ISO 9001:2015

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 Compliance International Telecom Laboratories
(A unit of Compliance International Pvt. Ltd.)

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

X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/71

Issue Date: 23/02/2024 **Validity: 23/02/2024 to 22/02/2027**

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

Signed by Vijay Dixit
Date: 23-02-2024 10:48:46

Vijay Dixit
Director (CA)
For Designating Authority
TEC

Certificate No: TEC/MRA/CAB/IND-D/71 dated 23/02/2024 issued to
M/s Compliance International Telecom Laboratories
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002.

ISO 9001:2015

Validity: - 23/02/2024 to 22/02/2027

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 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.

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

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

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 1 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
1.	**Router (IPv4, IPv6, MPLS, BNG/BRAS Router)**	**Parameters Linked with Product Variants**	Dynamic Routing (Annex P-11)	TEC ER No. TEC37682308
			IPv4 Parameters RFC 791 (Conformance Testing)	TEC ER No. TEC37682308
			IPv6 Complete Suite RFC2460 or 8200, RFC 4861, RFC 4862, RFC 1981,RFC4443 (Conformance Testing)	TEC ER No. TEC37682308
			BGP for IPv6 RFC 2545 (Conformance Testing)	TEC ER No. TEC37682308
			BGP4 as per RFC 4271 and MBGP as per RFC 4760 (Conformance Testing)	TEC ER No. TEC37682308
			LDP as per RFC 5036 (Conformance Testing)	TEC ER No. TEC37682308
			Manageability SNMP v2 or v3 RFC 3410, RFC 3416 (Functional Testing)	TEC ER No. TEC37682308
			OSPF v2 RFC 2328 (Conformance Testing)	TEC ER No. TEC37682308
			OSPF v3 RFC 2740 (Conformance Testing)	TEC ER No. TEC37682308
			Static Routing Annex-P11	TEC ER No. TEC37682308
			TCP Parameters RFC 793 (Conformance Testing)	TEC ER No. TEC37682308
		Interface: 10/100/1000 BASE-T Ethernet	Link Speed and Auto negotiation Test GE IEEE 802.3Annex-H	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router)	**Interface: 10/100 BASE-T Ethernet**	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC37682308
		Interface: 1G Optical Ethernet	Average Launch Power IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC37682308
			Receiver Sensitivity IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC37682308
			Wavelength IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC37682308
		Interface: 10 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
		Interface: 100 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC37682308
		Interface: 40 G Optical Ethernet	Average Launch Power IEEE 802.3ba Cl. 86 87Annex-H	TEC ER No. TEC37682308
			Receiver Sensitivity IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC37682308
			Wavelength IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 3 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router)	**Interface: Fast Ethernet Optical**	Average Launch Power IEEE 802.3u Annex-H	TEC ER No. TEC37682308
			Receiver Sensitivity IEEE 802.3u Annex-H	TEC ER No. TEC37682308
			Wavelength IEEE 802.3u Annex-H	TEC ER No. TEC37682308
		Interface: ISDN PRI	Bit Rate Tolerance for PRI ITU-T G.703 Clause no. 11.1 Annex-I	TEC ER No. TEC37682308
			Pulse Mask ITU-T G.703 Clause no. 11.2 Annex-I	TEC ER No. TEC37682308
			Input Return Loss ITU-T G.703 Clause no. 11.3 Annex-I	TEC ER No. TEC37682308
			Output Jitter ITU-T G.823 Clause no. 5.1 Annex-I	TEC ER No. TEC37682308
			Input Jitter Tolerance ITU-T G.823 Clause no. 7.1.2 Annex-I	TEC ER No. TEC37682308
			Layer-III PRI Specification - Call Setup ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 4 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router)	**Interface: ISDN PRI**	Layer-III PRI Specification – Call Clearing ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC37682308
		Interface: 2 Mbps -E1	Input Jitter Tolerance ITU-T G.823 ETSI TBR-4 Annex-I	TEC ER No. TEC37682308
			Input Return Loss ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Output Jitter ITU-T G.823 Annex-I	TEC ER No. TEC37682308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC37682308
		Interface: 34 Mbps -E3	Input Jitter Tolerance ITU-T G.823 Annex-I	TEC ER No. TEC37682308
			Input Return Loss ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Output Jitter ITU-T G.823 Annex-I	TEC ER No. TEC37682308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 5 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router	**Interface: 45 Mbps**	DC Power ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Input Jitter Tolerance ITU-T G.824 Annex-I	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC37682308
			Output Jitter ITU-T G.824 Annex-I	TEC ER No. TEC37682308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC37682308
		Interface: STM-1 Electrical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Input Return Loss ITU-T G.703 Annex-K	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-K	TEC ER No. TEC37682308
			Output Jitter ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Pulse Mask ITU-T G.703 Annex-K	TEC ER No. TEC37682308
		Interface: STM-1 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 6 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router	**Interface: STM-1 Optical**	Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC37682308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC37682308
		Interface: STM-4 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC37682308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC37682308
		Interface: STM-16 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC37682308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 7 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Router (IPv4, IPv6, MPLS, BNG/BRAS Router	**Interface: STM-16 Optical**	Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC37682308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC37682308
		Interface: STM-64 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC37682308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC37682308
			Operating Wavelength Range ITU-T G.691 Annex-K	TEC ER No. TEC37682308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC37682308
			Receiver Overload ITU-T G.691 Annex-K	TEC ER No. TEC37682308
			Receiver Sensitivity ITU-T G.691 Annex-K	TEC ER No. TEC37682308
2	**IP Security Equipment (UTM, IPS, IDS, Firewall Equipment)**	**Parameters Linked with Product Variant**	IPv4 Parameters RFC 791 (Conformance Testing)	TEC ER No. TEC34732305
			IPV6 Complete Suite RFC 2460 or 8200, RFC 4861, RFC 4862, RFC 1981, RFC 4443 (Conformance Testing)	TEC ER No. TEC34732305
			Manageability SNMP v2 or SNMP v3 RFC 3410, RFC 3416 (Functional Testing)	TEC ER No. TEC34732305

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 8 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IP Security Equipment (UTM, IPS, IDS, Firewall Equipment)	**Interface: 1 G Optical Ethernet**	Average Launch Power IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC34732305
			Receiver Sensitivity IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC34732305
			Wavelength IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC34732305
		Interface: 10/100/1000 BASE-T Ethernet	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC34732305
		Interface: 10/100 BASE-T Ethernet	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC34732305
		Interface: 10 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC34732305
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC34732305
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC34732305
		Interface: 100 G Optical Ethernet	Average Launch Power IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC34732305
			Receiver Sensitivity IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC34732305
			Wavelength IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC34732305
		Interface: 40 G Optical Ethernet	Average Launch Power IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC34732305

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 9 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IP Security Equipment (UTM, IPS, IDS, Firewall Equipment)	**Interface: 40 G Optical Ethernet**	Receiver Sensitivity IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC34732305
			Wavelength IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC34732305
		Interface: Fast Ethernet Optical	Average Launch Power IEEE 802.3u Annex-H	TEC ER No. TEC34732305
			Receiver Sensitivity IEEE 802.3u Annex-H	TEC ER No. TEC34732305
			Wavelength IEEE 802.3u Annex-H	TEC ER No. TEC34732305
3.	**Transmission Terminal Equipment-1**	**Interface: GPON**	Line Test for GPON Int. IEEE 802.3ah	TEC ER No. TEC78832308
			Operating Wavelength in upstream direction for GPON Int. ITU-T G.984.2, Cl. 8.2.5.2	TEC ER No. TEC78832308
			Operating Wavelength in downstream direction for GPON Int. ITU-T G.984.2, Cl. 8.2.5.1	TEC ER No. TEC78832308
			Opt. Output Power for GPON Int. at OLT G.984.2	TEC ER No. TEC78832308
			Opt. Output Power for GPON Int. at ONT G.984.2	TEC ER No. TEC78832308
			Receiver Sensitivity for GPON Int. at OLT G.984.2	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 10 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: GPON**	Receiver Sensitivity for GPON Int. at ONT G.984.2	TEC ER No. TEC78832308
			Throughput for GPON Int. G.984.1, RFC 2544	TEC ER No. TEC78832308
		Interface: 2 Wire	Idle State Current for 2 wire Int. ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1 Annex D	TEC ER No. TEC78832308
			Insulation Test for 2 wire Int. ETSI EN 300 001 Annex-D	TEC ER No. TEC78832308
			Longitudinal Conversion Loss for 2W Int. Q.552 Cl. 2.2.2 Annex-D	TEC ER No. TEC78832308
			Maximum Loop Current for 2W Int. ETSI EN 300 001 ETSI TBR-21, Cl.4.4.3 Annex-D	TEC ER No. TEC78832308
			Return Loss for 2W Int. Q.552 Cl. 2.2.1.2 Annex-D	TEC ER No. TEC78832308
		Interface: 1 G Optical Ethernet	Average Launch Power IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC78832308
			Receiver Sensitivity IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC78832308
			Wavelength IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC78832308
		Interface: 10/100/1000 BASE-T Ethernet	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 11 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: 10/100 BASE-T Ethernet**	Link Speed and Auto negotiation Test FE IEEE 802.3	TEC ER No. TEC78832308
		Interface: 10 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC78832308
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC78832308
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC78832308
		Interface: ISDN PRI	Bit Rate Tolerance for PRI ITU-T G.703 Clause no. 11.1 Annex-I	TEC ER No. TEC78832308
			Pulse Mask ITU-T G.703 Clause no. 11.2 Annex-I	TEC ER No. TEC78832308
			Input Return Loss ITU-T G.703 Clause no. 11.3 Annex-I	TEC ER No. TEC78832308
			Output Jitter ITU-T G.823 Clause no. 5.1 Annex-I	TEC ER No. TEC78832308
			Input Jitter Tolerance ITU-T G.823 Clause no. 7.1.2 Annex-I	TEC ER No. TEC78832308
			Layer-III PRI Specification - Call Setup ITU-T Q.931 Clause no.3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 12 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: ISDN PRI**	Layer-III PRI Specification - Call Clearing ITU-T Q.931 Clause no.3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC78832308
		Interface: 2 Mbps-E1	Input Jitter Tolerance ITU-T G.823 ETSI TBR-4 Annex-I	TEC ER No. TEC78832308
			Input Return Loss ITU-T G.703 Annex-I	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC78832308
			Output Jitter ITU-T G.823 Annex-I	TEC ER No. TEC78832308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC78832308
		Interface: 34 Mbps-E3	Input Jitter Tolerance ITU-T G.823 Annex-I	TEC ER No. TEC78832308
			Input Return Loss ITU-T G.703 Annex-I	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC78832308
			Output Jitter ITU-T G.823 Annex-I	TEC ER No. TEC78832308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC78832308
		Interface: 45 Mbps	DC Power ITU-T G.703 Annex-I	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 13 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: 45 Mbps**	Input Jitter Tolerance ITU-T G.824 Annex-I	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC78832308
			Output Jitter ITU-T G.824 Annex-I	TEC ER No. TEC78832308
			Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC78832308
		Interface: STM-1 Electrical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Input Return Loss ITU-T G.703 Annex-K	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-K	TEC ER No. TEC78832308
			Output Jitter ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Pulse Mask ITU-T G.703 Annex-K	TEC ER No. TEC78832308
		Interface: STM-1 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 14 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: STM-1 Optical**	Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC78832308
		Interface: STM-4 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC78832308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC78832308
		Interface: STM-16 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 15 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: STM-16 Optical**	Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC78832308
		Interface: STM-64 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC78832308
			Mean Launched Power ITU-T G.691 Annex-K	TEC ER No. TEC78832308
			Operating Wavelength Range ITU-T G.691 Annex-K	TEC ER No. TEC78832308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC78832308
			Receiver Overload ITU-T G.691 Annex-K	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.691 Annex-K	TEC ER No. TEC78832308
		Interface: OTU-1	Central Frequency ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC78832308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC78832308
			Mean Total Input Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Mean Total Output Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC78832308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 16 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-1	**Interface: OTU-1**	Output Jitter ITU-T G.8251 Annex-L	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
		Interface: OTU-2	Central Frequency ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC78832308
			Mean Total Input Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Mean Total Output Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Receiver Overload ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
			Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC78832308
			Output Jitter ITU-T G.8251 Annex-L	TEC ER No. TEC78832308
			Receiver Sensitivity ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC78832308
4	**Transmission Terminal Equipment-2**	**Parameters Linked with Product Variant**	Channel spacing for 10G/40G/100G DWDM ITU-T G.694.1	TEC ER No. TEC70122308
		Interface: 1 G Optical Ethernet	Average Launch Power IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC70122308
			Receiver Sensitivity IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 17 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: 1 G Optical Ethernet**	Wavelength IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC70122308
		Interface: 10/100/1000 BASE-T Ethernet	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC70122308
		Interface: 10/100 BASE-T Ethernet	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC70122308
		Interface: 10 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC70122308
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC70122308
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC70122308
		Interface: 100 G Optical Ethernet	Average Launch Power IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC70122308
			Receiver Sensitivity IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC70122308
			Wavelength IEEE 802.3ba Cl. 86 88 Annex-H	TEC ER No. TEC70122308
		Interface: 40 G Optical Ethernet	Average Launch Power IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC70122308
			Receiver Sensitivity IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC70122308
			Wavelength IEEE 802.3ba Cl. 86 87 Annex-H	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 18 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing	Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: ISDN PRI**	
		Bit Rate Tolerance for PRI ITU-T G.703 Clause no. 11.1 Annex-I	TEC ER No. TEC70122308
		Pulse Mask ITU-T G.703 Clause no. 11.2 Annex-I	TEC ER No. TEC70122308
		Input Return Loss ITU-T G.703 Clause no. 11.3 Annex-I	TEC ER No. TEC70122308
		Output Jitter ITU-T G.823 Clause no. 5.1 Annex-I	TEC ER No. TEC70122308
		Input Jitter Tolerance ITU-T G.823 Clause no. 7.1.2 Annex-I	TEC ER No. TEC70122308
		Layer-III PRI Specification - Call Setup ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC70122308
		Layer-III PRI Specification – Call Clearing ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 19 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: STM-1 Electrical**	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Input Return Loss ITU-T G.703 Annex-K	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-K	TEC ER No. TEC70122308
			Output Jitter ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Pulse Mask ITU-T G.703 Annex-K	TEC ER No. TEC70122308
		Interface: STM-1 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC70122308
		Interface: STM-4 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 20 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: STM-4 Optical**	Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC70122308
		Interface: STM-16 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC70122308
		Interface: STM-64 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC70122308
			Mean Launched Power ITU-T G.691 Annex-K	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 21 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: STM-64 Optical**	Operating Wavelength Range ITU-T G.691 Annex-K	TEC ER No. TEC70122308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.691 Annex-K	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.691 Annex-K	TEC ER No. TEC70122308
		Interface: OTU-1	Central Frequency ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC70122308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC70122308
			Mean Total Input Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Mean Total Output Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC70122308
			Output Jitter ITU-T G.8251 Annex-L	TEC ER No. TEC70122308
		Interface: OTU-2	Receiver Sensitivity ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Central Frequency ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Input Jitter Tolerance ITU-T G.8251 Annex-L	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 22 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: OTU-2**	Mean Total Input Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Mean Total Output Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC70122308
			Output Jitter ITU-T G.8251 Annex-L	TEC ER No. TEC70122308
		Interface: OTU-3	Central Frequency ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Mean Total Input Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Mean Total Output Power ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Receiver Overload ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
			Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.959.1, G.693 Annex-L	TEC ER No. TEC70122308
		Interface: OTU-4	Central Frequency ITU-T G.959.1, G.695 Annex-L	TEC ER No. TEC70122308
			Mean Total Input Power ITU-T G.959.1, G.695 Annex-L	TEC ER No. TEC70122308
			Mean Total Output Power ITU-T G.959.1, G.695 Annex-L	TEC ER No. TEC70122308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 23 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Transmission Terminal Equipment-2	**Interface: OTU-4**	Nominal Bit Rate with Tolerance ITU-T G.709 Annex-L	TEC ER No. TEC70122308
			Receiver Sensitivity ITU-T G.959.1, G.695 Annex-L	TEC ER No. TEC70122308
5	**PON Family of Broadband Equipment (ONT, ONU, OLT)**	**Parameters Linked with Product Variants**	Dual IP Layer Operation RFC 4213 – Address RFC 4213 Cl. 2.1 (Conformance Testing)	TEC ER No. TEC14762308
			Dual IP Layer Operation RFC 4213 – DNS RFC 4213 Cl. 2.2 (Conformance Testing)	TEC ER No. TEC14762308
			IPV4 Parameters Set-A RFC 791 Conformance Testing)	TEC ER No. TEC14762308
			IPV6 Extn. Header Parameters RFC 2460 / RFC 8200 (Conformance Testing)	TEC ER No. TEC14762308
			IPV6 Header Parameters RFC 2460 / RFC 8200 (Conformance Testing)	TEC ER No. TEC14762308
			MAC Address Limitation in PON IEEE 802.3	TEC ER No. TEC14762308
			Password based authentication in PON G.984.3	TEC ER No. TEC14762308
			DOS prevention SSHv1-2 for CLI in PON G.984.3	TEC ER No. TEC14762308
			MAC based 802.1x authentication in PON IEEE 802.1x	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 24 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Parameters Linked with Product Variants**	Switch Fabric throughput capability OLT G.984.1	TEC ER No. TEC14762308
			Throughput of PON RFC 2544	TEC ER No. TEC14762308
			Frame loss of PON RFC 2544	TEC ER No. TEC14762308
			Latency of PON RFC 2544	TEC ER No. TEC14762308
			VLAN stacking to Network support at OLT G.984.1 IEEE 802.1Q	TEC ER No. TEC14762308
			MAC address learning and aging control G.984.1	TEC ER No. TEC14762308
			MAC learning support at OLT G.984.1	TEC ER No. TEC14762308
			Maximum Bandwidth Limiting/ Minimum Guaranteed Bandwidth in PON G.984.3-200803	TEC ER No. TEC14762308
			Minimum two Classification in PON G.984.3-200803	TEC ER No. TEC14762308
			Port ID based VLAN support at OLT G.984.1 IEEE 802.1Q	TEC ER No. TEC14762308
		Interface: EPON	Line Test for EPON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in downstream direction for EPON Int. IEEE 802.3ah	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 25 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: EPON**	Operating Wavelength in Upstream direction for EPON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Opt Output Power for EPON Int. at OLT IEEE 802.3ah	TEC ER No. TEC14762308
			Opt Output Power for EPON Int. at ONT IEEE 802.3ah	TEC ER No. TEC14762308
			Receiver Sensitivity for EPON Int. at OLT IEEE 802.3ah	TEC ER No. TEC14762308
			Receiver Sensitivity for EPON Int. at ONT IEEE 802.3ah	TEC ER No. TEC14762308
			Throughput for EPON Int. RFC 2544	TEC ER No. TEC14762308
		Interface: GPON	Line Test for GPON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in upstream direction for GPON Int. ITU-T G.984.2, Cl. 8.2.5.2	TEC ER No. TEC14762308
			Operating Wavelength in Downstream direction for GPON Int. ITU-T G.984.2, Cl. 8.2.5.1	TEC ER No. TEC14762308
			Opt Output Power for GPON Int. at OLT G.984.2	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 26 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: GPON**	Opt Output Power for GPON Int. at ONT G.984.2	TEC ER No. TEC14762308
			Receiver Sensitivity for GPON Int. at OLT G.984.2	TEC ER No. TEC14762308
			Receiver Sensitivity for GPON Int. at ONT G.984.2	TEC ER No. TEC14762308
			Throughput for GPON Int. G.984.1, RFC 2544	TEC ER No. TEC14762308
		Interface: NGPON2	Line Test for NGPON2 Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in downstream direction for NGPON2 Int. G.989.2	TEC ER No. TEC14762308
			Operating Wavelength in Upstream direction for NGPON2 Int. G.989.2	TEC ER No. TEC14762308
			Opt Output Power for NGPON2 Int. at OLT G.989.2	TEC ER No. TEC14762308
			Opt Output Power for NGPON2 Int. at ONT G.989.2	TEC ER No. TEC14762308
			Receiver Sensitivity for NGPON2 Int. at OLT G.989.2	TEC ER No. TEC14762308
			Receiver Sensitivity for NGPON2 Int. at ONT G.989.2	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 27 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: NGPON2**	Throughput for NGPON2 Int. G.989.2	TEC ER No. TEC14762308
		Interface: WDMPON	Line Test for WDMPON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in downstream direction for WDMPON Int. G.694.1	TEC ER No. TEC14762308
			Operating Wavelength in upstream direction for WDMPON Int. G.694.1	TEC ER No. TEC14762308
			Opt Output Power for WDM PON Int. at OLT G.694.1	TEC ER No. TEC14762308
			Opt Output Power for WDM PON Int. at ONT G.694.1	TEC ER No. TEC14762308
			Receiver Sensitivity for WDM PON Int. at OLT G.694.1	TEC ER No. TEC14762308
			Receiver Sensitivity for WDM PON Int. at ONT G.694.1	TEC ER No. TEC14762308
			Throughput for WDM PON Int. G.694.1, RFC 2544	TEC ER No. TEC14762308
		Interface: XGPON	Line Test for XG PON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in downstream direction for XGPON Int. G.987.2	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 28 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: XGPON**	Operating Wavelength in upstream direction for XGPON Int. G.987.2	TEC ER No. TEC14762308
			Opt Output Power for XGPON Int. at OLT G.987.2	TEC ER No. TEC14762308
			Opt Output Power for XGPON Int. at ONT G.987.2	TEC ER No. TEC14762308
			Receiver Sensitivity for GPON Int. at OLT G.987.2	TEC ER No. TEC14762308
			Receiver Sensitivity for XGPON Int. at ONT G.987.2	TEC ER No. TEC14762308
			Throughput for XGPON Int. G.987.1, RFC 2544	TEC ER No. TEC14762308
		Interface: XGSPON	Line Test for XGSPON Int. IEEE 802.3ah	TEC ER No. TEC14762308
			Operating Wavelength in downstream direction for XGSPON Int. G.9807.1	TEC ER No. TEC14762308
			Operating Wavelength in upstream direction for XGSPON Int. G.9807.1	TEC ER No. TEC14762308
			Opt Output Power for XGSPON Int. at OLT G.9807.1	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 29 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: XGSPON**	Opt Output Power for XGSPON Int. at ONT G.9807.1	TEC ER No. TEC14762308
			Receiver Sensitivity for XGSPON Int. at OLT G.9807.1	TEC ER No. TEC14762308
			Receiver Sensitivity for XGSPON Int. at ONT G.9807.1	TEC ER No. TEC14762308
			Throughput for XGPON Int. G9807.1, RFC 2544	TEC ER No. TEC14762308
		Interface: 2 Wire	Idle State Current for 2 wire Int. ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1 Annex D	TEC ER No. TEC14762308
			Insulation Test for 2 wire Int. ETSI EN 300 001 Annex-D	TEC ER No. TEC14762308
			Longitudinal Conversion Loss for 2W Int. Q.552 Cl. 2.2.2 Annex-D	TEC ER No. TEC14762308
			Maximum Loop Current for 2W Int. ETSI EN 300 001 ETSI TBR-21, Cl.4.4.3 Annex-D	TEC ER No. TEC14762308
			Return Loss for 2W Int. Q.552 Cl. 2.2.1.2 Annex-D	TEC ER No. TEC14762308
		Interface: 1 G Optical Ethernet	Average Launch Power IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC14762308
			Receiver Sensitivity IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 30 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: 1 G Optical Ethernet**	Wavelength IEEE 802.3z Cl. 38 Annex-H	TEC ER No. TEC14762308
		Interface: 10/100/1000 BASE-T Ethernet	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC14762308
		Interface: 10/ 100 BASE-T Ethernet	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC14762308
		Interface: 10 BASE-T Ethernet	Link Speed IEEE 802.3 Annex-H	TEC ER No. TEC14762308
		Interface: 10 G Optical Ethernet	Average Launch Power IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC14762308
			Receiver Sensitivity IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC14762308
			Wavelength IEEE 802.3ae Cl. 52 Annex-H	TEC ER No. TEC14762308
		Interface: 2 Mbps-E1	Input Jitter Tolerance ITU-T G.823 ETSI TBR-4 Annex-I	TEC ER No. TEC14762308
			Input Return Loss ITU-T G.703 Annex-I	TEC ER No. TEC14762308
			Nominal Bit Rate with Tolerance ITU-T G.703 Annex-I	TEC ER No. TEC14762308
			Output Jitter ITU-T G.823 Annex-I	TEC ER No. TEC14762308

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 31 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PON Family of Broadband Equipment (ONT, ONU, OLT)	**Interface: 2 Mbps-E1**	Pulse Mask ITU-T G.703 Annex-I	TEC ER No. TEC14762308
		Interface: STM-1 Optical	Input Jitter Tolerance ITU-T G.825 Annex-K	TEC ER No. TEC14762308
			Mean Launched Power ITU-T G.957 Annex-K	TEC ER No. TEC14762308
			Nominal Bit Rate with Tolerance ITU-T G.957 Annex-K	TEC ER No. TEC14762308
			Operating Wavelength Range ITU-T G.957 Annex-K	TEC ER No. TEC14762308
			Output Jitter ITU-T G.783 Annex-K	TEC ER No. TEC14762308
			Receiver Overload ITU-T G.957 Annex-K	TEC ER No. TEC14762308
			Receiver Sensitivity ITU-T G.957 Annex-K	TEC ER No. TEC14762308
6	**PABX**	**Interface: Fast Ethernet Electrical**	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC67292301
		Interface: Gigabit Ethernet Electrical	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC67292301
		Interface: 2-Wire Trunk	Current on Junction/ Trunk Line in PABX ETSI EN 300 001 Annex-D	TEC ER No. TEC67292301
			DC Resistance ETSI TBR-21 Clause 4.4.1 Annex-D	TEC ER No. TEC67292301

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 32 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PABX	**Interface: 2-Wire Trunk**	Longitudinal Conversion Loss for 2W Trunk Int. Clause No. 2.2.2 & Figure-2 of ITU-T Q.552 Annex-D	TEC ER No. TEC67292301
			Resistance to Earth Clause No. 4.4.4 of ETSI TBR-21 Annex-D	TEC ER No. TEC67292301
			Return Loss for 2 W Trunk Int. Clause No. 2.2.1.2 & Figure-1 of ITU-T Q.552 Annex-D	TEC ER No. TEC67292301
			Transmission of DTMF Signalling Clause 6 & 7 of ITU-T Q.23 Annex-D	TEC ER No. TEC67292301
		Interface: ISDN PRI	Bit Rate Tolerance for PRI ITU-T G.703 Clause no. 11.1 Annex-I	TEC ER No. TEC67292301
			Pulse Mask ITU-T G.703 Clause no. 11.2 Annex-I	TEC ER No. TEC67292301
			Input Return Loss ITU-T G.703 Clause no. 11.3 Annex-I	TEC ER No. TEC67292301
			Output Jitter ITU-T G.823 Clause no. 5.1 Annex-I	TEC ER No. TEC67292301
			Input Jitter Tolerance ITU-T G.823 Clause no. 7.1.2 Annex-I	

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 33 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	PABX	**Interface: ISDN PRI**	Layer-III PRI Specification - Call Setup ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC67292301
			Layer-III PRI Specification – Call Clearing ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC67292301
7	**ISDN Customer Premises Equipment**	**Interface: Fast Ethernet Electrical**	Link Speed and Auto negotiation Test FE IEEE 802.3 Annex-H	TEC ER No. TEC64732301
		Interface: Gigabit Ethernet Electrical	Link Speed and Auto negotiation Test GE IEEE 802.3 Annex-H	TEC ER No. TEC64732301
		Interface: 2-Wire Trunk	Current on Junction/ Trunk Line in PABX ETSI EN 300 001 Annex-D	TEC ER No. TEC64732301
			DC Resistance ETSI TBR-21 Clause 4.4.1 Annex-D	TEC ER No. TEC64732301

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 34 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	ISDN Customer Premises Equipment	**Interface: 2-Wire Trunk**	Longitudinal Conversion Loss for 2W Trunk Int. Clause No. 2.2.2 & Figure-2 of ITU-T Q.552 Annex-D	TEC ER No. TEC64732301
			Resistance to Earth Clause No. 4.4.4 of ETSI TBR-21 Annex-D	TEC ER No. TEC64732301
			Return Loss for 2 W Trunk Int. Clause No. 2.2.1.2 & Figure-1 of ITU-T Q.552 Annex-D	TEC ER No. TEC64732301
			Transmission of DTMF Signalling Clause 6 & 7 of ITU-T Q.23 Annex-D	TEC ER No. TEC64732301
		Interface: ISDN PRI	Bit Rate Tolerance for PRI ITU-T G.703 Clause no. 11.1 Annex-I	TEC ER No. TEC64732301
			Pulse Mask ITU-T G.703 Clause no. 11.2 Annex-I	TEC ER No. TEC64732301
			Input Return Loss ITU-T G.703 Clause no. 11.3 Annex-I	TEC ER No. TEC64732301
			Output Jitter ITU-T G.823 Clause no. 5.1 Annex-I	TEC ER No. TEC64732301
			Input Jitter Tolerance ITU-T G.823 Clause no. 7.1.2 Annex-I	TEC ER No. TEC64732301

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 35 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	ISDN Customer Premises Equipment	**Interface: ISDN PRI**	Layer-III PRI Specification - Call Setup ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC64732301
			Layer-III PRI Specification – Call Clearing ITU-T Q.931 Clause No. 3.1.1, 3.1.2, 3.1.3, 3.1.14, 3.1.15, 3.1.5, 3.1.9, 3.1.10, 4.5.5, 4.5.8, 4.5.10, 4.5.13, Table 6-5 for all call clearing message Annex-D1	TEC ER No. TEC64732301
8	**2-Wire Telephone Equipment**	**Interface: 2 Wire**	Idle State Current for 2 wire Int. ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1 Annex D	TEC ER No. TEC18352108
			Insulation Test for 2 wire Int. ETSI EN 300 001 Annex-D	TEC ER No. TEC18352108
			Longitudinal Conversion Loss for 2W Int. Q.552 Cl. 2.2.2 Annex-D	TEC ER No. TEC18352108
			Maximum Loop Current for 2W Int. ETSI EN 300 001 ETSI TBR-21, Cl.4.4.3 Annex-D	TEC ER No. TEC18352108
			Return Loss for 2W Int. Q.552 Cl. 2.2.1.2 Annex-D	TEC ER No. TEC18352108

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 36 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
9	**Conferencing Equipment**	**Parameters Linked with Product Variant**	Voice Conference Verification (Functional Test)	TEC ER No. TEC12662108
		Interface: 2 Wire	Idle State Current for 2 wire Int. ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1 Annex D	TEC ER No. TEC12662108
			Insulation Test for 2 wire Int. ETSI EN 300 001 Annex-D	TEC ER No. TEC12662108
			Longitudinal Conversion Loss for 2W Int. Q.552 Cl. 2.2.2 Annex-D	TEC ER No. TEC12662108
			Maximum Loop Current for 2W Int. ETSI EN 300 001 ETSI TBR-21, Cl.4.4.3 Annex-D	TEC ER No. TEC12662108
			Return Loss for 2W Int. Q.552 Cl. 2.2.1.2 Annex-D	TEC ER No. TEC12662108
10	**Cordless Telephone**	**Interface: 2 Wire**	Idle State Current for 2 wire Int. ETSI EN 300 001 ETSI TBR-21 Cl. 4.4.1 Annex D	TEC ER No. TEC12672301
			Insulation Test for 2 wire Int. ETSI EN 300 001 Annex-D	TEC ER No. TEC12672301
			Longitudinal Conversion Loss for 2W Int. Q.552 Cl. 2.2.2 Annex-D	TEC ER No. TEC12672301
			Maximum Loop Current for 2W Int. ETSI EN 300 001 ETSI TBR-21, Cl.4.4.3 Annex-D	TEC ER No. TEC12672301

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001: 2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: **M/s Compliance International Telecom Laboratories**
(A unit of Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase-II, New Delhi-110 002

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 37 of 37**

Validity: 23/02/2024 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Cordless Telephone	**Interface: 2 Wire**	Return Loss for 2W Int. Q.552 Cl. 2.2.1.2 Annex-D	TEC ER No. TEC12672301
11	**Feedback device**	**Parameters Linked with Product Variant**	IPv6 as per RFC 2460 RFC 2460 / RFC 8200	TEC ER No. TEC23232106
			IPv6 Dual Stack as per RFC 4213	TEC ER No. TEC23232106

Signed by Sanjay Bhardwaj
Date: 23-02-2024 11:03:07

AD (CA), TEC

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

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

No. 1-50/2024-सी.ए./टी. ई. सी. **Dated: 21.03.2025**

To,
M/s Compliance International Telecom Laboratories
(a Unit of Compliance International Pvt. Ltd.)
X -35, 3rd Floor, Okhla Phase –II, Delhi-110020.
Mob: +91- 9811156939
Email ID:- yadav@typeapproval.com

[Kind attention to Mr. Tukaram Yadav, Director)]

Subject: Enhancement of Scope of CAB Designation of M/s Compliance International Telecom Laboratories (a unit of Compliance International Pvt. Ltd.), Delhi.

Ref: **1.** TEC CAB Designation Certificate no. TEC/MRA/CAB/IND-D/71 dated 23.02.2024.

2. Your application for enhancement of Scope of CAB Designation vide Application no. SW6876438150 dated 07.08.2024 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/71 dated 23.02.2024, valid upto 22.02.2027, submitted vide Application no. SW6876438150 dated 07.08.2024 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 “PABX, IoT Gateway, Soft switch, Session Board Controller & Equipment's Operating in 2.4 GHz and 5 GHz Band (Wi-Fi interface) and ECR Testing for PON Family of Broadband Equipment” 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/71 dated 23.02.2024 shall remain unchanged.

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

Encl: as above

Digitally signed by
Sanjeev Kumar Arya
Date: 21-03-2025
14:53:37

(Sanjeev Kumar Arya)
Director (CA), TEC

Copy to:
1. DDG (NGN), DDG (IoT), DDG (MT) & DDG (FA), TEC, New Delhi for kind information and necessary action please.
2. DDG (NR)/DDG(ER)/DDG (WR)/DDG (SR) TEC for kind information please.

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 1 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
1.	IoT Gateway	**Interface: LTE or LTE-A**	Operating Frequency for LTE or LTE-A Interface NFAP. Annex-F	TEC ER No. TEC24492408
			Maximum Output Power 3GPP TS 36.521-1 Clause- 6.2.2/ EN 301 908-13 (LTE)Clause- 4.2.2	TEC ER No. TEC24492408
			Receiver Adjacent Channel Selectivity (ACS) 3GPP TS 36.521-1 Clause- 7.5/ EN 301 908-13 (LTE)Clause- 4.2.6	TEC ER No. TEC24492408
			Receiver In-Band Blocking 3GPP TS 36.521-1 Clause- 7.6.1/ EN 301 908-13 (LTE)Clause- 4.2.7	TEC ER No. TEC24492408
			Receiver Reference Sensitivity Level 3GPP TS 36.521-1 Clause- 7.3/ EN 301 908-13 (LTE) Clause- 4.2.12	TEC ER No. TEC24492408
			Receiver Spurious Emission (Conducted) 3GPP TS 36.521-1 Clause- 7.9/ EN 301 908-13 (LTE) Clause- 4.2.10	TEC ER No. TEC24492408
			Spectrum Emissions Mask 3GPP TS 36.521-1 Clause- 6.6.2.1/ EN 301 908-13 (LTE) Clause- 4.2.3	TEC ER No. TEC24492408

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 2 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IoT Gateway	**Interface: LTE or LTE-A**	Spurious Emissions 3GPP TS 36.521-1 Clause- 6.6.3.1, 6.6.3.2, 6.6.3.3/ EN 301 908-13 (LTE) Clause- 4.2.4	TEC ER No. TEC24492408
		Interface: WCDMA or HSPA	Operating Frequency for WCDMA or HSPA Interface NFAP Annex F	TEC ER No. TEC24492408
			Receiver Adjacent Channel Selectivity (ACS) 3GPP TS 34.121-1 Clause- 6.4/ EN 301 908-2 (UMTS) Clause- 4.2.6	TEC ER No. TEC24492408
			Receiver In-band Blocking 3GPP TS 34.121-1 Clause- 6.5.2/ EN 301 908-2 (UMTS) Clause- 4.2.7	TEC ER No. TEC24492408
			Receiver Reference sensitivity Level 3GPP TS 34.121-1 Clause- 6.2/ EN 301 908-2 (UMTS) Clause- 4.2.13	TEC ER No. TEC24492408
			Receiver Spurious Emissions 3GPP TS 34.121-1 Clause- 6.8/ EN 301 908-2 (UMTS) Clause- 4.2.10	TEC ER No. TEC24492408

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 3 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IoT Gateway	**Interface: WCDMA or HSPA**	Transmitter Maximum Output Power 3GPP TS 34.121-1 Clause- 5.2/ EN 301 908-2 (UMTS) Clause- 4.2.2	TEC ER No. TEC24492408
			Transmitter Minimum Output Power 3GPP TS 34.121-1 Clause- 5.4.3/ EN 301 908-2 (UMTS) Clause- 4.2.5	TEC ER No. TEC24492408
			Transmitter Spectrum Emissions Mask 3GPP TS 34.121-1 Clause- 5.9/ EN 301 908-2 (UMTS) Clause- 4.2.3	TEC ER No. TEC24492408
			Transmitter Spurious Emissions (Conducted) 3GPP TS 34.121-1 Clause- 5.11/ EN 301 908-2 (UMTS) Clause 4.2.4	TEC ER No. TEC24492408
		Interface: GSM or GPRS or EDGE	Operating Frequency for GSM or GPRS or EDGE Interface NFAP. Annex-F	TEC ER No. TEC24492408
			Adjacent Channel Rejection (Speech Channels) 3GPP TS 51 010-1 Clause- 14.5.1/ EN 301 511 (GSM) Clause- 4.2.38	TEC ER No. TEC24492408

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 4 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IoT Gateway	**Interface: GSM or GPRS or EDGE**	Frequency Error and Phase Error 3GPP TS 51 010-1 Clause- 13.1/ EN 301 511 (GSM) Clause- 4.2.1	TEC ER No. TEC24492408
			Frequency Error and Phase Error 3GPP TS 51 010-1 Clause- 13.16.1/ EN 301 511 (GSM) Clause- 4.2.4	TEC ER No. TEC24492408
			Output RF Spectrum 3GPP TS 51 010-1 Clause- 13.4/ EN 301 511 (GSM) Clause- 4.2.6	TEC ER No. TEC24492408
			Output RF Spectrum 3GPP TS 51 010-1 Clause- 13.16.3/ EN 301 511 (GSM) Clause- 4.2.11	TEC ER No. TEC24492408
			Receiver blocking 3GPP TS 51 010-1 Clause- 14.7.1/ EN 301 511 (GSM) Clause- 4.2.20	TEC ER No. TEC24492408
			Reference Sensitivity Level (Speech Channels) 3GPP TS 51 010-1 Clause- 14.2.1/ EN 301 511 (GSM) Clause- 4.2.42	TEC ER No. TEC24492408
			Spurious Emissions (MS allocated a Channel) 3GPP TS 51 010-1 Clause- 12.1.1/ EN 301 511 (GSM) Clause- 4.2.12	TEC ER No. TEC24492408
			Spurious Emission (MS in Idle Mode) 3GPP TS 51 010-1 Clause- 12.1.2/ EN 301 511 (GSM) Clause- 4.2.13	TEC ER No. TEC24492408

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 5 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	IoT Gateway	**Interface: GSM or GPRS or EDGE**	Transmitter Maximum Output Power 3GPP TS 51 010-1Clause- 13.3/ EN 301 511 (GSM) Clause- 4.2.5	TEC ER No. TEC24492408
			Transmitter Maximum Output Power 3GPP TS 51 010-1 Clause- 13.16.2/ EN 301 511 (GSM) Clause- 4.2.10	TEC ER No. TEC24492408
		Parameters Linked with Product Variant	IoT Dev - Non-0 IMEI or MEID or Unique MAC Annex-M	TEC ER No. TEC24492408
			IPV6 Extn. Header Fragment Header RFC 8200, Clause-4.5	TEC ER No. TEC24492408
			PV6 Packet Size Issues Parameter RFC 8200, Clause-5	TEC ER No. TEC24492408
			IP V 4 Parameters SET-B RFC 791, Annex-P6	TEC ER No. TEC24492408
2.	**Equipment's Operating in 2.4 GHz and 5 GHz Band**	**Interface: Wi-Fi**	RF Output Power (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019 - 07), Clause-4.3.2.2	TEC ER No. TEC59432407
			Power Spectral Density (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019 - 07), Clause-4.3.2.3	TEC ER No. TEC59432407

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 6 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Equipment's Operating in 2.4 GHz and 5 GHz Band	**Interface: Wi-Fi**	Duty Cycle, Tx Sequence, Tx gap (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.4	TEC ER No. TEC59432407
			Medium Utilization (MU) Factor (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.5	TEC ER No. TEC59432407
			Adaptivity (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.6	TEC ER No. TEC59432407
			Occupied Channel Bandwidth (Conducted Mode only) EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.7	TEC ER No. TEC59432407
			Transmitter Unwanted Emission in OOB Domain (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.8	TEC ER No. TEC59432407
			Transmitter Unwanted Emissions in the Spurious Domain (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause - 4.3.2.9	TEC ER No. TEC59432407
			Receiver Spurious Emissions (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause- 4.3.2.10	TEC ER No. TEC59432407

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 7 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Equipment's Operating in 2.4 GHz and 5 GHz Band	**Interface: Wi-Fi**	Receiver Blocking (Conducted Mode only) ETSI EN 300 328 V2.2.2 (2019-07) Clause- 4.3.2.11	TEC ER No. TEC59432407
			Carrier Frequencies (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause- 4.2.1	TEC ER No. TEC59432407
			Nominal and Occupied Channel Bandwidth (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.2	TEC ER No. TEC59432407
			RF Output Power, Transmit Power Control (TPC), Power Density (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.3	TEC ER No. TEC59432407
			Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.4	TEC ER No. TEC59432407
			Transmitter Unwanted Emissions within the 5 GHz RLAN Bands (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.4	TEC ER No. TEC59432407

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 8 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Equipment's Operating in 2.4 GHz and 5 GHz Band	**Interface: Wi-Fi**	Receiver spurious emissions (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause- 4.2.5	TEC ER No. TEC59432407
			Adaptivity (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.7	TEC ER No. TEC59432407
			Receiver Blocking (Conducted Mode only) ETSI EN 301 893 V2.1.1 (2017-05); Clause- 4.2.8	TEC ER No. TEC59432407
			Designation of Center Frequencies and Frequency Error(Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause-4.2.1	TEC ER No. TEC59432407
			Transmitter RF Output Power, EIRP, TPC and EIRP Spectral Density (Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause 4.2.2, 4.2.4	TEC ER No. TEC59432407
			Transmitter Unwanted Emissions outside the 5725 MHz to 5875 MHz Band (Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause - 4.2.3	TEC ER No. TEC59432407

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 9 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment's Operating in 2.4 GHz and 5 GHz Band	**Interface: Wi-Fi**	
		Transmitter Unwanted Emissions within the 5725 MHz to 5875 MHz Band (Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause - 4.2.3	TEC ER No. TEC59432407
		Receiver Spurious Emissions (Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause-4.2.5	TEC ER No. TEC59432407
		Receiver Blocking (Conducted Mode only) ETSI EN 302 502 V2.1.1 (2017-03) Clause - 4.2.7	TEC ER No. TEC59432407
		Dynamic Frequency Selection (DFS) ETSI EN 302 502 V2.1.1 (2017-03) Clause - 4.2.6	TEC ER No. TEC59432407
		Dynamic Frequency Selection (DFS) ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.6	TEC ER No. TEC59432407
		User Access Restrictions ETSI EN 301 893 V2.1.1 (2017-05) Clause - 4.2.9	TEC ER No. TEC59432407
		User Access Restrictions ETSI EN 302 502 V2.1.1 (2017-03) Clause - 4.2.8	TEC ER No. TEC59432407

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS
TELECOMMUNICATION ENGINEERING CENTRE
Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

SCOPE OF DESIGNATION
(ANNEXURE)

Laboratory Name: M/s Compliance International Telecom Laboratories, New Delhi
(A Unit of M/s Compliance International Pvt. Ltd.)
X-35, 3rd Floor, Okhla Phase – II, Delhi- 110020.

Certificate Number: TEC/MRA/CAB/IND-D/71 **Page 10 of 10**

Validity: 21/03/2025 to 22/02/2027 **Last Amended on: ----**

Sl. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing	Standard/ Specification
3.	**Private Automatic Branch Exchange**	**Interface: - Gigabit Ethernet Electrical** DTMF Parameters Set-C RFC 4733. Annex-P8	TEC ER No. TEC67292301
		UDP Parameters RFC 768. Annex-P5	TEC ER No. TEC67292301
4.	**Softswitch**	**Parameters Linked with Product Variants** IPV4 Parameters Set-C RFC 791, Annex-P6	TEC ER No. TEC67792401
5.	**Session Border Controller**	**Parameters Linked with Product Variant** IPV4 Parameters Set-B RFC 791, Annex-P6	TEC ER No. TEC 67222401
6.	**PON Family of Broadband Equipment**	**Parameters Linked with Product Variant** ECR Testing TEC 74046 Annex-R	TEC ER No. TEC 14762407

Digitally signed by
Rajeev Ranjan
Date: 21-03-2025
14:57:08

AD (CA), TEC

***The validity of Certificate is up to 22/02/2027 or the continued validity of NABL Accreditation, whichever is earlier.**