



# PHOTRON PTY. LTD.

## 1.5" DIAMETER HOLLOW CATHODE LAMP OPERATING DATA FOR COMMON ELEMENT LAMPS

Each Hollow Cathode Lamp is tested to ensure that it will perform to specifications in your instrument. As each instrument uses different operating conditions, it is necessary to provide precise instructions of lamp run currents. By using this chart, the lamp will provide optimum performance and achieve the longest possible lamp life. \*\* Please carefully select the correct current setting from the data below for your instrument. Should you have any questions when using this lamp, please contact PHOTRON or your PHOTRON distributor.

Photron Element P/N	GBC SB-900 901, 902 904,906 908, Avanta	GBC 903,905, 909,932 933,933B Prospector SensAA Explorer	Shimadzu 640,645, 646,680 AA-6800 AA-6300 AA-6200	Shimadzu All Others	Jena novAA® 300 & 400 Zeeman ZEEnit 600/650/700	Varian SpectrAA 5/10 20/30/40/100 200/300/400 600/640/800 SpectrAA-50/55 AA140 & AA240 AA240FS & AA280FS AA Duo	Varian 30Z/40Z 300Z/400Z 640Z/800Z AA240Z & AA280Z	Thermo All Models M series S series
	mA	mA	mA	mA	mA	mA	mA	mA
P801 Aluminium (Al)	10	10	10	20	6	10	10	10
P802 Antimony (Sb)	10	10	10	20	7	8	7	10
P803 Arsenic (As)	8	7	8	16	5	7	6	8
P804 Barium (Ba)	15	15	15	20	6	15	15	15
P805 Beryllium (Be)	10	10	10	20	5	10	10	10
P806 Bismuth (Bi)	10	8	10	20	4	10	10	10
P807 Boron (B)	20	18	20	40	8	18	12	20
P808 Cadmium (Cd)	4	3	4	8	3	4	3	3
P809 Calcium (Ca)	5	4	5	10	4	4	4	5
P810 Cesium (Cs)	20	18	20	40	6	20	18	20
P812 Chromium (Cr)	6	6	6	12	5	6	6	6
P813 Cobalt (Co)	10	10	10	20	7	10	10	10
P814 Copper (Cu)	4	4	4	8	3	4	4	4
P819 Gallium (Ga)	5	5	5	10	3	4	4	5
P820 Germanium (Ge)	5	5	5	10	4	4	5	5
P821 Gold (Au)	5	5	5	10	5	4	4	5
P824 Indium (In)	5	5	5	10	3	5	3	5
P825 Iridium (Ir)	18	18	18	30	9	18	18	18
P826 Iron (Fe)	6	6	6	12	6	5	5	6
P828 Lead (Pb)	4	4	4	8	3	4	3	4
P829 Lithium (Li)	10	10	10	20	4	10	10	10
P831 Magnesium (Mg)	4	4	4	8	2	4	3	4
P832 Manganese (Mn)	5	5	5	10	7	5	4	5
P833 Mercury (Hg)	3	3	3	6	3	3	2	3
P834 Molybdenum (Mo)	7	7	7	15	7	7	7	7
P836 Nickel (Ni)	5	5	5	10	5	5	5	5
P839 Palladium (Pd)	10	10	10	15	6	10	10	10
P840 Platinum (Pt)	10	10	10	20	6	7	7	10
P841 Potassium (K)	10	10	10	20	4	10	10	10
P844 Rhodium (Rh)	6	6	6	10	4	6	6	6
P845 Rubidium (Rb)	10	10	10	20	6	10	10	10
P849 Selenium (Se)	10	8	10	20	6	10	8	10
P850 Silicon (Si)	14	12	14	30	7	12	12	14
P851 Silver (Ag)	4	4	4	8	4	3	3	4
P852 Sodium (Na)	5	5	5	10	3	5	5	5
P853 Strontium (Sr)	10	10	10	20	6	10	7	10
P854 Tantalum (Ta)	18	18	18	30	8	18	18	18
P855 Tellurium (Te)	7	6	7	15	7	6	6	7
P860 Tin (Sn)	8	8	8	12	6	8	8	8
P861 Titanium (Ti)	18	18	18	25	7	18	18	18
P862 Tungsten (W)	18	18	18	30	8	18	18	18
P863 Uranium (U)	18	18	18	30	8	18	18	18
P864 Vanadium (V)	20	18	18	30	6	18	18	18
P865 Ytterbium (Yb)	5	5	5	10	4	5	4	5
P867 Zinc (Zn)	5	5	5	10	4	5	4	5
P868 Zirconium (Zr)	18	18	18	30	7	18	18	18
P869 Continuum (H2)	40	40						
P870 Ca/ Mg	5	5	5	10	3	5	5	5
P871 Na/K	10	10	10	20	6	10	8	10
P872 Cu/Zn	5	5	5	10	3	5	4	5
P873 Cr/Co/Cu/Fe/Mn/Ni	10	10	10	20	6	10	8	10
P874 Phosphorus (P)	20	20	20	20	7	20	20	20

# 1.5" DIAMETER HOLLOW CATHODE LAMP OPERATING DATA FOR UNCOMMON ELEMENT LAMPS

PhotronElement P/N	GBC SB-900 901, 902 904,906 908, Avanta	GBC 903,905, 909,932 933,933B Prospector SensAA Explorer	Shimadzu 640,645, 646,680 AA-6800 AA-6300 AA-6200	Shimadzu All Others	Jena novAA® 300 & 400  Zeeman ZEEnit 600/ 650/700	Varian SpectrAA 5/10 20/30/40/100 200/300/400 600/640/800  SpectrAA-50/55 AA140 & AA240 AA240FS & AA280FS AA Duo	Varian 30Z/40Z 300Z/400Z 640Z/800Z  AA240Z & AA280Z	Thermo All Models  M series S series	
	mA	mA	mA	mA	mA	mA	mA	mA	
P811	Cerium (Ce)	10	10	10	20	10	10	10	10
P815	Dysprosium (Dy)	18	18	18	30	18	18	10	18
P816	Erbium (Er)	10	10	10	20	10	10	10	10
P817	Europium (Eu)	12	12	12	20	12	10	10	12
P818	Gadolinium (Gd)	18	18	15	30	18	15	10	18
P822	Hafnium (Hf)	12	12	12	20	12	10	8	12
P823	Holmium (Ho)	18	18	18	30	18	15	12	18
P827	Lanthanum (La)	18	18	18	30	18	14	10	10
P830	Lutetium (Lu)	10	10	10	20	10	15	10	10
P835	Neodymium (Nd)	18	18	18	30	18	15	12	18
P837	Niobium (Nb)	18	18	18	30	18	15	12	18
P838	Osmium (Os)	18	18	18	30	18	15	12	12
P842	Praseodymium (Pr)	12	12	12	20	12	10	8	12
P843	Rhenium (Re)	18	15	15	24	15	12	10	15
P846	Ruthenium (Ru)	10	10	10	20	10	8	6	10
P847	Samarium (Sm)	10	10	10	20	10	8	6	10
P848	Scandium (Sc)	10	10	10	20	10	8	7	10
P856	Terbium (Tb)	10	10	10	20	10	8	5	10
P857	Thallium (Tl)	7	7	7	7	7	5	4	5
P858	Thorium (Th)	10	10	10	20	10	8	6	10
P859	Thulium (Tm)	18	18	18	30	18	14	10	18
P866	Yttrium (Y)	10	10	10	20	10	8	6	10