

SORAA

Electrical compatibility – A19 100V - Japan

Table of contents

- General compatibility guidelines.....Page 2
- Dimming compatibility.....Page 3-5

General compatibility guidelines

Scope

This document provides the basic guidelines regards electrical compatibility of SORAA 100V A19 lamps.

Dimmer Compatibility

SORAA 100V A19 lamps are made to work with trailing edge (reverse phase) and leading edge (forward phase) phase cut dimmers. However, the use of trailing edge dimmers is preferred and will show in general better behavior.

Dimmer compatibility tables are on pages **3-5**.

The percentages for each dimmer combination are the percentage of light output that we were able to dim down to without seeing any problems like flicker/shimmer. Anything 30% or above is considered not compatible and you will see a "NC" in a grey cell.

There might be a minimum wattage load on the dimmer. If this minimum load is not met, there might be compatibility issues.

Maximum number of lamps on a dimmer

The following need to be considered when determining the amount of lamps on a dimmer.

1. SORAA tests have been carried out with 1 lamp unless stated otherwise.
2. There is a repetitive, very brief current spike the LED will see twice per cycle. This current spike has to be provided by the dimmer, and will affect the recommended fixture load on each dimmer.
3. Ultimately the dimmer manufacturer is the only one with authority to rate their product, but SORAA can give an Engineering estimate.
4. If the dimmer is not rated for LED lamps, we recommend to use a 5.0 de-rating factor for incandescent/halogen dimmers loaded with our 100V lamps.

For example for a 500W dimmer it would mean $500/5 = 100W$ of LED, so an estimated maximum of 9 lamps at 11W.

Disclaimer

Compatibility tests are conducted by Soraa only as guidance for the user.

All tests are conducted under bench conditions; results may differ from test results depending on conditions at the application site.

Results may vary due to variability in component choices and manufacturing processes by dimmer manufacturers.

For more information on the dimmers please find specs on the manufacturer's website.

SORAA A19 11W lamps 100V - DIMMER COMPATIBILITY LIST - Japan

Dimmer Manufacturer	Dimmer Model	Edge Trigger	Qty. of lamps tested	Dim (%)	Comments
Daiko	DP-34402F	Leading edge	1 to 9	16%	
			10	NC	
Daiko	DP-34406F	Leading edge	1 to 8	16%	
			9, 10	NC	
Daiko	DP-37154E	Leading edge	1, 10	15%	
Daiko	LZA-90306E	Leading edge	1, 3	5%	
ENDO	RX116WC	Leading edge	1, 10	13%	
ENDO	X-207W	Leading edge	1, 10	16%	
JIMBO (神保電器)	NKW-LC10N3	Leading edge	1, 10	8%	Limited by dimmer travel
JIMBO (神保電器)	NKW-LC10N3G	Leading edge	1, 10	6%	Limited by dimmer travel
JIMBO (神保電器)	WJ-RL5N	Leading edge	1, 10	6%	Limited by dimmer travel
Koizumi	AE36745E-A	Leading edge	1, 3	2%	
Koizumi	AE36745E-C	Leading edge	1, 3	2%	
Maxray	OP0734-04	Leading edge	1, 9	13%	
			10	NC	
Maxray	OP0735-04	Leading edge	1, 9	13%	
			10	NC	
Odelic	LC 211 (LED)	Leading edge	1, 3	8%	

SORAA A19 11W lamps 100V - DIMMER COMPATIBILITY LIST - Japan

Dimmer Manufacturer	Dimmer Model	Edge Trigger	Qty. of lamps tested	Dim (%)	Comments
Panasonic	NQ20203T	Leading edge	1, 9	13%	
			10	NC	
Panasonic	NQ20345	Leading edge	1, 10	4%	Limited by dimmer travel
Panasonic	WN57512		1, 10	7%	Limited by dimmer travel
Panasonic	WN575159		1, 10	6%	Limited by dimmer travel
Panasonic	WN575215K		1, 10	NC	
Panasonic	WN575259		1, 10	6%	Limited by dimmer travel
Panasonic	WT57511W	Leading edge	1, 3	NC	
Panasonic	WT57515WK	Leading edge	1 to 9	6%	Limited by dimmer travel
			10	NC	
Panasonic	WTA 57583W	Trailing edge	1, 3	7%	
Panasonic	WTC57521W	Leading edge	1, 10	NC	
Panasonic	WTC57523W	Leading edge	1, 3	2%	
Panasonic	WTC575251	Leading edge	1, 3	1%	
Panasonic	WTC57525WK	Leading edge	1 to 9	6%	Limited by dimmer travel
			10	NC	
Panasonic	WTC57528WK	Leading edge	1 to 9	1%	Limited by dimmer travel
			10	NC	
TES LIGHTING	TLC-0003	Leading edge	1, 3	12%	

SORAA A19 lamps 120V - DIMMER COMPATIBILITY LIST - North America

Notes:

Compatibility tests are conducted by Soraa (unless stated otherwise) only as guidance for the user

All tests are conducted under bench conditions; results may differ from test results depending on conditions at the application site

Results may vary due to variability in component choices and manufacturing processes by the dimmer manufacturer

Regards compatibility tests conducted by dimmer manufacturer, please contact the dimmer manufacturer or Soraa for more details and/or reports.

(*) Test results with this dimmer added to the compatibility list as of Revision 18Q3

--%	Dims to < 20% (of the measured light output)
--%	Dims to 20-30% (of the measured light output)
NC	Not compatible (or dims to >30%)
Blank cell	Not tested