



Healthcare Lighting Best Practices:
The Patient-Centric MRI Suite



SCOTT
Regional Sales Manager, Central



CHAD
National Sales Manager



AMANDA
Regional Sales Manager, West

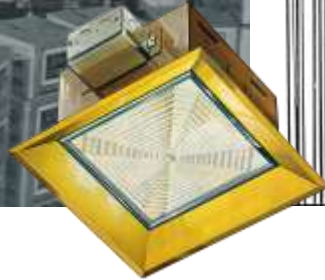


CHRIS
Exec. Vice President

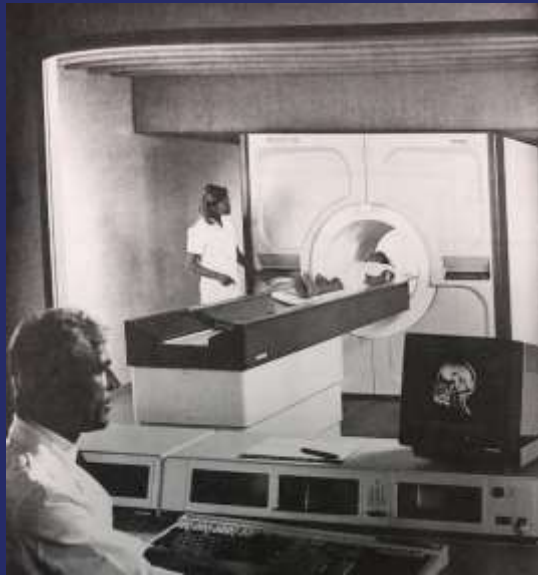
Kirlin

A Legacy of Innovation

Founded in 1895, we are the longest-operating independent luminaire designer and manufacturer in the US lighting industry.



Healthcare Lighting Legacy



- **1970s** - Kirlin developed the recessed motorized exam light with Dr. DeBakey
- **1980s** - Kirlin provided non-ferromagnetic lighting for the world's first MRIs



Trusted by the Best



Kirlin lighting is trusted by all of the U.S. News' Top 20 Honor Roll hospitals.



Areas of Expertise

LOBBY/
ATRIUM

OR &
HYBRID OR

CATH
LAB

MRI

PATIENT
ROOM

ICU

NICU

LABOR &
DELIVERY

BEHAVIORAL
HEALTH

EMERGENCY
ROOM



Core Principles

1



Enhanced Visual
Acuity

2



Improved Patient
Comfort

3



A Safer
Environment



Areas of Expertise

MRI

PATIENT ROOM

ICU

NICU

LABOR & DELIVERY

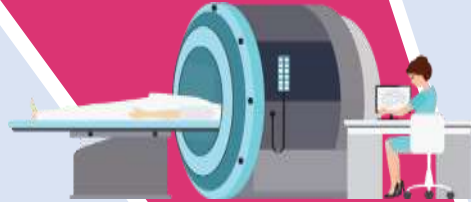
BEHAVIORAL HEALTH

EMERGENCY ROOM

CATH LAB

OR & HYBRID OR

LOBBY/ ATRIUM



HOSPITAL





MRI Scanners

Where to find them?

Dedicated MRI Suites

Hybrid Operating Rooms



A Room Within a Room

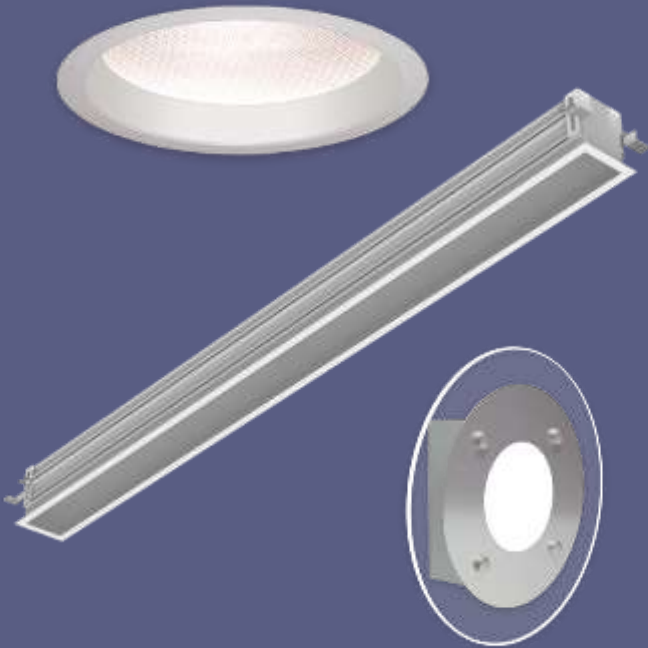
Why do we shield MRI suites?

- Prevent image artifacts do to RF/EM “noise”
- Protect other medical equipment from the powerful magnet



MRI Lighting

Non-Ferrous Lighting:



Remote Drivers and Cabinet:



RFI/EMI Filters:





But What About The Patient?

Who gets MRI scans?

Young and Old

Large and Small

Mobile and Immobile

Patient Centric MRI Lighting Toolkits



**AMBIENT &
TASK**



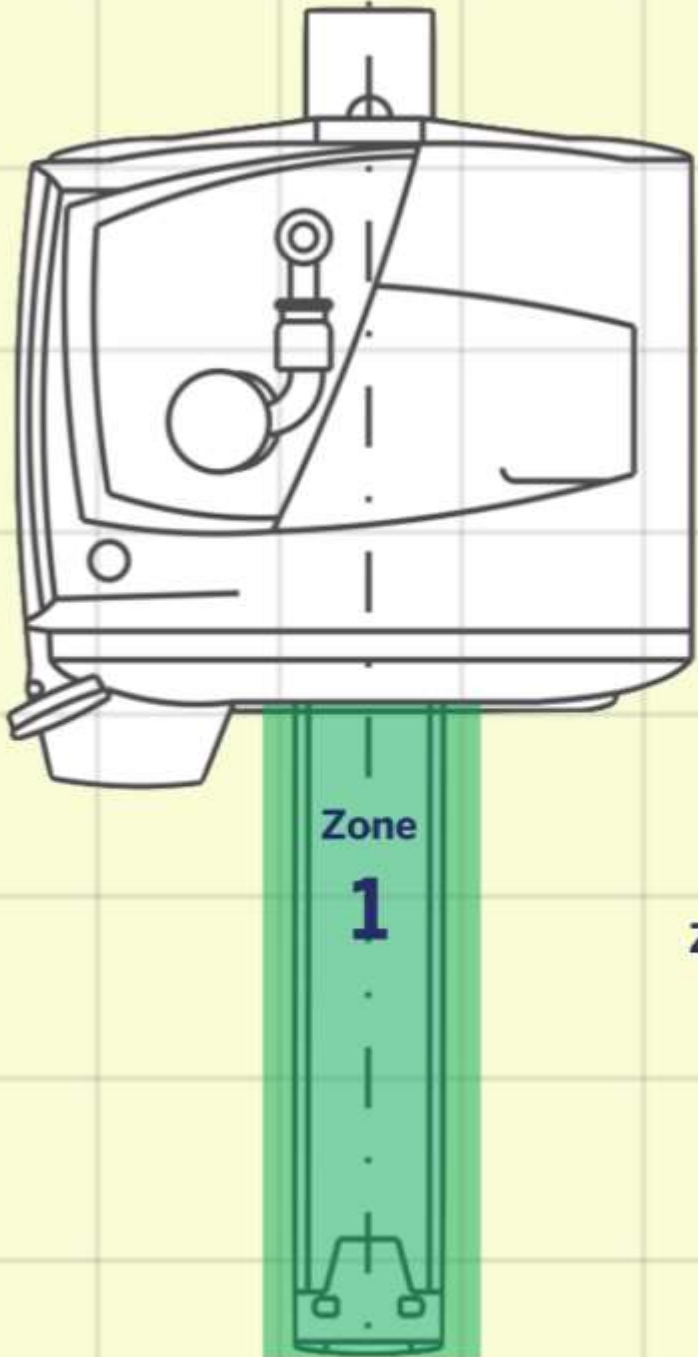
**DECORATIVE &
DYNAMIC**



Ambient & Task Lighting

Improving the patient experience through comfortable, sufficient illumination, thoughtfully deployed





Ambient/Task Light Levels

IES

RP-29-20

Kirlin

Recommendation

Zone 1
Patient Transfer
Table

75 fc
(5 fc during scan)

75-100 fc
(5 fc during scan)

Zone 2
Room Perimeter
and General Space

30 fc
(5 fc during scan)

30-50 fc
(5 fc during scan)

Improper Design



Suspended or track fixtures



Downlight over patient's face

Ambient/ Task Lighting

- 100 fc patient transfer table
- Adjustable downlights



A photograph of an MRI room. The ceiling features a large, illuminated grid pattern with a blue sky and white clouds. Several recessed circular lights are visible on the ceiling. In the foreground, a white MRI machine is partially visible, with a patient table extending from its opening. To the left of the machine, there is a white shelving unit with various items on it. The walls are light-colored, and the overall atmosphere is clean and professional.

Ambient/ Task Lighting

- Adjustable downlights over transfer table
- Perimeter downlights

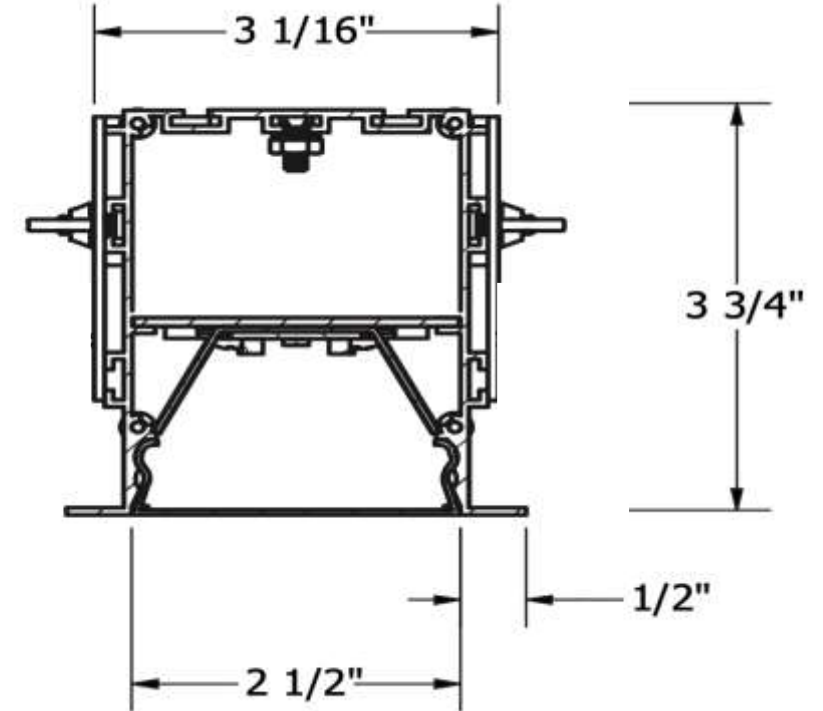


NEW **MRL-2 Slot**

**Static White for
Ambient Illumination**

At a Glance

- Approx. 800 lm/ft
- 2.5" aperture
- 2' increments
- 3.75" depth



KIRLIN
HEALTHCARE LIGHTING

www.kirlinlighting.com

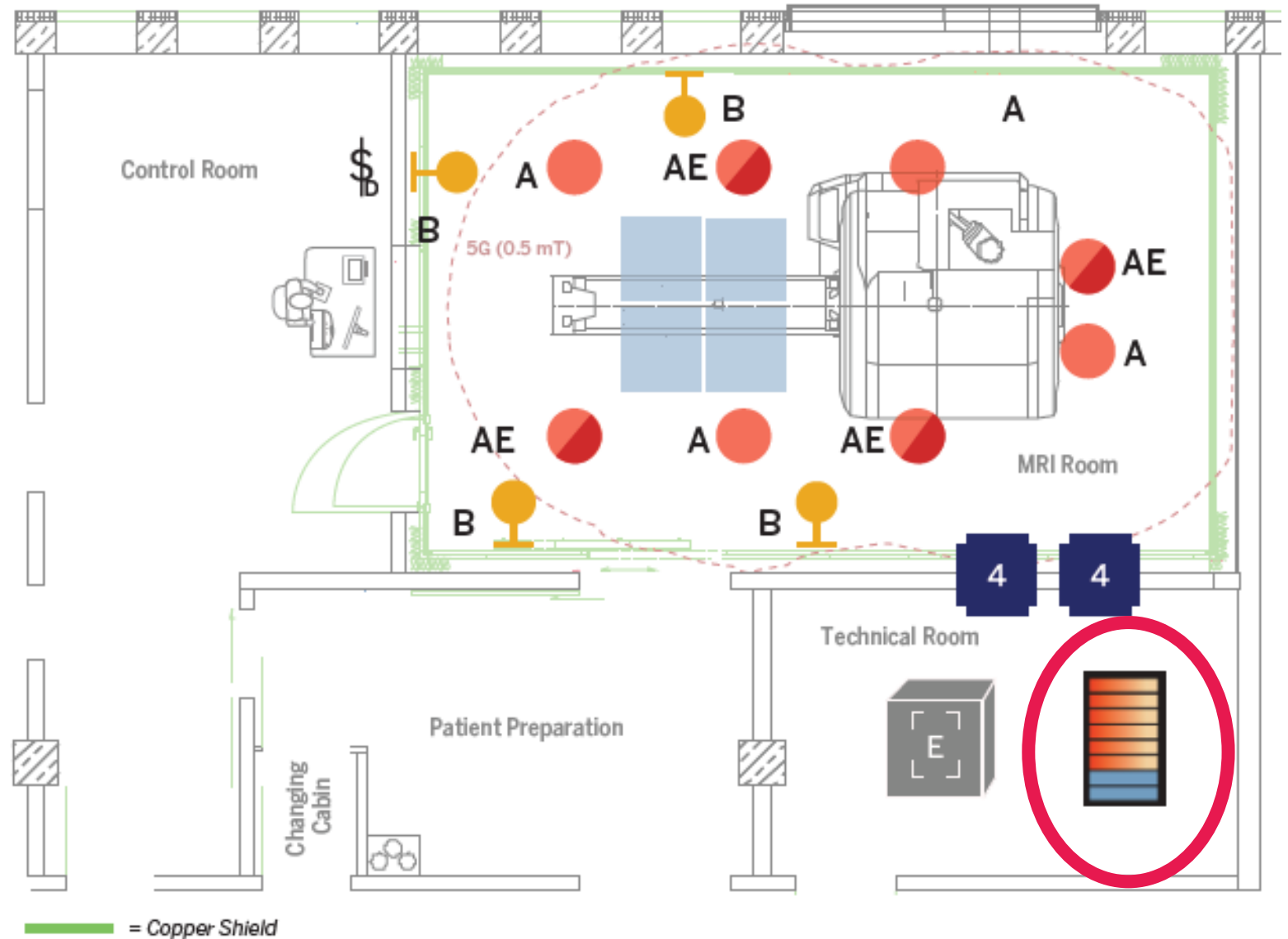
MRL-2 Slot

Static White for
Ambient and Task
Illumination



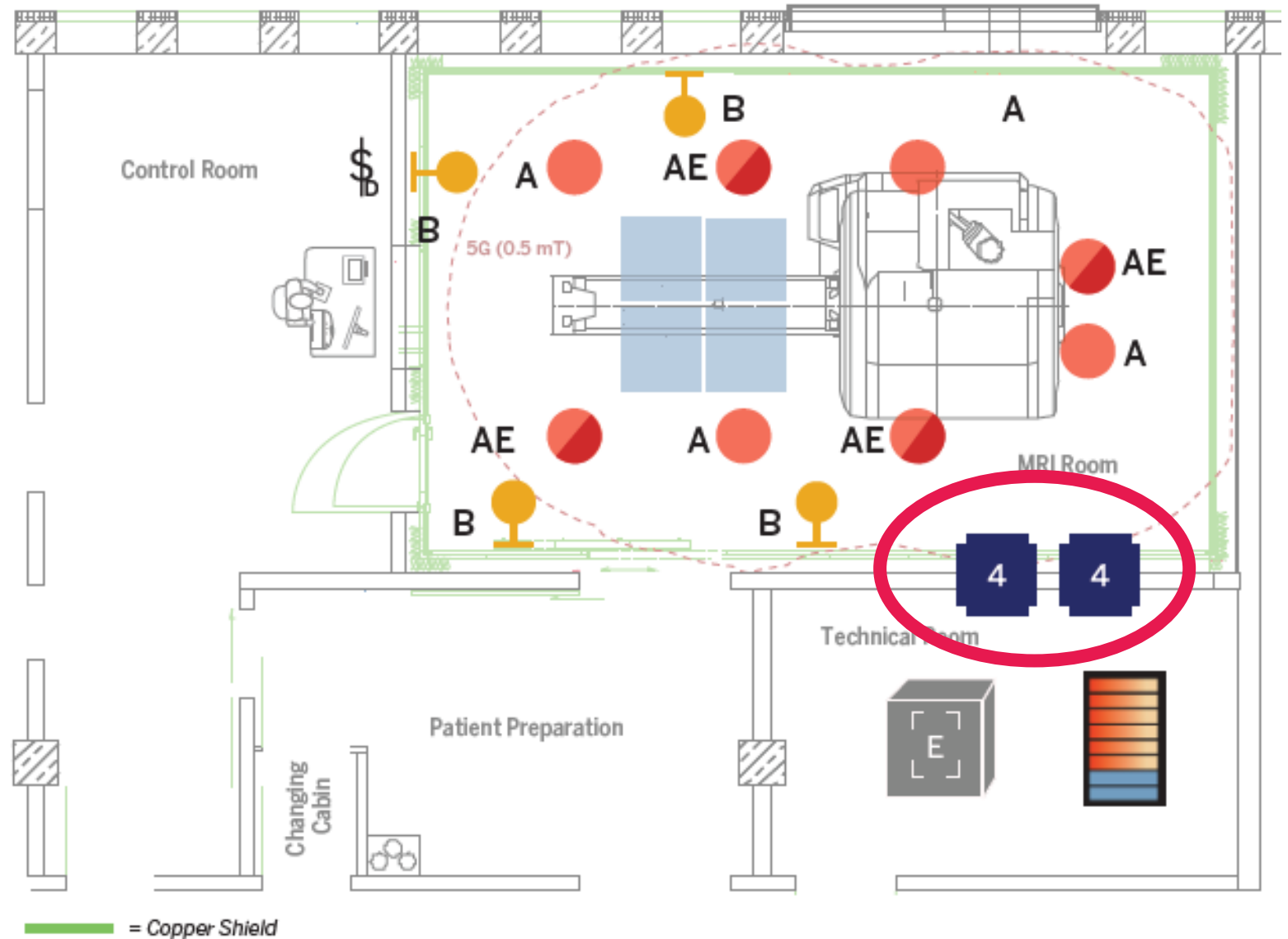
Remote Drivers

- Driver location
- Remote mounted in the equipment room



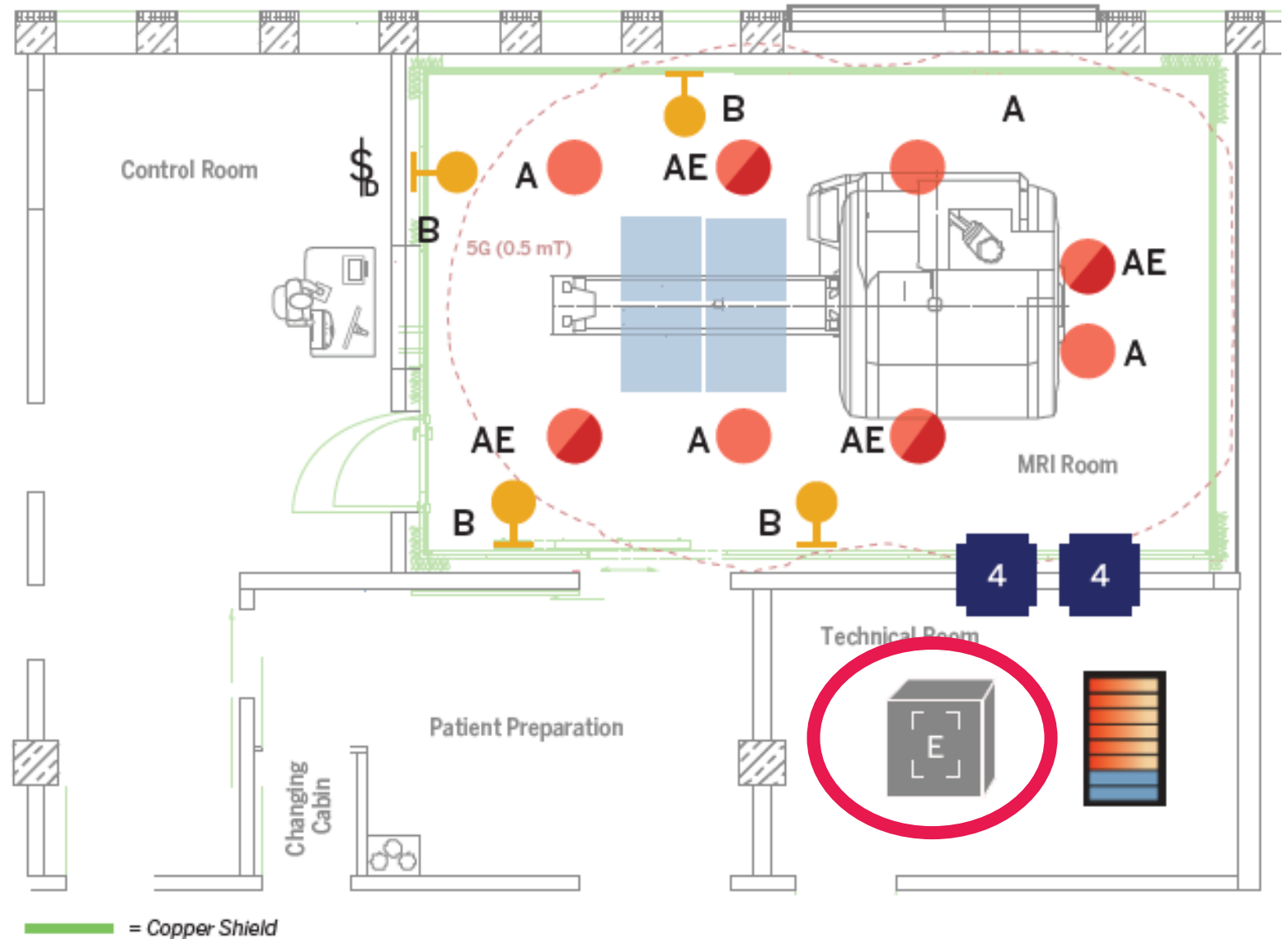
RFI/EMI Filters

- RFI/EMI Filtering
- Mounted on the copper shield
- Multiple channel filters minimize the openings in the shield



Emergency Backup

- Emergency Lighting
- Remote inverter in equipment room takes load off of generators



Lighting Controls

- Dimming for scans
- Mounted in the control room

CAUTION
MRI
ZONE III
Screened MRI Patients and Personnel Only

AUTOMATIC CAUTION DOOR

ACTIVATE SWITCH TO OPERATE

CAUTION
MRI
ZONE III
Screened MRI Patients and Personnel Only

AUTOMATIC CAUTION DOOR

STOP!
Do Not Enter
With O₂ Tanks
Ask Tech For Compatible
Tanks

WARNING!
STOP!
This MRI Machine
is On
24 Hours a Day!



Decorative & Dynamic

Improving the patient experience through the introduction of dynamic color, scenes of nature, and decorative architectural elements



Scenic Panels

- Large format scenes
- Regressed frame



Ideal MRI Suite

Putting it all together:

- Ambient
- Task
- Decorative Panels





MRL-2 Color Changing

- Distraction
- Connection
- Dynamic Accent

Ideal MRI Suite

Putting it all together:

- Ambient
- Task
- Dynamic Lighting



Patient Centric MRI Lighting Toolkits



**AMBIENT &
TASK**



**DECORATIVE &
DYNAMIC**

CEU Seminars: Join Us in Detroit

8 Credit Course: Healthcare Lighting Best Practices – Lighting the Modern Hospital



2022 Course Dates:

- May 12-13
- September 22-23
- October 27-28



Questions?

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