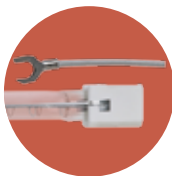


QIH

Quartz Infrared Heater Lamps

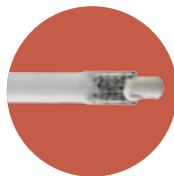
The quartz infrared heater (QIH) lamps provide clean, instantaneous and precision controlled heat for use in applications such as baking, drying, curing, dehydrating, warming of foods and general area warming.

Infrared heater lamps are available in a variety of base configurations and a variety of design alternatives. Including segmented lamps for uniform heating, coated lamps for better directional efficiency and special filament designs for medium wave lamps. We also offer a wide array of twin tube, circular and other bent type lamps to meet your specific heating requirements.

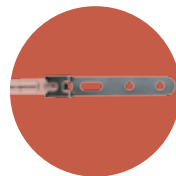


**Flat Ceramic Base
w/Lead Wire**

(Shown: Spade Tongue Terminal)



**R7s Base
(Contact Type)**



Metal Clip Base



**Round Ceramic Base
w/Lead Wire**



**Lead Wire;
No Metal Sleeve**

(Shown: Ring Tongue Terminal)



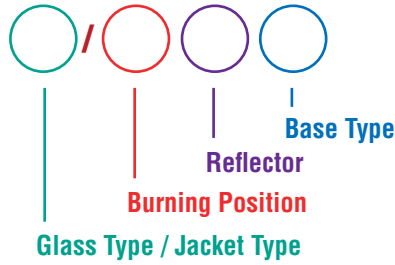
**Metal Sleeve
w/Lead Wire**

QIH/QUARTZ INFRARED LIGHTING



USHIO QIH PART NUMBER REFERENCE GUIDE

Q I H 240-1000



Glass Type

T Translucent Quartz
 No Indication; Clear Quartz

Jacket Type

C Clear
R Ruby

Burning Position

V Vertical Burning
 No Indication; Horizontal Burning

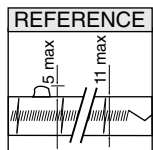
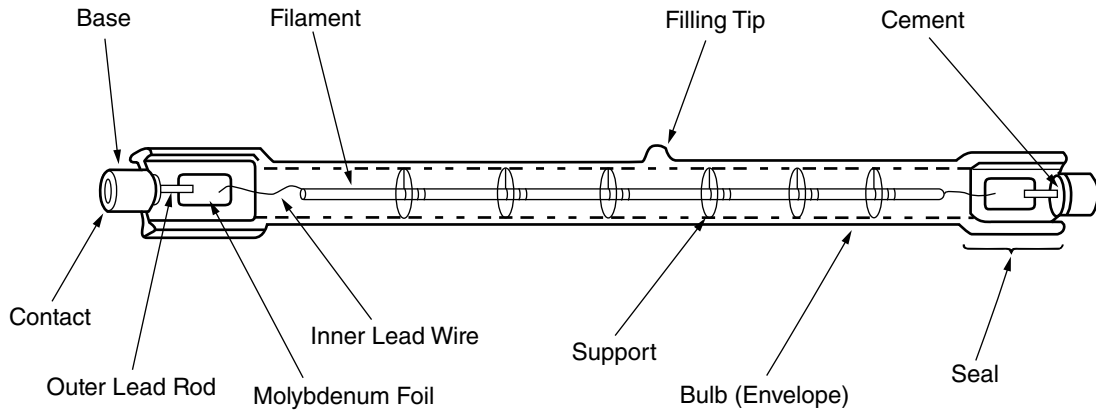
Reflector

Z White Coated Reflector
 No Indication; No Reflector

Base Type

B Metal Clip Base
E R7s (Contact Type)
S Metal Sleeve w/Lead Wire
C Lead Wire; No Metal Sleeve
L Round Ceramic Base w/Lead Wire
D Flat Ceramic Base w/Lead Wire
H Flat Ceramic Base w/Lead Wire (no adhesive)

GENERAL PROPERTIES OF A QIH LAMP



Dimensions

MOL = Maximum Overall Length
 LL = Lighted Length (Filament Length) (Avg.)
 L1 = Contact to Contact Length

Lamp Notes

F = Faston Terminal
 FR = Faston Receptacle
 FT = Faston Tab
 IW = Insulated Wire
 R = Ring Tongue Terminal
 S = Spade Tongue Terminal / Standard Lead Wire Length: 145mm

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the USA

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
104 Volts										
600	1001285	QIH104-600/S	303.0	152	—	2500	6000	1	600T3/CL/12	
115 Volts										
1350	1001287	QIH115-1350/L	317.0	256	—	2750	3000	2	13381/99	IW
120 Volts										
300	1001288	QIH120-300T/S	214.0	106	—	2450	6000	1	QH300T3	
375	1001289	QIH120-375T/E	219.0	128	215	2500	6000	3	QH375T3/7	
375	1001290	QIH120-375T/S	223.0	128	—	2500	6000	1	QH375T3	
500	1001293	QIH120-500/L	223.0	127	—	2500	5000	2	QH500T3/CL	
500	1001294	QIH120-500/S	223.0	127	—	2500	6000	1	QH500T3/CL	
500	1001295	QIH120-500/S2	221.0	142	—	2500	5000	1	13169Y	
500	1001296	QIH120-500/ZB	356.0	142	241	2500	5000	4	13169X/98	
500	1001297	QIH120-500T/E	220.0	127	216	2500	6000	3	QH500T3/7	
500	1001298	QIH120-500T/S	223.0	127	—	2500	6000	1	QH500T3	
500	1003201	QIH120-500T/S3	223.0	127	—	2500	5000	1	—	R
800	1001299	QIH120-800T/S	303.0	203	—	2500	6000	1	QH800T3	
850	1003565	QIH120-850R/VD	198.0	115	—	—	5000	5	13833Z/876	FT, IW w/Silicon Sleeve

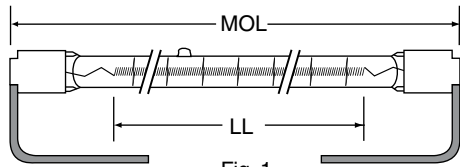


Fig. 1

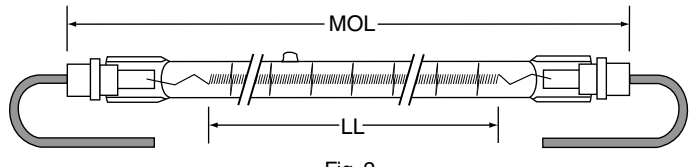
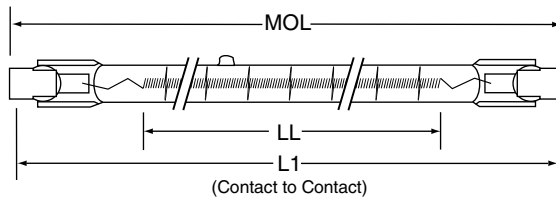


Fig. 2



(Contact to Contact)

Fig. 3

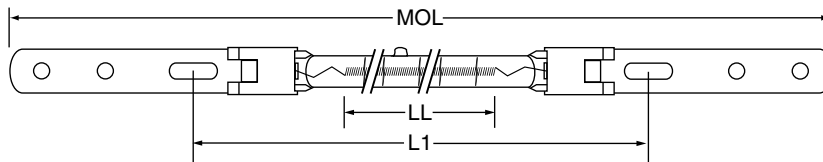
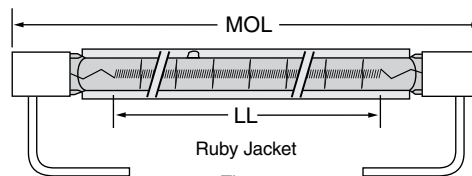


Fig. 4



Ruby Jacket

Fig. 5

QUARTZ INFRARED HEATER LAMPS • 144V - 230V

QUARTZ INFRARED HEATER LAMPS

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
144 Volts										
1200	1001300	QIH144-1200/S	224.0	155	—	2500	5000	1	QH1200T3/CL	
1200	1001301	QIH144-1200/S2	228.0	155	—	2500	5000	1	13561Y/00	IW, R
1200	1003792	QIH144-1200/ZS2	225.0	155	—	2500	5000	1	—	
1600	1001302	QIH144-1600/S	229.0	150	—	2650	3000	1	13568Y/00	IW, R
1600	1003793	QIH144-1600/ZS	225.0	155	—	2500	5000	1	—	
200 Volts										
1000	1003075	QIH200-1000/ZB	485.0	272	370	2500	5000	2	—	
1600	1003037	QIH200-1600/S	223.5	158	—	3000	1000	1	—	
208 Volts										
1600	1001305	QIH208-1600/L	502.0	407	—	2500	5000	3	—	
1600	1001306	QIH208-1600T/E	499.0	407	495	2400	6000	2	QH1600T3/7	
1600	1001307	QIH208-1600T/S	503.0	407	—	2400	6000	1	QH1600T3	
220 Volts										
1350	1001311	QIH220-1350/L	317.0	256	—	2750	3000	3	13381/99	IW
230 Volts										
1200	1003142	QIH230-1200/ZH	225.0	155	—	2700	3000	4	14134Z/98	IW, S
1300	1003236	QIH230-1300/ZL	453.0	358	—	2500	5000	3	—	IW, F
1500	1003235	QIH230-1500/ZL	453.0	360	—	2500	5000	3	—	IW, FR
1600	1003143	QIH230-1600/ZH	225.0	155	—	2700	3000	4	14135Z/98	IW, S
3000	1003768	QIH230-3000/ZH	787.0	700	—	2450	5000	4	—	

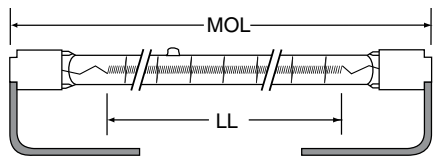


Fig. 1

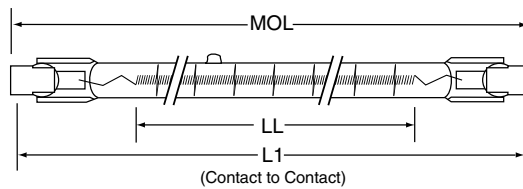


Fig. 2

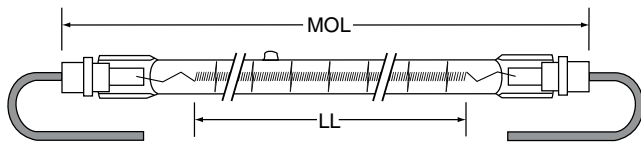


Fig. 3

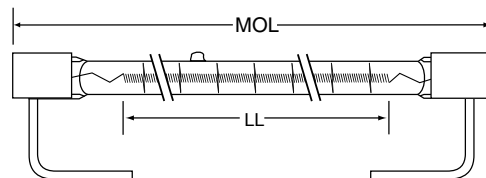


Fig. 4

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
240 Volts										
500	1001352	QIH240-500/D	227.5	165	—	2600	4000	1	13169Z	IW, S
500	1001353	QIH240-500/ZD	227.5	165	—	2600	4000	1	13169Z/98	IW, S
500	1001409	QIH240-500C/D	227.0	162	—	2500	5000	2	—	IW, S
1000	1001317	QIH240-1000/S	351.0	254	—	2500	5000	3	QH1000T3/2CL/HT	
1000	1001318	QIH240-1000/S2	303.0	254	—	2500	5000	3	QH1000T3/CL	
1000	1001319	QIH240-1000/S3	351.0	272	—	2500	5000	3	13195Y	
1000	1001320	QIH240-1000/VB	485.0	272	370	2500	5000	4	13713X	
1000	1001321	QIH240-1000/VD	357.5	272	—	2500	5000	1	13713Z	IW, S
1000	1001322	QIH240-1000/VZD	357.5	272	—	2500	5000	1	13713Z/98	IW, S
1000	1001323	QIH240-1000/ZB	485.0	272	370	2500	5000	4	13195X/98	
1000	1001324	QIH240-1000/ZD	357.5	272	—	2500	5000	1	13195Z/98	IW, S
1000	1002250	QIH240-1000/VZH	357.5	272	—	2500	5000	1	13713Z/98	IW, S
1000	1003244	QIH240-1000/ZH3	357.0	272	—	2500	5000	1	—	IW
1000	1003550	QIH240-1000R/VD4	531.0	440	—	—	5000	2	13836Z/876	FT, IW w/Silicon Sleeve
1000	1001325	QIH240-1000T/S	351.0	254	—	2500	5000	3	QH1000T3	
1500	1003235	QIH230-1500/ZL	453.0	360	—	2500	5000	5	—	IW, FR
1500	1001327	QIH240-1500/S	303.0	235	—	2500	5000	3	1500T3/CL/HT	
1500	1003566	QIH240-1500R/VD	787.0	700	—	—	5000	2	13250Z/876	FT, IW w/Silicon Sleeve

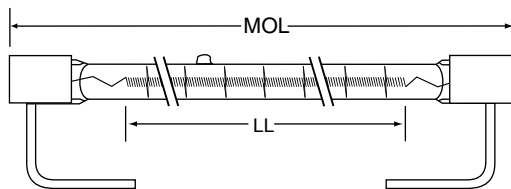


Fig. 1

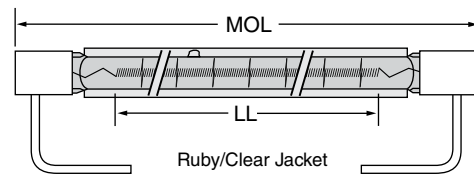


Fig. 2

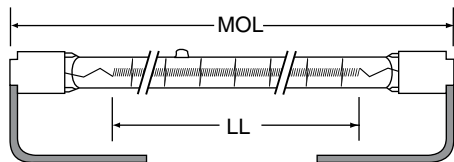


Fig. 3

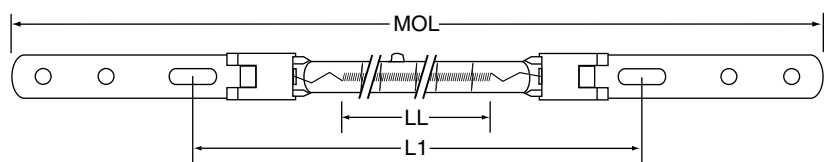


Fig. 4

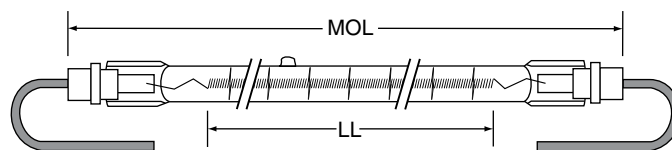


Fig. 5

QUARTZ INFRARED HEATER LAMPS • 240V

QUARTZ INFRARED HEATER LAMPS

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
240 Volts										
1600	1001328	QIH240-1600/E	499.0	407	495	2500	5000	1	—	
1600	1001329	QIH240-1600/L2	502.0	407	—	2500	5000	2	—	
1600	1001330	QIH240-1600/S	503.0	407	—	2500	5000	3	QH1600T3/CL	
1600	1001331	QIH240-1600/S2	455.5	407	—	2500	3000	3	1600T3/1CL/HT	
1600	1001332	QIH240-1600/VL2	502.0	407	—	2500	5000	2	—	
1600	1002198	QIH240-1600/VS	503.0	407	—	2500	5000	3	—	
1600	1001333	QIH240-1600T/E	499.0	407	495	2500	5000	1	QH1600T3/7	
1600	1001334	QIH240-1600T/L	502.0	407	—	2500	5000	2	1600T3/5	
1600	1001335	QIH240-1600T/S	503.0	407	—	2500	5000	3	QH1600T3	
2000	1003851	QIH240-2000/E2	604.5	540	598.5	2450	5000	1	—	
2000	1001339	QIH240-2000/S	303.0	248	—	2500	5000	3	QH2M/T3/1CL/HT	
2000	1001340	QIH240-2000/S2	351.0	254	—	2500	5000	3	QH2M/T3/CL/HT	
2000	1001341	QIH240-2000/VB	485.0	280	370	2500	5000	4	13168X	
2000	1003595	QIH240-2000/VC2	349.0	280	—	2500	5000	5	—	R
2000	1001343	QIH240-2000/VS	303.0	248	—	2500	5000	3	QH2M/T3/1CL/HT/VB	

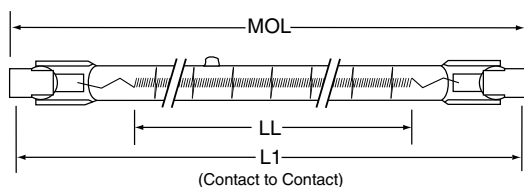


Fig. 1

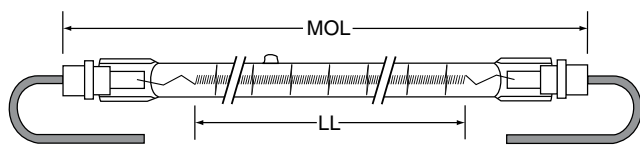


Fig. 2

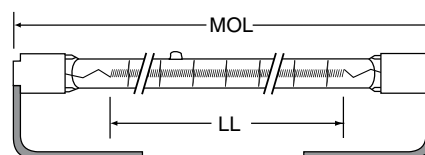


Fig. 3

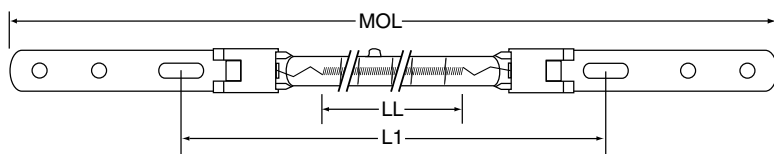


Fig. 4

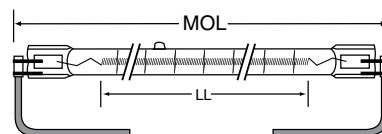


Fig. 5

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
240 Volts										
2000	1001344	QIH240-2000/VZD	357.0	280	—	2500	5000	1	13168Z/98	IW, S
2000	1002251	QIH240-2000/VZH	357.0	280	—	2500	5000	1	13168Z/98	IW
2000	1003405	QIH240-2000/ZD4	354.0	290	—	2500	5000	1	—	IW
2000	1003243	QIH240-2000/ZH3	357.0	280	—	2500	5000	1	—	IW
2000	1003404	QIH240-2000/ZH5	354.0	290	—	2400	5000	1	—	IW
2000	1001350	QIH240-2000T/S	603.0	508	—	2500	5000	2	2000T3/524	
2600	1001408	QIH240-2600R/D	583.0	500	—	—	5000	3	—	IW, S w/Silicon Sleeve
3000	1001351	QIH240-3000/S	503.0	410	—	2500	5000	2	3000T3/CL	
250 Volts										
2200	1001354	QIH250-2200/C	303.0	248	—	2500	3000	4	2200T3/CL/H	R
277 Volts										
1600	1001355	QIH277-1600/L	502.0	407	—	2500	5000	5	—	
1600	1001356	QIH277-1600T/E	499.0	407	495	2500	5000	6	QH1600T3/7	
1600	1001357	QIH277-1600T/S	503.0	407	—	2500	5000	2	QH1600T3	

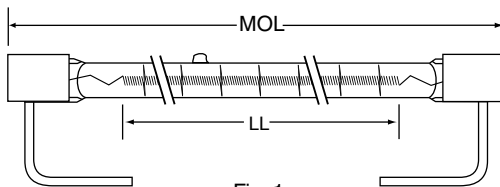


Fig. 1

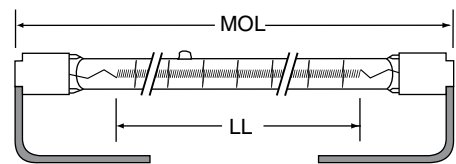


Fig. 2

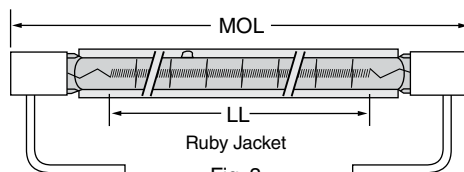


Fig. 3

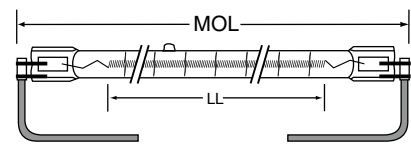


Fig. 4

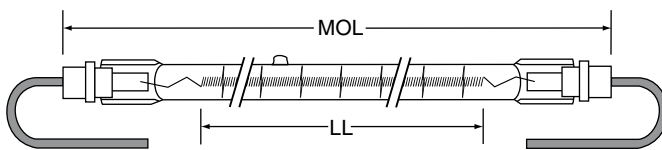
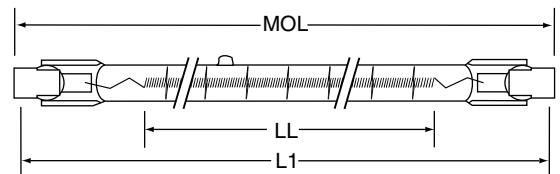


Fig. 5



(Contact to Contact)

Fig. 6

QUARTZ INFRARED HEATER LAMPS • 384V - 480V

QUARTZ INFRARED HEATER LAMPS

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
384 Volts										
3200	1001360	QIH384-3200/S	456.0	406	—	2500	3000	1	3200T3/CL/HT	
400 Volts										
2000	1001345	QIH400-2000/VB	623.0	410	508	2500	5000	2	13765X	
2000	1001362	QIH400-2000/ZB	623.0	410	508	2500	5000	2	13245X/98	
2500	1003570	QIH400-2500/ZD	381.0	310	—	2500	5000	3	—	IW
2500	1003329	QIH400-2500/ZH2	357.0	280	—	2700	3000	3	—	IW, S
3000	1003571	QIH400-3000/ZD	381.0	310	—	2500	5000	3	—	IW
3000	1003330	QIH400-3000/ZH2	357.0	280	—	2700	3000	3	—	IW, S
420 Volts										
3800	1003046	QIH420-3800/VS	1062.0	965	—	2500	5000	1	—	
3800	1001369	QIH420-3800T/S	1062.0	965	—	2500	5000	1	3800T3/HT	
480 Volts										
2500	1001372	QIH480-2500/L	731.0	635	—	2500	5000	4	—	
2500	1001373	QIH480-2500/S	732.0	635	—	2500	5000	1	QH2500T3/CL	
2500	1001375	QIH480-2500/VL	731.0	635	—	2500	5000	4	—	
2500	1001376	QIH480-2500/VS	732.0	635	—	2500	5000	1	2500T3/CL/VB	
2500	1003164	QIH480-2500/ZH	737.0	635	—	2500	5000	3	—	IW
2500	1001380	QIH480-2500T/L	729.0	635	—	2500	5000	4	—	
2500	1001381	QIH480-2500T/S	732.0	635	—	2500	5000	1	QH2500T3	

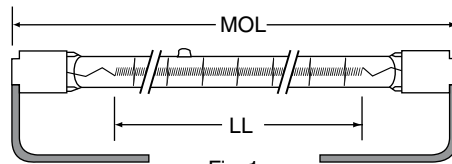


Fig. 1

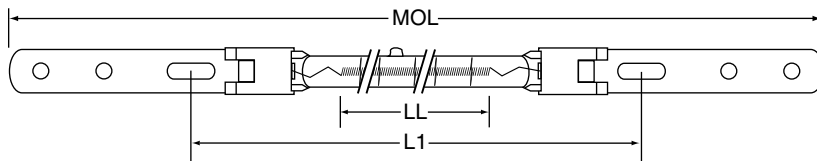


Fig. 2

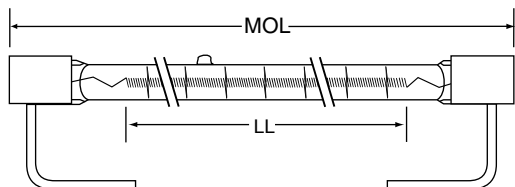


Fig. 3

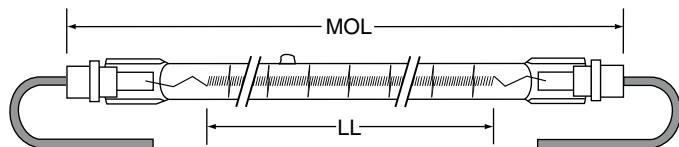


Fig. 4

QIH

- Short, Medium & Long Wavelengths Available
- ISO 9001 Certified
- Custom Designs
- Manufactured in the U.S.A.

Watts (W)	Ordering Code	Lamp Description	Dimensions			Color Temp (K)	Avg Life (h)	Fig No	Alternate Designation	Lamp Notes
			MOL (mm)	LL (mm)	L1 (mm)					
480 Volts										
3650	1001385	QIH480-3650/L	1062.0	965	—	2500	5000	1	—	
3650	1001386	QIH480-3650/S	1059.0	965	—	2500	5000	2	3650T3/CL	
3650	1003258	QIH480-3650/VS	1059.0	965	—	2500	5000	2	—	
3650	1001387	QIH480-3650T/L	1060.0	965	—	2500	5000	1	QH3650T3/5	
6000	1003753	QIH480-6000/C3	300.0	248	—	3150	—	3	—	
6000	1001391	QIH480-6000/RI	300.0	248	—	3150	1500	3	—	
570 Volts										
3800	1001392	QIH570-3800/L	1062.0	965	—	2500	5000	1	—	
3800	1001393	QIH570-3800/S	1062.0	965	—	2450	5000	2	QH3800T3/CL	
3800	1001395	QIH570-3800/VS	1062.0	965	—	2450	5000	2	3800T3/CL/VB	
3800	1001398	QIH570-3800T/VS	1062.0	965	—	2450	5000	2	QH3800T3/VB	
575 Volts										
2500	1001399	QIH575-2500/S	732.0	635	—	2500	5000	2	2500T3/HT	
600 Volts										
5000	1001402	QIH600-5000/S	732.0	638	—	2500	5000	2	QH5M/T3/1CL/HT	

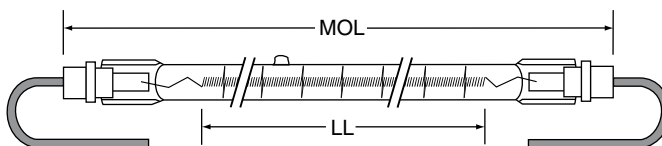


Fig. 1

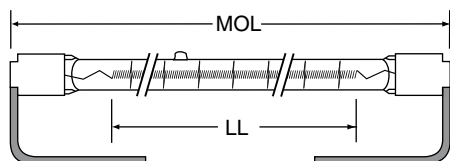


Fig. 2

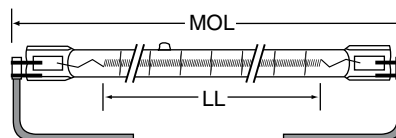


Fig. 3