

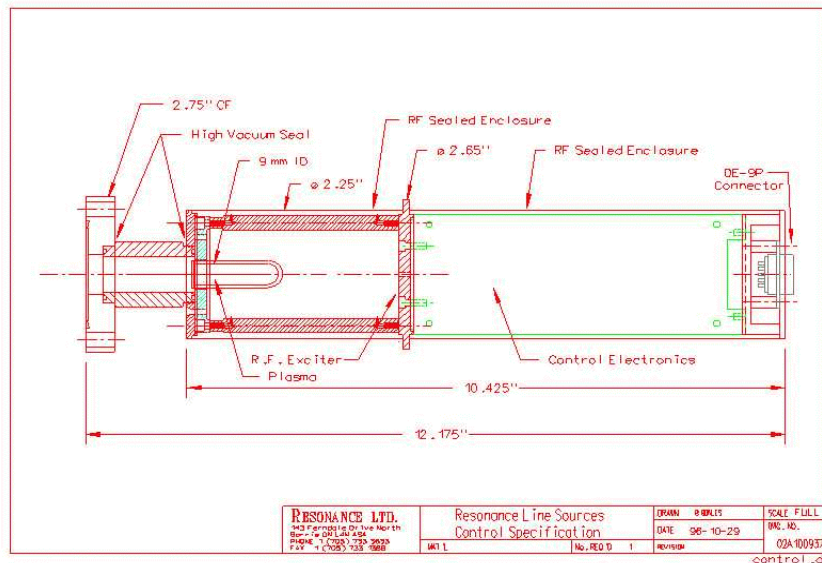
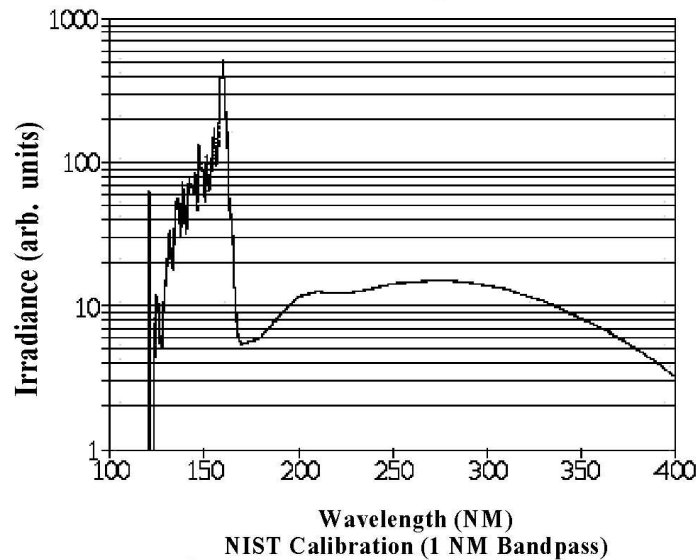
Model No:	Description:
D2ArCM-L	<p>Deuterium RF Powered LIGHT SOURCE</p> <p>This 115 to 1,000 NM lamp system is a reliable and maintenance free source of emissions from 115 to 7,000 NM. This source mounts to a 2.75 inch CF for convenient connection to a UHV system. VUV fluxes are delivered through the magnesium fluoride output window for use in vacuum applications such as photo-ionization, photolithography and mass spectroscopy. This lamp is the same type of lamp Resonance has on two instruments in the Hubble Space Telescope</p>

Electrical /Optical Specifications/General:				
Specification	Minimum	Typical	Maximum	units
Lamp/window	Deuterium/magnesium fluoride (transmission from 115-7,000 NM)			
Plasma diameter	0.15	0.25	0.35	CM.
Plasma length	1	1.5	2	CM.
Spectral Output	-	116.5 to 7,000	-	NM
Peak wavelengths	-	158.0, 250	-	NM
VUV Intensity 110 to 170 NM	2×10^{15}	5×10^{15}	1×10^{16}	Photons/sec/sr
UV Intensity 170 to 300 NM	5×10^{14}	1×10^{15}	3×10^{15}	Photons/sec/sr
Operational life before bulb replacement	1,500 hrs	3,000 hrs	10,000 hrs	
Certification	NIST Traceable Calibration of Irradiance in Vacuum			
Full angle output cone	22	28	34	Degrees
Input Power	10	15	20	Watts
Input voltage	70	115	260	VAC
Input Line Frequency	50	60	65	Hz
Mounting flange	2.75 inch Conflat is standard, lamp can be sealed to HV system			
Cooling	Convective air cooling			
Intensity monitor	Intensity monitor available as an option			
Thermal control	Lamp Deuterium Source Heater			
Pulse	Modulation to 1 kz available as option			
System	Complete system includes power supply, EMI shielded enclosure, Vacuum flange and NIST Traceable calibration			

Light source showing magnesium fluoride window (vacuum adapter removed)



Relative spectral irradiance of deuterium light source



Materials/misc. specs.

Window	Magnesium Fluoride
Body	Aluminum
Mass	<1 kg. incl pwr supply
Vacuum Adapter	Stainless Steel
Pwr. Supply	2 x 2.5 x 6 in

