



**Figure S1.** Irradiation and spectral distribution of the light sources used in this study. (A) White fluorescent lamp. (B) Blue light emitting diodes (LED). (C) Red LED.

**A: *PhELF4-1***

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1 ATCACAAACA CTTCTATATA CACCTACCAA CTCTCTATT AAATTCATTT CAATCTTTAA
61 TTAAGCATGG AAGGCACCTC TAACTTCAAT CGCTACCGTC AAAATTTAGC CAAATCTCAG
121 TCCATAAAAA CTAATGACCT CAGTTACGAG GAAGGTGACT CTGAGGTGTG GAACAATTTT
181 AACGAGAACC ATCAGTCAAG AACACACGAC AGTATGGTAC AGAACGTGGG TCTAATTCAA
241 GAACTTAATG GTAACATATC AAAAGTCGCT TCTCTCTATT CTGATTCAA TAATGACTTC
301 TCAACCATGG TTCATCAGCG GAAGAATGGC GTTGCACAGA AGAGCAACAA CAACAATCAG
361 GCCCACTACT CATAACTCAT GAGGCTTCT TTAATTTTAA TCTTTAATCT ACCTGTGATA
421 ATTTTAAATA ATTCCCTGGC TTAAATATG GTAATCACAT ACTCCCCTG TCCCATATTT
481 CAATTCATAT ATGATTATAT GTCACAATAT TTTATGGCAT ATTAAACAT AAATTTTAGC
491 AAAAAAAA

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**B: *PhELF4-2***

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1 CAACACCGAC TTCTCAACCA TGATTCATCA GCGGAAGAAT GGCGCAAACA CTTTCTGTAT
61 CTACACTTCT AACACTAAAG GAACTACTT CATTCCATT ATCAACTCTT GTGTTTAAGA
121 TGGAAGACAC TTCAAGCCTC AACCGCCACC GGCGAACCTT AGCCAAATCC CACTCTCGTA
181 ACGCTGCAGC CACCACCAAT AATCGCCGCC GCGTAATAA TTCTATCGTG GAAGATCAGG
241 ACTTCAGTAT GGAGGAAGGT GACTCTGAGG TATGGAACAC TTTTCCAAC AACTACAGAG
301 AGGTGCAGTC GGTGTTGGAT CGAAAATAGAG TGTTGATTCA ACAAGTTAAC GAGAACCATC
361 AGTCAAGAAC CCACGACAGT ATGGTGCAGA ATGTGGGTCT AATTCAAGAG CTCAACGGTA
421 ACATATCGAA GGTTCCTTCT CTTTATTCTG AGTTCAACAC CGACTTCTCA ACCATGATTC
481 ATCAGCGGAA GAATGGCGTA TGAGAGAATA CCAACAAAAA CAAGAGTCAC TACTCATGAG
491 CTTTCTCTAA TTTTATATA TTAAATTAAC CTATATGTAA TAATCTTCA GCTTCTCTA
501 CATCCTAGCT ATCTCTAGCT TATTTTGCAT GTTTGATTGT GGGATGAAAT ATCGAGAGTA
511 AATGCTCATA CATGTTTTAT GCGAAAAAAA AAAAAAAA

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**Figure S2.** cDNA sequences of *PhELF4-1* (A) and *PhELF4-2* (B) in petunia.