



Energy efficiency and long life

Ceramalux ALTO

These lamps pass the EPA's TCLP test for non-hazardous materials. Ideal for industrial applications, warehouses, post top applications and parking lots.

Benefits

- Low mercury - better for the environment.
- Long Life - 24,000 hours Rated Average Life.
- High efficacy up to 140 LPW.

Features

- Low total cost of ownership.
- Long life—up to 24,000 hours.
- High efficacy up to 140 LPW.
- ALTO® Lamp Technology - Sustainable solution.
- ED 18 Available in 200, 250 and 400 watt; ED-23 1/2 Available in 50, 70,100, and 150 watt

Application

- Ideal for street and roadway lighting, parking lots and garages, warehouses and manufacturing facilities where lower maintenance costs are desired.

Warnings and Safety

- Lamp contains mercury.
- Manage in Accord with Disposal Laws.
- See: www.lamprecycle.org or 1-800-555-0050

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Versions



E39, E-25, Clear

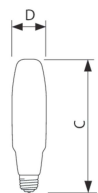
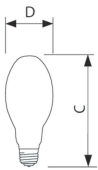
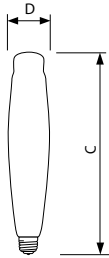


E39, ED-18, Clear



E39, ED-23 1/2, Clear

Dimensional drawing



Product

C100S52/ALTO

Product	D	C (max)
C100S54 3PK	3 in	7-3/4 in
SON 70W E39 ED75 CL SL/12		
SON 150W E39 ED75 CL SL/12		
C50S68/ALTO 12PK		
SON 100W E39 ED75 CL SL/12	3 in	7-3/4 in

Product	D	C (max)
SON 250W E39 ED58 CL SL/12	2-1/4 in	9-13/16 in
SON 400W E39 ED58 CL SL/12		
C200S66/ALTO 12PK		

Ceramalux ALTO

General information	
Cap-Base	E39
Main Application	General and Street Lighting
Operating Position	Universal
Luminaire design requirements	
Bulb Temperature (Max)	752 °F
Light technical	
Correlated Color Temperature (Nom)	2100 K
Mechanical and housing	
Bulb Finish	Clear
Bulb Material	Hard Glass

Approval and application

Order Code	Full Product Name	Mercury (Hg)		
		Mercury (Hg) Content (Max)	Content (Nom)	Picogram Per Lumen Hour
368837	C1000S52/ALTO	-	32 mg	11.3 pg/lm.h
467373	C400S51/ALTO 12PK	23.5 mg	-	26.4 pg/lm.h
467217	C250S50/ALTO 12PK	23.5 mg	-	-
467225	C200S66/ALTO 12PK	31 mg	-	-
467233	C150S55/ALTO 12PK	17 mg	-	-

Order Code	Full Product Name	Mercury (Hg)		
		Mercury (Hg) Content (Max)	Content (Nom)	Picogram Per Lumen Hour
140953	SON ALTO 100W LV E E39 CL SL/3	22.1 mg	-	-
467241	C100S54/ALTO 12PK	22.1 mg	-	-
467258	C70S62/ALTO 12PK	17 mg	-	-
467266	C50S68/ALTO 12PK	17.7 mg	-	-

Operating and electrical

Order Code	Full Product Name	Lamp Current (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Nom)	Re-Ignition Time (Min) (Max)
368837	C1000S52/ALTO	4.7 A	275 V	210 V	250 V	1003 W	3 min
467373	C400S51/ALTO 12PK	4.6 A	115 V	84 V	100 V	401.5 W	1 min
467217	C250S50/ALTO 12PK	3.0 A	110 V	79 V	95 V	251 W	2 min
467225	C200S66/ALTO 12PK	2.4 A	115 V	90 V	100 V	200.8 W	1 min
467233	C150S55/ALTO 12PK	3.2 A	62 V	48 V	55 V	150.6 W	2 min
140953	SON ALTO 100W LV E E39 CL SL/3	2.1 A	62 V	45 V	55 V	100.4 W	2 min
467241	C100S54/ALTO 12PK	2.1 A	62 V	45 V	55 V	100.4 W	2 min
467258	C70S62/ALTO 12PK	1.6 A	60 V	44 V	52 V	70.2 W	2 min
467266	C50S68/ALTO 12PK	1.18 A	62 V	46 V	52 V	50.2 W	2 min

Light technical (1/2)

Order Code	Full Product Name	Chromaticity	Chromaticity	Color	Luminous Efficacy (rated) (Min)	Luminous Efficacy (rated) (Nom)	Design Mean Lumens	Luminous Flux (Rated) (Min)
		Coordinate X (Nom)	Coordinate Y (Nom)	Rendering Index (Nom)				
368837	C1000S52/ALTO	515	420	21	121.5 lm/W	135 lm/W	126000 lm	121500 lm
467373	C400S51/ALTO 12PK	515	420	20	112.5 lm/W	125 lm/W	45000 lm	45000 lm
467217	C250S50/ALTO 12PK	523	412	26	102 lm/W	114 lm/W	24300 lm	25600 lm
467225	C200S66/ALTO 12PK	521	420	16	104 lm/W	115 lm/W	19260 lm	20700 lm
467233	C150S55/ALTO 12PK	514	424	17	96 lm/W	106 lm/W	14220 lm	14400 lm
140953	SON ALTO 100W LV E E39 CL SL/3	520	420	18	85 lm/W	94 lm/W	8460 lm	8500 lm

Ceramalux ALTO

Order Code	Full Product Name	Chromaticity	Chromaticity	Color	Luminous Efficacy (rated) (Min)	Luminous Efficacy (rated) (Nom)	Design Mean Lumens	Luminous Flux (Rated) (Min)
		Coordinate X (Nom)	Coordinate Y (Nom)	Rendering Index (Nom)				
467241	C100S54/ALTO 12PK	520	420	18	85 lm/W	94 lm/W	8460 lm	8500 lm
467258	C70S62/ALTO 12PK	522	425	13	86 lm/W	94 lm/W	5670 lm	6000 lm
467266	C50S68/ALTO 12PK	529	420	16	74 lm/W	82 lm/W	3600 lm	3700 lm

Light technical (2/2)

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)	Photosynthetic Photon Flux (PPF)	Order Code	Full Product Name	Luminous Flux (Rated) (Nom)	Photosynthetic Photon Flux (PPF)
368837	C100S52/ALTO	135000 lm	1550 µmol/s	140953	SON ALTO 100W LV E E39 CL SL/3	9400 lm	-
467373	C400S51/ALTO 12PK	50000 lm	595 µmol/s	467241	C100S54/ALTO 12PK	9400 lm	-
467217	C250S50/ALTO 12PK	28500 lm	-	467258	C70S62/ALTO 12PK	6600 lm	-
467225	C200S66/ALTO 12PK	23000 lm	-	467266	C50S68/ALTO 12PK	4100 lm	-
467233	C150S55/ALTO 12PK	16000 lm	-				

Mechanical and housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
368837	C100S52/ALTO	E25	140953	SON ALTO 100W LV E E39 CL SL/3	ED-23 1/2
467373	C400S51/ALTO 12PK	ED18	467241	C100S54/ALTO 12PK	ED-23 1/2
467217	C250S50/ALTO 12PK	ED18	467258	C70S62/ALTO 12PK	ED-23 1/2
467225	C200S66/ALTO 12PK	ED18	467266	C50S68/ALTO 12PK	ED-23 1/2
467233	C150S55/ALTO 12PK	ED-23 1/2			

