

DESCRIPTION

Cambria 230 is a small, low voltage dimmable LED and halogen MR16 luminaire. It features an integral mounting spike for easy installation of simple directional uplight. Various lenses, louvers and color or dichroic filters can be combined - up to three at once - to create multiple lighting effects. The Lumière exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

| Catalog # | Type |
|-------------|------|
| | |
| Project | |
| | |
| Comments | Date |
| | |
| Prepared by | |
| | |

SPECIFICATION FEATURES

Material

Housing and hood are precision-machined from corrosion-resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze*, C110 copper or 303/304 stainless steel.

Finish

Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS* compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available. Brass, Bronze*, Copper or Stainless Steel Fixtures are left unpainted to reveal the natural beauty of the material. Brass, bronze* and copper will patina naturally over time.

Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects. Weep holes prevent water and mineral stains from collecting on the lens, even in the straight-up position.

Gasket

Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion.

Lens

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock.

Mounting Spike

Cast zinc mounting spike is provided (model GS01). It is sealed around the lead wires for rigidity and a watertight seal.

Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

Socket

Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

Electrical

Remote 12V transformer required (not included). NOTE: initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 6 watts or 10 watts accordingly. Also, LEDs are more voltage sensitive than standard halogen MR16 lamps. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature failures.

Lamp

Halogen lamp not included. LED modules are included and are available in four color temperatures (2700, 3000, 4000, and 5700) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering. Sora lamp compatible (10W Max).

Warranty

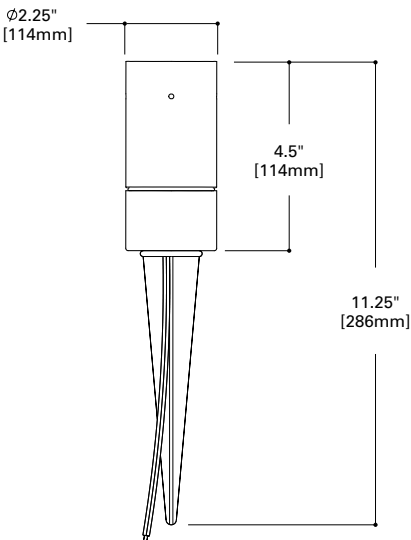
Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.



230 CAMBRIA

LED
HALOGEN

APPLICATIONS:
ACCENT / FLOOD



CERTIFICATION DATA

UL and cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS* Compliant
IP66 Ingress Protection Rated

TECHNICAL DATA

6W LED, L70/60,000 hours at 25°C
10W LED, L70/60,000 hours at 25°C
Low Voltage: 50W Halogen MR16

ORDERING INFORMATION

Sample Number: 230-6LED2721-12-CS

| Series | Source (for LED, select from each column and combine) | Voltage | Finish |
|---|---|---------|---|
| 2130=LED or MR16 Cambria Uplight w/ Integral Ground Spike | 50MR16=50W Max Halogen MR16, GU5.3 Base | 12=12V | Painted BK=Black BZ=Bronze CS=City Silver VE=Verde WT=White Premium Finish NBR=Natural Brass NCP=Natural Copper NBZ=Natural Bronze* NSS=Natural Stainless Steel |
| | 6LED=6W LED 27=2700K 12=12° Spot 10LED=10W LED 30=3000K 21=21° Narrow 40=4000K 41=41° Wide 57=5700K | | |
| | 4LED=4W LED AM=Amber 7LED=7W LED (585-595nm) | | |

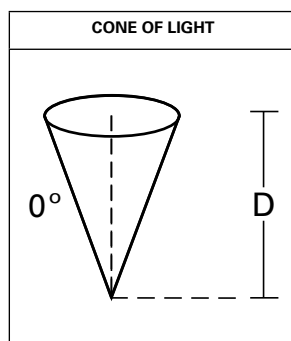
*For natural bronze ROHS material consult factory.

OPTICAL ACCESSORIES - ORDER SEPARATELY

| Filters (2.00" Diameter) | Optical Lenses (2.00" Diameter) | Optical Louvers (2.00" Diameter) |
|---|--|--|
| F71 = Peach Dichroic F72 = Amber Dichroic F73 = Green Dichroic F74 = Medium Blue F75 = Yellow Dichroic F76 = Red Dichroic F77 = Dark Blue Dichroic F78 = Light Blue Dichroic F79 = Neutral Density Dichroic F80 = Magenta Dichroic F22 = Red Color F33 = Blue Color F44 = Green Color F55 = Yellow Color F66 = Mercury Vapor | LSL =Linear Spread Lens (elongates standard beam spread) DIF =Diffused Lens (provides even illumination) OSL =Overall Spread Lens (increases standard beam spread) | LVR =45° Hex Cell Louver (reduces glare) |

CAMBRIA 230 MR16 HALOGEN PHOTOMETRY DATA

Horizontal Illuminance on Surface - Cambria 230 Standard Recessed Hood - 50W MR16



| Filename | 230-50MR16-12-BK-NSP.ies | |
|----------|--------------------------|---------------|
| Lamp | 50W MR16 NSP | |
| CBCP | 11,000 | |
| D | FC | Beam Diameter |
| 2' | 2550 | 1'6" |
| 4' | 638 | 1'0" |
| 6' | 283 | 1'6" |
| 8' | 159 | 2'0" |
| 10' | 102 | 3'0" |
| 15' | 45 | 4'0" |

| Filename | 230-50MR16-12-BK-NFL.ies | |
|----------|--------------------------|---------------|
| Lamp | 50W MR16 NFL | |
| CBCP | 3,200 | |
| D | FC | Beam Diameter |
| 2' | 725 | 1'0" |
| 4' | 181 | 2'6" |
| 6' | 81 | 4'0" |
| 8' | 45 | 5'0" |
| 10' | 29 | 6'6" |
| 15' | 13 | 10'0" |

CCT MULTIPLIER TABLE

| LAMP WATTAGE | MULTIPLIER |
|--------------|------------|
| 20W | 0.32 |
| 35W | 0.57 |

| Filename | 230-50MR16-12-BK-FL.ies | |
|----------|-------------------------|---------------|
| Lamp | 50W MR16 FL | |
| CBCP | 2,000 | |
| D | FC | Beam Diameter |
| 2' | 431 | 1'6" |
| 4' | 106 | 3'0" |
| 6' | 48 | 5'0" |
| 8' | 27 | 6'6" |
| 10' | 17 | 8'0" |
| 15' | 7 | 12'0" |

| Filename | 230-50MR16-12-BK-WFL.ies | |
|----------|--------------------------|---------------|
| Lamp | 50W MR16 WFL | |
| CBCP | 1,200 | |
| D | FC | Beam Diameter |
| 2' | 269 | 2'0" |
| 4' | 67 | 4'6" |
| 6' | 30 | 7'6" |
| 8' | 17 | 9'0" |
| 10' | 11 | 11'6" |
| 15' | 5 | 17'0" |

NOTES AND FORMULAS

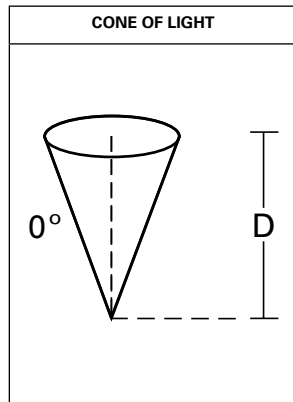
- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.
- Bare lamp data shown. Consult lamp manufacturers to obtain detailed specifications for their lamps.

CAMBRIA 230 LED PHOTOMETRY DATA

LED Lumen and CBCP Table - 4000K

| OPTIC TYPE (beam spread) | BASE + ACCESSORY OPTIONS | 4000K CCT - Standard Hood | | | | | | 4000K CCT - Flush Hood (FL option) | | | | | |
|-----------------------------|-----------------------------|---------------------------|--------|-----|------|--------|-----|------------------------------------|--------|-----|------|--------|-----|
| | | 10W | | | 6W | | | 10W | | | 6W | | |
| | | CBCP | LUMENS | LPW | CBCP | LUMENS | LPW | CBCP | LUMENS | LPW | CBCP | LUMENS | LPW |
| 12' | BASE | 7931 | 419 | 45 | 5948 | 314 | 53 | 8049 | 418 | 44 | 6037 | 314 | 53 |
| | + DIF (DIFFUSE) | 1178 | 289 | 31 | 884 | 217 | 37 | 1188 | 336 | 36 | 891 | 252 | 43 |
| | + OSL (OVERALL SPREAD LENS) | 820 | 350 | 38 | 615 | 263 | 45 | 886 | 368 | 40 | 665 | 276 | 47 |
| | + LSL (LINEAR SPREAD LENS) | NA | 343 | 36 | NA | 257 | 44 | NA | 378 | 41 | NA | 284 | 48 |
| | + LVR (HEXCELL LOUVER) | 7165 | 339 | 36 | 5374 | 254 | 43 | 6799 | 332 | 35 | 5099 | 249 | 42 |
| 21' | BASE | 2194 | 344 | 37 | 1646 | 258 | 44 | 2129 | 370 | 40 | 1597 | 278 | 47 |
| | + DIF (DIFFUSE) | 683 | 241 | 26 | 512 | 181 | 31 | 648 | 300 | 33 | 486 | 225 | 38 |
| | + OSL (OVERALL SPREAD LENS) | 595 | 290 | 32 | 446 | 218 | 37 | 596 | 337 | 37 | 447 | 253 | 43 |
| | + LSL (LINEAR SPREAD LENS) | NA | 282 | 31 | NA | 212 | 36 | NA | 329 | 36 | NA | 247 | 42 |
| | + LVR (HEXCELL LOUVER) | 2030 | 249 | 27 | 1523 | 187 | 32 | 2007 | 268 | 29 | 1505 | 201 | 34 |
| 41' | BASE | 1173 | 304 | 33 | 880 | 228 | 39 | 1169 | 361 | 39 | 877 | 271 | 46 |
| | + DIF (DIFFUSE) | 418 | 205 | 22 | 314 | 154 | 26 | 410 | 278 | 30 | 308 | 209 | 36 |
| | + OSL (OVERALL SPREAD LENS) | 595 | 250 | 27 | 446 | 188 | 32 | 509 | 318 | 35 | 382 | 239 | 41 |
| | + LSL (LINEAR SPREAD LENS) | NA | 245 | 27 | NA | 184 | 31 | NA | 315 | 34 | NA | 236 | 40 |
| | + LVR (HEXCELL LOUVER) | 1078 | 195 | 21 | 809 | 146 | 25 | 1004 | 213 | 23 | 753 | 160 | 27 |

Horizontal Illuminance on Surface - Cambria 230 Standard Recessed Hood -4000K



| Filename: 230-10LED4012-12-BK.IES | | | |
|-----------------------------------|--------|---------------|--|
| Test No.: P184449 | | | |
| Distance | FC | Beam Diameter | |
| 2' | 1912.8 | 0.4' | |
| 4' | 478.2 | 0.8' | |
| 6' | 212.5 | 1.2' | |
| 8' | 119.5 | 1.6' | |
| 10' | 76.5 | 2.0' | |
| 15' | 34.0 | 3.2' | |
| 20' | 19.1 | 4.2' | |
| 30' | 8.5 | 6.4' | |
| 40' | 4.8 | 8.4' | |

| Filename: 230-10LED4021-12-BK.IES | | | |
|-----------------------------------|-------|---------------|--|
| Test No.: P185199 | | | |
| Distance | FC | Beam Diameter | |
| 2' | 548.5 | 0.6' | |
| 4' | 137.1 | 1.3' | |
| 6' | 60.9 | 2.1' | |
| 8' | 34.3 | 2.8' | |
| 10' | 21.9 | 3.6' | |
| 15' | 9.8 | 5.3' | |
| 20' | 5.5 | 7.2' | |
| 30' | 2.4 | 10.6' | |
| 40' | 1.4 | 13.9' | |

| Filename: 230-10LED4041-12-BK.IES | | | |
|-----------------------------------|-------|---------------|--|
| Test No.: P185949 | | | |
| Distance | FC | Beam Diameter | |
| 2' | 290.7 | 0.8' | |
| 4' | 72.7 | 1.6' | |
| 6' | 32.3 | 2.5' | |
| 8' | 18.2 | 3.3' | |
| 10' | 11.6 | 4.2' | |
| 15' | 5.2 | 6.4' | |
| 20' | 2.9 | 8.5' | |
| 30' | 1.3 | 12.6' | |
| 40' | 0.7 | 16.2' | |

CCT MULTIPLIER TABLE

| CCT(K) / COLOR | MULTIPLIER |
|----------------|------------|
| 2700K | 0.79 |
| 3000K | 0.86 |
| 4000K | 1.00 |
| 5700K | 1.05 |
| AMBER | 0.57 |

TECHNICAL INFORMATION

- Dimming is dependant on remote transformer compatibility with LED module. Please see compatibility matrix for dimmer switch and transformer selection.
- When using a magnetic dimmer switch there are two recommended LED compatible 120V magnetic dimming switches:
Lutron Ariadni AVLV-600P and Lutron Diva DVLV-600P
- IMPORTANT: when sizing the transformer use 9 watts for 6LED or 15 watts for 10LED option fixture. Nominal power draw after start up is 6 watts or 10 watts accordingly. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature failures.