

**PHILIPS  
ADVANCE**

LED Driver

Xitanium

20W 277V 0.7A Fixed  
LED277A0700C28FO



Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. The Philips Advance Xitanium LED Outdoor Driver portfolio offers a range of products specially designed to operate LED solutions in outdoor applications. These drivers are designed for hard-wired integration into outdoor luminaires even in rugged applications. They operate to specification under wide temperature and electrical ranges to help ensure reliability.

**Specifications**

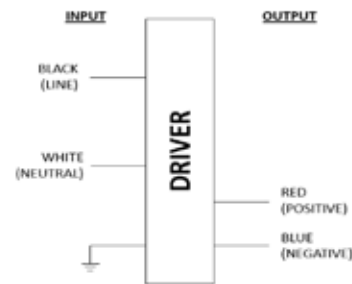
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating
277	20	2.8-28	0.7	83	90°C	0.09	24	<20%	>0.9	2.0	UL damp & dry and Type HL

**Enclosure**

	In. (mm)
Case Length	5.2 (132)
Case Width	1.3 (34)
Case Height	1.0 (25)
Mounting Length	4.8 (122.4)
Overall Length	5.2 (132)



**Wiring Diagram**



Input and output use lead-wires.  
Lead-wires are 18AWG 105C/600V solid copper.  
Input Lead Length outside enclosure: 6" (+2"/-1").  
Driver case must be grounded.

# Xitanium 20W 277V 0.7A Fixed Output

## Features

- UL Class 2 output
- 50,000+ hour lifetime<sup>1</sup>

## Benefits

- Flexibility and ease of design for Class 2 luminaire designs
- Enables long life luminaire designs

## Application

- Signage
- Parking garages
- Wallpacks

## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

## Product Data

Order Information	
Full Product Code	LED277A0700C28FOM (Mid-Pack, 10pcs/Box)
Line Frequency	50/60Hz
Min. Mains Voltage Operational	249 Vac
Max. Mains Voltage Operational	305 Vac
Output Information	
Maximum Open Circuit Voltage	28Vdc
Output Current Ripple (ripple = peak to average / average)	<=35%
Protections	Short Circuit, Open Circuit Protection for LED + and LED -
Environment & Approbation	
Operating Ambient Temp. Range	-40°C to +60°C
Max Case Temperature (Tcase)	90°C
Environmental Protection Rating	UL dry and damp, Type HL
Agency Approbations	UL879, UL1012, UL935, (cRUs/CSA)
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	.3Lbs/ .135kgs

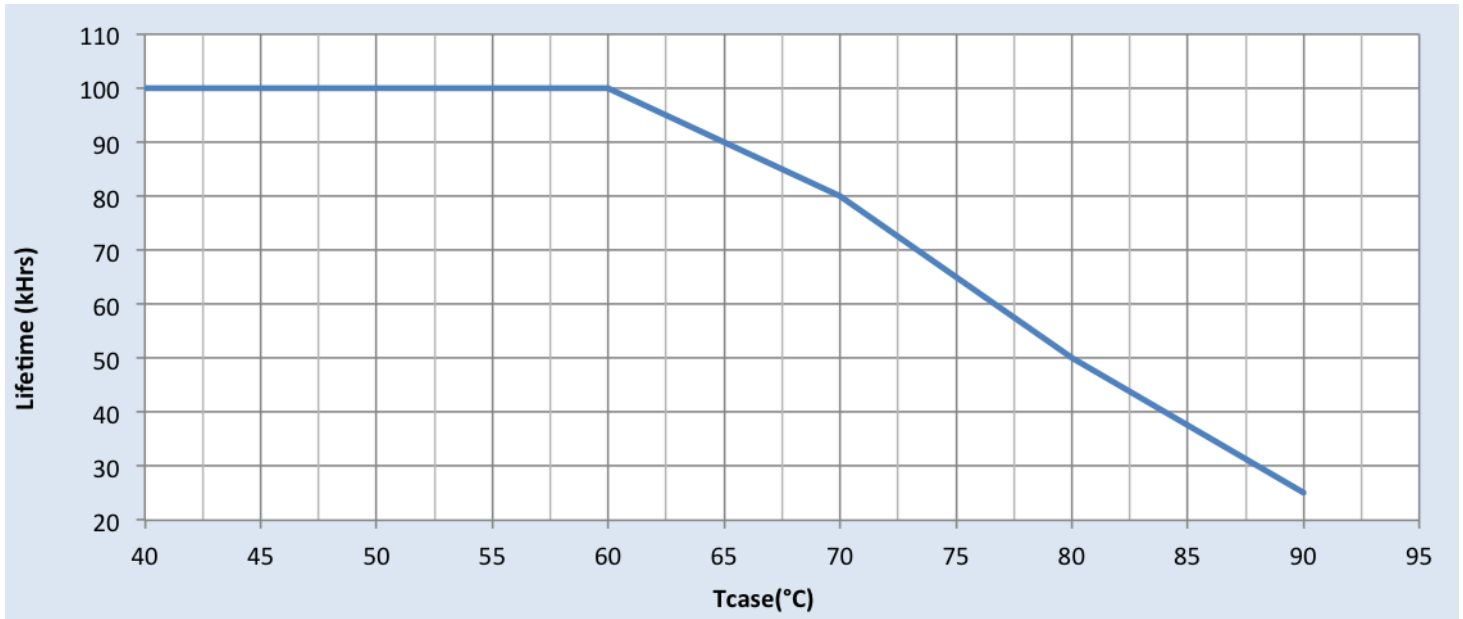
1. Philips Advance Xitanium LED Drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

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## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

## Driver Lifetime Vs. Driver Case Temperature

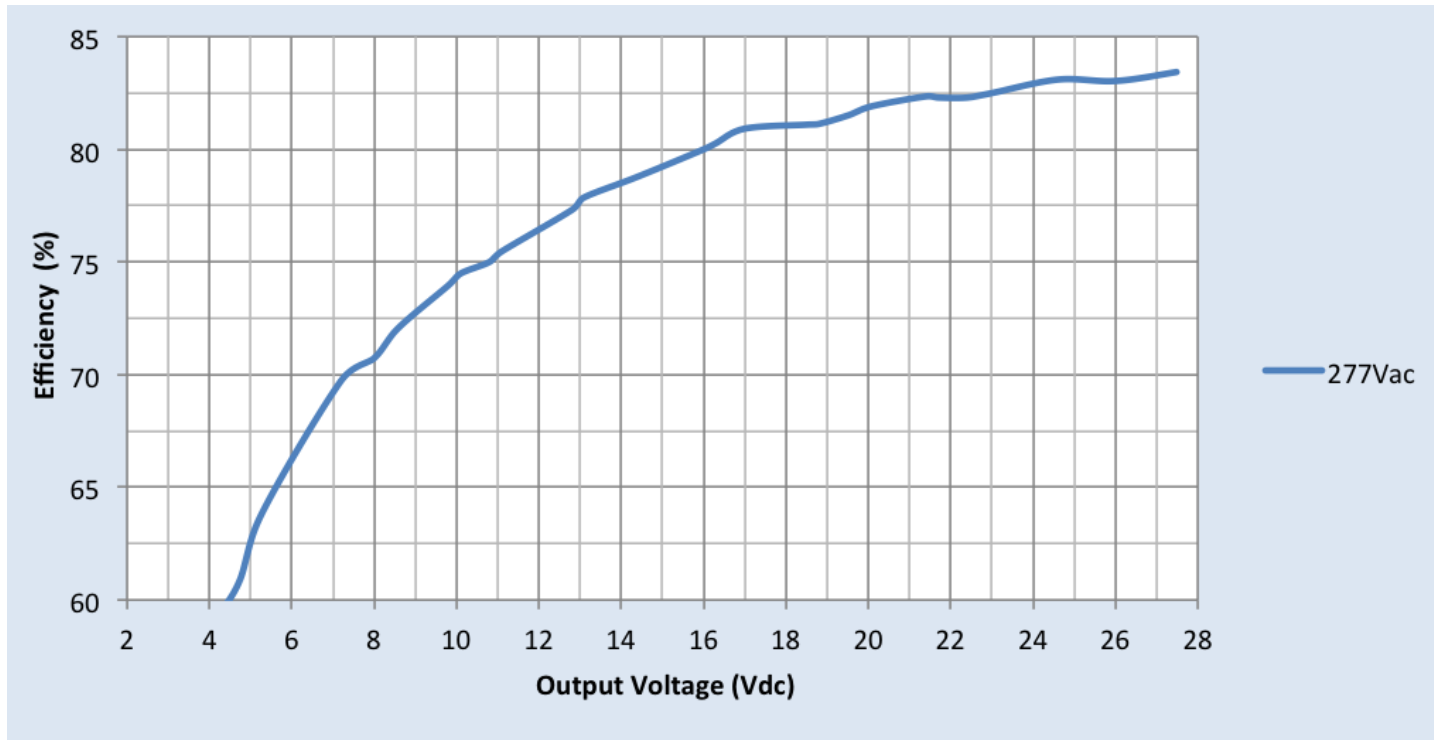


# Xitanium 20W 277V 0.7A Fixed Output

## Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

### Efficiency Vs. Output Voltage at Max Current

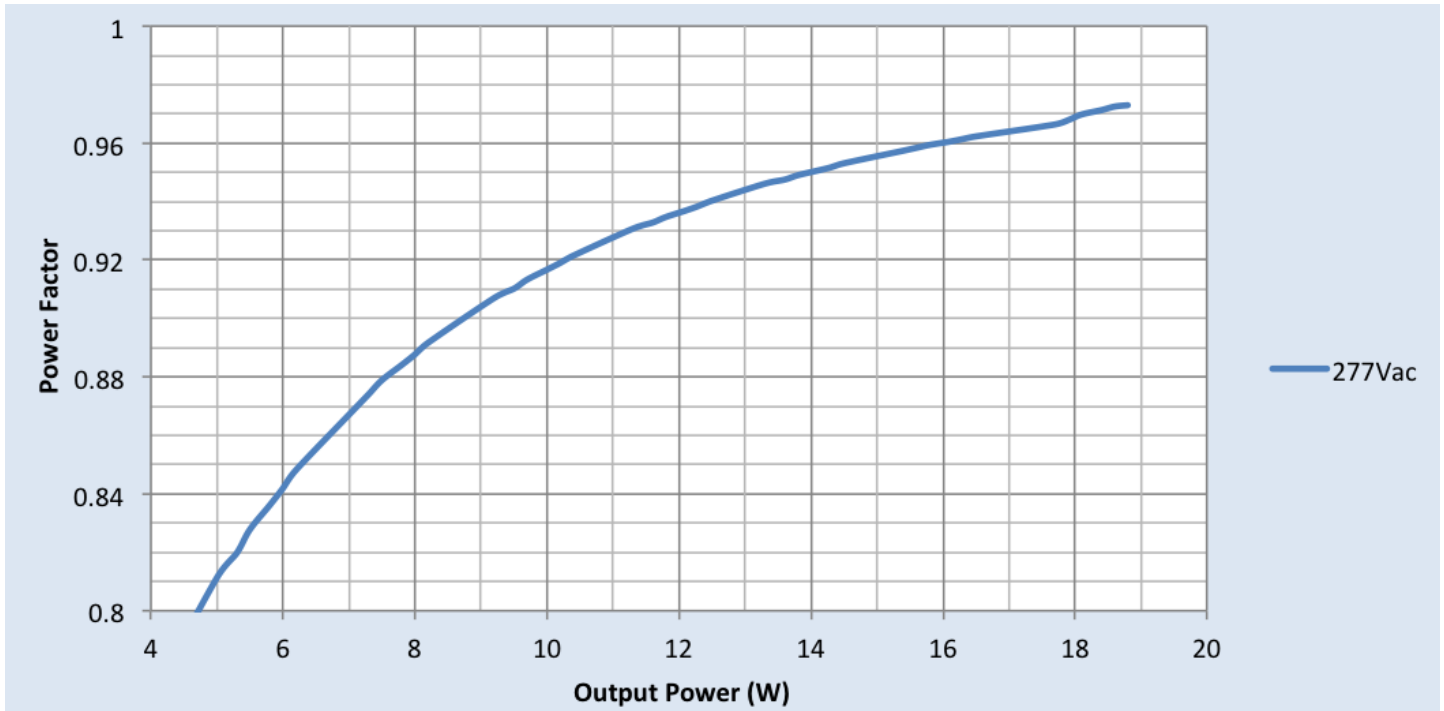


# Xitanium 20W 277V 0.7A Fixed Output

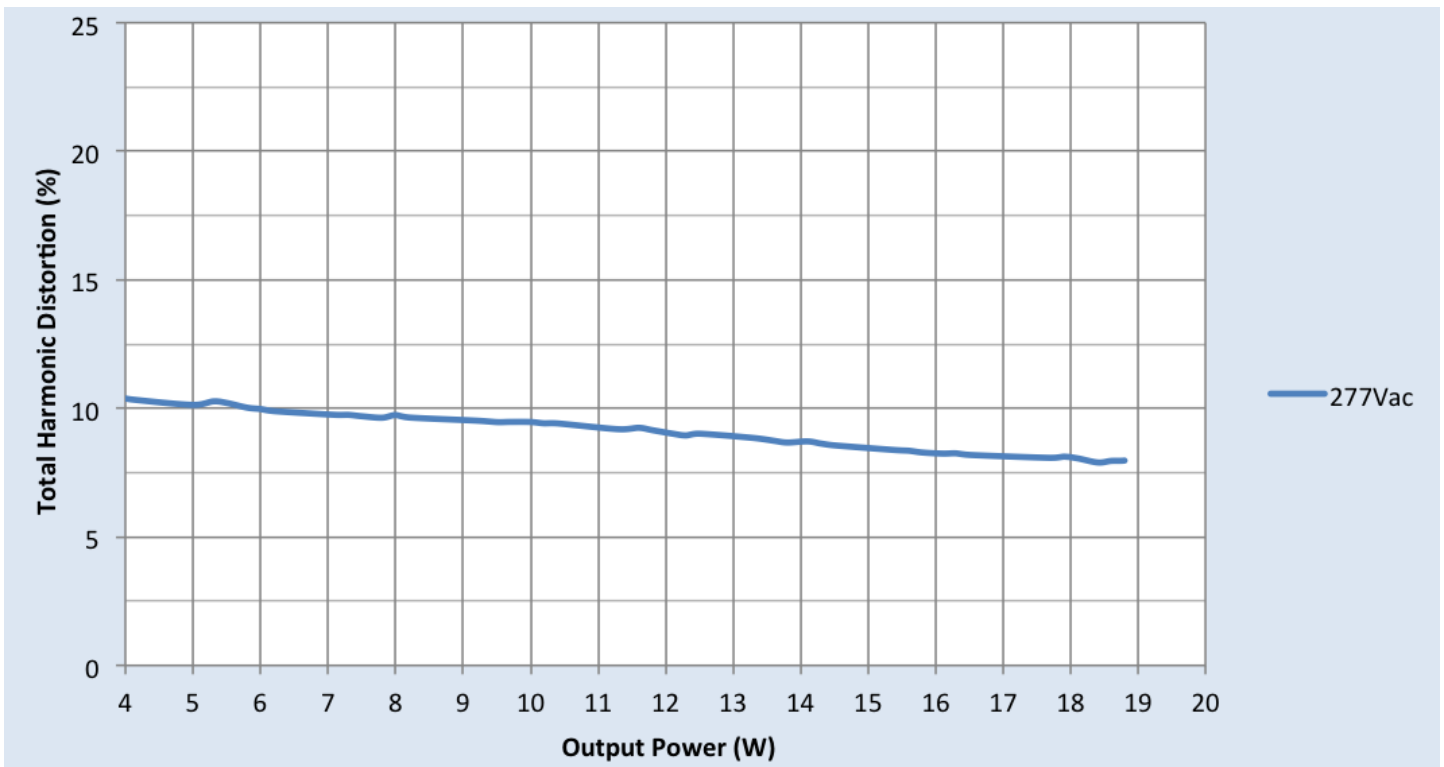
## Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

### Power Factor Vs. Output Power

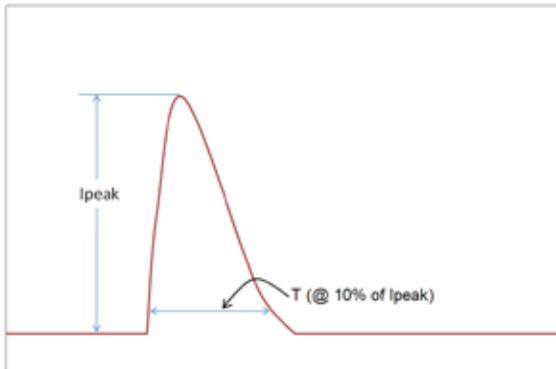


### Total Harmonic Distortion (THD) Vs. Output Power



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## Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
277 Vrms	27A	9 $\mu$ S

Inrush current is measured at peak of the corresponding line voltage. Source impedance per NEMA 410.

## Lightning Surge Info

ANSI Surge Type	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
1.2/50 $\mu$ s Combination Wave (w/t 2 $\Omega$ )	2kV	2kV

## Isolation

Isolation	Input	Output	Enclosure
Input	NA	2xU+1kV	2xU+1kV
Output	2xU+1kV	NA	500V
Enclosure	2xU+1kV	500V	NA

U = Max input voltage

## UL Conditions of Acceptability

Please contact your Philips representative for a copy of the latest UL Conditions of Acceptability (COA).

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