



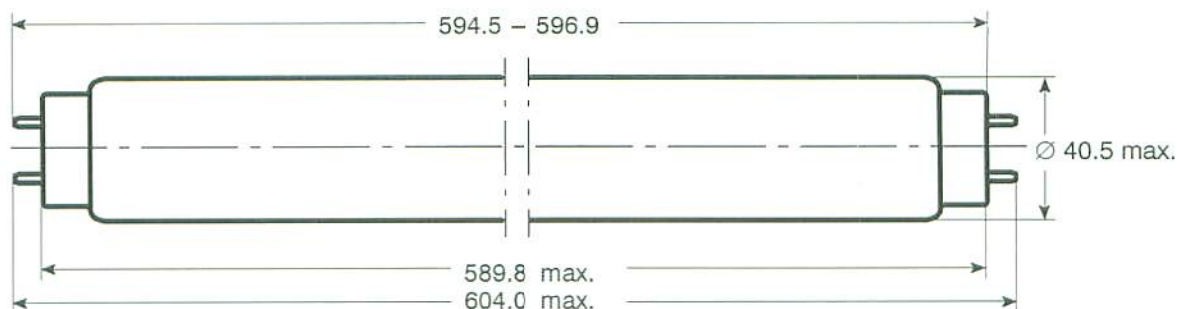
Data Sheet Standard Fluorescent Lamps coated

Product Specification Standard Linear Fluorescent

Lamp Types:	Standard Linear Fluorescent All Colours T5,T8 & T12
Coating Material:	Teflon [®] Fluoro Polymer Resin (FEP)
Light Transmission:	99% (Visible)
Coating Life:	+ 50,000 hours (open or enclosed fixtures)
Function:	To Contain Lamp Contents in Event of Accidental Breakage
Impact Test:	Passes: IEC60068-2-75 (5 Joule Pendulum) 4M Horizontal & Vertical Drop Test
FDA Approval:	In Compliance with 21CFR177.1550 Regulatory Compliance Status for Food Contact
Safety & Performance:	Passes: IEC61195 Fluorescent Lamp Performance Specifications IEC60695 Glow Wire Test 850° C IEC60598 Needle Flame Test
Management System:	ISO9001
Accreditations:	Meets the Requirements of the BRC & IFS Standards for UK & European Food Factories. Best practice for HACCP.

DIMENSIONS (mm) :

Nominal dimensions: 600 x 38



Cap: G13 (IEC61-1 sheet 7004-51-7)

ELECTRICAL DATA

		NOMINAL VALUE	MIN.	MAX.
Frequency	(Hz) :	50		
Lamp nominal wattage	(W) :	20		
Lamp rated wattage	single operation (W) :	19.3	17.8	20.8
	series operation (W) :	40		
Lamp operating voltage	(r.m.s.) (V) :	57.0	50.0	64.0
Lamp current	single operation (mA) :	370		
	series operation (mA) :	410		
Preheat current	single operation (mA) :	550		
	series operation (mA) :	615		

OPERATING CONDITIONS

		NOMINAL VALUE	MIN.	MAX.
Cap rim temperature	(°C) :			125
Lamp ambient temperature	(°C) :		-20	
Ballast impedance	single operation (Ω/V) :	270/127, 540/220, 580/230, 610/240		
	series operation (Ω/V) :	390/220, 420/230, 452/240		
Starter	single operation :	FS-11, FS-22, COP-11, COP-22		
	series operation :	FS-22, COP-22		
Burning position	:	any		

LAMP LIFE *

Average life (50% failure rate)	(h) :	10 000
Individual life	(h) :	4000

RADIATION DATA:

Radiation peak at 365 nm

COLOUR	No.	UV-A irradiance 1m distance bare lamp (315-400nm) (μW/cm ²)	UV-B irradiance 1m distance bare lamp (280-315nm) (μW/cm ²)	ILCOS-Code
BLACKLIGHT QUANTUM				
average at 0 h		49,0	0,03	XUV/FD20-E-G13-38/590

ATTENTION:

This UV energy source emits UV radiation. Avoid exposure to skin and eyes.
Lamps comply with the requirements of EN 60081 and EN 61195, respectively.
Starter and ballast must comply with EN 60155 and EN 60921, respectively.

* Life test according to EN 60081, Annex C.

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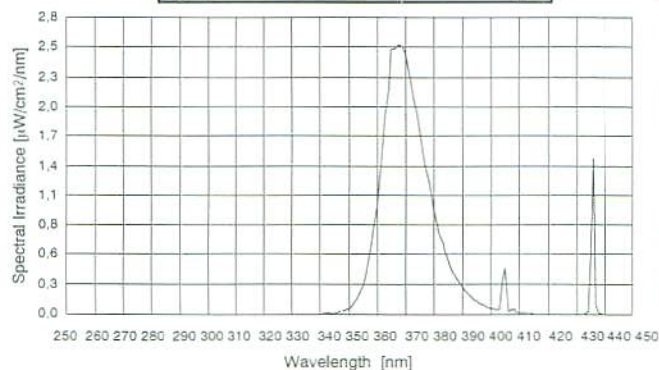
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F20W/T12/BL QUANTUM

A) Spectral Irradiance vs. Wavelength



Spectral Irradiance @ 1m distance

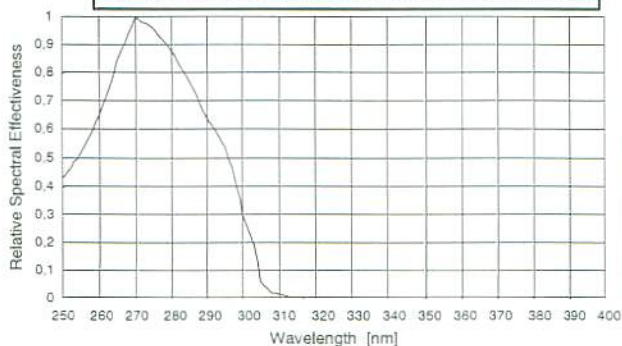
UVA = 49,00 $\mu\text{W}/\text{cm}^2$
 UVB = 0,03 $\mu\text{W}/\text{cm}^2$
 UVB/UVA = 0,06 %
 Wavelength range acc. to CIE
 UVA : 315 - 400 nm
 UVB : 280 - 315 nm

Lamp parameter:

Voltage: 57,0 V
 Current: 0,370 A
 Power: 20,0 W

B) UV Action Curve vs. Wavelength

Proposal of the British Committee to amend EN 60335-2-59 :1997: Insect killers



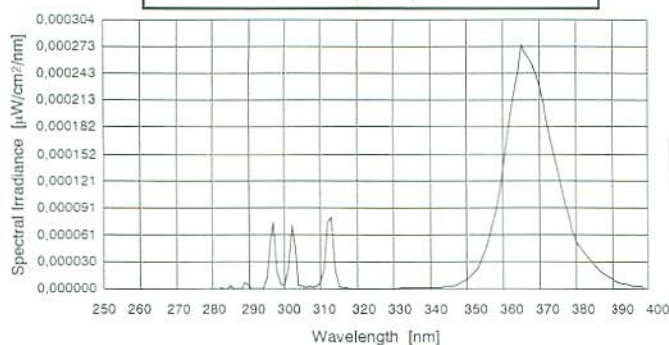
Acc. to EN 60335-2-59 : 1997
 CLC/TC61(GB)579

Total Effective Irradiance @ 1m distance

Max. 1 mW/m^2

Reason: to ensure that the ICNIRP 8 hour effective
 radiant exposure limit for the eyes and skin of
 30 J/m^2 is not exceeded

C) Total Effective Irradiance vs. Wavelength
 = A) x B)



Total Effective Irradiance @ 1m distance

0,050 mW/m^2

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