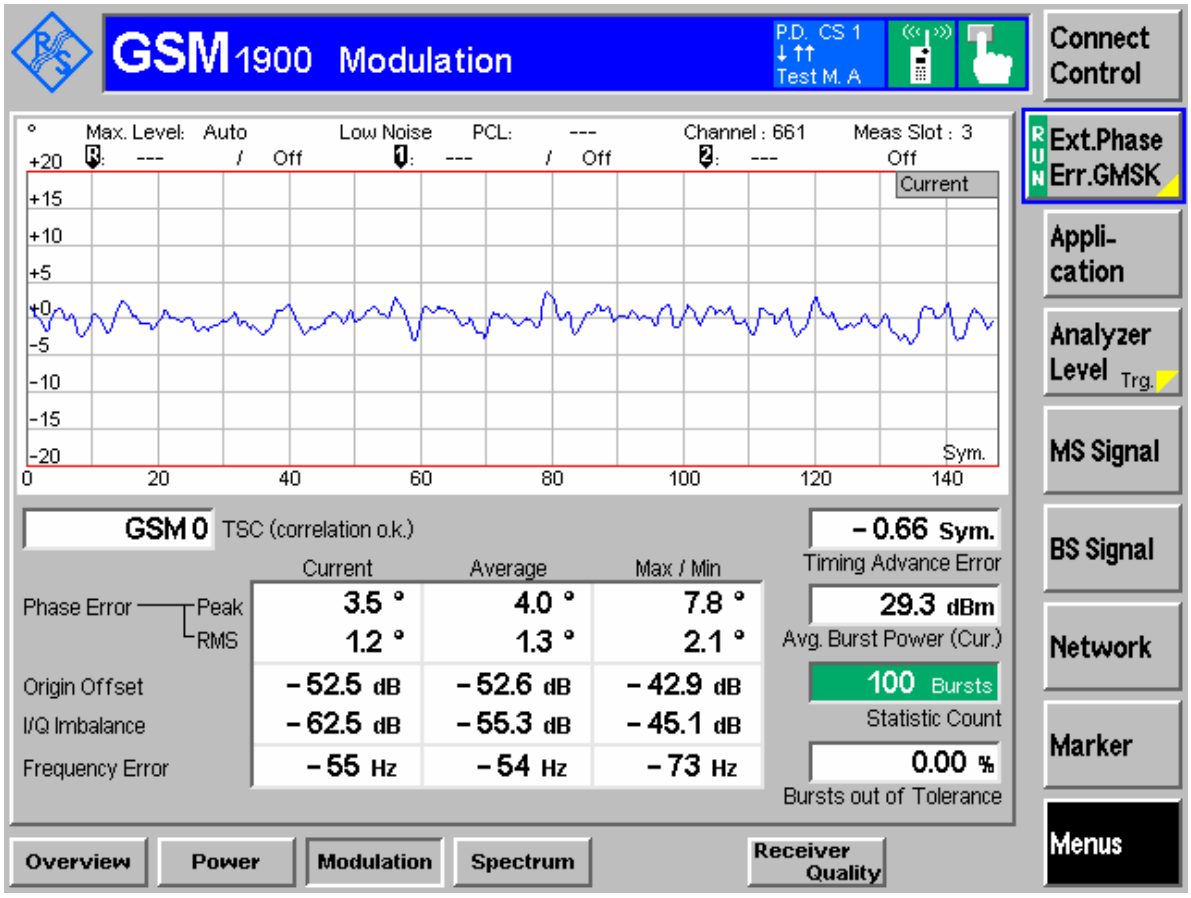
Appendix A

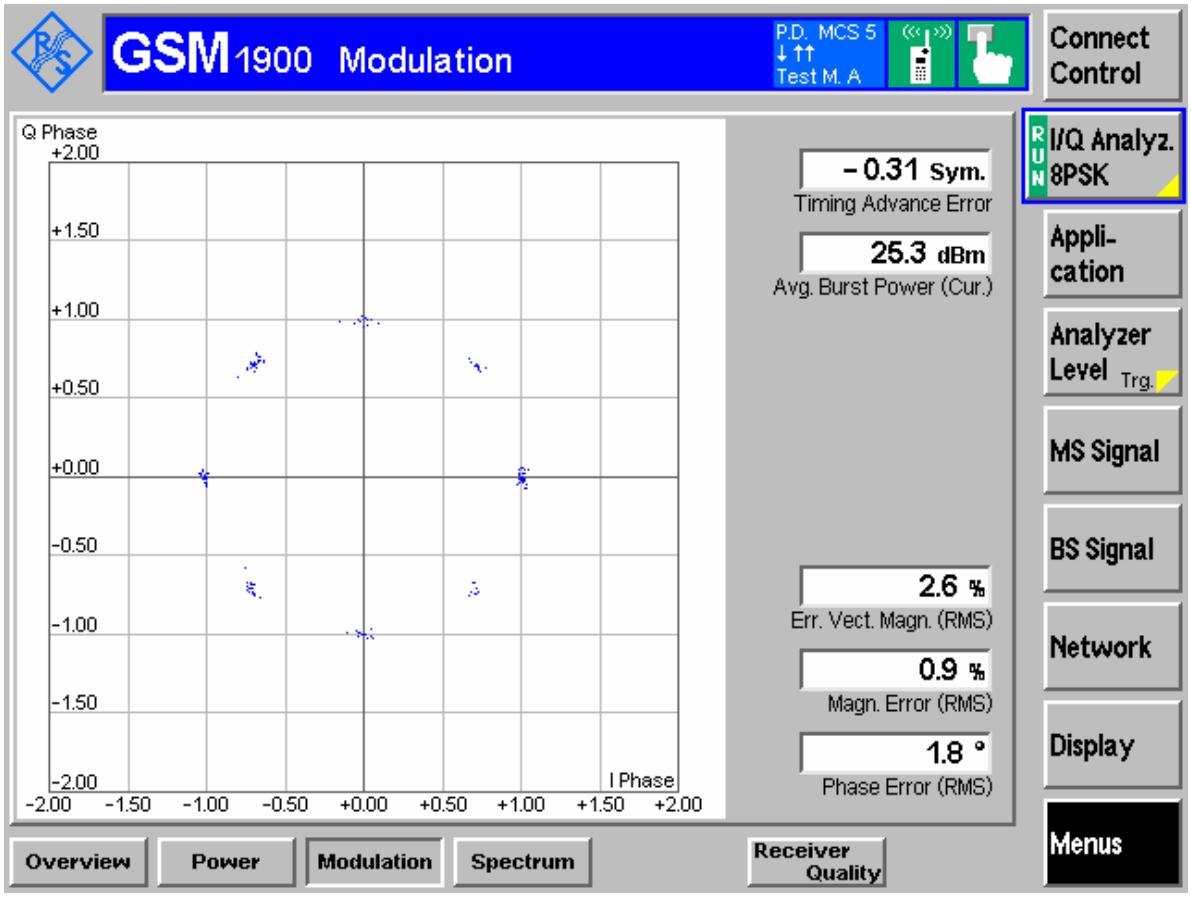
Modulation Characteristics

According to FCC Part 2.1047 & Part24 Subpart E

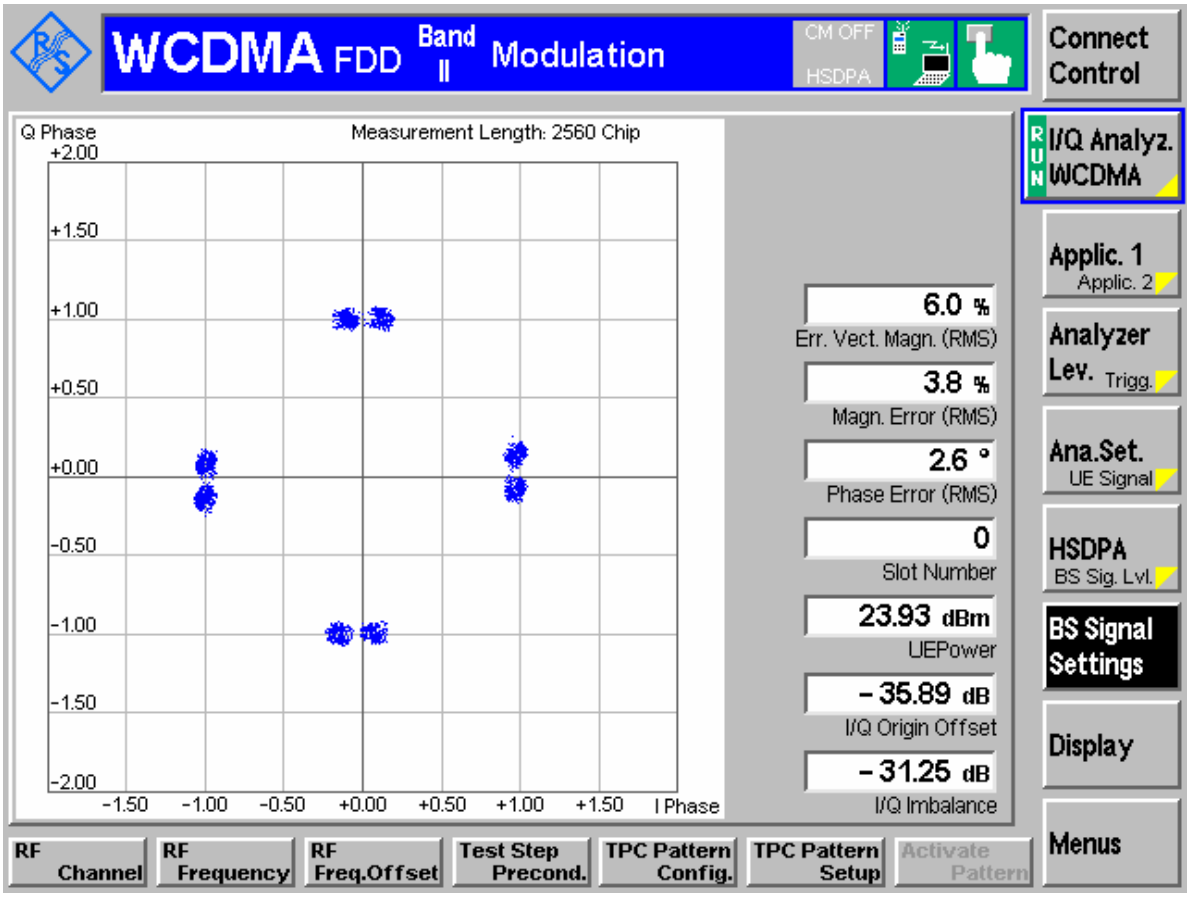
TM1:GPRS/GSM
Channel 661



TM2:EDGE
Channel 661



TM3: WCDMA
Channel 9400

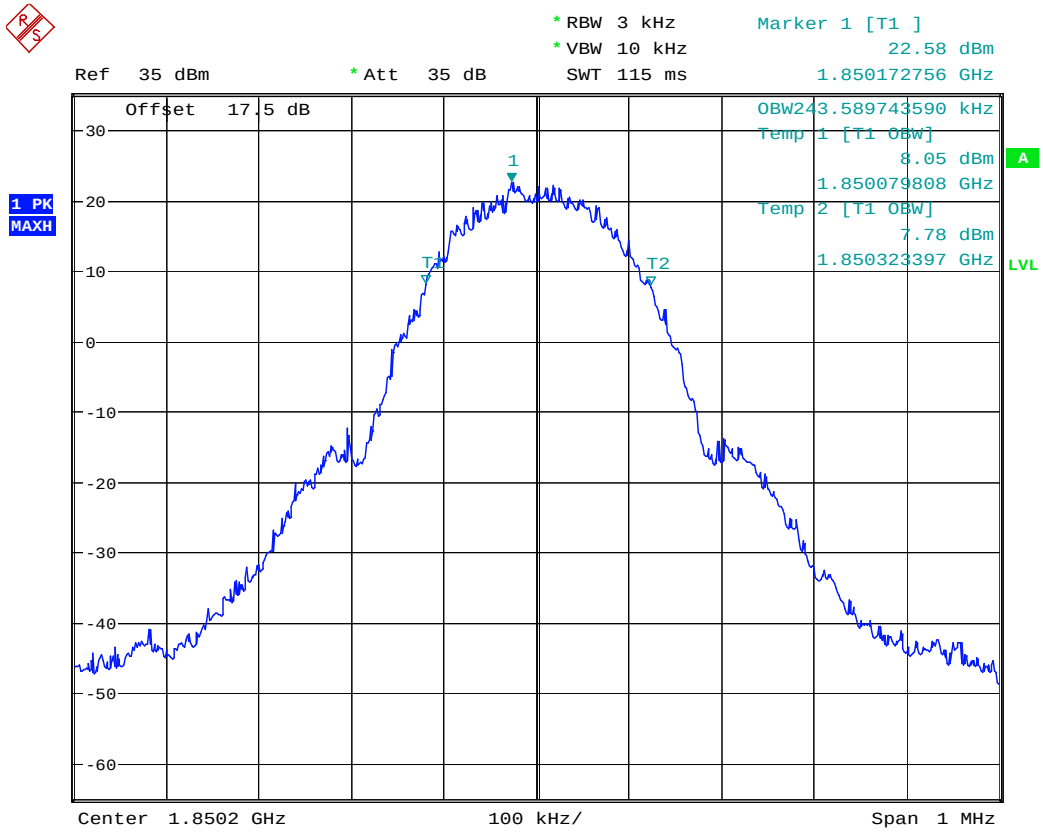


Appendix B

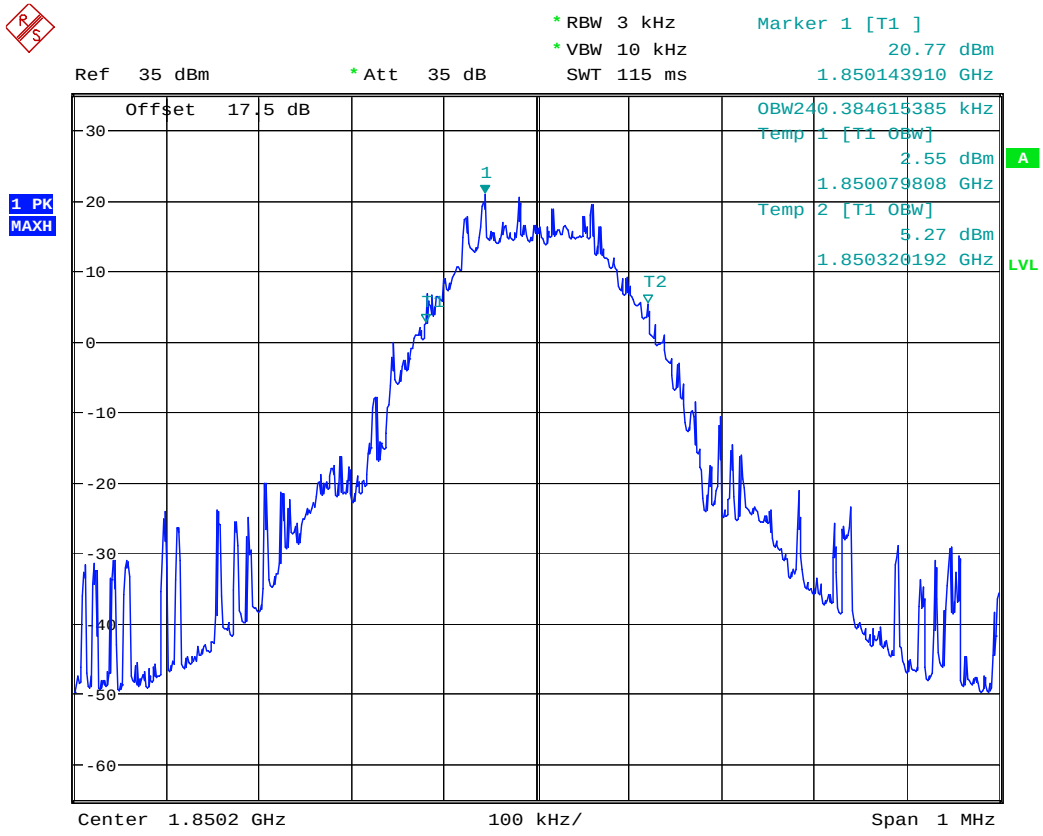
Occupied Bandwidth

According to FCC Part 2.1049 & Part 24 Subpart E & RSS-133

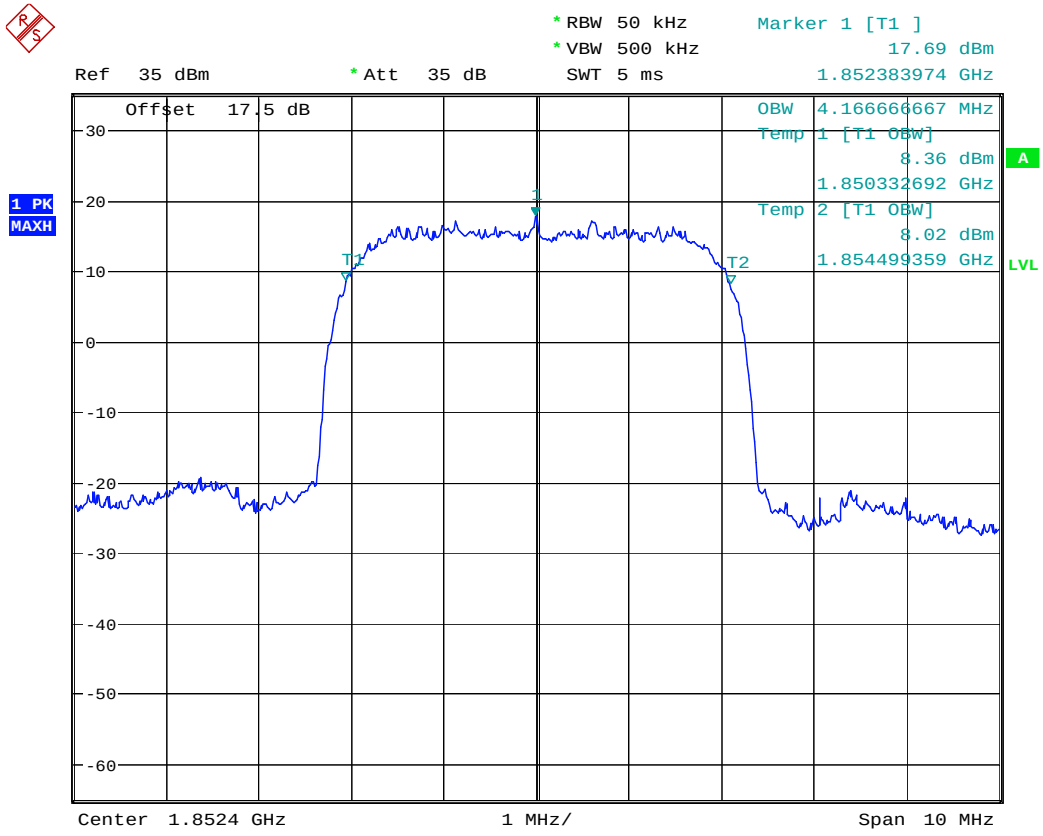
TM1:GPRS/GSM
Channel 512



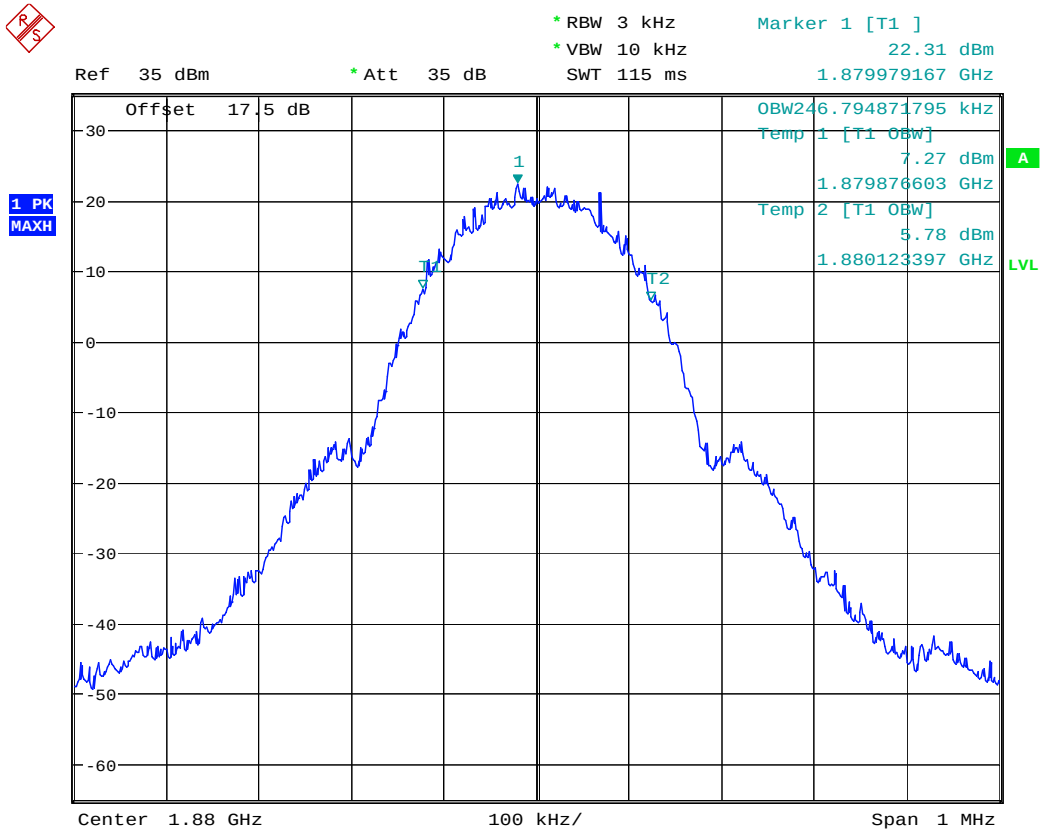
TM2:EDGE
Channel 512



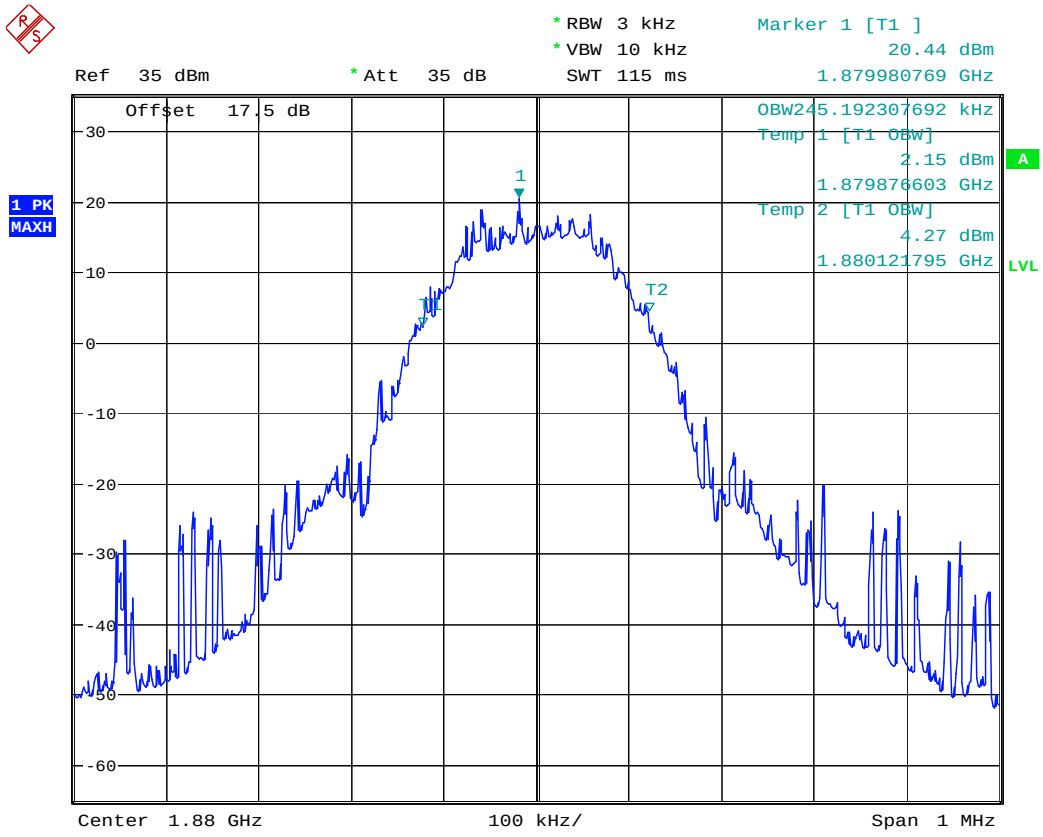
TM3: WCDMA
Channel 9262



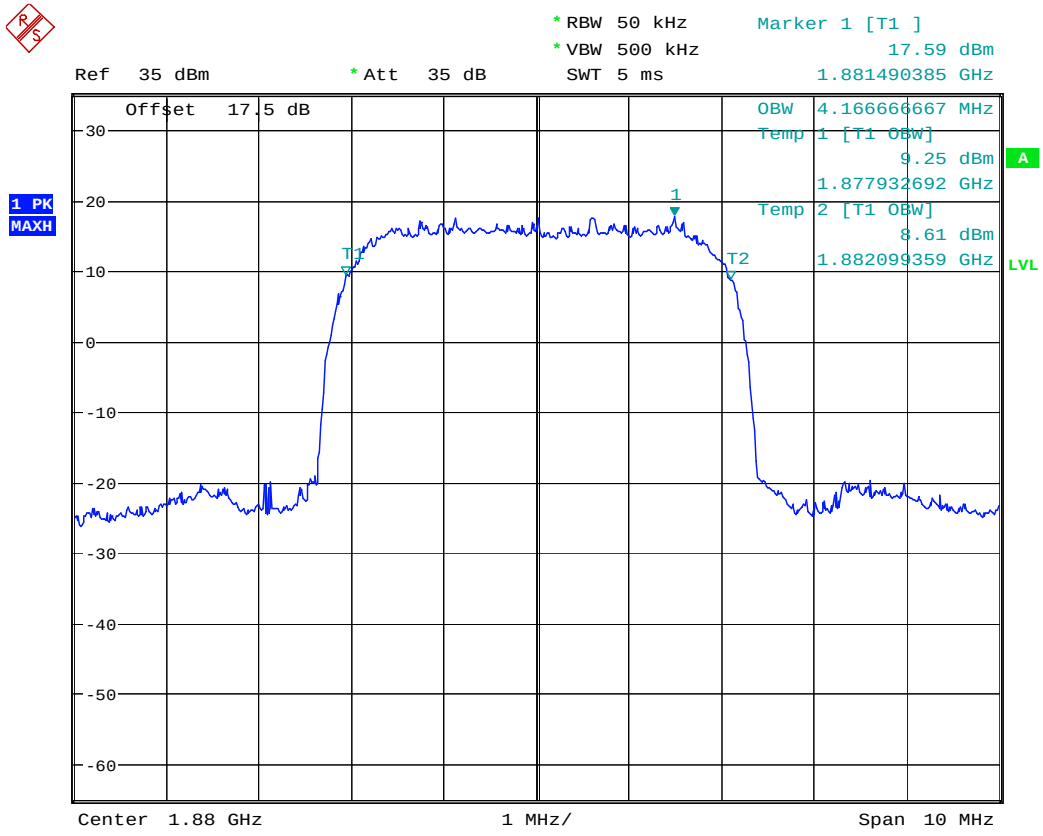
TM1:GPRS/GSM
Channel 661



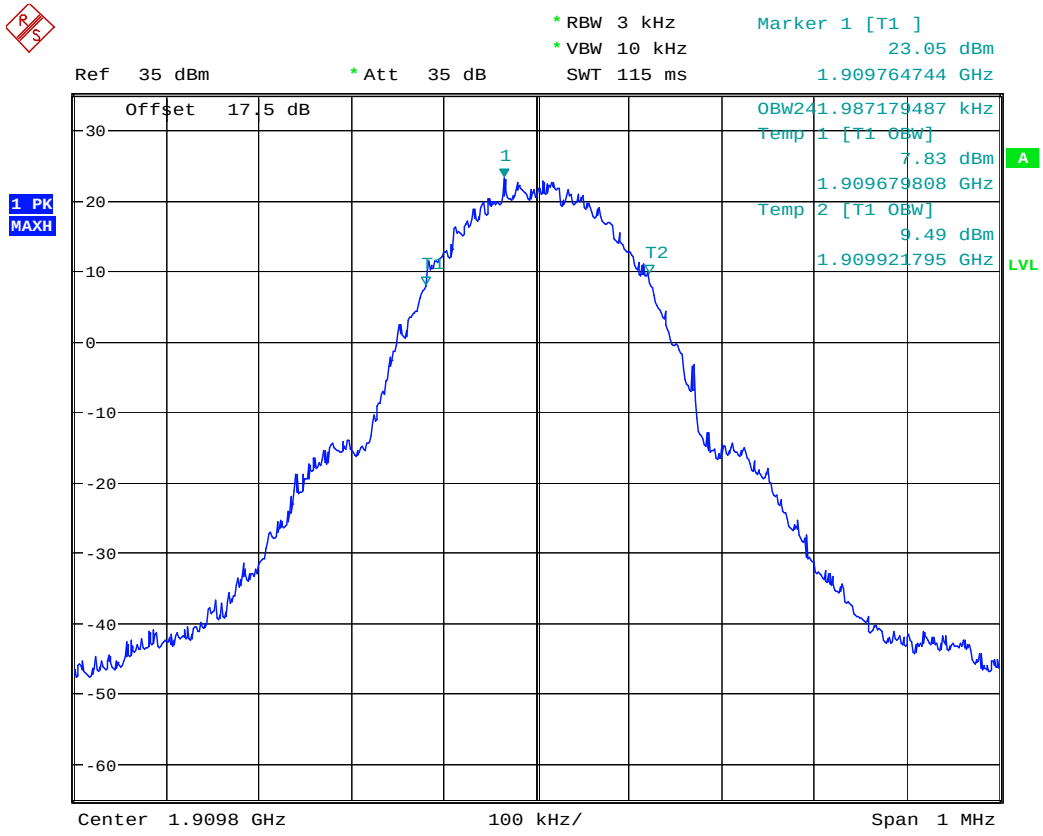
TM2:EDGE
Channel 661



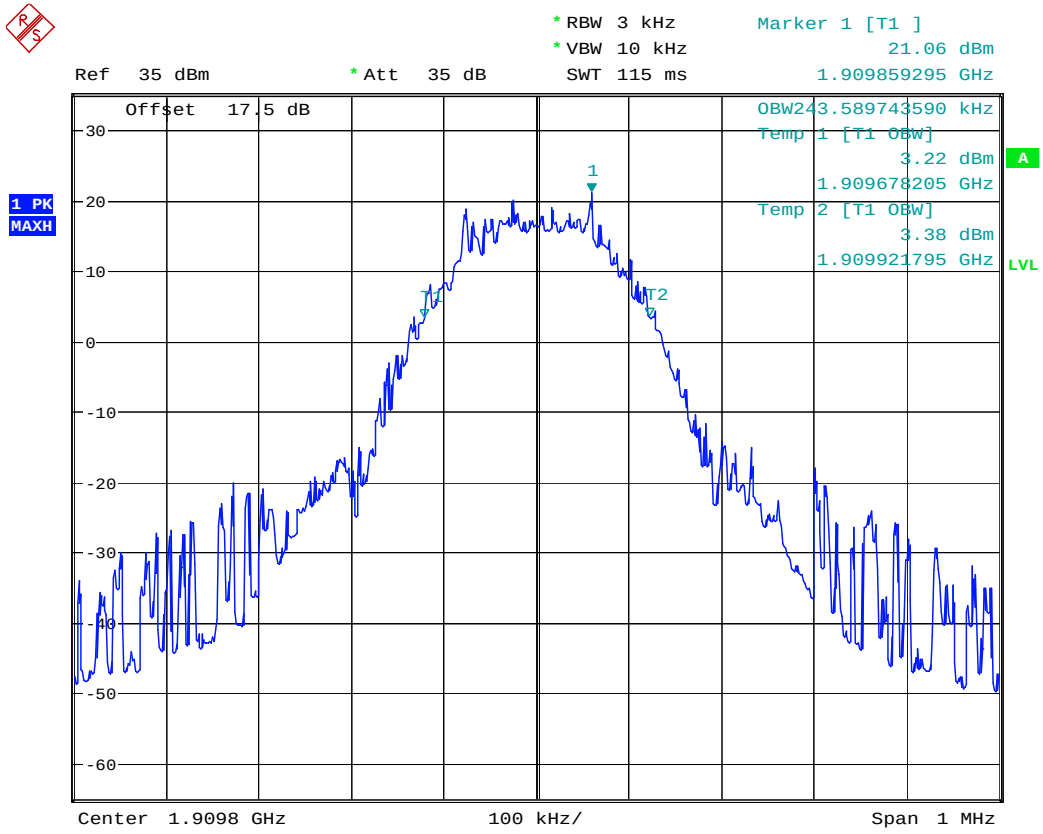
TM3: WCDMA
Channel 9400



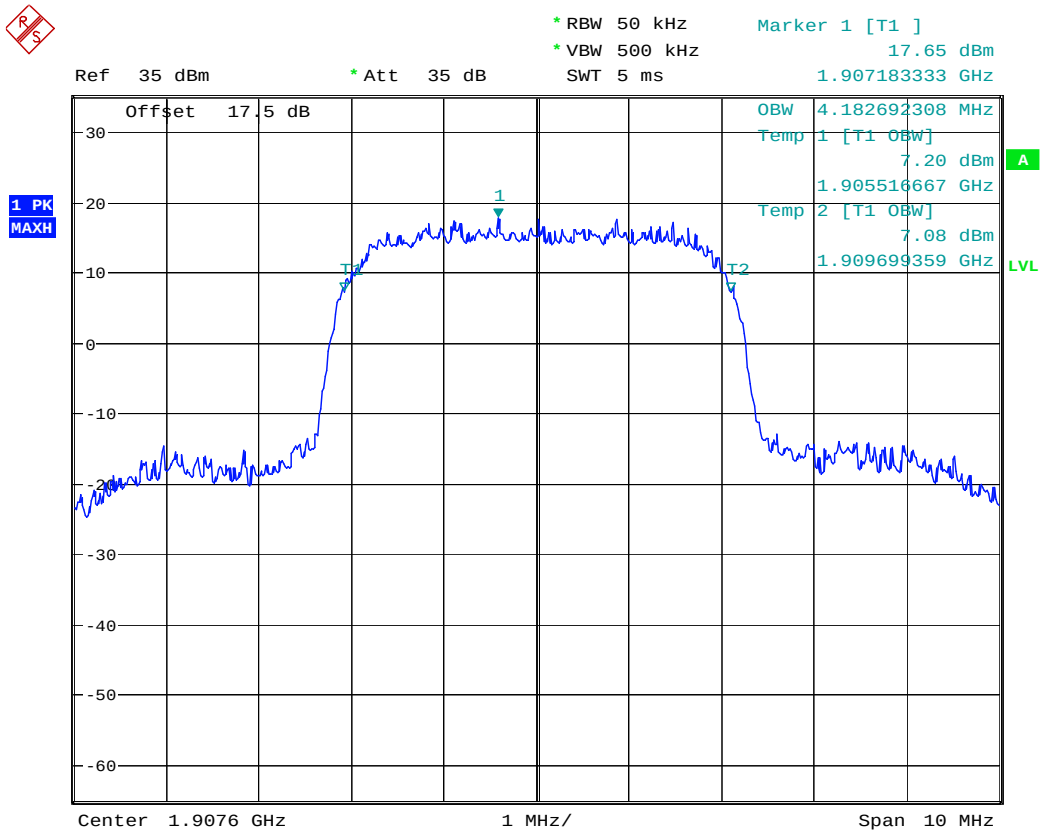
TM1:GPRS/GSM
Channel 810



TM2:EDGE
Channel 810



TM3: WCDMA
Channel 9538

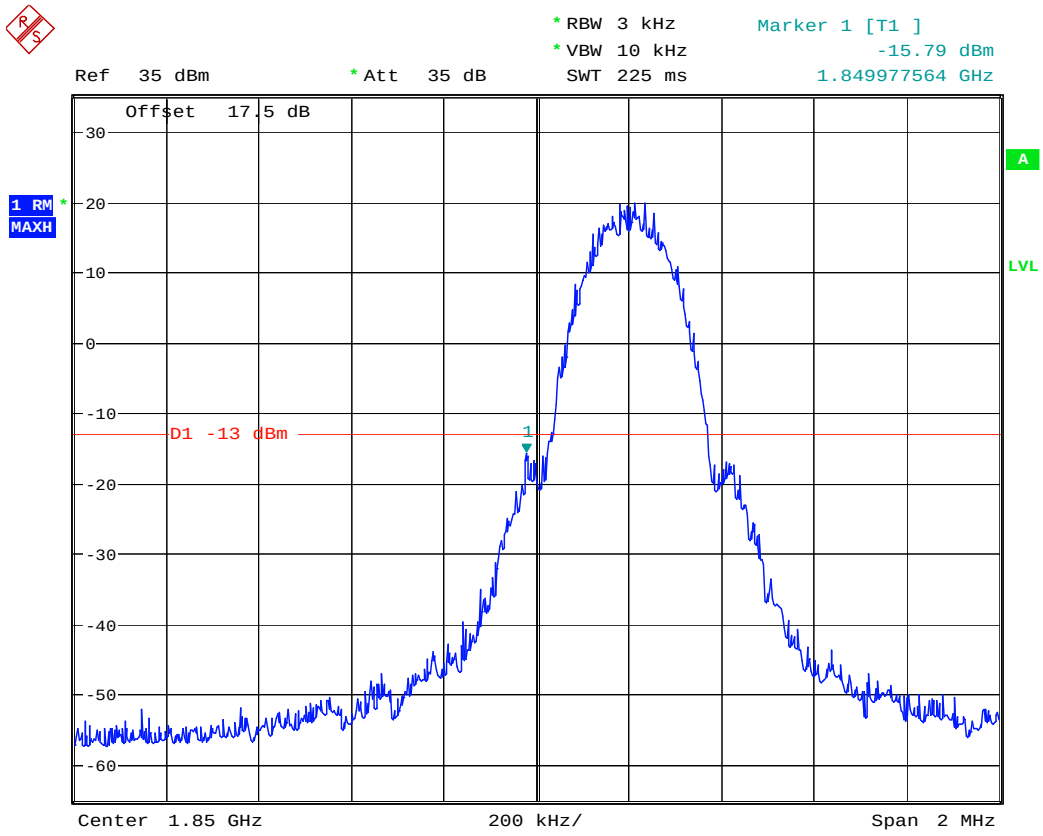


Appendix C

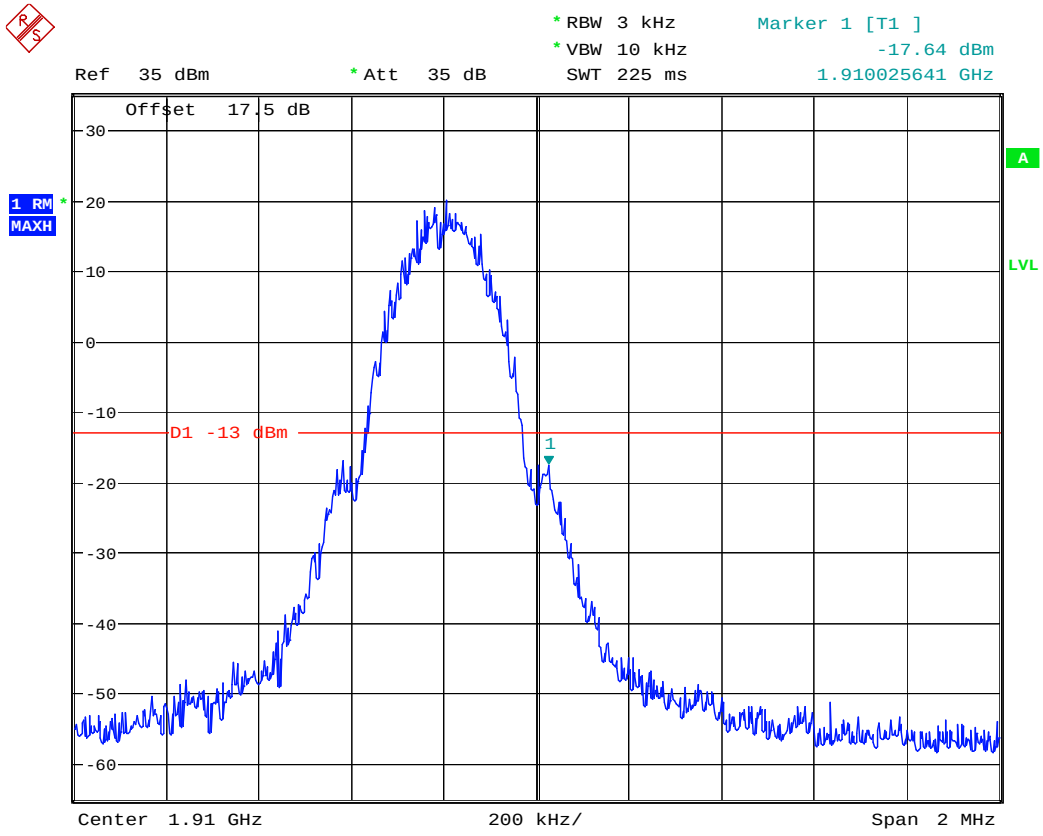
Band Edges Compliance

According to FCC Part 2.1051 & 24.238 & RSS-133

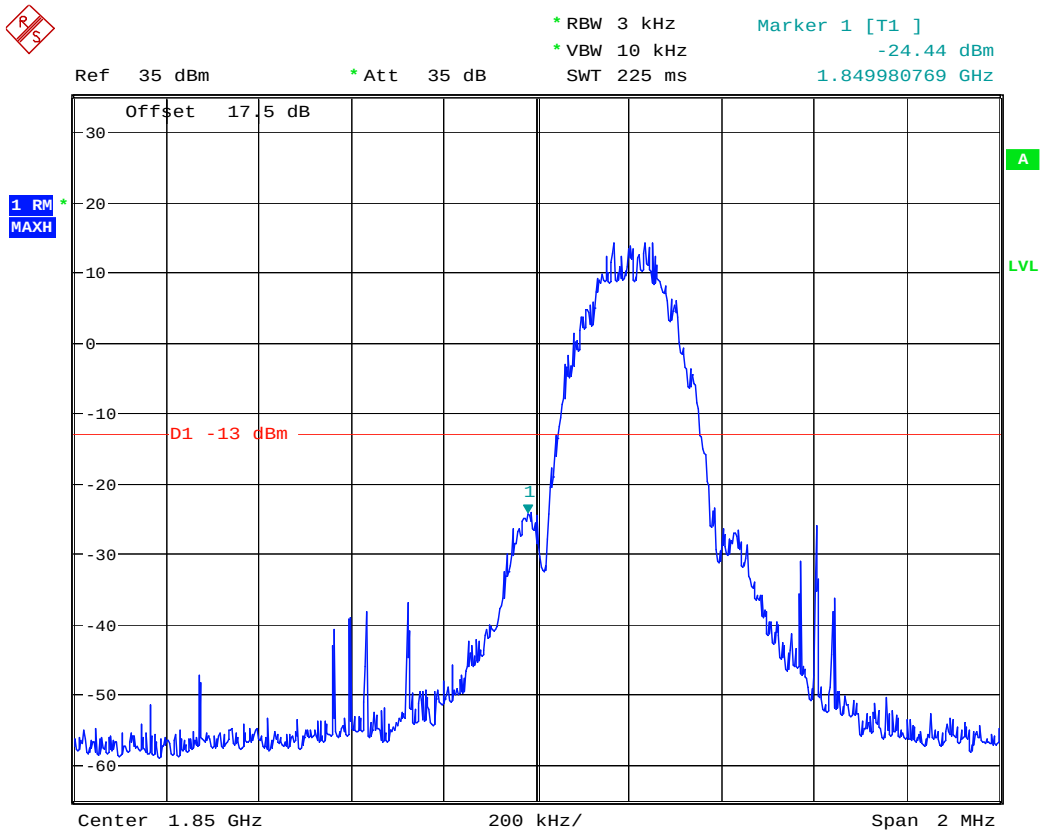
TM1:GPRS/GSM
Left Edge
Channel 512



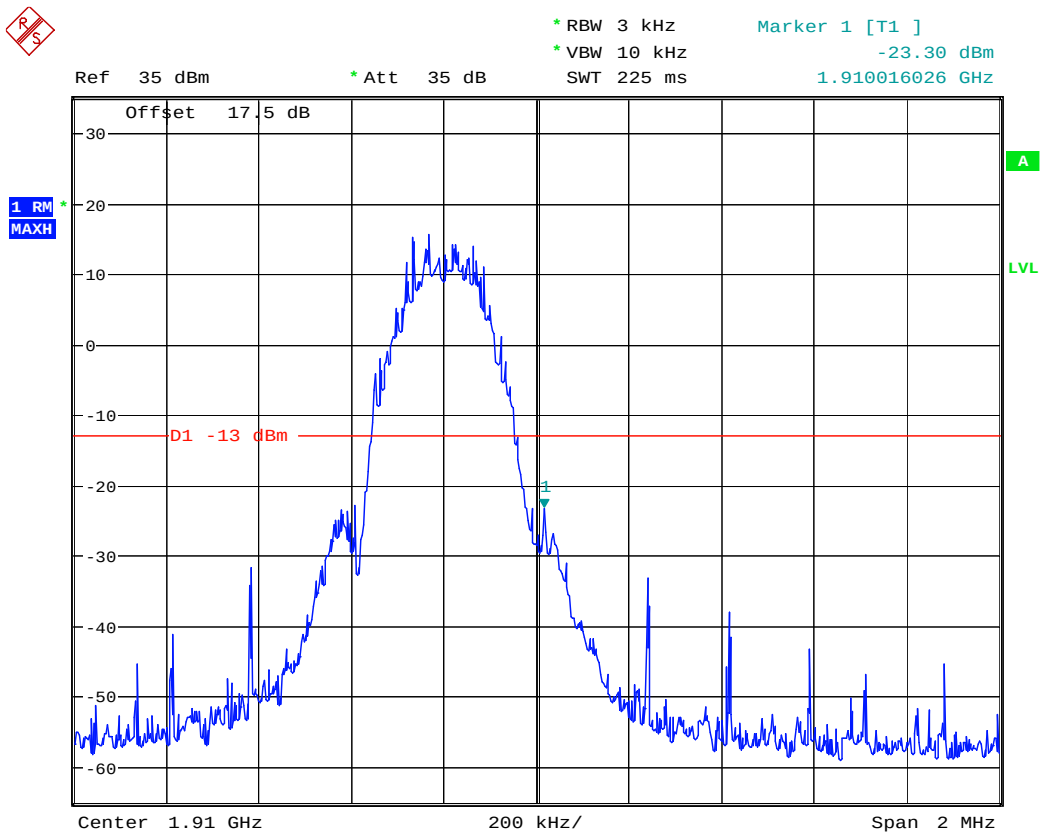
Right Edge
Channel 810



TM2:EDGE
Left Edge
Channel 512

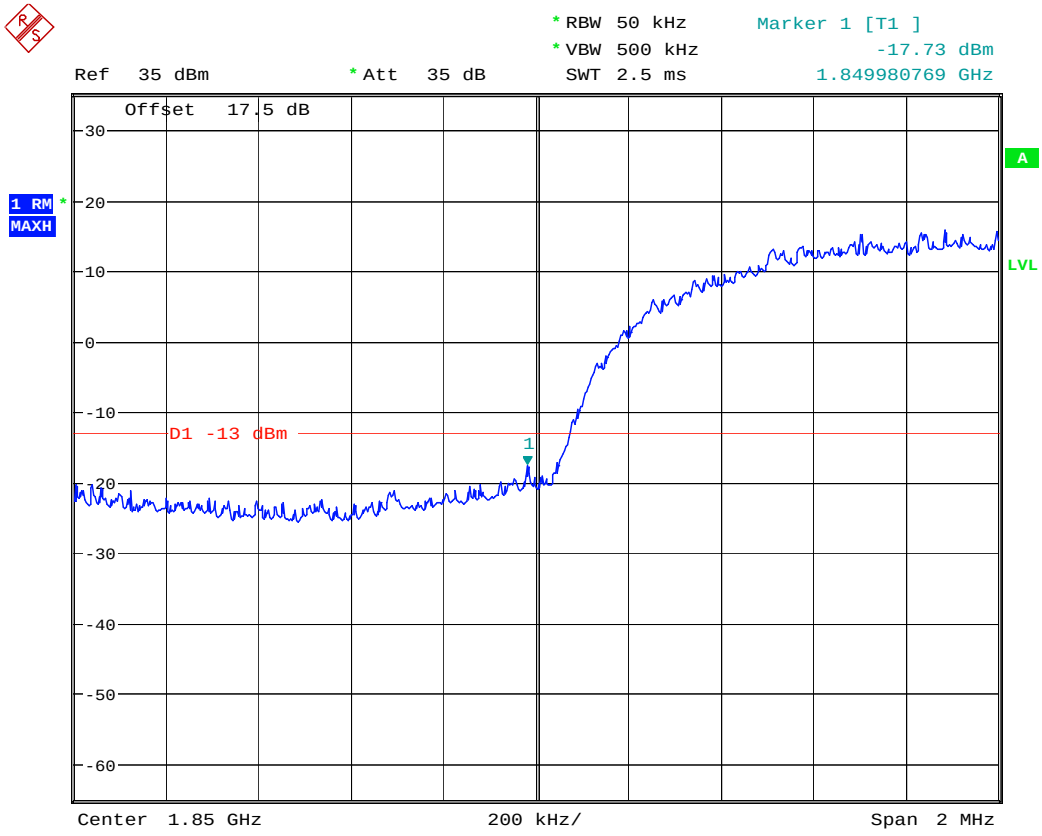


Right Edge
Channel 810

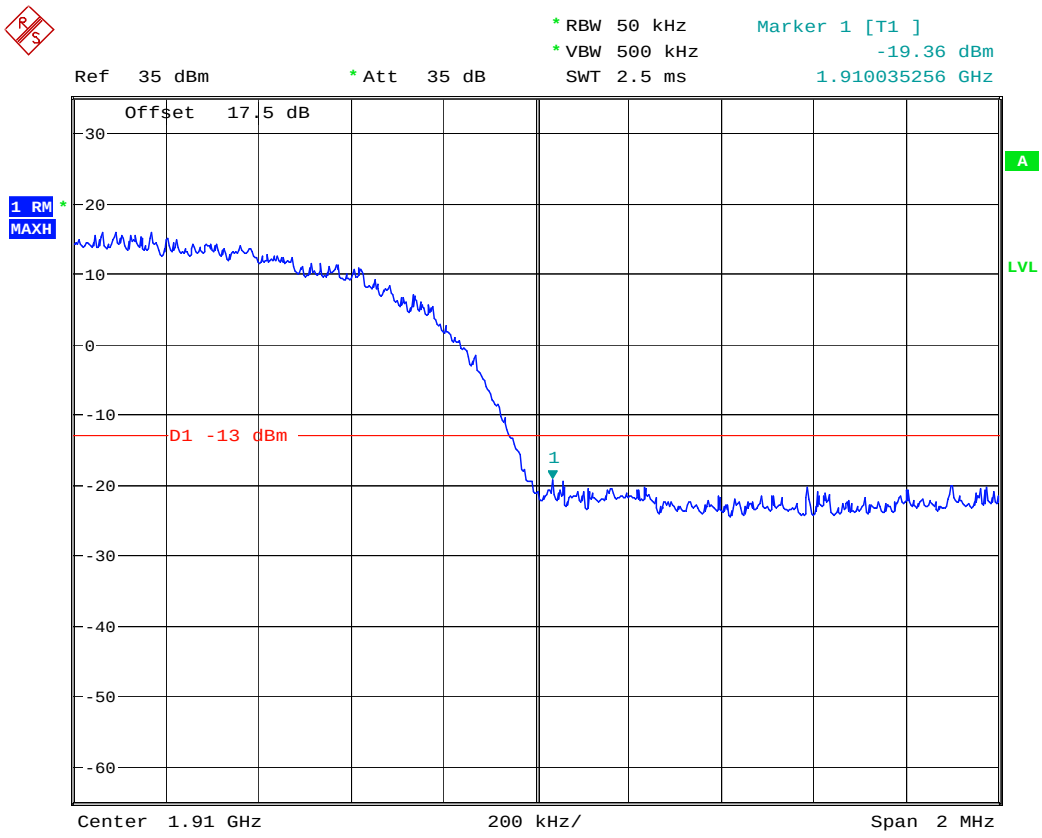


TM3: WCDMA

Left dge
Channel 9262



Right Edge
Channel 9538


RBW 50 kHz
VBW 500 kHz
SWT 2.5 ms
Marker 1 [T1]
-19.36 dBm
1.910035256 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

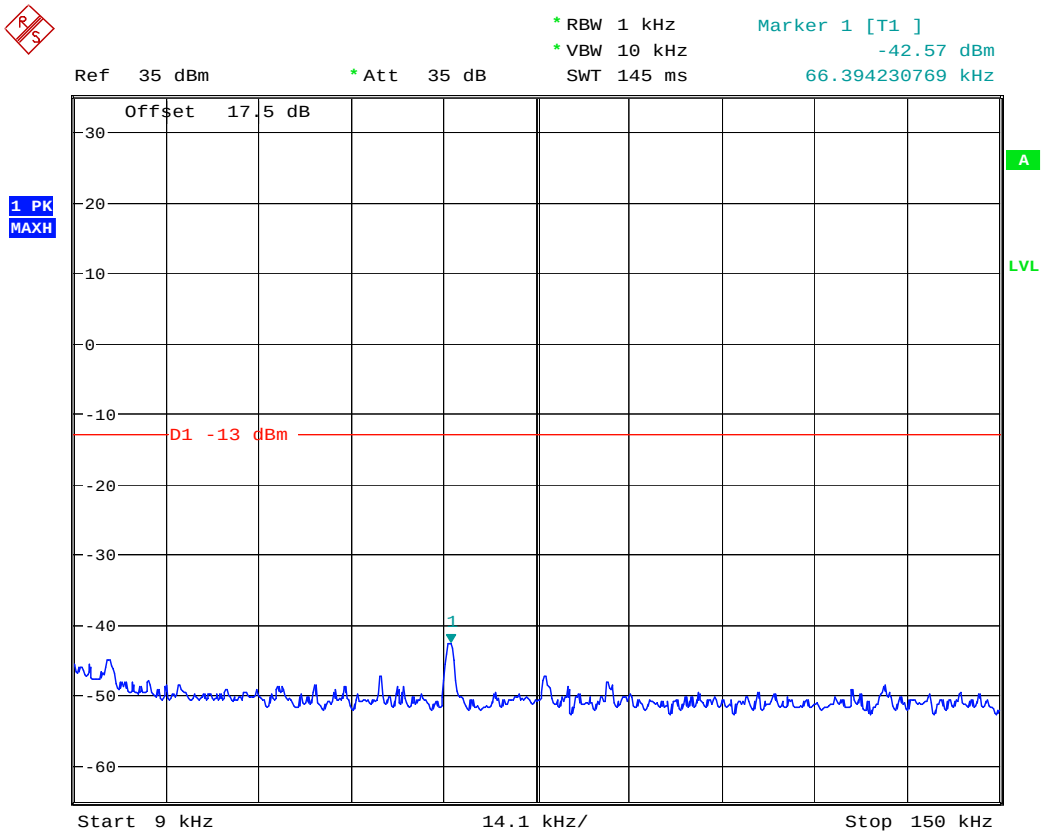
Appendix D

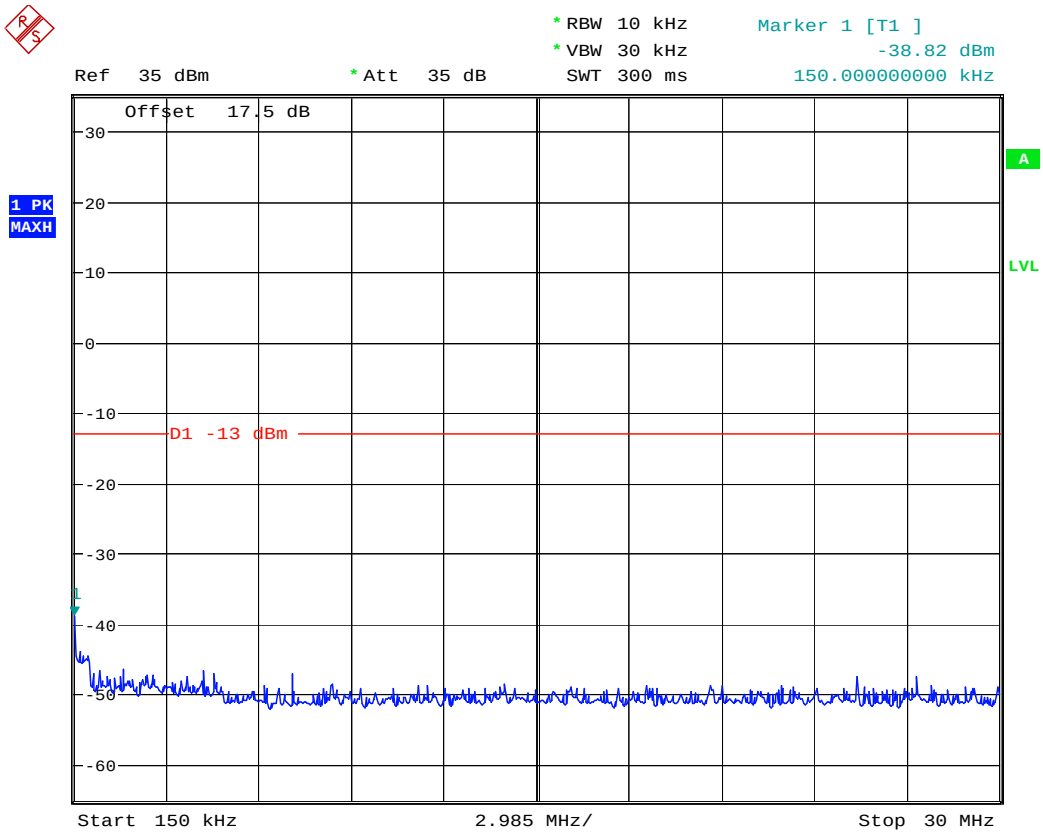
Spurious Emission at Antenna Terminal

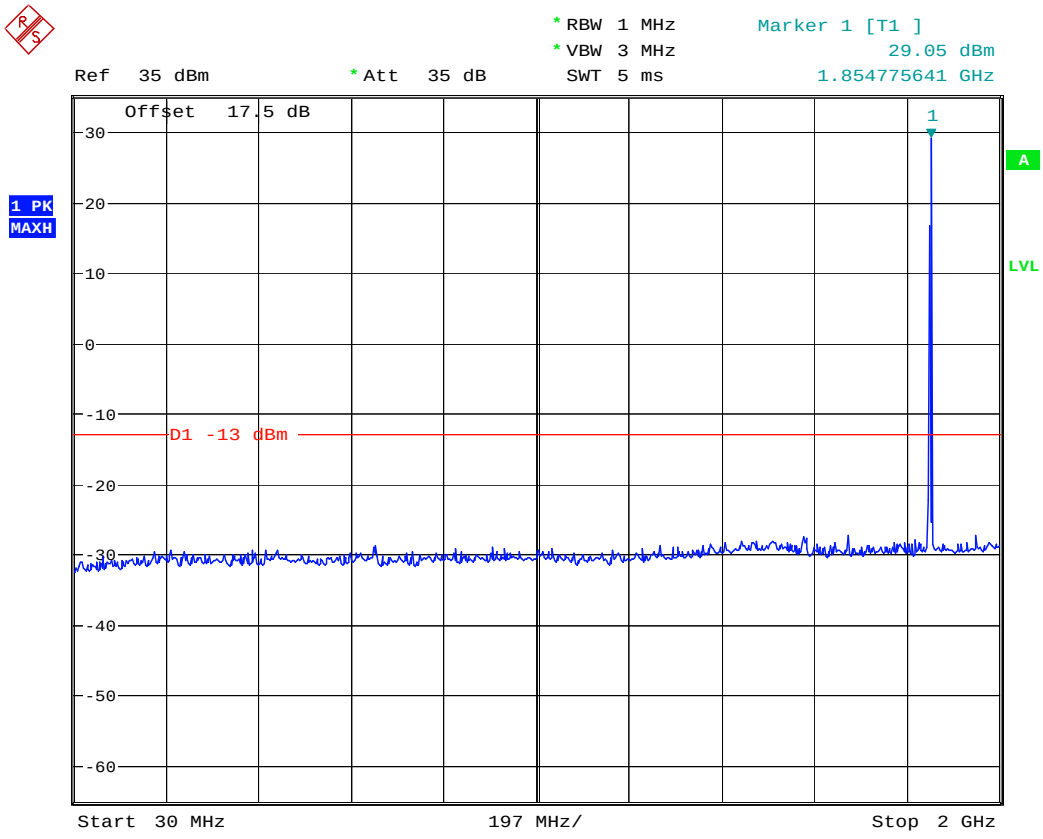
According to FCC Part 2.1051 & 24.238 & RSS-133

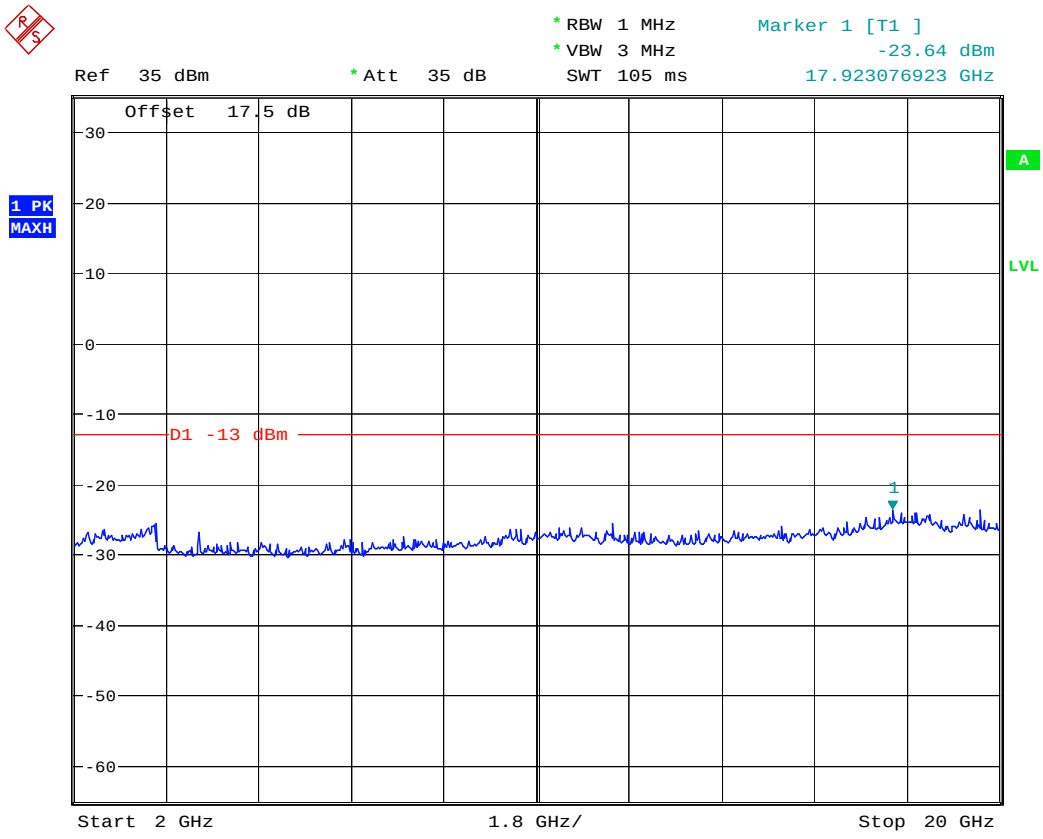
TM1:GPRS/GSM

Channel 512

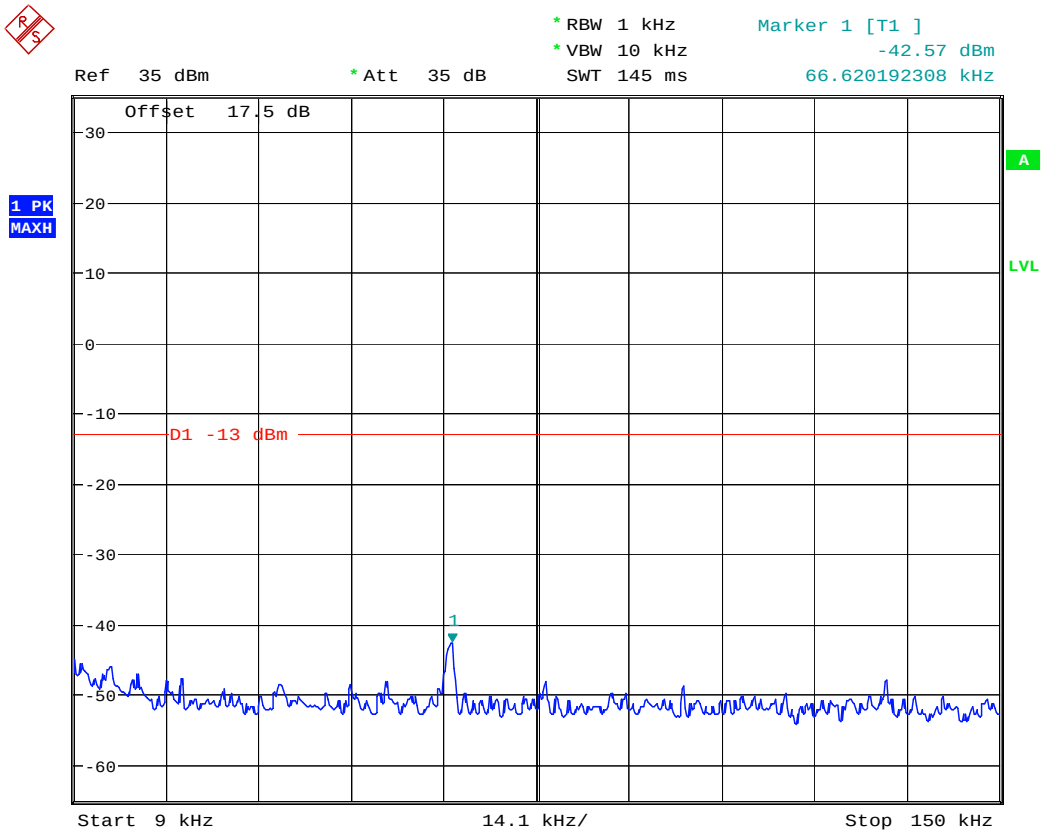


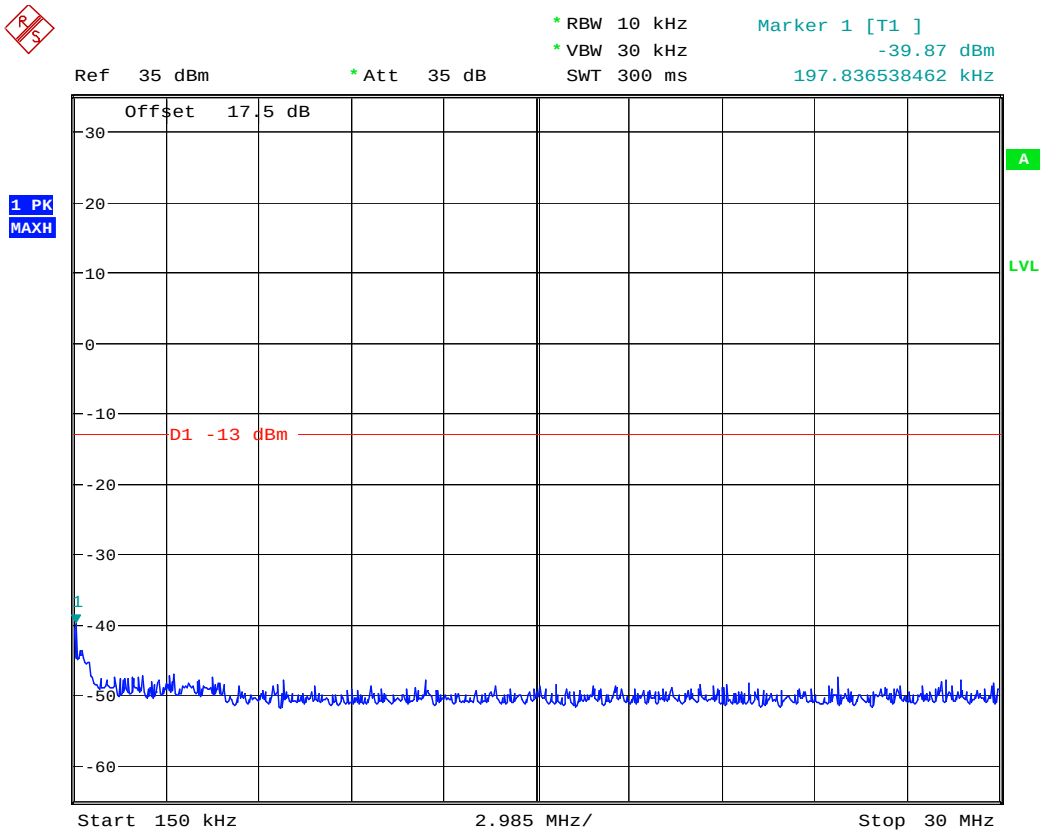

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-38.82 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

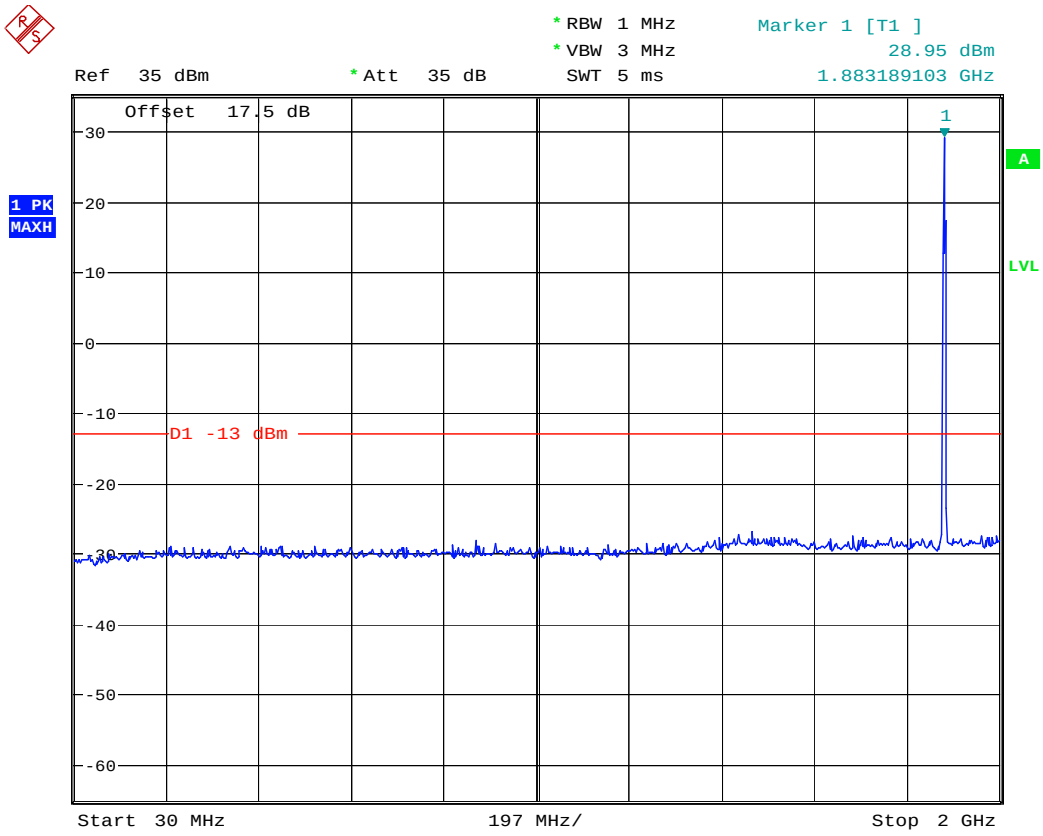

*RBW 1 MHz
*VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
29.05 dBm
1.854775641 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

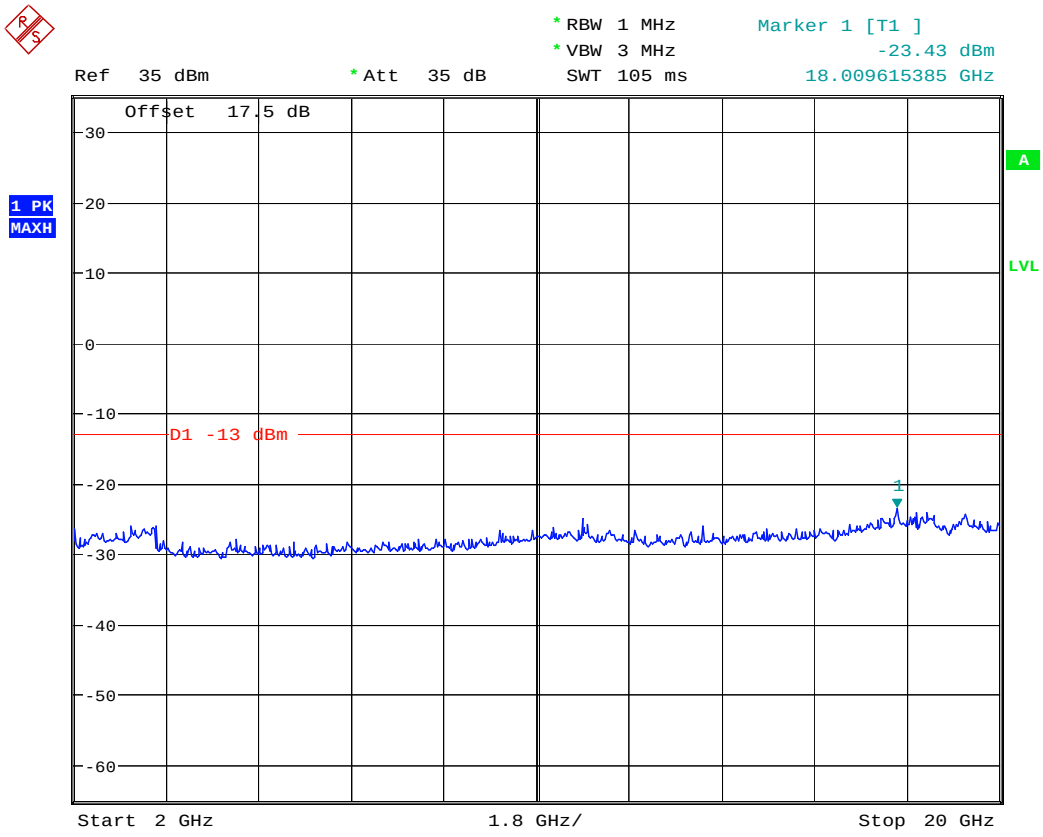

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.64 dBm
17.923076923 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 661

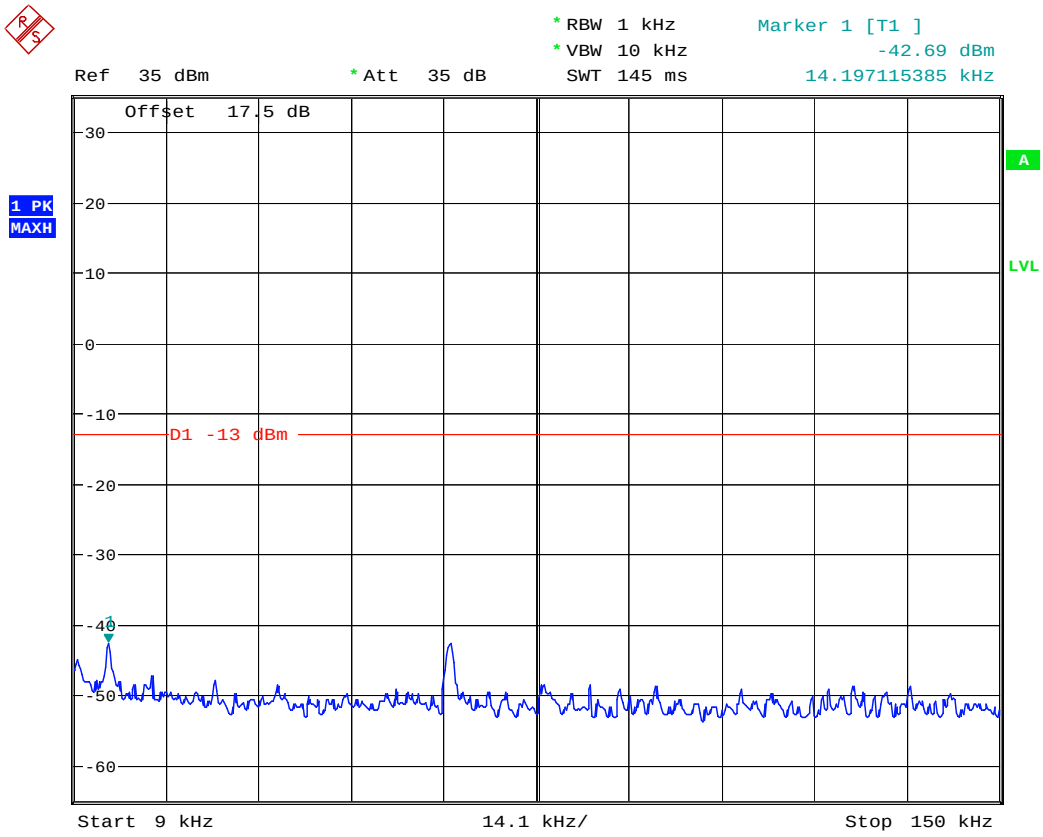

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-42.57 dBm
66.620192308 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

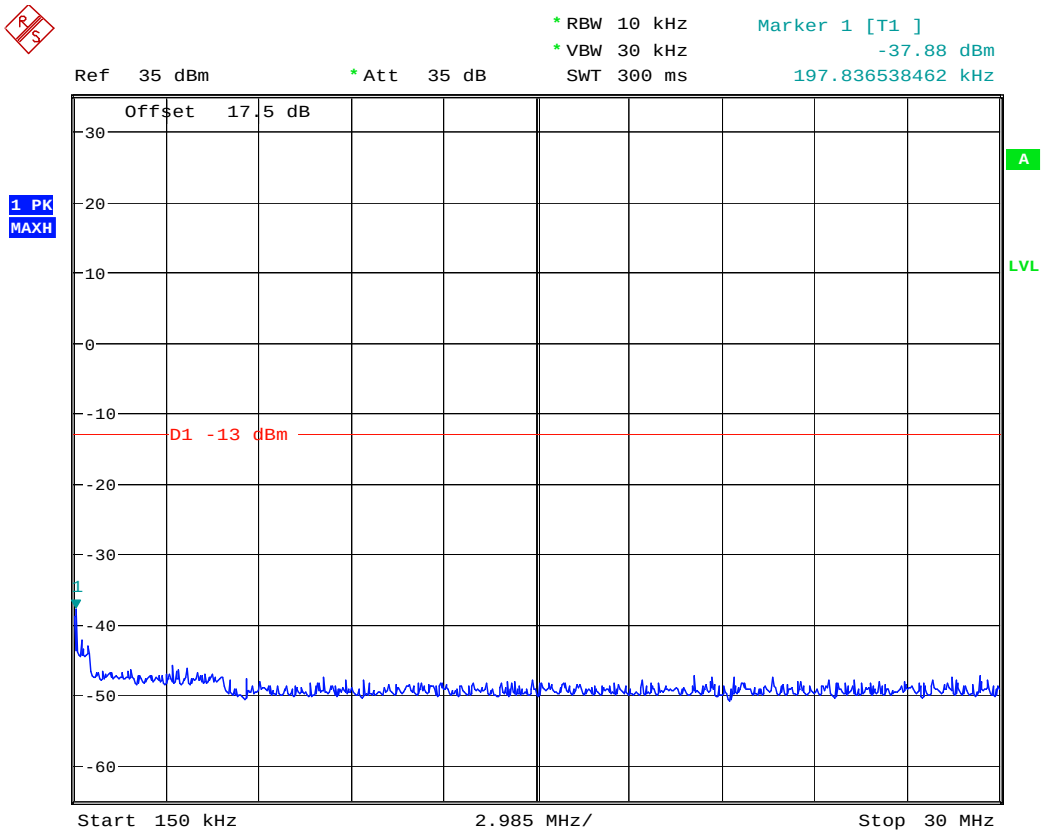

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.87 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

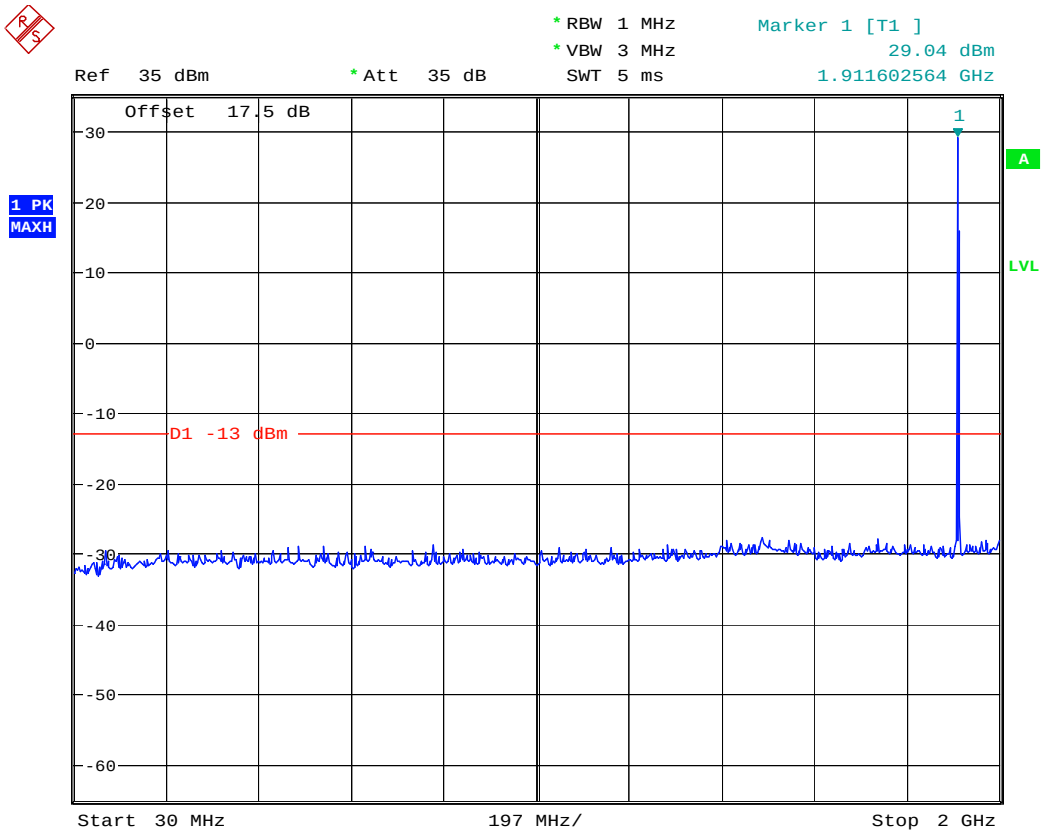

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
28.95 dBm
1.883189103 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

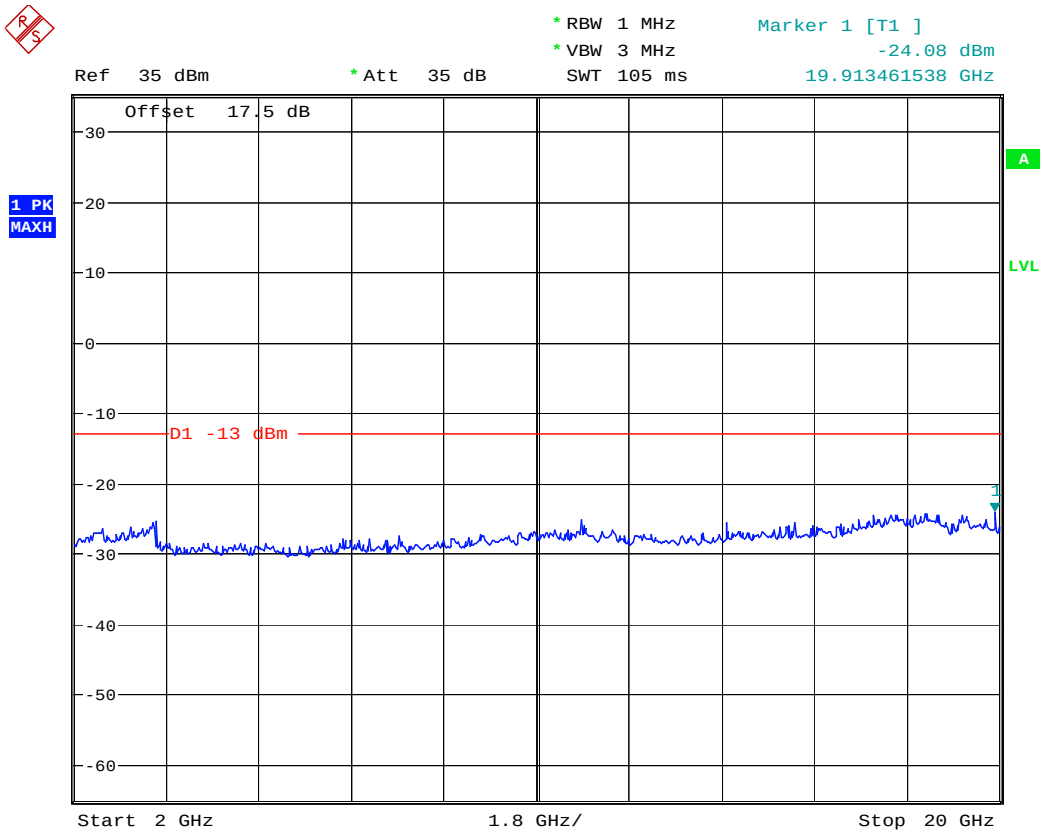

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.43 dBm
18.009615385 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 810

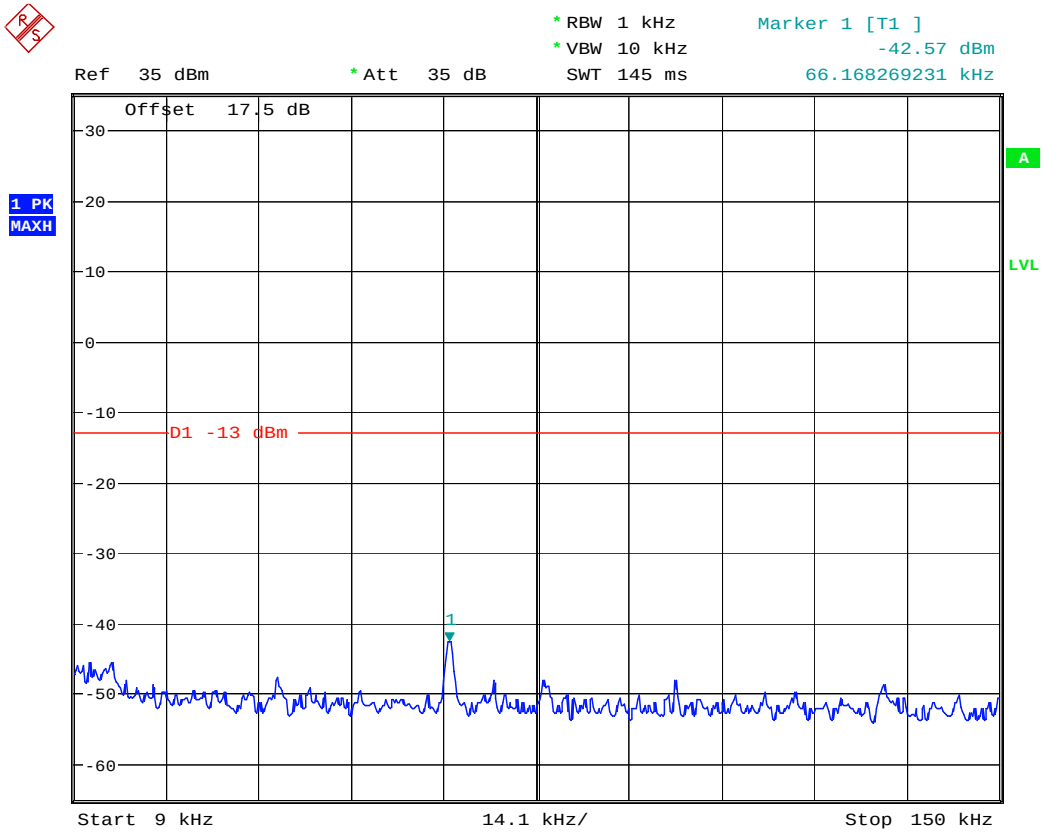

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-42.69 dBm
14.197115385 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 9 kHz
14.1 kHz/
Stop 150 kHz

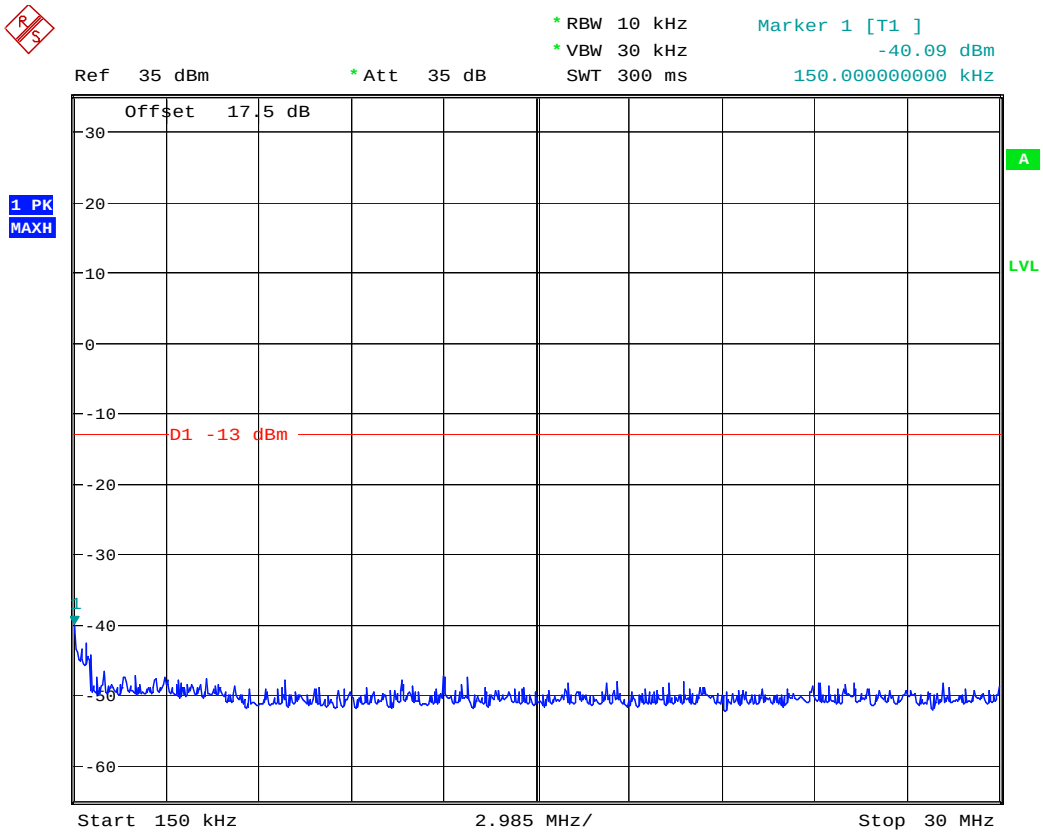

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-37.88 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 150 kHz
2.985 MHz/
Stop 30 MHz

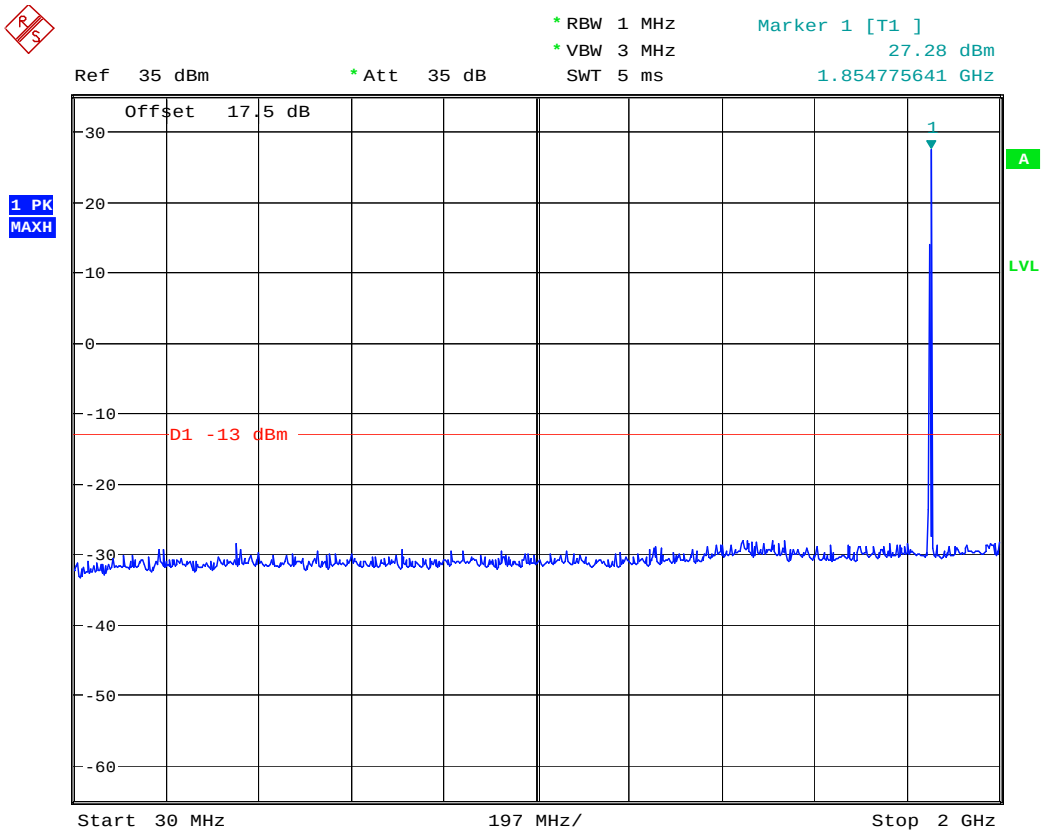

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
29.04 dBm
1.911602564 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

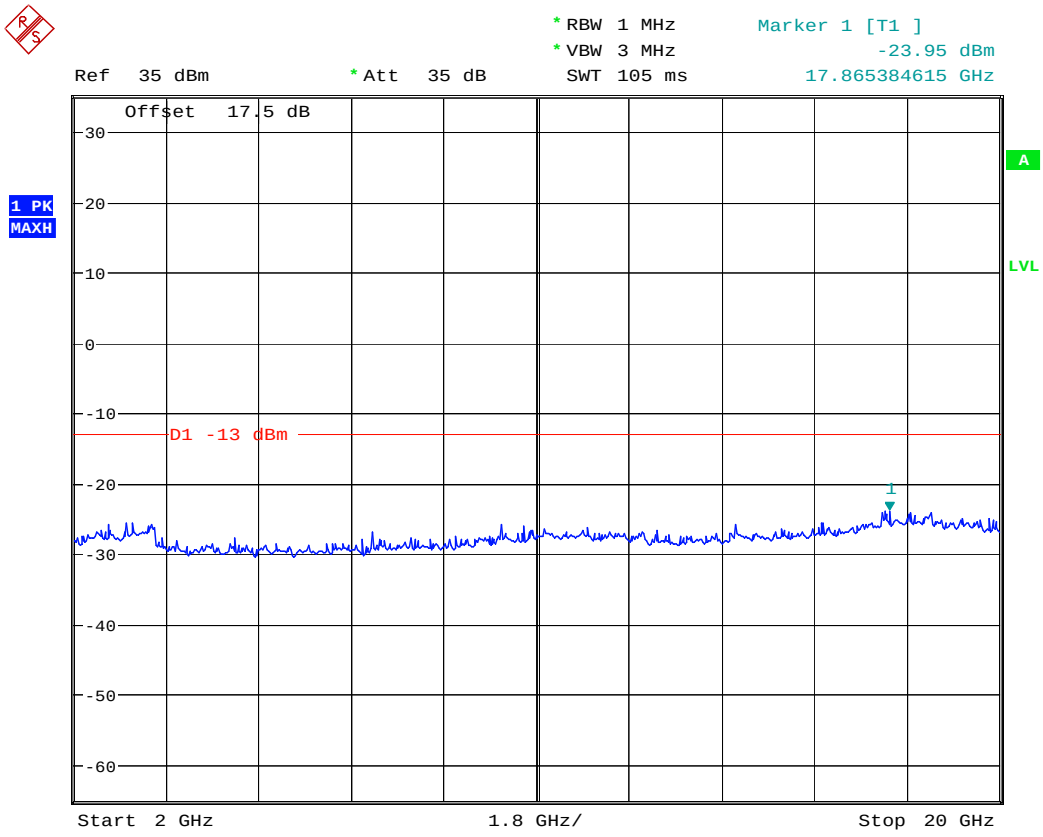

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.08 dBm
19.913461538 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 2 GHz
1.8 GHz/
Stop 20 GHz

TM2:EDGE
Channel 512

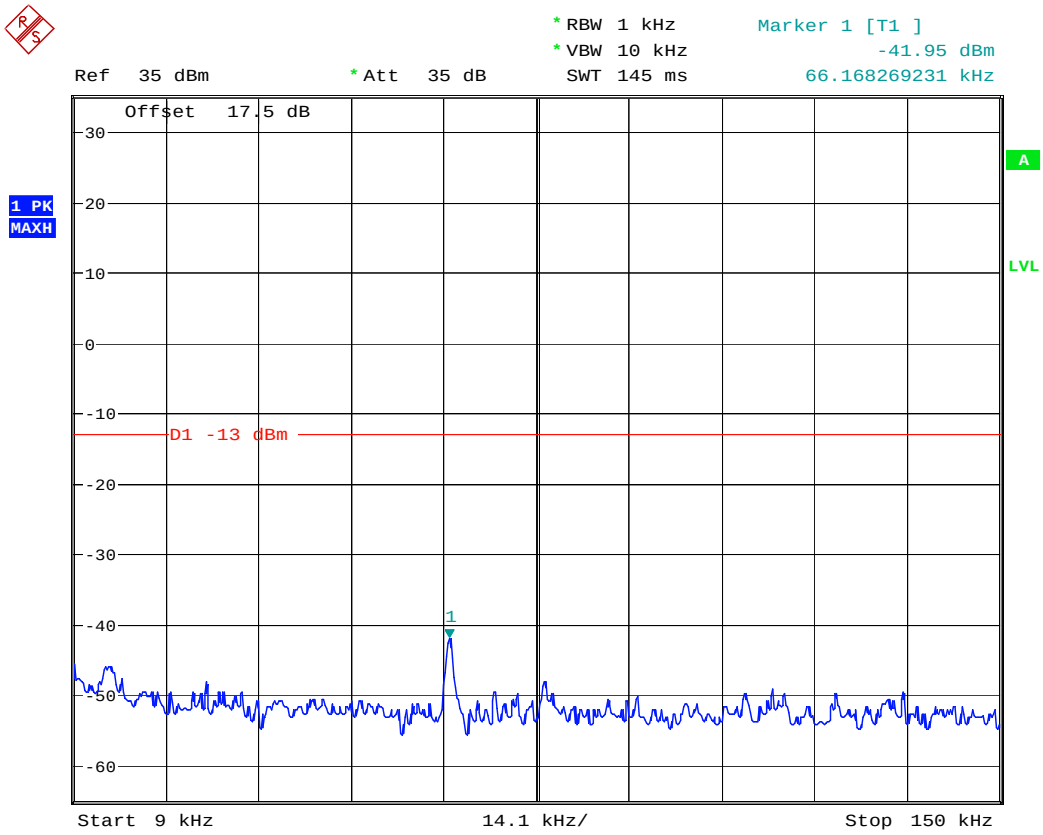


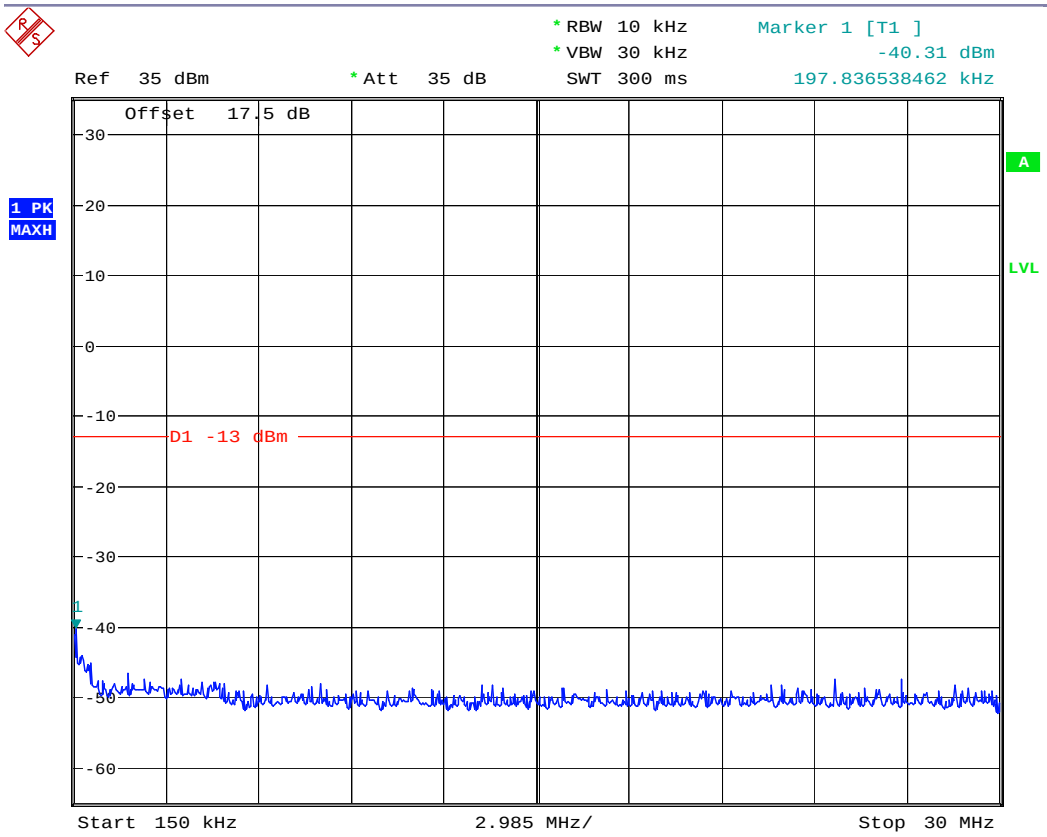

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.09 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

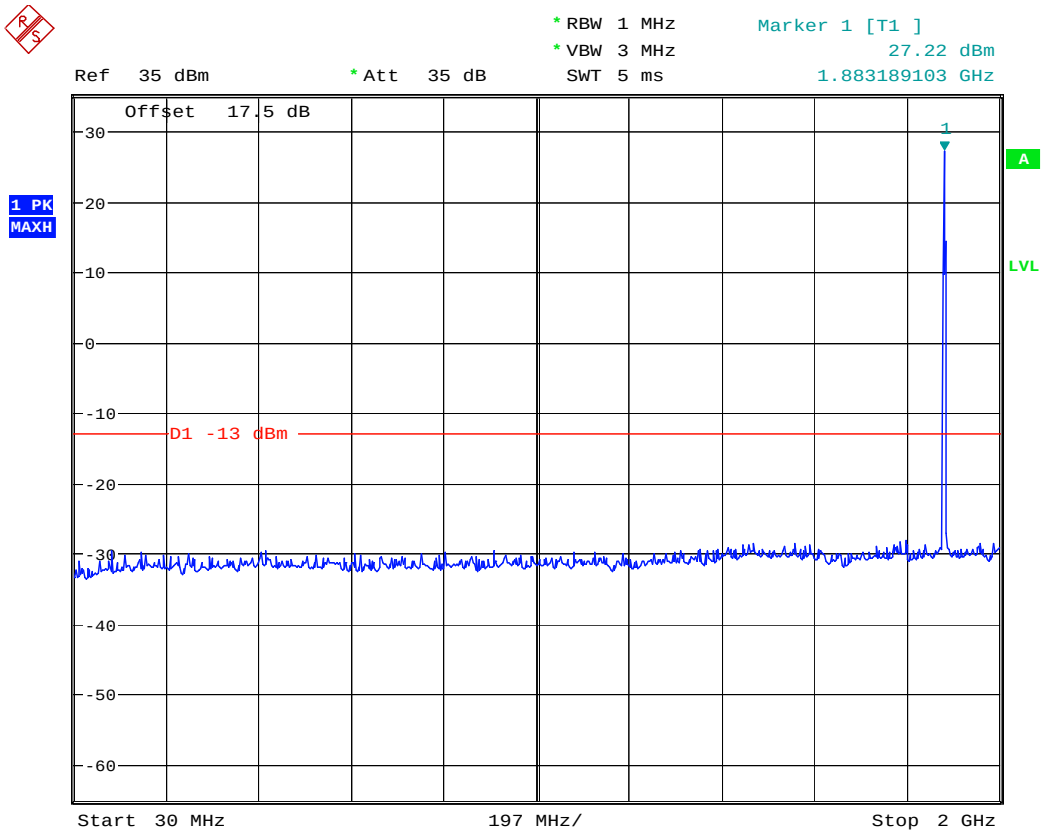

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
27.28 dBm
1.854775641 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

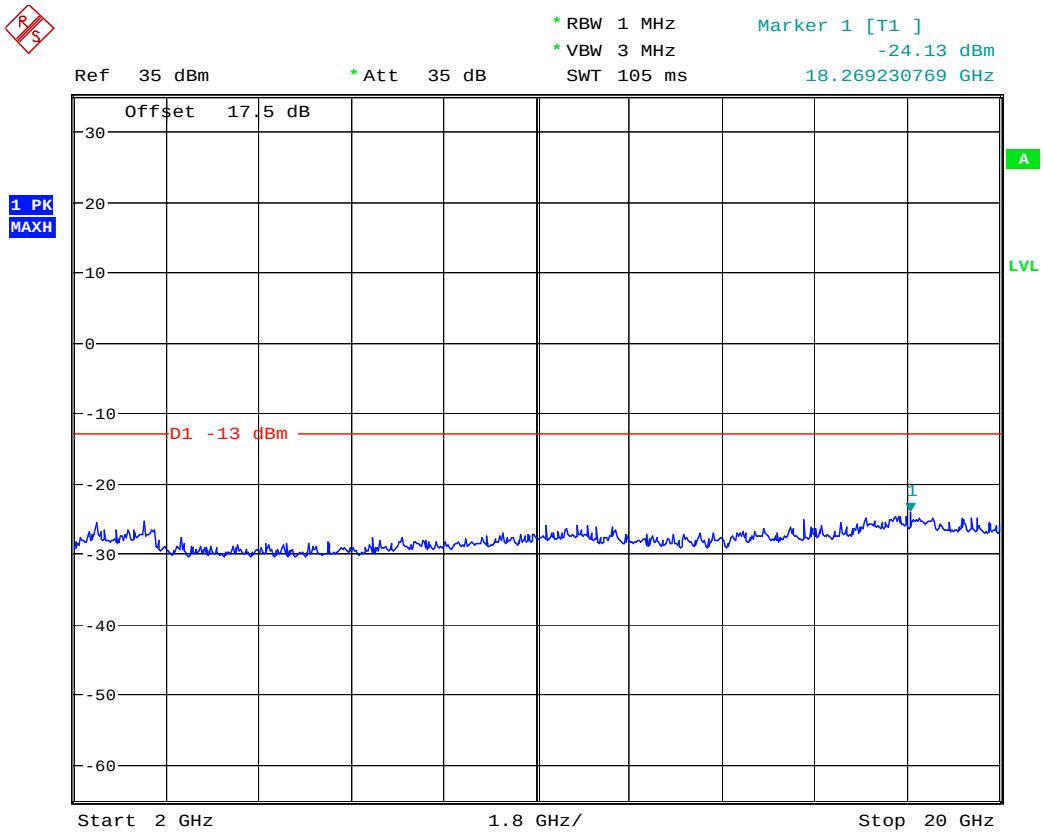

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.95 dBm
17.865384615 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 661

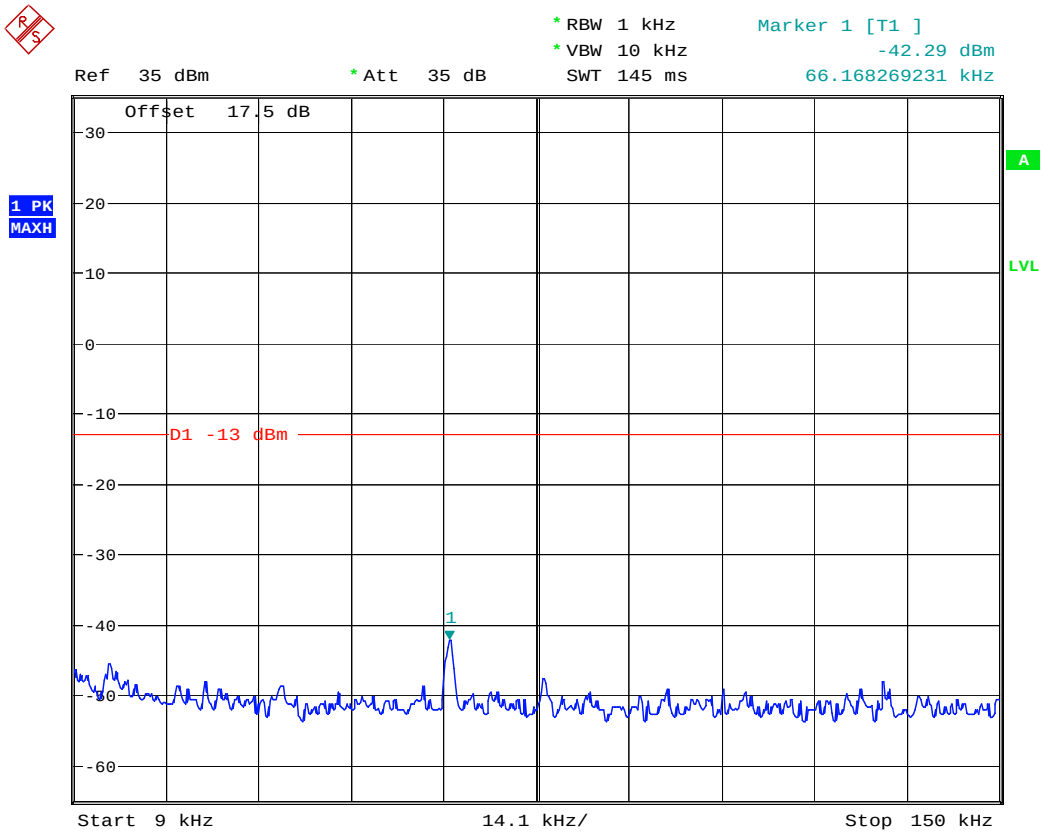

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-41.95 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

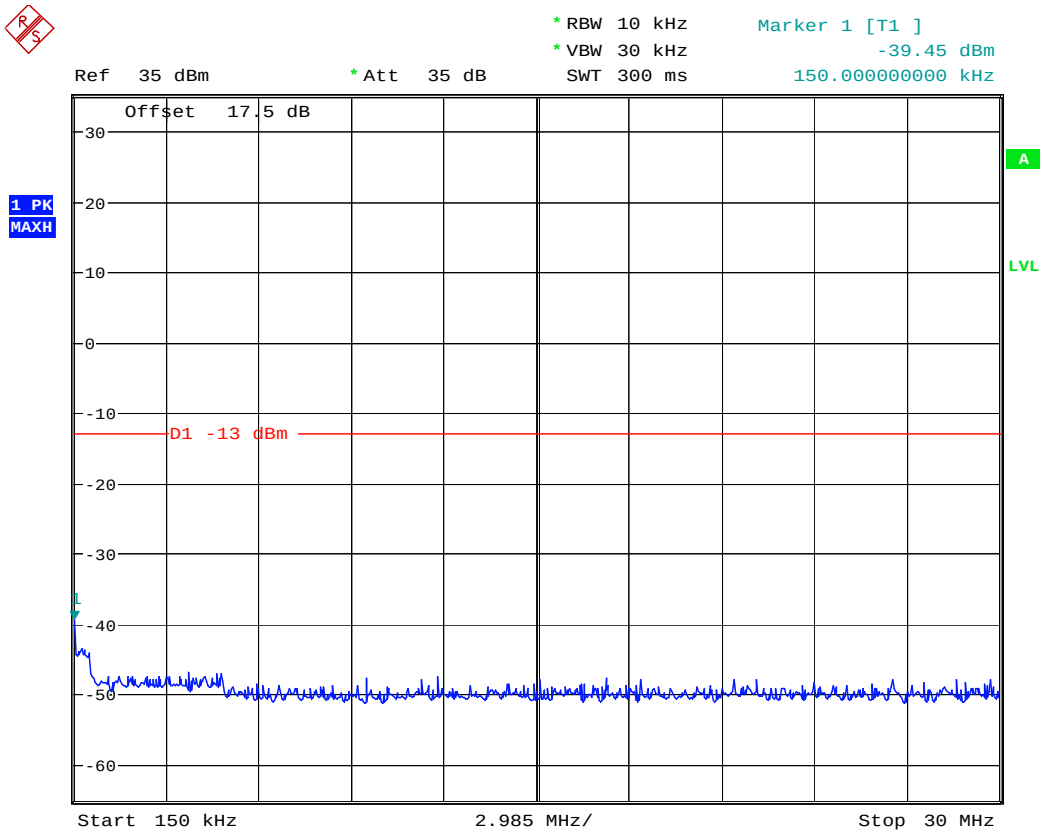

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.31 dBm
197.836538462 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

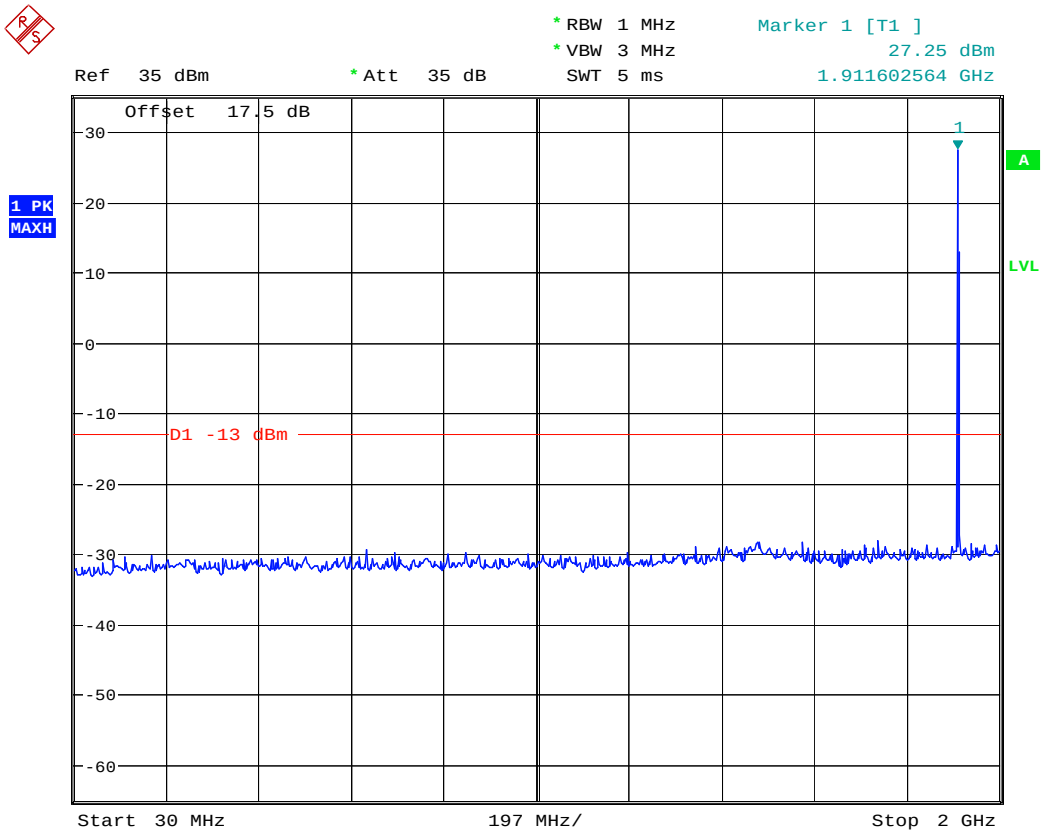

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
27.22 dBm
1.883189103 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

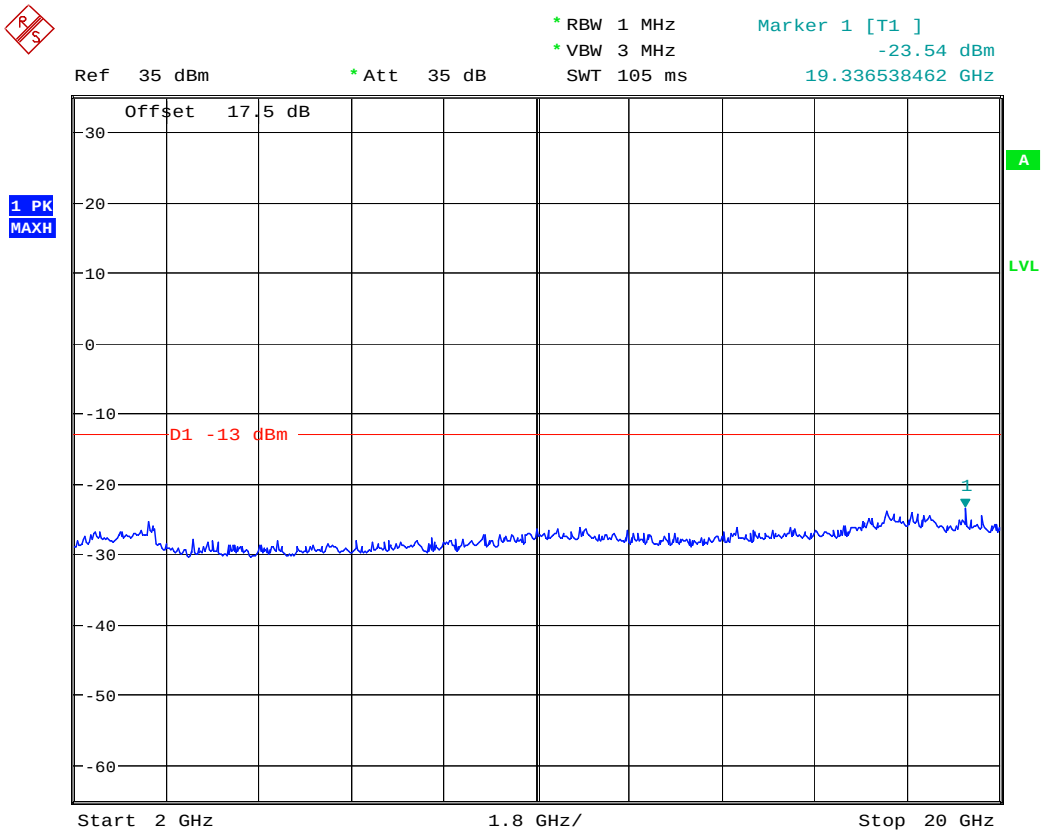

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.13 dBm
18.269230769 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 810

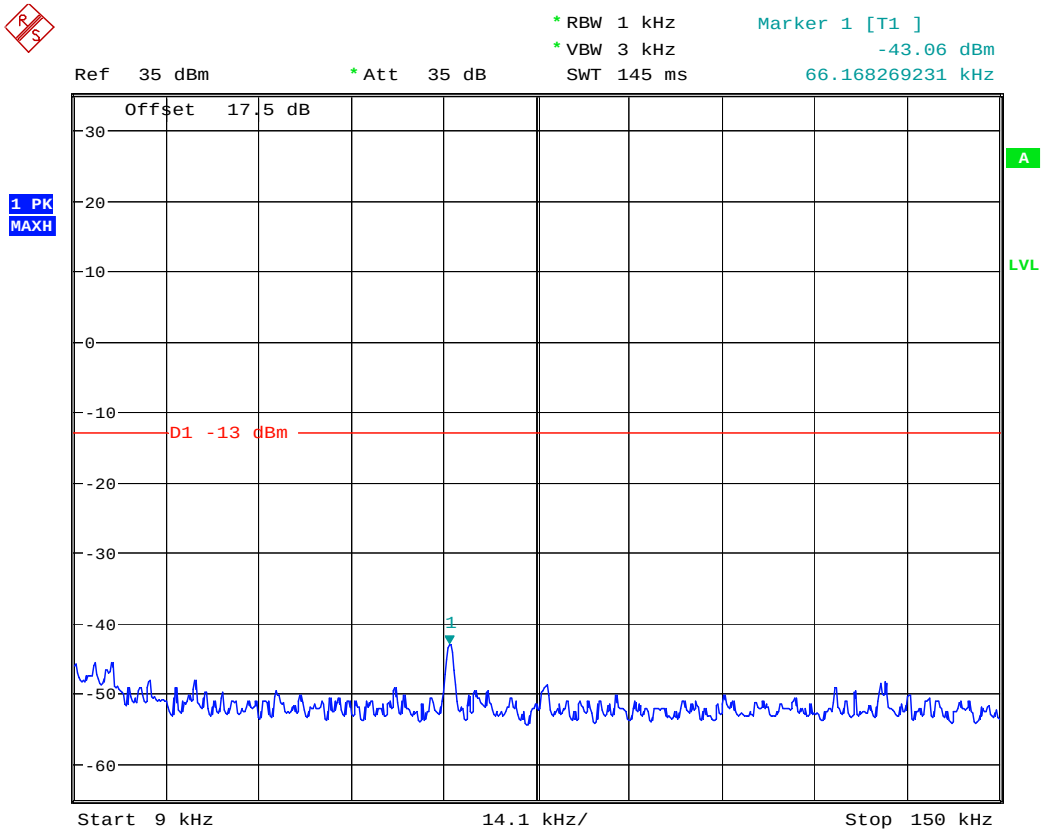

*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-42.29 dBm
66.168269231 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 9 kHz
14.1 kHz/
Stop 150 kHz

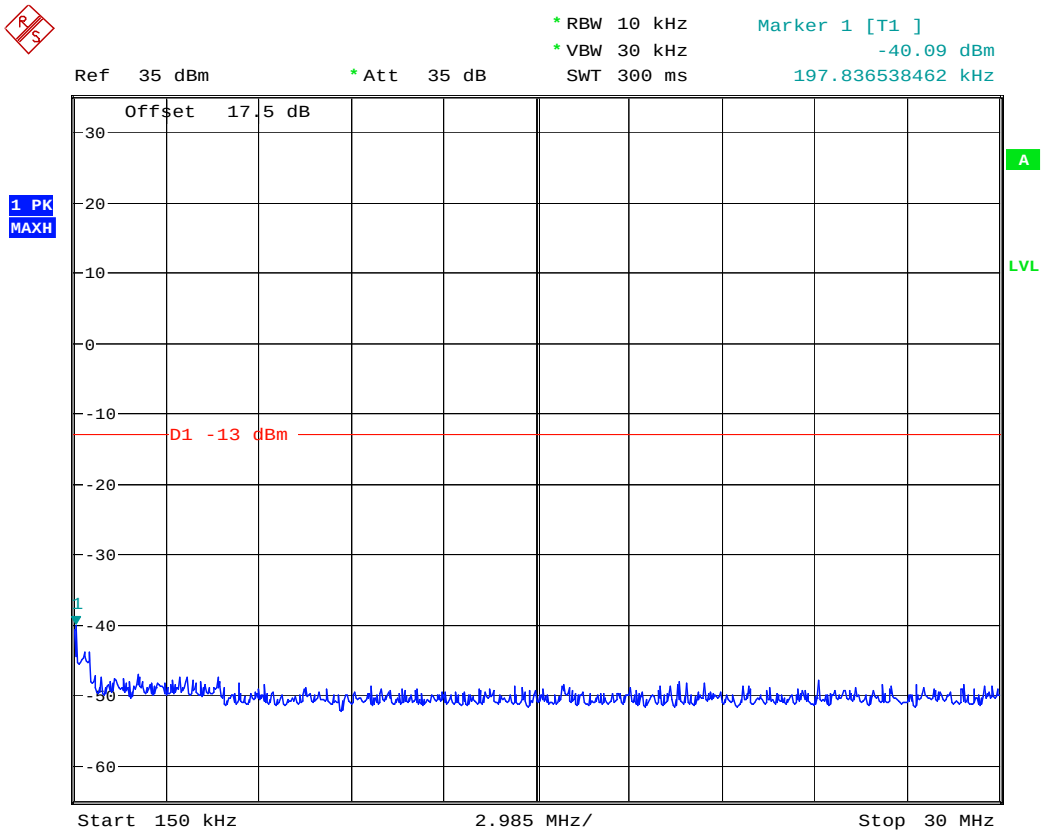

*RBW 10 kHz
*VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.45 dBm
150.000000000 kHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

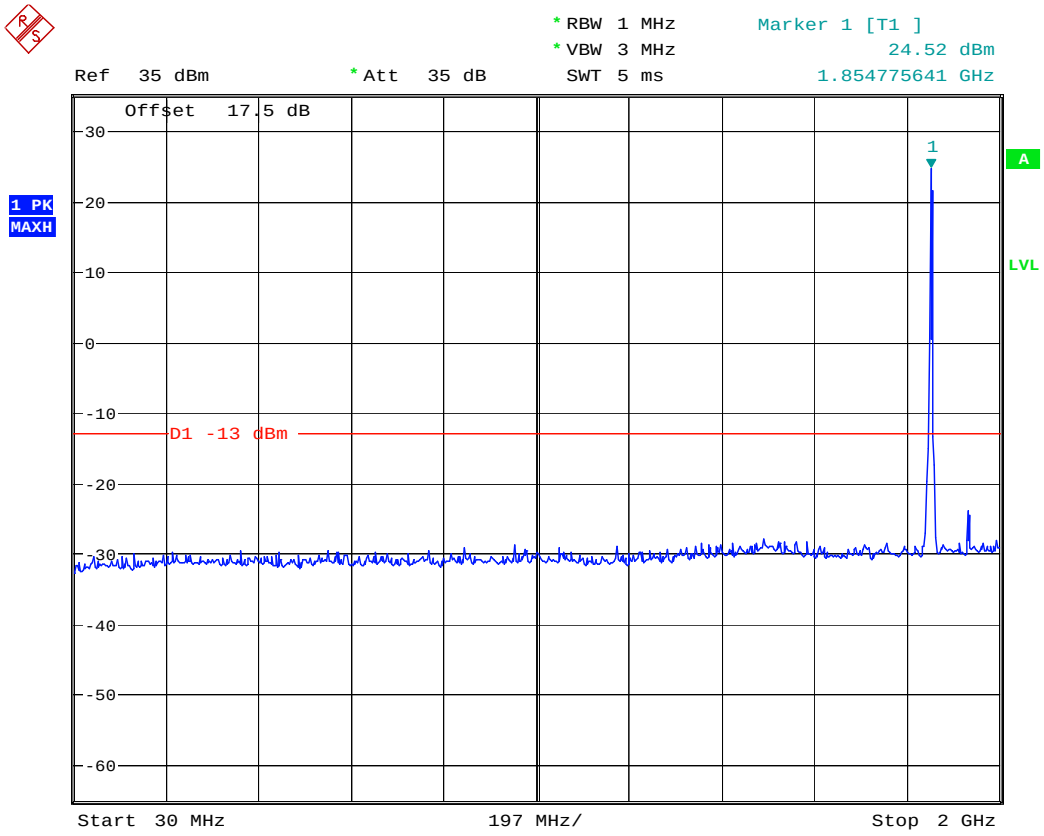

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
27.25 dBm
1.911602564 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

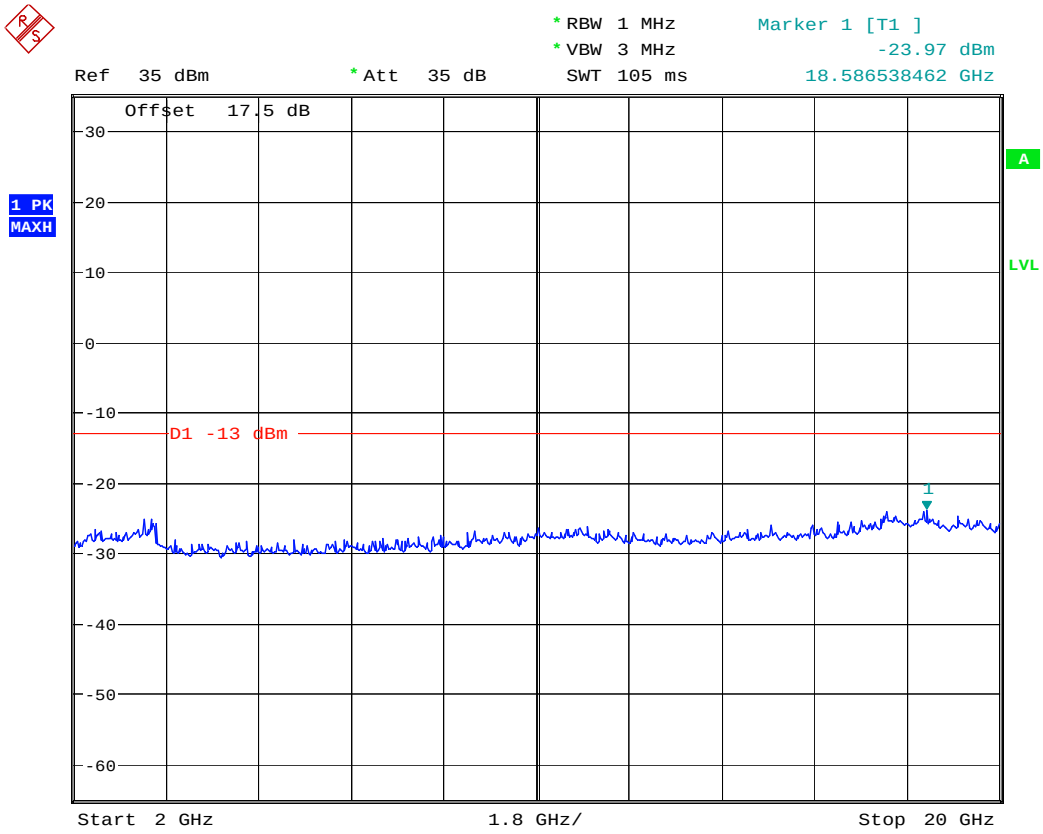

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.54 dBm
19.336538462 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

TM3: WCDMA
Channel 9262

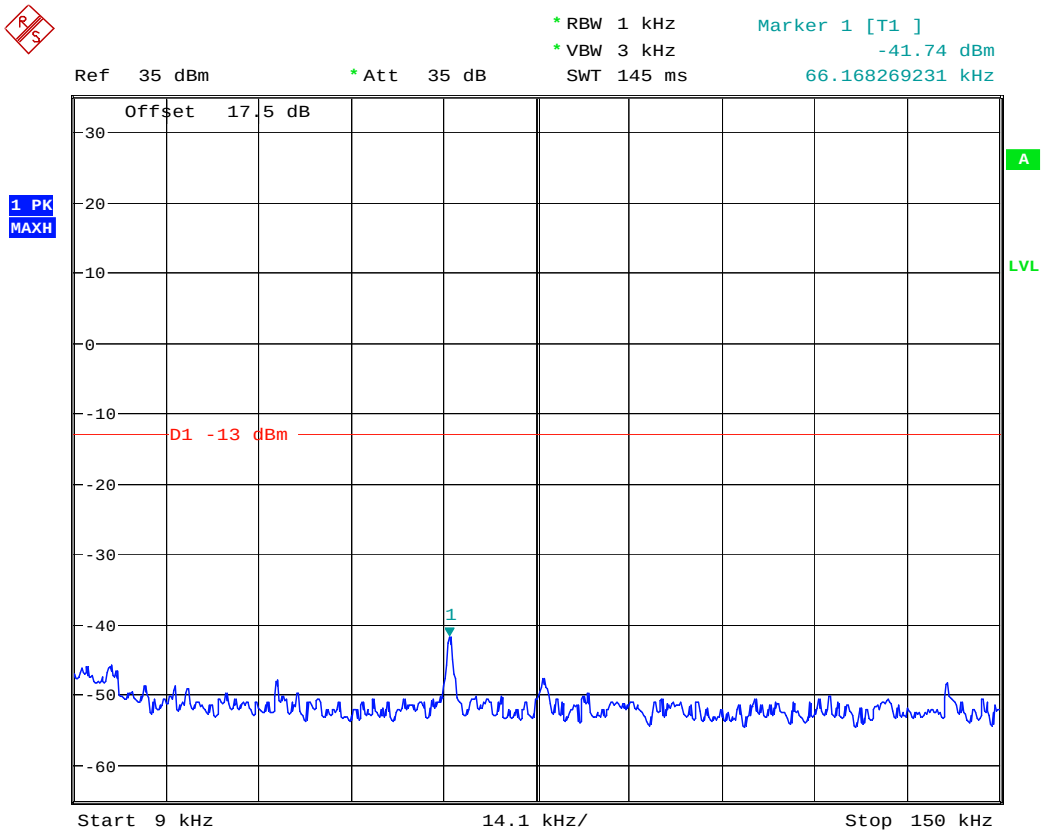


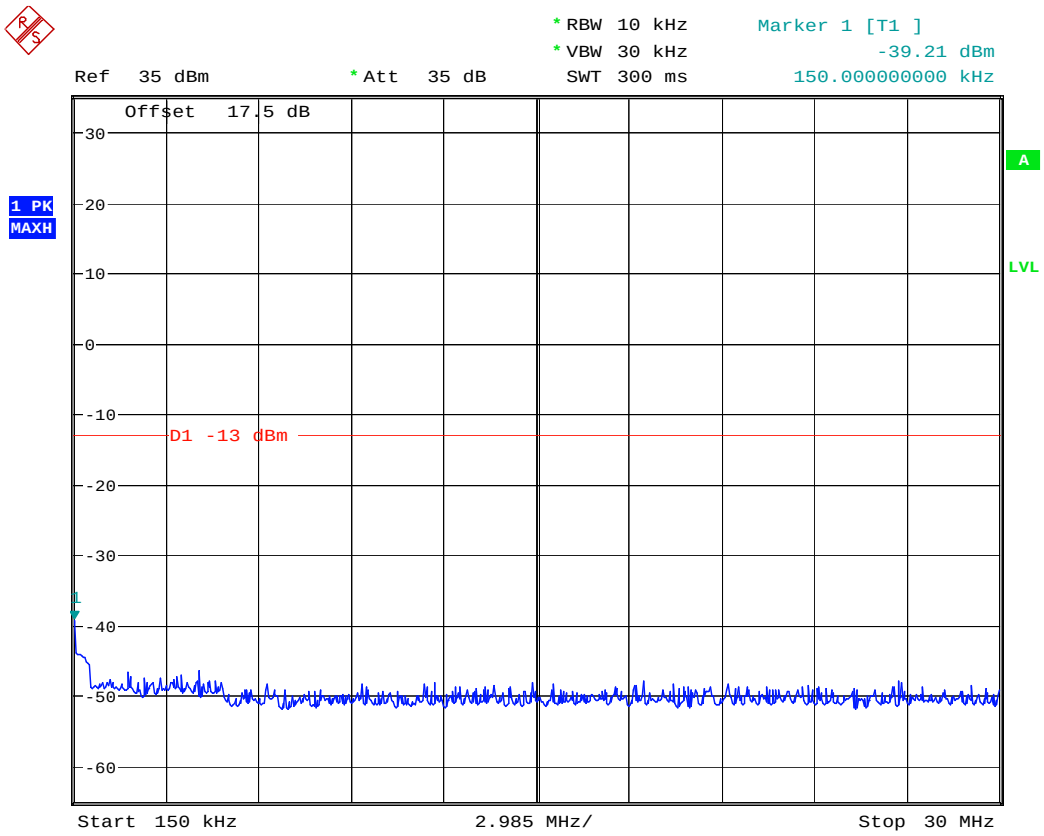

RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-40.09 dBm
197.836538462 kHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

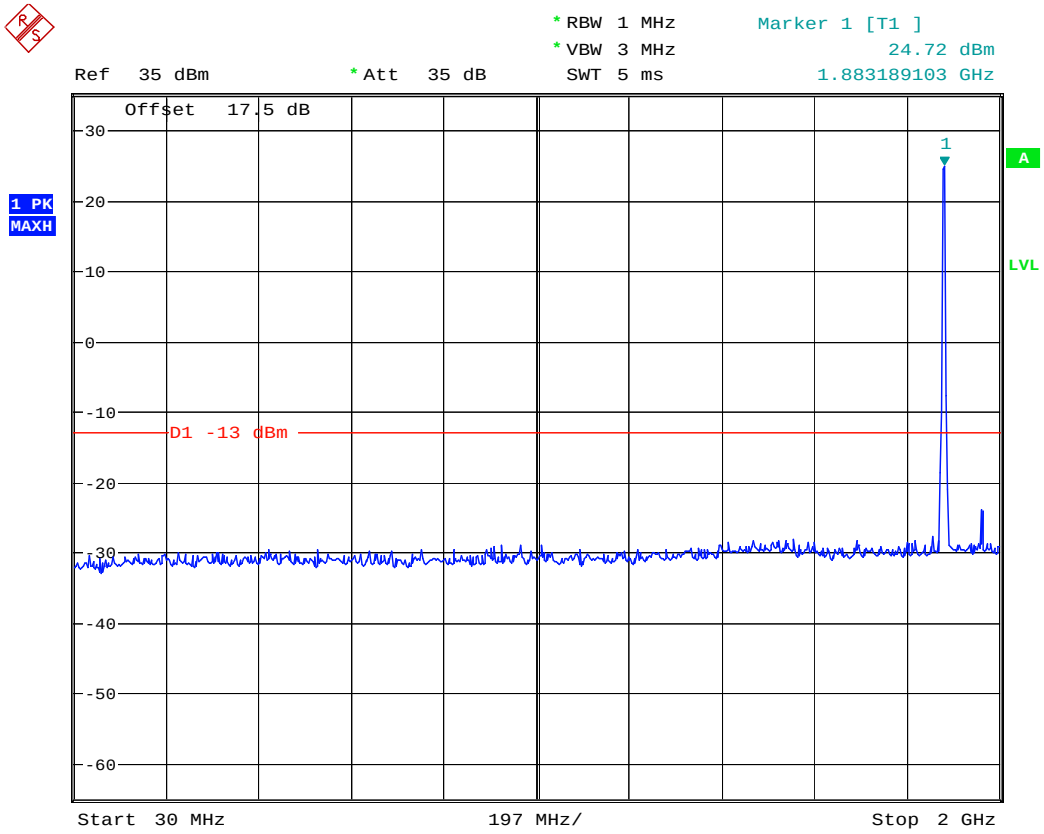

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
24.52 dBm
1.854775641 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

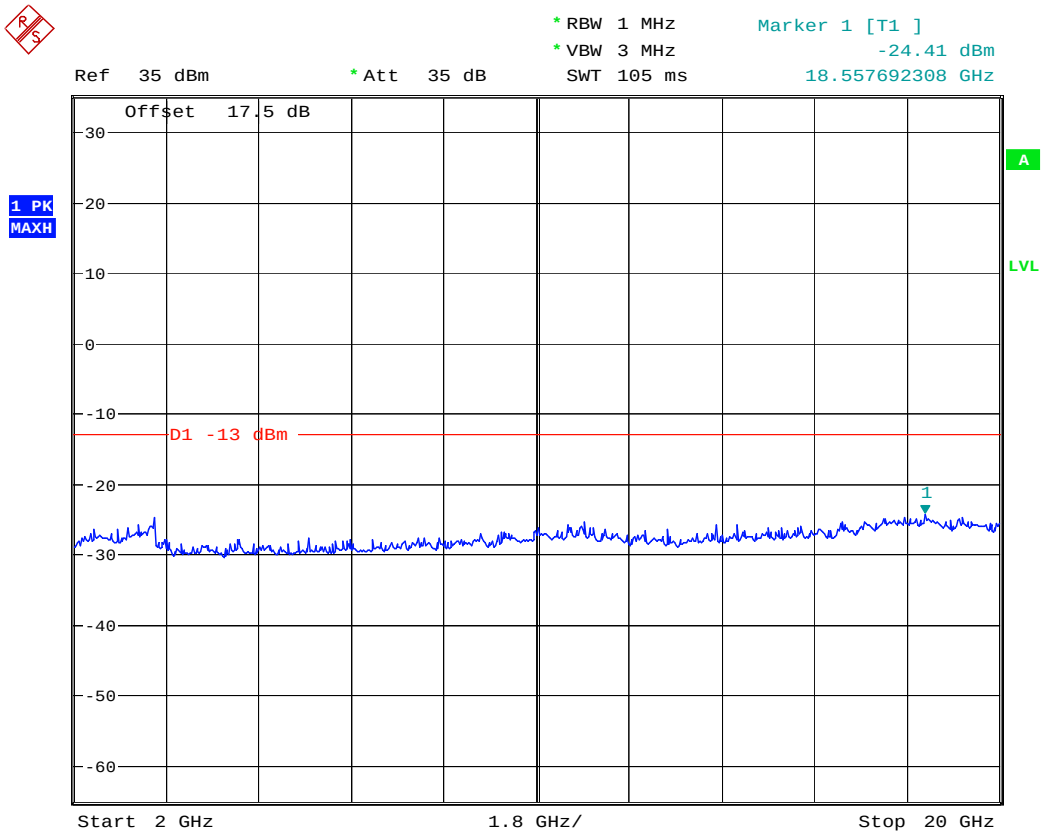

*RBW 1 MHz
*VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-23.97 dBm
18.586538462 GHz
Ref 35 dBm
*Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
1
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 9400

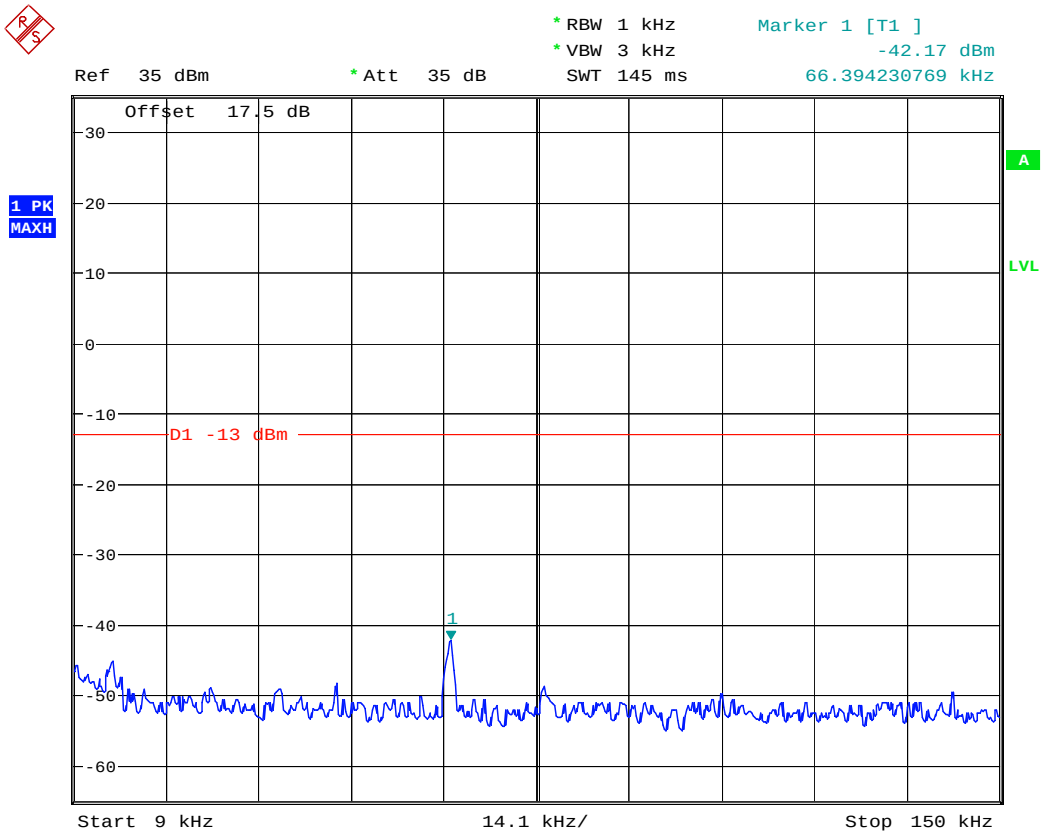


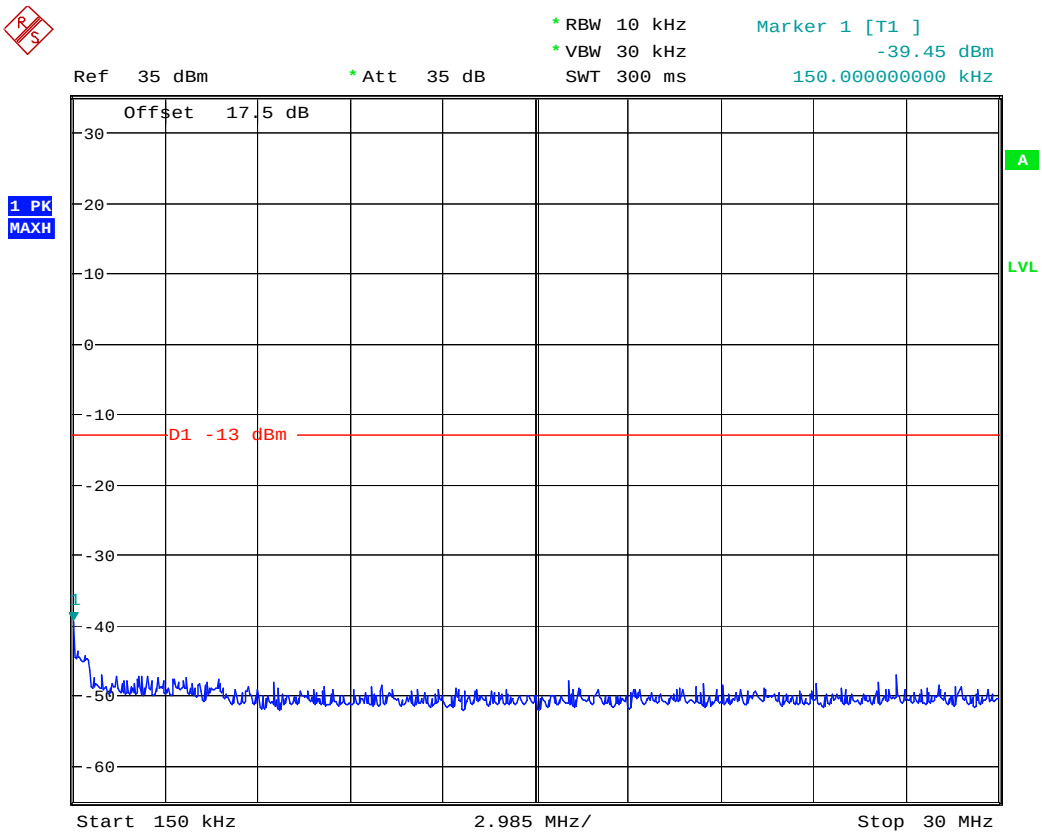

*RBW 10 kHz
Marker 1 [T1]
*VBW 30 kHz
-39.21 dBm
Ref 35 dBm
*Att 35 dB
SWT 300 ms
150.000000000 kHz
Offset 17.5 dB
1 PK
MAXH
A
LVL
30
20
10
0
-10
-20
-30
-40
-50
-60
D1 -13 dBm
Start 150 kHz
2.985 MHz/
Stop 30 MHz

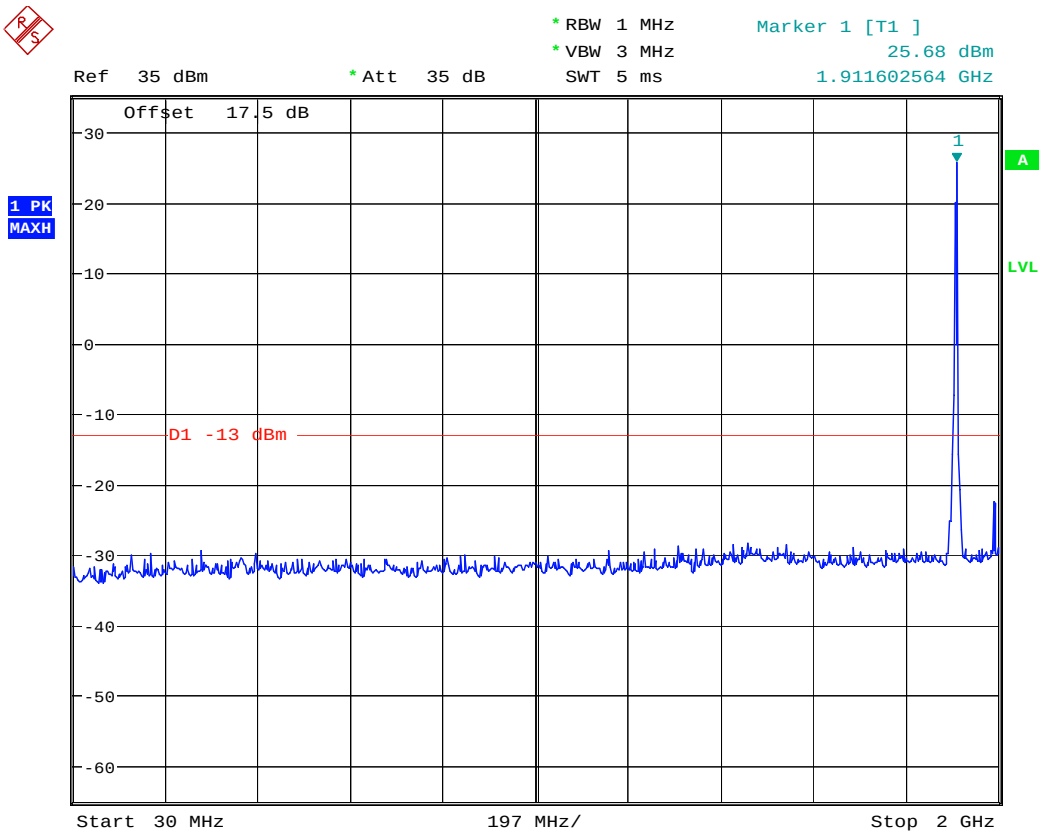

RBW 1 MHz
VBW 3 MHz
SWT 5 ms
Marker 1 [T1]
24.72 dBm
1.883189103 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 30 MHz
197 MHz/
Stop 2 GHz

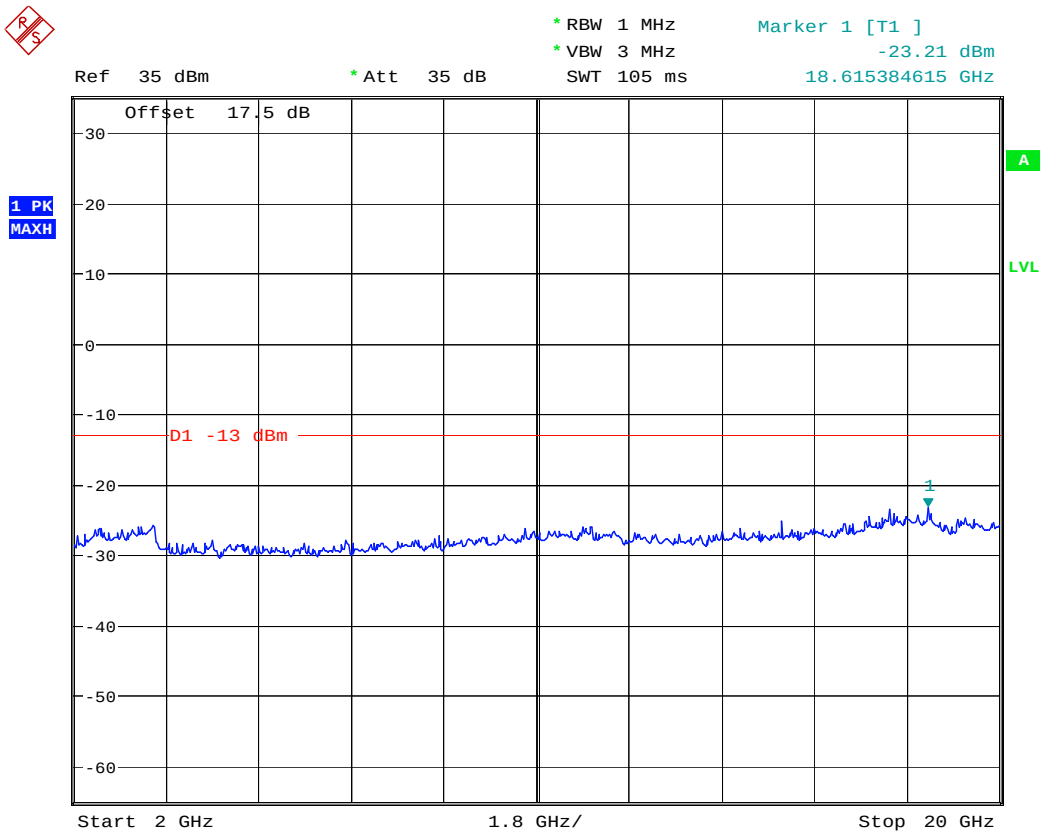

RBW 1 MHz
VBW 3 MHz
SWT 105 ms
Marker 1 [T1]
-24.41 dBm
18.557692308 GHz
Ref 35 dBm
Att 35 dB
Offset 17.5 dB
1 PK
MAXH
A
LVL
D1 -13 dBm
30
20
10
0
-10
-20
-30
-40
-50
-60
Start 2 GHz
1.8 GHz/
Stop 20 GHz

Channel 9538




RBW 10 kHz
VBW 30 kHz
SWT 300 ms
Marker 1 [T1]
-39.45 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]
25.68 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]
-23.21 dBm
18.615384615 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