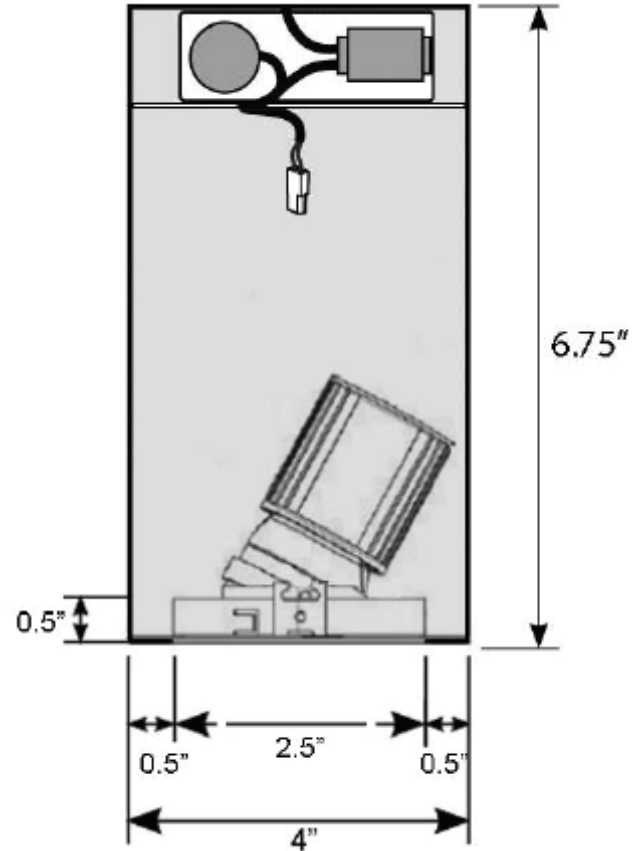


SR4-645-PAR16

Surface Mounted Cylinder - Wall Wash

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

**Key Features**

- 4" OD
- Up to 4 accessories
- Remote transformer option
- Over 10,000+ fixture custom color finish options
- 100,000+ hr L70 life
- **See Page 3 for additional mounting options**

LED Source Details

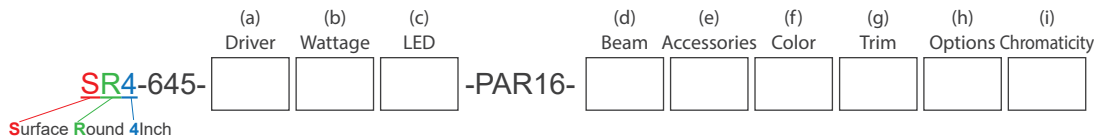
- CREE XPL LED maximum rating = 3,000mA
- Fixture operating milliamp range = 450mA to 1150mA.
 - Operating 15% to 38% of rated value
 - Fixture wattage range = 8W to 20W
 - Fixture delivered lumens = 700 to 1,300 lumens

Last revised: 01/24/2024

SR4-645-PAR16

Surface Mounted Cylinder - Wall Wash

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



(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)
- DALI2 = .01% Digital Addressable Lighting Interface V2
- 0-10V** = Remote mount 4 wire 0-10V LED driver single fixture
- 0-10V 2 = Remote mount 4 wire 0-10V driver for up to 2 fixtures
- 0-10V 3 = Remote mount 4 wire 0-10V driver for up to 3 fixtures
- 0-10V 4*** = Remote mount 4 wire 0-10V driver for up to 4 fixtures
- 0-10V MRI**** = 0-10V Dimming with 100bd Filter
- 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

*MLV power supply is intended for use with forward phase SCR or Triac dimmers.
 *Do not use with relays or toggle switches, do not use with reverse phase dimmers.
 **Remote single 0-10V LED driver up to 18' away 18ga and 50' away 12ga
 ***Remote 0-10V LED driver operates up to 4 fixtures up to 18' away 18ga and 50' away 12ga
 ****Operates up to 4 recessed LED light fixtures for MRI room installation with remote LED driver

(b) Wattage Options

- 9W (520 Lumens) = MLV <1% Dimming
 - 14W (800 Lumens) = MLV <1% Dimming
 - 17W (1100 Lumens) = MLV <1% Dimming
- } Can be used with Remote or In-Line 12V Transformer
- 12W (800 Lumens) = ON/OFF, 0-10V 1%, ED
 - 16W (1100 Lumens) = ON/OFF, 0-10V 1%, ED
 - 18W (900 Lumens) = Absolute Light RGBW
 - 19W (1300 Lumens) = DMX Dimming
 - 20W (1300 Lumens) = ON/OFF, 0-10V 1%, ED
- } To be used ONLY with Remote Transformer

(c) LED Type Options

XLED = Cree XPL2 LED @ All Wattages

(d) Beam Options

- NSP = Narrow Spot
- SP = Spot
- NFL = Narrow Flood
- 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 Hair Louver
- H = Halogen - 150K warmer. 2700k to 2550K
- DH = Dimmed Halogen - 300K warmer. 2700k to 2400K

(f) Fixture Color Options

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

(g) Trim Type

- OT = Oval Trim
- ST = Shallow Trim
- DT = Deep Trim

(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
- 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

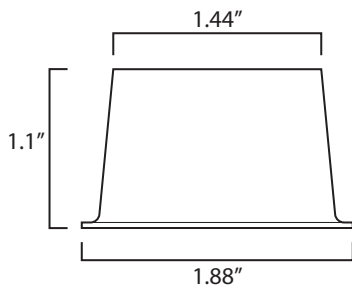
- | | |
|--|--------------------------------------|
| White LED | Colored/Themed LED |
| 22K* = 2200 Kelvin (candlelight color) | UV275** = 275 NM UV virus sterilizer |
| 27K = 2700 Kelvin (incandescent color) | UV365*** = 365 NM UV black light |
| 30K = 3000 Kelvin (halogen color) | UV390*** = 390 NM UV black light |
| 35K = 3500 Kelvin (warm incandescent) | Blue*** = 465 - 485 NM wavelength |
| 40K = 4000 Kelvin (cool incandescent) | Green*** = 520 - 535 NM wavelength |
| 50K = 5000 Kelvin (day white) | Amber*** = 585 - 595NM wavelength |
| 65K = 6500 Kelvin (12 noon sunlight) | Red*** = 620 - 630 NM wavelength |
| | RGBW3K**** = Red, Green, Blue, White |
| | RGBW4K**** = Red, Green, Blue, White |

*1050 mA or less

**500 mA
 ***700 mA
 ****Must utilize DMX @ 700 mA

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

Tapered Snoot

**Housing**

- 100% aluminum construction

Electrical

- Optional - 12V AC remote class 2
- 100V, 120V, 230V, 277V or 347V

LED

- 3,000mA maximum rated CREE XPL2 LED
- Operates between 450 to 1200mA
- 15% to 40% of rated mA

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

Optics

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

Installation

- IPS Nipple - Unistrut (Not provided)

Certification

- UL Damp Listed – IP 52

Warranty

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

- Oval Shallow Trim (291)



- Shallow Trim (298)



- Deep Trim (299)



SR4-645-PAR16

Surface Mounted Cylinder - Wall Wash

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

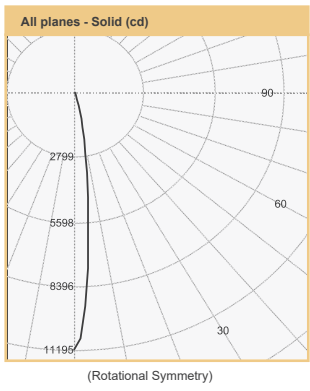
Narrow Narrow Spot 8.5°

| | | |
|-------|----------|------|
| 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 |



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 RGBW3K | 700 mA White 3K |
|--------------|---------------|-----------------|
| Red | 160 | |
| Green | 310 | |
| Blue | 46 | |
| White | 260 | |
| Total | 776 | 970 |

*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 | |

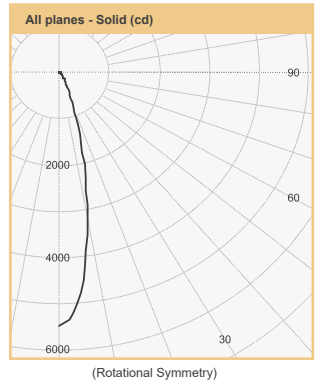
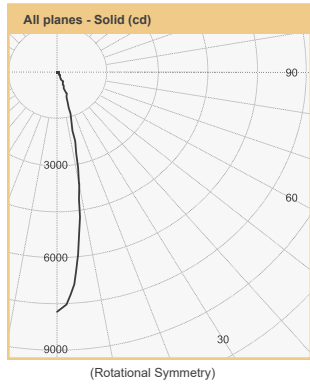
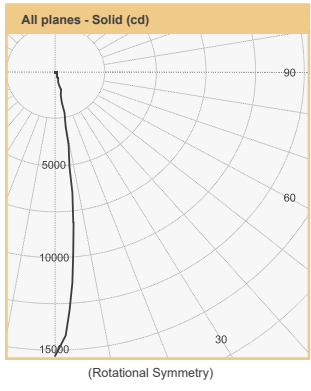
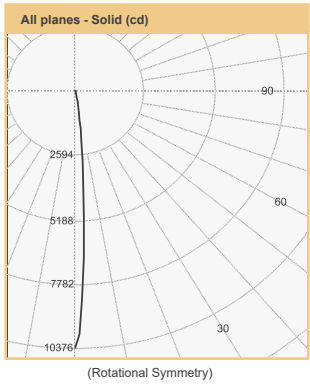
Zonal Flux and Percentages

| 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 |

Narrow Narrow Spot 7.9° (with Louver)

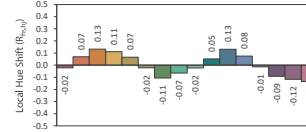
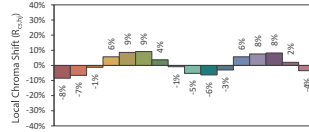
| | | |
|-------|---------|------|
| 3.3' | 953 fc | 0.5' |
| 6.7' | 231 fc | 0.9' |
| 10' | 104 fc | 1.4' |
| 13.3' | 58.7 fc | 1.8' |
| 16.7' | 37.2 fc | 2.3' |
| 20' | 25.9 fc | 2.8' |
| 26.7' | 14.6 fc | 3.7' |
| 33.3' | 9.36 fc | 4.6' |
| 40' | 6.48 fc | 5.5' |

20W PAR16 - 382 lm
10,376 CBCP

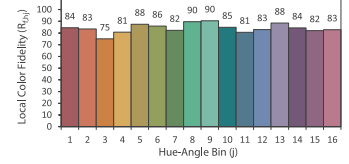


| | | | |
|-----------------|--|-------|--|
| Project Name: | | Type: | |
| Catalog Number: | | Date: | |

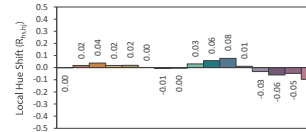
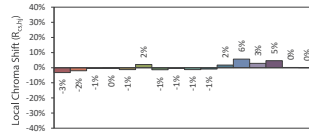
Clarté Lighting 3000K 80+ CRI Color Metrics



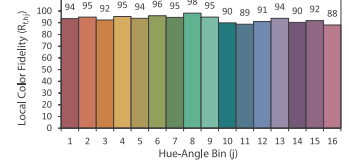
CIE 13.3-1995
 (CRI)
 R_a 86
 R_9 29



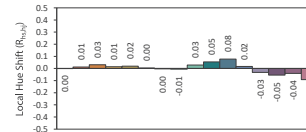
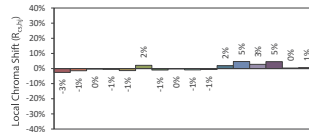
Clarté Lighting 3000K 90+ CRI Color Metrics



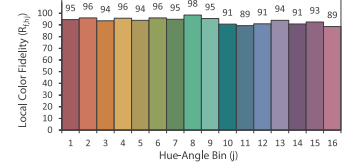
CIE 13.3-1995
 (CRI)
 R_a 95
 R_9 74



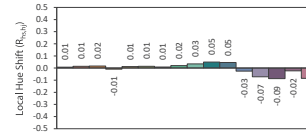
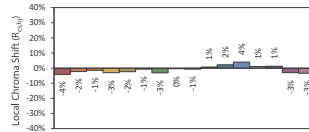
Clarté Lighting 3000K 90+ CRI Halogen Lens (H) Color Metrics



CIE 13.3-1995
 (CRI)
 R_a 96
 R_9 79



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



CIE 13.3-1995
 (CRI)
 R_a 95
 R_9 64

