

Section 15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. The exact method of calculating the average field strength shall be submitted with any application for certification.

'SHORT MESSAGE' The data output is phase encoded Manchester which has inherent 50% duty cycle. The transmitted data rate is 3.676 kBs +/-0.05%, i.e. each bit is 272uS duration typical and 272.13uS max. The worst case data format consists of 120 bits, The duration of each word is 32.655 mSec max. Each word is transmitted 5 times at each transmission event, the words are separated (start to start) by 105mSec max..

Total max transmission time at each transmission = 452.655mSec.

The duty cycle over a 100mSec measuring period is as follows:

Duty Cycle = Actual RF transmission ON time / 100mSec (interval)

Actual transmission ON time = 120 bits X 50% X 272.13uSec = 16.33mSec

Therefore Duty cycle = 16.33 / 100 mSec = .1633 = 16.33%

#### 'LONG MESSAGE'

The data output is phase encoded Manchester which has inherent 50% duty cycle. The transmitted data rate is 10kBs +/-0.05%, i.e. each bit is 100uS duration typical and 100.05uS max. The worst case data format consists of 440 bits, The duration of each word is 44.02 mSec max. Each word is transmitted 5 times at each transmission event, the words are separated (start to start) by 105mSec.

Total max transmission time at each transmission = 464.02mSec.

The transmitter is inhibited from further transmission of the long message for 15 seconds after each transmission

The duty cycle over a 100mSec measuring period is calculated as follows:

Duty Cycle = Actual RF transmission ON time / 100mSec (interval)

Actual transmission ON time = 440 bits X 50% X 100.05uSec = 22.011mSec

Therefore Duty cycle = 22.011 / 100 mSec = .22011 = 22.01%