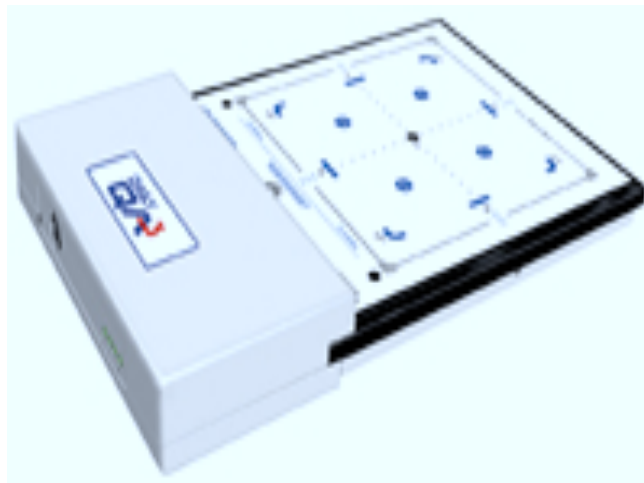
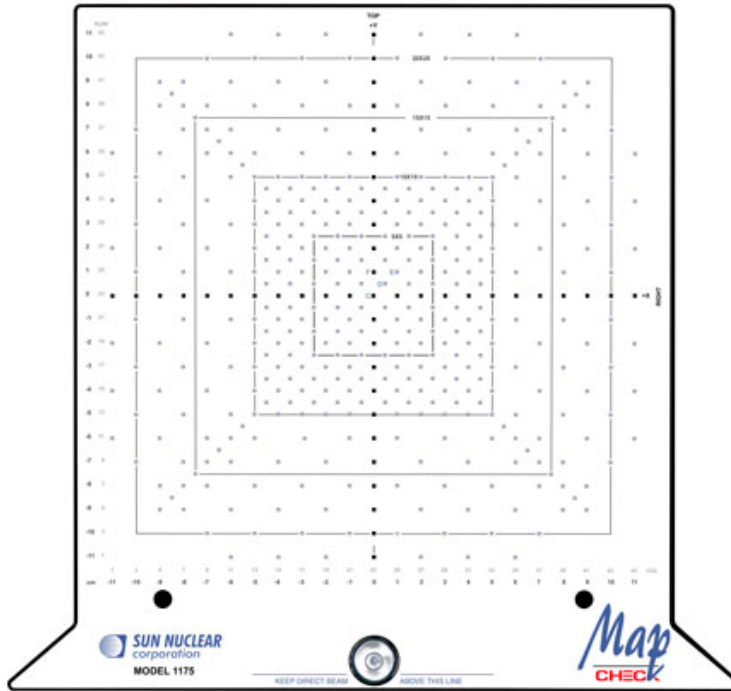


QA verification plan on QA phantom.





Sun Nuclear Map Check

Once an IMRT plan has been approved by a doctor, an IMRT QA must follow. The primary goals of IMRT QA are to identify safe parameters for treatment and to verify that the dose intended is the dose delivered.¹

1. Phantom or verification plan is created in the TPS system. The plan is then transferred to the MapCheck and accelerator.

2. Mapcheck phantom is setup in the treatment room. It is connected with a power/data cable. The phantom is then aligned with the treatment room lasers, and set at the calibrated SSD.
3. Once the QA device is hooked up, you are ready to open Sun Nuclear Corporation Patient icon. (SNC patient- QA computer program)
4. As soon as it is turned on the device immediately measures for background radiation.
5. Pick the patient you are interested in running a QA plan on, and then mode up that patient at the console. The QA IMRT plans are performed using isocentric setup. Each field is set to deliver the dose with the beam perpendicular to the phantom from a gantry angle of 180 (AP).
6. Run the entire plan. At this point pay close attention to MLC leaves and making sure everything is moving correctly. When IMRT plan is complete the doses then analyzed by physics.