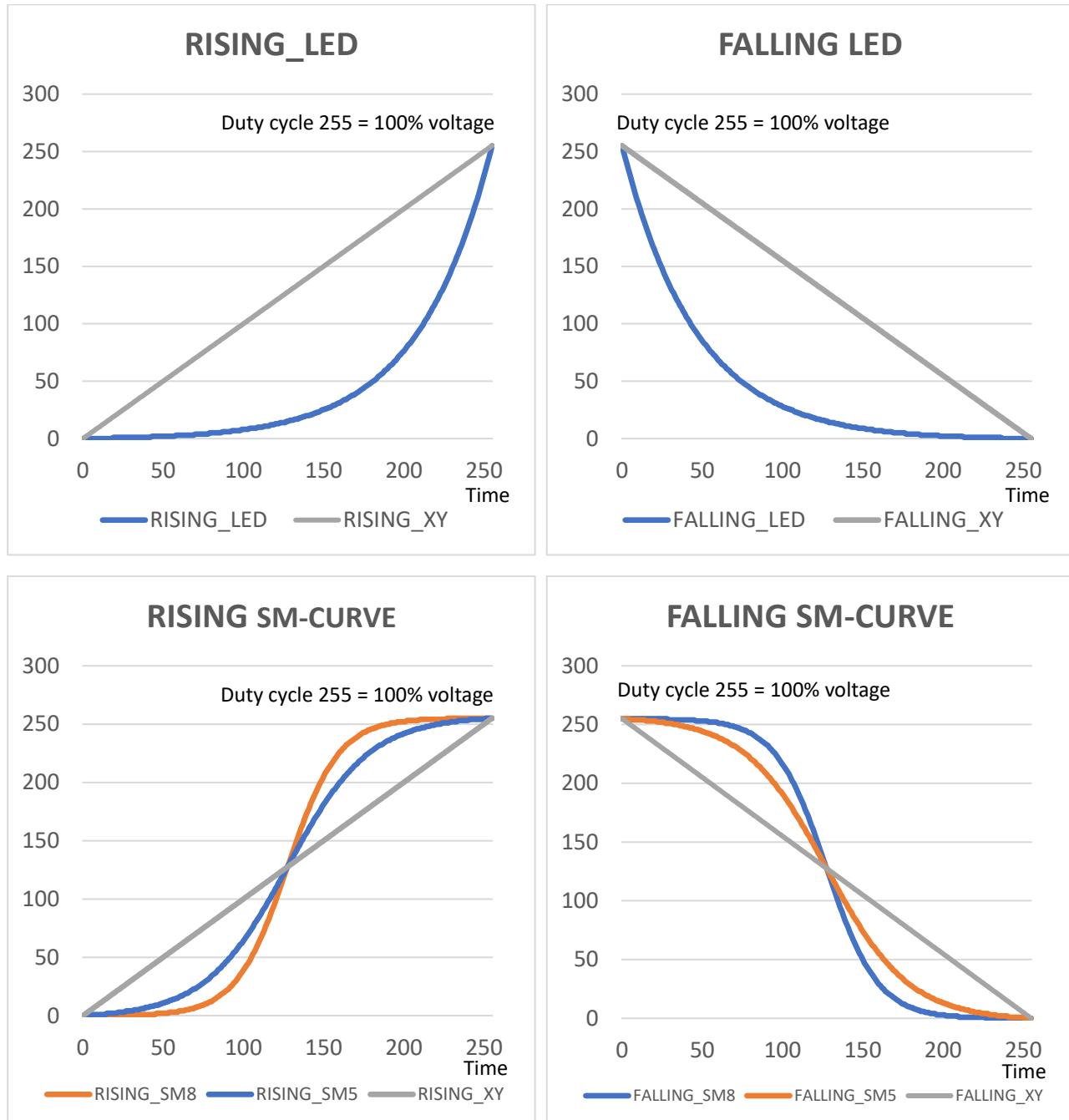
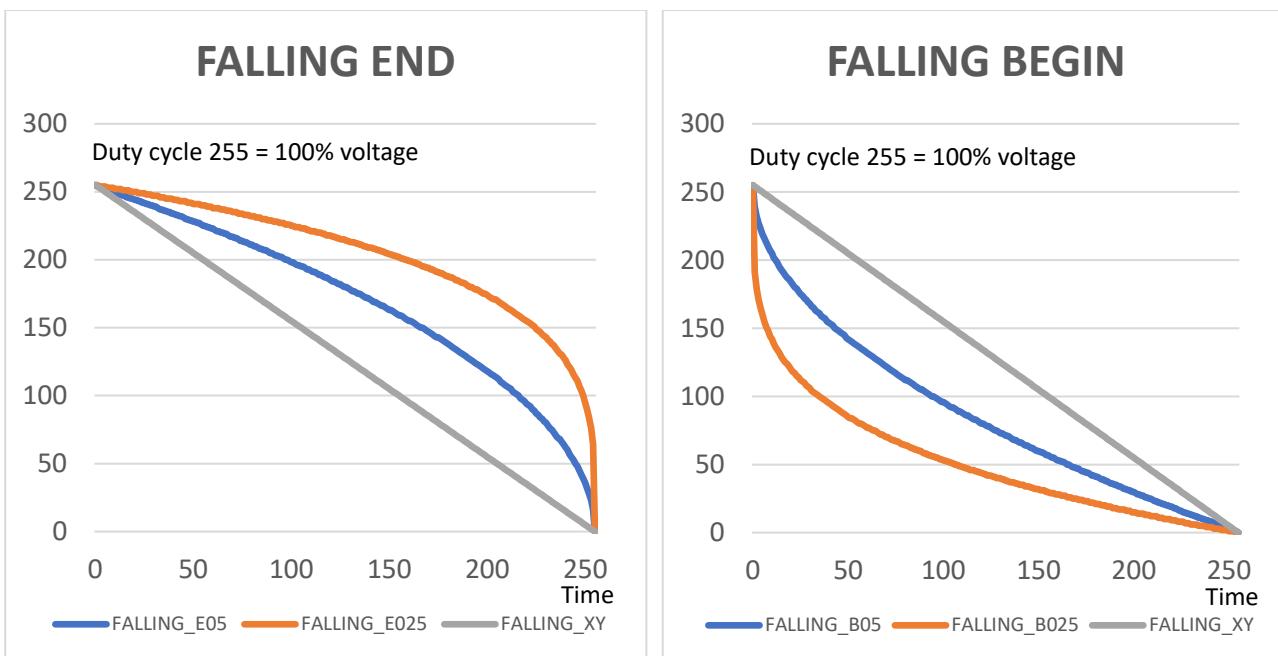
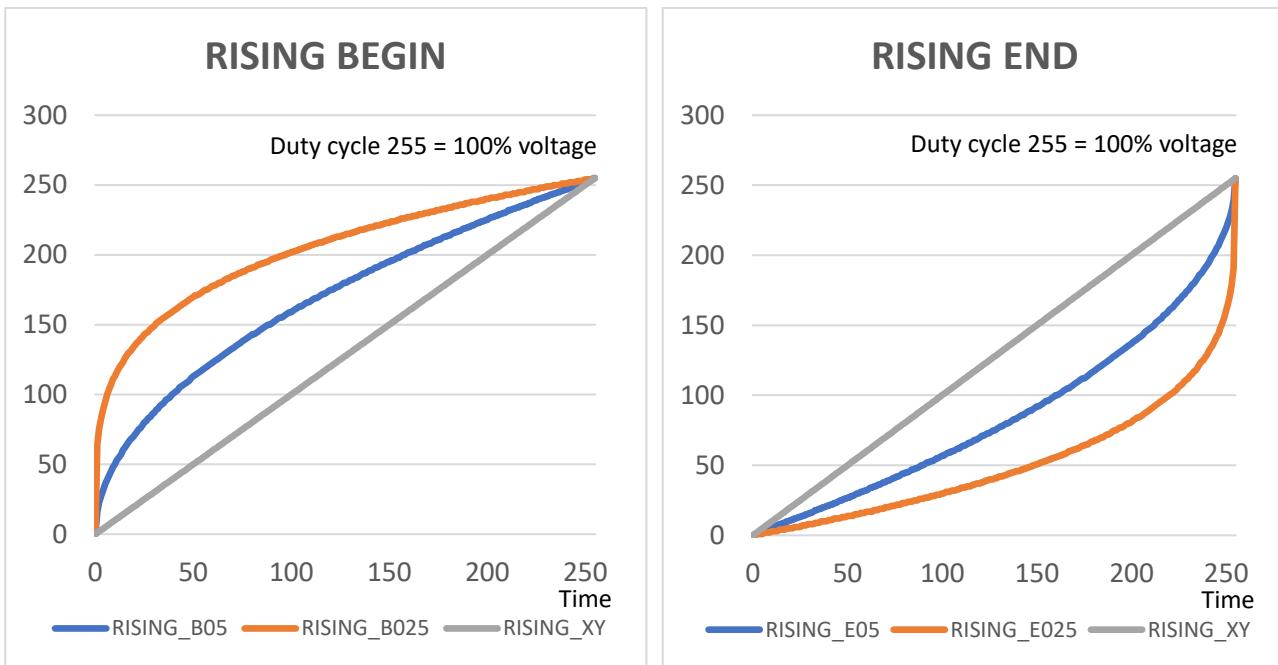


PWM_curves

MTD2A: Model Train Detection And Action – arduino library <https://github.com/MTD2A/MTD2A>
Jørgen Bo Madsen / V1.1 / 03-11-2025

16 different mathematical [PWM](#) curves are designed: 2 linear, 4 exponential and 10 power functions. The functions are intended to smooth out physical conditions that have a nonlinear relationship between time and function. E.g. LED fade in/fade out and acceleration and deceleration DC motors (trains) and servo.





The various curves are named global constants (MTD2A_const.h):

`MIN_PWM_VALUE`

NO_CURVE
RISING_XY
RISING_LED
RISING_SM8
RISING_B05
FALLING_B05

`MAX_PWM_VALUE`

FALLING_XY
FALLING_LED
RISING_SM5
RISING_B025
FALLING_B025

FALLING_SM8
RISING_E05
FALLING_E05

FALLING_SM5
RISING_E025
FALLING_E025

Clarification: [Pulse-width modulation - Wikipedia, the free encyclopedia](https://en.wikipedia.org/wiki/Pulse-width_modulation)