



Appendix A

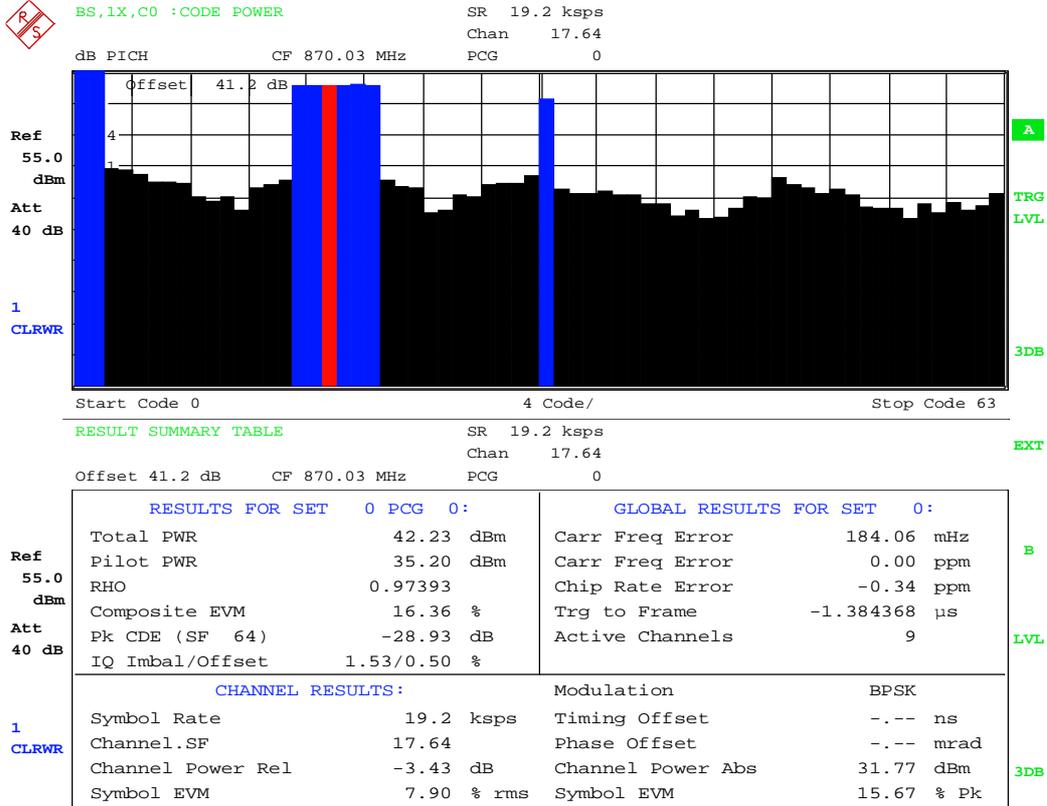
Modulation Characteristic Measurement

According to CFR 47 (FCC) part 2.1047



CDMA2000 1X:

RC1 Channel 1



Date: 21.DEC.2010 17:25:47



Channel 311



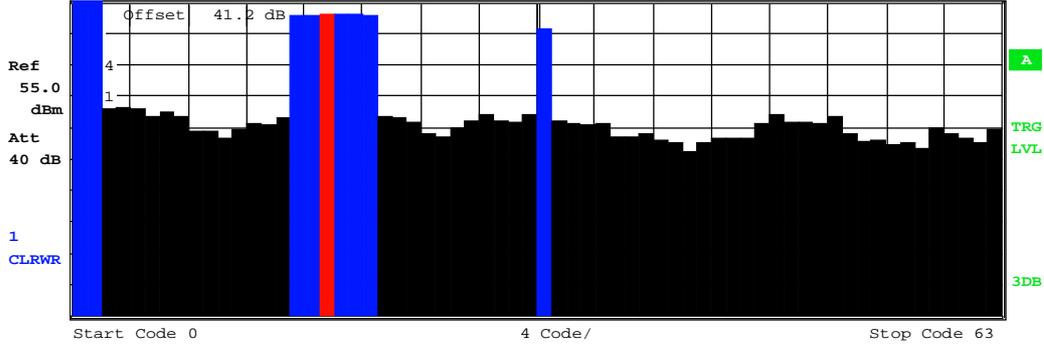
BS,1X,C0 :CODE POWER

SR 19.2 kbps

Chan 17.64

dB PICH CF 879.33 MHz

PCG 0



Start Code 0 4 Code/ Stop Code 63

RESULT SUMMARY TABLE

SR 19.2 kbps

Chan 17.64

Offset 41.2 dB CF 879.33 MHz

PCG 0

EXT

RESULTS FOR SET 0 PCG 0:		GLOBAL RESULTS FOR SET 0:	
Total PWR	42.37 dBm	Carr Freq Error	128.65 mHz
Pilot PWR	35.32 dBm	Carr Freq Error	0.00 ppm
RHO	0.97908	Chip Rate Error	0.56 ppm
Composite EVM	14.62 %	Trg to Frame	-1.406197 μs
Pk CDE (SF 64)	-30.94 dB	Active Channels	9
IQ Imbal/Offset	0.07/0.20 %		
CHANNEL RESULTS:		Modulation	
Symbol Rate	19.2 kbps	Modulation	BPSK
Channel.SF	17.64	Timing Offset	-.-- ns
Channel Power Rel	-3.19 dB	Phase Offset	-.-- mrad
Symbol EVM	8.05 % rms	Channel Power Abs	32.13 dBm
		Symbol EVM	16.33 % Pk

Date: 21.DEC.2010 17:24:15



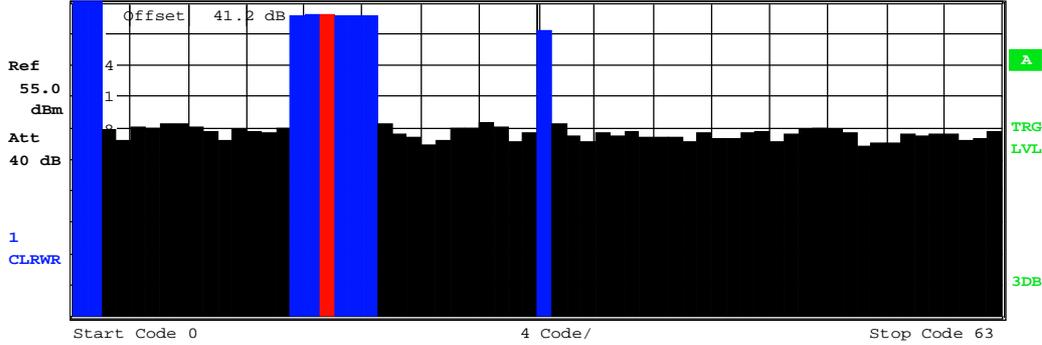
Channel 596



BS,IX,C0 :CODE POWER

SR 19.2 kbps
 Chan 17.64
 PCG 0

dB PICH CF 887.88 MHz



RESULT SUMMARY TABLE

SR 19.2 kbps
 Chan 17.64
 PCG 0

Offset 41.2 dB CF 887.88 MHz

RESULTS FOR SET 0 PCG 0:		GLOBAL RESULTS FOR SET 0:	
Total PWR	41.67 dBm	Carr Freq Error	-1.27 Hz
Pilot PWR	34.62 dBm	Carr Freq Error	-0.00 ppm
RHO	0.98569	Chip Rate Error	-0.21 ppm
Composite EVM	12.05 %	Trg to Frame	-1.246537 μs
Pk CDE (SF 64)	-33.85 dB	Active Channels	9
IQ Imbal/Offset	0.25/0.37 %		
CHANNEL RESULTS:		Modulation BPSK	
Symbol Rate	19.2 kbps	Timing Offset	-.-- ns
Channel.SF	17.64	Phase Offset	-.-- mrad
Channel Power Rel	-3.17 dB	Channel Power Abs	31.45 dBm
Symbol EVM	5.80 % rms	Symbol EVM	15.83 % Pk

Date: 21.DEC.2010 17:22:07



RC3

Channel 1



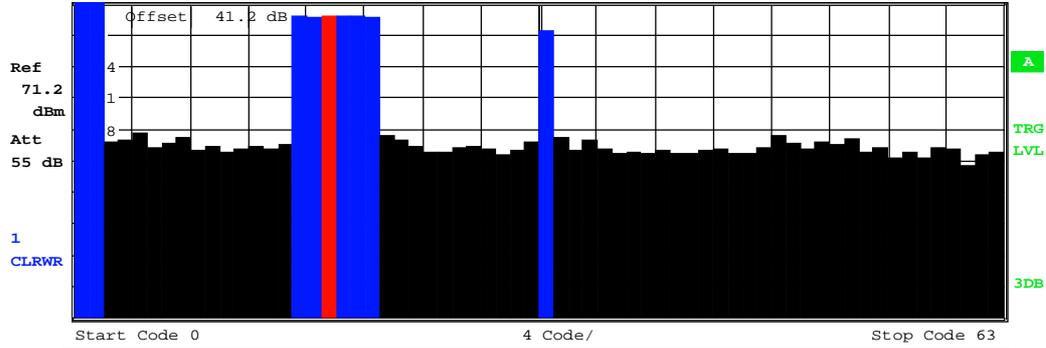
BS,1X,C0 :CODE POWER

SR 19.2 kbps

Chan 17.64

dB PICH CF 870.03 MHz

PCG 0



RESULT SUMMARY TABLE

SR 19.2 kbps

Chan 17.64

Offset 41.2 dB CF 870.03 MHz

PCG 0

RESULTS FOR SET 0 PCG 0:		GLOBAL RESULTS FOR SET 0:	
Total PWR	42.60 dBm	Carr Freq Error	-46.57 mHz
Pilot PWR	35.59 dBm	Carr Freq Error	-0.00 ppm
RHO	0.99223	Chip Rate Error	0.72 ppm
Composite EVM	8.85 %	Trg to Frame	-1.386757 μs
Pk CDE (SF 64)	-36.22 dB	Active Channels	9
IQ Imbal/Offset	0.22/0.14 %		
CHANNEL RESULTS:		Modulation QPSK	
Symbol Rate	19.2 kbps	Timing Offset	-.-- ns
Channel.SF	17.64	Phase Offset	-.-- mrad
Channel Power Rel	-3.22 dB	Channel Power Abs	32.36 dBm
Symbol EVM	4.05 % rms	Symbol EVM	7.52 % Pk

Date: 21.DEC.2010 16:44:23



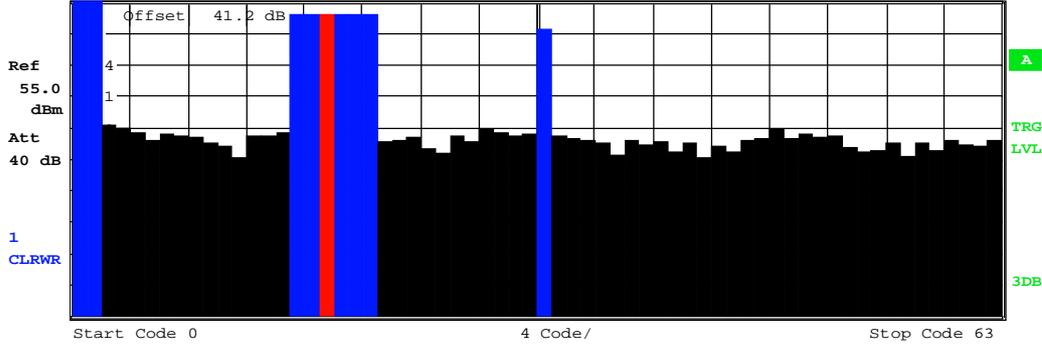
Channel 311



BS,IX,C0 :CODE POWER

SR 19.2 kbps
 Chan 17.64
 PCG 0

dB PICH CF 879.33 MHz



RESULT SUMMARY TABLE

SR 19.2 kbps
 Chan 17.64
 PCG 0

Offset 41.2 dB CF 879.33 MHz

RESULTS FOR SET 0 PCG 0:		GLOBAL RESULTS FOR SET 0:	
Total PWR	42.51 dBm	Carr Freq Error	-738.60 mHz
Pilot PWR	35.43 dBm	Carr Freq Error	-0.00 ppm
RHO	0.98981	Chip Rate Error	-0.68 ppm
Composite EVM	10.14 %	Trg to Frame	-1.405294 μs
Pk CDE (SF 64)	-34.97 dB	Active Channels	9
IQ Imbal/Offset	0.62/0.42 %		
CHANNEL RESULTS:		Modulation QPSK	
Symbol Rate	19.2 kbps	Timing Offset	-.-- ns
Channel.SF	17.64	Phase Offset	-.-- mrad
Channel Power Rel	-3.17 dB	Channel Power Abs	32.26 dBm
Symbol EVM	4.39 % rms	Symbol EVM	10.12 % Pk

Date: 21.DEC.2010 16:45:51



Channel 596



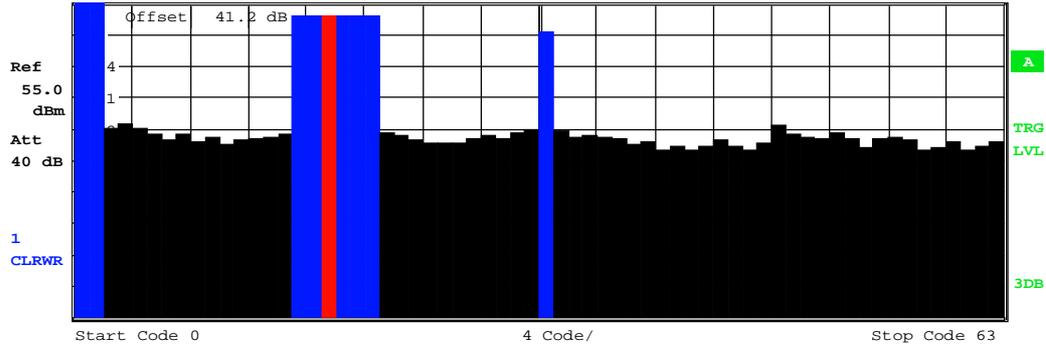
BS,IX,C0 :CODE POWER

SR 19.2 ksps

Chan 17.64

dB PICH CF 887.88 MHz

PCG 0



RESULT SUMMARY TABLE

SR 19.2 ksps

Chan 17.64

Offset 41.2 dB CF 887.88 MHz

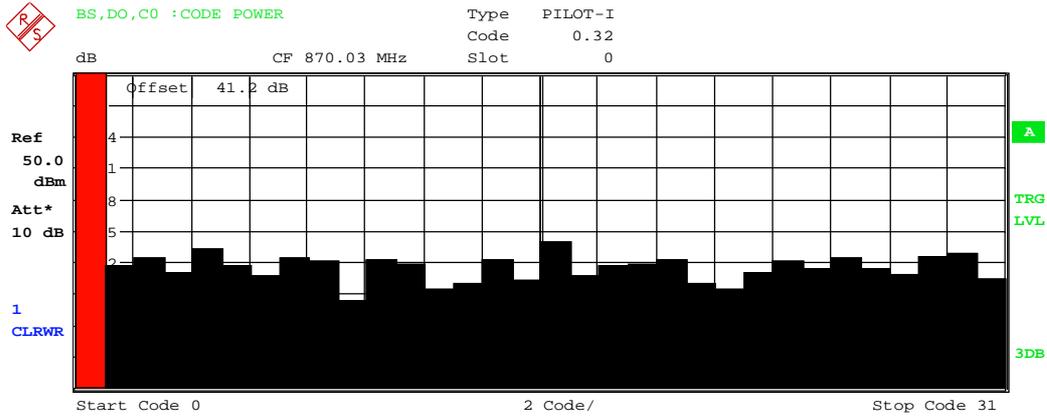
PCG 0

RESULTS FOR SET 0 PCG 0:		GLOBAL RESULTS FOR SET 0:	
Total PWR	41.70 dBm	Carr Freq Error	1.55 Hz
Pilot PWR	34.64 dBm	Carr Freq Error	0.00 ppm
RHO	0.98810	Chip Rate Error	0.29 ppm
Composite EVM	10.98 %	Trg to Frame	-1.251766 μs
Pk CDE (SF 64)	-34.13 dB	Active Channels	9
IQ Imbal/Offset	0.88/0.17 %		
CHANNEL RESULTS:		Modulation	
Symbol Rate	19.2 ksps	Modulation	QPSK
Channel.SF	17.64	Timing Offset	-.-- ns
Channel Power Rel	-3.24 dB	Phase Offset	-.-- mrad
Channel Power Abs	31.40 dBm	Channel Power Abs	31.40 dBm
Symbol EVM	5.30 % rms	Symbol EVM	10.14 % Pk

Date: 21.DEC.2010 17:00:42



CDMA2000 1X EV-DO: Channel 1



GENERAL RESULTS Type ALL EXT

Offset 41.2 dB CF 870.03 MHz

Global Results for Set 0:			
Ref	Carr Freq Error	748.86 mHz	RHO Pilot 0.99672
50.0	Carr Freq Error	0.00 ppm	RHO ov-1/-2 0.99308/0.99308
dBm	Chip Rate Error	-0.27 ppm	RHO MAC 0.99629
	Trg to Frame	-186.482765 ns	RHO DATA 0.99197
Results for Set 0 / Slot 0:			
Att*	Power PILOT	42.77 dBm	Data Modulation Type 16-QAM
10 dB	Power MAC	42.72 dBm	Act. MAC Channels 19
	Power DATA	42.56 dBm	Act. DATA Channels 16
	Power PREAMBLE	42.62 dBm	Preamble Length 64 Chips
1	Composite EVM	8.48 %	RHO 0.99286
CLRWR	Max. Pwr DATA	-14.42 dB	Max. inact. Pwr MAC -40.06 dB
	Min. Pwr DATA	-15.74 dB	

Date: 21.DEC.2010 18:05:27



Channel 311



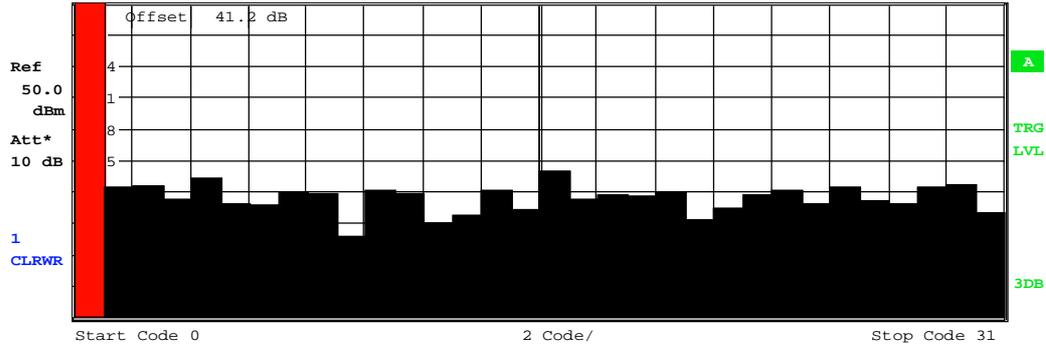
BS,DO,C0 :CODE POWER

Type PILOT-I

Code 0.32

dB CF 879.33 MHz

Slot 0



Start Code 0 2 Code/ Stop Code 31

GENERAL RESULTS

Type ALL

EXT

Offset 41.2 dB CF 879.33 MHz

Global Results for Set 0:				
Ref	Carr Freq Error	-386.15 mHz	RHO Pilot	0.99683
50.0	Carr Freq Error	-0.00 ppm	RHO ov-1/-2	0.99210/0.99239
dBm	Chip Rate Error	-0.20 ppm	RHO MAC	0.99617
	Trg to Frame	-208.498903 ns	RHO DATA	0.99111
Results for Set 0 / Slot 0:				
Att*	Power PILOT	42.65 dBm	Data Modulation Type	16-QAM
10 dB	Power MAC	42.64 dBm	Act. MAC Channels	14
	Power DATA	42.39 dBm	Act. DATA Channels	16
1	Power PREAMBLE	42.55 dBm	Preamble Length	64 Chips
CLRWR	Composite EVM	9.19 %	RHO	0.99162
	Max. Pwr DATA	-14.29 dB	Max. inact. Pwr MAC	-40.14 dB
	Min. Pwr DATA	-15.95 dB		

Date: 21.DEC.2010 18:07:12

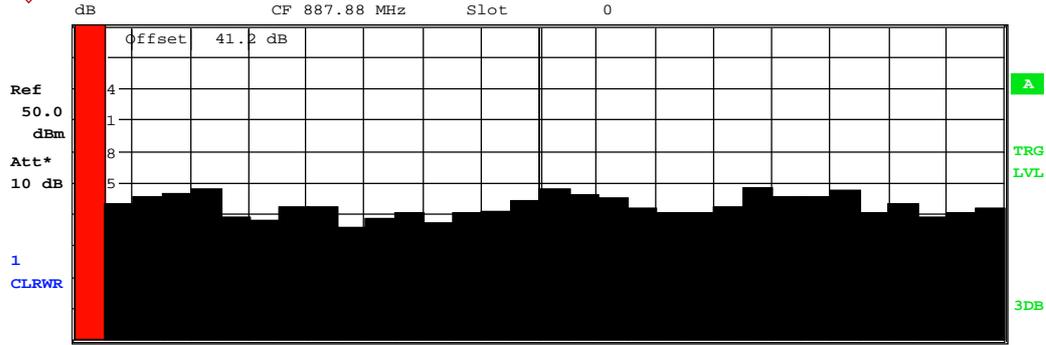


Channel 596



BS,DO,C0 :CODE POWER

Type PILOT-I
 Code 0.32
 Slot 0



Start Code 0 2 Code/ Stop Code 31

GENERAL RESULTS

Type ALL

EXT

Offset 41.2 dB CF 887.88 MHz

		Global Results for Set 0:				
Ref	Carr Freq Error	3.17 Hz	RHO Pilot	0.99404		B
50.0	Carr Freq Error	0.00 ppm	RHO ov-1/-2	0.98897/0.98938		
dBm	Chip Rate Error	-0.15 ppm	RHO MAC	0.99492		
Att*	Trg to Frame	-49.041017 ns	RHO DATA	0.98742		
10 dB	Results for Set 0 / Slot 0:					LVL
	Power PILOT	41.91 dBm	Data Modulation Type	16-QAM		
	Power MAC	41.85 dBm	Act. MAC Channels	28		
	Power DATA	41.70 dBm	Act. DATA Channels	16		
1	Power PREAMBLE	41.76 dBm	Preamble Length	64 Chips		
CLRWR	Composite EVM	10.59 %	RHO	0.98890		
	Max. Pwr DATA	-14.43 dB	Max. inact. Pwr MAC	-39.31 dB		3DB
	Min. Pwr DATA	-15.66 dB				

Date: 21.DEC.2010 18:00:12



Appendix B

Occupied Bandwidth Measurement

According to CFR 47 (FCC) part 2.1049



CDMA2000 1X

Channel 1



BS,1X,C0 :OCC BANDWDT

* RBW 30 kHz
 * VBW 300 kHz
 * SWT 100 ms

Marker 1 [T1]

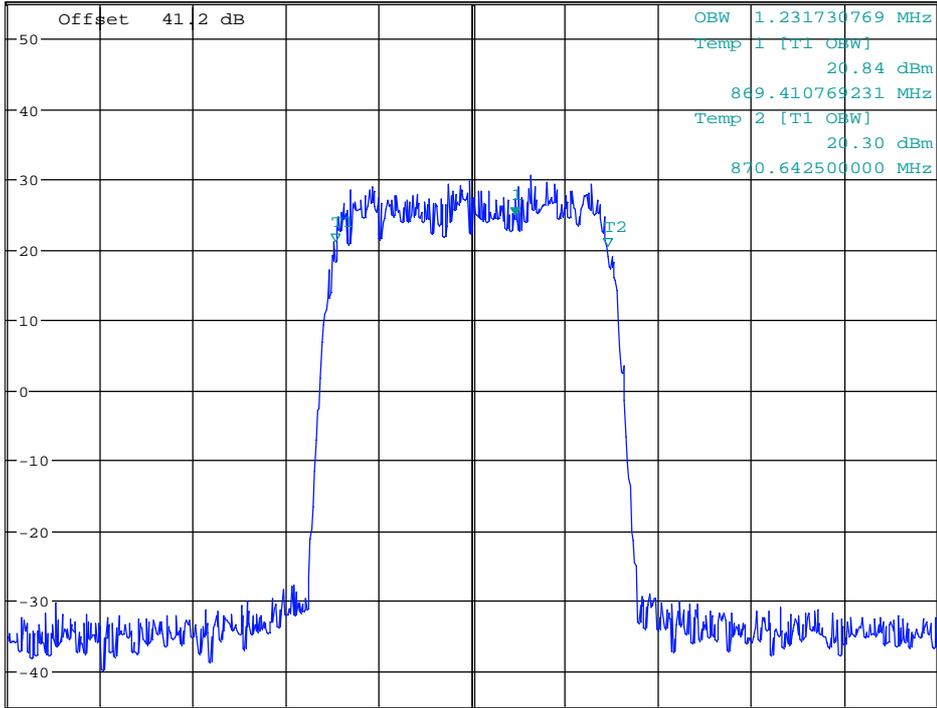
24.73 dBm

870.224711538 MHz

Ref 55 dBm

Att 20 dB

1 RM
 CLRWR



Center 870.03 MHz 420 kHz/ Span 4.2 MHz

Date: 21.DEC.2010 17:09:33



Channel 311



BS,1X,C0 :OCC BANDWDT

* RBW 30 kHz
* VBW 300 kHz
* SWT 100 ms

Marker 1 [T1]

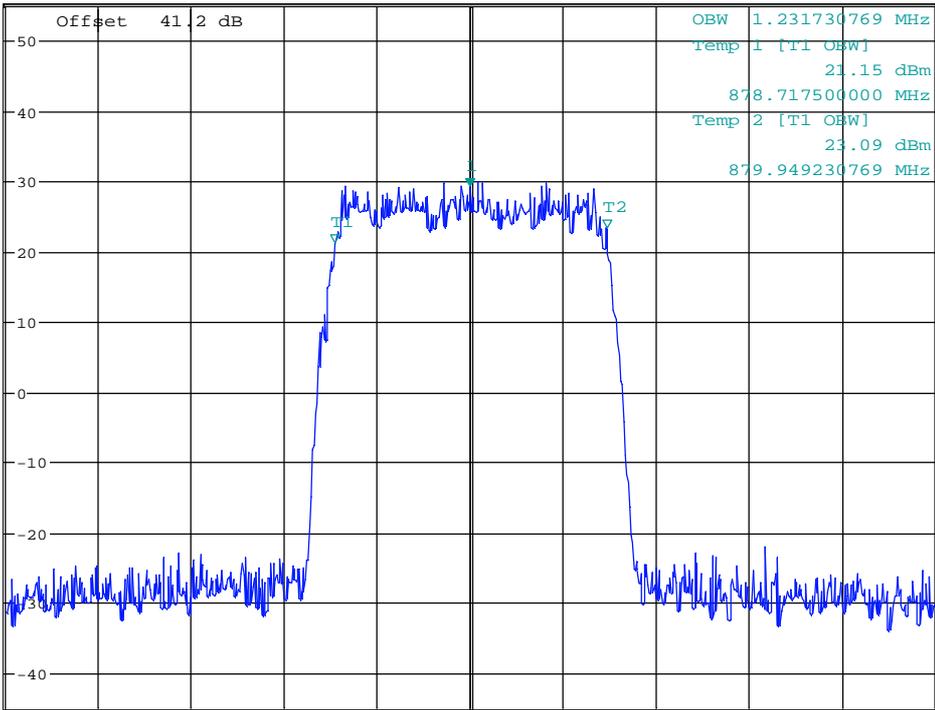
28.98 dBm

879.329129970 MHz

Ref 55 dBm

Att 20 dB

1 RM
CLRWR



Center 879.33 MHz 420 kHz/ Span 4.2 MHz

Date: 21.DEC.2010 17:06:23



Channel 596



BS,1X,C0 :OCC BANDWDT

* RBW 30 kHz
 * VBW 300 kHz
 * SWT 100 ms

Marker 1 [T1]

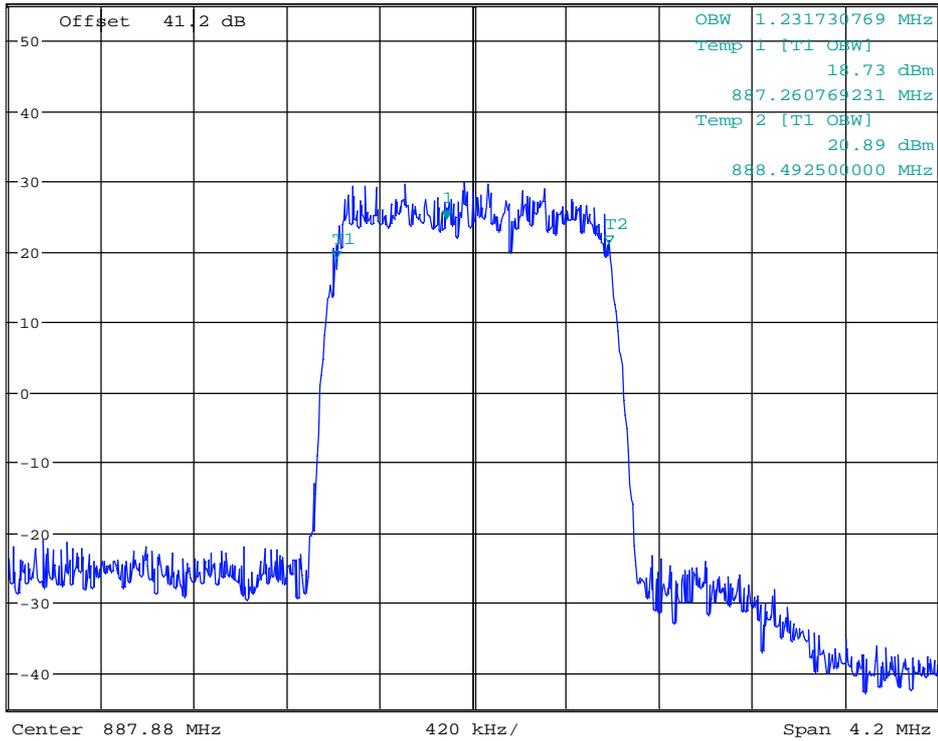
24.37 dBm

887.757403846 MHz

Ref 55 dBm

Att 20 dB

1 RM
 CLRWR



Date: 21.DEC.2010 17:02:22



CDMA2000 1X EV-DO Channel 1



BS,DO,C0 :OCC BANDWDT

* RBW 30 kHz

Marker 1 [T1]

* VBW 300 kHz

28.62 dBm

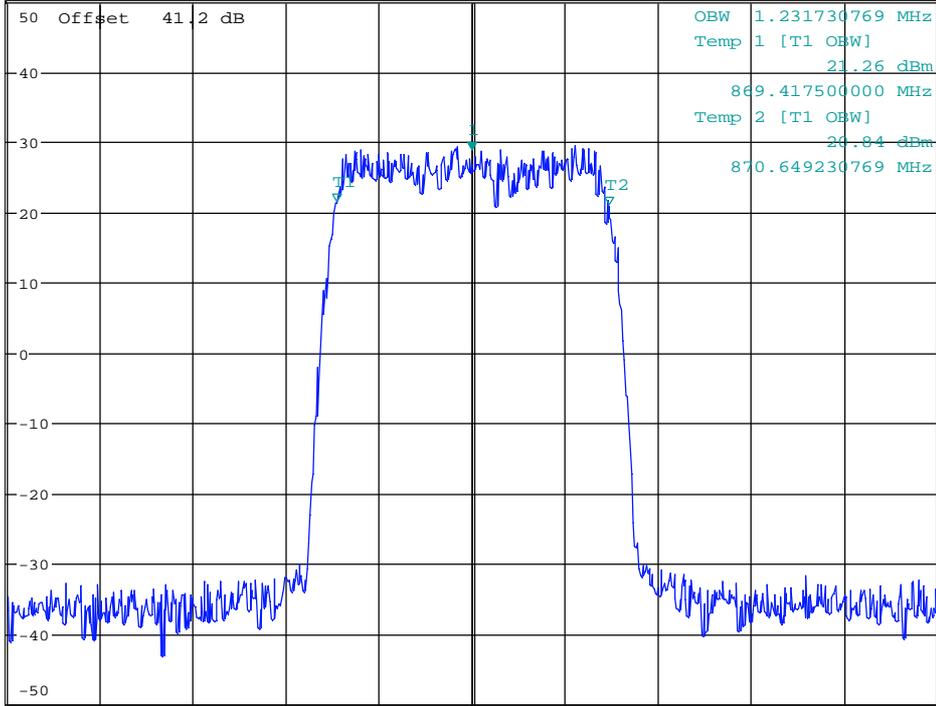
* SWT 100 ms

870.030000000 MHz

Ref 50 dBm

Att 15 dB

1 RM
CLRWR



Center 870.03 MHz 420 kHz/ Span 4.2 MHz

Date: 21.DEC.2010 18:04:35



Channel 311



BS,DO,C0 :OCC BANDWDT

* RBW 30 kHz
 * VBW 300 kHz
 * SWT 100 ms

Marker 1 [T1]

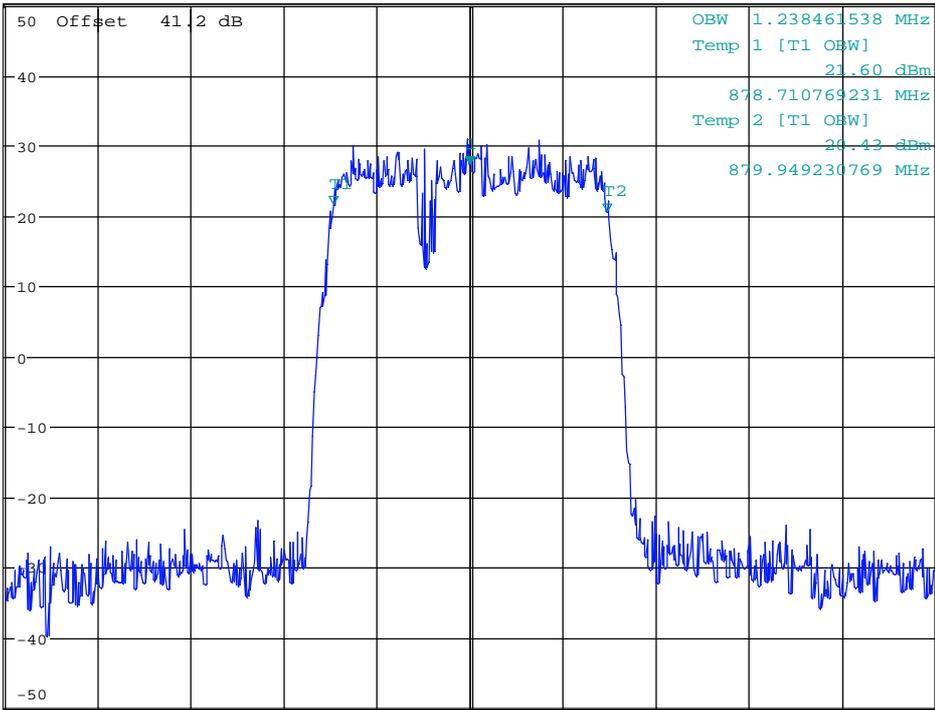
27.26 dBm

879.330000000 MHz

Ref 50 dBm

Att 15 dB

1 RM
 CLRWR



Center 879.33 MHz 420 kHz/ Span 4.2 MHz

Date: 21.DEC.2010 18:03:07

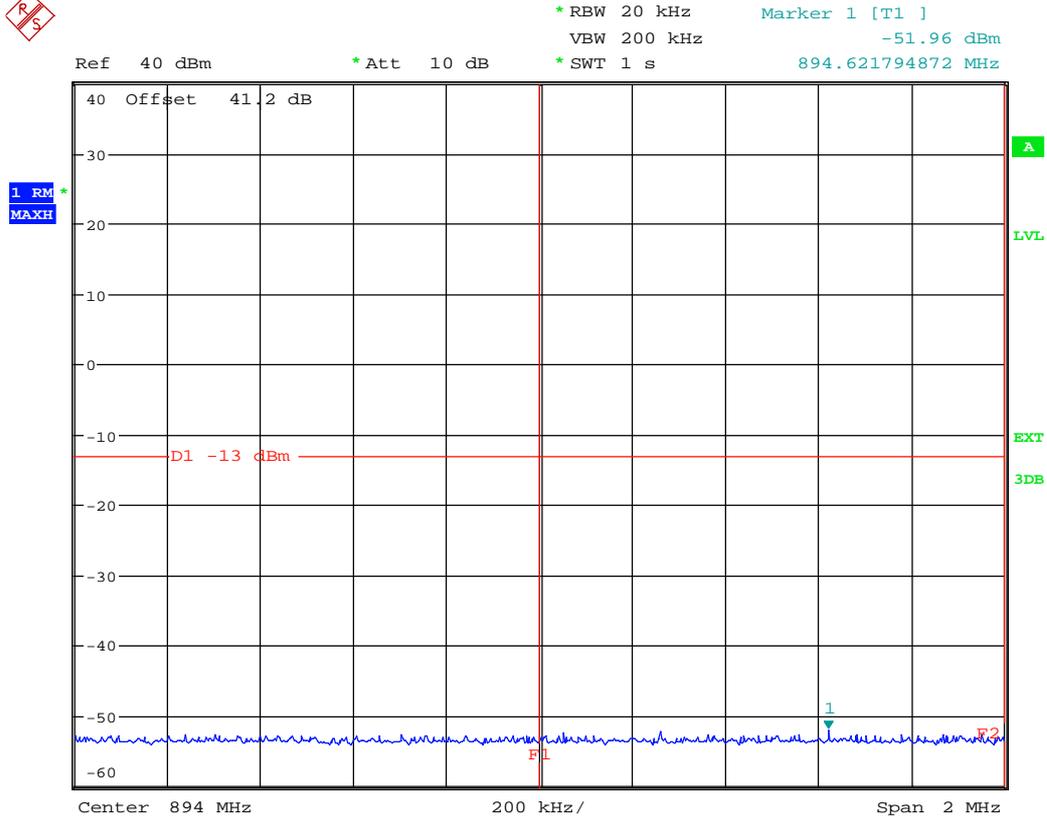


Appendix C

Band Edge Measurements According to FCC Part 2.1051 & 22.917



Channel 596(887.88 MHz)

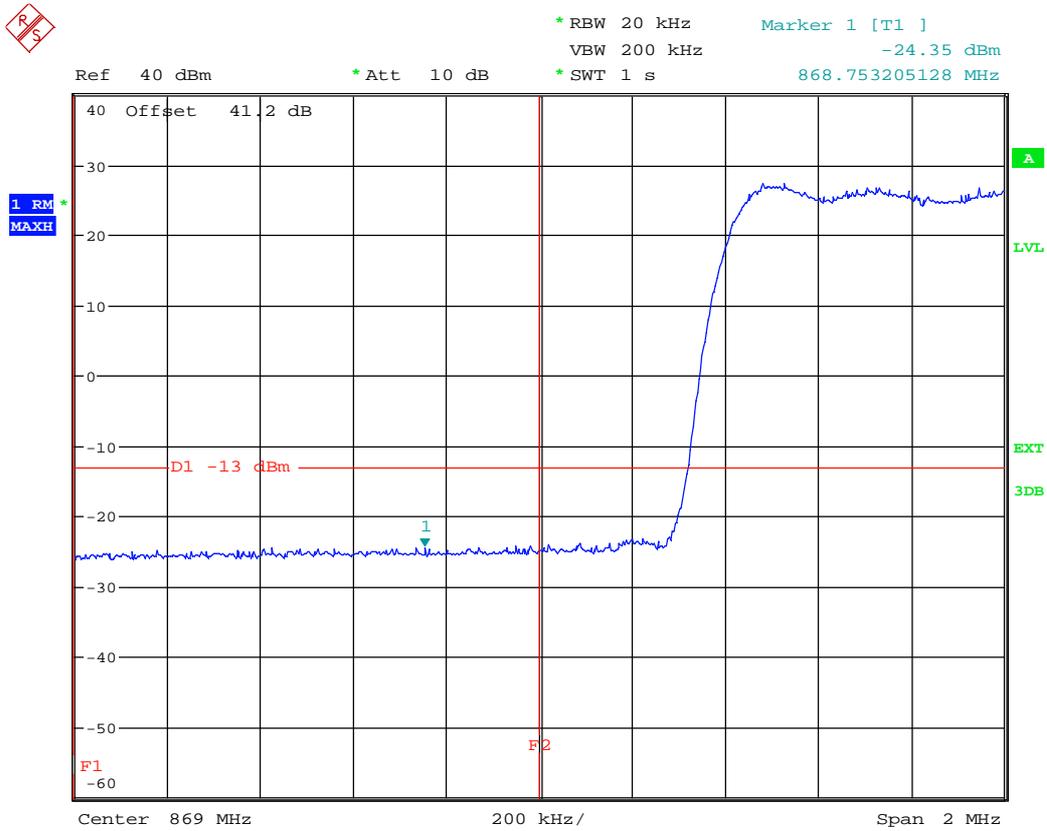


Date: 21.DEC.2010 17:16:41



B. Multiple Carriers:

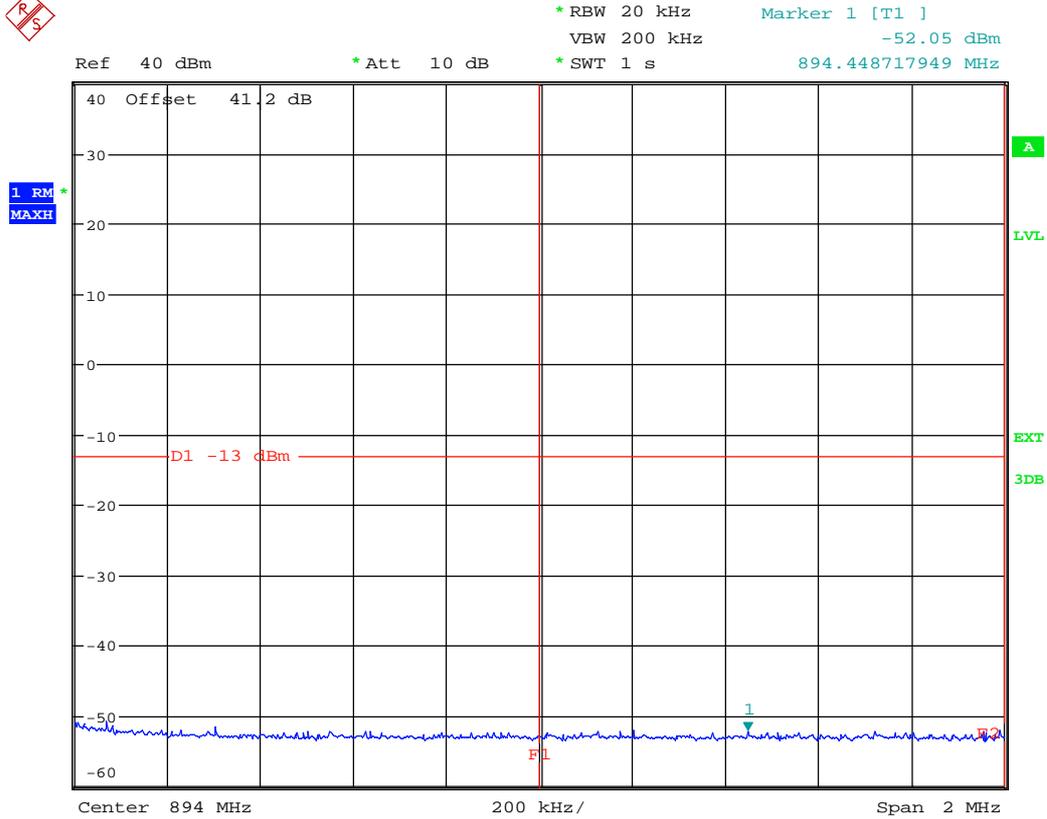
Channel Number: 1/42/83/124



Date: 21.DEC.2010 17:51:34



Channel Number: 473/514/555/596



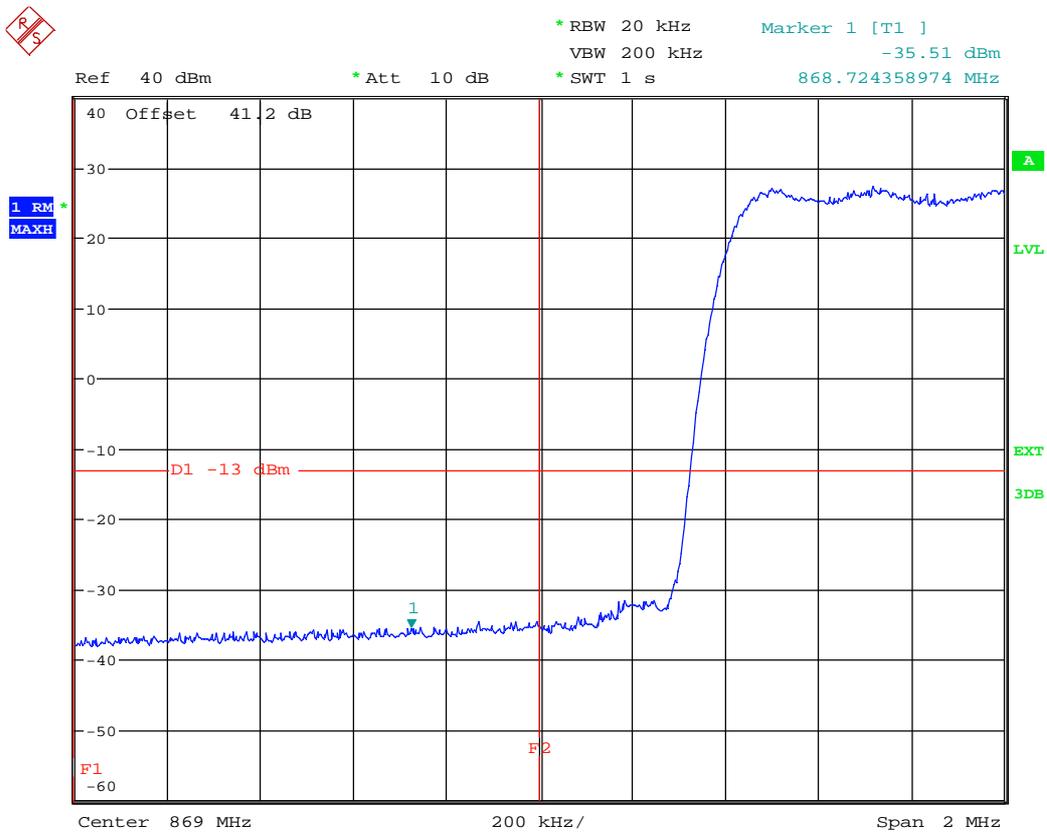
Date: 21.DEC.2010 17:48:44



CDMA2000 EVDO:

A. Single Carrier:

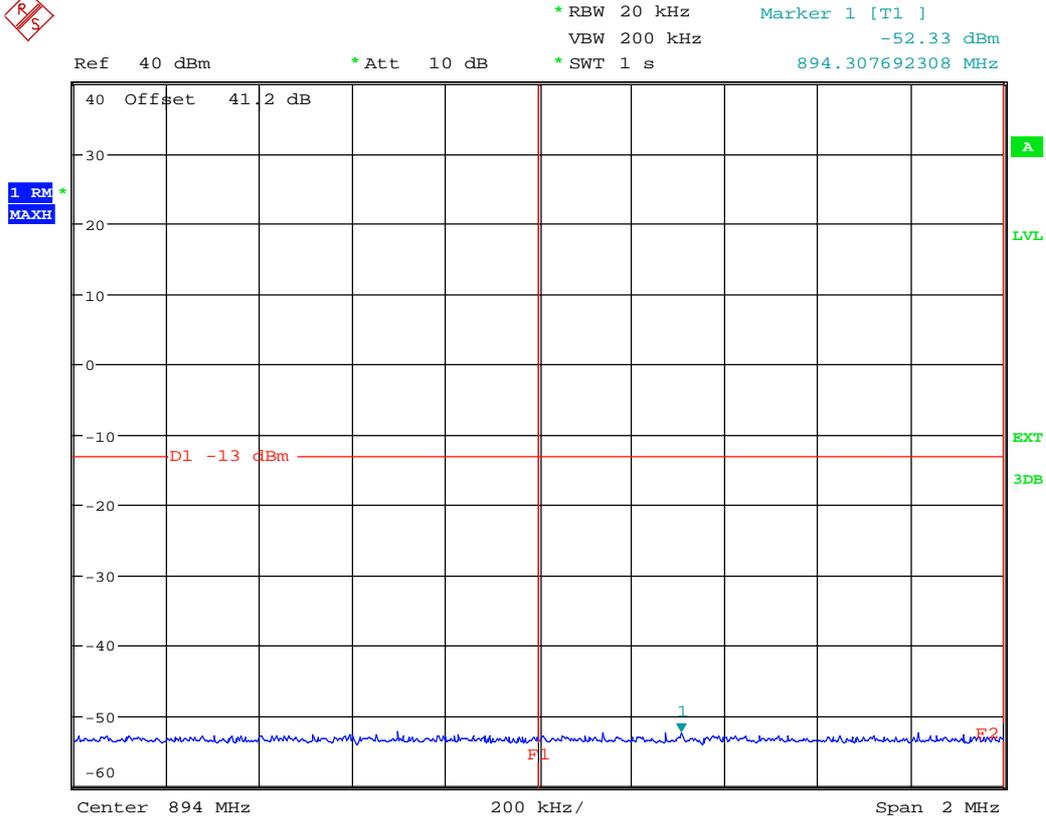
Channel 1 (870.03 MHz)



Date: 21.DEC.2010 17:57:07



Channel 596 (887.88 MHz)

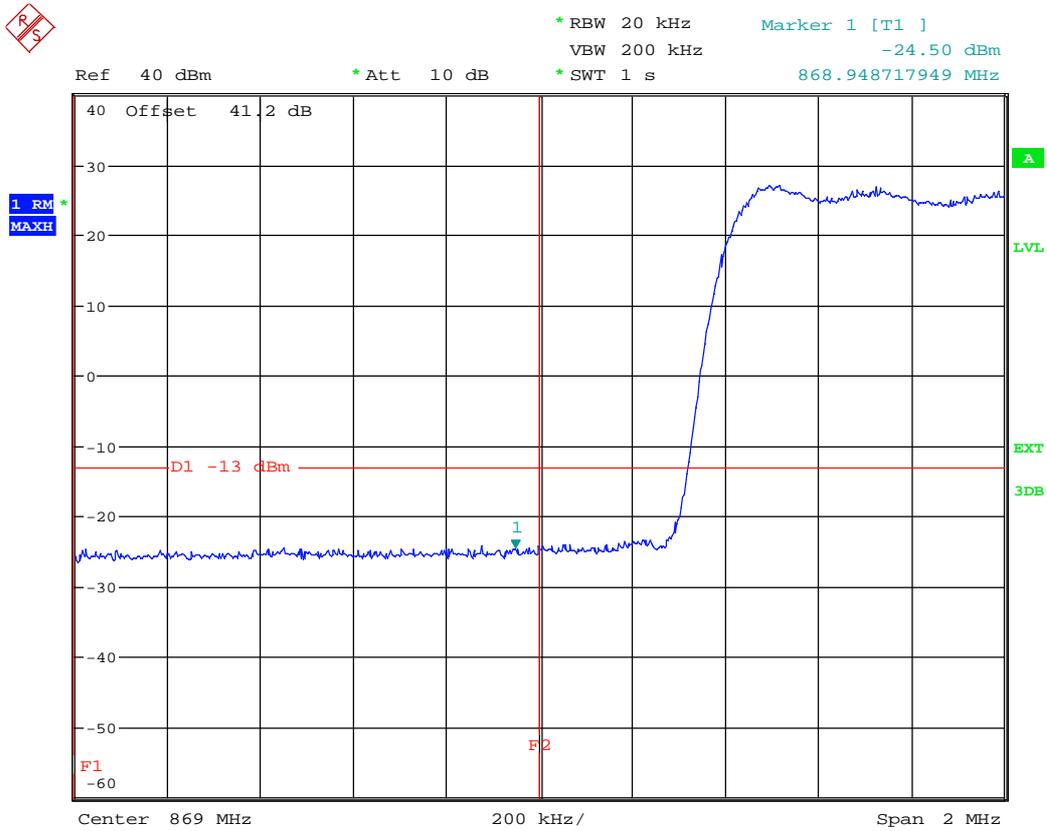


Date: 21.DEC.2010 17:58:30



B. Multiple Carriers:

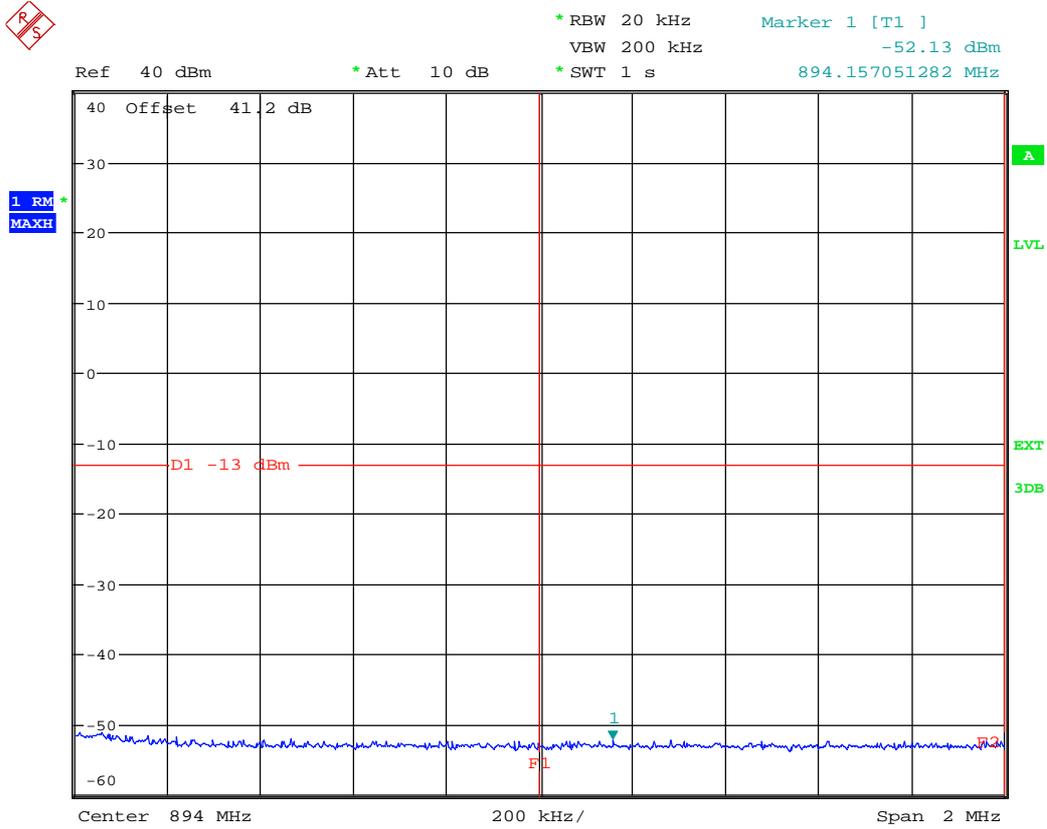
Channel Number: 1/42/83/124



Date: 21.DEC.2010 18:34:50



Channel Number:473/514/555/596



Date: 21.DEC.2010 18:31:05



Appendix D

Conducted Spurious Emission Measurements

According to FCC Part 2.1051 & 22.917

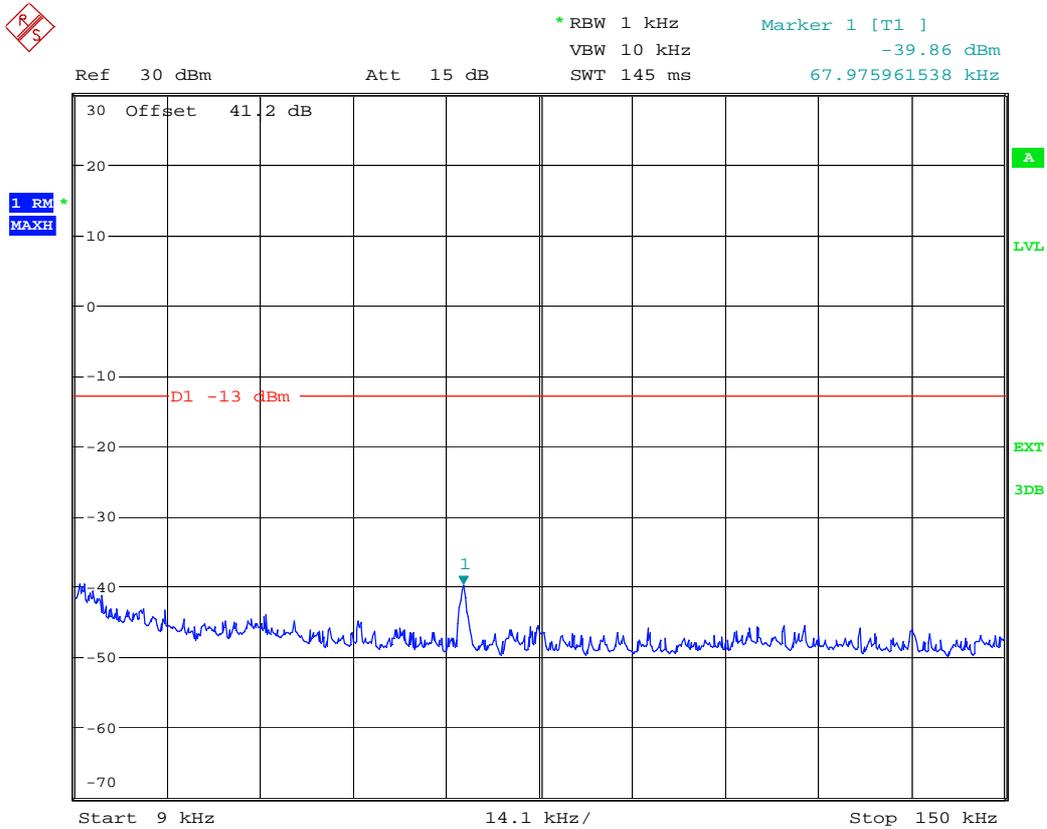


CDMA2000 1X:

A. Single Carrier

Channel Number: 1

(9k ~ 150k)

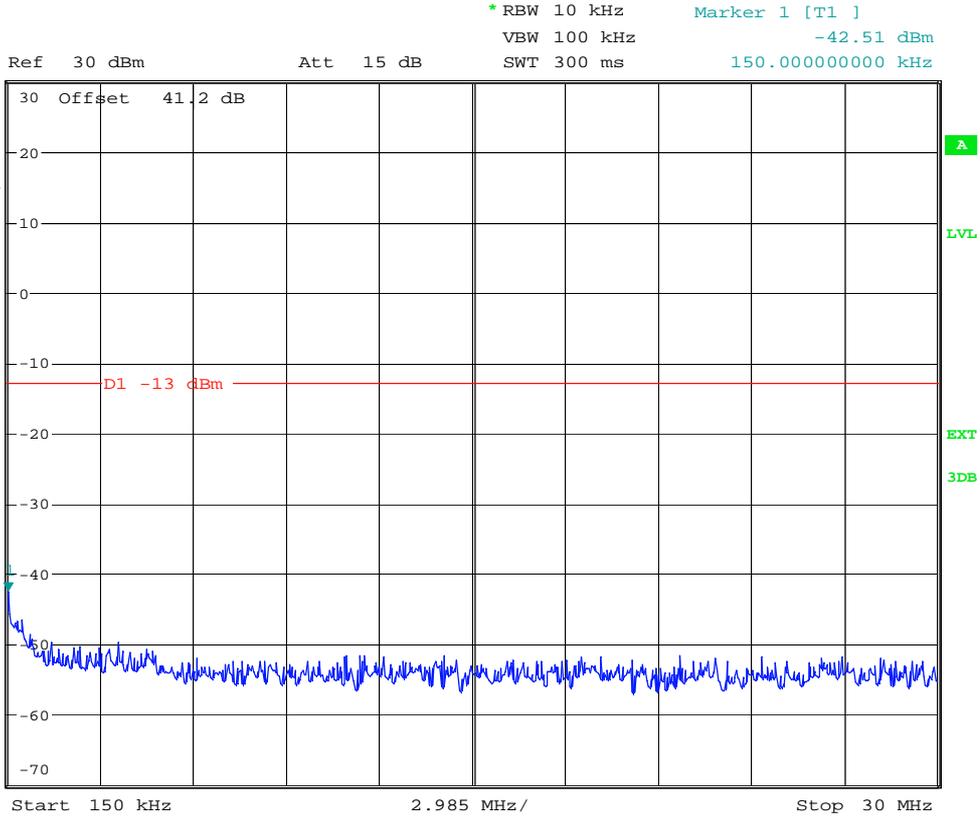


b0fW*])\yvs1233

Date: 22.DEC.2010 04:58:25



(150k ~ 30M)



b0fW*])\yvs1233

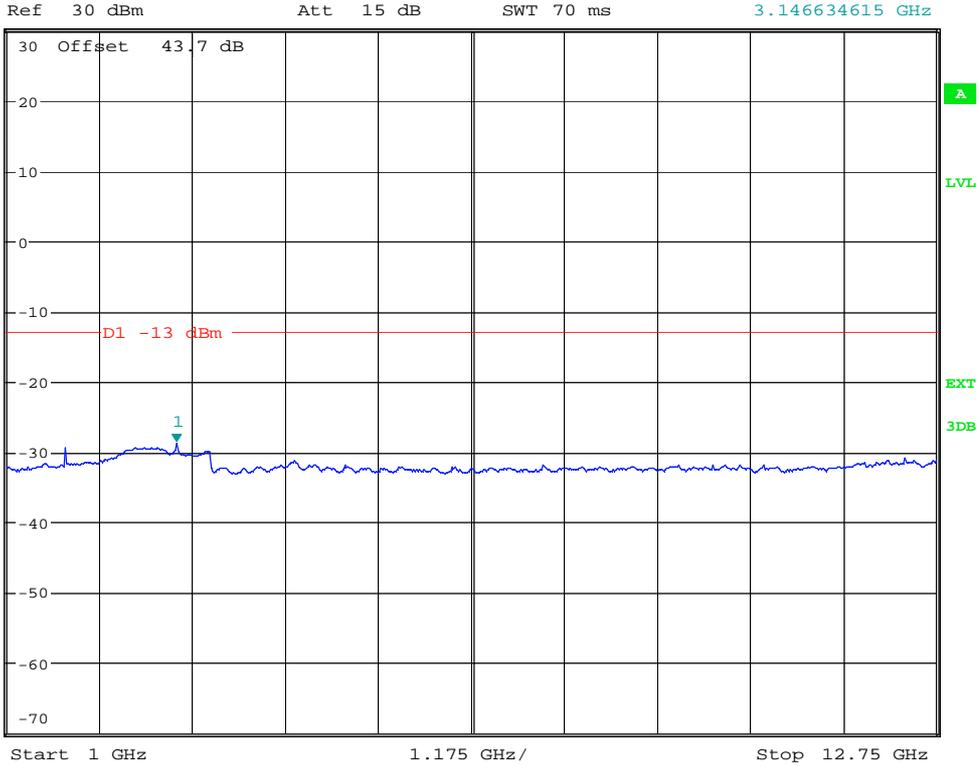
Date: 22.DEC.2010 04:59:18



(1G ~ 12.75G)



* RBW 1 MHz Marker 1 [T1]
VBW 10 MHz -28.62 dBm
SWT 70 ms 3.146634615 GHz



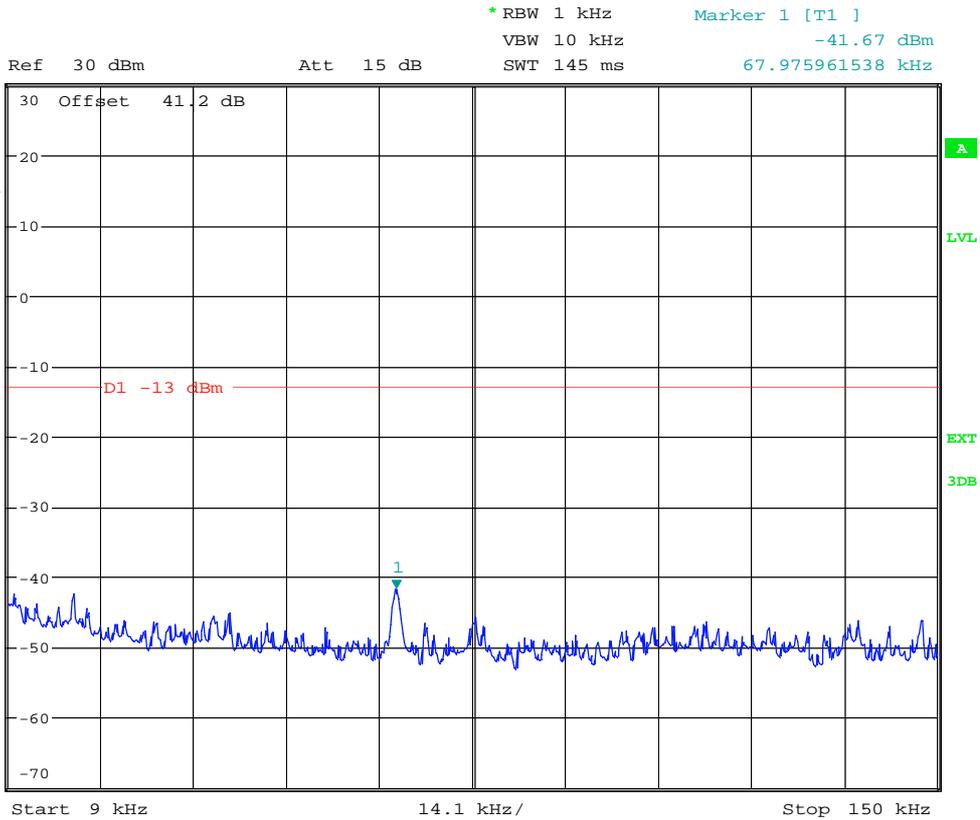
b0fw*]\yvs1233

Date: 22.DEC.2010 05:00:36



Channel Number: 311

(9k ~ 150k)

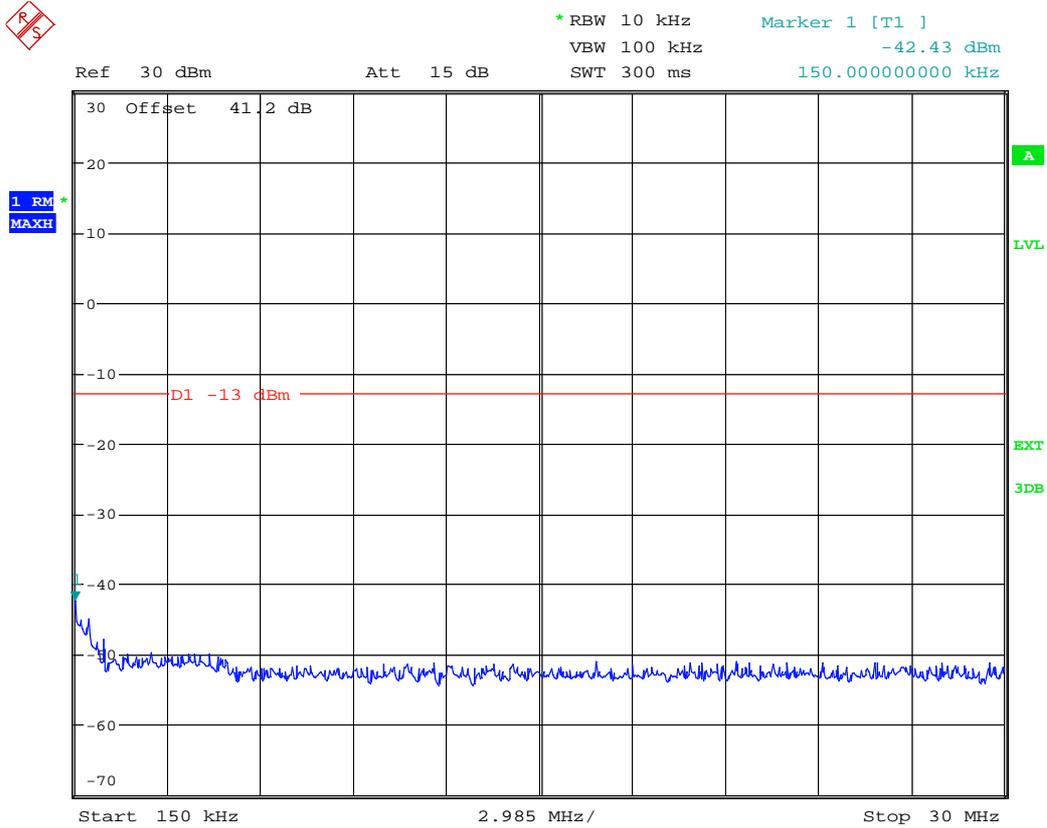


bofw*]\yvs1233

Date: 22.DEC.2010 04:56:36



(150k ~ 30M)

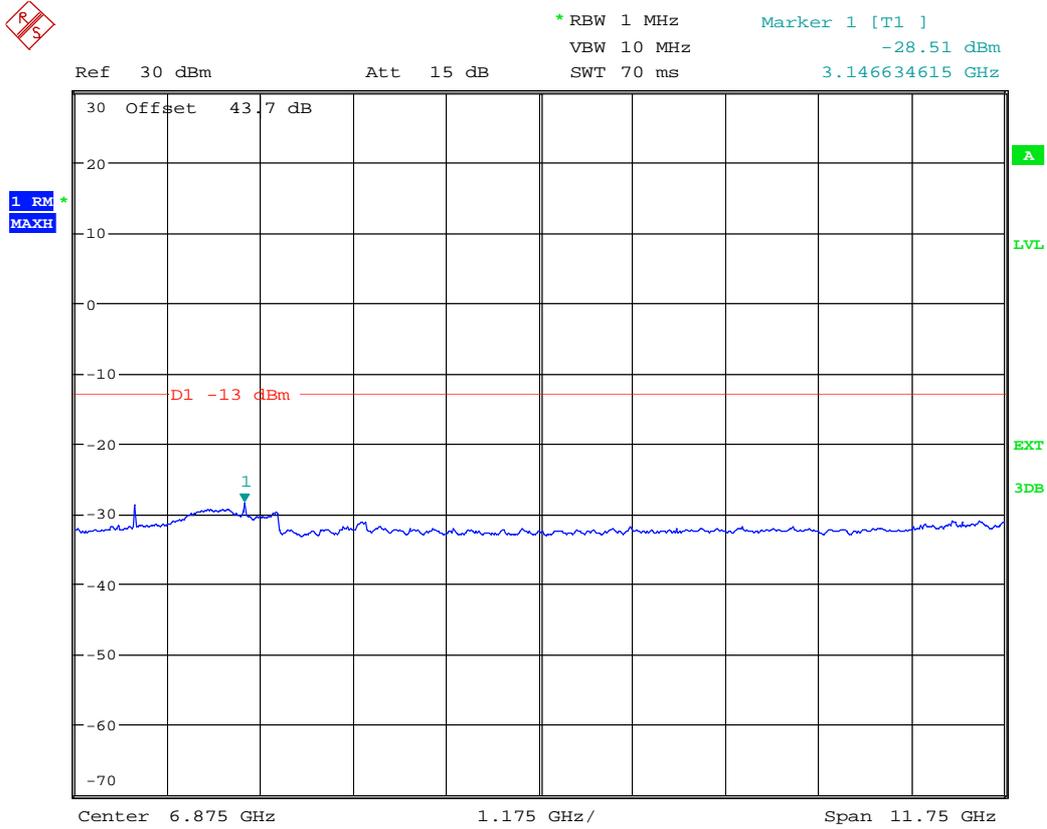


b0fW*])\yvs1233

Date: 22.DEC.2010 04:56:10



(1G ~ 12.75G)



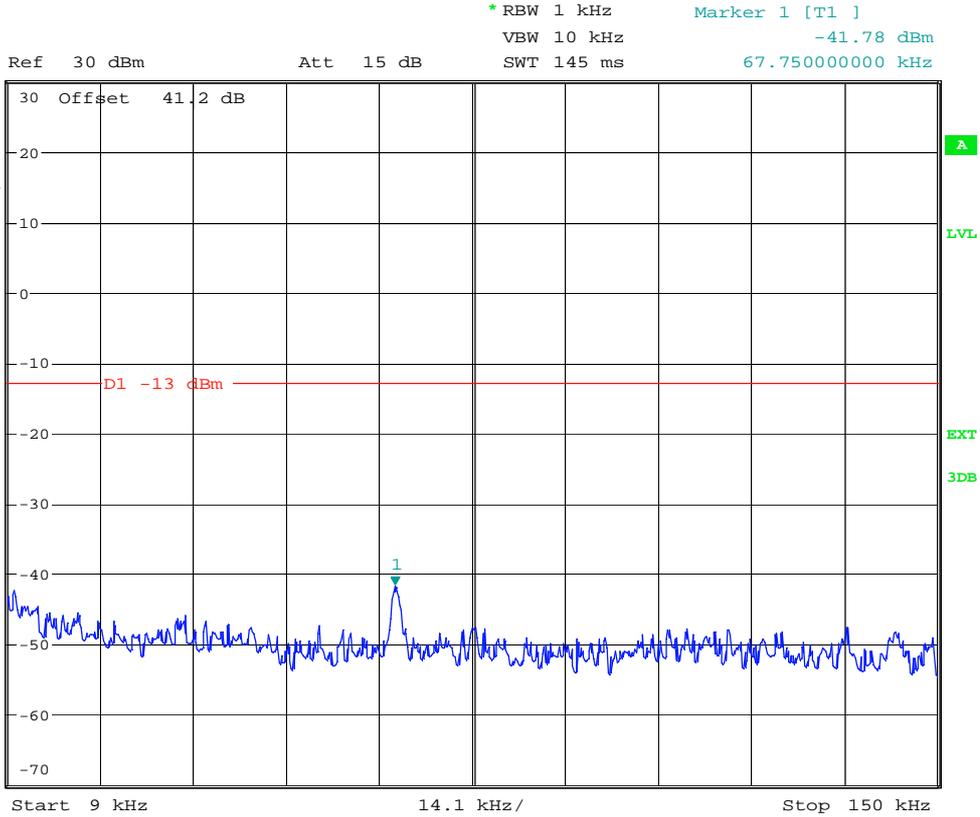
b0fw*])\yvs1233

Date: 22.DEC.2010 04:52:43



Channel Number: 596

(9k ~ 150k)



bOfW*]\yvs1233

Date: 22.DEC.2010 05:06:30



(150k ~ 30M)

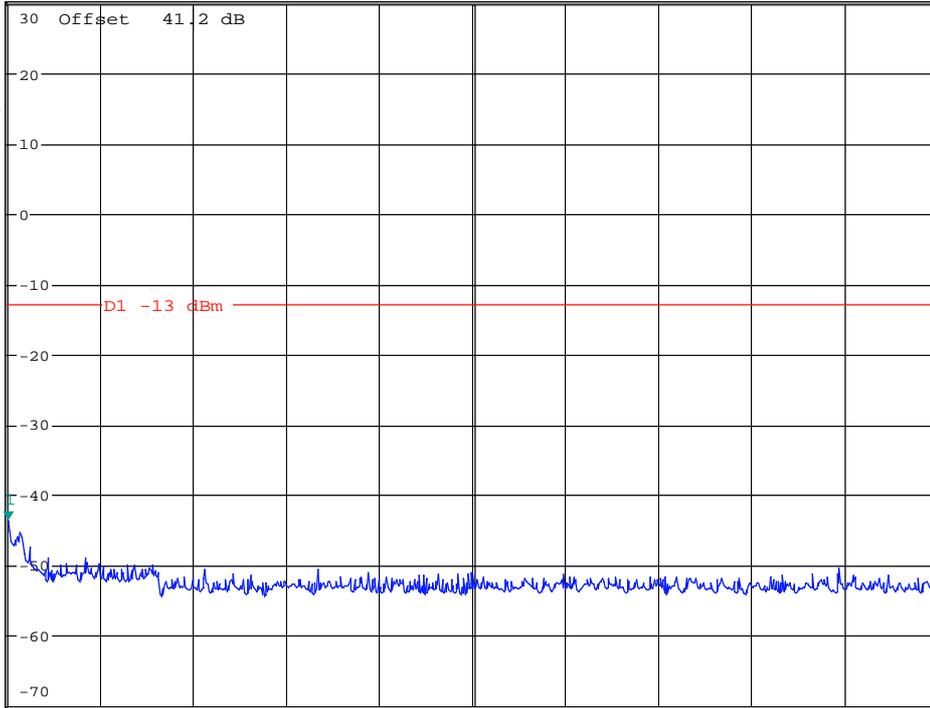


*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz -43.60 dBm
SWT 300 ms 150.00000000 kHz

Ref 30 dBm

Att 15 dB

1 RM*
MAXH

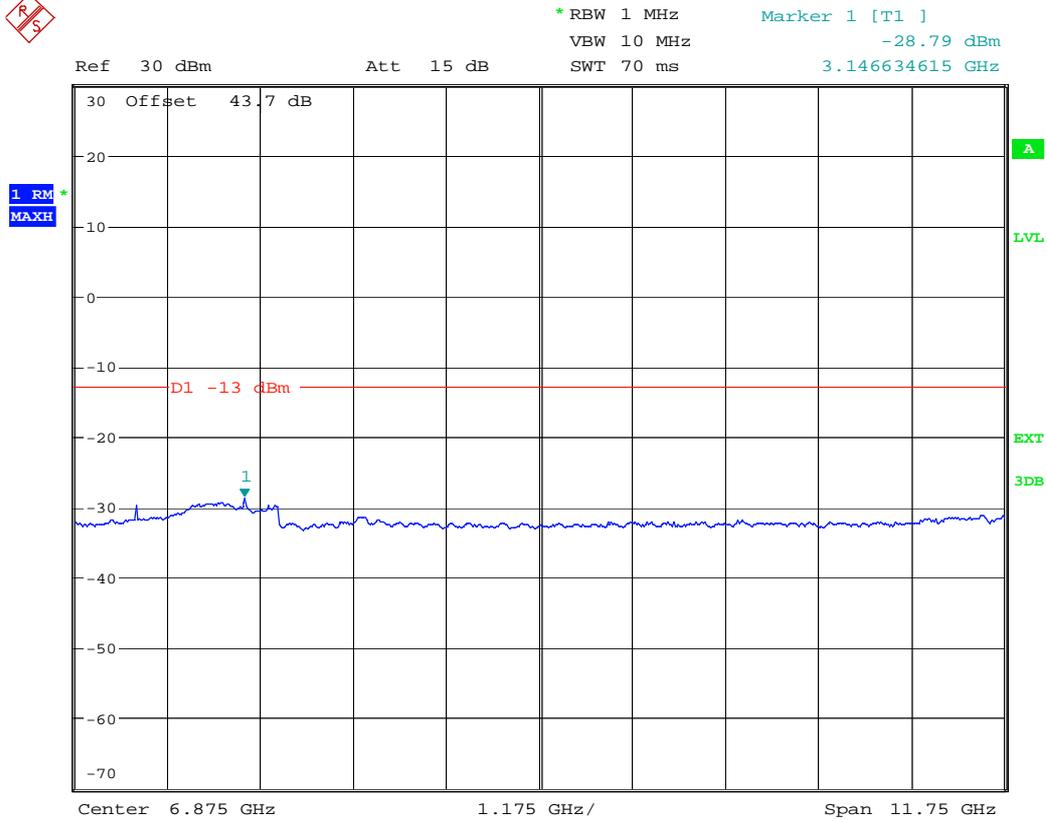


b0fW*])\yvs1233

Date: 22.DEC.2010 05:05:59



(1G ~ 12.75G)



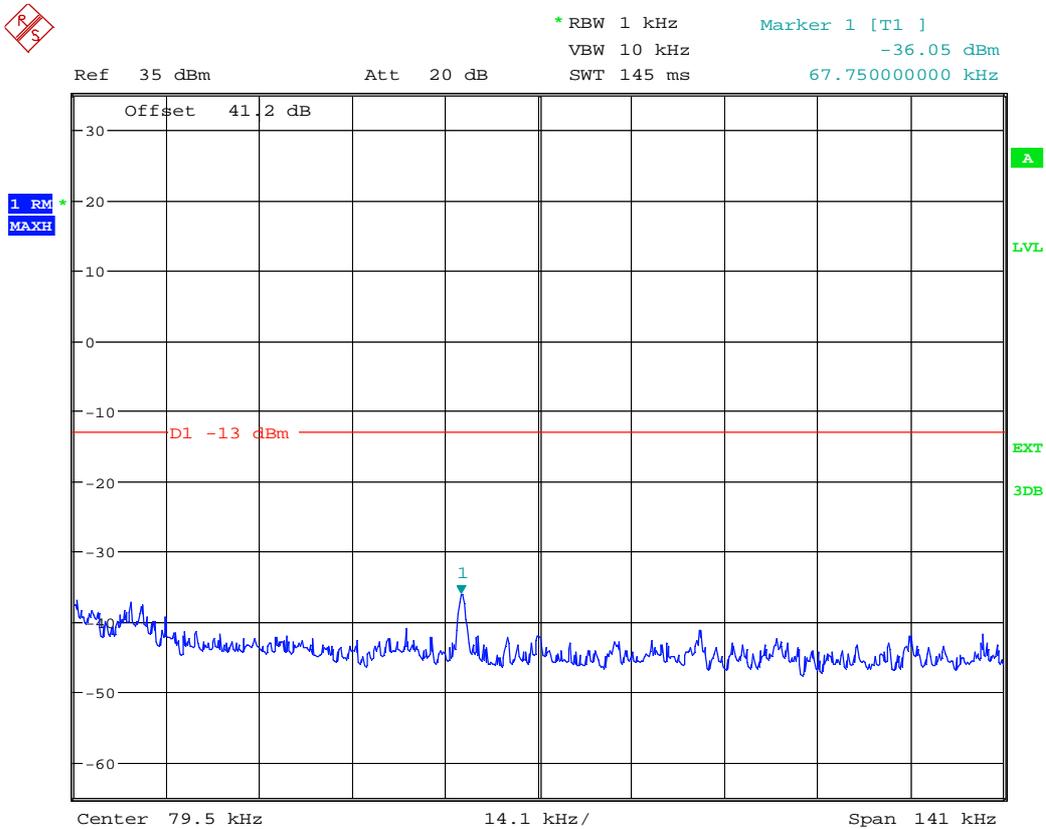
b0fw*])\yvs1233

Date: 22.DEC.2010 05:03:32



B. Multiple Carriers:

Channel Number: 1/42/83/124
(9k ~ 150k)

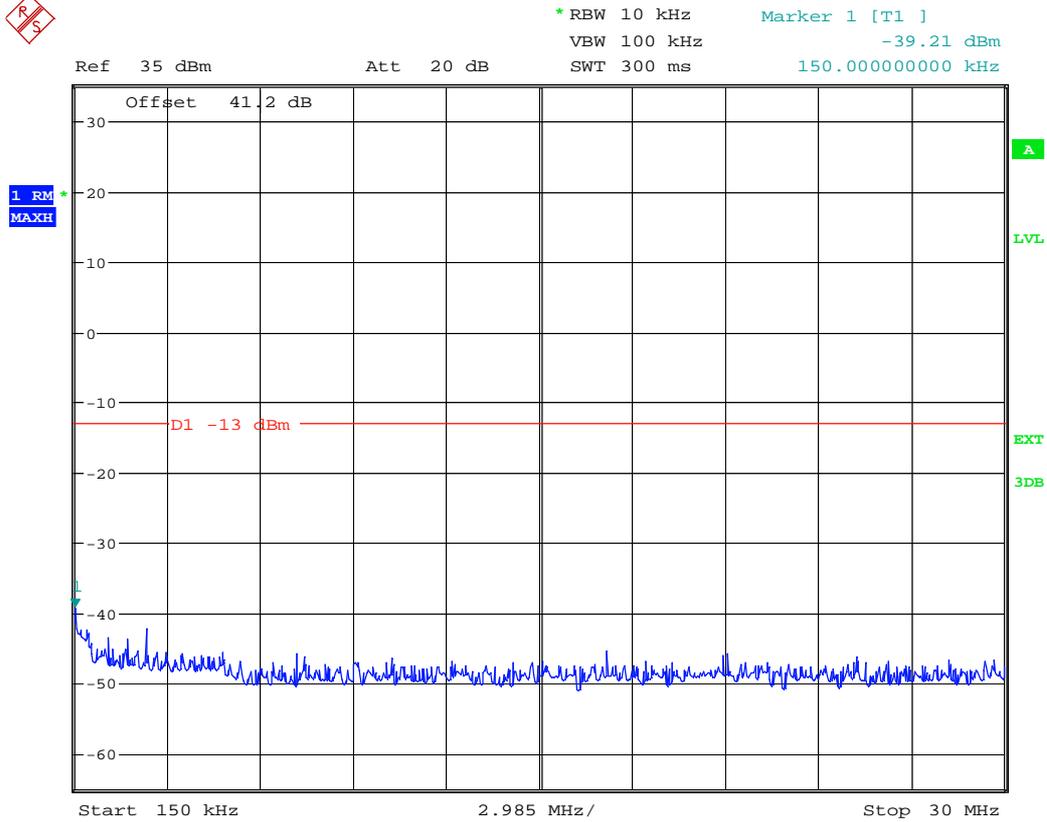


b0fW*]\yvs1233

Date: 22.DEC.2010 07:53:39



(150k ~ 30M)

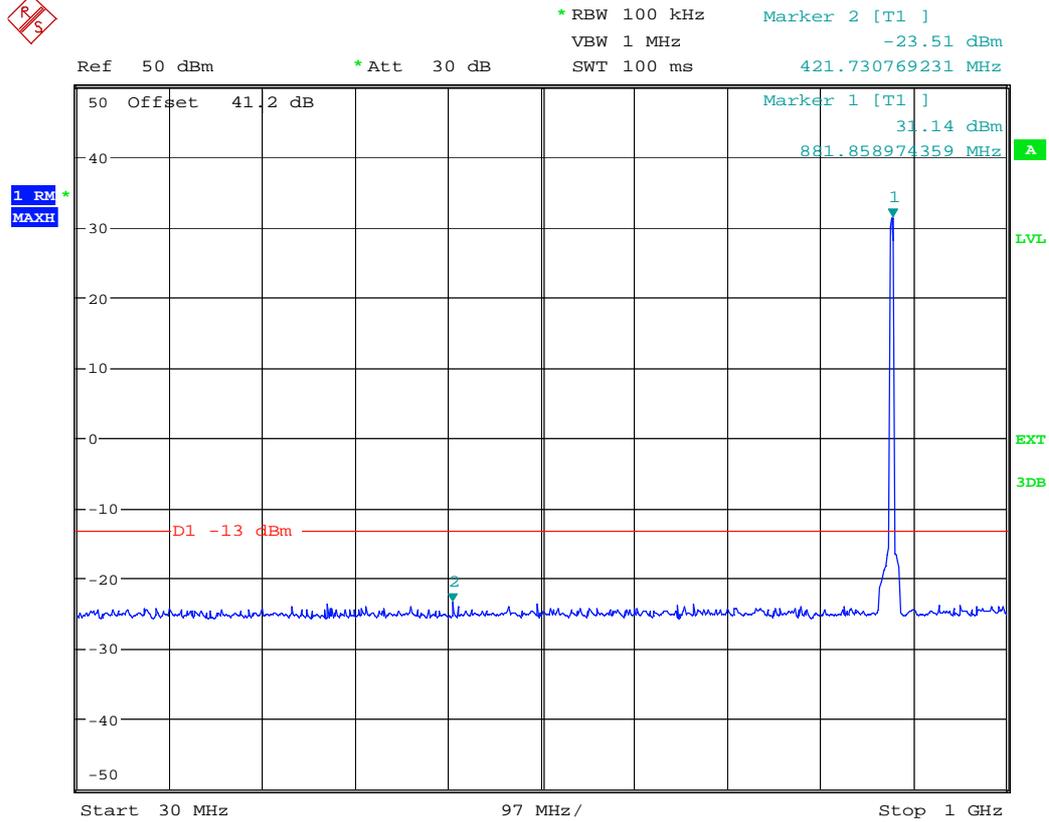


b0fW* l)\yvs1233

Date: 22.DEC.2010 07:54:14



(30M ~ 1G)

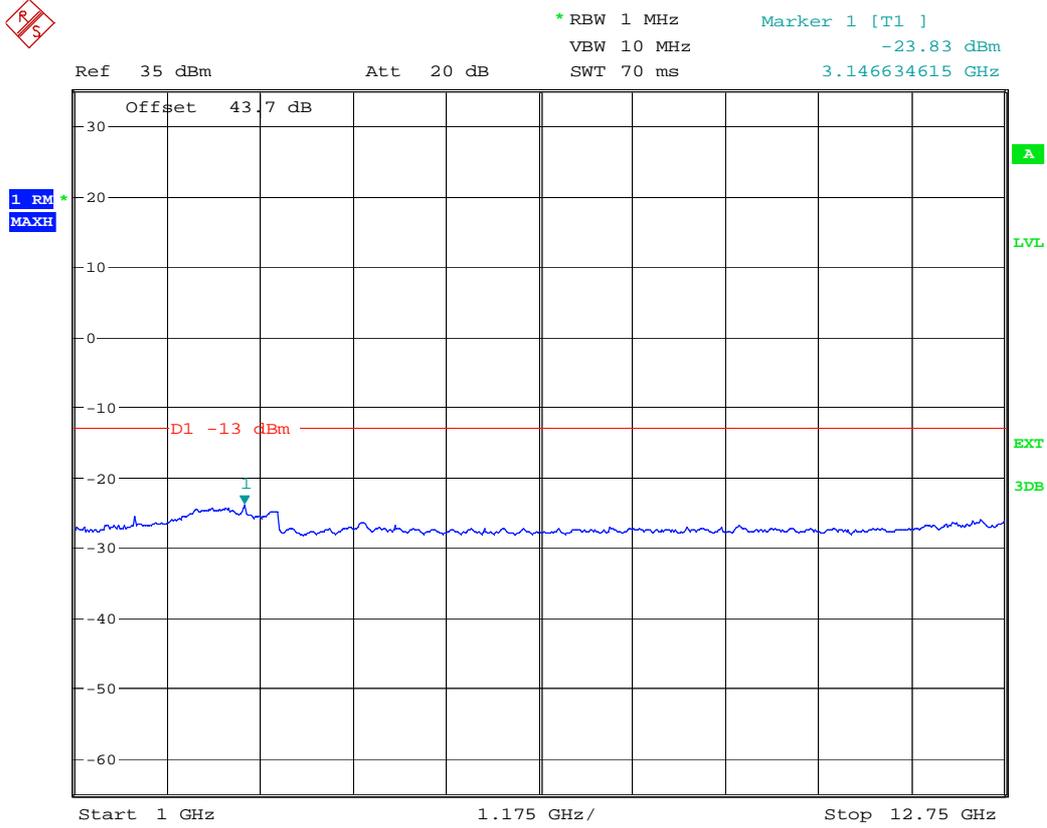


b0fw*]\yvs1233

Date: 22.DEC.2010 07:55:08



(1G ~ 12.75G)

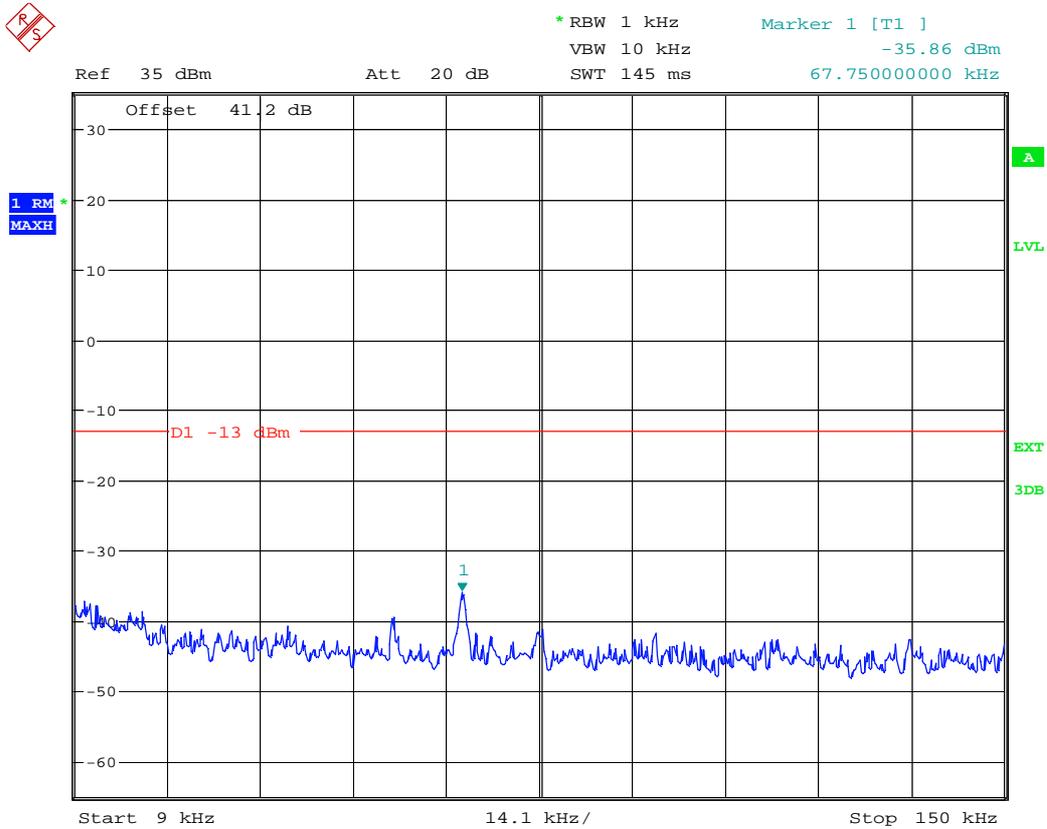


b0fW* 1)\yvs1233

Date: 22.DEC.2010 07:56:23



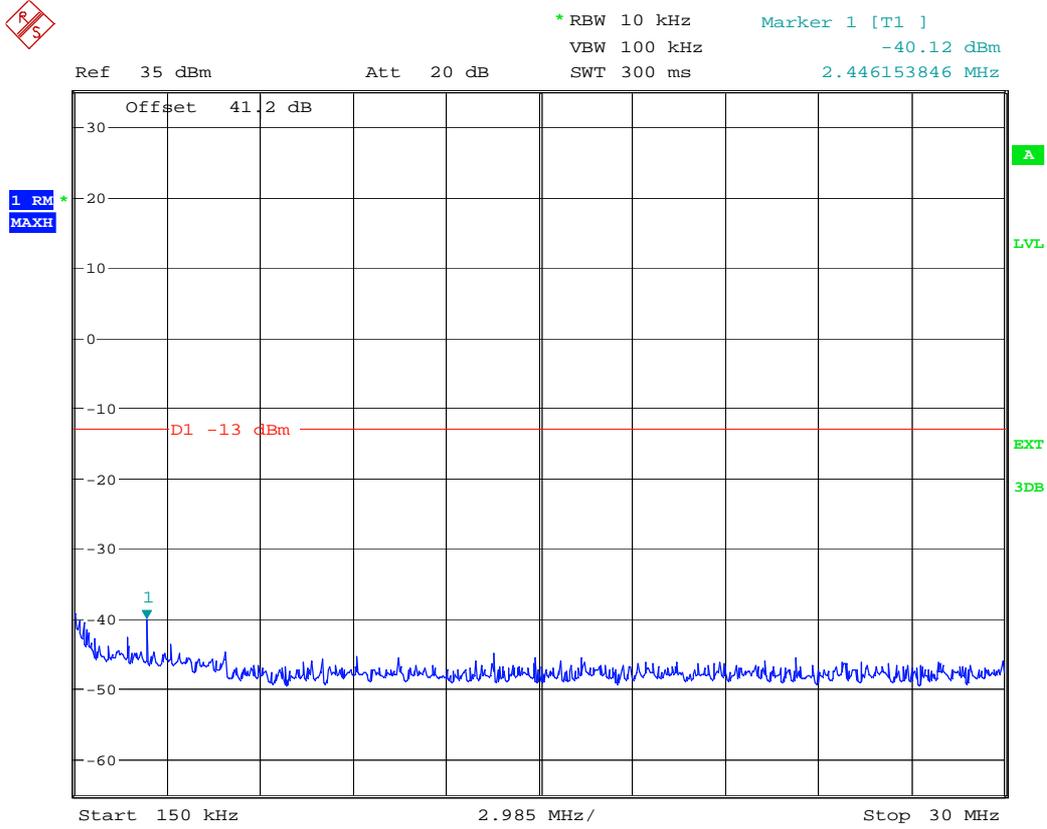
Channel Number: 270/311/352/393 (9k ~ 150k)



b0fw*])\yvs1233
Date: 22.DEC.2010 07:10:01



(150k ~ 30M)

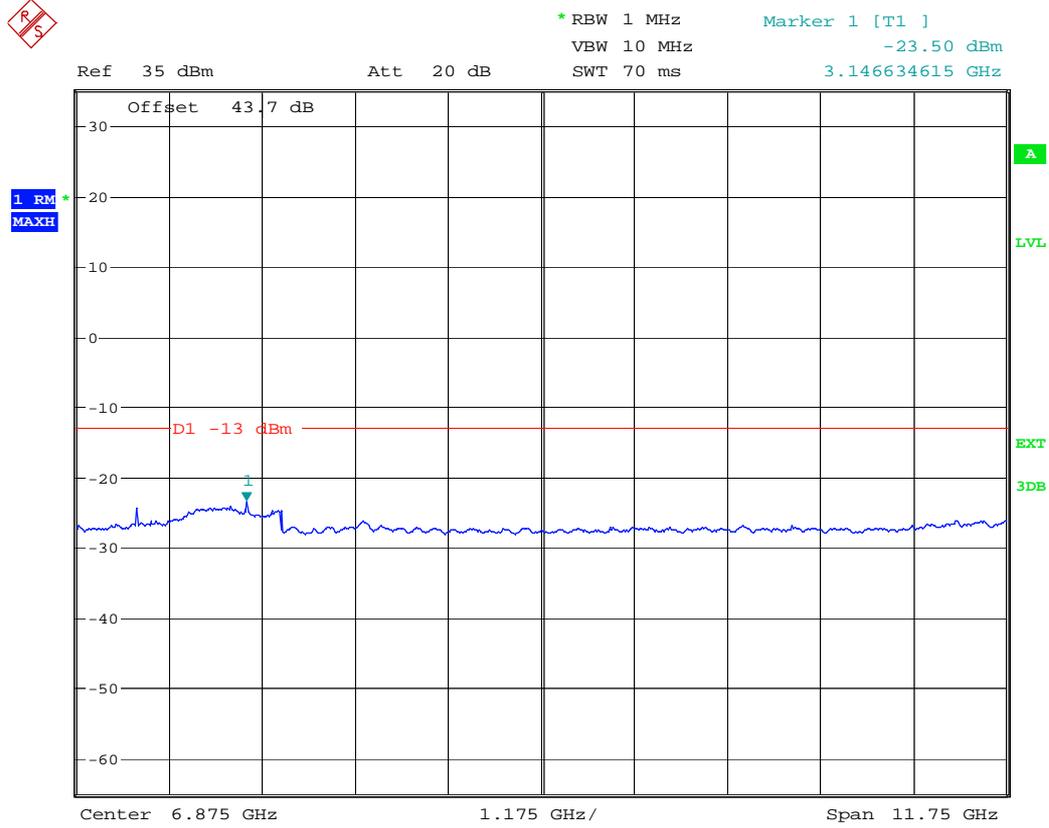


bOfw*])\yvs1233

Date: 22.DEC.2010 07:09:28



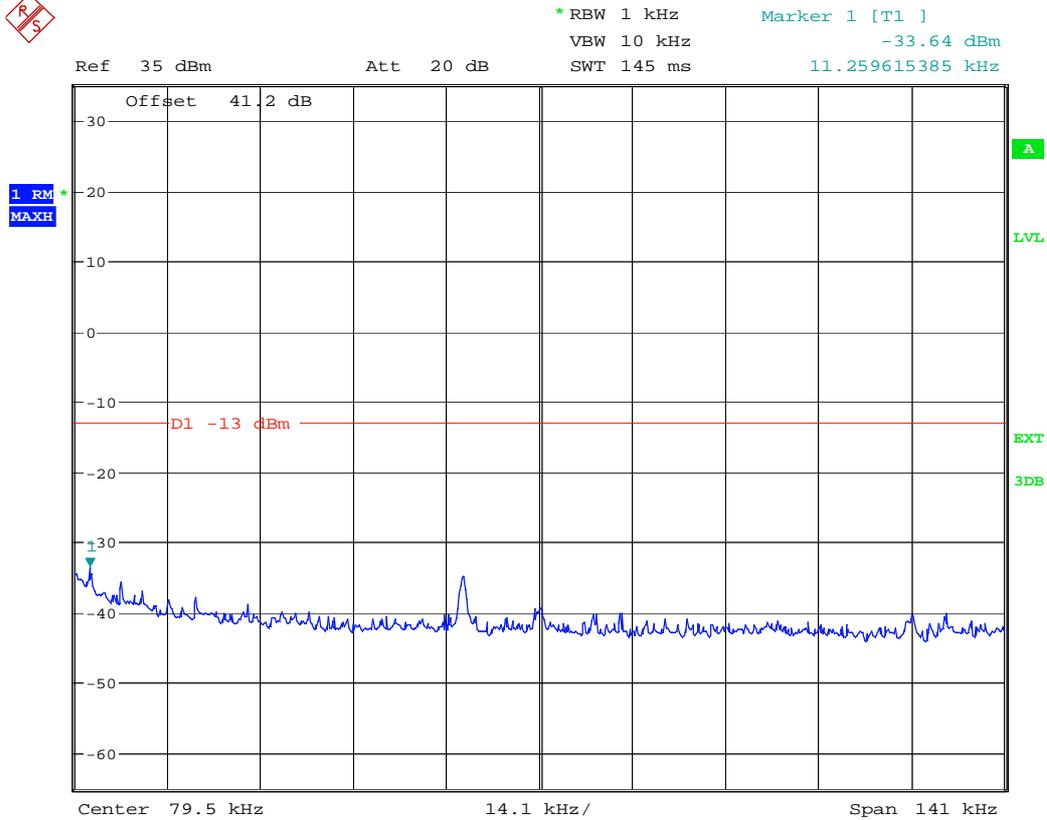
(1G ~ 12.75G)



b0fW* 1)\yvs1233
Date: 22.DEC.2010 05:31:12



Channel Number: 473/514/555/596 (9k ~ 150k)

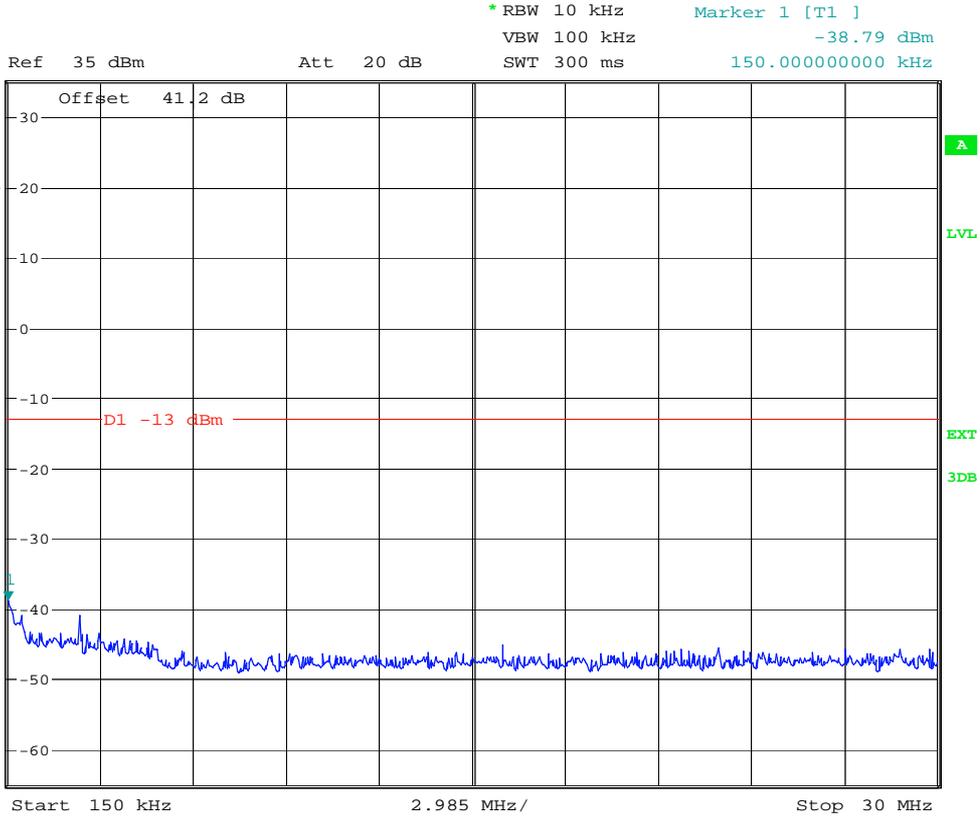


b0fw*])\yvs1233

Date: 22.DEC.2010 05:19:54



(150k ~ 30M)

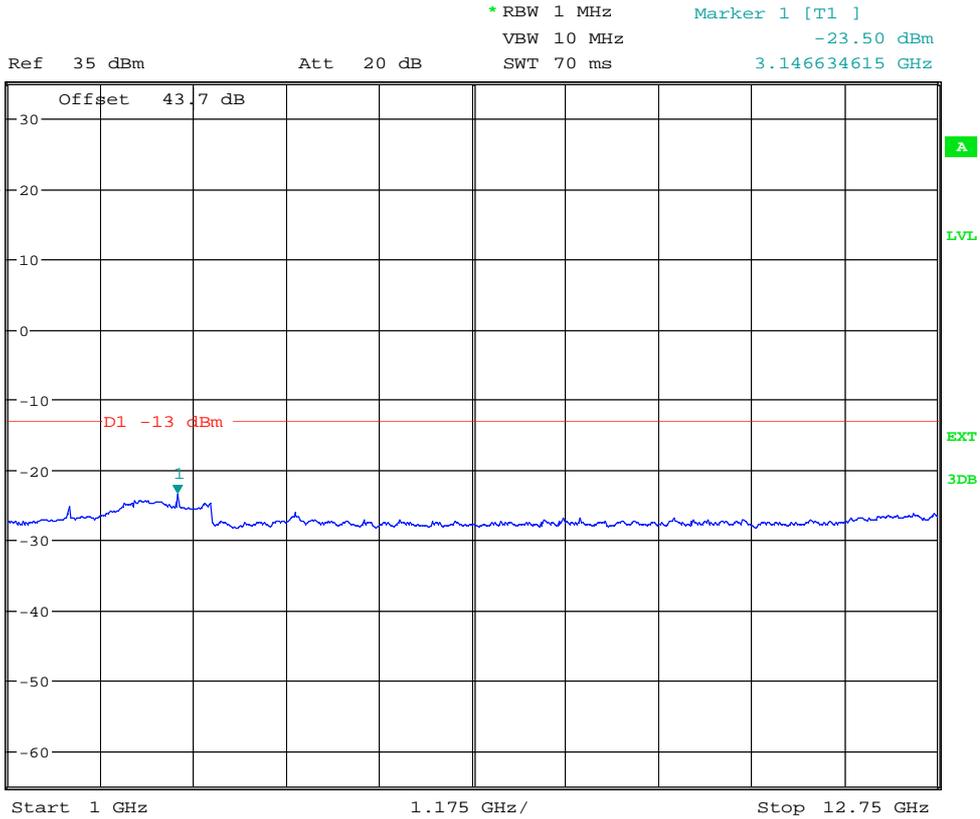


b0fW*])\yvs1233

Date: 22.DEC.2010 05:22:09



(1G ~ 12.75G)



b0fw*])\yvs1233

Date: 22.DEC.2010 05:27:00

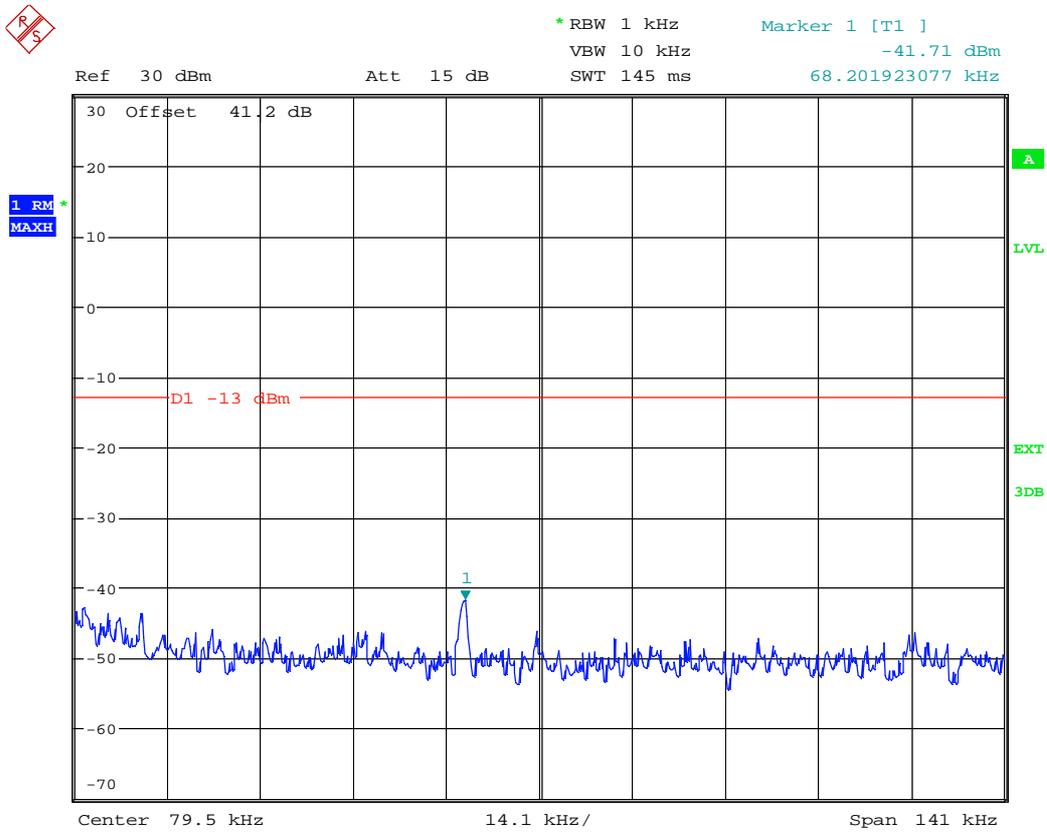


CDMA2000 1X EV-DO

A. Single Carrier

Channel Number: 1

(9k ~ 150k)

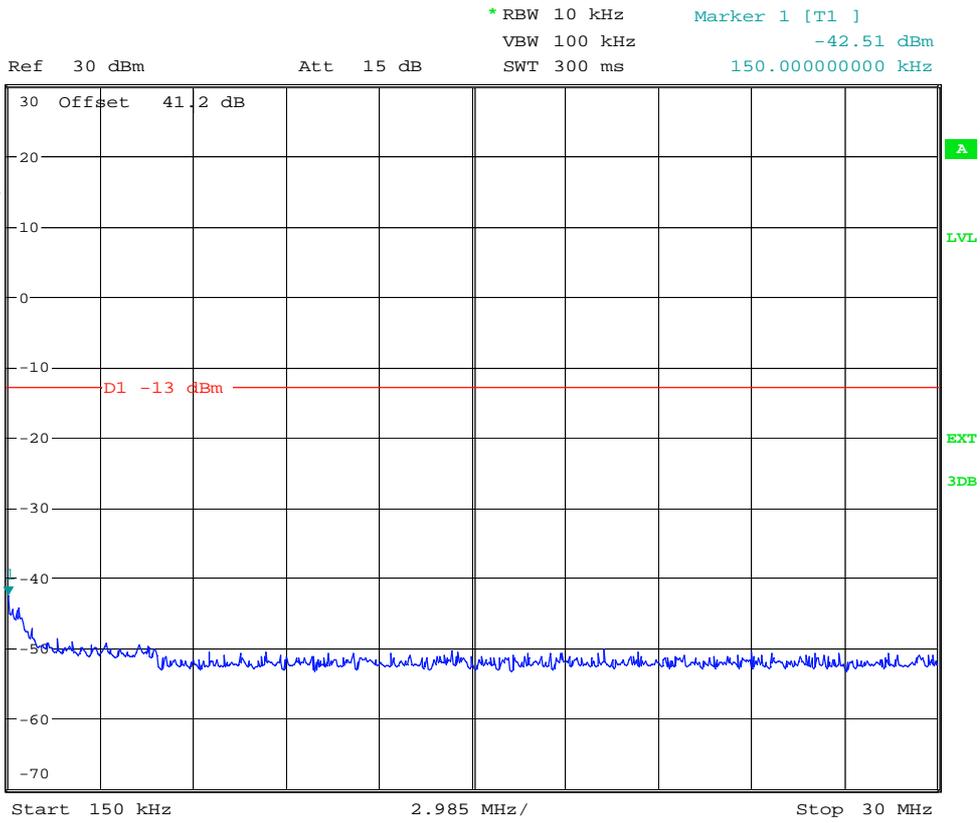


b0fW*])\yvs1233

Date: 22.DEC.2010 03:27:37



(150k ~ 30M)

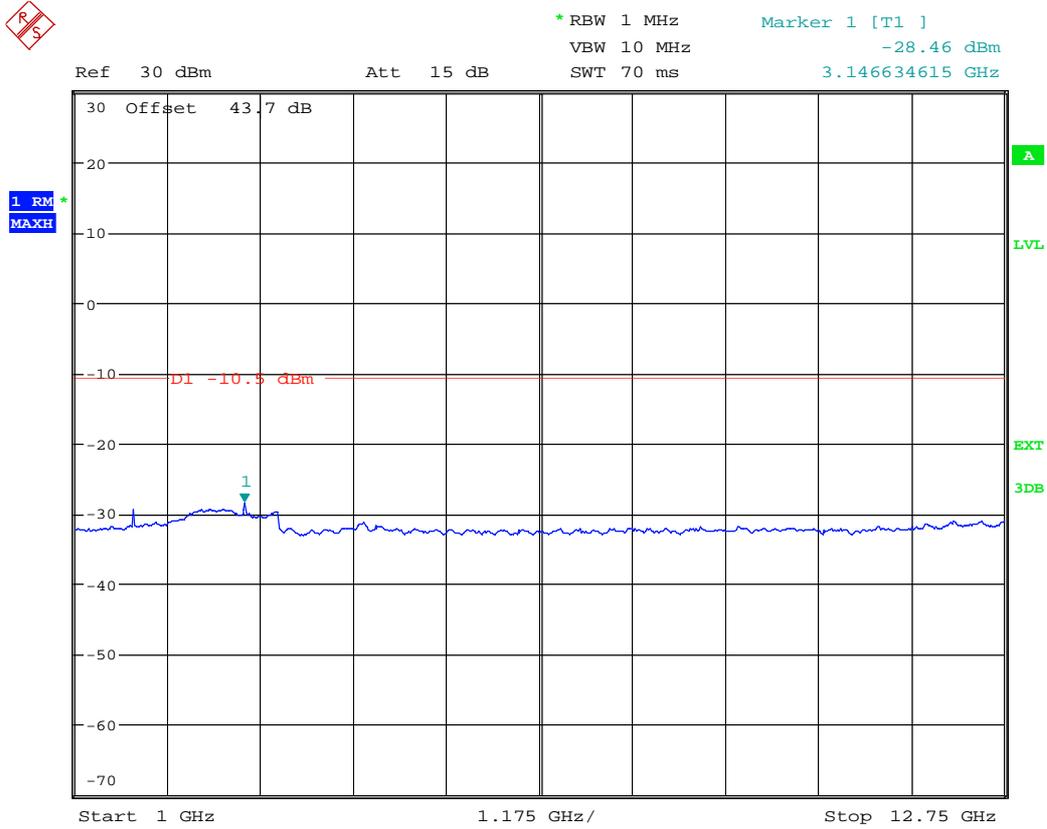


b0fw*])\yvs1233

Date: 22.DEC.2010 03:26:18



(1G ~ 12.75G)



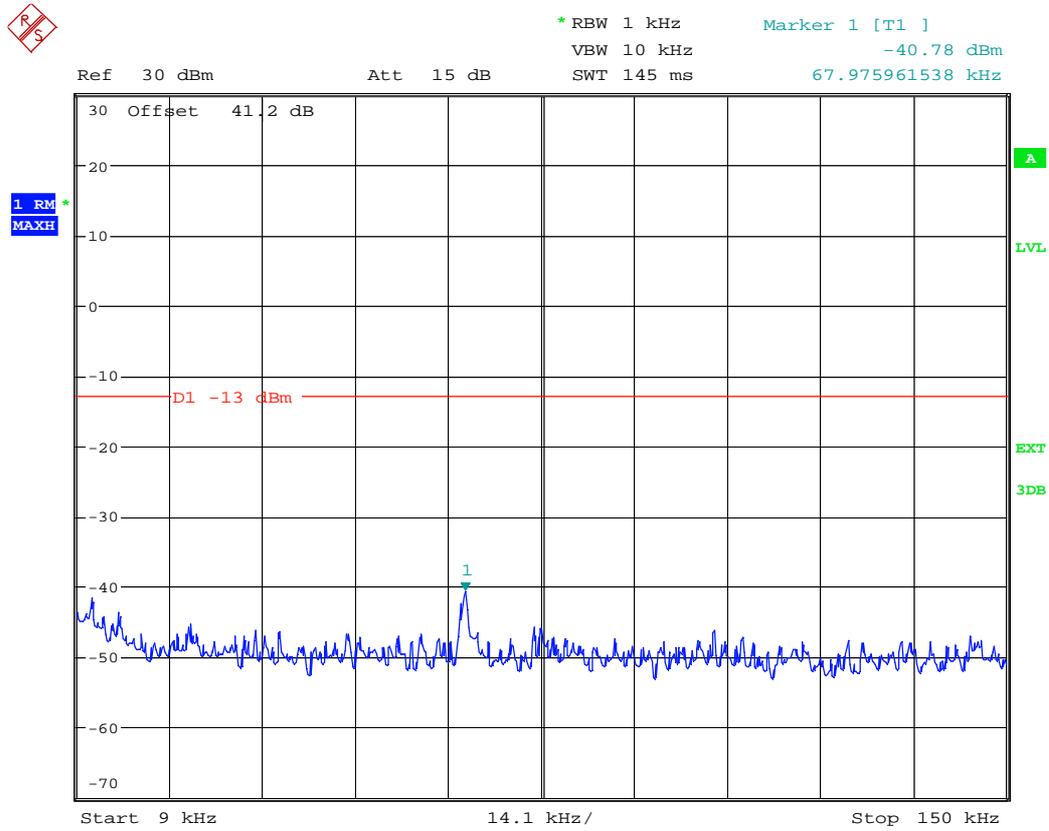
bofw*])\yvs1233

Date: 22.DEC.2010 03:29:38



Channel Number: 311

(9k ~ 150k)

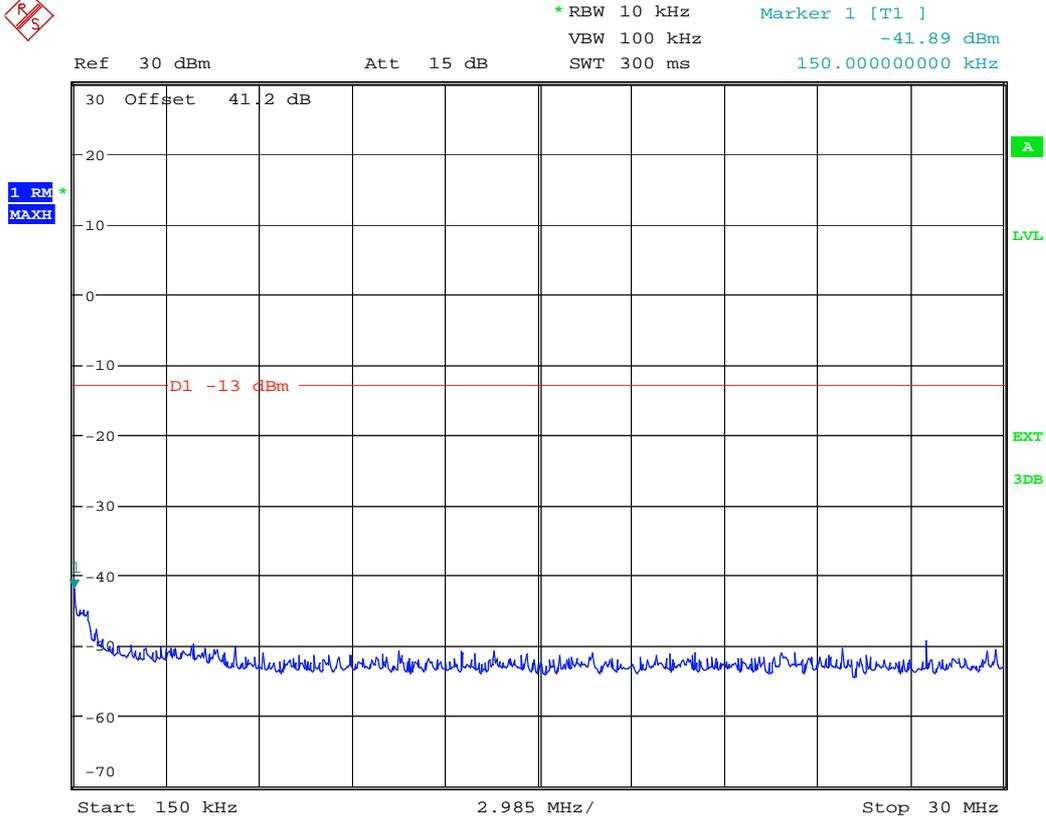


b0fw*])\yvs1233

Date: 22.DEC.2010 03:43:27



(150k ~ 30M)

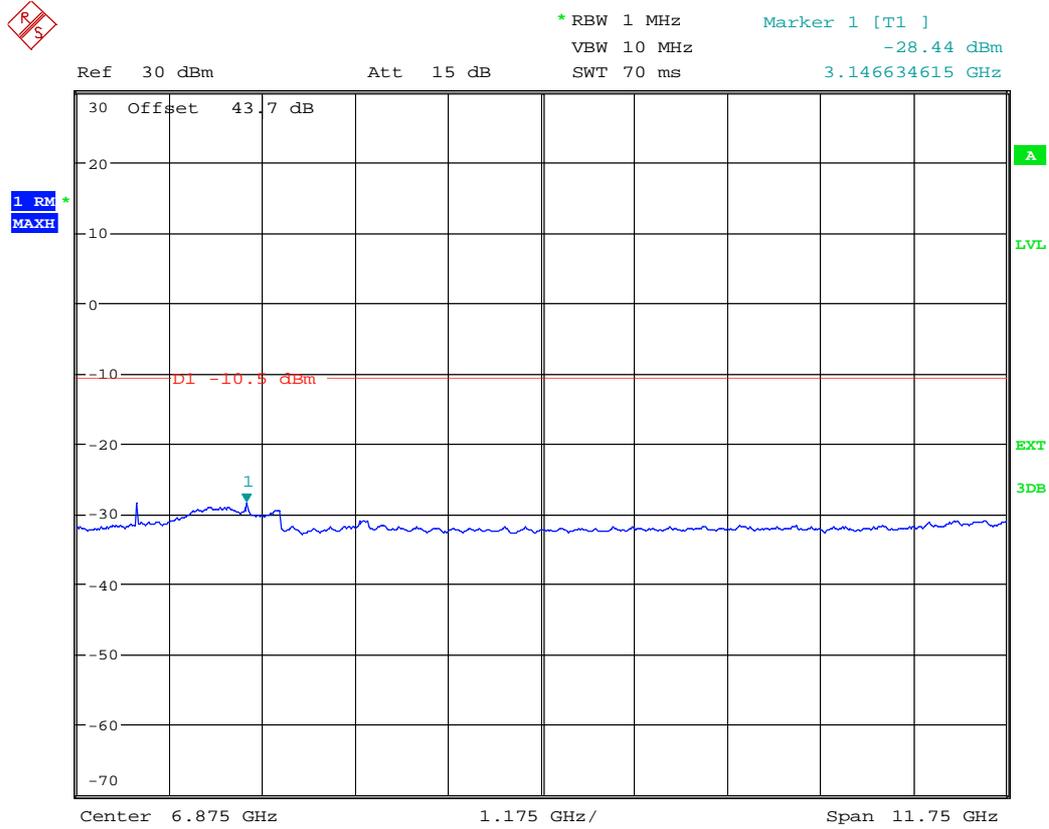


b0fW*])\yvs1233

Date: 22.DEC.2010 03:42:54



(1G ~12.75G)



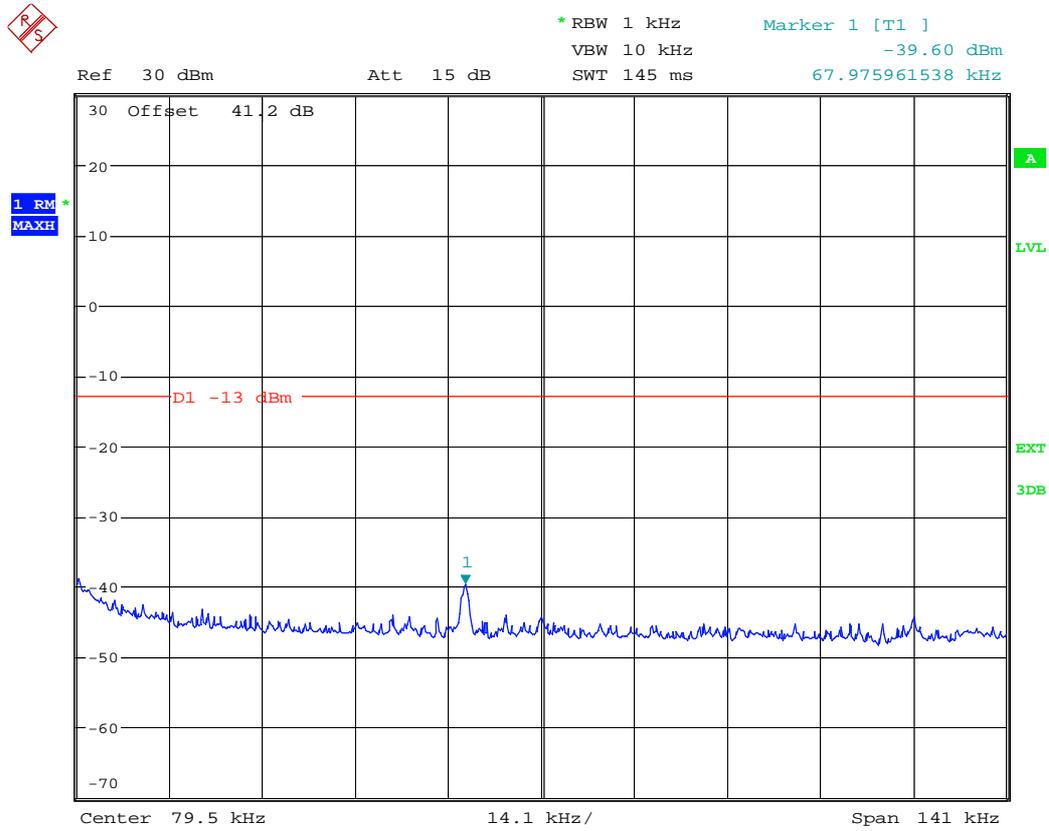
b0fw*])\yvs1233

Date: 22.DEC.2010 03:40:41



Channel Number: 596

(9k ~ 150k)

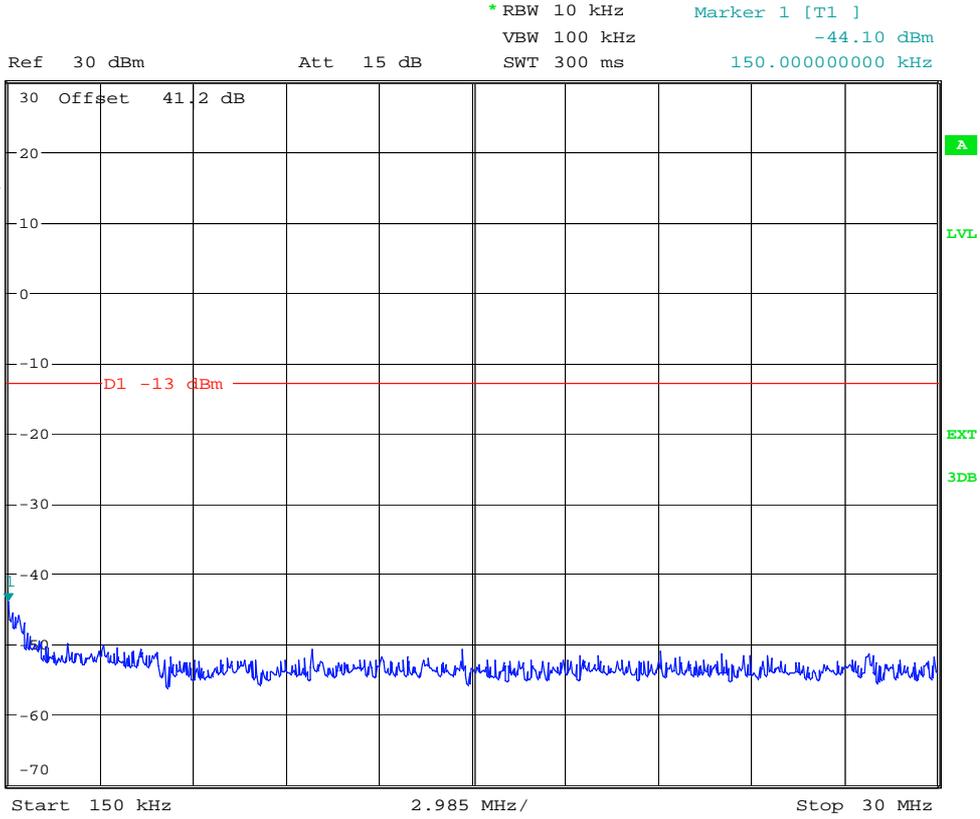


b0fw*])\yvs1233

Date: 22.DEC.2010 04:01:18



(150k ~ 30M)

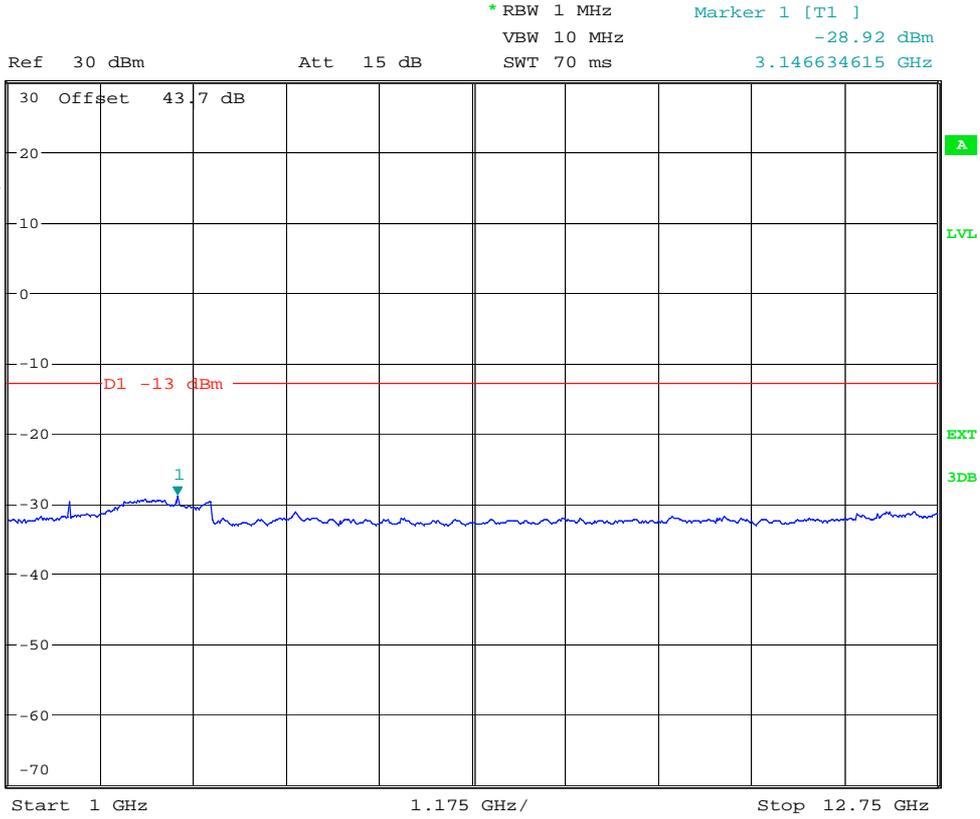


bOfW*]\yvs1233

Date: 22.DEC.2010 04:02:12



(1G ~ 12.75G)



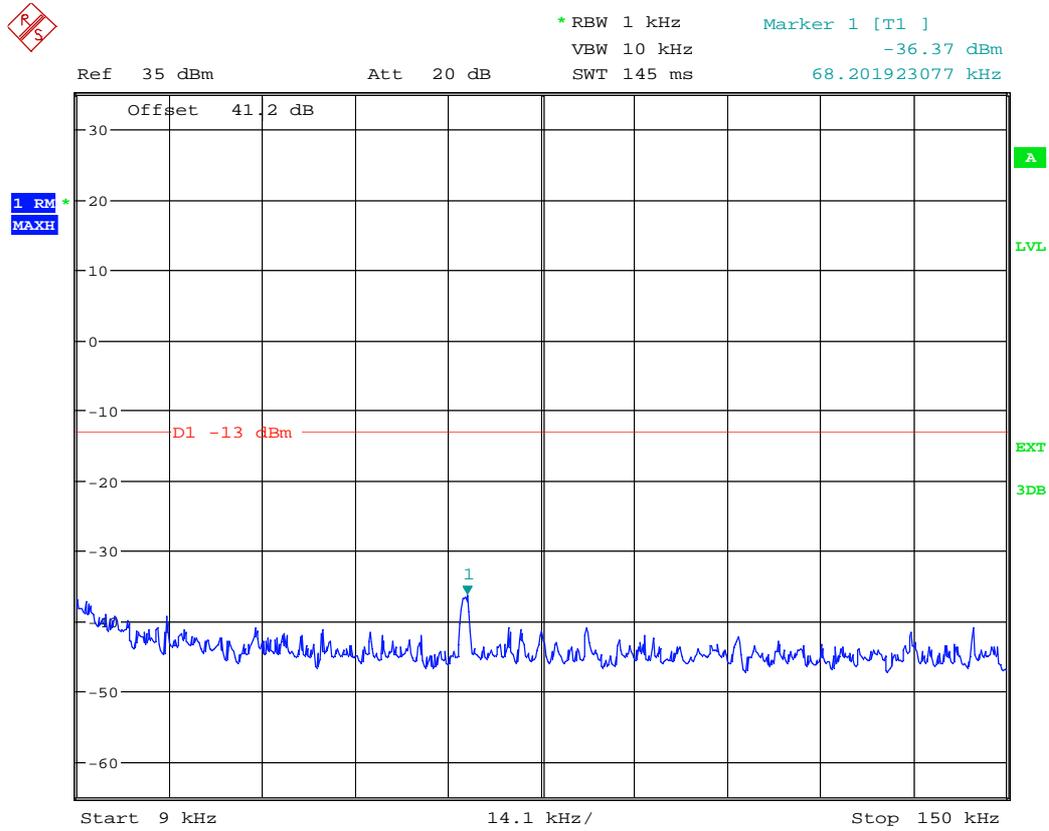
b0fW* l)\yvs1233

Date: 22.DEC.2010 04:04:46



B. Multiple Carriers:

Channel Number: 1/42/83/124
(9k ~150k)

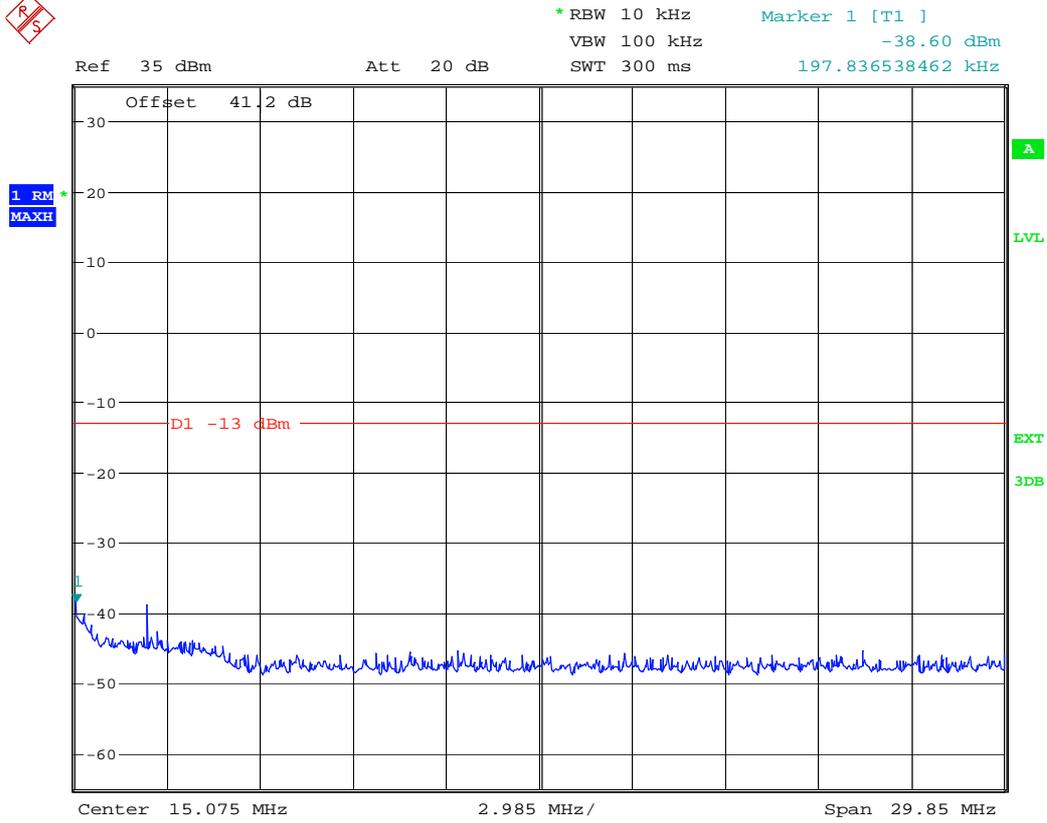


b0fw*])\yvs1233

Date: 22.DEC.2010 04:38:41



(150k ~ 30M)

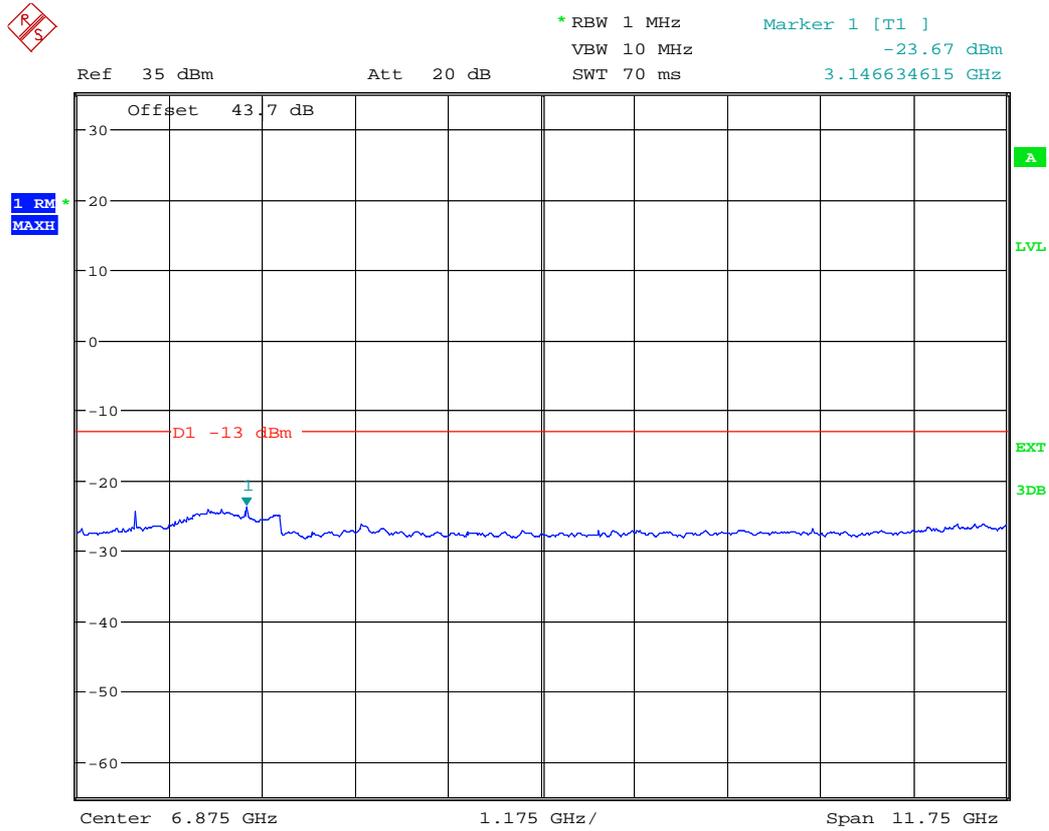


b0fw*])\yvs1233

Date: 22.DEC.2010 04:38:04



(1G ~ 12.75G)



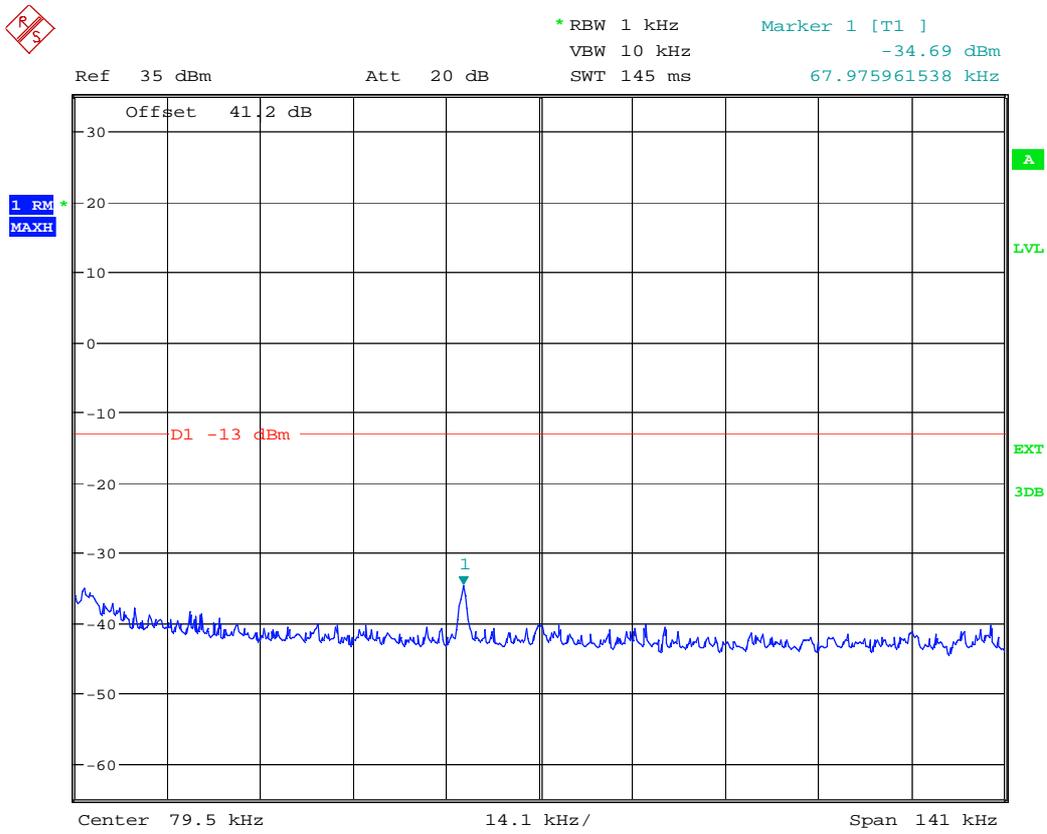
b0fW*])\yvs1233

Date: 22.DEC.2010 04:33:38



Channel Number: 270/311/352/393

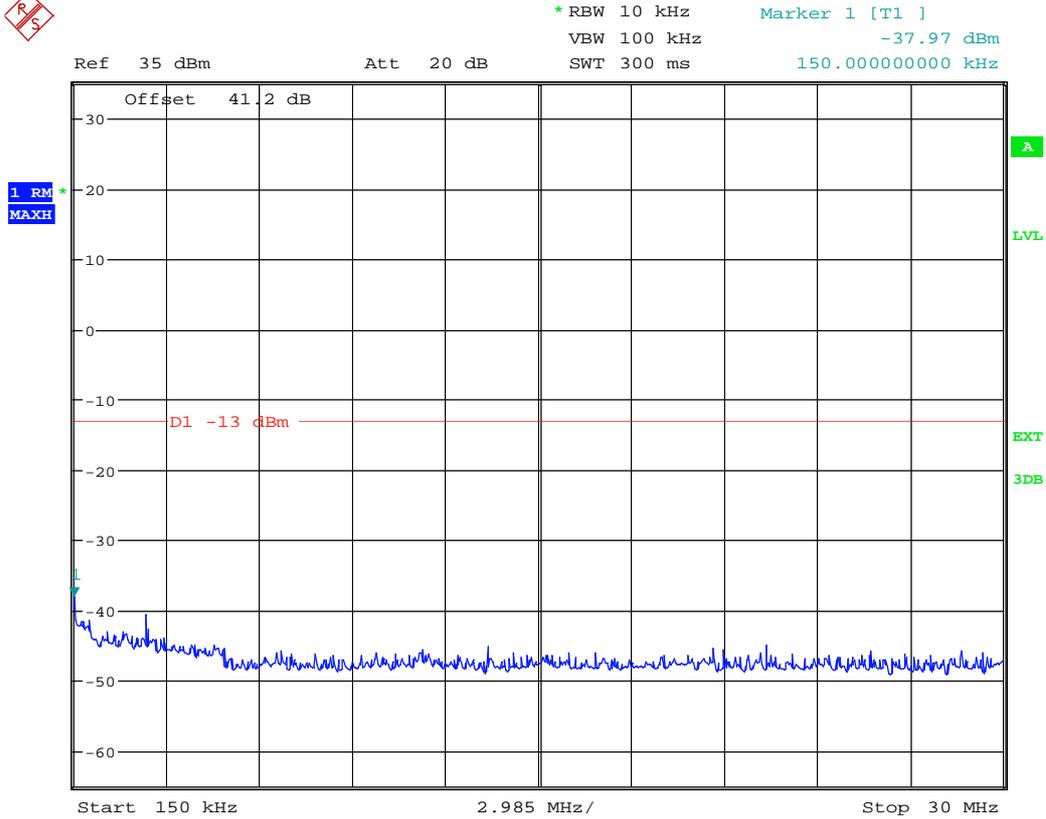
(9k ~ 150k)



b0fW*])\yvs1233
Date: 22.DEC.2010 04:25:47



(150k ~ 30M)

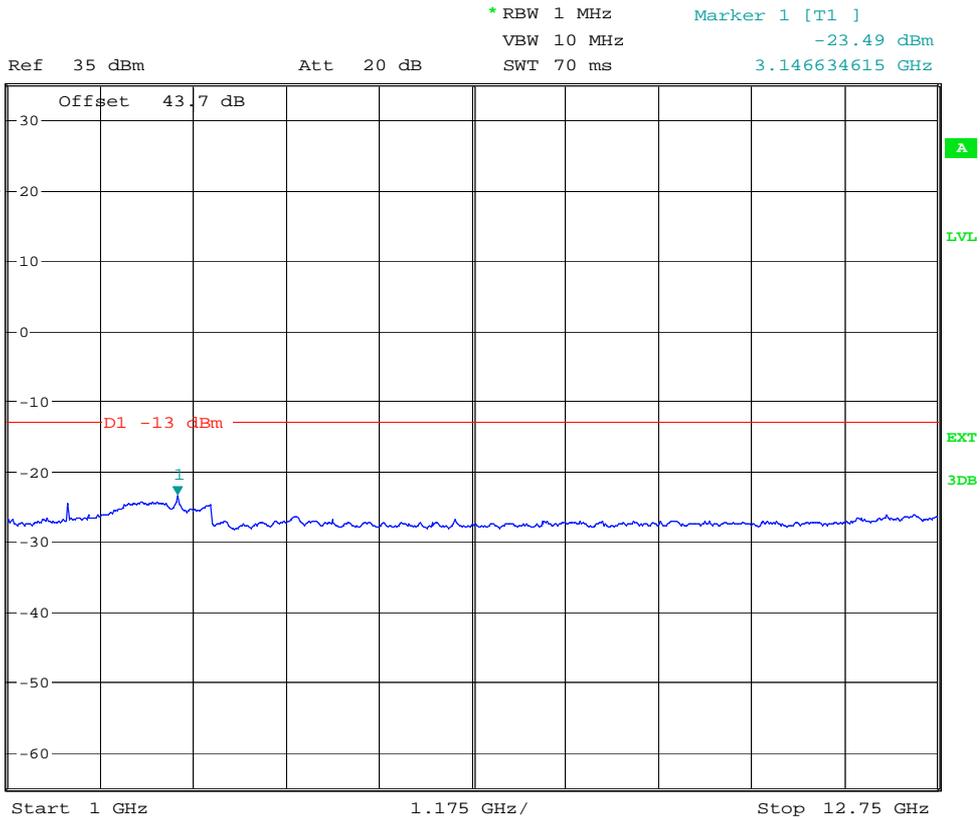


b0fw*])\yvs1233

Date: 22.DEC.2010 04:26:58



(1G ~ 12.75G)



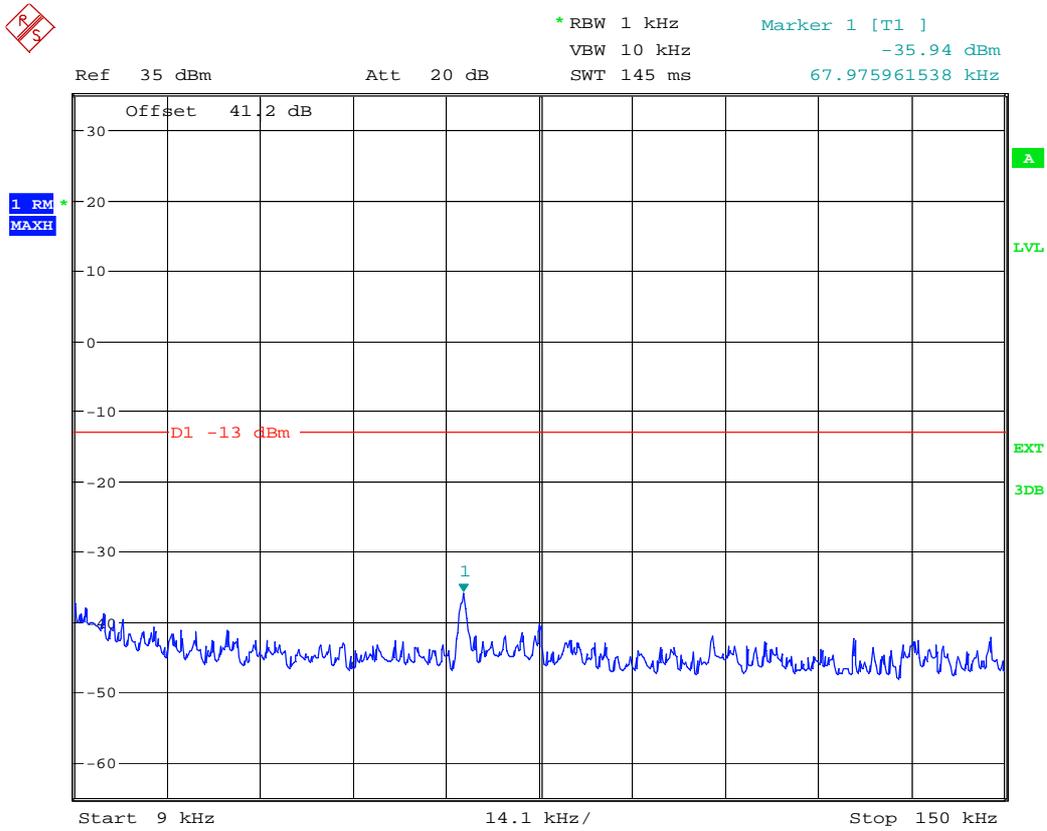
b0fW*])\yvs1233

Date: 22.DEC.2010 04:29:26



Channel Number: 473/514/555/596

(9k ~ 150k)



b0fw*])\yvs1233

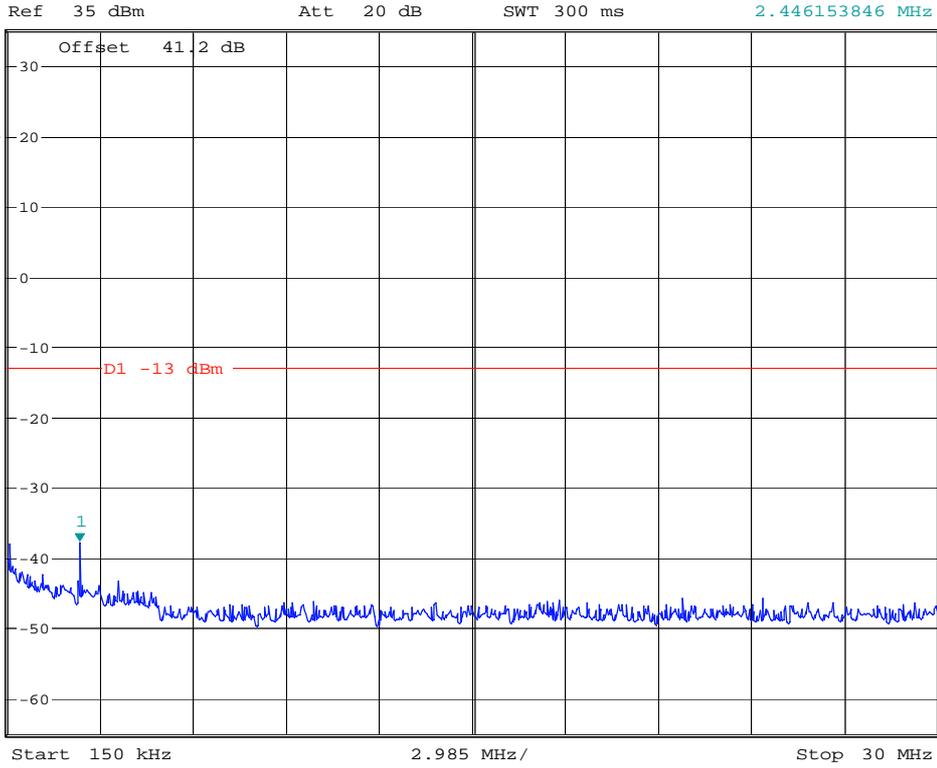
Date: 22.DEC.2010 04:18:23



(150k ~ 30M)



*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz -37.78 dBm
SWT 300 ms 2.446153846 MHz

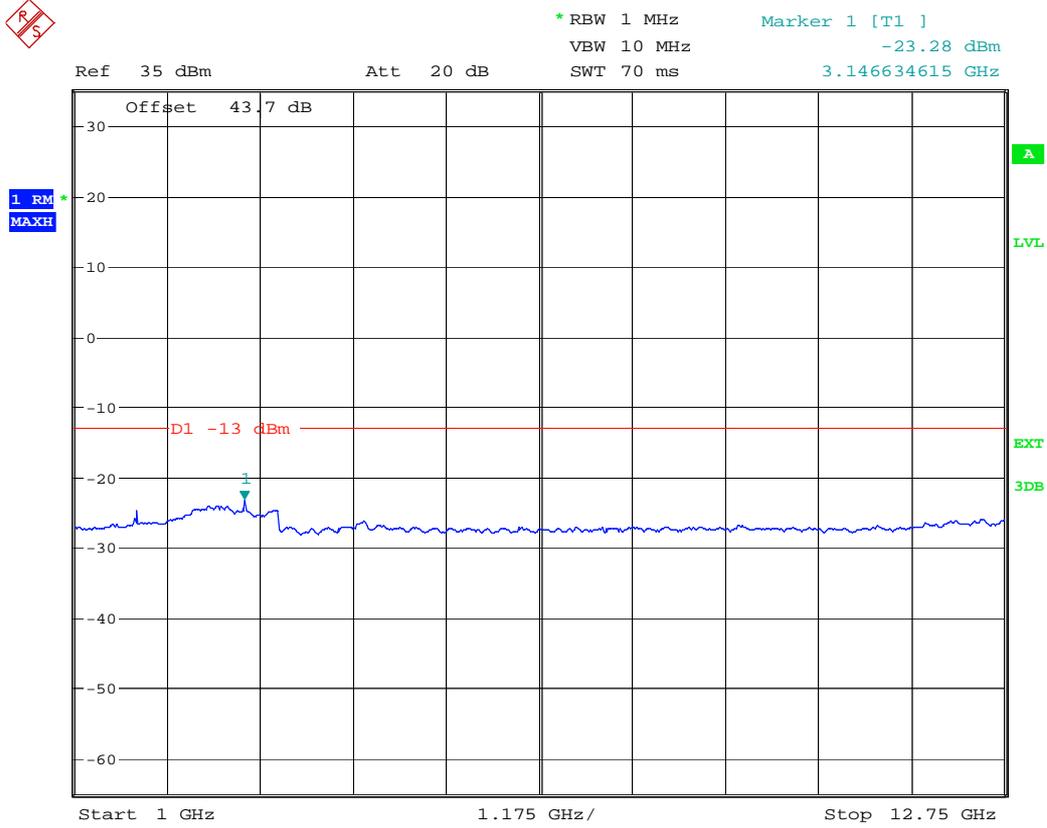


b0fW* 1)\yvs1233

Date: 22.DEC.2010 04:17:49



(1G ~ 12.75G)



b0fW* 1)\yvs1233

Date: 22.DEC.2010 04:15:06



Appendix E

Field Strength of Spurious Radiation

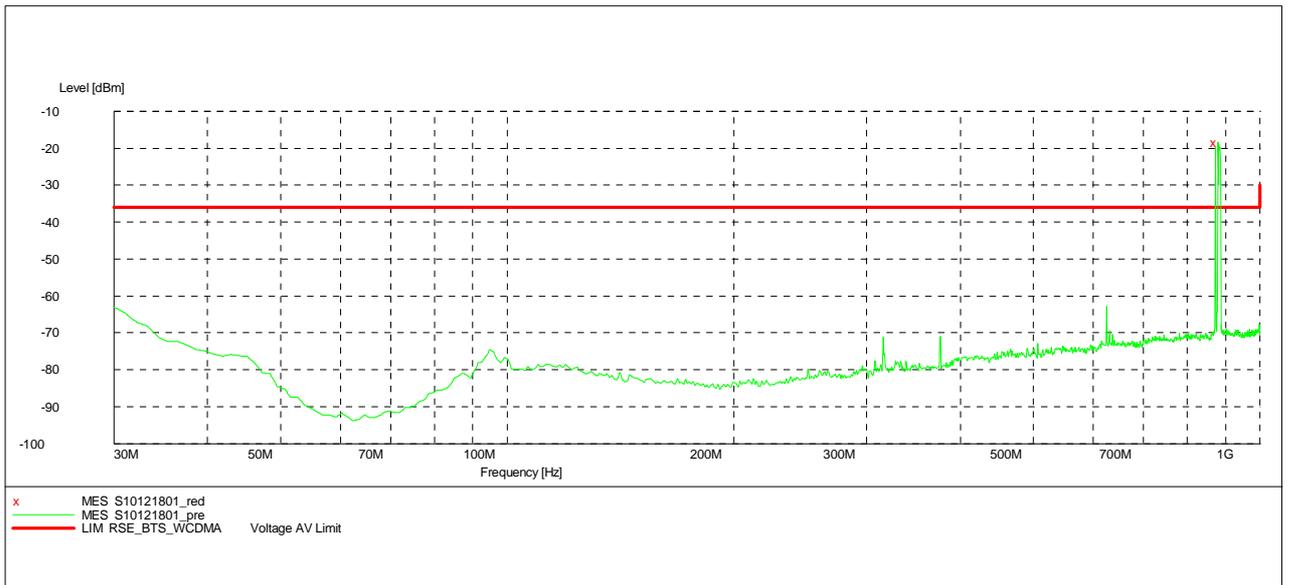
According to FCC Part 2.1053 & 22.917



Measurement Result

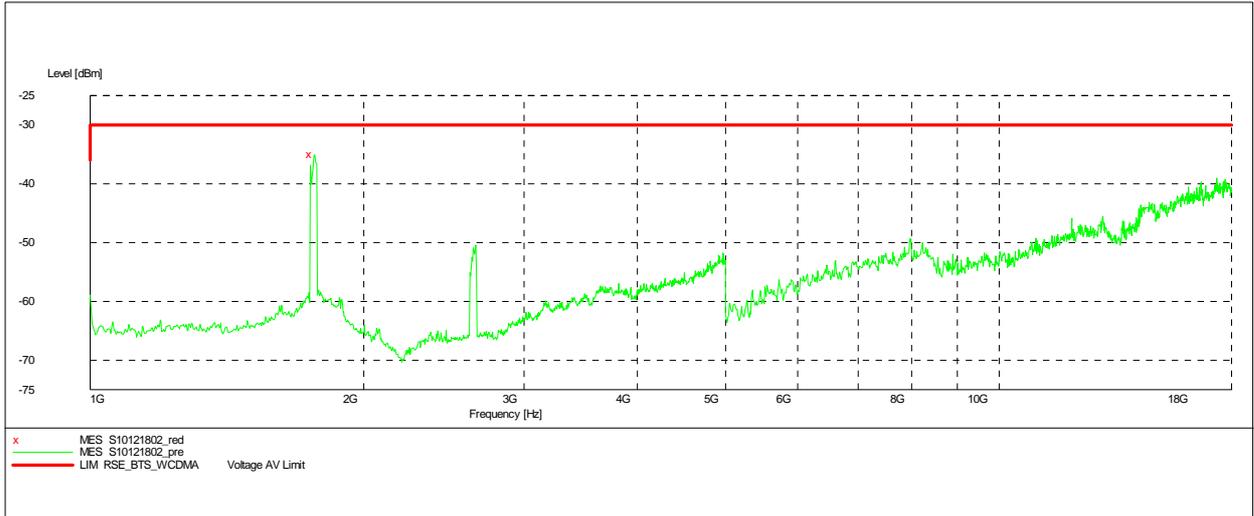
Note: more strict limit was employed by this test.

30MHz-1GHz





Above 1GHz



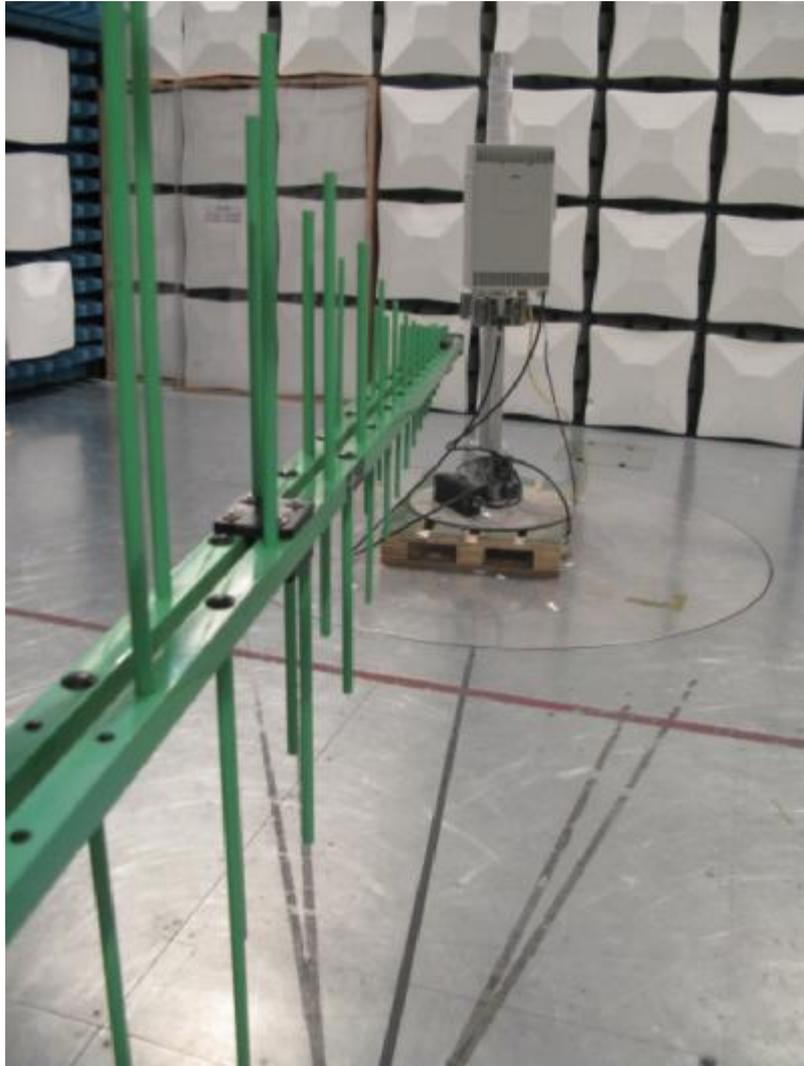


Appendix F

Photos of Test Setup



(Below 1GHz)





(Above 1GHz)

