AMEMNDMENT No. 1 AUGUST 2024

TO

IS 16614 (PART 2): 2022 DOUBLE-CAPPED LED LINEAR LAMPS PART 2 PERFORMANCE SPECIFICATION

(*Page* 5, *clause* **7.1,** *para* 4) — Insert the following new para after para 4:

'Alternatively, test data from IS 16105 shall be used for the derivation of maintained values at 6 000 h, together with related compliance criteria, as specified in Annex D.'

(*Page* 24, *Annex C, para* 4) — Insert the following new Annex after Annex C:

ANNEX D
(normative)

USE OF IS 16105 FOR LUMEN MAINTENANCE AND MAINTAINED CHROMATICITY COORDINATES DATA

D-1 GENERAL

According to **10.1** (colour variation categories) and **11.2** (lumen maintenance), both initial and maintained values for the LED lamp are measured. In order to reduce the test time for obtaining maintained values, data from IS 16105 shall be used given that the conditions in D-2 and the compliance criteria in D-3 are met.

D-2 CRITERIA FOR THE USE OF IS 16105

D-2.1 LED Package Data Used for LED Lamps

If data from an IS 16105 test report applied to an LED package is available, the test conditions in **7.1** are applicable for LED lamps with a test duration of 1 000 h.

For compliance criteria after 1 000 h testing, see **D-3.**

D-2.2 Boundary Conditions

D-2.2.1 *General*

The combination of the selected maximum r.m.s. input current and maximum case temperature from the IS 16105 report shall equal or exceed the LED package current and temperature under worst case conditions of the LED lamp.

D-2.2.2 *Temperature*

With the LED lamp operating according to the conditions in Annex A, the LED package case temperature, T_s, as defined by IS 16105, shall be measured. The highest measured value of T_s, inside the LED lamp, shall not exceed the limit temperature T_s taken from the IS 16105 report.

In the case of an LED lamp family according to Table 2, the T_s temperature measurement shall be performed with the LED lamp configuration that results in the highest T_s temperature.

D-2.2.3 *LED Package Input Current*

The maximum r.m.s. input current of the LED package in the LED lamp shall not exceed the r.m.s. input current that was tested as part of IS 16105.

Where IS 16105 is used for achieving lumen maintenance and maintained chromaticity coordinates data, any controlgear control circuits for automated compensation of the light output degradation over time shall be disabled.

D-3 COMPLIANCE CRITERIA

D-3.1 Chromaticity Coordinates

LED lamps evaluated according to **10.1** with a test duration as specified in **D-2.1** shall meet the initial colour variation category as declared by the manufacturer or responsible vendor according to Table 8.

D-3.2 Luminous Flux Maintenance

LED lamps evaluated according to **11.2** with a test duration as specified in **D-2.1** shall meet the Minimum lumen maintenance value according to Table 9 for respective Maximum Life Claim.'