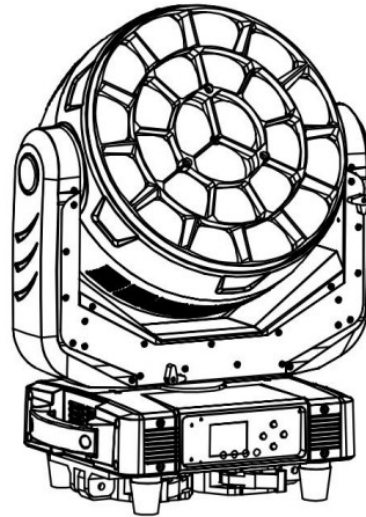


Silhouette Oculus XL Z

24x60w RGBW LED Wash with Pixel Mapping



User Manual

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1. Introduction and Setup

Unpacking and In the Box

Thank you for choosing our Silhouette Oculus XL Z. For your own safety, please read this manual before installing or using the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual for future needs.

In the box you will find:

Silhouette Oculus XL Z Fixture	1
Attached, Fold-Down Clamps	2
2m True1 Power Cable	1
DMX 3-Pin Signal Cable	1

Mounting and Operation

Clamp Mounting: The Silhouette Oculus XL Z moving head provides fold-down clamps which sit in the base on the unit. The folding clamps can swivel freely, and the swivel is tightened down via an allen wrench. The clamps do not have to be removed for floor-standing operation.

As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

Features

- ◆ 24*60w RGBW LED Wash light
- ◆ 24 Individual Pixel-Mapped Zones
- ◆ 3.5°-45° Motorized Zoom
- ◆ Beam Scatter and Rotation
- ◆ DMX or Art-Net Control with RDM

Safety Precautions

Do not expose this fixture to rain or moisture.

Do not spill water or other liquids into or on your unit.

Caution: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

From a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable materials (decoration etc.), and that .5m is kept around the fixture for ventilation.

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

·Don't try to modify the fixture without any instruction by the manufacturer or the appointed repairing agencies.

·Warranty is voided if there are any malfunctions from not following the user manual while operating or any hazardous operation, like shock short circuit, electronic shock, lamp broken, etc.

Customer Support

WARRANTY POLICY

GAMMA LED Vision warrants its products for the periods set below from the date of purchase to be free of manufacturer and workmanship defects. Warranty does not cover normal wear and tear caused by force, negligence or misuse of products. GAMMA LED Vision is not responsible for any damages or injury caused by misuse or improper handling of the products and in accordance with instructions and specifications of manual.

Warranty terms are as follows:

LED Fixtures:

Indoor: 2 Years

Outdoor (IP 54 or higher): 1 Year

Lamp Fixtures: 1 year / excludes the lamp

LED Video Products:

Indoor: 2 Years

Outdoor (IP 54 or higher): 1 Year

Controllers: 2 years

Batteries: 6 months

All Trussing Related Products and Accessories: 1 Year

Please visit WWW.GAMMALEDVISION.COM for complete Limited Warranty terms and contact information.

2. Setup and Operation

Using the LCD Menu and Buttons

The Oculus features Up/Down/Menu/Enter Buttons to navigate the menu. Use "ENTER" to go into the menu, UP/DOWN to make selections, and MENU to go back to a previous menu.

Menu Structure:

Menu	1. Pan Degree	1. 540°, 2. 360°	Sets the pan range, which can be limited to 360° if desired.		
	2. Mic Sense	001-100	Sensitivity for Sound-Active Mode		
	3. Pan Invert	NO/YES	Inverts the Pan Control		
	4. Tilt Invert	NO/YES	Inverts the Tilt Control		
	5. No Signal	1. Black Out, 2. Hold	Sets the behavior on DMX loss. Black out sets the DMX values to zero, whereas "Hold" will hold the last DMX value until DMX is received again or the fixture is restarted.		
	6. Fan Set	1. Auto, 2. Low, 3. High	Sets the fan speed. Warning: Use with caution, if the light is in a hot environment and low is selected, it may shut down due to heat.		
	7. ArtNet Set	ArtNet Enable	1. ON, 2. OFF	Enable or Disable Art-Net Control	
		2. Universe	0-255	Sets the Art-Net Universe	
3. IP Model		1: 2.X.X.X Auto , 2. 10.X.X.X Auto , 3. Custom	Sets the IP address type for Art-Net		
4. Custom		Sets the custom IP address.			
5. SubNet Mask		Sets the Subnet Mask			
8. Default	YES/NO	Resets the Fixture to Factory			

			Defaults – Warning: Use With Caution, this will set the unit to the Chinese language!
	9. Adjust	Password Entry Screen (Up/Down/Up/Down/Enter)	This menu allows you to calibrate the maximum value for each parameter within the light. Use with Caution, as this can cause your lights to be inconsistent across your lighting rig!
Address	001-512	Set the DMX Address	
Mode	1. DMX512	Sets the light in DMX mode	
	2. Auto	Sets the light in Auto Program mode.	
	3. Sound	Sets the light in Sound-Active Mode	
	4. Manual	Sets the light in Manual Mode, and offers a menu to set the values for each parameter.	
	5. Master or Alone	Sets the light in Master/Alone mode. When in this mode, the fixtures may be connected via DMX cable and multiple fixtures may follow a matching pattern.	
Channel	1. 21 CH 2. 25 CH 3. 33 CH 4. 129 CH 5. 106 CH	Sets the DMX channel mode. 106 channel mode not supported.	
Display	Pressing the “Display” option will flip the display.		
Language	English or Chinese	Sets the display language. Use with Caution!	
Reset	1. No, 2. Yes	Selecting “Yes” initiates re-homing of the fixture.	
Information	1. CH Value	Shows active DMX values for all channels	
	2. Temp	Shows Temperature in Celsius	
	3. Soft VX.X	Shows firmware version of light	
	4. IP	Shows IP Address	
	5. Mask	Shows Subnet Mask	

DMX Setup

DMX Basics

DMX512 stands for digital multiplex 512. This means that 512 channels are controlled digitally through 1 data cable.

A channel is a set of 255 steps that are assigned to control attributes in each light. This may be a color like red, green or blue, and intensity, strobe, pan/tilt or other attributes.

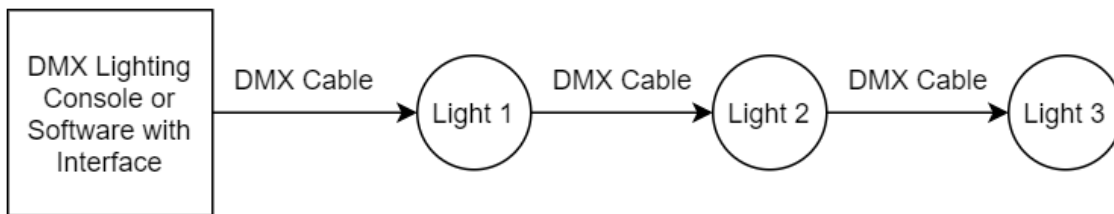
Multiple sets of 512 "universes" may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

DMX Wiring

DMX works by connecting 1 or multiple lights to the output of a DMX lighting console or software with a DMX interface.

DMX lights connect in what is called a "daisy-chain". Your first DMX cable will plug its male DMX connector into the female DMX connector on your lighting console. The remaining female connector will then connect to the DMX input on your first light.

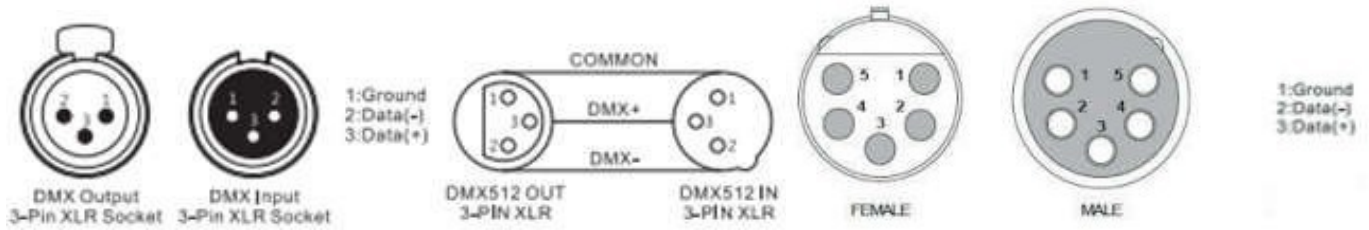
You may then connect your next fixture to the output of your first light, and continue the chain.



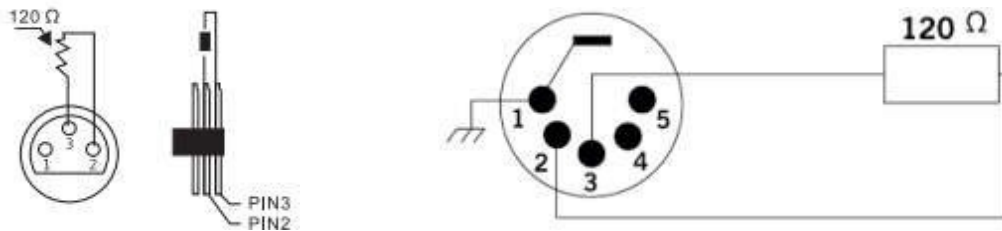
32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).

DMX Cables can be 3-pin or 5-pin. These use the same type of data, and in the 5-pin only pins 1, 2, and 3 are used. The cable should be a 2 conductor, shielded cable of at least 110 ohms resistance. Microphone cable is not DMX cable.

Please refer to the diagram below:



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise and reflections. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below:



DMX Modes and Configuration

The Silhouette Oculus XL Z has multiple DMX modes, sometimes called “personalities”, “profiles”, or as we will use here “modes”.

In general, modes with more DMX channels offer a greater level of control or options but take up more of your output channels on your lighting console or software.

Modes with less DMX channels often offer less control, but may be plenty for your needs. *Depending on your needs and control solution, you may not need channels for automated programs, strobes, or macros – your console may have great effects! In this case, you can use a lesser channel mode and fit more lights per DMX universe.*

View the DMX mode charts below to find the mode that best suits your needs.

DMX Channel Mode Sheet:

See below for the DMX channel layouts of the Silhouette Oculus X: Z:

21 Chan nels	25 Chan nels	33 Chan nels	129 Chan nels	Function	Channel Value	Description
1	10	11	11	Red	0-255	Red for Entire Fixture
2		12	12	Red Fine	0-255	Fine Control of Red
3	11	13	13	Green	0-255	Green for Entire Fixture
4		14	14	Green Fine	0-255	Fine Control of Green
5	12	15	15	Blue	0-255	Blue for Entire Fixture
6		16	16	Blue Fine	0-255	Fine Control of Blue
7	13	17	17	White	0-255	White for Entire Fixture
8		18	18	White Fine	0-255	Fine Control of White
9	14	20	20	Virtual Color Wheel and CTC	0-195	Virtual Color Wheel
					196-200	2800k
					201-205	3200k
					206-210	3800k
					211-215	4200k
					216-220	4700k
					221-225	4800k
					226-230	5200k
231-235	5400k					

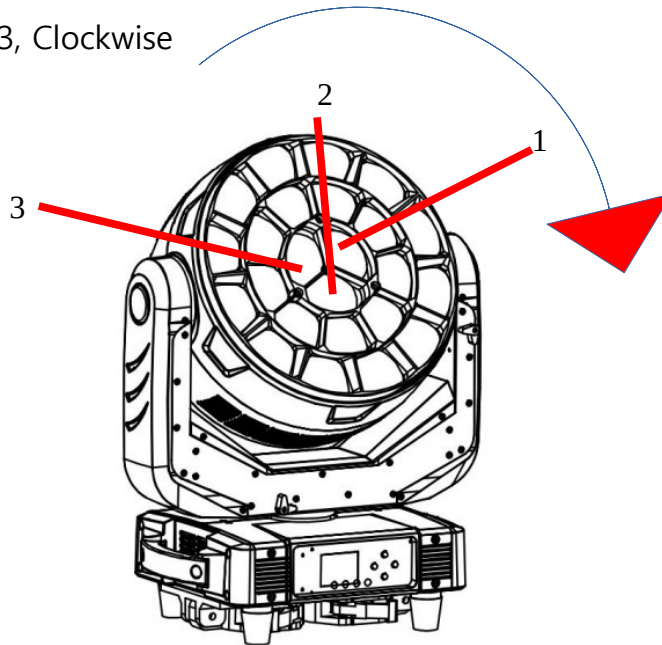
21 Channels	25 Channels	33 Channels	129 Channels	Function	Channel Value	Description
					236-240	5500k
					241-245	5600k
					246-255	5700k
10	15	21	21	Fixed Color Macros	0-255	Color Macros on entire front lens
	16	22	22	Static Shapes Patterns	0-9	No Function
					10-12	Monochromatic Pattern 1
					(Every 3 DMX Values)	Every 3 Values, a new monochromatic pattern is activated. So 10-12, 13-15, etc.
					211-213	Mixed Color Pattern 1
					(Every 3 DMX Values)	Every 3 Values, a new mixed color pattern is activated, thru Mixed Color Pattern 15 at 253-255
	17	23	23	Dynamic Shapes Patterns	0-9	No Function
					10-14	Monochromatic Pattern 1
					(Every 5 DMX Values)	Every 5 Values, a new monochromatic pattern is activated.
					211-213	Mixed Color Pattern 1
					(Every 3 DMX Values)	Every 5 Values, a new mixed color pattern is activated.
	18			Dynamic Pattern Speed	0-127	Pattern Speed, Forward Motion
					128-255	Pattern Speed, Reverse Motion
	19	25	25	Dynamic Pattern Speed II. When using ch. 17, this gives you speed control of the secondary aspect of the pattern.	0-9	No Function
					10-132	Forward, from Fast to Slow
					133-255	Backward, Fast to Slow

21 Chan nels	25 Chan nels	33 Chan nels	129 Chan nels	Function	Channel Value	Description
		27	27	Background Dimmer	0-255	Intensity control for background
		28	28	Background Strobe	0-255	Strobe control for background.
	20	29	29	Background Red	0-255	Red Control for Background of Patterns
	21	30	30	Background Green	0-255	Green Control for Background of Patterns
	22	31	31	Background Blue	0-255	Blue Control for Background of Patterns
	23	32	32	Background White	0-255	White Control for Background of Patterns
		24	24	Pattern Translation	0-255	Modify Dynamic Pattern Scene with Fade Pattern
		26	26	Pattern Effect Fade	0-255	Amount of Pattern Fading
11	8	8	8	Dimmer	0-255	Intensity Control
12		9	9	Dimmer Fine	0-255	Fine Intensity Control
13	9	10	10	Strobe	0-3	Open/ON
					4-203	Variable speed strobe, 1Hz-25Hz
					204-255	Random Strobe
14	1	1	1	Pan	0-255	Pan Control
15	2	2	2	Pan Fine	0-255	Fine Pan
16	3	3	3	Tilt	0-255	Tilt Control
17	4	4	4	Tilt Fine	0-255	Fine Tilt
	5	5	5	Pan/Tilt Speed	0-255	Speed from Fast to Slow
18	6	6	6	Zoom	0-255	3.5°-45° Zoom, Narrow to Wide
19	7	7	7	Lens Rotation	0-155	Lens Indexing
					156-205	Clockwise Rotation, Fast to Slow
					206-255	Counterclockwise Rotation, Slow to Fast

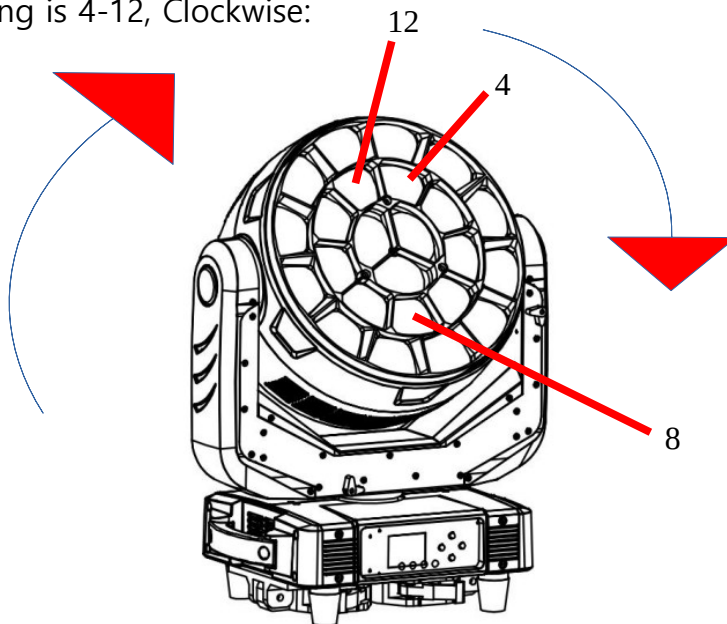
21 Channels	25 Channels	33 Channels	129 Channels	Function	Channel Value	Description
20	24	19	19	Dimming Mode	0-49	Mode 1
					50-99	Mode 2
					100-149	Mode 3
					150-249	Mode 4
21	25	33	33	Reset	1-249	No Function
					250-255	Reset
<i>RGB Cell Control Below – in 129 Channel Mode, these repeat every 4 channels</i>						
			34...	Red	0-255	RGBW for each cell from channels 34-129
			35...	Green	0-255	RGBW for each cell from channels 34-129
			36...	Blue	0-255	RGBW for each cell from channels 34-129
			37...	White	0-255	RGBW for each cell from channels 34-129

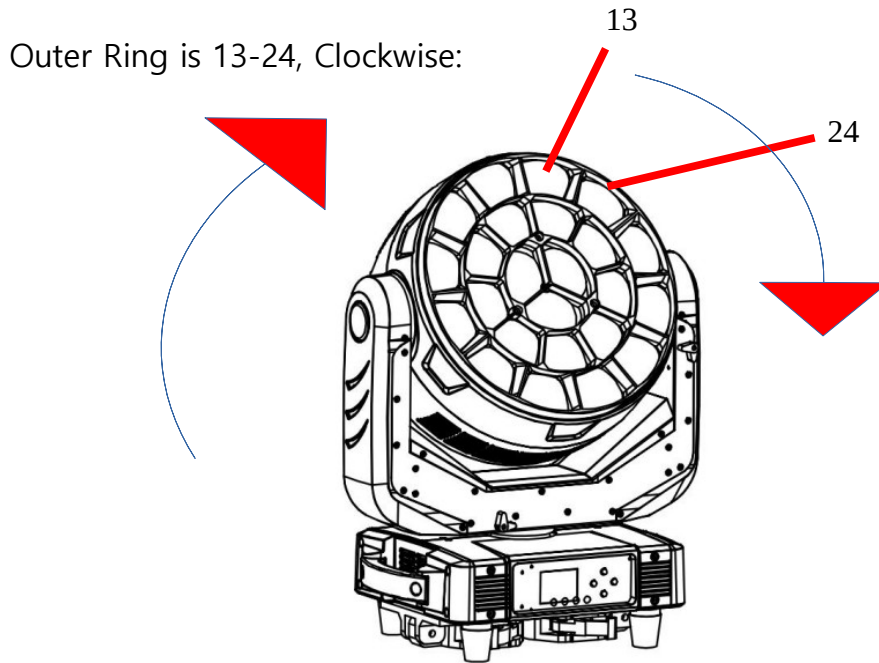
Pixel Layout – 129 Channel Mode:

Center is 1-3, Clockwise



Middle Ring is 4-12, Clockwise:





Example:

Here is a photo of pixels 1, 4, 13, in Red, 2, 5, 14 in Green, 3, 6, 15 in Blue, and the rest are White.



Pan/Tilt Calibration

When creating fixture profiles, it is helpful to know how the pan and tilt operates.

When the Pan and Tilt are at 50%, the yoke is perpendicular to the LCD screen. If you are standing in front of the unit, sitting on the ground, your shoulders are parallel to the yoke.

As you increase the Pan channel, the fixture moves **clockwise**.

When Pan is at 50%, and you increase the tilt, the head points **away** from you.

3. Maintenance

Routine Maintenance

Fan Cleaning

Periodically do a visual inspection of the fans. If they are dirty, power off the unit and use a small electronics vacuum to clean the fans out. Do not use a can of CO2 or an Air Compressor. These will simply blow the dust into the unit and may leave other residue.

Front Lens

The front lens should be cleaned so that light output is maintained.

With the light powered off, use a moist, lint-free cloth. Never use alcohol or solvents to clean the fixture.

Never spray any cleaners on the fixture.

Troubleshooting Problems

The following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work:

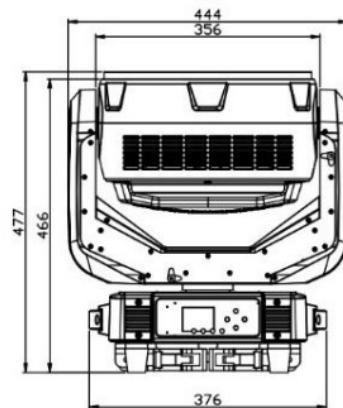
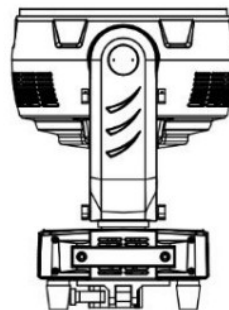
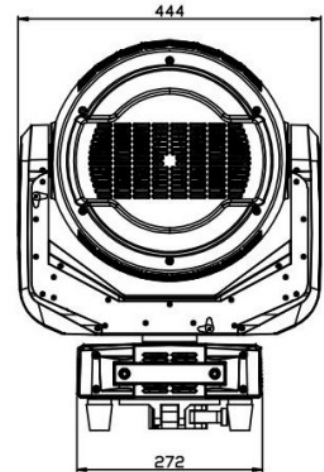
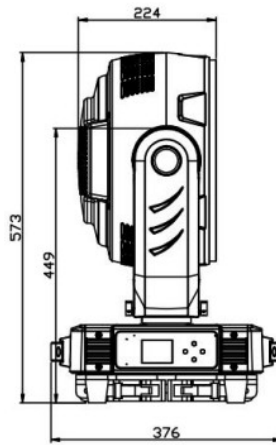
- Check that the unit is plugged in to a working power connector.
- Press the menu button to confirm that the unit is powered on. If the screen does not light up, the unit has no power.

B. Not Responding to the DMX Controller

- Check DMX cables to verify that they are plugged in and functional.
- Check the DMX address and mode – does it match the address and mode patched in the lighting console or software?
- Plug the light directly into the DMX controller with a cable that you know is good. Unplug all other lights – does it work?
- Try to use another DMX controller.

4. Technical Specifications

- 24*60w RGBW LED Wash light
- 1550w
- 24 Individual Pixel-Mapped Cells
- Pan: 540°
- Tilt 270°
- 3 and 5 Pin DMX Jacks
- Ethernet input for Art-Net
- True1 Input
- 3.5°-45° Motorized Zoom
- Beam Scatter and Rotation
- DMX or Art-Net Control with RDM
- Power Factor greater than or equal to 0.98
- AC 100-240v, 50/60Hz
- 57.2 lbs / 25.94 Kgs
- Dimensions: 13.94"x17.48"x18.78"
354x444x477mm
- Box Dimensions: 19.9"x20.87"x24.01" 485x530x610mm
- Working Temperature -10° C to 45° C
- IP20



5. Photometrics

Measured Brightness at Center Point:

Full Zoom 45°

Distance in Feet	Brightness at Full	High CRI Mix Brightness
5	2790	2330
10	700	630
15	330	284
20	200	167
25	161	126

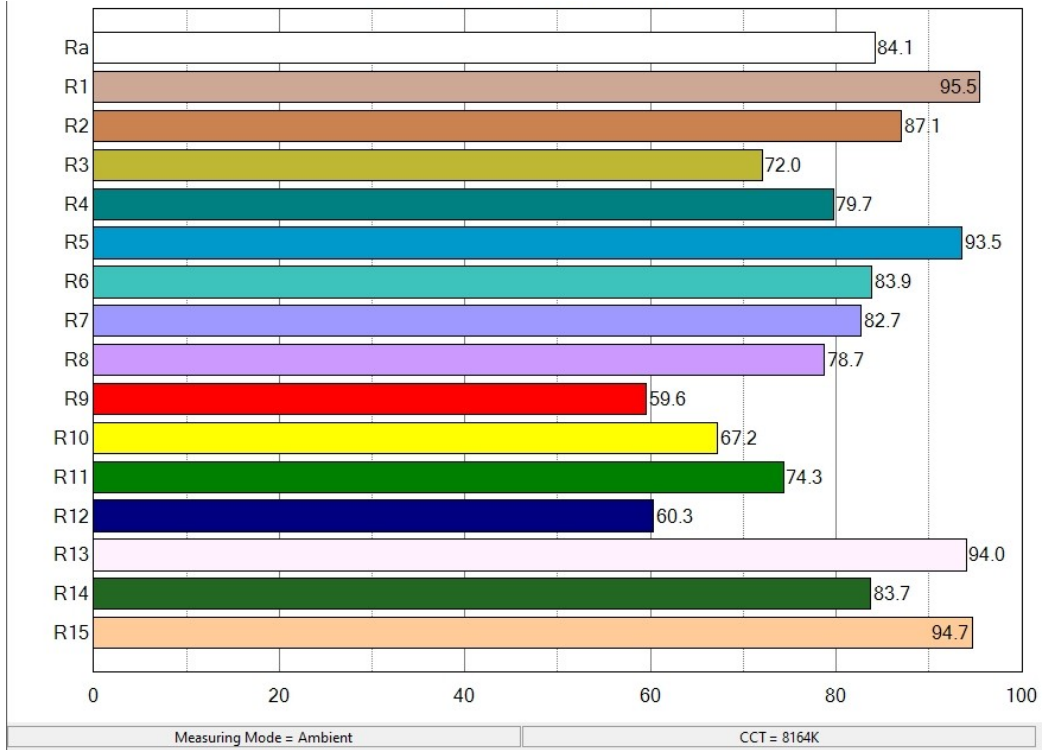
50% Zoom approx 25°

Distance in Feet	Brightness at Full	High CRI Mix Brightness
5	9270	7200
10	2400	2070
15	1100	968
20	632	581
25	462	421

Narrow Zoom 3.5°

Distance in Feet	Brightness at Full	High CRI Mix Brightness
5	10500	8230
10	9060	7010
15	6310	5510
20	4970	4030
25	3780	2790

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