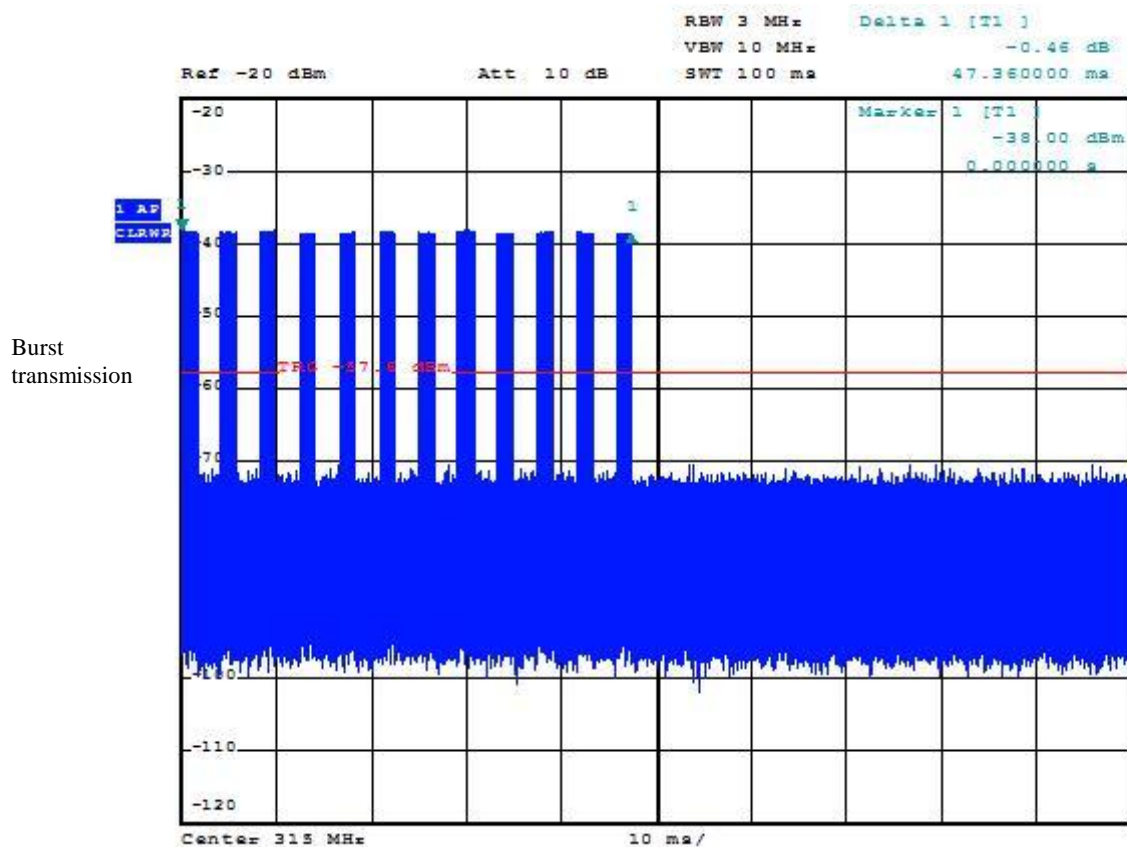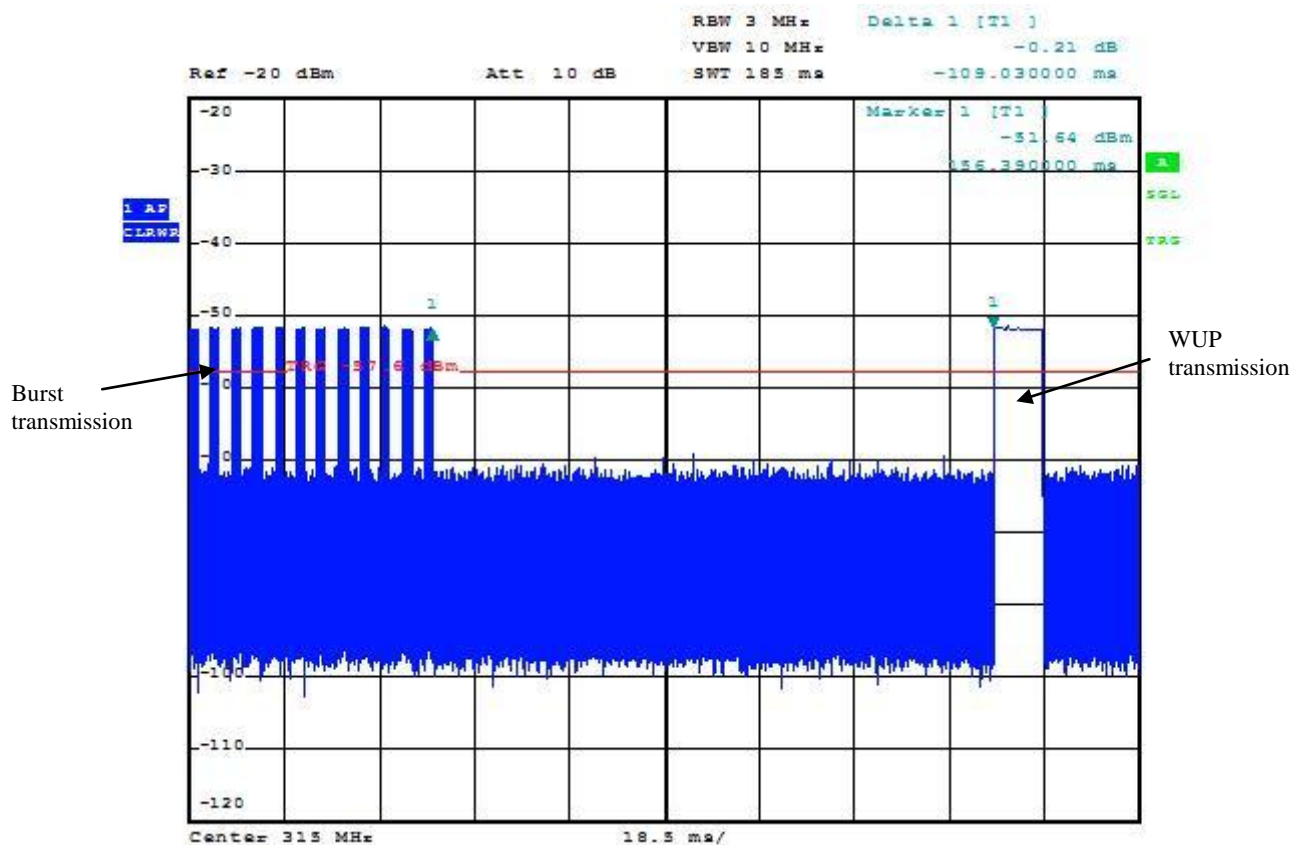# Periodic operation characteristics
Manually operated transmitter deactivation

15.231 (e) Intentional radiators may operate at a periodic rate exceeding that specified in paragraph (a) and may be employed for any type of operation, including operation prohibited in paragraph (a), provided the intentional radiator complies with the provisions of paragraphs (b) through (d) of this Section, except the field strength table in paragraph (b) is replaced. In addition, devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds

WUP Sequence: Manufacturing Mode

Burst
transmission

WUP
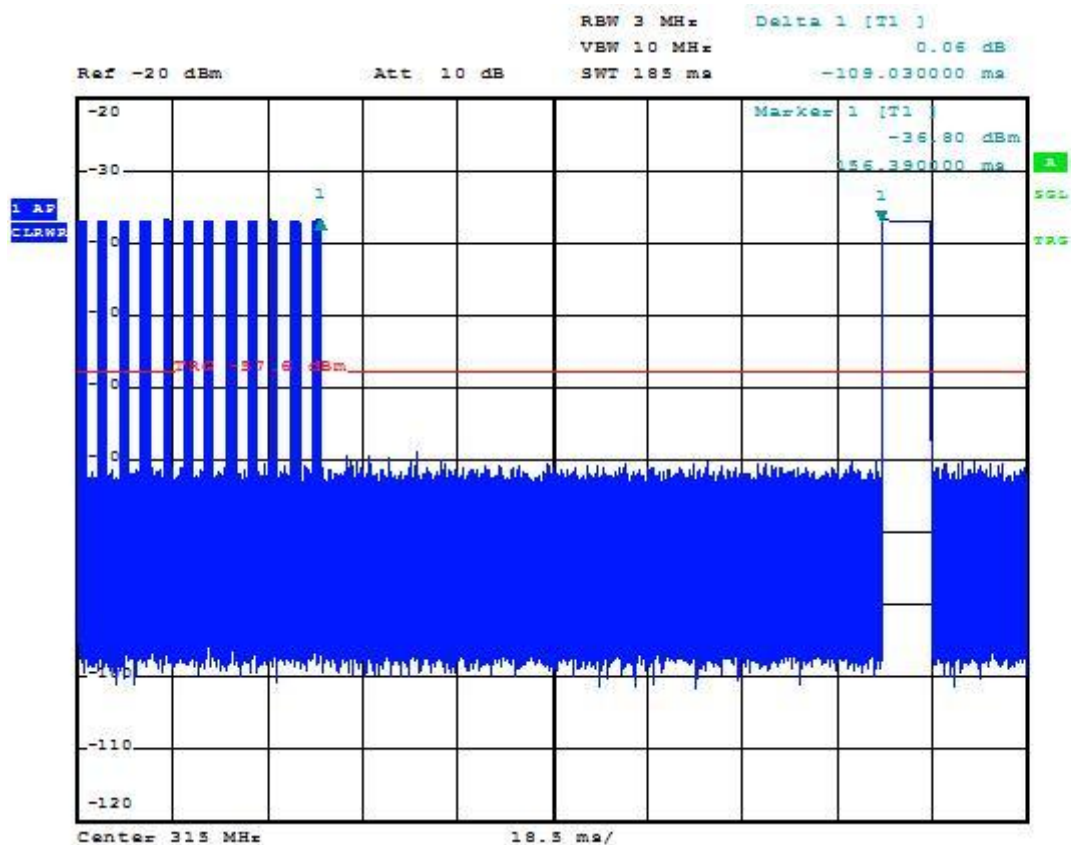transmission

Burst
transmission
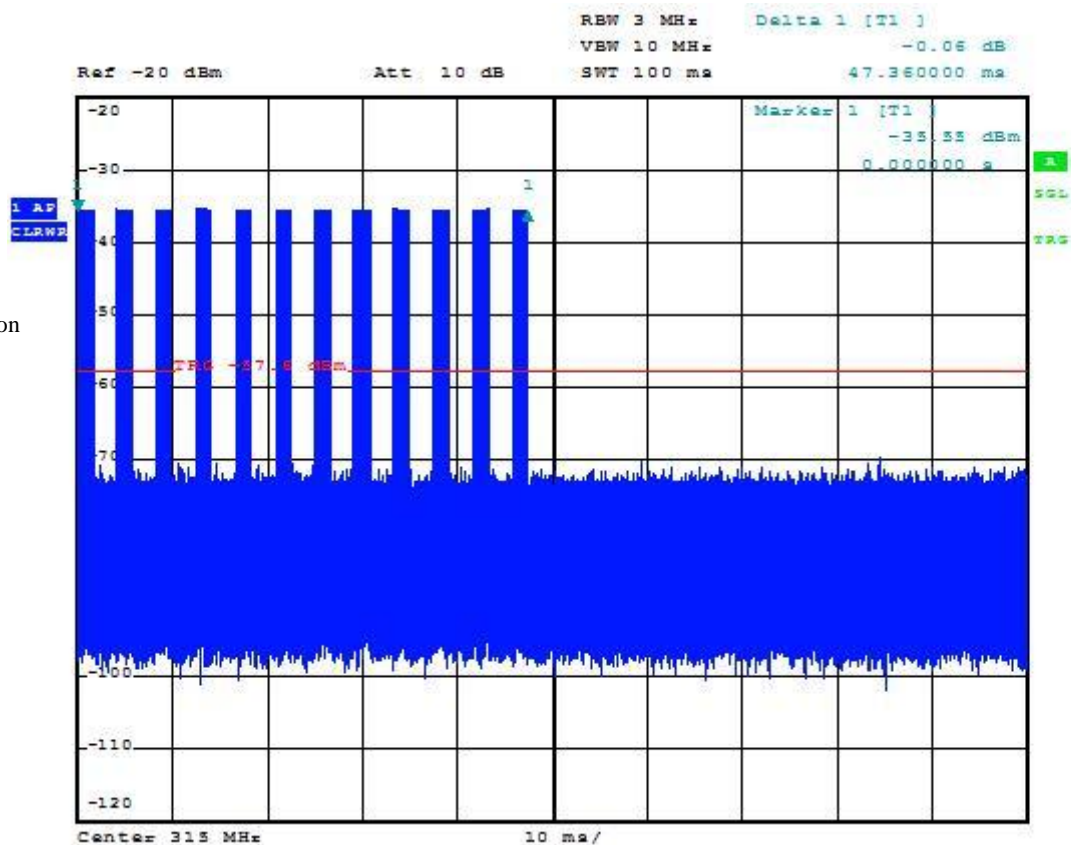
Burst transmission:
Single Burst = 2ms
Total transmission time in 100ms = 12 * 2ms = 24ms
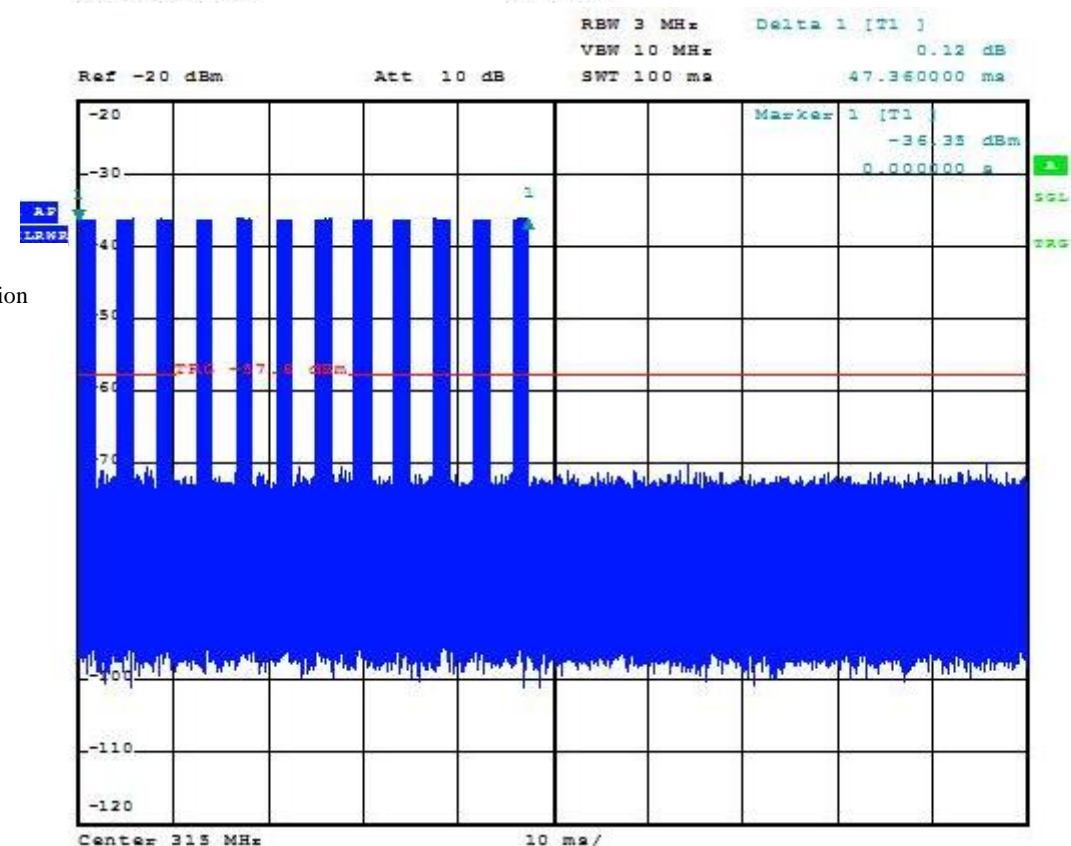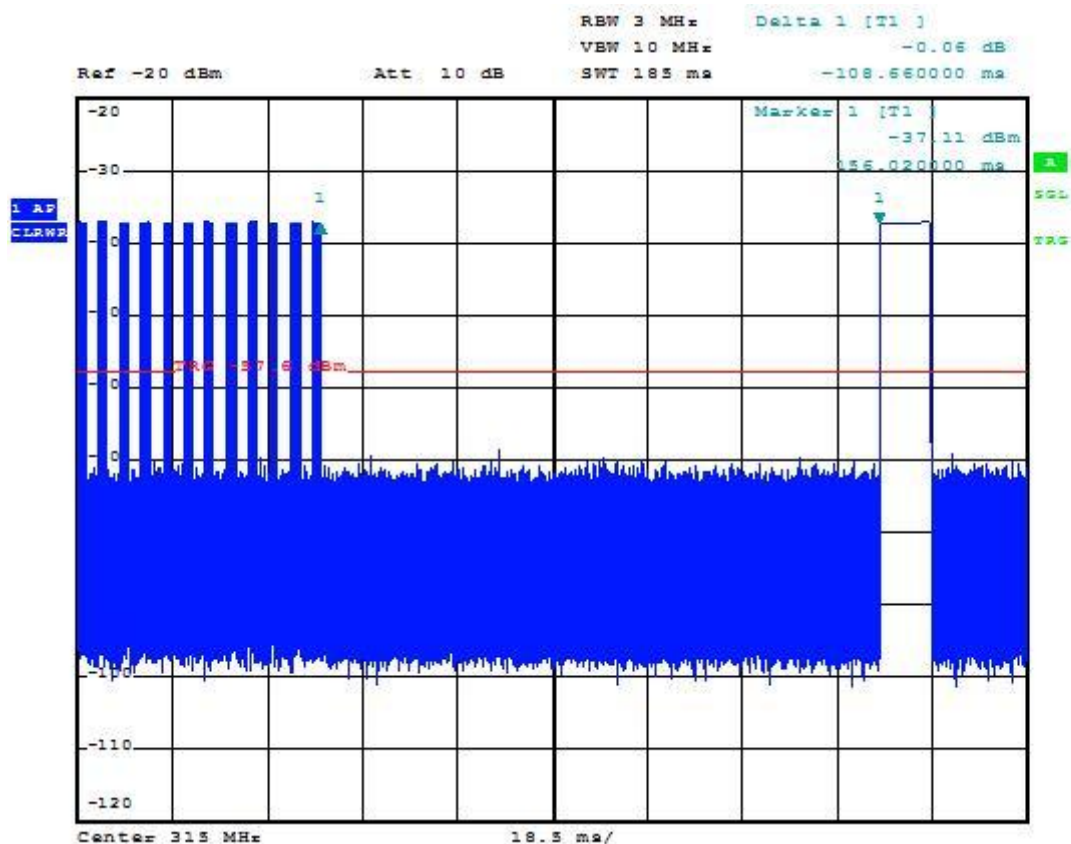
WUP Sequence: Parking Mode

Burst transmission

Burst transmission:
Single Burst = 2ms
Total transmission time in 100ms = 12 * 2ms = 24ms

WUP Sequence: Shipping Mode
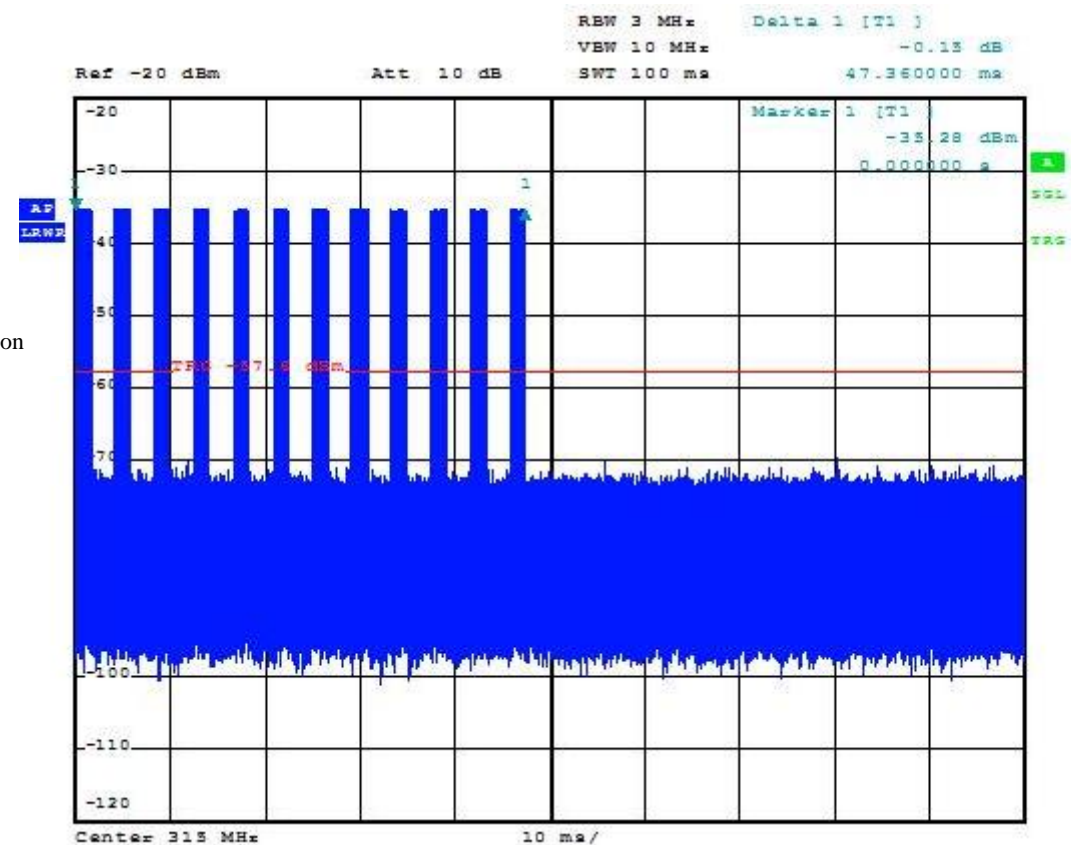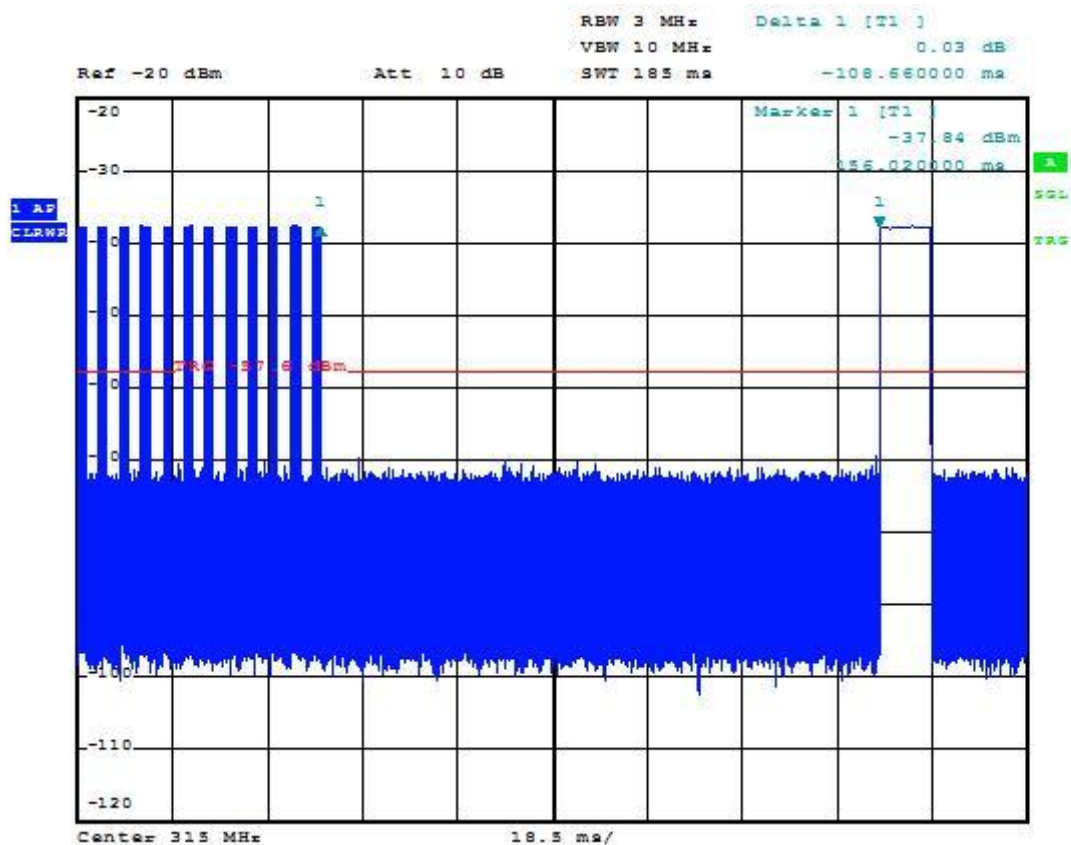

Burst
transmission

Burst transmission:
Single Burst = 2ms
Total transmission time in 100ms = 12 * 2ms = 24ms
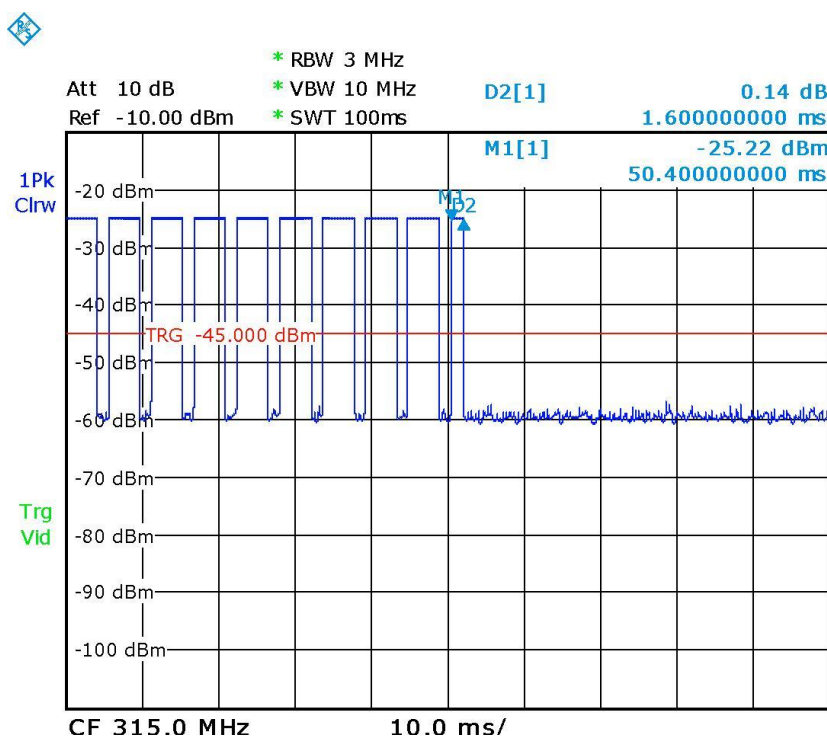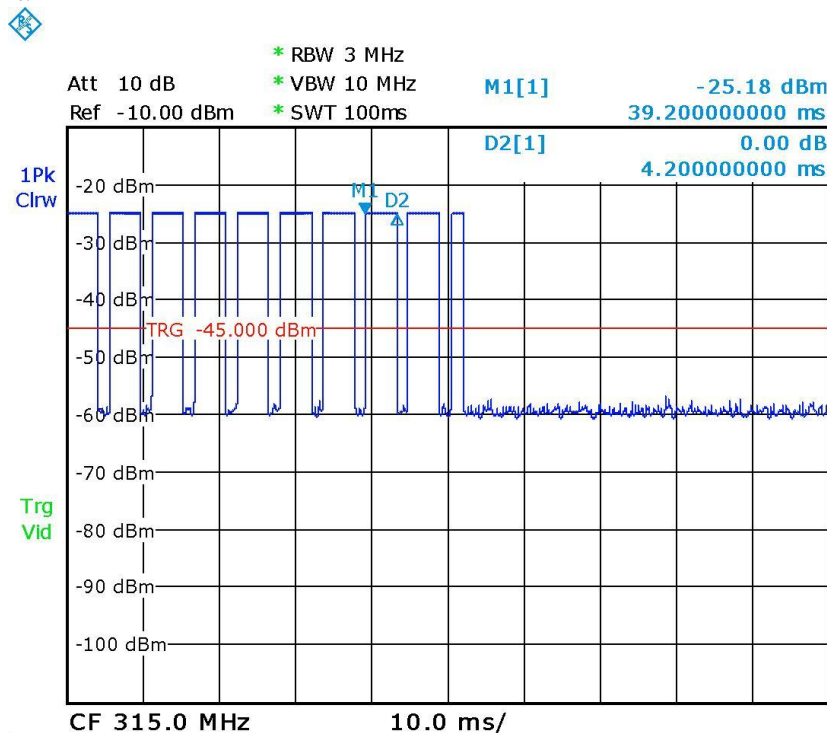
WUP Sequence: Test Mode

Burst
transmission

Burst transmission:
Single Burst = 2ms
Total transmission time in 100ms = 12 * 2ms = 24ms

Worst case emission

The worst case emission was determined in one of the WUP sequences during initializing the wheel unit.

WUP transmission max.:
9 * Single Burst a' 4.2ms
1 * Single Burst = a' 1.6 ms
Total transmission time in 100ms = 9 * 4.2ms + 1.6ms = 39.4ms

Average Factor:
Total transmission time in 100ms = 39.4 ms
Averaging Factor = 20*log (39.4/100) = -8.1dB (measured)
Averaging Factor = 20*log (42.1/100) = -7.5dB (declared by the manufacturer)