



Over 1000 hours of operation at 100 °C ambient temperature





# 85°C to 120°C Heat Resistant LED Light

### THT's Solution for High-Temperature Application





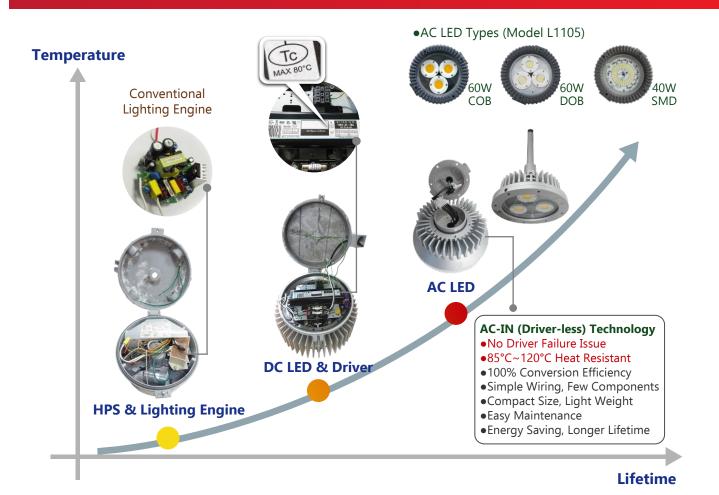
### **Common Issue for LED Lights in High Temperature Environment**

Driver failure is quite common in high temperature (high-temp.) environment due to the limitation of the driver. The highest operating temperature for the LED driver is usually 85°C/185°F, but with the heat that are contributed from the high-temp. ambient and from the LED chips, driver failure process will be accelerated and create a shorter maintenance cycle for the LED lights.

Industries like pulp & paper, metal/forge, fire power plant, recycling plant, where has equipment for drying or heating in the plants, the ambient temperature will be high during operation and thus will have LED driver failure issue.

### THT's Solution for High-Temperature Application

- Eliminate Driver Components That Fail in High-Temperature
- Utilize THT's Unique and Efficient Heat Dissipation System for High Ambient Environment
- Construct Light Fixtures with Industrial Grade Heat Resistance Parts



### Benefits of THT's Driverless Lights in High Temperature Environment

- Longer Lifespan than the LED Lights with Driver
- Reduce the Maintenace Cycles for LED Lights
- M No Need to Shut Down the Factory Production Lines for Lighting Maintenance
- Save Time and Cost for Lighting Maintenace (Manpower, Manlift, Parts, etc.)
- Increase Safety for Working Environment (No Light Outages for Production Lines as well as Reduce the Possibility of Work Injury for Lighting Maintenace)

### Applicable Area High Ambient Environment



- Pulp & Paper (Cooking and Drying Area)
- Glass Factory (Processing Area)
- Metal Forging or Metal Recycling Plant (Heating or Forging Area)
- Oil & Gas (Furnace Towers or Compressor Rooms)
- Garbage Processing Plant (Burning Area)
- Coal Power Plant (Burning Area)
- Gas Turbine Power Plant (Gas Turbine Area)
- Painting Factory (Drying Area)
- Winery (Distillation Chamber)
- Textile (Dyeing and Finishing Area)
- Food Process (Heating, Cooking or Baking Area)





Fixtures were tested at 100°C/212°F for 1000 hrs, and still maintain excellent lumen output. (100°C/212°F Testing reports are available upon request)

Over 1000 hours of operation at 100 °C ambient temperature

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#### 2023 Test Result

Model	LED	Watt.	Volt.	C.C.T.
L1319C 2ft	СОВ	40W	230V	5000K
L1319C 2ft	СОВ	60W	230V	5000K
L1319C 2ft	СОВ	80W	230V	5000K
L1319C 4ft	СОВ	80W	230V	5000K
L1319C 4ft	СОВ	120W	230V	5000K
L1319C 4ft	СОВ	160W	230V	5000K



Fixtures were tested at 100°C/212°F for 1000 hrs, and still maintain excellent lumen output. (100°C/212°F Testing reports are available upon request)

Over 1000 hours of operation at 100 °C ambient temperature

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#### 2023 Test Result

	Model	LED	Watt.	Volt.	C.C.T.		
	L1102D	СОВ	60W	220V	5000K		
	L2302	SMD	120W	220V	5000K		
	L1733N	СОВ	120W	220V	5000K		
	L1512D	СОВ	140W	277V	5000K		
	L1733NS	SMD	150W	277V	5000K		

Watt. & Volt. lower than the test values are available upon request.



Fixtures were tested at 85°C/185°F for 1000 hrs, and still maintain excellent lumen output. (85°C/185°F Testing reports are available upon request)



#### 2023 Test Result

2023 Test Result	Model	LED	Watt.	Volt.	C.C.T.
	L1905	СОВ	20W	277V	5000K
	L1908 4ft	SMD	40W	220V	5000K
	L1102D	СОВ	80W	220V	5000K
	L2004 2ft	SMD	20W	220V	5000K
	L2004 4ft	SMD	40W	220V	5000K
	L2302	SMD	150W	220V	5000K



Fixtures were tested at 85°C/185°F for 1000 hrs, and still maintain excellent lumen output. (85°C/185°F Testing reports are available upon request)



#### 2023 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1512D	СОВ	160W	220V	5000K
	L1733NS	SMD	170W	220V	5000K
	L1403L	SMD	200W	220V	5000K
	L1512D	SMD	250W	220V	5000K
	L1803A	SMD	500W	220V	5000K
	L1915	SMD	600W	220V	5000K
Cool in the second		Wa	att. & Volt. lower tha	in the test values are	available upon request.



Fixtures were tested at 85°C/185°F for 1000 hrs, and still maintain excellent lumen output. (85°C/185°F Testing reports are available upon request)



#### 2019 Test Result

Model	LED	Watt.	Volt.	C.C.T.
L1203	СОВ	20W	277V	5000K
L1705C	СОВ	50W	277V	5000K
L1219C	СОВ	70W	220V	5000K
L1511	SMD	75W	277V	5000K

Watt. & Volt. lower than the test values are available upon request.



LED Lighting Solutions for High Temperature Areas





Fixtures were tested at 100°C/212°F for 720 hrs, and still maintain excellent lumen output. (100°C/212°F Testing reports are available upon request)



#### 2018 Test Result

Model	LED	Watt.	Volt.	C.C.T.
L1319	SMD	40W	277V	5000K
L1102	СОВ	60W	277V	5000K
L1102	SMD	65W	277V	5000K
L1217E	SMD	120W	277V	3000K
L1217	СОВ	120W att. & Volt. lower tha	277V n the test values are	5000K available upon request.



100°C Heat Resistant Test AC-IN LED vs. DC-IN LED



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Fixtures were tested at 85°C/185°F for 720 hrs, and still maintain excellent lumen output. (85°C/185°F Testing reports are available upon request)



#### 2018 Test Result

Model	LED	Watt.	Volt.	С.С.Т.
L1319	SMD	40W	277V	5000K
P1202	СОВ	40W	277V	5000K
L1102	SMD	95W	277V	5000K
L1102	СОВ	100W	277V	5000K
L1217	СОВ	140W	277V	5000K
L1217E	SMD	150W	277V	3000K



Fixtures were tested at 120°C/248°F for 720 hrs, and still maintain excellent lumen output. (120°C/248°F Testing reports are available upon request)



#### 2023 Test Result

2023 Test Result					
	Model	LED	Watt.	Volt.	С.С.Т.
	L1512D (10W*8)	СОВ	80W	220V	5000K
	L1512D (20W*4)	СОВ	80W	277V	5000K

Watt. & Volt. lower than the test values are available upon request.

### [A Quick & Cost-Saving Lighting Solution - Retrofit Kits]



THT-EX proposes the Retrofit Kits that doesn't require a lot of money to upgrade your old lighting fixtures. With retrofit kits (A/C/H/K Pan), you can quickly replace existing lighting fixtures and have a better, brighter, safer working environment!



Fixtures were tested at 100°C/212°F for 1000 hrs, and still maintain excellent lumen output. (100°C/212°F Testing reports are available upon request)



#### 2018 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
A A A A A A A A A A A A A A A A A A A	L1705A	СОВ	20W	277V	5000K

#### 2020 Test Result

Model	LED	Watt.	Volt.	С.С.Т.
L1105	СОВ	60W	277V	3000K





Fixtures were tested at 85°C/185°F for 720 hrs, and still maintain excellent lumen output. (85°C/185°F Testing reports are available upon request)



#### 2021 Test Result

Model	LED	Watt.	Volt.	C.C.T.
L1319C 2ft	SMD	40W	220V	5000K

Watt. & Volt. lower than the test values are available upon request.



High Temperature Sun Exposure Test in Summer











THT-EX has an "in-house" high-temperature laboratory with multiple high-temperature baking machines.

### THT-EX TOP HI-TECH CO, LTD.

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