

MERCAT SANT ANTONI

Final Project

Localization



Origin, Expansion, and Renovation of the Sant Antoni Market





Origin and Foundation 19th Century

Market at the Sant Antoni Gate, on the southern entrance of Barcelona's walled city.

Integrating the market as part of the Cerdà Plan

It is the first market built outside the city walls





Textiles and non-food products set up around the market.

Sunday book market

Three markets create a unique commercial hub in Barcelona.



Renovation, Discoveries, and Present Day 21st Century

In 2007, renovation works began

Roman Via Augusta and the Sant Antoni bastion.

Origin, Expansion, and Renovation of the Sant Antoni Market

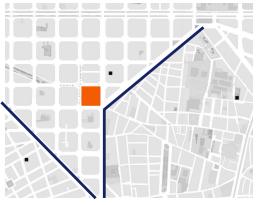


Origin and Foundation 19th Century

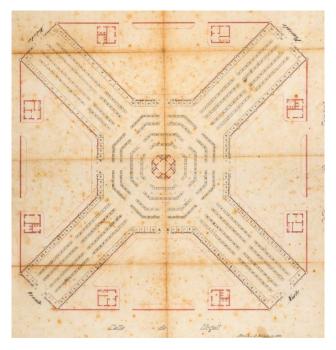
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Expansion and Commercial Diversification 20th Century

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Renovation, Discoveries, and Present Day 21st Century

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Superblock project

Roman Via Augusta and the Sant Antoni bastion.









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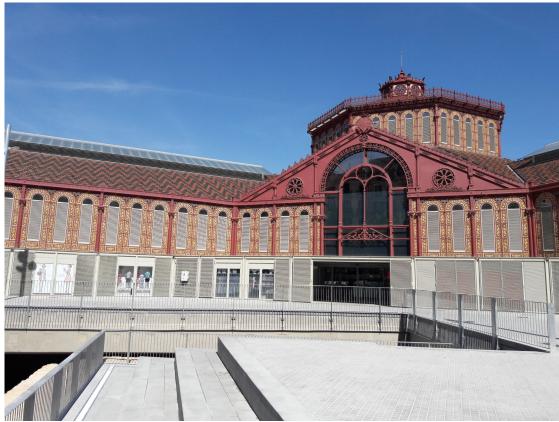
Renovation, Discoveries, and Present Day 21st Century

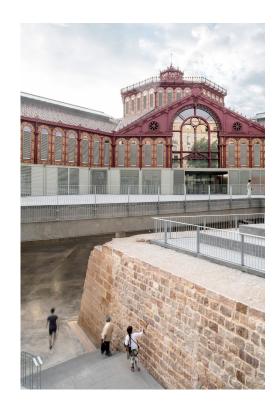
Superblock project

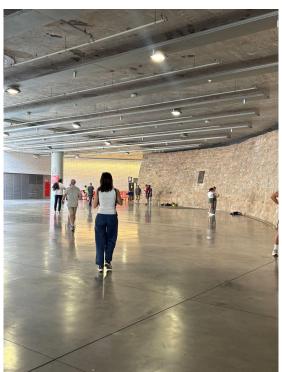


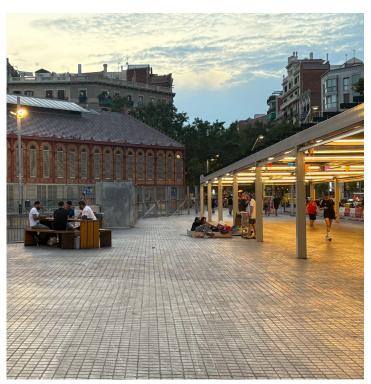


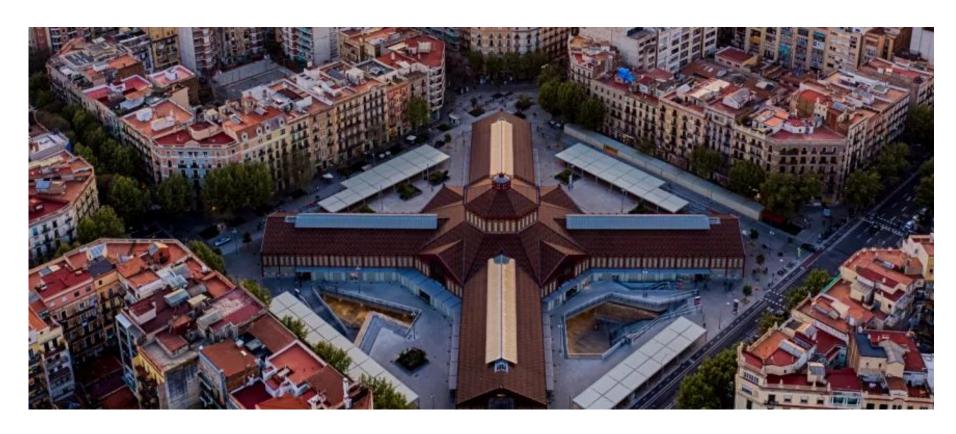






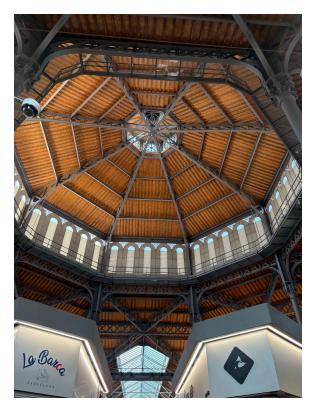


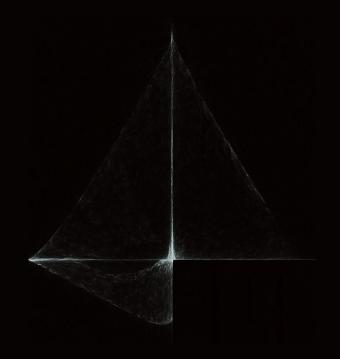










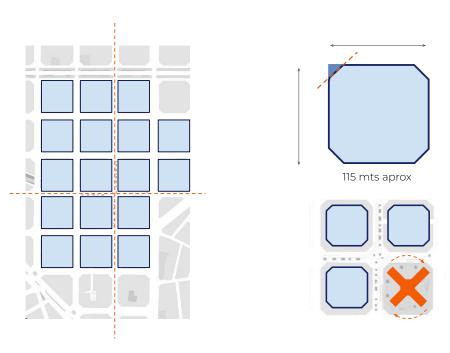


TRAMA
Lighting Design - Mercat Sant Antoni

Daniela Zambrano - Angel Audiel Cid

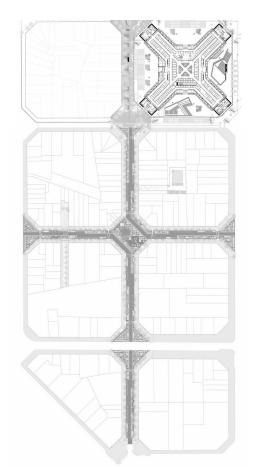
Urban Context

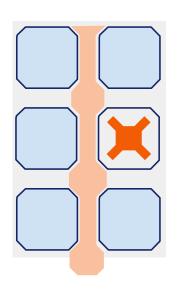


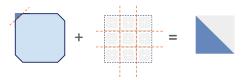


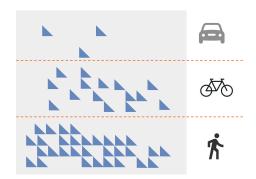
- The Sant Antoni market is embedded within a series of urban grids
- The first grid corresponds to the Cerdà Plan, conceived as the city's general urban layout.

Urban Context



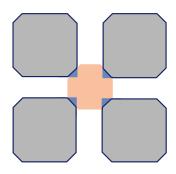




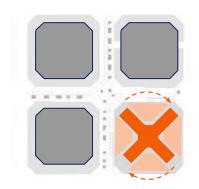


- Location within the Superblock Grid
- Traffic Reduction prioritizing space for pedestrians and cyclists
- Improved Quality of Life creating community gathering spaces.
- The objective is to transform public spaces, previously dominated by traffic, into areas more conducive to social interaction and community activities.

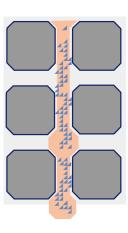
Urban Space Oriented at 45°



Cerdà Plan Corners Used to Create Public Space

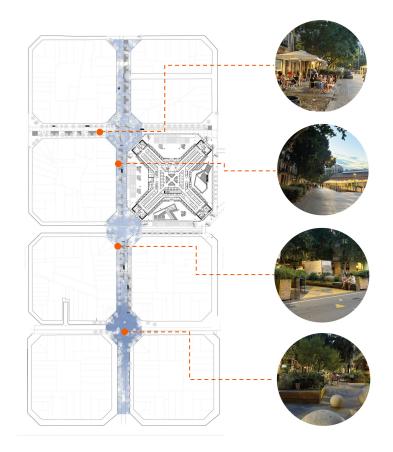


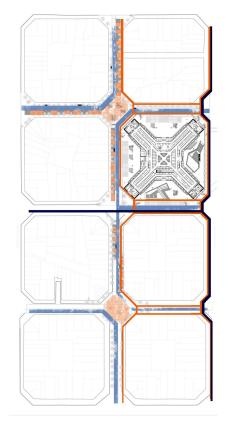
Rotating the Sant Antoni Market Volume Creates Public Spaces



Pedestrian circulation follows a zigzag pattern.

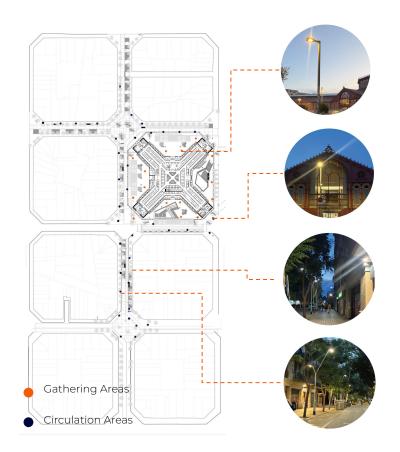
Urban Context

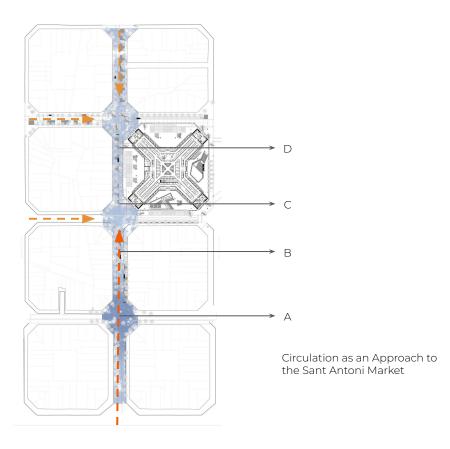




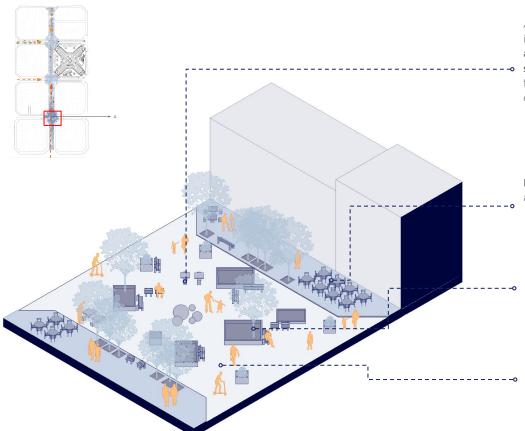
- Areas for Gathering
- Pedestrian Circulation
- Vehicular Circulation
- Cycling Circulation

Urban Context





Section A: Beginning of the Superblock



A variety of areas and elements invite people to stay, but the absence of a cohesive lighting strategy prevents the spaces from being reinforced and elevated.

No hierarchy established among gathering areas

Lack of vegetation in quantity and layers, with no lighting to enhance or integrate it.

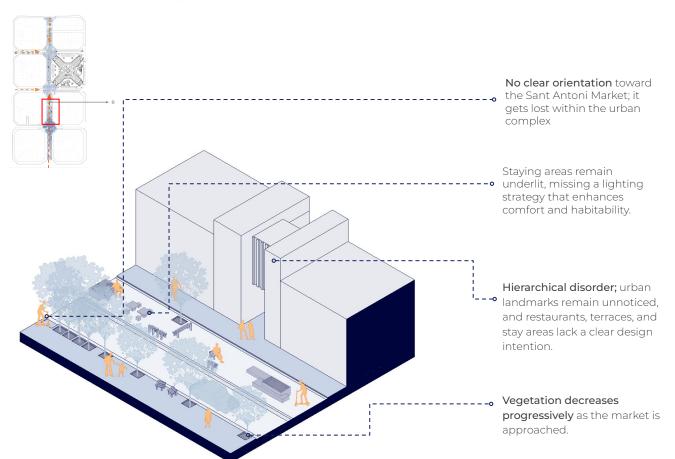
Absence of a clear lighting strategy to define and differentiate vehicular, cycling, and pedestrian flows.







Section B: Core of the Superblock

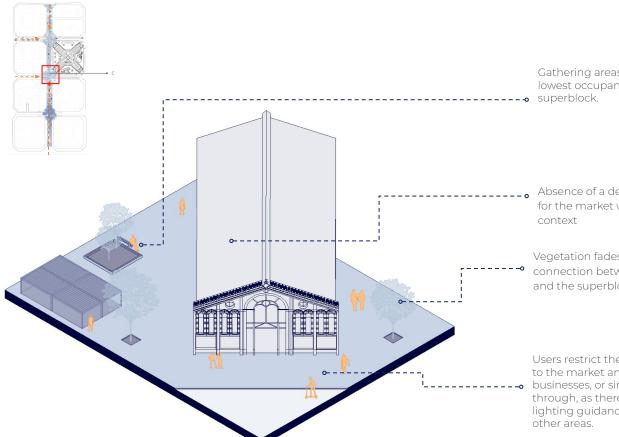




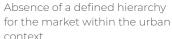




Section C: Initial Approach to the Market



Gathering areas show the lowest occupancy within the



Vegetation fades out, breaking the connection between the market and the superblock.

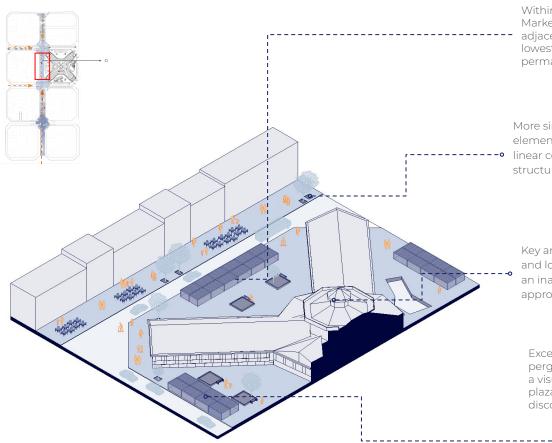
Users restrict their activity to the market and nearby businesses, or simply pass through, as there is no lighting guidance toward







Section D: Market Context



Within the Sant Antoni Market complex, the adjacent plazas show the lowest levels of use and permanence.

More singular vegetation elements appear, breaking the linear continuity of the green structure.

Key areas are not highlighted and lose hierarchy as a result of an inadequate lighting approach.

Excessive lighting in the pergola structures generates a visual barrier, making the plazas uncomfortable and discouraging user presence.





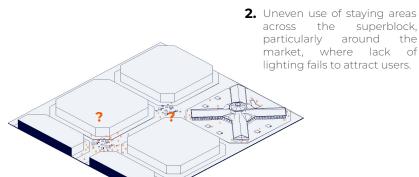


Conclusions

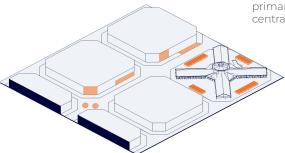
1. Absence lighting users approach Market.

1. Absence of a coherent lighting strategy that directs users and enhances the approach to the Sant Antoni Market.



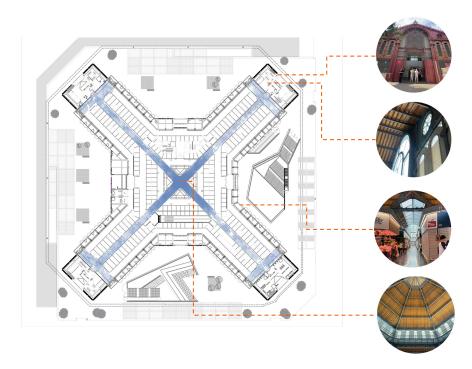


4. Inconsistent surroundings and absence of lighting hierarchy fail to emphasize primary elements like the central dome and entrances.

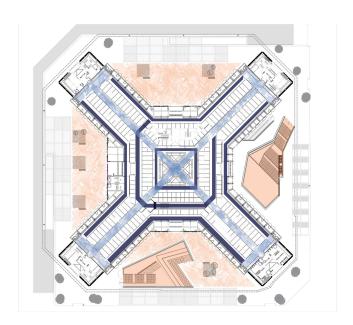


Interior analysis

Mercat Sant Antoni



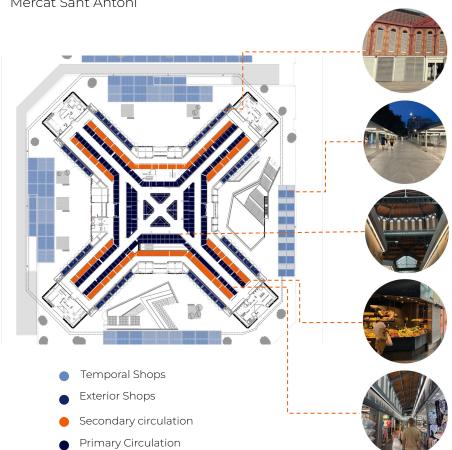
Major architectural features remain obscured because of inadequate commercial design and lack of lighting that would emphasize their presence.

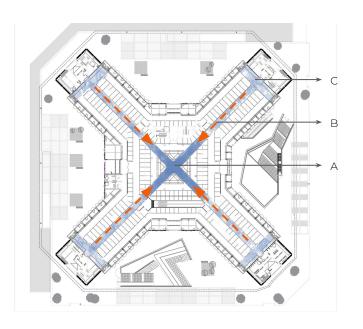


- Gathering Spaces or Areas for Occupancy
- Active Gathering Spaces
- Main Circulation Path
- Secondary Pathways

Interior analysis

Mercat Sant Antoni





Circulación como aproximación punto de convergencia del Mercat de Sant Antoni



















GUIDE STAY VEGETATION HIGHLIGHT























































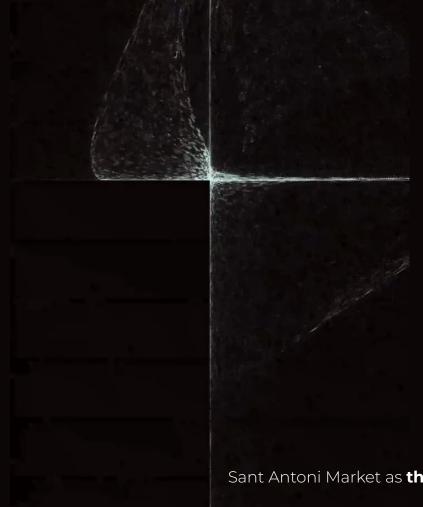












TRAMA

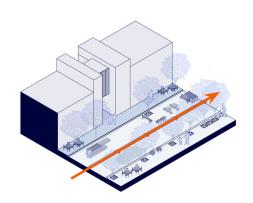
Sant Antoni Market as the heart of the urban context, where everything converges.

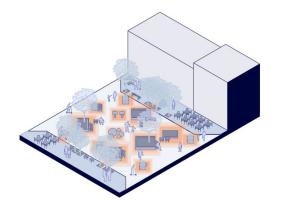


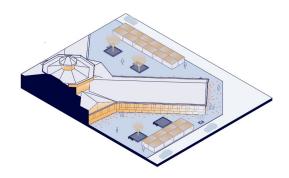
TRAMA

Light not only unveils space: it stitches it together, structures it, and restores its vital core.

Targets through LA TRAMA



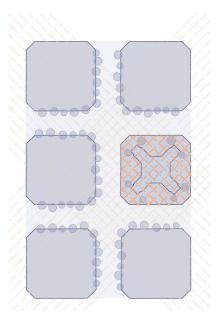




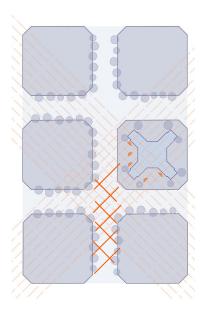
GUIDE

STAY

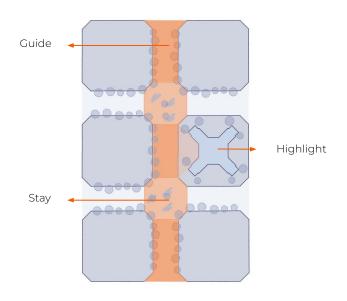
HIGHLIGHT



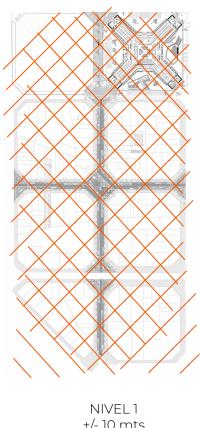
1. Overlay the urban grid on the Sant Antoni Market block and superblock

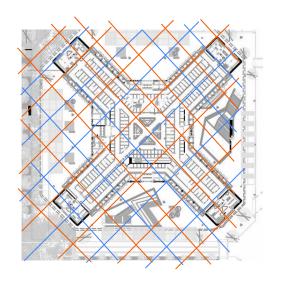


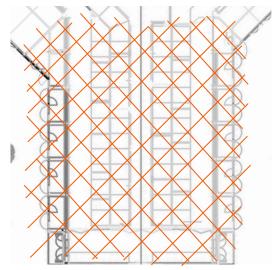
2. Determine zones needing urban grid density levels 1, 2, and 3



3. Identify zones where the grid should Guide, Promote Occupancy, and Highlight



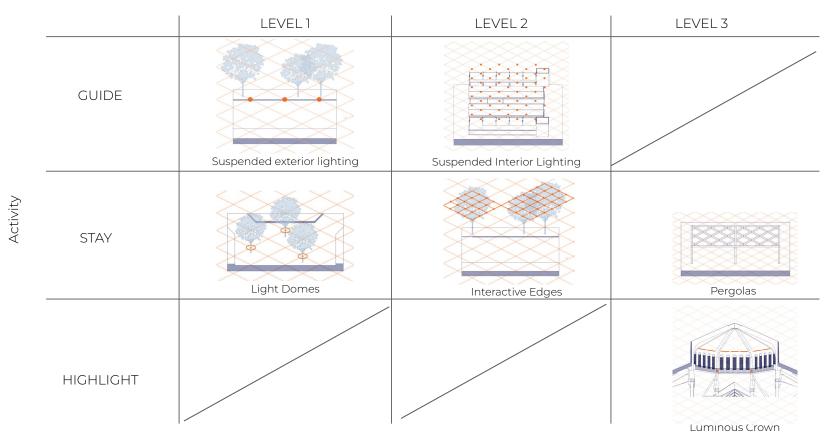




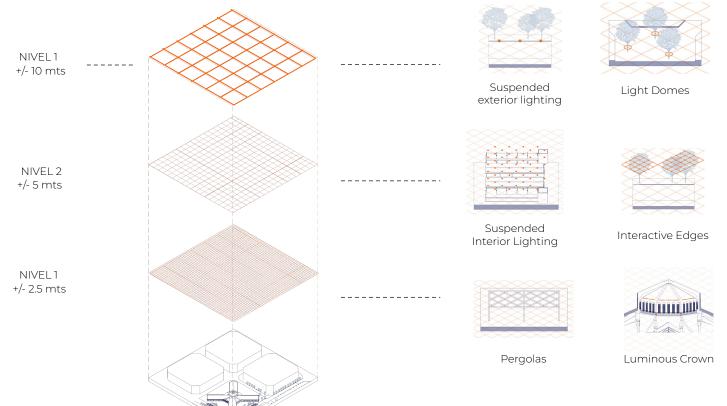
+/- 10 mts

NIVEL 2 +/- 5 mts NIVEL 3 +/- 1 mt

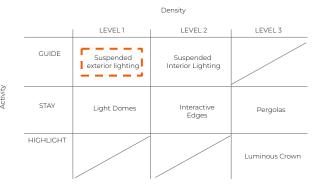
Density



Mesh placement in the site



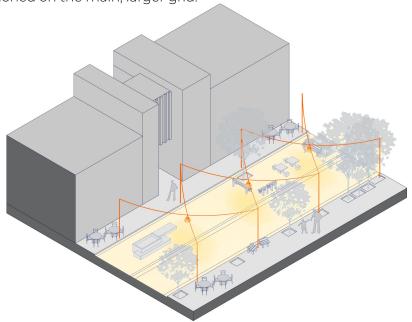
Suspended exterior lighting





Characteristics

- -Reinforces the urban identity of the space.
- -Provides general and uniform illumination.
- -Centralized catenary luminaires along the street.
- -Positioned on the main, larger grid.

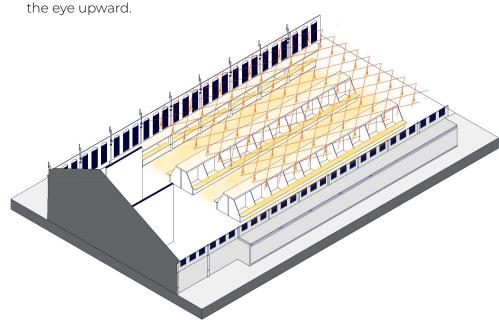


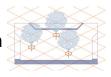
Suspended Interior lighting

		Density						
		LEVEL1	LEVEL 2	LEVEL 3				
	GUIDE	Suspended exterior lighting	Suspended Interior Lighting					
-	STAY	Light Domes	Interactive Edges	Pergolas				
	HIGHLIGHT			Luminous Crown				



- -Illuminate circulation paths to enhance wayfinding.
- -Create a woven light mesh that visually unifies the entire market.
- -Reinforce the perception of the market's structure by drawing



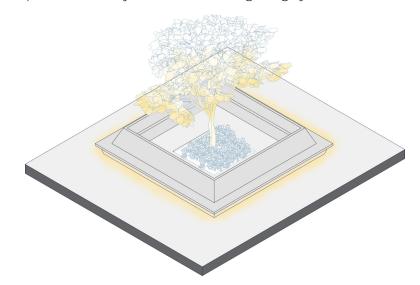


Light Dome

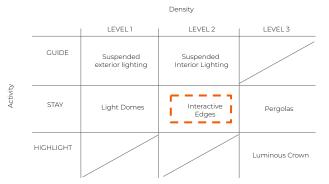
	Density						
		LEVEL1	LEVEL 2	LEVEL 3			
,	GUIDE	Suspended exterior lighting	Suspended Interior Lighting				
	STAY	Light Domes	Interactive Edges	Pergolas			
	HIGHLIGHT			Luminous Crown			



- -Unify solitary vegetation into the overall lighting and spatial concept of the market.
- -Creates a luminous ceiling effect through natural reflection.
- -Generate a domestic, shelter-like atmosphere, where vegetation acts as a house.
- -Positioned through a mesh layout, maintaining visual and conceptual continuity with the overall lighting system.

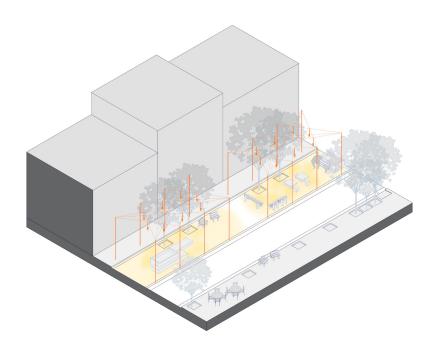


Interactive Edges



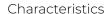


- -Create a human-scaled, warm light that invites permanence
- -Maintain the continuity of the mesh system
- -Transform edges into welcoming zones



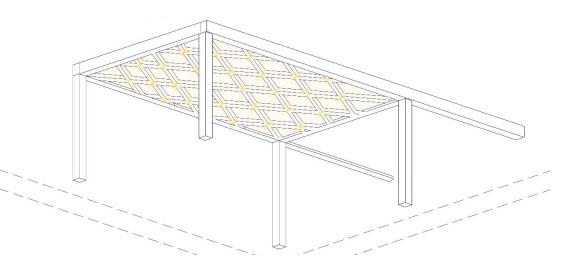
Pergolas

	Density					
	LEVEL 1	LEVEL 2	LEVEL 3			
GUIDE	Suspended exterior lighting	Suspended Interior Lighting				
STAY	Light Domes	Interactive Edges	Pergolas			
HIGHLIGHT			Luminous Crown			



- -Implement predefined lighting scenes adaptable to different market activities.
- -At night, create a starry-sky effect, visually extending the mesh across the urban space
- -Pergolas act as flexible light structures, supporting both commercial vibrancy and urban calm





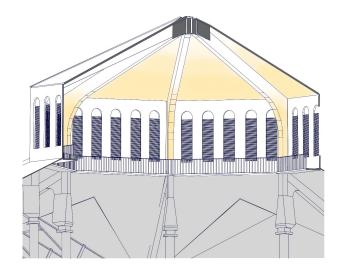
Luminous Crown

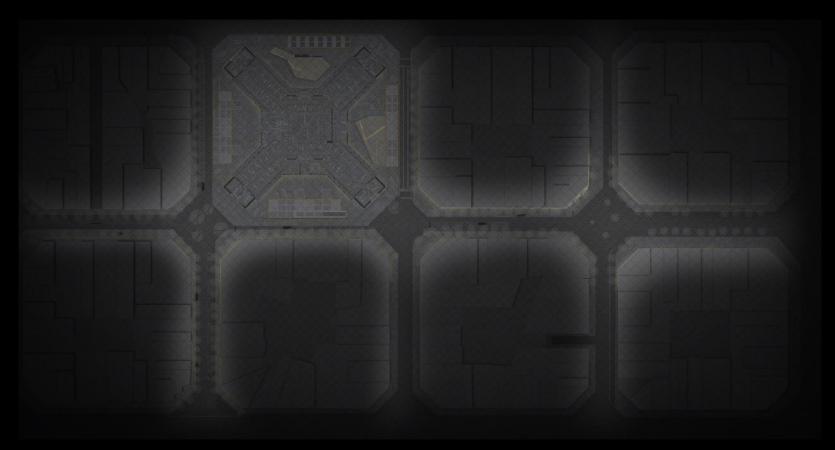
			Density		
		LEVEL 1	LEVEL 2	LEVEL 3	
	GUIDE	Suspended exterior lighting	Suspended Interior Lighting		
ACTIVITY	STAY	Light Domes	Interactive Edges	Pergolas	
	HIGHLIGHT			Luminous Crown	





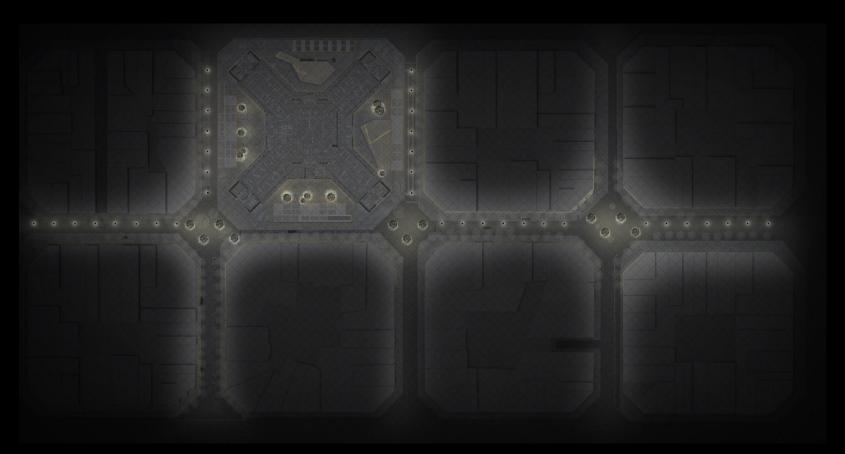
- -Establish a hierarchical focal point that highlights the architectural center of the market.
- -Create a contemplative atmosphere
- -The crown acts as a symbolic centerpiece, dignifying the architecture of Sant Antoni





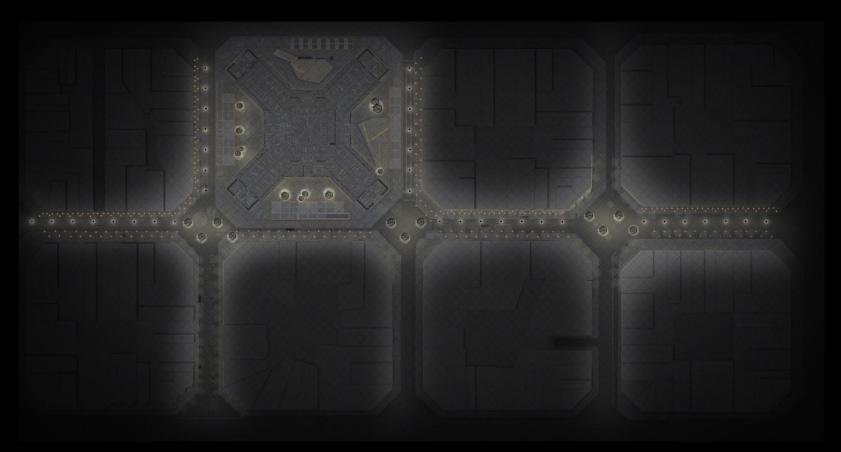
Master plan - Mercat Sant Antoni

Planta Luminica - Base



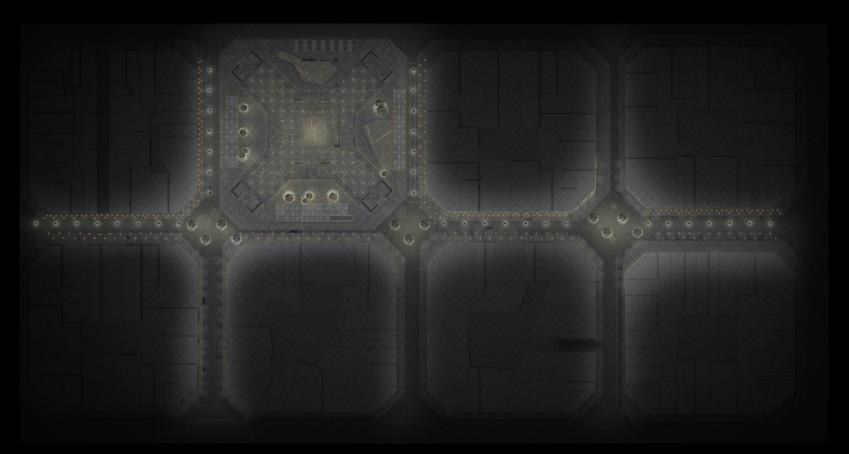
Master plan - Mercat Sant Antoni

Planta Luminica - Malla 10 mts



Master plan - Mercat Sant Antoni

Planta Luminica - Malla 5 mts

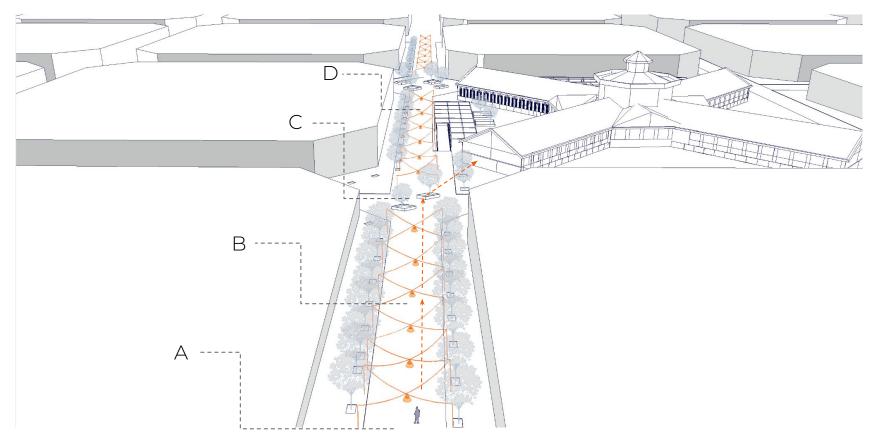


Master plan - Mercat Sant Antoni

Planta Luminica -Malla 1 mt

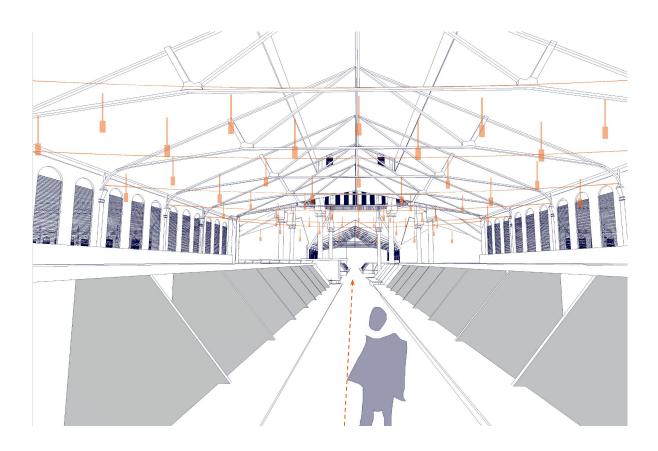
Intervention through the Pedestrian's Experience

At the urban scale

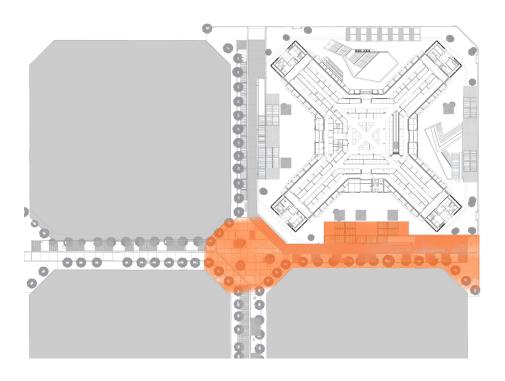


Intervention through the Pedestrian's Experience

At the Architectural scale



Superilla y plaza Mercat de Sant Antoni



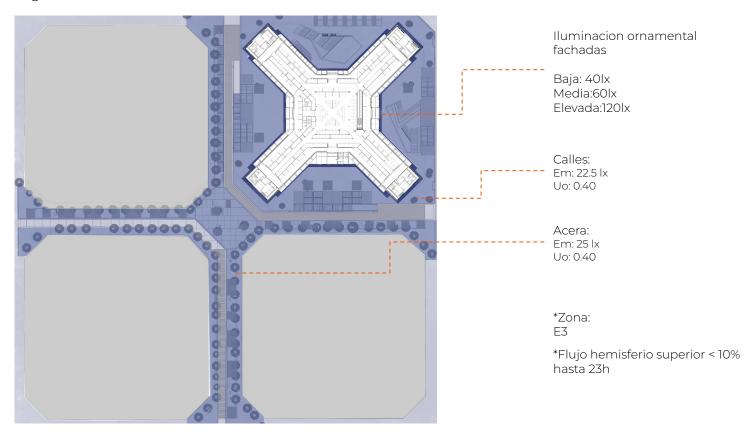
- Enhance the legibility and continuity of pedestrian routes.
- Strengthen the relationship between public spaces and their surroundings.
- Improve comfort, safety, and orientation in the urban environment.
- Contribute to the identity and attractiveness of the cityscape.



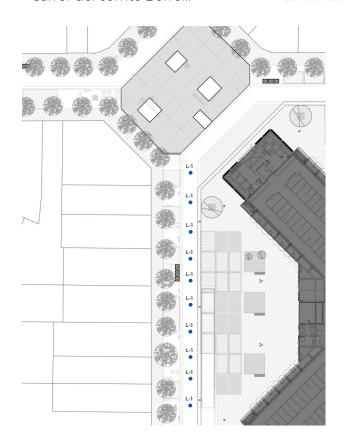




Target Levels

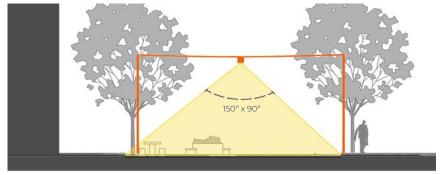


Carrer del comte Borrell.

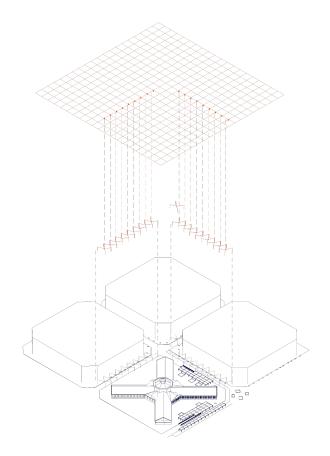




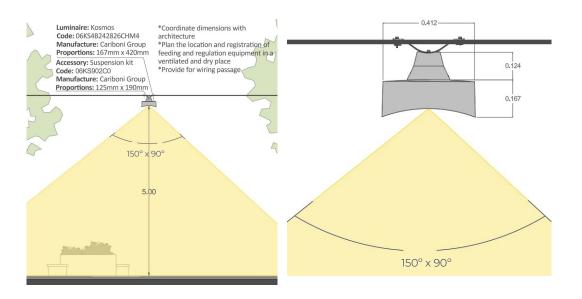




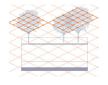
Carrer del comte Borrell.

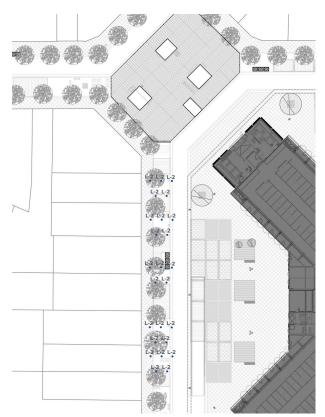


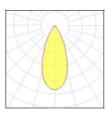




Superilla y plaza Mercat de Sant Antoni



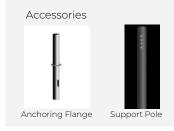


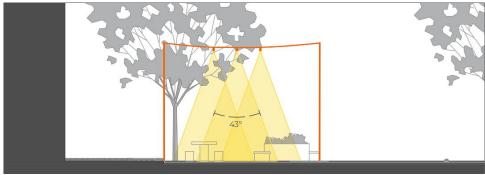




L-2

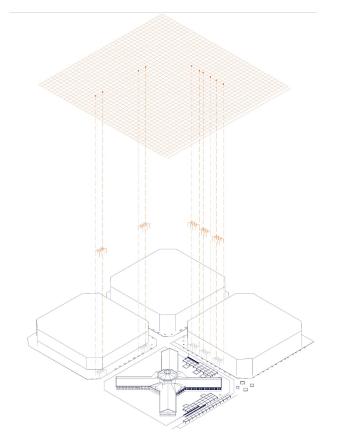
9.54W 380lm 2700K CRI 92 Óptica: 43 Control: Dali W: 60 mm H: 120mm D: 60 mm

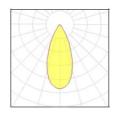




Superilla y plaza Mercat de Sant Antoni

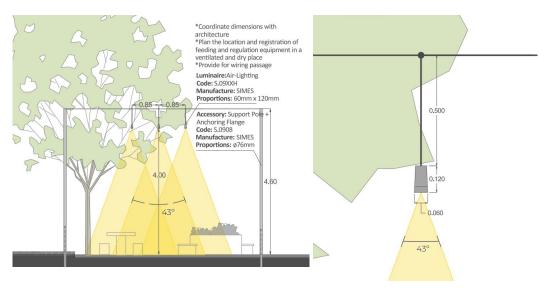




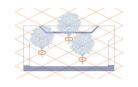


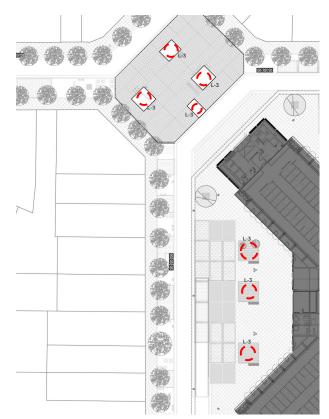


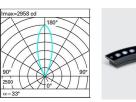
L-2
9.54W 380Im
2700K CRI 92
Óptica: 43
Control: Dali
W: 60 mm H: 120mm D: 60 mm



Superilla y plaza Mercat de Sant Antoni



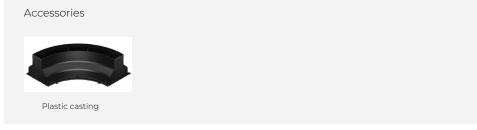


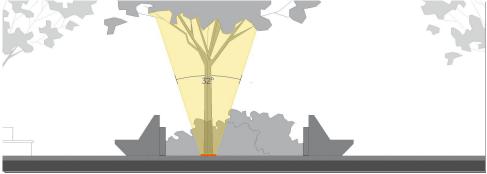




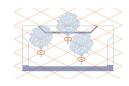
L-3

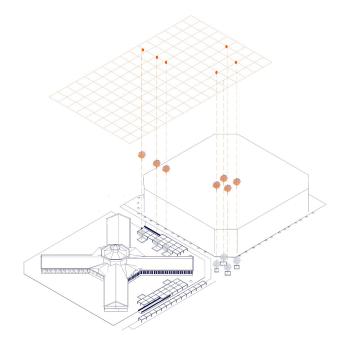
9.2W 1280lm 2700K CRI 92 Óptica: 32 Control: Dali W: 60 mm H: 120mm D: 60 mm



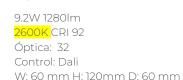


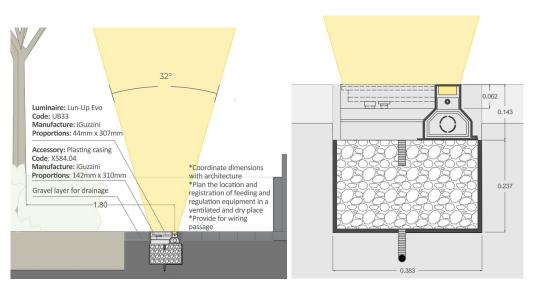
Superilla y plaza Mercat de Sant Antoni



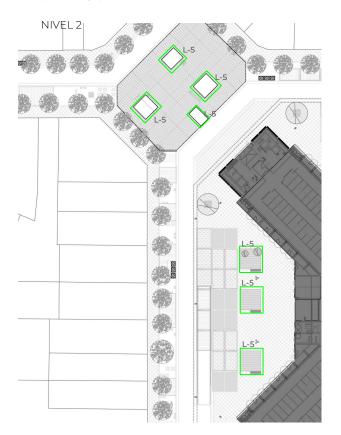


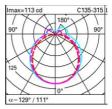






Superilla y plaza Mercat de Sant Antoni

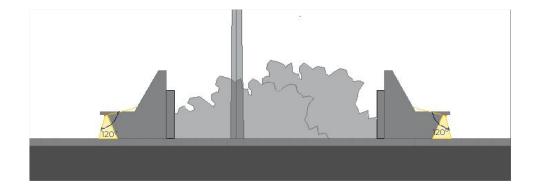




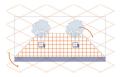


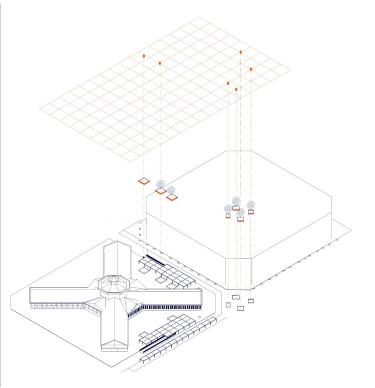
L-5

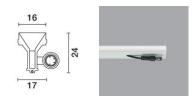
6.7W 438Im 2700K CRI 80 Óptica: 120 Control: Dali W: 17 mm H: 24mm D: 100 mm



Superilla y plaza Mercat de Sant Antoni

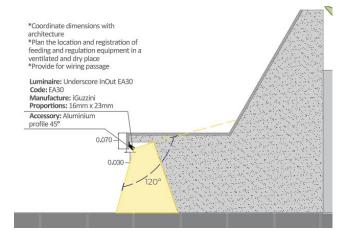


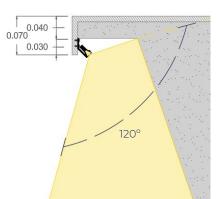




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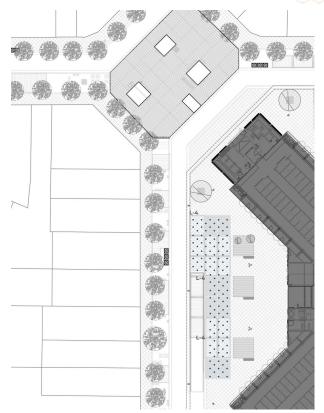
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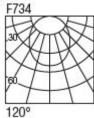




Superilla y plaza Mercat de Sant Antoni







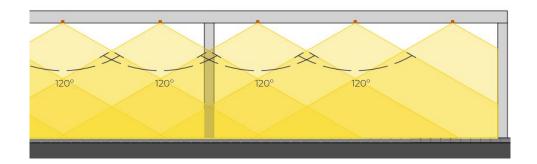


L-4

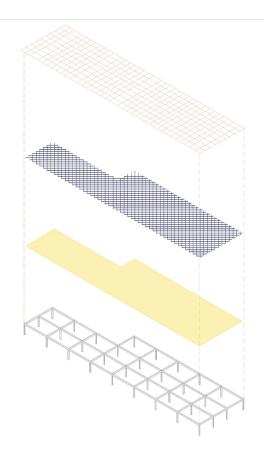
1W 101lm 2700K CRI 85 Óptica: 120 Control: Dali

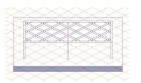
W: 30 mm H: 30mm D: 60 mm

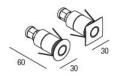
Accessories



Superilla y plaza Mercat de Sant Antoni









L-4

1W 101lm 2700K CRI 85 Óptica: 120 Control: Dali W: 30 mm H: 30mm D: 60 mm

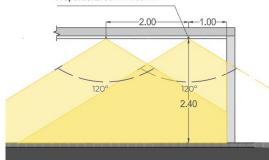
*Coordinate dimensions with architecture

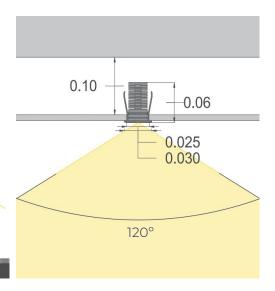
*Plan the location and registration of feeding and regulation equipment in a ventilated and dry place

*Provide for wiring passage

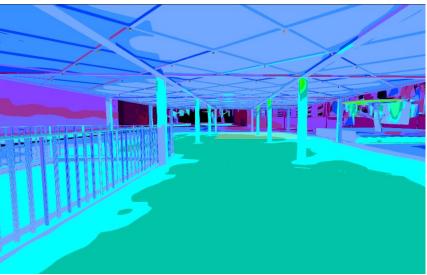
Luminaire:PUCK Code: PK290B

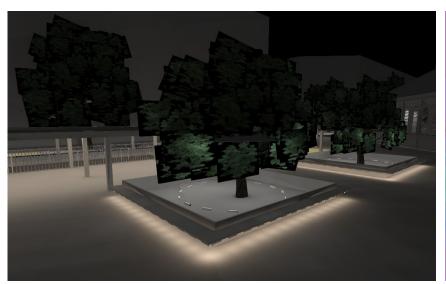
Manufacture: FLEXALIGHTING Proportions: 30mm x 60mm

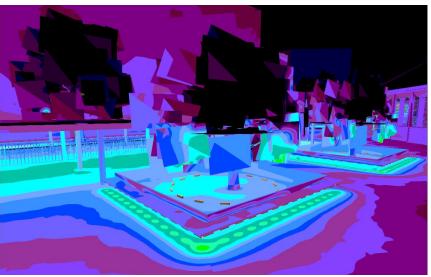


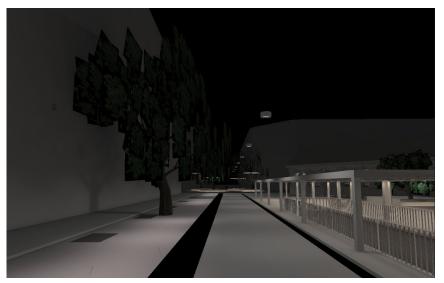


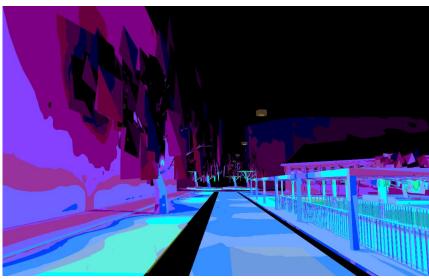




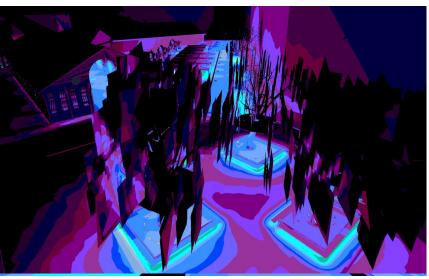


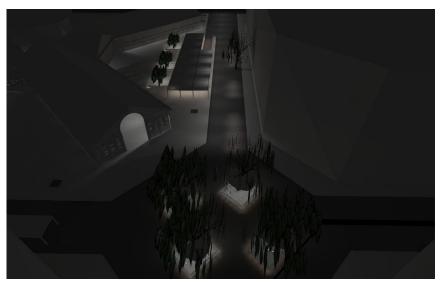


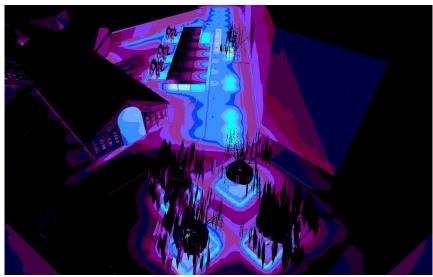










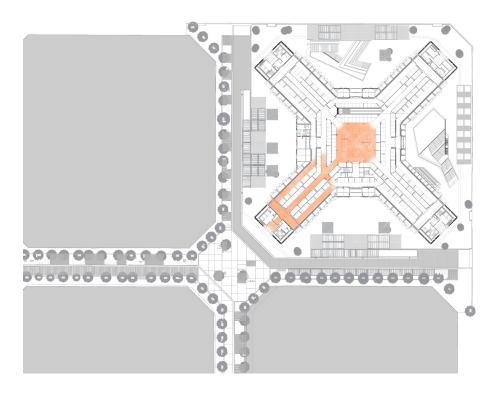


Lighting systems list

	Name	W	Beam Angle	K	CRI	Location	Driver	Brand
	L1 Street	22W	150 90 °	300)0k	70	Driver integrated DALI-2	Cariboni Group Kosmos
	L2	19W	43°	2700k	92	Terraces	Driver DALI-2	Simes Air Lighting
	L3	9.2W	32°	2700k	92	Trees	Driver DALI-2	iGuzzini UB 33
ŶĀ	L4	1W	120°	2700k	85	Pergolas	AL8035 (416) IP67 DALI 2	Flexa Lighting Puck
-	L-5	6.7W	120°	2700k	90	Urban Furniture	Driver MWP3 DALI-2 12/24/48V 120/240W	iGuzzini UnderscorE EA08



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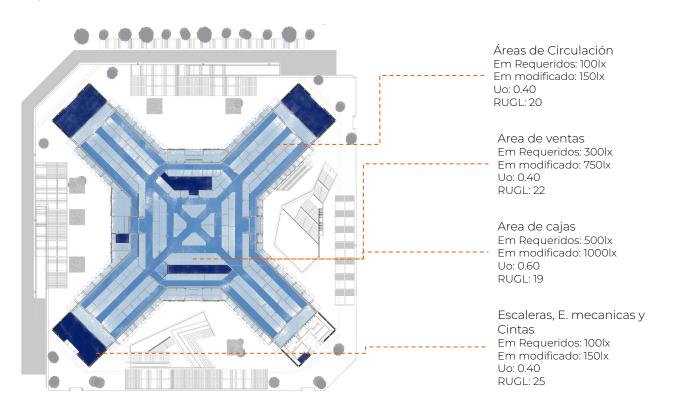
- Highlight and emphasize the architectural features of the space.
- Achieve the required illuminance levels according to standards.
- -Encourage appropriate circulation flows to optimize user experience and increase sales.



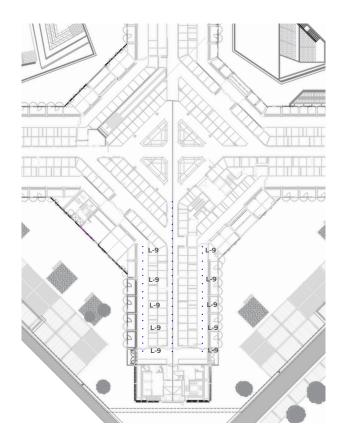




Target Levels



Interior Mercat de Sant Antoni

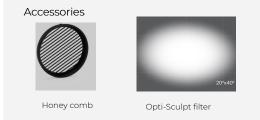


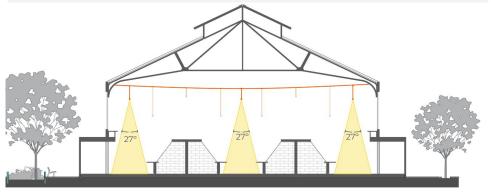




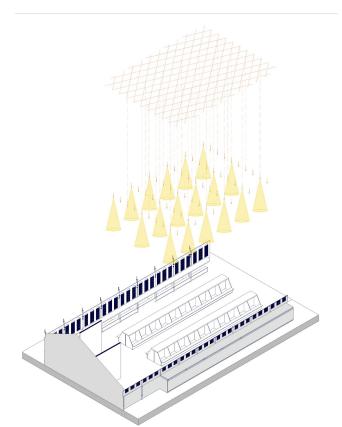


10.2W 888Im 2700K CRI 90 Óptica: 27 Control: Dali W: 72 mm H: 72mm D: 75mm

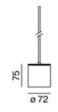




Interior Mercat de Sant Antoni



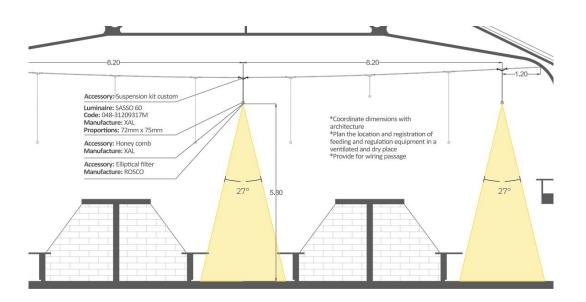




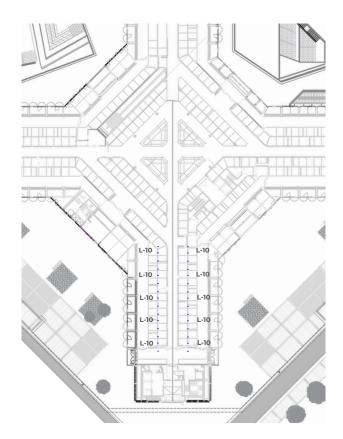


L-9

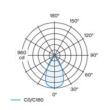
10.2W 888Im 2700K CRI 90 Óptica: 27 Control: Dali W: 72 mm H: 72mm D: 75mm



Interior Mercat de Sant Antoni





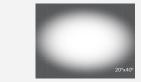




L-10

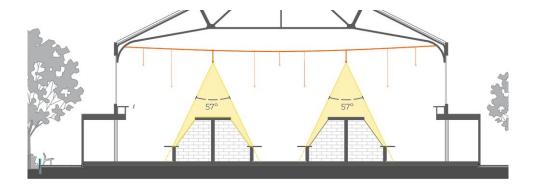
10.2W 888Im 2700K CRI 90 Óptica: 57 Control: Dali W: 72 mm H: 72mm D: 75mm



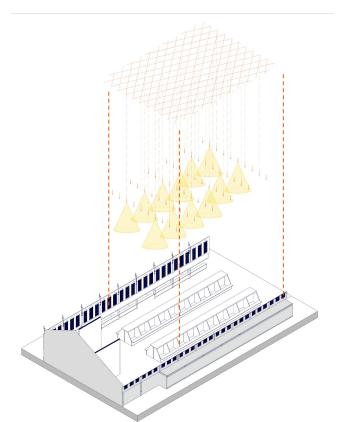


Honey comb

Opti-Sculpt filter



Interior Mercat de Sant Antoni







L-10

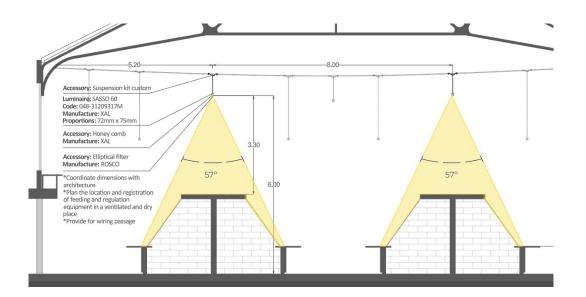
10.2W 888Im

2700K CRI 90

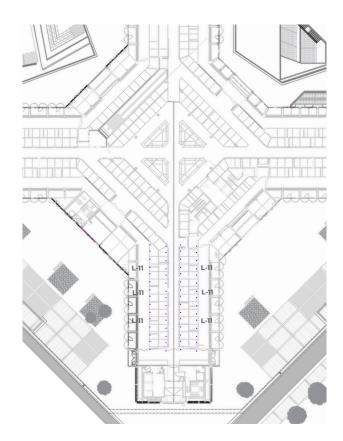
Óptica: 57

Control: Dali

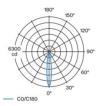
W: 72 mm H: 72mm D: 75mm



Interior Mercat de Sant Antoni



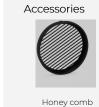






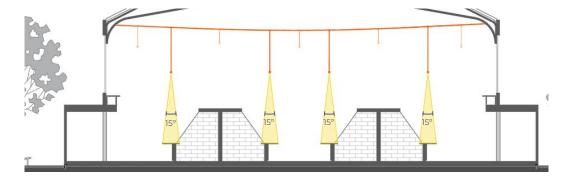
L-11

10.2W 754lm 2700K CRI 90 Óptica: 15 Control: Dali W: 72 mm H: 72mm D: 75mm



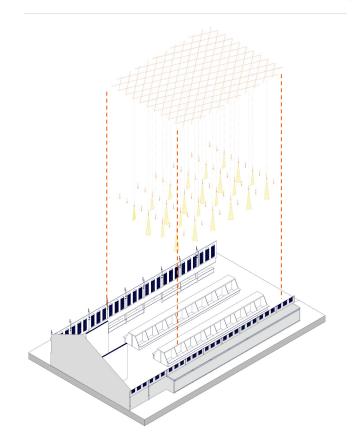


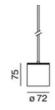
Opti-Sculpt filter



n

Interior Mercat de Sant Antoni

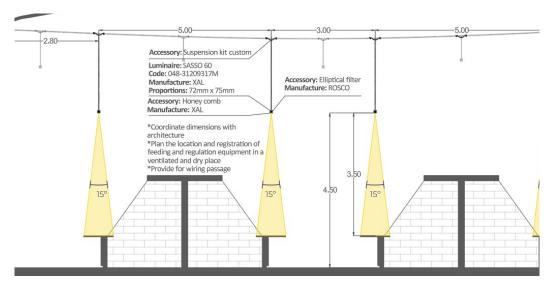




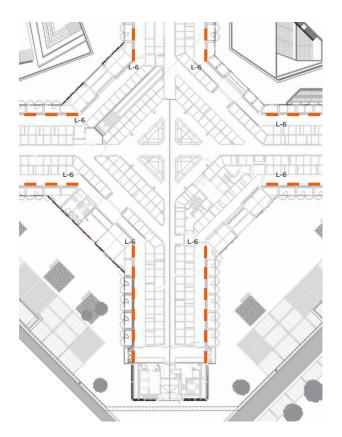


L-11

10.2W 888Im 2700K CRI 90 Óptica: 15 Control: Dali W: 72 mm H: 72mm D: 75mm



Interior Mercat de Sant Antoni







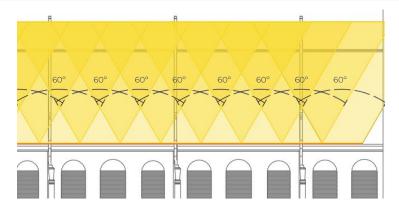


L-6

19.1W 2770lm 2700K CRI 80 Óptica: 60 x 26° Control: Dali W: 27 mm H: 34mm D: 1500 mm

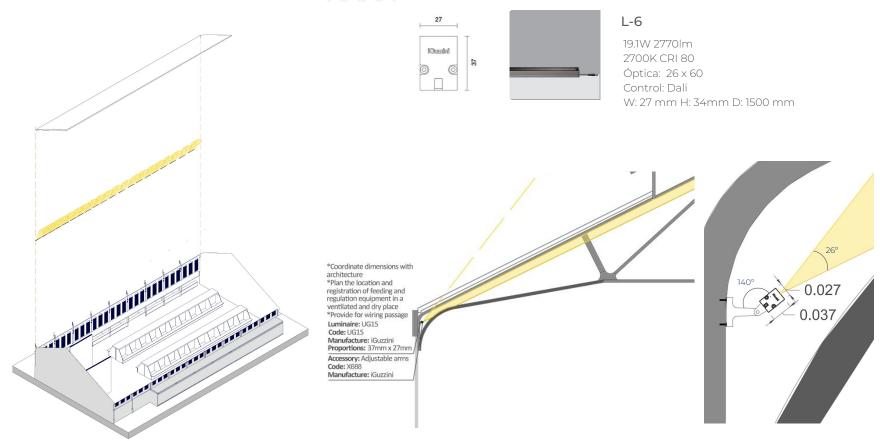
Accessories



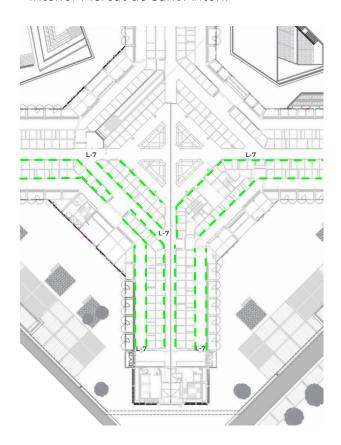


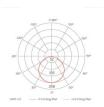
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Interior Mercat de Sant Antoni



Interior Mercat de Sant Antoni



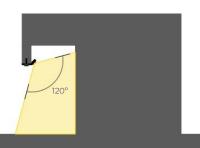




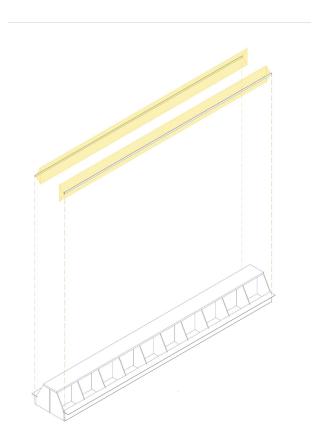
L-7

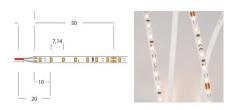
6.6W 600lm 2700K CRI 80 Óptica: 120 Control: Dali W: 27 mm H: 34mm D: 1500 mm

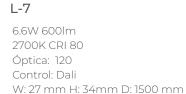


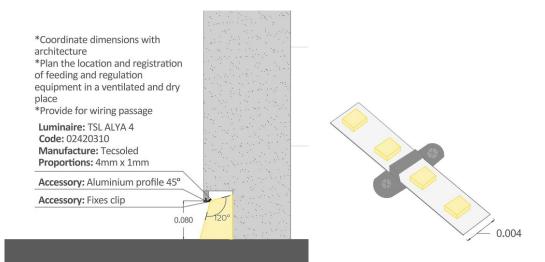


Interior Mercat de Sant Antoni

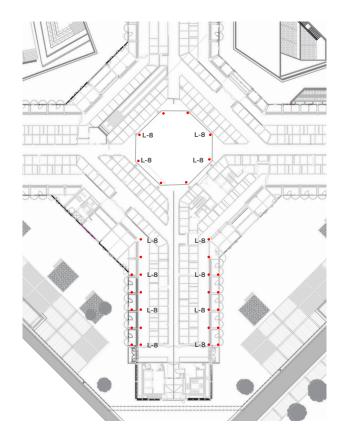


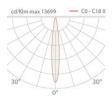










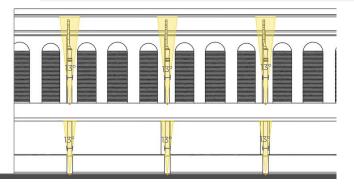




L-8

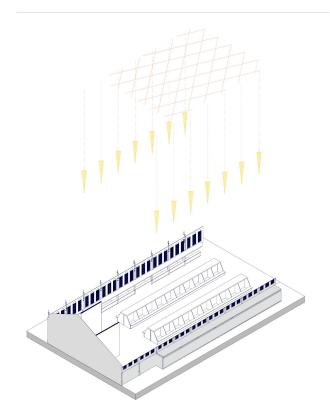
6.6W 188Im 2700K CRI 80 Óptica: 13 Control: Dali W: 48 mm H: 11mm D: 63mm





Interior Mercat de Sant Antoni



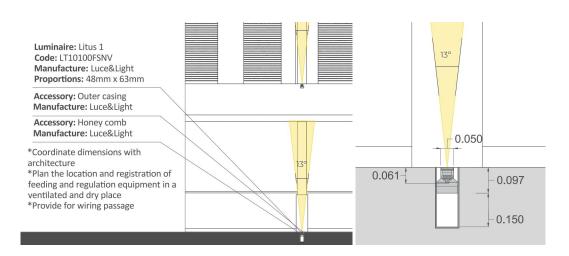






6.6W 188Im 2700K CRI 80 Óptica: 13 Control: Dali W: 48 mm H: 11mm D: 63mm

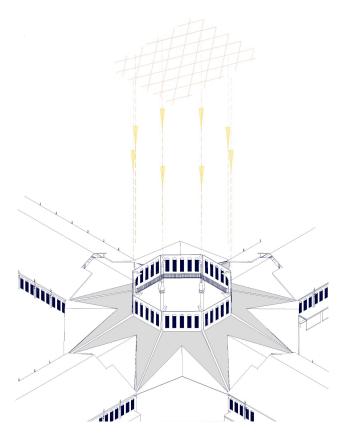
13°



L-8

Interior Mercat de Sant Antoni





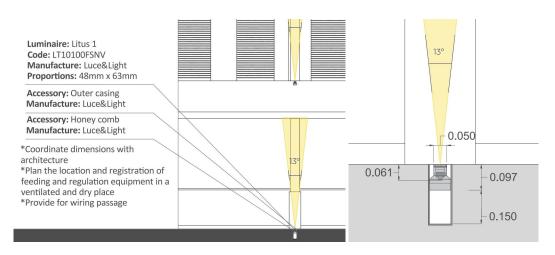




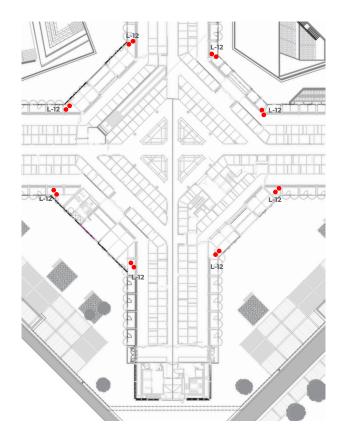
L-8

6.6W 188Im 2700K CRI 80 Óptica: 13 Control: Dali W: 48 mm H: 11mm D: 63mm

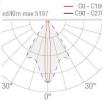
13°



Interior Mercat de Sant Antoni





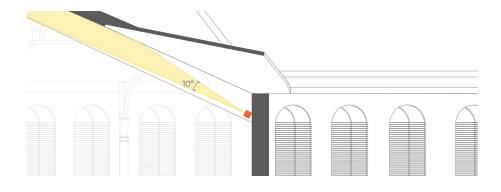




L-12

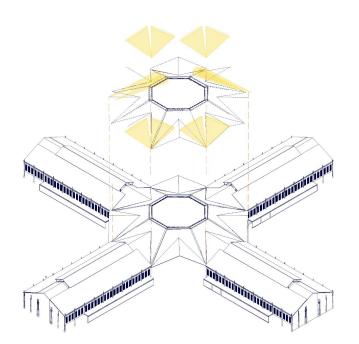
37W 3.000lm 2700K CRI 90 Óptica: 10°x65° Control: Dali W: 182 mm H: 272mm D: 110mm

Accessories



Interior Mercat de Sant Antoni



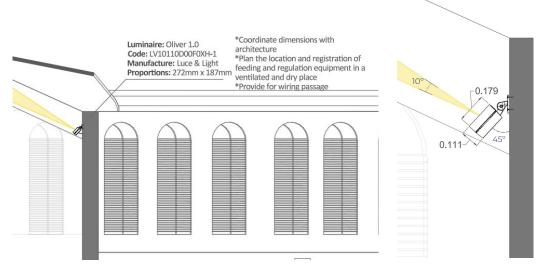






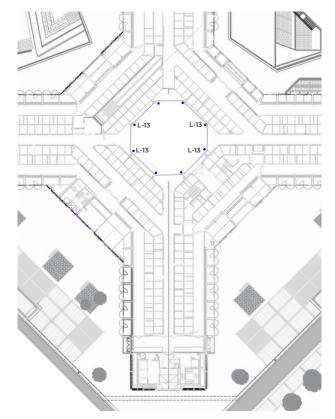
L-12

37W 3.000lm 2700K CRI 90 Óptica: 10°x65° Control: Dali W: 182 mm H: 272mm D: 110mm



Interior Mercat de Sant Antoni





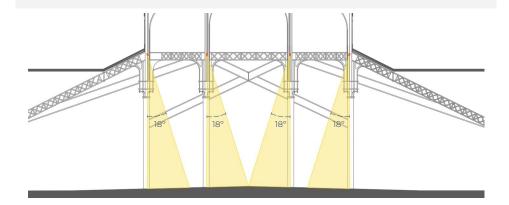




L-13

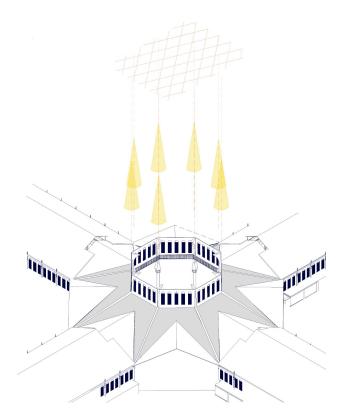
58.2W 6000lm 2700K CRI 80 Óptica: 18° Control: Dali W: 153 mm H: 276mm D: 300mm

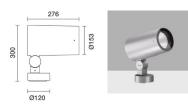
Accessories



Interior Mercat de Sant Antoni







L-13

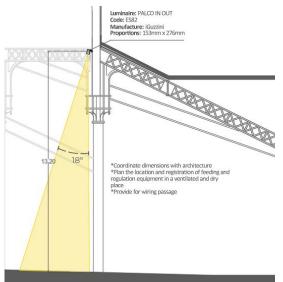
58.2W 6000lm

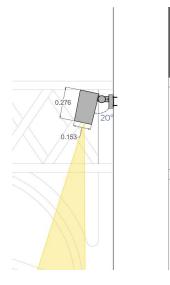
2700K CRI 80

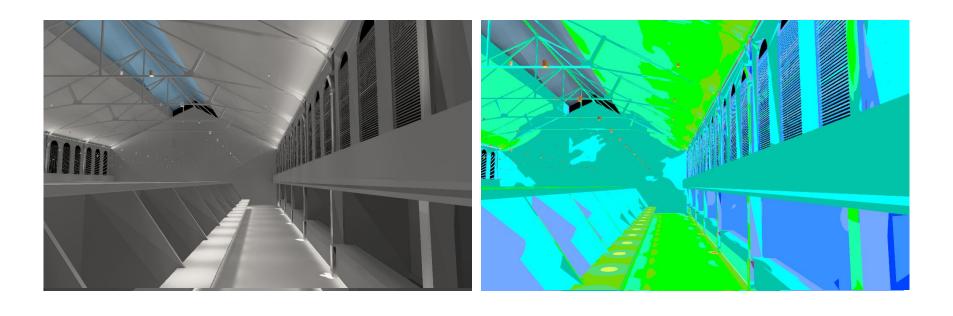
Óptica: 18°

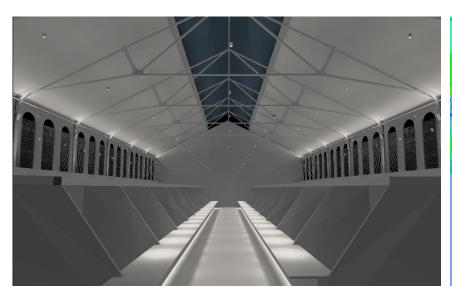
Control: Dali

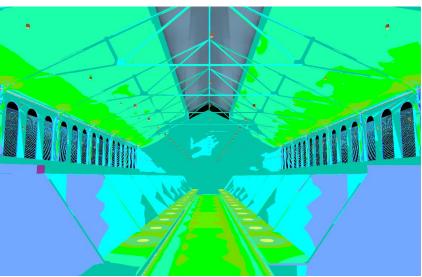
W: 153 mm H: 276mm D: 300mm

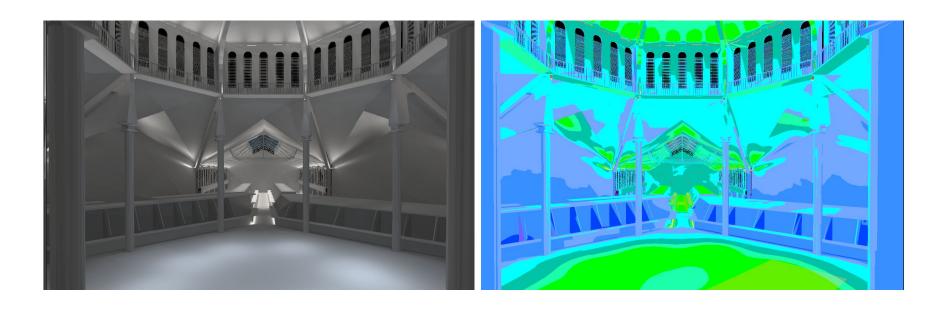


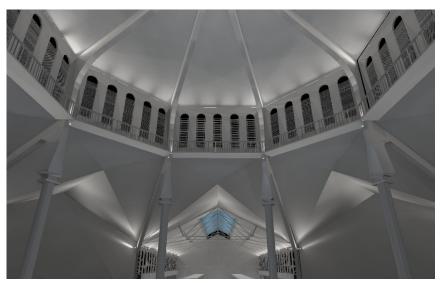


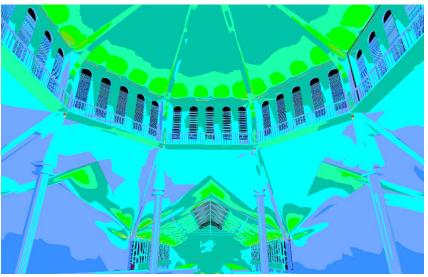










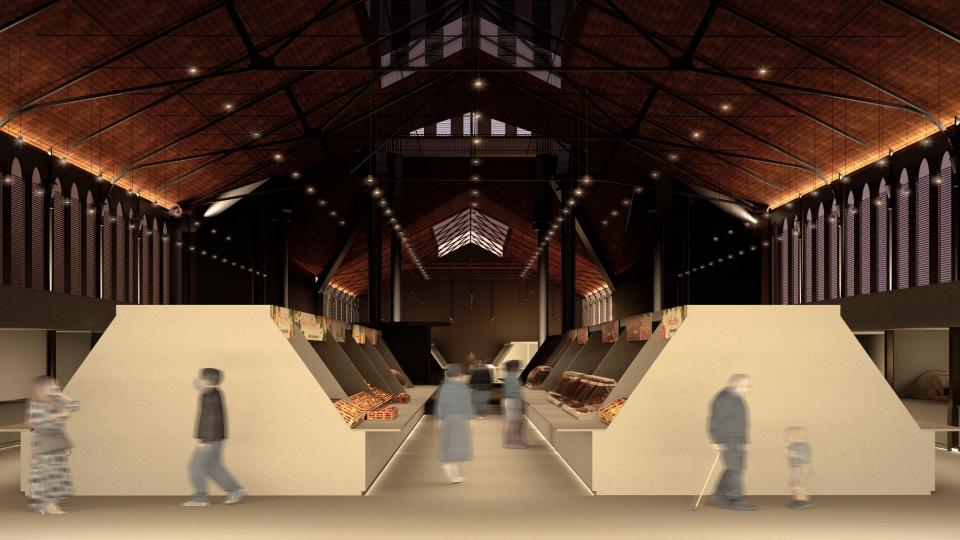


Lighting systems list

	Name	W	Beam Angle	K	CRI	Location	Driver	Brand
	L6	19.1W	120°	2700k	80	Ceiling	Driver integrated DALI-2	iGuzzini
								Lunea luce 27
<u> </u>	£ 2		120°	2700k	80	Rodapies	Driver DALI-2	Alya 4
F 3 98		6.6W						Tecsoled
	L8	6.6W	13°	2700k	80	Columns	Driver DALI-2	iGuzzini
								UB 33
	L9		27°	2700k	90	Ceiling	Diver DALI 2	Sasso 60
		10.2W						XAL
	L-10	10.2\4/	57°	2700k	90	Ceiling	Driver DALI-2	Sasso 60
		10.2W						XAL

Lighting systems list

	Name	W	Beam Angle	K	CRI	Location	Driver	Brand
	L-11	10.2W	15°	2700k	90	Ceiling	Driver DALI-2	Sasso 60 XAL
	L12	137W	10° x65°	2700k	90	Center Building	Driver DALI-2	Oliver Luce Light
30	L13	58.2W	18°	2700k	80	Center Building	Driver DALI-2	iGuzzini Palco In out



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