



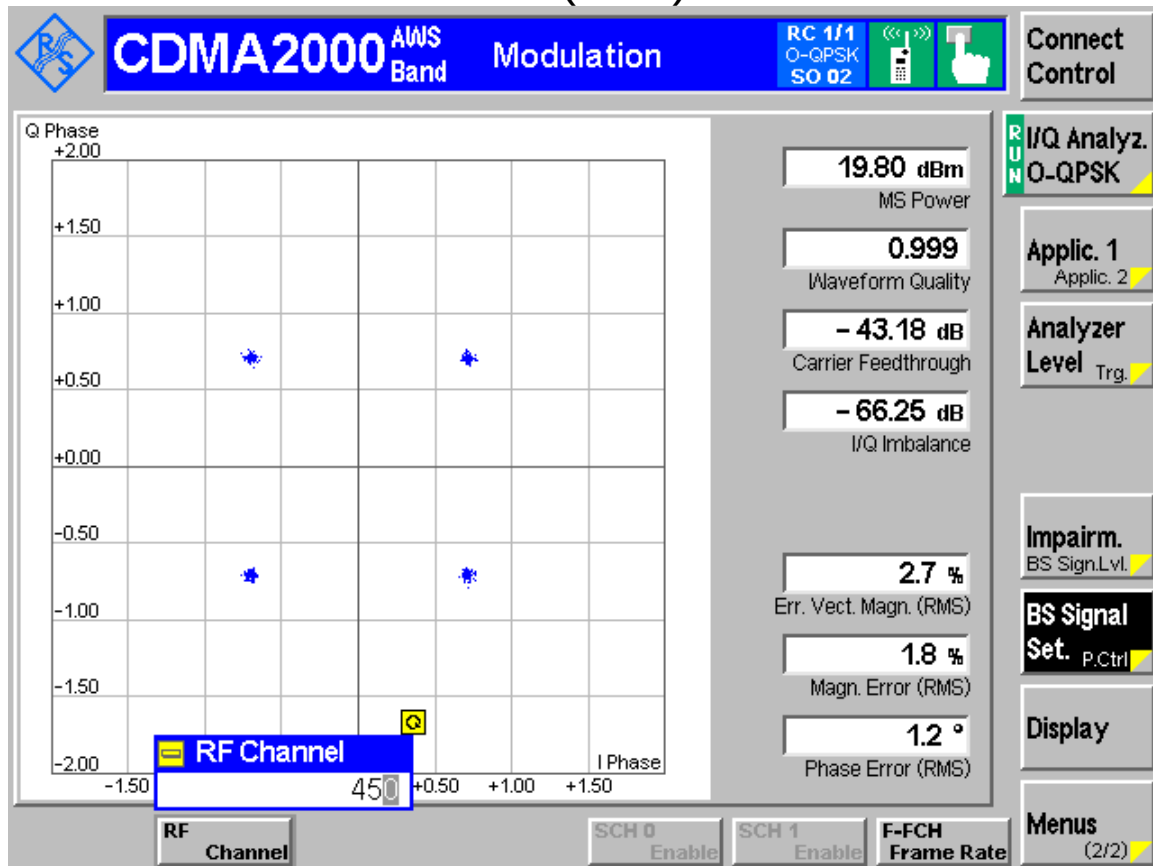
Appendix A

Modulation Characteristics

According to FCC Part 2.1047 & Part27 Subpart C&L

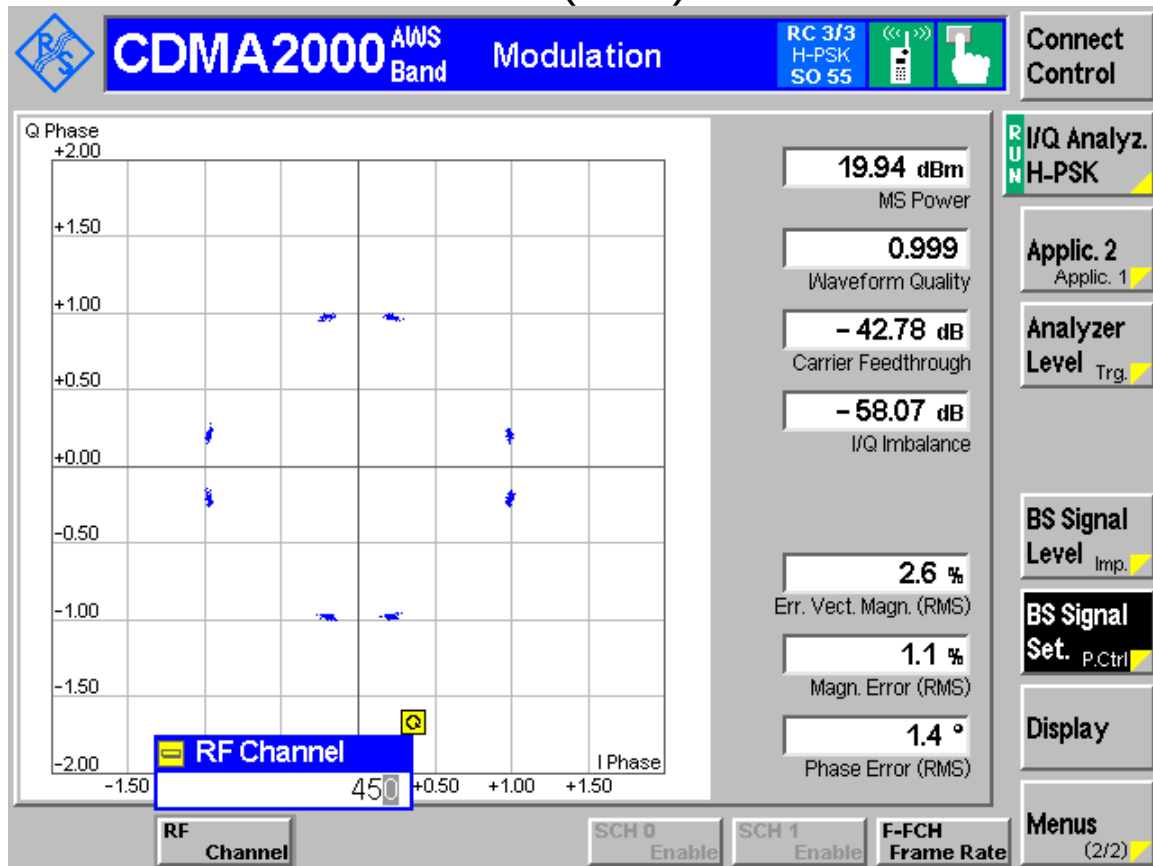


Channel 450(TM1)



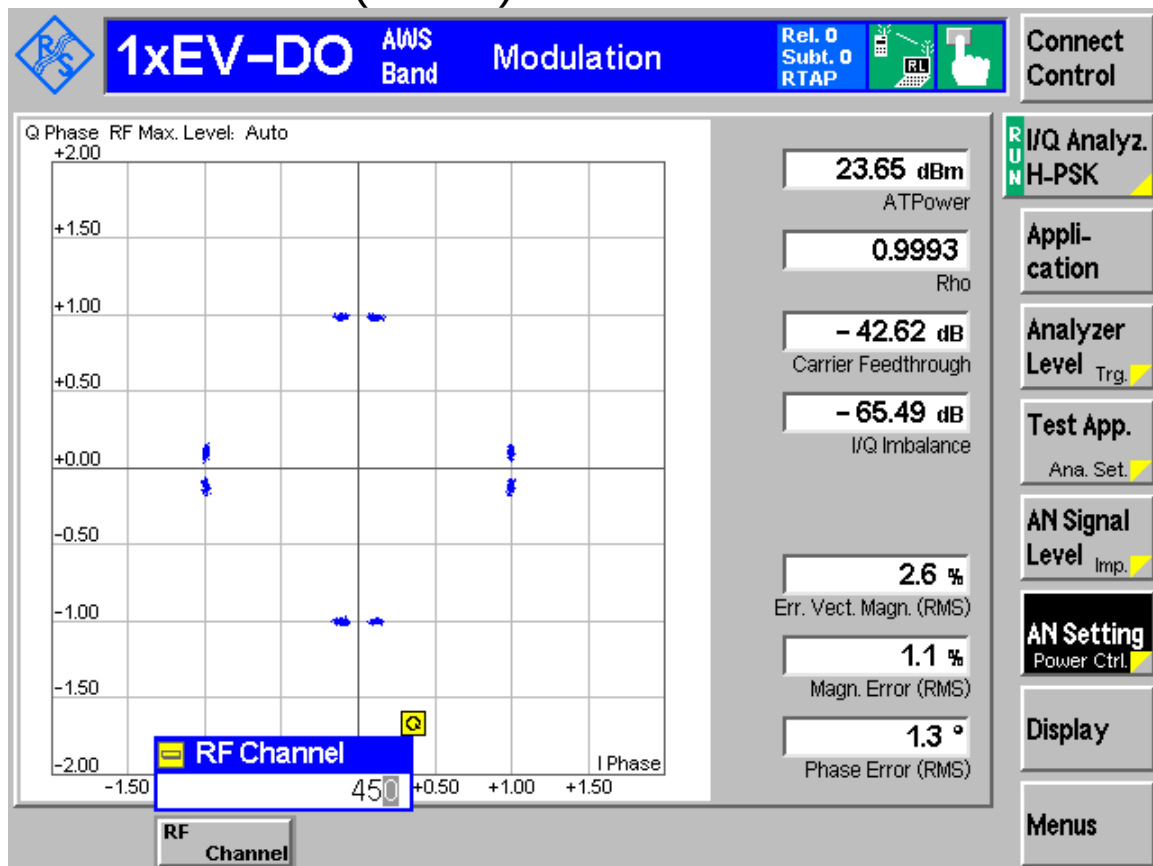


Channel 450(TM3)





Channel 450(Subtype 0) (HPSK)

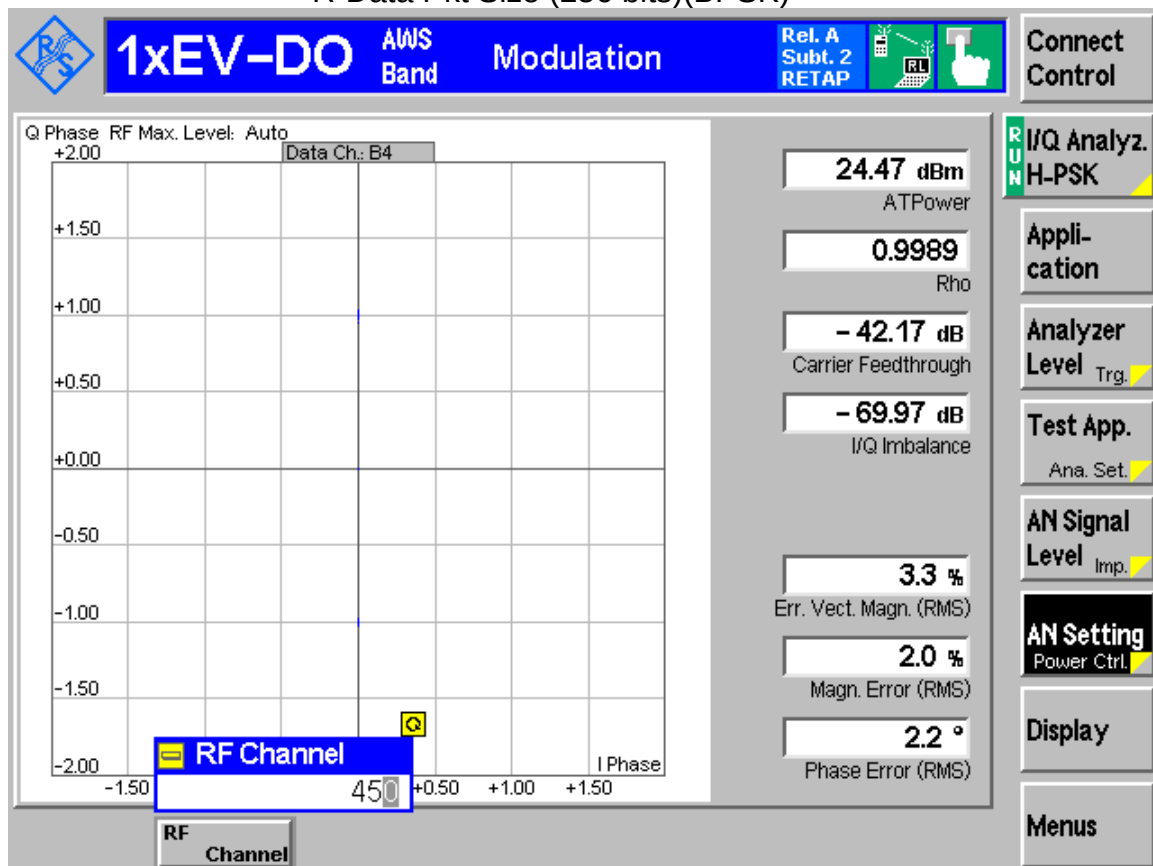


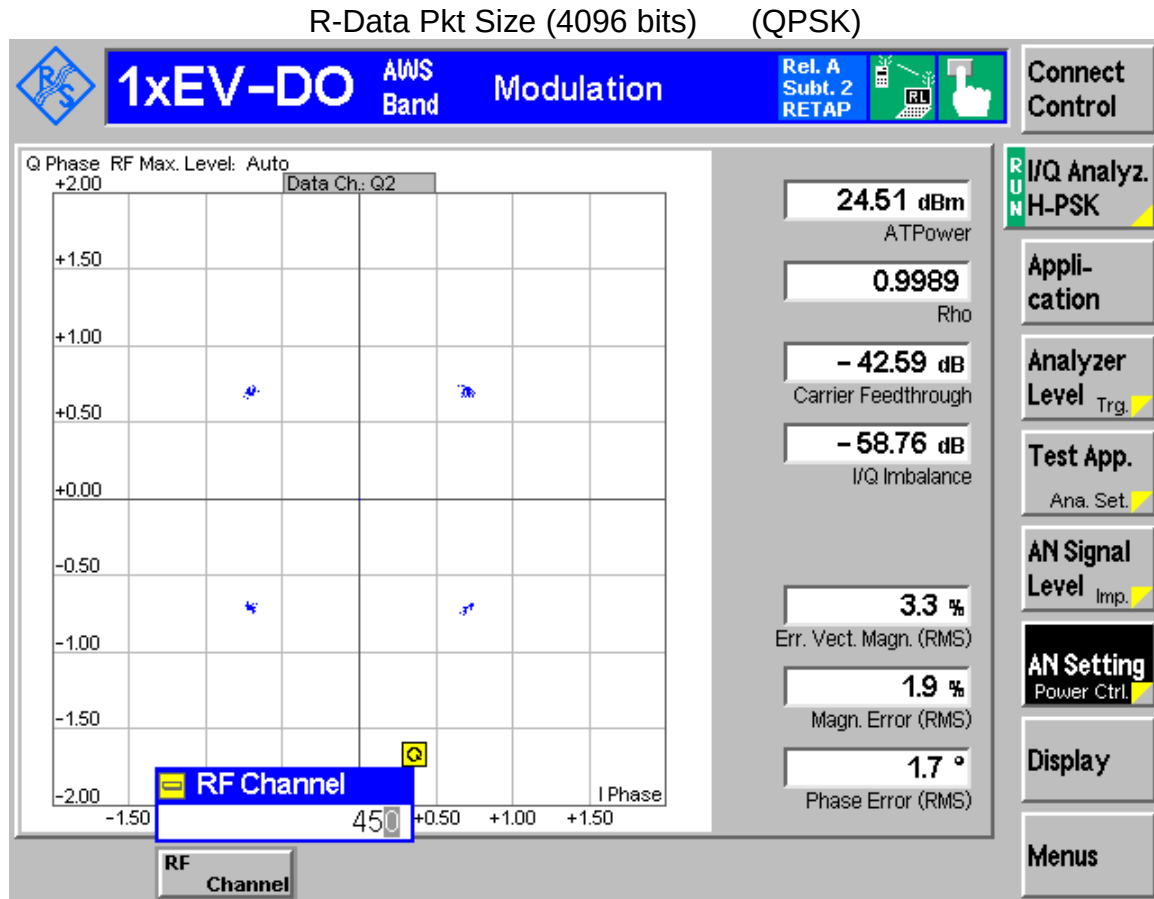


Channel 450(Subtype 2)

The R-Data packet size determines the modulation format:

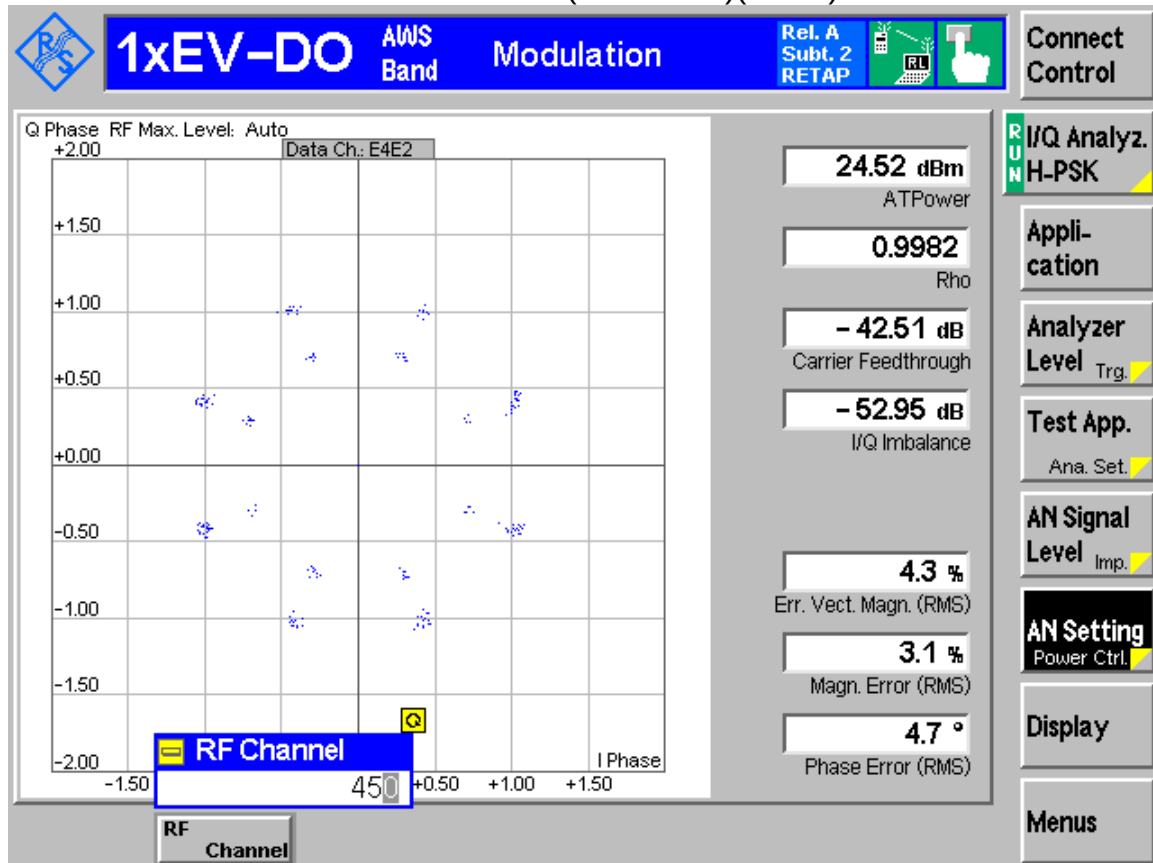
R-Data Pkt Size (256 bits)(BPSK)





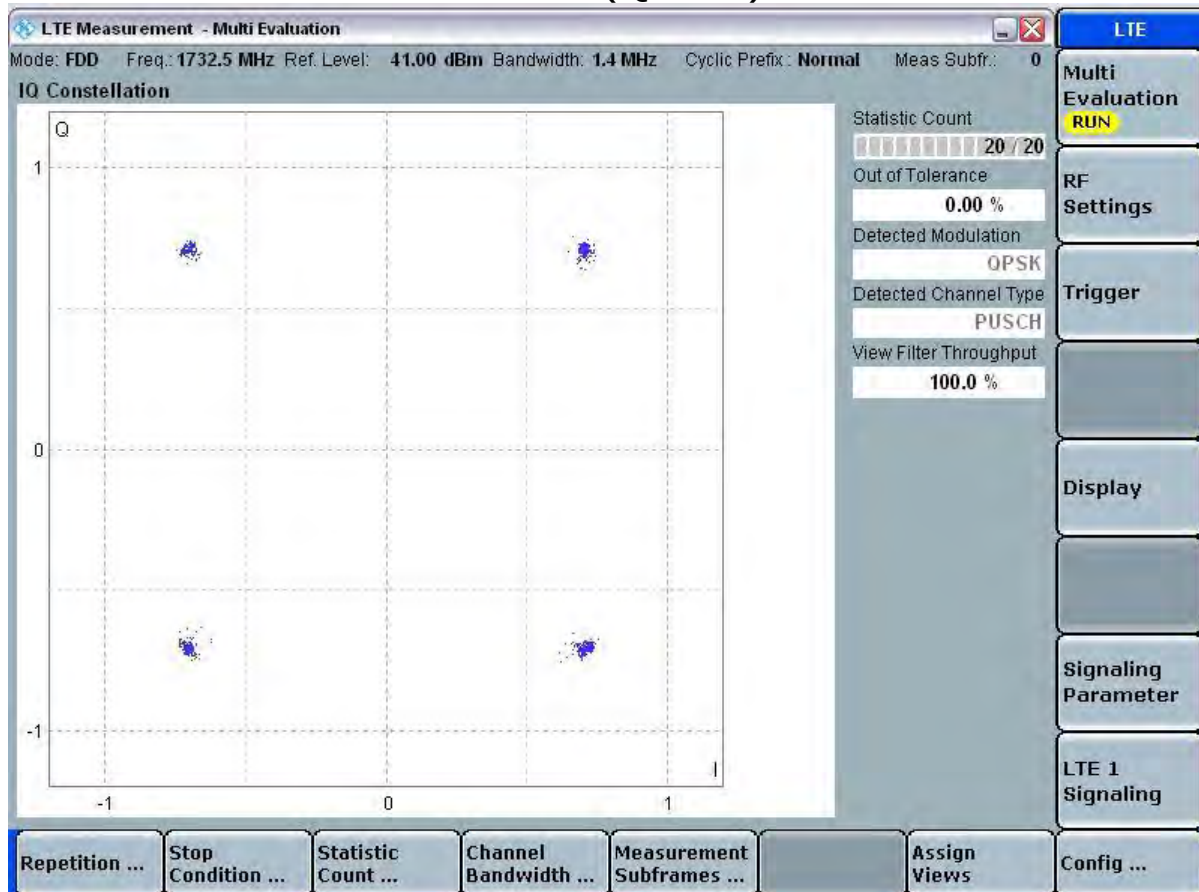


R-Data Pkt Size (12288 bits)(8PSK)



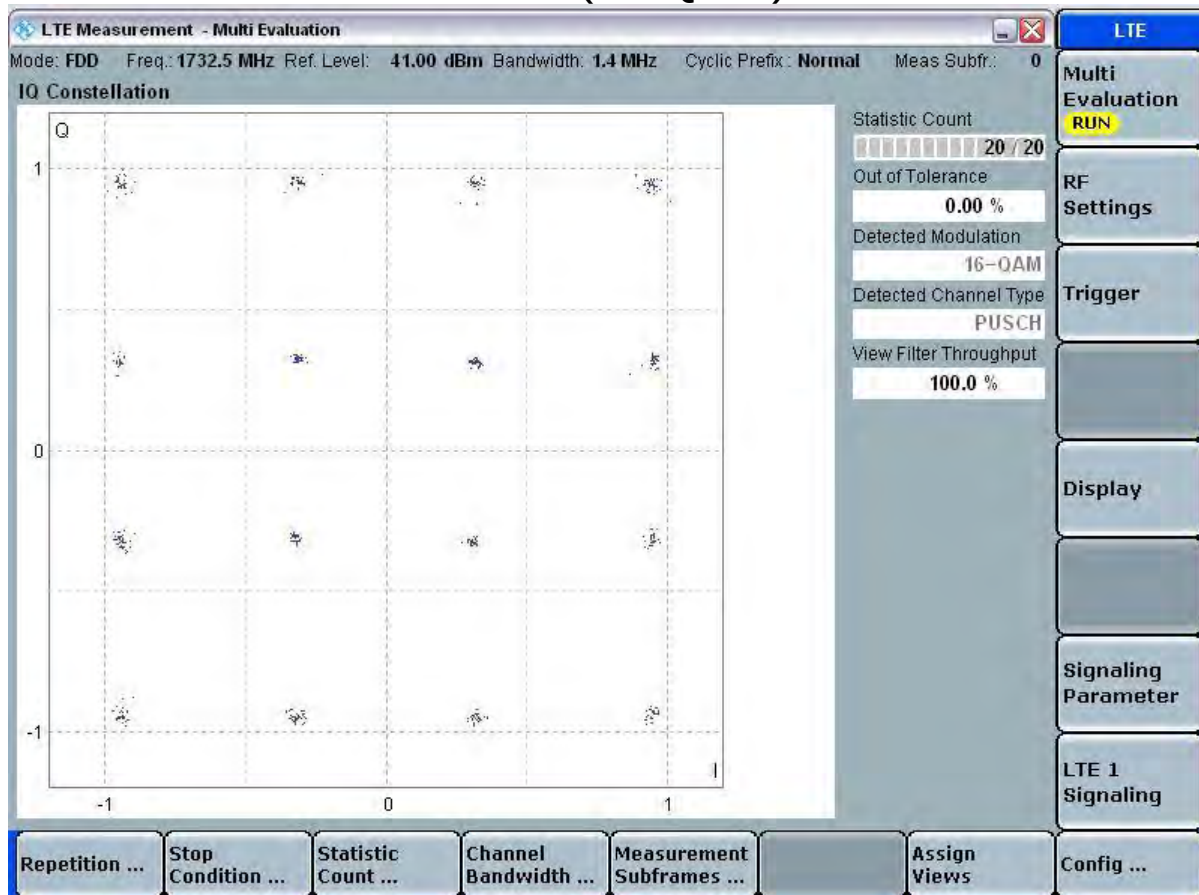


Channel 20175(TM4) 1.4MHz(QPSK)



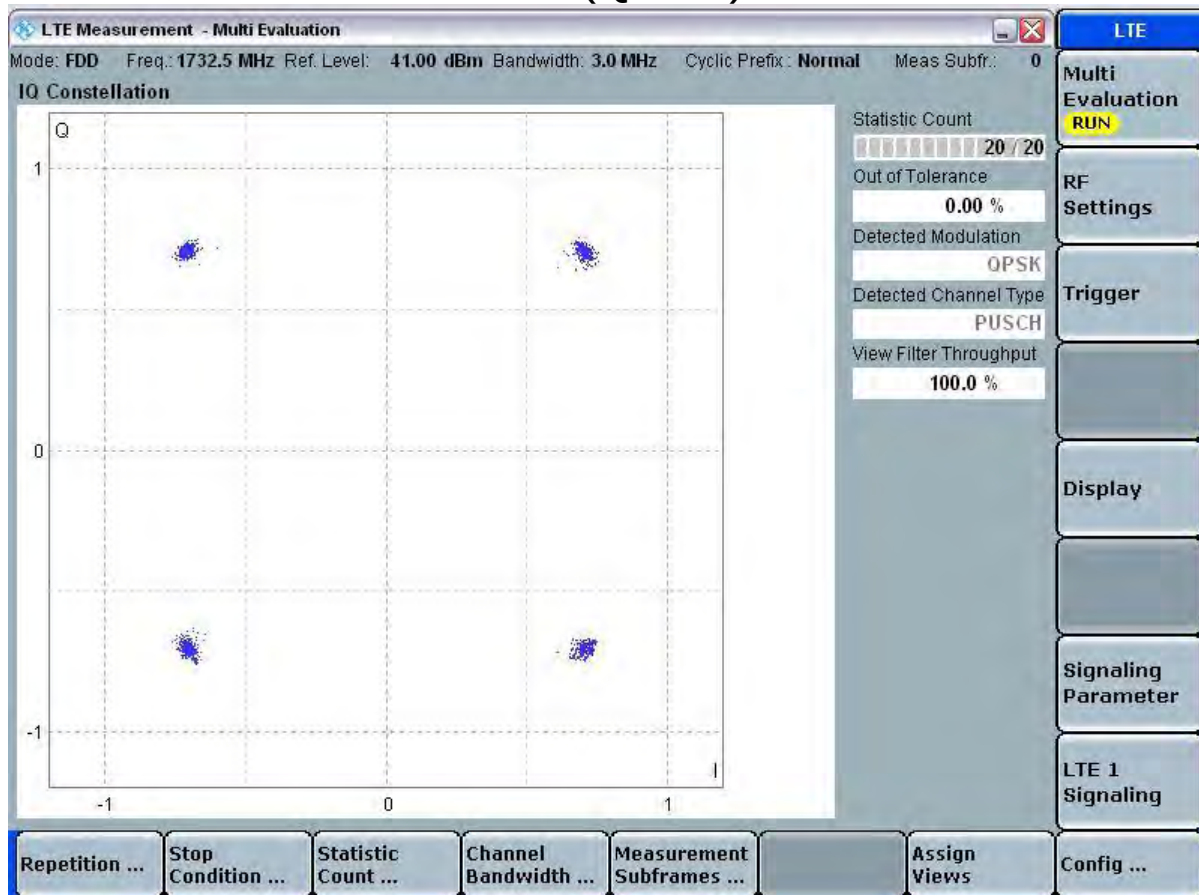


Channel 20175(TM5) 1.4MHz(16-QAM)



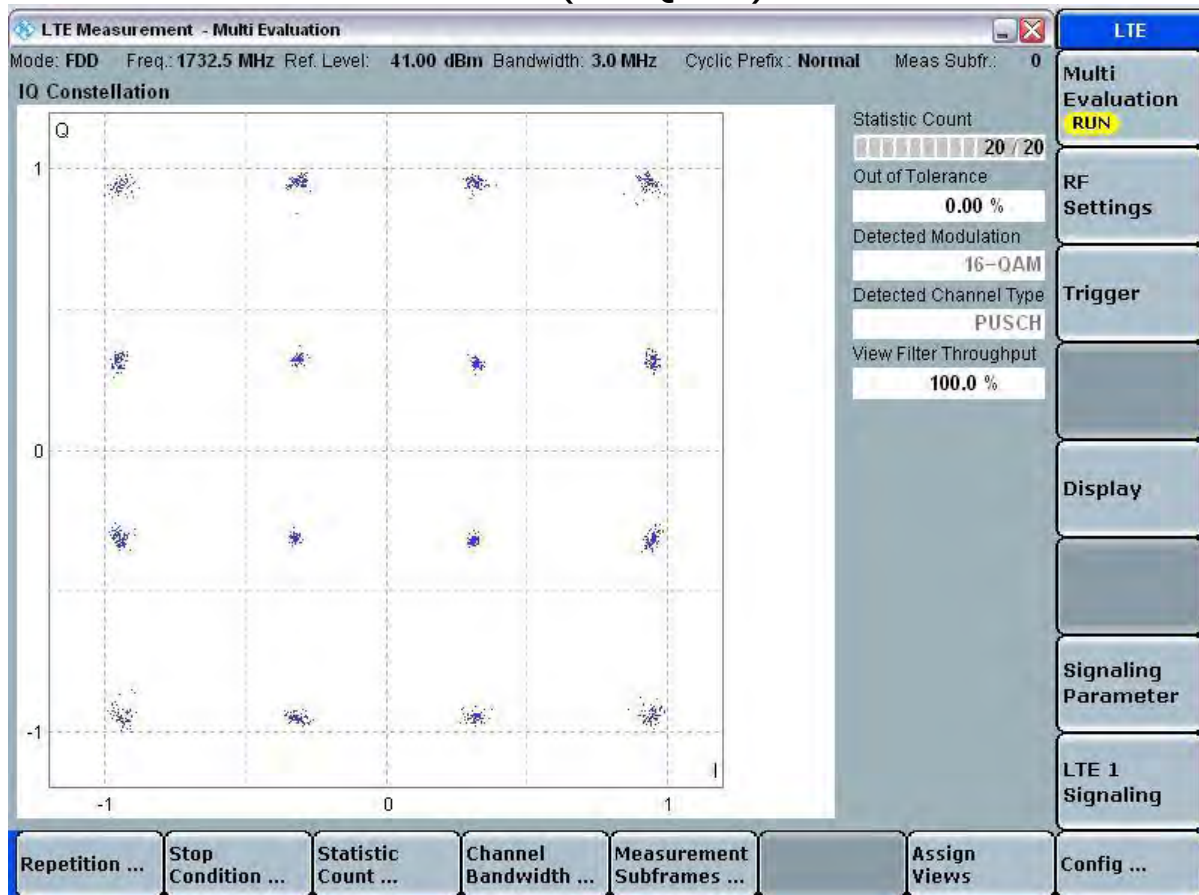


Channel 20175(TM4) 3MHz(QPSK)



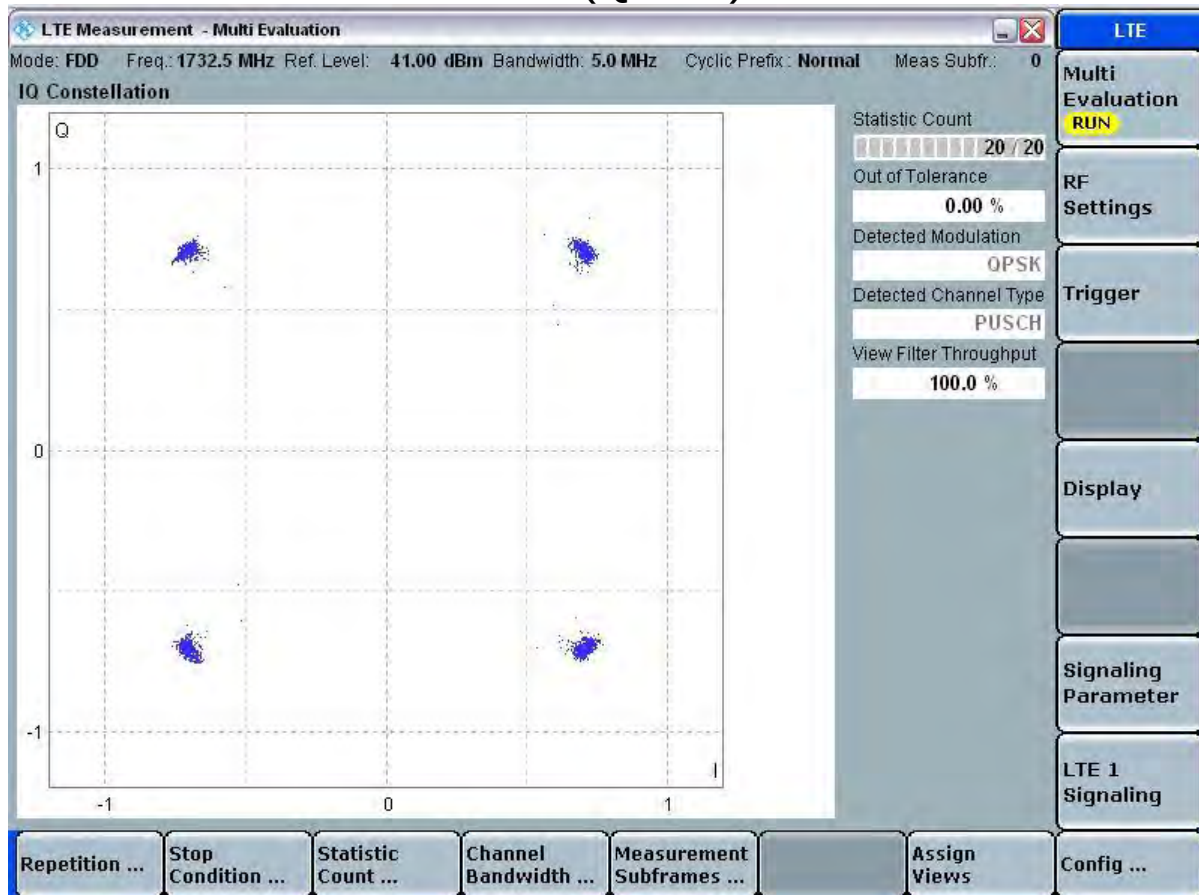


Channel 20175(TM5) 3MHz(16-QAM)



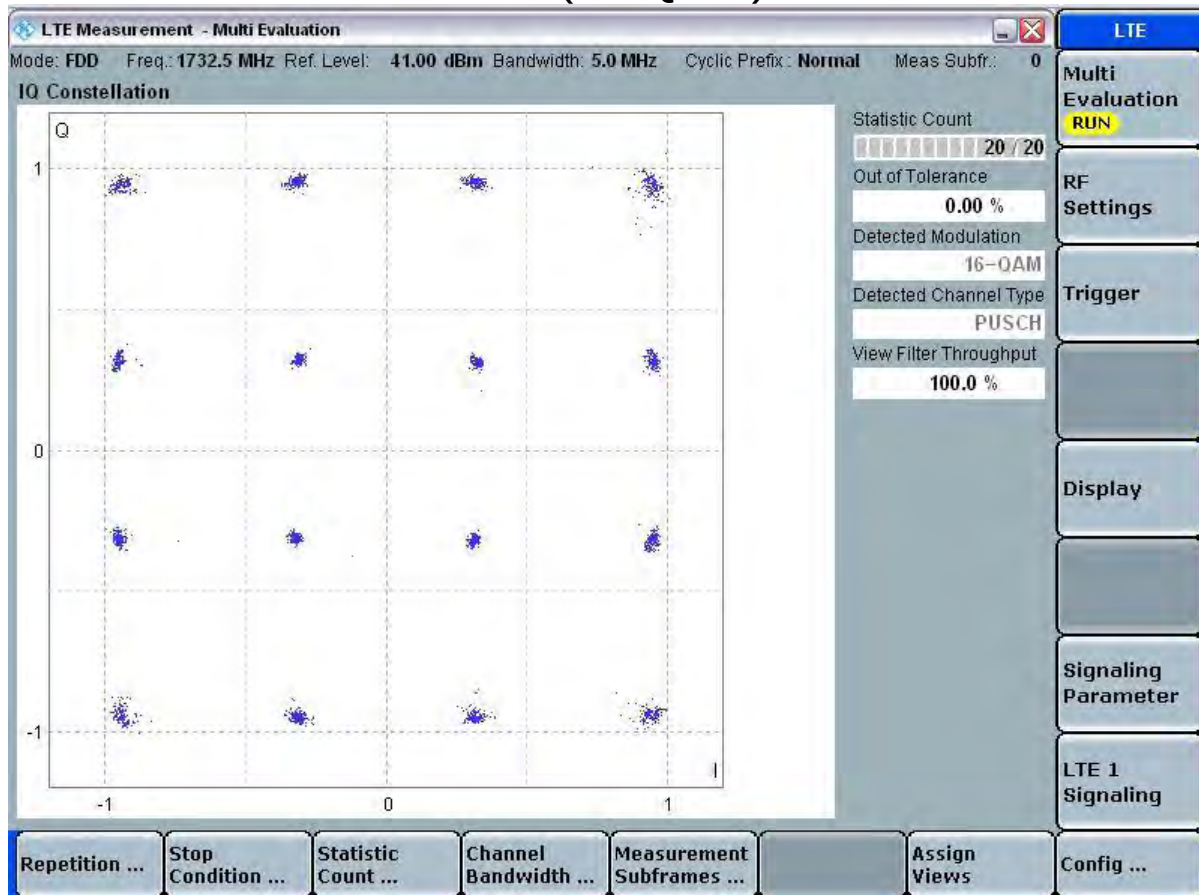


Channel 20175(TM4) 5MHz(QPSK)



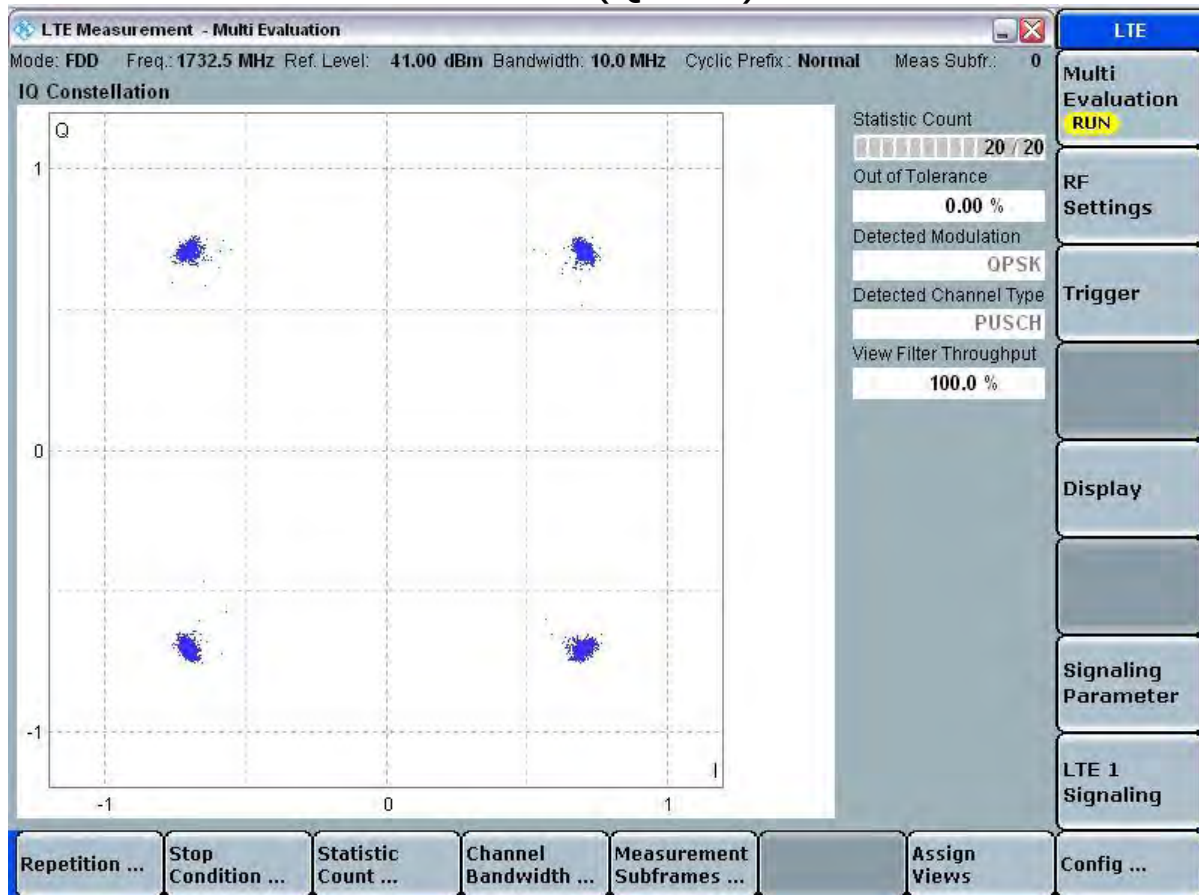


Channel 20175(TM5) 5MHz(16-QAM)



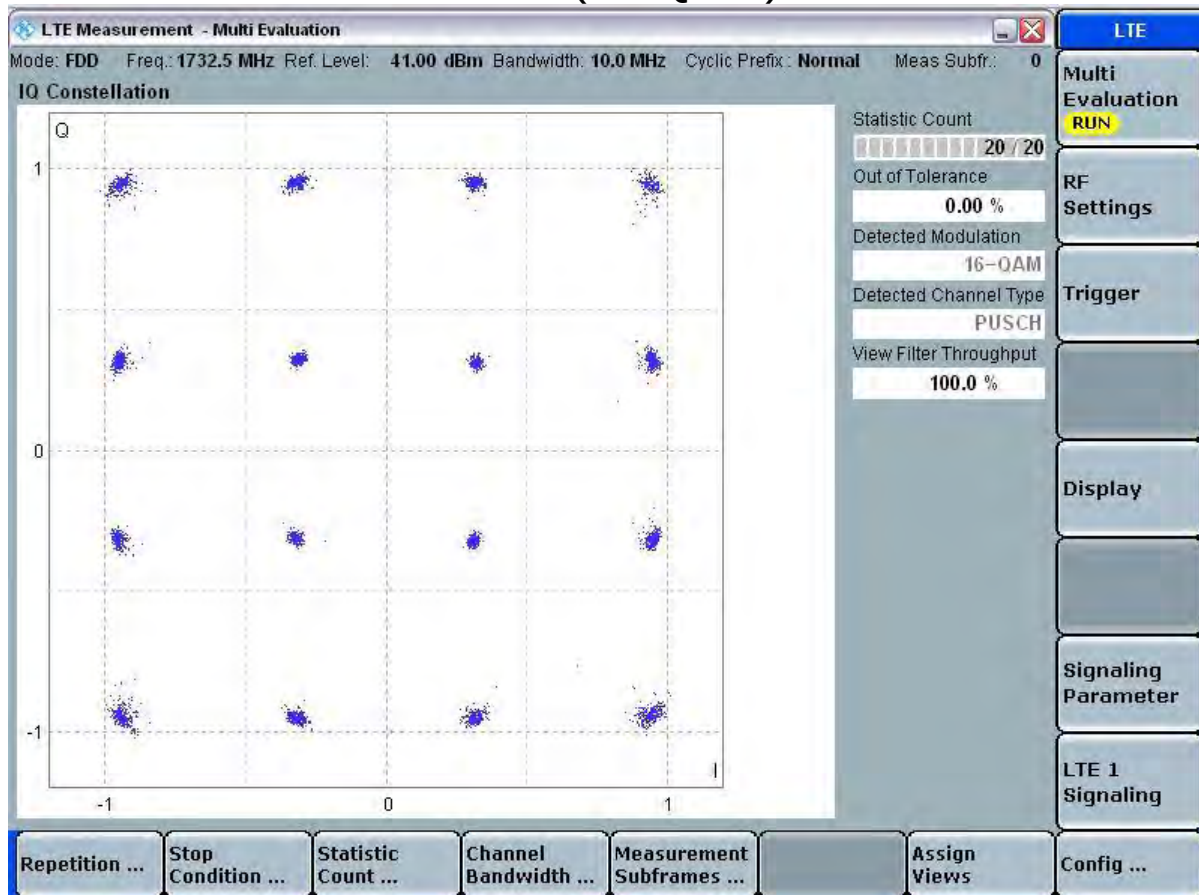


Channel 20175(TM4) 10MHz(QPSK)





Channel 20175(TM5) 10MHz(16-QAM)





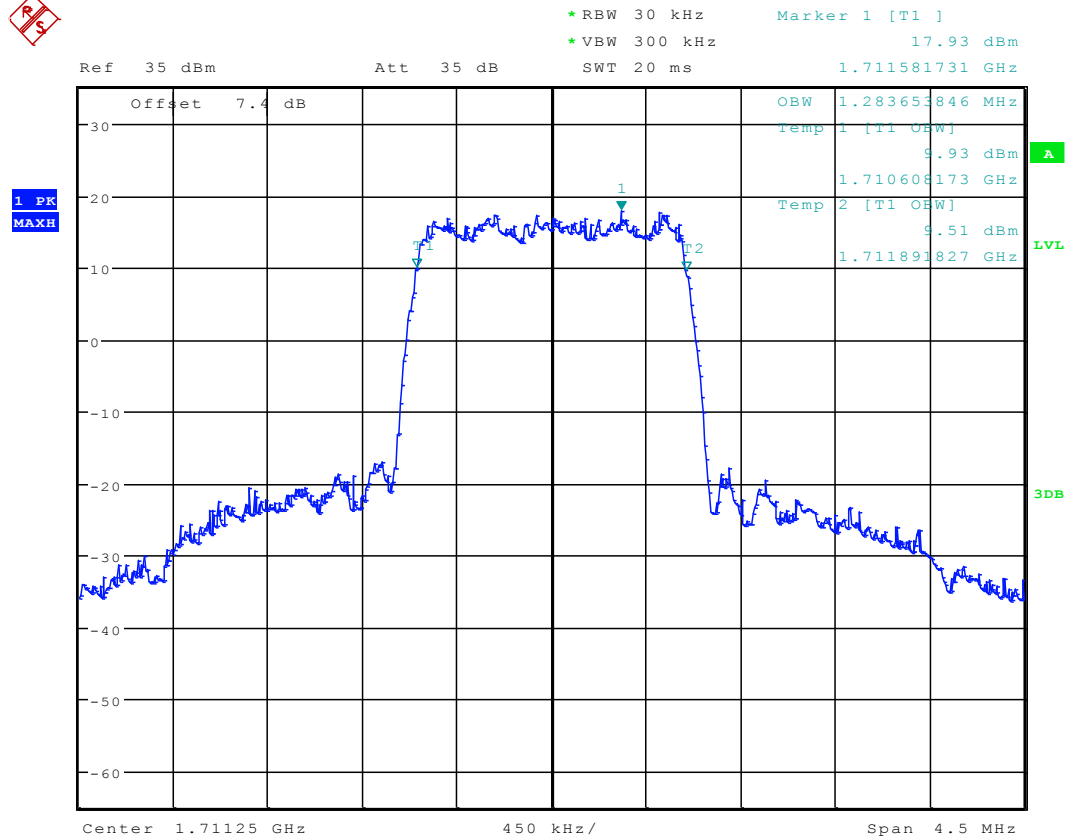
Appendix B

Occupied Bandwidth

According to FCC Part 2.1047 & Part27 Subpart C&L



Channel 25 (TM1)

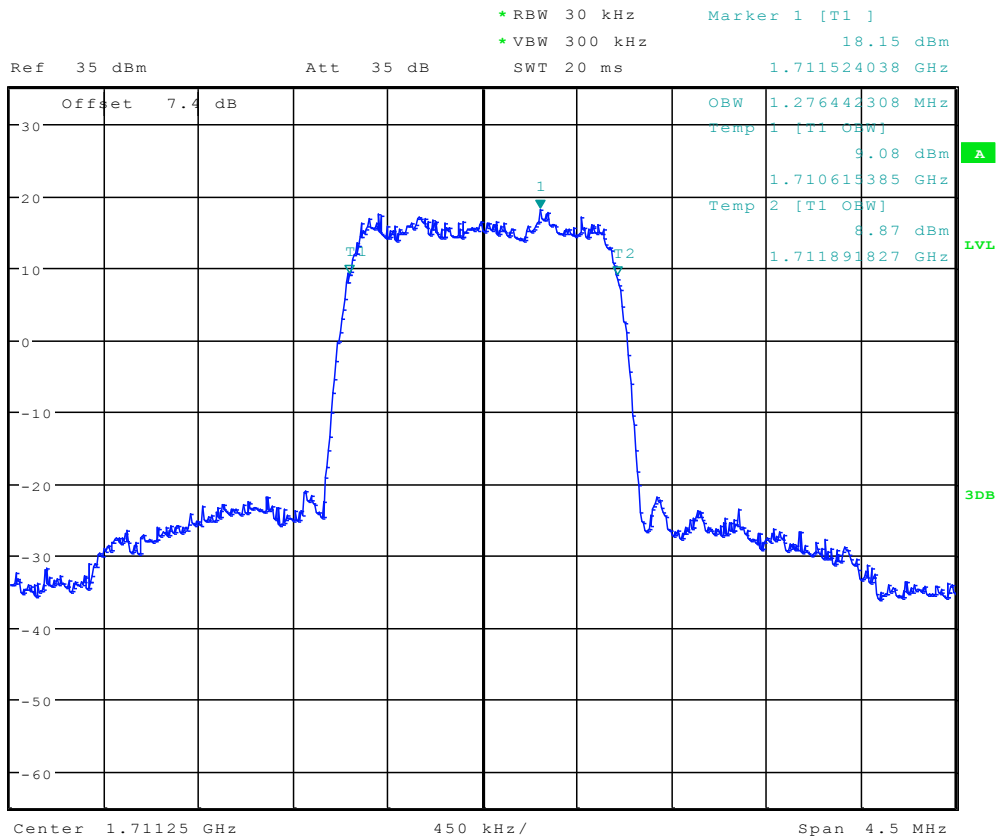




Channel 25 (TM3)



1 PK
MAXH

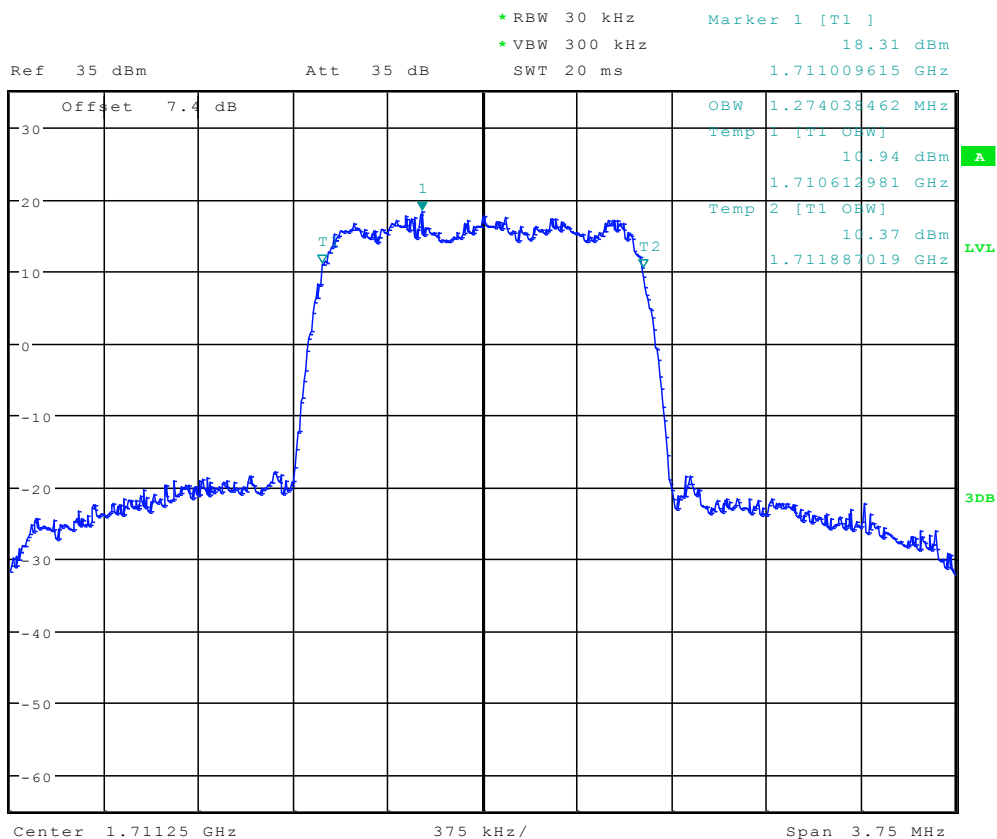




Channel 25 (EVDO subtype 0)

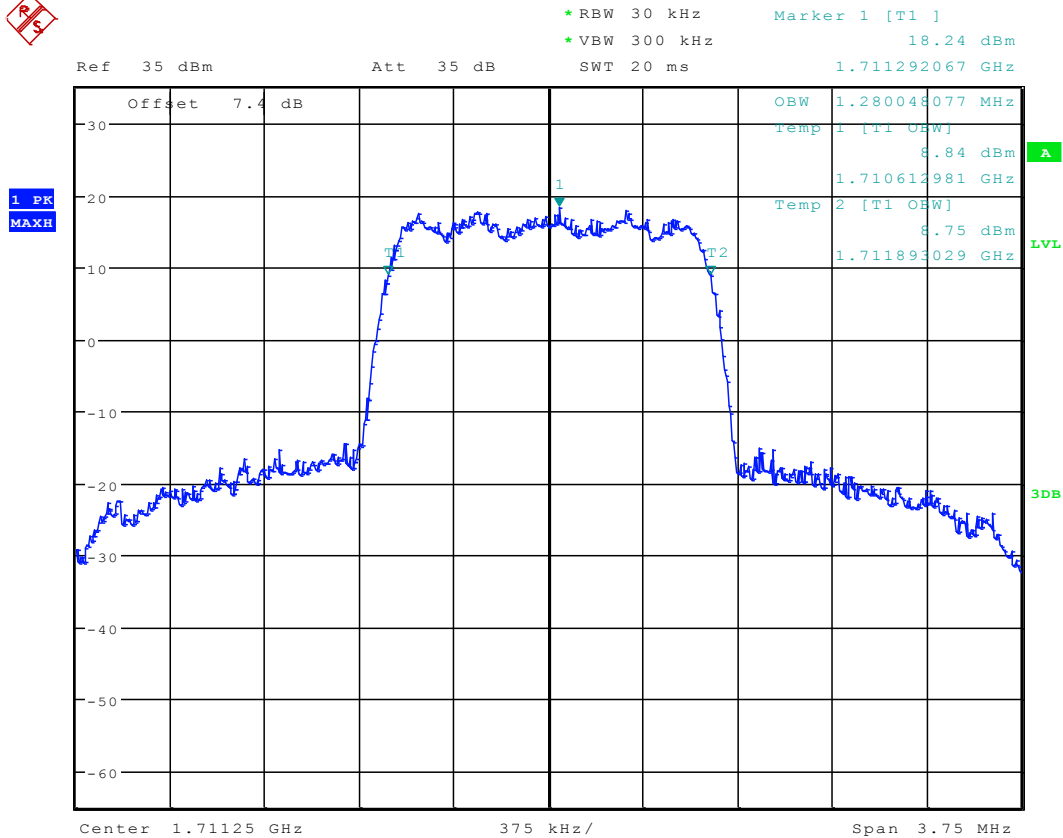


1 PK
MAXH



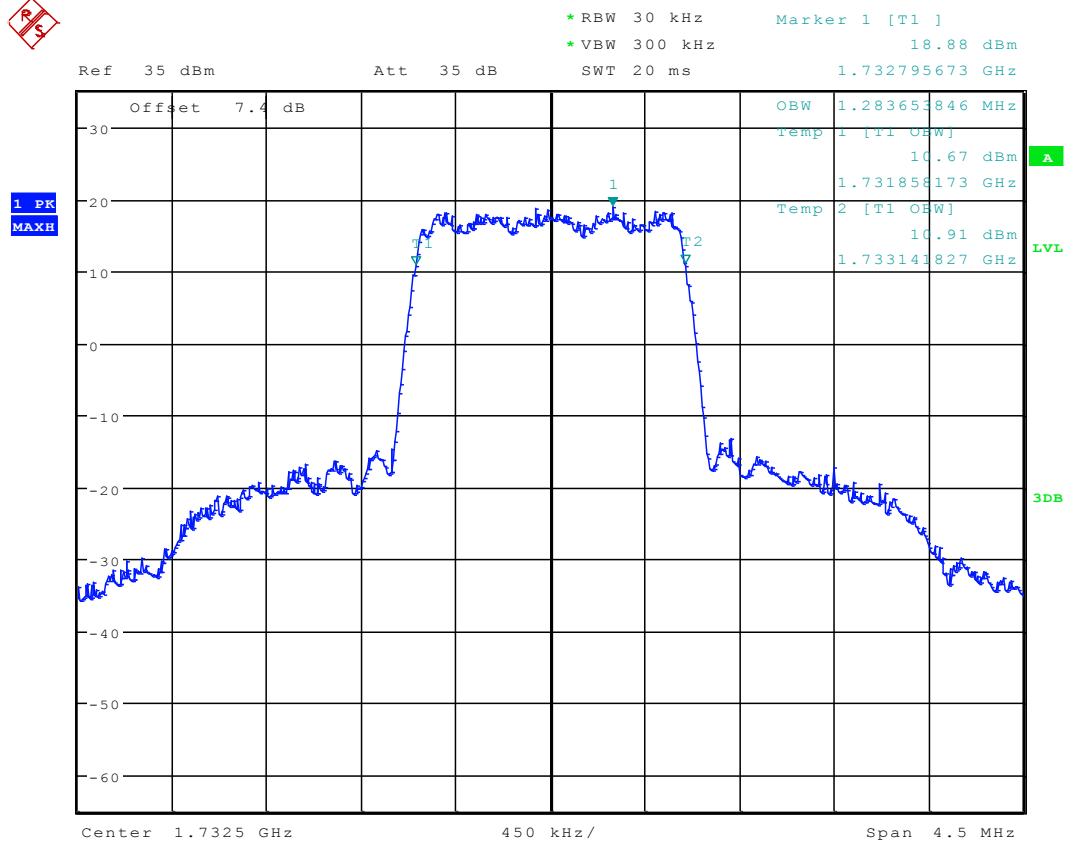


Channel 25 (EVDO subtype 2)



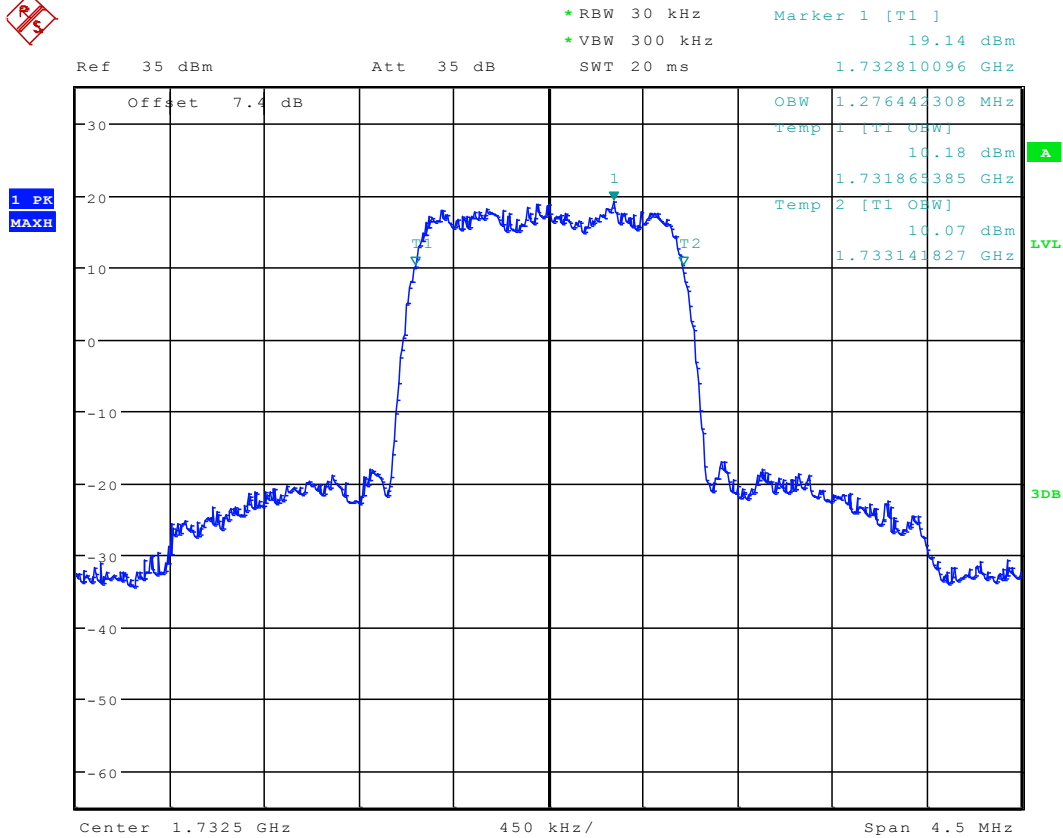


Channel 450 (TM1)



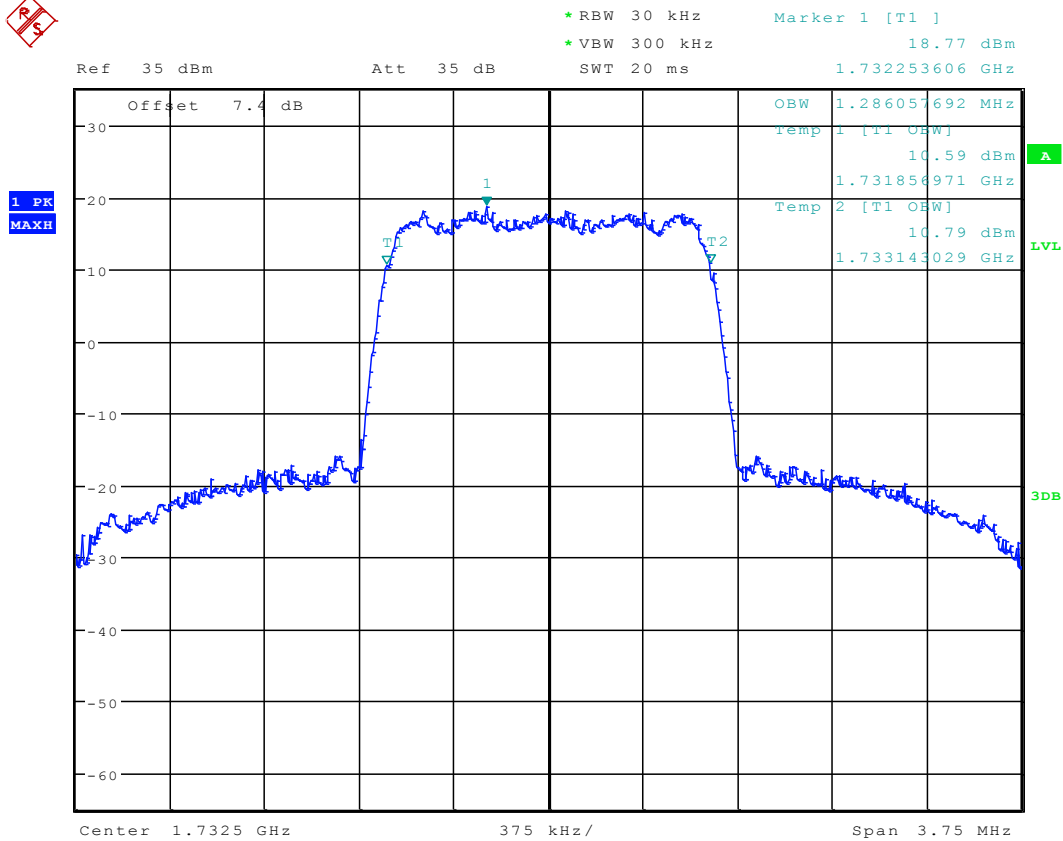


Channel 450 (TM3)



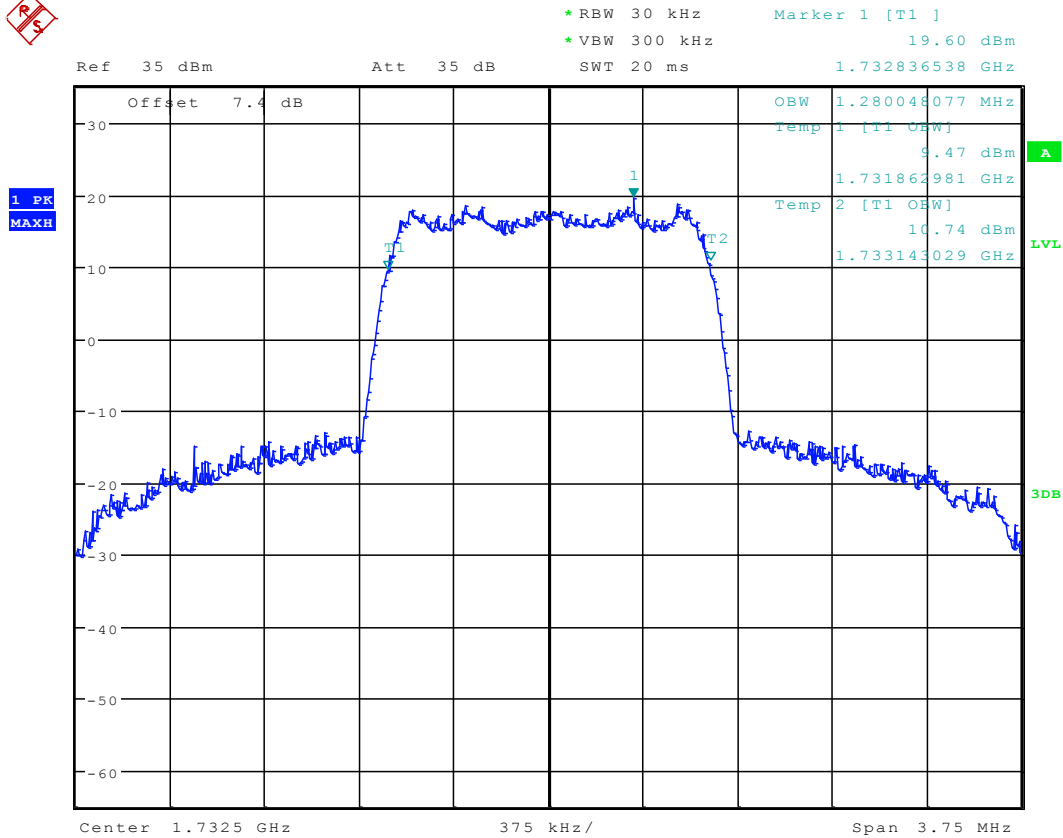


Channel 450 (EVDO release 0)





Channel 450 (EVDO subtype 2)

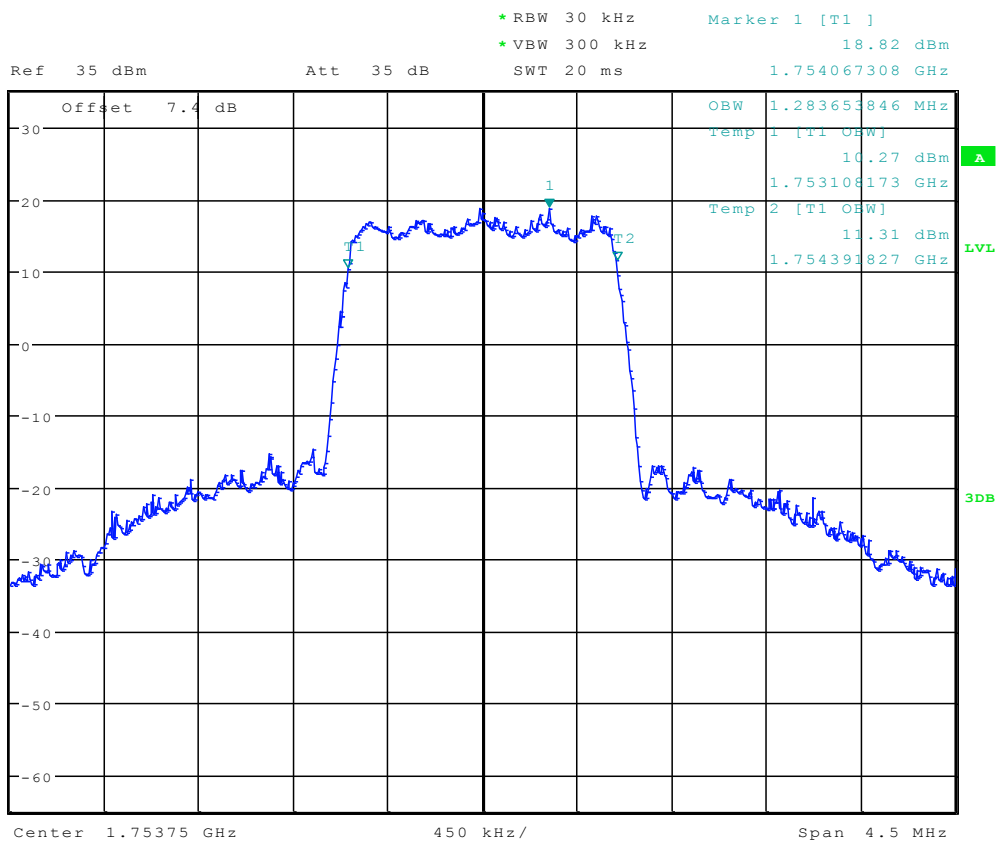




Channel 875 (TM1)

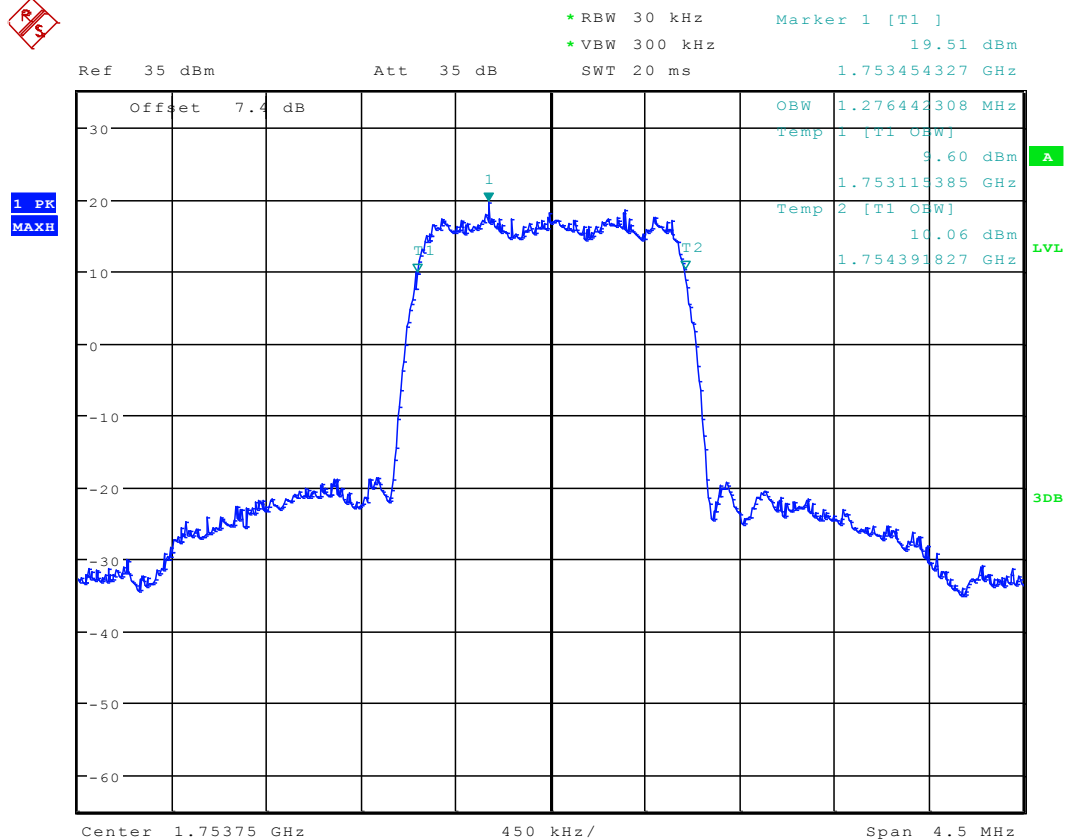


1 PK
MAXH



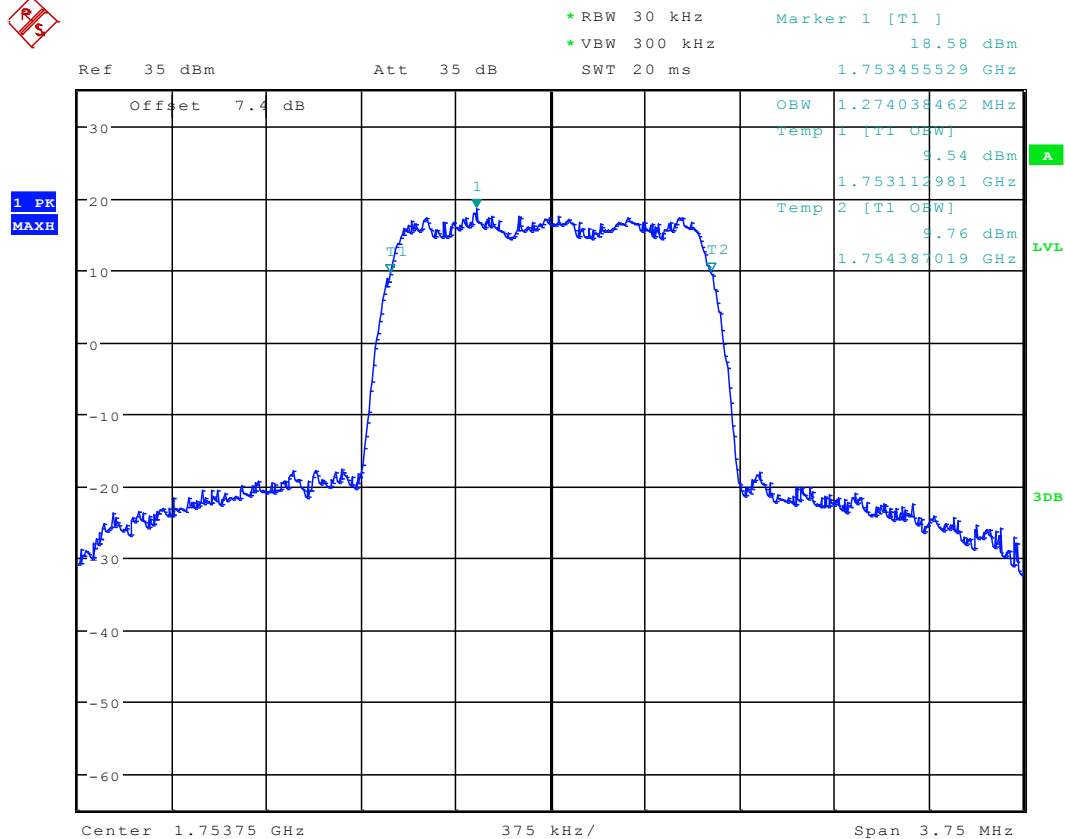


Channel 875 (TM3)





Channel 875 (EVDO subtype 0)

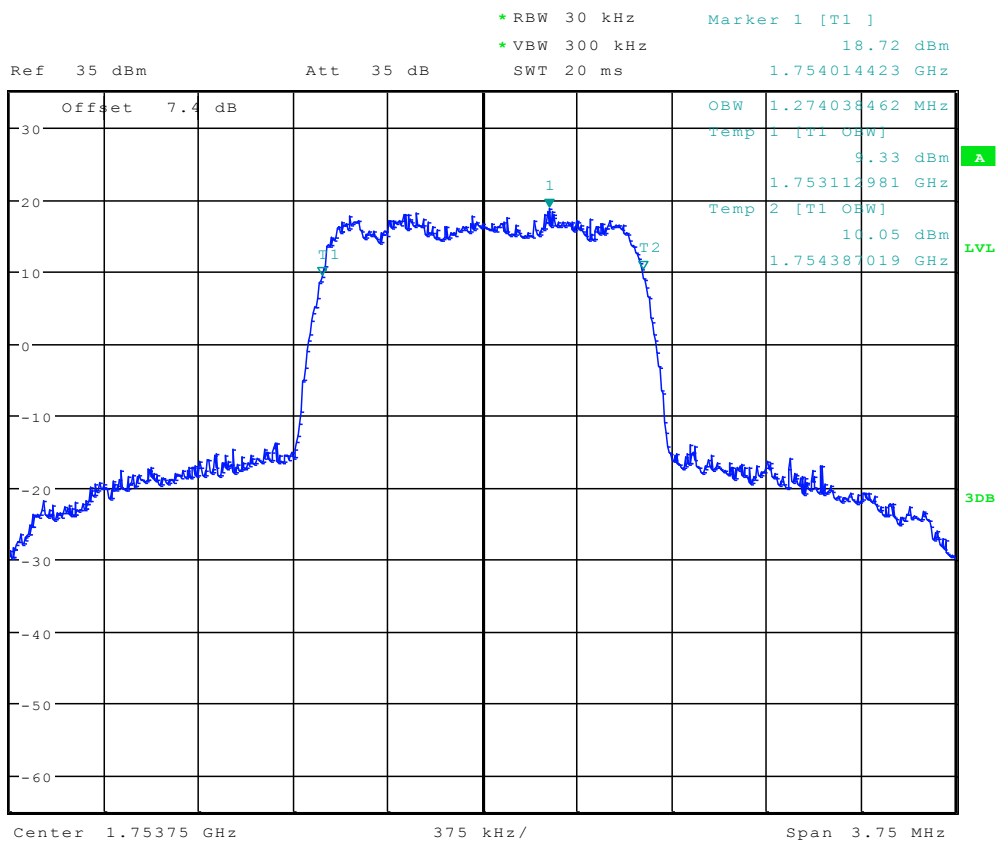




Channel 875 (EVDO subtype 2)

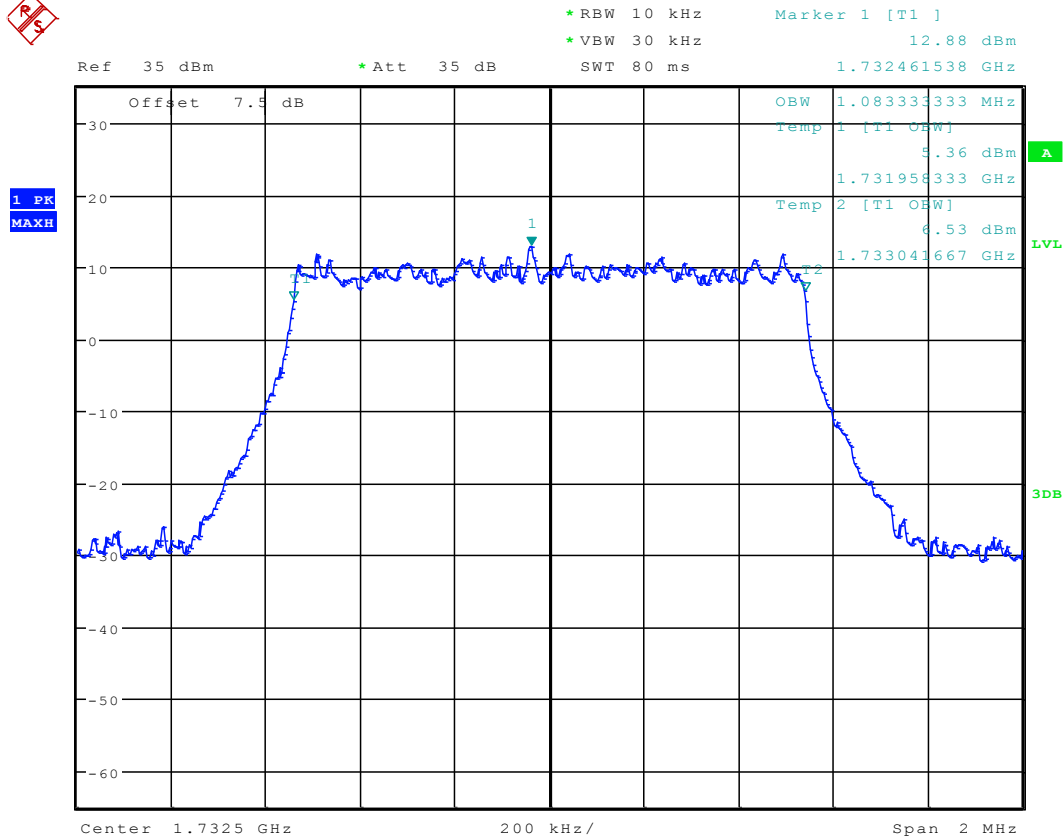


1 PK
MAXH



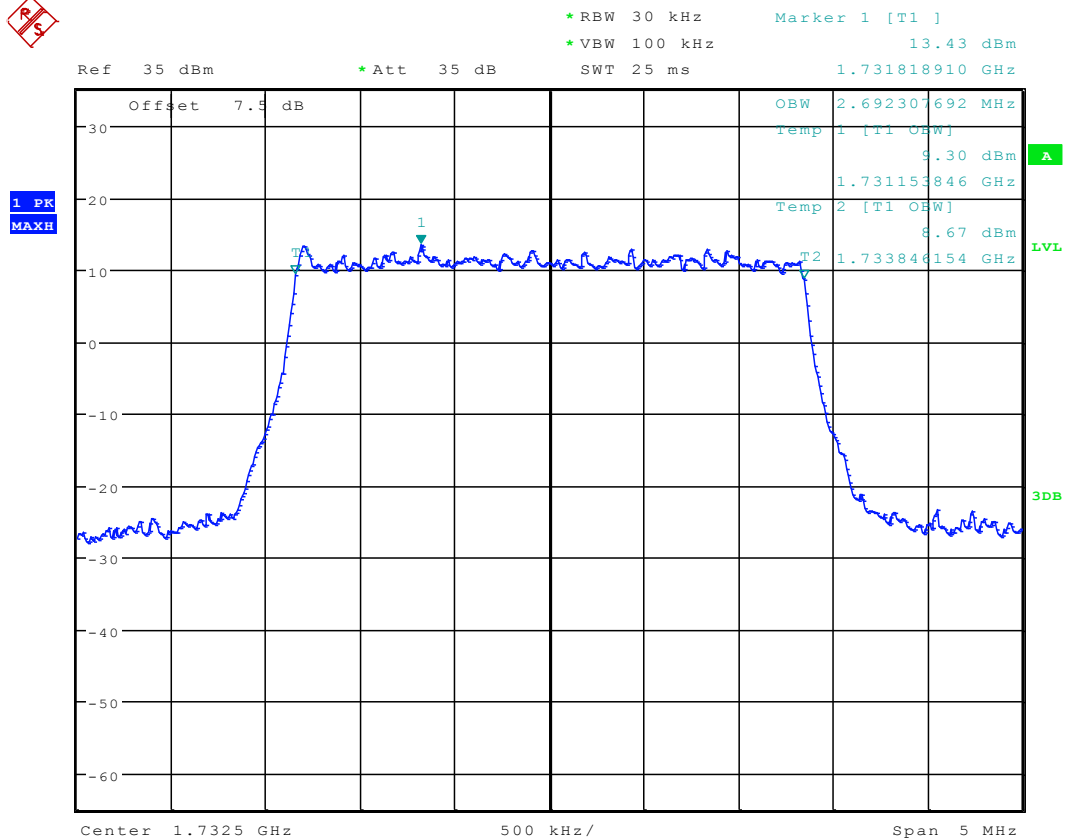


Channel 20175(TM4) 1.4MHz(BW)



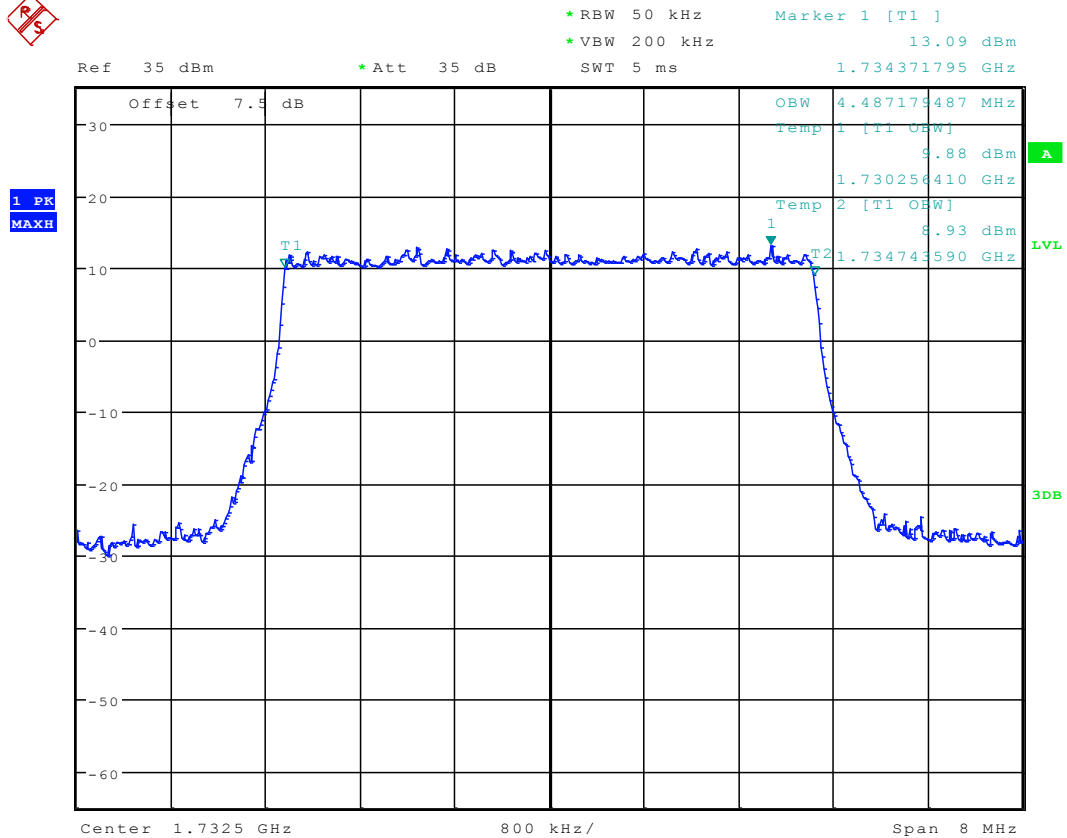


Channel 20175(TM4) 3MHz(BW)



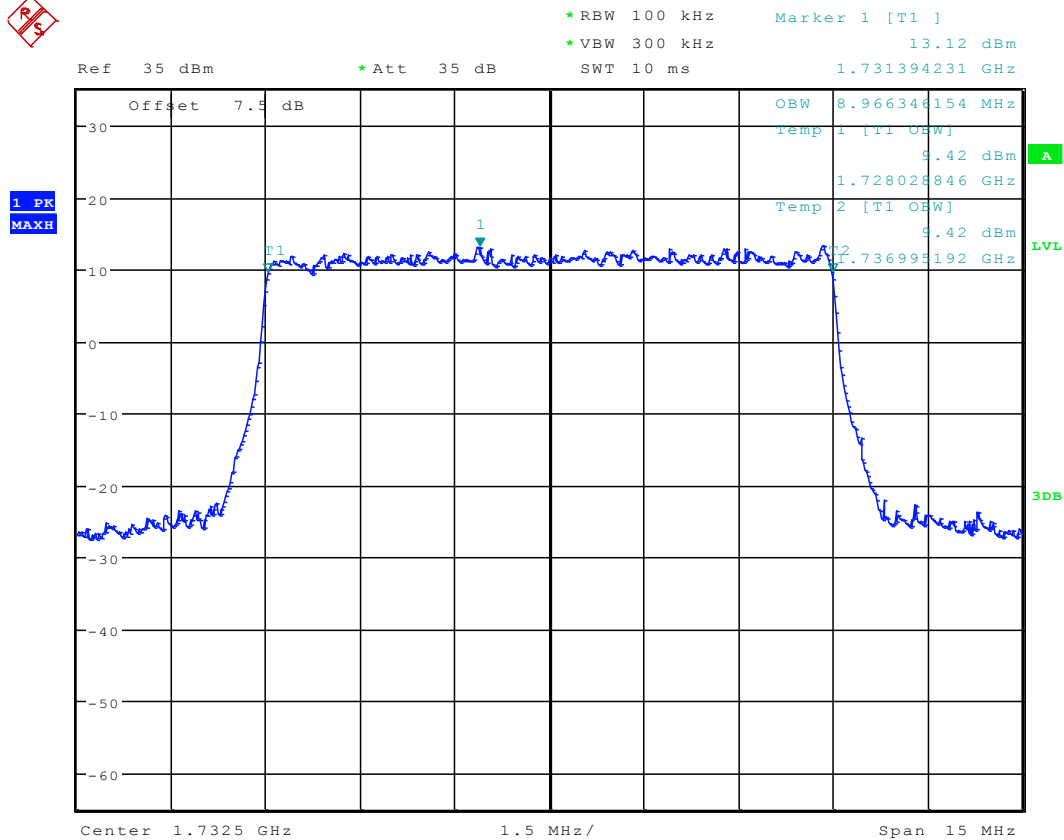


Channel 20175(TM4) 5MHz(BW)





Channel 20175(TM4) 10MHz(BW)



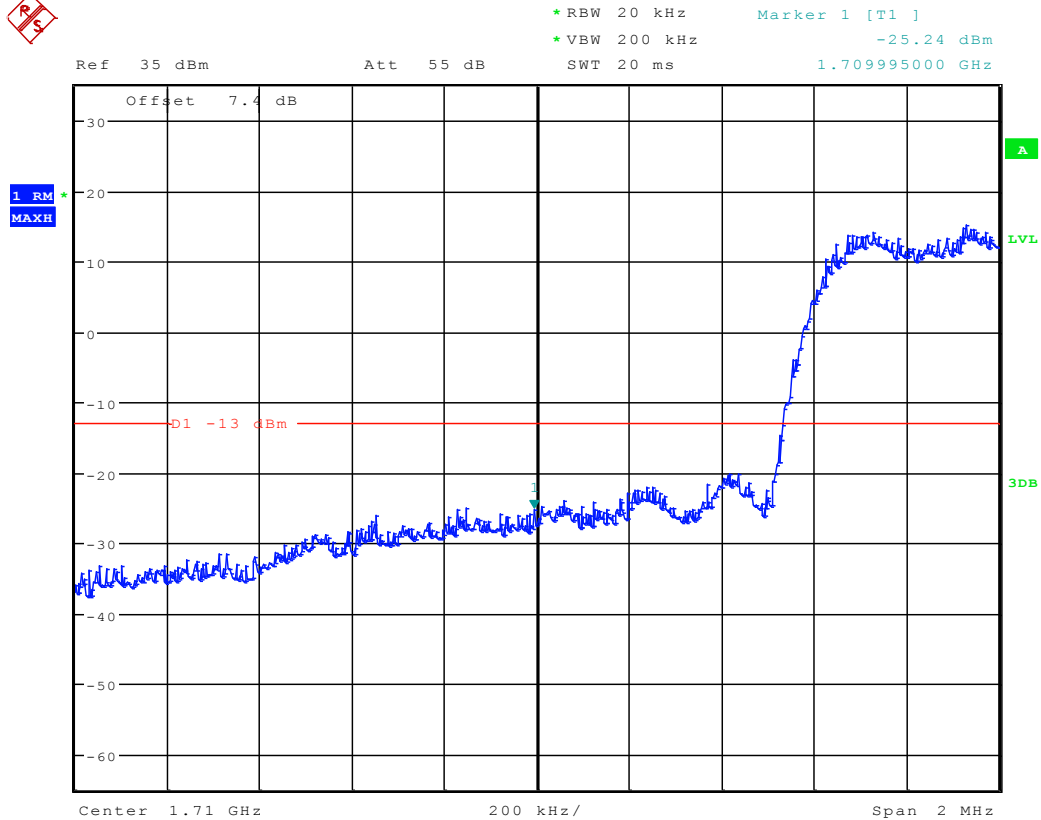


Appendix C

Band Edges Compliance According to FCC Part 2.1051 & 27.53(g)

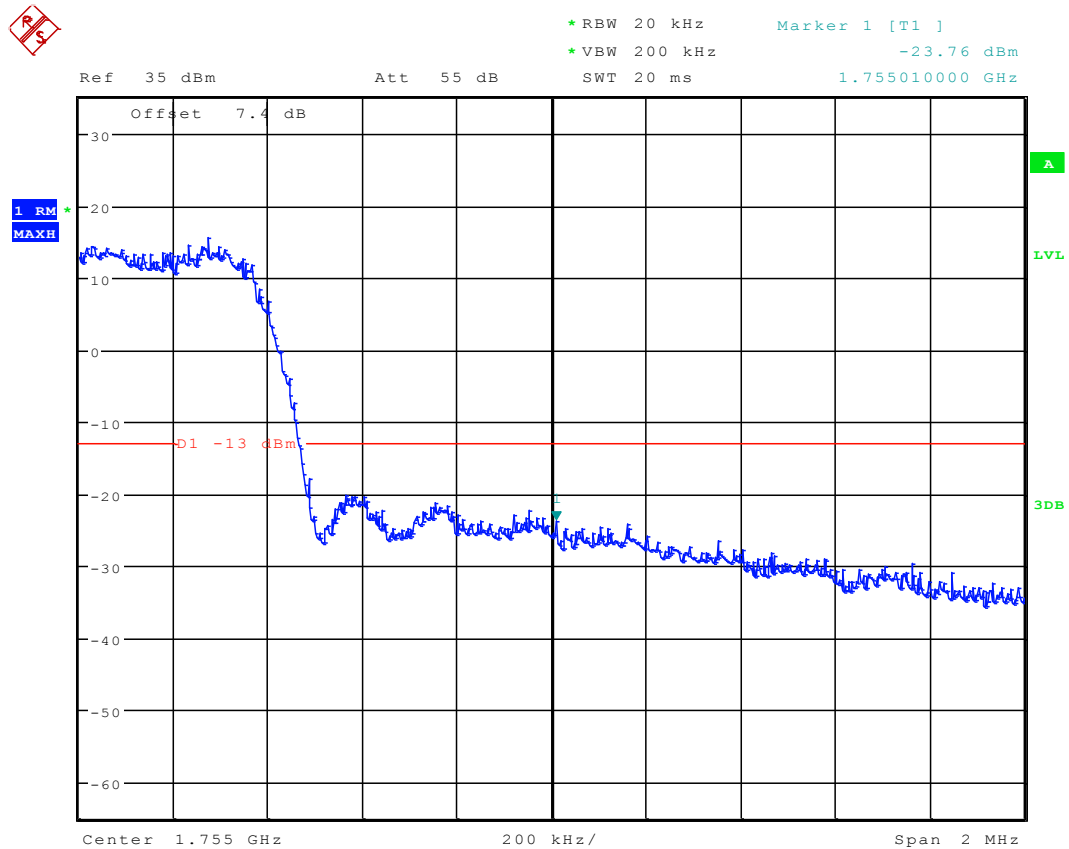


TM1 Left Edge Channel 25



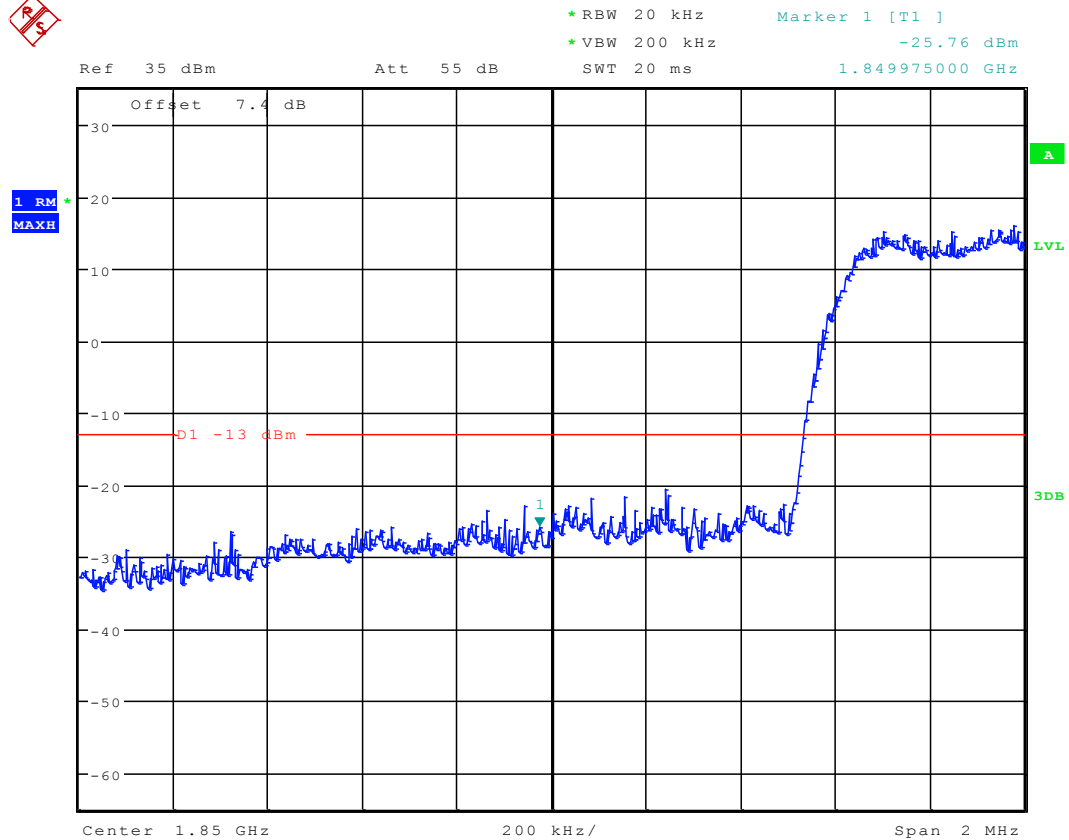


Right Edge Channel 875



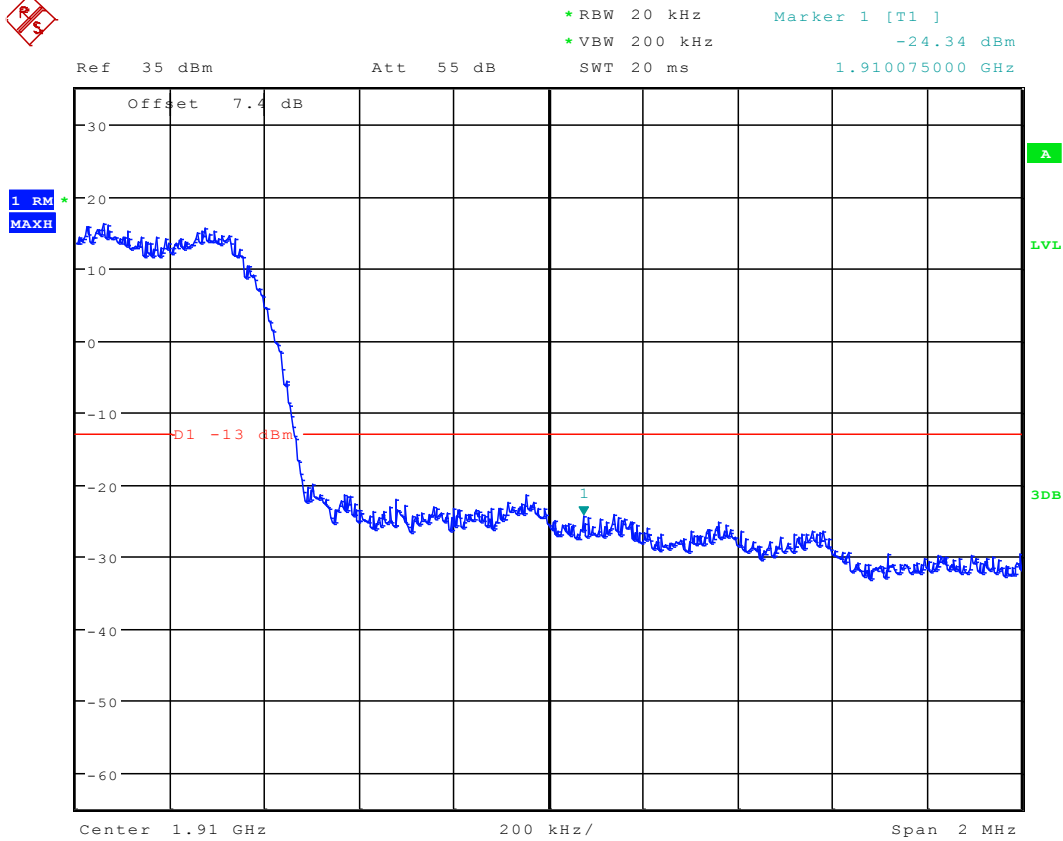


TM3 Left Edge Channel 25





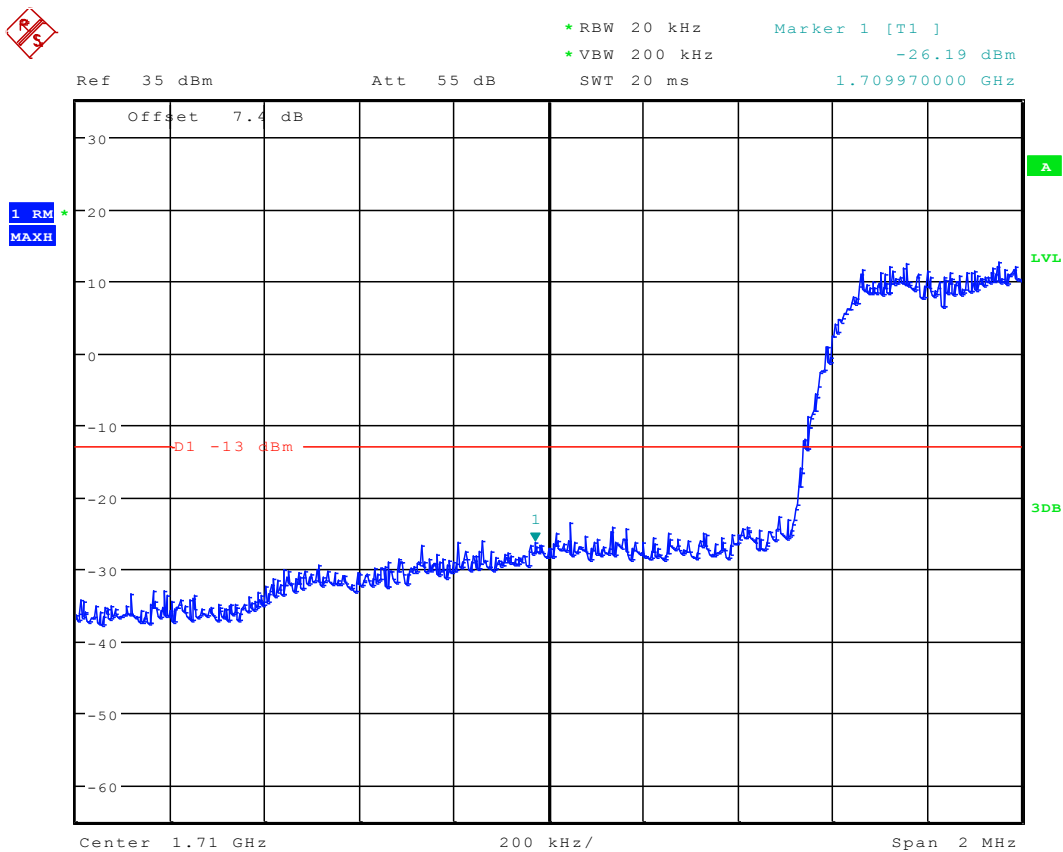
Right Edge Channel 875





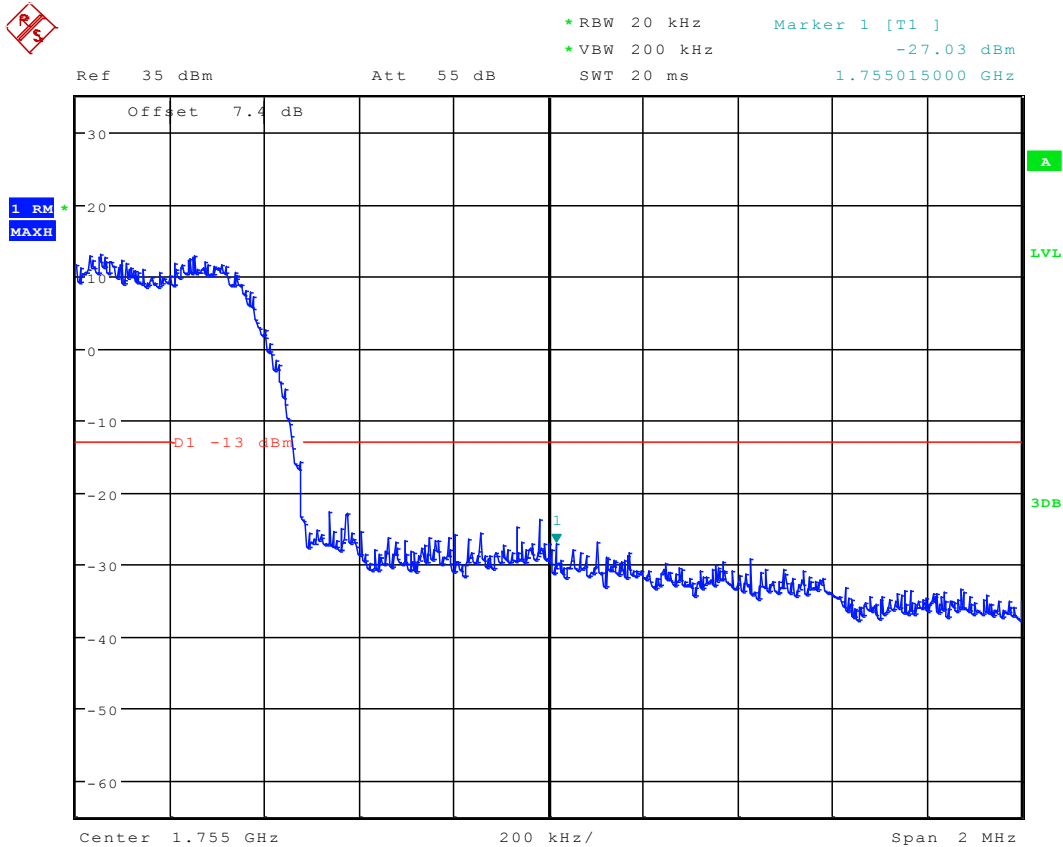
EVDO Subtype 0

Left Edge Channel 25





Right Edge Channel 875



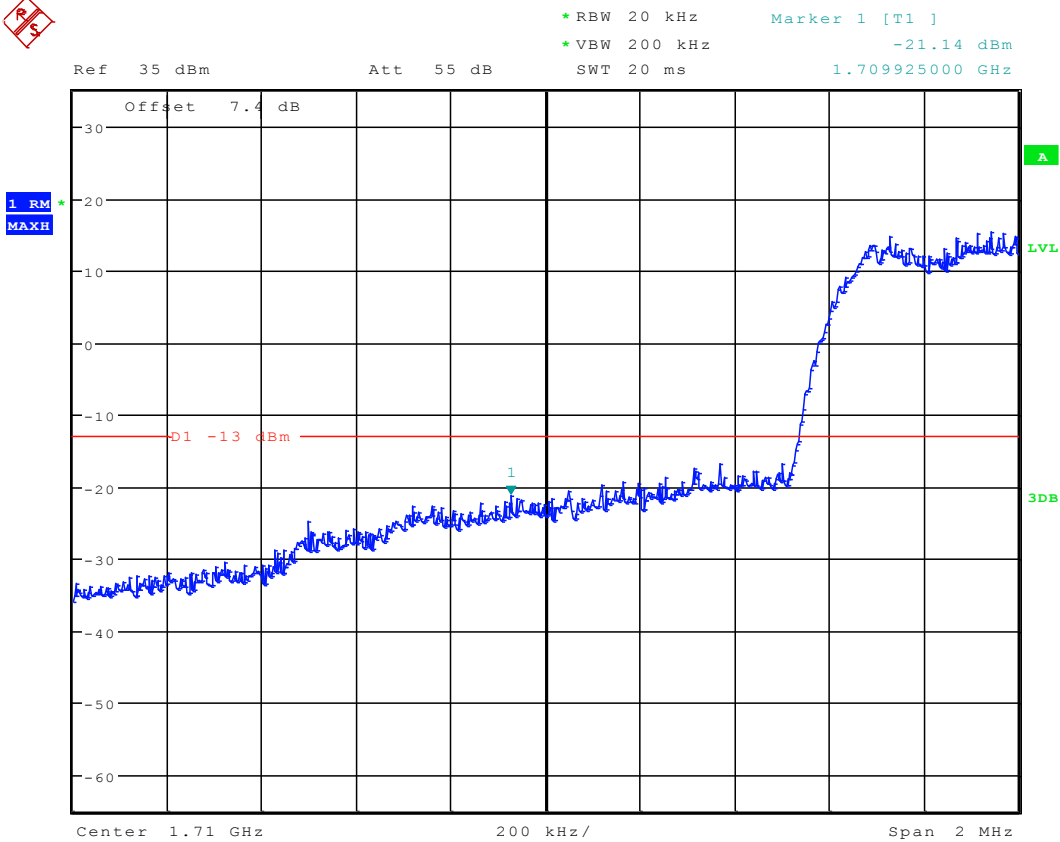


EVDO Subtype 2

Modulation: BPSK

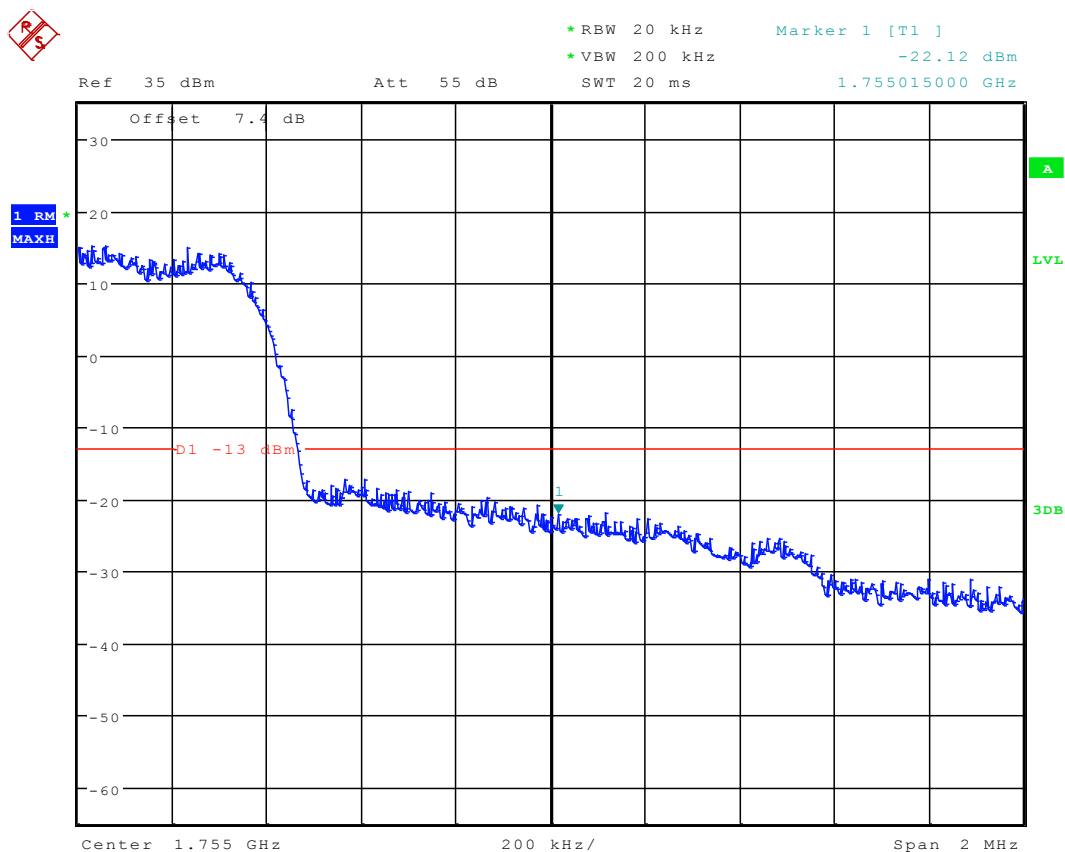
Left Edge

Channel 25





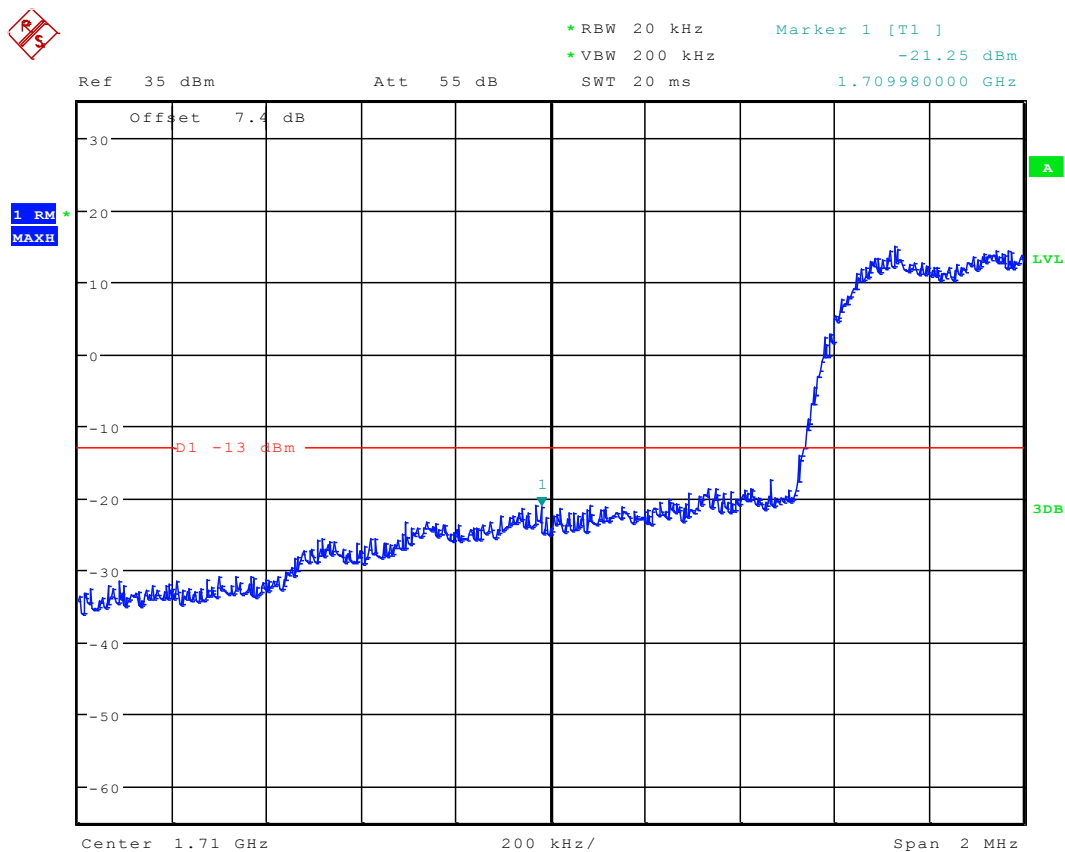
Right Edge Channel 875

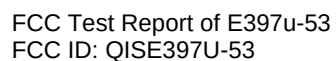
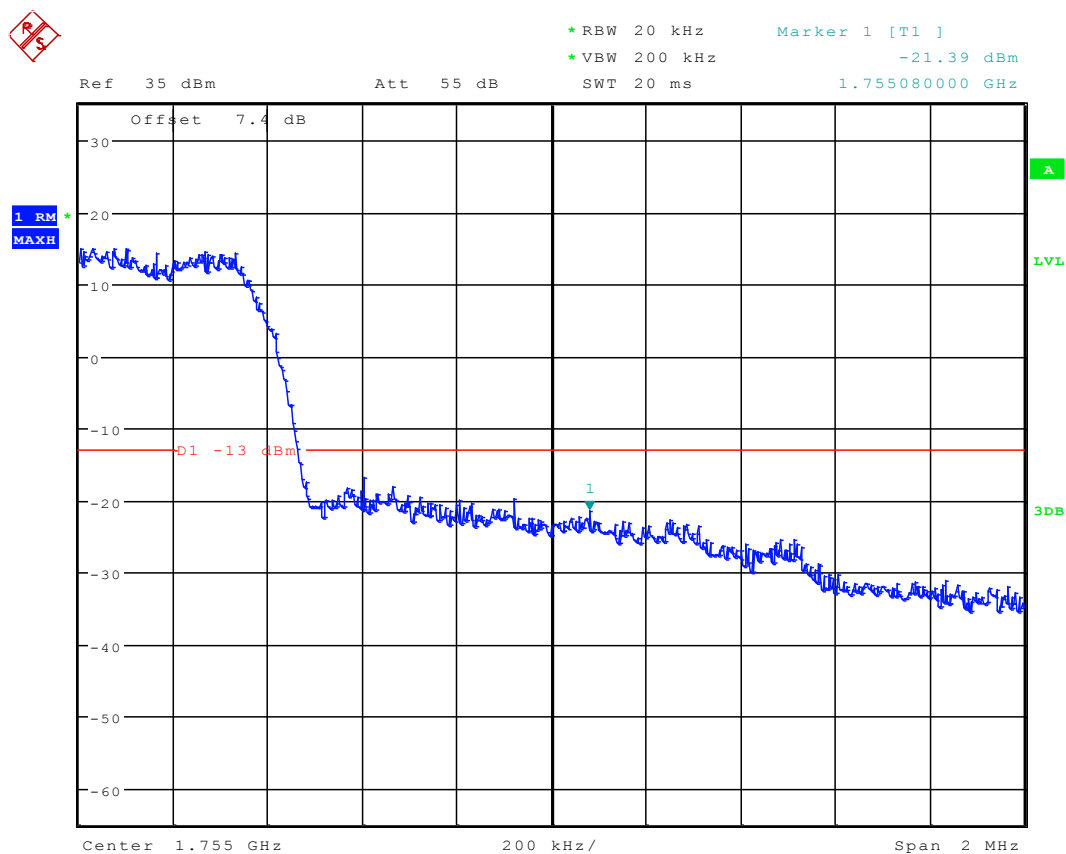




Modulation: QPSK

Left Edge
Channel 25

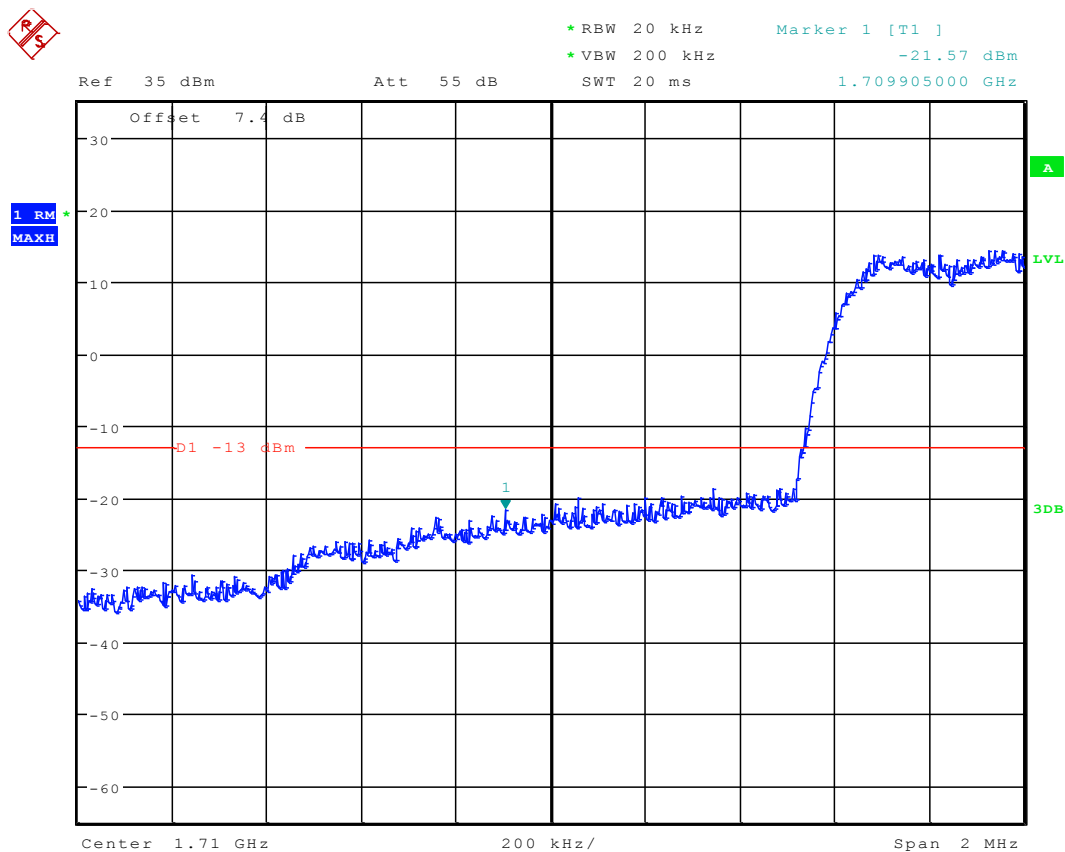


Right Edge
Channel 875



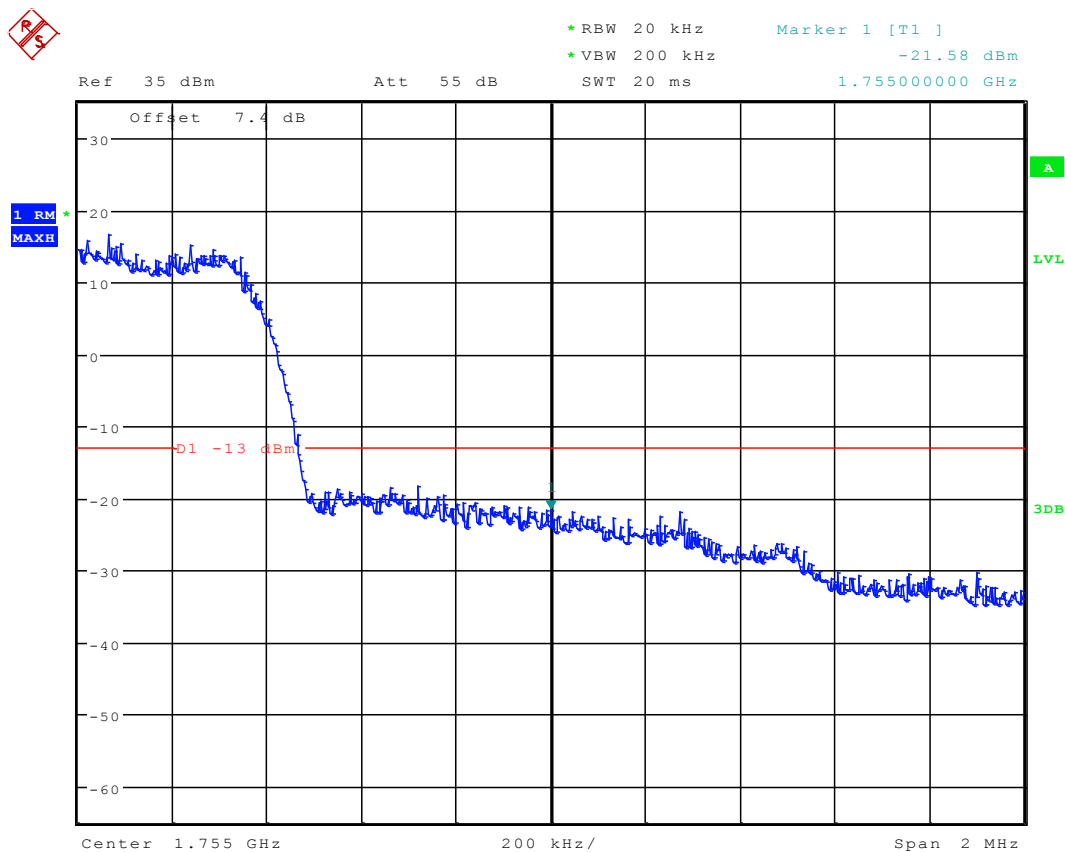
Modulation: 8PSK

Left Edge Channel 25



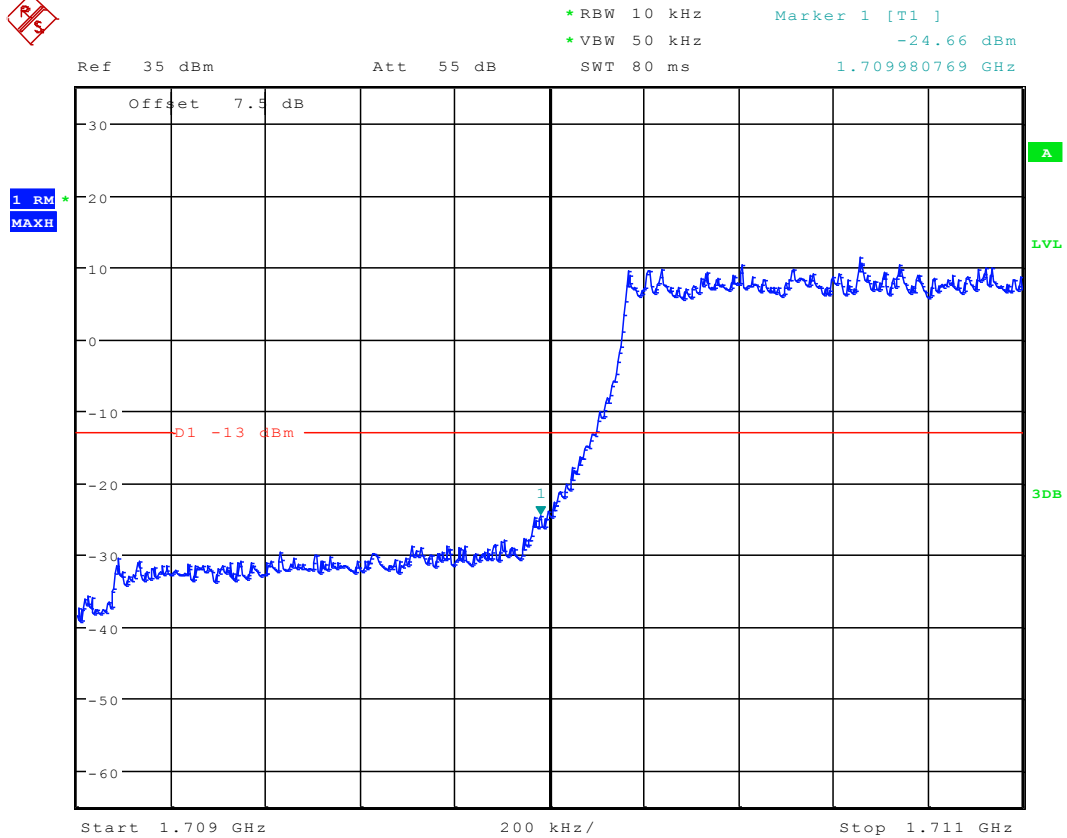


Right Edge Channel 875



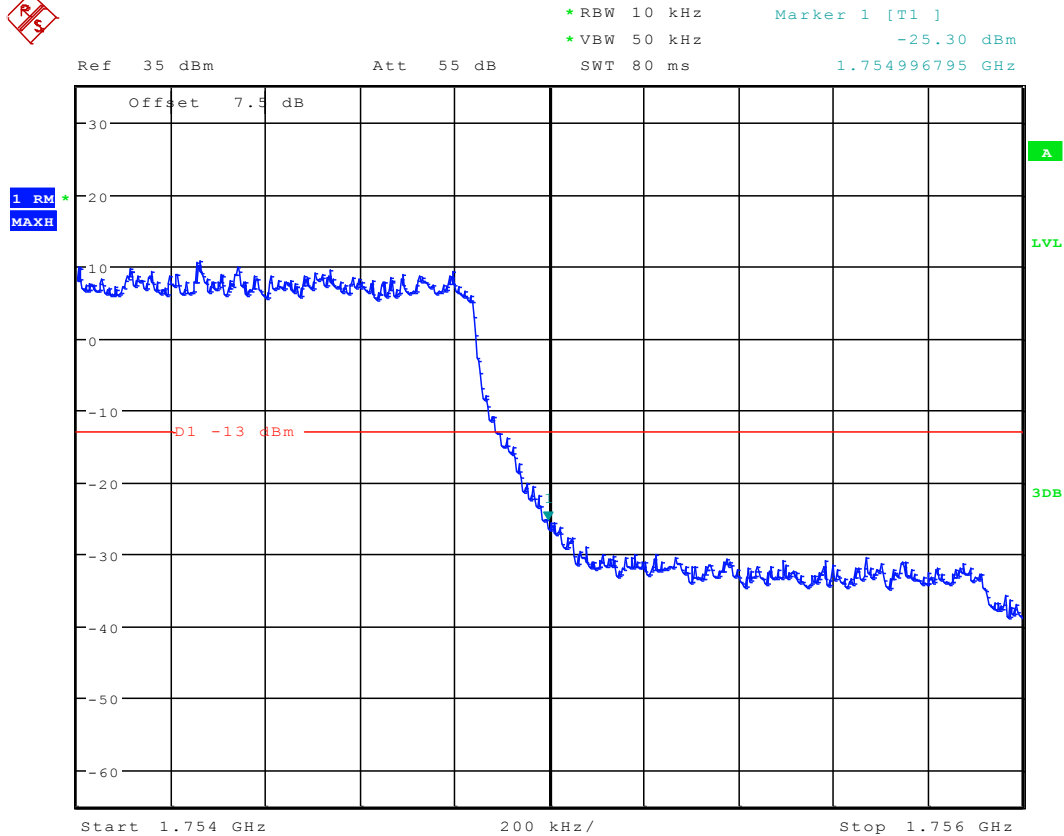


TM4
Left Edge
1.4MHz(BW)
Channel 19957



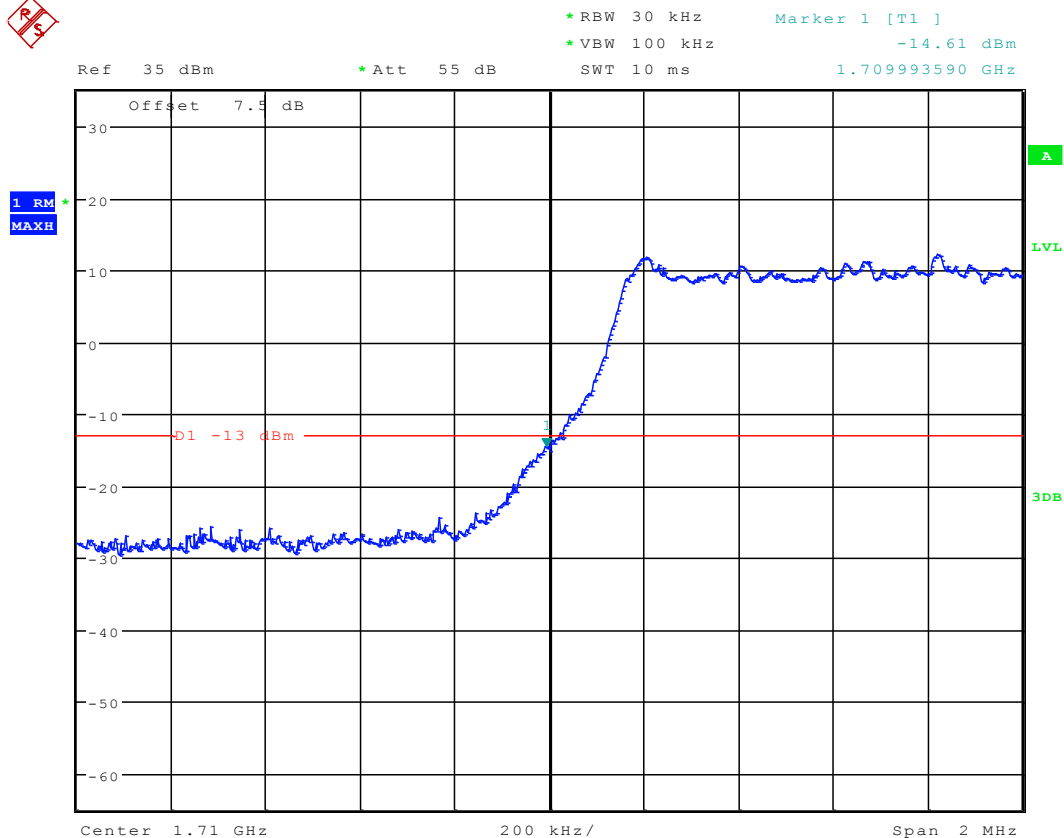


Right Edge 1.4MHz(BW) Channel 20393



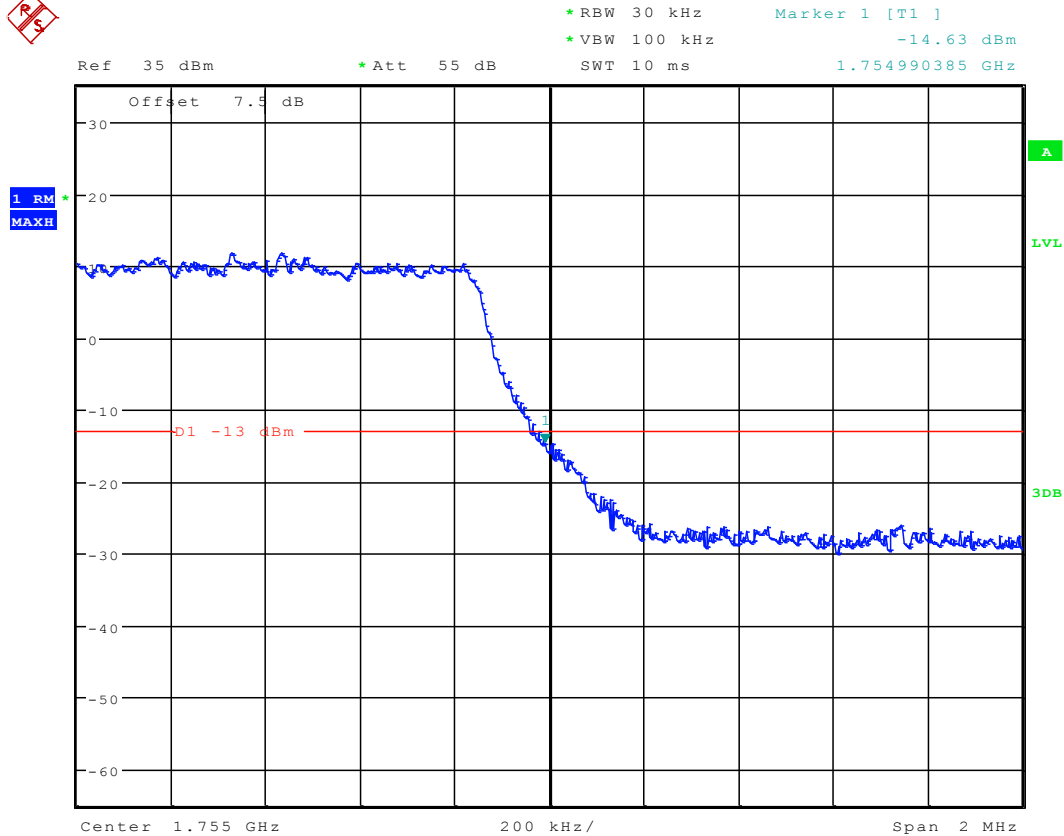


Left Edge 3MHz(BW) Channel 19965

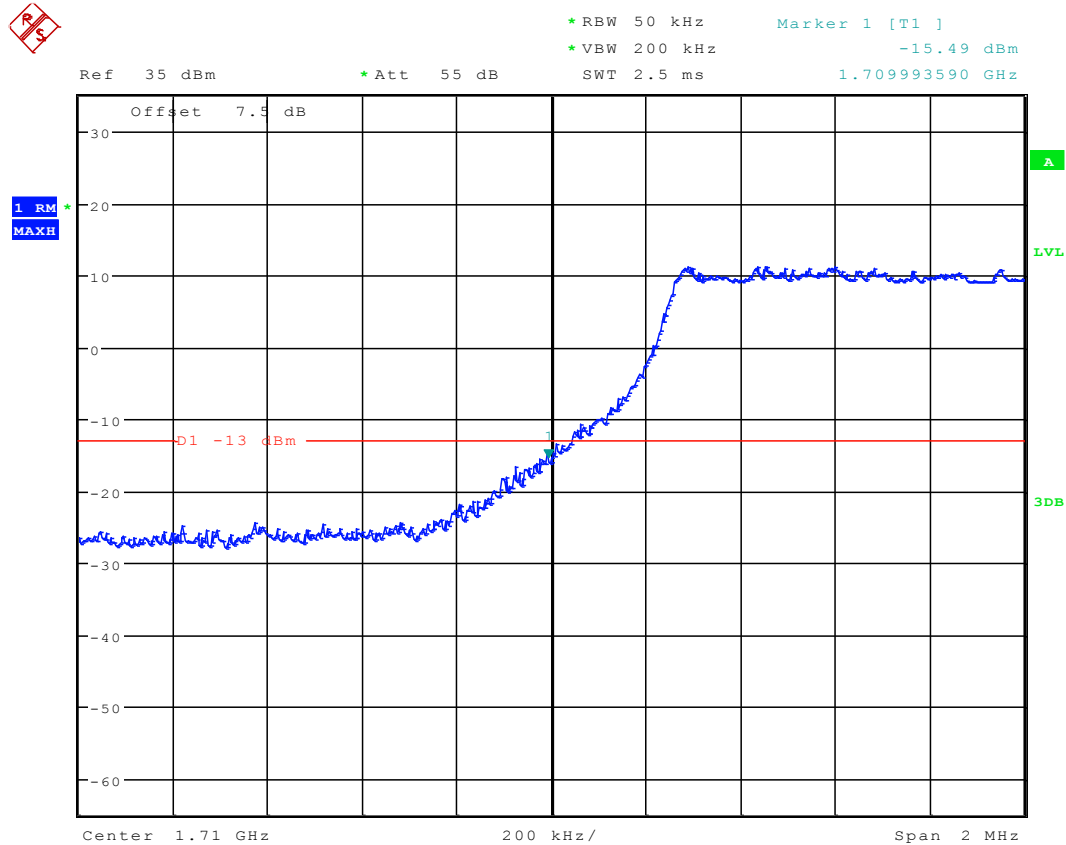




Right Edge 3MHz(BW) Channel 20385

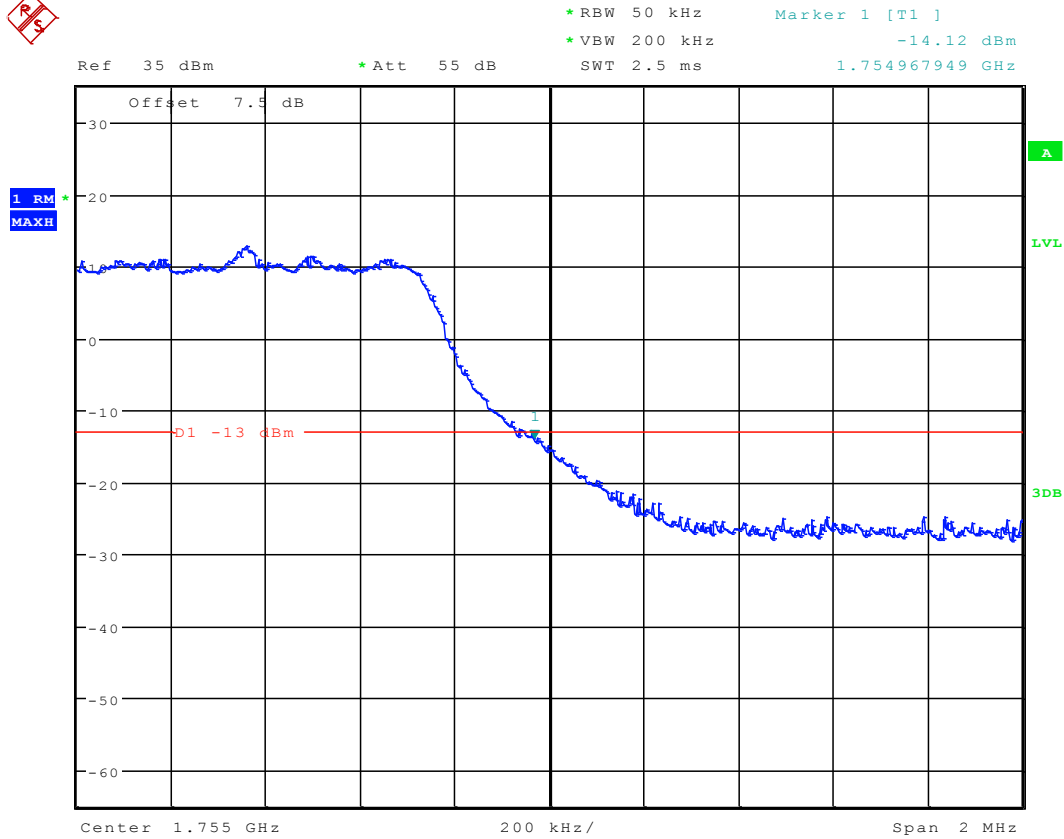


Left Edge
5MHz(BW)
Channel 19975



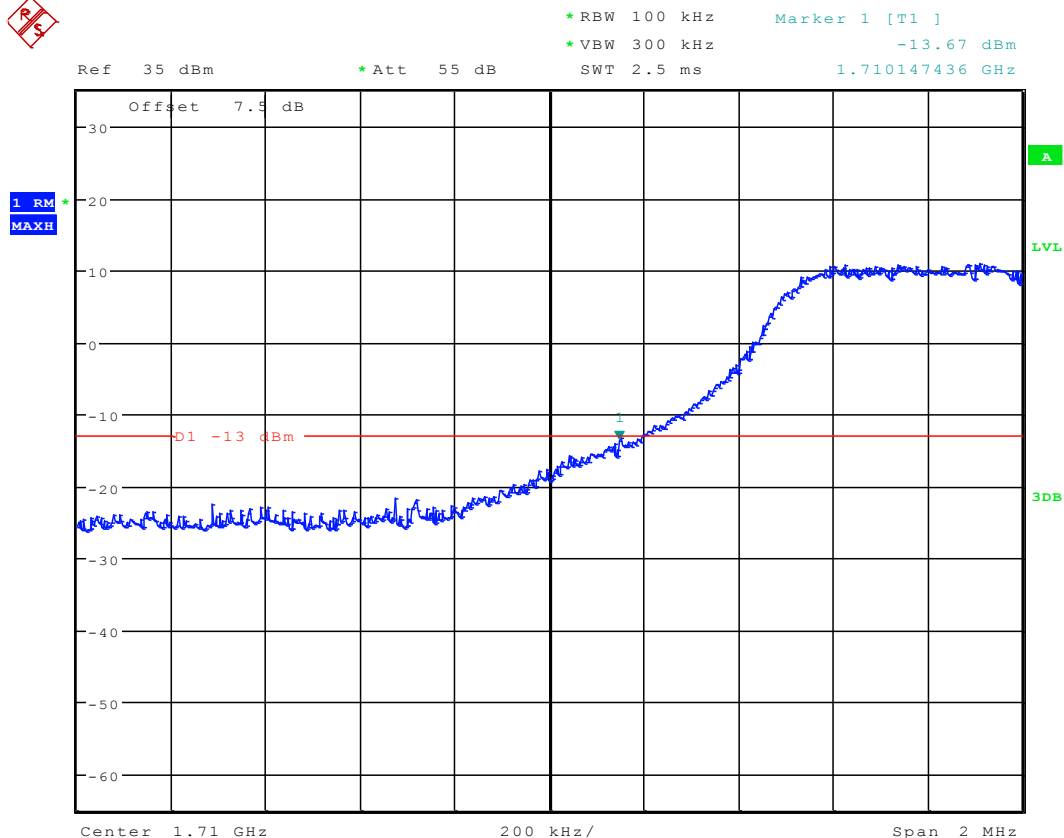


Right Edge 5MHz(BW) Channel 20375



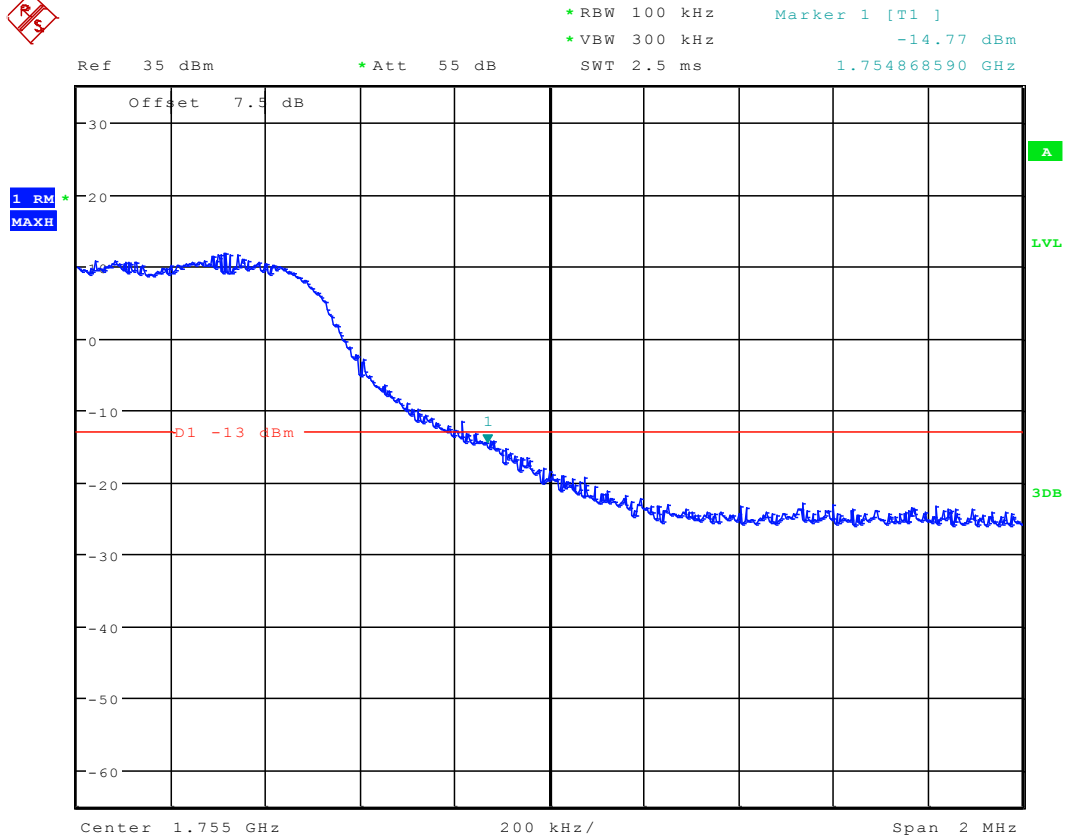


Left Edge 10MHz(BW) Channel 20000



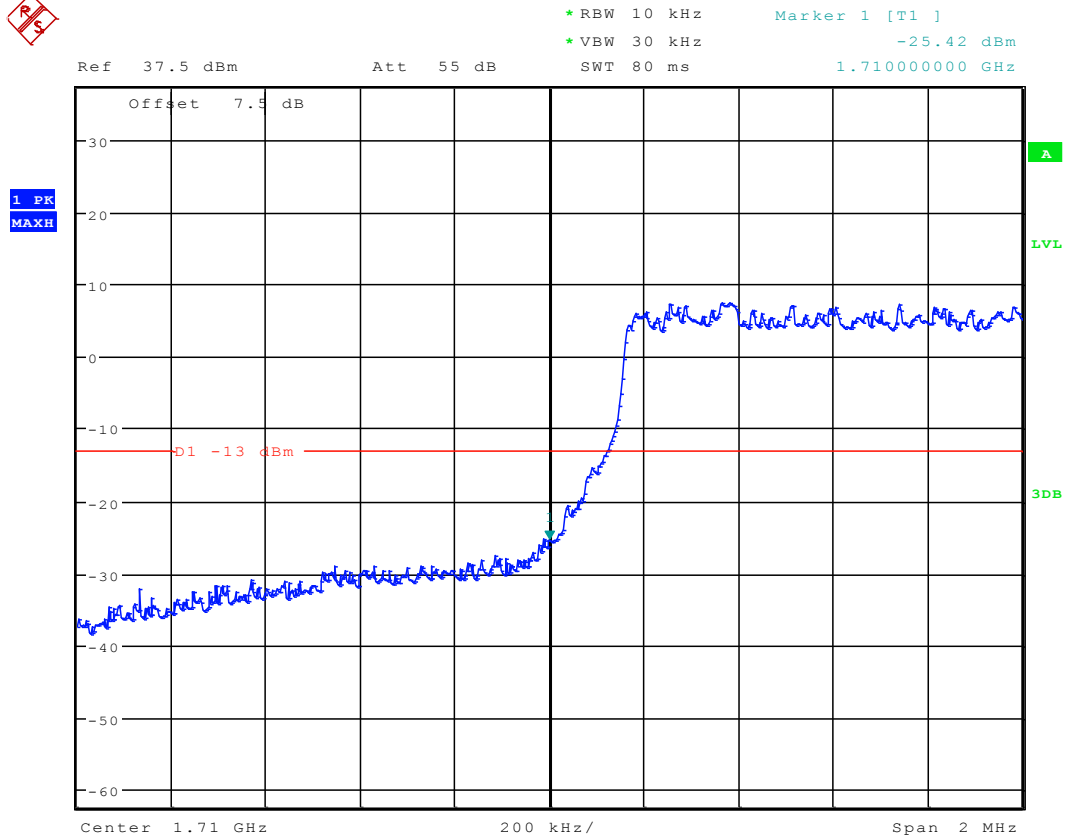


Right Edge 10MHz(BW) Channel 20350



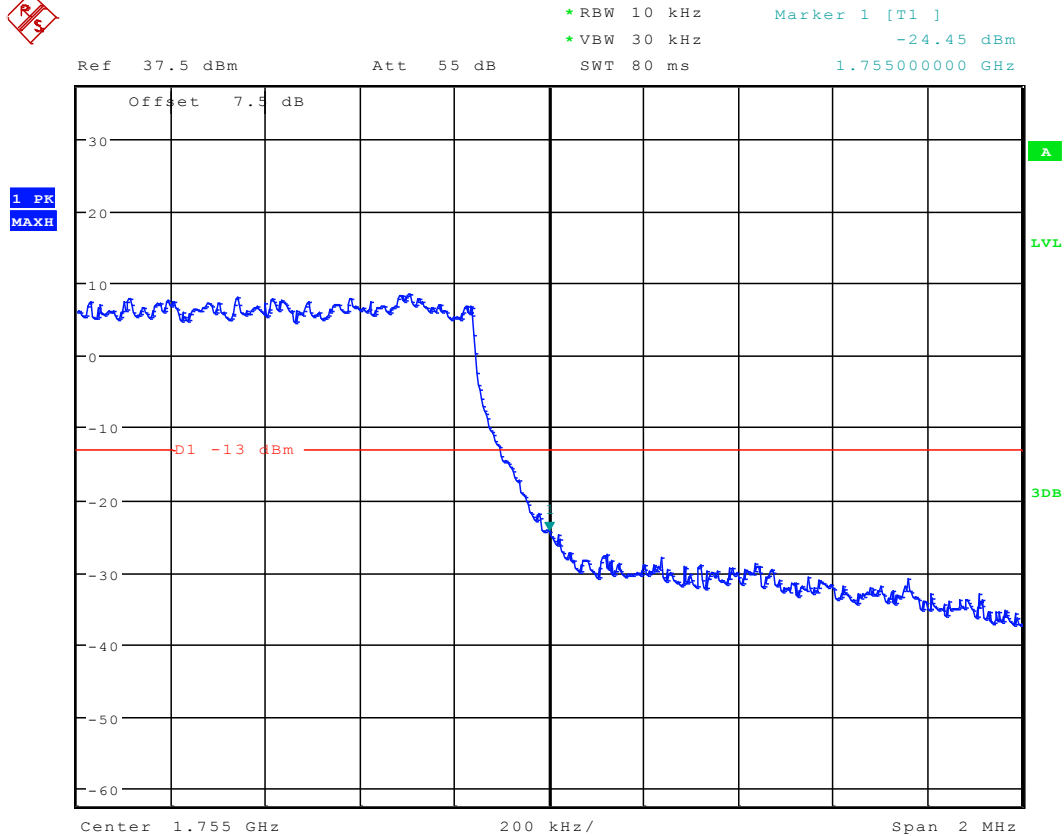


TM5
Left Edge
1.4MHz(BW)
Channel 19957



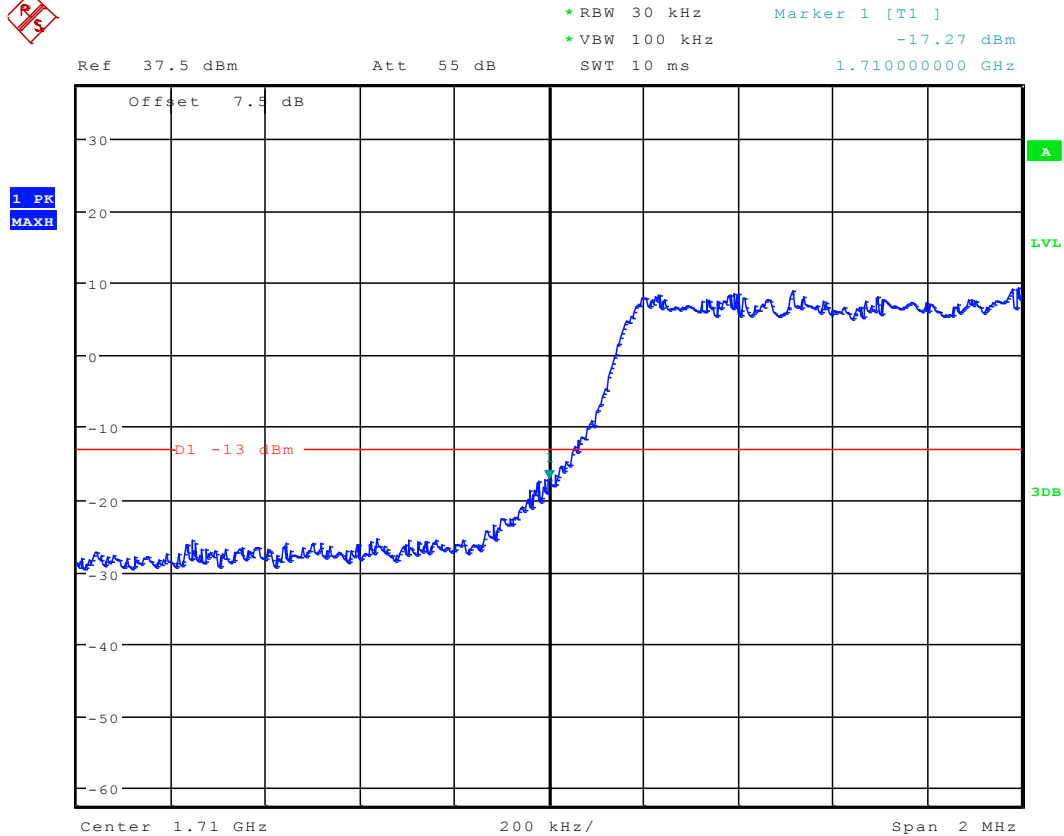


Right Edge 1.4MHz(BW) Channel 20393





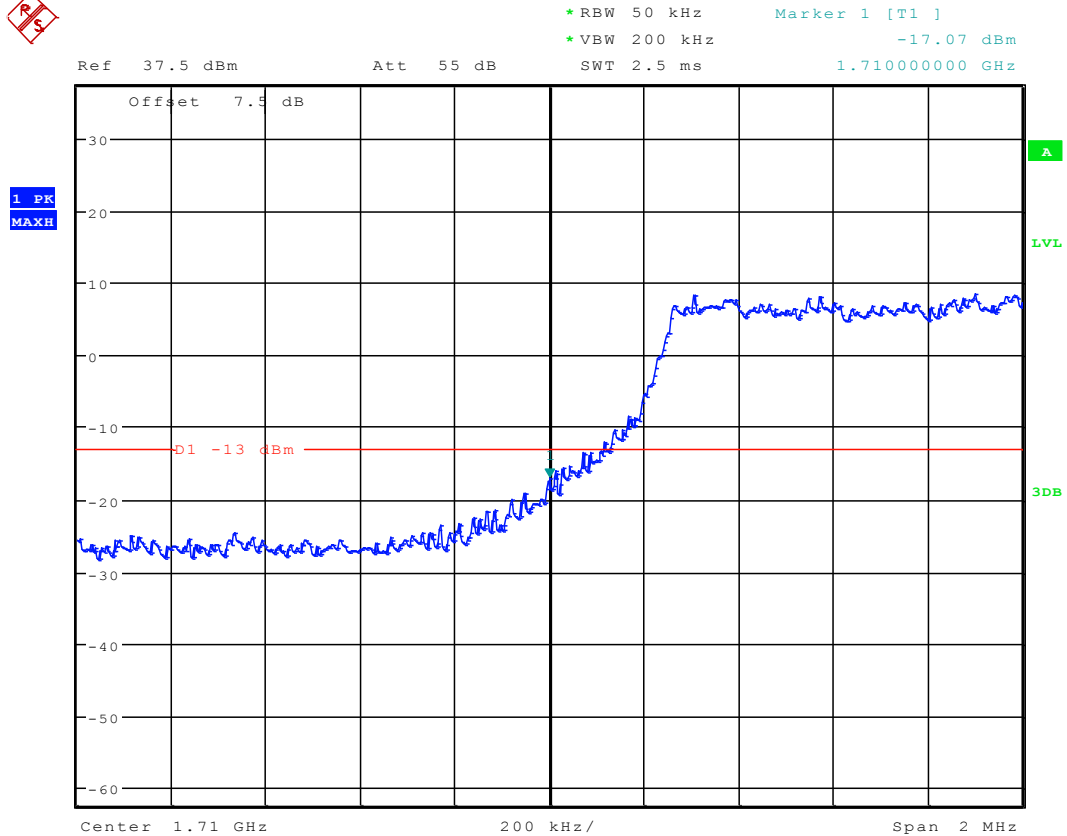
Left Edge 3MHz(BW) Channel 19965



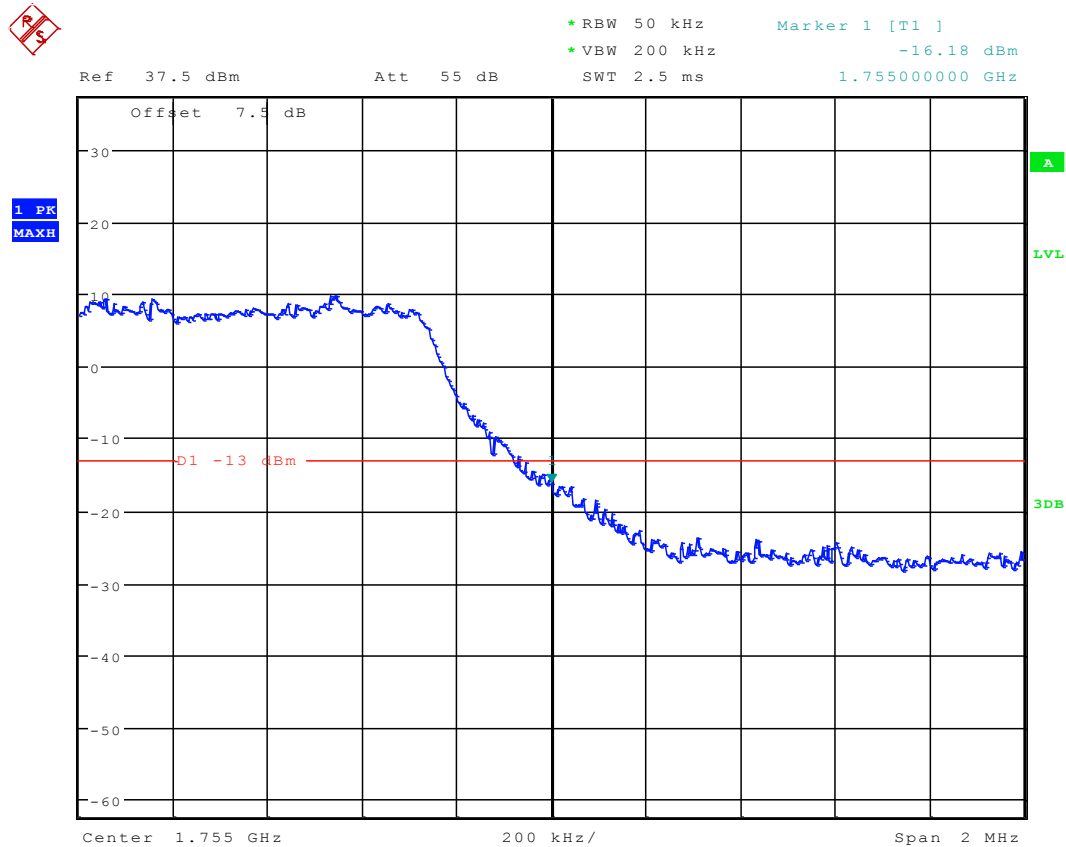




Left Edge 5MHz(BW) Channel 19975

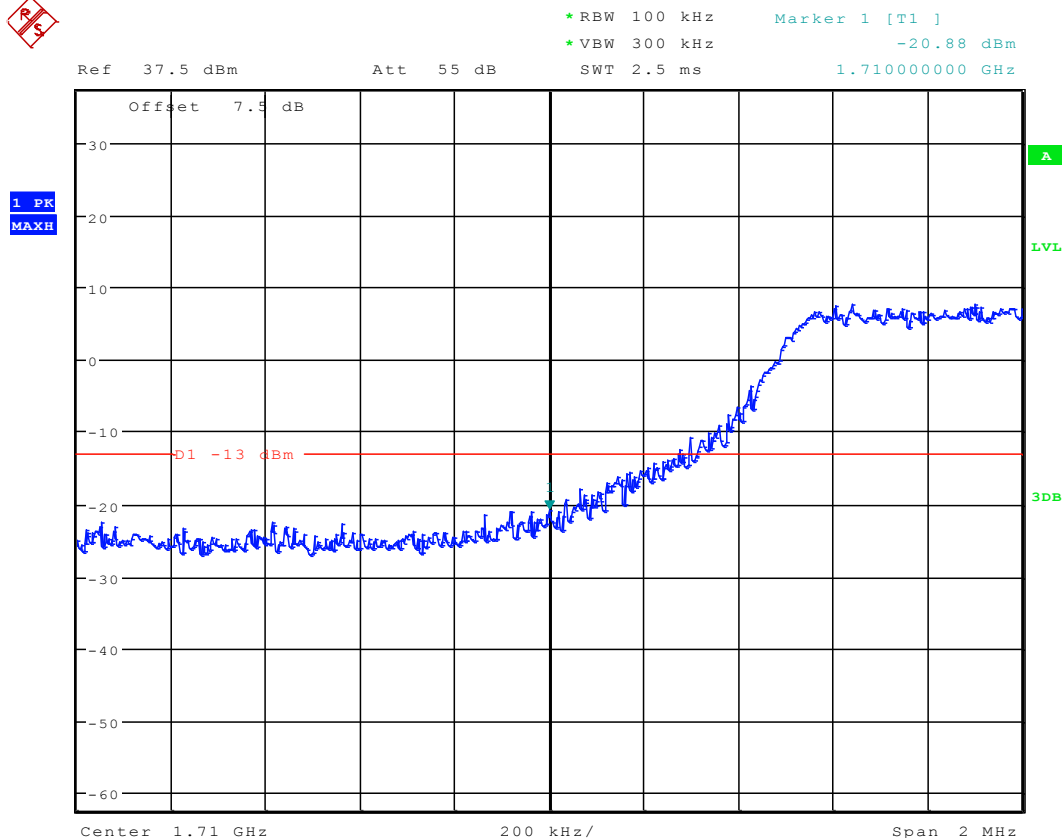


Right Edge
5MHz(BW)
Channel 20375



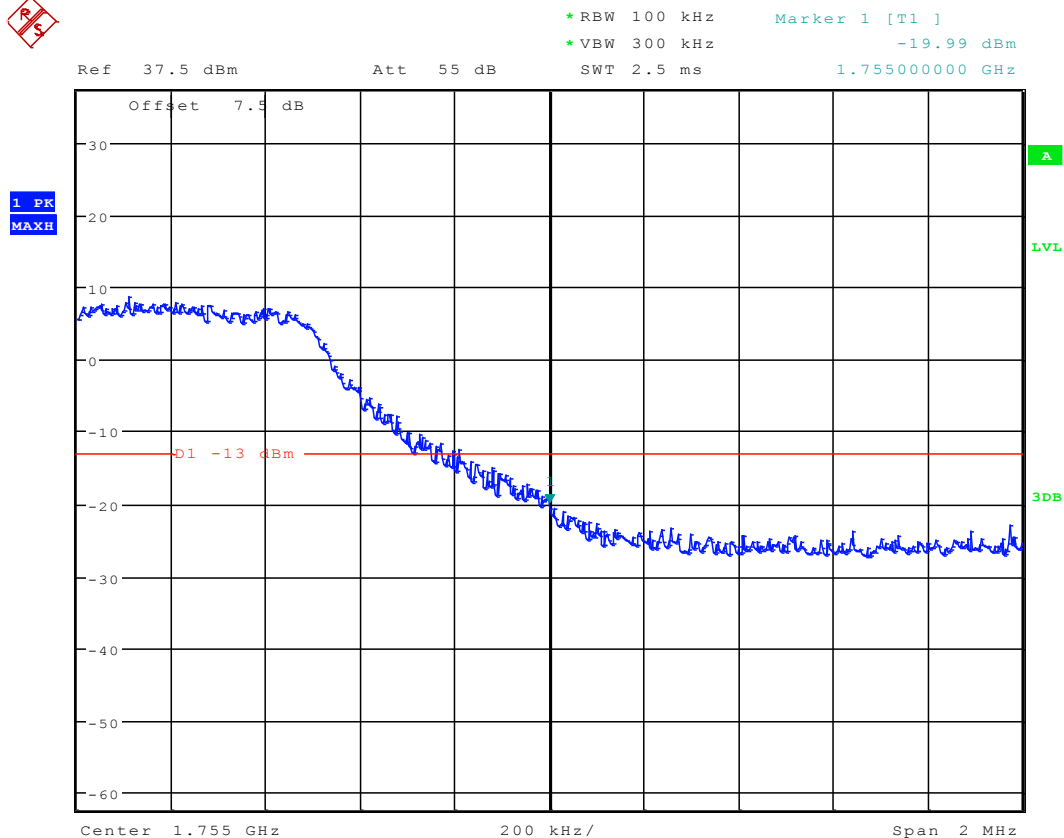


Left Edge 10MHz(BW) Channel 20000





Right Edge 10MHz(BW) Channel 20350





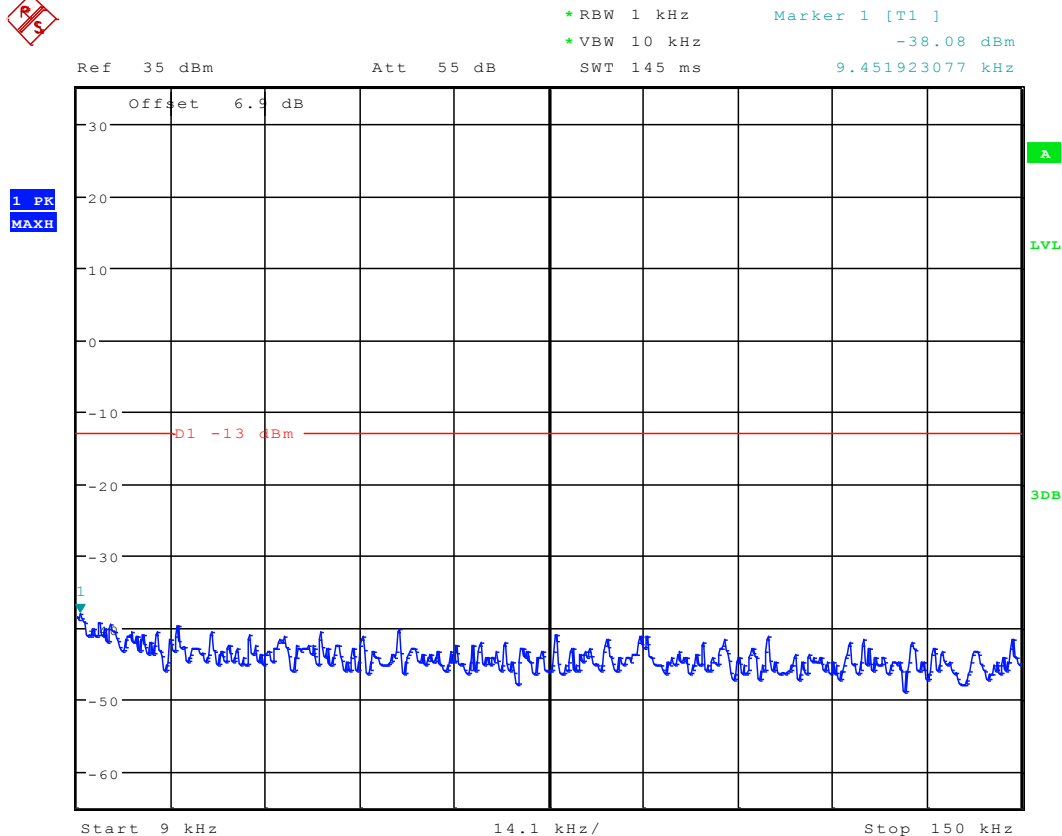
Appendix D

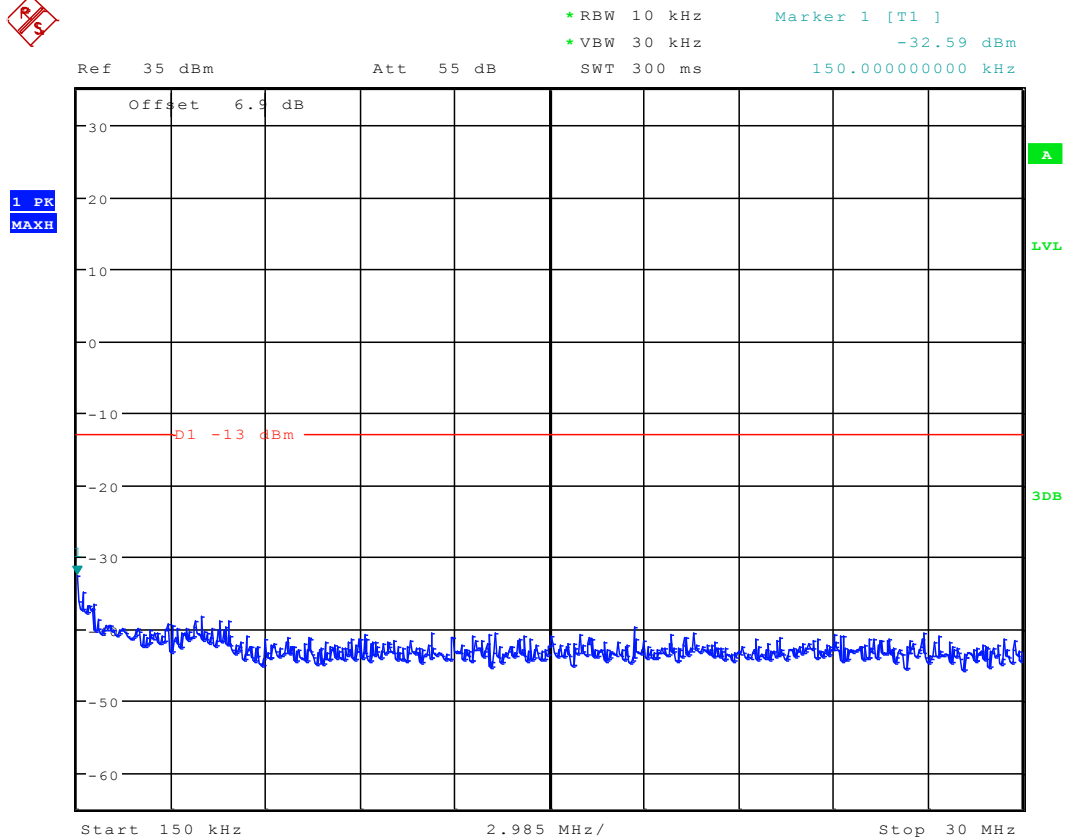
Spurious Emission at Antenna Terminal

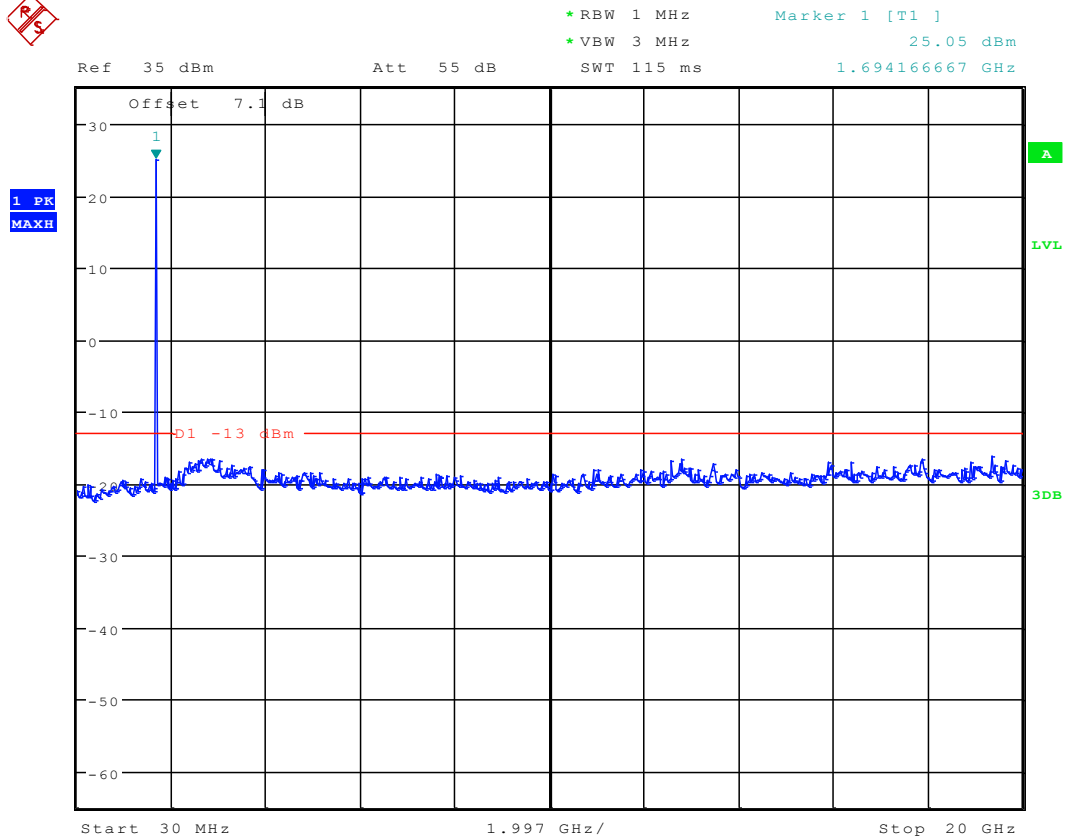
According to FCC Part 2.1051 & 27.53(g)



Channel 25 (TM1)

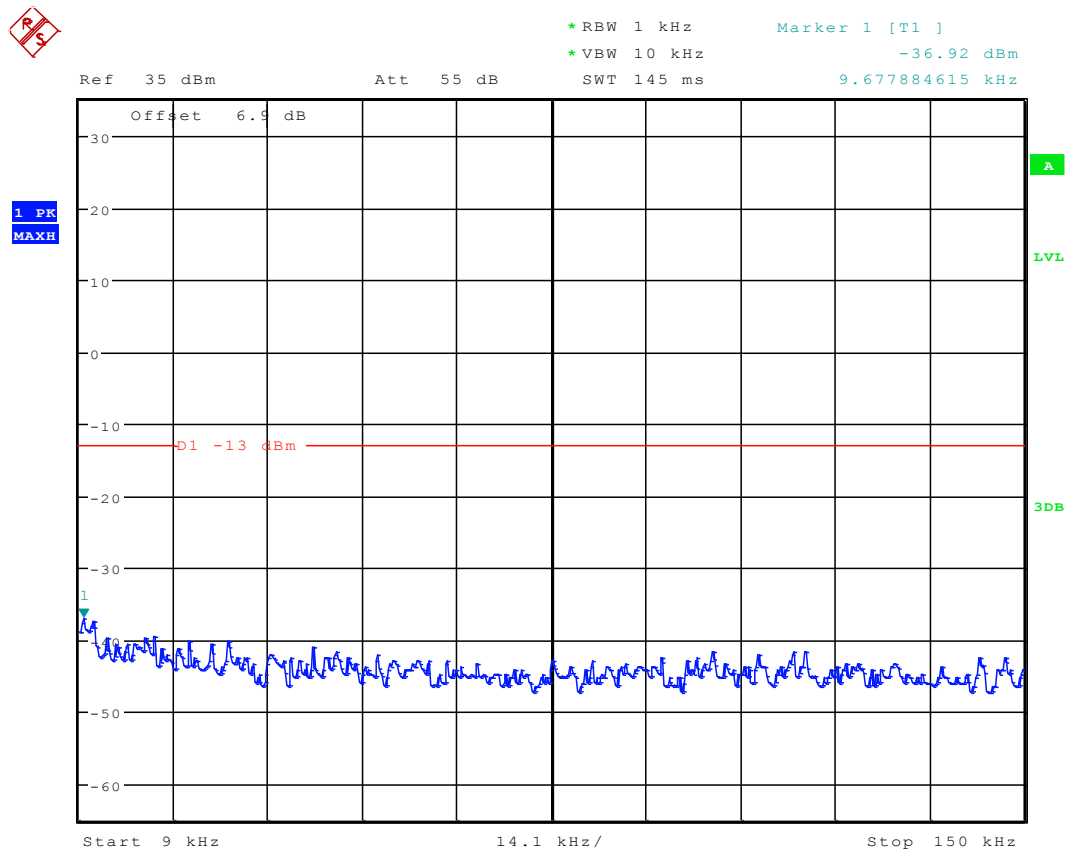


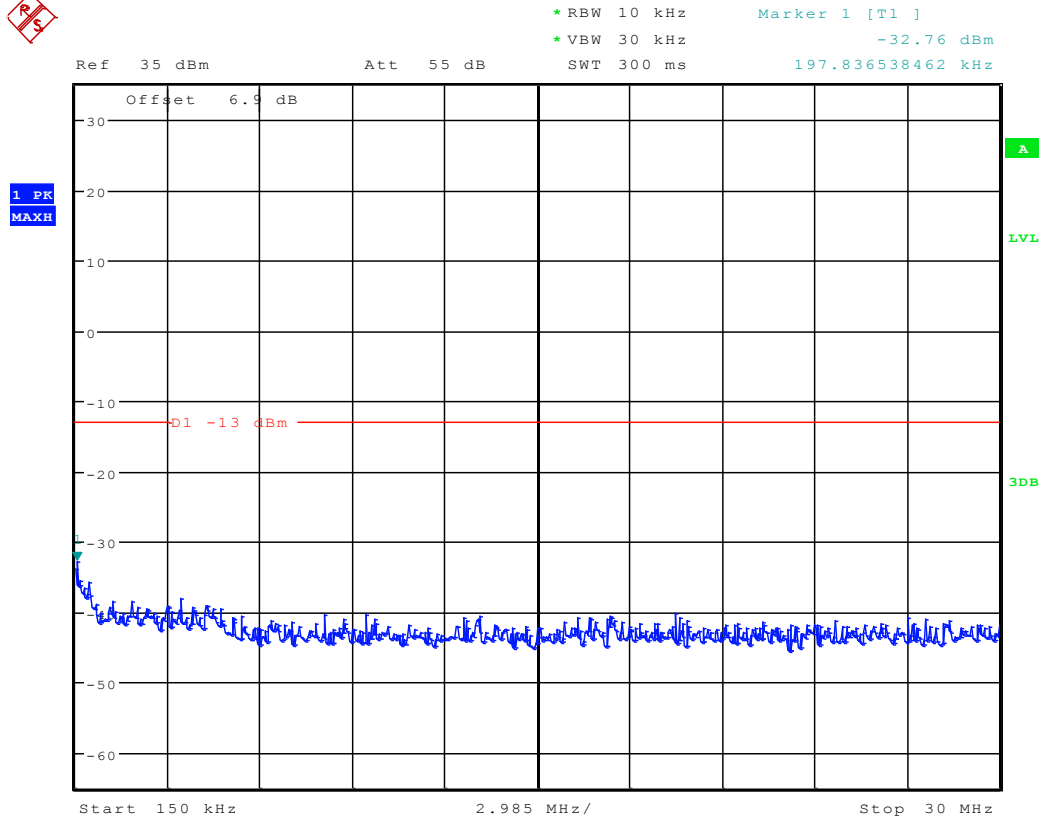


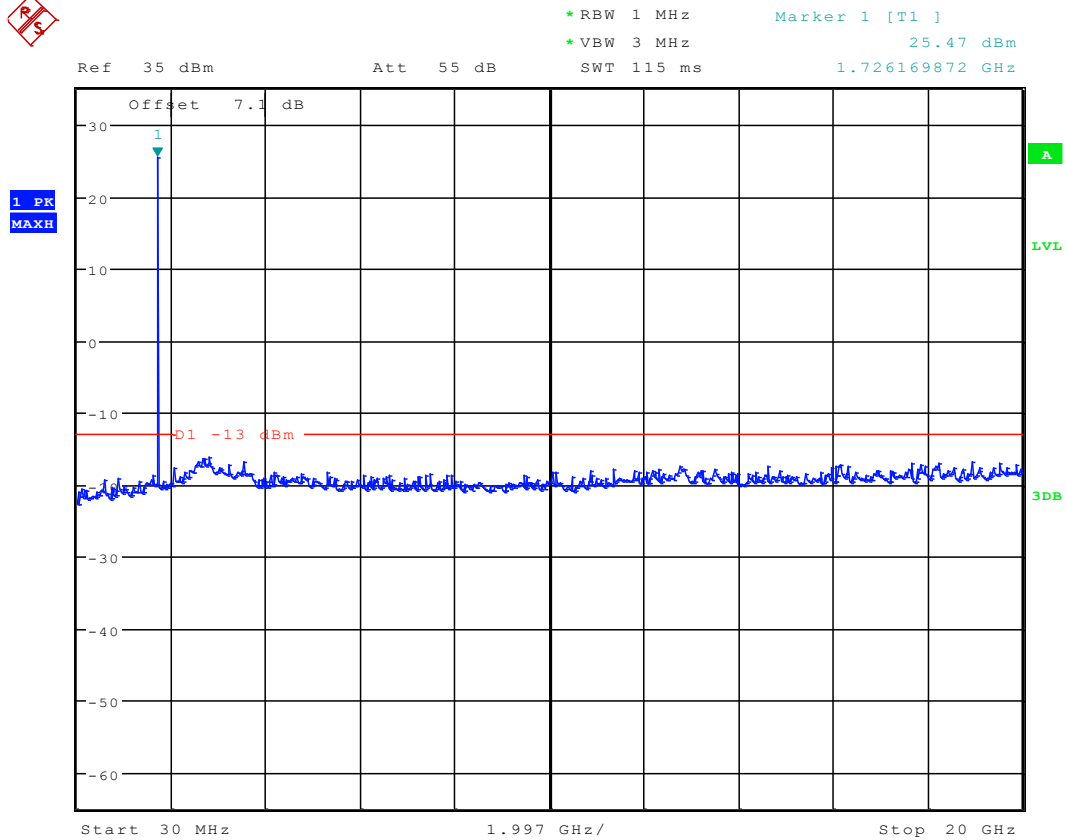




Channel 450 (TM1)

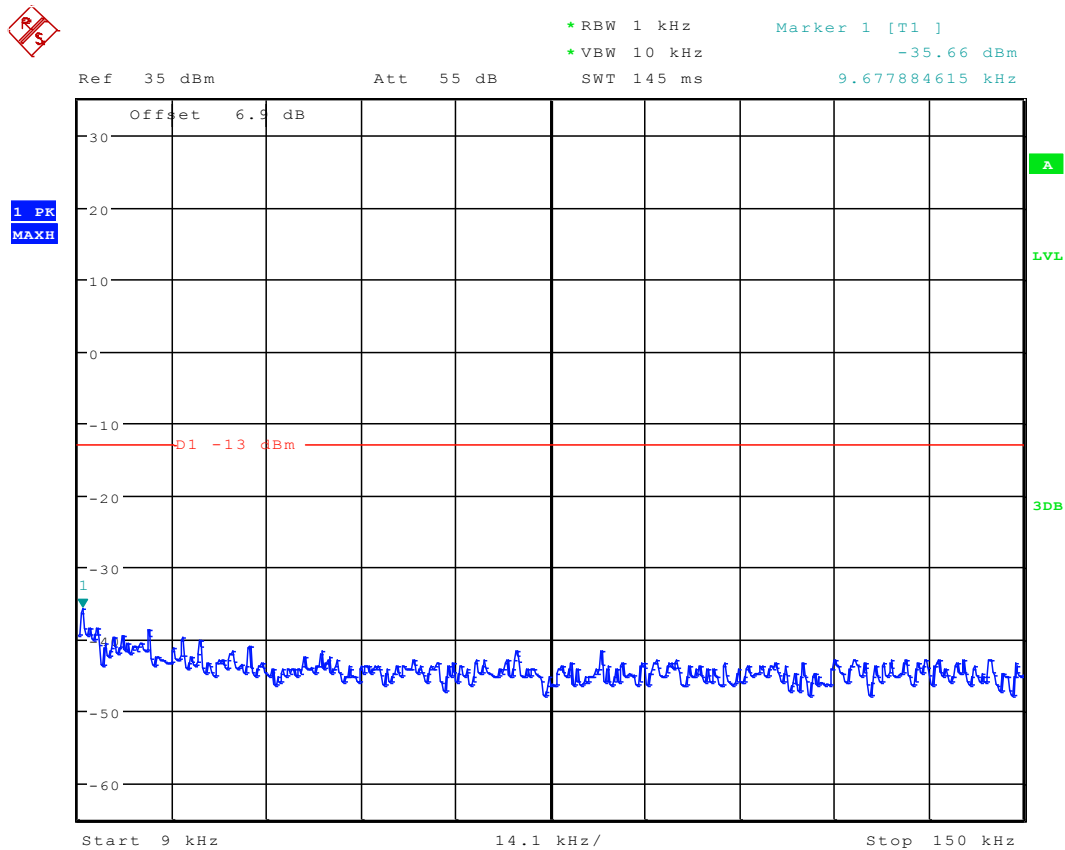


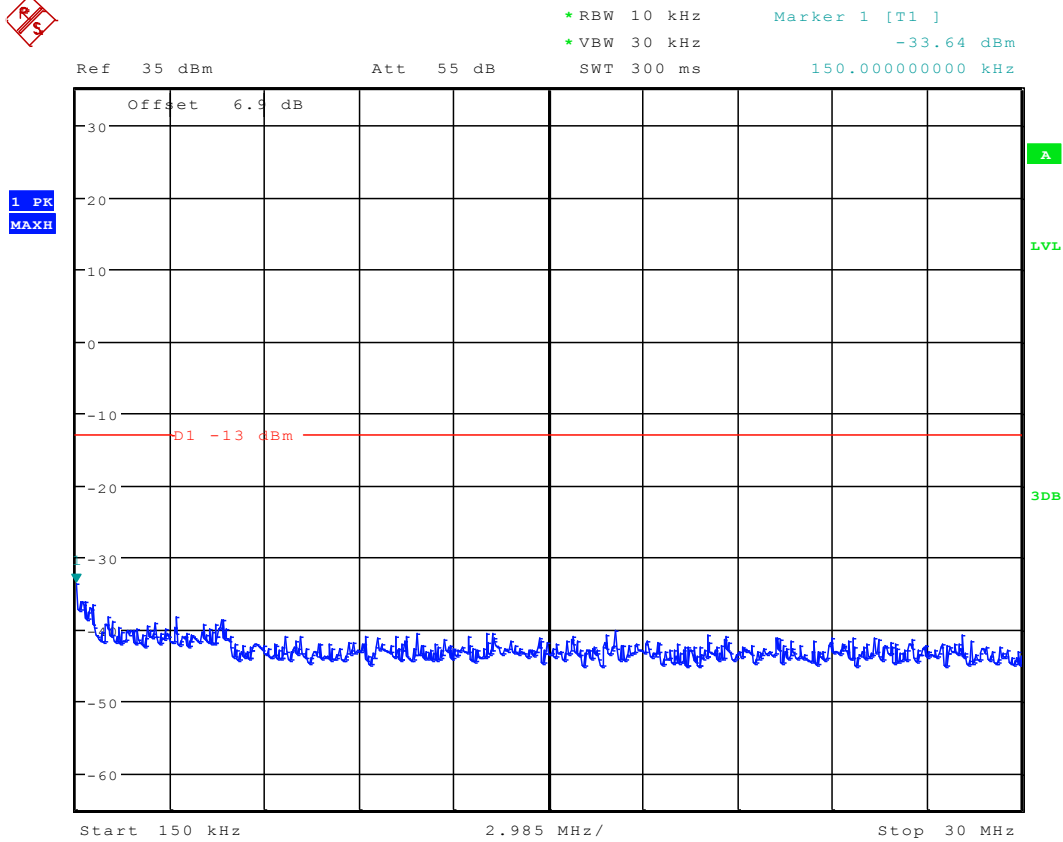


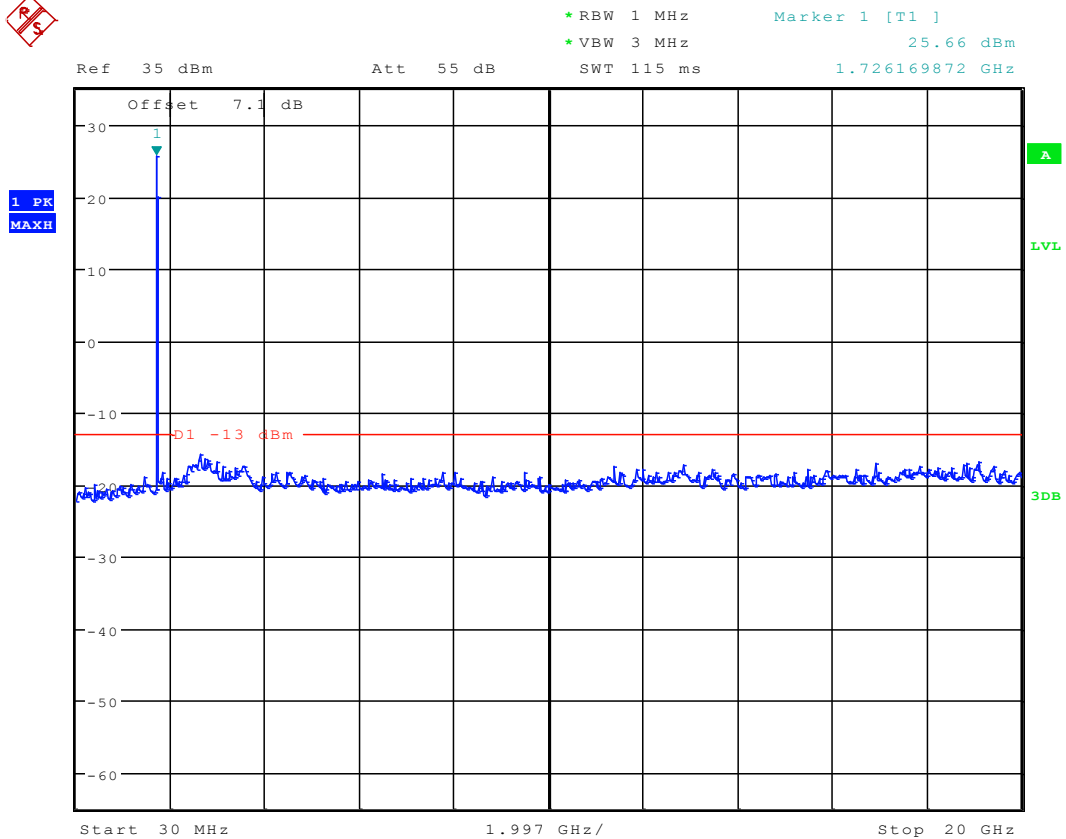




Channel 875 (TM1)

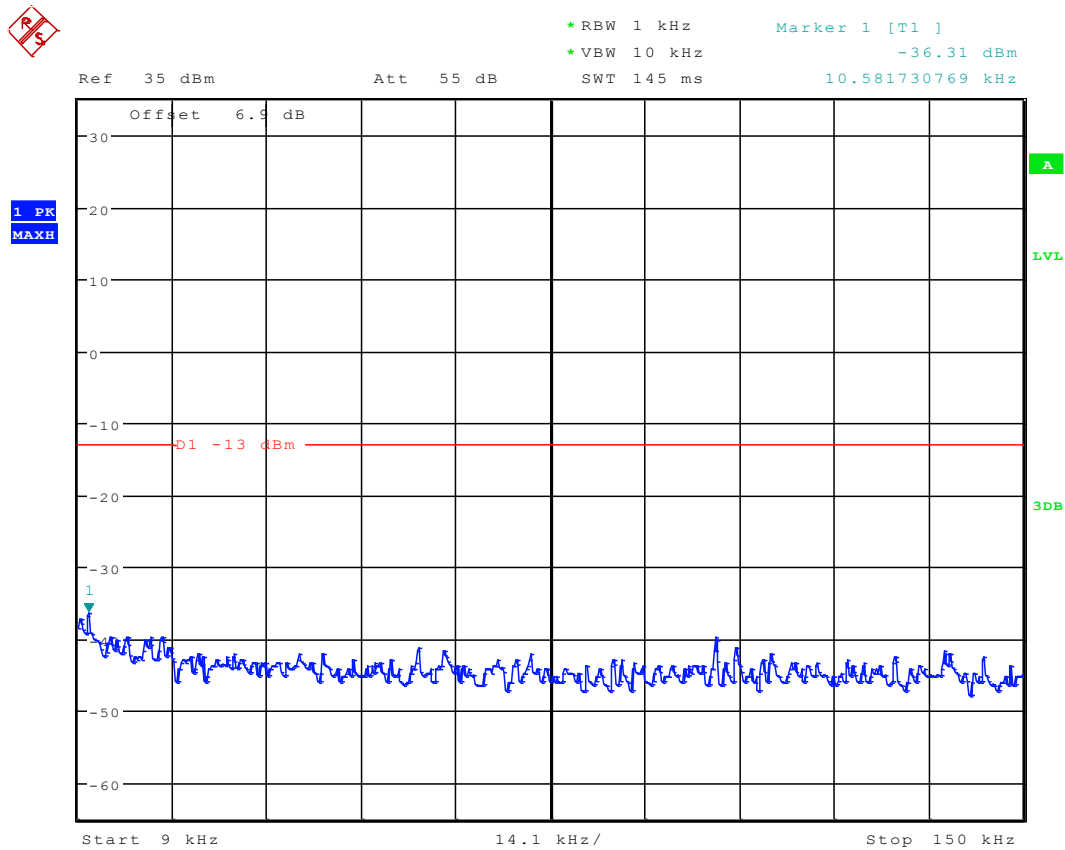


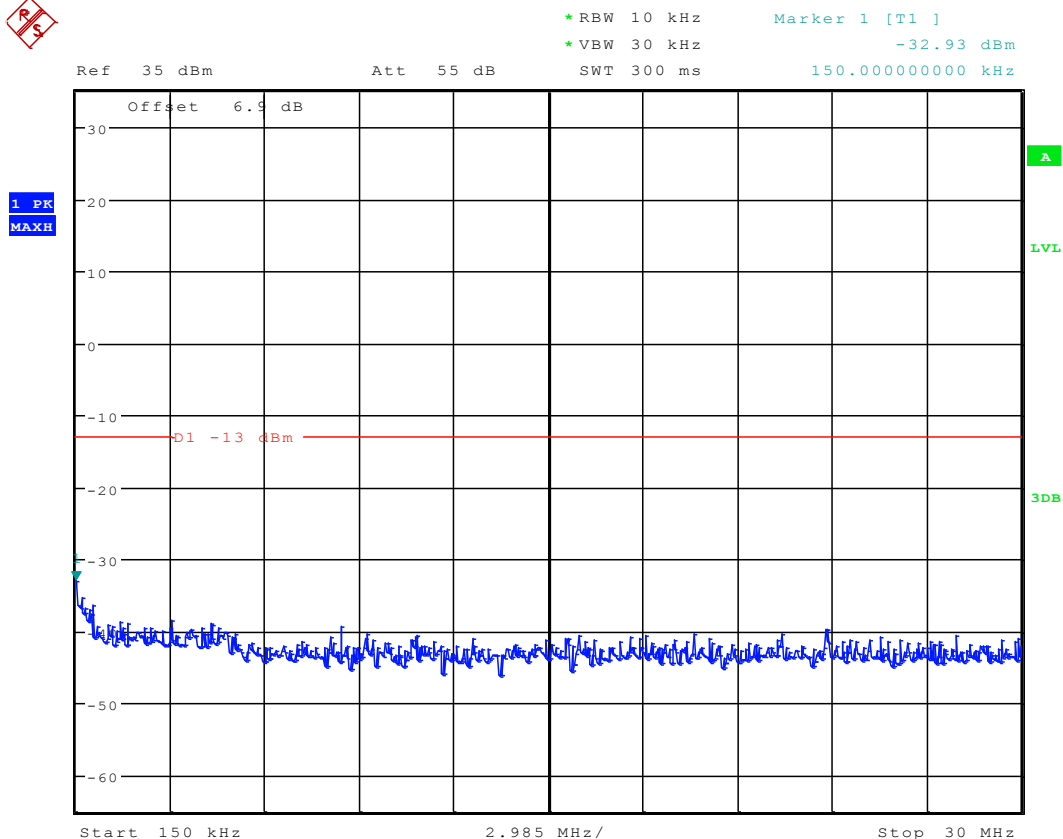


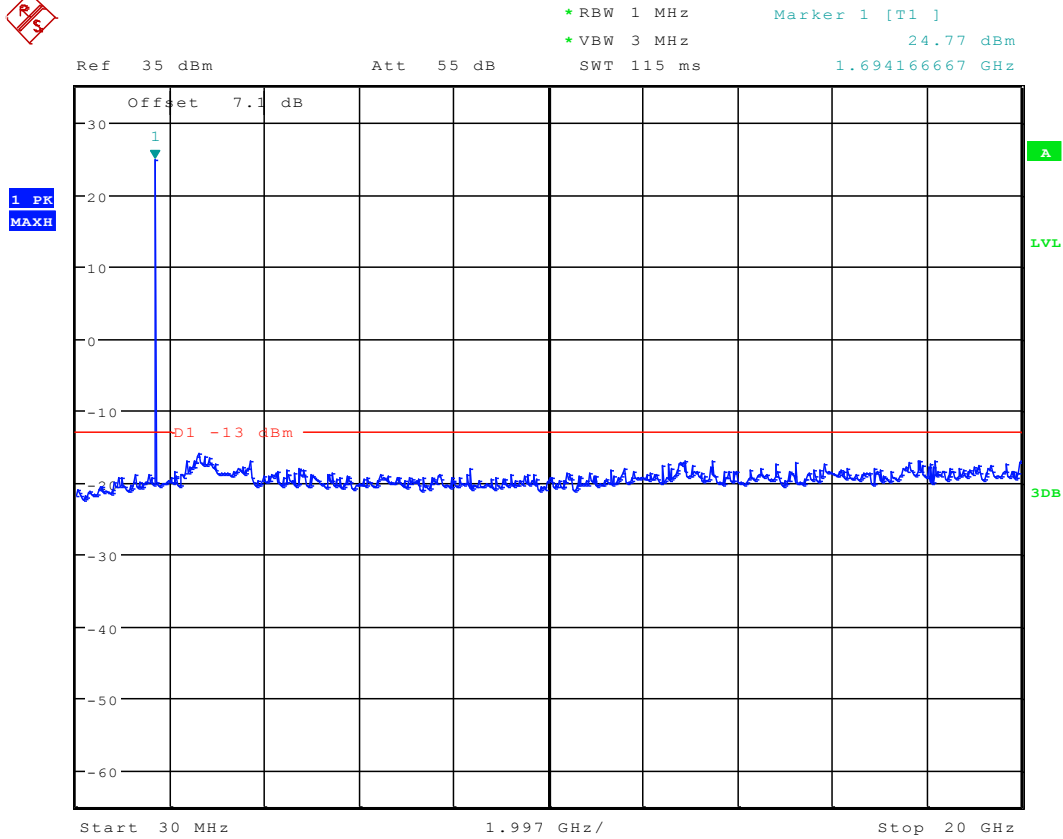




Channel 25 (TM3)

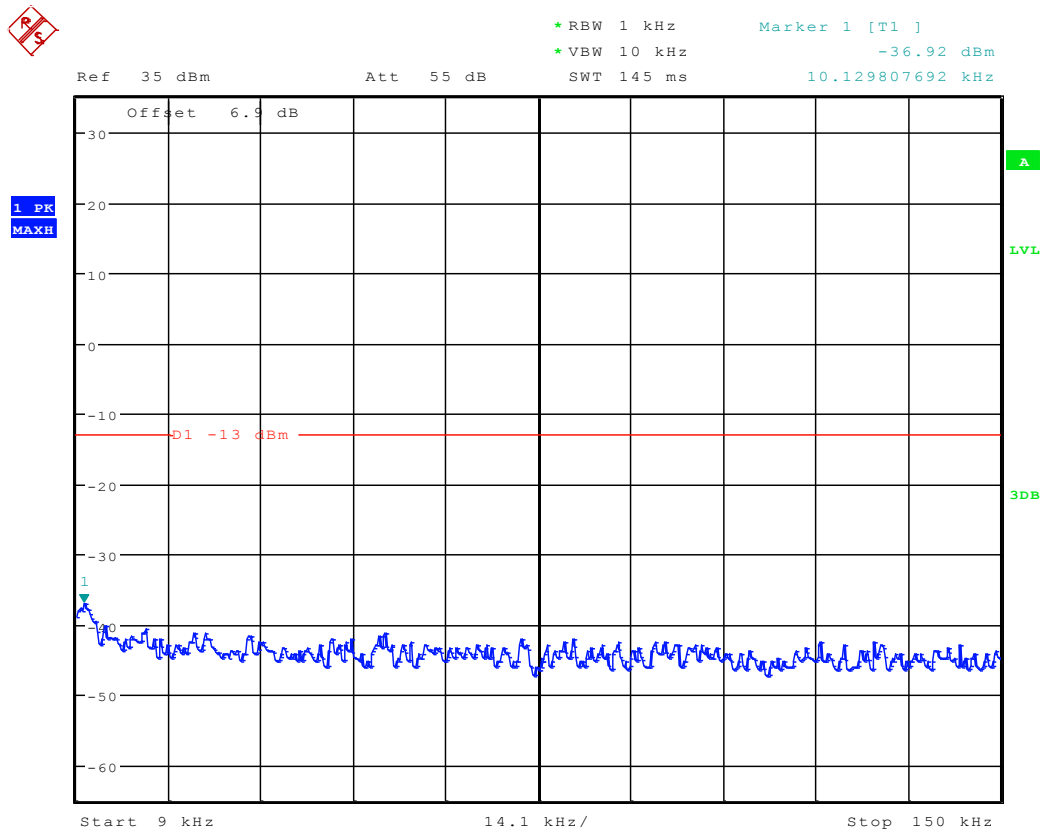


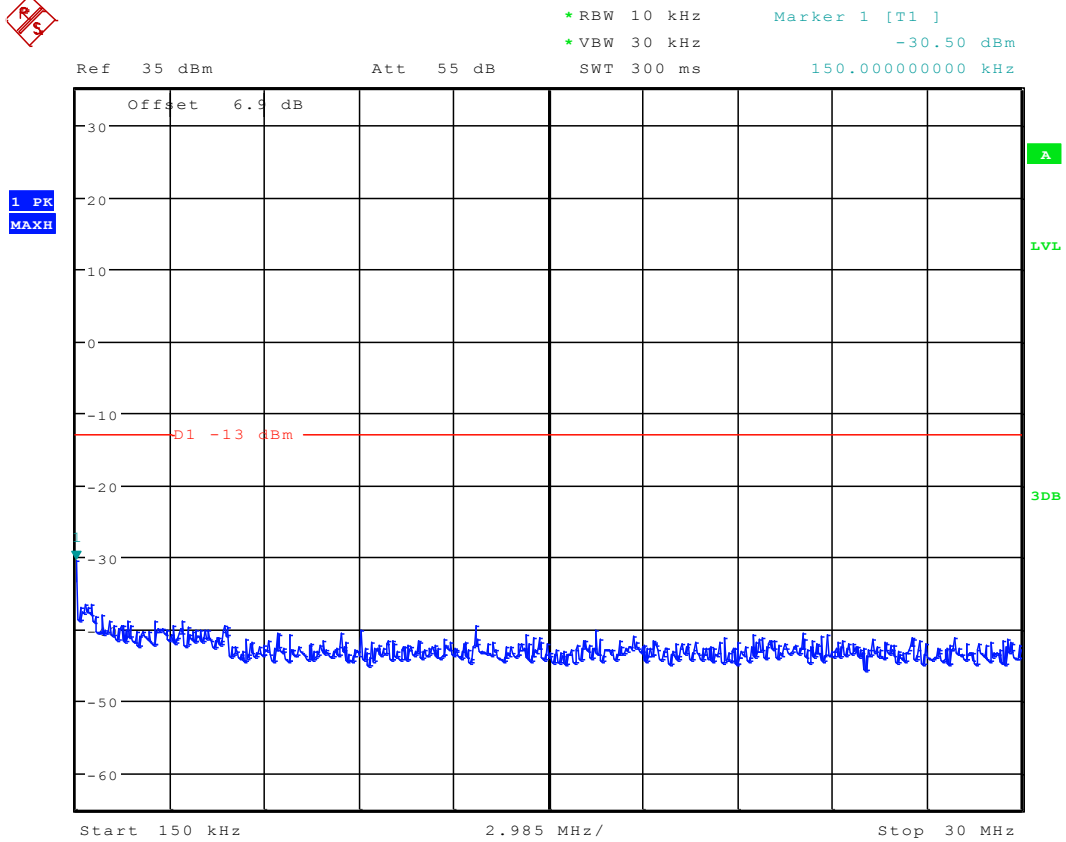






Channel 450 (TM3)







1.726169872 GHz

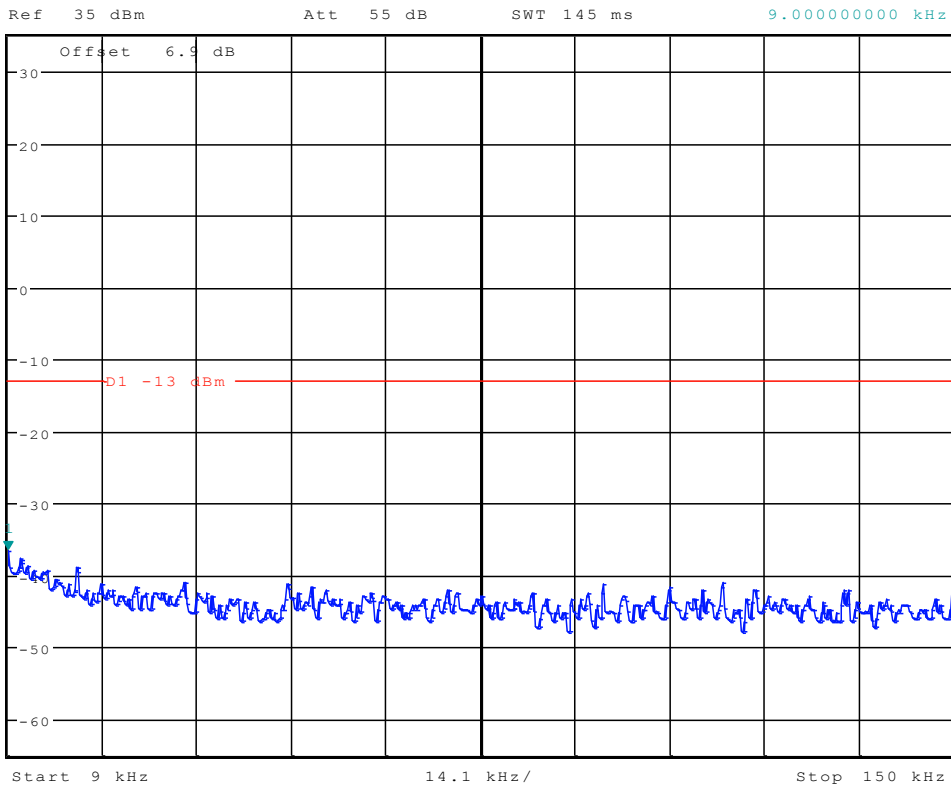
3DB



Channel 875 (TM3)

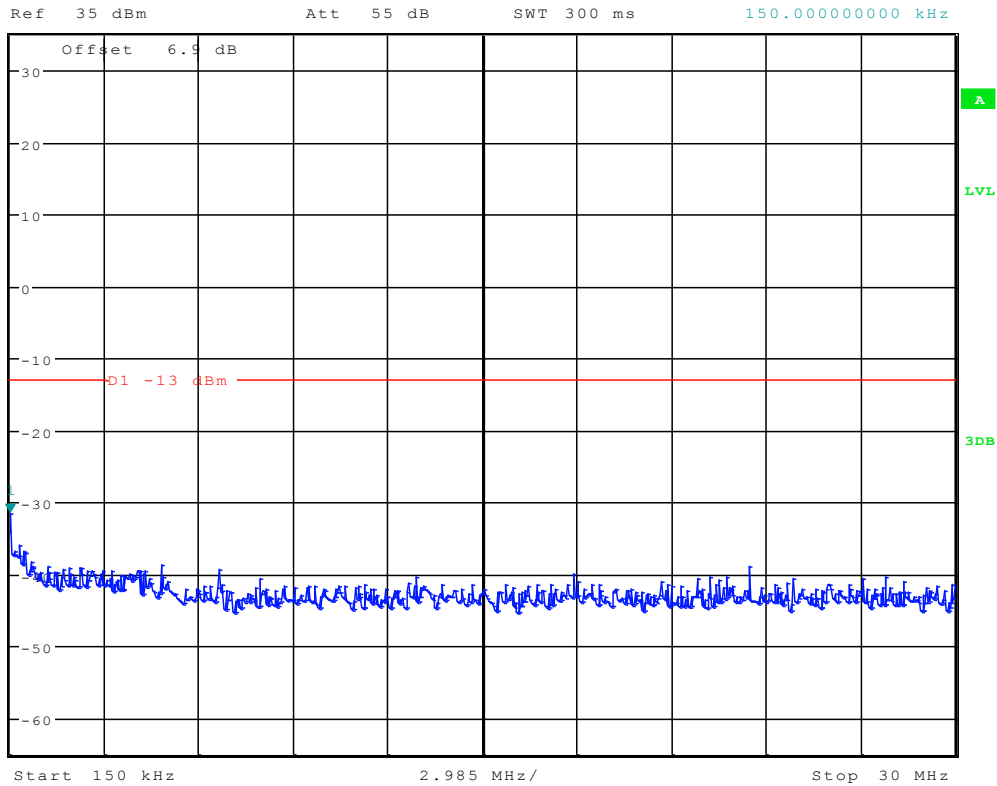


* RBW 1 kHz
* VBW 10 kHz
Marker 1 [T1]
-36.48 dBm
9.000000000 kHz



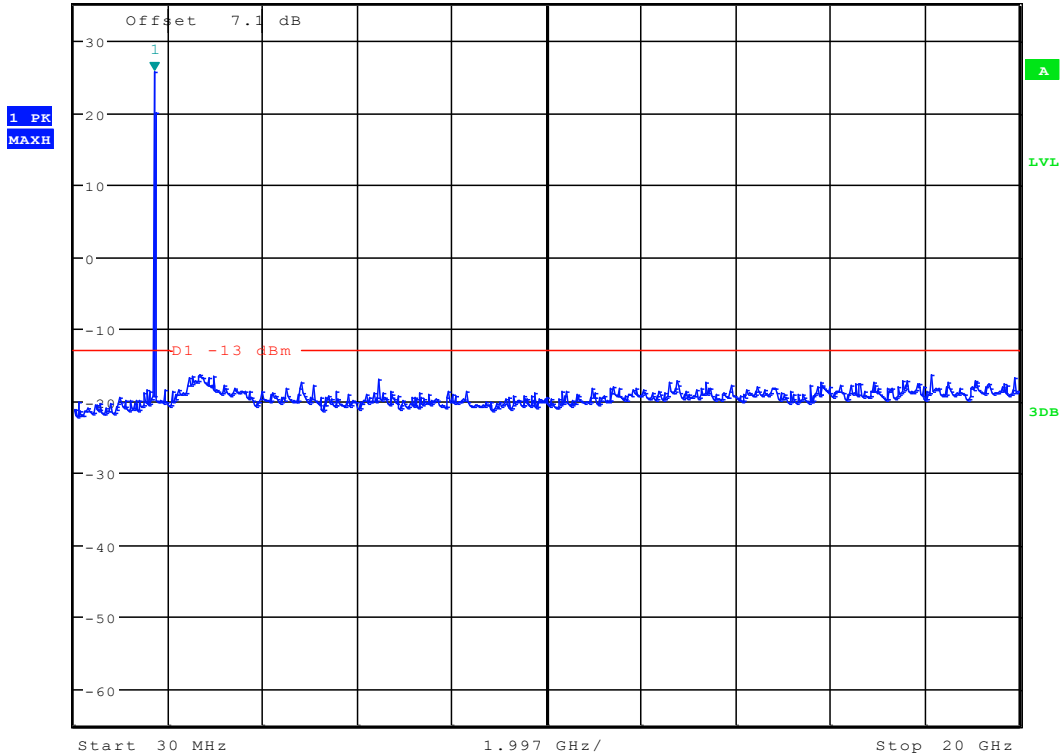


* RBW 10 kHz Marker 1 [T1]
* VBW 30 kHz -31.51 dBm
SWT 300 ms 150.000000000 kHz



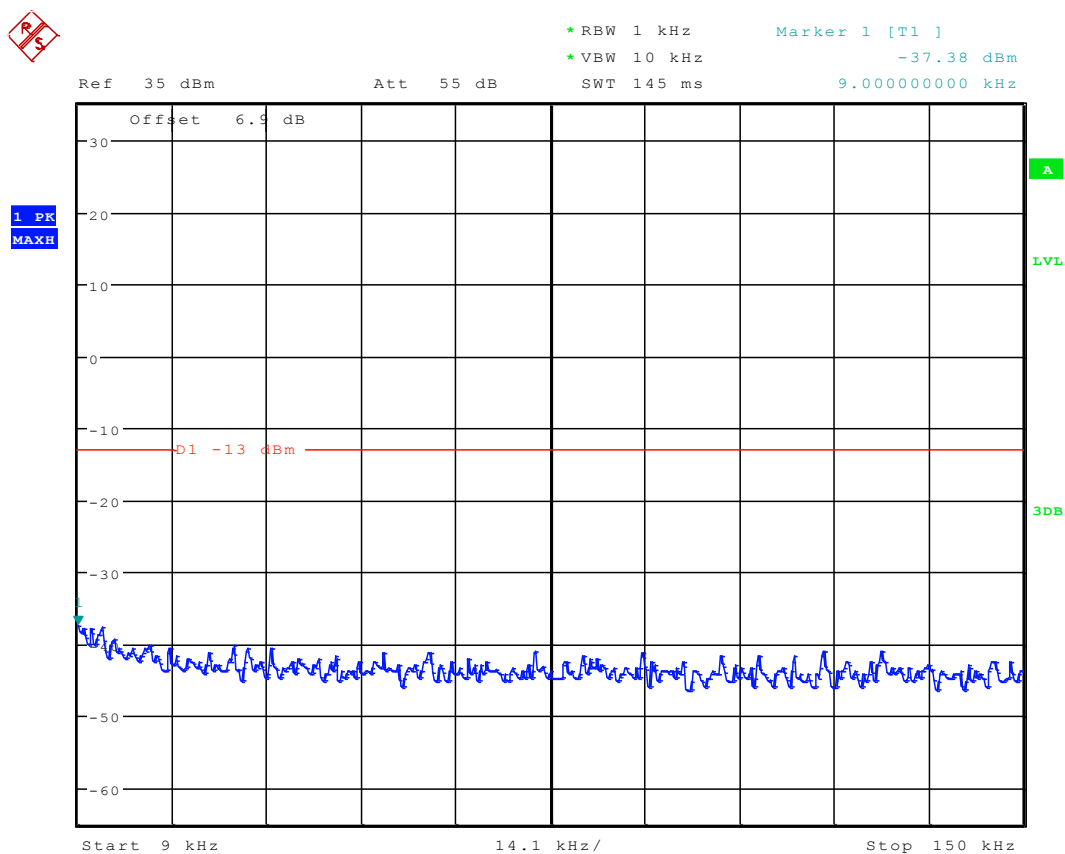


Ref	35 dBm	Att	55 dB	SWT	115 ms	1.726169872 GHz
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EVDO subtype 0 Channel 25





Ref 35 dBm Att 55 dB SWT 300 ms 197.836538462 kHz

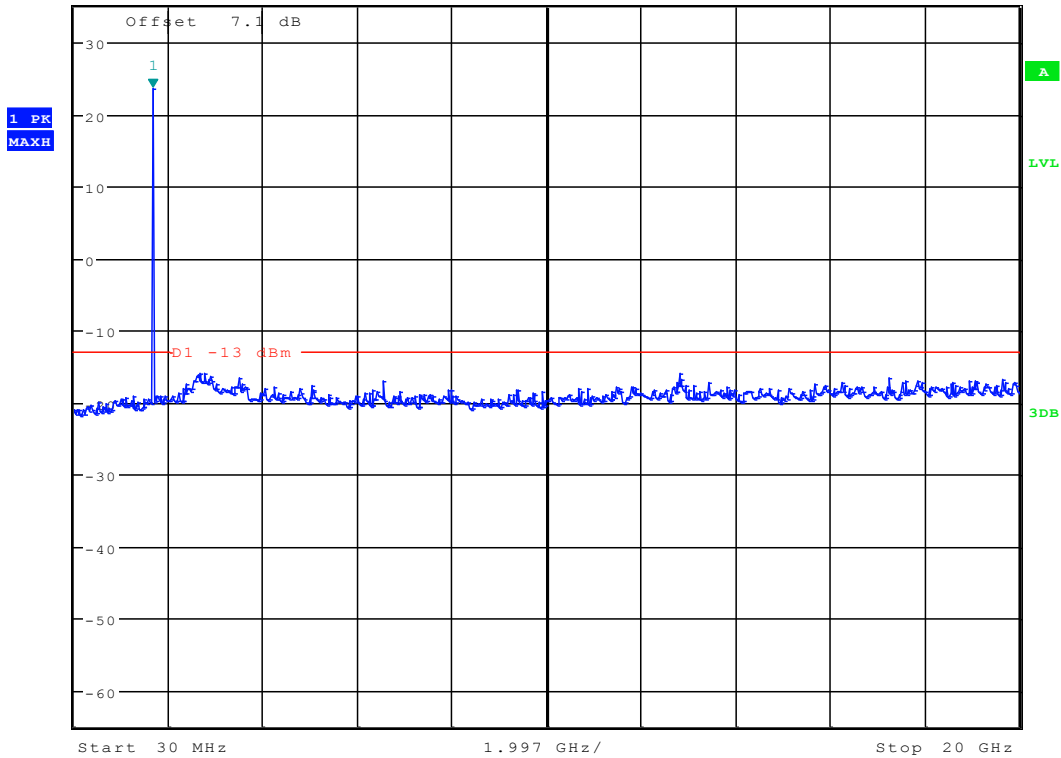
Offset 6.9 dB

D1 -13 dBm

Start 150 kHz 2.985 MHz/ Stop 30 MHz



```
Ref  35 dBm      Att  55 dB      SWT  115 ms      1.694166667 GHz
```

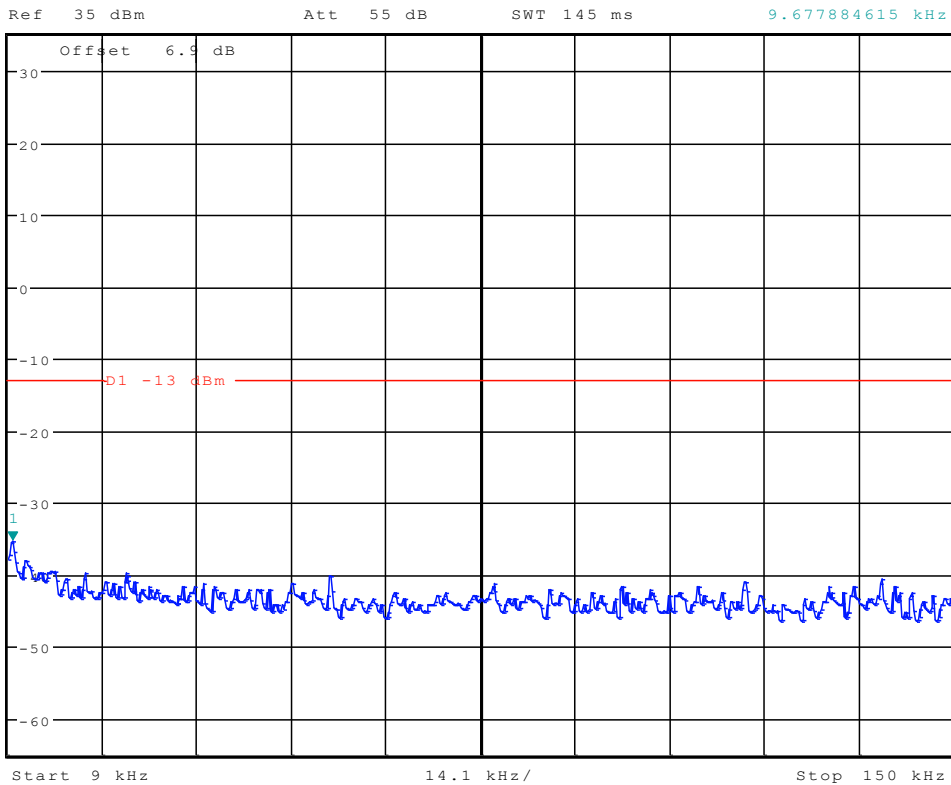




Channel 450

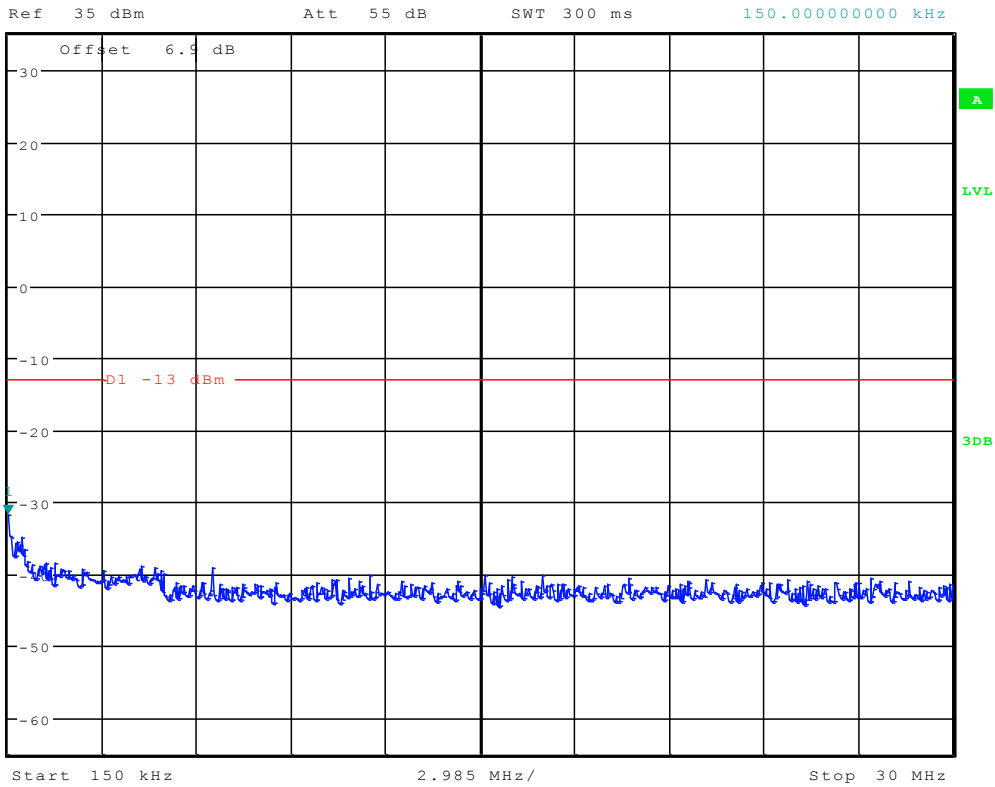


* RBW 1 kHz
* VBW 10 kHz
Marker 1 [T1]
-35.27 dBm
9.677884615 kHz



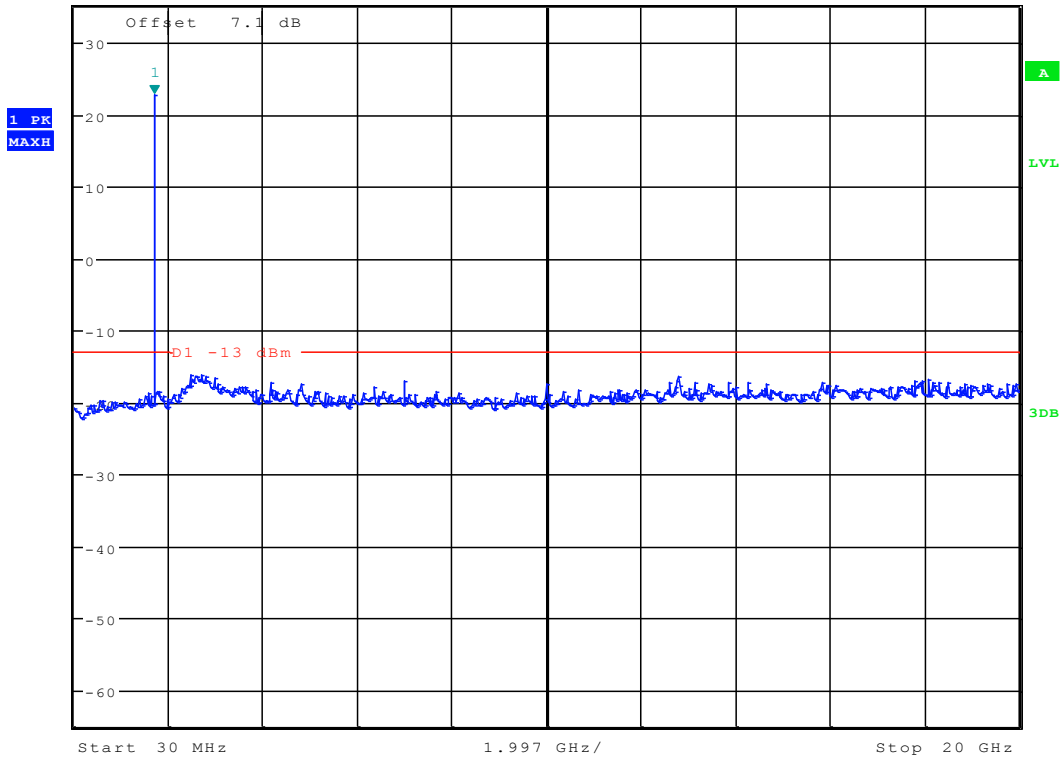


*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -31.80 dBm
SWT 300 ms 150.000000000 kHz





Ref 35 dBm Att 55 dB SWT 115 ms 1.726169872 GHz





Channel 875



* RBW 1 kHz
* VBW 10 kHz
Marker 1 [T1]
-36.74 dBm
9.000000000 kHz

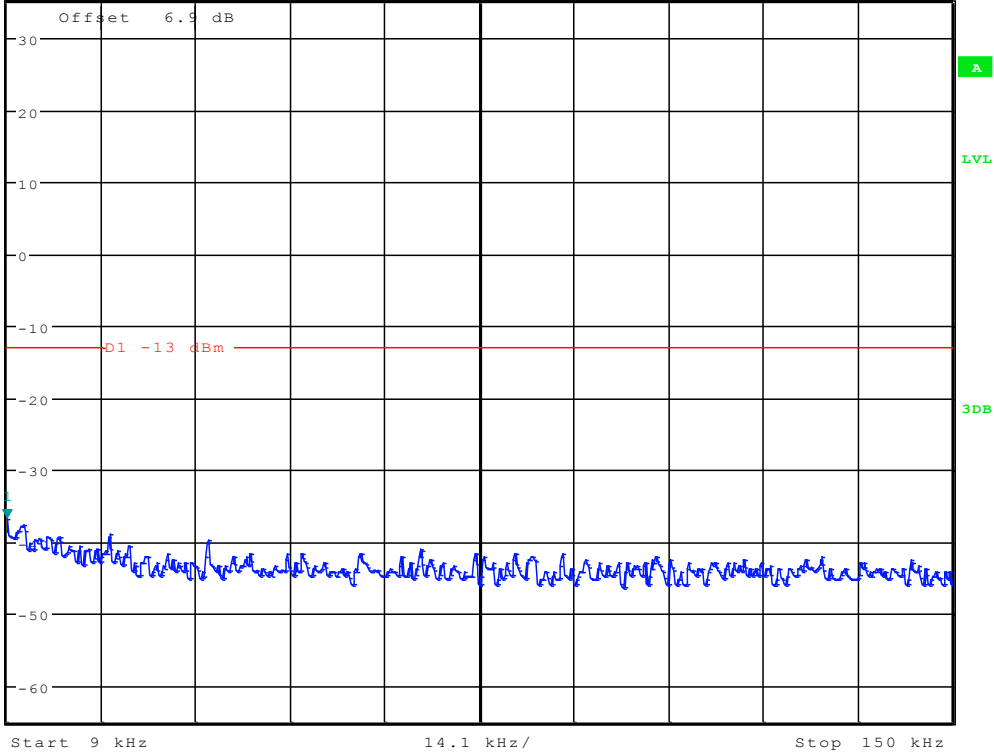
Ref 35 dBm

Att 55 dB

SWT 145 ms

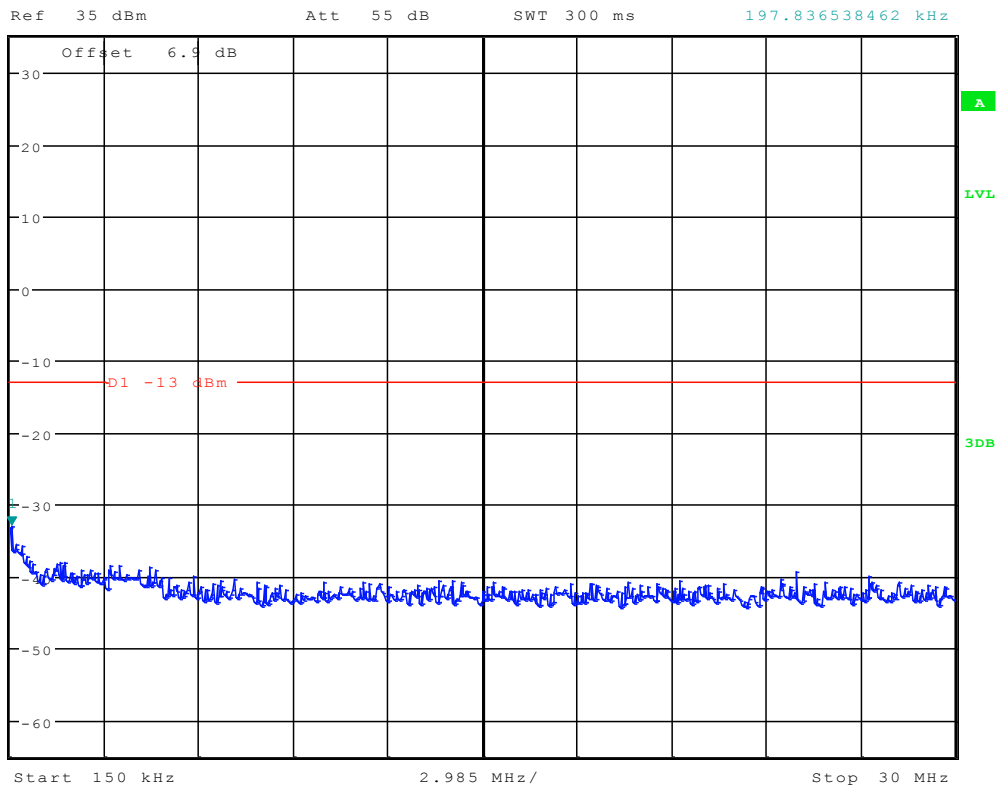
9.000000000 kHz

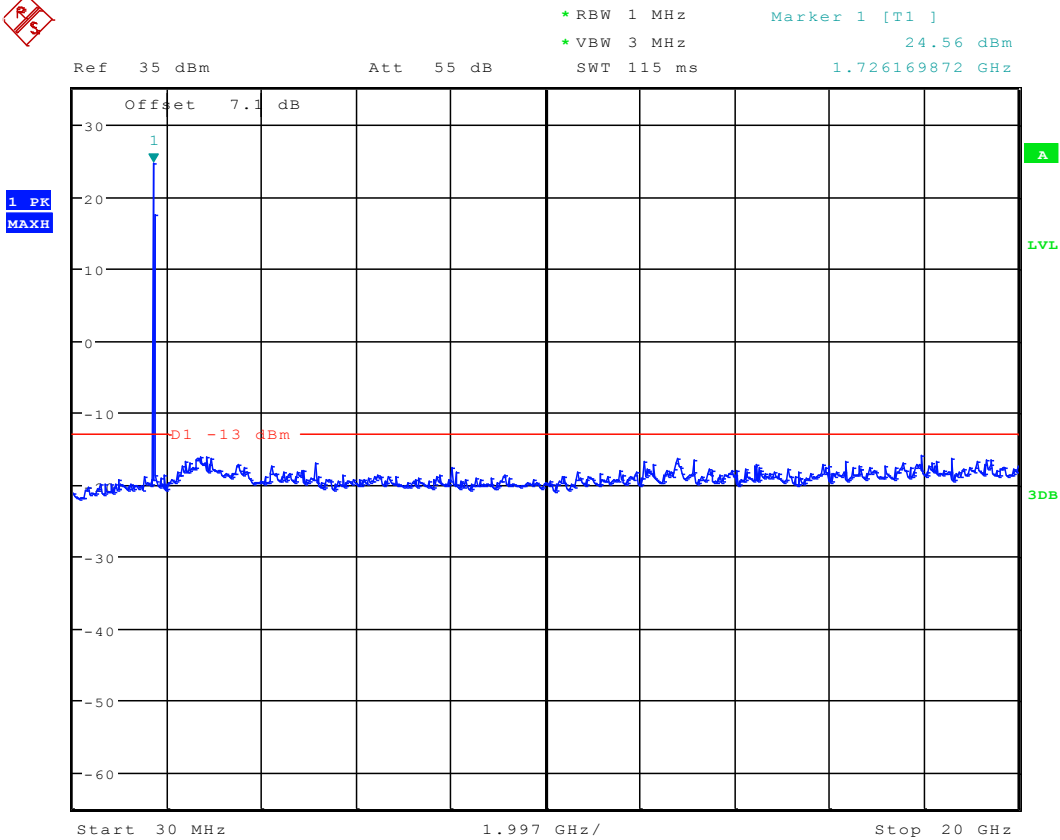
1 PK
MAXH





* RBW 10 kHz Marker 1 [T1]
* VBW 30 kHz -33.04 dBm
SWT 300 ms 197.836538462 kHz







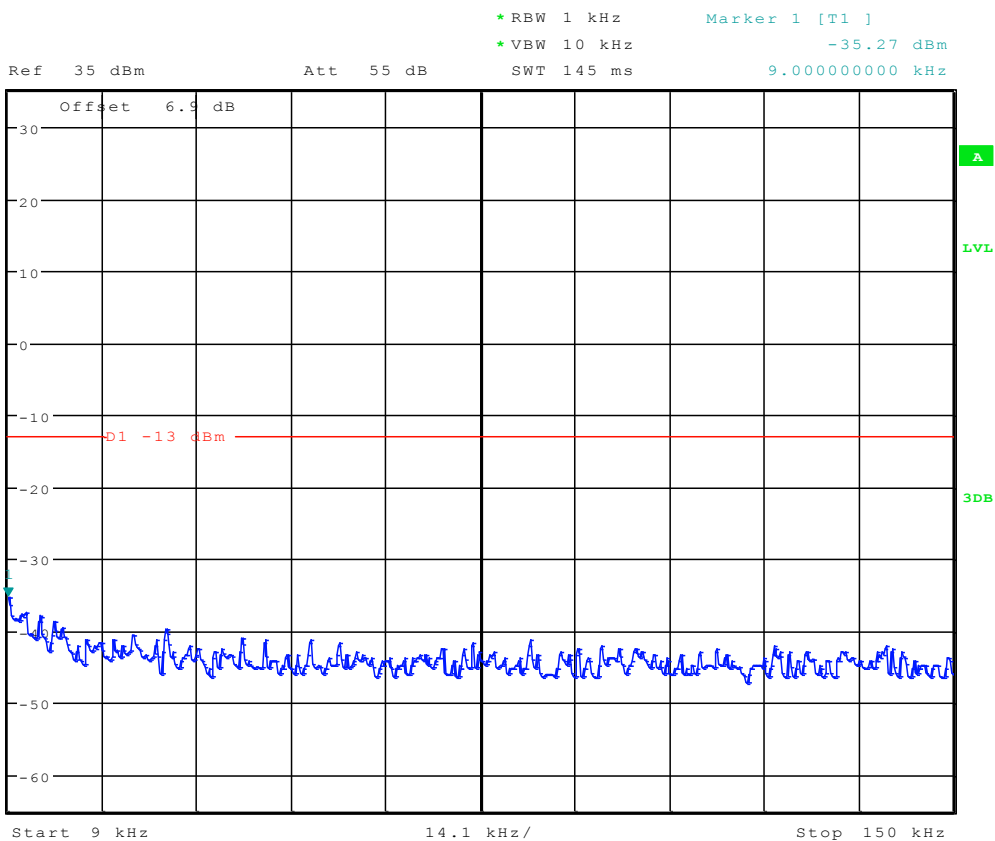
EVDO subtype 2

Modulation: BPSK

Channel 25

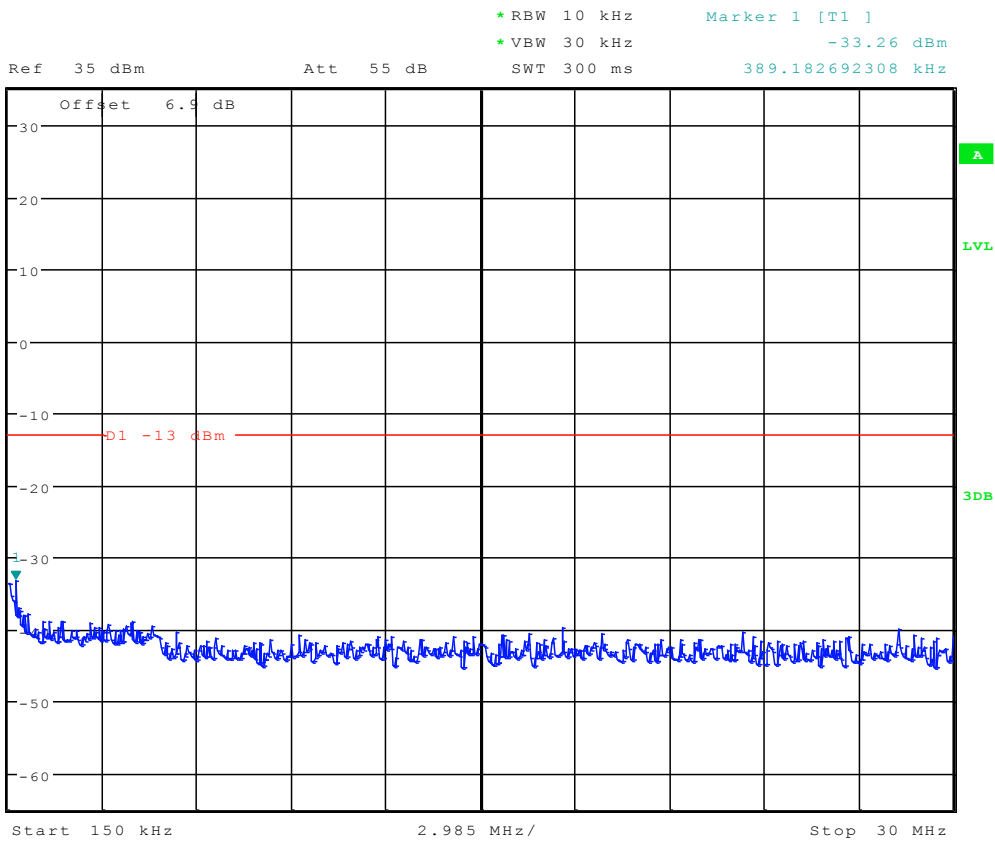


1 PK
MAXH





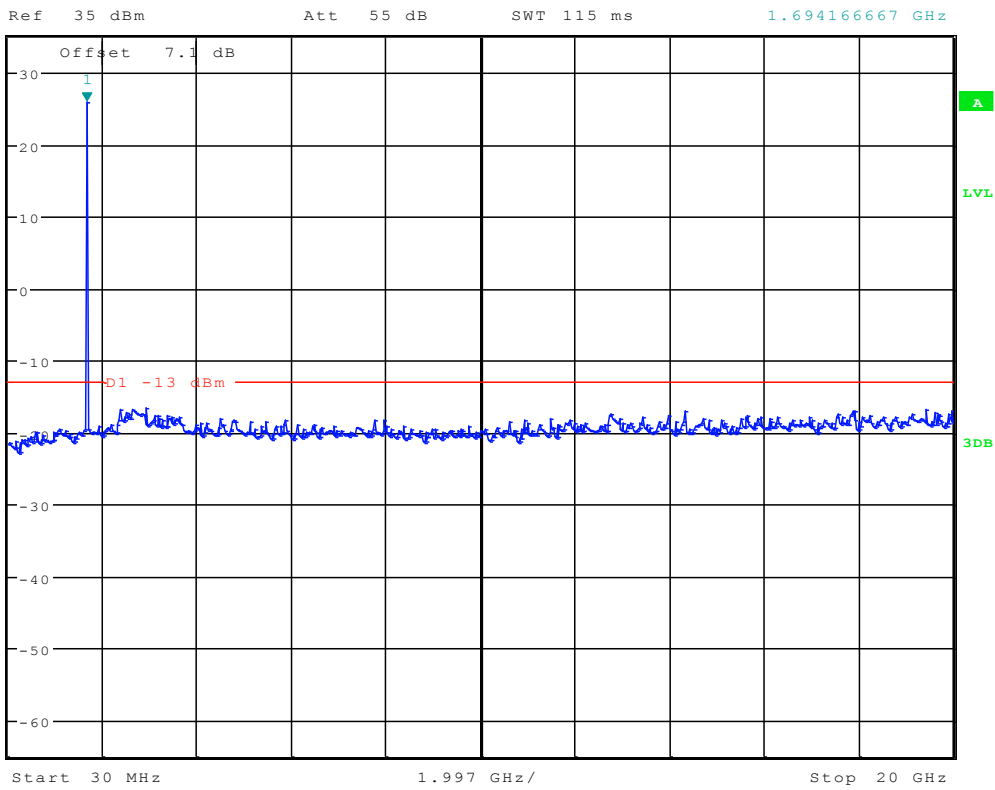
1 PK
MAXH





* RBW 1 MHz
* VBW 3 MHz
SWT 115 ms

Marker 1 [T1]
25.86 dBm
1.694166667 GHz

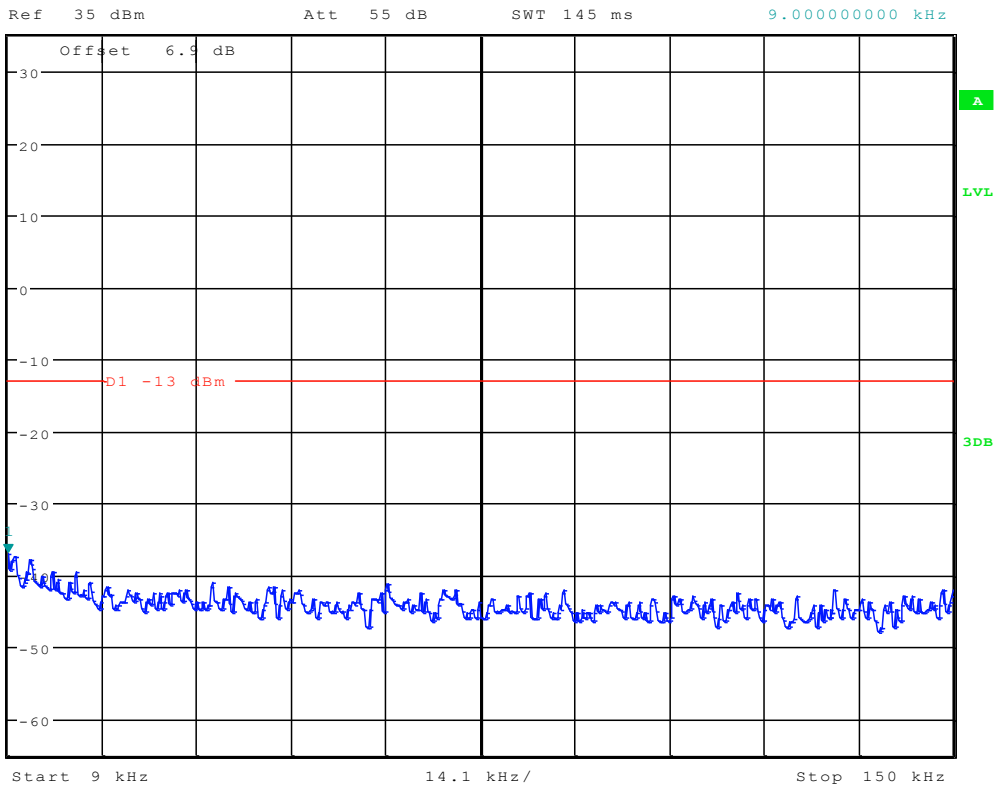




Channel 450

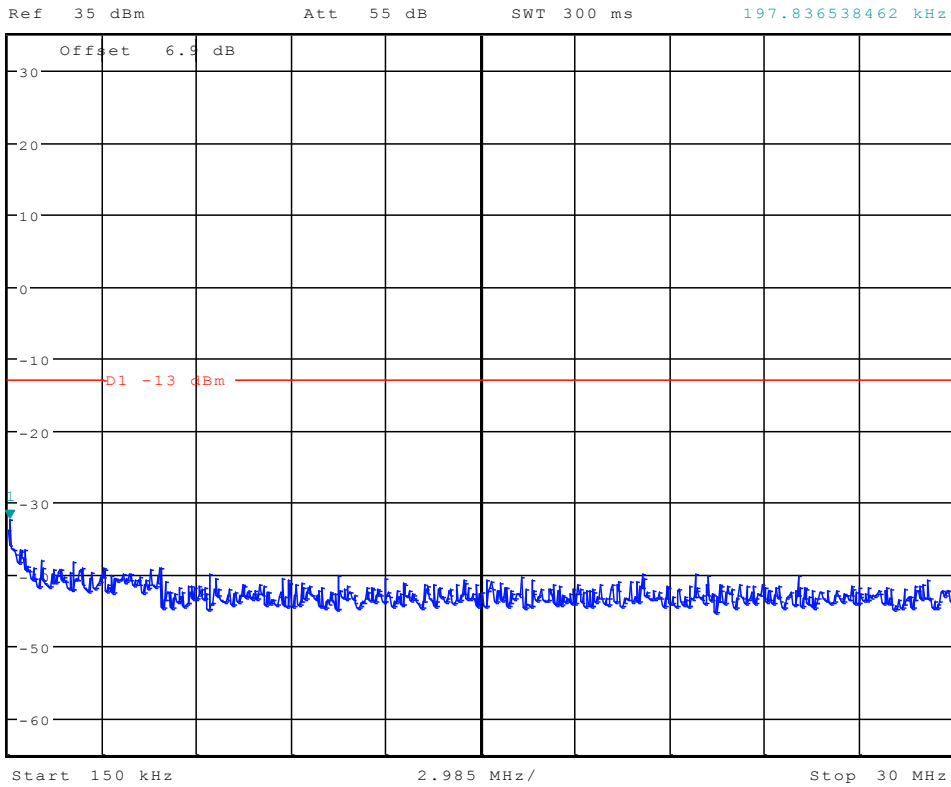


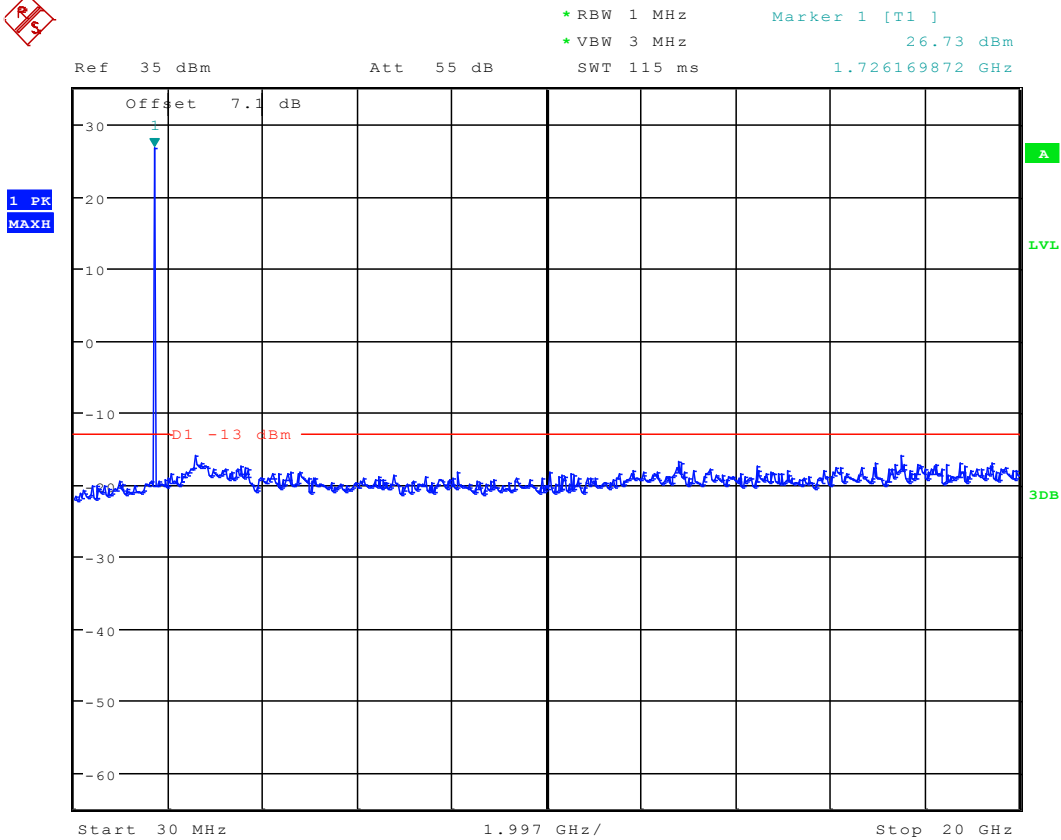
*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-36.92 dBm
9.000000000 kHz





* RBW 10 kHz
* VBW 30 kHz
Marker 1 [T1]
-32.43 dBm
197.836538462 kHz



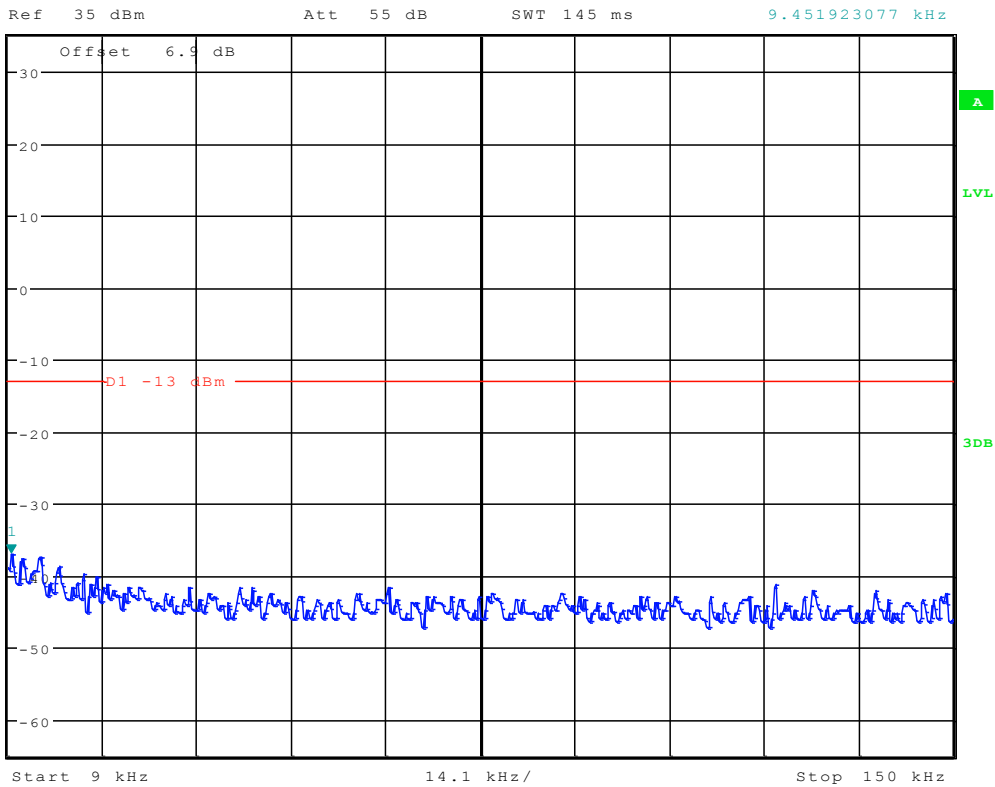




Channel 875

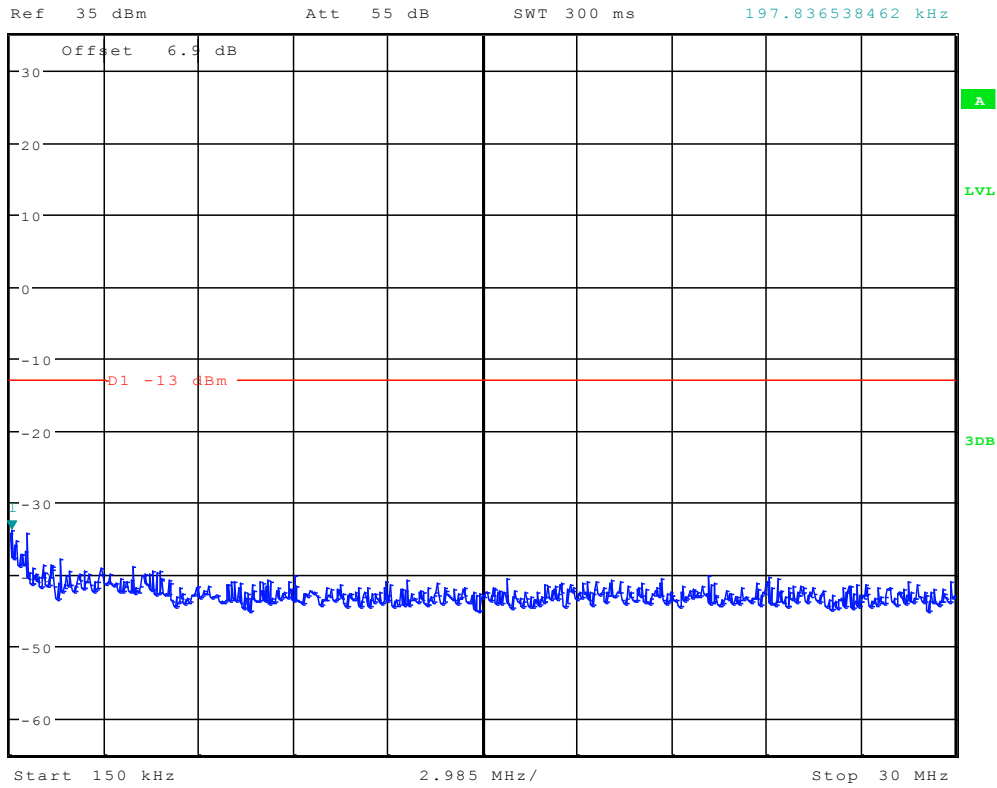


*RBW 1 kHz
*VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-36.92 dBm
9.451923077 kHz





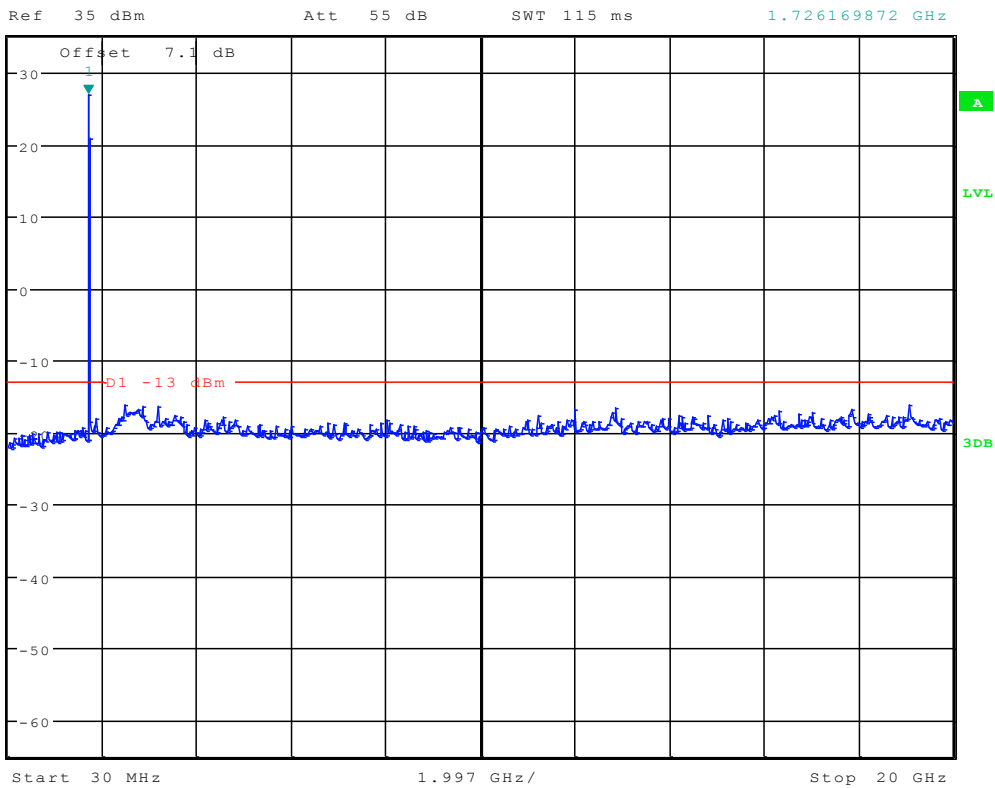
* RBW 10 kHz Marker 1 [T1]
* VBW 30 kHz -33.70 dBm
SWT 300 ms 197.836538462 kHz





* RBW 1 MHz
* VBW 3 MHz
SWT 115 ms

Marker 1 [T1]
26.88 dBm
1.726169872 GHz

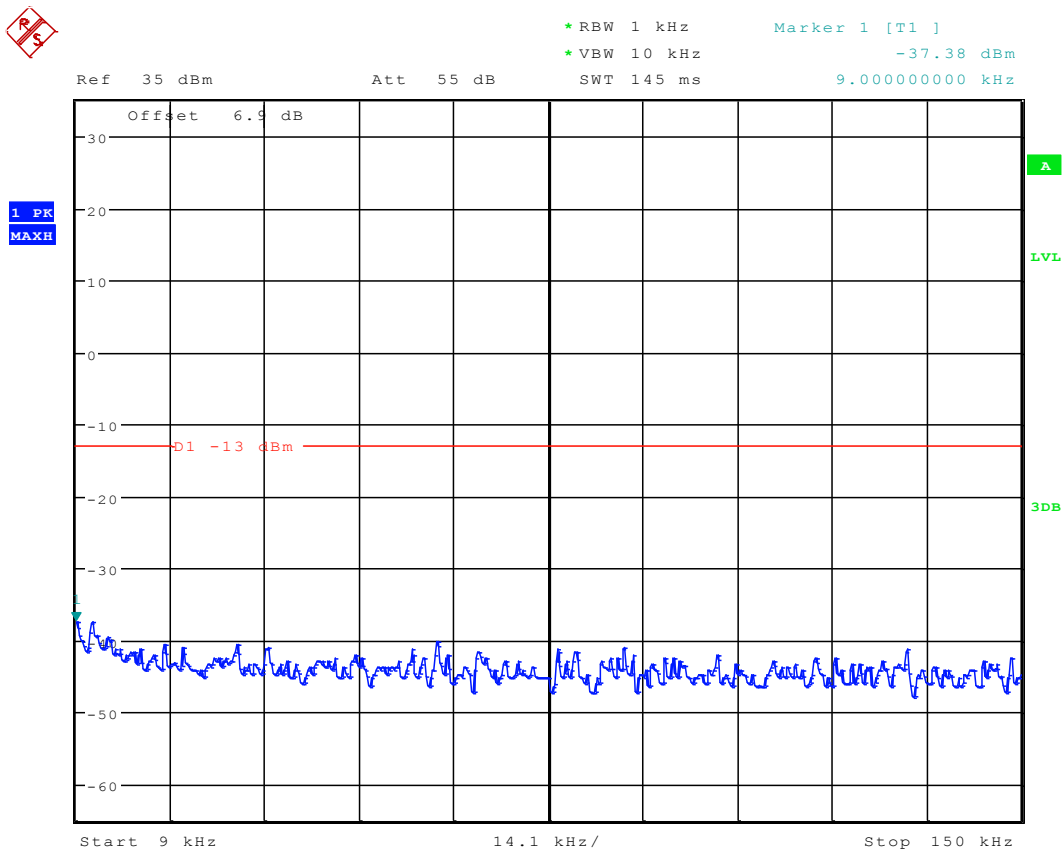




EVDO subtype 2

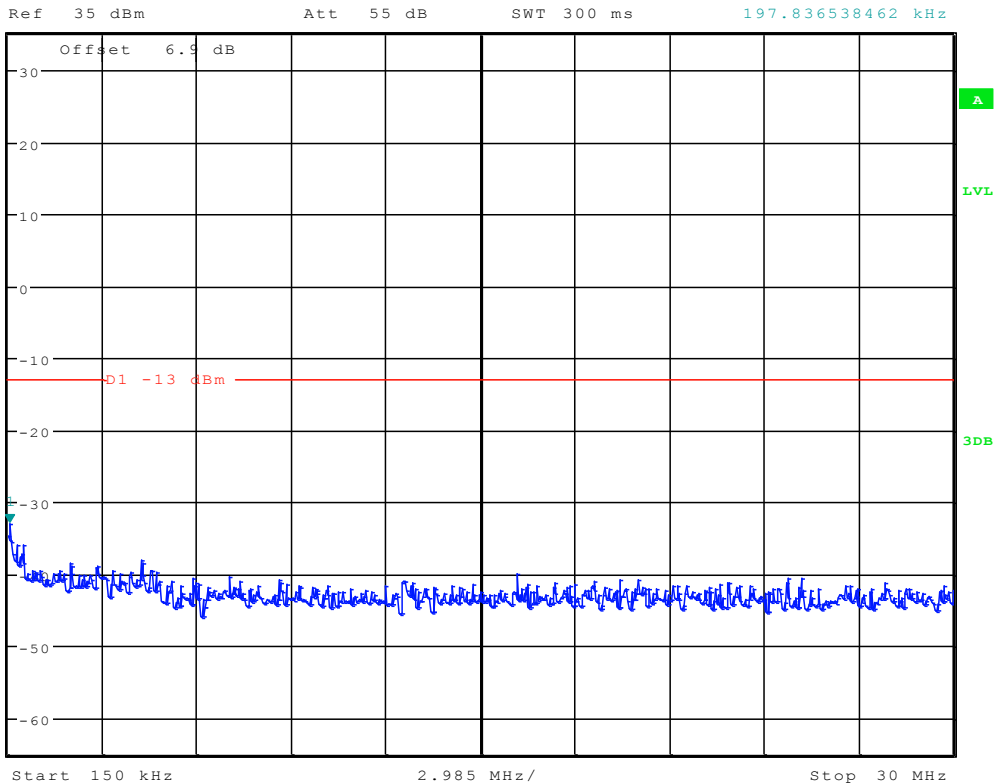
Modulation:QPSK

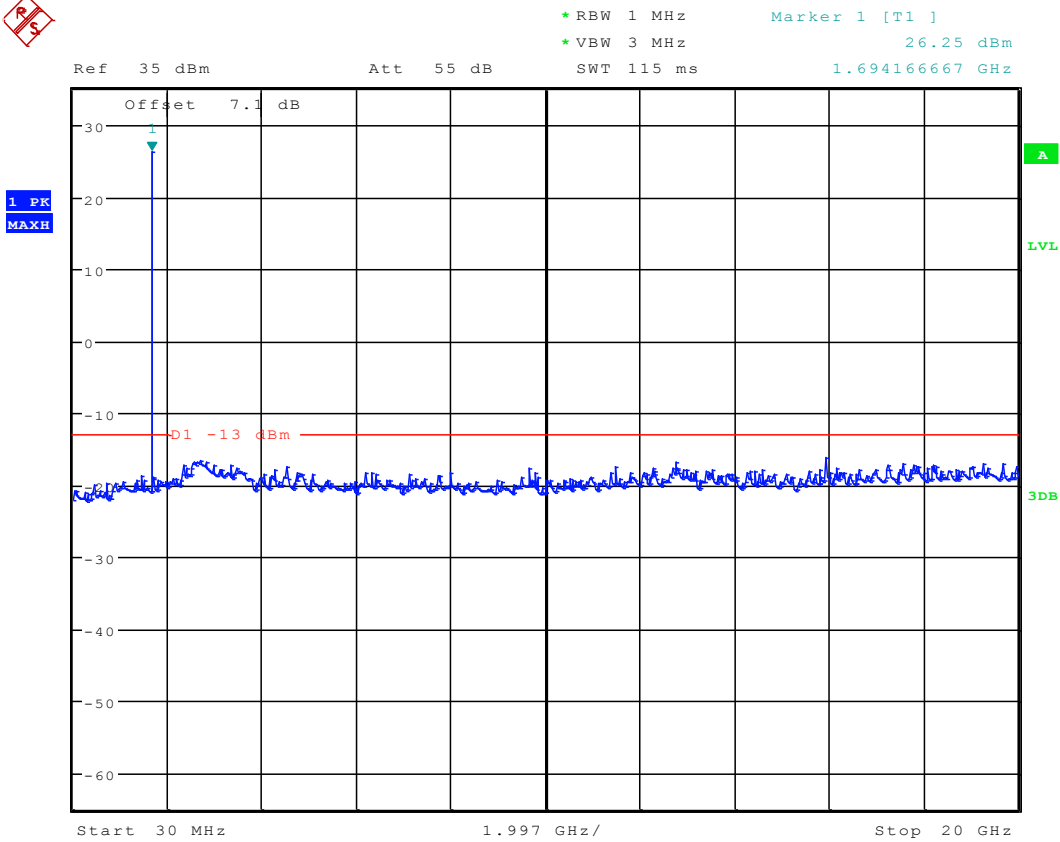
Channel 25





*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -32.87 dBm
SWT 300 ms 197.836538462 kHz



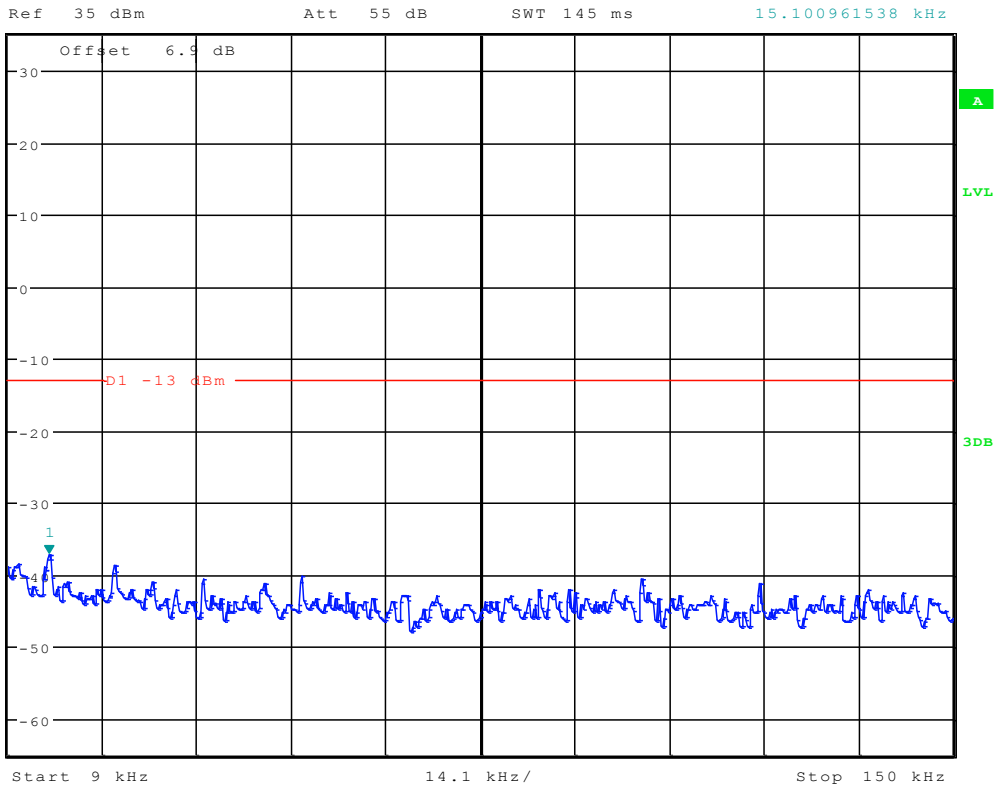




Channel 450

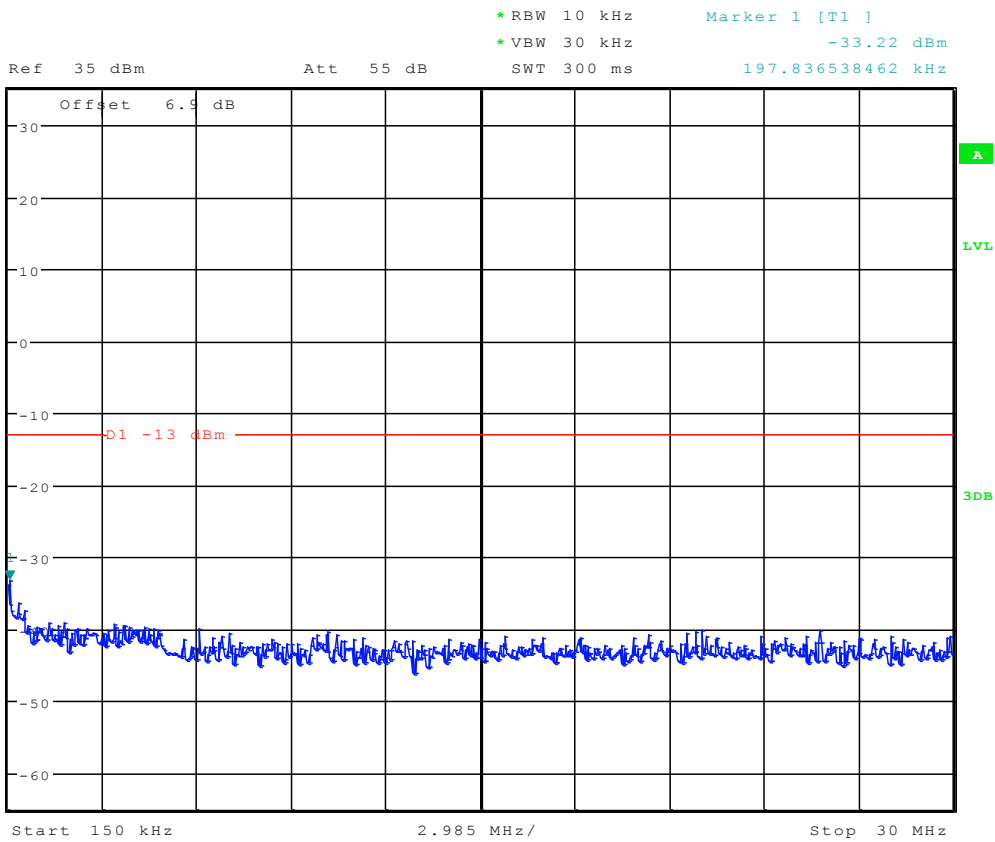


* RBW 1 kHz
* VBW 10 kHz
SWT 145 ms
Marker 1 [T1]
-37.19 dBm
15.100961538 kHz





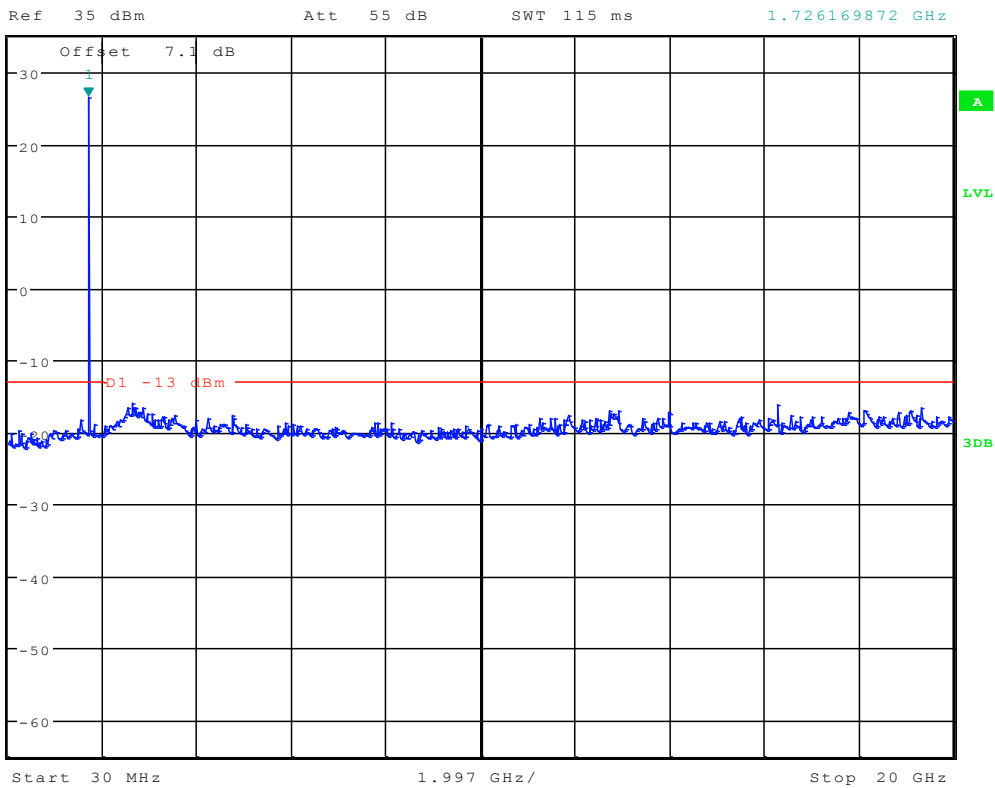
1 PK
MAXH





* RBW 1 MHz
* VBW 3 MHz
SWT 115 ms

Marker 1 [T1]
26.57 dBm
1.726169872 GHz

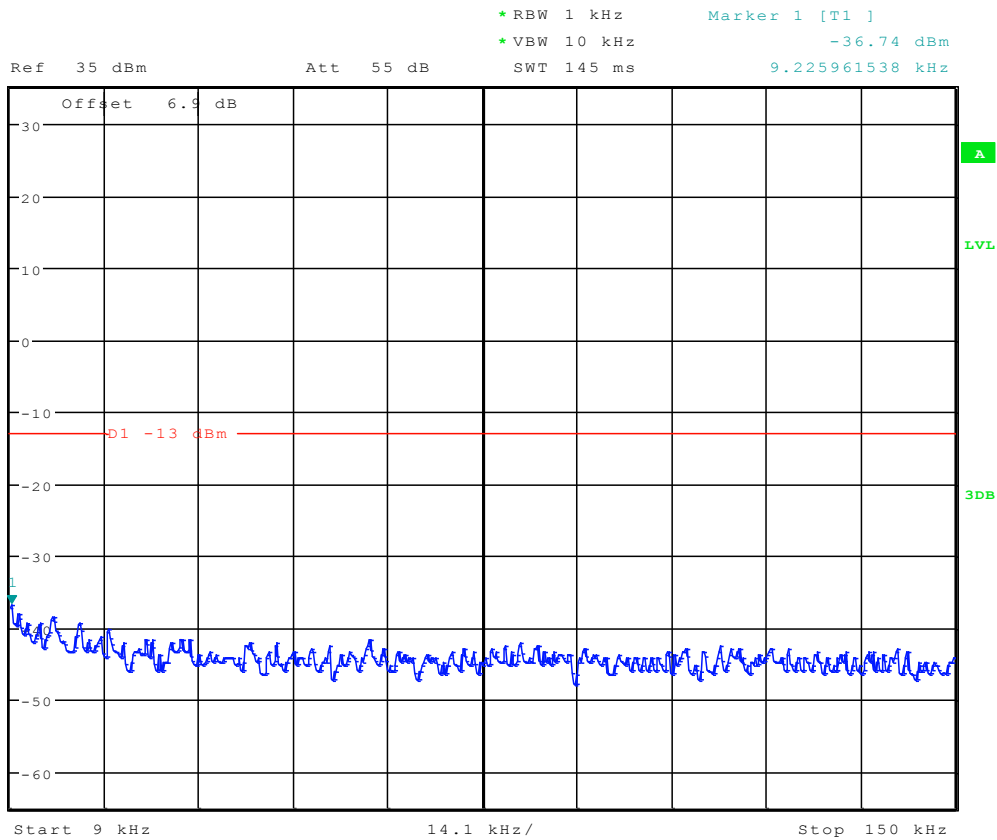




Channel 875

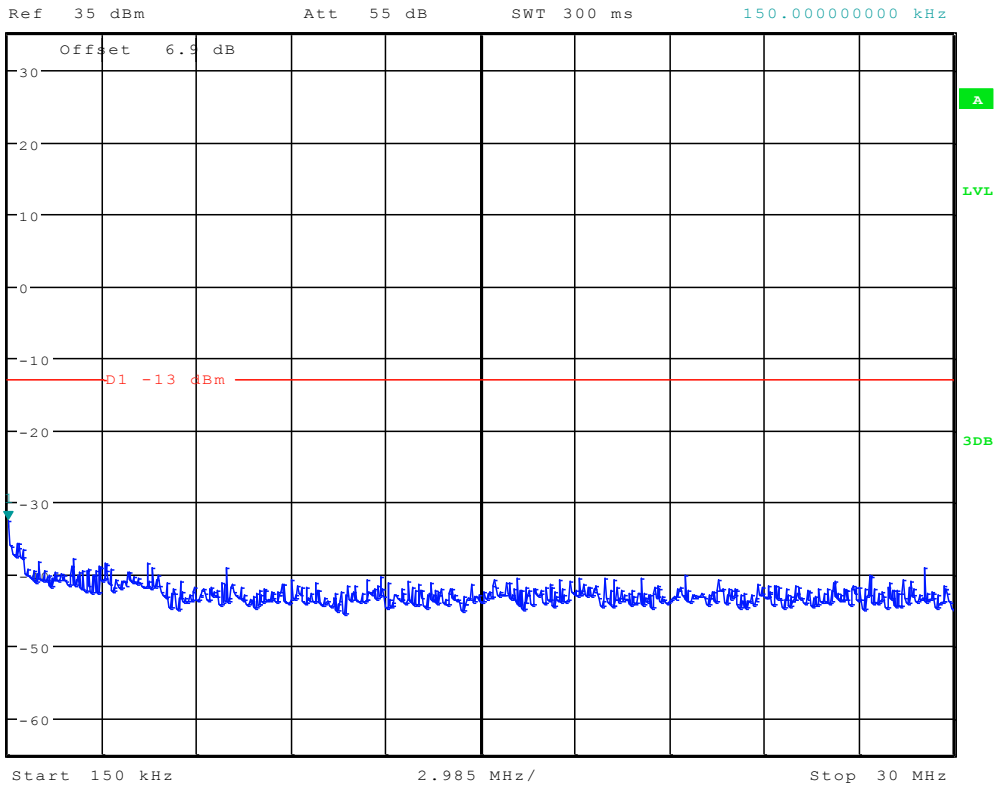


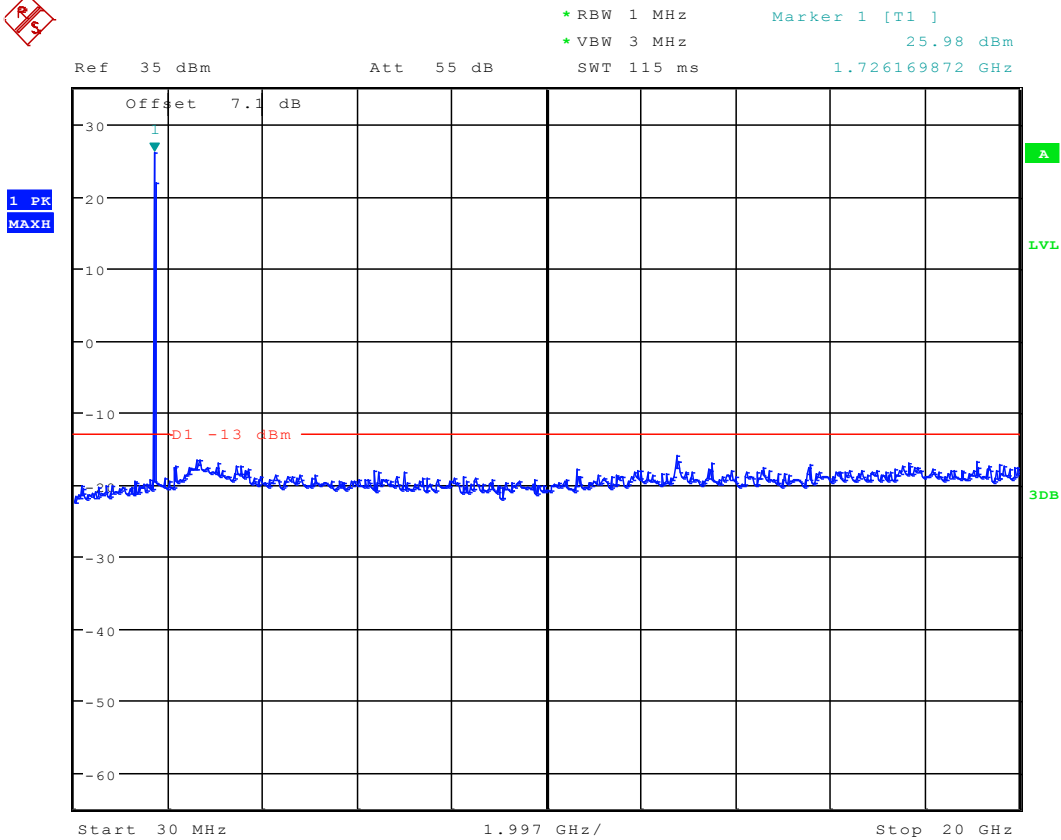
1 PK
MAXH





*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -32.59 dBm
SWT 300 ms 150.000000000 kHz



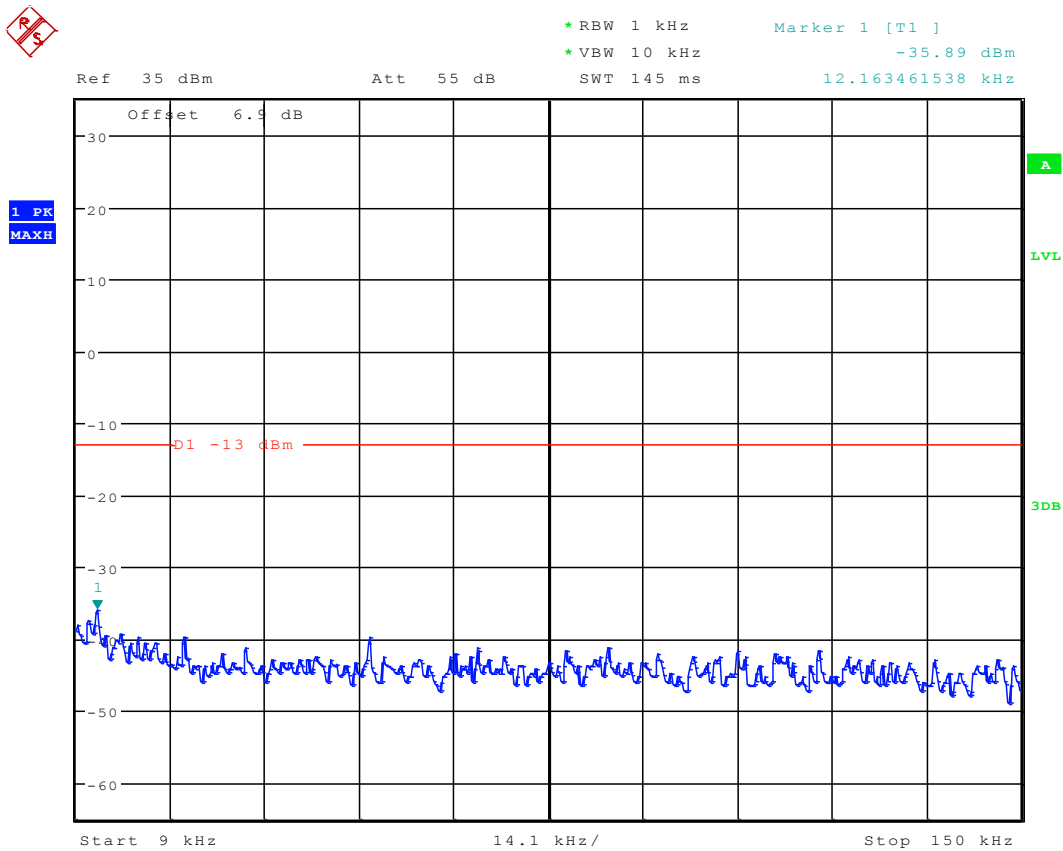




EVDO subtype 2

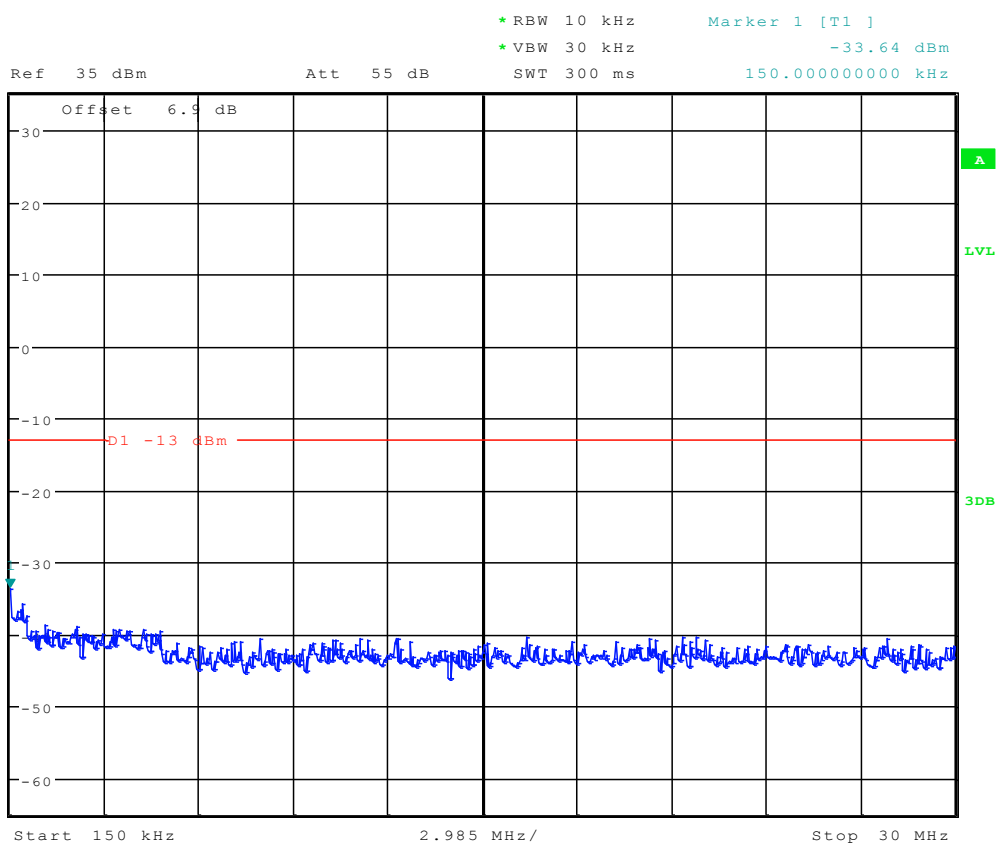
Modulation:8PSK

Channel 25





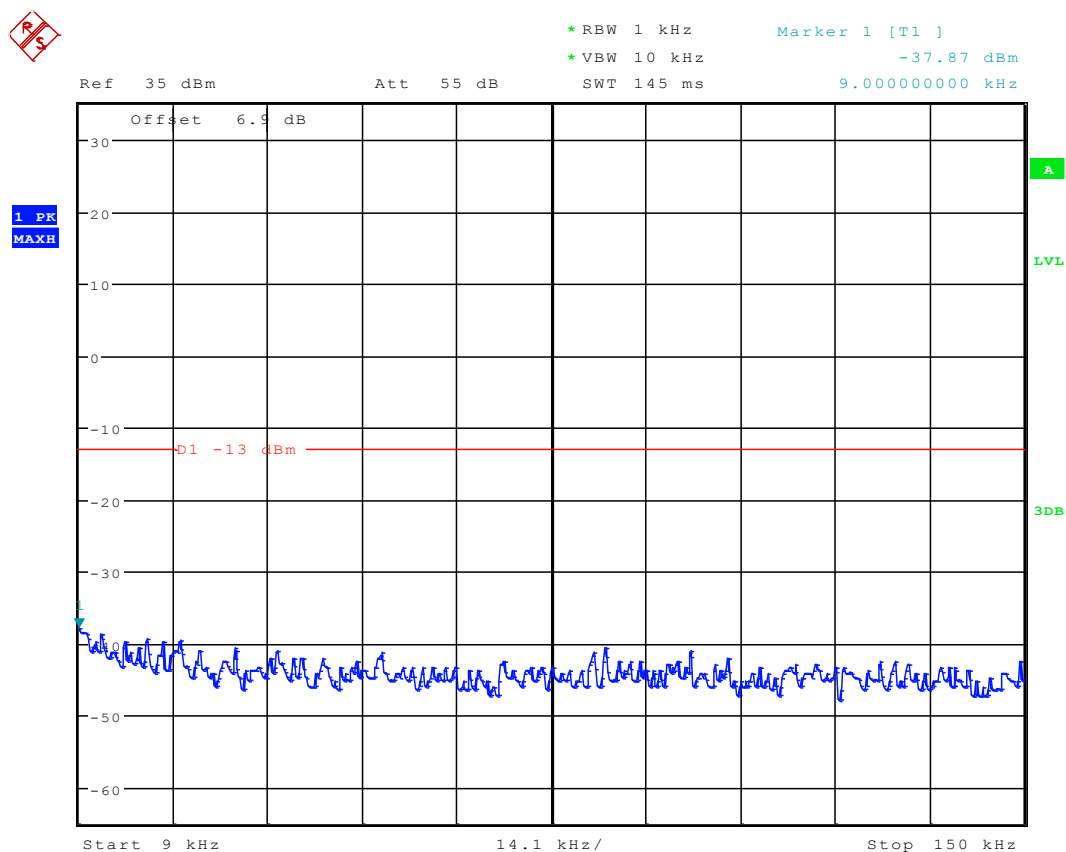
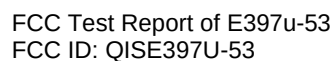
1 PK
MAXH





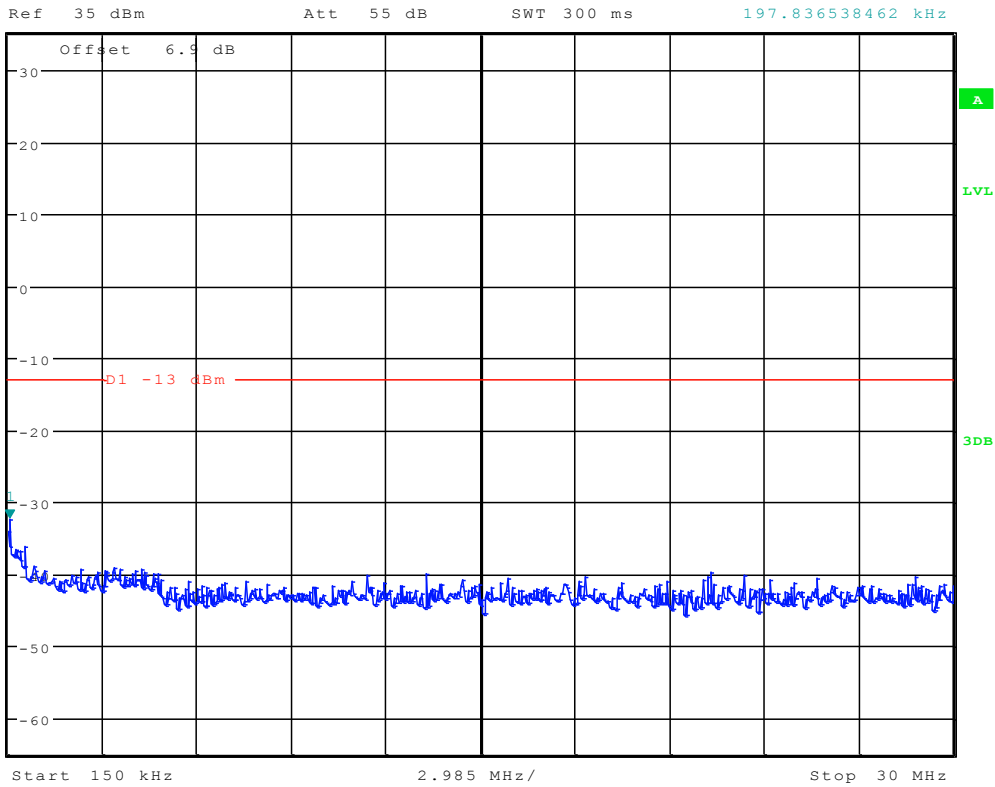
Ref	35 dBm	Att	55 dB	SWT	115 ms	1.694166667 GHz
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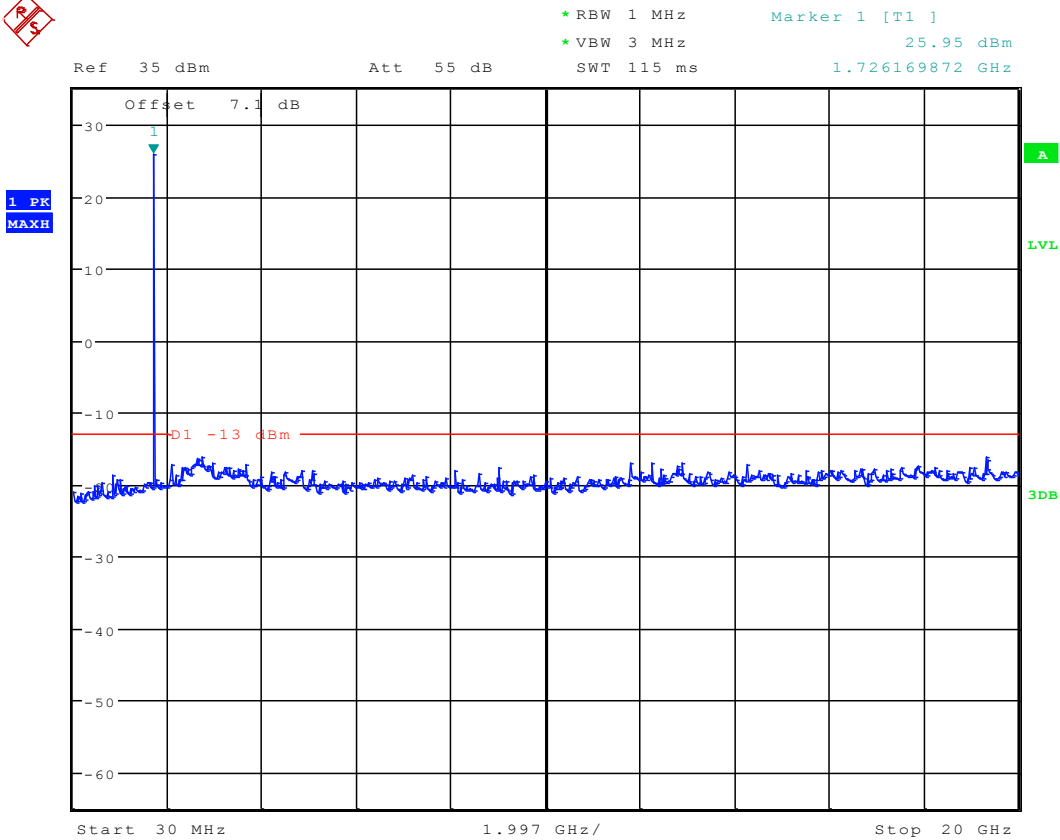






*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -32.32 dBm
SWT 300 ms 197.836538462 kHz



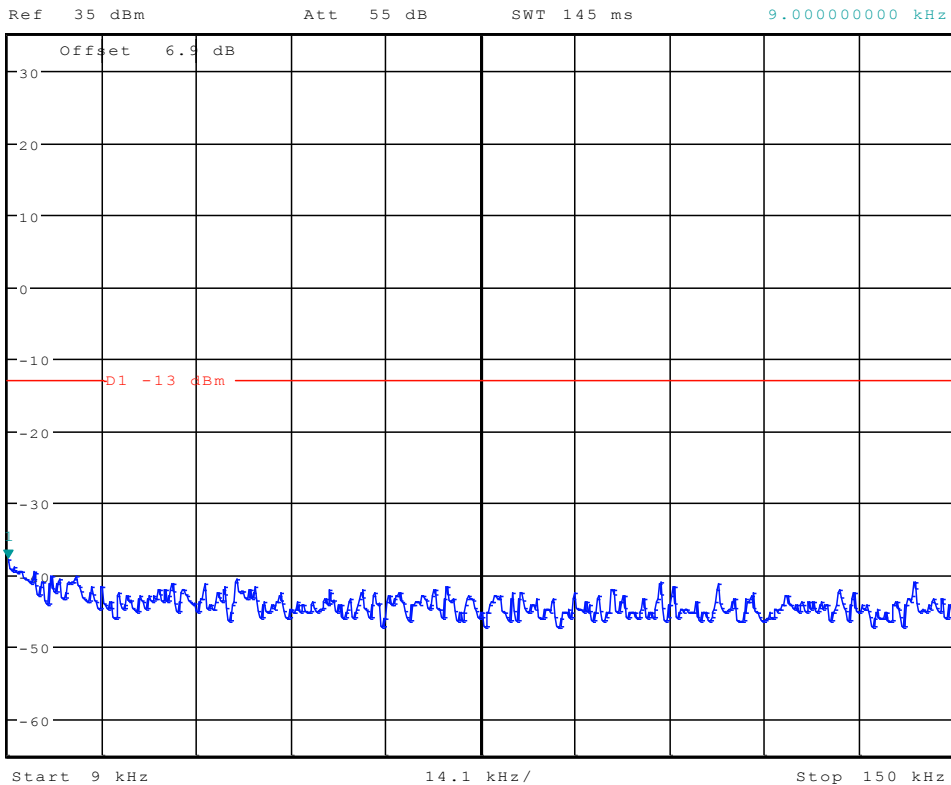




Channel 875



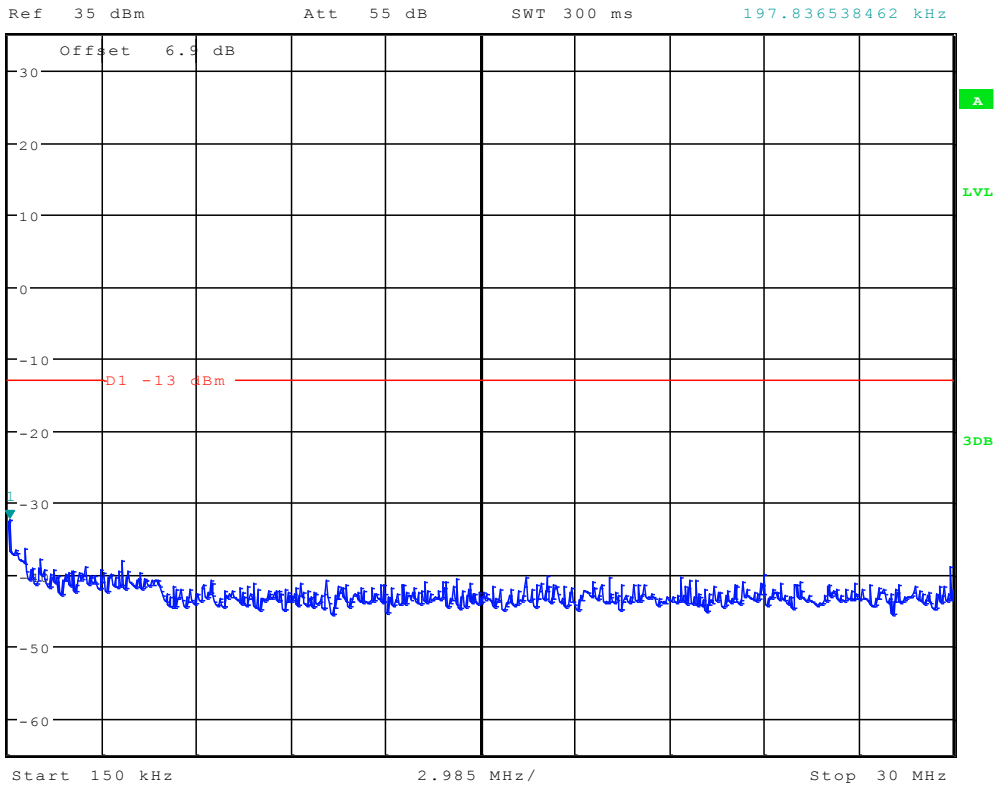
* RBW 1 kHz
* VBW 10 kHz
Marker 1 [T1]
-37.87 dBm
9.000000000 kHz





* RBW 10 kHz
* VBW 30 kHz
SWT 300 ms

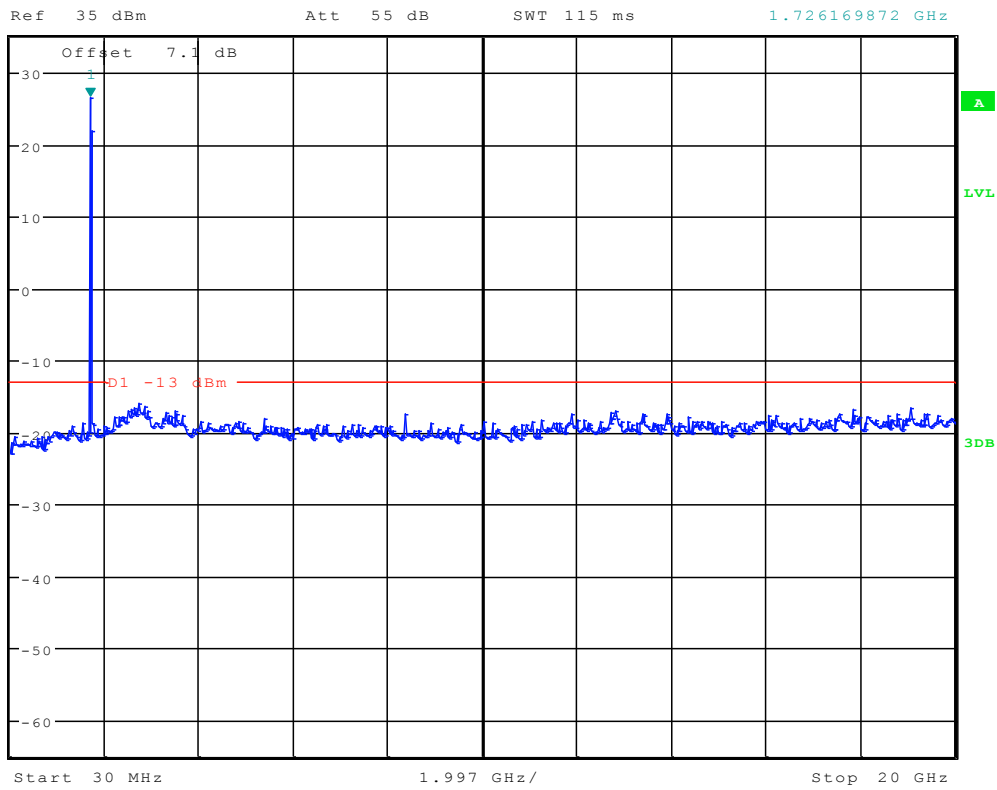
Marker 1 [T1]
-32.43 dBm
197.836538462 kHz





* RBW 1 MHz
* VBW 3 MHz
SWT 115 ms

Marker 1 [T1]
26.56 dBm
1.726169872 GHz





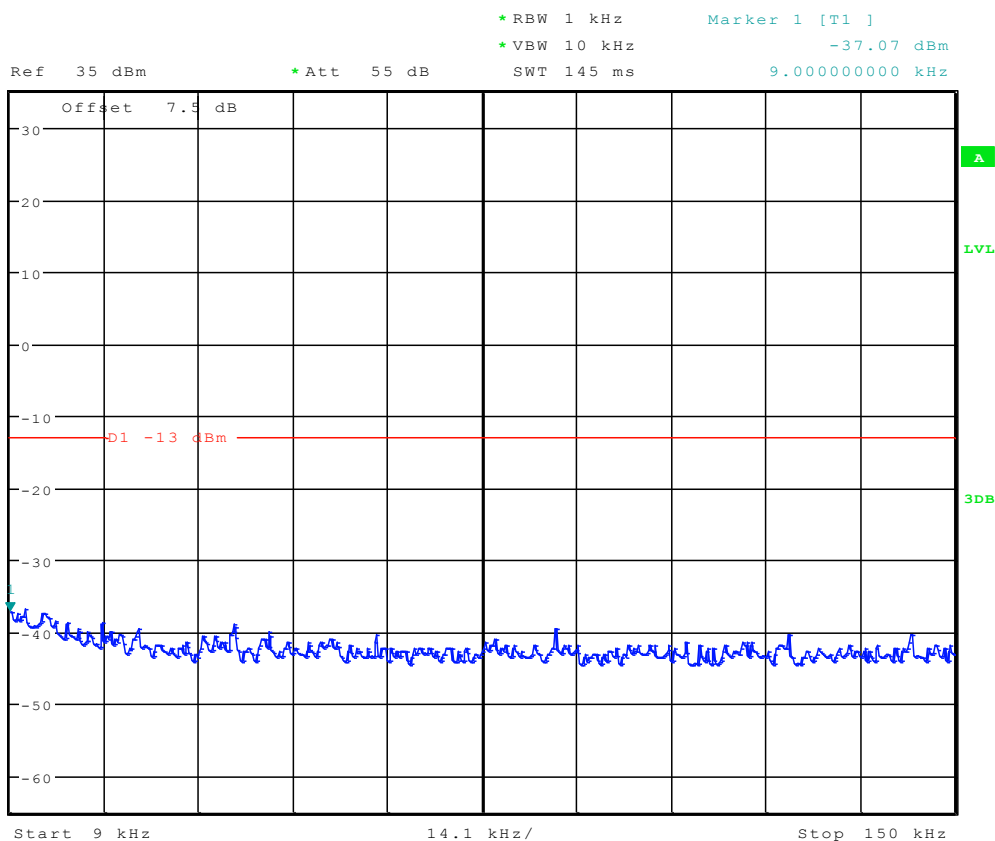
TM4

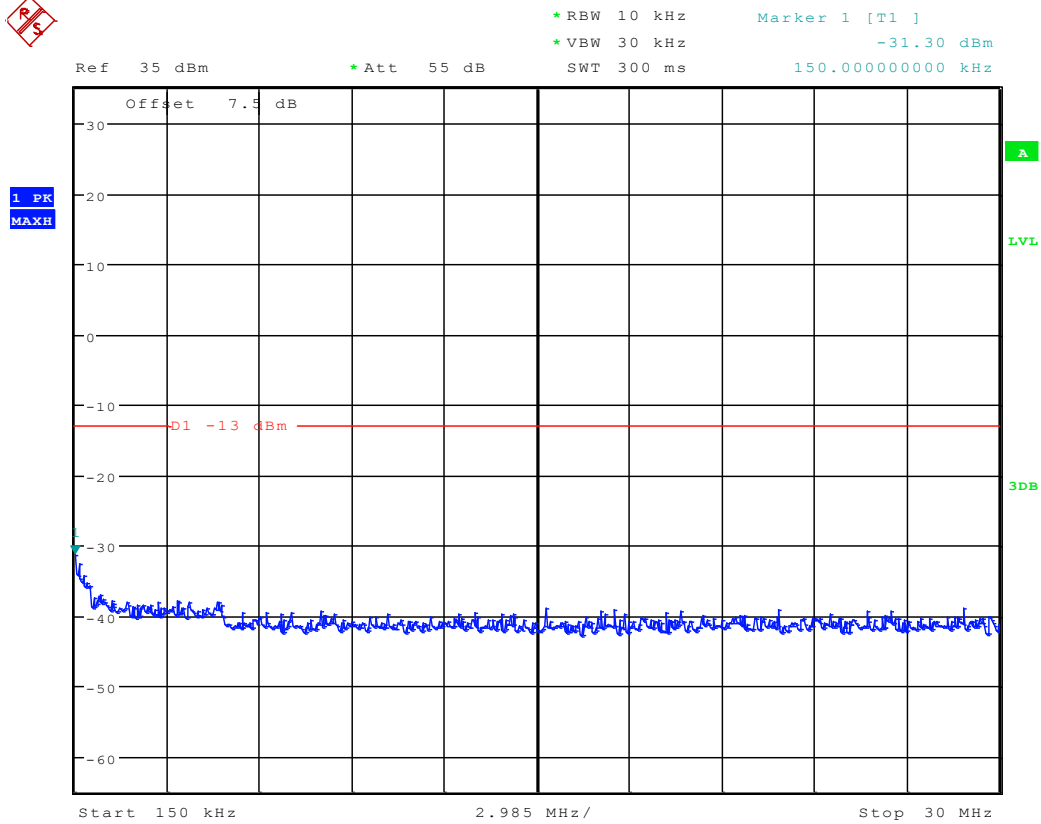
1.4MHz(BW)

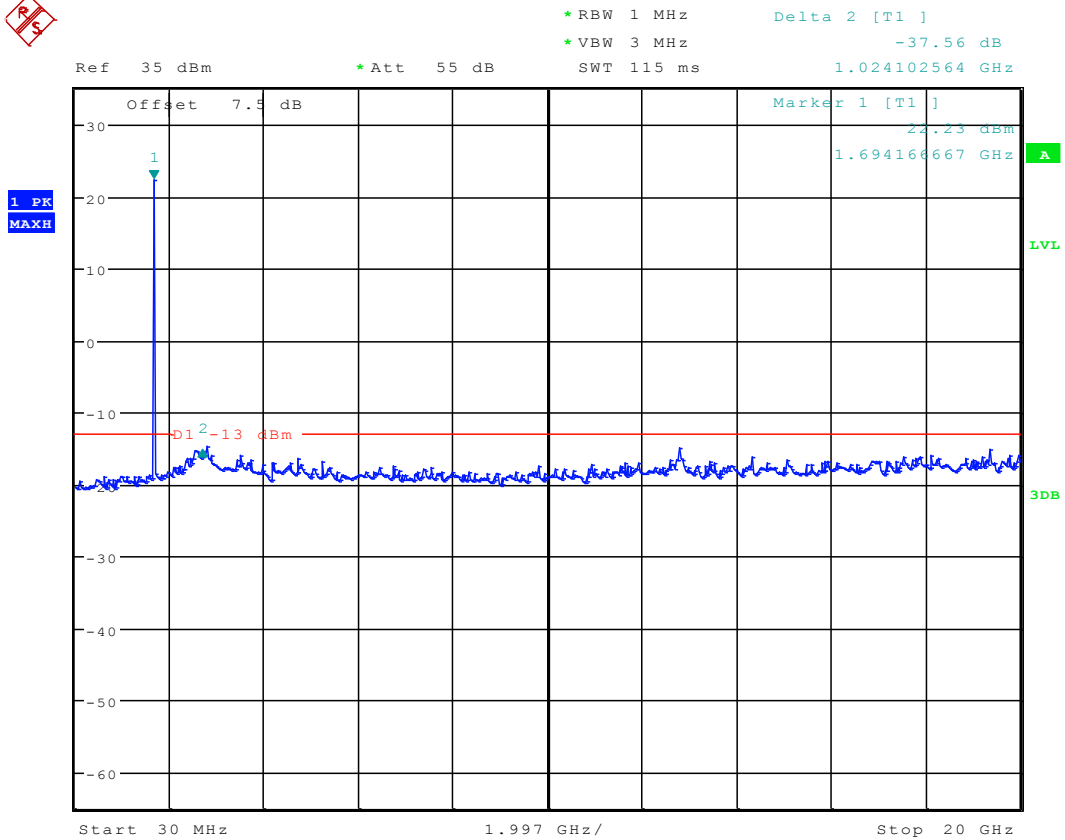
Channel 19957



1 PK
MAXH





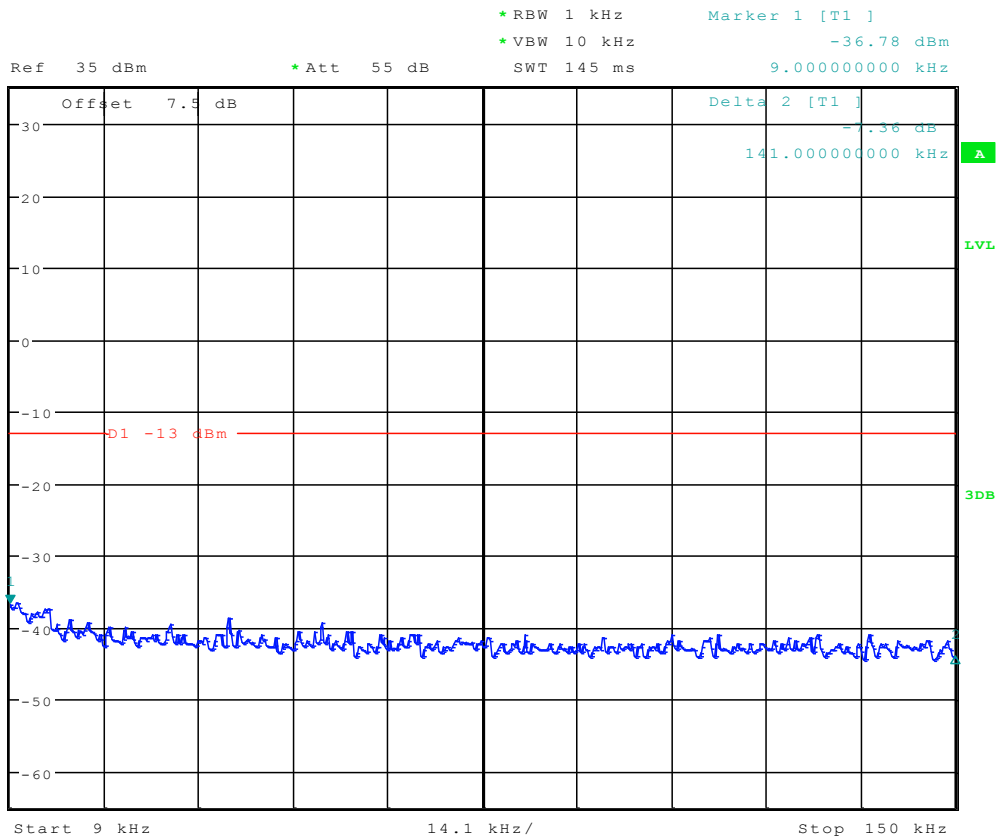




1.4MHz(BW) Channel 20175



1 PK
MAXH



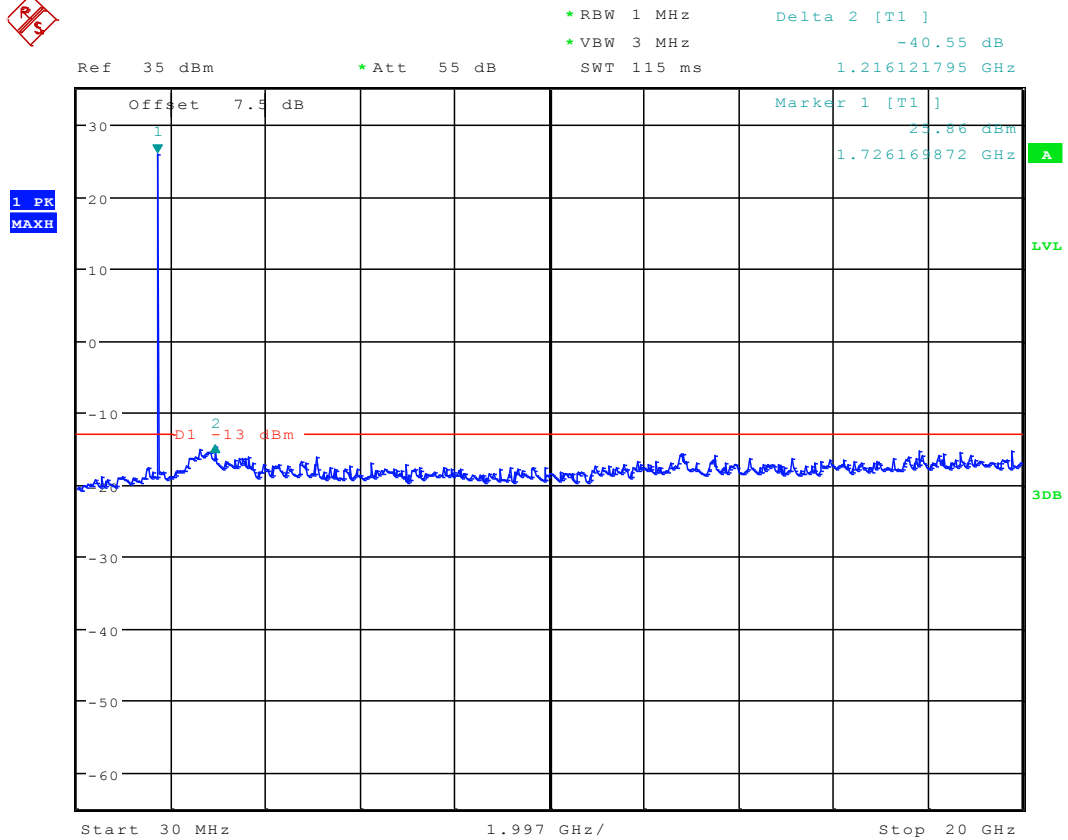


Ref 35 dBm * Att 55 dB SWT 300 ms 150.000000000 kHz

Offset 7.5 dB Delta 2 [T1] 0.00 dB 0.000000000 Hz

D1 -13 dBm

Start 150 kHz 2.985 MHz/ Stop 30 MHz

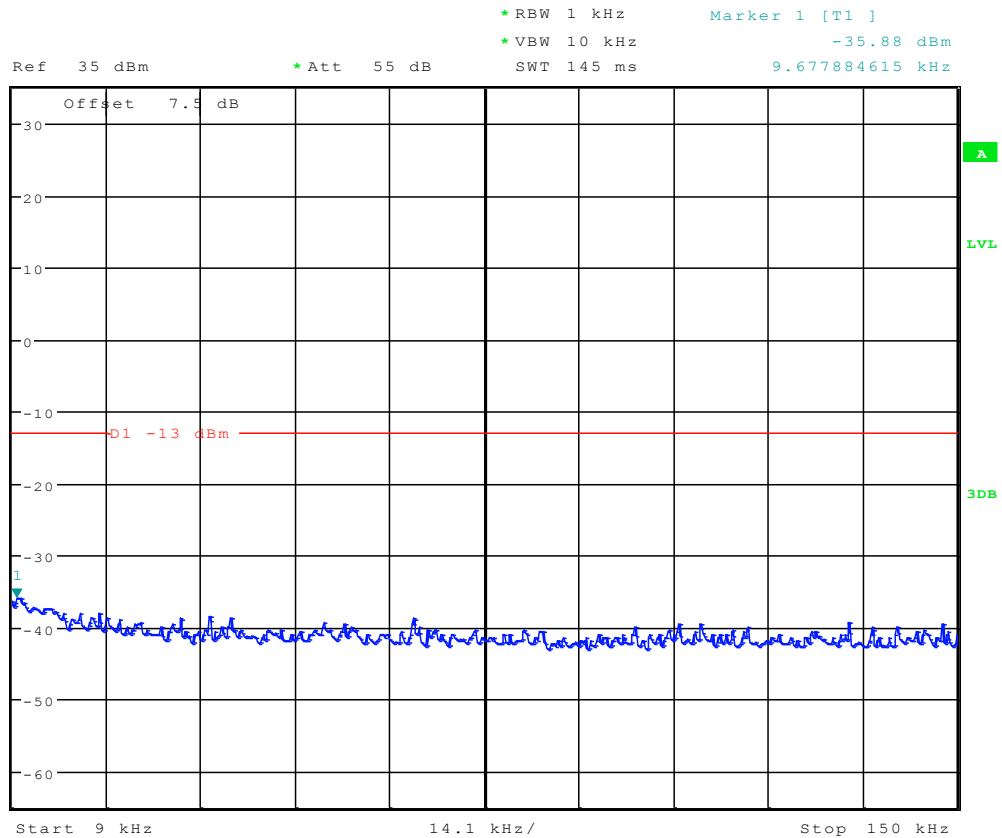


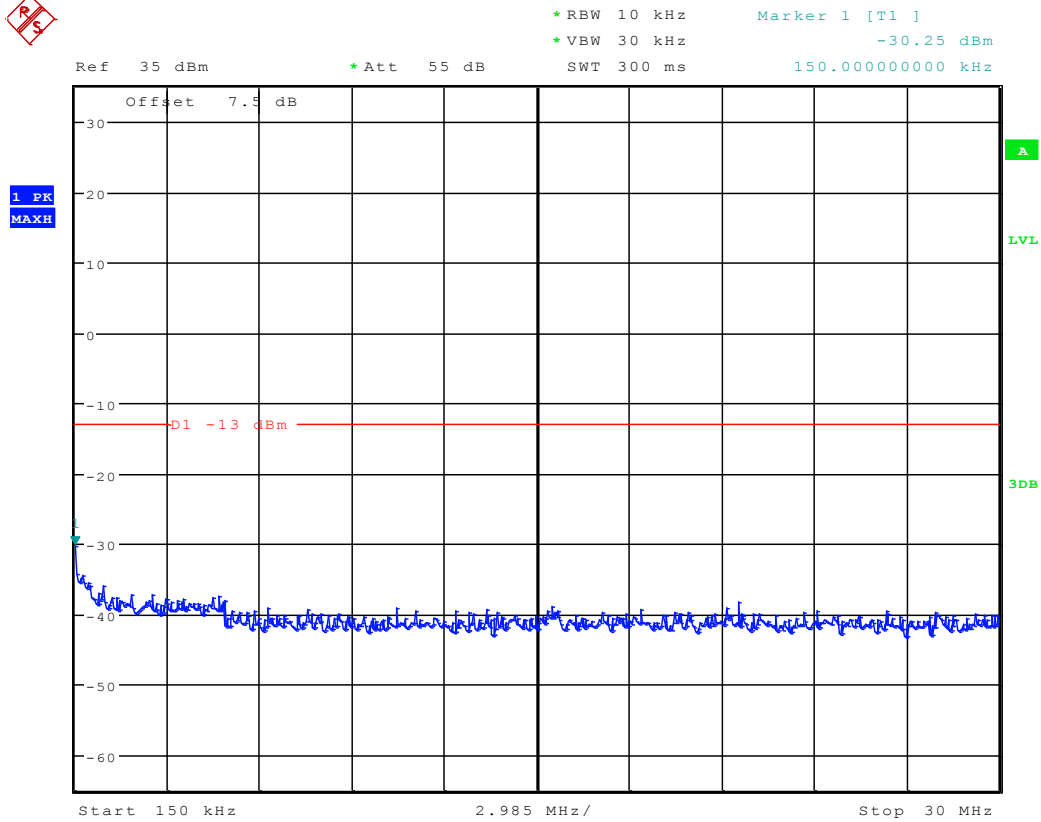


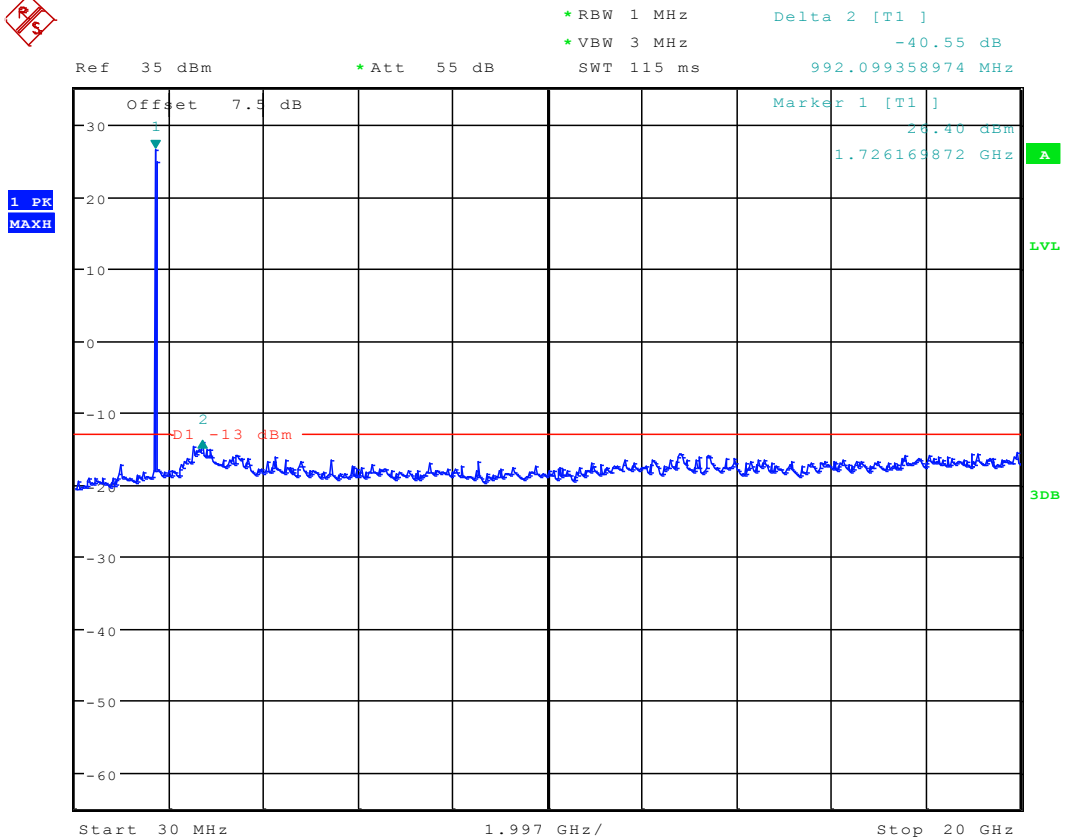
1.4MHz(BW) Channel 20393



1 PK
MAXH





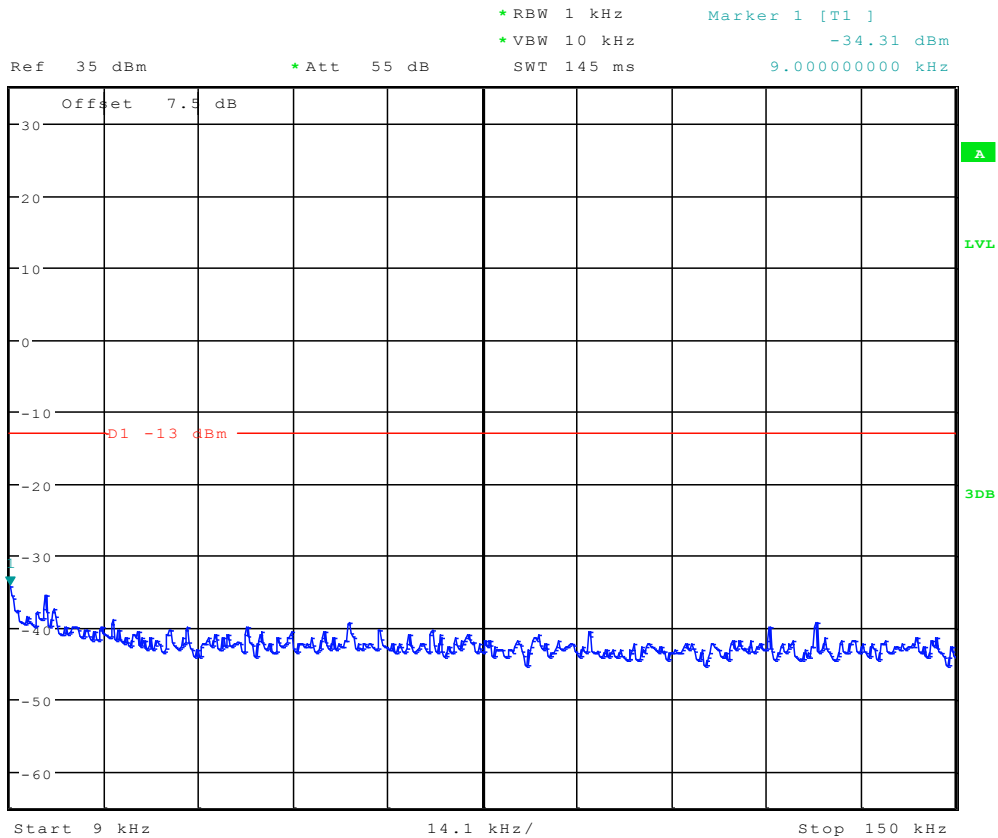


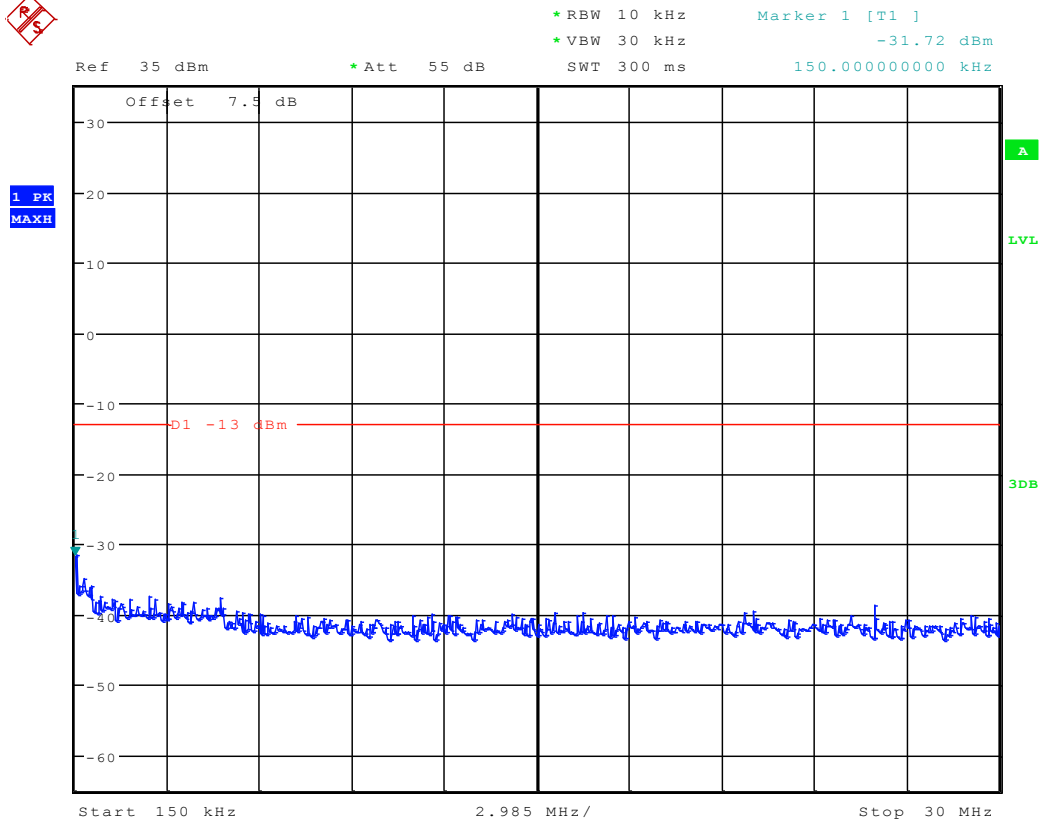


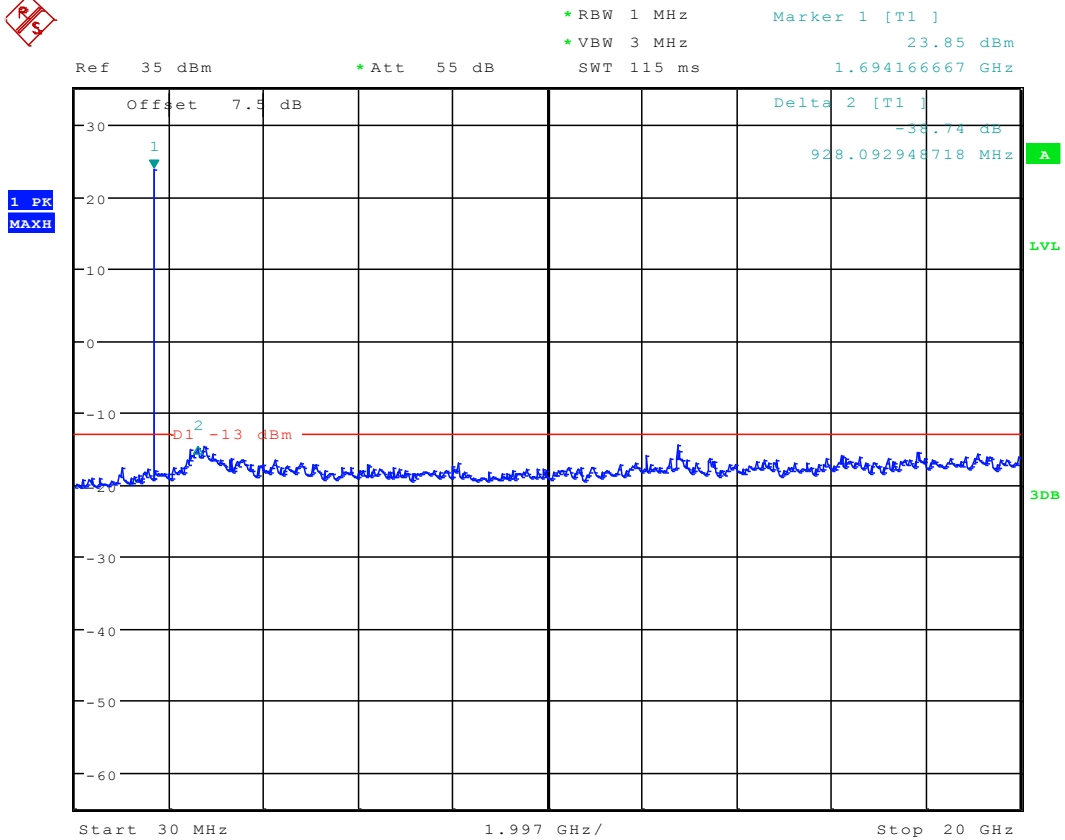
3MHz(BW) Channel 19965



1 PK
MAXH





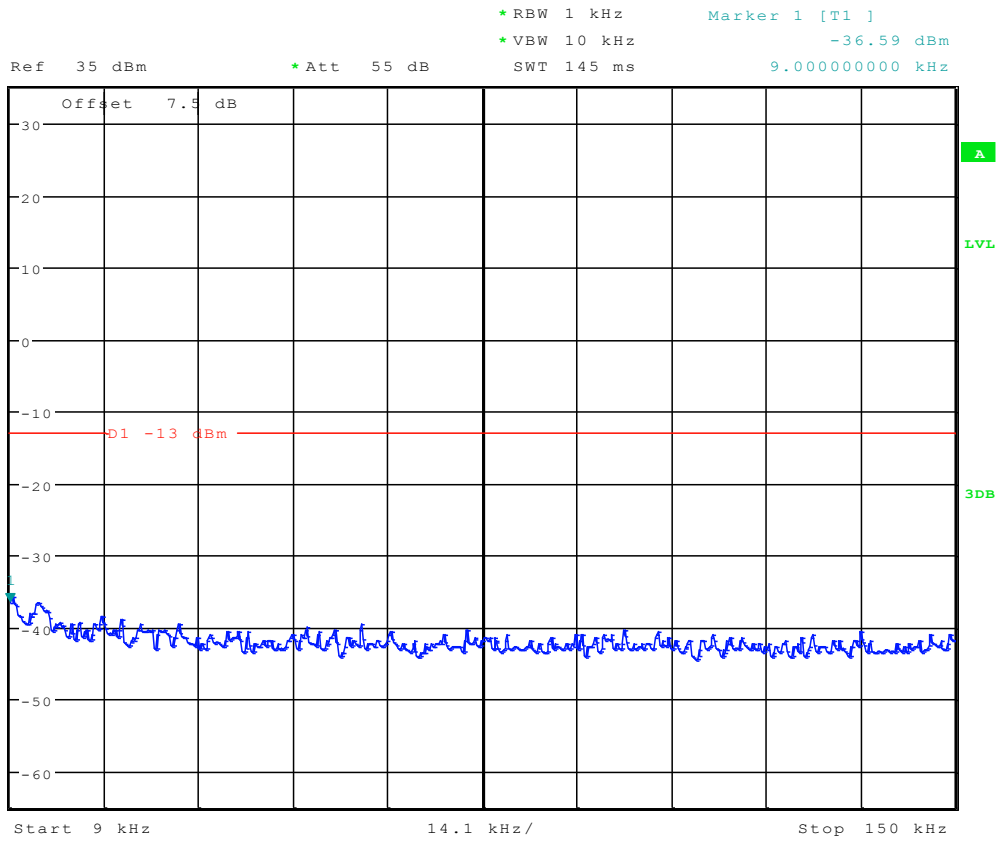


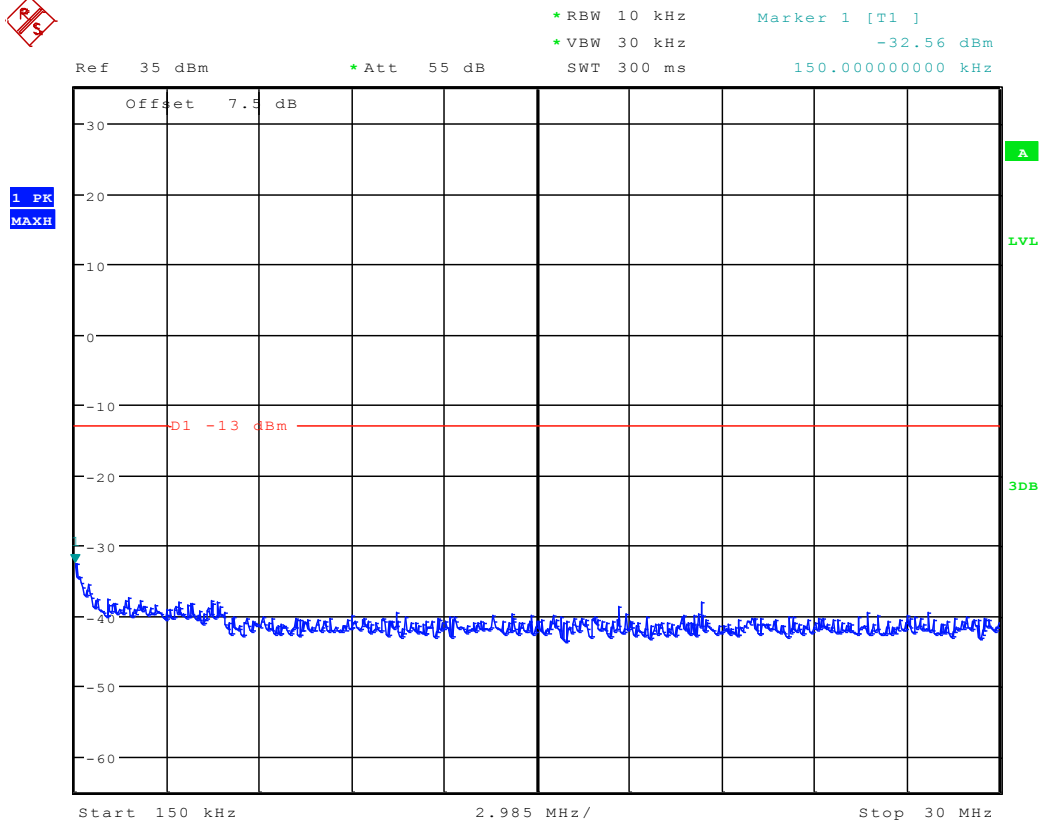


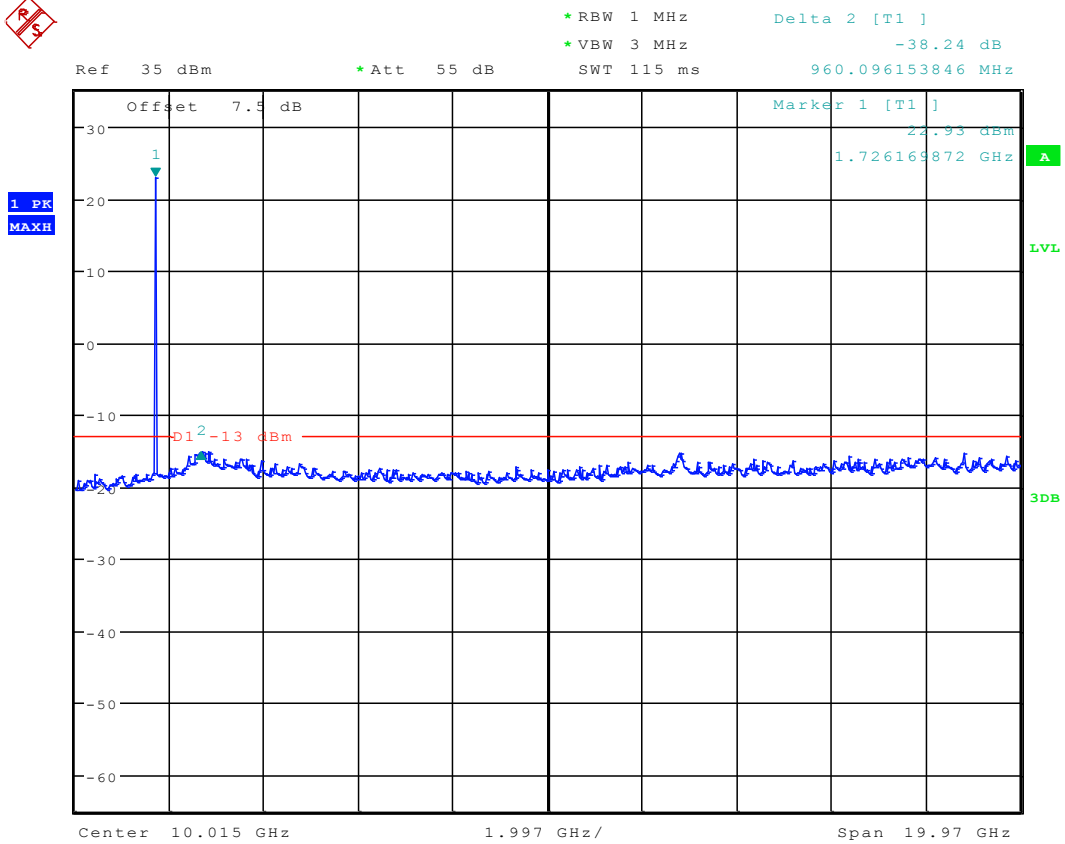
3MHz(BW) Channel 20175



1 PK
MAXH





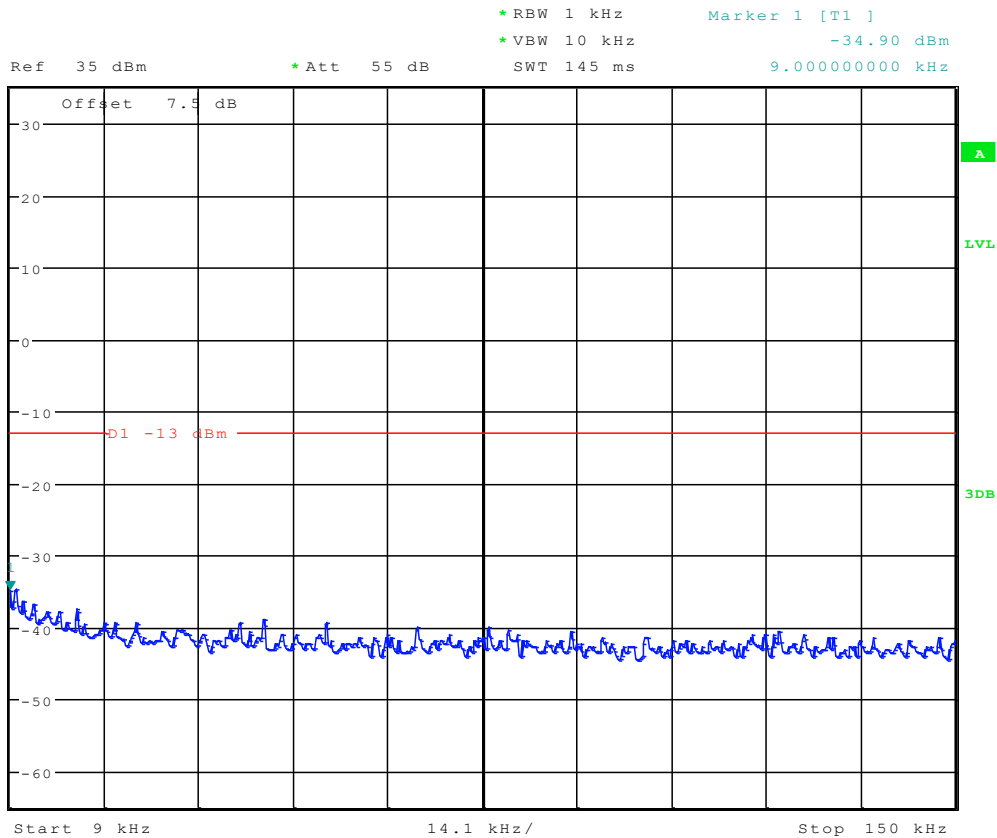


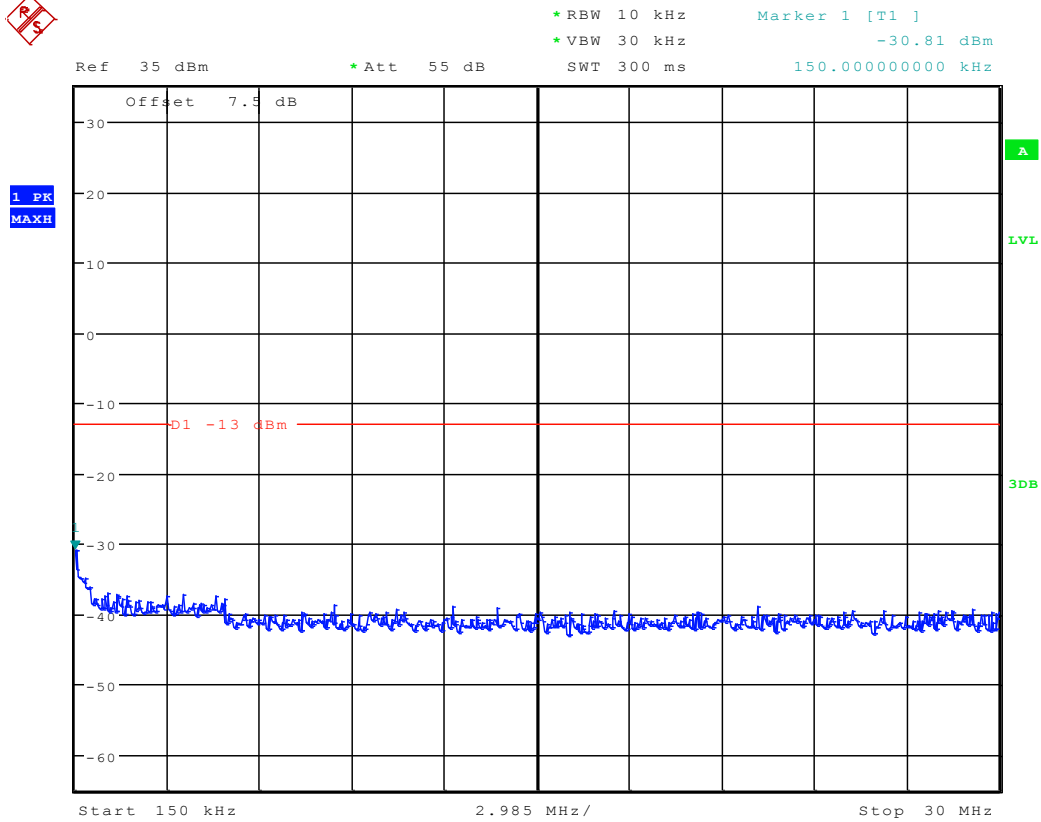


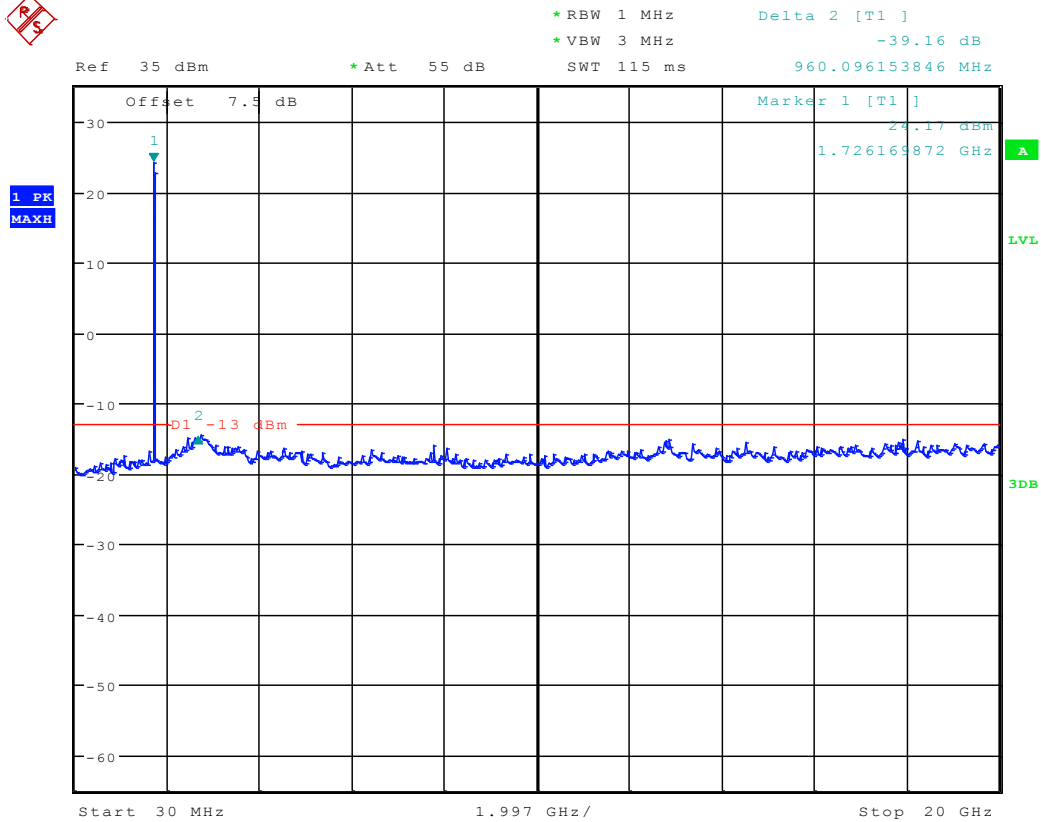
3MHz(BW) Channel 20385



1 PK
MAXH





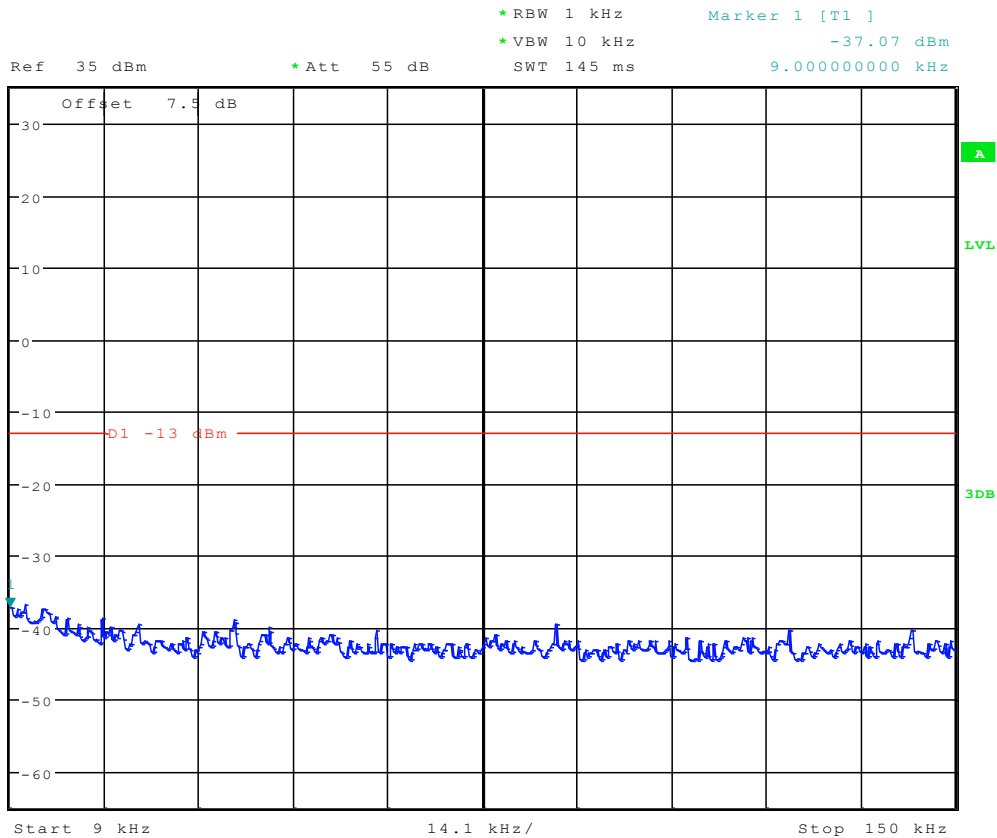


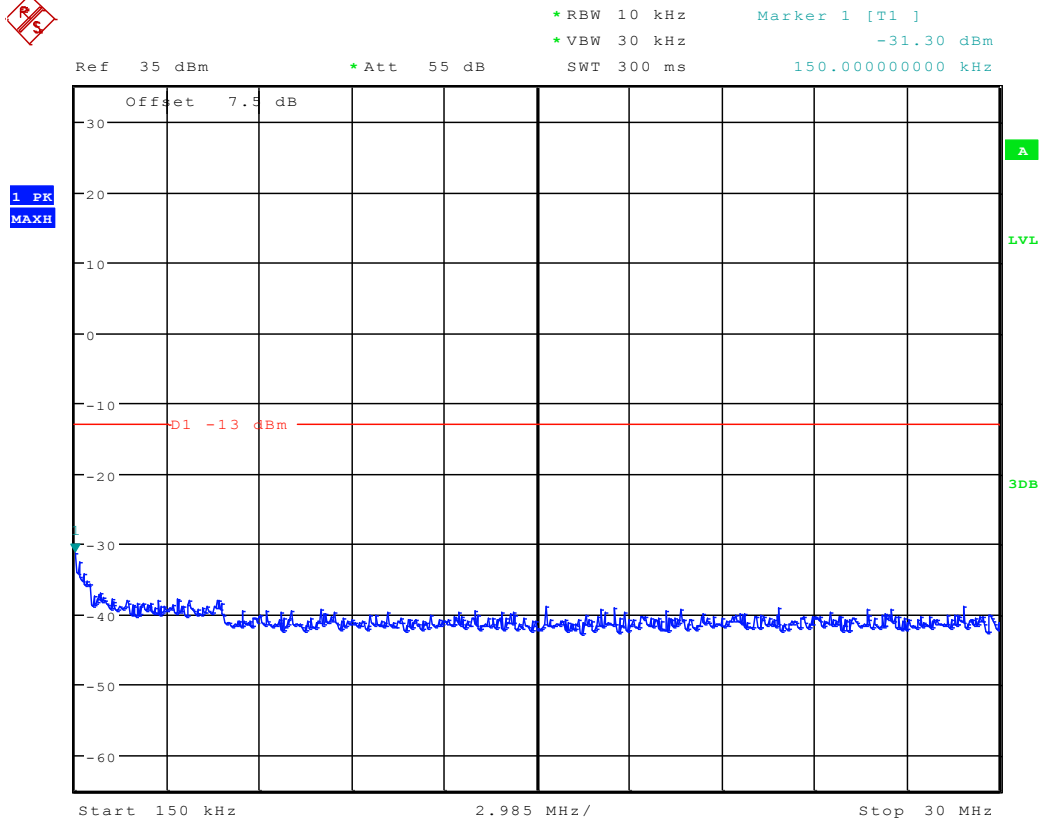


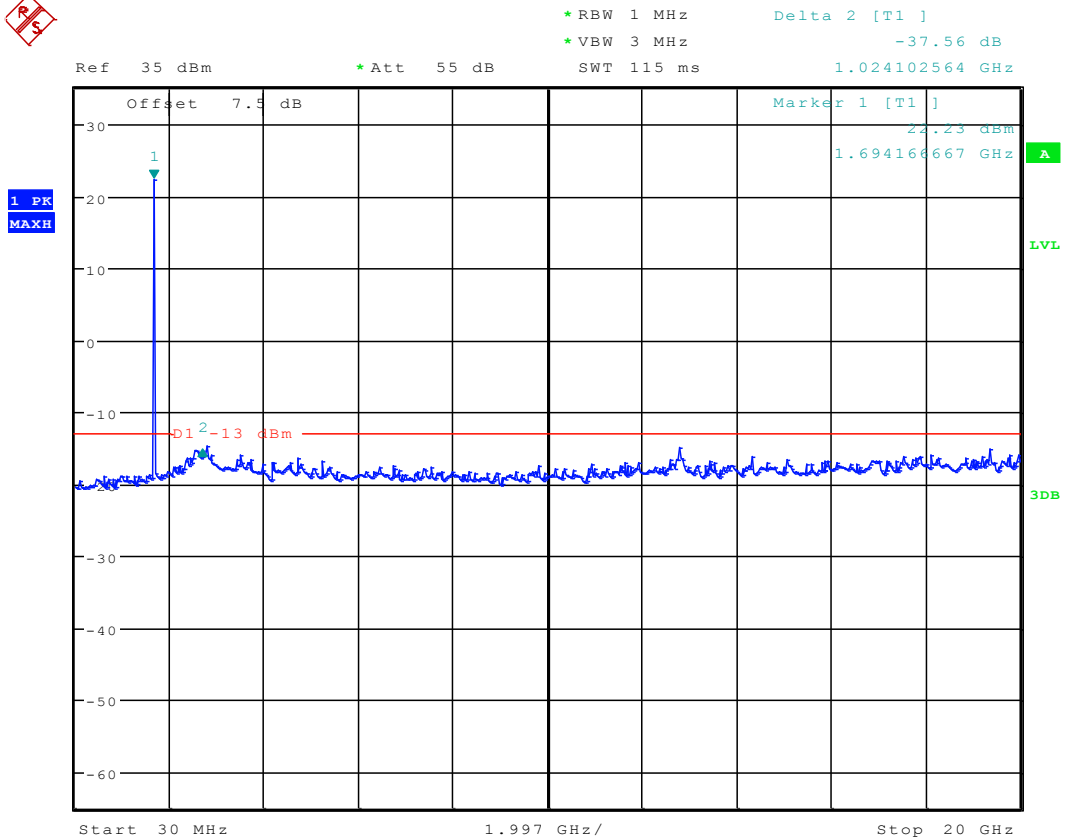
5MHz(BW) Channel 19975



1 PK
MAXH





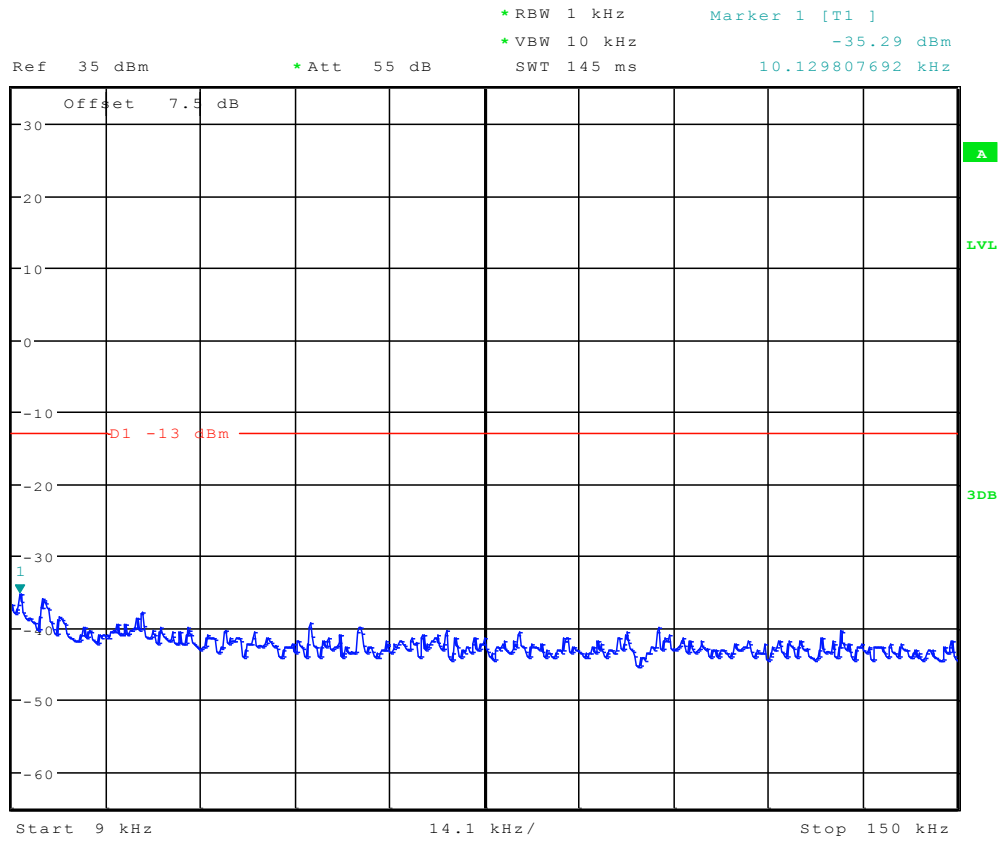


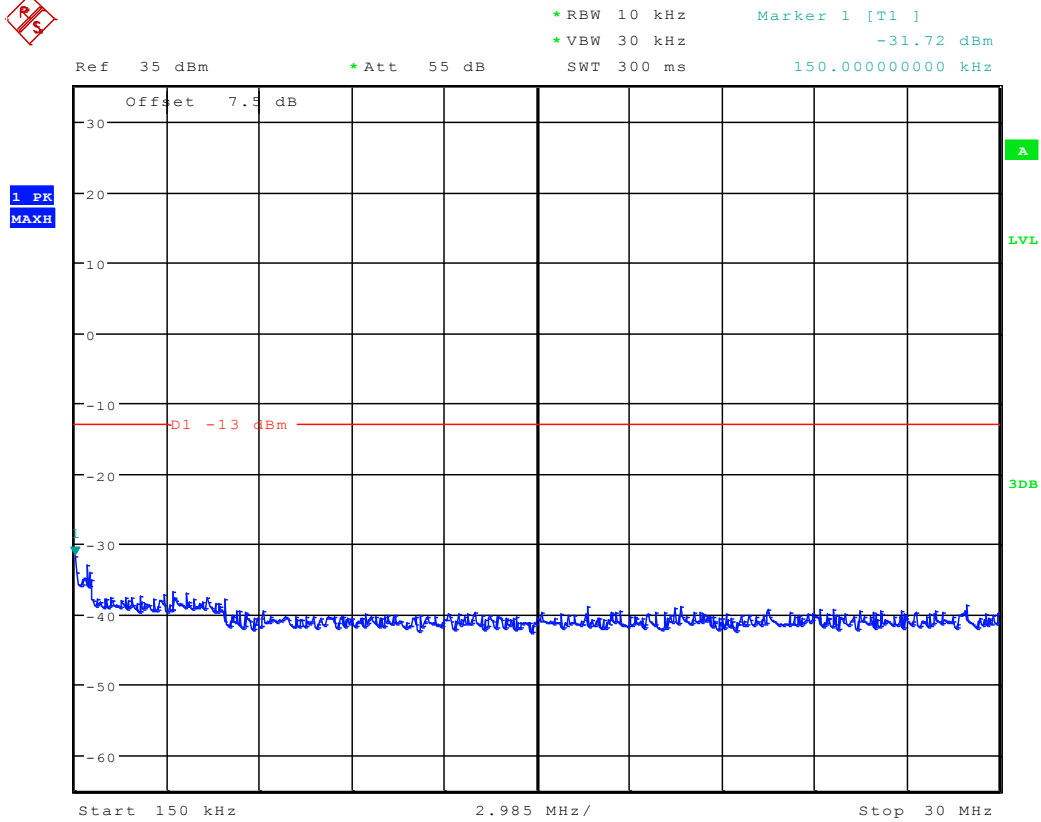


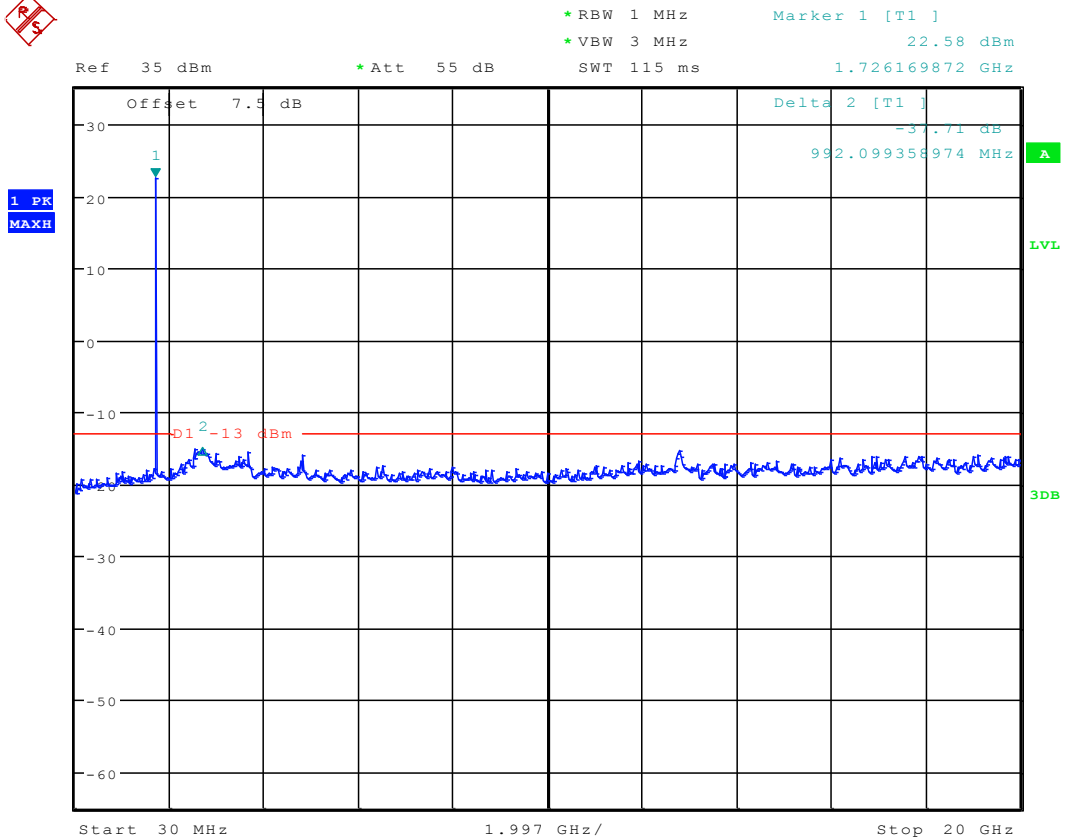
5MHz(BW) Channel 20175



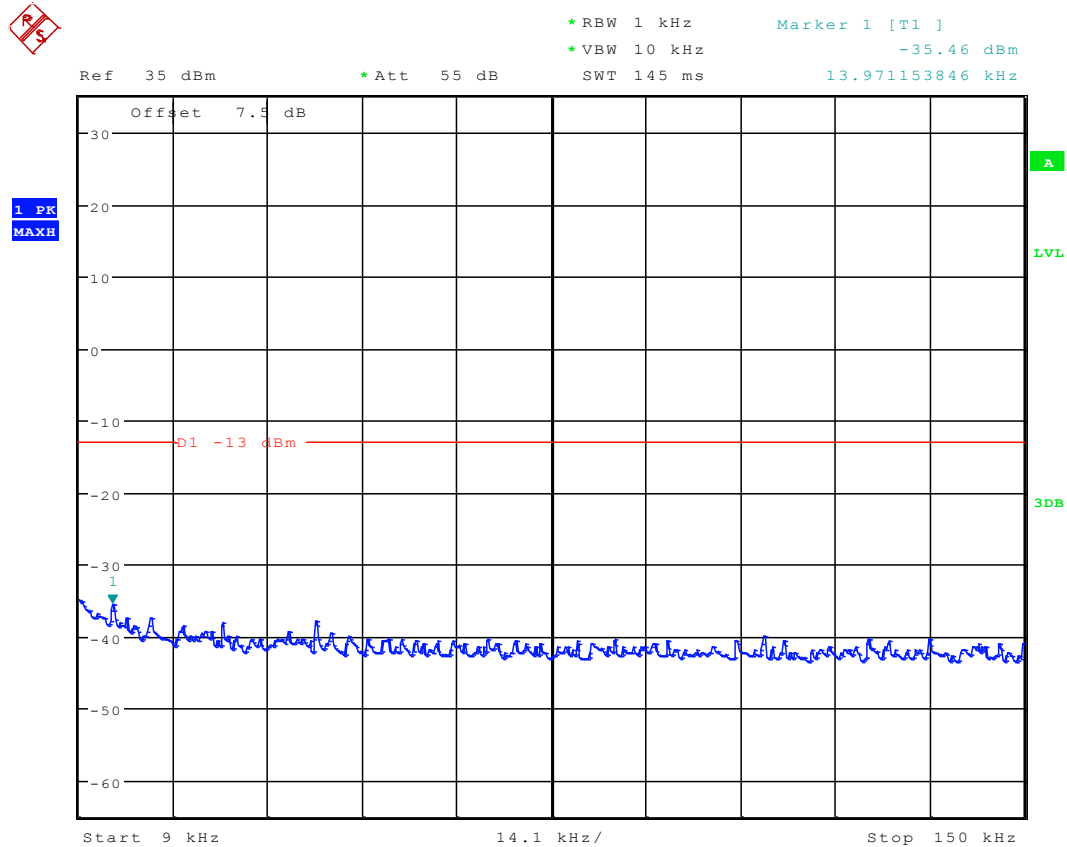
1 PK
MAXH

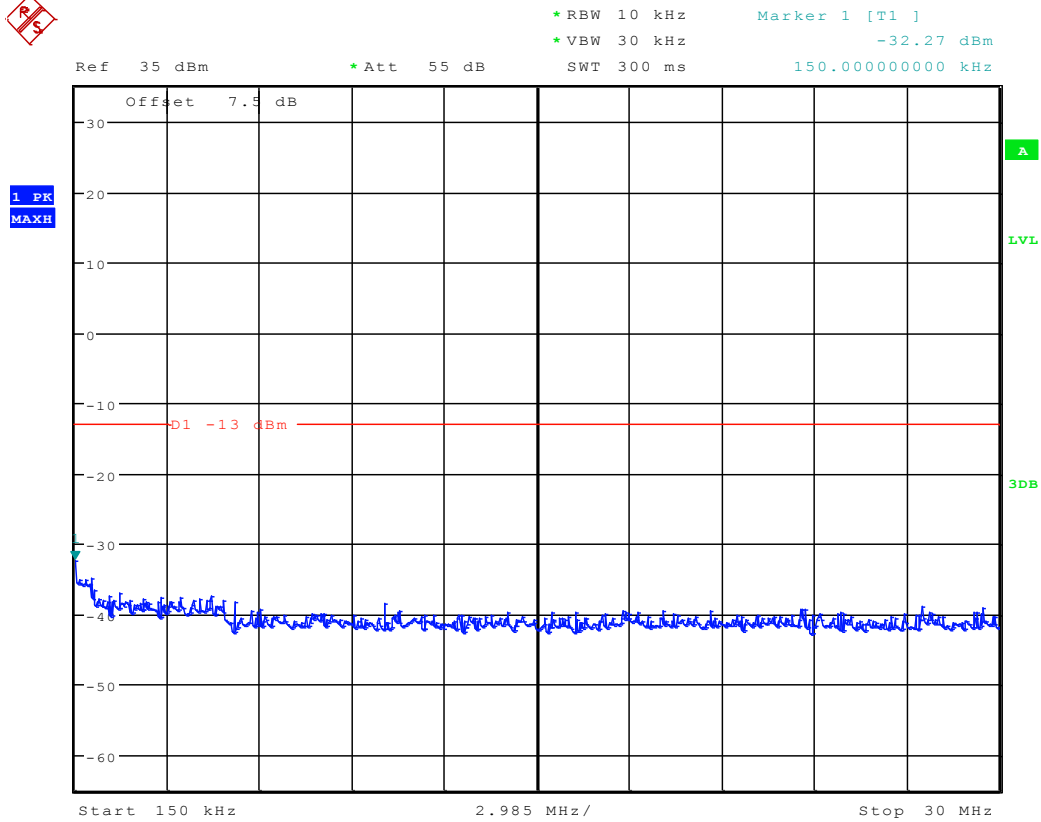


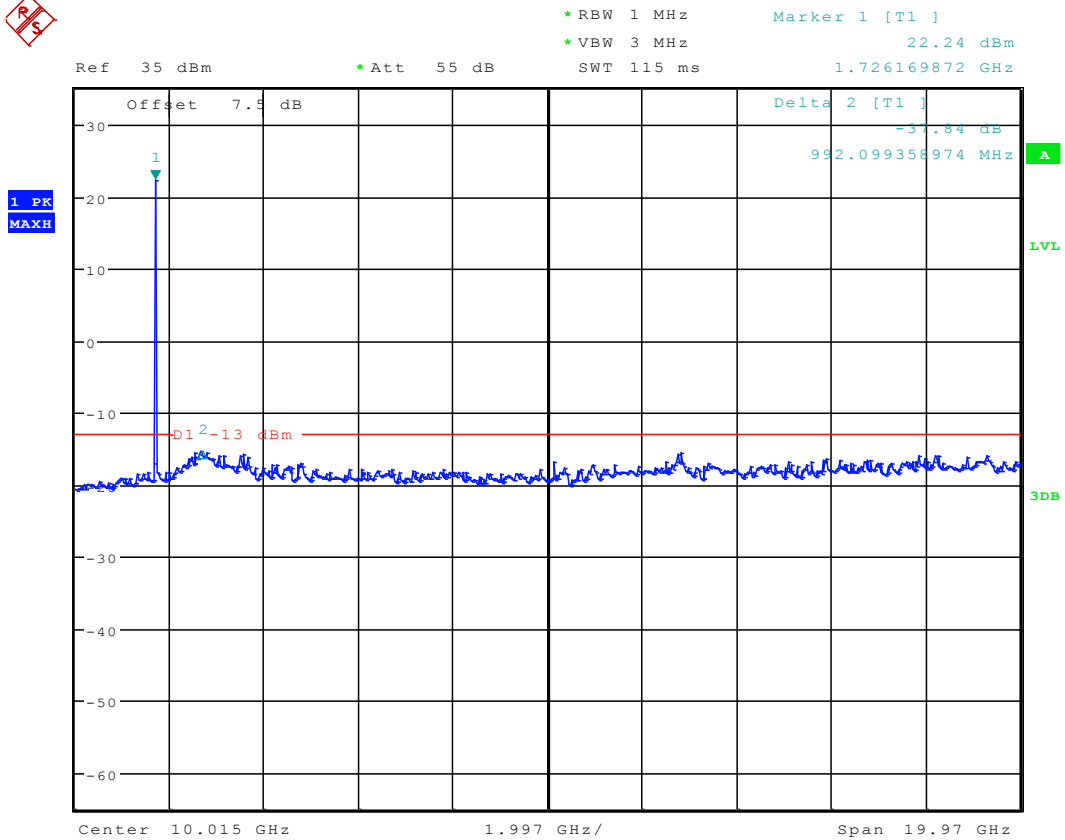




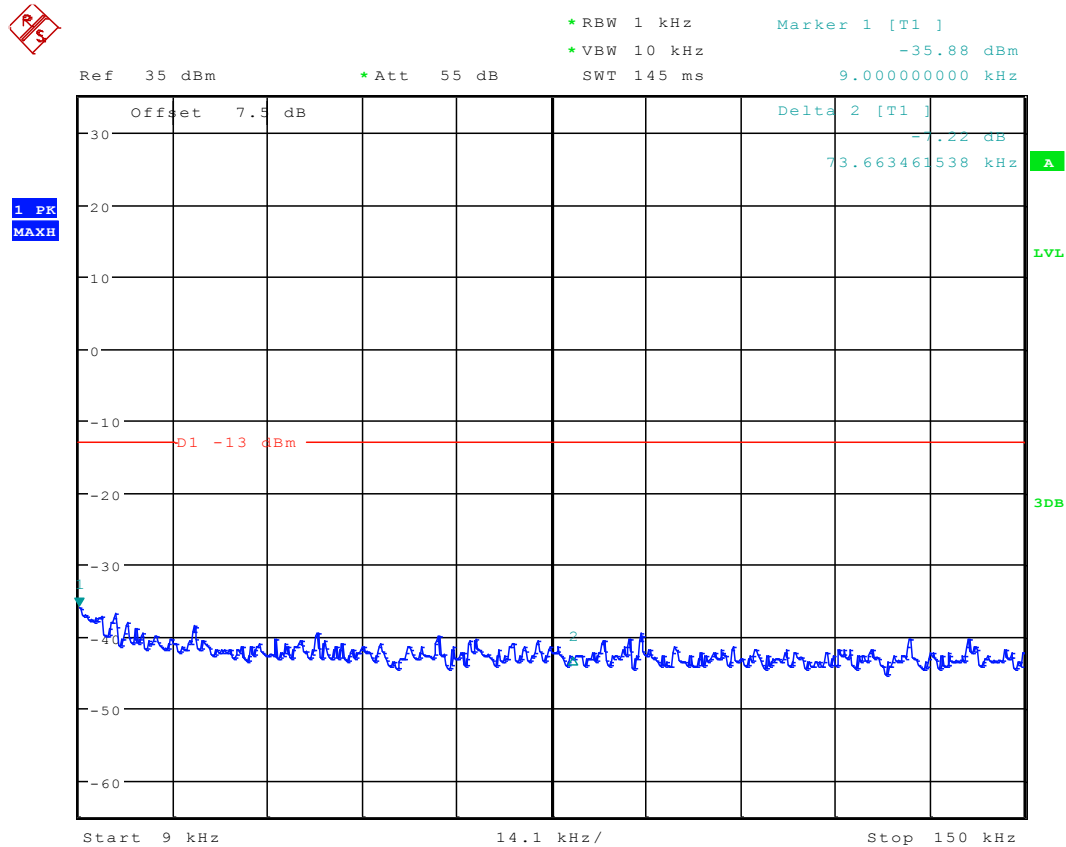
5MHz(BW)
Channel 20375

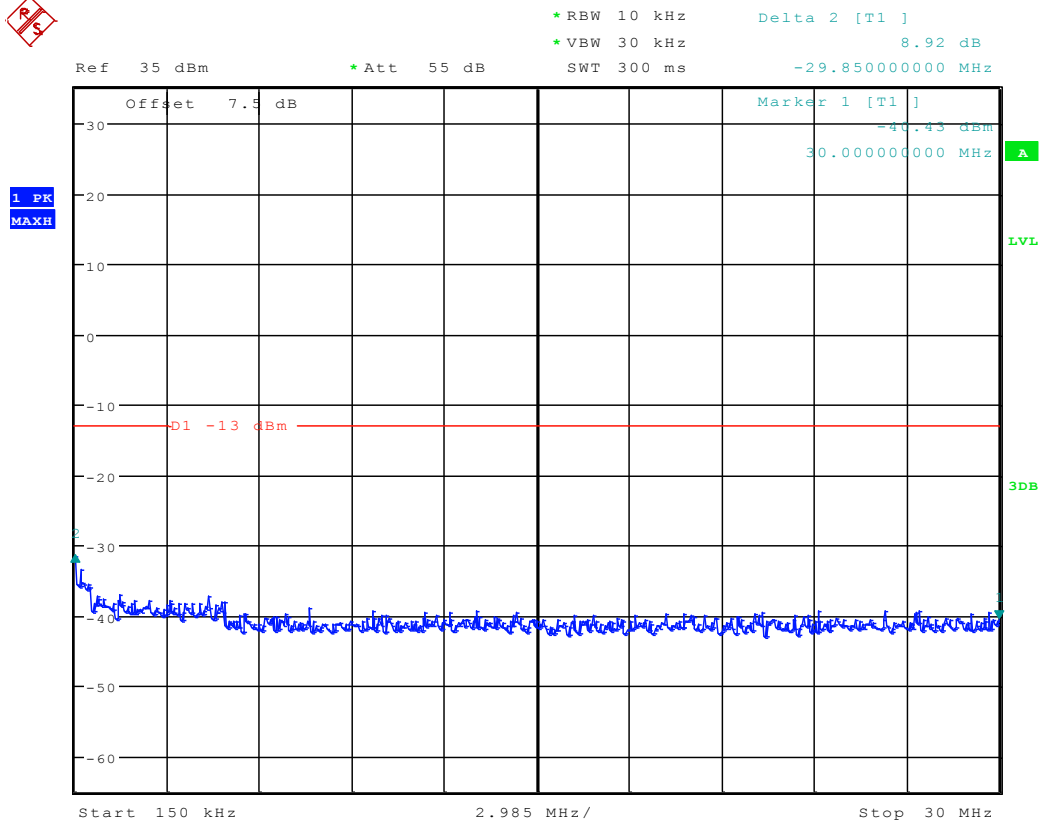


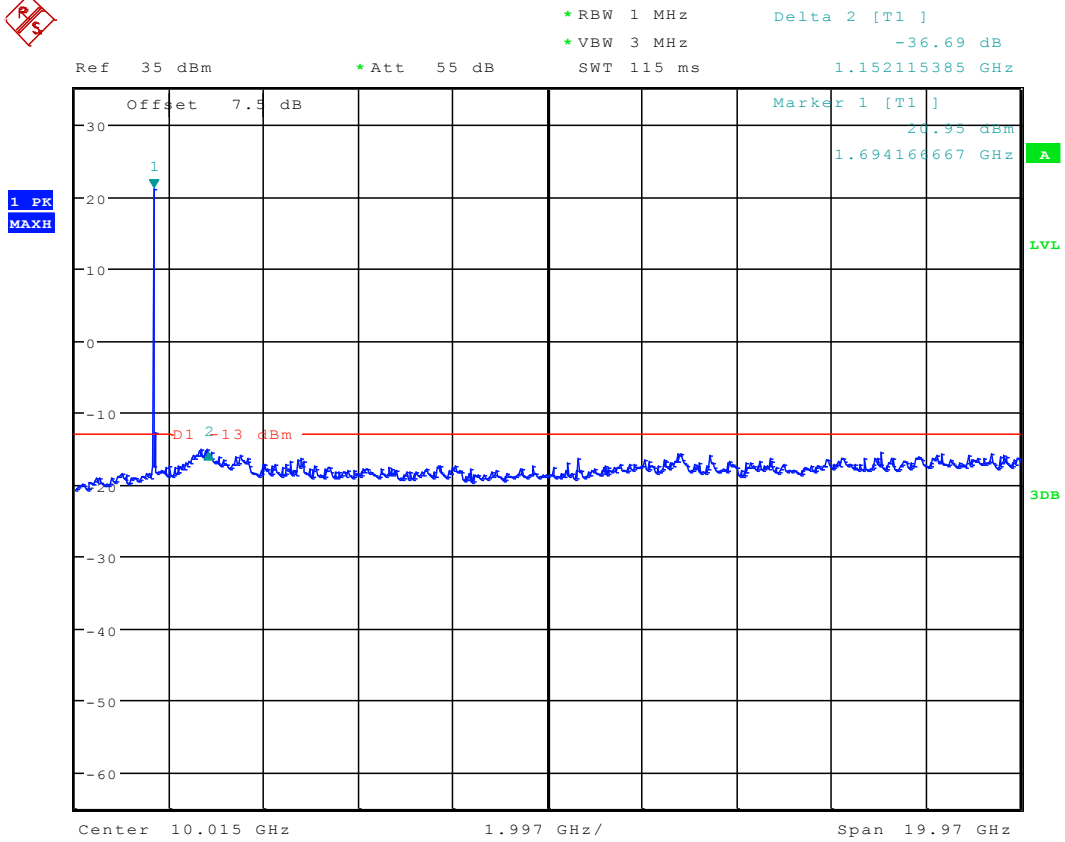




10MHz(BW)
Channel 20000

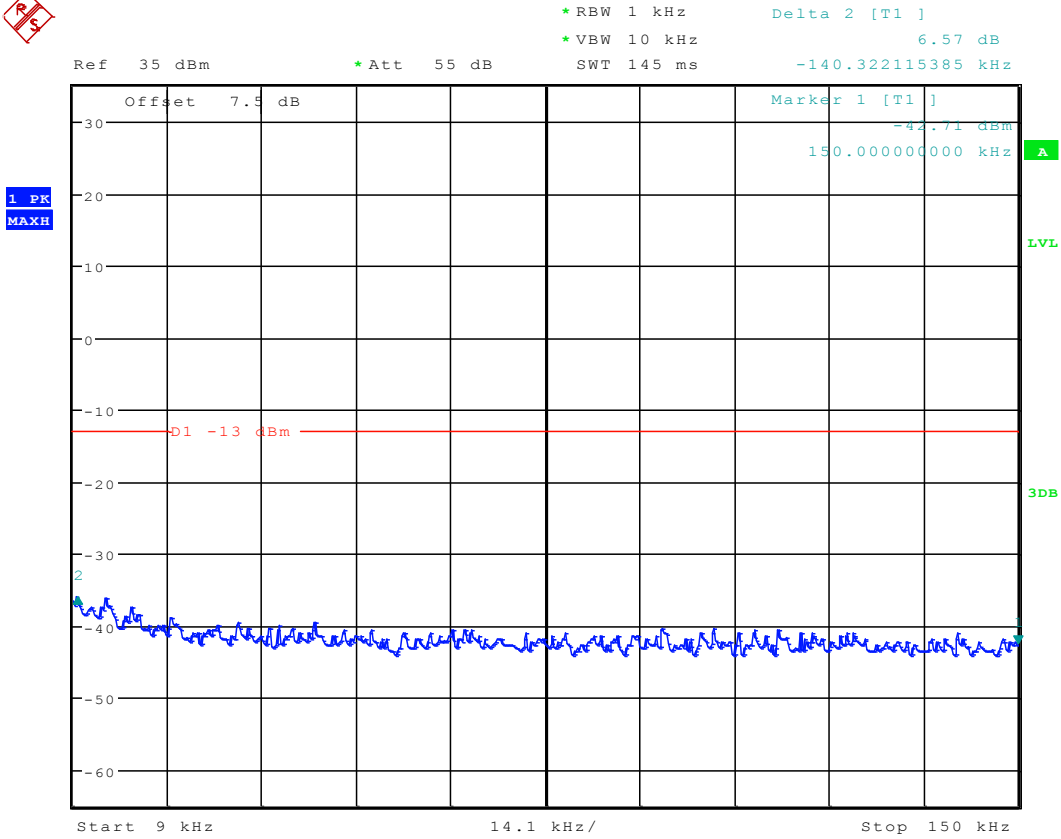


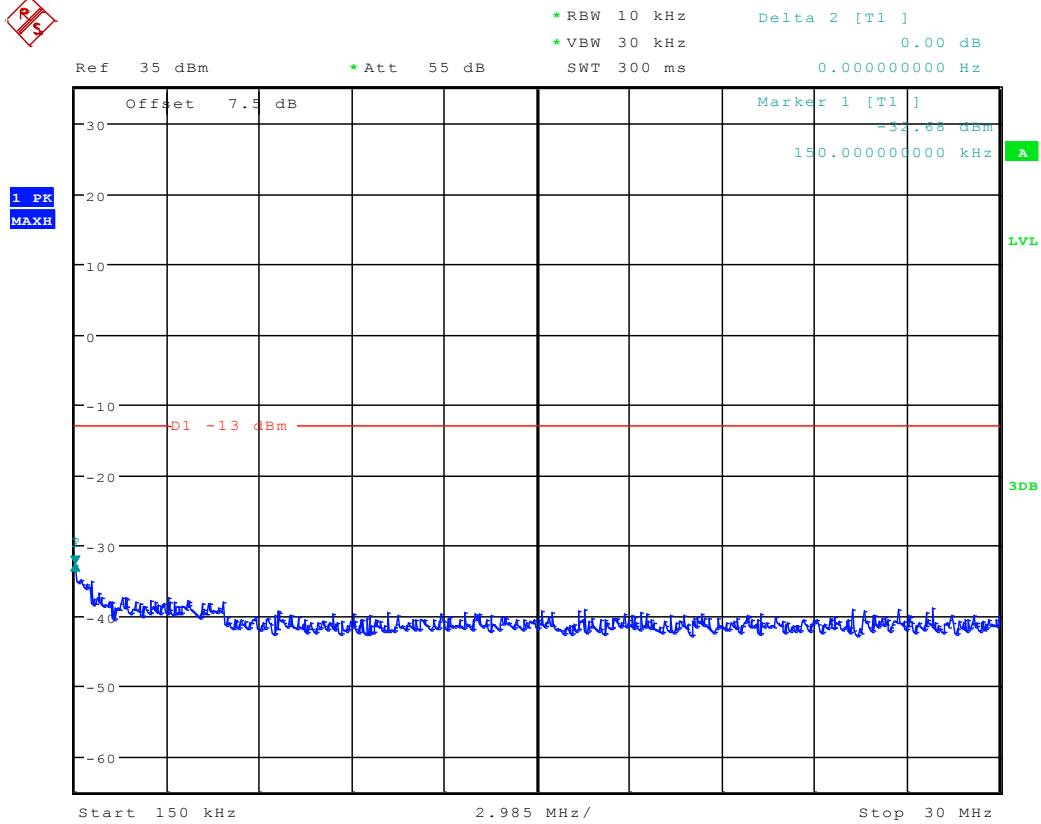


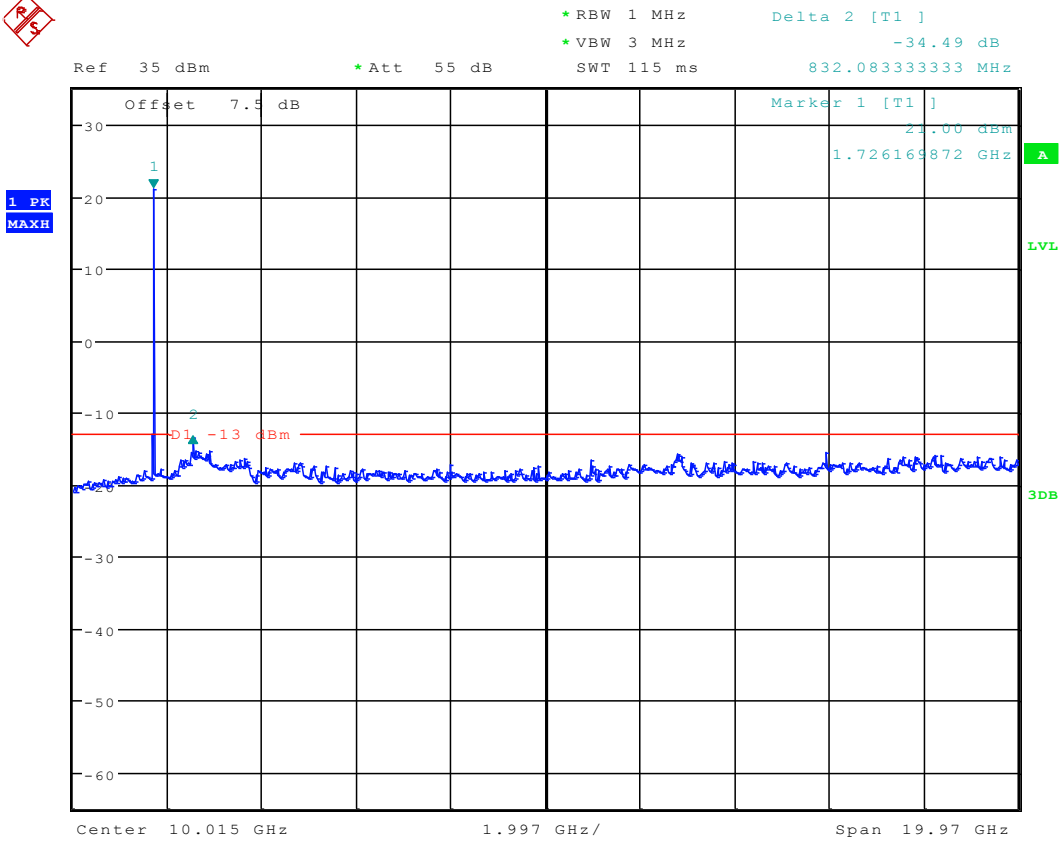




10MHz(BW) Channel 20175





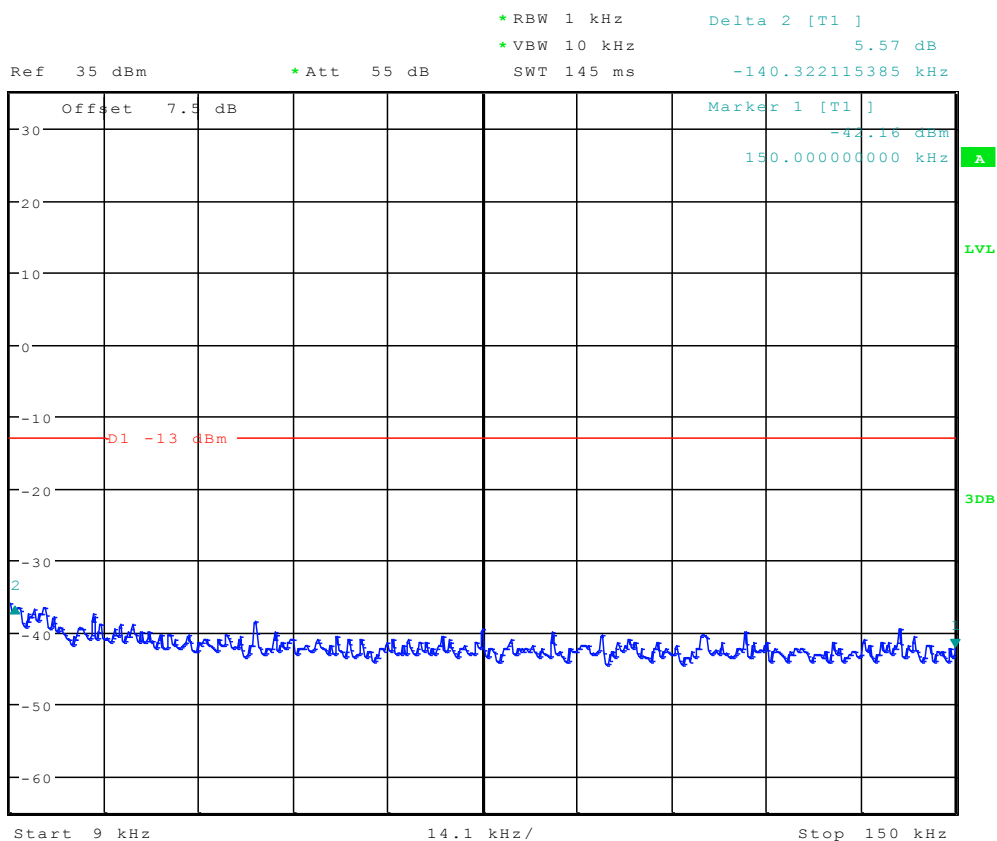


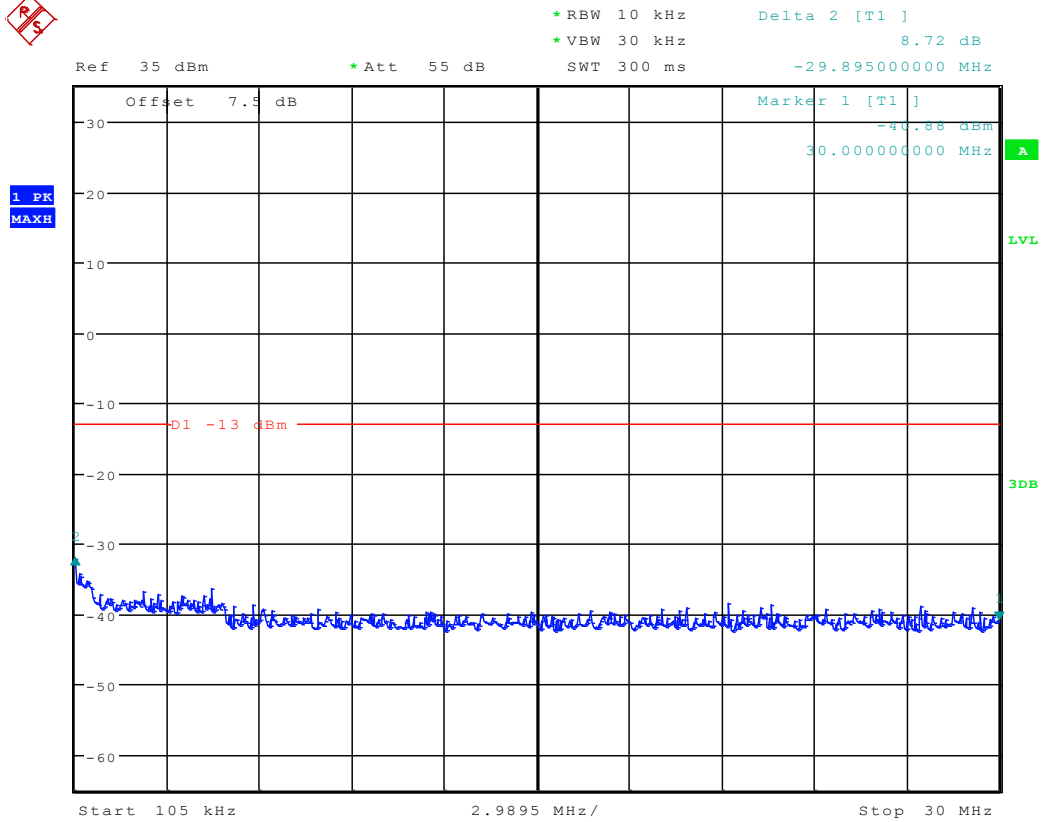


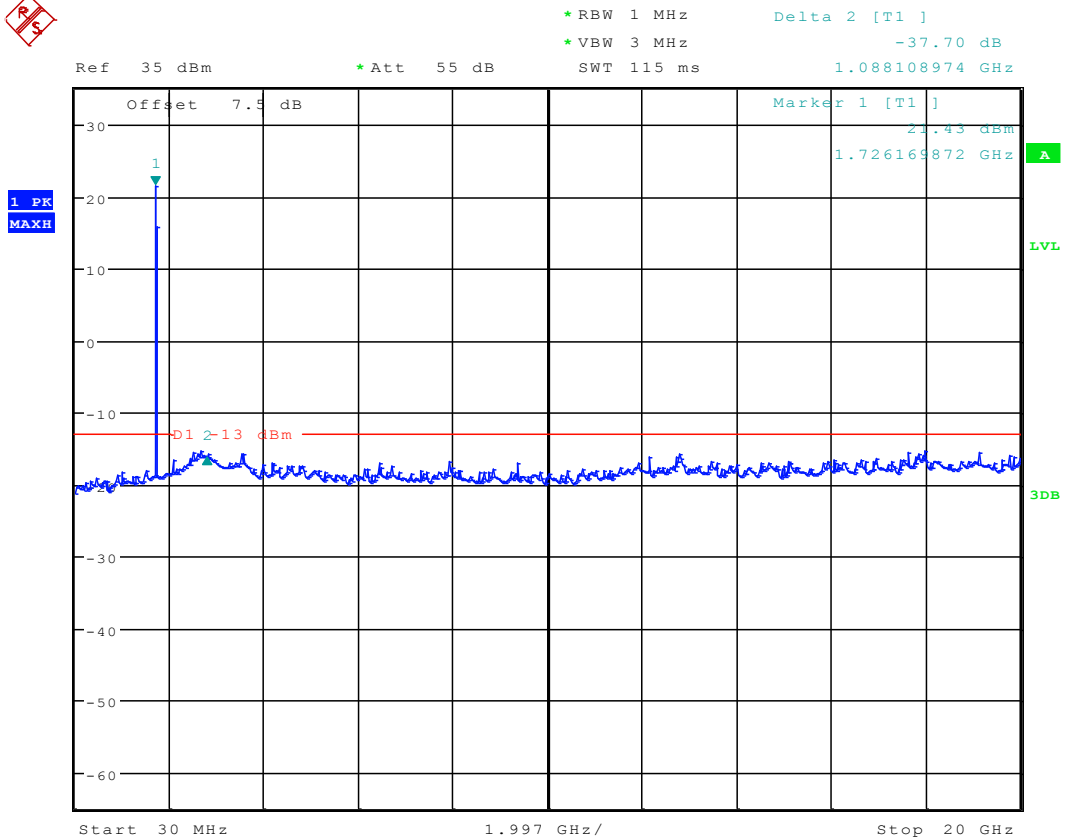
10MHz(BW) Channel 20350



1 PK
MAXH









Appendix E

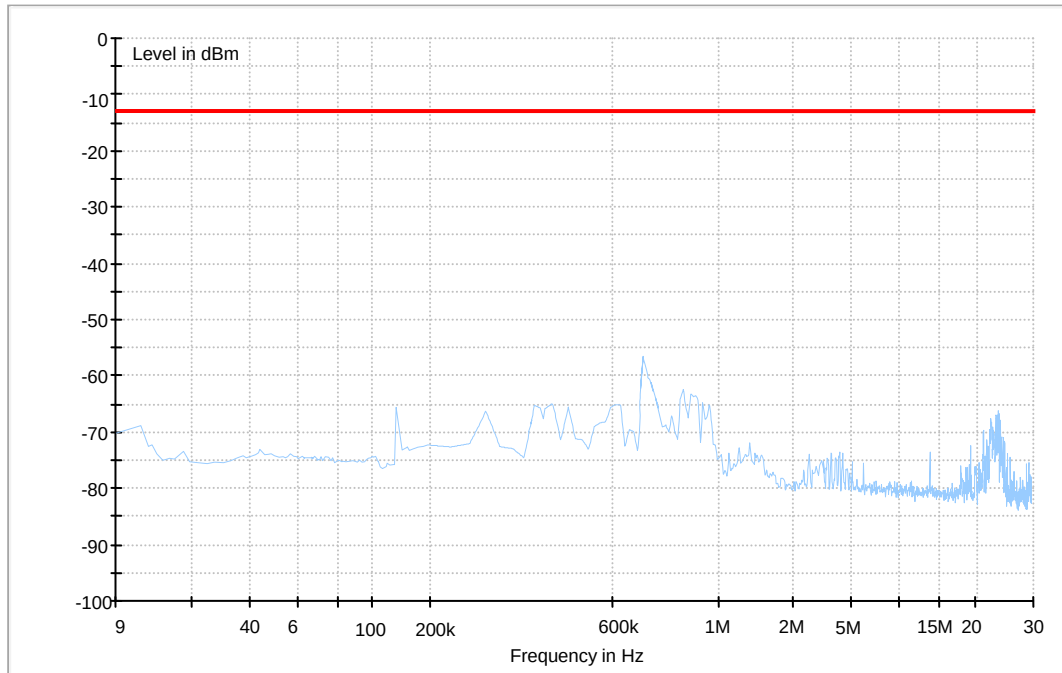
Radiated spurious emission

According to FCC Part 2.1053& Part 27.53(h)



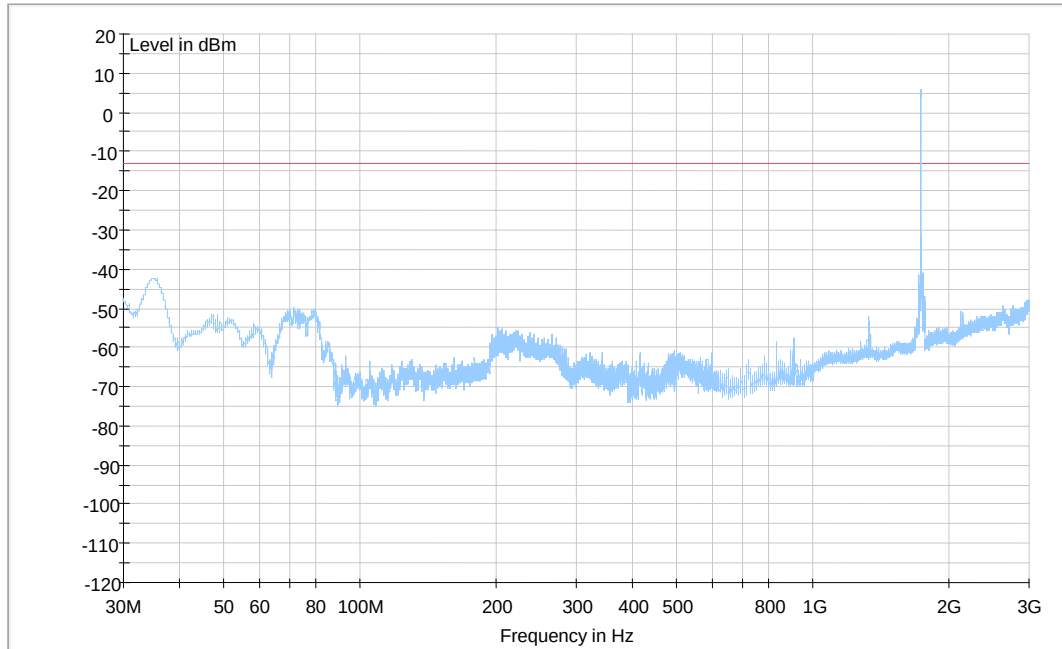
CDMA 1700

Traffic Mode (9kHz-30MHz)



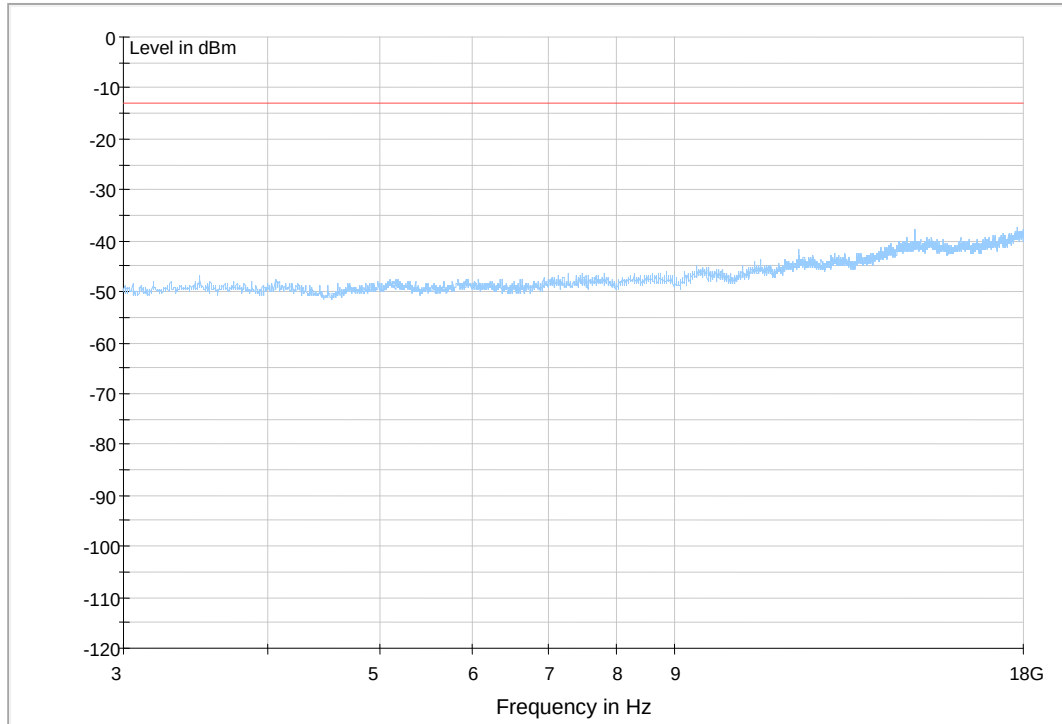


Traffic Mode (30MHz-3GHz)





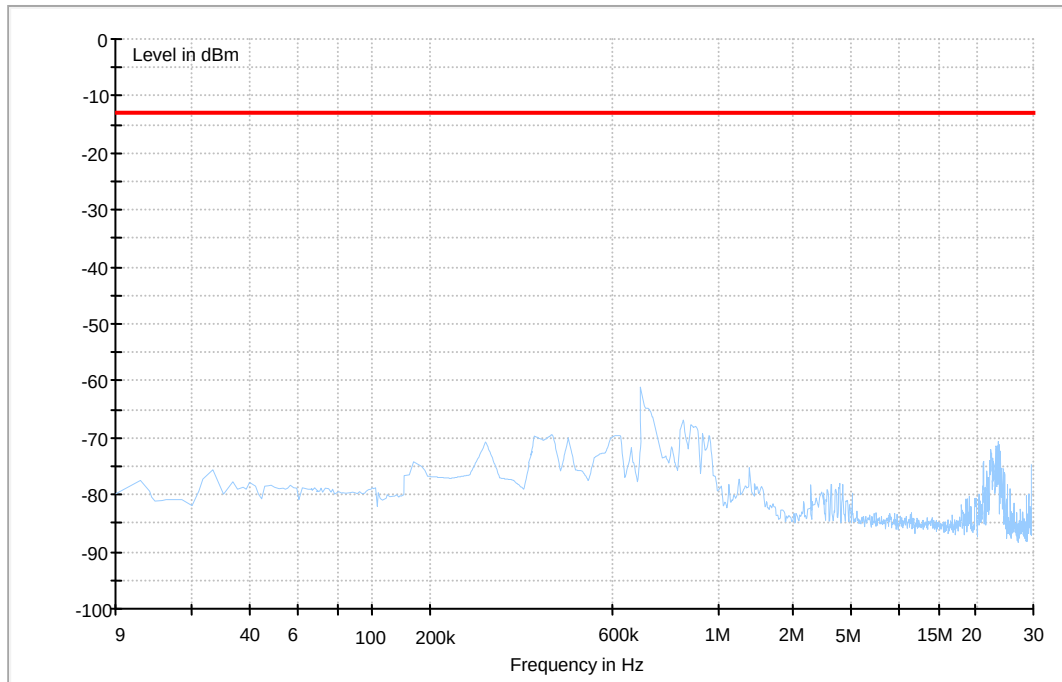
Traffic Mode (3GHz-18GHz)





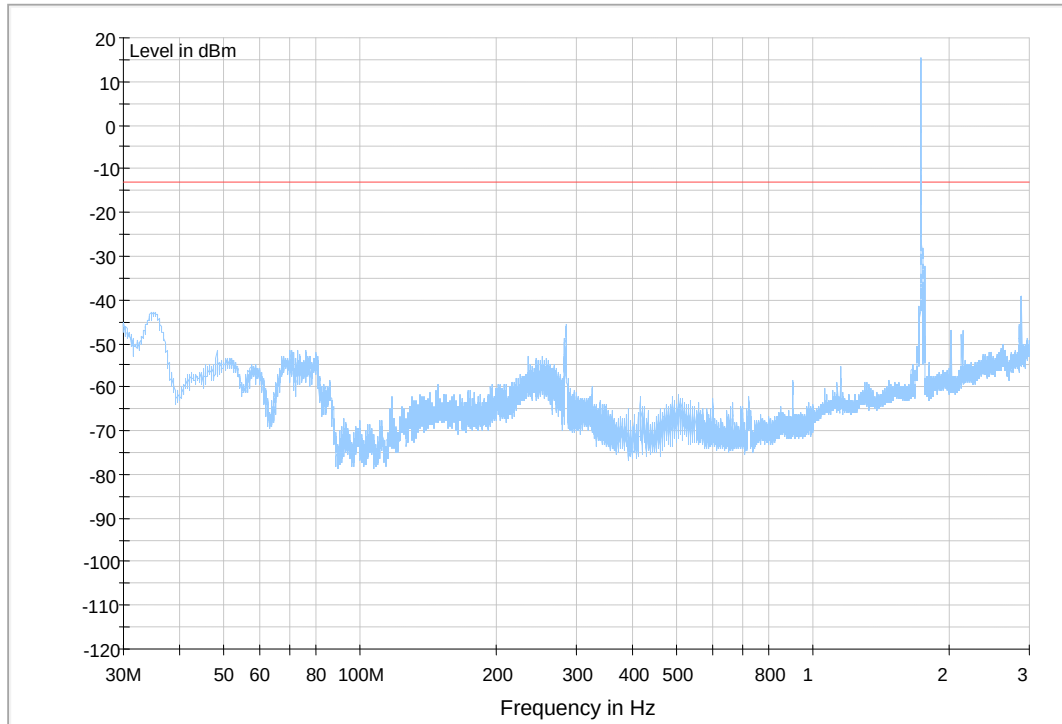
EVDO.0 1700

Traffic Mode (9kHz-30MHz)



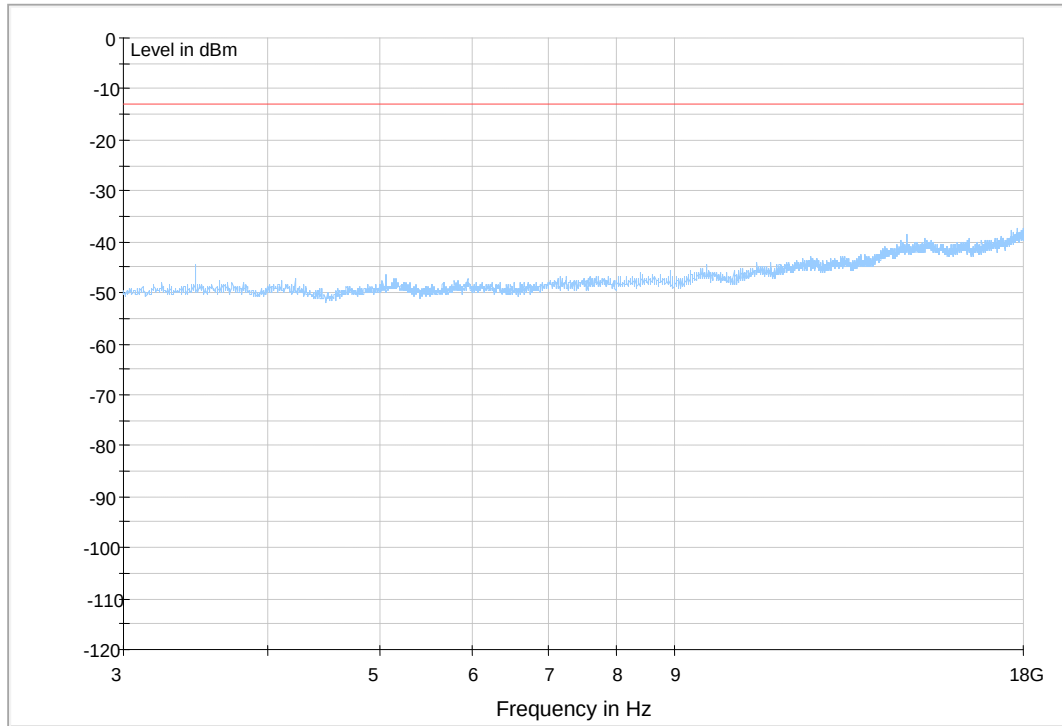


Traffic Mode (30MHz-3GHz)





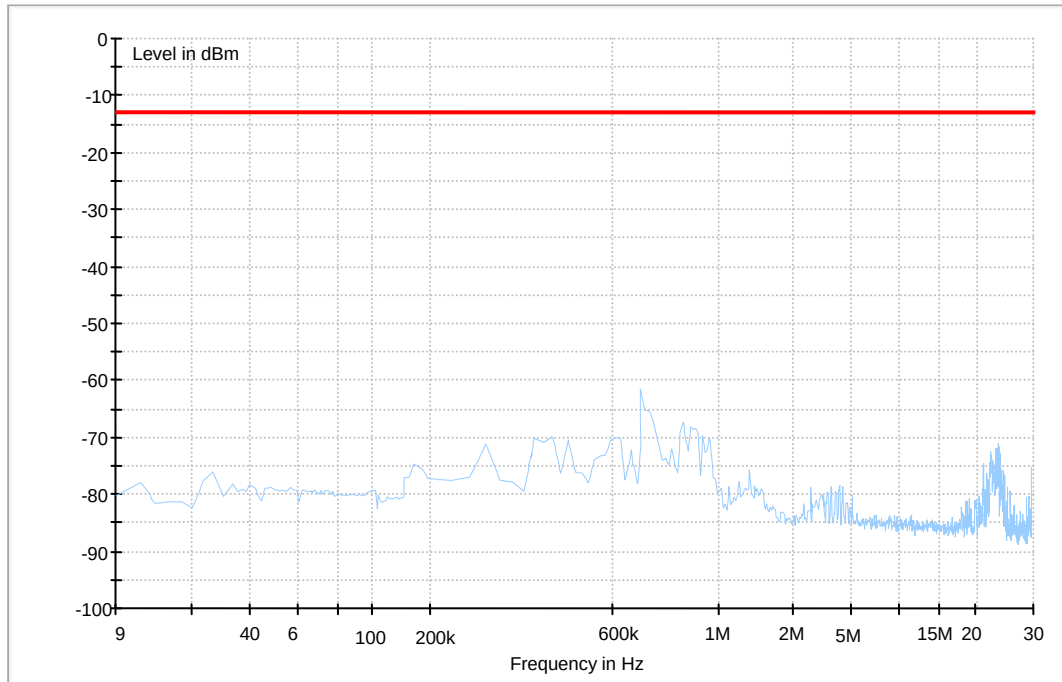
Traffic Mode (3GHz-18GHz)





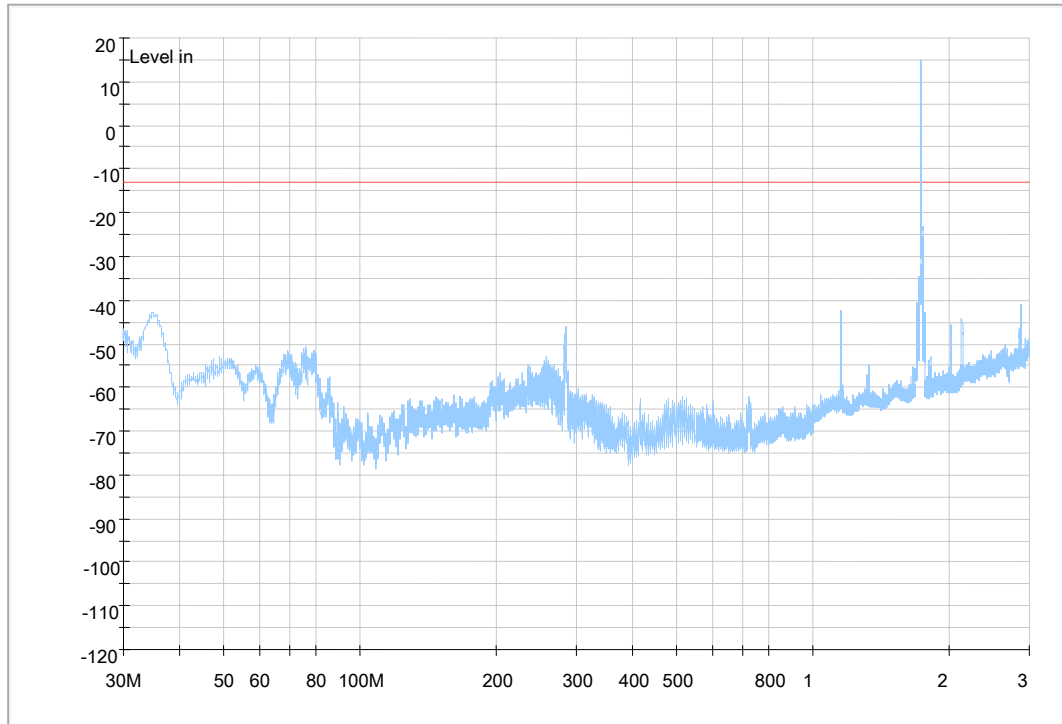
EVDO.A 1700

Traffic Mode (9kHz-30MHz)



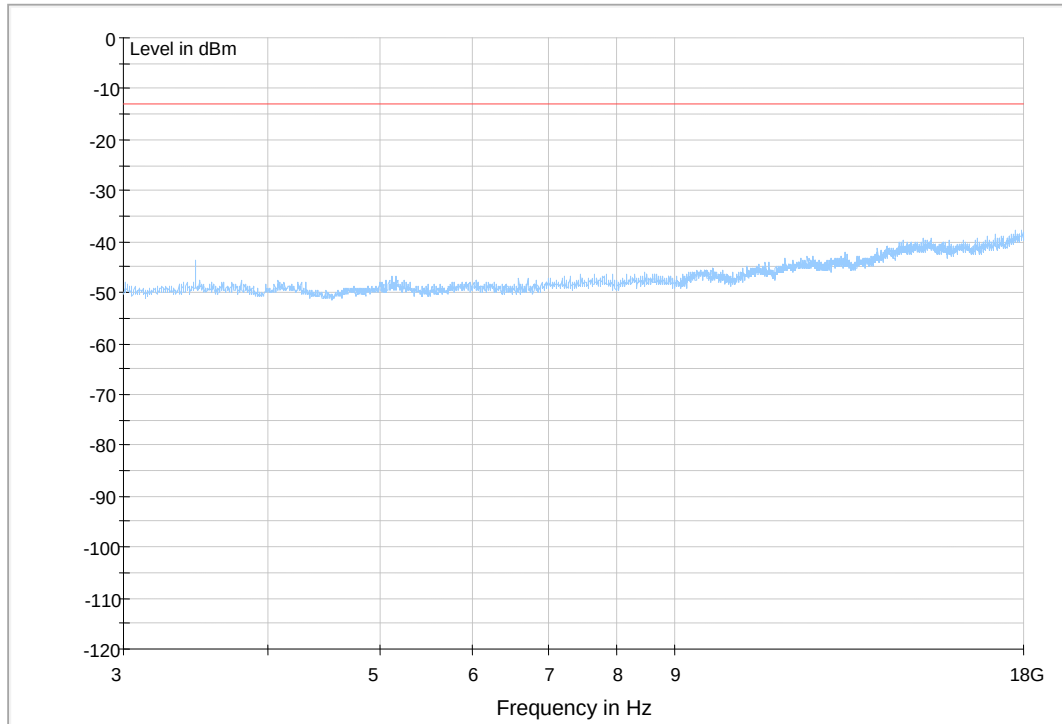


Traffic Mode (30MHz-3GHz)





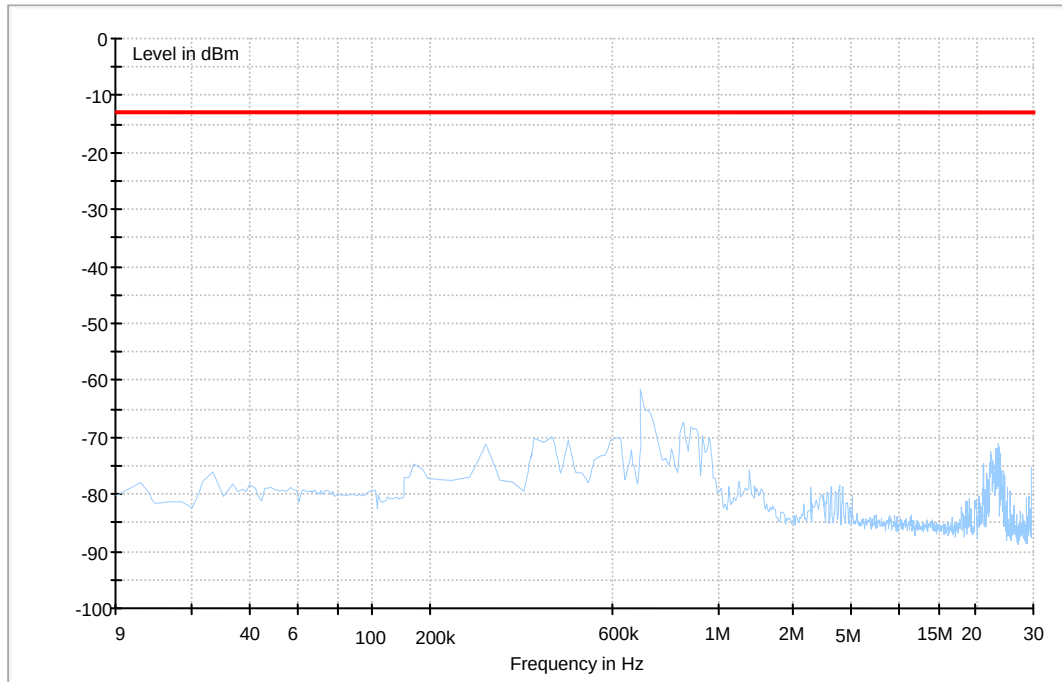
Traffic Mode (3GHz-18GHz)





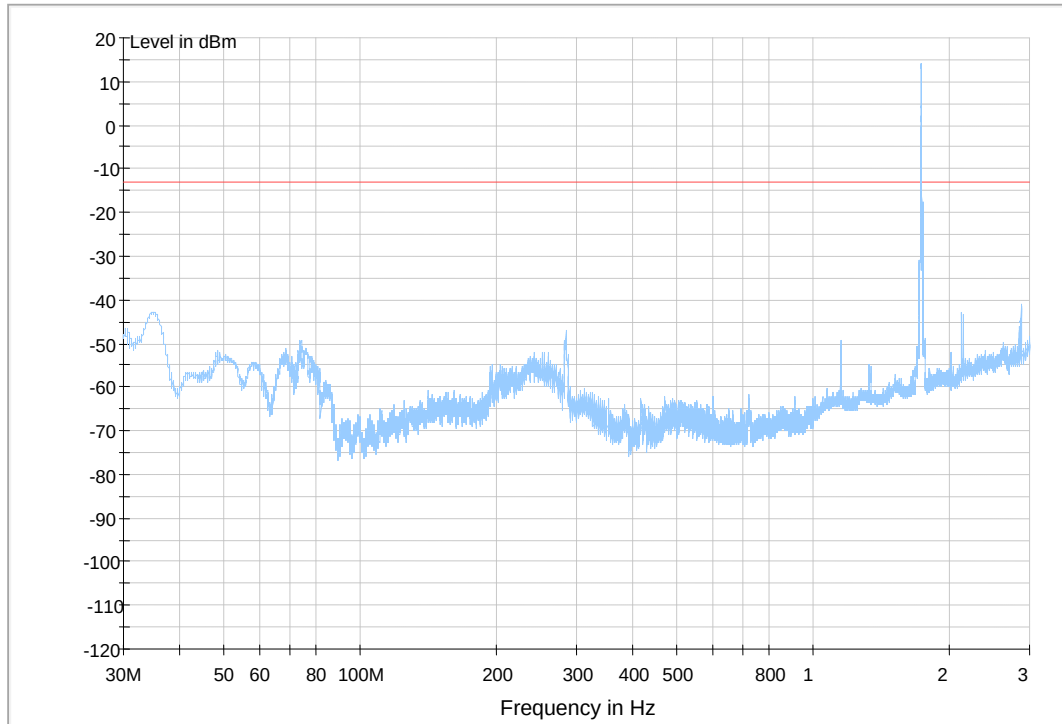
LTE band IV (Channel Bandwidth=1.4MHz)

Traffic Mode (9kHz-30MHz)



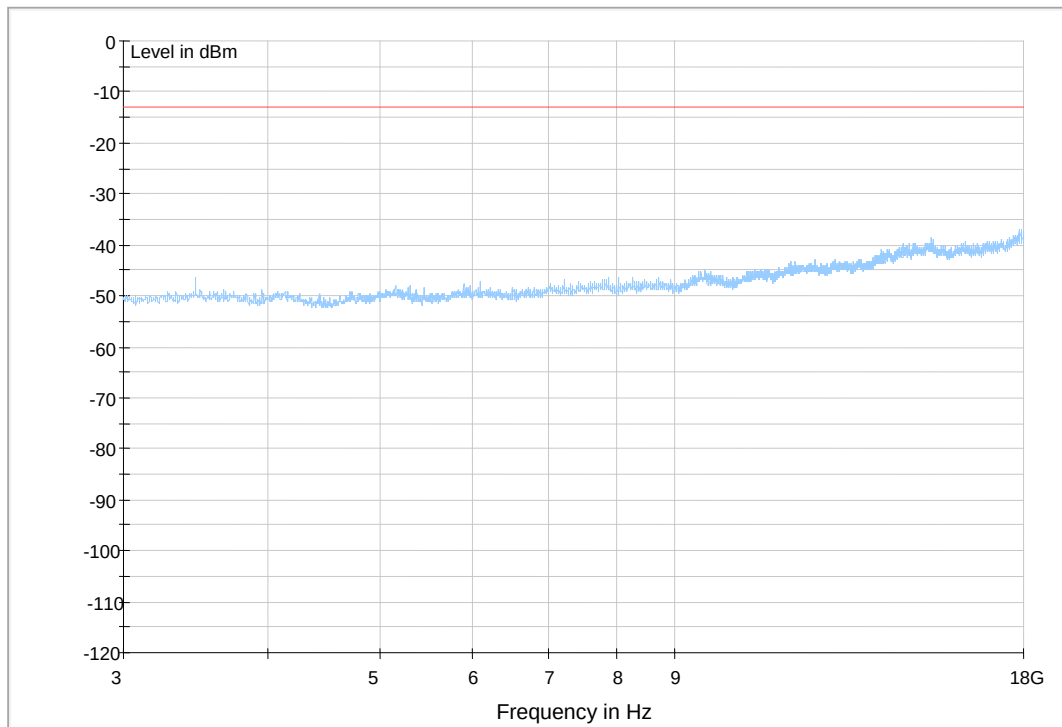


Traffic Mode (30MHz-3GHz)





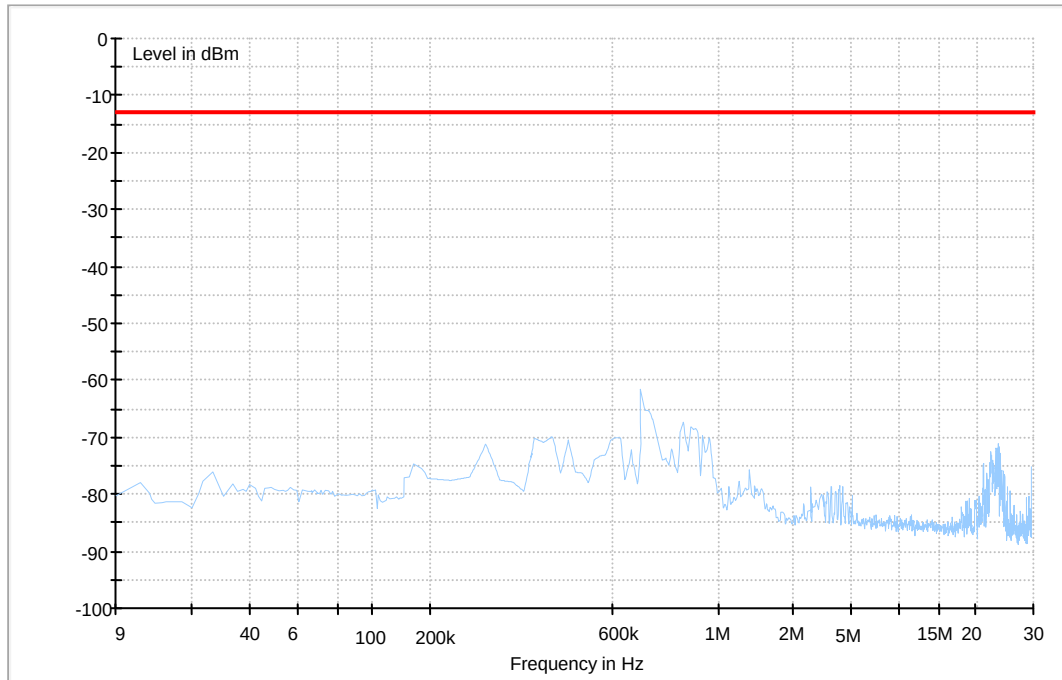
Traffic Mode (3GHz-18GHz)





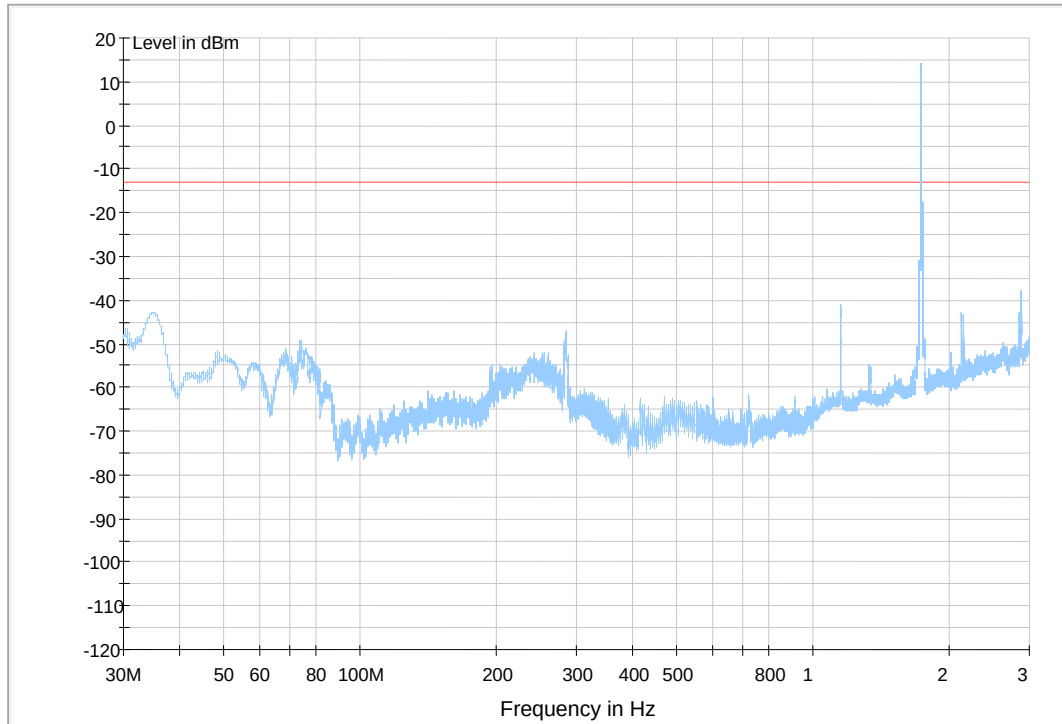
LTE band IV (Channel Bandwidth=3MHz)

Traffic Mode (9kHz-30MHz)



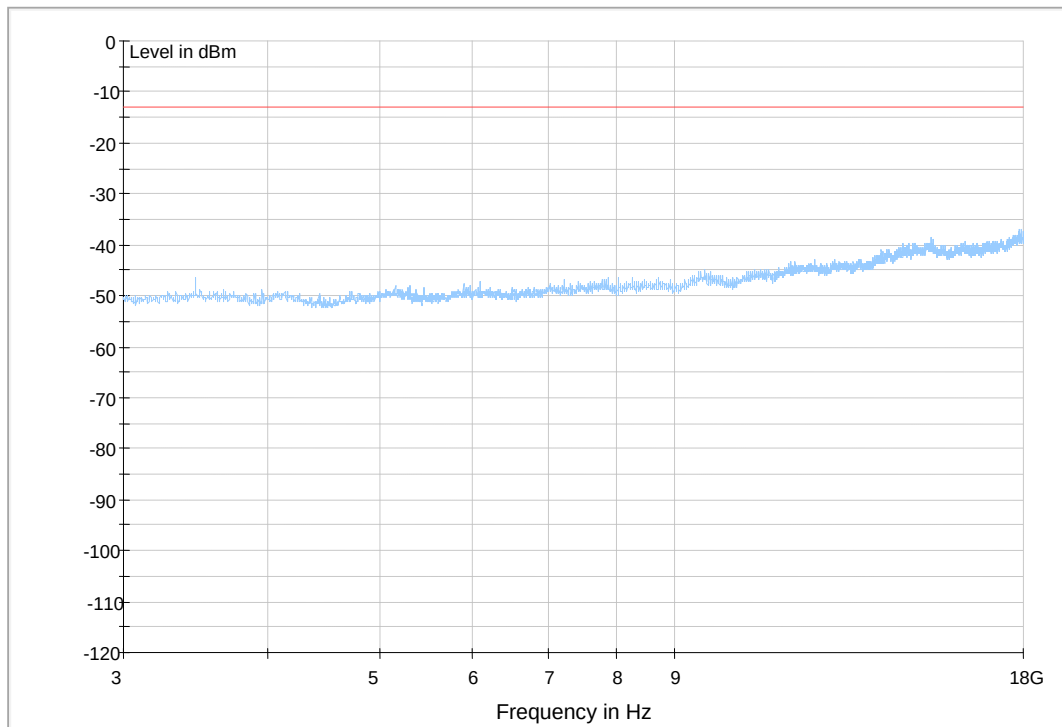


Traffic Mode (30MHz-3GHz)





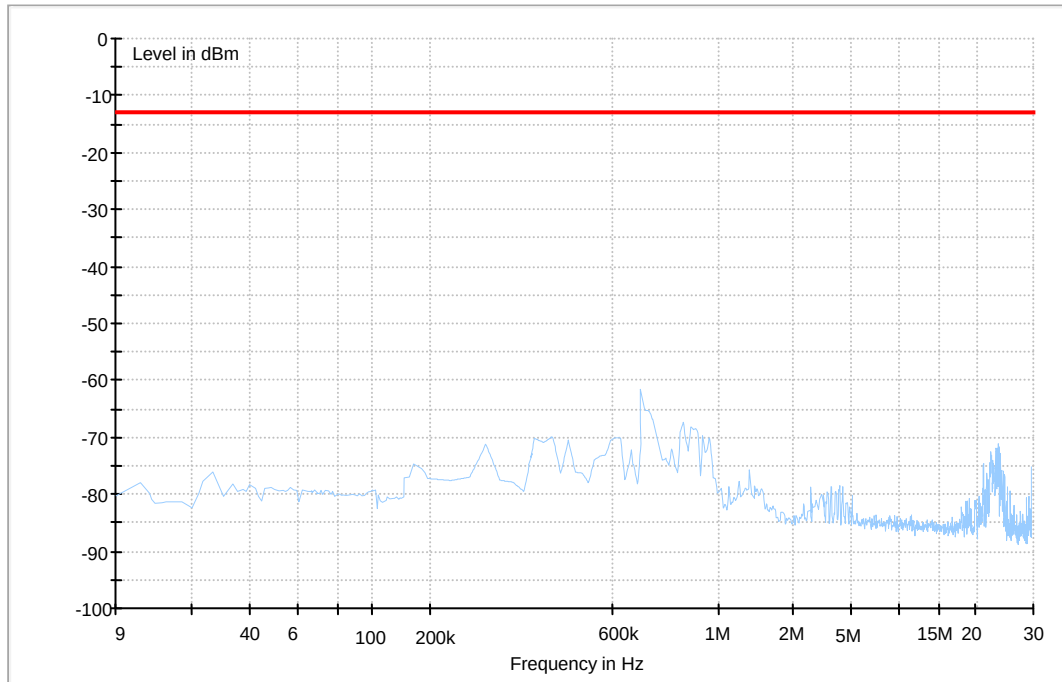
Traffic Mode (3GHz-18GHz)





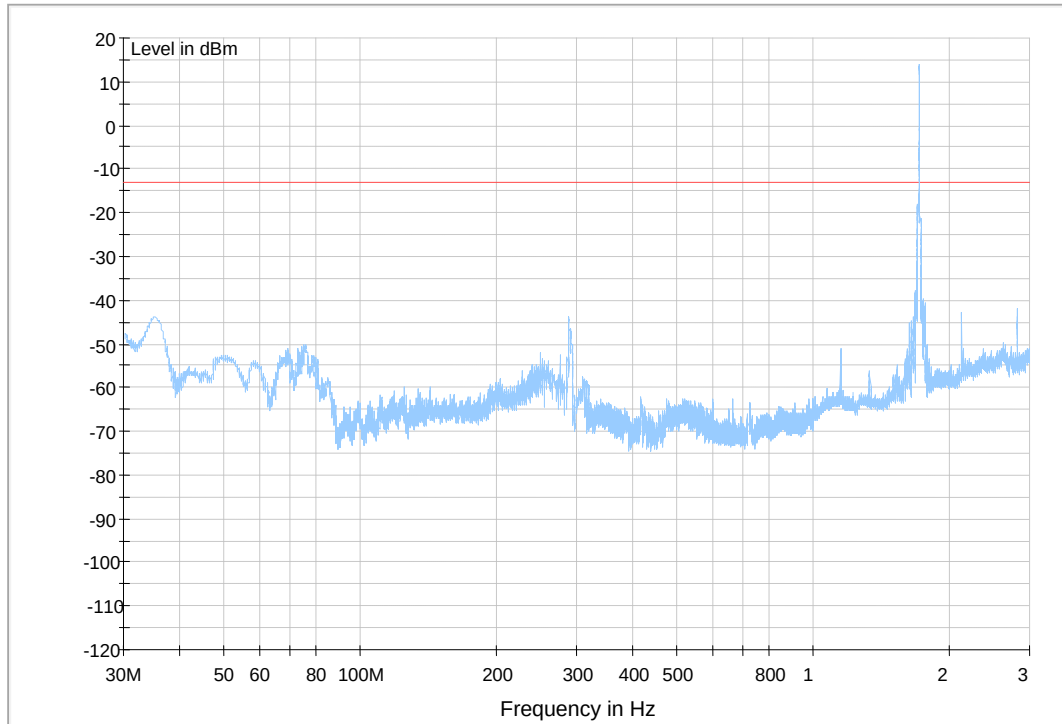
LTE band IV (Channel Bandwidth=5MHz)

Traffic Mode (9kHz-30MHz)



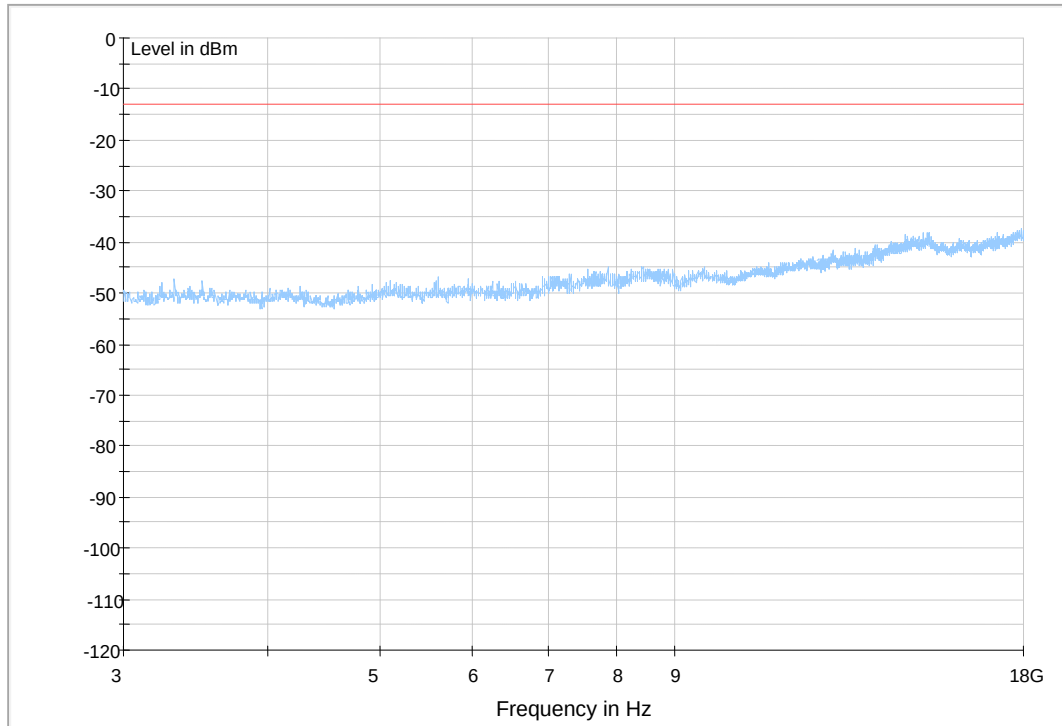


Traffic Mode (30MHz-3GHz)





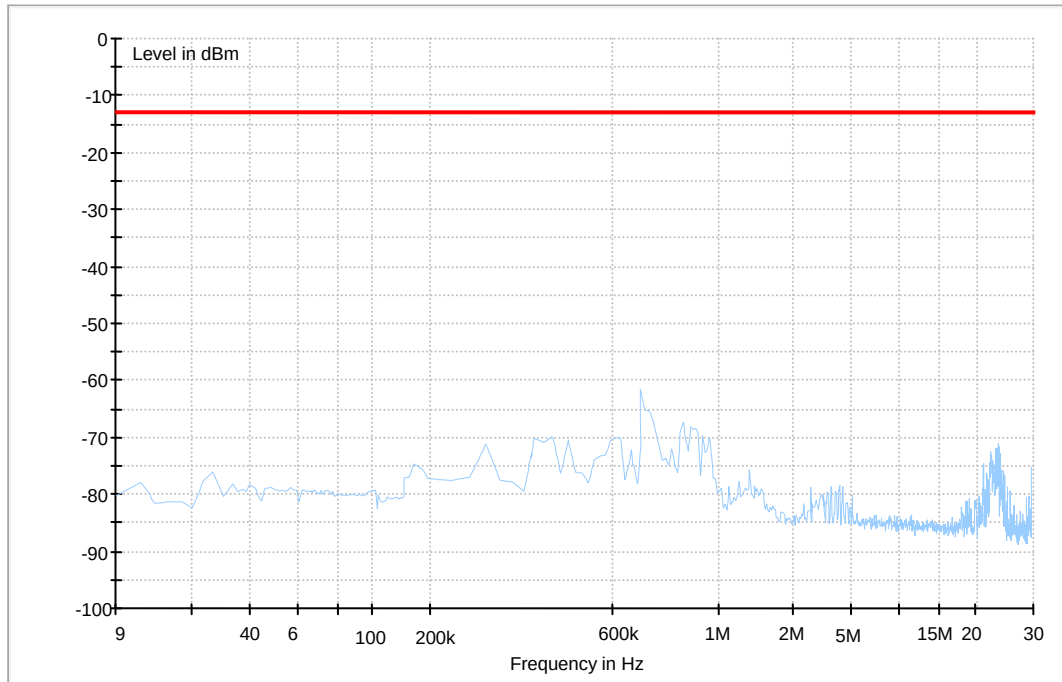
Traffic Mode (3GHz-18GHz)





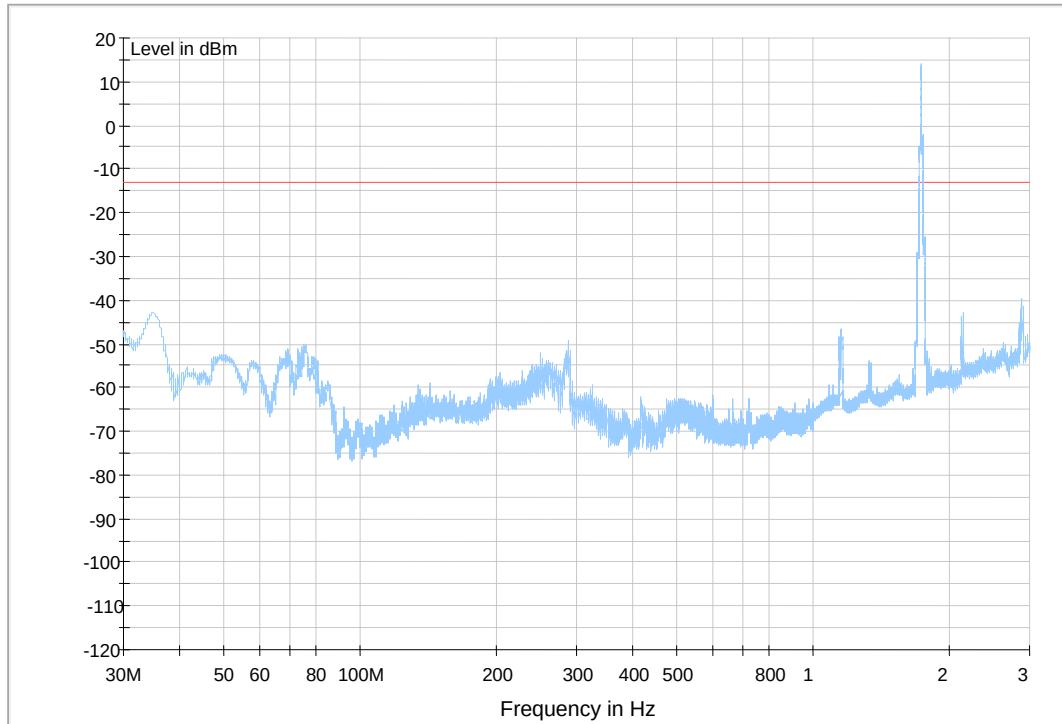
For LTE band IV (Channel Bandwidth=10MHz)

Traffic Mode (9kHz-30MHz)





Traffic Mode (30MHz-3GHz)





Traffic Mode (3GHz-18GHz)

