

# 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
5. Distinctive appearance and superior performance due to SPL2 optics which combines spiral reflector and lens optics



## Specification Data

|             |      |
|-------------|------|
| Catalog #   | Type |
| Project     |      |
| Comments    |      |
| Prepared by | Date |

## Ordering Information

| Item Number | Ordering Abbreviation | Wattage | Base         | Average Rated Life (hrs.) | Volts | CBCP (cd) | Beam Angle | Lumens | MOL (in.) |
|-------------|-----------------------|---------|--------------|---------------------------|-------|-----------|------------|--------|-----------|
| 14590       | 45PAR38/HAL/SP9       | 45      | Medium Skirt | 2,500                     | 120   | 10,000    | 9°         | 560    | 5 5/16    |
| 14593       | 45PAR38/HAL/SP9       | 45      | Medium Skirt | 2,500                     | 130   | 10,000    | 9°         | 560    | 5 5/16    |
| 15538       | 45PAR38/HAL/SP        | 45      | Medium Skirt | 2,500                     | 120   | 10,000    | 9°         | 560    | 5 5/16    |
| 14589       | 45PAR38/HAL/WSP12     | 45      | Medium Skirt | 2,500                     | 120   | 6,300     | 12°        | 560    | 5 5/16    |
| 14592       | 45PAR38/HAL/WSP12     | 45      | Medium Skirt | 2,500                     | 130   | 6,300     | 12°        | 560    | 5 5/16    |
| 14588       | 45PAR38/HAL/FL30      | 45      | Medium Skirt | 2,500                     | 120   | 1,500     | 30°        | 560    | 5 5/16    |
| 14591       | 45PAR38/HAL/FL30      | 45      | Medium Skirt | 2,500                     | 130   | 1,500     | 30°        | 560    | 5 5/16    |
| 15537       | 45PAR38/HAL/FL        | 45      | Medium Skirt | 2,500                     | 120   | 1,500     | 30°        | 560    | 5 5/16    |
| 14010       | 45PAR38/HAL/WFL50     | 45      | Medium Skirt | 2,500                     | 130   | 700       | 50°        | 560    | 5 5/16    |
| 14469       | 60PAR38/HAL/SP9       | 60      | Medium Skirt | 3,000                     | 120   | 15,000    | 9°         | 850    | 5 5/16    |
| 14449       | 60PAR38/HAL/SP9       | 60      | Medium Skirt | 3,000                     | 130   | 15,000    | 9°         | 850    | 5 5/16    |
| 14472       | 60PAR38/HAL/NFL25     | 60      | Medium Skirt | 3,000                     | 120   | 3,400     | 25°        | 850    | 5 5/16    |
| 14468       | 60PAR38/HAL/FL30      | 60      | Medium Skirt | 3,000                     | 120   | 2,500     | 30°        | 850    | 5 5/16    |
| 14448       | 60PAR38/HAL/FL30      | 60      | Medium Skirt | 3,000                     | 130   | 2,500     | 30°        | 850    | 5 5/16    |
| 14514       | 75PAR38/HAL/SP9       | 75      | Medium Skirt | 2,500                     | 120   | 21,000    | 9°         | 1,060  | 5 5/16    |
| 14516       | 75PAR38/HAL/SP9       | 75      | Medium Skirt | 2,500                     | 130   | 21,000    | 9°         | 1,060  | 5 5/16    |
| 14510       | 75PAR38/HAL/WSP12     | 75      | Medium Skirt | 2,500                     | 120   | 12,300    | 12°        | 1,060  | 5 5/16    |
| 14513       | 75PAR38/HAL/FL30      | 75      | Medium Skirt | 2,500                     | 120   | 3,150     | 30°        | 1,060  | 5 5/16    |
| 14515       | 75PAR38/HAL/FL30      | 75      | Medium Skirt | 2,500                     | 130   | 3,150     | 30°        | 1,060  | 5 5/16    |
| 14517       | 75PAR38/HAL/WFL50     | 75      | Medium Skirt | 2,500                     | 130   | 1,300     | 50°        | 1,060  | 5 5/16    |
| 14586       | 90PAR38/HAL/SP9       | 90      | Medium Skirt | 2,500                     | 120   | 22,000    | 9°         | 1,310  | 5 5/16    |
| 14587       | 90PAR38/HAL/SP9       | 90      | Medium Skirt | 2,500                     | 130   | 22,000    | 9°         | 1,310  | 5 5/16    |
| 15539       | 90PAR38/HAL/SP        | 90      | Medium Skirt | 2,500                     | 120   | 22,000    | 9°         | 1,310  | 5 5/16    |
| 14580       | 90PAR38/HAL/WSP12     | 90      | Medium Skirt | 2,500                     | 120   | 14,300    | 12°        | 1,310  | 5 5/16    |
| 14578       | 90PAR38/HAL/WSP12     | 90      | Medium Skirt | 2,500                     | 130   | 14,300    | 12°        | 1,310  | 5 5/16    |
| 14601       | 90PAR38/HAL/NFL25     | 90      | Medium Skirt | 2,500                     | 130   | 4,700     | 25°        | 1,310  | 5 5/16    |
| 15545       | 90PAR38/HAL/FL        | 90      | Medium Skirt | 2,500                     | 120   | 3,500     | 30°        | 1,310  | 5 5/16    |
| 14579       | 90PAR38/HAL/FL30      | 90      | Medium Skirt | 2,500                     | 120   | 3,500     | 30°        | 1,310  | 5 5/16    |
| 14577       | 90PAR38/HAL/FL30      | 90      | Medium Skirt | 2,500                     | 130   | 3,500     | 30°        | 1,310  | 5 5/16    |
| 14602       | 90PAR38/HAL/WFL50     | 90      | Medium Skirt | 2,500                     | 130   | 1,600     | 50°        | 1,310  | 5 5/16    |
| 14856       | 120PAR38/HAL/SP10     | 120     | Medium Skirt | 3,000                     | 120   | 23,000    | 10°        | 1,800  | 5 5/16    |
| 14874       | 120PAR38/HAL/SP10     | 120     | Medium Skirt | 3,000                     | 130   | 23,000    | 10°        | 1,800  | 5 5/16    |
| 14855       | 120PAR38/HAL/FL30     | 120     | Medium Skirt | 3,000                     | 120   | 4,600     | 30°        | 1,800  | 5 5/16    |
| 14861       | 120PAR38/HAL/FL30     | 120     | Medium Skirt | 3,000                     | 130   | 4,600     | 30°        | 1,800  | 5 5/16    |
| 14594       | 120PAR38/HAL/WFL50    | 120     | Medium Skirt | 3,000                     | 120   | 2,000     | 50°        | 1,800  | 5 5/16    |
| 15526       | 250PAR38/HAL/SP10     | 250     | Medium Skirt | 4,500                     | 120   | 50,000    | 10°        | 3,600  | 5 5/16    |
| 15558       | 250PAR38/HAL/FL30     | 250     | Medium Skirt | 4,500                     | 120   | 9,000     | 30°        | 3,600  | 5 5/16    |

## Ordering Guide


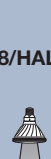
| 45       | PAR38               | / | HAL     | / | SP                 | 9          |
|----------|---------------------|---|---------|---|--------------------|------------|
| Wattage: | Parabolic Reflector |   | Halogen |   | Beam Spread        | Beam Angle |
| 45       | Diameter            |   | 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

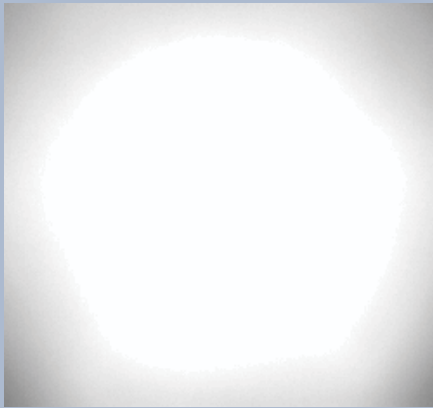
### Footcandle

| 45PAR38/HAL/SP9               |                   |   |      | 45PAR38/HAL/WSP12 |   |      |                   | 45PAR38/HAL/FL30  |      |                   |   | 45PAR38/HAL/WFL50 |                   |   |      | 60PAR38/HAL/SP9   |  |  |  |
|-------------------------------|-------------------|---|------|-------------------|---|------|-------------------|---|------|-------------------|---|-------------------|-------------------|---|------|-------------------|--|--|--|
| Distance from Source (in ft.) | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*               | Diameter (in ft.) |    | fc*  |                   |  |  |  |
| 3'                            | 0.9               |    | 1111 | 1.0               |    | 700  | 2.0               |    | 167  | 3.2               |    | 78                | 0.9               |    | 1667 |                   |  |  |  |
| 6'                            | 1.3               |    | 278  | 1.7               |    | 175  | 3.6               |    | 42   | 6.0               |    | 19                | 1.3               |    | 417  |                   |  |  |  |
| 9'                            | 1.8               |    | 123  | 2.3               |    | 78   | 5.2               |    | 19   | 8.8               |    | 9                 | 1.8               |    | 185  |                   |  |  |  |
| 60PAR38/HAL/NFL25             |                   |   |      | 60PAR38/HAL/FL30  |   |      |                   | 75PAR38/HAL/SP9   |      |                   |   | 75PAR38/HAL/WSP12 |                   |   |      |                   |  |  |  |
| Distance from Source (in ft.) | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*  | Diameter (in ft.) |    | fc*               | Diameter (in ft.) |    | fc*  |                   |  |  |  |
| 3'                            | 1.7               |    | 378  | 2.0               |    | 278  | 0.9               |    | 2133 | 1.0               |    | 1367              | 1.7               |    | 342  |                   |  |  |  |
| 6'                            | 3.1               |   | 94   | 3.6               |   | 69   | 1.3               |   | 533  | 1.7               |   | 342               | 2.3               |   | 152  |                   |  |  |  |
| 9'                            | 4.4               |   | 42   | 5.2               |   | 31   | 1.8               |   | 237  | 2.3               |   | 152               | 2.3               |   | 152  |                   |  |  |  |
| 75PAR38/HAL/FL30              |                   |   |      | 75PAR38/HAL/WFL50 |   |      |                   | 90PAR38/HAL/SP9   |      |                   |   | 90PAR38/HAL/WSP12 |                   |   |      | 90PAR38/HAL/NFL25 |  |  |  |
| Distance from Source (in ft.) | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*               | Diameter (in ft.) |  | fc*  |                   |  |  |  |
| 3'                            | 2.0               |  | 350  | 3.2               |  | 144  | 0.9               |  | 2467 | 1.0               |  | 1589              | 1.7               |  | 522  |                   |  |  |  |
| 6'                            | 3.6               |  | 88   | 6.0               |  | 36   | 1.3               |  | 617  | 1.7               |  | 397               | 3.1               |  | 131  |                   |  |  |  |
| 9'                            | 5.2               |  | 39   | 8.8               |  | 16   | 1.8               |  | 274  | 2.3               |  | 177               | 4.4               |  | 58   |                   |  |  |  |
| 90PAR38/HAL/FL30              |                   |   |      | 90PAR38/HAL/WFL50 |   |      |                   | 120PAR38/HAL/SP10   |      |                   |   | 120PAR38/HAL/FL30 |                   |   |      |                   |  |  |  |
| Distance from Source (in ft.) | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*               | Diameter (in ft.) |  | fc*  |                   |  |  |  |
| 3'                            | 2.0               |  | 389  | 3.2               |  | 178  | 0.9               |  | 2500 | 2.0               |  | 511               | 3.6               |  | 128  |                   |  |  |  |
| 6'                            | 3.6               |  | 97   | 6.0               |  | 44   | 1.4               |  | 625  | 3.6               |  | 128               | 5.2               |  | 57   |                   |  |  |  |
| 9'                            | 5.2               |  | 43   | 8.8               |  | 20   | 2.0               |  | 278  | 5.2               |  | 57                | 5.2               |  | 57   |                   |  |  |  |
| 120PAR38/HAL/WFL50            |                   |   |      | 250PAR38/HAL/SP10 |   |      |                   | 250PAR38/HAL/FL30   |      |                   |   |                   |                   |   |      |                   |  |  |  |
| Distance from Source (in ft.) | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*  | Diameter (in ft.) |  | fc*               | Diameter (in ft.) |  | fc*  |                   |  |  |  |
| 3'                            | 3.2               |  | 244  | 0.9               |  | 5167 | 2.0               |  | 1000 | 0.9               |  | 5167              | 2.0               |  | 5167 |                   |  |  |  |
| 6'                            | 6.0               |  | 61   | 1.4               |  | 1292 | 3.6               |  | 250  | 1.4               |  | 1292              | 3.6               |  | 250  |                   |  |  |  |
| 9'                            | 8.8               |  | 27   | 2.0               |  | 574  | 5.2               |  | 111  | 5.2               |  | 111               | 5.2               |  | 111  |                   |  |  |  |

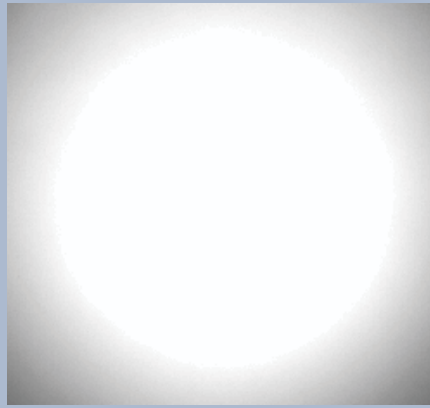
SYLVANIA CAPSYLITE® PAR lamps are available in a full range of beam angles to meet the demands of virtually any display or accent lighting application. For each available CAPSYLITE PAR lamp, this table shows how illuminance in footcandles varies as a function of distance.

\*Approximate footcandle values at center of beam

**Optical Performance**



Standard Halogen PAR38



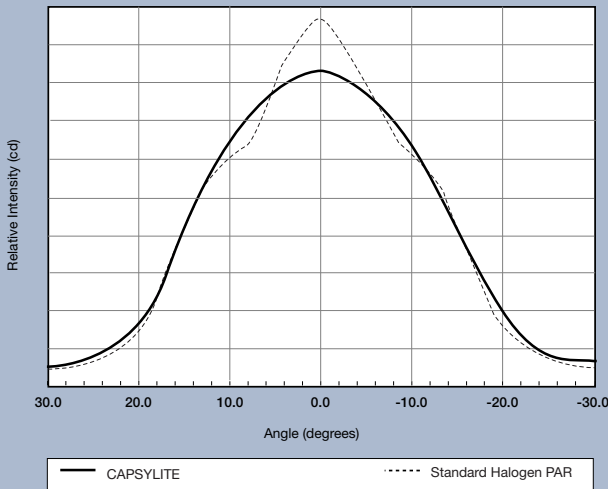
New CAPSYLITE SPL2 PAR38

**CAPSYLITE® SPL<sup>2</sup> 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**

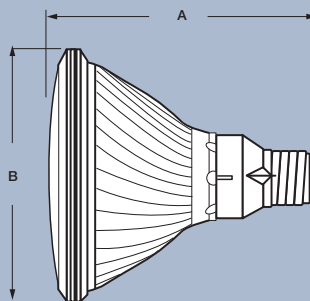
**Comparison of Standard Halogen PAR to CAPSYLITE with SPL2 Optics**



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**

|                 | (A)<br>MOL | (B)<br>Lamp Diameter |
|-----------------|------------|----------------------|
| CAPSYLITE PAR38 | 5-5/16"    | 4-3/4"               |



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.