



GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi-110001

CERTIFICATE OF DESIGNATION

M/S TARANG LABS, WIPRO LIMITED

has been assessed and designated as Conformity Assessment Body (CAB) for its facilities at

SURVEY NO. 70, 77, 78/8A, DODDAKKANELLI, SARJAPUR ROAD, BENGALURU-560 035

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/67

Issue Date: 20/12/2023

Validity: 17/12/2023 to 16/12/2026

This Certificate remains valid for the Scope of Designation as specified in the Annexure subject to the continued validity of NABL Accreditation and satisfied compliance to the Standards/specifications against which lab has been designated and strict compliance to the relevant terms and conditions of TEC CAB Designation Scheme.

(To see the scope of designation of this laboratory, you may also visit TEC website www.tec.gov.in)

Signed for and on behalf of TEC

Signed by Vijay Dixit Date: 20-12-2023 10:56:59 Reason: Approved Vijay Dixit Director (CA) For Designating Authority TEC

1/3 146157 Cartificate No: TEC/MRA/CAB/IND-D/67 dated 20/12/2023 issued to M/S Tarang Labs, Wipro Limited, Survey No. 70, 77, 78/8A, Doddakkanelli, Sarjapur Road, Bengaluru-560 035.



Validity: - 17/12/2023 to 16/12/2026 <u>Terms & Conditions</u>

This certificate is issued as per the terms and conditions stipulated in the TEC SCHEME FOR DESIGNATING DOMESTIC CONFORMITY ASSESEMENT BODIES AND CERTIFICATION BODIES FOR CONFORMITY ASSESEMENT AND CERTIFICATION OF TELECOMMUNICATION EQUIPMENT ISSUE 3 NO. TEC 04019:2023.

Some of the conditions are reiterated as under:

A. Obligations of the Designated CAB.

- 1. It shall ensure that it maintains its accreditation status from any recognised Indian accreditation body like NABL during validity period of certificate.
- 2. It shall follow the stipulated procedures, rules and policies laid down by Designating Authority (DA) or Mutual Recognition Agreement (MRA)* partner for testing and evaluation.
- 3. In respect of tests for which it is seeking designation, it shall have no interest whatsoever in any business to carry on testing in an unfair or biased manner.
- 4. It shall fully indemnify DA from and against all liabilities, damages, claims, costs, and expenses incurred or sustained by DA as a result of any action taken or omitted by DA relating to the process of designation.
- 5. It shall comply with DA's or MRA partner's terms and conditions for designation and recognition as modified from time to time.
- 6. It shall be under obligation to participate in the online process prescribed by TEC for test and certification against TEC's GR/IR/ER and standards.
- 7. It shall have a record system which shall have a retention period of at least 5 years for documents related to the equipment testing. It shall maintain all the relevant documents including list of products submitted for testing, product-wise testing and evaluation reports. These documents shall be produced before the DA within seven days, as and when required.
- 8. It shall ensure the Intellectual Property Rights of the customers in the course of testing by maintaining professional ethics, secrecy and keeping all the product related information confidential.

*Applicable only if recognized by MRA (Mutual Recognition Agreement) partner.

- 1/3146157/2023
 9. It shall notify the DA in writing of occurrence of any of the following incident(s) within 2 weeks of its occurrence
 - a) Cessation of its business of conformity assessment for which it is Designated or accredited
 - b) Changes in its legal, commercial, or Organisational status
 - c) Changes, which may affect continuing compliance with any of the criteria or requirement specified by DA or MRA partner.
 - d) Change of premises

REFERENCE TO DESIGNATION STATUS B.

- Designated CABs may advertise their designation status with regard to standards or 1. parts thereof which are included in the scope of designation.
- 2. The advertisement should not imply, or otherwise suggest that DA or MRA Partner has endorsed the product or imply that the designated CAB is an agent or representative of DA or MRA Partner.
- 3. CABs whose designations have been suspended or withdrawn for any reason, shall discontinue advertisement of their designated status and not make any misleading statements regarding their designation status.

С. **POST-DESIGNATION SURVEILLANCE**

As and when required, DA shall conduct surveillance assessments and other nonroutine assessments on the Designated CABs to ensure that standards of practices are maintained as well as to investigate complaints made against them.

SUSPENSION OR WITHDRAWAL OF DESIGNATION D.

- 1. DA shall suspend or withdraw the designation of a CAB if
 - a. Its accreditation is withdrawn.
 - b. It is found that the CAB is not complying with the stipulated criteria or requirements.
 - c. It is guilty of any offence involving fraud or dishonesty.
 - d. DA concludes that there is a just cause for withdrawing the designation.
- A CAB whose designation, and recognition in case of MRA, has been suspended or 2. withdrawn shall be removed from the list of designated CABs, in case it fails to take corrective measures.
- 3. DA shall keep the designation of a Designated CAB under suspension, until the completion of formal review process.

E. **AMENDMENT TO THE SCHEME**

DA reserves the rights to amend the scheme, as and when required, for the purpose of streamlining designation process.

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS

1-1/2023-सी.ए./टी.ई.सी.



Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

TELECOMMUNICATION ENGINEERING CENTRE

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Tarang Labs, Wipro Limited, Survey No. 70, 77, 78/8A, Doddakkanelli, Sarjapur Road, Bengaluru-560 035

Certificate Number: TEC/MRA/CAB/IND-D/67

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Validity: 17/12/2023 to 16/12/2026

Last Amended on: ----

Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		-

1.	Audio/Video, information and communication	Accessibility to electrical energy sources and safeguards (Clause 5.3.2)	IEC-62368-1:2018
	equipment-Safety Requirements	Ball Pressure test (Clause 5.4.1.10.3)	IEC-62368-1:2018
		Clearance, Creepage (Clause 5.4.2, 5.4.3)	IEC-62368-1:2018
		Electric Strength test (Clause 5.4.9)	IEC-62368-1:2018
		Capacitor Discharge (Clause 5.5.2.2)	IEC-62368-1:2018
		Resistance of Protective bonding (Clause 5.6.6)	IEC-62368-1:2018
		Prospective touch voltage, touch current and protective conductor current (Clause 5.7)	IEC-62368-1:2018
		Static Stability (Clause No. 8.6.2)	IEC-62368-1:2018
		Relocation Stability (Clause 8.6.3)	IEC-62368-1:2018
		Horizontal Force test (Clause 8.6.5)	IEC-62368-1:2018
		Telescoping or rod antennas (Clause 8.12) (Annex T.11)	IEC-62368-1:2018
		Input test (Annex B.2.5)	IEC-62368-1:2018

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Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		

	Audio/Video, information and Communication Technology Equipment-Safety Requirements	Heating/Temperature test (Clause 9.2.5)	IEC-62368-1:2018
2.	EMI/EMC Testing	Conducted Emission Test	TEC/SD/DD/EMC-
	of	CISPR 32/	221/05/OCT-16 and
	Telecommunication	EN 55032, EN 55011, EN 55022	ER Parameters
	Equipment	Conducted Emission Test	TEC/SD/DD/EMC-
		CISPR 14-1	221/05/OCT-16 and
			ER Parameters
		Conducted Emission Test	TEC/SD/DD/EMC-
		CISPR 25	221/05/OCT-16 and
			ER Parameters
		Radiated Emission Test	TEC/SD/DD/EMC-
		CISPR 32/	221/05/OCT-16 and
		EN 55032, EN 55011, EN 55022	ER Parameters
		Radiated Emission Test	TEC/SD/DD/EMC-
		CISPR 14-1	221/05/OCT-16 and
			ER Parameters
		Radiated Emission Test	TEC/SD/DD/EMC-
		CISPR 25	221/05/OCT-16 and
			ER Parameters
		Electrostatic Discharge Immunity Test	TEC/SD/DD/EMC-
		ITU-T K.21: 2018	221/05/OCT-16 and
			ER Parameters

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Certificate Number: TEC/MRA/CAB/IND-D/67

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Last Amended on: ----

Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		_

	EMI/EMC Testing	High Energy (1.2/50µs) / Telecom Surge	TEC/SD/DD/EMC- 221/05/OCT-16 and
	Telecommunication Equipment	ITU-T K.21: 2018	ER Parameters
3.	EquipmentAccumuloperating in 2.4occupationGHz, 5GHzOccupationOperating in 2.4OccupationOperating in 2.4Operating in 2.4 </th <th>Accumulated Transmit Time, Frequency occupation and Hopping sequence (Clause 4.3.1.4)</th> <th>ETSI EN 300 328 v 2.2.2</th>	Accumulated Transmit Time, Frequency occupation and Hopping sequence (Clause 4.3.1.4)	ETSI EN 300 328 v 2.2.2
	Equipment operating in 2.4 GHz, 5GHz	(Clause 4.3.1.7 or 4.3.2.6) Duty Cycle (Clause 4.3.1.3, 4.3.2.4)	v 2.2.2 ETSI EN 300 328 v 2.2.2
	Frequency Bands	Hoping Frequency Separation (Clause 4.3.1.5)	ETSI EN 300 328 v 2.2.2
		Occupied channel bandwidth (Clause 4.3.1.8, 4.3.2.7)	ETSI EN 300 328 v 2.2.2
		Power spectral density (Clause 4.3.2.3)	ETSI EN 300 328 v 2.2.2
		Receiver Blocking (Clause 4.3.1.12, 4.3.2.11)	ETSI EN 300 328 v 2.2.2
		Receiver spurious Emission (Clause 4.3.1.11, 4.3.2.10)	ETSI EN 300 328 v 2.2.2
		Transmitter RF output Power (Clause 4.3.1.2 & 4.3.2.2)	ETSI EN 300 328 v 2.2.2
		Transmitter Spurious Emission (Clause 4.3.1.10, 4.3.2.9)	ETSI EN 300 328 v 2.1.1 & v 2.2.2

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Certificate Number: TEC/MRA/CAB/IND-D/67

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Validity: 17/12/2023 to 16/12/2026

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Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		_

Equipment	Transmitter unwanted Emission in Outside	ETSI EN 300 328
operating in 2.4 GHz 5GHz	band (Clause 4.3.1.9, 4.3.2.8)	v 2.2.2
Frequency Bands	Adaptivity (Clause 4.2.7)	ETSI EN 301 893 v 2.1.1
	Dynamic Frequency Selection (DFS)- Amplitude (Clause 4.2.6)	ETSI EN 301 893 v 2.1.1
	Dynamic Frequency Selection (DFS)-Time (Clause 4.2.6)	ETSI EN 301 893 v 2.1.1
	EIRP (Equivalent isotropically radiated power) (Clause 4.2.3)	ETSI EN 301 893 v 2.1.1
	Frequency error & Frequency stability (Clause 4.2.1, 5.4.2)	ETSI EN 301 893 v 2.1.1
	Nominal and occupied channel bandwidth (Clause 4.2.2)	ETSI EN 301 893 v 2.1.1
	Power Spectral density (Clause 4.2.3.1.3, 5.4.4)	ETSI EN 301 893 v 2.1.1
	Receiver Blocking (Clause-4.2.8)	ETSI EN 301 893 v 2.1.1
	Receiver Spurious emission (Clause 4.2.5)	ETSI EN 301 893 v 2.1.1
	Transmitter Power Control (TPC) (Clause 4.2.3)	ETSI EN 301 893 v 2.1.1
	Transmitter RF Output Power (Clause 4.2.3)	ETSI EN 301 893 v 2.1.1

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Tarang Labs, Wipro Limited, Survey No. 70, 77, 78/8A, Doddakkanelli, Sarjapur Road, Bengaluru-560 035

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Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		

Equipment operating in 2.4	Transmitter spurious emission' (Clause 4.2.4.1)	ETSI EN 301 893 v 2.1.1
GHz, 5GHz Frequency Bands	Transmitter Unwanted emission within the band (Clause $4, 2, 4, 2$)	ETSI EN 301 893 v 2.1.1
	Radiated Emission (Annex B.2 and C.2)	ETSI EN 301 893 v 2.1.1
	Radiated Emission test (Annex C.2)	ETSI EN 302 502 v 2.1.1
	Accumulated Transmit Time, Frequency occupation and Hopping sequence (15.247)	FCC CFR 47 Subpart C
	Occupied Channel bandwidth/Channel bandwidth (15.247)	FCC CFR 47 Subpart C
	Power Spectral density (15.247)	FCC CFR 47 Subpart C
	Transmitter RF Output Power (15.247)	FCC CFR 47 Subpart C
	Transmitter Spurious emission (15.205)	FCC CFR 47 Subpart C
	Band edge measurements (15.407)	FCC CFR 47 Subpart E
	Dynamic Frequency Selection (DFS)- Amplitude (15.407)	FCC CFR 47 Subpart E

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Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		_

	Equipment operating in 2.4	Dynamic Frequency Selection (DFS)-Time (15.407)	FCC CFR 47 Subpart E
	GHZ, SGHZ frequency bands	EIRP (Equivalent isotropically radiated power) (15.407)	FCC CFR 47 Subpart E
		Frequency error & Frequency stability (15.407)	FCC CFR 47 Subpart E
		Occupied Channel bandwidth/channel bandwidth (15.407)	FCC CFR 47 Subpart E
		Power Spectral density (15.407)	FCC CFR 47 Subpart E
		Transmitter RF Output Power (15.407)	FCC CFR 47 Subpart E
		Transmitter Spurious Emission (15.407)	FCC CFR 47 Subpart E
4.	Safety Requirement for	Marking relevant to safety (Clause 6.4 a)	IEC 60215
	Radio transmitting	Insulation (Clause 7.6)	IEC 60215
	General requirement and	High Temperatures (Clause 8.2)	IEC 60215
	terminology	Creepage and Clearance Distance (Annex A)	IEC 60215
5.	Environmental	Cold (Low Temperature) Test	QM-333:2010
	Testing of Telecommunication	Dry Heat (High Temperature) Test	QM-333:2010
	Equipment	Tropical exposure (Damp Heat cyclic) Test	QM-333:2010

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Validity: 17/12/2023 to 16/12/2026

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Sl.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		-

Environmental	Temperature Cycling Test	QM-333:2010
Testing of	Damp Heat (Steady State) Test	QM-333:2010
Telecommunication Equipment	Vibration Test	QM-333:2010
Lyupment	Salt Mist Test	QM-333:2010

Signed by Sanjay Bhardwaj Date: 20-12-2023 11:04:18 Reason: Approved

AD (CA), TEC

Government of India Department of Telecommunications Telecommunication Engineering Centre Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi-110001

No. 1-1/2024-सी.ए./टी. ई. सी.

Dated: 17.03.2025

M/S Tarang Labs, Wipro Limited, Bangalore Survey No. 70, 77, 78/8a, Doddakkanelli, Sarjapur Road, Bengaluru-560 035 Mob: +91 8884200793 E-Mail: lavanya.k521@wipro.com

[Kind attention to Mrs. LAVANYA K, LEAD QA & RA)]

Subject: Enhancement of Scope of CAB Designation of M/S Tarang Labs, Wipro Limited, Bangalore.

Ref: 1. TEC CAB Designation Certificate no. TEC/MRA/CAB/IND-D/67 dated 17.12.2023

2. Your application for enhancement of Scope of CAB Designation vide Application no. SW9990892944-M008_D001_A194-1730718661610 dated 04.11.2024 submitted on NSWS CAB Designation Portal.

This is in reference to your application for enhancement of Scope of CAB Designation of Certificate No. TEC/MRA/CAB/IND-D/67 dated 17.12.2023, valid upto 16.12.2026, submitted vide Application no. SW9990892944-M008_D001_A194-1730718661610 dated 04.11.2024 in online mode on NSWS CAB Designation Portal.

2. In reference to the recommendations of Site visit assessment team, the scope of designation of CAB Certificate no. referred above is hereby enhanced in respect of test parameters of "Standard for Environmental testing of Telecommunication Equipment, Equipment's operating in 2.4 GHz and 5 GHz Frequency Bands, Degrees of protection provided by enclosures (IP Code) and Audio/Video, Information and Communication Technology Equipment: Safety Requirements " as per detail mentioned in Annexure attached.

3. All other details, terms and conditions and validity of CAB Designation Certificate no. TEC/MRA/CAB/IND-D/67 dated 17.12.2023 shall remain unchanged.

4. This is issued with the approval of Competent Authority.

Encl: as above

Digitally signed by Sanjeev Kumar Arya Date: 17-03-2025 14:49 Appieev Kumar Arya) Director (CA), TEC

Copy to:

i. DDG (Radio), TEC, New Delhi for kind information and necessary action please.

ii. DDG (NR)/DDG(ER)/DDG (WR)/DDG (SR) TEC for kind information please.

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SCOPE OF DESIGNATION (ANNEXURE)

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Certificate Number: TEC/MRA/CAB/IND-D/67

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Validity: 17/03/2025 to 16/12/2026

Last Amended on: ----

Sl.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

1	Standard for	Saaling (Cas tightness)/High Altitude	OM 222 Jagua
1.	Stanuaru for	Test	QIVI-555 1880e
	Environmental testing of		March 2010
	Telecommunication	Test No. /	
	Equipment	Water immersion Test	QM-333 Issue
		Test No. 8	March 2010
		Bump Test	QM-333 Issue
		Test No. 13	March 2010
		Rain Test	QM-333 Issue
		Test No. 14	March 2010
2.	Equipment's operating in	Adjacent channel selectivity	TEC ER No.
	2.4 GHz and 5 GHz	Clause- 4.2.9 & 5.4.11	TEC59432308
	Frequency Bands	ETSI EN 301 893 V2.2. 1:2024	
		Duty Cycle	TEC ER No.
		Clause 5.4.3.2.1.1	TEC59432308
		ETSI EN 302 502 V2.1.3:2017	
		Designation of Centre frequencies and	TEC ER No.
		frequency error Clause- 4.2.1	TEC59432308
		ETSI EN 302 502 V2.1.3:2017	
		Transmitter RF Output Power	TEC ER No.
		Clause- 4.2.2	TEC59432308
		ETSI EN 302 502 V2.1.3:2017	
		EIRP	TEC ER No.
		Clause- 4.2.2	TEC59432308
		ETSI EN 302 502 V2.1.3:2017	
		EIRP spectral density	TEC ER No.
		Clause- 4.2.2	TEC59432308
		ETSI EN 302 502 V2.1.3:2017	



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Certificate Number: TEC/MRA/CAB/IND-D/67

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Validity: 17/03/2025 to 16/12/2026

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Sl.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

	Transmitten Ularranta I Fasiania an Ostalia	TECED N.
Equipment's operating in	Transmitter Unwanted Emissions Outside	TEC EK NO.
2.4 GHz and 5 GHz	the 5 725 MHz to 5 875 MHZ Band	TEC59432308
Frequency Bands	Clause- 4.2.3.1 & 5.4.4.1	
	ETSI EN 302 502 V2.1.3:2017	
	Transmitter Unwanted Emissions Within	TEC ER No.
	the 5725 MHZ to 5875 MHz Band	TEC59432308
	Clause- 4.2.3.2 & 5.4.4.2	
	ETSI EN 302 502 V2.1.3:2017	
	Transmitter Power Control (TPC)	TEC ER No.
	Clause- 4.2.4 & 5.4.3	TEC59432308
	ETSLEN 302 502 V2 1 3:2017	12007 102000
	Receiver Spurious Emission	TEC ER No
	Clause $425 \& 545$	TEC 59/32308
	ETSLEN 302 502 V2 1 3.2017	12037432300
	Dynamic Fraguency Selection Channel	TEC ED No
	Availability Check and Channel	TEC EK INU.
	Availability Check and Channel	1EC39452506
	Revalidation Period	
	Clause- 4.2.6.2.1 & 5.4.6.2. 1.2	
	ETSI EN 302 502 V2.1.3:2017	
	Dynamic Frequency Selection- Non	TEC ER No.
	Occupancy Period Clause- 4.2.6.2.4	TEC59432308
	ETSI EN 302 502 V2.1.3:2017	
	Dynamic Frequency Selection-Channel	TEC ER No.
	Shutdown	TEC59432308
	Clause- 4.2.6.2.3 & 5.4.6.2. 1.7	
	ETSI EN 302 502 V2.1.3:2017	
	Dynamic Frequency Selection-In-Service	TEC ER No.
	Monitoring	TEC59432308
	Clause $42622 & 546216$	
	ETSLEN 302 S02 V2 1 3.2017	



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Sl.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

	Equipment's operating in	Receiver Blocking	TEC ER No.
	2.4 GHz and 5 GHz	Clause- 4.2.7	TEC59432308
	Frequency Bands	ETSI EN 302 502 V2.1.3:2017	
3.	Degrees of protection	Ingress protection (IP)	IEC 60529
	provided by enclosures (IP	Testing: Dust Test - IP5X& 6X	
	Code)	IEC 60529: 1989+A1:1999+ A2:2013	
		Water Ingression Test - IPXI to IPX8	IEC 60529
		IEC 60529:1989+A1:1999+ A2:2013	
		Ingress Protection, 1st characteristic	IEC 60529
		numeral IPIX, IP2X, IP3X & IP4X	
		IEC 60529:1989+A1:1999+A2:2013	
4.	Audio/Video, Information	Static stability test	IEC 62368-1
	and Communication	Clause-8.6.2.2	
	Technology Equipment:	Thermal energy source classifications	IEC 62368-1
	Safety Requirements	Clause- 9.2	
		Antenna terminal insulation Compliance	IEC 62368-1
		Criteria	
		Clause-5.4.5.3	
		Antenna terminal insulation Test Method	IEC 62368-1
		Clause-5.4.5.2	
		Wheels or casters attachment	IEC 62368-1
		requirements	
		Clause-8.9	
		Compliance criteria	IEC 62368-1
		Clause-4.8.5	
		Criteria for telephone ringing signals	IEC 62368-1
		Clause-Annex H	
		Crush test	IEC 62368-1
		Clause- 4.8.4.6	

*The validity of Certificate is up to 16/12/2026 or the continued validity of NABL Accreditation, whichever is earlier.



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Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/S Tarang Labs, Wipro Limited, Bangalore Survey No. 70, 77, 78/8a, Doddakkanelli, Sarjapur Road, Bengaluru-560 035.

Certificate Number: TEC/MRA/CAB/IND-D/67

Validity: 17/03/2025 to 16/12/2026

Last Amended on: ----

SI.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

Audio/Video, Information	Drop test	IEC 62368-1
and Communication	Clause-Annex T.7	
Technology Equipment:	Equipment markings, instructions and	IEC 62368-1
Safety Requirements	instructional safeguards	
	Clause- Annex F	
	Enclosure impact test	IEC 62368-1
	Clause-Annex T.6	
	Equipment mounted to a wall, ceiling or	IEC 62368-1
	other structure Clause- 8.7	
	Fixing of conductors	IEC 62368-1
	Clause- 4.6	
	Handle strength	IEC 62368-1
	Clause- 8.8	
	Humidity conditioning	IEC 62368-1
	Clause- 5.4.8	
	Glass impact test	IEC 62368-1
	Clause-Annex T.9	
	Impulse test	IEC 62368-1
	Clause- 5.4.10.2.2	
	Maximum operating components and	IEC 62368-1
	systems temperatures for materials,	
	Clause- 5.4.1.4	
	Power source circuit classifications	IEC 62368-1
	Clause-6.2.2	
	Determination of working voltage	IEC 62368-1
	Clause- 5.4.1.8	
	Steady force test, 10 N	IEC 62368-1
	Clause-Annex T.2	

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SCOPE OF DESIGNATION (ANNEXURE)

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Validity: 17/03/2025 to 16/12/2026

Last Amended on: ----

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Sl.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

			IEC (22(0.1
	Audio/Video, Information	Steady force test, 30 N	IEC 62368-1
	and Communication	Clause-Annex T.3	
	Technology Equipment:	Steady force test, 100 N	IEC 62368-1
	Safety Requirements	Clause-Annex T.4	
		Steady force test, 250 N	IEC 62368-1
		Clause-Annex T.5	
		Steady state test	IEC 62368-1
		Clause-5 4 10 2 3	120 02500 1
		Determination of accessible parts	IEC 62368-1
		Clause- Annex V	
		Downward force test	IEC 62368-1
		Clause-8.6.2.3	
		Mandrel test	IEC 62368-1
		Clause- 5.4.4.6.5	
		Mounting means for slide-rail mounted	IEC 62368-1
		equipment (SRME)	120 02000 1
		Clause 8 11	
		Ciausite inter de liferencieire	IEC (22(9.1
		Circuits intended for wiring	IEC 62368-1
		interconnection with building wiring	
		Clause-Annex Q	
		Glass slide test	IEC 62368-1
		Clause- 8.6.4	
		Compliance criteria	IEC 62368-1
		Clause- 5.4.4.8	
		Explosion	IEC 62368-1
		Clause- 4.5	
		Simulated abnormal operating conditions	IEC 62368-1
		Clause- B 3	



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GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE

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Validity: 17/03/2025 to 16/12/2026

Last Amended on: ----

Sl.	Telecom Equipment/	Test Parameter or Type of Testing	Standard/
No.	Product		Specification

Audio/Video, Informat and Communication	on Simulated single fault conditions Clause- Annex B.4	IEC 62368-1
Technology Equipmen Safety Requirements	Touch Temperature limits Clause- 9.3	IEC 62368-1
	Carts, stands, and similar carriers Clause 8.10	IEC 62368-1
	Internal and external wiring Clause- 6.5	IEC 62368-1
	Stress relief test Clause- Annex T.8	IEC 62368-1
	Equipment containing batteries and their protection circuits Clause- Annex M (Except M.7 & M.8)	IEC 62368-1
	Safeguards against moving parts Clause- 8.5	IEC 62368-1

Digitally signed by Rajeev Ranjan Date: 17-03-2025 AD 25:49;78C