



Mercury Quantity in Lamps for General Lighting Applications

11/01/07

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. The mercury is therefore crucial to achieving the lamps' higher level of operating efficiency. 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®-EB low mercury prerequisite¹ or additional point, 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 100 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.

Category	Lamp Type	Range	Hg Content (mg)
FL 1	T5, pre-heat	4W to 13W (incl BLB)	<15
FL 2	T5, PENTRON®	All	2.5
FL 3	PENTRON® Circline	All	<9
FL 4	T5, PENTRON® HO (High Output)	All	<2.5
FL 5	T12, pre-heat	All	<12 to 15
FL 6	T8, pre-heat	All	<6
FL 8	T8, OCTRON®, linear 800, 800XP, 800XPS	Up to 60"	<3.5
FL 9	T8, OCTRON®, linear 700XP	Up to 72"	<3.5
FL10	T8, OCTRON®, linear 700	Up to 72"	<8
FL 11	T8, OCTRON® linear	72" and longer	<8.5
FL 12	T8, OCTRON®, HO, linear (High Output)	All	<9.5
FL 13	T8, OCTRON®, CURVALUME®	All	<10
FL 14	T9 Circline	20W	<5
FL 15	T9 Circline	22W, 28W, 40W	<15
FL 16	T12, linear, Rapid Start	(excl. HO & VHO)	<9.5
FL 17	T12, linear, Instant Start	All (>24" L)	<9.5
FL 18	T12, CURVALUME®	All	<8
FL 19	T12, HO (High Output)	All	<15
FL 20	T12, VHO (Very High Output)	All	<30
FL 21	ICETRON®	70W to 150W	<18

CFL 1	DULUX EL®, one piece (amalgam and covered, ex. triple tube)	4W to 40W	<3
CFL 2	DULUX EL® one piece (bare burner)	4W to 25W	<3-5
CFL 3	DULUX EL® one piece (bare burner)	25W to 40W	<6
CFL 4	DULUX EL®, one piece (triple tube)	15W to 23W	<5
CFL 5	DULUX EL®, Circline	20W to 30W	<5
CFL 6	DULUX EL® Micro Mini	13W to 23W	<1.5
CFL 6	DURA-ONE®	23W	<1.8
CFL 7	DULUX® pin base (excl. some T, and F and L)	5W to 57W	<2.5
CFL 8	DULUX® pin base T, T/E	13W to 32W	<4.5
CFL 9	DULUX® pin base, T/E/IN	70W	<3
CFL 10	DULUX® F, pin base	18W to 36 W	<3
CFL 11	DULUX® L, pin base	18W to 55W	<4.5

¹ LEED-EB MR Prerequisite #2 – Toxic Material Source Reduction: Reduced Mercury in Light Bulbs

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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.

When using these numbers to determine compliance with the US Green Building Council's LEED®-EB low mercury prerequisite² or additional point, 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 100 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.

Category	Lamp Type	Range	Hg Content (mg)
HID 1	Metal Halide, METALARC® screw base ceramic PAR & TC	20W	<2.5
HID 2	Metal Halide, METALARC® screw base ceramic PAR, T,&TC	39W	<5
HID 3	Metal Halide, METALARC® screw base ceramic PAR, T,&TC	70W	<7
HID 4	Metal Halide, METALARC® screw base ceramic PAR	100W to 150W	<15
HID 5	Metal Halide, METALARC® screw base	50W to 100W	<13
HID 6	Metal Halide, METALARC® screw base	150W to 250W	<34
HID 7	Metal Halide, METALARC® screw base	320W to 360W	<56
HID 8	Metal Halide, METALARC® ceramic screw base	250W	<18
HID 9	Metal Halide, METALARC® ceramic screw base	320W	<31
HID 10	Metal Halide, METALARC® screw base	400W to 750W	<57 to 63
HID 11	Metal Halide, METALARC® screw base	1000W to 1500W	<145
HID 12	Metal Halide, pin base	39 to 150W	<6 to 13
HID 13	Metal Halide, double-ended (excl. HQI DE 150 WDX)	70 to 250W	<15
HID 14	Metal Halide, double-ended - HQI DE 150 WDX only	150W	<23
HID 15	Metal Halide, double-ended	1000 to 3000W	<281
HID 16	Mercury Vapor	50W to 100W	<11 to 20
HID 17	Mercury Vapor	175W	<24
HID 18	Mercury Vapor	250W	<48
HID 19	Mercury Vapor	400W to 1000W	<58 to 79
HID 20	Mercury Vapor H36	1000W	<165
HID 21	High Pressure Sodium, standard	35W to 400W	<11 to 15
HID 22	High Pressure Sodium, standard, SUPER	>400W to 1000W	<18 to 25
HID 23	High Pressure Sodium, LUMALUX® Standby	70W to 400W	<29
HID 24	High Pressure Sodium, LUMALUX® Standby	1000W	<43
HID 25	High Pressure Sodium, ECO	50W to 400W	<15
HID 26	High Pressure Sodium, PLUS, ECO	50W to 400W	<1 to 6
HID 27	High Pressure Sodium PLUS	1000W	<15
HID 28	High Pressure Sodium, HgF mercury free	70W to 150W	0.0001

² MR Prerequisite #2 – Toxic Material Source Reduction: Reduced Mercury in Light Bulbs