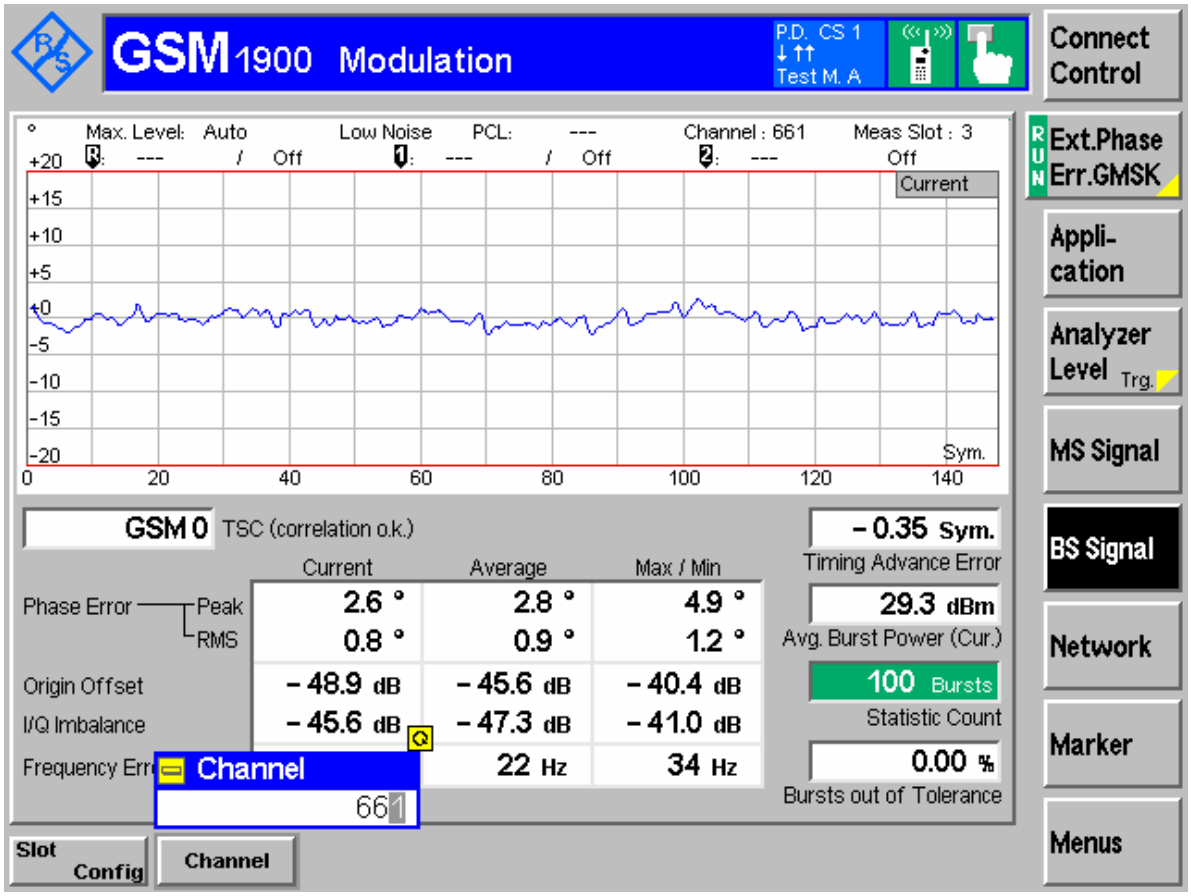
Appendix A

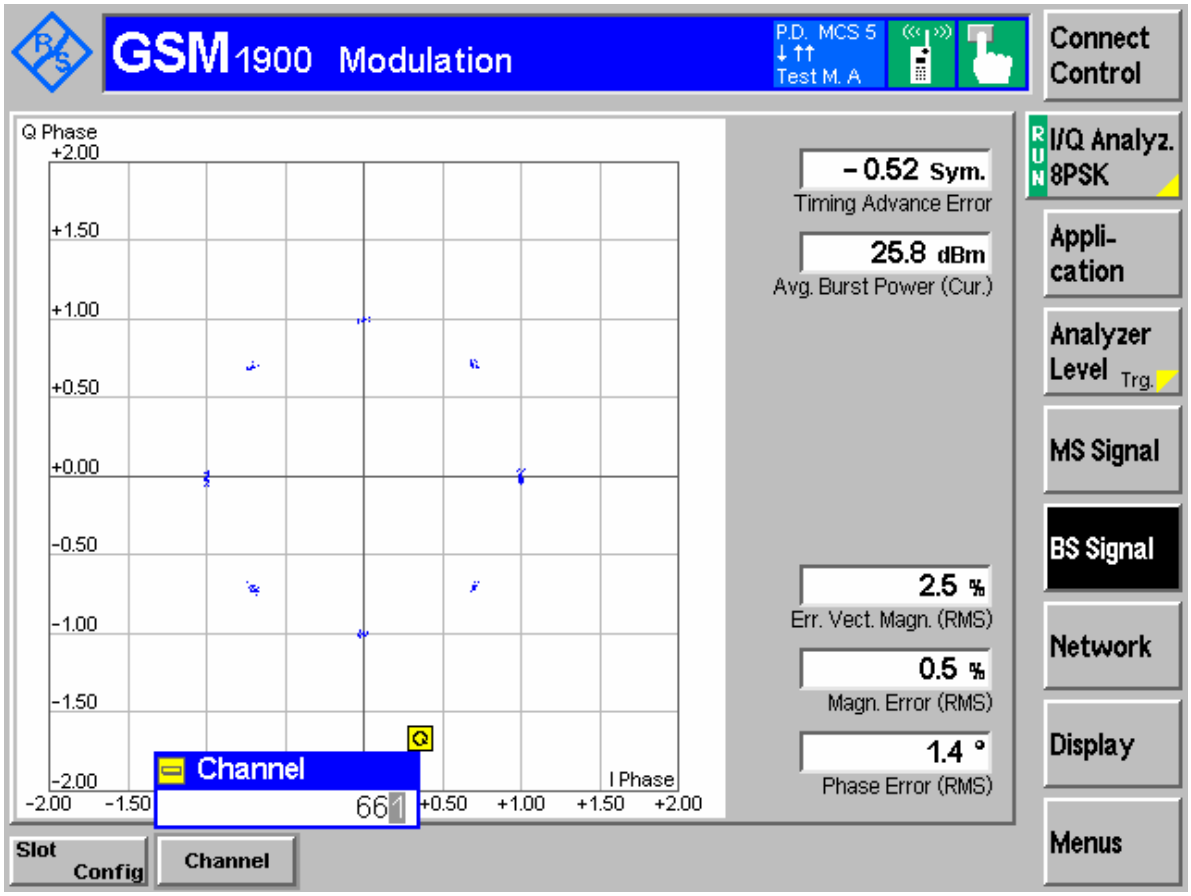
Modulation Characteristics

According to FCC Part 2.1047 & Part24 Subpart E

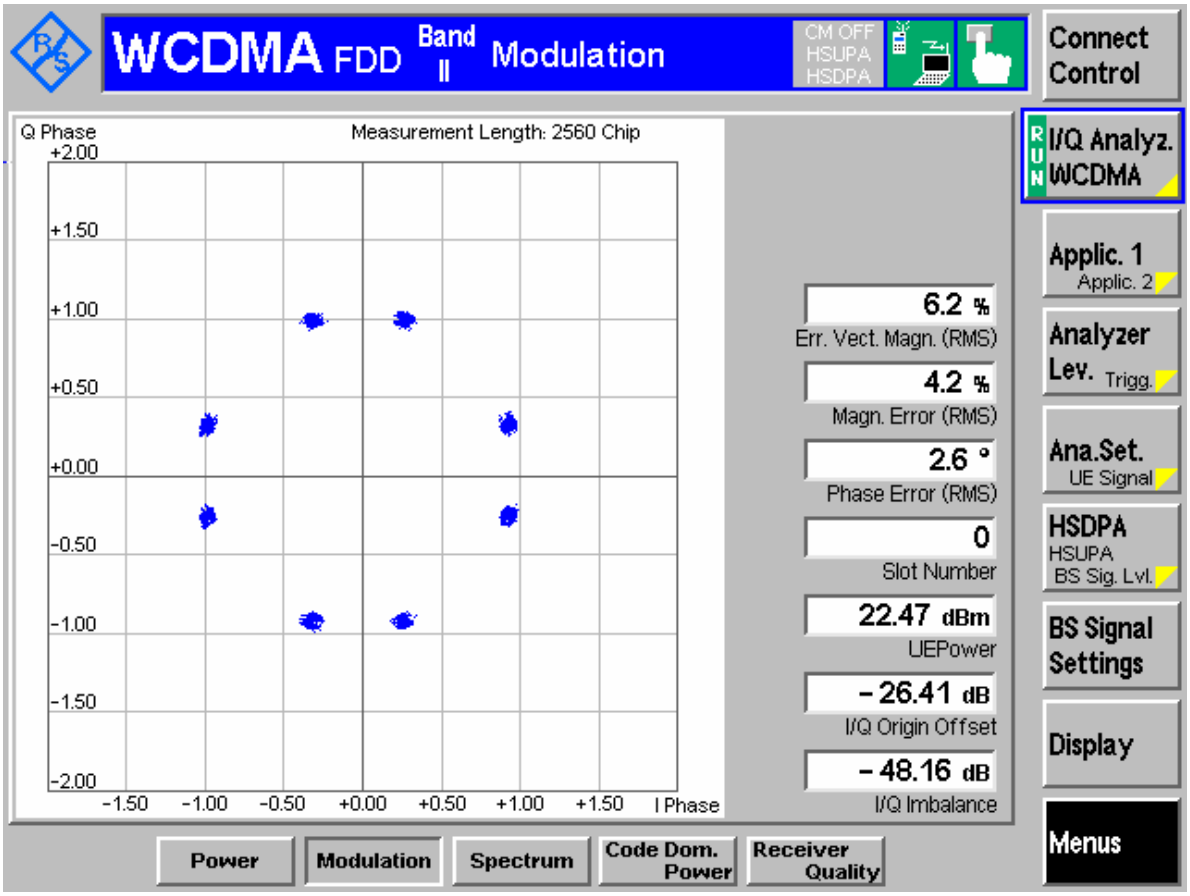
TM1:GPRS/GSM
Channel 661



TM2:EDGE
Channel 661



TM3: WCDMA
Channel 9400

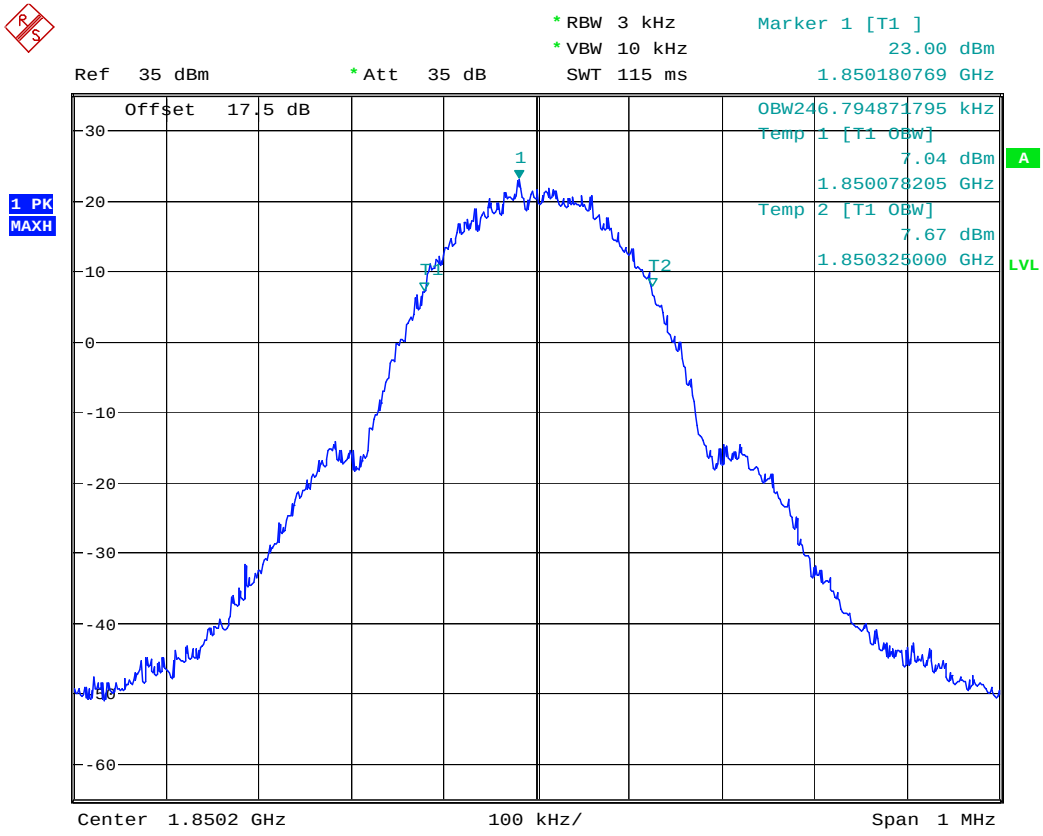


Appendix B

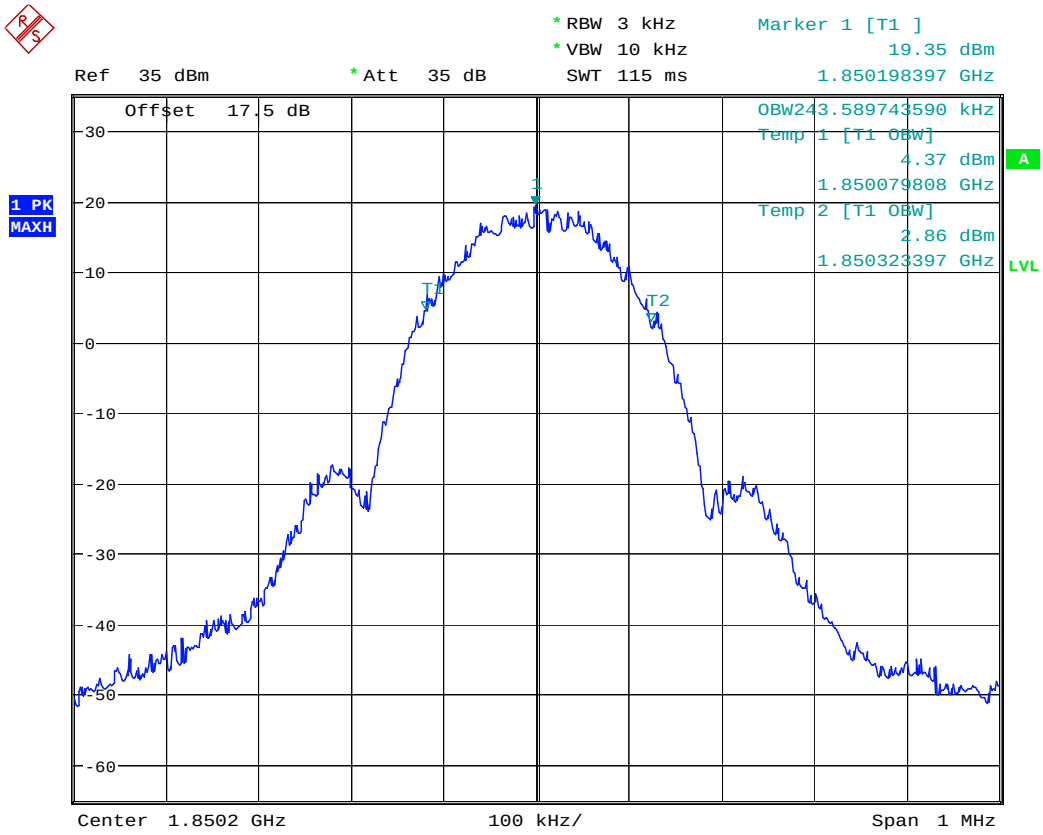
Occupied Bandwidth

According to FCC Part 2.1049 & Part 24 Subpart E

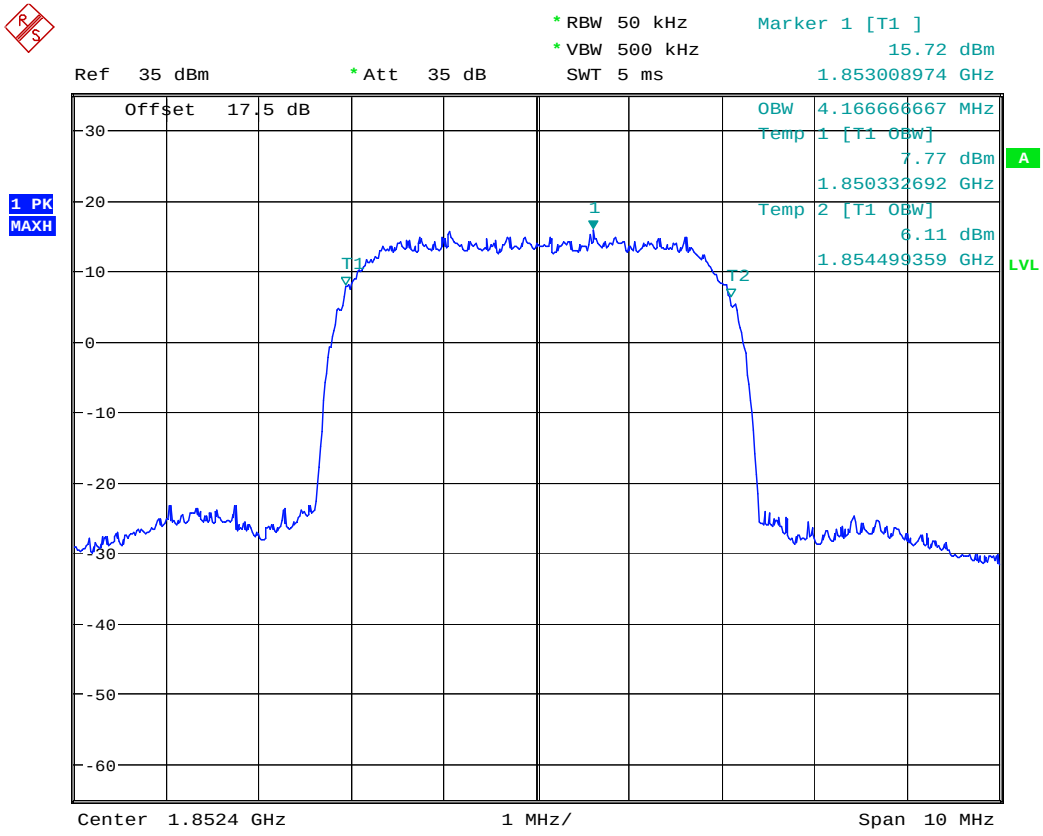
TM1:GPRS/GSM
Channel 512



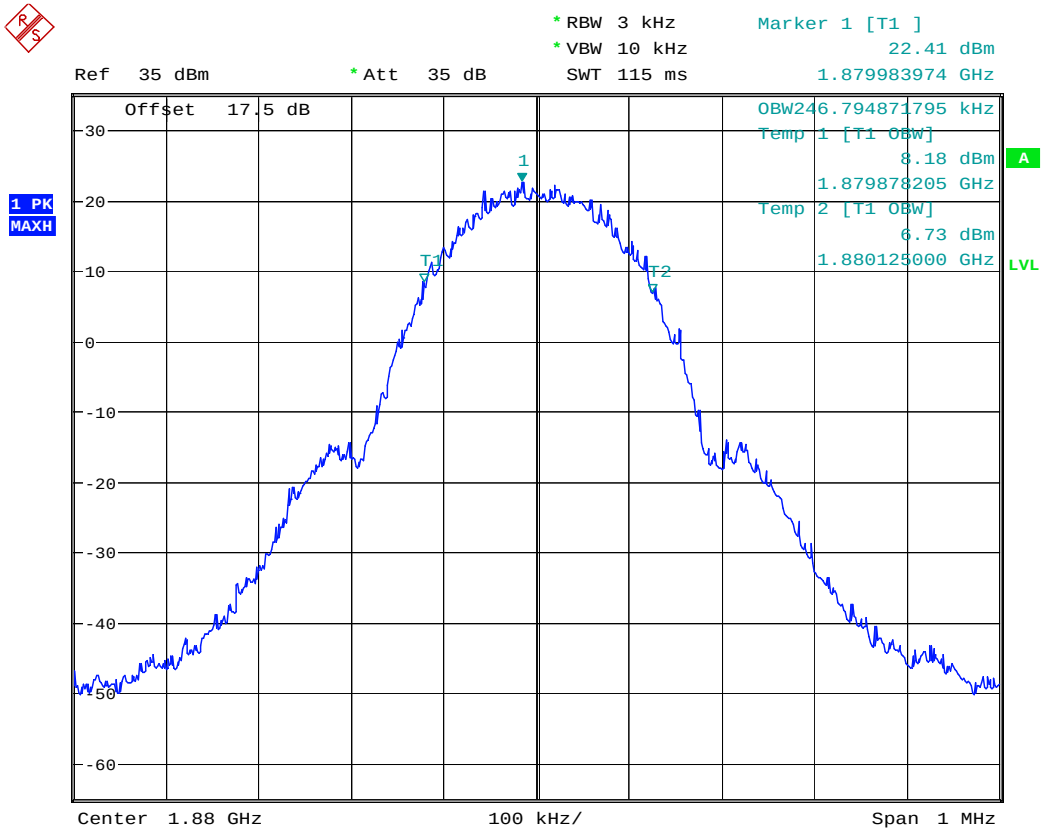
TM2:EDGE
Channel 512



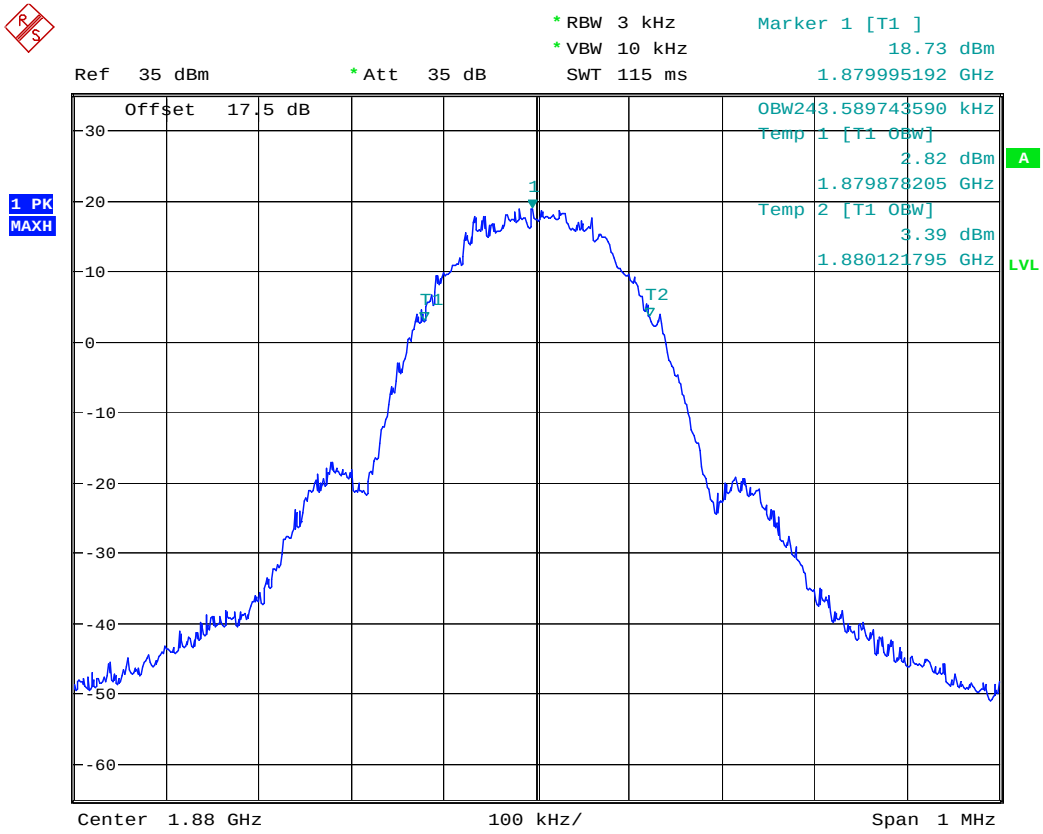
TM3: WCDMA
Channel 9262



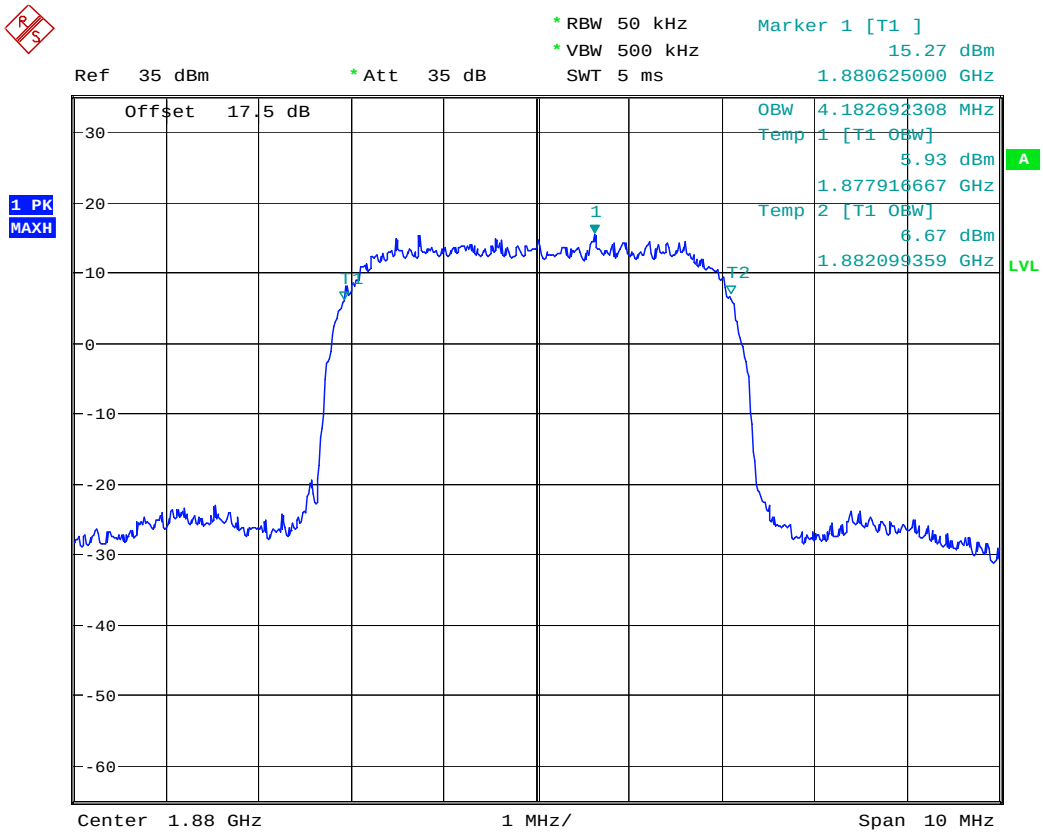
TM1:GPRS/GSM
Channel 661



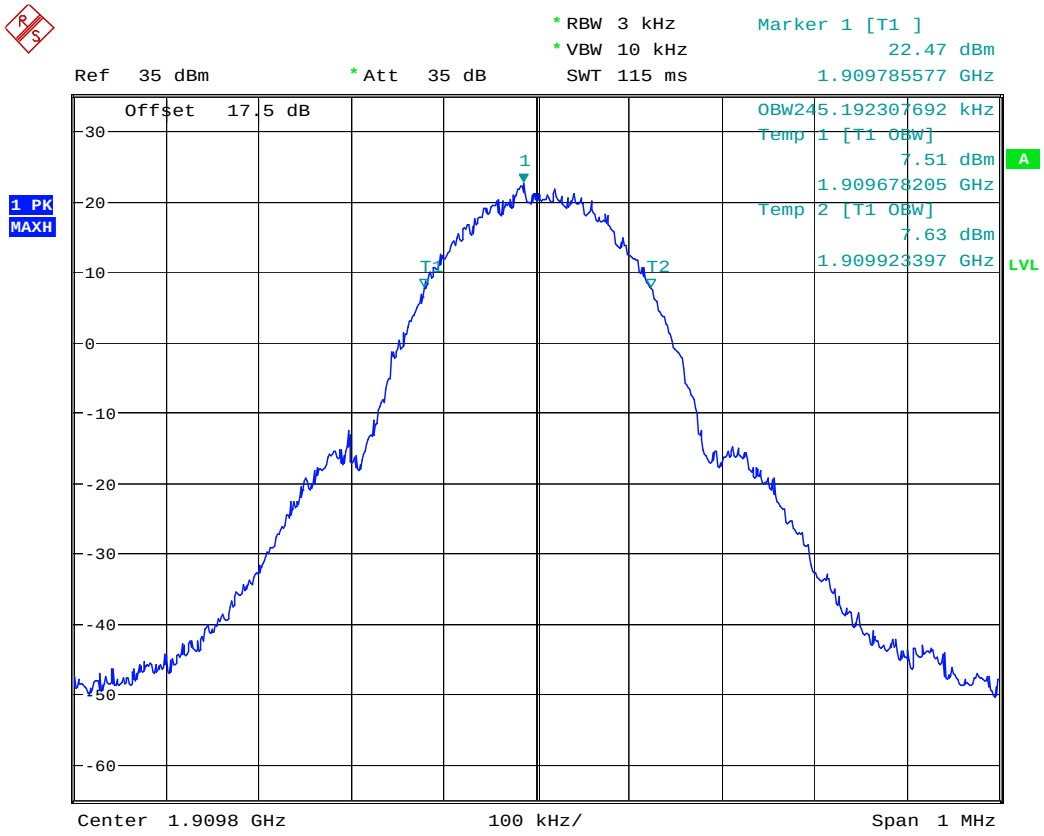
TM2:EDGE
Channel 661



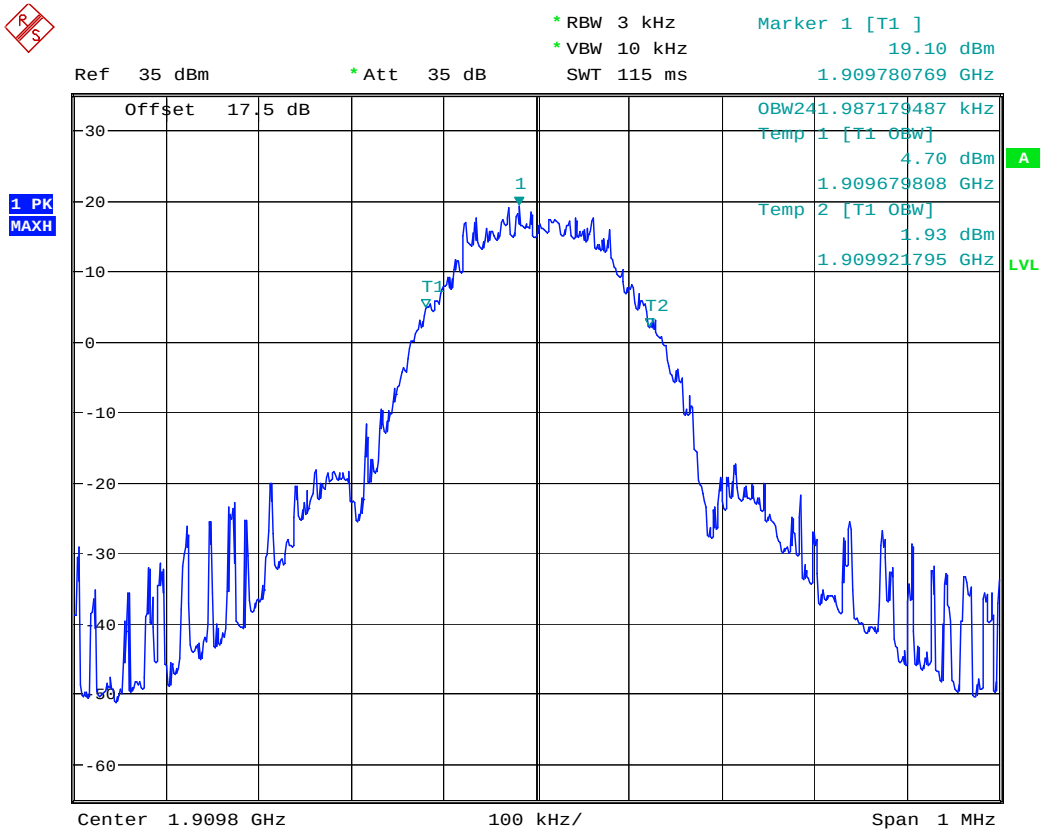
TM3: WCDMA
Channel 9400



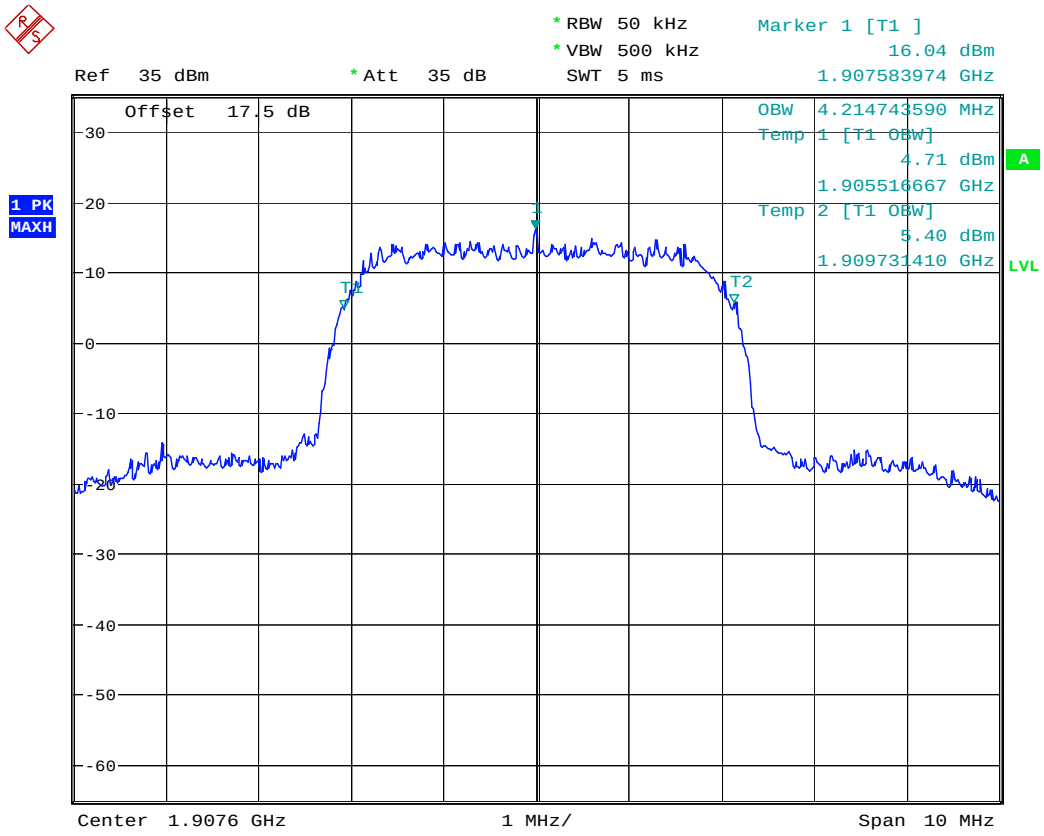
TM1:GPRS/GSM
Channel 810



TM2:EDGE
Channel 810



TM3: WCDMA
Channel 9538

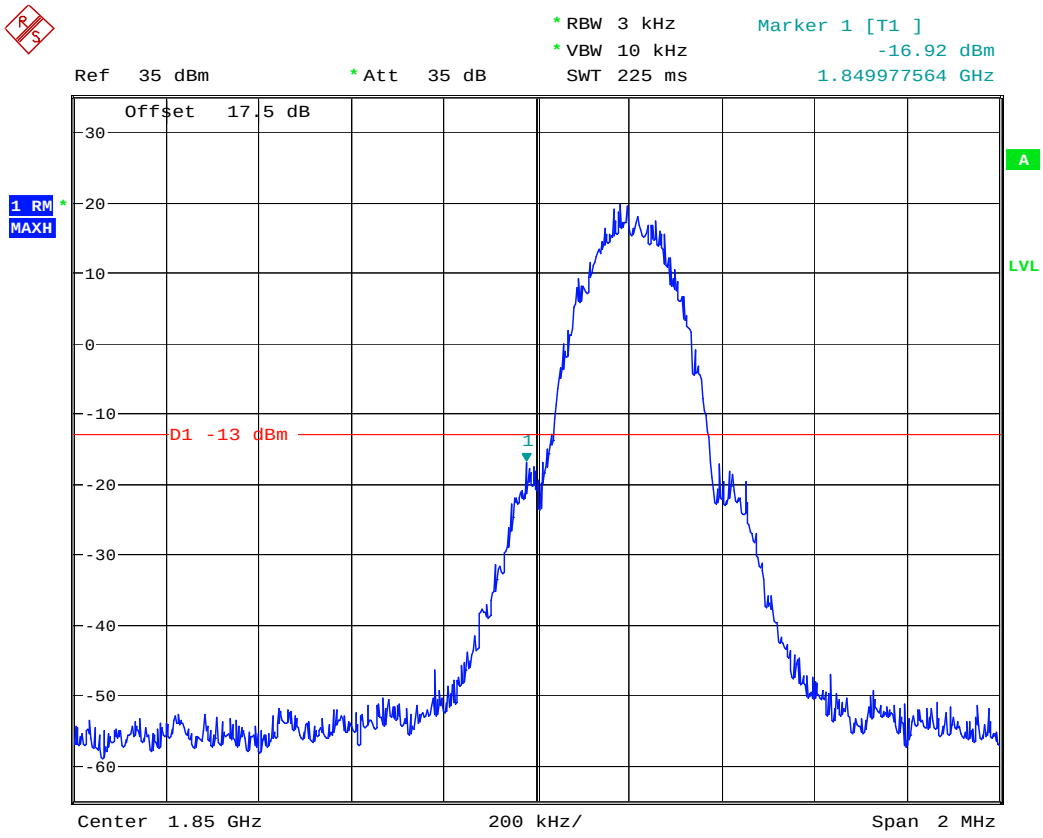


Appendix C

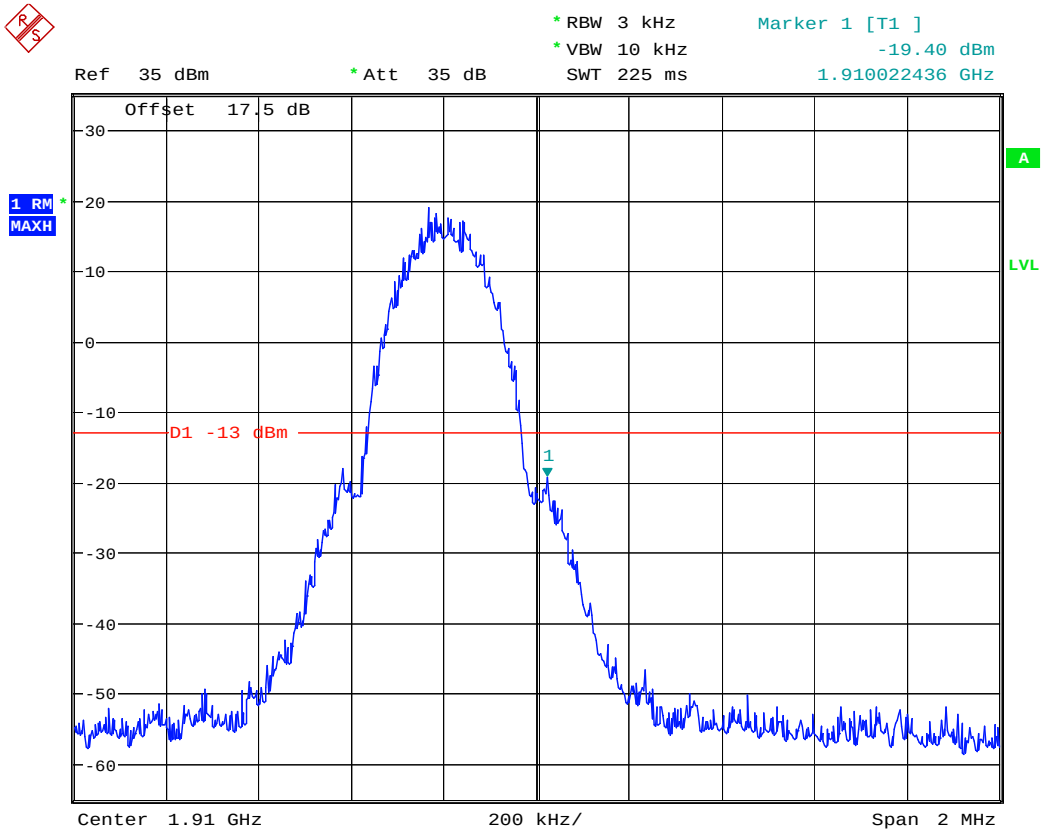
Band Edges Compliance

According to FCC Part 2.1051 & 24.238

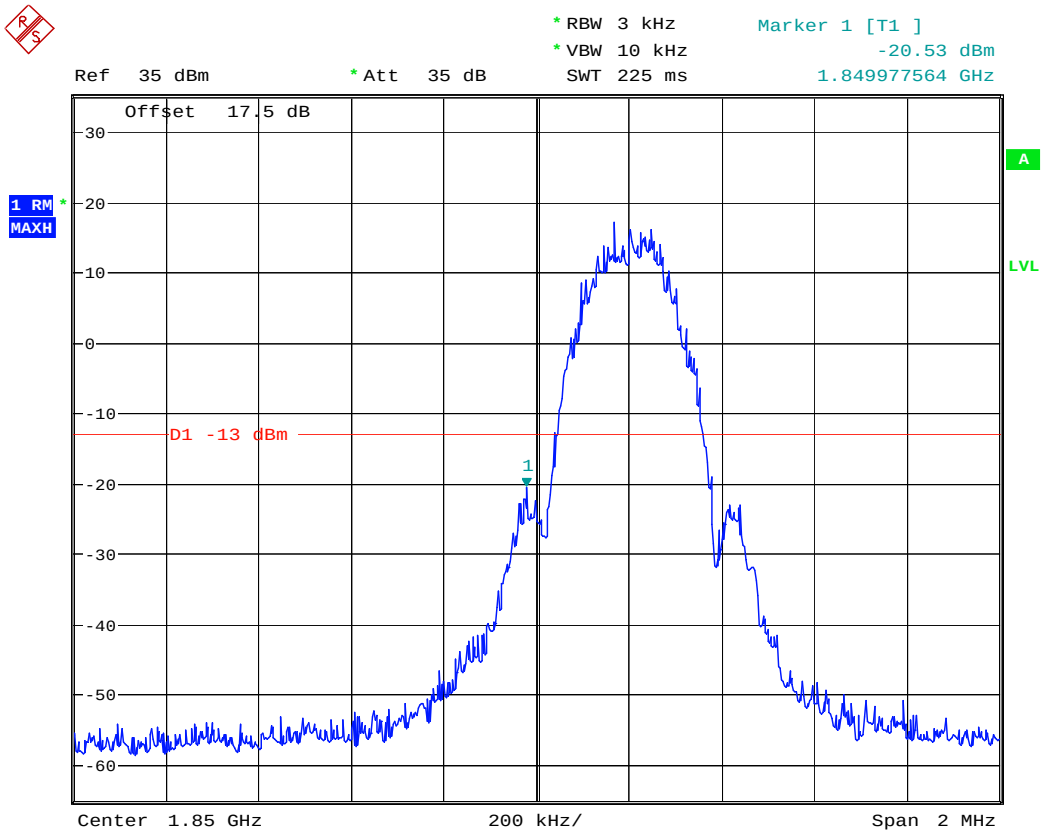
TM1:GPRS/GSM
Left Edge
Channel 512



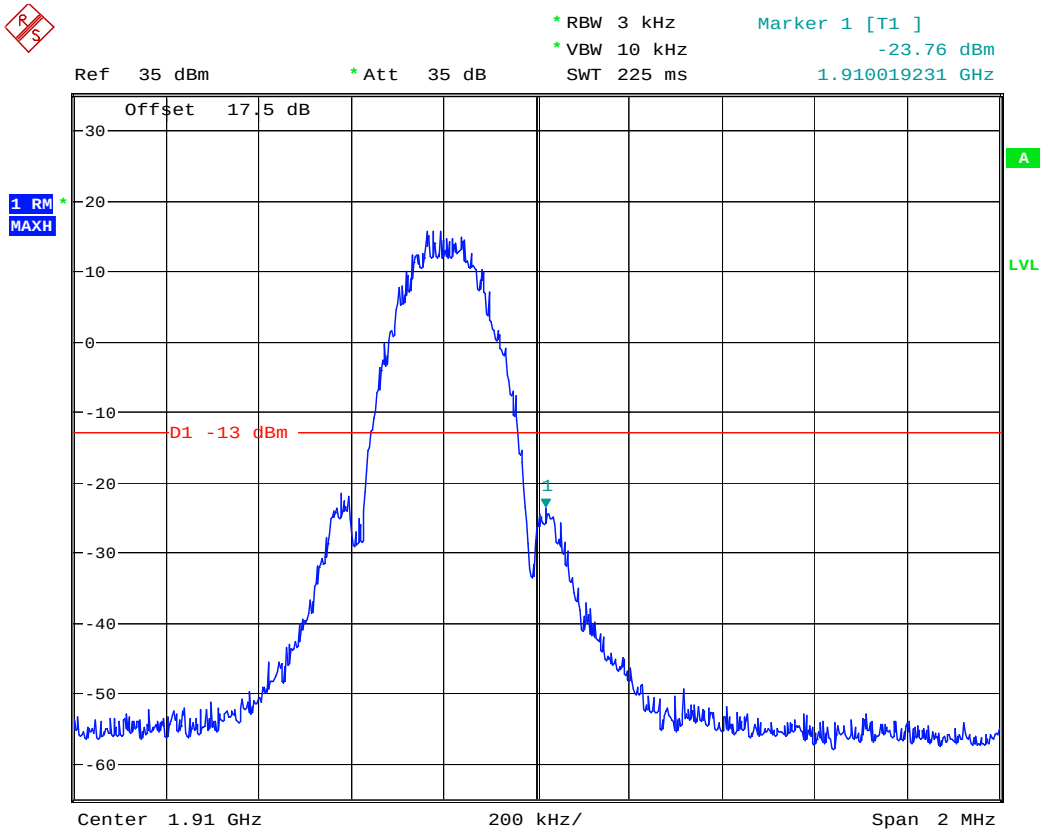
Right Edge
Channel 810



TM2:EDGE
Left Edge
Channel 512



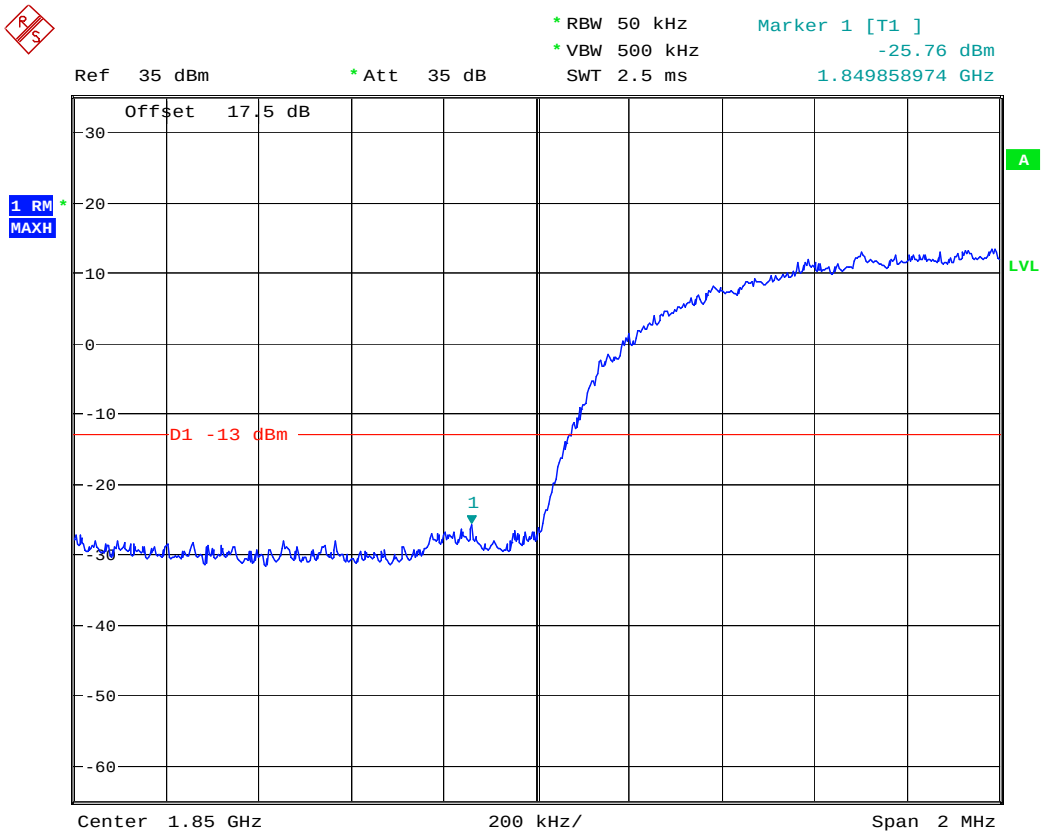
Right Edge
Channel 810



TM3: WCDMA

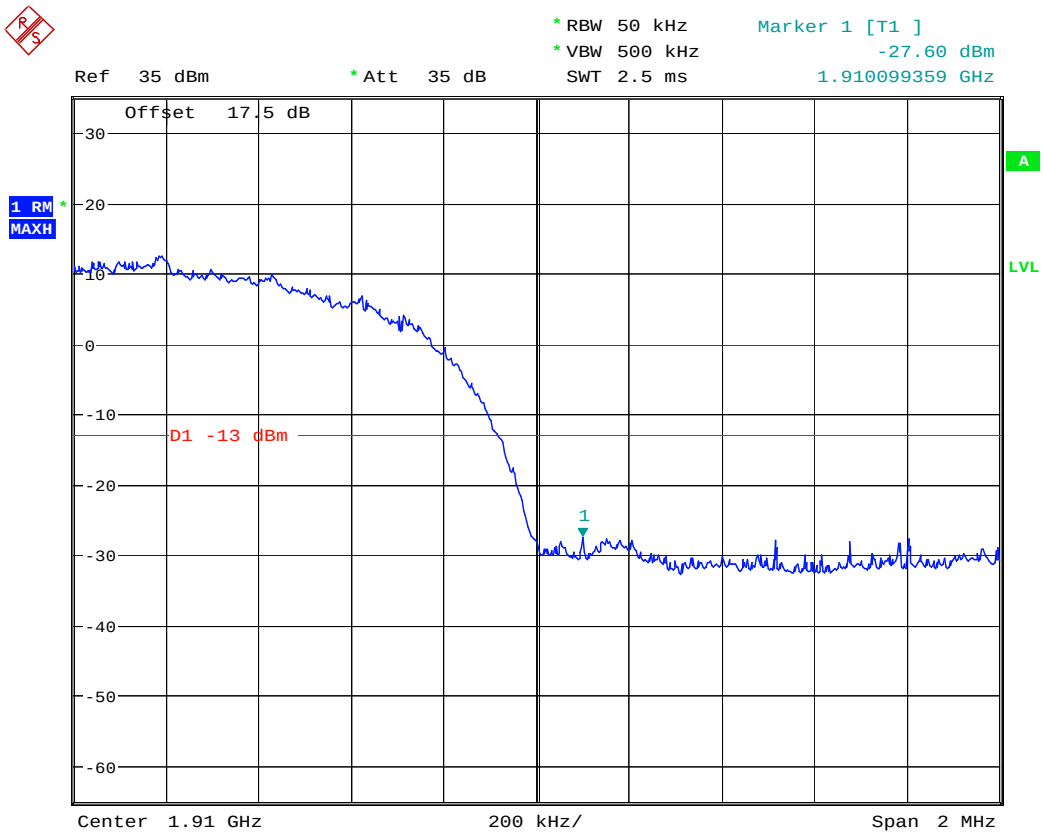
Left dge

Channel 9262



Right Edge

Channel 9538


*RBW 50 kHz
*VBW 500 kHz
SWT 2.5 ms
Marker 1 [T1]
-27.60 dBm
1.910099359 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 RM
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Center 1.91 GHz
200 kHz/
Span 2 MHz

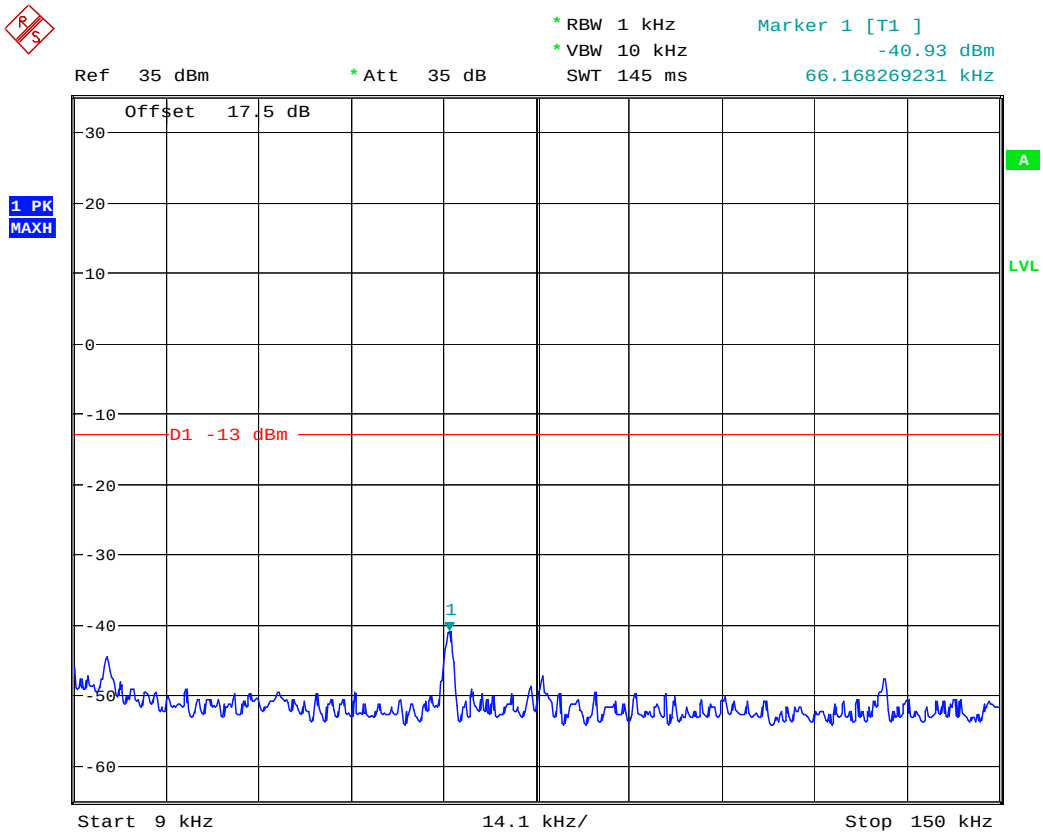
Appendix D

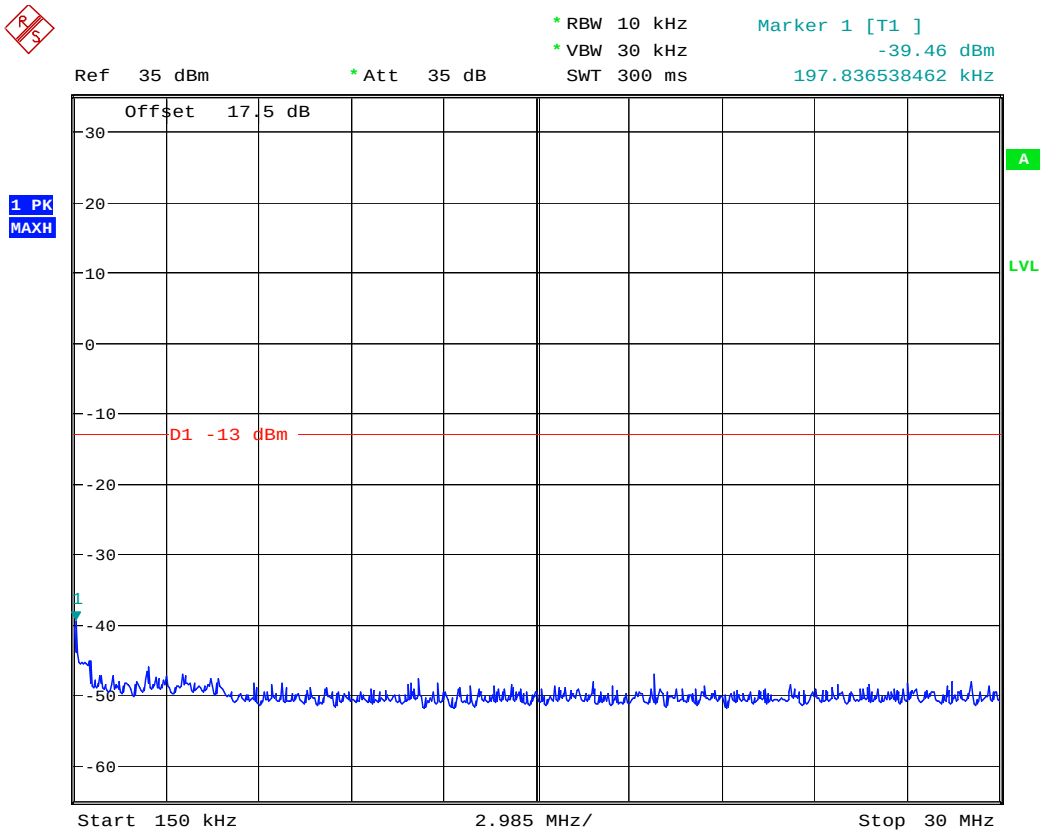
Spurious Emission at Antenna Terminal

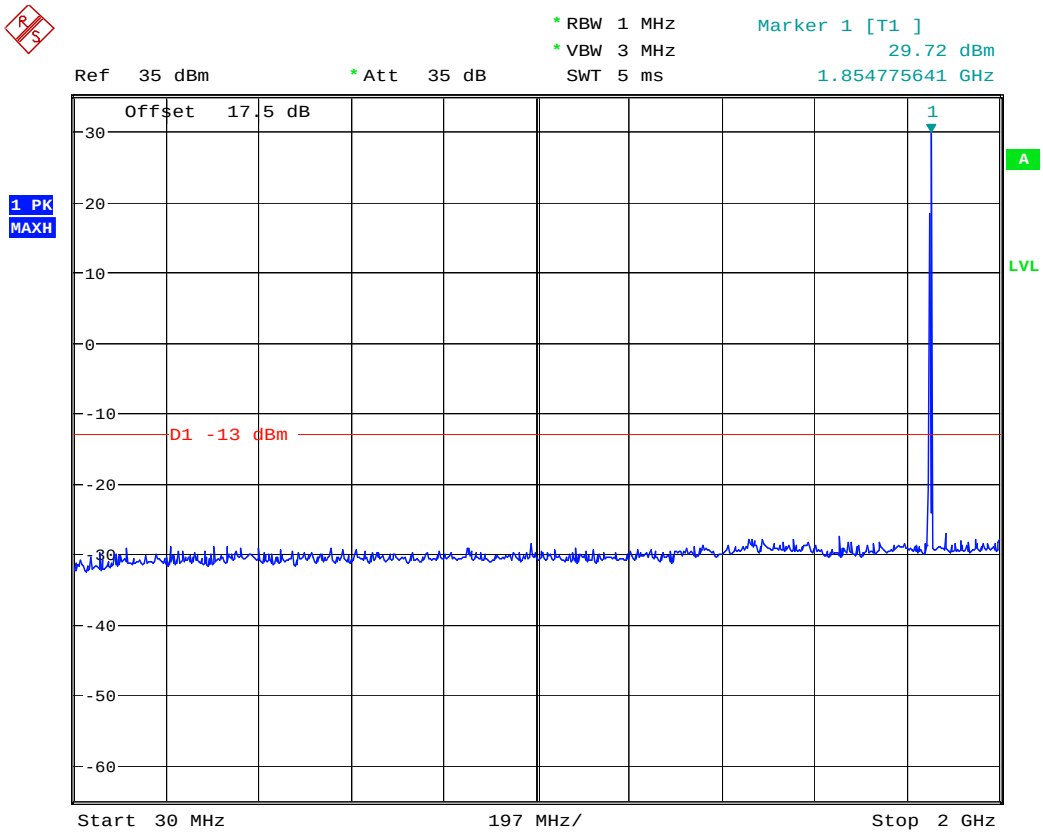
According to FCC Part 2.1051 & 24.238

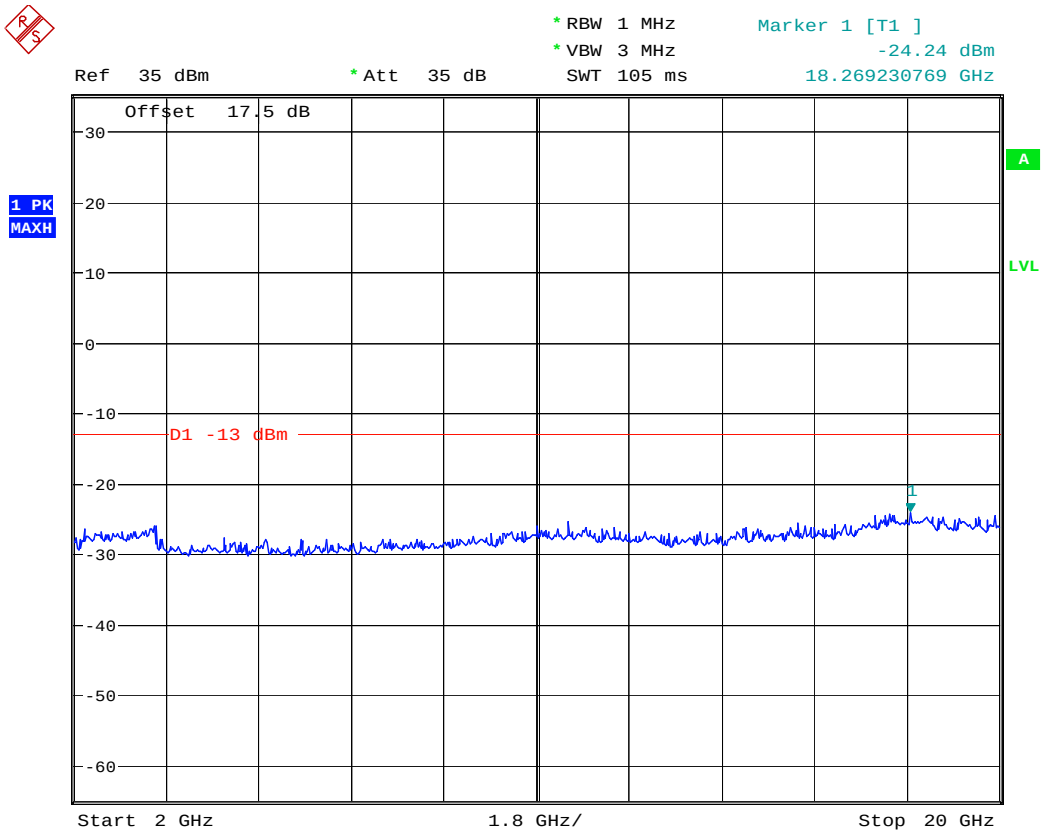
TM1:GPRS/GSM

Channel 512

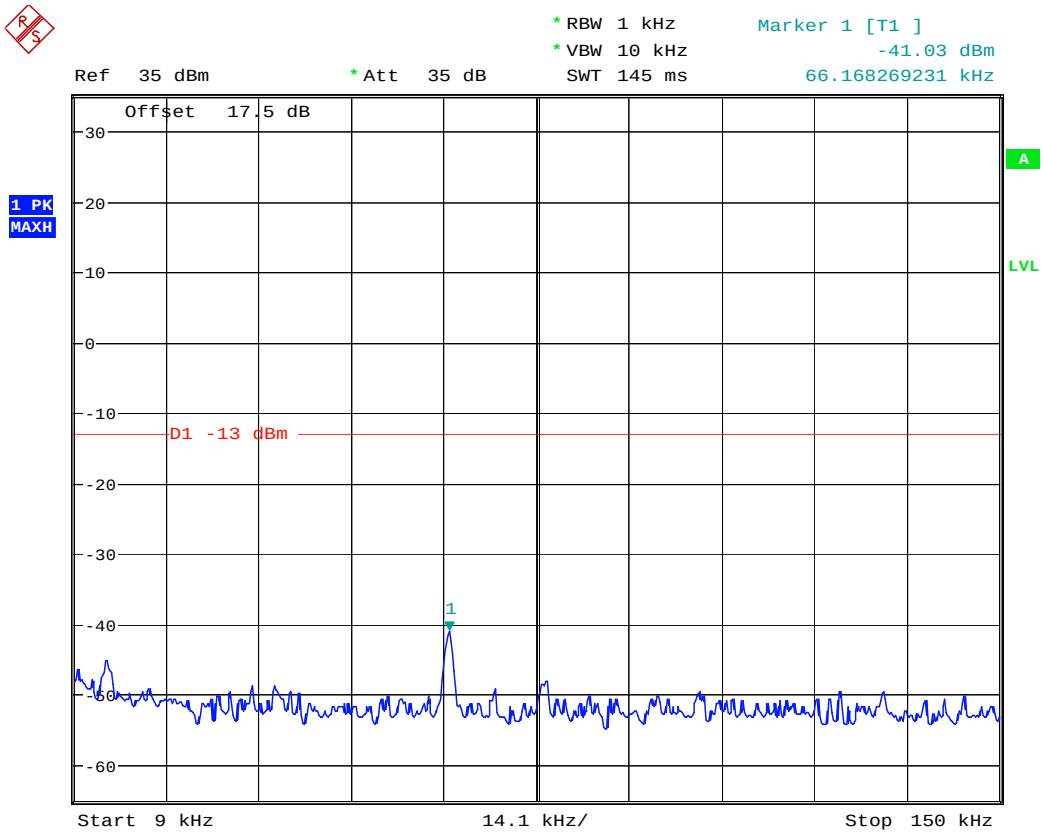


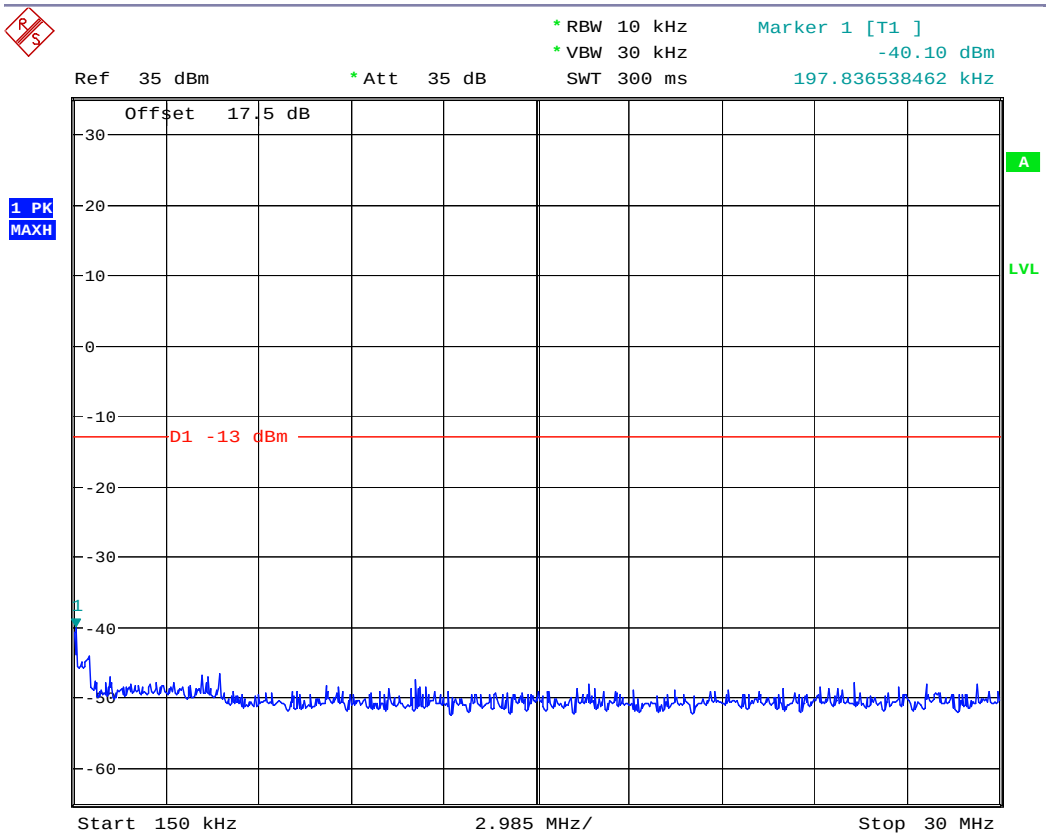

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.46 dBm
197.836538462 kHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

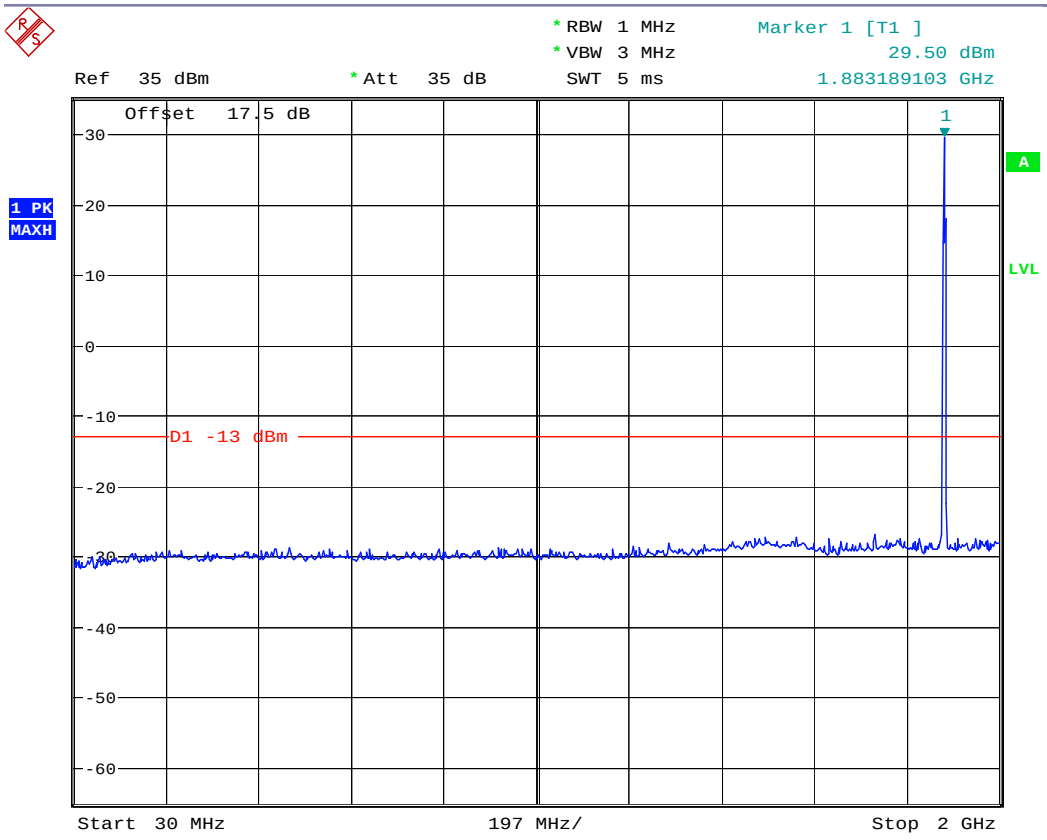

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
29.72 dBm
1.854775641 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

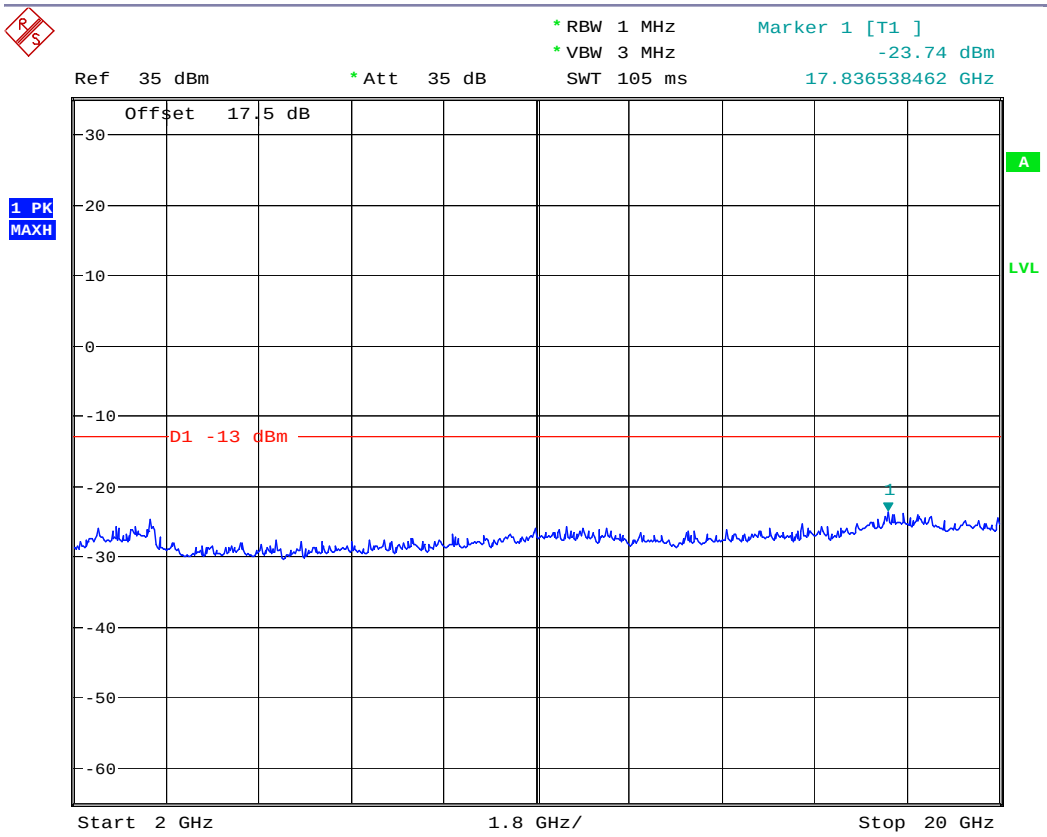

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.24 dBm
18.269230769 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 661

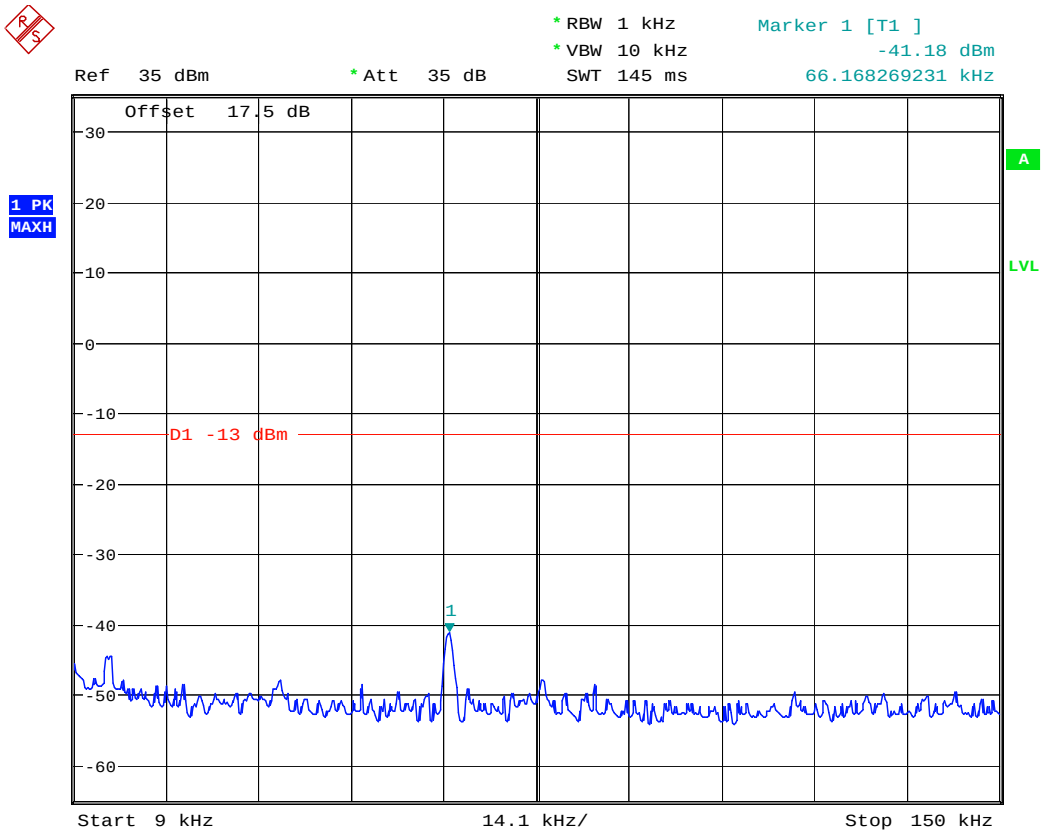

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.03 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

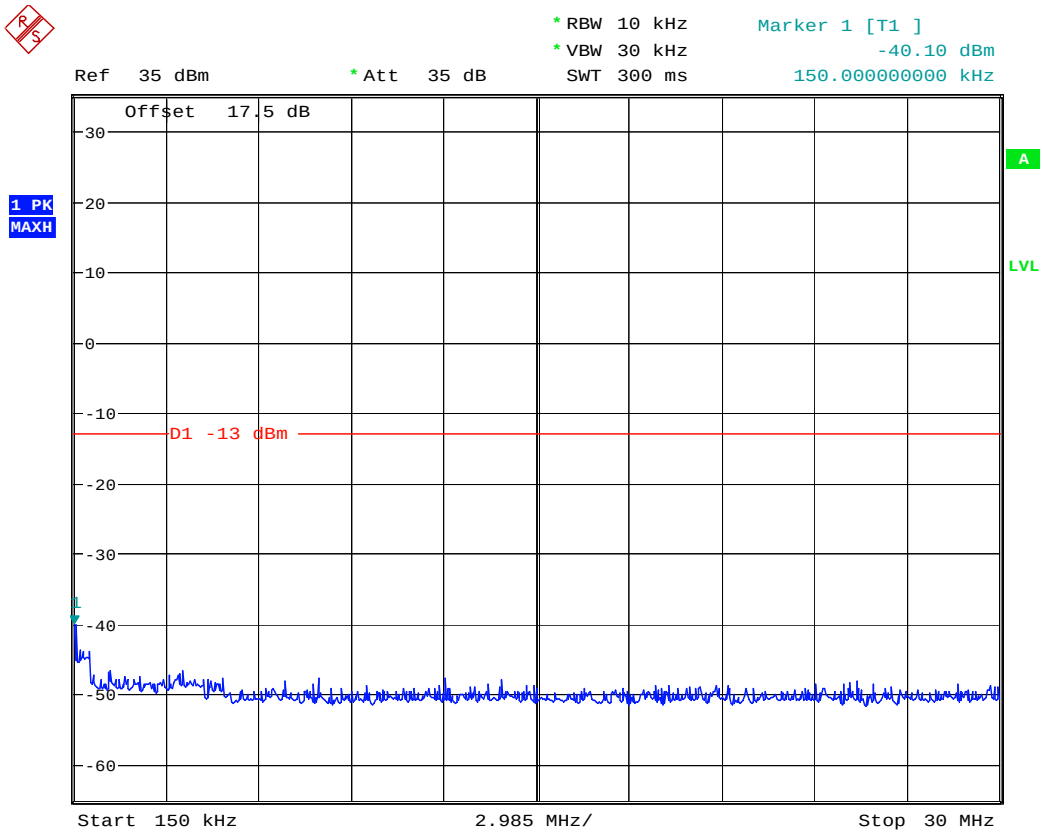

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.10 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

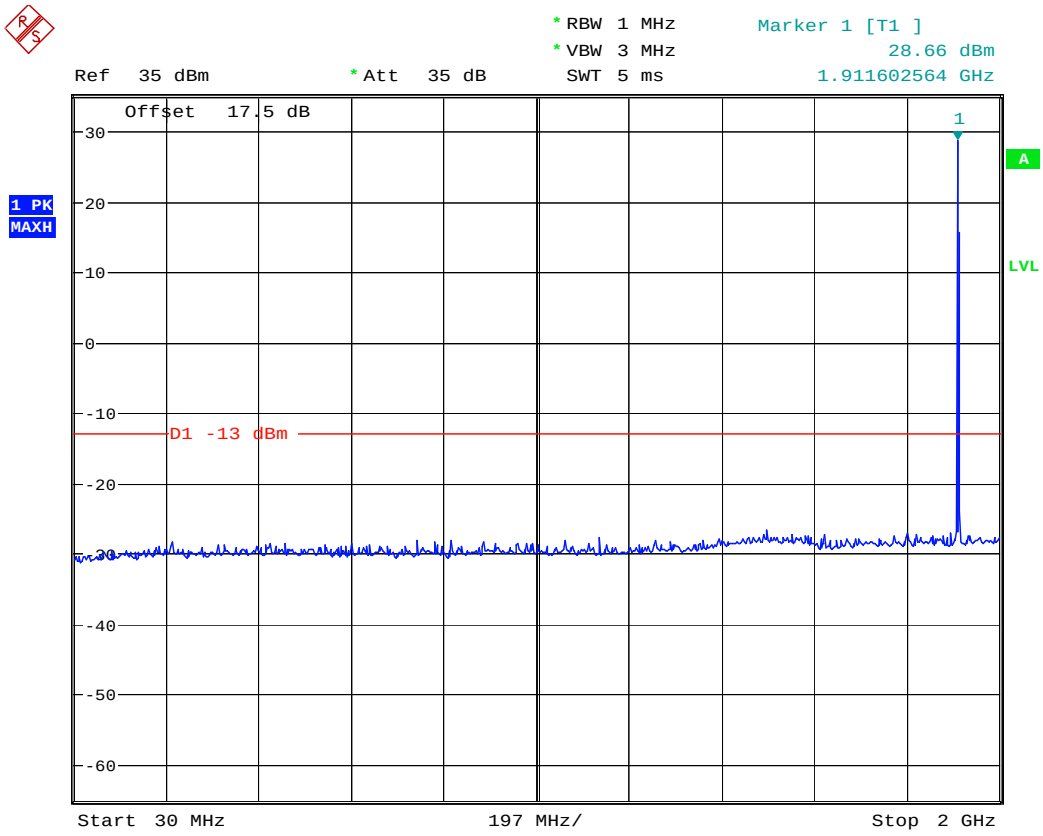

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
29.50 dBm
1.883189103 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

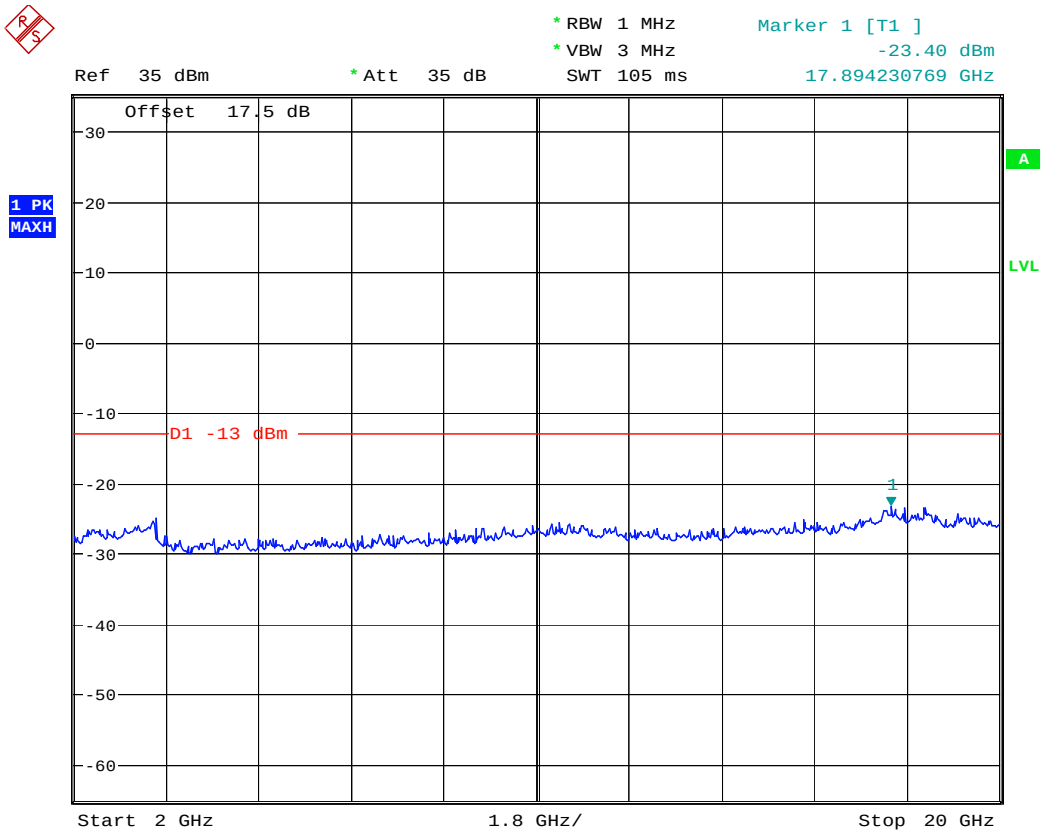

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.74 dBm
17.836538462 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 810

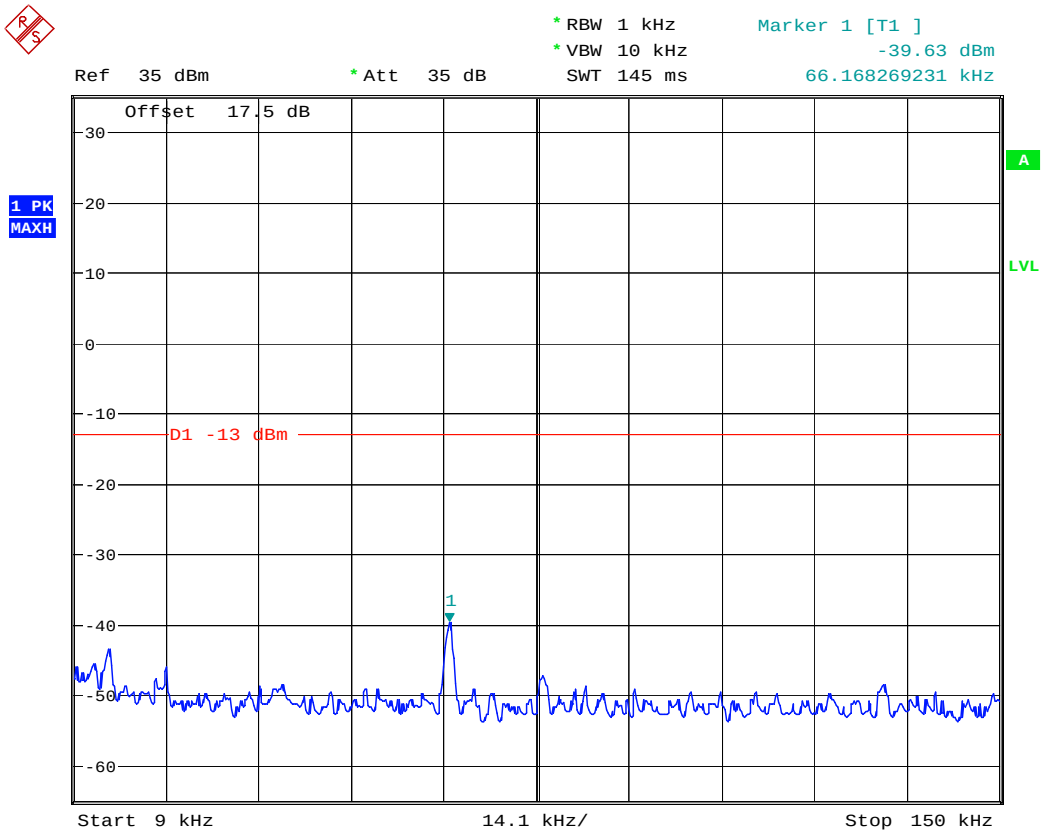

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.18 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

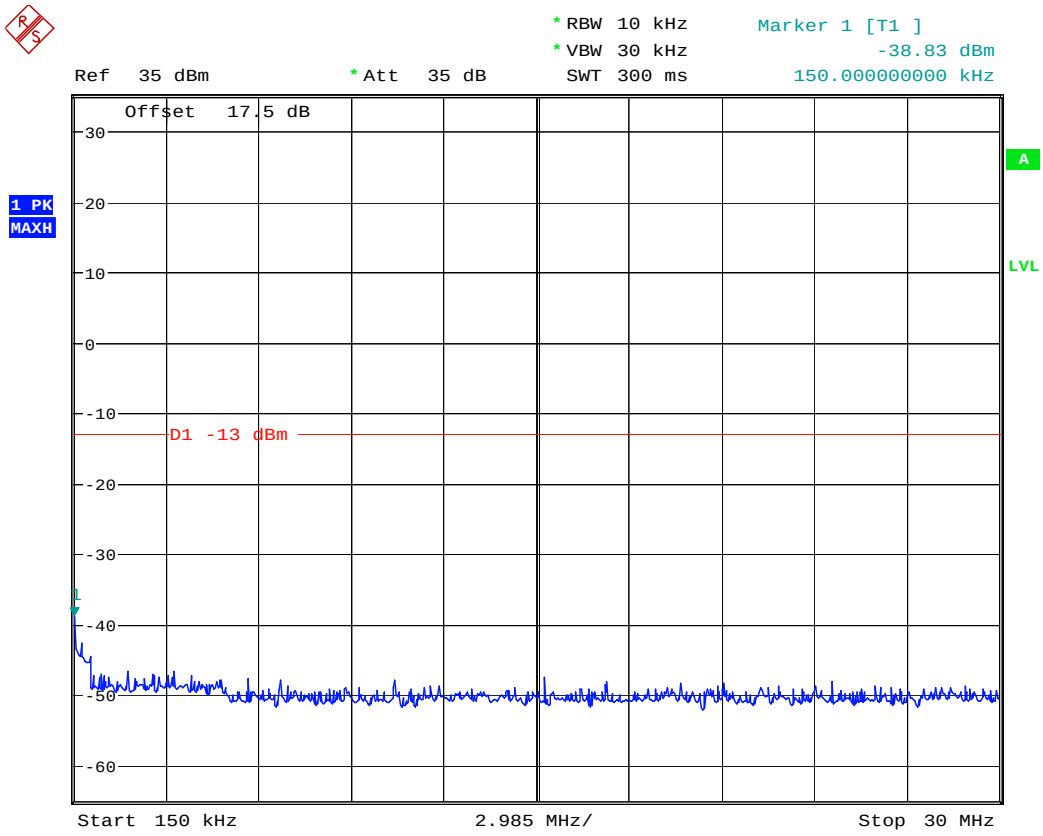

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.10 dBm
150.000000000 kHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

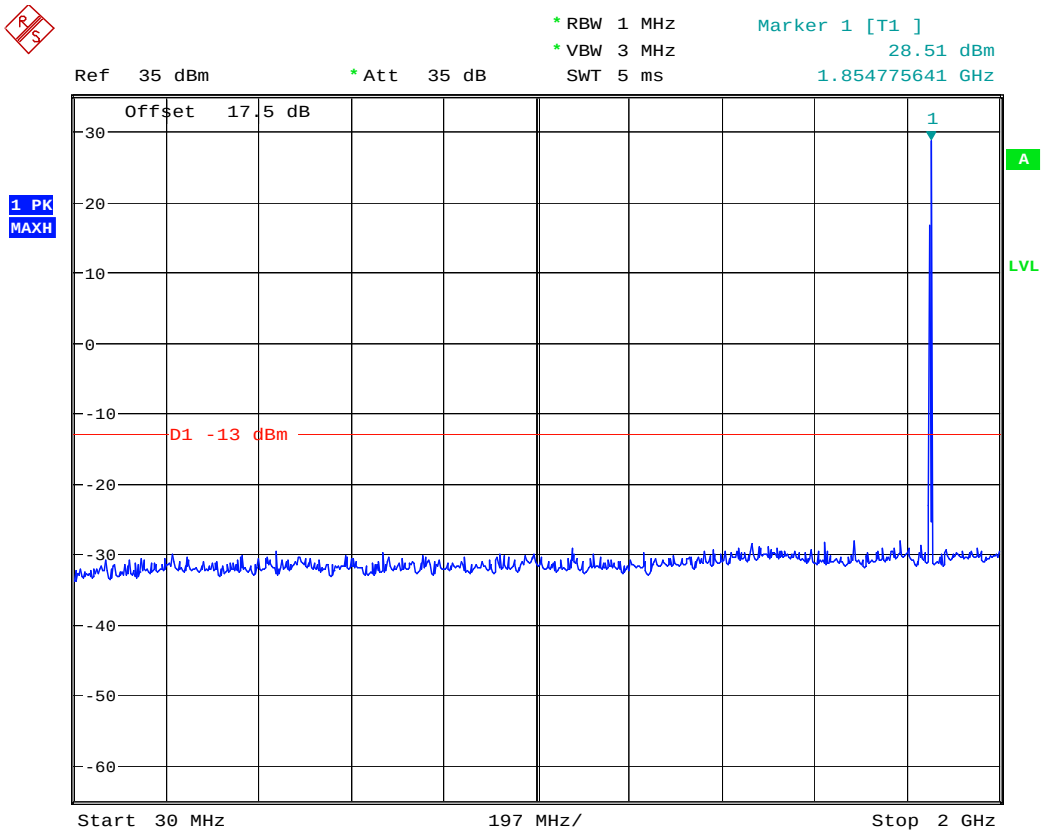

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
28.66 dBm
1.911602564 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

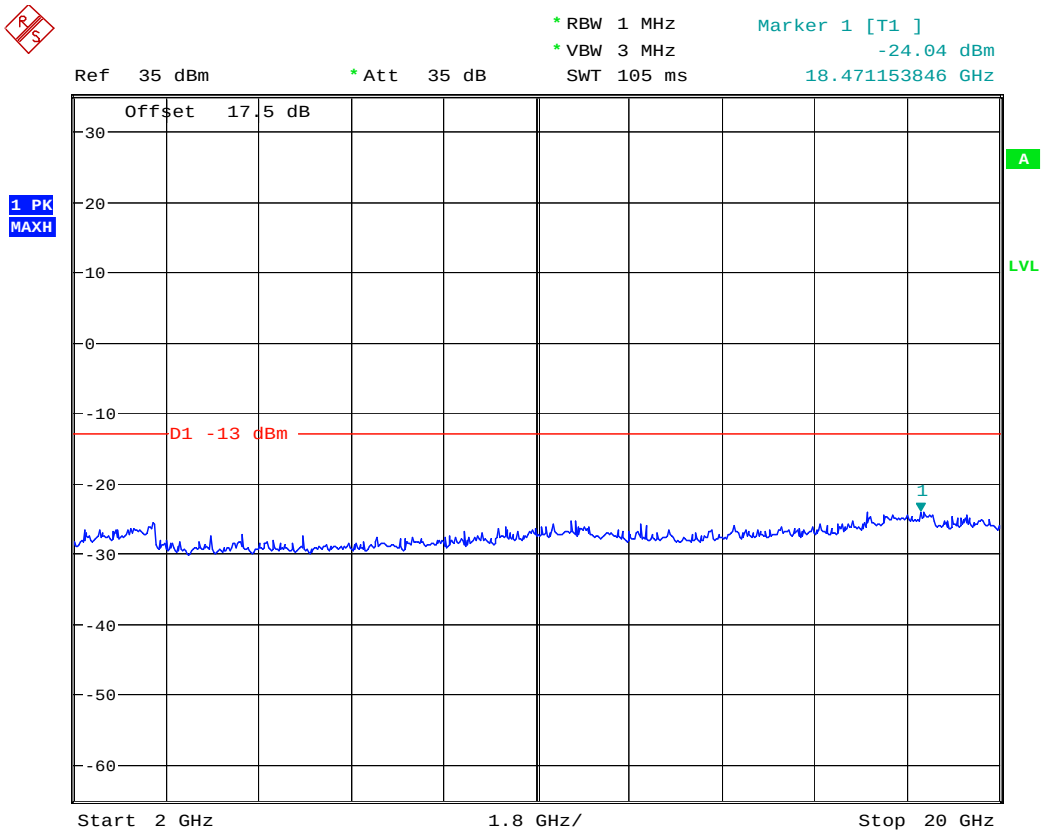

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.40 dBm
17.894230769 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 2 GHz
1.8 GHz/
Stop 20 GHz

TM2:EDGE
Channel 512

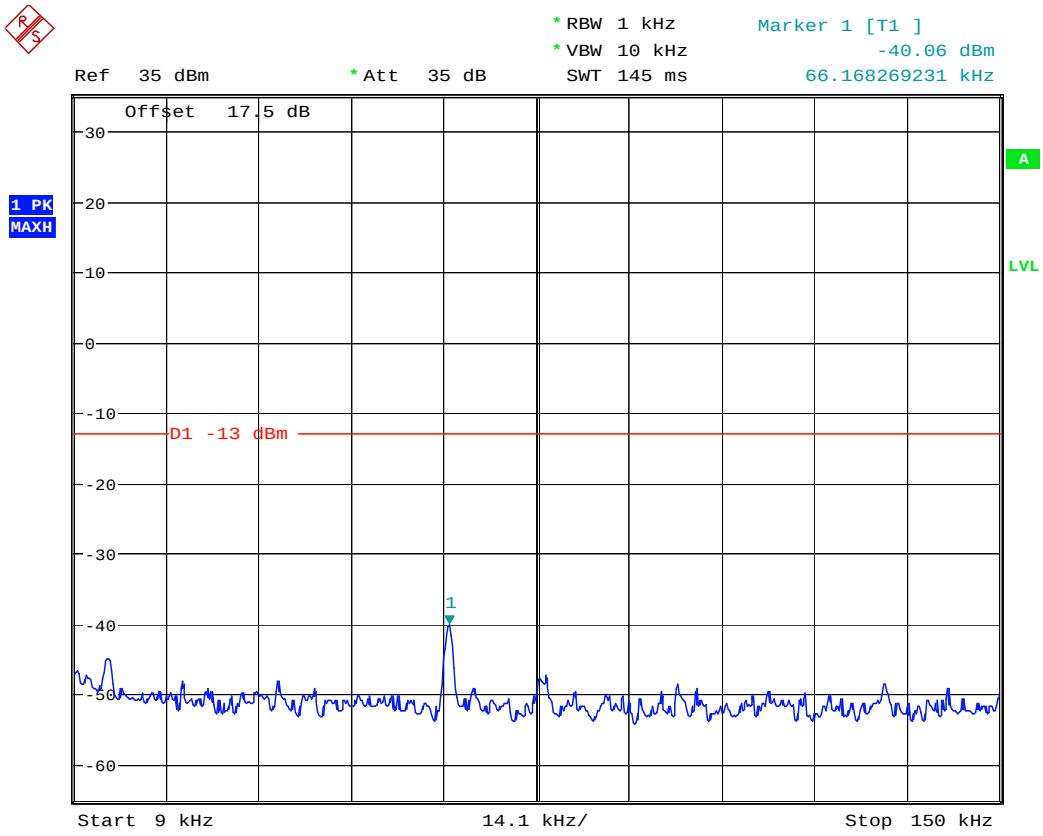


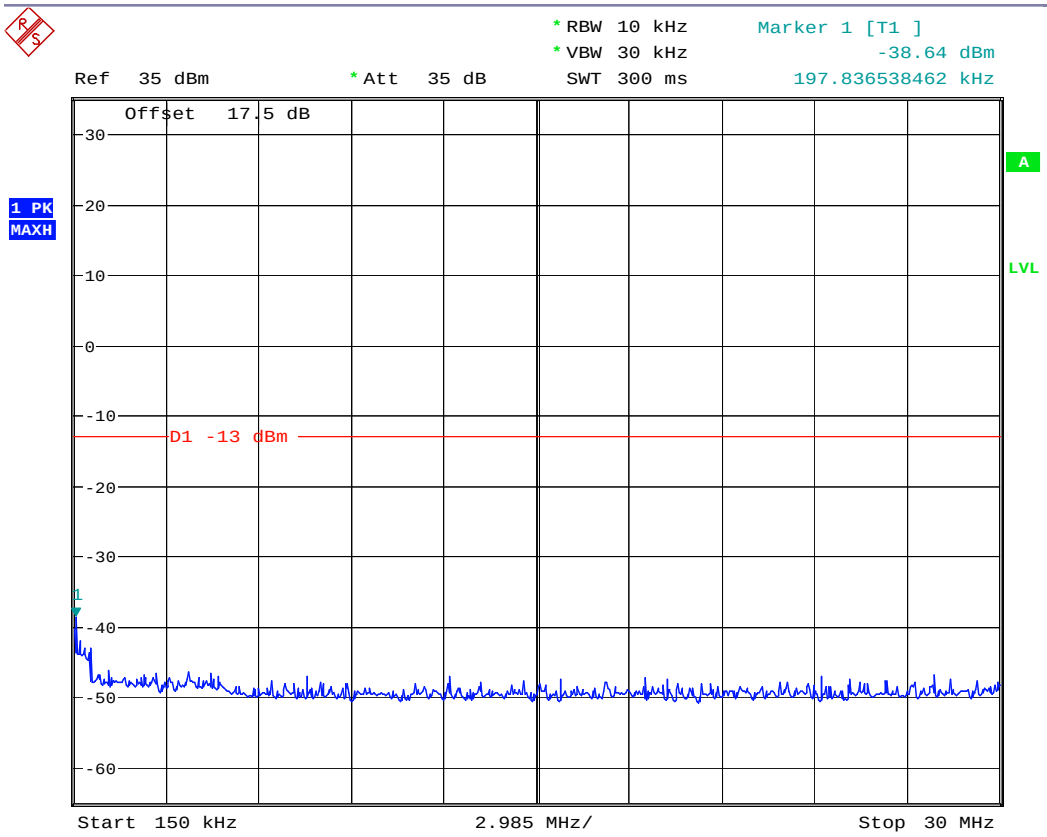

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.83 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

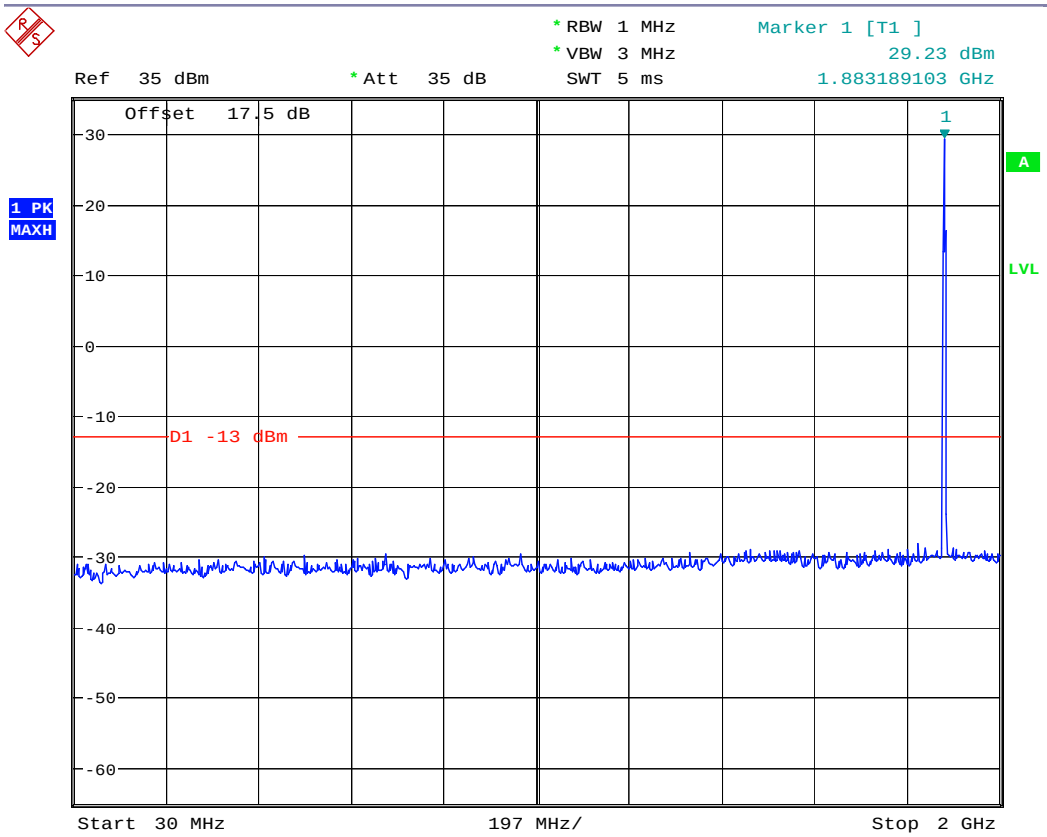

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
28.51 dBm
1.854775641 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 30 MHz
197 MHz/
Stop 2 GHz

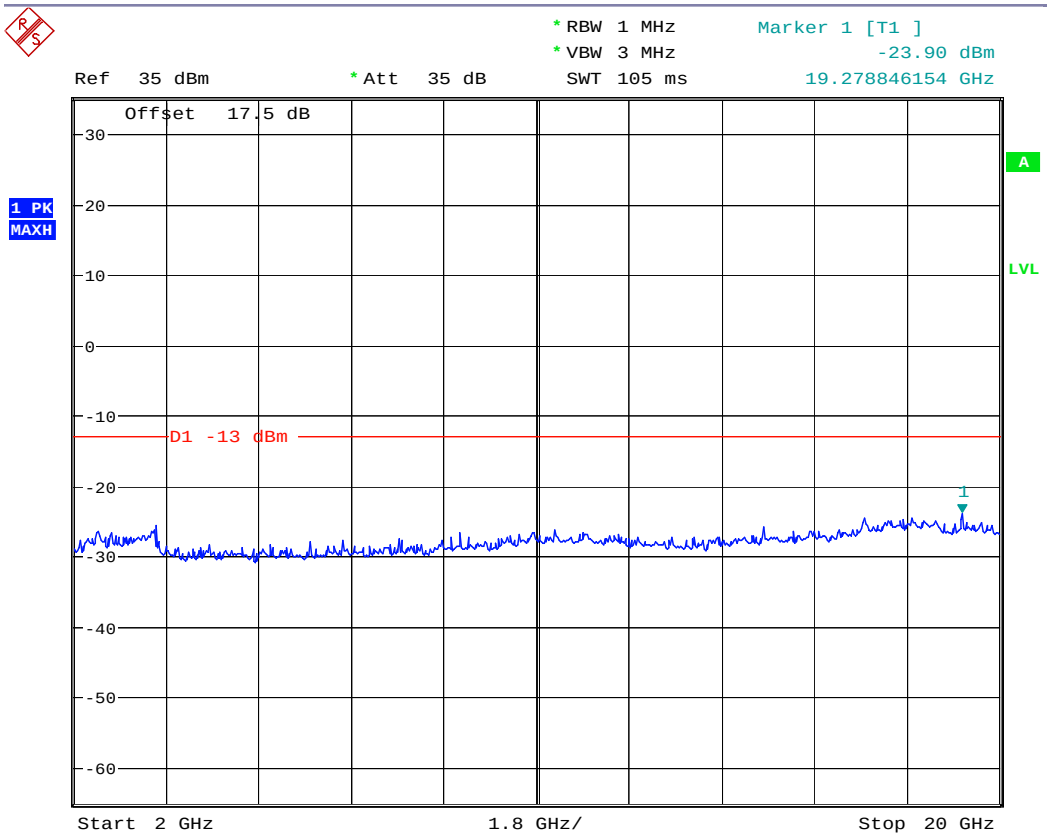

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.04 dBm
18.471153846 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 661

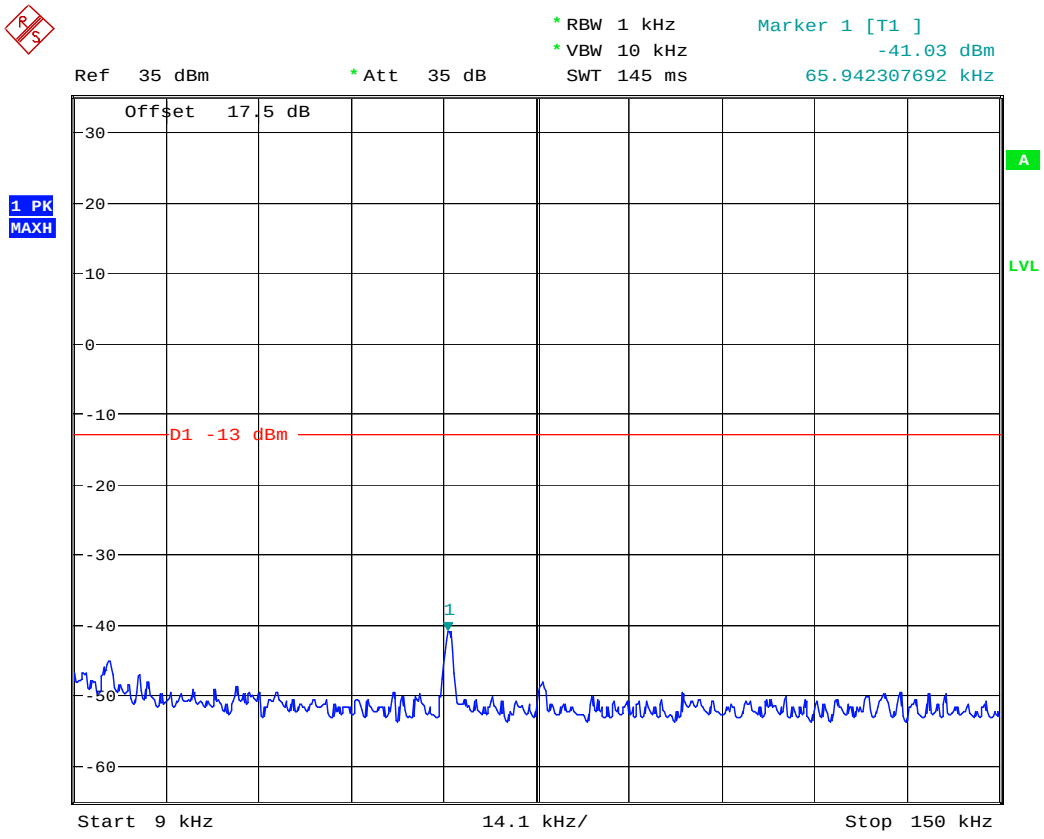

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-40.06 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 9 kHz
14.1 kHz/
Stop 150 kHz

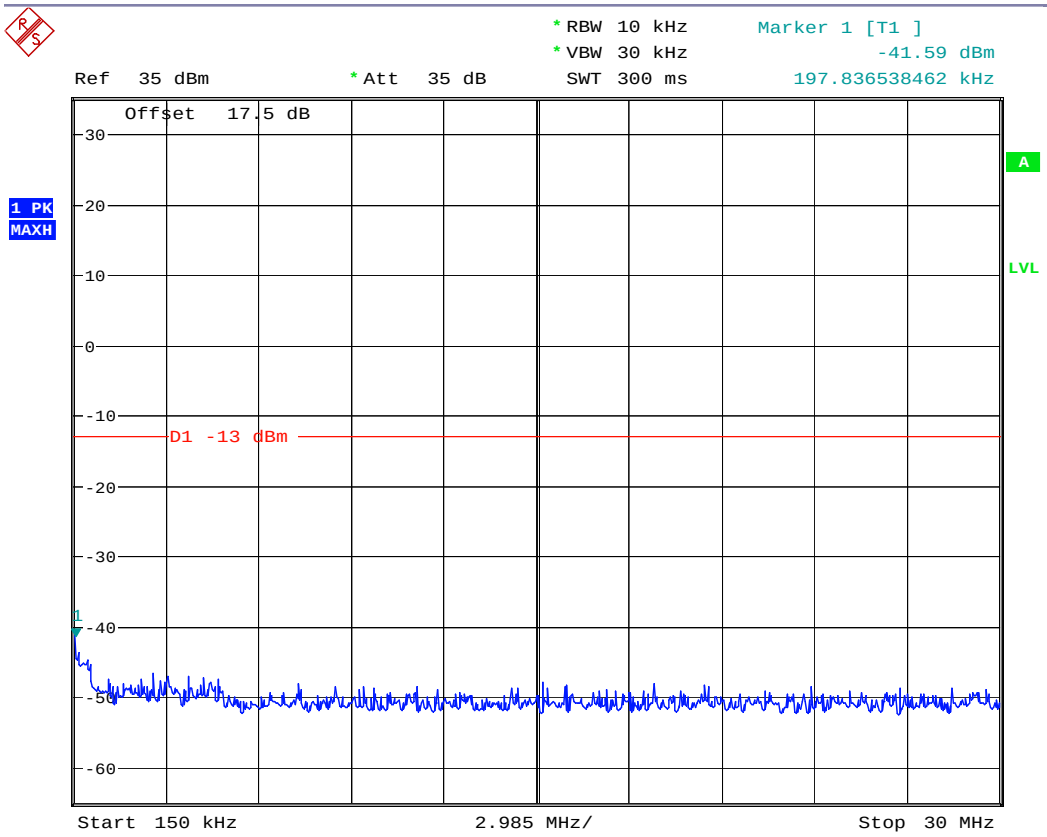

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.64 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

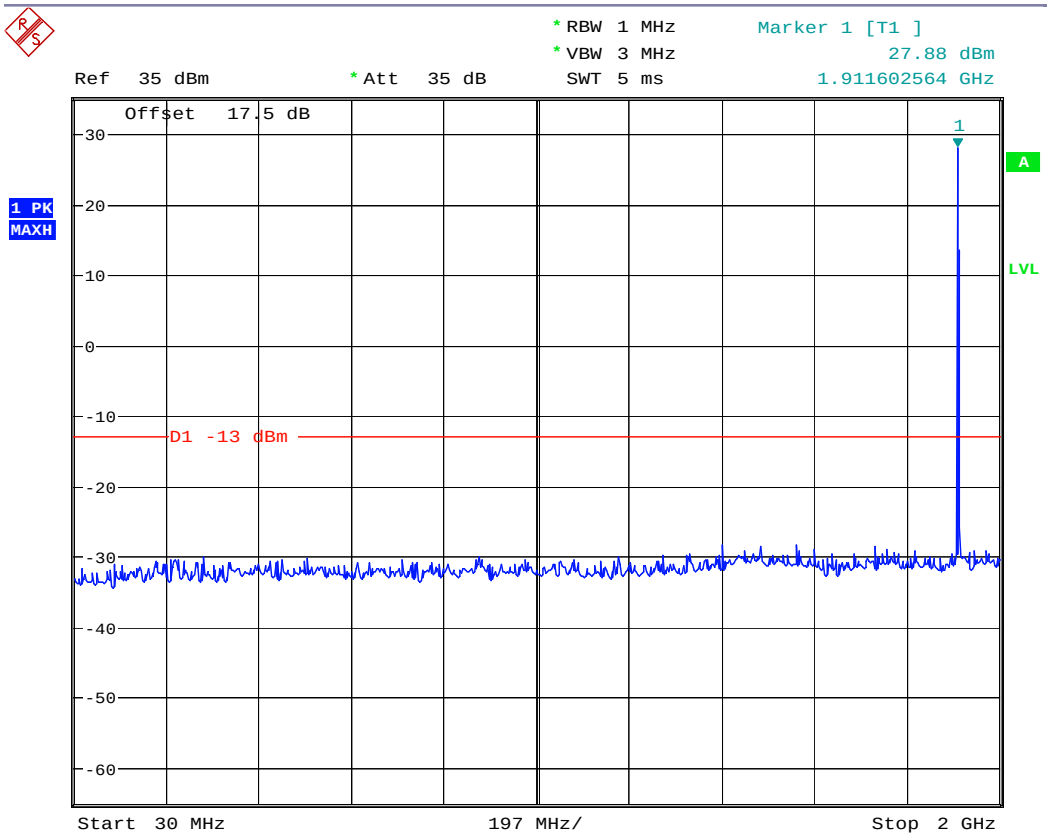

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
29.23 dBm
1.883189103 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

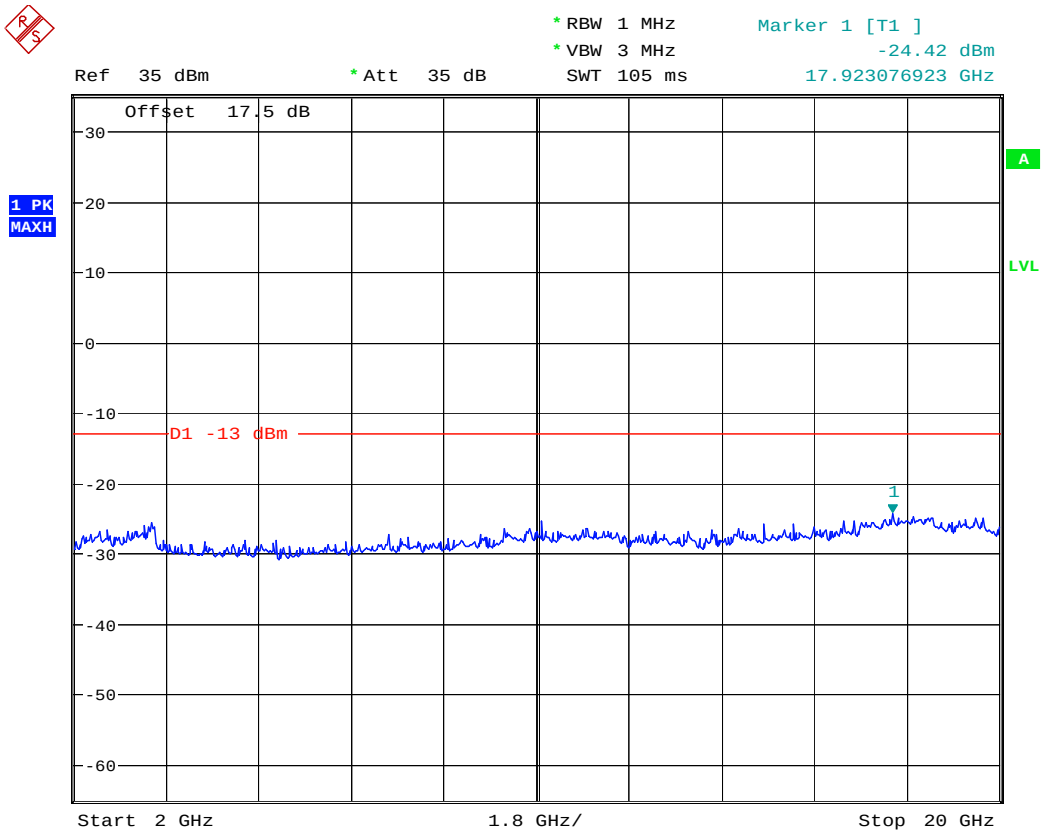

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.90 dBm
19.278846154 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 810

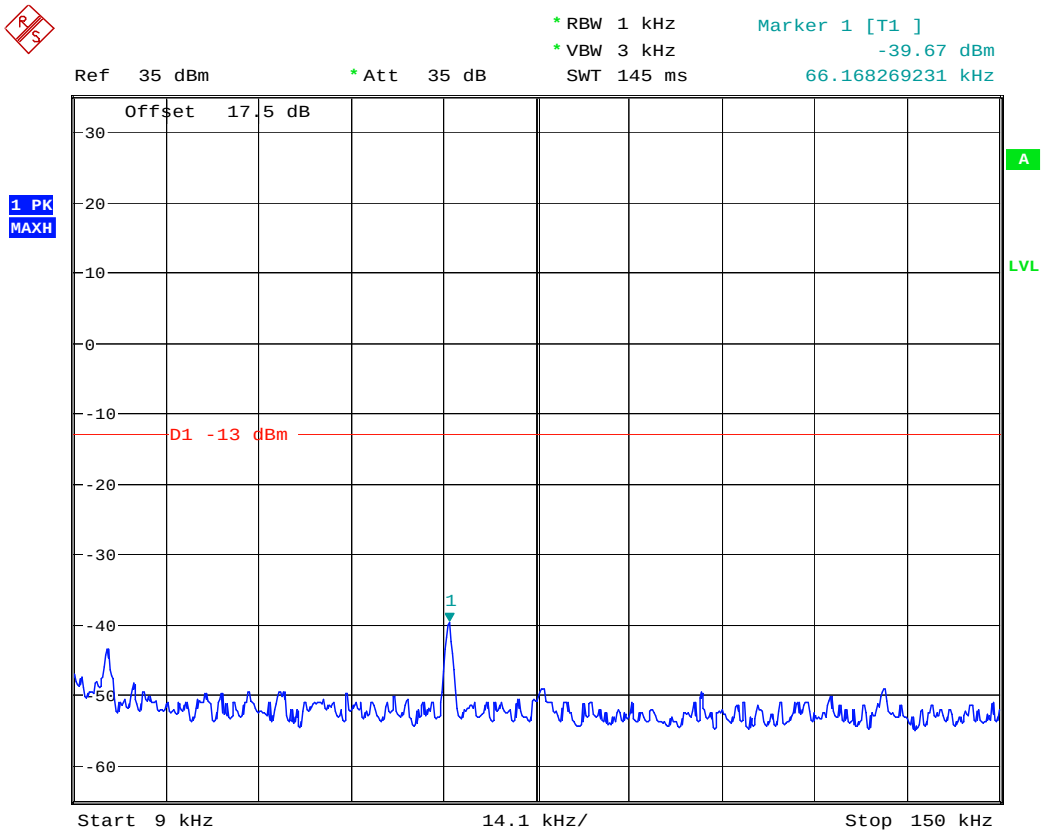

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.03 dBm
65.942307692 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

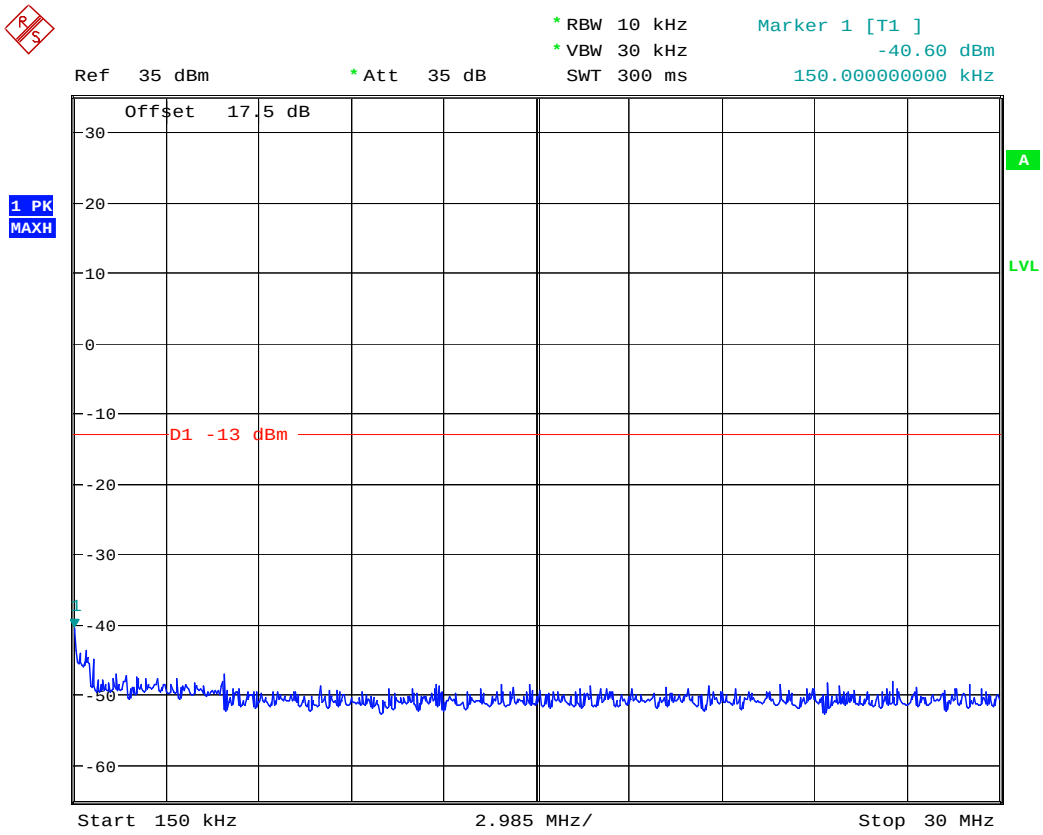

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-41.59 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

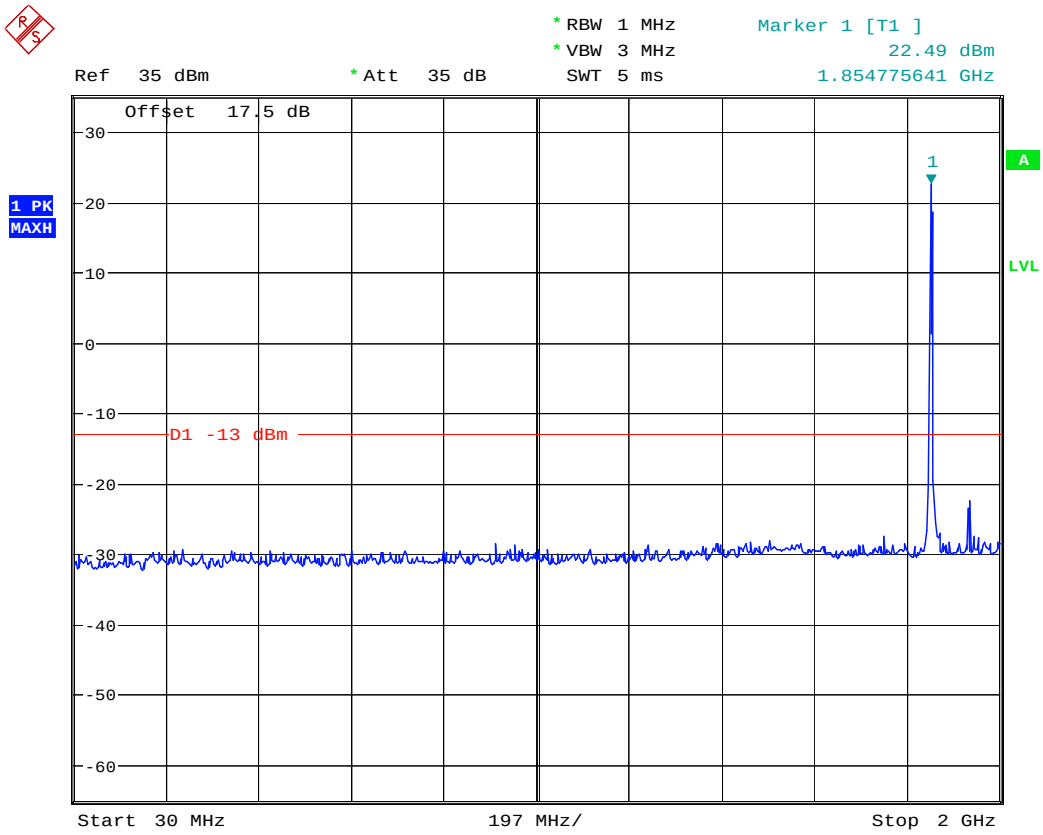

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
27.88 dBm
1.911602564 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

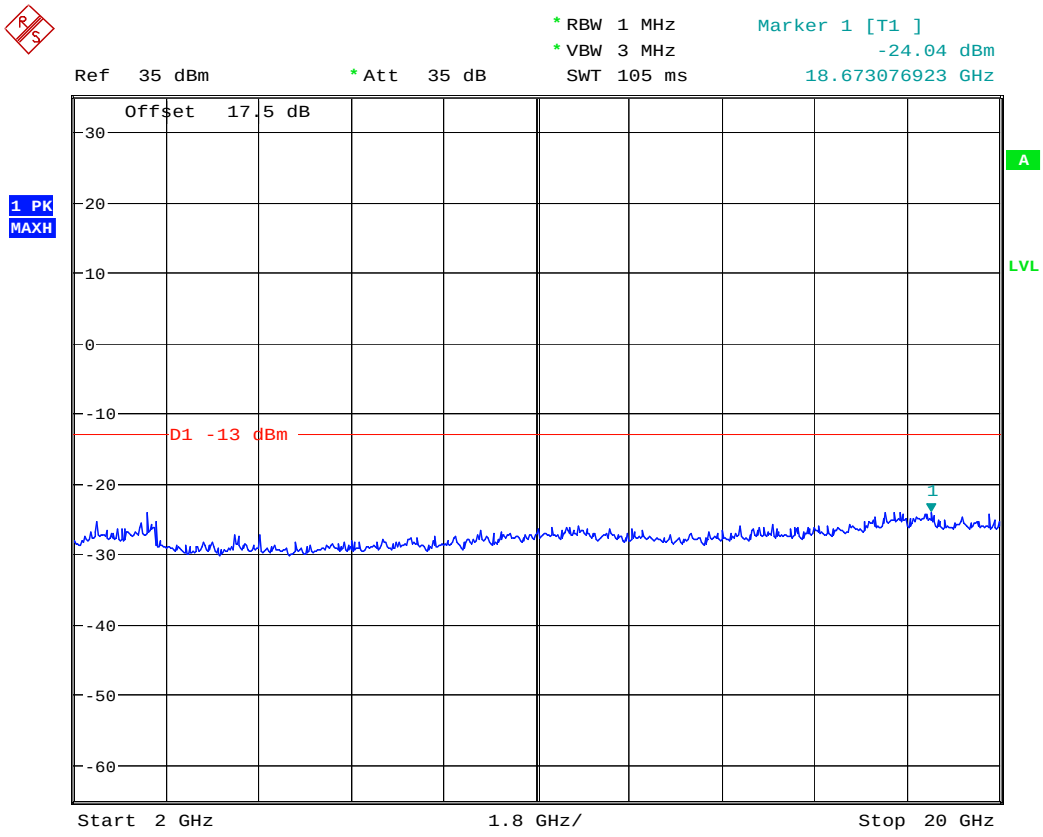

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.42 dBm
17.923076923 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

TM3: WCDMA
Channel 9262

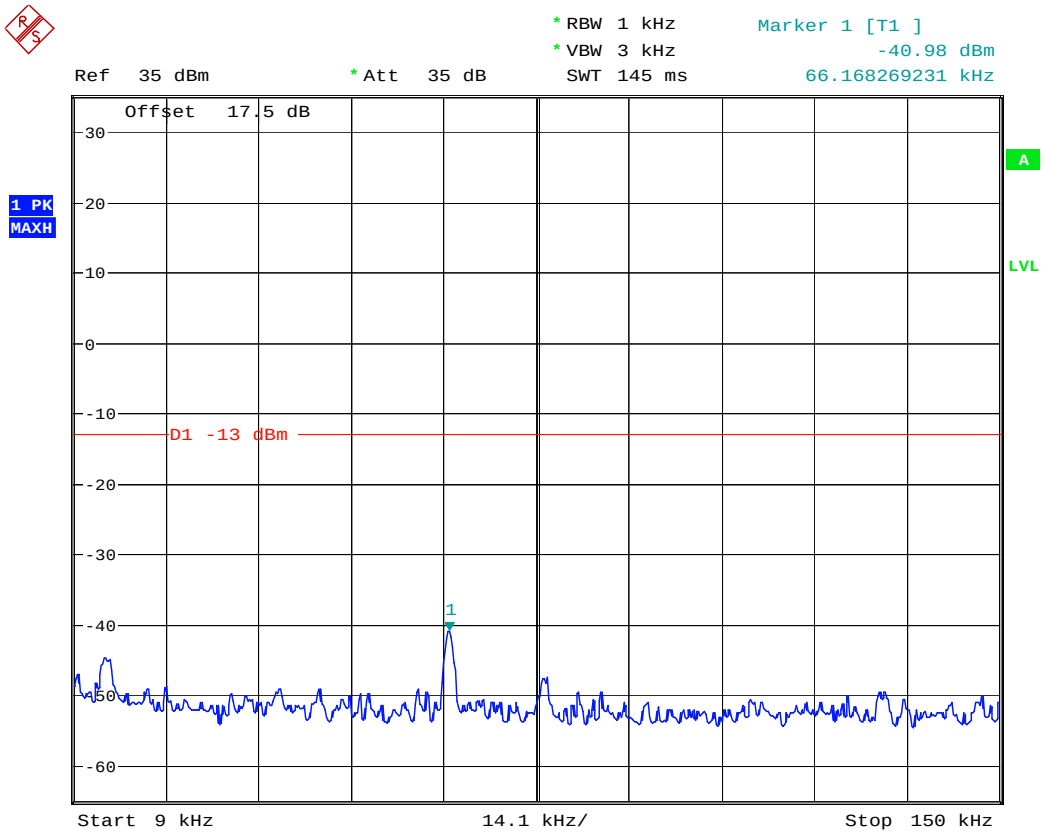


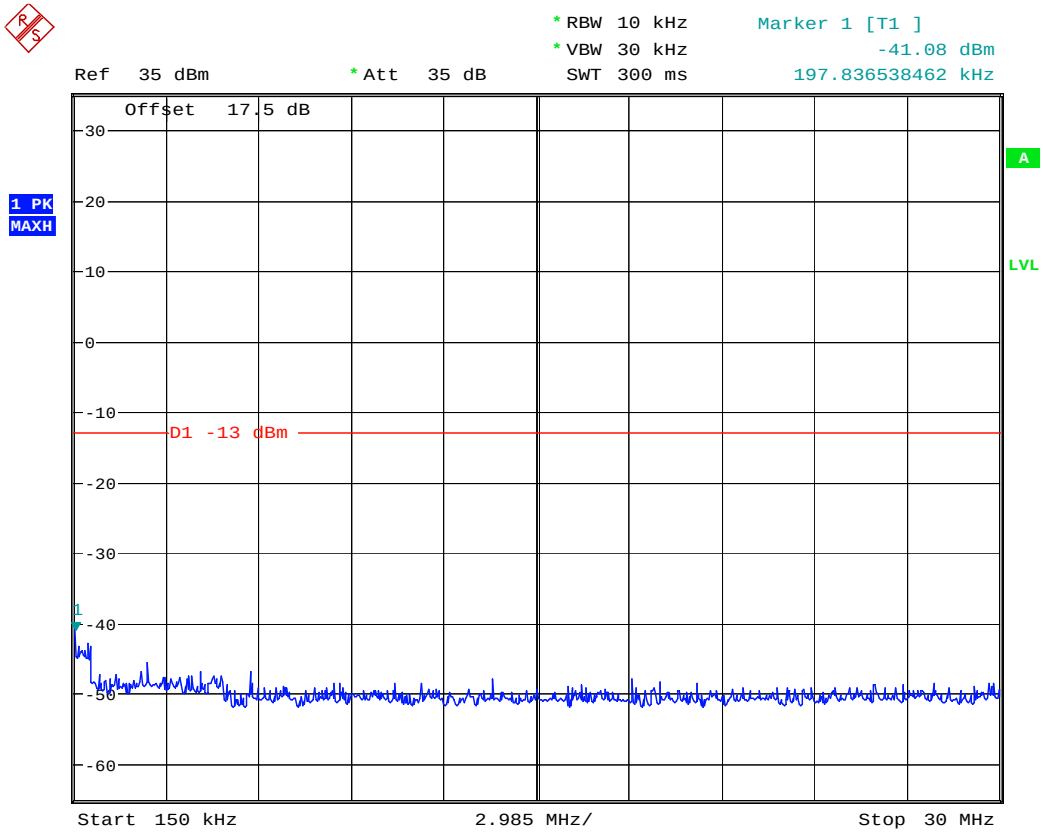

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.60 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

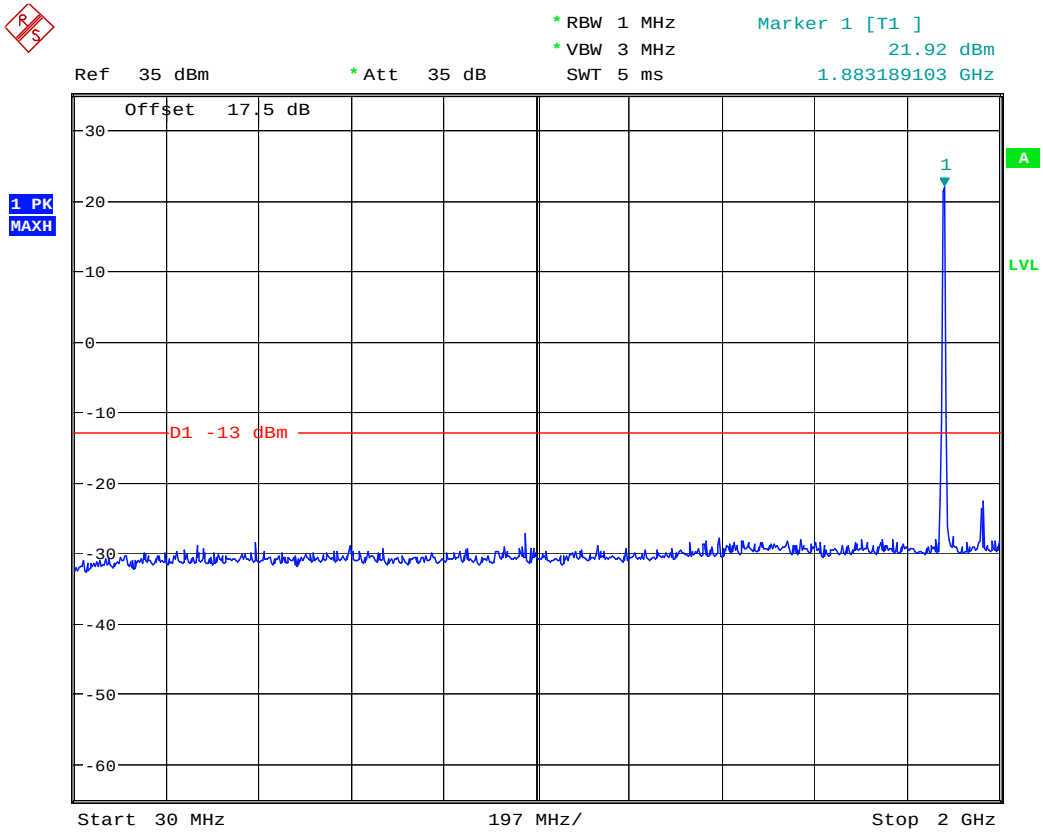

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
22.49 dBm
1.854775641 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 30 MHz
197 MHz/
Stop 2 GHz

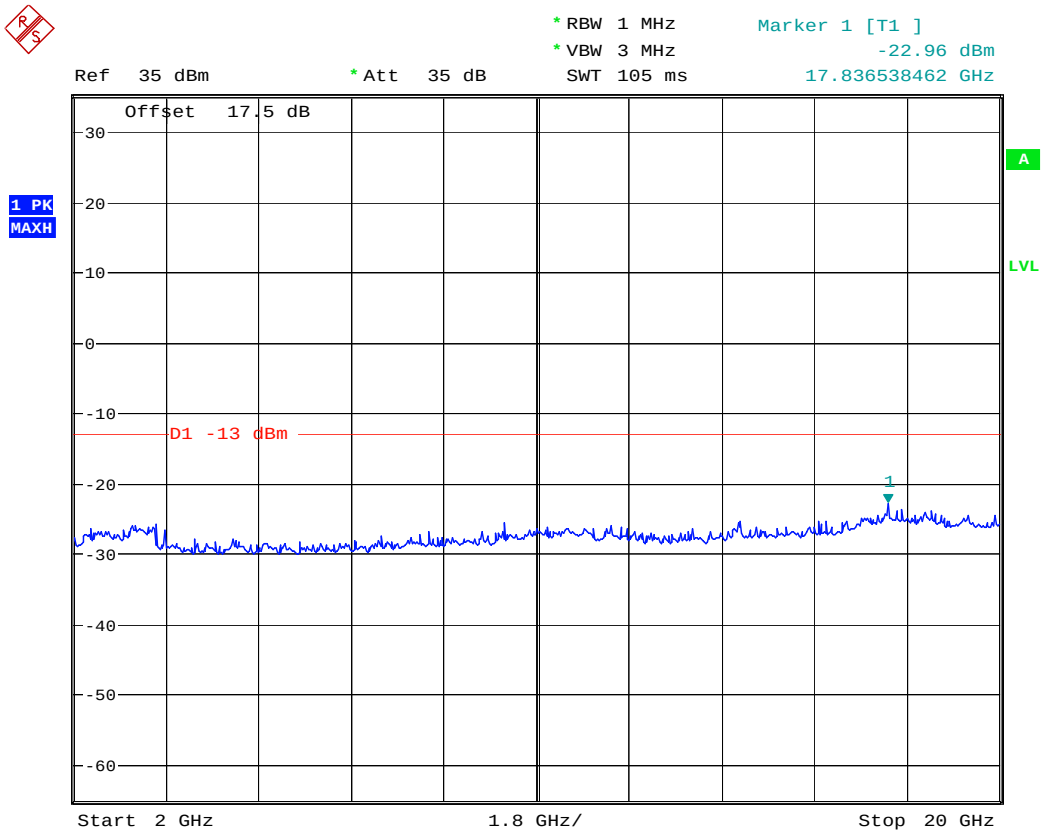

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.04 dBm
18.673076923 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 9400

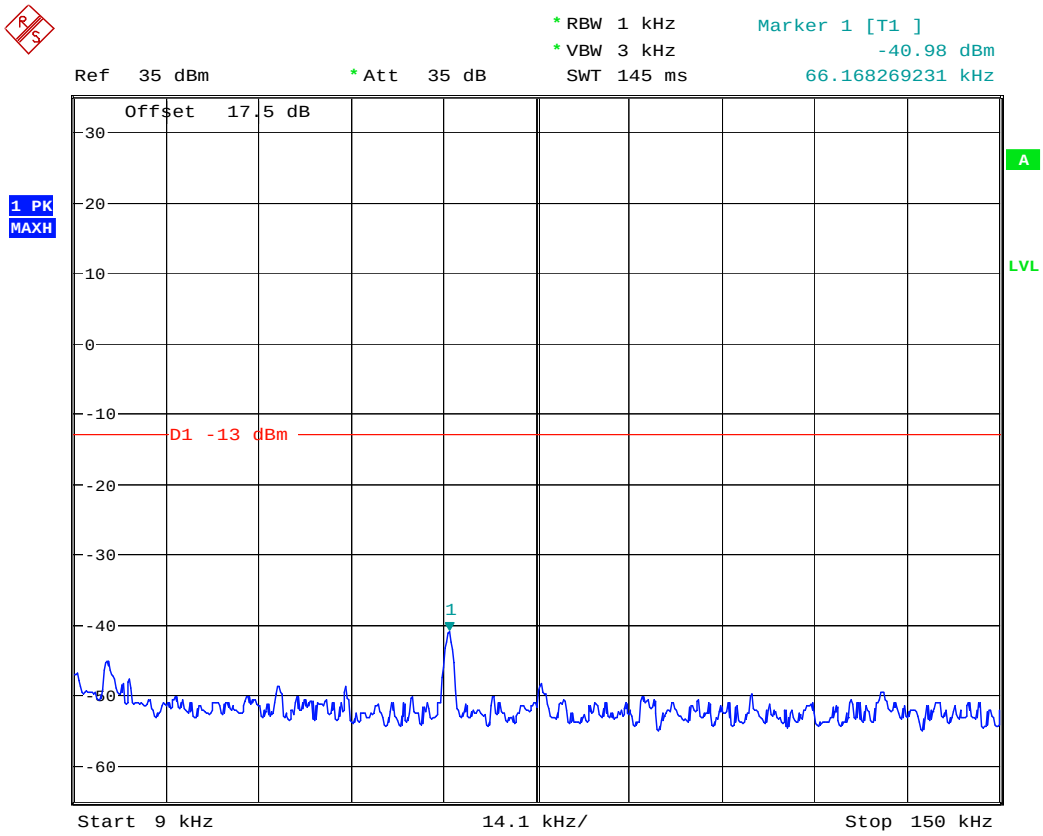


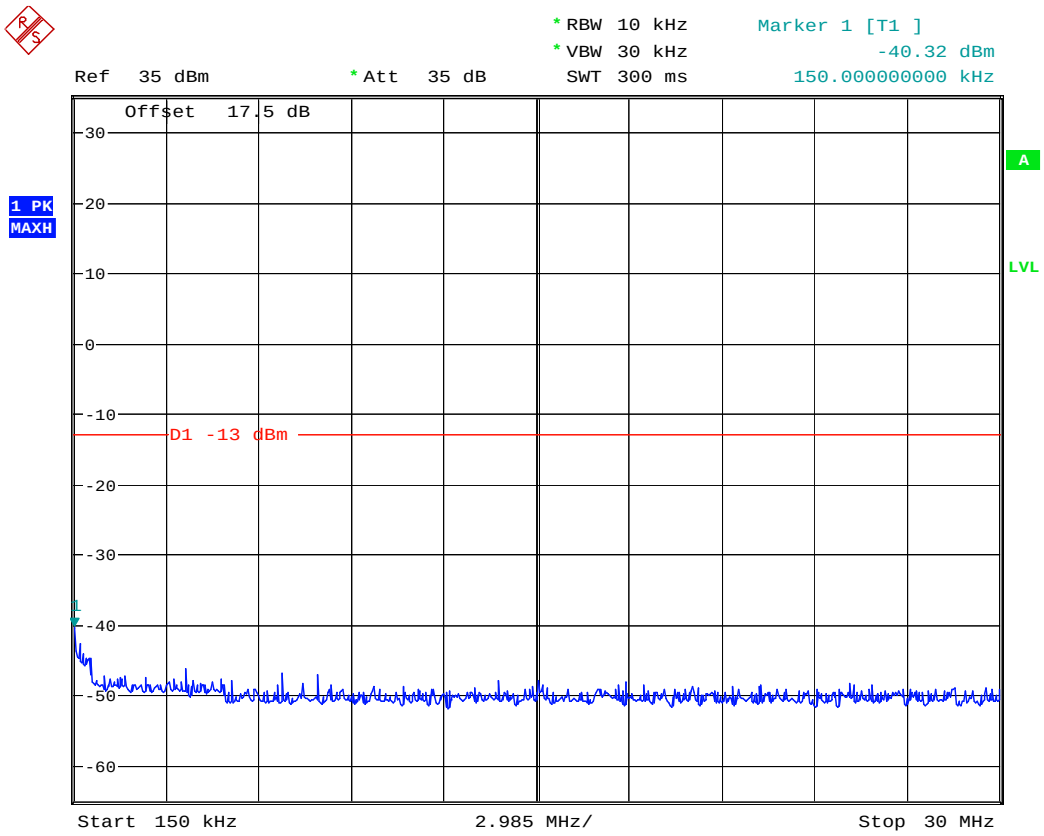

*RBW 10 kHz
Marker 1 [T1]
*VBW 30 kHz
-41.08 dBm
Ref 35 dBm
*Att 35 dB
SWT 300 ms
197.836538462 kHz
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 150 kHz
2.985 MHz/
Stop 30 MHz

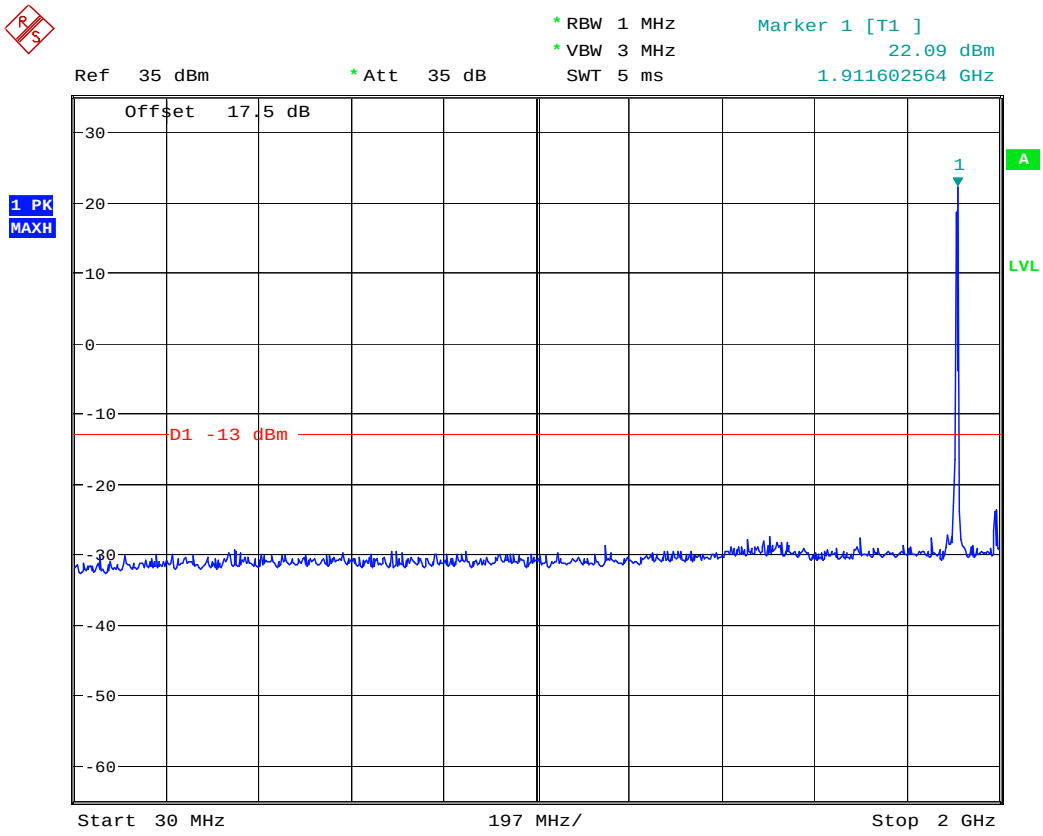

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
21.92 dBm
1.883189103 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
1
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

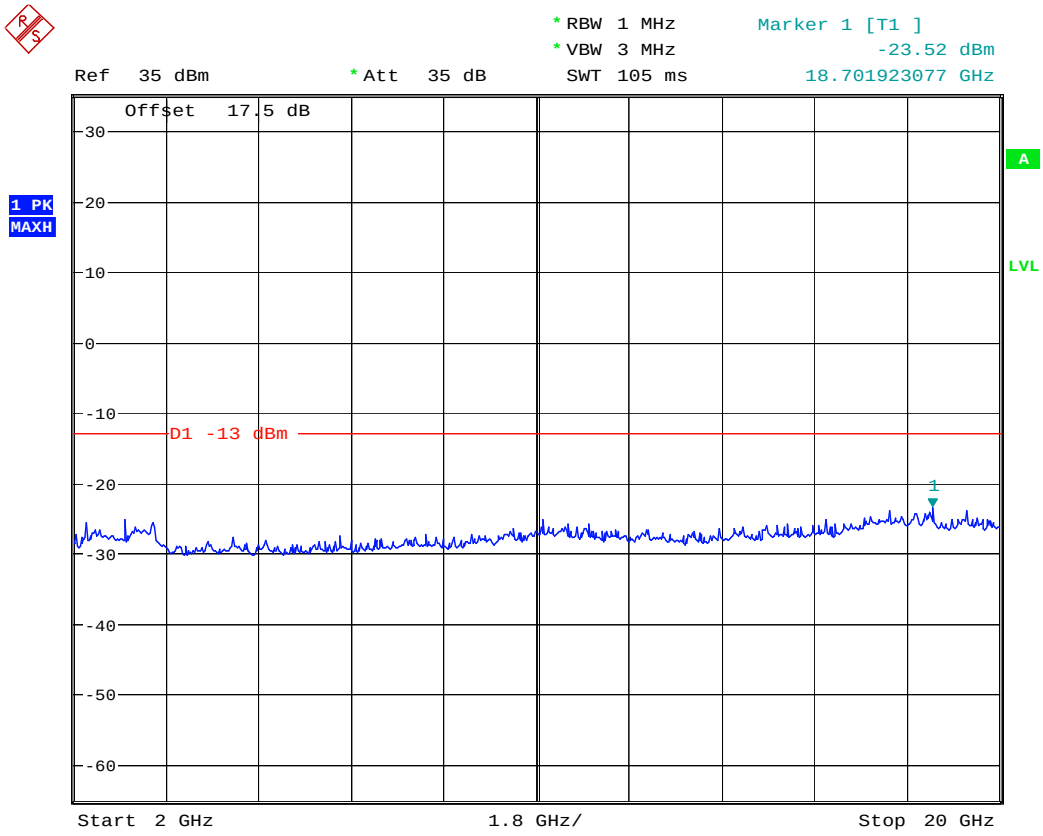

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-22.96 dBm
17.836538462 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 9538




*RBW 10 kHz
Marker 1 [T1]
*VBW 30 kHz
-40.32 dBm
Ref 35 dBm
*Att 35 dB
SWT 300 ms
150.000000000 kHz
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz


*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
22.09 dBm
1.911602564 GHz
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
197 MHz/
Stop 2 GHz


*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.52 dBm
18.701923077 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 2 GHz
1.8 GHz/
Stop 20 GHz