# RoadGrace

8K Lumen Package 2015 Q2 2016 18K lumen



### RoadGrace

### Complete Road lighting Luminaire









#### RoadGrace

#### Complete Road lighting Luminaire

- New aesthetic design road Luminaire
- Suitable for multiple application area (road, Stree and Urban applications)
- Unique optic options
- Die-cast Aluminum housing.
- Fully IP66 and IK08 rated



- Adjustable mounting spigot
- Two size of configurations (8,000lm Small and 18,000lm for medium)

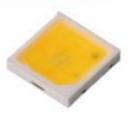




### Reliability and world class components



Offer aesthetic design with adjustable spigot and option for side entry & post top (ADC1 with MSP)



Designed with top class LED's to ensure reliability and long lifetime. (Nichia 757D –V1)



Five optics options which are optimized for multiple road / street applications. ( DM, DW1, DW2S, **DWP3** and **DWP**)



Use high specification drivers and SPD which ensure longer lifetime and operation on extreme conditions. (Philips Xitanium LED driver)

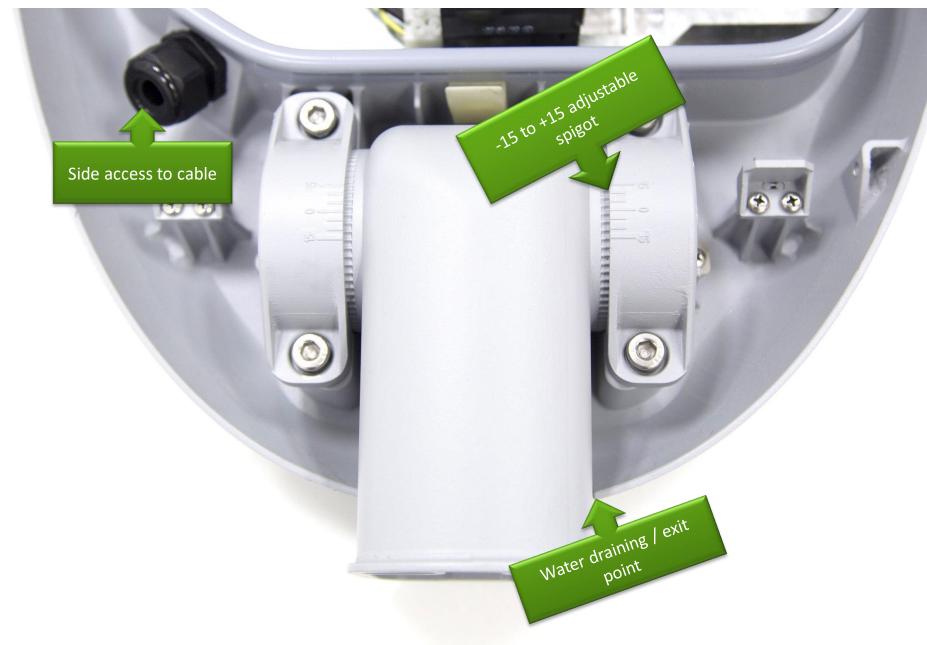




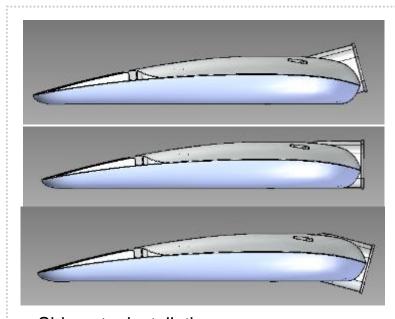




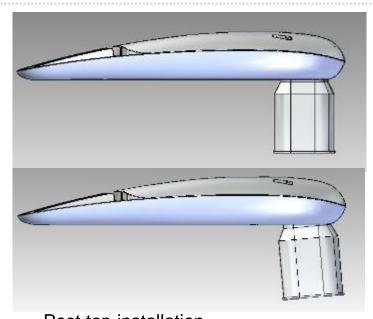




### 1. Adjustable spigot & installation



Side entry installation Adjusted angle: -15° ~+15°



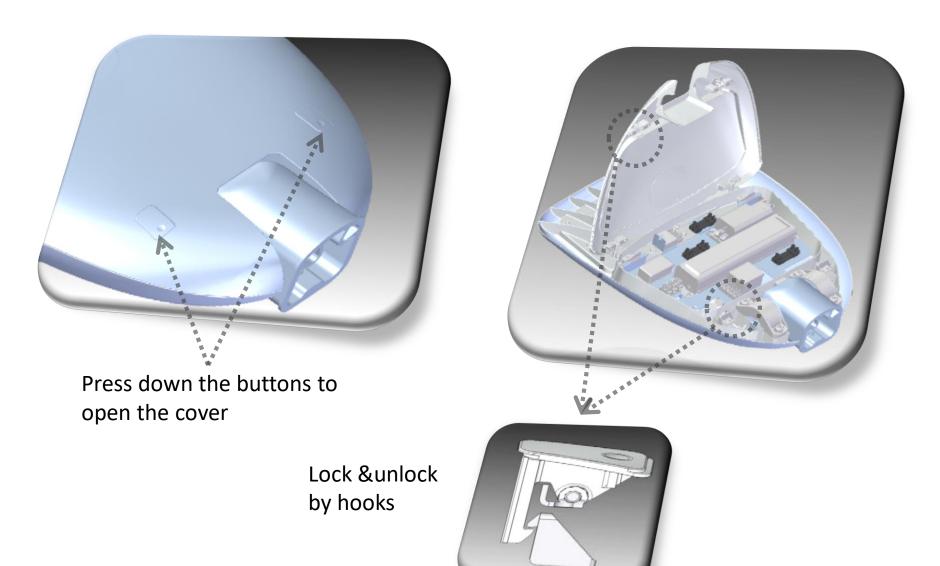
Post top installation Adjusted angle: 0° ~+5°

## **Spigot Configurations**

Spigot Type		Standard	Korea	Japan	ANZ
Side entry mounting	Pole diameter(mm)	42-60	48-60	42-60.5	25-34; 42/43-49
	Entry depth(mm)	100	180	120	80; 100
	Tilt angle(°)	-15~+15	-15~+15	-15~+15	-15~+15
Post top mounting	Pole diameter(mm)	60-76	60-76	60-76	60-76
	Entry depth(mm)	100	100	100	100



### 2. Tool-less opening and Easy access



### 3. NEMA Socket and Shorting Cap





Components	Supplier	Specification
7 pin PE cell socket	TE 2213362-4	
Short Cap	Longjoin	JL-208



#### 4. Exposed optic

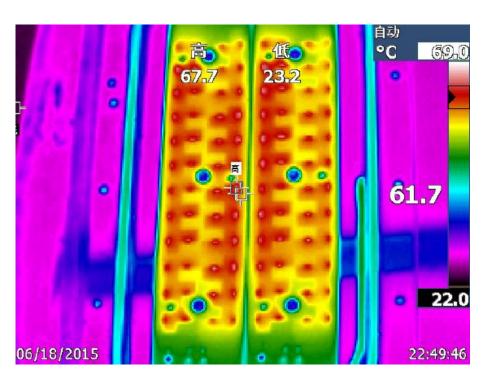
RoadGrace is design with exposed optic technology;

- Use of exposed optic technology improve luminaire overall efficacy
- Exposed optic result in additional 5 lumen per watt
- Polycarbonate (optic/expose optic material) is now available with very low yellowing index over lifetime and its Mechanical strength is suitable for road / outdoor application



	Lumen output (lm)	Lumen output (lm)	Lumen Reduction %	Luminaire Lumen Per watt
Product	Before dust test	After dust test		
Xceed with glass	10,505	10,427	0.74%	108 to 110lm /w
FlowBase	7,123	7,077	0.65%	110 to 115lm /w
StreetStar	2,283	2,242	1.80%	125 to 127lm /w
RoadGrace	3,000	2,950	1.67%	115 to 120lm/w

### 5. Thermal Management



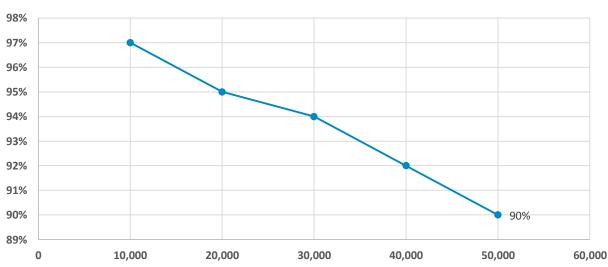


Suitable to operate at extreme temperatures



#### 6. Reliable Service lifetime

#### Lumen maintenance at time (t) (%):



#### Lifetime vs. Tcase of



Failure Rate Info:

1. <0.01% per 1 kHr @<= Tcase 80 C



## RoadGrace - Key Specification

Specification	RoadGrace			
System lumen output (lm)	Small Housing 8,100lm Medium Housing 18,000lm			
System efficacy (Im/W)	4000K: 115 to 120lm/w			
Input Voltage	220V-240V 50/60hz			
Power factor	0.9			
Surge protection	10kV (15kV/kA)			
Control Interface	CityTouch Ready, 1-10V/DALI/Amp/Dynadimmer			
Electric class	Class I and Class II			
Working temperature	-40 to 50C			
Working Humidity	Up to 95%			
Lifetime	50,000 hours L70 Ta 35C			
Color Temperature CCT	3,000K, 4000K, 57000K			
CRI	Min 70 additional option of CRI 80			
Color Consistency (SDCM)	SDCM 5 at Luminaire level			



### RoadGrace - Key Specification

Specification	RoadGrace		
Housing Material	High Pressure Die-Cast - ADC1		
Cover	Transparent and weather resistant grade Polycarbonate		
Optics	DM, DW1, DW2S, DWP3 and DWP		
Impact Resistance IK	IP66		
Ingress Protection IP	IK08		
Shocks & Vibration Standard	Philips Standard ULN_D1672; IEC60598		
Salt Spray Test Standard	1,000 hours MSP		
Installation	Side-Entry with Adjustable angles +/- 15 degrees Post Top with Adjustable angles +5 degrees		
Maintenance – Opening	tool-less opening		
Wind force	60 m/s		
Approbations	CB,CE,EMC,RoHS,PSE, ANZ		



### **RoadGrace Configurations**

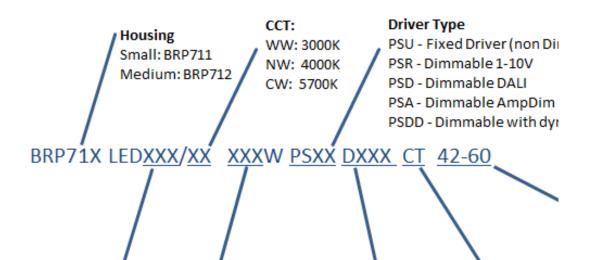


Support CityTouch, 1-10V/DALI/Amp/Dynadimmer controls and 7 Pin NEMA socket

### Configurations

12nc	Product
911401810598	BRP711 LED23/NW 20W PSDD I DWP3 25/34
911401810698	BRP711 LED30/NW 26W PSDD I DWP3 25/34
911401810798	BRP711 LED40/NW 36W PSDD I DWP3 P1 25/34
911401810898	BRP711 LED61/NW 56W I DWP3 42-60
911401810998	BRP711 LED81/NW 73W I DWP3 42-60
911401814298	BRP711 LED78/NW 70W PSDD I DWP3 CT 42-60
911401810498	BRP711 LED40/NW 36W PSDD II DWP3 42-60

#### RoadGrace Description





## **Design Concept**







Q2 2016

	Length(mm)	width(mm)	Height(mm)	weight(Kg)
RoadGrace ( Mid )	675	391	90	7.2 (7)
RoadGrace (Small )	565	391	90	6.5 (6)



## **Design Concept**





