



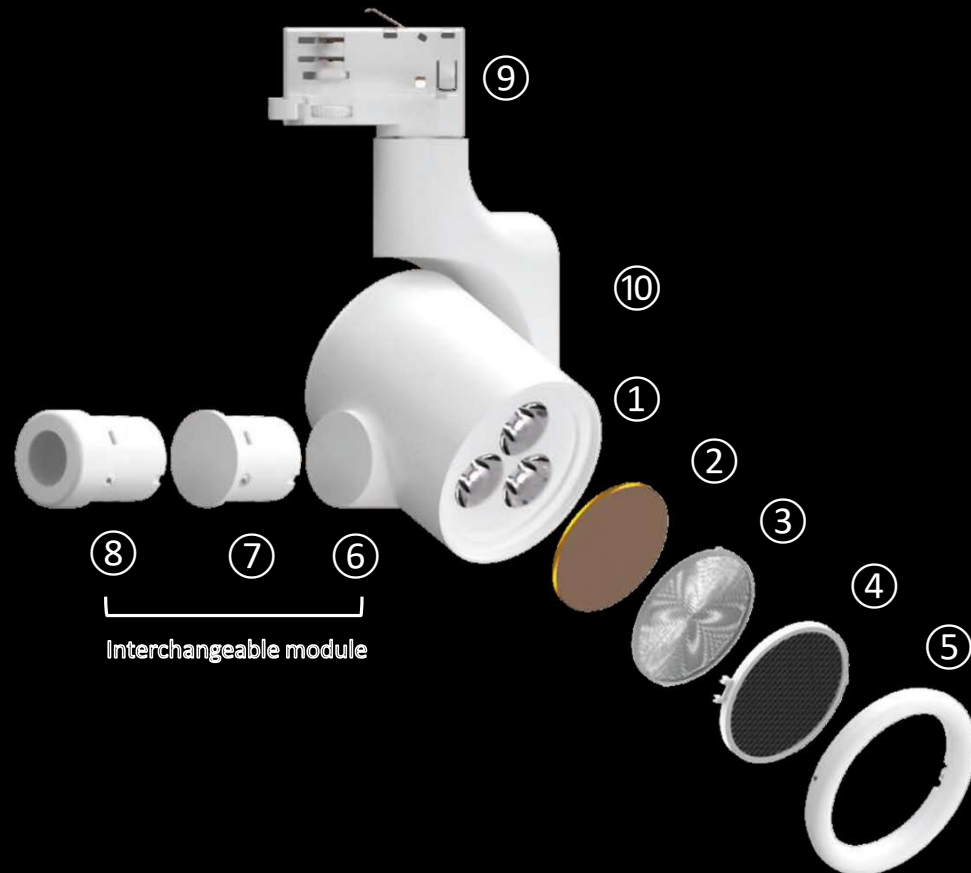
FlexRay-

Precision light for Culture



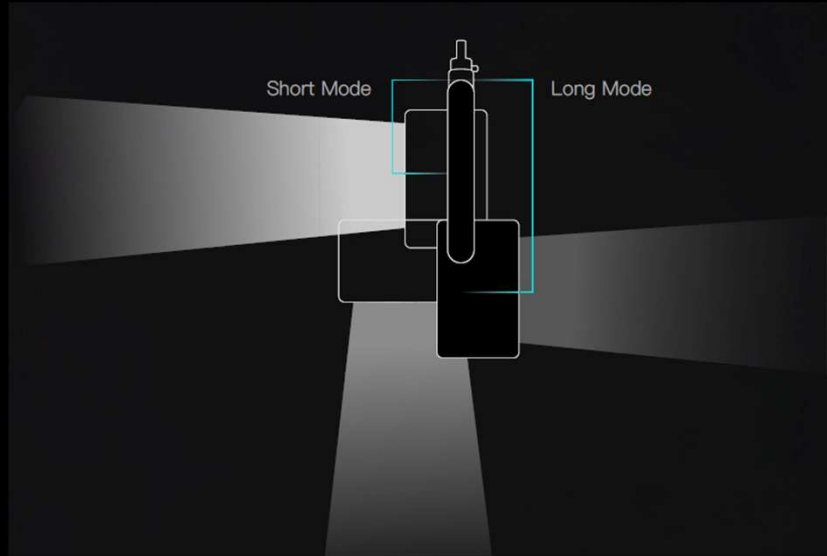
# Overall feature

**ACOfusion**

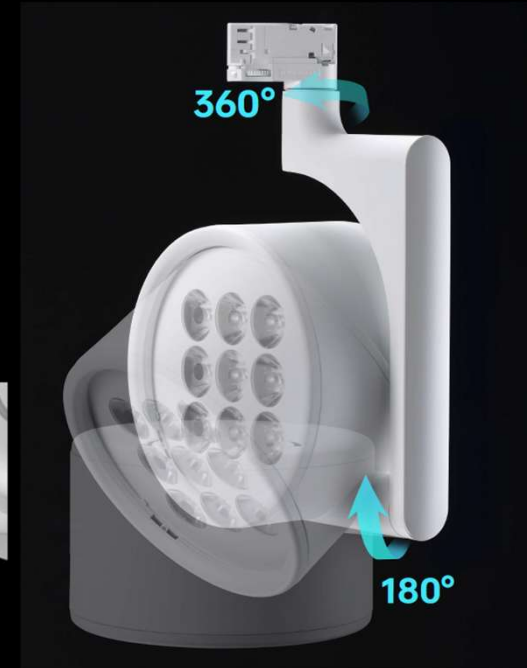
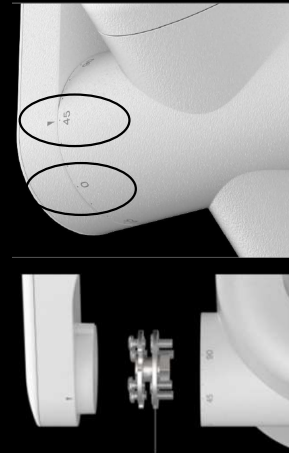


|                               |                                       |
|-------------------------------|---------------------------------------|
| ① Beam/ CCT                   | 9°, 4000K, SDCM≤2                     |
| ② CCT filter                  | 2700K/ 3000K/ 3500K                   |
| ③ Beam angle filter           | 15/20/25/40/50/70/<br>20x60/ Wallwash |
| ④ Honeycomb                   | Minimise UGR                          |
| ⑤ Magnetic Upper Ring         |                                       |
| ⑥ 0-10V On-board Dimming      | Brightness control                    |
| ⑦ ACO Smart                   | Wireless Control/ Bluetooth           |
| ⑧ Constant Illuminance_sensor | Preset 10 levels                      |
| ⑨ DALI or DMX (optional)      |                                       |
| ⑩ Precision Hinge             |                                       |

## Flex in Swivel Direction control



Provide two different lighting distance modes. Precision hinge within the mechanism of the light fixture to maximize the lighting mode of the fixture, while also allowing precise adjustment the direction of the light.

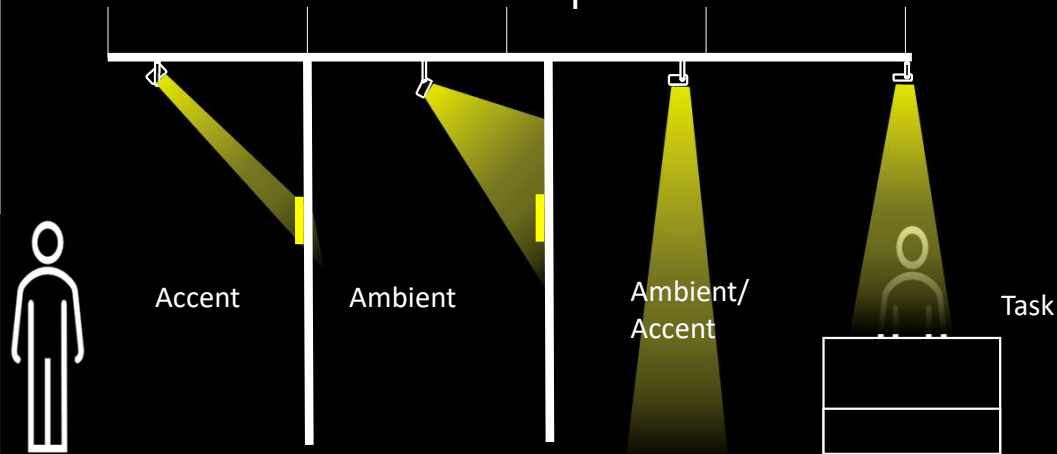


## Flex in Swivel

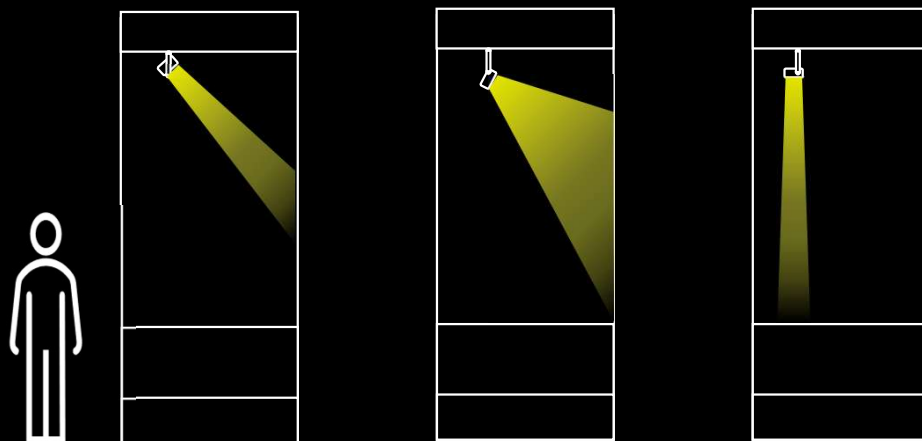


This feature enables lighting designer to hide or arrange the luminaires, depending on the type of the cabinets. It can be well-hidden the cabinets with short model but can be adjusted when needed.

### Surface mounted suspension track



### Surface mounted track inside cabinets



# Flex in Control Method

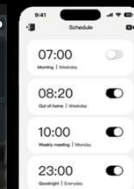
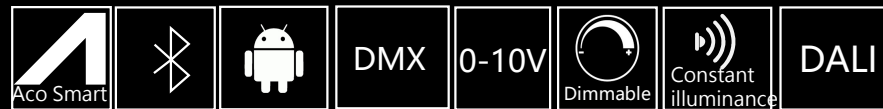
**ACOfusion**



Constant Illuminance



0-10V Dimming



|                       | Constant Illuminance | ACO Smart | ON/OFF | Preset scenes | CCT Adjustment | Brightness Adjustment |
|-----------------------|----------------------|-----------|--------|---------------|----------------|-----------------------|
| Manual Control        | X                    | X         | X      | X             | X              | √                     |
| Wall mount panel      | X                    | √         | √      | √             | √ (*)          | √                     |
| Bluetooth Remote      | X                    | √         | √      | √             | √              | √                     |
| Portable Device (APP) | √                    | √         | √      | √             | √              | √                     |

(\* FlexRay- Zoom- S72-1 with Tunable feature)

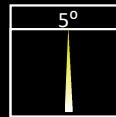
# Flex in Optical Control

**COfusion**



## Ultra-Spot: 5°

| Model# | S70-1 | S70-2  | S70-3  |
|--------|-------|--------|--------|
| lum    | 410lm | 1360lm | 2570lm |

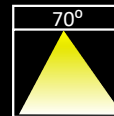
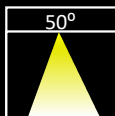
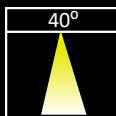
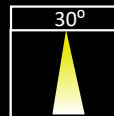
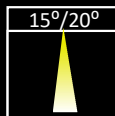
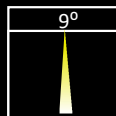


## Flexi-beam

| Model# | S71-1 | S71-2  | S71-3  |
|--------|-------|--------|--------|
| lum    | 410lm | 1360lm | 2570lm |

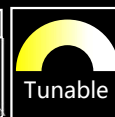
### Beam Degree

|          |           |
|----------|-----------|
| Spot     | 9°        |
| Narrow   | 15°, 20°  |
| Medium   | 30°, 40°  |
| Wide     | 50°, 70°  |
| Oval     | 20° x 60° |
| Wallwash |           |



## Zoom: 12° -68°

| Model# | S72-1 |
|--------|-------|
| lum    | 550m  |



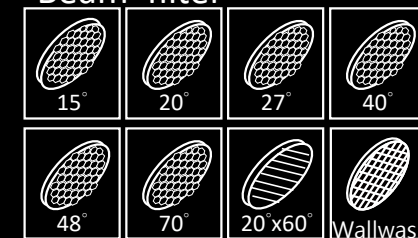
## CCT Filters



## Honeycomb



## Beam filter





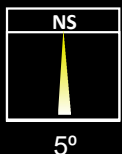
|                       | Model# | Wattage | Track Diameter | Zoom<br>12°-68° | 5° | Tunable<br>2700-4000K | CCT<br>filter | Beam<br>filter | Honeycomb |
|-----------------------|--------|---------|----------------|-----------------|----|-----------------------|---------------|----------------|-----------|
| FlexRay-<br>UltraSpot | S70-1  | 4       | Φ80mm          |                 | ✓  |                       | ✓             |                | ✓         |
|                       | S70-2  | 10      | Φ135mm         |                 | ✓  |                       | ✓             |                | ✓         |
|                       | S70-3  | 27      | Φ190mm         |                 | ✓  |                       | ✓             |                | ✓         |
| FlexRay-<br>FlexBeam  | S71-1  | 9       | Φ80mm          |                 |    |                       | ✓             | ✓              | ✓         |
|                       | S71-2  | 27      | Φ135mm         |                 |    |                       | ✓             | ✓              | ✓         |
|                       | S71-3  | 50      | Φ190mm         |                 |    |                       | ✓             | ✓              | ✓         |
| FlexRay-<br>Zoom      | S72-1  | 10      | Φ80mm          | ✓               |    | ✓                     |               |                |           |



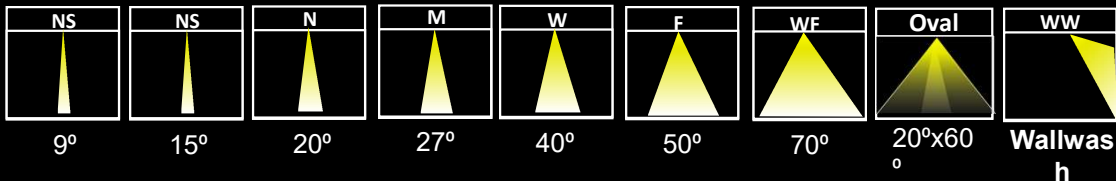


**COfusion**

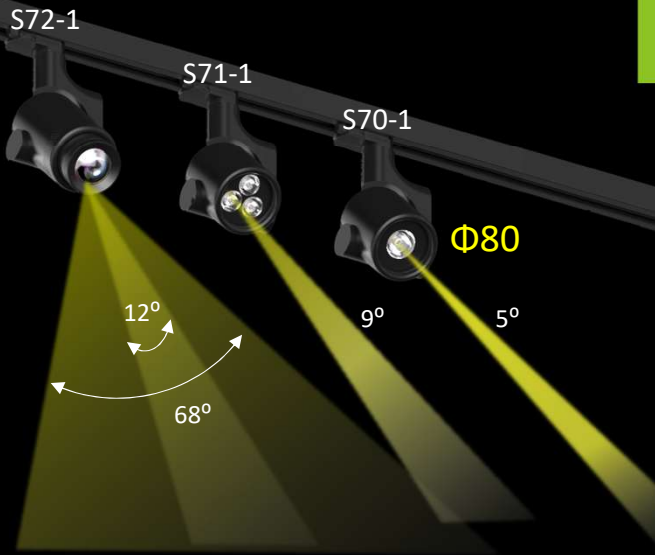
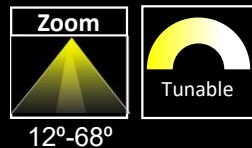
FlexRay-  
UltraSpot



FlexRay-  
FlexBeam



FlexRay-  
Zoom

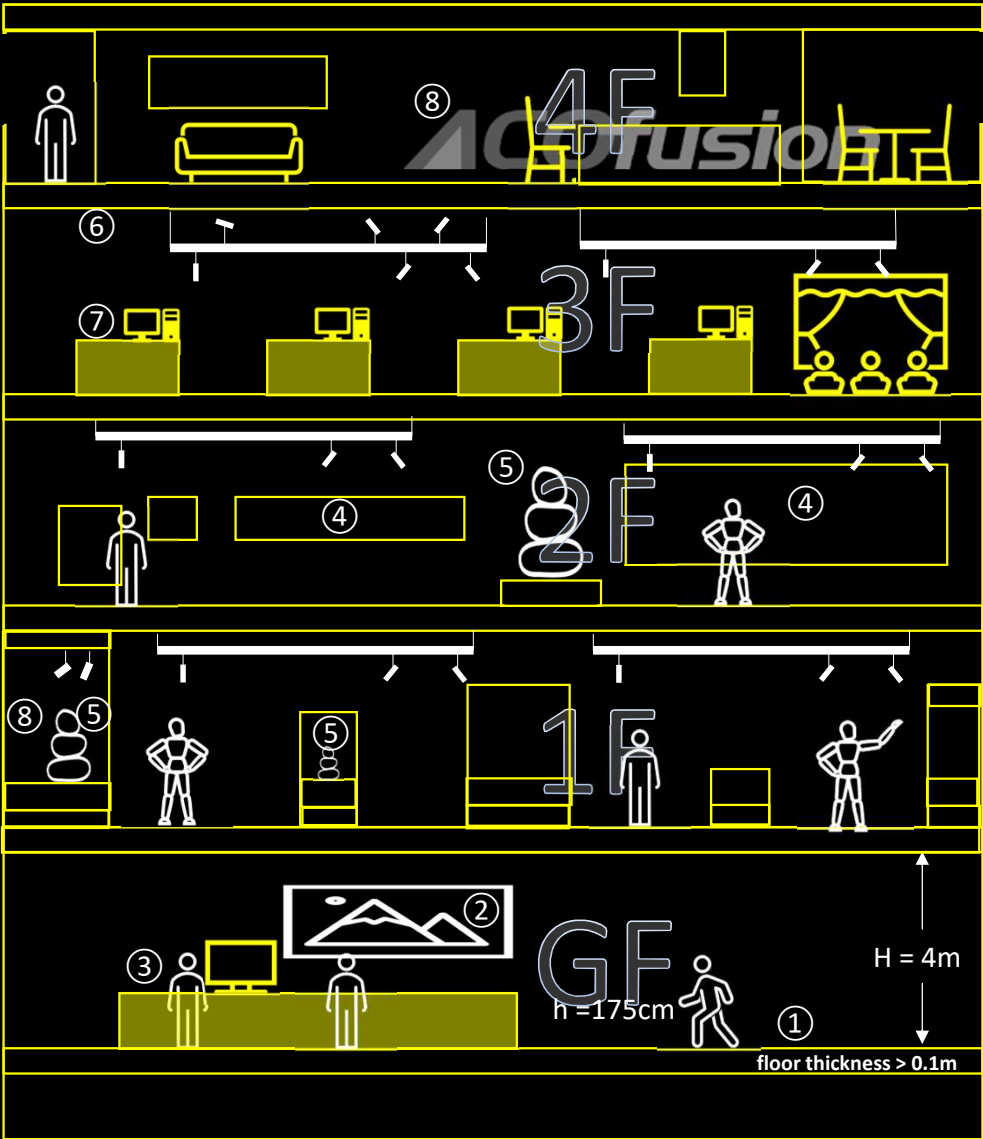




# Lower ceiling building: $H \leq 4m$

|         | S70-1 | S70-2 | S70-3 | Vertical surface | Horizontal surface |
|---------|-------|-------|-------|------------------|--------------------|
| Ambient |       | ✓     | ✓     | ③⑧               | ①③⑥                |
| Accent  | ✓     | ✓     | ✓     | ②④⑤⑧             | ⑤                  |
| Task    |       | ✓     | ✓     |                  | ③⑦                 |

- |                          |                                    |
|--------------------------|------------------------------------|
| ① Pathway/ Entrance      | ⑤ Focal objects/ cabinets          |
| ② Logo/ Feature          | ⑥ Ceiling –feature/ indirect light |
| ③ Reception              | ⑦ Working desktop                  |
| ④ Sign/ Artwork/ Feature | ⑧ Feature wall/ Wallwash           |

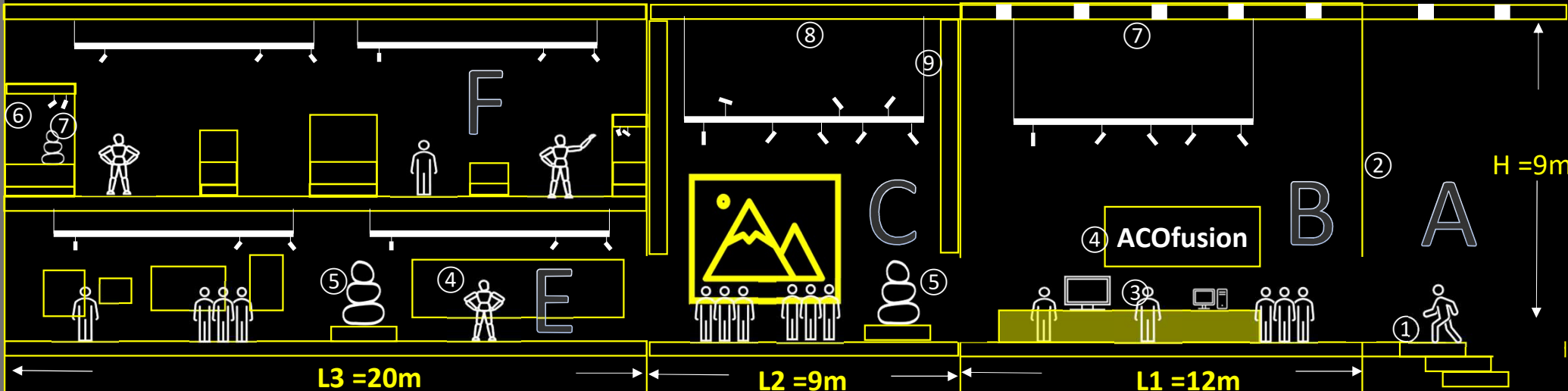


# Higher ceiling building $4\text{m} \leq H \leq 9\text{m}$

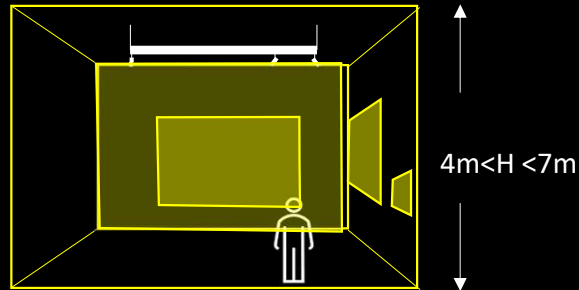
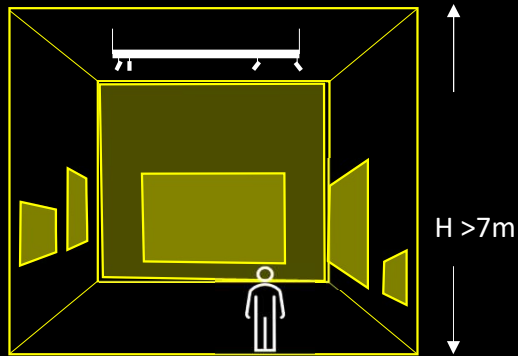
**ACOfusion**

- ① Pathway/ Entrance
- ② Logo/ Feature
- ③ Reception
- ④ Sign/ Artwork/ Feature
- ⑤ Focal objects outside cabinets
- ⑥ Artwork/ Feature
- ⑦ Focal objects inside cabinets
- ⑧ Ceiling – architectural feature
- ⑨ Column – architectural feature

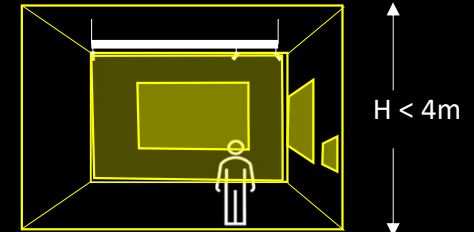
|         | S70-1 | S70-2 | S70-3 | S71-1 | S71-2 | S72-1 | S72-2 | Vertical surface | Horizontal surface |
|---------|-------|-------|-------|-------|-------|-------|-------|------------------|--------------------|
| Ambient |       | ✓     | ✓     |       | ✓     |       | ✓     | ②⑥⑨              | ①③⑦                |
| Accent  | ✓     | ✓     | ✓     | ✓     | ✓     | ✓     | ✓     | ②④⑤⑥⑧            | ①③⑤                |
| Task    |       | ✓     | ✓     |       | ✓     |       |       |                  | ③                  |



# Optimal Distance for Focal objects/ Surfaces



**COfusion**



| Model#              | Application                         | Beam Angle | Optimal Track Distance: Small Objects (m) | Optimal Track Distance: Medium Objects/Groups (m) | Optimal Track Distance : Large Objects/Walls (m) |
|---------------------|-------------------------------------|------------|---|---|--|
| <b>S70-1, S71-1</b> | Wall Showcase Cabinets (Low)        | 5°-20°     | 2-3                                       | 3-4   | 4-5  |
| <b>S71-1</b>        | Portable Showcase Cabinets (Low)    | 30°-60°    | 1-2                                       | 1.5-2.5   | 2-3  |
| <b>S71-1</b>        | Exhibition Area Pathway             | 30°-60°    | 1-2                                       | 1.5-2.5   | 2-3  |
| <b>S70-2, S71-2</b> | Wall Showcase Cabinets (Medium)     | 5°-20°     | 3-4                                       | 4-5   | 5-6  |
| <b>S71-2</b>        | Portable Showcase Cabinets (Medium) | 30°-60°    | 2-3                                       | 2.5-3.5   | 3-4  |
| <b>S71-2</b>        | Exhibition Entrance                 | 30°-60°    | 2-3                                       | 2.5-3.5   | 3-4  |
| <b>S70-3, S71-3</b> | Wall Showcase Cabinets (High)       | 5°-20°     | 4-5                                       | 5-6+  | 6-7+   |
| <b>S71-3</b>        | Portable Showcase Cabinets (High)   | 30°-60°    | 3-4                                       | 3.5-4.5   | 4-5+   |
|                     | Exhibition Objects                  | 5°-20°     | 4-5                                       | 5-6+  | 6-7+   |

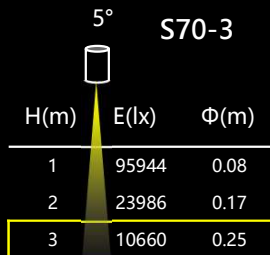
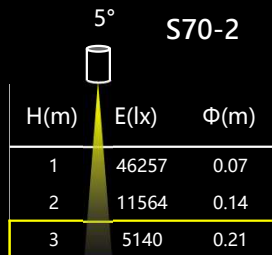
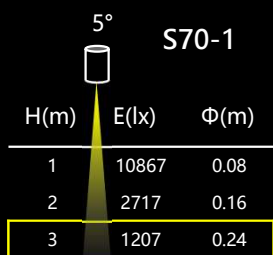
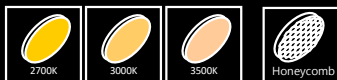


**COfusion**

# FlexRay-UltraSpot

| CCT   | Lumen | Wattage | CRI |
|-------|-------|---------|-----|
| 4000K | 150   | 4W      | ≥97 |
| 4000K | 620   | 10W     | ≥97 |
| 4000K | 1340  | 27W     | ≥97 |

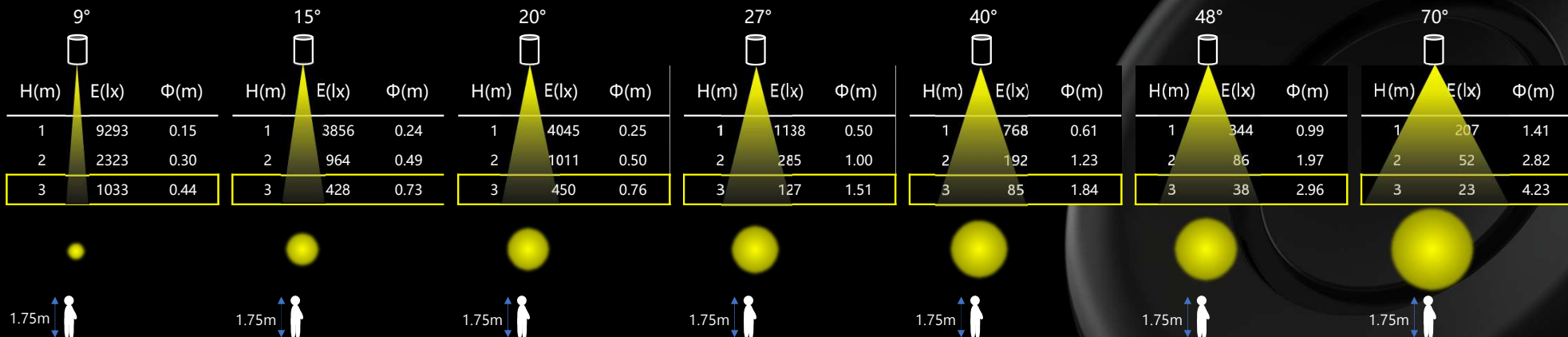
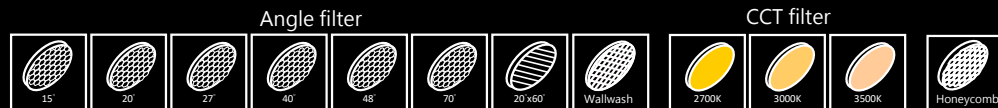
CCT filter





# FlexRay-MultiBeam

| CCT   | Lumen | Wattage | CRI |
|-------|-------|---------|-----|
| 4000K | 410   | 9W      | ≥97 |
| 4000K | 1360  | 27W     | ≥97 |
| 4000K | 2570  | 50W     | ≥97 |



S71-1

S71-2

S71-3

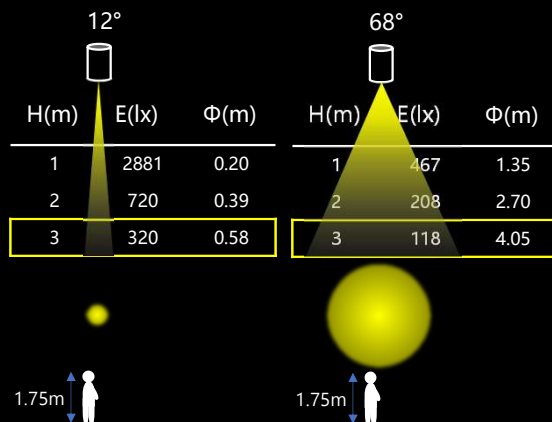
The above data is for S71-1



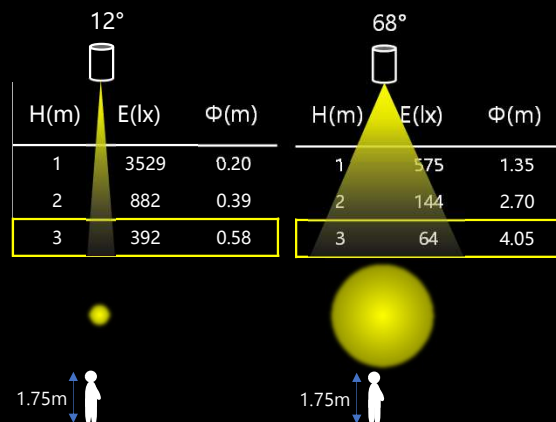
**ACofusion**

# FlexRay-Zoom

| CCT     | Lumen | Wattage | CRI | Application      |
|---------|-------|---------|-----|------------------|
| Tunable | 540   | 10W     | ≥97 | Gallery/ Museum  |
|         | 660   |         |     | Retail/ Resident |

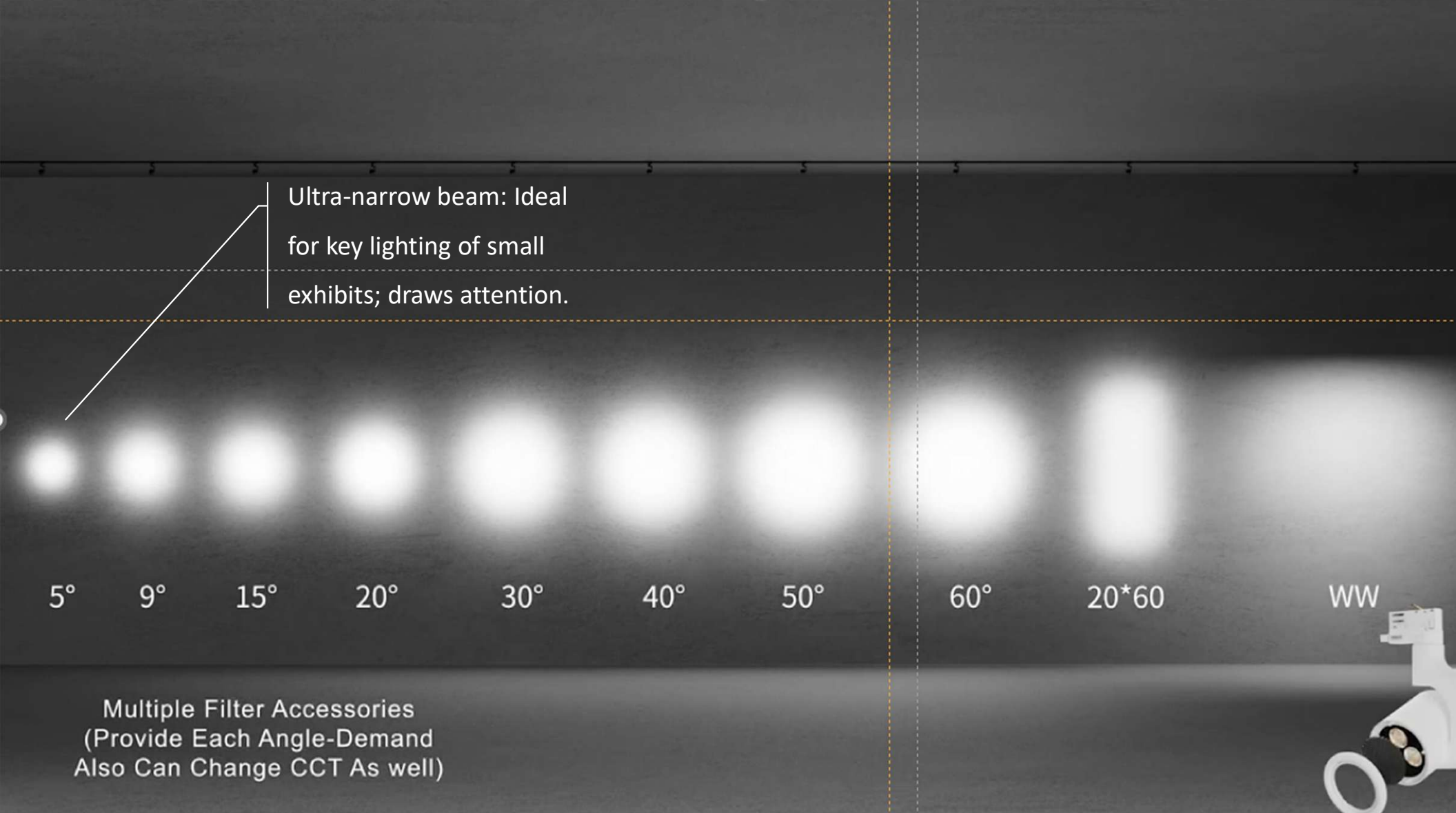


The above data is for 2700K



The above data is for 5700K





Ultra-narrow beam: Ideal  
for key lighting of small  
exhibits; draws attention.

5°

9°

15°

20°

30°

40°

50°

60°

20\*60

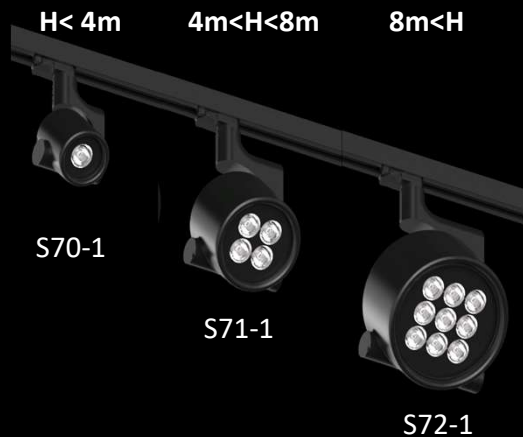
WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)





# Special lighting



Apply ultra narrow beam to create dramatic effect from high ceiling.  
Feel the light without seeing where does it come from.



# Special lighting

**ACOfusion**

H < 4m

4m < H < 8m

8m < H

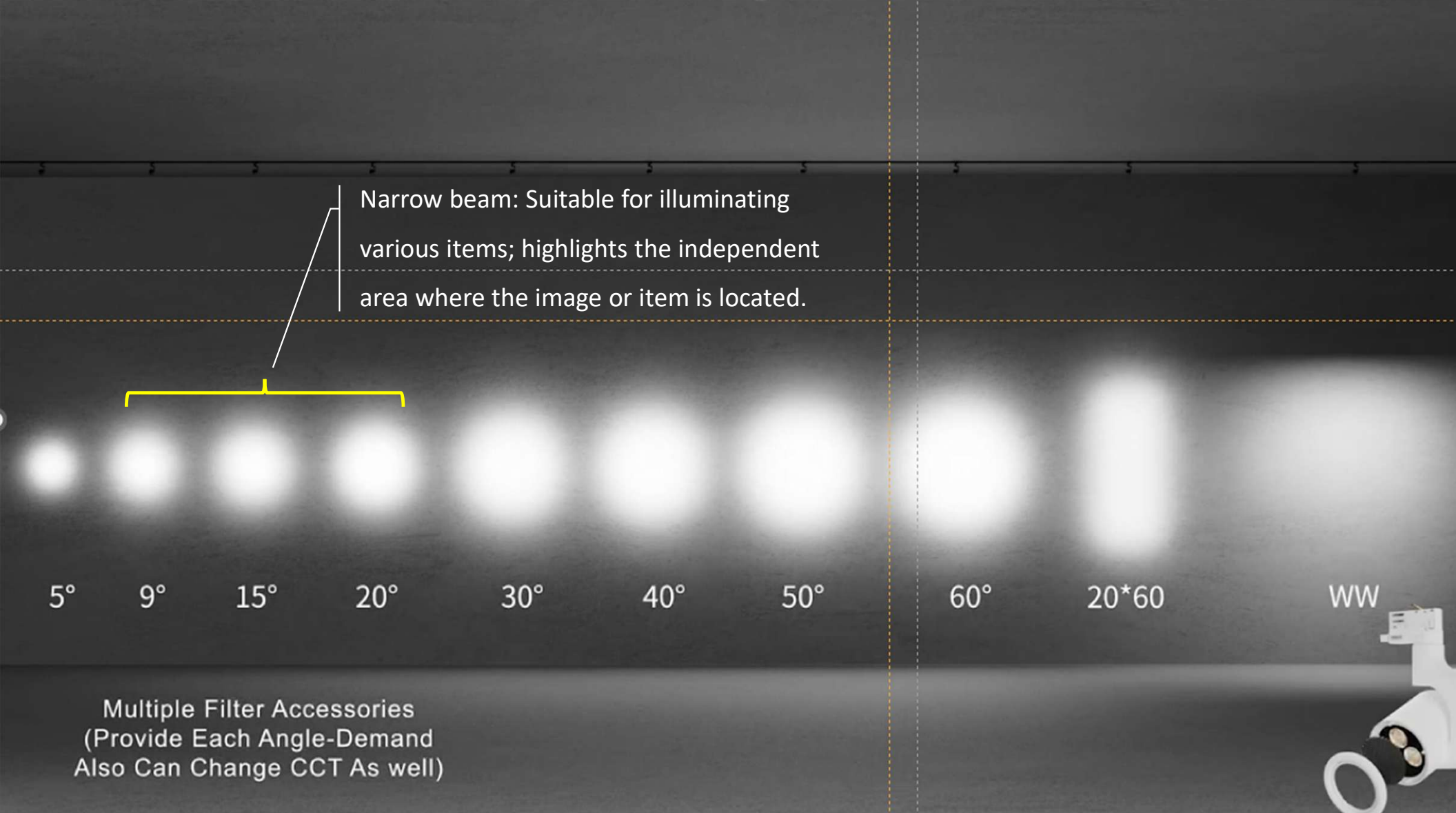
S70-1

S71-1

S72-1

Apply ultra narrow beam to create dramatic effect from high ceiling.  
Feel the light without seeing where does it come from.





The diagram shows a series of light patterns on a dark background, each corresponding to a specific beam angle. The angles are listed at the bottom: 5°, 9°, 15°, 20°, 30°, 40°, 50°, 60°, 20\*60, and WW. A yellow bracket is placed under the 15° and 20° patterns. A white line points from the text 'Narrow beam: Suitable for illuminating various items; highlights the independent area where the image or item is located.' to the 15° pattern. A vertical dashed line is positioned between the 50° and 60° patterns. A horizontal dashed line is positioned between the 20° and 30° patterns. A yellow dashed line is positioned between the 15° and 20° patterns. A white microscope is visible in the bottom right corner.

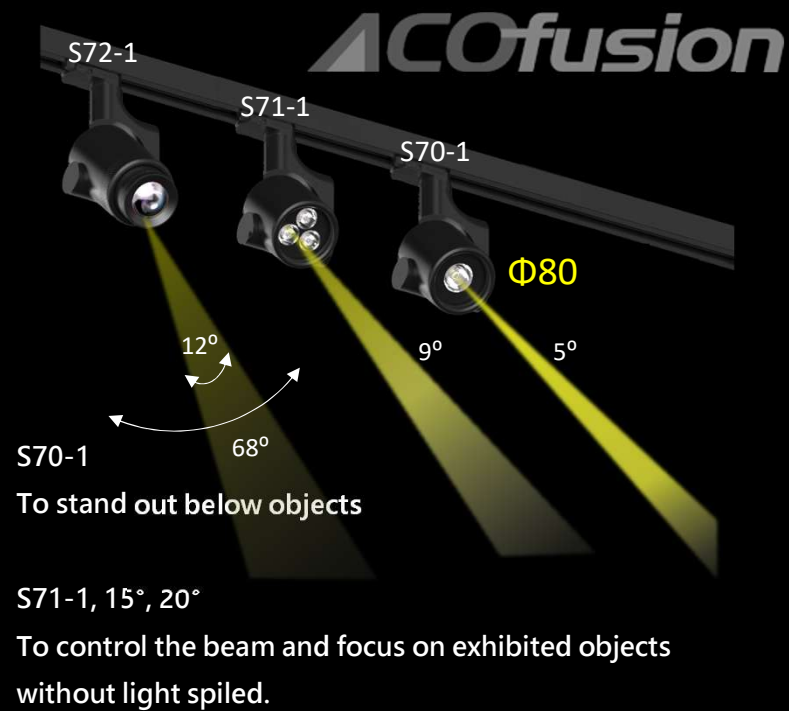
Narrow beam: Suitable for illuminating various items; highlights the independent area where the image or item is located.

5° 9° 15° 20° 30° 40° 50° 60° 20\*60 WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)



Museum, Hunan  
China



\*S72-1 may be considered with Zoomable 15°, 68°



**COfusion**



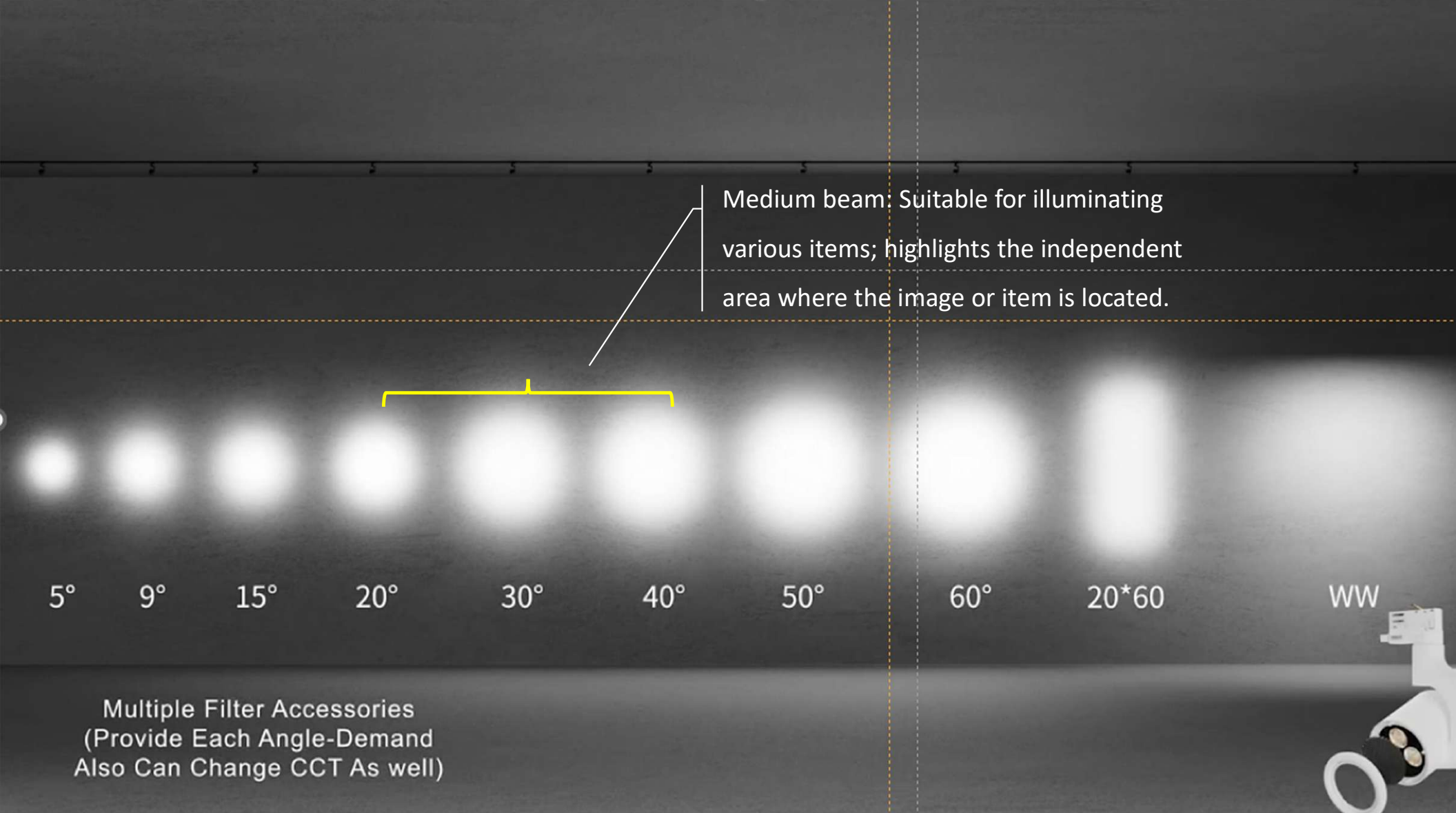
12°

68°

S72-1, 15° - 68°

To control the beam and focus on exhibited objects without light spilled.

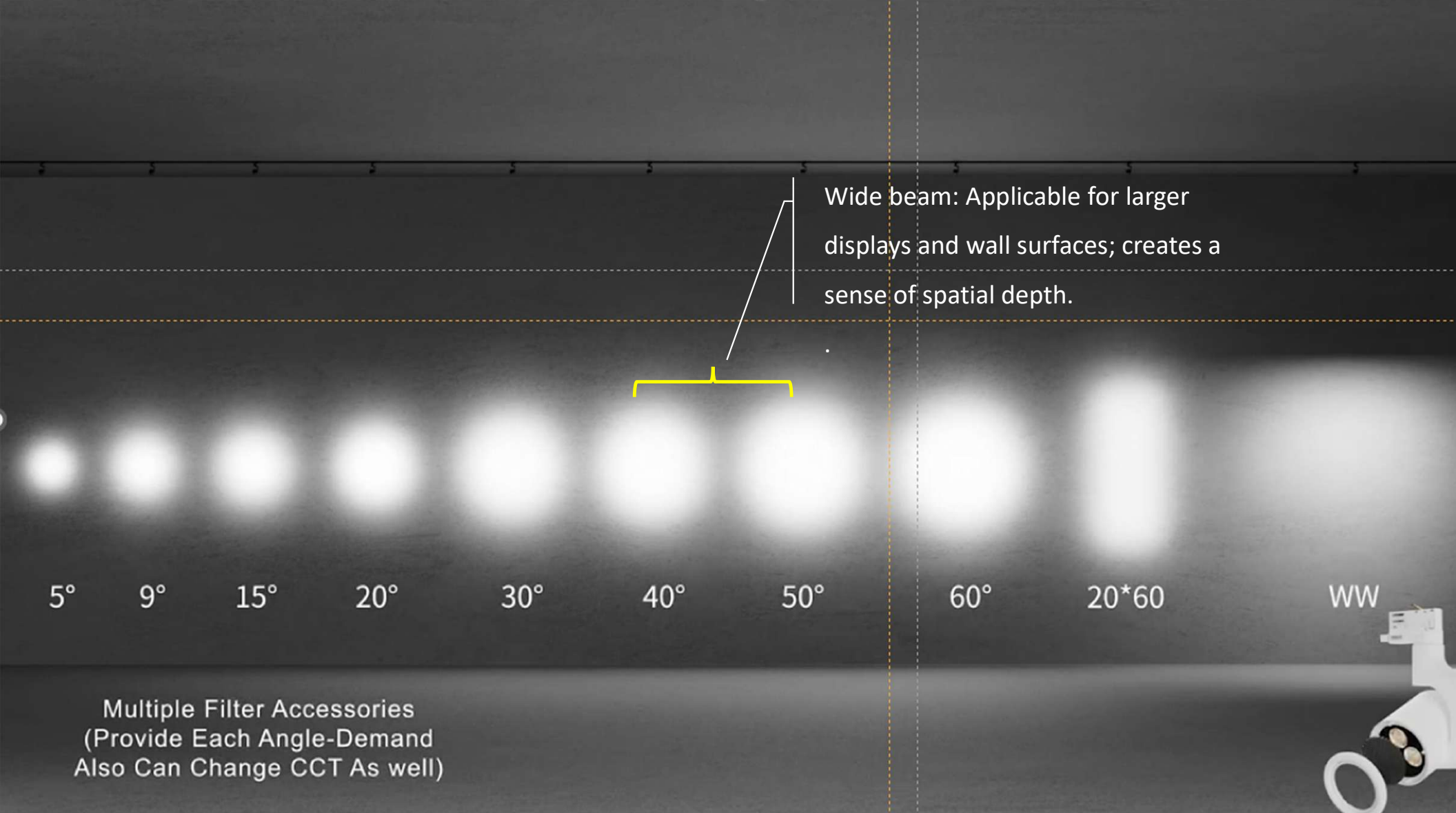




Medium beam: Suitable for illuminating various items; highlights the independent area where the image or item is located.

5° 9° 15° 20° 30° 40° 50° 60° 20\*60 WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)



Wide beam: Applicable for larger displays and wall surfaces; creates a sense of spatial depth.

5° 9° 15° 20° 30° 40° 50° 60° 20\*60 WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)





Gallery, Hunan  
China



S71-1, 40°

To control the beam and focus on exhibited objects without light spilled.

\* S71-1 40 ° can be also suitable depending on the requirements.



Museum, Hunan  
China

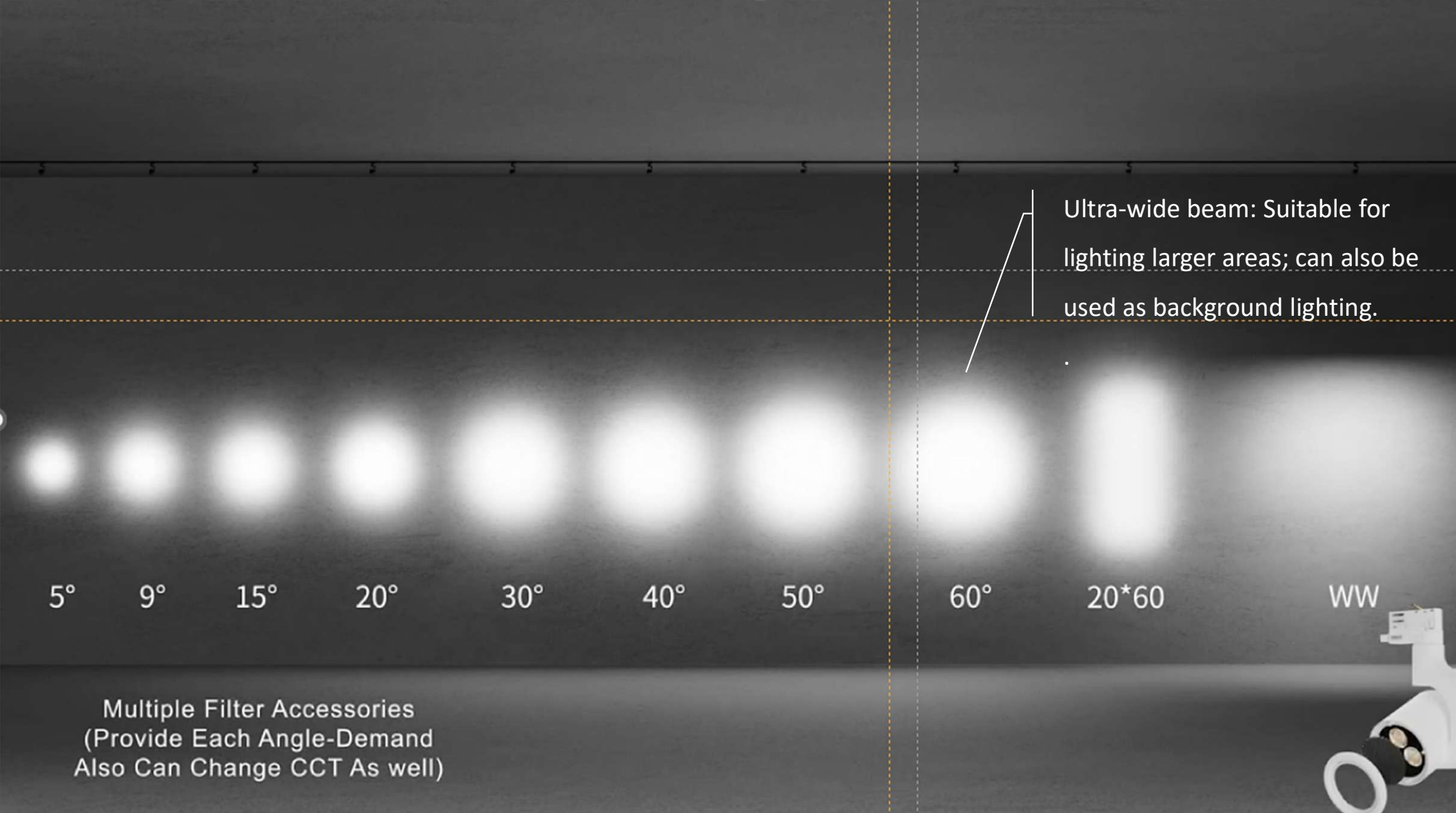


S71-1, 40°

To control the beam and focus on exhibited objects without light spilled.

\* S71-1 40 ° can be also suitable depending on the requirements.





Ultra-wide beam: Suitable for lighting larger areas; can also be used as background lighting.

5°    9°    15°    20°    30°    40°    50°    60°    20\*60    WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)



Elliptical wide beam:

Disperses in an elliptical shape; most  
suitable for elongated displays.

5°

9°

15°

20°

30°

40°

50°

60°

20\*60

WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)



Wall wash lighting:  
Provides uniform illumination  
over walls or larger images..

5°

9°

15°

20°

30°

40°

50°

60°

20\*60

WW

Multiple Filter Accessories  
(Provide Each Angle-Demand  
Also Can Change CCT As well)



**COfusion**



S71-1, 15°, 25°, 50°, Wallwash

To control the beam and focus on exhibited objects without light spiled.





**ACOfusion**



S71-1, 10°, 15°

To control the beam and focus on exhibited objects without light spiled.

Museum, Hunan  
China



**ACOfusion**

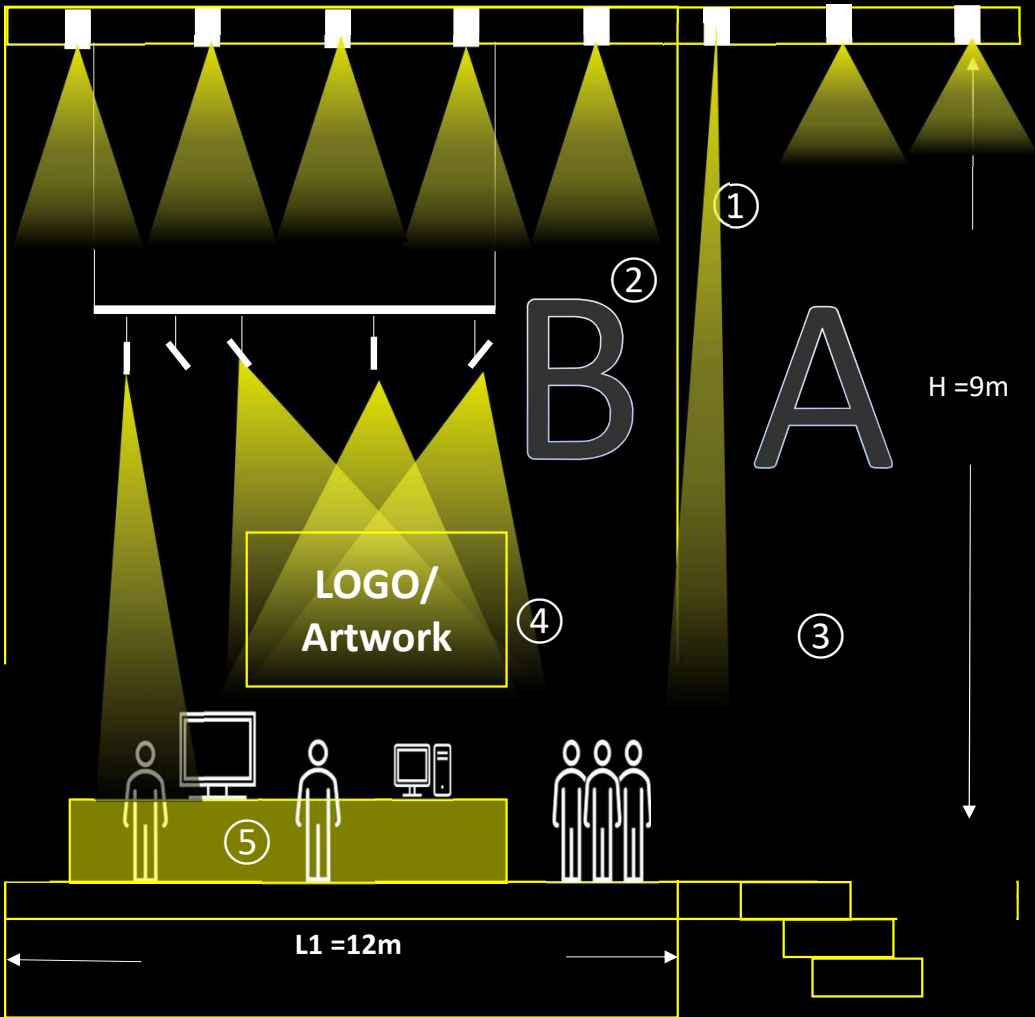


S71-1, Wallwash

To create uniform illumination as a  
combination of accent and ambient lighting

Museum, Hunan  
China

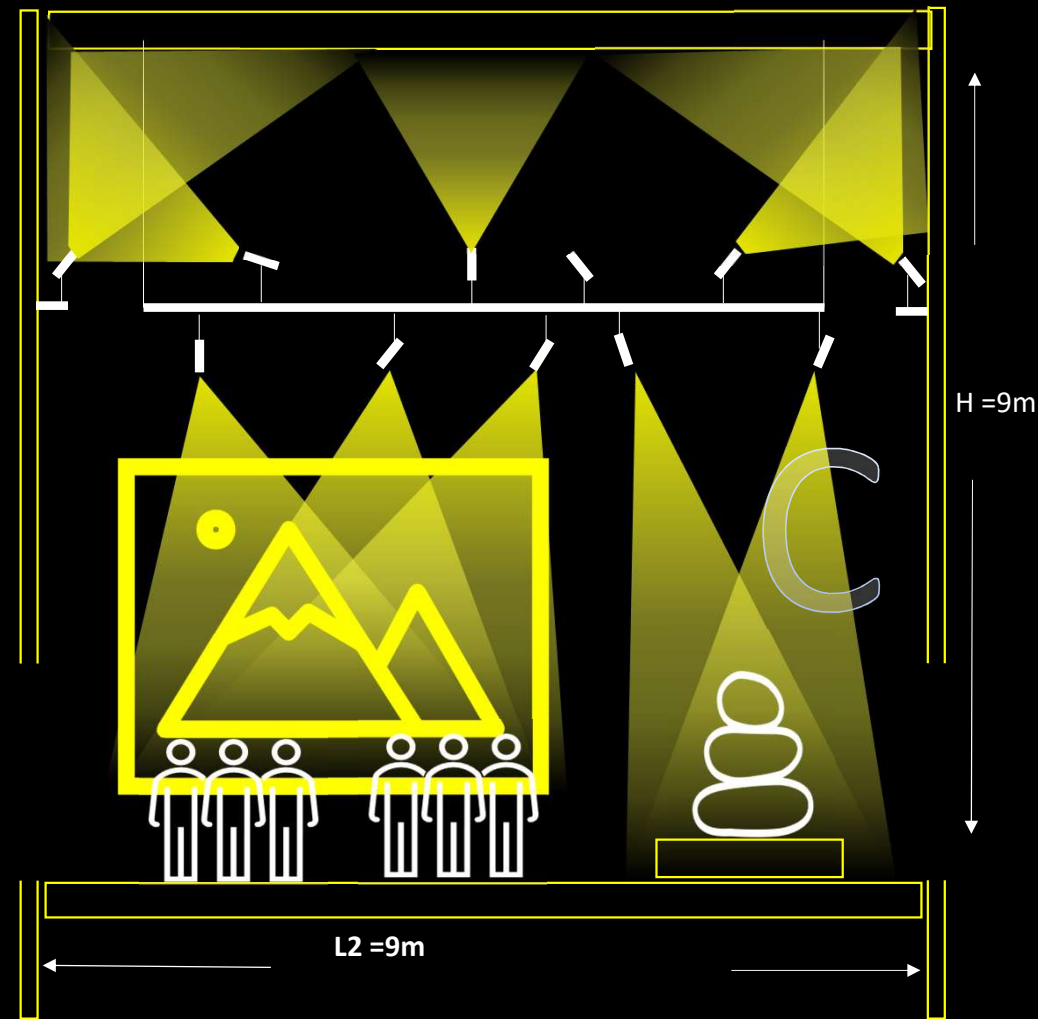
# Entrance/ Reception



|   | Series      | Model# | Beam    | Feature   | Beam          |
|---|-------------|--------|---------|-----------|---------------|
|  | MotoLux-Can | D3-2   | 7°/ 24° | Motorised | 45°-70° flood |
|  | Apollo      | D      | 7°/ 24° | Motorised | 45°-70° flood |

|   | Lighting Type | Vertical       | Beam        | Horizontal     | Beam          |
|---|---------------|----------------|-------------|----------------|---------------|
| ① | Ambient       | Column         | 5°-20°      | Celling        | 45°-70° flood |
| ② | Ambient       | Wall           | Wallwash    | Pathway        | 12°-24°       |
| ③ | Ambient       | Entrance/ Exit | 24°-45°     | Entrance/ Exit | 24°-45°       |
| ④ | Accent        | LOGO/ Objects  | 5°-40° Oval | Objects        | 5°-40° Oval   |
| ⑤ | Task          |                |             | Reception      | 15°-24° Oval  |

# Feature Room/ Ultra-High Room

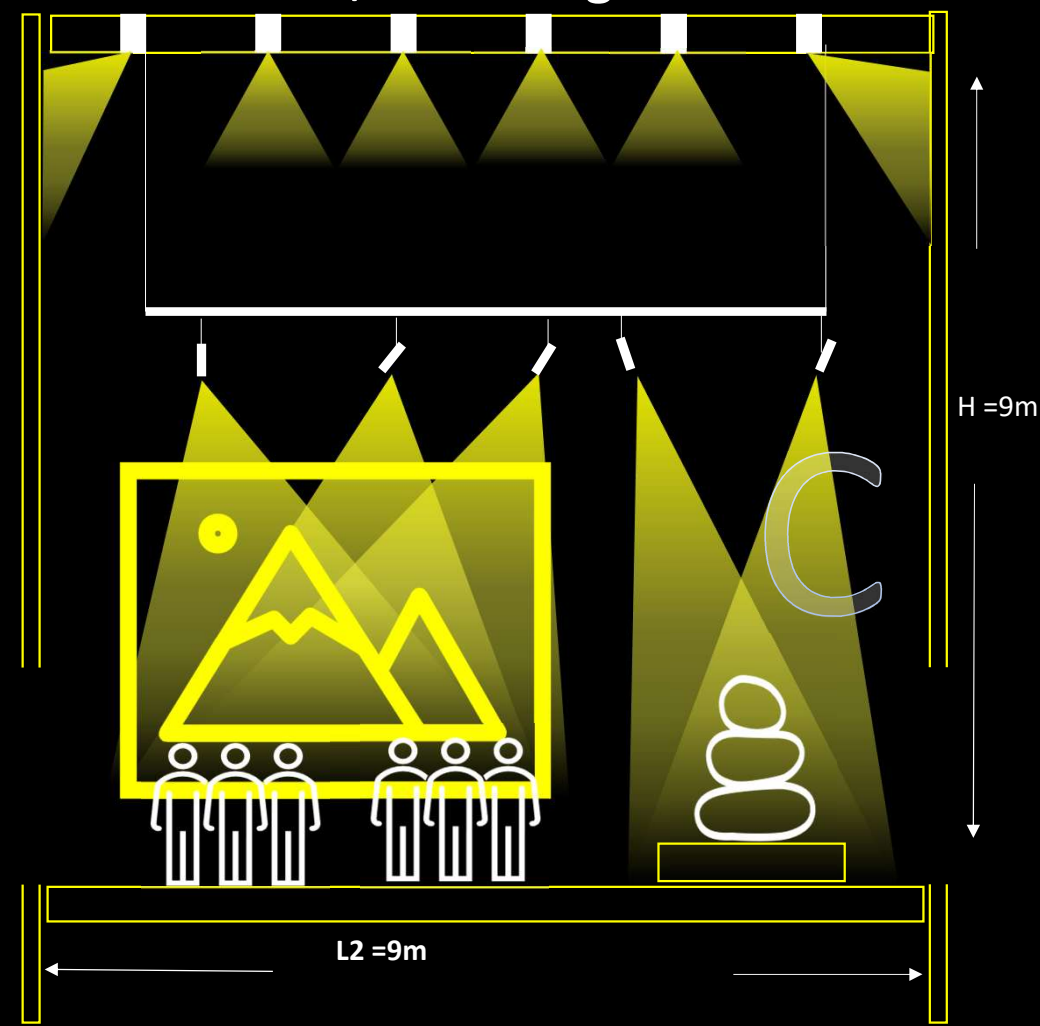




|   | Series      | Model# | Beam     | Feature   | Beam          |
|---|-------------|--------|----------|-----------|---------------|
| ■ | MotoLux-Can | D3-2   | 7° / 24° | Motorised | 45°-70° flood |
| ↙ | Apollo      | D      | 7° / 24° | Motorised | 45°-70° flood |

|   | Lighting Type | Vertical            | Beam        | Horizontal      | Beam        |
|---|---------------|---------------------|-------------|-----------------|-------------|
| ① | Ambient       | Column              | 12°-36°     | Celling         | 45°-70°     |
| ② | Ambient       | Wall                | Wallwash    | Pathway         | 12°-24°     |
| ③ | Ambient       | Entrance/Exit       | 24°-45°     | Entrance/Exit   | 24°-45°     |
| ④ | Accent        | Showcase (Cabinets) | 5°-24°      | Pathway (Guide) | 12°-24°     |
| ⑤ | Accent        | Artwork/Objects     | 5°-40° Oval | Objects         | 5°-40° Oval |



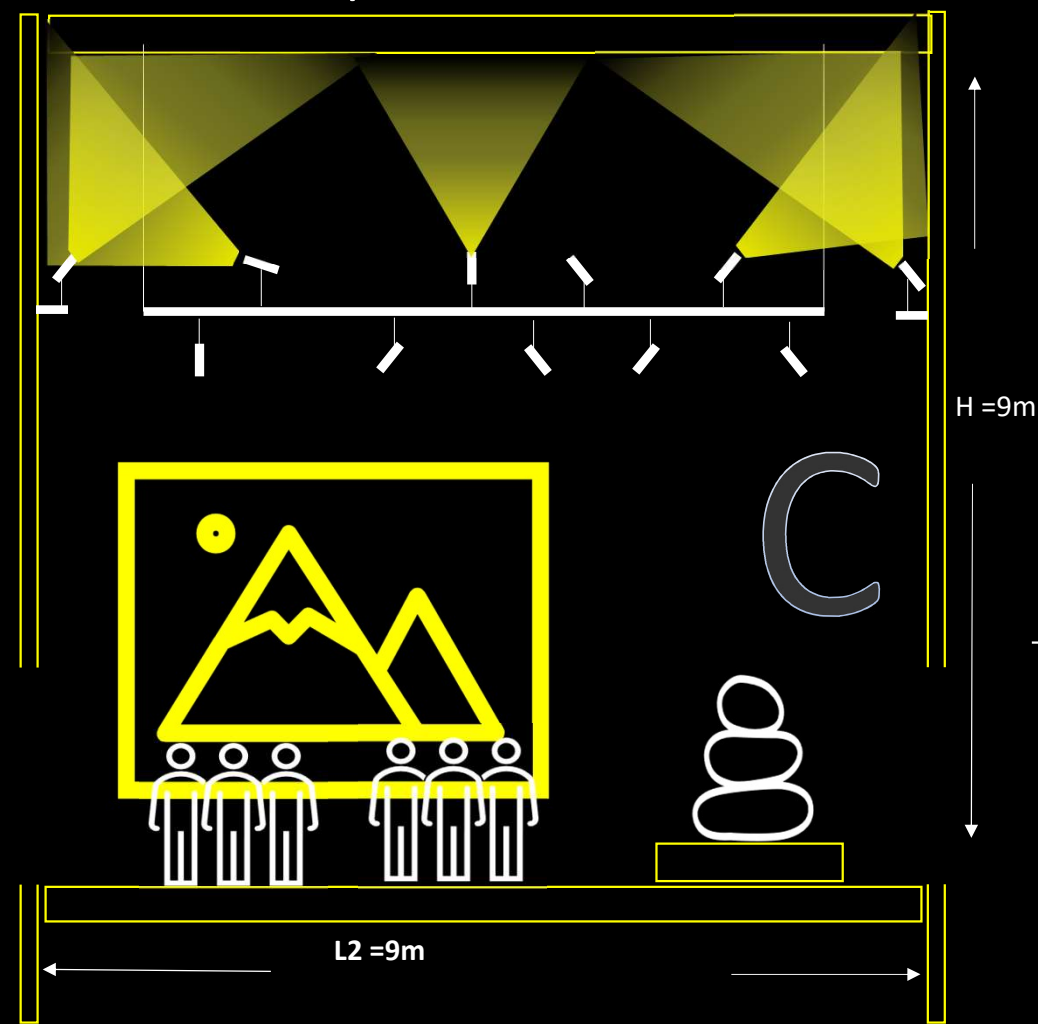
# Feature Room/ Ultra-High Room





| Series  | Model#      | Beam | Feature   | Beam                        |
|---|-------------|------|-----------|-----------------------------|
|  | MotoLux-Can | D3-2 | Motorised | $45^\circ - 70^\circ$ flood |
|  | Apollo      | D    | Motorised | $45^\circ - 70^\circ$ flood |

|   | Lighting Type | Vertical            | Beam                           | Horizontal      | Beam                      |
|---|---------------|---------------------|--------------------------------|-----------------|---------------------------|
| ① | Ambient       | Column              | $5^\circ - 36^\circ$           | Celling         | $45^\circ - 70^\circ$     |
| ② | Ambient       | Wall                | $45^\circ - 60^\circ$ Wallwash | Pathway         | $12^\circ - 24^\circ$     |
| ③ | Ambient       | Entrance/Exit       | $24^\circ - 45^\circ$          | Entrance/Exit   | $24^\circ - 45^\circ$     |
| ④ | Accent        | Showcase (Cabinets) | $5^\circ - 24^\circ$           | Pathway (Guide) | $12^\circ - 24^\circ$     |
| ⑤ | Accent        | Artwork/Objects     | $5^\circ - 40^\circ$ Oval      | Objects         | $5^\circ - 40^\circ$ Oval |

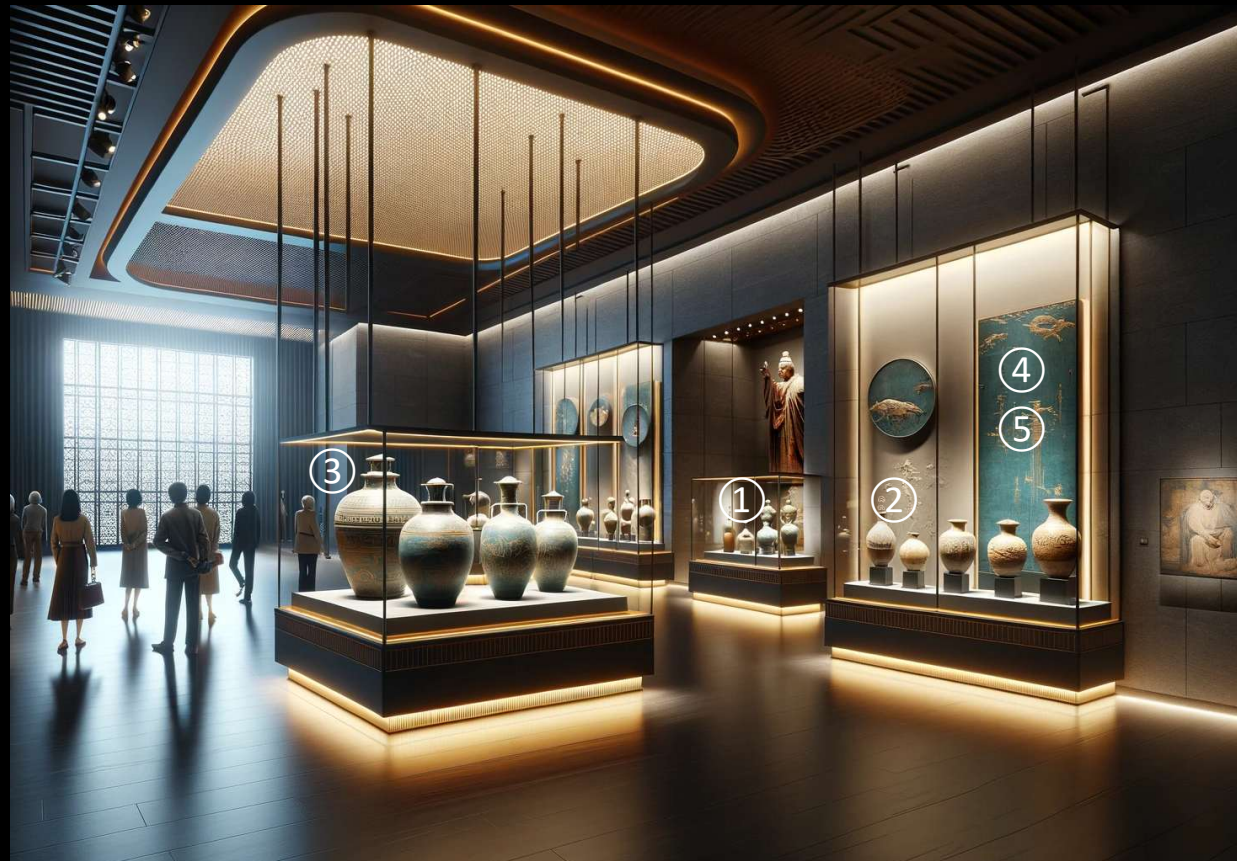
# Feature Room/ Ballroom



|   | Series      | Model# | Beam    | Feature   | Beam          |
|---|-------------|--------|---------|-----------|---------------|
|  | MotoLux-Can | D3-2   | 7°/ 24° | Motorised | 45°-70° flood |
|  | Apollo      | D      | 7°/ 24° | Motorised | 45°-70° flood |

|   | Lighting Type | Vertical            | Beam        | Horizontal      | Beam        |
|---|---------------|---------------------|-------------|-----------------|-------------|
| ① | Ambient       | Column              | 12°-36°     | Celling         | 45°-70°     |
| ② | Ambient       | Wall                | Wallwash    | Pathway         | 12°-24°     |
| ③ | Ambient       | Entrance/ Exit      | 24°-45°     | Entrance/ Exit  | 24°-45°     |
| ④ | Accent        | Showcase (Cabinets) | 5°-24°      | Pathway (Guide) | 12°-24°     |
| ⑤ | Accent        | Artwork             | 5°-40° Oval | Objects         | 5°-40° Oval |

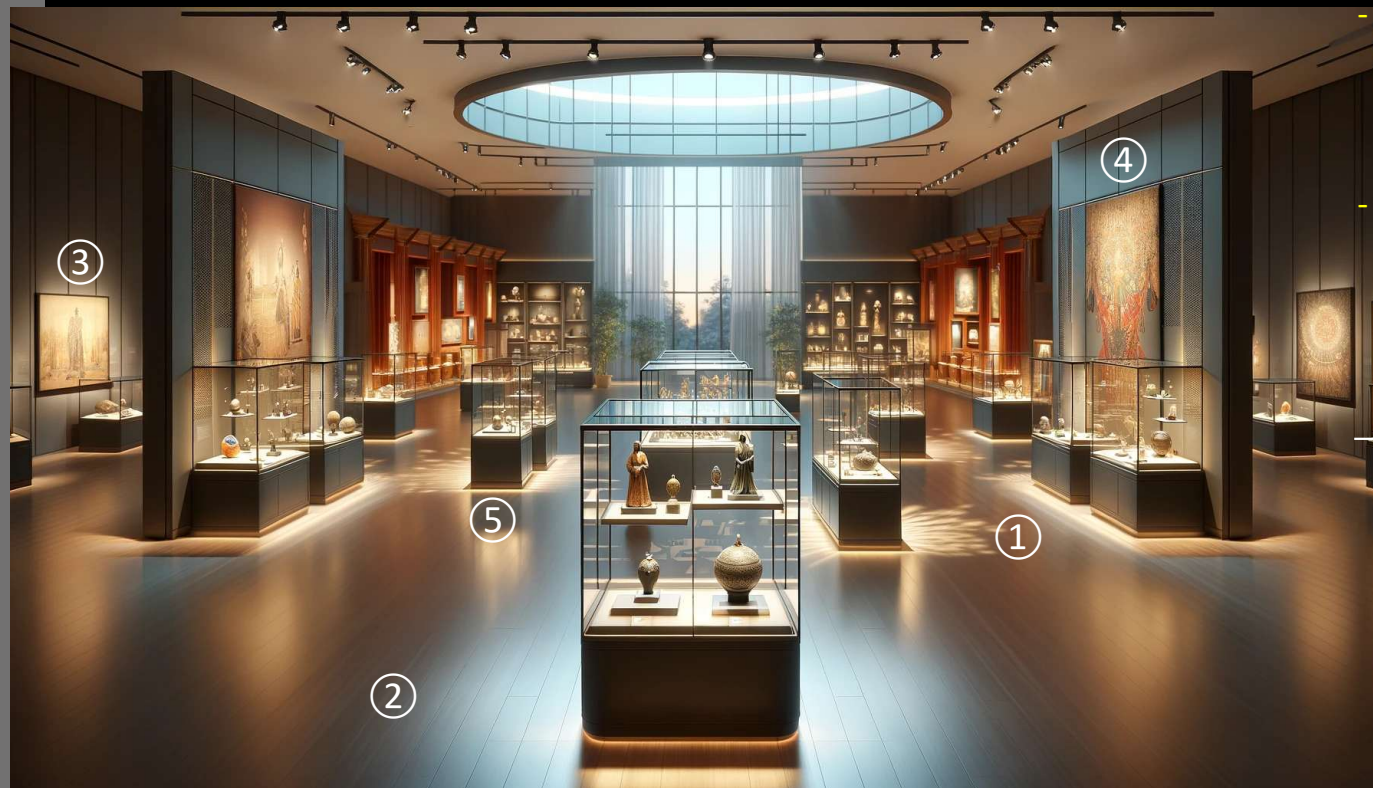
# Flex in Lighting layers create- Accent Lighting



- FlexiRay-Ultra Spot, S70-1, 5° Beam, enables focus on small focal piece or create special visual effect.
- FlexiRay- Multi Beam is available in 10°, 15°, 20°, 30°, 40°, 50°, 70°, 20°x 60°, and Asymmetrical wallwash

|   | Type   | Focal piece        | Examples  | Beam     |
|---|--------|--------------------|-----------|----------|
| ① | Accent | Small Object       | Jewelry   | 5°       |
| ② | Accent | Medium Object      | Sculpture | 10°-20°  |
| ③ | Accent | Large Object       | Painting  | 30°-60°  |
| ④ | Accent | Extra-Large Object | Textiles  |          |
| ⑤ | Accent | Rectangular Object | Painting  | 20°x 60° |

# Flex in Lighting layers create- Ambient Lighting



- **FlexiRay- Multi Beam** is available in **10°, 15°, 20°, 30°, 40°, 50°, 70°, 20°x 60°**, and **Asymmetrical Wallwash**
- **FlexiRay-Zoom**, gives **12° - 55° Beam**

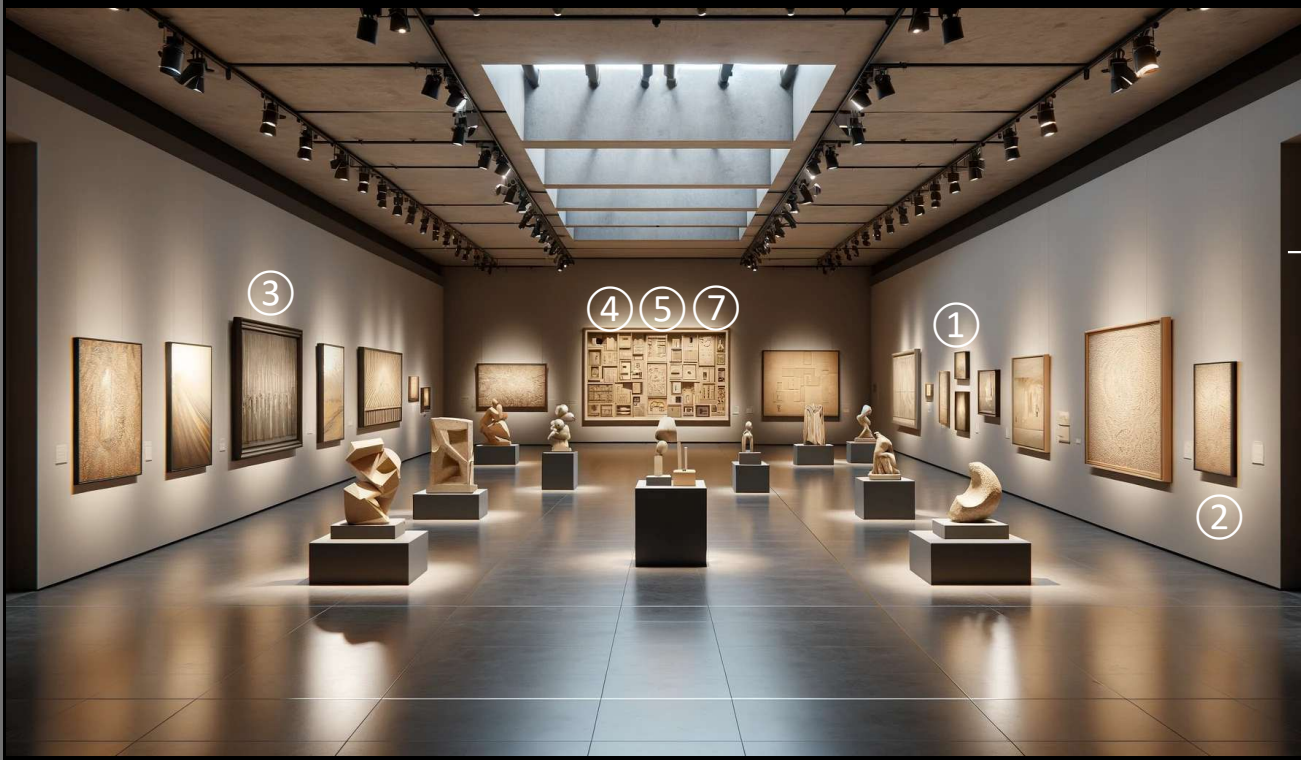
|   | Surface      | Contrast Ratio | Contrast  | Beam     |
|---|--------------|----------------|-----------|----------|
| ① | Pathway      | 1:15           |           | 10°-20°  |
| ② | Entrance     | 1:5            | Sculpture | 20°-40°  |
| ③ | Large Object | 1:3            | Painting  | 40°-60°  |
| ④ | Feature wall | Painting       | Textiles  | Wallwash |
| ⑤ | Rectangular  | 1:3            | Feature   | 20°x 60° |



# Flex in Lighting layers create



- FlexiRay-Ultra Spot, **S70-1, 5°**
- FlexiRay- Multi Beam: 10°, 15° 20°, 30°, 40°, 50°, 70°, 20°x 60°, Asymmetrical Wallwash
- **FlexiRay-Zoom, 12°- 55°**



|   | Type    | Focal piece        | Examples       | Beam     |
|---|---------|--------------------|----------------|----------|
| ① | Accent  | Small Object       | Small painting | 5°       |
| ② | Accent  | Medium Object      | Sculpture      | 10°-20°  |
| ③ | Accent  | Large Object       | Painting       | 30°-60°  |
| ④ | Accent  | Extra-Large Object | Textiles       |          |
| ⑤ | Accent  | Rectangular Object | Painting       | 20°x 60° |
| ⑥ | Ambient | Entrance           | Brightness     | 15°-45°  |
| ⑦ | Ambient | Feature Wall       |                | Wallwash |

# Flex in Control Method



Interchangeable  
Module



0-10V Dimming

- On board manual brightness adjustment



Constant Illuminance with light sensor

- Preset illuminance level

- 11 lux level, [ 100 lx – 800 lx]



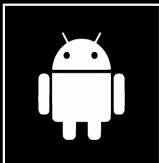
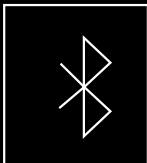
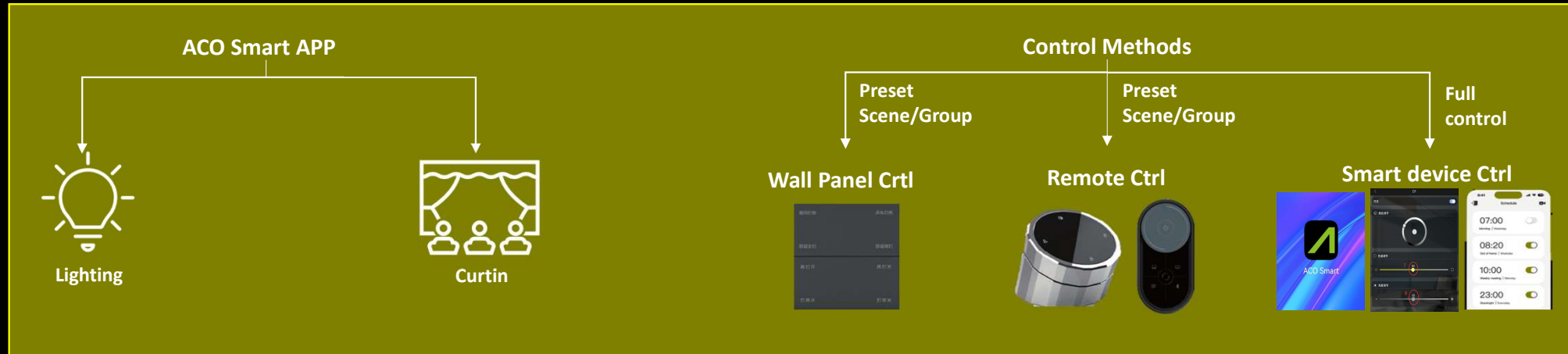
ACO Smart

- Full smart wireless control

(\*FlexRay- Zoom- S70-3 with Tunable feature)

| Control method        | Interchangeable module |                      |           | Function |               |               |                   |
|-----------------------|------------------------|----------------------|-----------|----------|---------------|---------------|-------------------|
|                       | 0-10V Dimming          | Constant Illuminance | ACO Smart | ON/ OFF  | Preset scenes | (*)CCT adjust | Brightness adjust |
| On-board manual       | √                      | X                    | X         | X        | X             | X             | √                 |
| Wall mount panel      | √                      | √                    | √         | √        | √             | √             | √                 |
| Bluetooth Remote      | X                      | X                    | √         | √        | √             | √             | √                 |
| Portable Device (APP) | X                      | X                    | √         | √        | √             | √             | √                 |

# General information- ACO Smart



 **1**  
Mesh network

 **16**  
Rooms/Space

 **200**  
Luminaires

 **2700K-5700K**  
Colour Temperature

**0-10V**


  
Dimmable

  
Constant illuminance

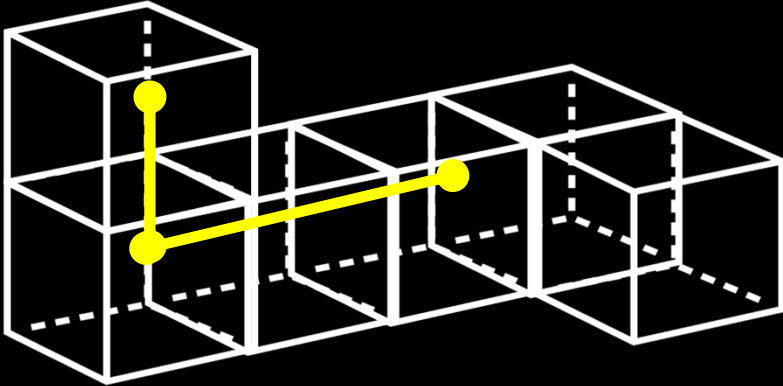
 **15m**  
Nodes distance

 **256**  
Preset scenes

 **16**  
Time Schedule

 **1% - 100%**  
Brightness

# Design and control - ACO Smart



## General Information:

1. Distance between luminaires (node to node)  $\leq 15\text{ m}$  \*(need to consider the thickness of between floors or walls)
2. Total numbers of control luminaires/ curtain motor  $\leq 200$
3. Each luminaire can be grouped or individual among different scenes, regardless of floors, circuits, rooms, tracks.
4. Wireless control can be done by
  - a) Physical devices ( Wall mount panel/ Portable remote)
  - b) Smart devices ( Tablet/ Smart phone)

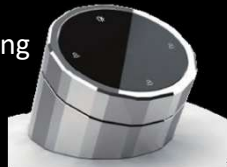
## Bluetooth Wall mount control Panel

1. 8 preset scenes/ Click control
2. Doesn't need to be installed in the same circuit
3. Preset scene needs to be set by ACO Smart APP



## Bluetooth portable desktop remote control

1. 3 preset scenes/ Rotate/ click control
2. Group/ Individual control, CCT and brightness dimming
3. Doesn't need to be installed in the same circuit
4. Preset scene needs to be set by ACO Smart APP



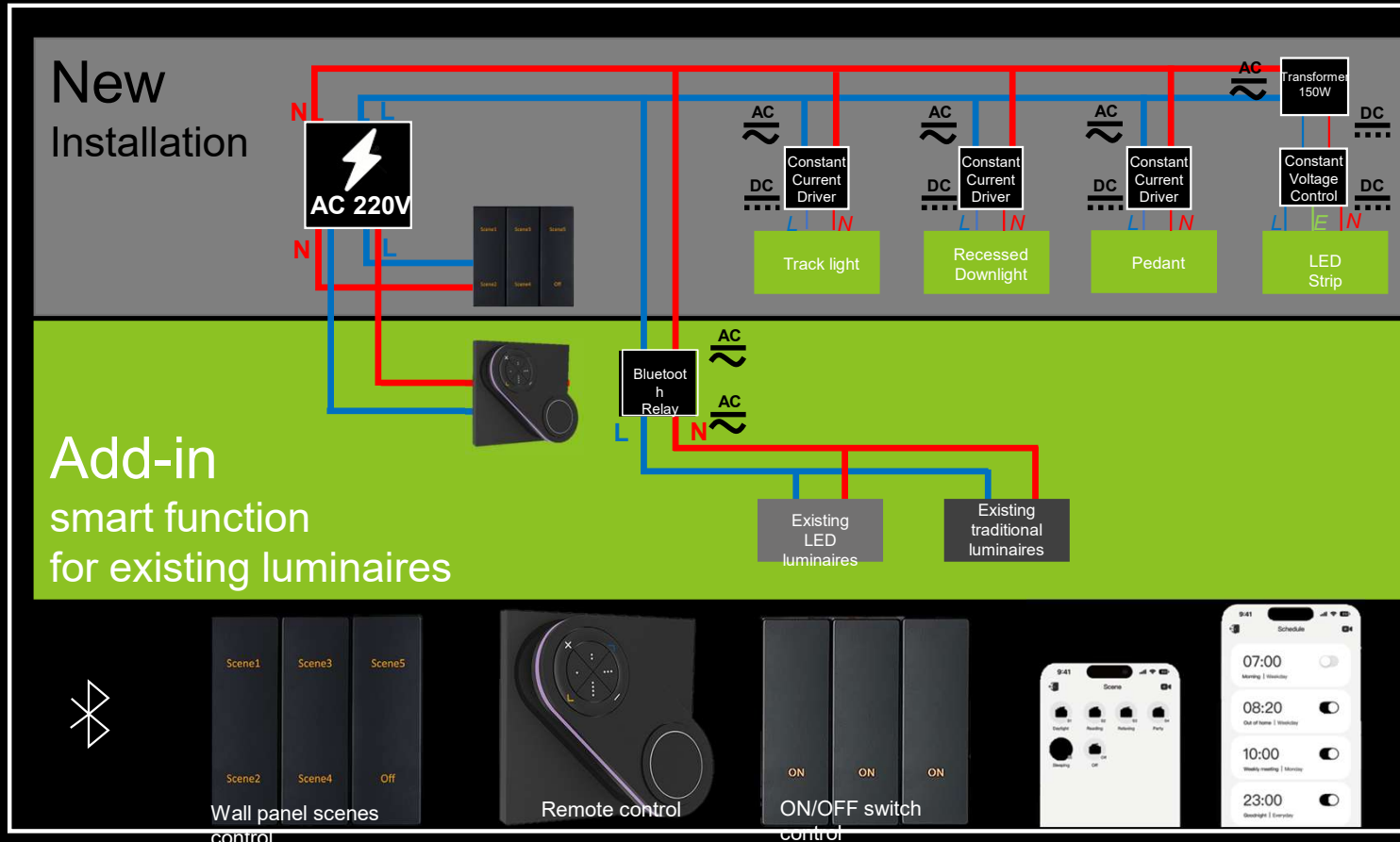
## Bluetooth portable remote control

1. 4 preset scenes/ Click control
2. Group/ Individual control, CCT and brightness dimming
3. Doesn't need to be installed in the same circuit
4. Preset scene needs to be set by ACO Smart APP





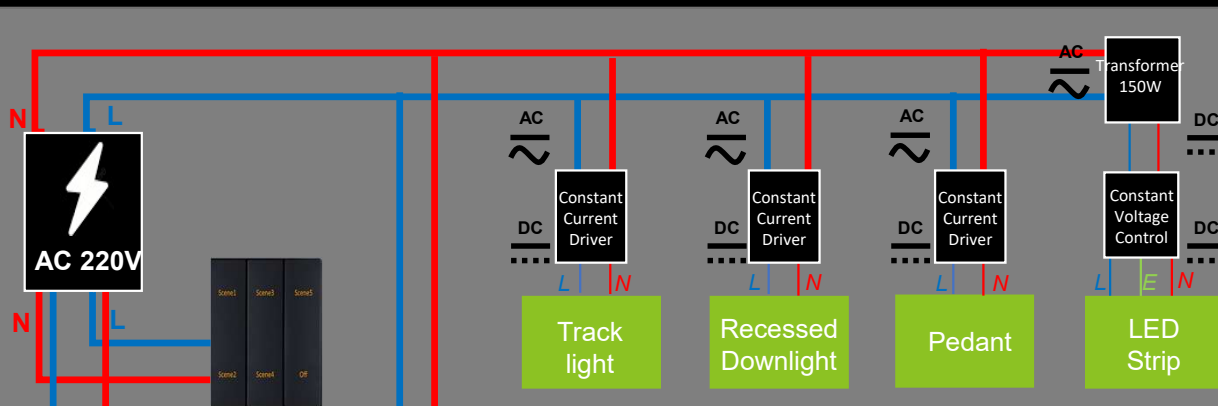
# ACO Smart lighting framework



- AC Wire: 1.5-2.0mm
- DC Wire: 1.0-1.25mm
- AMO smart luminaires
- Existing LED luminaires
- Existing traditional luminaires
- Bluetooth 5.0
- Bluetooth control protocol
  - Smart Phone/ Tablet
  - Wall panel control
  - Remote control

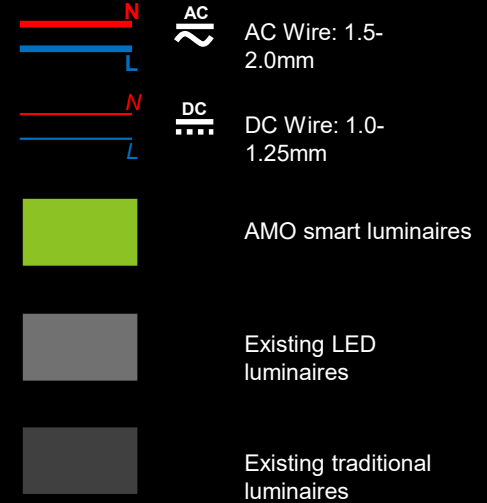
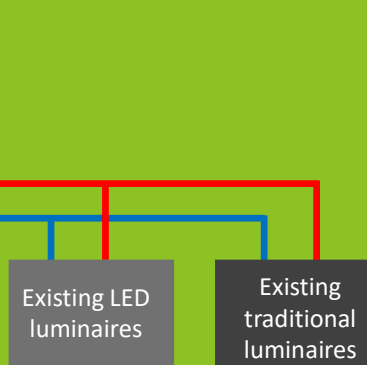
# ACO Smart lighting framework- Existing luminaires replacement

New  
Installation

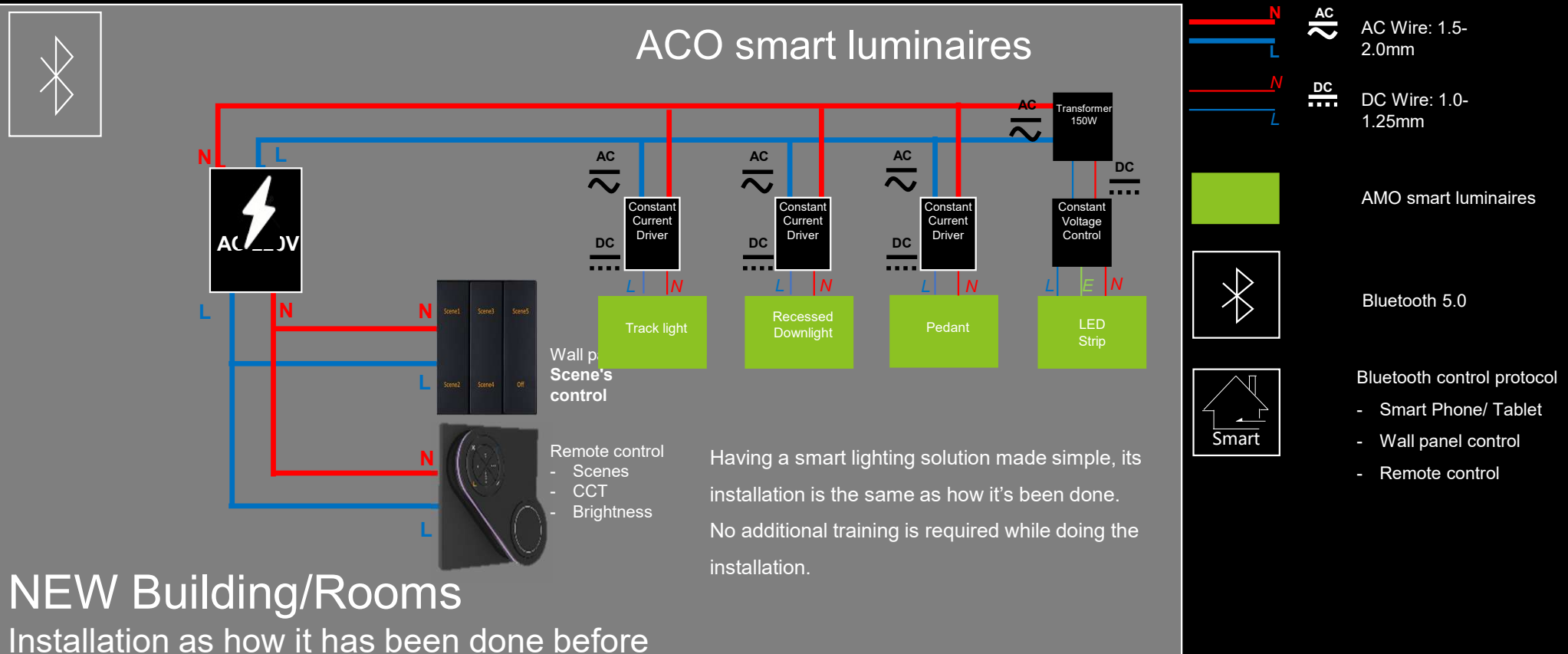


Add-in  
smart function  
for existing luminaires

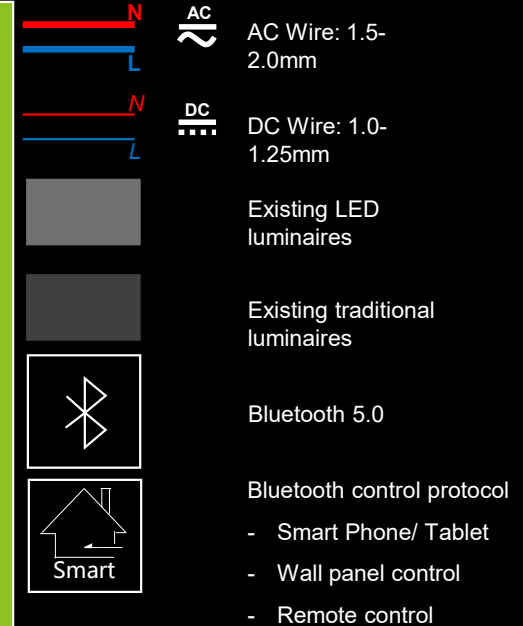
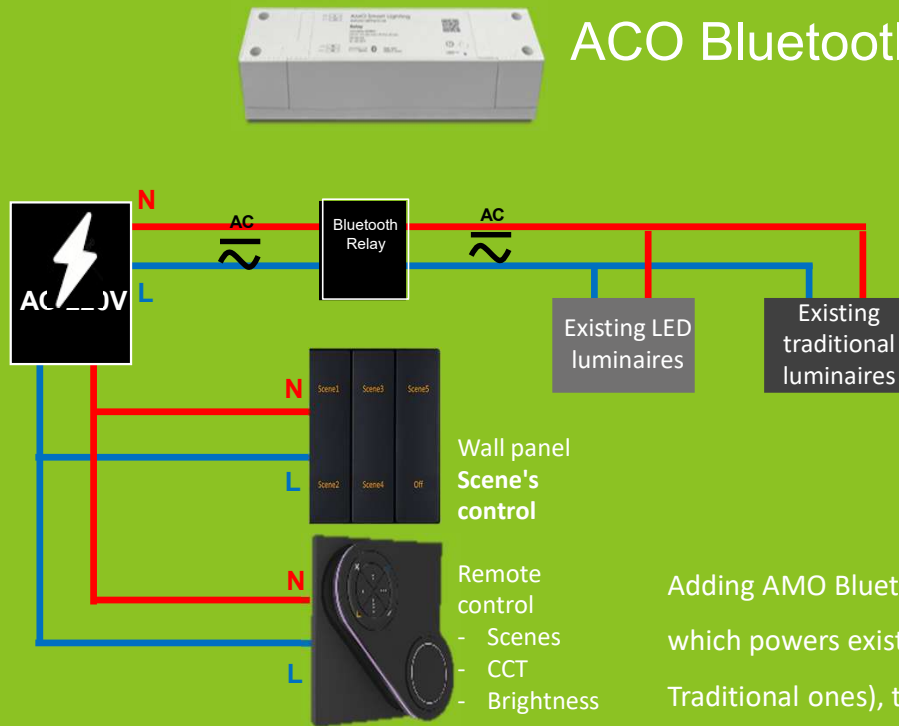
Bluetooth  
Relay



# ACO Smart lighting framework- New installation



# ACO Smart lighting framework



Transform  
Existing lighting into smart one

Adding AMO Bluetooth reply within the circuit which powers existing luminaires (LED ones or Traditional ones), to enable smart Bluetooth control features , such as ON/OFF, schedule light on your portable device or AMO wall panel or remote control.