A. COSMETIC

- Sometimes, "Gev" is used instead of "GeV", please find/replace.

- Section I, pg. 6, par.4, line 2 : knowlege -> knowledge

- Section II, pg. 7, par. 1, line 3 : evironment -> environment

- Section II, pg. 8, Table I caption : resoances -> resonances

- Section II, pg. 9, par. 2, of of nucleon -> of nucleon

- Section II, pg. 16, par. 5, recently recently by -> recently by

- Section IV, pg. 29, par. 1, assumptions need to made -> assumptions need to be made

- Section V, pg. 32, par. 2, Hamamtsu -> Hamamatsu

- Section V, pg. 34, par. 2, everywhere micromegas -> Micromegas (also later in the text, please find/replace). Also, 1.7\% -> 1.7°.

B. GENERAL

1) While I found the physics motivations reasonably motivated, I do not see the reason for a dedicated session about the theoretical model (SecIII). I would move it to the Appendix, leaving a short reference in the physics motivation section (SecII) adding a 'Summary of theoretical status'.
2) SecVI: rate calculation need to be cross-checked with what we estimate for the total hadro-production: the untagged part is a factor of 4-5 lower than what we estimated.
3) The untagged part of the spectrum needs a dedicated trigger that should reduce the online DAQ rate to a sustainable value: for the tagged fraction, the coincidence with the FT reduces the rate to a factor of 10 while for the untagged part what is the plan to keep it at a reasonable level?
4) How will the background will be affected by the trigger condition?

C. DETAILED COMMENTS

pg7. 'The photon energy ...' why the property of Omega- and its excited states are so interesting (other than saying that they are all poorly known)?
A strong and clear motivation of the whole search is still missing. What we could learn studying the Omega that is not already known? New information about the quarks structure of hadrons, new info about the s-quark
pg8 B.1 'Current status ...' I would put the detailed knowledge of the cascades quantum numbers in the context of the quark model: it is not fully clear why we need to know all of the cascade's quantum numbers: some arguments to justify why the mass determination is not enough to identify the missing states could help.

pg 16: 'Very clean signal ...' what are the kinematic constraints in the selection criteria that reduces the bg to a negligible level? please specify in the text.
pg 18: last row: developed by Afanasev -> A.Afanasev and add the reference.
pg 26: Brodsky-> S.Brodsky [ref]
pg 29: 'In order to ...' need to made -> need to be made
pg 31: Sec V.A: Add a ref to the FT TDR:
http://www.ge.infn.it/~batta/jlab/ft-tdr.2.0.pdf
pg 34: first row: via ~4 -> via 2 or 4
pg 36: 'Further tests of improved ...' all test have been done: put all sentences to the past-tense

D. Specifically on SecVI

- tagged fraction: cross checked with what we have in our TDR: ok
- untagged fraction: we calculated the untagged fraction using the Mo approx:
    equivalent photon luminosity= 1/50 ln(Emax/Emin) L_electron
obtaining:
L_untagged (all angles, energy 0.5-10 GeV) = 3.6 10^33
You quoted (from RADGEN calculation) 3.2 10^32 + pure bress 2 10^32 = 5.2 10^32
Limiting the energy range from 5 to 11 GeV (why?) from the prevoius formula one gets:
1/50 ln(11/5) 10^35 = 1.6 10^33
-- there is a factor of 2 difference in the untagged rate (over the omega threshold, I guess)
-- there is a factor of 7 different from the real untagged production that contributes to the 3-prong trigger
Overall we estimated a 3 prong rate of 10% with a total RCLAS12=36kHZ further reduced to few kH when in coincidence with the FT.

Your tagged trigger would be using 2 (or more) charged particles, what is your estimation of the DAQ rate corresponding to that?

How do you think to reduce the untagged rate to a manageable value?

So far there is not any plan to use a higher multiplicity trigger to reduce the rate. If this is the idea (4-prongs or a mixture of neutral and charges) you should provide a more detailed study on the expected DAQ rate and how it will affect the foreseen available DAQ bandwidth.

How the trigger condition is affecting the signal and the background rates?

pg 47: SecVI.A.4: the electron luminosity is 10^35