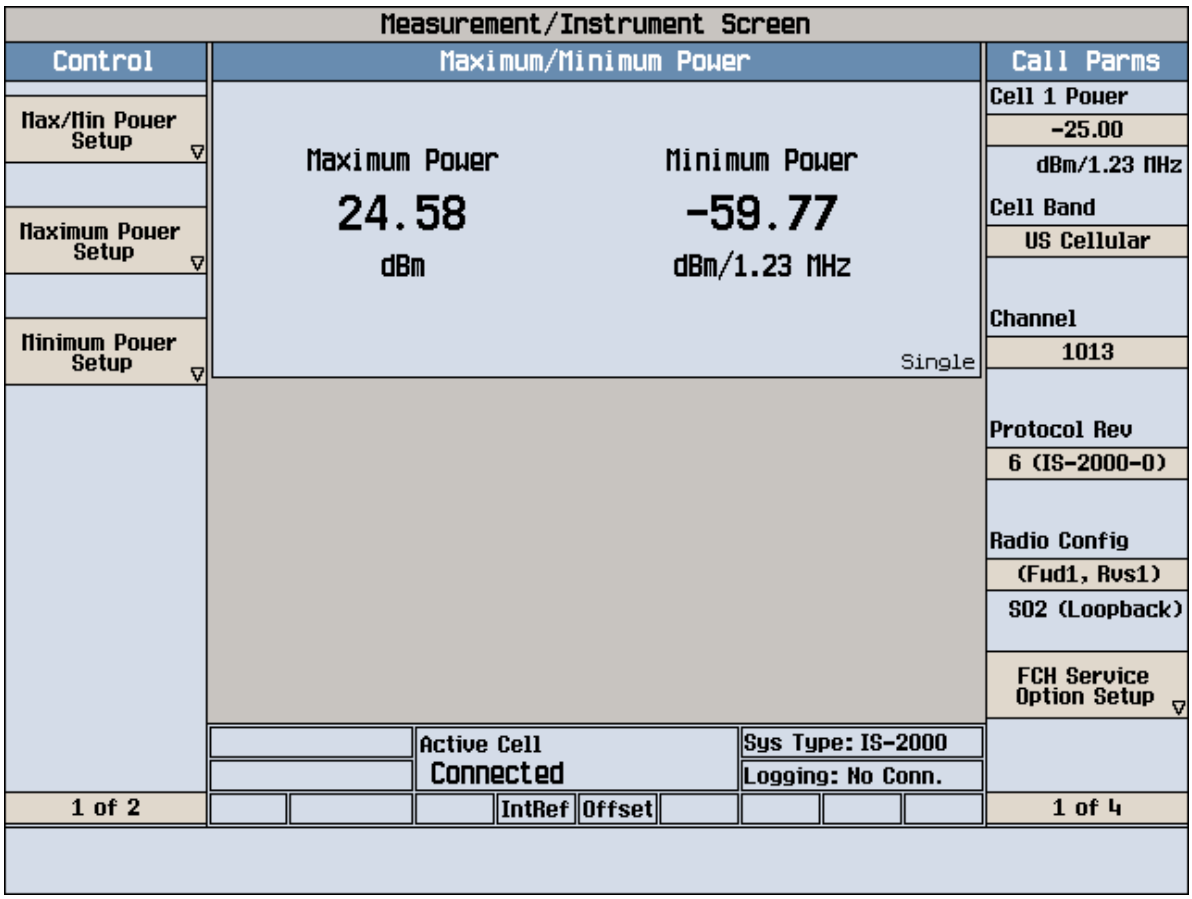
Appendix A

Channel Power Measurement

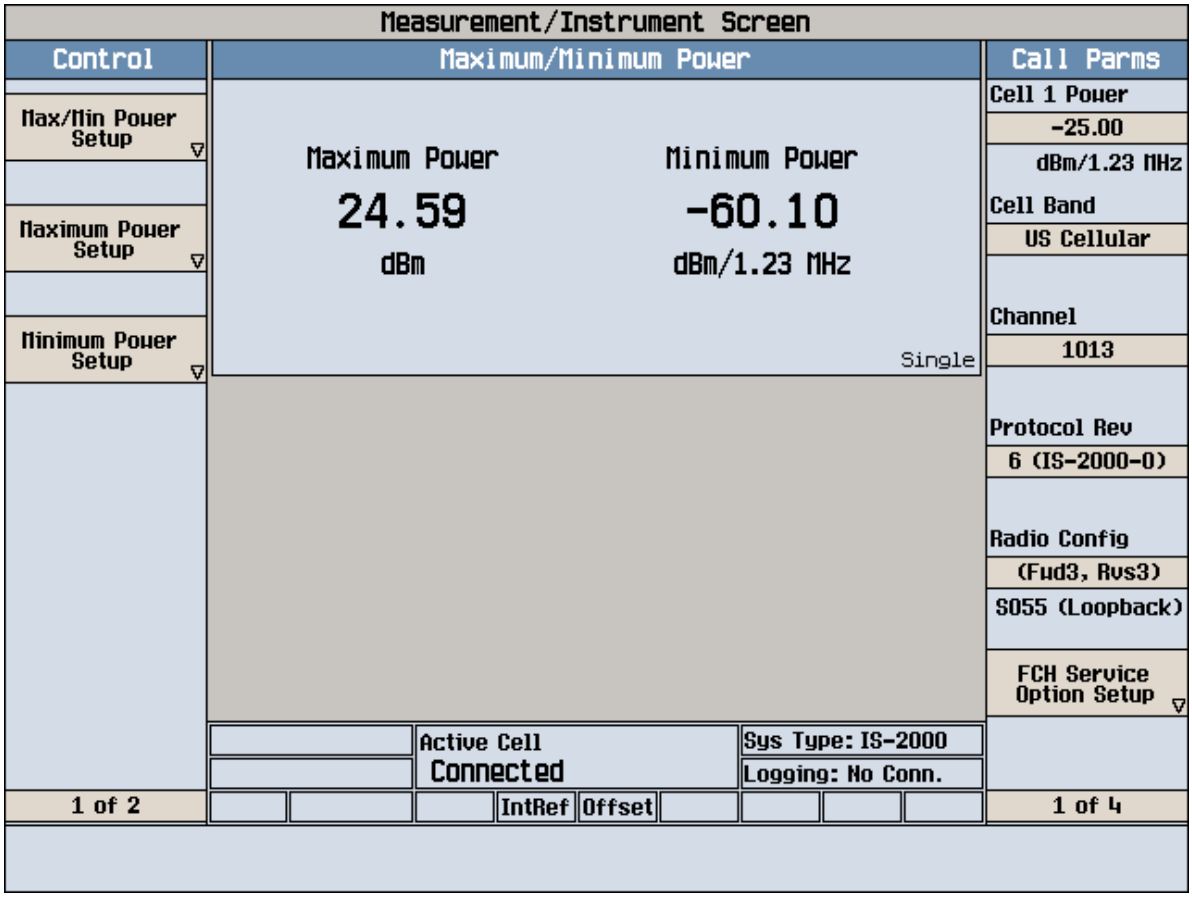
According to CFR 47 (FCC) part 2.1046 & 22.913

Channel 1013

TM1:

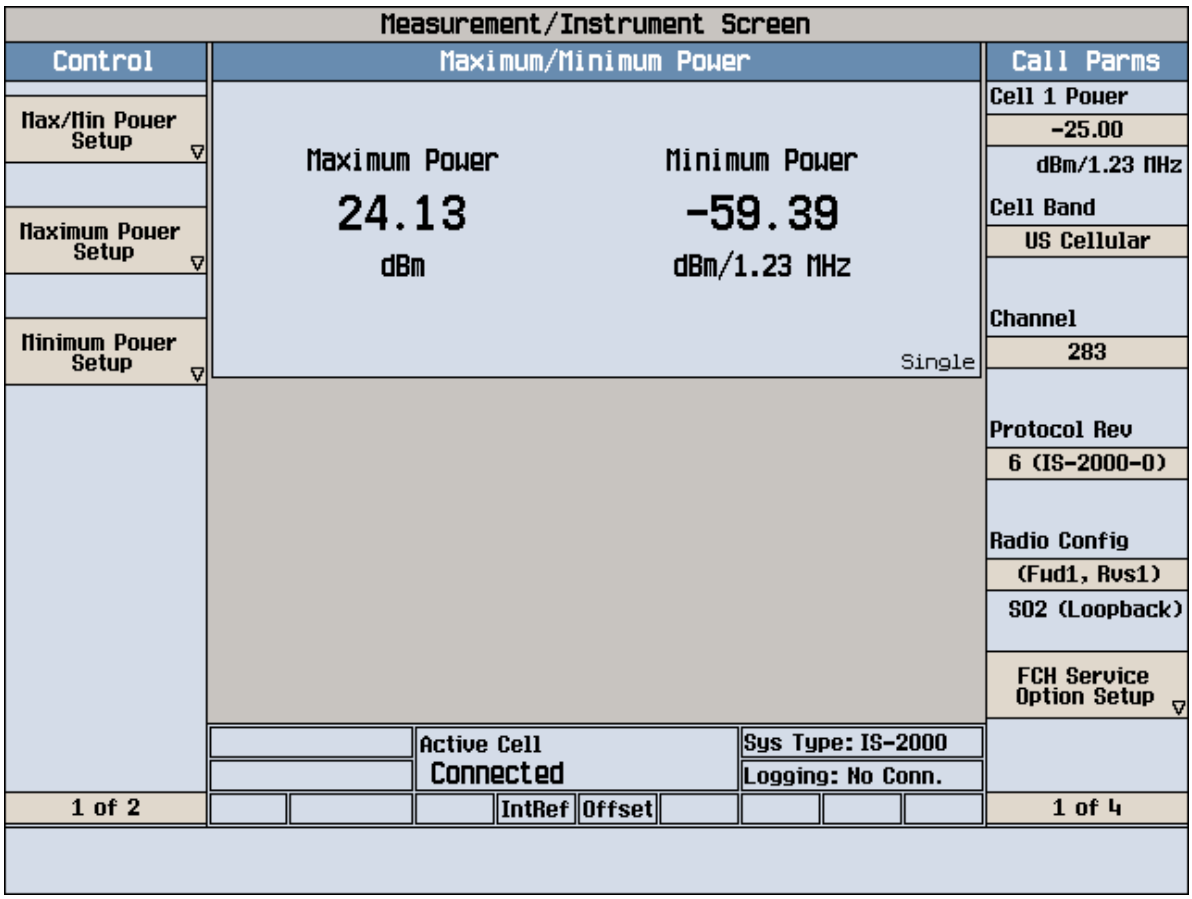


TM3:

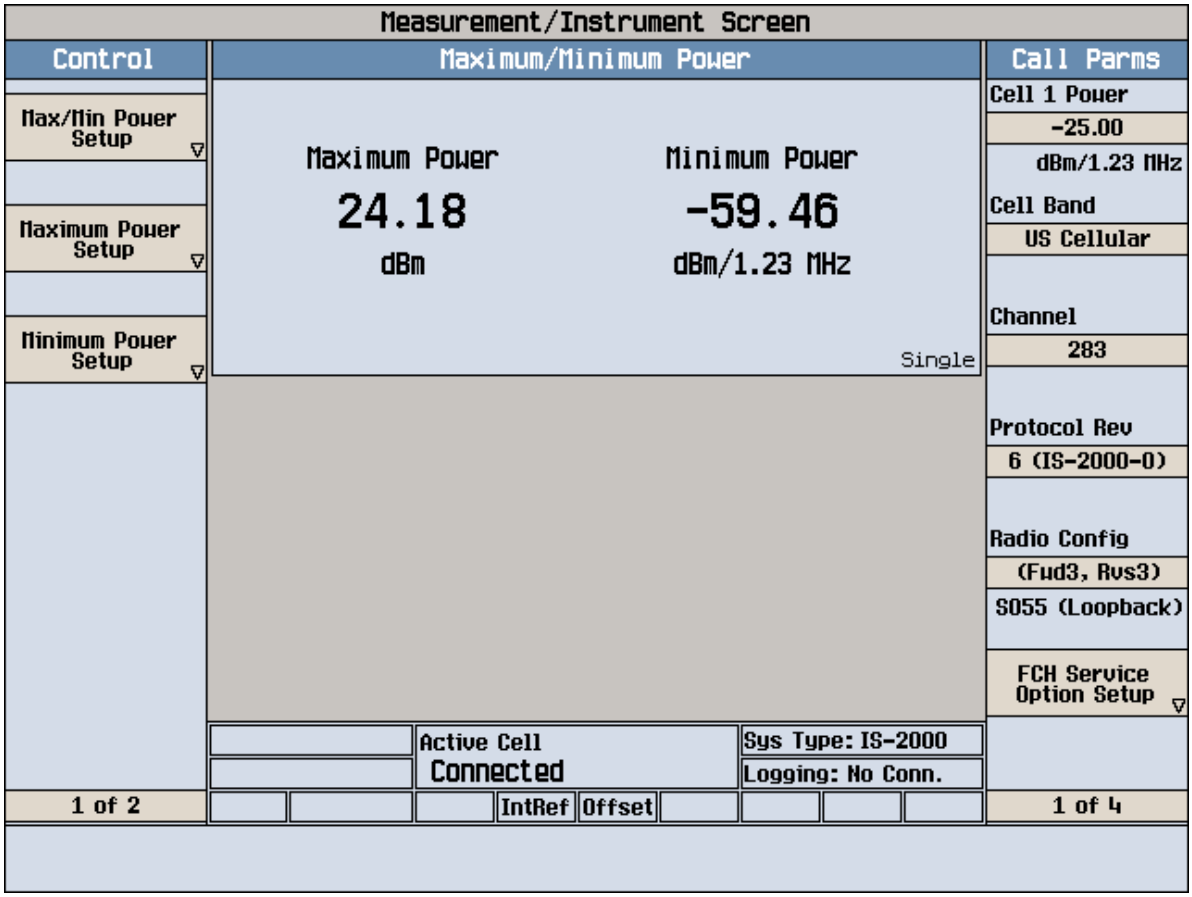

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
24.59
dBm
Minimum Power
-60.10
dBm/1.23 MHz
Single
Cell 1 Power
-25.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
1013
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Channel 283

TM1:

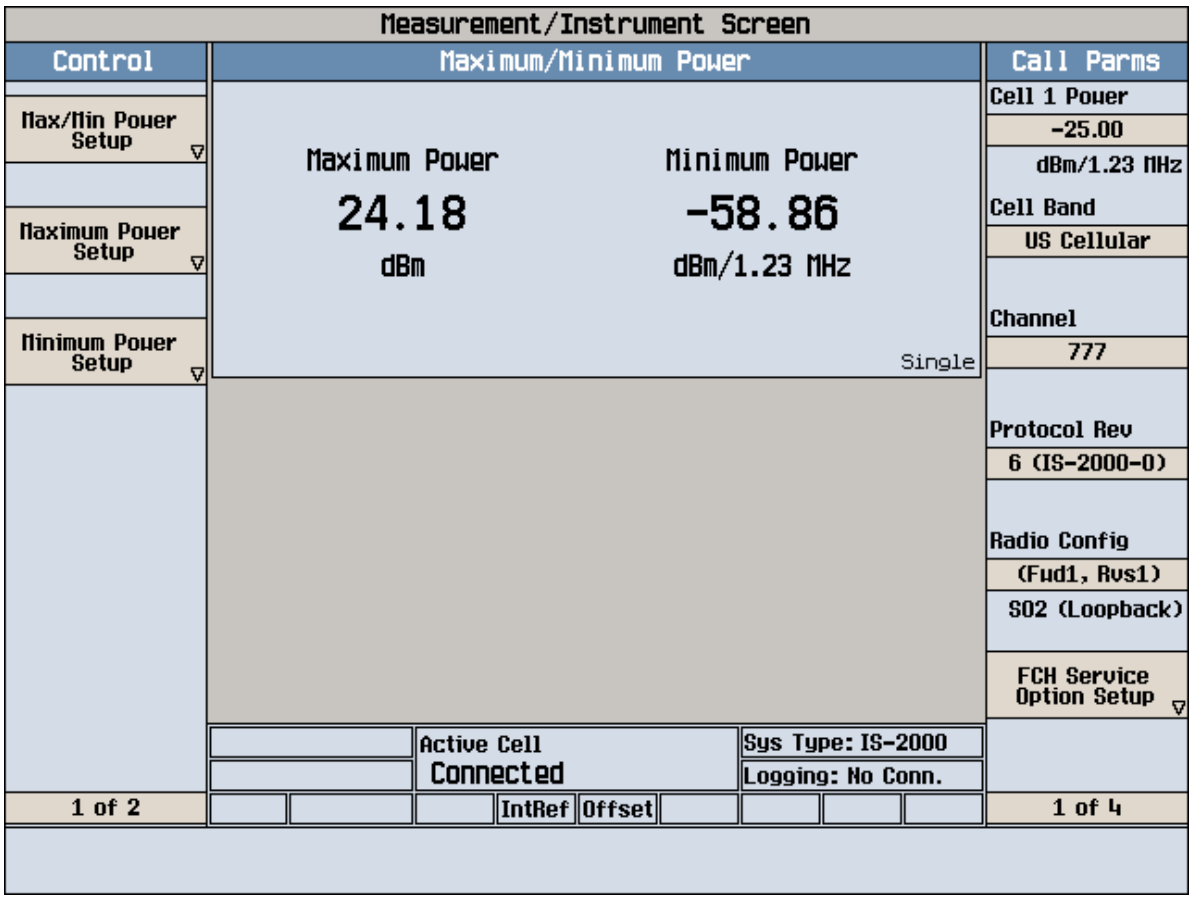


TM3:

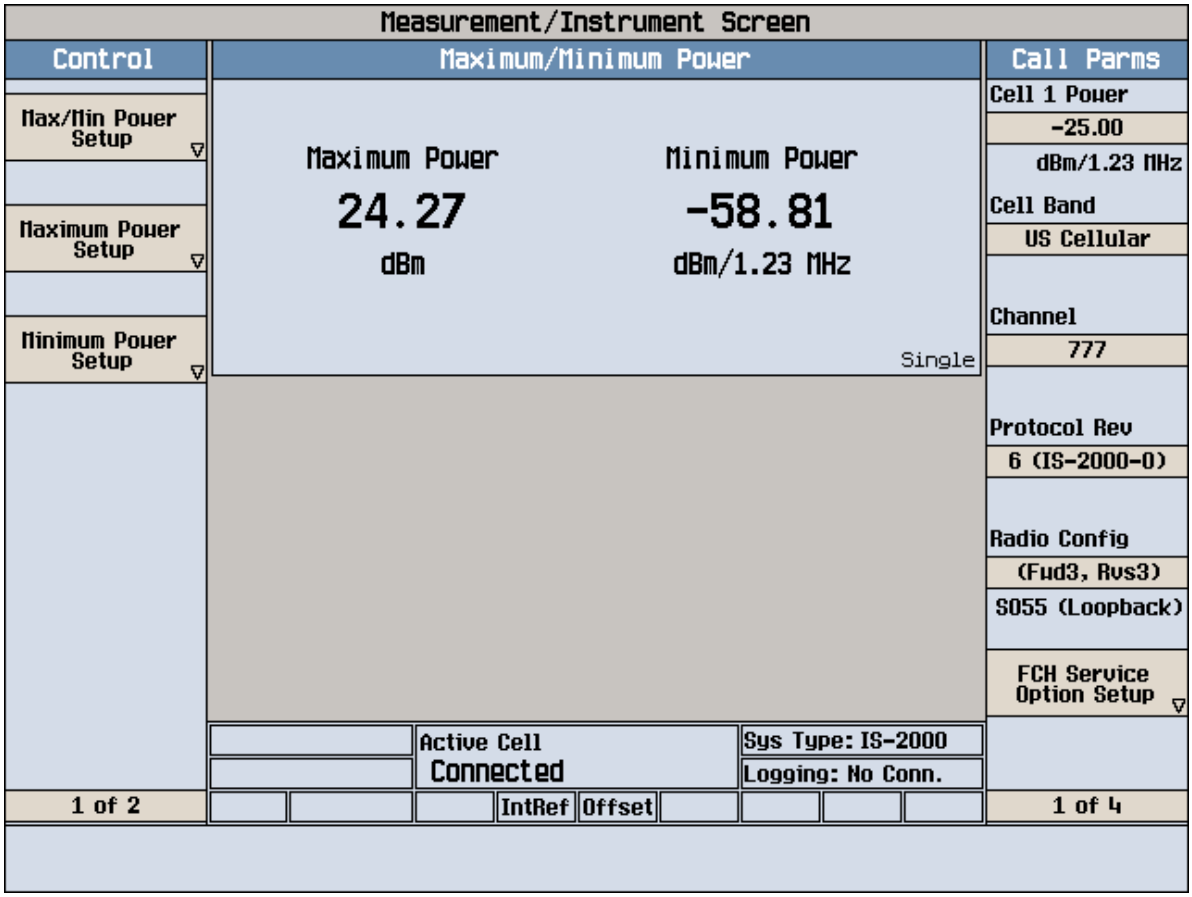

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
24.18
dBm
Minimum Power
-59.46
dBm/1.23 MHz
Single
Cell 1 Power
-25.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
283
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Channel 777

TM1:



TM3:

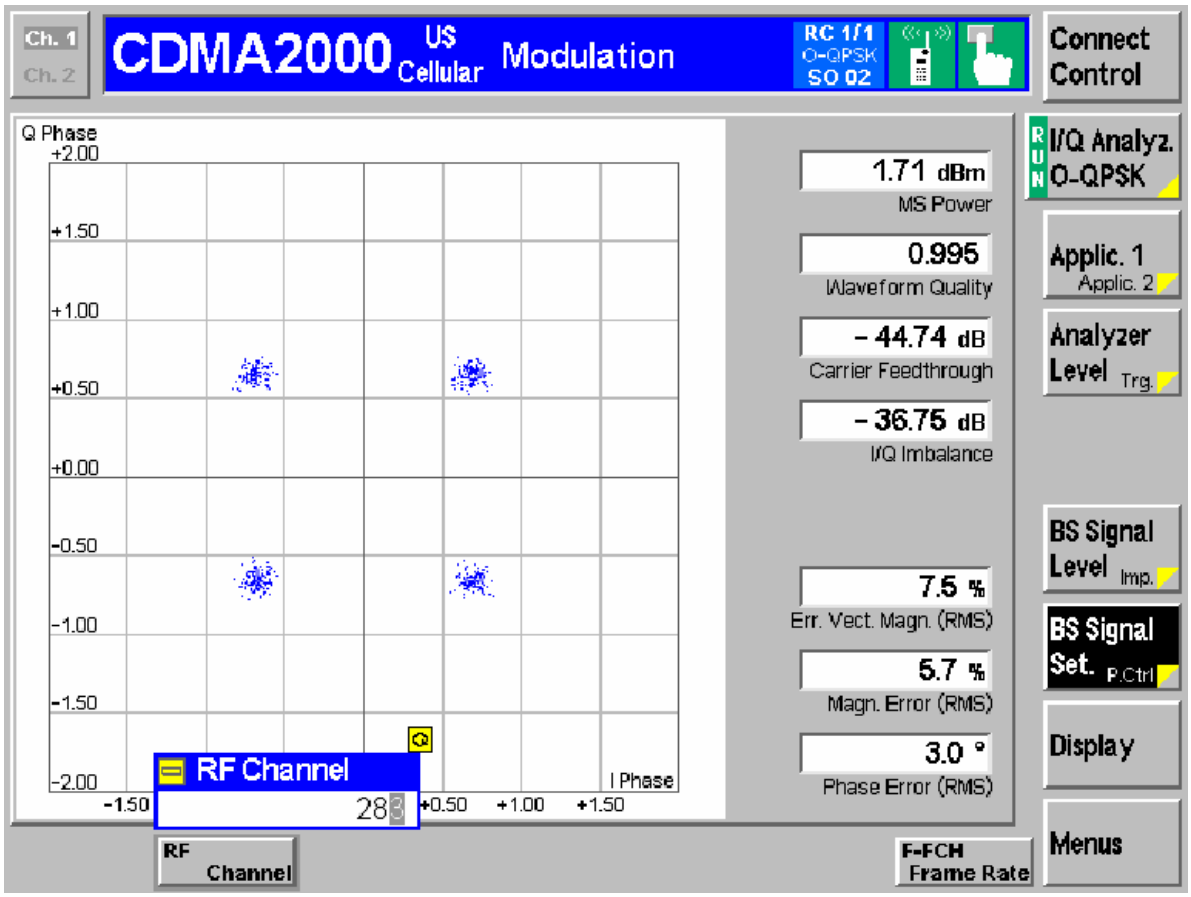

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
24.27
dBm
Minimum Power
-58.81
dBm/1.23 MHz
Single
Cell 1 Power
-25.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
777
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Appendix B

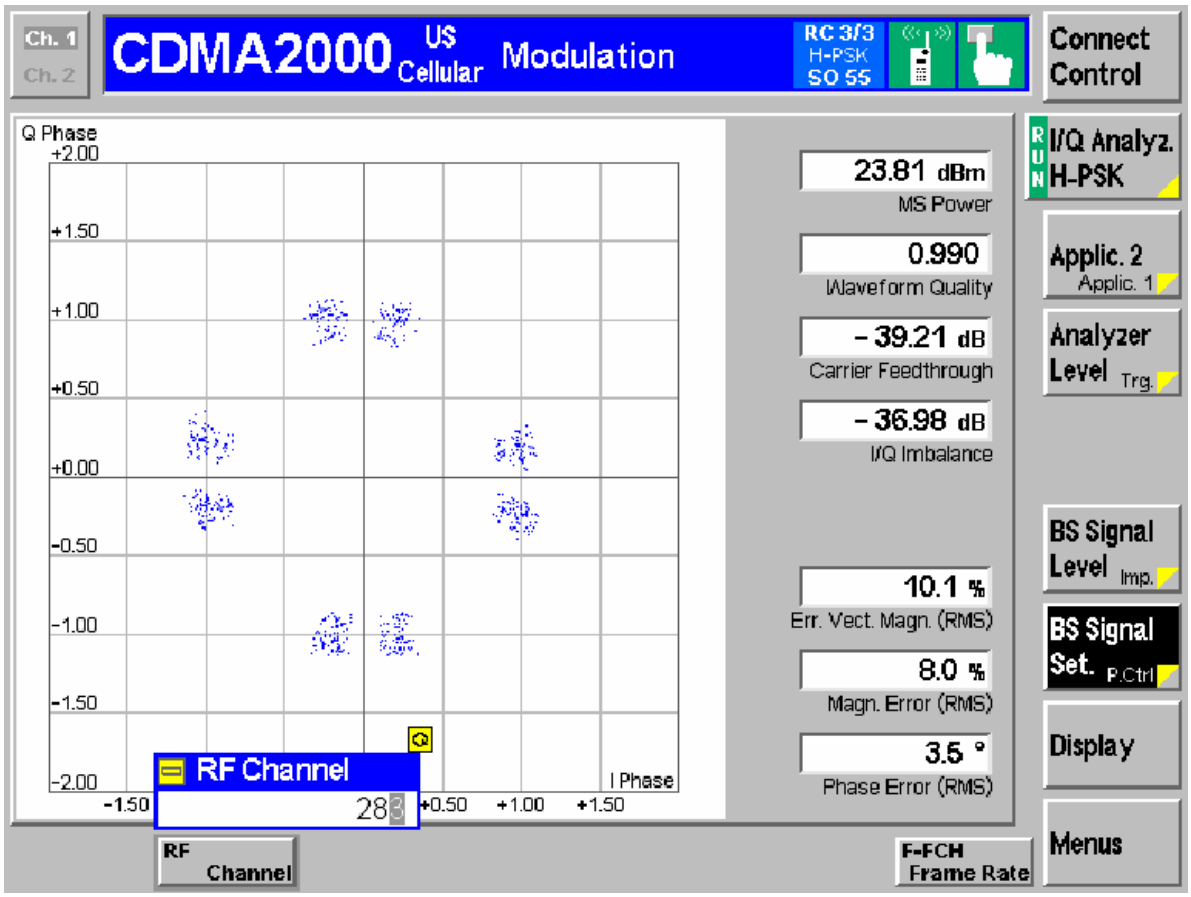
Modulation Characteristic Measurement

According to CFR 47 (FCC) part 2.1047 & 22.915

Channel 283（TM1）



Channel 283（TM3）

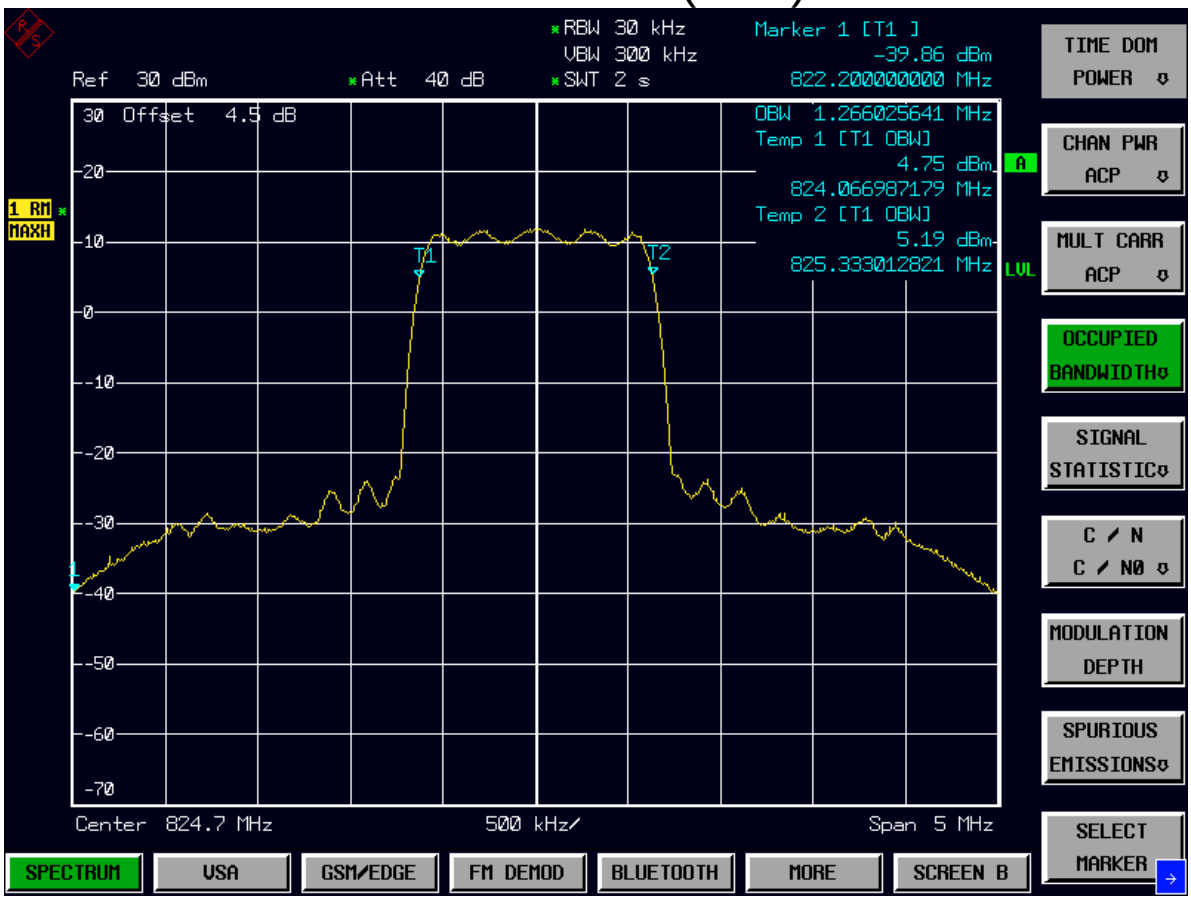


Appendix C

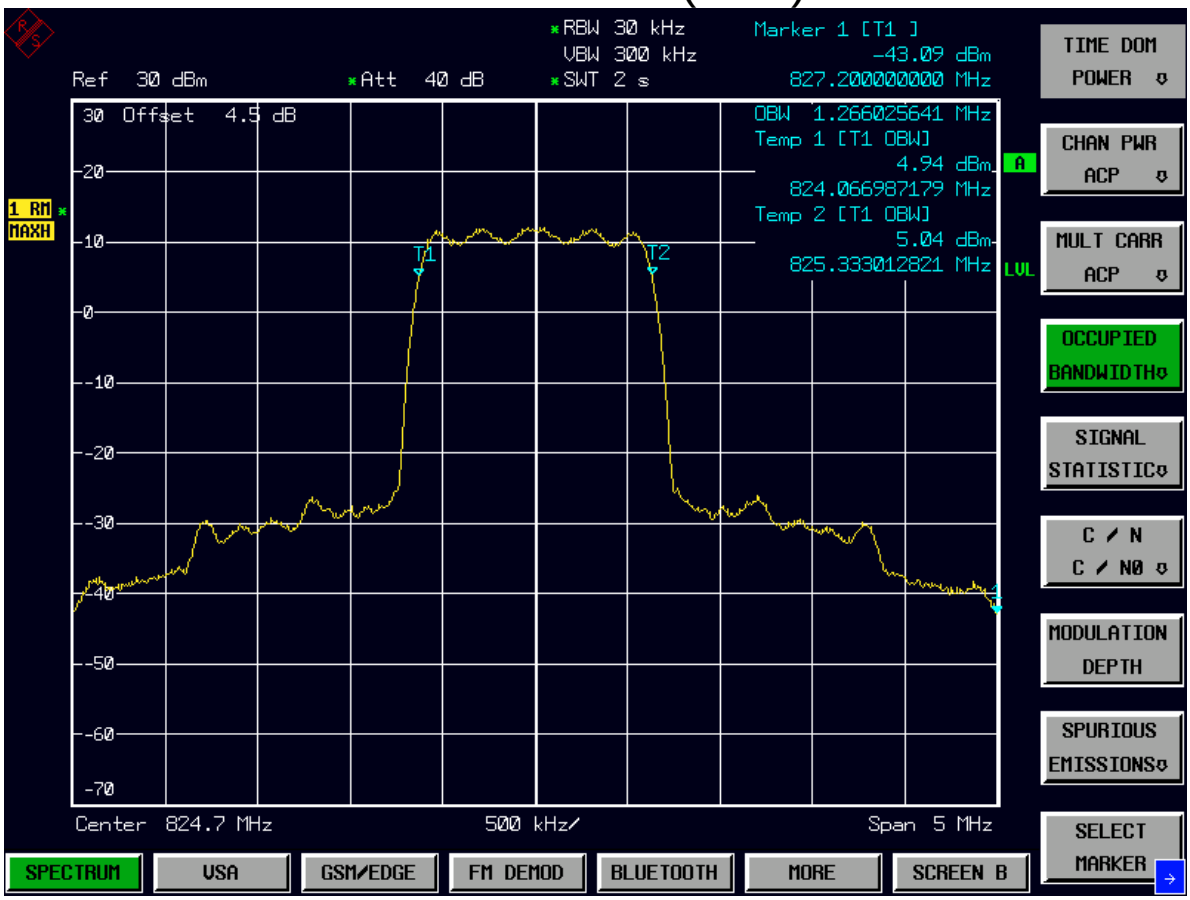
Occupied Bandwidth Measurement

According to CFR 47 (FCC) part 2.1049& 22.917

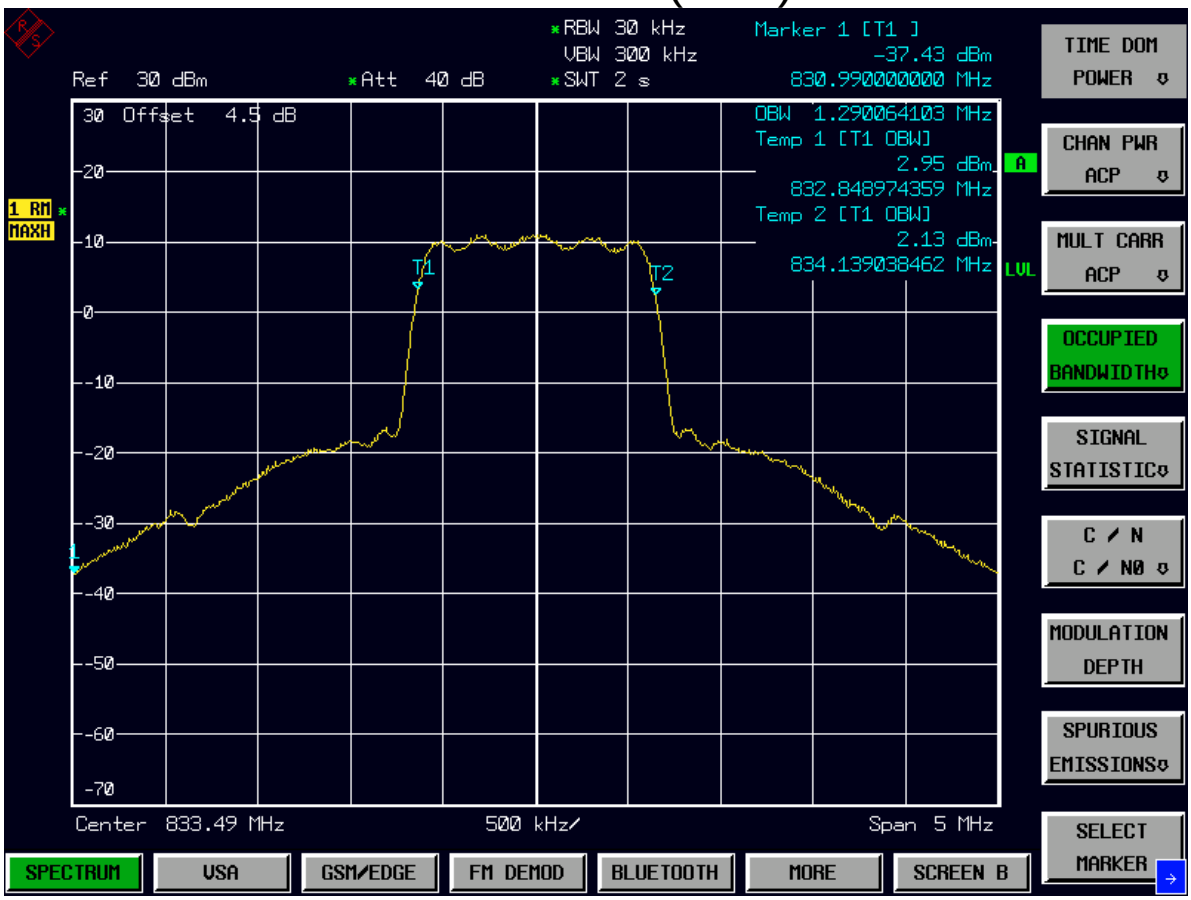
Channel 1013(TM1)



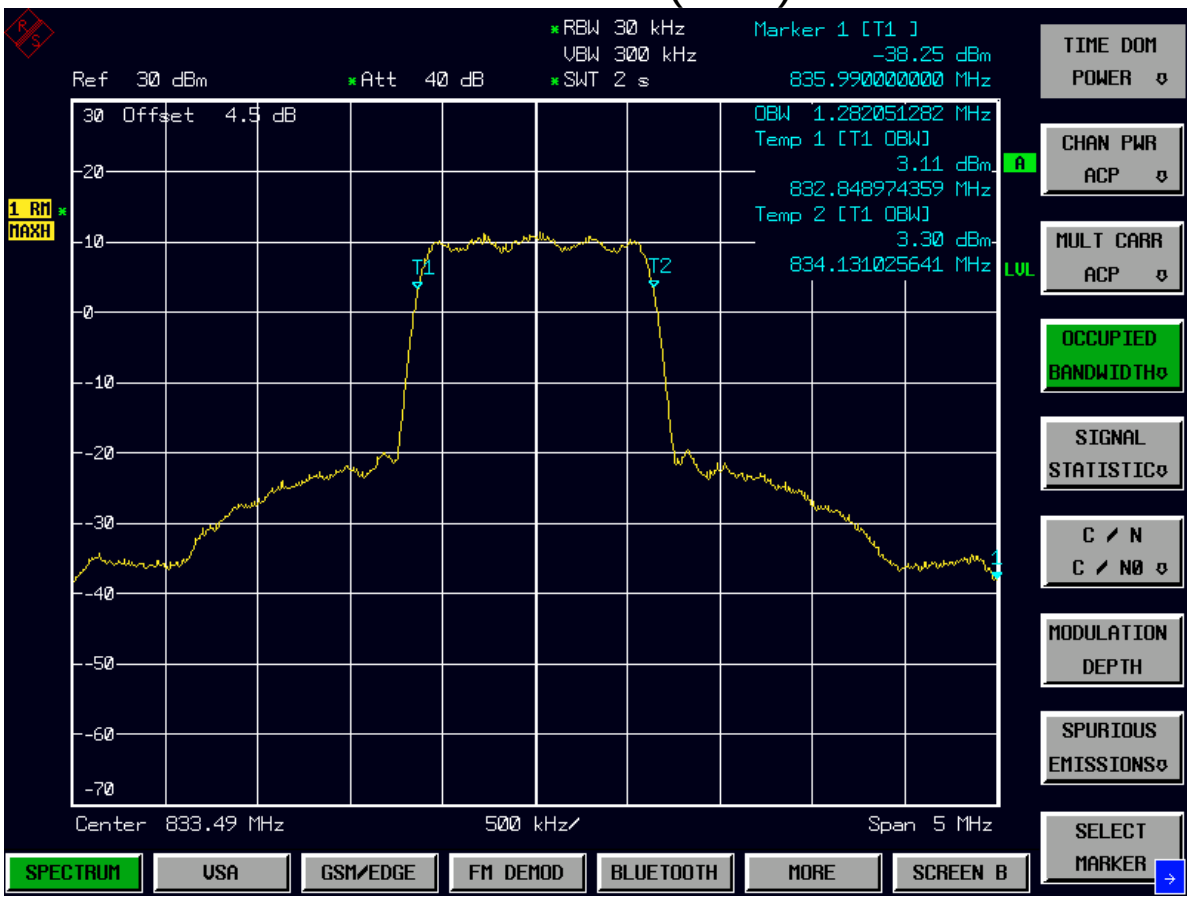
Channel 1013(TM3)



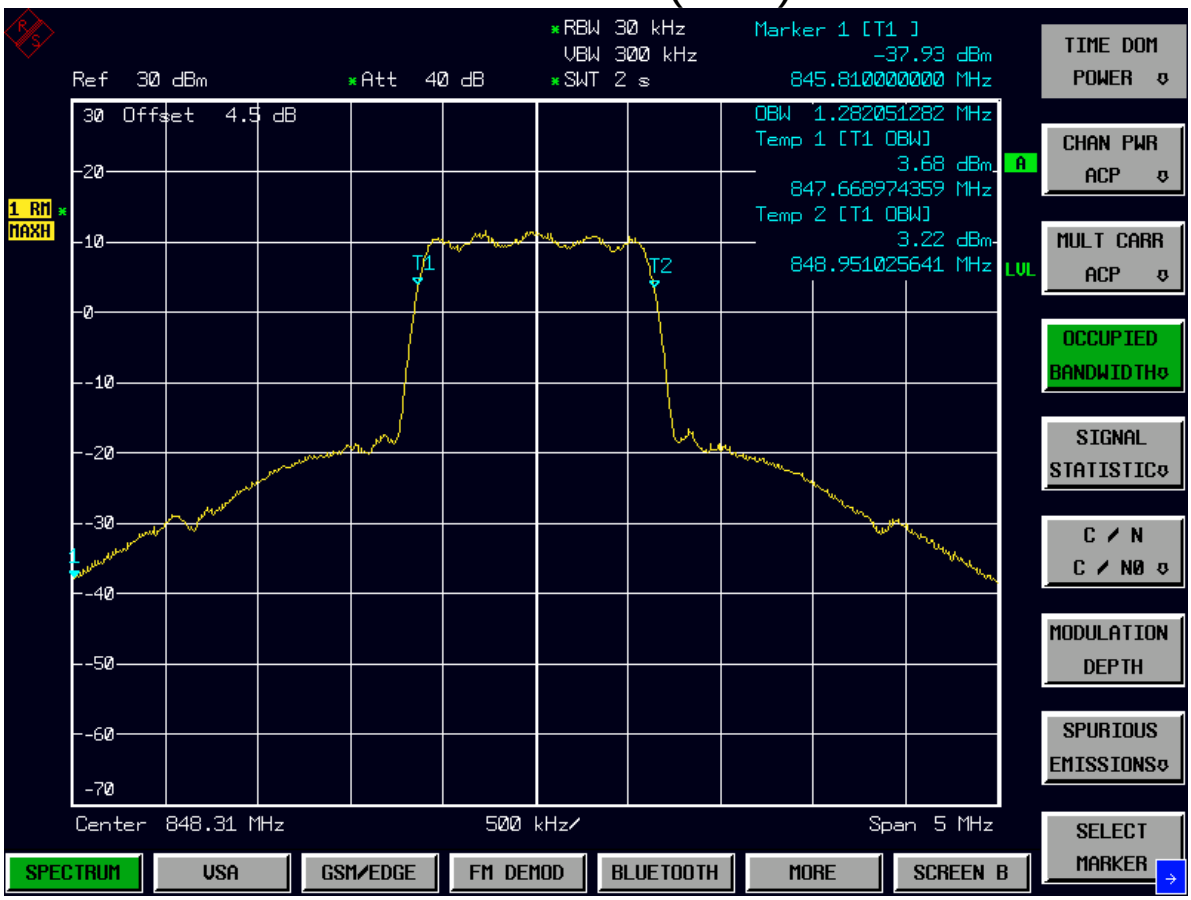
Channel 283(TM1)



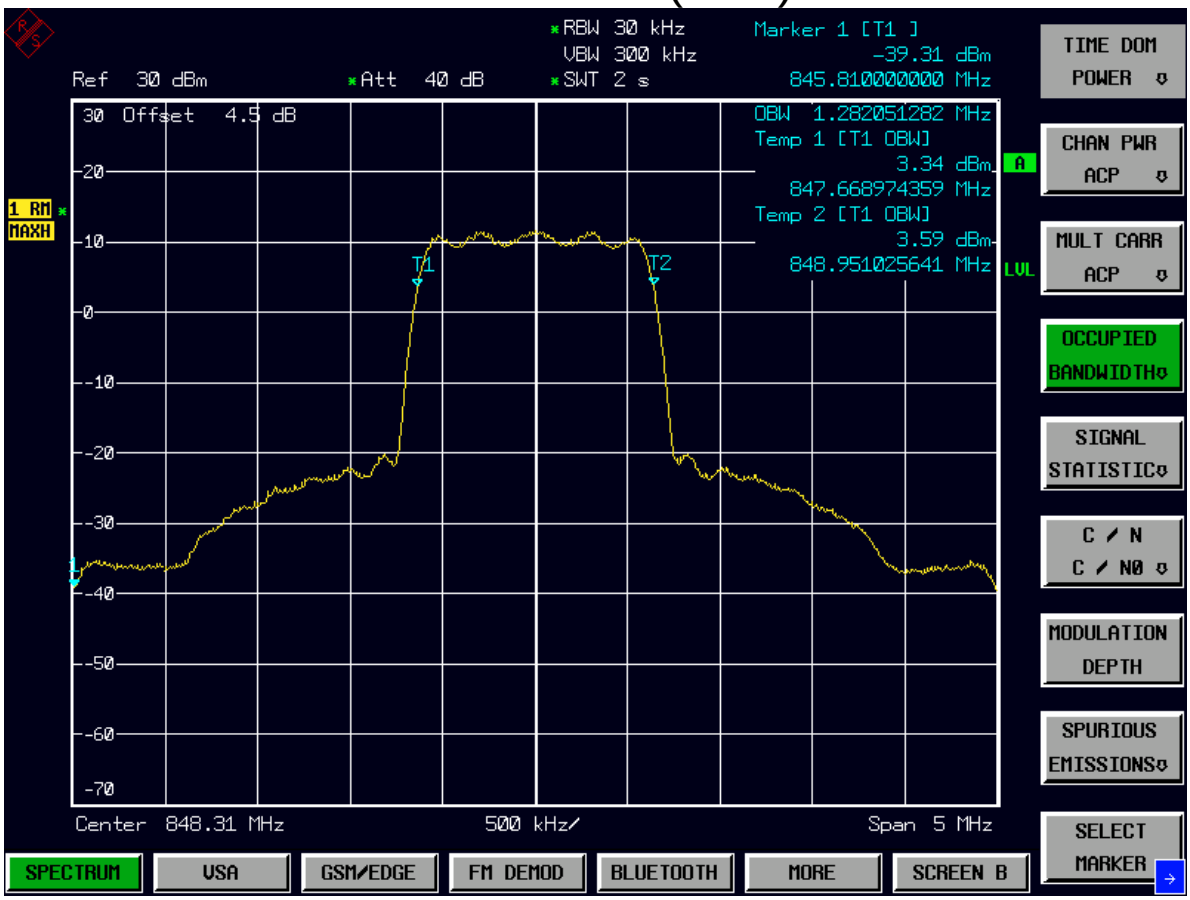
Channel 283(TM3)



Channel 777(TM1)



Channel 777(TM3)



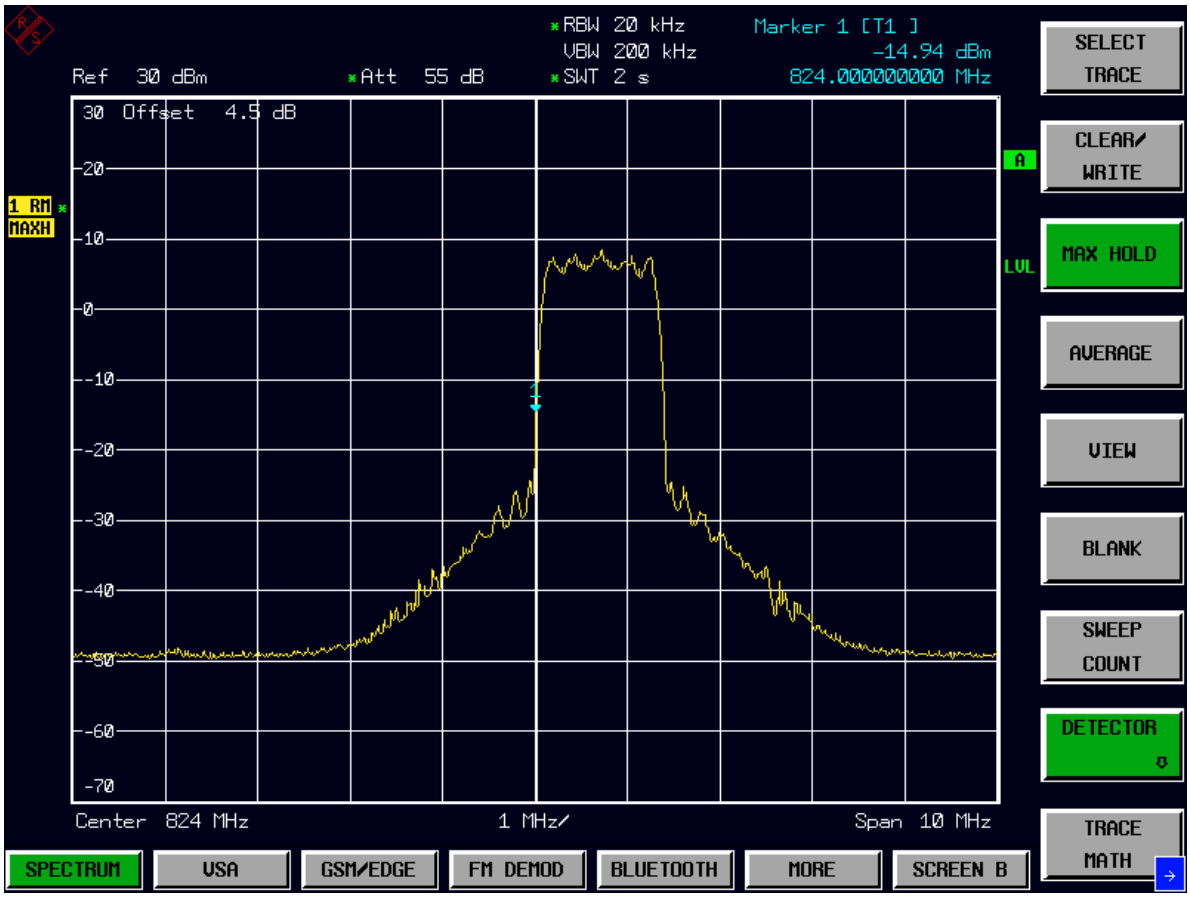
Appendix D

Band Edges Compliance

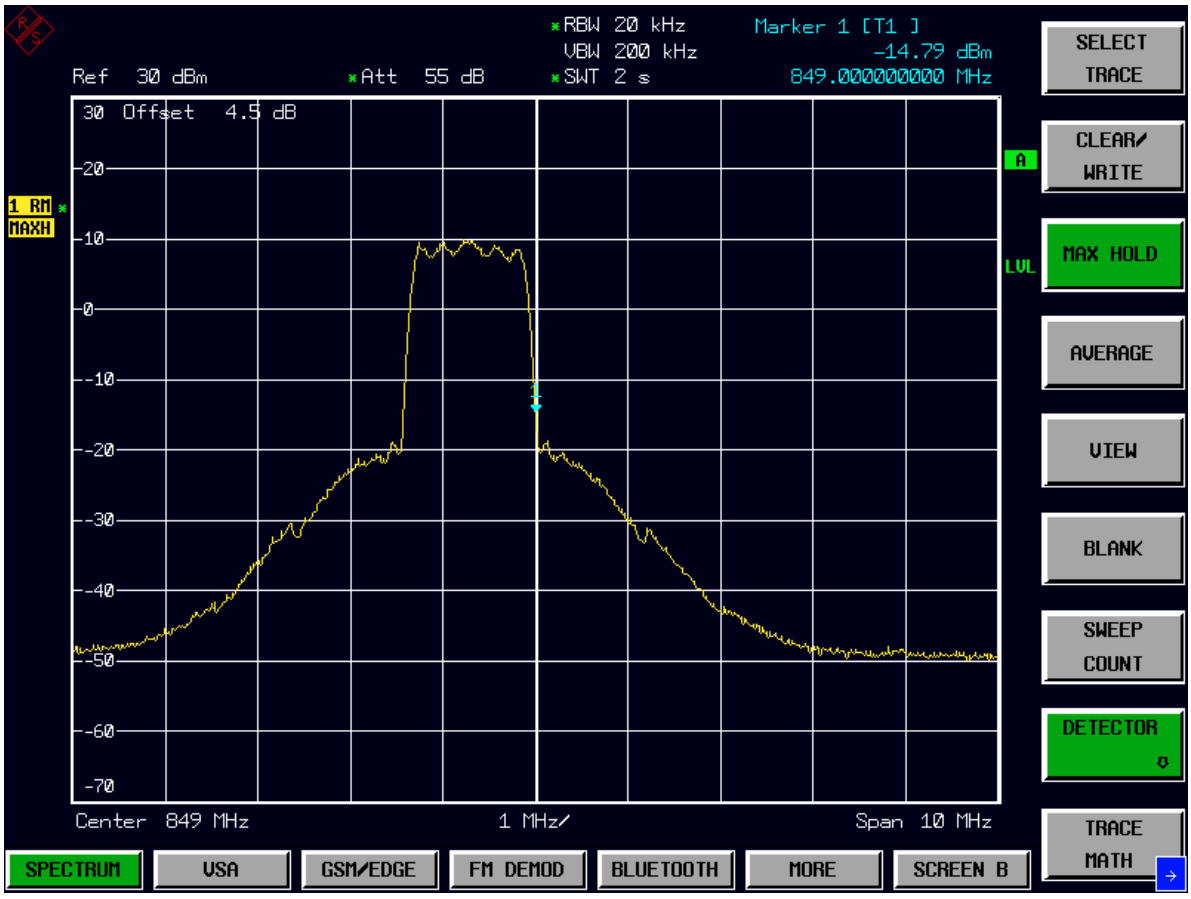
According to CFR 47 (FCC) part 2.1051 & 22.917(e)

TM1

Left Edge (824 MHz)
Channel 1013

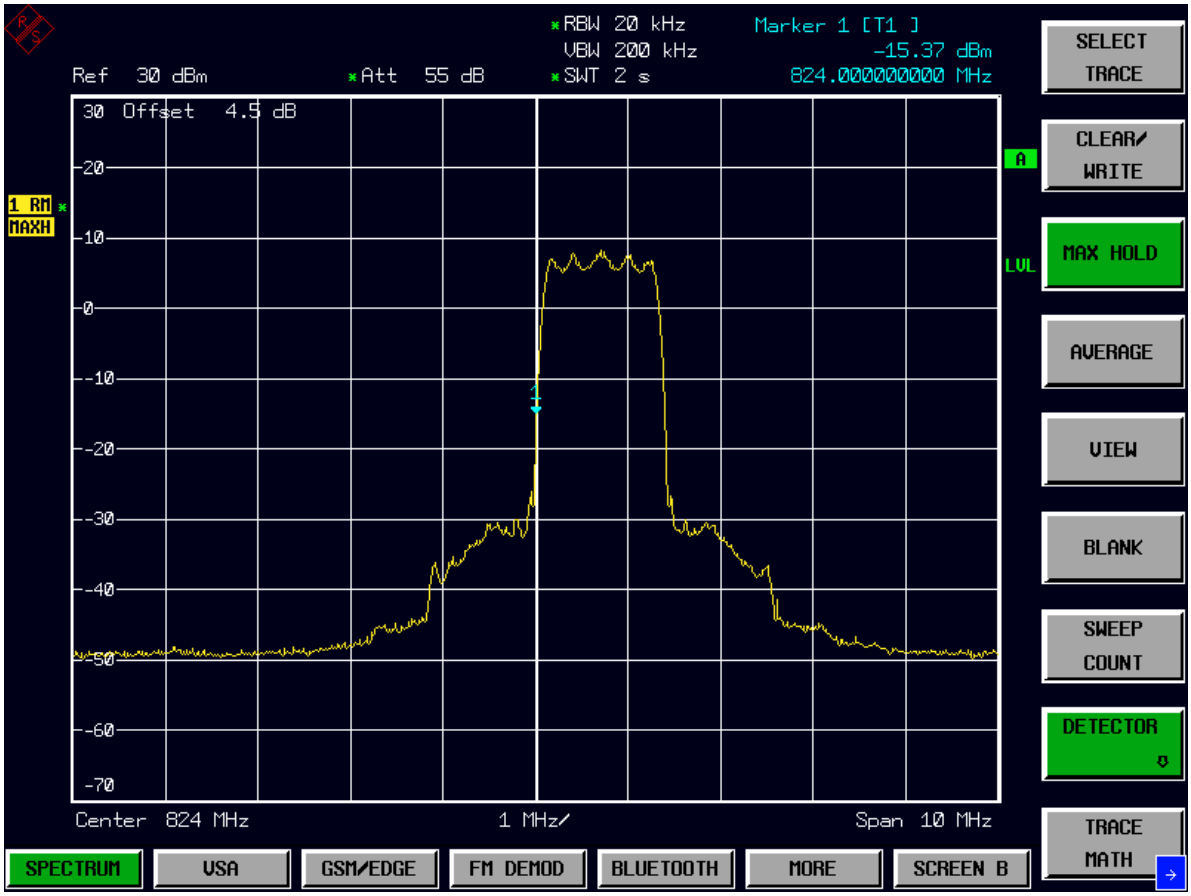


Right Edge (849MHz)
Channel 777

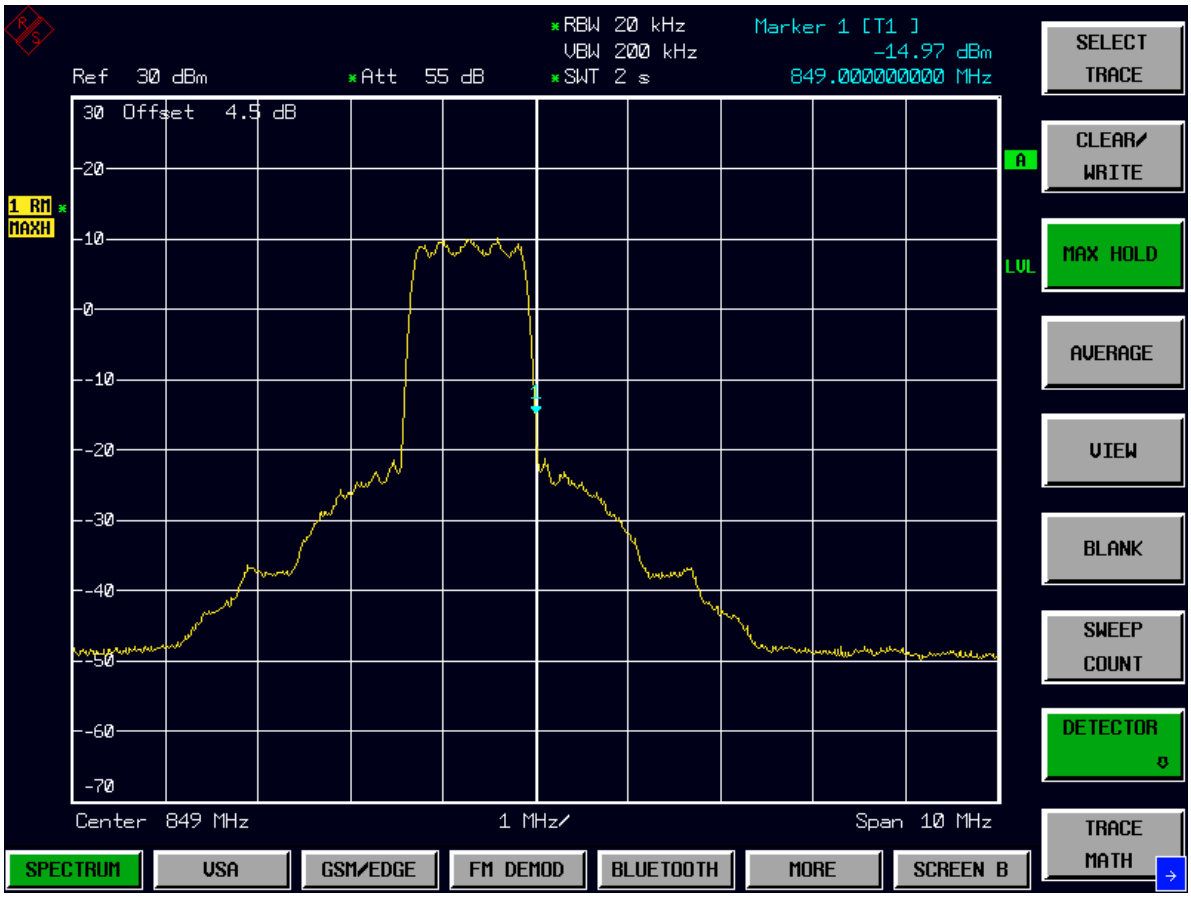


TM3

Left Edge (824 MHz)
Channel 1013



Right Edge (849MHz)
Channel 777



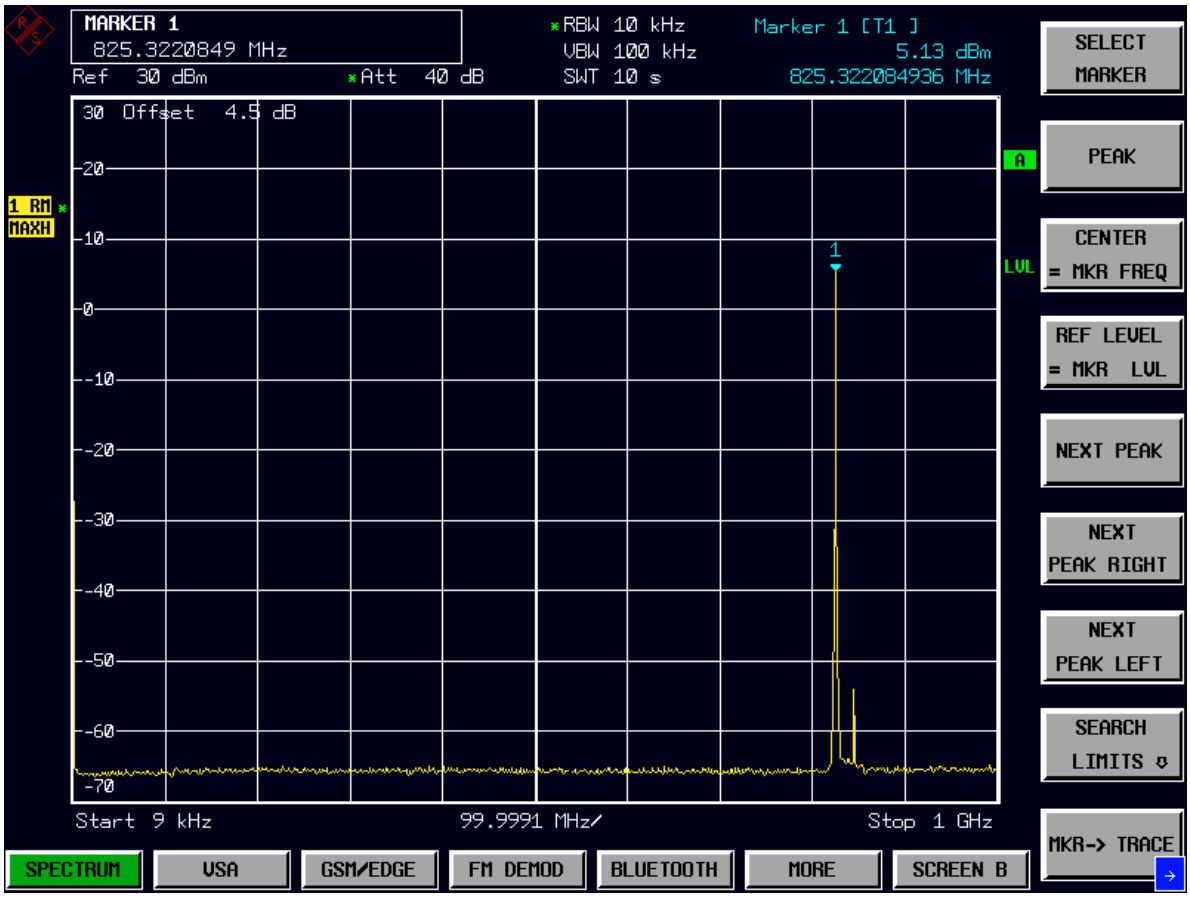
Appendix E

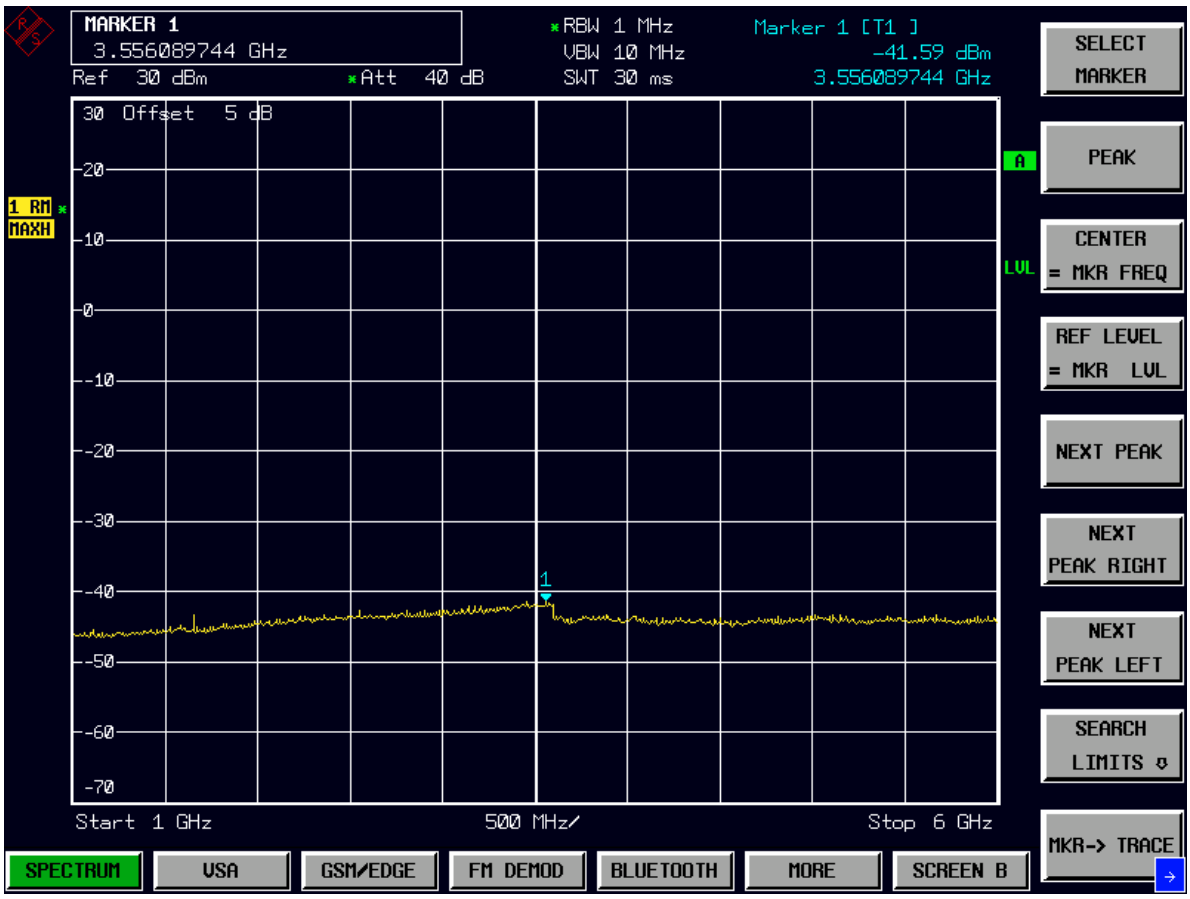
Spurious Emission at Antenna Terminal

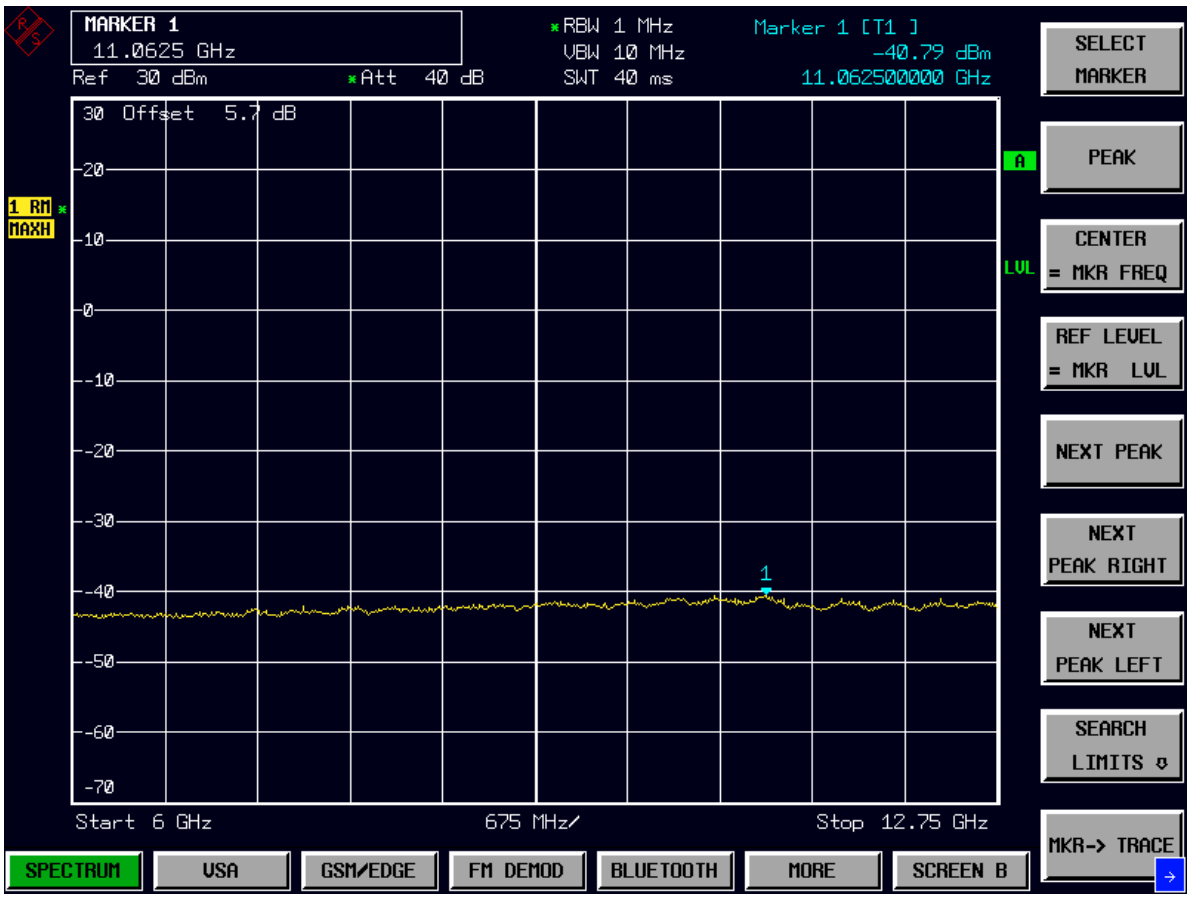
According to CFR 47 (FCC) part 2.1051 & 22.917(e)

TM1

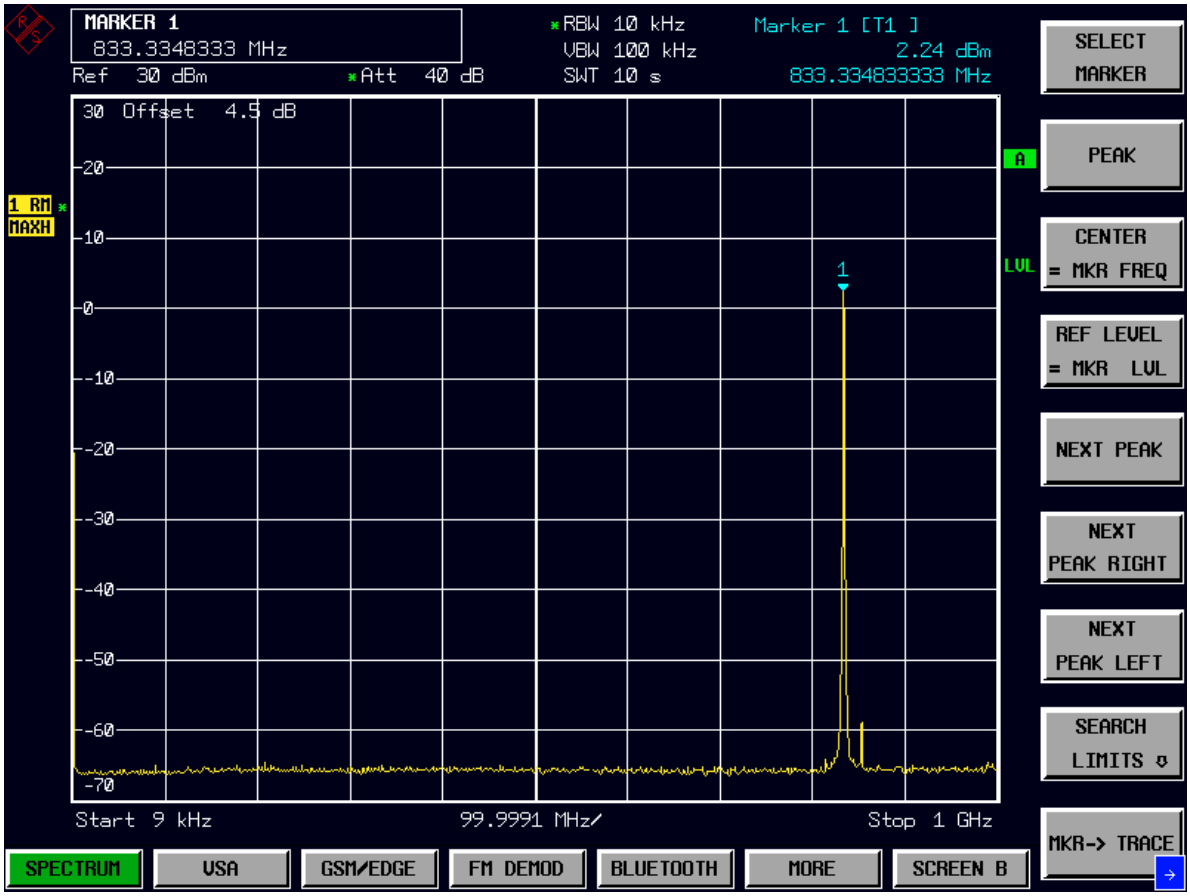
Channel 1013

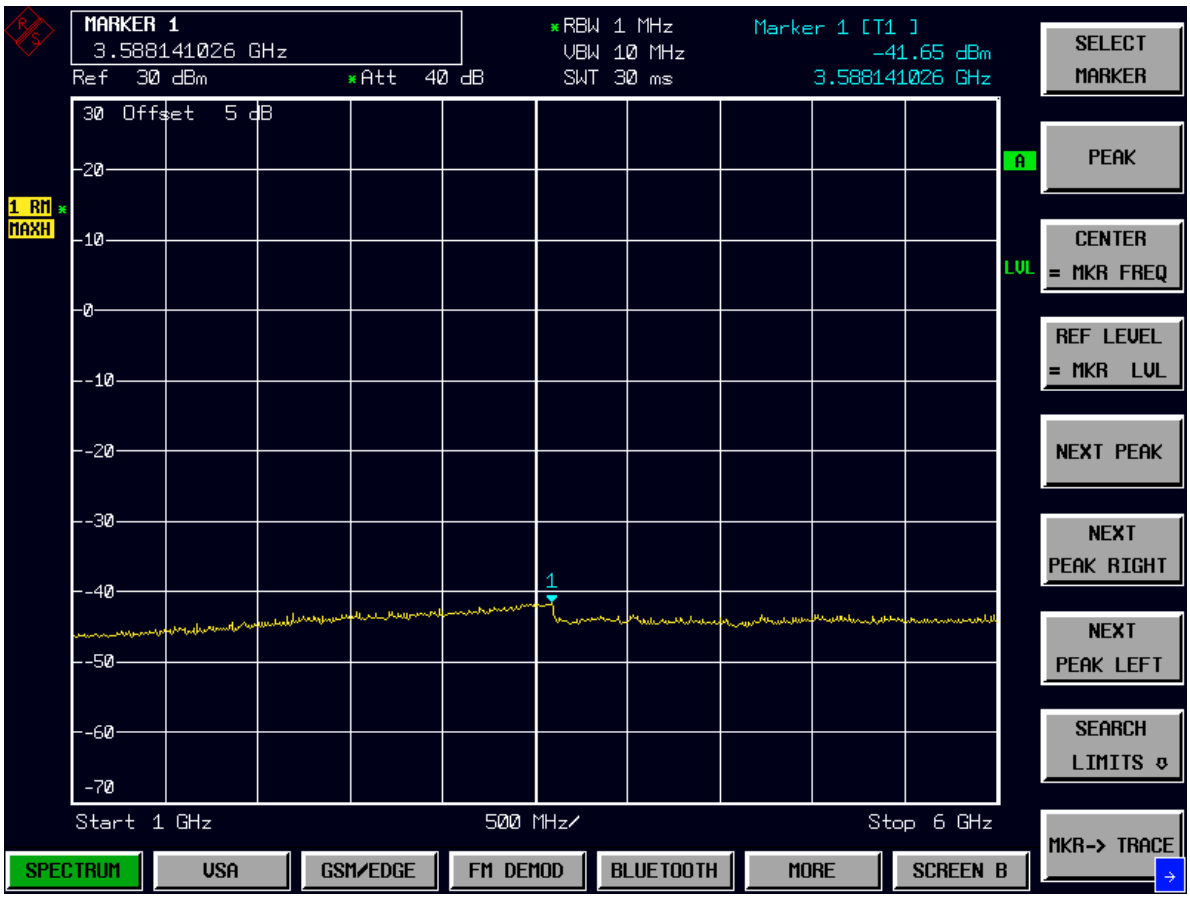


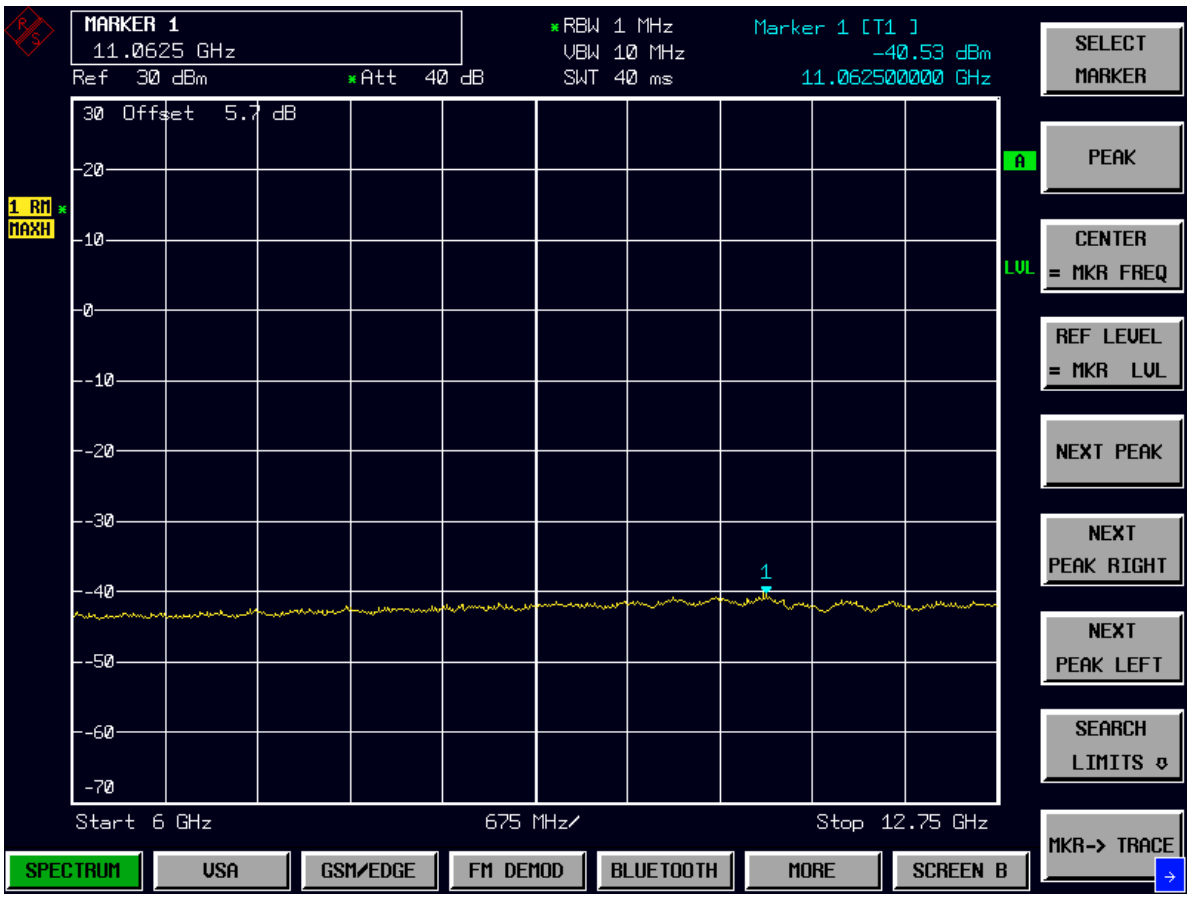

MARKER 1
3.556089744 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.59 dBm
3.556089744 GHz
30 Offset 5 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B


MARKER 1
11.0625 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.79 dBm
11.062500000 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

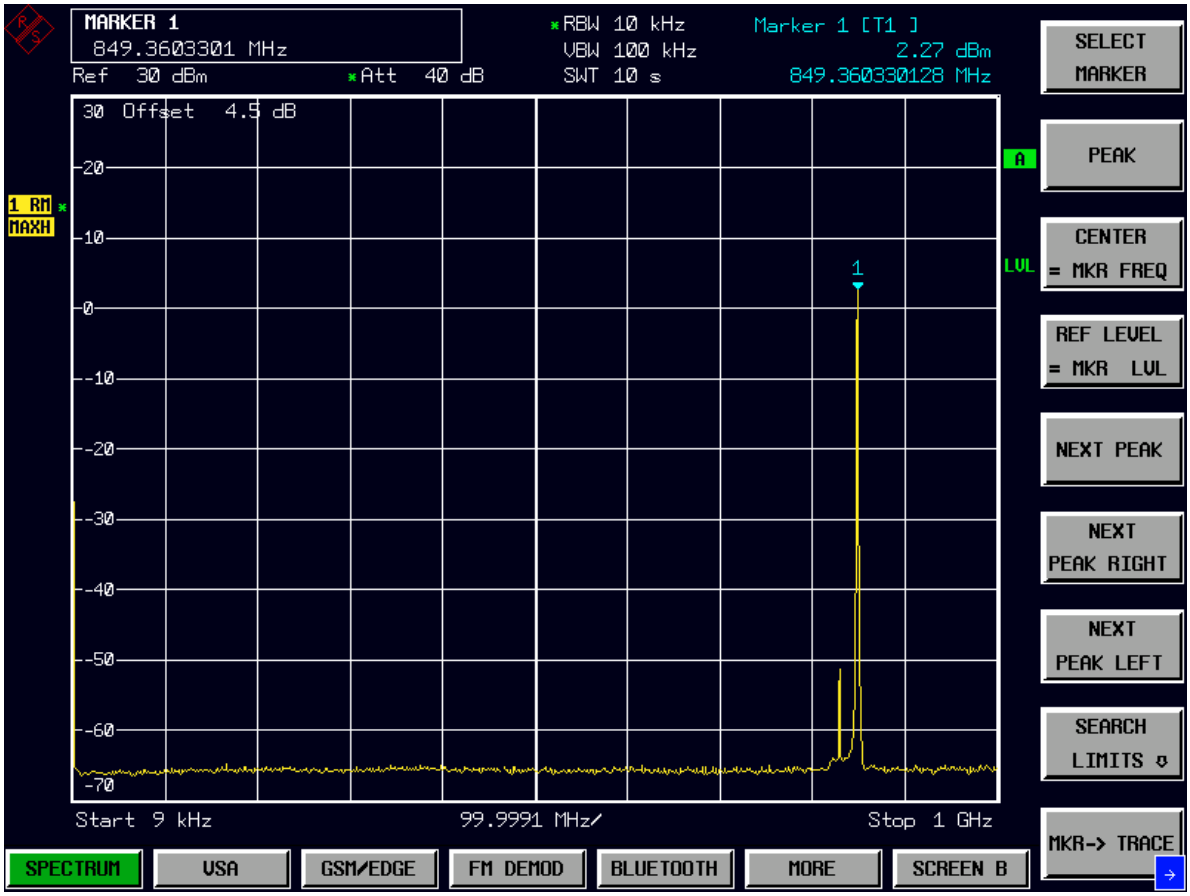
Channel 283

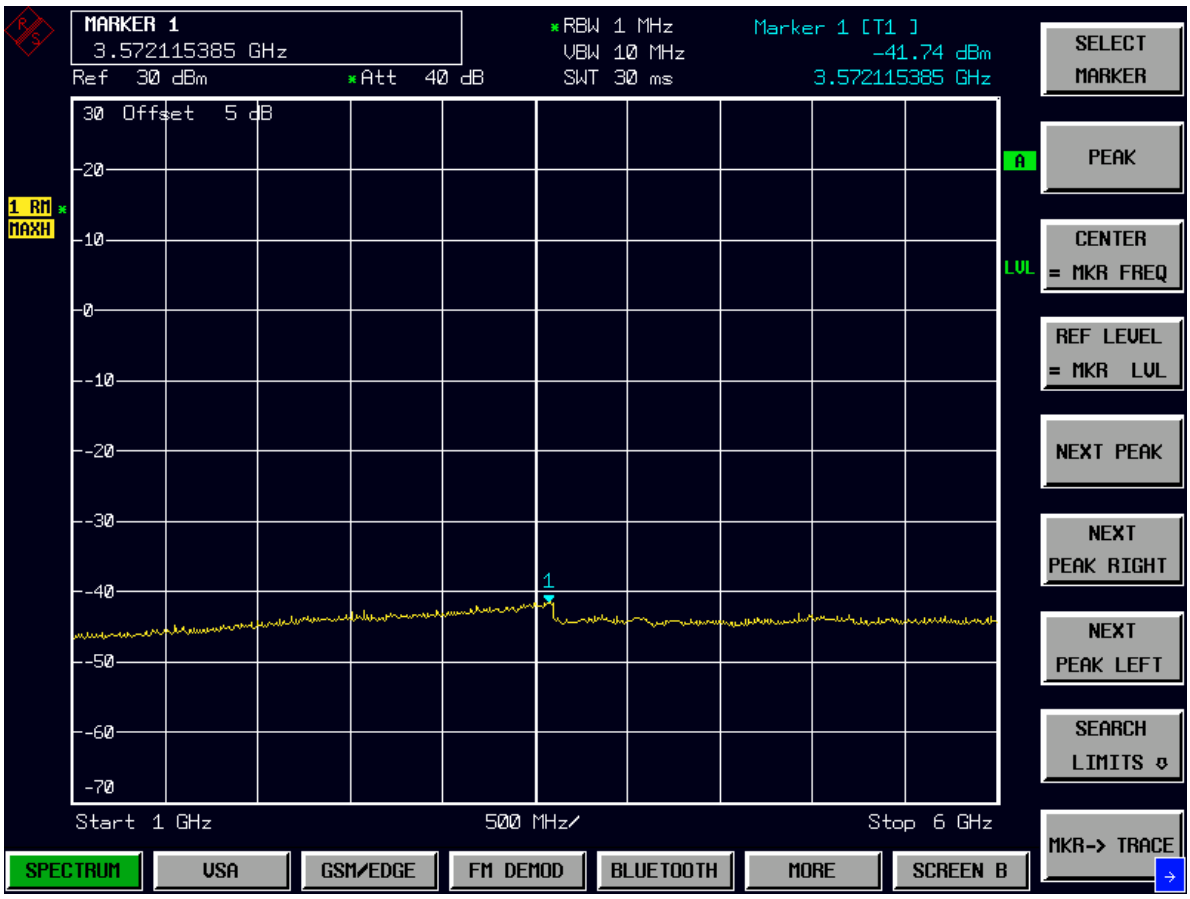

MARKER 1
833.3348333 MHz
Ref 30 dBm
Att 40 dB
RBW 10 kHz
VBW 100 kHz
SWT 10 s
Marker 1 [T1]
2.24 dBm
833.334833333 MHz
30 Offset 4.5 dB
1 RM
MAXH
A
LVL
Start 9 kHz
99.9991 MHz/
Stop 1 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

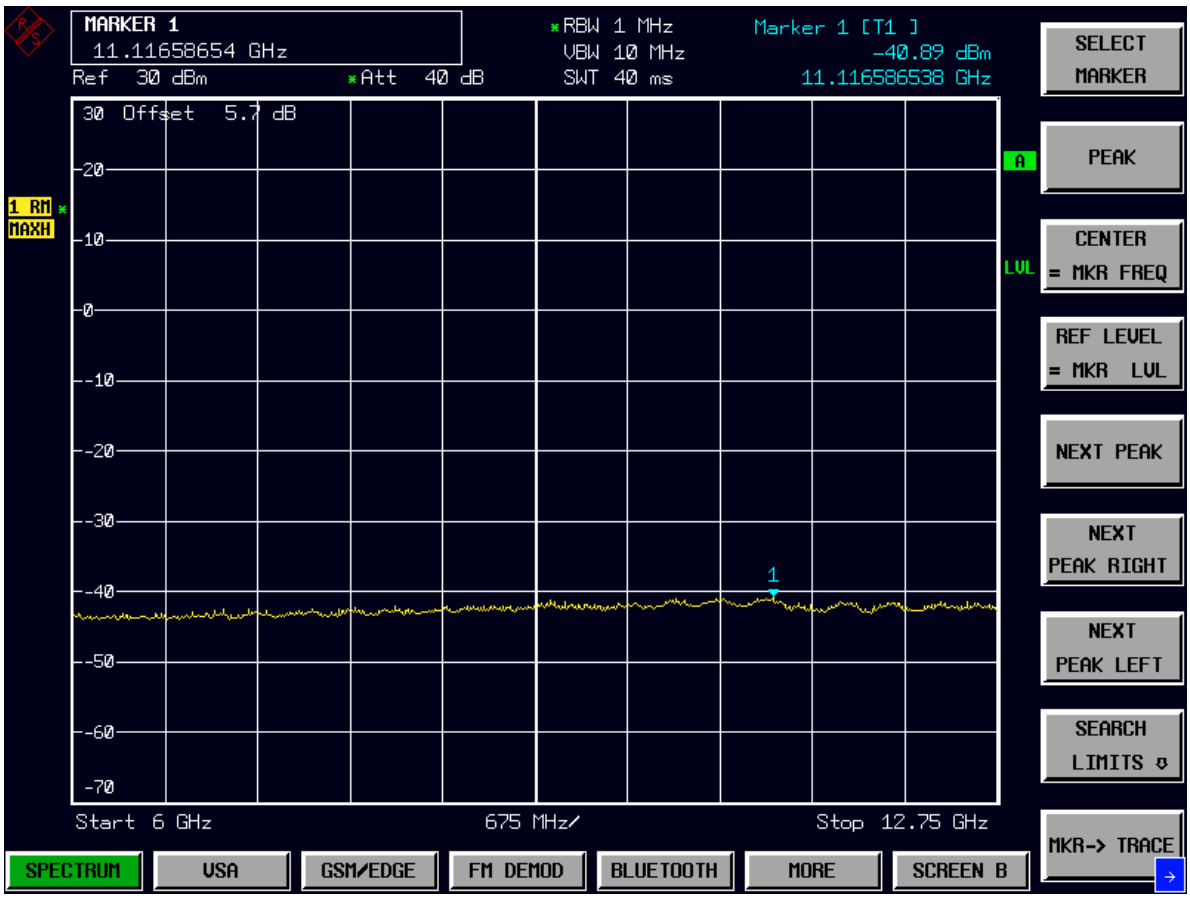

MARKER 1
3.588141026 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.65 dBm
3.588141026 GHz
30 Offset 5 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B


MARKER 1
11.0625 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.53 dBm
11.062500000 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

Channel 777

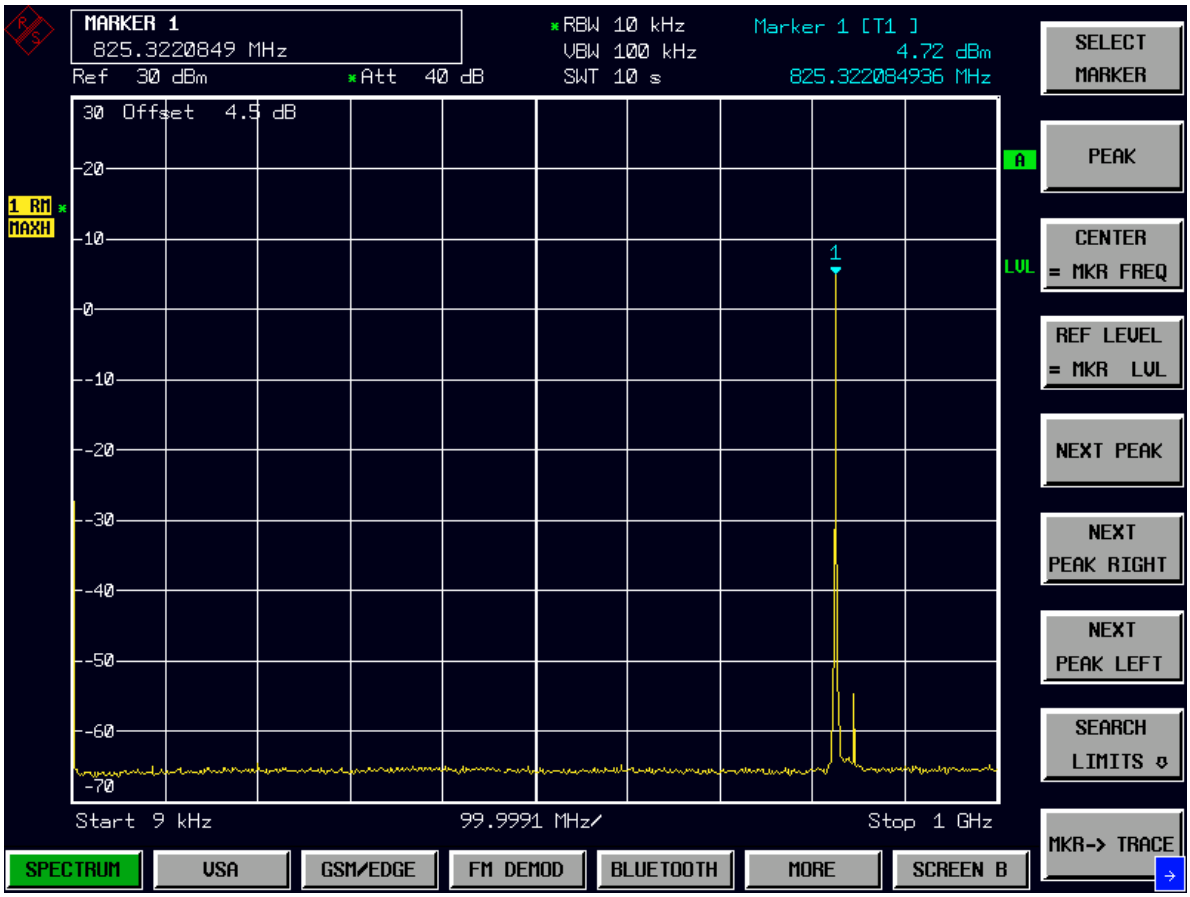

MARKER 1
849.3603301 MHz
Ref 30 dBm
Att 40 dB
RBW 10 kHz
VBW 100 kHz
SWT 10 s
Marker 1 [T1]
2.27 dBm
849.360330128 MHz
30 Offset 4.5 dB
1 RM
MAXH
A
LVL
Start 9 kHz
99.9991 MHz/
Stop 1 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

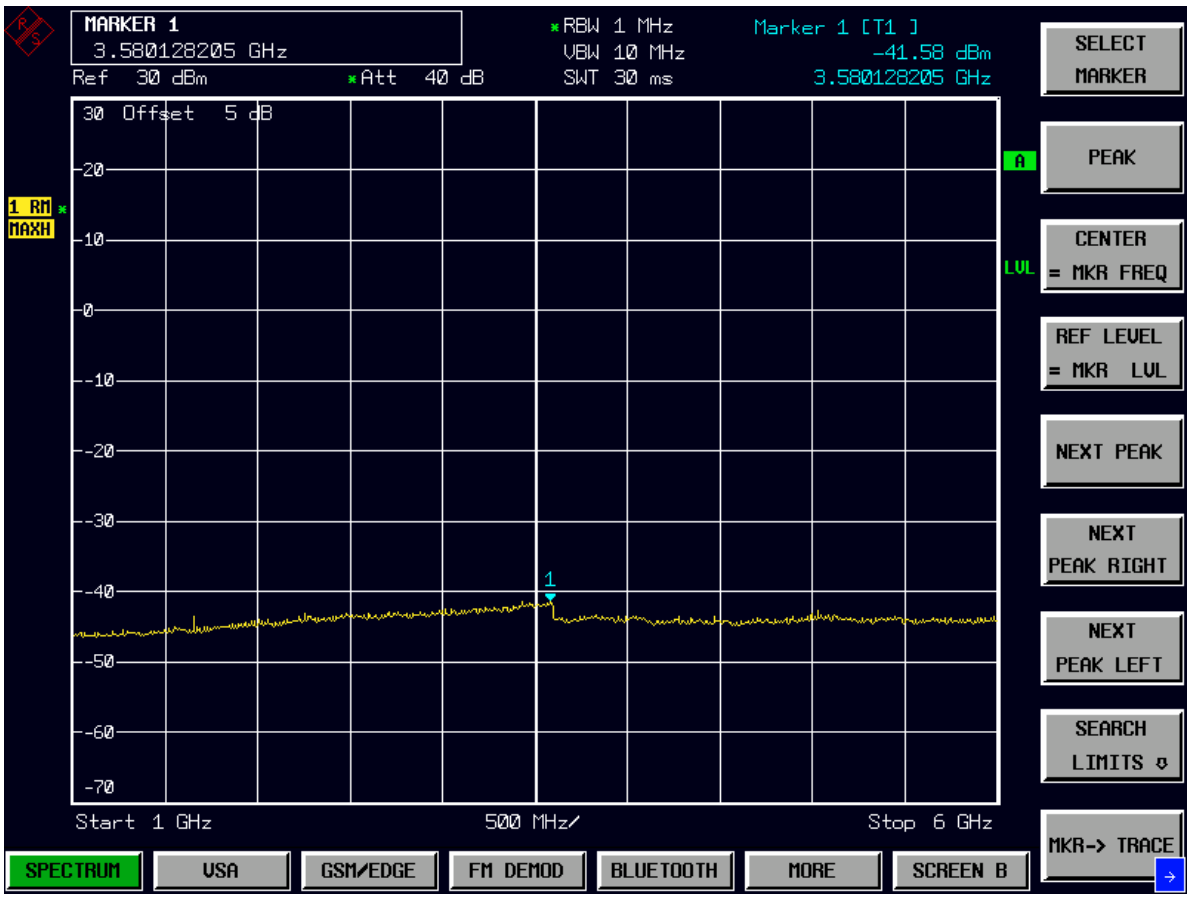

MARKER 1
3.572115385 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.74 dBm
3.572115385 GHz
30 Offset 5 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

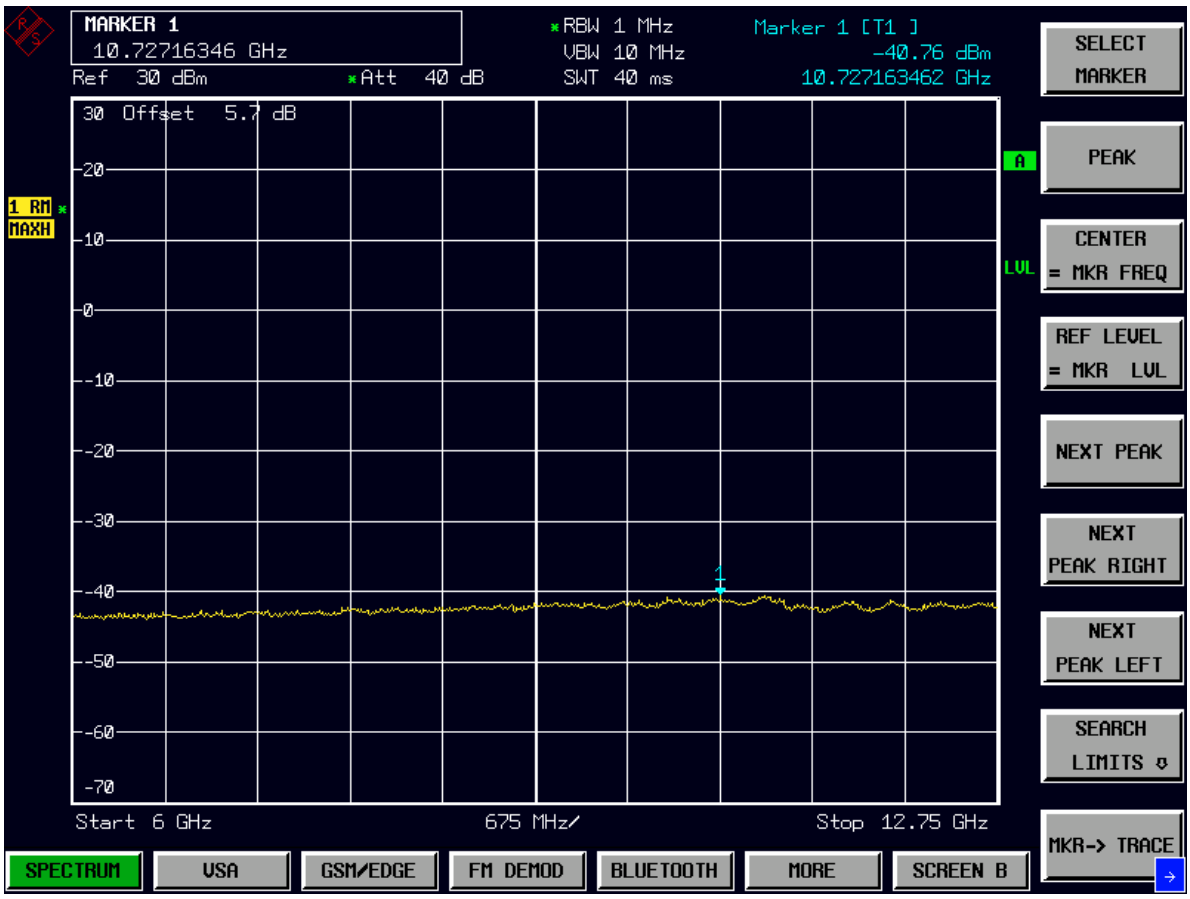

MARKER 1
11.11658654 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.89 dBm
11.116586538 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

TM3

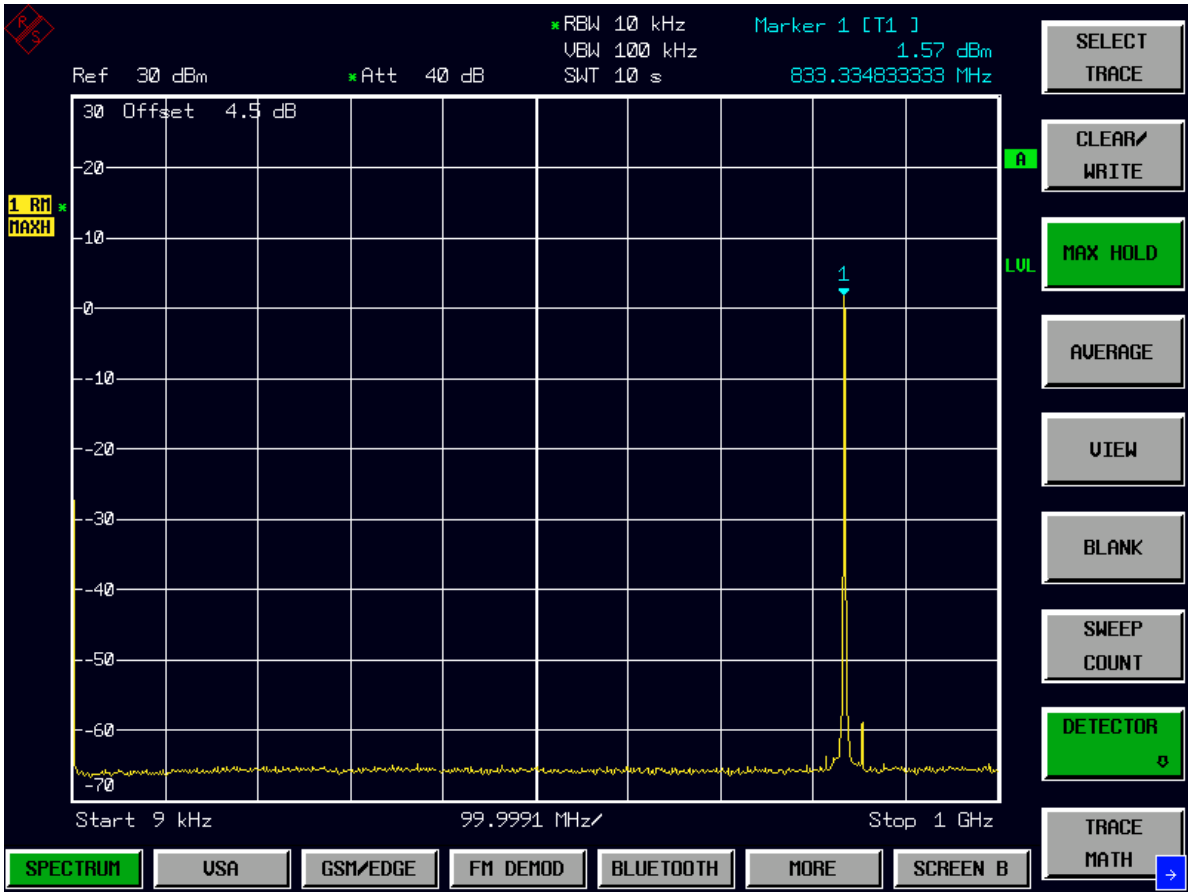
Channel 1013

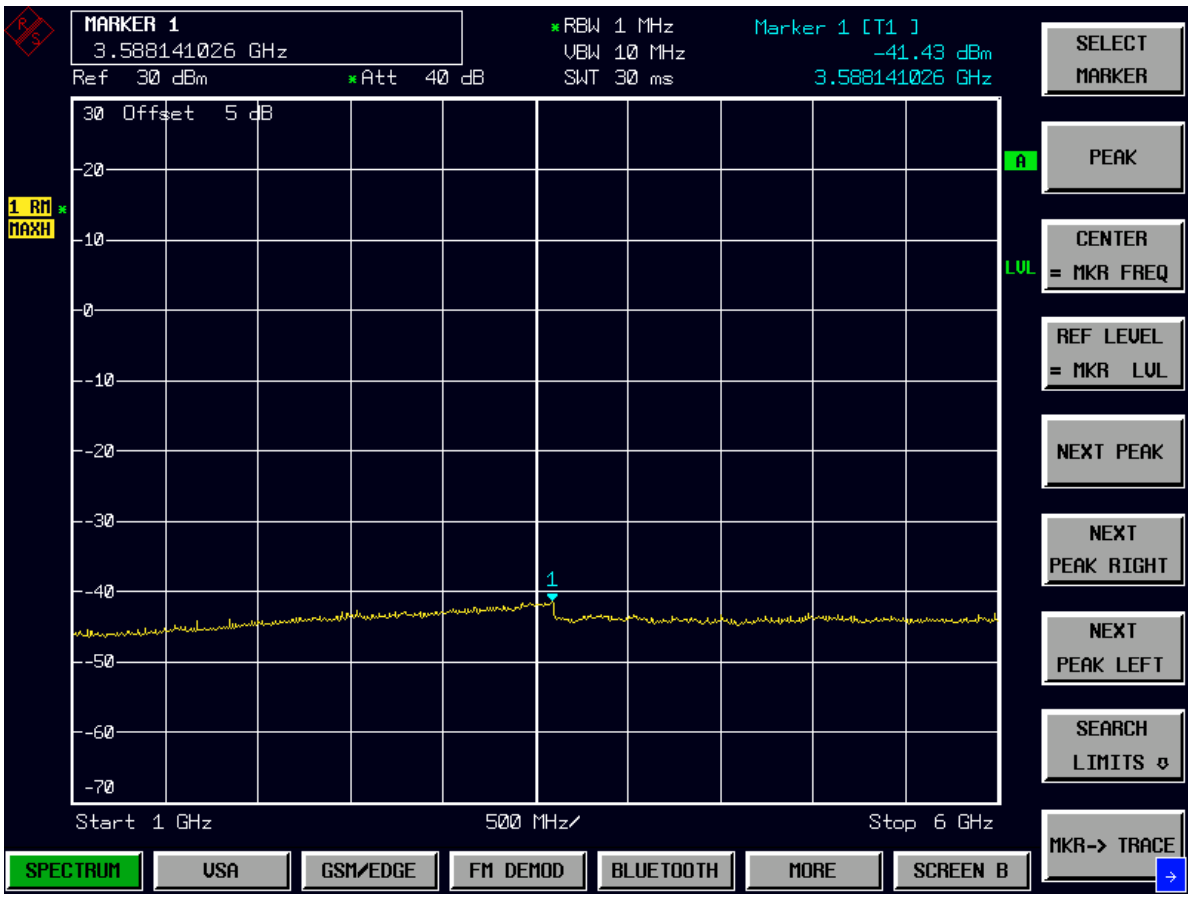


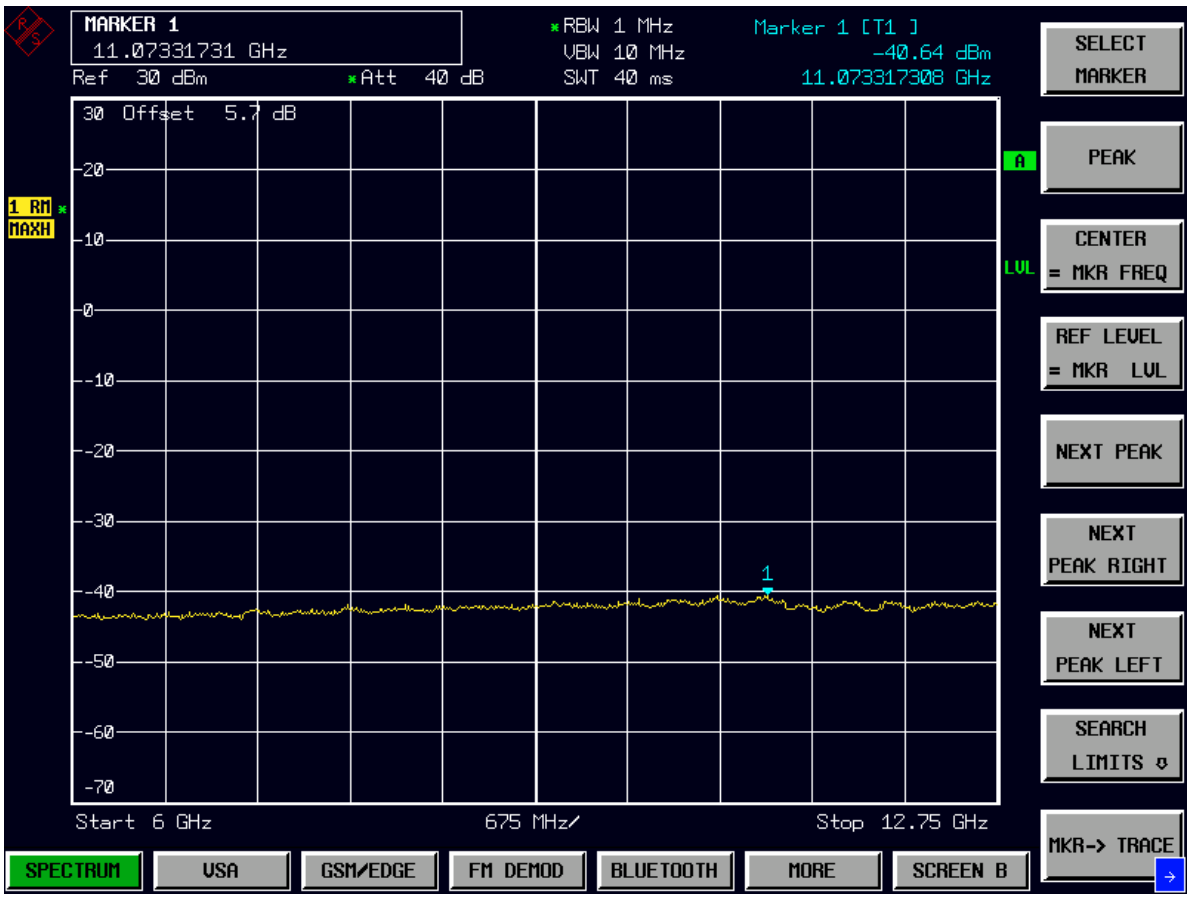

MARKER 1
3.580128205 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.58 dBm
3.580128205 GHz
30 Offset 5 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B


MARKER 1
10.72716346 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.76 dBm
10.727163462 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

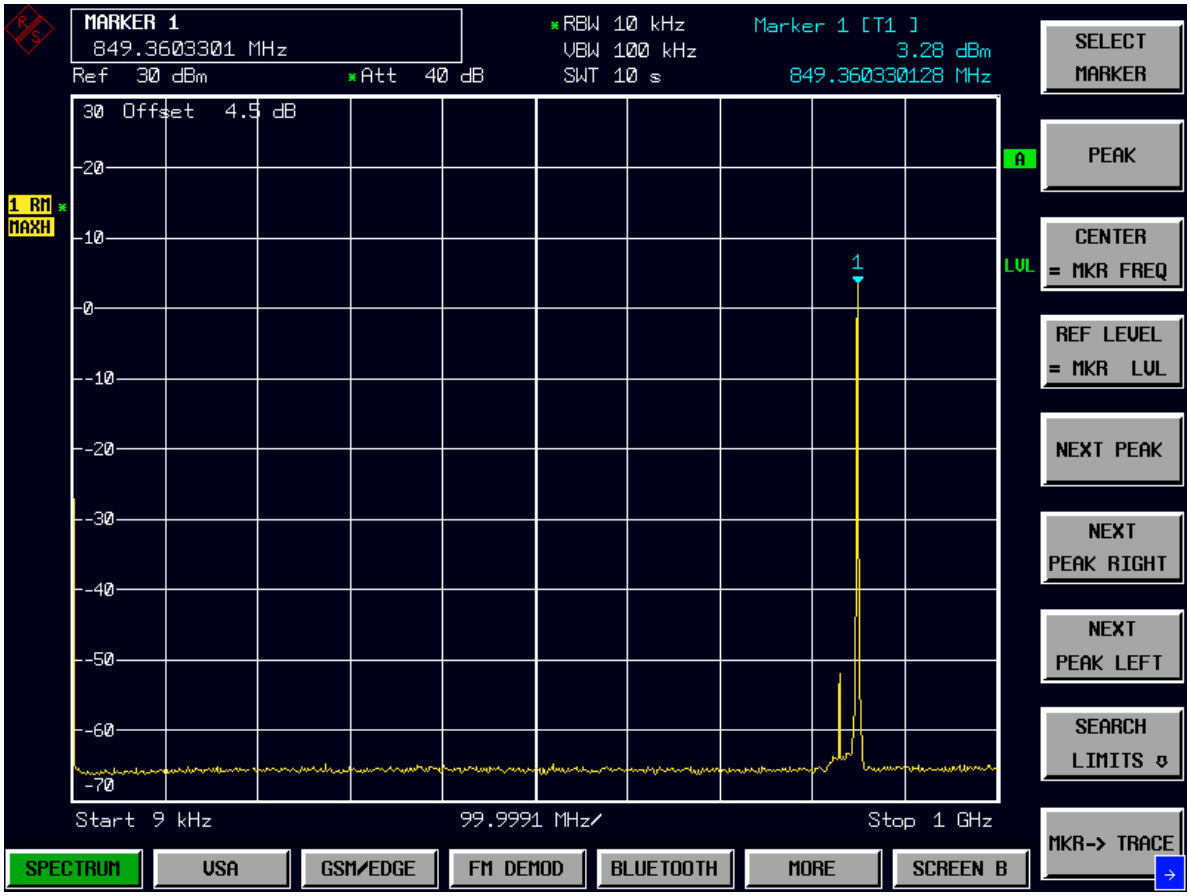
Channel 283

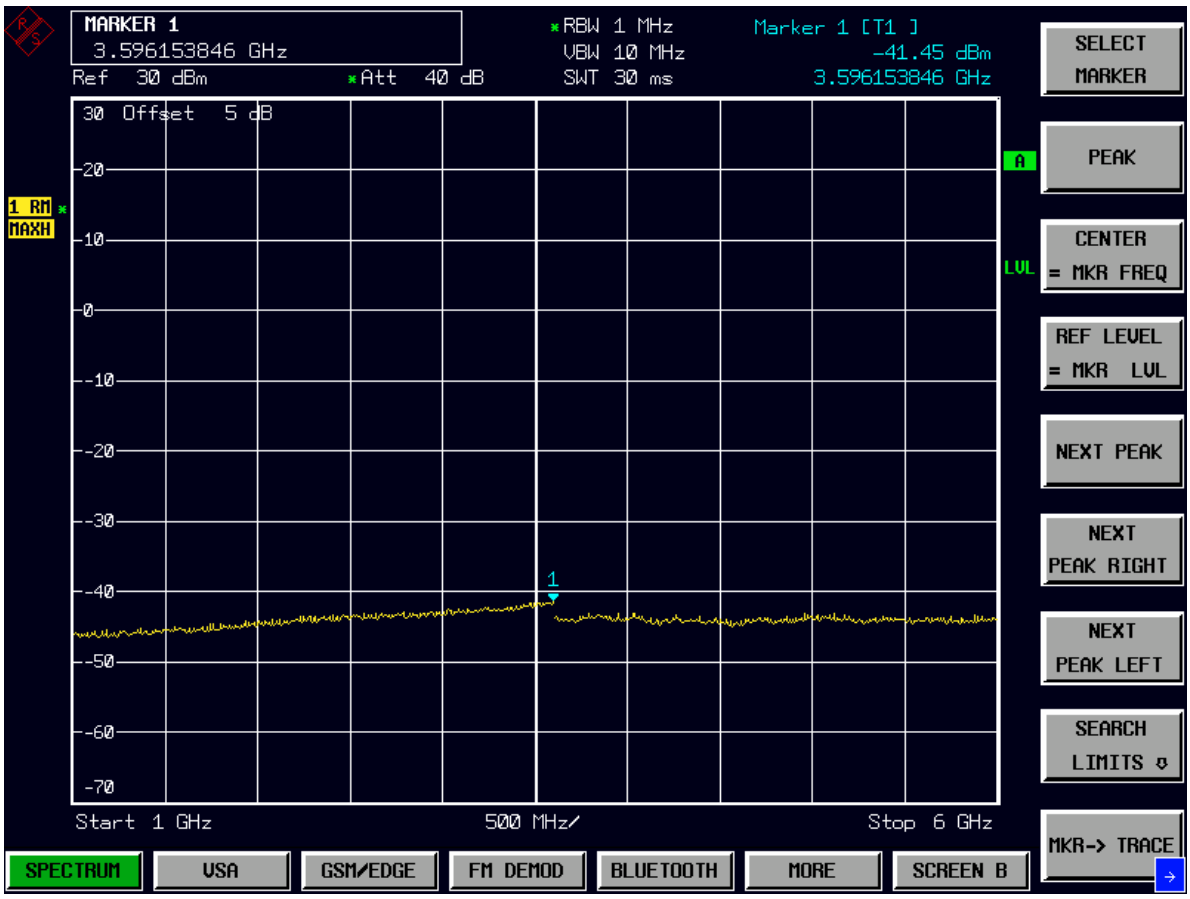

RBW 10 kHz
VBW 100 kHz
SWT 10 s
Marker 1 [T1]
1.57 dBm
833.334833333 MHz
Ref 30 dBm
Att 40 dB
30 Offset 4.5 dB
1 RM
MAXH
A
LVL
20
10
0
-10
-20
-30
-40
-50
-60
-70
Start 9 kHz
99.9991 MHz/
Stop 1 GHz
SELECT TRACE
CLEAR/ WRITE
MAX HOLD
AVERAGE
VIEW
BLANK
SWEEP COUNT
DETECTOR
TRACE MATH
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

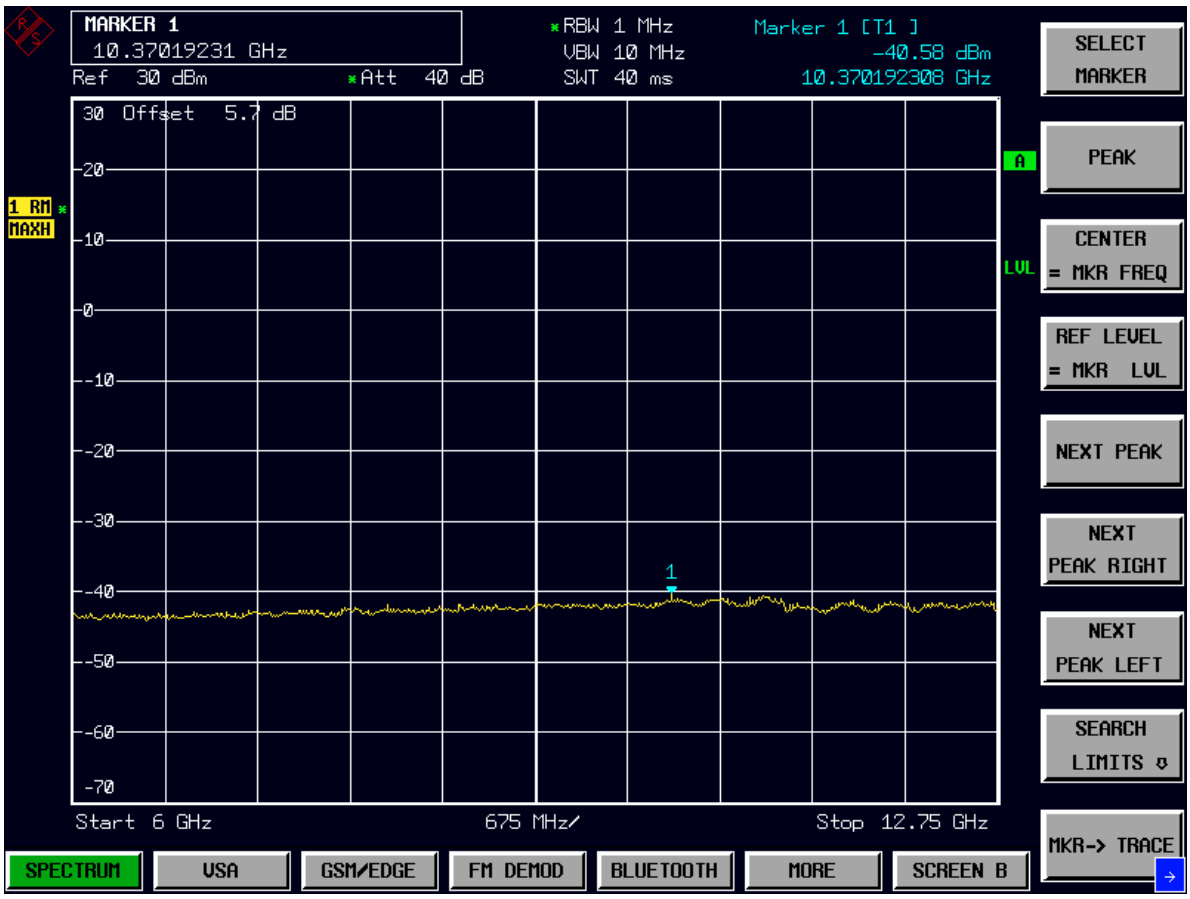

MARKER 1
3.588141026 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.43 dBm
3.588141026 GHz
30 Offset 5 dB
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B


MARKER 1
11.07331731 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.64 dBm
11.073317308 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

Channel 777


MARKER 1
849.3603301 MHz
Ref 30 dBm
Att 40 dB
RBW 10 kHz
VBW 100 kHz
SWT 10 s
Marker 1 [T1]
3.28 dBm
849.360330128 MHz
30 Offset 4.5 dB
1 RM
MAXH
A
LVL
Start 9 kHz
99.9991 MHz/
Stop 1 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B


MARKER 1
3.596153846 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 30 ms
Marker 1 [T1]
-41.45 dBm
3.596153846 GHz
30 Offset 5 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
1 RM
MAXH
A
LVL
Start 1 GHz
500 MHz/
Stop 6 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

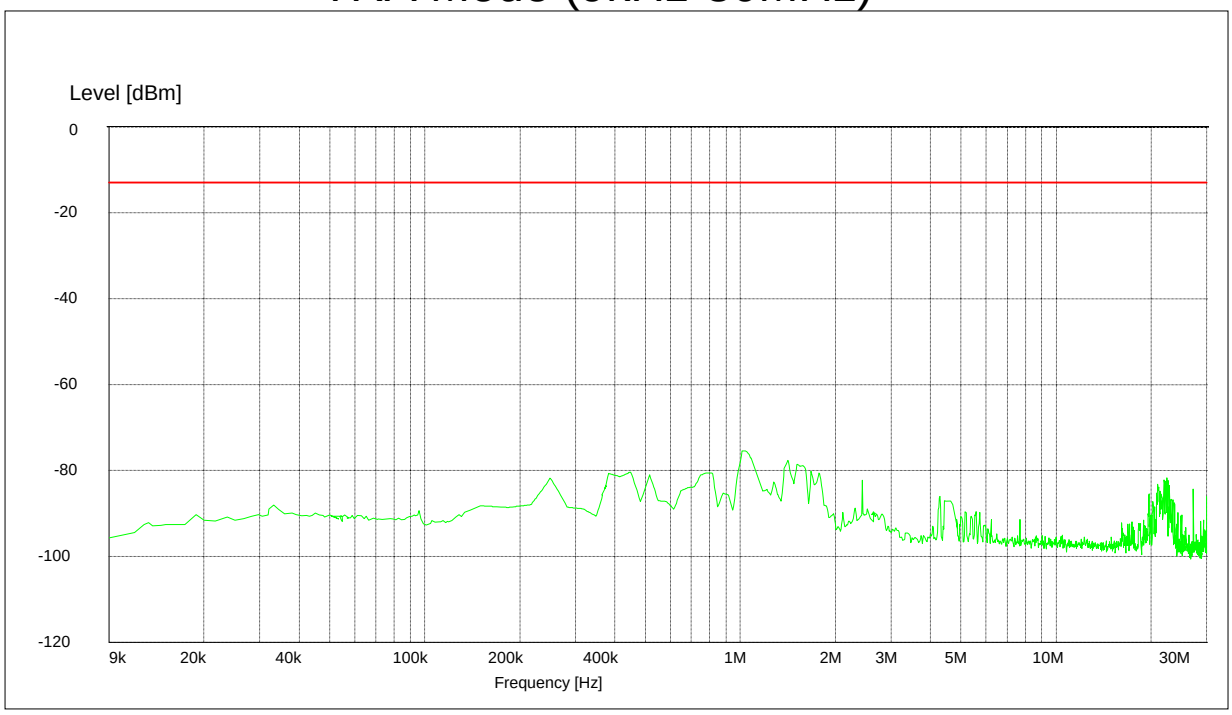

MARKER 1
10.37019231 GHz
Ref 30 dBm
Att 40 dB
RBW 1 MHz
VBW 10 MHz
SWT 40 ms
Marker 1 [T1]
-40.58 dBm
10.370192308 GHz
30 Offset 5.7 dB
1 RM
MAXH
A
LVL
Start 6 GHz
675 MHz/
Stop 12.75 GHz
SELECT MARKER
PEAK
CENTER = MKR FREQ
REF LEVEL = MKR LVL
NEXT PEAK
NEXT PEAK RIGHT
NEXT PEAK LEFT
SEARCH LIMITS
MKR-> TRACE
SPECTRUM
VSA
GSM/EDGE
FM DEMOD
BLUETOOTH
MORE
SCREEN B

Appendix F

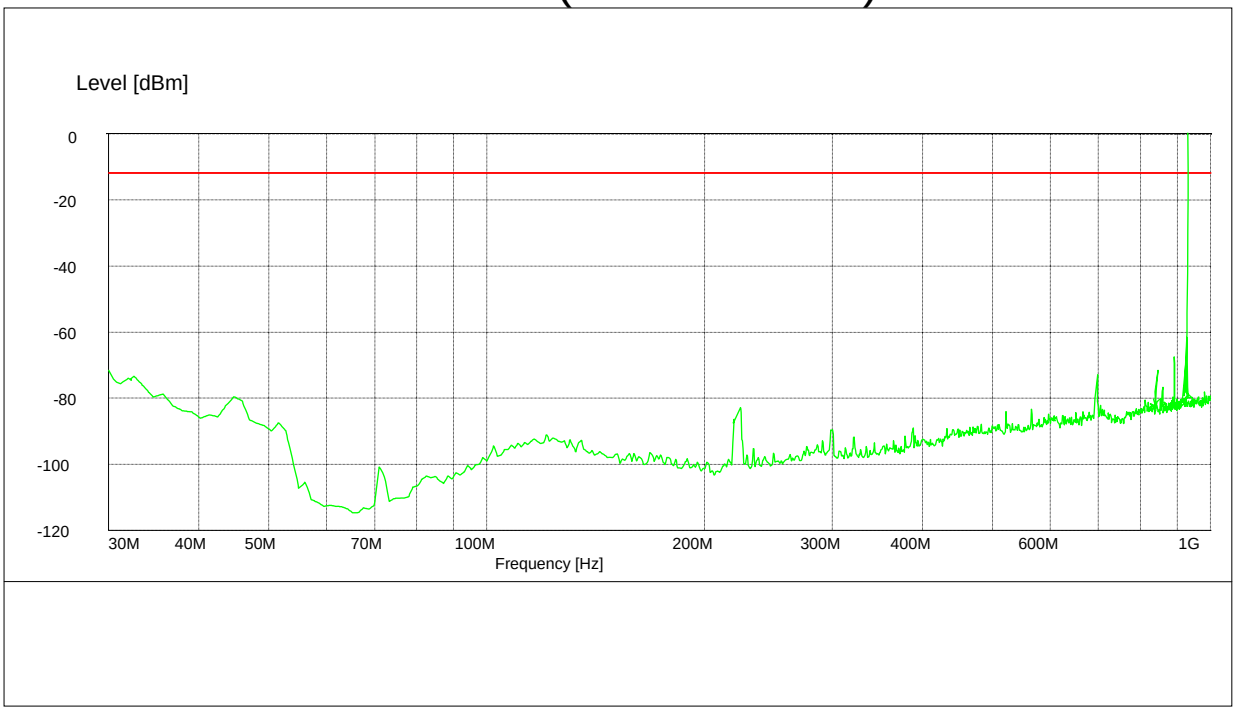
Field Strength of Spurious Radiation

According to CFR 47 (FCC) part 2.1053 & 22.917(e)

TRA Mode (9kHz-30MHz)

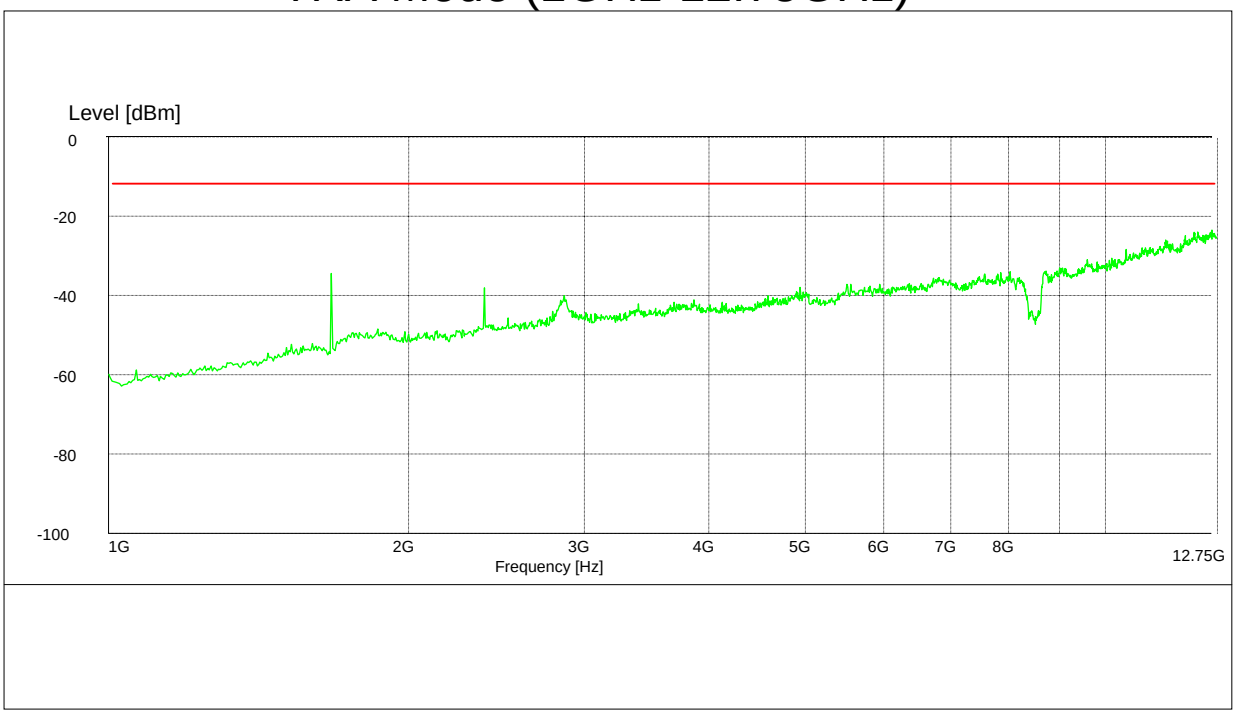


TRA Mode (30MHz-1GHz)

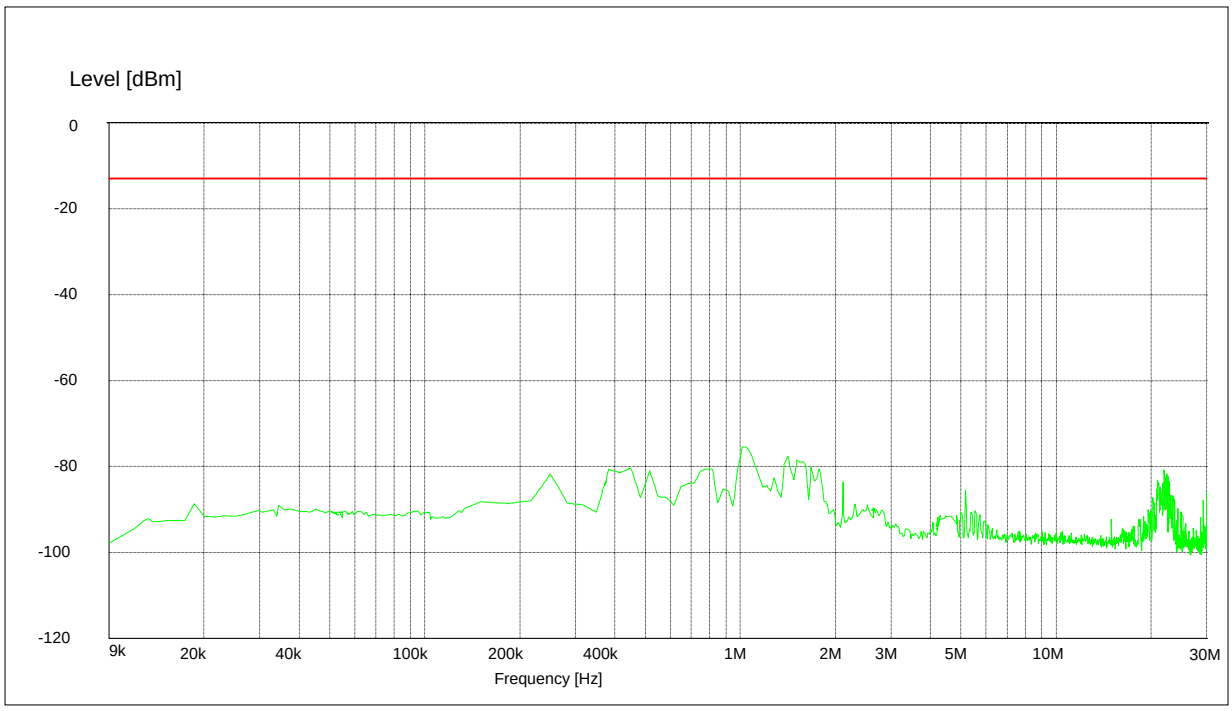


Note: The frequency which exceeded the limit was the carrier frequency.

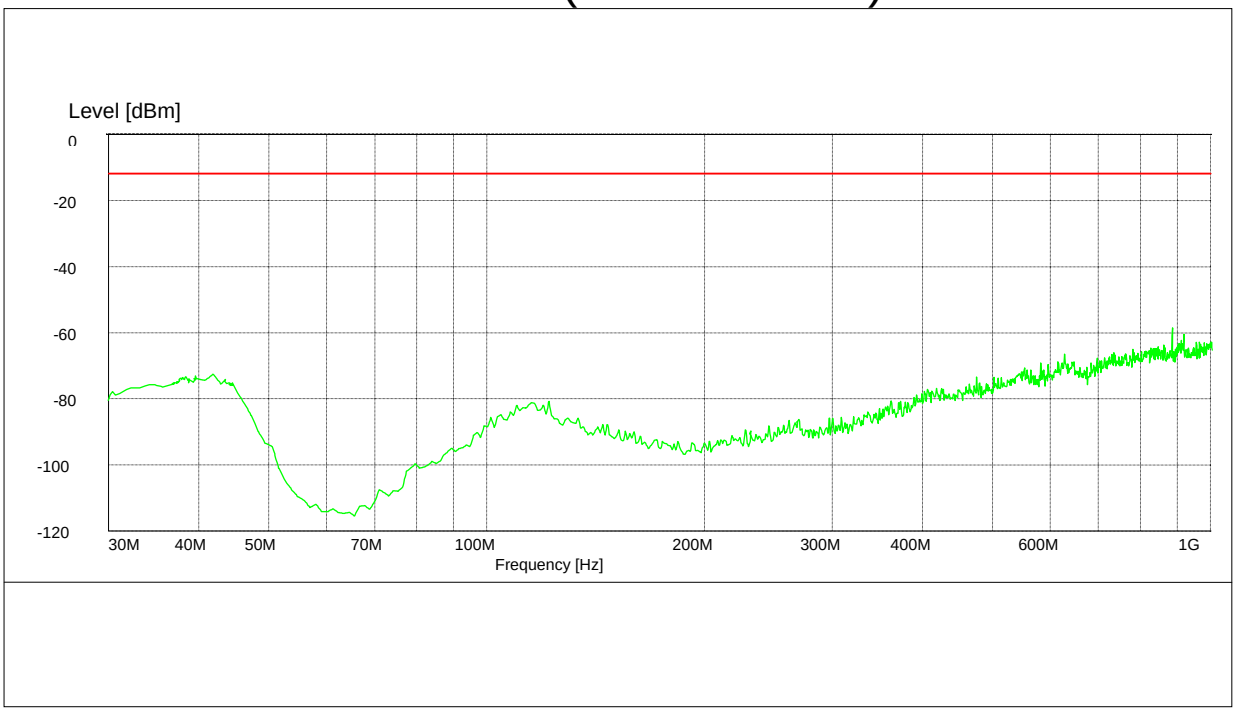
TRA Mode (1GHz-12.75GHz)



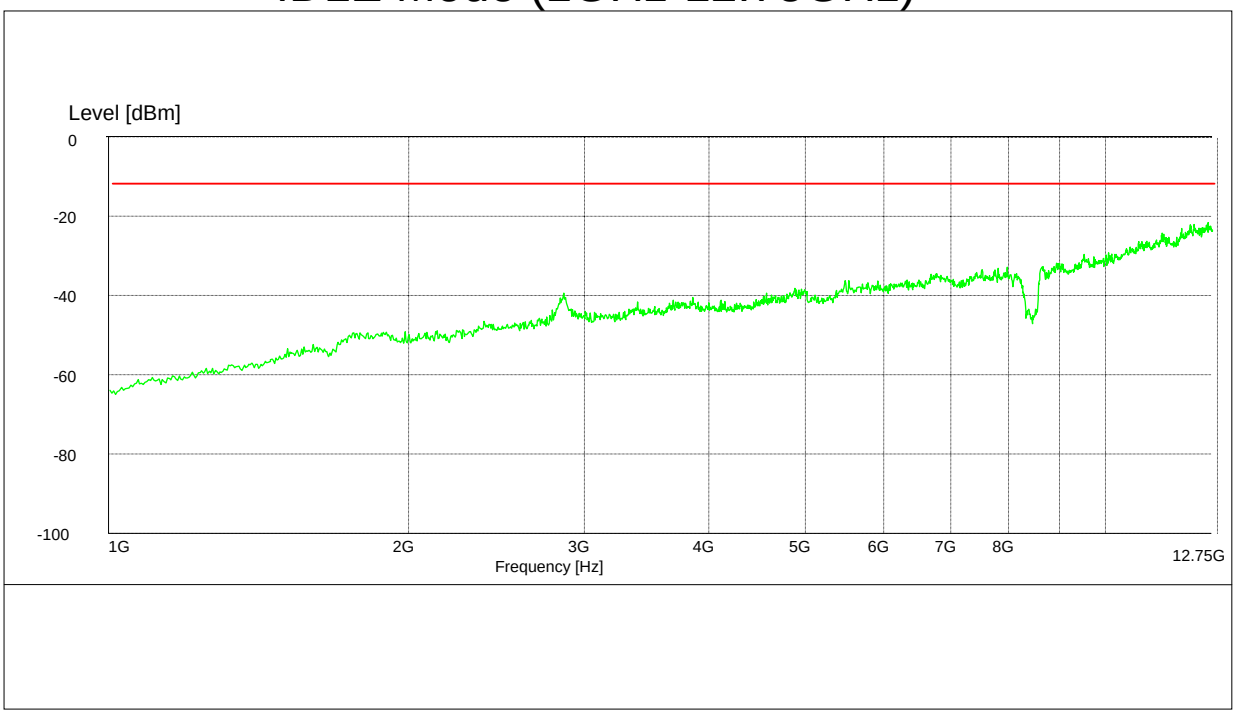
IDLE Mode (9 kHz-30MHz)



IDLE Mode (30MHz-1GHz)



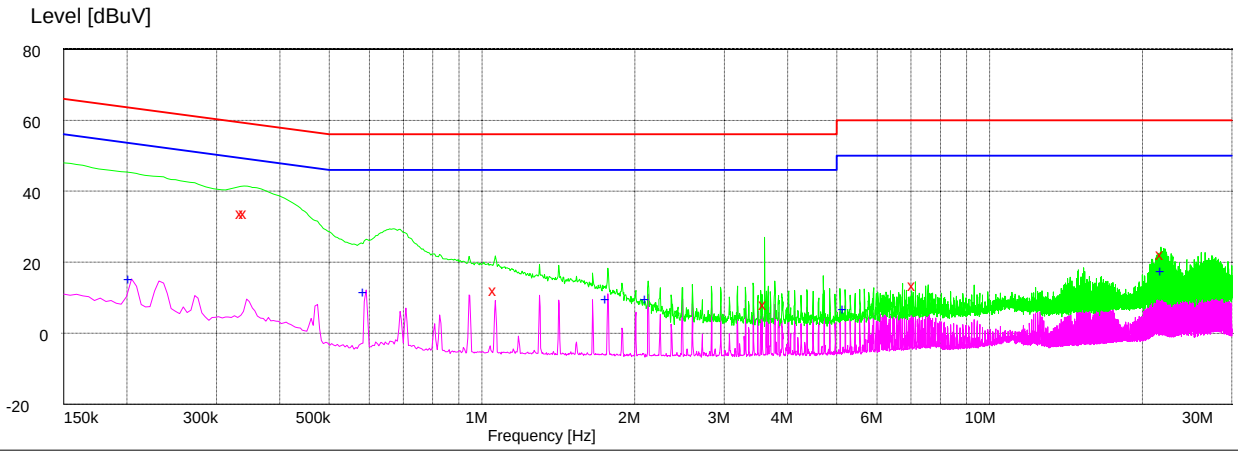
IDLE Mode (1GHz-12.75GHz)



Appendix G

Conducted Emission at Power Port

According to CFR 47 (FCC) part 15.107



MEASUREMENT RESULT: QP DECTER

Frequency （MHz）	Level （dBμV）	Transd （dB）	Limit （dBμV）	Margin （dB）	Line	PE
0.339000	34.20	0.9	59	25.0	L2	FLO
0.343500	34.20	0.8	59	24.9	L2	FLO
1.068000	12.80	0.6	56	43.2	L2	FLO
3.628500	8.80	0.5	56	47.2	L2	FLO
7.143000	14.10	0.8	60	45.9	L2	FLO
21.979500	22.70	2.9	60	37.3	L2	FLO

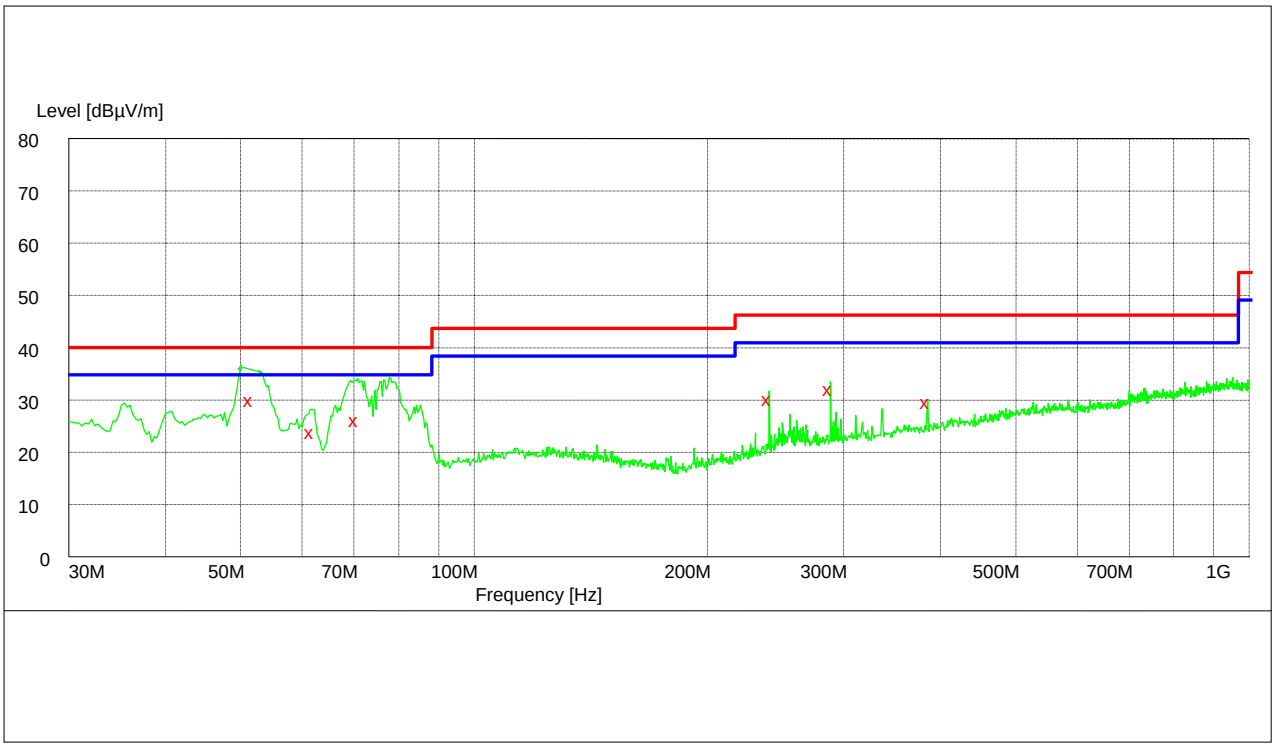
MEASUREMENT RESULT: “AV DECTER”

Frequency （MHz）	Level （dBμV）	Transd （dB）	Limit （dBμV）	Margin （dB）	Line	PE
0.204000	15.60	1.4	53	37.9	L2	FLO
0.591000	12.20	0.6	46	33.8	L2	FLO
1.774500	10.00	0.6	46	36.0	L2	FLO
2.125500	10.20	0.5	46	35.8	L2	FLO
5.199000	7.30	0.6	50	42.7	L2	FLO
21.979500	18.00	2.9	50	32.0	L2	FLO

Appendix H

Radiated Emission of Enclosure in Idle Mode

According to CFR 47 (FCC) part 15.109



MEASUREMENT RESULT: QP DECTER

Frequency (MHz)	Level (dBµV/m)	Transd (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (deg)	Polarisation
51.600000	30.30	-13.8	40.0	6.7	115.0	144.00	VERTICAL
61.800000	24.30	-9.8	40.0	15.7	100.0	20.00	VERTICAL
70.500000	26.50	-10.8	43.5	17.0	100.0	40.00	VERTICAL
240.600000	30.50	-11.7	46.0	15.5	105.0	30.00	VERTICAL
288.300000	32.40	-6.2	46.0	13.6	105.0	105.00	VERTICAL
384.770000	30.00	-5.1	46.0	16.0	100.0	10.00	VERTICAL

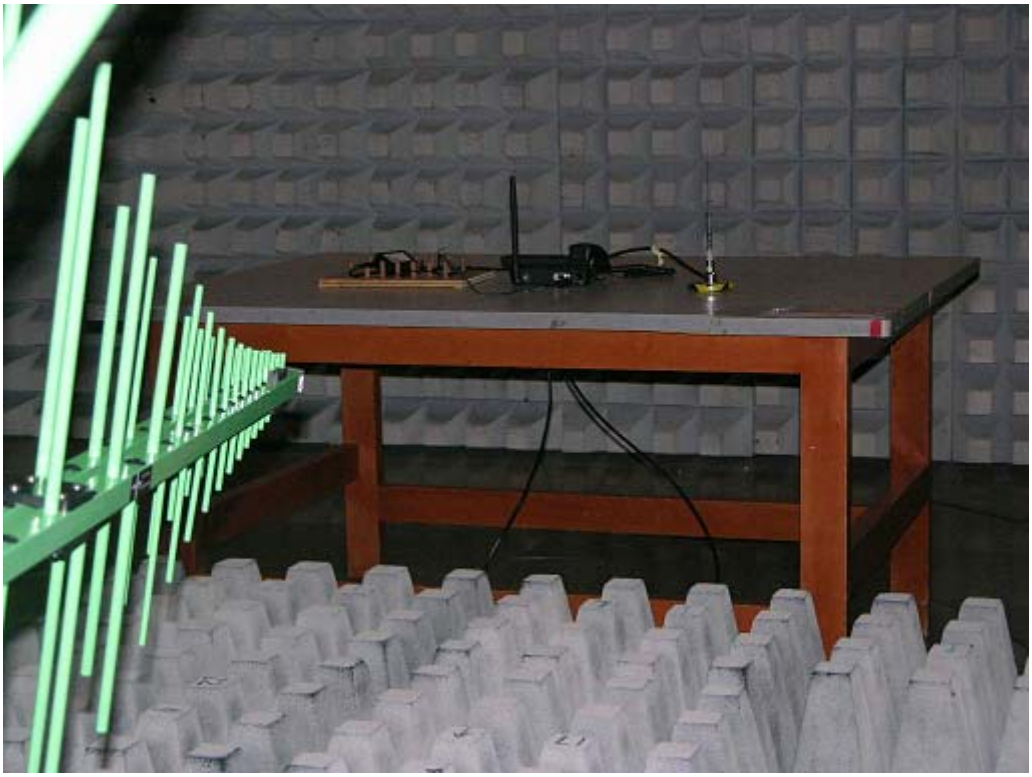
Appendix I

Photos of Test Setup

1 Radiated Emissions

Radiated Disturbance

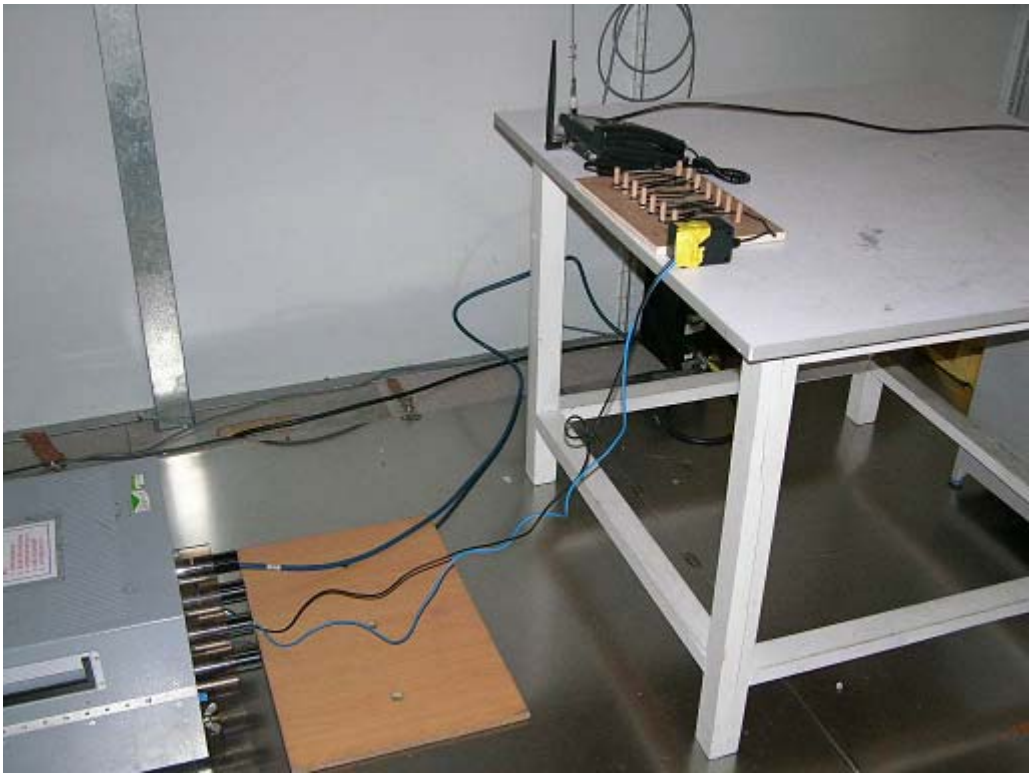
2 Radiated Spurious Emissions



Radiated Spurious Emission (below 1GHz)

Radiated Spurious Emission (above 1GHz)

3 Conducted Emissions



Conducted Emissions for AC Ports