

Billiard Illumination Project

Dimensions:

- For an 8-foot billiard table, a luminaire that is approximately **44 inches long** and **14 inches wide** may be appropriate.
- For an 8-foot billiard table, the armature should be around **10 to 11 feet long**
- The **ideal angle** for the light is about **30 degrees** from the vertical plane, which provides ample illumination without creating harsh shadows or glare.



Materials:

1. **Metal:** Metal is a popular

material choice for armature systems because it is strong, durable, and can be finished in a variety of colors and textures. A brushed metal finish, such as stainless steel or nickel, can complement the modern design of the billiard room.

2. **Glass:** Glass is an ideal

material for pendant light shades because it is both durable and transparent. An opaque glass shade can diffuse the light and reduce glare, providing even illumination across the billiard table.

3. **LEDs:** LED lights are an

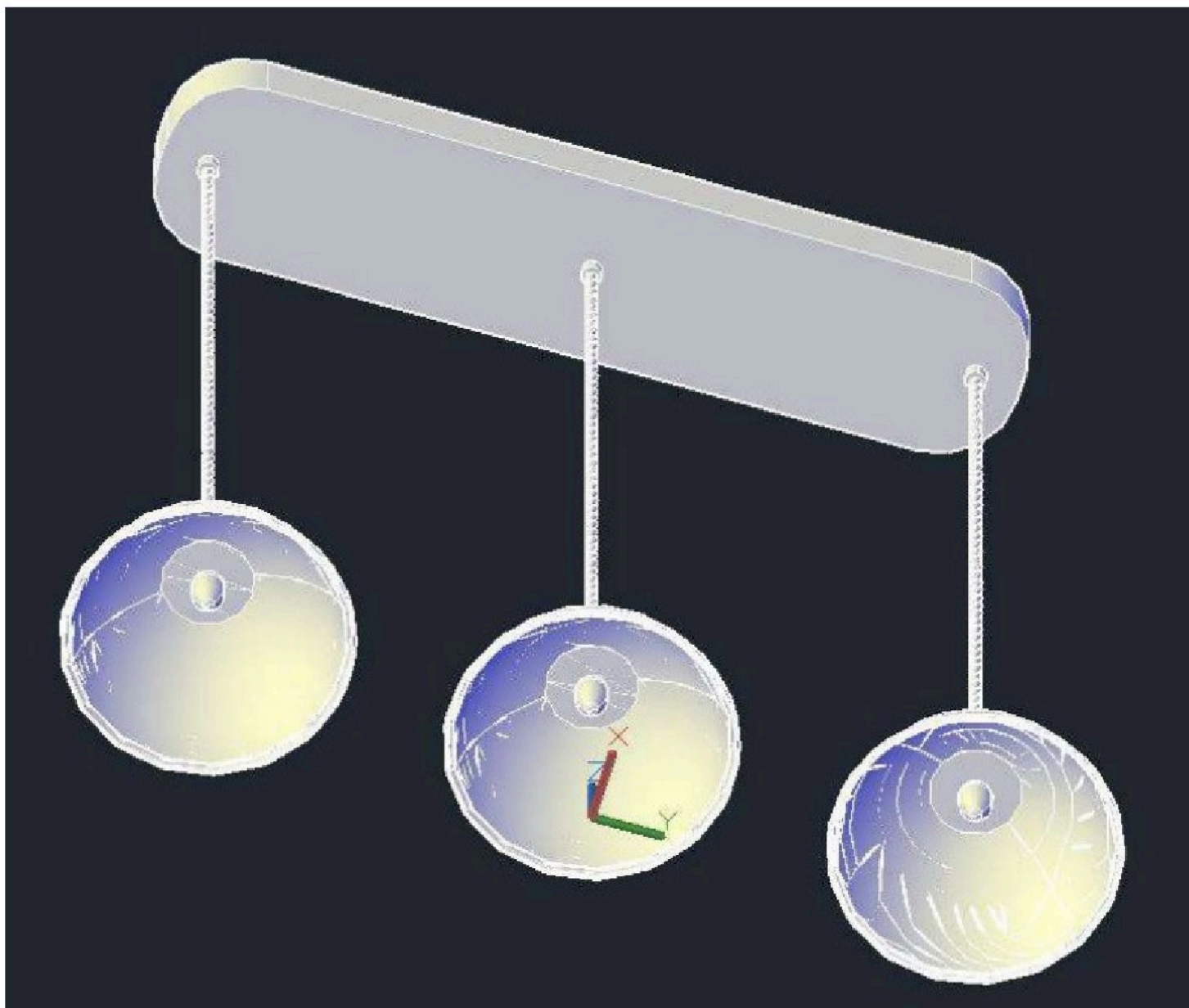
energy-efficient and long-lasting lighting solution that can be used in a billiard room. They emit little to no heat and are available in warm white color temperatures that are ideal for a billiard room.

To complete the look, the armature system would be finished with a brushed metal finish, which would complement the modern design of the billiard room.



Details

- A warm **white light** (around 2700-3000K on the Kelvin scale) is ideal for a billiard room.
- The pendant lights would be mounted on a track system that allows them to be easily moved and adjusted.
- The track system would be controlled by a remote, allowing for easy adjustments from anywhere in the room.
- Each pendant light would be adjustable in height, allowing for customization of the lighting level for each player's needs.



Assuming a room size of 16 feet by 20 feet with an 8-foot ceiling, the square footage of the billiard table area would be:

Square footage = Length x Width = 8 feet x 4 feet = 32 square feet

To achieve a foot-candle level of 30 to 50, we'll use the lower end of the range and assume a target foot-candle level of 30. Assuming the luminaires have a lumen output of 5000 lumens each, we can use the following formula to calculate the number of luminaires needed:

Luminaires = (Foot-candles x Square footage of the area) ÷ Lumens

Luminaires = (30 x 32) ÷ 5000 = 0.192, which rounds up to 1 luminaire

So we would need one luminaire with a lumen output of at least 5000 lumens to achieve a foot-candle level of 30 across the entire surface of the table.