



PROLiGHTS

GUIDELINES FOR INSTALLATION SETUP



Gallery WashDAT

Compact LED wall wash with 60W LED

Introduction

Gallery WashDAT is a compact and efficient LED wall-wash luminaire, purpose-designed for precise, uniform illumination of walls, exhibits, and shelving in galleries, events, and venues.

Its advanced optical system combines a custom linear LED source with an asymmetrical reflector, significantly reducing the required number of fixtures by enabling greater spacing without compromising visual comfort or uniformity. Its soft and wide optics features a beam angle of 115° horizontal x 67° vertical with GWASHDATFILT30 Smooth filter included, but an optional GWASHDATFILT80 light diffusion filter is also available for a wider projection. Its various configurations making this fixture flexible and effective to illuminate walls.

The Gallery WashDAT ensures good light distribution from 0,7 m up to 3,5 m installation distance from the wall, and it can be installed placing fixtures next each other with a clearance of up to 3 meter without hard edges or dark gaps, even when illuminating curved canvas.

Installation configurations

Gallery WashDAT can be installed at the bottom, top or both top + bottom depending of the desired effect. One of the key aspects of the Gallery WashDAT is its flexibility, and this document will shows how the fixture will behave at different distance from the wall with included GWASHDATFILT30 Smooth filter.

Gallery WashDAT is equipped with an integrated adjustable bracket that can be used to fix it and allow to adjust the tilt to improve the projection of the device. This guide presents an optimized installation approach based on extensive DIALux simulations providing a uniformity index $U_0 > 0.30$.

For comprehensive evaluation of multiple configuration variables and precise photometric analysis, we recommend performing computational simulations utilizing the DiaLux illumination modeling software to generate detailed quantitative results and illuminance distribution maps.

Simple rules to take in mind

When Gallery WashDAT units are installed in a single row of N units (top or bottom) they illuminate the walls with a uniform horizontal distribution that fades in intensity vertically.

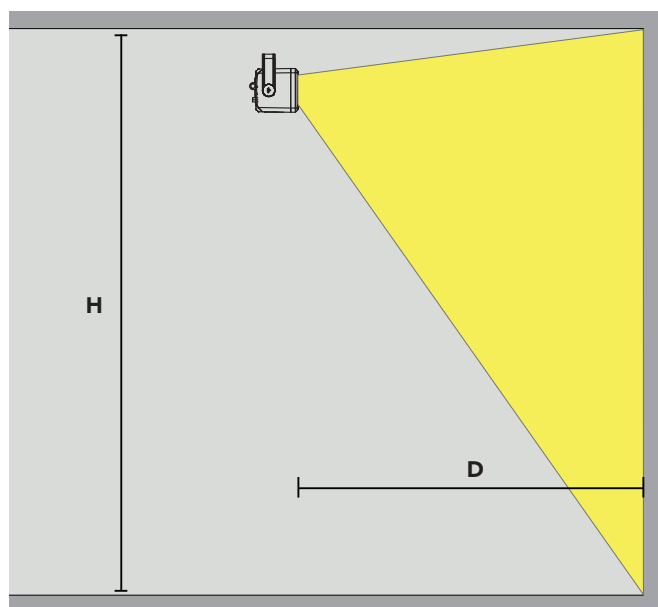
The empirical formula that gives us the optimal distance from the wall is as follows:

$$- D = H \times 0,4$$

where:

- D = optimal wall distance [m]
- H = wall height [m]

Distance (D) to Wall = **0,7 - 3,5 m**



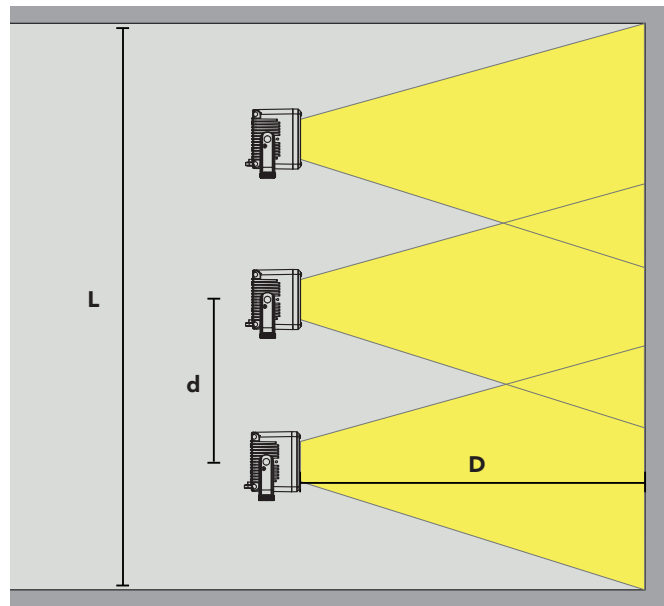
The empirical formula for finding the optimal number of fixtures is:

$$- n = L / 2.5$$

where:

- n = optimal number of luminaires
- L = wall length [m]

This formula need to rounding to the next higher integer.



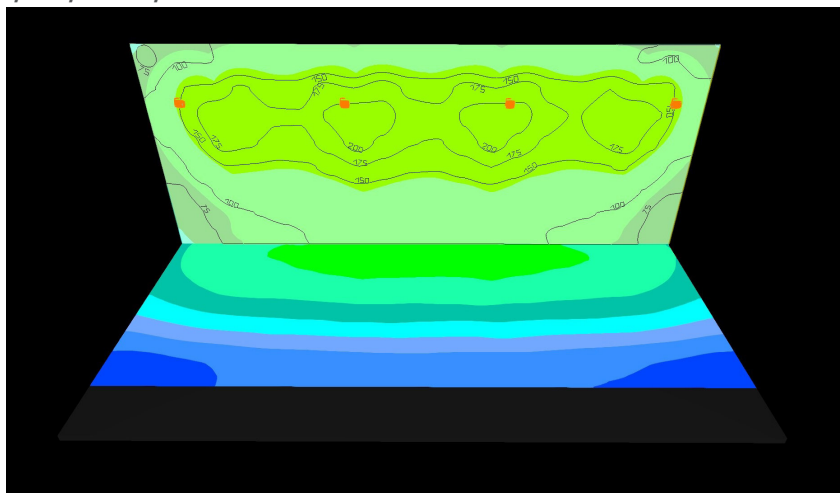
Quick Design Table

To facilitate design without simulations, here is a table combining formulas:

Wall height (H)	Wall width (L)	Optimum distance (D)	N° fixture (n)	Installation height
3 m	6 m	1,2 m	3	2,7 m
3 m	8 m	1,2 m	4	2,7 m
4 m	10 m	1,6 m	4	3,6 m
4 m	12 m	1,6 m	5	3,6 m
4 m	15 m	1,6 m	6	3,6 m
5 m	10 m	2,0 m	4	4,5 m
6 m	12 m	2,4 m	5	5,4 m

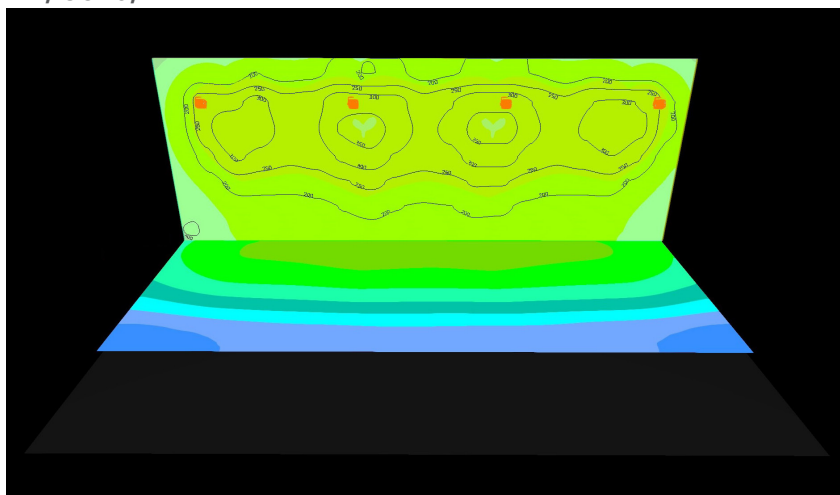
Case study 1: wall 10 m x 4 m

Configuration: 4 pcs Gallery WashDAT placed at the 3,6 mt high, and 1,6 mt from wall, Tilt 30°, with fixture spacing 2,5 m, $U_o=0,42$:



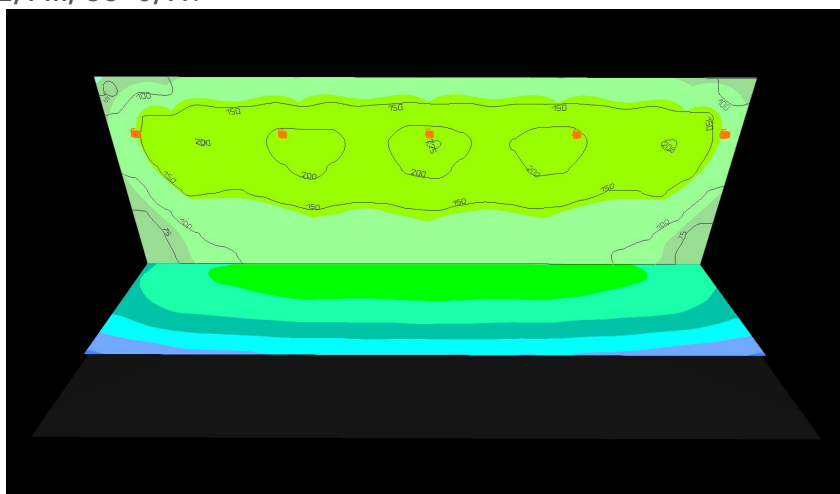
Case study 2: wall 8 m x 3 m

Configuration: 4 pcs Gallery WashDAT placed at the 2,7 mt high, and 1,2 mt from wall, Tilt 30°, with fixture spacing 2 m, $U_o=0,42$:



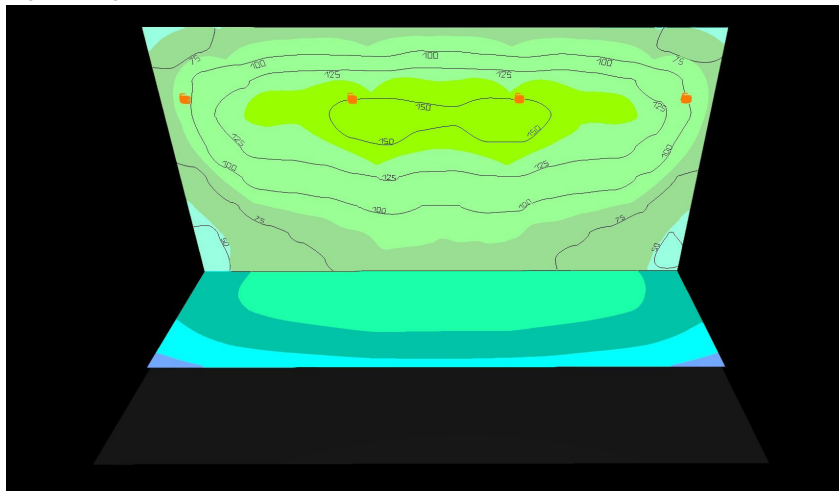
Case study 3: wall 12 m x 4 m

Configuration: 5 pcs Gallery WashDAT placed at the 3,6 mt high, and 1,6 mt from wall, Tilt 30°, with fixture spacing 2,4 m, $U_o=0,41$:



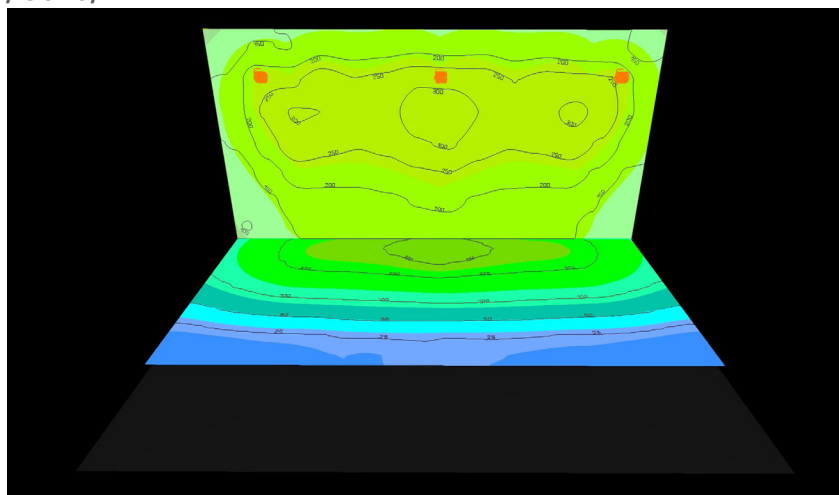
Case study 4: wall 10 m x 5 m

Configuration: 4 pcs Gallery WashDAT placed at the 4,5 mt high, and 2,0 mt from wall, Tilt 30°, with fixture spacing 2,5 m, $U_o=0,44$:



Case study 5: wall 6 m x 3 m

Configuration: 3 pcs Gallery WashDAT placed at the 2,7 mt high, and 1,2 mt from wall, Tilt 30°, with fixture spacing 2 m, $U_o=0,47$:



Case study 6: wall 10 m x 6 m

Configuration: 4 pcs Gallery WashDAT placed at the 5,4 mt high, and 2,4 mt from wall, Tilt 30°, with fixture spacing 2,5 m, $U_o=0,47$:

