at least one processor, causes the at least one processor to carry out a method comprising the steps of: receiving an indication of a calibrant being placed in the one or more receptacles of the multi-channel fluorometer; exciting the calibrant in the one or more receptacles with the one or more light sources; measuring the fluorescence level of each calibrant in the one or more receptacles; using the fluorescence level of the calibrant in a first receptacle of the one or more receptacles to generate a correction factor for the first receptacle; creating correction factors for each of the other of the one or more receptacles using the fluorescence level from the first receptacle; storing the correction factors; and applying the correction factors to subsequent measurements of fluorescence levels in each respective receptacle of the one or more receptacles.

[0008] A further embodiment comprises a method of normalizing fluorescence measurements. The method comprises receiving a plurality of fluorescence measurements for a plurality of receptacles in a fluorometer; using the fluorescence measurement of a first receptacle of the plurality of receptacles to generate a correction factor for the first receptacle; and creating correction factors for each of the other of the plurality of receptacles using the fluorescence measurement from the first receptacle. It further comprises storing the additional correction factors; and applying the correction factors to a subsequent plurality of fluorescence measurements in each respective receptacle of the plurality of receptacles.

[0008a] Another embodiment comprises a method of testing fluorescence according to a plurality of standards in a single test. The method comprises receiving a first plurality of fluorescence measurements for a plurality of receptacles in a multi-channel fluorometer, each containing a calibrant; using the fluorescence measurement of a first receptacle of the plurality of receptacles to generate a correction factor for the first receptacle; creating correction factors for each of the other of the plurality of receptacles using the fluorescence measurement from the first receptacle; storing the correction factors; receiving a second plurality of fluorescence measurements for the plurality of receptacles, wherein a first one or more receptacles of the plurality of receptacles contain concentrations of a first standard and a second one or more receptacles of the plurality of receptacles contain concentrations of a second standard; and applying the correction factors to the second plurality of fluorescence measurements.

[0009] The foregoing has outlined rather broadly the features and technical advantages of the present invention in order that the detailed description of the invention that follows may be better understood. Additional features and advantages of the invention will be described hereinafter which form the subject of the claims of the invention. It should be

appreciated by those skilled in the art that the conception and specific embodiments disclosed may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present invention. It should also be realized by those skilled in the art that such equivalent constructions do not depart from the spirit and scope of the invention as set forth in the appended claims. The novel features which are believed to be characteristic of the invention, both as to its organization and method of operation, together with further objects and advantages will be better understood from the following description when considered in connection with the accompanying figures. It is to be expressly understood, however, that each of the figures is provided for the purpose of illustration and description only and is not intended as a definition of the limits of the present invention.