

Denver



Denver DETAILS

The DENVER Series, with its circular design, can disperse light over vast areas such as boulevards and large parking lots. This series of luminaire features a full cut-off optical system that respects the environment and provides just the right amount of lighting where needed.

CD20S2A

EPA: 1.85 FT²
Weight: 60 lbs - 27 kg



CONSTRUCTION

- Sturdy aluminum housing
- Silicone gaskets and stainless steel hardware
- Mounts on to 2 3/8" O.D. x 7" long tenon

LED, LENS & OPTICS

- Type 2, 3, 3m (wide), 4 & 5 Roadway optics available
- Optional House-side shield available to cut back light
- High power LED available in 3000K & 4000K
- Flat Clear Glass (FGC) is 98% transmissive for highest efficiency and performance
- Flat Clear Frost (FGF) for reduced glare with better uniformity
- All lens & optics are fully UV stable and Dark Sky compliant

FINISH

- Available in 10 standard colors
- Textured (TX) or smooth (SM) finish
- Optional RAL colors are also available
- Super durable extremely resistant exterior polyester powder coating meets AAMA 2604 requirements (5 years South Florida exposure)
- For added protection a Marine Grade (MG) pre-finish is available to meet ASTM G7, B117, D1654 and D2247 requirements (salt spray, corrosion and humidity resistance)
- Tamper proof, stainless & black oxide hardware



CDM20S2A

EPA: 1.24 FT²
Weight: 40 lbs - 18 kg

FORMATS

- Available in two Side Mount sizes which features easy tool-free access

ELECTRICAL

- Dimmable 0-10 volt, high power factor (90%) driver
 - 120, 208, 240, 277, 347 or 480 volts available
 - 10 kA Surge protector supplied standard

OPTIONAL

- Programmable driver (PROG)
- Field adjustable 10% increment step-dimming switch (SD)
 - Photocell W/ 7-Pin Receptacle (PT)
 - Long Life Photocell W/ 7-Pin Receptacle (PTL)
 - 7-Pin Receptacle (PTDR)
 - Shorting Cap W/ 7-Pin Receptacle (PX)



Galaxy LED ENGINE

The Galaxy Light engine unit is a custom designed, modular system that combines state-of-the-art optics, LEDs and thermal management and is rigorously tested to ensure high performance and long life.



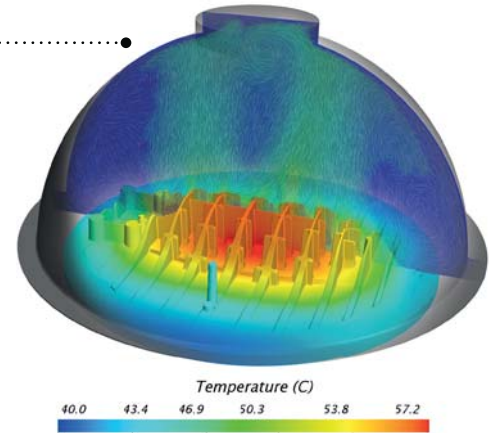
ROBUST DESIGN

- Sealed IP67
- Modular aluminum LED board with acrylic optic
- Die cast aluminum alloy heat sink with thermal interface
- Heat sink designed and tested for optimal thermal management performance in all weather from
- 40C/-40F to 50C/ 122F
- High Power LEDs with thermal and electric protection for stability and protects it from electrical surge.

Computational Fluid Dynamics simulation

PERFORMANCE DRIVEN

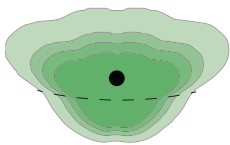
- Modular design allows the GALAXY wattages ranging from 20 to 120W
- Equivalent to 50-300W HID with 60% energy saving
- GALAXY engines are tested & designed for a lifespan of over 100,000 hours
- Tested according to LM79 standard by recognize NVLAP independent laboratories



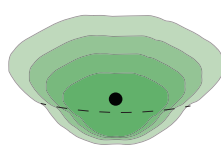
IES Distribution types

Cyclone Lighting offers optically engineered performance systems based on a series of acrylic injection molded lens of IES Roadway distribution types giving you the performance of a cobra head in a sleek decorative fixture.

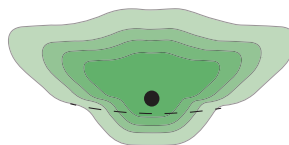
Type 2



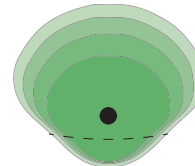
Type 3



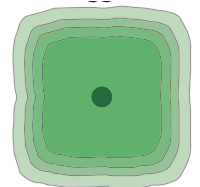
Type 3M



Type 4



Type 5



--- Indicates House Side Shield impact on photometrics



House Side Shield option

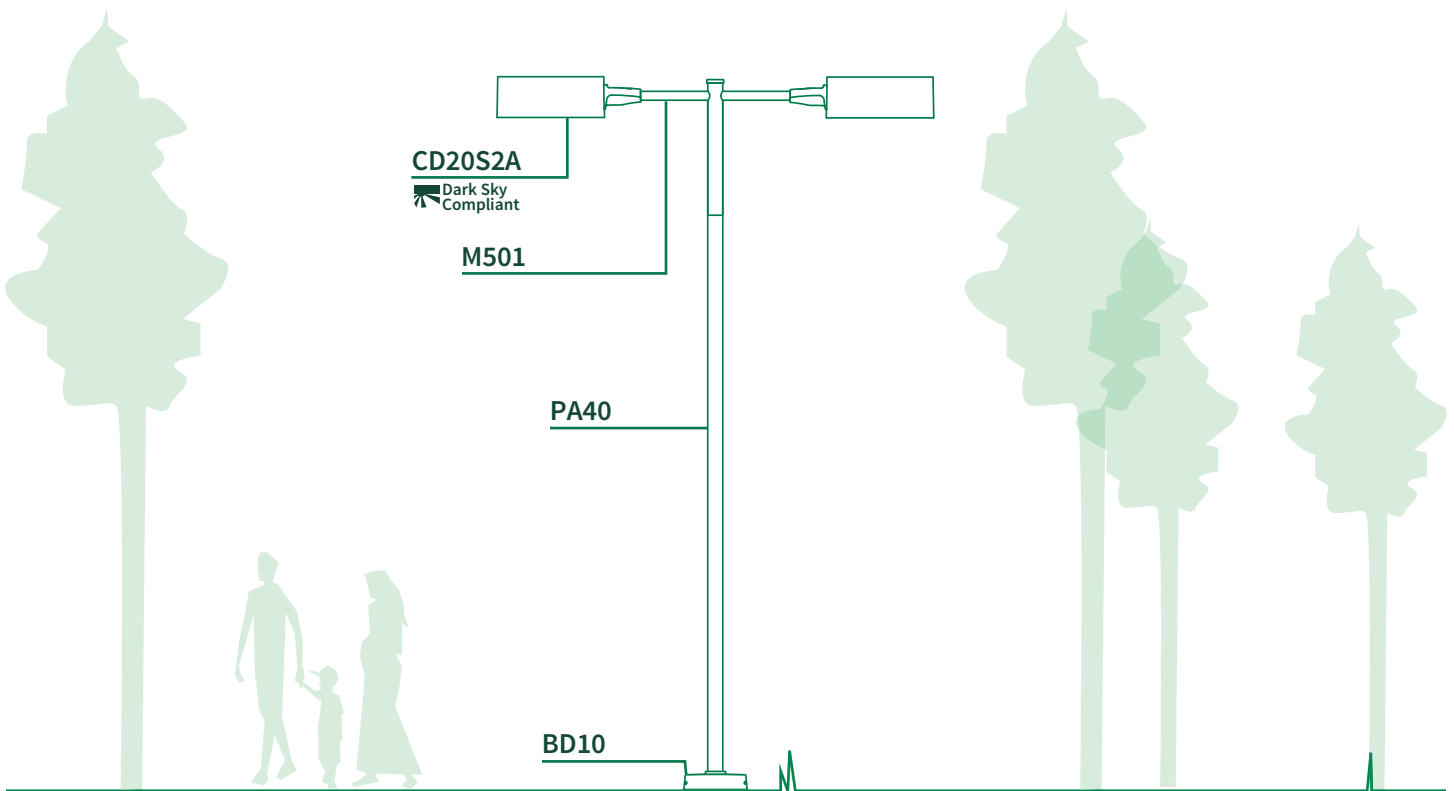
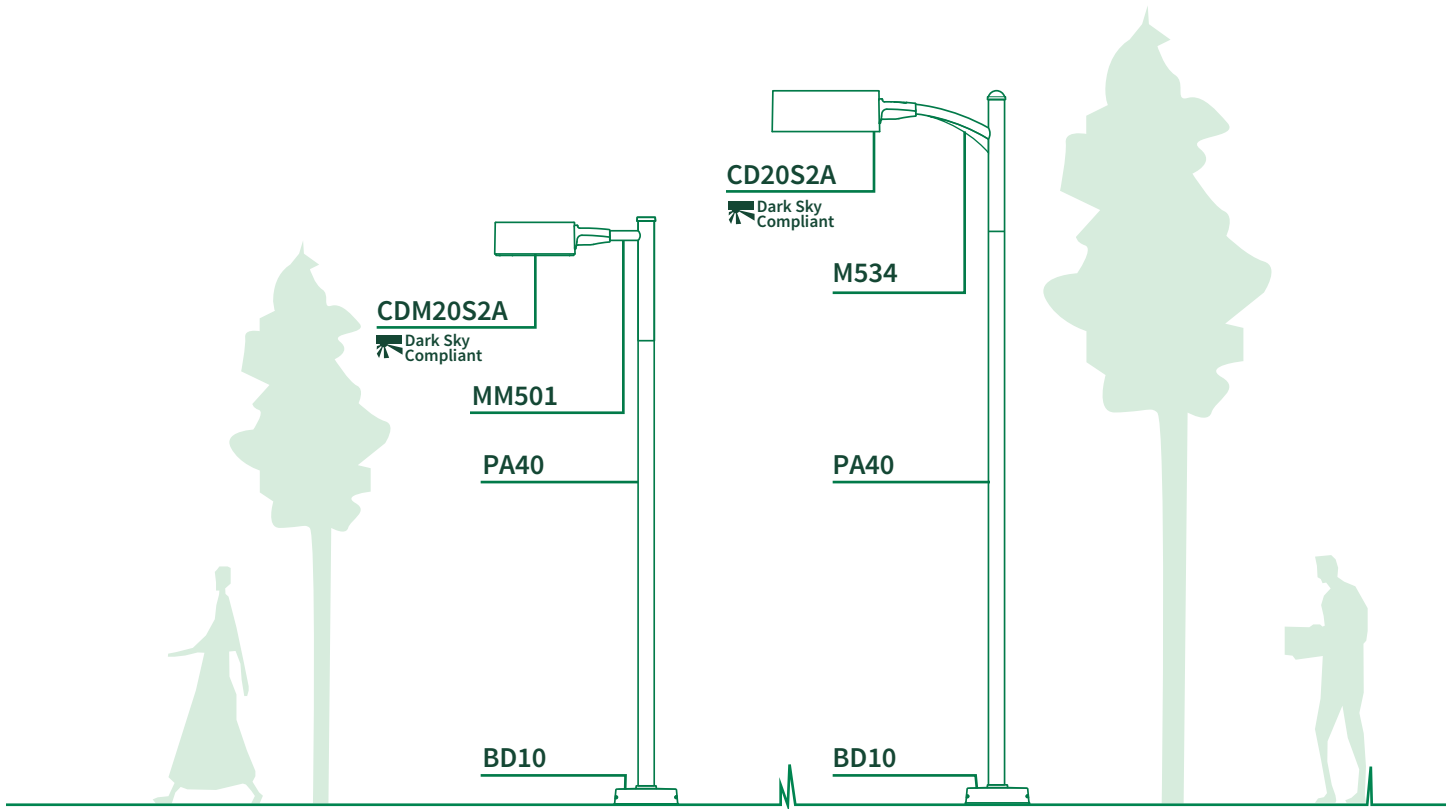
The HOUSE SIDE SHIELD (HS) give you a better back control for those LEED projects where light spill or light trespass are critical. This options can be added post installation.

Please consult website for latest IES files



Luminaire

SCALE GUIDE



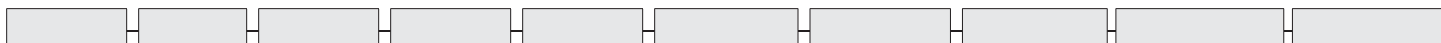
Side Mount CD20S2A

Ordering Template

MODEL	LENS	DIST.	WATT	CCT	VOLT	OPTIONS	COLOR	TEXTURE	OP.FIN.
CD20S2A	FGC	2	20W	3K	120	NONE	BK	TX	MG
		3	40W	4K	208	PT ¹	MT	SM ²	
	FGF	3M	60W		240	PTL ¹	DG		
		4	80W		277	PTDR ¹	MA		
		5	100W		347	PX ¹	SI ²		
		2HS	120W		480	PROG	BZ		
		3HS				SD	BG		
		3MHS					GM		
		4HS					PG		
								WH	

¹ONLY ONE OF THESE OPTION CAN BE CHOSEN

ORDERING CODE



References

LENS

FGC	FLAT GLASS CLEAR
FGF	FLAT GLASS FROST

DISTRIBUTION

HS	INTERNAL HOUSE SHIELD
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SEE PHOTOMETRIC PAGE FOR DETAILS

WATT

SEE PHOTOMETRIC PAGE FOR LUMEN OUTPUT

CCT

3K	3000K
4K	4000K

OPTIONS

NONE	NONE
PT ¹	PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTL ¹	LONG LIFE PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTDR ¹	7-PIN RECEPTACLE (ANSI C136.41)
PX ¹	SHORTING CAP W/7-PIN RECEPTACLE (ANSI C136.41)
PROG*	PROGAMMABLE DRIVER
SD*	FIELD ADJUSTABLE 10% INCREMENT STEP-DIMMING SWITCH

*CONTACT FACTORY FOR WIRELESS CONTROLS AND MORE INFORMATION REGARDING PROG AND SD OPTIONS

COLOR

BK	BLACK RAL9005
MT	METALLIC GRAPHITE TEXTURED ONLY (PROPRIETARY FORMULA)
DG	DARK GREEN RAL6012
MA	MARINE BLUE RAL5013
SI ²	METALLIC SILVER RAL9006 (SMOOTH ONLY)
BZ	DARK BRONZE RAL8019
BG	BURGUNDY RAL3005
GM	MOSS GREEN RAL6005
PG	PALE GREY RAL7040
WH	WHITE RAL9003

TEXTURE

TX	TEXTURED
SM ²	SMOOTH (METALLIC SILVER RAL9006 ONLY)

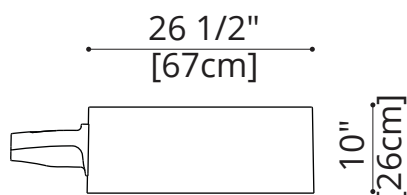
OP.FIN. (OPTIONAL FINISH)

MG	MARINE GRADE PRE-FINISH
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ADAPTOR

NONE	FITS ONTO 2 3/8" O.D. X MIN. 7" LONG TENON
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Luminaire



CD20S2A 

Side Mount

CDM20S2A

Ordering Template

MODEL	LENS	DIST.	WATT	CCT	VOLT	OPTIONS	COLOR	TEXTURE	OP.FIN.
CDM20S2A	FGC	2	20W	3K	120	NONE	BK	TX	MG
		3	40W	4K	208	PT ¹	MT	SM ²	
	FGF	3M	60W		240	PTL ¹	DG		
		4	80W		277	PTDR ¹	MA		
		5	100W		347	PX ¹	SI ²		
		2HS			480	PROG	BZ		
		3HS				SD	BG		
		3MHS					GM		
		4HS					PG		
								WH	

¹ONLY ONE OF THESE OPTION CAN BE CHOSEN

ORDERING CODE



References

LENS

FGC	FLAT GLASS CLEAR
FGF	FLAT GLASS FROST

DISTRIBUTION

HS	INTERNAL HOUSE SHIELD
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SEE PHOTOMETRIC PAGE FOR DETAILS

WATT

SEE PHOTOMETRIC PAGE FOR LUMEN OUTPUT

CCT

3K	3000K
4K	4000K

OPTIONS

NONE	NONE
PT ¹	PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTL ¹	LONG LIFE PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTDR ^{1*}	7-PIN RECEPTACLE (ANSI C136.41)
PX ¹	SHORTING CAP W/7-PIN RECEPTACLE (ANSI C136.41)
PROG [*]	PROGAMMABLE DRIVER
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COLOR

BK	BLACK RAL9005
MT	METALLIC GRAPHITE TEXTURED ONLY (PROPRIETARY FORMULA)
DG	DARK GREEN RAL6012
MA	MARINE BLUE RAL5013
SI ²	METALLIC SILVER RAL9006 (SMOOTH ONLY)
BZ	DARK BRONZE RAL8019
BG	BURGUNDY RAL3005
GM	MOSS GREEN RAL6005
PG	PALE GREY RAL7040
WH	WHITE RAL9003

TEXTURE

TX	TEXTURED
SM ²	SMOOTH (METALLIC SILVER RAL9006)

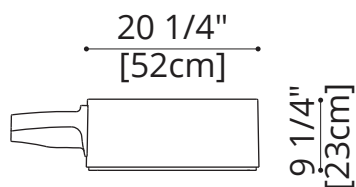
OP.FIN. (OPTIONAL FINISH)

MG	MARINE GRADE PRE-FINISH
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ADAPTOR

NONE	FITS ONTO 2 3/8" I.D. X MIN 7" LONG TENON
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Luminaire



CDM20S2A 



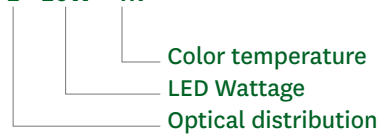
REV. 5: 05/17

Photometry

CD20S2A

SOURCE: LED 4000K ± 150K, 70 CRI minimum¹
 WATERPROOF RATING: IP67 optical system

LED code definition: 2 - 20W - 4K



Type 2

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
2-20W-4K	2491	113	20	22	350	B1-U0-G1	50W
2-40W-4K	4794	106	40	45	700	B1-U0-G1	70W
2-60W-4K	7263	108	60	67	700	B1-U0-G1	100W
2-80W-4K	9587	106	80	90	700	B2-U0-G1	150W
2-100W-4K	12057	107	100	112	700	B2-U0-G2	200W
2-120W-4K	14526	108	120	135	700	B2-U0-G2	250W

Type 3

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
3-20W-4K	2582	117	20	22	350	B1-U0-G1	50W
3-40W-4K	4733	105	40	45	700	B1-U0-G1	70W
3-60W-4K	7171	107	60	67	700	B2-U0-G1	100W
3-80W-4K	9466	105	80	90	700	B2-U0-G2	150W
3-100W-4K	11904	106	100	112	700	B2-U0-G2	200W
3-120W-4K	14342	106	120	135	700	B3-U0-G2	250W

Type 3M

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
3M-20W-4K	2305	104	20	22	350	B1-U0-G1	50W
3M-40W-4K	4226	93	40	45	700	B1-U0-G2	70W
3M-60W-4K	6403	95	60	67	700	B1-U0-G2	100W
3M-80W-4K	8452	93	80	90	700	B1-U0-G2	150W
3M-100W-4K	10629	94	100	112	700	B2-U0-G3	200W
3M-120W-4K	12806	94	120	135	700	B2-U0-G3	250W

¹IES-TM-21 Calculated L70 is over 363 000 hours.

IES-TM-21 Reported more than 54 000 hours.

²System wattage includes the LED and the Driver.

³Equivalency should always be verified by photometric layout.

*4000K used for testing, 3000K photometrics is available on website

Note: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Cyclone Lighting. Cyclone Lighting reserves the right to substitute materials or change the manufacturing process of its products without prior notification. See the latest results and updates on our website at www.cyclonelighting.com

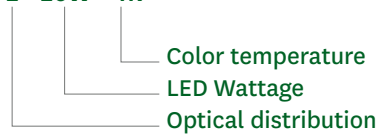


Photometry

CD20S2A

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LED code definition: 2 - 20W - 4K



Type 4

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
4-20W-4K	2537	115	20	22	350	B1-U0-G1	50W
4-40W-4K	4652	103	40	45	700	B1-U0-G1	70W
4-60W-4K	7048	105	60	67	700	B1-U0-G2	100W
4-80W-4K	9303	103	80	90	700	B1-U0-G2	150W
4-100W-4K	11700	104	100	112	700	B2-U0-G2	200W
4-120W-4K	14096	104	120	135	700	B2-U0-G2	250W

Type 5

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
5-20W-4K	2649	120	20	22	350	B2-U0-G1	50W
5-40W-4K	4857	107	40	45	700	B2-U0-G1	70W
5-60W-4K	7359	109	60	67	700	B3-U0-G1	100W
5-80W-4K	9714	107	80	90	700	B3-U0-G2	150W
5-100W-4K	12216	109	100	112	700	B3-U0-G2	200W
5-120W-4K	14719	109	120	135	700	B4-U0-G2	250W

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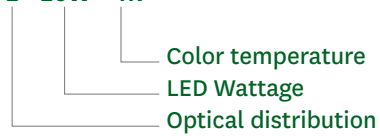


Photometry

CDM20S2A

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 WATERPROOF RATING: IP67 optical system

LED code definition: 2 - 20W - 4K



Type 2

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
2-20W-4K	2491	113	20	22	350	B1-U0-G1	50W
2-40W-4K	4794	106	40	45	700	B1-U0-G1	70W
2-60W-4K	7263	108	60	67	700	B1-U0-G1	100W
2-80W-4K	9587	106	80	90	700	B2-U0-G1	150W
2-100W-4K	12057	107	100	112	700	B2-U0-G2	200W

Type 3

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
3-20W-4K	2582	117	20	22	350	B1-U0-G1	50W
3-40W-4K	4733	105	40	45	700	B1-U0-G1	70W
3-60W-4K	7171	107	60	67	700	B2-U0-G1	100W
3-80W-4K	9466	105	80	90	700	B2-U0-G2	150W
3-100W-4K	11904	106	100	112	700	B2-U0-G2	200W

Type 3M

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
3M-20W-4K	2305	104	20	22	350	B1-U0-G1	50W
3M-40W-4K	4226	93	40	45	700	B1-U0-G2	70W
3M-60W-4K	6403	95	60	67	700	B1-U0-G2	100W
3M-80W-4K	8452	93	80	90	700	B1-U0-G2	150W
3M-100W-4K	10629	94	100	112	700	B2-U0-G3	200W

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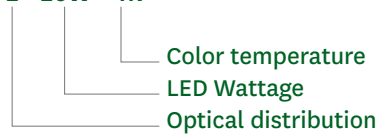


Photometry

CDM20S2A

SOURCE: LED 4000K ± 150K, 70 CRI minimum¹
 WATERPROOF RATING: IP67 optical system

LED code definition: 2 - 20W - 4K



Type 4

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
4-20W-4K	2537	115	20	22	350	B1-U0-G1	50W
4-40W-4K	4652	103	40	45	700	B1-U0-G1	70W
4-60W-4K	7048	105	60	67	700	B1-U0-G2	100W
4-80W-4K	9303	103	80	90	700	B1-U0-G2	150W
4-100W-4K	11700	104	100	112	700	B2-U0-G2	200W

Type 5

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
5-20W-4K	2649	120	20	22	350	B2-U0-G1	50W
5-40W-4K	4857	107	40	45	700	B2-U0-G1	70W
5-60W-4K	7359	109	60	67	700	B3-U0-G1	100W
5-80W-4K	9714	107	80	90	700	B3-U0-G2	150W
5-100W-4K	12216	109	100	112	700	B3-U0-G2	200W

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