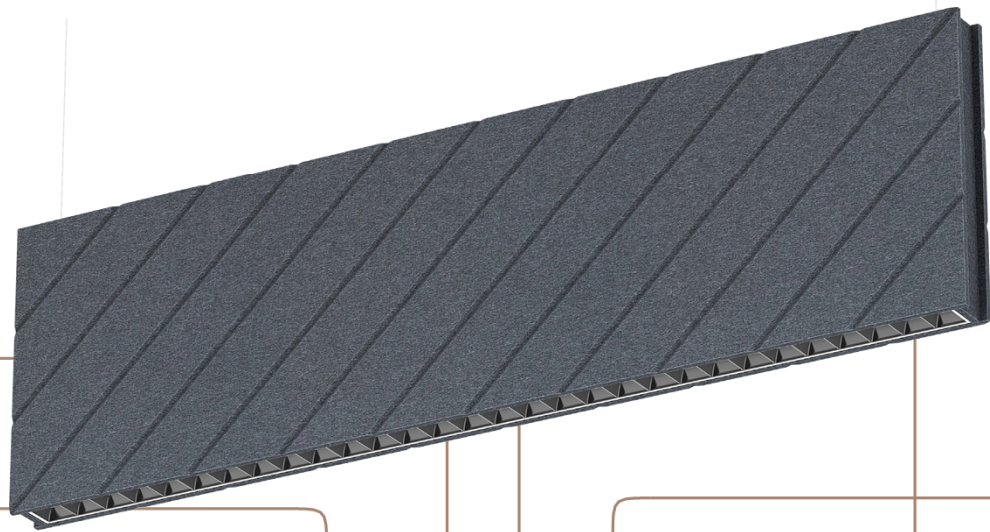
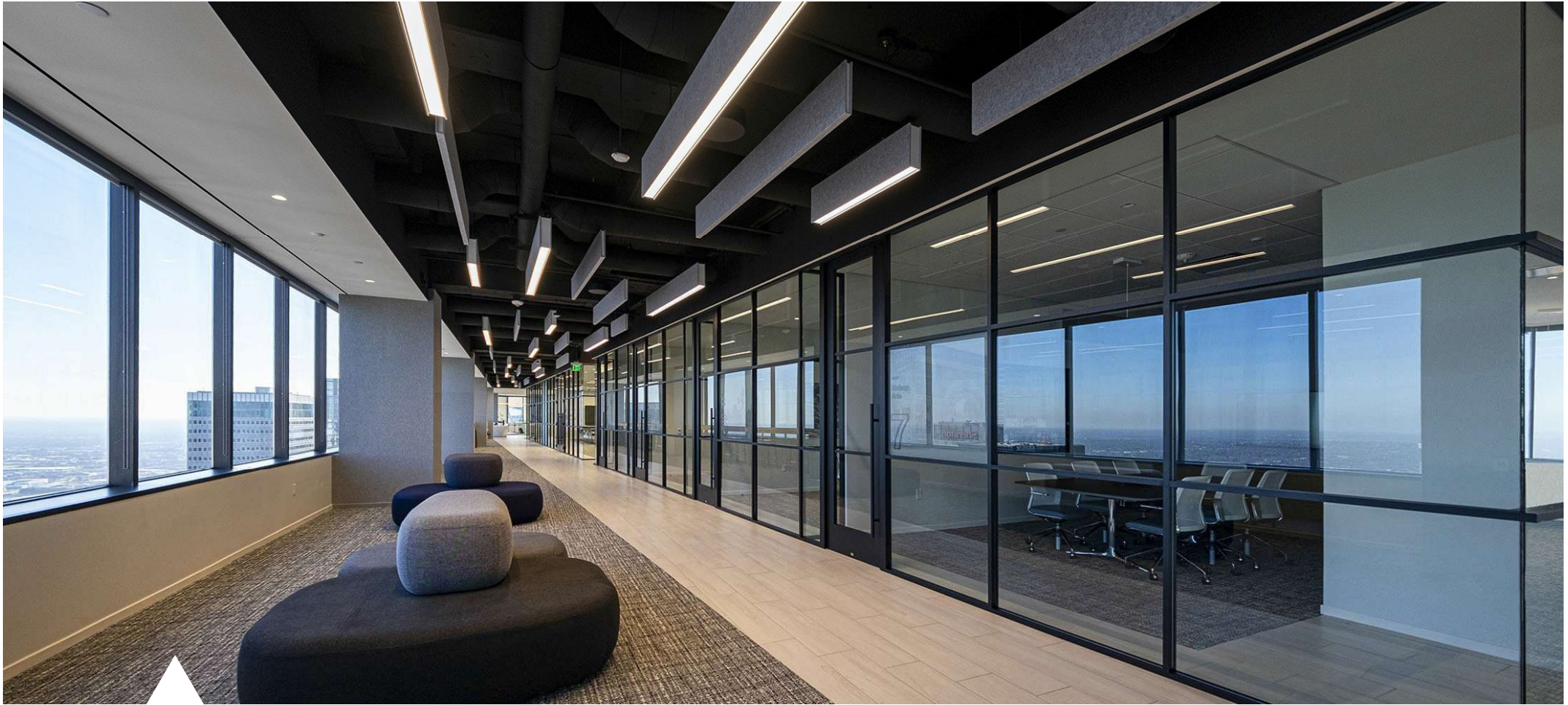


Entry/ECO Standard/STD Professional/PRO ODM & OEM Intelligent/INT

PRO
Specifications



LED Linear
DB160 Acoustic lighting Series



Introduction

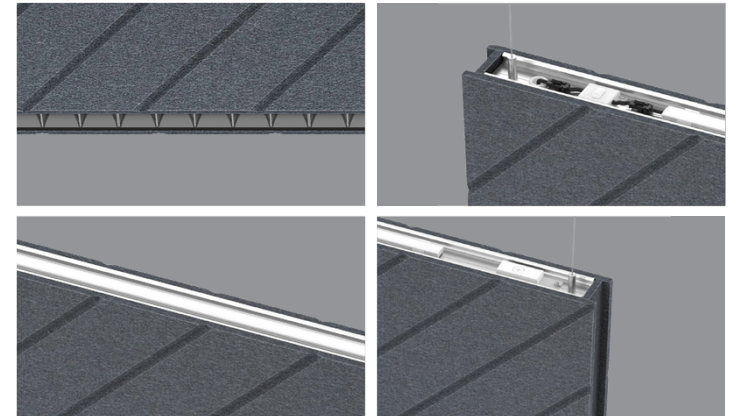
Bridging sound management and architectural lighting, DB160 is an integrated acoustic linear system that offers unmatched possibilities to control noise and provide optimal lighting in commercial environments. For optic design, DB160 adopts high lumen SMD light source, direct and indirect lighting design offers a uniform light distribution. For sound management, the polyester fiber sound-absorbing board is with striped grooves, and the concave-convex structure can fully diffuse excess sound rays, which can realize frequency sound absorption and diffusion, making the sound clearer and fuller, better integration of acoustics and modern lamps together.

Features

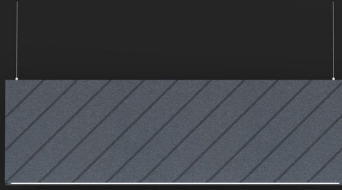
- Three types option: DB160A with grill reflector, DB160B with opal diffuser, DB160C with prismatic diffuser.
- Direct(80%) & indirect(20%) lighting design.
- High lumen efficiency, 95lm/W@DB160A/C, 120lm/W@DB160B.
- UGR<19 for DB160A.
- Interchangeable CCT(3000K+4000K)with slide switch.
- The color of polyester fiber sound-absorbing board can be customized(standard color is grey)
- Internal flicker free driver, Osram brand for non-dim version, Boke brand for DALI dimming version.

Application Areas

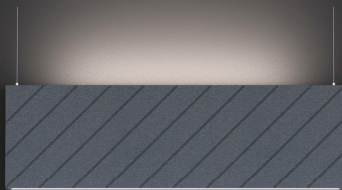
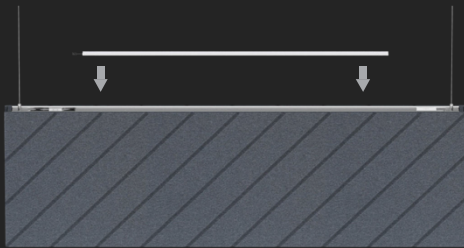
This sound-absorbing linear light is widely used in sports hall, restaurant, office, meeting room, study room etc.



Direct & indirect light emission by adding upward LED module



Direct light emission

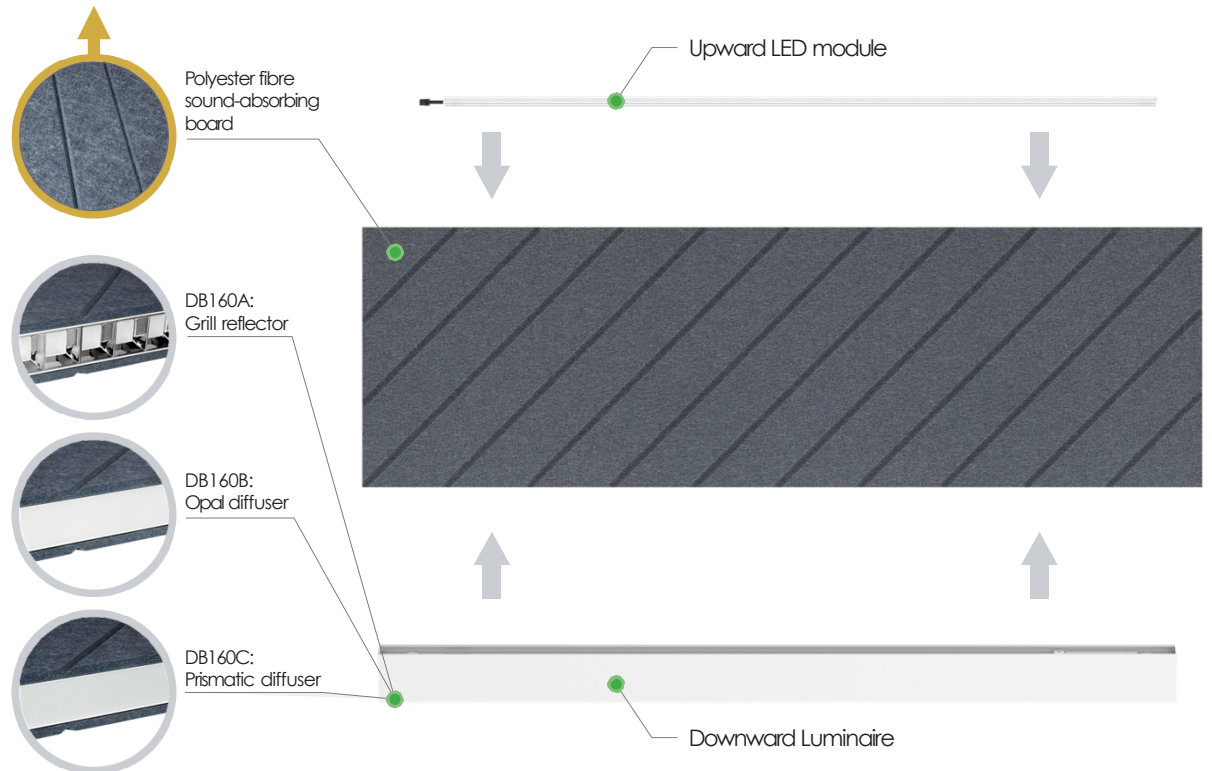
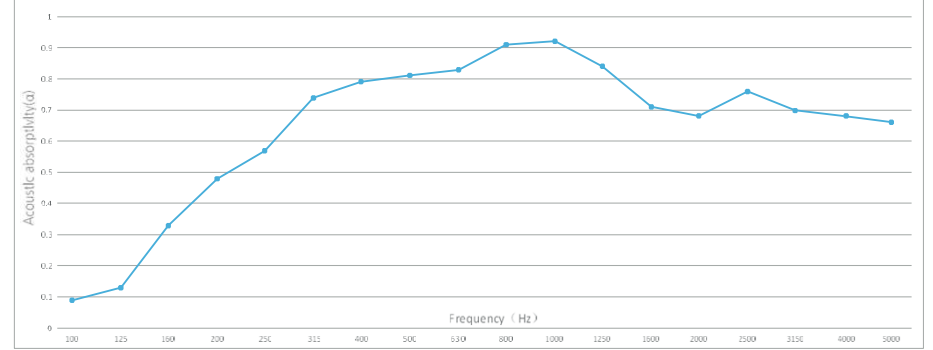


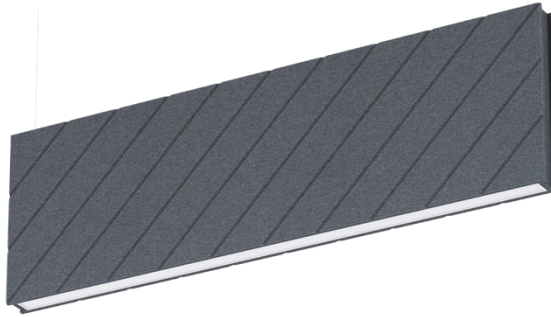
Direct / indirect light emission

Measurement of sound absorption in a reverberation room

| Frequency (Hz) | Acoustic absorptivity(α) |
|----------------|--------------------------|
| 100 | 0.09 |
| 125 | 0.13 |
| 160 | 0.33 |
| 200 | 0.48 |
| 250 | 0.57 |
| 315 | 0.74 |
| 400 | 0.79 |
| 500 | 0.81 |
| 630 | 0.83 |
| 800 | 0.91 |
| 1000 | 0.92 |
| 1250 | 0.84 |
| 1600 | 0.71 |
| 2000 | 0.68 |
| 2500 | 0.76 |
| 3150 | 0.7 |
| 4000 | 0.68 |
| 5000 | 0.66 |

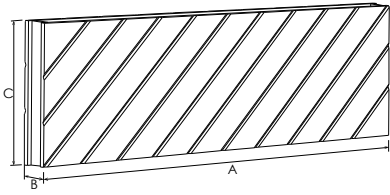
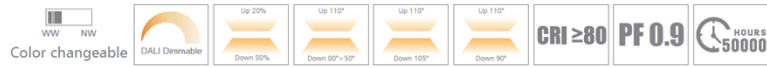
Acoustic material absorptivity curve





Technical Data Sheet

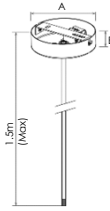
| Code No. | DB160A-1200-46W/ACC-DB160 | | | | DB160A-1500-65W/ACC-DB160 | | | | DB160B-1200-46W/ACC-DB160 | | | | DB160B-1500-65W/ACC-DB160 | | | | DB160C-1200-46W/ACC-DB160 | | | | DB160C-1500-65W/ACC-DB160 | | | | | |
|--|---|-------|-------------------------------------|-----------|---------------------------|-----------|-------------------------------------|-----------|---------------------------|-----------|----------------------------------|-----------|---------------------------|-----------|----------------------------------|-----------|---------------------------|-----------|---------------------------------|-----------|---------------------------|-----------|---------------------------------|-----------|--|-----------|
| Dimension(mm) | 1292*64*400 | | | | 1500*64*400 | | | | 1292*64*400 | | | | 1500*64*400 | | | | 1292*64*400 | | | | 1500*64*400 | | | | | |
| Cutout (mm) | - | | | | | | | | | | | | | | | | | | | | | | | | | |
| Watt(W) | 36W (Direct) | | 10W (Indirect) +36W (Direct) | | 50W (Direct) | | 15W (Indirect) +50W (Direct) | | 36W (Direct) | | 10W (Indirect) +36W (Direct) | | 50W (Direct) | | 15W (Indirect) +50W (Direct) | | 36W (Direct) | | 10W (Indirect) +36W (Direct) | | 50W (Direct) | | 15W (Indirect) +50W (Direct) | | | |
| Rated Input Voltage(V) | 220-240V | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input Voltage(V) | 230V | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED Module Input | - | | | | | | | | | | | | | | | | | | | | | | | | | |
| Light Source | SMD | | | | | | | | | | | | | | | | | | | | | | | | | |
| SDCM | <6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCT(K) | 2-CCT:3000K + 4000K | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCT Selection DIP Switch | YES | | | | | | | | | | | | | | | | | | | | | | | | | |
| Luminous Flux (lm) ±5% (White color) | Non-DIM | 1-CCT | - | | | | | | | | | | | | | | | | | | | | | | | |
| | | | DIM | - | | | | | | | | | | | | | | | | | | | | | | |
| | Non-DIM | 2-CCT | | 3050-3800 | | 4200-5000 | | 4300-5000 | | 5600-6800 | | 3750-4550 | | 4600-5750 | | 5000-6200 | | 6500-8000 | | 3050-3800 | | 4000-4800 | | 4500-5800 | | 6000-7500 |
| | | | DIM | 3050-3800 | | 4200-5000 | | 4300-5000 | | 5600-6800 | | 3750-4550 | | 4600-5750 | | 5000-6200 | | 6500-8000 | | 3050-3800 | | 4000-4800 | | 4500-5800 | | 6000-7500 |
| Remark: If the downward Luminaire with black color, lumen will decrease 15% (Type A will keep the same) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRI | 80 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Beam Angle (°) | 80°×50° (Direct) | | 110° (Indirect) 80°×50° (Direct) | | 80°×50° (Direct) | | 110° (Indirect) 80°×50° (Direct) | | 105°(Direct) | | 110° (Indirect) 105° (Direct) | | 105°(Direct) | | 110° (Indirect) 105° (Direct) | | 90°(Direct) | | 110° (Indirect) 90° (Direct) | | 90°(Direct) | | 110° (Indirect) 90° (Direct) | | | |
| UGR | <19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED Driver | Built-in | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dimming Option | DALI | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sensor | NO | | | | | | | | | | | | | | | | | | | | | | | | | |
| Emergency Kits | NO | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrical Class | Class I | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ingress Protection (IP Rating) | IP20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Impact Resistance (IK Rating) | - | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Finishing(Base) | Grey | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materials of Optics | PC | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materials of Housing | Polyester fibre (sound-absorbing board); Aluminum (luminaire) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lifetime (hr) | 50,000h | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glow wire test (°C) | 750°C | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating Temp. (°C) | -20~30°C | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage Temp. (°C) | -20°C~65°C | | | | | | | | | | | | | | | | | | | | | | | | | |
| Installation | Pendant | | | | | | | | | | | | | | | | | | | | | | | | | |



DB160/ACC-DB160
Acoustic lighting fixture



ACC-DB160-1200/1500
Upward LED module



ACC-DB160-(DA/D0)-BK(WT)-0200
Round ceiling plate

Measurement

| Code | Dimension(mm) | | | Size(mm) | Product Weight(kg) | | Package weight(Kg) | | Carton Size(cm) | Qty/CTN | 20GP (pcs) | 40HQ (pcs) |
|-------------------------------|---------------|------|-----|-------------|--------------------|--------|--------------------|---------|-----------------|---------|------------|------------|
| | A | B | C | | N.W/PC | G.W/PC | N.W/CTN | G.W/CTN | | | | |
| DB160-1200/ACC-DB160 | 1292 | 64 | 400 | 1292*64*400 | 5.28 | 6.75 | 5.28 | 6.75 | 132*9*48 | 1 | 460 | 1043 |
| DB160-1500/ACC-DB160 | 1500 | 64 | 400 | 1500*64*400 | 5.95 | 7.62 | 5.95 | 7.62 | 153*9*48 | 1 | 366 | 915 |
| ACC-DB160-1200 | 853 | 17.3 | 7 | 853*17.3*7 | 0.135 | - | 3.24 | 6.78 | 91.5*37.5*13 | 24 | 14976 | 34368 |
| ACC-DB160-1500 | 1061 | 17.3 | 7 | 1061*17.3*7 | 0.16 | - | 3.84 | 7.38 | 112.5*37.5*13 | 24 | 12288 | 28320 |
| ACC-DB160-(DA/D0)-BK(WT)-0200 | Ø100 | 25 | - | Ø100*25 | 0.28 | 0.31 | 1.12 | 1.35 | 26.5*13.5*14 | 4 | 20736 | 48624 |

Driver Datasheet (Non-dimmable)

| Total load wattage | | 36W | 46W | 50W | 65W |
|--------------------|-----------------------------------|---|--------|----------------|--------|
| Output | Output Voltage range | DC23-54V | | | |
| | Rated output current | 1050mA | | 1400mA | |
| | Line Regulation | ±5% | | | |
| | Setup, Rise Time | <0.5S@230V | | | |
| | Flickering Index | 0.45%(NO RISK) | | 0.56%(NO RISK) | |
| Input | Input Voltage | AC198-264V | | | |
| | Rated Input Voltage(V) | AC220-240V | | | |
| | Frequency | 50 / 60 Hz | | | |
| | Input Current | ≤0.21A | ≤0.26A | ≤0.28A | ≤0.36A |
| | Rated Input Current | ≤0.19A | ≤0.24A | ≤0.25A | ≤0.33A |
| | Power Factor | 0.9 | | | |
| | THD | < 15 %@230V | | | |
| | Efficiency | 87% | | | |
| Protection | No load wattage | <0.5W | | | |
| | Short circuit protection | PASS | | | |
| | Over voltage protection | PASS | | | |
| Safety & EMC | Over temperature protection | PASS | | | |
| | Withstand voltage | I/P-FG:1.5kVac,<5mA 60S | | | |
| | Isolation Resistance | 500VDC, ≥2M Ω | | | |
| | Surge | IEC/EN61000-4-5 (P≥25w L-N:1KV, L/N-PE:2KV) | | | |
| | EMC Emission | EN55015, EN61000-3-2 | | | |
| EMC Immunity | EN61000-4-2,3,4,5,6,8,11; EN61547 | | | | |

Driver Datasheet (Dali Dimmable)

| Total load wattage | | 36W | 46W | 50W | 65W |
|--------------------|-----------------------------------|---|--------|----------------|--------|
| Output | Output Voltage range | DC6-42V | | | |
| | Rated output current | 1050mA | | 1400mA | |
| | Line Regulation | ±5% | | | |
| | Setup, Rise Time | <0.6S@230V | | | |
| | Flickering Index | 0.36%(NO RISK) | | 0.29%(NO RISK) | |
| Input | Input Voltage | AC180-264V | | | |
| | Rated Input Voltage(V) | AC200-240V | | | |
| | Frequency | 50 / 60 Hz | | | |
| | Input Current | ≤0.22A | ≤0.28A | ≤0.31A | ≤0.40A |
| | Rated Input Current | ≤0.20A | ≤0.26A | ≤0.28A | ≤0.36A |
| | Power Factor | 0.9 | | | |
| | THD | <15 %@230V | | | |
| | Efficiency | 88% | | | |
| Protection | No load wattage | <0.5W | | | |
| | Short circuit protection | PASS | | | |
| | Over voltage protection | PASS | | | |
| Safety & EMC | Over temperature protection | PASS | | | |
| | Withstand voltage | I/P-FG:1.5kVac,<5mA 60S | | | |
| | Isolation Resistance | 500VDC, ≥2M Ω | | | |
| | Surge | IEC/EN61000-4-5 (P≥25w L-N:1KV, L/N-PE:2KV) | | | |
| | EMC Emission | EN55015, EN61000-3-2 | | | |
| EMC Immunity | EN61000-4-2,3,4,5,6,8,11; EN61547 | | | | |

Installation Procedure

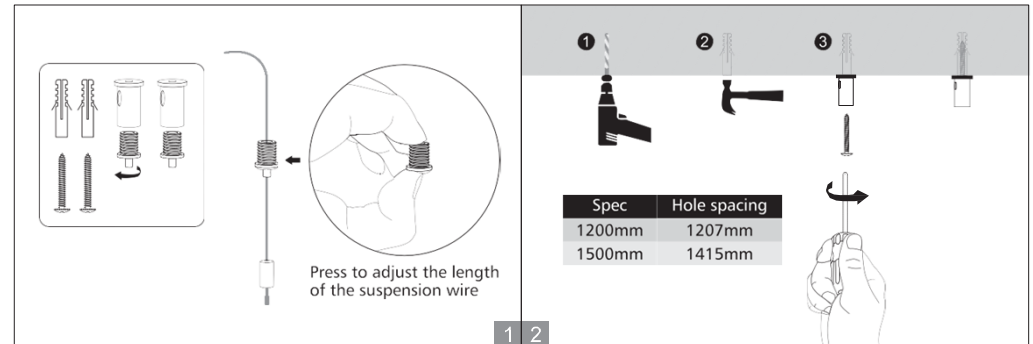
WARNING

- 1.Switch off before installation.
- 2.Switch on only after complete Installation and examination of the circuit.
- 3.Professional electrician for installation and maintenance only.

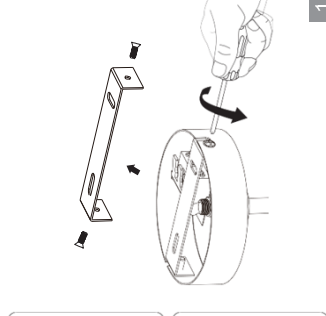
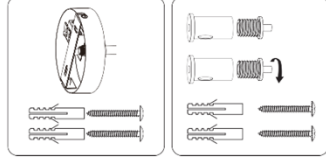


Turn Off power supply before starting any Installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

Suspended installation (Without round ceiling plate)



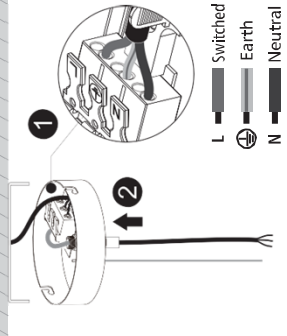
Suspended Installation (With round ceiling plate)



Press to adjust the length of the suspension wire

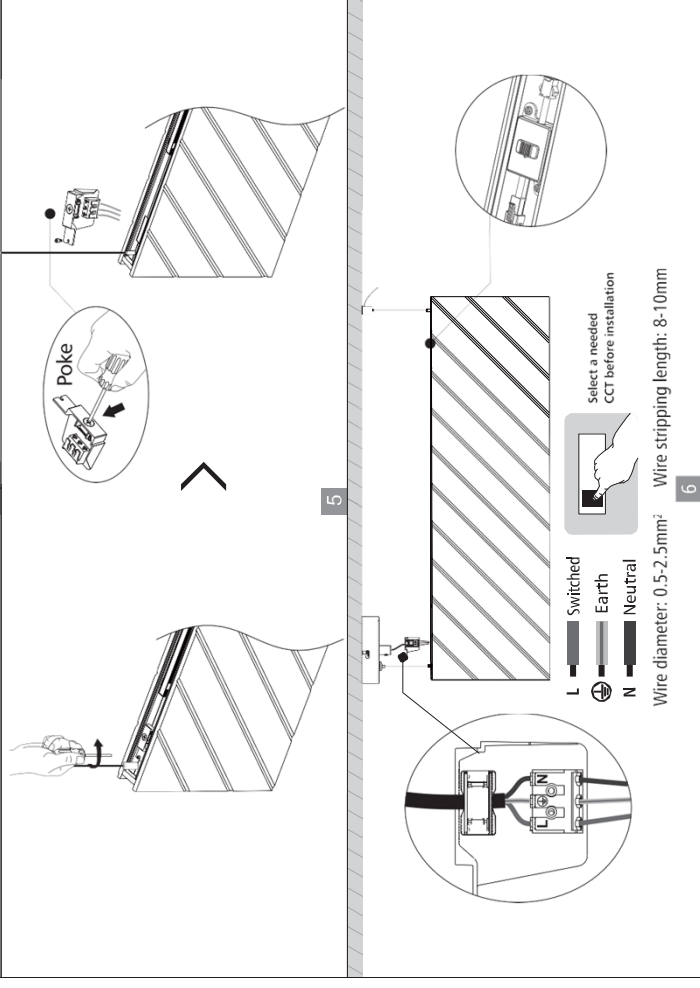
| Spec | Hole spacing |
|--------|--------------|
| 1200mm | 1207mm |
| 1500mm | 1415mm |

1 2



- L = Switched
- ⊕ = Earth
- N = Neutral

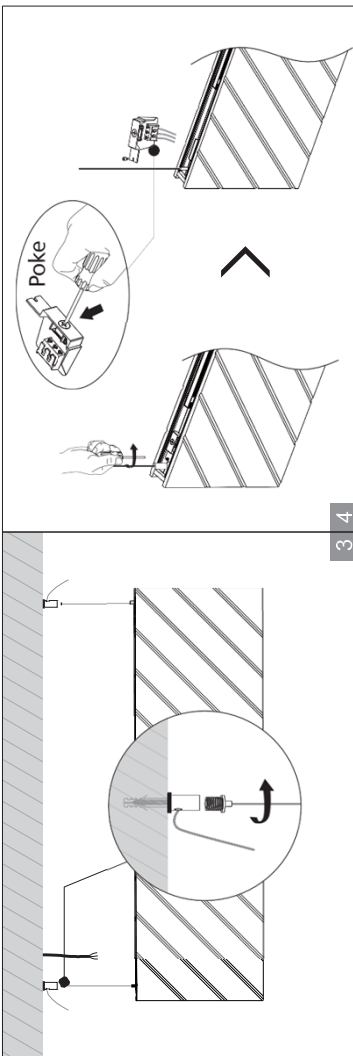
3 4



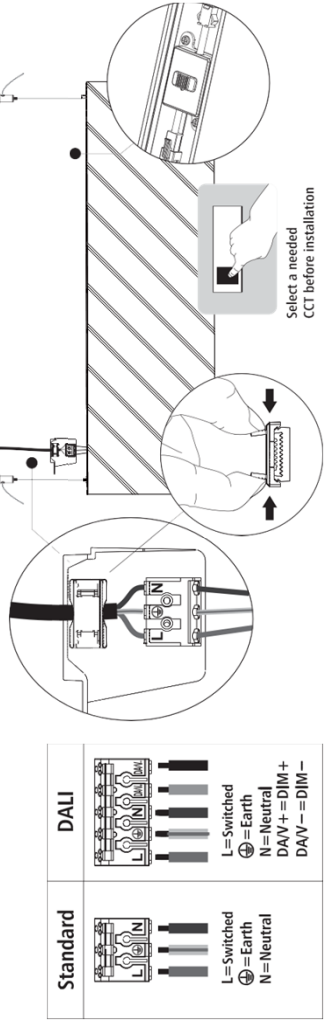
- L = Switched
- ⊕ = Earth
- N = Neutral

Wire stripping length: 8-10mm

6



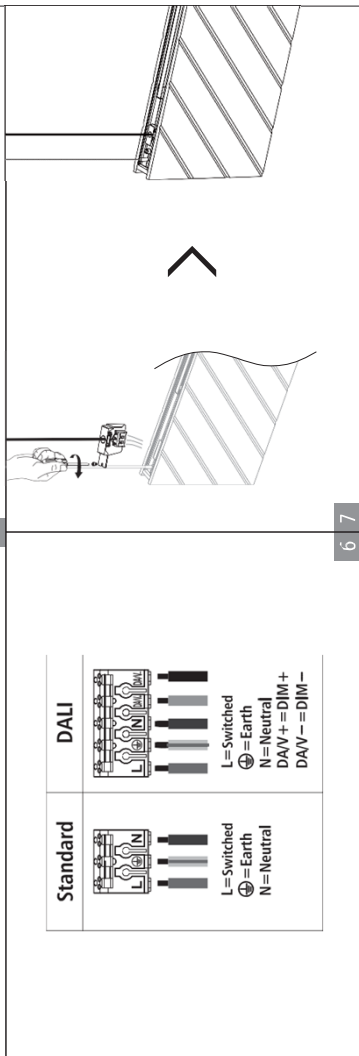
3 4



- | Standard | DALI |
|--|--|
| <ul style="list-style-type: none"> L = Switched ⊕ = Earth N = Neutral | <ul style="list-style-type: none"> L = Switched ⊕ = Earth N = Neutral DAV+ = DIM+ DAV- = DIM- |

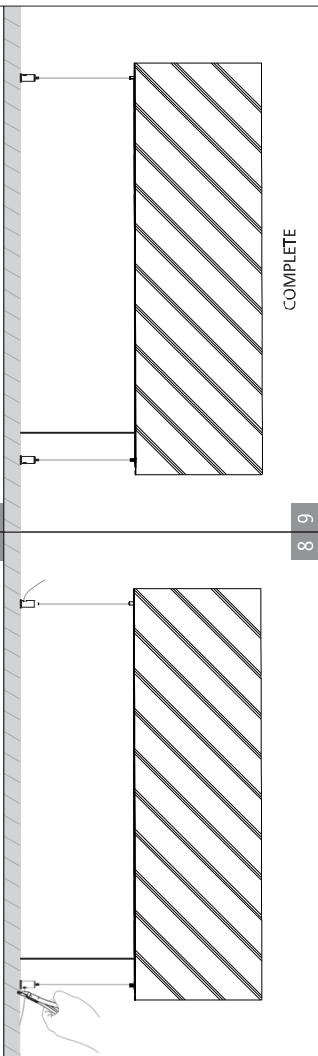
Select a needed CCT before installation

Wire diameter: 0.5-2.5mm² Wire stripping length: 8-10mm



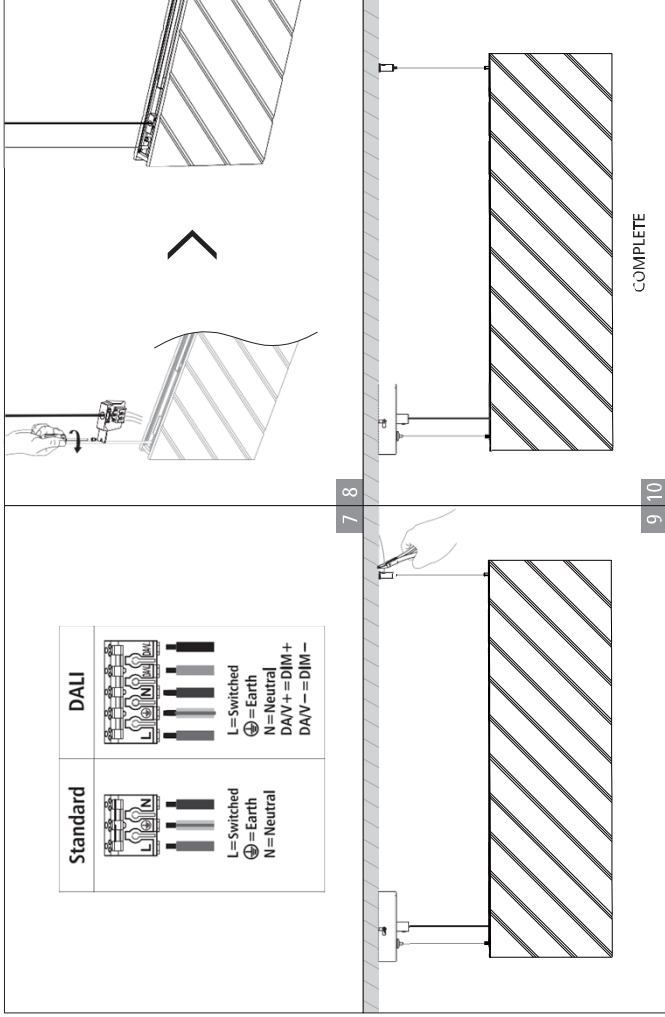
- | Standard | DALI |
|--|--|
| <ul style="list-style-type: none"> L = Switched ⊕ = Earth N = Neutral | <ul style="list-style-type: none"> L = Switched ⊕ = Earth N = Neutral DAV+ = DIM+ DAV- = DIM- |

6 7

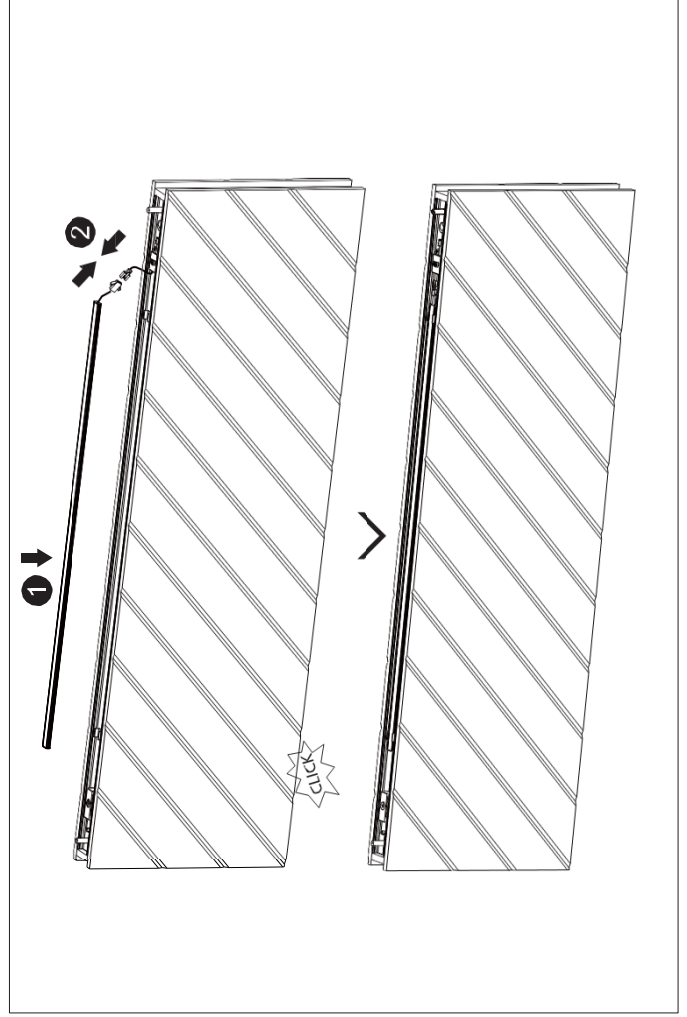


COMPLETE

8 9



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