

Change in particle flux:

JD plug in copper
JD plug in tungsten

G

th.n: 3.2kHz -12%
hi.n: 641 Hz -15%
had: 149 Hz -15%
c.r.: 21 Hz -13%
p.r.: 4.1 Hz -10%

th.n. = thermal neutron rate (neutrons < 100 keV)
hi.n. = high energy neutron rate (neutrons > 100 keV)
had = charged and neutral hadron rate > 20 MeV
c.r. = counting rate
= $0.0005n + 0.0117 \gamma + (\mu + p + \pi + 0.25e) / 2$
p.r. = penetrating particle rate
= $0.1 \cdot 0.0117 \gamma + (\mu + p + \pi + 0.25e) / 2$

F

th.n: 3.0kHz -10%
hi.n: 621 Hz -21%
had: 119 Hz -23%
c.r.: 20 Hz -20%
p.r.: 3.9 Hz -37%

Forward
Toroid

th.n: 24 kHz -10%
hi.n: 8.1kHz -27%
had: 1.1kHz -33%
c.r.: 155 Hz -19%
p.r.: 41 Hz -17%

th.n: 5.2kHz -8%
hi.n: 1.2kHz -6%
had: 381 Hz -6%
c.r.: 67 Hz -4%
p.r.: 14.6Hz -0%

th.n: 1.9kHz -8%
hi.n: 570 Hz -7%
had: 27 Hz -10%
c.r.: 18 Hz -7%
p.r.: 3.2 Hz -12%

th.n: 6.6kHz -5%
hi.n: 1.7kHz -9%
had: 409 Hz -3%
c.r.: 154 Hz -1%
p.r.: 27.6Hz +5%

