

SPECIFICATION

CUSTOMER	HADLER GMBH	PART NAME	FLUORENCE LAMPS
MODEL NAME	T5 FBL14W, 21W, 28W	PART NO.	

Products

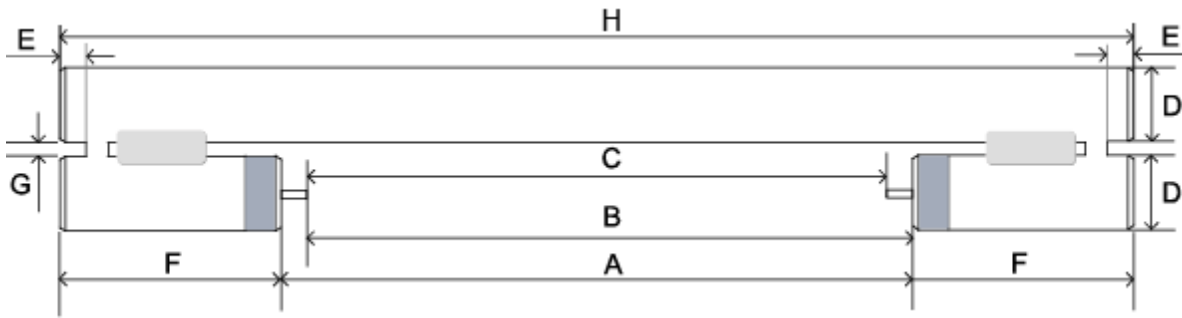
1. Scope

This specification covers the HADLER GMBH essential T5 FBL 14W, 21W and 28W lamps, purchased from FEELUX Co., Ltd. Later on referred to as "the products".

Changes or amendments to this specification are not valid until mutually agreed upon, in writing, by the Feelux and HADLER GMBH.

2. Product description

2.1 Dimensions



Type	Wattage (W)	Size (mm)								Pin Plane Deviation (Max)	Cap
		A (Min)	B (Min~Max)	C (Min)	D (Max)	Reference			H (Max)		
						E ±1.0	F ±1.5	G ±0.5			
FBL 14	14	481	473.9 ~476.3	466.8	17	8	49	3.5	582	6°	G5
FBL 21	21	781	773.9 ~776.3	766.8	17	8	49	3.5	882	6°	G5
FBL 28	28	1081	1073.9 ~1076.3	1066.8	17	8	49	3.5	1182	6°	G5

* Important Control Item : "A, B, C, D and H"

FEELUX

DESIGN

CHECK

APPROVAL

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2.2 Product specification

1) <u>Lamp wattage</u>	14W,	21W,	28W
2) <u>Application ambient (°C)</u>		5~50	
3) <u>Electrical parameters</u>			
4) <u>Frequency</u>		20~26KHz	
5) <u>Nominal current (mA)</u>	170	/	170 / 170
6) <u>Power (W)</u>	13.7	/	20.7 / 27.8
7) <u>Power tolerance(W)</u>	MAX 14.885	/	22.235 / 29.690
8) <u>Lamp voltage(V)</u>	82±10	/	123±10 / 167±17

9) Light output at 25°C, After 100h aging

	3000K	4000 K	6500 K	Rendering average (Ra)
T5 FBL 14W	1200 lm	1200 lm	1100 lm	80
T5 FBL 21W	1900 lm	1900 lm	1750 lm	80
T5 FBL 28W	2600 lm	2600 lm	2400 lm	80


10) Starting characteristics(ignition voltage)

	14W	21W	28W
Measured value(Max. V)	130	200	240

- * Ignition voltage is the Lamp Peak Voltage at the moment of ignition
- * Test result after connecting the ECG and lamp to the testing equipment(HB-5A)

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11) <u>Photometric Maintenance</u> @ 2kh against @ 100h Individual	Min.92% @ 2kh		
12) <u>Life performance</u> Nominal (h, @ 50%)	18,000		
13) <u>Early failure</u> Nominal @ 2,000h	<2.5%		
14) <u>Color Point</u>	x	y	
(3000K)	0.440	0.403	
(4000K)	0.380	0.380	
(6500K)	0.313	0.337	
Tolerance CRI	5 SDCM (based IEC standard) 80 (for individual lamps)		
15) <u>Torque test</u> Between Cap and bulb	0.5 Nm		
16) <u>Safety</u>	IEC 61195		
17) <u>Package design and relevant</u> Package Mark and label	Provided by FEELUX Provided by FEELUX		
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