

# Deep UV illumination system

## Lamp house with integrated ignition and ballast for 100 W HgXe lamps

With the LEJ Deep-UV illumination system you get an extremely stable UV radiation due to the low thermal drift and the very stable DC power supply by our ballast. Furthermore, our system allows reproducible mechanical adjustment of lamp, mirror and collector. Thus, the LEJ Deep-UV system is very suitable for wafer inspection and for illumination during optical review and analysis of photomasks, especially of structures and linewidths for defects and flaws.

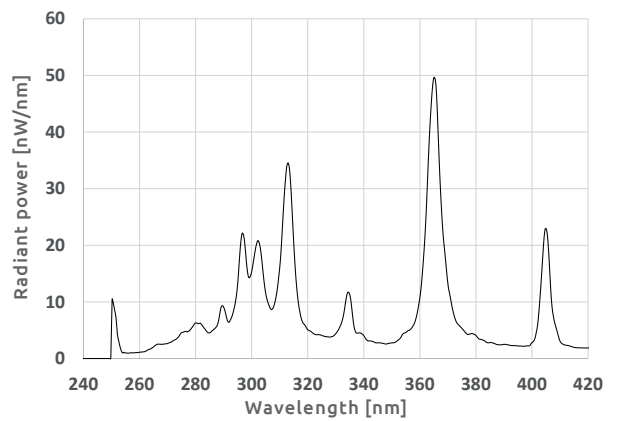
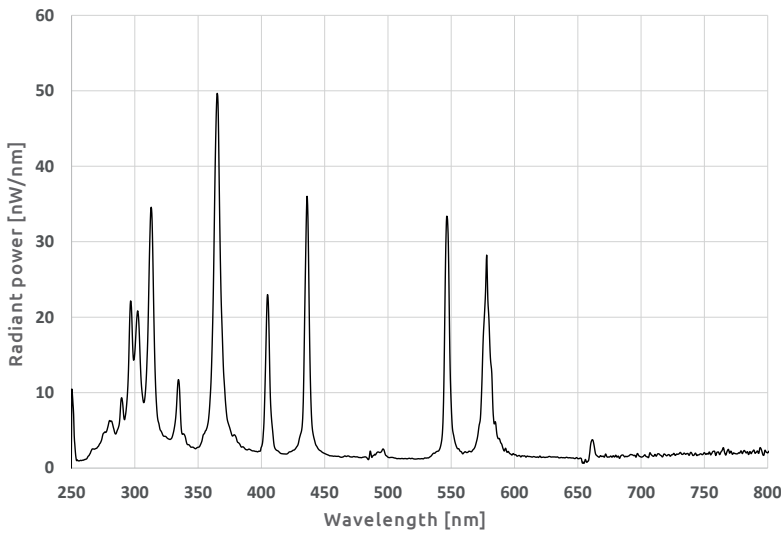


Fig. 1: Spectrum Deep-UV system without collector optics

Fig. 2: Spectrum deep UV system section UV range

### HIGHLIGHTS

- No thermal drift
- Reproducible mechanical adjustment
- Ignition integrated in the lamp house
- Compact lamp house
- Safety circuit function
- Operating hours counter

### APPLICATION AREAS

- Wafer inspection
- Analysis of photomasks
- Structure review
- Line width analysis
- Defect detection



Fig. 3: Deep UV illumination system

# Deep UV illumination system

## Lamp house with integrated ignition and ballast for 100 W HgXe lamps

Lamps house lh-qx-100.60	
Mounting	Lamp house over flange or ring dovetail Lamp via lamp adapter with x, y adjustment
Igniter	High voltage igniter integrated
Reflector	Mirror with x, y, z adjustment
Kollektor	with z adjustment
safety	According to EN 61010-1
Equipment protection class	I
Protection class	IP 20 (EN 60529)
Safety circuit	Shutdown at opening
Ambient temperature	0°C to + 40°C
Dimensions (HxWxD)	169 x 126 x 154 mm
Weight	3.4 kg

Ballast ebqx 100-04	
Functions	100 W HgXe
Lamp type	HAMAMATSU L8029-01, L2422-01
Lamp connection	Socket M1 6+PE, Schaltbau
safety	Safety circuit, overtemperature protection
Input parameters	
Mains voltage	90 to 264 VAC
Mains frequency	47 to 63 Hz
Power consumption	170 VA
Output parameters	
Operating mode	Constant current
Power	Max. 130 W
Output current	5.5 ± 0.3 A
Open circuit voltage	60 ± 5 VDC
Firing voltage	16.5 to 20 VDC
Ignition voltage	External igniter
Dimensions (WxHxD)	167 x 85 x 222 mm
Weight	2.0 kg

Ordering information Deep-UV illumination system		
Article		Item number
Lamp house lh-qx 100.60	①	0000013780
Ballast ebqx 100-04	②	0000008708
Ring dovetail/ Flange	③	Customer/application specific
Collector adapter	④	Customer/application specific
Lamp HAMAMATSU L8029 / L2422		0000013812 / 0000018455

