Guardian Angel Cathedral

Case Study

ABS 643 - Betty Casey
Guardian Angel Cathedral
302 Cathedral Way
Las Vegas, NV 89109

Architect:
Paul R. Williams

Paul R. Williams was the first African-American member and fellow of the AIA. He worked mainly in Los Angeles and Southern California but made contributions to the architectural community all over the world. At the time he built Guardian Angel he was a well know and well respected architect.

Paul Williams designed in the contemporary aesthetic. Guardian Angel captures the style of the 1960’s in his angular, clean design.
Guardian Angel Cathedral
302 Cathedral Way
Las Vegas, NV 89109

Owner
The Roman Catholic Church, Diocese of Las Vegas, Nevada.

The Cathedral’s main purpose is congregation of tourist and parishioners for mass. Mass is held twice daily and more often on Saturday and Sunday. Sacraments such as weddings, baptisms and funerals are also held on occasion.

The Diocese is funded mainly by donations from parishioners. The Cathedral is unique because it has a very small local congregation and relies heavily on the donations at mass from tourists. Because of the dwindling membership and resources directed to building new churches, there is not a lot of money for renovations.
Guardian Angel Cathedral
302 Cathedral Way
Las Vegas, NV 89109

Featured Artists
Isabel Piczek- Stained Glass
Edith Piczek- Mural
Isabel and Edith Piczeck are sisters who were born in Hungary in 1941. From a young age they trained as artists in Rome and then in Canada. After relocating to Southern California they worked prolifically in Catholic churches all over the west.
For this case study the Cathedral has been broken into three separate areas:

- Entry
- Seating
- Altar
Entry

The entry is a transitory space that is meant to transition from the outside to the main space. The low ceiling works well to direct people into the church and focus the viewer’s eye on the mural behind the altar.

lighting fixtures
Recessed Lighting is located on the low ceiling at the vestibule leading into the church. The lighting is very warm due to incandescent light bulbs.

color and material
Floor- White Marble, Gloss Finish
  Very Reflective
Ceiling- Ivory painted drywall
  Matte finish
  Mildly reflective
Accent- Wood Paneling
  Dark Matte Finish
  Non reflective

Guardian Angel Cathedral
Seating

The benches in the church are uniformly distributed and positioned facing the altar.

All lighting in the main area is reflected off the bright white walls.

Because only vertical task surfaces are used by people reading from the hymnals, no downward lighting is necessary.
Seating

The reflected light in the congregation space is from the side apses that line each side of the Cathedral.

The steep angle of the ceiling and the simplicity of the design does not allow for downward lighting.

The mood of the space is bright, inviting and clean.

The sharp lines allow for subtle variation of illumination levels.
Seating

The stained glass is only visible in the daytime when lit by natural light. At night the interior lights reflect against the glass and add illumination to the main space.

lighting fixtures

The lighting fixtures are located in the base of the side walls.

They are directed toward the wall and have a shield on the back portion.

The main light is a bright white light.

Two additional soft warmer lights are located on each side of the main light for ambient light.
Altar

A number of newer lighting fixtures that have been retrofitted on the side of the ceiling. They resemble stage lighting although they are set in a fixed position. The lights are aimed primarily at the center of the altar.

As the focal point of the Cathedral, the altar should have the most light. During mass the priest and the speaker are lit from mainly the side and slightly from the front.
Altar

The altar is finished in marble and other highly reflective materials.

The bright white marble is contrasted against the deep green marble partition wall.

Candle light adds slight sparkle to the altar and frames the key locations.
Altar

The mural is lit by both the spot lights to the side of the altar and under lighting from behind the altar. Due to the aim of the spot lights certain areas of the mural appear much brighter than others. The under lights are a warmer color and wash the wall from below.
Suggested Improvements

Entry

The lighting in the entry is too warm in comparison to the main interior space.

I would suggest reducing the level of illumination but increasing the color temperature of the light.

The reflective flooring and light colored ceiling allow for reflection and could compensate for the reduced brightness. Additionally, by replacing incandescent bulbs with compact fluorescent bulbs, energy would be saved.

The space would also look cleaner and under a whiter light and more synonymous with the main space.

Below is a comparison of the same marble at the altar vs. the entry. When placed together they appear to be two different colors when in fact they are identical.
Suggested Improvements

Seating

The current reflective lighting is very interesting. However, as the bulbs have been replaced they are not the same and have different color temperatures and intensity.

I would suggest choosing a uniform light source and replacing all the light bulbs.

A regular maintenance schedule should then be set up to make sure they do not fall out of sync again.

Below is a picture showing the obvious inconsistency of lighting on both the interior and exterior of the Cathedral.
Cohesive Solutions

Guardian Angel Cathedral is a fantastic example of mid-century modern design that has survived on Las Vegas Blvd. Currently, the biggest problems regarding the lighting in the Cathedral is effective maintenance and lack of a cohesive lighting plan. Some fixtures are clearly outdated and the color rendering has wide variations.

A uniform color temperature would allow the architectural elements to shape the light as originally intended. The design and artwork is so distinctive that the lighting should be and uniform and discrete as possible.