



LG LIGHTING

LG LED Road & Street Lighting





For More Pleasant and Safer Nighttime Travel

Street lighting, which lights up living environment and roads, is linked closely to the safety of drivers and pedestrians. That's why the function of the lighting itself is most important. LG LED Road & Street Lighting has been designed to properly blend in with neighboring street furniture as well as to mainly function as lighting itself by applying the utmost simple design.

Make citizens' nighttime movement safe and pleasant. LG LED Road & Street Lighting improves the visual environment of drivers and pedestrians, secures their safety, and helps to create a pleasant and smooth traffic flow. The value of the street lighting LG Electronics is seeking is properly well-harmonized street lighting that offers quantity and quality of light and energy efficiency.

Energy Efficiency, Better Payback

LG LED Road & Street Lighting saves up to 55% on energy costs and greatly reduces maintenance costs with a longer lifespan compared to traditional street lights (metal halide).

Optimized Lighting Solution

This is a customized lighting solution providing optimal brightness and light distribution to the applications by applying a modular design. Get maximum energy efficiency by lighting a target area with just enough light at the lowest energy consumption possible.

Customer-Focused Design

This is lighting with a modern, sleek design upgrading the dignity of the city view. What will truly make LG LED Road & Street Lighting stand out is that it has been optimally designed to meet the full range of outdoor lighting challenges. In addition, the modular design makes the installation and maintenance easier.

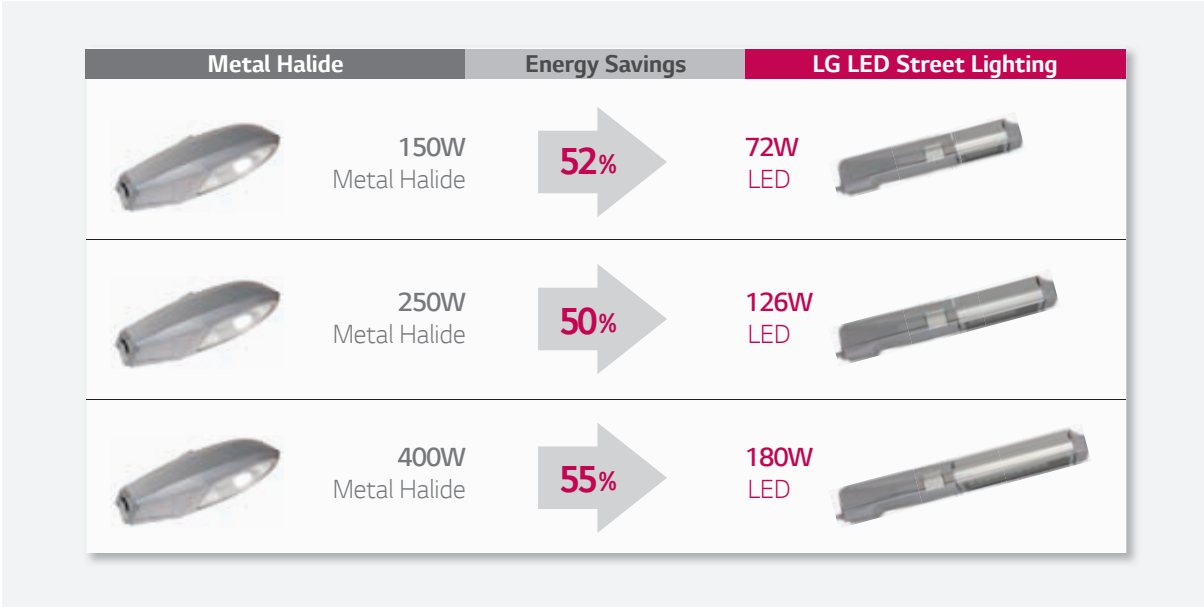
Energy Efficiency, Better Payback



LED ROAD & STREET LIGHTING

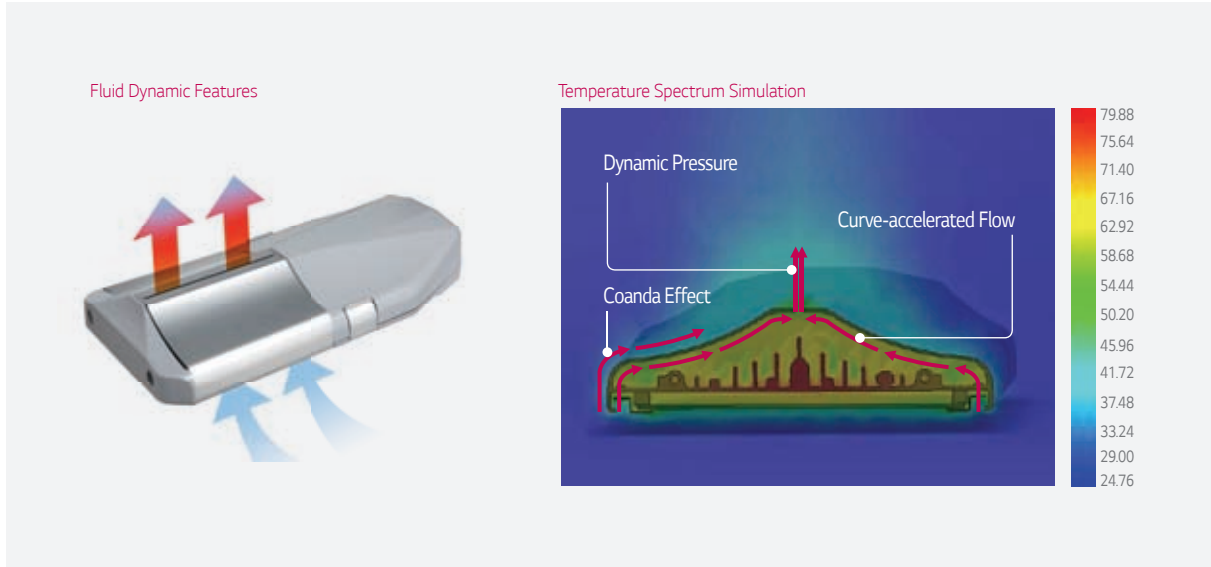
The Best Alternative to Traditional Street Lights

It saves up to 55% on energy and replaces traditional street lights without sacrificing performance through the optimization technique of LED package, thermal management, optical management.



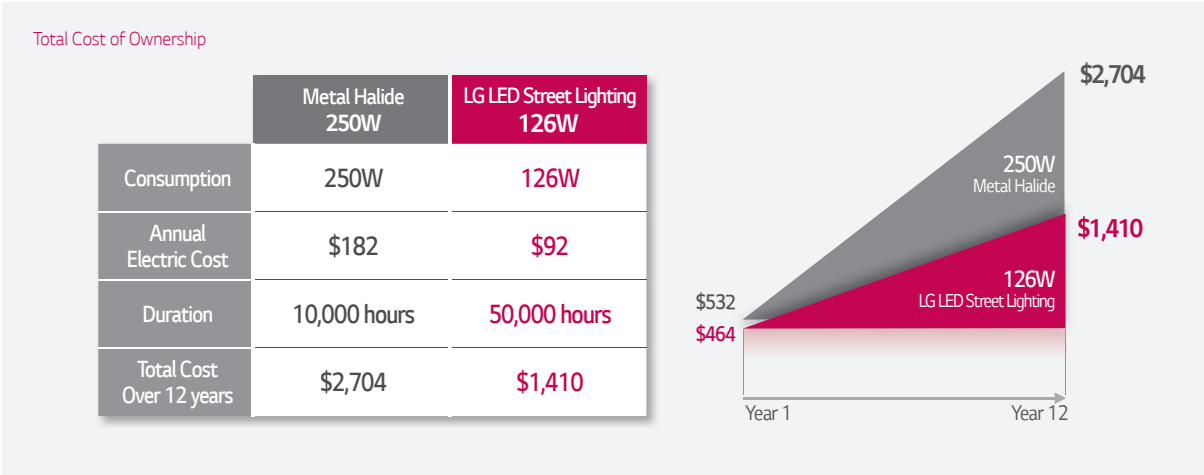
Long-lasting Performance Without Degradation

The efficacy and lifespan of LED is depending on the heat emission performance of the lighting. LG Electronics’ unique convection technology allows airflow to efficiently cool all LED modules and keeps them at low temperature so that it can ensure the long lifespan and great efficacy



Pays for Itself, Then Starts Paying You

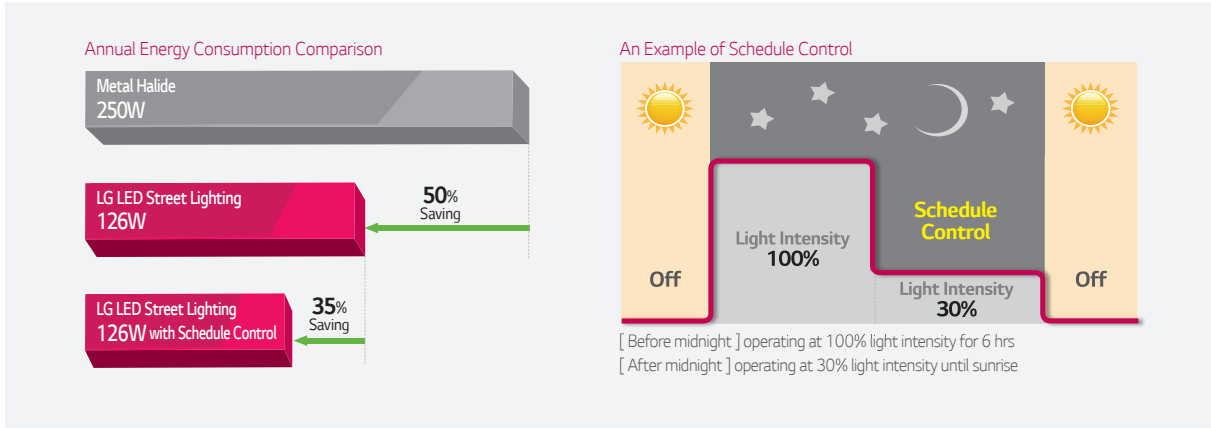
While other communities are still paying for costly replacing their conventional street lights, LG LED Road & Street Lighting will have returned your investment in lower operating expenses. A lower total cost of ownership will allow you to be flexible with your operating or capital expenses.



* Based on 12 hrs operation per day, electricity cost \$0.16/kwh.
* Calculation result may differ by the operating conditions and product lifetime.

Maximize Energy Efficiency with Intelligent Controls

Combined with wired control options, you can also control light intensity. Not only do you save up 50% on energy by just replacing the traditional street lighting(metal halide) 250W with LG LED Road & Street Lighting 126W, you can also save about 35% more when it is combined with control options. After midnight, for example, when traffic decreases, lower the light intensity. LG LED Road & Street Lighting can contribute to energy saving and reducing the emission of greenhouse gases while maintaining its original function of lighting and safety within the road environment.



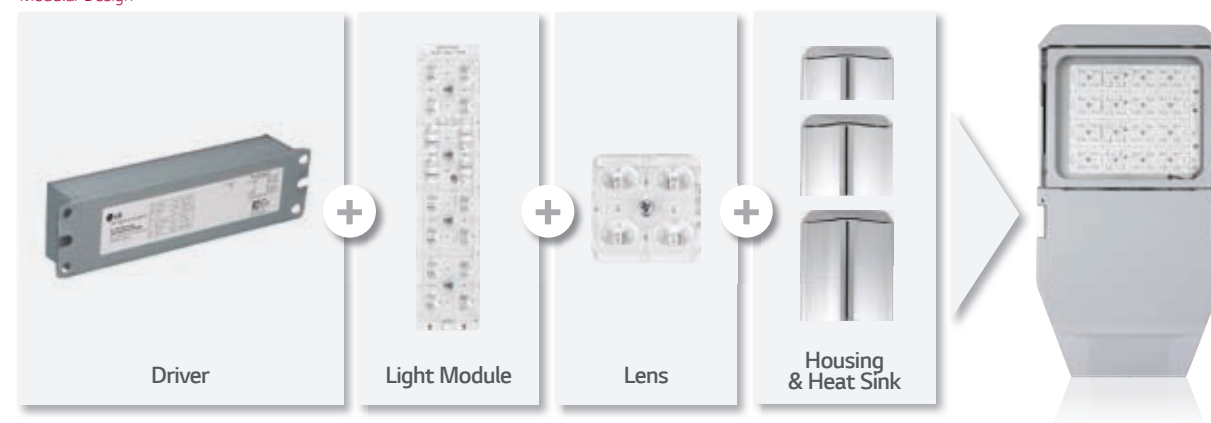
* Based on 12 hrs operation per day yearly.
* Calculation result may differ by the operating conditions.

Optimized Lighting Solution

Right Amount of Light in The Right Place

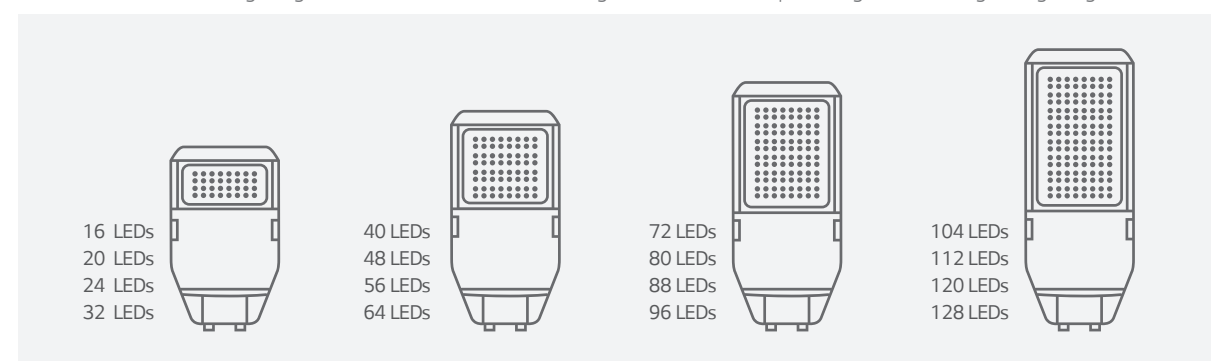
Use the right amount of light in the right place. This is the simplest and most effective way to save energy costs and ensure security at night. With a modular design, LG LED Road & Street Lighting can deal with various conditions required by the usage environment such as road lane, road width and the level of curve, vehicle speed, etc. In addition, it is suitable for a wide range of applications from suburban streets and urban traffic routes to highways.

Modular Design



LED Configurations

LG LED Road & Street Lighting has several standard LED configurations available, providing a broad range of lighting solutions.

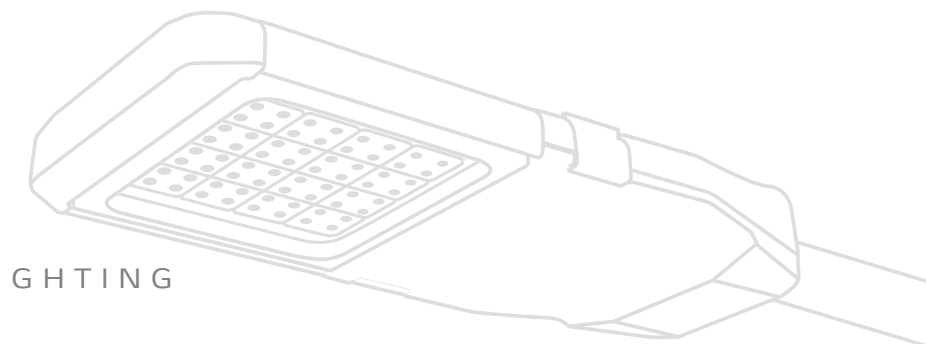


Easy Upgrades

You can easily upgrade your luminaire and retain the complete luminaire housing. This upgrades energy efficiency of the lighting for the future as well as greatly reduces the number of components to be replaced.



LED ROAD & STREET LIGHTING



Efficiently Deliver Light Where You Need It

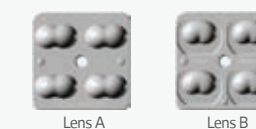
LED's directional light can be easily captured and controlled with precise optical lenses while significant light from traditional street lights is lost or uncontrolled. LG LED Road & Street Lighting provides optimized light according to road conditions with the different combination of the lenses.

Optical Distribution



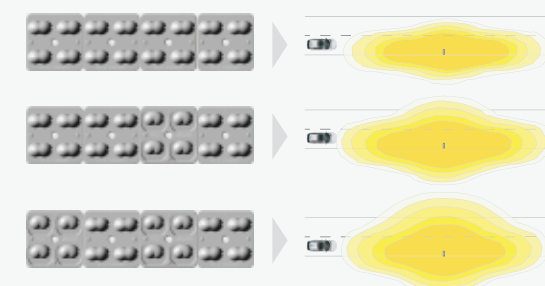
With the combination of two optical lenses by their arrangement or direction, it can create multiple light distributions.

Optical Lenses



In other words, IESNA Type I distribution can create various wave forms, which can flexibly correspond to all applications.

An Example of Various Light Distributions of Type I

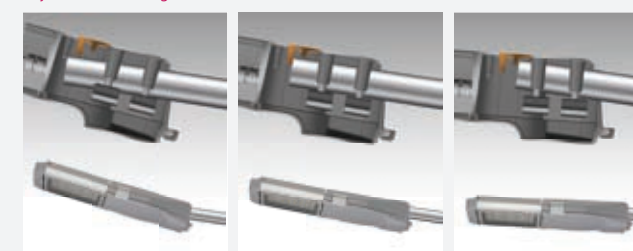


* Detailed light distributions will be available on DIALux web site : <http://www.dial.de/DIAL/>

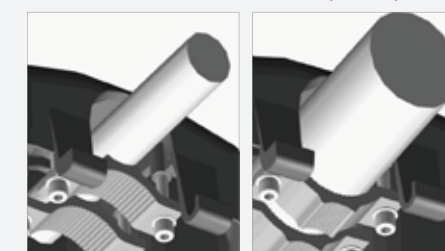
Easy Installation Without Replacing the Pole

LG LED Road & Street Lighting is designed to be compatible with various pole diameters and arm angle so that it can be easily installed without replacing the existing poles.

Adjust Tilt +/- 5 Degrees



Accommodates Different Arm Diameters (Ø34-63)



Customer-Focused Design

Tool-less Entry

It is possible to access the electrical compartment without additional tools. It makes the installation and maintenance quick and easy, saving time and money.



Tempered Glass Cover

Tempered glass is three times mechanically stronger (IK08) than normal glass. It crumbles into small granular chunks instead of splintering into jagged shards when broken. The granular chunks are less likely to cause injury, which ensures enhanced safety.



Long-lasting Protection with Rugged Finish

Die-cast aluminum housing and polyester powder-coating finish provide long-lasting protection.

Preventing the Deposition of Foreign Substance

Unlike other LED street lights, channel of heat sink doesn't come into view but is covered with housing. This prevents dust, leaves, birds' droppings from getting stacked on the top of luminaire.



NEMA Receptacle (Option)

A NEMA receptacle can be added to allow the installation of a photocell control in the field.

IP66 Rating

IP66-rated housing protects the LEDs from degradation caused by environmental pollutants such as rain, ice, snow, dust, sand, etc.

Surge Protection (Standard)

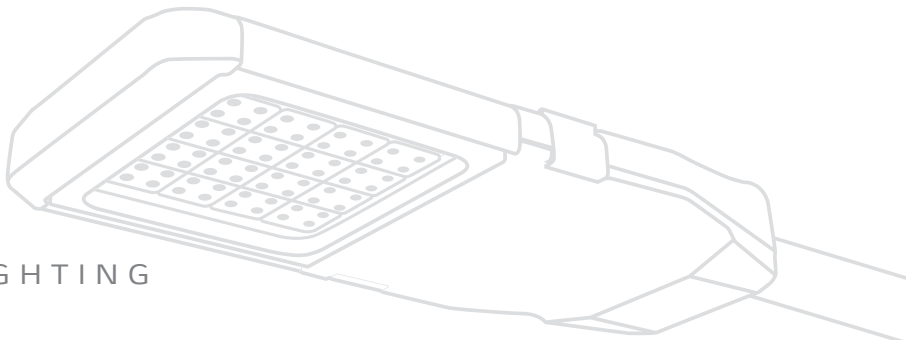
Integral surge protector with 10kV resistance prevents power damage caused by static electric spark such as lightning.

3G Vibration Rating

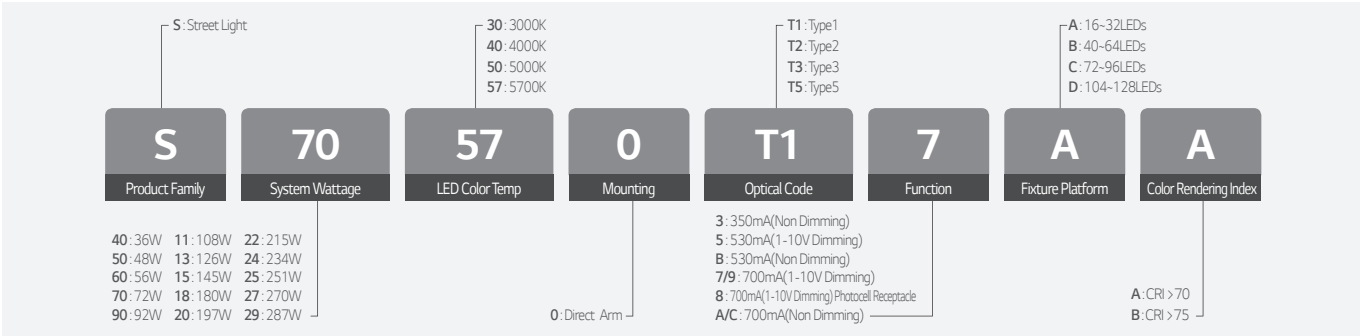
3G vibration rated to ensure strength of construction and longevity in application.
(Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards)

Product Specification

LED ROAD & STREET LIGHTING



Model Code for Entire Product Offering



* Standard 5700K CCT and nominal > 70 CRI
* Consult factory for additional information
* System wattage based on standard(700mA) model

General Information

Color Rendering Index	Operating Temperature	Main Voltage	Control System Input	Optical Cover	IK Code	Power Factor	IP Grade	Lifespan
> 70 (Optional: > 75)	-40°C < Ta < 50°C	120-277V/50-60Hz	1-10V	Glass, flat	IK 08	>0.9	IP 66	50,000hrs

* Based on system(LED+Driver) rated lifespan
* LED rated lifespan (L80)= 100,000hrs(Ambient temperature=25°C and Forward current=700mA)

Performance Table

5700/TYPE1 Standard : 700mA					Standard : 530mA				Standard : 350mA			
Number of LEDs	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)
16LEDs	S40570T19AA	3,850	36	107	-	-	-	-	-	-	-	-
20LEDs	S50570T19AA	5,130	48	107	-	-	-	-	-	-	-	-
24LEDs	S60570T19AA	5,970	56	107	-	-	-	-	-	-	-	-
32LEDs	S70570T19AA	7,900	72	110	S50570T15AA	6,450	53	121	S30570T13AA	4,500	34	132
40LEDs	S90570T19BA	10,020	92	110	S70570T15BA	8,250	67	122	S57570T13BA	5,750	45	129
48LEDs	S11570T17BA	11,850	108	110	-	-	-	-	SS0570T13BA	6,900	53	130
56LEDs	S13570T17BA	13,900	126	110	S90570T15BA	11,410	94	121	-	-	-	-
64LEDs	S15570T17BA	15,830	145	110	S11570T15BA	13,000	107	121	-	-	-	-
72LEDs	-	-	-	-	S12570T15CA	14,800	121	122	S80570T13CA	10,460	79	133
80LEDs	S18570T17CA	19,850	180	110	S13570T15CA	16,300	134	121	S90570T13CA	11,400	89	128
88LEDs	S20570T17CA	21,800	197	110	-	-	-	-	-	-	-	-
96LEDs	S22570T17CA	23,750	215	110	-	-	-	-	-	-	-	-
104LEDs	S24570T17DA	26,100	234	111	S18570T15DA	21,450	175	122	S11570T13DA	15,120	115	132
112LEDs	S25570T17DA	27,750	251	110	S19570T15DA	22,850	188	121	S12570T13DA	16,000	123	130
120LEDs	S27570T17DA	29,850	270	110	-	-	-	-	S13570T13DA	17,250	134	129
128LEDs	S29570T17DA	31,750	287	110	S21570T15DA	26,100	215	121	S14570T13DA	18,300	142	129

5700/TYPE2 Standard : 700mA					Standard : 530mA				Standard : 350mA			
Number of LEDs	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)
16LEDs	S40570T29AA	3,680	36	102	-	-	-	-	-	-	-	-
20LEDs	S50570T29AA	4,900	48	102	-	-	-	-	-	-	-	-
24LEDs	S60570T29AA	5,700	56	102	-	-	-	-	-	-	-	-
32LEDs	S70570T29AA	7,550	72	105	S50570T25AA	6,150	53	115	S30570T23AA	4,300	34	127
40LEDs	S90570T29BA	9,930	92	109	S70570T25BA	8,100	67	121	S57570T23BA	5,700	45	128
48LEDs	S11570T27BA	11,800	108	110	-	-	-	-	SS0570T23BA	6,790	53	128
56LEDs	S13570T27BA	13,700	126	109	S90570T25BA	11,150	94	119	-	-	-	-
64LEDs	S15570T27BA	15,680	145	109	S11570T25BA	12,650	107	119	-	-	-	-
72LEDs	-	-	-	-	S12570T25CA	14,600	121	121	S80570T23CA	10,150	79	129
80LEDs	S18570T27CA	19,700	180	110	S13570T25CA	16,000	134	120	S90570T23CA	11,250	89	126
88LEDs	S20570T27CA	21,430	197	109	-	-	-	-	-	-	-	-
96LEDs	S22570T27CA	23,300	215	109	-	-	-	-	-	-	-	-
104LEDs	S24570T27DA	26,050	234	112	S18570T25DA	21,200	175	121	S11570T23DA	14,900	115	130
112LEDs	S25570T27DA	27,500	251	110	S19570T25DA	22,500	188	120	S12570T23DA	15,800	123	128
120LEDs	S27570T27DA	29,200	270	109	-	-	-	-	S13570T23DA	16,800	134	126
128LEDs	S29570T27DA	30,800	287	109	S21570T25DA	25,450	215	119	S14570T23DA	17,700	142	124

5700/TYPE3 Standard : 700mA					Standard : 530mA				Standard : 350mA			
Number of LEDs	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)
16LEDs	S40570T39AA	3,630	36	101	-	-	-	-	-	-	-	-
20LEDs	S50570T39AA	4,850	48	101	-	-	-	-	-	-	-	-
24LEDs	S60570T39AA	5,650	56	101	-	-	-	-	-	-	-	-
32LEDs	S70570T39AA	7,450	72	103	S50570T35AA	6,050	53	113	S30570T33AA	4,230	34	125
40LEDs	S90570T39BA	9,840	92	108	S70570T35BA	8,100	67	121	S57570T33BA	5,700	45	128
48LEDs	S11570T37BA	11,700	108	109	-	-	-	-	SS0570T33BA	6,750	53	128
56LEDs	S13570T37BA	13,400	126	107	S90570T35BA	10,950	94	117	-	-	-	-
64LEDs	S15570T37BA	15,390	145	107	S11570T35BA	12,450	107	117	-	-	-	-
72LEDs	-	-	-	-	S12570T35CA	14,600	121	121	S80570T33CA	10,150	79	129
80LEDs	S18570T37CA	19,500	180	109	S13570T35CA	15,900	134	119	S90570T33CA	11,150	89	125
88LEDs	S20570T37CA	21,070	197	107	-	-	-	-	-	-	-	-
96LEDs	S22570T37CA	22,900	215	107	-	-	-	-	-	-	-	-
104LEDs	S24570T37DA	25,900	234	111	S18570T35DA	21,100	175	121	S11570T33DA	14,900	115	130
112LEDs	S25570T37DA	27,350	251	109	S19570T35DA	22,300	188	119	S12570T33DA	15,700	123	127
120LEDs	S27570T37DA	28,900	270	107	-	-	-	-	S13570T33DA	16,600	134	124
128LEDs	S29570T37DA	30,550	287	107	S21570T35DA	25,000	215	117	S14570T33DA	17,500	142	123

5700/TYPE5 Standard : 700mA					Standard : 530mA				Standard : 350mA			
Number of LEDs	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)	Model Code	Typical Delivered Lumens (lm)	Typical System Wattage (W)	Typical System Efficacy (lm/W)
16LEDs	S40570T59AA	3,560	36	99	-	-	-	-	-	-	-	-
20LEDs	S50570T59AA	4,750	48	99	-	-	-	-	-	-	-	-
24LEDs	S60570T59AA	5,550	56	99	-	-	-	-	-	-	-	-
32LEDs	S70570T59AA	7,300	72	101	S50570T55AA	5,950	53	111	S30570T53AA	4,150	34	122
40LEDs	S90570T59BA	9,750	92	107	S70570T55AA	8,000	67	120	S57570T53BA	5,630	45	126
48LEDs	S11570T57BA	11,500	108	107	-	-	-	-	SS0570T53BA	6,600	53	125
56LEDs	S13570T57BA	13,200	126	105	S90570T55BA	10,750	94	115	-	-	-	-
64LEDs	S15570T57BA	15,100	145	105	S11570T55BA	12,300	107	115	-	-	-	-
72LEDs	-	-	-	-	S12570T55CA	14,400	121	120	S80570T53CA	10,100	79	128
80LEDs	S18570T57CA	19,200	180	107	S13570T55CA	15,700	134	117	S90570T53CA	11,000	89	123
88LEDs	S20570T57CA	20,660	197	105	-	-	-	-	-	-	-	-
96LEDs	S22570T57CA	22,450	215	105	-	-	-	-	-	-	-	-
104LEDs	S24570T57DA	25,600	234	110	S18570T55DA	20,900	175	120	S11570T53DA	14,600	115	127
112LEDs	S25570T57DA	26,850	251	107	S19570T55DA	21,900	188	117	S12570T53DA	15,450	123	125
120LEDs	S27570T57DA	28,400	270	105	-	-	-	-	S13570T53DA	16,350	134	122
128LEDs	S29570T57DA	30,000	287	105	S21570T55DA	24,600	215	115	S14570T53DA	17,250	142	121

* Specifications are subject to change without notice.