

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-17186-01-06 according to DIN EN ISO/IEC 17025:2018

Valid from: 19.02.2020

Date of issue: 19.02.2020

Holder of certificate:

PHOENIX TESTLAB GmbH
Königswinkel 10, 32825 Blomberg

Tests in the fields:

Electromagnetic Compatibility and Telecommunication (FCC Requirements)

Section	Scope	Test Methods	Frequency (max. assessed)
Electromagnetic Compatibility (EMC) and Radio Equipment and Systems			
EMC	ANSI C 63.4-2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz Stand alone or in combination with: Unintentional Radiators (FCC Part 15, Subpart B)	Measurements in GTEM Cell excluded
EMC	FCC MP-5:1986-02	FCC Methods of Measurements of Radio Noise Emissions from Industrial, Scientific, and Medical Equipment Stand alone or in combination with: CFR 47 FCC Part 18, Industrial Scientific and Medical Equipment ◦ Consumer ISM equipment	

Section	Scope	Test Methods	Frequency (max. assessed)
TK	ANSI C 63.10-2013	<p>American National Standard for Testing of Unlicensed Wireless Devices</p> <p>Stand alone or in combination with:</p> <p>Intentional Radiators (FCC Part 15 Subpart C)</p> <p>U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E)</p> <ul style="list-style-type: none"> • Unlicensed National Information Infrastructure Devices (U-NII without DFS) • KDB Publication 789033 <p>UWB Intentional Radiators (FCC Part 15, Subpart F)</p> <ul style="list-style-type: none"> • Ultra-wideband Operation <p>BPL Intentional Radiators (FCC Part 15, Subpart G)</p> <ul style="list-style-type: none"> • Access Broadband Over Power Line (Access BPL) <p>White Space Device Intentional Radiators (FCC Part 15, Subpart H)</p> <ul style="list-style-type: none"> • White Space Devices 	<p>Highest measurable Frequency Range is limited to 325 GHz</p> <p>Measurements in GTEM Cell excluded</p>
TK	FCC KDB Publication 905462 D02 v02 (April 8, 2016)	<p>UNII DFS Compliance Procedures New Rules</p> <p>Stand alone or in combination with:</p> <p>U-NII with DFS Intentional Radiators (FCC Part 15 Subpart E)</p> <ul style="list-style-type: none"> • Unlicensed National Information Infrastructure U- NII) Devices with Dynamic Frequency Selection (DFS) 	
TK	ANSI C 63.17-2013	<p>American National Standard - Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices</p> <p>Stand alone or in combination with:</p> <p>CFR 47 FCC Part 15, Subpart D</p> <ul style="list-style-type: none"> ◦ Unlicensed Personal Communication Systems devices 	<p>Specialized Auxiliary Equipment to be provided externally</p>

Section	Scope	Test Methods	Frequency (max. assessed)
TK	ANSI/TIA-603-E (2016)	<p>Land Mobile FM or PM Communications Equipment Measurement and Performance Standards</p> <p>Stand alone or in combination with:</p> <p>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 22 (cellular) • Part 24 • Part 25 (below 3 GHz) • Part 27 • KDB Publication 971168 <p>General Mobile Radio Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 22 (non-cellular) • Part 90 (below 3 GHz) • Part 95 (below 3 GHz) • Part 97 (below 3 GHz) • Part 101 (below 3 GHz) <p>Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 96 • KDB Publication 971168 • KDB Publication 940660 <p>Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 80 • Part 87 <p>Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 25 • Part 30 • Part 74 • Part 90 (above 3 GHz) • Part 95 (above 3 GHz) • Part 97 (above 3 GHz) • Part 101 • KDB Publication 653005 <p>Broadcast Radio Services (FCC Licensed Radio Service Equipment)</p> <ul style="list-style-type: none"> • Part 73 • Part 74 (below 3 GHz) 	<p>Highest measurable Frequency Range is limited to 325 GHz</p> <p>Specialized Auxiliary Equipment to be provided externally</p>

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TK	TIA-102.CAAA Revision D, April 10, 2013	Project 25 Digital C4FM/CQPSK Transceiver Measurement Methods	
TK	TIA-102.CAAA Revision E, March 2, 2016	Project 25 Digital C4FM/CQPSK Transceiver Measurement Methods	
TK	ANSI C63.26-2015	IEEE/ANSI Standard for Compliance Testing of Transmitters Used in Licensed Radio Services Stand alone or in combination with: Signal Boosters (Part 20) <ul style="list-style-type: none"> • Wideband Consumer signal boosters • Provider-specific signal boosters • Industrial signal boosters Signal Boosters (Section 90.219) - KDB Publication 935210 D03, D04 and D05	Highest measurable Frequency Range is limited to 325 GHz Specialized Auxiliary Equipment to be provided externally
EMF	IEEE 1528:2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques Scope: <ul style="list-style-type: none"> • RF Radiation Exposure • Devices subject to MPE or SAR requirements Stand alone or in combination with: <ul style="list-style-type: none"> - KDB 865664 - KDB 447498 	Only Devices subject to MPE
47 CFR Part 2 Frequency Allocations and Radio Treaty Matters; General Rules and Regulations			
47 CFR Part 11 Emergency Alert System (EAS)			
47 CFR Part 21 Domestic Public Fixed Radio Services			