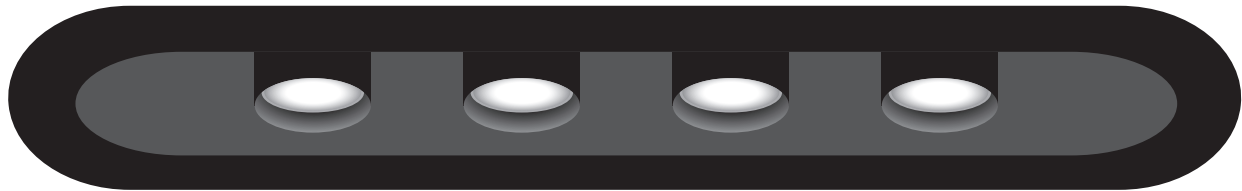
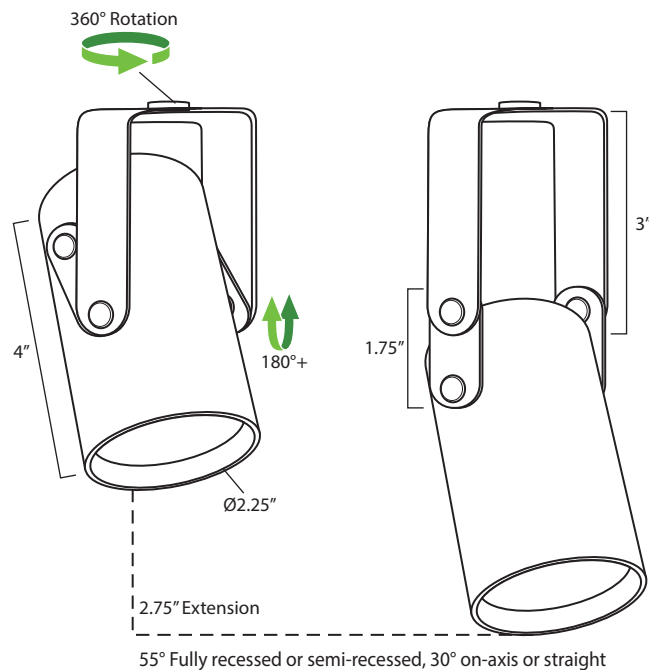


|                 |  |       |  |
|-----------------|--|-------|--|
| Project Name:   |  | Type: |  |
| Catalog Number: |  | Date: |  |

Trim



Trimless

**Key Features**

- Fully recessed or semi recessed PAR16 optic orientation
- 2 circuits - circuit for each optical array
- Up to 4 architectural accessories per optic
- Over 3300+ Custom color finish options
- 100,000+ L70 life
- 7 Year Warranty – White LED

**LED Source Details**

- CREE XPL LED maximum rating = 3,000mA
- Fixture operating milliamp range = 450mA to 1150mA.
  - Operating 15% to 38% of rated value
  - Fixture wattage range = 8W to 20W
  - Fixture delivered lumens = 700 to 1,300 lumens

Last revised: 03/31/2025

# Clarté Lighting

## MR4-635-PAR16

### Multiple Round 4-Light Slot

Ordering

|                 |  |       |  |
|-----------------|--|-------|--|
| Project Name:   |  | Type: |  |
| Catalog Number: |  | Date: |  |

MR4-635- PAR16-

(a) Driver (b) Wattage (c) LED (d) Beam (e) Accessories (f) Trim (g) Color (h) Options (i) Chromaticity

Multiple Round 4-Light

#### (a) Driver Options

|         |                                                               |
|---------|---------------------------------------------------------------|
| E       | = ON/OFF (Electronic)                                         |
| D       | = MLV 1% Dimming (2 wire)                                     |
| DC12V   | = .01% PWM DC dimming (2 wire)                                |
| DC24V   | = .01% PWM DC dimming (2 wire)                                |
| ED      | = Electronic Reverse Phase Dimming 1% (2 wire)                |
| 0-10V1  | = 0-10V 1% Dimming (4 wire)                                   |
| DALI2   | = .01% Digital Addressable Lighting Interface V2              |
| DALI2-4 | = .01% Digital Addressable Lighting Interface V2 (4 fixtures) |
| RDM DMX | = 16 Bit, 4 Channel (2 wire with CAT5)                        |
| ABS     | = Absolute Light .001% Dimming (use with RGBW)                |
| ABSX    | = DMX Absolute Light .001% RGBW dimming                       |

#### (b) Wattage Options

##### Adjustable Optic

|                   |                        |
|-------------------|------------------------|
| 8W (520 Lumens)   | = ON/OFF, 0-10V 1%     |
| 9W (520 Lumens)   | = MLV <1% Dimming      |
| 12W (800 Lumens)  | = ON/OFF, 0-10V 1%, ED |
| 14W (800 Lumens)  | = MLV <1% Dimming      |
| 16W (1100 Lumens) | = ON/OFF, 0-10V 1%, ED |
| 17W (1100 Lumens) | = MLV <1% Dimming      |
| 18W (900 Lumens)  | = Absolute Light RGBW  |
| 19W (1300 Lumens) | = DMX Dimming          |
| 20W (1300 Lumens) | = ON/OFF, 0-10V 1%, ED |

#### (c) LED Type Options

|      |                                |
|------|--------------------------------|
| XLED | = Cree XPL2 LED @ All Wattages |
|------|--------------------------------|

#### (d) Beam Options

|     |               |     |                |
|-----|---------------|-----|----------------|
| NSP | = Narrow Spot | NFL | = Narrow Flood |
| SP  | = Spot        | FL  | = Flood        |

#### (e) Optical and Accessory Options

|     |                                                                                                                     |                                                                                     |
|-----|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| LS  | = Lens Softener - +20% increase in beam width. Shields optical face visually. Softens edges of beam.                |  |
| LSL | = Linear Spread Lens - Horizontal or vertical beam elongation.                                                      |  |
| WFL | = Wide Flood Lens - Wall washing increases the beam by 50% width with elimination of center beam.                   |  |
| LV  | = Louver - Hexcel louver eliminates all surface brightness. Creates stronger vertical cut off with -20% beam width. |  |
| CHL | = Cross Hiar Louver                                                                                                 |  |
| H   | = Halogen - 150K warmer. 2700k to 2550K                                                                             |  |
| DH  | = Dimmed Halogen - 300K warmer. 2700k to 2400K                                                                      |  |

#### (f) Trim Type

|    |                                                                           |
|----|---------------------------------------------------------------------------|
| T  | = Trimmed (for suspended ceiling, T-bar, or plaster ceiling installation) |
| TL | = Trimless (for wood frame plaster ceiling installation)                  |

#### (g) Fixture Color Options

|                                                                   |          |
|-------------------------------------------------------------------|----------|
| BLK                                                               | = Black  |
| WHT                                                               | = White  |
| PWT                                                               | = Pewter |
| Select Custom Color (Review Website for Over 3,300 Color Options) |          |

#### (h) Options

|        |                                                                                                                                          |
|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| BTS    | = Black Tapered Snoot                                                                                                                    |
| WTS    | = White Tapered Snoot                                                                                                                    |
| WBTS   | = White Exterior / Black Interior                                                                                                        |
| WWSN   | = Wall Wash Snoot                                                                                                                        |
| 80+    | = CRI over 80                                                                                                                            |
| 90+    | = CRI over 90                                                                                                                            |
| RMT60  | = 60 watt 12V AC MLV Step Down Transformer                                                                                               |
| RMT150 | = 150 watt 12V AC MLV Step Down Transformer                                                                                              |
| RMT300 | = 300 watt 12V AC MLV Step Down Transformer                                                                                              |
| 12V    | = Up to 6 Fixtures - Add 12V AC Magnetic Step Down Transformer to Operate Track                                                          |
| 24V    | = Up to 10 Fixtures - Add 24V AC Magnetic Step Down Transformer to Operate Track                                                         |
| 120V   | = 120VAC 60Hz (Standard)                                                                                                                 |
| 230V   | = 230VAC 50Hz (Used in conjunction with 230V track)                                                                                      |
| 277V   | = 277VAC 60Hz (Used in conjunction with 277V track)                                                                                      |
| 347V   | = 347VAC 60Hz                                                                                                                            |
| PM     | = Praying Mantis                                                                                                                         |
| DMX*   | = .39% to 100% milliamp constant voltage LED driver, dip switch addressable, 3 channel for 27K & 30K, 4 channel for RGBW, CAT5 in & out* |

\*DMX is required in RGBW or in any 2 circuits or more.  
Custom colors available - Consult factory for more details

#### (i) Color Temperature Options

| White LED                              | Colored/Themed LED                   |
|----------------------------------------|--------------------------------------|
| 22K* = 2200 Kelvin (candlelight color) | UV365*** = 365 NM UV black light     |
| 27K = 2700 Kelvin (incandescent color) | UV390*** = 390 NM UV black light     |
| 30K = 3000 Kelvin (halogen color)      | Blue*** = 465 - 485 NM wavelength    |
| 35K = 3500 Kelvin (warm incandescent)  | Green*** = 520 - 535 NM wavelength   |
| 40K = 4000 Kelvin (cool incandescent)  | Amber*** = 585 - 595NM wavelength    |
| 50K = 5000 Kelvin (day white)          | Red*** = 620 - 630 NM wavelength     |
| 65K = 6500 Kelvin (12 noon sunlight)   | RGBW3K**** = Red, Green, Blue, White |
|                                        | RGBW4K**** = Red, Green, Blue, White |
|                                        | ***500 mA                            |
|                                        | ***700 mA                            |
|                                        | ****Must utilize DMX @ 700 mA        |

\*1050 mA or less

# Clarté Lighting

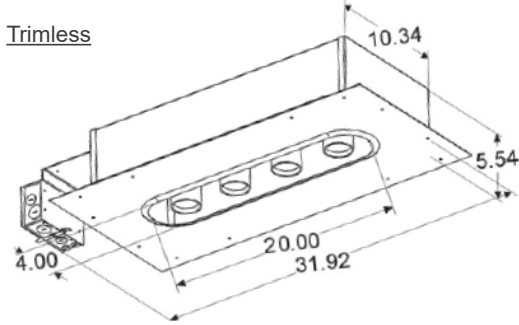
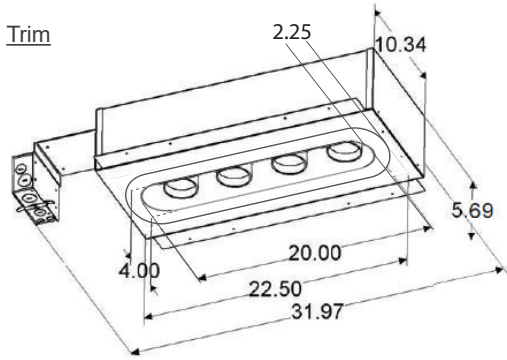
## MR4-635-PAR16

### Multiple Round 4-Light Slot

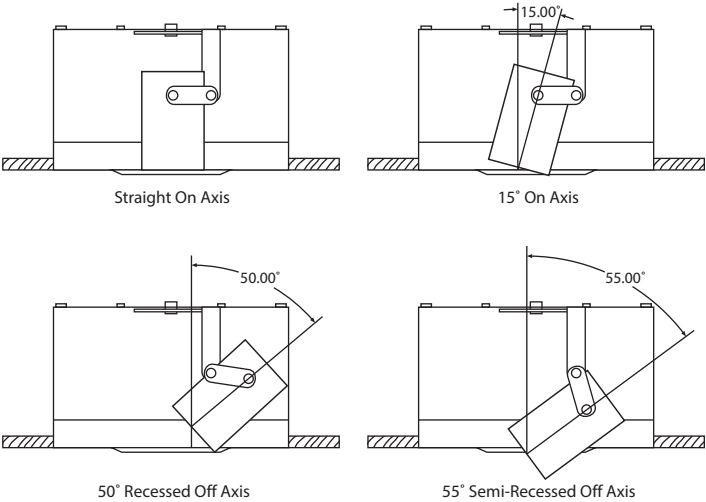
## Specifications

|                 |  |       |  |
|-----------------|--|-------|--|
| Project Name:   |  | Type: |  |
| Catalog Number: |  | Date: |  |

### Housing Dimensions:



Adjustability: Single bracket praying mantis shown below. Double bracket praying mantis increases adjustability by ~ 20%.



### Housing

- 100% aluminum construction
- Single screw removal of 3.375" x 17" top LED driver compartment
- Tool less driver compartment cover for easy access

### Electrical

- NON-IC fixture housing
- Optional - 12V AC remote class 2
- Optional - 12V or 24 DC remote class 2
- 100V, 120V, 230V, 277V or 347V

### Emergency Battery Back Up

- 190mA of light output per 2 optics = 2 x 3 watts (3 x 3 watts for 3 lamp multiple)
- LifePO4 battery = up to 10 times life of lead acid batteries
- 90 minute battery back up

### LED

- CREE XPL2 LED
- Operates at 1150
- L70 life = 100,000 hr.+

### LED Driver

- D – 2 wire forward phase .01% LED driver fade to off glow to on
- ED – 2 wire reverse phase 1% LED driver
- DC – 12V or 24V
- 0-10V – 4 wire 1% LED driver
- Absolute Light – Remote mount class 2 48V din rail .001% LED system
- 16-bit RMD DMX – 65,536 dimming steps fade to off glow to on

### Optics

- TIR discrete injection molded polycarbonate precision LED optic
- 45-degree vertical cut off

### Trim

- Spring loaded compression installation
- .02" thin trim

### Trim Finish

- Textured white, textured black or standard pewter
- 3300+ Custom powder coat finishes optional

### Trimless Installation

- Available in trimless

### Installation

- Accommodates ceiling thickness up to 2.5"
- Universal adjustable 24" adjustable hangar bars

### Certification

- UL Damp Listed – IP 52

### Warranty

- 5 Year – ED, 0-10V, DMX and colored LED fixtures
- 7 Year – D and White LED fixtures

### 2 Trim Installation Options



# Clarté Lighting

## MR4-635-PAR16

### Multiple Round 4-Light Slot

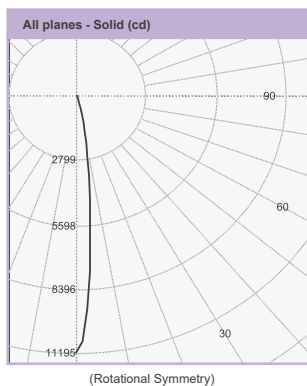
## PAR16 Photometrics

|                 |  |       |  |
|-----------------|--|-------|--|
| Project Name:   |  | Type: |  |
| Catalog Number: |  | Date: |  |

| Narrow Narrow Spot 8.5° |          |      |
|-------------------------|----------|------|
| 3.3'                    | 1,028 fc | 0.5' |
| 6.7'                    | 249 fc   | 1.0' |
| 10'                     | 112 fc   | 1.5' |
| 13.3'                   | 63.3 fc  | 2.0' |
| 16.7'                   | 40.1 fc  | 2.5' |
| 20'                     | 28 fc    | 3.0' |
| 26.7'                   | 15.7 fc  | 4.0' |
| 33.3'                   | 10.1 fc  | 5.0' |
| 40'                     | 7 fc     | 6.0' |

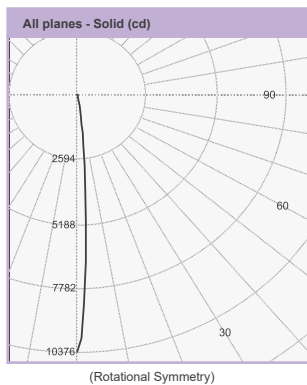
20W PAR16 - 472 lm  
11,195 CBCP

| Zonal Flux and Percentages |           |            |
|----------------------------|-----------|------------|
| Zone                       | Flux (lm) | %Luminaire |
| 0-30                       | 460       | 97.5       |
| 0-40                       | 467       | 99.0       |
| 0-60                       | 472       | 100.0      |
| 0-90                       | 472       | 100.0      |
| 40-70                      | 5         | 1.0        |
| 60-80                      | 0         | 0.0        |
| 90-180                     | 0         | 0.0        |
| 0-180                      | 472       | 100.0      |



| Narrow Narrow Spot 7.9° (with Louver) |         |      |
|---------------------------------------|---------|------|
| 3.3'                                  | 953 fc  | 0.5' |
| 6.7'                                  | 231 fc  | 0.9' |
| 10'                                   | 104 fc  | 1.4' |
| 13.3'                                 | 58.7 fc | 1.8' |
| 16.7'                                 | 37.2 fc | 2.3' |
| 20'                                   | 25.9 fc | 2.8' |
| 26.7'                                 | 14.6 fc | 3.7' |
| 33.3'                                 | 9.36 fc | 4.6' |
| 40'                                   | 6.48 fc | 5.5' |

20W PAR16 - 382 lm  
10,376 CBCP



| Wattage & Lumen Output       |                   |                              |                  |
|------------------------------|-------------------|------------------------------|------------------|
| 450 Milliamps - 520 Lumens   |                   | 700 Milliamps - 800 Lumens   |                  |
| 8W                           | ON/OFF            | 12W                          | ON/OFF           |
|                              | 0-10V 1% Dimming  |                              | 0-10V 1% Dimming |
| 9W                           | MLV <1% Dimming   |                              | ELV 10% Dimming  |
|                              |                   | 14W                          | MLV <1% Dimming  |
| 1000 Milliamps - 1100 Lumens |                   | 1150 Milliamps - 1300 Lumens |                  |
| 16W                          | ON/OFF            | 20W                          | ON/OFF           |
|                              | 0-10V 1% Dimming  |                              | 0-10V 1% Dimming |
|                              | ELV 10% Dimming   |                              | ELV 10% Dimming  |
| 17W                          | MLV <1% Dimming   |                              |                  |
| 19W                          | Lutron 1% Dimming |                              |                  |
|                              | DMX .33% Dimming  |                              |                  |

| 3 Step CREE XPL2 LED |            |
|----------------------|------------|
| Kelvin-CRI           | Multiplier |
| 27K-80+ CRI          | 1          |
| 27K-90+ CRI          | 0.80       |
| 30K-80+ CRI          | 1          |
| 30K-90+ CRI          | 0.85       |
| 35K-80+ CRI          | 105        |
| 35K-90+ CRI          | 0.9        |
| 40K-80+ CRI          | 109        |
| 50K-80+ CRI          | 109        |
| 65K-80+ CRI          | 105        |
| 80+ = 84 CRI         |            |
| 90+ = 94 CRI         |            |

### RGBW V2 Light Output Luminous Flux

Clarté Lighting offers 100% of fixtures in optional RGBW3K or RGBW4K

|              | 700 mA      | 700 mA     |
|--------------|-------------|------------|
|              | RGBW3K      | White 3K   |
| Red          | 480         |            |
| Green        | 930         |            |
| Blue         | 138         |            |
| White        | 780         |            |
| <b>Total</b> | <b>2328</b> | <b>844</b> |

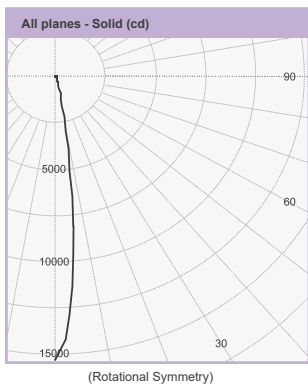
\*RGBW Fixtures are designed to not operate with all 4 colors at 100% of light for more than 24hrs continuously and suggest operating 55% or less of all 4 colors ON to ensure optimum thermal life of the RGBW LED.

| Narrow Spot 12° |          |       |
|-----------------|----------|-------|
| 2'              | 3,824 fc | 0.4'  |
| 4'              | 956 fc   | 0.9'  |
| 6'              | 425 fc   | 1.3'  |
| 8'              | 239 fc   | 1.8'  |
| 10'             | 153 fc   | 2.2'  |
| 12'             | 106 fc   | 2.7'  |
| 20'             | 28 fc    | 5.2'  |
| 26'             | 16 fc    | 7.0'  |
| 33'             | 10 fc    | 8.7'  |
| 40'             | 7 fc     | 10.5' |

20W PAR16 - 1,100 lm  
15,296 CBCP

| Intensity Summary (cd) |            |           |
|------------------------|------------|-----------|
| Gamma                  | All Planes | Flux (lm) |
| 0                      | 15296      |           |
| 5                      | 9739       | 696       |
| 10                     | 2978       |           |
| 15                     | 676        | 236       |
| 20                     | 229        |           |
| 25                     | 135        | 64        |
| 30                     | 90         |           |
| 35                     | 67         | 43        |
| 40                     | 53         |           |
| 45                     | 46         | 35        |
| 50                     | 34         |           |
| 55                     | 23         | 21        |
| 60                     | 15         |           |
| 65                     | 2          | 4         |
| 70                     | 1          |           |
| 75                     | 0          | 0         |
| 80                     | 0          |           |
| 85                     | 0          | 0         |
| 90                     | 0          |           |

| Zonal Flux and Percentages |           |            |
|----------------------------|-----------|------------|
| Zone                       | Flux (lm) | %Luminaire |
| 0-30                       | 997       | 90.6       |
| 0-40                       | 1040      | 94.6       |
| 0-60                       | 1096      | 99.6       |
| 0-90                       | 1100      | 100.0      |
| 40-90                      | 60        | 5.4        |
| 60-90                      | 4         | 0.4        |
| 90-180                     | 0         | 0.0        |
| 0-180                      | 1100      | 100.0      |

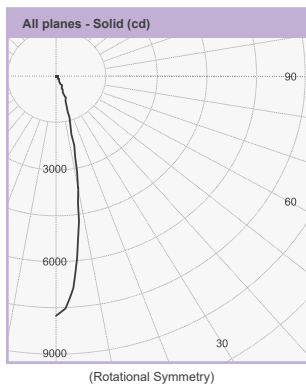


| Spot 19° |          |       |
|----------|----------|-------|
| 2'       | 1,939 fc | 0.7'  |
| 4'       | 485 fc   | 1.4'  |
| 6'       | 215 fc   | 2.0'  |
| 8'       | 121 fc   | 2.7'  |
| 10'      | 78 fc    | 3.4'  |
| 12'      | 54 fc    | 4.1'  |
| 20'      | 28 fc    | 6.1'  |
| 26'      | 16 fc    | 8.1'  |
| 33'      | 10 fc    | 10.1' |
| 40'      | 7 fc     | 12.1' |

20W PAR16 - 1,313 lm  
7,757 CBCP

| Intensity Summary (cd) |            |           |
|------------------------|------------|-----------|
| Gamma                  | All Planes | Flux (lm) |
| 0                      | 7757       |           |
| 5                      | 6432       | 519       |
| 10                     | 3640       |           |
| 15                     | 1648       | 475       |
| 20                     | 731        |           |
| 25                     | 336        | 166       |
| 30                     | 176        |           |
| 35                     | 110        | 71        |
| 40                     | 77         |           |
| 45                     | 67         | 50        |
| 50                     | 47         |           |
| 55                     | 29         | 26        |
| 60                     | 15         |           |
| 65                     | 3          | 5         |
| 70                     | 1          |           |
| 75                     | 0          | 1         |
| 80                     | 0          |           |
| 85                     | 0          | 0         |
| 90                     | 0          |           |

| Zonal Flux and Percentages |           |            |
|----------------------------|-----------|------------|
| Zone                       | Flux (lm) | %Luminaire |
| 0-30                       | 1160      | 88.3       |
| 0-40                       | 1231      | 93.8       |
| 0-60                       | 1308      | 99.6       |
| 0-90                       | 1313      | 100.0      |
| 40-90                      | 82        | 6.2        |
| 60-90                      | 5         | 0.4        |
| 90-180                     | 0         | 0.0        |
| 0-180                      | 1313      | 100.0      |

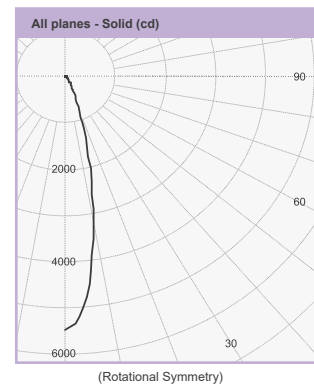


| Narrow Flood 24° |          |       |
|------------------|----------|-------|
| 2'               | 1,705 fc | 0.7'  |
| 4'               | 426 fc   | 1.4'  |
| 6'               | 189 fc   | 2.1'  |
| 8'               | 107 fc   | 2.8'  |
| 10'              | 68 fc    | 3.5'  |
| 12'              | 47 fc    | 4.3'  |
| 20'              | 17 fc    | 7.5'  |
| 26'              | 10 fc    | 10.0' |
| 33'              | 6 fc     | 12.4' |
| 40'              | 5 fc     | 14.9' |

20W PAR16 - 1,306 lm  
5,478 CBCP

| Intensity Summary (cd) |            |           |
|------------------------|------------|-----------|
| Gamma                  | All Planes | Flux (lm) |
| 0                      | 5478       |           |
| 5                      | 4774       | 404       |
| 10                     | 3229       |           |
| 15                     | 1800       | 500       |
| 20                     | 905        |           |
| 25                     | 452        | 219       |
| 30                     | 244        |           |
| 35                     | 146        | 95        |
| 40                     | 98         |           |
| 45                     | 75         | 57        |
| 50                     | 47         |           |
| 55                     | 25         | 25        |
| 60                     | 15         |           |
| 65                     | 3          | 5         |
| 70                     | 1          |           |
| 75                     | 1          | 1         |
| 80                     | 0          |           |
| 85                     | 0          | 0         |
| 90                     | 0          |           |

| Zonal Flux and Percentages |           |            |
|----------------------------|-----------|------------|
| Zone                       | Flux (lm) | %Luminaire |
| 0-30                       | 1123      | 86.0       |
| 0-40                       | 1219      | 93.3       |
| 0-60                       | 1301      | 99.6       |
| 0-90                       | 1306      | 100.0      |
| 40-90                      | 88        | 6.7        |
| 60-90                      | 6         | 0.4        |
| 90-180                     | 0         | 0.0        |
| 0-180                      | 1306      | 100.0      |



# Clarté Lighting

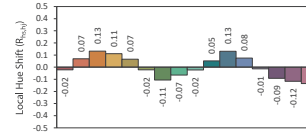
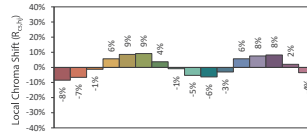
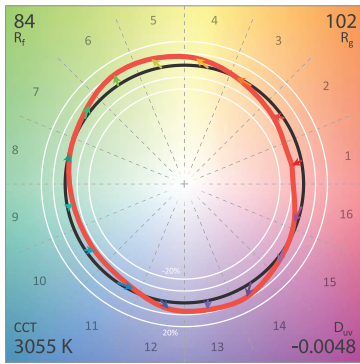
## MR4-635-PAR16

### Multiple Round 4-Light Slot

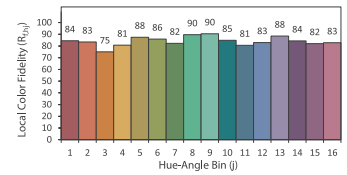
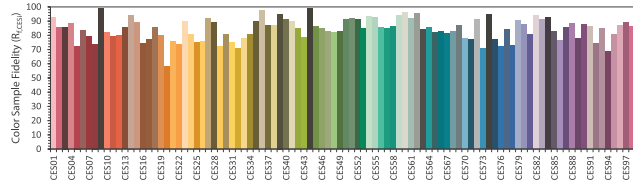
## TM-30-18 Color Metrics

|                 |  |       |  |
|-----------------|--|-------|--|
| Project Name:   |  | Type: |  |
| Catalog Number: |  | Date: |  |

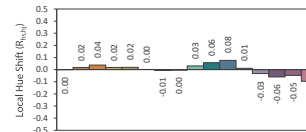
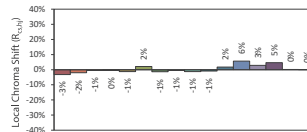
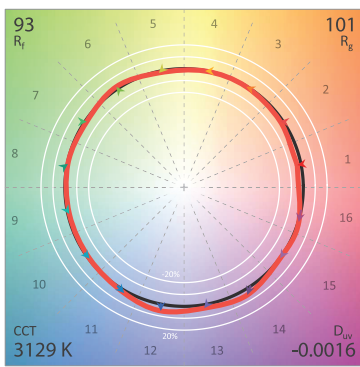
### Clarté Lighting 3000K 80+ CRI Color Metrics



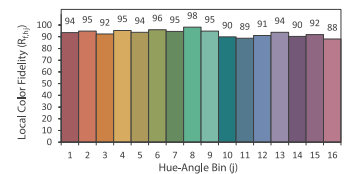
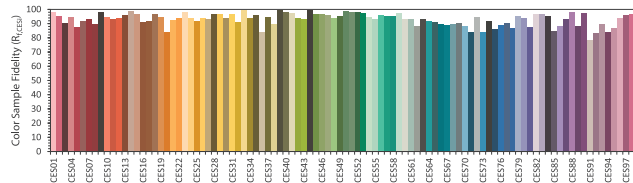
CIE 13.3-1995  
(CRI)  
R<sub>a</sub> 86  
R<sub>g</sub> 29



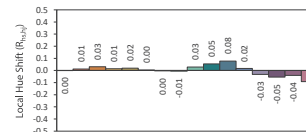
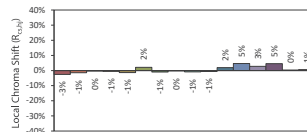
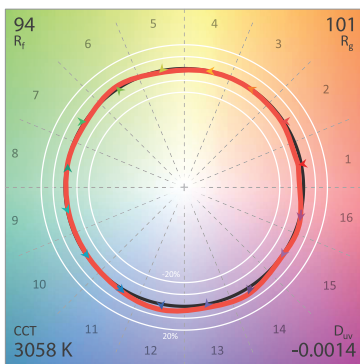
### Clarté Lighting 3000K 90+ CRI Color Metrics



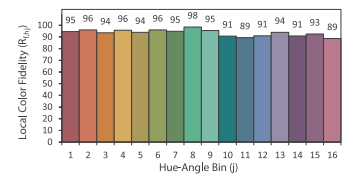
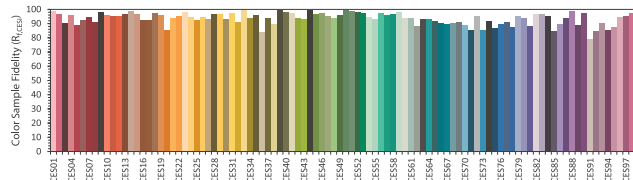
CIE 13.3-1995  
(CRI)  
R<sub>a</sub> 95  
R<sub>g</sub> 74



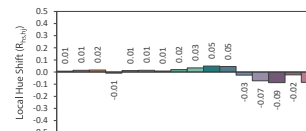
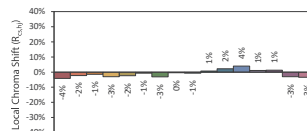
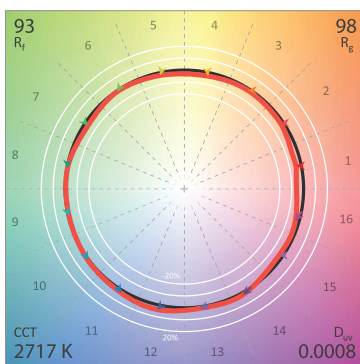
### Clarté Lighting 3000K 90+ CRI Halogen Lens (H) Color Metrics



CIE 13.3-1995  
(CRI)  
R<sub>a</sub> 96  
R<sub>g</sub> 79



### Clarté Lighting 3000K 90+ CRI Dimmed Halogen Lens (DH) Color Metrics



CIE 13.3-1995  
(CRI)  
R<sub>a</sub> 95  
R<sub>g</sub> 64

