NODE=B150

$\Lambda_c(2765)^+$ or $\Sigma_c(2765)$

$I(J^P) = ?(?^?)$ Status: $*$

OMITTED FROM SUMMARY TABLE

A broad, statistically significant peak (997^{+141}_{-129} events) seen in $\Lambda_c^+ \pi^+ \pi^-$. However, nothing at all is known about its quantum numbers, including whether it is a Λ_c^+ or a Σ_c, or whether the width might be due to overlapping states.

NODE=B150

$\Lambda_c(2765)^+$ MASS

NODE=B150205

The mass is obtained from the $\Lambda_c(2765)^+ - \Lambda_c^+$ mass-difference measurement below.

NODE=B150205

VALUE (MeV)	*DOCUMENT ID*
2766.6±2.4 OUR FIT	

NODE=B150M

$\Lambda_c(2765)^+ - \Lambda_c^+$ MASS DIFFERENCE

NODE=B150210

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
480.1±2.4 OUR FIT					
480.1±2.4	997^{+141}_{-129}	ARTUSO	01	CLE2	$e^+ e^- \approx \Upsilon(4S)$

NODE=B150D

$\Lambda_c(2765)^+$ WIDTH

NODE=B150215

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
50	ARTUSO	01	CLE2	$e^+ e^- \approx \Upsilon(4S)$

NODE=B150W

$\Lambda_c(2765)^+$ DECAY MODES

NODE=B150220;NODE=B150

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Lambda_c^+ \pi^+ \pi^-$	seen

DESIG=1;OUR EST

$\Lambda_c(2765)^+$ REFERENCES

NODE=B150

ARTUSO 01 PRL 86 4479 M. Artuso *et al.* (CLEO Collab.)

REFID=48126