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Planning Commission Staff Report

Project Type: 2nd Amended Architectural Elevations

Meeting Date: February 13, 2017

From: Cecilia Hernandez
Project Planner

Cc: Justin Wyse, Director of Planning & Development Services

Location: 17485 North Outer 40 Road

Applicant: Frisella Properties, LLC

Description: **MPD Investments, Lot 1 (Metro Lighting) 2nd AAE:** Architectural Elevations for a 4.02 acre tract of land zoned “PI” Planned Industrial District located west of Boone’s Crossing, and north of North Outer 40 Road (17U520148).

PROPOSAL SUMMARY

The request is for the addition of 36 color-changing LED up-lighting on a single-story building (as shown in the image below) within the MPD Investments development. These fixtures are already in place, and were installed without going through the necessary approval process. When a notice of violation was given, to the property owner the lights were turned off in order to go through the necessary approval process.

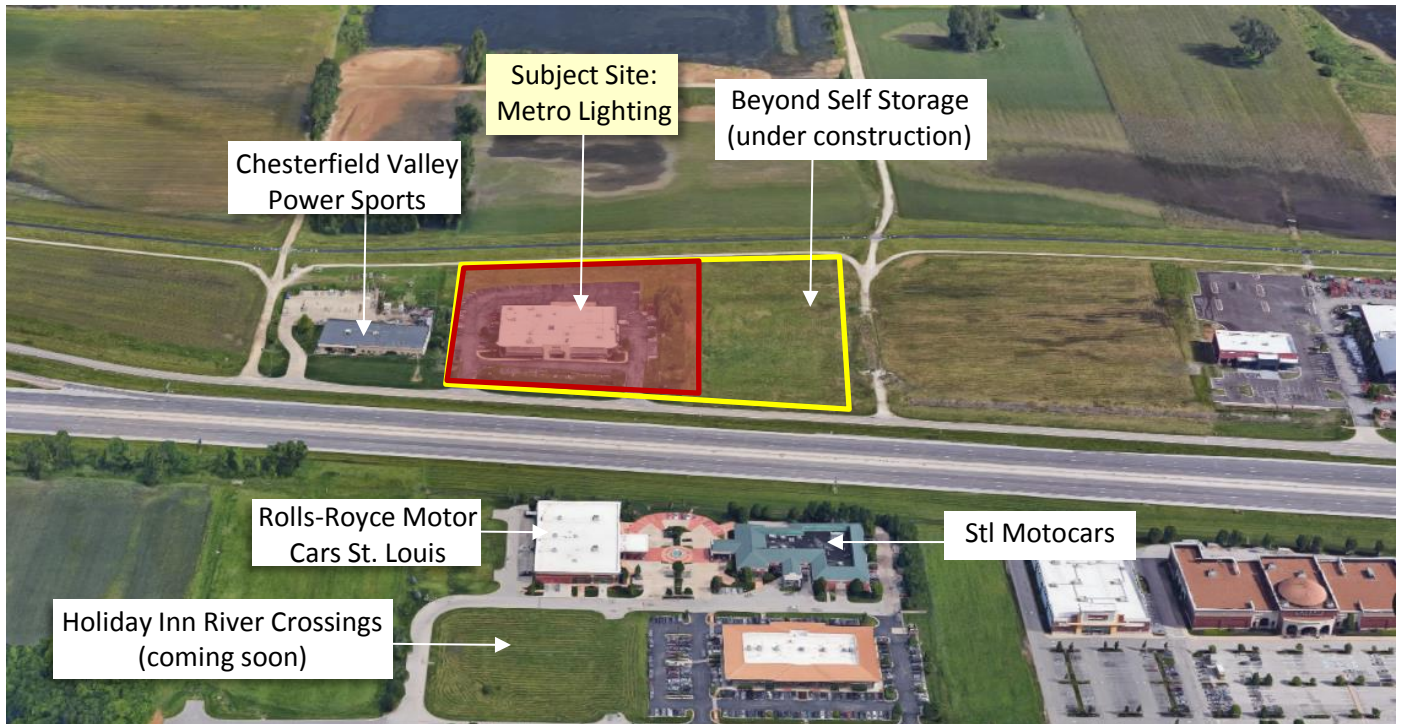
The applicant has submitted a statement of design which is attached as a part of the submittal packet. There are no other changes proposed in this application.



Daytime image



Evening Image



HISTORY OF SUBJECT SITE

According to St Louis County records, the building was built in 1989. Over the years there have been many amendments to elevations and to the site itself.

STAFF ANALYSIS

The subject site is zoned “PI” Planned Industrial District under the terms and conditions of City of Chesterfield Ordinance 2411. The subject site is located within the Chesterfield Valley sub area identified by the City’s Comprehensive Plan, and the following Chesterfield Valley Design Policies are applicable:

- *Facades of Buildings Along I-64/US 40 – Care should be taken to make sure that any portion of a building that can be viewed from I-64/US 40 conveys the image of high-quality office or commercial development and should be equally uniform in materials and attractiveness as the primary façade of the building if it does not face I-64/US 40.*
- *Lighting of Buildings Along I-64/US 40 – The facades of buildings facing I-64/US 40 should be lighted to provide an attractive image at night for individuals traveling along I-64/US 40. Accent lighting, as opposed to flood lighting should be used.*

The applicant is proposing a significant amount of façade accent lighting on the southern elevation, facing I-64/US 40. This accent lighting consists of projections of intense colored light across the façade (as seen in the images in this report). The applicant has submitted additional images of the proposed accent lighting, and the light fixture cut sheets are attached to this report.

Unified Development Code (UDC):

The UDC has a number of requirements and regulations which are applicable to the project, including lighting standards and architectural review design standards.

Lighting Standards:

While the Unified Development Code does require that all lighting be fully shielded, cut off optics, there is a provision in the UDC ([Sec. 31-04-03L.2](#)) which allows the Planning Commission to approve decorative lighting fixtures when it can be proven that there will be no off-site glare light trespass, and the proposed fixtures will improve the appearance of the site.

As identified by the applicant in the statement of design attached to this report, lighting shield guards would be used to ensure that no light leakage is emitted into the sky. Additionally, the Architectural Review Board viewed the fixtures as favorable to the appearance of the building.

Design Standards:

The UDC requires that the exterior building lighting be architecturally integrated with the building style, material, and color, specifying that the color of exterior lamps should be consistent with that on surrounding buildings.

The proposed exterior building lighting is integrated with the architectural elements of the building as it aligns with the solar panel awnings, and the central archway of the building, exhibiting the architecture of the building. The ARB did discuss that the lighting was tastefully integrated into the design of the building and that as long as the colors were limited to ensure there was no “Las Vegas effect,” they thought it was nice. It should be noted, however, that while the various colors of the exterior lamps show no consistency with that on surrounding buildings, this area has not been fully developed and thus may set a precedent for future development.

Additionally, the UDC provides specific design requirements for the Chesterfield Valley which are to be applied to commercial and industrial developments. The applicable items are as follows:

- 1. Utilize architectural elements from the front façade on the side and rear of the structure.*
- 2. Utilize accent lighting and avoid flood lighting for façade and buildings facing I-64/US 40.*

The proposed lighting elements are only proposed to be utilized on the front façade of the structure, and while the proposed architectural lighting elements are not flood lights, their architectural application on the building does flood the façade with color, as seen in the images in this report.

Signage:

A significant amount of discussion took place at the ARB meeting regarding the use of the proposed lighting as a sign. While it could be argued that the Metro Lighting Company using this type of lighting on the façade of their building draws attention to their business in an advertising function similar to signage, the UDC treats this type of lighting application as an architectural element of the building rather than signage. Therefore, this lighting application is not subject to review under the City’s signage regulations.

Images of proposed colored LED up-lighting:



ARCHITECTURAL REVIEW BOARD (ARB) RECOMMENDATION

Applications of accent lighting can be permitted if they are found to be architecturally integrated with the building design and harmonious with the surrounding area. As such, Staff requested a recommendation from the ARB who, with a vote of 6-0, has forwarded the Amended Architectural Elevations to the Planning Commission, with a recommendation for approval with the following conditions:

1. The colors be limited to two, with a primary color along the band above the solar panels and, if desired, a secondary color under the archway.
2. The colors be static for a 24-hour period, including from sun up to sun down.

Following the ARB's review, the applicant indicated to Staff that he would like for the Planning Commission to reconsider the ARB's second recommendation that the colors be static for a 24-hour period, including from sun up to sun down. It is the applicant's opinion that the changing colors is a positive feature, and that its gradual nature would not pose any safety concerns.

ARB Discussion

While the ARB did forward the Amended Architectural Elevations to the Planning Commission with a recommendation for approval with conditions as above, it should be noted that the discussion at the meeting was extensive. The Board discussed the difficulty in approving this development because it could set a precedent for future development in this area. The board concluded, however, that perhaps an approval at this location could be set apart from others because of its location and proximity to I-64/US 40, and that there is no residential nearby.

Another major point of discussion was the use of the lighting by a lighting company could be construed as signage. Staff, again, made it clear that the Unified Development Code (UDC) does not address lighting as signage, but rather as an architectural element. The board therefore concluded that the lighting is attractive on this building and is well integrated into building design.

Finally, the discussion regarding the use of this lighting as signage led to the recommended conditions above. The board felt that the changing colors could give a "Las Vegas" effect which was undesirable, and the colors should be static for a full evening. Additionally, a concern was raised that the capabilities of these lights was endless. To ensure that the lights could not be set to rainbow, or zebra stripes, the board decided that it would be beneficial to limit the colors to a maximum of two, with a primary color along the band above the solar panels and, if desired, a secondary color under the archway.

DEPARTMENTAL INPUT

. Staff has concluded review of this request and is seeking action from the Planning Commission on the 2nd Amended Architectural Elevations for MPD Investments, Lot 1 (Metro Lighting).

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) “I move to approve (or deny) the 2nd Amended Architectural Elevations for MPD Investments, Lot 1 (Metro Lighting).”
- 2) “I move to approve (or deny) the 2nd Amended Architectural Elevations for MPD Investments, Lot 1 (Metro Lighting), with the following conditions...” (Conditions may be added, eliminated, altered or modified)
 1. The colors be limited to two, with a primary color along the band above the solar panels and, if desired, a secondary color under the archway.
 2. The colors be static for a 24-hour period, including from sun up to sun down.

Attachments

1. Statement of Design
2. Lighting Cut-sheets
3. Day-time elevation
4. Night-time roofline images
5. Night-lighting example renderings

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City of Chesterfield
Department of Public Services

STATEMENT OF DESIGN



Corporate Office: 6801 Hoffman St. Louis MO 63139 314-645-5656

STATEMENT OF DESIGN FOR METRO CHESTERFIELD

The lighting project for METRO Lighting/METRO Electric Supply in Chesterfield was created and designed to enhance and beautify the front façade of our building in a sophisticated, high-tech manner, utilizing the latest in energy-saving LED technology and design. It also provides for safety and security for our customers and employees and those of the twenty-four hour veterinary clinic that shares the building.

The fixtures are manufactured by Color Kinetics, the leading manufacturer in the world of LED, color changing lighting technology and are sold throughout the world in a large part because of their unmatched innovations. The fixtures themselves can change color modes to include and display the entire color spectrum. Our plan is to have them display the entire color spectrum programmed over a long period of time which would not cause any spectacular and/or sudden changes to anyone viewing them from the highway or any other location. A zip-drive video (marked METRO) of the fixtures changing colors on the façade were included in the original packet and will be sent to you again. The specific fixtures that adorn the METRO Lighting building's façade have won dozens of awards and accolades from around the world for their innovation. These awards include their lighting of churches, monuments, government buildings and even city halls to name just a few.

The building's highway frontage is visible to thousands of vehicles passing each day. Obviously, we wanted a very tasteful look to reflect our professional image in the lighting industry and to the public. To avoid distraction to drivers, the LED's change color very gradually in the color-changing mode so that there is not a noticeable color change while traffic is driving by the building. To those driving by one evening it would seem that the building is lit in blue and on another evening it may seem to be lit up in green and so on. There is also a single-color mode where the LED's do not change colors. The fixtures themselves were chosen in part to physically fit unnoticed above our unique awning-style energy-saving solar panels. We have had dozens of compliments on how stylish the building looks with its lit façade and how nice the lighting enhances it. In the opinion of many and even discounting the hundreds of store signs in their many different colors, shapes and sizes that blare out on our streets and byways each evening, our façade is a very elegant way to adorn the front of our building, promote energy conservation and add sophistication, value and prestige to the building and to the City of Chesterfield.

The design has two distinct components: the small center arch located in the higher portion of the façade in the middle of the building, projects changing colors or, when programmed, one color across the arch itself. The second portion of the project projects color changing or, again, one color across each side of the center façade from the center façade to either end of the building. Both are simple but sophisticated ways to light a building in a classic manner.

The system is controlled and programmed by a plug-in controller within the building. It can be programmed to display colors to commemorate dozens of different events. To mention just a few:

Breast Cancer Awareness Month
Self-Care Women's Health

Christmas
Easter

National Birth Defects Prevention Month
Prostate Cancer Awareness
Cervical Awareness Month
American Heart Month
National Alcohol Awareness Month
National Birth Defects Prevention Month
Bullying Awareness
American Diabetes Month
National Cancer Prevention Month
National Men's Health Week

Memorial Day
Independence Day
Columbus Day
St. Patrick's Day
Labor Day
Cardinals
Blues
MIZZOU

Attached you will find color photos showing the front, sides and back of the building showing the building elevations. Also attached are aerials of the lighting at night showing how the lighting does not project past the height of the building. The fixtures are fully adjustable to angle properly on the façade so the light they emit does not project into the sky. We also purchased and installed an additional accessory, lighting shield guards, as a secondary assurance that there is no light leakage upward into the sky.

In addition, you will find included elevations on a number of different scenarios of the colors that would be included in our request. We are also including a video of the full color spectrum mode and the speed of the changing colors of this program.

We apologize for not realizing that a permit was required. There was no hard wiring and as high-tech as the fixtures are they simply screw into the building and plug into one another. We sincerely hope that you see the carbon benefits and the enhancements that this project brings to the building and to the community itself and allow for its approval. Thank you.

Sincerely,

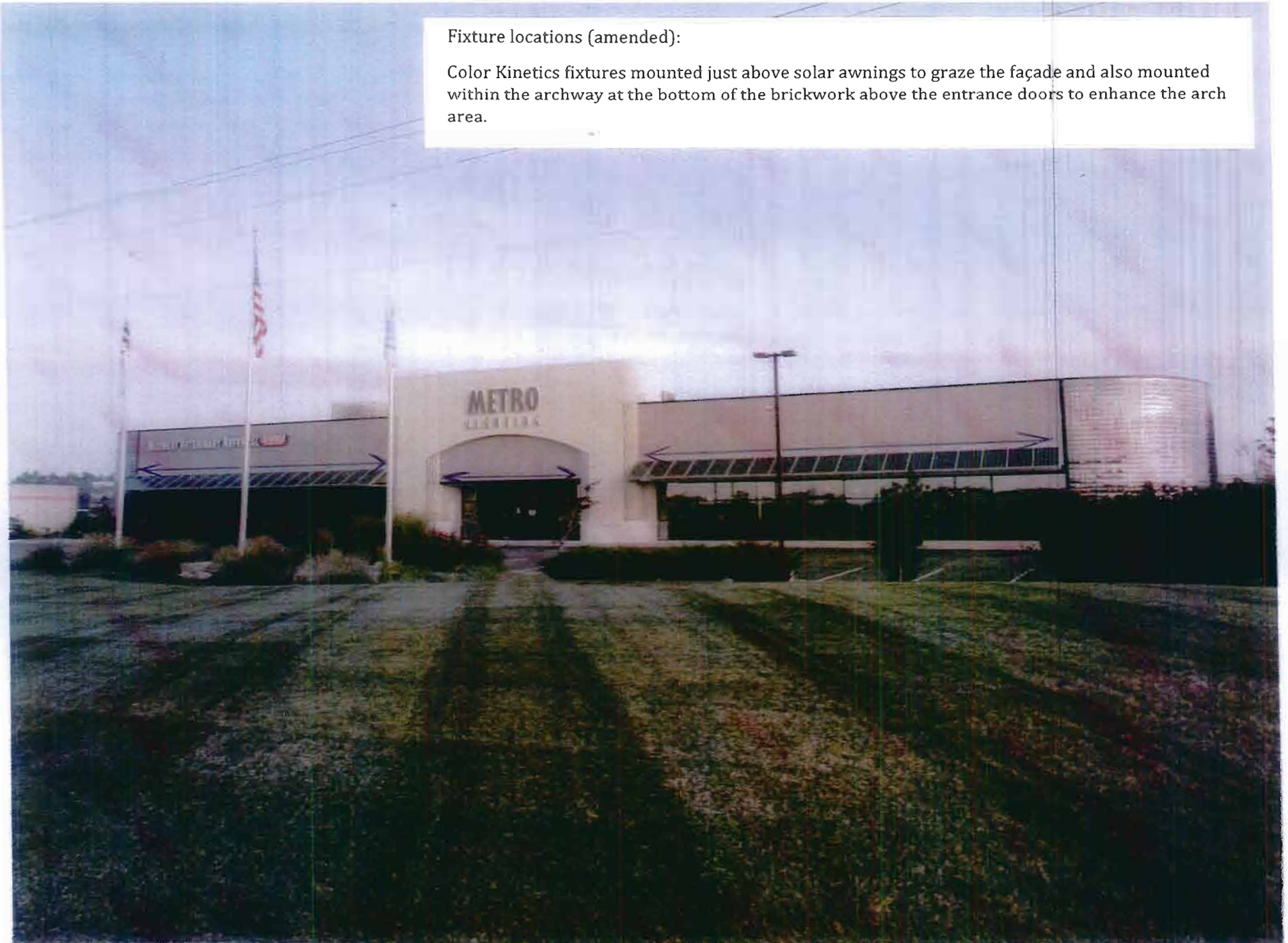
William Frisella
President
METRO Lighting/METRO Electric Supply

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Department of Public Services

FIXTURE CUT SHEETS

Fixture locations (amended):

Color Kinetics fixtures mounted just above solar awnings to graze the façade and also mounted within the archway at the bottom of the brickwork above the entrance doors to enhance the arch area.





ColorGraze MX4 Powercore

Exterior premium LED wall grazing fixtures with extended color range

PHILIPS





Date: _____ Type: _____

Firm Name: _____

Project: _____

ColorGraze MX4 Powercore

RGBW, 15° x 30° beam angle

Exterior premium LED wall grazing fixtures with extended color range

Intelligent, high-performance, RGBW fixtures offer an expanded palette of intensely saturated full-color light output in a variety of beam angles. Low-profile housing, connectorized cabling, a universal power input range, and direct line-voltage operation make fixtures easy to install and operate.

- Channels of neutral white LEDs seamlessly blend with channels of red, green, and blue LEDs. In addition to the millions of saturated colors achievable with RGB lighting fixtures, RGBW fixtures provide high-quality white light.

- Available in four standard lengths and five standard beam angles. Addressable in 305 mm (1 ft) segments for fine control of color-changing effects and light shows.

- Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Jumper Cables.

- Accepts a power input range of 100 – 277 VAC for consistent installation in any location.

For detailed product information, please refer to the ColorGraze MX4 Powercore Family Product Guide at www.philipscolorkinetics.com/ls/rgb/colorgraze-mx4-powercore/

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	305 mm (1 ft)	610 mm (2 ft)	914 mm (3 ft)	1219 mm (4 ft)
	Lumens*	622	1244	1866	2488
Output	LED Channels	Red / Green / Blue / 4000 K			
	Lumen Maintenance†	70,000 hours L70 @ 25° C 65,000 hours L70 @ 50° C 75,000 hours L50 @ 25° C 70,000 hours L50 @ 50° C			
	Input Voltage	100 – 277 VAC, auto-ranging, 50 / 60 Hz			
	Power Consumption (Max. at full output, steady state)	18.5 W	37 W	55.5 W	74 W
Control	Interface	Data Enabler Pro (DMX or Ethernet)			
	Control System	Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers			
	Dimensions (Height x Width x Depth)	69 x 305 x 71 mm (2.7 x 12 x 2.8 in)	69 x 610 x 71 mm (2.7 x 24 x 2.8 in)	69 x 914 x 71 mm (2.7 x 36 x 2.8 in)	69 x 1219 x 71 mm (2.7 x 48 x 2.8 in)
	Weight	1.0 kg (2.1 lb)	2.1 kg (4.6 lb)	3.2 kg (7.1 lb)	4.2 kg (9.3 lb)
	Housing	Extruded anodized aluminum			
	Lens	Clear polycarbonate			
Physical	Fixture Connectors	Integral male / female waterproof connectors			
	Mounting	Multi-positional, constant torque locking hinges			
	Temperature	-40° – 50° C (-40° – 122° F) Operating -20° – 50° C (-4° – 122° F) Startup -40° – 80° C (-40° – 176° F) Storage			
	Humidity	0 – 95%, non-condensing			
	Fixture Run Lengths	To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_cool/			
Certification and Safety	Certification	UL / cUL, FCC Class A, CE, PSE, C-Tick, CQC			
	Environment	Dry / Damp / Wet Location, IP66			

* 305 mm (1 ft) lumen output measurements comply with IES LM-79-08 testing procedures. 610 mm (2 ft), 914 mm (3 ft), and 1219 mm (4 ft) measurements are estimated based on the 305 mm (1 ft) measurements.



† L70 = 70% lumen maintenance (when light output drops below 70% of initial output). L50 = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.

PHILIPS

ColorGraze MX4 Powercore

Exterior premium LED wall grazing fixtures with extended color range

The new ColorGraze MX4 Powercore family extends the range and flexibility of the popular line of high-performance, full-color LED grazing fixtures from Philips Color Kinetics. These intelligent RGBW or RGBA fixtures offer an expanded palette of intensely saturated full-color light output in a variety of beam angles. Low-profile housing, connectorized cabling, a universal power input range, and direct line-voltage operation make ColorGraze MX4 Powercore fixtures easy to install and operate. Custom lengths, LED channels, beam angles, housing colors, and power consumption levels produce hundreds of possible configurations and light distribution patterns to support virtually any façade or surface illumination application.

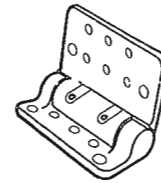
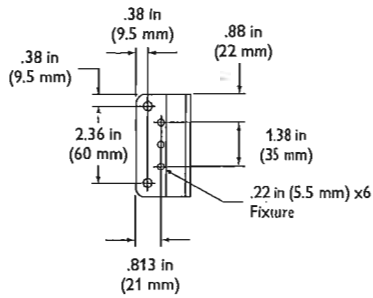
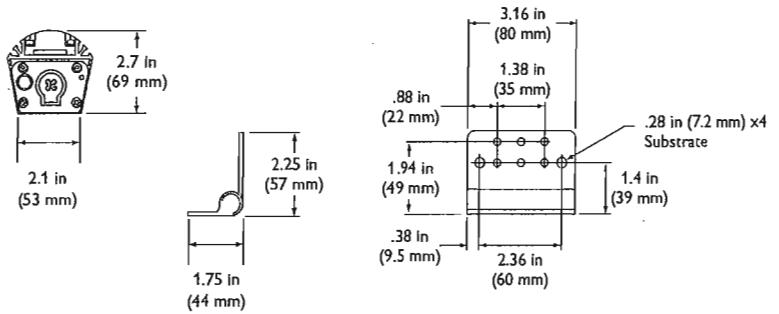
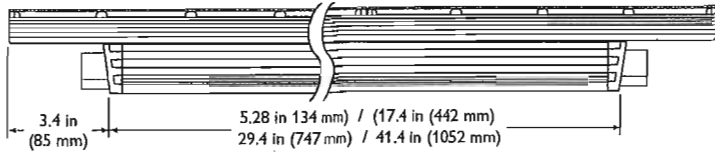
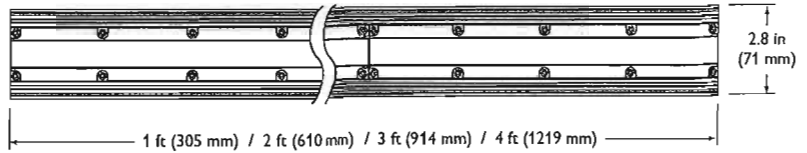
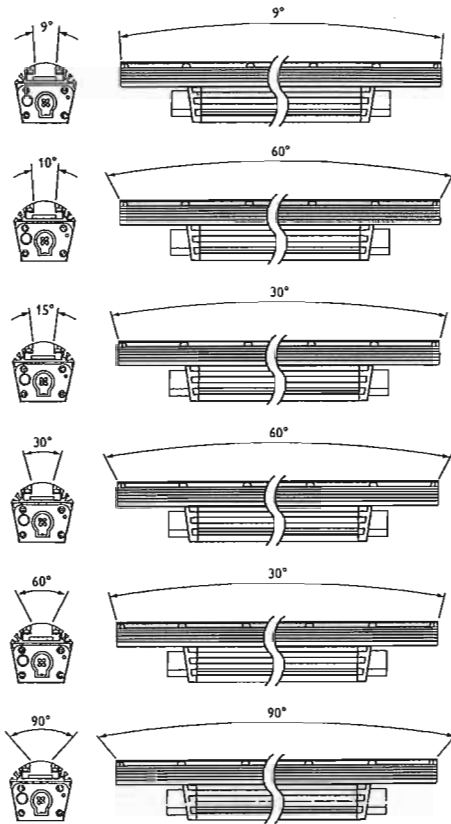
- Tailor light output to specific applications — Available in four standard lengths, with standard 9° x 9°, 10° x 60°, 15° x 30°, 30° x 60° and 60° x 30° beam angles. Individually addressable 305 mm (1 ft) segments accommodate fine control of color-changing effects and pre-programmed light shows.
- High-performance illumination and beam quality — ColorGraze MX4 Powercore delivers well over 500 lumens of color-changing light per foot. Superior beam quality offers striation-free saturation for several feet from fixture placement with no visible light scalloping between fixtures.
- Flexible color control — Channels of amber or neutral white LEDs seamlessly blend with channels of red, green, and blue LEDs to produce a significantly expanded color palette. In addition to the millions of saturated colors achievable with standard RGB lighting fixtures, ColorGraze MX4 Powercore RGBW fixtures produce an extended range of subtle pastel colors, while RGBA fixtures create vibrant golds and intense yellows that are more difficult to obtain on standard RGB fixtures.
- Integrates Powercore technology — Powercore technology rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage. The Philips Data Enabler Pro merges line voltage with control and delivers them to the fixture over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Versatile installation options — Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Jumper Cables. Multiple cable lengths support a variety of layouts. Constant torque locking hinges offer simple and consistent position control from various angles. The low-profile aluminum housing accommodates placement within most architectural niches.
- Superior color consistency and accuracy — Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing. Chromasync technology achieves unprecedented consistency of light performance and color precision across multiple fixtures in an installation, while maximizing intensity and color range.
- Industry-leading controls — Fixtures work seamlessly with the complete Philips line of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, as well as third-party controllers.
- Universal power input range — Fixtures accept a universal power input range of 100 – 277 VAC for consistent installation anywhere in the world.
- Custom configurations for special applications — Create custom configurations to support special applications by exchanging the LED sources in any channel. Options include white LED color temperatures ranging from 2700 K to 6500 K, Blue, Green, Amber, and Red. 60° x 60° and 90° x 60° beam angles also available. See the ColorGraze MX4 Powercore Ordering Information specification sheet for complete details.



High performance & easy installation

With flexible mounting options, multiple fixture length and beam angle options, integrated Powercore technology, and a discreet low-profile housing rated for use in outdoor locations,

Dimensions



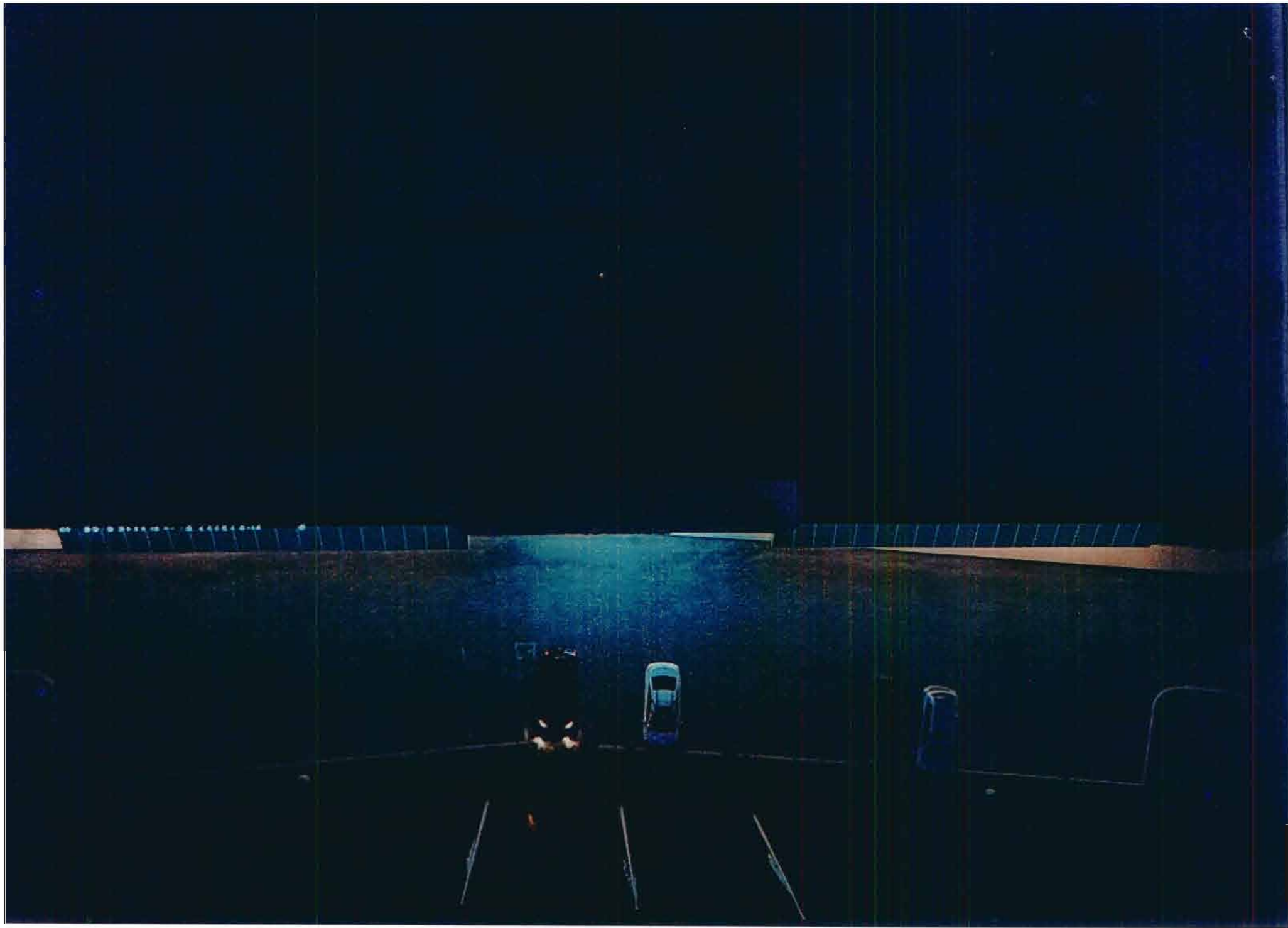
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**ROOF
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METRO
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**ARCHITECTURAL
COLOR
ELEVATIONS**

Breast
Cancer

Prostate
Cancer

Cardinals

STL Blues

Christmas

