

IMPACT ACOUSTIC®

LIGHTING SERVICES

Office

LIGHTING CALCULATION REPORT

Document No.: LCR001.2500.0.000

September 10, 2025

Commissioned by:
Client

Prepared by:
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A. IMPACT ACOUSTIC

IMPACT ACOUSTIC is a Swiss company, specialized in providing high-performance acoustic solutions made from recycled PET bottles. Our products offer high-quality acoustic treatments to various spaces ensuring a comfortable and aesthetically pleasing design.

B. ARCHISONIC

ARCHISONIC® is our flagship lineup of product solutions in the market. Our high-performance acoustic absorbers and textiles are developed with a focus on dematerialization, upcycling, and life cycle management.

ARCHISONIC® Felt and ARCHISONIC® Textile do not rely on the extraction of new materials; they are made from upcycled single-used plastics, resulting in a positive carbon footprint. Additionally, unlike conventional acoustic materials, ARCHISONIC® Cotton does not use synthetic binders, which are difficult to recycle. This design allows our absorbers to be fully reintegrated into the production process, promoting sustainability and efficiency.

Our ARCHISONIC® acoustic absorbers are a direct response to ecological sustainability and environmental quality requirements facing contemporary interior design and fit out. The complete ARCHISONIC® product range has been LEED accredited and Cradle to Cradle Certified™. Due to its flexibility in application, it offers the design community limitless possibilities to address acoustical challenges.

C. CONTACT DETAILS

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Lighting Designer

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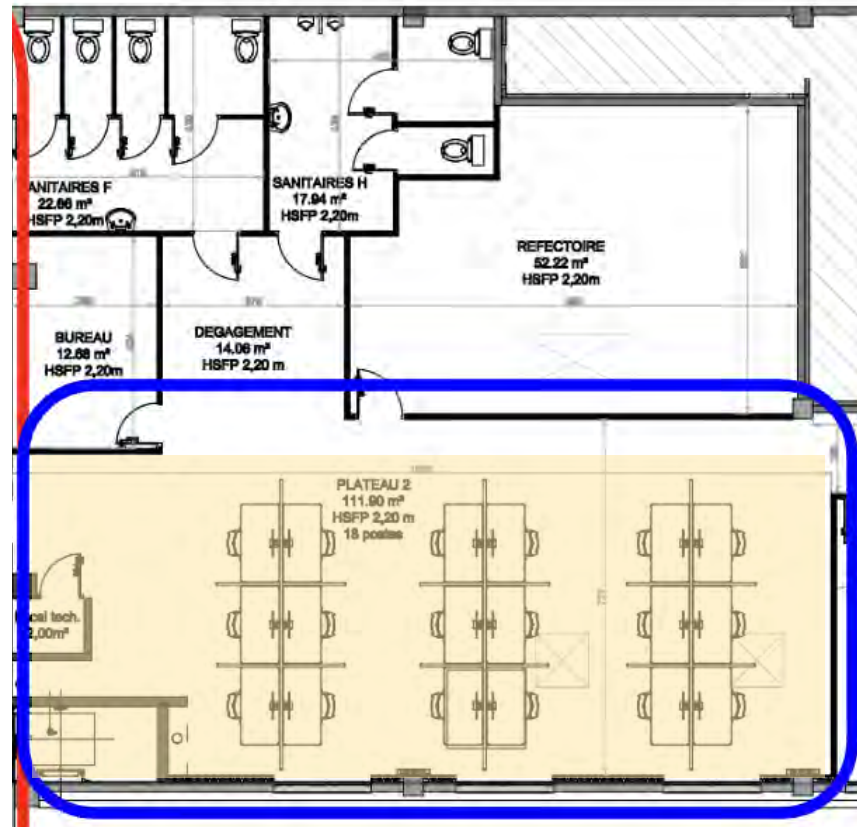


D. DOCUMENT CONTROL

Document No.	Revision	Date
LCR001.2500.0.000	Revision 0	9/10/2025

FLOOR OVERVIEW

CALCULATION SCOPE



General Floor Details

Number of rooms:	2	options
Total Area:	111.90	m ²
Total Volume:	246.18	m ³

Legend

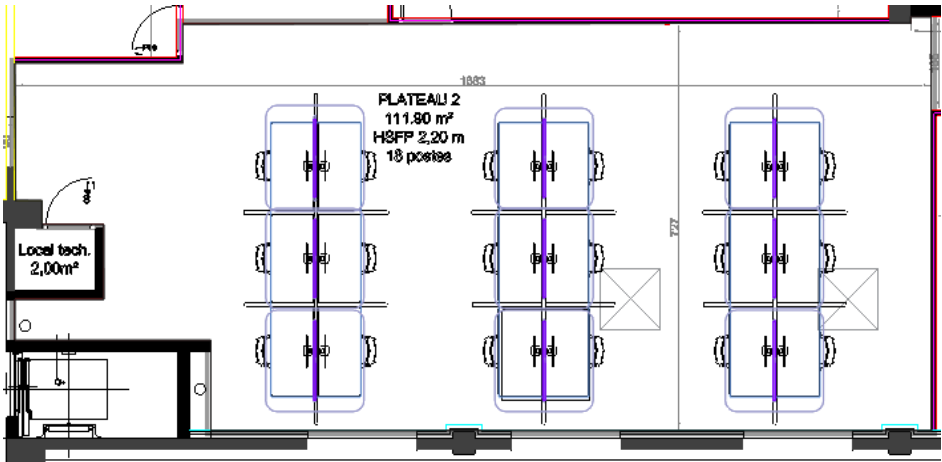
 Calculated Areas


LIGHTING CALCULATION RESULT

LUMINAIRE INFORMATION AND ROOM LAYOUT

Plateau 2 - Recommendation 1

Luminaires Used

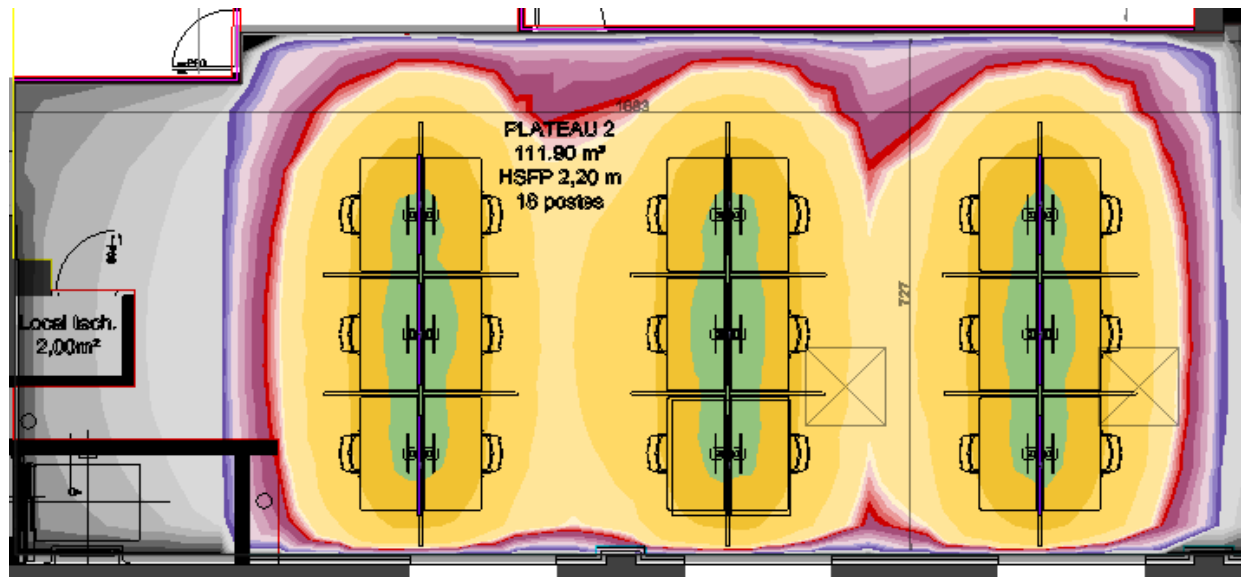


Symbol:	Name:	Acoustic Luminaire Bysso (Large)	Luminaire Height:
	Details:	31W 3061 4000K	2.1 M
	Article No.:	723.24.21.000.00	
	Quantity:	9	

LIGHTING CALCULATION RESULT

LUMINANCE AND ILLUMINANCE RESULTS

Plateau 2 - Recommendation 1



Illuminance (lux) Color Legend

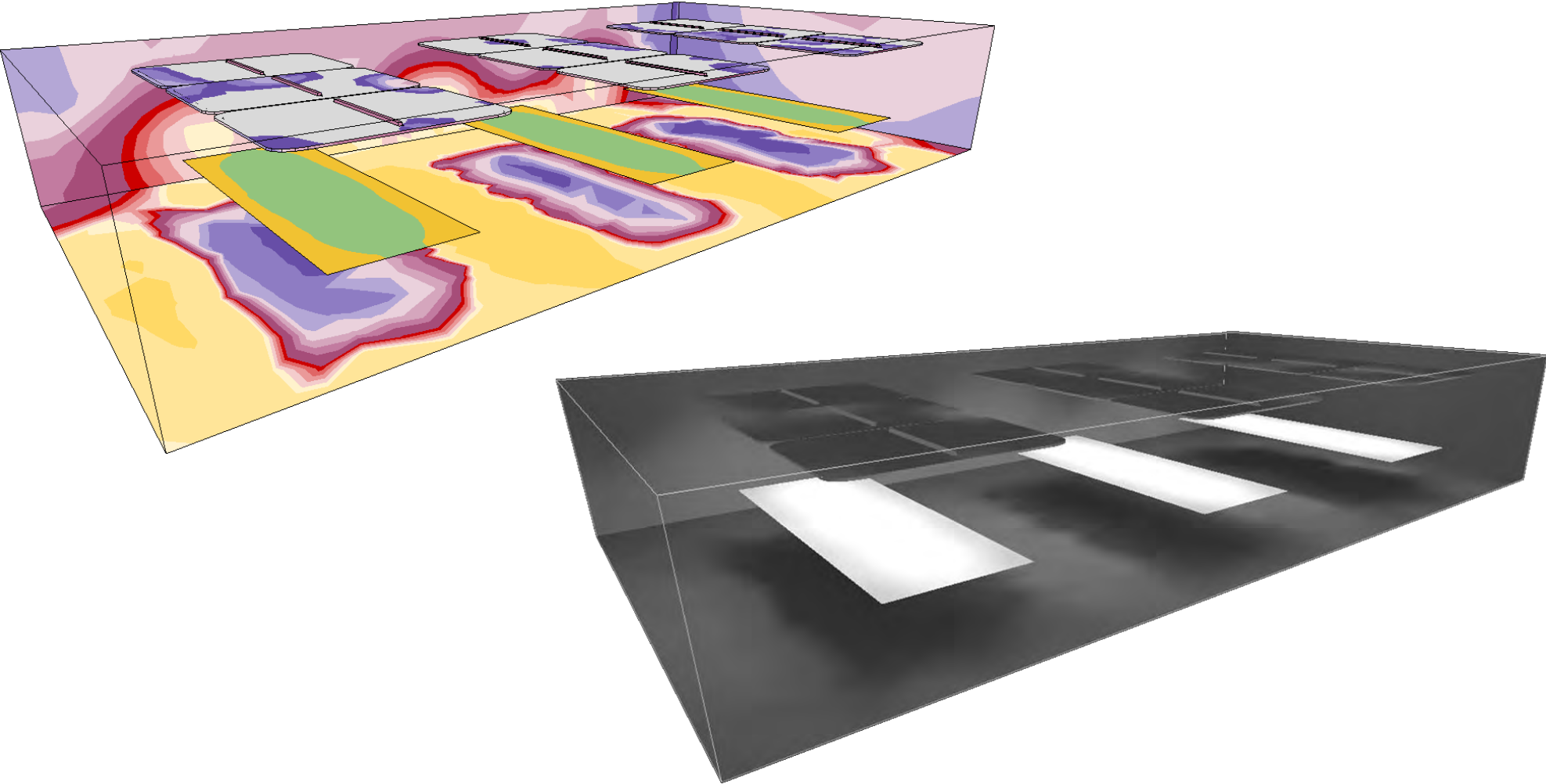


Luminance	Luminance Value	Recommended Luminance	Luminance Result
	215 cd/m2	200-800 cd/m2	Pass ✓
Surface Illuminance	Illuminance Value	Recommended Illuminance	Illuminance Result
Office Tables	535 lx	500 lx	Pass ✓
Surrounding Areas	372 lx	300 lx	Pass ✓
Background	184 lx	100 lx	Pass ✓

LIGHTING CALCULATION RESULT

VISUAL REPRESENTATION

Plateau 2 - Recommendation 1

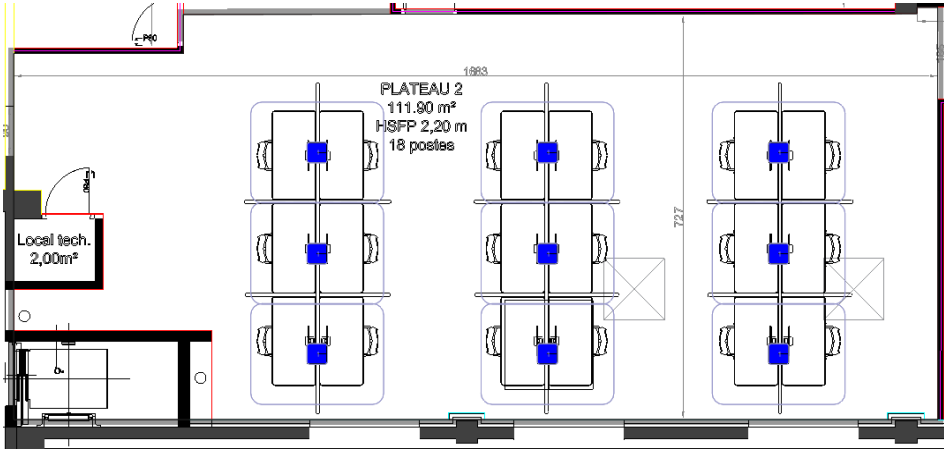


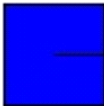
LIGHTING CALCULATION RESULT

LUMINAIRE INFORMATION AND ROOM LAYOUT

Plateau 2 - Recommendation 2

Luminaires Used

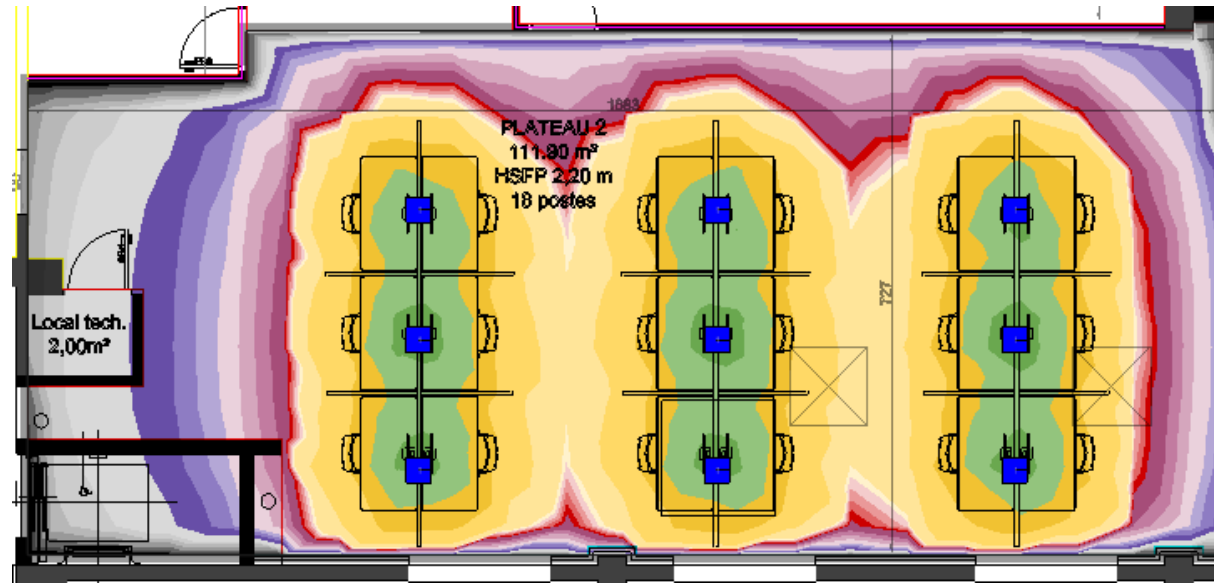


Symbol:	Name:	Acoustic Luminaire Tetra (Large R)	Luminaire Height:
	Details:	31W 3010lm 4000K	2.1 M
	Article No.:	725.24.16.000.00	
	Quantity:	9	

LIGHTING CALCULATION RESULT

LUMINANCE AND ILLUMINANCE RESULTS

Plateau 2 - Recommendation 2



Illuminance (lux) Color Legend

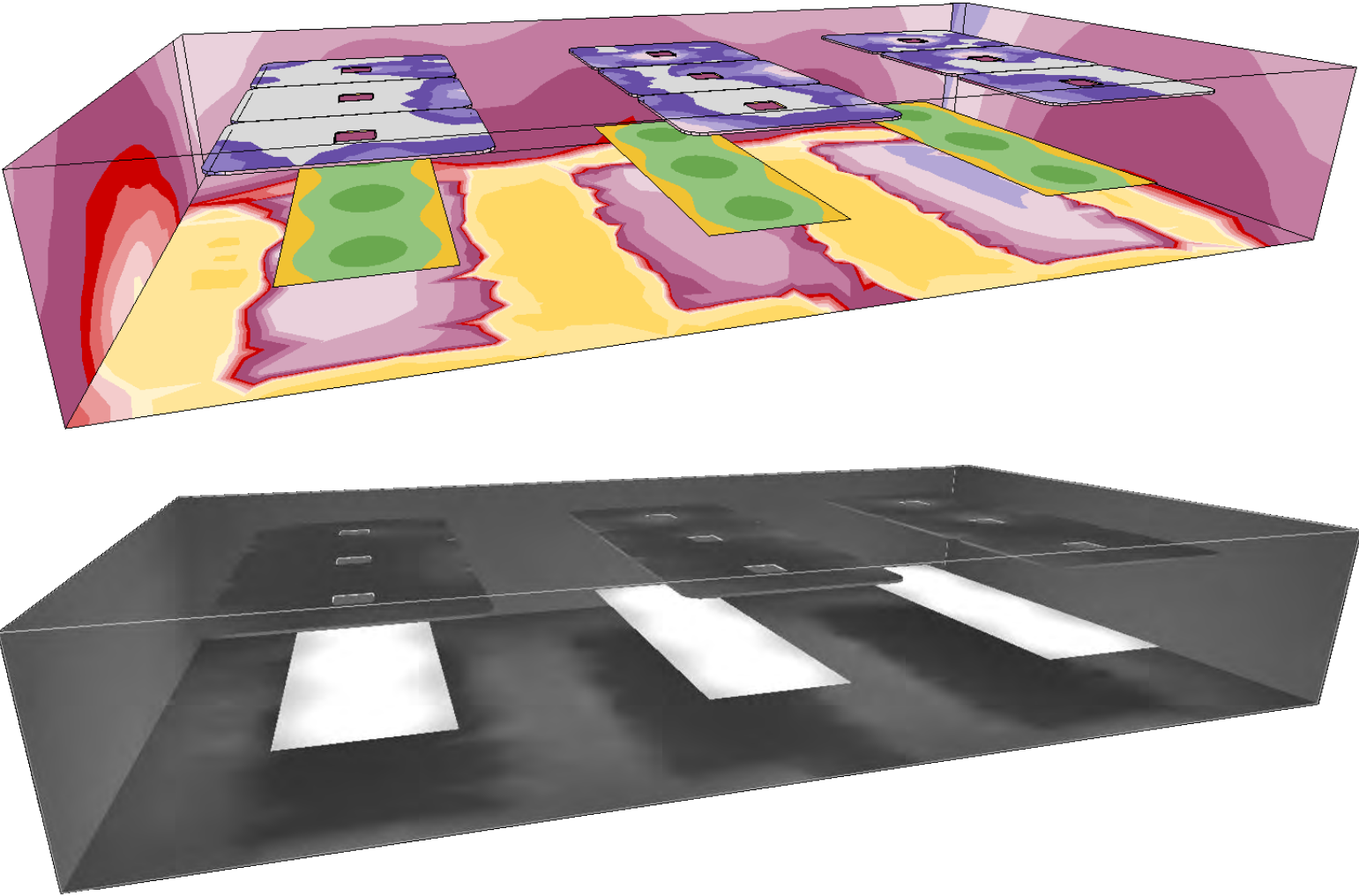


Luminance	Luminance Value	Recommended Luminance	Luminance Result
	239 cd/m ²	200-800 cd/m ²	Pass ✓
Surface Illuminance	Illuminance Value	Recommended Illuminance	Illuminance Result
Dining Tables	625 lx	500 lx	Pass ✓
Surrounding Areas	306 lx	300 lx	Pass ✓
Background	238 lx	100 lx	Pass ✓

LIGHTING CALCULATION RESULT

VISUAL REPRESENTATION

Plateau 2 - Recommendation 2



SUMMARY

The purpose of this report is to determine the quantity and type of lighting required to achieve the target illuminance and luminance levels for the room. Meeting these targets is essential to ensure that individuals can perform visual tasks efficiently and accurately, with appropriate and adequate lighting. Illumination may be provided by daylight, artificial lighting, or a combination of both.

The illuminance and luminance requirements are based on EN 12464-1, a standard that specifies the requirements and recommendations for lighting systems in most indoor workplaces and associated areas, addressing both the quantity and quality of illumination.

The results, as shown in the table, indicate that rooms with a 'Pass ✓' rating for surface illuminance across all evaluated zones comply with the illuminance and luminance levels prescribed in EN 12464-1 when fitted with the specified luminaires. In contrast, rooms rated 'Fail X' did not meet the recommended standards.

Based on the lighting calculation results, the **Plateau 2 - Recommendations 1 & 2** both achieved a 'Pass ✓' rating meeting the recommended illuminance and luminance levels specified in EN 12464-1.

Recommendation 1 provides a more uniform distribution of light across the space, which helps create a balanced visual environment and minimizes discomfort caused by glare.

Recommendation 2, in contrast, provides the use of luminaire with a higher lighting output, ensuring sufficient illumination levels that continue to comply with the required standards.

Room	Illuminance	Luminance
Plateau 2 - Recommendation 1	Pass ✓	Pass ✓
Plateau 2 - Recommendation 2	Pass ✓	Pass ✓



Luminaire efficiency: 68%
Luminaire efficacy: 98.26 lm/W
Classification: A70 ↓100.0% to ↑0%
CIE Flux Codes: 94 100 100 100 68
UGR 4H 8H: 15.3 / 20.1



Luminaire efficiency: 46%
Luminaire efficacy: 72.26 lm/W
Classification: A50 ↓100.0% to ↑0%
CIE Flux Codes: 60 88 97 100 46
UGR 4H 8H: 21.6 / 21.6



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