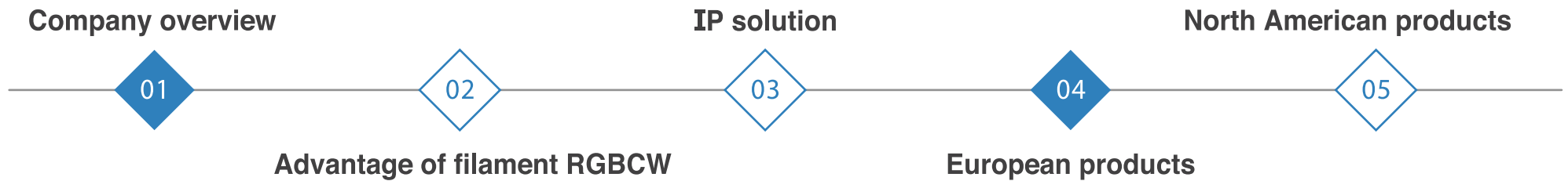


SMART LED BULB

CONTENTS



Company overview



1000+
WORKERS



Headquarter - Hangzhou



Anhui Factory 1 - filament packaging

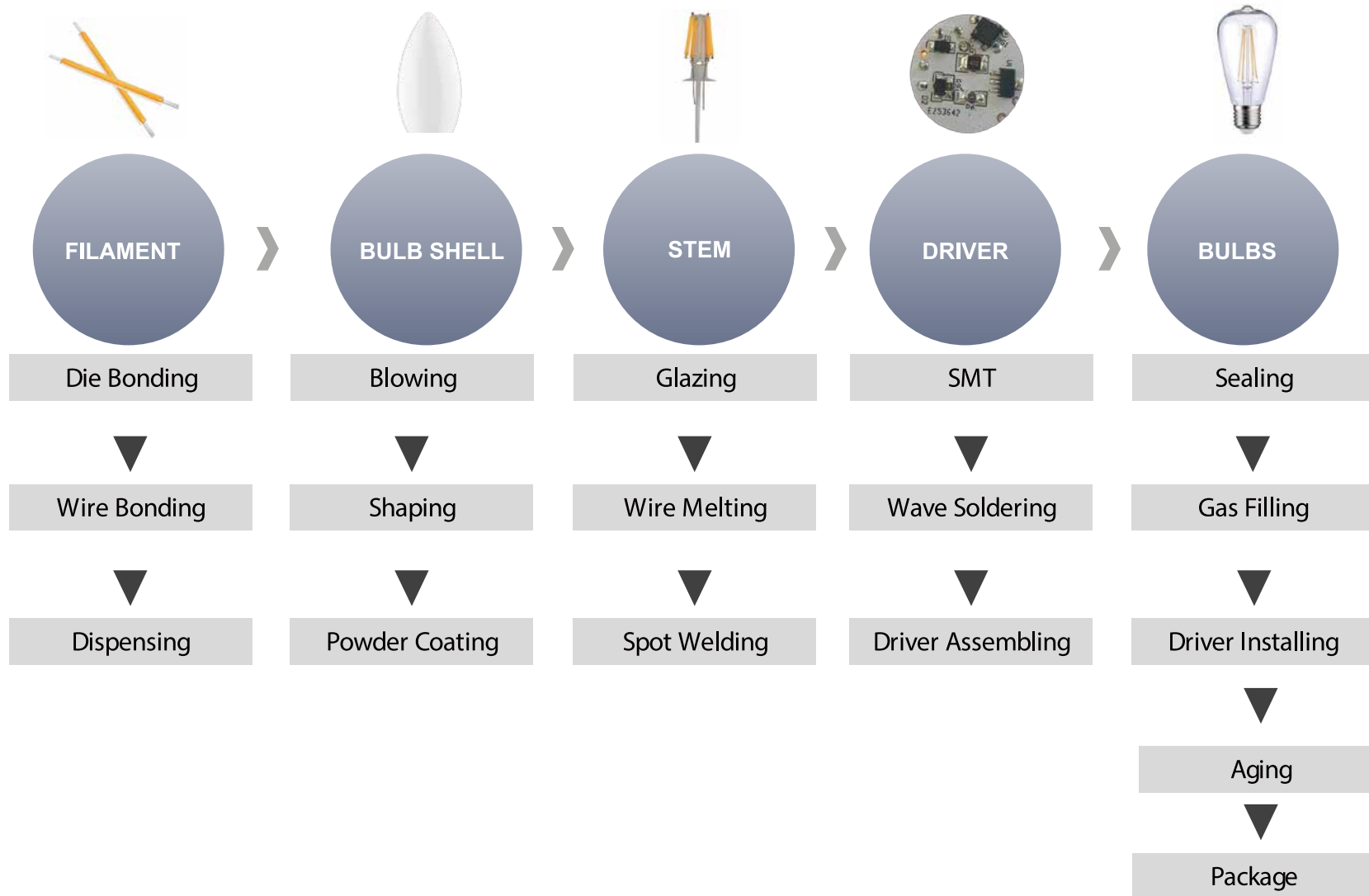
- 100 Filament package production lines
- Filament capacity: **50KK** pcs/month



Anhui Factory 2 - bulb production

- 32 Bulbs assembling line
- Filament bulb capacity: **10M** pcs/month

Vertical Integration Manufacturing



■ Why Choose Filament RGBCW

Huge Demand Of Smart RGBW Bulb In Market

SMD RGBCW :

- Lighting & RGB
- Hot Selling
- Plastic Parts



Selling Point

Filament RGBCW :

- Lighting & CCT & Decoration combined
- Full Glass
- Slim filament
- More Vintage shape

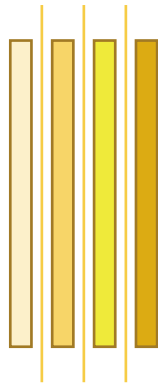


Advantage Of Hangke Version

High Color Purity



HANGKE IP



Purity

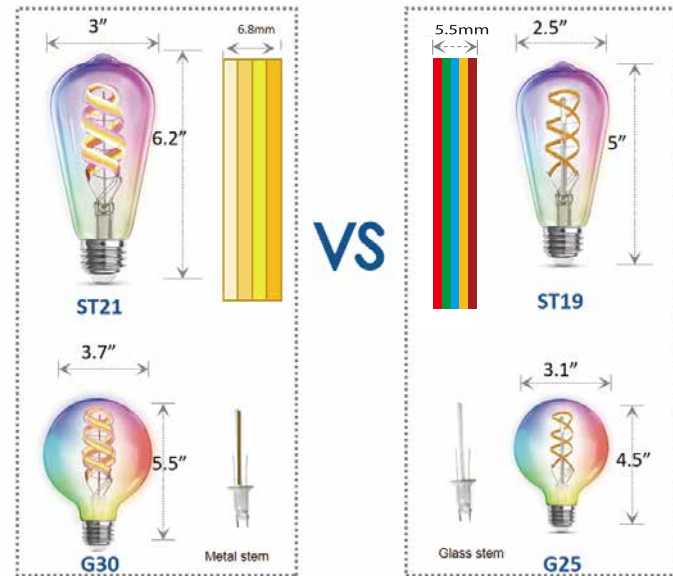
R: 94.6%
G: 84.4%
B: 89.6%



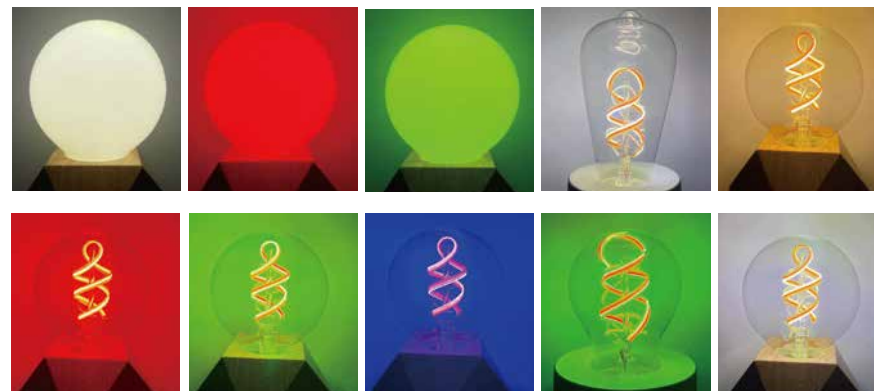
Purity

R: 97.6%
G: 84.8%
B: 95.1%

Slim Filament



Compare	Other brand	Hangke
Bulb	ST21 G30 N/A	ST19 G25 A19
CCT	2100K	2700K-6500K
Lumen	300	500
Filament	6.8mm	5.5mm
Stem	metal	glass



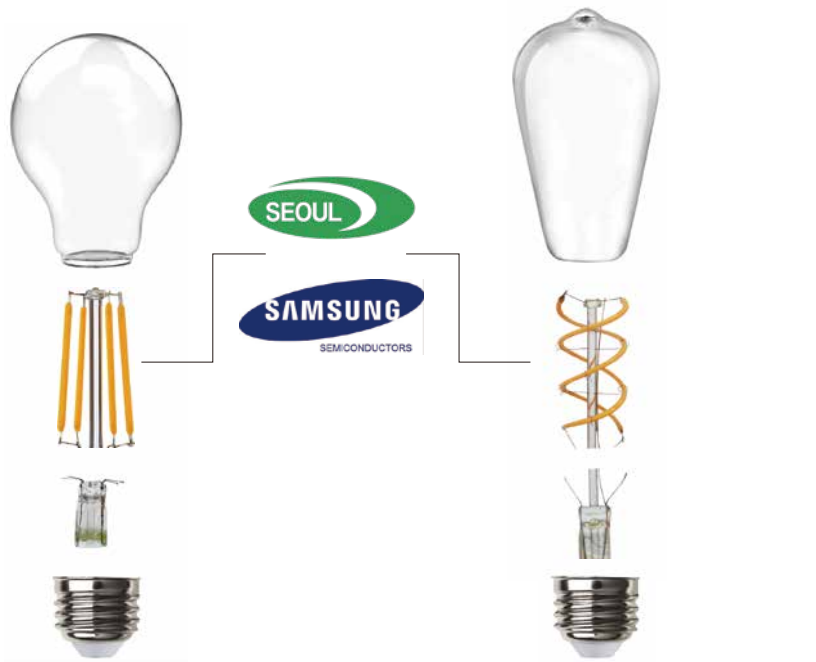
Application Scenarios



■ IP protection

Structure Patent

Straight filament bulb & Spiral filament bulb



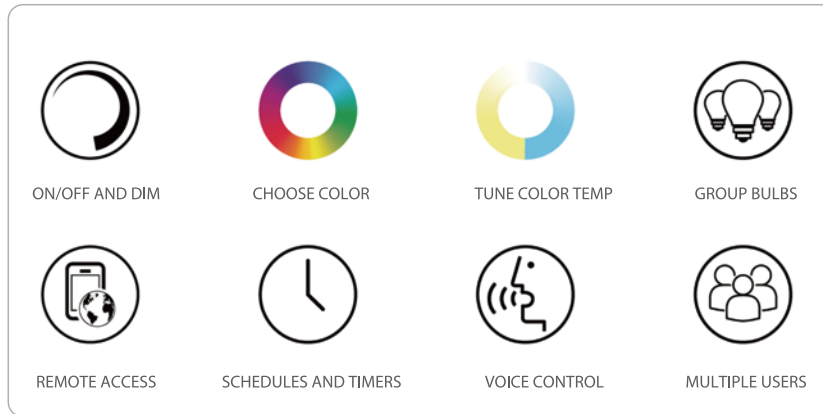
LEDISONG
锐迪生
EU: EP2535640B1
US:US9261242B2
CA:CA2810658
CN:CN201010610092.7

LEDISONG
锐迪生
EU: EP2535640B1
US:US9261242B2
CA:CA2810658
CN:CN201010610092.7

&
TIE HAN GE
EU: EP3065174
US:US9261242B2



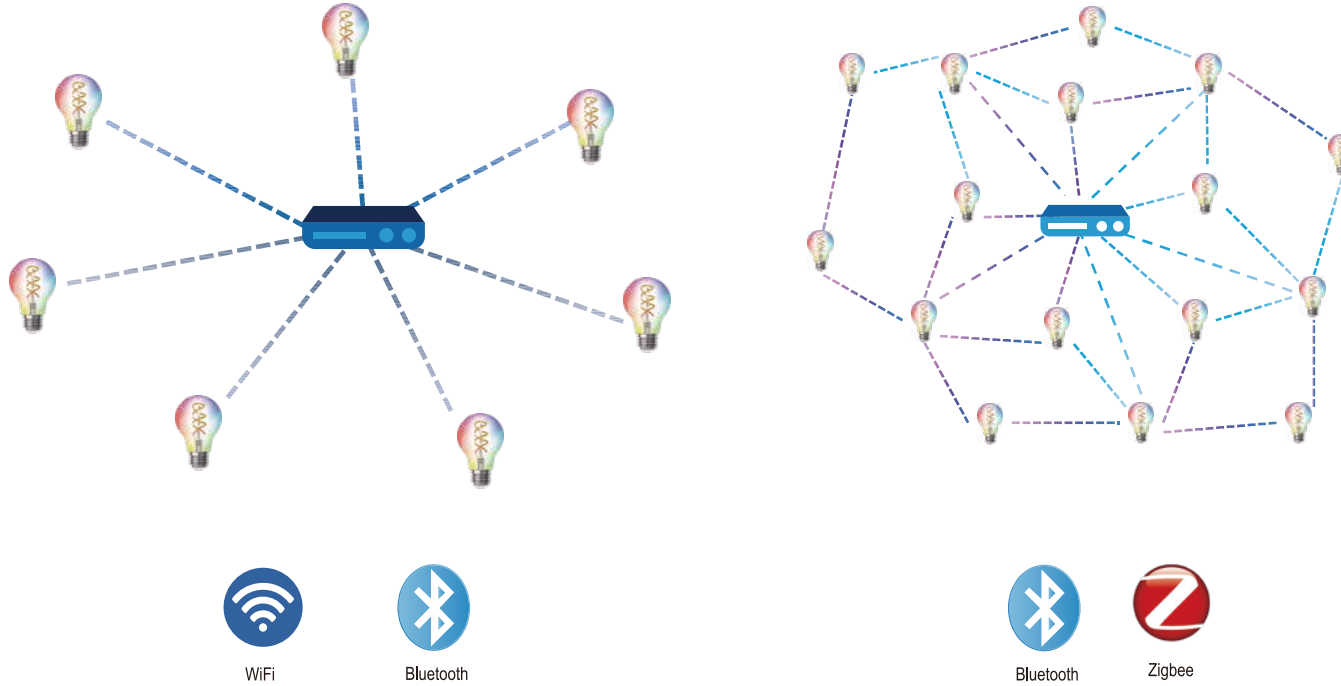
Support following Communication protocols:



Patent :

- Structure: Tie han Ge/Ledisong
- Filament: Samsung/Seoul
- CN Patent: Hangke

Communication Protocol



	Wi-fi	Bluetooth(Sig)	Zigbee
communication distance	30-50 meters (no shade indoors)	30-50 meters (no shade indoors)	30-50 meters (no shade indoors)
power dissipation	40mA	20mA	20mA
Whether a gateway is needed	Yes (router)	No	Yes
Number of gateway (route) connections	16	128	120
transmission rate	300Mb/s	1Mb/s	10-250Kb/s
Using spectrum	2.4GHz	2.4GHz	2.4GHz
security	under	high	high
The latest standards	Wifi5	SIG 1.01(based on BLE4.2)	Zigbee 3.0
cost	low price	low price	high-priced

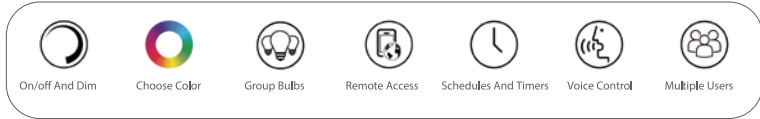


Smart Bulb

European products

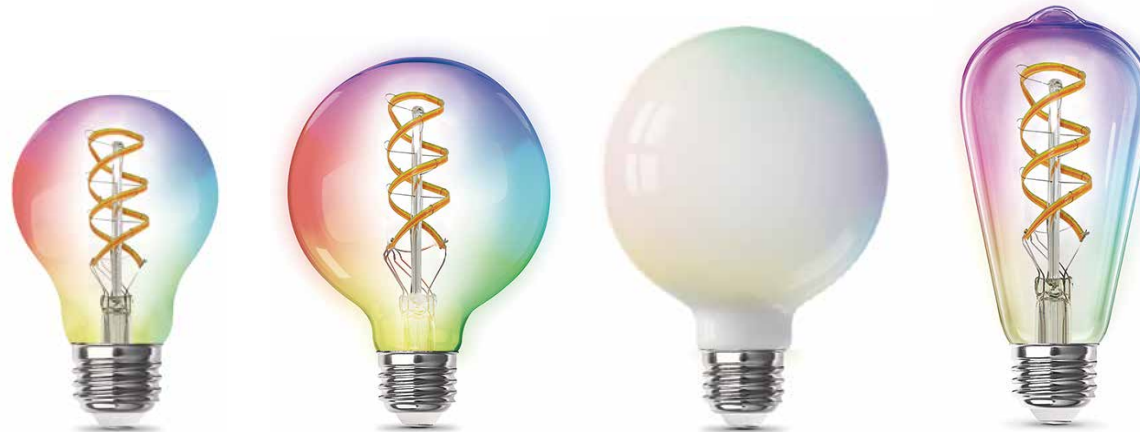
RGBW Smart Wifi Bulb

Features



Clear – 2700k

Color Changing



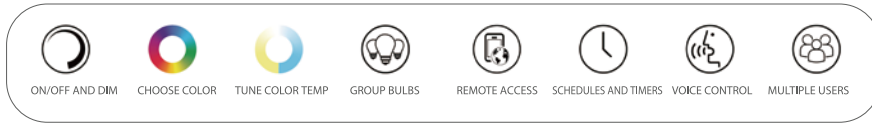
Bulb shape	Finish	Base	Lumen	Wattage	CRI	CCT	Communication Protocol	Cert needed
A60	clear	E27	300 lm	5W	>80	RGB&2700K	Wifi & BLE	CE/ROHS ERP exemption
ST64	clear	E27	300 lm	5W	>80	RGB&2700K	Wifi & BLE	CE/ROHS ERP exemption
G95	clear	E27	300 lm	5W	>80	RGB&2700K	Wifi & BLE	CE/ROHS ERP exemption
G95	frosted	E27	300 lm	5W	>80	RGB&2700K	Wifi & BLE	CE/ROHS ERP exemption



Slim Filament 5mm

RGBCW Smart Wifi Bulb

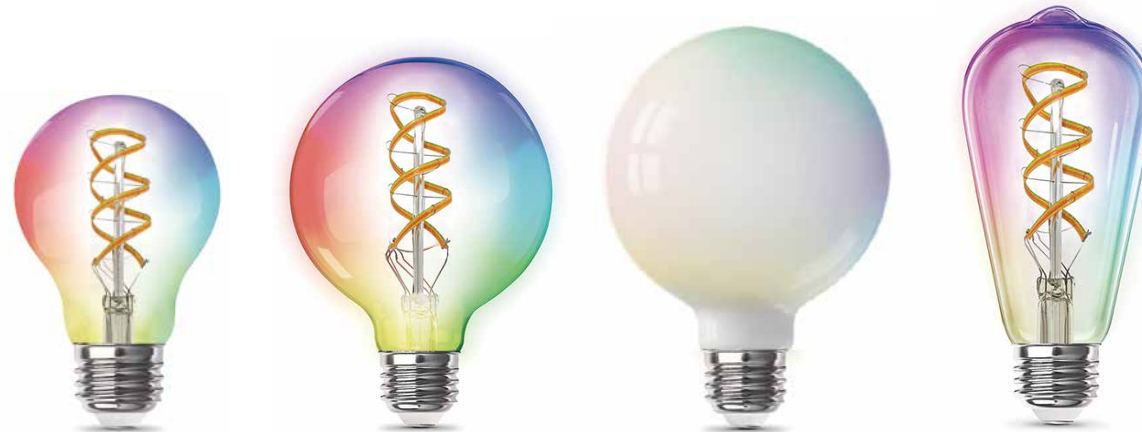
Features



RGB Color Changing & Tunable White 2700K-6500K



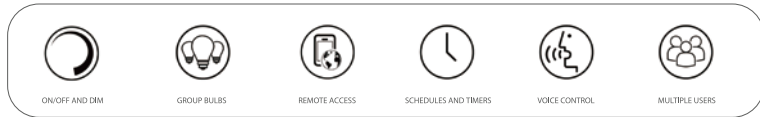
Slim Filament 5.5mm



Bulb shape	Finish	Base	Lumen	Wattage	CRI	CCT	Communication Protocol	Cert needed
A60	clear	E27	500 lm	7W	>80	RGB&2700K-6500K	Wifi & BLE	CE/ROHS ERP exemption
ST64	clear	E27	500 lm	7W	>80	RGB&2700K-6500K	Wifi & BLE	CE/ROHS ERP exemption
G95	clear	E27	500 lm	7W	>80	RGB&2700K-6500K	Wifi & BLE	CE/ROHS ERP exemption
G95	frosted	E27	500 lm	7W	>80	RGB&2700K-6500K	Wifi & BLE	CE/ROHS ERP exemption

Straight Filament Smart Bulbs

Features



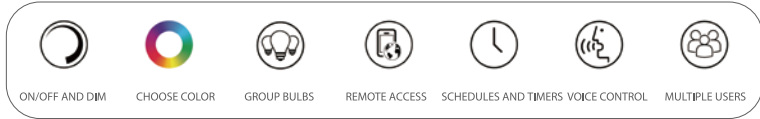
Clear –2700K/4000K/6500K



Bulb type	Finish	Base	Lumen	Watt	CRI	CCT	Cert needed
C35/G45	clear	E27	250 lm	3W	>80	2700K/4000K/6500K	CE/ROHS/ERP
C35/G45	clear	E27	470 lm	5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
C35/G45	clear	E14+Plastic Part	250 lm	3W	>80	2700K/4000K/6500K	CE/ROHS/ERP
C35/G45	clear	E14+Plastic Part	470 lm	5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
A60	clear	E27	470 lm	5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
A60	clear	E27	806 lm	7.5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
ST64	clear	E27	250 lm	3W	>80	2700K/4000K/6500K	CE/ROHS/ERP
ST64	clear	E27	470 lm	5.5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
ST64	clear	E27	806 lm	7.5W	>80	2700K/4000K/6500K	CE/ROHS/ERP
G80/G95/G125	clear	E27	250 lm	3W	>80	2700K/4000K/6500K	CE/ROHS/ERP
G80/G95/G125	clear	E27	470 lm	5W	>80	2700K/4000K/6500K	CE/ROHS/ERP

Straight Filament Smart Bulbs

Features




Tunable White 2700K-6500K



Bulb type	Finish	Base	Lumen	Watt	CRI	CCT	Cert needed
C35/G45	clear	E27	250 lm	3W	>80	2700K-6500K	CE/ROHS/ERP
C35/G45	clear	E27	470 lm	5W	>80	2700K-6500K	CE/ROHS/ERP
C35/G45	clear	E14+Plastic Part	250 lm	3W	>80	2700K-6500K	CE/ROHS/ERP
C35/G45	clear	E14+Plastic Part	470 lm	5W	>80	2700K-6500K	CE/ROHS/ERP
A60	clear	E27	470 lm	5W	>80	2700K-6500K	CE/ROHS/ERP
A60	clear	E27	806 lm	7.5W	>80	2700K-6500K	CE/ROHS/ERP
ST64	clear	E27	250 lm	3W	>80	2700K-6500K	CE/ROHS/ERP
ST64	clear	E27	470 lm	5.5W	>80	2700K-6500K	CE/ROHS/ERP
ST64	clear	E27	806 lm	7.5W	>80	2700K-6500K	CE/ROHS/ERP
G80/G95/G125	clear	E27	250 lm	3W	>80	2700K-6500K	CE/ROHS/ERP
G80/G95/G125	clear	E27	470 lm	5W	>80	2700K-6500K	CE/ROHS/ERP

Higher Lumen Spiral Smart Bulb



Other brand in market



HK higher lumen Smart version
2 in 1 function (lighting & deco)



Bulb Shape	Base	Finish	Lumen	CCT	CRI
ST/G/A	E27	clear	470lm	2700K	>80
ST/G/A	E27	amber	470lm	2200K	>80



Smart Bulb

North American products

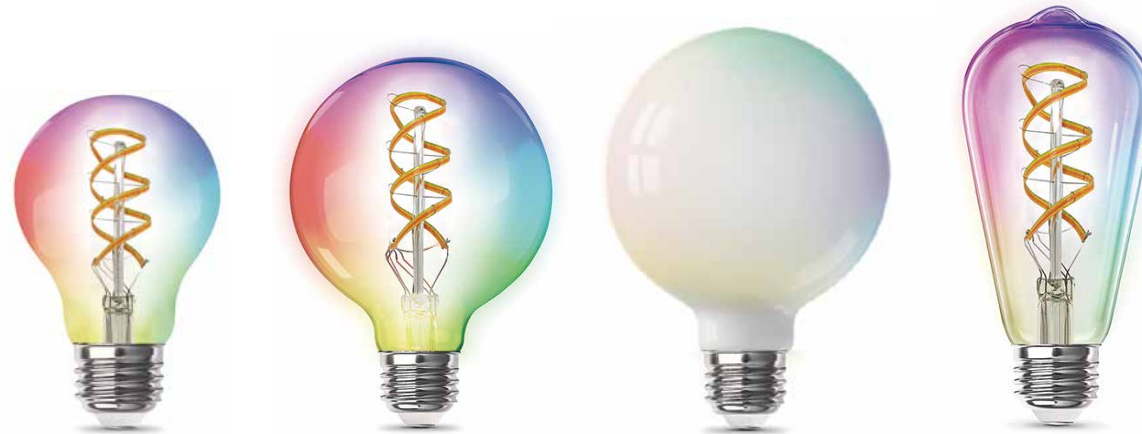
RGBW Smart Wifi Bulb

Features

ON/OFF AND DIM CHOOSE COLOR GROUP BULBS REMOTE ACCESS SCHEDULES AND TIMERS VOICE CONTROL MULTIPLE USERS



Slim Filament 5.5mm



Bulb shape	Finish	Base	Lumen	Equivalent Watt	CRI	CCT	Communication Protocol	Cert needed
A19	clear	E26	250 lm	25W	>80	RGB&2700K	Wifi & BLE	UL
ST19	clear	E26	300 lm	40W	>80	RGB&2700K	Wifi & BLE	UL
G25	clear	E26	350 lm	40W	>80	RGB&2700K	Wifi & BLE	UL
G25	frosted	E26	350 lm	40W	>80	RGB&2700K	Wifi & BLE	UL

RGBCW Smart Wifi Bulb

Features

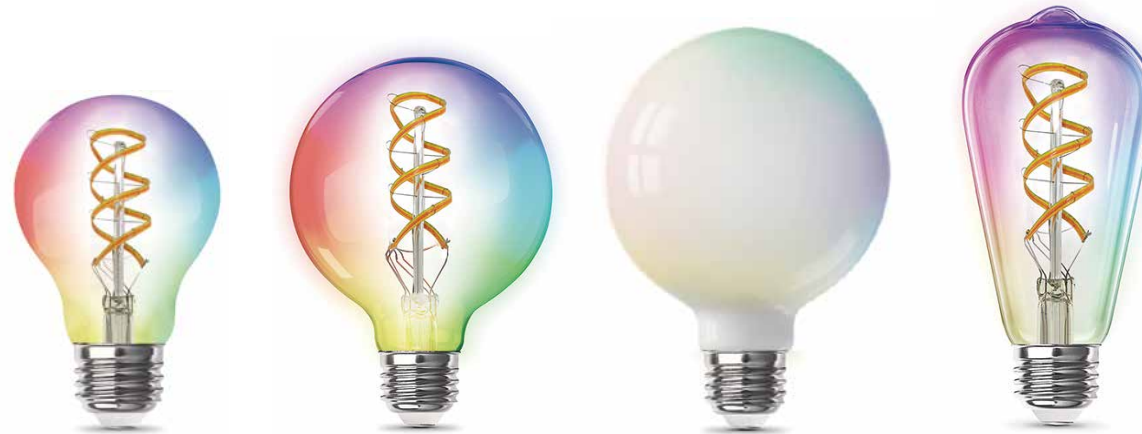
ON/OFF AND DIM CHOOSE COLOR TUNE COLOR TEMP GROUP BULBS REMOTE ACCESS SCHEDULES AND TIMERS VOICE CONTROL MULTIPLE USERS



RGB Color Changing & Tunable White 2700K-6500K



Slim Filament 5.5mm

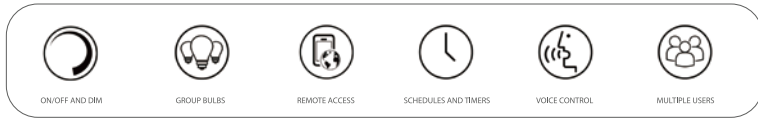


Bulb shape	Finish	Base	Lumen	Equivalent Watt	CRI	CCT	Communication Protocol	Cert needed
A19	clear	E26	450 lm	40W	>80	RGB&2700K-6500K RGB&2000K-5000K	Wifi & BLE	UL
ST19	clear	E26	500 lm	60W	>80	RGB&2700K-6500K RGB&2000K-5000K	Wifi & BLE	UL
G25	clear	E26	500 lm	60W	>80	RGB&2700K-6500K RGB&2700K-6500K	Wifi & BLE	UL
G25	frosted	E26	500 lm	60W	>80	RGB&2700K-6500K RGB&2700K-6500K	Wifi & BLE	UL

Straight Filament Smart Bulbs



Features



Clear –2700K/3000K/5000K



Bulb type	Finish	Base	Lumen	Equivalent Watt	CRI	CCT	Communication Protocol	Cert needed
B11/G16.5	clear	E26	300 lm	40W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
B11/G16.5	clear	E26	500 lm	60W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
B11/G16.5	clear	E12+Plastic Part	300 lm	40W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
B11/G16.5	clear	E12+Plastic Part	500 lm	60W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
A15	clear	E26	250 lm	25W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
A15	clear	E12+Plastic Part	250 lm	25W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
A19	clear	E26	450 lm	40W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
A19	clear	E26	800 lm	60W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
ST19	clear	E26	300 lm	40W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
ST19	clear	E26	500 lm	60W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
G25	clear	E26	350 lm	40W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES
G25	clear	E26	500 lm	60W	>80	2700K/3000K/5000K	Wifi & BLE	UL/ES

Straight Filament Smart Bulbs



Features



Tunable White 2700K-6500K



Bulb type	Finish	Base	Lumen	Equivalent Watt	CRI	CCT	Communication Protocol	Cert needed
B11/G16.5	clear	E26	300 lm	40W	>80	2700K-6500K	Wifi & BLE	UL/ES
B11/G16.5	clear	E26	500 lm	60W	>80	2700K-6500K	Wifi & BLE	UL/ES
B11/G16.5	clear	E12+Plastic Part	300 lm	40W	>80	2700K-6500K	Wifi & BLE	UL/ES
B11/G16.5	clear	E12+Plastic Part	500 lm	60W	>80	2700K-6500K	Wifi & BLE	UL/ES
A15	clear	E26	250 lm	25W	>80	2700K-6500K	Wifi & BLE	UL/ES
A15	clear	E12+Plastic Part	250 lm	25W	>80	2700K-6500K	Wifi & BLE	UL/ES
A19	clear	E26	450 lm	40W	>80	2700K-6500K	Wifi & BLE	UL/ES
A19	clear	E26	800 lm	60W	>80	2700K-6500K	Wifi & BLE	UL/ES
ST19	clear	E26	300 lm	40W	>80	2700K-6500K	Wifi & BLE	UL/ES
ST19	clear	E26	500 lm	60W	>80	2700K-6500K	Wifi & BLE	UL/ES
G25	clear	E26	350 lm	40W	>80	2700K-6500K	Wifi & BLE	UL/ES
G25	clear	E26	500 lm	60W	>80	2700K-6500K	Wifi & BLE	UL/ES

Higher Lumen Spiral Smart Bulb



Other brand in market



HK higher lumen Smart version
2 in 1 function (lighting & deco)



Bulb Shape	Base	Finish	Lumen	CCT	Equivalent Watt	CRI
ST/G/A	E26	clear	500lm	2700K	60W	>80
ST/G/A	E26	amber	500lm	2200K	60W	>80



The only reason for Hangke exists is to serve customers.

HANGZHOU HANGKE OPTOELECTRONICS GROUP CO., LTD.

Web: www.hkled.com

Tel: +86-571-89986666

Head Office: 33rd Floor, #4 Building of EFC, No. 1118 Xiangwang Street, Yuhang District, 311121 Hangzhou, China.

Factory: Xinglong Road, Tongcheng Technical Economic Development Zone, 231400 Anqing City, Anhui, China.