

**Production target ladder #4 mounted as TS2ET2**

Helmut Weick, 18.02.2020, after remeasurement of positions

		new	only calculated	adjusted positions Feb 2020				
		mg/cm <sup>2</sup>	+/- mg/cm <sup>2</sup>	mm	+/- mm	pos-x/mm	pos-y/mm	
1	Chromolux					-4.2	-14.7	
2	deutPE	95	10	0.850	0.080	-4.2	-38.0	
3	deutPE	12	1	0.160	0.020	-4.2	-61.3	
4	..	Al	1570	1	5.879	0.010	-4.5	-84.5
5	..	Al	397	1	1.474	0.004	-4.8	-107.6
6	.	Al	1992	1	7.323	0.005	-4.8	-130.8
7	.	Al	982	1	3.643	0.004	-4.8	-154.0
8	.	Al	784	1	2.946	0.005	-4.9	-177.1
9	.	Al	394	1	1.449	0.007	-5.0	-200.3
10	.	Al	170	2	0.629	0.004	-5.0	-223.6
11	.	Al	58	1	0.250	0.001	-5.0	-247.0
12		Al	102	1	0.350	0.004	-5.0	-270.3
13		Al	250	2	0.986	0.010	-5.3	-293.3
14		Al	407	4	1.466	0.002	-5.4	-316.3
15		Al	636	2	2.375	0.001	-5.6	-339.3
16		Al	1032	3	3.786	0.003	-5.6	-362.6
17		Be	113	1	0.64	0.003	-5.6	-386.0
18		Be	178	1	0.96	0.005	-5.6	-409.3
19		Be	271	2	1.46	0.003	-5.6	-432.6
20		Be/Nb <sup>^</sup>	114/117	2	0.59	0.012	18.6	-26.3
21		Be/Nb <sup>^</sup>	179/116	1	0.95	0.003	18.6	-49.6
22		Be/Nb <sup>^</sup>	269/120	1	1.46	0.002	18.6	-73.0
23		Be/Nb <sup>^</sup>	403/120	1	2.16	0.009	18.6	-96.3
24		Be/Nb <sup>*</sup>	664/220	1	3.59	0.004	18.5	-119.3
25		Be/Nb <sup>*</sup>	1032/220	1	5.59	0.006	18.3	-142.3
26		Be/Nb <sup>*</sup>	1625/220	1	8.78	0.005	18.2	-165.3
27		BCE2507				18.2	-188.6	
28		Be	448	?	2.4	?	18.2	-212.0
29		Be/Cu	16076 +90	?	87.0	?	18.2	-235.3
30		Be/Cu	8014 +90	?	43.4	?	18.2	-258.3
31		Be/Cu	12039 +90	?	65.2	?	18.2	-281.5
32		Be	662	1	3.56	0.005	18.2	-304.3
33		Be	1033	1	5.60	0.005	17.9	-327.8
34		Be	1622	1	8.77	0.007	17.6	-351.3
35		Be	2511	1	13.57	0.006	17.3	-374.8
36		Be	4009		21.7		17.3	-398.0
37		Be	6333	1	34.31	0.003	17.3	-421.1
38		Be	8045	1	43.50	0.003	17.3	-444.3
39		C	103	1	0.47	0.002	41.8	-38.3
40		C	197	1	0.91	0.011	41.8	-61.5
41		C	608	1	3.30	0.008	41.8	-84.7
42		C	978	1	5.41	0.001	41.8	-107.9
43		C	3027	7	16.39	0.038	41.6	-131.2
44		C	4008	6	21.94	0.003	41.3	-154.5
45		Be/Nb <sup>*</sup>	2512/223	1	13.58	0.007	41.1	-177.8
46		Be/Nb <sup>*</sup>	3991/225	1	21.70	0.004	41.2	-201.0
47		Be/Nb <sup>*</sup>	6333/223	1	34.30	0.004	41.2	-224.1
48		Cu	90	2	0.09	0.004	41.3	-247.3
49		Cu	242	5	0.29	0.006	41.3	-270.5
50		Cu	373	12	0.45	0.008	41.3	-293.6
51		Cu	671	9	0.73	0.008	41.3	-316.8
52		Cu	1015	5	1.10	0.002	41.3	-340.2
53		Cu	1621	5	1.74	0.011	41.3	-363.6
54		Cu	2497	11	2.92	0.004	41.3	-386.9
55		Cu	3984	10	4.35	0.014	41.3	-410.3
56		empty	0		0.00	0.000	41.3	-433.6
57		BC420				66.8	-25.3	
58		C	8080	13	43.66	0.063	66.6	-49.1
59		Ta	252	2	0.14	0.006	66.5	-73.0
60		Ta	626	27	0.37	0.006	66.3	-96.8
61		Ta	1730	17	0.93	0.005	65.9	-119.8
62		Ta	4017	5	2.41	0.002	65.6	-142.8
63		Ta	6448	3	3.87	0.002	65.3	-165.8
64		Al	1017	3	3.89	0.01	65.1	-189.0
65		Al	515	3	1.94	0.01	64.9	-212.1
66		Al	122	3	0.50	0.01	64.8	-235.3
67		Pb	116	5	0.10	0.002	64.8	-258.6
68		Pb	255	4	0.23	0.002	64.8	-282.0
69		Pb	407	4	0.36	0.003	64.8	-305.3
70		Pb	545	8	0.57	0.005	64.8	-328.3
71		Pb	954	10	0.88	0.003	64.8	-351.4
72		Pb	1542	5	1.35	0.006	64.8	-374.3
73		Pb	2386	7	2.20	0.004	64.7	-397.6
74		Pb	3955	11	3.51	0.003	64.5	-421.0
75		Pb	6328	12	5.48	0.005	64.3	-444.3

out

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- . concentric hole; Ø = 1mm
- .. two holes Ø = 1mm, one concentric one to the right, gap 1 mm
- ||||| 10 vertical strips d = 1 mm, gap 1 mm, in the middle of the target is a gap
- Be/Nb<sup>^</sup> Be targets with 117 ± 4 mg/cm<sup>2</sup> Nb foils mounted downstream
- Be/Nb<sup>\*</sup> Be targets with 223 ± 1 mg/cm<sup>2</sup> Nb foils mounted downstream
- Be/Cu Be targets with 90 ± 1 mg/cm<sup>2</sup> Cu foils mounted downstream
- deutPE Polyethylene with Deuterium instead of 1H