

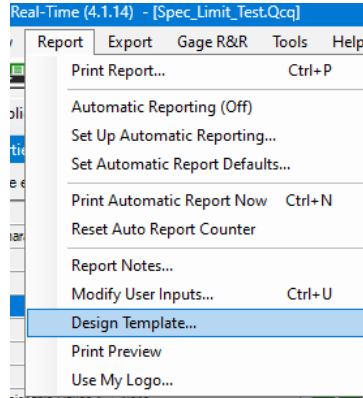
# Reporting – Adding the Characteristic Source

The default Raw Data reports that come with QC-CALC only show rows for the Feature Labels, Nominals, Tolerances, and the actual data values. This White Paper will give step by step instructions for designing your own custom template and adding a row of Characteristic Sources to one of the Raw Data standard templates.

## The Report Designer

The directions shown here will add a row containing Characteristic Sources into the report. This is a lengthy process, but relatively simple to accomplish.

1. From QC-CALC Real-Time choose the **Report – Design Template** menu.



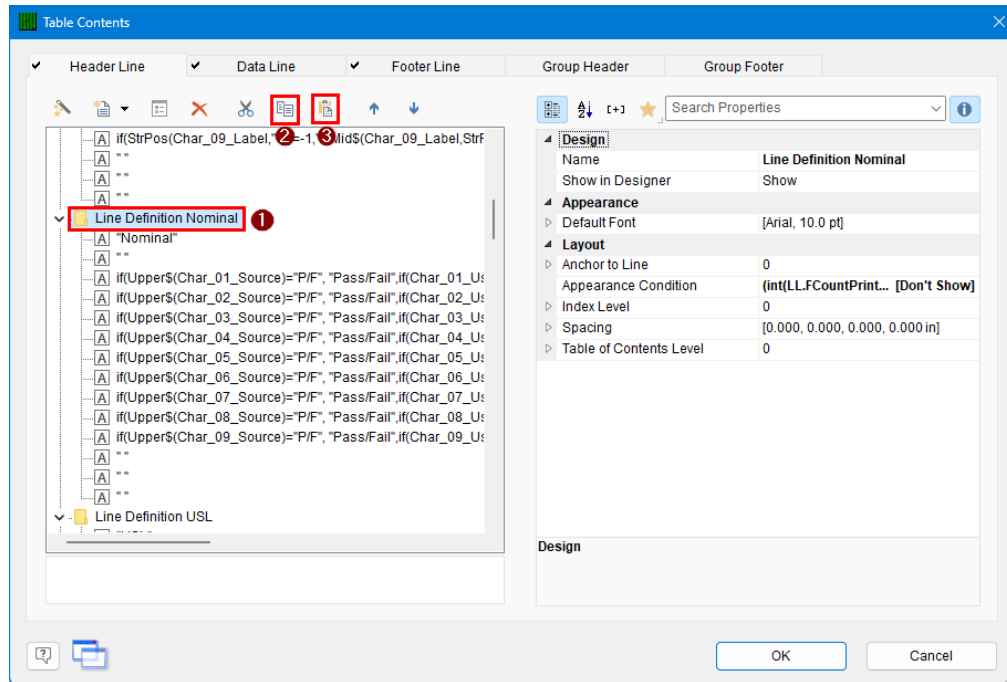
2. Choose the DataLand.raw template from the list of files that appears and click **Open**. The Report Designer now appears on the screen.

A screenshot of the Report Designer interface. The main window displays a 'Raw Data Report' template. The report includes a header with 'Prolink Inc.' and a date/time stamp. Below the header is a table with columns for 'Rec Num', 'Dimension number 1' through 'Dimension number 9', 'Date', and 'Time'. The table contains data for 'Sample200.qcq' and 'Sample200'. The 'Rec Num' column has values 1.640, 2.6600, 3.63, 4.640, 5.6600, 6.63, 7.640, 8.6600, 9.63. The 'Dimension number 1' column has values 1.500, 2.5000, 3.50, 4.500, 5.5000, 6.50, 7.500, 8.5000, 9.50. The 'Date' column has values 08/22/02, 12:53:45. The 'Time' column has values 08/22/02, 12:53:45. The report also includes a 'Notes' section and a 'Corrective Actions' section. The interface includes a toolbar with various design tools and a sidebar with a project tree and properties panel.

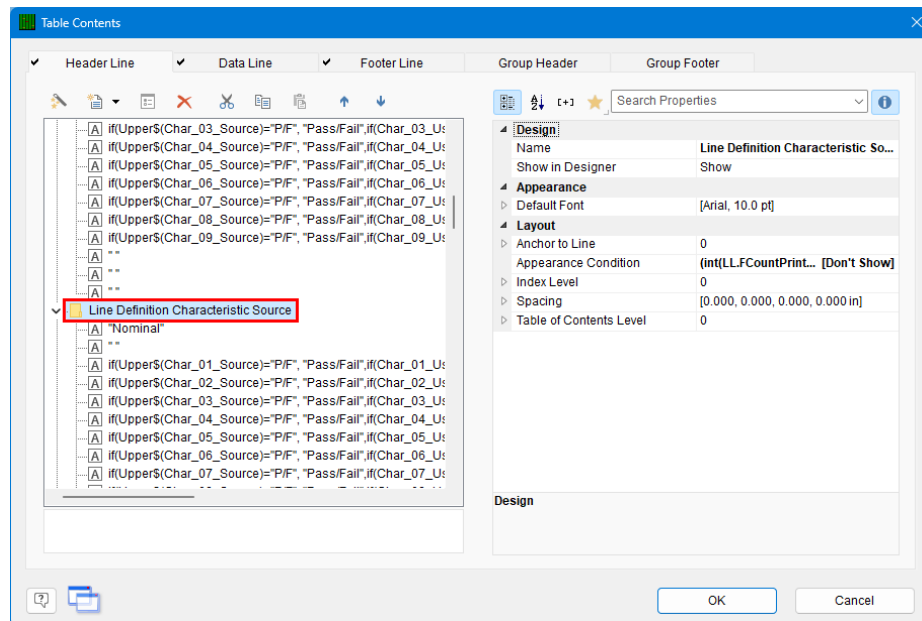
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## Header Lines

1. Double click on the table and the **Table Contents** window will appear. Select the **Header Line** tab and then Look for the line, “Line Definition Nominal”.

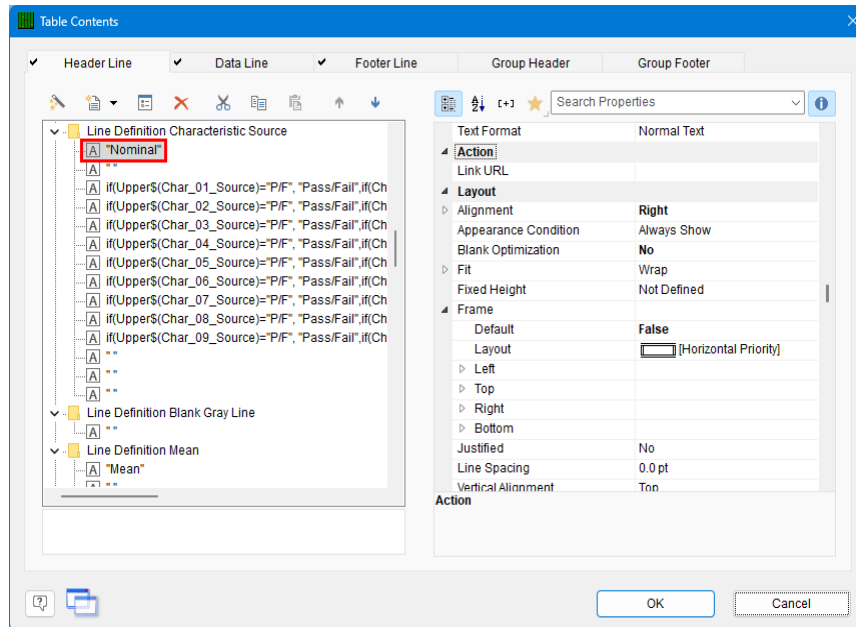


2. Select “Line Definition Nominal” and then click the **Copy** button ( ). This line definition gives us a good basis for the Characteristic Source line that we’ll be adding.
3. Next, select the **Paste** button ( ) to paste the copied line definition.
4. You now have a new **Header Line** showing in the list, but the name needs to be fixed. Right-click your new line definition and choose “Rename Table Line”. Rename the line definition to “Line Definition Characteristic Source”.

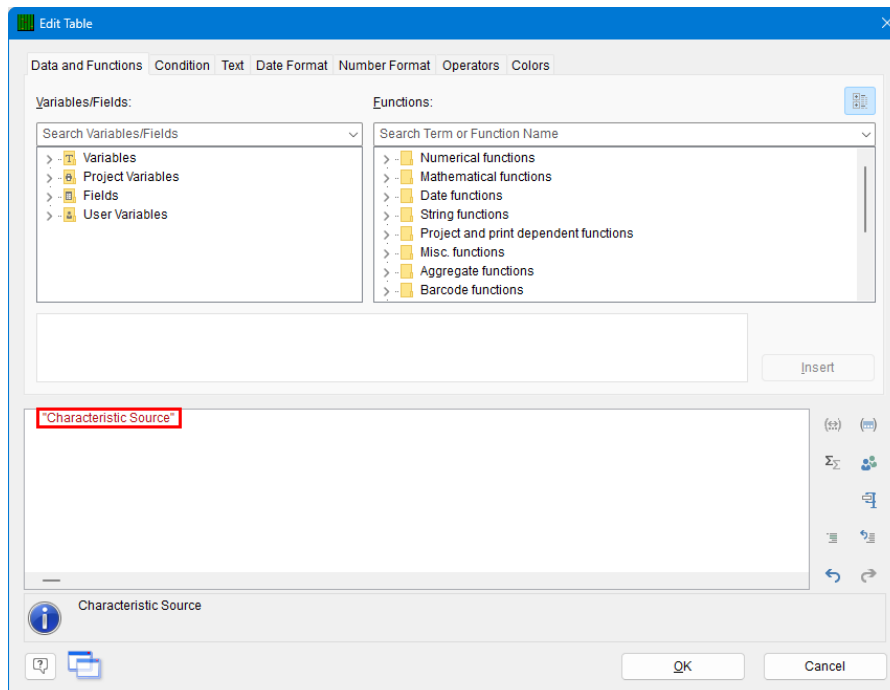


## Reporting – Adding the Characteristic Source

5. Choose the **Up Arrow** button (↑) above the line definitions to move the Characteristic Source line definition above the Nominal line definition. This will make the Characteristic Source line appear above the Nominal line in the report.
6. Back in the **Table Contents** window choose the new “Line Definition Characteristic Source” item we just created.
7. The very top line of the **Line** area is the left-most column in the report. At the moment this is going to print “Nominal”. Double click that line and the **Edit Table** screen appears.

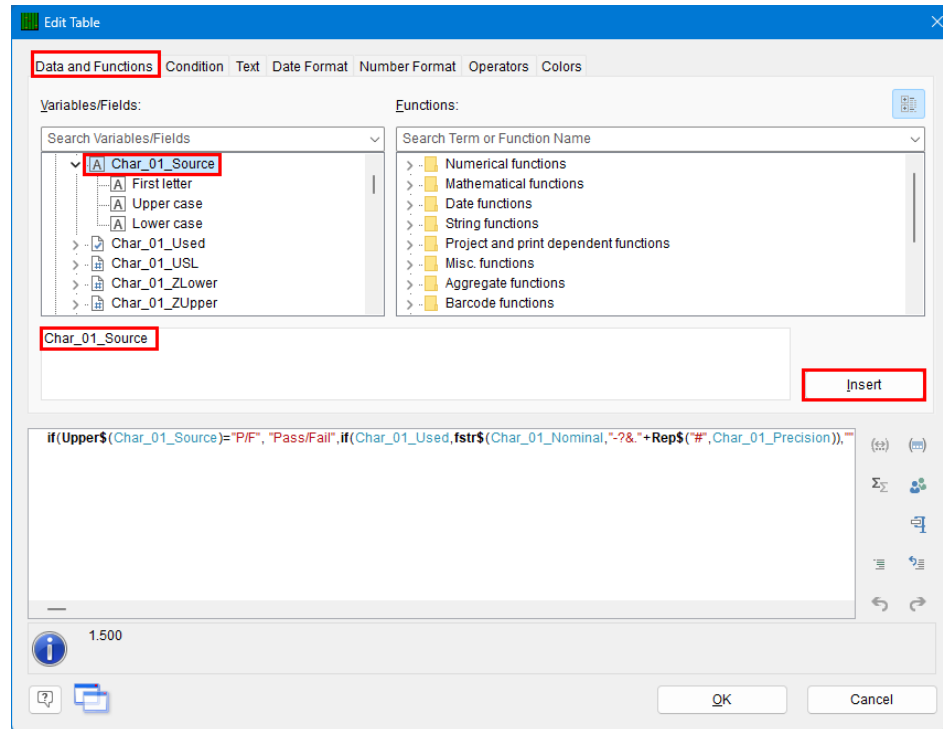


8. In the **Edit Table** screen change “Nominal” to “Char Source” to make the label column correctly identify the values in that row.

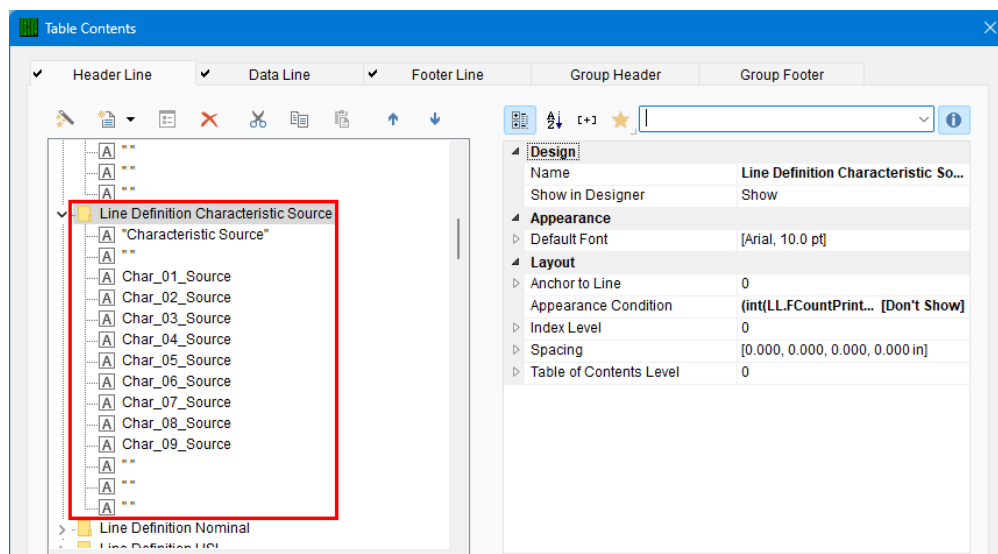


## Reporting – Adding the Characteristic Source

9. Back in the **Table Contents** screen double-click the 3<sup>rd</sup> line in the **Line** area (starts with “if (Upper\$(Char\_01\_Source\_1)=...”).
10. In the **Edit Table** screen replace the whole line showing at the bottom of the screen with “Char\_01\_Source”. The text will turn blue after inserting to show it is a recognized variable. If the first characteristic in the part file you have open has a **Characteristic Source** assigned, you will see that value at the bottom of the window. Select and copy (Ctrl+C) the Char\_01\_Source, we'll use it to edit subsequent lines.

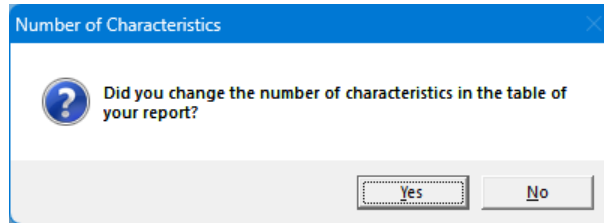


11. Back in the Table Contents window double-click the line right below the Char\_01\_Source line, paste in the clipboard contents (CTRL + V) and change the “01” to an “02”.
12. Continue this process for all 9 Characteristics making sure all numbers 1 – 9 are used.



## Reporting – Adding the Characteristic Source

13. Click the **OK** button on the **Table Contents** window and save your changes to the template.
14. You will be asked if you changed the number of Characteristics in the report.  
Answer  
**No.**



15. When you run your report you will now have an additional row in the lines at the top of the report that shows the **Characteristic Source** value for each Characteristic.

Raw Data Report										November 26, 2023 09:38:28	
Prolink Inc.										<UserInput>	
Sample200.qcc											
Sample200											
Res Num	Inner DIA	2Dimension number 2	3Dimension number 3	4Dimension number 4	5Dimension number 5	6Dimension number 6	7Dimension number 7	8Dimension number 8	9Dimension number 9	Date	Time
Char Source											
Nominal	1.500	2.5000	3.50	4.500	5.5000	6.50	7.500	8.5000	9.50		
USL	1.640	2.6500	3.63	4.640	5.6500	6.63	7.640	8.6500	9.63		
LSL	1.360	2.3900	3.37	4.360	5.3900	6.37	7.360	8.3900	9.37		
Mean	1.5026	2.48819	3.491	4.4894	5.48341	6.524	7.4868	8.50868	9.491		
Max	1.6202	2.54815	3.531	4.6248	5.54055	6.594	7.5775	8.57145	9.562		
Min	1.4022	2.43650	3.441	4.3691	5.41183	6.452	7.3686	8.49034	9.463		
Range	0.2181	0.11165	0.090	0.2557	0.12873	0.142	0.2089	0.08111	0.100		
Sigma	0.0636	0.05140	0.034	0.0937	0.04979	0.061	0.0637	0.03514	0.042		
Cp	0.5162	0.84303	1.265	0.4624	0.67030	0.709	0.5177	1.23329	1.044		
Cpk	0.4865	0.64326	1.181	0.3692	0.49147	0.560	0.4252	1.12589	0.971		
96	1.402	2.4944	3.44	4.625	5.4784	6.59	7.369	8.4924	9.46	08/22/02	12:53:45
Notes:											
Assignable Causes:						Corrective Actions:					