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HOSPITALITY LIGHTING

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CityCenter's

Glam gamble in Las Vegas

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RAISING THE STAKES

The ambitious CityCenter complex goes “all in,” coordinating multiple high-profile design and architecture firms for the largest privately funded U.S. development ever, with the lighting action centered on one executive team.

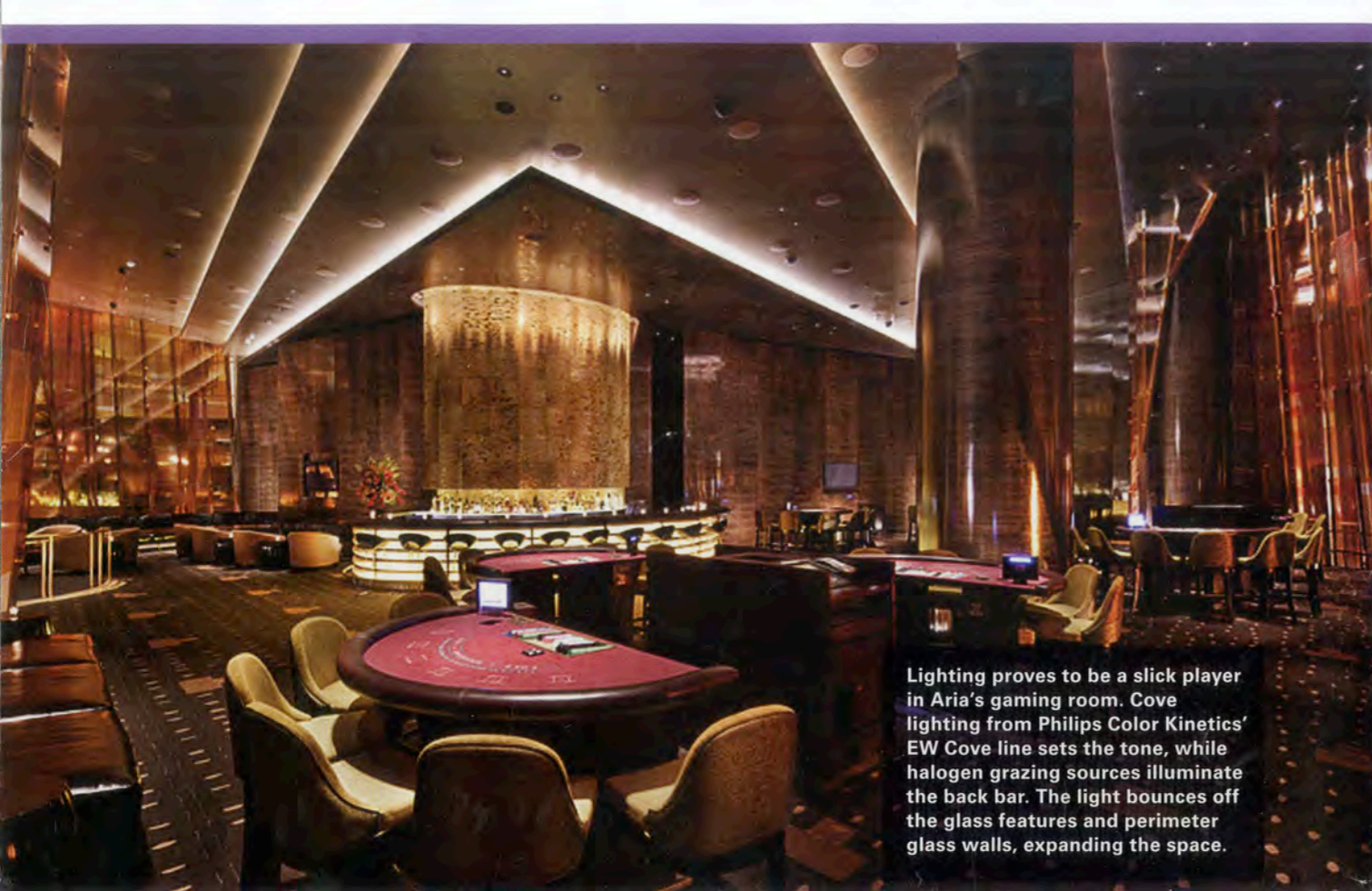
BY DARHIANA MATEO

Even in a city known for taking risks, the groundbreaking CityCenter complex in Las Vegas was quite the high-stakes wager. The ambitious project, which opened its many doors in December 2009, spans 67 acres between the Bellagio and Monte Carlo resorts on the sizzling Strip. Of course, a project of this sheer scale, scope and style can't help but stand out. And that's precisely the point.

The joint venture by MGM Mirage and Infinity World Development Corp. includes Aria, a gaming resort; luxury non-gaming hotels including Mandarin Oriental and Vdara Hotel & Spa; Crystals, a retail and entertainment district; and residential buildings. All of these settings were carefully crafted by world-renowned designers and architects to push the envelope in every way.

Shunning Sin City's penchant for overt themes and over-the-top drama, CityCenter brings a sleek, urban, cultural epicenter with global flavor and a decidedly modern aesthetic. And with a hefty price tag of \$8.5 billion — making it the largest privately funded real estate development in the United States — CityCenter is betting big that the “Entertainment Capital of the World” is ready for something new.

As if the menu by three-star Michelin Chef Pierre Gagnaire were not enough at the Mandarin Oriental's Twist restaurant, the multiple layers of lighting throughout also offer a feast for the eyes.



Lighting proves to be a slick player in Aria's gaming room. Cove lighting from Philips Color Kinetics' EW Cove line sets the tone, while halogen grazing sources illuminate the back bar. The light bounces off the glass features and perimeter glass walls, expanding the space.



Inside the sprawling Aria Buffet, designed by lighting firm Derek Porter Studio, guests are greeted by what looks like a dazzling sea of tubes suspended from the ceiling.

"The main goal was to make it a city within a city, to make it sustainable as well as beautiful" says Kelly Stechschulte, Project Director for Illuminating Concepts, the Executive Lighting Consultant for CityCenter charged with overseeing the design, direction and implementation of the entire project's lighting package. "It was meant to be on the forefront of design and have an overarching vision related to the traveler who is craving leisure, cultural experience and entertainment."

How does one go about executing a cohesive lighting design plan for a project of this magnitude? The answer is both incredibly complex and simple: "Generally speaking, the lighting, more than anything, was meant to enhance the environment and be part of an immersive experience," says Stechschulte.

"It wasn't meant to stand proud of any fit and finish. We had on this project so many world famous [interior] designers and architects and lighting designers, [the goal was] to work in harmony with one another and make it seem when you are walking through the area that [the lighting] was seamless and coordinated — not an afterthought," says Stechschulte.

Illuminating Concepts Studio Manager Kira Crossman, who worked closely on the CityCenter's lighting scheme, adds: "Traditionally, when you're talking about Las Vegas, everything is themed. The theme here was to not have a theme," she says. "It's contemporary, high-end design, with fine art dispersed throughout the space and unusual, custom lighting features — all of it very modern in nature."

CITYCENTER LIGHTING DESIGN FIRMS

Aria Podium Interior Venues
Design: L'Observatoire, Domingo Gonzalez Assoc. (DGA), Fisher Marantz Stone (FMS)

Construction
Administration: Illuminating Concepts (IC)

Aria Podium Exterior, Hotel Tower Exterior
Concept Design: Brandston Partnership Inc. (BPI)

Design and Construction
Administration: IC

Aria Interior, Super Penthouses Suites, Convention Center
Design and Construction
Administration: BPI
Executive Lighting
Design: IC

Aria Buffet
Design: Derek Porter Studio
Construction
Administration: IC

Aria Cafe Courtyard
Design: Focus Lighting
Executive Lighting
Design: IC

Aria Haze Nightclub
Conceptual Design: FMS
Design and Construction
Administration: IC

Aria Coffee Shop
Conceptual Design: Horton Lees Brogden (HLB)
Design and Construction
Administration: IC

Aria Executive Office
Design: HE Banks
Construction
Administration: IC

Aria Spa and Salon
Conceptual Design: Super Potato
Design and Construction
Administration: IC

Mandarin Interior
Conceptual: Isometrix
Exterior Design, Interior Construction
Administration: IC

Vdara
Exterior Design: CBB
Interior Design: Lumenarch
Construction
Administration: IC

CITYCENTER ARCHITECTURAL LIGHTING MANUFACTURERS

Controls: Lutron
Cove: Bartco, Celestial Lighting, Creative Light Source, CV Lighting, Electrix, Insight, Lighting Industry Technologies (LIT), Nippo, Philips Color Kinetics, Traxon
Custom Chandeliers/Features: Creative Light Source, Tivoli, Yesco
Downlighting: A-light, Belfer, Cooper Lighting, Edison Price, Kurt Versen, Selux
Exterior: Bega, Elliptipar, Erco, Hunza, Hydrel, Ilight, Lumascope, Philips Color Kinetics, We-ef
Gels/Filters: Abresia, Rosco
Ingrade: BK Lighting, Design Plan, Targetti
Lamps: Osram Sylvania
Task/Millwork: Alkco, Ardee, GE Lighting, GVA, Ilight, IO Lighting, J&J Lighting, Jesco, LIT, Lucifer, Prima Lighting, Sistemalux, Stylmark, Tivoli, Tokistar, USAI, Visual Lighting Technologies
Track: Amerlux, Bruck, Inter-Lux, Lite Lab, Nordic, Tech Lighting

Aria Resort & Casino

Even from afar, Aria's two breathtaking curvilinear steel-and-glass towers that pierce the Las Vegas skyline make a statement of what awaits inside. Designed by Pelli Clarke Pelli, the crystalline architectural gem gleams in the desert light. Aria was designed with an appreciation for soaring open spaces, evident from the three-story lobby to its guestrooms, all filled with natural light to evoke breadth and freedom.

Inside, organic elements such as lush foliage, wood and stone tame the gleaming metal exterior. Aria's stats are staggering: 4,000 guest rooms, a 150,000-square-foot casino, an 80,000-square-foot spa, 10 chic bars and lounges, several trendy restaurants, a 1,840-seat theater, among other treats.

With so much going on, lighting elements are weaved expertly throughout the structure to emphasize the architecture, commitment to sustainability and natural mood.

"In the footpath area adjacent to the gaming floor, there are ceiling panels, and behind the ceiling panels, a number of halogen source downlights that shine through, creating a dappled

tree effect, which makes it inviting and warm," describes Stechschulte. Inside the gaming area, architectural slots in the ceiling — with focusable halogen sources tucked inside — highlight the architectural features or add pools of light on the footpath, "creating visual way finding," she adds. Inside the casino, undulating wood canopies that have the lighting integrated into them appear to float over the table games. Low-glare light sources were carefully placed to ensure that nothing disturbed patrons' eyes.

Crossman describes the lighting scheme over the table games as "one of the most successful table game lighting systems that we have seen to date."

In the interior common areas not adjacent to the gaming floor, such as the registration lobby, pool level promenade area above the casino and pool deck, there are several restaurants and retail venues. Here, the lighting was approached very differently than in the casino, Stechschulte says. "The materials within the areas were different, and as such, so was the lighting. The [feel] was more contemporary, the sources changed to

color-corrected, more energy-efficient metal halide sources," she says. "And they were used effectively to create nice illumination and drama within the area, which is not typically what you think of when you're talking about metal halide."

Intimacy via Illumination

With so many lighting design firms and other players involved within Aria's 39 venues alone, there simply wasn't an overarching lighting theme, says Crossman. "There were so many different designers and they all had very unique qualities, but the goal was to create an intimate feel."

Inside the sprawling Aria Buffet, designed by lighting firm Derek Porter Studio, guests are greeted by what looks like a dazzling sea of tubes glistening from the ceiling. The ceiling consists of a wrapper panel system backlit by T5 fluorescent lighting. In addition, 1,497 LED-illuminated glass tubes from Yesco and 435 MR16 glass tubes from Shaper are dispersed throughout the ceiling, creating two enormous "chandeliers." The singular, decorative Shaper

pendants dangle above dining tables in the seating area.

Although the conceptual lighting design plans were done by Derek Porter Studio, budget constraints led to Illuminating Concepts taking over for the construction and execution of the lighting. "We had to create a solution that was cost-effective, quick to manufacture, easy to install, easy to maintain, and have it aesthetically look and meet the requirement of clients," says Stechschulte. "No easy feat."

While Super Potato handled the conceptual lighting design of the Aria Spa and Salon, Illuminating Concepts assumed the design development, construction documentation and execution of the lighting design. Various striking lighting elements come together to create a serene oasis. Along the spa walk, a grandiose stone corridor, internally illuminated fluorescent water features are placed strategically between the large stones along floor and walls to create a glowing effect, with soothing water streaming over.

Further along in the reception area, LED strips at the base of the stones point back at the water to create a dazzling sparkle effect: "The water floats on the top and spills over the edges onto a bed of river stones. The lighting is in place so you get a sparkle against the riverbed stones," she says. In the spa's salt treatment room, a series of large blocks of salt — used for its purifying qualities — create walls that are backlit with LED fixture technology from Philips Color Kinetics. "Integrating LED products where it makes the most sense helped us a lot with meeting and exceeding the energy codes," says Stechschulte.

Mandarin Oriental

Mandarin Oriental Las Vegas, a luxurious hotel and residential property, offers a chic and elegant respite — offset with subtle Oriental motifs — from the bustling Strip. Designed by Architect Kohn Pedersen Fox, the 47-story non-gaming hotel encompasses 392 guest rooms, a lush spa, bar and lounge, several restaurants, meeting and social event spaces, a pool, and 225 luxury condominiums occupying the top floors. Lighting firm Isometrix handled the interior conceptual plans with Illuminating Concepts as the Executive Lighting Consultant.

The Spa at Mandarin Oriental is a two-level, 27,000-square-foot oasis with 17 treatment rooms inspired by 1930s Shanghai. Inside the Hammam and Rhassoul treatment room, subtle lighting effects — such as the ceiling punctuated with twinkling lights and glowing elements throughout — work behind the scenes for an ethereal vibe.

Located on the 23rd floor, the Mandarin Bar's unique puzzle ceiling is comprised of a series of custom fixtures with edge lighting meant to glow from within. "It almost lifts the ceiling to create the wide-open vista for the view from the surrounding windows," she says. Internally illuminated large pendants with well-placed direct sources in between highlight the interior space for a calming effect.

Multiple layers of lighting — from internally glowing uplights to creative decorative chandeliers — contribute to the eclectic appeal of Twist, an elegant restaurant featuring three-star Michelin Chef Pierre Gagnaire.

In the airy Sky Lounge, integral lighting enhances the interior elements and features; the finish selected for the walls lends itself well to the grazing LED lighting.



Ingrade lighting by LIT accentuates Aria's City Bar. The back bar wine display features uplight of integrated art glass with Tivoli LED sources, and the ceiling slots up top bask the space in a soft glow.



Consistent with its global brand, the Mandarin Oriental Las Vegas offers an elegant respite from the bustling Strip.

Vdara Hotel & Spa

The internationally inspired 57-story all-suite hotel and spa is connected to Bellagio and adjacent to Aria, offering simultaneous access to and escape from the excitement of the Strip. Designed by RV Architecture and Cline Bettridge Bernstein (interior tower and public areas, and exterior tower and public areas) and Lumenarch (interior lobby lounge), it includes the Silk Road restaurant, 1,495 contemporary hotel suites, the Vdara Health & Beauty spa, the Sky Pool & Lounge and more.

Lighting alternates between subtle and bold throughout Silk Road. "The finishes and fit out within the space emulate a sense of culture and style," says Stechschulte. "The lighting is placed such that the environment is intimate and soft, but still very bold and rich. The lighting does not overcome the space, but works in concert with it."

Inside the sophisticated Bar Vdara lobby lounge, the lighting emphasizes organic motifs. "There is a sense of whimsy; there are swings, internally illuminated tables and uplit organic screens," she describes. "The reflecting pool located in the exterior seating area, in combination with the other elements, creates a wonderfully creative space."



Natural motifs are all the rage inside the sophisticated Bar Vdara lobby lounge, with internally illuminated tables and uplit organic screens.

All Photos courtesy of MGM MIRAGE.

"The lighting elements and fixtures work together to highlight the various features, not compete with them," Stechschulte emphasizes — a recurring tenet throughout CityCenter. "The lighting is meant to be an integrated solution," she says. The one-of-a-kind series of decorative fixtures found throughout help to anchor each venue and create a sense of place and style, she adds.

"Each area is so different," says Stechschulte. "Remember: It's meant to be a city within a city. It allows you to use different brushstrokes for each space or building, but still have a beautiful lighting design."

Sustainability Story

One common thread among the eclectic CityCenter's many venues is the project's overarching commitment to sustainability. With six LEED Gold-certified buildings by the U.S. Green Building Council — including Aria, Mandarin Oriental and Vdara — the 18 million-square-foot metropolis is one of the world's largest sustainable communities.

Of course, lighting played an integral role in the various buildings' ability to earn LEED certification. Generally speaking, the lighting firms involved were cognizant of opportunities to use low-wattage, high-efficacy sources — whether metal halides, LEDs or halogen-enhanced incandescents — and only using the wattage that's appropriate, says Stechschulte. "This carried all the way through the purchase of all the fixtures, as

most of the fixtures required de-rated UL labels."

The significance of a project of this scale and complexity achieving LEED certification is a major step forward in terms of sustainable hospitality design, Stechschulte says. "It's energy-efficient, it's thoughtful. There's a level of consciousness related to the environment."

Upping the Ante

CityCenter's unique architecture, a key strength, also posed a formidable challenge from a lighting perspective. Stechschulte points to the curvilinear elliptical-shaped salon privé in the Aria — private gaming rooms for high rollers — as an example. From the location of the lights to the viewing angles and everything in between, the multiple design firms involved had to make sure the lighting delivered on the promise of the project and expectations of the discerning clients.

The sheer number of players who were part of the development was another challenge, but Illuminating Concepts' understanding of the approval process and "how to push through an issue" was a large part of why the project was successful, says Crossman. The firm was also tasked with ensuring that its various elements and changes did not add cost during the construction phase.

On this venture, Illuminating Concepts was the first executive lighting design firm on a project, as well as being the first such firm on a project of this size. It's also the first project of this size to get LEED certification. "We [are] pioneers in that respect," says Crossman.