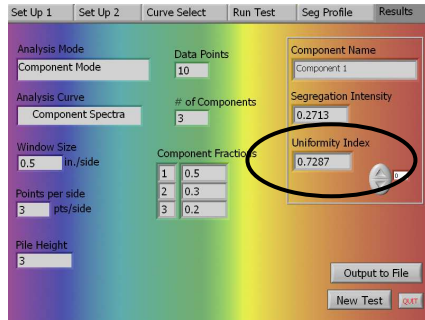
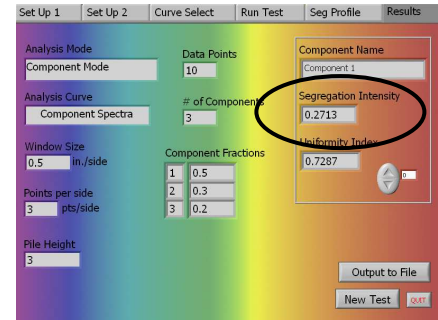


# What information do we get from the SPECTester ?

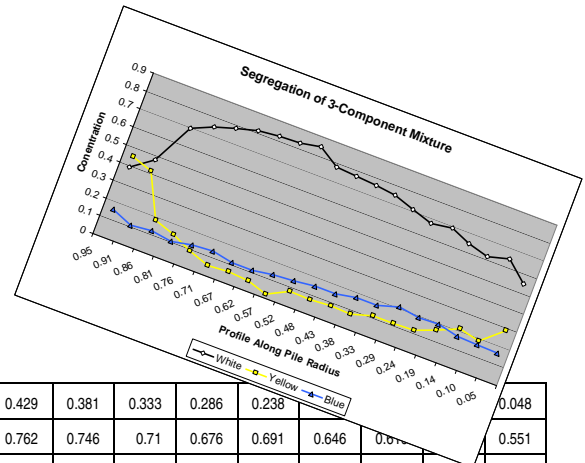
The SPECTester provides the user with three main tools: a segregation intensity number, a uniformity number, and an Excel-ready data base describing the segregation behavior of both the mixture and the individual components as they travel through a process.

The **segregation intensity number** for each individual component indicates how much that ingredient is contributing to the overall segregation occurring within the material mixture. Use the segregation intensity number to determine which component and/or components, in the mixture is/are problematic. This number is between 0 and 1. A segregation intensity number larger than about 0.25 means that specific ingredient is contributing significantly to the segregation issue.

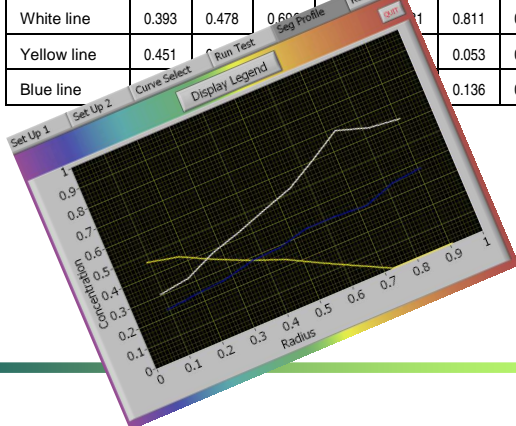


The **uniformity number** is the inverse of the segregation intensity number. This number is also between 0 and 1. The uniformity number represents the overall uniformity in concentration of each unique component within the mixture. A larger uniformity number indicates that the ingredient appears through the mixture relatively uniformly. A smaller uniformity number indicates that the ingredient turns up in the mixture pile to a non-uniform degree.

The **Excel-ready data base** (.csv format) can be used to create graphs, tables and charts that describe the segregation behavior (or lack thereof) of the material mixture and the individual ingredients in reports and presentations. This data base can be saved to the internal SPECTester computer and/or downloaded via a thumb drive through the USB port on the right side of the tester box.



Radius (in)	0.952	0.905	0.857	0.81	0.762	0.714	0.667	0.619	0.571	0.524	0.476	0.429	0.381	0.333	0.286	0.238	0.19	0.142	0.094	0.048
White line	0.393	0.478	0.60	0.71	0.811	0.822	0.828	0.848	0.777	0.768	0.762	0.746	0.71	0.676	0.691	0.646	0.61	0.57	0.53	0.551
Yellow line	0.451	0.51	0.58	0.65	0.72	0.79	0.86	0.93	0.88	0.82	0.75	0.68	0.61	0.54	0.47	0.40	0.33	0.26	0.19	0.12
Blue line	0.136	0.115	0.115	0.131	0.141	0.153	0.153	0.174	0.174	0.208	0.19	0.195	0.169	0.165	0.161					



This graphical segregation profile of a 3-component mixture indicated that two of the ingredients are bad-actors and contribute significantly to the overall pattern of segregation present in this sample. The third component (blue line) does not present a problem.