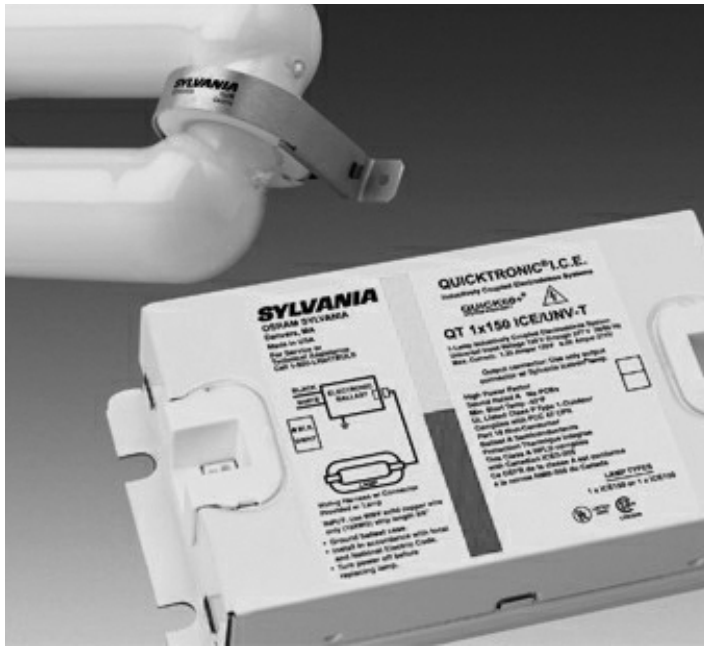


### Product Information Bulletin

## ICETRON® 2P

### Inductively Coupled Electrodeless Systems



- 2 Prong connector system with 24 inch lamp lead for system assembly
- Lead connector fits through 1/2" diameter conduit
- Long 100,000 hour life
- Universal voltage ballast
- Consistent color – 80CRI
- High output electronic system
- Starting temperatures as low as –40°F
- Amalgam technology for wide operating temperature range
- White Light - 3500K, 4100K and 5000K
- Ballast remote mounting possible

**SYLVANIA ICETRON® lamp and ballast system reduces maintenance cost due to the long 100,000 hour average rated life. This is five to eight times the typical service life of conventional fluorescent and metal halide lamps.**

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.

### Product Availability

Lamp	Ballast	Life (hrs)	System Wattage 120/277V	Initial System Lumens
ICETRON 70/2P	ICE100/UNV/T	100,000	82/81	6500
ICETRON 100/2P	ICE100/UNV/T	100,000	107/104	8000
ICETRON 100/2P	ICE150/UNV/T	100,000	150/146	11,000
ICETRON 150/2P	ICE150/UNV/T	100,000	157/153	12,000

### Lamp Comparison

	System Watts	System Lumens	System LPW	System Lumens@ 10,000 hours	Life (hrs) 10 hrs/start	CRI
ICETRON 70	82	6500	79	5525	100,000	80
70W Metal Halide	90	5200	58	3400	15,000	75
2 FBO31/800	57	4905	86	4400	24,000	82
ICETRON 100	107	8000	75	6800	100,000	80
100W Metal Halide	129	8500	66	5500	15,000	75
3 FBO31/800	84	7360	88	6600	24,000	82
ICETRON 150	157	12,000	76	10,230	100,000	80
150W Metal Halide	185	12,900	70	8400	15,000	75

### Application Information

#### Applications

Decorative street lighting  
Tunnel  
Bridge  
Internally lighted signs  
Low bay  
Indirect  
Indoor  
Escalators

#### Application Notes

1. Universal operating position – For vertical 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

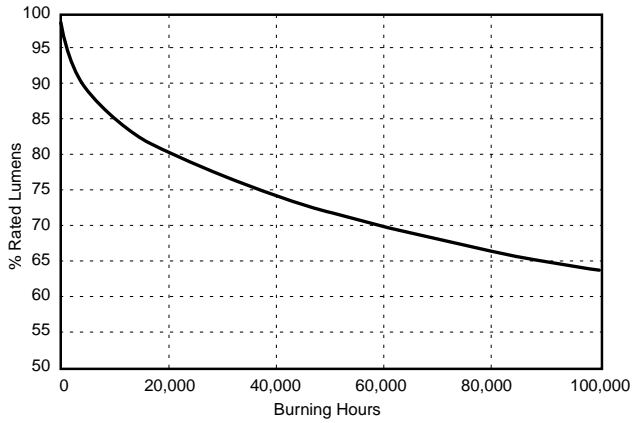
1. Fixture must act as heat sink for lamp induction cores and ballast – good thermal coupling required.
2. Maximum bulb wall temperature of 302°F (150°C).
3. Maximum fixture temperature at lamp base mounting of 212°F (100°C).
4. Amalgam tip temperature for 90% light output 130-260°F (55-125°C).

5. Max 158°F (70°C) ballast temperature at test point Tc on ballast label.
6. Ballast may be mounted up to 66 feet from lamp. See 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.

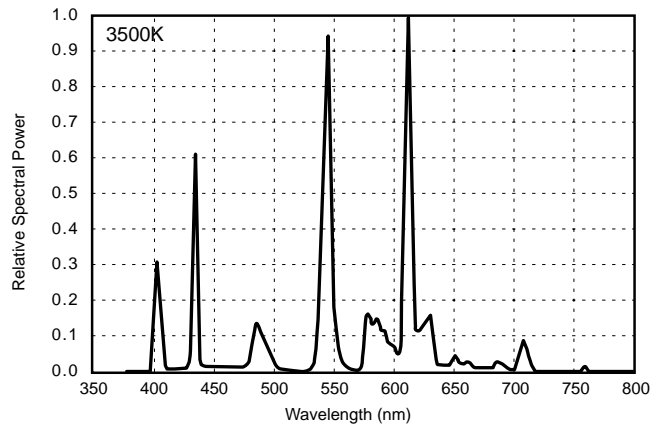


# Technical Information

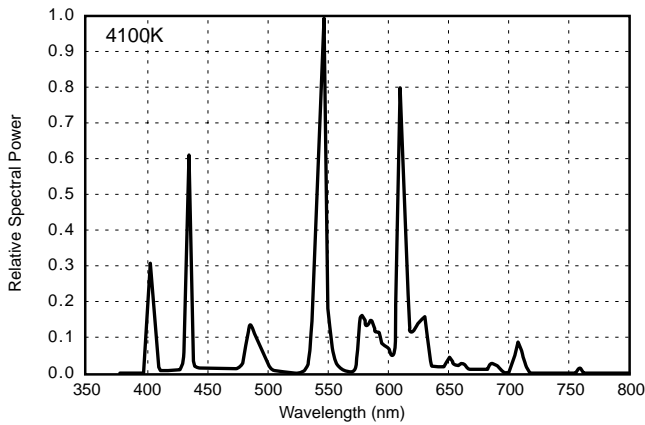
## Lumen Maintenance



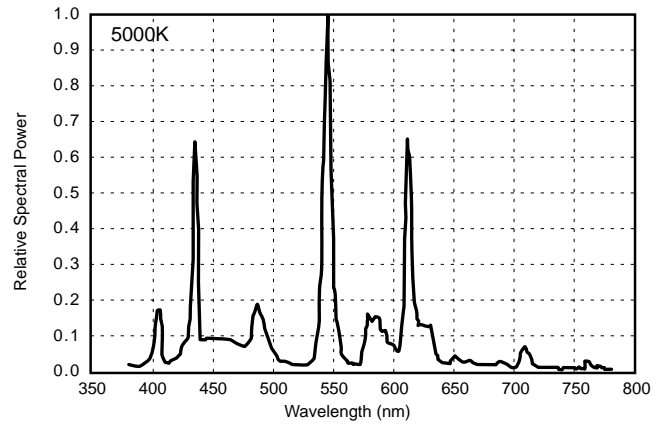
## Spectral Power Distribution – 3500K



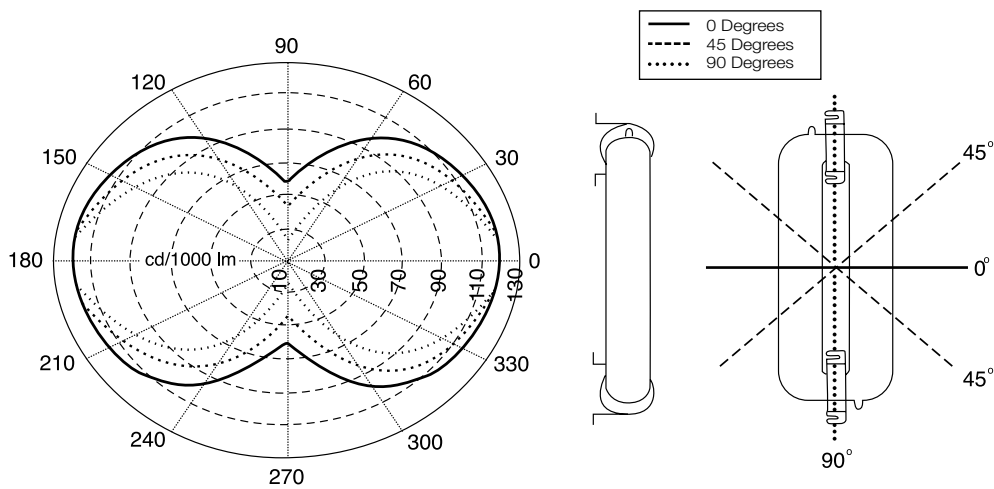
## Spectral Power Distribution – 4100K



## Spectral Power Distribution – 5000K



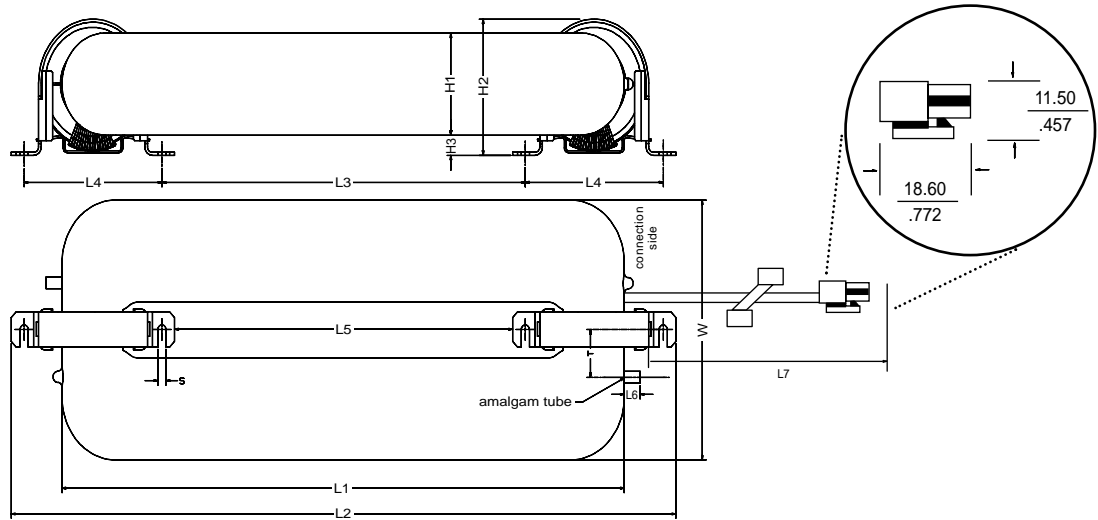
## Luminous Intensity Distribution



## Lamp Dimensions

Dim.	ICETRON 70		ICETRON 100		ICETRON 150		
	in.	(mm)	in.	(mm)	in.	(mm)	
Height of glass	H1	2.13 ± 0.04	54 ± 1	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	2.87 ± 0.08	73 ± 2
Tube to mount height	H3	.039 (Min)	10 (Min)	.039 (Min)	10 (Min)	.039 (Min)	10 (Min)
Length of main body	L1	9.84 ± 0.05	250 ± 1.2	9.84 ± 0.05	250 ± 1.2	13.78 ± 0.05	350 ± 1.2
Overall Length	L2	12.4 (Max)	315 (Max)	12.4 (Max)	315 (Max)	16.34 (Max)	415 (Max)
Mount hole spacing (between cores)	L3	5.02 ± 0.06	127.4 ± 1.5	5.02 ± 0.06	127.4 ± 1.5	9.00 ± 0.06	228.5 ± 1.5
Mount hole spacing (each core)	L4	3.36 ± 0.04	85.3 ± 0.9	3.36 ± 0.04	85.3 ± 0.9	3.36 ± 0.04	85.3 ± 0.9
Bracket spacing	L5	4.13 (Min)	105 (Min)	4.13 (Min)	105 (Min)	8.07 (Min)	205 (Min)
Amalgam tip length	L6	0.59 (Max)	15 (Max)	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)	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	0.20 ± 0.01	5.1 ± 0.2
Tip to centerline	T	0.98 ± 0.08	25 ± 2	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	5.41 ± 0.06	137.5 ± 1.5
Lamp weight - lb (kg)		2.1 lbs	0.95 kg	2.1 lbs	0.95 kg	2.5lbs	1.14 kg

\* Dimensions subject to change



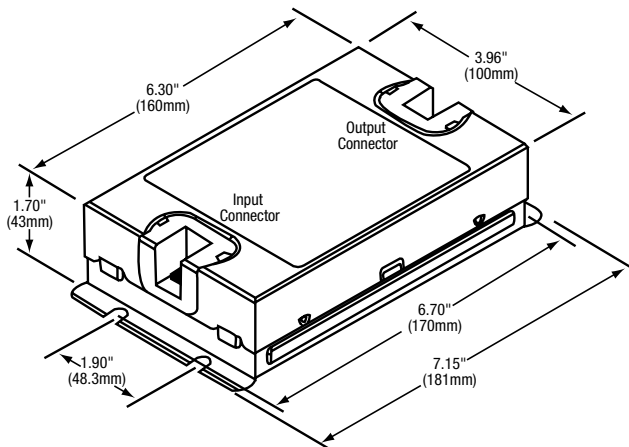
## Ballast Dimensions

### 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.)



### Sample Specification

System shall be 70W, 100W, or 150W) ICETRON inductively coupled electrodeless lamp and ballast system having (6500, 8000, 11,800 or 12,000) system lumens. System shall have an average rated life of 100,000 hours.

### Warranty Information

Shall be covered for up to 60 months with a comprehensive system warranty. Refer to QUICK60+® system warranty bulletin for additional details.

## Ordering and Specification Information

### SYSTEMS

Lamp Description	Ballast Description	Lamp Wattage	System Wattage	BF	System Lumens	Mean <sup>1</sup> Lumens	Rated Life	Initial LPW
ICE70/2P	ICE100/UNV/T	70	82/81	1.05	6500	4810	100,000	79
ICE100/2P	ICE100/UNV/T	100	107/104	1.00	8000	6280	100,000	75
ICE100/2P	ICE150/UNV/T	100	150/146	1.00	11,000	8635	100,000	70
ICE150/2P	ICE100/UNV/T	150	157/153	1.00	12,000	9420	100,000	76

### LAMPS

Item Number	Ordering Description	Initial Lamp Lumens	Color Temp K <sup>2</sup>	CRI
26087	ICE70/835/2P	6200	3500	80
26088	ICE70/841/2P	6200	4100	80
26089 <sup>3</sup>	ICE70/850/2P	6200	5000	80
26102	ICE100/835/2P	8000	3500	80
26103	ICE100/841/2P	8000	4100	80
26105 <sup>3</sup>	ICE100/850/2P	8000	5000	80
26152	ICE150/835/2P	12,000	3500	80
26153	ICE150/841/2P	12,000	4100	80
26155 <sup>3</sup>	ICE150/850/2P	12,000	5000	80

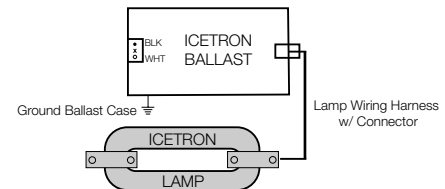
### BALLASTS

Item Number	Ordering Description	Voltage Range	Compatible Lamps
49753 <sup>4</sup>	QT1X100 ICE/UNV-T	120-277	ICE70/2P, ICE100/2P
49772	QT1X150 ICE/UNV-T	120-277	ICE100/2P, ICE150/2P

1. Mean Lumens at 40,000 Hours
2. Color and CRI @ an amalgam tip temperature of 149 °F (65 °C) for ICETRON 70 and ICETRON 100 and @ 158 °F (70 °C) amalgam tip temperature for ICETRON 150.
3. Preliminary Data
4. Available 2Q 2003

### Ballast Specification

Lamp Frequency: 200-300 KHz  
 Input Frequency: 50/60Hz  
 Voltage Range: 120 to 277 ± 10%  
 UL Listed Class P, Type1 Outdoor CSA Certification  
 Lamp CCF: Less than 1.7  
 Low THD: Less than 15%  
 158 °F (70 °C) Maximum Temperature at test point Tc on ballast label  
 Class A Sound Rating  
 Starting Temperature -40 °F (-40 °C) minimum  
 Power Factor: Greater than 95%  
 FCC 47CFR Part 18 Non-Consumer  
 ANSI 62.41 Cat. A Transient Protection  
 Ballast Dimension: 7.15" L x 3.96" W x 1.70" overall



### Ordering Guide

ICE100/835/2P					
ICE	100	/	8	35	2P
Inductively Coupled	Lamp Wattage		8 = 80 CR	35 = 3500K	2 Prong
Electrodeless	70W, 100W, 150W			41 = 4100K	Connector
				50 = 5000K	
QT1X100ICE/UNV-T					
QT	1X	100	ICE	/	UNV -T
QUICKTRONIC	# Lamps	Primary Lamp Wattage	ICETRON		Line Voltage Top Mount

**hi-Tech lamps**  
 800-229-6509  
 info@hi-techlamps.com

OSRAM SYLVANIA  
 National Customer Support Center  
 18725 N. Union Street  
 Westfield, IN 46074

#### Industrial & Commercial

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

#### National Accounts

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

In Canada  
 OSRAM SYLVANIA LTD.  
 Headquarters  
 2001 Drew Road  
 Mississauga, ON L5S 1S4

#### Industrial & Commercial

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

#### Special Markets

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

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