



Luminaire Schedule

Symbol	Qty	Label	Arrangement	LLF	Description	Arm	Tag	Lum. Watts	Lum. Lumens	BUG Rating
	7	B	SINGLE	0.850	CL41T4A-LAC-3-100W-4K	0	Classic Post Top	106	9375	B2-U3-G3
	5	C	SINGLE	0.850	XWM-FT-LED-08-40	0	Wall Pack	76	8265	B2-U0-G2

Calculation Summary

Label	CalcType	Units	Avg	Min	Max	Avg/Min	Max/Min
Front Parking Lot	Illuminance	Fc	1.88	0.57	4.03	3.30	7.07
Side Parking Lot	Illuminance	Fc	1.76	0.24	4.23	7.33	17.63

Luminaire Location Summary

LumNo	Label	Luminous center	Tilt
1	B	16.883	0
2	B	16.883	0
3	B	16.883	0
4	B	16.883	0
5	B	16.883	0
6	B	16.883	0
7	B	16.883	0
8	C	15	0
9	C	15	0
10	C	15	0
11	C	15	0
12	C	15	0



Filename: Romeoville Cardinal Liquors - 2018_02_20 - Request.AGI

Prepared by: Marc-Antoine Vachon

Date:2018-02-20

Page 1 of 2

AGi32 Version 17.5.10

ALL VALUES ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE

PHOTOMETRIC DATA USED AS INPUT FOR THESE CALCULATIONS
IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP,
RATINGS, FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP,
BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS.

LOT 4
DETENTION BASIN
HWL - 612.0
NWL - 608.2

PROPOSED
BUILDING
FOOTPRINT
3,900 SQ.FT.

PROPOSED BUILDING
FOOTPRINT
10,620 SQ.FT.
FFE=616.50

12'x50' LOADING ZONE

PART of LOT 3
1.57 Ac

MH: 16.883

MH: 16.883

(S89°36'16"W 380.00')

MH: 16.883

MH: 16.883

237.61'



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Page 2 of 2

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ALL VALUES ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE

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IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP,
RATINGS, FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP,
BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS.

Classic



Classic

DETAILS

The CLASSIC series is a archetypal lantern fixture form that is designed for use in a wide range of traditional environments from city-centers to suburban developments. It is available in either a square or hexagonal base cage format.



CL41P1

EPA: 2.7 FT²
Weight: 52 lbs - 24 kg

CONSTRUCTION

- Sturdy diecast aluminum housing
- Certified IP66 optical system
- Silicone gaskets and stainless steel hardware
- Mounts onto Ø2" I.D. pendant tenon or onto side-mount 2 3/8" Ø O.D. tenon with optional self-leveling (ADV) or static (ADH) adaptors

FINISH

- Super durable extremely resistant exterior polyester powder coating meets AAMA 2604 requirements (5 years South Florida exposure)
- Available in 10 standard colors / textured (TX) or smooth (SM) finish
- Optional RAL colors are also available
- 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)

LED, LENS & OPTICS

- High power LED available in 3000K & 4000K
- Type 2, 3, 3m (wide), 4 & 5 Roadway optics available
- Optional House-side shield available to cut back light
- Acrylic Frost lens (LAF) - for high efficiency and optical performance
- Acrylic Opaline lens (LAO) - for reduced glare applications
- All lens & optics are fully UV stable
- Dark Sky compliant



IP66

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), Button-type photocell (PC)
- 7-Pin ANSI C136.41 receptacle (PTDR) available with shorting cap (PX), photocell (PT) or long-life photocell (PTL)
- Field adjustable 10% increment step-dimming switch (SD)



CL41P1

Contact factory for **WIRELESS CONTROLS** and further details

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.



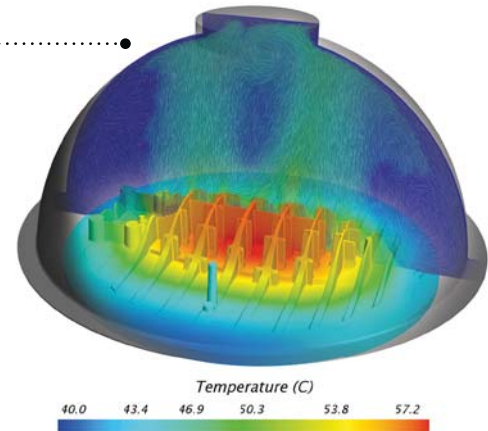
ROBUST DESIGN

- Sealed IP66
- 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

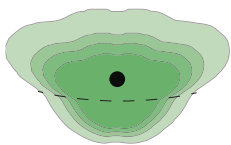
- Modular design allows the GALAXY wattages ranging from 20 to 100W
- Equivalent to 50-200W HID with 60% energy saving
- GALAXY engines are tested & designed for a lifespan of over 100,000 hours
- Tested according to LM79 standard by recognize NVLAP independent laboratories



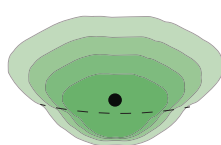
IES Distribution types

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.

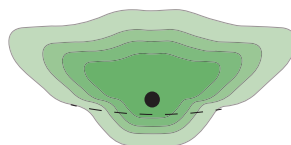
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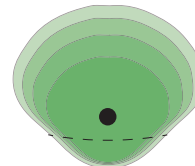
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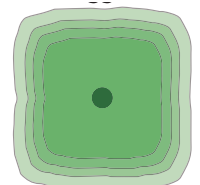
Type 3M



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

Sky LED ENGINE

The Sky Light engine is our mid-sized 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.



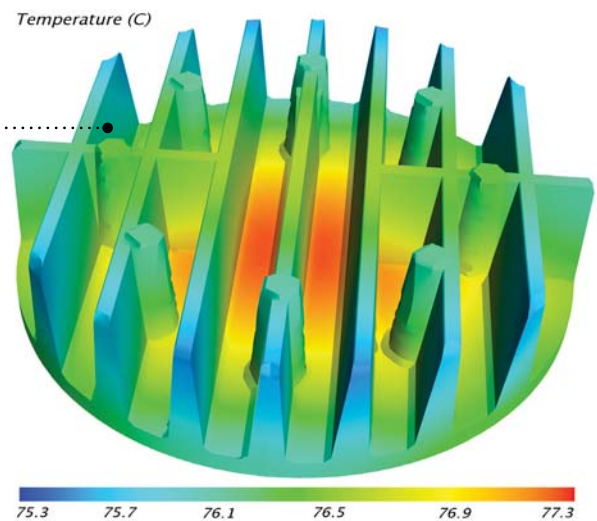
ROBUST DESIGN

- 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 LED diodes with thermal and electric protection for stability and protects it from electrical surge.

COMPACT PERFORMANCE

- Mid-sized, modular design allows the SKY wattages ranging from 34 to 68W
- Equivalent to 70 to 150 W HID with 60% energy saving
- SKY engines are tested & designed for a lifespan of over 100,000 hours
- Tested according to LM79 standard by recognize NVLAP independent laboratories

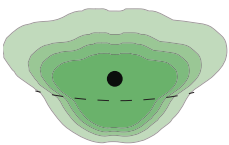
Computational Fluid Dynamics simulation



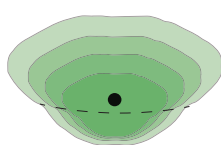
IES Distribution types

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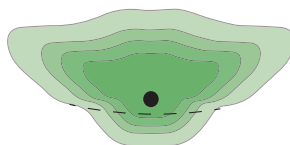
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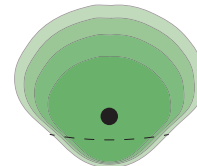
Type 3



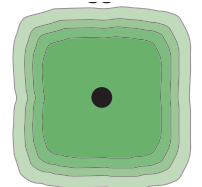
Type 3M



Type 4



Type 5



--- Indicates House Side Shield impact on photometrics

House Side Shield option

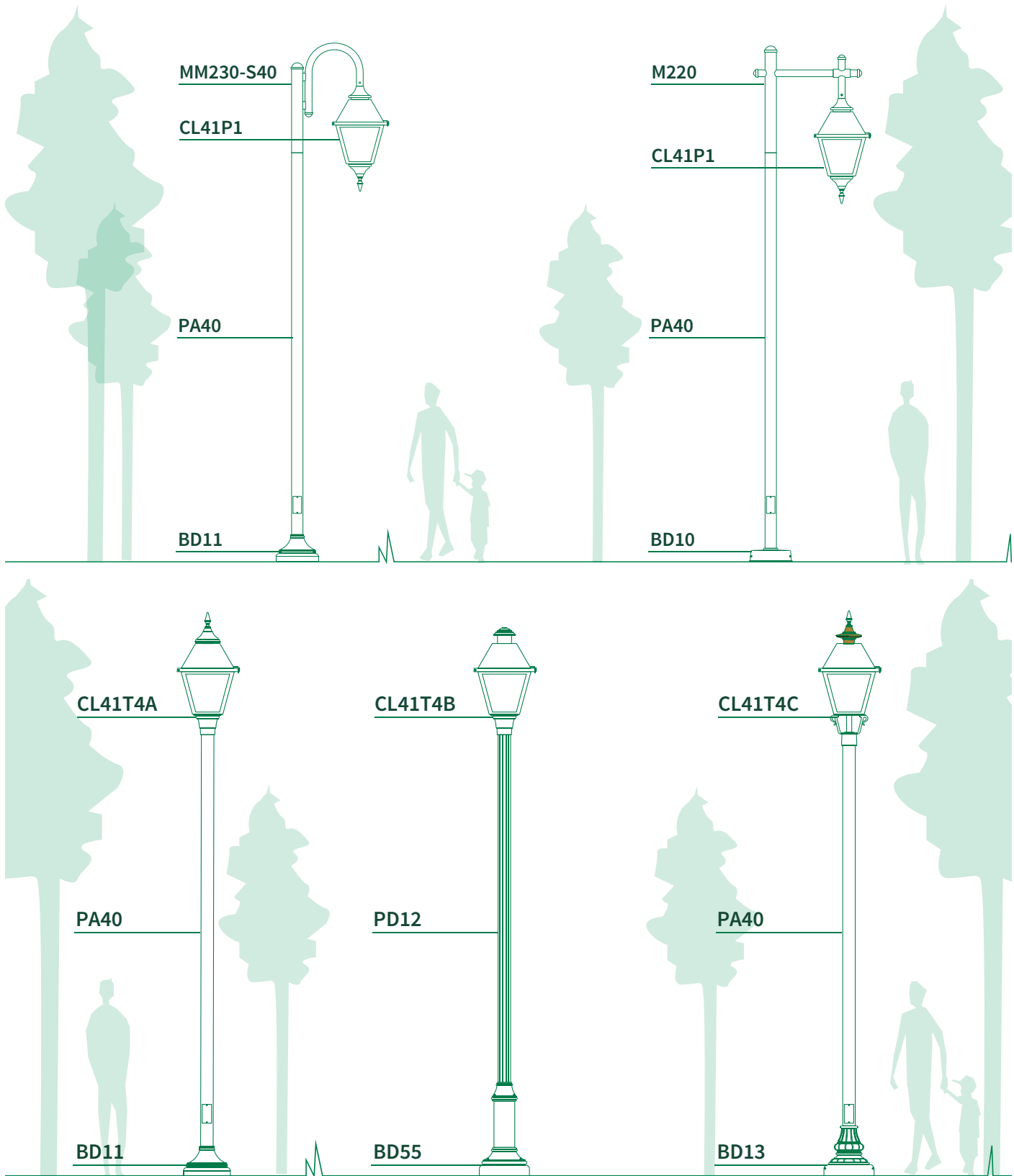
The HOUSE SIDE SHIELD (HS) give you a better back control for those LEED projects where light spill or light trespass are critical. This options can be added post installation.



Please consult website for latest IES files

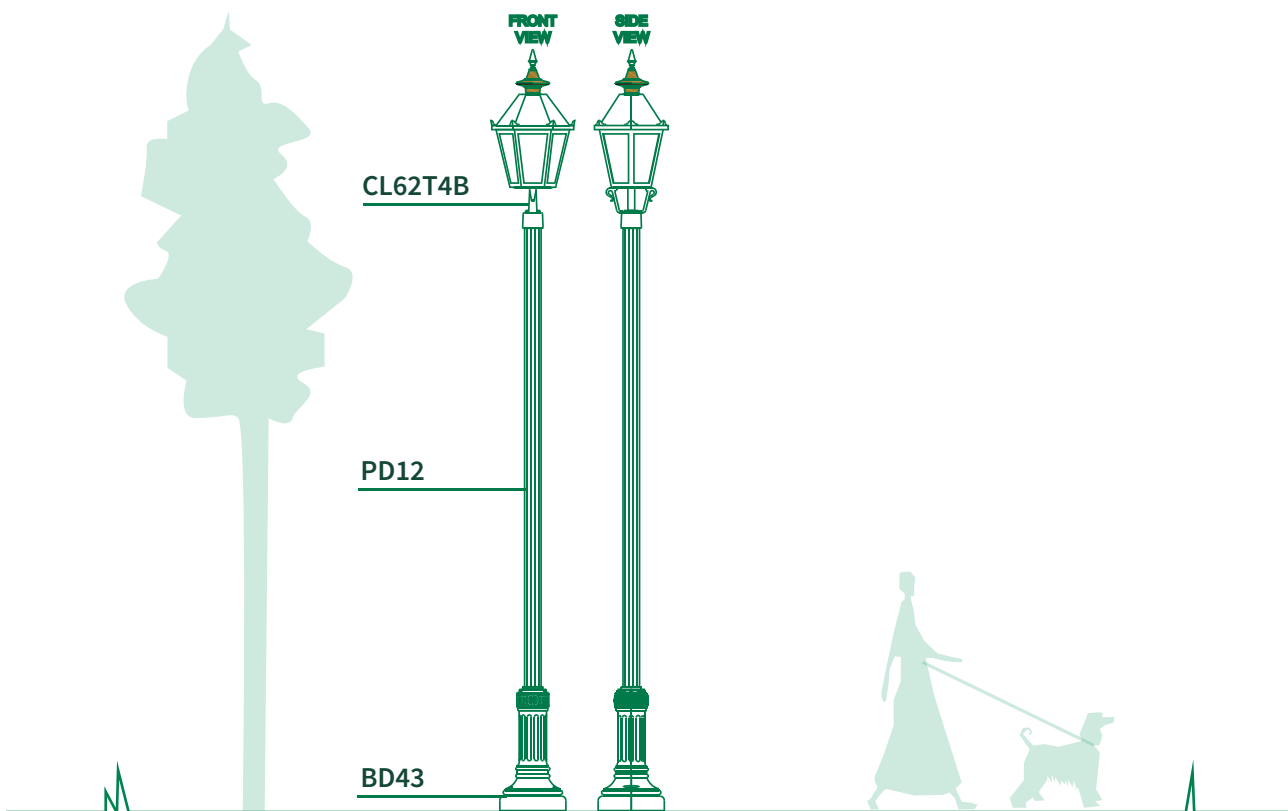
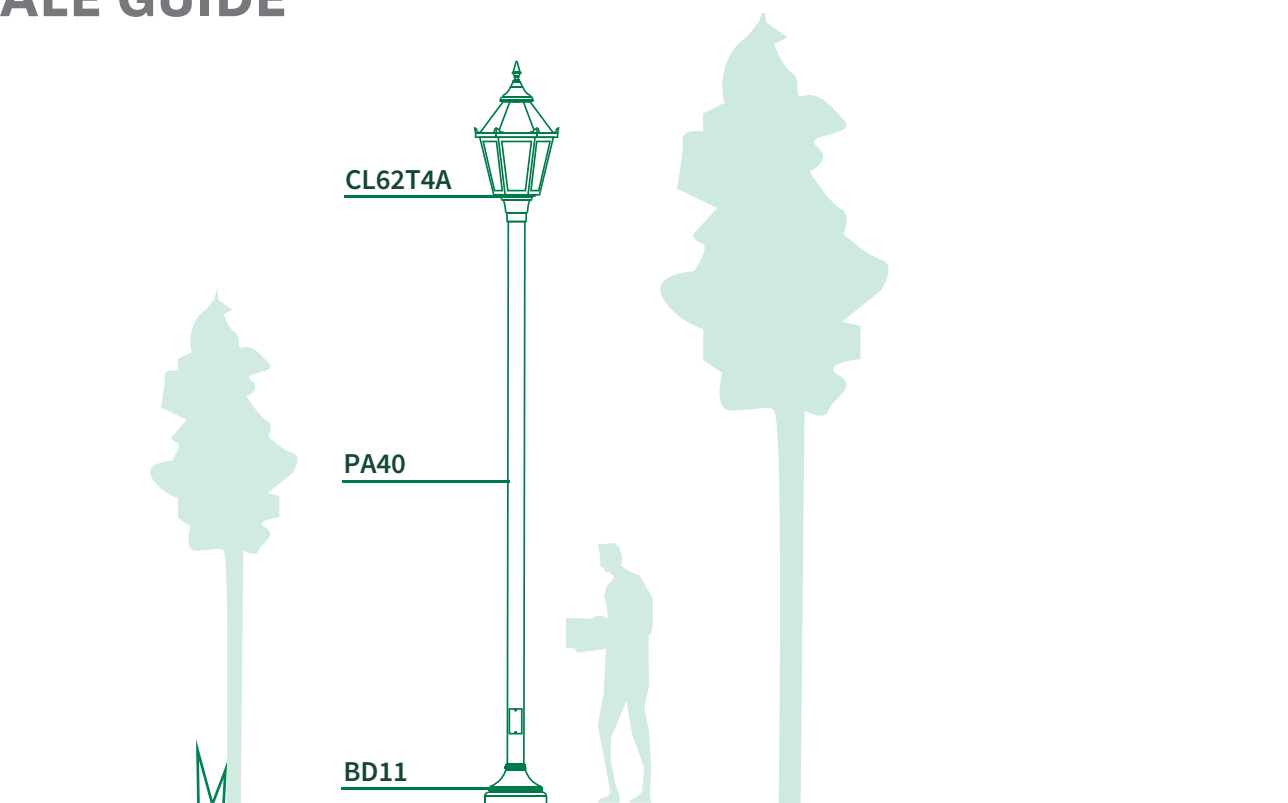
Luminaire

SCALE GUIDE



Luminaire

SCALE GUIDE



Post-Top

CL41T4A/CL41T4B/CL41T4C

Ordering Template

MODEL	LENS	DIST.	WATT	CCT	VOLT	FITTER	OPTIONS	COLOR	TEXTURE	OP.FIN.
CL41T4A	LAF	2	20W	3K	120	NONE	NONE	BK	TX	MG
CL41T4B	LAO ³	3	40W	4K	208	R28	PC	MT	SM ⁴	
CL41T4C		3M	60W		240	R30	PT ^{1,2}	DG		
		4	80W		277		PTL ^{1,2}	MA		
		5	100W		347		PTDR ^{1,2}	SI ⁴		
		2HS			480		PX ^{1,2}	BZ		
		3HS					PROG	BG		
		3MHS					SD	GM		
		4HS						PG		
								WH		

¹ONLY ONE OF THESE OPTION CAN BE CHOSEN

²ONLY A VAILABLE WITH CL41T4B

³TYPE 5 ONLY

ORDERING CODE

References

LENS

LAF LENS ACRYLIC FROST
 LAO* LENS ACRYLIC OPALINE
 *PHOTOMETRIC WILL BE AFFECTED DUE TO FINISH.

DISTRIBUTION

HS INTERNAL HOUSE SHIELD
 SEE PHOTOMETRIC PAGE FOR DETAILS

CCT

3K 3000K
 4K 4000K

WATT

SEE PHOTOMETRIC PAGE FOR LUMEN OUTPUT

FITTER

NONE FITS 4" O.D. X 3" LONG TENON
 R28 REDUCER 4" O.D. TO 2 7/8" O.D. X 3" LONG TENON
 R30 REDUCER 4" O.D. TO 3" O.D. X 3" LONG TENON

OPTIONS

NONE NONE
 PC BUTTON-TYPE PHOTOCELL
 PT PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
 PTL LONG LIFE PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
 PTDR* 7-PIN RECEPTACLE (ANSI C136.41)
 PX SHORTING CAP W/7-PIN RECEPTACLE (ANSI C136.41)
 PROG* PROGRAMMABLE DRIVER
 SD FIELD ADJUSTABLE 10% INCREMENT STEP-DIMMING SWITCH
 *CONTACT FACTORY FOR WIRELESS APPLICATIONS AND FOR MORE DETAILS

COLOR

BK BLACK RAL9005
 MT METALLIC GRAPHITE TEXTURED ONLY (PROPRIETARY FORMULA)
 DG DARK GREEN RAL6012
 MA MARINE BLUE RAL5013
 SI⁴ METALLIC SILVER RAL9006 (SMOOTH ONLY)
 BZ DARK BRONZE RAL8019
 BG BURGUNDY RAL3005
 GM MOSS GREEN RAL6005
 PG PALE GREY RAL7040
 WH WHITE RAL9003

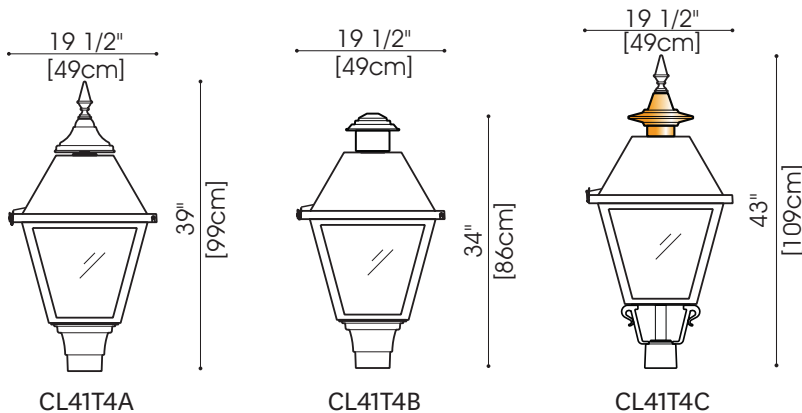
TEXTURE

TX TEXTURED
 SM⁴ SMOOTH (METALLIC SILVER RAL9006 ONLY)

OP.FIN. (OPTIONAL FINISH)

MG MARINE GRADE PRE-FINISH

Luminaire



Post-Top

CL62T4A / CL62T4B

Ordering Template

MODEL	LENS	DIST.	WATT	CCT	VOLT	FITTER	OPTIONS	COLOR	TEXTURE	OP.FIN.
CL62T4A	LAF	2	34W	3K	120	NONE	NONE	BK	TX	MG
CL62T4B	LAO ¹	3	50W	4K	208	R28	PC	MT	SM	
		3M	68W		240	R30	PROG	DG		
		4			277			MA		
		5						SI		
		2HS						BZ		
		3HS						BG		
		3MHS						GM		
		4HS						PG		
								WH		

¹TYPE 5 ONLY

ORDERING CODE

References

LENS

LAF	LENS ACRYLIC FROST
LAO*	LENS ACRYLIC OPALINE

*PHOTOMETRIC WILL BE AFFECTED DUE TO FINISH.

DISTRIBUTION

HS	INTERNAL HOUSE SHIELD
----	-----------------------

SEE PHOTOMETRIC PAGE FOR DETAILS

CCT

3K	3000K
4K	4000K

WATT

SEE PHOTOMETRIC PAGE FOR LUMEN OUTPUT

FITTER

NONE	FITS 4" O.D. X 3" LONG TENON
R28	REDUCER 4" O.D. TO 2 7/8" O.D. X 3" LONG TENON
R30	REDUCER 4" O.D. TO 3" O.D. X 3" LONG TENON

OPTIONS

NONE	NONE
PC	BUTTON-TYPE PHOTOCELL
PROG*	PROGRAMMABLE DRIVER

*CONTACT FACTORY WIRELESS APPLICATIONS AND FOR MORE DETAILS

COLOR

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

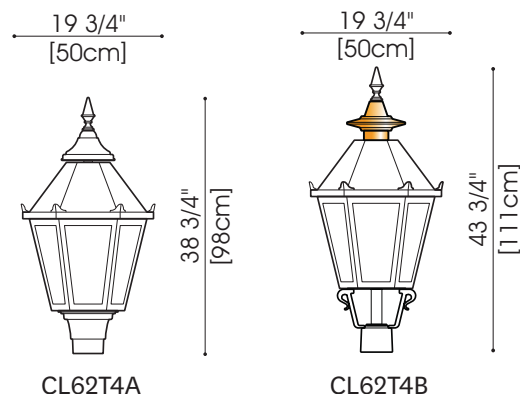
TEXTURE

TX	TEXTURED
SM	SMOOTH

OP.FIN. (OPTIONAL FINISH)

MG	MARINE GRADE PRE-FINISH
----	-------------------------

Luminaire



Pendant

CL41P1

Ordering Template

MODEL	LENS	DIST.	WATT	CCT	VOLT	ADAPTOR	OPTIONS	COLOR	TEXTURE	OP.FIN.
CL41P1	LAF	2	20W	3K	120	NONE	NONE	BK	TX	MG
	LAO ¹	3	40W	4K	208		PC	MT	SM	
		3M	60W		240		PT ²	DG		
		4	80W		277		PTL ²	MA		
		5	100W		347		PTDR ²	SI		
		2HS			480		PX ²	BZ		
		3HS					PROG	BG		
		3MHS					SD	GM		
		4HS						PG		
								WH		

¹TYPE 5 ONLY

²ONLY ONE OF THESE OPTION CAN BE CHOSEN

ORDERING CODE

References

LENS

LAF	FLAT LENS ACRYLIC FROST
LAO*	FLAT LENS ACRYLIC OPALINE

*PHOTOMETRIC WILL BE AFFECTED DUE TO FINISH.

DISTRIBUTION

HS	INTERNAL HOUSE SHIELD
----	-----------------------

SEE PHOTOMETRIC PAGE FOR DETAILS

CCT

3K	3000K
4K	4000K

WATT

SEE PHOTOMETRIC PAGE FOR LUMEN OUTPUT

ADAPTOR

NONE	FITS INTO Ø2" I.D. X MIN 4" LONG TENON
ADV	SELF-LEVELING, SIDE MOUNT ADAPTOR FITS ONTO Ø2 3/8" O.D. x MIN 6" LONG TENON
ADH	DECORATIVE SIDE MOUNT ADAPTOR FITS ONTO Ø2 3/8" O.D. x MIN 6" LONG TENON

OPTIONS

NONE	NONE
PC	BUTTON-TYPE PHOTOCELL
PT	PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTL	LONG LIFE PHOTOCELL W/7-PIN RECEPTACLE (ANSI C136.41)
PTDR*	7-PIN RECEPTACLE (ANSI C136.41)
PX	SHORTING CAP W/7-PIN RECEPTACLE (ANSI C136.41)
PROG*	PROGRAMMABLE 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	METALLIC SILVER RAL9006 (SMOOTH ONLY)
BZ	DARK BRONZE RAL8019
BG	BURGUNDY RAL3005
GM	MOSS GREEN RAL6005
PG	PALE GREY RAL7040
WH	WHITE RAL9003

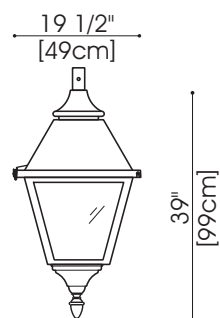
TEXTURE

TX	TEXTURED
SM	SMOOTH

OP.FIN. (OPTIONAL FINISH)

MG	MARINE GRADE PRE-FINISH
----	-------------------------

Luminaire



CL41P1

Photometry

CL41T4 / CL41P1

SOURCE: LED 4000K \pm 150K, 70 CRI minimum¹
 WATERPROOF RATING: IP66 optical system

LED code definition:

2 - 20W - 4K

Color temperature

LED Wattage

Optical distribution



Lens Acrylic Frost (LAF)

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	1915	87	20	22	350	B1-U3-G2	50W
2-40W-4K	3546	79	40	45	700	B1-U3-G2	70W
2-60W-4K	5320	79	60	67	700	B1-U3-G3	100W
2-80W-4K	7093	79	80	90	700	B2-U3-G3	150W
2-100W-4K	8866	79	100	112	700	B2-U3-G4	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	1983	90	20	22	350	B1-U3-G2	50W
3-40W-4K	3672	82	40	45	700	B1-U3-G3	70W
3-60W-4K	5508	82	60	67	700	B1-U3-G3	100W
3-80W-4K	7345	82	80	90	700	B2-U3-G4	150W
3-100W-4K	9181	82	100	112	700	B2-U3-G4	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	2067	94	20	22	350	B1-U3-G2	50W
3M-40W-4K	3827	85	40	45	700	B1-U3-G3	70W
3M-60W-4K	5741	86	60	67	700	B2-U3-G4	100W
3M-80W-4K	7654	85	80	90	700	B2-U4-G5	150W
3M-100W-4K	9568	85	100	112	700	B2-U4-G5	200W

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

CL41T4 / CL41P1

SOURCE: LED 4000K \pm 150K, 70 CRI minimum¹
 WATERPROOF RATING: IP66 optical system

LED code definition:

4-20W - 4K

Color temperature

LED Wattage

Optical distribution



Lens Acrylic Frost (LAF)

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	1937	88	20	22	350	B1-U3-G2	50W
4-40W-4K	3587	80	40	45	700	B1-U3-G3	70W
4-60W-4K	5381	80	60	67	700	B1-U3-G3	100W
4-80W-4K	7175	80	80	90	700	B2-U3-G4	150W
4-100W-4K	8969	80	100	112	700	B2-U4-G4	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	2157	98	20	22	350	B1-U3-G2	50W
5-40W-4K	3995	89	40	45	700	B2-U3-G2	70W
5-60W-4K	5993	89	60	67	700	B3-U3-G3	100W
5-80W-4K	7991	89	80	90	700	B3-U3-G3	150W
5-100W-4K	9988	89	100	112	700	B3-U4-G4	200W

Lens Acrylic Opaline (LAO)

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	1765	80	20	22	350	B1-U3-G2	50W
5-40W-4K	3269	73	40	45	700	B1-U4-G2	70W
5-60W-4K	4903	73	60	67	700	B2-U4-G3	100W
5-80W-4K	6538	73	80	90	700	B2-U5-G3	150W
5-100W-4K	8172	73	100	112	700	B3-U5-G3	200W

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²IES-TM-21 Reported more than 54 000 hours.

³System wattage includes the LED and the Driver.

⁴Equivalency should always be verified by photometric layout.

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

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Classic

CL62T4A / CL62T4B

SOURCE: LED 4000K \pm 150K, 70 CRI minimum¹
 WATERPROOF RATING: IP66 optical system

LED code definition:

3 - 34W - 4K

Color temperature

LED Wattage

Optical distribution



Lens Acrylic Frost (LAF)

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
2-34W-4K	3059	81	34	38	350	B1-U3-G2	70W
3-34W-4K	3168	83	34	38	350	B1-U3-G2	70W
3M-34W-4K	3480	92	34	38	350	B1-U3-G3	70W
4-34W-4K	3297	87	34	38	350	B1-U3-G3	70W
5-34W-4K	3469	91	34	38	350	B2-U3-G2	70W
2-50W-4K	4294	74	50	58	530	B1-U3-G3	100W
3-50W-4K	4446	77	50	58	530	B1-U3-G3	100W
3M-50W-4K	4884	84	50	58	530	B1-U3-G3	100W
4-50W-4K	4628	80	50	58	530	B1-U3-G3	100W
5-50W-4K	4869	84	50	58	530	B2-U3-G3	100W
2-68W-4K	5368	68	68	79	700	B1-U3-G3	150W
3-68W-4K	5558	70	68	79	700	B2-U3-G3	150W
3M-68W-4K	6105	77	68	79	700	B2-U3-G4	150W
4-68W-4K	5785	73	68	79	700	B1-U3-G3	150W
5-68W-4K	6086	77	68	79	700	B3-U3-G3	150W

Lens Acrylic Opaline (LAO)

LED CODE	LUMEN OUTPUT	EFFICACY (LM/W)	WATTAGE LED	WATTAGE SYSTEM ²	LED CURRENT (mA)	BUG RATING	HID EQUIVALENCY ³
5-34W-4K	2814	74	34	38	350	B1-U4-G2	70W
5-50W-4K	3949	68	50	58	530	B2-U4-G3	100W
5-68W-4K	4936	62	68	79	700	B2-U5-G3	150W

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



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