



## Mercury Quantity in Lamps for General Lighting Applications

2/24/10

Highly efficient, energy-conserving lamps typically contain small quantities of mercury. If the level of mercury is too low, then lamp life, number of starts, color, and light output can be dramatically affected. Lamps will consume all the pure mercury before reaching rated life, requiring additional lamp replacements, which increases mercury usage. OSRAM SYLVANIA is **continuously striving to reduce** the levels of mercury in our lamps. The levels in these tables are best projected estimates, subject to machine capabilities. When using these numbers to determine compliance with the US Green Building Council's LEED<sup>®</sup>-EBOM low mercury credits, please note:

- This calculation requires input of ALL mercury-containing lamps and is not designed as a lamp-by-lamp comparison. Each individual lamp does NOT need to meet the individual picogram per lumen hour level, but rather the total level of all lamp types and quantities must achieve that measurement.
- It is important to remember that individual products cannot be LEED-certified. Only buildings can be LEED-certified.

Lamp Type	Range	Hg Content (mg)
T5, pre-heat	4W to 13W (incl BLB)	15
T5, PENTRON <sup>®</sup>	All	1.8
PENTRON <sup>®</sup> Circline	All	9
T5, PENTRON <sup>®</sup> HO (High Output)	All	1.8
T12, pre-heat	All	12 to 15
T8, pre-heat	All	6
T8, OCTRON <sup>®</sup> , linear 800, 800XP, and XL	Up to 60"	3.5
T8, OCTRON <sup>®</sup> , linear 800XP/SS and 800XPS	All	2.9
T8, OCTRON <sup>®</sup> , linear 700XP	Up to 72"	3.5
T8, OCTRON <sup>®</sup> , linear 700	Up to 72"	4.8
T8, OCTRON <sup>®</sup> linear	72" and longer	8.5
T8, OCTRON <sup>®</sup> , HO, linear (High Output)	All	9.5
T8, OCTRON <sup>®</sup> , CURVALUME <sup>®</sup> 6" leg spacing	All	3.75
T8, OCTRON <sup>®</sup> , CURVALUME <sup>®</sup> 1 5/8" leg spacing	All	6
T9 Circline	20W	5
T9 Circline	22W, 28W, 40W	15
T12, linear, Rapid Start—halo-phosphor lamps	(excl. HO & VHO)	8
T12, linear, Rapid Start – Designer lamps	(excl. HO & VHO)	4.8
T12, linear, Instant Start	All (>24" L)	9.5
T12, CURVALUME <sup>®</sup>	All	8
T12, HO (High Output)	All	15
T12, VHO (Very High Output)	All	30
ICETRON <sup>®</sup>	70W to 150W	18

DULUX EL <sup>®</sup> , one piece (amalgam and covered, ex. triple tube)	4W to 40W	3
DULUX EL <sup>®</sup> one piece (bare burner)	4W to 25W	3-5
DULUX EL <sup>®</sup> one piece (bare burner)	25W to 40W	6
DULUX EL <sup>®</sup> , one piece (triple tube)	15W to 23W	5
DULUX EL <sup>®</sup> , Circline	20W to 30W	5
DULUX EL <sup>®</sup> Micro Mini and Living Spaces <sup>®</sup>	13W to 23W	1.5
DURA-ONE <sup>®</sup>	23W	1.8
DULUX <sup>®</sup> pin base (excl. some T, and F and L)	5W to 57W	2.5
DULUX <sup>®</sup> pin base T, T/E	13W to 32W	4.5
DULUX <sup>®</sup> pin base, T/E/IN	18W to 70W	3
DULUX <sup>®</sup> F, pin base	18W to 36 W	3
DULUX <sup>®</sup> L, pin base	18W to 55W	4.5

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In addition, energy-efficient lighting requires less energy, which lowers electricity demand. This means that power plants need to burn less fossil fuel to meet this demand, which reduces emissions of air pollutants – including airborne mercury. OSRAM SYLVANIA is **continuously striving to reduce** the levels of mercury in our lamps. The levels in these tables are best projected estimates, subject to machine capabilities.

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Lamp Type	Range	Hg Content (mg)
Metal Halide, METALARC® screw base ceramic PAR & TC	20W	2.5
Metal Halide, METALARC® screw base ceramic PAR & TC	24W	3.8
Metal Halide, METALARC® screw base ceramic PAR, T,&TC	39W	5
Metal Halide, METALARC® screw base ceramic PAR, T,&TC	70W	7
Metal Halide, METALARC® screw base ceramic PAR	100W to 150W	15
Metal Halide, METALARC® screw base	50W to 100W	13
Metal Halide, METALARC® screw base	150W to 250W	34
Metal Halide, METALARC® screw base	320W to 360W	56
Metal Halide, METALARC® ceramic screw base	50W	8
Metal Halide, METALARC® ceramic screw base	70W	7
Metal Halide, METALARC® ceramic screw base	100W	6.6 to 7.5
Metal Halide, METALARC® ceramic screw base	150W	16
Metal Halide, METALARC® ceramic screw base	250W	18
Metal Halide, METALARC® ceramic screw base	320W	31
Metal Halide, METALARC® screw base	400W to 750W	57 to 63
Metal Halide, METALARC® screw base	1000W to 1500W	145
Metal Halide, pin base	39 to 150W	6 to 13
Metal Halide, double-ended (excl. HQI DE 150 WDX)	70 to 250W	15
Metal Halide, double-ended - HQI DE 150 WDX only	150W	23
Metal Halide, double-ended	1000 to 3000W	281
Mercury Vapor	50W to 100W	11 to 20
Mercury Vapor	175W	24
Mercury Vapor	250W	48
Mercury Vapor	400W to 1000W	58 to 79
Mercury Vapor H36	1000W	165
High Pressure Sodium, standard	35W to 400W	11 to 15
High Pressure Sodium, standard, SUPER	>400W to 1000W	18 to 25
High Pressure Sodium, LUMALUX® Standby	70W to 400W	29
High Pressure Sodium, LUMALUX® Standby	1000W	43
High Pressure Sodium, ECO	50W to 400W	15
High Pressure Sodium, PLUS, ECO	50W to 400W	1 to 6
High Pressure Sodium PLUS	1000W	15
High Pressure Sodium, HgF mercury free	70W to 150W	0.0001

