CITATION: R.M. Barnett *et al.* Physical Review D54, 1 (1996) and 1997 off-year partial update for the 1998 edition (URL: http://pdg.lbl.gov)

$\eta_c(2S)$

$I^G(J^{PC}) = ?^?(?^{?+})$

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$\eta_c(2S)$ MASS

VALUE (MeV)		*DOCUMENT ID*		*TECN*	*COMMENT*
3594±5	[1]	EDWARDS	82C	CBAL	$e^+e^- \to \gamma X$

[1] Assuming mass of $\psi(2S) = 3686$ MeV.

$\eta_c(2S)$ WIDTH

VALUE (MeV)	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<8.0	95	EDWARDS	82C	CBAL	$e^+e^- \to \gamma X$

$\eta_c(2S)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	hadrons	seen
Γ_2	$\gamma\gamma$	

$\eta_c(2S)$ BRANCHING RATIOS

$\Gamma(\text{hadrons})/\Gamma_{\text{total}}$ — Γ_1/Γ

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	EDWARDS	82C	CBAL	$e^+e^- \to \gamma X$

$\Gamma(\gamma\gamma)/\Gamma_{\text{total}}$ — Γ_2/Γ

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*
<0.01	90	LEE	85	CBAL	$\psi' \to$ photons

$\eta_c(2S)$ REFERENCES

LEE 85 SLAC 282 (SLAC)

EDWARDS 82C PRL 48 70 +Partridge, Peck+ (CIT, HARV, PRIN, STAN, SLAC)

OTHER RELATED PAPERS

OREGLIA 82 PR D25 2259 +Partridge+ (SLAC, CIT, HARV, PRIN, STAN)

PORTER 81 SLAC Summer Inst. 355 +Edwards+ (CIT, HARV, PRIN, STAN, SLAC)

BARTEL 78B PL 79B 492 +Dittmann, Duinker, Olsson, O'Neill+ (DESY, HEIDP)