What is claimed is:

1. A computer implemented method, comprising: receiving through a digital communication channel, from a spectrophotometer, reflectance data from a calibration panel; calculating, with a processing device, Fourier coefficients of a phase function associated with the reflectance data from the calibration panel, wherein the phase function is associated with a portion of a radiative transfer equation; calculating, with the processing device, attenuation and orientation parameters and an anisotropic factor for the calibration panel, wherein the attenuation parameters comprise a scattering cross section and absorption determined from the reflectance data received from the spectrophotometer; determining a solution to the radiative transfer equation for the calibration panel, wherein the radiative transfer equation comprises portions associated with the Fourier coefficients of the phase function, the attenuation and orientation parameters, and the anisotropic factor; receiving through a digital communication channel, from a spectrophotometer, reflectance data from a target coating; selecting a list of possible toners that are present within the target coating; calculating a reflectance of the possible toners, based upon the attenuation parameters and a modified radiative transfer equation; and generating, using the processing device and based on the calculated reflectance of the possible toners, a coating formulation that is the same or substantially similar in appearance to the target coating, wherein the coating formulation utilizes one or more of the possible toners.

2. The method of claim 1, further comprising optimizing the coating formulation.

3. The method of claim 1, further comprising calculating a plurality of radiative transfer parameters from reflectance data obtained from the calibration panel.

4. The method of claim 1, further comprising changing the coating formulation by removing at least one toner from the coating formulation.

5. A system, comprising: a database; and a processor in communication with the database and programmed to: receive through a digital communication channel, from a spectrophotometer, reflectance data from a target coating; select a list of possible toners that are present within the target coating; calculate a reflectance of the possible toners, based upon attenuation parameters and a modified radiative transfer equation, wherein the attenuation parameters are

calculated from a calibration panel; and generate, using the processor and based on the calculated reflectance of the possible toners, a coating formulation that is the same or substantially similar in appearance to the target coating, wherein the coating formulation utilizes one or more of the possible toners.

6. The system of claim 5, wherein the processor comprises an analysis module, a display module, and an input/output module.

7. The system of claim 5, wherein the processor is further programmed to optimize the coating formulation.

8. The system of claim 5, wherein the processor is further programmed to calculate a plurality of radiative transfer parameters from reflectance data obtained from the calibration panel.

9. The system of claim 5, wherein the processor is further programmed to: calculate, with the processor, Fourier coefficients of a phase function associated with the reflectance data from the calibration panel, wherein the phase function is associated with a portion of a radiative transfer equation; calculate, with the processor, attenuation and orientation parameters and an anisotropic factor for the calibration panel, wherein the attenuation parameters comprise a scattering cross section and absorption determined from the reflectance data received from the spectrophotometer; and determine a solution to the radiative transfer equation for the calibration panel, wherein the radiative transfer equation comprises portions associated with the Fourier coefficients of the phase function, the attenuation and orientation parameters, and the anisotropic factor.

10. An apparatus, comprising: means for receiving through a digital communication channel, from a spectrophotometer, reflectance data from a calibration panel; means for calculating, with a processing device, Fourier coefficients of a phase function associated with the reflectance data from the calibration panel, wherein the phase function is associated with a portion of a radiative transfer equation; means for calculating, with the processing device, attenuation and orientation parameters and an anisotropic factor for the calibration panel, wherein the attenuation parameters comprise a scattering cross section and absorption determined from the reflectance data received from the spectrophotometer; means for determining a solution to the radiative transfer equation for the calibration panel, wherein the

radiative transfer equation comprises portions associated with the Fourier coefficients of the phase function, the attenuation and orientation parameters, and the anisotropic factor; means for receiving through a digital communication channel, from a spectrophotometer, reflectance data from a target coating; means for selecting a list of possible toners that are present within the target coating; means for calculating a reflectance of the possible toners, based upon the attenuation parameters and a modified radiative transfer equation; and means for generating, based on the calculated reflectance of the possible toners, a coating formulation that is the same or substantially similar in appearance to the target coating, wherein the coating formulation utilizes one or more of the possible toners.

11. The apparatus of claim 10, further comprising means for optimizing the coating formulation.

12. The apparatus of claim 10, further comprising means for calculating a plurality of radiative transfer parameters from reflectance data obtained from the calibration panel.

13. A non-transitory computer readable medium including software, which when executed by a processor, causes the processor to: receive through a digital communication channel, from a spectrophotometer, obtain reflectance data from a calibration panel; calculate, with a processing device, Fourier coefficients of a phase function associated with the reflectance data from the calibration panel, wherein the phase function is associated with a portion of a radiative transfer equation; calculate, with the processing device, attenuation and orientation parameters and an anisotropic factor for the calibration panel, wherein the attenuation parameters comprise a scattering cross section and absorption determined from the reflectance data received from the spectrophotometer; determine a solution to the radiative transfer equation for the calibration panel, wherein the radiative transfer equation comprises portions associated with the Fourier coefficients of the phase function, the attenuation and orientation parameters, and the anisotropic factor; receive through a digital communication channel, from a spectrophotometer, reflectance data from a target coating; select a list of possible toners that are present within the target coating; calculate a reflectance of the possible toners, based upon the attenuation parameters and a modified radiative transfer equation; and generate, based on the calculated reflectance of the possible toners, a coating formulation that is the same or substantially similar in appearance to the target coating, wherein the coating formulation utilizes one or more of the possible toners.

14. The medium of claim 13, further comprising software for causing the processor to optimize the coating formulation.

15. The medium of claim 13, further comprising software for calculating a plurality of radiative transfer parameters from reflectance data obtained from the a processor in communication with the database and programmed to calibration panel.