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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 (RF TR Lab), BANGALORE

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

SY. NO. 69P, 71/4P, 78/8AP, 134P, 76P, 77P, 80P, 70P, 79/1P, UNIT 1, SARJAPUR ROAD, DODDAKANNELLI VILLAGE, VARTHUR HOBLI, BANGALORE, KARNATAKA- 560 035

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/99

Issue Date: 16/08/2024 Validity: 16/08/2024 to 15/08/2027

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

Sanjeev Kumar Arya Director (CA) For Designating Authority TEC 1/3202854/2024 1/3202854/2024

Certificate No: TEC/MRA/CAB/IND-D/99 dated 16/08/2024 issued to M/s TARANG LABS, WIPRO LIMITED (RF TR Lab), SY. NO. 69P, 71/4P, 78/8AP, 134P, 76P, 77P, 80P, 70P, 79/1P, Unit- 1, Sarjapur Road, Doddakannelli Village, Varthur Hobli



Bangalore -560 035

Validity: -16/08/2024 to 15/08/2027

Terms & Conditions

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 recognized 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.

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- 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 Organizational 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

B. REFERENCE TO DESIGNATION STATUS

- 1. Designated CABs may advertise their designation status with regard to standards or 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.

C. POST-DESIGNATION SURVEILLANCE

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

D. SUSPENSION OR WITHDRAWAL OF DESIGNATION

- 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.
- 2. A CAB whose designation, and recognition in case of MRA, has been suspended or 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 TELECOMMUNICATION ENGINEERING CENTRE



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

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s TARANG LABS, WIPRO LIMITED (RF TR Lab),

SY. NO. 69P, 71/4P, 78/8AP, 134P, 76P, 77P, 80P, 70P, 79/1P, Unit-1, Sarjapur Road, Doddakannelli Village, Varthur Hobli

Bangalore -560 035

Certificate Number: TEC/MRA/CAB/IND-D/99 Page 1 of 5

Sl. No.	Telecom Equipment /Product	VI 8		Standard/ Specification
1	D	D C4 4	D C4 - 4' O - 4 4 D	TEC ED M-

1	Base Station for Cellular	Base Station with MSR Transmitter	Base Station Output Power Clause- 6.2 3GPP TS 37.141	TEC ER No. TEC42722304
	Network	Parameters	Transmitter Spurious Emissions Clause- 6.6.1 3GPP TS 37.141	TEC ER No. TEC42722304
			Operating Band Unwanted Emissions Clause- 6.6.2 3GPP TS 37.141	TEC ER No. TEC42722304
			Adjacent Channel Leakage Power Ratio (ACLR) Clause- 6.6.	TEC ER No. TEC42722304
			3GPP TS 37.141 Transmitter Intermodulation Clause- 6.7 3GPP TS 37.141	TEC ER No. TEC42722304
		Base Station with MSR Receiver	Receiver Spurious Emissions Clause- 7.6 3GPP TS 37.141	TEC ER No. TEC42722304
		Parameters	In-band Selectivity and Blocking or In Band Blocking and Narrow Band Blocking	TEC ER No. TEC42722304
			Clause- 7.4 3GPP TS 37.141 Out-of-Band Blocking Clause- 7.5	TEC ER No. TEC42722304
			3GPP TS 37.141	1EC42/22304

^{*}The validity of Certificate is up to 15/08/2027 or the continued validity of NABL Accreditation, whichever is earlier.

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Standard/

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Unit- 1, Sarjapur Road, Doddakannelli Village, Varthur Hobli

Bangalore -560 035

Sl Telecom

Certificate Number: TEC/MRA/CAB/IND-D/99 Page 2 of 5

Test Parameter or Type of Testing

No.	Equipment /Product	Test Parameter	or Type of Testing	Standard/ Specification
	Base Station for Cellular Network	Base Station with MSR Receiver Parameters	Receiver Intermodulation Clause- 7.7 3GPP TS 37.141 Reference Sensitivity Level Clause- 7.2 3GPP TS 37.141	TEC ER No. TEC42722304 TEC ER No. TEC42722304
		Base Station with AAS Transmitter	Base Station Output Power Clause- 6.2 3GPP TS 37.145-1	TEC ER No. TEC42722304
		Parameters	Spurious Emissions Clause- 6.6.6 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Operating Band Unwanted Emissions Clause- 6.6.5 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Adjacent Channel Leakage Power Ratio (ACLR) Clause- 6.6.3 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Spectrum Emission Mask Clause- 6.6.4 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Transmitter Intermodulation Clause- 6.7 3GPP TS 37.145-1	TEC ER No. TEC42722304
		Base Station with AAS Receiver Parameters	Reference Sensitivity Level Clause- 7.2 3GPP TS 37.145-1	TEC ER No. TEC42722304

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



Standard/

Specification

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

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s TARANG LABS, WIPRO LIMITED (RF TR Lab),

SY. NO. 69P, 71/4P, 78/8AP, 134P, 76P, 77P, 80P, 70P, 79/1P, Unit-1, Sarjapur Road, Doddakannelli Village, Varthur Hobli

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Bangalore -560 035

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Telecom

No. Equipment

Certificate Number: TEC/MRA/CAB/IND-D/99 Page 3 of 5

Test Parameter or Type of Testing

110.	/Product			Specification
	Base Station for Cellular Network	Base Station with AAS Receiver Parameters	Adjacent Channel Selectivity and Narrow Band Blocking or In Band Blocking and Narrow Band Blocking Clause- 7.4 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Blocking or Out-of-Band Blocking Clause- 7.5 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Receiver Spurious Emissions Clause- 7.6 3GPP TS 37.145-1	TEC ER No. TEC42722304
			Receiver Intermodulation Clause- 7.7 3GPP TS 37.145-1	TEC ER No. TEC42722304
2.	Base Station for Cellular Network for 5G	BTS with Multi Standard Radio	Base Station Output Power Clause- 6.2 3GPP TS 37.141	TEC ER No. TEC42732304
		Transmitter Parameters	Transmitter Spurious Emissions Clause- 6.6.1 3GPP TS 37.141	TEC ER No. TEC42732304
			Operating Band Unwanted Emissions Clause- 6.6.2 3GPP TS 37.141	TEC ER No. TEC42732304
			Adjacent Channel Leakage Power Ratio (ACLR) Clause- 6.6. 3GPP TS 37.141	TEC ER No. TEC42732304

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Standard/

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

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s TARANG LABS, WIPRO LIMITED (RF TR Lab),

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Unit- 1, Sarjapur Road, Doddakannelli Village, Varthur Hobli

Bangalore -560 035

Sl Telecom

Certificate Number: TEC/MRA/CAB/IND-D/99 Page 4 of 5

Test Parameter or Type of Testing

No.	Equipment /Product	Test Parameter or Type of Testing		Standard/ Specification
	Base Station for Cellular Network for 5G	BTS with Multi Standard Radio Transmitter Parameters	Transmitter Intermodulation Clause- 6.7 3GPP TS 37.141	TEC ER No. TEC42732304
		BTS with Multi Standard Radio	Receiver Spurious Emissions Clause- 7.6 3GPP TS 37.141	TEC ER No. TEC42732304
		Receiver Parameters	In-band Selectivity and Blocking or In Band Blocking and Narrow Band Blocking Clause- 7.4 3GPP TS 37.141	TEC ER No. TEC42732304
			Out-of-Band Blocking Clause- 7.5 3GPP TS 37.141	TEC ER No. TEC42732304
			Receiver Intermodulation Clause- 7.7 3GPP TS 37.141	TEC ER No. TEC42732304
			Reference Sensitivity Level Clause- 7.2 3GPP TS 37.141	TEC ER No. TEC42732304
		Base Station with Hybrid Active Antenna System Transmitter Parameters	Base Station Output Power Clause- 6.2 3GPP TS 37.145-1	TEC ER No. TEC42732304

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Bangalore -560 035

Certificate Number: TEC/MRA/CAB/IND-D/99 Page 5 of 5

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

Base	Base Station	Spurious Emissions	TEC ER No.
Station for	with Hybrid	Clause- 6.6.6	TEC42732304
Cellular	Active Antenna	3GPP TS 37.145-1	
Network	System	Operating Band Unwanted Emissions	TEC ER No.
for 5G	Transmitter	Clause- 6.6.5	TEC42732304
		3GPP TS 37.145-1	
	Parameters	Adjacent Channel Leakage Power	TEC ER No.
		Ratio (ACLR)	TEC42732304
		Clause- 6.6.3	
		3GPP TS 37.145-1	
		Transmitter Intermodulation	TEC ER No.
		Clause- 6.7	TEC42732304
		3GPP TS 37.145-1	
	Base Station	Reference Sensitivity Level	TEC ER No.
	with Hybrid	Clause- 7.2	TEC42732304
	Active Antenna	3GPP TS 37.145-1	
	System	Adjacent Channel Selectivity and	TEC ER No.
		Narrow Band Blocking or In Band	TEC42732304
	Receiver	Blocking and Narrow Band Blocking	
	Parameters	Clause- 7.4	
		3GPP TS 37.145-1	
		Receiver Intermodulation	TEC ER No.
		Clause- 7.7	TEC42732304
		3GPP TS 37.145-1	

AD (CA), TEC

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