

AR70 and AR111

Low Voltage Halogen Lamps



SYLVANIA AR lamps are outstanding low voltage halogen light sources that produce an unparalleled beam of controlled light. The high precision aluminum reflectors contain a low-pressure halogen light source made with UV-stop quartz. The result of this capsule construction is that the lamps do not require shielding.*

The combination of an axial filament capsule, a computer designed reflector and a cap to eliminate capsule glare creates a lamp with exceptional performance: High center beam candle power values; a smooth, even beam; and a clear, sharp cutoff.

Key Features & Benefits

- Unparalleled beam performance
- Aluminum reflectors
- 3000-hour average rated life
- UV-stop capsule
- Tightly controlled beam with sharp cut-off
- Suitable for use without shielding*

*SYLVANIA does not require lamp containment shielding.
Consult most recent UL standards for luminaire requirements.

Product Offering

Product	Beam Angle
AR70 (20 Watt & 50 Watt)	Spot 8°, Flood 25°
AR111	
35 Watt – 6 Volt	Super Spot 4°
35 Watt	Super Spot 4°, Spot 8°, Flood 25°
50 Watt	Super Spot 4°, Spot 8°, Flood 25°
75 Watt	Spot 8°, Flood 25°
100 Watt	Spot 8°, Flood 25°, Wide Flood 45°

Fixture Availability

AR111

Belfer	Kramer	Rojey
Capri	Kurt Versen	Staff
CSL	Lightolier	Translite
Flos	LSI	
Kirlin	Lumiere	

AR70

Belfer	Kirlin	Omega
Capri	Kurt Versen	Rojey
Cooper	Lightolier	Staff
Edison Price	LSI	Translite

Application Information

Applications

- Artwork and sculpture
- Atriums
- High-end residential/commercial
- Retail

AR111

- Exceptional beam control
- Fully dimmable
- Socket: G53 (push in or screw terminal)
- Long distance throws (up to 50,000 CBCP)
- Interchangeable with PAR36 in shielded fixtures
- For use in downlight, track and accent fixtures

AR70

- Exceptional beam control
- Fully dimmable
- Socket: BA15D
- Smooth, non scattered beam pattern
- Small profile
- Long distance throws
- For use in downlight, track and accent fixtures



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	Date

Ordering Information

Item Number	Ordering Abbreviation	Watts	Volts	Base	Average Rated Life (hrs.)	CBCP (cd)	Beam Angle
59013	20AR70/SP8	20	12	BA15D	3,000	7,700	8°
59012	20AR70/FL25	20	12	BA15D	3,000	900	25°
59017	50AR70/SP8	50	12	BA15D	3,000	12,500	8°
59016	50AR70/FL25	50	12	BA15D	3,000	2,600	25°
55102	35AR111/SSP4	35	12	G53	3,000	45,000	4°
55110	35AR111/SP8	35	12	G53	3,000	14,000	8°
55114	35AR111/FL25	35	12	G53	3,000	2,500	25°
55105	50AR111/SSP4	50	12	G53	3,000	50,000	4°
55104	50AR111/SP8	50	12	G53	3,000	20,000	8°
55103	50AR111/FL25	50	12	G53	3,000	3,500	25°
55125	75AR111/SP8	75	12	G53	3,000	30,000	8°
55123	75AR111/FL25	75	12	G53	3,000	5,300	25°
55129	100AR111/SP8	100	12	G53	3,000	48,000	8°
55127	100AR111/FL25	100	12	G53	3,000	8,500	25°
55128	100AR111/WFL45	100	12	G53	3,000	2,800	45°

Ordering Guide

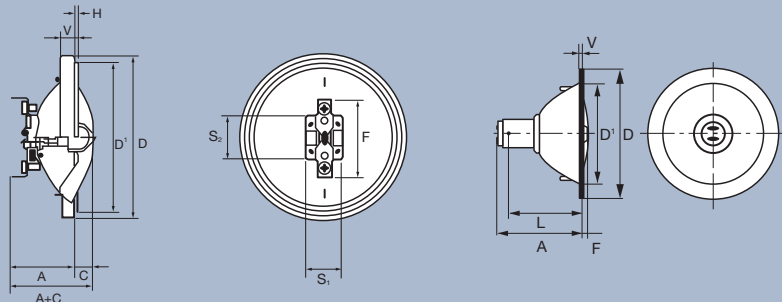
20	AR	70	/	SP	10
Wattage 20, 35, 50 75, 100	Aluminum Reflector	Diameter 70 = 70mm 111 = 111mm		Beam Spread SSP = Super Spot SP = Spot FL = Flood WFL = Wide Flood	Beam Angle 4° 8° 25° 45°

Lamp Comparison

Item Number	Ordering Abbreviation	Watts	Beam Angle	Average Rated Life (hrs.)	CBCP (cd)
59017	50AR70/SP8	50	8°	3,000	15,000
	Brand X 50ALR18/SP10	50	10°	2,000	12,000
	Brand X 50PAR20/HAL//SP10	50	10°	2,500	6,000
55104	50AR111/SP8	50	8°	3,000	23,000
	Brand X 50PAR36/H/NSP8	50	8°	4,000	30,000
55129	100AR111/SP8	100	8°	3,000	48,000
	Brand X 100PAR/H/SP10	100	10°	2,000	17,000

Technical Information

Dimensions



	AR111	mm	inch	AR70	mm	inch
Overall length	A + C	60	2.36	A + F	48.5	1.91
Projection of grip cap	C	15 ±0.5	0.59 +0.02	F	3.0 max.	0.12 max.
Length w/o grip cap	A	45 ±0.4	1.77 +0.02	A	45.5 +1	1.79 +0.04
				L	41.0 max.	1.61
Reflector diameter	D	111 -0.2	4.37 -0.01	D	70.0 ±0.2	2.75 ±0.08
	D1	102.5 ±0.3	4.04 +0.01	D1	59.76	23.53
Thickness of refl. edge	V	9.5 +0.5	0.37 +0.02	V	1.2	0.05
	H	2.5 -0.7	0.98 -0.03			
Dim. of ceramic holder	S1 x S2	25 x 32	9.84 x 1.26			
Distance of contact strips	F	53.2 ±1	2.09 +0.04			

Footcandle

Distance from Source (in ft.)	8° Spot			25° Flood		
	Diameter (in ft.)	Center FC		Diameter (in ft.)	Center FC	
0'		20W	50W		20W	50W
10'	1.6	77	125	4.7	9	26
20'	3.0	19	31	9.1	2.3	6.5
30'	4.4	9	14	13.5	1.0	2.9
40'	5.8	5	8	18	0.6	1.6
50'	7.2	3	5	22.4	0.4	1.0
60'	8.6	2	3	26.8	0.3	0.7

Distance from Source (in ft.)	4° Super Spot			8° Spot			
	Diameter (in ft.)	Center FC		Diameter (in ft.)	Center FC		
0'		35W/6v	35W/12v	50W	35W	50W	75W
10'	1.1	300	450	500	140	200	300
20'	1.8	75	113	125	35	50	75
30'	2.5	33	50	56	16	22	33
40'	3.2	19	28	31	9	13	19
50'	3.9	12	18	20	6	8	12
60'	4.6	8	13	14	4	6	8

Distance from Source (in ft.)	25° Flood			
	Diameter (in ft.)	Center FC		
0'		35W	50W	75W
10'	4.8	25	35	53.0
20'	9.2	6.3	8.8	13.3
30'	13.7	2.8	3.9	5.9
40'	18.1	1.6	2.2	3.3
50'	22.5	1.0	1.4	2.1
60'	27	0.7	1.0	1.5

AR70 & AR11 lamps are available in a wide range of beam angles to meet the demand of virtually any display or accent lighting application. For each AR lamp, this table shows how lamp output – in footcandles – varies as a function of distance. Distance and diameter are measured in feet. Candle power distribution curves are available in IES format at mysylvania.com.

Sample Specification

AR70/AR111

Lamp(s) shall be (a) 12V ____ halogen lamp(s) (AR70, AR111) with a UV-stop capsule, an aluminum reflector and a glare guard (70 or 111-mm diameter). Lamp(s) shall be ____ watts (20, 35, 50, 75 or 100) with a ____ beam spread (4°, 8°, 25° or 45°) or as noted on drawings/schedules. Lamp(s) shall have a ____ Base (BA15D double contact bayonet or G53 push or screw terminal base) and a 3000-hour average rated life.