soraa brilliant HI



SORAA BRILLIANT HL™

The Soraa Brilliant HL single-source COB lamp combines Soraa's world-class optics design and driver technology with a photopically efficacious LED

SORAA POINT SOURCE OPTICS™

With a point source and sophisticated folded optics, Soraa creates very controlled beam angles from 10 to 36 degrees, in form factors as challenging as the compact MR16 resulting in smooth uniform beams and crisp shadows

FLICKER

Soraa lamps demonstrate low levels of flicker in both dimmed and undimmed states

ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime to L70: 35,000hrs

Warranty: 3yrs or 25,000hrs whichever comes first

Warranty information: soraa.com/resources/legal

CERTIFICATIONS

Title 20 certification **pending**, UL/CUL Class 2 and non-Class 2, FCC Title 47 Part 15B, RoHS, CE







GENERAL SPECIFICATIONS

Form Factor Width: 50.1mm (1.97") Height: 45.5mm (1.79") Weight: 47g Operating Temperature Minimum: -40°C (ambient) Typical: 85°C - 95°C (base) Maximum: 100°C (base)

MR16 GU5.3 7.5W

Output Range	575 - 630 lumen
Beam Angle Range	10°, 25°, 36°
Color Metrics	CCT: 2700K, 3000K Color Rendering CIE Metrics: CRI 90, R9 50
Application	This lamp is suitable for use in fully enclosed fixtures, subject to the maximum heatsink temperature limits stated in this data sheet. Halogen replacement for indoor applications.



HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations

This lamp is suitable for use in fully enclosed fixtures, subject to the maximum heatsink temperature limits stated in this data sheet. A list of qualified enclosed fixtures can be found at www.soraa.com/resources

Works with trailing edge and leading edge phase cut dimmers (see www.soraa.com/resources)

INTENDED USE AND APPLICATIONS

Intended for use in GU10 compatible recessed downlights, track lighting and other indoor and outdoor applications

Soraa lamps are designed to safely turn down in any thermal environment not conducive to minimum airflow or proper ventilation

ACCESSORIES

Narrow spot compatible with the Soraa SNAP System[™]

Electrical Wattage: 7.5W Power factor: 0.92 Voltage: 12V +/- 1.2V Frequency: 50/60Hz Dimming

Dimmable to <20%





10 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.5	1.1	11.1%
1.0	2.1	2.8%
1.6	3.2	1.2%
2.1	4.2	0.7%
2.6	5.3	0.4%

25 DEGREE BEAM

36 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)		Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.3	2.2	11.1%	3'	1.9	3.3	11.1%
2.7	4.4	2.8%	6'	3.9	6.5	2.8%
4.0	6.6	1.2%	9'	5.8	9.8	1.2%
5.3	8.7	0.7%	12'	7.8	13.0	0.7%
6.7	10.9	0.4%	15'	9.7	16.3	0.4%

Note: Footcandles may be calculated by multiplying the CBCP of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED MR16

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	CBCP (Cd)	Halogen Equiv	Total Flux (Lm)	Efficacy (Lm/W)	CRI	McA	SNAP	Title 20
BRILLIANT HL SERIES												
SM16-07-10D-827-H1	08722	2700	10	20	8000	75	575	77	90	3	Yes	pending
SM16-07-25D-827-H1	08724	2700	25	40	3170	75	600	80	90	3	-	pending
SM16-07-36D-827-H1	08726	2700	36	57	1550	75	600	80	90	3	-	pending
SM16-07-10D-830-H1	08728	3000	10	20	8400	75	600	80	90	3	Yes	pending
SM16-07-25D-830-H1	08730	3000	25	40	3300	75	630	84	90	3	-	pending
SM16-07-36D-830-H1	08732	3000	36	57	1650	75	630	84	90	3	-	pending

 $\textbf{CCT}: \mbox{ Correlated Color Temperature } \textbf{McA}: \mbox{ White Point Accuracy in McA step}$

*Specifications are at stable warm operating conditions (25°C ambient)



Rf: TM-30 metric measuring color fidelity (whether colors are similar to those under natural light). Rf is a more accurate version of the CRI Ra. Rf is 100 for natural light. Rg: TM-30 metric measuring color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light. Rfh1: TM-30 metric measuring color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.



<u>Electrical compatibility – BRILLIANT HL MR16 12V GU5.3 7.5W & 9W lamps - North</u> <u>America</u>

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Scope

This document provides the basic guidelines regards electrical compatibility of SORAA 12V BRILLIANT HL MR16 lamps and compatibility tables for transformers and dimmers.

Transformer Compatibility

SORAA 12V BRILLIANT HL MR16 lamps are made to work with 12V AC magnetic (MLV) and electronic (ELV) transformers and 12V DC transformers. Transformer compatibility tables are available on this document. If multiple lamps are installed on one transformer, they need to be connected in parallel. They cannot be installed in series.

- 12V AC Magnetic transformers and 12V DC transformers are in general compatible.
- 12V AC Electronic transformers generally have a minimum load, and SORAA recommends using only transformers that have been tested and found compatible. In general
 we recommend to use transformers with very little or no minimum load (0W). If your transformer is not in the compatibility tables below, it does not mean it is
 incompatible, but it means that we have not tested it to date, please contact <u>techsupport@soraa.com</u> for guidance.

For transformer-lamp compatibility, Soraa only tests up to 5 transformers per circuit. Consult Soraa, controls provider and transformer manufacturer for latest compatibility when installing 5 or more fixtures per circuit. Lamp performance may vary based on field conditions, including but not limited to THD, shared neutral wires, power-quality. Whenever possible, test lamps in-situ to verify satisfactory performance.

Dimmer Compatibility

SORAA 12V BRILLIANT HL MR16 lamps are made to work with trailing edge (reverse phase) and leading edge (forward phase) phase cut dimmers.

Electronic dimmable transformers need trailing edge dimmers, while Magnetic transformers need leading edge dimmers.

The percentages for each transformer/dimmer combination in the compatibility tables are the percentage of <u>measured</u> 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 transformer/dimmer. If this minimum load is not met, there might be compatibility issues.

Maximum number of lamps on a dimmer/transformer

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

- 1. SORAA tests have been carried out with 1 lamp unless stated otherwise.
- 2. There is a repetitive, very brief current spike the LED lamp will see twice per cycle. This current spike has to be provided by the transformer and/or dimmer, and will affect the recommended lamp load on each transformer or dimmer.
- 3. Ultimately the transformer/dimmer manufacturer is the only one with authority to rate their product, but SORAA can give an Engineering estimate.
- 4. We have added the maximum amount of MR16 lamps we recommend for each transformer in the transformer compatibility tables.
- 5. For dimmers, we recommend to use a 2.0 de-rating factor forward phase dimmers with magnetic transformers; and a 4.0 de-rating factor for incandescent/halogen reverse phase dimmers driving Low Voltage lamps on electronic transformers.

For example for a 500W forward phase dimmer it would mean 500/2=250W of LED, so an estimated maximum of 33 lamps 7.5W. For example for a 400W reverse phase dimmer it would mean 400/4=100W of LED, so an estimated maximum of 13 lamps 7.5W.

Distance between transformer and lamp(s)

- 12V AC Magnetic transformers and 12V DC transformers do not have a limitation regards the maximum length of the wires between transformer and lamp. Only the voltage drop has to be taken into account (losses because of the inner resistance of the conductors).
- 12V AC Electronic transformers have a limitation in the length of the wires between transformer and lamp(s). This length is usually stated by the transformer manufacturer on its specs or on the transformer itself, and generally it is limited to 2 meters (6 feet).

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 the transformer and dimmer manufacturers. For more information on the dimmers/transformers, please find specs on the manufacturer's website.

SORAA BRILLIANT H.L. MR16 12V 7.5W & 9W - TRANSFORMER COMPATIBILITY LIST - North America

PASS - The transformer supports one or more lamps up to the maximum wattage;

NC - SORAA does not recommend this transformer for use with its lamps;

2 Lamp Min - The transformer supports two or more lamps upto the maximum lamp wattage limit;

3 Lamp Min - The transformer supports three or more lamps upto the maximum lamp wattage limit

Brand	Model	Wattage	Voltage (Vac)	Transformer Type	7.5	7.5W		Maximum Number of 7.5W Lamps per Transformer	Maximum Number of 9W Lamps per Transformer
					Free Air or	Enclosed	Free Air or		
North America					Open Fixture	Fixture	Open Fixture		
B+L	FX95100 / RFI	0-75	120	Electronic	PASS	PASS	PASS	6	5
ELG	250EL7512	75	120	Electronic	PASS	PASS	PASS	7	5
Fulham	T1M1UNV012V-20L	20	120-277	Electronic/DC	PASS	PASS	PASS	1	1
Fulham	T1M1UNV012V-60L	60	120-277	Electronic/DC	PASS	PASS	PASS	2	2
Hatch	RL12-75A-EPL	75	120	Electronic	PASS	PASS	PASS	6	5
Hatch	RS1215BFLED	15	120	Electronic	PASS	PASS	PASS	1	1
Hatch	RS12-150	150	120	Electronic	PASS	PASS	PASS	13	11
Hatch	RS12-300	300	120	Electronic	PASS	PASS	PASS	5	4
Hatch	RS12-60(AS)	60	120	Electronic	PASS	PASS	PASS	5	4
Hatch	RS12-15M-LED	15	120	Electronic	PASS	PASS	PASS	1	1
Hatch	RS12-30M-LED	30	120	Electronic	PASS	PASS	PASS	2	2
Hatch	RS12-60M-LED	60	120	Electronic	PASS	PASS	PASS	5	4
Hatch	RS12-60M-LED-FCC	60	120	Electronic	PASS	PASS	PASS	5	4
Hatch	RL12-60M-LED	60	120	Electronic	PASS	PASS	PASS	5	4
Hatch	RS12-80(AS)	80	120	Electronic	NC	NC	NC	NC	NC
Hatch	VS12-60W	60	120	Electronic	PASS	PASS	PASS	5	4
Hatch	VS12-105	105	120	Electronic	3 Lamps min	3 Lamps min	3 Lamps min	9	8
Juno	T537QJU	60	120	Electronic	PASS	PASS	PASS	5	4
Juno	T537U	60	120	Electronic	PASS	PASS	PASS	5	4
Juno	T538	75	120	Electronic	NC	NC	NC	NC	NC
LighTech	LET-60, LET-60 BF	60	120	Electronic	PASS	PASS	PASS	5	4
LighTech	LET60-LW	60	120	Electronic	PASS	PASS	PASS	5	4
LighTech	LET-75-120	75	120	Electronic	PASS	PASS	PASS	6	5
LighTech	LET-151 R	150	120	Electronic	PASS	PASS	PASS	11	9
LighTech	LET-303-12	300	120	Electronic	PASS	PASS	PASS	23	19
LTF	TA15WA12LEDB15	15	120	Electronic	PASS	PASS	PASS	1	1
LTF	TA60WA12LED	60	120	Electronic	PASS	PASS	PASS	5	4
LTF	TA75WA12	75	120	Electronic	PASS	PASS	PASS	6	5
LTF	TA105WA12LED	105	120	Electronic	PASS	PASS	PASS	9	8
Lutron	L3DA4U1UKS-AV120	20	120 & 277	Electronic/DC	NC	NC	NC	NC	NC
Lutron	LTEA4U1UKL-AV120	20	120 & 277	Electronic/DC	NC	NC	NC	NC	NC
Meanwell	LPV-20-12	20	120	Electronic/DC	PASS	PASS	PASS	1	1
Meanwell	PWM-90-12 (300Hz version)	90	120 & 277	Electronic/DC	PASS	PASS	PASS	8	6
Meanwell	PWM-90-12 (1.47kHz version)	90	120 & 277	Electronic/DC	NC	NC	NC	NC	NC
Meanwell	PWM-120-12 (300Hz version)	120	120 & 277	Electronic/DC	PASS	PASS	PASS	10	8
Meanwell	PWM-120-12 (1.47kHz version)	120	120 & 277	Electronic/DC	NC	NC	NC	NC	NC
MDL Corp	MDL Corp 316-0002 150		120	Electronic	PASS	PASS	PASS	13	13

12V BRILLIANT HL MR16 GU5.3 7.5W & 9W, North America compatibility, Rev 20Q2, 5/26/2020

SORAA BRILLIANT H.L. MR16 12V 7.5W & 9W - TRANSFORMER COMPATIBILITY LIST - North America

PASS - The transformer supports one or more lamps up to the maximum wattage;

NC - SORAA does not recommend this transformer for use with its lamps;

2 Lamp Min - The transformer supports two or more lamps upto the maximum lamp wattage limit;

3 Lamp Min - The transformer supports three or more lamps upto the maximum lamp wattage limit

Brand	Model	Wattage	Voltage (Vac)	Transformer Type	7.5	7.5W		Maximum Number of 7.5W Lamps per Transformer	Maximum Number of 9W Lamps per Transformer
					Free Air or	Enclosed	Free Air or		
North America					Open Fixture	Fixture	Open Fixture		
TCI	DC JOLLY DALI (cod.123424)	10	120	Electronic/DC	NC	NC	NC	NC	NC
WAC	EN-12100-R-AR	100	120	Electronic	PASS	PASS	PASS	9	7
WAC	EN-1260-R	60	120	Electronic	PASS	PASS	PASS	5	4
Cooper	T50W120VSL	50	120	Magnetic	PASS	PASS	PASS	4	3
Cooper	TF-149911	50	120	Magnetic	PASS	PASS	PASS	4	3
Cooper	TF149911-TP120	50	120	Magnetic	PASS	PASS	PASS	4	3
Cooper	TFA4120	50	120	Magnetic	PASS	PASS	PASS	4	3
Cooper	TF-E4-120	10	120	Magnetic	PASS	PASS	PASS	1	1
Cooper	TF-E4-UNV	10	120 & 277	Magnetic	PASS	PASS	PASS	1	1
Hammond Mfg	166Q12	75	120	Magnetic	PASS	PASS	PASS	1	5
Hatch	LT12-75-JIG-1	75	120	Magnetic	PASS	PASS	PASS	7	5
Hatch	RL12-50(E, EN, ENT)	50	120	Magnetic	PASS	PASS	PASS	4	3
Hatch	RL12-75(E, EN, ENT)	75	120	Magnetic	PASS	PASS	PASS	7	5
Iris	TFT-212	75		Magnetic	PASS	PASS	PASS	7	5
Iris	TFA-311T	50	120	Magnetic	PASS	PASS	PASS	4	3
Iris	TFA-3TR	50	120	Magnetic	PASS	PASS	PASS	4	3
Iris	TFA-400	75	120	Magnetic	PASS	PASS	PASS	7	5
Iris	TFA-51T	75	120	Magnetic	PASS	PASS	PASS	7	5
Juno	310-1333	300	120	Magnetic	PASS	PASS	PASS	28	23
MDL Corp	315-0071A-IRIS RPN3MR Fixt Dim Tab	50	120	Magnetic	PASS	PASS	PASS	4	3
MDL Corp	315-0071A-IRIS RPN3MR Fixt Norm Tab	50	120	Magnetic	PASS	PASS	PASS	4	3
MDL Corp	315-0126-12.3V	50	120	Magnetic	PASS	PASS	PASS	4	3
MDL Corp	315-0005-1	150	120	Magnetic	PASS	PASS	PASS	14	11
LINEA	701970	300	120	Magnetic	PASS	PASS	PASS	28	23
Orientronic	DLR1250BN	50	120	Magnetic	PASS	PASS	PASS	4	3
Orientronic	DLR1250BN	50	120 & 277	Magnetic	PASS	PASS	PASS	4	4
Q-Tran (*)	QT10-120/12-TP	10	120	Magnetic	PASS	PASS	NC	1	0
Q-Tran	QT50SV-120/12-RC	50	120	Magnetic	PASS	PASS	PASS	4	3
Q-Tran	QTMS-300MV	300	120	Magnetic	PASS	PASS	PASS	10	8
Q-Tran	QSET-300-120/12	300	120	Magnetic	PASS	PASS	PASS	20	15
Cooper	TF-E4-277	10	277	Magnetic	PASS	PASS	PASS	1	1
Hatch	LT12-75-JIG-2	75	277	Magnetic	PASS	PASS	PASS	7	5
Hatch	RL12-75-ABF-277 (*1)(*2)	60	277	Electronic	NC	NC	NC	NC	NC
Hatch	RS12-105-277 (*1) (*2)	105	277	Electronic	NC	NC	NC	NC	NC
Hatch	RS12-80-277 (*1) (*2)	80	277	Electronic	NC	NC	NC	NC	NC
Hatch	Hatch RS12-60M-LED-277 (*1)		277	Electronic	PASS	PASS	PASS	5	<u>4</u> 1

12V BRILLIANT HL MR16 GU5.3 7.5W & 9W, North America compatibility, Rev 20Q2, 5/26/2020

SORAA BRILLIANT H.L. MR16 12V 7.5W & 9W - TRANSFORMER COMPATIBILITY LIST - North America

PASS - The transformer supports one or more lamps up to the maximum wattage;

NC - SORAA does not recommend this transformer for use with its lamps;

2 Lamp Min - The transformer supports two or more lamps upto the maximum lamp wattage limit;

3 Lamp Min - The transformer supports three or more lamps upto the maximum lamp wattage limit

Brand	Model	Wattage	Voltage (Vac)	Transformer Type	7.5W		9W	Maximum Number of 7.5W Lamps per Transformer	Maximum Number of 9W Lamps per Transformer
North Amorica					Free Air or	Enclosed	Free Air or		
North America					Open Fixture	Fixture	Open Fixture		
Lightech	LET75 277 R (*1)	75	277	Electronic	PASS	PASS	PASS	5	4
LTF	TE15WA12LED-0000 (*1)	15	277	Electronic	PASS	PASS	PASS	1	1
Q-Tran	QT10-277/12-TP-RC	10	277	Magnetic	NC	NC	NC	NC	NC
Q-Tran	QT20-277/12-TP-RC	20	277	Magnetic	PASS	PASS	PASS	1	1
Q-Tran	QT50-75CK-PT-277-RC	50	277	Magnetic	PASS	PASS	PASS	4	3

Notes:

- Compatibility tests are conducted by Soraa under bench conditions as guidance for the user; results at the application site may differ due to variability in usage conditions or in transformer components/manufacturing
- If the transformer's minimum wattage is not met, the lamp may only operate under nominal conditions (nominal line voltage and thermal conditions where the lamp is at full power).
- If the transformer is not listed, please consult with Soraa before making recommendations to the end customer
- For transformer-lamp compatibility, Soraa only tests up to 5 transformers per circuit. Consult Soraa, controls provider and transformer manufacturer for latest compatibility when installing 5 or more fixtures per circuit. Lamp performance may vary based on field conditions, including but not limited to THD, shared neutral wires, power-quality. Whenever possible, test lamps in-situ to verify satisfactory performance.
- Above table is for applications where no dimmer is used. If a dimmer is used, the user should consult the Dimmer/Transformer table, or contact Soraa if their desired combination is not listed.
- (AS) means "Any Suffix"
- (*1) Soraa does not recommend 277V Electronic transformers for dimming applications, unless stated on our dimming compatibility list.
- (*2) Hatch does not warranty their electronic 277V transformers when used with LED lamps unless their product number ends with –LED
- (*) This transformer added to the compatibility list as of this Revision

SORAA BRILLIANT H.L. MR16 12V 7.5W & 9W - DIMMING COMPATIBILITY LIST - ELV - North America

Transf. manuf. ↓	Transformer model ↓	Transf type ↓	\leftarrow Number of lamps per transformer	Dimmer → Dimming	Creston DIN-1DIMU4	Legrand Radiant RH703PTU	Lutron Caseta PD-5NE	Lutron Diva DVELV-300 Keverse	Lutron Grafik Eye QS + ELV Interface PHPM	Lutron Maestro MAELV-600	Lutron Maestro PRO MA-PRO	Lutron Maestro Wireless MRF2-6ELV-120	Lutron Nova-T NTELV-600	Lutron Radio RA2 RRD-6NA	Lutron Remote Power Modules HW / LP-RPM-4A-120	Lutron Skylark SELV-300 Beverse	Lutron Spacer SPSELV-600	Marlin SMP ELV Dimmer 600-10-00-4
B+L	FX95100/RFI	ELV	1		5%	7%	8%	6%	4%	5%	neutral)	5%		4%	0%	6%	9%	5%
Hatch	RL12-60M-LED (*)	ELV	1		4%	15%	5%	5%	4%	6%	5%	5%	7%	5%	5%	5%	6%	6%
Hatch	RS12-60M-LED	ELV	1		5%	6%	6%	6%	4%	6%		5%		5%	5%	6%	6%	6%
Juno	T537QJU	ELV	1		5%	6%	6%	6%	4%	6%		5%		5%	5%	6%	6%	6%
Juno	T537U	ELV	1		5%	6%	6%	6%	4%	6%		5%		5%	5%	6%	6%	6%
L.T.F.	TA15WA12LED-0000	ELV	1		5%	5%	6%	5%	5%	6%		5%		5%	5%	5%	6%	6%
L.T.F.	TA60WA12LED	ELV	1		5%	6%	6%	6%	4%	5%		5%		5%	4%	6%	6%	5%
L.T.F.	TA300WDS12LEDRE- 0000 (#12)	ELV / DC	3		4%	18%	6%	6%	4%	5%		4%		4%	0%	6%	8%	5%
Lightech	LET60, LET60-BF	ELV	1		4%	6%	6%	5%	5%	5%		5%		5%	4%	5%	6%	5%
Lightech	LET60 LW	ELV	1		5%	9%	6%	6%	5%	5%		5%		5%	0%	6%	6%	5%
Lightech	LET75	ELV	1		4%	6%	5%	4%	4%	5%		5%		4%	4%	4%	5%	5%

SORAA BRILLIANT H.L. MR16 12V 7.5W & 9W - DIMMING COMPATIBILITY LIST - MLV - North America

Transformer manufacturer ↓	Transformer model ↓	Transf. type ↓	· Number of lamps per transformer	Dimmer →	Creston DIN-1DIMU4	Lutron Caseta PD-5NE	Lutron Grafik Eye QS QSGRJ-3P	Lutron Maestro MA-PRO	Lutron Radio RA2 RRD-6NA	Lutron Remote Power Modules HW/LP-RPM-4A-120	Lutron Remote Power Modules HW/LP-RPM-4U-120	Marlin SMP ELV Dimmer 600-10-001-00-4
			•	Dimming phase →	Forward	Forward	Forward	Forward	Forward	Forward	Forward	Forward
Q-Tran (*)	QT10-120/12-TP	MLV	1 (7.5W)					13%				
Q-Tran	QT50SV-120/12-RC	MLV	1		0%	8%	0%		5%	0%	0%	0%

	120V NON PHASE-DIMMABLE		IERS WITH D	IFFERENT CONTROL	s	
Transformer	Model		Number of lamps per transformer during test	Controllers, Potentiometers, PWM dimmers>	Potentiometer	0/1-10V
NA						
Fulham	T1M1UNV012V-20L (120V & 277V) (*)	Electronic/DC	1		8%	8%
Fulham	T1M1UNV012V-60L (120V & 277V) (*)	Electronic/DC	1			12%
Meanwell	PWM-90-12 (300Hz version) (*) (120V & 277V)	Electronic/DC	1		7%	7%
Meanwell	PWM-120-12 (300Hz version)(*) (120V & 277V)	Electronic/DC	1		7%	7%
Tivoli	ADUL801512DOT (*)	Electronic/DC	1 - 3 (max)			0%

Notes:

- Compatibility tests are conducted by Soraa (unless stated otherwise) under bench conditions as guidance for the user.
- Regards compatibility tests conducted by dimmer/transformer manufacturer, please contact Soraa or the manufacturer for more details and/or reports.
- Results at the application site may differ due to variability in usage conditions or in dimmer or transformer components/manufacturing.
- If the transformer's minimum wattage is not met, the lamp may only operate under nominal conditions (nominal line voltage and thermal conditions where the lamp is at full power).
- Transformer maximum load listed in the transformer compatibility table should not be exceeded.
- If the dimmer and/or transformer is not listed, please consult with Soraa before making recommendations to the end customer.
- (*) One or more test results with this transformer 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