

**Annex acc. to FCC Title 47 CFR Part 15
relating to
Hirschmann Car Communication GmbH
920510A**

Annex no. 11

Periodic Operation Characteristics

**Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013**



Deutsche
Akkreditierungsstelle
D-PL-12053-01-00

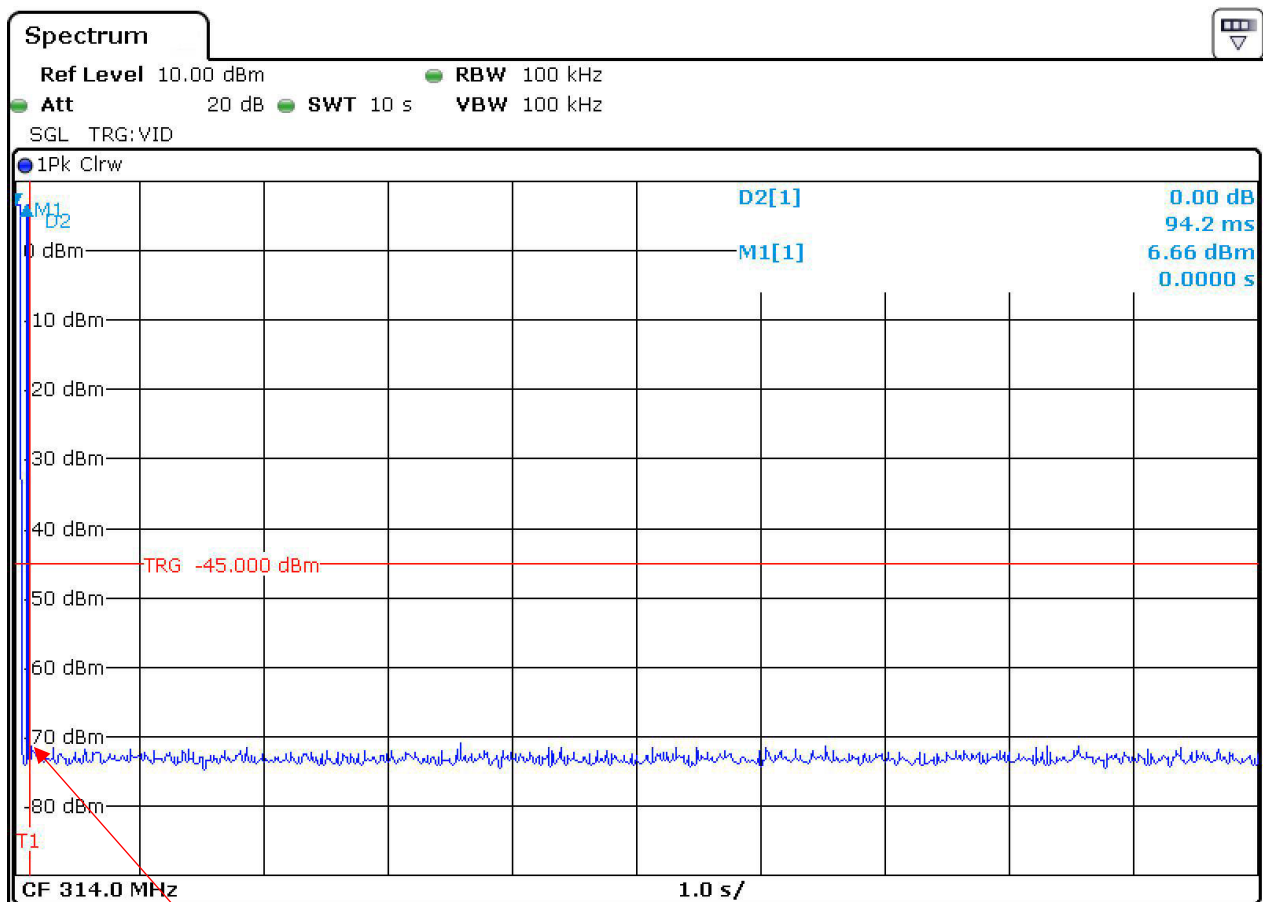
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (deactivation time)
(channel 1)**



Switch off point

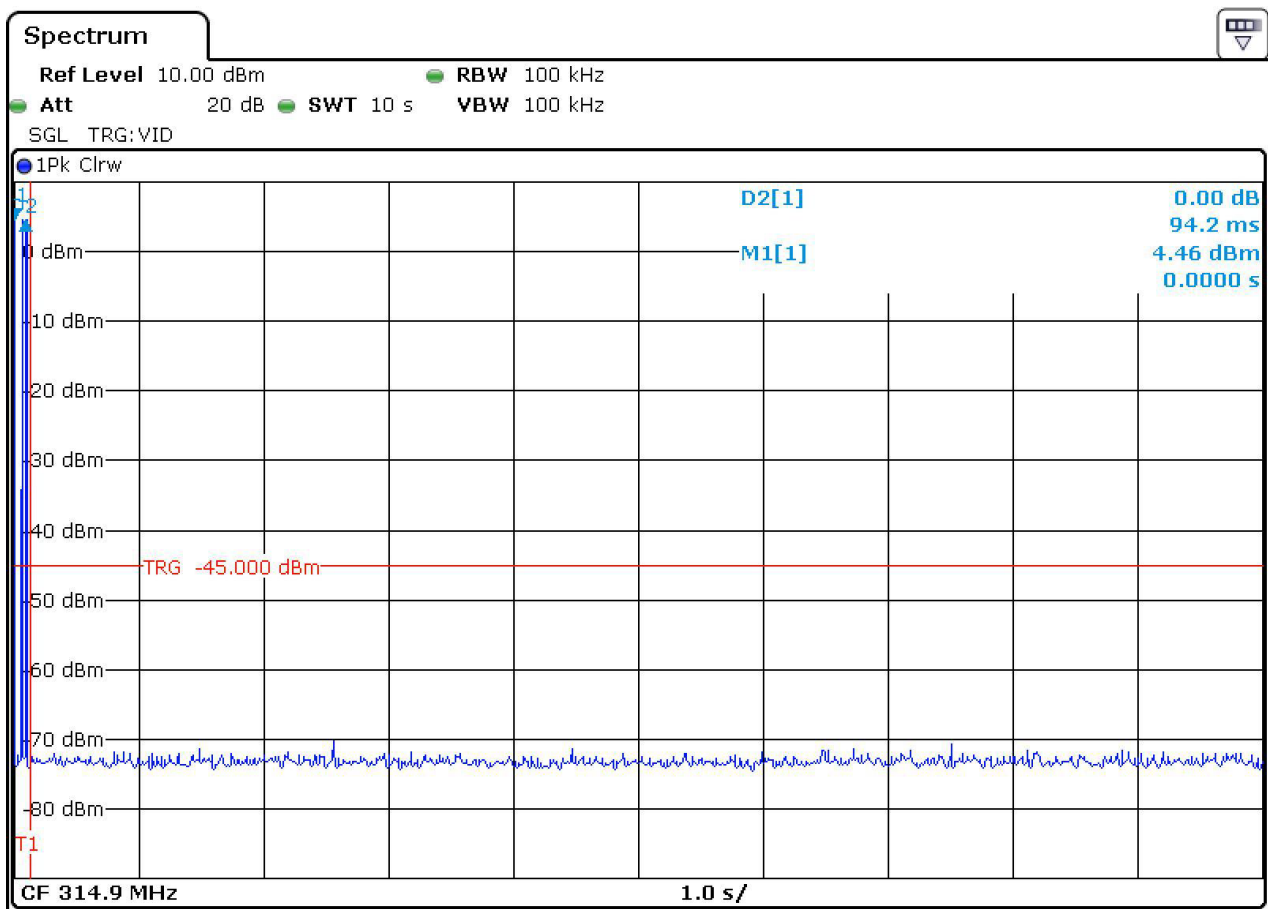
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (deactivation time)
(channel 2)**



Switch off point

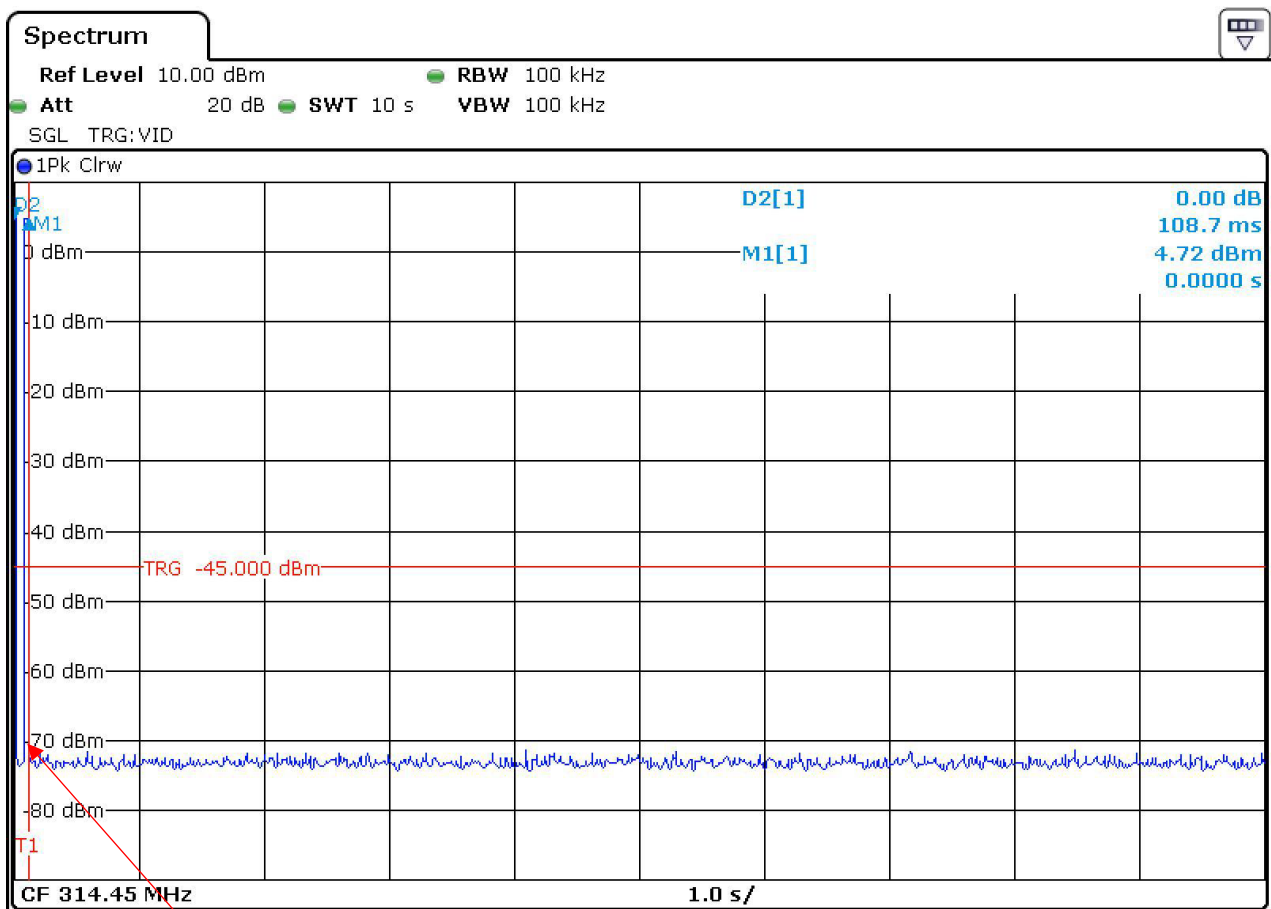
EUT: 920510A

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Date of issue: 2017-07-24

**Total transmission time (deactivation time)
(channel 2)**



Switch off point

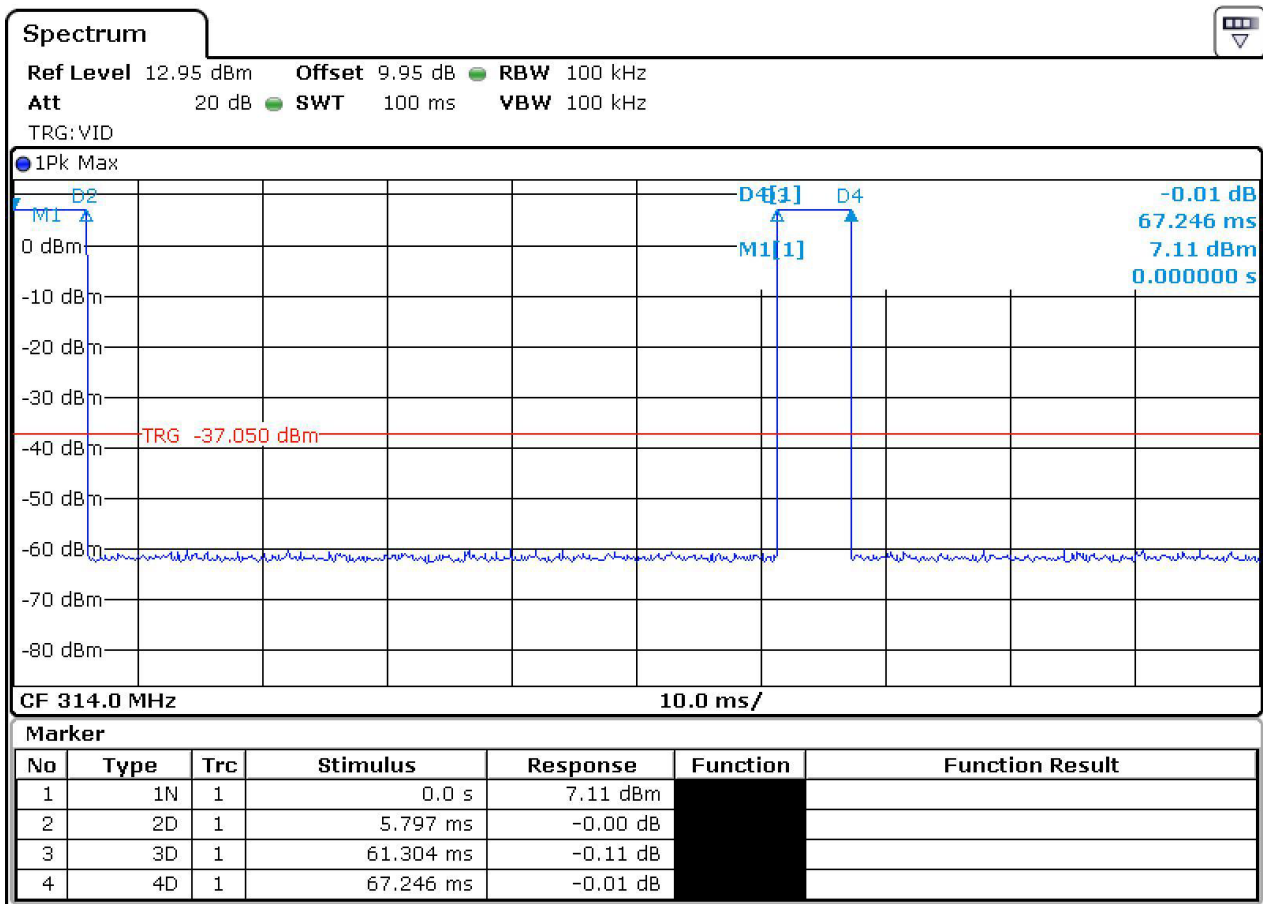
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Remote access)
(channel 1)**



first telegram: 5.8 ms
 second telegram: 5.9 ms

worst case transmission in any 100 ms time period during pulse train = 11.7 ms

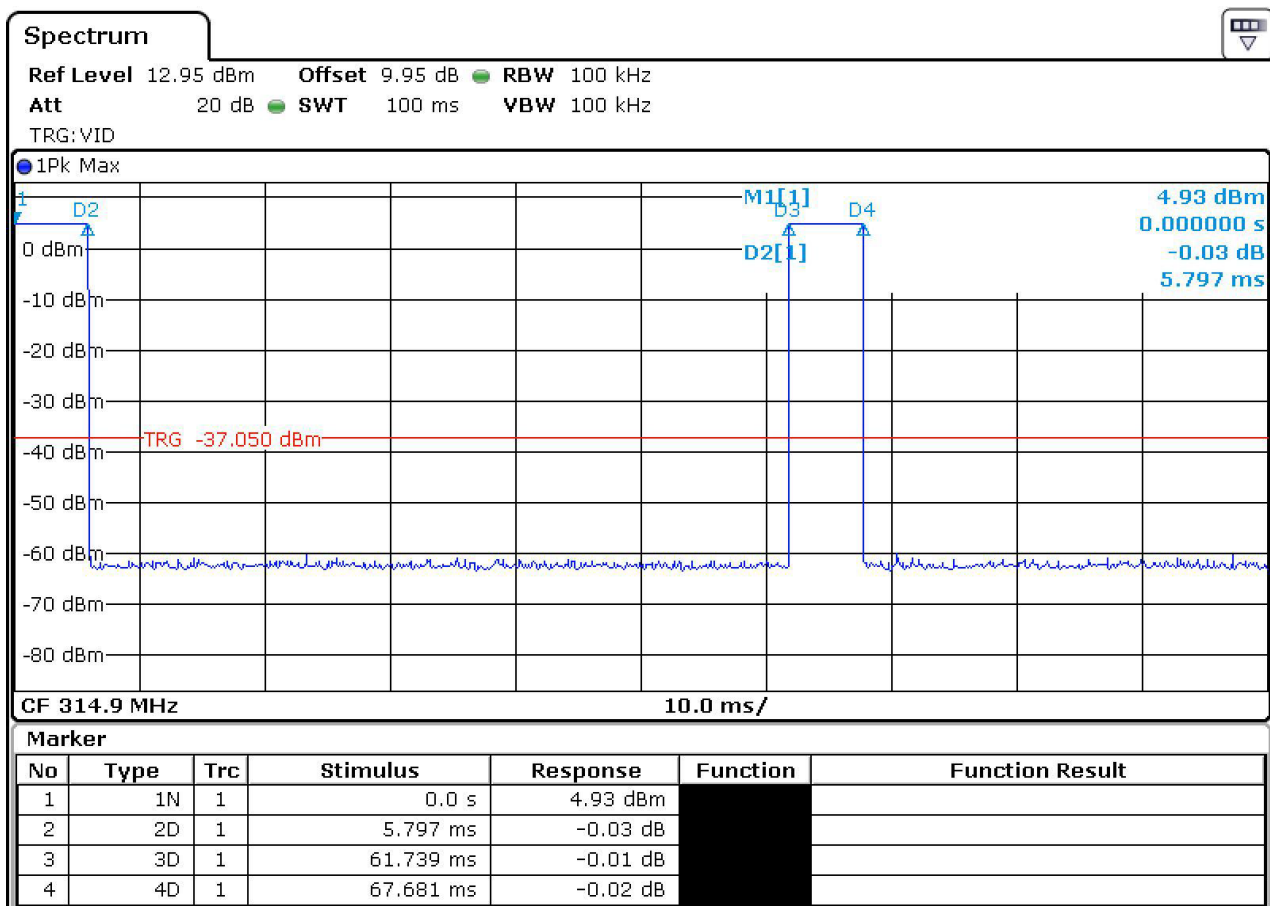
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Remote access)
(channel 2)**



first telegram: 5.8 ms
 second telegram: 5.9 ms

worst case transmission in any 100 ms time period during pulse train = 11.7 ms

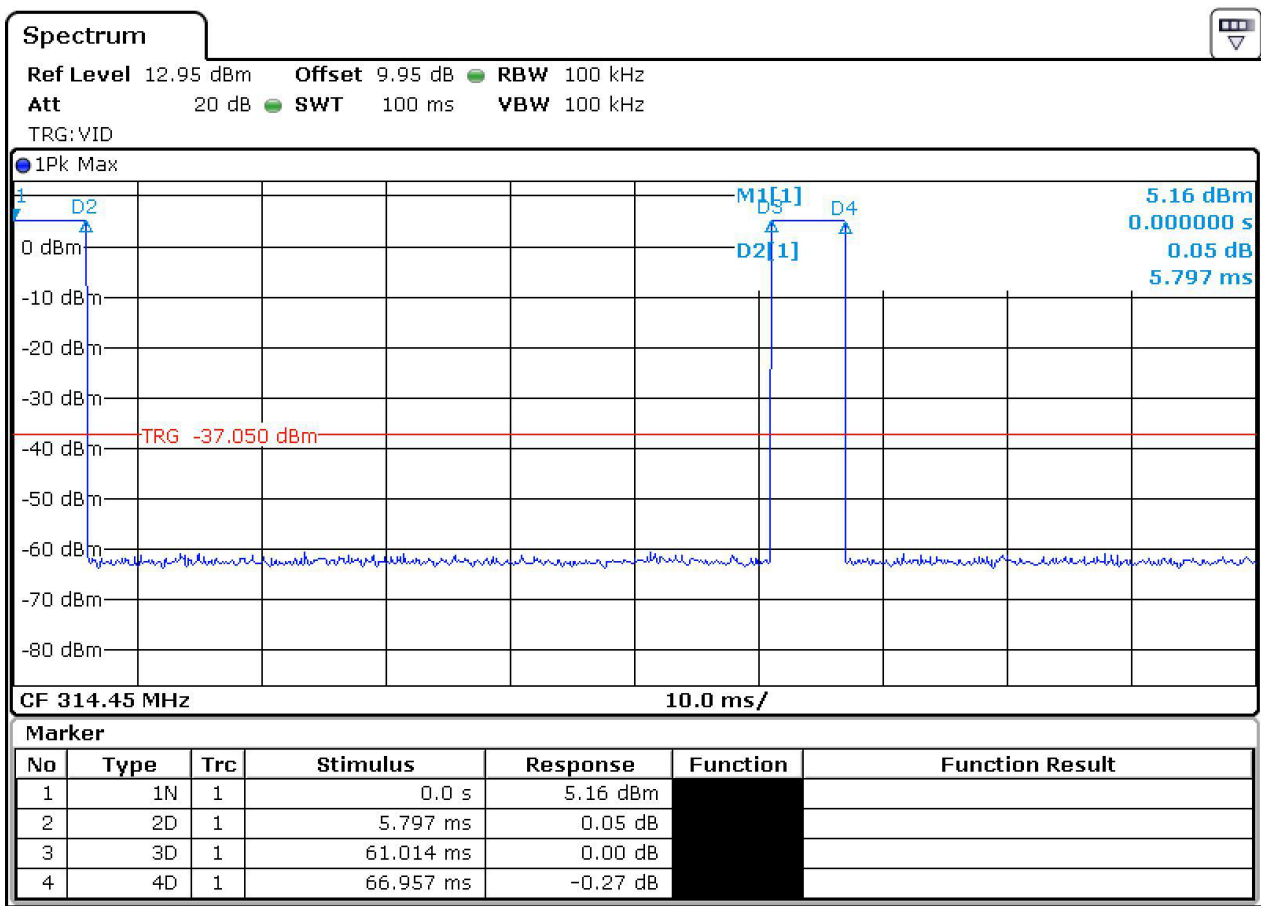
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Remote access)
(channel 3)**



first telegram: 5.8 ms
 second telegram: 5.9 ms

worst case transmission in any 100 ms time period during pulse train = 11.7 ms

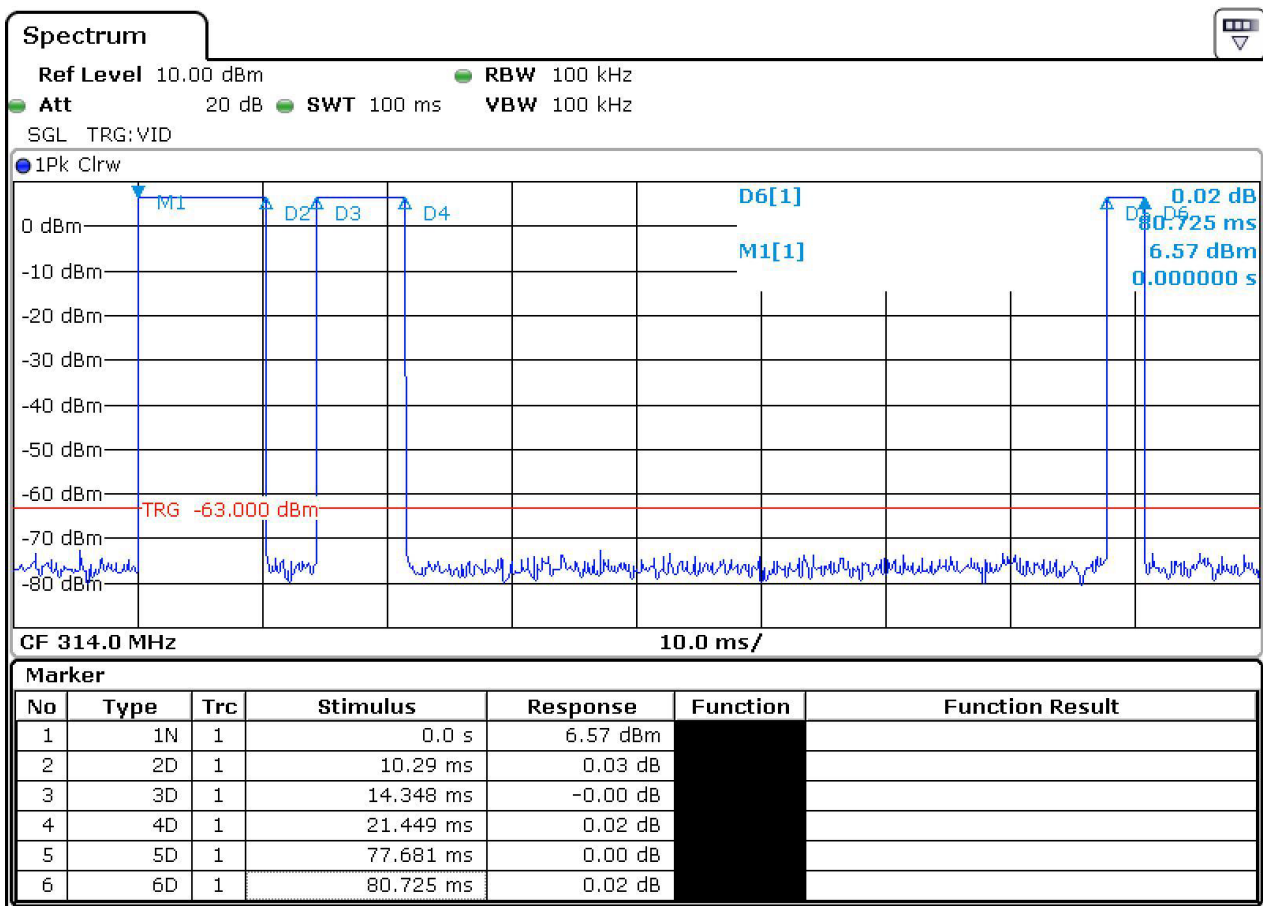
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Keyless Go access)
(channel 1)**



first telegram: 10.3 ms
 second telegram: 7.1 ms
 third telegram: 3.0 ms

worst case transmission in any 100 ms time period during pulse train = 20.4 ms

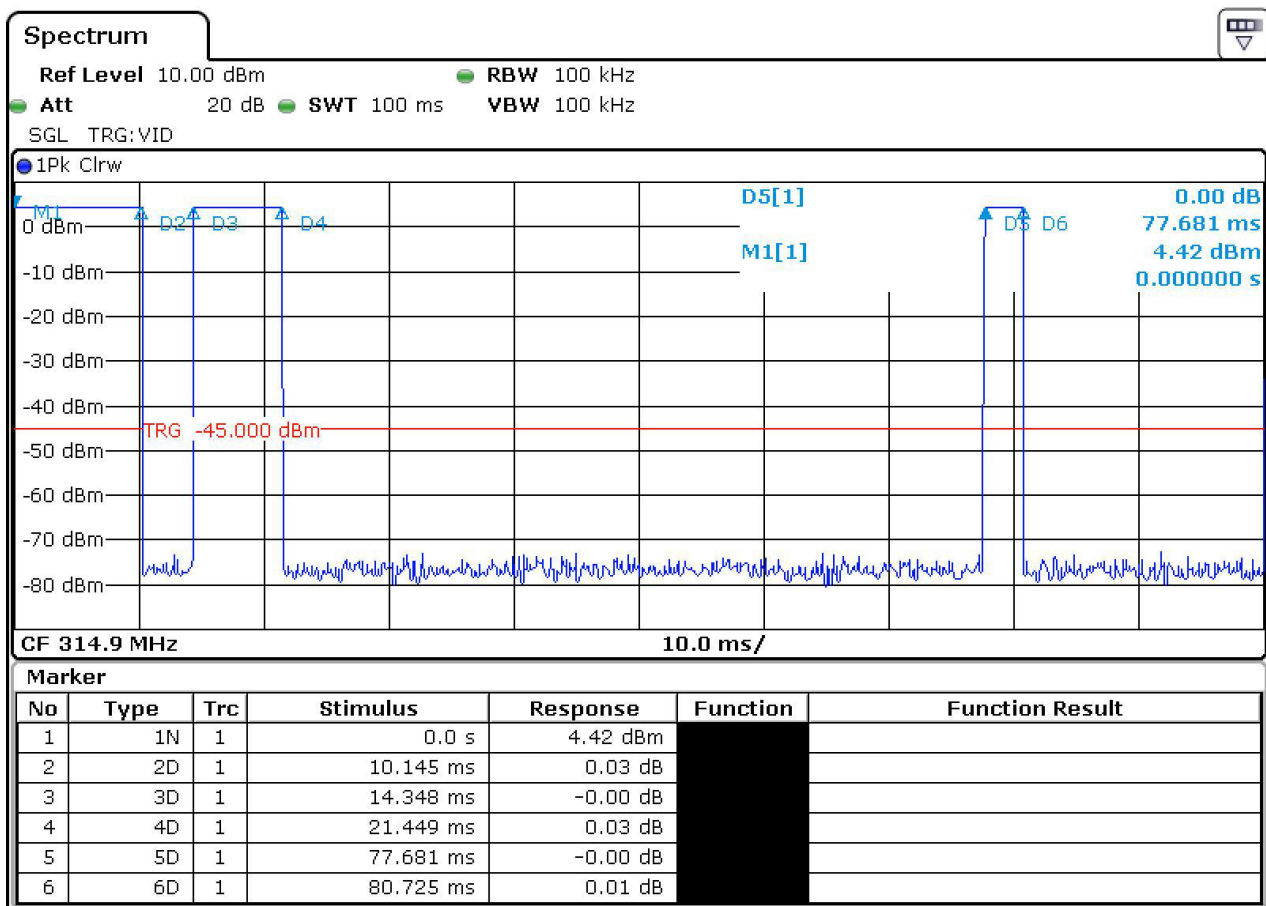
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Keyless Go access)
(channel 2)**



first telegram: 10.1 ms
 second telegram: 7.1 ms
 third telegram: 3.0 ms

worst case transmission in any 100 ms time period during pulse train = 20.2 ms

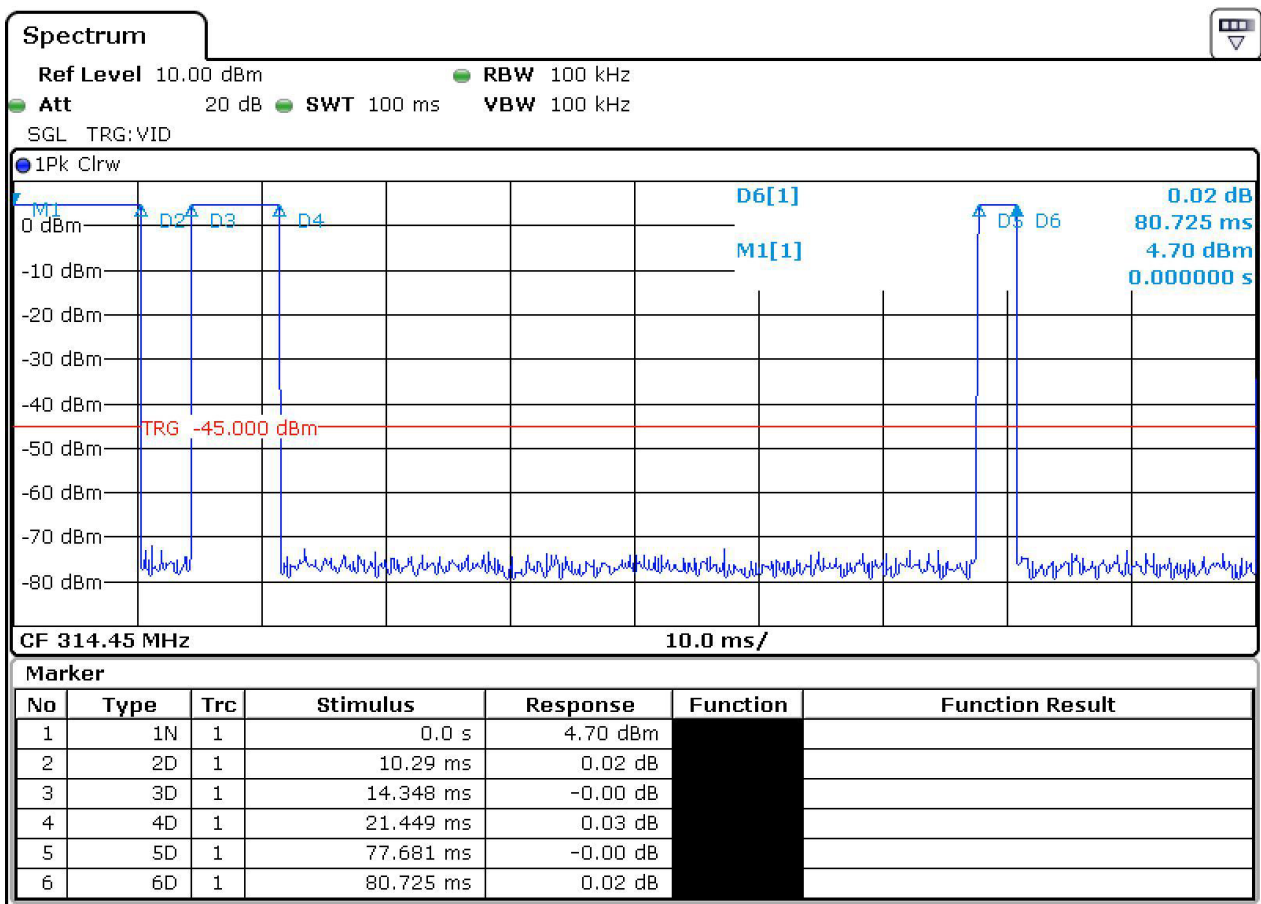
EUT: 920510A

FCC ID: XTJ-920510A

FCC Title 47 CFR Part 15

Date of issue: 2017-07-24

**Total transmission time (Keyless Go access)
(channel 3)**



first telegram: 10.3 ms
 second telegram: 7.1 ms
 third telegram: 3.0 ms

worst case transmission in any 100 ms time period during pulse train = 20.4 ms

Calculating the averaging factor

The worst-case transmission time per channel is 20.4 ms in a 100 ms time sweep.

The averaging factor was calculated by the following formula:

$$\begin{aligned}\text{Averaging factor} &= 20 \cdot \log(\text{TX}_{\text{ON}} / 100 \text{ ms}) \\ &= 20 \cdot \log(20.4 / 100 \text{ ms}) \\ &= -13.8 \text{ dB}\end{aligned}$$

(Worst case declared by the manufacturer = -13.7 dB)