# Xitanium LED Drivers – Linear Sensor Ready Philips Advance Specifications

## Section I - Physical Characteristics

- 1.1 Driver shall be available in an all metal-can construction.
- 1.2 Driver shall have a slim profile with height  $\leq 1$  in and width  $\leq 1.2$  in.
- 1.3 Driver shall be provided with integral color-coded connectors.

#### Section II - Performance Requirements

- 2.1 Driver shall operate from 50/60 Hz input source of 120V through 277V or 347V (separate SKU) with sustained variations of +/- 10% (voltage) with no damage to the Driver.
- 2.2 Driver output shall be regulated to +/- 5% within performance window across published load range.
- 2.3 Driver shall have an easy way to lower the output current, without using the dimming leads.
- 2.4 Driver shall have a Power Factor greater than 0.90 for primary application when operated between full load power and 50% of full load power.
- 2.5 Driver input current shall have Total Harmonic Distortion (THD) of less than 20% when operated between full load power and 50% of full load power.
- 2.6 Driver shall have a Class A sound rating.
- 2.7 Driver shall have a minimum operating temperature of -20C (-4F).
- 2.8 Driver shall tolerate sustained open circuit and short circuit output conditions without fail and autoresetting without need for external fuses or trip devices.
- 2.9 Driver output ripple current shall be less than 15% measured peak-to-average, with ripple frequency >3000Hz.
- 2.10 Driver performance requirements shall be met within performance window.
- 2.11 Driver shall be rated for UL Damp and Dry locations.
- 2.12 Driver shall have integral common mode and differential mode surge protection of 2.5kV(100kHz 30ohm ring wave).
- 2.13 Driver shall have integral thermal foldback to reduce driver power to protect the driver if temperatures reach unacceptable high levels.
- 2.14 Driver shall comply with NEMA 410 for in-rush current limits.
- 2.15 Driver shall incorporate an integral means of limiting surges to the LEDs.
- 2.16 Driver shall dim to specified dim level 5via the digital interface to the sensor within performance window.
- 2.17 Driver shall allow the original equipment manufacturer to set drive current (light level) at the factory by means not requiring physical hardwiring to the driver.

### Section III - Sensor-Ready Functionality

- 3.1 Driver shall have a standard interface to the sensor based on DALI 2.0 protocol.
- 3.2 Driver shall provide peak power to the sensor: 52 60mA and 12 20vdc with average current 26 mA and voltage range 12-20Vdc.
- 3.3 Driver shall have power reporting accuracy of +/-4% or +/- 4% x Pmax x 30% (0.5W for 40W driver) whichever is higher.
- 3.4 Driver shall be capable of dim-to-off with standby power less than 0.5W without connecting a sensor and 1.0W, including sensor.
- 3.5 Driver shall have a 2-wire connection to the sensor only.

### Section IV - Regulatory

- 4.1 Driver shall be Underwriters Laboratories (UL) listed per UL8750 and meet Class 2 output requirements per UL1310 or Canadian Standards Association (CSA) recognized Class 2 per CSA-C22.2.
- 4.2 Driver shall be Underwriter Laboratories (UL) Class P per UL8750.
- 4.3 Driver shall have a digital interface to the sensor that meets UL Class 2 requirements.
- 4.4 Driver shall not contain any Polychlorinated Biphenyl (PCB).
- 4.5 Driver shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 15, for Non-Consumer equipment.
- 4.6 Driver shall be RoHS compliant.

#### Section V - Other

- 5.1 Driver shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 5.2 Driver shall carry a five-year limited warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 75C (Go to our web site for up-to-date warranty information:

  www.usa.lighting.philips.com/connect/tools\_literature/warranties.wpd).
- 5.3 Manufacturer shall have a 20-year history of producing electronic drivers for the North American market.
- 5.4 Driver shall be Philips Advance Part #\_\_\_\_\_ or approved equal.