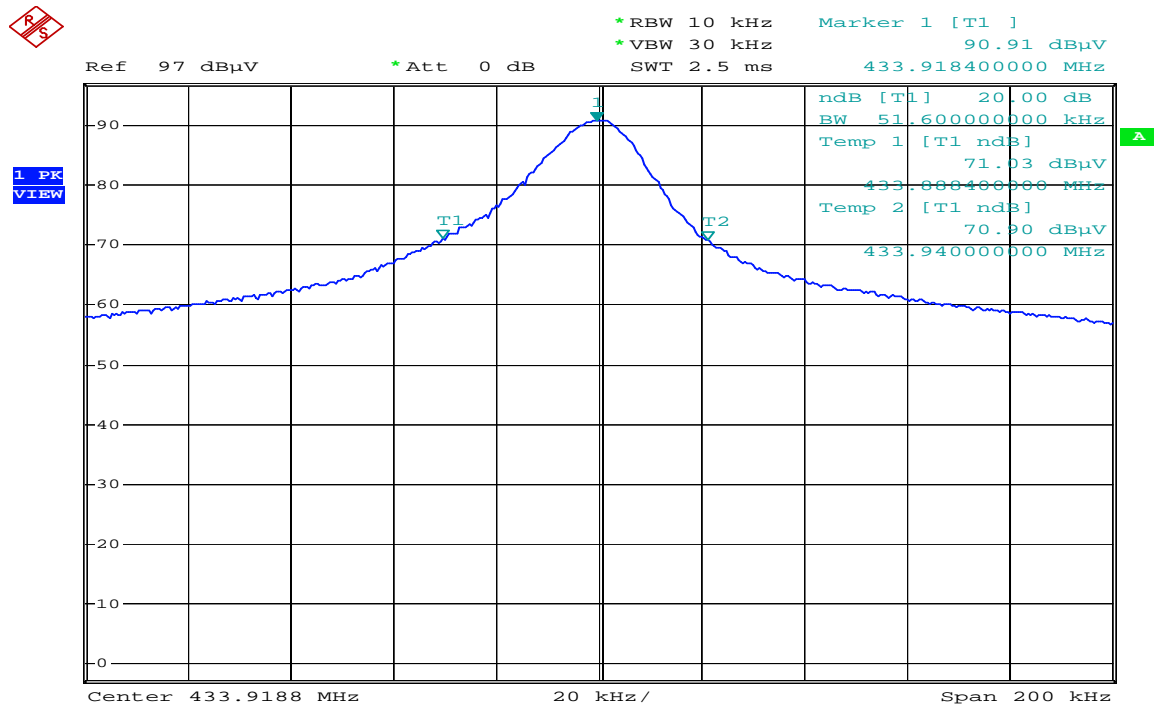


After verify each pulse trains the worst case are 20dB bandwidth at 52.4kHz and the average factor at -10.29dB.

1. 20dB Bandwidth

Pulse Train	Frequency (MHz)	20dB Bandwidth (kHz)
1	433.92	51.6
2	433.92	52.4
3	433.92	49.2
4	433.92	50.4
5	433.92	49.6

Pulse Train 1:



Comment: 20dB BandWidth
 Date: 14.OCT.2009 14:32:20

Pulse Train 2:

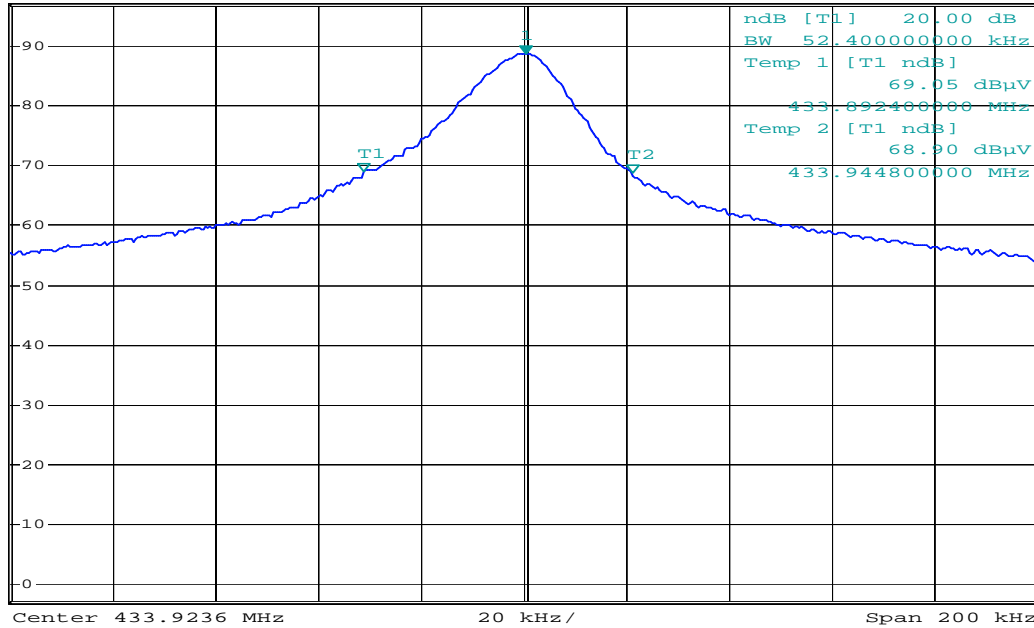


*RBW 10 kHz Marker 1 [T1] 88.70 dBμV
 *VBW 30 kHz 433.924000000 MHz
 SWT 2.5 ms

Ref 97 dBμV

*Att 0 dB

1 PK
VIEW



Comment: 20dB Bandwidth
 Date: 29.OCT.2009 08:31:37

Pulse Train 3:

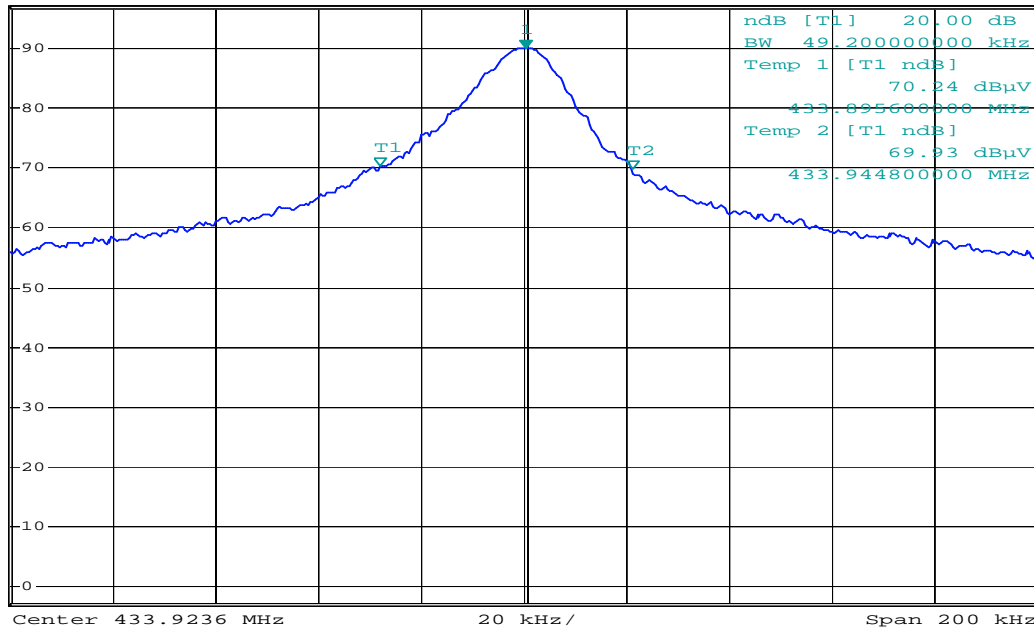


*RBW 10 kHz Marker 1 [T1] 90.10 dBμV
 *VBW 30 kHz 433.924000000 MHz
 SWT 2.5 ms

Ref 97 dBμV

*Att 0 dB

1 PK
VIEW



Comment: 20dB Bandwidth
 Date: 29.OCT.2009 08:32:41

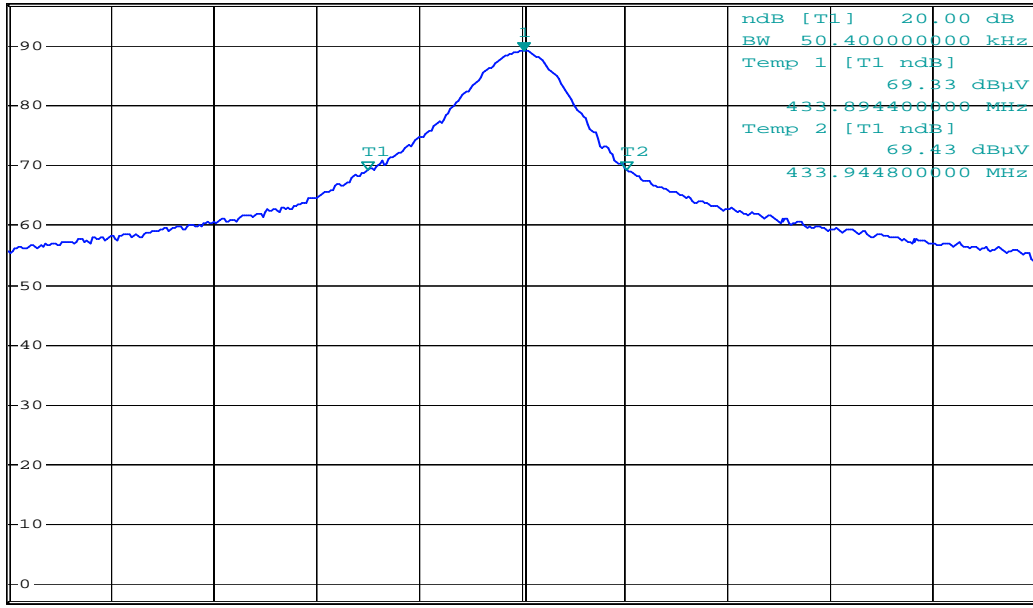
Pulse Train 4:



*RBW 10 kHz Marker 1 [T1] 89.26 dBμV
 *VBW 30 kHz
 SWT 2.5 ms 433.924800000 MHz

Ref 97 dBμV *Att 0 dB

1 PK
VIEW



Center 433.9244 MHz 20 kHz/ Span 200 kHz

Comment: 20dB Bandwidth
 Date: 29.OCT.2009 08:33:30

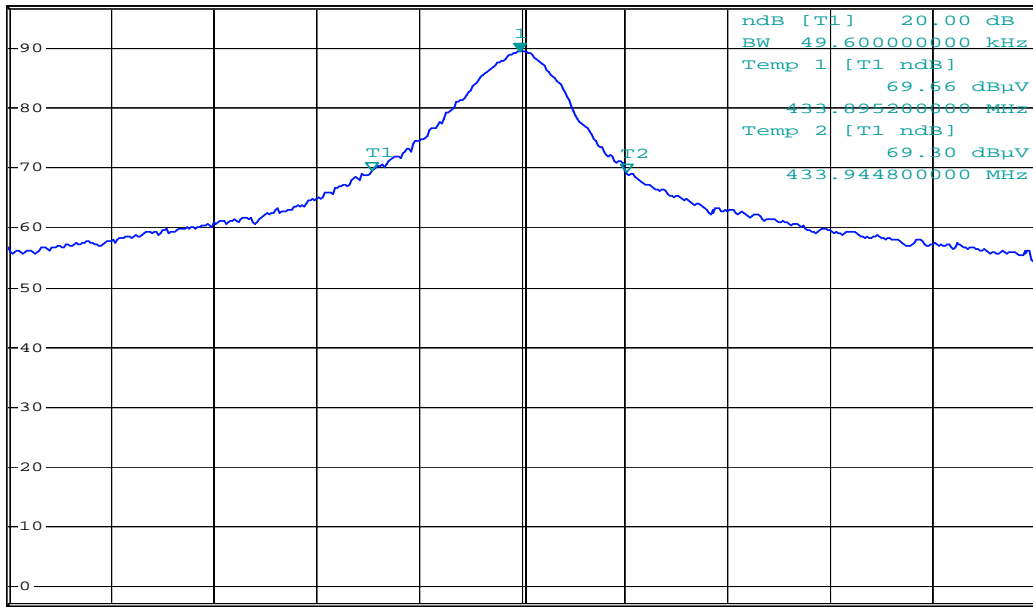
Pulse Train 5:



*RBW 10 kHz Marker 1 [T1] 89.46 dBμV
 *VBW 30 kHz
 SWT 2.5 ms 433.924000000 MHz

Ref 97 dBμV *Att 0 dB

1 PK
VIEW



Center 433.9244 MHz 20 kHz/ Span 200 kHz

Comment: 20dB Bandwidth
 Date: 29.OCT.2009 08:34:26

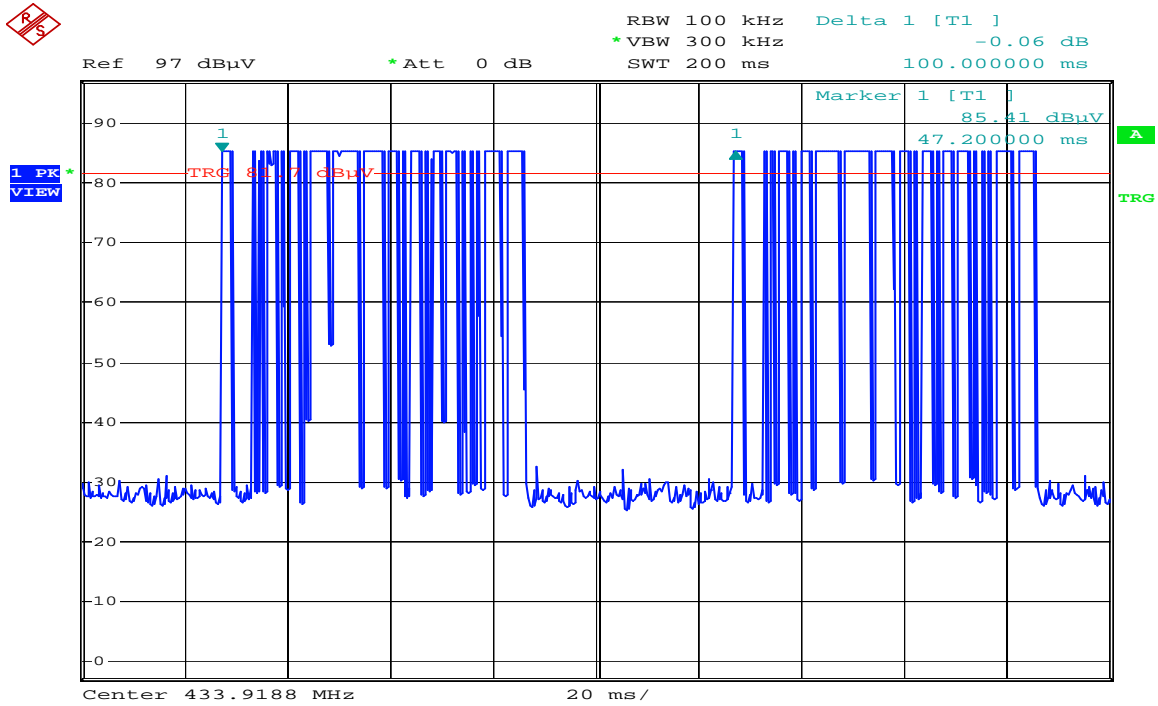
2. Duty Cycle

Pulse Train	Duty Cycle	Average Factor (dB)
1	0.306	-10.29
2	0.2988	-10.49
3	0.2718	-11.32
4	0.3024	-10.39
5	0.288	-10.81

Pulse Train 1

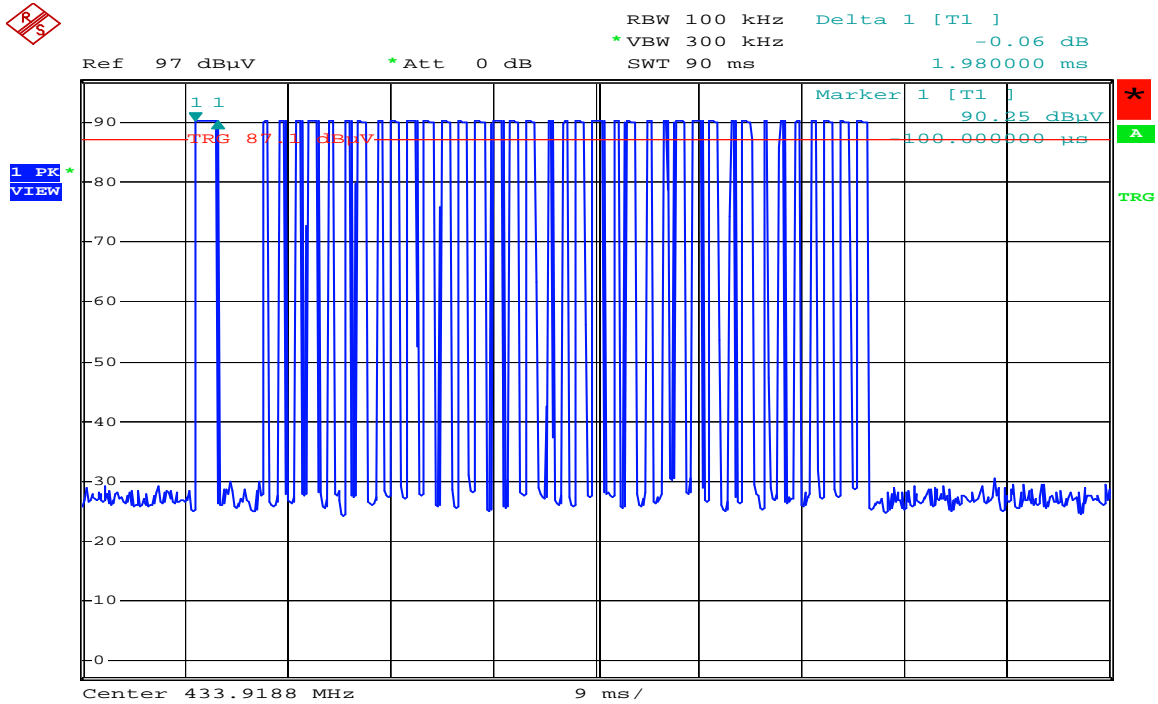
$$\text{Duty Cycle} = (1.98\text{ms} \cdot 1 + 0.9\text{ms} \cdot 24 + 0.54\text{ms} \cdot 13) / 100\text{ms} = 0.306$$

$$\text{Average factor is } 20 \log 0.306 = -10.29\text{dB}$$



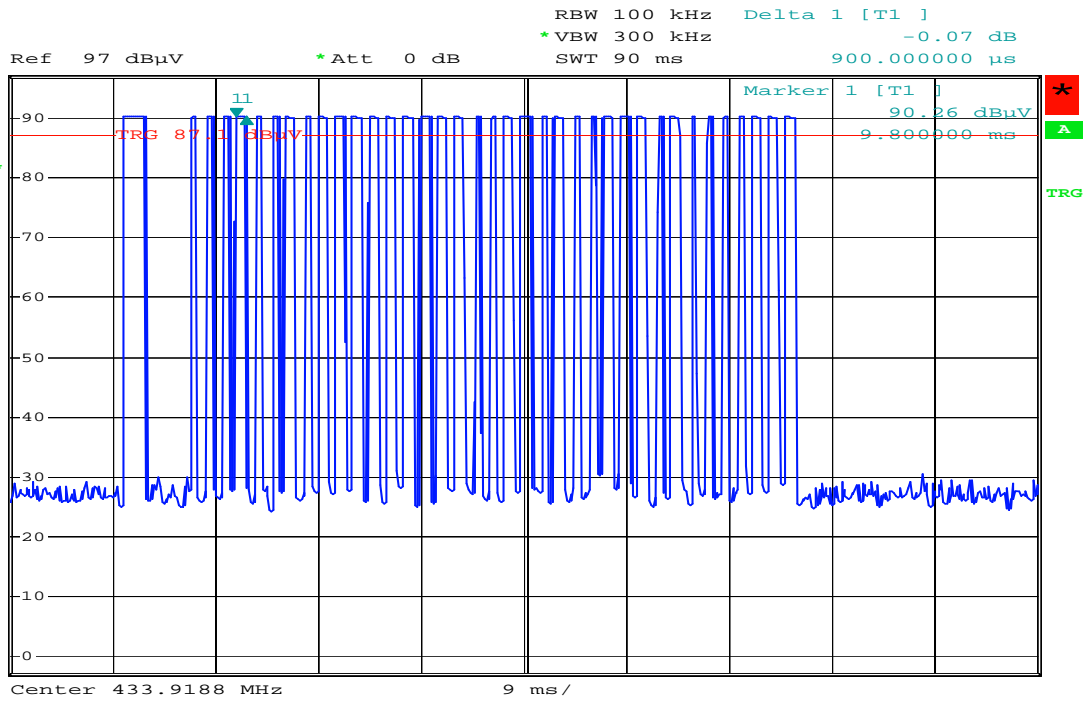
Comment: Duty Cycle
Date: 14.OCT.2009 14:37:36

Time slot 1:



Comment: Ton1
Date: 14.OCT.2009 14:43:56

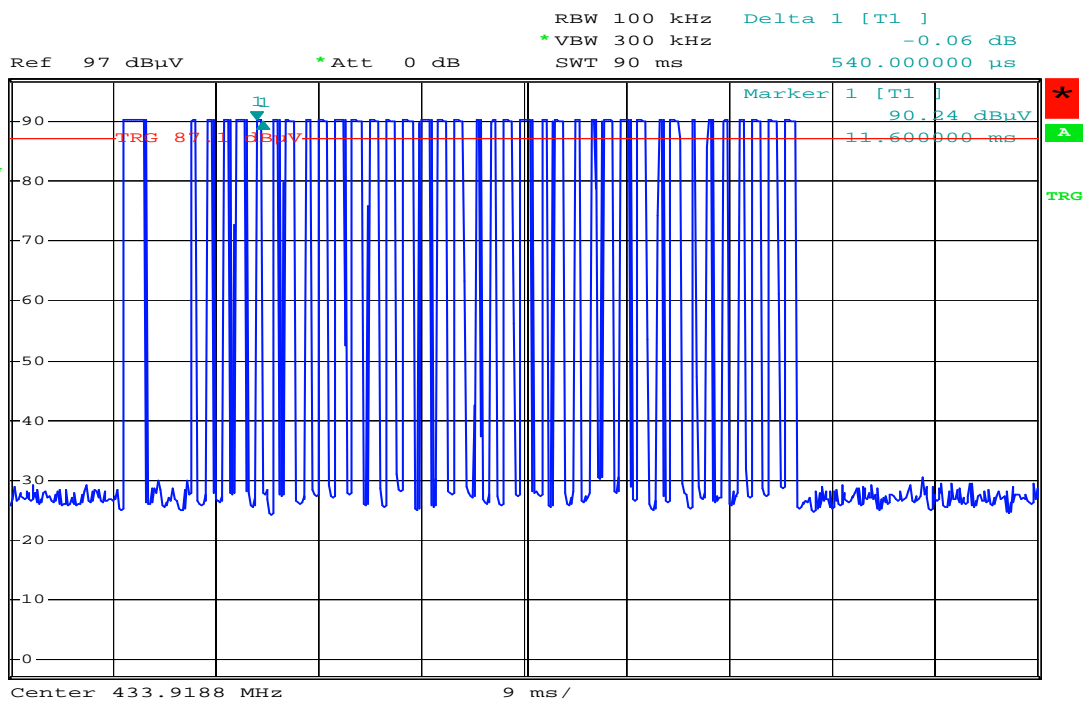
Time slot 2:



Comment: Ton2

Date: 14.OCT.2009 14:44:22

Time slot 3:



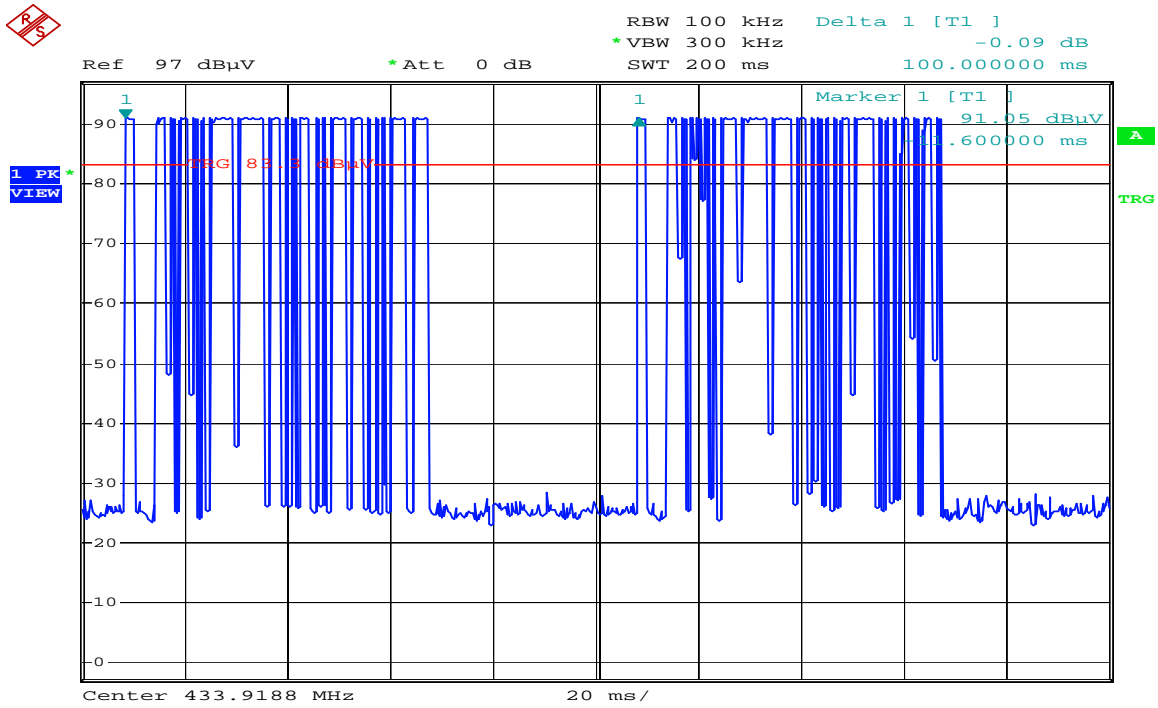
Comment: Ton3

Date: 14.OCT.2009 14:44:56

Pulse Train 2

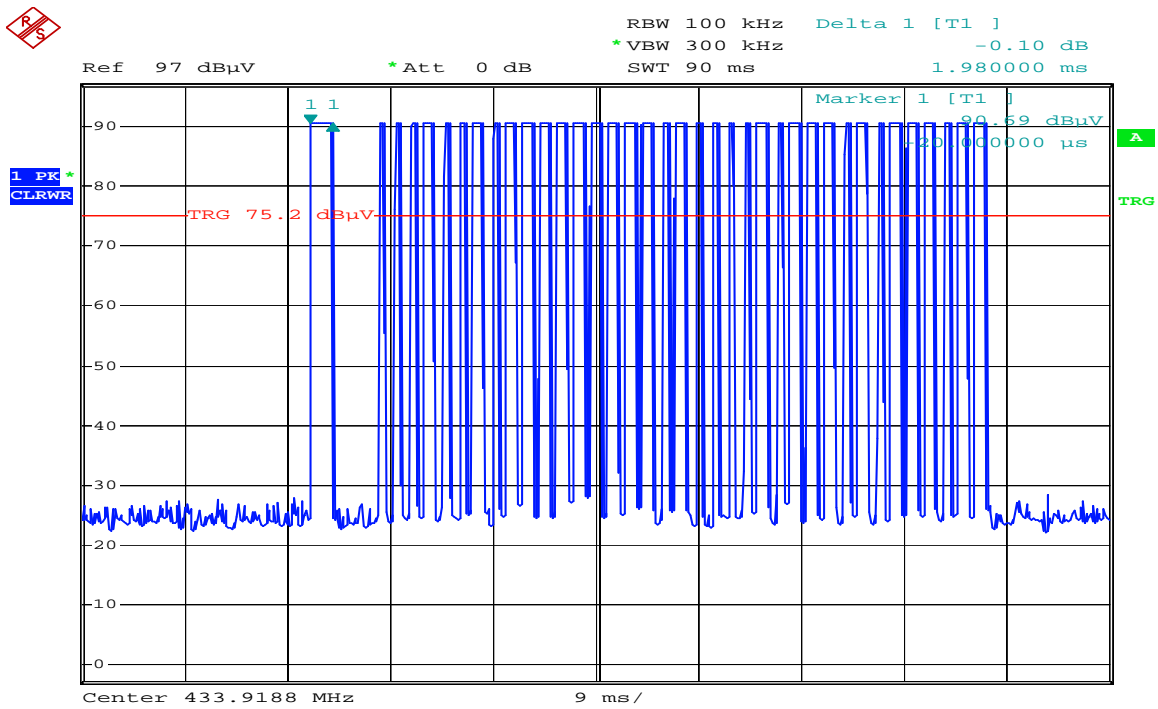
$$\text{Duty Cycle} = (1.98\text{ms} \cdot 1 + 0.9\text{ms} \cdot 22 + 0.54\text{ms} \cdot 15) / 100\text{ms} = 0.2988$$

$$\text{Average factor is } 20 \log 0.2988 = -10.49\text{dB}$$



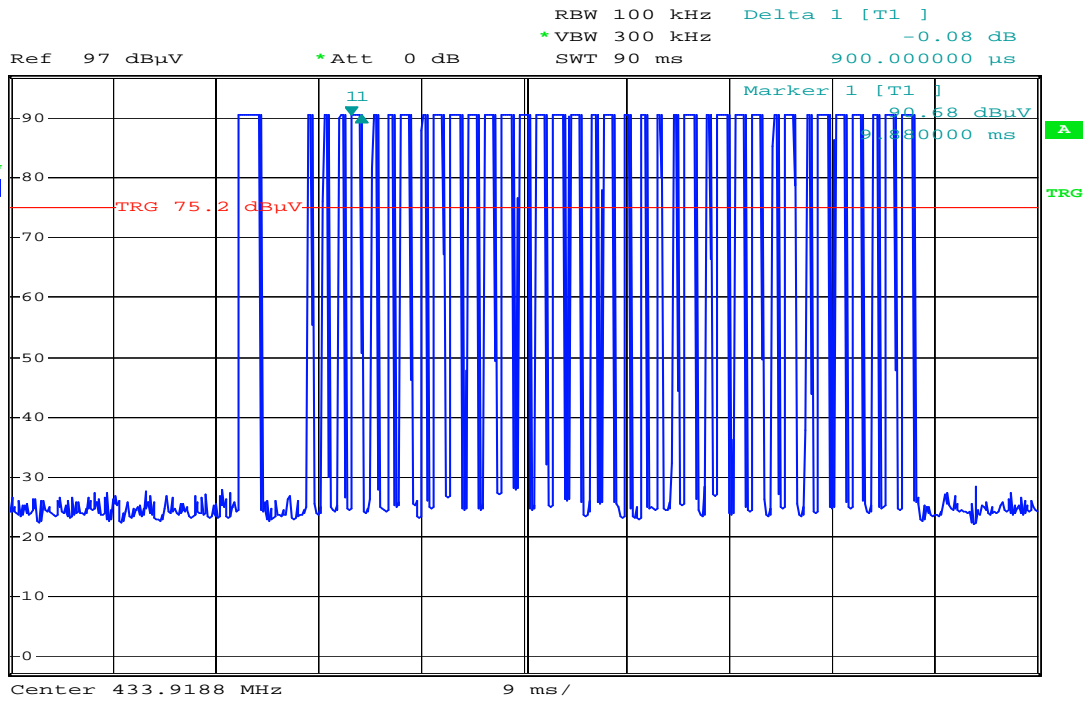
Comment: Duty Cycle
Date: 28.OCT.2009 16:34:19

Time slot 1:



Comment: Ton1
Date: 29.OCT.2009 08:23:17

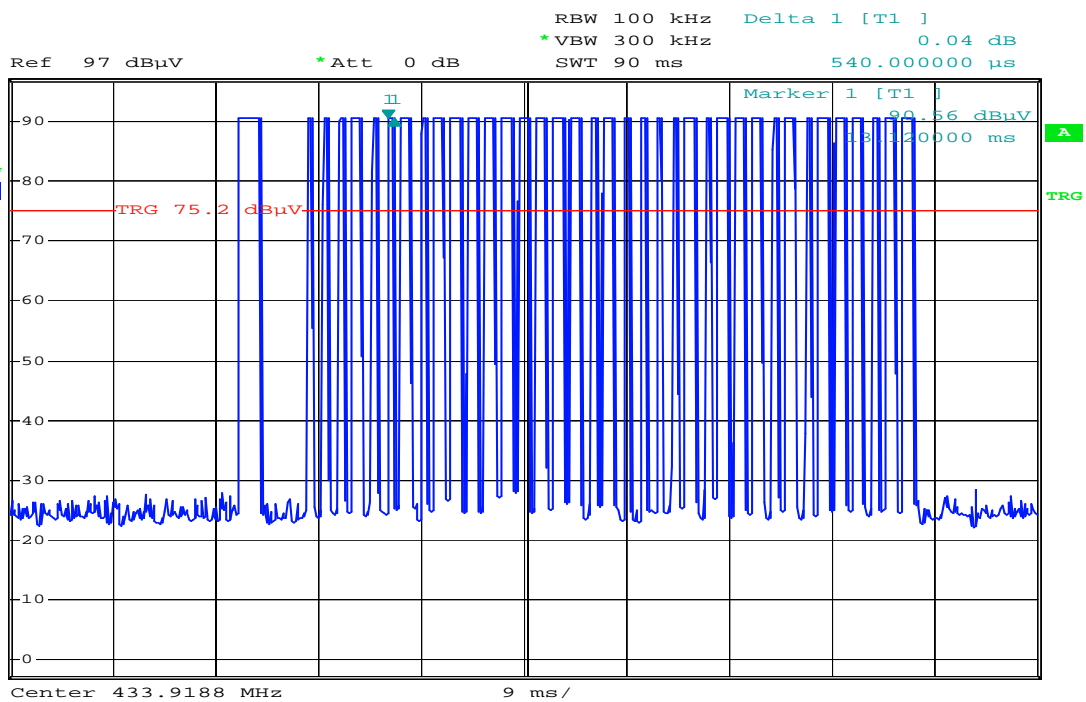
Time slot 2:



Comment: Ton2

Date: 29.OCT.2009 08:23:53

Time slot 3:



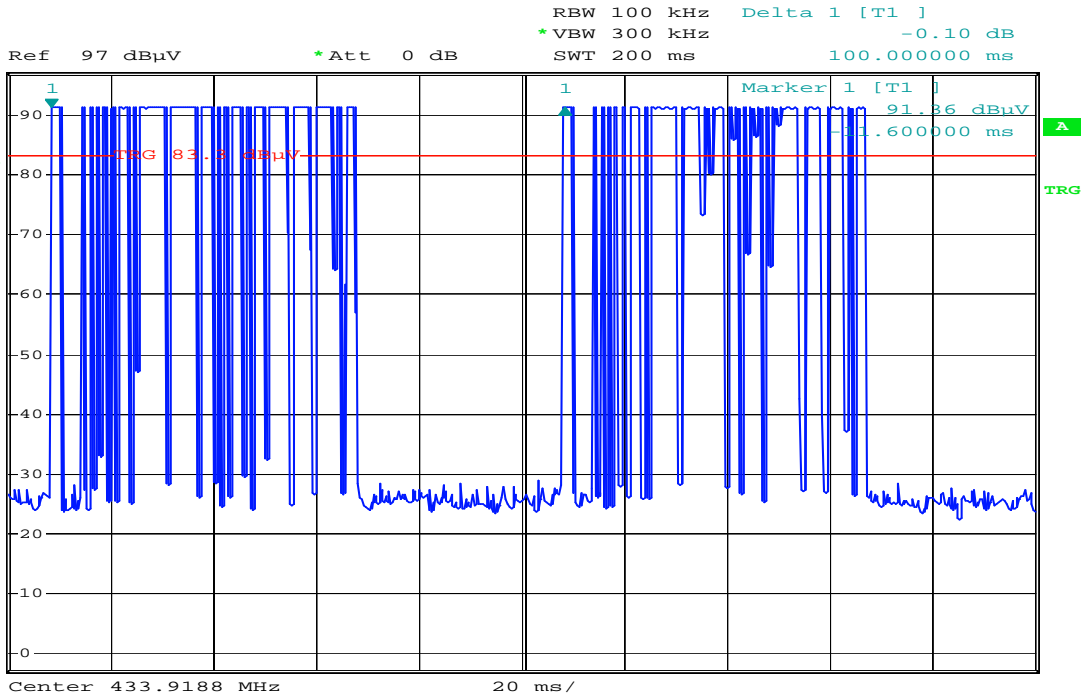
Comment: Ton3

Date: 29.OCT.2009 08:24:35

Pulse Train 3

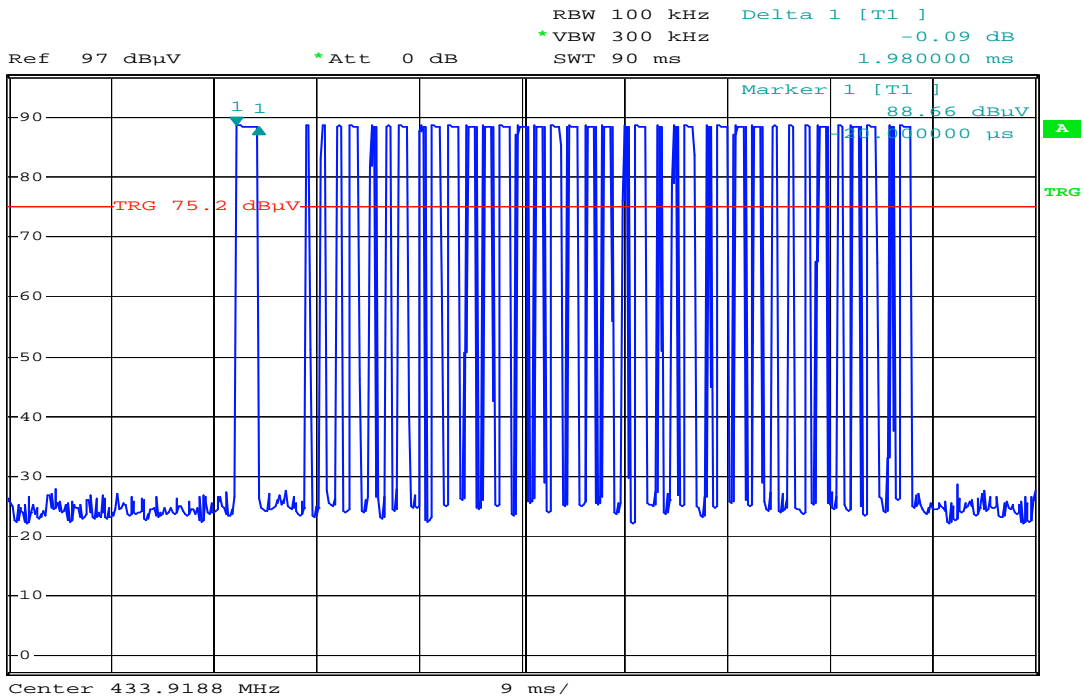
$$\text{Duty Cycle} = (1.98\text{ms} \cdot 1 + 0.9\text{ms} \cdot 22 + 0.36\text{ms} \cdot 15) / 100\text{ms} = 0.2718$$

$$\text{Average factor is } 20 \log 0.2718 = -11.32\text{dB}$$



Comment: Duty Cycle
Date: 28.OCT.2009 16:35:00

Time slot 1:

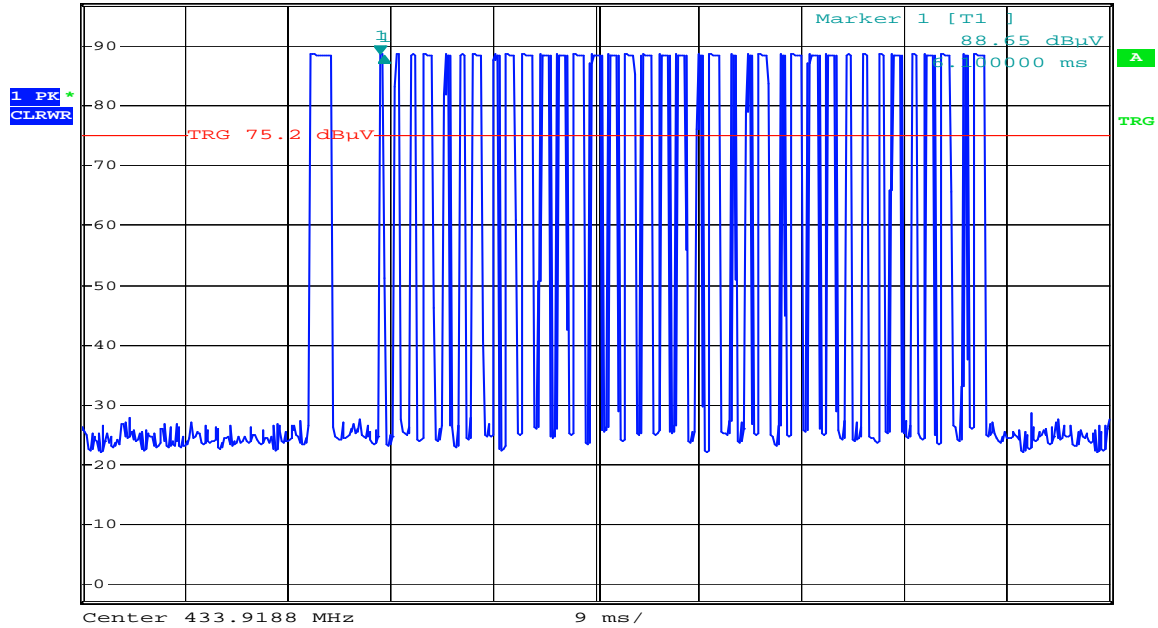


Comment: Ton1
Date: 29.OCT.2009 08:12:33

Time slot 2:



Ref 97 dBuV *Att 0 dB RBW 100 kHz Delta 1 [T1]
*VBW 300 kHz -0.06 dB
SWT 90 ms 360.000000 μs



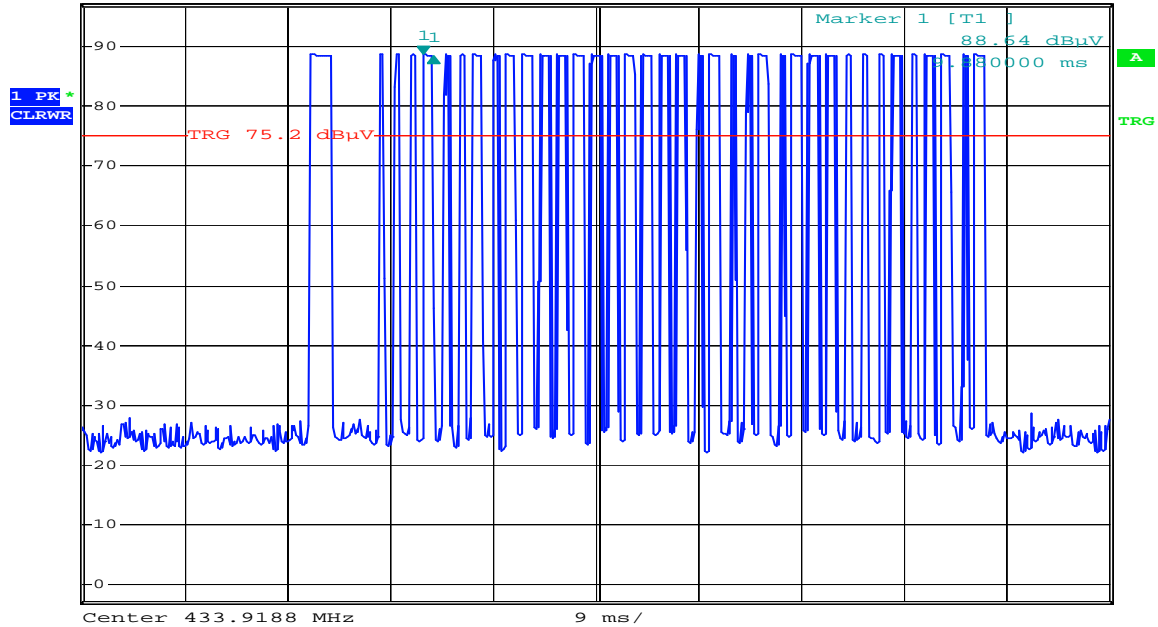
Comment: Ton2

Date: 29.OCT.2009 08:13:07

Time slot 3:



Ref 97 dBuV *Att 0 dB RBW 100 kHz Delta 1 [T1]
*VBW 300 kHz -0.08 dB
SWT 90 ms 900.000000 μs



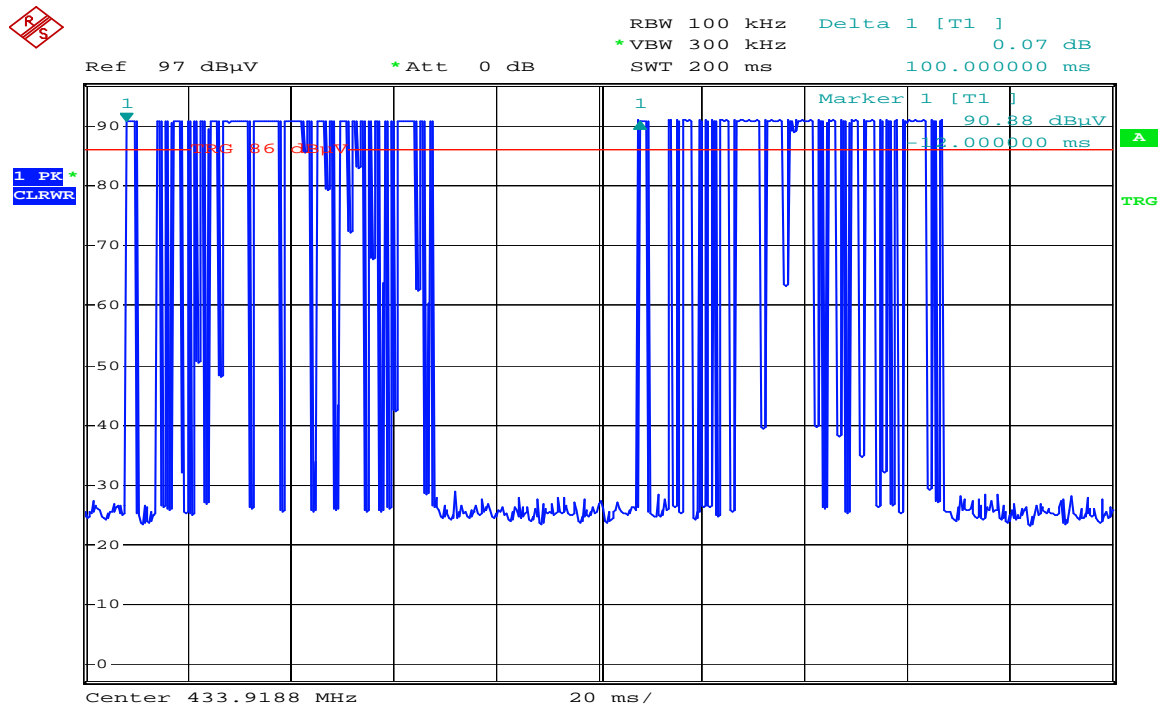
Comment: Ton3

Date: 29.OCT.2009 08:13:28

Pulse Train 4

Duty Cycle = $(1.98\text{ms} \cdot 1 + 0.9\text{ms} \cdot 23 + 0.54\text{ms} \cdot 14) / 100\text{ms} = 0.3024$

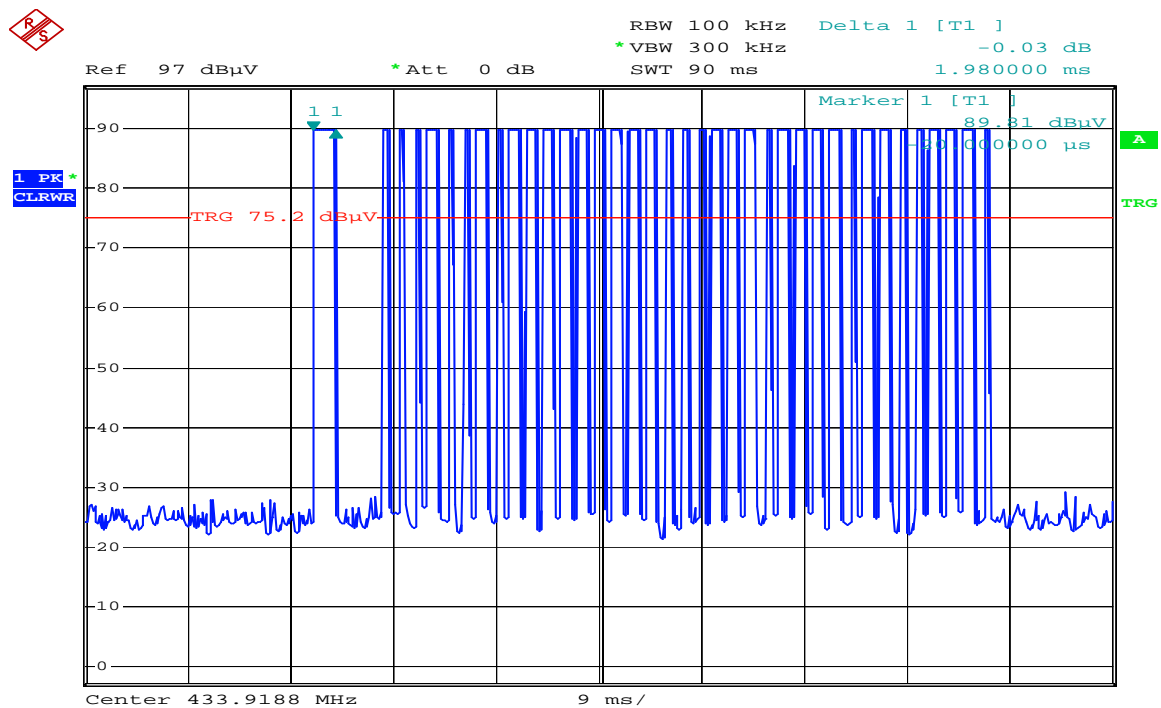
Average factor is $20 \log 0.3024 = -10.39\text{dB}$



Comment: Duty Cycle

Date: 28.OCT.2009 16:36:05

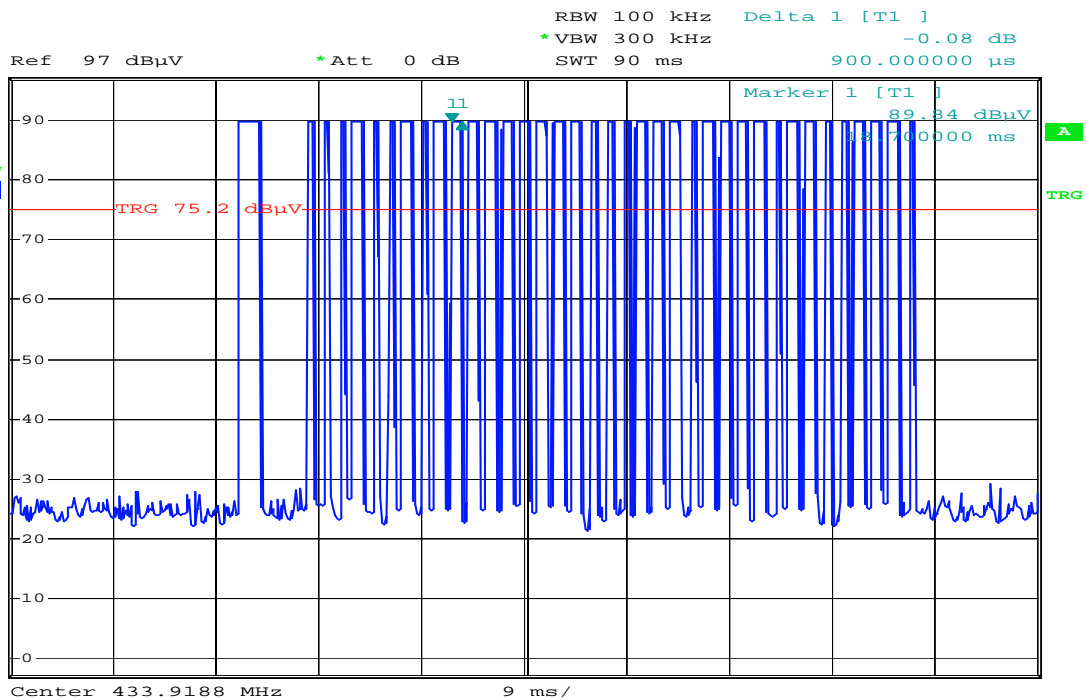
Time slot 1:



Comment: Ton1

Date: 29.OCT.2009 08:27:06

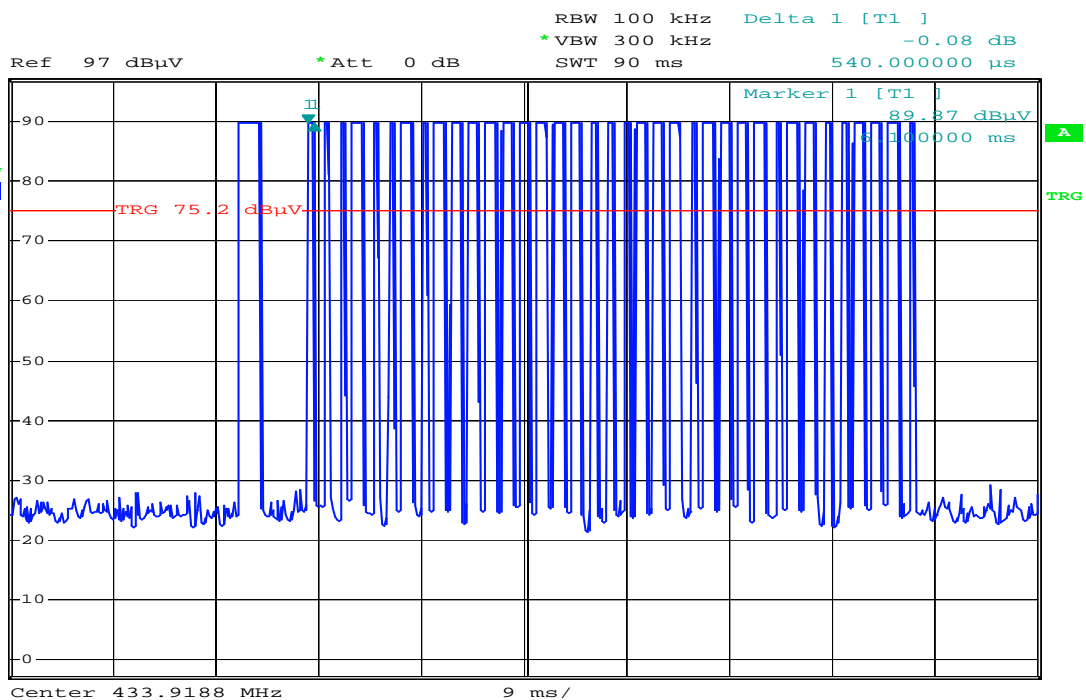
Time slot 2:



Comment: Ton2

Date: 29.OCT.2009 08:27:58

Time slot 3:



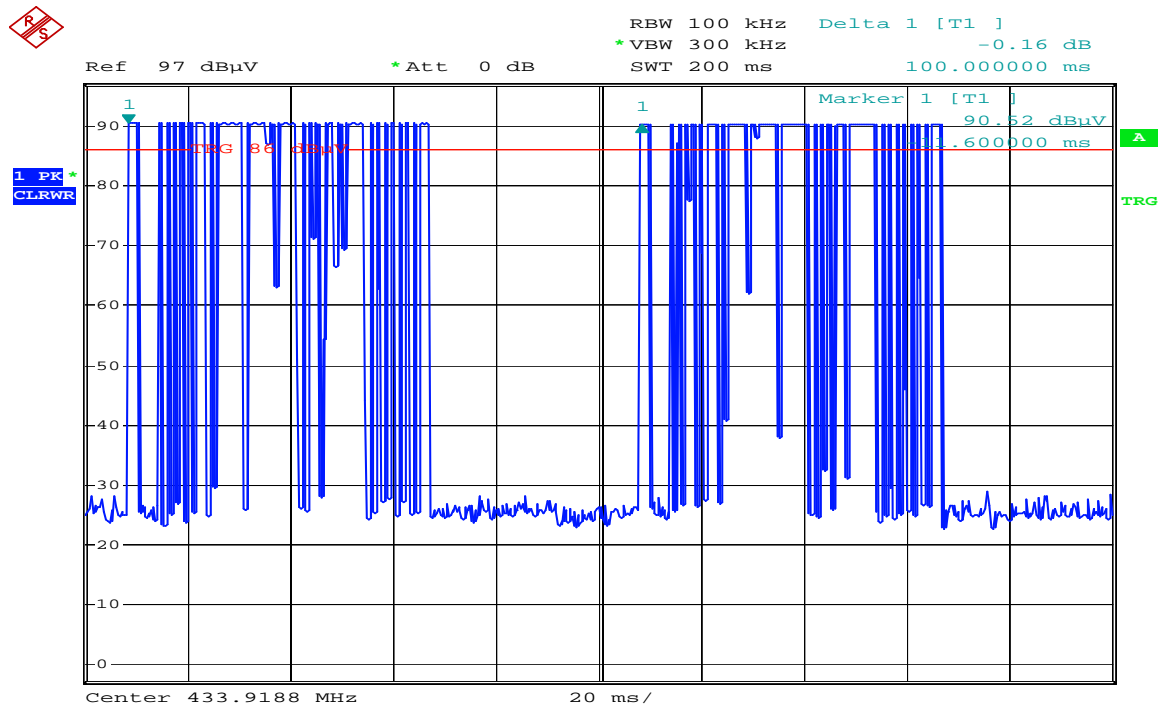
Comment: Ton3

Date: 29.OCT.2009 08:28:42

Pulse Train 5

Duty Cycle = $(1.98\text{ms} \cdot 1 + 0.9\text{ms} \cdot 19 + 0.54\text{ms} \cdot 18) / 100\text{ms} = 0.288$

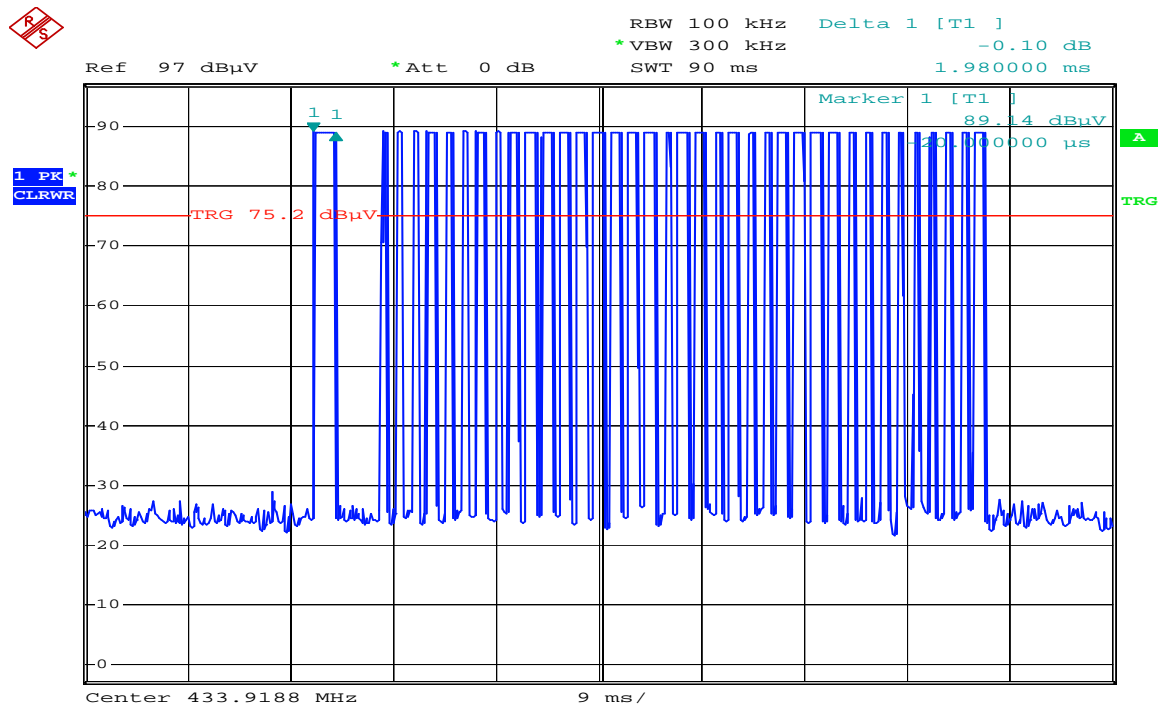
Average factor is $20 \log 0.288 = -10.81\text{dB}$



Comment: Duty Cycle

Date: 28.OCT.2009 16:36:41

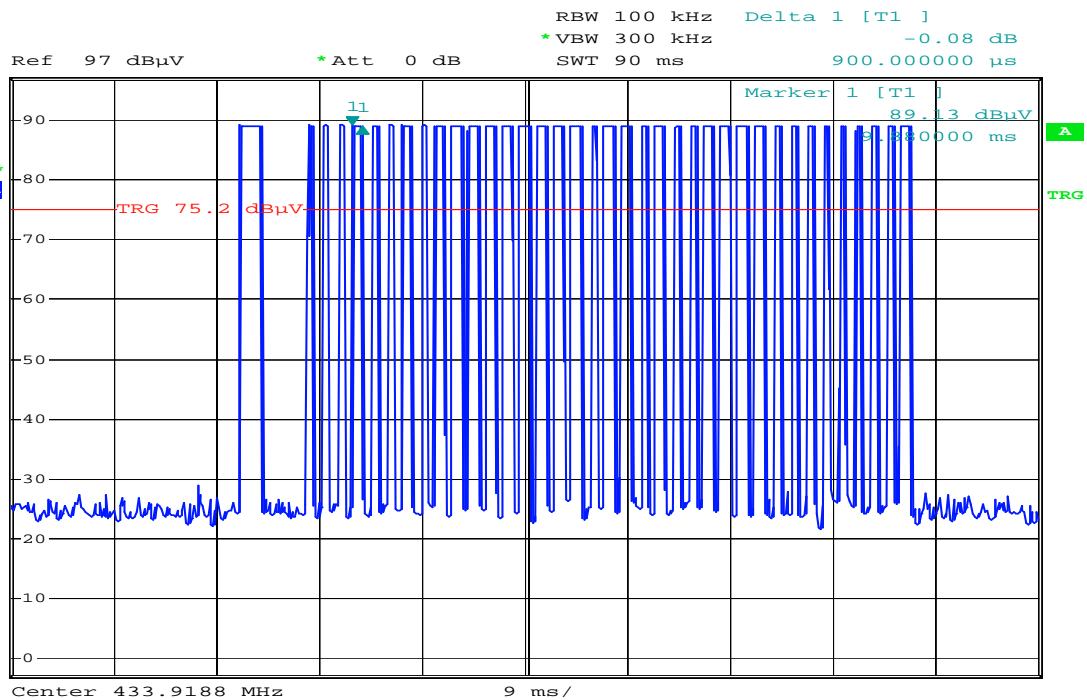
Time slot 1:



Comment: Ton1

Date: 29.OCT.2009 08:21:27

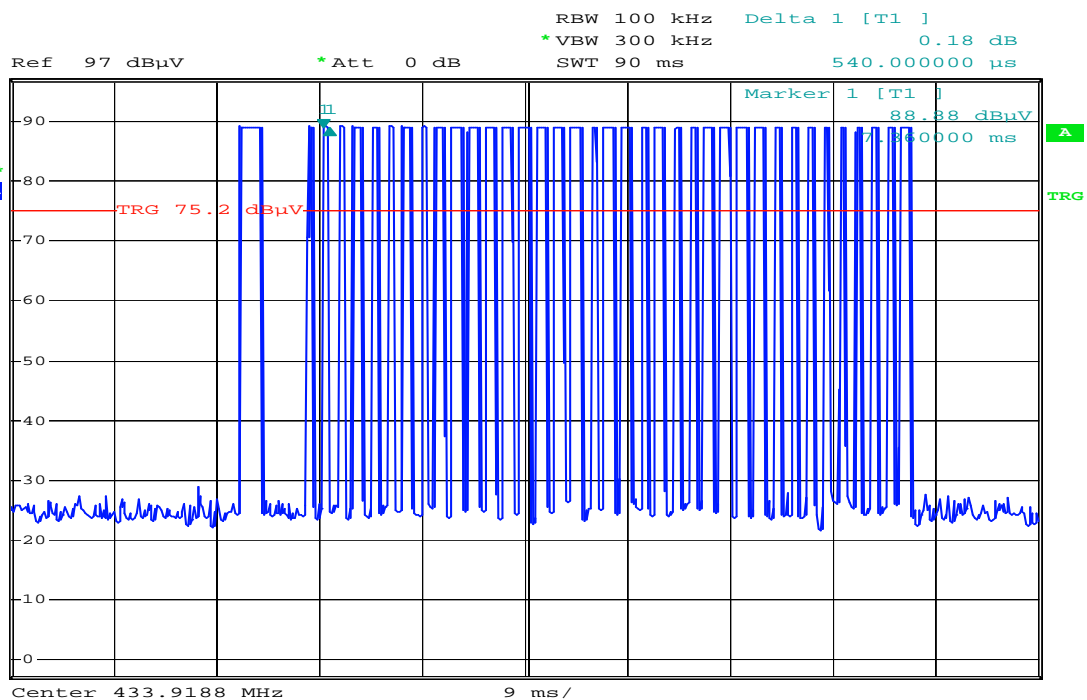
Time slot 2:



Comment: Ton2

Date: 29.OCT.2009 08:20:38

Time slot 3:



Comment: Ton3

Date: 29.OCT.2009 08:21:06