Expected CARIBU beam intensities for October 2016 PAC cycle

Note: isotopes in blue squares have not been used for experiment yet,
their yields are extrapolated using the 252Cf fission yield table from T.R. England and B.F. Rider, LA-UR-94-3106, ENDF-349

Nuclide	t1/2		low energy yield (ion/sec on target)	reaccelerated yield (ion/sec on target)
83As	13.4	s	6.3E+02	9.3E+01
83Se	22.3	m	2.4E+02	3.8E+01
84As	5.5	s	5.9E+02	8.3E+01
84Se	3.3	m	6.9E+02	1.1E+02
85As	2.03	s	7.0E+02	8.3E+01
85Se-m	19	s	1.0E+03	1.5E+02
85Se	39	s	1.0E+03	1.6E+02
85Br	2.87	m	5.2E+02	8.1E+01
86As	0.9	s	2.5E+02	2.1E+01
86Se	15	s	1.8E+03	2.7E+02
86Br-m	4.5	s	5.7E+02	7.8E+01
86Br	55.5	s	5.7E+02	8.7E+01
87Se	5.6	s	1.9E+03	2.7E+02
87Br	55.9	s	3.0E+03	4.6E+02
87Kr	1.27	h	6.0E+02	9.4E+01
88Se	1.5	s	1.2E+03	1.3E+02
88Br	16.4	s	4.6E+03	6.9E+02
88Kr	2.84	h	2.4E+03	3.7E+02
89Se	0.41	s	4.1E+02	1.7E+01
89Br	4.37	s	4.1E+03	5.5E+02
89Kr	3.15	m	4.7E+03	7.3E+02
89Rb	15.4	m	5.4E+02	8.4E+01
90Br	1.9	s	2.9E+03	3.4E+02
90Kr	32.3	s	9.0E+03	1.4E+03
90Rb-m	4.3	m	2.0E+03	3.1E+02
90Rb	2.6	m	4.7E+02	7.3E+01
91Br	0.54	s	1.1E+03	6.2E+01
91Kr	8.6	s	8.5E+03	1.2E+03
91Rb	58	s	6.0E+03	9.3E+02
91Sr	9.5	h	4.8E+02	7.5E+01
92Br	0.34	s	3.2E+02	9.9E+00
92Kr	1.84	s	6.4E+03	7.3E+02
92Rb	4.48	s	9.4E+03	1.3E+03
92Sr	2.71	h	2.2E+03	3.4E+02
93Kr	1.29	s	3.5E+03	3.6E+02
93Rb	5.85	s	1.4E+04	1.9E+03
93Sr	7.4	m	6.4E+03	9.9E+02
93Y	10.2	h	2.9E+02	4.5E+01
94Kr	0.21	s	1.3E+03	1.5E+01
94Rb	2.73	s	1.2E+04	1.6E+03
94Sr	1.25	m	1.5E+04	2.3E+03
94Y	18.7	m	1.6E+03	2.5E+02

95Kr	0.78	s	3.0E+02	2.3E+01
95Rb	0.377	s	7.2E+03	2.6E+02
95Sr	25.1s		2.1E+04	3.2E+03
95Y	10.3	m	5.3E+03	8.3E+02
96Rb	0.199	s	3.4E+03	3.3E+01
96Sr	1.06	s	2.4E+04	2.2E+03
96Y -m	9.6	s	1.3E+04	1.9E+03
96Y	6.2	s	1.5E+03	2.1E+02
97Rb	0.169	s	9.3E+02	5.4E+00
97Sr	0.42	s	1.6E+04	6.8E+02
97Y	3.76	s	2.3E+04	3.2E+03
97Zr	16.8	h	4.5E+03	7.0E+02
98Rb	0.107	s	2.2E+02	3.4E+01
98Sr	0.65	s	1.0E+04	6.6E+02
98Y -m	2.1	s	1.7E+04	2.1E+03
98Y	0.59	s	1.7E+04	1.1E+03
98Zr	30.7	s	1.6E+04	2.4E+03
98Nb	2.9	s	4.4E+02	5.6E+01
99Sr	0.269	s	3.6E+03	7.2E+01
99Y	1.47	s	3.1E+04	3.3E+03
99Zr	2.2	s	3.4E+04	4.1E+03
99Nb-m	2.6	m	2.9E+03	4.5E+02
99Nb	15	s	2.5E+02	3.8E+01
100Sr	0.201	s	9.5E+02	9.4E+00
100Y	0.73	s	2.1E+04	1.5E+03
100Zr	7.1	s	5.6E+04	8.0E+03
100Nb-m	3	s	7.7E+03	9.9E+02
100Nb	1.5	s	7.7E+03	8.3E+02
100Mo	stable		4.0E+02	6.2E+01
101Y	0.43	s	9.1E+03	3.9E+02
101Zr	2.1	s	5.9E+04	7.1E+03
101Nb	7.1	s	3.5E+04	5.0E+03
101Mo	14.6	m	2.4E+03	3.7E+02
102Y	0.36	s	2.2E+03	7.4E+01
102Zr	2.9	s	3.9E+04	5.0E+03
102Nb	1.3	s	5.5E+04	5.6E+03
102Mo	11.3	m	1.3E+04	1.9E+03
103Y	0.26	s	4.8E+02	8.9E+00
103Zr	1.3	s	2.3E+04	2.3E+03
103Nb	1.5	s	8.3E+04	8.9E+03
103Mo	1.13	m	4.0E+04	6.2E+03
103Tc	54	s	1.5E+03	2.4E+02
104Zr	1.2	s	6.0E+03	5.9E+02
104Nb	4.8	s	5.8E+04	8.0E+03
104Mo	60	s	7.6E+04	1.2E+04
104Tc	18.2	m	1.2E+04	1.8E+03
105Zr	0.493	s	1.1E+03	5.3E+01
105Nb	3	s	2.7E+04	3.5E+03
105Mo	36	s	8.2E+04	1.2E+04
105Tc	7.6	m	5.7E+04	8.8E+03

105Ru	4.44	h	1.8E+03	2.9E+02
106Nb	1	s	1.2E+04	1.1E+03
106Mo	8.4	s	9.4E+04	1.4E+04
106Tc	36	s	5.9E+04	9.1E+03
106Ru	1.02	y	5.6E+03	8.7E+02
107Nb	0.766	s	2.4E+03	1.8E+02
107Mo	3.5	s	5.4E+04	7.2E+03
107Tc	21.2	s	9.8E+04	1.5E+04
107Ru	3.8	m	2.4E+04	3.7E+03
107Rh	21.7	m	4.3E+02	6.6E+01
108Nb	0.242	s	2.8E+02	4.3E+00
108Mo	1.5	s	1.8E+04	1.9E+03
108Tc	5.1	s	9.0E+04	1.3E+04
108Ru	4.5	m	5.3E+04	8.3E+03
108Rh-m	5.9	m	1.5E+03	2.4E+02
108Rh	17	s	1.5E+03	2.3E+02
109Mo	1.41	s	4.0E+03	4.2E+02
109Tc	1.4	s	5.1E+04	5.3E+03
109Ru	34.5	s	8.1E+04	1.2E+04
109Rh-m	50	s	6.9E+03	1.1E+03
109Rh	1.34	m	1.8E+04	2.7E+03
110Mo	2.77	s	6.2E+02	7.9E+01
110Tc	0.83	s	2.3E+04	1.8E+03
110Ru	15	s	9.8E+04	1.5E+04
110Rh-m	29	s	1.8E+04	2.8E+03
110Rh	3.1	s	1.8E+04	2.4E+03
110Pd	stable		1.6E+03	2.5E+02
111Tc	1.98	s	4.8E+03	5.6E+02
111Ru	1.5	s	6.1E+04	6.6E+03
111Rh	11	s	6.6E+04	9.8E+03
111Pd-m	5.5	h	4.6E+03	7.2E+02
111Pd	23.4	m	3.3E+03	5.1E+02
112Tc	0.431	s	6.2E+02	2.7E+01
112Ru	4.5	s	2.5E+04	3.5E+03
112Rh	4	s	6.5E+04	8.7E+03
112Pd	20.04	h	2.0E+04	3.1E+03
112Ag	3.13	h	9.7E+02	1.5E+02
113Ru	2.7	s	5.8E+03	7.3E+02
113Rh	0.9	s	5.3E+04	4.4E+03
113Pd	1.64	m	6.5E+04	1.0E+04
113Ag-m	1.14	m	5.3E+03	8.2E+02
113Ag	5.3	h	7.9E+02	1.2E+02
114Ru	8.14	s	5.1E+02	7.5E+01
114Rh	1.8	s	1.5E+04	1.7E+03
114Pd	2.48	m	4.9E+04	7.6E+03
114Ag	4.6	s	2.5E+04	3.4E+03
114Cd	stable		5.3E+02	8.3E+01
115Rh	0.99	s	4.6E+03	4.1E+02
115Pd	47	s	4.6E+04	7.1E+03
115Ag-m	18.7	s	1.5E+04	2.2E+03

115Ag	20	m	1.2E+04	1.8E+03
115Cd-m	44.6	d	1.1E+03	1.7E+02
115Cd	2.228	d	3.3E+02	5.2E+01
116Rh	0.7	s	6.1E+02	4.3E+01
116Pd	12.7	s	2.2E+04	3.3E+03
116Ag-m	10.5	s	1.4E+04	2.1E+03
116Ag	2.68	m	1.8E+04	2.7E+03
116Cd	stable		2.7E+03	4.1E+02
117Pd	5	s	7.9E+03	1.1E+03
117Ag-m	5.3	s	1.4E+04	1.9E+03
117Ag	1.22	m	1.4E+04	2.1E+03
117Cd-m	3.4	h	4.0E+03	6.2E+02
117Cd	2.49	h	1.2E+03	1.8E+02
118Pd	2.4	s	3.4E+03	4.2E+02
118Ag-m	2.4	s	7.9E+03	9.8E+02
118Ag	4	s	8.0E+03	1.1E+03
118Cd	50.3	m	7.3E+03	1.1E+03
119Pd	1.76	s	2.3E+02	2.6E+01
119Ag	2.1	s	5.2E+03	6.2E+02
119Cd-m	2.2	m	2.4E+03	3.7E+02
119Cd	2.69	m	2.4E+03	3.7E+02
120Ag	1.23	s	2.1E+03	2.1E+02
120Cd	50.8	s	4.2E+03	6.5E+02
121Ag	0.78	s	5.1E+02	3.9E+01
121Cd	13.5	s	2.6E+03	3.9E+02
122Cd	5.3	s	2.3E+03	3.2E+02
123Cd	2.09	s	9.0E+02	1.1E+02
124Cd	1.24	s	3.0E+02	3.0E+01
124In	3.18	s	2.6E+02	3.3E+01
126In	1.63	s	2.2E+02	2.4E+01
126Sn	1.00E+05	y	4.8E+02	7.4E+01
127Sn-m	4.15	m	7.7E+02	1.2E+02
127Sn	2.12	h	1.9E+03	2.9E+02
128Sn	59.1	m	4.7E+03	7.3E+02
128Sb-m	10.1	m	2.6E+02	4.0E+01
129Sn-m	6.9	m	3.2E+03	5.0E+02
129Sn	2.4	m	7.8E+03	1.2E+03
129Sb	4.4	h	4.6E+03	7.2E+02
130In	0.29	s	2.8E+02	6.3E+00
130Sn	3.7	m	9.8E+03	1.5E+03
130Sb-m	6.5	m	7.6E+03	1.2E+03
130Sb	38.4	m	4.4E+03	6.9E+02
130Te	stable		8.3E+02	1.3E+02
131Sn	39	s	8.0E+03	1.2E+03
131Sb	23	m	2.7E+04	4.2E+03
131Te-m	1.35	d	6.4E+03	9.9E+02
131Te	25	m	1.9E+03	2.9E+02
132Sn	40	s	3.7E+03	5.7E+02
132Sb-m	2.8	m	1.4E+04	2.1E+03
132Sb	4.2	m	1.9E+04	3.0E+03

132Te	3.26	d	2.1E+04	3.3E+03
132I	2.28	h	5.7E+02	8.9E+01
133Sn	1.44	s	1.7E+03	1.8E+02
133Sb	2.5	m	2.9E+04	4.4E+03
133Te-m	55.4	m	3.5E+04	5.4E+03
133Te	12.4	m	1.4E+04	2.2E+03
133I	20.8	h	5.9E+03	9.2E+02
134Sn	1.04	s	4.1E+02	3.7E+01
134Sb	0.8	s	1.5E+04	1.2E+03
134Te	42	m	6.3E+04	9.9E+03
134I -m	3.7	m	1.6E+04	2.4E+03
134I	52.6	m	8.9E+03	1.4E+03
134Xe-m	0.29	s	7.0E+02	1.6E+01
135Sb	1.71	s	3.9E+03	4.4E+02
135Te	19	s	4.8E+04	7.3E+03
135I	6.57	h	5.0E+04	7.8E+03
135Xe-m	15.3	m	6.1E+03	9.4E+02
135Xe	9.1	h	5.0E+03	7.8E+02
136Sb	0.82	s	8.2E+02	6.5E+01
136Te	17.5	s	2.5E+04	3.7E+03
136I -m	47	s	2.5E+04	3.9E+03
136I	1.39	m	3.7E+04	5.7E+03
137Te	2.5	s	6.3E+03	7.8E+02
137I	24.5	s	4.2E+04	6.4E+03
137Xe	3.82	m	7.0E+04	1.1E+04
137Cs	30.17	y	1.9E+04	2.9E+03
138Te	1.4	s	1.5E+03	1.5E+02
138I	6.5	s	2.7E+04	3.9E+03
138Xe	14.1	m	9.8E+04	1.5E+04
138Cs-m	2.9	m	8.1E+03	1.3E+03
138Cs	32.2	m	1.5E+04	2.4E+03
139Te	0.58	s	2.2E+02	1.3E+01
139I	2.3	s	1.1E+04	1.4E+03
139Xe	39.7	s	9.5E+04	1.4E+04
139Cs	9.3	m	4.9E+04	7.7E+03
139Ba	1.396	h	3.9E+03	6.1E+02
140I	0.86	s	3.1E+03	2.6E+02
140Xe	13.6	s	6.9E+04	1.0E+04
140Cs	1.06	m	7.5E+04	1.2E+04
140Ba	12.75	d	1.4E+04	2.2E+03
141I	0.45	s	7.5E+02	3.4E+01
141Xe	1.72	s	2.7E+04	3.0E+03
141Cs	24.9	s	1.0E+05	1.6E+04
141Ba	18.3	m	3.0E+04	4.7E+03
141La	3.9	h	1.0E+03	1.6E+02
142Xe	1.22	s	9.9E+03	9.8E+02
142Cs	1.8	s	6.8E+04	7.8E+03
142Ba	10.7	m	7.3E+04	1.1E+04
142La	1.54	h	1.1E+04	1.7E+03
143Xe	0.3	s	1.1E+03	2.8E+01

143Cs	1.78	s	2.0E+04	2.3E+03
143Ba	14.3	s	1.2E+05	1.8E+04
143La	14.1	m	2.8E+04	4.4E+03
143Ce	1.38	d	4.4E+02	6.9E+01
144Xe	1.2	s	3.1E+02	3.1E+01
144Cs	1.01	s	1.5E+04	1.3E+03
144Ba	11.4	s	9.1E+04	1.3E+04
144La	40.7	s	5.0E+04	7.7E+03
144Ce	284.6	d	2.7E+03	4.2E+02
145Cs	0.59	s	4.0E+03	2.4E+02
145Ba	4	s	5.6E+04	7.5E+03
145La	24	s	6.8E+04	1.0E+04
145Ce	3	m	9.4E+03	1.5E+03
146Cs	0.322	s	7.0E+02	1.9E+01
146Ba	2.2	s	2.6E+04	3.2E+03
146La	6.3	s	6.5E+04	9.2E+03
146Ce	13.5	m	2.7E+04	4.2E+03
146Pr	24.2	m	8.3E+02	1.3E+02
147Ba	0.892	s	6.8E+03	5.6E+02
147La	4.02	s	5.2E+04	7.1E+03
147Ce	56	s	5.2E+04	7.9E+03
147Pr	13.4	m	4.9E+03	7.6E+02
148Ba	0.64	s	1.3E+03	8.5E+01
148La	1.1	s	2.7E+04	2.5E+03
148Ce	56	s	6.3E+04	9.8E+03
148Pr	2.27	m	1.5E+04	2.3E+03
148Nd	stable		3.6E+02	5.6E+01
149La	1.1	s	6.3E+03	5.9E+02
149Ce	5.2	s	4.1E+04	5.7E+03
149Pr	2.3	m	2.5E+04	3.9E+03
149Nd	1.72	h	1.6E+03	2.4E+02
150La	0.608	s	1.5E+03	9.3E+01
150Ce	4.4	s	2.5E+04	3.5E+03
150Pr	6.2	s	3.5E+04	5.0E+03
150Nd	stable		3.9E+03	6.1E+02
151Ce	1	s	7.9E+03	7.0E+02
151Pr	22.4	s	2.9E+04	4.4E+03
151Nd	12.4	m	1.5E+04	2.4E+03
151Pm	1.183	d	5.8E+02	9.0E+01
152Ce	3.1	s	2.0E+03	2.6E+02
152Pr	3.2	s	1.9E+04	2.5E+03
152Nd	11.4	m	2.2E+04	3.5E+03
152Pm-m	7.5	m	1.6E+03	2.5E+02
152Pm	4.1	m	1.6E+03	2.5E+02
153Ce	1.47	s	2.8E+02	2.9E+01
153Pr	4.3	s	7.0E+03	9.6E+02
153Nd	28.9	s	2.2E+04	3.3E+03
153Pm	5.4	m	5.9E+03	9.1E+02
154Pr	2.3	s	1.4E+03	1.8E+02
154Nd	25.9	s	1.1E+04	1.7E+03

154Pm-m	2.7	m	6.9E+03	1.1E+03
154Pm	1.7	m	8.0E+03	1.3E+03
154Sm	stable		1.1E+03	1.8E+02
155Pr	1.12	s	3.1E+02	2.9E+01
155Nd	8.9	s	6.6E+03	9.6E+02
155Pm	48	s	1.2E+04	1.8E+03
155Sm	22.2	m	2.6E+03	4.0E+02
156Nd	5.5	s	2.8E+03	4.0E+02
156Pm	26.7	s	1.2E+04	1.9E+03
156Sm	9.4	h	2.7E+03	4.2E+02
156Eu	15.2	d	2.7E+02	4.2E+01
157Nd	2.48	s	4.8E+02	5.9E+01
157Pm	10.9	s	5.4E+03	8.0E+02
157Sm	8	m	7.7E+03	1.2E+03
157Eu	15.13	h	9.5E+02	1.5E+02
158Pm	4.8	s	1.9E+03	2.6E+02
158Sm	5.5	m	6.6E+03	1.0E+03
158Eu	45.9	m	4.0E+03	6.2E+02
159Pm	3	s	5.5E+02	7.1E+01
159Sm	11.3	s	4.8E+03	7.0E+02
159Eu	18.1	m	3.5E+03	5.5E+02
159Gd	18.6	h	3.3E+02	5.2E+01
160Sm	9.6	s	2.3E+03	3.4E+02
160Eu	38	s	4.2E+03	6.5E+02
160Gd	stable		1.0E+03	1.6E+02
161Sm	4.78	s	6.7E+02	9.3E+01
161Eu	27	s	2.9E+03	4.4E+02
161Gd	3.66	m	1.6E+03	2.5E+02
162Eu	11	s	1.3E+03	1.9E+02
162Gd	8.4	m	1.6E+03	2.6E+02
163Eu	7.6	s	4.1E+02	5.9E+01
163Gd	1.13	m	1.3E+03	2.0E+02
163Tb	19.5	m	3.5E+02	5.4E+01
164Gd	45	s	7.0E+02	1.1E+02
164Tb	3	m	4.5E+02	6.9E+01
165Gd	0.705	m	2.7E+02	4.2E+01
165Tb	2.1	m	4.1E+02	6.3E+01
166Tb			2.8E+02	4.4E+01