

# SORAA

## Electrical compatibility – ARC Pendant, Adjustable Surfaced 230V - International

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## General compatibility guidelines

### Scope

This document provides the basic guidelines regards electrical compatibility of SORAA 230V ARC Pendant and Adjustable surfaced fixtures.

### Dimmer Compatibility

SORAA 230V ARC Pendant and Adjustable surfaced fixtures are made to work with reverse phase and forward phase phase cut dimmers. However, the use of reverse phase dimmers is preferred and will show in general better behavior .

Dimmer compatibility tables are on pages **3-4**.

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 Pendants on a dimmer

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

1. SORAA tests have been carried out with 1 fixture 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. We recommend to use a 5.0 de-rating factor for dimmers loaded with our 230V fixtures.

**For example for a 500W dimmer it would mean  $500/5 = 100W$  of LED, so an estimated maximum of 5 fixtures of 18.5W.**

### 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 ARC Pendant, Adjustable, SURFACED 230V - DIMMER COMPATIBILITY LIST - International**

Manufacturer	Model	MD #	Edge Trigger	Number of fixtures tested	50mm (11W)	50mm (18W)	100mm (20W)	Comments
Lutron	Energi Svr Node	QSNE-4A-D	Trailing	1, 5	28%	30%	30%	
Lutron	LCP Panel	LP-RPM-4A-230	Adaptive - Trailing	1, 5	9%	6%	8%	
Lutron	Grafik Eye QS	QSGR	Leading	1, 5	NC	NC	NC	
Lutron	Grafik Eye QS	QSGR +ELVI module	Trailing	1, 5	6%	6%	7%	Limited by dimmer travel
Philips Dynalite		DGLEDM401	Trailing	1, 5	14%	13%	16%	Limited by dimmer travel
Philips Dynalite		DGTM402	Trailing	1, 5	30%	30%	30%	Limited by dimmer travel
Clipsal		L5504D2U	Adaptive - Trailing	1 - 5	11% (min 2pcs)	7%	8%	
Helvar	Digidim	452	Trailing	1, 5	3%	5%	5%	Limited by dimmer travel
Helvar	Digidim	454	Trailing	1, 5	5%	4%	7%	
Honeywell	Inncom	D454.F.CE	Trailing	1, 5	10%	9%	11%	
RVE		RV LED 250	Trailing	1, 5	18%	16%	15%	Limited by dimmer travel

# SORAA ARC Pendant, Adjustable Surfaced 230V - 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 this Revision

--%	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