

### **W-DALI** The Secret to Success with Wireless Lighting Control

#### Manilla School, Stockholm Campus Konradsberg

LUMENRADIO W-BACNET, MINIMAL DISRUPTION TO THE SCHOOL

- Renovation to improve the building's energy performance. W-BACnet chosen for installation of temperature regulators based on BACnet MS/TP.
- A wireless installation meant the running of the school was barely disrupted. One room at a time could be renovated while the school was open and lessons were taking place.
- 126 nodes in 5 separate wireless networks.
- 7,610m<sup>2</sup> total area.



#### **Example: A more efficient way of working with W-DALI**



 6 conference rooms with 10 fixtures each are to be upgraded with DALI controllers (motion sensors, manual and central control)



#### **Installation of wired DALI**



- 6 conference rooms with 10 fixtures each are to be upgraded with DALI controllers (motion sensors, manual and central control)
- DALI control unit is often installed in a technical room in another part of the building
- This is where the similarities end between working with traditional wired DALI versus wireless W-DALI



#### **Installation of wired DALI**



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- When new cables are installed, the whole floor is affected
- In reality the whole business needs to be shut down



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# THE SECRET BEHIND W-DALI

#### **Range and mesh**











- The technical room where the DALI controller is installed is often in another part of the building.
- The W-DALI DIN rail and the W-DALI node can be far apart.
- Walls and floors can be in the way which weakens the signal.
- Up to 500m apart is important, it must be easy to install.



• Mesh means that each unit can repeat the signal which further increases the range.



- Mesh means that each unit can repeat the signal which further increases the range.
- And if a W-DALI node does stop workings, another W-DALI node will repeat the signal.
- This is known as a self-healing network.

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Verkauf / Beratung

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