lumos CONTROLS
A WISILICA BRAND

Lighting Controls Design Guide

HOSPITALITY

Lighting plays a significant role in hospitality, creating a unique and memorable experience. Also, enhanced lighting experience improves staff efficiency and energy savings. In fact, hotels and hospitality require lighting controls that can set the right ambiance that make guests feel at ease and comfortable, ensure energy conservation and lower carbon emissions.

Lumos Controls has been assisting building communities to create energy efficient and lively spaces. We thought that sharing our experiences and best practices will be helpful for your next projects.

Hospitality require a very specific lighting system that adapts and conforms to the following needs:

→ Reduce maintenance costs
→ Improve workers' safety as well as their working conditions
→ Flexibility in creating the right ambience
→ Integration with building management system
→ Emergency Lighting
→ Energy monitoring and maintenance

Hospitality Lighting Controls Possibilities

With Us- Save energy and enhance ambiance

We have a device portfolio that is simple to install and easy-to-use.

Energy efficiency and comfort are crucial in lighting, and our lighting controls help you achieve them. Our future-proof solution helps you save energy, enhance the ambiance, and guarantee enhanced learning experience through easy deployment of lighting control strategies. We also provide detailed analytical reports on energy utilization, occupancy patterns, and device usage. You will maximize ROI with better energy savings. The solution easily integrates with the building management system, bringing added benefits.

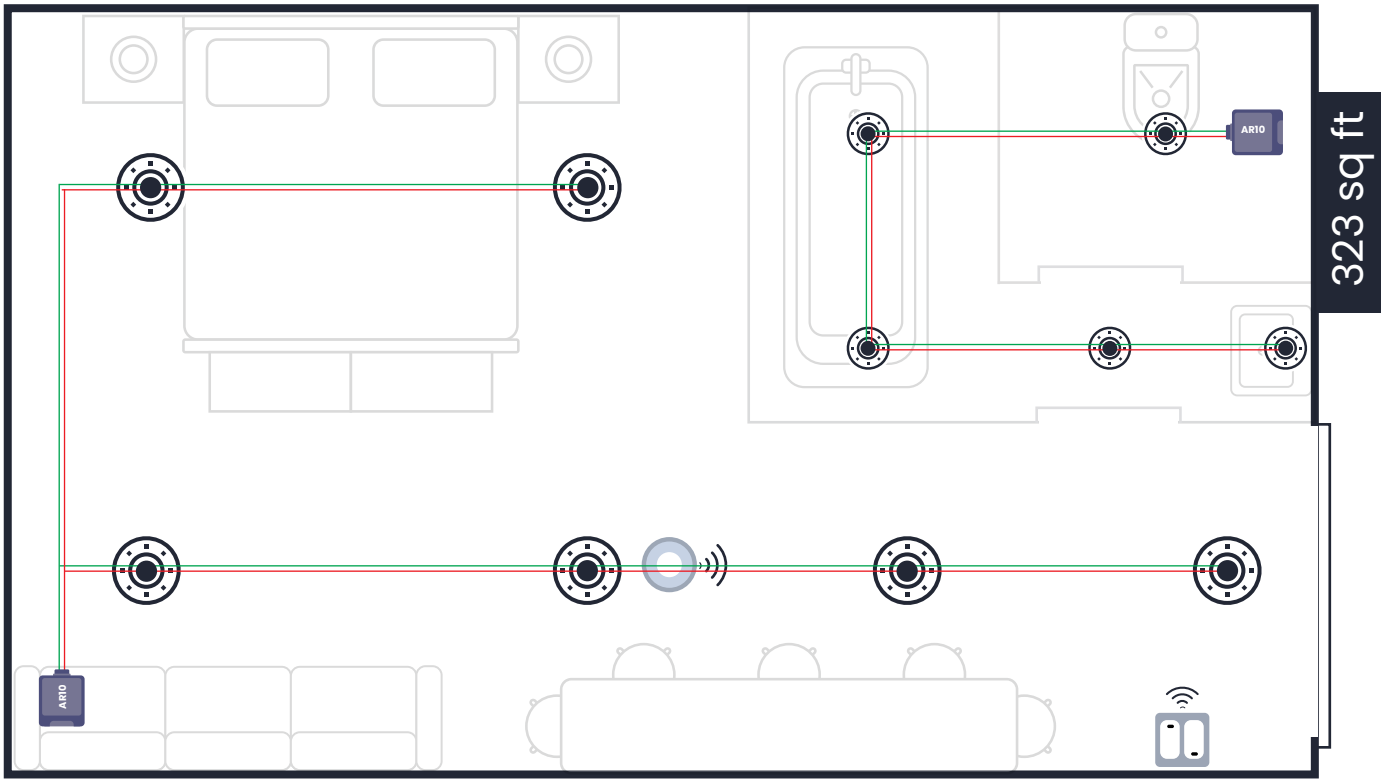
Lighting Control Strategies for Each Spaces

Control Requirement	Code Summary	Guest Rooms	Reception	Lift lobbies	Restaurant	Business Centres
Manual ON/OFF/ Dimming	Areas with occupant sensors shall incorporate a manual control to allow occupants to turn fixtures off (IECC)	Yes	Yes	Yes	Yes	Yes
Time Scheduling	Lighting not already shut off by Automatic Full Off control must be shut off when scheduled unoccupied (Ashrea)		Yes			Yes
Occupancy Control	Occupancy sensor control devices shall be installed to automatically turn lights off within 20 minutes of all occupants leaving the space (IECC)	Yes		Yes	Yes	
Vacancy Control	The vacancy sensor must provide the occupant with the option to turn the lights off manually. (Title 24)	Yes		Yes	Yes	Yes
Daylight Harvesting	Daylight-responsive controls shall be provided. (IECC)		Yes		Yes	Yes
Emergency Lighting	Lights that automatically turn on during emergencies (IECC)	Yes	Yes	Yes	Yes	Yes

Did you Know?

Higher color temperatures (4,600K or more) appear blue-white and are called cool or daylight colors
Mid-range color temperatures (3,100K–4,600K) appear cool white
Lower color temperatures (up to 3,000K) range from red to yellowish-white in tone and are called warm colors

Guest Rooms



147.6ft is the device-to-device BLE communication distance with LoS. The actual range depends on the installation conditions and varies between 30ft - 130ft.

Motion/Light Sensor 0-10V Room Controller Switch

Visitors want to be in charge of their lights. Giving them the freedom to determine light levels makes the whole experience exciting. Lighting needs to be aesthetically appealing and functional. And, lighting controls play a crucial role in making a guest room visually attractive and convenient for occupants.

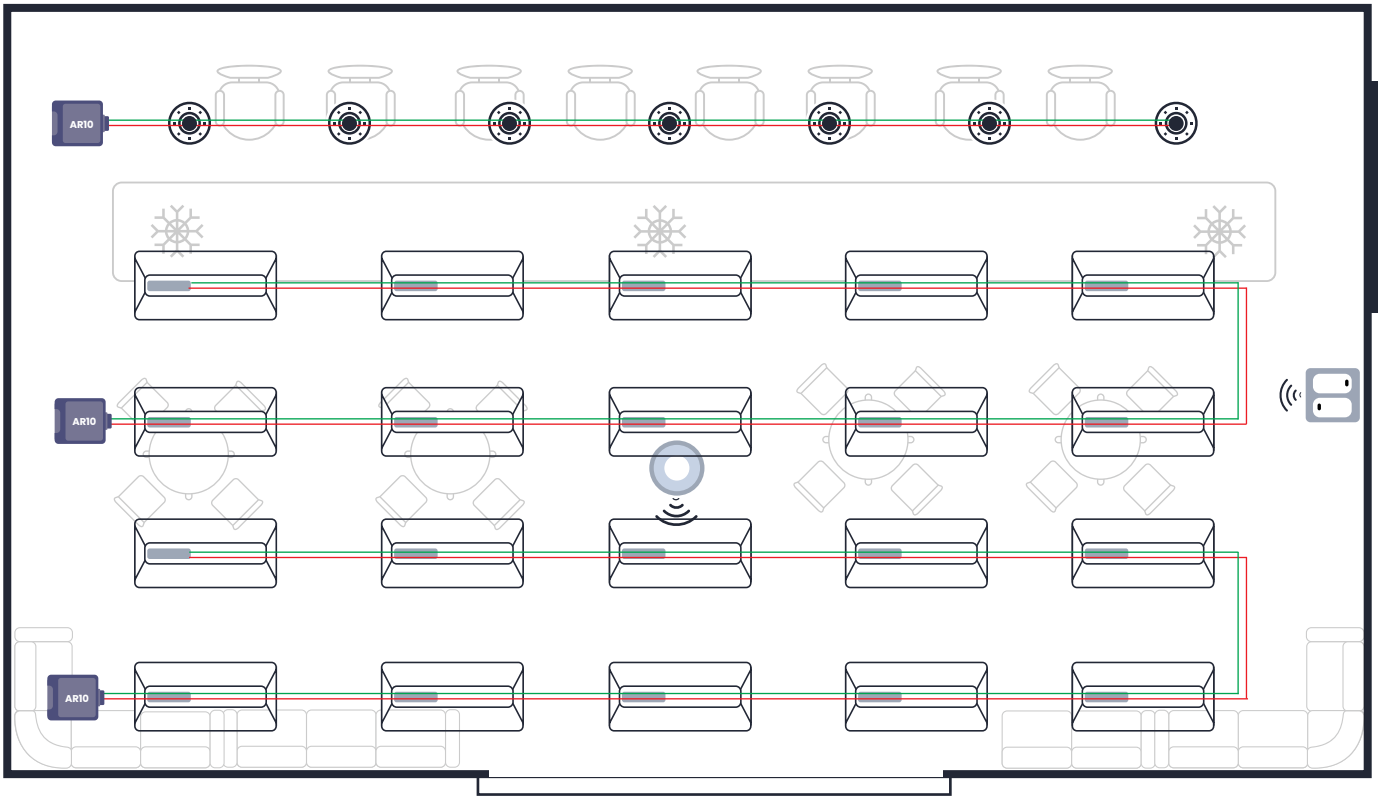
We suggest

→ Occupancy Control for energy savings and convenience

Pro tip:

Occupancy sensors and controllers work together to detect human presence to turn lights ON automatically. Controllers and vacancy sensors detect vacancy and turn OFF devices.

Reception



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Motion/Light Sensor 0-10V Room Controller Switch

First impressions matter in hospitality. Hence, the lighting should make the space cozy, comfortable and create a positive mood. Visitors should feel positive every moment they stay in the reception. Also the staff should feel comfortable.

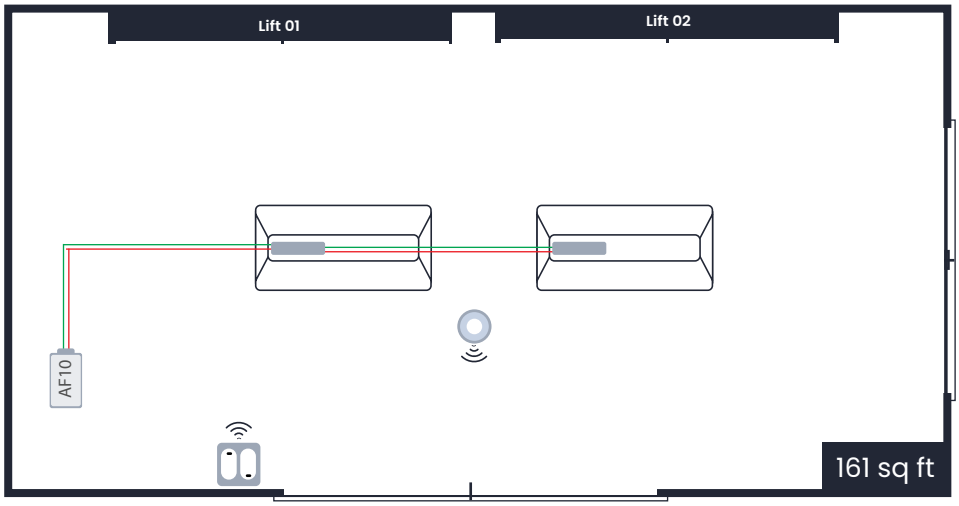
We suggest

→ High-end trim for visual comfort and energy savings
→ Daylight Control comfort and energy savings

Pro tip:

Use controllers to define the highest light level required. If the room gets enough daylight, incorporate light sensors and controllers for open-loop daylight harvesting. On the contrary, if you want to set a required light level, use light sensors and controllers for closed-loop daylight harvesting.

Lobbies



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Microwave/Motion/Light Sensor AF10 0-10V Fixture Controller Switch

Lobbies are a place where occupants are engaged in several forms of communication and visual tasks. The right lighting and controls will make the space feel warm, welcoming and navigate easily. The lighting should enhance employee productivity and save a considerable amount of energy.

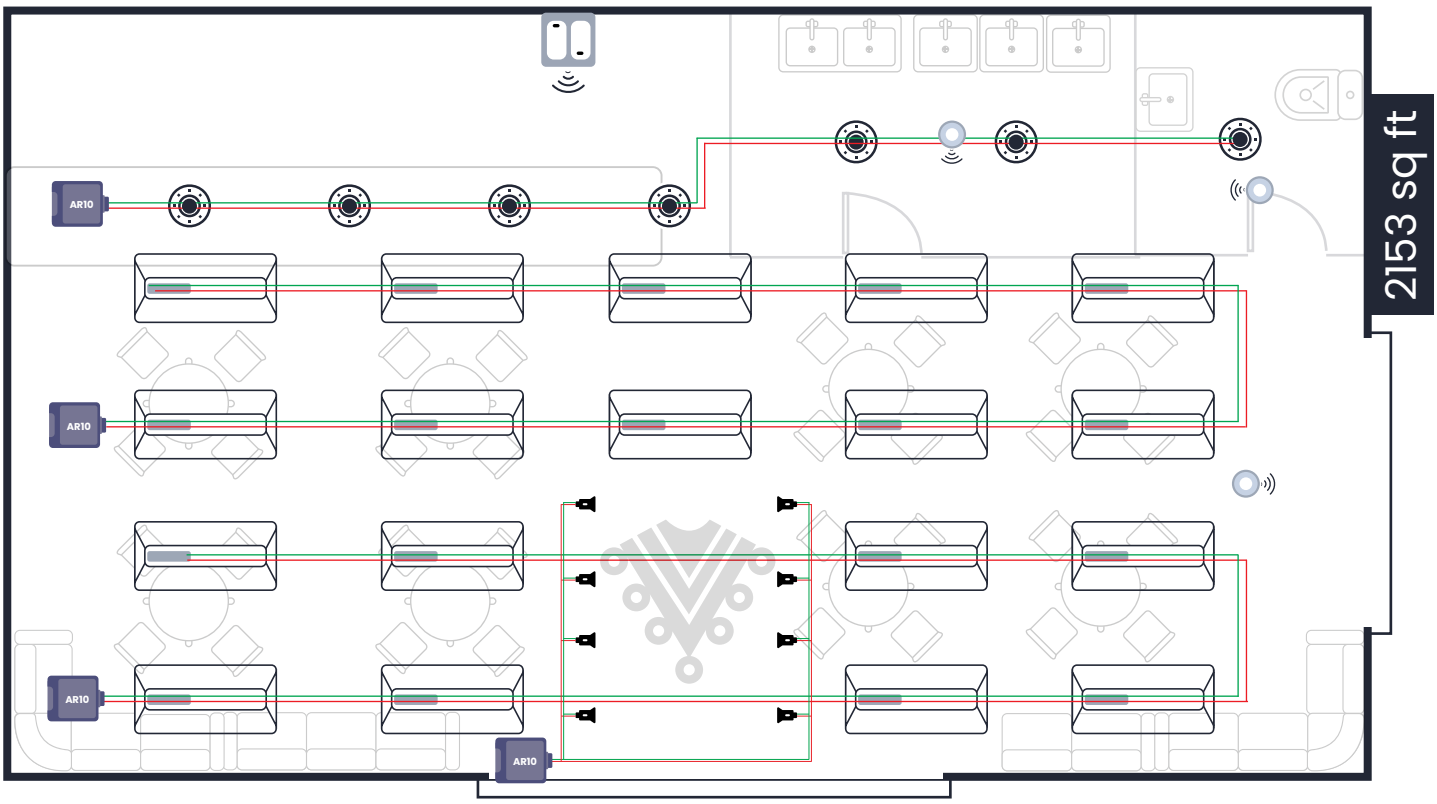
We suggest

→ High-end trim for glare-free and comfortable lighting
→ Occupancy Control for energy savings
→ Daylight Control for productivity and energy savings

Pro tip:

You can use controllers to implement high-end trim to create glare-free and comfortable lighting. Occupancy sensors and controllers work together to detect human presence to turn lights ON automatically. Controllers and vacancy sensors detect vacancy and turn OFF devices. If the room gets enough daylight, incorporate light sensors and controllers for open-loop daylight harvesting. On the contrary, if you want to set a required light level, use light sensors and controllers for closed-loop daylight harvesting.

Restaurant



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Motion/Light Sensor AR10 0-10V Room Controller Switch

The restaurant lighting should be functional and comfortable. Also, the light level should be appropriate, resulting in an outstanding dining experience. And customers must feel a warm and welcoming atmosphere.

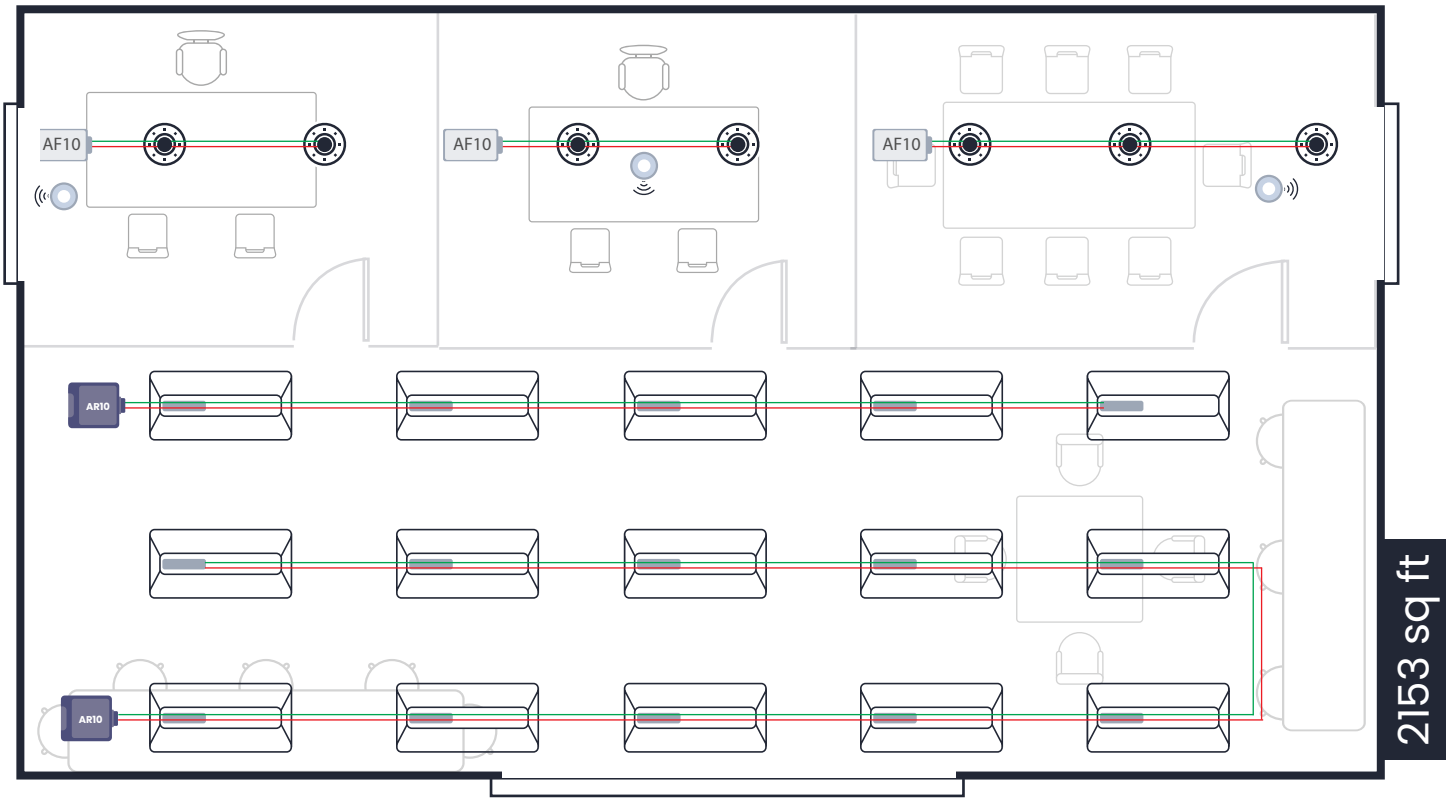
We suggest

→ High-end trim for visual comfort and energy savings
→ Daylight Control comfort and energy savings
→ Occupancy Control for energy savings and convenience

Pro tip:

Occupancy sensors and controllers work together to detect human presence to turn lights ON automatically. Controllers and vacancy sensors detect vacancy and turn OFF devices. If the room gets enough daylight, incorporate light sensors and controllers for open-loop daylight harvesting. On the contrary, if you want to set a required light level, use light sensors and controllers for closed-loop daylight harvesting.

Business Centres



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Motion/Light Sensor | AR10 0-10V Room Controller | AF10 0-10V Fixture Controller | Switch

Lighting has a direct impact on mood, energy, and productivity. Business centres require lighting that makes occupants feel comfortable and energized. Flexibility and control over lighting is also a major concern as a wide range of business activities happen here.

We suggest

→ High-end trim for visual comfort
→ Occupancy Control for safety and energy savings
→ Daylight Control for comfort and energy savings

Pro tip:

You can use controllers to implement high-end trim to create glare-free and comfortable lighting. Occupancy sensors and controllers work together to detect human presence to turn lights ON automatically. Controllers and vacancy sensors detect vacancy and turn OFF devices. If the room gets enough daylight, incorporate light sensors and controllers for open-loop daylight harvesting. On the contrary, if you want to set a required light level, use light sensors and controllers for closed-loop daylight harvesting.

Use our mobile app to enjoy maximum convenience and flexibility. You can wall mount our kinetic/ remote switches for ease of use. Our controllers meet emergency lighting requirements to ensure your building safety. Implement plug load controls for maximizing energy savings.

Grow Seamless

Optimize building operations with our advanced reports and analytics.

→ Understand occupancy patterns
→ Energy utilization
→ Device usage

Emergency monitoring dashboards ensure occupant safety 24*7

[Available only with our DALI lighting control system]

Device Placement Guidelines

Device placement considerations are crucial for optimizing the performance and functionality of devices in various scenarios. Here are some key points to consider:

1. **Signal Strength and Distance:** Keep in mind that signal strength tends to weaken as the distance between devices increases. Therefore, it is essential to consider the proximity of devices to ensure reliable communication. Maintain an appropriate distance between devices to ensure optimal signal strength.

2. **Metal Structures:** When devices are placed near metal structures, it is important to ensure that the Bluetooth Low Energy (BLE) antennas have a clear line of sight with nearby devices. This can be achieved by creating small holes in the metal enclosure to allow the BLE antennas to maintain connectivity.

3. **Sensor Mounting Guidelines:** Install sensors in a way that protects them from damage, vandalism, and accidents. Avoid placing sensors near heating sources that can cause rapid temperature changes within the detection or measurement zone. This includes air vents, fan heaters, incandescent lamps, and halogen lamps.

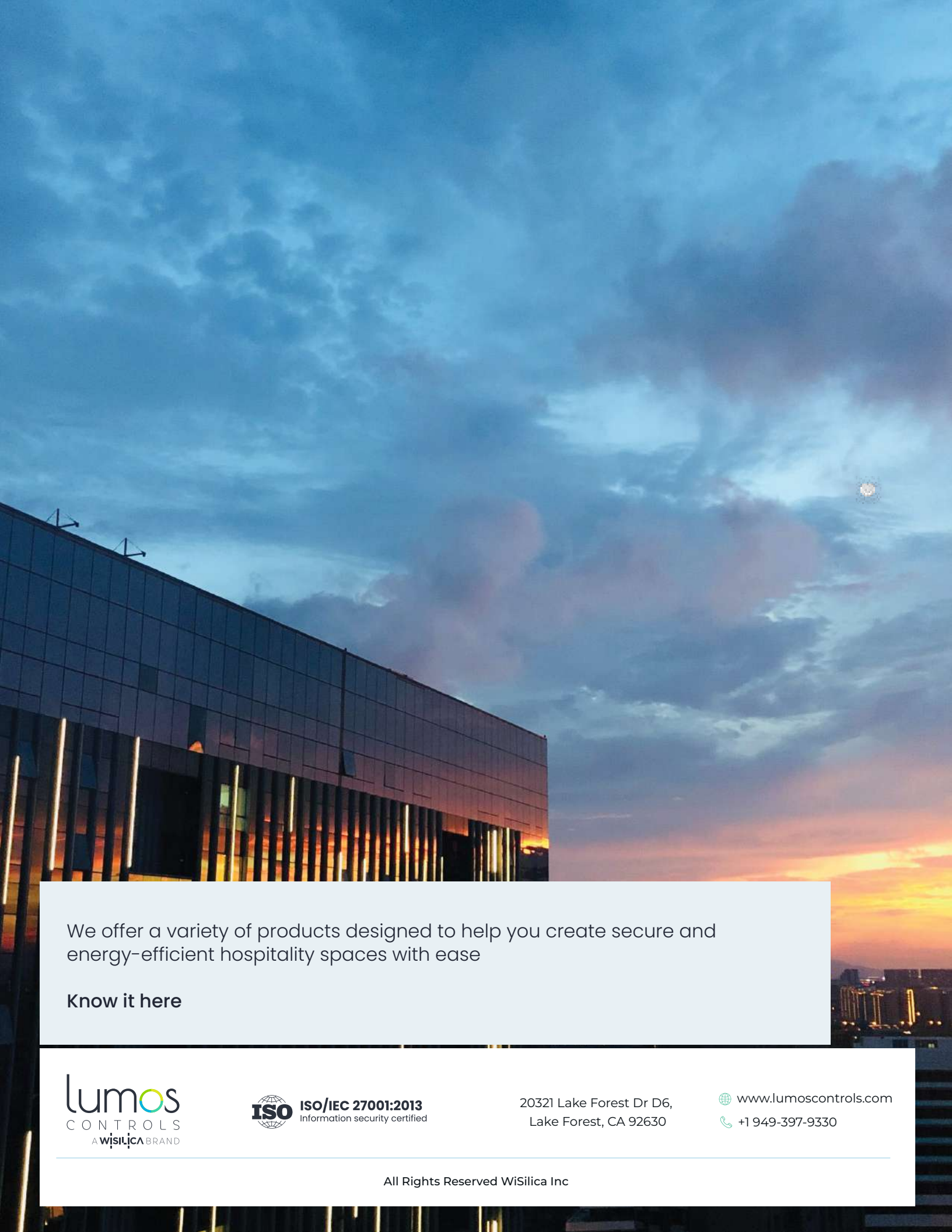
4. **Interference-Free Detection Range:** Ensure that the detection range of sensors is free from interferences that can affect their performance. Identify and mitigate potential sources of interference to maintain accurate and reliable measurements.

5. **Light Sensor Placement:** When using light sensors, make sure they only measure indirect light (light reflected from other surfaces) to avoid measurement distortions caused by direct sunlight. This ensures accurate and consistent measurement results.

6. **Scaling Up for Large Installations:** For large installations, establish a proper building hierarchy before commissioning the devices. Use Lumos Controls app, which allows devices to be divided among Buildings, Floors, and Zones. Choose the appropriate Zone for each device during commissioning. Note that devices commissioned in a Zone can only communicate with other devices in the same Zone. It is recommended to use a single phone for commissioning and configuring devices within a specific Zone to avoid multiple sync attempts to the cloud.

7. **Proximity for Configuration:** When creating, deleting, or editing Groups, Scenes, Schedules, etc., ensure that you are within the Bluetooth Low Energy (BLE) range of the related control devices. This proximity is necessary for seamless configuration and synchronization.

By considering these device placement considerations, you can optimize the performance, reliability, and functionality of your devices in various environments and scenarios.



We offer a variety of products designed to help you create secure and energy-efficient hospitality spaces with ease

Know it here

lumos CONTROLS
A WISILICA BRAND

ISO/IEC 27001:2013
Information security certified

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