**Table S2.** The data sets used to fit the model parameters.

ID	Light	Reporter	Data sets
LD_20080110	4*LD 12:12	all	4
LD_20060824	4*LD 12:12	all	4
LL_20070319	3*LL 24	all	4
LD_20080625_S	4*LD 8:16	all	4
LD_20080625_L	4*LD 16:8	all	4
LD_20080819_S	5*LD 8:16	all	4
LD_20080819_L	5*LD 16:8	all	4
LD_20080225_S	5*LD 8:16	all	4
LD_20080129_L	5*LD 16:8	all	4
PP_20070615_S	2*LD 12:12, 3*LD $n$ :(24- $n$ ), 3*LL 24; $n \in \{2,4,6,8,10,12\}$	all	24
PP_20070615_L	LD 12:12, 3*LD (24- $n$ ): $n$ , 3*LL 24; $n \in \{2,4,6,8,10,12\}$	all	24
PP_20070610_S	LL 12, 3*DL (24- $n$ ): $n$ , LL 20; $n \in \{2,4,6,8,10,12\}$	TOC1-LUC, CCA1-LUC	12
PS_20070808_LM	LL 12, 3*DL (24- <i>n</i> ): <i>n</i> , 3*LL 24; <i>n</i> ∈{ 2,4,6,8,10,12 }	all	24
PS_20070808_EM	DL 12:12, 3*DL $n$ :(24- $n$ ), 3*LL 24; $n \in \{2,4,6,8,10,12\}$	all	24