### **METAL HALIDE LAMP**

# Superia CMI-TC 20W WDL/UVS

### DIMENSIONS (mm) 85 max 85 max 17 maxMercury Content : 2.6 mg Cap : G8.5 (IEC 60061-1) $52\pm1$

Bulb : UV-stop quartz glass clear, tubular

		Magnetic Gear			Electronic Gear		
		NOM.	MIN.	MAX.	NOM.	MIN.	MAX.
ELECTRICAL DATA:							
Lamp wattage	(W r.m.s.)				20		
Lamp voltage	(V r.m.s.)				90	80	100
Lamp current	(A r.m.s.)				0.22		
Lamp warm-up current	<b>(A</b> r.m.s.)					0.30	0.50
Lamp inrush current	(A peak)						
OPERATING CONDITIONS		Operation on LFSW electronic					
	<u></u>	ballast only					
Burning position		-			universai		• • • • • • • • • • • • •
Fixture type		-			closed with p	rotective from	nt Shield
Ballast type		-			Electronic LF	SW Danast it	
Ignitor pulse height	(kV peak)					3.0	5.0
Ignitor pulse width at 90% pe	ak(us/s)		-			100	
Pinch temperature	(°°)			-			280
Bulb temperature	(°C)			-			400
Adjacent to cap temperature	(°C)			-			-
LAMP LIFE:							
Rated average life	(h)	-			18000		
Life to 10% failures	(h)	-			10000		
PHOTOMETRIC DATA*:							
Initial luminous Flux	(lm)				1900		
Luminous efficacy	(Im/W)				95		
Correlated colour temp.	(K)				3000		
Colour rendering index					85		
Colour point (x,y)		-			(.434,.398)		
* Data for vertical burning positio	n after 100 h						
ageing							
LAMP LIFE: Rated average life Life to 10% failures PHOTOMETRIC DATA*: Initial luminous Flux Luminous efficacy Correlated colour temp. Colour rendering index Colour point (x,y) * Data for vertical burning position ageing	(h) (h) (Im) (Im/W) (K) n after 100 h	-			18000 10000 1900 95 3000 85 (.434,.398)		

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.

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### SURVIVAL RATE



0.96

0.94

0.83



2000h	4000h	6000h	8000h	12000h	16000h
0.80	0.73	0.71	0.69	0.67	0.65

#### LAMP SPECTRUM

0.98

1.00



0.65

#### **DIMMING CONDITIONS**

Sylvania CMI 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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### LUMEN MAINTENANCE

**COLOUR RENDERING**