

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).

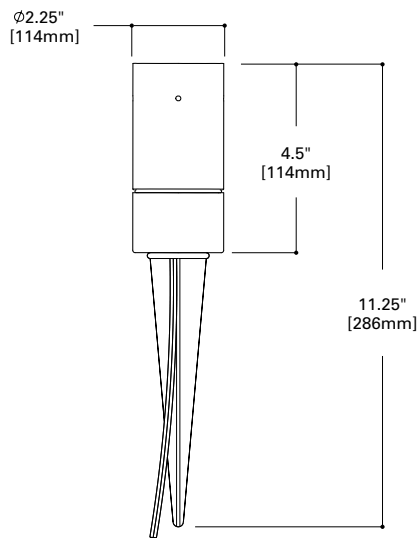
Warranty

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 Ingressed 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

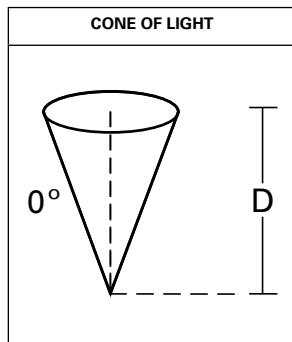
Series	Source (for LED, select from each column and combine)	Voltage	Finish		
2130=LED or MR16 Cambria Uplight w/ Integral Ground Spike	50MR16=50W Max Halogen MR16, GU5.3 Base	12=12V	Painted BK=Black BZ=Bronze CS=City Silver VE=Verde WT=White Premium Finish NBR=Natural Brass NCP=Natural Copper NBZ=Natural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

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

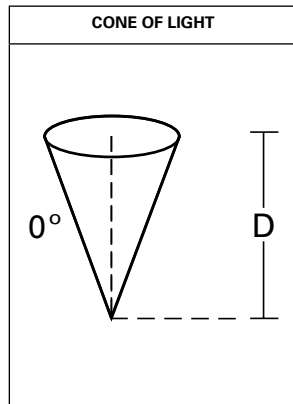
- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.
- Bare lamp data shown. Consult lamp manufacturers to obtain detailed specifications for their lamps.

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

1. Dimming is dependant on remote transformer compatibility with LED module. Please see [compatibility matrix](#) for dimmer switch and transformer selection.
2. 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
3. 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.