

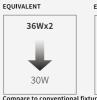


Toshiba LED linear waterproof have been specifically developed with

IP65-rated linear luminares and produce an excellent efficiency of 127 lm/W.

They are widely suitable for underground parking, warehosue which is designed for best replacement of waterproof flourescent fittings.











สว่างกลางใจ ไทยทุกดวง

LED Industrial & Outdoor

**TOSHIBA** 

IK 08

IP 66

Weight

(Kg)

3.35

4.15

5.36

5.87

(Hrs.)

50,000h

50,000h

50,000h

50,000h



Workshop

Warehouse Industrial Commercial

Ф360x201(200W)

Ф300x201(75W,110W,150W

FOUIVALENT

MH250W/MV400W/MH400W/MV700W

75W/110W/150W/200W

Compare to Metal Halide and Mercury Vapor







**LED Floodlight** 

363x284x91 (75W)

419x330x91 (115W) 454x373x91 (150W) 495x402x91 (200W)

Voltage

(V)

100-240

100-240

100-240

100-240

Operation temperature : -20°C to 50°C

Product code

RLDFD07565BTH1

RLDFD11565BTH1

RLDFD15065BTH1

RLDFD20065BTH1

Toshiba LED Floodlight provides lighting that draws attention to a large area

and helps to emphasize textures on vertical surfaces and walls. They can be

Toshiba LED Floodlight is perfect to use in Facade, signboard and parking area.

FOUIVALENT

Rated

Wattage (W)

75

115

150

200

MH250W/MV400W/MH400W/MV700W

75W/115W/150W/200W

Efficacy

(lm/W)

130

130

130

130

Luminous

Flux (lm)

10,000

15,000

20,000

26,000

ENERGY SAVING

Colour Color Rendering

≥80

≥80

≥80

≥80

Temperature Index (Ra)

6500K

6500K

6500K

6500K

**ENERGY SAVING** 

70%/71%/62%/71%

Power

Factor

>0.9

>0.9

>0.9

>0.9

Beam

Angle

110°

110°

110°

110°

used in outdoor fields providing steady lumen output and weatherproof functionality.







SNI 04-6973.2.1-2005

,	'								5000K only*			
Product code	Voltage (V)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Power Factor	Beam Angle	Weight (Kg)	Lifespan (Hrs.)		
RLDJC07550WTH1	220-240	75	10,500	140	5000K	≥80	>0.9	110°	2.67	50,000h		
RLDJC07565WTH1	220-240	75	10,500	140	6500K	≥80	>0.9	110°	2.67	50,000h		
RLDJC11050WTH1	220-240	110	15,400	140	5000K	≥80	>0.9	110°	2.71	50,000h		
RLDJC11065WTH1	220-240	110	15,400	140	6500K	≥80	>0.9	110°	2.71	50,000h		
RLDJC15050WTH1	220-240	150	21,000	140	5000K	≥80	>0.9	110°	2.76	50,000h		
RLDJC15065WTH1	220-240	150	21,000	140	6500K	≥80	>0.9	110°	2.76	50,000h		
RLDJC20050WTH1	220-240	200	28,000	140	5000K	≥80	>0.9	110°	3.04	50,000h		
RLDJC20065WTH1	220-240	200	28,000	140	6500K	≥80	>0.9	110°	3.04	50,000h		

ENERGY SAVING

70%/73%/63%/71%



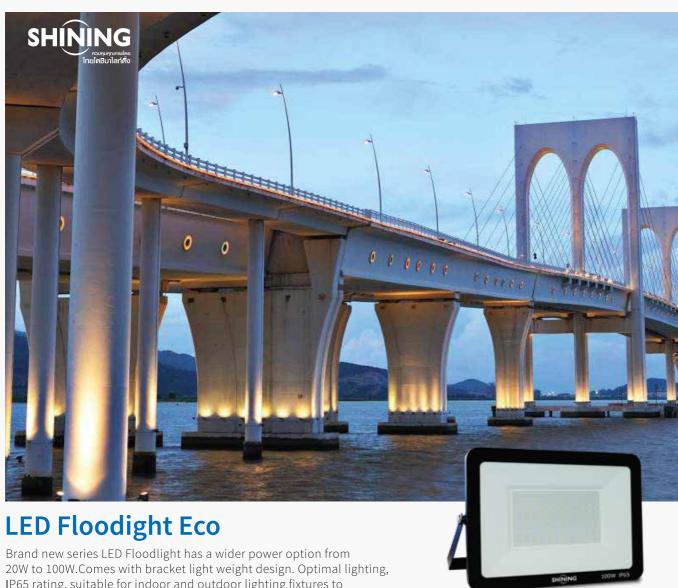


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LED Industrial & Outdoor



IP65 rating, suitable for indoor and outdoor lighting fixtures to give you a bright and safe night. Fit for landscape lighting, garden, building lighting, hotels and residential, and other outdoor place

for atmosphere decorate.



150x110(20W) 200x160(30W) 240x174(50W)







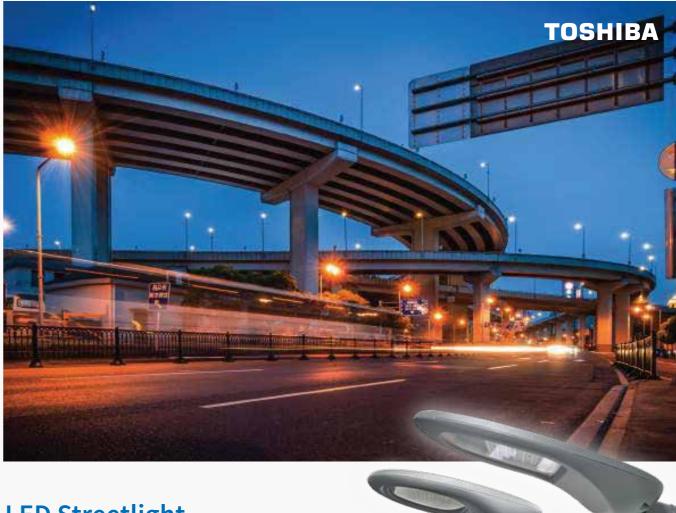




IP 65

Product code	Voltage (V)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (Im/W)	Colour Temperature	Color Rendering Index (Ra)	Power Factor	Beam Angle	Weight (Kg)	Lifespan (Hrs.)
RLCFC02030CTH1	220-240	20	1,600	80	3000K	≥80	0.9	120°	0.3	30,000h
RLCFC02065CTH1	220-240	20	1,700	85	6500K	≥80	0.9	120°	0.3	30,000h
RLCFC03030CTH1	220-240	30	2,400	80	3000K	≥80	0.9	120°	0.6	30,000h
RLCFC03065CTH1	220-240	30	2,550	85	6500K	≥80	0.9	120°	0.6	30,000h
RLCFC05030CTH1	220-240	50	4,250	85	3000K	≥80	0.9	120°	8.0	30,000h
RLCFC05065CTH1	220-240	50	4,500	90	6500K	≥80	0.9	120°	0.8	30,000h
RLCFC10030CTH1	220-240	100	8,500	85	3000K	≥80	0.9	120°	2.1	30,000h
RLCFC10065CTH1	220-240	100	9,000	90	6500K	≥80	0.9	120°	2.1	30,000h

Operation temperature : -20°C to 45°C



**LED Streetlight** 

The Toshiba LED streetlight series offer more 15 years of service life to significantly reduce maintenance frequency and expense, base on a 50,000 hours life and 12 hours of operation per day. This efficiency fixture can yield up to a 60 percent reduction in system energy compared with standard HID system, depending on roadway applications.







LDWC08060WTH2



LDWC10060WTH2

LDWC12060WTH2

LDWC15060WTH2



100 520	<u>.</u>	100 680	→ LDWC10060WTH
	130 LDWC08060WTH		128 LDWC12060WTH
Ф48-60‡	300	Φ60 \$	370

DWC10060WTH2 DWC12060WTH2 DWC15060WTH2	150W/250W/250W/400W
0	80W/100W/120W/150W
	Compare to High Pressure Sodium lamp

EOUIVALENT

Product code	Voltage (V)	Rated Wattage (W)	Luminous Flux (lm)	Efficacy (lm/W)	Colour Temperature	Color Rendering Index (Ra)	Power Factor	Beam Angle	Weight (Kg)	Lifespan (Hrs.)
LDWC08060WTH2	220-240	80	8,000	110	6000K	70	>0.95	Wide	5.3	50,000h
LDWC10060WTH2	220-240	100	11,000	110	6000K	70	>0.95	Wide	8.5	50,000h
LDWC12060WTH2	220-240	120	13,200	110	6000K	70	>0.95	Wide	8.5	50,000h
LDWC15060WTH2	220-240	150	16,500	110	6000K	70	>0.95	Wide	8.5	50,000h

Operation temperature : -20°C to 50°C

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# Fluorescent Lamps

### Standard

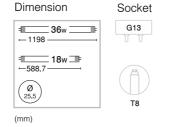
#### "Toshiba's standard, the world fluorescent's standard"

Pre- heat start lamps use a "start switch "which operates only at the moment the lamp is switched on to pre-heat the cathodes. The use of this starter permits more economical ballast designs. Of all fluorescent lamps this is the most economical type with long life, high lumen output and low initial cost.

#### Specification

- » Luminous efficacy up to 75 lm/W for fluorescent 36 W and 61 lm/W for fluorescent 18 W.
- » Available in 3 colors : Daylight, Cool White and Warm White
- » First certificate approval of Green label in Thailand.
- >> First TIS certificate of 20,000 hrs. approval in Thailand.

### Dimension



Product Code	Watts	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Daylight							
FL18W/T8/DAYLIGHT	18	0.500	1,090	70	61	20,000	30
FL36W/T8/DAYLIGHT	36	6,500	2,500		70		
Cool White							
FL18W/T8/COOLWHITE	18	4.000	1,200		67	20,000	30
FL36W/T8/COOLWHITE	36	4,200	3,100	70	86		
Warm White							
FL18W/T8/WARMWHITE	18	2 000	1,200	70	67	20,000	20
FL36W/T8/WARMWHITE	36	3,000	3,100	/0	86	20,000	30

TOSHIBA

Fluorescent Standard

Fluorescent Shatter proof

Fluorescent Super daylight

Fluorescent Special colors

Fluorescent Control gears

Fluorescent Circline lamp

Compact Fluorescent lamp

Fluorescent Repel & Lure insects

Fluorescent Buddhist religious set

Fluorescent Extra

Fluorescent lamp

# Fluorescent Lamps

### Extra (3 Band Phosphors)

#### "The more clear, the more relieve"

With 3 types of phosphor colored blue, green and red, color performance (the way that the color looks) is vastly improved and color is reproduced vividly. Color performance, where the quality of light has become luxuriant, is obtained by these lamps with the ideal conditions to meet your needs for high quality, authenticity and nature.

#### Specification

Dimension

» Relief with 25% brighter but less power consume as usual.

Socket

G13

- » Generate light as close natural light with high color accuracy, CRI 85, while only CRI 69-70 by general fluorescent lamp.
- » Suitable for areas that require more clear such as terrace light, building light.



















# Dimension Ø 25.5

G13	
44	

### Fluorescent Lamps

### **Shatter Proof**

#### "Meticulously developed to protect you"

Due to safety of you all from broken fluorescent tube. Toshiba has developed the Shatter Proof lamps by covered the whole lamp with transparency rasin in order to cover the glass not to spread and do harm

#### Specification

- » Protected more by cover one more layer on the glass tube with qualitatively resin
- >> 25% brighter but small energy consume as usual.
- » Generate light as close natural light with high color accuracy, CRI 85, while only CRI 69-70 by general fluorescent lamp.
- » Suitable to high safety wanted areas such as food factory or office.

### Super Daylight

#### "Fresh light, fresh attractive for a signage"

Fresh light with an overflowing cool-rays. You can create a fresh space with Super Daylight under the color temperature at 12,000 kelvin of Super Daylight and Super Extra Daylight.

#### Specification of Supre Extra Daylight

- » Color temperature at 12,000 KELVIN, CRI 85.
- » Available in both 18W and 36 W.
- » Suitable for billboard and display shop.
- » More white light can bring up the color of displayed products.

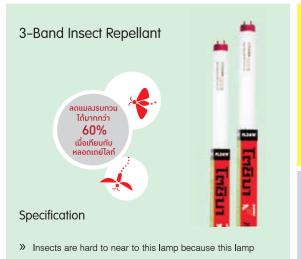
Product Code	Watts	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Extra Daylight							
FL18W/T8/EX-D	18	6,500	1,300	85	72	18,000	30
FL36W/T8/EX-D	36	6,500	3,250		90		30
Extra Cool White							
FL18W/T8/EX-W	18	4,000	1,350	85	75	13,000	30
Extra Warm White							
FL36W/T8/EX-WW	36	3,000	3,350	85	93	13,000	30

Product Code	Watts	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Daylight							
FL18W/T8/EX-D-P	18	0.500	1,260	84	70	18,000	30
FL36W/T8/EX-D-P	36	6,500	3,250		90		
Super Daylight							
FL18T8 12K/18	18	10.000	940		52	12,000	25
FL36T8 12K/36	36	12,000	2,320	70	64		
Super Extra Daylight 🕒							
FL20T8 EX-12K/18	18	10,000	1,118	85	62	10,000	O.E.
FL40T8 EX-12K/36	36	12,000	2,795	00	78	12,000	25

# Fluorescent Lamps



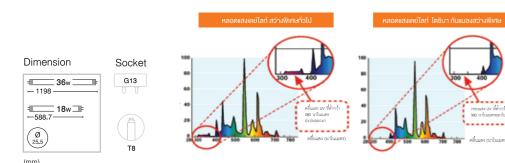
## "Repel & Lure" insects

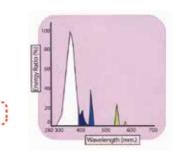


- have ultraviolet filter to cut wave length lower than 380nm.
- » Reduce insect infestation than 60%.
- » Last up to 18,000 hrs.
- >> 25% brigther than typical fluorescent lamps









Product Code	Watts	Temp. (K)	Flux (lm)	Rend Index	•	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Insect Repellant								
FL18W/T8/EX-D-MS	18	6 500	1,300	84	72	18,000	30	
FL36W/T8/EX-D-MS	36	6,500	3,250	04				90
Deep Yellow								
FL18W/T8/DY	18	Dana Vallau		-			40.000	30
FL36W/T8/DY	36	Deep Yellow	=			-	12,000	
Black Light Fluorescent								
FL20T8BL/18	18	Dio ale Limbt	30			3.2		25
FL40T8BL/36	36	Black Light	53	53		6.0	5,000	25

# Fluorescent Lamps

# **Special Colors**

6 colors variation (Red, Deep red, Blue, Green, Yellow and Deep yellow) provides attractive colorful decoration in shops, restaurants, festivals or special events.

Toshiba utilities in this regard. We focus on the development of color fluorescent to expand happiness, under light more than ever.

### Light & Color



Red: is a warm and positive color associated with our most physical needs. Red light is widely used to decorate any celebration.



Deep Red: is more sophisticated and serious and less energetic than red. It indicates controlled power and is often favored by the wealthy.



Blue: is the color of trust and peace. It can suggest loyalty and integrity as well as conservatism and frigidity.



Socket

Dimension

-588.7

Yellow: is the color of the mind and the intellect. It is optimistic and cheerful. However it can also suggest impatience, criticism and cowardice.



Green: It is the color of natural, makes you open and free. While green light is well shining through the water. It is widely used in the shallow squid fishing.



Deep Yellow: is the color of the loner with an intense curiosity and interest in investigating the finer details of its interests.

Product Code	Watts		Color	Average Life (hrs.)	Std. Packing	
FL Color 18W				,	,	
FL18W/T8/DY		• [	Deep Yellow			
FL18W/T8/DR		•	Deep Red		30	
FL18W/T8/B	10	•	Blue	10.000		
FL18W/T8/RE	18	•	Red	12,000		
FL18W/T8/Y		•	Yellow			
FL18W/T8/G		•	Green			
FL Color 36W						
FL36W/T8/DY		• [	Deep Yellow			
FL36W/T8/DR		•	Deep Red			
FL36W/T8/B	20	•	Blue	40.000	00	
FL36W/T8/RE	36	•	Red	12,000	30	
FL36W/T8/Y		•	Yellow			
FL36W/T8/G		•	Green			

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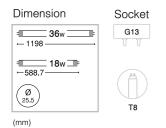
# Fluorescent Lamps

# **Buddhist Religious Set**

### "Offering brightness, Bright up your life"

Toshiba's religious lamp set is used to offering to the monk in any Buddhist ceremony. Regarding to the believe of Buddhism about offering offering lighting things to a monk will return lightness to the life and dispel the misery.

The Toshiba's religious lamp sets are available as a set of 3, 5 and 9 tubes and also has the "All in one set" (The ready set of fluorescent with fixture, ballast and starter). Products come with nice package design and relevant hymns.











Product Code	Watts	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing			
Buddhist Religious lamp sets										
FL18W/T8/D-3M							3			
FL18W/T8/D-9M	18		1,090		61		9			
FL36W/T8/D-3M	00	6,500	0.000	70	75	20,000	3			
FL36W/T8/D-9M	36		2,690		/5		9			

# Fluorescent Control Gears Starter

#### Specification

- Strong resin encasement.
- » Perfect electrical insulation.
- » Moisture proof.
- » Heat-resistant.

Product Code	Voltage 50-60 HZ (V)	ชนิดหลอด		กำลับไฟ	(Watts)		Std. Packing
FG-UP		T5	4	6	8	13	
		Т8	10	15	18	36	
	000.040	Т9	19	38			0.5
	220–240	T10	20	40			25
		T12	20	40			
		หลอดกลม	22	30	32	40	

### Fluorescent Circline

### Extra

#### "Coverage all needs colors to fulfill happiness"

The modern round shape of the Toshiba Circline lamps is the basis, for many unique illumination applications. "Circline" is also available as a table lamp or chandelier and it can be used in conjunction with compact fluorescnt lamps as well.

Toshiba's fluorescent lamp has been changed from liquid mercury to "Amalgam" in order to reduce the spread of mercury into the environment. Toshiba also changed from butyl coating to water base coating, which harmful to humans and the environment.



- » 25% brighter but small energy consume as usual.
- » Generate light as close natural light with high color accuracy,
- » Ideal for an areas that require extra brightness.
- » Last up to 10,000 hrs.

Dimension	Dimension	Dimension	Socket
22w 210	9 29 30w 230	929 32w 300	G10q
	(mm)	(mm)	

TOSHIBA

Product Code	Watts	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing		
FCL 32D/30	32	6,500	1,890	70	59	10,000	20		
Circular Fluorescent Extra	EXTRA								
FCL 22 EX-D/21	22		1,220		55		30		
FCL 30 EX-D/28	30	6,500	2,000	85	67	10,000	20		
FCL 32 EX-D/30	32		2,360		74		20		

## **Compact Fluorescent**

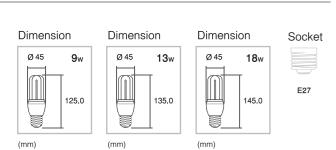
### **NEOBALL 3U**

#### "EFD - they are super star"

The Toshiba's NEOBALL EFD provides high efficacy luminosity than other one on the same series. In advantage, it can save up to 80% energy consume than incandescent lamps and not cause electromagnetic interference during use. This is the super star like no one else.

### Specification

- » High luminous efficacy.
- » Available in both 11W and 13W with E27 socket.
- » Up to 80% energy saving than incandescent lamps.
- » Last up to 6,000 hrs.
- » Not cause electromagnetic.
- » EMC standard certified.







### **Compact Fluorescent**

### **NEOBALL Twist**

#### "Twist - compact and stylish"

Compact Fluorescent Lamp "Twist" was named from its shape which sompact and small. It is suitably to plenty type of luminaires such as downlight, table lamps and many more. In davantage, as the shape of twist so it can emit the light as same as other shape which has longer

### Specification

- » High luminous efficiency.
- » E14 socket is available for EFS 8 Watts.
- » Last up to 6,000 hrs.
- » High efficiency (lumens / Watts).
- » Not cause electromagnetic interference during use.
- » EMC standard certified.

Dimension	Dimension	Dimension	Dimension	Dimension	Socket
Ø 48 <b>8</b> w	Ø 48 <b>14</b> w	Ø 55 18w	Ø 55 <b>22</b> w	Ø 65 <b>28</b> w	
95.0	104.0	115.0	122.0	159.0	E27
(mm)	(mm)	(mm)	(mm)	(mm)	

Product Code	Watts	Replace to (W)	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Daylight								
EFD9D/65-E3U	9	50		510		57		
EFD13D/65-E3U	13	70	0.500	710	0.4	55	0.000	20
EFD18D/65-E3U	18	100	6,500	1,000	84	56	6,000	20
Warm White								
EFD9L/27-E3U	9	50		560		62		
EFD13L/27-E3U	13	70	0.700	810	0.4	62	0.000	00
EFD18L/27-E3U	18	100	2,700	1,100	84	61	6,000	20

Product Code	Watts	Replace to (W)	Temp. (K)	Flux (lm)	Rendering Index (Ra)	Efficacy (lm/w)	Average Life (hrs.)	Std. Packing
Daylight			1					
EFS8D/65 (E14, E27)	8	50		520		65		
EFS14D/65	14	80		900	84	64	6,000	20
EFS18D/65	18	100	6,500	1,150		64		
EFS22D/65	22	115		1,380		63		
EFS28D/65	28	135		1,700		61		
Warm White								
EFS8L/27 (E14, E27)	8	50		570		71		
EFS14L/27	14	80	2,700	1,000	84	71	6,000	20
EFS18L/27	18	100		1,290		72		
EFS22L/27	22	115		1,550		74		
EFS28L/27	28	135		1,870		67		

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