

# Customised P410 Application Sources

Please download and use this check list to see if your chosen application source (P410) is possible.

Step 1. Place the desired elements in the element column.

Step 2. Tick the groups that elements belongs too. (Note Group 2 & 3 have common elements)

Step 3. Check constraints to see if lamp is possible.

**Group 1** - Dy, Er, Eu, Ge, Gd, Ho, La, Lu, Hf, Nd, Pr, Ru, Os, Sc, Sn, Tb, Th, Tm, U

**Group 2** - Ba, Cs, K, Na/K, Rb, Sr

**Group 3** - Ba, Be, Ca, Ca/Mg, Ce, Cs, Na, Na/k, Rb, Rh, K, Sm, Sr

**Group 4** - As, Bi, Hg, Pb, Te, Tl, Cu/Zn, Zn

**Group 5** - Al, B, Sb, Cd, Cr, Co, Cu, Ga, Au, In, Ir, Fe, Mg, Mn, Mo, Ni, Nb  
Pd, P, Pt, Re, Se, Si, Ag, Ta, Ti, W, V, Yb, Y, Zr, Six Multi(Co/Cu/Mn/Cr/Fe/Ni)

	Insert Elements	Group (1)	Group (2)	Group (3)	Group (4)	Group (5)
Cathode 1						
Cathode 2						
Cathode 3						
Cathode 4						
Cathode 5						
Cathode 6						
		2 ticks max	2 ticks max If ticked no ticks in <b>group 4</b>	If ticked no ticks in <b>group 4</b> allowed	If ticked no ticks in <b>group 2,3</b> allowed	0 - 6 ticks No Restraints

## Analysis of your selection

For the P410 to be possible columns **1 & 2** must have no more than two ticks in each.  
Also If there is a tick in column **3** then there must be no ticks in column **4** or vice versa.  
Column 5 elements have no restraints.

Note:-

Please do checklist after each change of element.

Lithium (**Li**) must be a single cathode lamp as it has a different fill gas.

Mercury (**Hg**) can only be combined with **Group 4 & 5**

For Multi-Element cathode application sources get a quote.

Note : Only one **Hg** Cathode per Application Source.

Email [Service@photron.com.au](mailto:Service@photron.com.au) for a 100% conformation that the Application source is possible.

**This checklist is a guide only.**