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 AA Electro Magnetic Test Laboratory Private Limited, Gururam**
has been assessed and designated as Conformity Assessment Body (CAB)
for its facilities at

**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016, Haryana**

## In the field of Testing

**Certificate No. TEC/MRA/CAB/IND-D/63-II**

**Issue Date: 16/04/2025** **Validity: 05/04/2025 to 04/04/2028**

**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**

Digitally signed by
Sanjeev Kumar Arya
Date: 16-04-2025
17:29:55

**Sanjeev Kumar Arya**
**Director (CA)**
**For Designating Authority**
**TEC**

**Certificate No: TEC/MRA/CAB/IND-D/63-II dated 16/04/2025 issued to**
**M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122 016**

ISO 9001:2015

**Validity: - 05/04/2025 to 04/04/2028**

## 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 1 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| 1. | **Equipment Operating in 2.4 GHz, 5 GHz Frequency Bands** | RF Output Power (Conductive only)<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.2 & 4.3.2.2, 5.3.2 | **TEC ER No. TEC59432407** |
| | | Power Spectral Density (Conductive only)<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.2.3 & 5.3.3 | **TEC ER No. TEC59432407** |
| | | Duty Cycle, Tx sequence, Tx-gap<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.3, 4.3.2.4 & 5.3.2 | **TEC ER No. TEC59432407** |
| | | Geo Location Capability<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.13, 4.3.2.12 | **TEC ER No. TEC59432407** |
| | | Accumulated Transmit Time, Frequency occupation and Hopping sequence<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.4 & 5.3.4 | **TEC ER No. TEC59432407** |
| | | Hoping Frequency Separation<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.5 & 5.3.5 | **TEC ER No. TEC59432407** |
| | | Medium Utilization<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.6, 4.3.2.5 & 5.3.2 | **TEC ER No. TEC59432407** |
| | | Adaptivity<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.7 or 4.3.2.6 & 5.3.7 | **TEC ER No. TEC59432407** |
| | | Occupied Channel Bandwidth<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.8, 4.3.2.7 & 5.3.8 | **TEC ER No. TEC59432407** |
| | **Equipment Operating in 2.4 GHz, 5 GHz Frequency Bands** | Transmitter Unwanted emissions in OOB Domain<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.9, 4.3.2.8 & 5.3.9 | **TEC ER No. TEC59432407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 2 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Equipment operating in 2.4 GHz, 5 GHz Frequency Bands** | Transmitter unwanted emissions in the spurious domain<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.10, 4.3.2.9 & 5.3.10 | **TEC ER No. TEC59432407** |
| | | Receiver Spurious Emission<br>ETSI EN 300 328 V 2.2.2<br>Clause 4.3.1.11, 4.3.2.10 & 5.3.11 | **TEC ER No. TEC59432407** |
| | | Receiver Blocking<br>ETSI EN 300 328 V 2.2.2<br>Clause- 4.3.1.12, 4.3.2.11 & 5.3.7 | **TEC ER No. TEC59432407** |
| | | Carrier Frequencies<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.1 | **TEC ER No. TEC59432407** |
| | | Nominal and Occupied Channel Bandwidth<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.2 | **TEC ER No. TEC59432407** |
| | | RF Output Power, Transmit Power Control (TPC), Power Density<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.3 | **TEC ER No. TEC59432407** |
| | | Transmitter unwanted Emissions outside the 5 GHz RLAN Bands<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.4.1 | **TEC ER No. TEC59432407** |
| | | Transmitter unwanted Emissions within the 5 GHz RLAN Bands<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.4.2 | **TEC ER No. TEC59432407** |
| | | Receiver Spurious Emission<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.5 | **TEC ER No. TEC59432407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 3 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Equipment operating in 2.4 GHz, 5 GHz Frequency Bands** | Geo Location Capability<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.10 | **TEC ER No. TEC59432407** |
| | | Dynamic Frequency Selection (DFS)<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.6.2 | **TEC ER No. TEC59432407** |
| | | Adaptivity<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.7 | **TEC ER No. TEC59432407** |
| | | Receiver Blocking<br>ETSI EN 301 893 V2.1.1<br>Clause- 4.2.8 | **TEC ER No. TEC59432407** |
| | | Designation of Centre Frequencies and Frequency error<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.1 | **TEC ER No. TEC59432407** |
| | | Transmitter RF Output Power, EIRP and EIRP Spectral Density<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.2, 5.4.3 | **TEC ER No. TEC59432407** |
| | | Transmitter Unwanted Emission<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.3, 5.4.4 | **TEC ER No. TEC59432407** |
| | | Transmitter Power Control (TPC)<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.4 | **TEC ER No. TEC59432407** |
| | | Receiver Spurious Emission<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.5, 5.4.5 | **TEC ER No. TEC59432407** |
| | | Dynamic Frequency Selection (DFS)<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.6, 5.4.6 | **TEC ER No. TEC59432407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 4 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | Receiver Blocking<br>ETSI EN 302 502 V2.1.1<br>Clause- 4.2.7, 5.4.7 | | **TEC ER No. TEC59432407** |
| | | Frequency Error<br>ETSI EN 302 502 V2.1.1<br>Clause- 5.4.2 | | **TEC ER No. TEC59432407** |
| **2.** | **EMI/EMC testing of Telecom Products** | Voltage Dips, short interruption and Voltage variations immunity Test on DC input power port immunity test<br>IEC 61000-4-29 | | |
| **3.** | **Mobile User Equipment** | **Parameters Linked with Product Variant** | Mobile Device Indian Language Support<br>IS 16333 (Part 3)<br>Inputting of Text<br>Clause 5/5.1<br>Marking 6/6.1/6.2/6.2.1<br>Message readability Clause 5/5.2 | **TEC ER No. TEC47722408** |
| | **Mobile User Equipment** | **Parameters Linked with Product Variant** | Mobile Emergency Support - Call on 112DoT 16-04/2015-AS-III/NP/67/120 dt 4.5.16, 3GPP2 C.S0023 for CDMA2000, 3GPP TS 22.101 and TS 24.008for GSM/ UMTS/ LTE | **TEC ER No. TEC47722408** |
| | | | Mobile Emergency Support - GPS Location<br>G.S.R. No. 1441 (E) | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 5 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | | Mobile Emergency Support - Panic Button<br>G.S.R. No. 436 (E) dated 22-04-2016, 3GPP TS 22.101 for GSM/ UMTS/ LTE, 3GPP2 C.S0023 for CDMA | **TEC ER No. TEC47722408** |
| | | **Interface: GSM/GPRS / EDGE** | Transmitter Maximum Output Power for GSM<br>3GPP TS 51 010-1 Clause-13.3 or<br>EN 301 511 (GSM) Clause- 4.2.5 | **TEC ER No. TEC47722408** |
| | | | Transmitter Output Power for GPRS/EDGE<br>3GPP TS 51 010-1 Clause-13.16.2 or<br>EN 301 511 (GSM) Clause- 4.2.10 | **TEC ER No. TEC47722408** |
| | | **Interface: GSM/GPRS/ EDGE** | Output RF Spectrum for GSM<br>3GPP TS 51 010-1 Clause-13.4 or<br>EN 301 511 (GSM) Clause- 4.2.6 | **TEC ER No. TEC47722408** |
| | | | Output RF Spectrum for GPRS/EDGE<br>3GPP TS 51 010-1 Clause-13.16.3 or<br>EN 301 511 (GSM) Clause- 4.2.11 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 6 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | **Interface: GSM/GPRS/ EDGE** | Spurious Emissions - MS allocated a channel 3GPP TS 51 010-1 Clause-12.1.1 or EN 301 511 (GSM) Clause- 4.2.12 | **TEC ER No. TEC47722408** |
| | | | Spurious Emissions - MS in idle mode 3GPP TS 51 010-1 Clause-12.1.2 or EN 301 511 (GSM) Clause- 4.2.13 | **TEC ER No. TEC47722408** |
| | | | Frequency Error and Phase Error for GSM 3GPP TS 51 010-1 Clause-13.1 or EN 301 511 (GSM) Clause-4.2.1 | **TEC ER No. TEC47722408** |
| | | | Frequency Error and Phase Error for GPRS/EDGE 3GPP TS 51 010-1 Clause-13.16.1 or EN 301 511(GSM) Clause-4.2.4 | **TEC ER No. TEC47722408** |
| | | | Reference Sensitivity Level (Speech Channels) 3GPP TS 51 010-1 Clause-14.2.1 or EN 301 511 (GSM) Clause-4.2.42 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 7 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | | Adjacent Channel Rejection (Speech channels) 3GPP TS 51 010-1 Clause- 14.5.1 or EN 301 511 (GSM) Clause- 4.2.38 | **TEC ER No. TEC47722408** |
| | | | Receiver Blocking 3GPP TS 51 010-1 Clause- 14.7.1 or EN 301 511 (GSM) Clause- 4.2.20 | **TEC ER No. TEC47722408** |
| | | **Interface : WCDMA or HSPA** | Transmitter Maximum Output Power 3GPP TS 34.121-1 Clause- 5.2 OR EN 301 908-2 (UMTS) Clause- 4.2.2.1 | **TEC ER No. TEC47722408** |
| | | **Interface : WCDMA or HSPA** | Spectrum Emissions Mask 3GPP TS 34.121-1 Clause- 5.9 OR EN 301 908-2 (UMTS) Clause- 4.2.3.1 | **TEC ER No. TEC47722408** |
| | | | Transmitter Spurious Emissions 3GPP TS 34.121-1 Clause- 5.11 OR EN 301 908-2 (UMTS) Clause- 4.2.4.1 | **TEC ER No. TEC47722408** |
| | | | Receiver Spurious Emission 3GPP TS 34.121-1 Clause- | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 8 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | **Interface : WCDMA or HSPA** | 6.8 OR<br>EN 301 908-2 (UMTS)<br>Clause- 4.2.10 | |
| | | | Transmitter Minimum Output Power<br>3GPP TS 34.121-1 Clause-5.4.3 OR<br>EN 301 908-2 (UMTS)<br>Clause- 4.2.5.1 | **TEC ER No. TEC47722408** |
| | | | Receiver Reference Sensitivity level<br>3GPP TS 34.121-1 Clause-6.2 OR<br>EN 301 908-2 (UMTS)<br>Clause- 4.2.13 | **TEC ER No. TEC47722408** |
| | | | Receiver Adjacent Channel Selectivity(ACS)<br>3GPP TS 34.121-1 Clause-6.4 OR<br>EN 301 908-2 (UMTS)<br>Clause- 4.2.6 | **TEC ER No. TEC47722408** |
| | | | Receiver In-band blocking<br>3GPP TS 34.121-1Clause-6.5.2.1 OR<br>EN 301 908-2 (UMTS)<br>Clause- 4.2.7 | **TEC ER No. TEC47722408** |
| | | **Interface: LTE or LTE-A** | Maximum Output Power<br>3GPP TS 36.521-1 Clause-6.2.2 OR<br>EN 301 908-13 (LTE)<br>Clause- 4.2.2.1 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 9 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | **Interface: LTE or LTE-A** | Spectrum Emissions Mask 3GPP TS 36.521-1Clause 6.6.2.1 OR EN 301 908-13 (LTE) Clause- 4.2.3.1 | **TEC ER No. TEC47722408** |
| | | | Spurious Emissions 3GPP TS 36.521-1 Clauses- 6.6.3.1,6.6.3.2, 6.6.3.3 OR EN 301 908-13 (LTE) Clause- 4.2.4.1 | **TEC ER No. TEC47722408** |
| | | | Receiver Spurious Emission 3GPP TS 36.521-1 Clause-7.9 OR EN 301 908-13 (LTE) Clause- 4.2.10.1 | **TEC ER No. TEC47722408** |
| | | | Receiver Reference Sensitivity level 3GPP TS 36.521-1 Clause-7.3 OR EN 301 908-13 (LTE) Clause- 4.2.12 | **TEC ER No. TEC47722408** |
| | | | Receiver Adjacent Channel Selectivity(ACS) 3GPP TS 36.521-1 Clause-7.5 OR EN 301 908-13 (LTE) Clause- 4.2.6.1 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 10 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | | Receiver In-band blocking 3GPP TS 36.521-1 Clause-7.6.1 OR EN 301 908-13 (LTE) Clause- 4.2.7.1 | **TEC ER No. TEC47722408** |
| | | **Interface: Wi-Fi** | RF Output Power(EIRP) ETSI EN 300 328 V 2.2.2 (EIRP for Wi-Fi Interface ) Clause No.4.3.1.2 & 4.3.2.2, 5.3.2 | **TEC ER No. TEC47722408** |
| | | **Interface: Wi-Fi** | Power Spectral Density (Conductive only) ETSI EN 300 328 V 2.2.2 Clause 4.3.2 & 5.3.3 | **TEC ER No. TEC47722408** |
| | | | Duty Cycle, Tx sequence, Tx-gap ETSI EN 300 328 V 2.2.2 Clause 4.3.1.3, 4.3.2.4 & 5.3.2 | **TEC ER No. TEC47722408** |
| | | | Geo Location Capability ETSI EN 300 328 V 2.2.2 Clause 4.3.1.13, 4.3.2.12 | **TEC ER No. TEC47722408** |
| | **Mobile User** | | Accumulated Transmit Time, Frequency occupation and Hopping sequence ETSI EN 300 328 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 11 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Equipment** | **Interface: Wi-Fi** | V 2.2.2<br>Clause 4.3.1.4 & 5.3.4 | |
| | | | Hoping Frequency Separation<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.5 & 5.3.5 | **TEC ER No. TEC47722408** |
| | | | Medium Utilization<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.6, 4.3.2.5 & 5.3.2 | **TEC ER No. TEC47722408** |
| | | | Adaptivity<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.7 or 4.3.2.6 & 5.3.7 | **TEC ER No. TEC47722408** |
| | | | Occupied Channel bandwidth<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.8, 4.3.2.7 & 5.3.8 | **TEC ER No. TEC47722408** |
| | **Mobile User Equipment** | | Transmitter Unwanted emissions in OOB Domain<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.9, 4.3.2.8 & 5.3.9 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 12 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | **Interface: Wi-Fi** | Transmitter unwanted emissions in the Spurious domain<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.10, 4.3.2.9 & 5.3.10 | **TEC ER No. TEC47722408** |
| | | | Receiver Spurious Emission<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.11, 4.3.2.10 & 5.3.11 | **TEC ER No. TEC47722408** |
| | | | Receiver Blocking<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.12, 4.3.2.11 & 5.3.7 | **TEC ER No. TEC47722408** |
| | | | Carrier Frequencies<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.1 | **TEC ER No. TEC47722408** |
| | | | Nominal and Occupied Channel Bandwidth<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.2 | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 13 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Mobile User Equipment** | **Interface: Wi-Fi** | RF Output Power, Transmit Power Control (TPC), Power Density ETSI EN 301 893 V 2.1.1 Clause 4.2.3 | **TEC ER No. TEC47722408** |
| | | | Transmitter Unwanted Emissions outside the 5 GHz RLAN bands ETSI EN 301 893 V 2.1.1 Clause 4.2.4.1 | **TEC ER No. TEC47722408** |
| | | | Transmitter Unwanted Emissions within the 5 GHz RLAN bands ETSI EN 301 893 V 2.1.1 Clause 4.2.4.2 | **TEC ER No. TEC47722408** |
| | | | Receiver Spurious Emission ETSI EN 301 893 V 2.1.1 Clause 4.2.5 | **TEC ER No. TEC47722408** |
| | | | Geo Location Capability ETSI EN 301 893 V 2.1.1 Clause 4.2.10 | **TEC ER No. TEC47722408** |
| | | **Interface: Wi-** | Dynamic Frequency Selection (DFS) | **TEC ER No. TEC47722408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 14 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | **Fi** | ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.6.2 | |
| | | | Adaptivity<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.7 | **TEC ER No. TEC47722408** |
| | | | Receiver Blocking<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.8 | **TEC ER No. TEC47722408** |
| **4.** | **Smart Watch** | **Interface: GSM/GPRS/ EDGE** | Transmitter Maximum Output Power for GSM<br>3GPP TS 51 010-1 Clause-13.3 or<br>EN 301 511 (GSM)<br>Clause- 4.2.5 | **TEC ER No. TEC28982407** |
| | | | Transmitter Output Power for GPRS/EDGE<br>3GPP TS 51 010-1 Clause-13.16.2 or<br>EN 301 511 (GSM)<br>Clause- 4.2.10 | **TEC ER No. TEC28982407** |
| | | | Output RF Spectrum for GSM<br>3GPP TS 51 010-1 Clause-13.4 or<br>EN 301 511 (GSM)<br>Clause- 4.2.6 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 15 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: GSM/GPRS/ EDGE** | Output RF Spectrum for GPRS/EDGE<br>3GPP TS 51 010-1<br>Clause- 13.16.3 or<br>EN 301 511 (GSM)<br>Clause- 4.2.11 | **TEC ER No. TEC28982407** |
| | | | Spurious Emissions - MS allocated a channel<br>3GPP TS 51 010-1 Clause-12.1.1 or<br>EN 301 511 (GSM)<br>Clause- 4.2.12 | **TEC ER No. TEC28982407** |
| | | | Spurious Emissions - MS in idle mode<br>3GPP TS 51 010-1 Clause-12.1.2 or<br>EN 301 511 (GSM)<br>Clause- 4.2.13 | **TEC ER No. TEC28982407** |
| | | | Frequency Error and Phase Error for GSM<br>3GPP TS 51 010-1 Clause-13.1 or<br>EN 301 511 (GSM) Clause-4.2.1 | **TEC ER No. TEC28982407** |
| | | | Frequency Error and Phase Error for GPRS/EDGE<br>3GPP TS 51 010-1 Clause-13.16.1 or<br>EN 301 511(GSM) Clause-4.2.4 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 16 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: GSM/GPRS / EDGE** | Reference Sensitivity Level (Speech Channels) 3GPP TS 51 010-1 Clause-14.2.1 or EN 301 511 (GSM) Clause-4.2.42 | **TEC ER No. TEC28982407** |
| | | | Adjacent Channel Rejection (Speech channels) 3GPP TS 51 010-1 Clause-14.5.1 or EN 301 511 (GSM) Clause-4.2.38 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking 3GPP TS 51 010-1 Clause-14.7.1 or EN 301 511 (GSM) Clause-4.2.20 | **TEC ER No. TEC28982407** |
| | | **Interface : WCDMA or HSPA** | Transmitter Maximum Output Power 3GPP TS 34.121-1 Clause-5.2 OR EN 301 908-2 (UMTS) Clause- 4.2.2.1 | **TEC ER No. TEC28982407** |
| | | | Spectrum Emissions Mask 3GPP TS 34.121-1 Clause-5.9 OR EN 301 908-2 (UMTS) Clause- 4.2.3.1 | **TEC ER No. TEC28982407** |
| | | | Transmitter Spurious Emissions 3GPP TS 34.121-1 Clause-5.11 OR | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 17 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface : WCDMA or HSPA** | EN 301 908-2 (UMTS) Clause- 4.2.4.1 | |
| | | | Receiver Spurious Emission 3GPP TS 34.121-1 Clause- 6.8 OR EN 301 908-2 (UMTS) Clause- 4.2.10 | **TEC ER No. TEC28982407** |
| | | | Transmitter Minimum Output Power 3GPP TS 34.121-1 Clause- 5.4.3 OR EN 301 908-2 (UMTS) Clause- 4.2.5.1 | **TEC ER No. TEC28982407** |
| | | | Receiver Reference Sensitivity level 3GPP TS 34.121-1 Clause- 6.2 OR EN 301 908-2 (UMTS) Clause- 4.2.13 | **TEC ER No. TEC28982407** |
| | | | Receiver Adjacent Channel Selectivity(ACS) 3GPP TS 34.121-1 Clause- 6.4 OR EN 301 908-2 (UMTS) Clause- 4.2.6 | **TEC ER No. TEC28982407** |
| | | | Receiver In-band blocking 3GPP TS 34.121-1Clause- 6.5.2.1 OR | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 18 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | | EN 301 908-2 (UMTS) Clause- 4.2.7 | |
| | | **Interface: LTE or LTE-A** | Maximum Output Power 3GPP TS 36.521-1 Clause- 6.2.2 OR EN 301 908-13 (LTE) Clause- 4.2.2.1 | **TEC ER No. TEC28982407** |
| | | | Spectrum Emissions Mask 3GPP TS 36.521-1Clause 6.6.2.1 OR EN 301 908-13 (LTE) Clause- 4.2.3.1 | **TEC ER No. TEC28982407** |
| | | | Spurious Emissions 3GPP TS 36.521-1 Clauses- 6.6.3.1,6.6.3.2, 6.6.3.3 OR EN 301 908-13 (LTE) Clause- 4.2.4.1 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emission 3GPP TS 36.521-1 Clause- 7.9 OR EN 301 908-13 (LTE) Clause- 4.2.10.1 | **TEC ER No. TEC28982407** |
| | **Smart Watch** | **Interface:** | Receiver Reference Sensitivity level 3GPP TS 36.521-1 Clause- 7.3 OR EN 301 908-13 (LTE) Clause- 4.2.12 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 19 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **LTE or LTE-A** | Receiver Adjacent Channel Selectivity(ACS) 3GPP TS 36.521-1 Clause-7.5 OR EN 301 908-13 (LTE) Clause- 4.2.6.1 | **TEC ER No. TEC28982407** |
| | | | Receiver In-band blocking 3GPP TS 36.521-1 Clause-7.6.1 OR EN 301 908-13 (LTE) Clause- 4.2.7.1 | **TEC ER No. TEC28982407** |
| | | **Interface: BLE** | Frequency of Operation for BLE Interface WPC GSR 45(E), ETSI EN 300 328 V2.2.2 (2019-07) | **TEC ER No. TEC28982407** |
| | | | Maximum Transmit Power for BLE Interface ETSI EN 300 328 V2.2.2 (2019-07) Clause 5.4.2.2 | **TEC ER No. TEC28982407** |
| | | | EIRP for BLE Interface ETSI EN 300 328 V2.2.2 (2019-07) Clause 5.4.2.2 | **TEC ER No. TEC28982407** |
| | | **Interface:** | Power Spectral Density ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.2.3 & 5.4.3 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 20 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **BLE**<br><br>**Interface: BLE** | Duty cycle, Tx-Sequence, Tx-gap<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4, 4.3.2.4 & 5.4.2 | **TEC ER No. TEC28982407** |
| | | | Accumulated Transmit time, Frequency Occupation & Hopping Sequence<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4 & 5.4.4 | **TEC ER No. TEC28982407** |
| | | | Hopping Frequency Separation<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6 or 4.3.2.5 & 5.4.5 | **TEC ER No. TEC28982407** |
| | | | Medium Utilization (MU) factor<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6, 4.3.2.5 & 5.4.2 | **TEC ER No. TEC28982407** |
| | | | Adaptivity<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.7 or 4.3.2.6 & 5.4.6 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 21 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: BLE** | Occupied Channel Bandwidth<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.8 or 4.3.2.7 & 5.4.7 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted Emission in the OOB domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.9 or 4.3.2.8 & 5.4.8 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted Emissions in the Spurious domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.10 or 4.3.2.9 & 5.4.9 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emissions<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.11 or 4.3.2.10 & 5.4.10 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 22 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | | Receiver Blocking<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.12 or 4.3.2.11 & 5.4.11.2 | **TEC ER No. TEC28982407** |
| | | | Geo-location Capability<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.13, 4.3.2.12(Only for equipment with Geo-location Capability) | **TEC ER No. TEC28982407** |
| | | **Interface: NFC** | Frequency of Operation for NFC Interface<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 6.2.2 | **TEC ER No. TEC28982407** |
| | | | Permitted Range of Operating Frequencies<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.1 | **TEC ER No. TEC28982407** |
| | | | Modulation Bandwidth<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.3 | **TEC ER No. TEC28982407** |
| | | **Interface**: | | |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 23 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **NFC**<br><br>**Interface: NFC** | Transmitter H-Field Requirements<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.4 | **TEC ER No. TEC28982407** |
| | | | Transmitter RF Carrier Current<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.5 | **TEC ER No. TEC28982407** |
| | | | Transmitter Radiated E-Field<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.6 | **TEC ER No. TEC28982407** |
| | | | Transmitter Conducted Spurious Emissions ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.7 | **TEC ER No. TEC28982407** |
| | | | Transmitter Radiated Spurious domain Emission Limits<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.8 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 24 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | | Transmitter Radiated Spurious domain Emission Limits>30MHz<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.9 | **TEC ER No. TEC28982407** |
| | | | Transmitter Frequency Stability<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.4 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emissions<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.2 | **TEC ER No. TEC28982407** |
| | | | Adjacent Channel Selectivity<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.3 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking or desensitization<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.4 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 25 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: RFID** | Frequency of Operation for RFID Int.<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 6.2.2 | **TEC ER No. TEC28982407** |
| | | | Permitted Range of Operating Frequencies<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.1 | **TEC ER No. TEC28982407** |
| | | | Modulation Bandwidth<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.3 | **TEC ER No. TEC28982407** |
| | | | Transmitter H-Field Requirements<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.4 | **TEC ER No. TEC28982407** |
| | | | Transmitter RF Carrier Current<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.5 | **TEC ER No. TEC28982407** |
| | | **Interface: RFID** | Transmitter Radiated E-field<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.6 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 26 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Smart Watch** | Transmitter Conducted Spurious Emissions ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.7 | **TEC ER No. TEC28982407** |
| | | Transmitter Radiated Spurious domain Emission Limits ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.8 | **TEC ER No. TEC28982407** |
| | | Transmitter Radiated Spurious domain Emission Limits > 30 MHz ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.9 | **TEC ER No. TEC28982407** |
| | | Transmitter Frequency Stability ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.10 | **TEC ER No. TEC28982407** |
| | **Interface: RFID** | Receiver Spurious Emissions ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.4.2 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 27 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: RFID** | Adjacent Channel Selectivity<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.3 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking or desensitization<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.4 | **TEC ER No. TEC28982407** |
| | | | Unwanted Emissions in the Spurious domain<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.9.3 | **TEC ER No. TEC28982407** |
| | | | TX Maximum e.r.p Spectral density<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.3.2 | **TEC ER No. TEC28982407** |
| | | | TX Duty Cycle<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.5.2 | **TEC ER No. TEC28982407** |
| | | | Occupied Bandwidth<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.6.3 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 28 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: RFID** | TX Out of Band Emissions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.8.3 | **TEC ER No. TEC28982407** |
| | | | Transient Power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.10.3 | **TEC ER No. TEC28982407** |
| | | | Adjacent Channel Power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.11.3 | **TEC ER No. TEC28982407** |
| | | | TX behaviour under low Voltage Conditions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.12.3 | **TEC ER No. TEC28982407** |
| | | | Adaptive Power Control<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.13.3 | **TEC ER No. TEC28982407** |
| | | | RX Sensitivity<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.14.3 | **TEC ER No. TEC28982407** |
| | | | Polite Spectrum access<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.21.3.2 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 29 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | | Blocking<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.18.6 | **TEC ER No. TEC28982407** |
| | | **Interface: Wi-Fi** | RF Output Power (EIRP)<br>ETSI EN 300 328<br>V 2.2.2 (EIRP for Wi-Fi Interface )<br>Clause No. 4.3.1.2 & 4.3.2.2, 5.3.2 | **TEC ER No. TEC28982407** |
| | | | Power Spectral Density (Conductive only)<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.2 & 5.3.3 | **TEC ER No. TEC28982407** |
| | | | Duty Cycle, Tx sequence, Tx-gap<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.3, 4.3.2.4 & 5.3.2 | **TEC ER No. TEC28982407** |
| | | | Geo Location Capability<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.13, 4.3.2.12 | **TEC ER No. TEC28982407** |
| | **Smart Watch** | **Interface: Wi-Fi** | Accumulated Transmit Time, Frequency | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 30 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: Wi-Fi** | Occupation and Hopping Sequence<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.4 & 5.3.4 | |
| | | | Hoping Frequency Separation<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.5 & 5.3.5 | **TEC ER No. TEC28982407** |
| | | | Medium Utilization<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.6, 4.3.2.5 & 5.3.2 | **TEC ER No. TEC28982407** |
| | | | Adaptivity<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.7 or 4.3.2.6 & 5.3.7 | **TEC ER No. TEC28982407** |
| | | | Occupied Channel Bandwidth<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.8, 4.3.2.7 & 5.3.8 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted emissions in OOB Domain<br>ETSI EN 300 328<br>V 2.2.2 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 31 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: Wi-Fi** | Clause 4.3.1.9, 4.3.2.8 & 5.3.9 | |
| | | | Transmitter Unwanted Emissions in the Spurious domain<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.10, 4.3.2.9 & 5.3.10 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emission<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.11, 4.3.2.10 & 5.3.11 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.12, 4.3.2.11 & 5.3.7 | **TEC ER No. TEC28982407** |
| | | | Carrier Frequencies<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.1 | **TEC ER No. TEC28982407** |
| | | | Nominal and Occupied Channel Bandwidth<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.2 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 32 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: Wi-Fi** | RF Output Power, Transmit Power Control (TPC), Power Density ETSI EN 301 893 V 2.1.1 Clause 4.2.3 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted Emissions Outside the 5 GHz RLAN bands ETSI EN 301 893 V 2.1.1 Clause 4.2.4.1 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted Emissions within the 5 GHz RLAN bands ETSI EN 301 893 V 2.1.1 Clause 4.2.4.2 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emission ETSI EN 301 893 V 2.1.1 Clause 4.2.5 | **TEC ER No. TEC28982407** |
| | | | Geo Location Capability ETSI EN 301 893 V 2.1.1 Clause 4.2.10 | **TEC ER No. TEC28982407** |
| | | | Dynamic Frequency Selection (DFS) | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 33 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Smart Watch** | **Interface: Wi-Fi** | ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.6.2 | |
| | | | Adaptivity<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.7 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.8 | **TEC ER No. TEC28982407** |
| | | | Designation of Centre Frequencies and Frequency Error<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.1 | **TEC ER No. TEC28982407** |
| | | | Transmitter RF Output Power,EIRP and EIRP Spectral Density<br>ETSI 302 502 V 2.1.1<br>Clause 4.2 | **TEC ER No. TEC28982407** |
| | | | Transmitter Unwanted Emission<br>ETSI 302 502 V 2.1.1<br>Clause 4.3, 5.4.4 | **TEC ER No. TEC28982407** |
| | | | Transmitter Power Control<br>ETSI 302 502 V 2.1.1<br>Clause 4.4 | **TEC ER No. TEC28982407** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 34 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | **Interface: Wi-Fi** | Transmitter Power Control(TPC)<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.4 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emissions<br>ETSI 302 502 V 2.1.1<br>Clause 4.5 | **TEC ER No. TEC28982407** |
| | | | Dynamic Frequency Selection (DFS)<br>ETSI 302 502 V 2.1.1<br>Clause 4.6, 4.2.6, 5.4.6 | **TEC ER No. TEC28982407** |
| | | | Frequency Error<br>ETSI 302 502 v 2.1.1<br>Clause 5.4.2 | **TEC ER No. TEC28982407** |
| | | | Receiver Blocking<br>ETSI 302 502 v 2.1.1<br>Clause 4.2.7, 5.4.7 | **TEC ER No. TEC28982407** |
| | | | Receiver Spurious Emission<br>ETSI 302 502 v 2.1.1<br>Clause 4.2.5, 5.4.5 | **TEC ER No. TEC28982407** |
| | | | Transmitter RF Output Power, EIRP and EIRP Spectral Density<br>ETSI 302 502 v 2.1.1<br>Clause 4.2.2, 5.4.3 | **TEC ER No. TEC28982407** |
| **5** | **IoT Gateway** | **Interface: GSM/GPRS/ EDGE** | Transmitter Maximum Output Power for GSM<br>3GPP TS 51 010-1 Clause- | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 35 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | | 13.3 or<br>EN 301 511 (GSM)<br>Clause- 4.2.5 | |
| | | | Transmitter Output Power for GPRS/EDGE<br>3GPP TS 51 010-1 Clause- 13.16.2 or<br>EN 301 511 (GSM)<br>Clause- 4.2.10 | **TEC ER No. TEC 24492408** |
| | | | Output RF Spectrum for GSM<br>3GPP TS 51 010-1 Clause- 13.4 or<br>EN 301 511 (GSM)<br>Clause- 4.2.6 | **TEC ER No. TEC 24492408** |
| | **IoT Gateway** | **Interface: GSM/GPRS/ EDGE** | Output RF Spectrum for GPRS/EDGE<br>3GPP TS 51 010-1 Clause- 13.16.3 or<br>EN 301 511 (GSM)<br>Clause- 4.2.11 | **TEC ER No. TEC 24492408** |
| | | | Spurious Emissions - MS allocated a channel<br>3GPP TS 51 010-1<br>Clause- 12.1.1 or<br>EN 301 511 (GSM)<br>Clause- 4.2.12 | **TEC ER No. TEC 24492408** |
| | | | Spurious Emissions - MS in idle mode<br>3GPP TS 51 010-1<br>Clause- 12.1.2 or | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 36 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: GSM/GPRS/ EDGE** | EN 301 511 (GSM) Clause-4.2.13 | |
| | | | Frequency Error and Phase Error for GSM<br>3GPP TS 51 010-1<br>Clause- 13.1 or<br>EN 301 511 (GSM) Clause-4.2.1 | **TEC ER No. TEC 24492408** |
| | | | Frequency Error and Phase Error for GPRS/EDGE<br>3GPP TS 51 010-1<br>Clause- 13.16.1 or<br>EN 301 511(GSM) Clause-4.2.4 | **TEC ER No. TEC 24492408** |
| | | | Reference Sensitivity Level (Speech Channels)<br>3GPP TS 51 010-1<br>Clause- 14.2.1 or<br>EN 301 511 (GSM) Clause-4.2.42 | **TEC ER No. TEC 24492408** |
| | | | Adjacent channel rejection (Speech channels)<br>3GPP TS 51 010-1 Clause-14.5.1 or<br>EN 301 511 (GSM) Clause-4.2.38 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>3GPP TS 51 010-1 Clause-14.7.1 or<br>EN 301 511 (GSM) Clause-4.2.20 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 37 of 63**

**Validity: 05/04/2025 to 04/04/2028** **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<br>3GPP TS 34.121-1 Clause- 5.2 OR<br>EN 301 908-2 (UMTS) Clause- 4.2.2.1 | **TEC ER No. TEC 24492408** |
| | | | Spectrum Emissions Mask<br>3GPP TS 34.121-1 Clause- 5.9 OR<br>EN 301 908-2 (UMTS) Clause- 4.2.3.1 | **TEC ER No. TEC 24492408** |
| | | **Interface : WCDMA or HSPA** | Transmitter Spurious Emissions<br>3GPP TS 34.121-1 Clause- 5.11 OR<br>EN 301 908-2 (UMTS) Clause- 4.2.4.1 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emission<br>3GPP TS 34.121-1 Clause- 6.8 OR<br>EN 301 908-2 (UMTS) Clause- 4.2.10 | **TEC ER No. TEC 24492408** |
| | | | Transmitter Minimum Output Power<br>3GPP TS 34.121-1 Clause- 5.4.3 OR<br>EN 301 908-2 (UMTS) Clause- 4.2.5.1 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 38 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | | Receiver Reference Sensitivity level 3GPP TS 34.121-1 Clause- 6.2 OR EN 301 908-2 (UMTS) Clause- 4.2.13 | **TEC ER No. TEC 24492408** |
| | | | Receiver Adjacent Channel Selectivity(ACS) 3GPP TS 34.121-1 Clause- 6.4 OR EN 301 908-2 (UMTS) Clause- 4.2.6 | **TEC ER No. TEC 24492408** |
| | | | Receiver In-band blocking 3GPP TS 34.121-1 Clause- 6.5.2.1 OR EN 301 908-2 (UMTS) Clause- 4.2.7 | **TEC ER No. TEC 24492408** |
| | | **Interface: LTE or LTE-A** | Maximum Output Power 3GPP TS 36.521-1 Clause- 6.2.2 OR EN 301 908-13 (LTE) Clause- 4.2.2.1 | **TEC ER No. TEC 24492408** |
| | | | Spectrum Emissions Mask 3GPP TS 36.521-1Clause 6.6.2.1 OR EN 301 908-13 (LTE) Clause- 4.2.3.1 | **TEC ER No. TEC 24492408** |
| | | | Spurious Emissions 3GPP TS 36.521-1 Clause- 6.6.3.1,6.6.3.2, 6.6.3.3 OR | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 39 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: LTE or LTE-A** | EN 301 908-13 (LTE) Clause- 4.2.4.1 | |
| | | | Receiver Spurious Emission 3GPP TS 36.521-1 Clause- 7.9 OR EN 301 908-13 (LTE) Clause- 4.2.10.1 | **TEC ER No. TEC 24492408** |
| | | | Receiver Reference Sensitivity level 3GPP TS 36.521-1 Clause- 7.3 OR EN 301 908-13 (LTE) Clause- 4.2.12 | **TEC ER No. TEC 24492408** |
| | | | Receiver Adjacent Channel Selectivity (ACS) 3GPP TS 36.521-1 Clause- 7.5 OR EN 301 908-13 (LTE) Clause- 4.2.6.1 | **TEC ER No. TEC 24492408** |
| | | | Receiver In-band blocking 3GPP TS 36.521-1 Clause- 7.6.1 OR EN 301 908-13 (LTE) Clause- 4.2.7.1 | **TEC ER No. TEC 24492408** |
| | | **Interface: BLE** | Frequency of Operation for BLE Interface WPC GSR 45(E), ETSI EN 300 328 V2.2.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 40 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: BLE** | (2019-07) | |
| | | | Maximum Transmit Power for BLE Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | EIRP for BLE Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | Power Spectral Density<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.2.3 & 5.4.3 | **TEC ER No. TEC 24492408** |
| | | | Duty cycle, Tx-Sequence, Tx-gap<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4, 4.3.2.4 & 5.4.2 | **TEC ER No. TEC 24492408** |
| | | | Accumulated Transmit time, Frequency Occupation & Hopping Sequence<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4 & 5.4.4 | **TEC ER No. TEC 24492408** |
| | | | Hopping Frequency Separation | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 41 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: BLE** | ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.1.6 or 4.3.2.5 & 5.4.5 | |
| | | | Medium Utilization (MU) factor ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.1.6, 4.3.2.5 & 5.4.2 | **TEC ER No. TEC 24492408** |
| | | | Adaptivity ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.1.7 or 4.3.2.6 & 5.4.6 | **TEC ER No. TEC 24492408** |
| | | | Occupied Channel Bandwidth ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.1.8 or 4.3.2.7 & 5.4.7 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emission in the OOB domain ETSI EN 300 328 V2.2.2 (2019-07) Clause 4.3.1.9 or 4.3.2.8 & 5.4.8 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 42 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: BLE** | Transmitter unwanted emissions in the spurious domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.10 or 4.3.2.9 & 5.4.9 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious emissions<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.11 or 4.3.2.10 & 5.4.10 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.12 or 4.3.2.11 & 5.4.11.2 | **TEC ER No. TEC 24492408** |
| | | | Geo-location capability<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.13, 4.3.2.12 (Only for equipment with geo-location capability) | **TEC ER No. TEC 24492408** |
| | | **Interface: NFC** | Frequency of Operation for NFC Interface<br>ETSI EN 300 330 V2.1.1 (2017-02) | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 43 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: NFC** | Clause 6.2.2 | |
| | | | Permitted range of operating frequencies ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.1 | **TEC ER No. TEC 24492408** |
| | | | Modulation bandwidth ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.3 | **TEC ER No. TEC 24492408** |
| | | | Transmitter H-field requirements ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.4 | **TEC ER No. TEC 24492408** |
| | | | Transmitter RF carrier current ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.5 | **TEC ER No. TEC 24492408** |
| | | | Transmitter radiated E-field ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.6 | **TEC ER No. TEC 24492408** |
| | **IoT Gateway** | | Transmitter conducted spurious emissions ETSI EN 300 330 V2.1.1 (2017-02) | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 44 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: NFC** | Clause 4.3.7 | |
| | | | Transmitter radiated spurious domain emission limits<br>ETSI EN 300 330 V2.1.1 (2017-02) Clause 4.3.8 | **TEC ER No. TEC 24492408** |
| | | | Transmitter radiated spurious domain emission limits >30MHz<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.9 | **TEC ER No. TEC 24492408** |
| | | | Transmitter Frequency Stability<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.3.4 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emissions<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.2 | **TEC ER No. TEC 24492408** |
| | | | Adjacent Channel Selectivity<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.3 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 45 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | | | |
| | | | Receiver blocking or desensitization<br>ETSI EN 300 330 V2.1.1 (2017-02)<br>Clause 4.4.4 | **TEC ER No. TEC 24492408** |
| | | **Interface: Wi-Fi** | RF Output Power (EIRP)<br>ETSI EN 300 328<br>V 2.2.2 (EIRP for Wi-Fi Interface )<br>Clause 4.3.1.2 & 4.3.2.2, 5.3.2 | **TEC ER No. TEC 24492408** |
| | | **Interface: Wi-Fi** | Power Spectral Density (Conductive only)<br>ETSI EN 300 328<br>V 2.2.2 Clause 4.3.2 & 5.3.3 | **TEC ER No. TEC 24492408** |
| | **IoT Gateway** | | Duty Cycle, Tx sequence, Tx-gap<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.3,4.3.2.4 & 5.3.2 | **TEC ER No. TEC 24492408** |
| | | | Geo Location Capability<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.13,4.3.2.12 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 46 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: Wi-Fi** | Accumulated Transmit Time, Frequency Occupation and Hopping sequence<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.4 & 5.3.4 | **TEC ER No. TEC 24492408** |
| | | | Hoping Frequency Separation<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.5 & 5.3.5 | **TEC ER No. TEC 24492408** |
| | | | Medium Utilization<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.6, 4.3.2.5 & 5.3.2 | **TEC ER No. TEC 24492408** |
| | | | Adaptivity<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.7 or 4.3.2.6 & 5.3.7 | **TEC ER No. TEC 24492408** |
| | | | Occupied Channel bandwidth<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.8,4.3.2.7 & 5.3.8 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 47 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: Wi-Fi** | Transmitter Unwanted emissions in OOB Domain<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.9,4.3.2.8 & 5.3.9 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emissions in the spurious domain<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.10,4.3.2.9 & 5.3.10 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emission<br>ETSI EN 300 328<br>V 2.2.2<br>Clause 4.3.1.11,4.3.2.10 & 5.3.11 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>ETSI EN 300 328<br>V2.2.2<br>Clause 4.3.1.12,4.3.2.11 & 5.3.7 | **TEC ER No. TEC 24492408** |
| | | | Carrier Frequencies<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.1 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 48 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | IoT Gateway | Interface: Wi-Fi | Nominal and Occupied Channel Bandwidth<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.2 | **TEC ER No. TEC 24492408** |
| | | | RF output power, Transmit Power Control (TPC), Power Density<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.3 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emissions outside the 5 GHz RLAN bands<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.4.1 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emissions within the 5 GHz RLAN bands<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.4.2 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emission<br>ETSI EN 301 893<br>V 2.1.1 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 49 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: Wi-Fi** | Clause 4.2.5 | |
| | | | Geo Location Capability<br>ETSI EN 301 893 v 2.1.1<br>Clause 4.2.10 | **TEC ER No. TEC 24492408** |
| | | | Dynamic Frequency Selection(DFS)<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.6.2 | **TEC ER No. TEC 24492408** |
| | | | Adaptivity<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.7 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>ETSI EN 301 893<br>V 2.1.1<br>Clause 4.2.8 | **TEC ER No. TEC 24492408** |
| | | | Designation of Centre Frequencies and Frequency error<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.1 | **TEC ER No. TEC 24492408** |
| | | | Transmitter RF output Power ,EIRP and EIRP Spectral Density<br>ETSI 302 502 V 2.1.1 Clause 4.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 50 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: Wi-Fi** | Transmitter unwanted emission<br>ETSI 302 502 V 2.1.1<br>Clause 4.3, 5.4.4 | **TEC ER No. TEC 24492408** |
| | | | Transmitter Power Control<br>ETSI 302 502 V 2.1.1<br>Clause 4.4 | **TEC ER No. TEC 24492408** |
| | | | Transmitter Power Control(TPC)<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.4 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emissions<br>ETSI 302 502 V 2.1.1<br>Clause 4.5 | **TEC ER No. TEC 24492408** |
| | | | Dynamic Frequency Selection (DFS)<br>ETSI 302 502 V 2.1.1<br>Clause 4.6, 4.2.6, 5.4.6 | **TEC ER No. TEC 24492408** |
| | | | Frequency Error<br>ETSI 302 502 V 2.1.1<br>Clause 5.4.2 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.7, 5.4.7 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emission<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.5, 5.4.5 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 51 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | | Transmitter RF Output Power, EIRP and EIRP Spectral Density<br>ETSI 302 502 V 2.1.1<br>Clause 4.2.2, 5.4.3 | **TEC ER No. TEC 24492408** |
| | | **Interface: Zig Bee** | Frequency of Operation for Zig Bee Interface<br>WPC GSR 45(E),<br>ETSI EN 300 328 V2.2.2 (2019-07) | **TEC ER No. TEC 24492408** |
| | | **Interface: Zig Bee** | Maximum Transmit Power for Zig Bee Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | EIRP for Zig Bee Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | Power Spectral Density<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.2.3 & 5.4.3 | **TEC ER No. TEC 24492408** |
| | | | Duty cycle, Tx-Sequence, Tx-gap<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4, 4.3.2.4 & 5.4.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 52 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **IoT Gateway** | **Interface: Zig Bee** | |
| | | Accumulated Transmit time, Frequency Occupation & Hopping Sequence<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4 & 5.4.4 | **TEC ER No. TEC 24492408** |
| | | Hopping Frequency Separation<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6 or 4.3.2.5 & 5.4.5 | **TEC ER No. TEC 24492408** |
| | | Medium Utilization (MU) factor<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6, 4.3.2.5 & 5.4.2 | **TEC ER No. TEC 24492408** |
| | | Adaptivity<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.7 or 4.3.2.6 & 5.4.6 | **TEC ER No. TEC 24492408** |
| | **IoT Gateway** | Occupied Channel Bandwidth<br>ETSI EN 300 328 V2.2.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 53 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | **Interface: Zig Bee** | (2019-07)<br>Clause 4.3.1.8 or 4.3.2.7 & 5.4.7 | |
| | | | Transmitter unwanted emission in the OOB domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.9 or 4.3.2.8 & 5.4.8 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emissions in the spurious domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.10 or 4.3.2.9 & 5.4.9 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emissions<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.11 or 4.3.2.10 & 5.4.10 | **TEC ER No. TEC 24492408** |
| | **IoT Gateway** | | Receiver Blocking<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.12 or 4.3.2.11 & 5.4.11.2 | **TEC ER No. TEC 24492408** |
| | | | Geo-location capability<br>ETSI EN 300 328 V2.2.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 54 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | | (2019-07)<br>Clause 4.3.1.13, 4.3.2.12(Only for equipment with geo-location capability) | |
| | **IoT Gateway** | **Interface: 6 LoWPAN** | Frequency of Operation for 6 LoWPAN Interface<br>WPC GSR 45(E),<br>ETSI EN 300 328 V2.2.2 (2019-07) | **TEC ER No. TEC 24492408** |
| | | **Interface: 6 LoWPAN** | Maximum Transmit Power for 6 LoWPAN Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | EIRP for 6 LoWPAN Interface<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 5.4.2.2 | **TEC ER No. TEC 24492408** |
| | | | Power Spectral Density<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.2.3 & 5.4.3 | **TEC ER No. TEC 24492408** |
| | | | Duty cycle, Tx-Sequence, Tx-gap<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4, 4.3.2.4 & 5.4.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 55 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: 6 LoWPAN** | | |
| | | | Accumulated Transmit time, Frequency Occupation & Hopping Sequence<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.4 & 5.4.4 | **TEC ER No. TEC 24492408** |
| | | | Hopping Frequency Separation<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6 or 4.3.2.5 & 5.4.5 | **TEC ER No. TEC 24492408** |
| | | | Medium Utilization (MU) factor<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.6, 4.3.2.5 & 5.4.2 | **TEC ER No. TEC 24492408** |
| | | | Adaptivity<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.7 or 4.3.2.6 & 5.4.6 | **TEC ER No. TEC 24492408** |
| | | | Occupied Channel Bandwidth<br>ETSI EN 300 328 V2.2.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 56 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: 6 LoWPAN** | (2019-07)<br>Clause 4.3.1.8 or 4.3.2.7 & 5.4.7 | |
| | | | Transmitter unwanted emission in the OOB domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.9 or 4.3.2.8 & 5.4.8 | **TEC ER No. TEC 24492408** |
| | | | Transmitter unwanted emissions in the spurious domain<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.10 or 4.3.2.9 & 5.4.9 | **TEC ER No. TEC 24492408** |
| | | | Receiver Spurious Emissions<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.11 or 4.3.2.10 & 5.4.10 | **TEC ER No. TEC 24492408** |
| | | | Receiver Blocking<br>ETSI EN 300 328 V2.2.2 (2019-07)<br>Clause 4.3.1.12 or 4.3.2.11 & 5.4.11.2 | **TEC ER No. TEC 24492408** |
| | | | Geo-location capability<br>ETSI EN 300 328 V2.2.2 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 57 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | | (2019-07)<br>Clause 4.3.1.13, 4.3.2.12<br>(Only for equipment with geo-location capability) | |
| | **IoT Gateway** | **Interface: LPWAN-LoRa** | Frequency of Operation for LoRa Interface<br>WPC GSR 564(E),<br>ETSI EN 300 220-1<br>V 3.1.1 | **TEC ER No. TEC 24492408** |
| | | **Interface: LPWAN-LoRa** | Maximum Transmit Power for LoRa Interface<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.2.2 | **TEC ER No. TEC 24492408** |
| | | | EIRP for LoRa Interface<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.2.2 | **TEC ER No. TEC 24492408** |
| | | | Unwanted emissions in the Spurious domain<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.9.3 | **TEC ER No. TEC 24492408** |
| | | | TX Maximum e.r.p Spectral density<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.3.2 | **TEC ER No. TEC 24492408** |
| | | | TX Duty Cycle<br>ETSI EN 300 220-1 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 58 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: LPWAN-LoRa** | V 3.1.1<br>Clause 5.5.2 | |
| | | | Occupied bandwidth<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.6.3 | **TEC ER No. TEC 24492408** |
| | | | TX out of Band Emissions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.8.3 | **TEC ER No. TEC 24492408** |
| | | | Transient power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.10.3 | **TEC ER No. TEC 24492408** |
| | | | Adjacent Channel Power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.11.3 | **TEC ER No. TEC 24492408** |
| | | | TX behaviour under low voltage conditions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.12.3 | **TEC ER No. TEC 24492408** |
| | | | Adaptive Power Control<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.13.3 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 59 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **IoT Gateway** | **Interface: LPWAN-LoRa** | RX Sensitivity<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.14.3 | **TEC ER No. TEC 24492408** |
| | | | Polite Spectrum access<br>ETSI EN 300 220-1 V 3.1.1<br>Clause 5.21.3.2 | **TEC ER No. TEC 24492408** |
| | | | Blocking<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.18.6 | **TEC ER No. TEC 24492408** |
| | | **Interface: LPWAN-SigFox** | Frequency of Operation for SigFox Interface<br>WPC GSR 564(E),<br>ETSI EN 300 220-1<br>V 3.1.1 | **TEC ER No. TEC 24492408** |
| | | | Maximum Transmit Power for SigFox Interface<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.2.2 | **TEC ER No. TEC 24492408** |
| | | | EIRP for SigFox Interface<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.2.2 | **TEC ER No. TEC 24492408** |
| | | | Unwanted Emissions in the Spurious domain<br>ETSI EN 300 220-1<br>V 3.1.1 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 60 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | **Interface: LPWAN-SigFox** | Clause 5.9.3 | |
| | | | TX Maximum e.r.p Spectral density<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.3.2 | **TEC ER No. TEC 24492408** |
| | | | TX Duty cycle<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.5.2 | **TEC ER No. TEC 24492408** |
| | | | Occupied bandwidth<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.6.3 | **TEC ER No. TEC 24492408** |
| | | | TX out of band Emissions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.8.3 | **TEC ER No. TEC 24492408** |
| | | | Transient Power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.10.3 | **TEC ER No. TEC 24492408** |
| | | | Adjacent channel Power<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.11.3 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 61 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | | **Interface: LPWAN-SigFox** | TX behaviour under low voltage conditions<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.12.3 | **TEC ER No. TEC 24492408** |
| | | | Adaptive Power Control<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.13.3 | **TEC ER No. TEC 24492408** |
| | | | RX Sensitivity<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.14.3 | **TEC ER No. TEC 24492408** |
| | | | Polite Spectrum access<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.21.3.2 | **TEC ER No. TEC 24492408** |
| | | | Blocking<br>ETSI EN 300 220-1<br>V 3.1.1<br>Clause 5.18.6 | **TEC ER No. TEC 24492408** |

***The validity of Certificate is up to 04/04/2028 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 AA Electro Magnetic Test Laboratory Private Limited**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63-II** **Page 62 of 63**

**Validity: 05/04/2025 to 04/04/2028** **Last Amended on: ----**

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

Digitally signed by Rajeev Ranjan
Date: 16-04-2025 17:29:57

**AD (CA), TEC**

***The validity of Certificate is up to 04/04/2028 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

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 AA Electro Magnetic Test Laboratory Private Limited, Gurugram

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

**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016, Haryana**

## In the field of Testing

**Certificate No. TEC/MRA/CAB/IND-D/63**

**Issue Date: 09/08/2023** **Validity: 10/08/2023 to 09/08/2026**

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

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

**Signed for and on behalf of TEC**

Signed by Vijay Dixit
Date: 09-08-2023 16:44:48
Reason: Approved

**Vijay Dixit**
**Director (CA)**
**For Designating Authority**
**TEC**

I/3119658/2023

**Certificate No: TEC/MRA/CAB/IND-D/63 dated 09/08/2023 issued to**
**M/s AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

ISO 9001:2015

**Validity: - 10/08/2023 to 09/08/2026**

## 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.

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 1 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| 1. | **Information Technology Equipment- Safety Requirement** | Power Interface (Clause 1.6) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Verification of Markings and instructions (Clause 1.7) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Protection from hazards (Clause 2.1) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | SELV Circuits (Clause 2.2) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | TNV Circuit (Clause 2.3) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Limited current circuit (Clause 2.4) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Limited Power sources (Clause 2.5) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Provisions for Earthing and bonding (Clause 2.6) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Over current and earth fault protection in primary circuits (Clause 2.7) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Safety Interlocks (Clause 2.8.1, 2.8.4, 2.8.6, 2.8.8) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Electrical Insulation (Clause 2.9) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Clearances and Creepage distances and distance through insulation (Clause 2.10) | IEC:60950-1: 2005+ A1:2009+A2:2013 |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 2 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Information Technology Equipment- Safety Requirement** | Wiring, connections and supply (Clause 3.0, 3.1, 3.2, 3.3, 3.4, 3.5) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Stability (Clause 4.1) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Mechanical strength (impact, Drop, Stress relief) & Design and construction (Clause 4.2, 4.3) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Protection against hazardous moving parts (Clause 4.4) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Thermal Requirements (Clause 4.5) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Opening in enclosure (Clause 4.6) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Resistance to fire (Clause 4.7) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Touch current and protective conductor current (Clause 5.1) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Electric strength (Clause 5.2) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Abnormal operating and fault conditions (Clause 5.3) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| | | Connection to telecommunication network (Clause 6.0) | IEC:60950-1: 2005+ A1:2009+A2:2013 |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 3 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Information Technology Equipment-Safety Requirement** | Connection to cable distribution networks (Clause 7.0) | IEC:60950-1: 2005+ A1:2009+A2:2013 |
| **2.** | **Audio/video, information and communication technology Equipment-Safety Requirements** | Electric Strength (Clause 5.4.9) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Equipment for direct insertion into mains socket-outlets (Clause 4.7) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Equipment having an Electro-mechanical device for destruction of media (Clause 8.5.4.2) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Equipment mounted to a wall or ceiling (Clause 8.7 to 8.12) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Glass slide test (Clause 8.6.4) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Handle strength method (Clause 8.8) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Horizontal force test (Clause 8.6.5) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Humidity Treatment (Clause 5.4.8) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Max operating temperatures for materials, component and systems (Clause 5.4.1.4, 9.2.5) | IEC-62368-1: 2018 (Ed.2.0) |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 4 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Audio/video, information and communication technology Equipment-Safety Requirements** | Mechanical energy source classification (Clause 8.2) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Power source circuit classification (Clause 6.2.2) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Preventive touch voltage, touch current & protective conductor current (Clause 5.7) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Protection against energy sources (Clause 4.3) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Resistance of protective conductors and their terminations (Clause 5.6.4.1) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Safeguards against transient voltages from external circuits (Clause 5.4.10) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Separation between external circuit and earth (Clause 5.4.11) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Static stability for floor standing equipment (Clause 8.6.2) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Steady state voltage and current limits (Clause 5.2.2.2) | IEC-62368-1: 2018 (Ed.2.0) |
| | | Top opening and top openings properties (Clause 6.4.8.3.3) | IEC-62368-1: 2018 (Ed.2.0) |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 5 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| 3. | **EMI/EMC Testing for Telecom Equipment** | Electrostatic discharge immunity test (IEC 61000-4-2:2008) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Radiated, radio-frequency electromagnetic field immunity test (IEC 61000-4-3 :2010) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Electrical fast transient/burst immunity test (IEC 61000-4-4: 2012) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Surge immunity test (IEC 61000-4-5: 2017) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Immunity to conducted disturbances, induced by radio-frequency fields (IEC 61000-4-6:2013) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Voltage dips, short interruption and voltage variations immunity tests (IEC 61000-4-11:2017) | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Conducted Emission CISPR 22 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Radiated Emission CISPR 22 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Conducted Emission CISPR 11 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Radiated Emission CISPR 11 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Conducted Emission CISPR 32 | TEC/SD/DD/ EMC-221/05/OCT-16 |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 6 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **EMI/EMC Testing for Telecom Equipment** | Radiated Emission CISPR 32 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Conducted Emission CISPR 14-1 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Radiated Emission CISPR 14-1 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Conducted Emission CISPR 25 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | Electrostatic Discharge Immunity test ITU-T K.21 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | High Energy/Telecom Surge immunity test ITU-T K. 21 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| | | High Energy/ Telecom Surge immunity test ITU-T K. 44 | TEC/SD/DD/ EMC-221/05/OCT-16 |
| **4.** | **Equipment operating in 2.4 GHz, 5Ghz, 5.8 GHz frequency bands** | RF Power output, Transmit Power control (TPC), Power Density (Clause 4.2.3:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Adpativity (Clause 4.2.7:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Carrier frequencies (Clause 4.2.1:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Dynamic Frequency Selection(DFS) (Clause 4.2.6.2:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 7 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Equipment operating in 2.4 GHz, 5Ghz, 5.8 GHz frequency bands** | Geo-location capability (Clause 4.2.10:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Nominal and occupied channel bandwidth (Clause 4.2.2:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Receiver Blocking (Clause 4.2.8:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Receiver spurious emission (Clause 4.2.5:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Transmitter unwanted emissions outside the 5GHz RLAN bands (Clause 4.2.4.1:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| | | Transmitter unwanted emissions within the 5GHz RLAN bands (Clause 4.2.4.2:2017) | ETSI EN 301 893 V2.1.1 (2017-05) |
| **5.** | **Uninterruptible Power Systems (UPS) part 1 General and safety requirements for UPS** | Component (Clause 4.5) | IEC 62040-1: 2008 |
| | | Power Interface (Clause 4.6) | IEC 62040-1: 2008 |
| | | Marking & Instructions (Clause 4.7) | IEC 62040-1: 2008 |
| | | Protection Against Electric Shock and Hazards (Clause 5.1) | IEC 62040-1: 2008 |
| | | Requirements for Auxiliary Circuits (Clause 5.2) | IEC 62040-1: 2008 |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 8 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Uninterruptible Power Systems (UPS) part 1 General and safety requirements for UPS** | Protective Earthing and Bonding (Clause 5.3) | IEC 62040-1: 2008 |
| | | AC and DC Power isolation (Clause 5.4) | IEC 62040-1: 2008 |
| | | Over Current and Earth Fault Protection (Clause 5.5) | IEC 62040-1: 2008 |
| | | Protection of Personnel-Safety Interlocks (Clause 5.6) | IEC 62040-1: 2008 |
| | | Clearance, Creepage Distance and Distance Through Insulation (Clause 5.7) | IEC 62040-1: 2008 |
| | | Wiring connections and supply (Clause 6) | IEC 62040-1: 2008 |
| | | Connection to Power (Clause 6.2) | IEC 62040-1: 2008 |
| | | Wiring terminal for external power conductor (Clause 6.3) | IEC 62040-1: 2008 |
| | | Enclosure (Clause 7.1) | IEC 62040-1: 2008 |
| | | Stability (Clause 7.2) | IEC 62040-1: 2008 |
| | | Mechanical Strength (Clause 7.3) | IEC 62040-1: 2008 |

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**

I/3119658/2023

**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 AA Electro Magnetic Test Laboratory Private Limited,**
**Plot N0. 174, Udyog Vihar, Phase-4, Sector-18, Gurugram-122016**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 9 of 12**

**Validity: 10/08/2023 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Uninterruptible Power Systems (UPS) part 1 General and safety requirements for UPS** | Construction Details (Clause 7.4) | IEC 62040-1: 2008 |
| | | Resistance to Fire (Clause 7.5) | IEC 62040-1: 2008 |
| | | Battery Location (Clause 7.6) | IEC 62040-1: 2008 |
| | | Temperature Rise (Clause 7.7) | IEC 62040-1: 2008 |
| | | Electrical requirement and Simulated abnormal conditions (Clause 8) | IEC 62040-1: 2008 |
| | | Electric Strength (Clause 8.2) | IEC 62040-1: 2008 |
| | | Abnormal Operating and Fault Conditions (Clause 8.3) | IEC 62040-1: 2008 |
| | | Connection to Telecommunication Networks (Clause 9) | IEC 62040-1: 2008 |

Signed by Sanjay Bhardwaj
Date: 09-08-2023 16:56:24
Reason: Approved
**AD (CA), TEC**

***The validity of Certificate is up to 09/08/2026 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. 1-72/2024-CA/TEC** **Dated: 10.10.2024**

**To,**
**M/s AA Electro Magnetic Test Laboratory Private Limited,**
**Plot No. 174, Udyog Vihar, Phase-4,**
**Sector-18, Gurugram-122 016, Haryana.**
**Ph.: +91 8929173840,**
**E-Mail Id: info@aaemtlabs.com, dr.lenin@aaemtlabs.com**

**[Kind attention to Ms. Aishwarya Sharma, Quality Manager)]**

**Subject: Enhancement of Scope of CAB Designation of M/s AA Electro Magnetic Test Laboratory Private Limited, Gurugram**.

Ref: 1. TEC CAB Designation Certificate no. TEC/MRA/CAB/IND-D/63 dated 09.08.2023
2. Your application for enhancement of Scope of CAB Designation vide Application no. SW5227011533 dated 26.12.2023 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/63 dated 09.08.2023, valid upto 09.08.2026, submitted vide Application no. SW5227011533 dated 26.12.2023 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 "**Base Station for Cellular Network for 5G**" and "**Router (For 5G NR FR1 Interface)"** 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/63 dated 09.08.2023 shall remain unchanged.

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

Signed by Sanjeev Kumar Arya
Date: 10-10-2024 12:39:12

Encl: as above

(Sanjeev Kumar Arya)
Director (CA), TEC

Copy to:

1. DDG (TC), 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 1 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| 1. | **Base Station for Cellular Network for 5G** | **Base Station 5G- NR Type 1C** | |
| | | Adjacent Channel Leakage Power Ratio-5GNR 1C<br>3GPP TS 38.141-1<br>Clause- 6.6.3.5.3 | TEC ER No. TEC42732304 |
| | | Adjacent Channel Selectivity-5GNR 1C<br>3GPP TS 38.141-1<br>Clause- 7.4.1 | TEC ER No. TEC42732304 |
| | | Base Station Output Power- 5G NR1C<br>3GPP TS 38.141-1<br>Clause- 6.2 | TEC ER No. TEC42732304 |
| | | In-band Blocking- 5G NR 1C<br>3GPPTS 38.141-1<br>Clause- 7.4.2 | TEC ER No. TEC42732304 |
| | | Operating Band Unwanted Emission-5G NR 1C<br>3GPP TS 38.141-1<br>Clause-6.6.4.5.7 | TEC ER No. TEC42732304 |
| | | Out-of -Band Blocking-5G NR 1-C<br>3GPP TS 38.141-1<br>Clause- 7.5 | TEC ER No. TEC42732304 |
| | | Receiver Intermodulation-5G NR 1C<br>3GPP TS 38.141-1<br>Clause- 7.7 | TEC ER No. TEC42732304 |
| | | Receiver Spurious Emissions-5G NR1C<br>3GPP TS 38.141-1<br>Clause-7.6.5.2 | TEC ER No. TEC42732304 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 2 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Base Station for Cellular Network for 5G** | **Base Station 5G- NR Type 1C** | Reference Sensitivity Level-5G NR1C 3GPP TS 38.141-1 Clause- 7.2 | TEC ER No. TEC42732304 |
| | | | Transmitter Intermodulation-5G NR1C 3GPP TS 38.141-1 Clause- 6.7.5.1 | TEC ER No. TEC42732304 |
| | | | Transmitter Spurious Emissions-5GNR 1-C 3GPP TS 38.141-1 Clause- 6.6.5.5.3 | TEC ER No. TEC42732304 |
| | | **Base Station 5G-NR Type 1H** | Adjacent Channel Leakage Power Ratio-5GNR 1H 3GPP TS 38.141-1 Clause- 6.6.3.5.4 | TEC ER No. TEC42732304 |
| | | | Adjacent Channel Selectivity-5GNR1H 3GPP TS 38.141-1 Clause- 7.4.1 | TEC ER No. TEC42732304 |
| | | | Base Station Output Power-5G NR 1H 3GPP TS 38.141-1 Clause- 6.2 | TEC ER No. TEC42732304 |
| | | | In-Band Blocking- 5G NR 1H 3GPPTS 38.141-1 Clause- 7.4.2 | TEC ER No. TEC42732304 |
| | | | Operating Band Unwanted Emissions-5G NR 1H 3GPP TS 38.141-1 Clause- 6.6.4.5.8 | TEC ER No. TEC42732304 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 3 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Base Station for Cellular Network for 5G** | **Base Station 5G-NR Type 1H** | Out-of-Band Blocking-5G NR 1H<br>3GPP TS 38.141-1<br>Clause- 7.5 | TEC ER No. TEC42732304 |
| | | | Receiver Intermodulation-5G NR 1H<br>3GPP TS 38.141-1<br>Clause- 7.7 | TEC ER No. TEC42732304 |
| | | | Receiver Spurious Emissions-5G NR1H<br>3GPP TS 38.141-1<br>Clause- 7.6.5.3 | TEC ER No. TEC42732304 |
| | | | Reference Sensitivity Level-5G NR1H<br>3GPP TS 38.141-1<br>Clause- 7.2 | TEC ER No. TEC42732304 |
| | | | Transmitter Intermodulation-5G NR1H<br>3GPP TS 38.141-1<br>Clause--6.7.5.2 | TEC ER No. TEC42732304 |
| | | | Transmitter Spurious Emissions-5GNR 1H<br>3GPP TS 38.141-1<br>Clause- 6.6.5.5.4 | TEC ER No. TEC42732304 |
| | | **BTS with Multi Standard Radio Transmitter Parameters** | Base Station Output Power<br>3GPP TS 37.141<br>Clause- 6.2, Annex-F4 | TEC ER No. TEC42732304 |
| | | | Transmitter Spurious Emissions<br>3GPP TS37.141<br>Clause-6.6.1, Annex-F4 | TEC ER No. TEC42732304 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 4 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Base Station for Cellular Network for 5G** | **BTS with Multi Standard Radio Transmitter Parameters** | Operating Band Unwanted Emissions<br>3GPP TS37.141<br>Clause-6.6.2, Annex-F4 | TEC ER No. TEC42732304 |
| | | | Adjacent Channel Leakage Power Ratio (ACLR)<br>3GPP TS37.141<br>Clause-6.6.4, Annex-F4 | TEC ER No. TEC42732304 |
| | | | Transmitter Intermodulation<br>3GPP TS37.141<br>Clause-6.7, Annex-F4 | TEC ER No. TEC42732304 |
| | | **BTS with Multi Standard Radio Receiver Parameters** | Receiver Spurious Emissions<br>3GPP TS37.141<br>Clause-7.6, Annex-F4 | TEC ER No. TEC42732304 |
| | | | In-Band Selectivity and Blocking or In Band Blocking and Narrow Band Blocking<br>3GPP TS37.141<br>Clause-7.4, Annex-F4 | TEC ER No. TEC42732304 |
| | | | Out-of-Band Blocking<br>3GPP TS37.141<br>Clause-7.5, Annex-F4 | TEC ER No. TEC42732304 |
| | | | Receiver Intermodulation<br>3GPP TS37.141<br>Clause-7.7, Annex-F4 | TEC ER No. TEC42732304 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 5 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Base Station for Cellular Network for 5G** | **BTS with Multi Standard Radio Receiver Parameters** | Reference Sensitivity Level<br>3GPP TS37.141<br>Clause-7.2, Annex-F4 | TEC ER No.<br>TEC42732304 |
| **2.** | **Router** | **Interface: -**<br>**5G NR (FR 1)** | Additional Spectrum Emission Mask for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.2.3 | TEC ER No.<br>TEC37682308 |
| | | | Additional Spectrum Emission Mask Transmitter<br>3GPP TS 38.521-1<br>Clause- 6.5.2.3 | TEC ER No.<br>TEC37682308 |
| | | | Additional Spurious Emissions<br>3GPP TS 38.521-1<br>Clause- 6.5.3.3 | TEC ER No.<br>TEC37682308 |
| | | | Additional Spurious Emissions for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.3.3 | TEC ER No.<br>TEC37682308 |
| | | | Adjacent Channel Selectivity<br>3GPP TS 38.521-1<br>Clause- 7.5 | TEC ER No.<br>TEC37682308 |
| | | | Adjacent Channel Selectivity for 2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.5A.1 | TEC ER No.<br>TEC37682308 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 6 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Router** | **Interface: - 5G NR (FR 1)** | Adjacent Channel Selectivity for UL-MIMO<br>3GPP TS 38.521-1 Clause- 7.5D | TEC ER No. TEC37682308 |
| | | | General Spurious Emissions for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.3.1 | TEC ER No. TEC37682308 |
| | | | General Spurious Emissions Transmitter<br>3GPP TS 38.521-1<br>Clause- 6.5.3.1 | TEC ER No. TEC37682308 |
| | | | Inband Blocking<br>3GPP TS 38.521-1<br>Clause- 7.6.2 | TEC ER No. TEC37682308 |
| | | | In-Band Blocking for CA-2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.6A.2.1 | TEC ER No. TEC37682308 |
| | | | Inband Blocking for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 7.6D.2 | TEC ER No. TEC37682308 |
| | | | Minimum Output Power<br>3GPP TS 38.521-2<br>Clause- 6.3.1 | TEC ER No. TEC37682308 |
| | | | Narrow Band Blocking<br>3GPP TS 38.521-1<br>Clause- 7.6.4 | TEC ER No. TEC37682308 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 7 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Router** | **Interface: - 5G NR (FR 1)** | Narrow Band Blocking for CA-2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.6A.4.1 | TEC ER No. TEC37682308 |
| | | | Narrow Band Blocking for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 7.6D.4 | TEC ER No. TEC37682308 |
| | | | NR ACLR<br>3GPP TS 38.521-1<br>Clause- 6.5.2.4.1 | TEC ER No. TEC37682308 |
| | | | NR ACLR for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.2.4.1 | TEC ER No. TEC37682308 |
| | | | Out-of-Band Blocking<br>3GPP TS 38.521-1<br>Clause- 7.6.3 | TEC ER No. TEC37682308 |
| | | | Out-of-Band Blocking for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 7.6D.3 | TEC ER No. TEC37682308 |
| | | | Reference Sensitivity Power Level<br>3GPP TS 38.521-1<br>Clause- 7.3.2 | TEC ER No. TEC37682308 |
| | | | Reference Sensitivity Power Level for 2DL CA without Exception<br>3GPP TS 38.521-1<br>Clause- 7.3A.1 | TEC ER No. TEC37682308 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 8 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | Standard/ Specification |
|---|---|---|---|
| | **Router** | **Interface: - 5G NR (FR 1)** | |
| | | Reference Sensitivity Power Level for ULMIMO<br>3GPP TS 38.521-1<br>Clause- 7.3D.2 | TEC ER No. TEC37682308 |
| | | Spectrum Emission Mask-5G NR FR1<br>3GPP TS 38.521-1<br>Clause- 6.5.2.2 | TEC ER No. TEC37682308 |
| | | Spectrum Emission Mask for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.2.2 | TEC ER No. TEC37682308 |
| | | Spurious Emission for 2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.9A.1 | TEC ER No. TEC37682308 |
| | | Spurious Emission for UE Co-Existence<br>3GPP TS 38.521-1<br>Clause- 6.5.3.2 | TEC ER No. TEC37682308 |
| | | Spurious Emission for UE Co-Existence for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.3.2 | TEC ER No. TEC37682308 |
| | | Spurious Emissions-5G NR FR1<br>3GPP TS 38.521-1<br>Clause- 7.9 | TEC ER No. TEC37682308 |
| | | Spurious Response<br>3GPP TS 38.521-1<br>Clause- 7.7 | TEC ER No. TEC37682308 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 9 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Router** | **Interface: - 5G NR (FR 1)** | Spurious Response for 2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.7A.1 | TEC ER No. TEC37682308 |
| | | | Spurious Response for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 7.7D | TEC ER No. TEC37682308 |
| | | | UE Maximum Output Power<br>3GPP TS 38.521-1<br>Clause- 6.2.1 | TEC ER No. TEC37682308 |
| | | | UE Maximum Output Power for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 6.2D.1 | TEC ER No. TEC37682308 |
| | | | UE Maximum Output Power Reduction for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.2D.2 | TEC ER No. TEC37682308 |
| | | | UTRA ACLR<br>3GPP TS 38.521-1<br>Clause- 6.5.2.4.2 | TEC ER No. TEC37682308 |
| | | | UTRA ACLR for UL MIMO<br>3GPP TS 38.521-1<br>Clause- 6.5D.2.4.2 | TEC ER No. TEC37682308 |
| | | | Wide Band Intermodulation<br>3GPP TS 38.521-1<br>Clause- 7.8.2 | TEC ER No. TEC37682308 |

***The validity of Certificate is up to 09/08/2026 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, KhurshidLalBhawan, Janpath, New Delhi - 110 001

ISO 9001:2015

# SCOPE OF DESIGNATION
## (ANNEXURE)

**Laboratory Name:** **M/s AA Electro Magnetic Test Laboratory Private Limited**
**Plot No. 174, Udyog Vihar, Phase-4, Sector-18,**
**Gurugram-122 016, Haryana**

**Certificate Number: TEC/MRA/CAB/IND-D/63** **Page 10 of 10**

**Validity: 10/10/2024 to 09/08/2026** **Last Amended on: ----**

| Sl. No. | Telecom Equipment/ Product | Test Parameter or Type of Testing | | Standard/ Specification |
|---|---|---|---|---|
| | **Router** | **Interface: - 5G NR (FR 1)** | Wide Band Intermodulation for CA-2DL CA<br>3GPP TS 38.521-1<br>Clause- 7.8A.2.1 | TEC ER No. TEC37682308 |
| | | | Wide Band Intermodulation for UL-MIMO<br>3GPP TS 38.521-1<br>Clause- 7.8D.2 | TEC ER No. TEC37682308 |

Signed by Sanjay Bhardwaj
Date: 10-10-2024 12:45:23
**AD (CA), TEC**

***The validity of Certificate is up to 09/08/2026 or the continued validity of NABL Accreditation, whichever is earlier.**