Thank you for your opportunity to review this manuscript.  The reviewed manuscript "***Observation of Self-Healing and Blue Response Enhancement in c-Si Solar Cells Exposed to Electron Irradiation***" had reviewed the background and also the latest literatures. I recommend this manuscript after some minor revisions:

1). In general, solar cells for space application are tested under conditions based on the environment of a satellite in a geostationary orbit (GEO) (at a distance of ~ 36000 km) or low earth orbit (LEO) (at a distance of ~ 500 – 2000 km): 1 MeV electron irradiation with fluence 1013 – 1016 e/cm2. Why in this study was chosen as the electron irradiation 8 MeV with a fluence of 1.6·1011 cm-2?

2). In the section 2 (on page 6, line from 26 to 33), electron beam conditions are described. However, there is no information about the uniformity of the beam. Please mention about beam size and its uniformity, also temperature of Si solar cell during the irradiation.

3). In the section 3 "Results and discussions" given information about the illuminated I-V characteristics of Si solar cells under AM1.5G condition before and after electron irradiation. However, there is no information about the light J-V characteristics under AM0 condition, because light J-V characteristics were conducted under AM0 condition for space use.

4). It would be better if could give graphs of the light J-V characteristics of Si solar cell before and after laser cutting under AM0 condition, since after cutting a solar cell with an area of 15.6 x 15.6 cm2 into small area of 2.8 cm2 to conduct investigation, efficiency of solar cell decreases due to damage of cell edges. Also, could you give the information on temperature during laser cutting and leakage current after laser cutting?

5). It is not clear why the FF value does not change after electron irradiation (Fig. 3a). It is known that FF depends on the series and shunt resistance of the solar cell. Usually, the value of series resistance changes after radiation, which is shown in Fig. 4.

6). In the section 3 “Results and discussions” given photo J-V curves of solar cells under AM1.5G condition before and just after and after 52 months of electron irradiation with different doses. It is not clear why just after electron irradiation the FF values do not change with irradiation dose, while the Jsc values decrease. When measurements are conducted 52 weeks after irradiation, Jsc remains unchanged, while FF decreases.

7). It would be better if could provide data on the lifetime or diffusion lengths of minority carriers before and after electron irradiation, since these parameters are the main ones. On page 12, line 40-47.

8). It would be better if could provide information about the energy, capture cross-section and concentration of defects in the silicon substrate that have formed after electron irradiation