METAL HALIDE LAMP

CMI-TT 100W WDL/UVS



DIMENSIONS (mm)

211 48

Mercury Content: 10.3 mg
Cap: E40 (IEC 60061-1)

Bulb: UV-stop soft glass tubular clear

		Magnetic Gear			Electronic Gear		
		NOM.	MIN.	MAX.	NOM.	MIN.	MAX.
ELECTRICAL DATA:							
Lamp wattage	(W r.m.s.)	93			100		
Lamp voltage	(V r.m.s.)	95	85	105	90	80	100
Lamp current	(A r.m.s.)	1.20			1.11		
Lamp warm-up current	(A r.m.s.)		1.2	2.4			
Lamp inrush current	(A peak)			24			
OPERATING CONDITION	<u>IS:</u>						
Burning position		universal			universal		
Fixture type		closed			closed		
Ballast type		Metal Halide/High Pressure Sodium choke ballast rated for 100 W, 1.2 A			Electronic LFSW ballast for 100 W		
Ignitor pulse height	(kV _{peak})		2.8	5.0		2.8	5.0
Ignitor pulse width at 90% pe	ak(μs/s)		100			100	
Cap temperature	(\mathcal{C})			250			250
Bulb temperature	(\mathfrak{C})			400			400
Adjacent to cap temperature	(\mathcal{C})						-
LAMP LIFE:							
Rated average life	(h)	24000			24000		
Life to 10% failures	(h)	14000			14000		
PHOTOMETRIC DATA*:							
Initial luminous Flux	(lm)	10000			10800		
Luminous efficacy	(lm/W)	108			108		
Correlated colour temp.	(K)	3000			3000		
Colour rendering index		80			82		
Colour point (x,y)		(.343,.398))		(.343, .398)		
* Data for vertical burning positio ageing	n after 100 h						

APPLICATION

Lamps comply with the requirements of IEC publications 61167, 62035 and 62471. Electromagnetic ballasts must comply with IEC 60923 and electronic ballasts with IEC 61167, annex G. Ignitors used must be in accordance with IEC 60927 and luminaires with IEC 60598-1. Lamp inspection is performed in accordance with IEC 60410. The luminaire must be provided with a safety screen (shattering and UV). Because of a possible risk of abnormal operation at the end of life, thermally protected balalsts must be used.

DATA SHEET

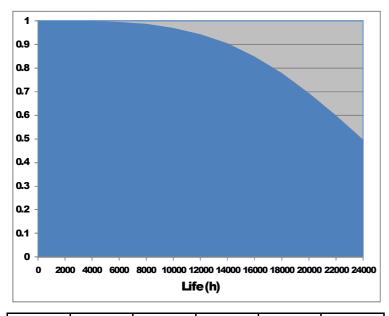
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SURVIVAL RATE



8000h

0.98

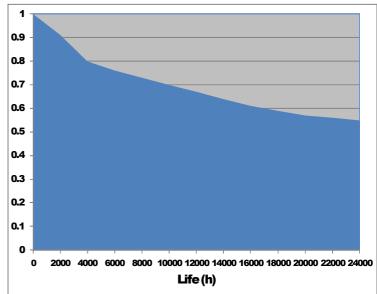
12000h

0.94

16000h

0.85

LUMEN MAINTENANCE



2000h	4000h	6000h	8000h	12000h	16000h
0.91	0.80	0.76	0.73	0.67	0.61

LAMP SPECTRUM

4000h

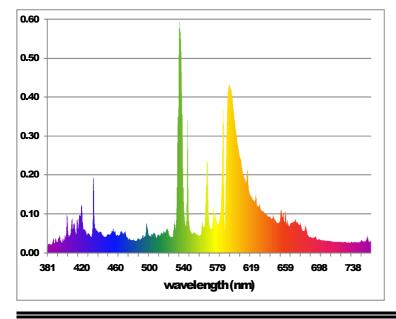
1.00

6000h

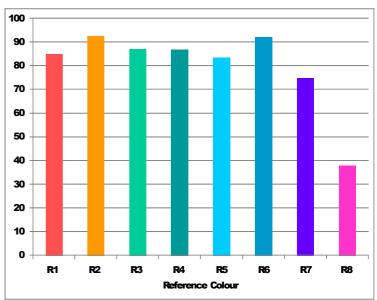
0.99

2000h

1.00



COLOUR RENDERING



DIMMING CONDITIONS

Sylvania CMI-TT lamps can be dimmed with negligible impact on performance creating the potential for for flexible light levels and reduced energy consumption. Dimming is supported on electronic square wave ballasts and magnetic systems that can maintain the open circuit voltage. Square wave operation is recommended. Dimming causes a reduction of light and some colour change.

We advise to start the lamps at full power and to hold this for 15 minutes before reducing the power. To avoid extinguishing the power should be adjusted gradually taking a few minutes to reach the final dimming condition. Square wave dimming down to 65% of the rated power will have negligible impact on performance, dimming down to 50% of the rated power can affect lumen maintenance and colour appearance.

Dimming by means of voltage on magnetic systems is not advised as this increases the chance of lamp extinguishing. Dimming by phase-cutting on magnetic systems is not allowed. Instant dimming on magnetic systems by adding an impedance is suggested down to 70% of the rated power but the average life can be reduced.

90 % power=90 % rated lumens 70% power=60 % rated lumens 50% power=45 % rated lumens

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