

# Change in particle flux: Standard conical JD hub Cylindrical JD hub



th.n: 6.6kHz +3%  
hi.n: 882 Hz +5%  
had: 167 Hz +3%  
c.r.: 32 Hz +4%  
p.r.: 5.9 Hz +5%

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  
 $= 0.1 \cdot 0.0117 \gamma^+ (\mu^+ p + \pi^+ 0.25e) / 2$



th.n: 5.7kHz +3%  
hi.n: 836 Hz +7%  
had: 158 Hz +8%  
c.r.: 32 Hz +4%  
p.r.: 7.1Hz +6%

Forward  
Toroid

th.n: 27 kHz	+7%
hi.n: 8.8kHz	+14%
had: 1.7kHz	+12%
c.r.: 210 Hz	+9%
p.r.: 54 Hz	+6%

th.n: 42 kHz	+13%
hi.n: 29 kHz	+14%
had: 8.4kHz	+12%
c.r.: 538 Hz	+15%
p.r.: 175 Hz	+8%

