IROC Houston QA Center

### PHOTON MACHINE DATA

1. INSTITUTION: MACHINE (IN HOUSE DESIGNATION):

* MANUFACTURER: MODEL: \_\_\_\_\_\_\_\_\_\_ SN \_\_\_\_\_\_\_\_\_\_\_
* DATE MACHINE STARTED CLINICAL USE: \_\_\_\_/\_\_\_\_/\_\_\_\_
* DATE OF THE LAST MEASUREMENT FOR OUTPUT (ANNUAL): \_\_\_\_/\_\_\_\_/\_\_\_\_

1. OUTPUT DETERMINATION:

Present calibration protocol:  TG51  TRS398  Other

* ANNUAL CALIBRATION SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D, depth: \_\_\_ cm

# Phantom: composition: Ionization chamber:

# Output stated at dmax Other depth \_\_\_\_\_\_ at \_\_\_\_\_ cm S\_\_\_D

Output is stated to:  muscle  water

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Energy (MV) |  |  |  |  |  |
| dmax (cm) |  |  |  |  |  |
| %dd(10)x |  |  |  |  |  |
| Clinical % dd @ 10 cm |  |  |  |  |  |

* MONTHLY CALIBRATION SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D

# Phantom: composition: , Ionization chamber:

Date of last comparison between the annual, monthly and daily devices: \_\_\_\_/\_\_\_\_/\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Energy (MV) |  |  |  |  |  |
| Depth of Ion Chamber |  |  |  |  |  |

* DAILY OUTPUT SETUP: \_\_\_ cm x \_\_\_ cm, \_\_\_ cm S\_\_\_D

# Monitor device: \_\_\_\_\_\_\_\_\_\_ Make \_\_\_\_\_\_ Model \_\_\_\_\_\_\_

* What are the criteria for readjusting the output?

>2% >3% >5%  other/explain

* If output is allowed to float, what are the criteria for adjusting the monitor set for patient?

>2% >3% >5%  other/explain

PHOTON MACHINE DATA (cont’d.)

* FACTORS USED TO CALCULATE ABSORBED DOSE RATE (Gy/mu) FROM DOSIMETER READING Attach a copy of the most recent annual TG-51 calibration and monthly output verification for each of the photon energies.

1. TREATMENT DELIVERY MODALITIES USED WITH THIS MACHINE

# A. 3DCRT B. IMRT

# C. SRS D. TBI

# E. SBRT F. IGRT

# G. VMAT H. OTHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Type of MLC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Image Guided Radiation Therapy

# IGRT is defined here to include only those procedures where imaging is used in combination with computer-assisted manual or automatic registration with the planning-CT image. Use of MV EPID or film images as a visual comparison to DRRs does not meet this definition.

* What Image Guidance is available on this machine?

# A. None

# B. kV cone-beam CT

# C. MV cone-beam CT

# D. Planar stereoscopic kV images (e.g., OBI)

# E. Planar stereoscopic MV images

# F. Helical MV tomography

# G. Dual kV imaging panels (e.g., ExacTrac, Cyberknife)

# H. Ultrasound localization

# I. Patient skin-surface alignment

# J. In-room diagnostic CT scanner

# K. OTHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_