



**Series** 

**Specification Sheet** 

# **Product Introduction**

Orion is one of the few constellations visible throughout the world. Its magnitude of lights and brightness represent our idea of the ideal Lighting product. Completely adaptable to any public spaces, ALT's Orion T8 is a truly revolutionary product. It converts the inefficient traditional fluorescents to energy-saving, long lasting, and mercury free LED system. Ideal for Main Indoor Lighting, Orion Series is designed to be available in , 2-feet, 3-feet, 4-feet , 5-feet, 6-feet and 8-feet versions. They can be used in Classrooms, Offices, Hospitals, Supermarkets, General Warehouse, and others. Tested locally by ALT's engineers, all Orion products are approved by the most important safety certification organizations in the world. It comes with a 3-years warranty and 2 million US dollars product liability insurance, and is rated up to 50,000 hours of use.

#### **Certificates**











#### **Features**

- Has been designed where there is no danger of getting shocked during installation.
- ✓ ALT LED T8 tube can directly replace traditional fluorescent T8 tube ( simply remove starter ) .
- ✓ Industry leading heat fin design endorses excellent heat management.
- ✓ NO UV, no radiation, no infra-red, no mercury or toxic materials used.

## **Application**

- ✓ Commercial Lighting.
- Office Lighting.
- ✓ Illumination Lighting.
- ✓ Residential Lighting.

# **Specifications V2 for Standard**

Item	Specification	Details		
	Beam Angle	180°		
Output	Colour Range	TW / NW / WW		
Output	Lumen Maintenance	50,000 hours		
	Input Voltage	100 ~ 240V AC		
Electrical	Power Consumption	8, 10, 16, 20 Watts		
	Base	<ul><li>G13</li><li>G13 90 Degree</li></ul>		
	Option	single side input is available		
	Lens	PC		
Physical	Operating Temperature	-4° F to 104° F (-20°C to 40°C)		
	Humidity	0 – 95%, non-condensing		
	Weight	216g (2Feet) 433g (4Feet) 528g (5Feet)		
	Certifications	CE, FCC, RoHS, Laser, IP68		
Certificatio n and Safety	Environment	Not for use in totally enclosed fixtures Suitable for damp location		
	Warranty	3 years		
	Two Million Worldwide Product Liability Insurance.			

# **Optical Characteristics**

**Dominant Wavelength (nm) or Colour Temperature (K)** 

#### **OSRAM LED chips**

Correlated Colour Temperature	Min.	Тур.	Max.
True White	5000K	6000K	7000K
Natural White	3500K	4000K	5000K
Warm White	2700K	3000K	3500K

**Lamp Luminous Flux** 

Chipsets		OSRAM 3014 plus					
LED Qty		72 pcs	96 pcs	144 pcs	192 pcs	192 pcs	
		8W	10W	16W	20W	20W	
Power Consumption	1	( 2 Feet )	( 2 Feet )	( 4 Feet )	( 4 Feet )	( 5 Feet )	
Beam Angle		180°					
True White	CRI 80	1050lm	1300lm	2100lm	2600lm	2600lm	
Natural White	CRI 80	1000lm	1250lm	2000lm	2500lm	2500lm	
Warm White	CRI 80	900lm	1150lm	1800lm	2350lm	2350lm	

**Specifications V2 for High PF** 

Specifications V2 for High PF					
Item	Specification	Details			
Output	Beam Angle Colour Range Lumen Maintenance	180° TW / NW / WW 50,000 hours			
Electrical	Input Voltage  Power Factor  Power Consumption	100~277V AC >0.9 10, 21, 42 Watts			
Physical	Base Option Lens Operating Temperature Humidity Weight	● G13 ● G13 90 Degree single side input is available PC  -85° F to 104° F (-65°C to 40°C) 0 - 95%, non-condensing  242g (2Feet) 434~482g (4Feet) 528~579g (5Feet)			
Certification and Safety	Certifications	RoHS, Laser CE FCC ETL LVD IP68			
	Environment Warranty	Not for use in totally enclosed fixtures Suitable for damp location 3 years			
	Two Million Worldwide Product Liability Insurance.				

Optical Characteristics

Dominant Wavelength (nm) or Colour Temperature (K)

#### **OSRAM LED chips**

Correlated Colour Temperature	Min.	Тур.	Max.
True White	5000K	6000K	7000K
Natural White	3500K	4000K	5000K
Warm White	2700K	3000K	3500K

### **LUXEON LED chips**

Correlated Colour Temperature	Min.	Тур.	Max.
True White	4500K	5700K	7000K
Natural White	3500K	4000K	4500K
Warm White	2500K	3000K	3500K

**Lamp Luminous Flux** 

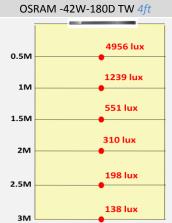
Chipsets		Lumileds 3535-L( HPF)					
LED Qty		48 pcs	48 pcs	96 pcs	96 pcs	120 pcs	120 pcs
Power Consumption		10W (2 Feet)	21W (2 Feet)	21W (4 Feet)	42W (4 Feet)	21W (5 Feet)	42W (5 Feet)
Beam Angle		180°					
True White	CRI82	1250lm	2400lm	2700lm	4800lm	2850lm	4950lm
Natural White	CRI 82	1200lm	2250lm	2600lm	4550lm	2750lm	4700lm
Matural Willite	CRI 92	1000lm	1850lm	2100lm	3700lm	2250lm	3850lm
Warm White	CRI 82	1100lm	2150lm	2450lm	4300lm	2600lm	4450lm
	CRI 92	900lm	1750lm	2000lm	3500lm	2150lm	3650lm

Chipsets		OSRAM 3014 plus( HPF)			
LED Qty		96 pcs	192 pcs	192 pcs	
Power Consumption		10W	21W 21W		
		(2 Feet) (4 Feet)		(5 Feet)	
Beam Angle		180°			
True White	CRI 80	1300lm	2700lm	2700lm	
Natural White	CRI 80	1250lm	2650lm	2650lm	
Warm White	CRI 80	1100lm	2550lm	2550lm	

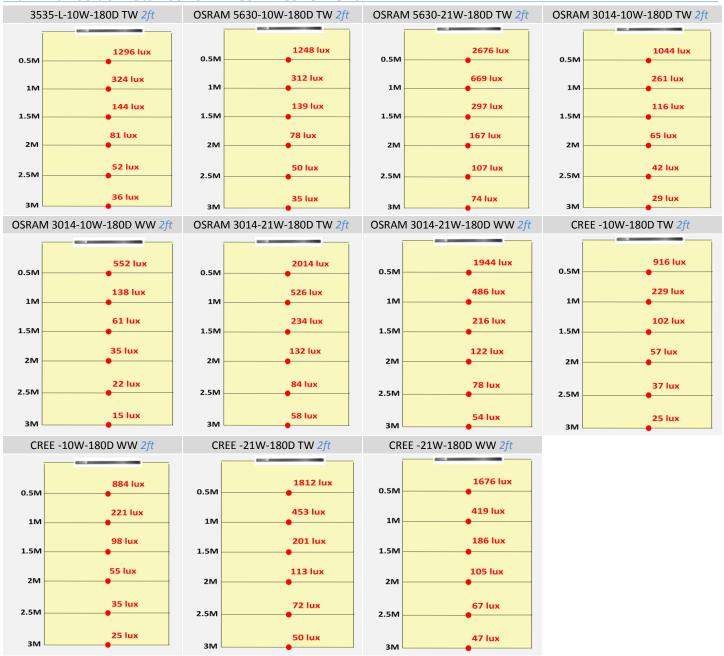
Chipsets		OSRAM 5630( HPF)					
LED Qty		48 pcs	48 pcs	96 pcs	96 pcs	96 pcs	96 pcs
Power Consumption		10W	21W	21W	42W	21W	42W
		(2 Feet)	(2 Feet)	(4 Feet)	(4 Feet)	(5 Feet)	(5 Feet)
Beam Angle				180°			
True White	CRI 80	1100lm	2100lm	2400lm	4200lm	2400lm	4200lm
Natural White	CRI 80	1000lm	1900lm	2200lm	3850lm	2200lm	3850lm
Warm White	CRI 80	900lm	1750lm	2000lm	3500lm	2000lm	3500lm

# **Illuminance at Distance for Clear Lens**

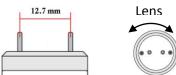


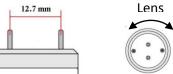


## **Illuminance at Distance for Linear Fresnel Lens**



G13 90 Degree





2FT 21W (Asia & EU)







