## **Supplemental Table I.** Carotenoid composition of free-pigment fractions (band 1)

Carotenoid concentrations are normalized to 100 chlorophyll molecules. None of the samples contained detectable amounts of zeaxanthin or antheraxanthin (nd). n=3 (±SD).

	N	V	Lx	L	A+Z	α-car	β-car
shade	12.7 (0.1)	12.7 (0.4)	50.6 (2.2)	16.1 (0.6)	nd	15.6 (0.1)	3.2 (0.1)
shadeL	13.0 (0.8)	8.1 (0.6)	17.0 (0.5)	47.8 (0.2)	nd	18.7 (0.9)	6.3 (0.1)
sun	8.6 (0.2)	21.1 (0.3)	23.2 (0.7)	28.0 (0.5)	nd	11.0 (0.3)	7.2 (0.1)