Dispute Resolution

I was asked to represent My Client in my capacity of electrical engineer to report to the Client as to why the lighting control system kept failing.

The Client was with holding a significant final account sum against the contractor.

It was determined that the original design submitted to the architect had changed with both the system and components being substituted.

The number of control modules had been significantly reduced and the loads to the circuit relays increased, also the modules had been substituted from precious metal contact relays to standard type contact relays.

What occurred was the system circuits opening on switching were creating extremely high currents at the millisecond cycle resulting in the contacts welding together.

Having presented my findings which were gained from discussions with several lighting control manufacturers R&D departments together with published evidence, the conclusion was that the design change and value engineering created the problem.

It was further established at the enquiry that the Architect had appointed the designer to also be the contractor seconded to my Client to appoint and that the Architect had accepted the change.

I was asked for a solution and as it was established that there were a small number of areas heavily condensed and affected by the increased circuit loads, as such to reduce the load to the module, an additional module should be installed alongside the ones in question, added to the network and then circuits diverted, this would allow the software to be changed and circuits diverted with minimum disruption to the building.

I stated it was for the designer and architect to complete the retrofit design as my Client had no responsibility and the payment was then released to my Client.