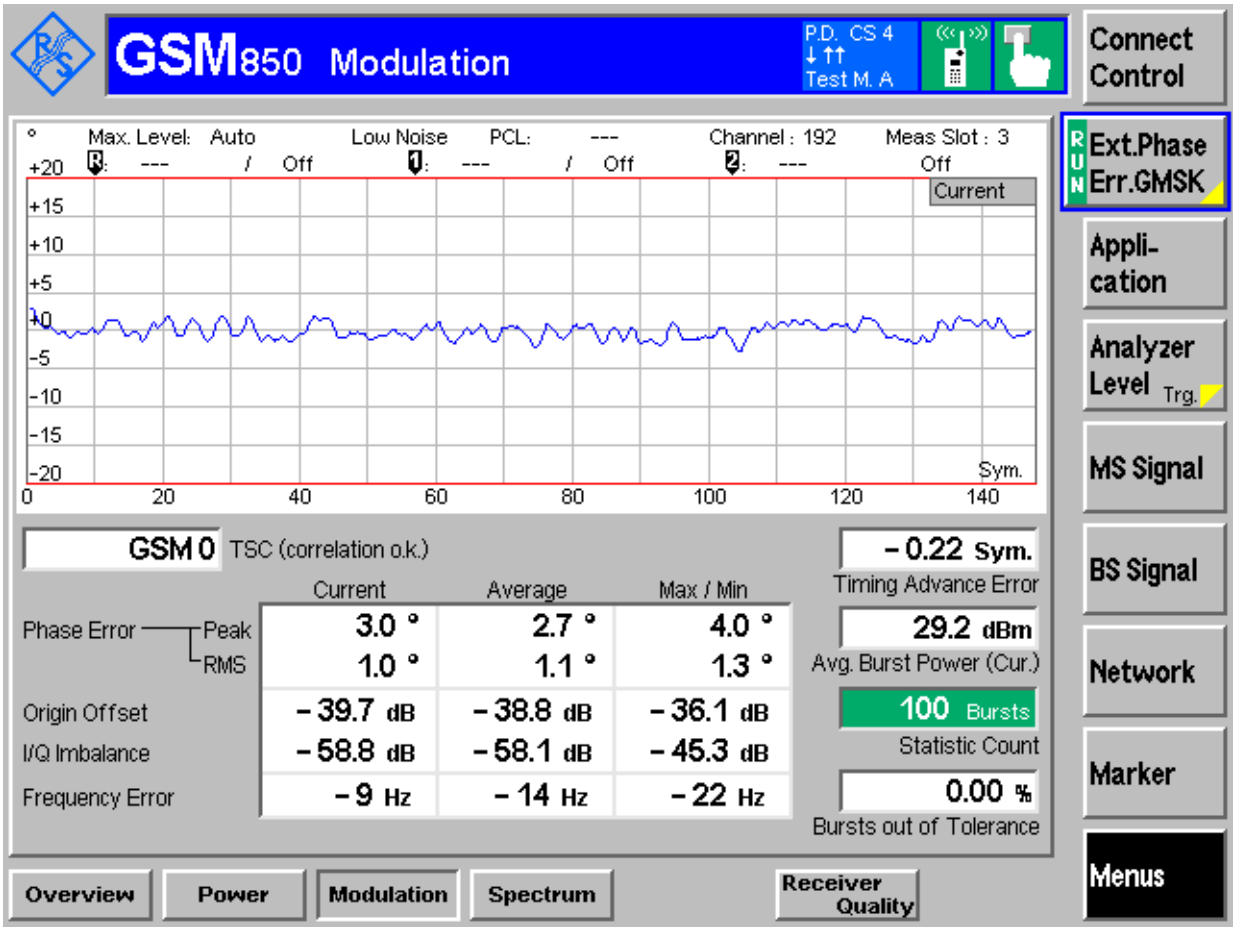
Appendix A

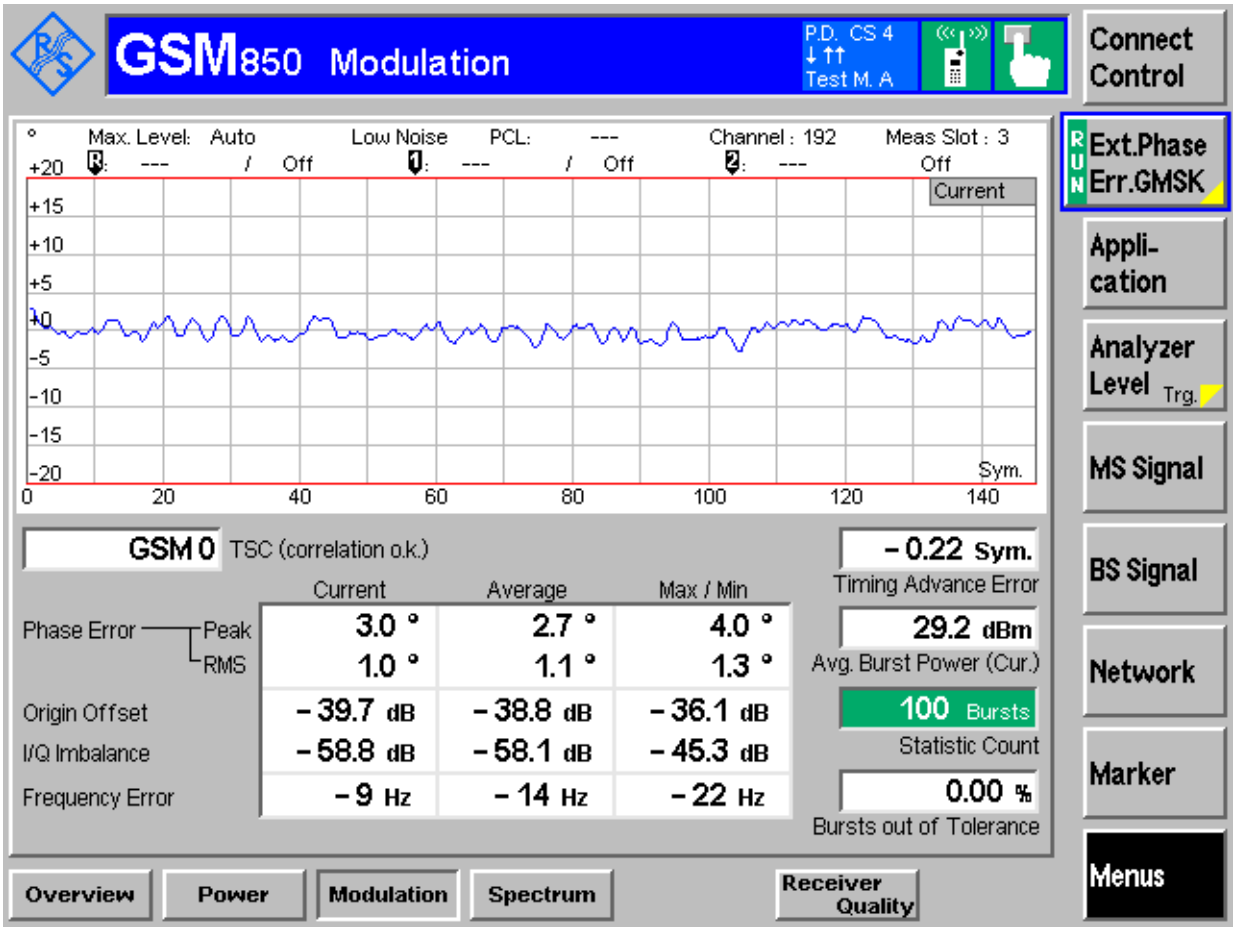
Modulation Characteristics

According to FCC Part 2.1047 & Part22 Subpart H

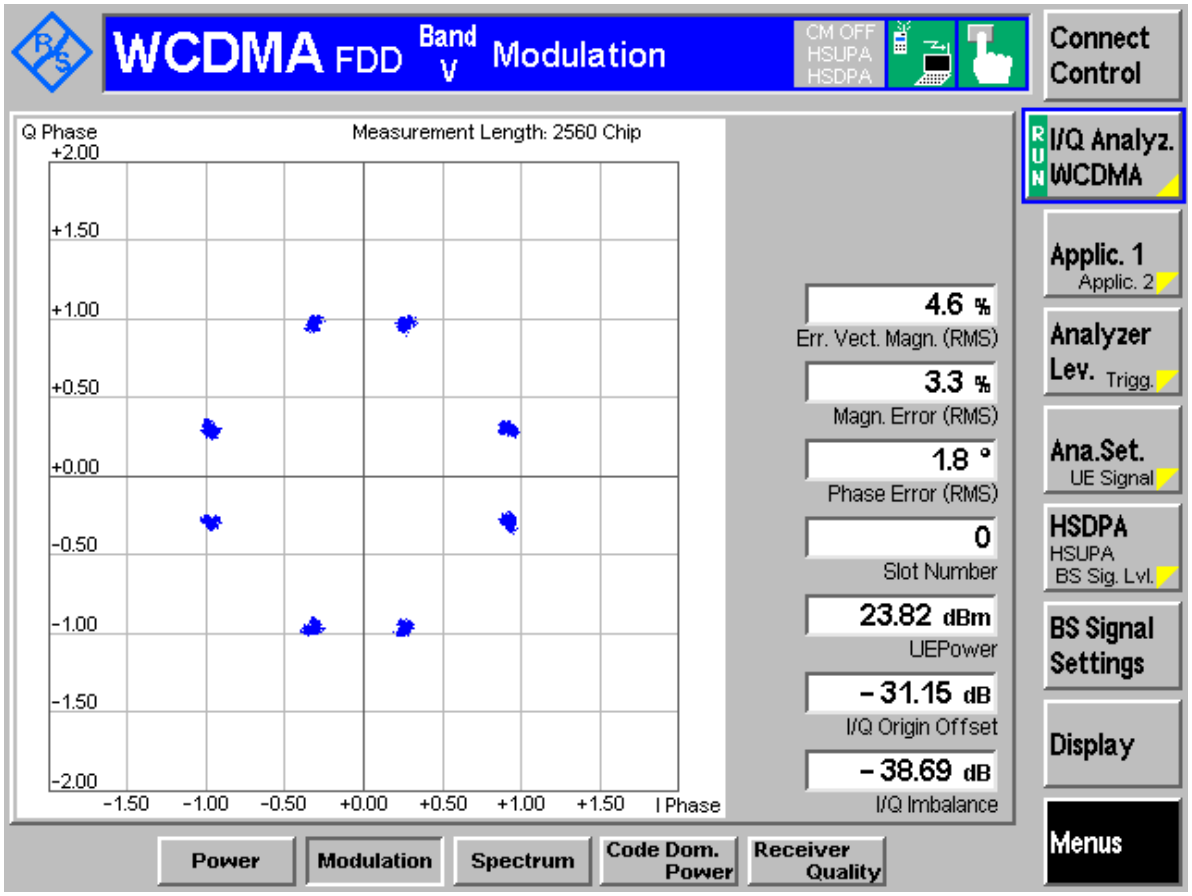
TM1:GPRS/GSM
Channel 192



TM2:EDGE
Channel 192



TM3: WCDMA
Channel 4182

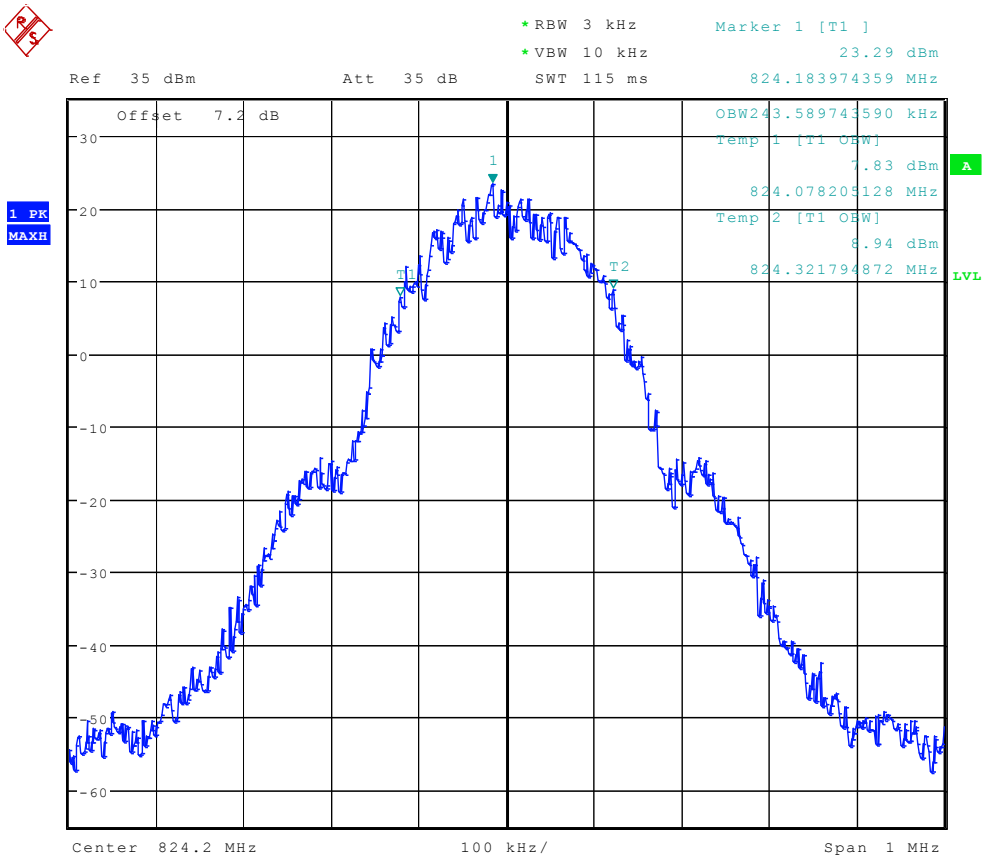


Appendix B

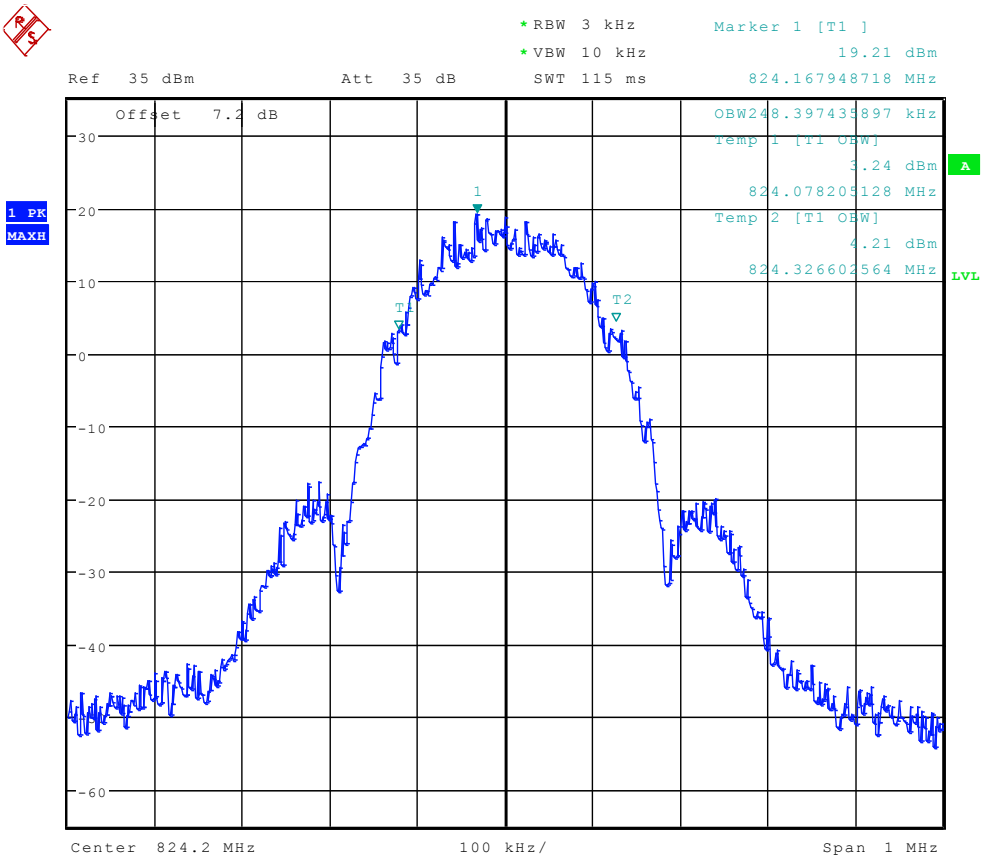
Occupied Bandwidth

According to FCC Part 2.1049 & Part 22 Subpart H

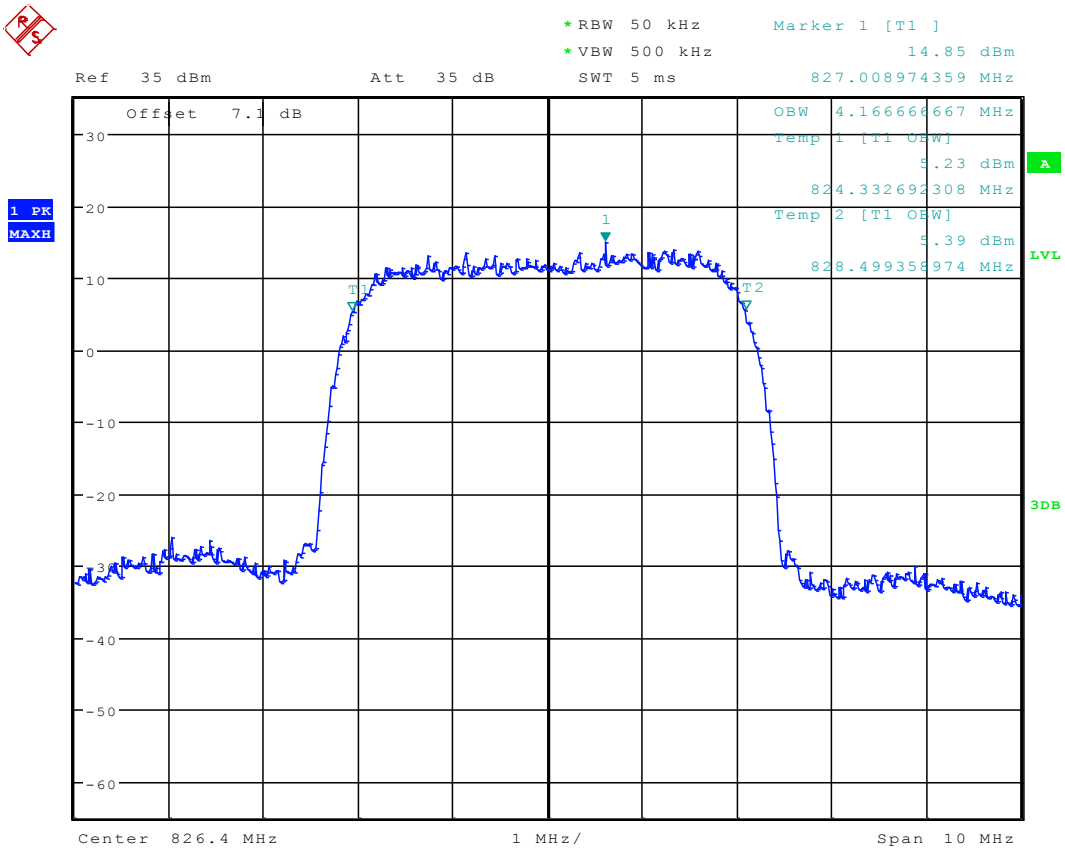
TM1:GPRS/GSM
Channel 128



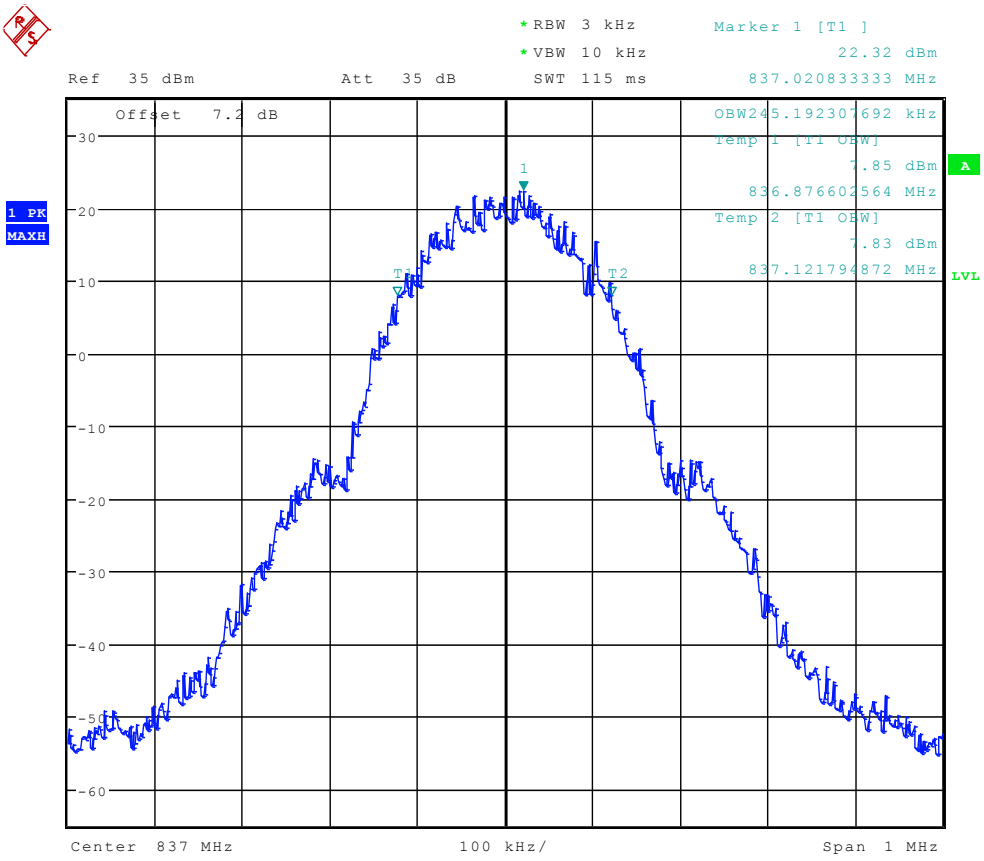
TM2:EDGE
Channel 128



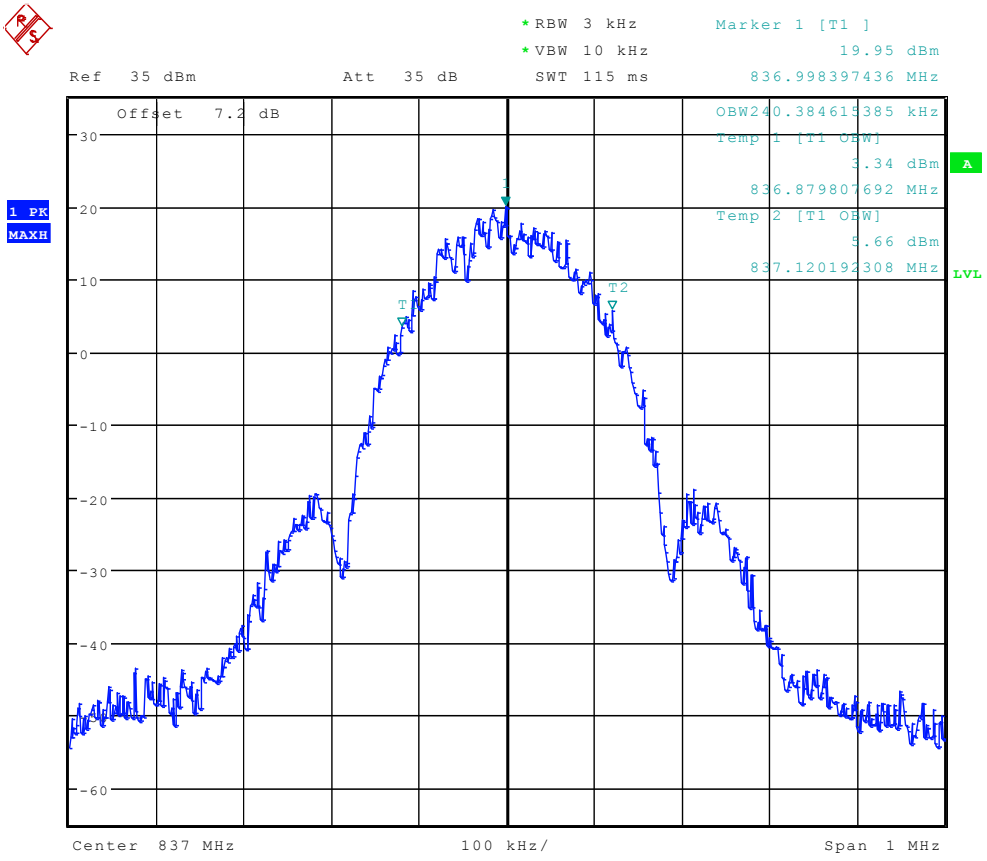
TM3: WCDMA
Channel 4132



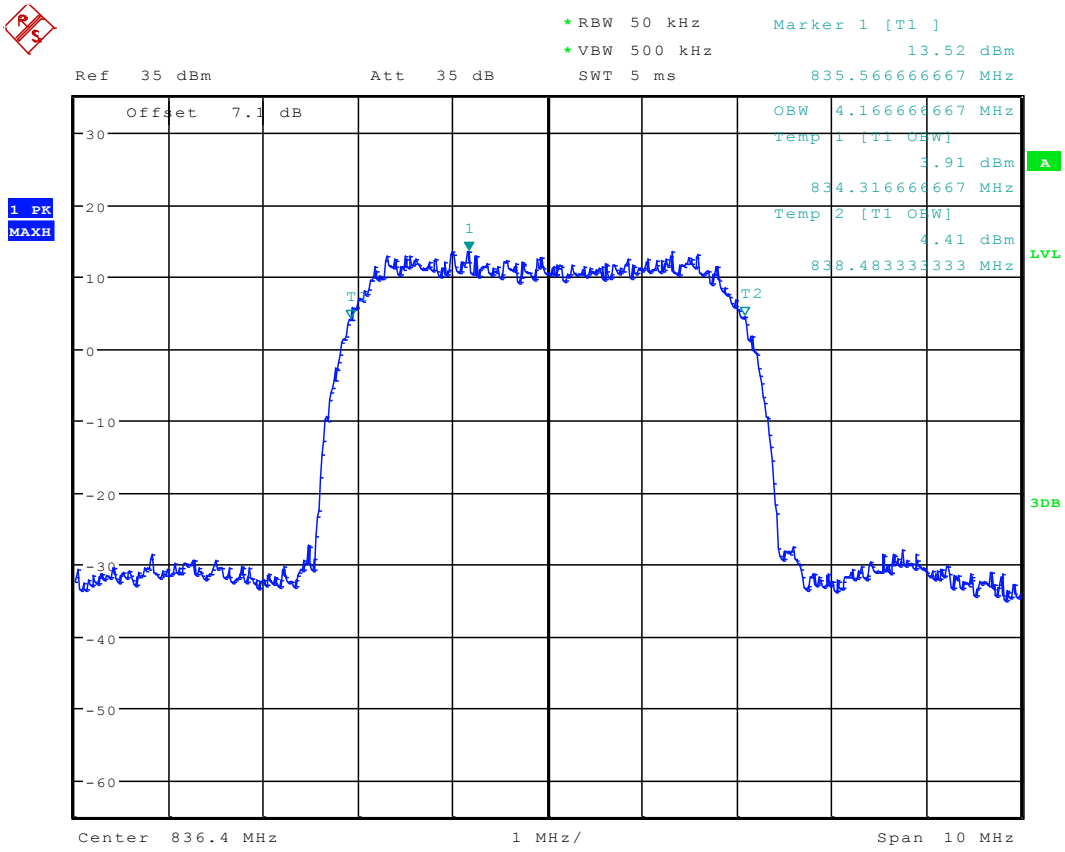
TM1:GPRS/GSM
Channel 192



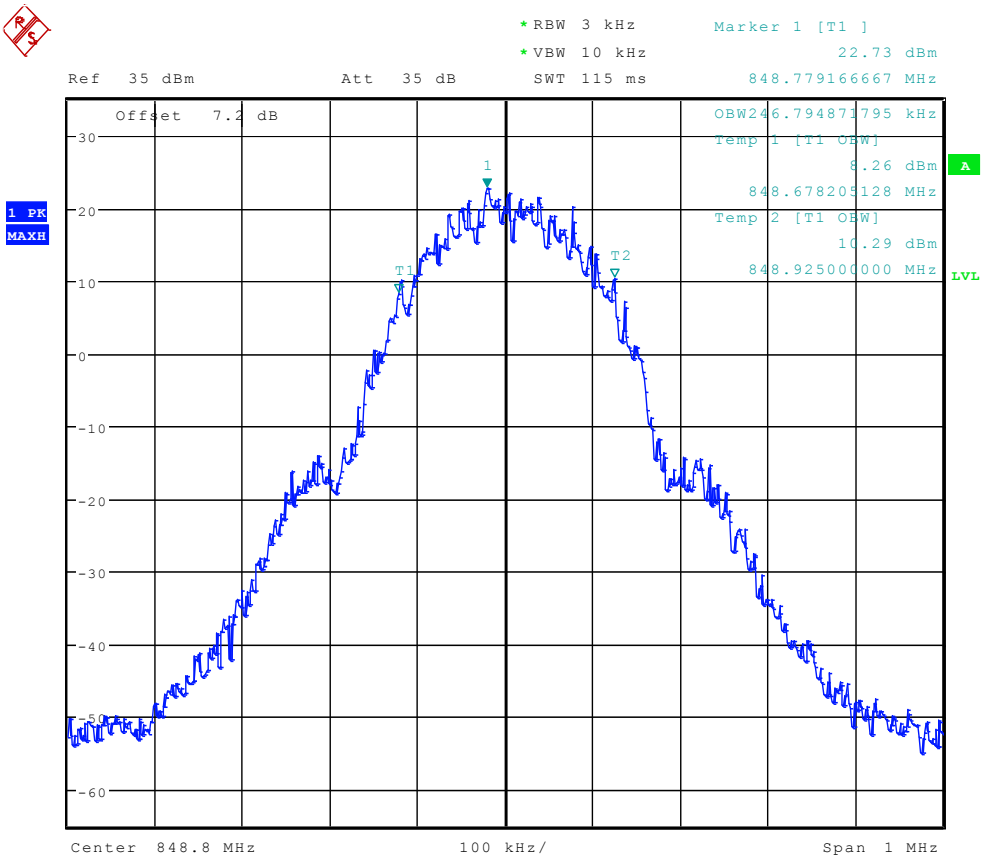
TM2:EDGE
Channel 192



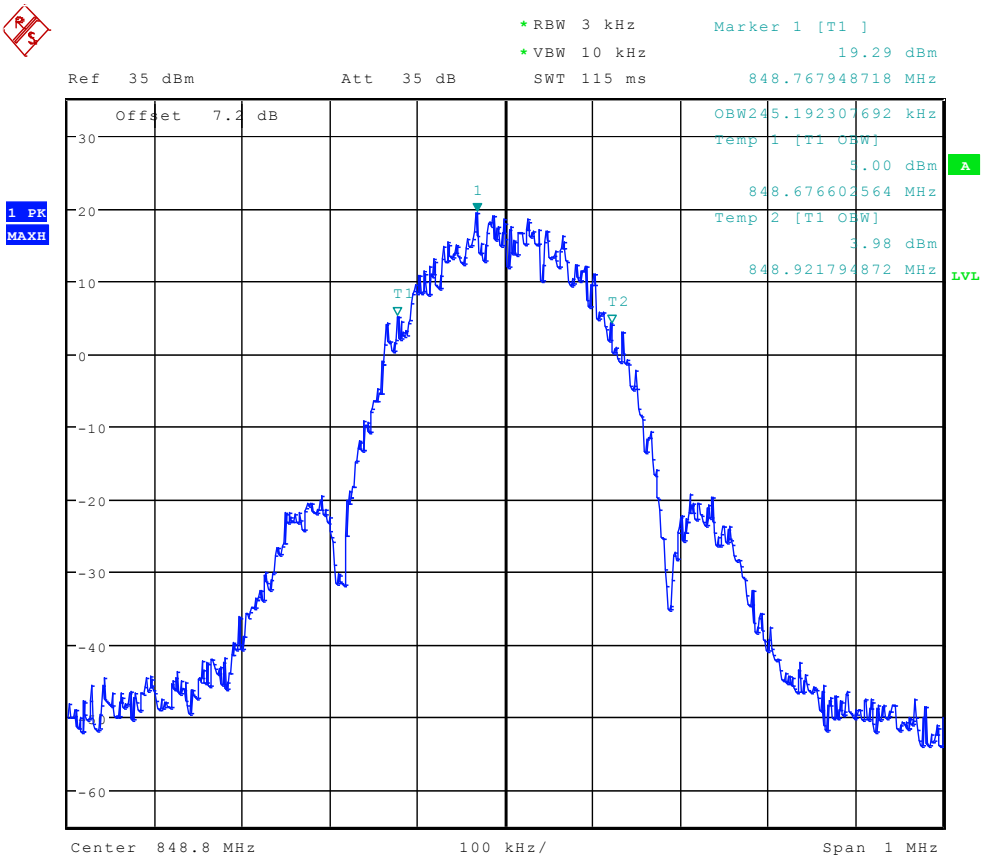
TM3: WCDMA
Channel 4182



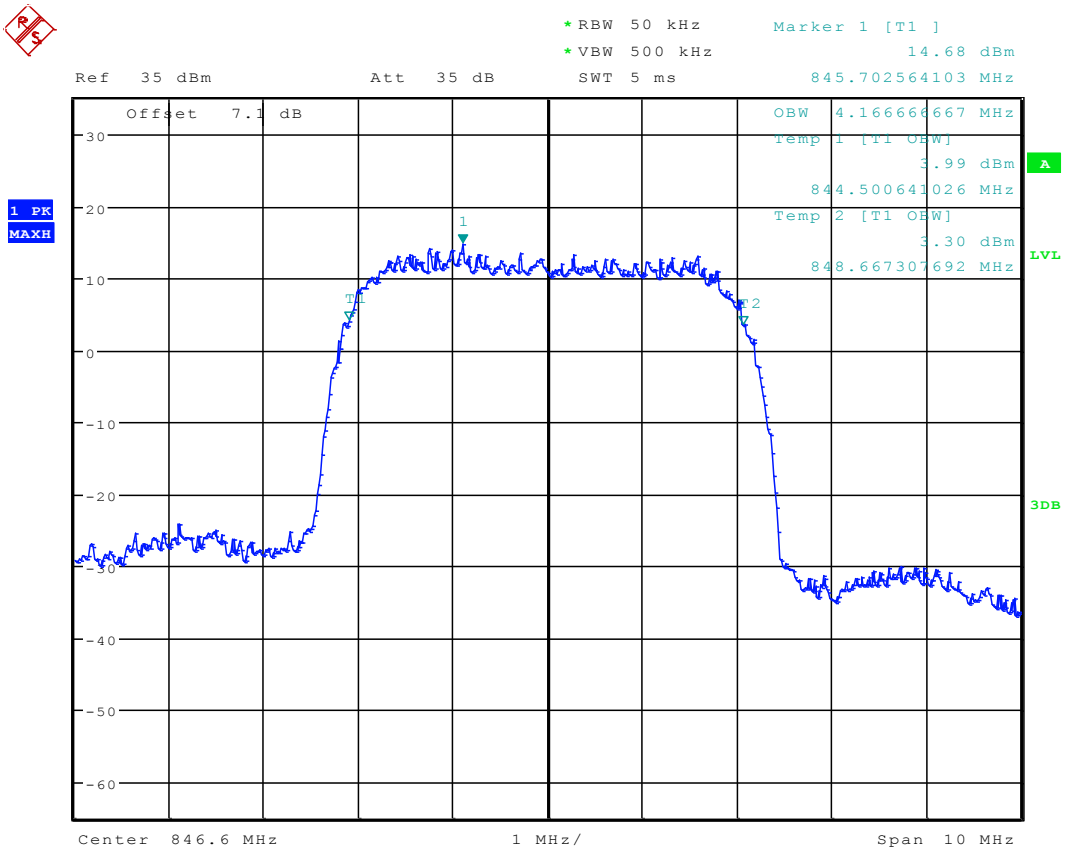
TM1:GPRS/GSM
Channel 251



TM2:EDGE
Channel 251



TM3: WCDMA
Channel 4233



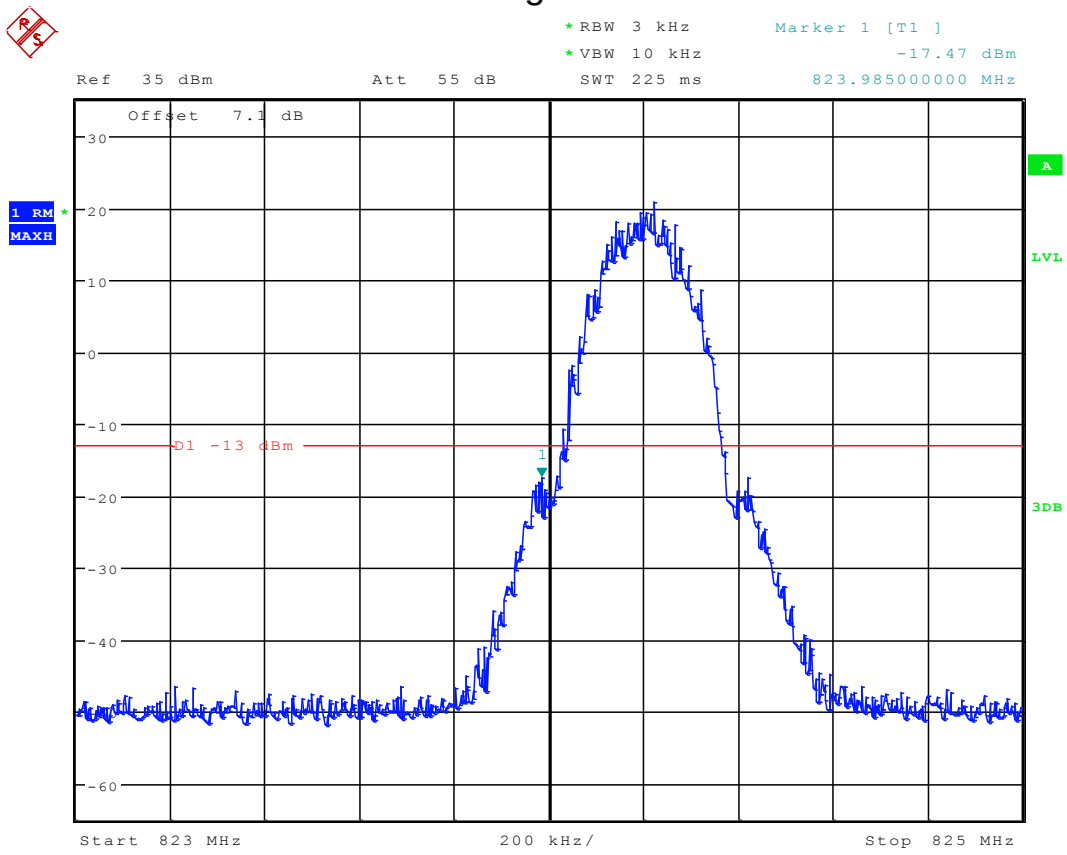
Appendix C

Band Edges Compliance

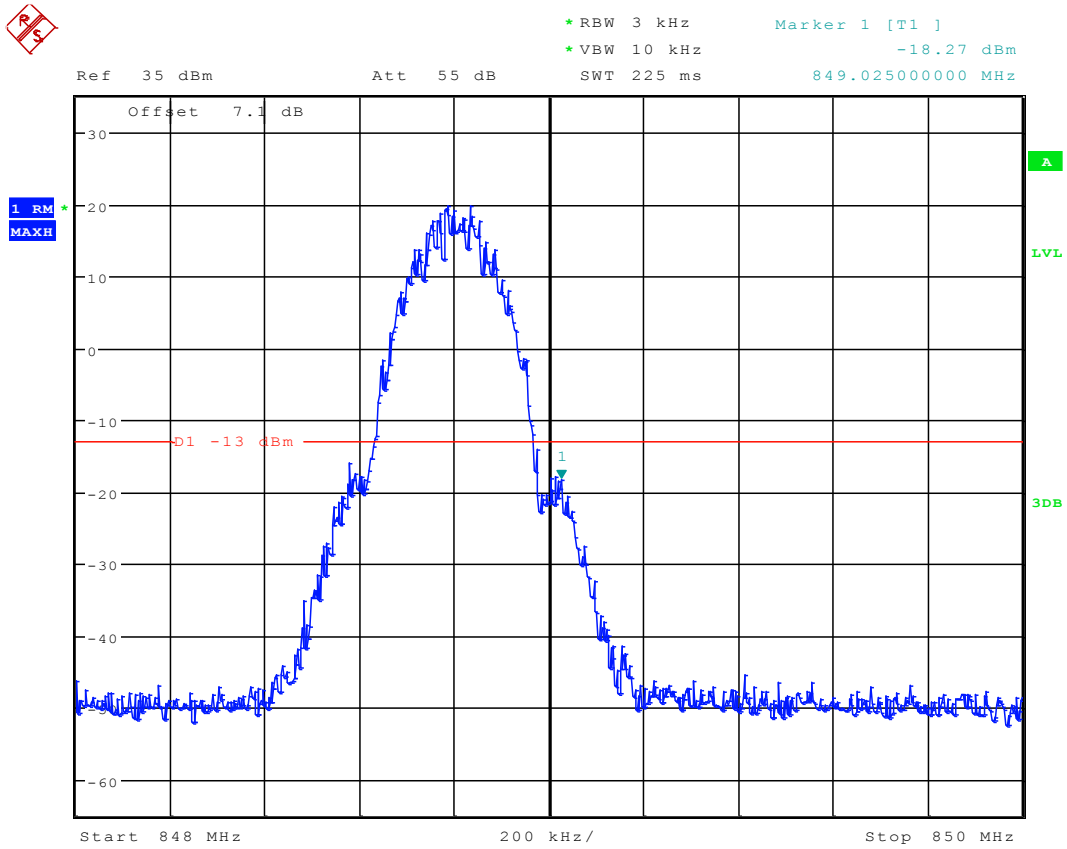
According to FCC Part 2.1051 & 22.917

TM1:GPRS/GSM

Left Edge Channel 128



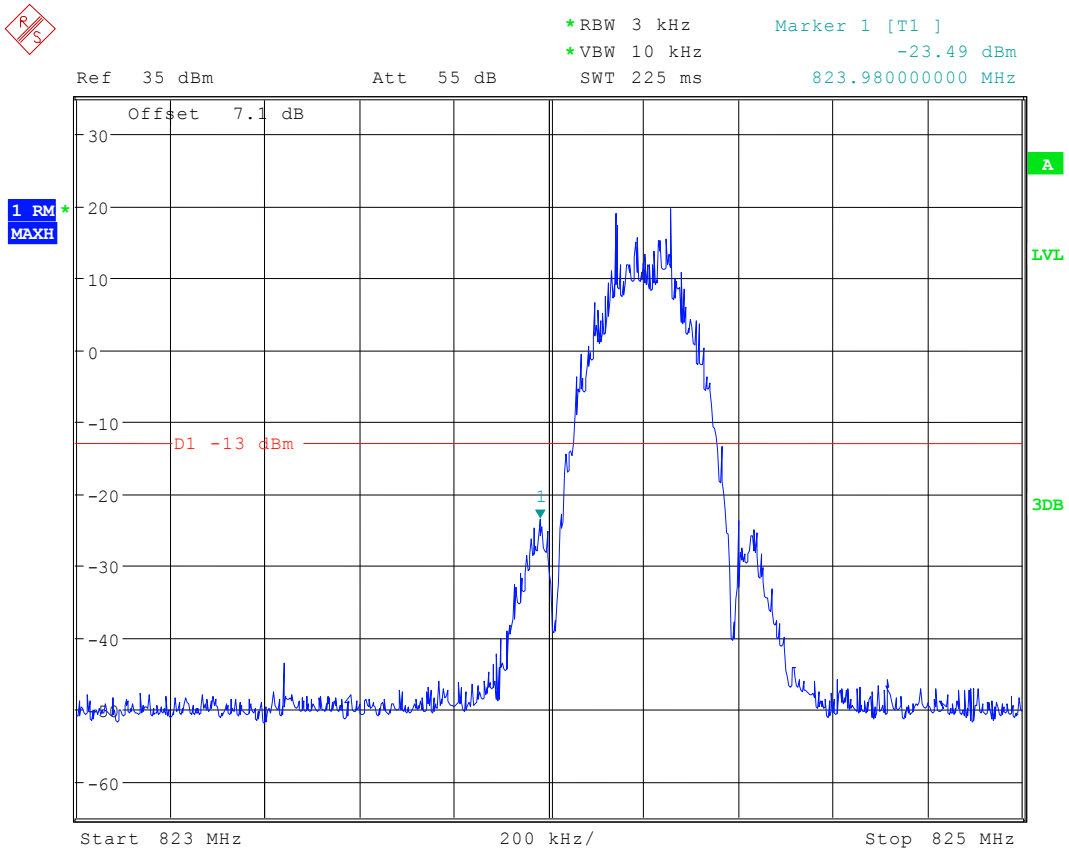
Right Edge
Channel 251



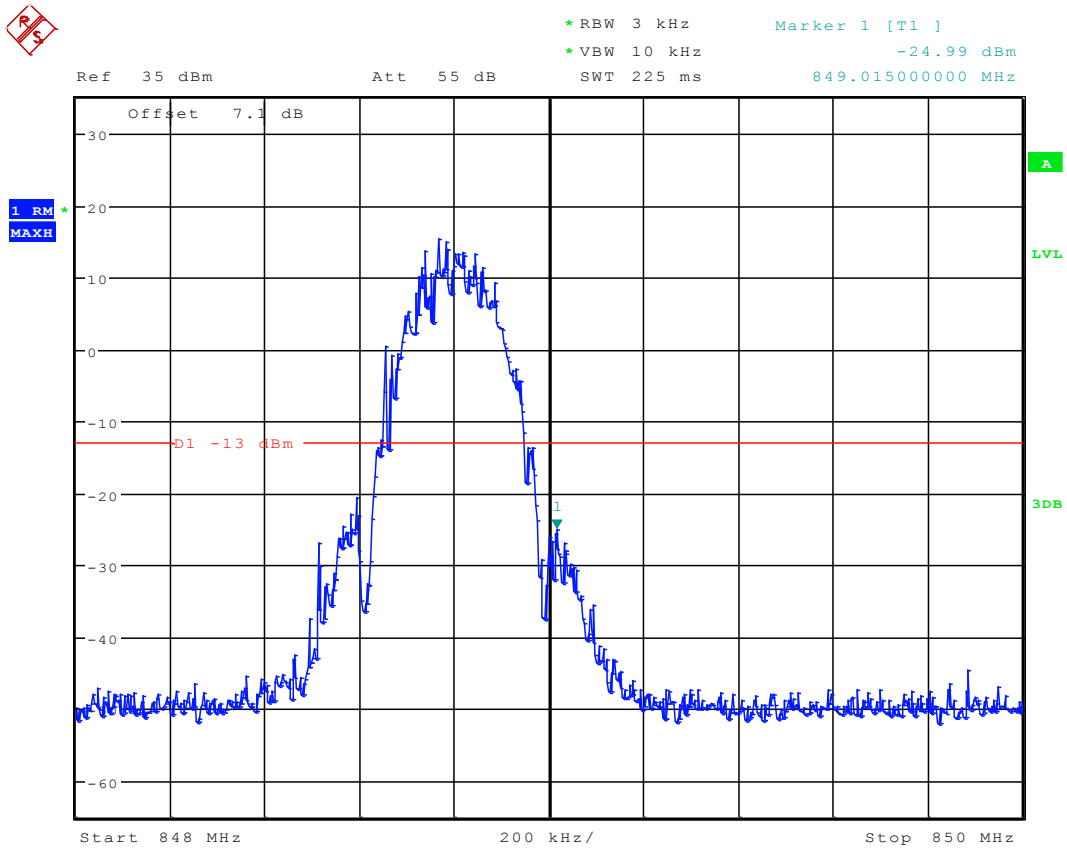
TM2:EDGE

Left Edge

Channel 128



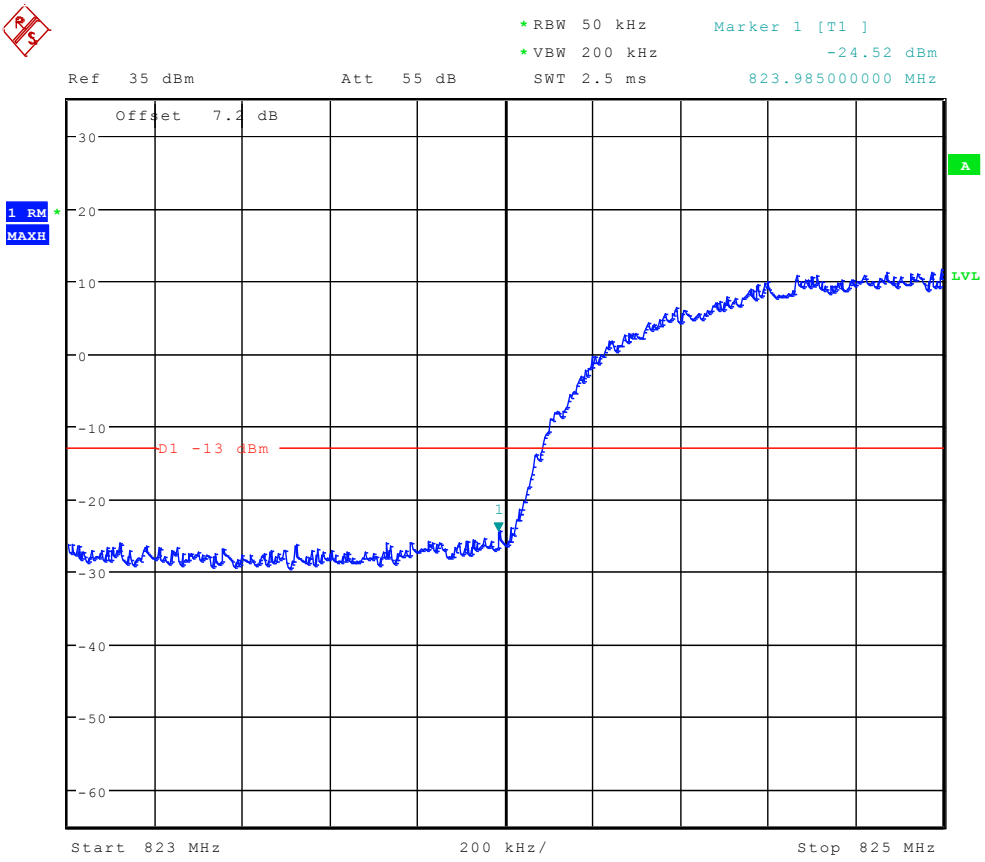
Right Edge
Channel 251



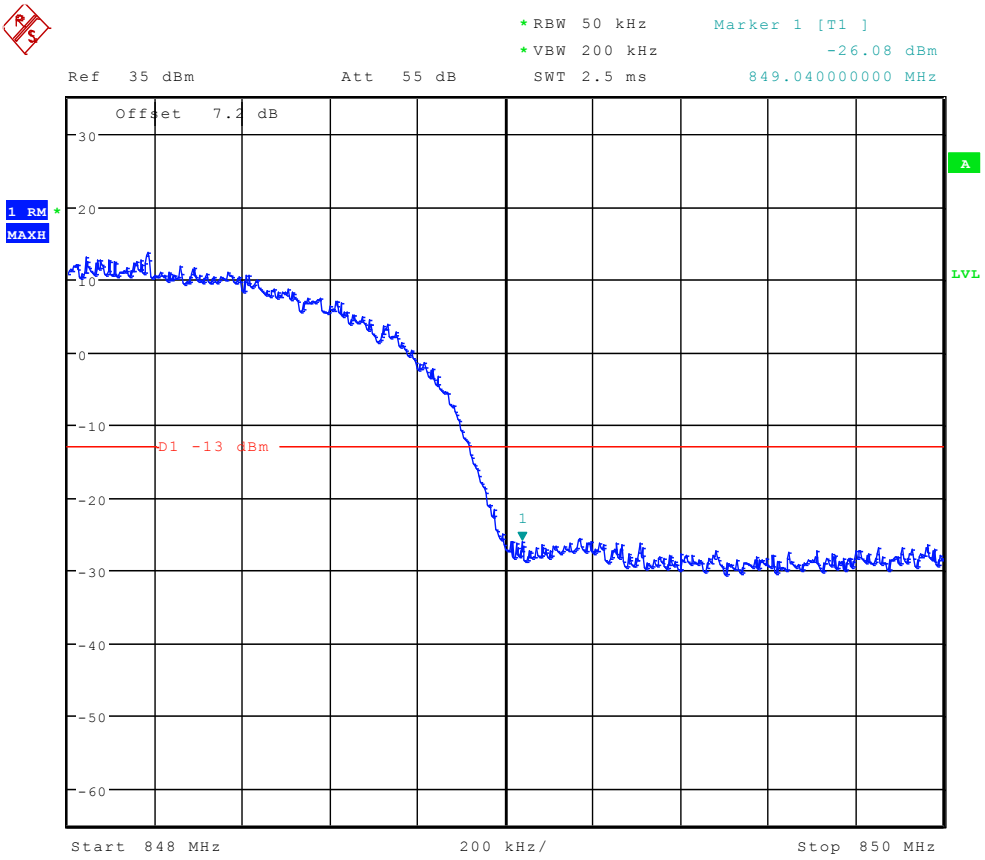
TM3: WCDMA

Left Edge

Channel 4132



Right Edge
Channel 4233



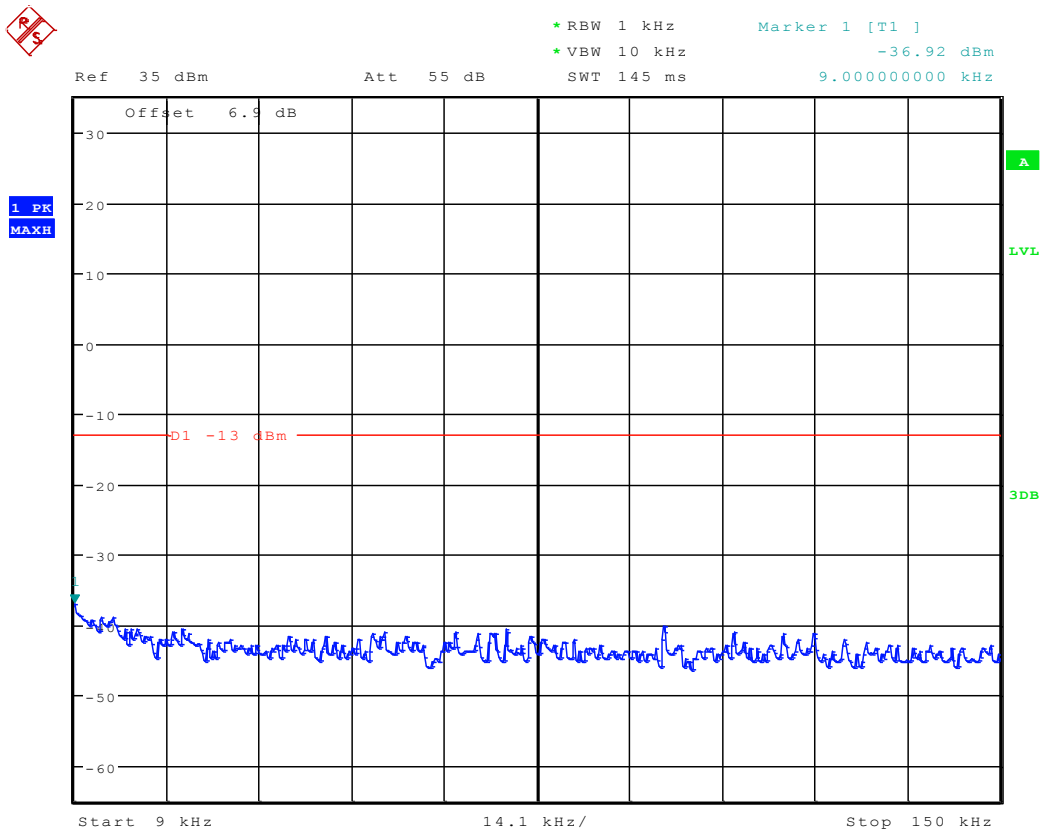
Appendix D

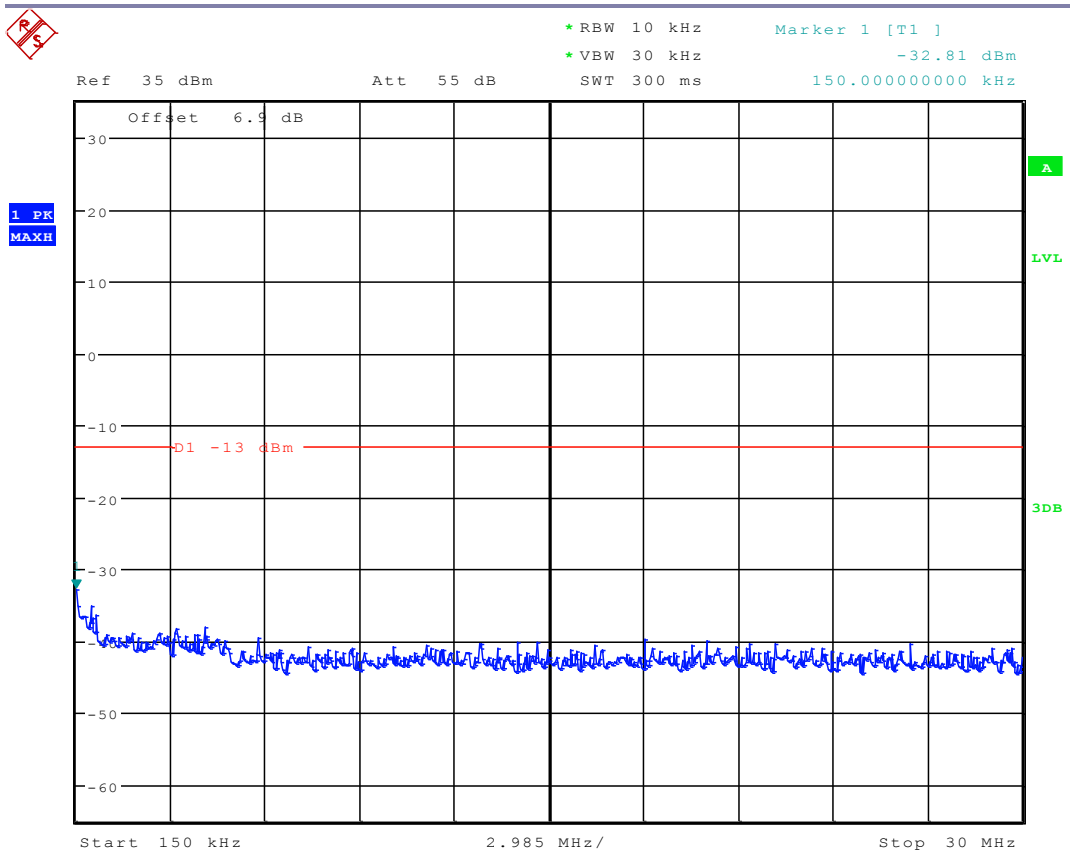
Spurious Emission at Antenna Terminal

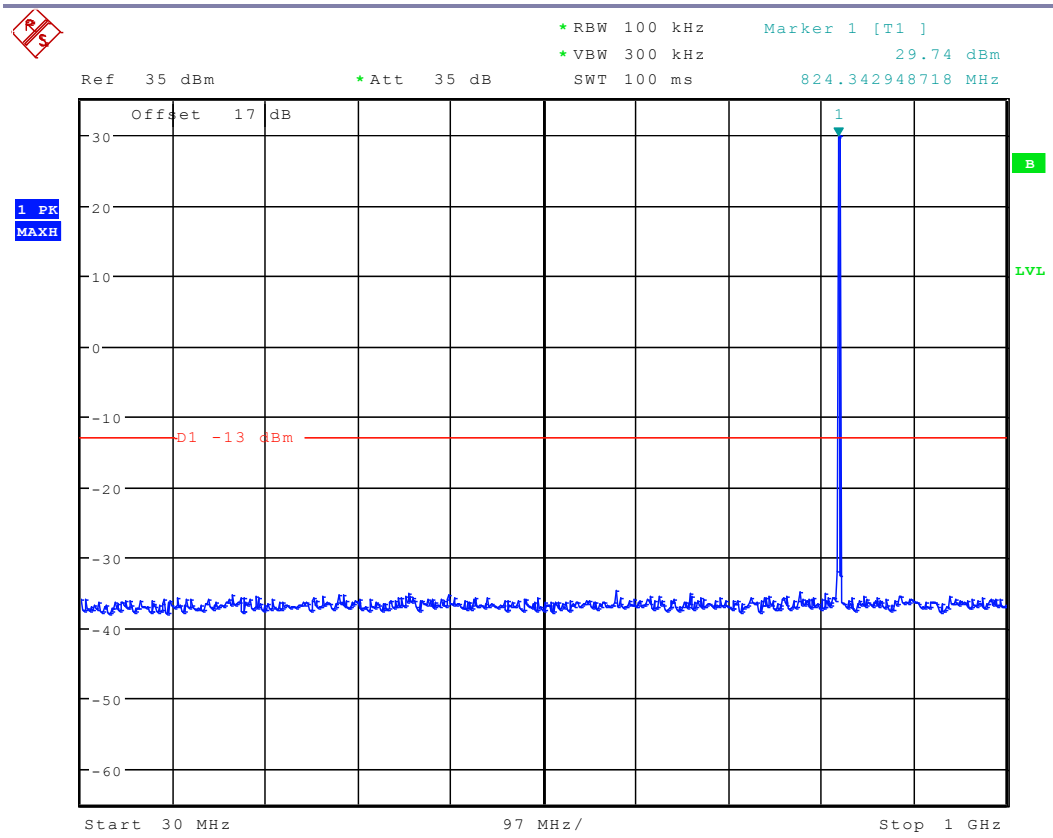
According to FCC Part 2.1051 & 22.917

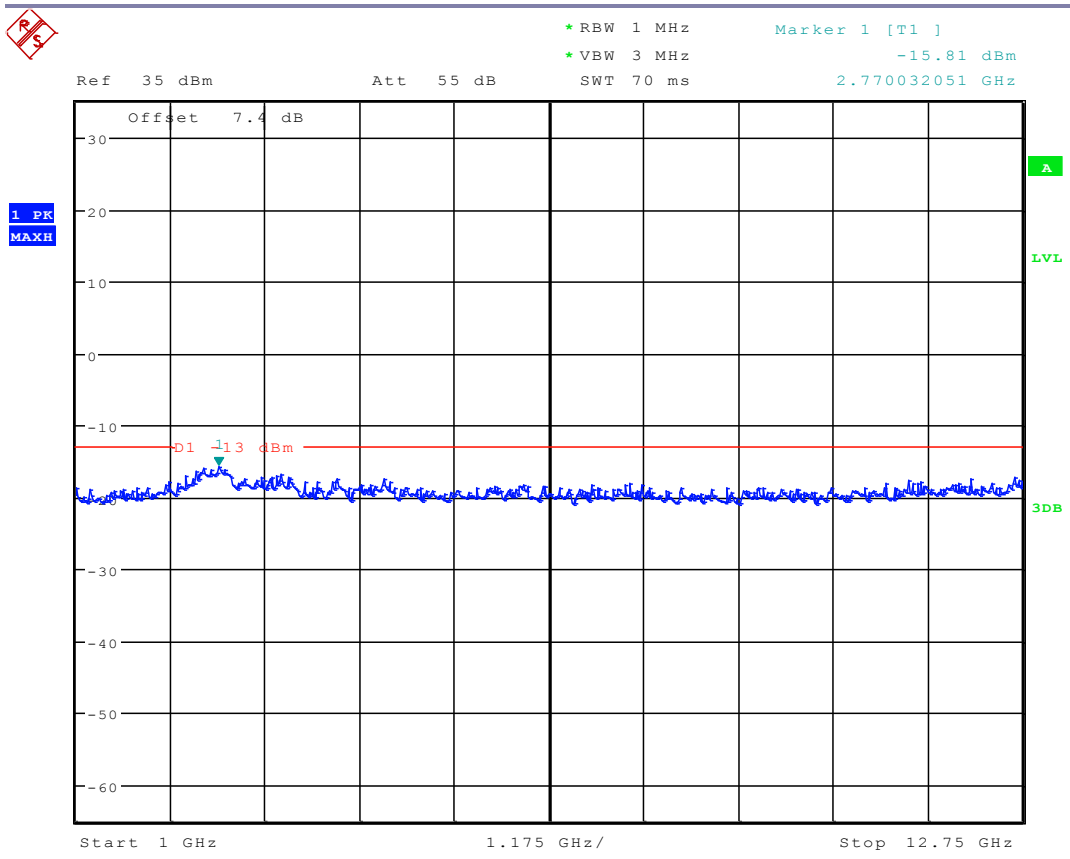
TM1:GPRS/GSM

Channel 128

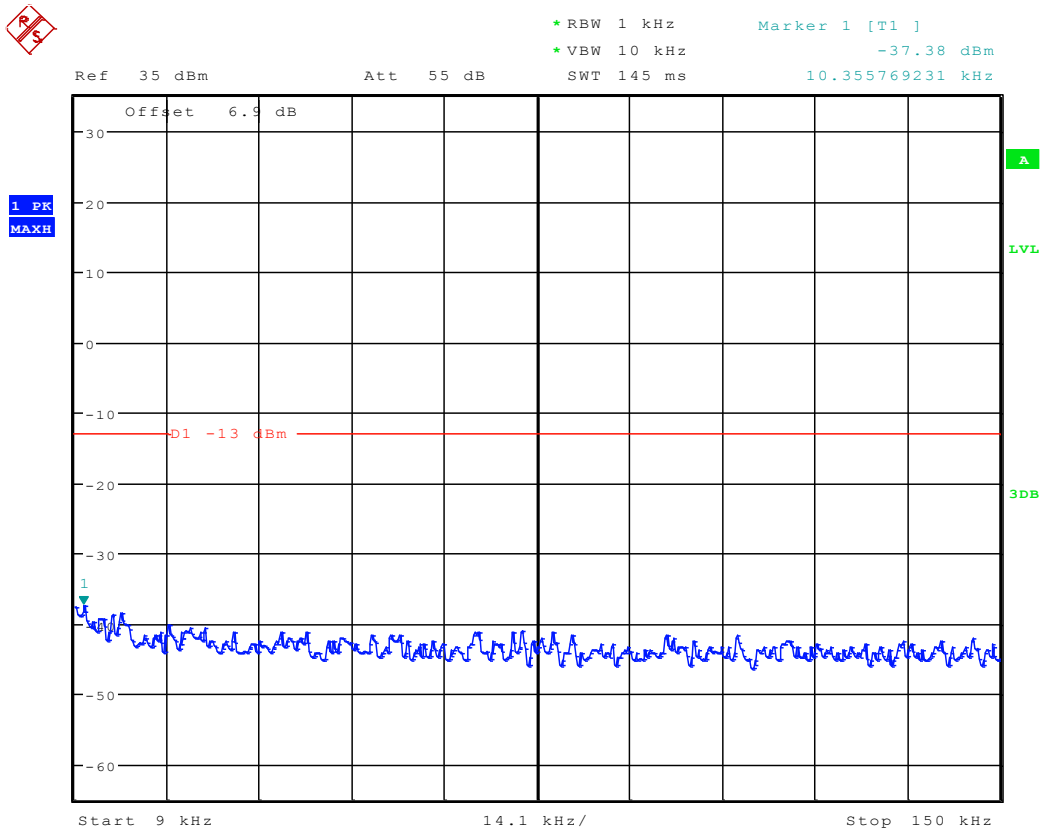


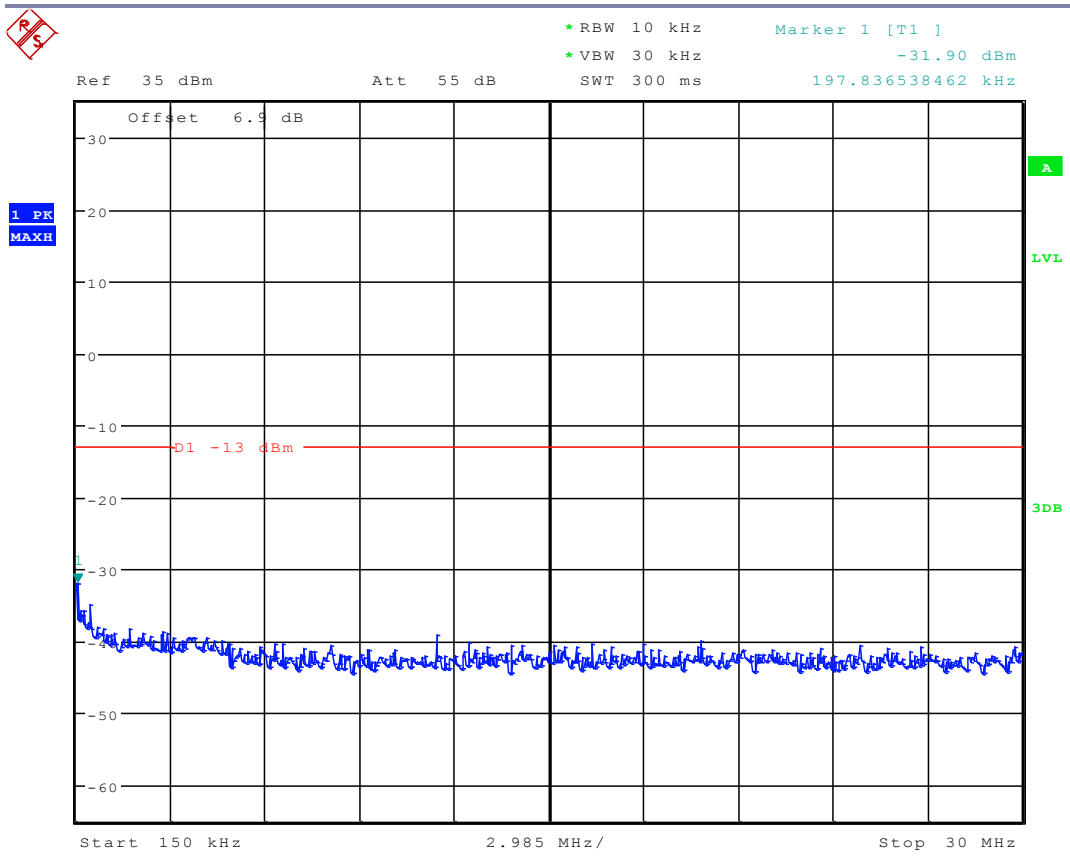

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-32.81 dBm
150.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

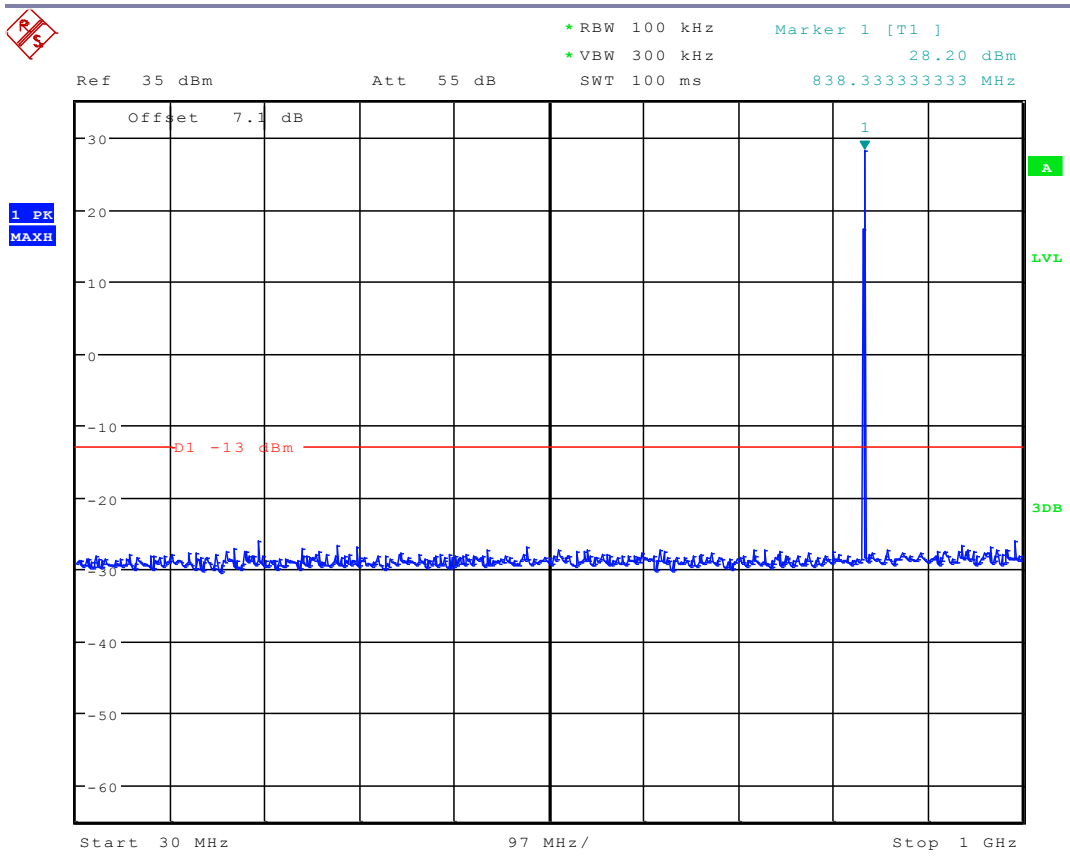

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
29.74 dBm
824.342948718 MHz
Ref 35 dBm
Att 35 dB
Offset 17 dB
1 PK
MAXH
B
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

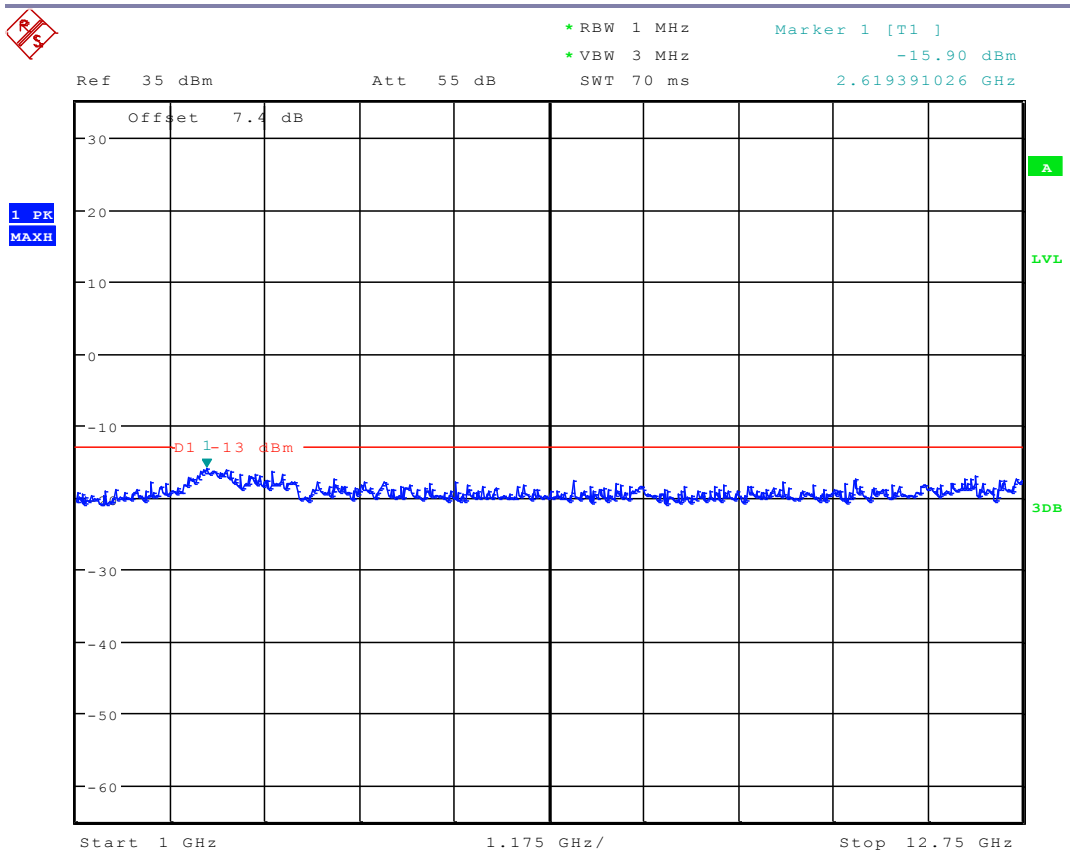

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-15.81 dBm
2.770032051 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 13 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 192

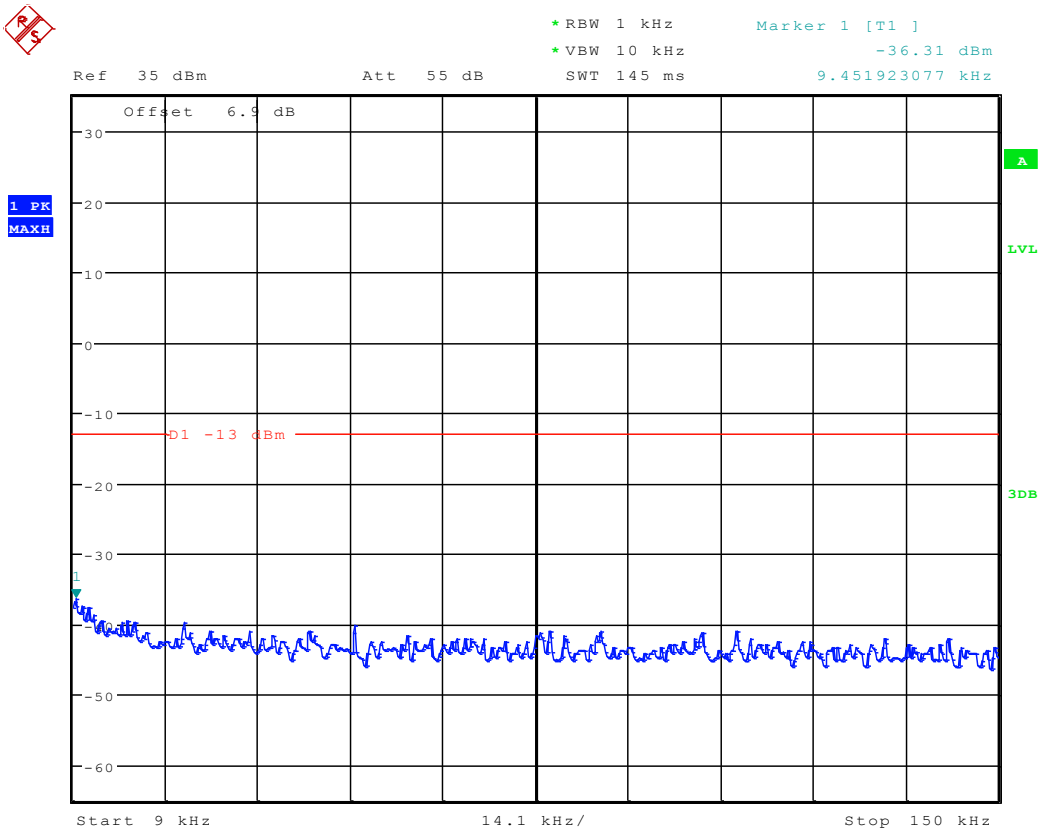

RBW 1 kHz
VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-37.38 dBm
10.355769231 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
Start 9 kHz
14.1 kHz/
Stop 150 kHz

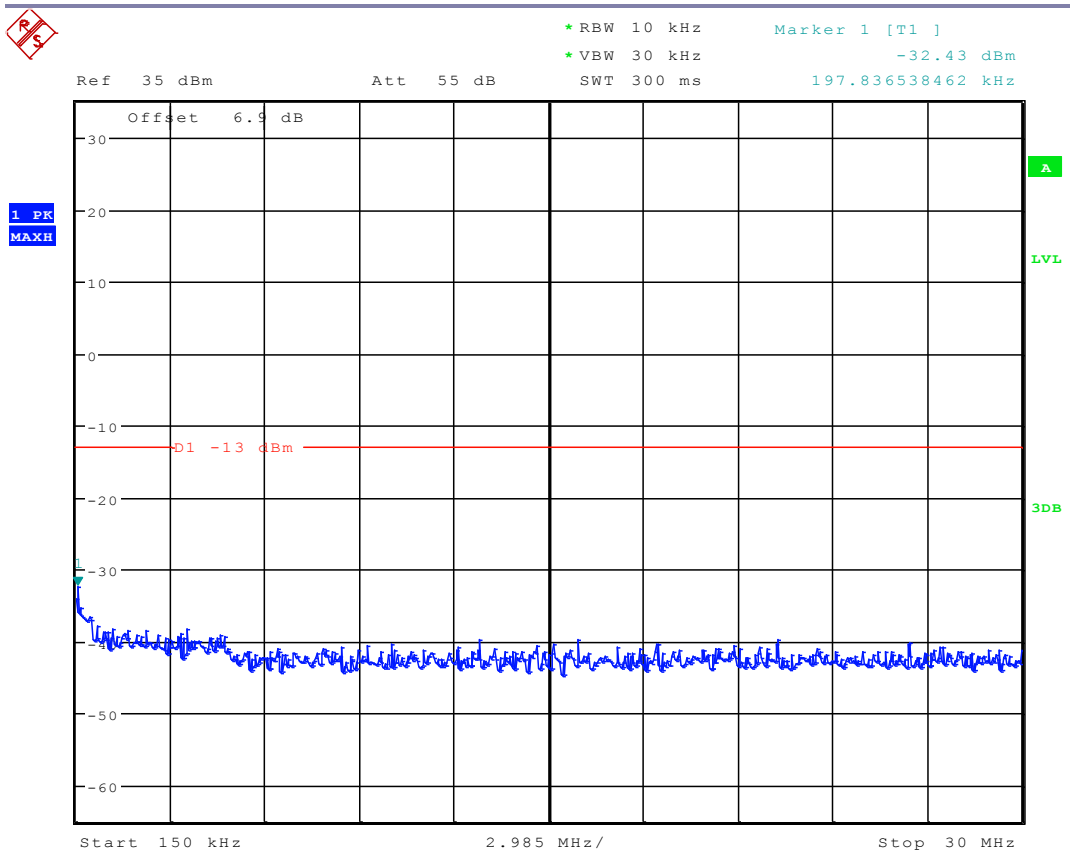

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-31.90 dBm
197.836538462 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

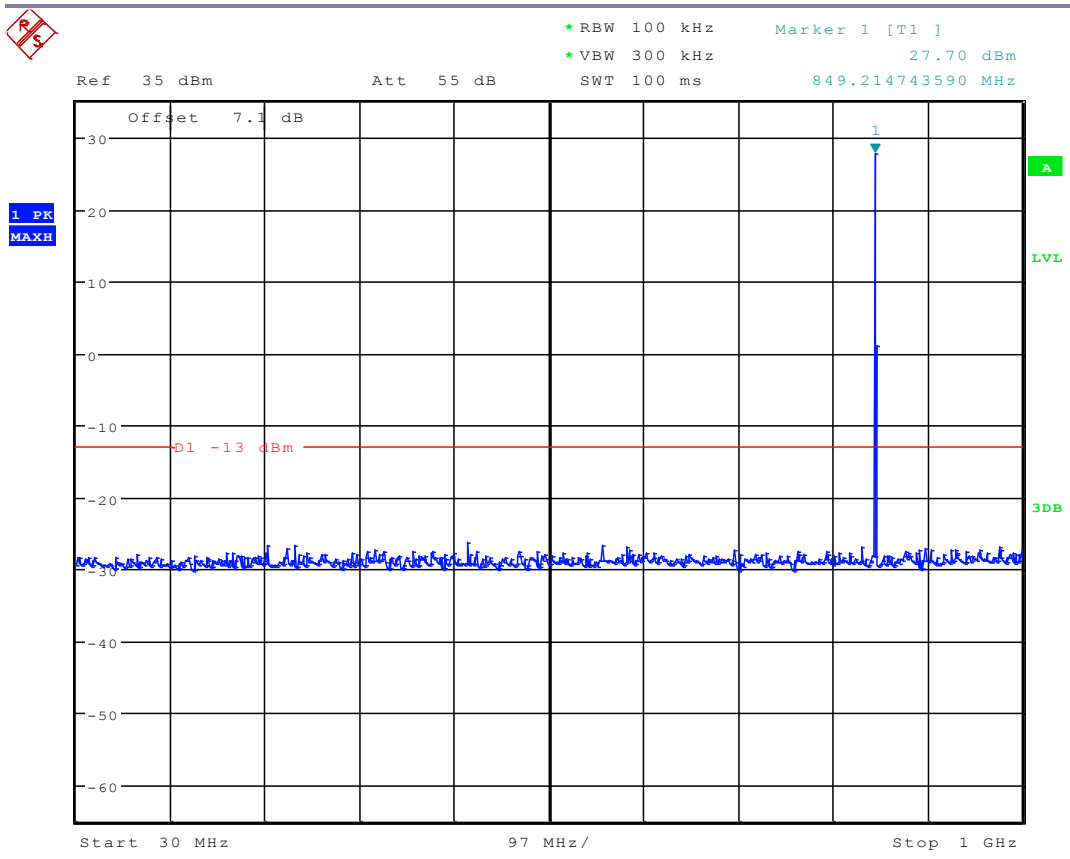

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
28.20 dBm
838.333333333 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

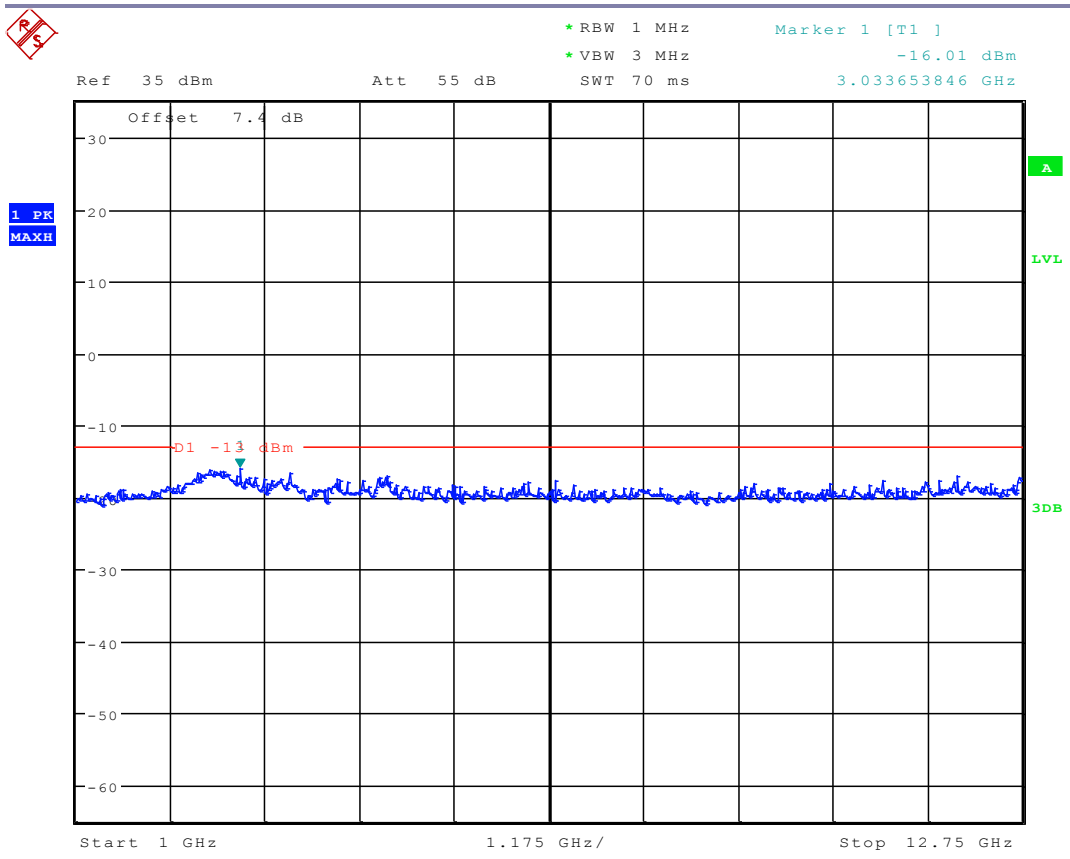

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-15.90 dBm
2.619391026 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 251

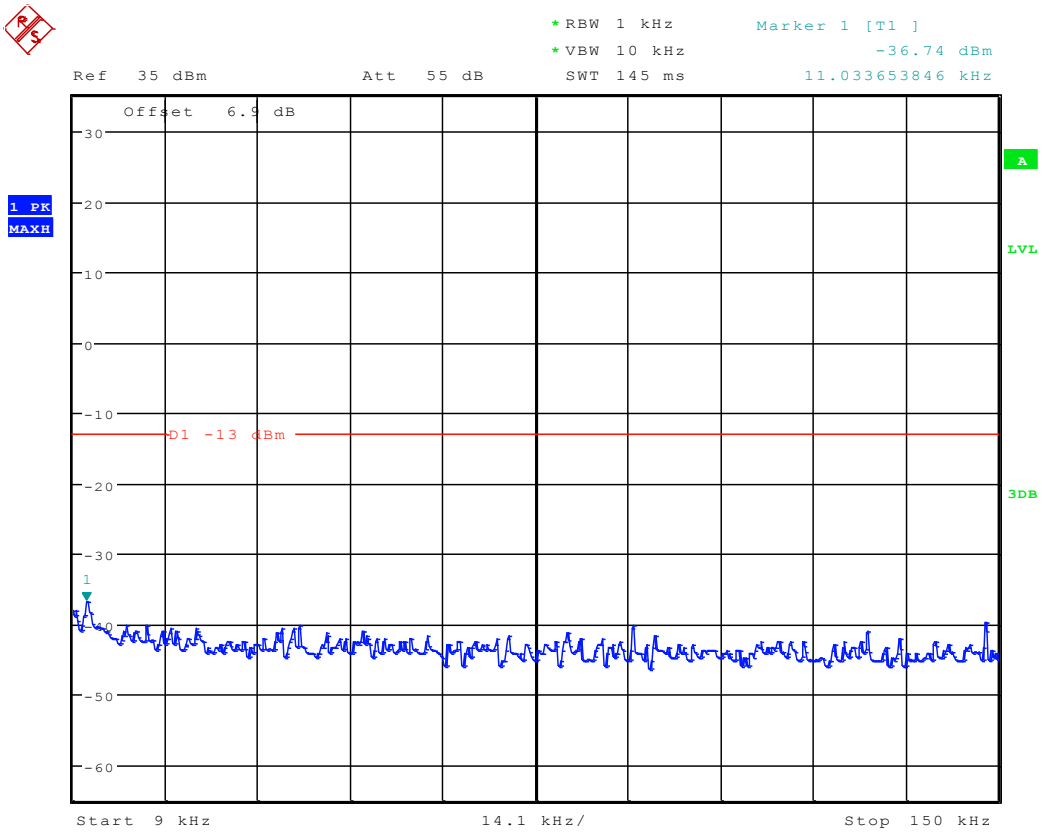

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-36.31 dBm
9.451923077 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-50
-60
Start 9 kHz
14.1 kHz/
Stop 150 kHz

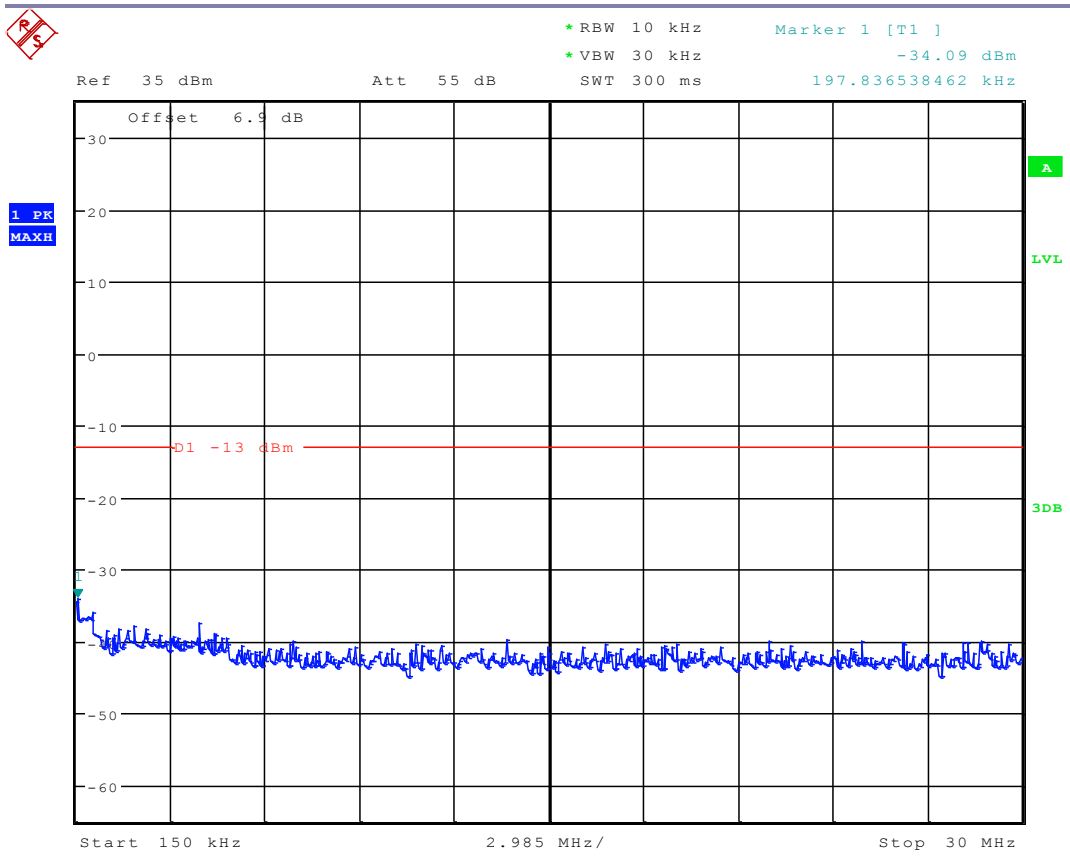

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-32.43 dBm
197.836538462 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

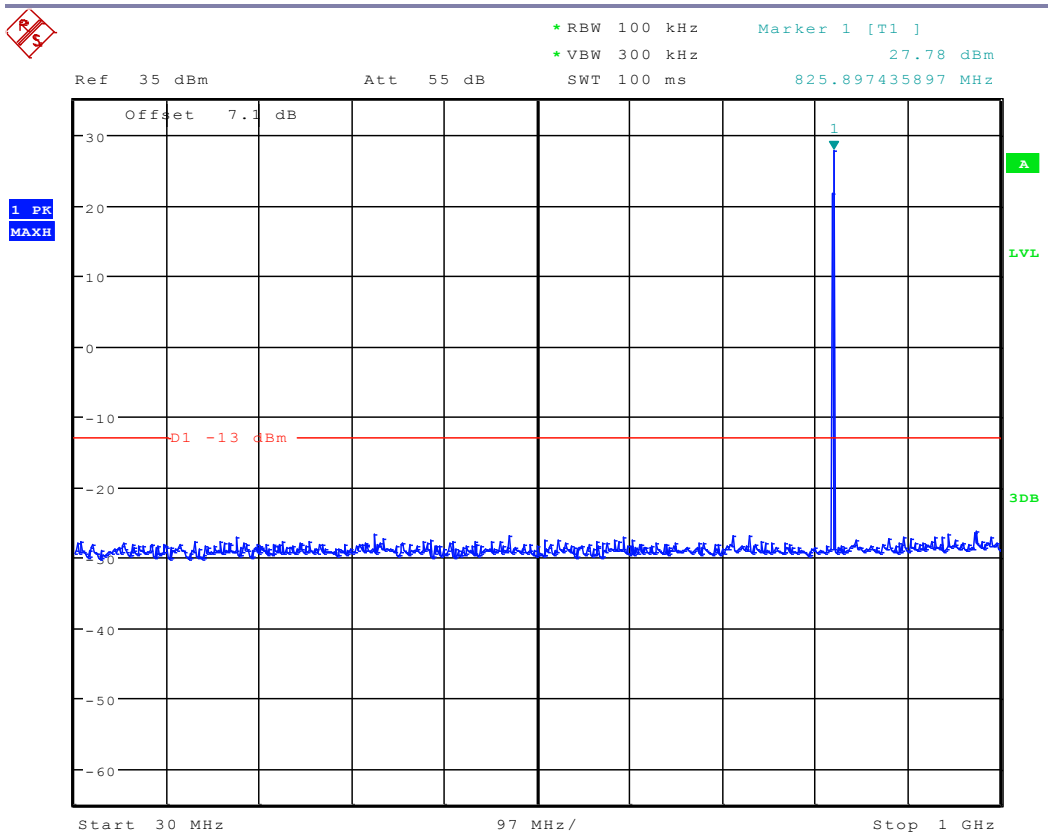

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
27.70 dBm
849.214743590 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

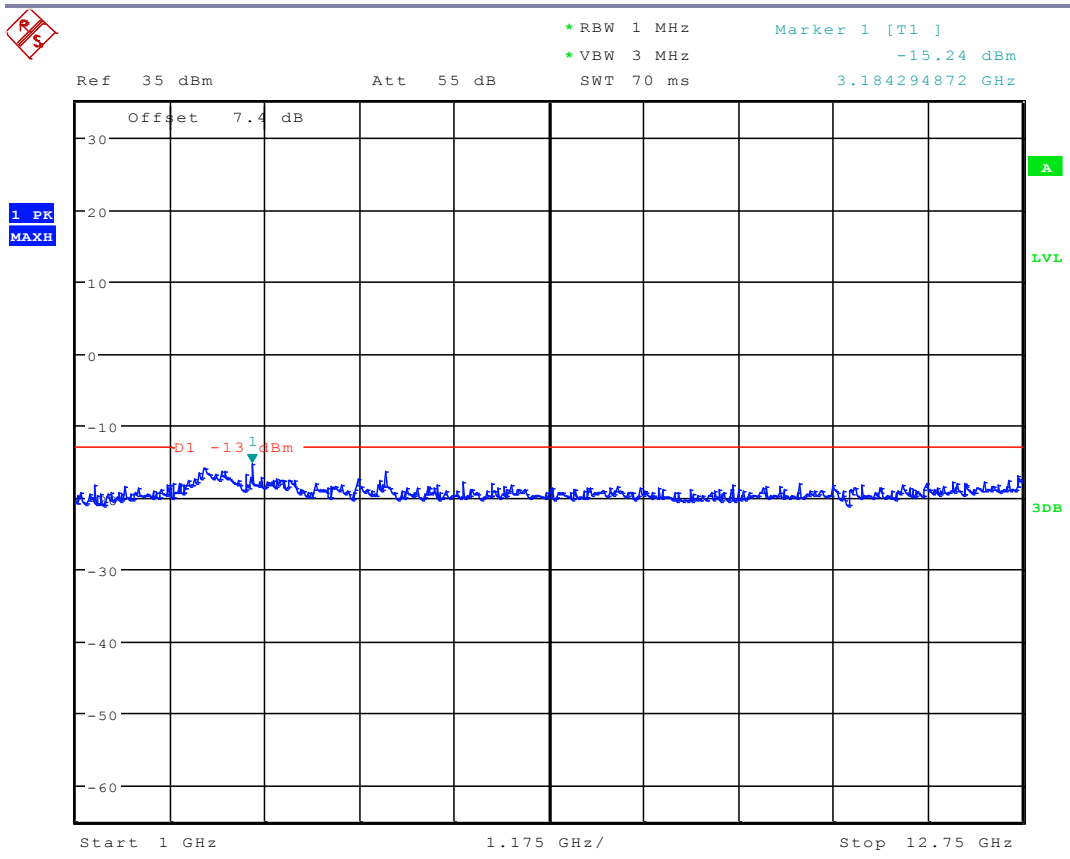

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-16.01 dBm
3.033653846 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 -11 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

TM2:EDGE
Channel 128

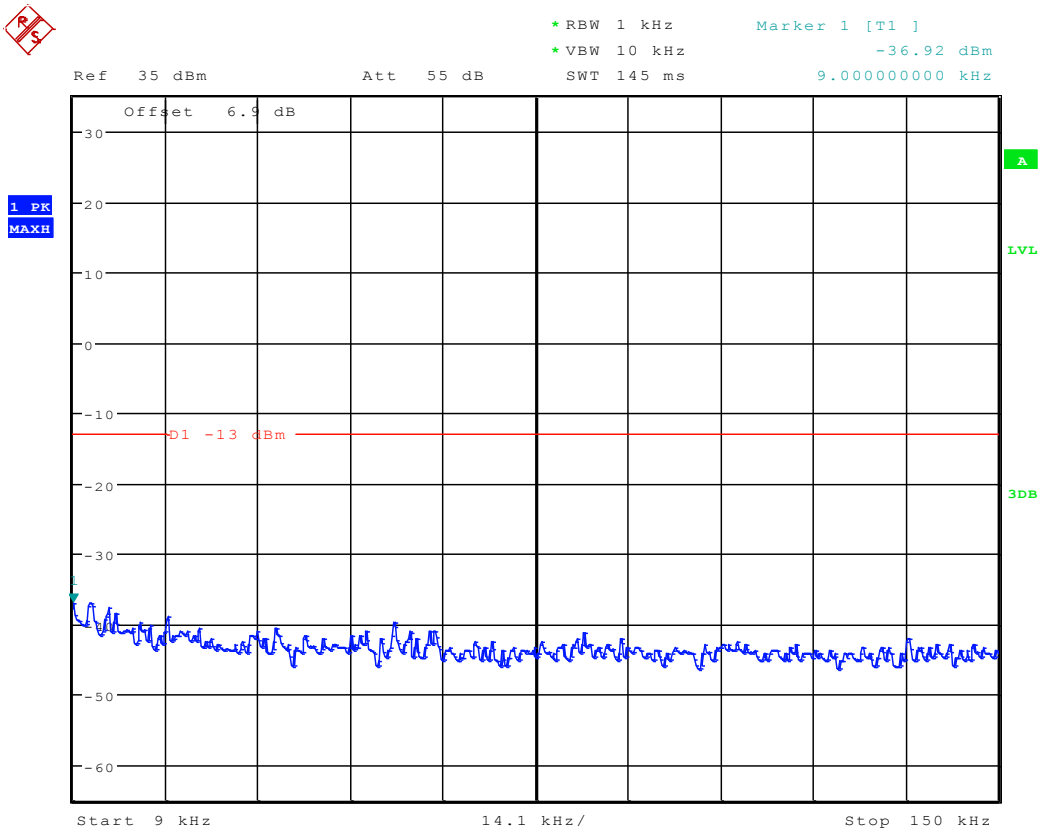


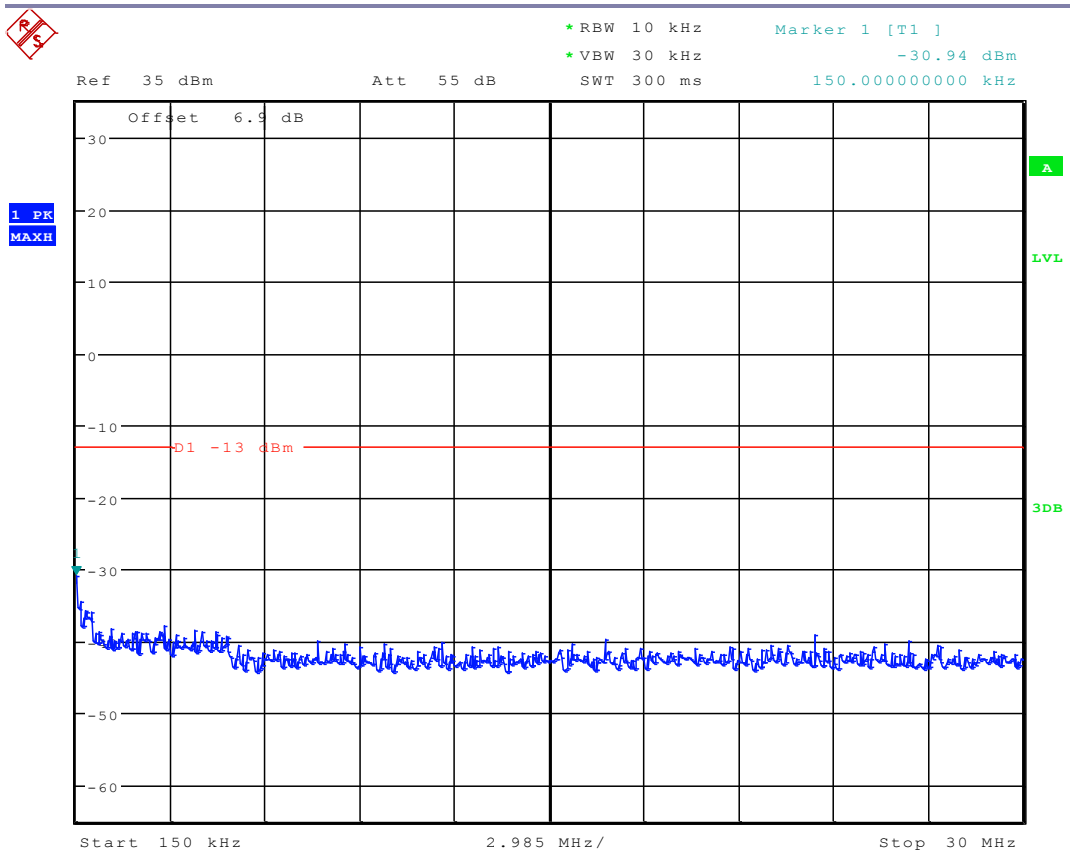

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-34.09 dBm
197.836538462 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

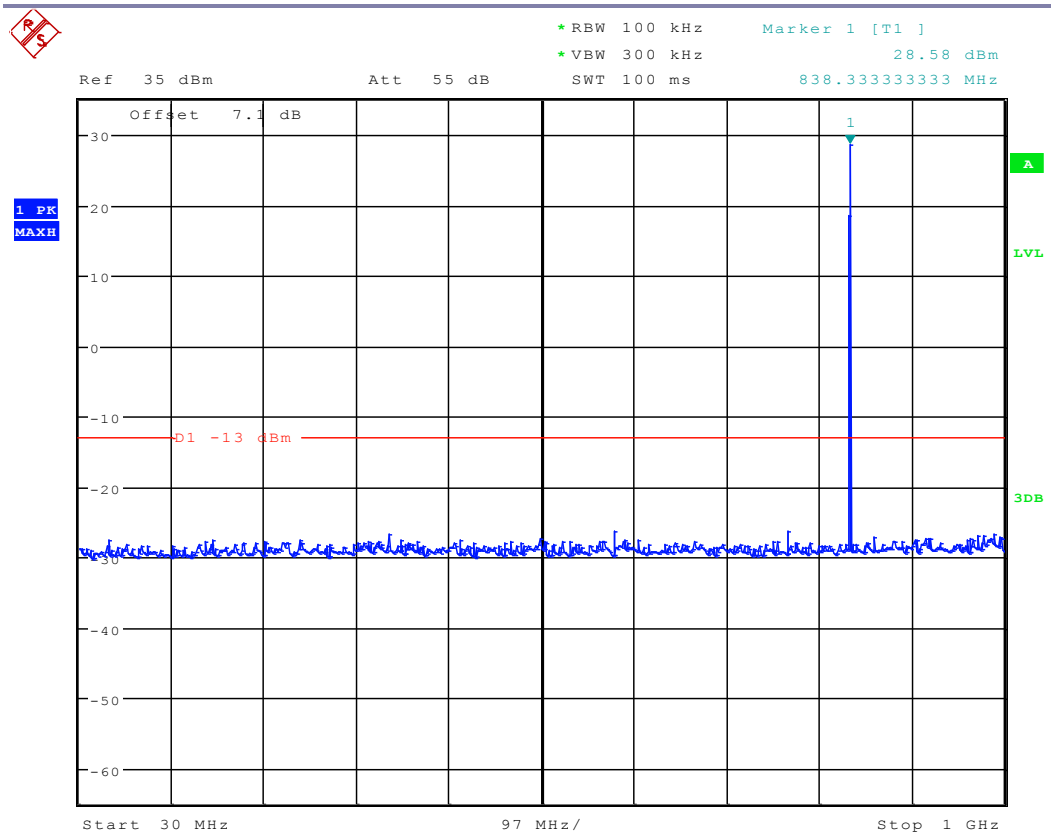

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
27.78 dBm
825.897435897 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

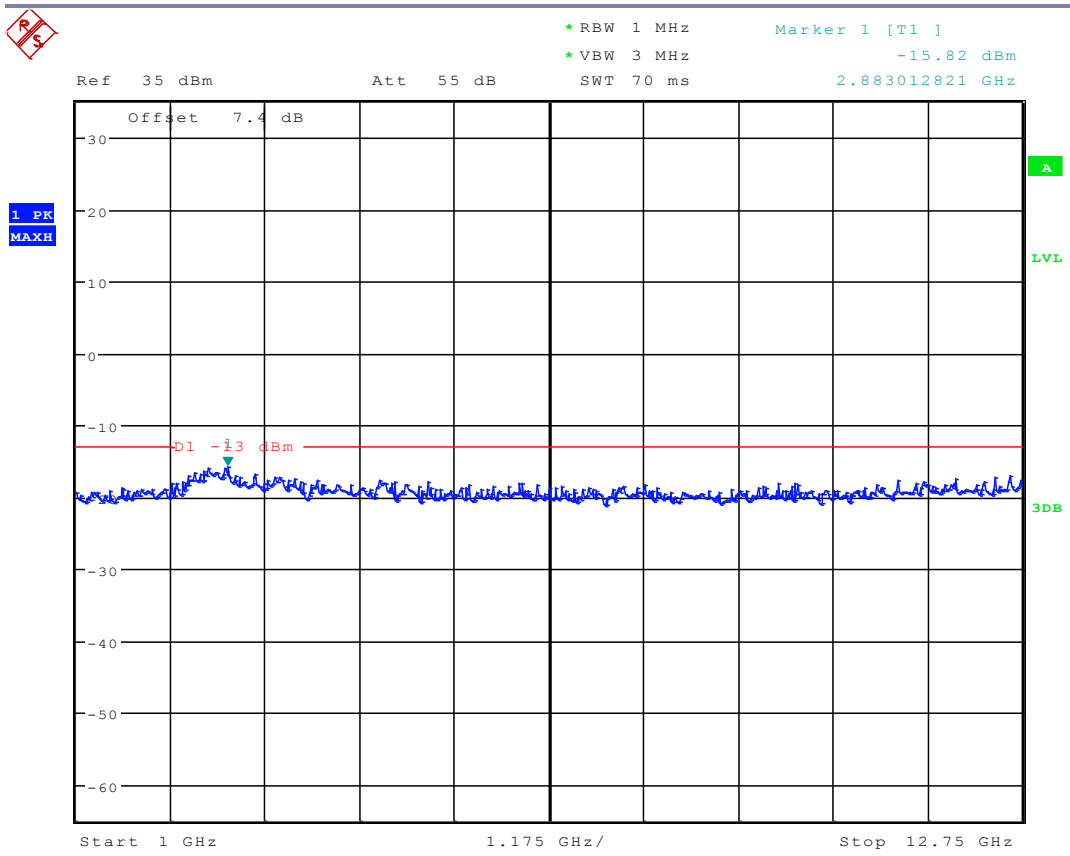

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-15.24 dBm
3.184294872 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 192

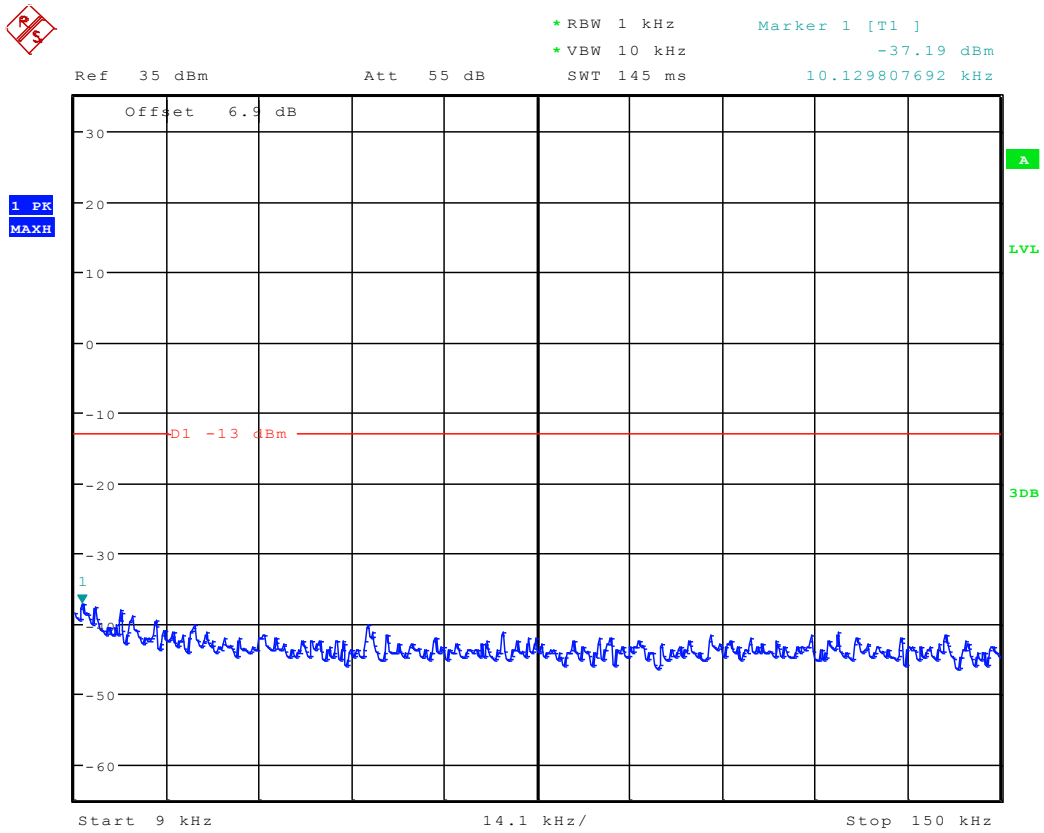

RBW 1 kHz
VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-36.92 dBm
9.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-50
-60
Start 9 kHz
14.1 kHz/
Stop 150 kHz

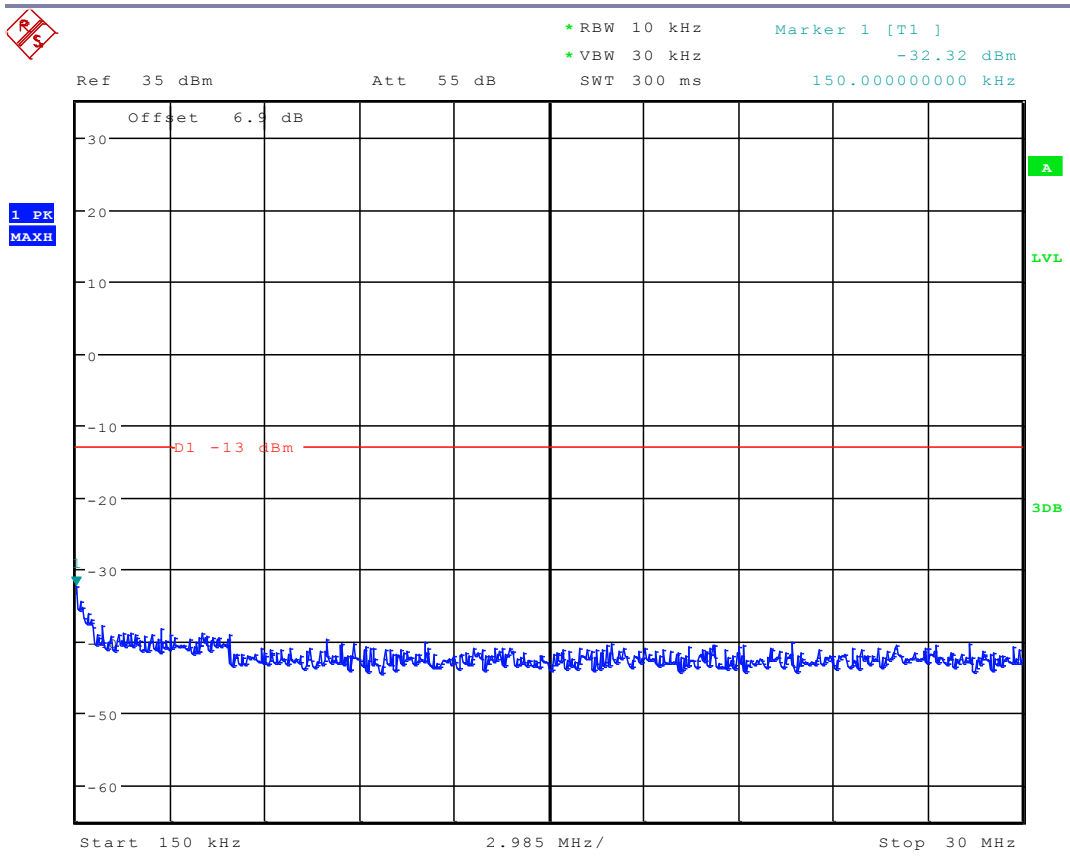

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-30.94 dBm
150.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

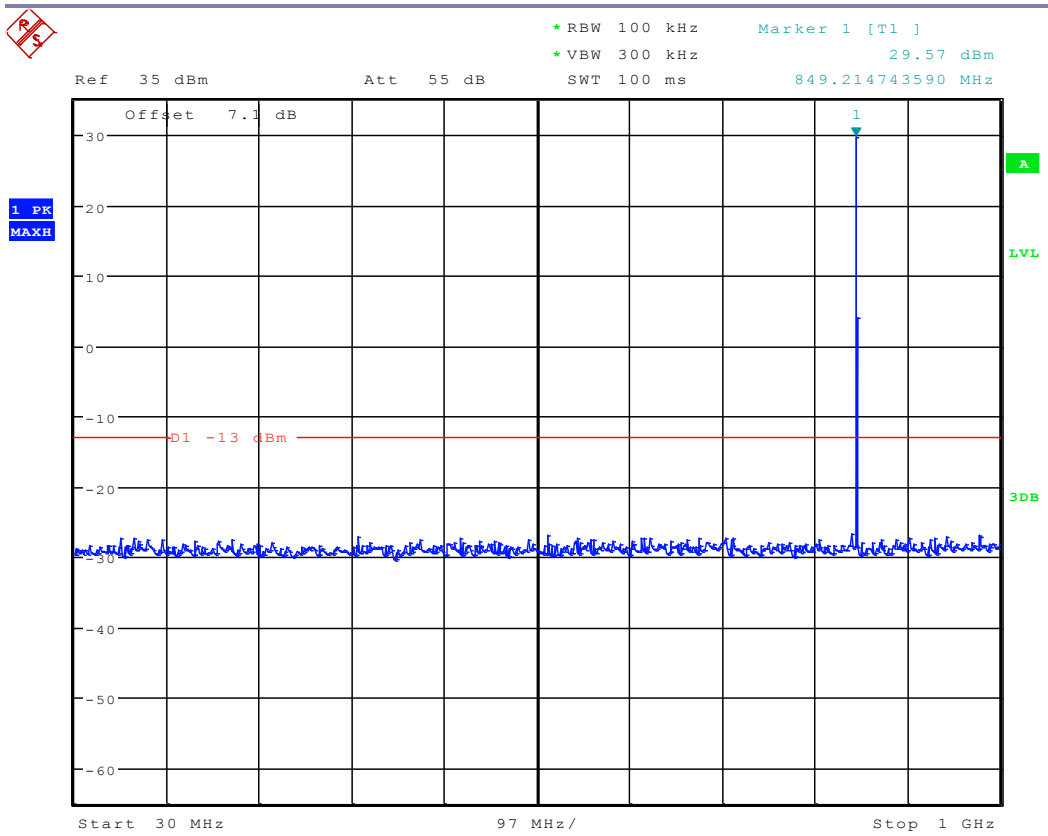

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
28.58 dBm
838.333333333 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

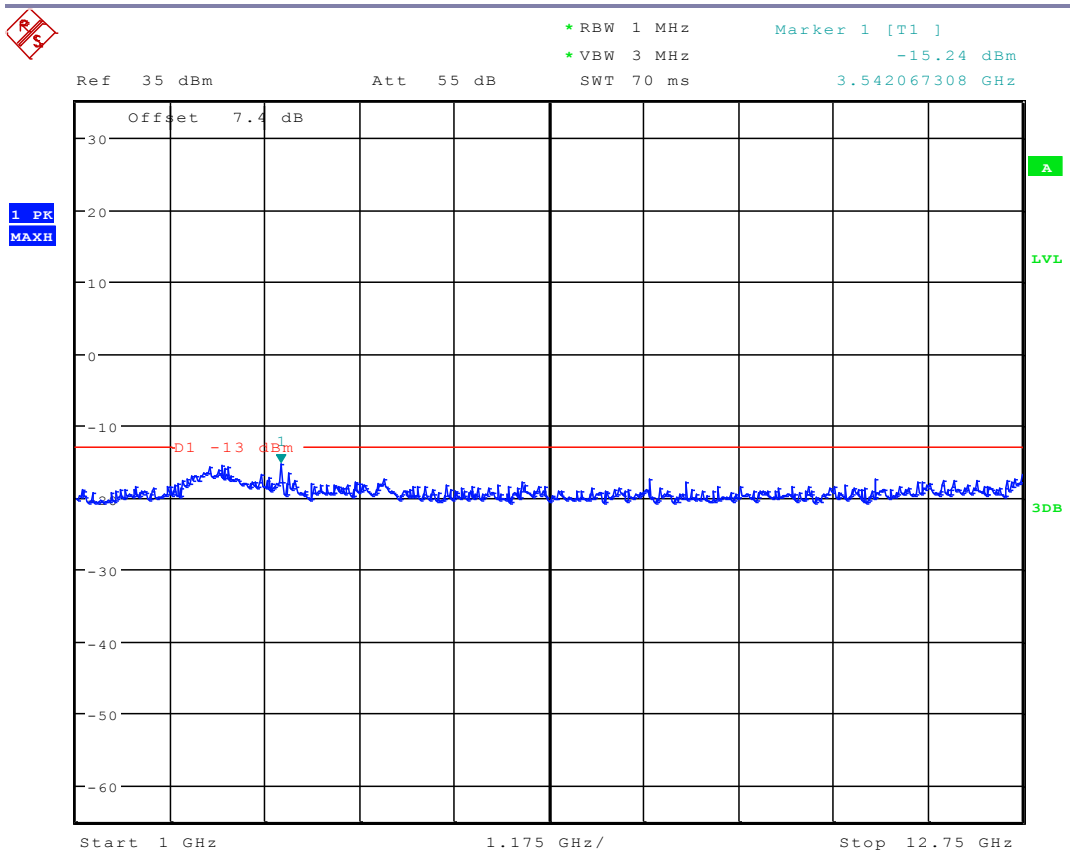

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-15.82 dBm
2.883012821 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 251

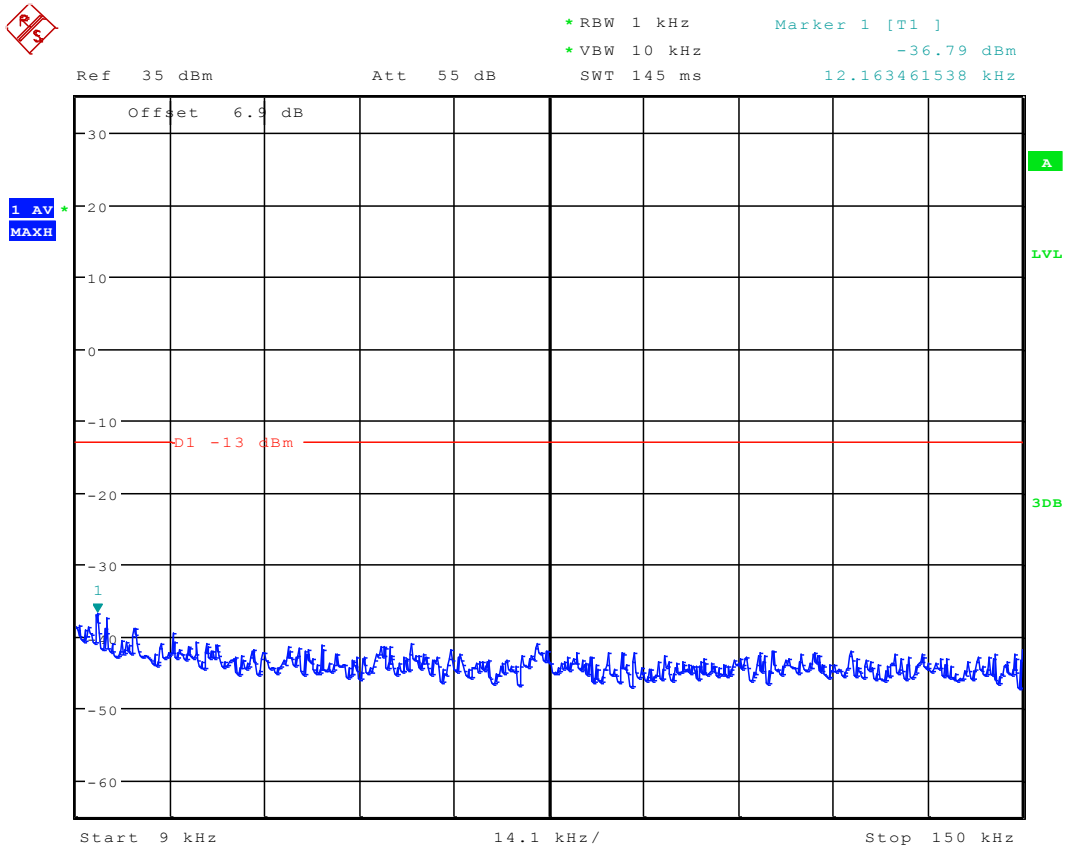

RBW 1 kHz
VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-37.19 dBm
10.129807692 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 9 kHz
14.1 kHz/
Stop 150 kHz

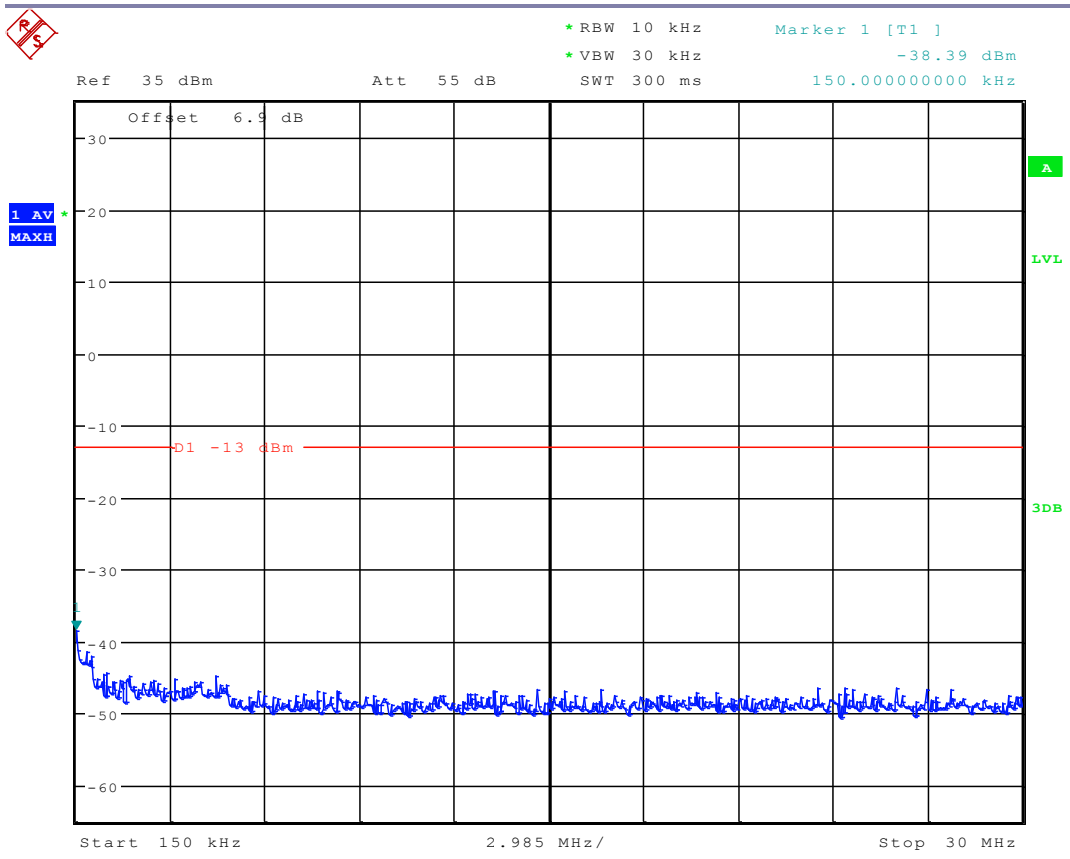

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-32.32 dBm
150.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

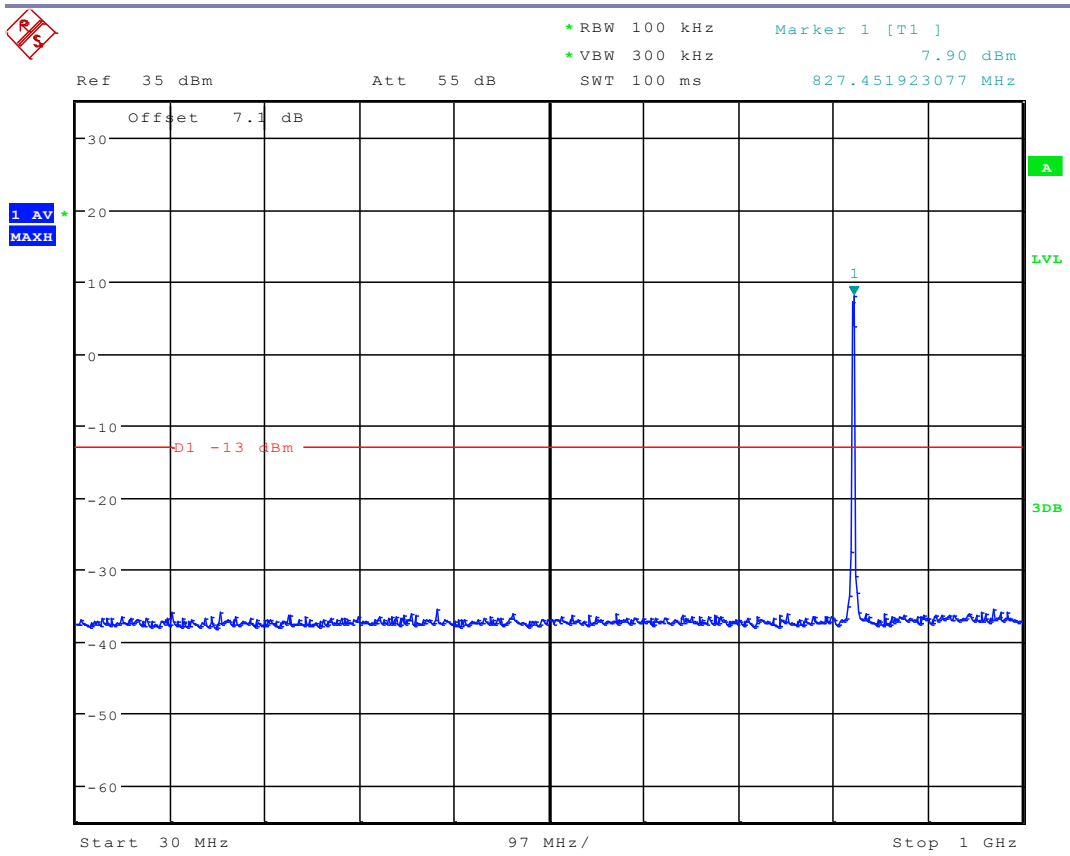

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
29.57 dBm
849.214743590 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

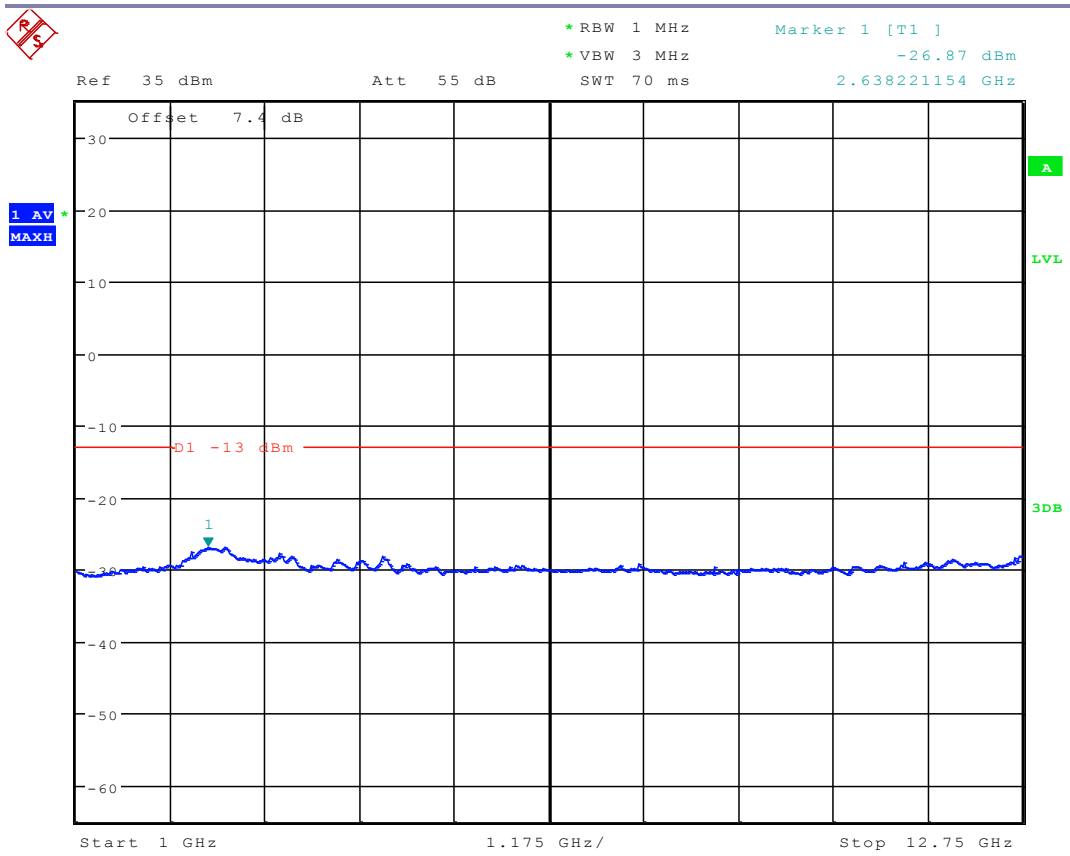

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-15.24 dBm
3.542067308 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 PK
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

TM3: WCDMA
Channel 4132

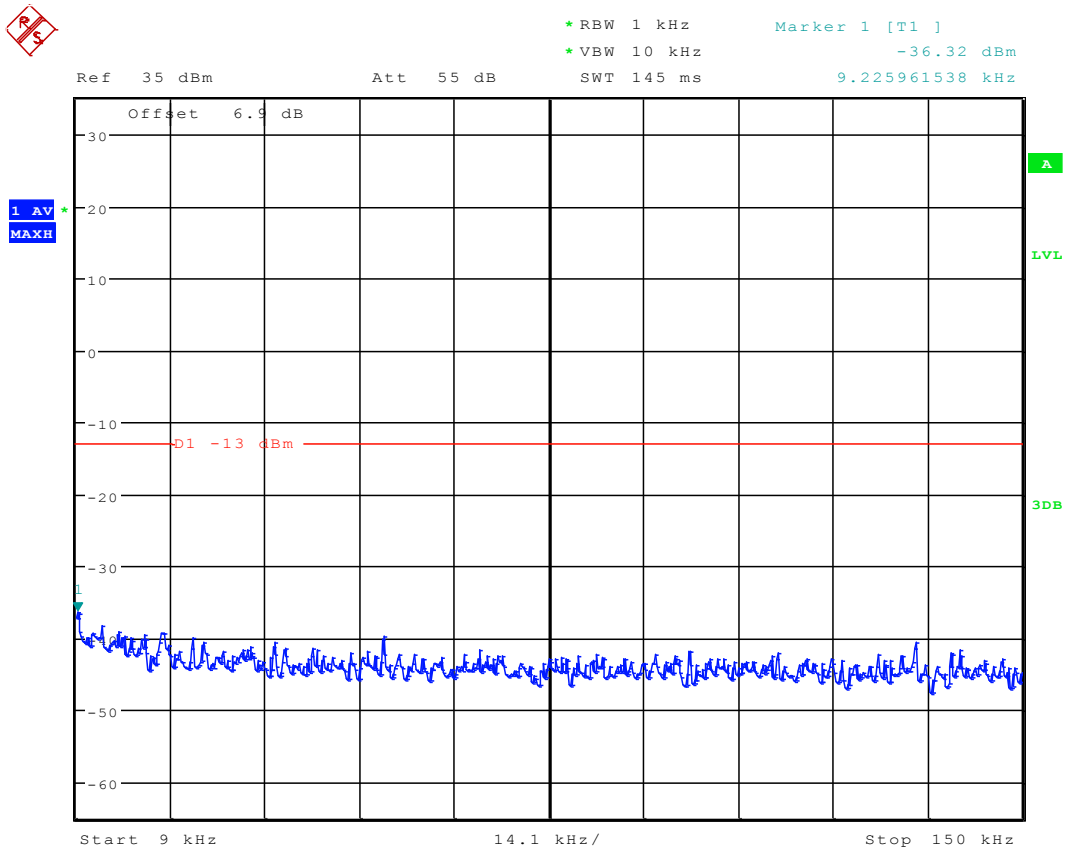


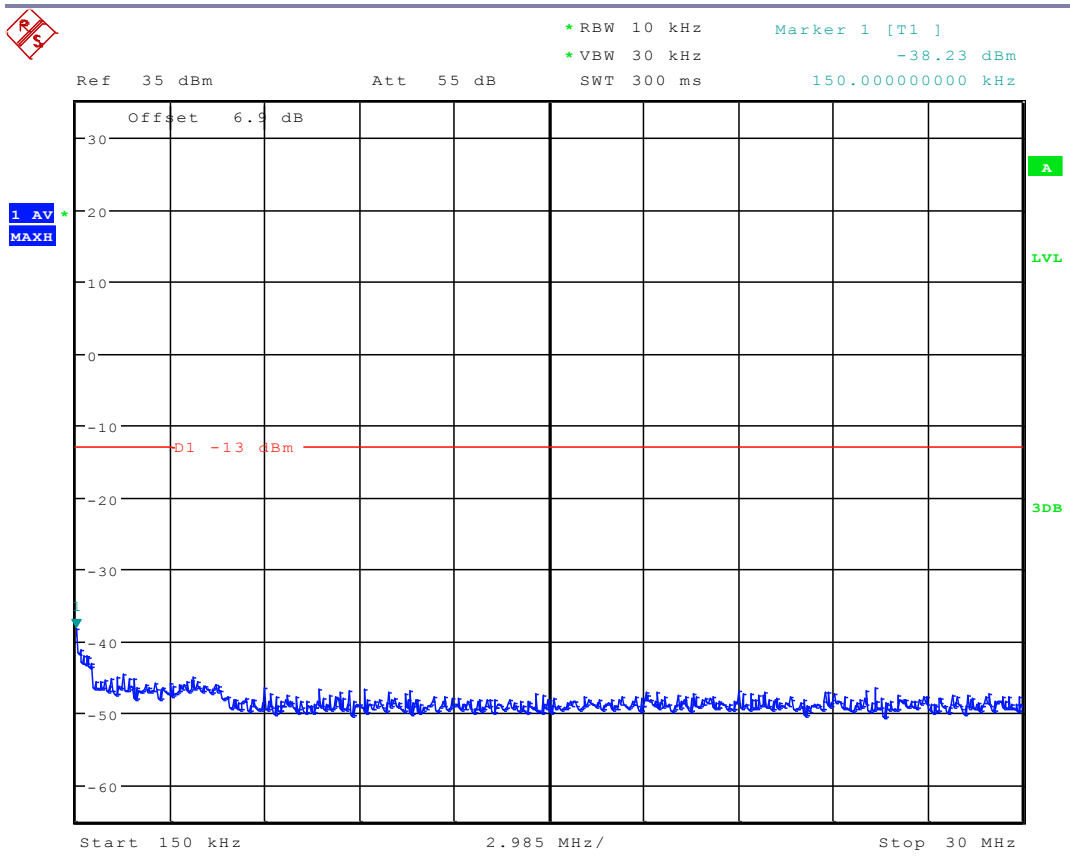

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.39 dBm
150.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

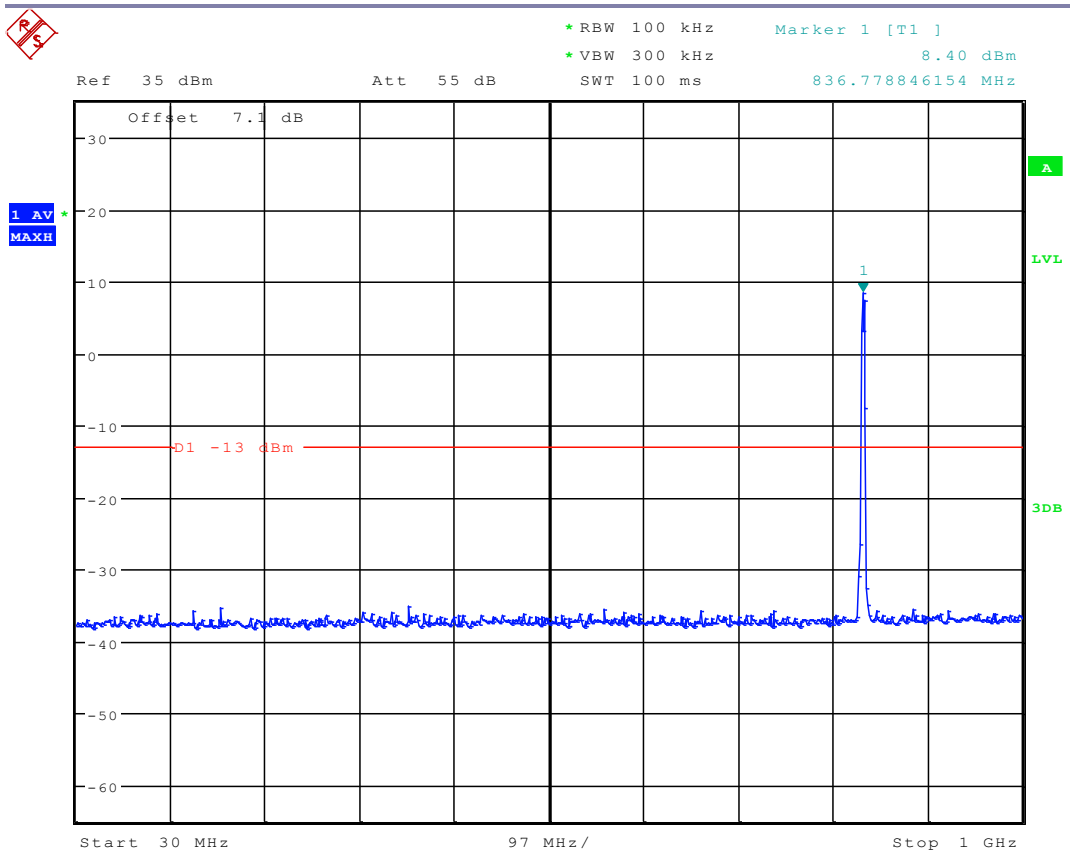

RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
7.90 dBm
827.451923077 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

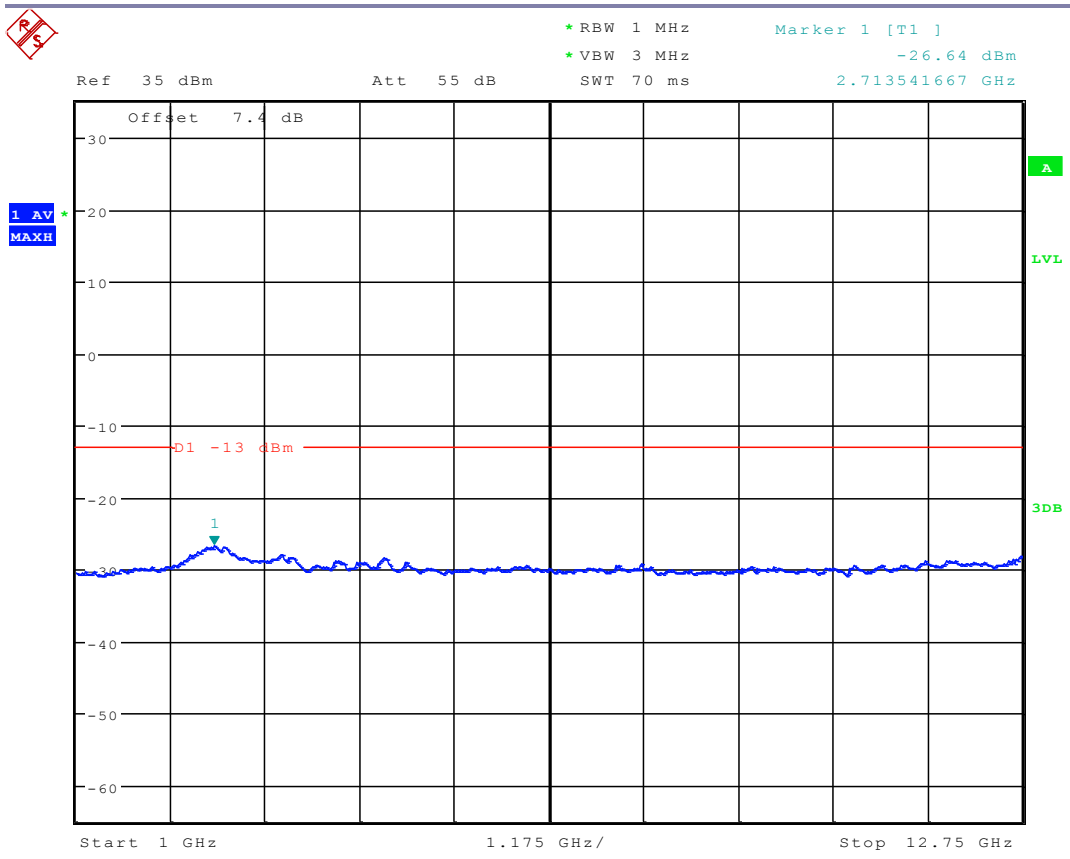

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-26.87 dBm
2.638221154 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 4182

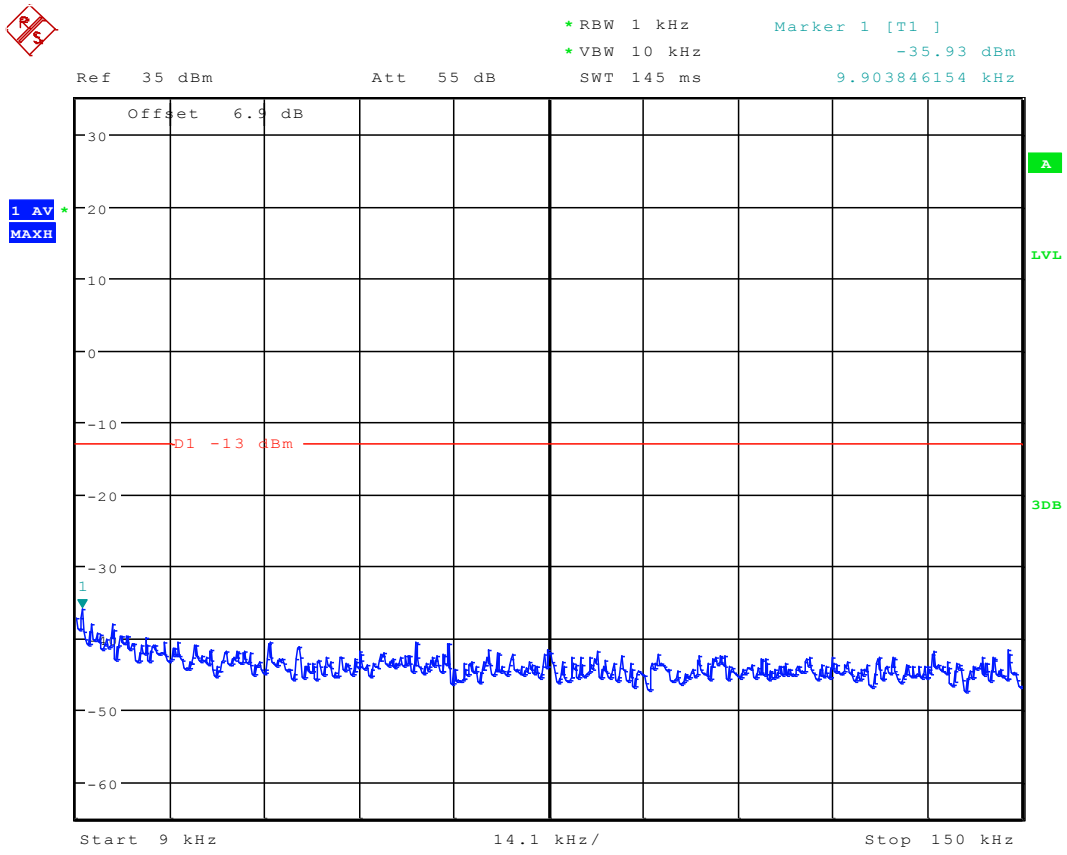


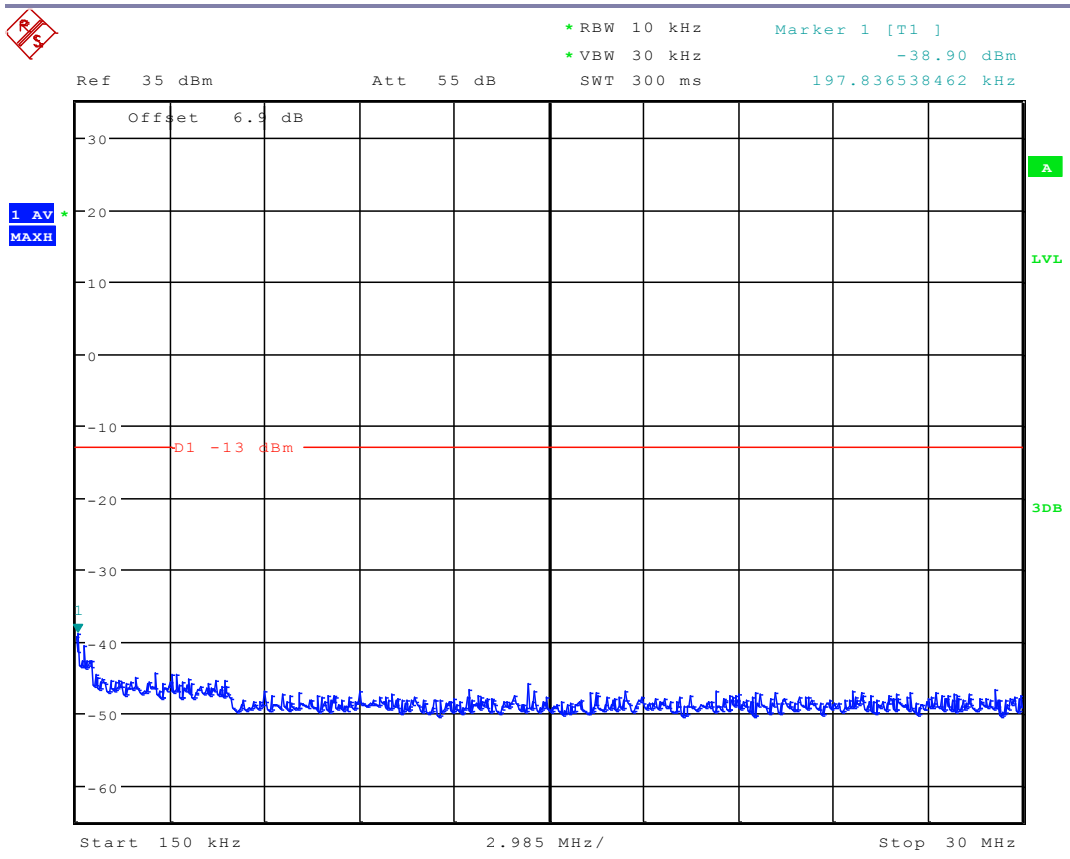

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.23 dBm
150.000000000 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz

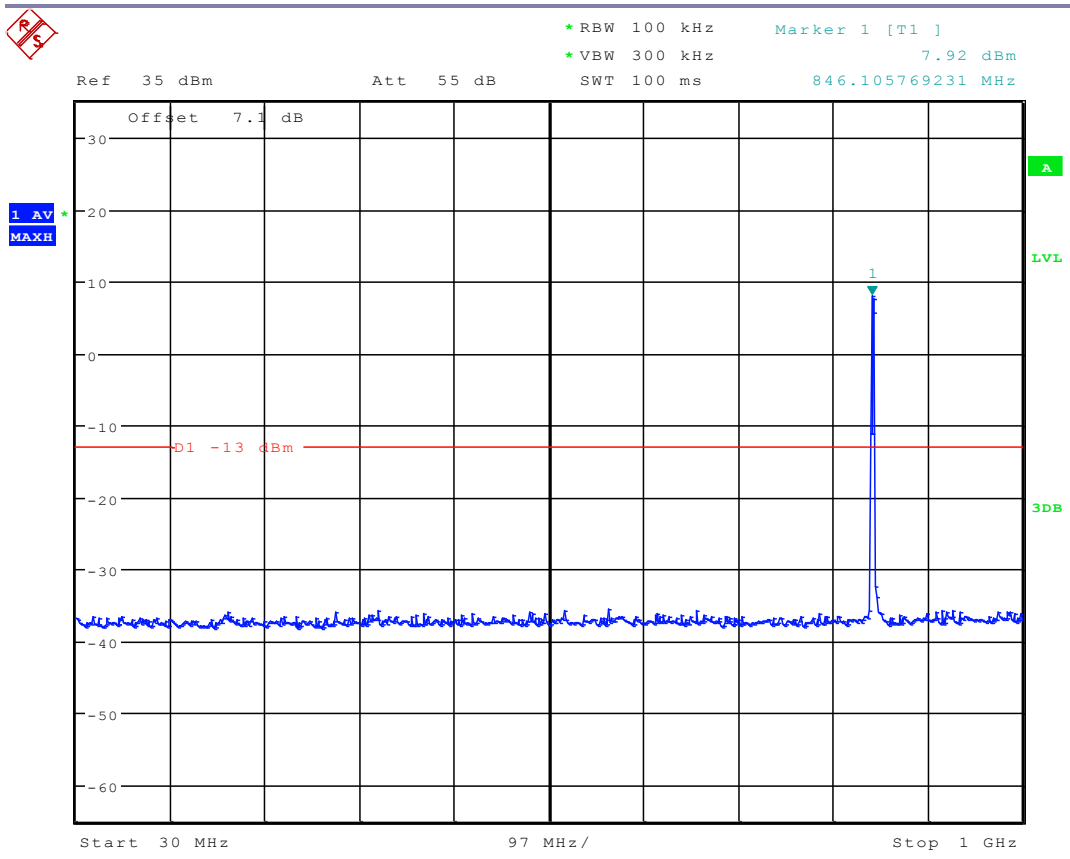

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
8.40 dBm
836.778846154 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

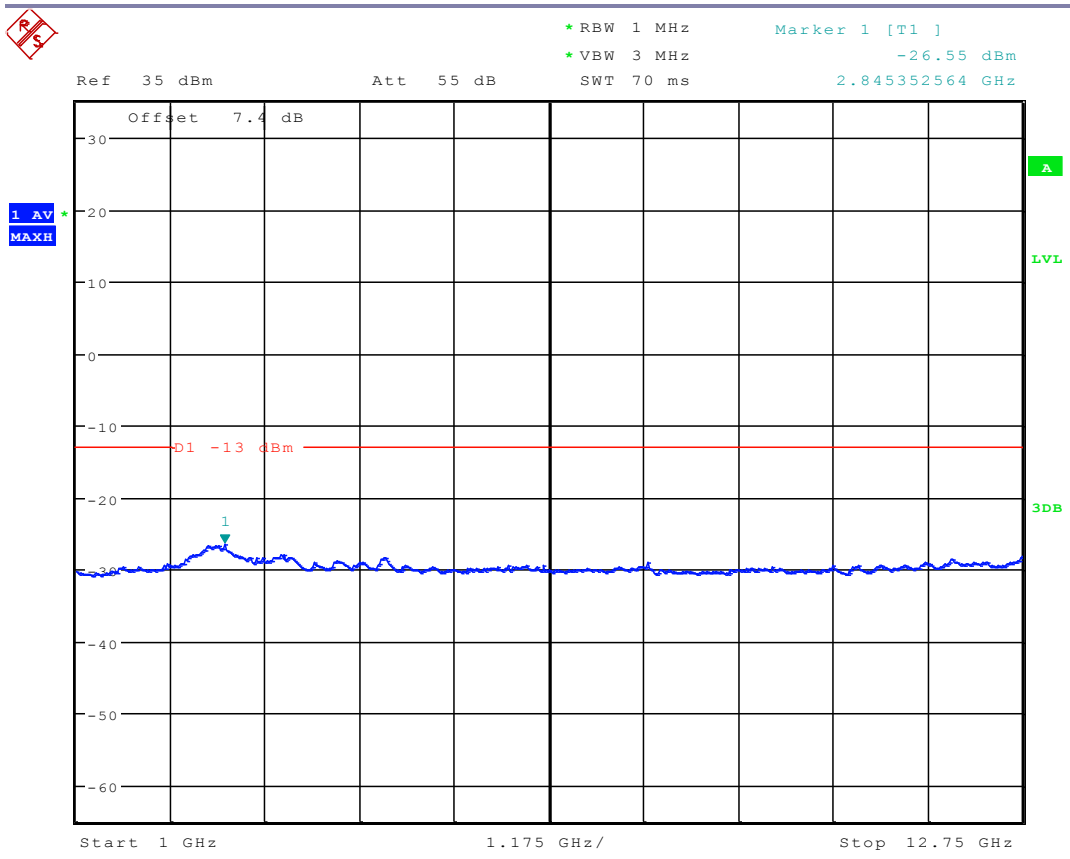

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-26.64 dBm
2.713541667 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
1
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 4233




RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.90 dBm
197.836538462 kHz
Ref 35 dBm
Att 55 dB
Offset 6.9 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 150 kHz
2.985 MHz/
Stop 30 MHz


RBW 100 kHz
VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
7.92 dBm
846.105769231 MHz
Ref 35 dBm
Att 55 dB
Offset 7.1 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz


RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-26.55 dBm
2.845352564 GHz
Ref 35 dBm
Att 55 dB
Offset 7.4 dB
1 AV
MAXH
A
LVL
3DB
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz