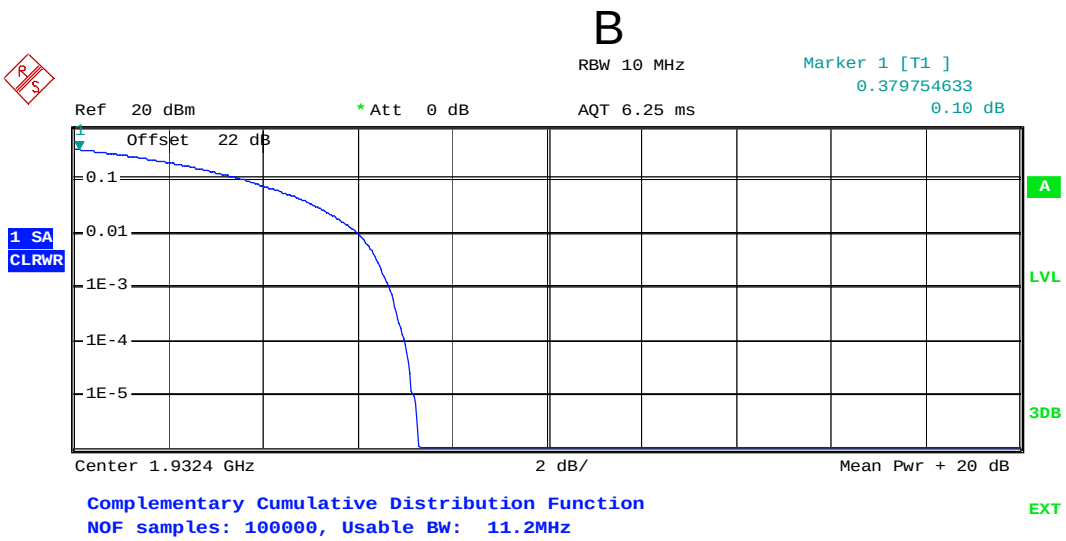
Appendix A

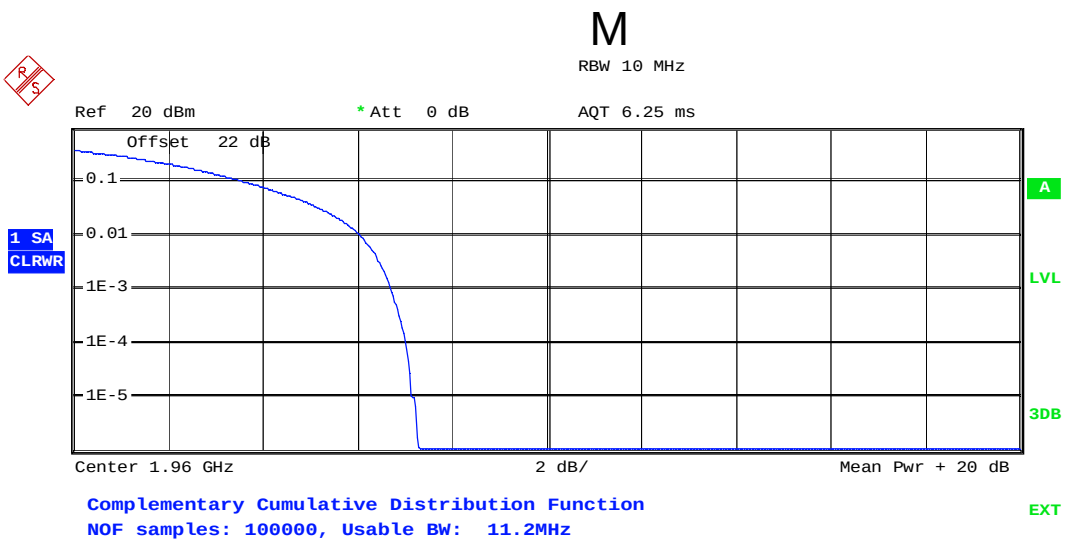
Peak-to-Average Ratio Measurement

According to FCC part 2.1046 and part 24.232

PCS Band:

(1) TM1

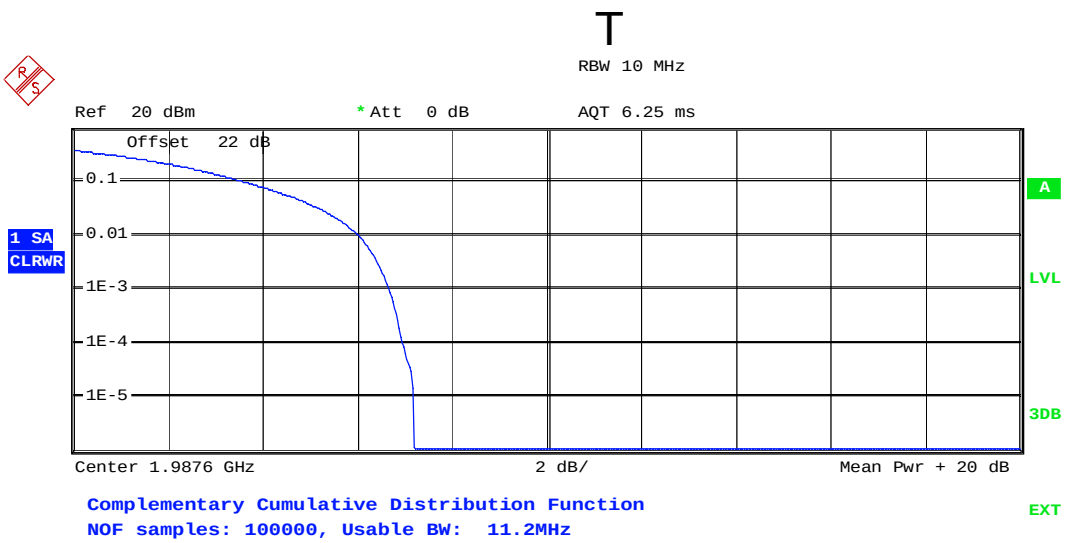




Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	11.86 dBm
Peak	19.14 dBm
Crest	7.28 dB
10 %	3.59 dB
1 %	6.03 dB
.1 %	6.70 dB
.01 %	7.02 dB

Date: 17.SEP.2009 19:00:17

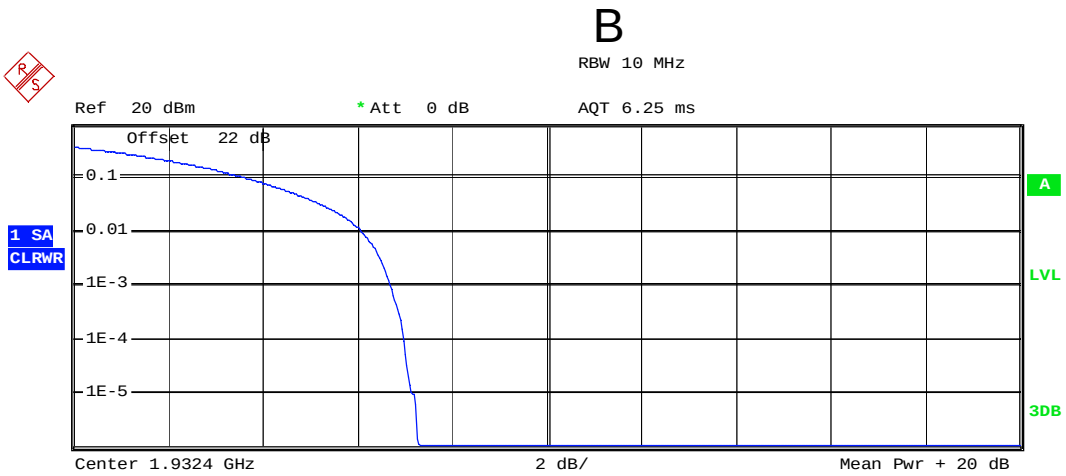


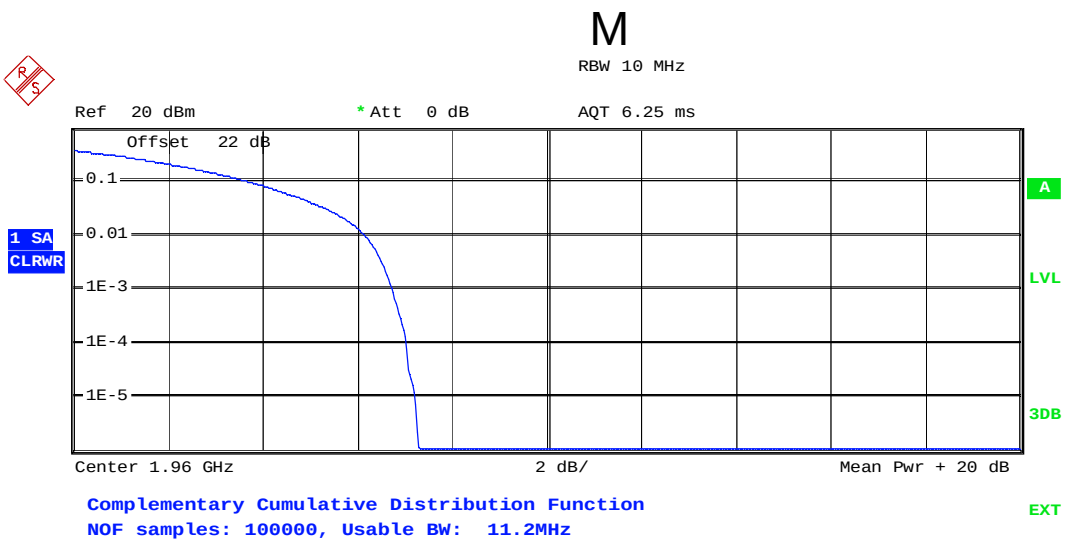
Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	11.58 dBm
Peak	18.78 dBm
Crest	7.20 dB
10 %	3.59 dB
1 %	5.99 dB
.1 %	6.67 dB
.01 %	6.96 dB

Date: 17.SEP.2009 19:28:20

(2) TM5

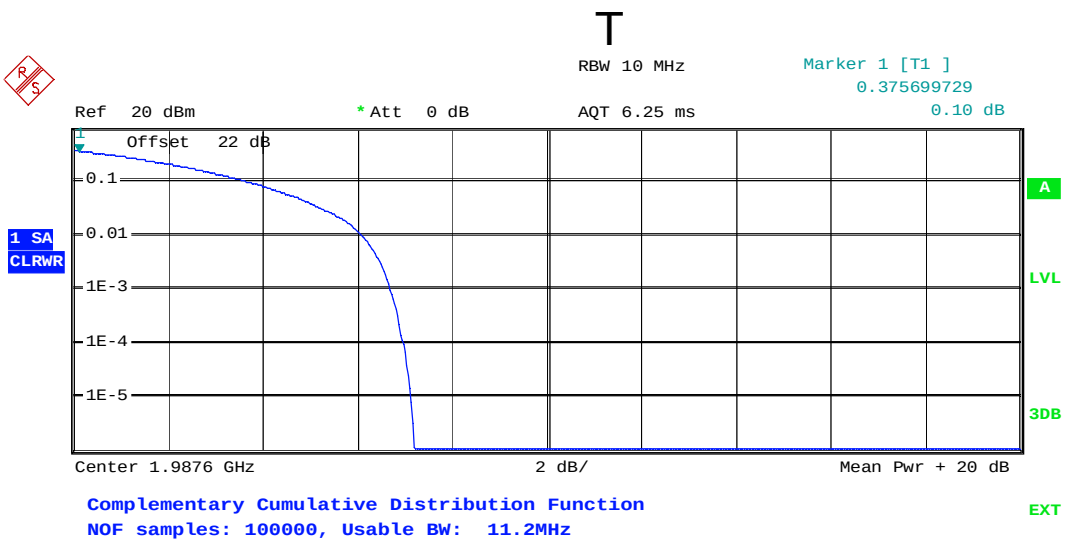

B
RBW 10 MHz
Ref 20 dBm
*Att 0 dB
AQT 6.25 ms
Offset 22 dB
0.1
0.01
1E-3
1E-4
1E-5
1 SA
CLRWR
A
LVL
3DB
EXT
Center 1.9324 GHz
2 dB/
Mean Pwr + 20 dB
Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz
Trace 1
Mean 12.53 dBm
Peak 19.80 dBm
Crest 7.27 dB
10 % 3.69 dB
1 % 6.09 dB
.1 % 6.70 dB
.01 % 6.99 dB
Date: 17.SEP.2009 19:25:08



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	11.93 dBm
Peak	19.21 dBm
Crest	7.28 dB
10 %	3.72 dB
1 %	6.15 dB
.1 %	6.73 dB
.01 %	7.02 dB

Date: 17.SEP.2009 19:10:23



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	11.52 dBm
Peak	18.71 dBm
Crest	7.19 dB
10 %	3.69 dB
1 %	6.09 dB
.1 %	6.70 dB
.01 %	6.99 dB

Date: 17.SEP.2009 19:38:29

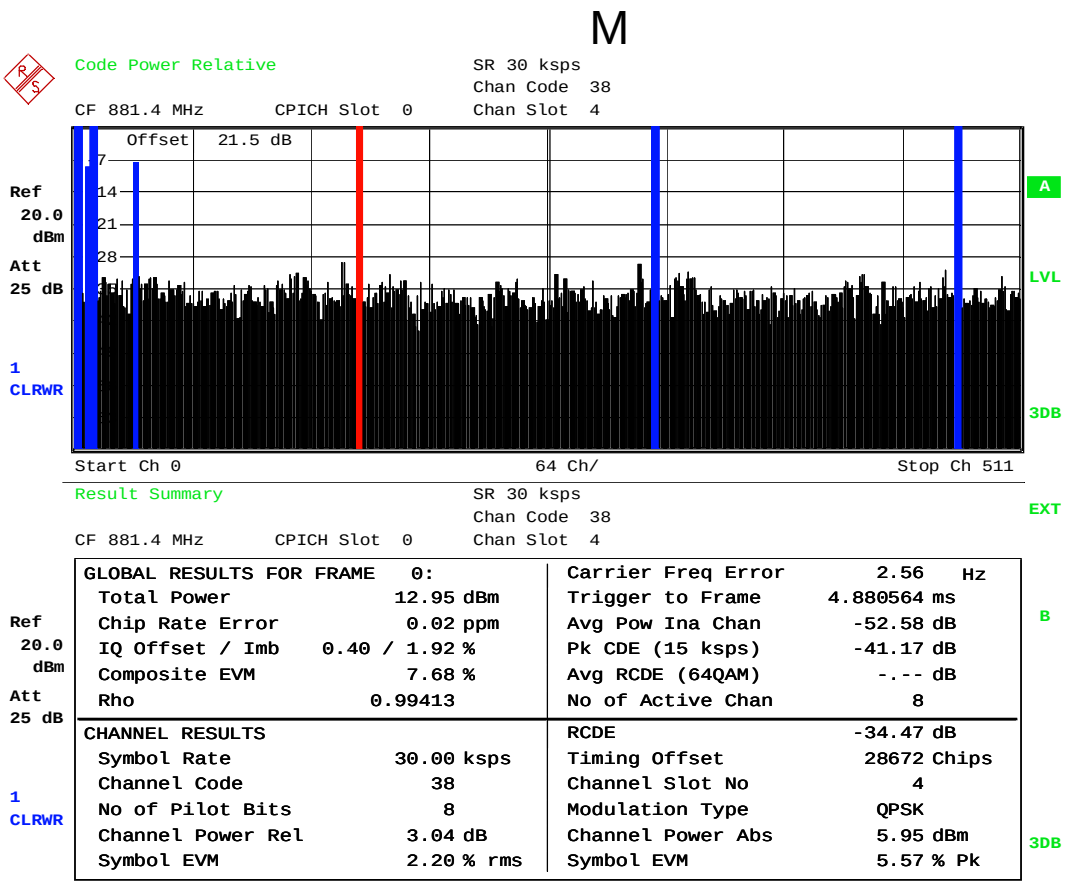
Appendix B

Modulation Characteristic Measurement

According to FCC part 2.1047 and part 22 subpart H
According to FCC part 2.1047 and part 24 subpart E

1. Cellular Band

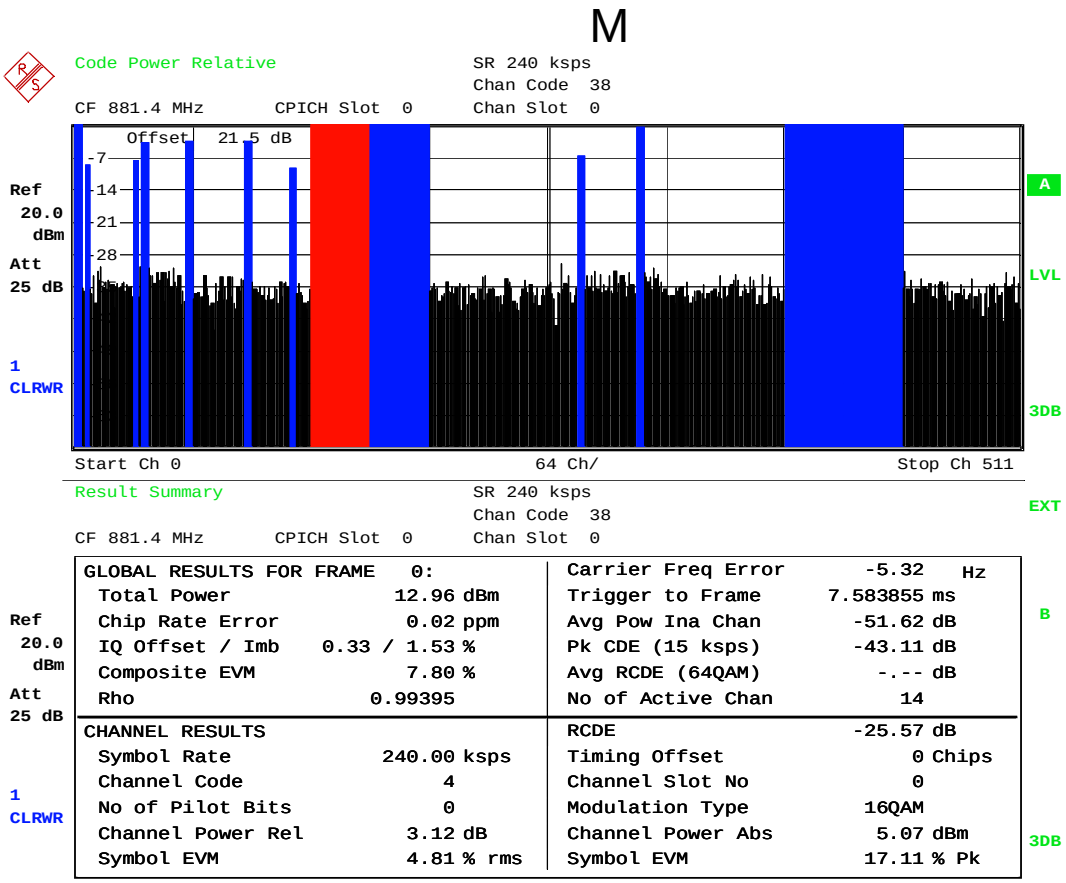
(1) TM1



GLOBAL RESULTS FOR FRAME 0:		Carrier Freq Error	2.56 Hz
Total Power	12.95 dBm	Trigger to Frame	4.880564 ms
Chip Rate Error	0.02 ppm	Avg Pow Ina Chan	-52.58 dB
IQ Offset / Imb	0.40 / 1.92 %	Pk CDE (15 ksps)	-41.17 dB
Composite EVM	7.68 %	Avg RCDE (64QAM)	-.-- dB
Rho	0.99413	No of Active Chan	8
CHANNEL RESULTS		RCDE	-34.47 dB
Symbol Rate	30.00 ksps	Timing Offset	28672 Chips
Channel Code	38	Channel Slot No	4
No of Pilot Bits	8	Modulation Type	QPSK
Channel Power Rel	3.04 dB	Channel Power Abs	5.95 dBm
Symbol EVM	2.20 % rms	Symbol EVM	5.57 % Pk

Date: 17.SEP.2009 19:42:55

(2) TM5

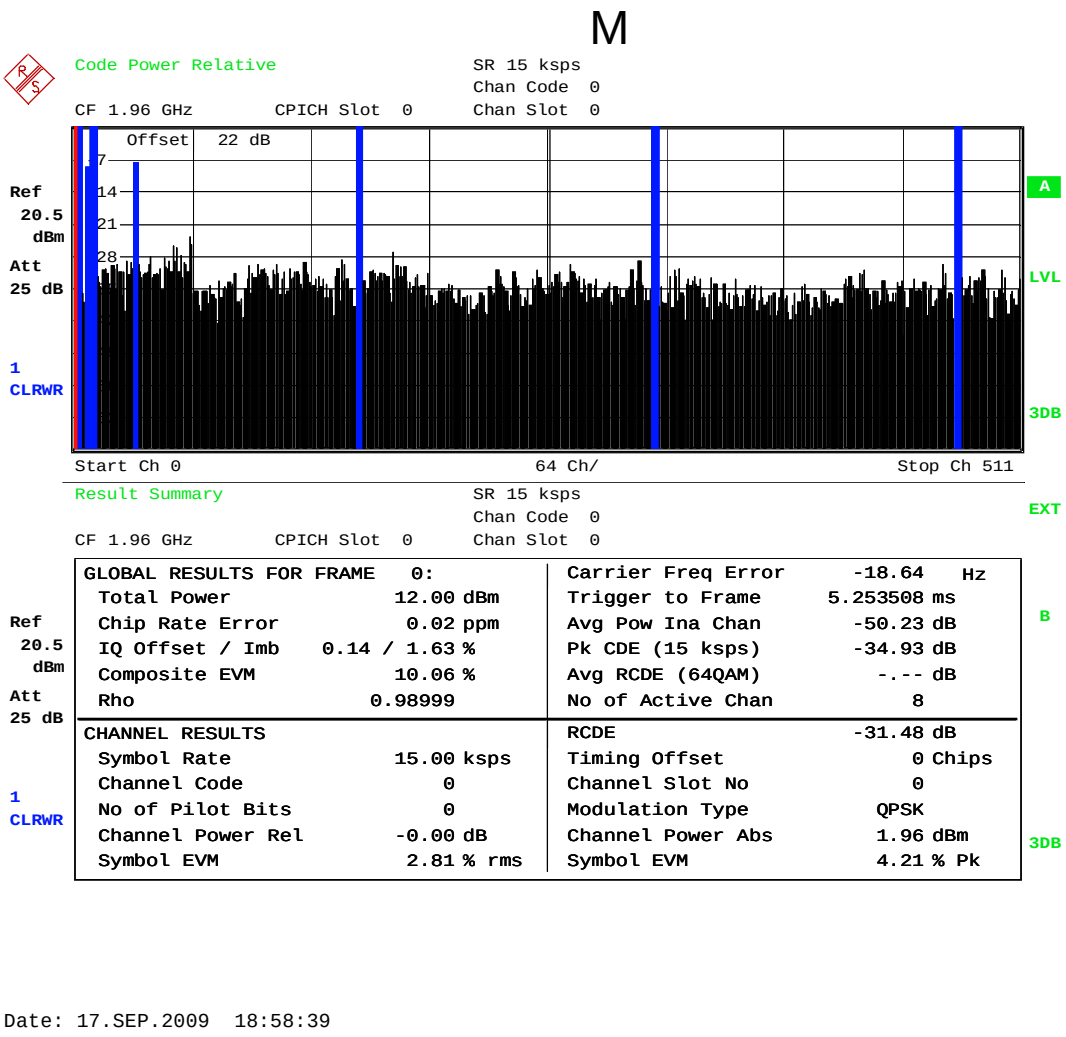


GLOBAL RESULTS FOR FRAME 0:			
Total Power	12.96 dBm	Carrier Freq Error	-5.32 Hz
Chip Rate Error	0.02 ppm	Trigger to Frame	7.583855 ms
IQ Offset / Imb	0.33 / 1.53 %	Avg Pow Ina Chan	-51.62 dB
Composite EVM	7.80 %	Pk CDE (15 ksps)	-43.11 dB
Rho	0.99395	Avg RCDE (64QAM)	-.-- dB
		No of Active Chan	14
CHANNEL RESULTS		RCDE	-25.57 dB
Symbol Rate	240.00 ksps	Timing Offset	0 Chips
Channel Code	4	Channel Slot No	0
No of Pilot Bits	0	Modulation Type	16QAM
Channel Power Rel	3.12 dB	Channel Power Abs	5.07 dBm
Symbol EVM	4.81 % rms	Symbol EVM	17.11 % Pk

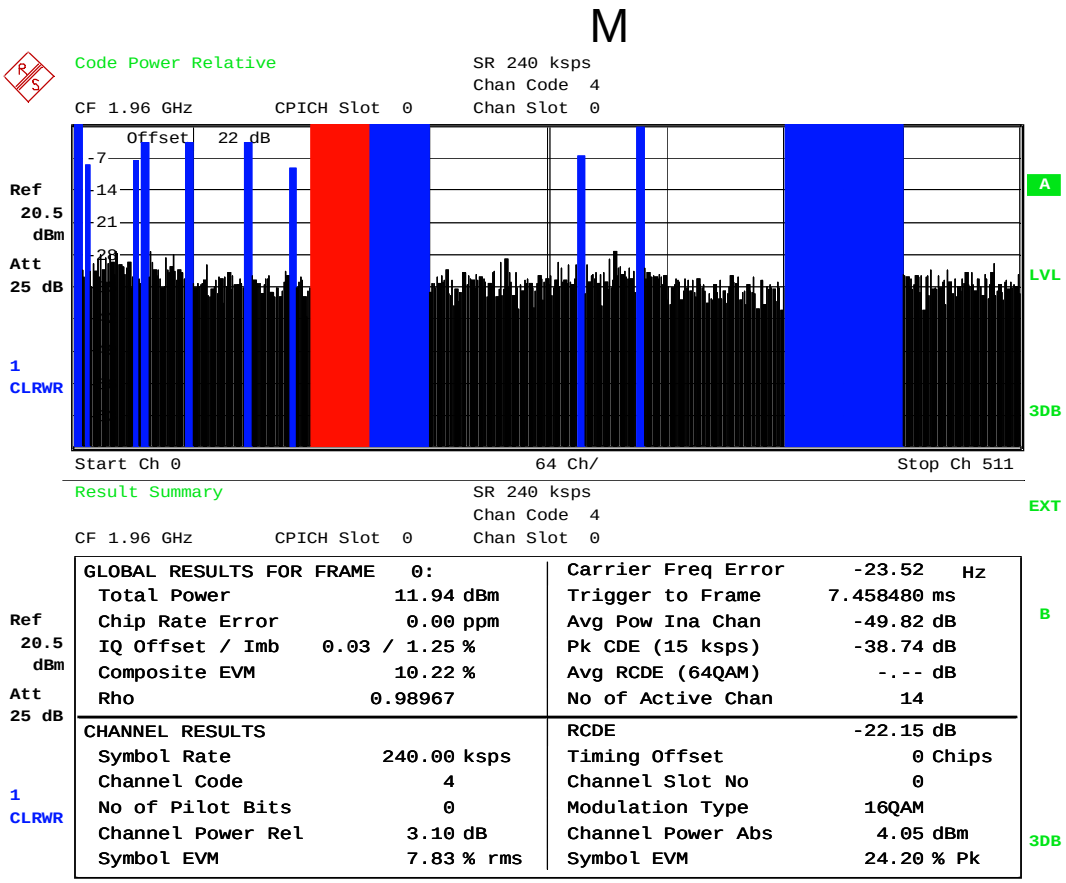
Date: 17.SEP.2009 19:54:49

2. PCS Band

(1) TM1



(2) TM5



GLOBAL RESULTS FOR FRAME 0:		Carrier Freq Error	-23.52 Hz
Total Power	11.94 dBm	Trigger to Frame	7.458480 ms
Chip Rate Error	0.00 ppm	Avg Pow Ina Chan	-49.82 dB
IQ Offset / Imb	0.03 / 1.25 %	Pk CDE (15 ksps)	-38.74 dB
Composite EVM	10.22 %	Avg RCDE (64QAM)	-.-- dB
Rho	0.98967	No of Active Chan	14
CHANNEL RESULTS		RCDE	-22.15 dB
Symbol Rate	240.00 ksps	Timing Offset	0 Chips
Channel Code	4	Channel Slot No	0
No of Pilot Bits	0	Modulation Type	16QAM
Channel Power Rel	3.10 dB	Channel Power Abs	4.05 dBm
Symbol EVM	7.83 % rms	Symbol EVM	24.20 % Pk

Date: 17.SEP.2009 19:09:36

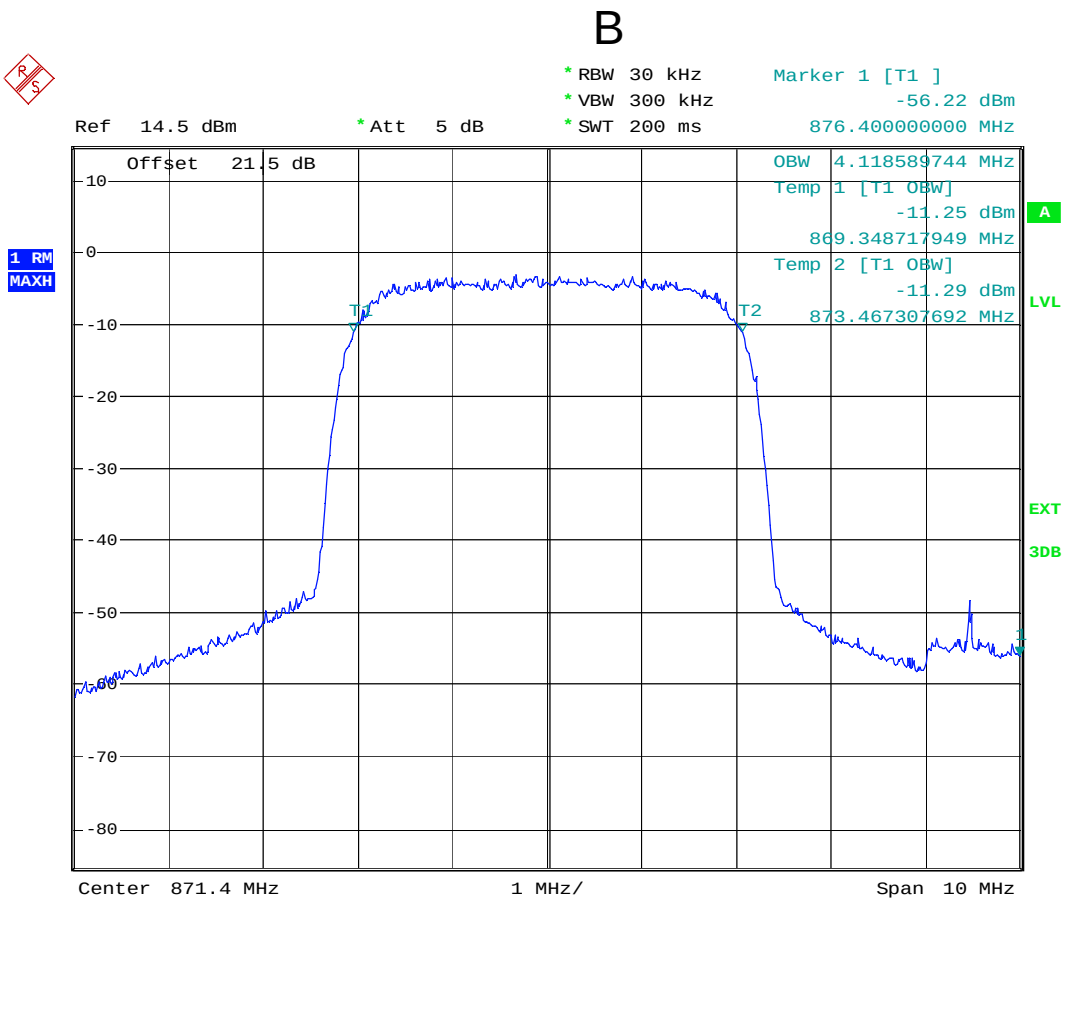
Appendix C

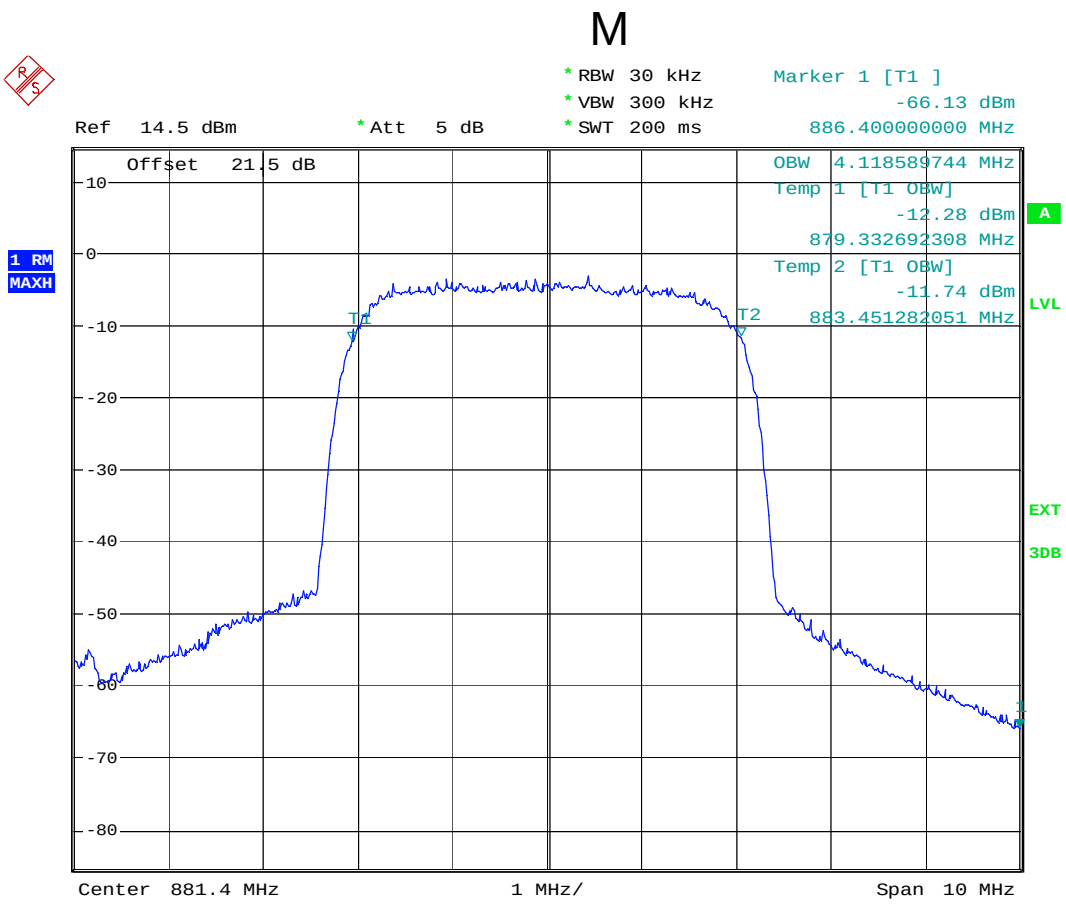
Occupied Bandwidth Measurement

According to FCC part 2.1049 and part 22 subpart H
According to FCC part 2.1049 and part 24 subpart E

1. Cellular Band

(1) TM1





Date: 17.SEP.2009 19:44:26

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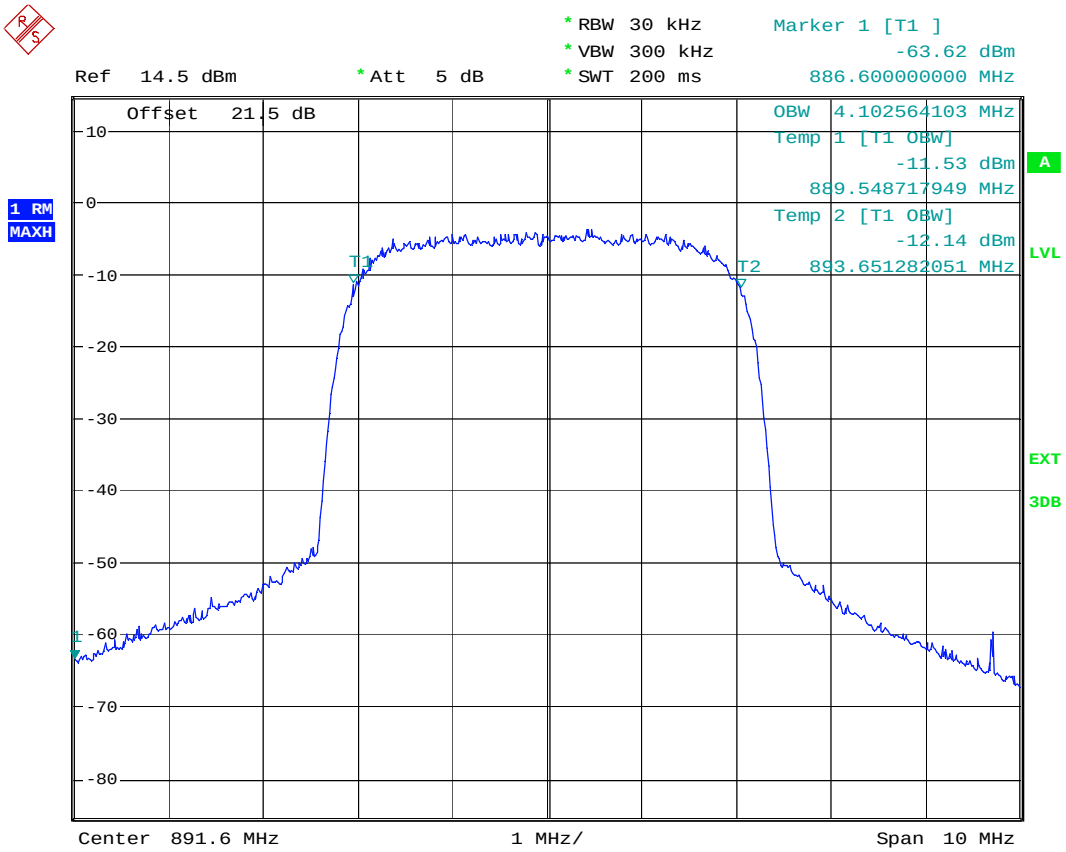
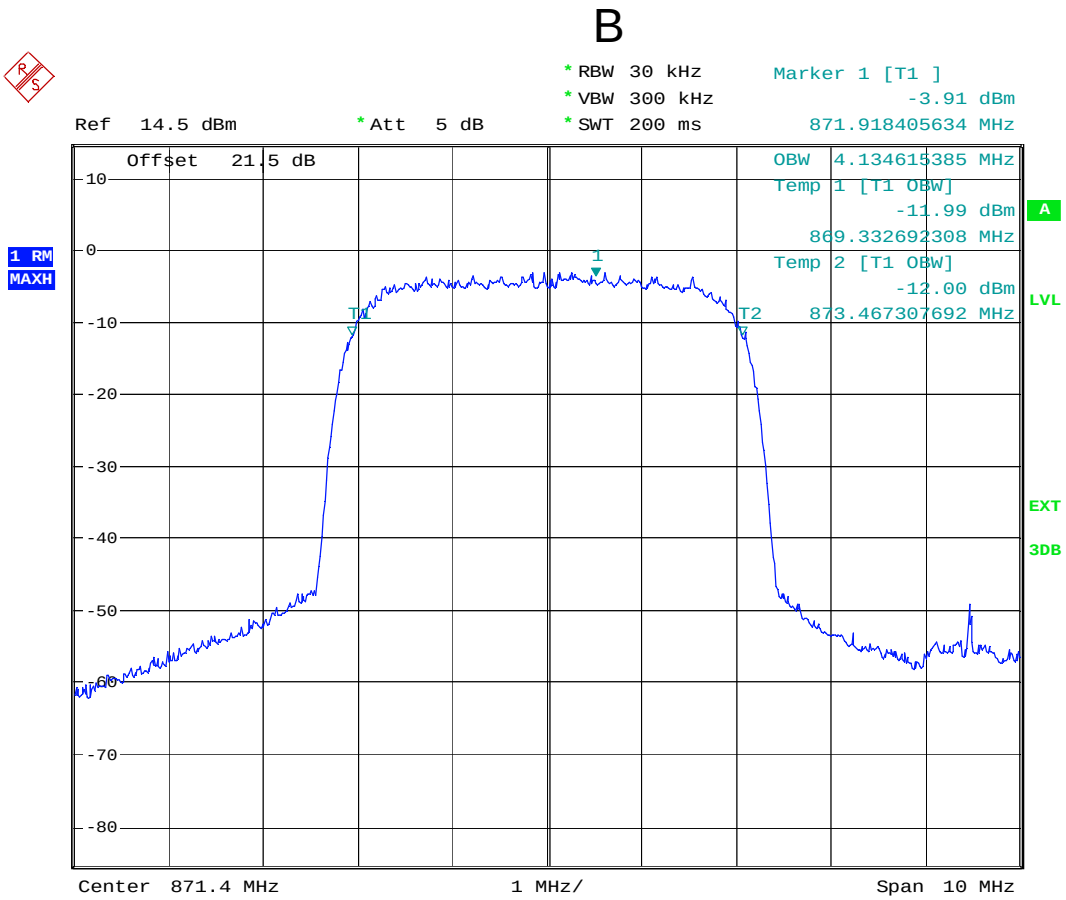
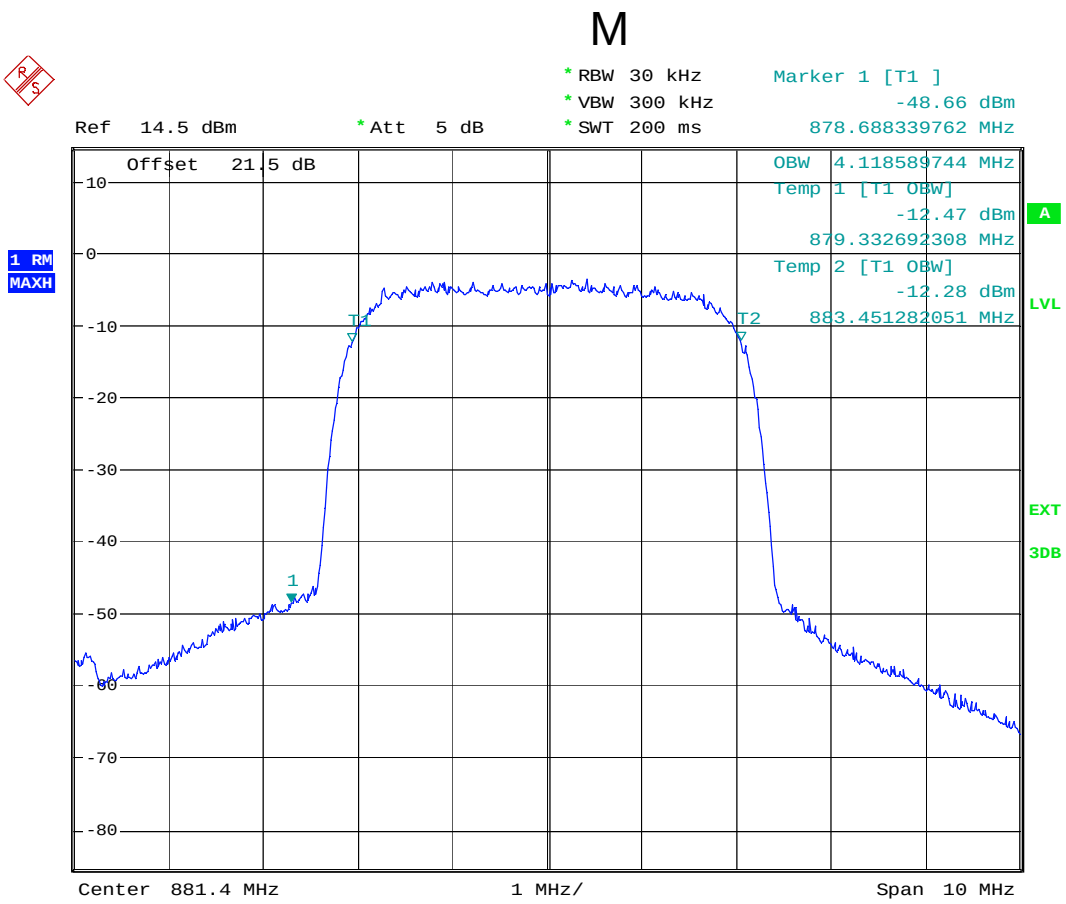


Date: 17.SEP.2009 20:12:43

(2) TM5

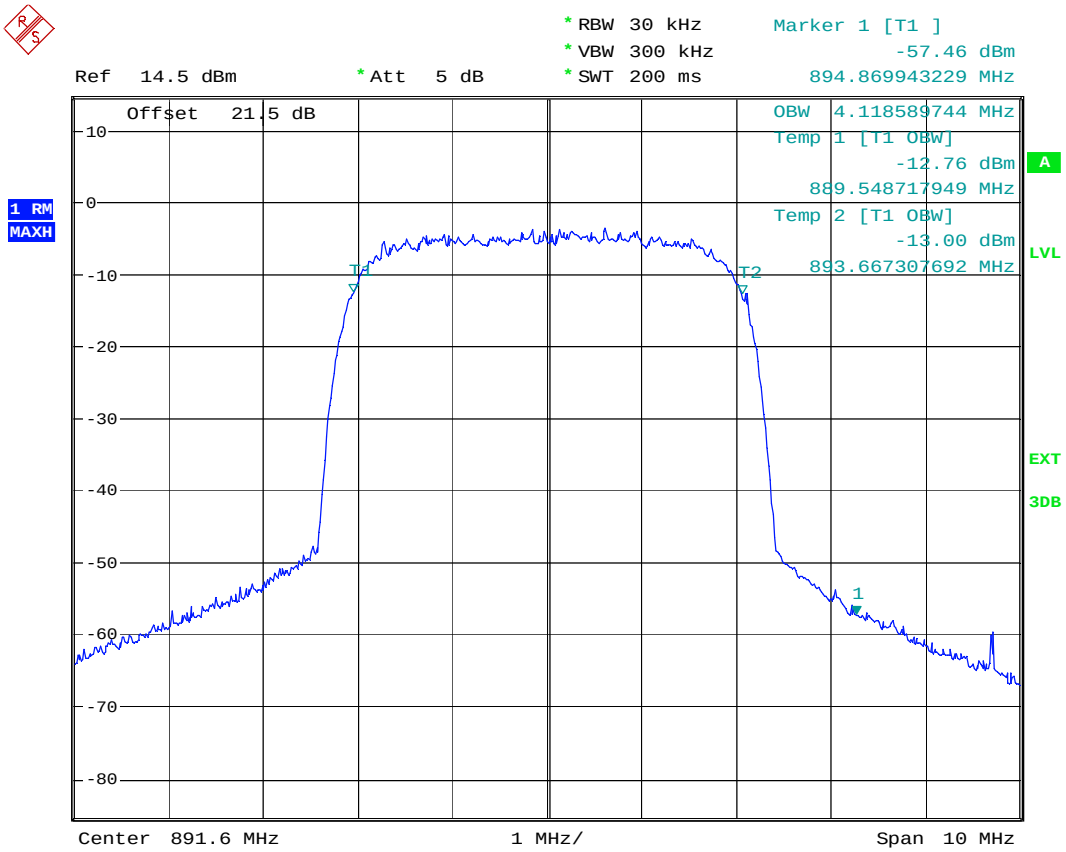


Date: 17.SEP.2009 20:10:02



Date: 17.SEP.2009 19:55:27

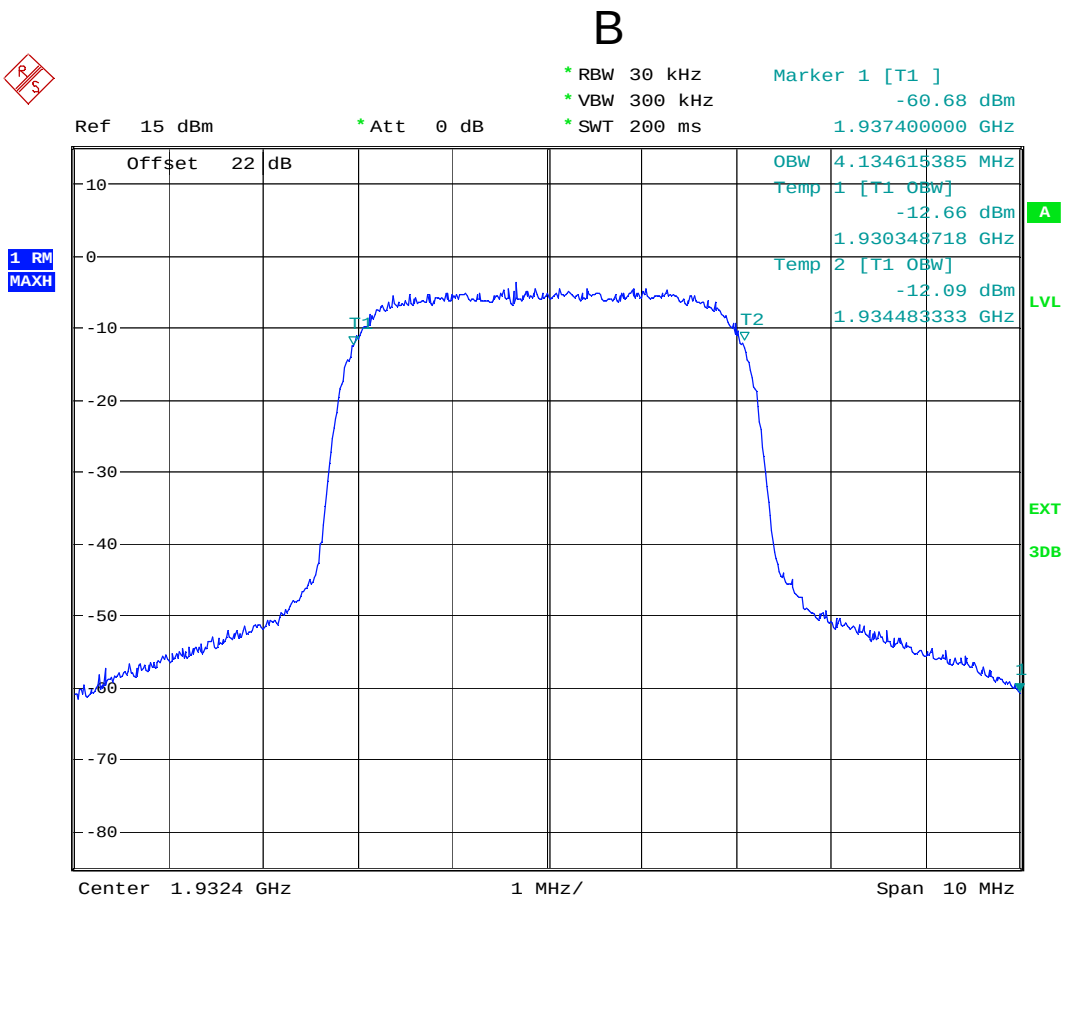
T

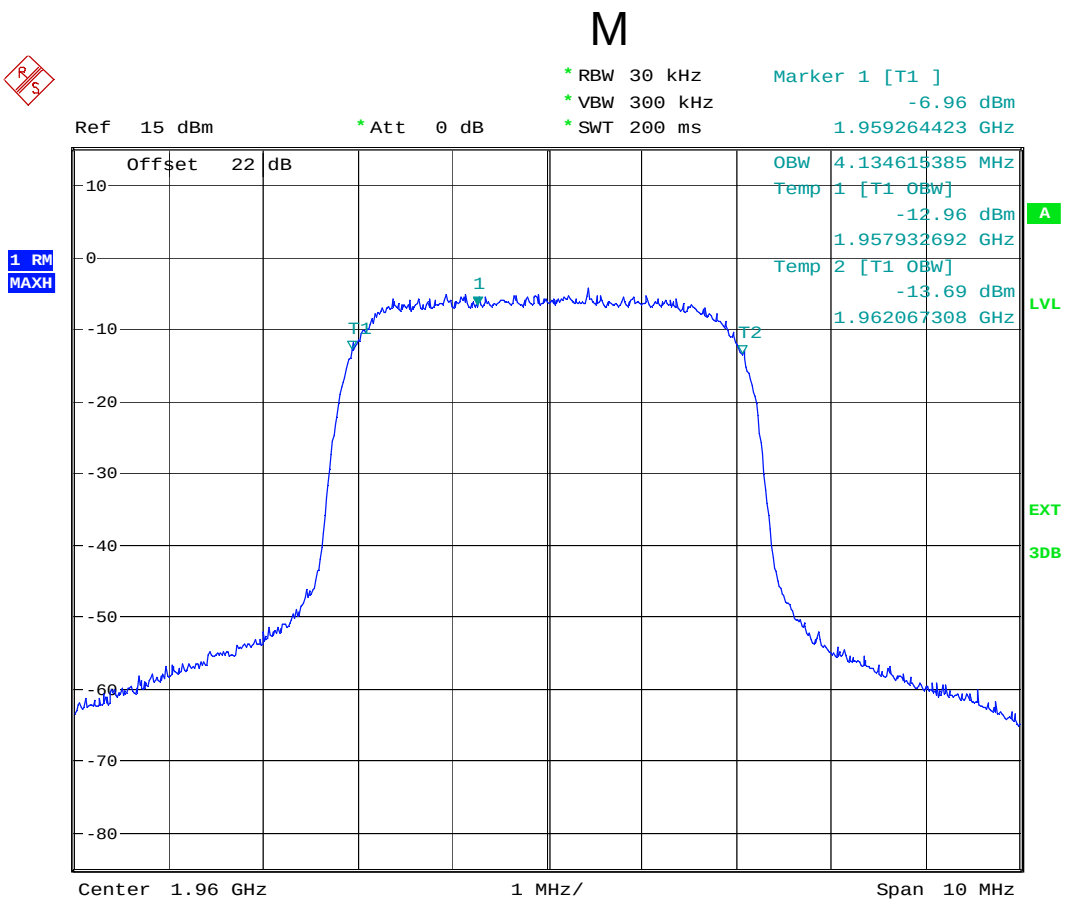


Date: 17.SEP.2009 20:25:39

2. PCS Band

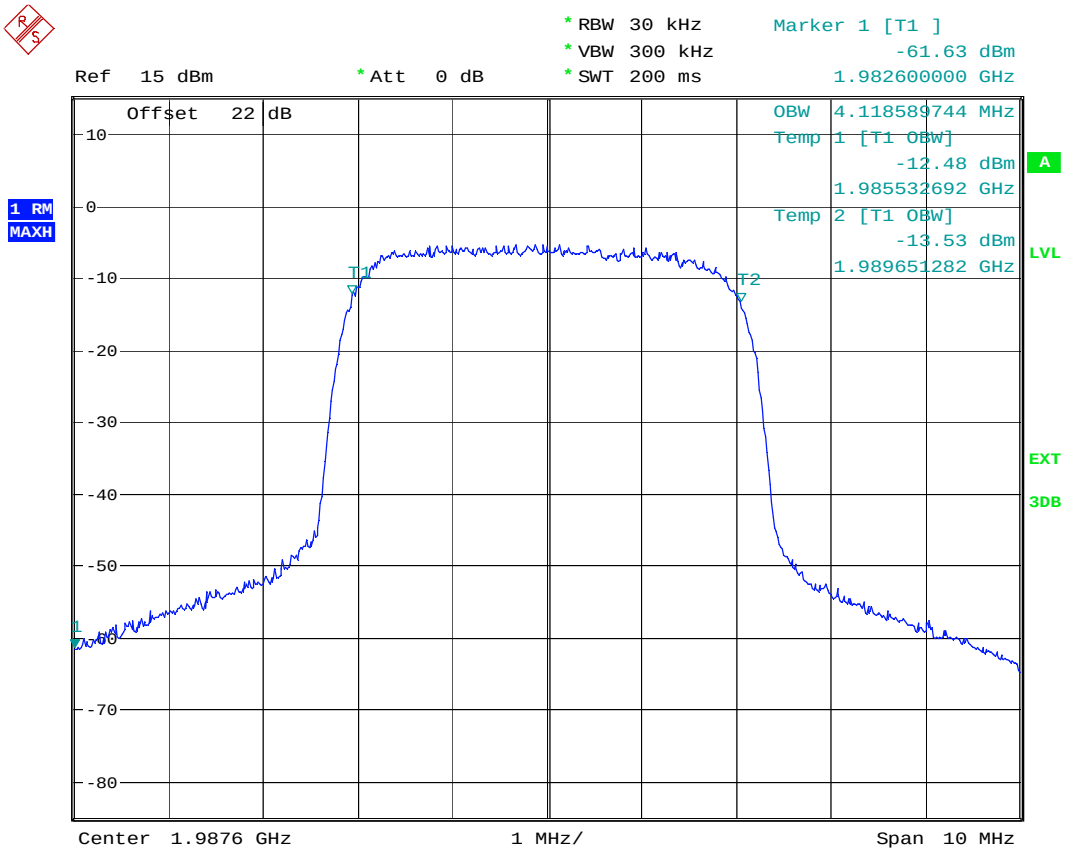
(1) TM1





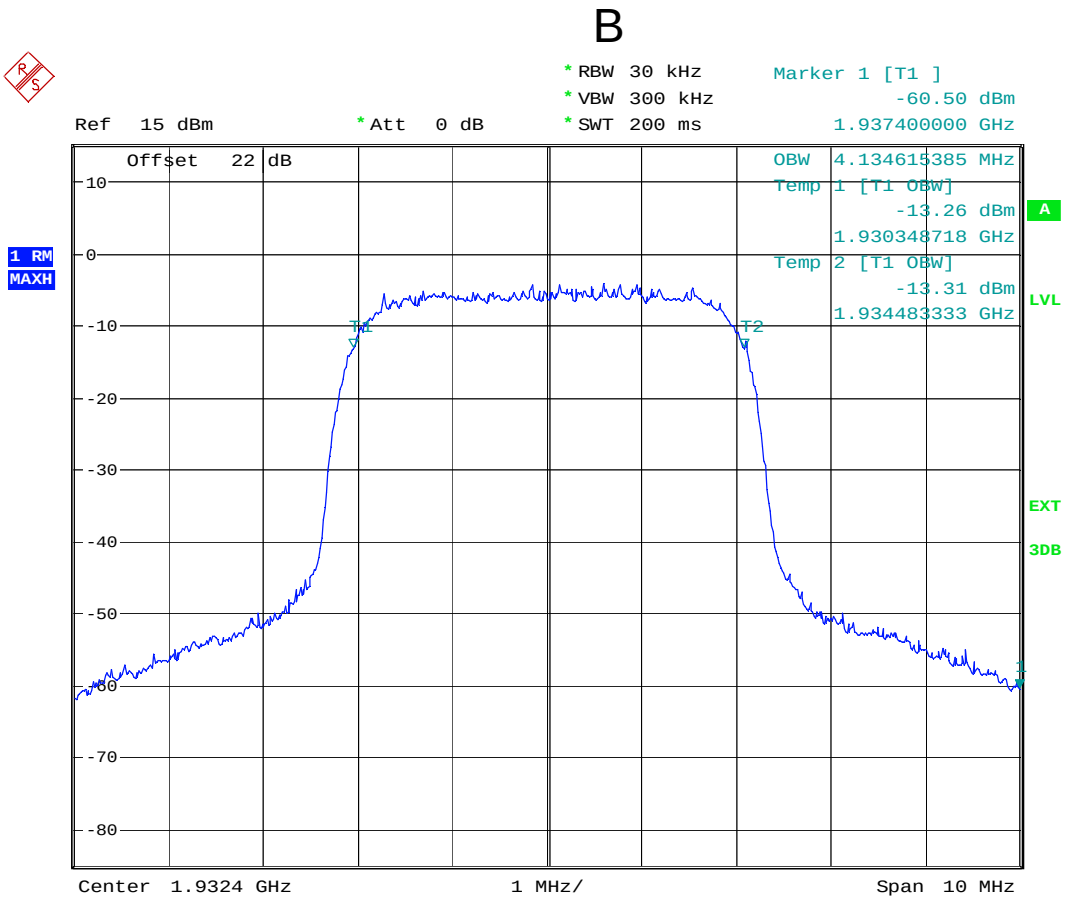
Date: 17.SEP.2009 18:59:58

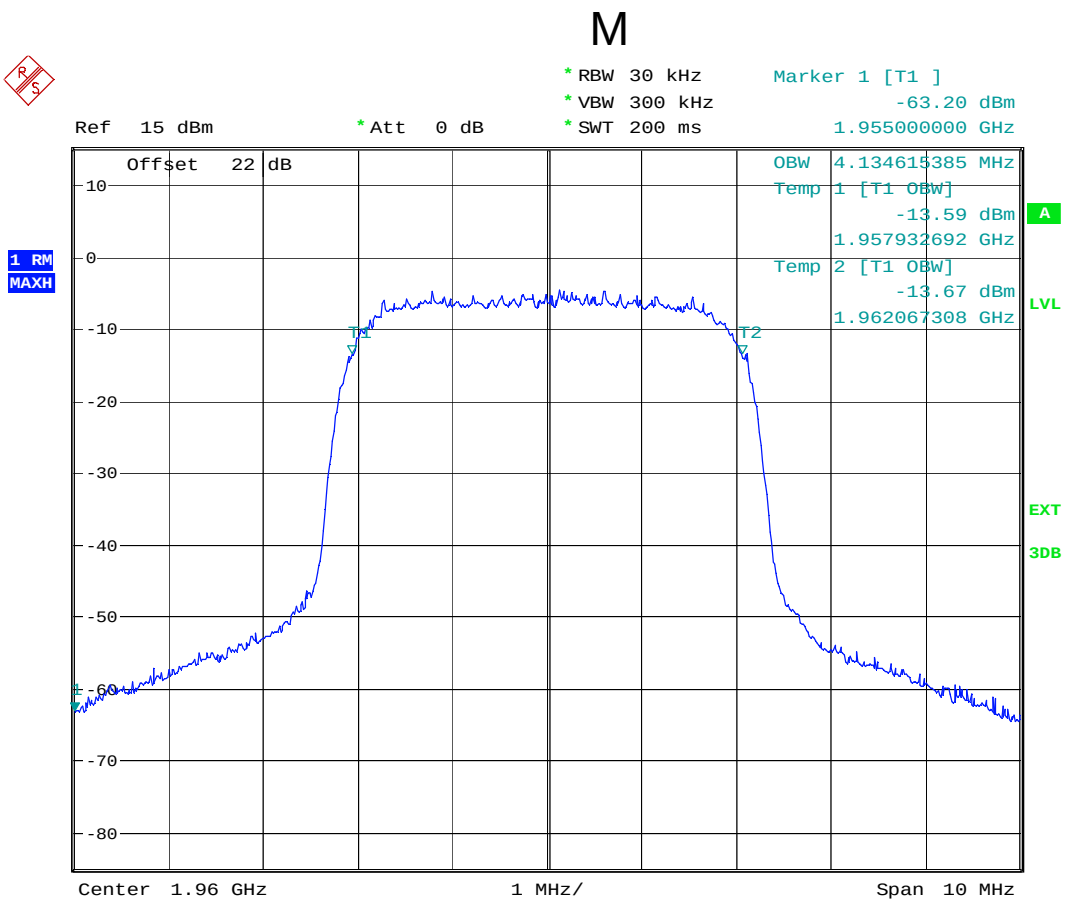
T



Date: 17.SEP.2009 19:28:10

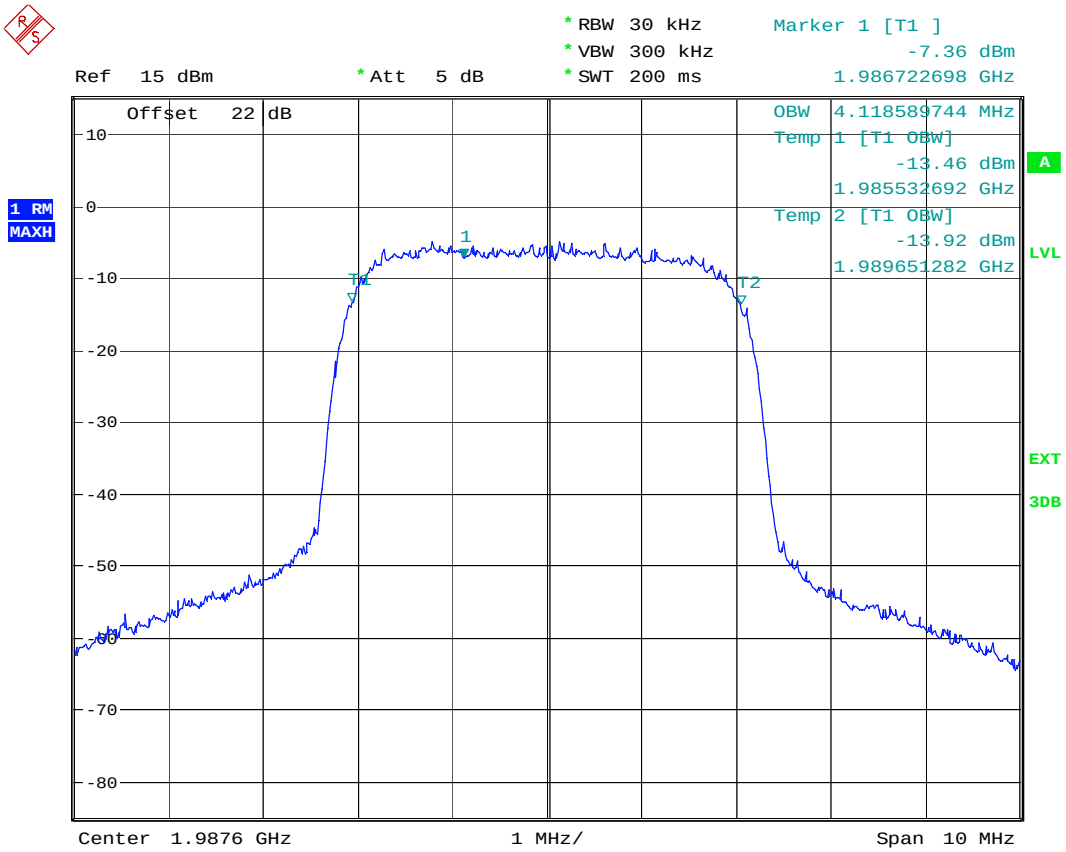
(2) TM5


B
*RBW 30 kHz
*VBW 300 kHz
*SWT 200 ms
Marker 1 [T1]
-60.50 dBm
1.937400000 GHz
Ref 15 dBm
*Att 0 dB
Offset 22 dB
OBW 4.134615385 MHz
Temp 1 [T1 OBW]
-13.26 dBm
1.930348718 GHz
Temp 2 [T1 OBW]
-13.31 dBm
1.934483333 GHz
1 RM
MAXH
A
LVL
EXT
3DB
T1
T2
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 1.9324 GHz
1 MHz/
Span 10 MHz
Date: 17.SEP.2009 19:24:53



Date: 17.SEP.2009 19:10:09

T



Date: 17.SEP.2009 19:38:07

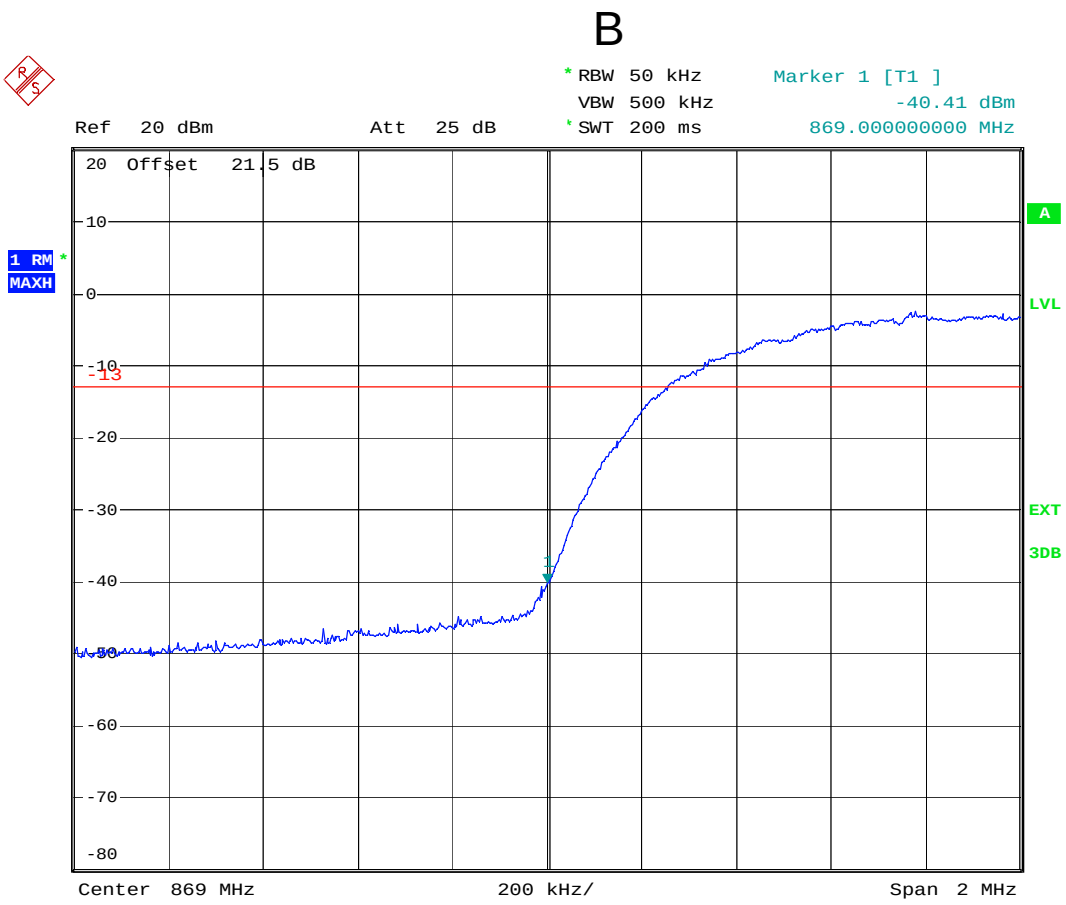
Appendix D

Band Edge Measurement

According to FCC part 2.1051 and part 22.917
According to FCC part 2.1051 and part 24.238

1. Cellular Band

(1) TM1



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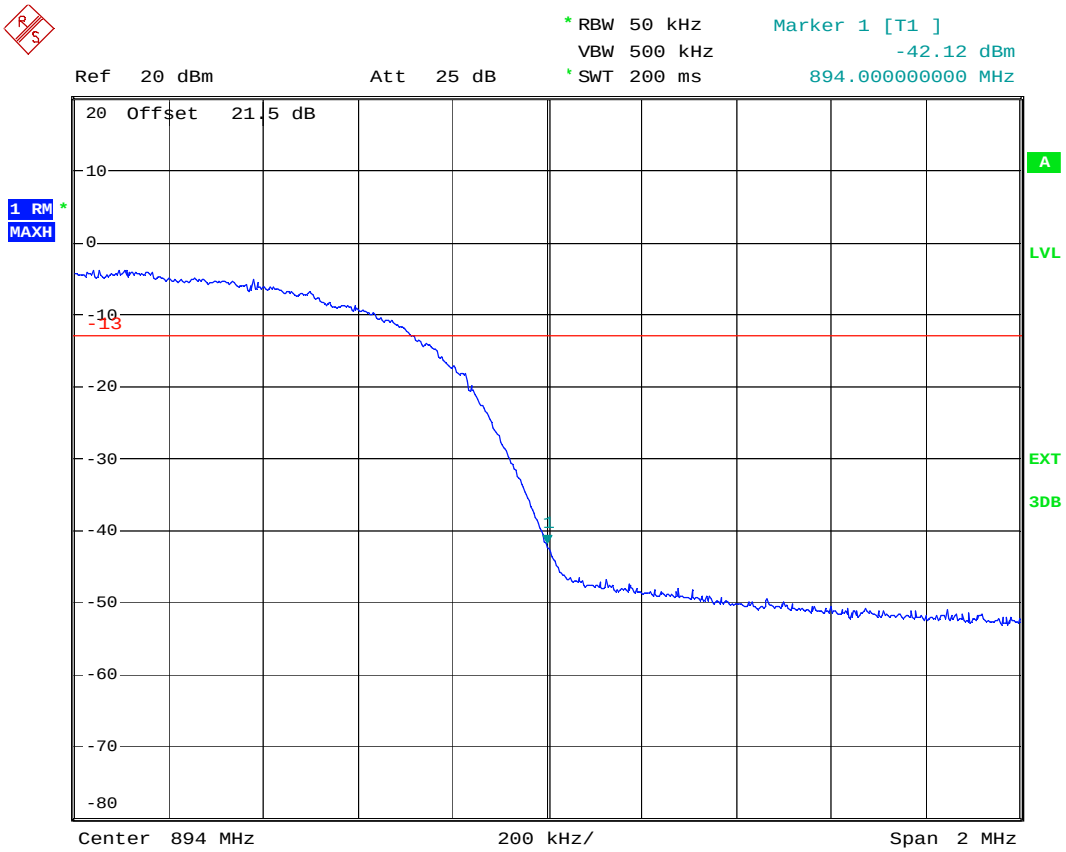
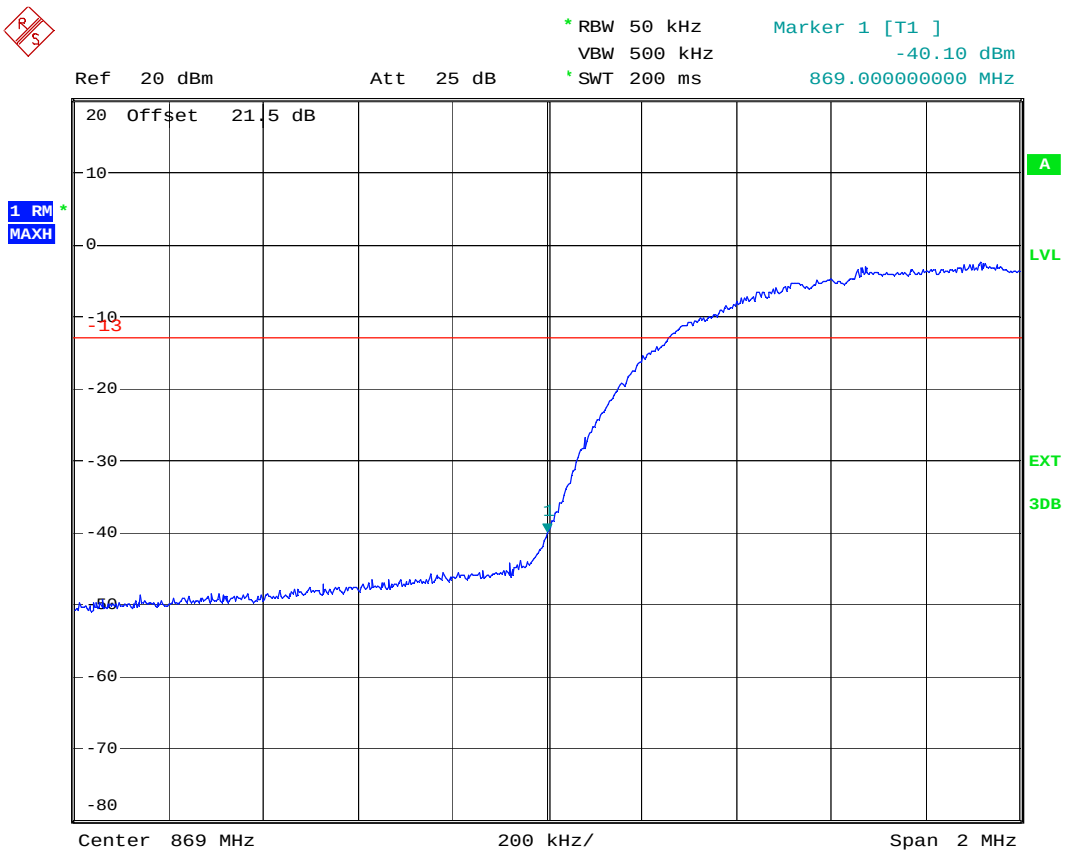


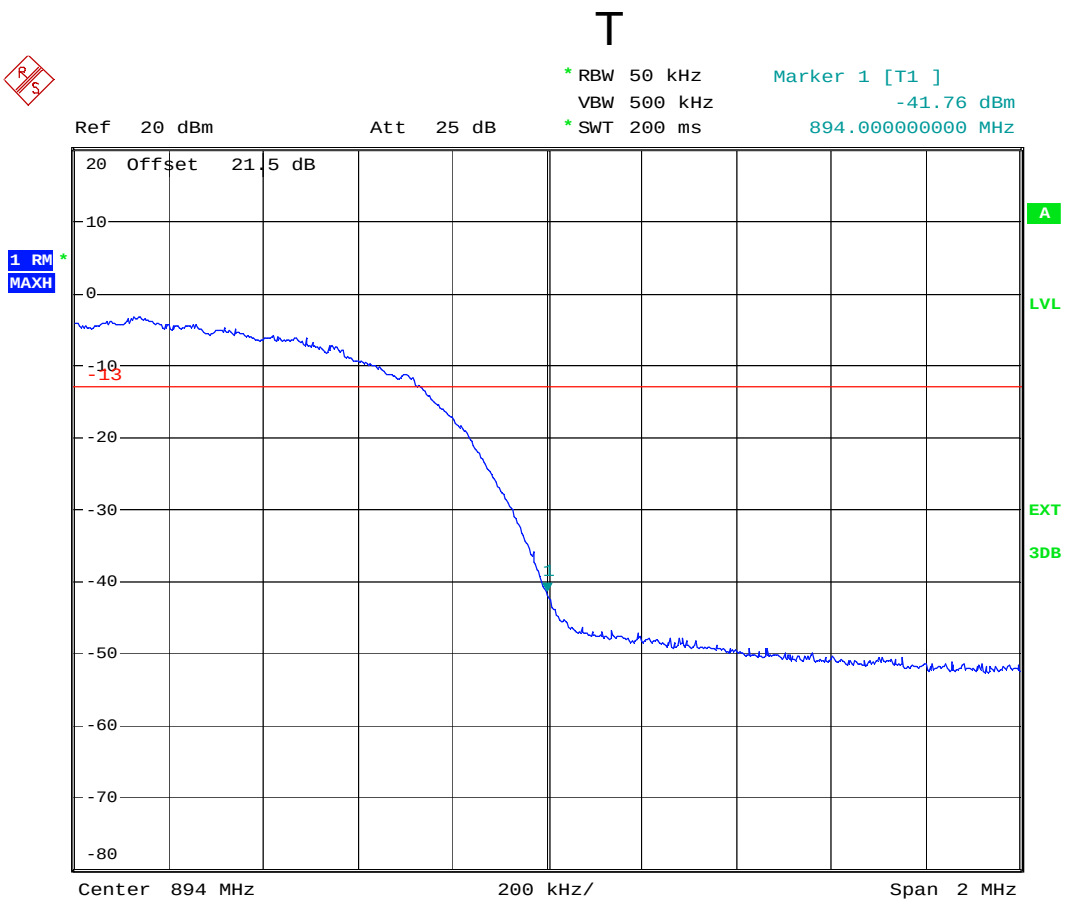
Date: 17.SEP.2009 20:13:45

(2) TM5

B



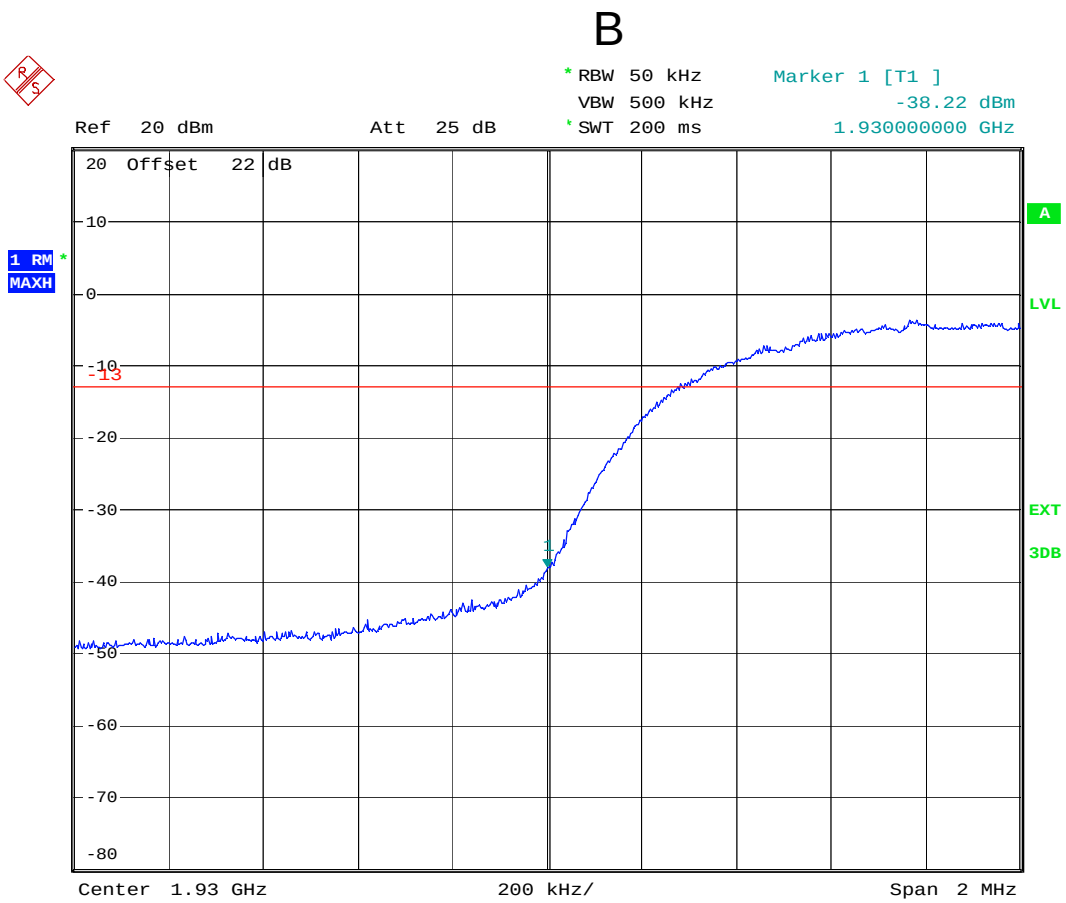
Date: 17.SEP.2009 20:09:06



Date: 17.SEP.2009 20:24:15

2. PCS Band

(1) TM1



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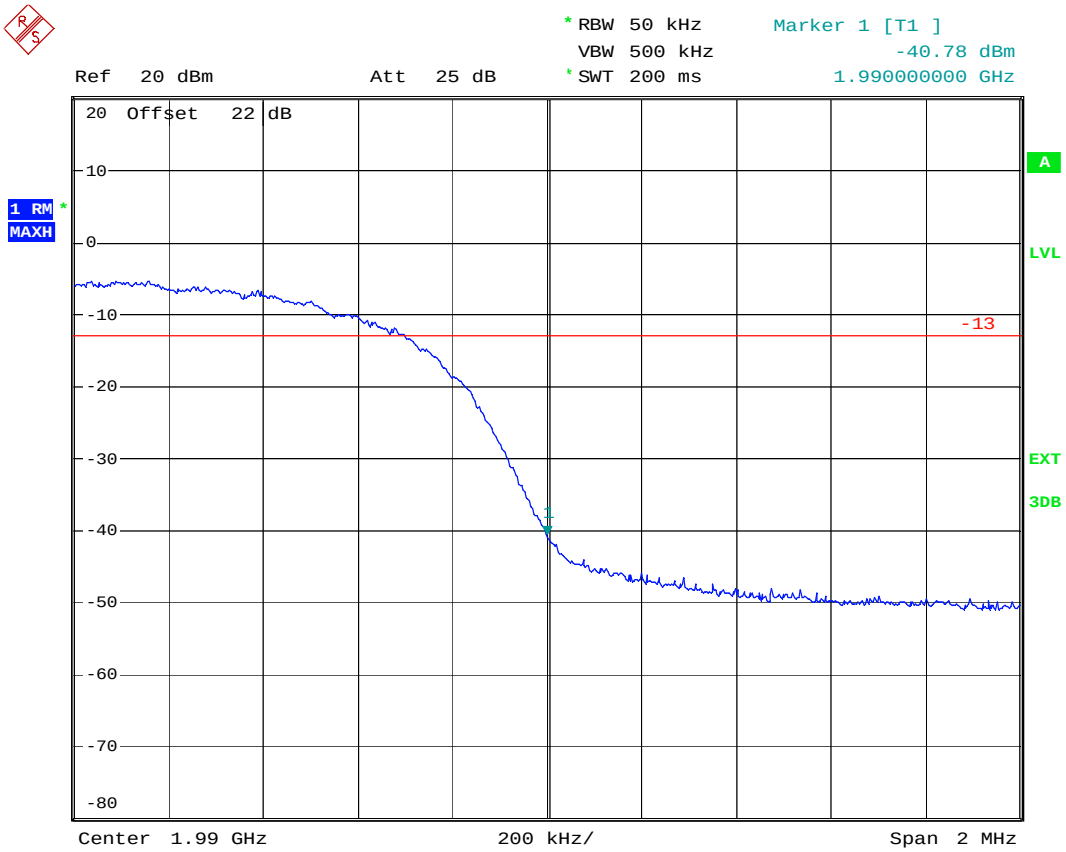
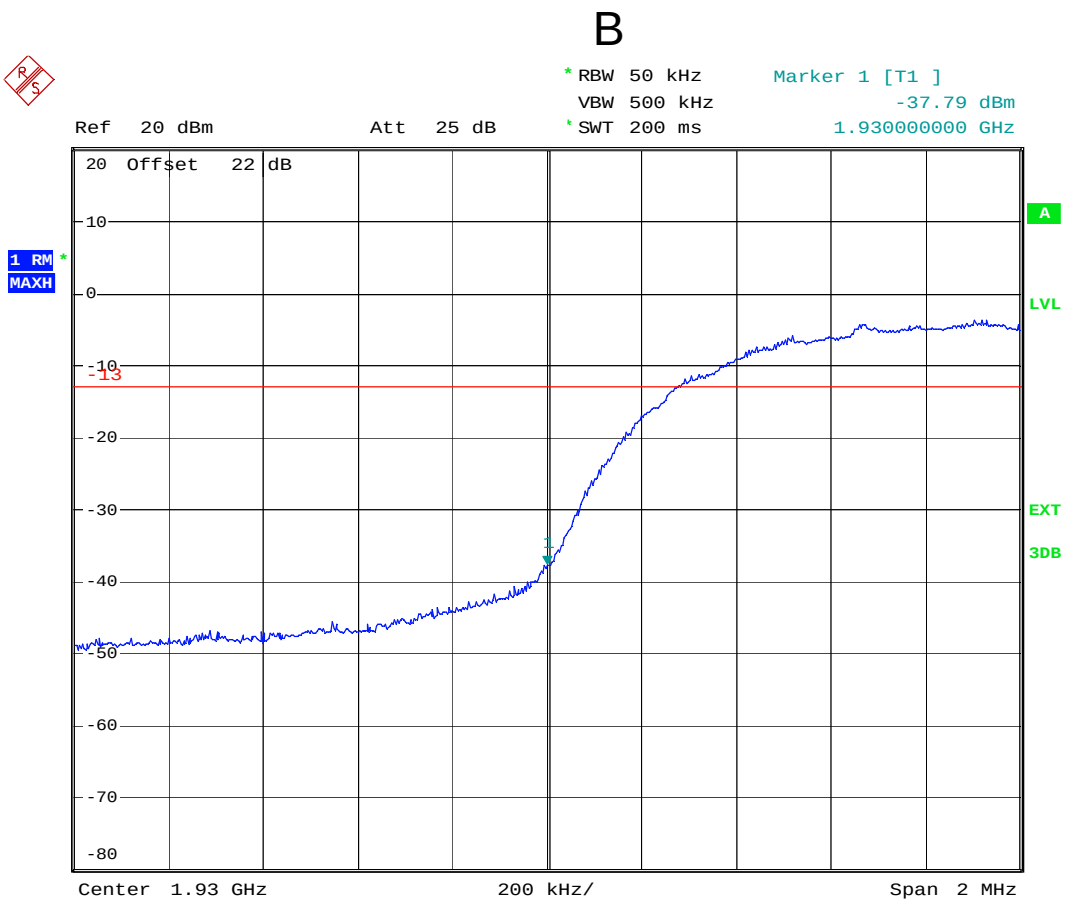


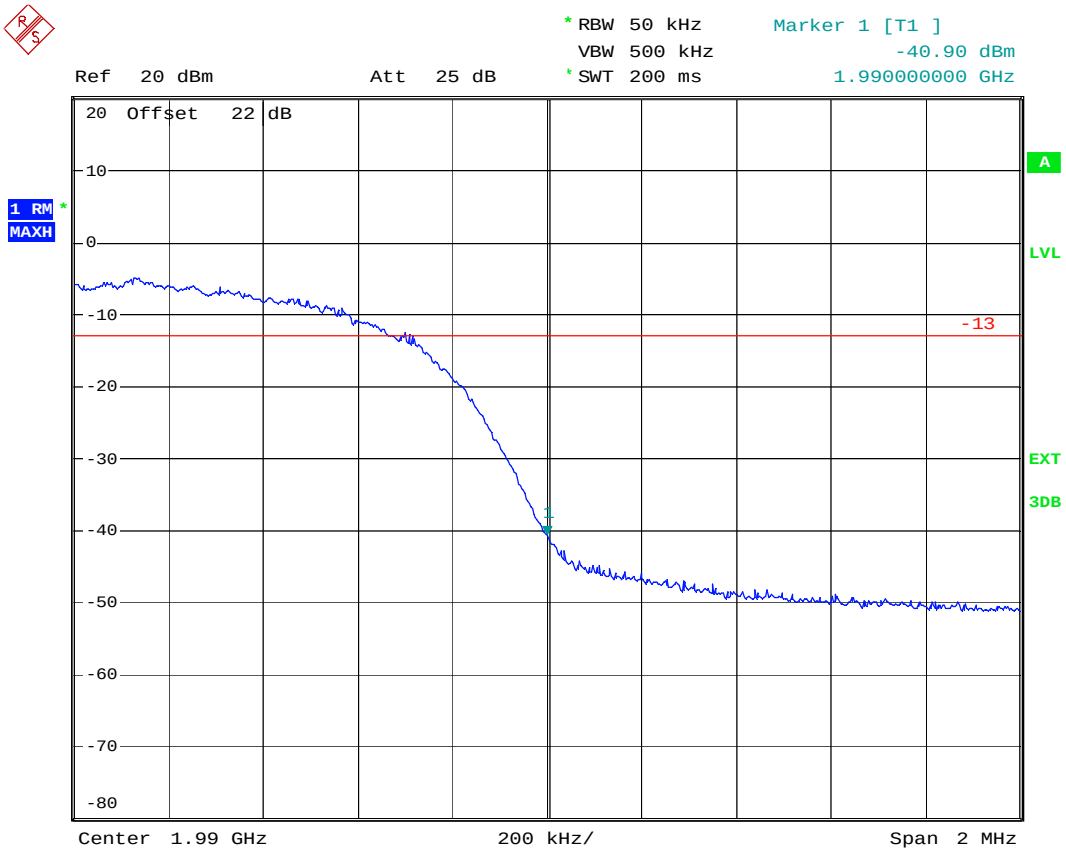
Date: 17.SEP.2009 19:30:07

(2) TM5



Date: 17.SEP.2009 19:24:07

T



Date: 17.SEP.2009 19:37:02

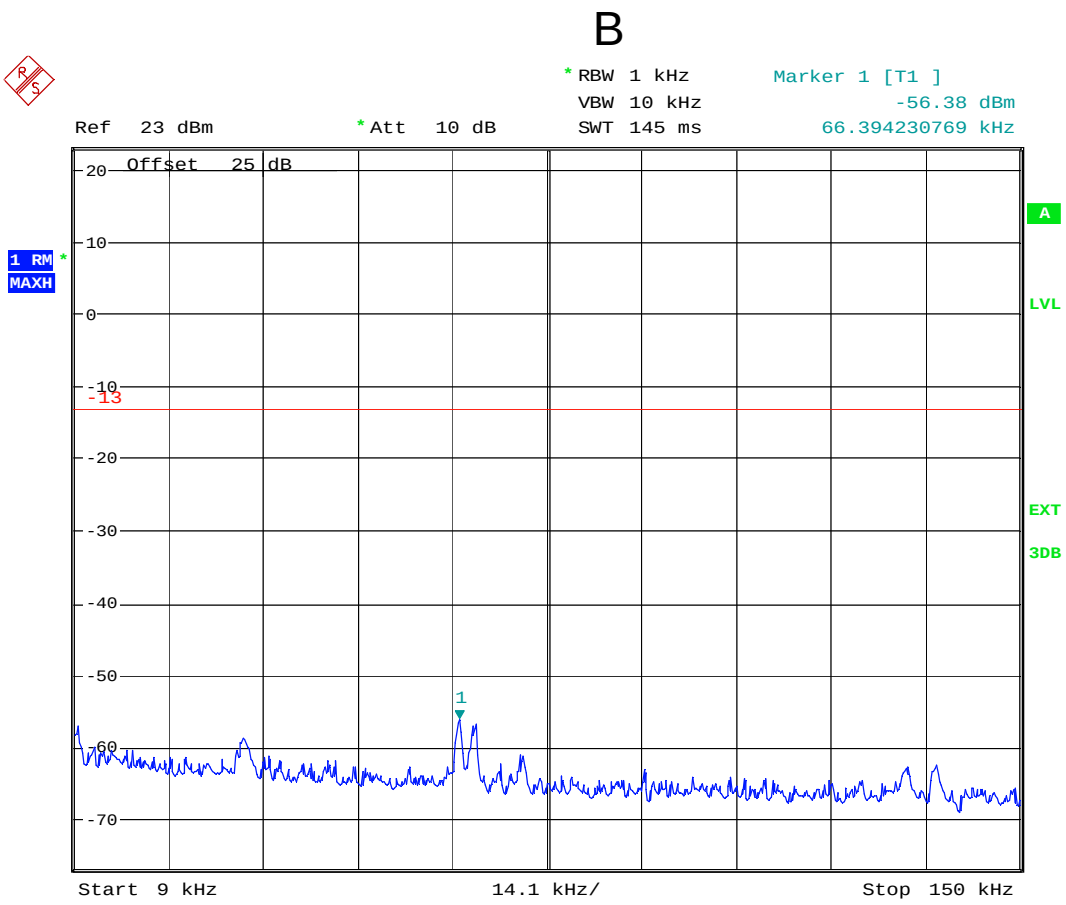
Appendix E

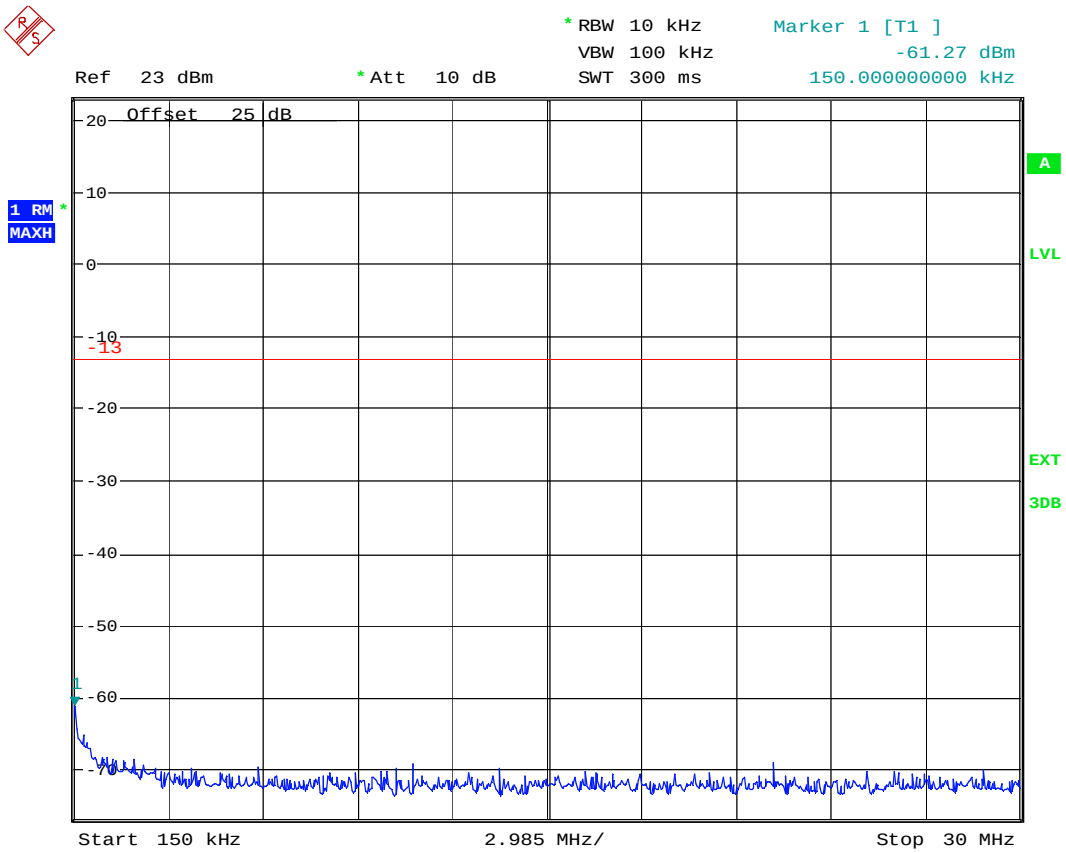
Spurious Emission at Antenna Terminal Measurement

According to FCC part 2.1051 and part 22.917
According to FCC part 2.1051 and part 24.238

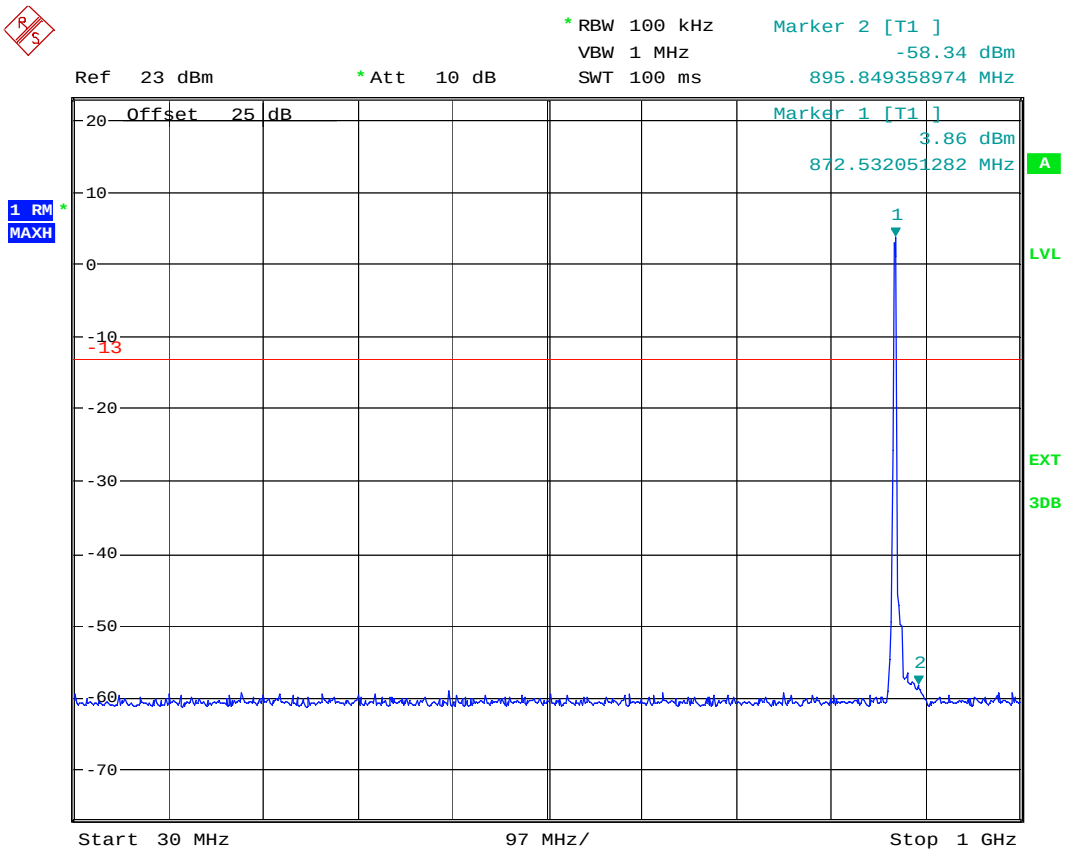
1. Cellular Band

(1) TM1

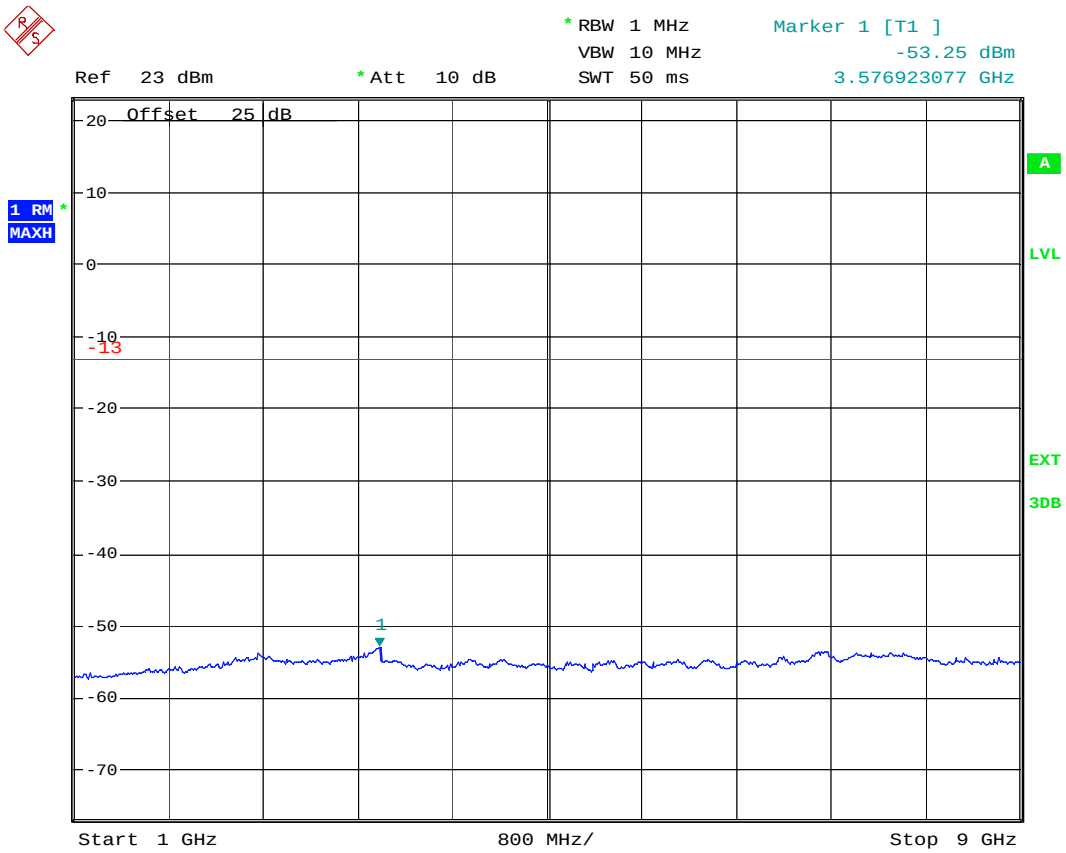




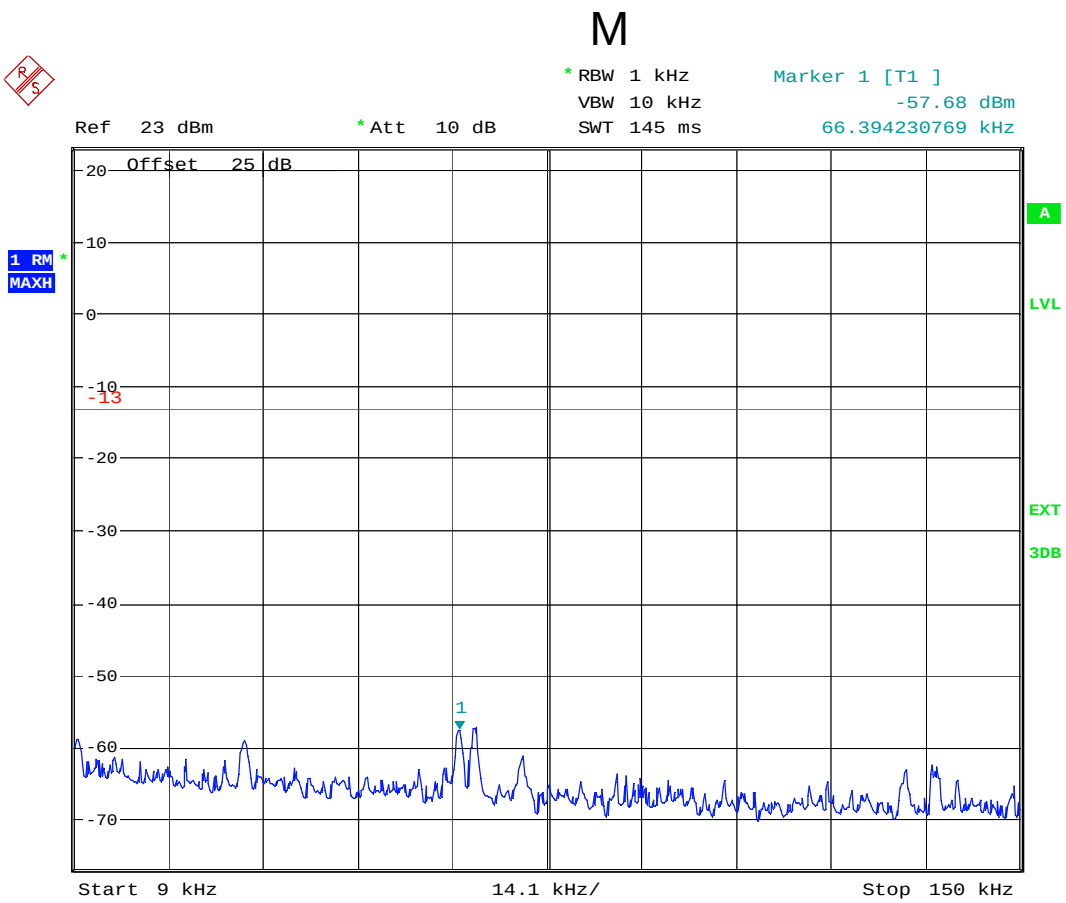
Date: 17.SEP.2009 20:03:39



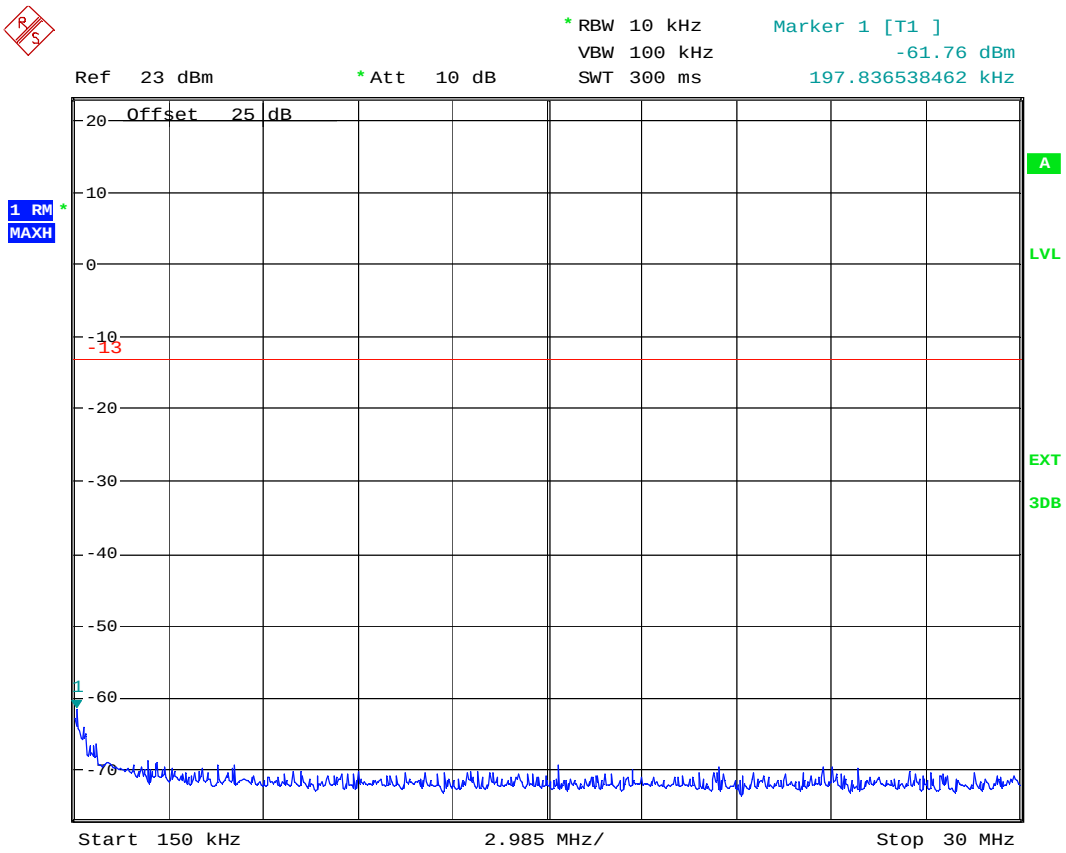
Date: 17.SEP.2009 20:04:35



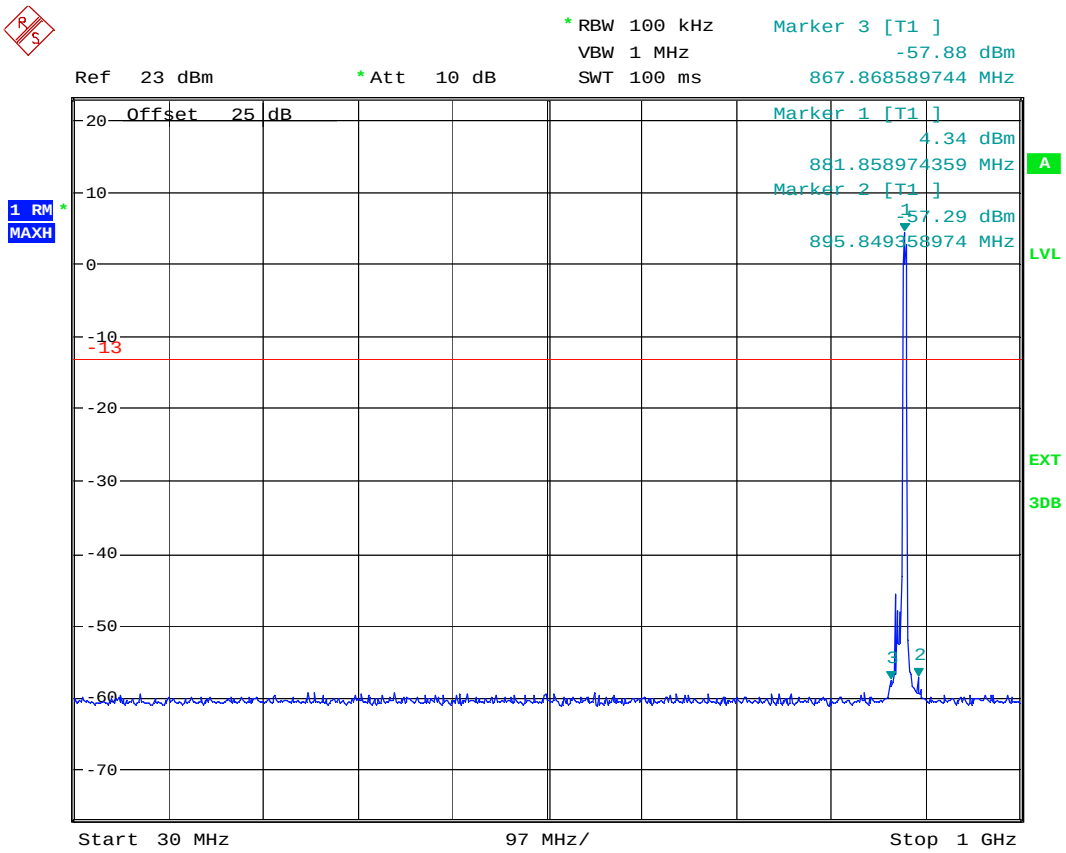
Date: 17.SEP.2009 20:04:55



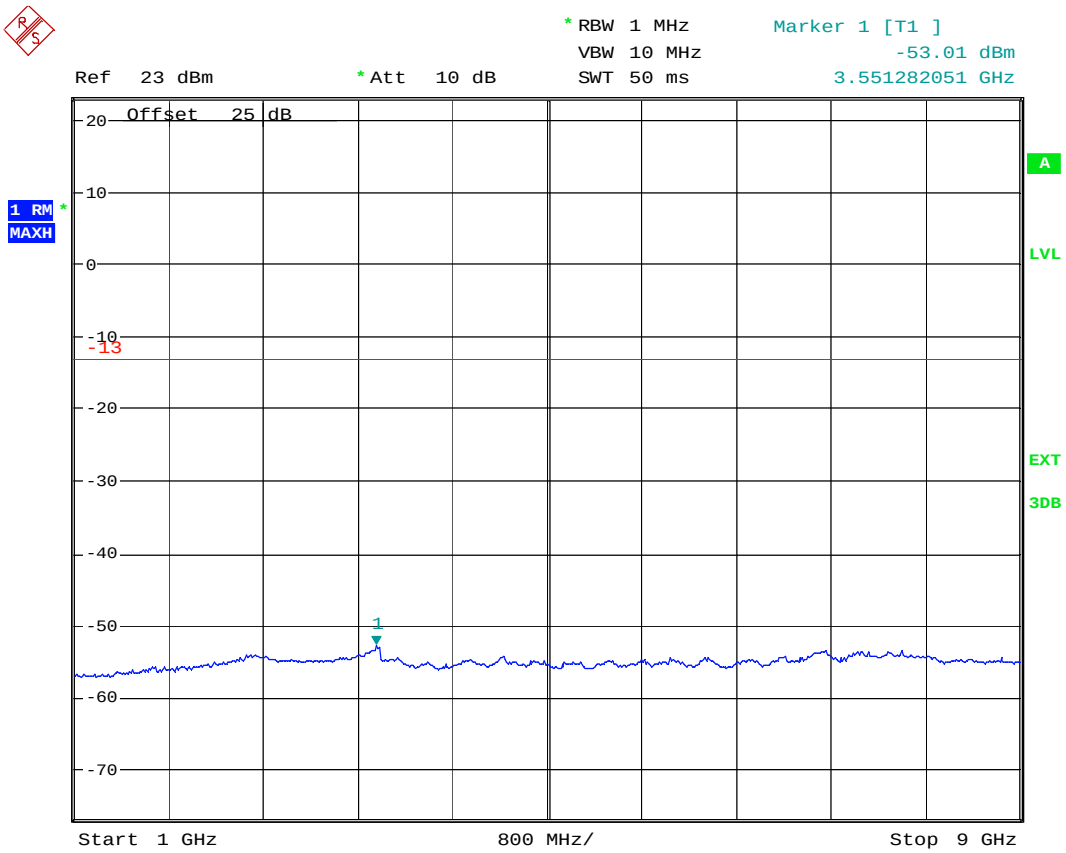
Date: 17.SEP.2009 19:45:52



Date: 17.SEP.2009 19:46:20



Date: 17.SEP.2009 19:48:14



Date: 17.SEP.2009 19:48:51

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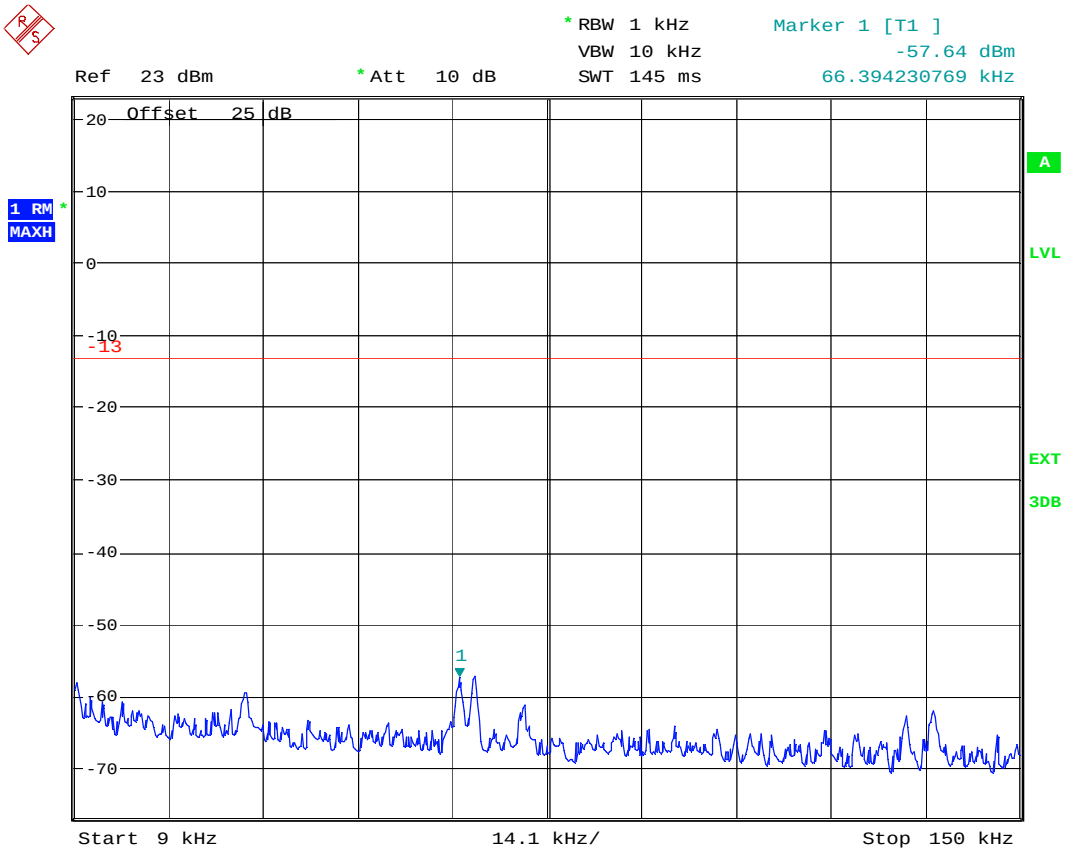
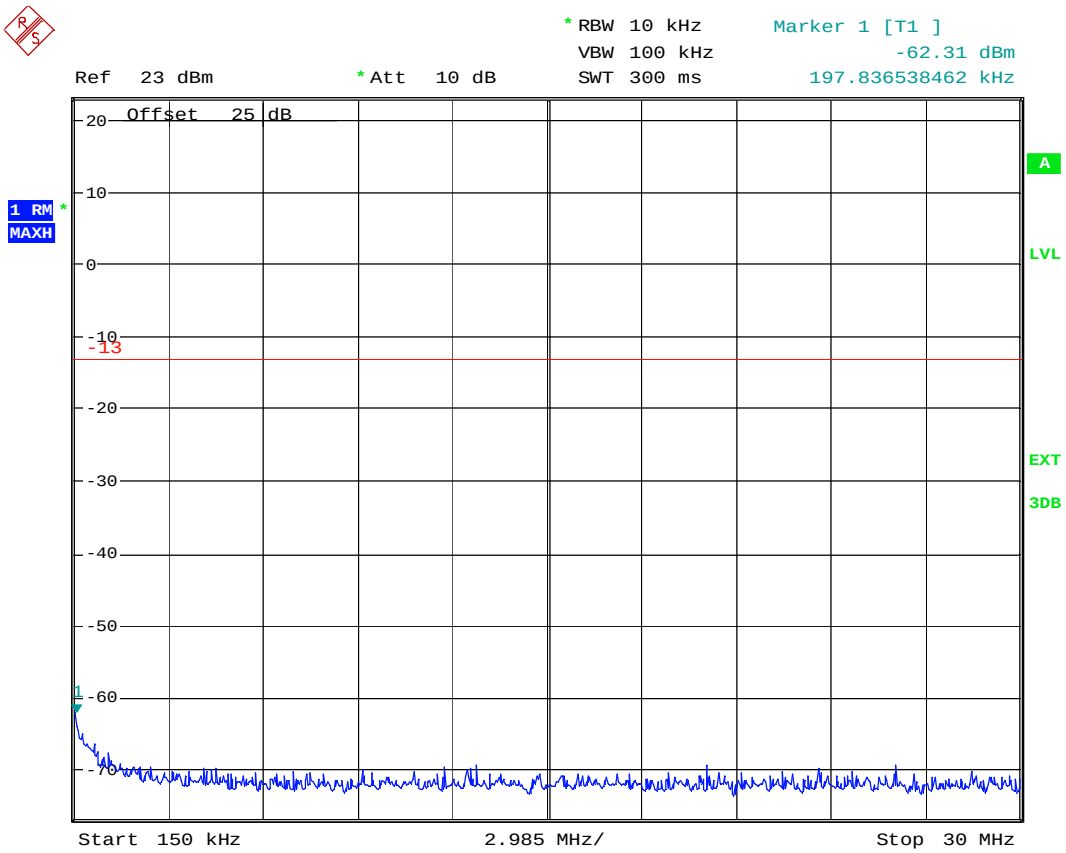
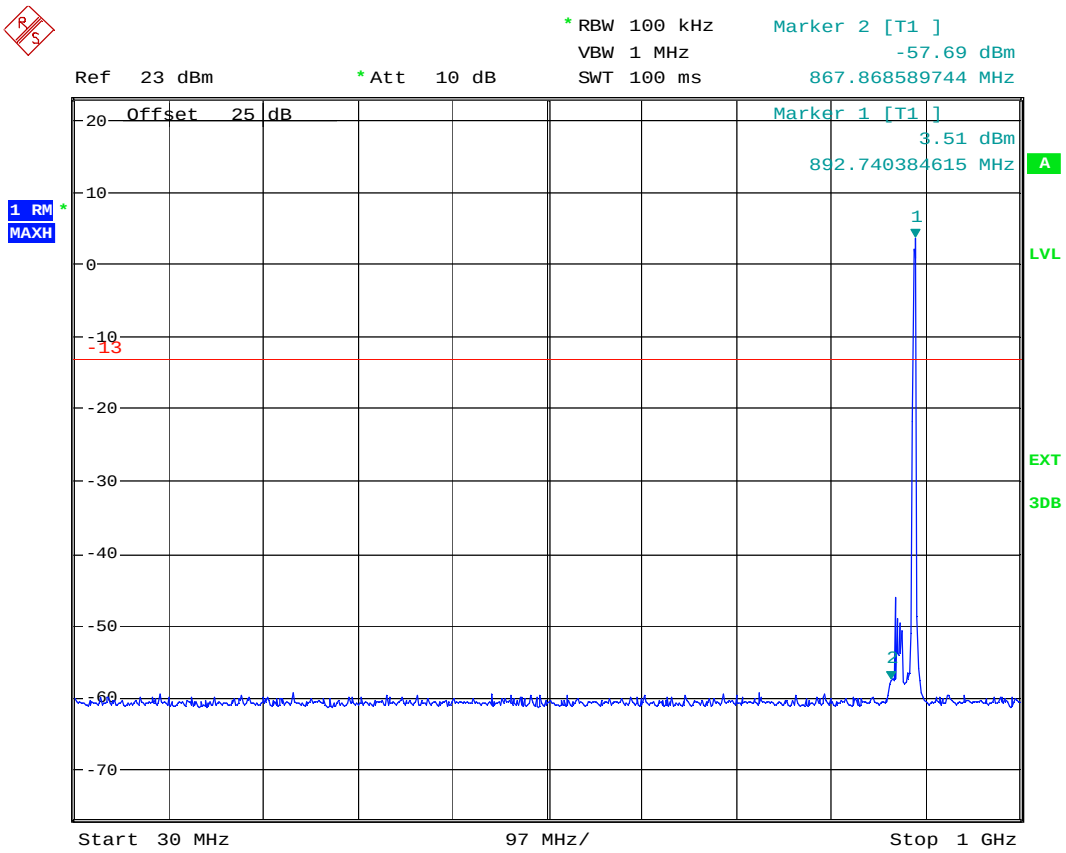


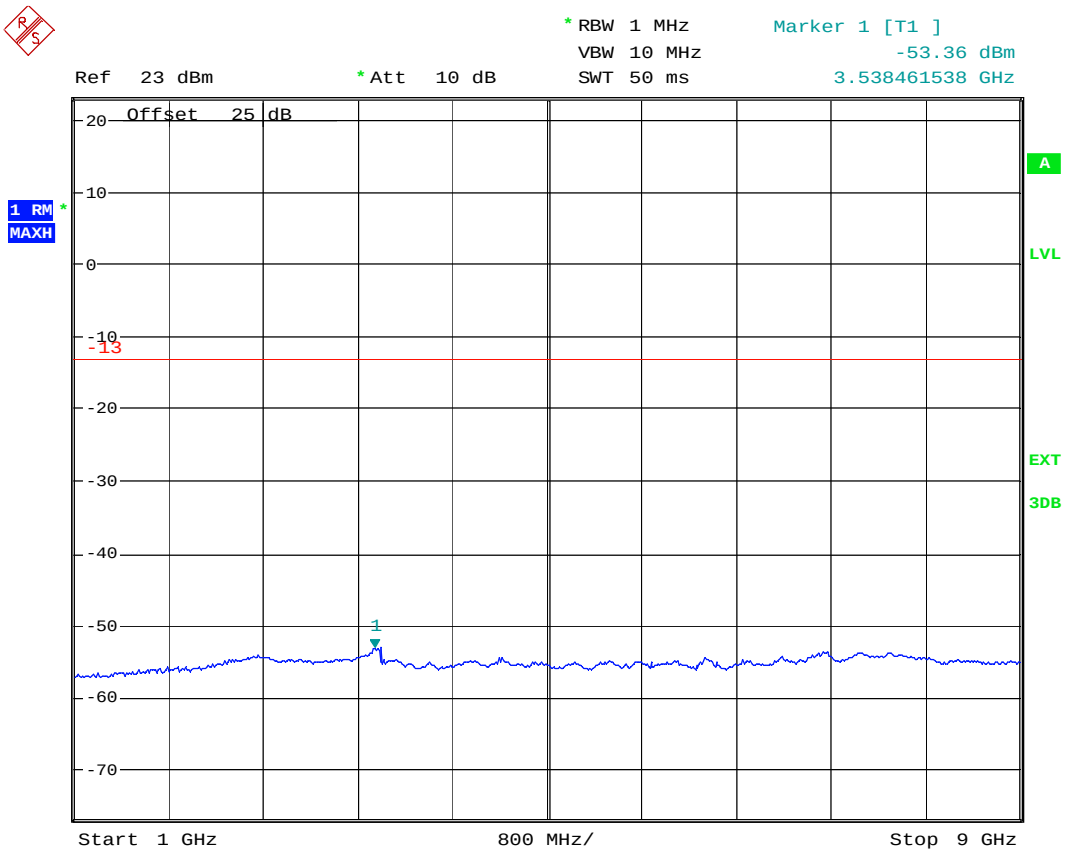
Date: 17.SEP.2009 20:14:26



Date: 17.SEP.2009 20:14:54



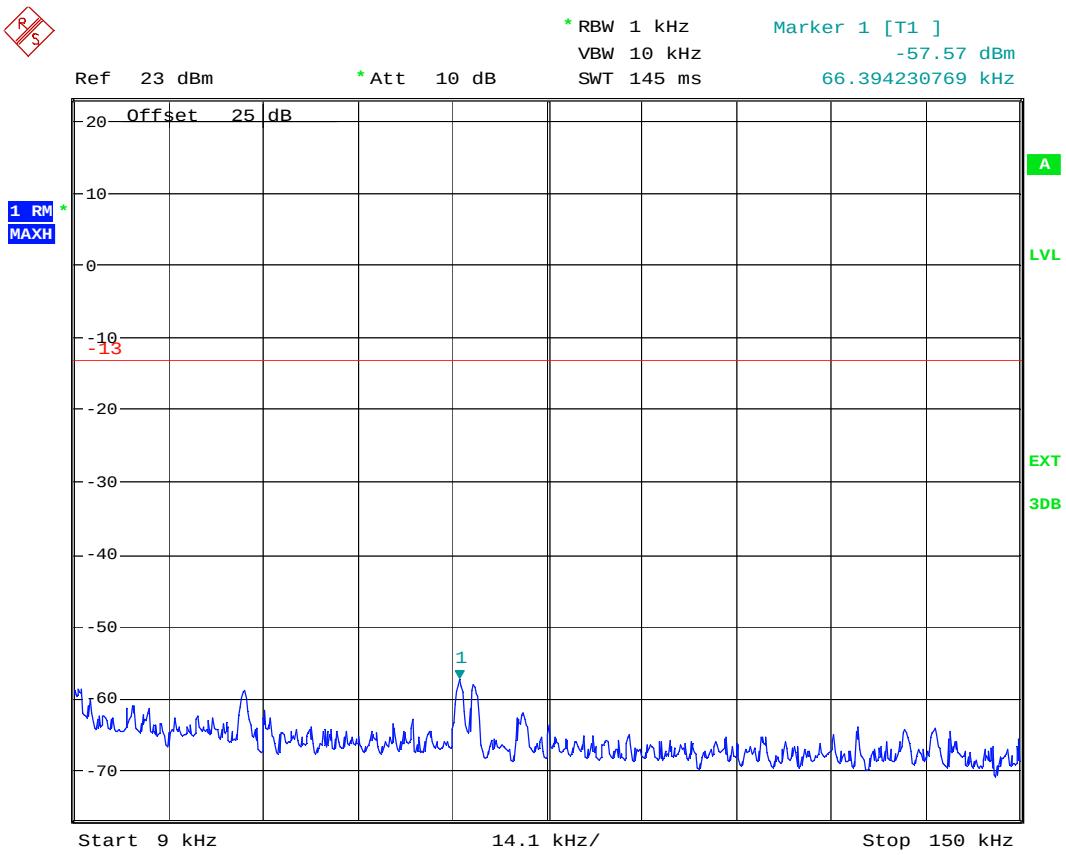
Date: 17.SEP.2009 20:15:49



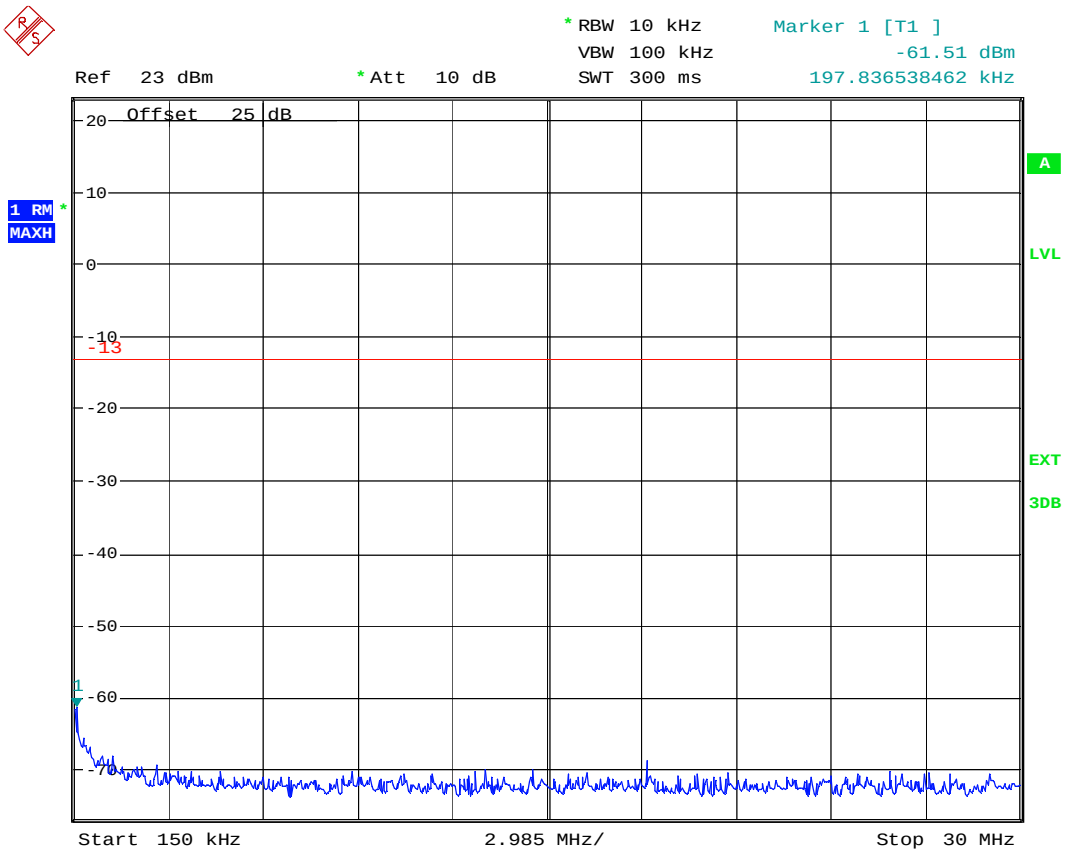
Date: 17.SEP.2009 20:16:16

(2) TM5

B



Date: 17.SEP.2009 20:07:43



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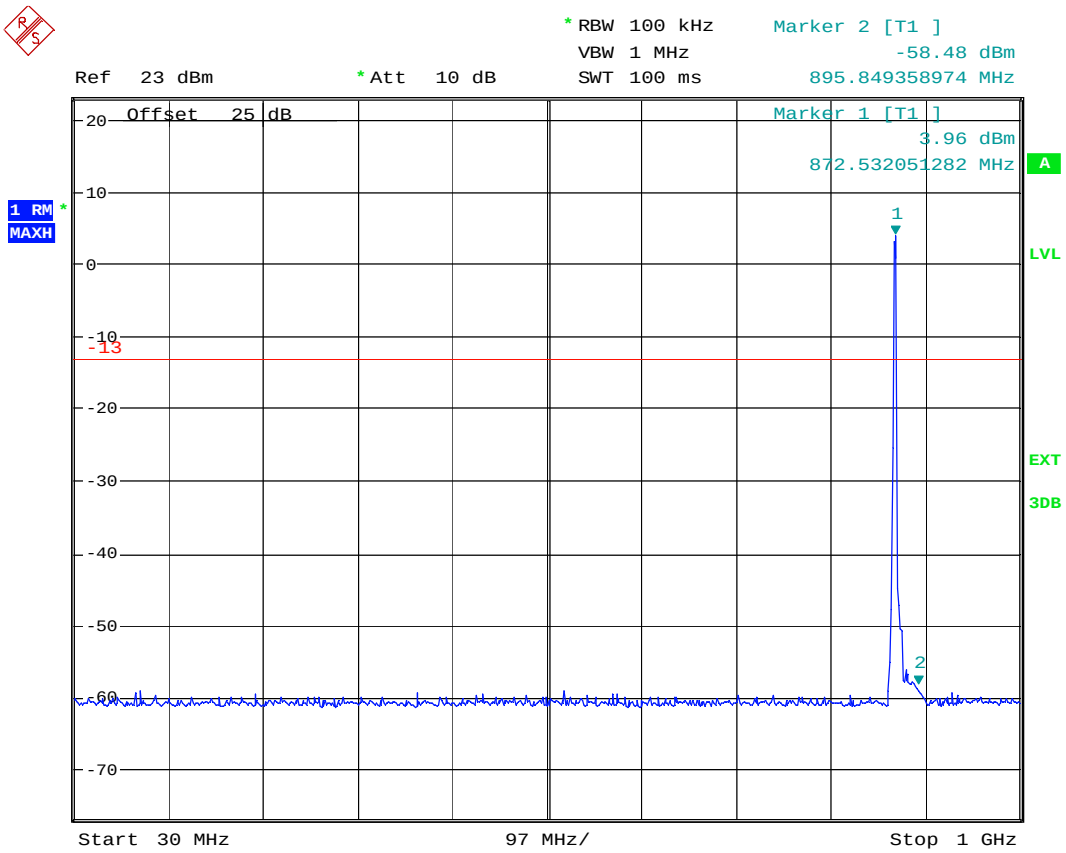

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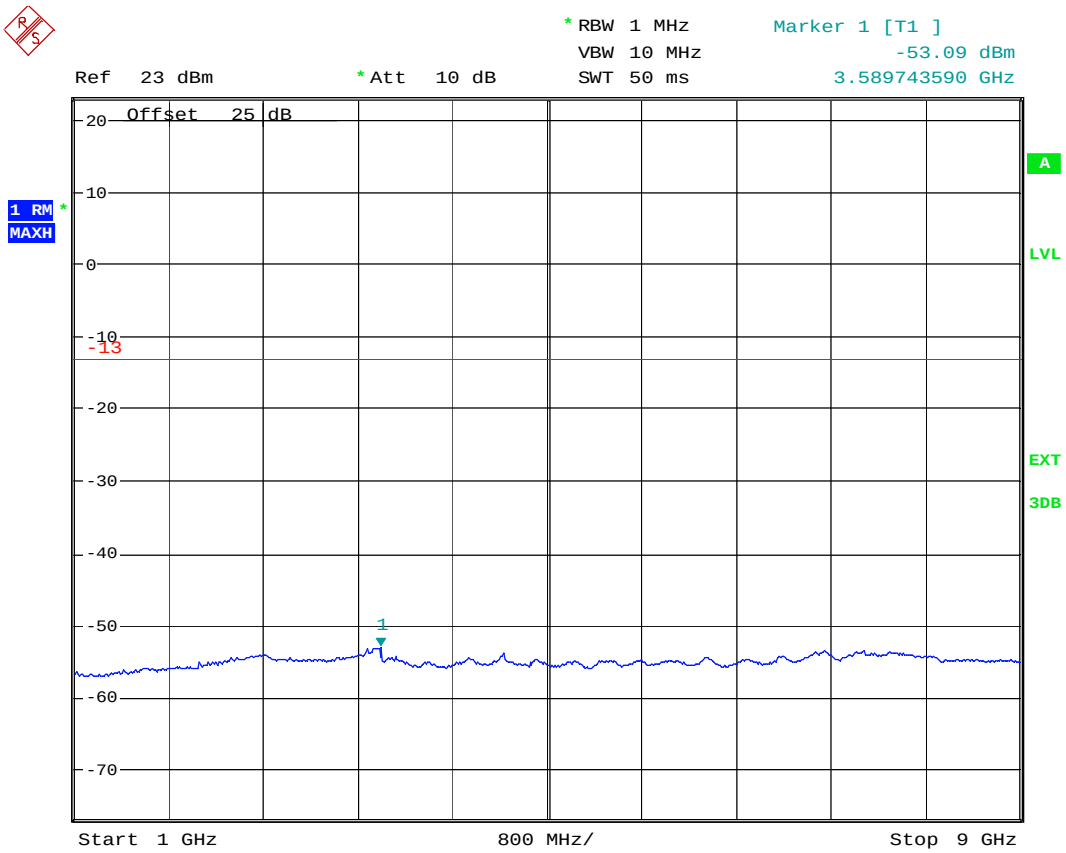

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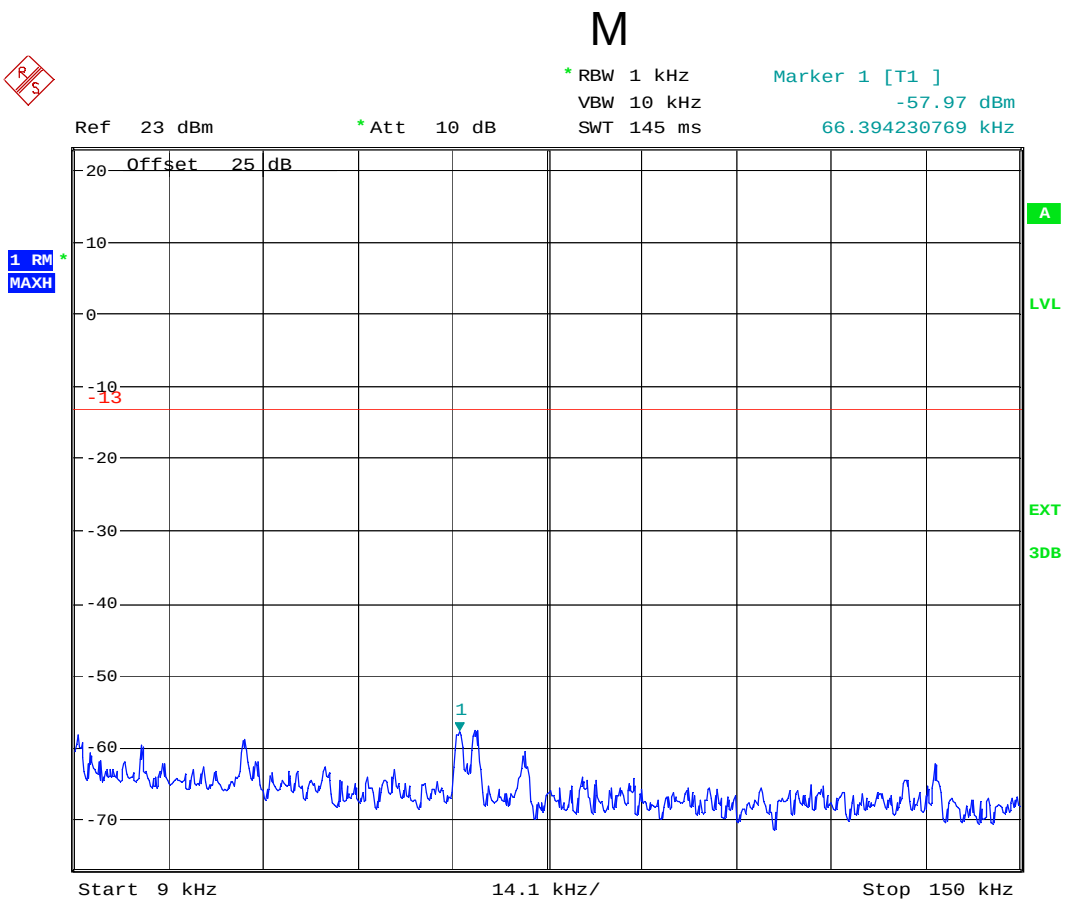

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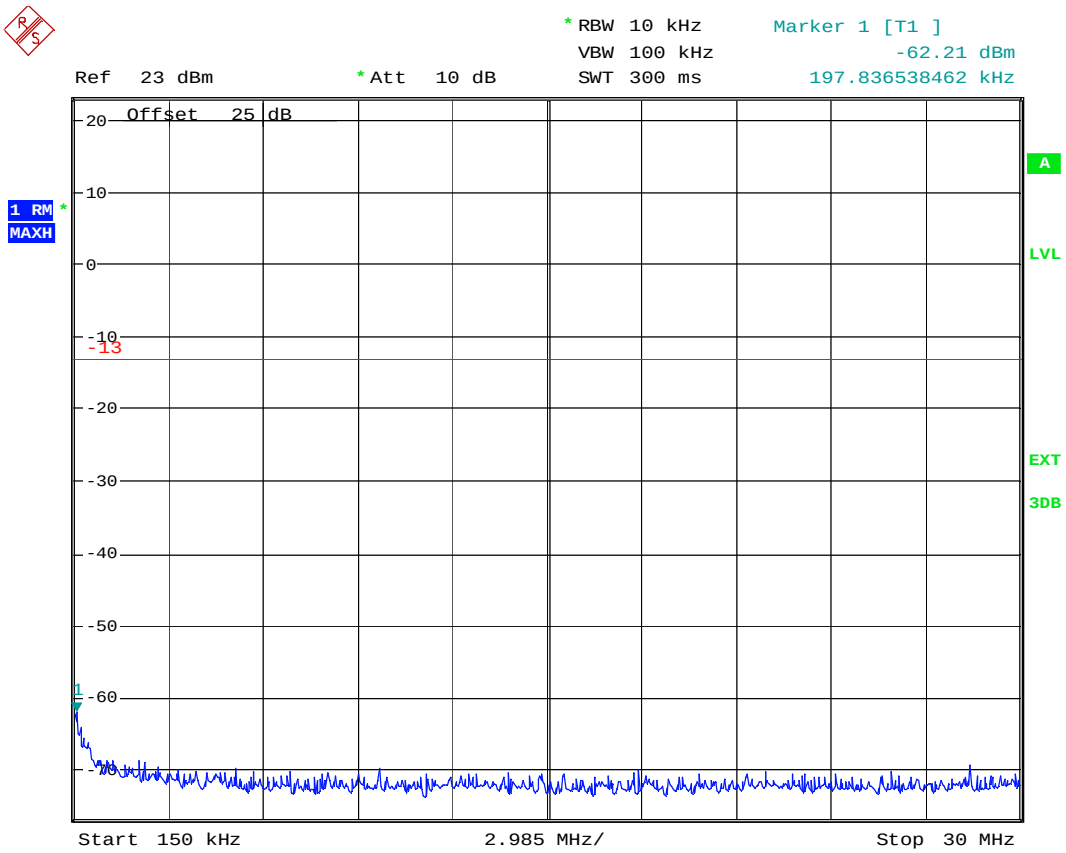

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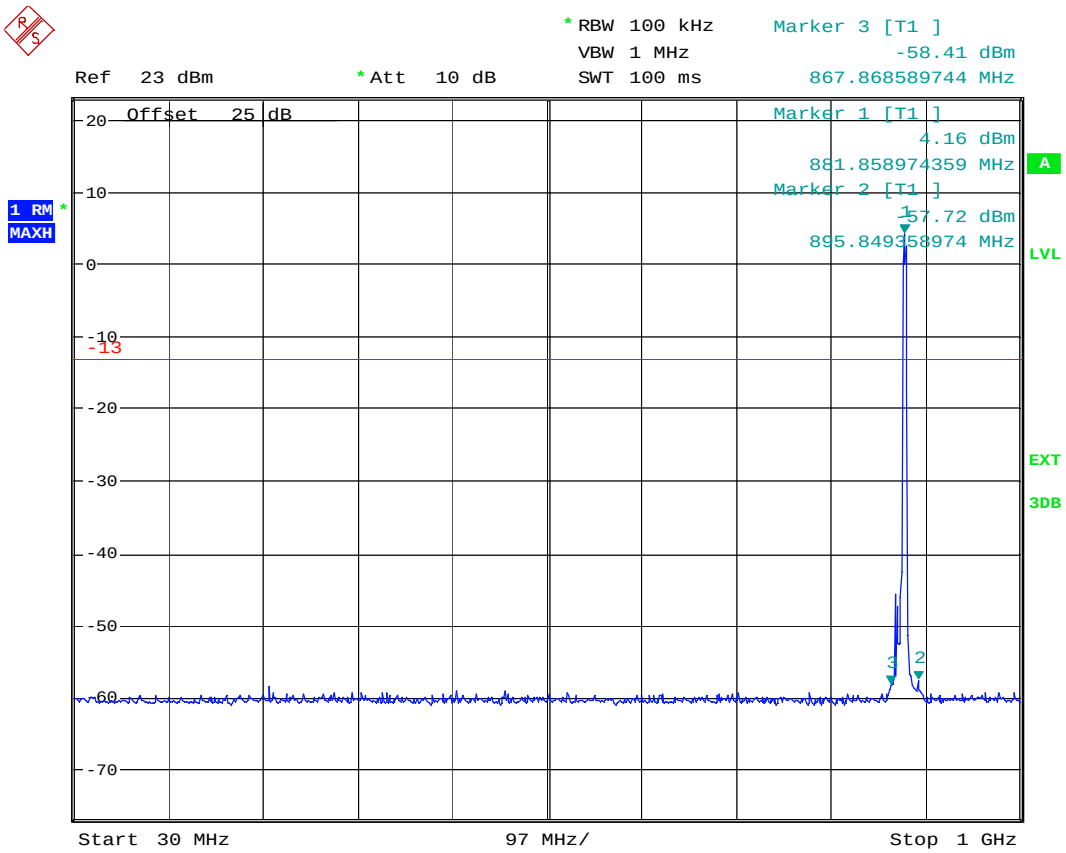

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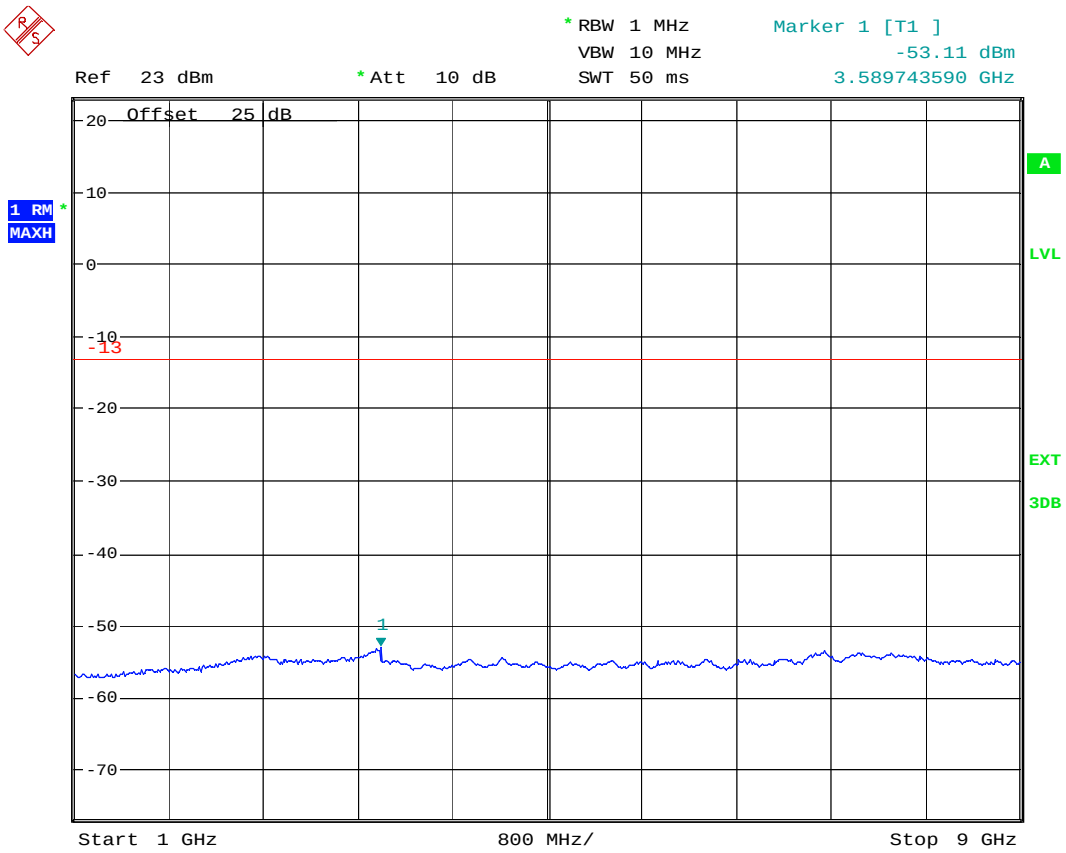

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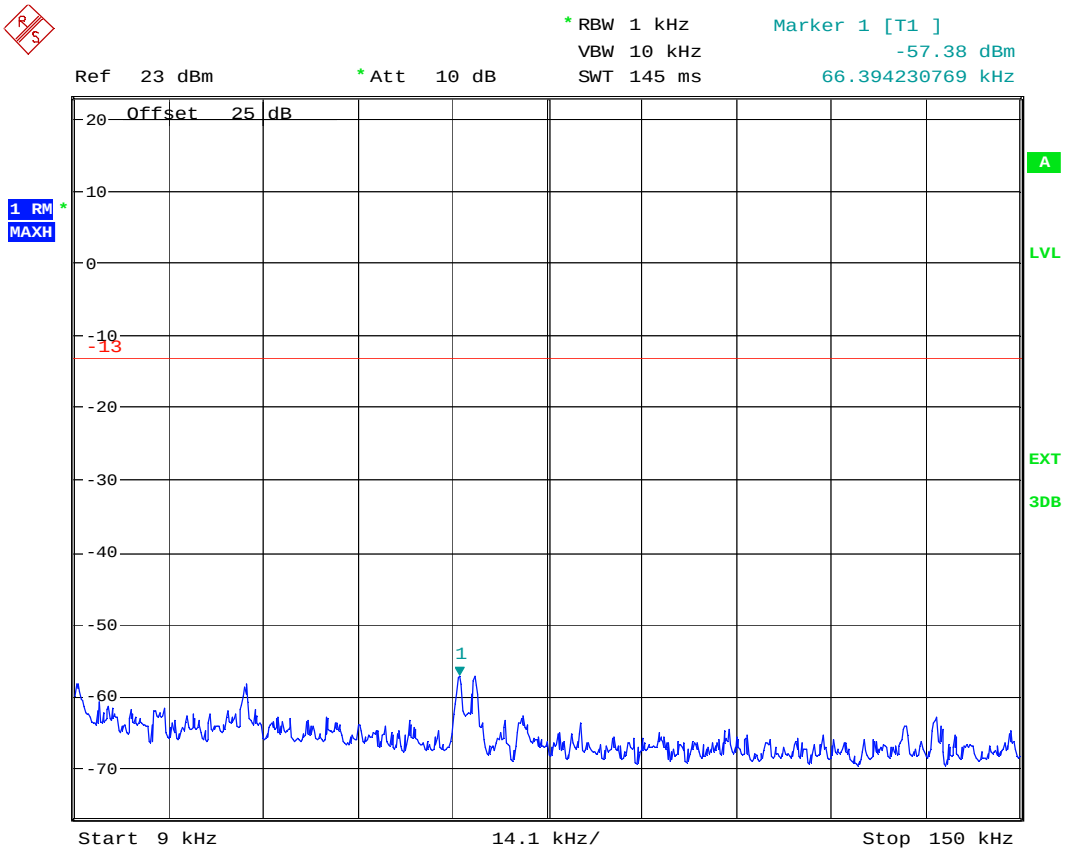

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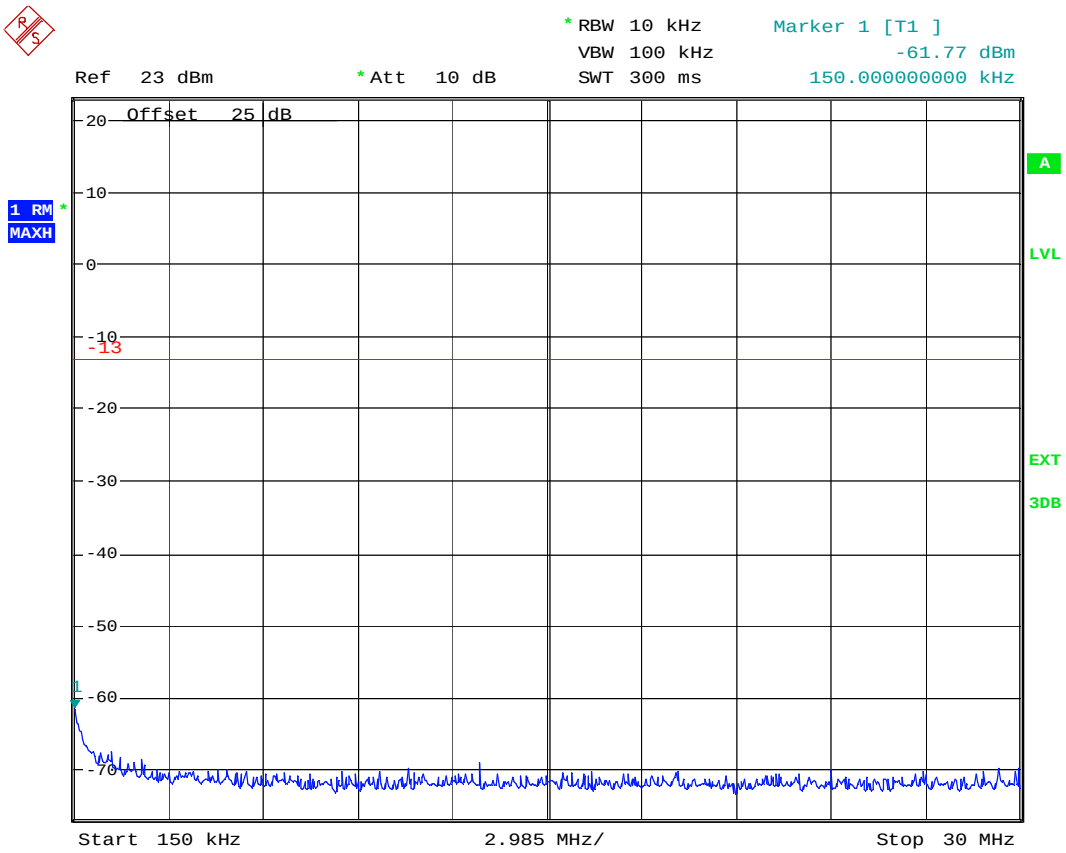

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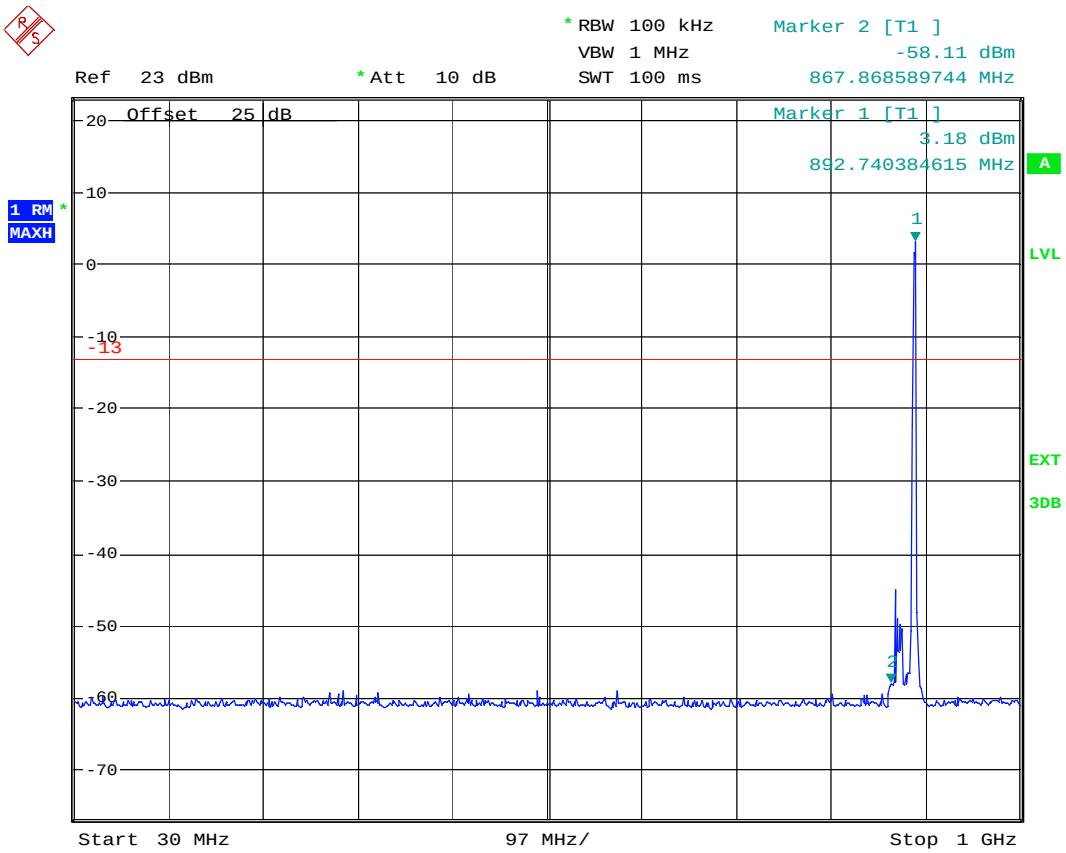

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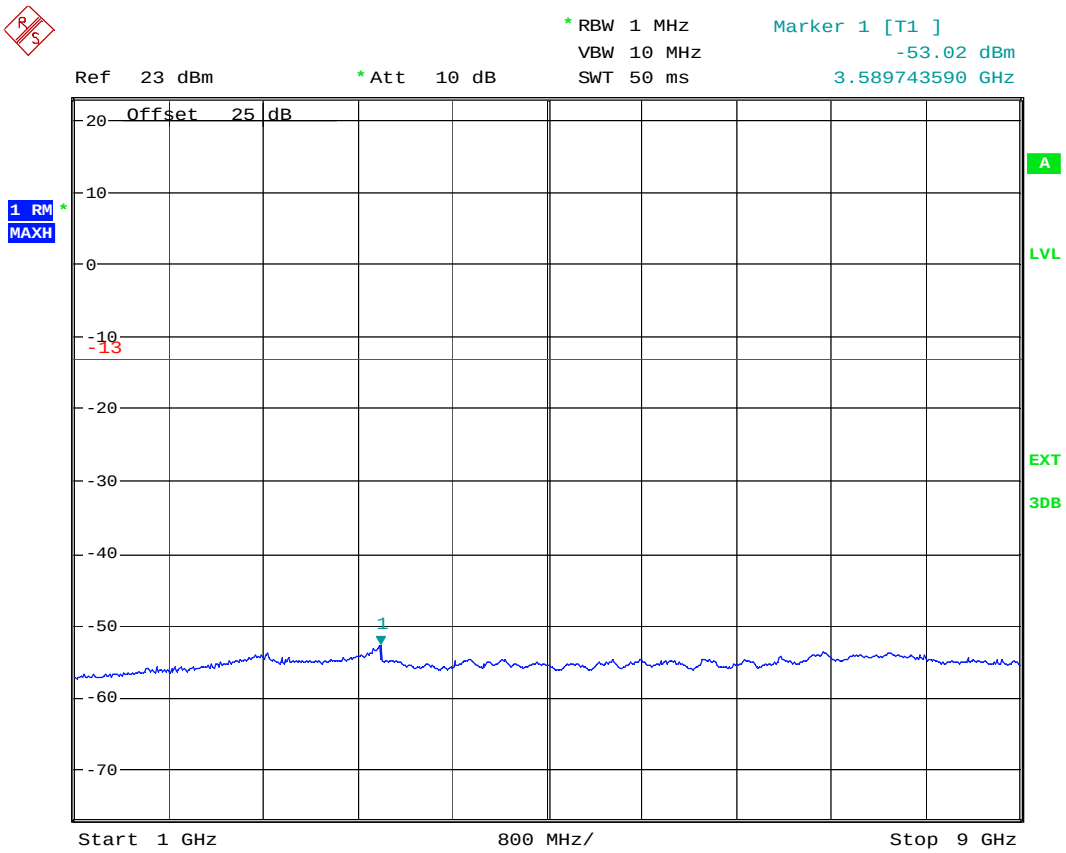

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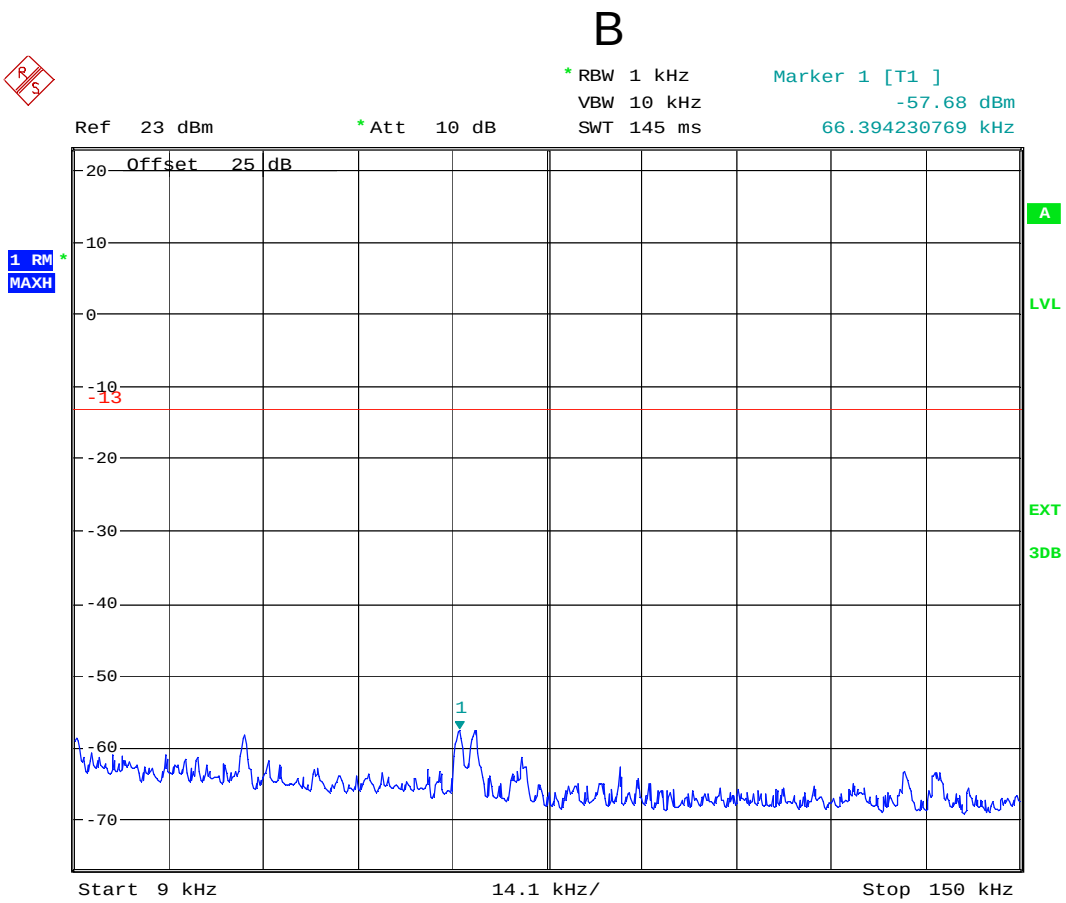
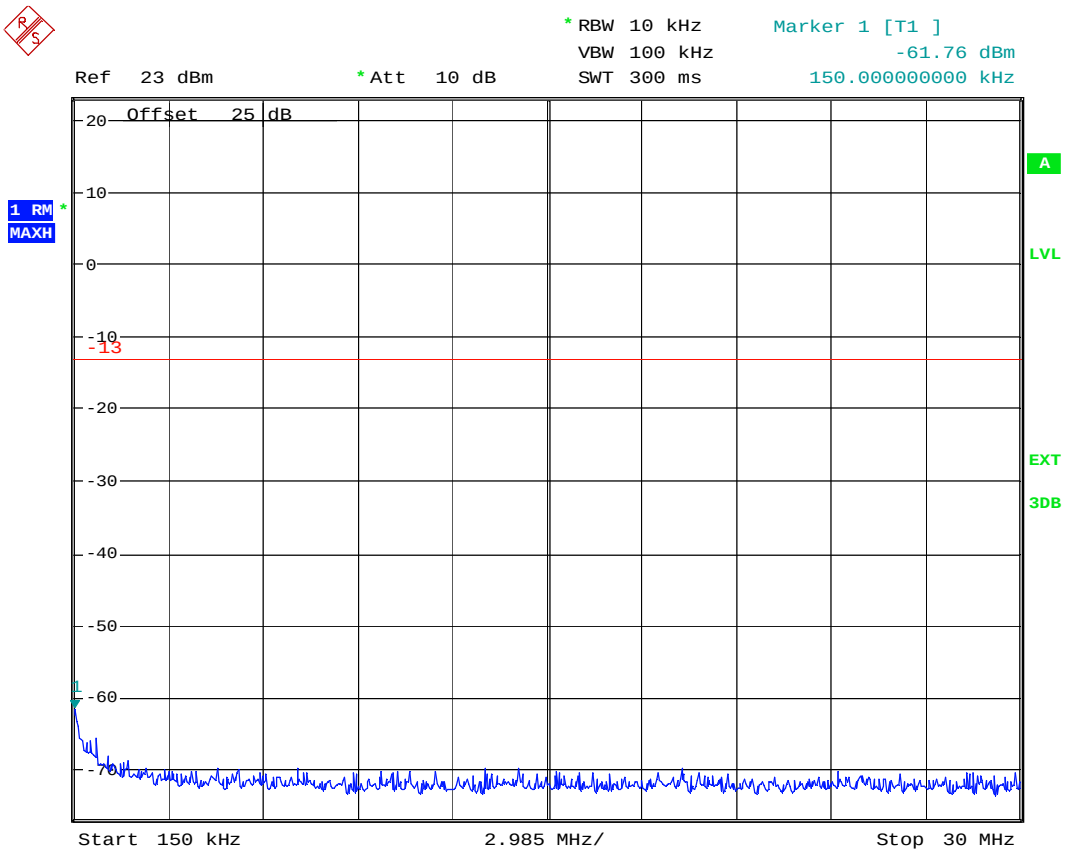
2. PCS Band

(1) TM1





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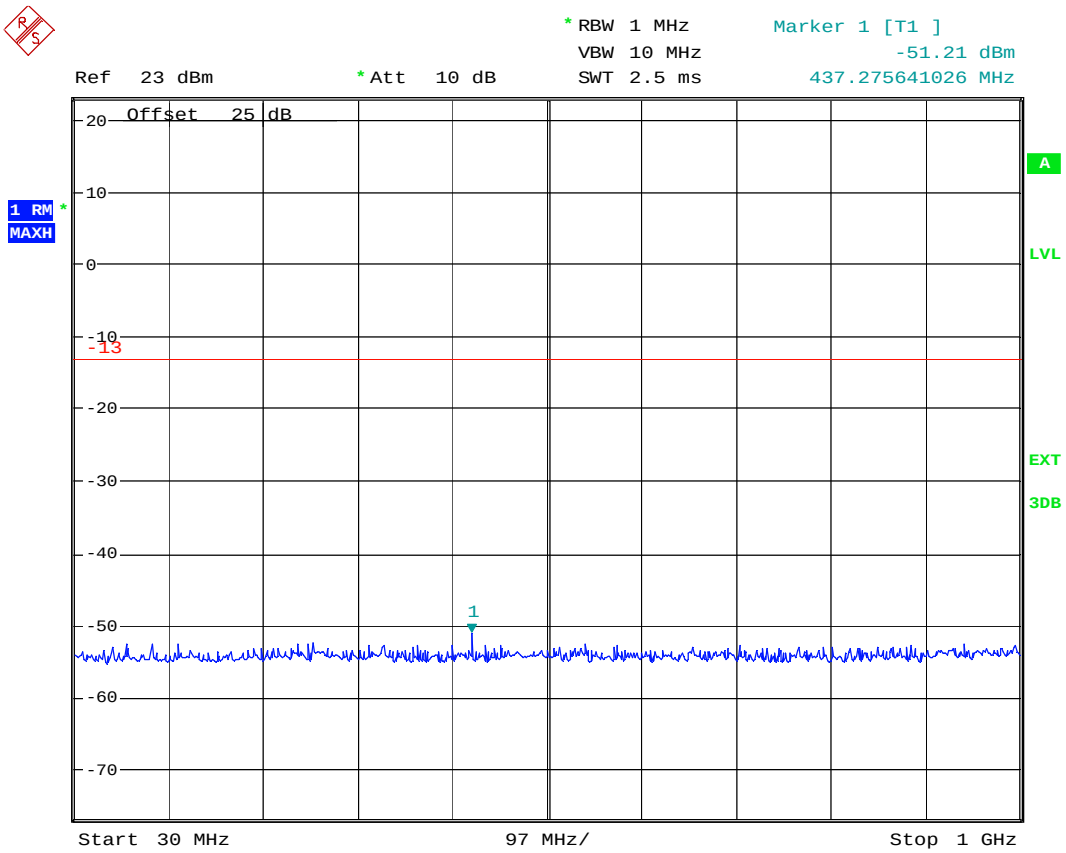

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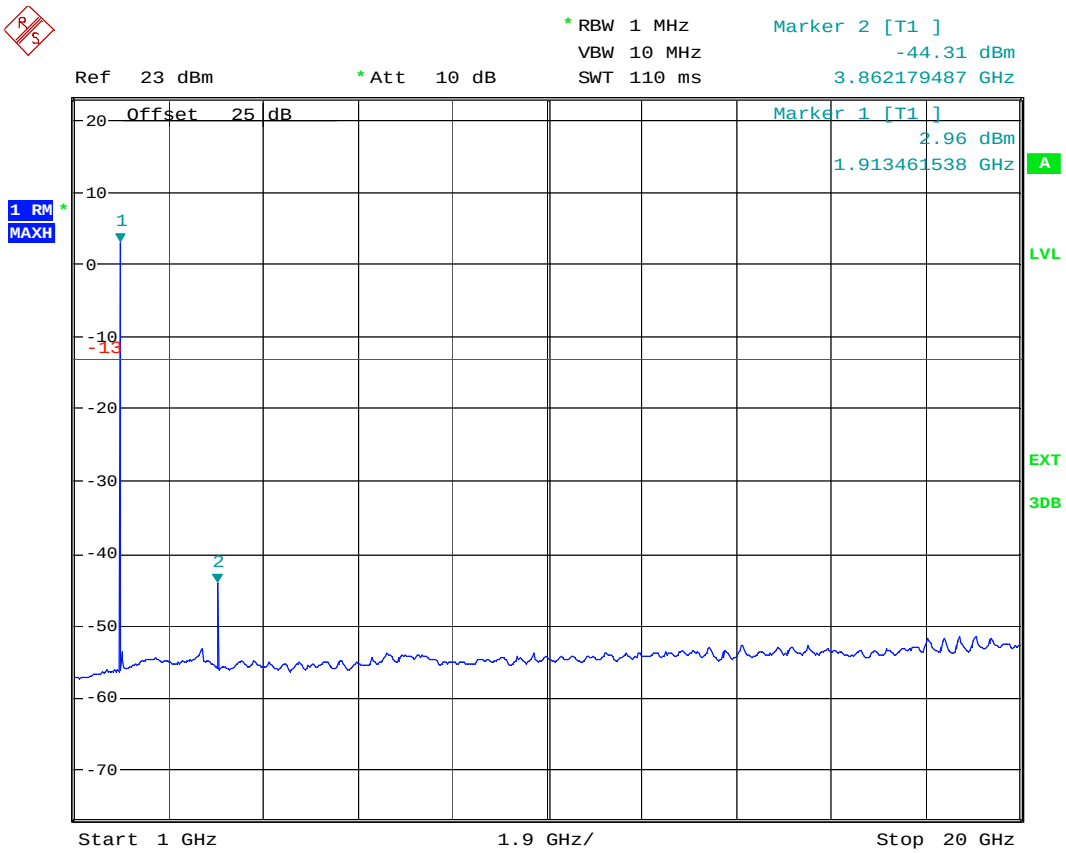

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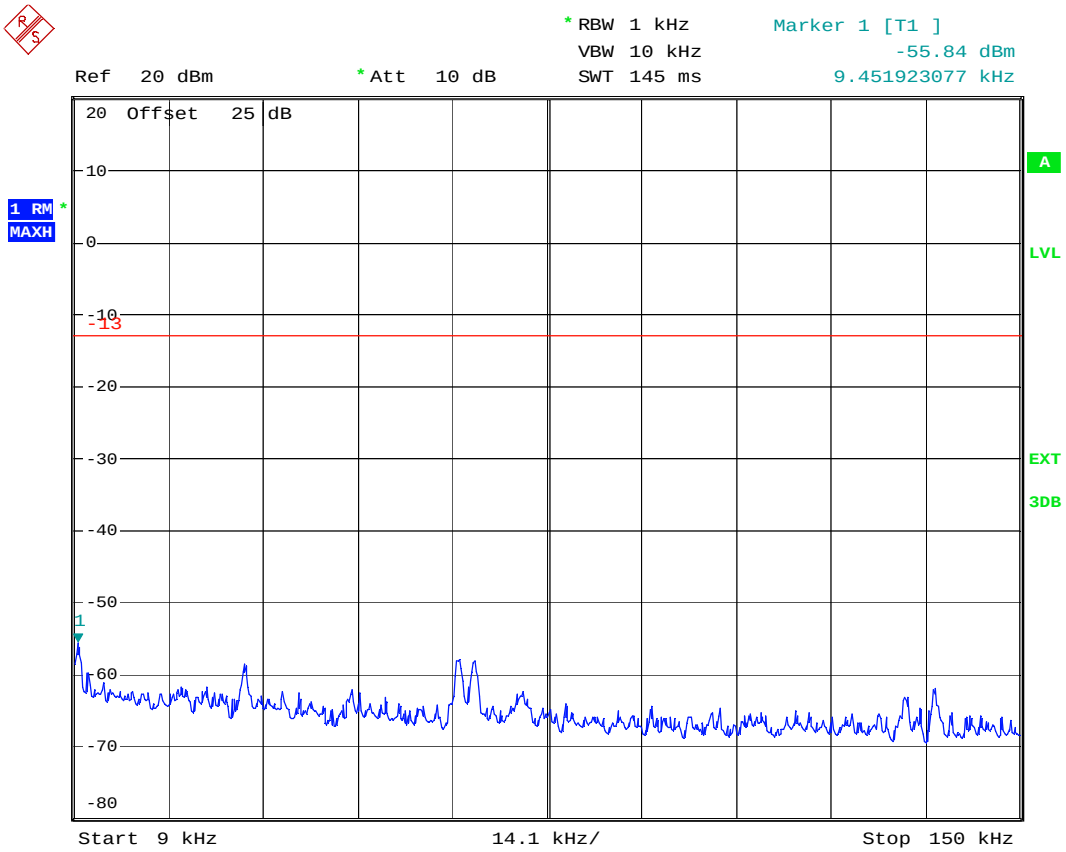

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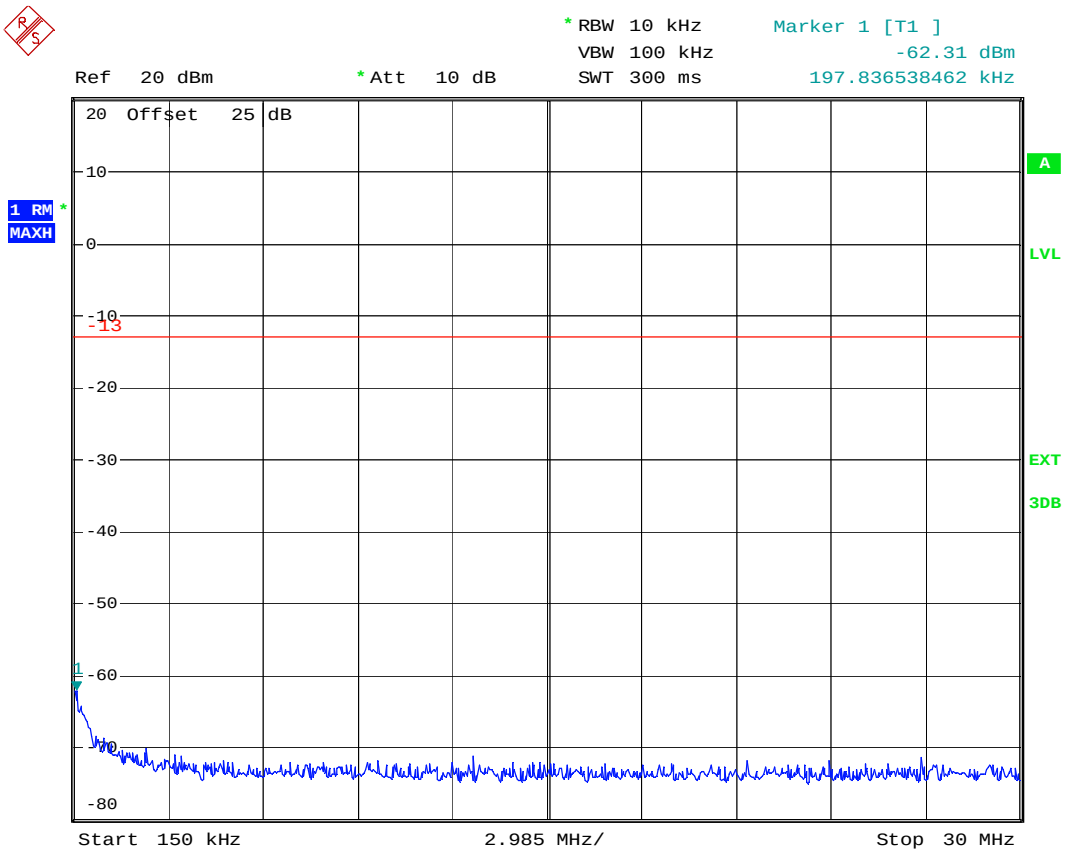

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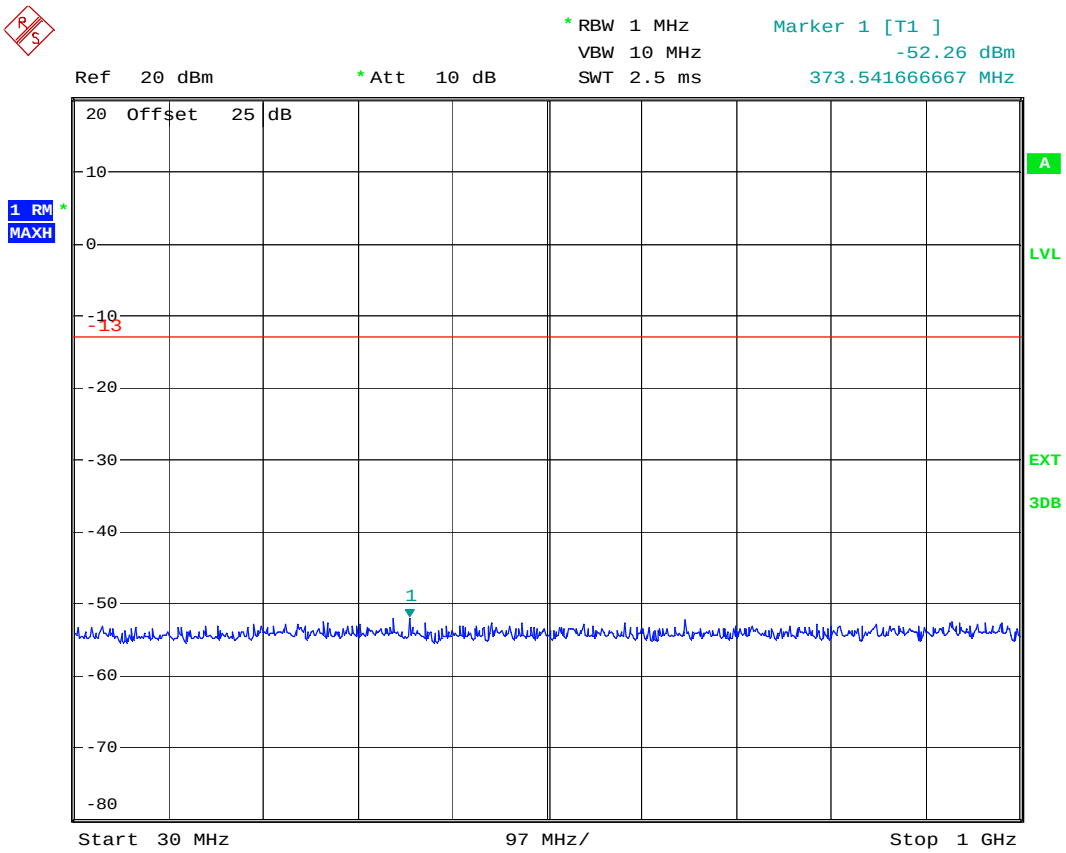

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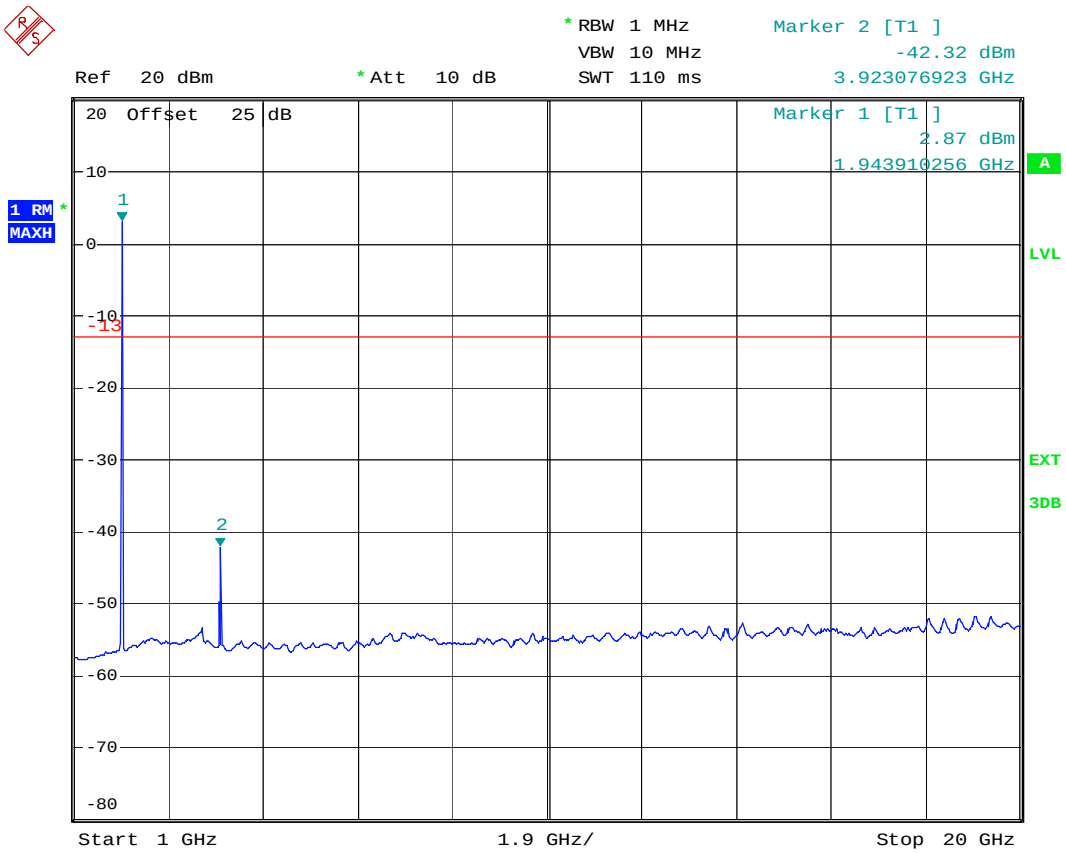

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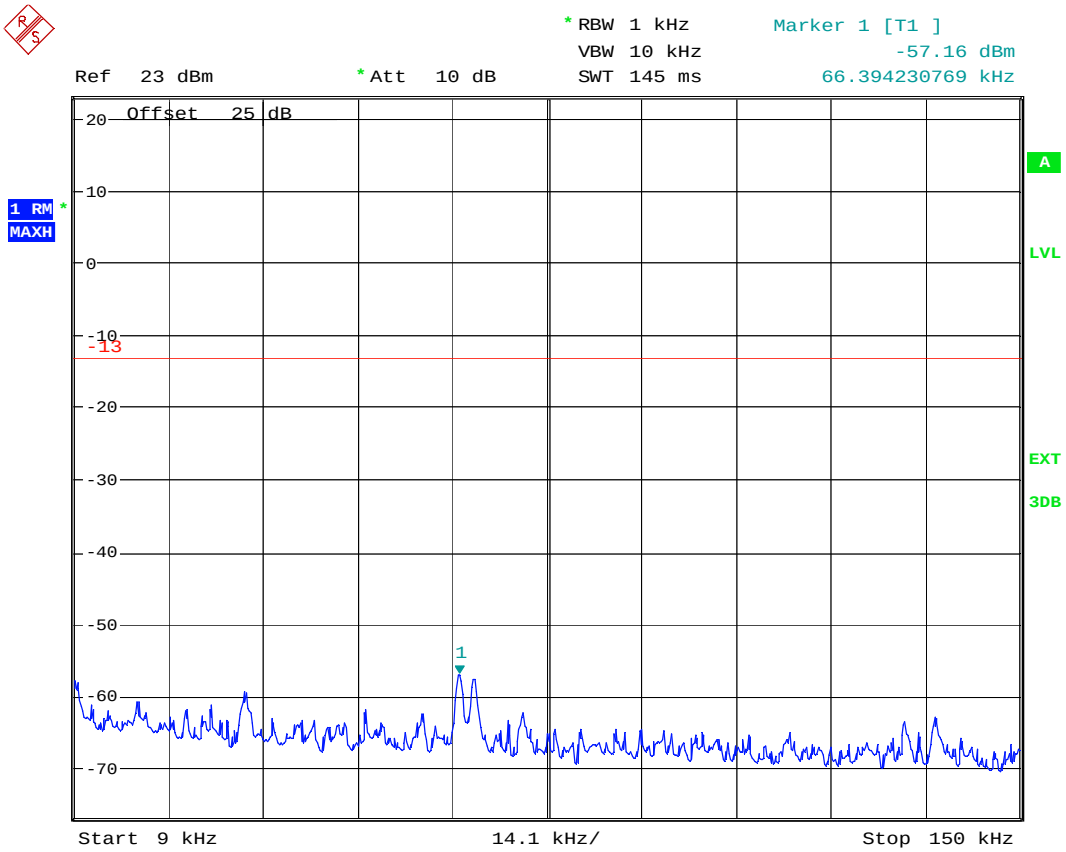

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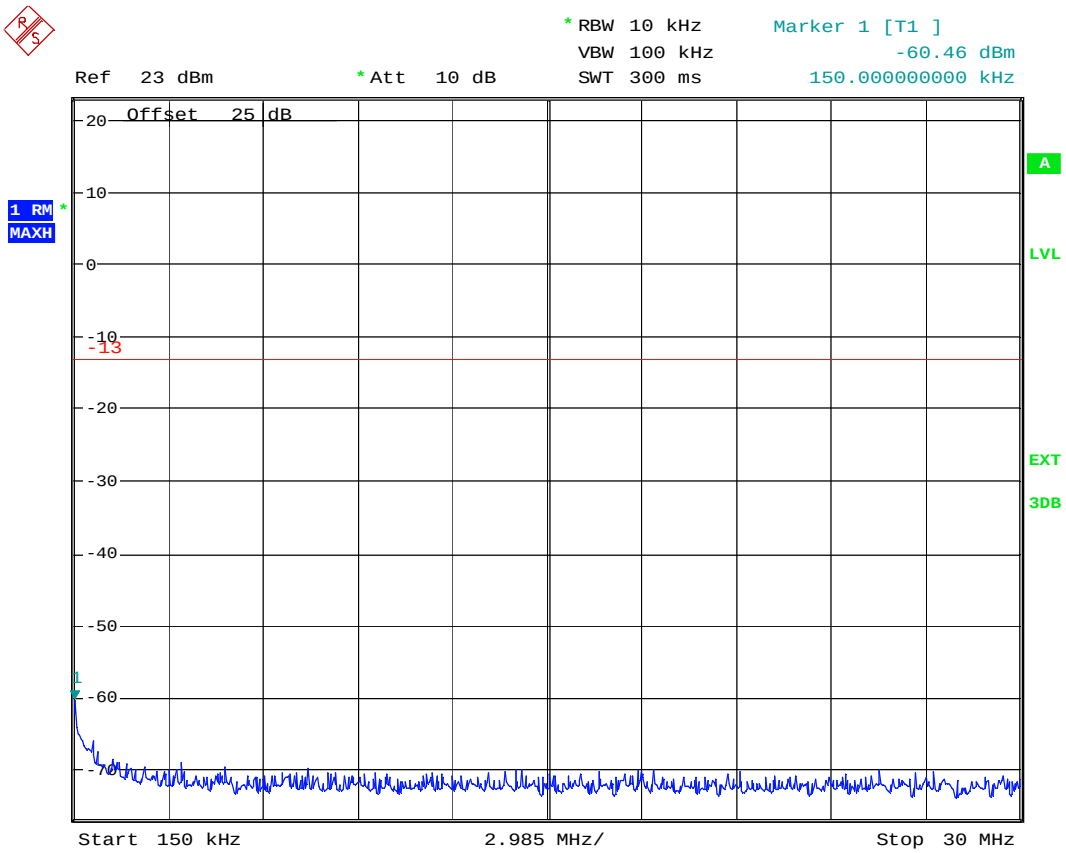

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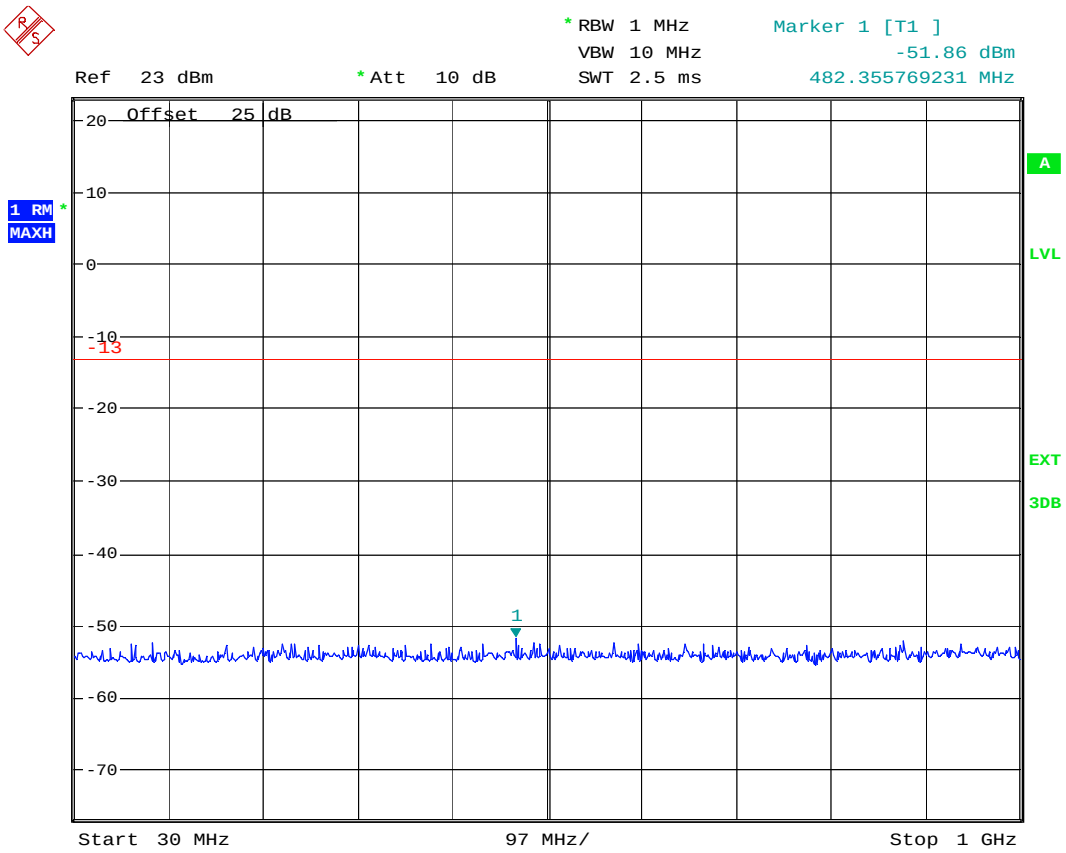

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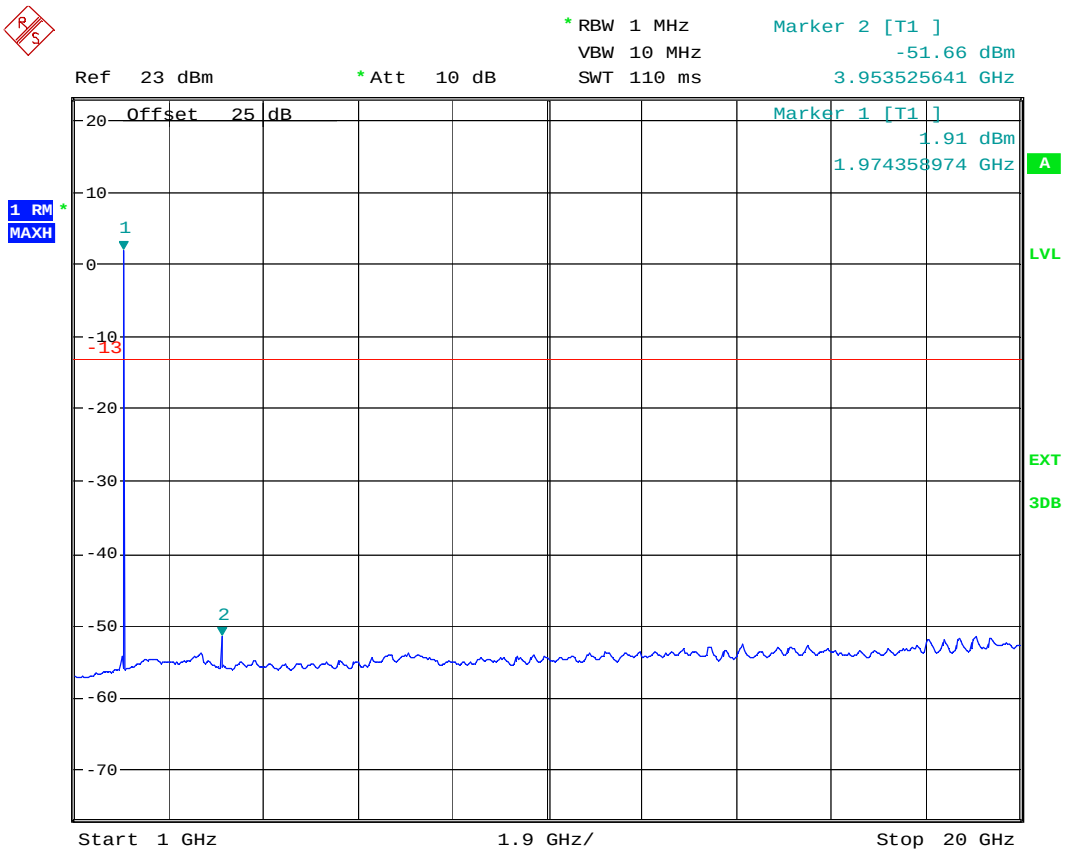

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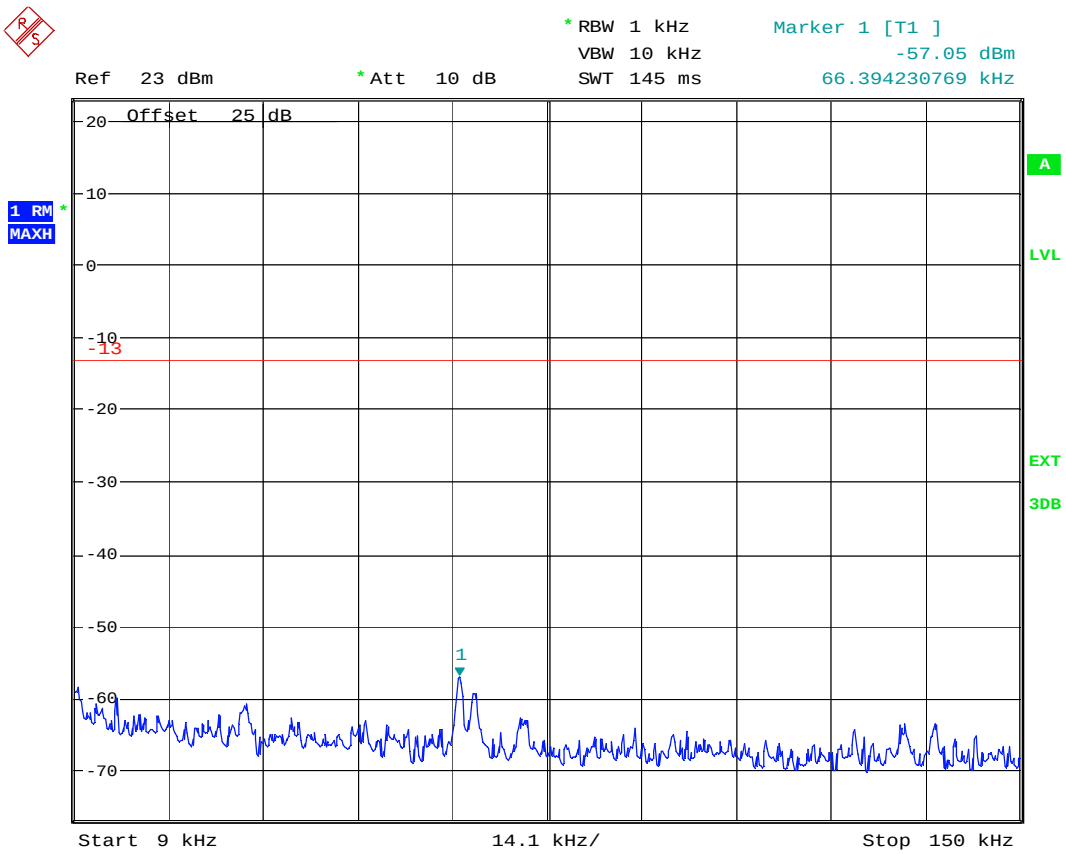
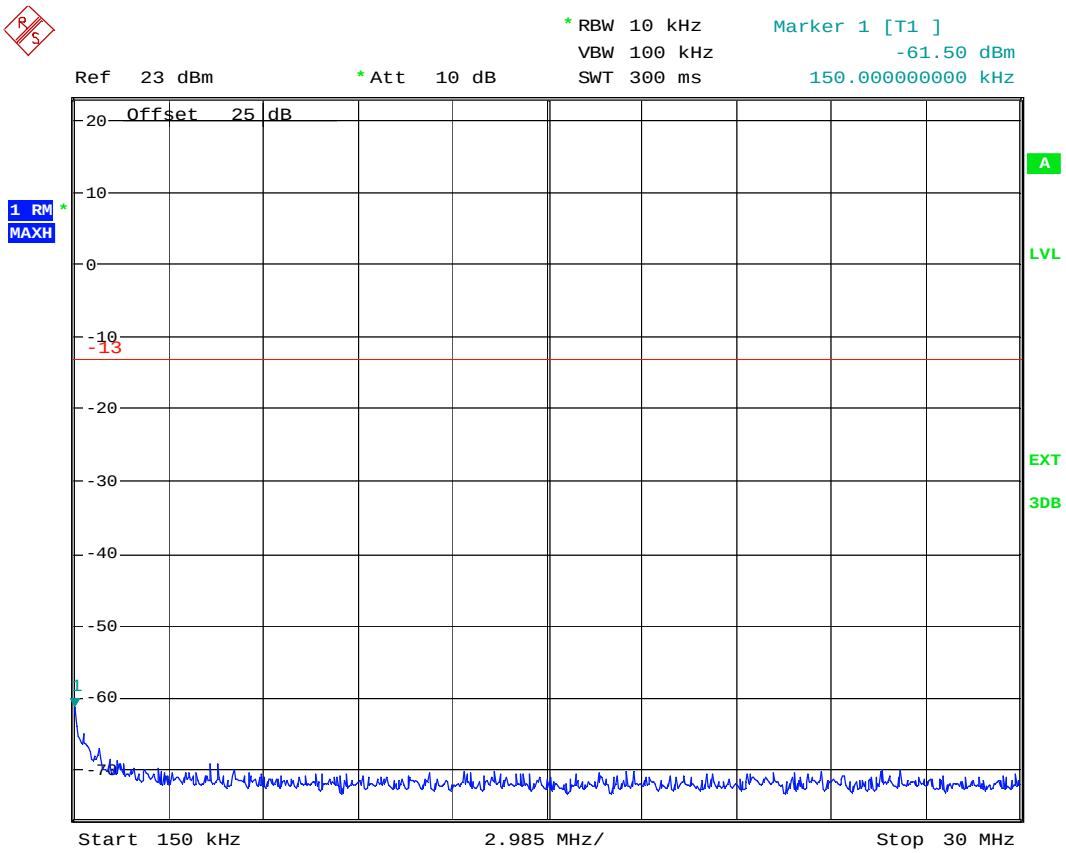
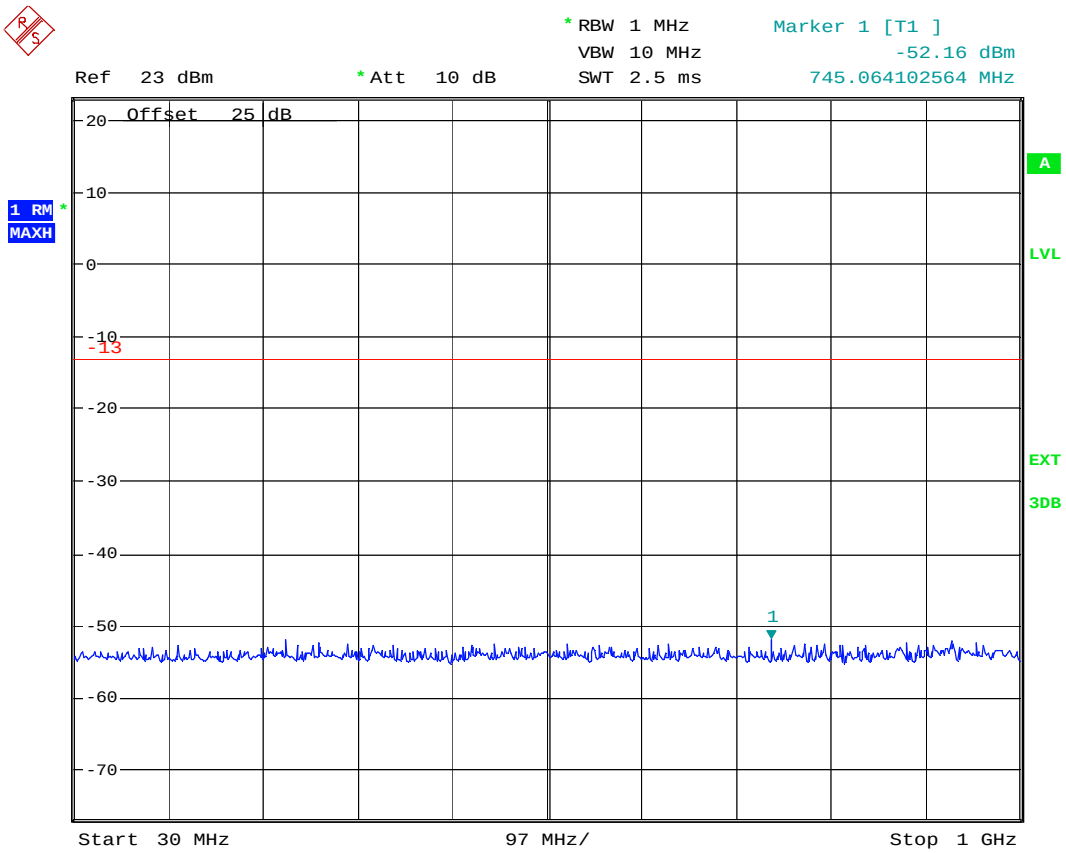
(2) TM5

B


RBW 1 kHz
VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-57.05 dBm
66.394230769 kHz
Ref 23 dBm
Att 10 dB
Offset 25 dB
1 RM
MAXH
A
LVL
EXT
3DB
-13
Start 9 kHz
14.1 kHz/
Stop 150 kHz
Date: 17.SEP.2009 19:22:13



Date: 17.SEP.2009 19:21:51



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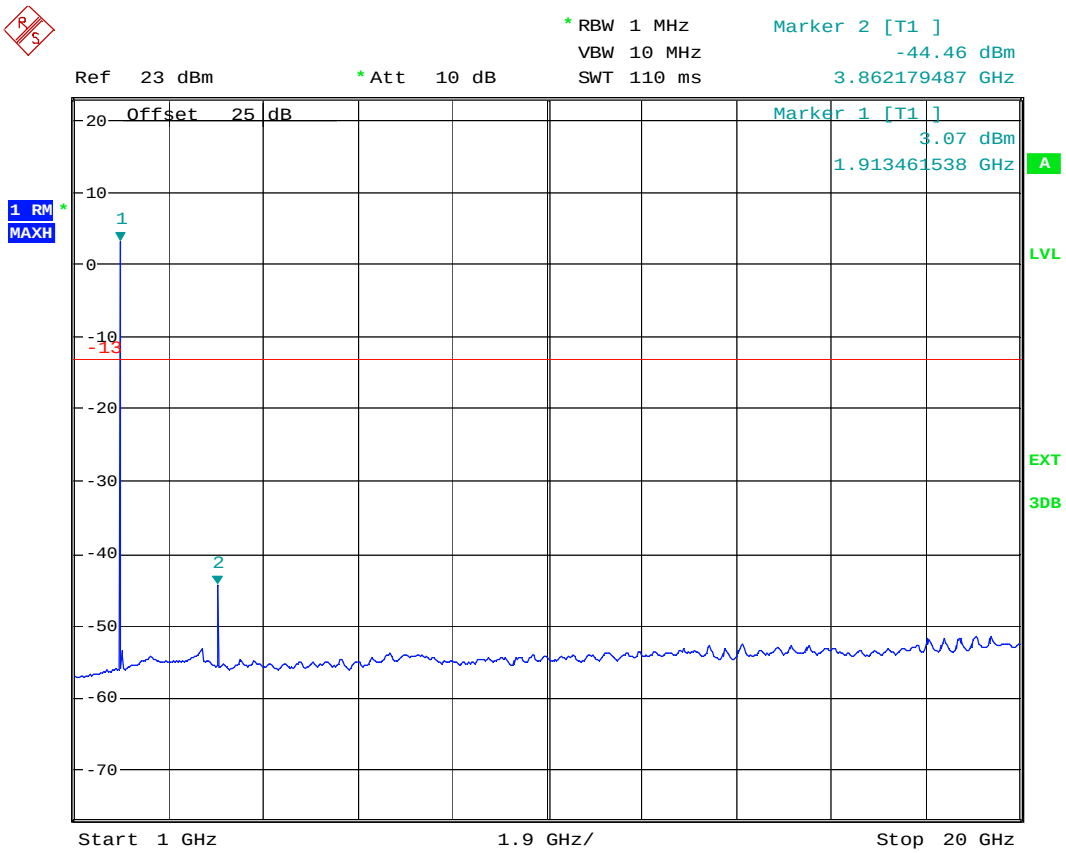

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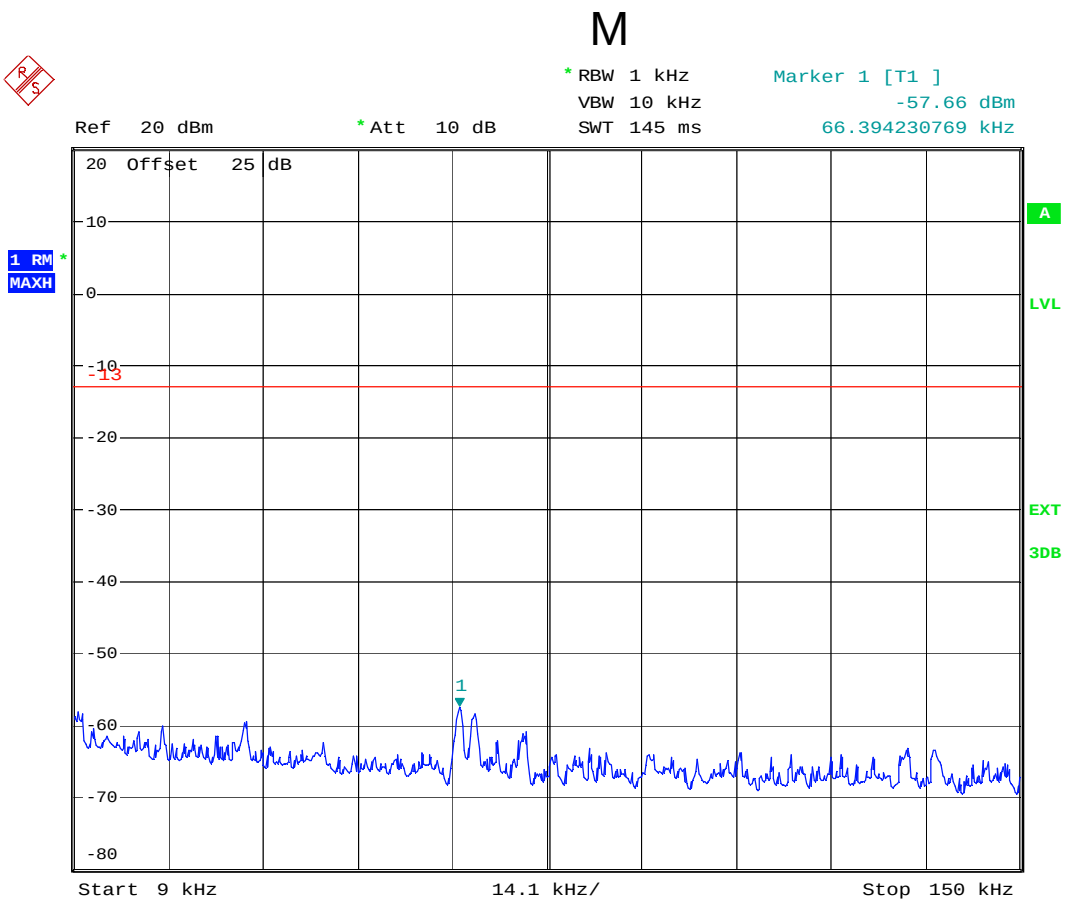

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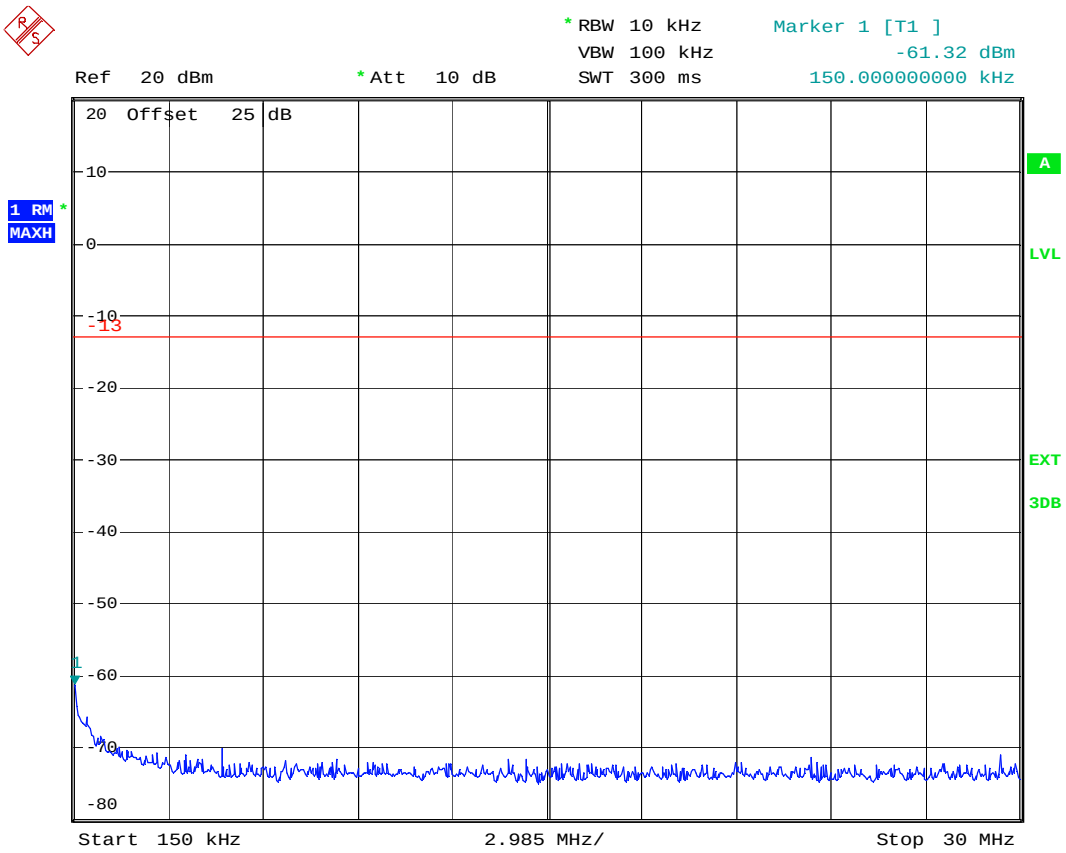

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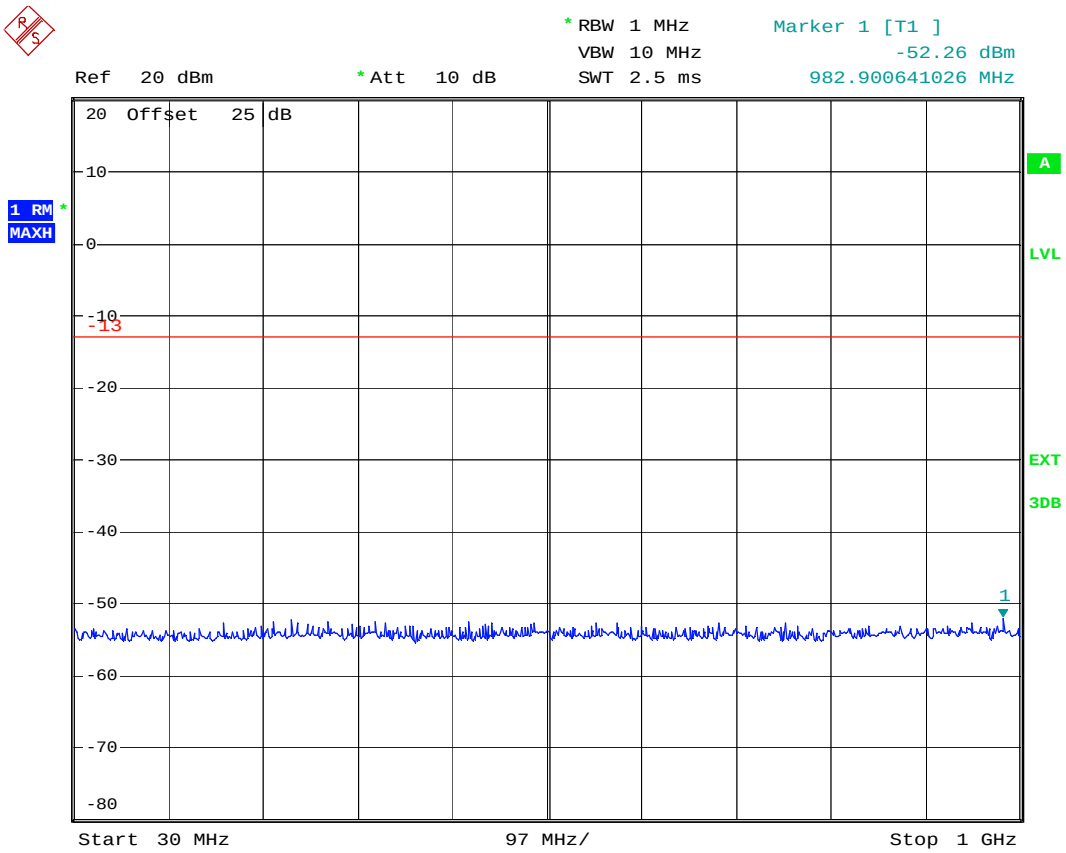

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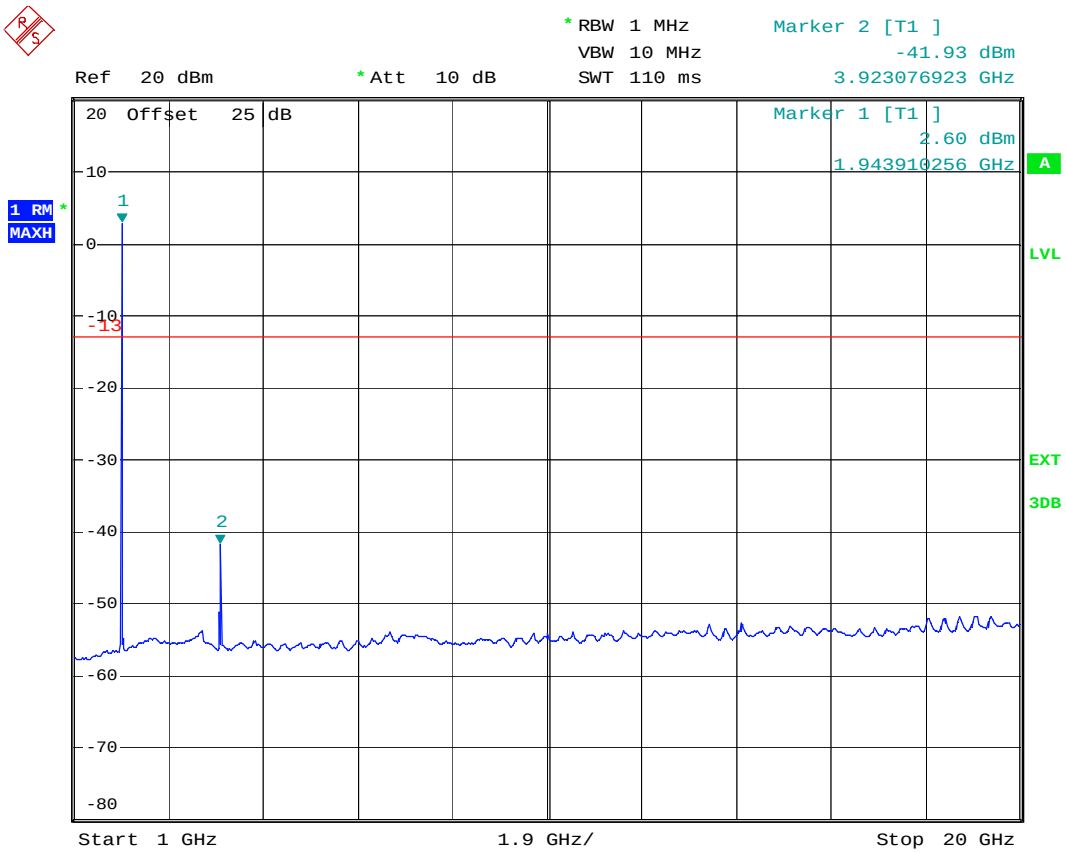

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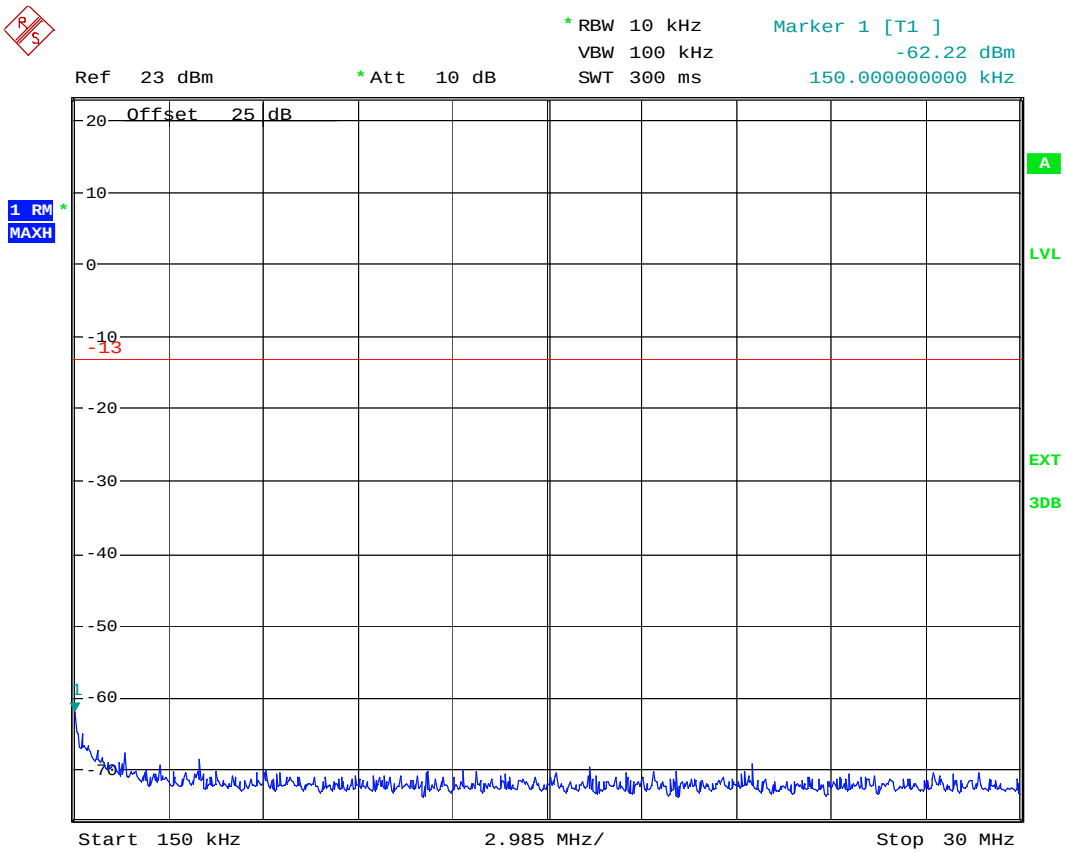
Date: 17.SEP.2009 19:36:11



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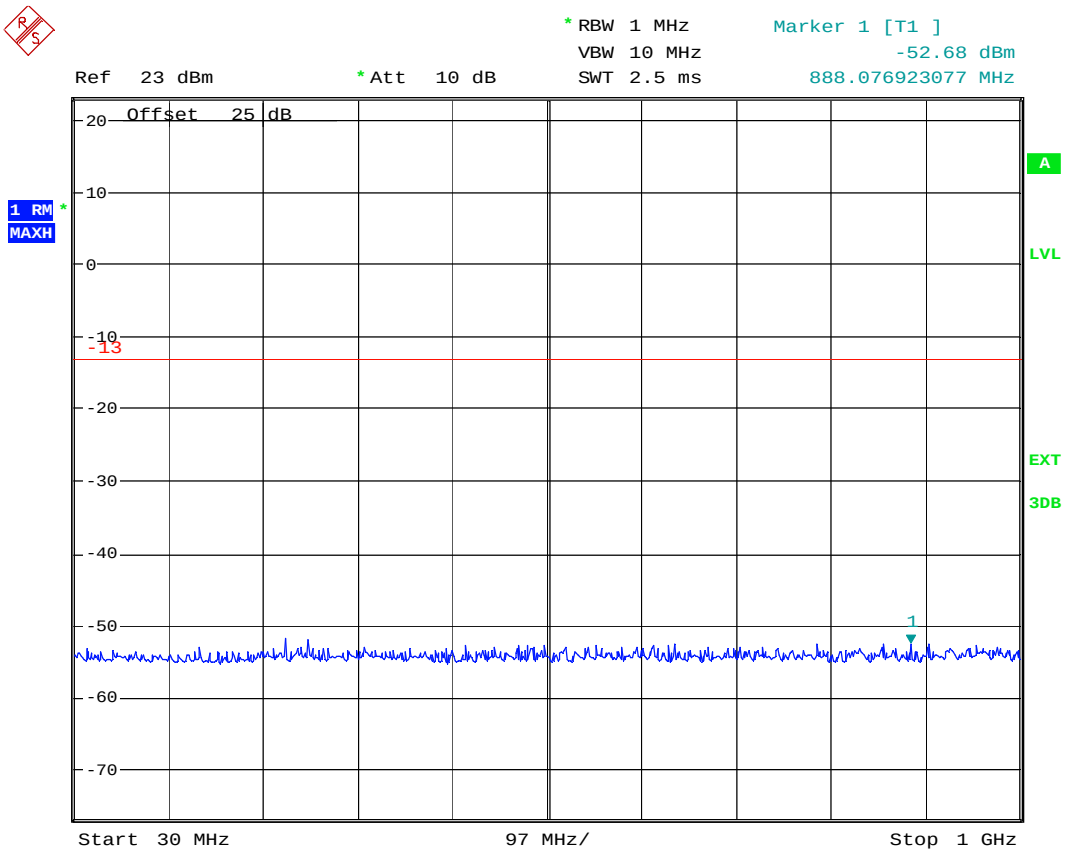

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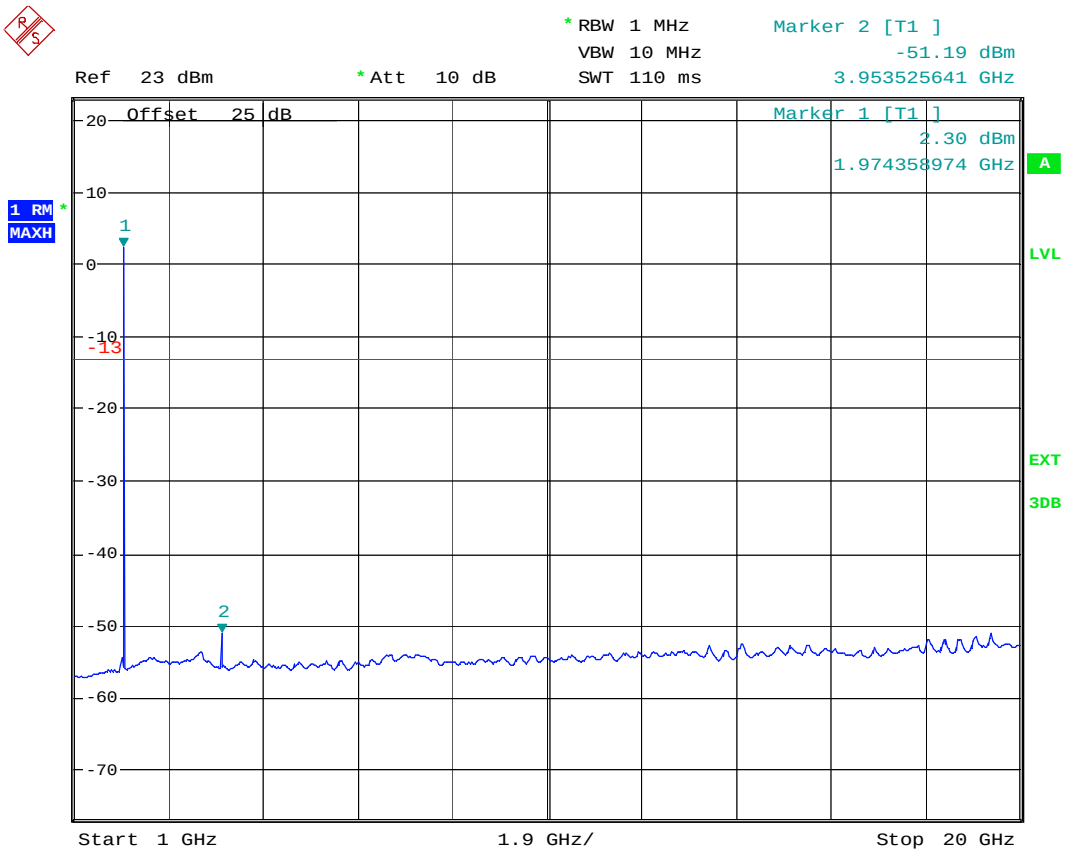


Date: 17.SEP.2009 19:35:11

Appendix F

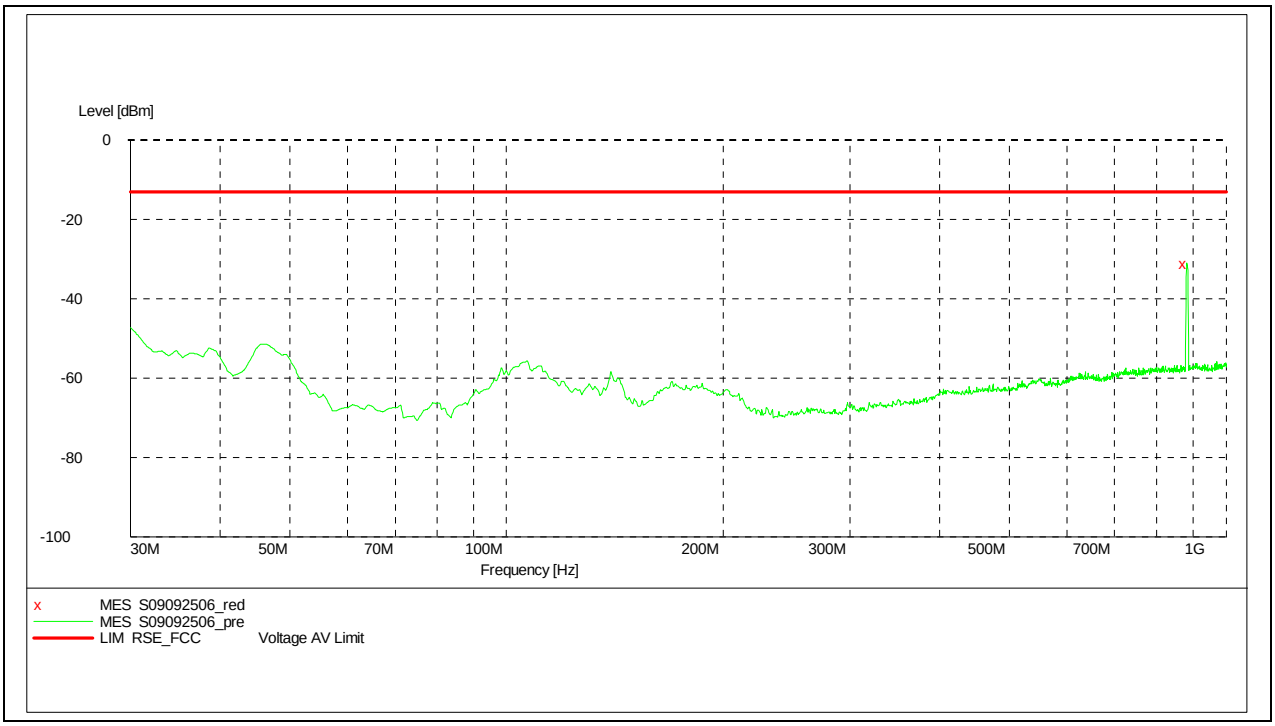
Field Strength of Spurious Radiation Measurement

According to FCC part 2.1053 and part 22.917
According to FCC part 2.1053 and part 24.238

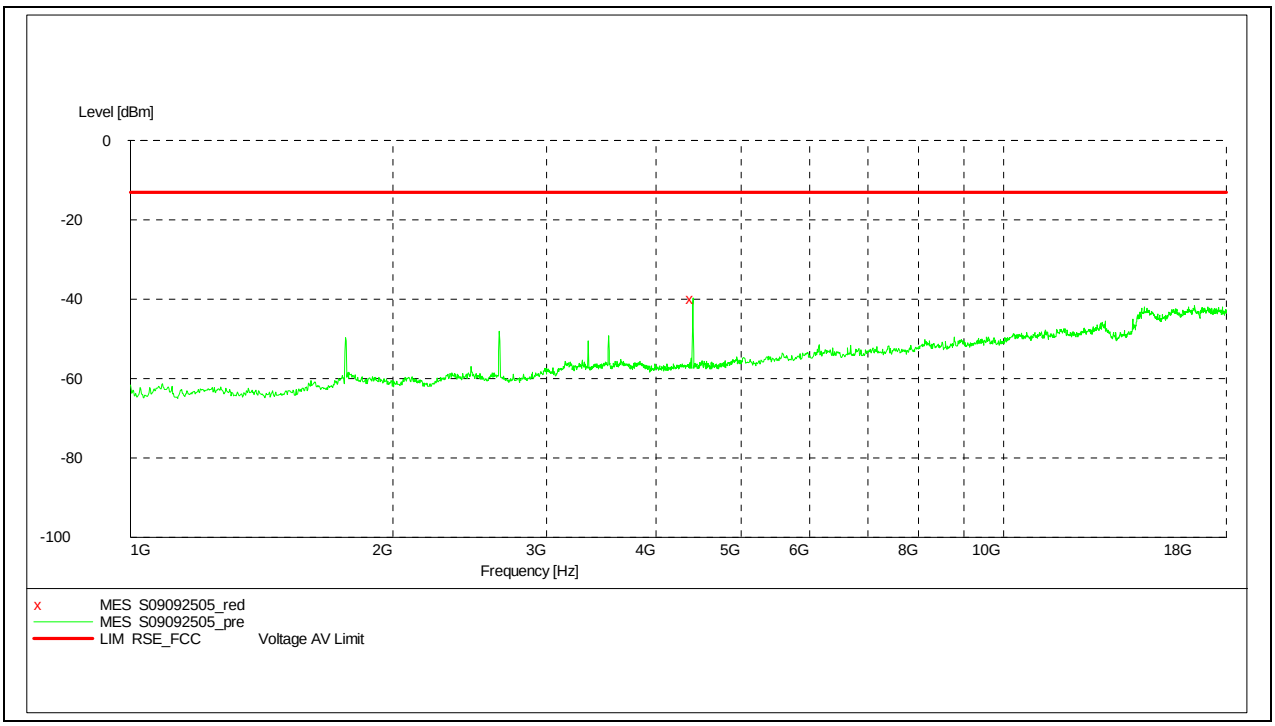
NOTE: a limit line that is stringent than FCC limit (-13dBm) is used in plot(s).

1. Cellular Band:

(1) Below 1GHz:

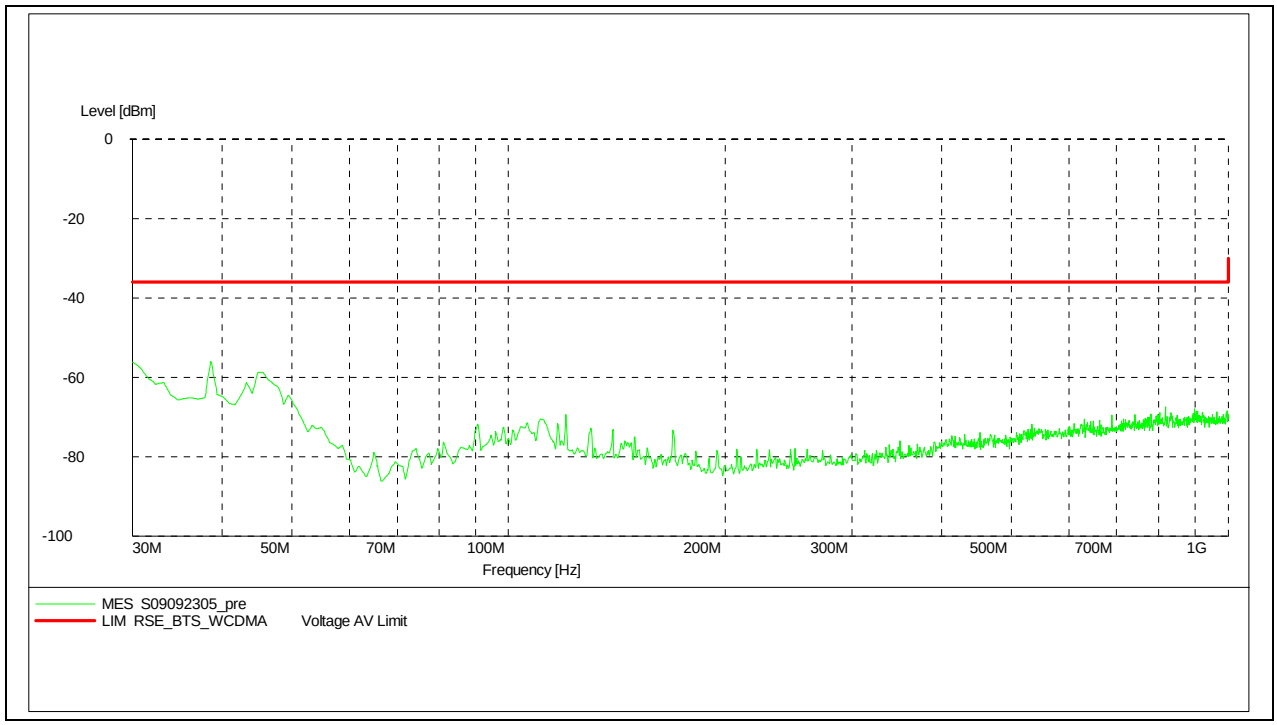


(2) Above 1GHz:

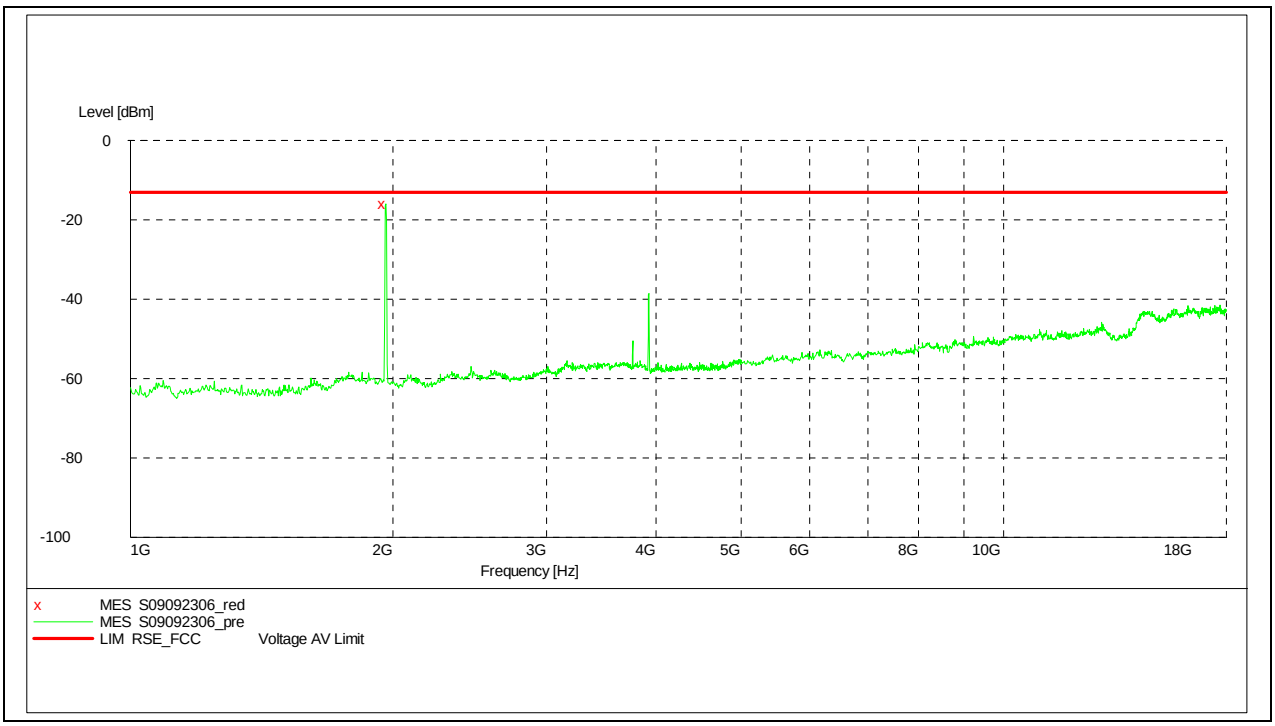

Level [dBm]
0
-20
-40
-60
-80
-100
1G
2G
3G
4G
5G
6G
8G
10G
18G
Frequency [Hz]
x MES S09092505_red
MES S09092505_pre
LIM RSE_FCC Voltage AV Limit

2. PCS Band:

(1) Below 1GHz:



(2) Above 1GHz:


Level [dBm]
0
-20
-40
-60
-80
-100
1G
2G
3G
4G
5G
6G
8G
10G
18G
Frequency [Hz]
x
MES S09092306_red
MES S09092306_pre
LIM RSE_FCC
Voltage AV Limit

Appendix G

Photos of Test Setup

1. Photos for Radiated Spurious Emissions:

1) Radiated Spurious Disturbance (below 1GHz)

2) Radiated Spurious Disturbance (above 1GHz)

END