145.3.5 PD signature configurations

A single-signature PD shall present a valid detection signature, as defined in Table 145–21, on a given Mode in all 2-pair configurations per Table 145-20 when no voltage or current is applied to across the other Mode, and shall not present a valid detection signature on the given Mode in all 2-pair configurations per Table 145-20 when any voltage in the range of 3.7 V to 57 V is applied to across the other Mode or any current greater than 124 µA is applied to drawn from the negative pair of the other Mode. These requirements apply to both Mode A and Mode B and apply when the positive pairs of both Modes are either tied together or separated.

NOTE—A valid detection signature meets every requirement in Table 145–21 across all specified conditions. A failure under any allowed condition is considered "not a valid signature."

A dual-signature PD shall present a valid detection signature, as defined in Table 145–21, on a given Mode in all 2-pair configurations per Table 145-20 when, regardless of any voltage between 0 V and 57 V applied to across the other Mode. This requirement applies to both Mode A and Mode B and apply when the positive pairs of both Modes are either tied together or separated.