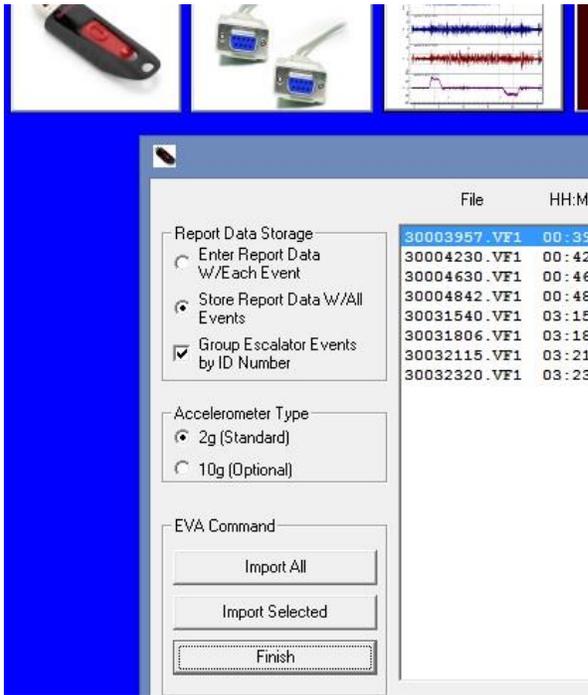**Understanding the Escalator Step/Skirt Performance Index Report**


When importing files from the flash drive, there is an option to Group Escalator Events by ID Number, as shown below.

When this checkbox is selected, the EVA875 software will internally tag a group of events which have the same ID Numbers as one test using the time and date stamp of the Step 1 Right file. This grouping utility is what allows all four recordings to be displayed on one page. When grouped, it is only necessary to Analyze any one of the four recordings and they will all display on one page for convenient submission of a report.

The Index Report shown below is a complete report, showing the results of four measurements, Step 1 Right and Left as well as Step 2 Right and Left.
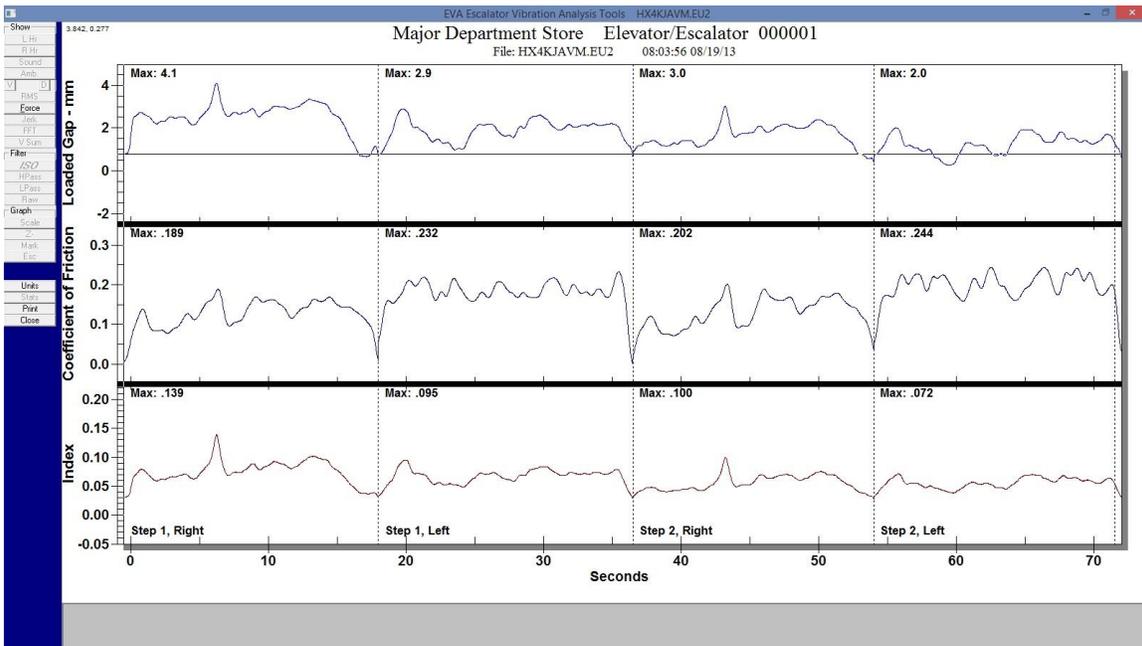
The Index Test consists of the measurement of 2 physical parameters. The top row shows the loaded gap, which is the size of the step to skirt gap under the 25lbs. load applied by the spring force of the IMD, into the skirt panel, in the incline portion of the escalator run. The middle row shows the Coefficient of Friction which is determined by measuring the drag on the Index Friction Shoe (the small plastic piece which is placed on the IMD-1 Shoe Plate) as it runs up the Escalator Skirt. The bottom row shows the Step/Skirt Performance Index is calculated from the Loaded Gap and the Coefficient of Friction, though the Loaded gap is more heavily weighted in the calculation than the Coefficient of Friction.
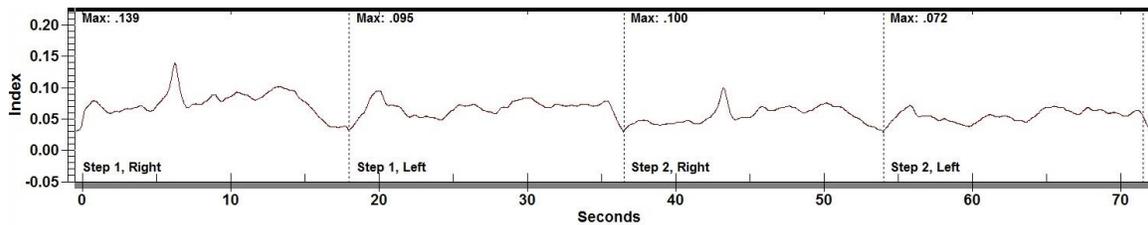
When determining if the Escalator passes or fails according to which ever code version is applicable, compare against the highest of the **Max** values shown in each box. For example, the Index Pass Fail number above would be .139 on the Step 1 Right. Some codes specify a maximum loaded gap as well, simply compare against the highest **Max** in the Loaded Gap row.

*Also of note is that the profile shown in all three rows is very similar for each side. Step 1 Right and Step 2 Right show very similar gap deflection and coefficient while the Left sides are also similar in shape. From this we can determine which side of the escalator would be in need of adjustment to improve the Index value as well as the approximate are based on how many seconds up the run an increase in gap is seen.