

BUREAU OF INDIAN STANDARDS**Minutes**

Name of the Committee	No. of Meeting	Day	Date	Time	Venue
Lamps and Related Equipment Sectional Committee, ETD 23	37 th	Friday	8 th November 2024	10:30 h	Hybrid Meeting (Lal C Verma Hall, Manak Bhawan, New Delhi, India)

CHAIRPERSON: Dr. Ravindra Kumar Sinha**MEMBER SECRETARY:** Ms. Neha Agarwal**Members Present:**

Sl.	Organization	Members	Email	Attended by
1	Gautam Buddha University, Greater Noida	Dr. Ravindra Kumar Sinha (<i>Chairperson</i>)	dr_rk_sinha@yahoo.com	Physical
2	Bureau of Indian Standard, New Delhi	Shri Asit Kumar Maharana (HETD) Smt. Neha Agarwal (<i>Member Secretary</i>)	eetd@bis.gov.in	Physical
3	Bajaj Electricals Limited, Mumbai	Mr. Razi Khan	razi.khan@bajajelectricals.com	Virtual
4	Binay Opto Electronics Private Limited, Kolkata	Shri Bhanu Pratap Singh (Representative)	bhanu.delhi@binayled.com	Virtual
5	Binay Opto Electronics Private Limited, Kolkata	Shri Vineet Rohatgi	info@binayled.com	Virtual
6	Bureau of Energy Efficiency, New Delhi	Smt. Pravatanalini Samal	psamal@beeindia.gov.in	Virtual
7	Central Electricity Authority, New Delhi	Shri R.K. Tiwari (Representative)	rktiwari.cea@gov.in	Virtual
8	Central Power Research Institute, Bengaluru	Shri N. Rajkumar	rajkumar@cpri.in	Virtual
9	Central Power Research Institute, Bengaluru	Shri R Sudhir Kumar	sudhir@cpri.in	Virtual
10	Central Public Works Department, New Delhi	Shri Jagmohan (Representative)	jagmohansadana@gmail.com	Virtual
11	Consumer Association, Palakkad	Shri Ad. P.A Surendran	surendranpdca1@gmail.com	Virtual

12	Crompton Greaves, Mumbai	Ms Uma lanka	uma.lanka@crompton.co.in	Virtual
13	CSIR - National Physical Laboratory, New Delhi	Dr. Parag Sharma	sharmap2@nplindia.org	Virtual
14	CSIR - National Physical Laboratory, New Delhi	Shri V. K. Jaiswal	jaiswalvk@nplindia.org	Virtual
15	Delhi Metro Rail Corporation Limited, Delhi	Md Pervez Alam Khan	pervez1093@dmrc.org	Virtual
16	Development Commissioner Micro-Small and Medium Enterprises	Shri Datta A. Potdukhe	datta.potdukhe@dcmsme.gov.in	Virtual
17	Development Commissioner Micro-Small and Medium Enterprises	Shri Manoj Khunekar	manoj.khunekar@dcmsme.gov.in	Virtual
18	Electrical Research and Development Association, Vadodara	Shri Nitin Patel	nitin.patel@erda.org	Virtual
19	Halonix Technologies Private Limited, Noida	Shri Rajeev Chhabra	chandra.kishore@halonix.co.in	Virtual
20	Havells India Limited, Noida	Shri Soumo Ghosal	soumo.ghosal@havells.com	Virtual
21	IN PERSONAL CAPACITY	Smt. Bhavna Kasturia	bhavnakast@gmail.com	Virtual
22	Intertek India Private Limited, New Delhi	Shri Hari Om	hari.om@intertek.com	Virtual
23	Jadhavpur University, Kolkata	Dr Saswati Mazumdar	saswati.mazumdar@gmail.com	Virtual
24	Ledvance India Private Limited, Gurugram	Shri Dharendra Agrahari	d.agrahari@ledvance.com	Virtual
25	Ministry of Electronics and Information Technology, New Delhi	Shri Bharat Kumar Yadav	b.yadav@meity.gov.in	Virtual
26	NTPC Limited, New Delhi	Shri Allupati Balaji	abalaji@ntpc.co.in	Virtual
27	NTPC Limited, New Delhi	Shri Sameer Garg	sameergarg@ntpc.co.in	Virtual
28	Signify Innovations India Limited, Gurugram	Shri Murli Toshniwal	murli.toshniwal@signify.com	Virtual
29	Signify Innovations India Limited, Gurugram	Shri Nitish Poonia	nitish.poonia@signify.com	Virtual
30	Surya Roshni Limited, Delhi	Shri Amit Tyagi	amit.tyagi@surya.in	Virtual
31	Surya Roshni Limited,	Shri Tapan Kumar	tapan@surya.in	Virtual

	Delhi	Bandyopadhyay		
32	The Brihanmumbai Electricity Supply and Transport, Mumbai	Shri M.M. Shaikh	devigsouth@bestundertaking.com	Virtual
33	UL India Private Limited, Bengaluru	Shri Anand Verma (Representative)	anand.verma@ul.com	Virtual
34	UL India Private Limited, Bengaluru	Shri Gautam Brahmhatt	gautam.brahmbhatt@ul.com	Virtual
35	UL India Private Limited, Bengaluru	Ms. Gurpreet Kaur (Representative)	gurpreet.kaur@ul.com	Virtual
36	UL India Private Limited, Bengaluru	Shri Satish Kumar	satish.kumar@ul.com	Virtual
37	Voluntary Organisation in Interest of Consumer Education (VOICE), New Delhi	Shri Harbans Wadhwa	hswadhwa@gmail.com	Virtual
38	Jadhavpur University, Kolkata	Dr.Suddhasatwa Chakraborty (Representative)	suddhasatwachakraborty@gmail.com	Virtual
39	Halonix Technologies Private Limited, Noida	Shri Mukesh Chaturvedi	mukesh.chaturvedi@halonix.co.in	Physical
40	Electric Lamp and Component Manufacturers Association of India, New Delhi	Shri Amal Sengupta	amalsengupta@elcomaindia.com	Physical
41	Electric Lamp and Component Manufacturers Association of India, New Delhi	Shri Santosh Agnihotri	santosh.agnihotri@orientelectic.com	Physical
42	Havells India Limited, Noida	Smt. Sudeshna Mukhopadhyay	sudeshna.mukhopadhyay@havells.com	Physical
43	In Personal Capacity	Dr Ranjana Mehrotra (Invitee)	drranjana.mehrotra@gmail.com	Physical

Item 0 GENERAL

0.1 WELCOME AND OPENING REMARKS BY THE CHAIRPERSON

Dr. Ravindra Kumar Sinha, Chairperson, welcomed all members attending the meeting, both in person and virtually. He expressed his gratitude to the Bureau of Indian Standards (BIS) for entrusting him with the responsibility of chairing the ETD 23 meeting and wished everyone productive discussions on all agenda items.

Ms. Neha Agarwal, Member Secretary, extended a warm welcome to all members present.

The committee formally acknowledged and appreciated the contributions of Dr. Ranjana Mehrotra, former Chairperson of ETD 23, for her leadership and dedication to the work of the committee.

The meeting commenced with brief introductions of all members in attendance.

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 In view of no comments received, the committee confirmed the minutes of the last meeting (36th meeting) of Lamps and Related Equipment Sectional Committee, ETD 23 held on 19-04- 2024.

Item 2 SCOPE AND COMPOSITION OF LAMPS AND RELATED EQUIPMENTS SECTIONAL COMMITTEE, ETD 23

The committee reviewed the composition of the Sectional Committee ETD 23 and decided to seek fresh nominations from Airports Authority of India, New Delhi. Dr. Ravindra Kumar Sinha kindly agreed to provide details of concern person.

It was decided to coopt Dr. Ranjana Mehrotra, the former chairperson as member of ETD 23 in Personal Capacity.

In view of absence in last two consecutive meetings of ETD 23, it was decided to remove the following organizations:

1. MLS India Private Limited, New Delhi
2. The Energy and Resources Institute, New Delhi
3. International Centre of Automotive Technology, Manesar

Item 3 ACTION ARISING OUT OF PREVIOUS MEETING

SI No.	Subject	Decision of the last meeting	Action/Remarks	Decision taken during the meeting
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1.	Revision of IS 15885 (PART 1): 2011 Safety of Lamp Control gear Part 1 General Requirements	The Committee requested ELCOMA to review the Standard. ELCOMA agreed to the request. BIS, to provide a word copy of the documents to ELCOMA for assistance	The word copy of IS 15885 (Part 1) was shared with ELCOMA. The revised draft is awaited from ELCOMA.	The committee approved the adoption of IEC 61347-1: 2015 as an Indian Standard. The IEC document will be shared with ELCOMA for review, with a request to provide any country-specific modification suggestions within 15 days.
2.	IS 2418 (Part 3): 1977 Tubular Fluorescent Lamps for General Lighting Service - Part 3 Dimensions of G-5 and G-13 Bi-Pin Caps	The committee formed a panel with following member to review and revise the Standard: a) Shri P K Mukherjee – Chairperson b) Members from ELCOMA. It was decided to take updates from Shri P K Mukherjee.	No inputs received from Shri P. K. Mukherjee.	The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete. Therefore, it was decided to archive the standard.
3.	IS 16102 (Part 1): 2012 Self – Ballasted LED Lamps for General Lighting Services Part 1 Safety Requirements	The draft revision document is under process. The panel is working on the document	ETD 23/ P3 meeting held twice, 2 nd Panel Meeting on 30 th May 2024 and 3 rd Panel Meeting on 16 th July 2024 to discuss the revised draft of IS 16102 (Part 1) and IS 16102 (Part 2). Minutes of last two meetings are added in Annex 2 & Annex 3.	The committee Approved the wide circulation of document with changes as discussed during the meeting for one-month period of time. Please refer Annex 1 for discussion/decision on comments received.

4.	IS 16102 (Part 2): 2017 Self – Ballasted LED Lamps for General Lighting Services Part 2 Performance Requirements	Draft document of IS 16102 (Part 2) was circulated among panel members via email dated 14 February 2023	<p>The revised drafts ETD 23 Doc. (26232)/IS 16102-1 & ETD 23 Doc. (26233)/IS 16102-2 as finalized by panel was circulated as P Draft vide letter dated 25 July 2024 with last date of comments as 24th August 2024.</p> <p>The comments received are placed at Annex 4.</p>	<p>The committee Approved the wide circulation of document with changes as discussed during the meeting for one-month period of time.</p> <p>Please refer Annex 1 for discussion/decision on comments received.</p>
5.	IS 16103 (Part 1) : 2012 LED Modules for General Lighting Part 1 Safety Requirements	The draft revision document is under process. The panel is working on the document.	<p>The panel recommended to adopt latest IEC 62031: 2018 ‘LED Modules for General Lighting - Safety Specifications’.</p> <p>The committee may consider.</p>	<p>The committee decided to approved the adoption of IEC 62031: 2018 ‘LED Modules for General Lighting - Safety Specifications’ as Indian Standard.</p> <p>The document will be wide circulated for seeking comments for one-month period of time.</p>
6.	IS 16103 (Part 2): 2012 LED modules for general lighting Part 2 Performance requirements	The draft revision document is under process. The panel is working on the document	<p>The panel recommended to adopt latest IEC 62717: 2014 ‘LED Modules for General Lighting - Performance Requirements’.</p> <p>The committee may consider.</p>	<p>The committee decided to approved the adoption of IEC 62717: 2014 ‘LED Modules for General Lighting - Performance Requirements’. The document will be wide circulated for seeking comments for one-month period of time.</p>

7.	IS 16614 (Part 1) Double-Capped LED Linear Lamps Part 1 Safety Requirements	Draft document of IS 16614 (Part 1) was circulated among panel members via email dated 14 February 2023.	The draft amendment ETD 23 (26497)/Revise draft for IS 16614 (Part 1) was circulated as P Draft vide letter dated 03 September 2024 with last date of comments as 2 nd October 2024. No comments received.	The committee approved the draft for wide circulation for one-month period of time.
8.	IS 16614 (Part 2) Double-Capped LED Linear lamps Part 1 Performance Requirements	-	The panel recommended to issue an amendment to IS 16614 (Part 2), to add an annexure on 'Use of IS 16105 for lumen maintenance and maintained chromaticity coordinates data'. The draft amendment ETD 23 (26420) to IS 16614 (Part 2) was circulated as P Draft vide letter dated 27 August 2024 with last date of comments as 26 th September 2024. The comments received are placed at Annex 5.	The committee Approved the wide circulation of document with changes as discussed during the meeting for one-month period of time. Please refer Annex 2 for discussion/decision on comments received.

Item 4 OVERVIEW OF THE ACTIVITIES OF THE COMMITTEE

The committee noted the information

Item 5 REVIEW/REAFFIRMATION OF INDIAN STANDARDS

5.1 The decisions of standards due for review / reaffirmation are as follows:

IS Number	Document Year	Title	Based on IEC	Latest IEC	Remarks/Recommendations	Decision Taken
IS 12897	2001	Filaments for general service lamps Guide (First Revision)				<p>The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete.</p> <p>Therefore, it was decided to archive the standard.</p>
IS 15111: Part 1	2002	Self-ballasted lamps for general lighting services: Part 1 safety requirements	IEC 60968 : 1988	IEC 60968 - 2015	<p>This edition includes the following significant technical changes with respect to the previous edition:</p> <ul style="list-style-type: none"> caps and prevention of cap misuse; a) interchangeability; b) mechanical and electrical strength; c) creepage distances and clearances; d) end of lamp life precaution; e) abnormal operation; f) test conditions for dimmable and three-way lamps; g) water contact related marking; h) verification, and assessment; 	<p>The committee has decided not to allocate resources, as this technology is expected to become obsolete within few years.</p> <p>Therefore, it was decided to archive the standard.</p>

					i) Information for luminaire design in the form of annexes.	
IS 15111: Part 2	2002	Self-ballasted lamps for general lighting services: Part 2 performance requirements	IEC 60969 : 1988	IEC 60969:2 016	<p>This edition includes the following significant technical changes with respect to the previous edition:</p> <p>a) title change;</p> <p>b) scope is now limited to compact fluorescent lamps, but expanded to cover all lamps of voltages greater than 50 V and all power ratings;</p> <p>c) introduction of requirements for lamp equivalency claims, switching withstand, starting time;</p> <p>d) low temperature, run up time, treatment of claims for different operating conditions;</p> <p>e) enhanced assessment and compliance criteria especially for lifetime;</p> <p>f) Introduction in-rush test conditions and displacement factor.</p>	<p>The committee has decided not to allocate resources, as this technology is expected to become obsolete within few years.</p> <p>Therefore, it was decided to archive the standard.</p>

IS 15687 : Part 1	2006	Single Capped fluorescent lamps: Part 1 safety requirements	IEC 61199 :1999	IEC 61199: 2011	Main technical changes are the introduction of requirements for high frequency operation, a new temperature measurement position and few new cap- holder fits.	The committee has decided not to allocate resources, as this technology is expected to become obsolete within few years. Therefore, it was decided to archive the standard.
IS 15885 : PART 2 : SEC 1	2011	Safety of lamp control gear: Part 2 particular requirements: Sec 1 starting devices (Other Than Glow Starters)	IEC 61347-2-1 :2000	IEC 61347-2-1:2024	This edition includes the following significant technical changes with respect to the previous edition: a) update of normative references, introducing dated references where appropriate; b) clarification of sample item numbers; c) alignment of clause numbers with those of IEC 61347-1; Renumbering of Clause 15 and Clause 16.	The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete. Therefore, it was decided to archive the standard.
IS 15885: PART 2 : SEC 3	2011	Safety of lamp control gear: Part 2 particular requirements: Sec 3 ac supplied electronic ballasts for fluorescent lamps	IEC 61347-2-3: 2004	IEC 61347-2-3: 2011	This edition includes the following significant technical changes with respect to the previous edition: a) introduction of dated references where appropriate; b) clarification of sample item numbers;	The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete. Therefore, it was decided to archive the standard.

					c) alignment clause numbers with those of IEC 61347-1.	
IS 15885: PART 2 : SEC 8	2011	Safety of lamp control gear: Part 2 particular requirements: Sec 8 ballasts for fluorescent lamps	IEC 61347-2-8 : 2000	IEC 61347-2-8:2024	This edition includes the following significant technical changes with respect to the previous edition: a) introduction of dated references where appropriate; alignment of clause numbers with those of IEC 61347-1.	The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete. Therefore, it was decided to archive the standard.
IS 15885: PART 2 : SEC 9	2011	Safety of lamp control gear: Part 2 particular requirements: Sec 9 ballasts for discharge lamps (Excluding Fluorescent Lamps)	IEC 61347-2-9 date miss	IEC 61347-2-9:2012	This edition includes the following significant technical changes with respect to the previous edition: a) the addition of a new Clause 14; b) the word ballast is changed to electromagnetic control gear	The committee deliberated on the declining usage of these lamps and concluded that they may soon become obsolete. Therefore, it was decided to archive the standard.
IS 15885 : Part 2 : Sec13	2012	Safety of lamp control gear: Part 2 particular requirements: Sec 13 d.c. or a.c. supplied electronic control gear for led modules	IEC 61347-2-13 date miss	IEC 61347-2-13:2024	This edition includes the following significant technical changes with respect to the previous edition: a) alignment with respect to the fourth edition of IEC 61347-1: - introduction of dated references to the fourth edition of IEC	The committee approved the revision of IS 15885 (Part 2/Sec 13): 2012 in line with latest IEC. The IEC document will be shared with committee members for review, with a request to provide any country-specific modification suggestions within 15

				<p>61347-1 as appropriate; - deletion of the clauses and subclauses which are either no longer relevant or now covered in IEC 61347-1;</p> <p>b) update of normative references, introducing dated references where appropriate;</p> <p>c) scope extension to 1 500 V for direct current;</p> <p>d) scope clarification;</p> <p>e) deletion of unused definitions; revision of information and marking requirements;</p> <p>g) new marking requirement electronic controlgear for LED light sources ;</p> <p>h) new requirements for electronic controlgear for LED light sources with constant light output function or programmable current (additions to Clause 3, Clause 6, Clause 16 and Clause 18);</p> <p>i) modification of requirements for the determination of the output working</p>	<p>days.</p> <p>Shri Amal sen Gupta, ELCOMA kindly agreed to provide the national annexure for further necessary action within 30 days.</p>
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					voltage (new Clause 17); new requirements for the determination of the rated output characteristics (Clause 18).	
IS 16101	2012	General lighting - LEDs and led modules - Terms and definitions	IEC/TS 62504 :2011	IEC 62504:2014	The significant changes with respect to IEC TS 62504 are as follows: a) Terms from the International Electrotechnical Vocabulary that have not been modified are deleted; b) Alignment with the CIE has been done; an introduction has been added.	The committee decided to reaffirm the standard.
IS 16105	2012	Method of measurement of lumen maintenance of solid state Light (LED) sources	IES-LM-80-2008	IES LM 80: 2021		The committee decided to reaffirm the standard
IS 16106	2012	Method of Electrical and photometric measurements of solid state lighting (LED) products	IES-LM-79-2008	IES-LM-2019		The committee decided to reaffirm the standard

IS 15974	2013	Auxiliaries for Lamps starting Devices (Other Than Glow Starters-Performance Requirements)	IEC 60927 : 2004	IEC 60927 : 2007	-	The committee decided to reaffirm the standard
IS 16661/ IEC TR 62778	2019	Application of IS 16108/ IEC 62471 for the assessment of blue hazard to light sources and luminaires	IEC TR 62778: 2014	Withdrawn	-	The committee decided to reaffirm the standard

5.1 Review of Standards - Taking up Revision of pre-2000 standards

The committee review the status of pre- 2000 and decisions are placed in Annex 3.

Item 6 NEW SUBJECTS AND FUTURE PROGRAMME OF WORK

6.1 The committee noted the information.

Item 7 INTERNATIONAL ACTIVITIES

7.1 The committee noted the information as given in agenda.

Members were requested to review the structure of IEC TC 34 and its subcommittees and to express their interest in joining any of the working groups. A list of the working groups under IEC TC 34 and its subcommittees will be shared with all members for their reference.

Additionally, members were invited to express their interest in being nominated as designated experts for reviewing high- and medium-priority IEC documents circulated for balloting. This will facilitate the collation of Indian viewpoints for submission to the IEC, enhancing India's international presence while addressing country-specific concerns during the drafting stage of the documents.

Item 8 DATE AND PLACE OF NEXT MEETING

The committee noted the annual calendar of ETD 23. It was decided to schedule the next meeting in February 2025 tentatively.

Item 9 ANY OTHER BUSINESS

Shri Asit Maharana, Head (ETD) appraised the member regarding the Manak Pravardhak program for engagement of Young Professionals in BIS's standardization work.

The meeting ended with vote of thanks to chair and members present.

ANNEX 1

Comments Received on IS 16102 PART 1 (26232) & IS 16102 PART 2 (26233) and decision taken

IS 16102 PART 1 (26232)

**Title - Self-Ballasted Led Lamps for General Lighting Services Part 1 Safety Requirements
(First Revision)**

Sl. No	Basic Details	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Comments/Suggestions along with Justification for the Proposed Change	Proposed Change/Modified Wordings	Decision taken during the meeting
1.	Name: Shri H. Wadhwa Organization: Consumer Voice			I agree with the Draft		-----
2.	Name: Shri Gautam Brahmhatt Organization: UL India Private Limited	3.9	-	Clause No. 3.9 is missing	Add clause no. 3.9 as “ type test sample - sample consisting of one or more similar units submitted by the manufacturer or responsible vendor for the purpose of the type test.”	Agreed
		6.2	Table 2	“a)” is not defined	Add explanation for “a)” as “ under consideration ” in table	Agreed
		8.2	Paragraph 1	SI unit system need to follow	Eg. 91% should be written as 91 %, 25°C should be written as 25 °C etc.	Agreed
		13.1		Change Clause Name	Mention “ General Requirements ” in place of “ General ”.	Agreed
		13.2	Paragraph 13	Word “clause” Missing in line	Mention “ Clause 7 ” in place of “ 7 ”.	Agreed
		16		Word “clause” Missing in line	Mention “ Clause 10 ” in place of “ 10 ”, “ Clause ”	Agreed

					17” in place of “17” and “ Clause 13 ” in place of “13”	
		20.1	Table 5/ Column (3)	There is no requirement of “*” mark	Remove “*” mark from word “ Test ”	Agreed
		20.1	Table 5/ Column (3)	Explanation of “#” mark required	Explain the mark “#” as “ under consideration ”	Agreed
3	Name: Shri Hari Om Organization: Intratek	8.2	2	It is not safe to conduct Insulation Resistance test inside the Humidity chamber because usually the chambers are metallic and humidity inside the chamber and it can be hazardous for operator.	Insulation resistance shall be measured in the humidity cabinet immediately with a d.c. voltage of approximately 500 V, 1 min after application of the voltage.	The committee decided to write a mail to IEC about the reasoning of Insulation Resistance test & Electric Strength inside the humidity chamber. Meanwhile, it was decided to keep the requirement as given already.
		8.3	3	It is not safe to conduct Electric Strength test inside the Humidity chamber because usually the chambers are metallic and humidity inside the chamber and it can be hazardous for operator.	Measurements shall be carried out in the humidity cabinet immediately	
		17.2	1	Due to lack of the facilities, testing as per IEC TR 62778 should also allowed	The blue light hazard shall be assessed according to IS 16661/ IEC TR 62778	The members noted that IEC TR 62778 has been adopted as IS 16661. Consequently, it was decided to

						include a note under Clause 17.2 to clarify that lighting products already assessed for blue light hazard risk group classification in accordance with IEC TR 62778 do not need to undergo duplicate testing as per IS 16661. Shri Nitish Poonia kindly agreed to provide appropriate wording to introduce the note.
		20.1	Table 5	Meaning of # mark not defined in the standard	Notes shall be added for explanation	Agreed
4	Name: Shri Nitish Poonia Organization: Signify Innovations India Limited		Marking	“Instructions regarding battery charging and the ambient temperature range for the charging system during charging shall be provided” can be removed as the lamps are supposed to be operated in normal operating conditions and in the same they will get charged and discharged. This is more suitable to luminaires.		Agreed
			Short Circuit Protection	Charging terminals of the battery-operated Lamp that are simultaneously accessible with the test probe 13 of IS 1401 are short circuited to produce the most unfavorable result- This test to be done after BMS IC (Charging /discharging / over voltage protection /short circuit protection) circuit which is mounted on driver PCB. Direct short-		

				circuiting of the battery is dangerous and not recommended even in safety testing	
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IS 16102 PART 2 (26233)

Title - Self-Ballasted LED Lamps for General Lighting Services Part 2 Performance Requirements Second Revision

Sl. No	Basic Details	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Comments/Suggestions along with Justification for the Proposed Change	Proposed Change/Modified Wordings	Decision taken during the meeting
1.	Name: Shri H. Wadhwa Organization: Consumer Voice			I agree with the Draft	-----	
2.	Name: Shri Gautam Brahmhatt Organization: UL India Private Limited	3.21		Change in heading	TLED should be denoted as T _{LED}	Agreed
		ANNE X B		Correction in photometric explanation example	1. Instruction “ (Explanation of the number from left to right) ” need to mention above the photometric code table 2. Explanation of numbers are not aligned. E.g. Arrows of number 8 and number 30 are not indicating the	Agreed

					correct explanation. Arrows of number 3, 5 and 9 are shifted towards right and correctly aligned	
3. 4	Name: Shri Nitish Poonia Organization: Signify Innovations India Limited			Clause 12 ‘Dimming’ – “The dimming requirements of LED lamps are under consideration.” Shall be modified as “Performance testing of dimmable (step/continuous dimming)/color changing lamps is under consideration”		Agreed
				Table 6 conflicts with BEE star labelling program. It shall be aligned with BEE star labelling program, or we can remove the table and only state the threshold efficacy (90lm/W) as per BEE 1star label requirement so that no lamp is allowed to be manufactured and sold in market below that threshold limit		The committee reviewed the comment and agreed to delete the table to avoid any conflict with the BEE star rating system.

ANNEX 2
IS 16614 PART 2 (26420)

Title- Double-Capped LED Linear Lamps Part 2 Performance Specification

Sl. No	Basic Details	Comments/Suggestion along with Justification for the Proposed Change	Proposed Change/ Modified Wordings	Decision taken during the meeting
1.	Name: Shri Hari Om Organization : Intratek	No comments from our side in this document.		
2.	Name: Shri Nitish Poonia Organization : Signify Innovations India Limited	One comment regarding registration requirements	we propose that organizations be allowed to submit ANSI LM-80-2008 test reports to demonstrate IS16105 (which is based on ANSI LM-80-2008 only) compliant test report. This aligns with our previous discussions during the sectional committee meeting on IS16102- 1/2, where we agreed that IEC TR 62778 test reports, if available, can suffice for demonstrating compliance with IS16661. This approach aims to avoid duplication of testing efforts	The members noted that IS 16105 is based on IES-LM-80-2008 'IES approved method for measuring lumen maintenance of LED light sources'. It was therefore decided to add a note below Clause 7.1 regarding the acceptance of test reports in accordance with LM 80. Shri Nitish Poonia kindly agreed to provide appropriate wording to introduce the note.

ANNEX 3

Pre-2000 Standards- Status

Sl. No	IS No.	Title	Status/Remarks	Decision Taken
1.	IS 2418 (Part 3) : 1977 IEC 61-1	Specification for tubular fluorescent lamps for general lighting service: Part3 dimensions of g - 5 and g - 13 bi - Pincaps (First Revision)	Archived	-----
2.	IS 8685 : 1977	Specification for aircraft lamps	The committee decided to send a reminder and request Shri Vidya Dutt, M/s Vardhman Airport Lighting to prepare draft revision document and inform the tentative timeframe for submission of the draft document.	Dr. Ravindra Kumar Sinha kindly agreed to provide concern person details for seeking comments.
3.	IS 8901 : 1978	Specification for lamps for aerodrome lighting fittings	The committee decided to send a reminder and request Shri Vidya Dutt, M/s Vardhman Airport Lighting to prepare draft revision document and inform the tentative timeframe for submission of the draft document.	
4.	IS 8913 : 1978 IEC 360	Method of measurement of lamp captemperature rise	Under Revision	The committee approved the draft document for ETD/23 (25617) for WC for one month period of time.
5.	IS 9589 : 1980	Specification for electric lamps for railway signalling	The committee decided to request DDG (Standardization) to write a strong letter to Chief Engg of RDSO for their comments on the usage of this standard.	It was informed RDSO is an active member in ETD 47 "Railway Electric Traction Equipment". Therefore, it was decided to forward IS 9589 to ETD 47 for seeking comments.

6.	IS 11472 (Part 1) : 1985	Specification for artificial daylight for the assessment of colour: Part 1 illuminant for colour matching and colour appraisal	Dr Saswati Mazumdar informed that she will inform the status after consulting the concerned professors. The Committee decided to send a reminder email.	Shri Sudhasatwa Chakraborty is requested to provide necessary inputs for the revision of IS 11472 series.
7.	IS 11472 (Part 2) : 1985	Specification for artificial daylight for the assessment of colour: Part 2 viewing conditions for graphic arts industry		
8.	IS 11980 : 1987	Specification for lamp (Bulb) for cycledynamo	Withdrawn	-----
9.	IS 897: 1982	Specification for tungsten filament electric lamps for railway rolling stock (Second Revision)	The committee decided to request DDG (Standardization) to write a strong letter to Chief Engg. of RDSO for their comments on the usage of this standard.	It was informed RDSO is an active member in ETD 47 "Railway Electric Traction Equipment". Therefore, it was decided to forward IS 9589 to ETD 47 for seeking comments.
10.	IS 12290 : 1987	Specification for isolating transformers for airport lighting systems	The committee decided to send a reminder and request Shri Vidya Dutt, M/s Vardhman Airport Lighting to prepare draft revision document and inform the tentative timeframe for submission of the draft document.	Dr. Ravindra Kumar Sinha kindly agreed to provide concern person details for seeking comments.
11.	IS 12291 : 1987	Specification for constant current regulators for airport lighting systems	The committee decided to send a reminder and request Shri Vidya Dutt, M/s Vardhman Airport Lighting to prepare draft revision document and inform the tentative timeframe for submission of the draft document.	

12.	IS 2418 (Part 4) : 1977 IEC-3	Specification for tubular fluorescent lamps for general lighting service: Part 4 go and no - Go gauges for g - 5 and g - 13 bi-pin caps (First Revision)	Archived	-----
13.	IS 9206: 1979 IEC 60061-1	Dimensions of caps for tungsten filament general service electric lamps	To be reviewed	The committee decided to revise the standard by incorporating all the amendments and making the necessary editorial changes.
14.	IS 13021(Part 2): 1991	AC supplied electronic ballasts for tubular fluorescent lamps- Specification: Part 2 performance requirements	The committee finalized the revised draft document for wide circulation.	The committee reviewed the standard and decided to archive IS 13021 (Part 2) in view of obsolete technology.

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