AGENDA

MEETING	NO. OF MEETING	DAY & DATE	TIME	VENUE
Illumination Engineering and Luminaires Sectional Committee, ETD 49	**11th**	**8th October 2024**	**1030 Hrs**	**Virtual**

CHAIRPERSON: Prof. Saswati Mazumdar **MEMBER SECRETARY**: Ms Neha Agarwal

Item 0 WELCOME ADDRESS BY THE CHAIRPERSON

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The minutes of the 10th meeting of Illumination Engineering and Luminaires Sectional Committee, ETD 49 held on 18th April 2024 were circulated to committee members.

No Comments received.

The Committee may formally confirm these minutes.

1.4 Actions Arising Out of Previous Meetings

Sl. No.	Subject	Decision of the last meeting	Action taken
1.	Revision of IS 7785 Elevated type aerodrome lighting fittings	The committee deliberated the suggestion received from Vardhmar Airport regarding addition of other like surge protection, THD % etc which are missing in IEC TS 61827. The members opined that specified values for THD and surge protection may be specified into the standard. It was decided to take inputs from Airport Authority of India for further discussion on the subject.	The mail was sent to Airport Authority of India for seeking inputs. Reply is awaited.

2.	Revision of IS 1944 (Part 1 & 2) 'Code of Practice for Lighting of Public Thoroughfares'	The modified document was circulated amongst panel members vide email dated 15 April 2024 for seeking comments. Further, the committee recommended to divide the draft in two sections consisting separate section for tunnel lighting. It was decided to circulate the draft under wide circulation.	ETD 49_P2 meetings were held twice on 03/07/2024 and 30/08/2024 for reviewing and modifying the revised draft. Minutes of the meeting are placed at Annex 1.
3.	Specification for Road Traffic Signals	The committee discussed the comments and decided the following: a) To modify the scope as 'working voltages d.c. supplies up to 250 V or a.c. supplies up to 1 000 V at 50 Hz' b) Specific lampcaps are not required c) Cl 4.14.3- Specify '10kV±3% for 50μs±20%' with note as 'applicable for a.c. luminaires only'. With the above mentioned changes, the committee decided to send the draft for printing.	The document is under printing stage.
4.	Revision of National Lighting Code, SP 72	The committee noted the information. Member Secretary urged members to review the drafts and submit the comments.	All revised parts of NLC haven been circulated as P Draft for seeking comments. Comments received are placed at Annexure 2. Please refer Item 3 also.
5.	Revision of IS 10322 series	Shri Nitish Poonia, Signify suggested to also include reference of IS 694 for PVC cables. Further, it was decided to circulate IEC 60598-1 along with National Annexure with changes as submitted by ELCOMA as P-draft amongst committee members.	ETD/49/25743 (revision of IS 10322 (Part 1): 2014) was circulated as P-Draft vide letter dated 28th May 2024 with last date of comments as 27 June 2024. Comments received from DCMSME and VOICE in agreement of the draft.

			The committee may consider.
6.	Revision of IS 3646 (Part 1) : 1992 Code of practice for Interior illumination Part 1 General Requirements and Recommendations for Working Interiors	The committee approved the draft for wide circulation.	ETD 49 (22373) WC (revision of IS 3646-1) was wide circulated vide BISDG letter dated 03/07/2024 with last date of comments as 02 August 2024. Comments received from Intertek in agreement of the draft. Comments received from Shri Nitish Poonia (Editorial- Table 54. It shall be '1000' in place of '100'.) The committee may consider.
7.	New Work Item Proposals (NWIPs)	**1. Indian Standards on 'Search Light'- by Shri Narender Reddy Beesu** The committee deliberated on the new subject received on search light. Member secretary also informed regarding existing Indian Standard on Flash light i.e. IS 2083: 1991. It was decided to circulate the draft document as received from the proposer along with the copy of IS 2083 amongst members for further review. 2. **Luminaires for Swimming Pools and Similar Applications IEC 60598-2-18:2022 'Luminaires - Part 2-18: Particular requirements - Luminaires for swimming pools and similar applications'** The committee agreed to take up the subject for formulation of Indian Standard. It was decided to circulate the concerned IEC as P-draft amongst committee members for seeking feedback.	1. Mail was sent to all members in this regard. Comments received from Shri P K Mukherjee are placed at Annexure 3. 2. ETD 49 Doc. (25619) was circulated as P Draft amongst committee members vide letter dated 14 May 2024 with last date of comments as 13 June 2024. No comments received.

Item 2 REVIEW OF COMPOSITION OF SECTIONAL COMMITTEE, ETD 49

2.1 The composition of the Sectional Committee ETD 49 is given in **ANNEX 4**.

The Committee may note.

2.2 Status of participation of members in the previous two meetings inviting suggestions for improvement

Standardization is a collaborative effort and its success largely depends on the participation and contribution of the members of the concerned technical committees. Further, for standards to be relevant it is also important that viewpoints of all interested stakeholders are brought on board and duly considered while building consensus on the standard being developed. Hence, participation in the technical committee meetings is extremely important in order to ensure that the views of all stakeholder interests are given due consideration by the committee in the formulation of Indian Standards.

The status of participation of committee members in the previous two meetings is given in **ANNEX 4.**

The committee members are requested to provide suggestions for improvement.

Item 3 APPROVAL OF DRFAT INDIAN STANDARDS FOR FINALIZATION/WC

SI. No.	Doc No	TITLE
1	ETD 49 (25378) Revision of: SP 72:2010	National Lighting Code of India Part 3 Electric Light Sources and their Accessories Section 1 Solid State Lighting LED Technology Section 2 LED Driver and Controls First Revision of SP 72 Part 3
2	ETD 49 (25578) Revision of: SP 72:2010	National Lighting Code of India Part 5 Interior Illumination Section 1 to Section 9 First Revision of SP 72 Part 5Section 1 to Section 9
3	ETD 49 (25619)	Luminaires for swimming pools and similar applications
4	ETD 49 (25743) Revision of: IS 10322:2014	Luminaires Part 1 General Requirements and Tests Third Revision
5	ETD 49 (25787) Revision of: SP 72:2010	National Lighting Code of India Part 7 Energy-Effective Lighting Systems Section 1 and Section 2 First Revision of SP 72 Part 7 Section 1 and Section 2
6	ETD 49 (25814) Revision of: SP 72:2010	National Lighting Code of India Part 10 Installation Aspects for Lighting Section 1 Mechanical Section 2 Electrical Section 3 Coordination with Related Disciplines Section 4 Installation Guidelines for LED System Section 5 Lighting Maintenance First Revision of SP 72 Part 10Section 1- Section 5

SI. No.	Doc No	TITLE
7	ETD 49 (26127) Revision of: SP 72:2010	National Lighting Code of India PART 17 SCIENCE OF ULTRA VIOLET AND ULTRA VIOLET GERMICIDAL IRRADIATION APPLICATIONS FOR HOSPITALS First Revision of SP 72 Part 17
8	ETD 49 (26128) Revision of: SP 72:2010	National Lighting Code of India Part 6 Outdoor Lighting Section 1 to Section 12First Revision of SP 72 Part 6Section 1 to Section 12
9	ETD 49 (26166) Revision of: SP 72:2010	National Lighting Code of India Part 11 Human Centric Lighting First Revision of SP 72 Part 11
10	ETD 49 (26189) Revision of: SP 72:2010	National Lighting Code of India Part 15 Horticulture Lighting First Revision of SP 72 Part 15
11	ETD 49 (26211) Revision of: SP 72:2010	National Lighting Code of India Part 14 Adverse Effects of Lighting First Revision of SP 72 Part 14
12	ETD 49 (26319) Revision of: SP 72:2010	National Lighting Code of India Part 8 Daylighting for Buildings First Revision of SP 72 Part 8
13	ETD 49 (26435) Revision of: SP 72:2010	National Lighting Code of India Part 9 Emergency Lighting First Revision of SP 72 Part 9
14	ETD 49 (26462) Revision of: SP 72:2010	National Lighting Code of India Part 12 Indoor Connected IoT Based Lighting First Revision of SP 72 Part 12
15	ETD 49 (26468) Revision of: SP 72:2010	National Lighting Code of India Part 13 Outdoor Digital Connected IOT Based Road Lighting First Revision of SP 72 Part 13
16	ETD 49 (26629) Revision of: SP 72:2010	National Lighting Code of India Part 4 Luminaires First Revision of SP 72 Part 4

Draft Standards Completed WC Stage

Si. No.	Doc No	Title
1	ETD 49 (22373)	Code Of Practice For Interior Illumination Part 1 General Requirements And Recommendations For Working Interiors First Revision
2	ETD 49 (23883)	Electrical Installations For Lighting And Beaconing Of Aerodromes Characteristics Of Inset And Elevated Luminaires Used On Aerodromes And Heliports

Si. No.	Doc No	Title
3	ETD 49 (25066) Revision Of: SP 72:2010	National Lighting Code Of India Part 1 Lighting Vocabulary
4	ETD 49 (25108) Revision Of: SP 72:2010	National Lighting Code Of India Part 2 Physics Of Light First Revision Of SP 72 Part 2

Item 4 PRESENT POSITION OF WORK

4.1 Programme of work of ETD 49 is given in **ANNEX 5.**

The committee may consider.

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

BIS has identified a list of standards which are very old (pre year 2000). Status of such Indian Standards under the purview of ETD 49 Sectional Committee on given at **ANNEX 6 as** per decision taken during the last meeting.

The committee may consider.

Item 5 REVIEW/REAFFIRMATION OF PUBLISHED INDIAN STANDARDS

As per BIS procedure, Indian Standards are to be reviewed which are 5 years old and are to be reaffirmed. As on date, following standards are due for reaffirmation:

S.NO	ETD	Action
1.	IS 10322 (Part 5/Sec 5): 2013 Luminaires: Part 5 particular requirements: Sec 5 floodlights (First Revision)	Proposed to be reaffirmed as base IEC is not revised
2.	IS 10322 (Part 5/Sec 6) : 2013 Luminaires: Part 5 particular requirements: Sec 6 handlamps	Proposed to be reaffirmed as base IEC is not revised
3.	IS 10322 (Part 5/Sec 8) : 2013 Luminaires: Part 5 particular requirements: Sec 8 emergency lighting	Proposed to be reaffirmed as base IEC is not revised

The committee may consider.

Item 6 NEW SUBJECTS AND FUTURE PROGRAMME OF WORK

6.1 As per BIS policy guidelines, before any subject is taken up for formulation of Indian Standard, the following issues are to be examined by BIS.

i) Whether the subject is financed by the proposer
ii) Salability of the standard
iii) Social needs with regard to safety, health and environment

Only after assessing the above aspects, it will be possible for BIS to consider/ take up any subject for formulation of Indian Standard.

The committee may note.

Item 7 INTERNATIONAL ELECTROTECHNICAL COMMISSION

7.1 program of Work

7.1.1 India is having **"P"** membership in IEC committees: IEC/SC 34 D.

All members are requested to kindly provide their comments on the IEC documents being circulated for comments. As 'P' member, we have obligation to cast ballot on each and every document received from the concerned IEC committee.

7.1.2 Designation of Indian Experts at IEC Projects:

- The Member Secretary, in consultation with the Chair of the SC and the HoD, and if felt necessary, with the entire SC, shall establish and indicate the Level of Interest in respect of each of the NWIPs or draft standards received from ISO/IEC in the IRD Portal.

- The next step will be to designate one or two members of the SC to represent BIS in respect of the standards of the Level H (High) and M(Medium). The designated experts will be the face and voice of BIS for that project at the ISO/IEC level.

- The designated expert shall have the responsibilities of sharing detailed comments on the Drafts/documents received from ISO/IEC, helping the SC in putting together the rationale for proposing NWIPs and firming up proposals for leadership positions and secretariats and briefing the SC on the deliberations at ISO/EC level.

Project Reference	Title	Level of Interest (Proposed)
PWI 34-8	LED light sources for horticultural lighting - Safety	**Medium**

PWI TR 34-12	Environmental aspects for lighting products and systems	**High**
IEC 61547 ED4	Equipment for general lighting purposes - EMC immunity requirements	**High**
IEC 62386-105 ED2	Digital addressable lighting interface - Part 105: Particular requirements for control gear and control devices - Firmware transfer	**High**
IEC 62386-225 ED1	Digital addressable lighting interface - Part 225: Particular requirements for control gear - Adaptive escape lighting (device type 24)	**High**
IEC 62386-351 ED1	Digital addressable lighting interface – Part 351: Particular requirements – Control devices – Luminaire-mounted control devices	**High**
IEC 63494-1 ED1	Lighting systems - Electro-mechanical interfaces - Part 1: Safety	**Low**
IEC 63533 ED1	Active airborne microorganism inactivation by Germicidal Ultraviolet (GUV) luminaires	**Medium**
IEC 63535 ED1	Germicidal UV luminaires - Radiation safety	**Medium**
IEC 63544 ED1	Horticultural luminaires incorporating LED sources - Performance	**Low**
IEC 63545 ED1	Horticultural luminaires - Safety	**Medium**
PWI TR 34A-1	Guidance for the design of LED retrofit light sources	**High**
IEC 62031 ED3	LED modules - Safety requirements	**High**
IEC 62868-2-4 ED1	Organic light emitting diode (OLED) light sources for general lighting - Safety - Part 2-4: Particular requirements - Rigid OLED tiles and panels	**Medium**
IEC 63553 ED1	Fully flexible Organic Light Emitting Diode (OLED) panels for general lighting - Performance requirements	**Low**
IEC 63554 ED1	LED lamps – Safety requirements	**High**
IEC 63555 ED1	LED Light sources – Performance requirements	**High**
IEC 60598 Series	Luminaires	**High**

Further, the list of Working group under IEC SC 34D are as follows:

Type	Label	Description	Scope
Editing Group	EG 3	Editing Committee	To editorially prepare drafts of SC 34D projects and to answer associated editorial questions.
Joint Working Groups	JWG 2	Emergency Lighting	The Joint Working Group (JWG) Emergency Lighting works on tasks assigned to it by SC34C and SC34D with respect to emergency lighting aspects of the standards for which these SC are responsible for. The JWG is established to draft proposals for new standards and maintain the published standards for luminaires and controlgear as detailed below. Reporting back to SC34C and SC34D, as relevant for these publications, the JWG is tasked to maintain consistency between all of these publications and investigate opportunities for future rationalisation of the publications. Liaison to SC34C WG COMEX and SC34D WG LUMEX is to be provided. Liaison to the TC34 groups responsible for data communication protocols (TC34 WG 11) and lighting systems (TC34 AG 4) is also within the scope of this JWG as far as emergency lighting subjects are concerned. The scope of the JWG also includes the development and maintenance of technical reports, PAS publications, technical specifications, etc. as allocated by SC 34C and/or SC 34D. Administrative leadership for the JWG is the responsibility of SC 34D. Note: Liaison SC 21A/WG 3 (see 34D/1474A/INF); Liaison TC 40/WG 40 (see 34D/1475/INF)
Working Group	WG 1	LUMEX	To draft proposals for new standards and maintain published standards for luminaires and specific associated accessories within the scope of SC 34D. Also within its work scope is the development and maintenance of technical reports, PAS publications, technical specifications, etc. as allocated by SC 34D. Note: In this respect WG 1 LUMEX also has the function of a MT. Please also see documents: 34D/1306A/RQ, 34D/1326/INF

7.1.2 Details of voting for IEC SC 34D are given in **ANNEX 7.**

7.1.3 Programme of Work and published IEC standards of the corresponding IEC/ SC 34 D are given at **ANNEX 8.**

The committee may consider identifying the IEC publications from the programme of work of IEC TC 34 and SC 34D that may be considered for harmonization.

The Committee may consider.

7.1.4 The measures to ensure effective participation by the Indian experts at IEC meetings

Item 8 DATE AND PLACE FOR THE NEXT MEETING

8.1 Annual Calendar of ETD 49

Committee	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ETD 49	19-04-2024	-	08-10-2024	16/01/2025

Item 9 ANY OTHER BUSINESS

ANNEX 1

ANNEX 1 MOM of 4th Panel Meeting of ETD 49

The panel discussed the comments received and decided to make the following changes:

1. In foreword-

a) Mention the details of sections in foreword itself

b) Add a separate annexure on 'Light Distribution Classification of Luminaires' and on 'BUG Rating of Luminaires. - To be provided by Ms Sudeshna Mukhopadhyay

c) Add the following 'For the environmental consideration the information regarding backlight, up light and glare is essential and hence it has been introduced in the standard'

2.Clause 2.3.2- Lighting System & Luminaire — Modify the definition as follows:
'The whole of the system comprising of the luminaire, which is a housing for light source (integrated or separate), comprising a body and any refractor, reflector, diffuser, lenses, or enclosure associated with the light source, controlgear, driver ballast etc.'

3. Clause 2.3.5: Delete 'of 20m or more'

4. **Clause 5:** Purpose of tunnel lighting as mentioned in clause 5 shall be shifted into Section 6 along with definitions related to tunnel lighting.

5. Additional Clause 6.3.4 to be added regarding concept of IES classification and BUG rating giving reference of annexure for more details.

6. **Table 2** 'Lighting Parameters of Category 'A' road'

a) Luminance level for class of road 'A1'- 2.5 Cd/m2

b) Shift 'urban collector street' from class of road A1 to class of road B1 in Table 3 and delete row 4.

7. Annexure II- Keep the CCT (corelated color temperature values in Kelvin) as 2000-6500 K for each class of road. Further, it was decided to modify the document by BIS and circulate amongst panel members again for 7 days for seeking further comments. The meeting ended with vote of thanks to convenor.

MOM of 5th Panel Meeting of ETD 49

The panel decided to make the following changes:

1. In foreword:

a) **Para 4-** Delete 'It was felt by the sectional committee'.

b) **Modify the para as follows:**

Road categories and associated areas such as, road categories defined in Indian Road Congress (IRC) standards, Pedestrian roads, Conflict areas, Truck/Bus Bays, Toll Plazas, Underpasses and Tunnels have been incorporated.
This comprehensive list is especially pertinent to State and National Highways, whose construction methods and criteria for designs are different from those used in cities, towns, and villages, as well as smart city roadways; however, it was felt that proper integration and assimilation of Lighting arrangements, lighting level needs and scenarios will help users (motorists, pedestrians, etc) and the local, state and National highway authorities and departments in their workings in coming times and MORTH, The National Highways Authority, IRC and other Central Govt and State Bodies may find it advantageous to consider these guidelines to the current IRC manuals. All the current/practical challenges, related to lighting systems, faced by Concessionaires Project Authorities and Design consultants, suppliers and other agencies viz. Lighting Manufacturers and Authorities /specifying organizations that are building, developing or upgrading the existing working Road infrastructure have been considered while framing the revised standard.

c) Add the following at the end:

'Current ANSI/IES also classify luminaire IES Type I, II, III, IV, V, VS and backward/upward/glare (BUG) to take into sustainability consideration. Details of ANSI/IES classification, obtrusive lighting and BUG are included in Annex C'

d) Delete Points g) & h), as this is repetitive contents.

Fig. 3, Fig. 4 & Fig. 5 are blurred and needs to be redrawn with photoshop. ELCOMA/ISLE were requested to do the needful.

e) Clause 6.8.1- Comment by Shri Anil Valia to be added as a note below the clause. Ms Sudeshna kindly agreed to draft the note and shared with Ms Neha Agarwal.

f) Clause 6.8.3- The panel agreed to shift the entire clause in Annexure. However, the same to be discussed with Dr Suddhasatwa Chakraborty also for final decision.

g) Table 5, Table 6, Table 7- Addition of column on 'Min/Max' (Its value is less than overall uniformity min/avg) Further, it was decided to modify the document and circulate amongst panel members for 7 days for seeking further comments. It was also decided to review annexures in the next panel meeting. The meeting ended with vote of thanks to all the members present during the meeting.

ANNEX 2
Comments Received on revised NLC

Sl. No	Title	Basic Details	Comments/Suggestions along with Justification for the Proposed Change	Proposed Change/Modified Wordings
1.	National Lighting Code of India: Part 3 Electric Light Sources and their Accessories Section 1 Solid State Lighting LED Technology ,Section 2 LED Driver and Controls (First Revision of SP 72 (Part 3))	Name: Shri M. Moumita Naskar Organisation: CPRI	I agree with the Draft	
		Name: Shri Hari Om Organisation: Intertek	The light from these lamps are produced by a discharge between two electrodes in a glass or ceramic tube fil LED filled with a gas	
2.	National Lighting Code of India: Part 5 Interior Illumination Section 1 to Section 9 First Revision of SP 72 Part 5Section 1 to Section 9	Name: Shri Hari Om Organisation: Intertek	I agree with the Draft	
3.	National Lighting Code of India: Part 6 Outdoor Lighting Section 1 to Section 12First Revision of SP 72 Part 6Section 1 to Section 12	Name: Shri Pradeep Kumar mukherjee Organisation: Personal Capacity	Modify the sentence as follows: Following definition in addition to those given in part 1 of this code shall apply.	Modify the first sentence as commented
			Abbreviation like VVIP, BSF may be expanded. also VVIP residence can be replaced with VVIP areas/locations Last para of clause 5.1 is not required. What we should specify is the suitable light source used in security lighting. mercury based light source	Modify as commented

			should not be allowed as such lamps are likely to be paused out in next 2 to 3 years. However a note can be added for the time being as commented in Part 17	
			Movable and portable lighting are not the same. One is fixed but you can change the direction of the focus but portable lighting is you can shift one place to another	From the description of clause 6.4 the title could be Potable lighting
			Para 1, a) to f) and 10.1 is about LED lamps which should come under chapter on light sources. Clause 5 to 7 of exiting Part 6, section 3 has not been covered in the revised draft.	Para 1 of 10 and 10.1 may be removed and shifted under chapter on light sources Consider incorporating existing clause 5 to 7 with modification if necessary may be considered
			The document looks like a workshop or conference paper and very generic. None of the contents from the existing Part 6, section 4 have been taken into account. It can only help the lighting designer but form the application point of view. It is just a narrative about the decorative lighting of monuments	Consider incorporating the requirements form the application point of view.
		Name: Shri H. Wadhwa Organisation: Consumer	I agree with the Draft	

		Voice			
		Name: Shri K. Ajith Kumar Organisation: Schneider Electric India Private Limited	I agree with the Draft		
		Name: Shri Saunak Mondal / Organisation NPCIL	Part 6 /Section 1 Security Lighting		
			8.3	Enhanced Property Value	This point is already covered in Cl. 8.2 Benefits of Security Lighting - To be deleted
			9.1	"Security Lighting scheme should be regularly reviewed and audited" Comment: The auditing agency is not clear, whether it is internal or external	
			9.1	The operational requirement should be reviewed periodically. Comment: The review period is not clearly indicated whether it is facility specific or any specific requirement is there e.g., annual, biannual etc.	
			Part 6 /Section 7 Lighting of Hazardous Areas		

			5.1	The statement “Hazardous area luminaires generally are not required in non-plant buildings, open areas and roads” is conflicting with Table 2 Different Type LED Lighting products used in hazardous areas as Streetlight is mentioned there.	
			5.2	Typographical error in line 1 “The enclosures shall be provided with gasket made of non-inflammable and self-extinguishing material “	
			6.3	Table 3 Zone 1 statement is incomplete. Please correct	
			3.1.13	Typographical error “Lightning Finial”	
			Part 6 /Section 4 Lighting for Utility Areas		

		Name: Shri Sourish Datta Choudhury – Organisation: Service and Labour Institutes, Mumbai	4.2	Maintained average horizontal illuminance (lux) may be increased from 20 to 25	To avoid contradiction of Regulation 16 of Dock Workers (Safety, Health & Welfare) Regulations, 1990 which talks about 25 lux at working area. "16. Illumination (1) All areas in a dock and on a ship where the dock work is carried on and all approaches to such areas and to places to which dock workers may be required to go in the course of their employment, shall be safely and efficiently lighted in an appropriate way. (2) The general illumination, in areas on the dock where dock workers have to pass, shall be at least 10 lux and at places where dock workers are employed the illumination shall be at least 25 lux without prejudice to the provision of any additional illumination needed at particularly dangerous places."

			Sl. No.(v)	Maintained average horizontal illuminance (lux) may be increased from 5 to 10	To avoid contradiction of Regulation 16 of Dock Workers (Safety, Health & Welfare) Regulations, 1990 which talks about 10 lux at passing area. Same as above.
4.	National Lighting Code of India: Part 7 Energy-Effective Lighting Systems/Section 1 and Section 2 (First Revision of SP 72 Part 7(Section 1 and Section 2))	Name: Shri Shailendra Singh Organisation: dcmsme	I agree with the Draft		
		Name: Shri Amar Mahajan, Organisation Wipro Enterprises Private Limited	1.Scope	First Line of Scope – Snap Short to be changed to Snap shot	
			4.1 Thought Process	Daylight to be changed to Daylight Harvesting	Daylight Harvesting is correct strategy for energy saving
				Lighting System to be changed to Energy Efficiency lighting system	Users will be using both conventional and LED based lighting system, they need to understand that energy efficient system can help in getting better savings.

				Controlling System can be changed as Lighting Management System which will control lights as per user requirements or inputs from sensors for better energy management. Various control strategies like occupancy-based control, daylight-based control, user control, time scheduling can be deployed using advance lighting management system to increase energy savings in any of the applications.	
			7.2.3 Dimmable Drivers	Analogue (1-10V) must be changed to (0-10V/1-10V)	Multiple solutions are available in market with dim to off Analogue Drivers which are more popular in projects where in the terminal needs to be 0-10V

			7.2.3 No. B For	Additional of BLE protocol is required along with options given c) For entire buildings and multiple buildings with comprehensive infrastructure needs, wired / Wireless networks with best possible security options like AES 128 Bit protocol for communication in building control systems manage lighting, sun control, heating, ventilation, facade lighting, area lighting, etc., utilizing technologies such as KNX or equivalent proprietary solutions.	BLE is most common protocol used and widely acceptable in this case. In current future, we are seeing more of wired and wireless solutions getting popular in Indian market and hence need to add wireless option in this clause. Also the secure communication protocols like AES 128 Bit is of advantage in case of both wired and wireless systems which are import when multiple systems integration are happening through BMS etc.
5.	National Lighting Code of India Part 8 Daylighting for Buildings First Revision of SP 72 Part 8	Name: Shri H. Wadhwa Organisation: Consumer Voice	I agree with the Draft		

		Name: Shri Harshal Talele Organisation: N/A	I agree with the Draft	
6.	National Lighting Code of India: Part 11 Human Centric Lighting First Revision of SP 72 Part 11	Name: Shri H. Wadhwa Organisation: Consumer Voice	I agree with the Draft	
7.	National Lighting Code of India: Part 14 Adverse Effects of Lighting First Revision of SP 72 Part 14	Name: Shri Harshal Talele Organisation: N/A	I agree with the Draft	
		Name : Shri Dr. Amit Tyagi/ Surya Roshni Limited	Out of the 4 adverse effects mentioned in the foreword, only points 'b' and 'c' have been discussed in detail in the Chapter. Point 'a' and point 'd' have not been dealt with at all.	To complete the adverse effects of lighting, enough information on points a to d should be given, which is missing in the writeup.
	National Lighting Code of India: Part 15 Horticulture Lighting First Revision of SP 72 Part 15	Name: Shri Harshal Talele Organisation: N/A	I agree with the Draft	
8.	National Lighting Code of India Part 8 Daylighting for Buildings First	Name: Shri H. Wadhwa Organisation: Consumer Voice	I agree with the Draft	

	Revision of SP 72 Part 8	Name: Shri Harshal Talele Organisation: N/A	I agree with the Draft	
9.	National Lighting Code Of India: Part 17 Science Of Ultra Violet And Ultra Violet Germicidal Irradiation Applications For Hospitals First Revision Of Sp 72 Part 17	Name: Shri Pradeep Kumar Mukherjee Organisation: Personal Capacity	Mercury based lamps are going to be pahsed out in the immkdiate future, India has aleready committed throug Minamata conevntion. Should we incorportate mercury based lamps for diinfecting and taht btoo in hospitals. Mecuty pahse out prgram in India may be verified from MoEFCC	Add a note that mercury beoing a haradous substances, use of mercury based lamps may not be used as wneh goverment of India refulation comes into force.
			The contents of clause 7 does noyt appear to be an applocation guidlines but opertaional and maintamnce guidlies/instruction	Title of clause 7 may be modified commented
		Name: Shri H. Wadhwa Organisation: Consumer Voice	I agree with the Draft	
		Name: Shri K. Ajith Kumar Organisation: Schneider Electric India Private Limited	I agree with the Draft	

ANNEX 3

Comments Received from Shri P K Mukherjee

1. Flashlight and search light are two different products and are used for different applications.
2. Flashlights are portable light sources used in a variety of situations, such as outdoors, during power outages, or when there is no permanent lighting, whereas searchlights are used for navigation, searching for missing people, and detecting dangers at sea. They are also used by emergency services and in the military.
3. Flashlights have a very low light intensity enough to see what you are lighting up. Searchlights have a very bright beam that can be turned in any direction. Also power requirement is much higher in searchlights.
4. We may consider having a separate standard on searchlight taking reference from flashlight standard for some of the common requirements.

ANNEX 4

COMPOSITION OF
ETD 49 ILLUMINATION ENGINEERING AND LUMINAIRES SECTIONAL COMMITTEE

Sl.No.	Organization	Member Name	Attendance out of Last 2 Meeting
1.	Jadhavpur University, Kolkata	Dr Saswati Mazumdar (*Chairperson*)	2/2
2.	Baba Farid College of Engineering And Technology, Bathinda	Dr. Aniruddha Mukherjee (*Principal Member*)	-
3.	Bajaj Electricals Limited, Mumbai	Shri Hrishikesh Ta (*Principal Member*)	0/0
		Shri Razi Khan (*Alternate Member*)	
4.	Binay Opto Electronics Private Limited, Kolkata	Vineet K. Rohatgi (*Principal Member*)	1/1
		Shri Bhanu Pratap Singh (*Alternate Member*)	
		Shri Rajeev Rohatgi (*Alternate Member*)	
4.	CSIR - National Physical Laboratory, New Delhi	Shri V. K. Jaiswal (*Alternate Member*)	2/2
		Shri Parag Sharma (*Principal Member*)	

5.	Central Electricity Authority, New Delhi	Ms Bhaavya Pandey (*Principal Member*)	0/2
6.	Central Power Research Institute, Bengaluru	Shri N Rajkumar (*Alternate Member*) Shri R Sudhir Kumar (*Principal Member*)	0/2
7.	Consumer Voice, New Delhi	Shri H. S. Wadhwa (*Alternate Member*) B.K.Mukhopadhyay (*Principal Member*)	2/2
8.	Crompton Greaves, Mumbai	Ms Uma lanka *Principal Member*	1/1
9.	Development Commissioner Micro-Small and Medium Enterprises	Shri S. Dharmaselvan (*Principal Member*)	0/2
10.	Directorate General Factory Advice Service and Labour Institutes, Mumbai	Shri Sourish Datta Choudhury (*Alternate Member*) Shri Vipul Mishra (*Principal Member*)	0/2
11.	Electric Lamp and Component Manufacturers Association of India, New Delhi	Shri Amal Sengupta (*Principal Member*) Shri Santosh Agnihotri (*Alternate Member*)	2/2
12.	Electrical Contractors Association of Maharashtra, Pune	Shri Anil Gachke (*Principal Member*) Shri Sanjay Kolhatkar (*Alternate Member*)	1/2
13.	Electrical Research and Development Association, Vadodara	Shri N. L. Patel (*Principal Member*) Shri Avainsh Trivedi (*Alternate Member*)	2/2
14.	Energy Efficiency Services Limited, New Delhi	Shri Anil Kumar Choudhary (*Principal Member*) Shri Pankaj Mohan (*Alternate Member*)	2/2
15.	Havells India Limited, Noida	Shri Pankaj Mittal (*Alternate Member*) Shri Pushpraj Giri (*Principal Member*) Shri Sudeshna Mukhopadhyay (*Alternate Member*)	2/2
16.	Indian Society of Lighting Engineers, New Delhi	Shri P. K. Sood (*Alternate Member*)	1/1

		Dr. Rajat Subhra Mandal (*Principal Member*)	
		Shri B. M. Bhatia (*Alternate Member*)	
		Priya Arvind Kumar (*Alternate Member*)	-
17.	Intertek India Private Limited, New Delhi	Shri Hari Om (*Principal Member*)	
		Shri B. Roy (*Principal Member*)	2/2
19.	Jadhavpur University, Kolkata	Shri S. Chakraboraty (*Alternate Member*)	
		Shri Vishal Bhardwaj (*Principal Member*)	0/2
20.	Ledvance India Private Limited, Gurugram	Shri Dhirendra Agrahari (*Alternate Member*)	
21.	Luminaries Accessories Components Manufacturers Association, Maharashtra	Shri Jignesh Shah (*Principal Member*)	1/1
22	MLS India Private Limited, New Delhi	Shri Krishan Sujan (*Principal Member*)	0/2
		Shri Dhanashree V Vyawahare (*Principal Member*)	0/2
23	Nuclear Power Corporation of India Limited, Mumbai	Shri Saunak Mondal (*Alternate Member*)	
		Shri Shreekant Dattatray Phanse (*Principal Member*)	2/2
24	Signify Innovations India Limited, Gurugram	Shri Nitish Poonia (*Alternate Member*)	
25	Surya Roshni Limited, Delhi	Shri Amit Tyagi (*Principal Member*)	2/2
		Shri S. P. Sontakke (*Principal Member*)	1/1
26	The Brihanmumbai Electricity Supply and Transport, Mumbai	Shri M. M. Rane (*Alternate Member*)	
		Shri Satish Kumar (*Principal Member*)	1/2
26	UL India Private Limited, Bengaluru	Shri Gautam Brahmbhatt (*Alternate Member*)	
27		Dr. Ranjana Mehrotra	1/2

	IN PERSONAL CAPACITY	*Personal Capacity*	
28	IN PERSONAL CAPACITY	Shri P K Mukherjee *Principal Member*	2/2

ANNEX 5
Programme of work of ETD 49

Published Standards

SI. No.	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10322 (Part 1) : 2014 Reviewed In : 2019 IEC 60598-1(2003-10)	Luminaires: Part 1 general requirements and tests (First Revision)		1	Modified/Technically Equivalent
2	IS 10322 (Part 5/Sec 1) : 2012 Reviewed In : 2024 IEC 60598-2-1 : 1979 + Amendment 1(1987)	Luminaires: Part 5 particular requirements: Sec 1 fixed general purpose luminaires (First Revision)	April, 2024	1	Modified/Technically Equivalent
3	IS 10322 (Part 5/Sec 2) : 2012 Reviewed In : 2024 IEC 60598-2-2 : 1997	Luminaires: Part 5 particular requirements: Sec 2 recessed luminaires (First Revision)	April, 2024	1	Modified/Technically Equivalent
4	IS 10322 (Part 5/Sec 3) : 2012 Reviewed In : 2024 IEC 60598-2-3 : 2002	Luminaires: Part 5 particular requirements: Sec 3 luminaires for road and street lighting (First Revision)	April, 2024	1	Modified/Technically Equivalent
5	IS 10322 (Part 5/Sec 4) : 1987 IEC 60598-2-4 Reviewed In : 2020 IEC 60598-2-4 (1979)	Specification for luminaires: Part 5 particular requirements: Sec 4 portable general purpose luminaires	May, 2020	1	Modified/Technically Equivalent
6	IS 10322 (Part 5/Sec 5) : 2013 Reviewed In : 2024 EC 60598-2-5 (1998)	Luminaires: Part 5 particular requirements: Sec 5 floodlights (First Revision)	April, 2024	1	Modified/Technically Equivalent
7	IS 10322 (Part 5/Sec 6) : 2013 Reviewed In : 2024 IEC 60598-2-8, (1996)	Luminaires: Part 5 particular requirements: Sec 6 handlamps	April, 2024	1	Modified/Technically Equivalent
8	IS 10322 (Part 5/Sec 7) : 2017	Luminaires: Part 5 particular requirements:	April, 2024	-	Identical under dual numbering

	Reviewed In : 2024 IEC 60598-2-20 : 2014	Sec 7 lighting chains (First Revision)			
9	IS 10322 (Part 5/Sec 8) : 2013 Reviewed In : 2024 IEC 60598-2-22, (1997) + Amendment 1 (2002)	Luminaires: Part 5 particular requirements: Sec 8 emergency lighting	April, 2024	-	Modified/Technically Equivalent
10	IS 10322 (Part 5/Sec 9) : 2017 IEC 60598-2-21 : 2014 Reviewed In : 2024 IEC 60598-2-21 : 2014	Luminaires: Part 5 particular requirements: Sec 9 rope lights	April, 2024	-	Identical under dual numbering
11	IS 10894 : 1984 Reviewed In : 2018 Reaffirmed but not taken up for revision	Code of practice for lighting of educational institutions	August, 2018	-	Indigenous
12	IS 10947 : 1984 Reviewed In : 2020 IES (UK). Technical Report No. 13 Industrial area flood lighting. 1969. Illuninating Engineering S	Code of practice for lighting for ports and harbours	May, 2020	-	Modified/Technically Equivalent
13	IS 11071 (Part 1) : 1984 Reviewed In : 2021 Aerodromes Annex 14 (1976), Ed 7.	Specification for inset type aerodrome lighting fittings: Part 1 general requirements and tests	May, 2021	-	Modified/Technically Equivalent
14	IS 11071 (Part 2) : 1984 Reviewed In : 2021 Aerodromes Annex 14 (1976), Ed 7.	Specification for inset type aerodrome lighting fittings: Part 2 runway centre line lighting fittings	May, 2021	-	Modified/Technically Equivalent
15	IS 11071 (Part 3) : 1984 Reviewed In : 2020 Aerodromes Annex 14 (1976), Ed 7.	Specification for inset type aerodrome lighting fittings: Part 3 approach lighting fittings	May, 2020	-	Modified/Technically Equivalent
16	IS 11071 (Part 4) : 1984	Specification for ikset type aerodrome lighting fittings:	May, 2020	-	Modified/Technically Equivalent

	Reviewed In : 2020 Aerodromes Annex 14 (1976), Ed 7.	Part 4 touch down zone lighting fittings			
17	IS 11116 : 1984 Reviewed In : 2020 a) International Standards and Recommended Practices, Aerodromes, Annexure 14 (1976) Ed 7, Interna	Code of practice for lighting for airport aprons	May, 2020	-	Modified/Technically Equivalent
18	IS 12309 (Part 1) : 1988 Reviewed In : 2018	Code of practice for installation and maintenance of aerodrome lighting fittings	March, 2018	-	Indigenous
19	IS 12309 (Part 2) : 1988 Reviewed In : 2018	Code of practice for installation and maintenance of aerodrome lighting fittings: Part 2 maintenance	March, 2018	-	Indigenous
20	IS 13383 (Part 1) : 1992 Reviewed In : 2024 CIE Publication No. 24 (TC 2.4) 1973	Photometry of luminaires - Method of measurement: Part 1 luminaires for use in interior lighting	April, 2024	-	Modified/Technically Equivalent
21	IS 13383 (Part 2) : 1992 Reviewed In : 2024 CIE Publication No. 27 (TC-2.4) 1973	Photometry of luminaires - Method of measurement: Part 2 luminaires for road and street lighting	April, 2024	1	Modified/Technically Equivalent
22	IS 13383 (Part 3) : 1992 Reviewed In : 2024 CIE Publication 43 (TC-2.4) 1979	Photometry of luminaires - Methods of measurement: Part 3 luminaires for floodlighting	April, 2024	-	Modified/Technically Equivalent
23	IS 16107 (Part 1) : 2012 Reviewed In : 2024 IEC/PAS 62772-1 (2011)	Luminaires performance: Part 1 general requirements	May, 2024	-	Modified/Technically Equivalent
24	IS 16107 (Part 2/Sec 1) : 2012	Luminaires performance: Part 2 particular	May, 2024	-	Modified/Technically Equivalent

	Reviewed In : 2024 IEC/PAS 62722-2-1(2011)	requirements: Sec 1 led luminaire			
25	IS 18687 : 2024	Germicidal UV-C Irradiation Devices -Safety Requirements		-	Indigenous
26	IS 1944 (Part 5) : 1981 Reviewed In : 2024 BS: CP 1004 - Street lighting, Part 5 Lighting for grade-separated junctions and Part 6 Lighting for	Code of practice for lighting of public thoroughfares: Part 5 lighting for grade separated junctions, bridges and elevated road (Group D)	May, 2024	-	Modified/Technically Equivalent
27	IS 1944 (Part 6) : 1981 Reviewed In : 2024	Code of practice for lighting of public thoroughfares: Part 6 lighting for town and city centres and areas of civic importance (Group E)	May, 2024	-	Indigenous
28	IS 1944 (Part 7) : 1981 Reviewed In : 2024 CIE 32 (TC 4+6)-1976 Lighting in situations requiring special treatment. International Commission o	Code of practice for lighting of public thoroughfares: Part 7 lighting for roads with special requirements (Group F)	May, 2024	-	Modified/Technically Equivalent
29	IS 1944 (Part 12) : 1970 Reviewed In : 2024	Code of practice for lighting of public thoroughfares (First Revision)	May, 2024	2	Indigenous
30	IS 2672 : 1966 Reviewed In : 2015 Reaffirmed but not taken up for revision	Code of practice for library lighting		-	Indigenous
31	IS 3646 (Part 1) : 1992 Reviewed In : 2024 CIE-Publication on Interior Lighting, DIN 5035 (Parts 1 and 2) : 1979	Code of practice for interior illumination: Part 1 general requirements and recommendations for working interiors (First Revision)	April, 2024	1	Modified/Technically Equivalent

32	IS 4347 : 1967 Reviewed In : 2015 Reaffirmed but not taken up for revision	Code of practice for hospital lighting		-	Indigenous
33	IS 6665 : 1972 Reviewed In : 2015 Reaffirmed but not taken up for revision IES Code. Recommendations for good interior lighting. 1961. The Illuminating Engineering Society, Lo	Code of practice for industrial lighting		-	Modified/Technically Equivalent
34	SP 72 : 2010 Reviewed In : 2016	National lighting code 2010	March, 2016	-	Indigenous
35	IS 7537 : 1974 Reviewed In : 2021 B.S. 505- 1971	Specification for road traffic signals	November, 2021	-	Modified/Technically Equivalent
36	IS 7785 (Part 1) : 1975 Reviewed In : 2024 BS : 3224	Specification for elevated type aerodrome lighting fittings: Part 1 general requirements	April, 2024	-	Modified/Technically Equivalent
37	IS 7785 (Part 2) : 1976 Reviewed In : 2024 BS : 3224	Specification for elevated typei aerodrome lighting fittings: Part 2 fixed focus high intensity biqireectional runway edge lighting fittings	April, 2024	-	Modified/Technically Equivalent
38	IS 7785 (Part 3) : 1976 Reviewed In : 2024 BS : 3224	Specification for elevated type aerodrome lighting fittings: Part 3 low intensity runway edge lighting - Fittings	April, 2024	-	Modified/Technically Equivalent
39	IS 7785 (Part 4/Sec 1) : 1981 Reviewed In : 2024 BS : 3224 : Section Cl : 1963	Specification for elevated type aerodrome lighting fittings: Part 4 angle of approach lights: Sec 1 visual approach slope indicators	April, 2024	-	Modified/Technically Equivalent
40	IS 7785 (Part 5/Sec 1) : 1981	Specification for elevated type aerodrome lighttNg fittings: Part 5 approach	April, 2024	-	Modified/Technically Equivalent

	Reviewed In : 2024 BS 3224: Section-B1 : 1970	lighting fittings: Sec 1 high intensity elevated approach lighting fittings			
41	IS 7785 (Part 6/Sec 1) : 1981 Reviewed In : 2024 BS 3224 : Section F 1 : 1968	Specification for elevated type aerodrome lighting fittings: Part 6 taxiway lights: Sec 1 low intensity omni - Directional elevated taxiway lighting fittings	April, 2024	-	Modified/Technically Equivalent
42	IS 9583 : 1981 IEC 598-2-22 Reviewed In : 2018 IEC : 598-2-22(1980)	Specification for emergency lighting units	March, 2018	-	Modified/Technically Equivalent

Standards under Development

Projects Approved		
SI. No.	**Doc No**	**TITLE**
-	-	-
Preliminary Draft Standards		
SI. No.	**Doc No**	**TITLE**
1	ETD 49 (25378)	National Lighting Code of India Part 3 Electric Light Sources and their Accessories Section 1 Solid State Lighting LED Technology Section 2 LED Driver and Controls First Revision of SP 72 Part 3
2	ETD 49 (25578)	National Lighting Code of India Part 5 Interior Illumination Section 1 to Section 9 First Revision of SP 72 Part 5Section 1 to Section 9
3	ETD 49 (25619) (60598-2-18)	Luminaires for swimming pools and similar applications
4	ETD 49 (25743) (60598-1)	Luminaires Part 1 General Requirements and Tests Third Revision
5	ETD 49 (25787)	National Lighting Code of India Part 7 Energy-Effective Lighting Systems Section 1 and Section 2 First Revision of SP 72 Part 7 Section 1 and Section 2
6	ETD 49 (25814)	National Lighting Code of India Part 10 Installation Aspects for Lighting Section 1 Mechanical Section 2 Electrical Section 3 Coordination with Related Disciplines Section 4 Installation

		Guidelines for LED System Section 5 Lighting MaintenanceFirst Revision of SP 72 Part 10Section 1- Section 5
7	ETD 49 (26127)	National Lighting Code of India PART 17 SCIENCE OF ULTRA VIOLET AND ULTRA VIOLET GERMICIDAL IRRADIATION APPLICATIONS FOR HOSPITALS First Revision of SP 72 Part 17
8	ETD 49 (26128)	National Lighting Code of India Part 6 Outdoor Lighting Section 1 to Section 12First Revision of SP 72 Part 6Section 1 to Section 12
9	ETD 49 (26166)	National Lighting Code of India Part 11 Human Centric Lighting First Revision of SP 72 Part 11
10	ETD 49 (26189)	National Lighting Code of India Part 15 Horticulture Lighting First Revision of SP 72 Part 15
11	ETD 49 (26211)	National Lighting Code of India Part 14 Adverse Effects of Lighting First Revision of SP 72 Part 14
12	ETD 49 (26319)	National Lighting Code of India Part 8 Daylighting for Buildings First Revision of SP 72 Part 8
13	ETD 49 (26435)	National Lighting Code of India Part 9 Emergency Lighting First Revision of SP 72 Part 9
14	ETD 49 (26462)	National Lighting Code of India Part 12 Indoor Connected IoT Based Lighting First Revision of SP 72 Part 12
15	ETD 49 (26468)	National Lighting Code of India Part 13 Outdoor Digital Connected IOT Based Road Lighting First Revision of SP 72 Part 13
16	ETD 49 (26629)	National Lighting Code of India Part 4 Luminaires First Revision of SP 72 Part 4
Drafts Standards in WC Stage		
SI. No.	**Doc No**	**TITLE**
No Records Found		
Draft Standards Completed WC Stage		

SI. No.	Doc No	TITLE
1	ETD 49 (22373)	Code Of Practice for Interior Illumination Part 1 General Requirements and Recommendations for Working Interiors First Revision
2	ETD 49 (23883) (61827: 2004)	Electrical Installations for Lighting and Beaconing Of Aerodromes Characteristics of Inset And Elevated Luminaires Used On Aerodromes And Heliports
3	ETD 49 (25066)	National Lighting Code of India Part 1 Lighting Vocabulary
4	ETD 49 (25108)	National Lighting Code of India Part 2 Physics Of Light First Revision Of SP 72 Part 2
Finalized Draft Indian Standard		
SI. No.	**Doc No**	**TITLE**
No Records Found		
Finalized Draft Indian Standards under Print		
SI. No.	**Doc No**	**TITLE**
1	ETD 49 (26044)	

ANNEX 6

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

Sl No.	IS No.	Title	Decision taken during the previous meeting	Status
1.	IS 1944 : Part 5 : 1981	Code of practice for lighting of public thoroughfares Part 5 lighting for grade separated junctions bridges and elevated road Group D	Please refer Item 1.4 (2) of agenda.	
2.	IS 1944 : Part 6 : 1981	Code of practice for lighting of public thoroughfares Part 6 lighting for town and city centers and areas of civic importance Group E		
3.	IS 1944 : Part 7 : 1981	Code of practice for lighting of public thoroughfares Part 7 lighting for roads with special requirements Group F		
4.	IS 1944 : Part 1 and 2 : 1970	Code of practice for lighting of public thoroughfares First Revision		
5.	IS 2672 : 1966	Code of practice for library lighting	Archived	
6.	IS 3646 : Part 1 : 1992	Code of practice for interior illumination Part 1 general requirements and recommendations for working interiors First Revision	WC Stage	
7.	IS 4347 : 1967	Code of practice for hospital lighting	Archived	
8.	IS 6665 : 1972	Code of practice for industrial lighting	Archived	
9.	IS 7537 : 1974	Specification for road traffic signals	Under Printing	Please refer Item 1.4 (3) of agenda.
10	IS 7785 : Part 1 : 1975	Specification for elevated type aerodrome lighting fittings Part 1 general requirements	Under revision (WC)	Please refer Item 1.4 (1) of agenda.
11	IS 7785 : Part 2 : 1976	Specification for elevated type aerodrome lighting fittings Part 2 fixed focus high intensity	Under revision (WC)	

		biqireectional runway edge lighting fittings		
12	IS 7785 : Part 3 : 1976	Specification for elevated type aerodrome lighting fittings Part 3 low intensity runway edge lighting - Fittings	Under revision (WC)	
13	IS 7785 : Part 4 : Sec 1 : 1981	Specification for elevated type aerodrome lighting fittings Part 4 angle of approach lights Sec 1 visual approach slope indicators	Under revision (WC)	
14	IS 7785 : Part 5 : Sec 1 : 1981	Specification for elevated type aerodrome lighttNg fittings Part 5 approach lighting fittings Sec 1 high intensity elevated approach lighting fittings	Under revision (WC)	
15	IS 7785 : Part 6 : Sec 1 : 1981	Specification for elevated type aerodrome lighting fittings Part 6 taxiway lights Sec 1 low intensity omni - Directional elevated taxiway lighting fittings	Under revision (WC)	
16	IS 10894 : 1984	Code of practice for lighting of educational institutions	Archived	
17	IS 10947 : 1984	Code of practice for lighting for ports and harbours	Archived	
18	IS 11071 : Part 1 : 1984	Specification for inset type aerodrome lighting fittings Part 1 general requirements and tests	Under revision (WC)	Please refer Item 1.4 (1) of agenda.
19	IS 11071 : Part 2 : 1984	Specification for inset type aerodrome lighting fittings Part 2 runway centre line lighting fittings	Under revision (WC)	
20	IS 11071 : Part 3 : 1984	Specification for inset type aerodrome lighting fittings Part 3 approach lighting fittings	Under revision (WC)	
21	IS 11071 : Part 4 : 1984	Specification for ikset type aerodrome lighting fittings Part 4 touch down zone lighting fittings	Under revision (WC)	
22	IS 11116 : 1984	Code of practice for lighting for airport aprons	Archived	
23	IS 12309 : Part 1 : 1988	Code of practice for installation and maintenance of aerodrome lighting fittings	M/s Vardhman Lighting Solutions has been requested to prepare	Awaited

			draft revision documents	
24	IS 12309 : Part 2 : 1988	Code of practice for installation and maintenance of aerodrome lighting fittings Part 2 maintenance	M/s Vardhman Lighting Solutions has been requested to prepare draft revision documents	
25	IS 13383 : Part 1 : 1992	Photometry of luminaires - Method of measurement Part 1 luminaires for use in interior lighting	Archived	
26	IS 13383 : Part 2 : 1992	Photometry of luminaires - Method of measurement Part 2 luminaires for road and street lighting		
27	IS 13383 : Part 3 : 1992	Photometry of luminaires - Methods of measurement Part 3 luminaires for floodlighting		

ANNEX 7

Details of voting for IEC SC 34D

S.NO	Doc Number	Last Date	Comment
1.	34D/1725/Q	03-05-2024	Yes vote sent
2.	34D/1736/DC	05-07-2024	No comment
3.	34D/1739/FDIS	09-08-2024	In favour

ANNEX 8

Programme of Work and published IEC standards of the corresponding IEC/ SC 34 D

SL.NO	REFERENCE	TITLE
1.	IEC 60570:2003+AMD1:2017+AMD2:2019 CSV	Electrical supply track systems for luminaires
2.	IEC 60570:2003+AMD1:2017 CSV	Electrical supply track systems for luminaires
3.	IEC 60570:2003	Electrical supply track systems for luminaires
4.	IEC 60570:2003/AMD1:2017	Amendment 1 - Electrical supply track systems for luminaires
5.	IEC 60570:2003/AMD2:2019	Amendment 2 - Electrical supply track systems for luminaires
6.	IEC 60598-1:2020 RLV	Luminaires - Part 1: General requirements and tests
7.	IEC 60598-1:2020	Luminaires - Part 1: General requirements and tests
8.	IEC 60598-1:2020/ISH1:2023	Interpretation Sheet 1 - Luminaires - Part 1: General requirements and tests
9.	IEC 60598-2-1:2020	Luminaires - Part 2-1: Particular requirements - Fixed general purpose luminaires
10.	IEC 60598-2-2:2023 CMV	Luminaires - Part 2-2: Particular requirements - Recessed luminaires and recessed air-handling luminaires
11.	IEC 60598-2-2:2023	Luminaires - Part 2-2: Particular requirements - Recessed luminaires and recessed air-handling luminaires
12.	IEC 60598-2-3:2002+AMD1:2011 CSV	Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting
13.	IEC 60598-2-3:2002	Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting

14.	IEC 60598-2-3:2002/AMD1:2011	Amendment 1 - Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting
15.	IEC 60598-2-4:2017	Luminaires - Part 2-4: Particular requirements - Portable general purpose luminaires
16.	IEC 60598-2-4:2017 RLV	Luminaires - Part 2-4: Particular requirements - Portable general purpose luminaires
17.	IEC 60598-2-5:2015	Luminaires - Part 2-5: Particular requirements - Floodlights
18.	IEC 60598-2-8:2013	Luminaires - Part 2-8: Particular requirements - Handlamps
19.	IEC 60598-2-10:2003	Luminaires - Part 2-10: Particular requirements - Portable luminaires for children
20.	IEC 60598-2-11:2013+AMD1:2022 CSV	Luminaires - Part 2-11: Particular requirements - Aquarium luminaires
21.	IEC 60598-2-11:2013	Luminaires - Part 2-11: Particular requirements - Aquarium luminaires
22.	IEC 60598-2-11:2013/AMD1:2022	Amendment 1 - Luminaires - Part 2-11: Particular requirements - Aquarium luminaires
23.	IEC 60598-2-12:2013	Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights
24.	IEC 60598-2-13:2006+AMD1:2011+AMD2:2016 CSV	Luminaires - Part 2-13: Particular requirements - Ground recessedluminaires
25.	IEC 60598-2-13:2006+AMD1:2011 CSV	Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires
26.	IEC 60598-2-13:2006	Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires
27.	IEC 60598-2-13:2006/AMD1:2011	Amendment 1 - Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires
28.	IEC 60598-2-13:2006/AMD2:2016	Amendment 2 - Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires

29.	IEC 60598-2-14:2009	Luminaires - Part 2-14: Particular requirements - Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment
30.	IEC 60598-2-17:2017	Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and indoor)
31.	IEC 60598-2-18:2022	Luminaires - Part 2-18: Particular requirements - Luminaires for swimming pools and similar applications
32.	IEC 60598-2-20:2022	Luminaires - Part 2-20: Particular requirements - Lighting chains
33.	IEC 60598-2-20:2022 RLV	Luminaires - Part 2-20: Particular requirements - Lighting chains
34.	IEC 60598-2-21:2014	Luminaires - Part 2-21: Particular requirements - Rope lights
35.	IEC 60598-2-21:2014/COR1:2016	Corrigendum 1 - Luminaires - Part 2-21: Particular requirements - Rope lights
36.	IEC 60598-2-22:2021	Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting
37.	IEC 60598-2-22:2021 RLV	Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting
38.	IEC 60598-2-23:2020	Luminaires - Part 2-23: Particular requirements - Extra-low-voltage lighting systems for ELV light sources
39.	IEC 60598-2-24:2013	Luminaires - Part 2-24: Particular requirements - Luminaires with limited surface temperatures
40.	IEC 60598-2-25:1994	Luminaires - Part 2: Particular requirements - Section 25: Luminaires for use in clinical areas of hospitals and health care buildings

41.	IEC 60598-2-25:1994/COR1:1994	Corrigendum 1 - Luminaires - Part 2: Particular requirements - Section 25: Luminaires for use in clinical areas of hospitals and health care buildings
42.	IEC 60598-2-25:1994/AMD1:2004	Amendment 1 - Luminaires - Part 2-25: Particular requirements - Luminaires for use in clinical areas of hospitals and health care buildings
43.	IEC 62034:2012	Automatic test systems for battery powered emergency escape lighting
44.	IEC TR 62696:2011	Luminaires - Application of the IK code IEC 62262
45.	IEC 62722-1:2022	Luminaire performance - Part 1: General requirements
46.	IEC 62722-1:2022 RLV	Luminaire performance - Part 1: General requirements
47.	IEC 62722-2-1:2023	Luminaire performance - Part 2-1: Particular requirements - LED luminaires
48.	IEC 62722-2-1:2023 CMV	Luminaire performance - Part 2-1: Particular requirements - LED luminaires
49.	IEC TR 62854:2014	Sharp edge testing apparatus and test procedure for lighting equipment - Tests for sharpness of edge

SC34D Work Programme generated on 2024-09-27

Sl. No	Project Reference	Title	Current Stage	Working Group
1.	IEC 60570 ED5	Electrical supply track systems for luminaires	CD	WG 1
2.	IEC 60598-1 ED10	Luminaires - Part 1: General requirements and tests	PRVD	WG 1
3.	IEC 60598-2-1 ED3	Luminaires - Part 2-1: Particular requirements - Fixed general purpose luminaires	TCDV	WG 1
4.	IEC 60598-2-2 ED5	Luminaires - Part 2-2: Particular requirements - Recessed luminaires and recessed air-handling luminaires	TCDV	WG 1

5.	IEC 60598-2-3 ED4	Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting	ACD	WG 1
6.	IEC 60598-2-4 ED4	Luminaires - Part 2-4: Particular requirements - Portable general purpose luminaires	ACD	WG 1
7.	IEC 60598-2-5 ED4	Luminaires - Part 2-5: Particular requirements - Floodlights	ACD	WG 1
8.	IEC 60598-2-10 ED3	Luminaires - Part 2-10: Particular requirements - Portable luminaires for children	ACD	WG 1
9.	IEC 60598-2-12 ED3	Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights	ACD	WG 1
10.	IEC 60598-2-13 ED2	Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires	CD	WG 1
11.	IEC 60598-2-20 ED6	Luminaires - Part 2-20: Particular requirements - Lighting chains	ACD	WG 1
12.	IEC 60598-2-21 ED2	Luminaires - Part 2-21: Particular requirements - Rope lights	ACD	WG 1
13.	IEC 60598-2-24 ED3	Luminaires - Part 2-24: Particular requirements - Luminaires with limited surface temperatures	TCDV	WG 1