Beam Cerenkov format:

The Cerenkov data appears in ROC24.

ROC 24:

<0xfead0000> - Cerenkov data flag
<0x0f000040>
<numwords> ← ignore
<trigger count higher 16bits>
<trigger count lower 16bits>
<turn onset higher 16bits>
<turn onset lower 16bits>
<RF onset>
<33 words> - each word consists of beam intensity. Multiply by 3.2 to get intensity in fC. The 17th word is the RF bucket that fired the trigger. The other 32 words are +/-16RF buckets around the trigger bucket.

Note!!! At the moment, there's something wrong with the format for the first event of each spill. I would suggest ignoring this event for the time being.

For all words starting from <numwords> only the first 16 bits of the 32 bit record is used.

So if <numwords> = <0x00200000>, then this is equal to 0x20, or 32 decimal.