

P Category
Lighting Software
for
AS/NZS 1158.3.1:2005



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1. INTRODUCTION

The **P Category Lighting** software (PlePcat) produces Spacing Tables which can be used as design aids in the lighting of Category ‘P’ roads in Australia and New Zealand. Category ‘P’ was originally introduced in the revised Road Lighting Standard AS/NZS 1158.3.1:1999, released in November 1999. This Standard has now been superceded by AS/NZS 1158.3.1:2005 which contains more detail as well as some minor changes and enhancements. Several further amendments were made in 2008 and 2010.

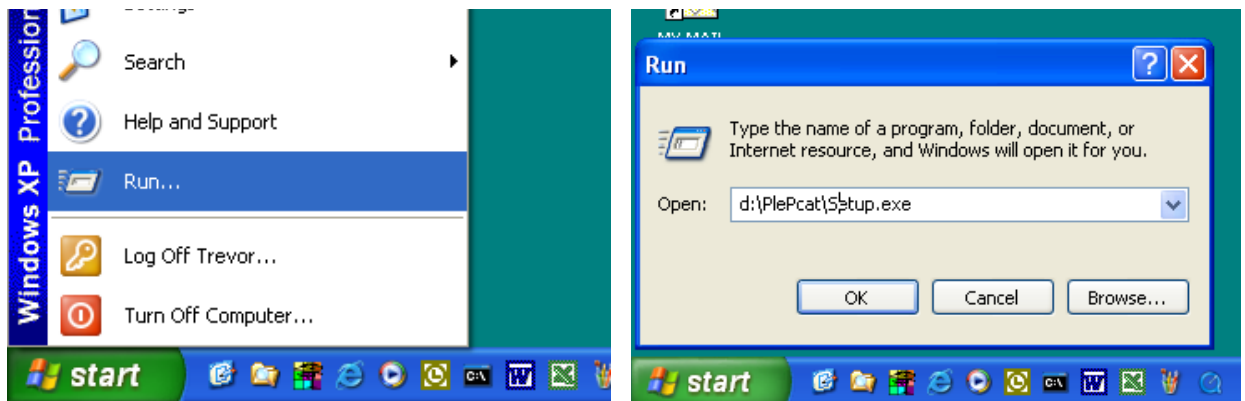
It is assumed that the user has basic knowledge of the operations of the Windows PC operating system.

2. INSTALLING THE SOFTWARE

Depending on how the software was purchased it will be provided in either of two forms:-

1. On a CD-ROM

First, load the CD-ROM into your CD Drive and then click on the **Start** button, Select **Run...** from the menu and type **d:\PlePcat\setup.exe** (**d:** is the drive letter of your CDROM) into the Run dialog box and then click **OK**.



Follow the subsequent instructions on the screen to correctly install the P Category Lighting software on your computer. Generally, it will only be necessary to click on the **Next** button several times to carry out the installation.

2. Via Email or Download from the website

Instructions will be provided in the email or on the website on the procedure to install the software in this case.

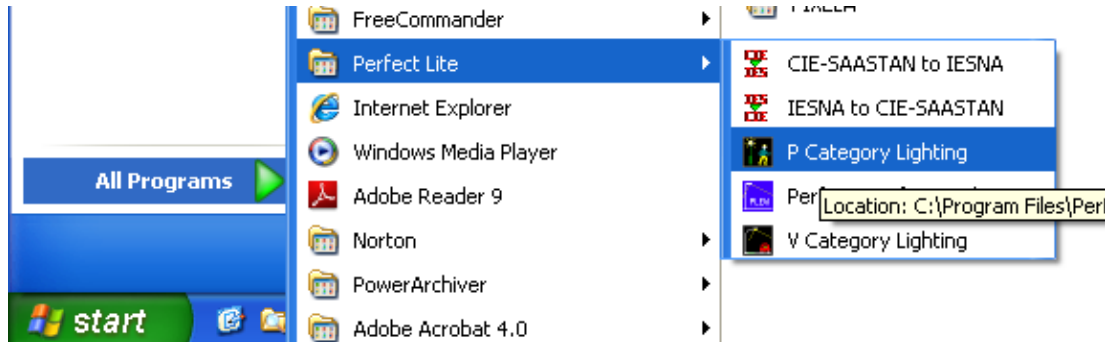
It is recommended you choose the default folder eg. **c:\Program Files\Perfect Lite** (or **c:\Program Files (x86)\Perfect Lite** on 64bit operating systems) in which to install the software. If you install the software in another drive and/or folder then please make a note of the location below for future reference.

P Category Lighting software installed in drive/folder:

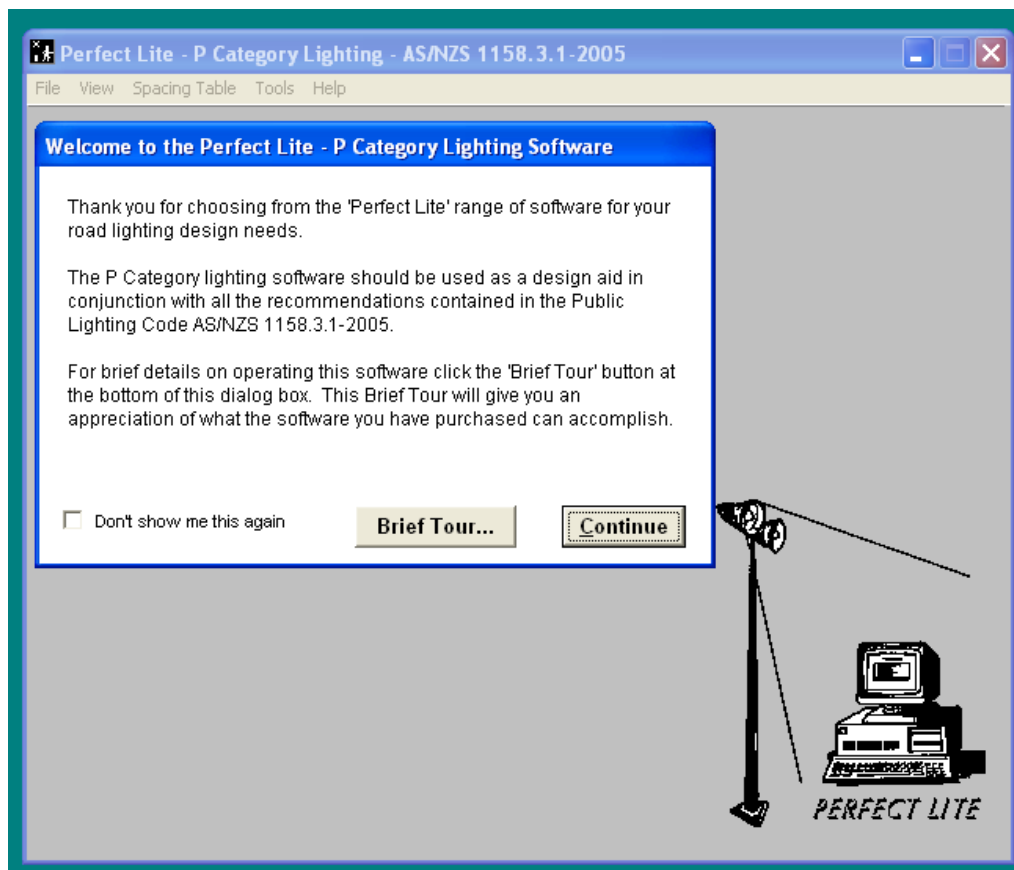
.....

3. STARTING THE SOFTWARE

Click on the **Start** button, select **All Programs** then **Perfect Lite** then **P Category Lighting** from the menu. (Note: The menu may also show **Pedestrian Area Lighting**, which is still available for use, but the LTPs and calculation methods relate to AS/NZS 1158.3.1:1999 – *the superceded Standard*.)



The window as shown below should then be displayed.

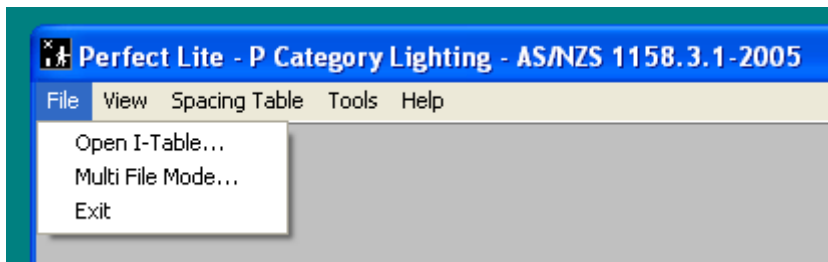


If this is the first time you have run the software then the 'Welcome to the Perfect Lite.....' window will appear. If you don't want it to appear again click in the check box adjacent to the text "Don't show me this again".

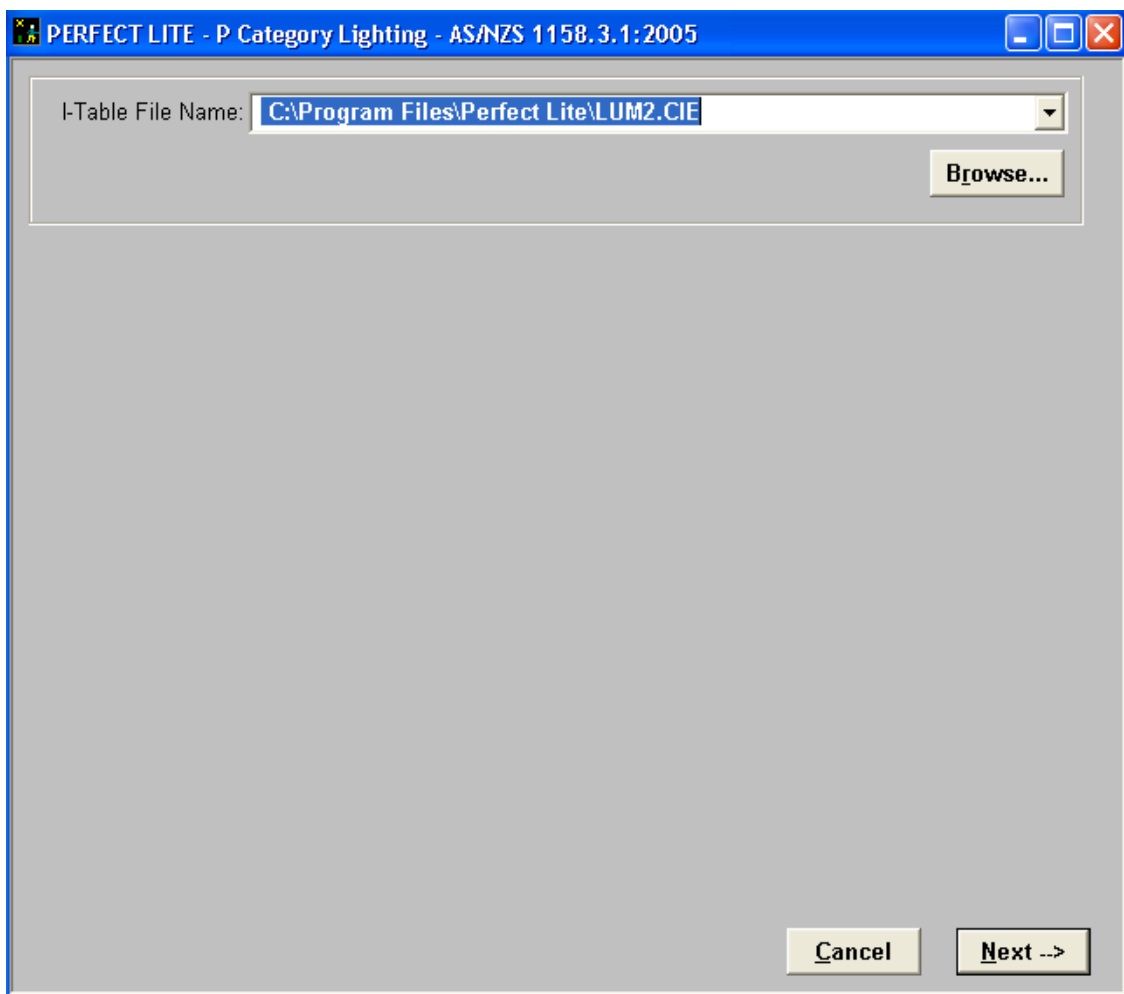
4. BRIEF TOUR OF THE SOFTWARE

The **P Category Lighting software** (referred to as "PlePcat") mainly produces spacing tables which can be used as design aids in the provision of lighting for Category 'P' roads, paths and cycleways. Category 'P' was originally introduced in 1999 when the (1986) road lighting Code, AS1158, was revised. The Code has been further revised and is now known as **AS/NZS 1158.3.1:2005**. The PlePcat software has been amended to meet the changes in the Standard.

Before you produce a spacing table (or generally do anything else in the software) it is necessary to load (or open) a photometric I-table for the luminaire under consideration. These I-tables would usually be stored on your computer's hard drive as a file supplied from the manufacturer or supplier of the luminaire. To get you up and running the PlePcat software is supplied with a sample file (LUM2.cie) which corresponds to the one used in the Appendix of **AS/NZS 1158.3.1:2005**. From the **File** menu click on **Open I-Table**.

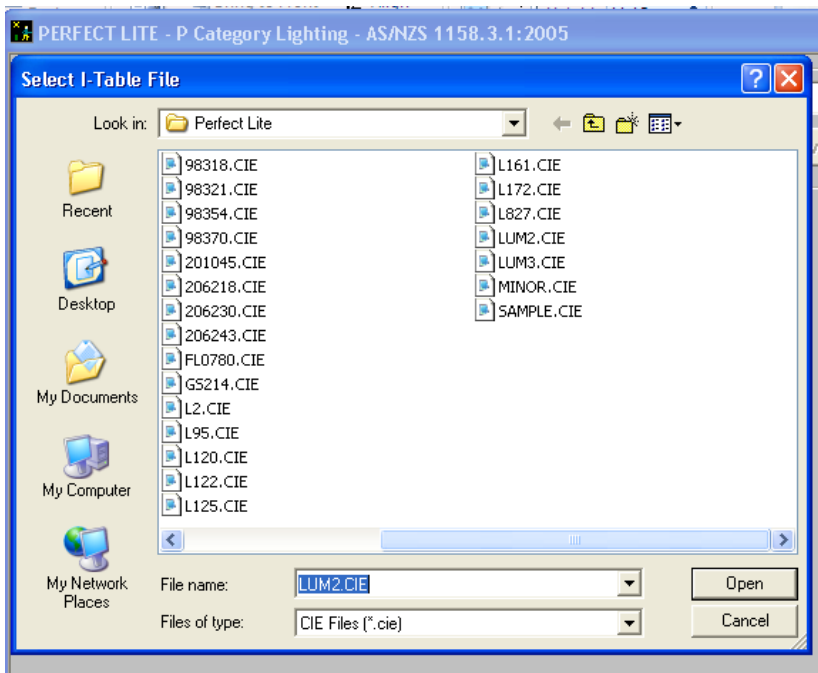


This will then display the screen where the file name is required to be input.



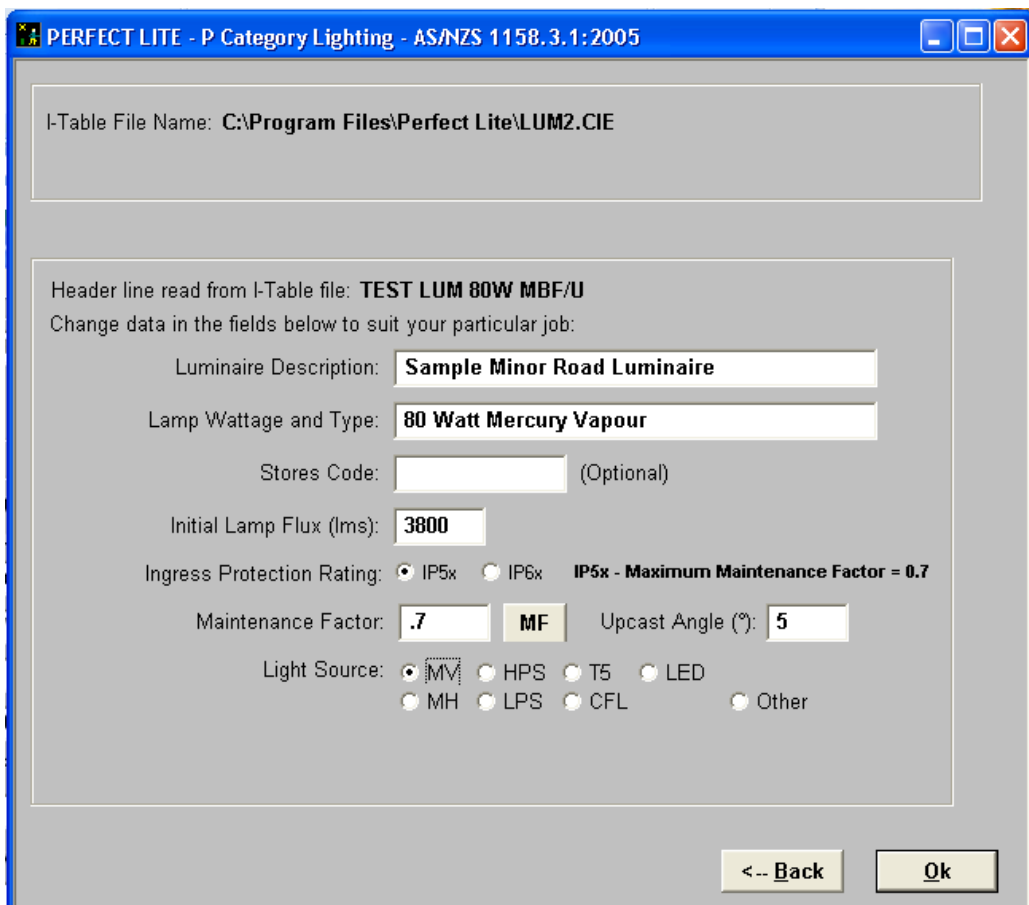
Each time you enter this screen (and most others in the program) the fields will be filled with the data last input. Should you wish to select a different file then either:-

- 1) enter the name directly in the **I-Table File Name** field
- 2) click the down arrow to the right of the combo box to select from previous files used or
- 3) click on the **Browse** button to invoke the standard Window File Open Dialog Box.
to select the appropriate file, example below



*It should be noted that by default, the dialog box will initially only display all the files with a “cie” file extension (typical for road lights). If this is not the type of file you are looking for make a choice from the **Files of type** drop down list box. When the desired file is in the **File name** field click the **Open** button on the file dialog box to continue on with the software.*

When the desired file name has been entered click on the **Next** button to continue on with the software. On the following screen input descriptions of the luminaire, initial flux value, maintenance factor, light source etc..

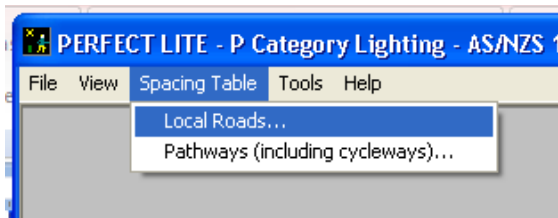


Inputs in the description fields are only necessary for identification of the luminaire and lamp and will be included on any output produced by the software. Once again when all the information has been entered click on the **Ok** button.

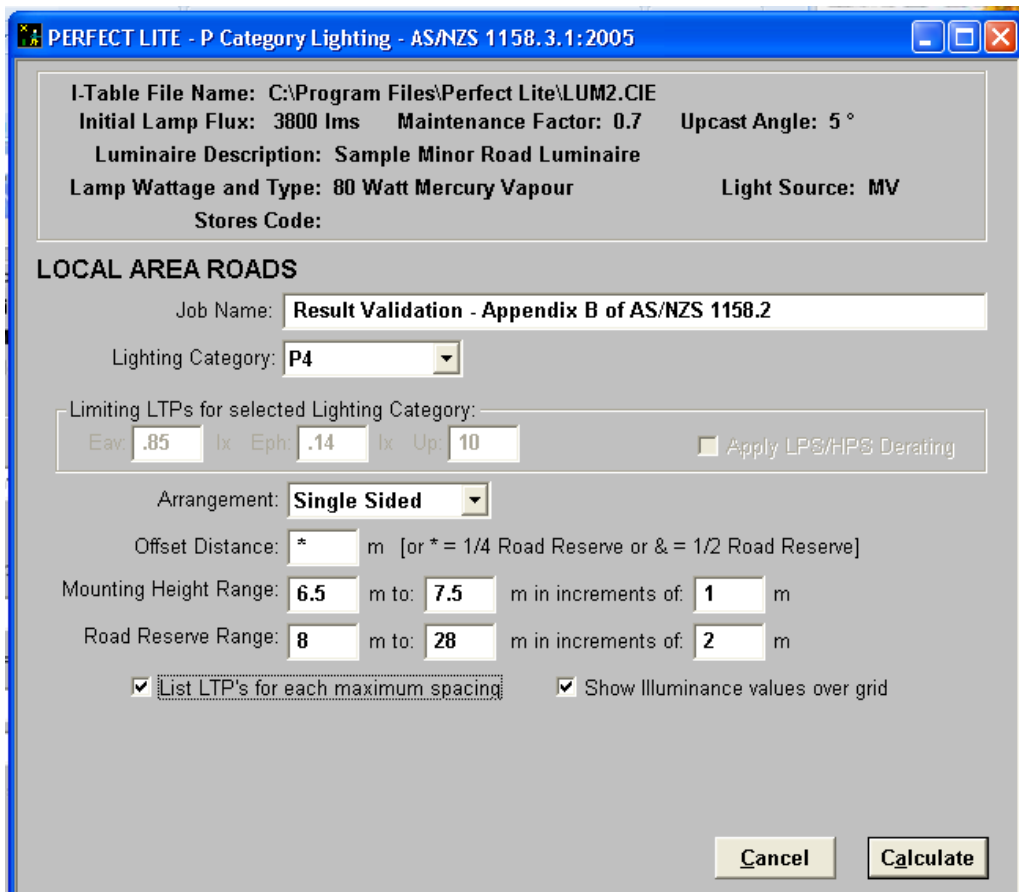
You have now loaded the I-table file into the program and at this point you can view the photometric I-Table by selecting either of the top two items from the **View** menu.



However, the main thing that we want to do is produce a spacing table (or check on compliance for a particular spacing). From the **Spacing Table** menu select **Local Roads...**. Alternatively, you could select **Pathways (including cycleways)** from the same menu depending on your needs.



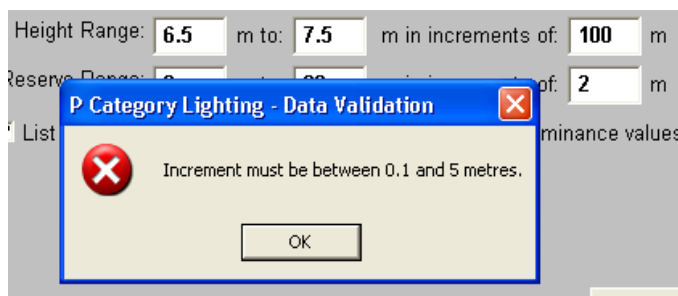
The screen will change to show several input fields to be filled with appropriate data relative to the table you wish to produce. As this is the first time the software has been run it will have the default values as used in Appendix B of AS/NZS 1158.2:2005.



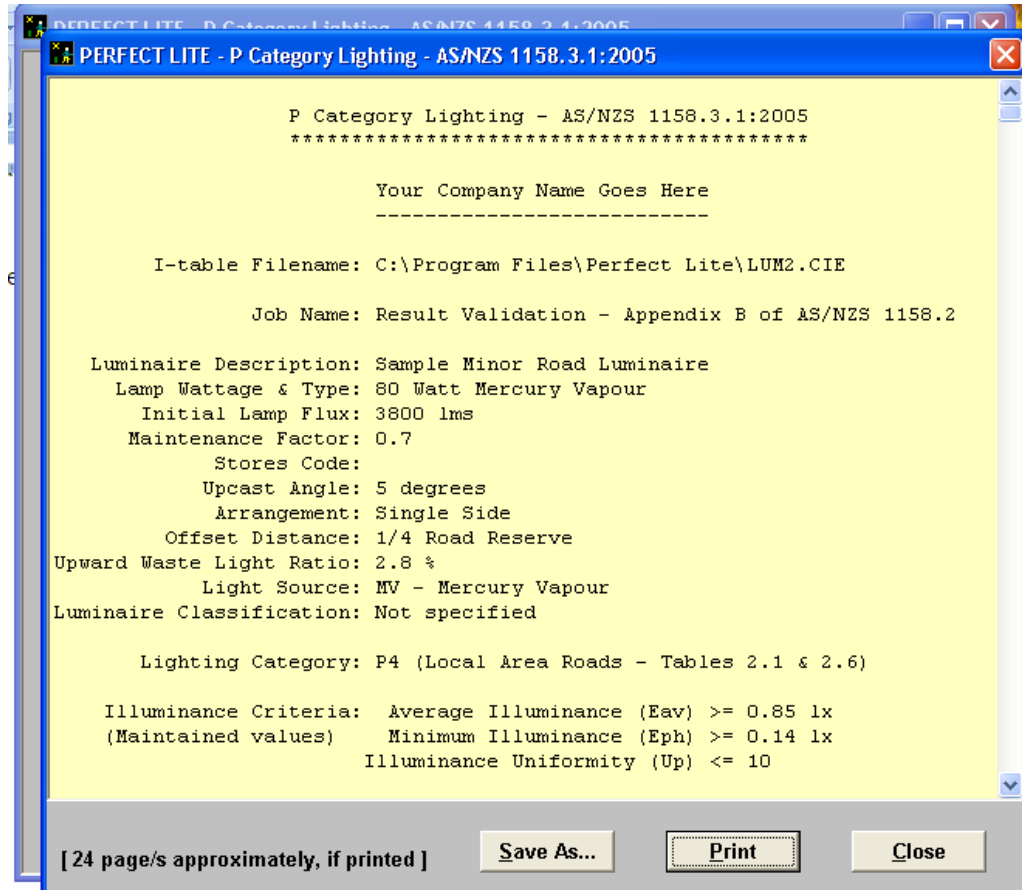
When any of the 'standard' Road Categories are selected eg. P1, P2....P5 then the **Limiting LTPs for selected Lighting Category** fields will be 'greyed out' indicating the default values (that cannot be altered). If you select the **User Defined** Category these fields will be available to input respective values.

Now might be a good time to talk about the **On-line Help** accessible from within the software. If you are in doubt as to what details should be input into any field then simply put the cursor in that field (ie. Left mouse click in the field) and press the **F1** key. A pop-up Help screen will appear giving you information on the contents of the field and limit of values that can be input etc. This help feature is available for any item on a Menu, any button or screen displayed. To remove the Help screen click on the **X** in top right-hand corner of the Help window. You can check out this help feature for some of the fields on the current screen.

Anyhow, back to the process of producing the spacing table. Now press the **Calculate** button to get the software to carry out the necessary calculations to determine the maximum spacing for the range of road widths and heights etc. entered. When **Calculate** is pressed the software first validates the data in the input fields. If an error occurs, such as a value being out of an allowable range then an error message will appear such as below.

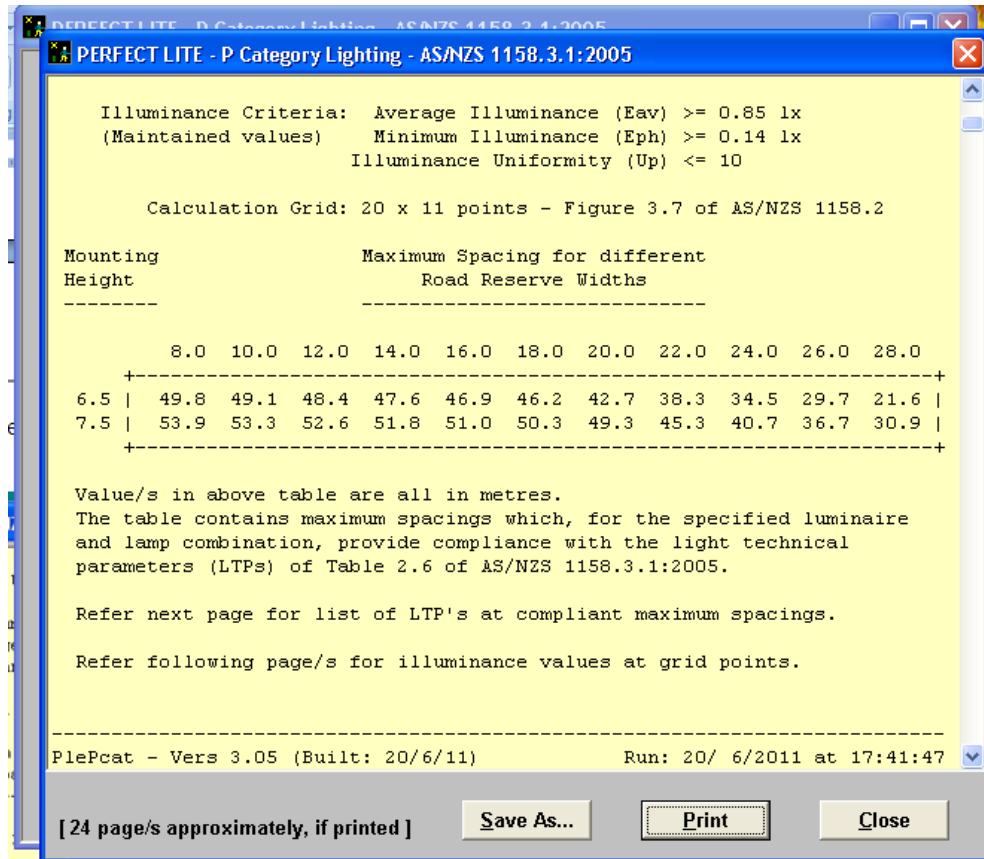


An example of the top part of the resultant spacing table is shown below.

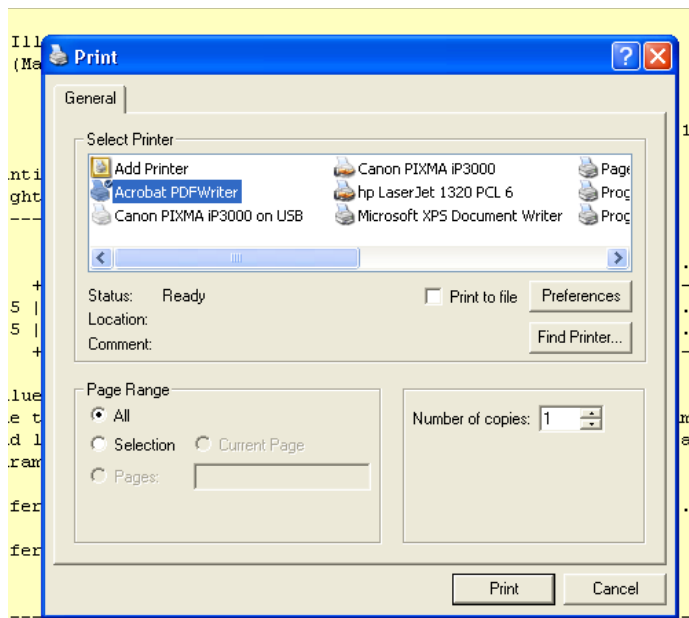


Use the scroll bar on the right side of the screen to move the display up to view the remainder of

the table.

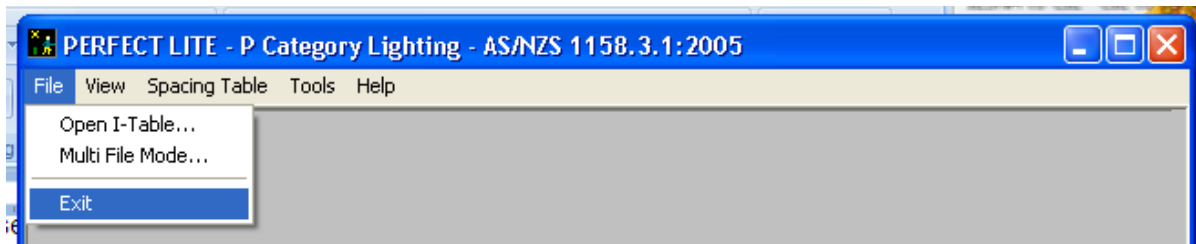


To print out the complete table on your printer click on the **Print** button and the standard Windows print dialog box will be displayed. Alternatively, you can save the results to a text file by clicking on the **Save As** button.

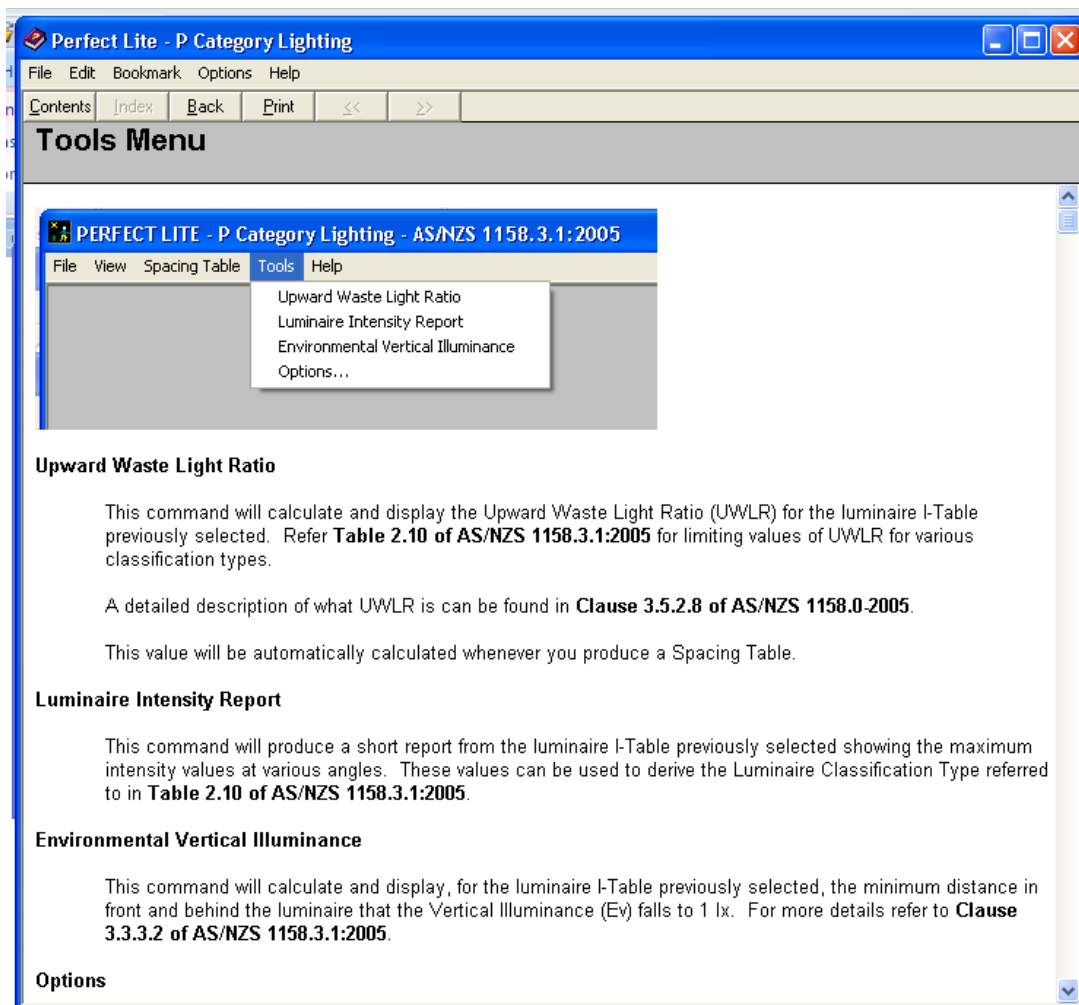


Select an appropriate printer and click on the **Print** button to send the printout. Once the printout has been produced click on the **Close** button to remove the calculated results and return to the screen where you can change some values and produce another table. If you don't want to produce another table then just click on the **Cancel** button. This will take you back to the point where you can make a selection from the menu along the top of the PlePcat window.

To close down the program altogether select from the **File** menu the **Exit** option or click on the **X** in the top right-hand corner of the PlePcat window.



The other choices from the menu along the top of the window are self explanatory so I won't go into detail here. If you have doubts then place the cursor over the required menu item and while holding down the left mouse button press the **F1** key and a pop-up Help screen will be displayed. An example of the one for the **Tools Menu** is below.



Should you have any problems using this software or would like to offer suggestions on future enhancements contact the developer on: support@perfectlite.com.