

# TOSHIBA

Lighting products and gears.  
by Thai Toshiba Lighting Co., Ltd.



## PRODUCTS CATALOG 2022





Thai Toshiba Lighting Company Limited was established by Dr.Korn and Thanpuying Niramol Suriyasat and joint ventured with Toshiba Lighting & Technology Corporation (TLT) Japan On September 24, 1973; as a manufacturer of lighting products under TOSHIBA brand.

**BUSINESS TYPE**

Manufacturing & Sales of lighting product : Fluorescent Lamps, Fluorescent Circline Lamps, Compact Fluorescent Lamps, Special lamps, LED Lamps, Ballasts, Starters & lamp components

**ESTABLISHMENT** September 24, 1973

**Produce quality products with environmental consciousness.**

Thai Toshiba Lighting has produce quality product for Thai people more than 48 years by strive on environmental consciousness such as following.

- We changed the original coating system of tubes used Butyl Acetate, which is harm to the workers and the environment, to water.
- Produce fluorescent lamps which last for 20,000 hrs long, first brand of Thailand. In order to reduce lamps deterioration and reduces the amount of toxic wastes in the environment.
- Replaced liquid mercury with amalgam to control and reduce the amount of mercury in the process up to 55%, from 10mg to 4.5mg per lamp.

The manufacturing of Thai Toshiba Lighting are RoHs compliant with environmental awareness. All Toshiba lamps has been confirmed by various environmental organization such as these following certifications.



- First Thai's Green Label lamp.
- ISO 14001 standard certified of environmental management.
- The first brand to received the Carbon Reduction certified which given to the manufacturer who reduce energy consumption and reduce emissions of CO<sub>2</sub> in the atmosphere.





- 1973 Establishment**  
To establish Thai Toshiba Fluorescent Lamp Co. Ltd. to produce glass tube.
- 1982 Expansion**  
To establish Thai Toshiba Lighting Co., Ltd. and transfer the operation from Thai Toshiba Fluorescent Lamp Co., Ltd. to TTL
- 1987 1988 Outstanding Workplace (1987) / Outstanding Product (1988)**  
To receive the “Outstanding Workplace Award” / Received the “Outstanding Product Award” from MOI (Ministry of Industry)
- 1996 Good attitude toward people and the environment.**  
To replace coating chemical from butyl acetate base to purified water base, which does not affect to environment and worker.
- 1998 Leader in environmental conservation**  
First brand of lighting products to get approval and authorized for use of “Green Label” for 18W and 36W fluorescent lamps.
- 2003 Extend its use to reduce environmental waste**  
To develop fluorescent lamps that last for up to 20,000 hours of life, first brand in Thailand. To reduce the amount of hazardous waste to the environment.
- 2005 Only one to use amalgam instead of liquid mercury**  
First and only one brand which using an amalgam instead of liquid mercury to reduce the spread of mercury into the environment in the production process and reduce the factors that cause hazard waste from breakage fluorescent tube.
- 2007 Reduce the global warming**  
To collaborate the Electricity Generating Authority of Thailand (EGAT) distributed free of 400,000 compact fluorescent lamps to anyone who participating “Sufficient energy consume for the King” campaign and improve production process to comply with RoHS standard.
- 2009 OHSAS/TIS 18001 standard**  
To receive certificate of OHSAS/TIS 18001 standard for occupational health and safety management system.
- 2010 Reduce carbon emissions globally**  
Again with a leading environmental products of the first brand who received Carbon Reduction Label in Thailand.
- 2011 Green System**  
To receive certification from the Ministry of Industry as a green industry level 3 which has environmental management system.
- 2013 Labeling standard No. 5 for LED MR16**  
Toshiba LED MR16 (LDRA0930WU5USD, LDRA0940WU5USD) passed the testing of EGAT's standard label No.5.
- 2014 Reduce carbon emission globally (New project LCA process)**  
First brand of lighting products to get Carbon Footprints label from Thailand Greenhouse gas management organization (Public organization): TGO

**Corporate Social Responsibility**  
To receive CSR-DIW Award 2014 from the Department of Industry. This award is presented to those who follow the industry standard to promote implementation of social responsibility and sustainable development.
- 2015 Thailand Green Label Award**  
To receive a plaque of honor “Thailand Green Label Award” which continuously participate for over 10 years.

**Labeling standard No. 5 for LED A60**  
Toshiba LED A60 (LDA0016510-TH) passed testing of EGAT's standard label No.5.
- 2017 Green label standard for LED tube**  
First brand of LED tube product to get approval and authorize for use of “Green label” for 16W and 18W LED tube.

**ISO 9001:2015 Standard**  
To receive certificate of ISO 9001:2015 standard for Quality management system.
- 2018 Get more green Industry level**  
To receive certification from the Ministry of Industry. as a green industry level 4 which has an environmental management system.

**ISO 14001:2015 Standard**  
To receive certificate of ISO 14001: 2015 standard for environmental management system.
- 2019 ISO 45001:2018 Standard**  
To receive certificate of ISO 45001:2018 standard for occupational health and safety management system.

**Good Environmental Governance**  
To receive Good Environmental Governance Award 2019 from Department of Industrial Works Ministry of Industry.
- 2020 Thailand Green Label Award**  
To receive a plaque of honor “Thailand Green Label Award” which continuously participate Green Label continuously for over 15 years.





# TOSHIBA

## LED Lamps

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LED Bulb

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LED Sunlight Sensor

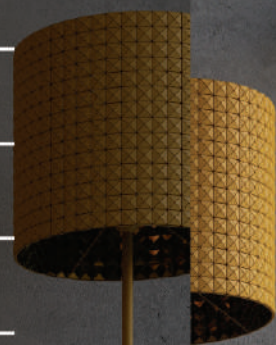
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LED Bulb Dimmable

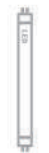
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LED T Lamp

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LED A45  
(4W)



LED A60  
(7W,9W)



LED A60  
(11W,13W)

## LED Bulb A Series

Wide range of brightness with all 3 color temperatures options, TOSHIBA LED A series have been useful over the time, generation to generation. Long lasting, Robust and Eyes safety LED quality with 200 degree wide beam angle.

### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety  
IEC 62471 : Photobiological safety

#### DIMENSION



(mm)

#### EQUIVALENT



Compare to Incandescent lamp

#### ENERGY SAVING



Non-Dimmable



NBN 2780-2562 TTLIC



NBN 1955-2551 TTLIC



Eye Safety IEC 62471

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC0427E7TH7	A45	220-240	4	350	2700K	88	80	200°	15,000h
RLDAC0440E7TH7	A45	220-240	4	380	4000K	95	80	200°	15,000h
RLDAC0465E7TH7	A45	220-240	4	380	6500K	95	80	200°	15,000h
RLDAC0727E7TH7	A60	220-240	7	600	2700K	86	80	200°	15,000h
RLDAC0740E7TH7	A60	220-240	7	650	4000K	93	80	200°	15,000h
RLDAC0765E7TH7	A60	220-240	7	650	6500K	93	80	200°	15,000h
RLDAC0927E7TH7	A60	220-240	9	810	2700K	90	80	200°	15,000h
RLDAC0940E7TH7	A60	220-240	9	850	4000K	94	80	200°	15,000h
RLDAC0965E7TH7	A60	220-240	9	850	6500K	94	80	200°	15,000h
RLDAC1127E7TH7	A60	220-240	11	1055	2700K	96	80	200°	15,000h
RLDAC1140E7TH7	A60	220-240	11	1150	4000K	105	80	200°	15,000h
RLDAC1165E7TH7	A60	220-240	11	1150	6500K	105	80	200°	15,000h
RLDAC1327E7TH7	A60	220-240	13	1350	2700K	104	80	200°	15,000h
RLDAC1340E7TH7	A60	220-240	13	1521	4000K	117	80	200°	15,000h
RLDAC1365E7TH7	A60	220-240	13	1521	6500K	117	80	200°	15,000h

Operation temperature : -20°C to 40°C





## LED A Bulb A Series

Wide range of brightness with all 3 color temperatures options, TOSHIBA LED A series have been useful over the time, generation to generation. Long lasting, Robust and Eyes safety LED quality with 200 degree wide beam angle.



A70  
15 Watt

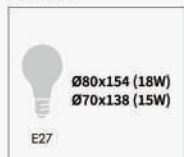
A80  
18 Watt

IEC standard

IEC 62560 : Self-ballasted LED-lamps safety

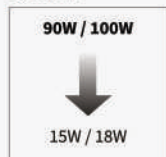
IEC 62471 : Photobiological safety

### DIMENSION



(mm)

### EQUIVALENT



Compare to incandescent lamp

### ENERGY SAVING



Non-Dimmable



IEC 2780-2562  
TTLIC



IEC 1955-2551  
TTLIC



Eye Safety  
IEC 62471

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC1530E7TH7	A70	220-240	15	1215	3000K	81	80	200°	15,000h
RLDAC1540E7TH7	A70	220-240	15	1280	4000K	85	80	200°	15,000h
RLDAC1565E7TH7	A70	220-240	15	1350	6500K	90	80	200°	15,000h
RLDAC1830E7TH7	A80	220-240	18	1460	3000K	81	80	200°	15,000h
RLDAC1840E7TH7	A80	220-240	18	1540	4000K	86	80	200°	15,000h
RLDAC1865E7TH7	A80	220-240	18	1620	6500K	90	80	200°	15,000h

Operation temperature : -20°C to 40°C



A60  
9 Watt

A70  
12 Watt

## LED Sunlight Sensor

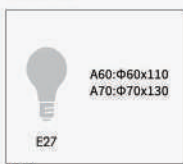
Toshiba LED Sunlight sensor comes with double intelligent light sensor automatically turn on when darkness and turn off when bright enough easy to replacement with classic lamps E27 socket

### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety

IEC 62471 : Photobiological safety

#### DIMENSION



(mm)

#### EQUIVALENT

80W,100W



9W,12W

Compare to Incandescent lamp

#### ENERGY SAVING



Non-Dimmable



NDI 2780-2562  
TTL



NDI 1955-2551  
TTL



Eye Safety  
IEC 62471



DUAL LIGHT SENSOR  
Automatic  
Turn on-off

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC0927E7TH1LS	A60	220-240	9	1000	2700K	111	80	220°	25,000h
RLDAC0965E7TH1LS	A60	220-240	9	1080	6500K	120	80	220°	25,000h
RLDAC1265E7TH1LS	A70	220-240	12	1200	6500K	100	80	220°	25,000h

Operation temperature : -20°C to 45°C





## LED A Bulb Dual Pack

TOSHIBA LED A Series have been useful over the time, generation to generation. Long lasting, Robust and Eyes safety LED quality with 200 degree wide beam angle. Comes with super save pack.

LED 8W A60  
(Dual Pack)

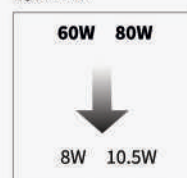
LED 10.5W A60  
(Dual Pack)

### DIMENSION



(mm)

### EQUIVALENT



Compare to incandescent lamp

### ENERGY SAVING



### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety

IEC 62471 : Photobiological safety



Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC0840E7TH7	A60	220-240	8	770	4000K	96	80	200°	15,000h
RLDAC0865E7TH7	A60	220-240	8	810	6500K	101	80	200°	15,000h
RLDAC1065E7TH7	A60	220-240	10.5	1080	6500K	102	80	200°	15,000h

Operation temperature : -20°C to 40°C





LED 8W A60

LED 13W A70

## LED A-Bulb Dimmable

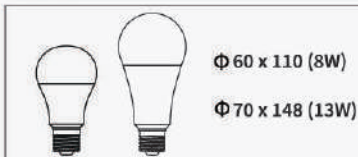
The new LED A-Bulb Dimmable comes with 3 color temperatures options. Supports dimming the light when used in conjunction with dimmer switch. Dimming is create the right light for any activity with 10-100% brightness level. Eyes safety LED quality with 200 degree wide beam angle.

### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety

IEC 62471 : Photobiological safety

### DIMENSION



(mm)

### EQUIVALENT



Compare to incandescent lamp

### ENERGY SAVING



Non-Dimmable



HiDPI 2780-2562 TTL



HiDPI 1955-2551 TTL



Eye Safety IEC 62471

Product code	Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC0830E7TH1DM	A60	220-240	8	860	3000K	107	80	200°	15,000h
RLDAC0840E7TH1DM	A60	220-240	8	860	4000K	107	80	200°	15,000h
RLDAC0865E7TH1DM	A60	220-240	8	860	6500K	107	80	200°	15,000h
RLDAC1330E7TH1DM	A70	220-240	13	1300	3000K	100	80	200°	15,000h
RLDAC1340E7TH1DM	A70	220-240	13	1300	4000K	100	80	200°	15,000h
RLDAC1365E7TH1DM	A70	220-240	13	1300	6500K	100	80	200°	15,000h

Operation temperature : -20°C to 40°C

### \*Recommended dimmer compatibility list

Brand	Model
Philips	LeafStyle 2M
Panasonic	WEG57912
Schneider Electric	3031H360M
Clipsal	3031H500M/K





## LED T Stick Lamp

Toshiba LED T Stick lamp design with extra wide beam angle 220°/240°  
Replace to compact fluorescent lamp with both vertical & horizontal  
E27 fixture. Compact T-shape design to use in condominium,  
hotel and office.



T38  
5 Watt

T41  
8 Watt

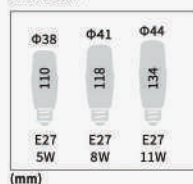
T44  
11 Watt

### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety

IEC 62471 : Photobiological safety

### DIMENSION



(mm)

### EQUIVALENT

40W / 60W / 75W



5W / 8W / 11W

Compare to Incandescent lamp

### ENERGY SAVING



Non-Dimmable



2780-2562  
TTLIC



1955-2551  
TTLIC



Eye Safety  
IEC 62471

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDTC0527E7TH1	T38	220-240	5	485	2700K	97	80	240°	15,000h
RLDTC0565E7TH1	T38	220-240	5	500	6500K	100	80	240°	15,000h
RLDTC0827E7TH1	T41	220-240	8	800	2700K	100	80	220°	15,000h
RLDTC0840E7TH1	T41	220-240	8	850	4000K	106	80	220°	15,000h
RLDTC0865E7TH1	T41	220-240	8	850	6500K	106	80	220°	15,000h
RLDTC1127E7TH1	T44	220-240	11	1100	2700K	100	80	220°	15,000h
RLDTC1140E7TH1	T44	220-240	11	1150	4000K	105	80	220°	15,000h
RLDTC1165E7TH1	T44	220-240	11	1150	6500K	105	80	220°	15,000h

Operation temperature : -20°C to 40°C





LED T65  
(15W)

LED T65  
(20W)

## LED T Stick Lamp Hi-Power

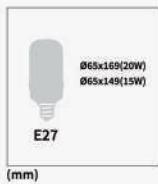
Toshiba LED T Stick lamp High Power design With extra wide beam angle 220°. Replace to ordinary compact fluorescent E27. High power LED can be more brightness when using with Low bay fixture E27 in Central hall, Exhibition area or Night market. The cover design to help reducing glare to your eyes.

### IEC standard

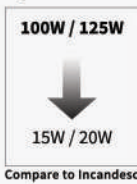
IEC 62560 : Self-ballasted LED-lamps safety  
IEC 62471 : Photobiological safety



### DIMENSION



### EQUIVALENT



### ENERGY SAVING



(mm)

Compare to Incandescent lamp

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDTC1527E7TH1	T65	220-240	15	1600	2700K	107	80	220°	15,000h
RLDTC1565E7TH1	T65	220-240	15	1700	6500K	113	80	220°	15,000h
RLDTC2027E7TH1	T65	220-240	20	2000	2700K	100	80	220°	15,000h
RLDTC2065E7TH1	T65	220-240	20	2100	6500K	105	80	220°	15,000h

Operation temperature : -20°C to 40°C



# TOSHIBA

## LED Reflector Lamps

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LED GU10

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LED MR16

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LED PAR LAMP

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Beam Angle  
24°,36°



Beam Angle  
100°

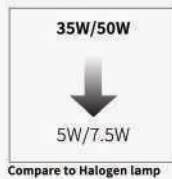
## LED GU10

Toshiba LED GU10 is outstanding reflector lamp design with wide beam angle , 24-100 degree. Compatible with EU standard GU10 fixture. It is the perfect product to replace any halogen lamp and save up to 86% energy consumption. The range of difference colour temperatures will adapt to any installation requirement.

### DIMENSION



### EQUIVALENT



### ENERGY SAVING



### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety  
IEC 62471 : Photobiological safety



Non-Dimmable



NON 2780-2562  
TTL



NON 1955-2551  
TTL



Eye Safety  
IEC 62471

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	CBCP (cd)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDMC05273U1TH1	220-240	5	380	900	76	2700K	80	24°	15,000h
RLDMC05274U1TH1	220-240	5	380	600	76	2700K	80	36°	15,000h
RLDMC05654U1TH1	220-240	5	400	650	80	6500K	80	36°	15,000h
RLDMC0527AU1TH1	220-240	5	380	130	76	2700K	80	100°	15,000h
RLDMC0565AU1TH1	220-240	5	400	140	80	6500K	80	100°	15,000h
RLDMC08273U1TH1	220-240	7.5	600	1600	80	2700K	80	24°	15,000h
RLDMC08274U1TH1	220-240	7.5	600	900	80	2700K	80	36°	15,000h
RLDMC08654U1TH1	220-240	7.5	630	1000	84	6500K	80	36°	15,000h
RLDMC0827AU1TH1	220-240	7.5	600	190	80	2700K	80	100°	15,000h
RLDMC0865AU1TH1	220-240	7.5	630	200	84	6500K	80	100°	15,000h

Operation temperature : -20°C to 40°C





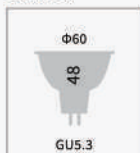
## LED MR16 GU5.3

Toshiba LED MR16 is design to replace the low voltage halogen lamps. Design for wide range of beam angle : 24, 36 and 100 degree. It's suitable for both accent and general lighting.

Beam Angle  
24°,36°

Beam Angle  
100°

### DIMENSION



(mm)

### EQUIVALENT

20W/35W/50W



3W/5W/7W

Compare to Halogen lamp

### ENERGY SAVING



Non-Dimmable



IEC standard

IEC 62471 : Photobiological safety

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	CBCP (cd)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDMA03273U5TH1	12	3	230	600	77	2700K	80	24°	25,000h
RLDMA03653U5TH1	12	3	240	620	80	6500K	80	24°	25,000h
RLDMA03274U5TH1	12	3	230	390	77	2700K	80	36°	25,000h
RLDMA03654U5TH1	12	3	240	400	80	6500K	80	36°	25,000h
RLDMA0327AU5TH1	12	3	230	80	77	2700K	80	100°	25,000h
RLDMA0365AU5TH1	12	3	240	90	80	6500K	80	100°	25,000h
RLDMA05273U5TH1	12	5	350	900	70	2700K	80	24°	25,000h
RLDMA05653U5TH1	12	5	360	950	72	6500K	80	24°	25,000h
RLDMA05274U5TH1	12	5	350	600	70	2700K	80	36°	25,000h
RLDMA05654U5TH1	12	5	360	620	72	6500K	80	36°	25,000h
RLDMA0527AU5TH1	12	5	350	130	70	2700K	80	100°	25,000h
RLDMA0565AU5TH1	12	5	360	135	72	6500K	80	100°	25,000h
RLDMA07273U5TH1	12	7	500	1300	71	2700K	80	24°	25,000h
RLDMA07653U5TH1	12	7	520	1350	74	6500K	80	24°	25,000h
RLDMA07274U5TH1	12	7	500	800	71	2700K	80	36°	25,000h
RLDMA07654U5TH1	12	7	520	850	74	6500K	80	36°	25,000h

Operation temperature : -20°C to 40°C



## LED PAR Lamp

Remarkable and unique area by LED PAR lamp for indoor using such as Building, Restuarant, Department store and Gallery or use outdoor with waterproof socket fixture for Garden, Tree decoration and outdoor landscape. Comes with various of beam angle in 25 and 35 degree.



PAR20  
IP 20



PAR30  
IP 65

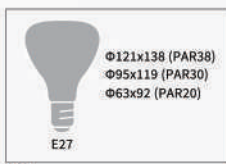


PAR38  
IP 65

### IEC standard

IEC 62560 : Self-ballasted LED-lamps safety  
IEC 62471 : Photobiological safety

### DIMENSION



(mm)

### EQUIVALENT



Compare to Halogen lamp

### ENERGY SAVING



Indoor use only for PAR20



Can use Outdoor for PAR30 and PAR38



Non Dimmable



2780-2562 TTLC



1955-2551 TTLC



Eye Safety IEC 62471

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	CBCP (cd)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Beam Angle	IP level	Lifespan (Hrs.)
RLDPC0727WE7TH1	220-240	7	500	1,000	71	2700K	80	25°	20	25,000h
RLDPC0765WE7TH1	220-240	7	550	1,100	78	6500K	80	25°	20	25,000h
RLDPC1027WE7TH1	220-240	10	750	1,500	75	2700K	80	25°	65	25,000h
RLDPC1040WE7TH1	220-240	10	800	1,600	80	4000K	80	25°	65	25,000h
RLDPC1065WE7TH1	220-240	10	800	1,600	80	6500K	80	25°	65	25,000h
RLDPC1527WE7TH1	220-240	15	1,100	1,900	73	2700K	80	35°	65	25,000h
RLDPC1565WE7TH1	220-240	15	1,200	2,000	80	6500K	80	35°	65	25,000h

Operation temperature : -20°C to 40°C

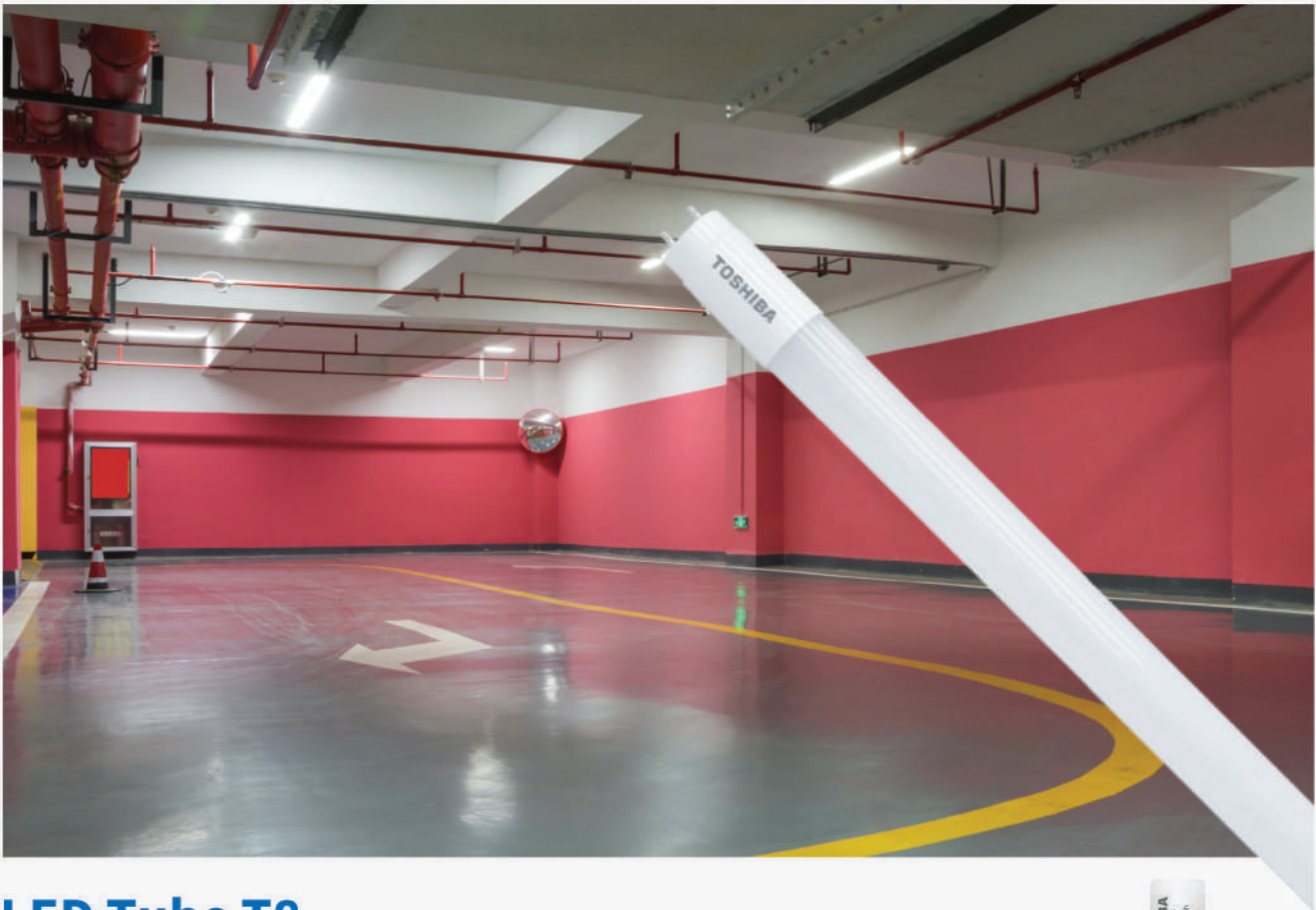


# TOSHIBA

## LED Tube

LED Tube T8

LED Glass Tube T5

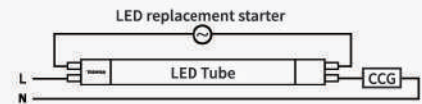


## LED Tube T8

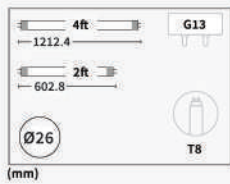
Toshiba LED TUBE lets you perfectly light up wide range of the applications such as office, factory and public space. It will ensure bright light and a low energy consumption as well as long life. It is now available from 1,100 to 2,100 lm. in 2ft and 4ft

### IEC standard

IEC 62776 : Double-capped LED lamps designed to retrofit linear fluorescent lamps. – Safety specifications.  
IEC 62471 : Photobiological safety



### DIMENSION



### EQUIVALENT



### ENERGY SAVING



Non-Dimmable



NBN 2779-2562 TTLIC



NBN 1955-2551 TTLIC



Eye Safety IEC 62471



Surge Protection 0.5kV

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Power Factor	THDi	Beam Angle	Lifespan (Hrs.)
RLDL0282C0840G1TH1	220-240	8	1,100	137	4000K	80	>0.90	<15%	160°	50,000h
RLDL0282C0865G1TH1	220-240	8	1,100	137	6500K	80	>0.90	<15%	160°	50,000h
RLDL0284C1440G1TH1	220-240	14	2,100	150	4000K	80	>0.90	<15%	160°	50,000h
RLDL0284C1465G1TH1	220-240	14	2,100	150	6500K	80	>0.90	<15%	160°	50,000h

Operation temperature : -20°C to 45°C



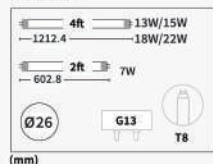




## LED Tube T8

Toshiba LED Tube lets you perfectly light up wide range of the applications such as office, factory and public space. It will ensure bright light and a low energy consumption as well as long life. It is now available from 1,120 to 3,750 lm in 2ft and 4ft.

### DIMENSION



(mm)

### EQUIVALENT

18W/36W/36W/36W/36W

7W/13W/15W/18W/22W

Compare to conventional fixture with fluorescent lamp

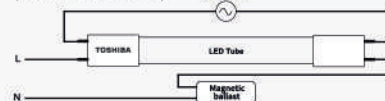
### ENERGY SAVING



### ■ Wiring diagram for new installation (No need to use LED starter)



### ■ Wiring diagram for instead of installation fluorescent Lamp (Need to use LED starter)



Non-Dimmable



HBN 2779-2562  
TTLIC



HBN 1955-2551  
TTLIC



Eye Safety  
IEC 62471



Surge Protection  
6.5kV

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature	Efficacy (lm/W)	Color Rendering Index (Ra)	Power Factor	THDi	Beam Angle	Lifespan (Hrs.)
RLDL82C0730G1TH7	220-240	7	1120	3000K	160	80	>0.95	<10%	160°	60,000
RLDL82C0740G1TH7	220-240	7	1200	4000K	171	80	>0.95	<10%	160°	60,000
RLDL82C0765G1TH7	220-240	7	1200	6500K	171	80	>0.95	<10%	160°	60,000
RLDL84C1330G1TH7	220-240	13	2080	3000K	160	80	>0.95	<10%	160°	60,000
RLDL84C1340G1TH7	220-240	13	2200	4000K	169	80	>0.95	<10%	160°	60,000
RLDL84C1365G1TH7	220-240	13	2200	6500K	169	80	>0.95	<10%	160°	60,000
RLDL84C1530G1TH7	220-240	15	2400	3000K	160	80	>0.95	<10%	160°	60,000
RLDL84C1540G1TH7	220-240	15	2550	4000K	170	80	>0.95	<10%	160°	60,000
RLDL84C1565G1TH7	220-240	15	2550	6500K	170	80	>0.95	<10%	160°	60,000
RLDL84C1830G1TH7	220-240	18	2880	3000K	160	80	>0.95	<10%	160°	60,000
RLDL84C1840G1TH7	220-240	18	3100	4000K	172	80	>0.95	<10%	160°	60,000
RLDL84C1865G1TH7	220-240	18	3100	6500K	172	80	>0.95	<10%	160°	60,000
RLDL84C2230G1TH7	220-240	22	3600	3000K	163	80	>0.95	<10%	160°	50,000
RLDL84C2240G1TH7	220-240	22	3750	4000K	170	80	>0.95	<10%	160°	50,000
RLDL84C2265G1TH7	220-240	22	3750	6500K	170	80	>0.95	<10%	160°	50,000

Operation temperature : -20°C to 45°C



## LED Tube T8 High Lumen

LED Tube lets you perfectly up wide range of the applications and very bright with hi lumen such as office, factory and public space. It will ensure bright light and a low energy consumption as well as long life.

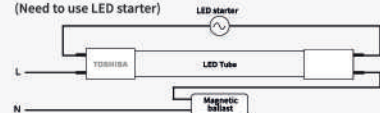


LED replacement starter

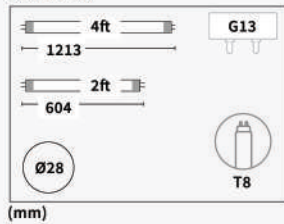
■ Wiring diagram for new installation (No need to use LED starter)



■ Wiring diagram for instead of installation fluorescent Lamp (Need to use LED starter)



### DIMENSION



### EQUIVALENT

18W/36W  
↓  
9W/18W

Compare to conventional fixture with fluorescent lamp

### ENERGY SAVING



Non-Dimmable



■ 2780-2562 TTLIC



■ 1955-2551 TTLIC



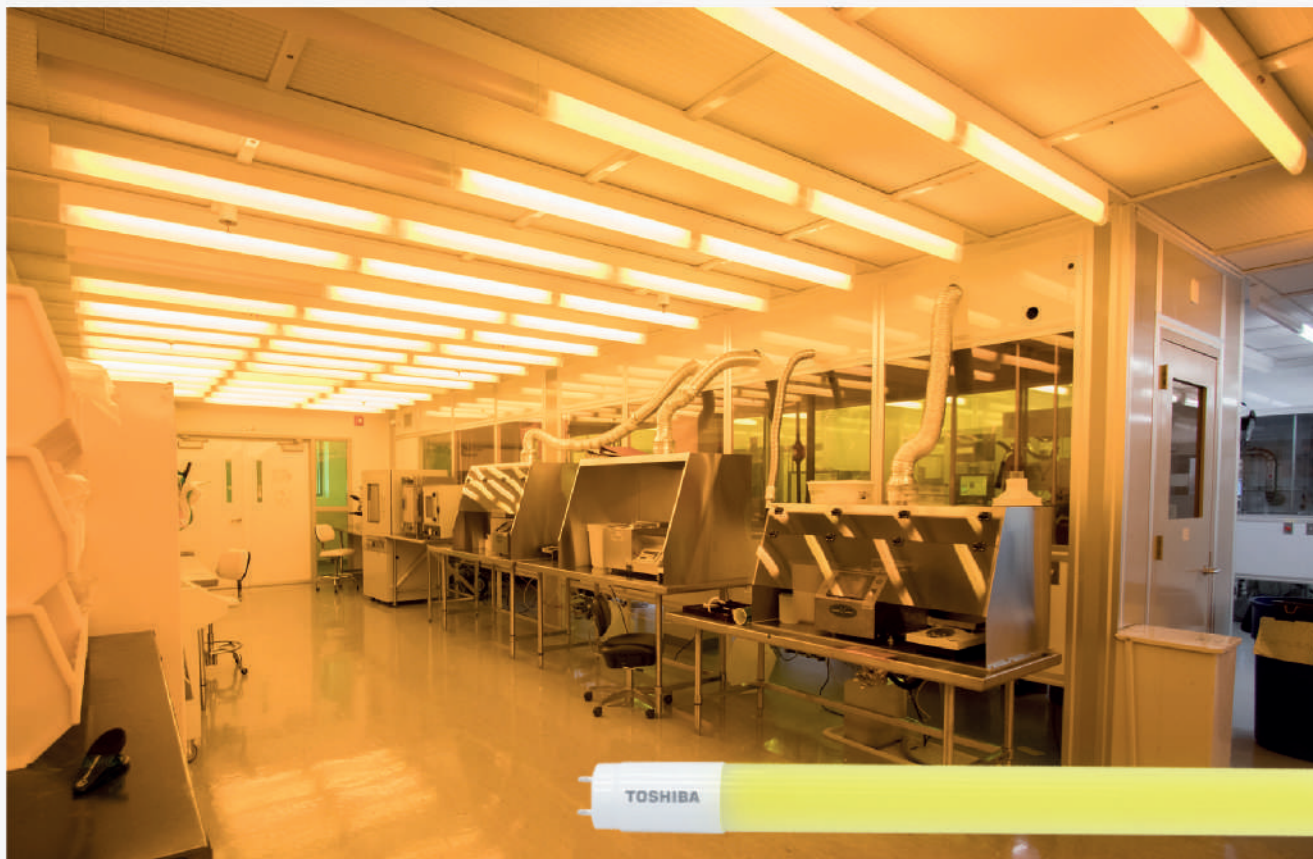
Surge Protection 0.5 kV

Product code	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (lm/W)	Color Temperature	Color Rendering Index (Ra)	Power Factor	Beam Angle	Lifespan (Hrs.)
RLDL82C0965G1TH1G	220-240	9	1100	122	6500K	80	0.5	170°	25,000h
RLDL84C1865G1TH1G	220-240	18	2200	122	6500K	80	0.5	170°	25,000h

Operation temperature : -20°C to 45°C







## LED Tube Deep Yellow

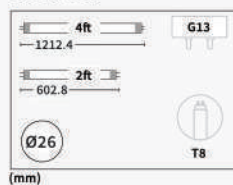
Insect repellent LED T8 Tube Deep Yellow, keeps pesky insects away with energy saving. Specially designed deep yellow colored light and also pleasing to humans. Standard certified for Safety and Quality. It is now available from 8 Watt and 14 Watt.

Industry : Clean Rooms, Laboratories and Research Facilities  
Hotels and Gastronomy : Commercial Kitchens  
Workplace : Utility Rooms

### IEC standard

IEC 62776 : Double-capped LED lamps designed to retrofit linear fluorescent lamps. – Safety specifications.

### DIMENSION

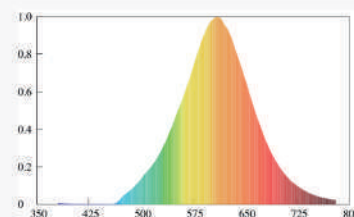


### EQUIVALENT

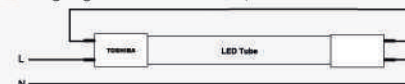
18W/36W\*  
↓  
8W/14W

Compare to conventional fixture with fluorescent lamp

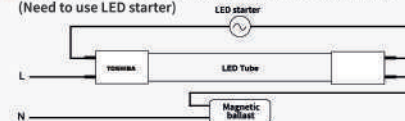
### ENERGY SAVING



### ■ Wiring diagram for new installation (No need to use LED starter)



### ■ Wiring diagram for instead of installation fluorescent Lamp (Need to use LED starter)



LED replacement starter



HfDf. 1955-2551



SURGE PROTECTION



Non-dimmable

Product code	Voltage (V)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (lm/W)	Color Temperature	Color Rendering Index (Ra)	Power Factor	THDi	Beam Angle	Lifespan (Hrs.)
RLDL82C0822G1TH1DY	220-240	8	880	110	2200K	50	0.95	<10%	160°	50,000h
RLDL84C1422G1TH1DY	220-240	14	1,540	110	2200K	50	0.95	<10%	160°	50,000h

Operation temperature : -25°C to 45°C



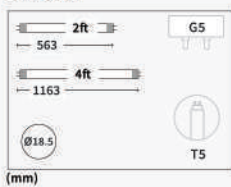
## LED Tube T5

Toshiba LED Tube T5 lets you perfectly light up wide range of the applications such as office, factory and public space. It will ensure bright light and a low energy consumption as well as long life. It is now available from 1,040 to 2,100 lm.

■ Wiring diagram after retrofit / new installation.



### DIMENSION



### EQUIVALENT



Compare to conventional fixture with fluorescent lamp

### ENERGY SAVING



Non-Dimmable



NBN 1955-2551 TTLC



Eye Safety IEC 62471



Surge Protection

Product code	Bulb Shape	Voltage (Vac)	Rated Wattage (W)	Luminous Flux (lm)	Color Temperature (K)	Efficacy (lm/W)	Color Rendering Index (Ra)	Beam Angle	Lifespan (Hrs.)
RLDAC0927E7TH1LS	A60	220-240	9	1000	2700K	111	80	220°	25,000h
RLDAC0965E7TH1LS	A60	220-240	9	1080	6500K	120	80	220°	25,000h
RLDAC1265E7TH1LS	A70	220-240	12	1200	6500K	100	80	220°	25,000h

Operation temperature : -20°C to 45°C

