Product Information Bulletin

CAPSYLITE® IR™50W & 60W PAR38

Halogen Lamps



SYLVANIA'S NEW PAR38 CAPSYLITE IR lamps offer substantial energy savings, great color, long life, and State-of-the-Art SPL Optics

The combination of an inner halogen capsule which is coated with a special infrared conserving film and SYLVANIA's unique SPL optical system make Capsylite IR lamps the best choice when constant crisp, white light and energy savings are required. The high luminous efficacy of the Capsylite IR lamp is achieved by using an infrared reflective coating on the inner halogen capsule that reflects the radiated infrared energy, which would be otherwise wasted, back into the lamp capsule. Recycling the invisible infrared energy lowers the power consumption of the capsule and produces more visible light per watt.

- Features a halogen inner capsule with an infrared conserving coating for maximum energy efficiency
- IR conserving capsule is combined with State-of-the-Art SPL optics to deliver the maximum lumens on the target and a smooth, precise beam pattern
- Superior 3000 hour life
- IR conserving capsule produces more light with fewer watts than conventional halogen lamps, reducing energy consumption and heat generation
- Crisp, white halogen light and consistent lamp-to-lamp optical performance
- IR conserving coating and hard glass lens further reduce the already low level of UV present in standard Halogen PAR lamps

ECOLOGIC® is a comprehensive program of OSRAM SYLVANIA focused on addressing environmental issues at all stages of lamp life.



Product Availability

Product	Wattage	Beam Angle
PAR38 CAPSYLITE IR	60 50	SP 10°, WSP 12°, NFL 25°, FL 30° SP 10°, NFL 25°

Application Information

Applications

Highlight merchandise Accent / display lighting Floor lighting General lighting Indoor / Outdoor Retail Art galleries Hotels, restaurants Offices Residential

Application Notes

- 1. Lens stamped with beam pattern
- 2. Better cutoff maximum lumens in the beam
- 3. Eliminates stray light at the edges of the beam pattern
- 4. Superior candlepower rating
- 5. New distinctive appearance and superior performance due to SPL optics which combines new spiral reflector and lens



Sample Specification

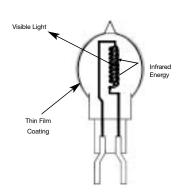
Lamp(s) shall be (a)
CAPSYLITE IR halogen
PAR38 lamp(s) with a
3000 – hour average
rated life, shall be diode
free and employ
stabilized coils. Lamp(s)
shall be energy efficient
and produced to EPACT
standards. Lamp base
shall contain no lead
solder to make the
disposal of used
CAPSYLITE IR lamp(s)
easier for the end user.

Lamp Comparison

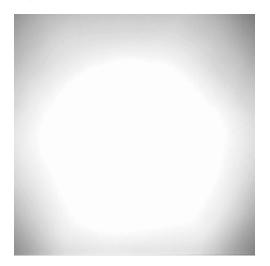
Item No.	Lamp Type	Beam Angle	Color Temperature (K)	CBCP (cd)	Lumen (Im)	Life (hours)
14485	SYLVANIA 60PAR/CAP/IR/SP/10	10	2900	18,000	1110	3000
	Brand X 60PAR/HIR/SP10	10	2875	20,000	1110	3000
14360	SYLVANIA 60PAR/CAP/IR/WSP/12	12	2900	12,000	1110	3000
	Brand X 60PAR/HIR/SP12	12	2875	12,000	1110	3000
14442	SYLVANIA 60PAR/CAP/IR/NFL/25	25	2900	5100	1110	3000
	No Competitive Product Available					
14466	SYLVANIA 60PAR/CAP/IR/FL/30	30	2900	3600	1110	3000
	Brand X 60PAR/HIR/FL30	30	2875	3600	1110	3000

IR Coated Capsule

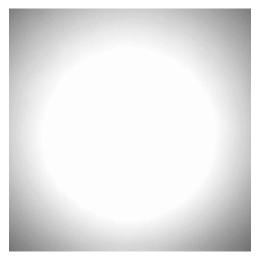
While producing visible light, all incandescent and halogen filaments also produce a significant amount of infrared heat. Unfortunately, the infrared energy produced by the filament is wasted. The wasted energy also increases the load on HVAC systems. The CAPSYLITE IR lamp has a multi-layered thin film coating on the outer surface of an ellipsoidal shaped halogen capsule. This coating allows visible light to pass through it while reflecting infrared heat back to the filament. The reflected heat helps to maintain the coil at its optimum operating temperature and lowers its power consumption. The result is more visible light generated for each watt that is consumed. CAPSYLITE IR lamps can be used to replace higher wattage PAR lamps to achieve almost the same lighting effect with lower energy costs and less heat generation.



Optical Performance







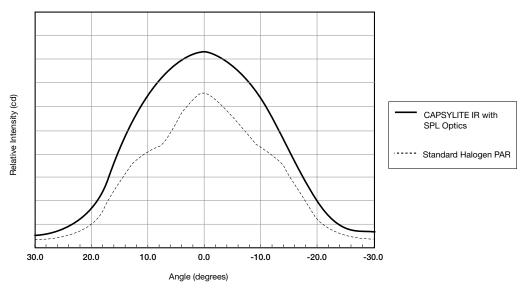
New CAPSYLITE IR

CAPSYLITE SPL Optical System

PAR38 IR CAPSYLITE lamps employ a patented spiral lenticule layout on their lenses. These patterns were computer designed to deliver a smooth, round beam pattern that is free from hot spots and stray light. The new lenses, however, are only half of the story. The new spiral flat reflectors were also computer designed to work in concert with the lenses. The spiral flats on the inner surface of the reflector begin to shape and contour the light rays before they reach the lens. The reflector and the lens, therefore, share the job of controlling the light so that the resultant beam pattern is as smooth as possible. The optical system maximizes the lumens in the beam angle, while providing consistent lamp-to-lamp performance.

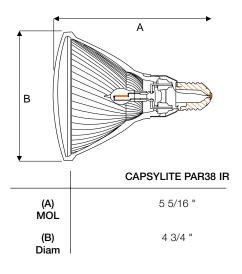
Beam Performance

Comparison of Standard Halogen PAR to New CAPSYLITE IR with SPL Optics

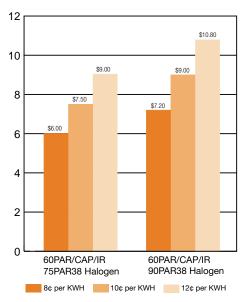


The beam performance of the CAPSYLITE IR product line with SPL optics will change the way PAR lamps are specified. Traditionally, PAR lamps were designed to provide peak intensity in the center of the beam and the light level dropped rapidly from that point. In contrast, the CAPSYLITE IR product line is designed to give a more even distribution of high level light across as broad an area as possible with no hot spots. The result is a uniform light level on the target that maximizes the impact of the halogen source.

Dimensions



Energy Cost Savings for PAR38 IR*



*Based on 3000 hour lamp life

Footcandle

10° PAR38 IR SP

5	istance from Source (in ft.)	Diameter (in ft.)	Å	60W
	3'	0.5		1833
	6'	1.0		458
	9'	1.6		204
	12'	2.1		115
	15'	2.6	\bowtie	73

25° PAR38 IR NFL

s	stance from ource (in ft.)	Diameter (in ft.)	Å	60W
	3'	1.3		567
	6'	2.7		142
	9'	4.0		63
	12'	5.3		35
	15'	6.7	\bowtie	23

30° PAR38 IR FL

5	istance from Source (in ft.)	Diameter (in ft.)		60W
	3'	1.6		400
	6'	3.2		100
	9'	4.8		44
	12'	6.4		25
	15'	8.0		16
			· /	

12° PAR38 IR WSP

S	istance from Source (in ft.)	Diameter (in ft.)	Å	60W
	3'	0.6		1333
	6'	1.3		333
	9'	1.9		148
	12'	2.5		83
	15'	3.2	\bowtie	53

10° PAR38 IR SP

Distance from Source (in ft.)	Diameter (in ft.)	A	50W
3'	0.5		1556
6'	1.0		389
9'	1.6	M	173
12'	2.1		97
15'	2.6	\bowtie	62

25° PAR38 IR NFL

Diameter (in ft.)	Å	50W
1.3		333
2.7		83
4.0		37
5.3		21
6.7	\bowtie	14
	(in ft.) 1.3 2.7 4.0 5.3	(in ft.) 1.3 2.7 4.0 5.3

SYLVANIA CAPSYLITE IR lamps are available in a full range of beam angles to meet the demands of virtually any display or accent lighting application. For each available CAPSYLITE IR lamp, this table shows how lamp output in footcandles varies as a function of distance.

Ordering and Specification Information

ltem Number	Ordering Abbreviation	Watts	Base	Avg. Rated Life (hrs.)	Volts	СВСР	Beam Angle	Lumens	MOL
14136	50PAR/CAP/IR/SP10	50	Medium Skirt	3000	120	14,000	10°	850	5 5/16
14138	50PAR/CAP/IR/NFL25	50	Medium Skirt	3000	120	3000	25°	850	5 5/16
14485	60PAR/CAP/IR/SP10	60	Medium Skirt	3000	120	18,000	10°	1110	5 5/16
14716	60PAR/CAP/IR/SP10	60	Medium Skirt	3000	130	18,000	10°	1110	5 5/16
14360	60PAR/CAP/IR/WSP12	60	Medium Skirt	3000	120	12,000	12°	1110	5 5/16
14442	60PAR/CAP/IR/NFL25	60	Medium Skirt	3000	120	5100	25°	1110	5 5/16
14466	60PAR/CAP/IR/FL30	60	Medium Skirt	3000	120	3600	30°	1110	5 5/16
14715	60PAR/CAP/IR/FL30	60	Medium Skirt	3000	130	3600	30°	1110	5 5/16

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Special Markets

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Ordering Guide

60	PAR	1	CAP	-/	IR	- /	SP	- /	30
Wattage:	Parabolic		CAPSYLITE		Type		Beam		Degrees
50	Reflector				Infrared		Spread:		10°
60	Diameter=38/8	"					SP=Spot		12°
							WSP=Wide Spot		25°
						N	NFL=Narrow Floo	d	30°
							FL=Flood		