

Incandescent Lighting Fixtures EFL Series

Wet Locations
Factory Sealed
NEMA 3, 3R, 7



❖ Type of Explosion-proof
Class I Division 1,2 Group C,D
Flameproof (Ex d IIC T3)

❖ Application

- EFL Series lighting fixtures are used :
- in locations which are hazardous due to the presence of flammable vapors or gases and where dampness or corrosion are present.
 - as pendant, ceiling, wall bracket or bulkhead fixtures, indoor for general area or room lighting and outdoor for spot lighting.

❖ Standard Finish

- MUNSSELL No. 7.5BG 6/1.5
- If you want another color, contact us please.



<EFL 6021>

❖ Features

- Factory sealed – no external seal required
- Easy to assemble and relamping
- Light weight
- Corrosion resistant
- Inner reflector eliminates upward spill light

❖ Standard Materials

- Enclosure : Die casting aluminium
- Globe : Heat resistant hard glass
- Inner Reflector : Extra pure aluminium
- Guard : Die casting aluminium

❖ Certification

- UL Listed File No. E 131747
- Certified by UL (Underwriters Laboratories Inc.), KOSHA (Korea Occupational Safety & Health Agency), KGS (Korea Gas Safety Corporation), and the others.

❖ Compliance

- NEC – Class I Division 1,2 Group C,D,
- UL 844 – Lighting Fixtures for Use in Hazardous (Classified) Locations
- IEC 60079-0, 1
- NEMA 3, 3R, 7
- IP 55

❖ Technical Data

Electrical Rating	
Rated Voltage	Max. 240V (120V/ 220V for UL Listed)
Rated Wattage	100W/ 200W/ 300W
Rated Frequency	50Hz/ 60Hz
Entry Size	
	1/2", 3/4", 1"

❖ Weight

Mounting Type	Catalog No.	Weight
Pendant	EFL 6011	5.3 kg
Ceiling	EFL 6021	5.2 kg
Bulkhead	EFL 6043	7.3 kg
Bracket	EFL 6033	8.1 kg

❖ Ordering Number

Lamp	Watt	Pendant	Ceiling	Bracket	Bulkhead	Certification
Incandescent	100	EFL 6011	EFL 6021	EFL 6031	EFL 6041	Class I Division 1,2 Group C,D Ex d IIC T3
	200	EFL 6012	EFL 6022	EFL 6032	EFL 6042	
	300	EFL 6013	EFL 6023	EFL 6033	EFL 6043	

⇒ If you need more information, contact us please

❖ Ordering Information

EFL 60 1 1			
①	②	③	④

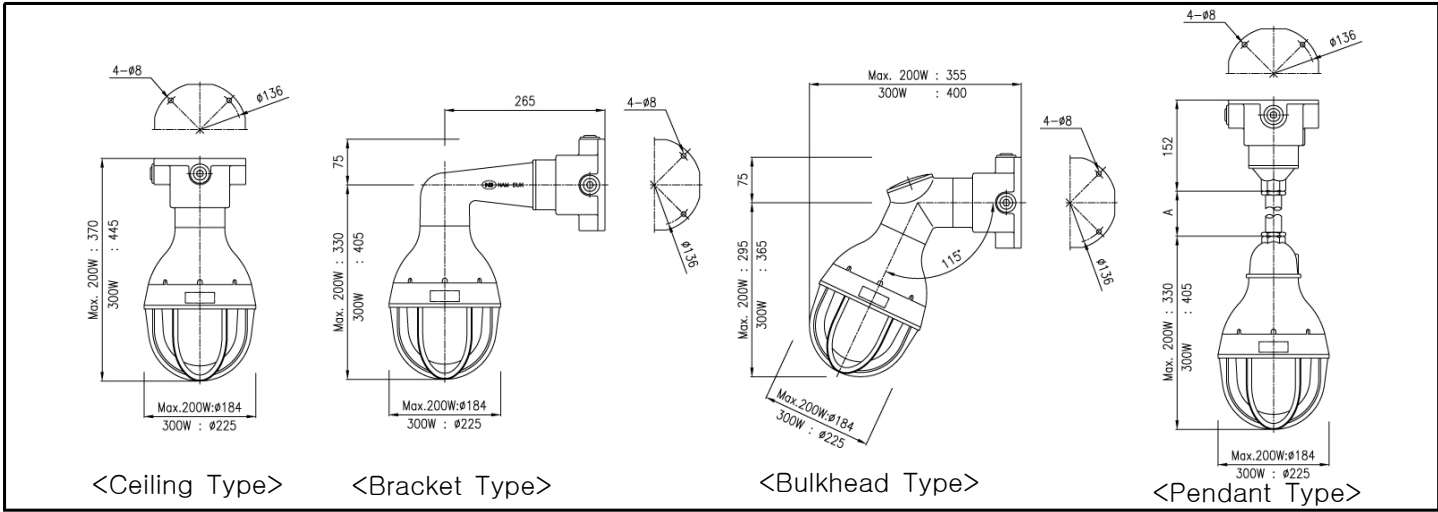
- ① EFL Lighting Fixture ③ Mounting Type ④ Watt
- ② Lamp Type
- 60 - Incandescent
- 1 - Pendant 1 - 100
- 2 - Ceiling 2 - 200
- 3 - Bracket 3 - 300
- 4 - Bulkhead

❖ Temperature Performance Data

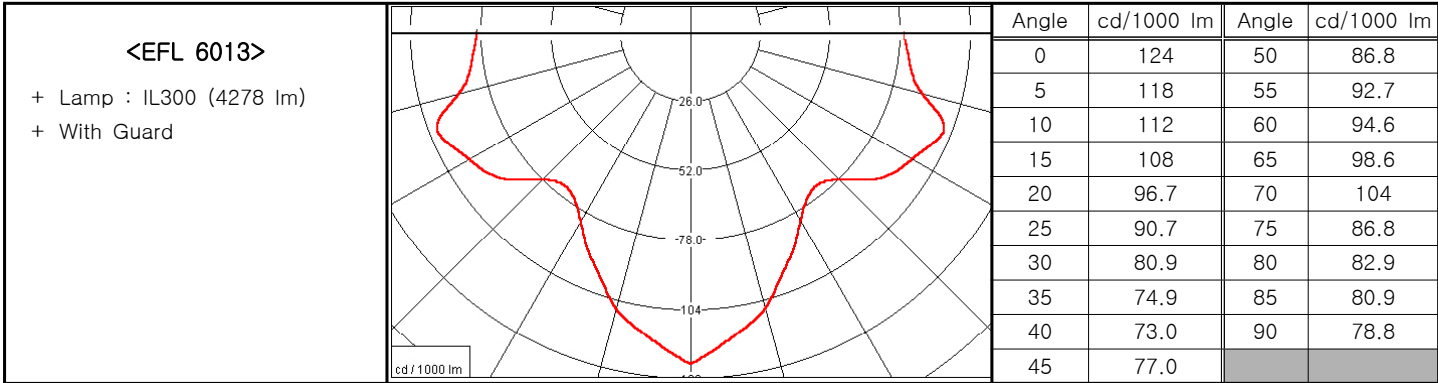
Lamp		Ambient	Class I	Flameproof
Type	Watt.	Temp (°C)	Group C,D	"d"
Incandescent	100	40	120 (T4A)	T3
		55	-	-
	200	40	160(T3C) / 120(T4A)*	T3
		55	-	-
	300	40	160 (T3C)	T3
		55	-	-

* are when use 300W body

❖ Dimension



❖ Photometric Data



Coefficients of Utilization - Zonal Cavity

%Effective Ceiling Cavity Reflectance(ρ_{cc})	80			70			50			30			10			0
	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance															
0	.66	.66	.66	.64	.64	.64	.61	.61	.61	.59	.59	.59	.56	.56	.56	.55
1	.56	.53	.50	.54	.52	.49	.52	.50	.48	.50	.48	.46	.48	.46	.45	.44
2	.47	.43	.39	.46	.42	.38	.44	.41	.38	.42	.39	.37	.40	.38	.36	.34
3	.41	.35	.31	.40	.35	.31	.38	.34	.30	.36	.33	.30	.35	.32	.29	.28
4	.35	.30	.26	.35	.30	.26	.33	.29	.25	.32	.28	.25	.31	.27	.25	.23
5	.31	.26	.22	.31	.26	.22	.30	.25	.22	.28	.24	.21	.27	.24	.21	.20
6	.28	.23	.19	.28	.23	.19	.27	.22	.19	.26	.22	.19	.25	.21	.18	.17
7	.26	.20	.17	.25	.20	.17	.24	.20	.17	.23	.19	.16	.23	.19	.16	.15
8	.23	.18	.15	.23	.18	.15	.22	.18	.15	.22	.18	.15	.21	.17	.15	.14
9	.22	.17	.14	.21	.17	.14	.21	.16	.13	.20	.16	.13	.19	.16	.13	.12
10	.20	.15	.12	.20	.15	.12	.19	.15	.12	.19	.15	.12	.18	.15	.12	.11

Compact Fluorescent Lighting Fixtures EFL Series

Wet Locations
Factory Sealed
NEMA 3, 3R, 7

❖ Type of Explosion-proof
Flameproof (Ex d IIC T5)

❖ Application

EFL Series lighting fixtures are used ;

- in locations which are hazardous due to the presence of flammable vapors or gases and where dampness or corrosion are present.
- as pendant, ceiling, wall bracket or bulkhead fixtures, indoor for general area or room lighting and outdoor for spot lighting.

❖ Standard Finish

- MUNSELL No. 7.5BG 6/1.5
- If you want another color, contact us please.



<EFL 7014>

❖ Features

- Factory sealed – no external seal required
- Easy to assemble and relamping
- Light weight
- Corrosion resistant
- Inner reflector eliminates upward spill light
- Use compact fluorescent lamp 20W instead of incandescent lamp.

❖ Standard Materials

- Enclosure : Die casting aluminium
- Globe : Heat resistant hard glass
- Inner Reflector : Extra pure aluminium
- Guard : Die casting aluminium

❖ Certification

- Certified by KOSHA (Korea Occupational Safety & Health Agency), KGS(Korea Gas Safety Corporation), and the others.

❖ Compliance

- IEC 60079-0, 1
- NEMA 3, 3R, 7
- IP 55

❖ Technical Data

Electrical Rating	
Rated Voltage	Max. AC240V
Rated Wattage	Compact Fluorescent 20W
Rated Frequency	50Hz/ 60Hz
Entry Size	1/2", 3/4", 1"

❖ Weight

Mounting Type	Catalog No.	Weight
Pendant	EFL 7014	5.3 kg

❖ Ordering Number

Lamp	Watt	Pendant	Ceiling	Bracket	Bulkhead	Certification
Compact Fluorescent	20	EFL 7014	EFL 7024	EFL 7034	EFL 7044	Ex d IIC T5

⇒ If you need more information, contact us please.

Lighting Fixture

❖ Ordering Information

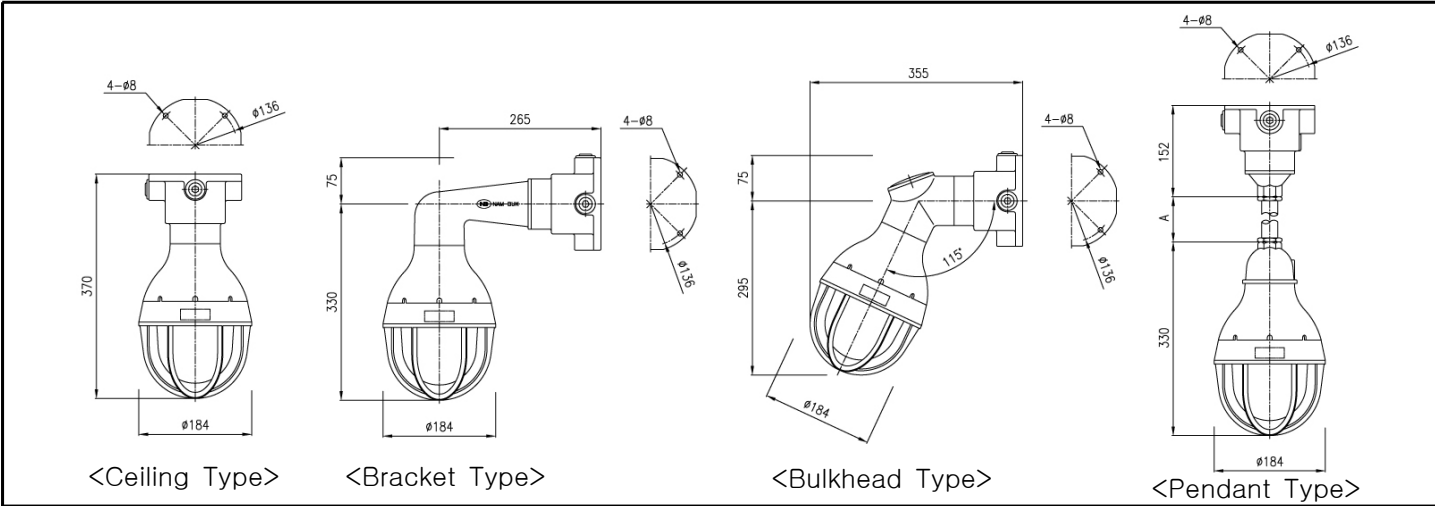
EFL 70 1 4
① ② ③ ④

- ① EFL Lighting Fixture
- ② Lamp Type
70 - Compact Fluorescent
- ③ Mounting Type
1 - Pendant
2 - Ceiling
3 - Bracket
4 - Bulkhead
- ④ Watt : 4 - 20

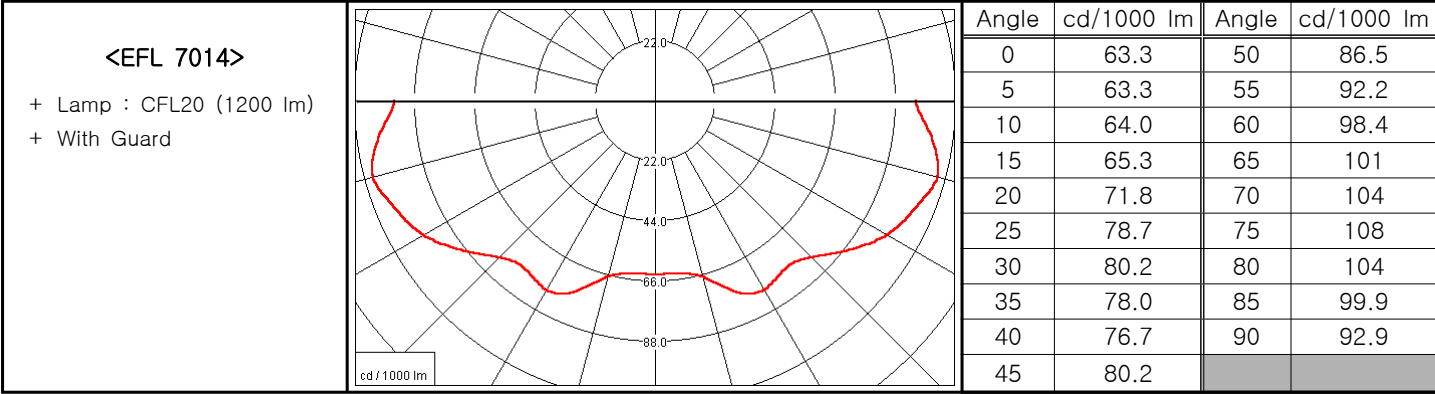
❖ Temperature Performance Data

Lamp		Ambient Temp (°C)	Flameproof "d"
Type	Watt.		
Compact Fluorescent	20	40	T5
		55	-

❖ Dimension



❖ Photometric Data



■ Coefficients of Utilization - Zonal Cavity

%Effective Ceiling Cavity Reflectance(ρ_{cc})	80			70			50			30			10			0
%Wall Reflectance(ρ_w)	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance															
0	.69	.69	.69	.67	.67	.67	.64	.64	.64	.62	.62	.62	.59	.59	.59	.58
1	.58	.55	.52	.57	.54	.51	.54	.52	.50	.52	.50	.48	.50	.48	.47	.45
2	.48	.44	.39	.47	.43	.39	.45	.41	.38	.43	.40	.37	.41	.39	.36	.35
3	.41	.35	.31	.40	.35	.31	.38	.34	.30	.37	.33	.29	.35	.32	.29	.27
4	.36	.30	.25	.35	.29	.25	.33	.28	.25	.32	.28	.24	.30	.27	.24	.22
5	.31	.25	.21	.31	.25	.21	.29	.24	.21	.28	.24	.20	.27	.23	.20	.19
6	.28	.22	.18	.27	.22	.18	.26	.21	.18	.25	.21	.17	.24	.20	.17	.16
7	.25	.20	.16	.25	.19	.15	.24	.19	.15	.23	.18	.15	.22	.18	.15	.14
8	.23	.17	.14	.22	.17	.14	.22	.17	.14	.21	.17	.13	.20	.16	.13	.12
9	.21	.16	.12	.21	.16	.12	.20	.15	.12	.19	.15	.12	.19	.15	.12	.11
10	.19	.14	.11	.19	.14	.11	.18	.14	.11	.18	.14	.11	.17	.14	.11	.10