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

UL Laboratory Tested

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

- AC in LED (Driver-less)
- 120°C/248°F Heat Resistant
- IP67/68/69K Waterproof
- Made In Taiwan

Edition 2024 / 03

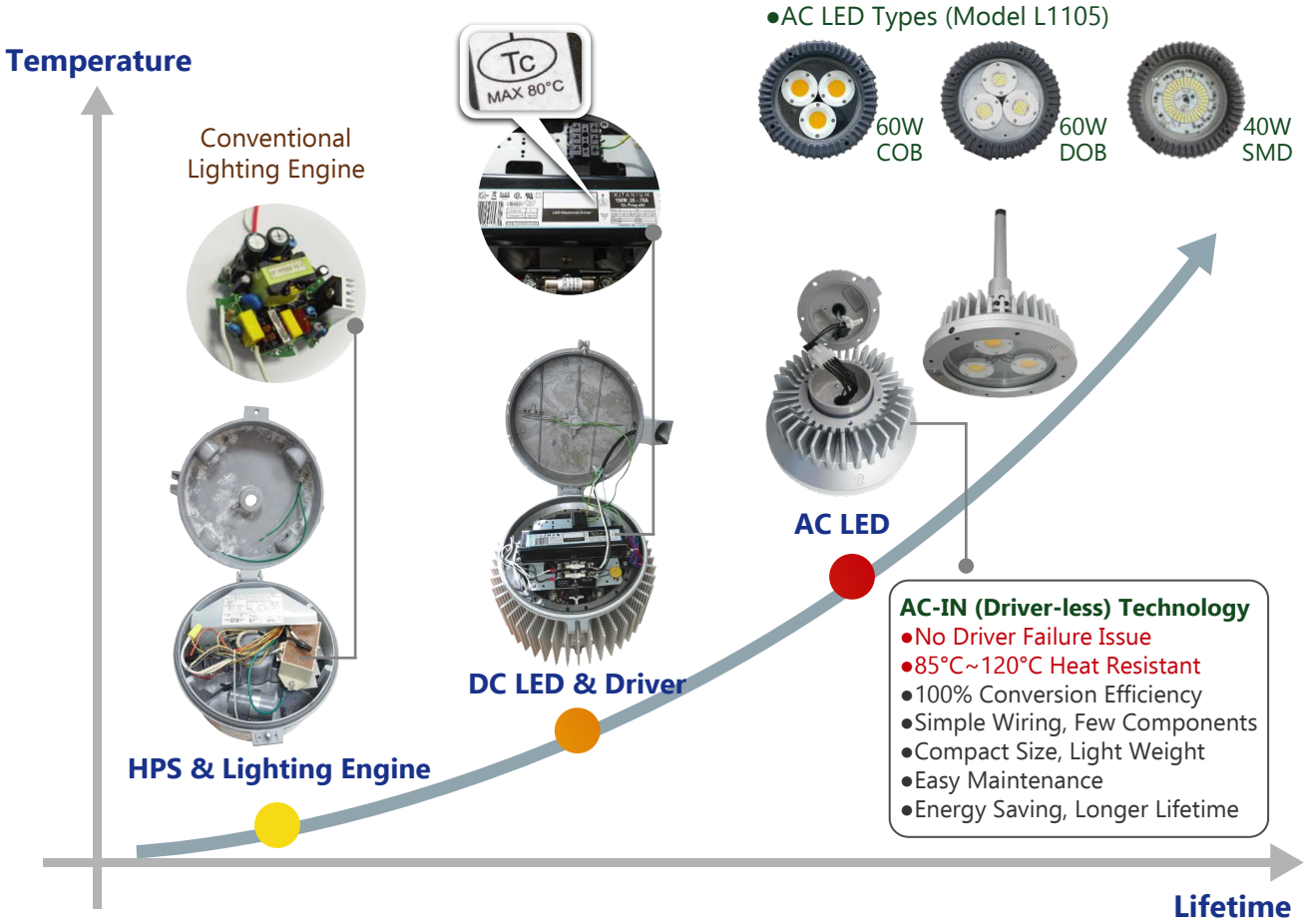
Common Issue for LED Lights in High Temperature Environment

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
- ☑ 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)

UL High-Temp. Reliability Testing

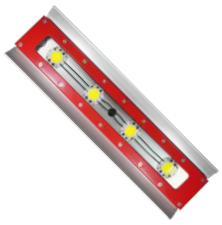
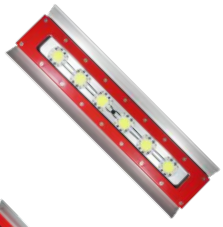
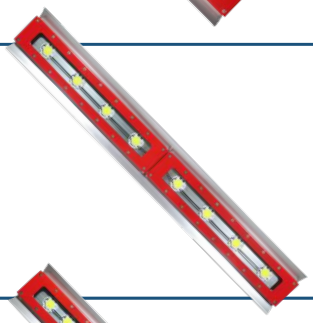
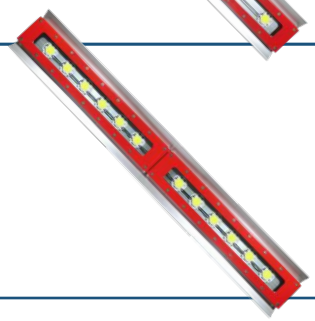
100°C Heat-Resistant

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

UL Laboratory Tested

2023 Test Result

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

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

LED Lighting Solutions for High Temperature Areas

UL High-Temp. Reliability Testing

100°C Heat-Resistant

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

UL Laboratory Tested

2023 Test Result

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

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



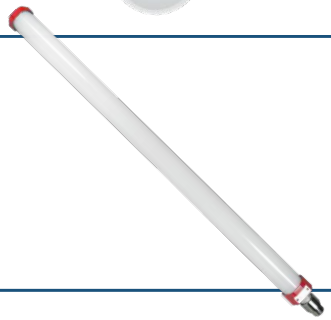
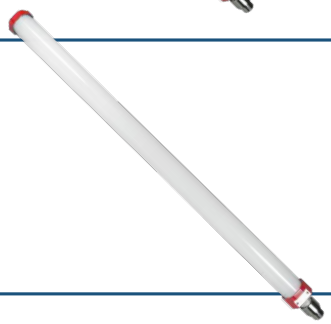
UL High-Temp. Reliability Testing

85°C Heat-Resistant

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)

UL Laboratory Tested

2023 Test Result

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

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

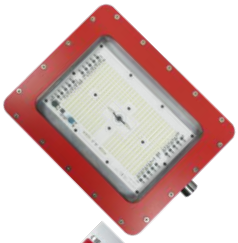
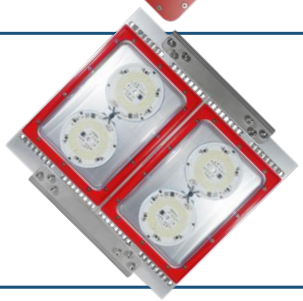
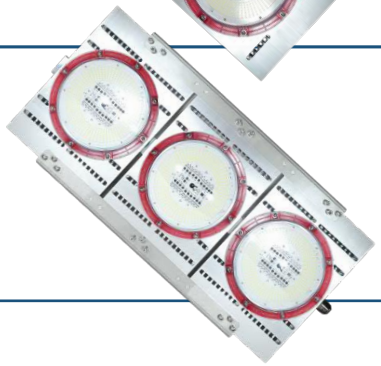
UL High-Temp. Reliability Testing

85°C Heat-Resistant

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)

UL Laboratory Tested

2023 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1512D	COB	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

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

UL High-Temp. Reliability Testing

85°C Heat-Resistant

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)

UL Laboratory Tested

2019 Test Result

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

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

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

UL High-Temp. Reliability Testing

100°C Heat-Resistant

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)

UL Laboratory Tested

2018 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1319	SMD	40W	277V	5000K
	L1102	COB	60W	277V	5000K
	L1102	SMD	65W	277V	5000K
	L1217E	SMD	120W	277V	3000K
	L1217	COB	120W	277V	5000K

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

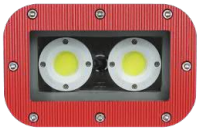
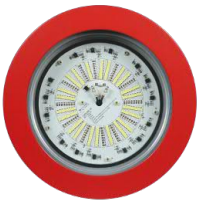
UL High-Temp. Reliability Testing

85°C Heat-Resistant

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)

UL Laboratory Tested

2018 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1319	SMD	40W	277V	5000K
	P1202	COB	40W	277V	5000K
	L1102	SMD	95W	277V	5000K
	L1102	COB	100W	277V	5000K
	L1217	COB	140W	277V	5000K
	L1217E	SMD	150W	277V	3000K

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

THT High-Temp. Reliability Testing

120°C Heat-Resistant

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)

THT-EX Laboratory Tested

2023 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1512D (10W*8)	COB	80W	220V	5000K
	L1512D (20W*4)	COB	80W	277V	5000K

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

【A Quick & Cost-Saving Lighting Solution - Retrofit Kits】

Video

The retrofit kits can be specified on many other product series.

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!

UL High-Temp. Reliability Testing

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)

THT-EX Laboratory Tested

2018 Test Result

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

2020 Test Result

	Model	LED	Watt.	Volt.	C.C.T.
	L1105	COB	60W	277V	3000K

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

100°CHeat Resistant LED Lighting - All Tests

UL High-Temp. Reliability Testing

85°C Heat-Resistant

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)

THT-EX Laboratory Tested

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

Designed &
Made In Taiwan

Website

YouTube

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

THT-EX

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