# CAPSYLITE® SPL®2 PAR38 Halogen Lamps



SYLVANIA CAPSYLITE SPL2 PAR38 lamps achieve extraordinary performance by combining a tungsten halogen capsule with a unique lens/reflector system. The new lenticuled spot lens (pictured above) helps to maximize usable lumens in the beam.

The CAPSYLITE SPL2 PAR38 product line is designed to give a more uniform intensity distribution across the beam and maximizes lumens within the beam. The result is a uniform light level on the target that maximizes the impact of the halogen source.

CAPSYLITE SPL2 PAR38 products are available in wattages ranging from 45 to 250 watts and in beam spreads ranging from 9° to 50°. There is a CAPSYLITE SPL2 PAR38 available to meet virtually any lighting need.

## **Key Features & Benefits**

- CAPSYLITE SPL2 PAR38 spiral optical system design incorporated into lens and reflector maximizes lumens in the beam, provides superior beam control and sharp cutoff
- Improved optical system provides consistent, uniform performance from lamp-to-lamp
- Superior life: Up to 4500 hour lamp life
- Innovative technology for high performance
- Energy efficient halogen sources
- Lens stamped with beam pattern for easy identification

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



## **Product Offering**

Product	Wattage	Beam Angle
PAR38	45	SP 9°, WSP 12°, FL 30°, WFL 50°
	60	SP 9°, NFL 25°, FL 30°
	75	SP 9°, WSP 12°, FL 30°, VWFL 50°
	90	SP 9°, WSP 12°, NFL 25°, FL 30°, WFL 50°
	120	SP 10°, FL 30°, WFL 50°
	250	SP 10°, FL 30°

## **Application Information**

#### **Applications**

- · Accent/display lighting
- Art galleries
- Floor lighting
- · General lighting
- Hard-to-reach areas
- Highlight merchandise
- Homes
- Hotels
- Indoor/outdoor
- Offices
- Restaurants
- Retail

#### **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
- Distinctive appearance and superior performance due to SPL2 optics which combines spiral reflector and lens optics



## **Specification Data**

Catalog #	Туре
Project	
Comments	
Prepared by	Date

# **Ordering Information**

Number         At           14590         45PA           14593         45PA           15538         45PA           14589         45PA           14592         45PA           14588         45PA           14591         45PA	Ordering obreviation R38/HAL/SP9 R38/HAL/SP9 R38/HAL/SP R38/HAL/SP R38/HAL/WSP12 R38/HAL/WSP12 R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45 45 45 45 45 45 45	Medium Skirt	Rated Life (hrs.) 2,500 2,500 2,500 2,500 2,500	120 130 120 120	CBCP (cd) 10,000 10,000 10,000	9° 9° 9°	560 560	<b>MOL (in.)</b> 5 5/16 5 5/16
14593 45PA 15538 45PA 14589 45PA 14592 45PA 14588 45PA 14591 45PA	R38/HAL/SP9 R38/HAL/SP R38/HAL/WSP12 R38/HAL/WSP12 R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45 45 45 45 45	Medium Skirt Medium Skirt Medium Skirt Medium Skirt Medium Skirt Medium Skirt	2,500 2,500 2,500	130 120	10,000 10,000 10,000	9°	560	
15538 45PA 14589 45PA 14592 45PA 14588 45PA 14591 45PA	R38/HAL/SP R38/HAL/WSP12 R38/HAL/WSP12 R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45 45 45 45	Medium Skirt Medium Skirt Medium Skirt Medium Skirt	2,500 2,500	120	10,000			5 5/16
14589 45PA 14592 45PA 14588 45PA 14591 45PA	R38/HAL/WSP12 R38/HAL/WSP12 R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45 45 45	Medium Skirt Medium Skirt Medium Skirt	2,500			9°	FC0	
14592 45PA 14588 45PA 14591 45PA	R38/HAL/WSP12 R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45 45	Medium Skirt Medium Skirt		120			560	5 5/16
14588 45PA 14591 45PA	R38/HAL/FL30 R38/HAL/FL30 R38/HAL/FL	45 45	Medium Skirt	2,500		6,300	12°	560	5 5/16
14591 45PA	R38/HAL/FL30 R38/HAL/FL	45			130	6,300	12°	560	5 5/16
	R38/HAL/FL			2,500	120	1,500	30°	560	5 5/16
15537 45PA			Medium Skirt	2,500	130	1,500	30°	560	5 5/16
		45	Medium Skirt	2,500	120	1,500	30°	560	5 5/16
14010 45PA	R38/HAL/WFL50	45	Medium Skirt	2,500	130	700	50°	560	5 5/16
14469 60PA	R38/HAL/SP9	60	Medium Skirt	3,000	120	15,000	9°	850	5 5/16
14449 60PA	R38/HAL/SP9	60	Medium Skirt	3,000	130	15,000	9°	850	5 5/16
14472 60PA	R38/HAL/NFL25	60	Medium Skirt	3,000	120	3,400	25°	850	5 5/16
14468 60PA	R38/HAL/FL30	60	Medium Skirt	3,000	120	2,500	30°	850	5 5/16
14448 60PA	R38/HAL/FL30	60	Medium Skirt	3,000	130	2,500	30°	850	5 5/16
14514 75PA	R38/HAL/SP9	75	Medium Skirt	2,500	120	21,000	9°	1,060	5 5/16
14516 75PA	R38/HAL/SP9	75	Medium Skirt	2,500	130	21,000	9°	1,060	5 5/16
14510 75PA	R38/HAL/WSP12	75	Medium Skirt	2,500	120	12,300	12°	1,060	5 5/16
14513 75PA	R38/HAL/FL30	75	Medium Skirt	2,500	120	3,150	30°	1,060	5 5/16
14515 75PA	R38/HAL/FL30	75	Medium Skirt	2,500	130	3,150	30°	1,060	5 5/16
14517 75PA	R38/HAL/WFL50	75	Medium Skirt	2,500	130	1,300	50°	1,060	5 5/16
14586 90PA	R38/HAL/SP9	90	Medium Skirt	2,500	120	22,000	9°	1,310	5 5/16
14587 90PA	R38/HAL/SP9	90	Medium Skirt	2,500	130	22,000	9°	1,310	5 5/16
15539 90PA	R38/HAL/SP	90	Medium Skirt	2,500	120	22,000	9°	1,310	5 5/16
14580 90PA	R38/HAL/WSP12	90	Medium Skirt	2,500	120	14,300	12°	1,310	5 5/16
14578 90PA	R38/HAL/WSP12	90	Medium Skirt	2,500	130	14,300	12°	1,310	5 5/16
14601 90PA	R38/HAL/NFL25	90	Medium Skirt	2,500	130	4,700	25°	1,310	5 5/16
15545 90PA	R38/HAL/FL	90	Medium Skirt	2,500	120	3,500	30°	1,310	5 5/16
14579 90PA	R38/HAL/FL30	90	Medium Skirt	2,500	120	3,500	30°	1,310	5 5/16
14577 90PA	R38/HAL/FL30	90	Medium Skirt	2,500	130	3,500	30°	1,310	5 5/16
14602 90PA	R38/HAL/WFL50	90	Medium Skirt	2,500	130	1,600	50°	1,310	5 5/16
14856 120P	AR38/HAL/SP10	120	Medium Skirt	3,000	120	23,000	10°	1,800	5 5/16
14874 120P	AR38/HAL/SP10	120	Medium Skirt	3,000	130	23,000	10°	1,800	5 5/16
14855 120P	AR38/HAL/FL30	120	Medium Skirt	3,000	120	4,600	30°	1,800	5 5/16
14861 120P	AR38/HAL/FL30	120	Medium Skirt	3,000	130	4,600	30°	1,800	5 5/16
14594 120P	AR38/HAL/WFL50	120	Medium Skirt	3,000	120	2,000	50°	1,800	5 5/16
15526 250P	AR38/HAL/SP10	250	Medium Skirt	4,500	120	50,000	10°	3,600	5 5/16
15558 250P	AR38/HAL/FL30	250	Medium Skirt	4,500	120	9,000	30°	3,600	5 5/16

# **Ordering Guide**

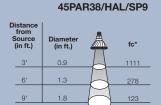
45	PAR38	1	HAL	/	SP	9
Wattage:	Parabolic		Halogen		Beam Spread	Beam Angle
45	Reflector				SP = Spot	9°, 10°
60	Diameter				WSP = Wide Spot	12°
75	38 = 38/8"				NFL = Narrow Flood	25°
90					FL = Flood	30°
120					WFL = Wide Flood	50°
250						

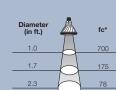
## **Lamp Comparison**

Product	Wattage	Lumens	Average Rated Life (hrs.)
Halogen 45PAR38	45	560	2,500
Incandescent 65BR40	65	540	2,000

## **Technical Information**

## **Footcandle**





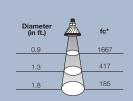
45PAR38/HAL/WSP12

45PAR38/HAL/FL30

Diameter (in ft.)	<b>A</b>	fc*
3.2		78
6.0	A	19
8.8	M	9

75PAR38/HAL/WSP12

45PAR38/HAL/WFL50



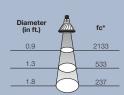
60PAR38/HAL/SP9

60PA		

S	istance from Source (in ft.)	Diameter (in ft.)	A	fc*
	3'	1.7		378
	6'	3.1	A	94
	9'	4.4	M	42



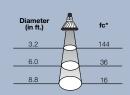
60PAR38/HAL/FL30



75PAR38/HAL/SP9

<u></u>	fc*
	1367
M	342
$\bowtie$	152

S	stance from ource (in ft.)	Diameter (in ft.)	A	fc*
	3'	2.0		350
	6'	3.6	M	88



75PAR38/HAL/WFL50

	A	
Diameter (in ft.)	<b>A</b>	fc*
0.9	A	2467
1.3	A	617
1.8	$\bowtie$	274

120PAR38/HAL/SP10

90PAR38/HAL/SP9

Diameter (in ft.)		fc*
1.0	4	1589
1.7	$\mathcal{A}$	397
2.3	$\bowtie$	177

90PAR38/HAL/WSP12

Diameter	A	
(in ft.)		fc* 522
3.1	A	131
4.4	M	58

90PAR38/HAL/NFL25

90PA	R38	/ΗΔΙ	/FI	30

75PAR38/HAL/FL30

istance from Source (in ft.)	Diameter (in ft.)	<b>A</b>	fc*
3'	2.0		389
6'	3.6	A	97
9'	5.2	M	43
		~ _	

Diameter (in ft.)	fc*
3.2	178
6.0	44

8.8

90PAR38/HAL/WFL50

<b>A</b>	fc*	Diameter (in ft.)	<b>A</b>	fc*
	178	0.9		250
M	44	1.4	M	625
$\bowtie$	20	2.0	$\bowtie$	278

120PAR38/HAL/FL30
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Diameter (in ft.)	<b>A</b>	fc*
2.0		511
3.6	A	128
5.2	M	57
	8	128 57

## 120PAR38/HAL/WFL50

S	istance from Source (in ft.)	Diameter (in ft.)	<b>A</b>	fc*
	3'	3.2		244
	6'	6.0	A	61
	9'	8.8	$\bowtie$	27
			~ _	

Diameter (in ft.)	<b>A</b>	fc*
0.9		5167
1.4	A	1292
2.0	$\bowtie$	574

250PAR38/HAL/SP10

Diameter (in ft.)	<b>A</b>	fc*
2.0		1000
3.6	M	250
5.2	M	111

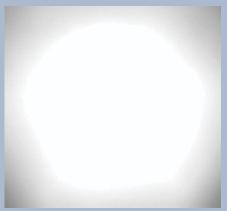
250PAR38/HAL/FL30

SYLVANIA CAPSYLITE® PAR 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 PAR lamp, this table shows how illuminance in footcandles varies as a function of distance.

<sup>\*</sup>Approximate footcandle values at center of beam

Lamp shall be CAPSYLITE SPL2 PAR38 halogen (2500, 3000 or 4500) – hour average rated life, shall be diode free and employ stabilized coils. Lamp shall be energy efficient and produced to EPAct standards. Lamp base shall contain no lead solder to make the disposal of used CAPSYLITE SPL2 lamps easier for the end user.

## **Optical Performance**





**Standard Halogen PAR38** 

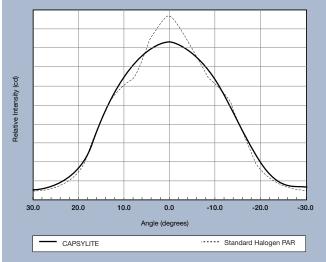
**New CAPSYLITE SPL2 PAR38** 

#### CAPSYLITE® SPL®2 PAR38 Optical System

CAPSYLITE SPL PAR38 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 lenses, however, are only half of the story. The spiral flat reflectors are 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 CAPSYLITE with SPL2 Optics



The beam performance of the CAPSYLITE product line with SPL2 optics changes the way PAR38 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 product line is designed to give a more uniform intensity distribution across the beam with no hot spots. The result is a uniform light level on the target that maximizes the impact of the halogen source.

## **Dimensions**



