

GLOBAL charge states calculations

(ref. the GLOBAL code (C. Scheidenberger et al, NIM B142 (1998) 441) and LISE++ v.7.4.139)

^{112}Sn with 600 MeV/u and intensity of $1\text{e}+8$ pps for ^{94}Pd setting

Setting-TA: Be/Nb (4015/221 mg/cm²)

S2-AlMg3 (800 mg/cm²)

S4-AlMg3-none

S4-user plastic-C9H10 (2 mm)

S4-user plexiglas-H6C4O2 (6 mm)

$^{112}\text{Sn}(\text{Qo})$ with 599.2 MeV/u @ $^9\text{Be}/\text{Nb}$ target

Material Thickness after D4 [mg/cm ²]	Charge state [%] - CHARGE	Be-target ^{GLOBAL} : 97.35% (Be-target ^{LISE} : 88.45%) Nb-stripper ^{GLOBAL} : 97.72% (Nb-stripper ^{LISE} : 100.0%)
MW41-Ti-45	97.96	Be-target-D1-survivals Qo: 85.8%
MW41-G-20.2	98.26	
MW41-Ti-45	97.89	Be target-D2-survivals Qo: 81.6%
Exit-win-Ti-90	97.72	Be-target-D2-Qo: 79.4% (LISE: 72.2%)
Air-21.9	97.82	(79.4%=81.6%*97.35%) (72.2%=88.45%*81.6%)
MU41-M-3.5	99.29	
MU41-Air-2	99.63	Be-target-D3-survivals Qo: 66.5%
MU41-GI-52.7	97.64	Be-target-D4-survivals Qo: 64.6%
MU41-CH4-164.9	97.34	
MU41-GI-52.7	97.40	
MU41-Air-2	99.58	
MU41-M-3.5	99.18	
Air-18.0	97.65	Vac-out-D4: 64.6%
MU42-M-3.5	99.17	Vac-out-Qo: 62.9% (LISE: 57.1%)
MU42-Air-2	99.27	(62.9%=64.6%*97.35%) (57.1%=64.6%*88.45%)
MU42-GI-52.7	97.30	
MU42-CH4-164.9	96.97	
MU42-GI-52.7	97.00	
MU42-Air-2	96.38	
MU42-M-3.5	99.03	
Air-19.3	97.18	
MW42-C-50	95.56	
MW42-G-19.6	97.29	
MW42-C-50	95.26	
Air-19.3	96.91	
SC41-51.6	93.65	
Air-154.32	95.68	
Plastic-sc-206.4	91.00	
Air	97.82	