

Table 8: ${}^2\text{H}$, ${}^3\text{H}$ and ${}^3\text{He}$ Cross Section and Rates for d/u Extraction with **only one HRS and optimized kinematic settings**. F2ALLM97 model is used. A $W^2 > 4$ cut is applied when calculating the rate ($W^2 > 3$ when $x > 0.70$). 15cm Target Length is used and 10% reduction with SOS is applied. 20% RC effect and 20% total efficiencies are considered.

	x_{bj}^{avg} (x_{bj})	W^2 (W_{avg}^2) (GeV^2)	Q^2 (GeV^2)	E' (GeV)	θ (Deg)	σ_{H2} (nb/s /GeV)	σ_{H3} (nb/sr /GeV)	σ_{He3} (nb/sr /GeV)	H2 Rate &Hour Hz(Hour)	H3 Rate &Hour Hz(Hour)	He3 Rate &Hour Hz(Hour)	Total Hour
HRS	0.87(0.83)	3.06(3.67)	14.58	2.07	47.10	0.0055	0.0067	0.0098	0.005(1329.87)	0.003(2501.80)	0.006(1195.82)	5027.49
HRS	0.83(0.78)	3.11(3.79)	10.90	4.00	28.82	0.0733	0.0916	0.1285	0.131(53.10)	0.071(97.69)	0.143(48.50)	199.29
HRS	0.79(0.76)	3.64(4.02)	10.38	4.00	28.11	0.0999	0.1258	0.1741	0.244(28.52)	0.133(52.05)	0.265(26.20)	106.76
HRS	0.75(0.74)	4.16(4.32)	9.85	4.00	27.37	0.1399	0.1776	0.2423	0.414(16.77)	0.229(30.34)	0.448(15.50)	62.61
HRS	0.71(0.71)	4.69(4.70)	9.33	4.00	26.62	0.2049	0.2623	0.3524	0.669(10.38)	0.373(18.61)	0.719(9.65)	38.64
HRS	0.67(0.67)	5.22(5.17)	8.80	4.00	25.84	0.3080	0.3980	0.5261	1.030(6.74)	0.580(11.98)	1.099(6.32)	25.04
HRS	0.63(0.63)	5.74(5.70)	8.28	4.00	25.05	0.4645	0.6058	0.7876	1.553(4.47)	0.882(7.87)	1.646(4.22)	16.56
HRS	0.59(0.59)	6.27(6.23)	7.75	4.00	24.23	0.6872	0.9045	1.1572	2.298(3.02)	1.317(5.27)	2.418(2.87)	11.17
HRS	0.55(0.55)	6.79(6.75)	7.22	4.00	23.38	0.9987	1.3260	1.6700	3.339(2.08)	1.931(3.60)	3.490(1.99)	7.67
HRS	0.51(0.51)	7.32(7.28)	6.70	4.00	22.50	1.4348	1.9216	2.3826	4.797(1.45)	2.798(2.48)	4.979(1.39)	5.32
HRS	0.47(0.47)	7.84(7.80)	6.17	4.00	21.59	2.0465	2.7643	3.3752	6.842(1.01)	4.025(1.73)	7.053(0.98)	3.72
HRS	0.43(0.43)	8.37(8.32)	5.65	4.00	20.64	2.9097	3.9635	4.7657	9.729(0.71)	5.771(1.20)	9.959(0.70)	2.61
HRS	0.39(0.39)	8.89(8.85)	5.12	4.00	19.65	4.1498	5.7005	6.7488	13.875(0.50)	8.300(0.84)	14.103(0.49)	1.83
HRS	0.35(0.35)	9.42(9.38)	4.60	4.00	18.60	5.9200	8.2002	9.5599	19.793(0.35)	11.940(0.58)	19.977(0.35)	1.28
HRS	0.31(0.31)	9.94(9.90)	4.07	4.00	17.50	8.5334	11.9191	13.6811	28.531(0.24)	17.355(0.40)	28.589(0.24)	0.89
HRS	0.27(0.27)	10.47(10.43)	3.55	4.00	16.32	12.5154	17.6292	19.9171	41.845(0.17)	25.668(0.27)	41.620(0.17)	0.60
HRS	0.23(0.23)	10.99(10.95)	3.02	4.00	15.06	18.9053	26.8602	29.8557	63.209(0.11)	39.109(0.18)	62.389(0.11)	0.40
											Total Days	232 (21)