Table 8.18 from (2004TI06): Summary of recent direct measurements of ^{7}Be(p, γ)^{8}B [a]

Energy	$S(0)$ factor (eV · b)	Refs.
$E_{\rm cm}$ = 117–1230 keV	21.7 ± 2.5	(1983FI13)
$E_{\rm p}$ = 0.35–1.4 MeV	18.5 ± 1.0 [b]	(1997SC46, 1998HA05)
$E_{\rm cm}$ = 1.09 and 1.29 MeV	20.3 [c]	(1999HA51)
$E_{\rm p}$ = 0.32–2.61 MeV	18.4 ± 0.6	(2001ST27)
$E_{\rm p}$ = 111.7, 134.7 and 185.8 keV	18.8 ± 1.7 [d]	(2001HA26, 2001HA36)
$E_{\rm cm}$ = 116–2460 keV	22.1 ± 0.6(expt..)± 0.6(theory) [e]	(2003JU04)
$E_{\rm cm}$ = 992 keV [f]	16 ± 4	(2000GL04)
	15.3 ± 4.5	(2001TE03)
$E_{\rm cm}$ = 302–1078 keV	21.2 ± 0.7 [g]	(2003BA04, 2003BA51, 2003BA84)

[a] See (1983FI13, 1998AD12) for discussion of prior measurements.

[b] Depending on the extrapolation theory, values of $S(0)$ ranging from 16.6 to 20.0 eV · b were deduced; $S(0) = 18.5 \pm 1.0$ eV · b was recommended.

[c] Measured $S(1.09\ {\rm MeV}) = 22.7 \pm 1.2$ eV · b and $S(1.29) = 23.8 \pm 1.5$ eV · b using a ^{7}Be target that was implanted on a Cu backing [to minimize backscattering losses]; these values are extrapolated to $S(0) = 20.3$ eV · b.

[d] Weighted mean including data from (1998HA05), data below 0.43 MeV yield $S(0) = 19.2 \pm 1.2$ eV · b.

[e] Based on $E_{\rm cm}$ = 116–362 keV. This value is revised from $S = 22.3 \pm 0.6$(expt..) $\pm$ 0.6(theory) which was given in (2001JU01, 2002JU01).

[f] Measurement with ^{7}Be particles on a windowless hydrogen target: σ(992 keV) = 0.41 ± 0.11 p-barns.

[g] Cu substrate with implanted ^{7}Be. The low-energy part of the data extrapolate to $S(0) = 20.8 \pm 1.3$ eV · b.