EXHIBIT 3 **CFS8DLLXL1000**
Message protocol, timing and duty cycle calculation.

SHORT MESSAGE PER 15.231 a)
The data output is phase encoded Manchester which has inherent 50% duty cycle.
The transmitted data rate is 4 kBs +/-0.05%, i.e. each bit is 250uS duration typical and 251.25uS max.
The worst case data format consists of 120 bits,
The duration of each word is 30. 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 251.25uSec = 15.0mSec

Therefore **Duty cycle** = 15.0 / 100 mSec = .15 = **15.0%**

LONG MESSAGE PER 15.231 e)
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 (i.e. >30 times the transmission duration per 15.231 e)).

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%**