



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

CERTIFICATE OF DESIGNATION

M/S UL INDIA PRIVATE LIMITED, BENGALURU

has been assessed and designated as Conformity Assessment Body (CAB)

for its facilities at

**30/A, I STAGE, VISHVESHWARYA INDUSTRIAL ESTATE, DODDANEKKUNDI,
INDUSTRIAL AREA, BENGALURU - 560 048**

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/59-II

Issue Date: 24/12/2021

Valid Until: 27/10/2023

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

**Prasanth Kumar
Deputy Director General (MTC TE)
For Designating Authority
TEC**

**Certificate No: TEC/MRA/CAB/IND-D/59-II dated 24/12/2021 issued to
M/s UL India Private Limited
30/A, I Stage, Vishveshwarya Industrial Estate, Doddanekkundi,
Industrial Area, Bengaluru – 560 048**

Validity:-28/10/2020 to 27/10/2023

Terms & Conditions

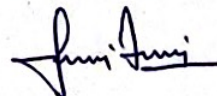
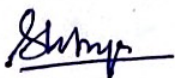
This certificate is issued as per the terms and conditions stipulated in the TEC Scheme for Designating Domestic Conformity Assessment Bodies and Certification Bodies for Conformity Assessment and Certification of Telecommunication Equipment Issue 2 No. TEC/DES-01/02.DEC.2017.

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 out 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 two 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

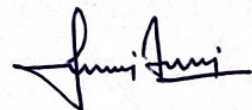
As and when required, DA shall conduct surveillance assessments and other non-routine assessments of the Designated CABs to ensure that Standards of practices are maintained as well as to investigate complaints made against them.

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.



SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
30/A, IStage, Vishveshwarya Industrial Estate, Doddanekkundi,
Industrial Area, Bengaluru - 560048

Certificate Number: TEC/MRA/CAB/IND-D/59-II

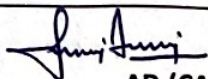
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
1.	EMI/EMC Testing of Telecommunication Equipment	Conducted Emission Test CISPR 32 (Edition 2.0) (2015-03)/ EN 55032:2015	TEC/SD/DD/EMC- 221/05/OCT-16
		Conducted Emission Test CISPR 11: 2015	TEC/SD/DD/EMC- 221/05/OCT-16
		Radiated Emission Test CISPR 32 (Edition 2.0) (2015-03)/ EN 55032:2015	TEC/SD/DD/EMC- 221/05/OCT-16
		Radiated Emission Test CISPR 11 (Edition 6.2) (2019-01)	TEC/SD/DD/EMC- 221/05/OCT-16
		Electrostatic Discharge Immunity Test IEC 61000-4-2(Edition 2.0):(2008-12)/ EN 61000-4-2:2009	TEC/SD/DD/EMC- 221/05/OCT-16
		Radiated Radio Frequency Electromagnetic Field Immunity Test IEC 61000-4-3 (Edition 3.2) Consol. with Amd. 1 & 2 (2010-04) / EN 61000-4-3:2006 Amd. 2 :2010	TEC/SD/DD/EMC- 221/05/OCT-16
		Electrical Fast Transient (EFT)/ Burst Immunity Test IEC 61000-4-4(Edition 3.0):(2012-04)/ EN 61000-4-4:2012	TEC/SD/DD/EMC- 221/05/OCT-16


Director (CA), TEC


AD (CA), TEC

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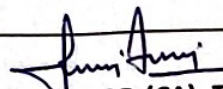
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	EMI/EMC Testing of Telecommunication Equipment	Surge Immunity Test IEC61000-4-5:2014/AMD1:2017(Ed 3.1) / EN 61000-4-5:2014	TEC/SD/DD/EMC-221/05/OCT-16
		Conducted RF Immunity Test IEC 61000-4-6 (Edition 4.0):(2013-10) /EN 61000-4-6:2014	TEC/SD/DD/EMC-221/05/OCT-16
		Voltage Dips, Short Interruption & Voltage Variations Immunity Test IEC61000-4-11(2nd Edition):(2004-03) IEC 61000-4-11 (2.1 Edition):(2017-05) /EN 61000-4-11: 2004	TEC/SD/DD/EMC-221/05/OCT-16
		Voltage Dips, Short Interruptions and Voltage variations on DC Input Power Port Immunity Tests IEC 61000-4-29:Ed 01, 2000-08/ EN 61000-4-29: 2000-11	TEC/SD/DD/EMC-221/05/OCT-16
2.	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	RF Output Power Clause- 4.3.1.2/4.3.2.2	ETSI EN 300 328 V2.1.1 (2016-11)
		Power Spectral Density Clause- 4.3.2.3	ETSI EN 300 328 V2.1.1 (2016-11)


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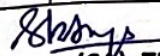
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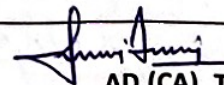
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Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Duty cycle, Tx-Sequence Tx-gap Clause- 4.3.1.3/4.3.2.4	ETSI EN 300 328 V2.1.1 (2016-11)
		Accumulated transmit time, Frequency Occupation & Hopping Sequence Clause- 4.3.1.4	ETSI EN 300 328 V2.1.1 (2016-11)
		Hopping Frequency Separation Clause- 4.3.1.5	ETSI EN 300 328 V2.1.1 (2016-11)
		Medium Utilization Clause- 4.3.1.6/4.3.2.5	ETSI EN 300 328 V2.1.1 (2016-11)
		Adaptivity Clause- 4.3.1.7/4.3.2.6	ETSI EN 300 328 V2.1.1 (2016-11)
		Occupied Channel Bandwidth Clause- 4.3.1.8/4.3.2.7	ETSI EN 300 328 V2.1.1 (2016-11)
		Transmitter Unwanted Emissions in the OOB domain Clause- 4.3.1.9/4.3.2.8	ETSI EN 300 328 V2.1.1 (2016-11)
		Transmitter Unwanted Emissions in the Spurious Domain – Conducted and Radiated Clause- 4.3.1.10/4.3.2.9	ETSI EN 300 328 V2.1.1 (2016-11)


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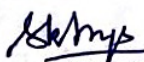
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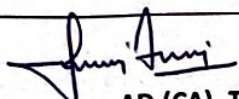
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Receiver Spurious Emission – Conducted and Radiated Clause- 4.3.1.11/4.3.2.10	ETSI EN 300 328 V2.1.1 (2016-11)
		Receiver Blocking Clause- 4.3.1.12/4.3.2.11	ETSI EN 300 328 V2.1.1 (2016-11)
		Maximum Conducted Output Power Clause- 15.247(b)	FCC Part 15 Subpart C
		Power Spectral Density Clause- 15.247(e)	FCC Part 15 Subpart C
		6 dB Bandwidth & 99% Occupied Channel Bandwidth Clause- 15.247(a)(2)	FCC Part 15 Subpart C
		Band Edge Compliance (Emissions in the Non-Restricted Frequency Band) and Conducted Spurious Emission Clause- 15.247(d)	FCC Part 15 Subpart C
		Radiated Emission, Transmitter Spurious Emission, Receiver Spurious Emission, Unwanted Emissions Clause 15.209, 15.205	FCC Part 15 Subpart C


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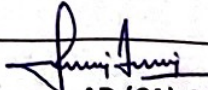
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Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Bandwidth Occupancy (20dB Bandwidth) Clause- 15.247(a)(1)/15.215(c)	FCC Part 15 Subpart C
		Number of Hopping Channel Clause- 15.247 (a)(1)	FCC Part 15 Subpart C
		Carrier Frequency Separation Clause- 15.247(a)(1)	FCC Part 15 Subpart C
		Time of Occupancy Clause- 15.247(a)(1)	FCC Part 15 Subpart C
		Carrier Frequencies Clause- 4.2.1	ETSI EN 301 893 V2.1.1 (2017-05)
		Nominal and Occupied Channel Bandwidth Clause- 4.2.2	ETSI EN 301 893 V2.1.1 (2017-05)
		RF Output Power Transmit Power Control (TPC) Power Density Clause- 4.2.3	ETSI EN 301 893 V2.1.1 (2017-05)
		Transmitter Unwanted Emissions within the 5 GHz RLAN bands Clause- 4.2.4.2	ETSI EN 301 893 V2.1.1 (2017-05)


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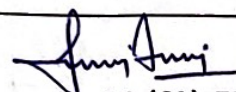
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Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Transmitter Unwanted Emissions outside the 5 GHz RLAN bands – Conducted and Radiated Clause- 4.2.4.1	ETSI EN 301 893 V2.1.1 (2017-05)
		Receiver Spurious Emission- Conducted and Radiated Clause- 4.2.5	ETSI EN 301 893 V2.1.1 (2017-05)
		Adaptivity Clause- 4.2.7	ETSI EN 301 893 V2.1.1 (2017-05)
		Dynamic Frequency Selection (DFS) Clause- 4.2.6	ETSI EN 301 893 V2.1.1 (2017-05)
		Receiver Blocking Clause- 4.2.8	ETSI EN 301 893 V2.1.1 (2017-05)
		Maximum Conducted Output Power Clause 15.407(a)	FCC Part 15 Subpart E
		6 dB Bandwidth & 99% Occupied Channel Bandwidth Clause- 15.407(a)	FCC Part 15 Subpart E
		Maximum Power Spectral Density Clause- 15.407(a)	FCC Part 15 Subpart E


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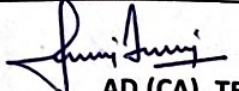
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Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Band Edge Compliance (Emissions in the Non-Restricted Frequency Band) and Conducted Spurious Emission Clause- 15.407(b)	FCC Part 15 Subpart E
		Emission Bandwidth (X dB Bandwidth) Clause- 15.407(a)	FCC Part 15 Subpart E
		Dynamic Frequency Selection Clause- 15.407(h)	FCC Part 15 Subpart E
		Radiated Emission, Transmitter Spurious Emission, Receiver Spurious Emission, Unwanted Emissions Clause- 15.209 & 15.407(b)	FCC Part 15 Subpart E
		Designation of Centre Frequencies & Frequency Error Clause- 4.2.1	ETSI EN 302 502 V2.1.1 (2017-03)
		Transmitter RF Output Power, EIRP, TPC and EIRP Spectral Density Clause- 4.2.2 & 4.2.4	ETSI EN 302 502 V2.1.1 (2017-03)
		Transmitter Unwanted Emissions within the 5725 MHz to 5875 MHz Band Clause- 4.2.3.2	ETSI EN 302 502 V2.1.1 (2017-03)


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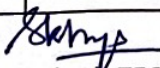
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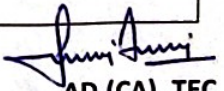
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Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Equipment Operating in 2.4 GHz and 5 GHz Frequency Bands	Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands – Conducted & Radiated Clause- 4.2.3.1		ETSI EN 302 502 V2.1.1 (2017-03)
		Receiver Spurious Emission – Conducted & Radiated Clause- 4.2.5		ETSI EN 302 502 V2.1.1 (2017-03)
3.	Point of Sale Devices	Interface: GSM/ GPRS/ EDGE	Transmitter Maximum Output Power and Burst Timing for GSM 3GPP TS 51 010-1 Clause- 13.3 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.5:2017	TEC ER No. TEC17672105
			Transmitter output power for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.2 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.10:2017	TEC ER No. TEC17672105


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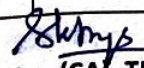
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Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	Interface: GSM/ GPRS/ EDGE	Transmitter - Output RF Spectrum for GSM 3GPP TS 51 010-1 Clause- 13.4 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.6:2017
			TEC ER No. TEC17672105
			Transmitter - Output RF Spectrum for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.3 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.11:2017
			TEC ER No. TEC17672105
			Spurious Emissions - MS allocated a channel 3GPP TS 51 010-1 Clause- 14.5.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.12:2017
			TEC ER No. TEC17672105


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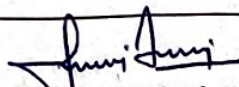
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Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Point of Sale Devices	Interface: GSM/ GPRS/ EDGE	Spurious Emissions - MS in idle mode 3GPP TS 51 010-1 Clause- 12.1.2 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.13:2017	TEC ER No. TEC17672105
			Frequency Error and Phase Error for GSM 3GPP TS 51 010-1 Clause- 13.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.1:2017	TEC ER No. TEC17672105
			Frequency Error and Phase Error for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.4:2017	TEC ER No. TEC17672105


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Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	Interface: GSM/ GPRS/ EDGE	Reference Sensitivity Level (Speech Channels) 3GPP TS 51 010-1 Clause- 14.2.1 or EN 301 511 V 12.5.1 (2017-03)(GSM) Clause- 4.2.42:2019
			TEC ER No. TEC17672105
			Adjacent channel rejection - Speech channels 3GPP TS 51 010-1 Clause- 14.5.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.38:2019
			TEC ER No. TEC17672105
		Receiver Blocking 3GPP TS 51 010-1 Clause- 14.7.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.20:2017	TEC ER No. TEC17672105


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Industrial Area, Bengaluru - 560048

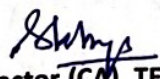
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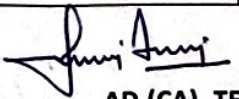
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	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. TEC17672105
		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. TEC17672105
		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. TEC17672105
		Receiver Spurious Emission 3GPP TS 34.121-1 Clause- 6.8 OR EN 301 908-2 (UMTS) Clause- 4.2.10	TEC ER No. TEC17672105


Director (CA), TEC


AD (CA), TEC

*The validity of Certificate is up to 27/10/2023 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
30/A, IStage, Vishveshwarya Industrial Estate, Doddanekkundi,
Industrial Area, Bengaluru - 560048

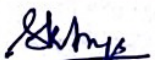
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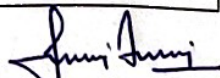
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	Interface: WCDMA or HSPA 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. TEC17672105
		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. TEC17672105
		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. TEC17672105
		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. TEC17672105


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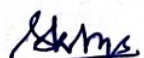
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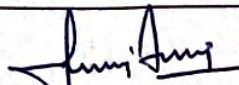
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	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. TEC17672105
			Spectrum Emissions Mask 3GPP TS 36.521-1 Clause 6.6.2.1 OR EN 301 908-13 (LTE) Clause- 4.2.3.1
			TEC ER No. TEC17672105
			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. TEC17672105
			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. TEC17672105


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

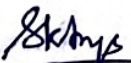
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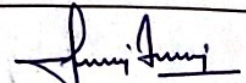
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Point of Sale Devices	Interface: LTE or LTE-A	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. TEC17672105
			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. TEC17672105
			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. TEC17672105
		Interface: RFID	Permitted Range of Operating Frequencies ETSI EN 300 330 V 2.1.1 (2017-02) Clause- 4.3.1 Annexure-G6	TEC ER No. TEC17672105


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

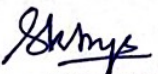
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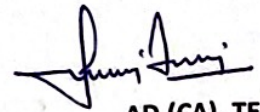
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Point of Sale Devices	Interface: RFID	Frequency of Operation ETSI EN 300 330 V 2.1.1 (2017-02) Clause- 6.2.2 Annexure-G 6 ETSI EN 300 220-1 V 3.1.1 Clause- 5.1.2 Annexure-G 5	TEC ER No. TEC17672105
			Modulation Bandwidth ETSI EN 300 330 V2.1.1 (2017-02) Clause- 4.3.3, Clause- 6.2.3 Annexure- G 6	TEC ER No. TEC17672105
			Transmitter Radiated Spurious domain Emission limits > 30 MHz ETSI EN 300 330 V2.1.1 (2017-02) Clause- 4.3.9 (For equipment under class 1, 2 and 4 in clause- 6.1.2), Clause- 6.2.9 Annexure- G 6	TEC ER No. TEC17672105


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

Certificate Number: TEC/MRA/CAB/IND-D/59-II

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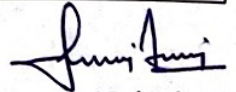
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Point of Sale Devices	Interface: RFID	Receiver Spurious Emissions ETSI EN 300 330 V2.1.1 (2017-02) Clause- 4.4.2, Clause- 6.3.1 Annexure- G6 TEC ER No. TEC17672105
			EIRP for Interface ETSI EN 300 220-1 V3.1.1 Clause- 5.2.2 Annexure- G5 TEC ER No. TEC17672105
			Maximum Transmit Power ETSI EN 300 220-1 V3.1.1 Clause- 5.2.2 Annexure- G5 TEC ER No. TEC17672105
			Unwanted Emissions in the Spurious domain ETSI EN 300 220-1 V3.1.1 Clause- 5.9.3 Annexure- G5 TEC ER No. TEC17672105
			Transmitter radiated Spurious domain emission limits <30 MHz ETSI EN 300 330 V 2.1.1 (2017-02) Clause-4.3.8, 6.2.8 Annexure-G6 TEC ER No. TEC17672105


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

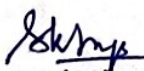
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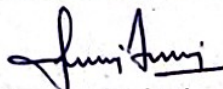
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
4	Feedback Device	Interface: GSM/ GPRS/ EDGE	Transmitter Maximum Output Power and Burst Timing for GSM 3GPP TS 51 010-1 Clause- 13.3 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.5:2017	TEC ER No. TEC17672105
			Transmitter Output Power for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.2 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.10:2017	TEC ER No. TEC23232106
			Transmitter - Output RF Spectrum for GSM 3GPP TS 51 010-1 Clause- 13.4 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.6:2017	TEC ER No. TEC23232106


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
30/A, IStage, Vishveshwarya Industrial Estate, Doddanekkundi,
Industrial Area, Bengaluru - 560048

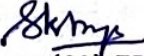
Certificate Number: TEC/MRA/CAB/IND-D/59-II

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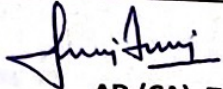
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Feedback Device	Interface: GSM/ GPRS/ EDGE Transmitter - Output RF Spectrum for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.3 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.11:2017	TEC ER No. TEC23232106
		Spurious Emissions - MS allocated a channel 3GPP TS 51 010-1 Clause- 14.5.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.12:2017	TEC ER No. TEC23232106
		Spurious Emissions - MS in idle mode 3GPP TS 51 010-1 Clause- 12.1.2 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.13:2017	TEC ER No. TEC23232106


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

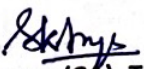
Certificate Number: TEC/MRA/CAB/IND-D/59-II

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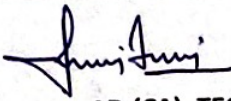
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Feedback Device	Interface: GSM/ GPRS/ EDGE	Frequency Error and Phase Error for GSM 3GPP TS 51 010-1 Clause- 13.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.1:2017 TEC ER No. TEC23232106
			Frequency Error and Phase Error for GPRS/EDGE 3GPP TS 51 010-1 Clause- 13.16.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.4:2017 TEC ER No. TEC23232106
			Reference Sensitivity Level (Speech Channels) 3GPP TS 51 010-1 Clause- 14.2.1 or EN 301 511 V 12.5.1 (2017-03)(GSM) Clause- 4.2.42:2019 TEC ER No. TEC23232106


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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Industrial Area, Bengaluru - 560048

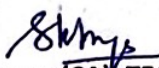
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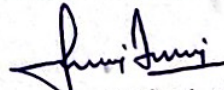
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Feedback Device	Interface: GSM/ GPRS/ EDGE	Adjacent channel rejection - Speech channels 3GPP TS 51 010-1 Clause- 14.5.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.38:2019	TEC ER No. TEC23232106
			Receiver Blocking 3GPP TS 51 010-1 Clause- 14.7.1 or EN 301 511 V 12.5.1 (2017-03) (GSM) Clause- 4.2.20:2017	TEC ER No. TEC23232106
		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. TEC23232106
			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. TEC23232106


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SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
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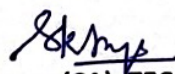
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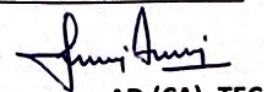
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Feedback Device	Interface: WCDMA or HSPA 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. TEC23232106
		Receiver Spurious Emission 3GPP TS 34.121-1 Clause- 6.8 OR EN 301 908-2 (UMTS) Clause- 4.2.10	TEC ER No. TEC23232106
		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. TEC23232106
		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. TEC23232106


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Laboratory Name: M/s UL India Private Limited,
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Certificate Number: TEC/MRA/CAB/IND-D/59-II

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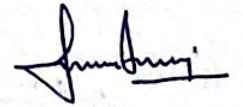
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Feedback Device	Interface: WCDMA or HSPA	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. TEC23232106
			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. TEC23232106
		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. TEC23232106
			Spectrum Emissions Mask 3GPP TS 36.521-1 Clause- 6.6.2.1 OR EN 301 908-13 (LTE) Clause- 4.2.3.1	TEC ER No. TEC23232106


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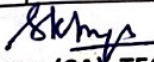
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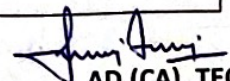
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification	
	Feedback Device	Interface: LTE or LTE-A	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. TEC23232106
			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. TEC23232106
			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. TEC23232106
			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. TEC23232106


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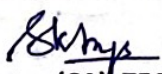
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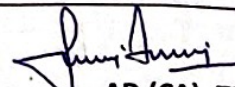
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Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing		Standard/ Specification
	Feedback Device	Interface: LTE or LTE-A	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. TEC23232106
		Interface: LPWAN-LoRa	Frequency of Operation ETSI EN 300 220-1 V3.1.1 Clause- 5.1.2 Annexure-G5	TEC ER No. TEC23232106
			EIRP for Interface ETSI EN 300 220-2 V3.1.1 Clause- 5.2.2 Annexure-G5	TEC ER No. TEC23232106
			Maximum Transmit Power ETSI EN 300 220-2 V3.1.1 Clause- 5.2.2 Annexure-G5	TEC ER No. TEC23232106
			Unwanted Emissions in the Spurious domain ETSI EN 300 220-2 V3.1.1 Clause- 5.9.3 Annexure-G5	TEC ER No. TEC23232106
			TX Transient ETSI EN 300 220-2 V3.1.1 Clause- 4.3.6 Annexure-G5	TEC ER No. TEC23232106


Director (CA), TEC


AD (CA), TEC

*The validity of Certificate is up to 27/10/2023 or the continued validity of NABL Accreditation, whichever is earlier.

SCOPE OF DESIGNATION

Laboratory Name: M/s UL India Private Limited,
30/A, IStage, Vishveshwarya Industrial Estate, Doddanekkundi,
Industrial Area, Bengaluru - 560048

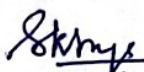
Certificate Number: TEC/MRA/CAB/IND-D/59-II

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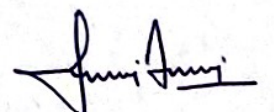
Validity: 28/10/2020 to 27/10/2023*

Last Amended on: 24/12/2021

Sl. No.	Telecom Equipment/Product	Test Parameter or Type of Testing	Standard/ Specification
	Feedback Device	Interface: LPWAN-LoRa	
		TX Adjacent channel Power ETSI EN 300 220-2 V3.1.1 Clause- 4.3.7 Annexure-G5	TEC ER No. TEC23232106
		TX behaviour under low voltage conditions ETSI EN 300 220-2 V3.1.1 Clause- 4.3.8 Annexure-G5	TEC ER No. TEC23232106
		RX Sensitivity ETSI EN 300 220-2 V3.1.1 Clause- 4.4.1 Annexure-G5	TEC ER No. TEC23232106
		RX Blocking ETSI EN 300 220-2 V3.1.1 Clause- 5.18.6 Annexure-G5	TEC ER No. TEC23232106


Director (CA), TEC

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AD (CA), TEC