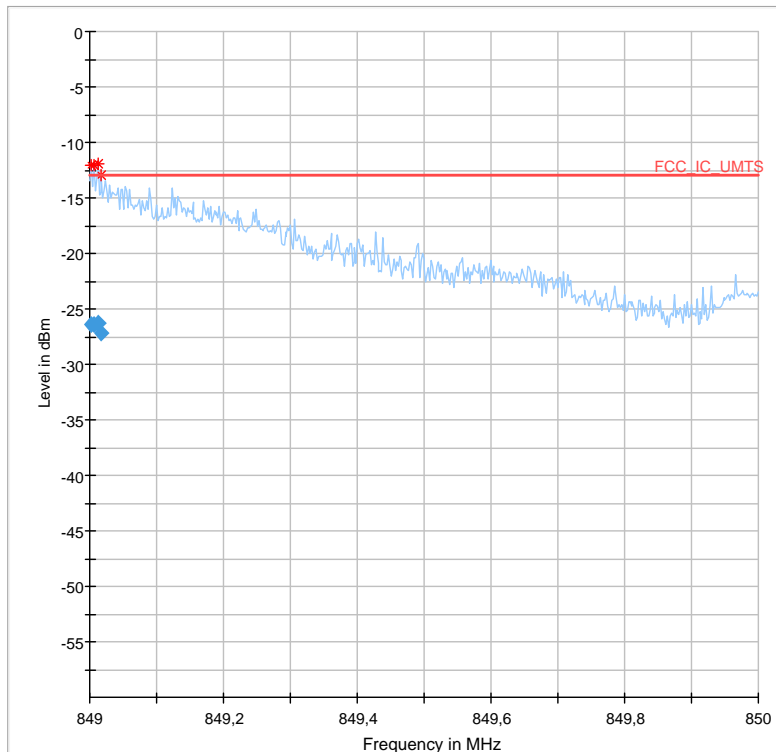
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH;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

Full Spectrum



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

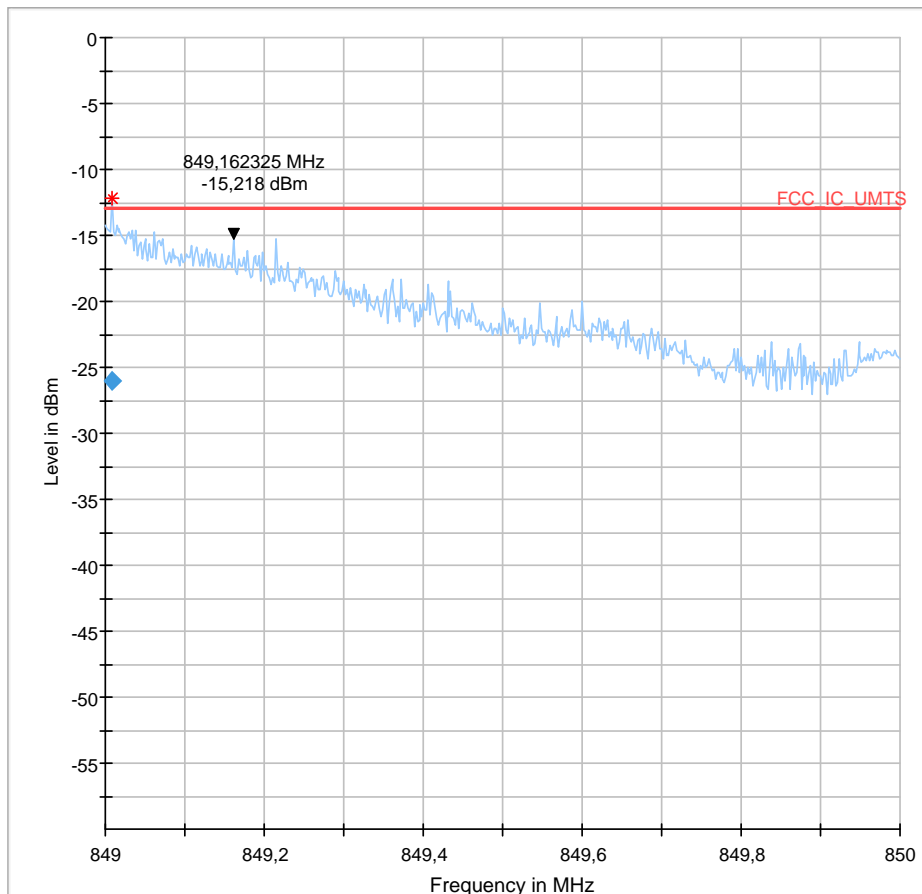
Test Description:	Band-Edge High - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 20643 (fc = 844.0MHz), BW_10MHz, QAM
Environmental Conditions:	Humidity: 35%rH;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

EUT Information

Manufacturer:	peiker acoustic 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

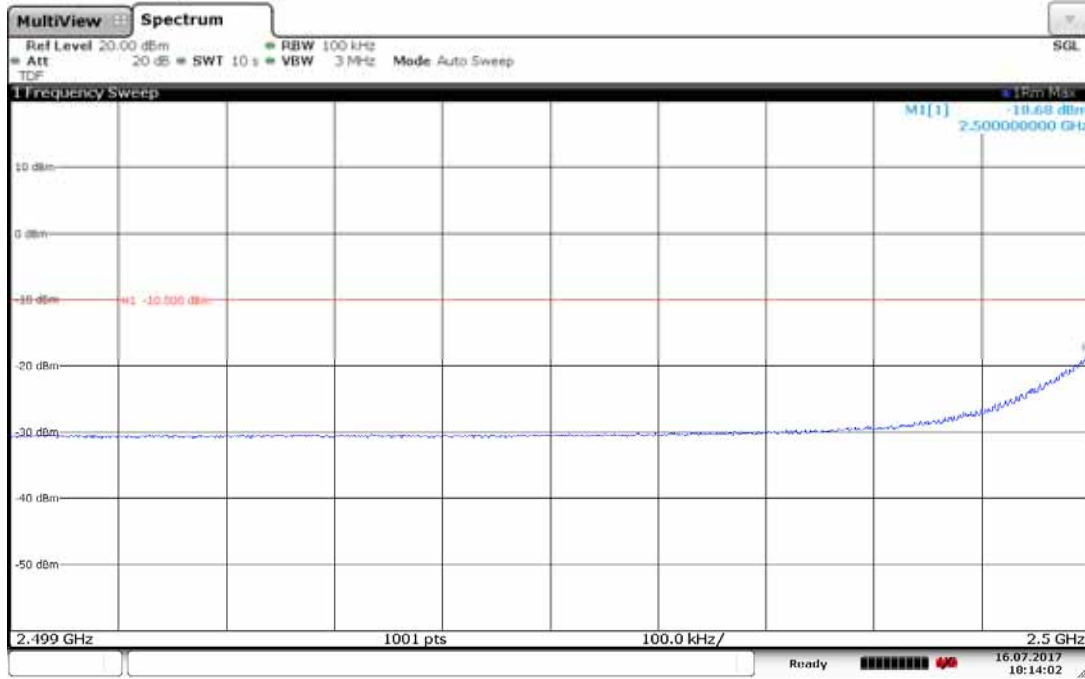


Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Measurement Time	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Correction (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



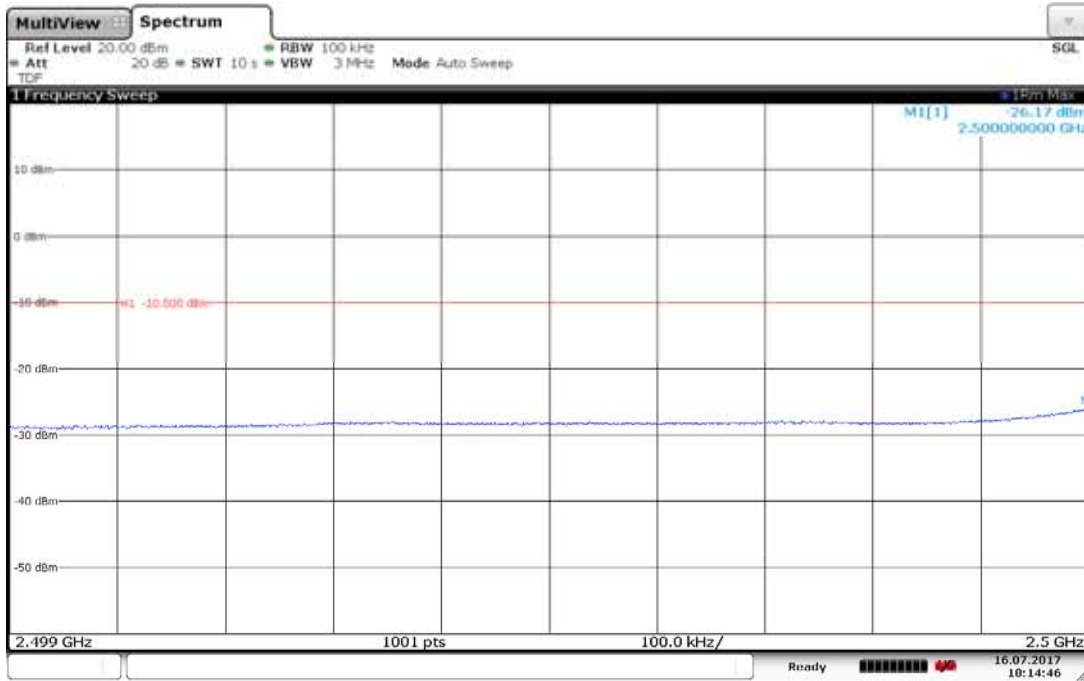
18:14:03 16.07.2017

9.701_BE_Low_Ch20775_QPSK_1RBs_Sweep1



18:13:29 16.07.2017

9.701_BE_Low_Ch20775_QPSK_1RBs_Sweep2



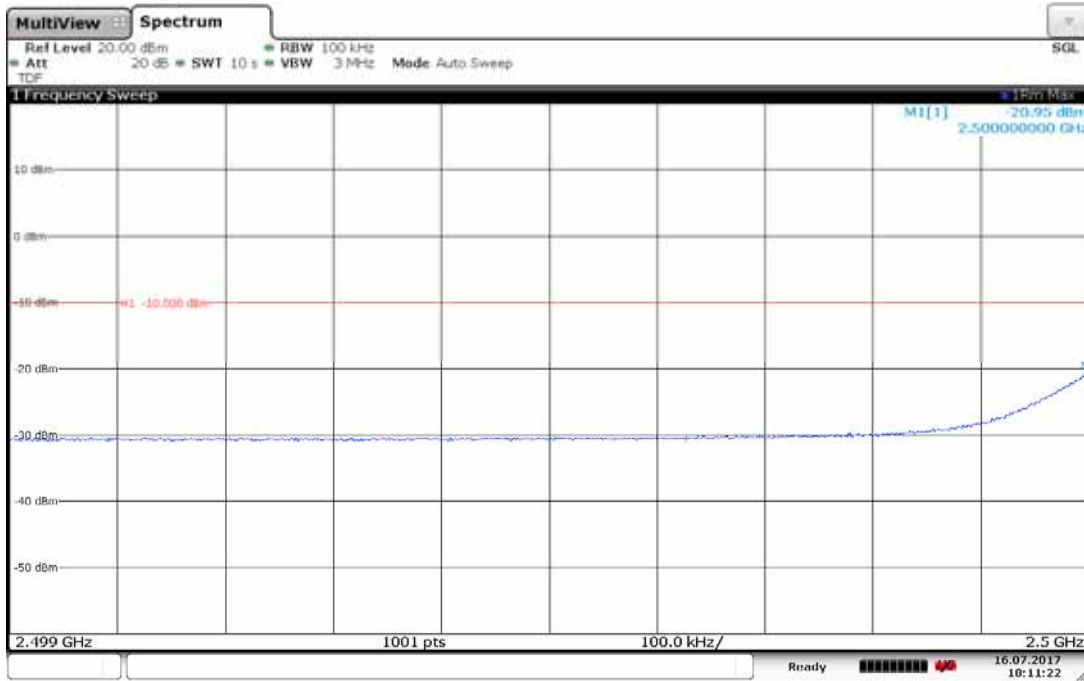
18:14:47 16.07.2017

9.702_BE_Low_Ch20775_QPSK_25RBs_Sweep1



18:15:43 16.07.2017

9.702_BE_Low_Ch20775_QPSK_25RBs_Sweep2



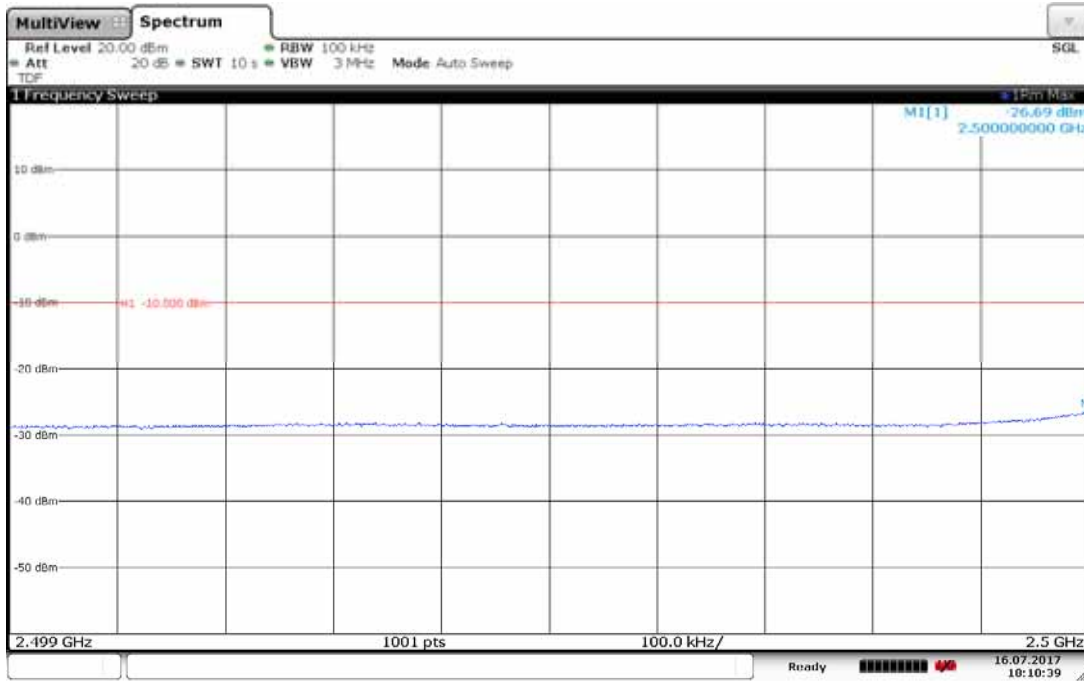
18:11:22 16.07.2017

9.703_BE_Low_Ch20775_16QAM_1RBs_Sweep1



18:12:33 16.07.2017

9.703_BE_Low_Ch20775_16QAM_1RBs_Sweep2



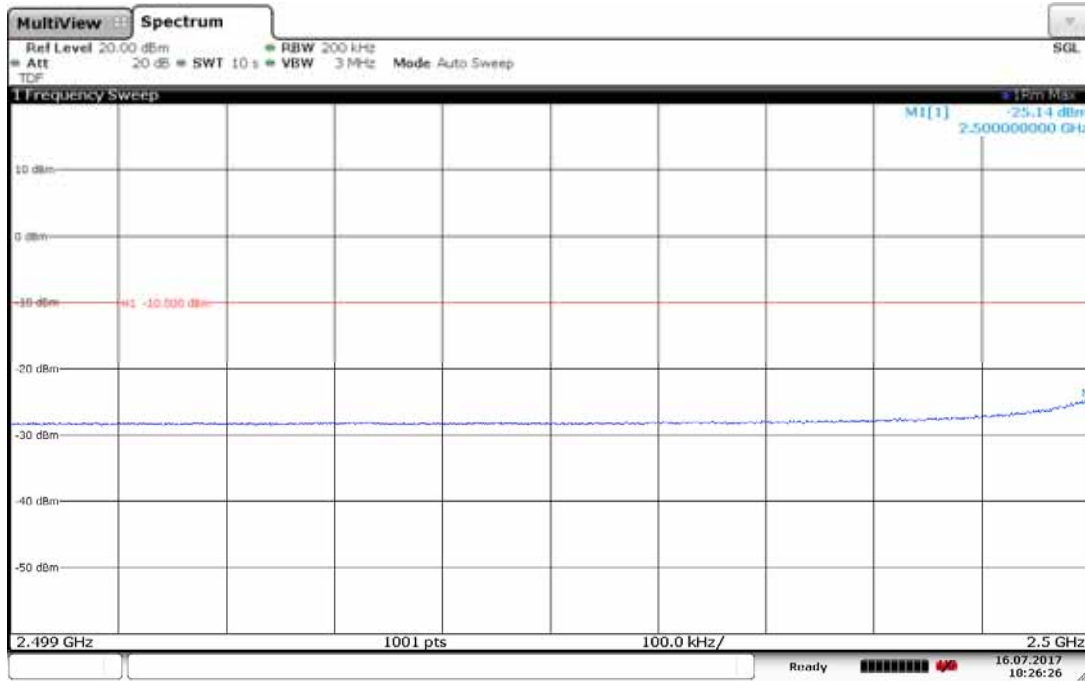
18:10:39 16.07.2017

9.704_BE_Low_Ch20775_16QAM_25RBs_Sweep1



18:09:54 16.07.2017

9.704_BE_Low_Ch20775_16QAM_25RBs_Sweep2



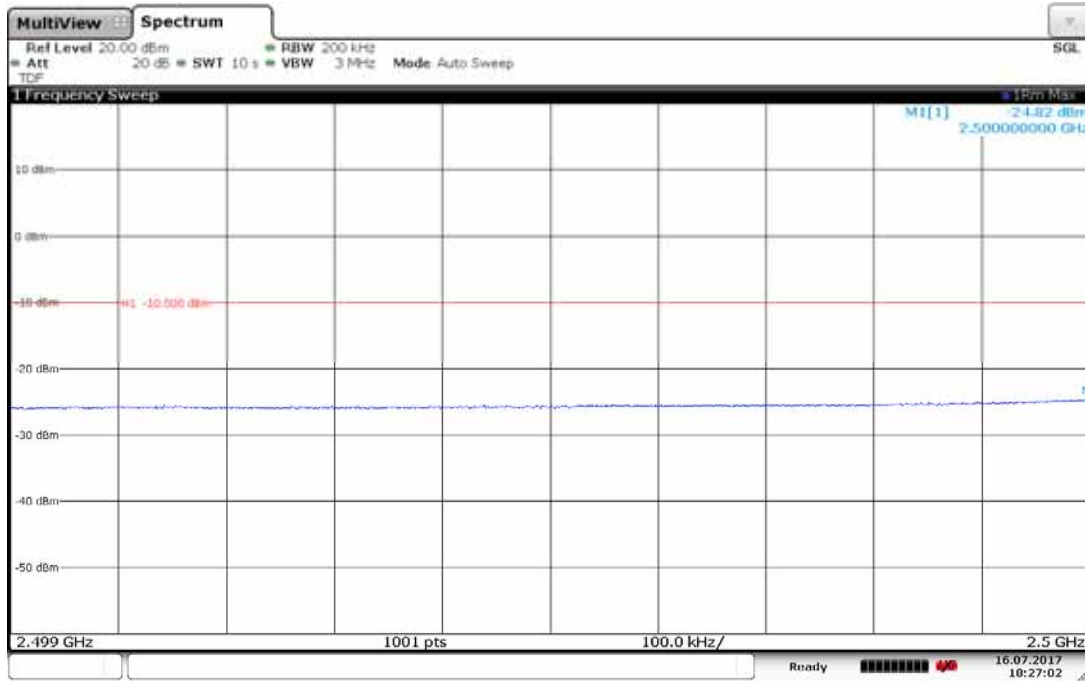
18:26:26 16.07.2017

9.705_BE_Low_Ch20800_QPSK_1RBs_Sweep1



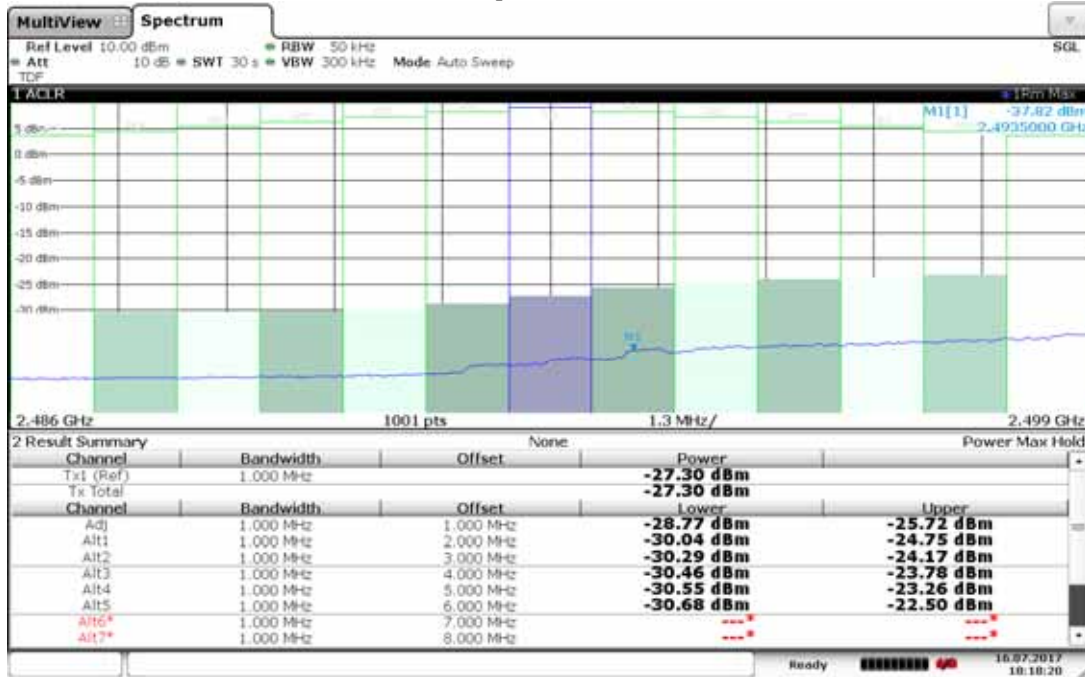
18:21:10 16.07.2017

9.705_BE_Low_Ch20800_QPSK_1RBs_Sweep2



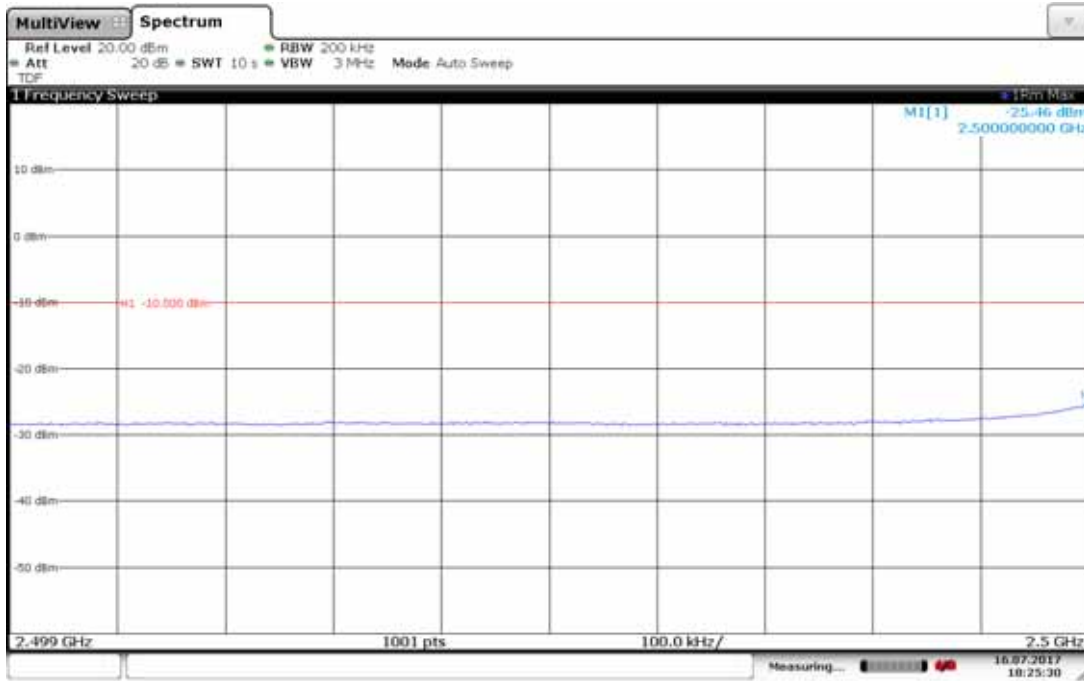
18:27:02 16.07.2017

9.706_BE_Low_Ch20800_QPSK_50RBs_Sweep1



18:18:21 16.07.2017

9.706_BE_Low_Ch20800_QPSK_50RBs_Sweep2



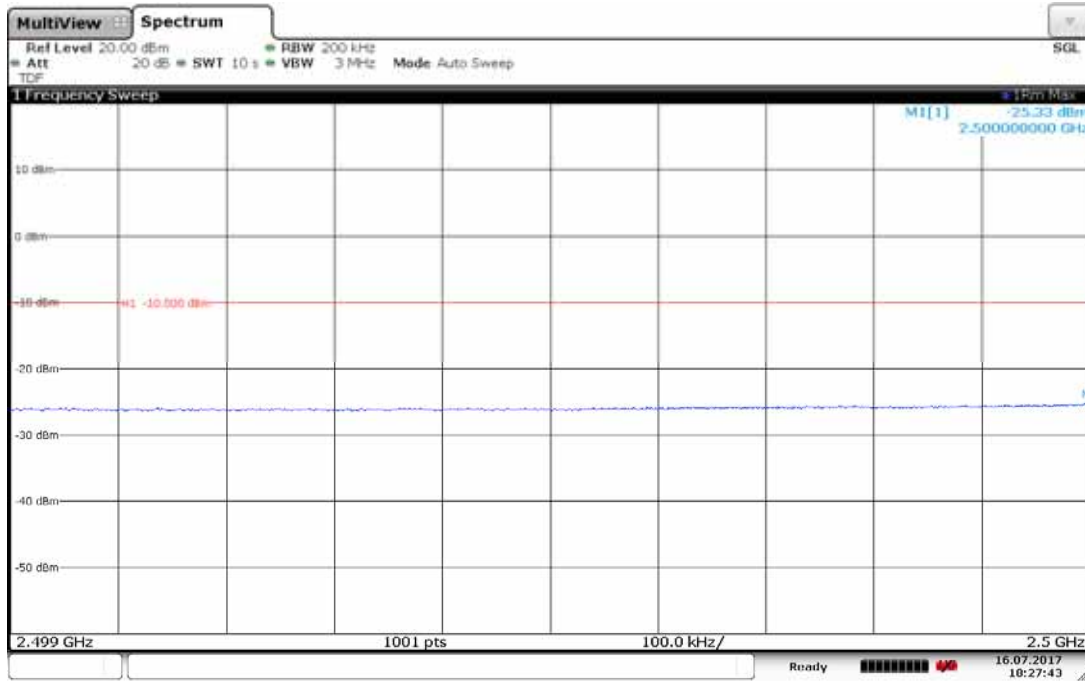
18:25:30 16.07.2017

9.707_BE_Low_Ch20800_16QAM_1RBs_Sweep1



18:22:46 16.07.2017

9.707_BE_Low_Ch20800_16QAM_1RBs_Sweep2



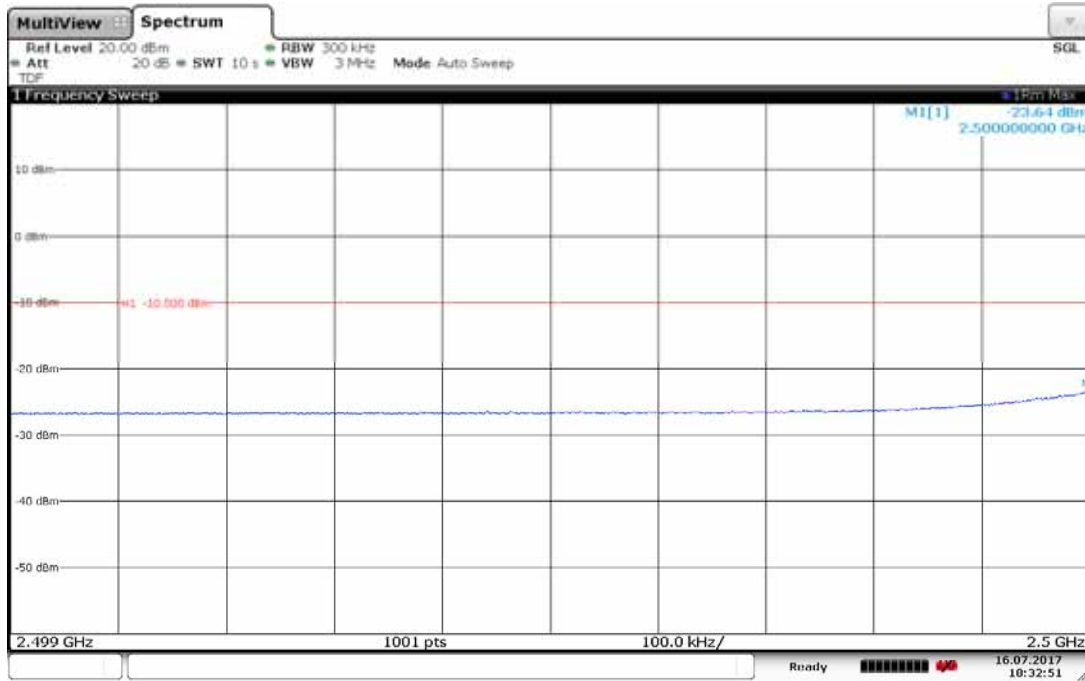
18:27:44 16.07.2017

9.708_BE_Low_Ch20800_16QAM_50RBs_Sweep1



18:28:43 16.07.2017

9.708_BE_Low_Ch20800_16QAM_50RBs_Sweep2



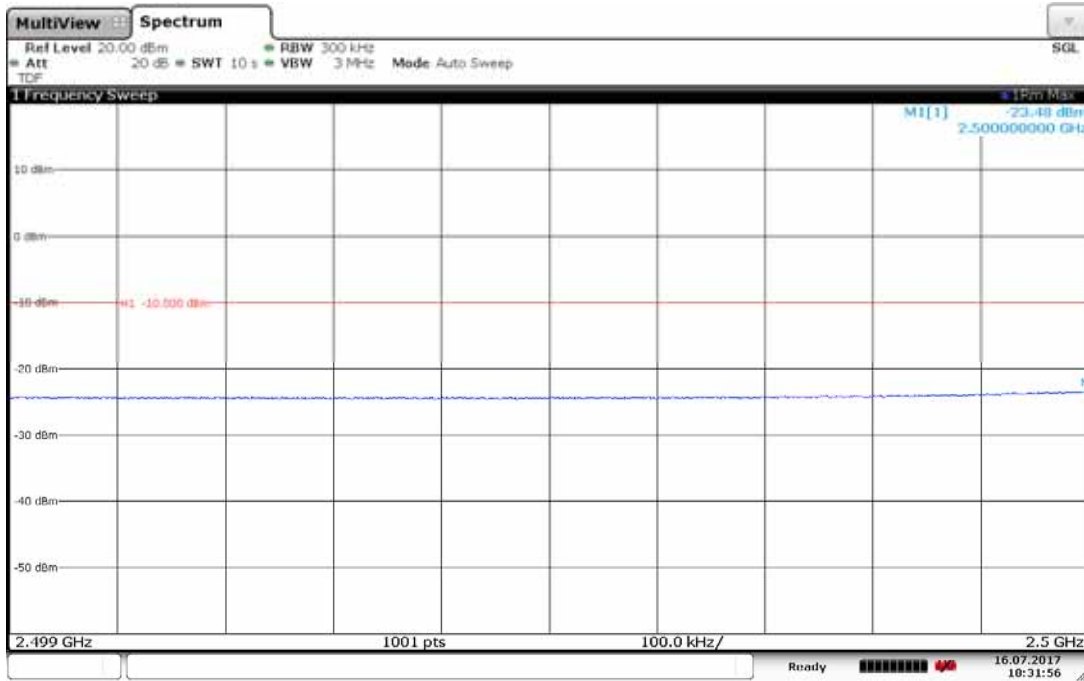
18:32:51 16.07.2017

9.709_BE_Low_Ch20825_QPSK_1RBs_Sweep1



18:37:42 16.07.2017

9.709_BE_Low_Ch20825_QPSK_1RBs_Sweep2



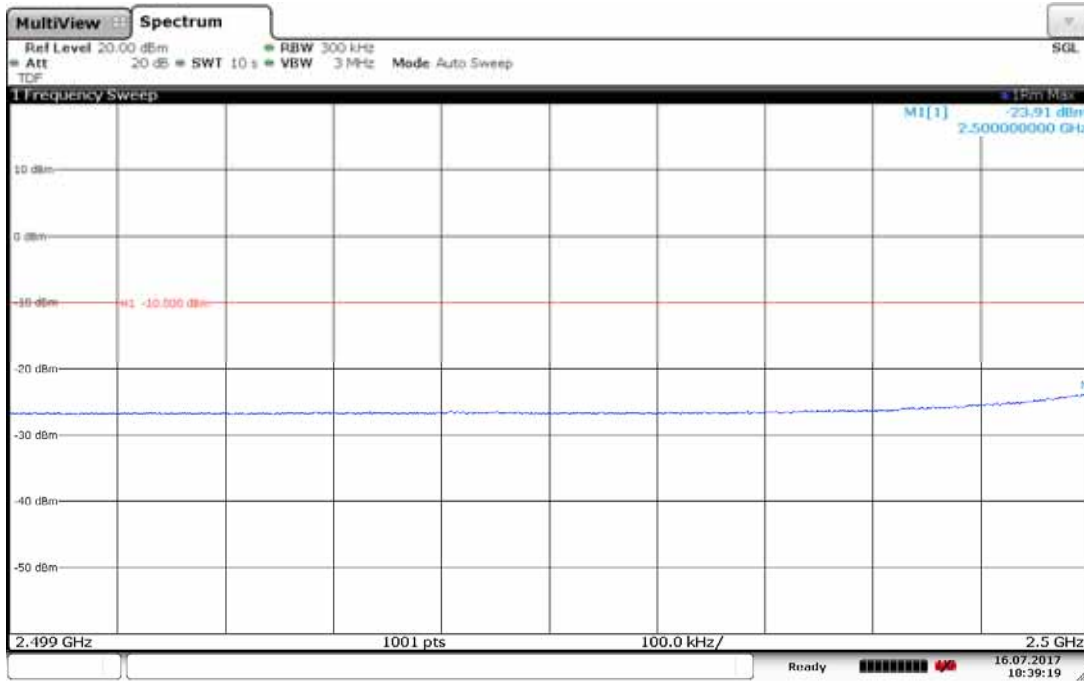
18:31:57 16.07.2017

9.710_BE_Low_Ch20825_QPSK_75RBs_Sweep1



18:31:00 16.07.2017

9.710_BE_Low_Ch20825_QPSK_75RBs_Sweep2



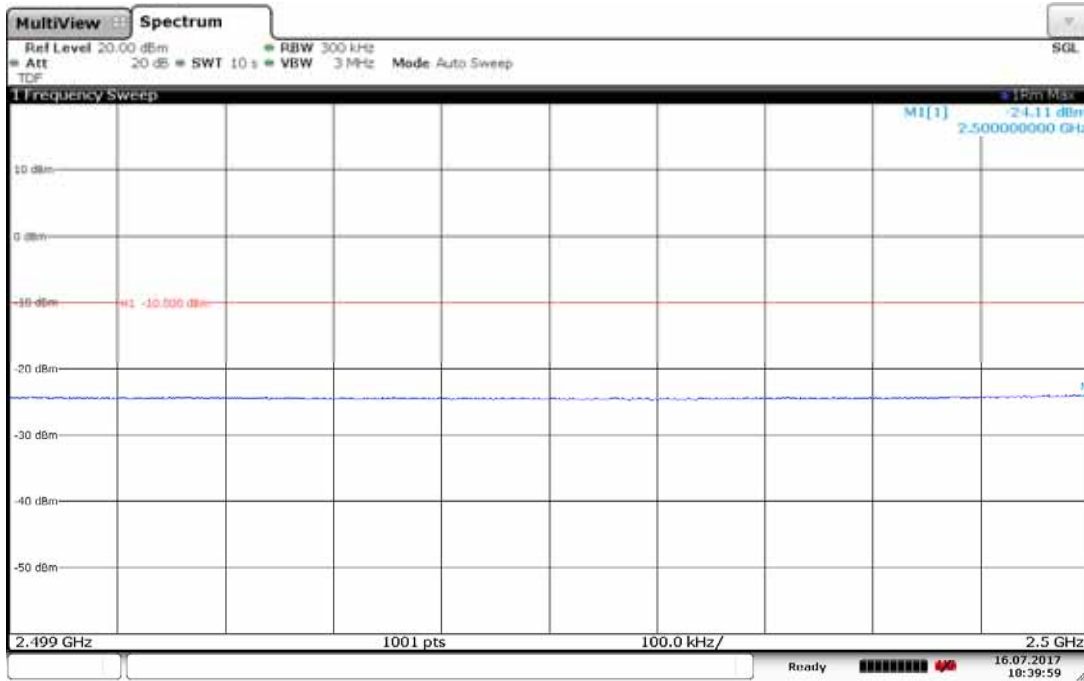
18:39:20 16.07.2017

9.711_BE_Low_Ch20825_16QAM_1RBs_Sweep1



18:38:40 16.07.2017

9.711_BE_Low_Ch20825_16QAM_1RBs_Sweep2



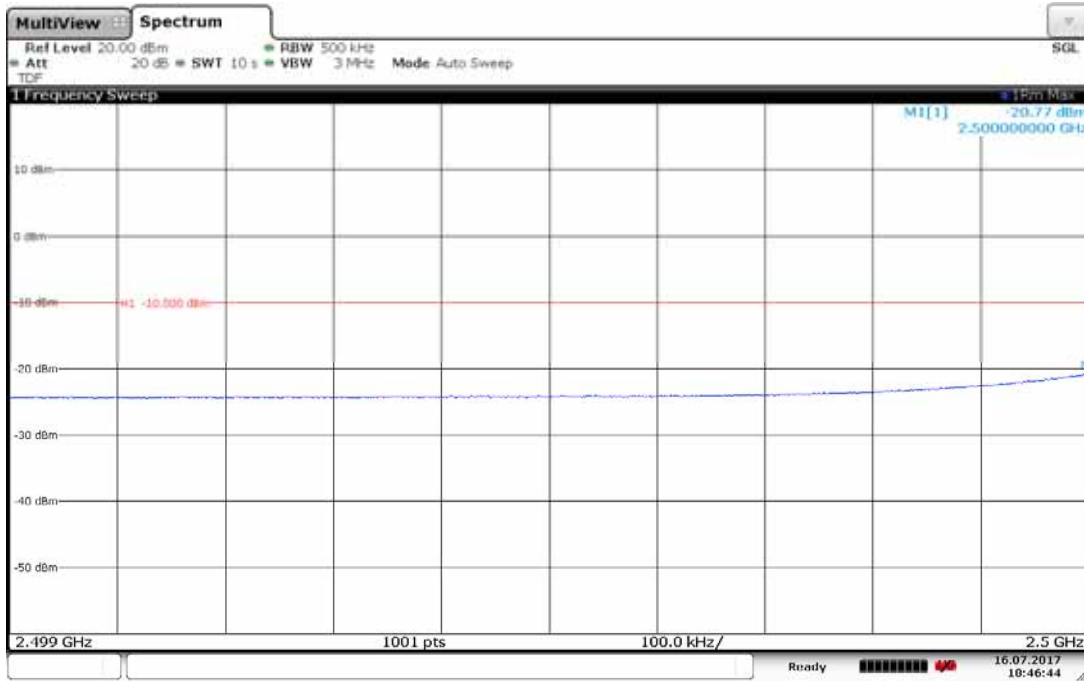
18:40:00 16.07.2017

9.712_BE_Low_Ch20825_16QAM_75RBs_Sweep1



18:40:50 16.07.2017

9.712_BE_Low_Ch20825_16QAM_75RBs_Sweep2



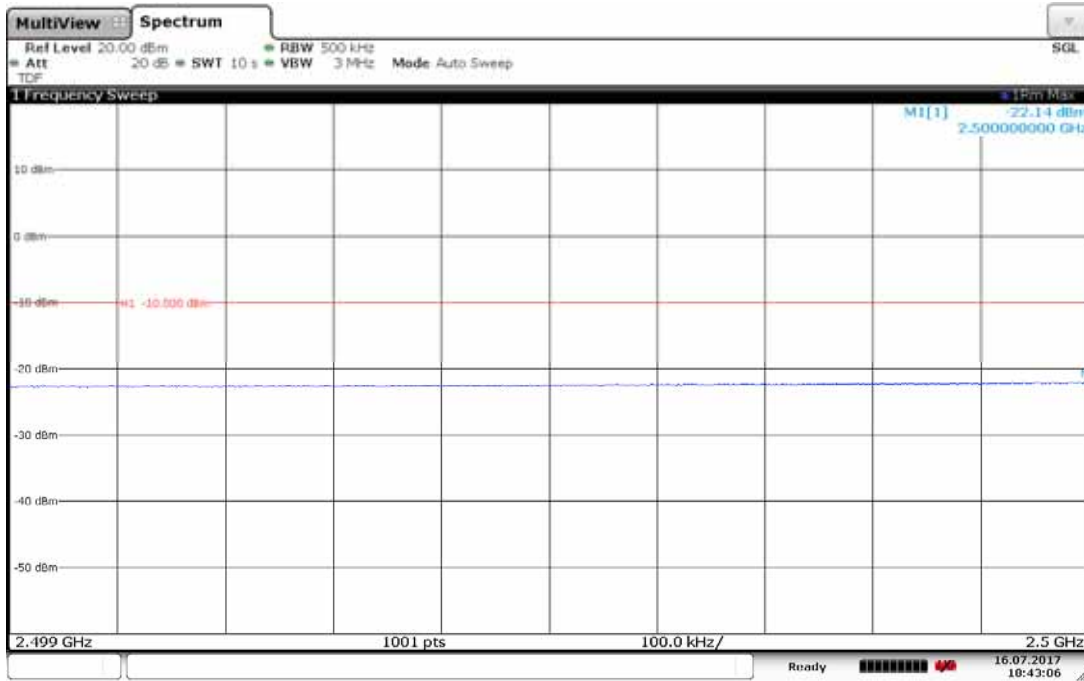
18:46:45 16.07.2017

9.713_BE_Low_Ch20850_QPSK_1RBs_Sweep1



18:45:56 16.07.2017

9.713_BE_Low_Ch20850_QPSK_1RBs_Sweep2



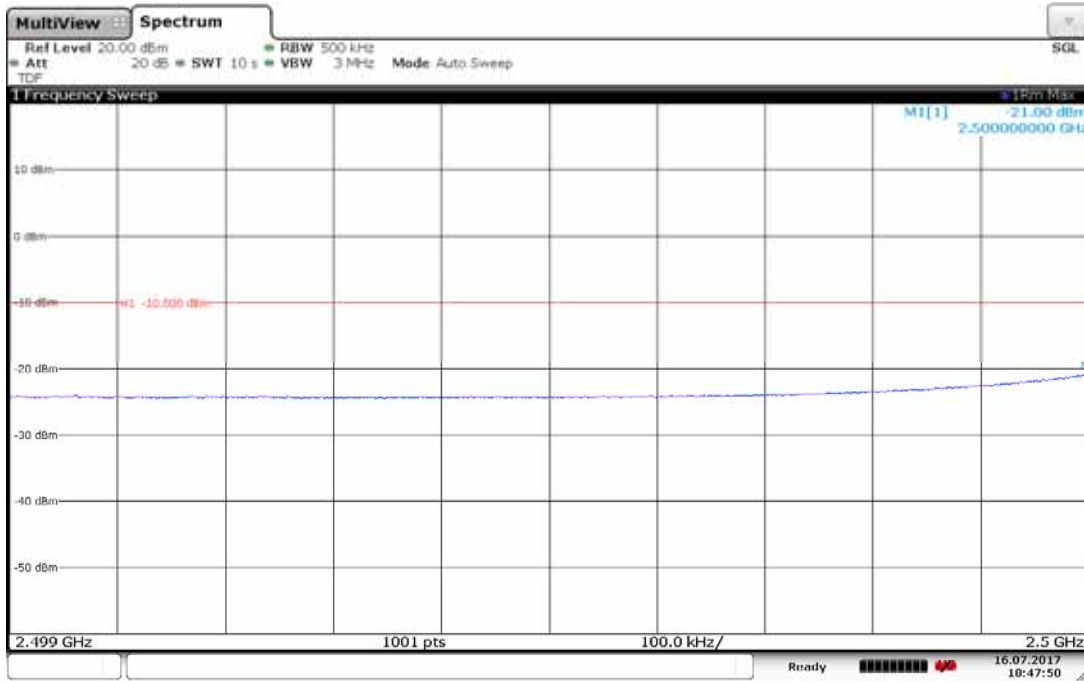
18:43:07 16.07.2017

9.714_BE_Low_Ch20850_QPSK_100RBs_Sweep1



18:44:43 16.07.2017

9.714_BE_Low_Ch20850_QPSK_100RBs_Sweep2



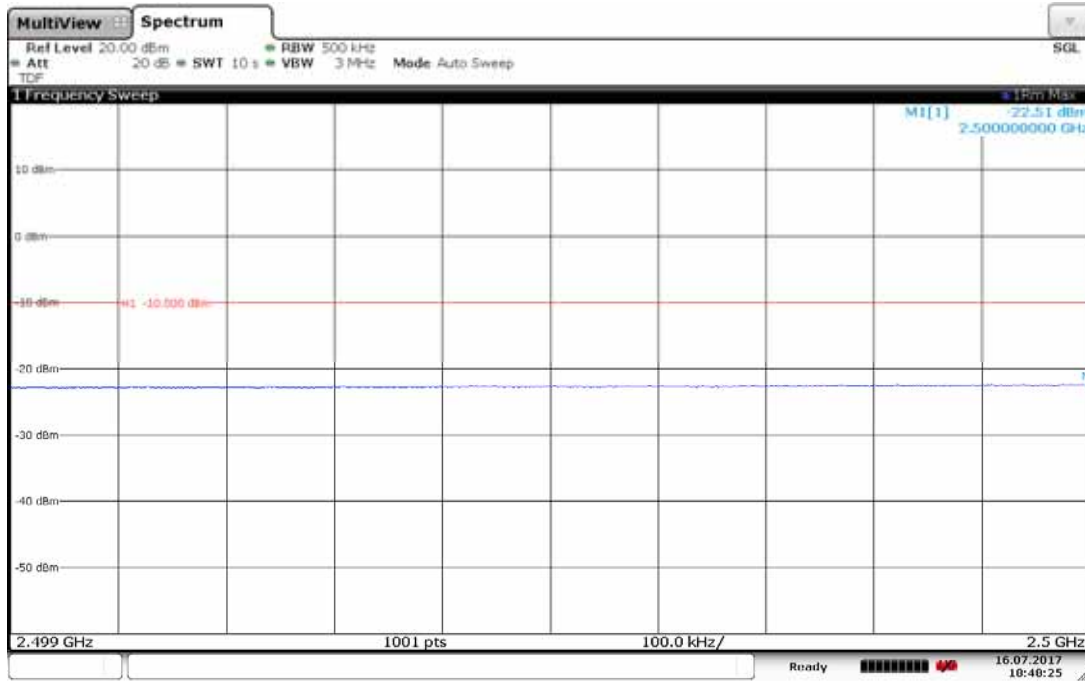
18:47:51 16.07.2017

9.715_BE_Low_Ch20850_16QAM_1RBs_Sweep1



18:50:34 16.07.2017

9.715_BE_Low_Ch20850_16QAM_1RBs_Sweep2



18:48:26 16.07.2017

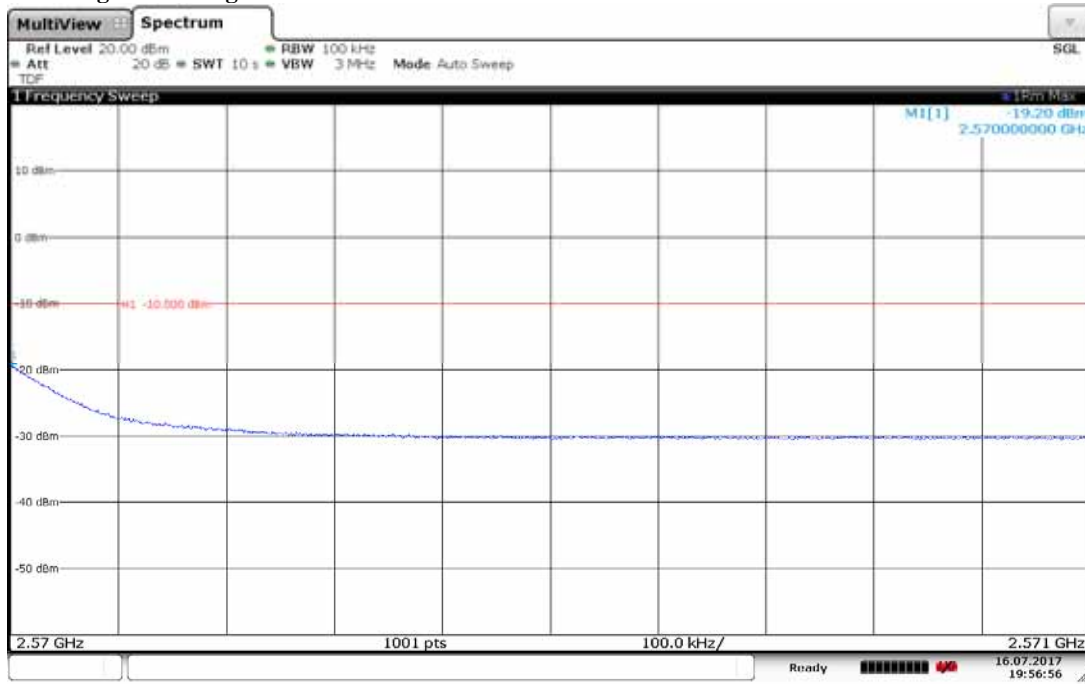
9.716_BE_Low_Ch20850_16QAM_100RBs_Sveep1



18:49:40 16.07.2017

9.716_BE_Low_Ch20850_16QAM_100RBs_Sveep2

1.6.2. High Band-Edge



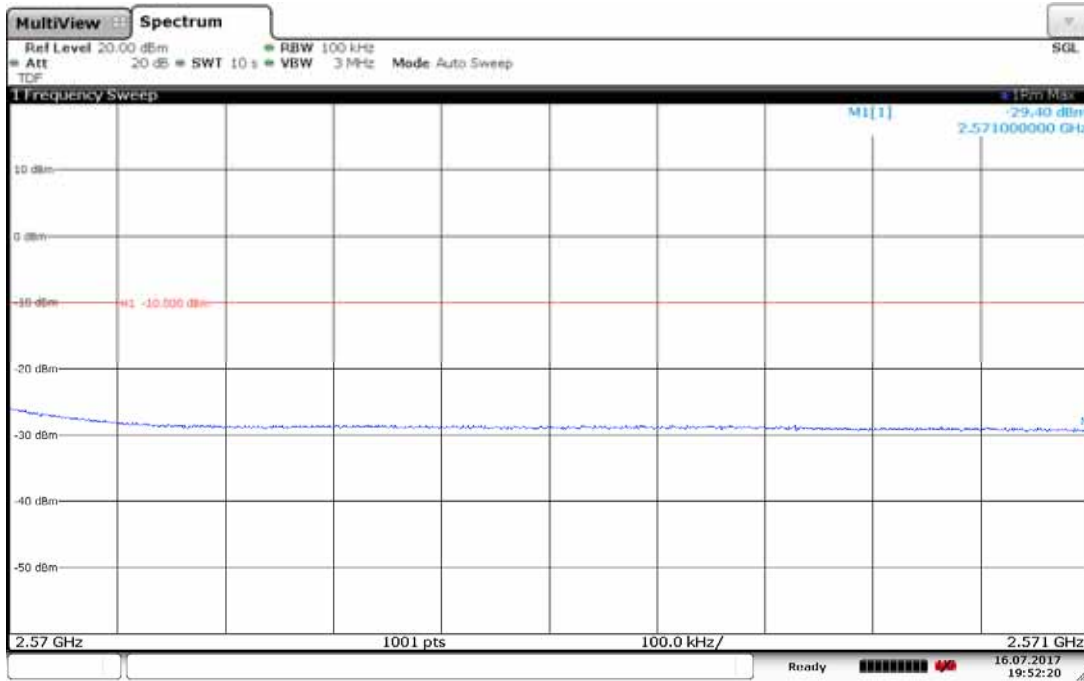
19:56:56 16.07.2017

9.717_BE_High_Ch21425_QPSK_1RBs_Sweep1



19:55:39 16.07.2017

9.717_BE_High_Ch21425_QPSK_1RBs_Sweep2



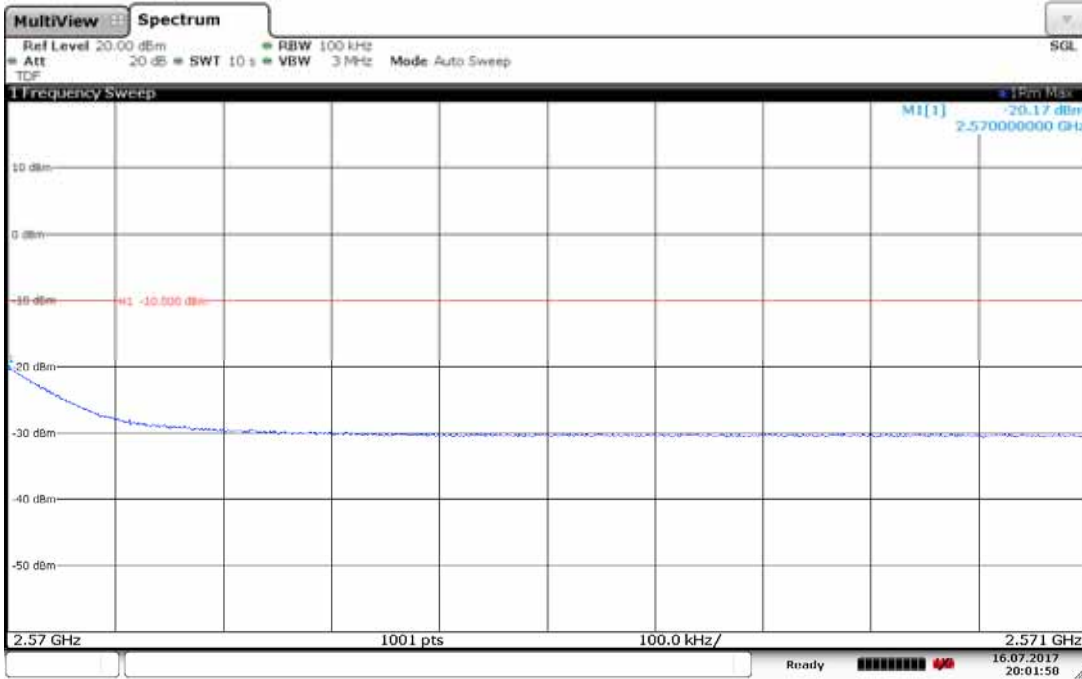
19:52:20 16.07.2017

9.718_BE_High_Ch21425_QPSK_25RBs_Sweep1



20:00:17 16.07.2017

9.718_BE_High_Ch21425_QPSK_25RBs_Sweep2



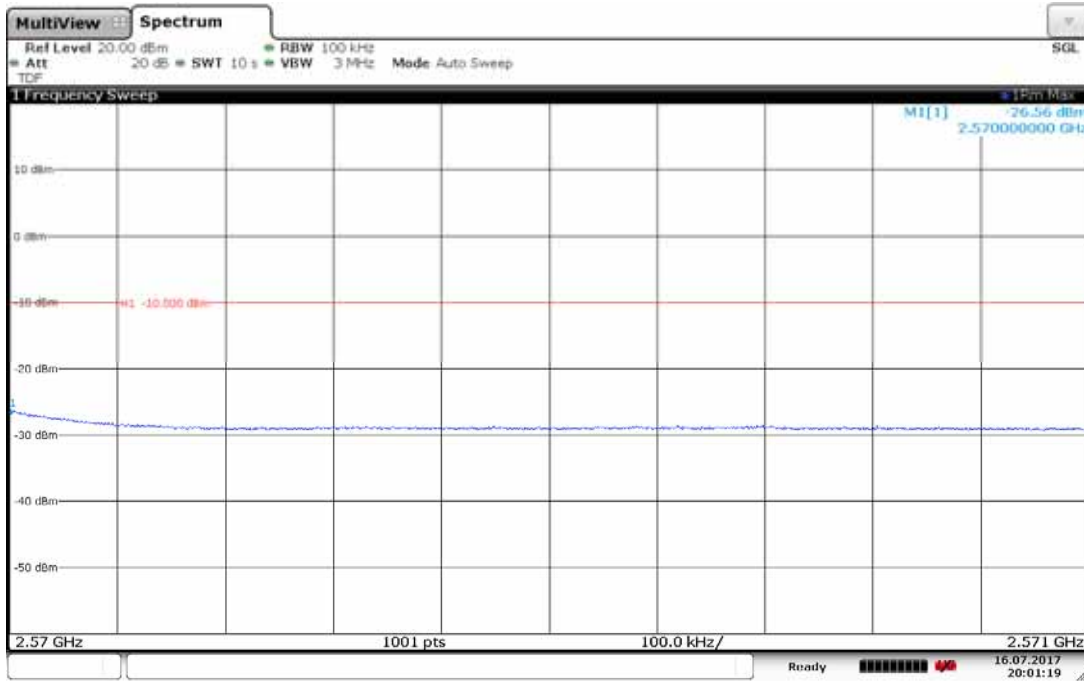
20:01:58 16.07.2017

9.719_BE_High_Ch21425_16QAM_1RBs_Sweep1



20:02:48 16.07.2017

9.719_BE_High_Ch21425_16QAM_1RBs_Sweep2



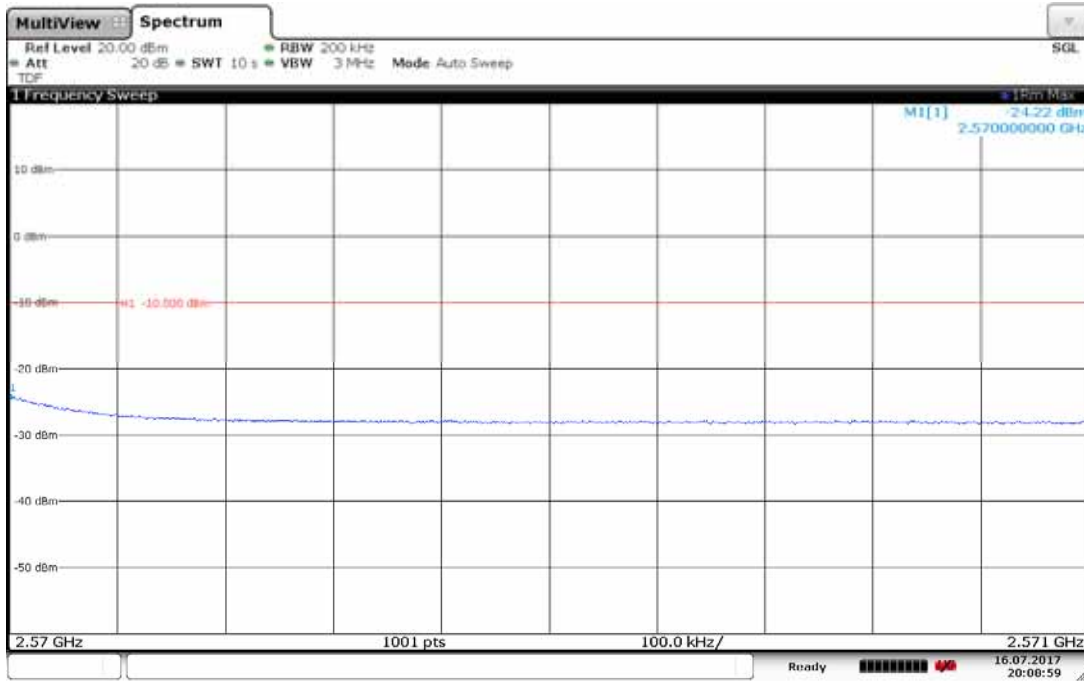
20:01:20 16.07.2017

9.720_BE_High_Ch21425_16QAM_25RBs_Sweep1



19:59:20 16.07.2017

9.720_BE_High_Ch21425_16QAM_25RBs_Sweep2



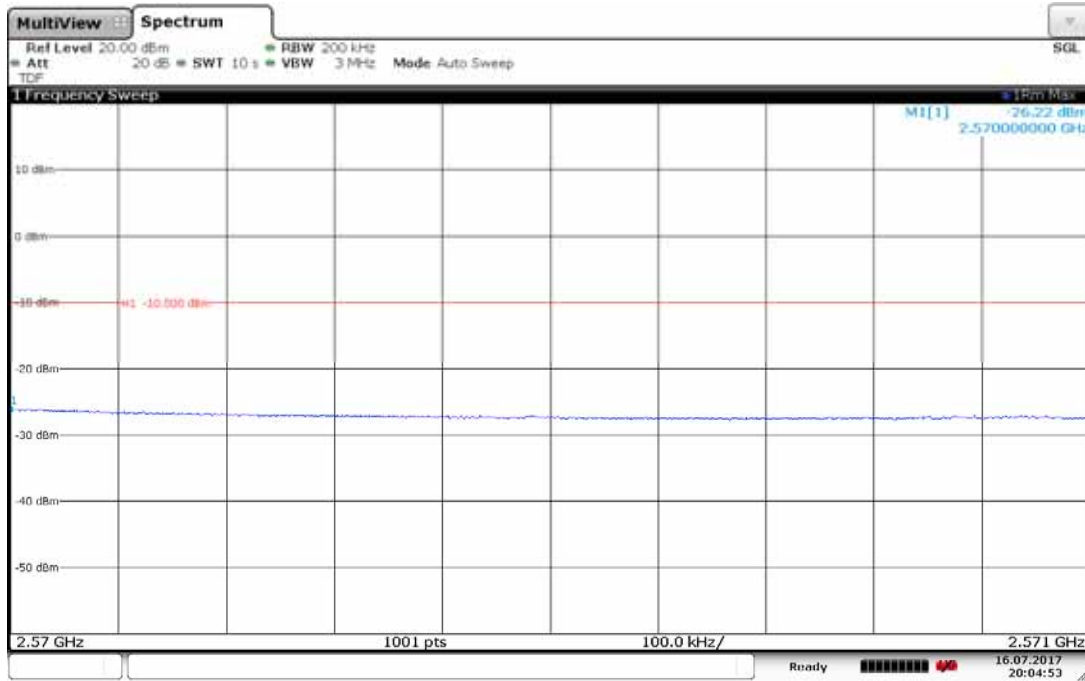
20:08:59 16.07.2017

9.721_BE_High_Ch21400_QPSK_1RBs_Sweep1



20:08:10 16.07.2017

9.721_BE_High_Ch21400_QPSK_1RBs_Sweep2



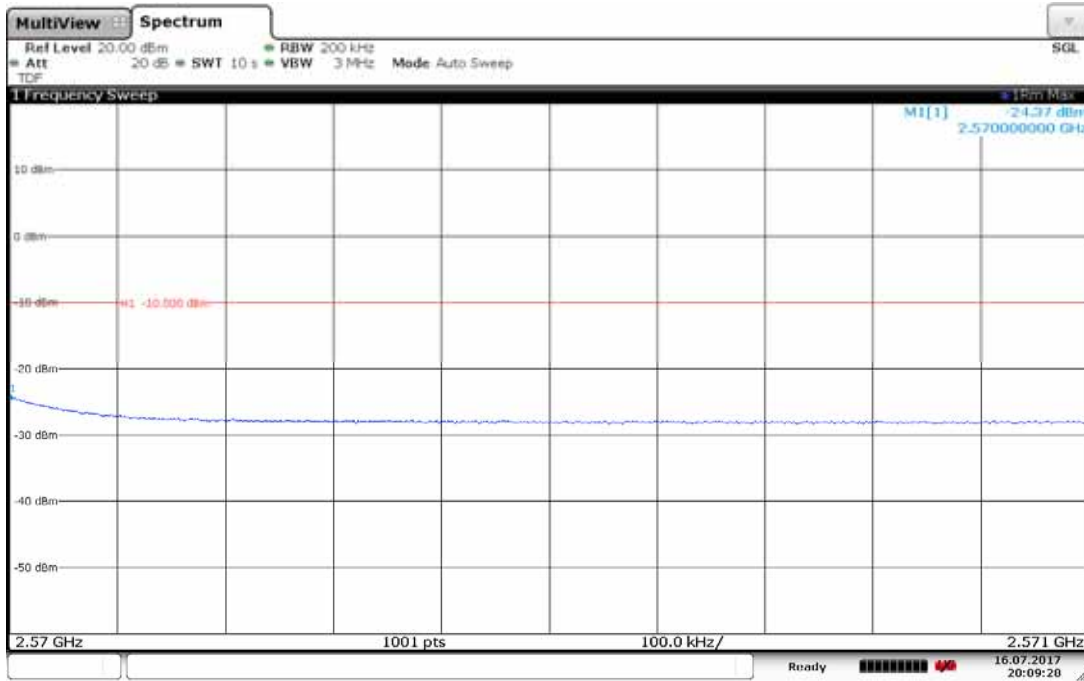
20:04:54 16.07.2017

9.722_BE_High_Ch21400_QPSK_50RBs_Sweep1



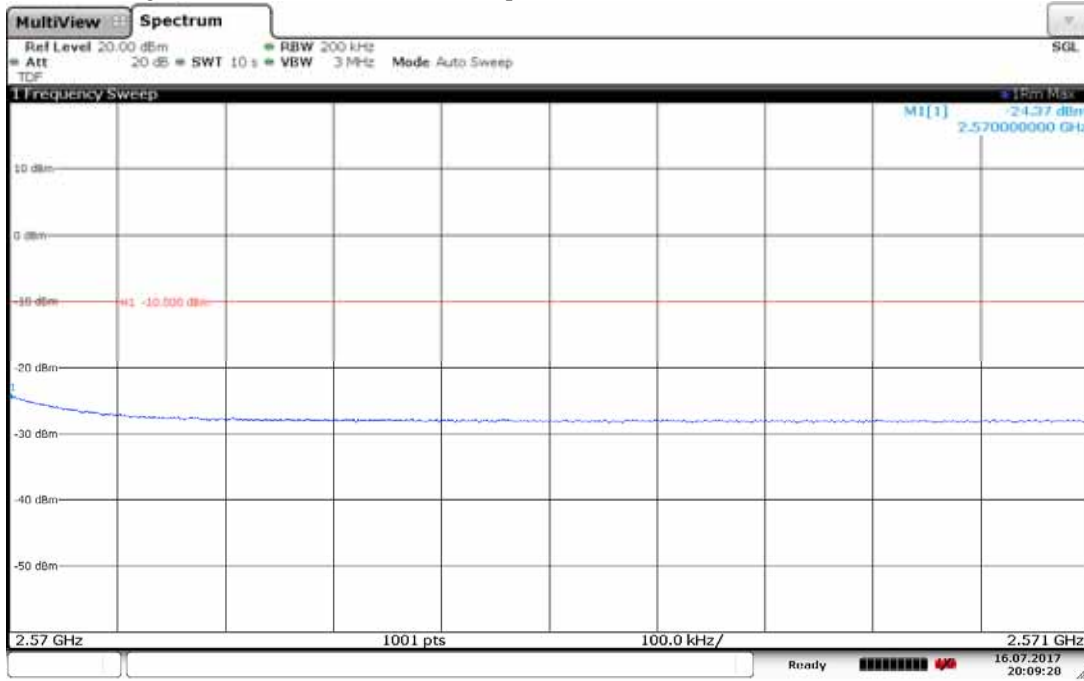
20:07:07 16.07.2017

9.722_BE_High_Ch21400_QPSK_50RBs_Sweep2



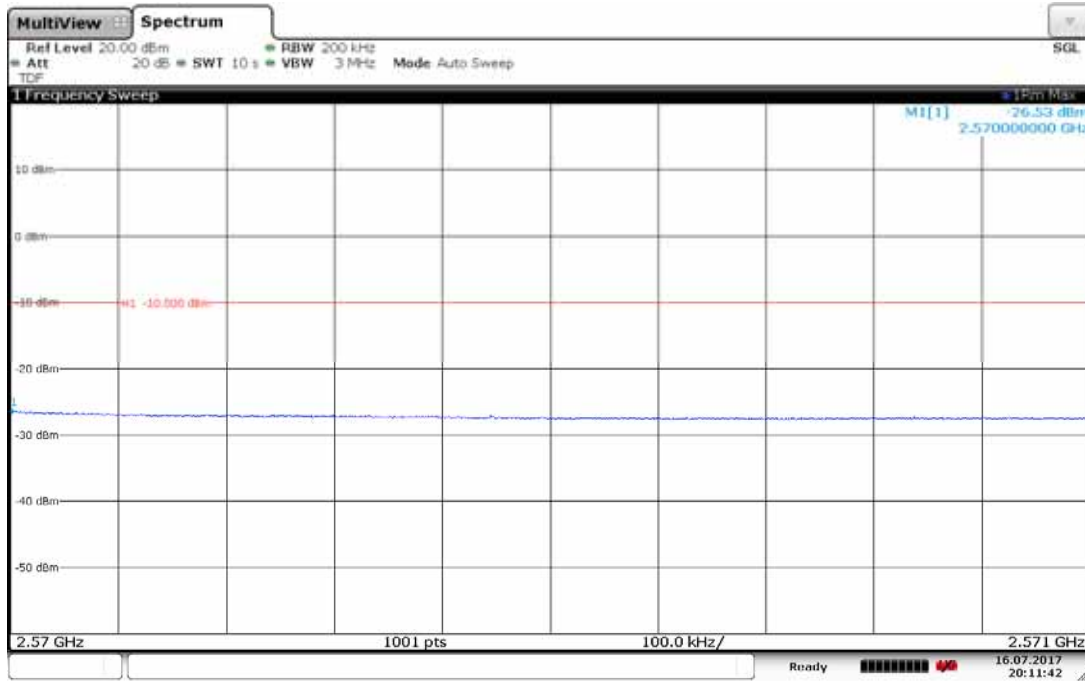
20:09:28 16.07.2017

9.723_BE_High_Ch21400_16QAM_1RBs_Sweep1



20:09:28 16.07.2017

9.723_BE_High_Ch21400_16QAM_1RBs_Sweep2



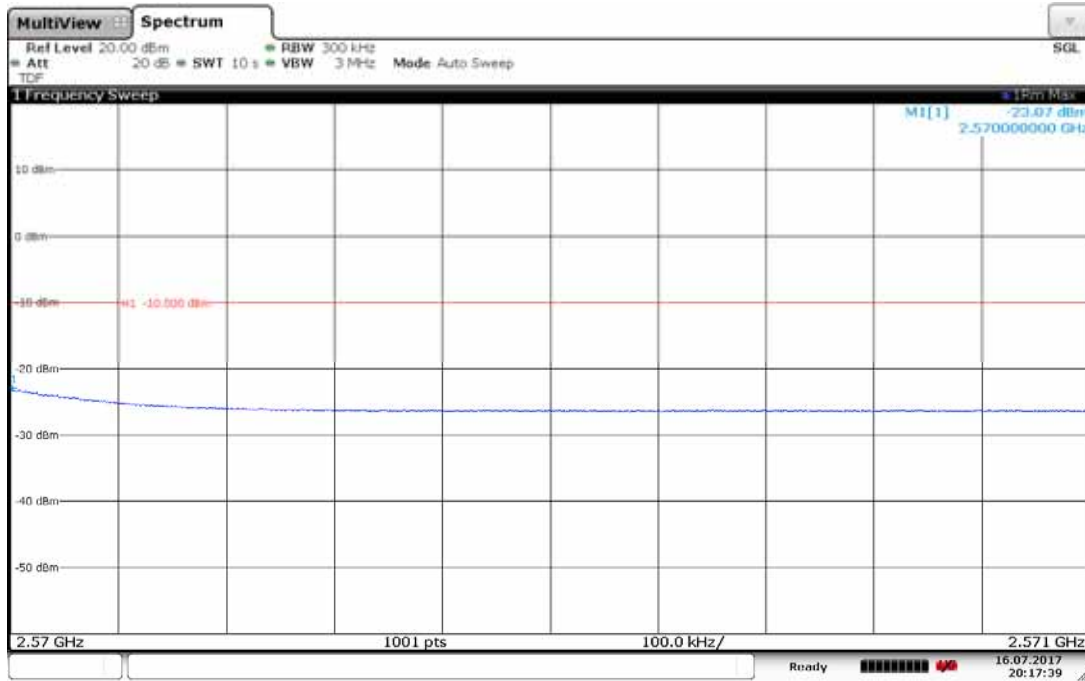
20:11:42 16.07.2017

9.724_BE_High_Ch21400_16QAM_50RBs_Sweep1



20:11:14 16.07.2017

9.724_BE_High_Ch21400_16QAM_50RBs_Sweep2



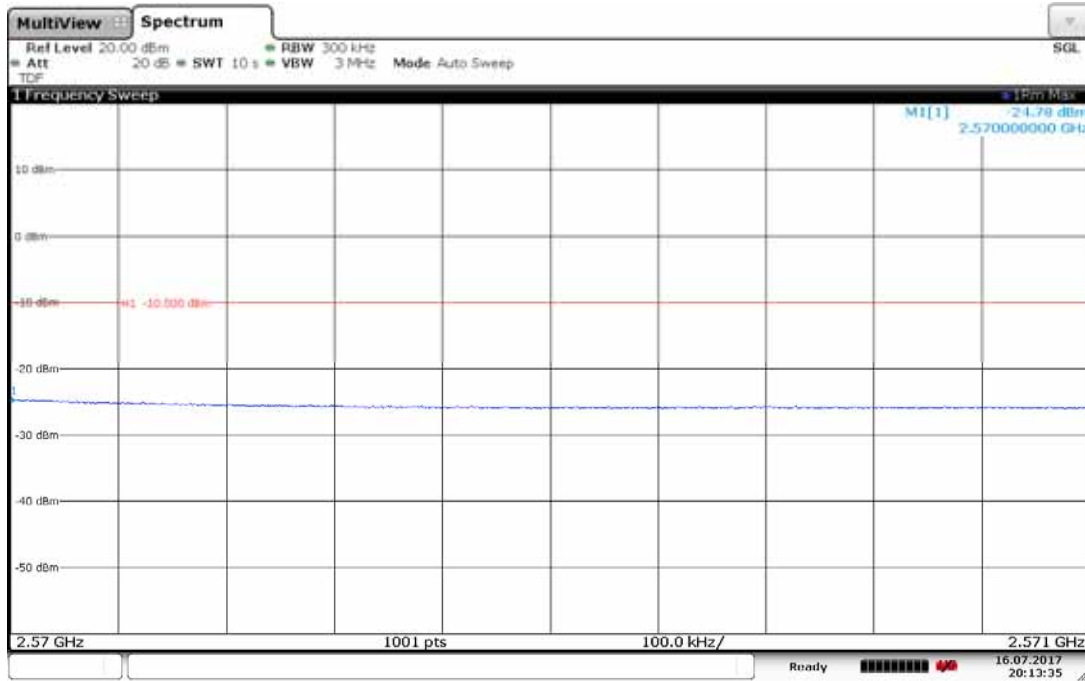
20:17:39 16.07.2017

9.725_BE_High_Ch21375_QPSK_1RBs_Sweep1



20:17:06 16.07.2017

9.725_BE_High_Ch21375_QPSK_1RBs_Sweep2



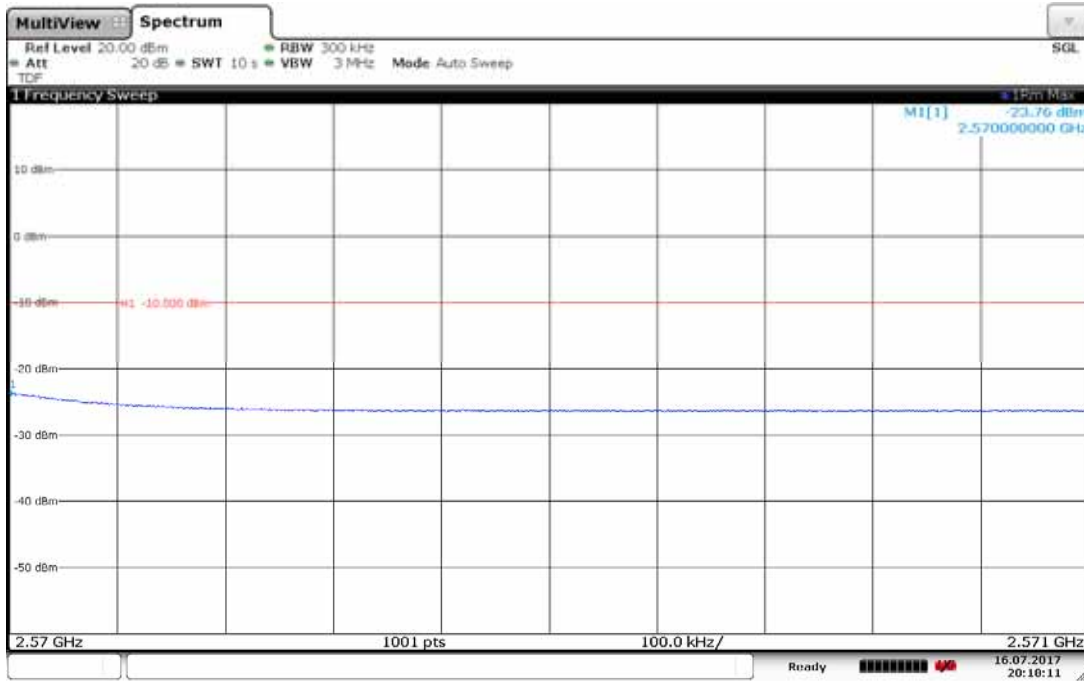
20:13:36 16.07.2017

9.726_BE_High_Ch21375_QPSK_75RBs_Sweep1



20:15:43 16.07.2017

9.726_BE_High_Ch21375_QPSK_75RBs_Sweep2



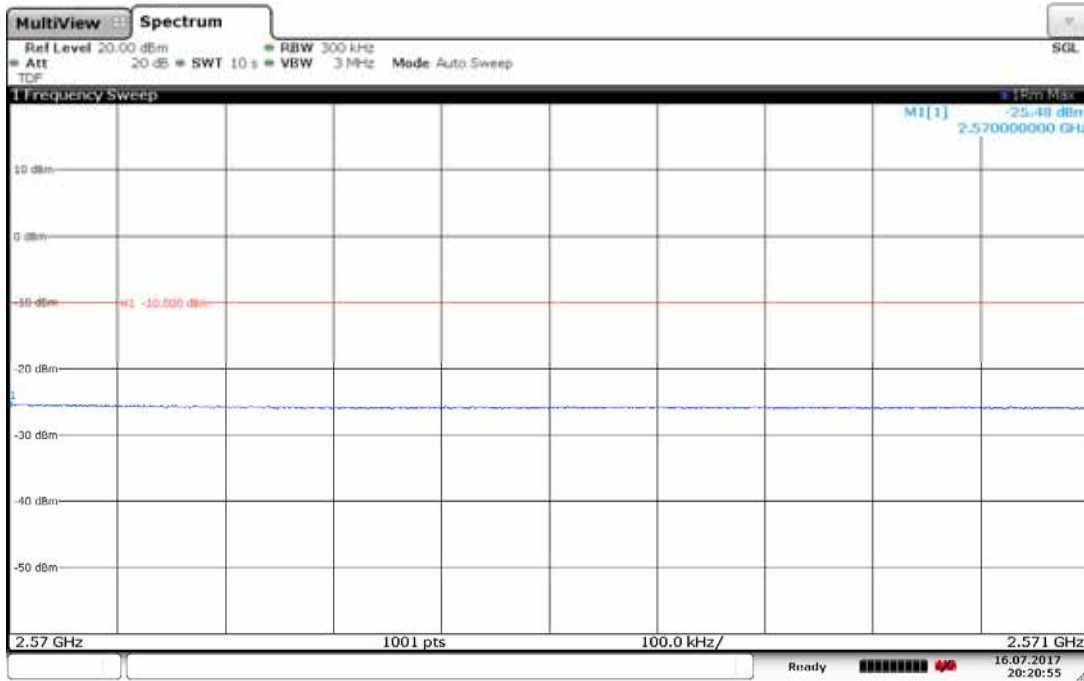
20:18:12 16.07.2017

9.727_BE_High_Ch21375_16QAM_1RBs_Sweep1



20:19:18 16.07.2017

9.727_BE_High_Ch21375_16QAM_1RBs_Sweep2



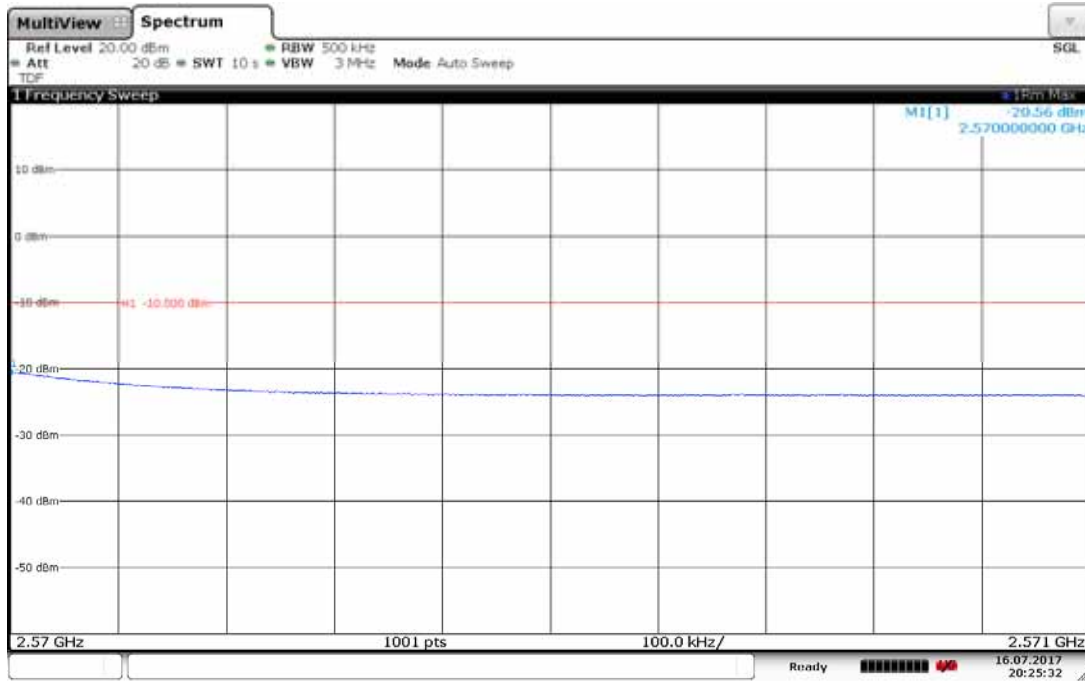
20:20:55 16.07.2017

9.728_BE_High_Ch21375_16QAM_75RBs_Sweep1



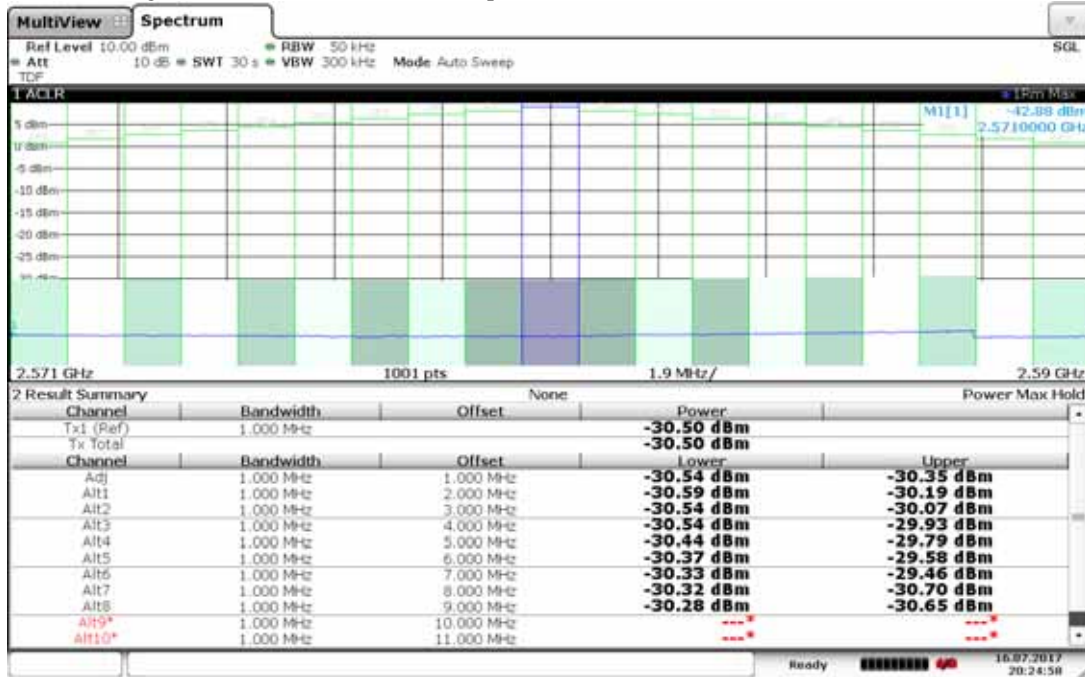
20:20:20 16.07.2017

9.728_BE_High_Ch21375_16QAM_75RBs_Sweep2



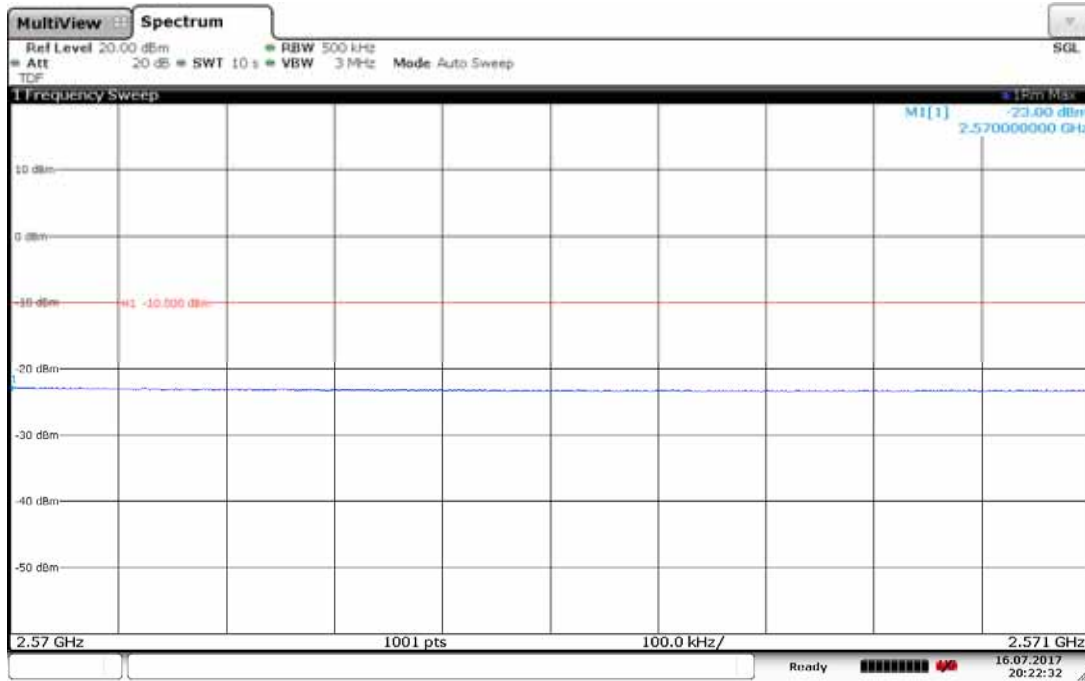
20:25:32 16.07.2017

9.729_BE_High_Ch21350_QPSK_1RBs_Sweep1



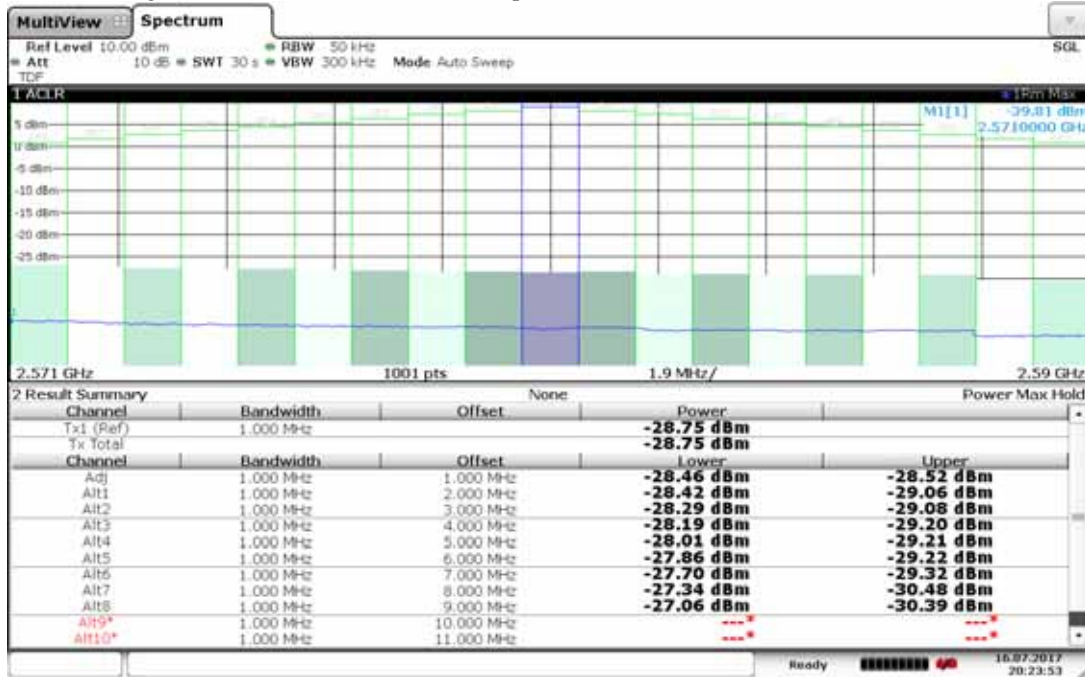
20:24:58 16.07.2017

9.729_BE_High_Ch21350_QPSK_1RBs_Sweep2



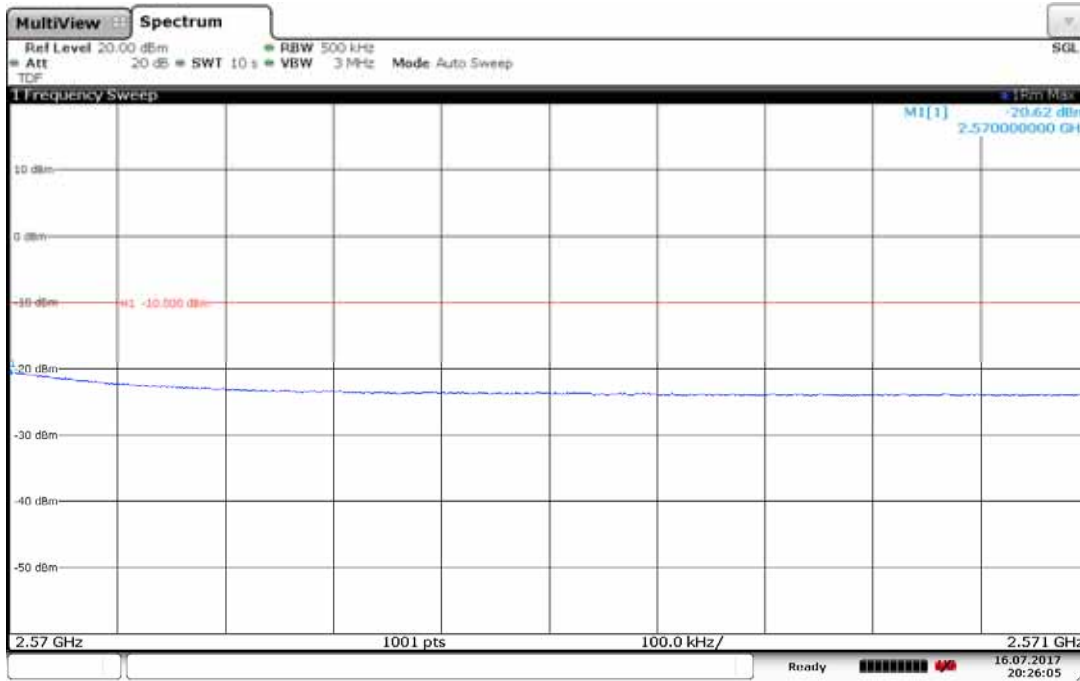
20:22:32 16.07.2017

9.730_BE_High_Ch21350_QPSK_100RBs_Sweep1



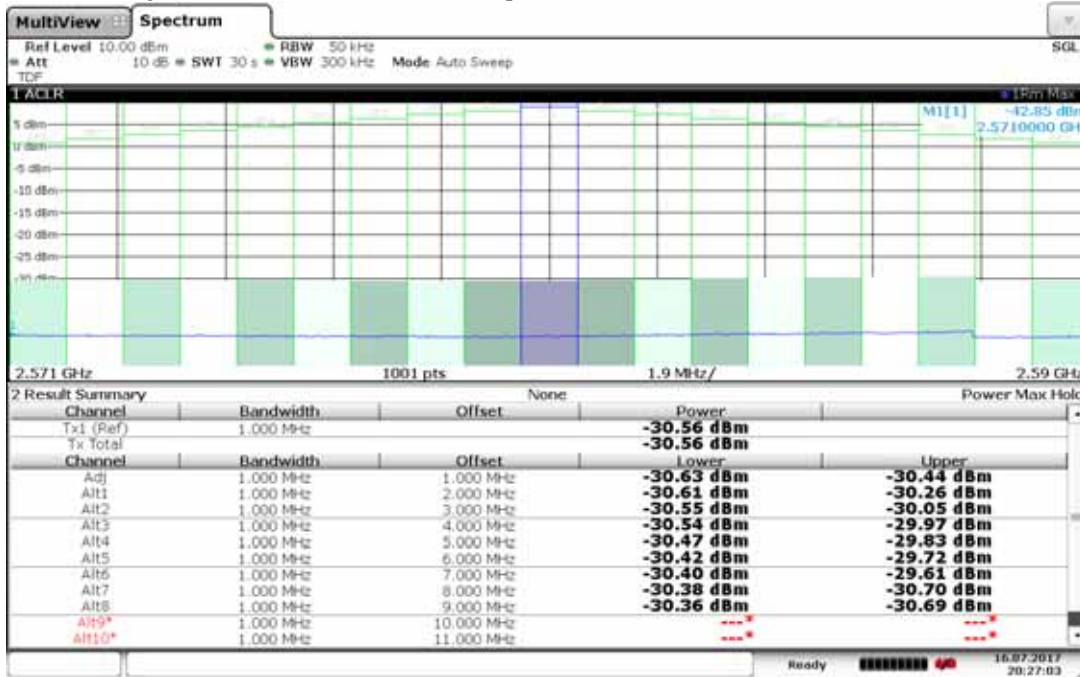
20:23:53 16.07.2017

9.730_BE_High_Ch21350_QPSK_100RBs_Sweep2



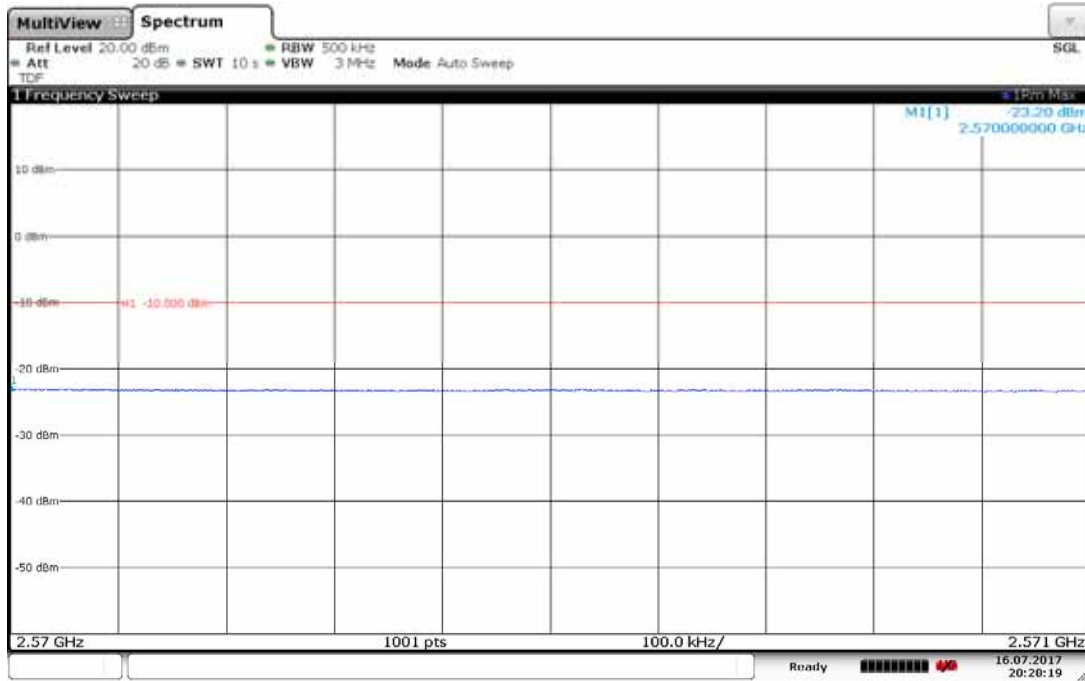
20:26:06 16.07.2017

9.731_BE_High_Ch21350_16QAM_1RBs_Sweep1



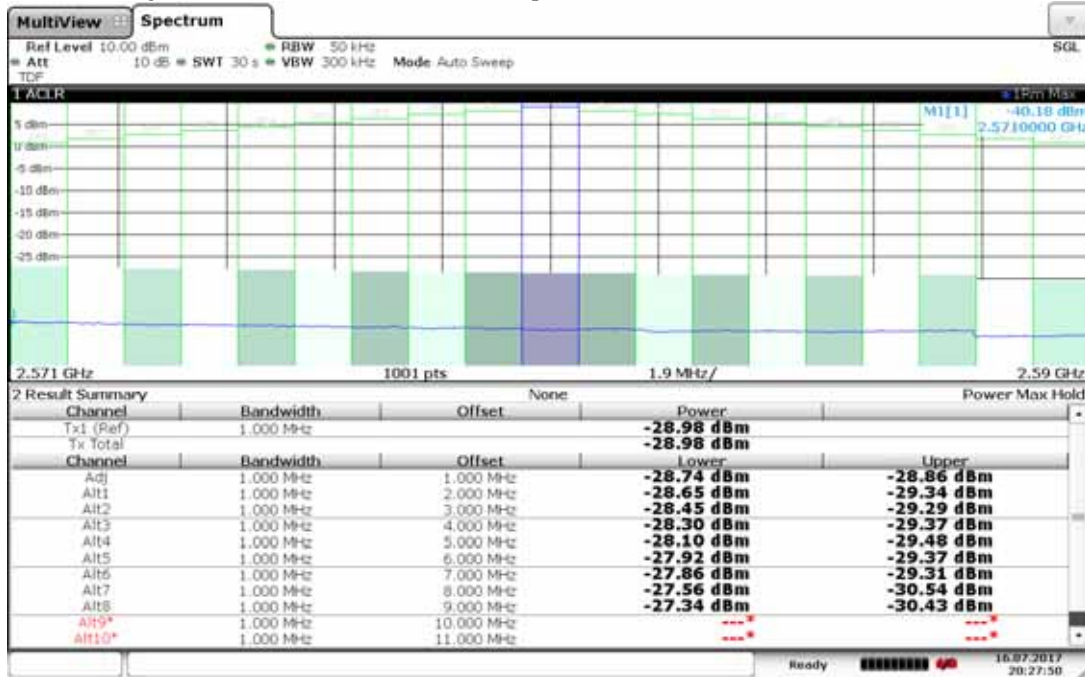
20:27:03 16.07.2017

9.731_BE_High_Ch21350_16QAM_1RBs_Sweep2



20:28:19 16.07.2017

9.732_BE_High_Ch21350_16QAM_100RBs_Sweep1



20:27:51 16.07.2017

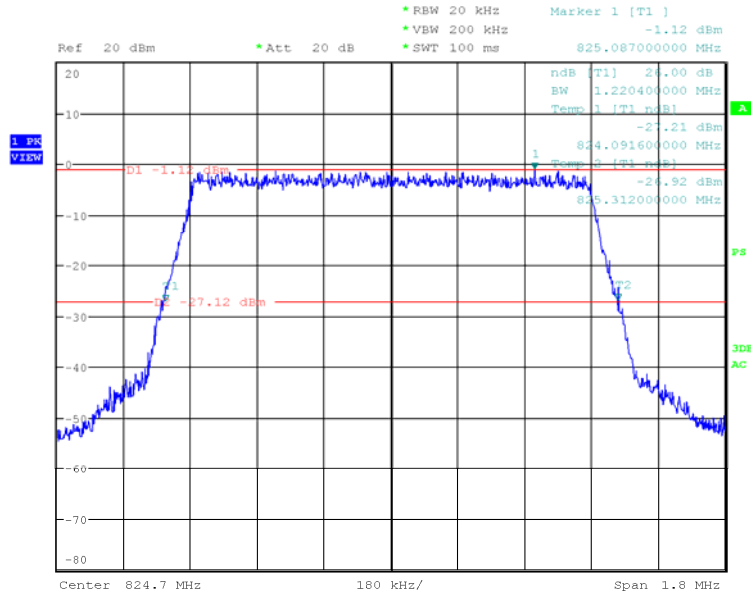
9.732_BE_High_Ch21350_16QAM_100RBs_Sweep2

1.7. 26dBc Emission bandwidth

1.7.1. LTE Band 5

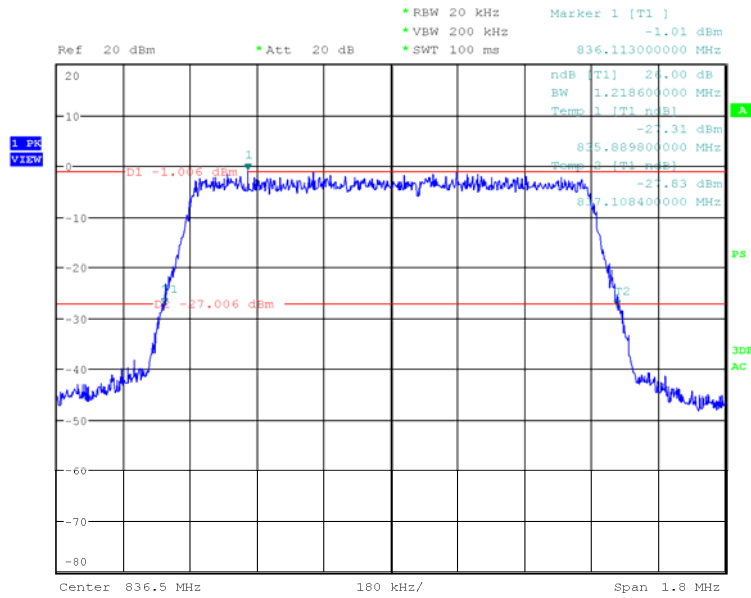
1.7.1.1. BW = 1.4MHz

QPSK-Modulation



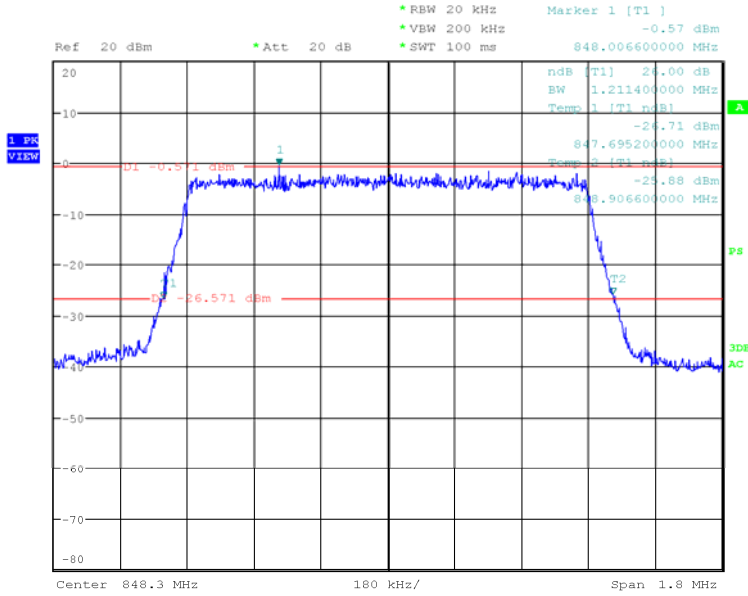
Date: 19.APR.2017 10:08:49

Diagram 34_501_26 dB



Date: 19.APR.2017 10:13:53

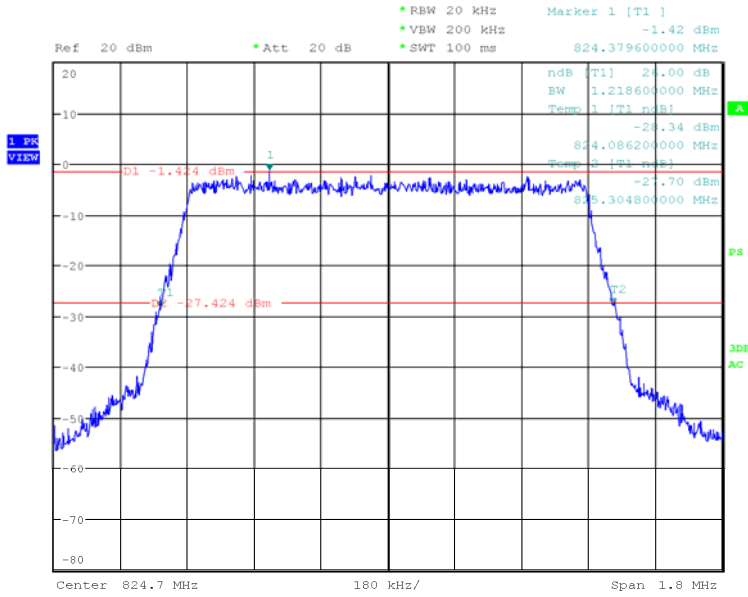
Diagram 34_502_26 dB



Date: 19.APR.2017 10:14:43

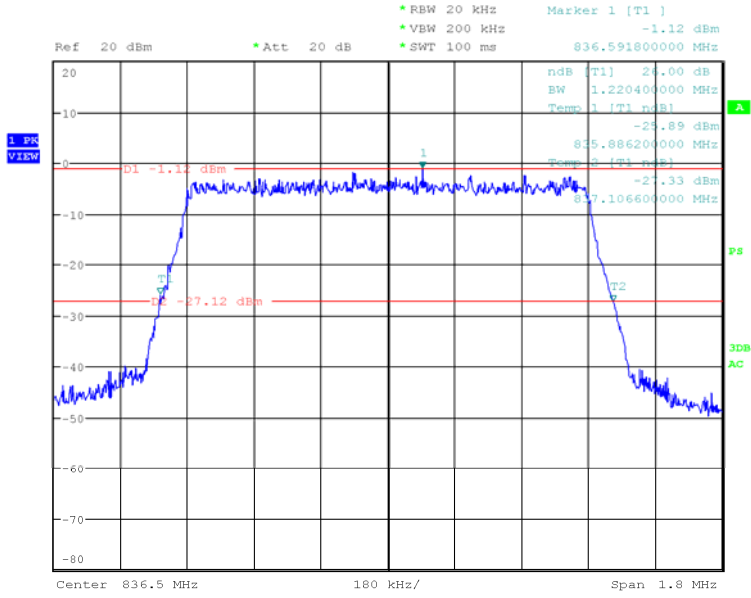
Diagram 34_503_26 dB

16-QAM-Modulation



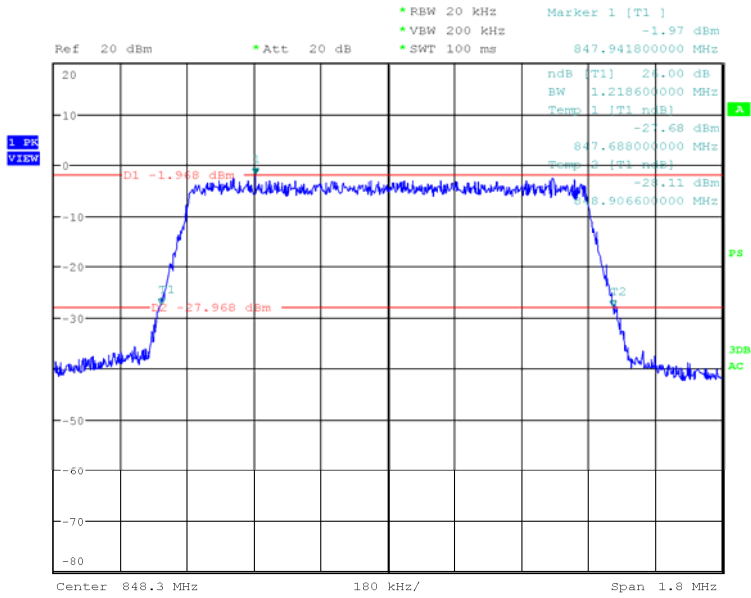
Date: 19.APR.2017 10:38:11

Diagram 34_513_26 dB



Date: 19.APR.2017 10:38:51

Diagram 34_514_26 dB

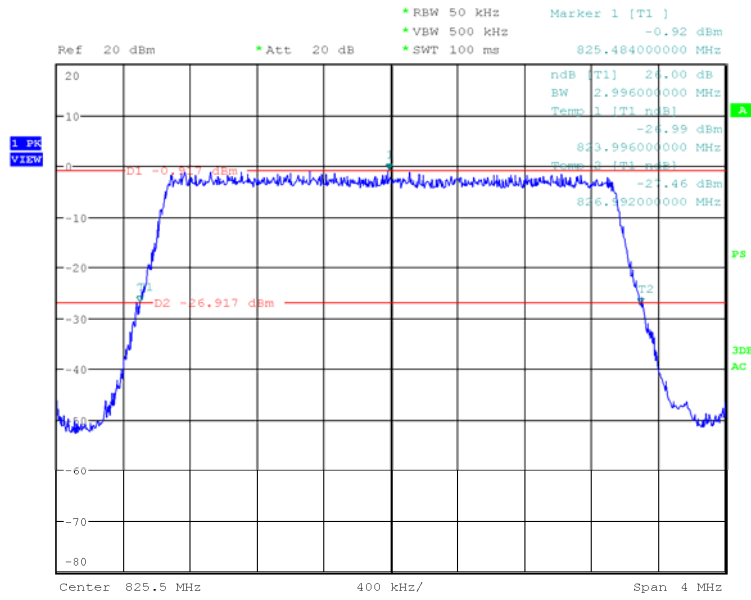


Date: 19.APR.2017 10:39:25

Diagram 34_515_26 dB

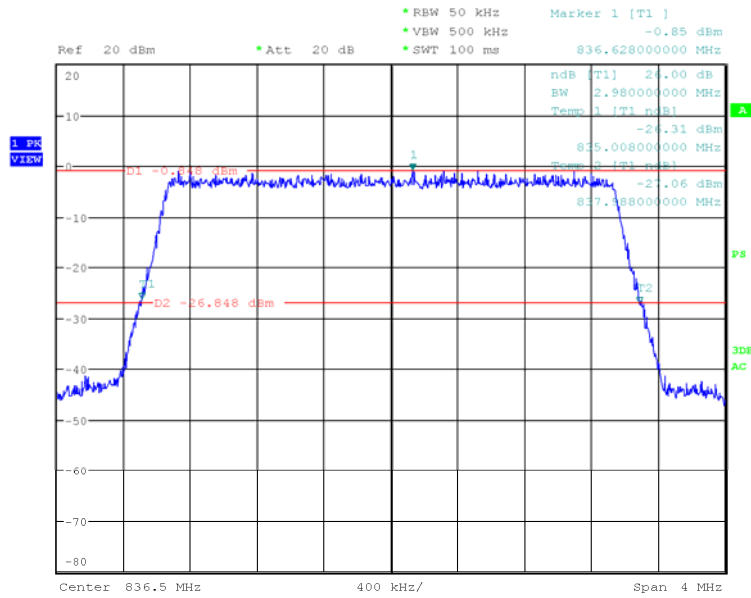
1.7.1.2. BW = 3MHz

QPSK-Modulation



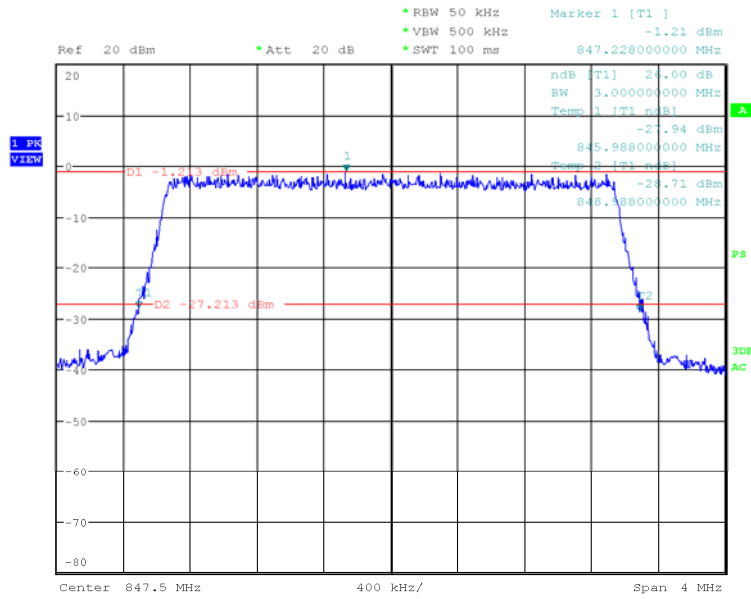
Date: 19.APR.2017 10:18:53

Diagram 34_504_26 dB



Date: 19.APR.2017 10:20:55

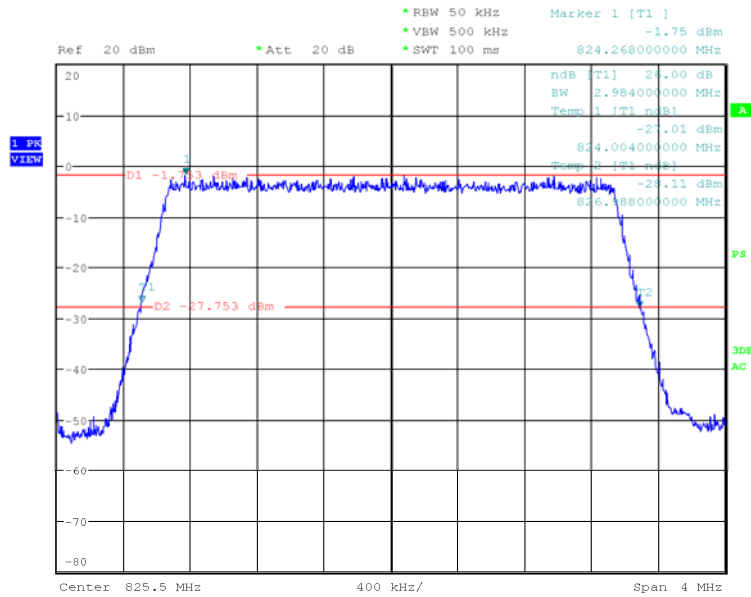
Diagram 34_505_26 dB



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

Diagram 34_506_26 dB

16-QAM-Modulation

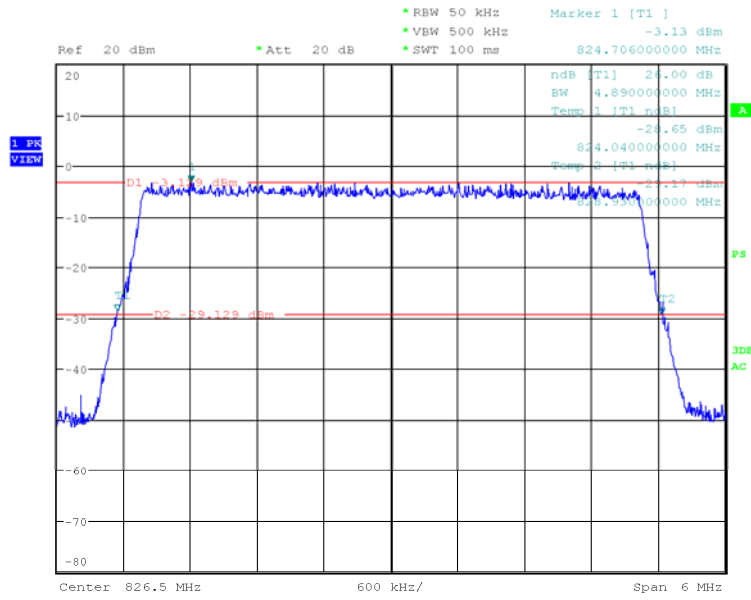


Date: 19.APR.2017 10:41:09

Diagram 34_516_26 dB

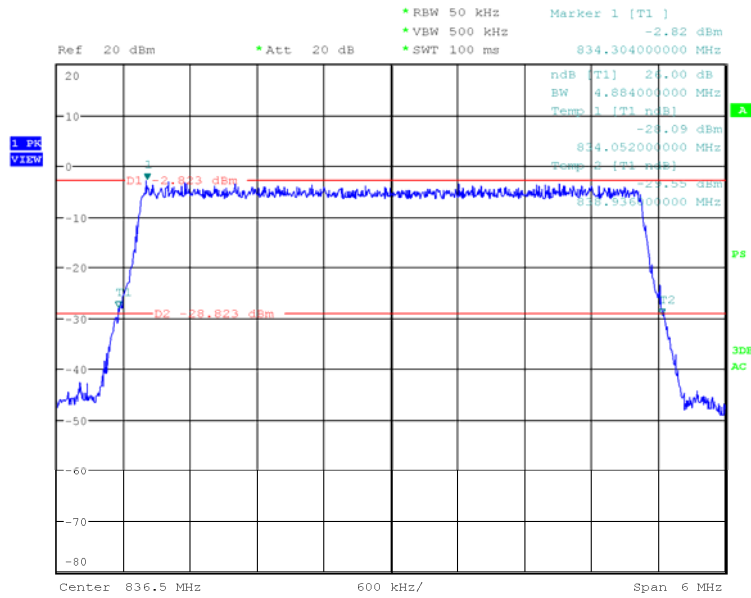
1.7.1.3. BW = 5MHz

QPSK-Modulation



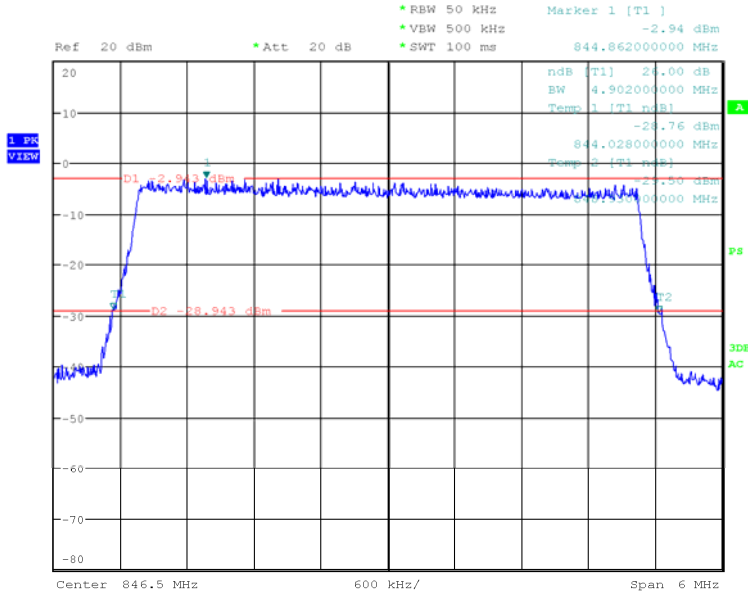
Date: 19.APR.2017 10:33:44

Diagram 34_507_26 dB



Date: 19.APR.2017 10:28:17

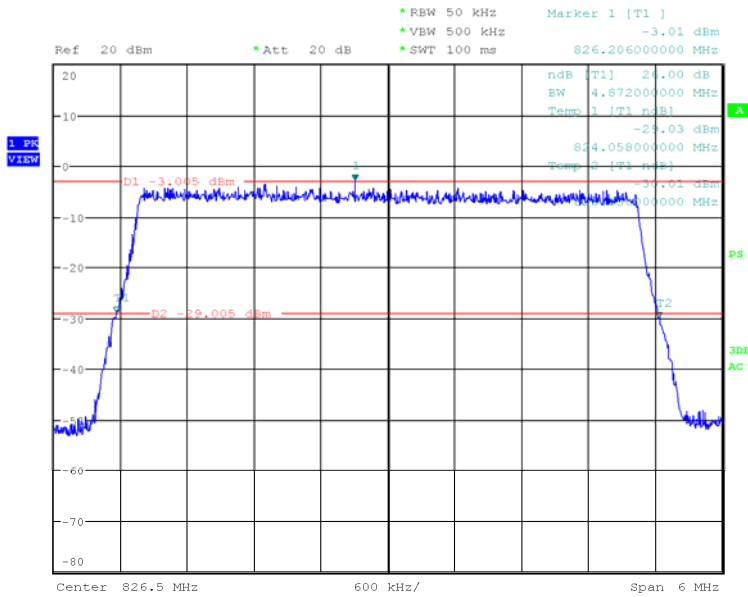
Diagram 34_508_26 dB



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

Diagram 34_509_26 dB

16-QAM-Modulation

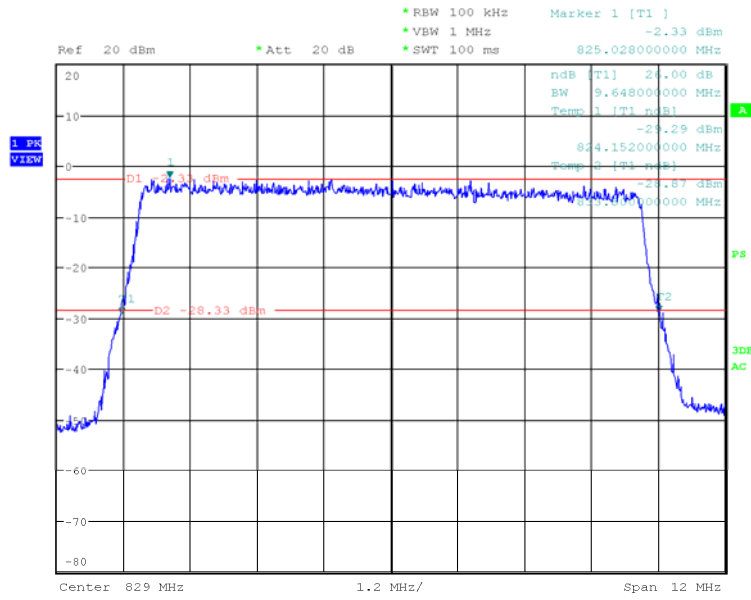


Date: 19.APR.2017 10:44:42

Diagram 34_519_26 dB

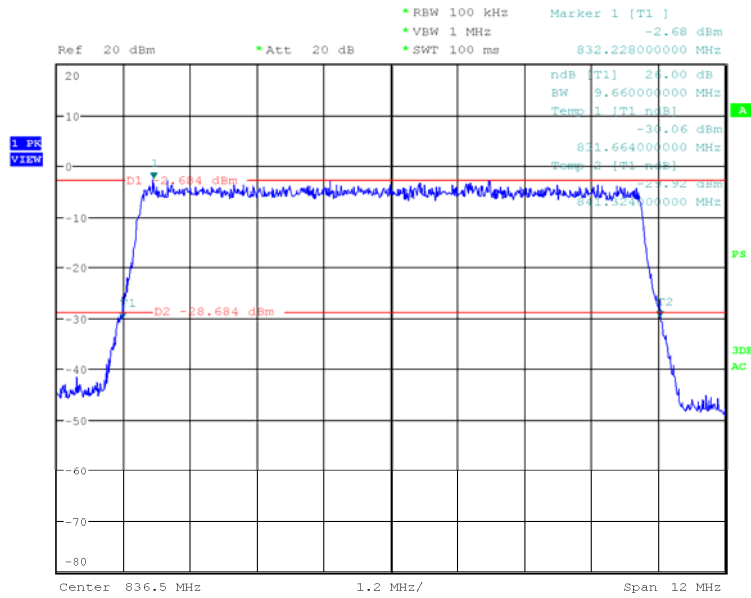
1.7.1.4. BW = 10MHz

QPSK-Modulation



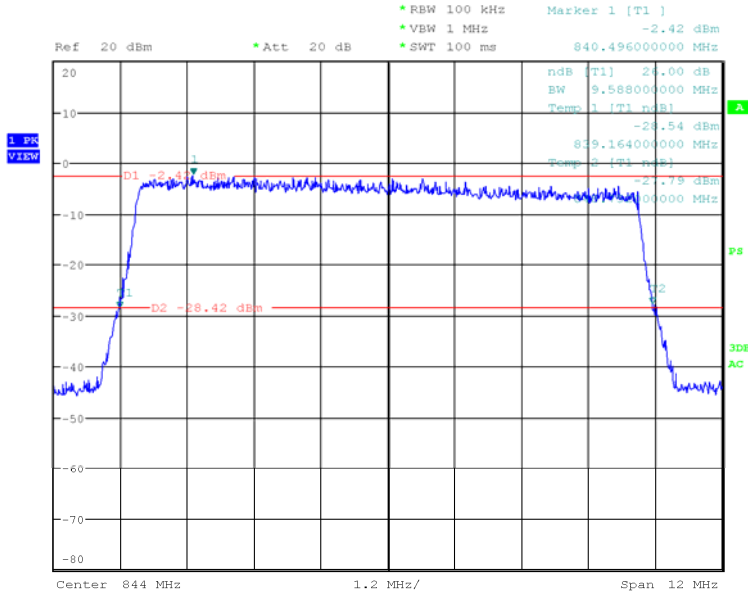
Date: 19.APR.2017 10:30:31

Diagram 34_510_26 dB



Date: 19.APR.2017 10:35:44

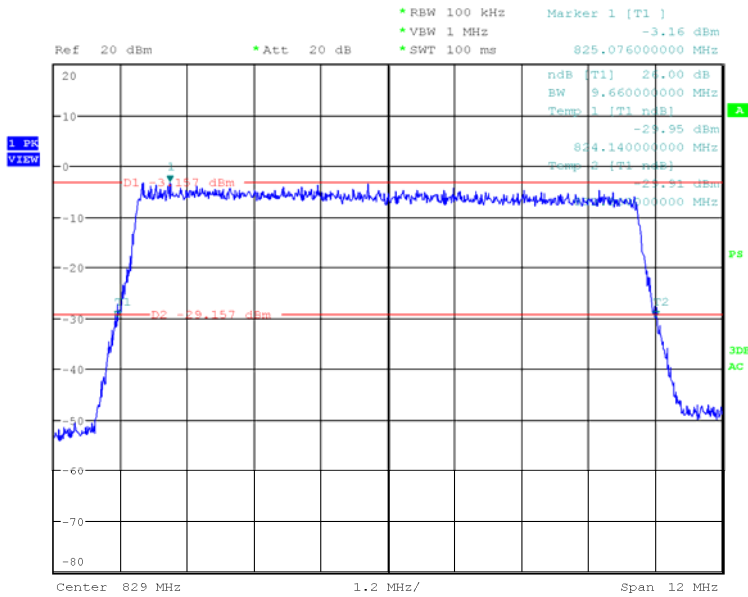
Diagram 34_511_26 dB



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