A.2. CHAIN YIELDS FROM THE ENDF/B-VI FILE

Symbols To Indicate Accuracy of Weighted Average Numbers

Letter	Range,%	Error Stored in File,%
A	<0.35	0.35
B	0.35-0.50	0.50
C	0.50-0.70	0.70
D	0.70-1.00	1.00
E	1.00-1.40	1.40
F	1.40-2.00	2.00
G	2.00-2.80	2.80
H	2.80-4.00	4.00
I	4-6	6
J	6-8	8
K	8-11	11
L	11-16	16
M	16-23	23
N	23-32	32
O	32-45	45
P	45 and up	>64

The reader should note that the letter P stands for all errors greater than 45%. The letter P should suggest "*is poorly*" known. The modeled independent yields greater than 1% per fission, are assumed to have 32% error. Those between 0.5 and 1.0 are assumed to have 64% error and those <0.5% are assumed to have 100% error. The latter two cases, (although weighted as indicated) both translate as P in every output table. *It is recognized that even smaller independent yields have even larger than 100% error. Indeed, independent yields in the range of 1.0e-9 to 1.0e-12 may be difficult to predict to better than a factor of 100. For this reason, all yields less than 1.0e-12 are blanked out.*

Table 1
Set A Mass Chain Yields

mass	u235t	u235f	u235he	u238f	u238he	pu239t	pu239f	pu241t	u233t	th232f
66	7.22e-08n	7.23e-07m	0.000288j	3.71e-06n	7.82e-05k	2.21e-07o	8.68e-07l	1.67e-07l	2.50e-07o	1.13e-06n
67	3.61e-07m	2.32e-06m	0.000604j	2.15e-05n	0.000139l	4.48e-07n	2.87e-06l	5.05e-07l	1.12e-06o	3.90e-06n
68	7.16e-07n	4.03e-06m	0.000887k	2.80e-05n	0.000299l	1.62e-06n	8.42e-06l	1.41e-06l	3.43e-06o	1.43e-05n
69	1.57e-06n	8.70e-06m	0.001320n	3.58e-05n	0.000501l	5.89e-06n	3.12e-05l	3.64e-06l	9.41e-06o	3.30e-05n
70	3.62e-06m	1.89e-05m	0.002361k	4.41e-05m	0.000901l	1.99e-05m	8.69e-05l	1.40e-05l	3.67e-05o	6.54e-05m
71	8.38e-06n	4.65e-05m	0.003946k	4.95e-05n	0.001592l	3.67e-05n	0.000203n	5.24e-05l	0.000162o	0.000166m
72	2.65e-05k	0.000166m	0.006014j	6.05e-05n	0.002706k	0.000122o	0.000520n	2.43e-05m	0.000416n	0.000414l
73	0.000102m	0.000524l	0.011346k	0.000206m	0.005230k	0.000262m	0.000706m	5.78e-05l	0.001155l	0.000621l
74	0.000339m	0.001190m	0.017011k	0.000277n	0.008006l	0.000636n	0.001736l	9.48e-05m	0.002708m	0.001154l
75	0.001067k	0.003530m	0.026986k	0.000462n	0.013869l	0.001372l	0.002548m	0.000284m	0.007981m	0.002835l
76	0.003097j	0.017577k	0.040021k	0.000800m	0.021990l	0.002936l	0.005810l	0.000948m	0.013847m	0.006739l
77	0.007961j	0.031808k	0.066594k	0.003301k	0.031293j	0.007235k	0.012692j	0.001896m	0.025959l	0.011765j
78	0.020966j	0.057118k	0.099752k	0.011222m	0.057133l	0.018776m	0.022929m	0.011521l	0.053838l	0.035280k
79	0.044732i	0.090857k	0.167953k	0.032673m	0.133283l	0.043651f	0.060771j	0.014959l	0.143515l	0.076873k
80	0.128832h	0.175956k	0.253418k	0.042741l	0.212880l	0.093888m	0.092512l	0.029235l	0.234071l	0.194213l
81	0.203680g	0.228000k	0.341500k	0.086208m	0.333000k	0.183643l	0.141870k	0.062121l	0.367786h	0.469835k
82	0.324569g	0.340196k	0.593200k	0.213784l	0.453127l	0.229687m	0.218850j	0.136745j	0.586339g	1.075426l

 83 0.536435b 0.576795d 1.100956h 0.396237e 0.667981g 0.296793b 0.315587c 0.201544e 1.014543d 2.169280f
 84 1.002093c 1.030822e 1.509030k 0.825770e 1.123985g 0.480359d 0.498717d 0.351325f 1.689426d 4.026097e
 85 1.318713a 1.363796c 1.666312g 0.743050d 1.005966e 0.574068a 0.604191b 0.406488e 2.237148d 4.167428e
 86 1.965113b 1.946855d 1.828273m 1.296448d 1.571025g 0.766201b 0.789466d 0.594552f 2.844415e 6.587601f
 87 2.560298b 2.543847d 2.450685h 1.625506d 1.686410f 1.003923b 1.043375d 0.752828f 4.018205e 7.073593g
 88 3.575006c 3.494430c 3.430017i 2.028030e 2.175602f 1.329789d 1.329720c 0.990303e 5.465197e 7.260472f
 89 4.733074d 4.373684e 4.123095g 2.761051e 2.921217f 1.722836f 1.725338f 1.233109g 6.340165e 7.467815g
 90 5.782353d 5.465049c 4.594181g 3.246924e 3.189564g 2.104298f 2.048497c 1.535820e 6.789072e 7.924058h
 91 5.828245c 5.733461c 4.823241h 4.039440f 3.867595f 2.486500d 2.516537d 1.864133e 6.485957d 7.363992f
 92 6.021674c 5.846002c 5.103359j 4.312441g 3.879351f 3.009177c 3.037739c 2.308494e 6.552445d 6.920399g
 93 6.346743c 6.254059c 5.193751i 4.913253f 4.529122g 3.797575c 3.825724c 2.978050e 6.978996d 6.697280h
 94 6.472653c 6.300219c 5.097699k 4.610062g 4.694998i 4.321833d 4.233177c 3.391152e 6.831345e 5.562996h
 95 6.503326c 6.432034b 5.175438g 5.140443d 4.891811f 4.818517d 4.671429d 3.925621e 6.349605d 5.652666f
 96 6.340230d 6.202490c 5.207079j 6.017329h 5.575470k 4.893751d 4.856321c 4.401147e 5.678962d 4.776764l
 97 5.997223c 6.002914b 5.520253i 5.562461c 5.280014e 5.414114d 5.297278b 4.801799e 5.515746d 4.425500f
 98 5.790300c 5.923745b 5.436396k 5.944993d 5.464244k 5.830892d 5.633049c 5.035685f 5.189312d 3.680042i
 99 6.109164d 5.943191d 5.136274g 6.168192e 5.705377d 6.211806e 5.982639f 5.961885f 4.910973e 2.944060f
100 6.292781c 6.298379d 3.950416k 6.697326d 4.998117k 6.774621e 6.544341c 6.254494f 4.459033e 1.370638i
101 5.172919d 5.124290e 3.452705k 6.209007e 5.697793g 6.019171e 6.669887d 6.231942f 3.171242e 0.713542k
102 4.298778d 4.359081d 3.254026k 6.447346d 4.621668j 6.126339e 6.731884d 6.655272f 2.402804d 0.367805k
103 3.031149d 3.243933e 3.205137g 6.275279e 4.615807f 6.994895f 6.829040e 6.776879g 1.573207f 0.155461h
104 1.880825d 2.072379d 2.479191l 5.035980d 4.026081h 6.094829d 6.584723c 7.179518f 0.980193f 0.090313k
105 0.964228e 1.196323g 1.872265h 4.051243e 3.215881e 5.643815f 5.361104g 6.074350g 0.495809g 0.051481g
106 0.401576d 0.532399d 1.609732h 2.489722e 2.454599g 4.350214f 4.365499e 6.103987f 0.246245f 0.048561j
107 0.146202g 0.302329k 1.285484k 1.445866j 1.694368i 3.330057h 3.221088i 4.886322j 0.114532h 0.051075k
108 0.054129h 0.130816l 1.178097k 0.601420l 1.222461l 2.163956h 2.002769j 3.769599j 0.075767h 0.061347l
109 0.031223i 0.081546h 1.173138i 0.252140i 1.122826i 1.477898h 1.036285k 2.587597h 0.039405l 0.066215h
110 0.025445h 0.064915l 1.083704k 0.140760l 1.027439k 0.645132i 0.647332j 1.325114j 0.038664h 0.070997l
111 0.017432g 0.042577f 1.079385g 0.071214f 0.992245g 0.295993f 0.357018e 0.585511g 0.021600j 0.071619i
112 0.013043h 0.037712f 1.075936j 0.055901h 1.032693g 0.128508f 0.188927f 0.218486g 0.013304j 0.078263i
113 0.014205h 0.032614g 1.091408j 0.046111k 0.914336i 0.081664g 0.127662f 0.151924h 0.013562k 0.078066h
114 0.011833h 0.032294g 1.057132k 0.039257l 0.718885k 0.060254g 0.094265f 0.071086m 0.012860k 0.073423l
115 0.012584g 0.033878g 1.091665g 0.037548f 0.857044g 0.042600i 0.081409h 0.038087j 0.014982i 0.077003g
116 0.013249h 0.034004f 1.056328k 0.039314k 0.675634k 0.050678j 0.060358g 0.027787n 0.013202l 0.073801l
117 0.012762h 0.036819j 1.065332j 0.037732k 0.604700h 0.044459j 0.069871j 0.023626k 0.014124k 0.073822g
118 0.011346j 0.033632j 1.081950k 0.043176k 0.831012k 0.032488k 0.059864k 0.023157n 0.015417k 0.063281k
119 0.012874j 0.035020j 1.084139k 0.039720k 0.725951k 0.032249j 0.055017k 0.023156n 0.018558l 0.057210l
120 0.012609j 0.035292j 1.090448k 0.038713k 0.777414k 0.030585k 0.055690k 0.025623m 0.021829j 0.054327l
121 0.013047i 0.036811j 1.054143h 0.036927j 0.833461h 0.037808j 0.063088k 0.025882n 0.023082j 0.048821i
122 0.015485j 0.040409k 1.146120k 0.041073k 0.850253k 0.044695j 0.069905k 0.025882n 0.040969j 0.036527l
123 0.015658g 0.044063k 1.192724k 0.044534l 0.921818k 0.044120l 0.076809k 0.026704n 0.060415m 0.029354l
124 0.026788j 0.063333k 1.290173k 0.046461k 1.034995k 0.078717k 0.120774k 0.032352n 0.074624l 0.026475l
125 0.034022f 0.068030i 1.460497j 0.048524i 1.196325h 0.111659j 0.177846j 0.046901j 0.116962j 0.032954k
126 0.058518j 0.097545j 1.863928h 0.054089i 1.325201l 0.202324i 0.266786i 0.082238m 0.226118j 0.048129l
127 0.156991g 0.306279f 2.179644g 0.136294h 1.493819i 0.506298i 0.500864j 0.232387h 0.555457k 0.101355h
128 0.348840g 0.504501j 2.456115j 0.286086i 1.947001j 0.734121k 0.879000i 0.379232m 0.836918j 0.182599l
129 0.543386d 0.835170h 3.375012j 1.011337i 2.077459i 1.371454h 1.451065i 0.819952m 1.591337l 0.252076h
130 1.810633f 1.794634h 3.599778j 1.913653i 3.149253l 2.361688j 2.454095i 1.818825k 2.091632k 0.945582k
131 2.890898b 3.219551c 4.103087g 3.290794d 3.992440e 3.856439b 3.878424b 3.100837e 3.604300c 1.620949f
132 4.313407a 4.671072b 4.886339g 5.147494e 4.838119d 5.406858b 5.329531c 4.564343e 4.953559c 2.968856e
133 6.699915a 6.724035b 5.529694i 6.762707b 6.017644e 7.016466b 6.971140b 6.729190c 5.950570d 4.046220f
134 7.872644b 7.666747b 5.715190g 7.609406g 6.453250f 7.676881b 7.382961b 7.917365e 6.306880c 5.351795f
135 6.539455a 6.601362c 5.729764i 6.967573c 5.841928f 7.621001c 7.554585b 7.170771d 6.265223e 5.528784f
136 6.318709a 6.227129b 5.302789h 6.979834f 5.645631f 7.143924d 7.063767d 7.105131e 6.905353d 5.621469f
137 6.188944b 6.221562a 4.948814g 6.052506c 5.146585f 6.613842b 6.590226b 6.650911c 6.757385c 5.839457h
138 6.768035b 6.680526c 4.593901i 5.762451e 4.883588g 6.124533d 6.126624c 6.605149d 5.907377f 6.449821i
139 6.413852c 6.343309b 4.810269h 5.670141d 5.049720f 5.637200g 5.611585e 6.217390f 6.305604g 7.096623f
140 6.220169b 5.977979c 4.528971g 5.815266c 4.611131e 5.364788d 5.333198c 5.766685e 6.424816e 7.877878f
141 5.847414d 5.949134e 4.486032h 5.336511f 4.381533f 5.246968f 5.147149g 4.905772e 6.480480g 7.463862g
142 5.849283b 5.542190d 4.205015i 4.585776d 4.061520g 4.928967b 4.754411c 4.746982d 6.670707e 6.540381g
143 5.956198a 5.731209b 3.815571g 4.622060c 3.908647f 4.413261b 4.342002a 4.577993c 5.965845c 6.647205f
144 5.499964a 5.268694c 3.172470g 4.547939c 3.722810g 3.739785a 3.672940c 4.227384c 4.726134c 7.916097g
145 3.933647a 3.775731b 2.709269i 3.808983c 3.003810h 2.986310a 3.004180b 3.262911d 3.444062d 5.338663f
146 2.997113a 2.921372b 2.198985k 3.445628c 2.436894i 2.458146a 2.460051b 2.766456c 2.585897c 4.554332g
147 2.246885c 2.138887c 1.623358g 2.592719c 2.091141f 2.002981d 1.990639c 2.284949e 1.738401g 2.978662g
148 1.673660a 1.683442b 1.197989k 2.112485c 1.730509l 1.642120b 1.661454a 1.932103c 1.301585d 2.005246g
149 1.081705d 1.036973c 0.813282l 1.625277d 1.458148i 1.216561c 1.241118b 1.474076e 0.778134g 1.083641h
150 0.653325b 0.685836b 0.511870k 1.273456d 1.080910l 0.967459b 0.996874b 1.209439d 0.505712e 0.561977m
151 0.418797d 0.411991b 0.357774j 0.799397d 0.801471h 0.738426c 0.784939c 0.913021e 0.315725f 0.363657i
152 0.266932d 0.270856e 0.257674k 0.530227d 0.578793l 0.576317d 0.626702e 0.717632e 0.213639g 0.075545l
153 0.158290g 0.167056g 0.203611k 0.414787f 0.391921i 0.361259i 0.425848h 0.540584h 0.103685i 0.031009k
154 0.074439d 0.072319d 0.126975m 0.216281d 0.252123l 0.259788e 0.267251e 0.379114f 0.046690g 0.006876m
155 0.032138h 0.039472k 0.078729k 0.141515k 0.155257l 0.165724k 0.208821k 0.241414j 0.021430l 0.003617m
156 0.014854g 0.020259f 0.057898g 0.076033f 0.114368g 0.124018h 0.154754h 0.172125g 0.012794i 0.002690j
157 0.006151j 0.010583m 0.037707k 0.041375l 0.080349k 0.074152i 0.106137j 0.135369h 0.006302j 0.000932m

158	0.003286k	0.006494l	0.023471k	0.018487l	0.042592l	0.041439l	0.065658l	0.092244m	0.002055m	0.000464n
159	0.001009i	0.003007k	0.012126j	0.008619l	0.026018k	0.020653i	0.038547k	0.048030h	0.000886i	9.77e-05n
160	0.000319n	0.001132l	0.007209k	0.003544m	0.015666l	0.009681l	0.016051n	0.020499m	0.000316n	6.92e-05n
161	8.53e-05h	0.000333h	0.005261j	0.001215g	0.008469h	0.004841i	0.008649h	0.008468h	0.000122i	1.45e-05m
162	1.59e-05n	5.77e-05m	0.002783k	0.000340n	0.005937l	0.002231l	0.006141l	1.27e-05n	1.27e-05o	7.98e-06n
163	6.11e-06n	9.62e-06m	0.001584k	0.000204n	0.003393l	0.000916m	0.003147m	5.90e-06n	5.93e-06o	4.64e-06n
164	1.88e-06n	5.77e-06m	0.000976k	0.000125n	0.001992l	0.000330m	0.001793m	1.97e-06n	1.95e-06o	2.04e-06n
165	9.52e-07n	2.31e-06m	0.000538k	7.66e-05m	0.001097l	0.000134m	0.000897n	6.15e-07m	6.32e-07n	3.53e-07m
166	3.63e-07n	9.62e-07m	0.000279j	5.67e-05n	0.000630j	6.66e-05l	0.000635n	4.14e-07n	3.68e-07o	1.38e-07n
167	2.47e-07n	3.85e-07m	0.000185k	4.35e-05l	0.000369l	1.52e-05n	0.000267n	1.04e-07n	5.09e-08o	9.77e-08n
168	5.71e-08n	9.62e-08m	0.000107k	2.84e-05n	0.000200l	4.29e-06n	7.66e-05n	9.50e-06n	1.29e-08o	5.30e-08n
169	2.38e-08n	5.77e-08m	7.80e-05j	1.70e-05n	0.000129j	1.47e-06n	2.58e-05n	4.02e-06n	4.40e-09o	2.69e-08n
170	5.01e-09n	1.92e-08m	3.25e-05k	1.02e-05n	5.95e-05l	3.18e-07n	7.66e-06n	1.64e-06m	1.62e-09n	1.07e-08n
171	2.35e-09n	6.73e-09m	1.76e-05k	5.72e-06n	3.30e-05l	1.57e-07n	2.58e-06n	2.19e-07n	4.47e-10o	4.64e-09n
172	7.69e-10n	1.92e-09m	1.66e-05j	1.07e-05n	2.13e-05l	4.94e-08n	7.66e-07n	7.31e-08n	1.51e-10o	2.39e-09n

Table 2
Set B Mass Chain Yields

mass	u233f	u233he	u236f	pu239h	pu240f	pu241f	pu242f	th232h	np237f	cf252s
66	3.99e-07n	0.000670k	8.30e-07n	6.23e-05l	8.88e-07n	1.88e-07n	2.90e-06n	0.000129i	1.87e-07l	5.26e-08n
67	1.60e-06n	0.001515l	2.08e-06n	9.82e-05l	1.33e-06n	1.31e-06n	5.79e-06n	0.000224j	3.73e-07l	1.44e-07n
68	4.88e-06n	0.001803n	4.15e-06n	0.000217l	3.11e-06n	2.82e-06n	8.69e-06n	0.000760j	1.88e-06l	3.84e-07n
69	1.33e-05n	0.002900n	9.34e-06n	0.000371l	4.88e-06n	1.03e-05n	1.16e-05n	0.001515j	6.89e-08l	9.91e-07n
70	5.32e-05n	0.004704n	2.08e-05n	0.000670l	1.19e-05n	3.28e-05n	2.90e-05n	0.002783j	2.44e-05l	2.39e-06m
71	0.000231n	0.007445n	5.19e-05n	0.001196l	3.41e-05n	8.45e-05n	5.79e-05n	0.005304j	6.19e-05l	6.02e-06n
72	0.000683n	0.013031j	0.000187n	0.002184l	0.000109j	0.000150n	0.000125n	0.007873j	0.000150l	1.41e-05n
73	0.001564m	0.018747l	0.000719m	0.003759k	0.000309m	0.000478m	0.000241n	0.016263j	0.000369k	3.21e-05n
74	0.003725n	0.028083l	0.003113n	0.005881l	0.000784n	0.001126n	0.000772n	0.030213j	0.000663l	7.06e-05n
75	0.011085n	0.043497l	0.008302n	0.010230l	0.001705n	0.002816n	0.001158n	0.053042j	0.001318l	0.000152n
76	0.019703n	0.066968l	0.022832n	0.016418l	0.004092n	0.005632n	0.002413n	0.090643j	0.006012l	0.000317n
77	0.037259m	0.101957l	0.045174m	0.023704k	0.010786m	0.009693l	0.006828m	0.130970j	0.010440k	0.000625m
78	0.062079n	0.154923l	0.058119n	0.041512l	0.022211m	0.018416l	0.013517n	0.249312j	0.024370k	0.002061k
79	0.097555n	0.230843l	0.114166n	0.086286k	0.041693m	0.035864l	0.033796n	0.413505j	0.056444k	0.003436n
80	0.211819l	0.337640l	0.186862n	0.157412l	0.071108m	0.064944l	0.055138m	0.691637j	0.111391k	0.004784n
81	0.369983i	0.541361m	0.269840n	0.272005l	0.117767m	0.092375k	0.091706m	1.055407j	0.235745j	0.008336l
82	0.592212j	0.837895m	0.384297n	0.349828l	0.173119m	0.142856j	0.125578n	1.371988j	0.357483k	0.015277l
83	0.992729d	1.305686i	0.564755m	0.473539k	0.225812f	0.203536e	0.178704f	1.730971h	0.482728f	0.041355i
84	1.646913d	2.055871i	1.041023m	0.797597l	0.387259f	0.356864e	0.344098f	2.405313h	0.764156f	0.065824l
85	2.120474d	2.128544j	1.404166h	0.965547h	0.433496g	0.446553f	0.323157f	4.504953h	0.943529f	0.109031i
86	2.791283d	2.682477l	1.769318m	1.135089k	0.626292f	0.599326e	0.541052f	5.387893j	1.312144g	0.127391l
87	3.839970d	3.384983i	2.300375h	1.311613h	0.855547g	0.801993f	0.633340h	4.972307g	1.748054g	0.214949l
88	5.074510d	3.972427j	2.903340h	1.905361j	0.974526h	0.988938e	0.834913f	5.344973h	2.160309g	0.316107j
89	5.752346g	4.624521i	3.866771i	2.068536h	1.409931i	1.282172i	1.098864j	5.935102g	2.540089h	0.363233g
90	6.386977d	4.758131j	4.726828l	2.102754k	1.798823f	1.550924f	1.360012f	6.084759g	3.341144f	0.522465l
91	6.449272d	5.178402i	5.500850g	2.237309j	2.190363f	1.928825f	1.801399g	5.991665g	3.926816f	0.597083g
92	6.541788d	5.475885i	5.611012h	2.914485k	2.680322f	2.394422f	2.151179g	5.515768g	4.385161f	0.683939g
93	6.938879d	5.377588i	5.530128h	3.228897k	3.510794f	2.980999f	2.805855g	5.583862g	5.116882f	0.922775h
94	6.754053d	5.028212l	5.022972i	3.488761k	3.931243f	3.305810f	3.126856g	5.355038j	5.135931f	1.082168i
95	6.282346d	5.053958h	6.357054i	3.928726i	4.438210f	3.791982f	3.624745f	4.938007i	5.669297e	1.242835f
96	5.724824d	4.815132l	6.048170l	4.374147k	4.733370f	4.293444f	4.281194g	3.774838j	5.488387f	1.595509k
97	5.428447d	4.833920h	5.450093g	4.564323h	5.165564f	4.458663f	4.455980f	3.359161h	6.137973e	1.667163f
98	5.138015d	3.947898l	6.034184k	4.864154k	5.501400f	4.799103f	4.833419f	2.709561j	6.106580f	2.297083k
99	4.698149g	3.781740h	5.815444g	4.749738h	5.930922g	5.528992h	5.437807i	2.048452f	6.118047g	2.632067f
100	4.357599d	3.086651l	5.776085k	5.121307k	6.811451f	5.960374f	6.084161f	1.638174i	6.436427g	3.448161j
101	3.893542f	2.743740l	5.229041i	4.997584k	6.479862h	6.490907e	5.990136i	1.357787i	6.124369f	3.933948g
102	2.935481f	2.507262l	5.196586l	5.476686k	6.667164h	6.865604e	6.420304i	1.023859i	5.769296g	4.038054h
103	1.664343i	2.532174i	4.156286i	5.207893h	6.613308i	6.508026h	6.544403j	0.886648h	5.558304f	5.447208f
104	1.279155e	1.978568l	3.540101l	5.443429k	6.839620h	7.306442e	6.485519i	0.962435i	4.131492h	5.656980h
105	0.855466i	1.804765i	2.465547h	4.274868h	5.584536i	6.583418i	6.966055h	1.081533h	3.103525g	6.211626f
106	0.325219h	1.387055k	1.012315j	3.577379j	5.093262h	6.244297e	5.758838i	1.194485h	2.334109i	6.311680f
107	0.145756j	1.422649m	0.616013m	2.862284k	3.927550k	4.906669k	5.027247l	1.177844i	1.712617j	6.618205g
108	0.097559n	1.431957m	0.384001n	2.398210k	2.795166k	3.541954k	4.397309l	1.279823i	1.296866l	6.109400g
109	0.085292m	1.503545k	0.154096m	2.476479i	1.746191i	2.352977k	3.194055k	1.413551h	0.637752j	5.940418g
110	0.079815n	1.321089m	0.114152n	1.744318k	0.941013l	1.399562j	2.077608l	1.382254i	0.300653k	5.903153k
111	0.073687j	1.412376i	0.067305j	1.547298i	0.487211i	0.644584l	1.222247l	1.303290g	0.095279h	5.187627f
112	0.064857l	1.690540i	0.052925n	1.392305i	0.227972i	0.317786l	0.653576m	1.471980h	0.073460j	4.135488g
113	0.062631l	1.702444i	0.041067m	1.295266k	0.149580k	0.213241l	0.318057m	1.418936h	0.051558j	4.782829h
114	0.055870n	1.228653m	0.036321n	1.256600k	0.091121m	0.117393k	0.133050m	1.331016i	0.052834l	3.328425k
115	0.054779k	1.447280j	0.038445m	1.271726i	0.061250i	0.109020k	0.109153l	1.312195g	0.048947i	2.897211f
116	0.065484m	1.381761l	0.037359n	1.157196k	0.064827m	0.096928l	0.097549m	1.272370i	0.047787k	2.127287k
117	0.065723j	1.320991l	0.037698l	1.151458k	0.063752l	0.088045k	0.098267l	1.429681h	0.043023k	1.500654i
118	0.070680j	1.285070m	0.036295m	1.265306j	0.058995m	0.083358l	0.087794m	1.113324i	0.052941k	0.993867k

119	0.074920j	1.220152l	0.035340m	1.251859k	0.058555m	0.082389l	0.087794m	1.060308i	0.053266k	0.384147k
120	0.070917j	1.159649l	0.038205m	1.248022k	0.067071m	0.086505l	0.082916m	0.975484i	0.053022k	0.238962k
121	0.080336l	1.710001j	0.037463n	1.444680j	0.068034m	0.091594l	0.082044n	0.949023i	0.052609i	0.117532f
122	0.072647j	1.235136m	0.050575n	1.460716k	0.075996m	0.094651l	0.083866n	0.848247i	0.060728k	0.088464l
123	0.075808n	1.351245l	0.071178n	1.729587k	0.086940m	0.101771l	0.088422n	0.805834i	0.075697k	0.040869j
124	0.103384k	1.514461m	0.094016n	1.882184k	0.109879m	0.113101l	0.100519n	0.796609j	0.072747k	0.025432l
125	0.146139g	1.516257i	0.164285m	1.954902j	0.089289i	0.151116k	0.128898k	0.720982i	0.131045h	0.017685j
126	0.284589i	2.312017l	0.243428m	2.547933l	0.271673k	0.223951k	0.168351l	0.878031i	0.165173k	0.027712k
127	0.739534k	2.226838h	0.353390m	2.204234i	0.417491i	0.332128l	0.277268l	1.078026h	0.355856j	0.105591i
128	1.183967i	2.542472l	0.544425m	2.719282k	0.693441k	0.658785k	0.517936l	1.166342i	1.499571j	0.193489k
129	1.737216i	2.833625l	0.930972j	3.387362k	1.149483l	1.167150j	1.230159j	1.252821h	1.759487i	0.588805h
130	2.792976l	3.200091l	1.742986l	4.472198k	2.031069k	1.863027j	2.005994k	2.445798j	2.726681j	0.847124l
131	3.742352d	4.066951h	2.949756f	4.365749g	3.520040g	3.362428f	3.106466f	2.815254h	3.600055d	1.599812h
132	5.037372e	3.983494h	4.376397f	5.231195g	5.041959j	4.709868f	4.483763e	3.428572g	4.853792d	2.152595g
133	6.038073d	4.560393i	6.893372h	4.865743j	6.919886e	6.459724e	6.649572d	4.663337i	6.468864f	3.152104g
134	6.314475d	4.985265i	7.740875f	6.009275h	7.486179g	7.544606e	7.430162d	6.642892h	7.072826e	3.899700h
135	6.423164d	5.133530i	6.079545f	6.376440k	7.442543e	7.069647e	6.997196f	5.246944g	7.259395f	4.190145g
136	7.039554e	5.708629l	6.592126g	6.243613g	6.681315f	6.687501f	6.877002f	6.579760k	6.712400e	4.191617j
137	6.749106d	5.076073h	6.004417h	4.545788i	6.559005g	6.386823f	6.315746f	5.598808g	6.252811e	5.022656g
138	6.575755e	6.396232k	6.638414k	4.131454k	6.449165f	6.147261i	6.195603f	5.760764g	6.135233f	5.561545g
139	5.887556f	5.866070h	6.062405i	4.128723j	5.982345i	6.307392g	6.015723f	5.796842g	5.634704f	5.853515f
140	6.005914e	5.030049j	5.635502f	3.843636i	5.505426f	5.306048f	5.449694g	5.989903g	5.493600e	5.959867e
141	6.247733g	4.464269h	5.379958h	3.560214i	5.015438h	5.075319h	5.016567i	6.114955g	5.341258g	5.966351f
142	6.122289e	4.397528l	5.423144h	3.108543j	4.889920f	4.634242f	4.600878f	5.408502i	4.795652f	6.025751g
143	5.524121d	3.218155h	5.762824h	2.807836i	4.436753f	4.671235d	4.545299e	5.119583g	4.649954f	6.253822f
144	4.379333d	2.478323i	5.111680h	2.704471h	3.962051g	4.171096f	4.262299f	4.217892i	4.139619f	5.899073f
145	3.199751d	2.025202j	4.152905i	2.158065j	3.075099f	3.326693d	3.369644e	2.630949h	3.450362f	5.051517h
146	2.381593d	1.629104m	3.462719j	1.743971k	2.553082e	2.805788d	2.908089e	2.453127j	2.799534f	4.433891h
147	1.685954d	1.241185i	2.295173f	1.709635i	2.202893f	2.224196f	2.370548f	1.864808h	2.227831f	4.280649f
148	1.197536d	0.884282m	1.729152m	1.295678k	1.774039f	1.956179d	2.001289e	1.068817j	1.719460f	3.945769j
149	0.710615d	0.616857k	1.338310j	1.055207k	1.335202e	1.458571e	1.573372e	0.813042i	1.302589f	2.719409g
150	0.469859e	0.446070m	0.739914n	0.993759l	1.085382f	1.230379d	1.319905e	0.410517j	0.993970f	2.444907k
151	0.308286d	0.342014j	0.414867k	0.737611k	0.850480e	0.911266f	0.987960f	0.232520h	0.727214f	1.948906g
152	0.192187e	0.216819l	0.315192m	0.539999l	0.651102f	0.731908e	0.790400f	0.129381j	0.459940f	1.721700k
153	0.103453i	0.142869j	0.252867n	0.457717k	0.514598i	0.550597h	0.623322g	0.089584i	0.365157h	1.292928g
154	0.043626g	0.097651l	0.131116n	0.326903l	0.309577h	0.381333f	0.435689f	0.055172j	0.187242f	1.067268k
155	0.022742o	0.065374l	0.093655n	0.233150k	0.235513i	0.335845l	0.328165n	0.031656j	0.141933k	0.792890h
156	0.017567k	0.043623i	0.033729i	0.213972i	0.173939i	0.244251l	0.237008n	0.018313j	0.100496i	0.676700g
157	0.010122l	0.027761k	0.023414n	0.113299k	0.130276j	0.162834l	0.164082n	0.010612j	0.032215l	0.537819h
158	0.003317n	0.017080l	0.011239n	0.073087l	0.077783m	0.111948l	0.109388n	0.006249j	0.012772l	0.469618k
159	0.001734l	0.010649k	0.004402n	0.052510k	0.035905i	0.065134l	0.065633n	0.004550j	0.006491l	0.340237i
160	0.000419n	0.007162l	0.001967n	0.035386l	0.019401n	0.039692l	0.041021n	0.001724j	0.002508l	0.285805k
161	9.48e-05n	0.004672i	0.000493i	0.018506i	0.011869j	0.023407l	0.023701n	0.001058i	0.000779l	0.193696h
162	2.27e-05n	0.002749n	0.000206n	0.009047l	0.006864m	0.011788m	0.012762n	0.000510j	0.000303l	0.119572l
163	1.04e-05n	0.001706n	0.000112n	0.003195l	0.002167m	0.005228m	0.005469n	0.000255j	0.000130l	0.075839l
164	3.51e-06n	0.001047n	4.50e-05n	0.001841l	0.001164n	0.003313n	0.001367n	0.000132j	5.62e-05l	0.047208l
165	1.16e-06m	0.000626n	1.72e-05m	0.000737l	0.000570m	0.001538m	0.000937m	7.28e-05j	1.92e-05k	0.028645l
166	6.73e-07n	0.000264k	1.03e-05n	0.000505l	0.000303n	0.000621n	0.000456n	2.97e-05i	1.12e-05l	0.018396k
167	9.38e-08n	0.000218n	4.87e-06n	0.000274l	0.000182n	0.000311n	0.000182n	1.59e-05j	1.55e-06l	0.009568l
168	2.46e-08n	0.000133n	1.22e-06n	0.000138l	9.10e-05n	0.000124n	7.29e-05n	8.01e-06j	3.98e-07l	0.005251l
169	8.24e-09n	8.29e-05k	3.00e-07n	6.42e-05l	9.27e-05l	5.90e-05n	4.38e-05n	3.88e-06j	1.30e-07l	0.001669m
170	2.46e-09n	4.37e-05n	9.08e-08n	4.80e-05l	2.02e-05n	1.66e-05n	2.10e-05n	1.74e-06j	4.08e-07l	0.001398o
171	7.58e-10n	2.37e-05n	3.00e-08n	3.67e-05l	1.11e-05n	5.80e-06n	1.19e-05n	8.19e-07j	1.21e-07l	0.000708o
172	2.84e-10n	2.28e-05m	8.05e-09n	1.84e-05l	6.06e-06n	1.66e-06n	6.38e-06n	3.81e-07j	4.68e-07l	0.000346o

Table 3
Set C Mass Chain Yields

mass	u234f	u237f	pu240h	u234he	u236he	pu238f	am241f	am243f	np238f	cm242f
66	3.92e-06n	4.46e-07n	6.18e-05m	0.000446k	0.000185k	1.22e-06n	9.34e-07n	4.99e-07n	1.29e-07n	9.98e-07n
67	9.29e-06n	1.39e-06n	0.000132m	0.001052k	0.000406k	2.04e-06n	1.87e-06n	8.98e-07n	5.47e-07n	2.99e-06n
68	2.68e-05n	1.98e-06n	0.000245n	0.001472n	0.000787n	6.12e-06n	5.71e-06n	2.20e-06n	2.29e-06n	3.99e-06n
69	6.19e-05n	5.95e-06n	0.000501n	0.002060n	0.001096n	2.04e-05n	9.34e-06n	4.99e-06n	6.97e-06n	5.99e-06n
70	0.000207n	1.19e-05n	0.001002n	0.003436n	0.001994m	7.14e-05n	2.08e-05n	1.60e-05n	1.59e-05n	1.50e-05n
71	0.000516n	2.78e-05n	0.002146n	0.005298n	0.003088n	0.000183n	3.32e-05n	2.50e-05n	4.38e-05n	2.59e-05n
72	0.000634m	4.96e-05n	0.004575k	0.010425j	0.004685j	0.000428n	0.000135n	4.99e-05n	0.000159n	6.39e-05n
73	0.001074m	0.000298m	0.008405i	0.014800m	0.008177m	0.000461m	0.000349m	0.000120m	0.000299l	0.000200m
74	0.004143m	0.000991n	0.016348n	0.022567n	0.013944n	0.001267m	0.000685n	0.000280n	0.000648m	0.000399n
75	0.011764m	0.003172n	0.032695n	0.034342n	0.019920n	0.002433m	0.001350n	0.000699n	0.002890m	0.000898n
76	0.026097m	0.007334n	0.052206n	0.055061n	0.028895n	0.007862m	0.003644n	0.001299n	0.005233m	0.001364m
77	0.056774m	0.017887m	0.076151m	0.083869m	0.059830m	0.021288m	0.008729m	0.002896m	0.014451m	0.004942m
78	0.088793n	0.046589n	0.110352n	0.135411n	0.109573n	0.036494m	0.018485m	0.004992n	0.030398m	0.012980m
79	0.144550n	0.075342n	0.159412n	0.206237m	0.169365n	0.067414m	0.034404m	0.018970n	0.057810m	0.027956m

80 0.216850n 0.128942n 0.221860n 0.260171n 0.239304n 0.111522m 0.061629m 0.038955n 0.098687m 0.047489m
81 0.361367n 0.208182n 0.299399n 0.472964n 0.348707n 0.182472m 0.095508m 0.064894n 0.169432m 0.085865m
82 0.653781n 0.307337n 0.402437n 0.828336n 0.540249m 0.275110m 0.157605n 0.100272n 0.239364m 0.124796m
83 1.207121m 0.477178m 0.507700m 1.174167m 0.638303m 0.378619l 0.236196m 0.169797m 0.388699m 0.191277l
84 1.963561l 0.926643n 0.660155n 1.493364m 1.072087m 0.613372n 0.354250n 0.252693n 0.682940n 0.289891n
85 2.173022j 0.964954m 0.832866m 2.318464l 1.347133m 0.709709m 0.509810m 0.359741m 0.708002m 0.409372m
86 3.494133m 1.552907l 1.046460m 2.269865m 1.744527m 1.043544m 0.654537m 0.503297m 1.151290m 0.566987n
87 2.989971j 1.791696m 1.246311j 3.184755l 2.579003m 1.185290l 0.854085l 0.674492m 1.440597m 0.790016m
88 3.966095j 2.744195l 1.490658j 3.767984l 2.655251m 1.601367m 1.265693m 0.875808n 1.801165m 0.960182m
89 5.389946l 3.389245l 1.747368i 4.300028l 3.659138j 2.074393m 1.357625m 1.124441m 2.300614l 1.219797m
90 6.038863l 3.915434l 1.952523i 4.707081l 3.820010l 2.434680l 1.715407m 1.369531m 2.667405l 1.517704m
91 6.425058j 4.386102l 2.450160h 5.002994l 4.254236k 2.948812l 2.126664i 1.748210m 3.223750l 1.887072m
92 6.110431j 4.810684l 2.872168h 5.183537l 4.818080l 3.477655l 2.939793j 2.106981m 3.677868l 2.269659l
93 6.155856i 5.299536k 2.896950i 5.042664k 5.069331j 4.112736l 2.818777l 2.578962l 4.380033l 2.661108l
94 6.418682l 5.464065l 3.493818l 5.165801l 5.361608l 4.740867l 3.688954m 3.143605m 4.846381l 3.358067l
95 6.334472j 5.610686l 3.697669i 5.032528j 5.261609j 4.424131l 3.751411i 3.739426l 5.044699l 4.015632l
96 6.224629l 5.804128l 4.135222l 5.292175l 5.307519l 5.337094l 4.740649l 4.453158l 5.421906l 4.633765l
97 6.038748i 5.879938l 4.276969i 5.042643j 5.445944j 5.656110l 4.636896i 4.677929l 5.650345l 4.844937l
98 5.766617l 5.938378k 4.759399l 4.857642l 5.225298l 5.622103l 5.445534l 5.087262l 5.697342k 5.205408l
99 5.075879i 6.197933k 4.868966i 4.254718j 5.126146j 6.112515k 5.398710i 5.398364k 6.164795k 5.427610k
100 4.136138l 5.941237k 5.207708l 3.508873l 4.790620l 6.108882l 5.909581k 5.445501l 6.095436l 5.649250l
101 3.394207l 5.804044l 5.397972l 3.167298m 4.201578l 6.048102l 6.104194l 5.924719l 6.055529l 5.953334l
102 2.669984m 5.685019l 5.438604l 2.970021m 3.553056l 6.139202l 6.063632l 5.994938l 6.145743l 5.973385l
103 2.417112i 4.948943l 5.291055i 2.298263l 3.213834l 5.896871l 6.451358i 5.905154l 5.816819l 5.943383l
104 1.321509l 4.639230l 5.218491l 2.084273m 2.820132l 5.706725l 6.024053l 5.990533l 5.707294l 5.945120l
105 1.237440i 2.688536l 4.754474g 2.132680k 2.504589j 4.762554k 5.335824i 5.866728k 4.240514l 5.785440k
106 0.429079k 2.060784l 4.021683i 1.529381m 1.814851m 4.240739l 4.813459i 5.624986l 3.840821l 5.483860l
107 0.268439n 1.122885m 3.147594m 1.233372m 1.585501m 3.010741m 5.125893l 5.245324l 2.444159l 5.134254l
108 0.185862n 0.495590n 2.638614l 1.420996m 1.376317m 2.140623l 4.117154l 4.936190l 1.656408l 4.485087l
109 0.122809m 0.178977m 2.297550i 1.258807l 1.197770m 1.216499m 2.335166i 3.778282k 0.897512m 3.406221l
110 0.103246n 0.128837n 1.949985m 1.420860m 1.296324m 0.608231m 2.054700m 2.816597m 0.477711n 2.412818m
111 0.058195m 0.069377n 1.671646i 1.318350j 1.106070j 0.305820n 1.001643i 1.747796m 0.229225m 1.427738m
112 0.072272n 0.059466n 1.568710i 1.471315j 1.160652j 0.163104n 0.743581i 0.928829m 0.129380n 0.738830m
113 0.059741m 0.043712m 1.717772i 1.304214m 1.085207m 0.082404m 0.285529m 0.421411m 0.069905m 0.351414m
114 0.058850n 0.036671n 1.248885m 1.324603n 1.047029m 0.081552n 0.134957n 0.219608n 0.073647n 0.179597n
115 0.068516k 0.041579l 1.193070g 1.328335k 1.044624k 0.083435m 0.159600i 0.101991m 0.071175m 0.110575m
116 0.056786n 0.034688n 1.066283m 1.180295m 1.266416m 0.075051m 0.102696m 0.099822n 0.060794m 0.099776n
117 0.054787m 0.034780m 0.861726g 1.193030l 1.143987l 0.075015m 0.092426m 0.099911l 0.060855l 0.099842m
118 0.054787m 0.035773m 0.984892m 1.190142m 1.101793m 0.074416n 0.092426m 0.094880m 0.059798m 0.089858m
119 0.059768m 0.034744m 1.004251m 1.170307m 1.022384m 0.072887m 0.087292m 0.089887m 0.058343m 0.089858m
120 0.064644n 0.034744m 1.065212m 1.150471m 1.052162m 0.074884m 0.087292m 0.084893m 0.059315m 0.084866m
121 0.069617n 0.036618n 1.166651m 1.338944m 1.161425m 0.077829n 0.093612n 0.084850n 0.061501n 0.082838n
122 0.081585n 0.044535n 1.248066m 1.220235m 1.101895m 0.082448n 0.099163n 0.094724n 0.064385n 0.092673n
123 0.099453n 0.056410n 1.369443m 1.299239m 1.171275m 0.092797n 0.114414n 0.099669n 0.072071n 0.107203n
124 0.119440n 0.071312n 1.536602m 1.430212n 1.293255m 0.109895n 0.125526n 0.119679n 0.083231n 0.118397n
125 0.156502l 0.119122m 1.613847m 1.610590l 1.469057m 0.149768m 0.193194k 0.129836j 0.126410m 0.155931n
126 0.259256l 0.177882m 2.066375l 2.136081l 1.596479m 0.230362l 0.261674l 0.230988l 0.184736m 0.268908l
127 0.388771j 0.248163m 2.002128i 2.197159l 1.955418m 0.369425m 0.380497m 0.349178m 0.272261m 0.373166m
128 0.647501m 0.574035n 2.919041l 2.510235m 2.234180m 0.659086m 0.613680n 0.568125n 0.586200n 0.604254n
129 1.616498j 1.012595m 2.859785l 3.191397l 2.809725k 1.118321m 1.018105m 0.947889m 1.011311m 1.011492m
130 2.540781m 2.029719l 4.309479l 3.478193m 3.350675l 2.227635m 1.867115m 1.736782m 2.090704m 1.906686m
131 3.735867j 3.213456l 4.460339i 3.708335l 3.809984l 3.915719l 4.168328i 3.194724l 3.476196j 3.455496l
132 4.364303j 4.755271l 4.590675k 5.261590k 4.873230k 5.304196l 4.321860j 4.722176l 5.147919k 4.887063l
133 6.464197i 5.472325k 5.553934i 5.010730l 5.390076k 5.873619l 5.817838h 5.620808l 5.769666k 5.647269l
134 5.749837j 6.819004l 5.473597k 5.542541k 5.844895l 6.604941l 7.828396k 6.237599k 8.045237j 6.296452l
135 5.581853k 6.624940k 5.341134h 5.459793l 5.573625l 6.745252l 6.506050h 6.772182l 6.429053j 6.764861l
136 6.492108l 6.718522k 5.776373l 6.500150l 6.109720l 7.420700l 7.796377l 7.457241l 7.278368k 8.302974l
137 5.862588i 6.466979k 4.541609i 5.031960i 5.139651i 6.510333l 5.838064i 7.152656l 6.556096l 6.981347l
138 6.587177l 6.287656l 5.445086k 5.261842l 5.071495l 6.296191l 6.655478k 6.605988l 6.192929l 6.441033l
139 6.004106l 6.068429l 4.583750i 5.279236l 5.203529l 5.724017l 6.751272i 5.950888l 5.730036l 5.775629l
140 5.787173h 6.640428l 3.853162i 3.930933j 4.118092j 5.614320l 4.941442g 5.481615l 5.786680l 5.370960l
141 6.505636j 5.575092l 3.587640i 3.680841j 4.054839j 4.785162l 4.719010i 4.952430l 4.933550l 4.768646l
142 5.990981j 5.456845l 3.899261j 4.325688l 4.262499l 5.875272l 5.448542l 5.246326l 5.771746l 5.381958l
143 6.142069j 4.816876l 3.102701i 3.285722j 3.939119j 4.535451l 3.888470i 5.202590l 4.379986l 4.966082l
144 5.443792j 4.852575l 2.671651i 2.695224j 3.486658j 3.925876l 3.414493i 4.153681l 4.140539l 3.949147l
145 3.989072l 3.632061l 2.687350k 2.340618m 2.551063m 3.236464l 3.447823l 3.414374l 3.265225l 3.297530l
146 3.071571l 3.123756l 2.130256m 1.914146m 1.995138m 2.766972l 2.917383l 2.895203l 2.853172l 2.794016l
147 2.017734j 2.616392l 1.785936i 1.282374h 1.732623h 2.236537m 2.149320i 2.336129l 2.392061m 2.180079m
148 1.434487m 1.856962m 1.511467m 1.047696n 1.270610m 1.757320m 1.902551m 1.865712m 1.770249m 1.806850m
149 1.035806k 1.442550l 1.367703h 0.622681n 0.880697n 1.597527m 1.570523i 1.556353m 1.750311m 1.492667m
150 0.637331n 1.042320m 1.069353n 0.483257n 0.684734n 0.982394n 1.239334m 1.233071m 0.903318n 1.241071n
151 0.318111l 0.771929n 0.811540j 0.336050n 0.484876n 0.908011n 0.946359i 0.966791n 0.894592m 0.932917m
152 0.248632n 0.524515n 0.653045n 0.237211n 0.356236n 0.678513n 0.811300n 0.797353n 0.643832n 0.750385n
153 0.148761l 0.346378n 0.580414i 0.181944k 0.279672k 0.468972n 0.629203i 0.588048n 0.432424n 0.545759n
154 0.080563n 0.188033n 0.400489n 0.089192n 0.141543n 0.319398n 0.426601n 0.418833n 0.288283n 0.407957n

155	0.050721n	0.118758n	0.279493i	0.064245n	0.092028n	0.239475n	0.398477i	0.308974n	0.201798n	0.292371n
156	0.020885n	0.057400n	0.226092i	0.047118j	0.070480j	0.159650n	0.262464i	0.219272n	0.124923n	0.204660n
157	0.010940n	0.042555n	0.160359i	0.032617n	0.049477n	0.099781n	0.145618n	0.149504n	0.077836n	0.136444n
158	0.006365n	0.014845n	0.110223n	0.019769n	0.027707n	0.079721p	0.096732n	0.095683n	0.043242n	0.088735n
159	0.002089n	0.006829n	0.070300l	0.011638k	0.016302k	0.035921n	0.079375i	0.057808n	0.025945n	0.053602n
160	0.001095n	0.002730m	0.052202n	0.007020n	0.009921n	0.019994n	0.063022n	0.034972n	0.013453n	0.034201n
161	0.000438m	0.001042m	0.034781i	0.004551k	0.006469j	0.010234m	0.037668i	0.019934n	0.007001m	0.018517n
162	0.000159n	0.000297n	0.023470n	0.002767n	0.003859n	0.003744m	0.008741m	0.008480m	0.002917m	0.007365m
163	4.97e-05n	5.15e-05n	0.016327n	0.001680n	0.002276n	0.001796n	0.002571m	0.003242m	0.000942n	0.002455m
164	2.88e-05n	2.77e-05n	0.010220n	0.000990n	0.001386n	0.000699n	0.001040n	0.001395n	0.000279n	0.001078n
165	9.46e-06m	9.93e-06m	0.006939n	0.000583n	0.000754m	0.000300m	0.000617m	0.000599m	8.17e-05m	0.000526n
166	2.49e-06n	5.94e-06n	0.004490n	0.000257n	0.000420j	0.000130n	0.000239n	0.000299n	2.69e-05n	0.000214n
167	5.97e-07n	2.38e-06n	0.002857n	0.000208n	0.000257n	4.49e-05n	0.000104n	9.97e-05n	1.15e-05n	7.80e-05n
168	2.69e-07n	1.09e-06n	0.001837n	0.000119n	0.000148n	6.98e-06n	4.16e-05n	5.58e-05n	4.13e-06n	2.44e-05n
169	9.45e-08n	4.16e-07n	0.001154i	7.91e-05n	0.000119m	3.99e-06n	1.46e-05n	2.39e-05n	1.25e-06n	1.46e-05n
170	2.49e-08n	8.41e-08n	0.000741n	3.91e-05n	4.46e-05n	1.70e-06n	8.33e-06n	1.30e-05n	3.08e-07n	1.01e-05n
171	7.96e-09n	2.28e-08n	0.000531n	2.08e-05n	2.47e-05n	6.98e-07n	4.89e-06n	3.49e-06n	6.73e-08n	4.48e-06n
172	1.19e-09n	6.93e-09n	0.000367n	1.68e-05n	1.38e-05n	3.79e-07n	1.98e-06n	1.79e-06n	5.77e-09n	2.73e-06n

Table 4
Set D Mass Chain Yields

mass	th227t	th229t	pa231f	am241t	am241h	a242mt	cm245t	cf249t	cf251t	es254t
66	8.53e-08n	3.02e-08l	9.85e-05n	1.36e-07n	0.000339n	9.57e-06n	1.04e-06n	3.00e-07n	9.35e-05n	9.39e-09n
67	2.16e-07n	7.18e-08l	0.000177n	2.52e-07n	0.000726n	1.91e-05n	2.09e-06n	5.01e-07n	0.000140n	1.88e-08n
68	8.23e-07n	2.71e-07l	0.000345n	5.81e-07n	0.001162n	2.87e-05n	4.18e-06n	3.00e-06n	0.000187n	3.75e-08n
69	2.35e-06n	1.15e-06l	0.000689n	1.26e-06n	0.001937n	5.74e-05n	1.04e-05n	5.71e-06n	0.000281n	7.51e-08n
70	5.19e-06n	3.64e-06l	0.001280n	4.55e-06n	0.003200n	9.57e-05n	2.61e-05n	3.06e-05n	0.000374n	1.41e-07n
71	1.27e-05n	1.56e-05l	0.002462n	6.78e-06n	0.004842n	0.000191n	5.75e-05n	5.36e-05n	0.000468n	2.35e-07n
72	5.68e-05n	7.18e-05l	0.004432n	9.93e-06n	0.008716n	0.000478n	0.000104n	0.000109n	0.000655n	1.45e-07l
73	9.37e-05m	0.000260l	0.008903m	3.98e-05m	0.013559n	0.000957n	0.000209n	0.000214m	0.000954m	9.69e-07l
74	0.000265n	0.001041l	0.016742n	8.94e-05n	0.021308n	0.001722n	0.000460n	0.000533m	0.001216n	1.88e-06n
75	0.000784n	0.003383l	0.031514n	0.000248n	0.027118n	0.002871n	0.000773n	0.000956m	0.001777n	3.29e-06n
76	0.002256n	0.011973l	0.059124n	0.000517n	0.038940n	0.005746n	0.002091n	0.001913m	0.002340n	6.58e-06n
77	0.010891l	0.042056j	0.098926m	0.003383m	0.058663m	0.009695m	0.005158m	0.004620m	0.003340m	1.36e-05l
78	0.037246n	0.255851k	0.196972n	0.007148n	0.077482n	0.019138n	0.010448n	0.008172l	0.004676n	2.42e-05l
79	0.643541l	0.422800j	0.396969l	0.011939m	0.106546n	0.029353l	0.020448l	0.018454l	0.005806l	4.85e-05l
80	1.883283m	1.636491i	0.689483n	0.021847n	0.181000m	0.047855n	0.036582n	0.030261l	0.008420n	9.39e-05n
81	3.485008l	2.298120i	0.989297m	0.043684n	0.249329m	0.066983n	0.062692n	0.048030l	0.011223n	0.000235n
82	4.883868m	3.456487j	1.691246m	0.064077n	0.354041m	0.115419n	0.104844n	0.075751l	0.015551l	0.000424n
83	5.653256l	5.199428g	2.301276j	0.177265j	0.464420m	0.247989j	0.190982k	0.129884i	0.021947m	0.000872l
84	6.149415l	9.351723f	4.230482j	0.277786j	0.593532m	0.390846j	0.269753m	0.189642l	0.028484n	0.001726n
85	6.722658k	9.209156f	4.484248i	0.318023j	0.782329m	0.450324k	0.294181i	0.250688l	0.042969m	0.003352m
86	7.084953k	8.306021f	5.149603l	0.443596l	0.948662m	0.571047m	0.474388n	0.336594l	0.056565n	0.007124n
87	7.038131l	7.237108g	5.963832l	0.697907m	1.076704i	0.674619n	0.508205j	0.422156l	0.075285n	0.014230n
88	7.083168l	8.189612g	6.633533l	0.768877l	1.214488k	0.920838m	0.614886i	0.521144l	0.104051n	0.028593n
89	7.588615h	9.054496f	6.985217i	0.988304i	1.537910m	1.192149j	0.857202i	0.455434i	0.151198n	0.051894k
90	7.682956i	8.373094h	6.849946l	1.366567j	1.741136m	1.379422j	1.080187k	0.588868i	0.296187m	0.113012n
91	6.167085k	6.593329f	6.448984j	1.847946h	2.044897h	1.749651k	0.880204h	0.828127g	0.519946i	0.275741j
92	4.740288l	5.965047g	6.773657l	2.010441h	2.217020j	2.101637i	1.290145j	0.891135h	0.581024n	0.357619n
93	4.373777l	4.844053g	6.715180l	2.687143i	2.424342l	2.579150j	1.816635i	1.078319h	0.701689k	0.470869m
94	3.664474l	4.111336j	6.359588l	3.192690l	2.598156i	2.721451m	1.639377i	1.197019h	0.749811n	0.565227n
95	3.382430j	2.675366f	6.356235i	3.977545g	3.124817i	3.294279j	2.351206h	1.506069f	0.978960j	0.708960j
96	2.613811m	1.380278j	4.966944l	4.260961l	3.284327l	3.624064l	2.824579l	1.680999i	1.432866m	0.751744n
97	2.382440l	0.731037g	4.353357h	5.267398g	3.545127j	4.280808j	2.896429h	2.085608f	1.649746i	0.975554j
98	1.366808l	0.271352j	3.178944l	5.875970l	3.939538l	4.611194l	3.679975l	2.318423i	2.203117m	1.343856m
99	1.432854j	0.152071h	2.534050h	6.624390g	4.336901i	5.349424i	4.169585f	2.800711g	3.288263h	2.297705i
100	0.936641m	0.036026l	1.978594m	6.254700k	4.566865l	5.479308l	4.938151l	3.236425i	3.386625l	2.423282l
101	0.749312m	0.013081l	1.384969m	5.998302l	4.783424l	5.870560l	5.761641j	3.686038i	3.870362l	2.487148m
102	0.581725m	0.006552l	0.643032m	6.177847l	4.891798l	6.653634l	5.956845k	4.214248i	4.257632l	2.714242l
103	0.570188l	0.005997j	0.370689i	6.229465h	5.040525i	7.072962j	6.328250h	4.927273f	4.354513l	3.128265j
104	0.314197n	0.010114l	0.197173n	6.219106l	4.727494i	6.951483l	6.754414j	5.092728h	4.553161l	3.398538l
105	0.276770k	0.008090h	0.146306k	6.644416g	4.729528i	6.953949j	6.402817g	5.434584f	4.843500i	4.248856i
106	0.173128m	0.012004j	0.103468k	5.958447l	4.123556i	6.164088l	5.742900i	5.618008g	4.934712l	4.023853j
107	0.094091n	0.010813l	0.095527n	5.270934l	3.784033i	5.381347l	5.579344j	5.698314i	5.224989l	3.877234l
108	0.053909n	0.011742l	0.078791n	4.254739l	3.513967l	4.109745l	5.743715l	5.725655i	5.322621l	3.684061l
109	0.033753m	0.012898k	0.079651j	2.494585i	3.222369i	3.749192j	4.658722j	5.579277h	5.225069i	3.721595j
110	0.035284n	0.016895k	0.068937n	1.492485m	2.876922l	2.423846m	4.723505l	5.414621i	5.225127l	3.877295l
111	0.040989l	0.021650i	0.095282j	0.951136h	2.332104i	1.534712j	4.010336i	5.500346h	5.017987h	4.192541h
112	0.028713l	0.020836i	0.058512j	0.559857i	2.423159i	0.642989j	3.006297k	4.925475h	5.334010i	4.342348j
113	0.036696l	0.017003j	0.080964j	0.196580k	2.467821i	0.251871m	2.039334k	4.165386i	4.456789j	3.890811j
114	0.030304n	0.021486l	0.061059n	0.148919n	1.838109m	0.105254n	1.093787m	3.624160i	4.508978l	4.943476l
115	0.030215m	0.019833i	0.083305j	0.051124h	1.720210i	0.073742j	0.559542h	2.986375g	4.559190g	5.572666h
116	0.032324n	0.019618l	0.064668m	0.039796m	1.544809m	0.038780m	0.216646m	2.199953i	3.627723m	5.480334k

117	0.038272m	0.022747i	0.065692m	0.031885l	1.496050l	0.029353l	0.143133l	1.830886j	2.902772l	5.087148k	
118	0.047476n	0.016930i	0.066719m	0.036024l	1.447021m	0.027146m	0.084595m	1.021380i	1.908332m	4.458818l	
119	0.063451m	0.015712k	0.068772m	0.027857m	1.447021m	0.023268m	0.052614m	0.609513i	1.240416m	3.913191k	
120	0.083840n	0.014678l	0.072878m	0.025867m	1.540443m	0.023268m	0.037139m	0.385308l	0.763333m	3.392579l	
121	0.113596m	0.013309k	0.079029k	0.026180n	1.601252m	0.019529j	0.031133k	0.206423i	0.497224i	2.695797i	
122	0.109142n	0.013673k	0.087210n	0.029351n	1.788519m	0.032850n	0.053311n	0.180266l	0.280555n	2.295830m	
123	0.221216n	0.012893l	0.098553n	0.039794n	1.905286m	0.043771n	0.063304m	0.168209i	0.196388n	1.938617l	
124	0.313720n	0.011105l	0.116361n	0.050377n	2.296014m	0.054787n	0.071014n	0.137428l	0.187420n	1.339261m	
125	0.500067k	0.005644m	0.145755m	0.081637m	2.352158l	0.103657l	0.093503k	0.207119k	0.380967k	0.903326k	
126	0.569149l	0.019045j	0.193271l	0.170100l	3.578009k	0.169126l	0.161991l	0.446129l	0.506719m	0.845123l	
127	0.673108l	0.038914k	0.291509m	0.585649h	2.321208i	0.266662m	0.486344j	0.588926j	0.608631j	0.944831j	
128	0.926608m	0.051942m	0.529081n	0.930118m	2.908697l	0.413702l	0.651684i	0.783704i	0.709418m	1.286096l	
129	1.428327k	0.118843i	1.034453h	1.361734h	3.604077l	1.471999m	1.270584j	1.630072j	0.929550i	1.960259j	
130	1.864049m	0.417244k	2.084777m	2.233984m	4.595209l	2.004841m	1.850324j	1.974170i	1.216432m	2.461702m	
131	2.626336l	0.604336g	2.667257i	3.563315f	4.472304i	3.483687h	2.915607g	3.168128g	1.841308i	3.794180i	
132	3.388646i	1.204007f	3.584308i	4.775108f	3.772098k	4.813691h	4.184611f	4.159552h	3.217466j	4.798906j	
133	4.839077k	2.966538f	5.092815i	5.507630e	4.630996h	5.982260i	5.467867g	5.249503g	3.911973j	5.058292k	
134	5.729390l	5.968143f	6.375640k	7.239502g	5.281205k	7.003336i	7.100712h	5.390574g	4.854212l	5.354648l	
135	6.776684l	5.806931f	6.672920i	7.012588g	4.741971j	6.654152k	6.800380g	5.420276h	4.432428j	5.476295j	
136	7.666171l	5.974547f	7.476111l	7.930157g	6.216885l	6.553652k	5.041344j	5.662877k	5.665815l	5.135196l	
137	6.966919k	7.169380g	7.018564i	6.415981h	4.390373i	6.137532j	6.219815i	5.700280h	5.707720l	4.699539l	
138	7.248573l	7.888810g	7.452637l	6.934448i	4.404919l	5.975975l	6.173800h	5.399914h	5.777183l	4.474047l	
139	7.548144l	8.487908g	7.345277l	6.668077g	4.079915i	5.766955j	5.843295i	6.109041g	5.655673l	4.157150l	
140	7.749613k	7.940885f	6.715763h	5.936439g	3.532391j	5.409275j	5.516822f	5.324028f	4.509273h	3.995753h	
141	7.640609j	7.461594f	6.838927i	4.791970g	3.243333i	5.244436j	5.159751h	5.431640h	4.918617j	4.583781i	
142	7.448923l	7.300350g	6.208105l	4.720582k	3.038531i	4.490711j	4.731230h	4.393599g	5.464604l	4.592552l	
143	6.989135j	8.307434g	5.325788h	3.671068g	2.704216i	4.637793j	4.417257g	4.704304g	5.080525i	4.827392i	
144	5.966224j	9.758022h	4.694476i	3.488406h	2.525339i	4.425765j	4.298894j	4.317734h	5.050883l	3.889585j	
145	3.105632l	5.016667j	3.208685j	3.313133i	2.249859m	3.350866l	3.036074j	3.537418k	4.947034l	3.561060l	
146	1.037369m	3.379384h	2.607171m	2.645464m	2.026899m	2.879976m	2.754335j	3.351229h	4.239998l	3.264100l	
147	0.183393m	2.114336h	2.027286h	2.032382h	1.815791i	2.466797j	2.438092h	2.856442h	3.513508k	2.967364l	
148	0.031314n	1.021486h	1.560233m	1.829189m	1.590821m	2.133477m	2.316050l	2.255527l	3.345269m	2.659000m	
149	0.010101n	0.588230h	0.921756i	1.432518i	1.305875i	1.719593j	1.950343j	2.053920h	3.020187k	2.264642m	
150	0.002021n	0.178456i	0.550639n	1.148799m	1.235721m	1.602343m	1.818158m	1.755003l	2.424743l	1.979998l	
151	0.000505n	0.037998k	0.316407n	0.839475j	0.897233i	1.218078j	1.142816h	1.604719h	2.019051l	1.700240k	
152	0.000202n	0.009755l	0.179470n	0.722576n	0.815177n	1.023991m	1.222758m	1.255875l	1.520199m	1.624615m	
153	0.000101n	0.002058l	0.076967j	0.602388i	0.671613i	0.829094j	1.295211m	1.210257g	1.216134m	1.591976l	
154	4.04e-05n	0.000483l	0.041501n	0.377025n	0.530077n	0.547193n	0.892515m	0.892833l	0.912163m	1.280085m	
155	1.01e-05n	9.84e-05l	0.020748n	0.307721k	0.341757i	0.361109n	0.696315n	0.616094i	0.713341n	0.984615m	
156	5.05e-06n	2.60e-05l	0.010374n	0.191143i	0.273777i	0.327549j	0.432886k	0.676861h	0.566411k	0.796263l	
157	1.52e-06n	7.16e-06l	0.005187n	0.164262j	0.179285j	0.155052k	0.447993n	0.421298i	0.407619n	0.754309k	
158	5.76e-07n	1.79e-06l	0.003216n	0.085871n	0.153996n	0.087542n	0.328393n	0.381032l	0.305713n	0.684770n	
159	2.02e-07n	5.28e-07l	0.001556n	0.073005j	0.133100i	0.054713n	0.229064n	0.364075i	0.203810n	0.489121n	
160	1.01e-08n	1.34e-07l	0.000737n	0.034595n	0.087645n	0.038331n	0.179528n	0.232957l	0.152907n	0.391501n	
161	6.06e-09n	3.58e-08l	0.000373n	0.022102j	0.060727i	0.020150k	0.119600n	0.193116j	0.101904n	0.293473n	
162	3.03e-09n	8.86e-09l	0.000197n	0.010472n	0.034647n	0.013131n	0.079666n	0.110678n	0.081523n	0.195649n	
163	1.01e-09n	2.68e-09l	0.000104n	0.002827n	0.024462n	0.006566n	0.054732n	0.066861n	0.061142n	0.097824n	
164	6.06e-10n	8.95e-10l	4.15e-05n	0.000325n	0.017450n	0.002189n	0.024934n	0.043472n	0.040762n	0.047934n	
165	3.02e-10m	2.68e-10l	2.05e-05m	0.000100m	0.010190n	0.001067m	0.010904m	0.028031m	0.030403m	0.019692m	
166	1.01e-10n	7.16e-11l	9.34e-06n	6.81e-05n	0.007133n	0.000547n	0.004460n	0.016692n	0.020381n	0.008804n	
167	6.06e-11n	1.79e-11l	3.63e-06n	3.04e-05n	0.004076n	0.000219n	0.002230n	0.007394n	0.015285n	0.003913n	
168	3.03e-11n	6.27e-12l	1.56e-06n	1.36e-05n	0.002956n	0.000109n	0.001318n	0.004182n	0.010190n	0.001956n	
169	1.01e-11n	1.79e-12l	6.22e-07n	5.86e-06n	0.001936n	8.75e-05n	0.000598n	0.001687n	0.008152n	0.000978n	
170	6.06e-12n	1.61e-12l	3.11e-07n	1.68e-06n	0.001165n	4.38e-05n	0.000294n	0.000863n	0.006115n	0.000489n	
171	3.02e-12l	1.34e-12l	1.56e-07n	3.25e-07n	0.000774n	2.19e-05n	0.000172n	0.000481n	0.004076n	0.000196n	
172	1.11e-12l	1.16e-12l	1.04e-07n	1.05e-07n	0.000510n	1.09e-05n	8.01e-05n	0.000363n	0.003057n	9.78e-05n	

Table 5
Set E Mass Chain Yields

mass	cf250s	cm244s	cm248s	es253s	fm254s	fm255t	fm256s	np237h	u232t	u238s
66	0.001965n	3.98e-05n	0.000439n	0.000267n	2.83e-05n	0.000158n	0.000101n	0.005000n	0.006995n	8.13e-11n
67	0.002457n	6.57e-05n	0.000549n	0.000359n	3.84e-05n	0.000205n	0.000162n	0.006999n	0.008994n	2.45e-10n
68	0.002948n	9.96e-05n	0.000769n	0.000513n	5.26e-05n	0.000252n	0.000222n	0.008999n	0.012991n	8.13e-10n
69	0.003734n	0.000149n	0.000988n	0.000677n	7.48e-05n	0.000326n	0.000303n	0.011999n	0.017988n	2.45e-09n
70	0.004917n	0.000249n	0.001390m	0.000946n	0.000102n	0.000438n	0.000405n	0.015001n	0.025001n	8.13e-09n
71	0.005896n	0.000398n	0.001867n	0.001334n	0.000152n	0.000578n	0.000525n	0.019998n	0.034977n	2.45e-08n
72	0.007861n	0.000657n	0.002416n	0.001847n	0.000202n	0.000746n	0.000707n	0.024998n	0.046967n	8.13e-08n
73	0.009877m	0.000997m	0.003208m	0.002342m	0.000282m	0.000952m	0.001007m	0.032997m	0.067962m	2.55e-07m
74	0.012775n	0.001494n	0.004392n	0.003386n	0.000384n	0.001305n	0.001313n	0.042996n	0.089940n	8.13e-07n
75	0.016705n	0.002569n	0.005930n	0.004617n	0.000505n	0.001585n	0.001818n	0.052995n	0.129911n	2.45e-06n
76	0.019719n	0.003989n	0.007689n	0.006199n	0.000722n	0.002149n	0.002540n	0.070053n	0.170962n	8.13e-06n
77	0.025549n	0.004749m	0.010694m	0.008147m	0.001011n	0.002796n	0.003424m	0.094992m	0.249875m	2.55e-05m
78	0.032428n	0.009958n	0.014276n	0.011286n	0.001516n	0.003729n	0.004645n	0.119994n	0.349760n	8.14e-05n

79 0.042256n 0.016928n 0.018670n 0.015390n 0.002325n 0.004661n 0.007069n 0.160003n 0.479754m 0.000337m
80 0.050130n 0.026890n 0.025268n 0.022588n 0.003546n 0.006340n 0.009095n 0.200064n 0.640217n 0.000818n
81 0.068788n 0.044810n 0.035143n 0.030780n 0.005054n 0.008017n 0.012118n 0.259996n 0.799466n 0.004026n
82 0.089646n 0.070740n 0.046282n 0.041960n 0.008566n 0.010364n 0.016540n 0.351876n 1.144032n 0.012247n
83 0.096572j 0.115805k 0.045639j 0.061642k 0.012090m 0.013328m 0.022152m 0.449979m 1.499281m 0.029141j
84 0.159726l 0.115547m 0.076734k 0.082559n 0.017225n 0.016826n 0.030423n 0.585247n 1.802569m 0.107053j
85 0.223454k 0.220776k 0.100485k 0.112051m 0.026280n 0.023803m 0.040284m 0.730191m 2.672660k 0.081399m
86 0.287095k 0.202581m 0.165606k 0.155366n 0.041024n 0.030049n 0.055094n 0.918798m 3.356207l 0.985261i
87 0.287376m 0.369410m 0.214938m 0.204494m 0.056549m 0.040079m 0.074709m 1.210520m 4.383922k 1.545151m
88 0.345654n 0.448949n 0.278483n 0.288819n 0.095617o 0.051433n 0.111469n 1.528665m 6.208151j 2.586694i
89 0.477084k 0.715469i 0.434625k 0.369393k 0.131508n 0.065332n 0.151701n 2.020057l 6.916297h 3.955079i
90 0.513752m 0.806883k 0.481615m 0.458447m 0.201544m 0.085695m 0.201430m 2.503496l 6.598398l 5.431288h
91 0.566510i 0.824986k 0.596273i 0.532615j 0.394977j 0.111863n 0.242146l 2.669318k 7.157881h 5.820960h
92 0.772840n 1.096325n 0.859116m 0.616334n 0.444972n 0.139962n 0.303310n 4.024789l 6.849382i 5.860970i
93 0.952141m 1.298633m 1.195295m 0.680820k 0.482813j 0.190588m 0.404111m 4.915119k 7.292711h 6.215516h
94 1.137351m 1.496442m 1.502795m 0.968637m 0.495389n 0.233152n 0.525419n 5.038630l 6.227445i 6.500918i
95 1.481512i 1.627707k 1.627802i 1.145034l 0.521892i 0.307643n 0.666565n 5.544108l 6.199644h 6.606563i
96 1.532493m 2.495774m 2.101514l 1.531561m 1.015462m 0.410507n 0.747381m 5.507429l 5.834200l 6.679377i
97 1.583535i 3.064710j 2.617648i 1.874113i 1.261351h 0.687185k 0.767752m 5.379936k 5.431860h 6.540650i
98 2.483212l 3.495306l 3.221834m 2.231597l 1.511893m 0.699482n 1.010356n 5.310420l 4.699501l 6.497335i
99 3.278954h 3.896997h 4.120521h 3.104331i 1.754805j 0.856908m 1.208492m 4.861882j 4.207946g 6.071174g
100 3.568951l 4.989660l 4.510950l 3.445266l 2.218967m 0.952051m 1.510748m 5.200182l 3.000601m 6.130801i
101 4.008989l 5.787726l 5.245274l 3.849302l 2.714429l 1.142432m 1.812454m 4.999801l 1.999071m 6.537861h
102 4.956870l 6.885586l 5.455486l 4.558574l 3.016096l 1.237658m 2.009848l 4.599987l 1.499276m 6.160764h
103 5.303707i 6.929656k 5.514035i 5.856763i 3.168797i 1.332866m 2.210852l 4.329988l 1.060987h 4.557441h
104 6.473899k 7.685087l 6.313833l 6.282349l 4.022437l 1.523693m 2.719992m 4.001153l 0.349759n 3.744879h
105 6.593749h 9.293313i 6.397579h 6.241100k 4.931077j 2.388842j 3.108347j 3.444595k 0.243278k 0.786172k
106 6.825548i 7.397748k 6.169435i 6.531296j 5.564657j 2.415192l 3.617618l 2.999881l 0.099931n 0.269772m
107 7.270417k 6.985186l 6.294329l 6.280450l 5.428867l 2.608408l 4.522027l 2.499859m 0.025982n 0.139032n
108 6.939567l 5.987469l 6.086124l 5.875518l 5.630144l 2.705282l 5.225943l 1.900148m 0.008194n 0.081323n
109 6.331166k 5.012555k 6.056896j 5.520885k 5.701464j 2.898647l 5.419375k 1.456841l 0.008996m 0.011855m
110 5.950842l 3.991859l 5.769829l 5.274117l 6.456305l 3.284716l 5.621100k 1.299910m 0.008295n 0.009792n
111 4.931662k 2.876289i 5.417081j 4.728588i 5.529359i 3.188053l 5.433589j 1.213998l 0.009140j 0.008565m
112 4.095200i 2.045340k 4.683308i 3.977335k 6.228977i 3.625350l 5.627411l 1.211692l 0.010992n 0.005859n
113 3.510651j 0.881390k 2.662815j 3.646713l 5.730471l 4.253715k 6.029369l 1.229910m 0.013991n 0.005103m
114 2.469580m 0.398307n 2.098110l 3.242006l 5.032474l 4.830385l 6.029607l 1.229892n 0.015989n 0.004110n
115 2.049625h 0.257776h 1.387753h 2.828023h 5.078004i 5.591322j 6.131334j 1.229247h 0.018780j 0.003827m
116 1.191441n 0.069704n 0.076868n 2.571044m 4.244323l 5.662013k 5.657000k 1.229966m 0.015477m 0.003554m
117 0.493871m 0.029910m 0.021387m 2.228547l 3.518710l 5.856075k 4.716267k 1.229951l 0.014499m 0.003280m
118 0.196533n 0.009970m 0.007486m 1.222017m 2.619656m 5.893067l 4.019579l 1.229323m 0.011433n 0.003189m
119 0.117920n 0.004985m 0.003208m 0.661928m 1.813613m 5.953676k 3.222151m 1.229358m 0.008699m 0.003793m
120 0.058960n 0.001992n 0.002139m 0.315689m 1.111835n 5.796459l 2.618003m 1.229289m 0.008119m 0.003793m
121 0.027037j 0.001318k 0.001818m 0.152455j 0.796747j 5.699855l 2.719902j 1.259340m 0.008636k 0.003890n
122 0.019653n 0.002440n 0.001647n 0.065661n 0.409269n 5.329909l 1.569186m 1.299445m 0.014436n 0.004189n
123 0.018671n 0.004866n 0.001867n 0.031804n 0.252673n 4.926991l 0.908811n 1.349286m 0.019055n 0.004489n
124 0.018796n 0.008776n 0.002061n 0.020023n 0.160207n 3.879258m 0.467613n 1.408380m 0.031557n 0.004988n
125 0.021288k 0.015498l 0.006506k 0.018983k 0.126788l 3.016298k 0.443043m 1.499181m 0.158293i 0.005989m
126 0.043971n 0.068132n 0.013257n 0.029947n 0.163834n 2.404707l 0.418656n 1.899685l 0.228646n 0.006985n
127 0.113078k 0.198664j 0.031151j 0.063365j 0.238890k 2.321930j 0.429335l 2.501147k 0.382894j 0.013975m
128 0.214964n 0.486668n 0.101962n 0.154564n 0.455129n 2.168970l 0.570901n 2.899035m 1.063250m 0.019952n
129 0.396905k 0.660480j 0.322215k 0.310467j 0.871424j 2.264065j 0.858857l 3.298829l 1.765107j 0.026590k
130 0.880002n 1.991361i 2.027769m 0.580676n 1.507504m 2.482584m 1.546477m 3.615708m 3.012895m 0.139653n
131 1.704686h 3.004012g 2.620447h 1.136256k 2.440037i 3.214969k 2.537032l 4.090617h 3.748439h 0.448890h
132 2.459597h 4.194229h 4.335317h 2.528404k 3.520872l 4.808938j 4.024000k 4.397509h 5.170557i 3.326248f
133 3.904174h 5.660986g 5.264997i 2.669811k 4.341222i 5.422682j 3.827673l 4.498360l 5.803819h 5.601202f
134 4.159653h 6.812967h 4.993017k 2.952382l 5.188870l 5.855151l 4.102546l 5.447073h 5.235405k 4.837292e
135 4.642911k 7.483203g 5.741358i 4.702590k 4.478733i 6.163349j 6.211316k 4.999421l 5.319465h 5.213117f
136 4.982011h 7.629288h 4.851178j 4.363838l 5.806152l 6.369712l 4.911367l 5.008906h 7.198364m 5.714467f
137 5.453609l 7.923238i 6.076900i 4.530537l 5.542704l 6.285112l 5.089951l 5.113161l 7.804503i 5.809433h
138 5.736640l 7.663838i 6.534107l 4.820372l 5.732576l 6.057570l 5.275900l 5.003579l 5.639774j 6.440974i
139 6.191587i 6.997414i 6.221661i 5.870703k 4.987087k 5.659810l 6.098468k 4.764126k 7.120304h 6.840348i
140 5.249179i 6.101880h 5.820549i 5.660598i 5.543736h 4.828491k 5.960553j 4.826781k 7.304308h 6.798937f
141 5.849432i 5.619863h 5.607301i 5.740320k 5.478458i 4.621492l 5.757499l 4.798816l 6.913198h 6.890223i
142 6.544320k 4.876956i 6.303152i 5.802861l 5.032920k 4.343200l 5.273306l 4.502399l 6.350994i 6.300047i
143 5.565486i 3.995777h 5.484139k 6.442620i 5.454272i 3.138478k 4.880066l 3.542717l 5.085506g 7.160881h
144 4.743435i 3.675941i 5.828263i 5.107928k 4.846000j 3.206951l 4.489211l 2.999562l 4.329340i 6.212791i
145 4.942833l 3.085355i 4.443857l 5.799818l 4.106912l 2.829023l 3.903043l 2.498738m 3.115456i 5.997633i
146 4.448470l 2.587718i 3.736030l 5.406569l 3.724867l 2.482331m 3.415123l 1.998957m 2.504767k 5.243420l
147 3.814493i 1.981320i 3.130742i 4.816761l 3.447090k 2.022638m 3.122393l 1.701924l 1.205412h 4.399052j
148 3.460255l 1.691969i 2.626143l 3.833932l 2.865348l 1.747026m 2.704178m 1.199355m 0.952662n 3.043279l
149 3.257319i 1.451882i 2.027575m 3.131921k 2.856980l 1.468327k 2.653692k 0.899318n 0.666917n 2.201026i
150 2.367200m 0.997406i 1.521120m 2.465120m 2.201135m 1.287714m 2.238920m 0.702004n 0.511157n 0.998215m
151 2.071794i 0.696698i 1.184067i 1.907814k 1.685685m 1.285991k 2.050003l 0.529598n 0.342982n 0.199498n
152 1.574084m 0.597165i 0.968502n 1.561535m 1.498378m 1.103257m 1.641670m 0.399692n 0.266765n 0.049874n
153 1.215109i 0.500561i 0.792720i 1.482217k 1.385176i 0.998079k 1.352259m 0.314825l 0.190543n 0.019950n

154	0.836687m	0.389370n	0.407796n	1.075242m	1.034244m	0.708804n	1.064752m	0.249927n	0.134020n	0.007980n
155	0.683967n	0.291983n	0.254869n	0.927166m	0.800964n	0.531592n	0.837312n	0.179863n	0.104799n	0.002992n
156	0.508090n	0.203949j	0.203895n	0.772813n	0.664436n	0.442994n	0.721898m	0.139891n	0.076217n	0.000997n
157	0.410380n	0.155725n	0.132532n	0.744247k	0.618913j	0.364707k	0.520306l	0.092571n	0.052400n	0.000399n
158	0.341985n	0.097328n	0.101948n	0.579632n	0.473402n	0.265796n	0.399648n	0.079938n	0.033348n	9.97e-05n
159	0.254045n	0.068130n	0.071363n	0.564124k	0.433259j	0.194917n	0.304477n	0.067885n	0.020960n	1.99e-05n
160	0.215609n	0.043847n	0.050979n	0.439806n	0.218077n	0.150646n	0.231067n	0.050143n	0.014547n	4.99e-06n
161	0.166106n	0.029198n	0.035682n	0.289805n	0.118324n	0.115178n	0.161753n	0.034973n	0.008574n	1.50e-06n
162	0.127022n	0.019466n	0.030584n	0.212523n	0.072815n	0.088599n	0.114179n	0.026979n	0.005716n	5.98e-07n
163	0.107481n	0.011679n	0.023448n	0.144905n	0.054617n	0.070879n	0.079926n	0.019984n	0.003525n	9.97e-08n
164	0.078176n	0.007786n	0.018351n	0.106390n	0.038394n	0.053159n	0.057130n	0.015990n	0.002384n	2.99e-08n
165	0.062963m	0.004906m	0.013179m	0.077282n	0.024575n	0.045969m	0.043456m	0.011993m	0.001715n	9.98e-09m
166	0.050809n	0.003406n	0.010195n	0.057961n	0.018204n	0.035439n	0.033302n	0.009493n	0.001143n	3.99e-09n
167	0.040061n	0.002433n	0.008156n	0.040573n	0.011833n	0.026580n	0.024739n	0.006995n	0.000762n	9.97e-10n
168	0.032244n	0.001460n	0.006117n	0.028981n	0.005462n	0.017720n	0.019030n	0.005496n	0.000476n	3.99e-10n
169	0.024427n	0.000973n	0.004588n	0.022218n	0.003641n	0.015062n	0.013321n	0.004197n	0.000305n	1.99e-10n
170	0.020541n	0.000584n	0.003568n	0.016584n	0.002809n	0.012404n	0.009563n	0.003202n	0.000212n	9.98e-11n
171	0.015634n	0.000389n	0.002549n	0.010626n	0.001820n	0.008860n	0.007041n	0.002388n	0.000143n	2.99e-11n
172	0.012702n	0.000292n	0.002039n	0.007728n	0.000910n	0.007088n	0.004757n	0.001899n	9.53e-05n	9.98e-12n

Table 6
Set F Mass Chain Yields

mass	cm243t	cm246s	cm243f	cm244f	cm246f	cm248f	pu242h	np237t	pu240t	pu242t
66	3.42e-06n	2.16e-05o	9.50e-06n	7.30e-06n	4.11e-06n	2.08e-06n	2.08e-07n	4.88e-08n	1.60e-07n	4.97e-08n
67	8.56e-06n	0.000441o	1.80e-05n	1.30e-05n	7.53e-06n	3.66e-06n	4.17e-07n	8.78e-08n	3.10e-07n	9.95e-08n
68	2.12e-05n	0.000421o	3.40e-05n	2.50e-05n	1.40e-05n	6.83e-06n	7.33e-07n	4.88e-07n	9.39e-07n	2.29e-07n
69	4.70e-05n	0.000815o	6.70e-05n	4.80e-05n	2.91e-05n	1.29e-05n	1.56e-06n	1.95e-06n	2.98e-06n	4.97e-07n
70	8.56e-05n	0.000801o	0.000140n	9.61e-05n	5.72e-05n	2.58e-05m	3.12e-06m	5.85e-06n	9.99e-06n	1.79e-06n
71	0.000170n	0.001107o	0.000270n	0.000190n	0.000110n	5.25e-05n	5.22e-06n	1.46e-05n	1.80e-05n	2.69e-06n
72	0.000376n	0.001499o	0.000530n	0.000380n	0.000231n	0.000109n	1.14e-05n	2.93e-05n	5.99e-05n	9.95e-06n
73	0.000670m	0.002097o	0.001000m	0.000730m	0.000451m	0.000208m	1.86e-05m	8.85e-05m	0.000150m	2.99e-05m
74	0.001712n	0.002871o	0.002000n	0.001401n	0.000863n	0.000396n	5.22e-05n	0.000263n	0.000300n	7.96e-05n
75	0.004238n	0.004155o	0.003700n	0.002601n	0.001605n	0.000762n	5.22e-05n	0.000439n	0.000899n	0.000199n
76	0.008582n	0.005707o	0.006647n	0.004818n	0.003012n	0.001386n	0.000209n	0.001854n	0.001798n	0.000418n
77	0.017785m	0.007492n	0.012000n	0.008503m	0.005313m	0.002581m	0.005183m	0.004325m	0.005894m	0.002690m
78	0.029914n	0.011857o	0.020001n	0.015008n	0.009432n	0.004652n	0.014569n	0.012687n	0.016977n	0.006467n
79	0.051272n	0.017150o	0.034002n	0.025013n	0.016057n	0.008020n	0.029249n	0.026350n	0.015980n	0.007464n
80	0.085619n	0.025595o	0.055038n	0.041035n	0.027108n	0.013878n	0.055415n	0.035167n	0.038968n	0.019920n
81	0.158714n	0.039200o	0.087004n	0.066034n	0.043153n	0.022777n	0.091987n	0.117108n	0.109853n	0.040801n
82	0.246251n	0.057134o	0.133216n	0.101318n	0.068418n	0.036653n	0.134639n	0.175875n	0.120049n	0.060722n
83	0.355703m	0.083109n	0.199998m	0.160054m	0.100249m	0.057603m	0.218992m	0.341803l	0.249766m	0.139571m
84	0.421916n	0.099802o	0.300797n	0.231209n	0.163345n	0.092479n	0.353737n	0.504681n	0.421773n	0.286289n
85	0.406853m	0.159790n	0.420051m	0.330181m	0.230783m	0.129404m	0.674781h	1.004938j	0.469720m	0.329257m
86	0.550524m	0.184031n	0.585856m	0.464337m	0.324214n	0.190041n	0.830466n	1.141117m	0.684139n	0.501334n
87	0.717813n	0.292597n	0.782941n	0.634178n	0.456513n	0.281081n	0.999695j	1.857655j	0.837637n	0.684730n
88	0.776808n	0.364701n	1.003472m	0.844165n	0.620735n	0.385740n	1.180816j	2.253053j	1.201259m	0.868460n
89	1.058497m	0.569279n	1.301320m	1.103167m	0.808538n	0.526878n	1.345949k	2.819611l	1.324100m	0.924308n
90	1.136520m	0.635261n	1.600331m	1.401007m	1.004433m	0.677513m	1.533371m	3.442702l	1.840562l	1.238810m
91	1.155202i	0.701050n	1.900159m	1.700750m	1.303979m	0.876133m	2.124179j	3.661816j	2.208392m	1.685824m
92	1.377563l	0.969182n	2.303857m	2.006985m	1.610599m	1.096403m	2.397422j	4.175698i	2.683834l	2.047368m
93	1.794693k	1.243862n	2.608430l	2.417954l	1.947100l	1.441356m	2.647926k	4.824462j	3.460291l	2.683496l
94	2.207092k	1.463276n	3.001639m	2.804011m	2.213912l	1.717995m	2.826936k	5.019365k	3.896098l	3.156832l
95	2.893548h	1.976309l	3.228403k	3.016501j	2.327108k	2.052410j	3.393017j	5.681872j	4.689112l	3.780645l
96	3.346583l	2.278779m	3.622052l	3.609472l	2.909138l	2.296173l	3.857548l	5.675136l	4.730495l	4.255794l
97	3.960518h	2.363460k	4.000712l	4.102079l	3.307764l	2.689426l	4.250292i	5.853327i	5.168953l	4.513259l
98	4.739465l	3.334578l	4.402346l	4.605646l	3.819868k	3.094768m	4.563730k	5.910276l	5.948129l	5.621140k
99	5.021762h	4.225438j	4.900341k	5.101816l	4.308126k	3.594600k	5.127936i	6.612058i	5.968915k	5.995629k
100	5.429661l	4.716195l	5.503917k	5.702185k	4.908335l	4.085070k	5.064528l	5.344593l	6.695368l	6.148659k
101	5.946531j	5.470746l	6.100085l	6.201489l	5.409126l	4.675793l	5.085941k	6.640116j	5.925860l	6.094089l
102	8.702216k	6.139192k	6.600228l	6.501772l	6.010530l	5.372696l	5.368715l	5.088098l	6.156005l	6.134488l
103	6.421727h	6.835643j	6.900187l	6.701817l	6.411477l	5.970477l	5.676476j	5.778366j	5.966247l	6.234774l
104	6.714521j	6.954057l	6.901156l	6.703418l	6.723471l	6.499667l	5.509407k	3.881990j	6.111221l	6.254705l
105	6.383824h	6.795922j	6.600092k	6.401184k	6.808940k	6.879708k	5.550813i	2.647381k	5.656419l	6.006371l
106	5.910693k	6.731699l	6.000084l	5.901417l	6.611154l	6.963948l	5.064454l	3.299610l	5.266321l	5.934506l
107	5.666908k	6.606551k	5.200072l	5.201249l	6.210478l	6.764978l	3.834644k	2.410494l	4.197068l	5.485678l
108	4.306337l	6.007434l	4.200135l	4.301147l	5.510196l	6.369620l	3.039441l	1.778680l	3.267952l	4.449664l
109	4.105321k	5.512780k	3.200066l	3.401232m	4.706985k	5.786775k	2.546623j	1.101409m	2.148744l	3.505540k
110	2.625986m	4.845288l	2.203500m	2.602558m	3.806493l	4.974249l	2.329649l	0.536698n	1.458981l	2.603203l
111	1.849240l	4.309427l	1.500030m	1.900456l	2.904901l	4.078884l	2.234185j	0.136614n	0.399442n	1.105912m
112	2.355469k	4.029611k	0.960019m	1.300442m	2.105019m	3.183519l	1.932375j	0.058549n	0.199721n	0.397917n
113	0.466983n	1.752167m	0.590016n	0.850289m	1.503585m	2.387639l	1.780168i	0.039033n	0.109891m	0.259042m
114	0.177819n	1.242047n	0.350010n	0.540259n	1.002390m	1.687618m	1.425522m	0.034154n	0.099860n	0.149219n

115 0.162740m 0.813718m 0.210004m 0.340115m 0.651098l 1.094334l 1.237393k 0.016257k 0.069931m 0.119558m
116 0.069466n 0.070974n 0.130004n 0.210071m 0.400956m 0.734610m 0.916407m 0.019658m 0.049930n 0.079705m
117 0.045783m 0.025342m 0.088002m 0.140048m 0.250423l 0.457631l 0.810312l 0.017782l 0.042970l 0.049870l
118 0.032313m 0.008606n 0.068001m 0.095032m 0.150359m 0.277961m 0.712761m 0.016709m 0.041959m 0.049816m
119 0.027294m 0.004022n 0.060001m 0.074025m 0.098234m 0.168762m 0.610938m 0.016200m 0.041959m 0.049816m
120 0.035218m 0.002031n 0.057001m 0.065022m 0.070167m 0.109199m 0.610938m 0.014294m 0.030865m 0.035867m
121 0.037392n 0.001548o 0.059002n 0.064031n 0.057194n 0.072473m 0.647598m 0.015868n 0.030810n 0.024745n
122 0.054121n 0.001951o 0.065438n 0.070339n 0.056194n 0.057405n 0.775774n 0.017737n 0.033796n 0.024744n
123 0.061131n 0.002919o 0.079378n 0.086214n 0.064226n 0.055423n 0.880621m 0.019602n 0.041742n 0.031672n
124 0.072503n 0.004366p 0.110015n 0.119452n 0.086003n 0.066334n 1.076351m 0.026143n 0.060663n 0.040639n
125 0.102306m 0.010165n 0.211210k 0.179425k 0.117374k 0.087341k 1.329445l 0.029540m 0.060735m 0.055594m
126 0.166261n 0.034641o 0.297670n 0.287386n 0.207515n 0.148175n 1.565842m 0.070951n 0.139148n 0.118791n
127 0.655311h 0.105346n 0.497249m 0.466997m 0.347046m 0.237888m 1.986371j 0.183390l 0.358431m 0.208474m
128 0.745795k 0.250849o 0.825492m 0.745302m 0.553344n 0.395077n 2.462089l 0.522738n 0.696985m 0.415731n
129 1.206708k 0.566578n 1.292862m 1.092992m 0.872706m 0.634411m 2.659214l 0.971301k 1.354207m 0.843891m
130 2.133605l 1.792972n 2.000642m 1.692700m 1.289321m 0.991321m 2.937754m 1.839257m 2.160803m 1.631795l
131 3.193492g 3.325675j 2.888722l 2.389162l 1.888696l 1.486900m 3.781217i 3.156840h 3.339711l 2.616641l
132 4.773685h 4.654923j 3.884835l 3.185548l 2.677256m 2.081571m 5.269045g 4.567736i 4.815151l 3.969568l
133 5.742512h 5.705270j 4.880948l 3.981943l 3.479293l 2.882821l 5.559636i 6.476310i 6.715520k 5.860116k
134 7.528245k 5.833108l 5.795511k 4.881466l 4.378895l 3.798307l 5.931830j 7.351504h 7.631007l 7.469011l
135 5.908389k 6.626351k 6.475204l 5.675232l 5.273826l 4.696607k 6.177574i 7.676000i 7.234269l 7.494485k
136 4.868946l 7.000599k 7.469068l 6.598412l 6.215476k 5.756134l 5.556258k 7.179158i 7.026604k 7.390275k
137 6.317239l 6.759442k 6.813590j 6.687470j 6.515968j 6.363644j 5.160803l 6.175714l 6.556774l 6.721415l
138 5.813323l 6.655420l 6.683342k 6.772442l 6.779051l 6.746141l 5.230965j 6.224770i 6.408550l 6.616675l
139 6.800054k 6.292854l 6.175956l 6.570461l 6.761938l 6.973103l 4.893587j 6.131347l 5.962652l 6.354039l
140 5.540412h 6.368095k 5.678098l 6.272075l 6.562240l 6.864362l 4.879387i 6.015882j 5.703479l 6.022604l
141 5.149223k 5.323566k 4.850189k 5.925597k 5.929272k 6.617429j 4.823173j 6.018260j 5.493817l 5.295156l
142 3.773883l 5.531054l 4.582862l 5.278035l 5.578393l 6.094366l 4.310172j 4.972978j 4.791217l 4.677512l
143 4.285902i 5.314201k 4.084231l 4.778842l 4.974197l 5.587022l 3.632369j 5.036064j 4.487740l 4.547277l
144 3.721052l 5.051618k 3.699217k 4.023911k 4.673161k 5.054390j 3.166505j 4.845564l 3.928864l 4.195433l
145 3.273451k 3.511538l 3.386780l 3.782849l 3.976388l 4.275163l 2.560566l 3.605956l 3.070610l 3.435676m
146 2.457357l 2.905219m 3.087944l 3.285096l 3.479152l 3.776420l 2.156618k 2.809937k 2.568782m 2.805559l
147 2.092211i 2.570281j 2.689500l 2.881477m 3.081535l 3.279523l 1.956934m 2.500001j 2.123452l 2.387710l
148 2.353141m 1.977976m 2.390693l 2.484103m 2.677745m 2.785428l 1.761575m 1.658467m 1.772483m 1.990738l
149 1.984747m 1.543240n 1.989001m 2.090518l 2.280648m 2.379099m 1.592938k 1.547169l 1.393918m 1.598404m
150 1.852588m 1.119150n 1.729205m 1.803632m 1.989916l 2.081676m 1.274227m 0.737521n 1.063766n 1.260829m
151 1.244853i 0.857558n 1.392300m 1.490419m 1.685679m 1.685082m 0.905197k 0.741838l 0.854712n 1.022541m
152 1.237907m 0.571297o 1.093945m 1.192334m 1.388207m 1.387714m 0.872593n 0.364031n 0.655942n 0.801704n
153 1.309522m 0.589571n 0.843389n 0.904188m 1.090734m 1.189469m 0.659293n 0.196017n 0.457172n 0.623548n
154 0.904141m 0.335650o 0.637940n 0.686427m 0.849812n 0.941665m 0.455775n 0.104821m 0.327975n 0.435494n
155 0.708376n 0.228519o 0.456422n 0.526842l 0.693182l 0.737896l 0.368428n 0.078616m 0.258401n 0.316723n
156 0.445058n 0.181208o 0.327433n 0.366658n 0.484163n 0.562926n 0.271473n 0.061457m 0.139139n 0.237542n
157 0.455385n 0.120508o 0.228212n 0.257652n 0.355711n 0.414788n 0.178397n 0.024299m 0.099385n 0.168259n
158 0.344903n 0.083017o 0.148850n 0.178378n 0.247022n 0.306153n 0.119255n 0.012864m 0.072551n 0.118771n
159 0.233372n 0.058022o 0.099222n 0.118916n 0.177856n 0.217270n 0.073589n 0.001027n 0.044723n 0.079181n
160 0.184298n 0.039288o 0.063879n 0.074870n 0.118643n 0.148142n 0.045812n 0.000373n 0.021868n 0.051468n
161 0.121849n 0.026780o 0.038697n 0.046575n 0.076083n 0.098759n 0.026856n 0.000233n 0.008945n 0.024744n
162 0.081061n 0.020531o 0.023813n 0.028738n 0.048416n 0.065181n 0.013961n 0.000140n 0.001193n 0.008908n
163 0.055762n 0.014282o 0.013891n 0.016847n 0.030631n 0.041479n 0.006118n 5.60e-05n 0.000914n 0.003959n
164 0.025414n 0.010712o 0.007849n 0.009913n 0.018774n 0.025677n 0.003054n 2.33e-05n 0.000318n 0.001485n
165 0.011049m 0.007393n 0.004366n 0.005664m 0.010907m 0.015860m 0.002035m 1.05e-05m 0.000110m 0.000298m
166 0.004544n 0.005356o 0.002381n 0.003072n 0.006225n 0.009481n 0.001028n 2.52e-06n 6.46e-05n 0.000139n
167 0.002272n 0.004463o 0.001290n 0.001685n 0.003557n 0.005432n 0.000398n 9.33e-07n 2.39e-05n 3.96e-05n
168 0.001342n 0.002678o 0.000645n 0.000882n 0.001877n 0.003062n 0.000173n 1.87e-07n 9.24e-06n 1.29e-05n
169 0.000609n 0.001785o 0.000327n 0.000456n 0.000988n 0.001679n 9.68e-05n 7.00e-08n 3.68e-06n 3.46e-06n
170 0.000301n 0.001696o 0.000170n 0.000229n 0.000544n 0.000918n 4.59e-05n 9.33e-09n 9.94e-07n 1.98e-06n
171 0.000176n 0.001160o 8.24e-05n 0.000119n 0.000277n 0.000484n 1.97e-05n 4.67e-09n 2.39e-07n 9.90e-07n
172 9.57e-05n 0.000982o 4.17e-05n 5.85e-05n 0.000138n 0.000247n 1.53e-05n 9.33e-10n 7.65e-08n 4.95e-07n