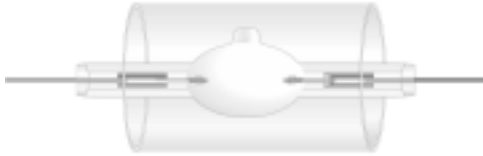
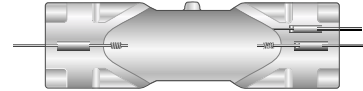




Shrouded Pulse Start Lamps Competitive Comparison *At a Glance*



versus



Shrouded Formed Body

- No Luminaire Lens Required
- Longer Life
- Superior Lumen Maintenance
- Optimum Protection
- UV Shield® - reduces UV up to 80%
- Now a standard feature

Pinched Body

- Standard technology, over 35 years old

450 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
Venture	MP 450W/BU/UVS/PS	Formed	47500	38000	80%	2
Philips	-	-	-	-	-	0
Osram/Sylvania	-	-	-	-	-	0
General Electric	-	-	-	-	-	0

400 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
Venture	MP 400W/BU/UVS/PS	Formed	42000	33600	80%	4
Philips	MP400/BU/PS	Pinched	44000	28000	64%	2
Osram/Sylvania	MP350/400/PS/BU-ONLY	Pinched	40000	29500	74%	2
General Electric	MPR400/VBU/XHO PA	Shaped	42000	29500	70%	2

350 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
Venture	MP 350W/V/UVS/PS	Formed	35200	28200	80%	5
Philips	-	-	-	-	-	0
Osram/Sylvania	MP350/400/PS/BU-ONLY	Pinched	33000	24500	74%	2
General Electric	MPR350/C/VBU/PA	Shaped	33400	23500	70%	2

320 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
Venture	MP 320W/BU/ED28/UVS/PS	Formed	32300	25800	80%	4
Philips	-	-	-	-	-	0
Osram/Sylvania	MP320/350/PS/BU-ONLY/BT28	Pinched	29500	21000	71%	2
General Electric	MPR320/VBU/XHO PA	Shaped	32000	22500	70%	2



Shrouded Pulse Start Lamps Competitive Comparison

300 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 300W/V/ED28/UVS/PS</i>	<i>Formed</i>	<i>29000</i>	<i>23200</i>	<i>80%</i>	<i>4</i>
Philips	-	-	-	-	-	0
Osram/Sylvania	-	-	-	-	-	0
General Electric	-	-	-	-	-	0

250 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 250W/BU/UVS/PS</i>	<i>Formed</i>	<i>23800</i>	<i>19000</i>	<i>80%</i>	<i>2</i>
Philips	-	-	-	-	-	0
Osram/Sylvania	MP250/PS/BU-ONLY	Shaped	22500	17000	75%	2
General Electric	MPR250/VBU/O	Shaped	23000	17000	74%	1

200 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 200W/V/UVS/PS</i>	<i>Formed</i>	<i>20000</i>	<i>16000</i>	<i>80%</i>	<i>3</i>
Philips	-	-	-	-	-	0
Osram/Sylvania	-	-	-	-	-	0
General Electric	-	-	-	-	-	0

150 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 150W/U/UVS/PS</i>	<i>Formed</i>	<i>13300</i>	<i>10000</i>	<i>75%</i>	<i>7</i>
Philips	MHC150/U/MP/4K	Shaped	12400	9920	80%	2
Osram/Sylvania	MP150/U/MED	Pinched	12900	10000	78%	6
General Electric	MXR150/U/MED/O	Formed	12500	8600	69%	2

125 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 125W/BU/UVS/PS</i>	<i>Formed</i>	<i>11400</i>	<i>8000</i>	<i>70%</i>	<i>2</i>
Philips	-	-	-	-	-	0
Osram/Sylvania	-	-	-	-	-	0
General Electric	-	-	-	-	-	0

100 Watt

Company	Lamp Description	Arc Tube	Initial Lumens	Mean Lumens	Mean Lumens (%)	# of Lamp Designs
<i>Venture</i>	<i>MP 100W/U/UVS/PS</i>	<i>Formed</i>	<i>8500</i>	<i>5500</i>	<i>65%</i>	<i>6</i>
Philips	MHC100/U/MP/4K	Shaped	8000	6800	85%	4
Osram/Sylvania	MP100/U/MED	Pinched	8500	5525	65%	6
General Electric	MXR100/U/MED/O	Shaped	9000	6200	69%	2

* Note: This competitive survey does not include a comparison of PAR lamps