

ICETRON® ECOLOGIC® Inductively Coupled Fluorescent System



ICETRON ECOLOGIC lamp and QUICKTRONIC ballast system offers a high quality white light lamp with color consistency throughout the unparalleled long life. With a lamp life of 100,000 hours, which is equal to 10 years of continuous life, you will reduce maintenance cost without giving up light or color. This is five to ten times the typical service life of conventional fluorescent and metal halide lamps. ICETRON lamps are available in 3500K, 4100K and 5000K color temperatures with a premium phosphor blend that assures color consistency throughout the life of the lamp.

The inductively coupled electrodeless lamp uses magnetic-induction technology instead of an electrode at each end of the fluorescent tube to generate light. The absence of electrodes allows much longer lamp life. The 70, 100 and 150W lamps pass the Federal TCLP test, classifying them as non-hazardous waste in most states.

Key Features & Benefits

- Unparalleled lamp life
 - 100,000 hour life
 - 10 years of continuous operation
- White Light
 - 3500K, 4100K, 5000K
- Consistent color over long lamp life
- Instant on/restrike
- Low temperature starting:
 - 25°F with ICE40 and ICE70
 - 40°F with ICE100 and ICE150
- Broad operating temperature range
- Simple connector assembly
 - Small profile 2-prong connector with 18 to 24" leads
 - Fits through 1/2 inch conduit
- Ballast remote mounting possible up to 66-feet
- Universal voltage ballast (120-277V)

SYLVANIA ICETRON ECOLOGIC fluorescent lamps pass the Federal Toxicity Characteristic Leaching Procedure (TCLP)¹ criteria for classification as non-hazardous waste in most states.²



1. TCLP test results are based on NEMA LL Series standards and are available on request.
2. Lamp disposal regulations may vary; check your local & state regulations.

Product Offering

Lamp	Watts	CCT
ICETRON 40/2P	40	3500K, 4100K, 5000K
ICETRON 70/2P/ECO	70	3500K, 4100K, 5000K
ICETRON 100/2P/ECO	100	3500K, 4100K, 5000K
ICETRON 150/2P/ECO	150	3500K, 4100K, 5000K



Application Information

Applications

- Bridge/Tunnel
- Escalators
- Freezers/cold storage
- High/Low bay
- Indirect
- Indoor & outdoor
- Signage
- Street and area lighting

Application Notes

1. Universal operating position – For non-horizontal lamp operation, the amalgam tip should be pointed down.

2. Universal input voltage: 120-277 volts, 50/60 Hz.
3. Low EMI – complies with FCC Non-Consumer limits.

Thermal Characteristics

1. Fixture must act as heat sink for lamp induction cores and ballast – good thermal coupling required.
2. Maximum bulb wall temperature of 302°F (150°C).
3. Maximum fixture temperature at lamp base mounting of 212°F (100°C).

4. Amalgam tip temperature for 90% light output for 70W, 100W, 150W types is 130-260°F (55-125°C) and 104-199°F (40-93°C) for the 40W types.
5. Max. 158°F (70°C) ballast temperature at test point Tc on ballast label for QT1X150 UNV-T, 149°F (65°C) for QT1X100 UNV-T and QT1X40 UNV-T.
6. Ballast may be mounted up to 66 feet from lamp. Please request remote mounting instructions.

7. For cold temperature application, use suitably enclosed fixture to maximize lumen output.
8. Amalgam tip covers (NAED 22093) available for faster warm-up under very cold operating conditions.
9. ICETRON TYPE-1 outdoor ballast must be within overall electrical enclosure and fully protected from any exposure to moisture.
10. 24" wiring extension/harness available (NAED 49755).



Fixture Description:	Type
Project/Job:	
SYLVANIA lamp:	
SYLVANIA ballast:	
Notes:	

Ordering Information

SYSTEMS Lamp Description	Ballast Description	Lamp Wattage	System Wattage 120/277V	Ballast Factor	System Lumens ¹	Mean Lumens ^{1,2}	Rated Life	Initial LPW 120/277V
ICE40/RCT/2P	QT 1X40ICE/UNV-T	40	44	1.00	2800	1850 ⁴	100,000	63
ICE40/CIR/2P	QT 1X40ICE/UNV-T	40	44	1.00	2800	1850 ⁴	100,000	63
ICE70/2P/ECO	QT 1x100ICE/UNV-T	70	79/77	1.05	6500	4830	100,000	82/84
ICE100/2P/ECO	QT 1x100ICE/UNV-T	100	106/103	1.00	8000	5945	100,000	75/77
ICE100/2P/ECO	QT 1x150ICE/UNV-T	100	154/149	1.375	11,000	8175	100,000	71/73
ICE150/2P/ECO	QT 1x150ICE/UNV-T	150	161/156	1.00	12,000	8915	100,000	74/76

LAMPS Item Number	Ordering Description	Initial Lamp Lumens	Mean Lamp Lumens ²	Color Temp ³	CRI ³
26310	ICE40/835/RCT/2P	2800	1850 ⁴	3500K	80
26312	ICE40/841/RCT/2P	2800	1850 ⁴	4100K	80
26314	ICE40/850/RCT/2P	2730	1850 ⁴	5000K	80
26311	ICE40/835/CIR/2P	2800	1848	3500K	80
26313	ICE40/841/CIR/2P	2800	1850 ⁴	4100K	80
26315	ICE40/850/CIR/2P	2730	1850 ⁴	5000K	80
26087	ICE70/835/2P/ECO	6200	4605	3500K	80
26088	ICE70/841/2P/ECO	6200	4605	4100K	80
26089 ¹	ICE70/850/2P/ECO	5950	4420	5000K	80
26102	ICE100/835/2P/ECO	8000	5945	3500K	80
26103	ICE100/841/2P/ECO	8000	5945	4100K	80
26105 ¹	ICE100/850/2P/ECO	7600	5645	5000K	80
26161	ICE100/841/R/2P/ECO	7300	5425	4100K	80
26152	ICE150/835/2P/ECO	12,000	8915	3500K	80
26153	ICE150/841/2P/ECO	12,000	8915	4100K	80
26155 ¹	ICE150/850/2P/ECO	11,650	8655	5000K	80

- Lumen data for 3500K and 4100K; lumens for 5000K will be slightly lower.
- Mean Lumens at 40,000 hours.
- Lumens, wattage, and CRI measured @ an amalgam tip temperature of 149°F (65°C) for ICETRON® 100 and @ 158°F (70°C) amalgam tip temperature for ICETRON 70 & ICETRON 150.
- Preliminary engineering data.

BALLASTS Item Number	Ordering Description	Voltage Range	Compatible Lamps
49758	QT1x40ICE/UNV-T	120-277	ICE40/RCT/2P, ICE40/CIR/2P
49753	QT1X100ICE/UNV-T	120-277	ICE70/2P, ICE100/2P
49772	QT1X150ICE/UNV-T	120-277	ICE100/2P, ICE150/2P
49756	QT1X100ICE/UNV-W	120-277	ICE70/2P, ICE100/2P
49773	QT1X150ICE/UNV-W	120-277	ICE100/2P, ICE150/2P

* Models rated UL Type 1 ("T" suffix) are designed for general lighting applications. Models rated UL Type 2 ("W" suffix) provide protection from water intrusion and are suitable for damp or wet locations.

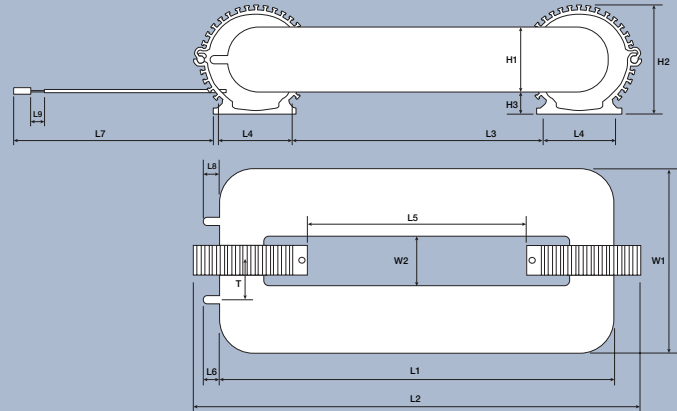
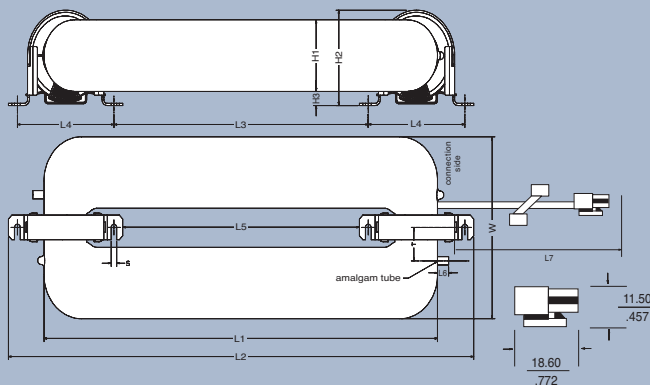
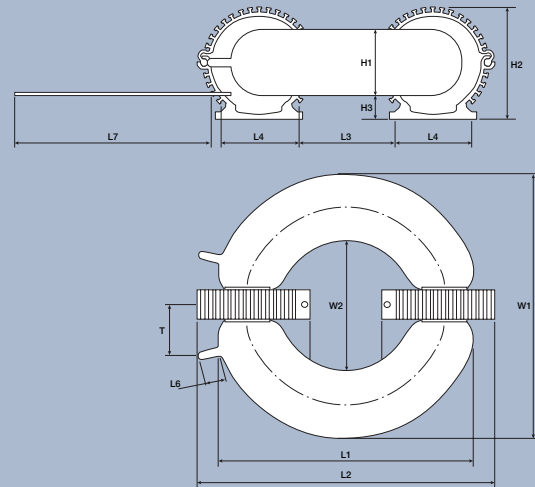
Ordering Guide

ICE100/835/2P/ECO										
ICE	100	/	8	35	/	RCT	/	2P	/	ECO
ICETRON® Inductively Coupled Electrodeless	Lamp Wattage 40W, 70W, 100W, 150W		8 = 80 CRI	35 = CCT 3500K 41 = CCT 4100K 50 = CCT 5000K		Bulb Type RCT=Rectangular CIR=Circular R=Reflector		2 Prong Connector		ECOLOGIC® TCLP Compliant
QT1X100ICE/UNV-T										
QT	1X	100	ICE	/	UNV	-T				
QUICKTRONIC®	# Lamps	Primary Lamp Wattage	ICETRON Inductively Coupled Electrodeless		Line Voltage 120 to 277V	Top Mount				

Dimensions

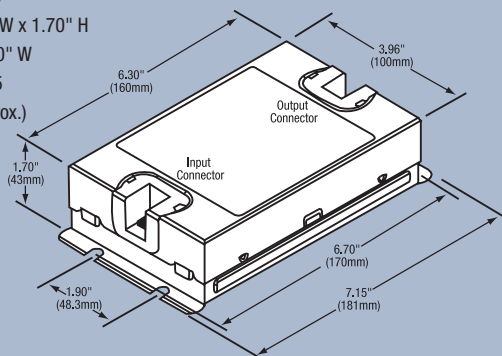
Dims.	ICETRON 40/CIR		ICETRON 40/RCT		ICETRON 70		
	in.	(mm)	in.	(mm)	in.	(mm)	
Height of glass	H1	1.65 ± 0.04	42 ± 1	1.65 ± 0.04	42 ± 1	2.13 ± 0.04	54 ± 1
Overall height	H2	2.44 ± 0.06	62 ± 1.5	2.44 ± 0.06	62 ± 1	2.87 ± 0.08	73 ± 2
Tube to mount height	H3	0.43 ± 0.08	11 ± 2	0.43 ± 0.08	11 ± 2	0.39 min	10 min
Length of main body	L1	5.45 ± 0.04	138.5 ± 1	5.89 ± 0.04	149.5 ± 0.04	9.84 ± 0.05	250 ± 1.2
Overall Length	L2	6.85 ± 0.08	174 ± 2	7.54 ± 0.08	191.5 ± 0.08	12.4 (Max)	315 (Max)
Mount hole spacing (between cores)	L3	2.58 ± 0.08	65.5 ± 2	3.31 ± 0.08	84 ± 2	5.10 ± 0.15	129.5 ± 3.7
Mount hole spacing (each core)	L4	1.57 ± 0.04	40 ± 1	1.57 ± 0.04	40 ± 1	3.23 ± 0.11	82.0 ± 2.7
Bracket spacing	L5	1.10 ± 0.06	28 ± 1.5	1.81 ± 0.06	46 ± 1.5	4.13 (Min)	105 (Min)
Amalgam tip length	L6	0.71 max	18 max	0.71 max	18 max	0.59 (Max)	15 (Max)
Lead wire length	L7	18.50 ± 0.40	470 ± 10	18.50 ± 0.40	470 ± 10	24.00 (Min)	609.6 (Min)
Slot width	S	—	—	—	—	0.20 ± 0.01	5.1 ± 0.2
Tip to centerline	T	0.98 max	25 max	1.02 ± 0.20	26 ± 5	0.98 ± 0.08	25 ± 2
Width	W	5.83 ± 0.12	148 ± 3	4.33 ± 0.12	110 ± 3	5.41 ± 0.06	137.5 ± 1.5
Lamp weight – lb (kg)		1.04 lb	0.47 kg	1.05 lb	0.475 kg	2.1 lbs	0.95 kg
Mounting Screw (Included)			M4* 0.7		M4* 0.7		

Dims.	ICETRON 100		ICETRON 150		
	in.	(mm)	in.	(mm)	
Height of glass	H1	2.13 ± 0.04	54 ± 1	2.13 ± 0.04	54 ± 1
Overall height	H2	2.87 ± 0.08	73 ± 2	2.87 ± 0.08	73 ± 2
Tube to mount height	H3	0.39 min	10 min	0.39 min	10 min
Length of main body	L1	9.84 ± 0.05	250 ± 1.2	13.78 ± 0.05	350 ± 1.2
Overall Length	L2	12.4 (Max)	315 (Max)	16.34 (Max)	415 (Max)
Mount hole spacing (between cores)	L3	5.10 ± 0.15	129.5 ± 3.7	9.04 ± 0.15	229.5 ± 3.7
Mount hole spacing (each core)	L4	3.23 ± 0.11	82.0 ± 2.7	3.23 ± 0.11	82.0 ± 2.7
Bracket spacing	L5	4.13 (Min)	105 (Min)	8.07 (Min)	205 (Min)
Amalgam tip length	L6	0.59 (Max)	15 (Max)	0.59 (Max)	15 (Max)
Lead wire length	L7	24.00 (Min)	609.6 (Min)	24.00 (Min)	609.6 (Min)
Slot width	S	0.20 ± 0.01	5.1 ± 0.2	0.20 ± 0.01	5.1 ± 0.2
Tip to centerline	T	0.98 ± 0.08	25 ± 2	0.98 ± 0.08	25 ± 2
Width	W	5.41 ± 0.06	137.5 ± 1.5	5.41 ± 0.06	137.5 ± 1.5
Lamp weight – lb (kg)		2.1 lbs	0.95 kg	2.5 lbs	1.14 kg



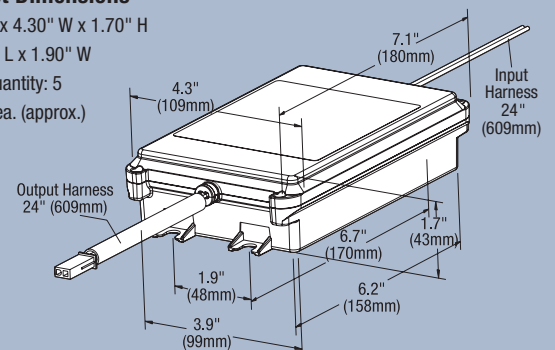
Ballast Dimensions

Overall: 7.15" L x 3.96" W x 1.70" H
 Mounting: 6.70" L x 1.90" W
 Packaging – Quantity: 5
 Weight: 1.9 lbs ea. (approx.)



Type 2 Ballast Dimensions

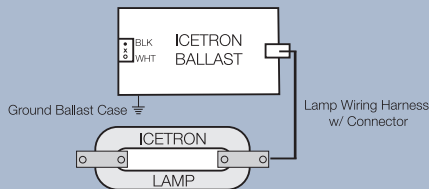
Overall: 7.10" L x 4.30" W x 1.70" H
 Mounting: 6.70" L x 1.90" W
 Packaging – Quantity: 5
 Weight: 2.5 lbs ea. (approx.)



Ballast Specification

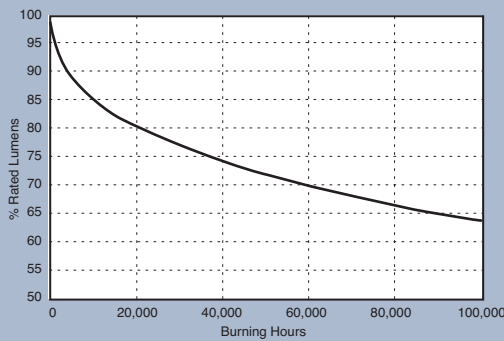
Lamp Frequency: 200-300 KHz
 Input Frequency: 50/60Hz
 Voltage Range: 120 to 277 ± 10%
 UL Listed Class P, Type 2 Outdoor CSA Certification
 Lamp CCF: Less than 1.7
 Low THD: Less than 15%
 158°F (70°C) Maximum Temperature for
 QT1X150ICE/UNV-T (W) at test point Tc on ballast label
 149°F (65°C) Maximum Temperature for
 QT1X40ICE/UNV-T or QT1X100ICE/UNV-T at test point
 Tc on ballast label

Class A Sound Rating
 Minimum Starting Temperature -40°F
 (-40°C) for ICE100 and ICE150 systems
 Minimum Starting Temperature -13°F (-25°C)
 for ICE40 and ICE70 lamps on
 QT1X40ICE/UNV-T or QT1X100 ICE/UNV-T
 Power Factor: Greater than 95%
 FCC 47CFR Part 18 Non-Consumer
 ANSI 62.41 Cat. A Transient Protection

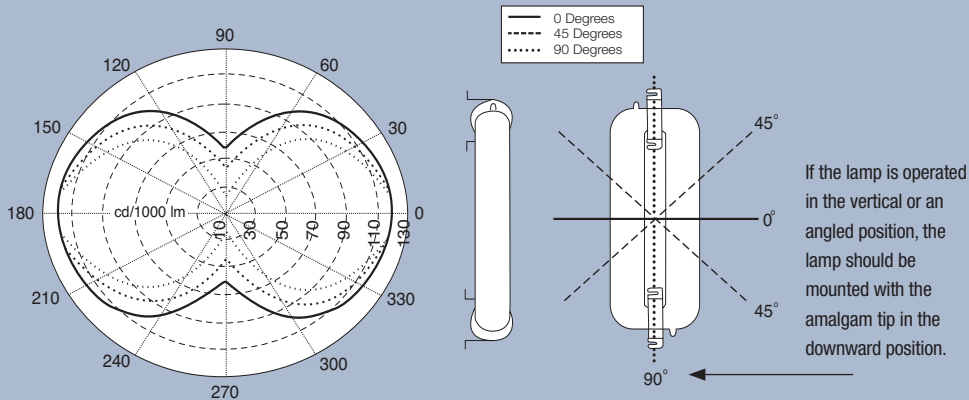


Technical Information

Lumen Maintenance for 70, 100 and 150W ICETRON



Luminous Intensity Distribution



Related Literature

QUICKTRONIC ICE ballast (Literature Code: ECS081)
 QUICK 60+® System Warranty (Literature Code: ECS140)
 ICETRON Reflector PIB (Literature Code: FL069)

SYLVANIA is a registered trademark of OSRAM SYLVANIA Inc.
 SEE THE WORLD IN A NEW LIGHT is a registered trademarks of OSRAM SYLVANIA Inc.
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 QUICKTRONIC is a registered trademark of OSRAM GmbH.
 Specifications subject to change without notice.

FL061R10

Sample Specification

System shall be (40W, 70W, 100W, or 150W)
 ICETRON® ECO® inductively coupled electrodeless
 lamp and ballast system having (2800, 6500,
 8000, 11,000 or 12,000) system lumens.
 System shall have an average rated life of
 100,000 hours.

Warranty

QUICK 60+® OSRAM SYLVANIA lamp and
 ballast combination - Limited 5 year lamp and
 ballast warranty is possible if both lamps and
 ballasts are provided by OSRAM SYLVANIA. See
 the QUICK 60+ warranty for details and restric-
 tions.

United States

OSRAM SYLVANIA
 100 Endicott Street
 Danvers, MA 01923

Trade

Phone: 1-800-255-5042
 Fax: 1-800-255-5043

National Accounts

Phone: 1-800-562-4671
 Fax: 1-800-562-4674

OEM/Special Markets

Phone: 1-800-762-7191
 Fax: 1-800-762-7192

Display/Optic

Phone: 1-888-677-2627
 Fax: 1-800-762-7192

SYLVANIA Lighting Services

Phone: 1-800-323-0572
 Fax: 1-800-537-0784

Canada

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 2001 Drew Road
 Mississauga, ON L5S 1S4

Trade

Phone: 1-800-263-2852
 Fax: 1-800-667-6772

OEM/Special Markets/Display/Optic

Phone: 1-800-265-2852
 Fax: 1-800-667-6772

SYLVANIA Lighting Services

Phone: 1-800-663-4268
 Fax: 1-866-239-1278

Mexico

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