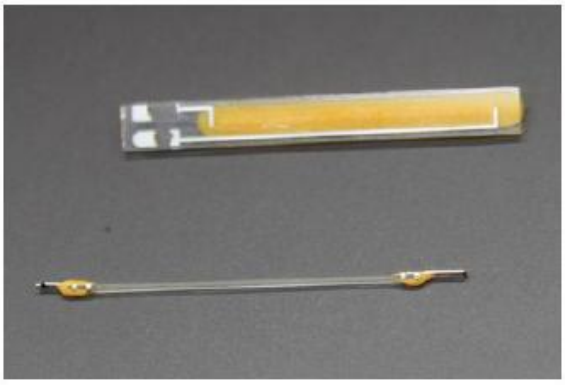
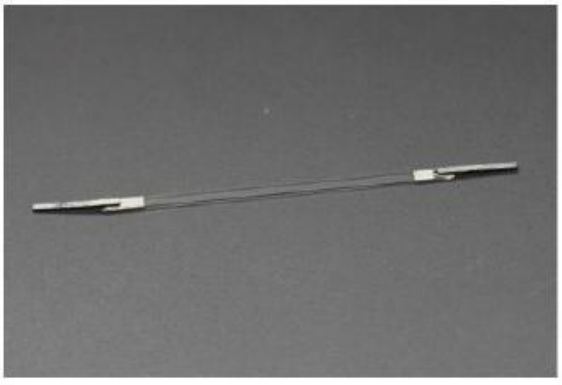
Model: SL-FB-2W / SL-FBC01-2W

1.

	Glass	Sapphire
Heat Conductivity (W/m·K)	1.09	30
Light Decaying-6000H	40%	<5%

※Sapphire with higher heat conductivity will achieve better heat dissipation, light decaying, stability and longer lifetime.





Glass Filament:
Heat Conductivity(W/m·K) Index=
1.09 W/m·K

Sapphire Filament:
Heat Conductivity(W/m·K) Index=
=30 W/m·K

2. Mechanical Strength Comparison (See photos below)

Sapphire, with higher mechanical strength than glass, will guarantee a higher qualified products rate during production process.

3. How to tell glass from sapphire?

Material	Glass	Sapphire
Moh's hardness scale	6.5	9

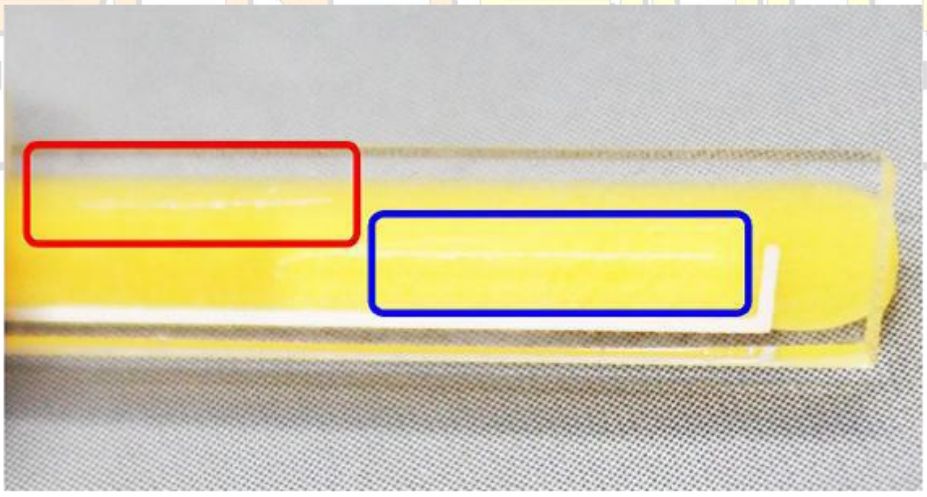
Sapphire has strong scratch resistance, 9 is just second to that of diamond.

To Scratch Sapphire substrate with glass, no scratch marks left

To Scratch sapphire substrate with sapphire will leave obvious scratch marks

To Scratch glass with sapphire w

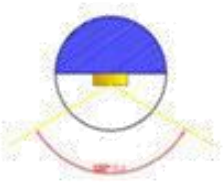
To scratch glass with glass will leave shallow and unobvious scratch marks



- ★ **scratch marks** in **Red circle** are from glass scratched by glass
- ★ **scratch marks** in **Blue circle** are from glass scratched by sapphire

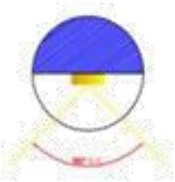
Item No.	Pic	Specifications		
SL-FB-2W		Light Data	Luminous Flux:	2W - 250lm
				4W – 500lm
				6-750 lm
			CRI:	>80
			Main CCT	2200K, 2600-2900K,5000-5500K
			Beam Angle:	360°
		Electrical Data	Power Consumption:	3.3±0.2W
			Input Voltage:	220V/110V AC
			Operating Frequency:	50Hz/60Hz
			Power Factor:	>0.4
		Others	Body Material:	Glass
			Glass Option:	Clear
			Base Type:	E27
			Lifetime:	35000hrs
			Working Temperature:	-20℃~ 60℃
SL-FBC01-2W		Light Data	Luminous Flux:	2W - 250lm
				4W – 500lm
			CRI:	>80
			Main CCT	2200K, 2600-2900K,5000-5500K
			Beam Angle:	360°
		Electrical Data	Power Consumption:	1.6±0.2W
			Input Voltage:	220V AC
			Operating Frequency:	50Hz
			Power Factor:	>0.4
		Others	Body Material:	Glass
			Glass Option:	Clear
			Base Type:	E14
			Lifetime:	35000hrs
			Working Temperature:	-20℃~ 60℃

Comparison of Beam Angle



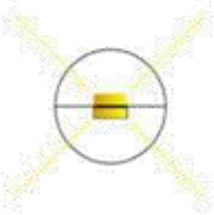
Ordinary 120 luminous LED

Ordinary LED chip is one-sided luminous, the back side cannot give out light,so the beam angle is limited within 180°



Ordinary 90 luminous LED

Ordinary LED chip is one-sided luminous, the back side cannot give out light,so the beam angle is limited within 180°



SensLights 360 Luminous LED Square Type

We adopt high light transmitting(up to 99%)sapphire as substrate, the back side also can give out light,if ingnore the base part,the beam angle can reach 360°

SensLights 360 Luminous LED Filament Type

We adopt high light transmitting(up to 99%)sapphire as substrate, the back side also can give out light,if ingnore the base part,the beam angle can reach 360°

Comparison of Different Substrate Materials

Materials' Name	Aluminum	Ceramics	Glass	Sapphire
Pictures				
Heat conductivity	High	High	Low	High
Beam angle	< 180°	< 180°	360°	360°
Insulativity	Not Insolated	Insulated	Insulated	Insulated
Luminous Efficiency	70-100LM/W	70-100LM/W	90-140LM/W	90-140LM/W
Material and Production Cost	Low	High	Low	High
Light source type	Spot	Surface	Line	Surface/Line
Life time	Long	Long	Short	Long

Notes:

1.High Heat conductivity will increse the lifetime

2.Material itself is insolator will lower the cost

3.Spot light source-light is uneven,surface/line light souce-light is more even