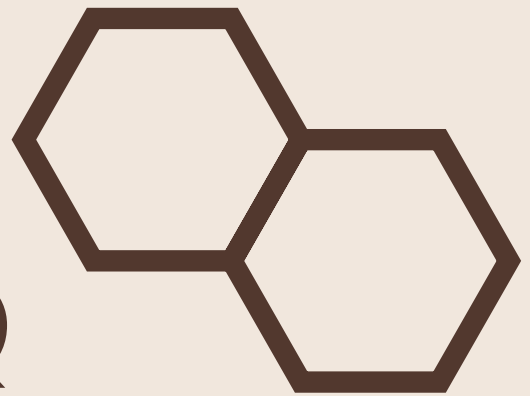
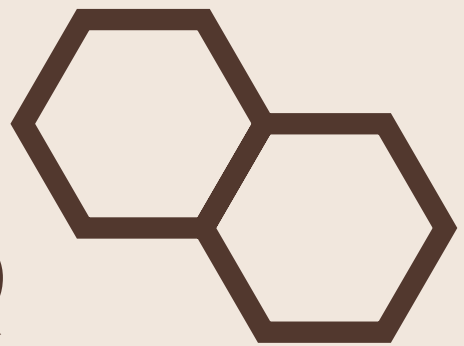

INFINITY
SOUQ



INFINITY SOUQ



ROCHESTER INSTITUTE OF TECHNOLOGY
COLOR AND LIGHTING THEORY
SPRING 2019
THOMAS RICHTER



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PROJECT DESCRIPTION

Design a mixed-use building that interprets the essential elements of your palimpsest and tectonic rules of the parti as architectural and | or space planning elements for a commercial space on the pedestrian level. The design intent is to create an experiential “place” that serves as a point of cultural convergence for both the Syrian and Malmo communities.

INSPIRATION/CONCEPT STATEMENT

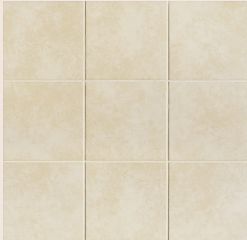
The initial inspirations for this project were the Syrian Arch and the Turning Torso. The Syrian Arch represents the start or an end of a journey, there is a constant stream people moving in and out of spaces. The Turning Torso in Malmo, Sweden embodies a similar concept of path through its repetitive nature of its exterior form. The palimpsest portrays the essence of the repetitive nature of the Turning Torso. In addition, it incorporates the purpose of the arch, permitting a continuous flow of people moving from one area to another.

The concept was developed through the parti model displays the concept of the palimpsest, which converges Swedish and Syrian cultures together and exhibits them in three dimensions through architectonics. The parti model employs the architectonics of folding, repetition, edge connections, intersections, rhythm and motion. The geometric and repetitive planes and organic form of the Turning Torso, and the openness of the Syrian Arch is represented throughout the exterior and interior of the form.



MOOD BOARD

COLORS AND MATERIALS



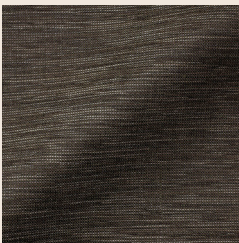
FLOOR 1



FLOOR 2



CEILING



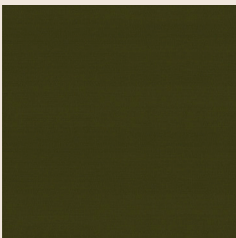
SEATING 1



SEATING 2



CURTAIN



WALL FELT



TABLE TOP



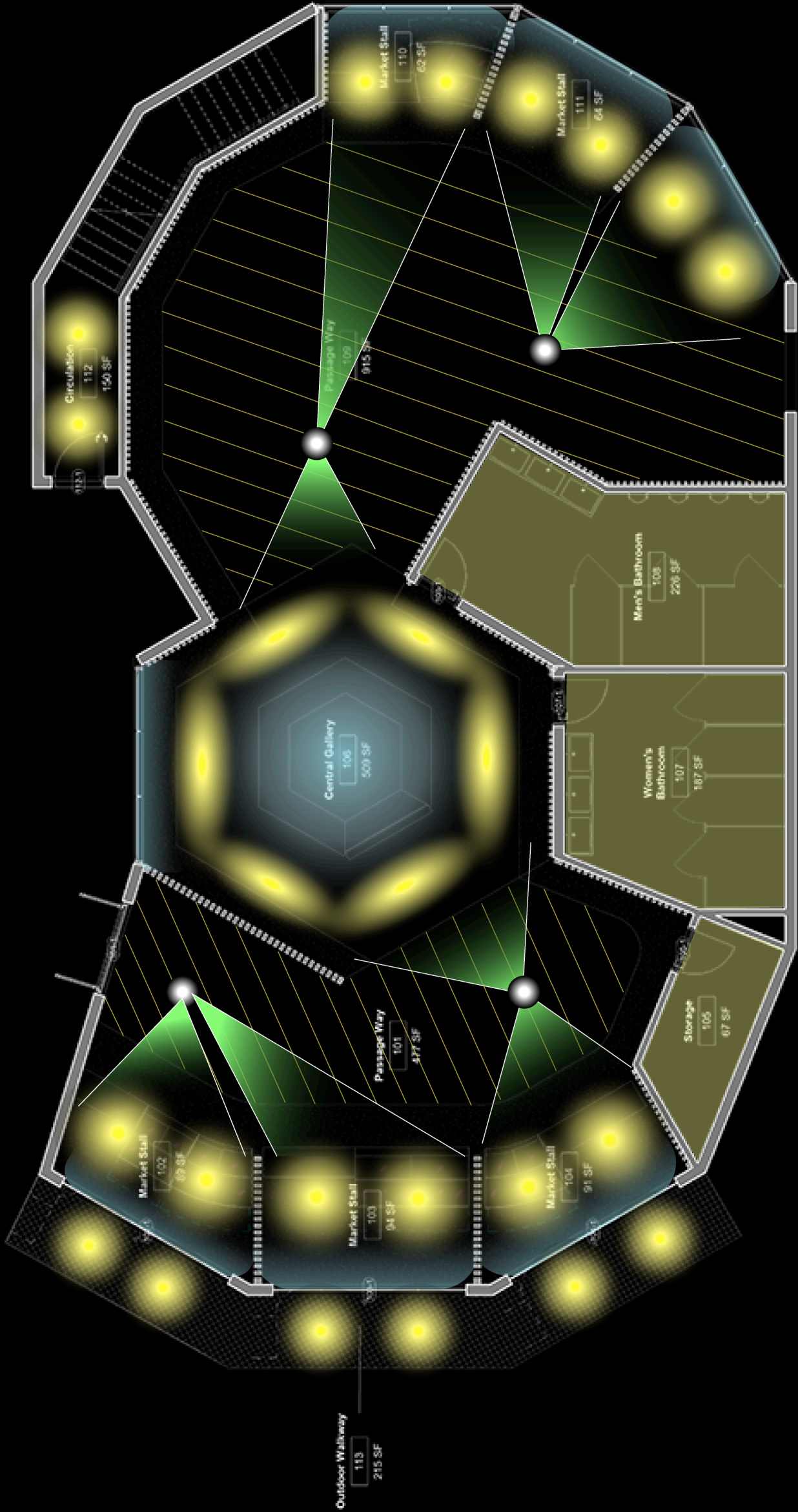
BENCH SEAT

APPROACH TO LIGHTING DESIGN

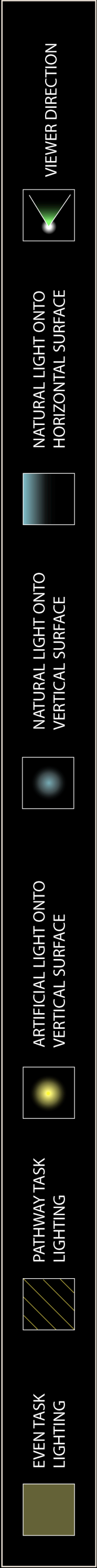
The Infinity Souq integrates Syrian and Swedish culture together, to combine a very open public market and a private family apartment. The first floor functions as a family run multi-cultural Souq (public market). Natural colors gives the space a connectivity to the outdoor stall area. Private space for the family is provided through the circulation and serves as a relaxing luxury family apartment for family employees.

The natural colors gives the space a connectivity to the outdoor stall area with the surrounding natural area. Materiality follows the natural color scheme and uses a mix of materials from both Syria and Sweden. A heavy emphasis will be on letting natural lighting into the overall space, much like many of the Syrian souqs (marketplaces). The surfaces I will illuminate are the shelving fixtures, table surfaces, marketshop aisles/pathways, the fountain area, wall and ceiling surfaces.

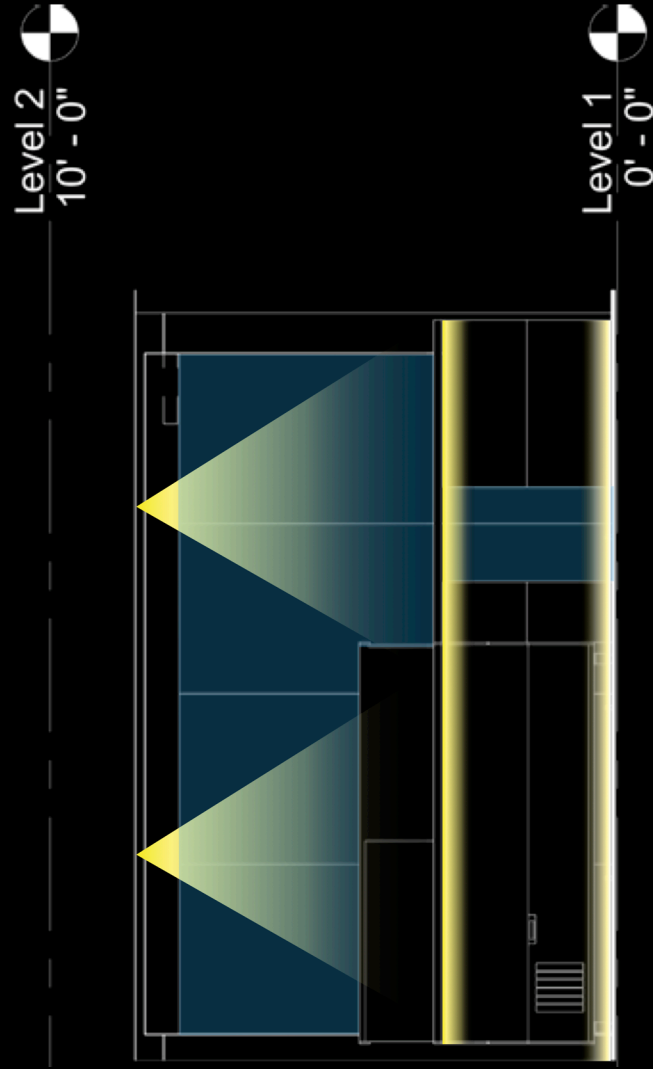
The lighting will complement the architecture by highlighting the continuous flow of people moving from each space in the structure. Color, lighting, and materiality will be used to emphasize the passage flow within the souq. The main surfaces that will be illuminated are the passageway within the souq. Natural lighting and materiality will use to define the mood within the souq, it will add more ambience with in the area so that the souq are feels like one with the surrounding outdoor area. The types luminaires used for the space are ceiling suspended lights and recessed can lights to highlight the passage way.



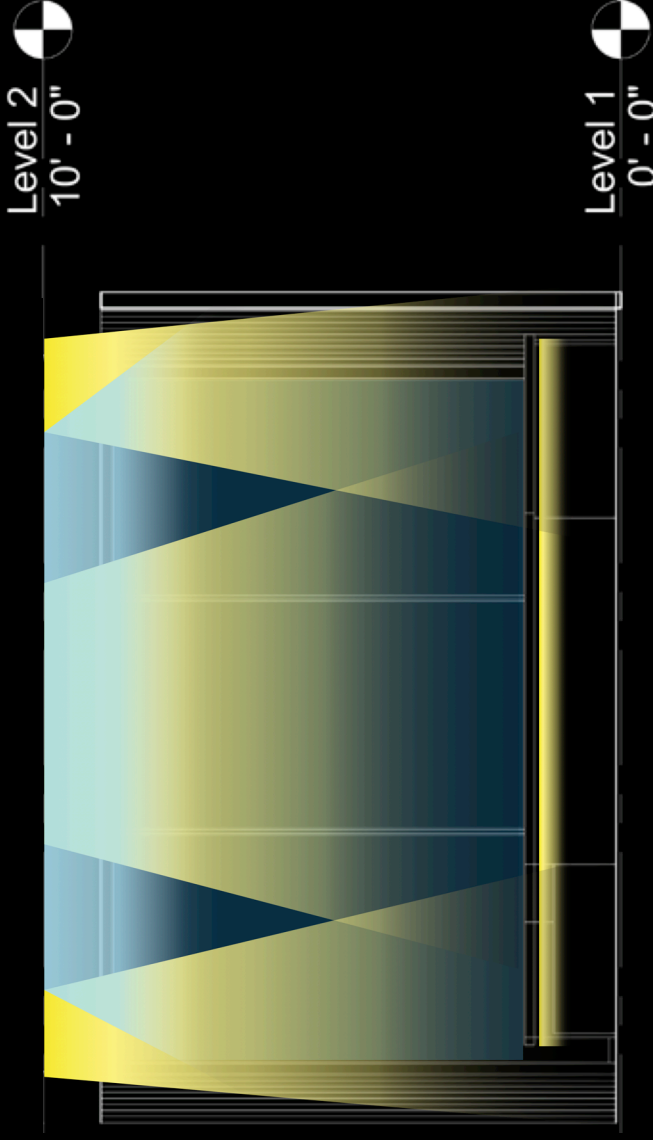
COMMERCIAL FLOOR - FLOOR PLAN



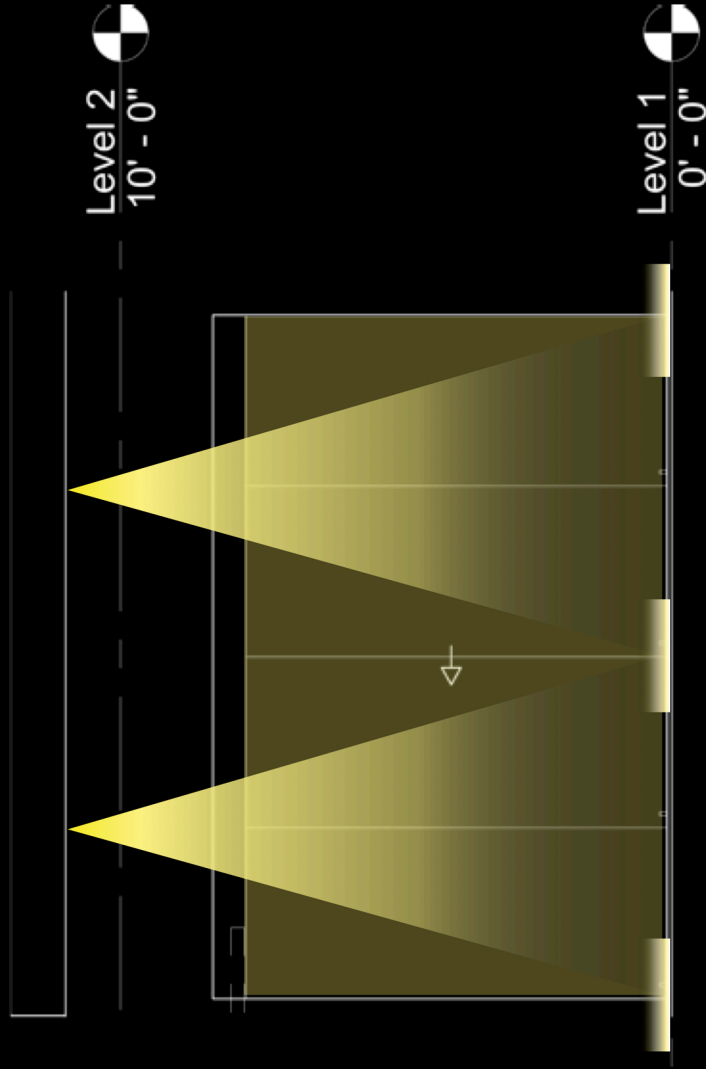
LIGHT MAPPING - ELEVATIONS



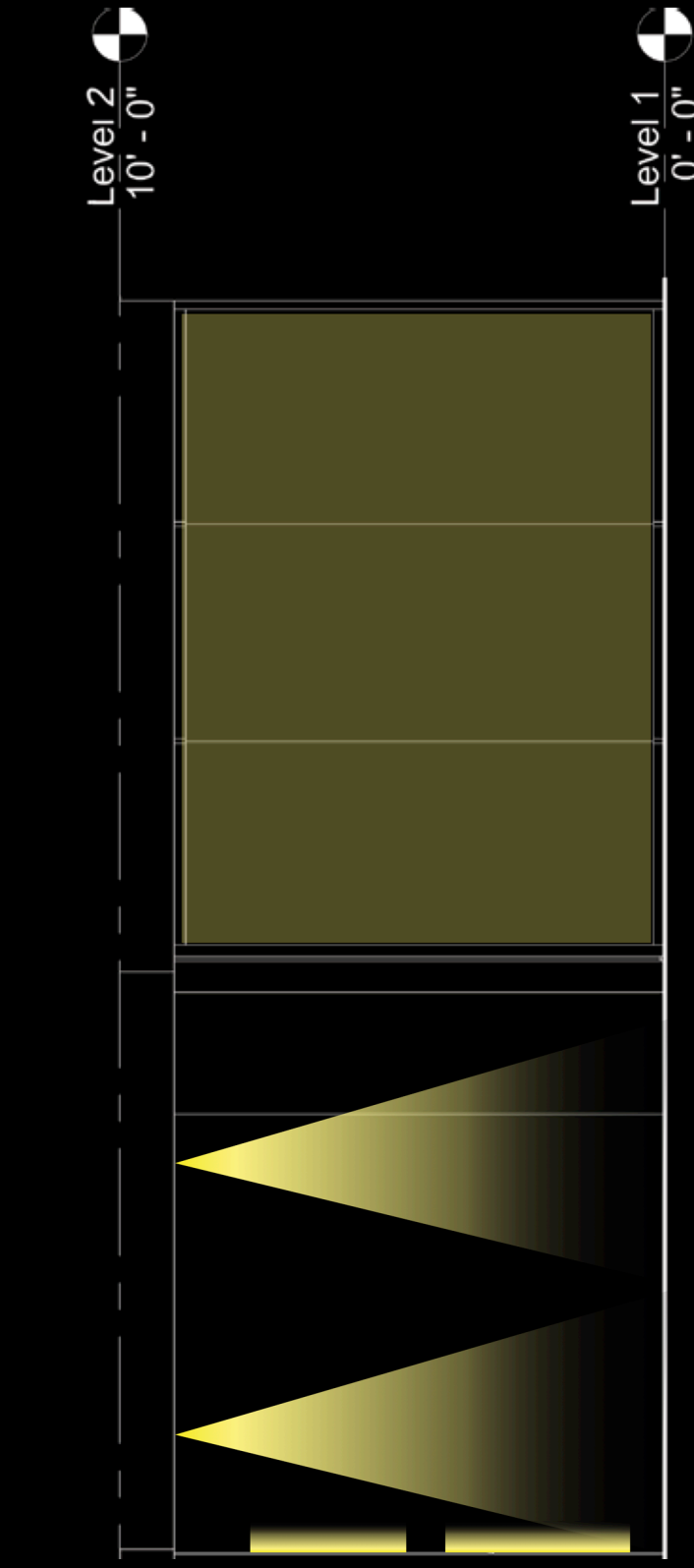
MARKET STALL - INTERIOR



CENTRAL GALLERY - INTERIOR

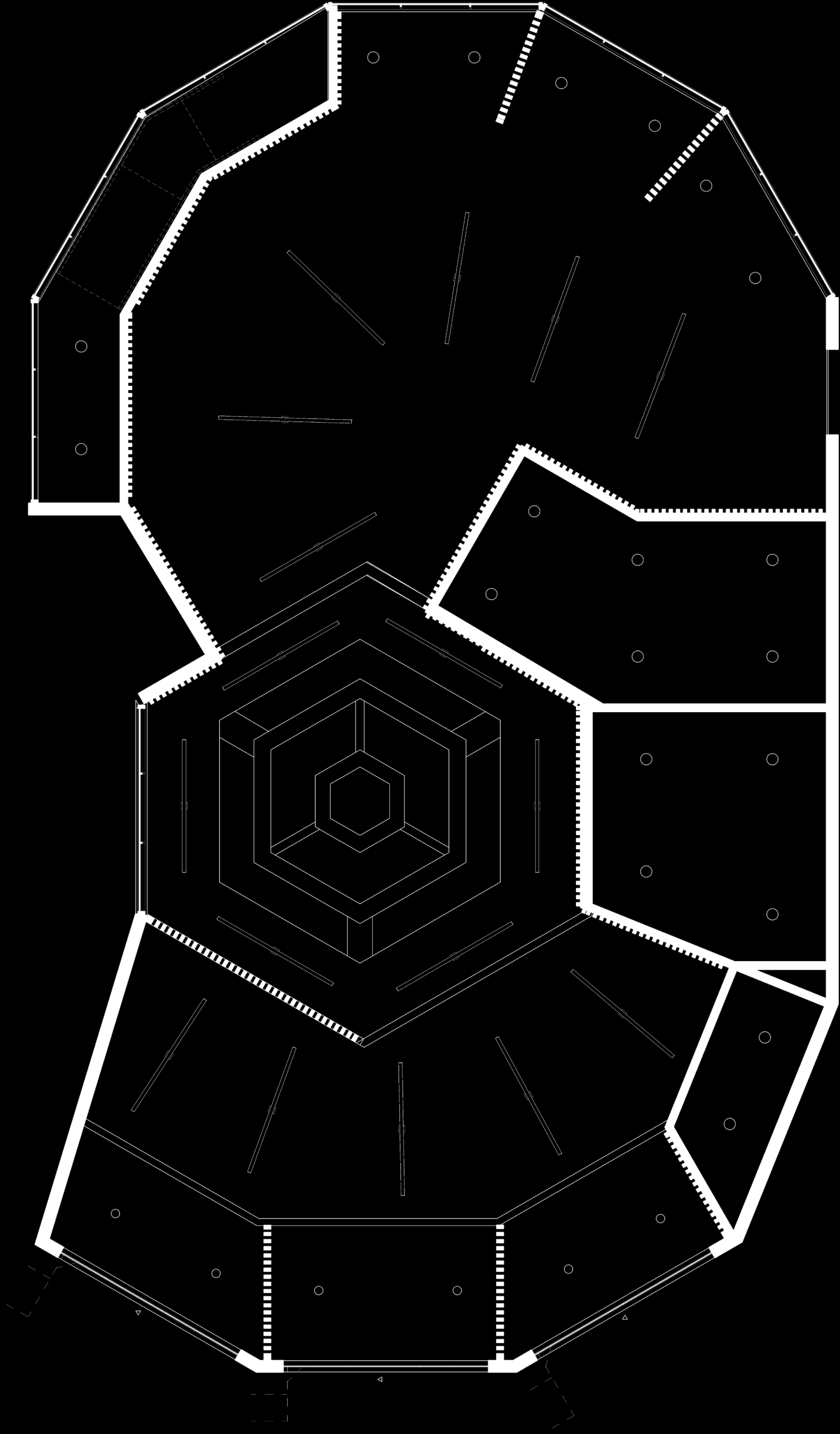


PATIO - EXTERIOR

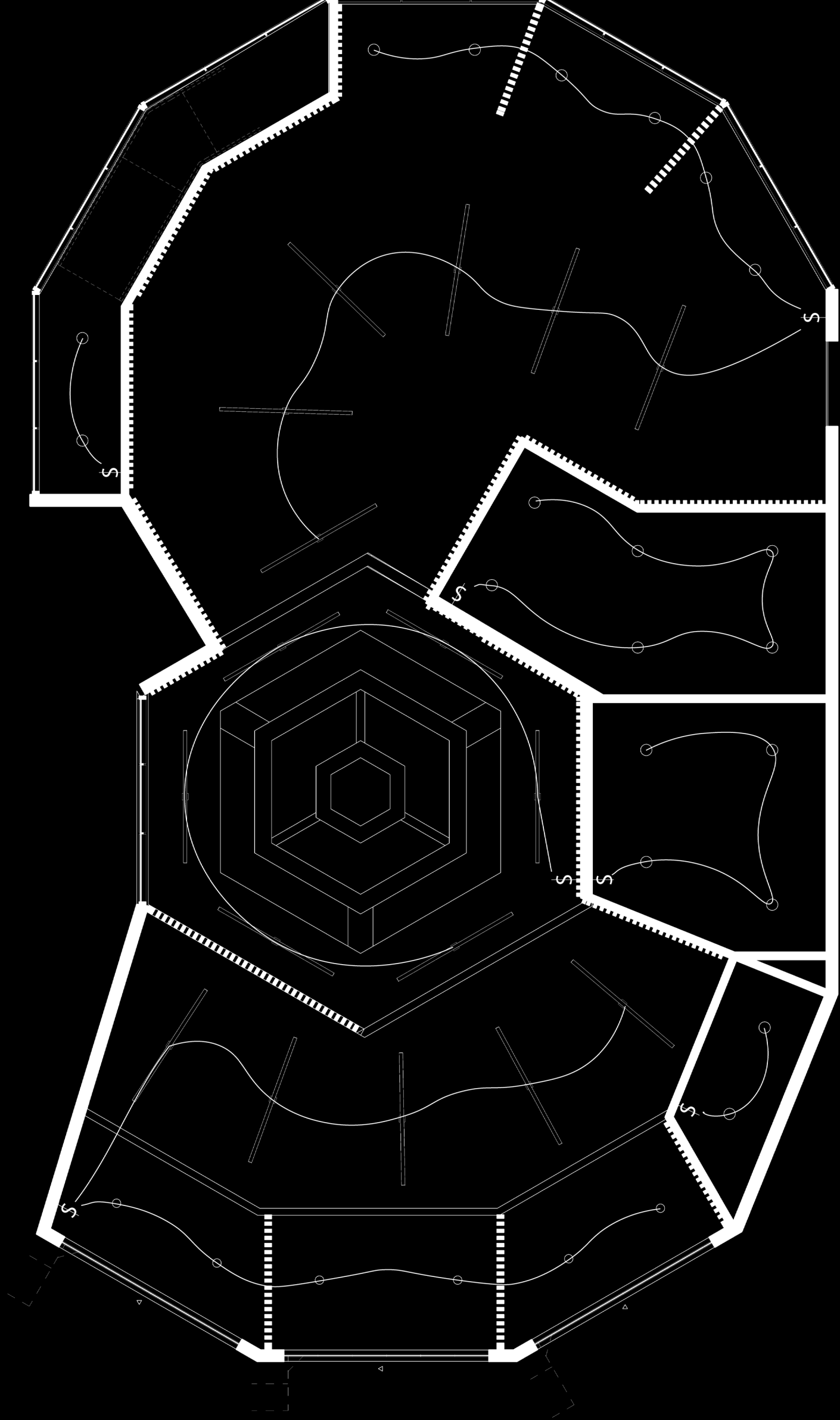


ENTRANCE - EXTERIOR


REFLECTED CIELING PLAN



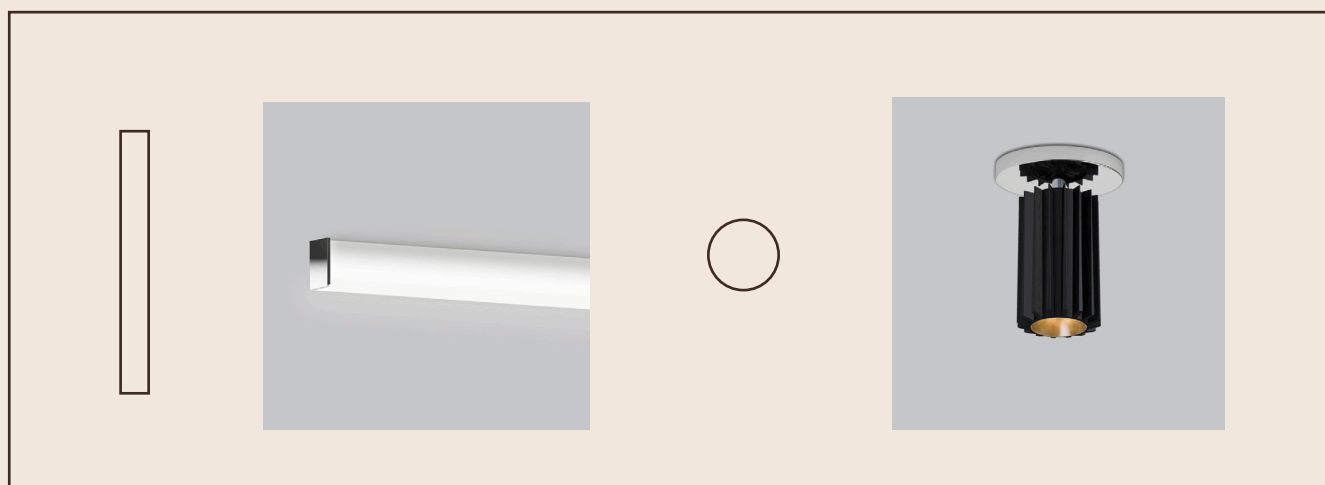
SWITCHING PLAN



LUMINARE SCHEDULE AND KEY

SYMBOL	LABEL	QTY.	TYPE	MOUNT	COLOR TEMP.	WATTAGE
	A	22	SL	CIELING	3450 K	72 W
	B	11	RC	CIELING	3750 K	60 W

KEY



LIGHTING CALCULATIONS

1 RECESSED CAN = 1,061 LM

1 STRIP LIGHT = 6,615 LM

MARKET STALLS (PER ONE)

2 RECESSED CANS (100%)* 1,061 LM = 2,122 LM
2,122 LM/100 SQFT = 21.22 LM

CENTRAL GALLERY

6 STRIP LIGHTS (100%)* 6,615 LM = 39,690 LM
39,690/509 SQFT = 77.97 LM

PASSAGE WAY 1

5 STRIP LIGHTS (100%)* 6615 LM = 33,075 LM
33,075/477 SQFT = 69.33 LM

PASSAGE WAY 2

8 STRIP LIGHTS (100%)* 6615 LM = 52,920 LM
52,920/915 SQFT = 57.83 LM

STORAGE

1 RECESSED CAN (100%)* 1,061 LM = 1,061 LM
1,061 LM/67 SQFT = 15.84 LM

WOMEN'S BATHROOM

6 RECESSED CANS (45.8%) * 486 LM = 2916 LM
2,916 LM/226 SQFT = 12.90 SF

MEN'S BATHROOM

4 RECESSED CANS (45.8%) * 486 LM = 1,944 LM
1,944 LM/187 SQFT = 10.40 SF

OUTDOOR WALKWAY

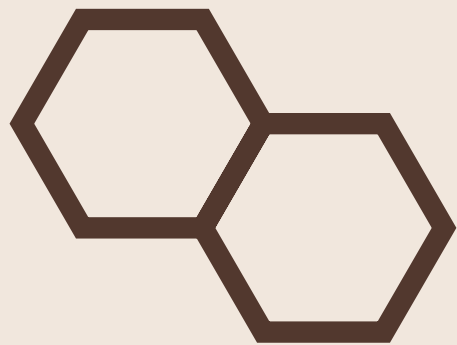
6 RECESSED CANS (45.8%) * 486 LM = 2916 LM
2,916 LM/215 SQFT = 13.56 SF

CIRCULATION

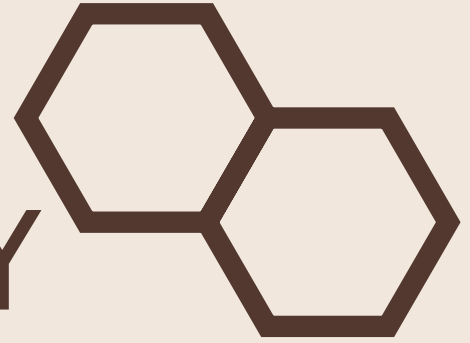
2 RECESSED CANS (100%) * 486 LM = 972 LM
972 LM/150 SQFT = 6.48 SF



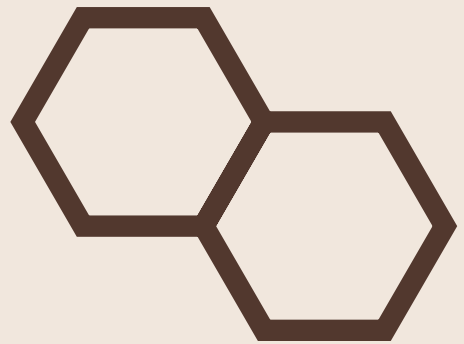
MARKET STALL



CENTRAL GALLERY



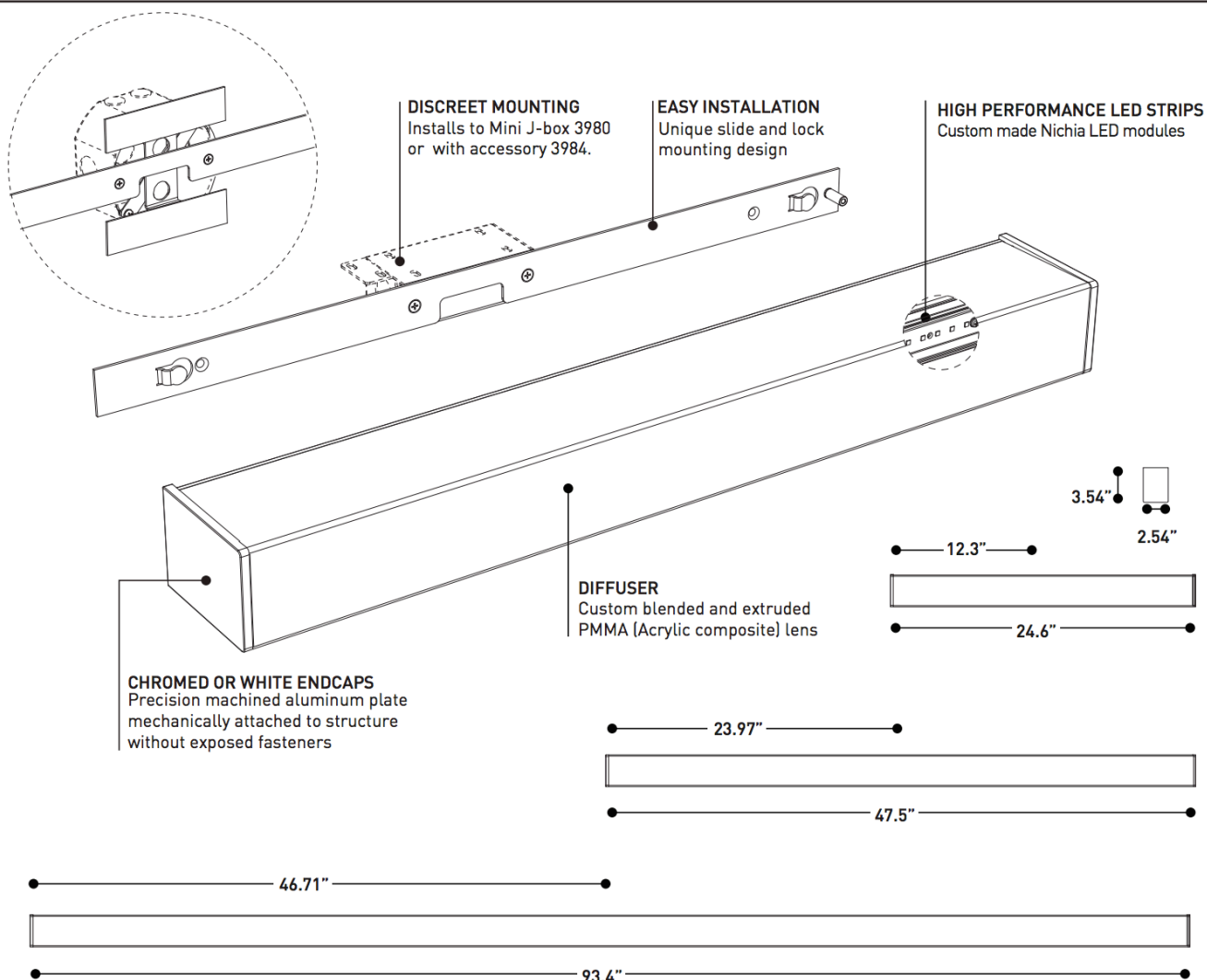
FIXTURE CUTSHEET



ANATOMY

BIM DIM IES LED ADA

STROKE



SPECIFICATIONS

LIGHT SOURCE	48 x Nichia mid power LED		96 x Nichia mid power LED		192 x Nichia mid power LED	
MODULE	UL Recognized - Made in USA					
DELIVERED LUMENS	~923lm	~1687lm	~1806lm	~3483lm	~3488lm	~6615lm
LUMENS PER FOOT	~461.5lm	~843lm	~451lm	~870lm	~436lm	~826lm
SYSTEM WATTAGE	9.4W	19.8W	18.4W	40.4W	37.4W	77.2W
DIMMING	Standard 0-10V dimming [DV]					
CRI	85 CRI (Typical)					
ENDCAPS	Chromed or white machined aluminum endcaps					
DIFFUSER	Custom extruded high performance diffuser					
VOLTAGE	120V - 277V					
LIGHT DISTRIBUTION	Semi-Direct					
WARRANTY	5 years					

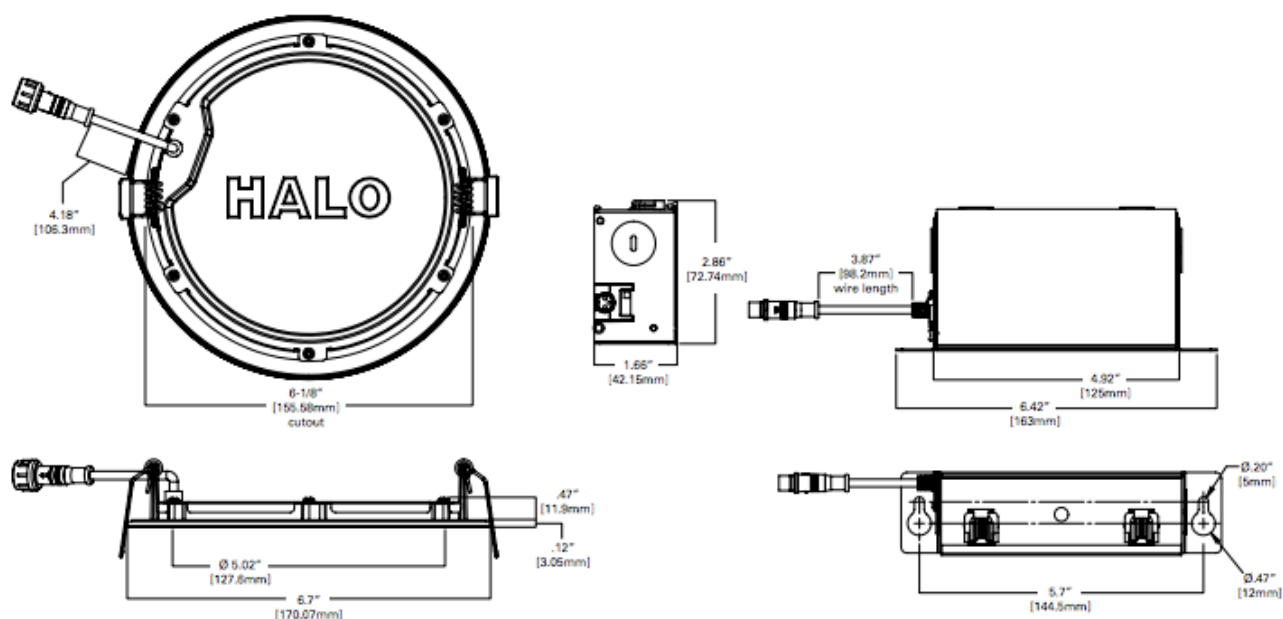


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www.eurekalinghting.com



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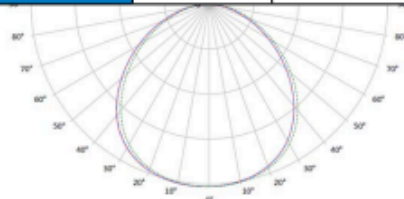
ORDERING INFORMATION

SAMPLE NUMBER: HLB6099FS1EMWR

Models	Lumens	CRI / CCT	Driver	Finish	Packaging	Accessories
HLB6 = 6-inch ultra-thin LED lens downlight with remote driver / junction box	09=900 lumen (nominal)	9FS=90 CRI minimum, field selectable 2700, 3000, 3500, 4000 or 5000 K CCT	1E= 120V 60Hz, LE & TE phase cut 5% dimming	MW= matte white flange	R= recyclable 4-color unit carton suitable for point of purchase merchandizing display	HL6NCMF = 6" new construction mounting frame

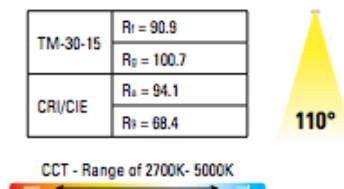
PHOTOMETRIC DATA

HLB6099FS1EMWR-3000K		
Luminaire lumens	1061	
Input watts	16	
LER (LPW)	66.3	
Spacing Criteria	0-180	1.31
	90-270	1.31
	Diagonal	1.41
Beam angle (degrees)	112.2	
Field angle (degrees)	161.3	
Zonal lumen	Lumens	% Lumens
0-30	294	27.7
0-40	486	45.8
0-60	851	80.2
0-90	1061	100



* Tested in accordance with IES LM63. Field results may vary.

Color Metric Summary - 3000K

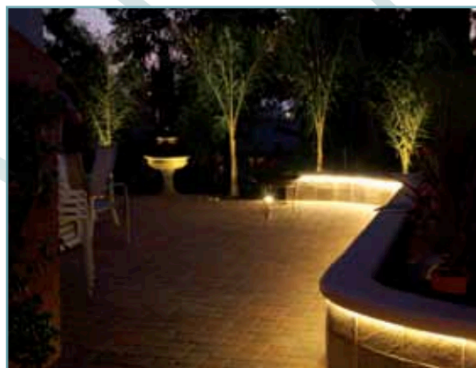


Product Specifications

PRODUCT SPECIFICATIONS	
Lumens	1061
Watts	16
Lumens Per Watt (Efficacy)	66.3
Color Accuracy (CRI)	92
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	

	CCT	Lumens	Power (W)	LPW
6in HLB	2700K	1037.3	16	64.8
	3000K	1061	16	66.3
	3500K	1078.9	16	67.4
	4000K	1094.9	16	68.4
	5000K	1103.4	16	69

Flex LED Tape WP Installation Manual



SPECIFICATIONS

Average Rated Life: 30,000 hours

Operating Temperature: -40°C to 80°C



ELATION FLEX LED TAPE WP is a very thin and flexible LED circuit strip mounted inside a silicone water proof sleeve. It can be cut every 2" and put back together using simple soldering techniques and silicone seal kit. It comes available in RGB and Single Color versions. High output, low heat and easy installation make this product the ideal product for a variety of applications.

FLEX RGB WP+ TAPE SPECIFICATIONS

View Angle: 120°

Length: 3 meters / 9.8 feet

Width: 14 mm

Power Consumption: 43.2w

Voltage: DC12V

LEDs: 180 SMD

Wiring Diagram:

W	Power supply DC12V+
R	Red color LED DC12V-
G	Green color LED DC12V-
B	Blue color LED DC12V-

SINGLE COLOR TAPE SPECIFICATIONS

View Angle: 120°

Length: 6 meters / 20 feet

Width: 14 mm

Power Consumption: 28.8w

Voltage: DC12V

LEDs: 360 SMD

Wiring Diagram:

W	Power supply DC12V+
C	Color LED DC12V-

DMX Accessories



Flex RGB+ WP



Elar Driver-1



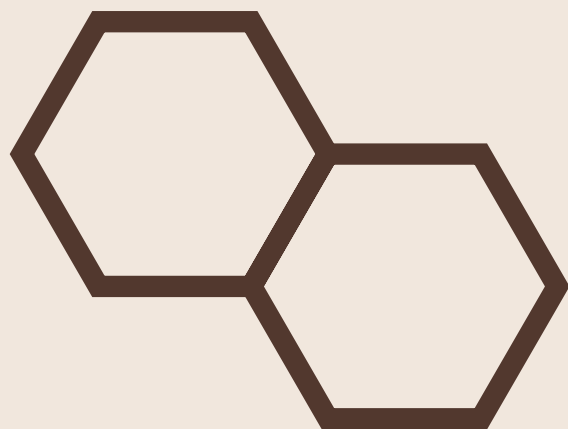
AL-150-12



Elar Driver-8



Flex PSU 4A



västra hammen