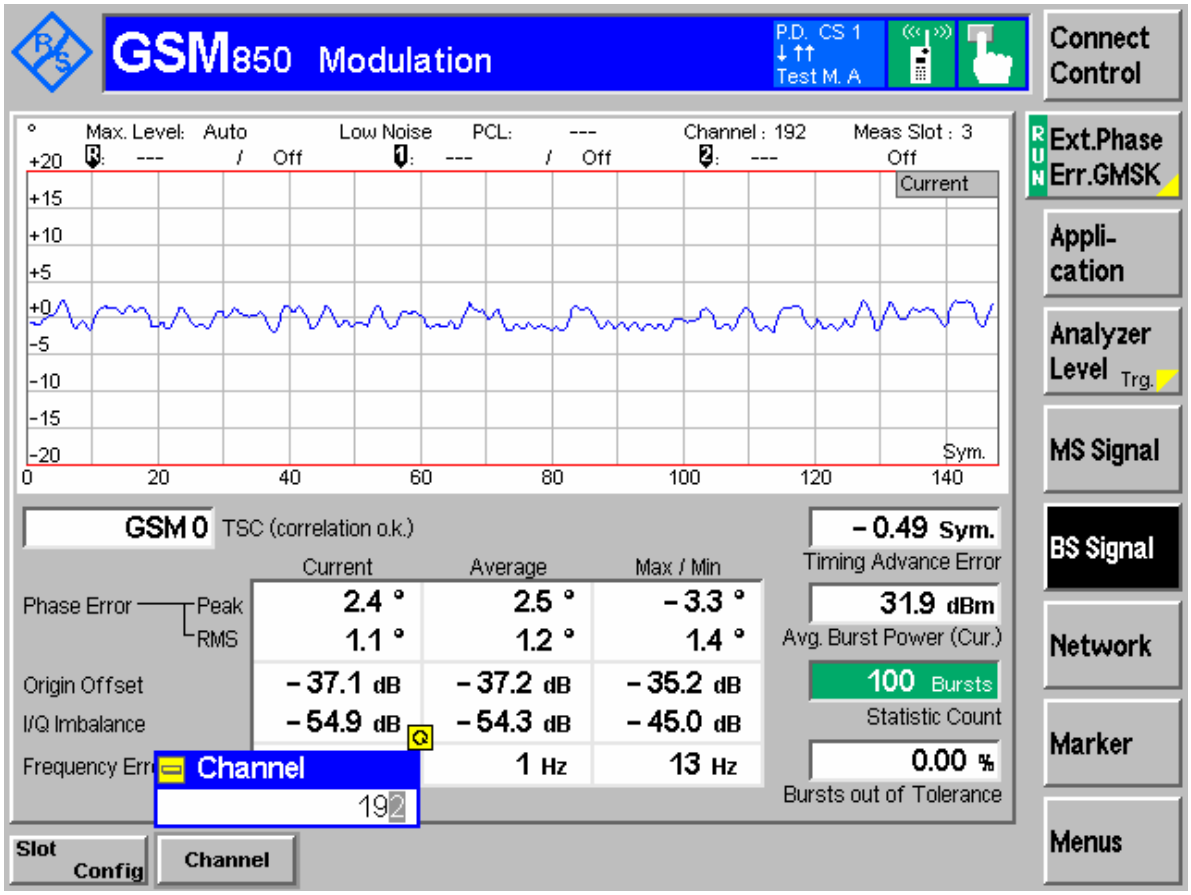
Appendix A

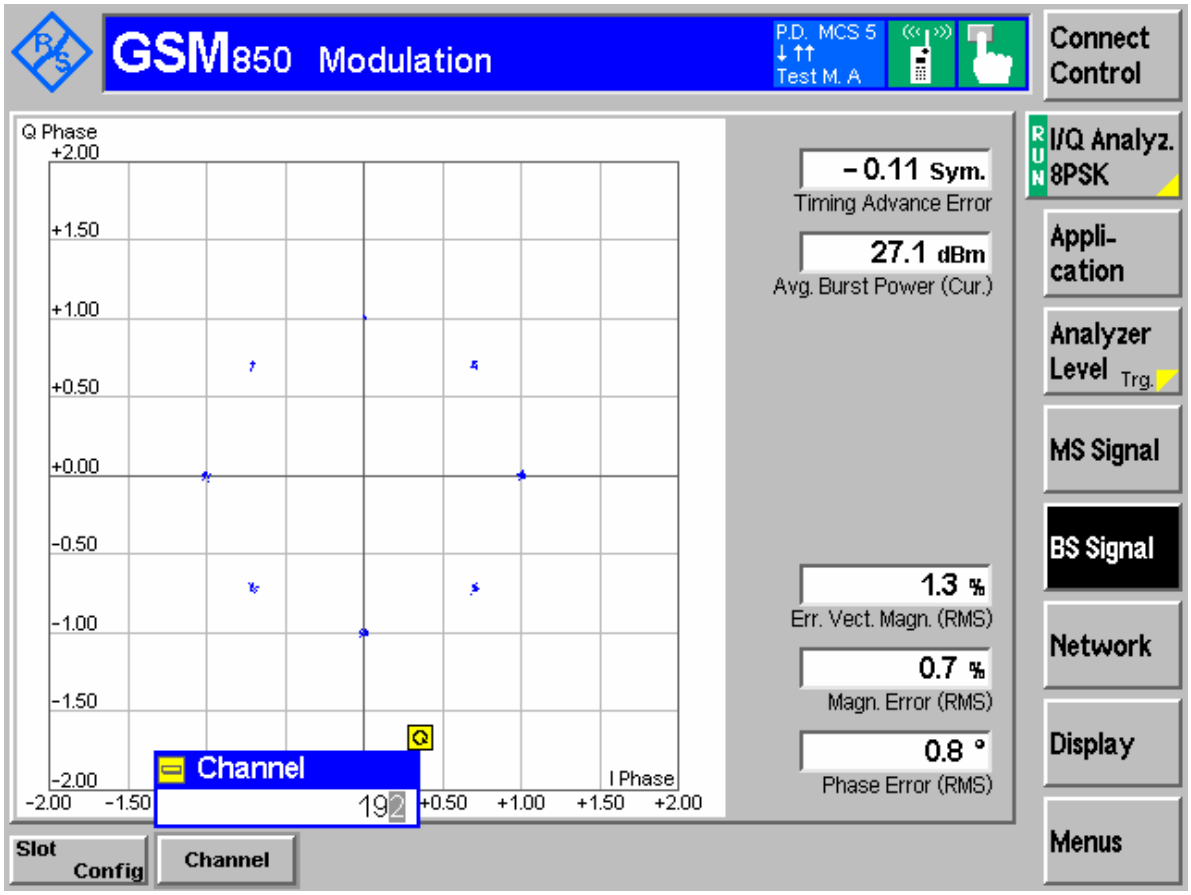
Modulation Characteristics

According to FCC Part 2.1047 & Part22 Subpart H

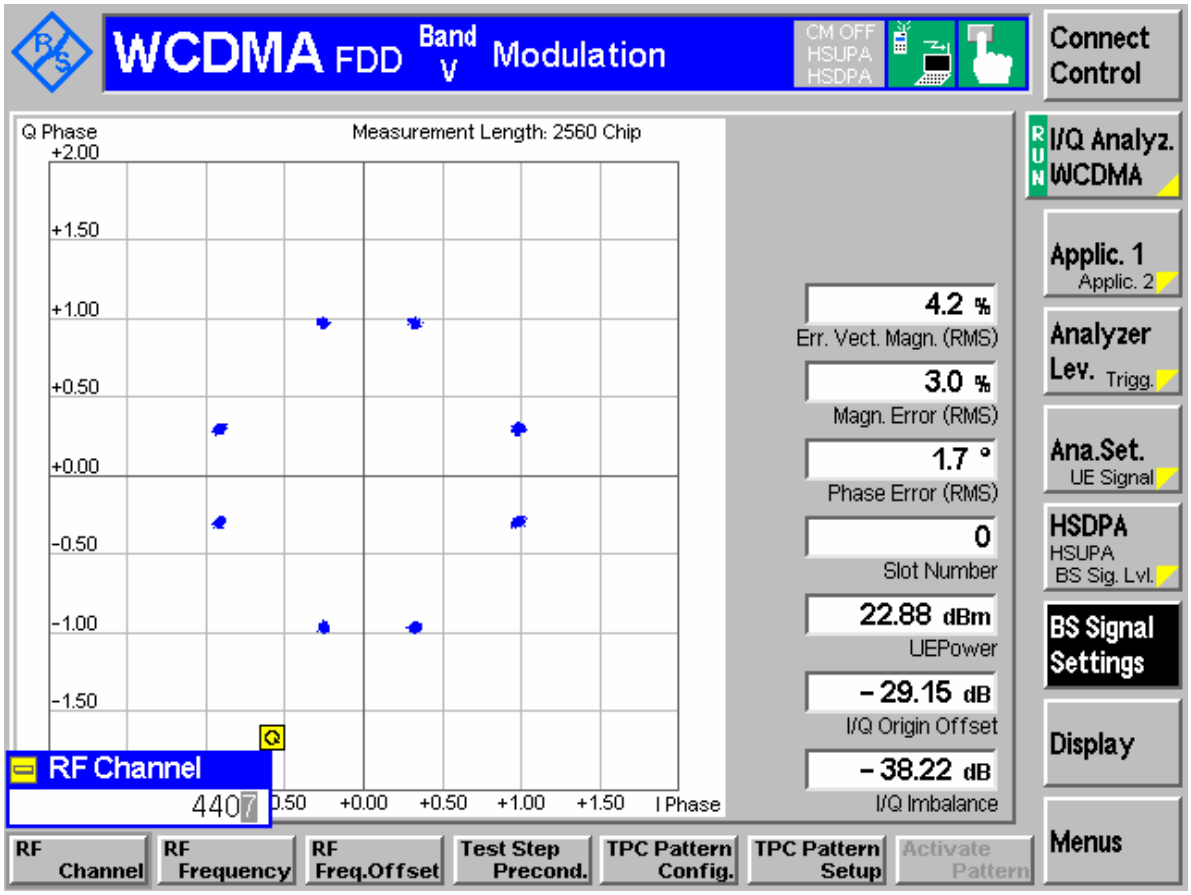
TM1:GPRS/GSM
Channel 192



TM2:EDGE
Channel 192



TM3: WCDMA
Channel 4182

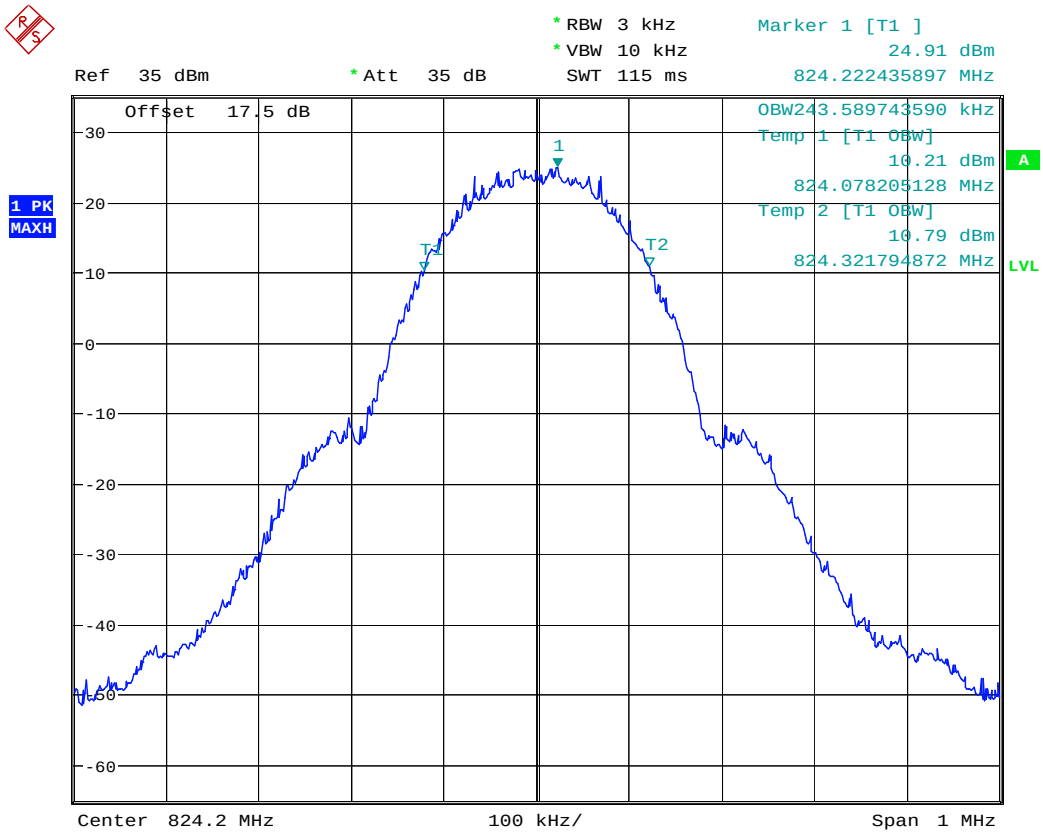


Appendix B

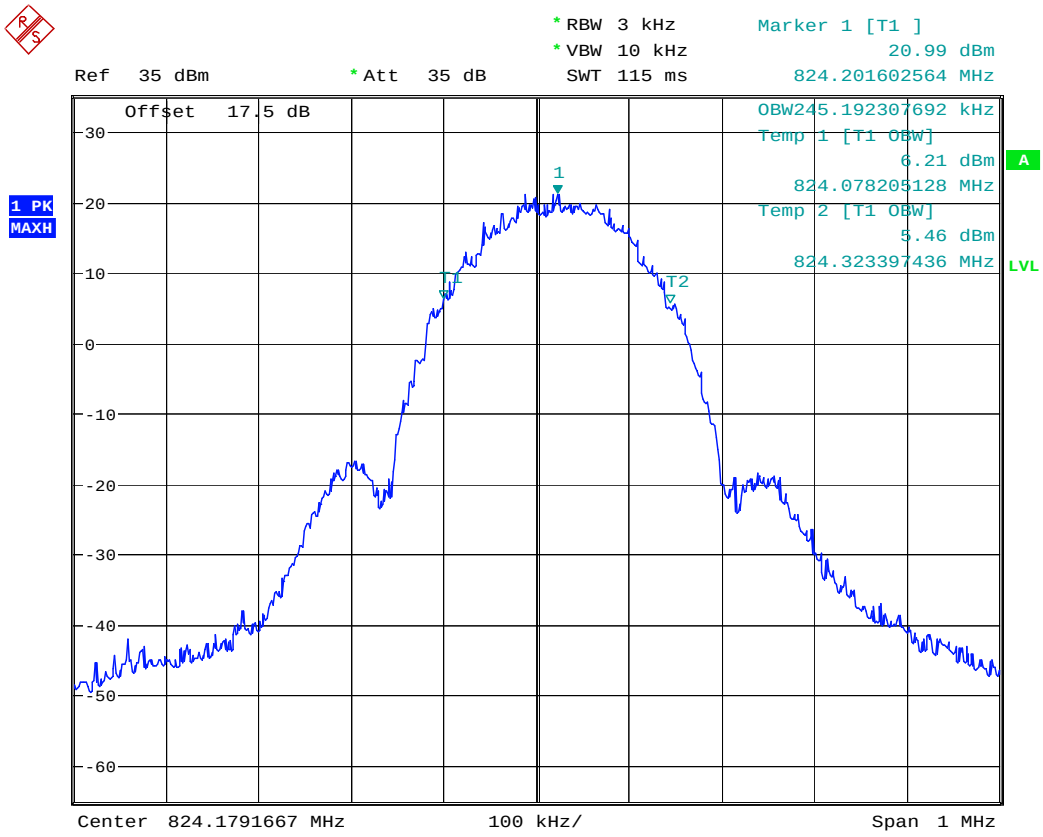
Occupied Bandwidth

According to FCC Part 2.1049 & Part 22 Subpart H

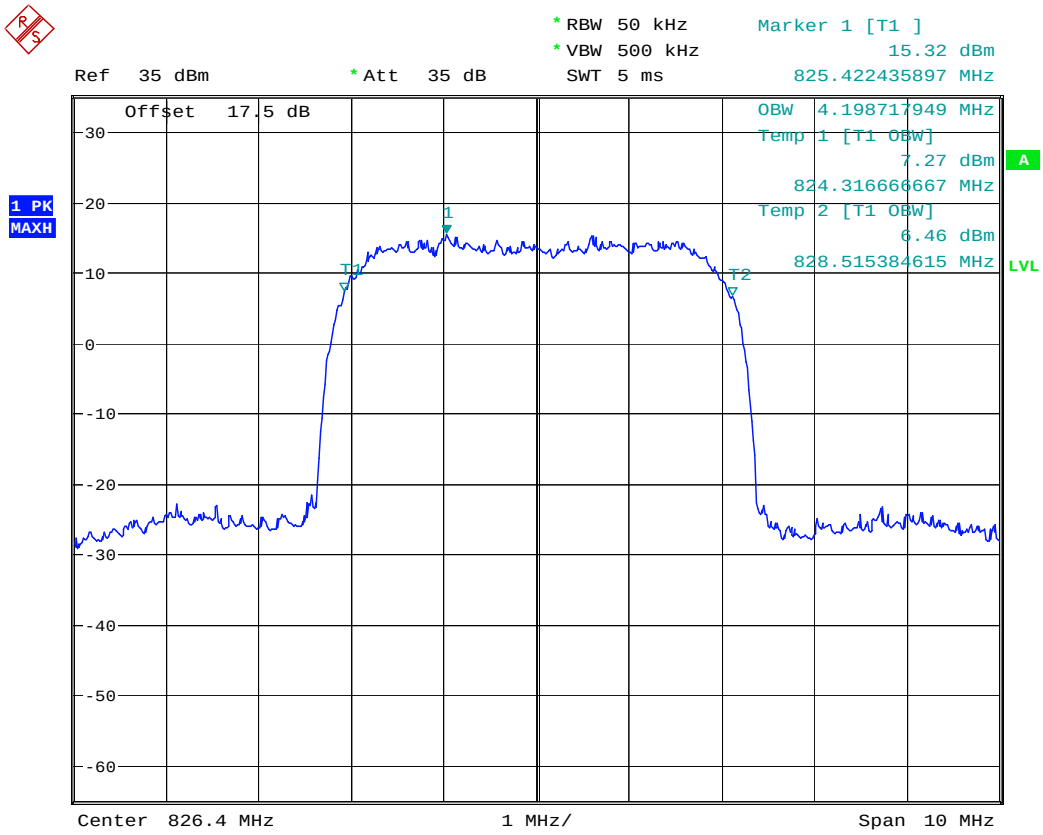
TM1:GPRS/GSM
Channel 128



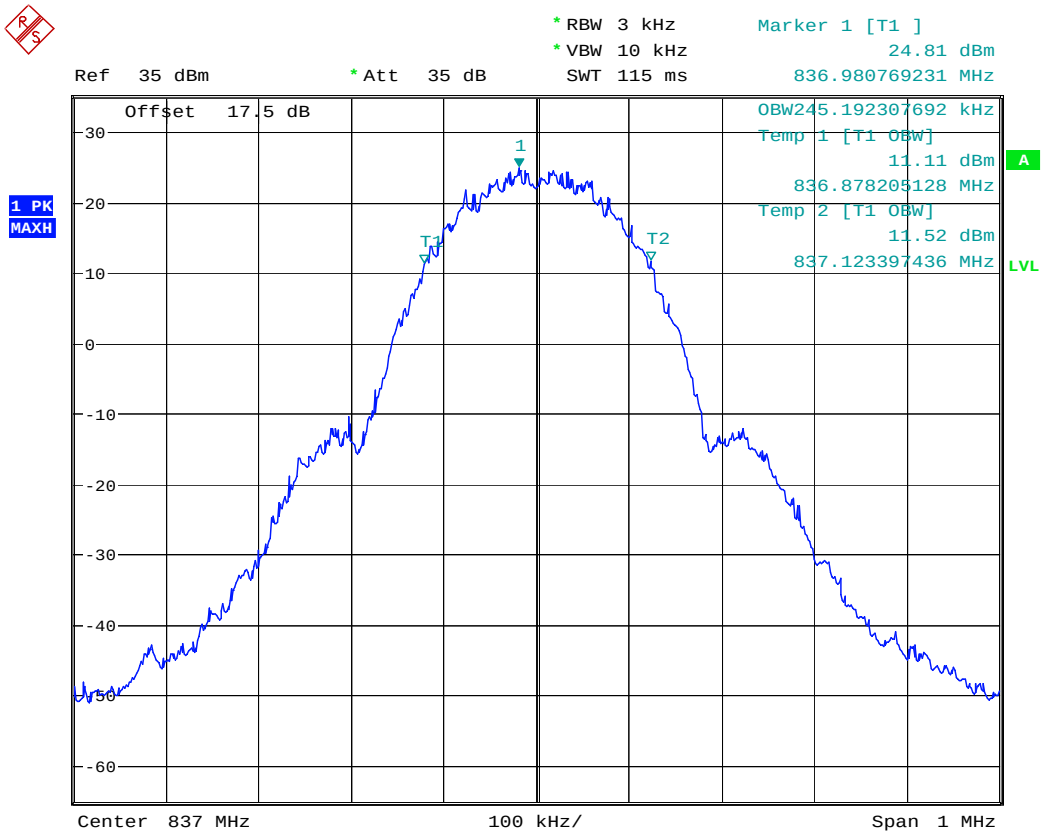
TM2:EDGE
Channel 128



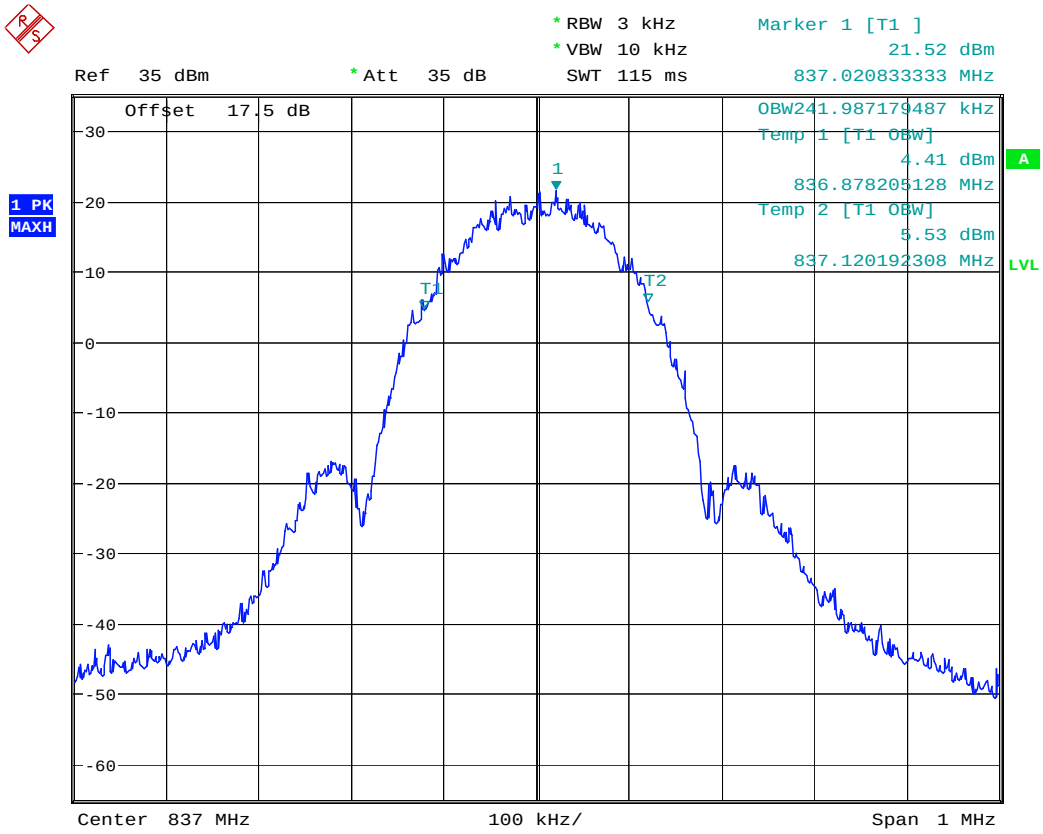
TM3: WCDMA
Channel 4132



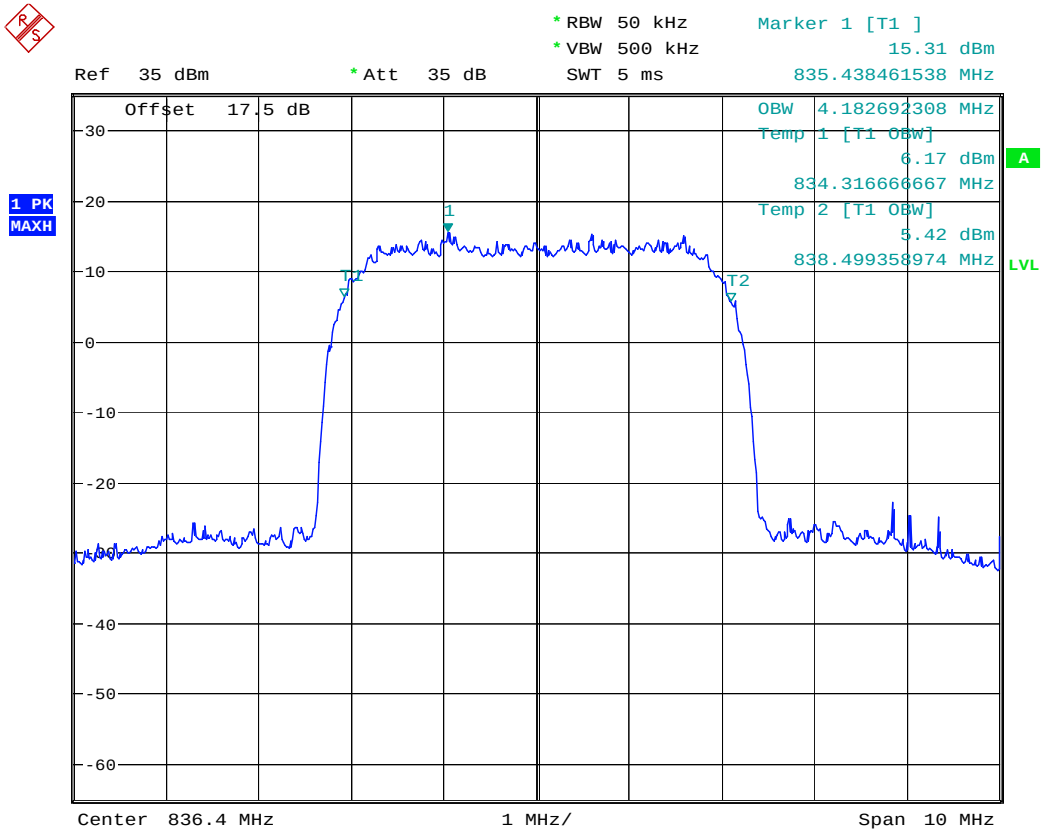
TM1:GPRS/GSM
Channel 192



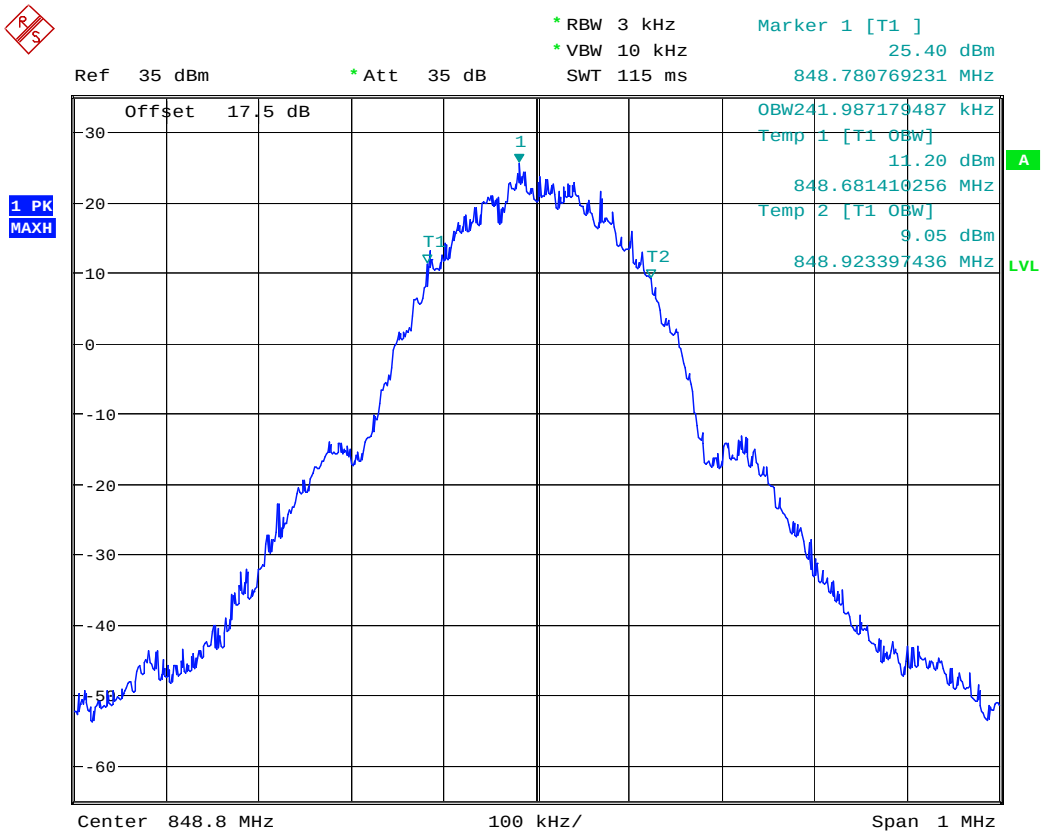
TM2:EDGE
Channel 192



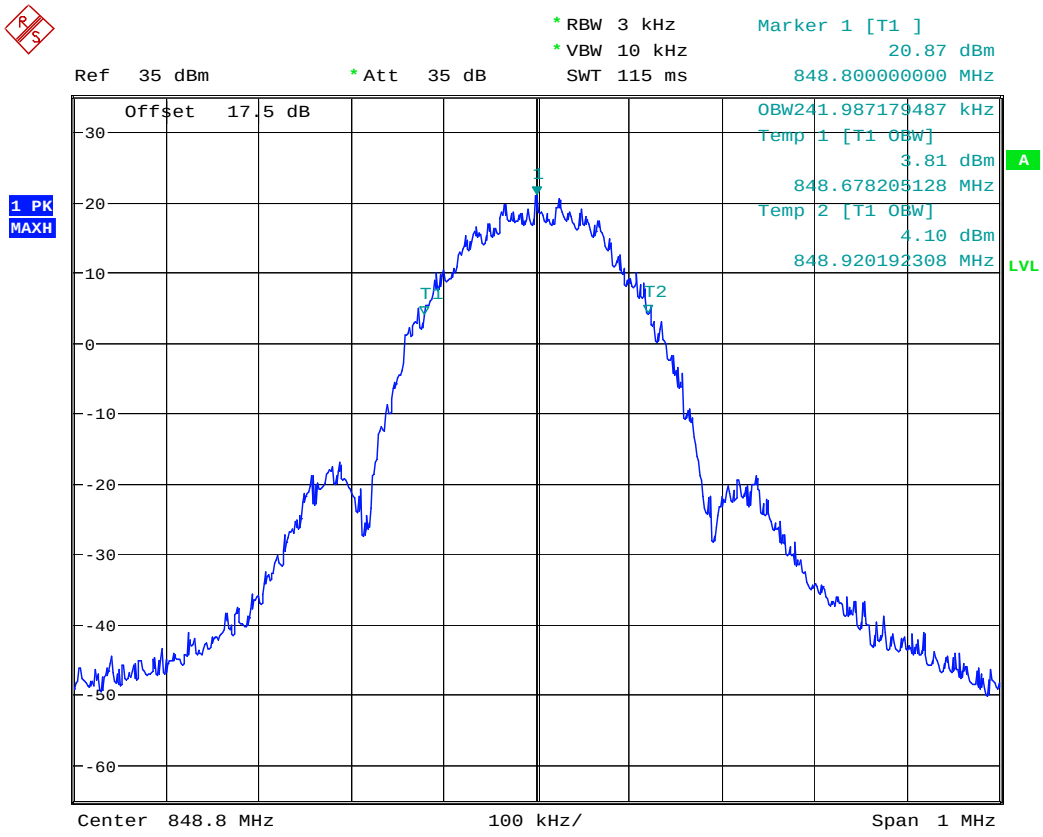
TM3: WCDMA
Channel 4182



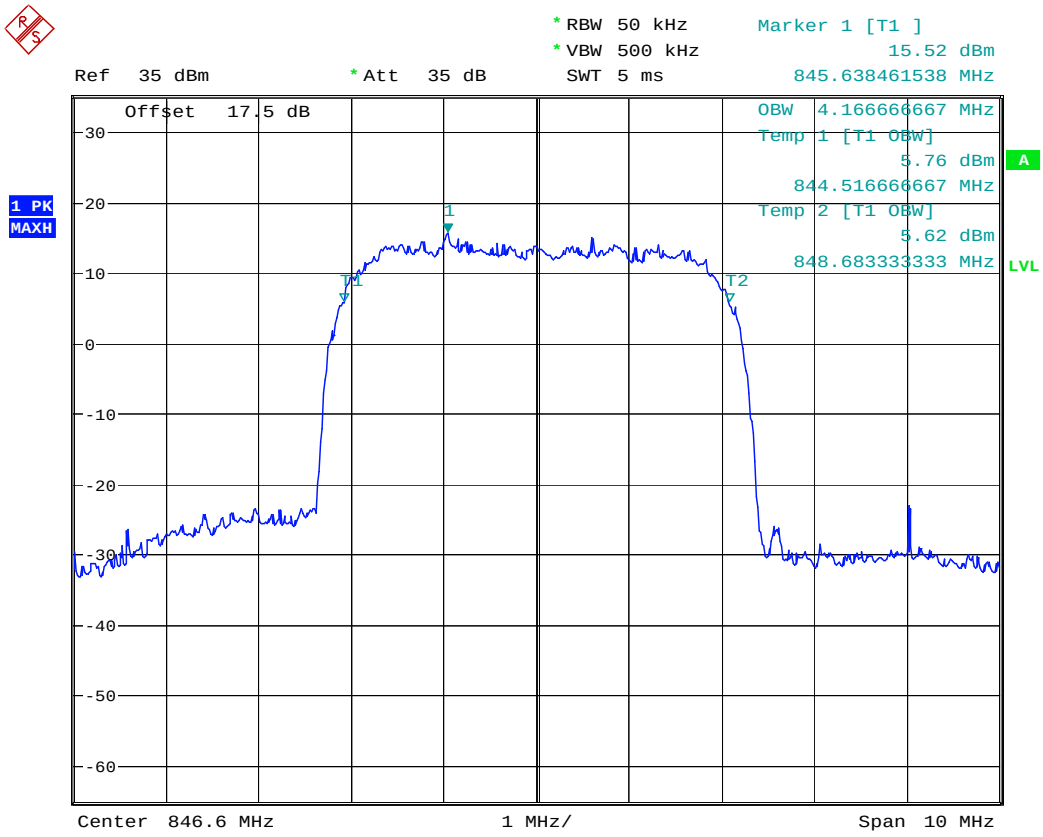
TM1:GPRS/GSM
Channel 251



TM2:EDGE
Channel 251



TM3: WCDMA
Channel 4233



Appendix C

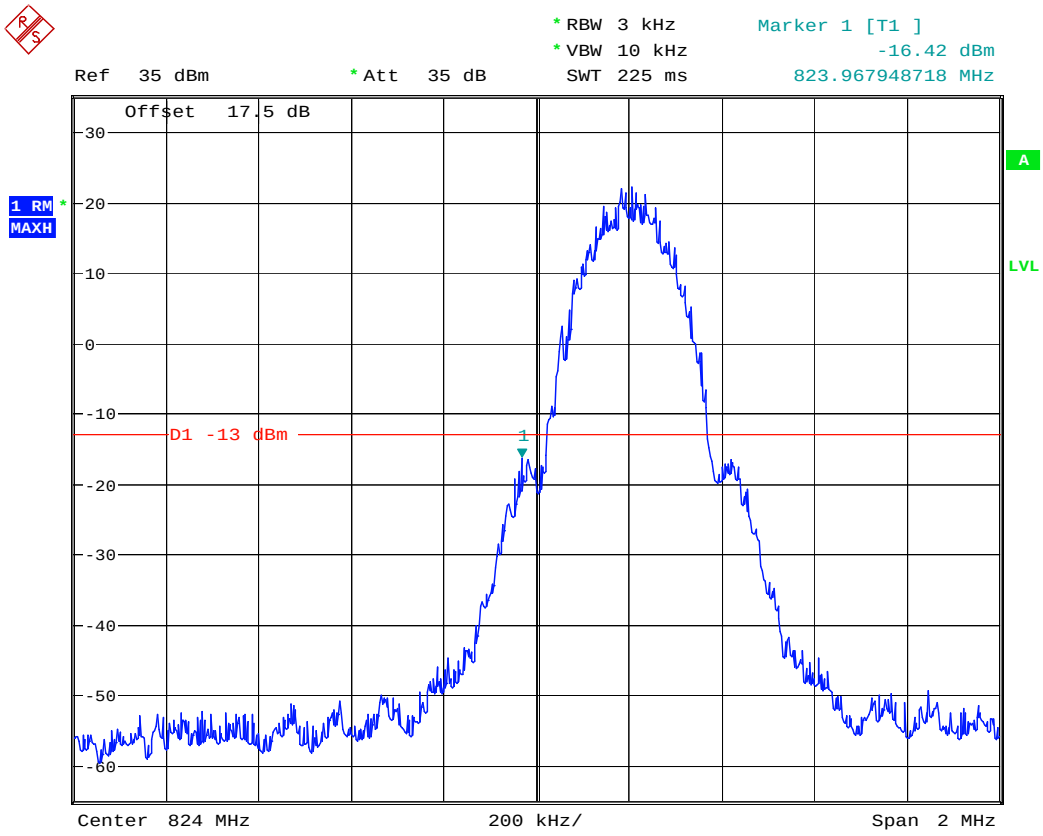
Band Edges Compliance

According to FCC Part 2.1051 & 22.917

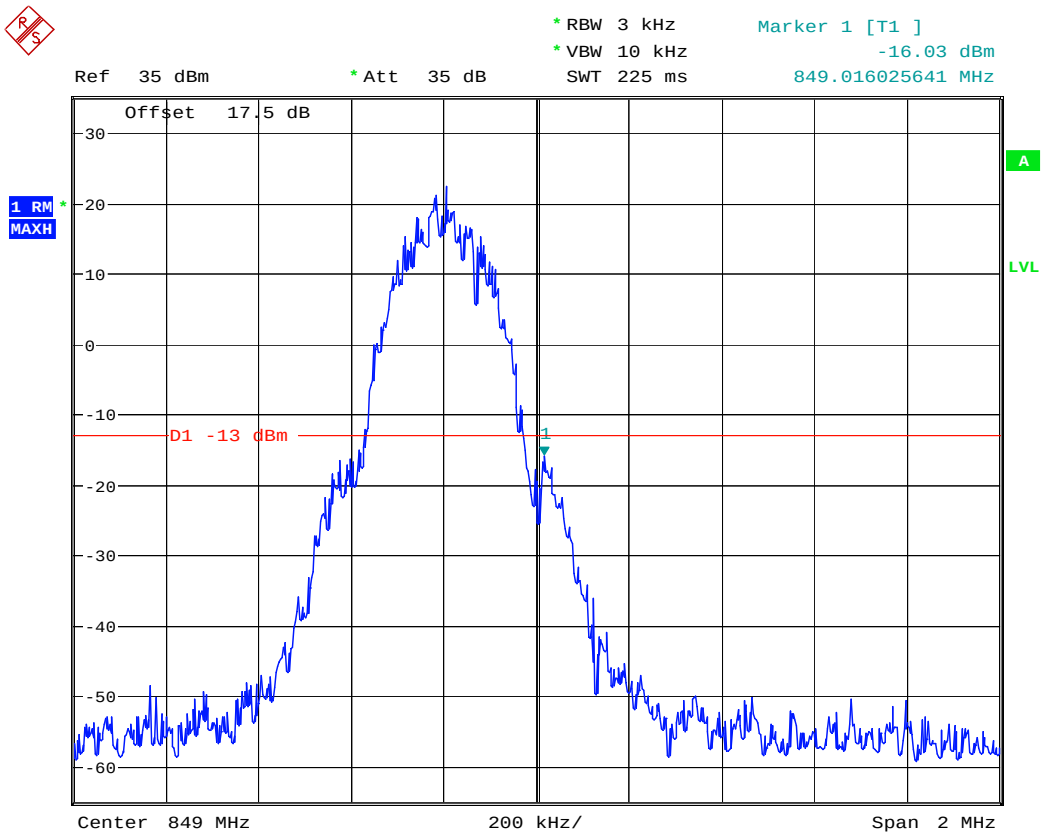
TM1:GPRS/GSM

Left Edge

Channel 128



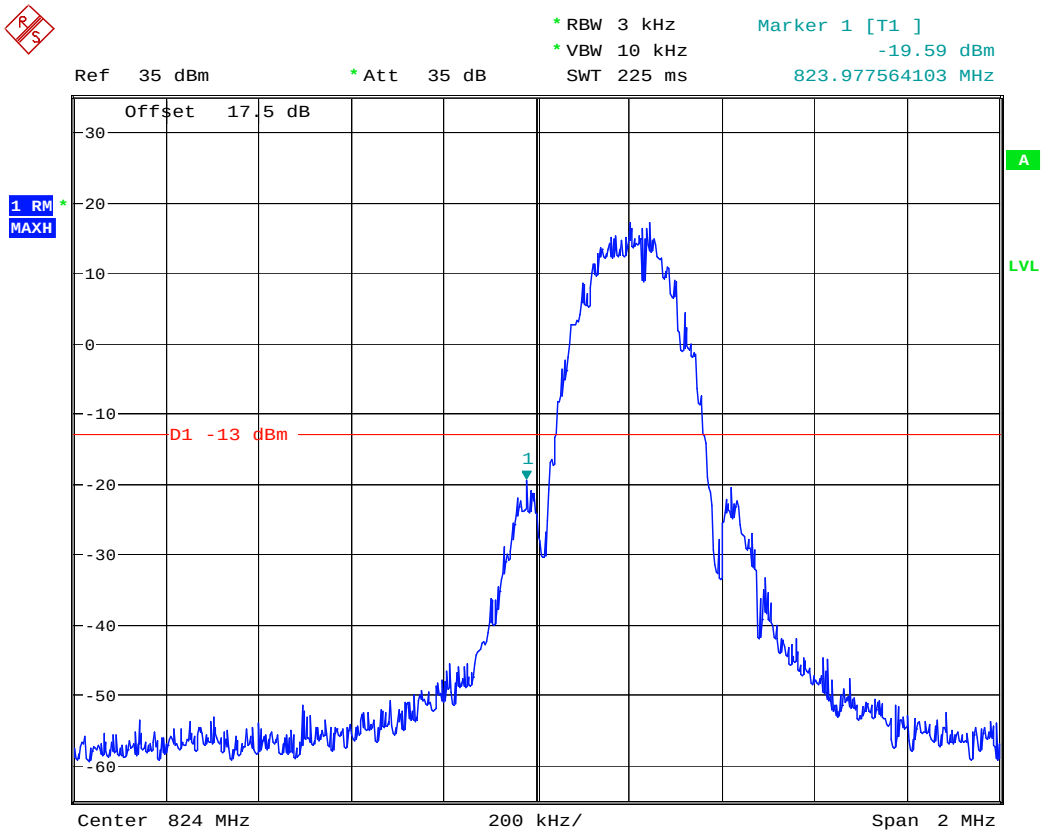
Right Edge
Channel 251



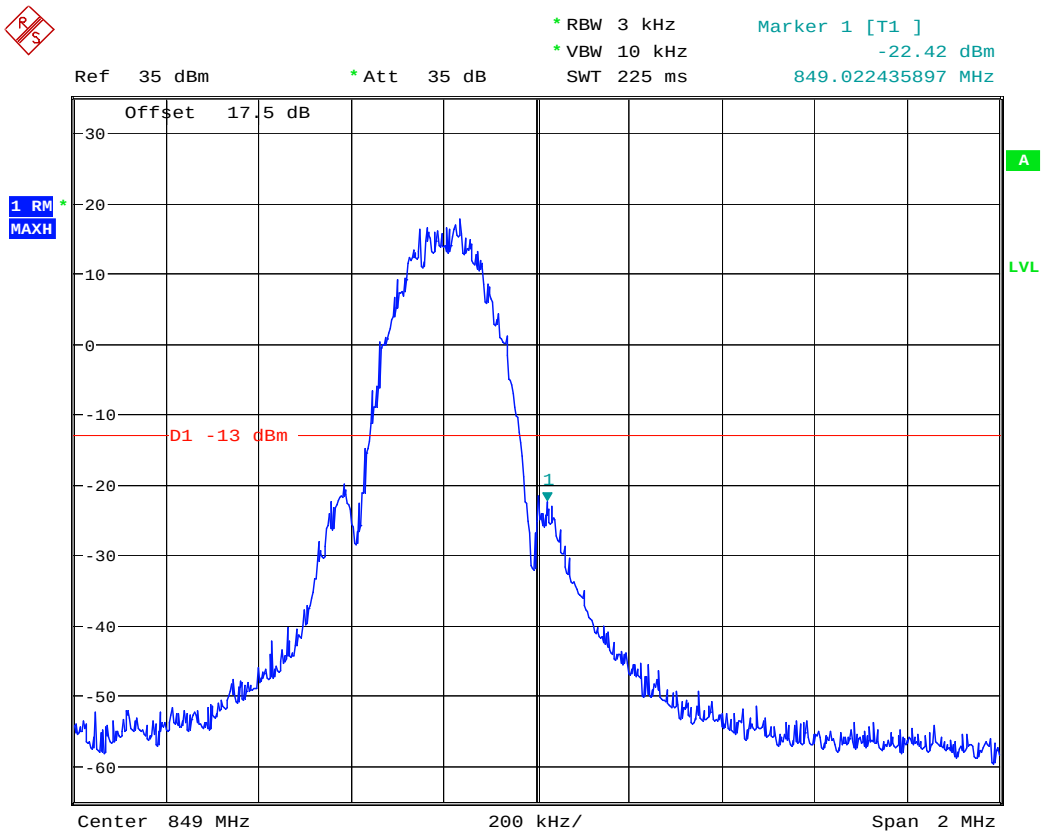
TM2:EDGE

Left Edge

Channel 128



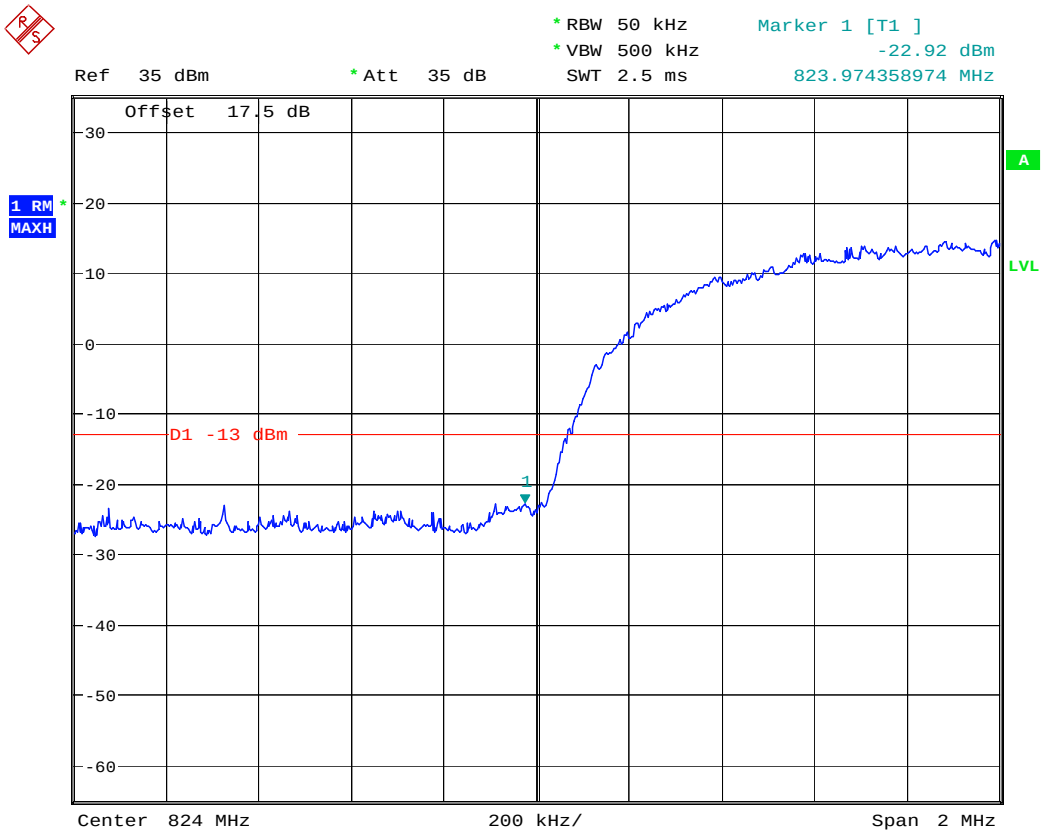
Right Edge
Channel 251



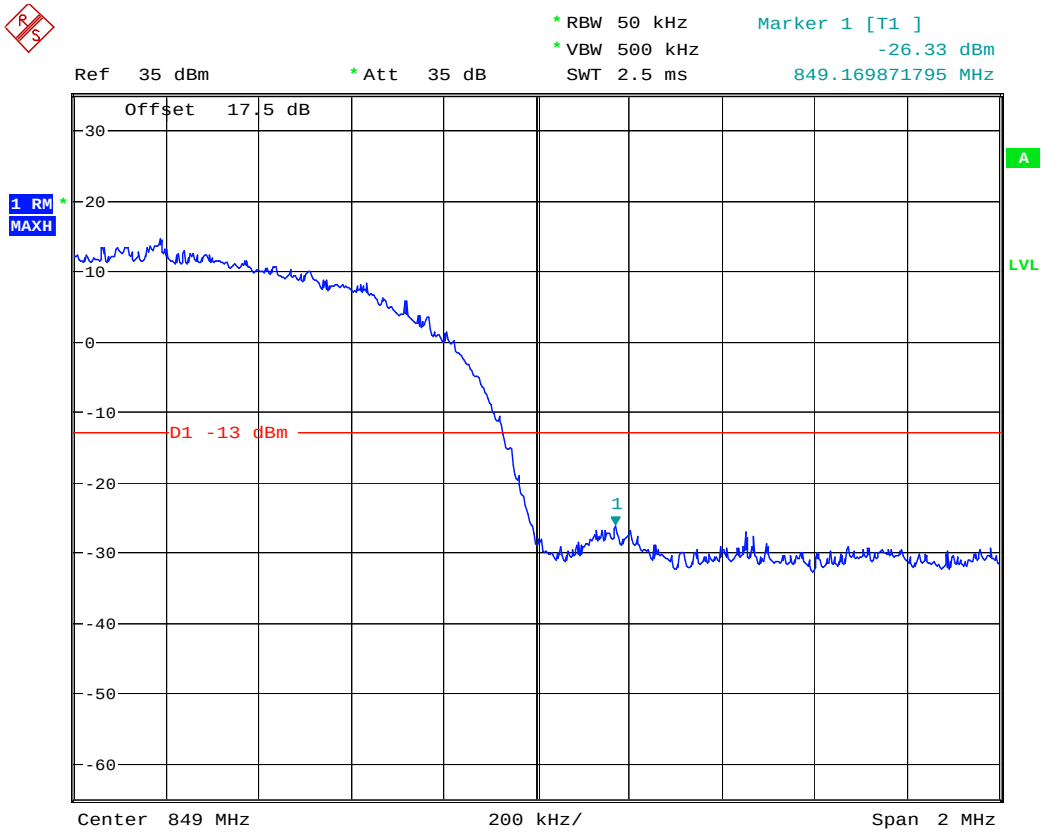
TM3: WCDMA

Left Edge

Channel 4132



Right Edge
Channel 4233



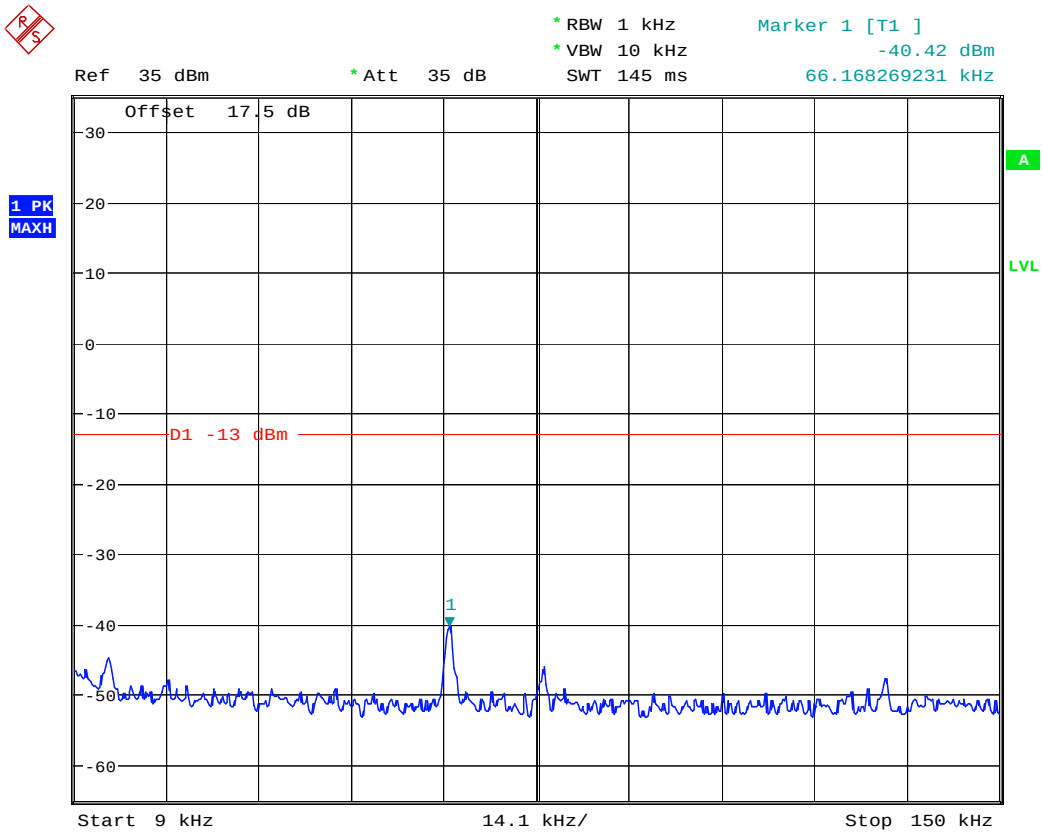
Appendix D

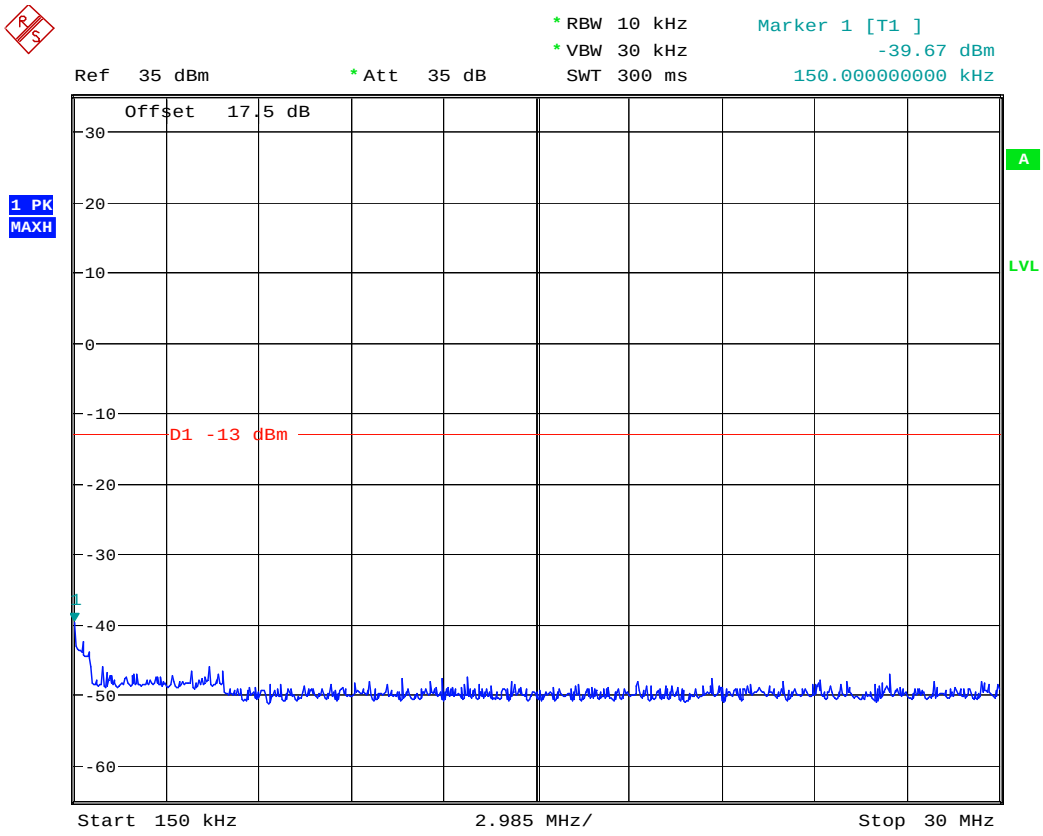
Spurious Emission at Antenna Terminal

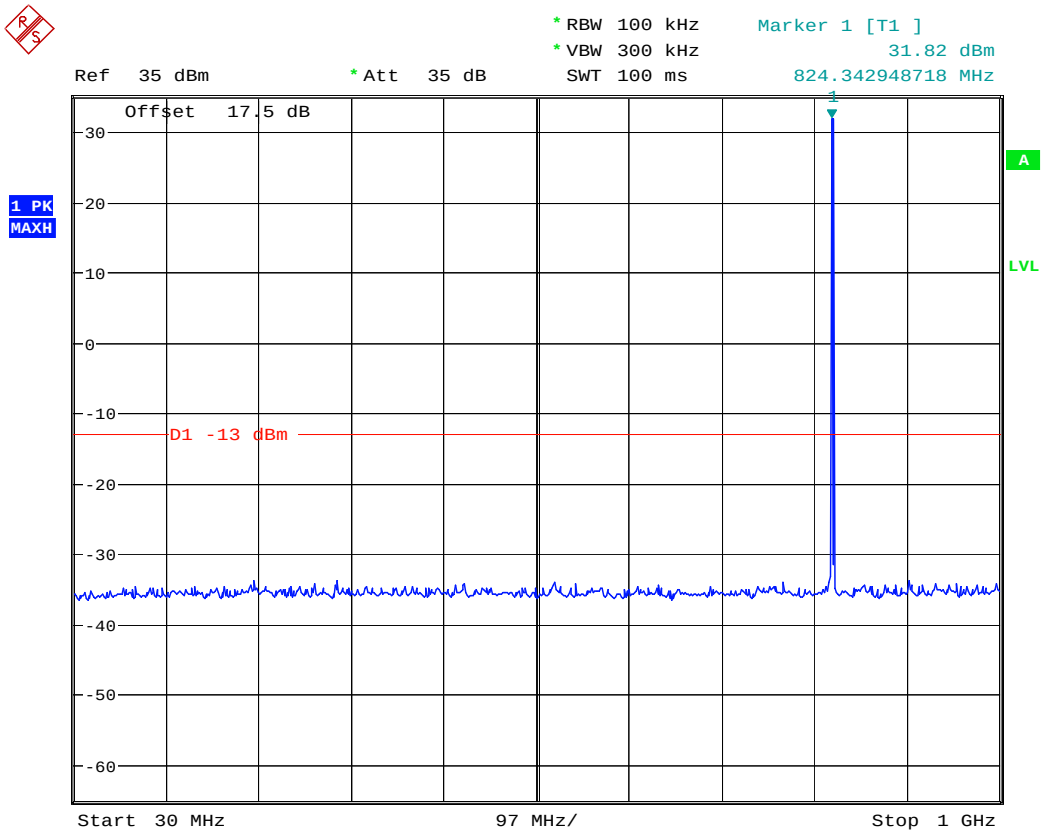
According to FCC Part 2.1051 & 22.917

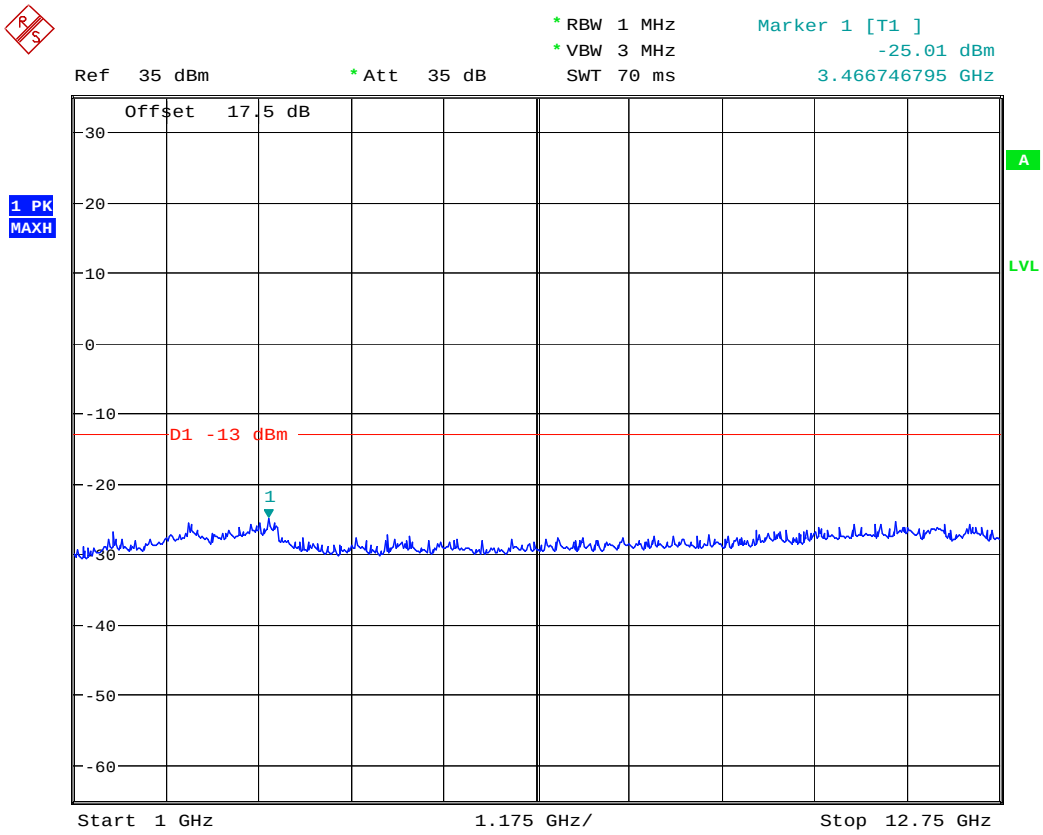
TM1:GPRS/GSM

Channel 128

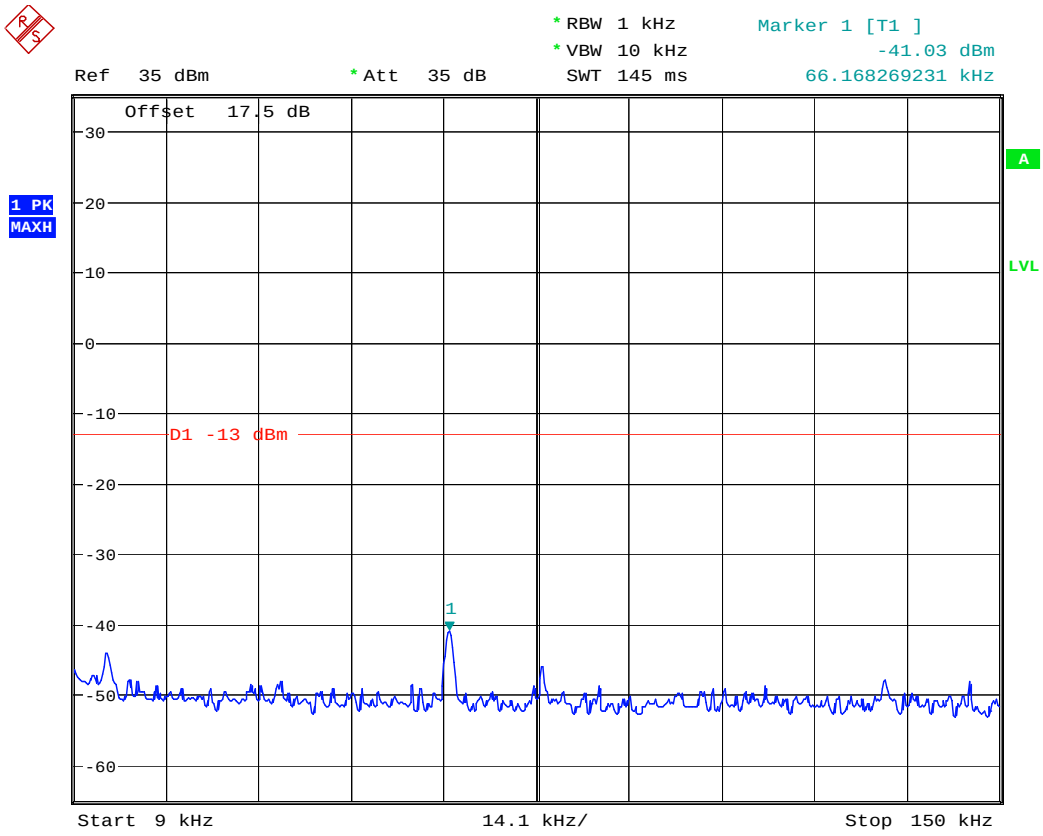


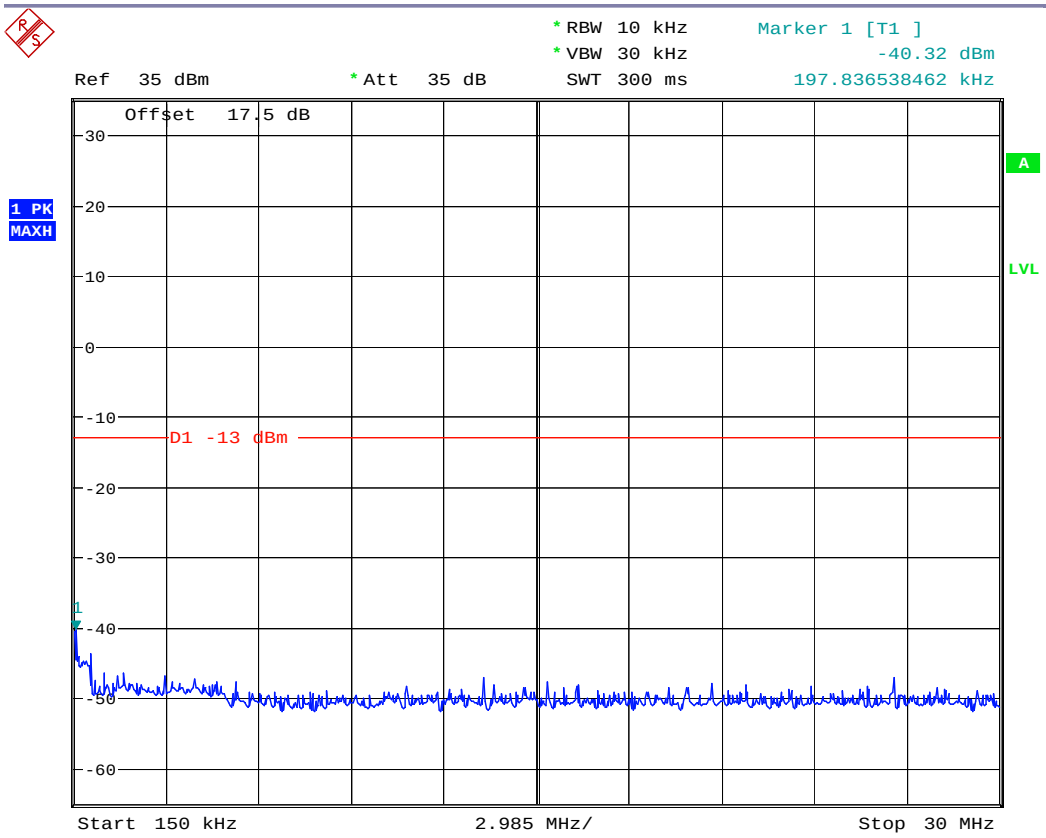

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.67 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 150 kHz
2.985 MHz/
Stop 30 MHz

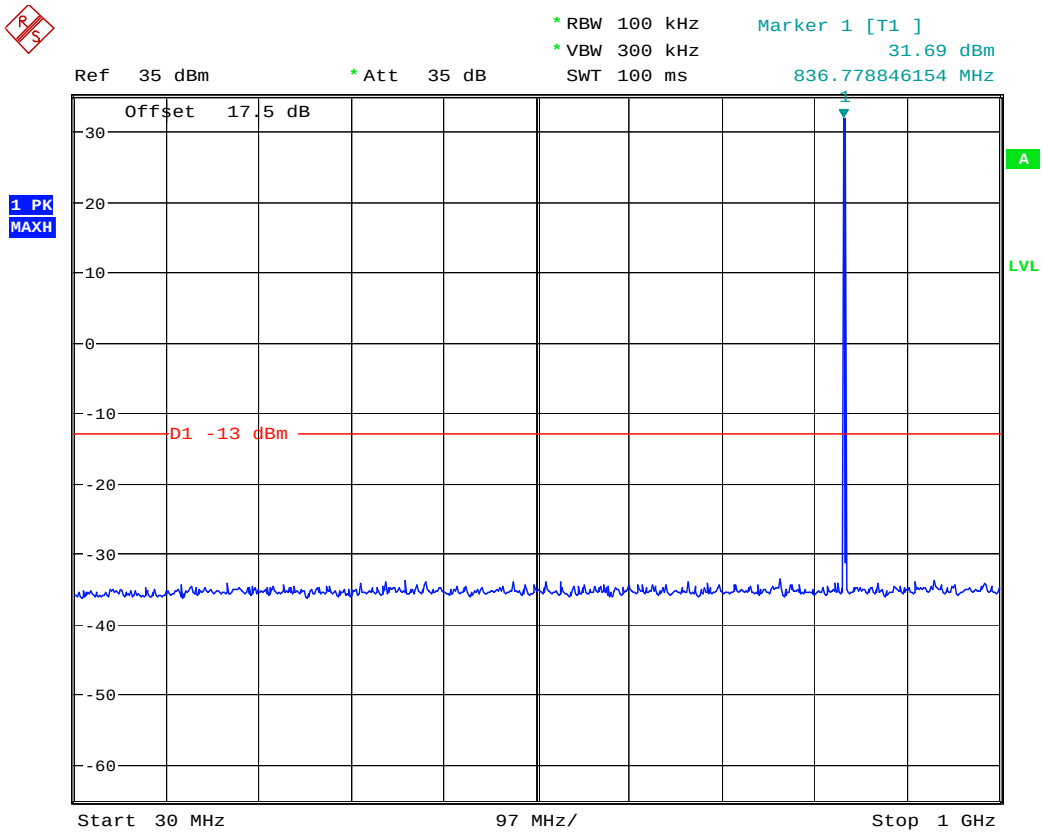

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
31.82 dBm
824.342948718 MHz
1
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

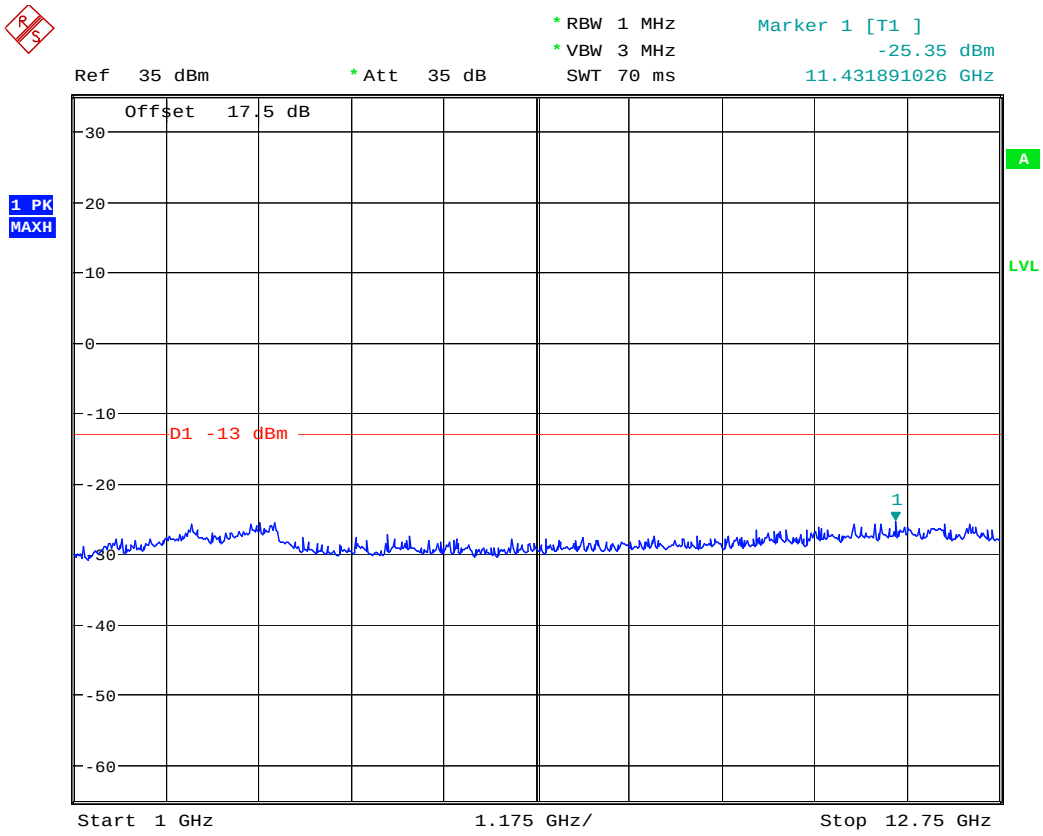

*RBW 1 MHz
*VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.01 dBm
3.466746795 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 192

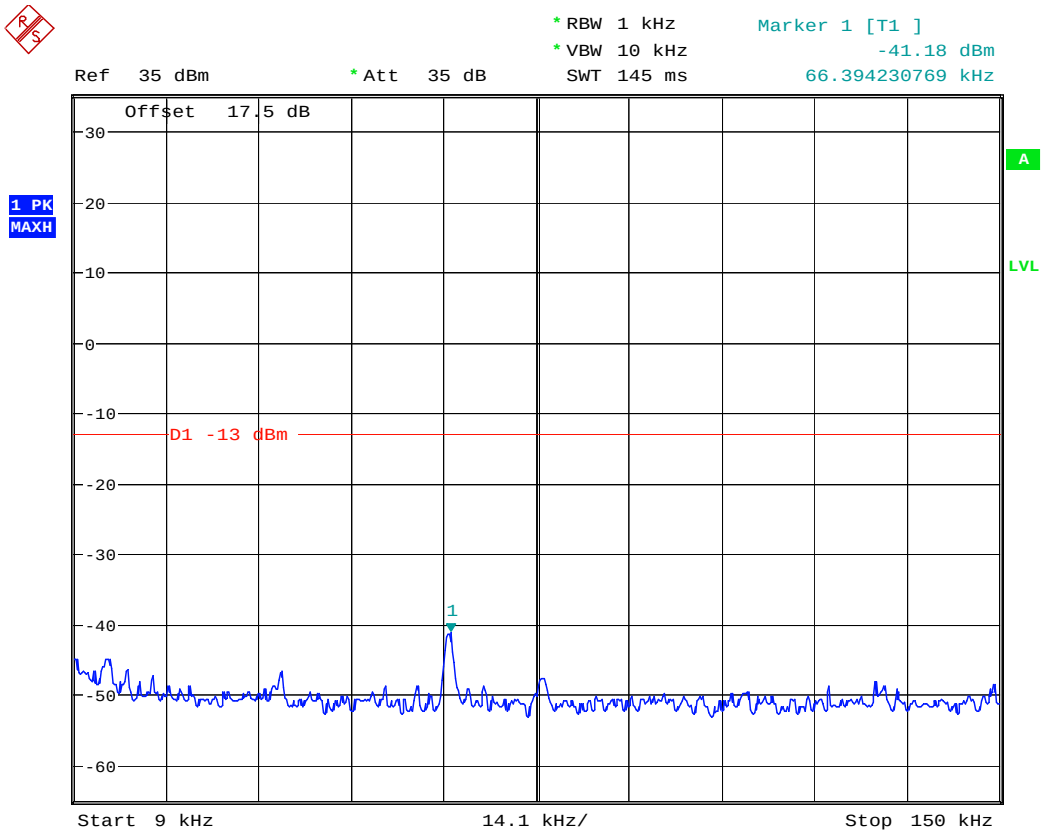

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.03 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

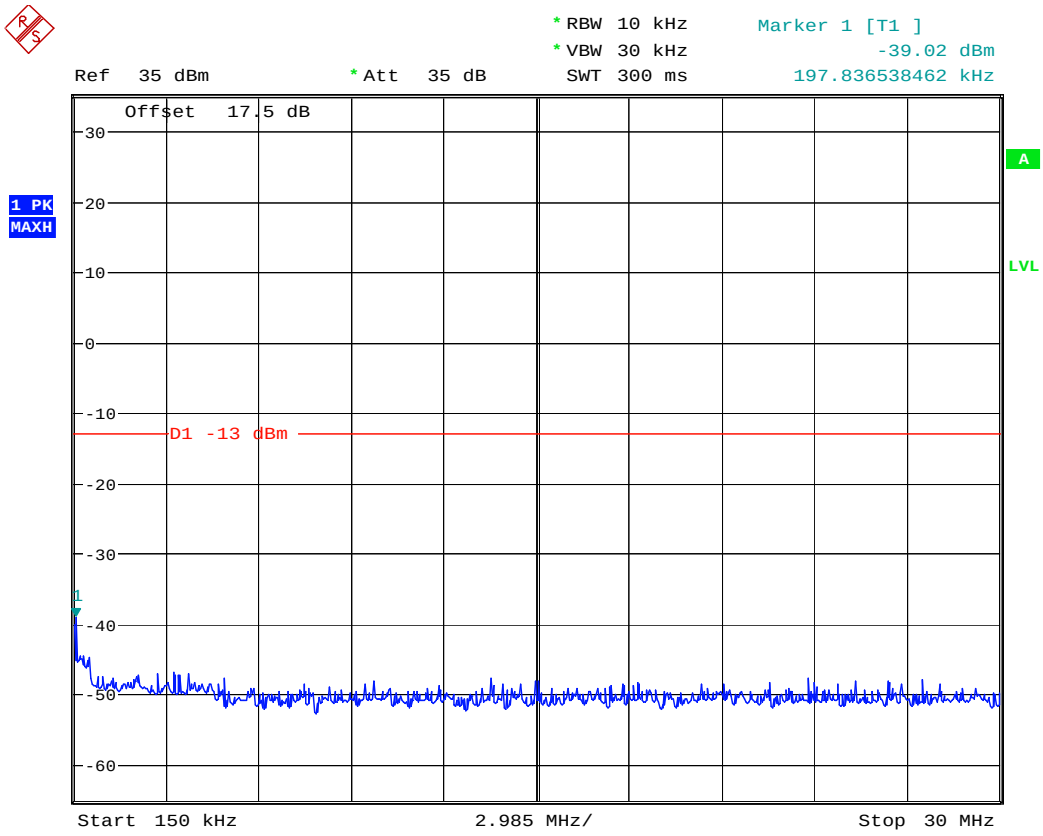

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.32 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

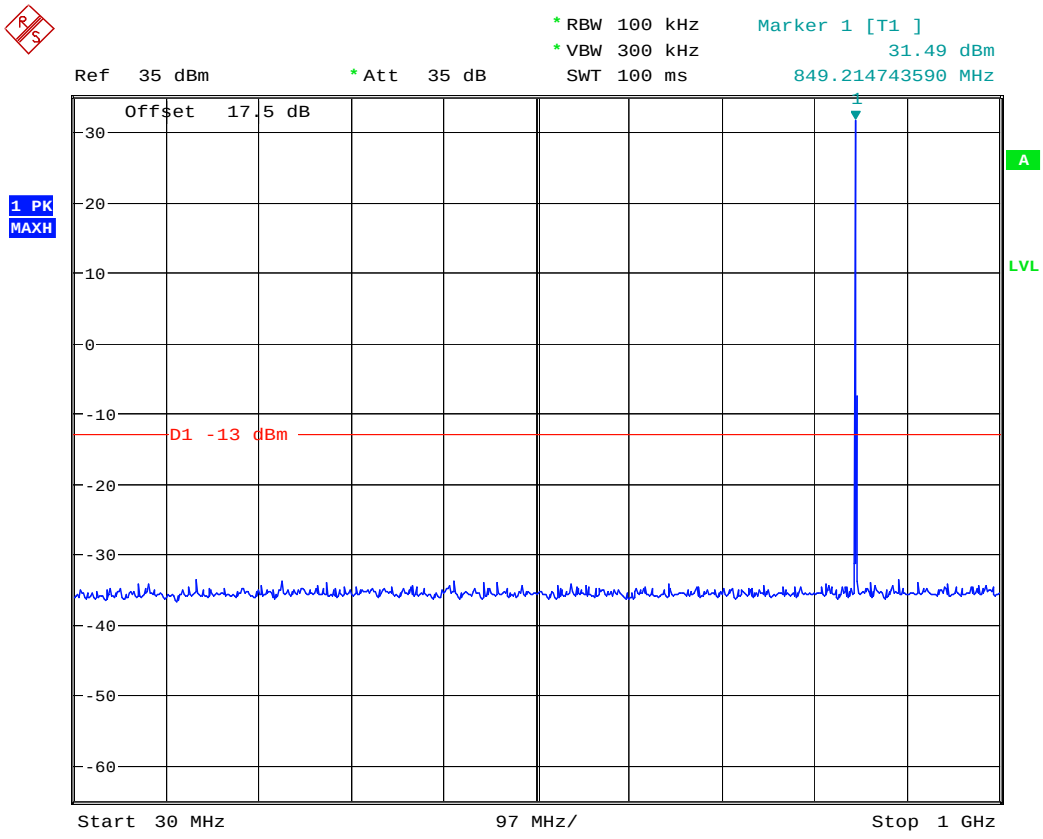

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
31.69 dBm
836.778846154 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

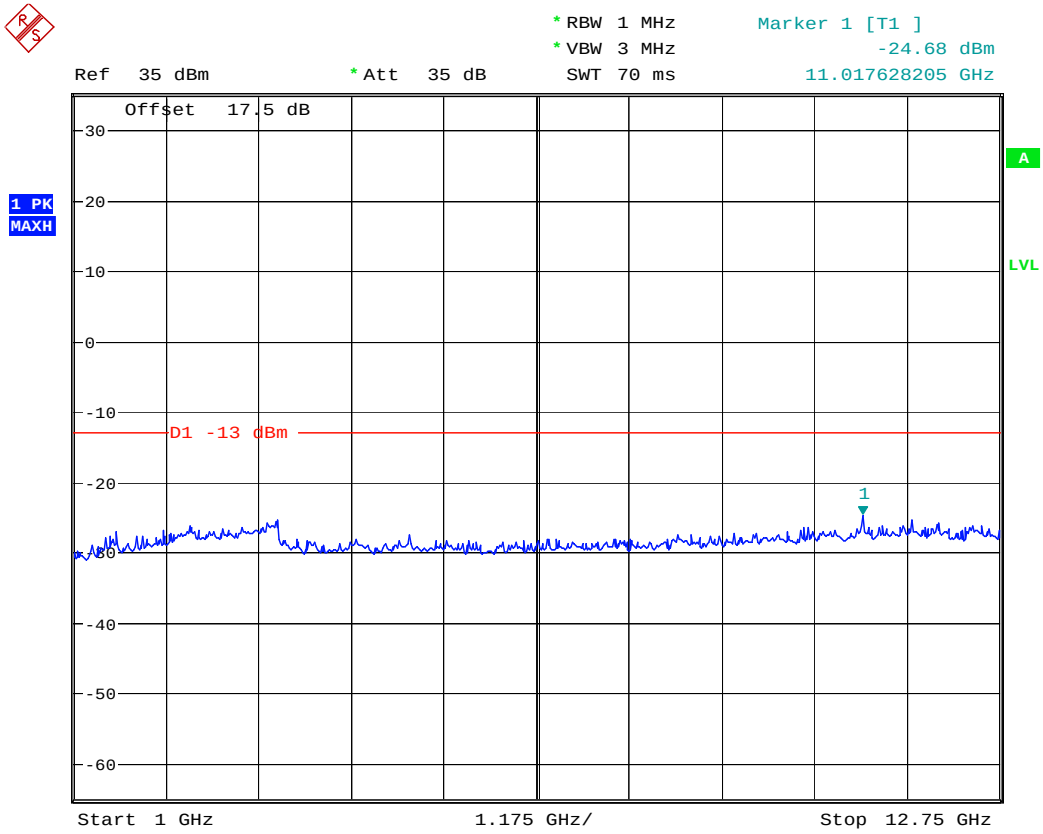

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.35 dBm
11.431891026 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 251

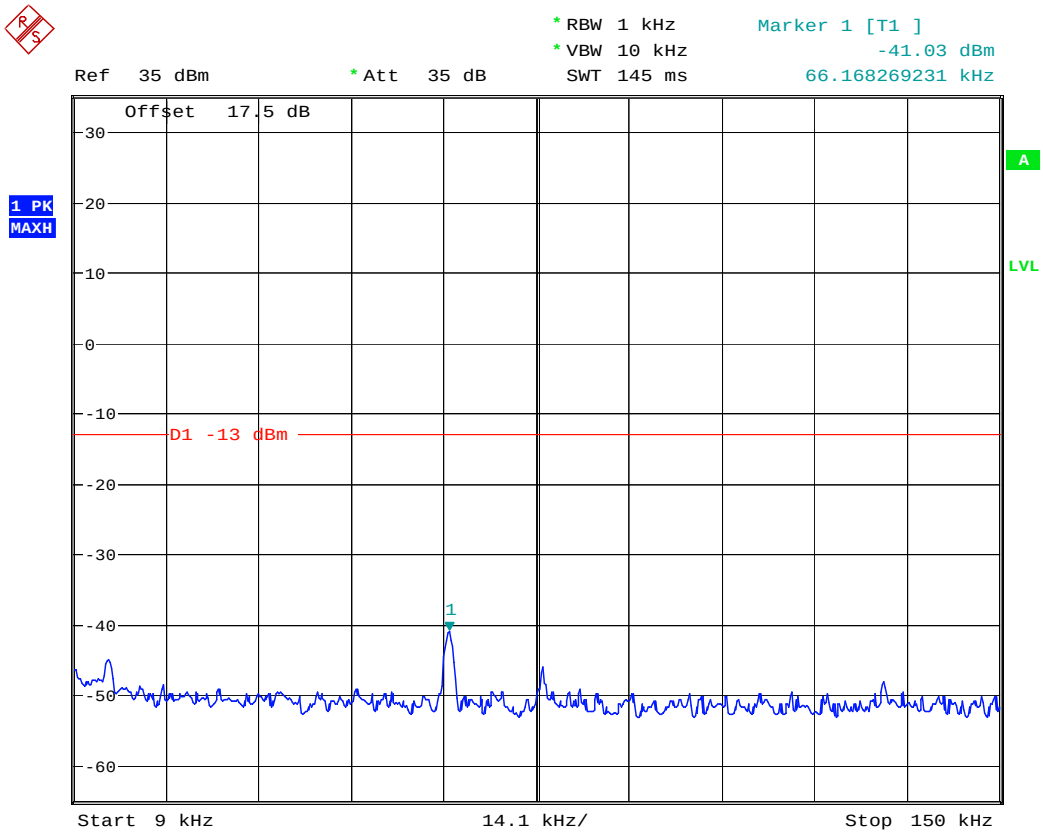

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.18 dBm
66.394230769 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

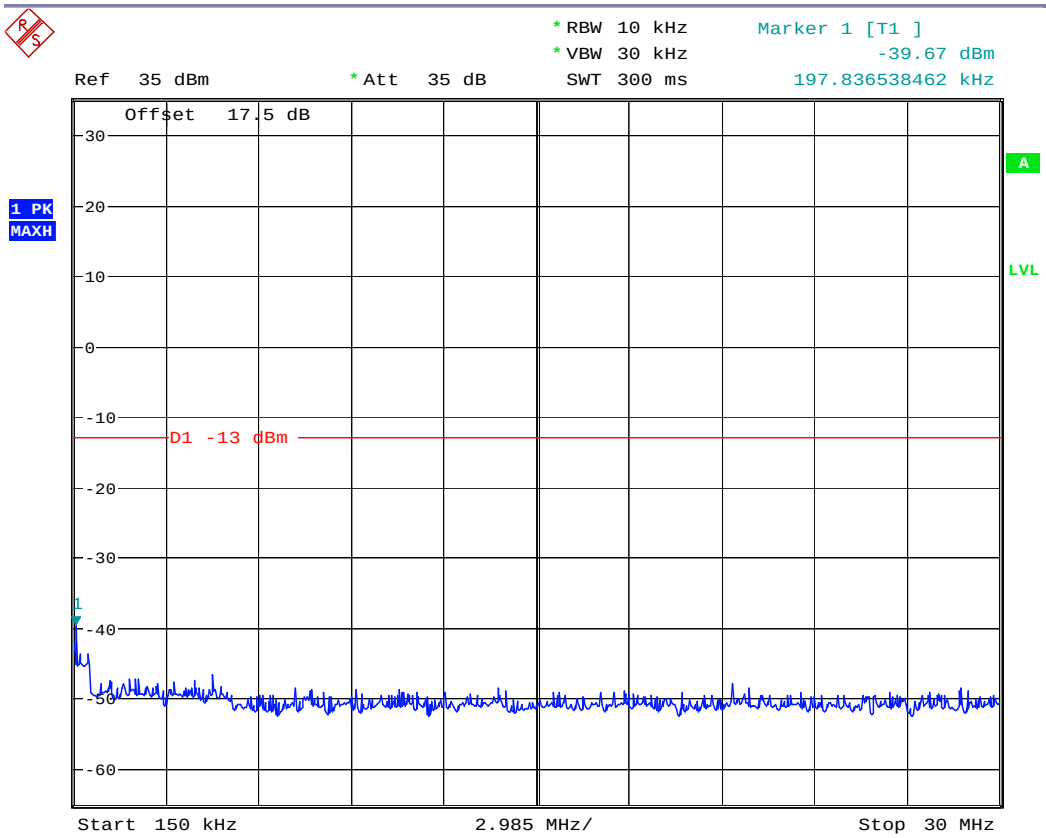

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.02 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

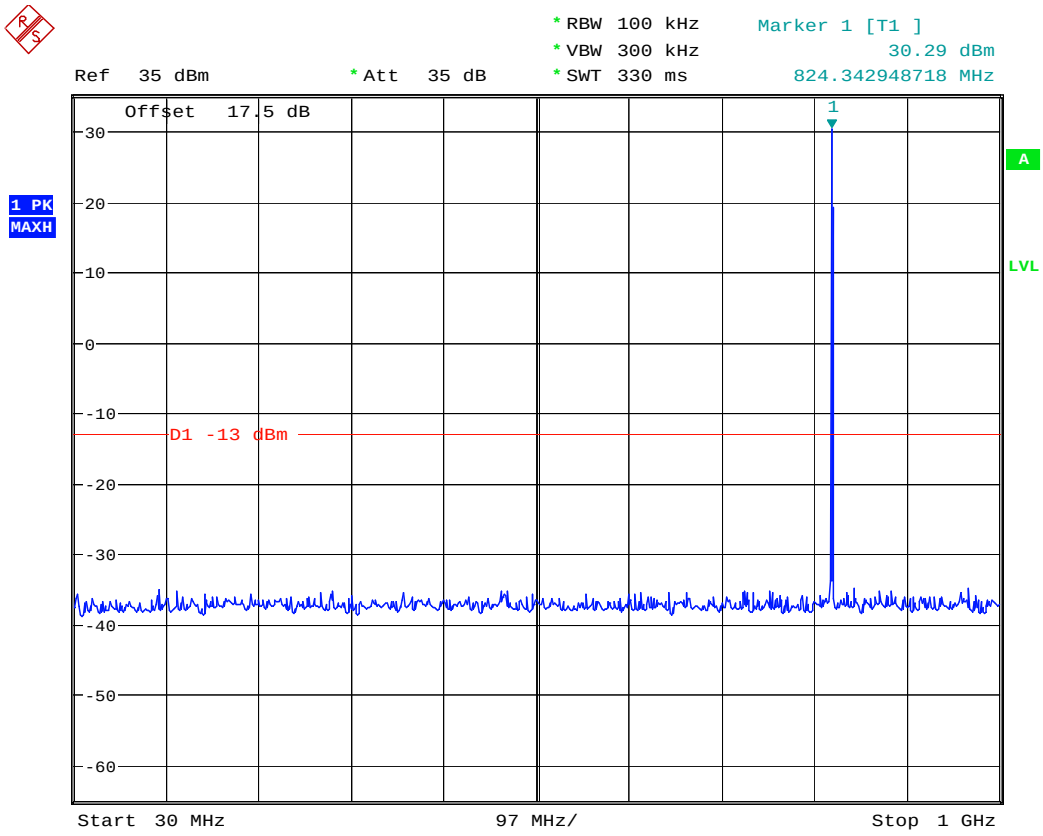

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
31.49 dBm
849.214743590 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

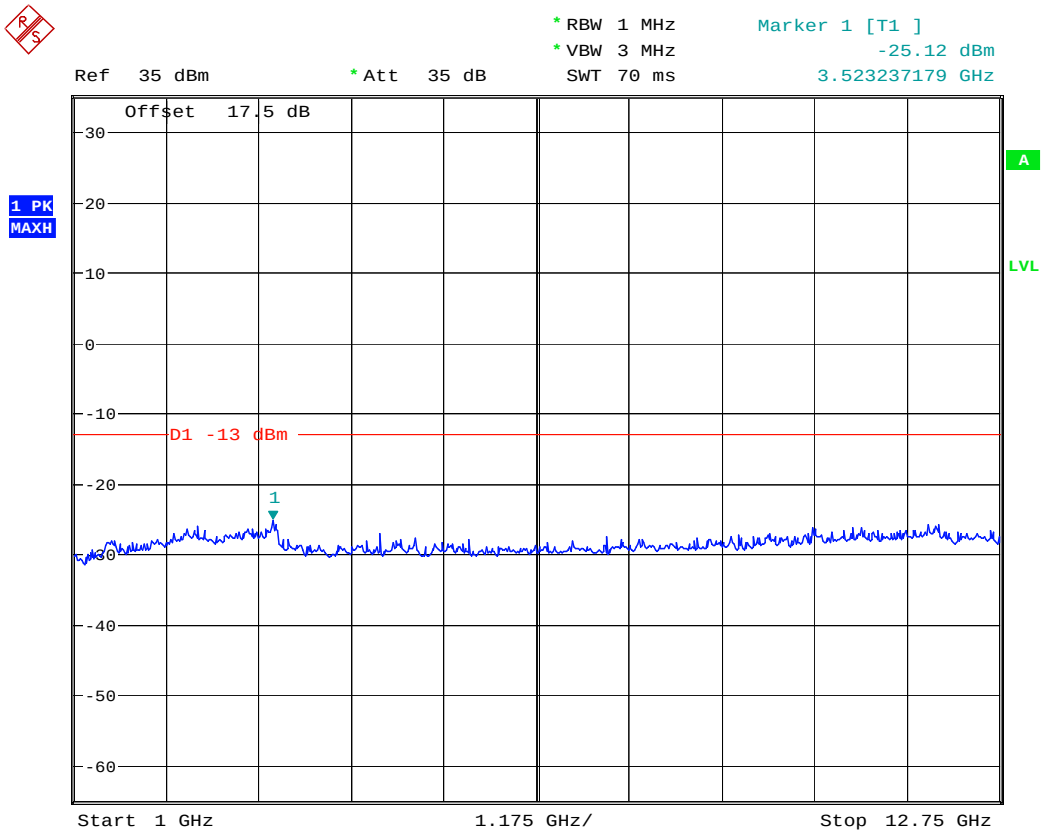

*RBW 1 MHz
*VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-24.68 dBm
11.017628205 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

TM2:EDGE
Channel 128

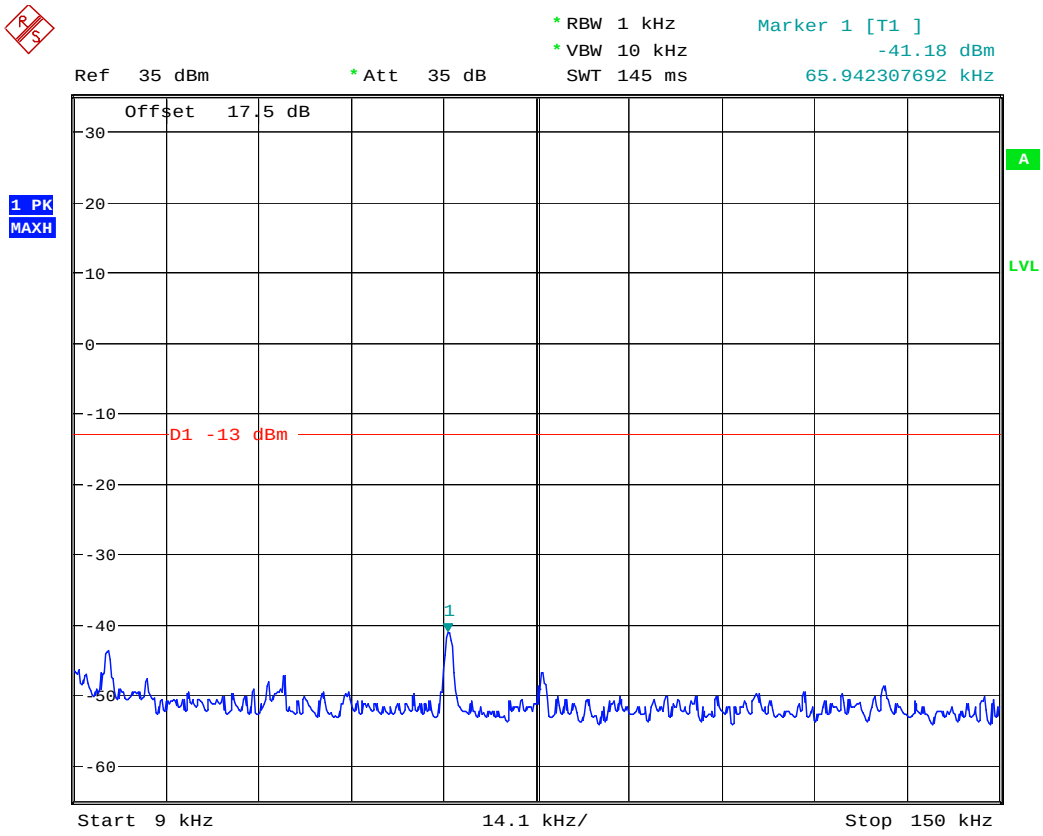


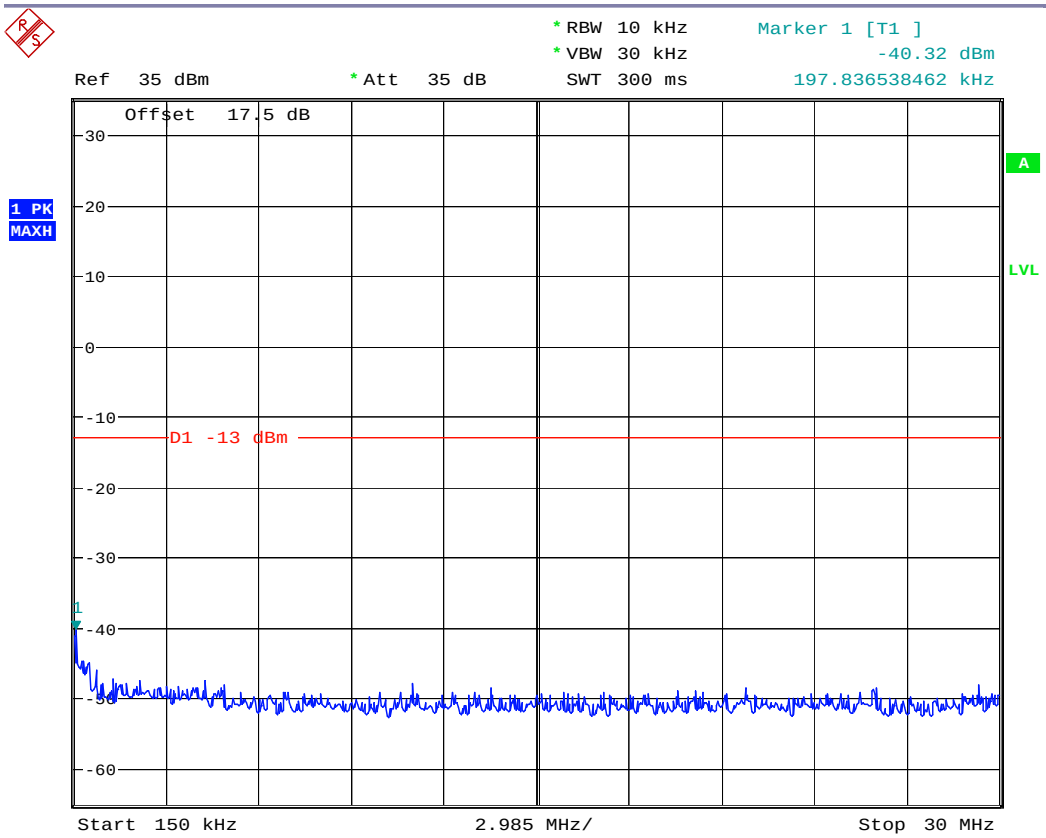

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.67 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

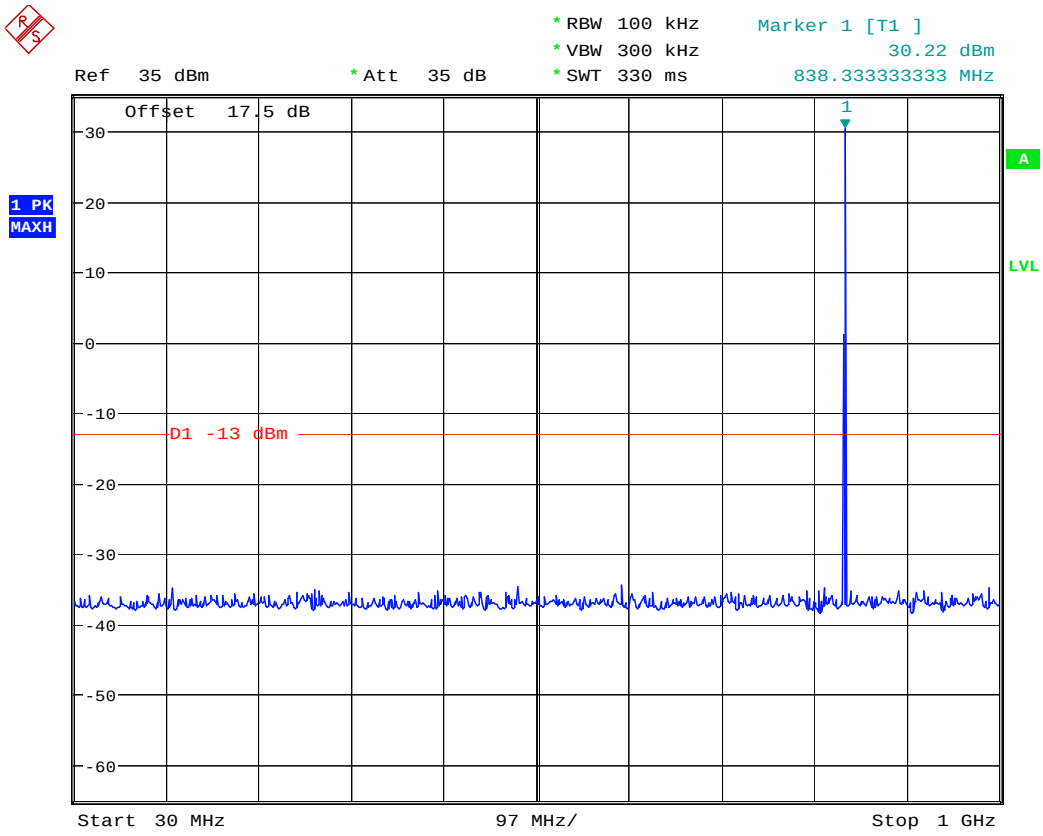

*RBW 100 kHz
*VBW 300 kHz
*SWT 330 ms
Marker 1 [T1]
30.29 dBm
824.342948718 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

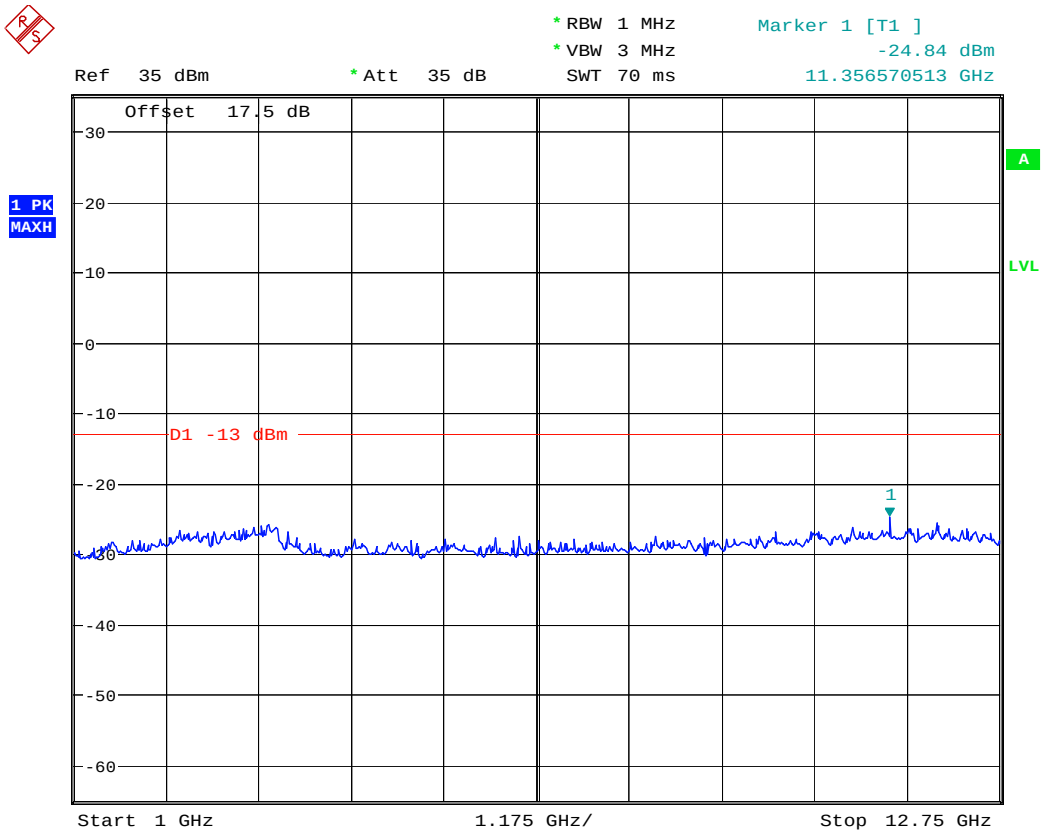

*RBW 1 MHz
*VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.12 dBm
3.523237179 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 192

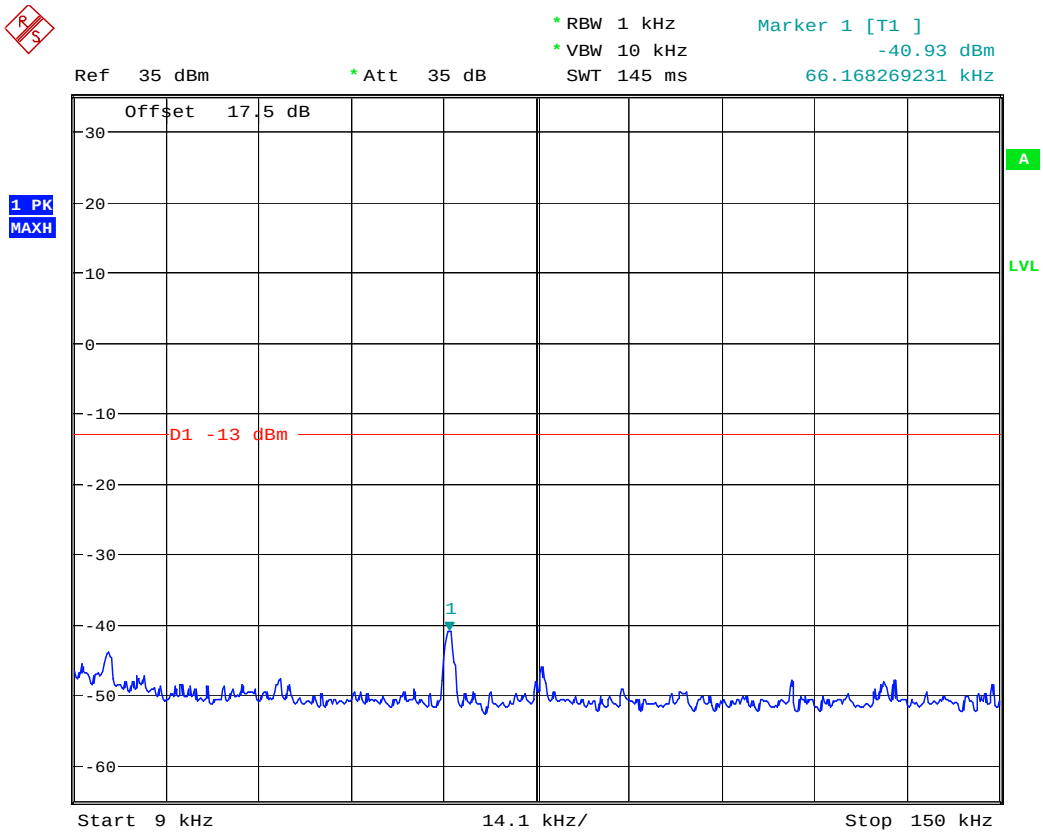

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.18 dBm
65.942307692 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

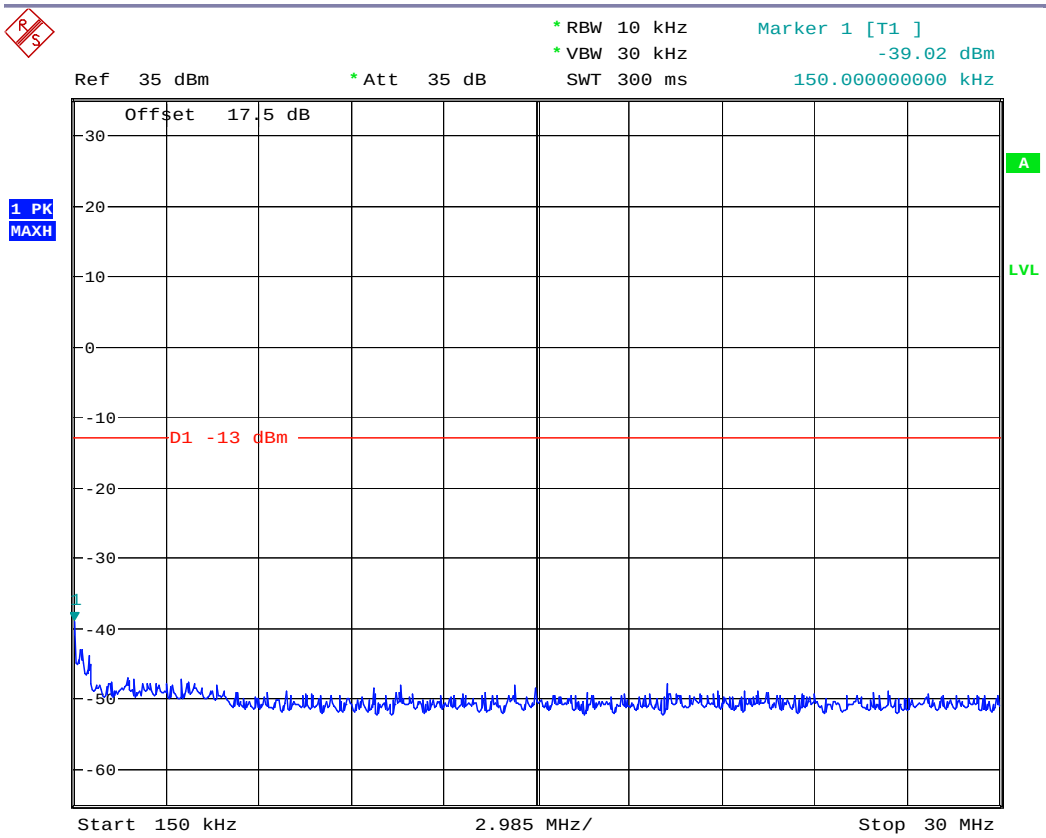

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.32 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

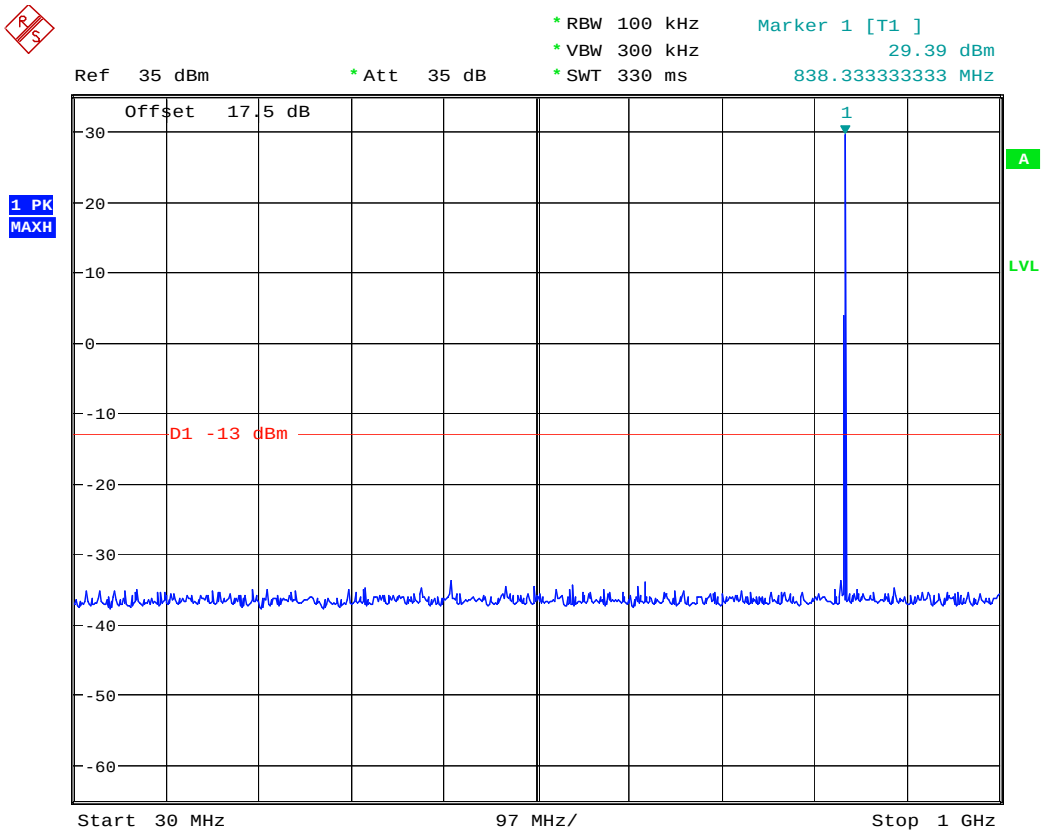

*RBW 100 kHz
*VBW 300 kHz
*SWT 330 ms
Marker 1 [T1]
30.22 dBm
838.333333333 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

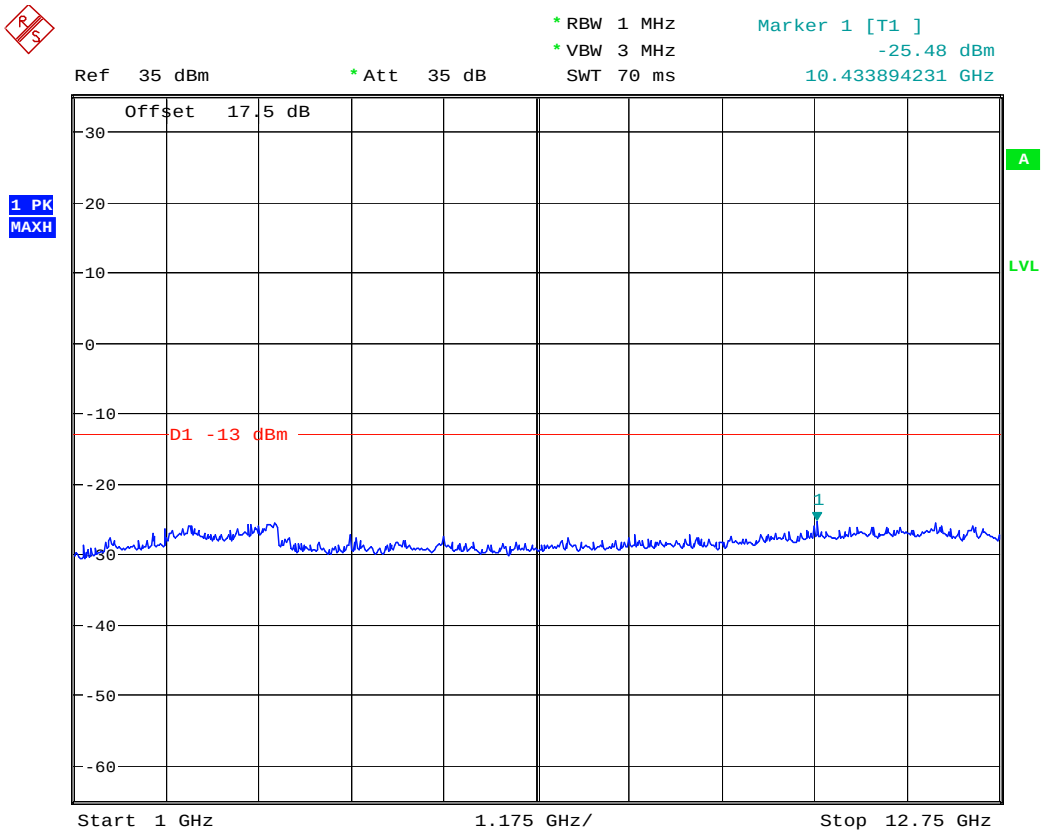

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-24.84 dBm
11.356570513 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 251

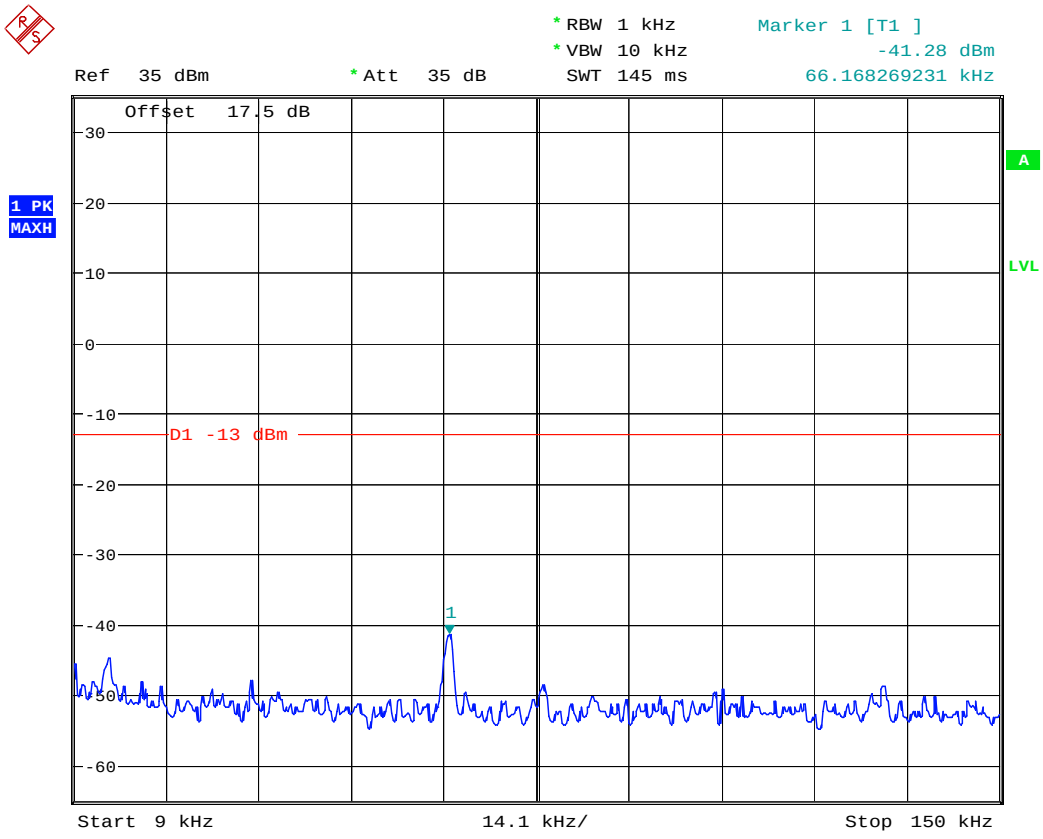

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-40.93 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

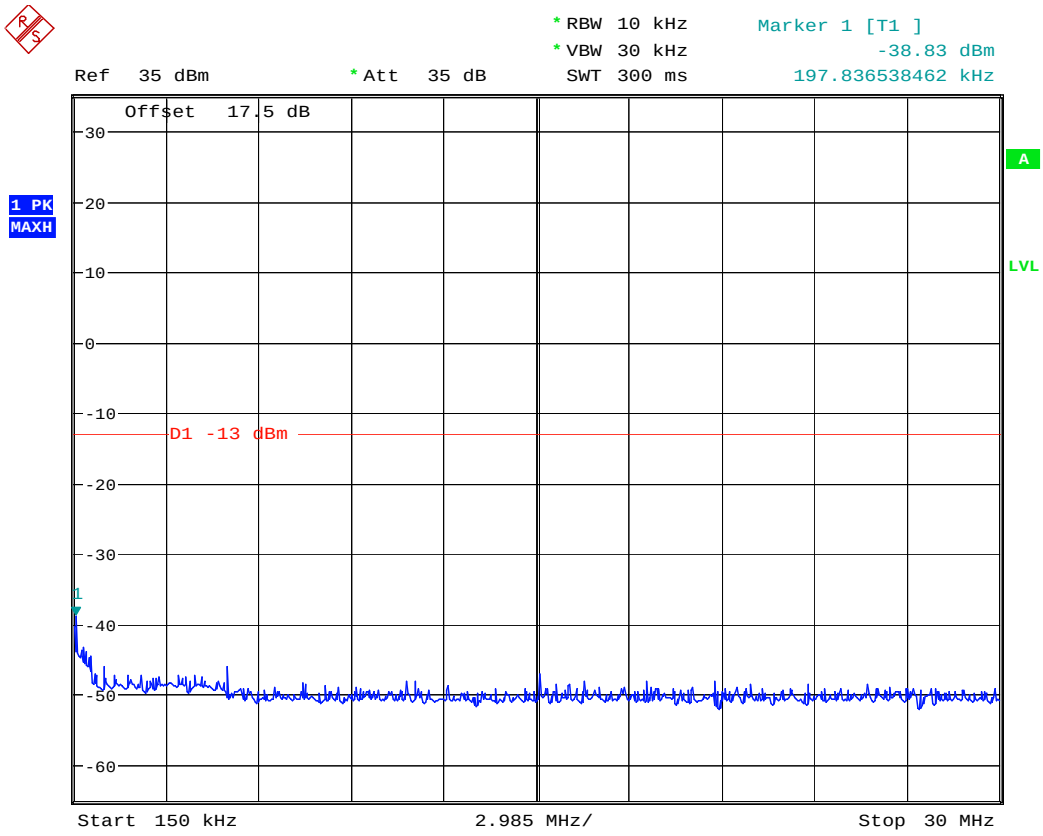

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.02 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

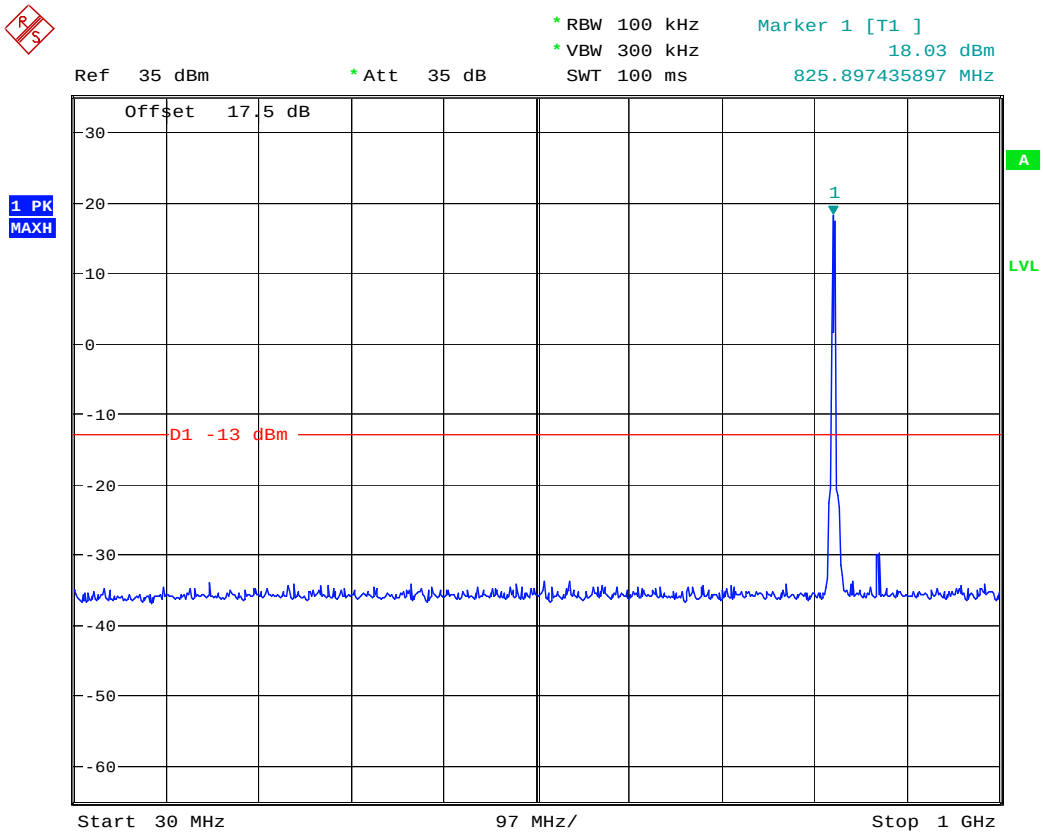

*RBW 100 kHz
*VBW 300 kHz
*SWT 330 ms
Marker 1 [T1]
29.39 dBm
838.333333333 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

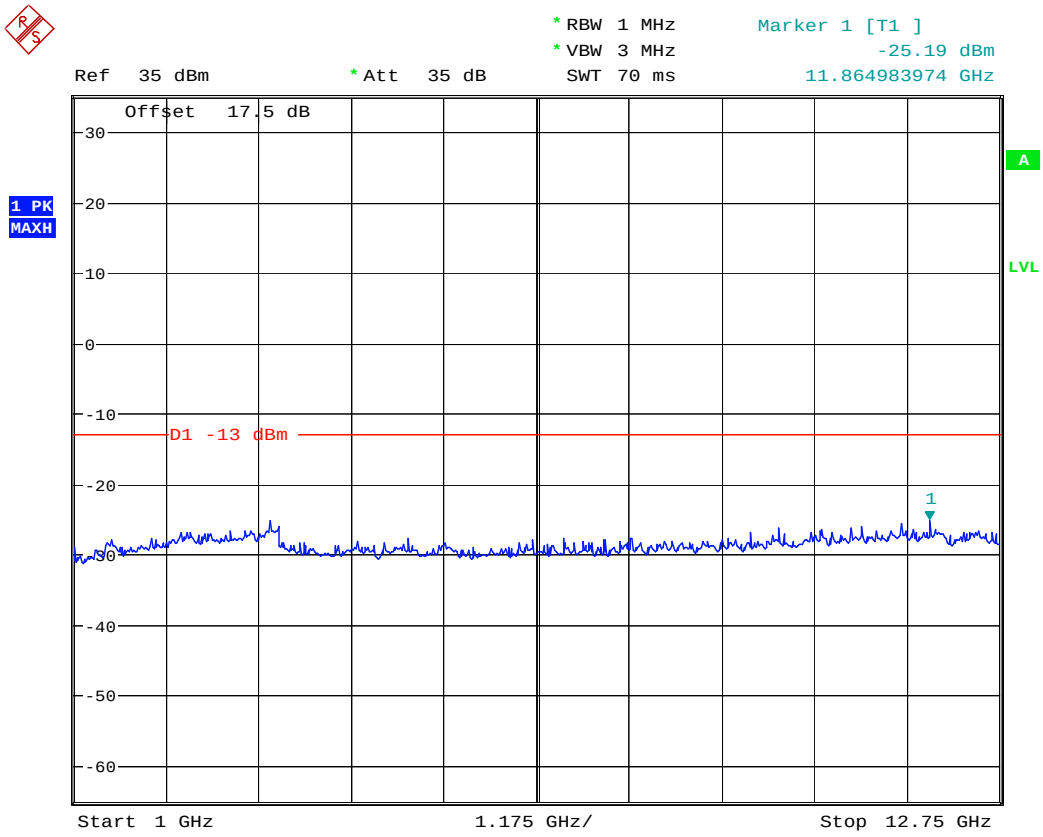

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.48 dBm
10.433894231 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

TM3: WCDMA
Channel 4132

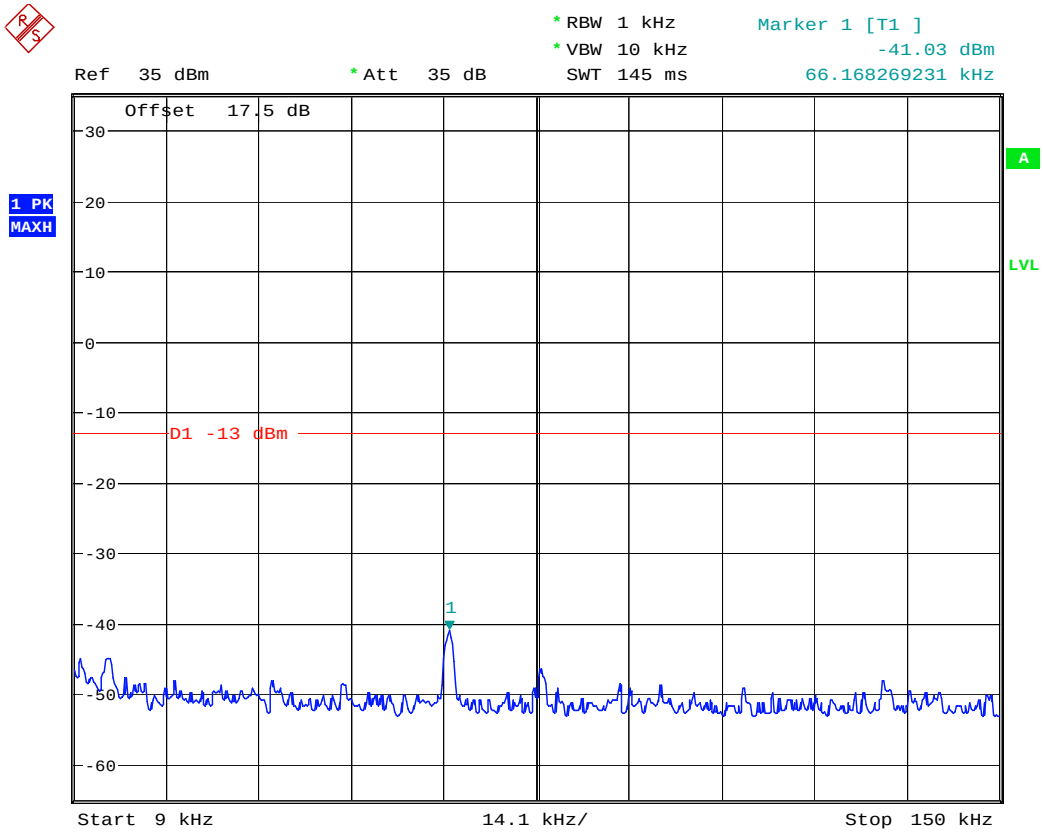


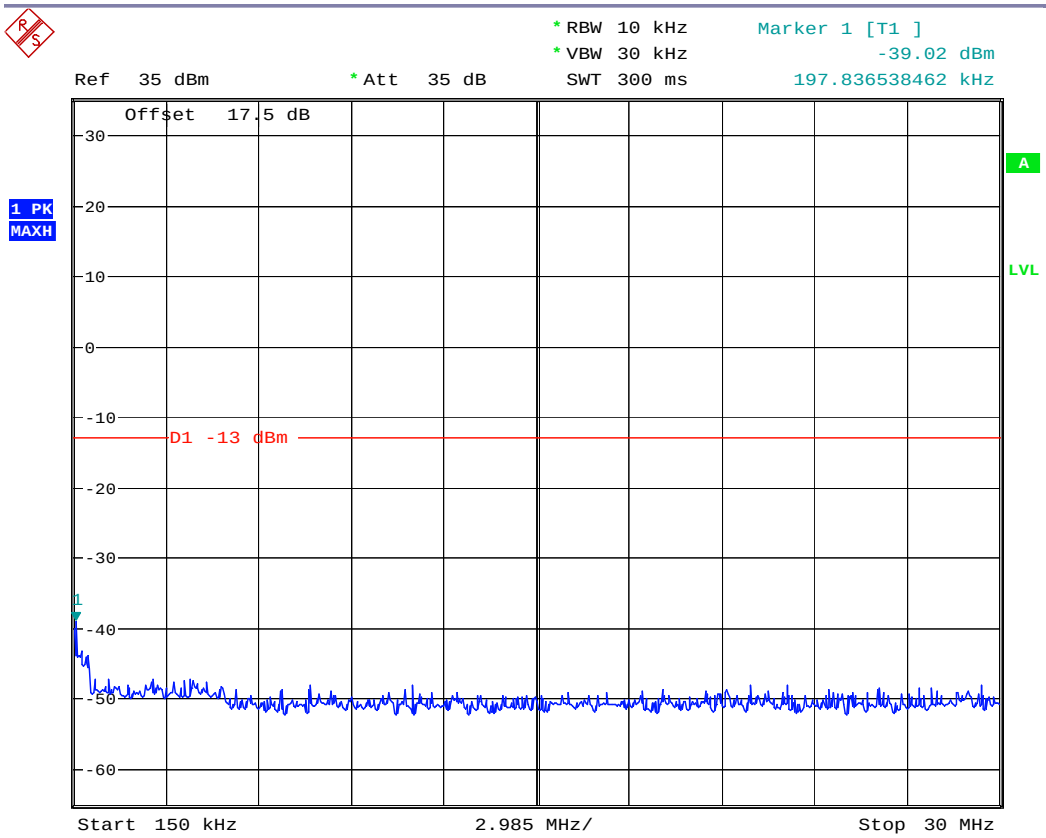

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.83 dBm
197.836538462 kHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

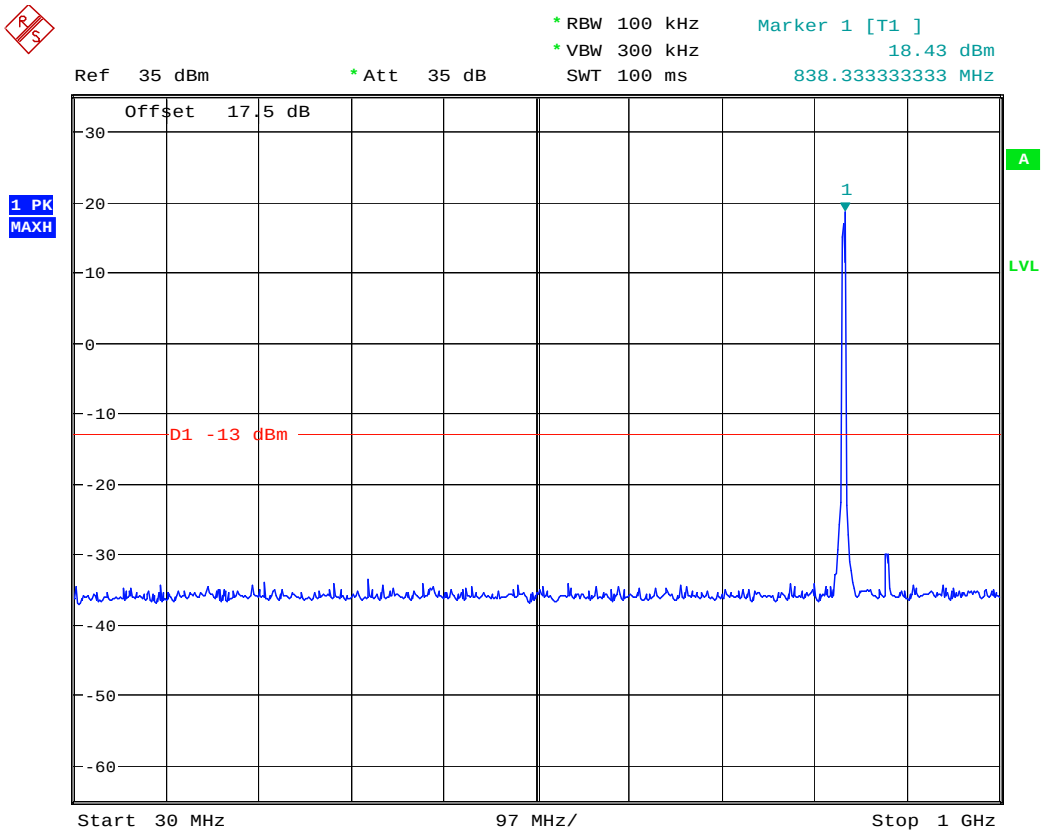

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
18.03 dBm
825.897435897 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

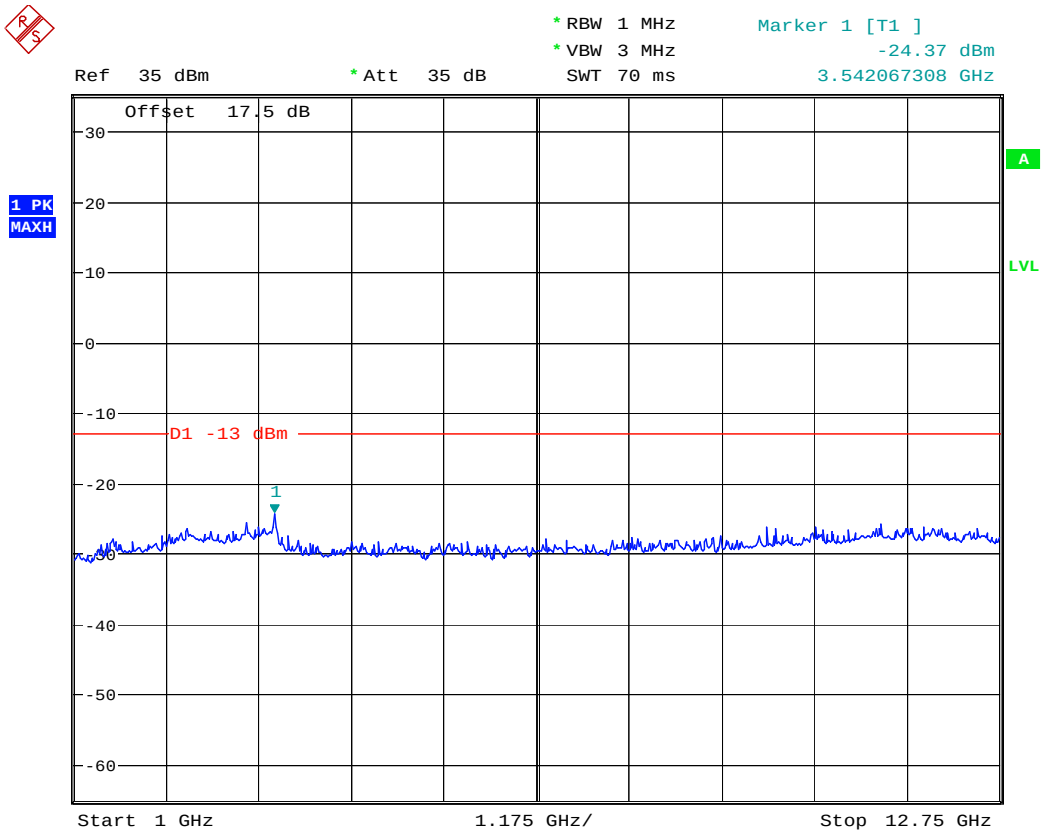

*RBW 1 MHz
*VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.19 dBm
11.864983974 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 4182

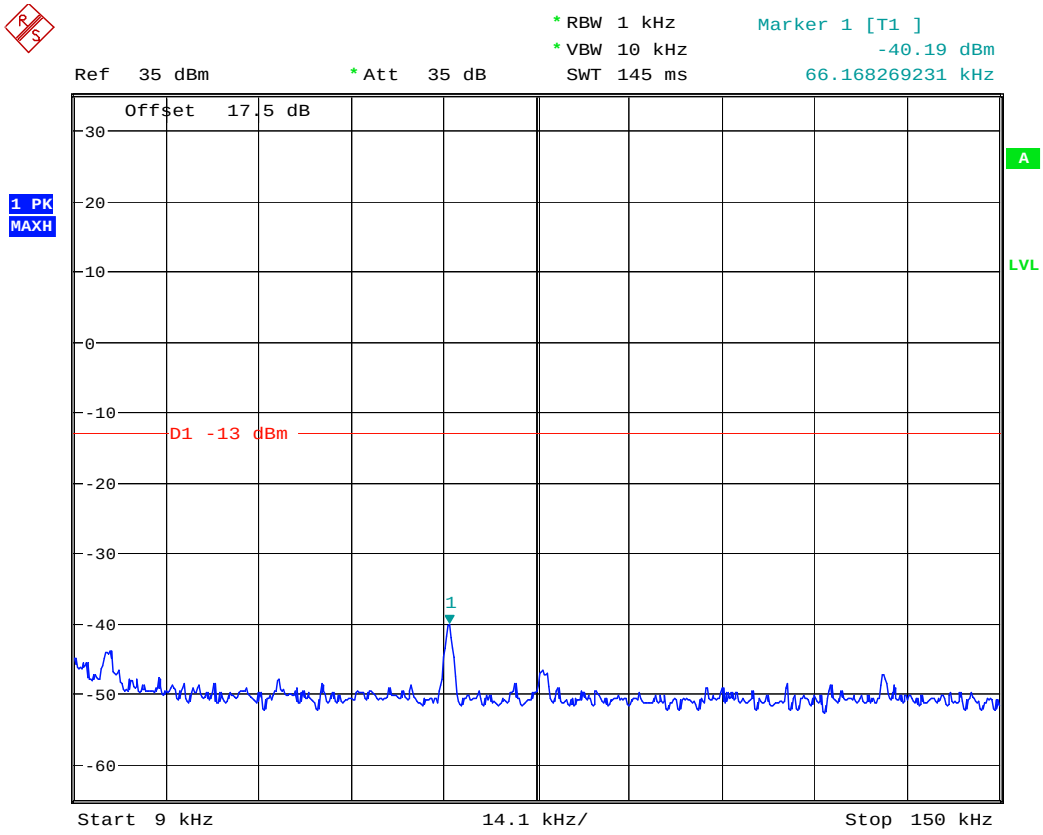


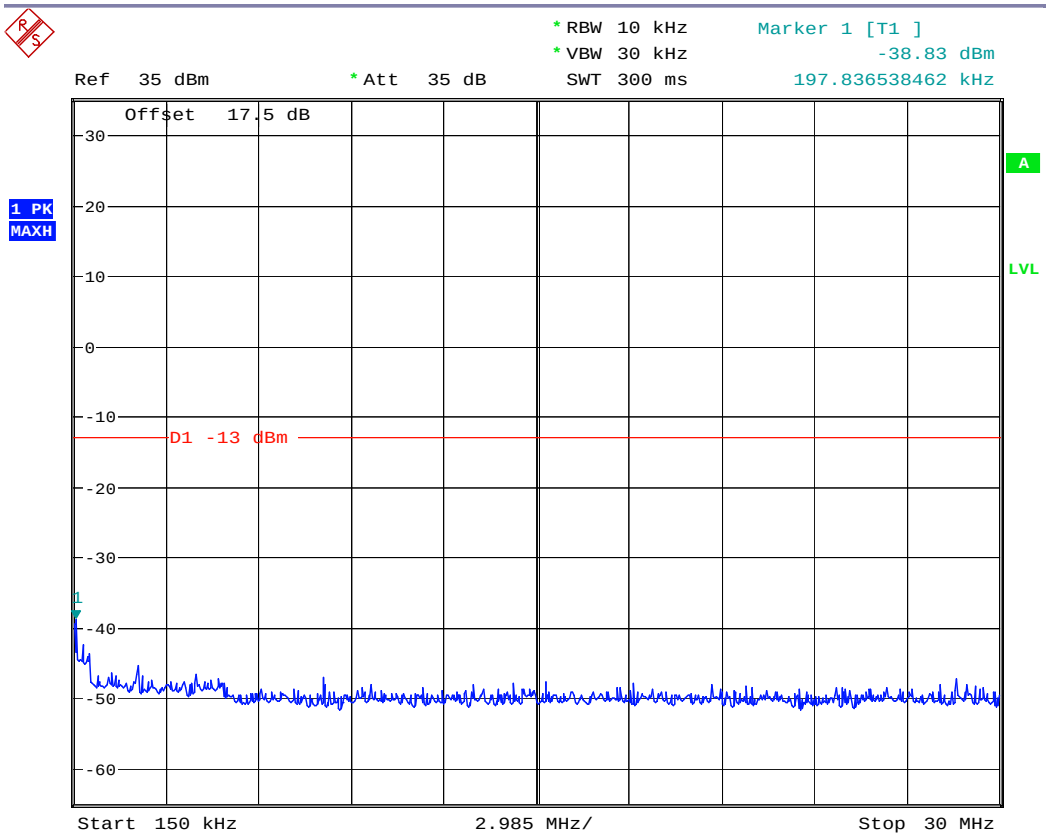

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.02 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

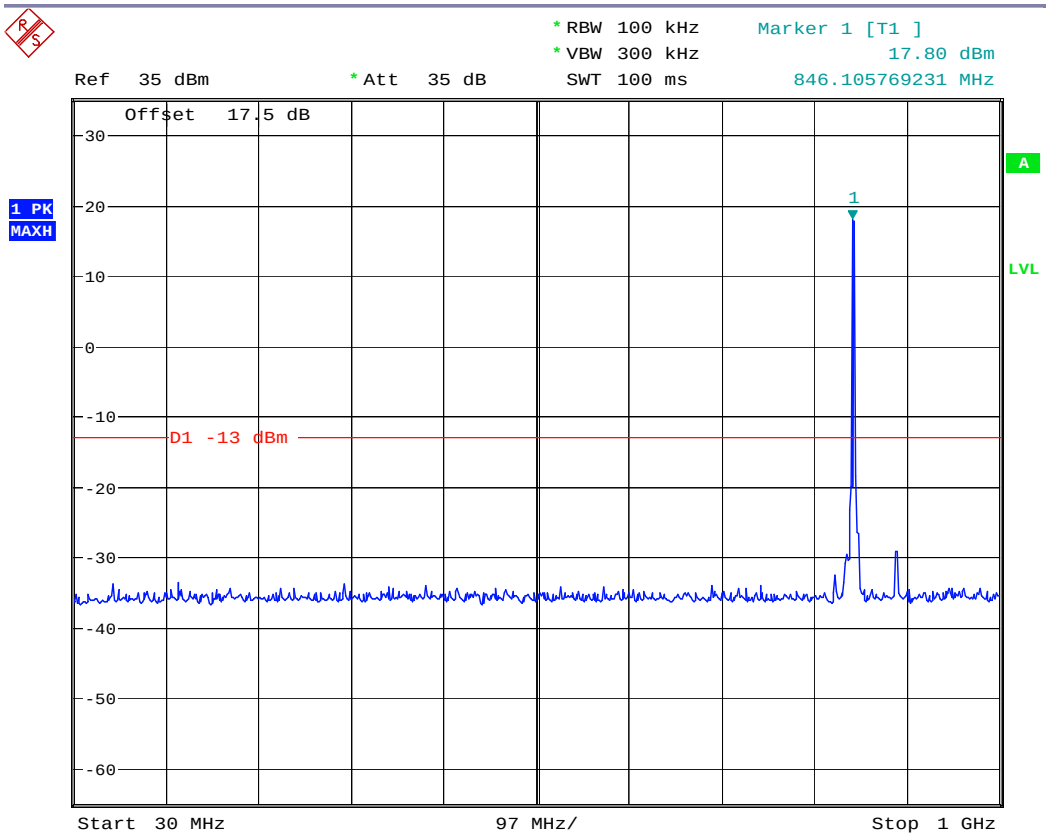

*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
18.43 dBm
838.333333333 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
1
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
97 MHz/
Stop 1 GHz

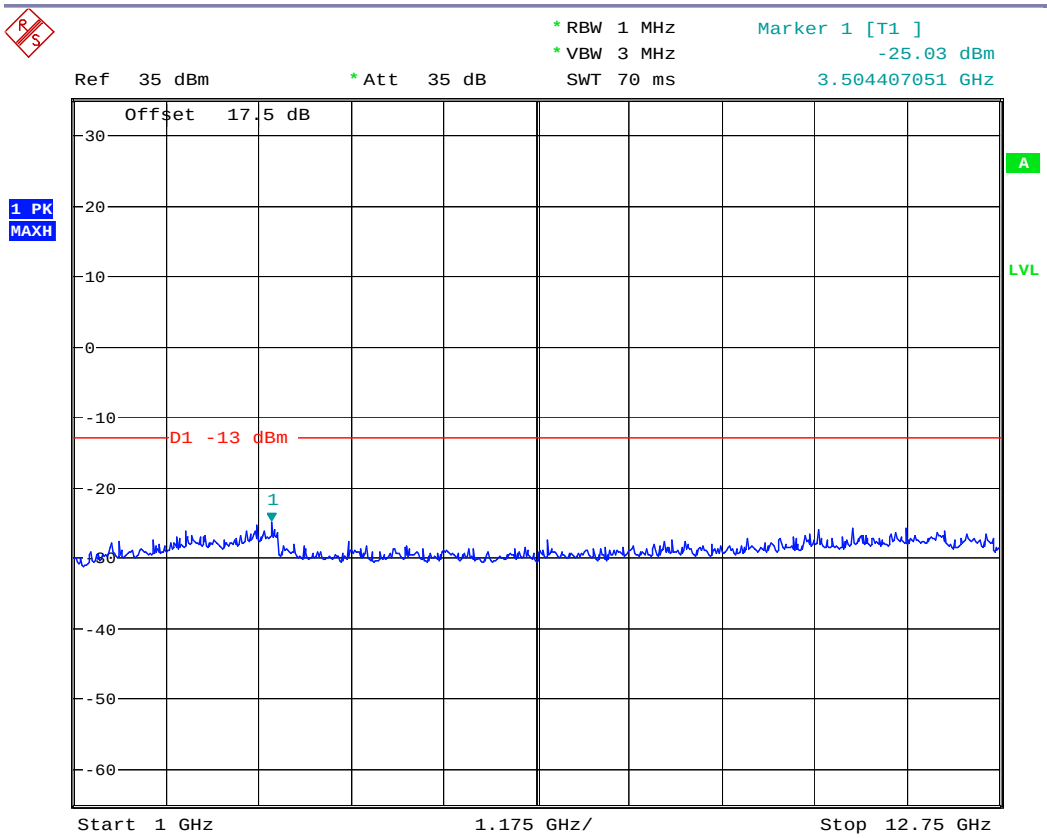

RBW 1 MHz
VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-24.37 dBm
3.542067308 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz

Channel 4233




*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.83 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz


*RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Marker 1 [T1]
17.80 dBm
846.105769231 MHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz


*RBW 1 MHz
*VBW 3 MHz
SWT 70 ms
Marker 1 [T1]
-25.03 dBm
3.504407051 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 1 GHz
1.175 GHz/
Stop 12.75 GHz