

CTL DECISION SHEET (DSH)

Standard(s) (incl. year)	Subclause(s)	Tracking No.	Year
IEC 62031:2018 IEC 60598-1:2014+A1:2017	0.5-component	DSH2057A	2023
Category			
LITE			
Subject	Keywords	Developed by	To be approved
Simplify the acceptance of replacement of LED modules in luminaires and LEDpackages/ chips in LED modules	- Component code A* - LED packages - Chips in LED modules	ETF5	2023 CTL Plenary Meeting
Question			
<p>LED-modules are normally classified as critical components (code B or C in the component list). Therefore any modification of the design or internal components shall be declared to the Test House by the manufacturer (to obtain an Acceptance letter / CB renewal / CB Modification etc.). Due to the rapid development of LED technology it seems to become necessary to introduce a procedure to facilitate the replacement of new generations of LED packages in modules, LED modules and COB in luminaires.</p> <p>If specified criteria stated below are fulfilled, clarification is needed as to whether the modification or update of the module/COB in the luminaire should be acceptable without renewing the CB certificate.</p> <p>The component code for such components would then be: A* <i>"A* = The component is replaceable with another one according to ETF5-OSM-LUM/DSH....."</i></p> <p>Situation 1 – Performance Upgraded LED Module in a Luminaire</p> <ol style="list-style-type: none"> The same ratings of constant voltage and/or constant current. The same or lower tc operating temperature. The same or lower blue light hazard as mentioned in the luminaires test report acc. to IEC/TR 62778. The same geometry and creepage distances and clearances (outline, LED package position and number, same dimensions of PCB tracks and material of PCB). In compliance with standard IEC 62031:2008 + AMD1:2012 + AMD2:2014. <p>Situation 2 – Performance Upgraded LED Chip in an LED Module or COB</p> <ol style="list-style-type: none"> The same or less electrical stress applied to the LED chips The same electrical ratings of the LED chip. The same or lower ts/tj operating temperature ratings for the LED chip (according to LM80 report) The same or lower blue light hazard as mentioned in the luminaires test report according to IEC/TR 62778. The same geometry and creepage distances and clearances (outline, LED package position and number, same emitting surface, optics, same dimensions of PCB tracks, identical PCB material). <p>Compliance of the new component shall be proven by a pertinent declaration or certificate based on a CBTL or an accredited laboratory.</p> <p>The license holder/manufacturer must inform the Test House about the modification.</p> <p>The new luminaire and/or module design has to be considered, reported and notified in a relevant test reports but without any further certification by Test Houses.</p> <p>With these detailed controls no possible unsafe conditions are foreseen.</p> <p>Is it possible to simplify the process and accept the component as code A*, if the above criteria are verified?</p>			
Decision			

YES

Explanatory notes

This decision updates the old decision sheet DSH2057(2016) to be in line with NEW standard editions.

These conditions for change are for safety conformity only (to the above mentioned standards IEC 62031 and IEC 60598) and not for situations where certification of the performance of the final luminaire or module are applicable. I.e. excluded are conformity situations for:

IEC 62717

IEC 62722-2-1

IEC 60598-2-22.