



## Providing light to ensure safety on the road

# LEDSROAD

LED Road Lighting LLF0016A / LLF0017A



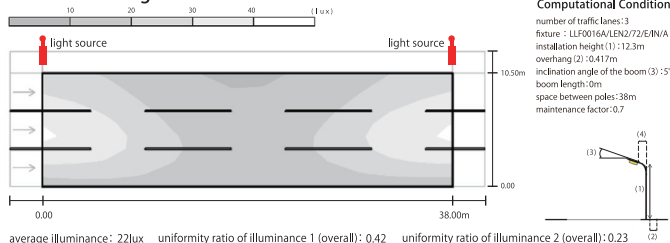
**LLF0016A** The tolerance to lightning surge is as high as 20kV, which provides security in a long term use under harsh conditions. The risk of bugs getting inside the product is very low, because it is designed with high airtightness (IP66) even on the parts other than the light source. The product can meet a variety of demands because it can provide many combinations of its output range, which is 100-200W, and its four patterns of light distribution. Construction for this lighting fixture is simple because opening/closing of the cover does not require a tool.

Design that suits urban areas	Implemented optimal control of light distribution with the slim body that matches a variety of scenes.
High tolerance to UV	Tempered glass is used for the outer lens of the light-emitting part, and the optical lenses are made of acrylic.
High tolerance to heat	Ambient temperature is 50°C at the highest.
Wide range of input voltage	Voltage for lighting can be in the range of AC90-305V; usable in regions with unstable voltage.
Wide variety of lenses	The most suitable lens can provide the road with a uniform light distribution.
Maintenance & upgrade	In addition to the power source part, we unitized the LED part so it can be replaced or upgraded by unit.

### Specifications

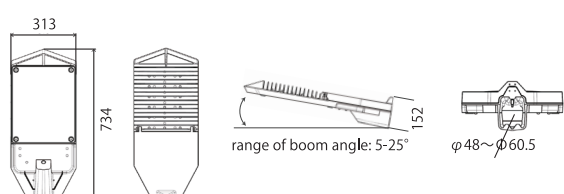
Power Consumption (at 220V)	117W	134W	150W	159W	167W	202W
Fixture Luminous Flux	15,000lm	17,200lm	19,400lm	20,400lm	21,500lm	25,800lm
Luminous Efficiency	129lm/W	129lm/W	129lm/W	129lm/W	129lm/W	129lm/W
Class of the Lighting	ME3~ME6	ME2~ME6	ME1~ME6	ME1~ME6	ME1~ME6	ME1~ME6
Type of Road	general	general	general / expressway	general / expressway	general / expressway	expressway
Material:	Body: aluminum die-cast, Outer lens: tempered glass					
Color Temperature:	4000K					
Waterproof and dustproof:	IP66					
LED light source lifetime:	60,000h (lumen maintenance factor 70%)					
Shock Resistance:	IK08					
Vibration Resistance:	2G					
Wind Resistance:	60m/s					
Input Voltage:	rated voltage AC100~240V (AC90~305V)					
Lightning Surge Protection Pressure Resistance:	20kV (Common mode)					

### Simulation of light Distribution



### External Dimension

unit: mm



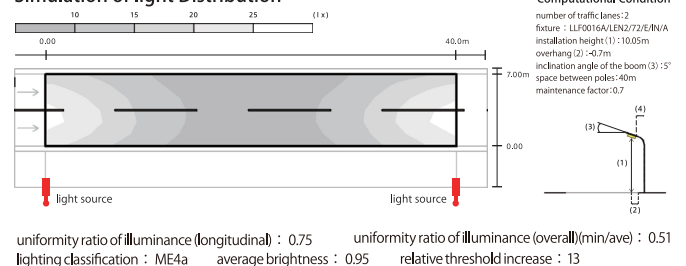
**LLF0017A** We materialized this compact and lightweight body while having the power source built in the fixture. The risk of bugs getting inside the product is very low, because it is designed with high airtightness (IP66) even on the parts other than the light source. Its wide light-distribution and high utilization factor allow a minimized number of installation of fixture. Construction for this lighting fixture is simple because opening and closing of the cover does not require a tool.

Design that suits urban areas	Implemented optimal control of light distribution with the slim body that matches a variety of scenes.
High tolerance to UV	Tempered glass is used for the outer lens of the light-emitting part, and the optical lenses are made of acrylic.
High tolerance to heat	Ambient temperature is 50°C at the highest.
Wide range of input voltage	Voltage for lighting can be in the range of AC90-305V; usable in regions with unstable voltage.
Maintenance & upgrade	In addition to the power source part, we unitized the LED part so it can be replaced or upgraded by unit.
High brightness & efficiency	Materialized 0.94cd/m <sup>2</sup> with power consumption 90W, while the standard brightness value of EU roads is ≥0.75.

### Specifications

Power Consumption (at 220V)	42W	70W	90W
Fixture Luminous Flux	5,300lm	8,400lm	11,000lm
Luminous Efficiency	126lm/W	120lm/W	122lm/W
Material:	Body: aluminum die-cast, Outer lens: tempered glass		
Color Temperature:	4000K		
Waterproof and dustproof:	IP66		
LED light source lifetime:	60,000h (lumen maintenance factor 70%)		
Shock Resistance:	IK08		
Vibration Resistance:	2G		
Ambient Temperature:	-40 ~ + 55°C		
Wind Resistance:	60m/s		
Input Voltage:	rated voltage AC100~240V (AC90~305 V) *90W type has rated voltage AC200-240V (AC160-305V)		
Lightning Surge Protection Pressure Resistance:	10 k V (Common mode)		
Weight:	5.0 kg		
Height of Installation:	6~12m		
Compatible Pole:	Φ60.5mm × 100mm		

### Simulation of light Distribution



### External Dimension

unit: mm

