How far should 40 mm counters be from nominal focal plane? DS 17-Jan-2013

Transition from 25 mm to 40 mm counters is fixed at 373.05 MeV.
At 8 cm location, max. relative counting rate is .0303 (target value is .030).
To move the counters back to 15 or 20 cm, we can either
(1) keep the width at 40 mm and increase the number of counters by 1 or 2, or
(2) increase the width of the counters, keeping the number of counters and the maximum counting rate fixed.
*Energy width refers to the lowest-E_e counter.
**Max. Relative rate refers to the highest-E_e counter.

Distance (cm)	B (gauss)	Energy resol. (MeV)	Counter width (mm)	No. of counters	Min. E_e (MeV)	Energy width* (MeV)	Max. relative rate**
8	9.5	~5.5	40	13	127.7	10.8	0.0303
15	5	~6	40	14	127.8	10.3	0.0282
			43	13	128.3	10.8	0.0303
20	3	~6.5	40	15	125.4	9.6	0.0269
			45	13	129.0	10.8	0.0301