



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CISCO SYSTEMS, INC.
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Buildings P, 7, 16¹
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ELECTRICAL

Valid to: November 30, 2024

Certificate Number: 1178.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the laboratory's compliance with A2LA's ENERGY STAR® Accreditation Program requirements ²), accreditation is granted to this laboratory to perform the following product safety, telecommunications, environmental simulation, radio, and electromagnetic compatibility (EMC/EMI) tests:

EMC/EMI (Buildings P, 7, 16)

Test Technology:

Test Method(s) ³:

EMC/EMI: Emissions

Worldwide

ANSI C63.4:2014;
CISPR 16-1-4:2010; CISPR 22:2008;
CISPR 32:2015; CISPR 32:2015/COR1:2016; CISPR 32:2015/A1:2019;
FCC CFR 47, Part 15 B (using ANSI C63.4:2014);
IEC 61000-3-2:2018+A1:2020;
IEC 61000-3-3:2013+A1:2017+A2:2021;
IEC 61000-3-11:2017; IEC 61000-3-12:2011

Europe

EN 55022:2010;
EN 55032:2015; EN 55032:2015/A11:2020;
EN 50083-2:2012; EN 50083-2:2012+A1:2015;
EN 300 386 V2.1.23:2021;
EN IEC 61000-3-2:2019+A1:2021;
EN 61000-3-3:2013+A1:2019;
EN IEC 61000-3-11:2019;
EN 61000-3-12:2011

Korea

KS C 9832

Taiwan

CNS 15936:2016 (Radiated Emissions 30 MHz to 1 GHz at 10m only)

Japan

VCCI-CISPR 32:2016

Vietnam

QCVN 118:2018/BTTTT (CISPR 32:2015 RLV and COR1:2016)

Test Technology:**Test Method(s) ³:*****EMC/EMI: Immunity***

Electrostatic Discharge (ESD)	IEC 61000-4-2:2008/ EN 61000-4-2:2009; KS C 9610-4-2
Radiated Immunity	IEC/EN 61000-4-3:2006+AMD1:2007+AMD2:2010; KS C 9610-4-3
Electrical Fast Transient/Burst	IEC/EN 61000-4-4:2012; KS C 9610-4-4
Surge Immunity	IEC/EN 61000-4-5:2014+A1:2017; KS C 9610-4-5
Conducted Immunity	IEC 61000-4-6:2013, EN 61000-4-6:2014; KS C 9610-4-6
Power Frequency Magnetic Field Immunity	IEC 61000-4-8:2009, EN 61000-4-8:2010; KS C 9610-4-8
Pulsed Magnetic Field Immunity	IEC/EN 61000-4-9:2016; KS C 9610-4-9
Damped Oscillatory Magnetic Field Immunity	IEC 61000-4-10:2016, EN 61000-4-10:2017
Voltage Dips, Short Interruptions, and Line Voltage Variations	IEC/EN 61000-4-11:2004 +A1:2011; KS C 9610-4-11
Conducted, Common Mode Disturbances in the Frequency Range: 0 Hz to 150 kHz	IEC 61000-4-16:2015, EN 61000-4-16:2016
Ripple on D.C. Input Power Port	IEC 61000-4-17:1999+AMD1:2001+AMD2:2008, EN 61000-4-17:1999+AMD1:2004+AMD2:2009
Damped Oscillatory Wave	IEC 61000-4-18:2006+AMD1:2010, EN 61000-4-18:2007+AMD1:2010 (excluding fast damped oscillatory waves)
Voltage Dips, Short Interruptions and Voltage Variations on D.C. Input Power Port	IEC/EN 61000-4-29:2000

Worldwide

CISPR 35:2016

EuropeEN 55035:2017+A11:2020;
EN 300 386 V2.1.23:2021***Korea***

KS C 9835



Test Technology:**Test Method(s) ³:***Vietnam*

TCVN 7317:2003 (CISPR 24:1997)

*EMC/EMI: Wireless**Worldwide*

EN 301 489-1:2019:V2.2.3 (excluding section 9.6);
 EN 301 489-3:2019:V2.1.1;
 EN 301 489-6:2019:V2.2.1;
 EN 301 489-17:2020:V3.2.4;
 EN 301 489-19:2019:V2.1.1;
 EN 301 489-52:2021:V1.2.1

Korea

KS X 3124 (excluding section 9.6); KS X 3125;
 KS X 3128; KS X 3126; KS X 3129

Vietnam

QCVN 18:2014/BTTTT (EN 301 489-1);
 QCVN 112:2017/BTTTT (EN 301 489-17);
 QCVN 86:2019/BTTTT (based on EN 301 489-52 “draft”)

EMC/EMI: Medical

EN 60601-1-2:2015 (clauses 7 & 8)

Product Safety (Building P)**Test Technology:****Test Method(s) ³:***Product Safety*

IEC 60950-1:2005, A1:2009, A2:2013 (excluding: Cl. 2.8, Cl. 2.10.5.8, Cl. 2.10.6, Cl. 2.10.7, Cl. 2.10.8, Cl. 2.10.9, Cl. 2.10.10, Cl. 2.10.11, Cl. 2.10.12, Cl. 4.2.7, Cl. 4.3.1, Cl. 4.3.6, Cl. 4.3.10, Cl. 4.3.12, Cl. 4.3.13.4, Cl. 4.3.13.5 (Class 2 and higher), Cl. 4.7.3.6, Cl. 5.3.8, Annex A, Annex B [except B.7], Annex H, Annex K, Annex Q, Annex U, Annex AA, Annex CC, Annex EE);
 AS/NZS 60950.1:2015 (excluding: Cl. 2.8, Cl. 2.10.5.8, Cl. 2.10.6, Cl. 2.10.7, Cl. 2.10.8, Cl. 2.10.9, Cl. 2.10.10, Cl. 2.10.11, Cl. 2.10.12, Cl. 4.2.7, Cl. 4.3.1, Cl. 4.3.6, Cl. 4.3.10, Cl. 4.3.12, Cl. 4.3.13.4, Cl. 4.3.13.5 (Class 2 and higher), Cl. 4.7.3.6, Cl. 5.3.8, Annex A, Annex B [except B.7], Annex H, Annex K, Annex Q, Annex U, Annex AA, Annex CC, Annex EE);
 IEC 62368-1:2014 / IEC 62368-1:2018 / EN IEC 62368-1:2020+A11:2020
 (excluding: --Cl. 4.4.3.7, Cl. 4.4.4.6/4.4.3.6, Cl. 4.4.4.9/–, Cl. 4.7, Cl. 4.8.4, Cl. 4.8.5, Cl. 5.2.2.7, Cl. 5.4.1.5.2, Cl. 5.4.1.10.2, Cl. 5.4.2.3.2.5, Cl. 5.4.4.6.2, Cl. 5.4.4.6.4, Cl. 5.4.4.6.5, Cl. 5.4.7, Cl. 8.5.4, Cl. 8.5.5, Cl. 8.6.4, Cl. 10.5, Cl. 10.6, Annex C, G.1, G.2, G.3, G.5.4.6.3, G.6, G.8, G.9, G.10, G.11, G.12, G.13, G.14, G.15, G.16, K.6, K.7, M.6, M.7, M.8, P.3, P.4, P.5/–, R, S, T.9, T.10, T.11, U, V.1.5, V.1.6.);
 AS/NZS 62368.1:2018 (excluding: Cl. 4.4.4.6, Cl. 4.4.4.9, Cl. 4.7, Cl. 4.8.4,

Test Technology:**Test Method(s) ³:*****Product Safety (cont.)***

Cl. 4.8.5, Cl. 5.2.2.7, Cl. 5.4.1.5.2, Cl. 5.4.1.10.2, Cl. 5.4.2.3.2.5,
 Cl. 5.4.4.6.2, Cl. 5.4.4.6.4, Cl. 5.4.4.6.5, Cl. 5.4.7, Cl. 8.5.4, Cl. 8.5.5,
 Cl. 8.6.4, Cl. 10.5, Cl. 10.6, Annex C, G.1, G.2, G.3, G.5.4.6.3, G.6,
 G.8,
 G.9, G.10, G.11, G.12, G.13, G.14, G.15, G.16, K.6, K.7, M.6, M.7,
 M.8,
 P.3, P.4, P.5, R, S, T.9, T.10, T.11, U, V.1.5, V.1.6.)

Telecom (Building P)**Test Technology:****Test Method(s) ³:*****Telecommunications:
Analog***

AS/CA (S002, S003);
 DGT PSTN 01; DPT-TE-001;
 ETSI ES 203 021;
 FCC 47 CFR Part 68 (68.318);
 HKTA (2011, 2013, 2023);
 IC: CS-03, Part I, Issue 9, Amendment 5, 2016;
 IMDA TS PSTN;
 PTC 200/220;
 SKMM MTSFB TC T001;
 TBR (15, 17, and 21);
 TIA-968-B;
 KS X 3074;
 KS X 3075;
 QCVN 19:2010/BTTT

***Telecommunications:
Digital (ISDN)***

AS/ACIF (S031, S038);
 ACA TS014; DGT IS 6100

***Telecommunications:
Digital (Leased Line)***

HKTA (2014, 2015, 2027);
 IC: CS-03, Part VI, Issue 9, Amendment 1, September 2012;
 IMDA TS ISDN;
 ITU (I.431, Q.921, Q.931);
 MCMC MTSFB TC T008; MCMC MTSFB TC T009;
 TBR (4, 34 – *excluding section 8 of all parts*);
 TIA-968-B;
 KS X 3074;
 KS X 3078
 AS/ACIF S016;
 DGT: ID 0002;
 HKTA 2017;
 IC: CS-03, Part II, Issue 9, Amendment 1, September 2012;
 IMDA TS DLCN;
 ITU G.703 (*excluding sections 4, 6, 7, 10, 12, 14, and 16*);
 TIA-968-B;
 TBR (12 [*excluding section 5.4*], 13 [*excluding section 4.4*], 14, and 24);
 KS X 3074;

Test Technology:**Test Method(s) ³:**

***Telecommunications:
Digital (Leased Line)
(cont.)***

KS X 3078;
QCVN 21:2010/BTTTT

***Telecommunications:
Digital (DSL)***

ADSL01:2020 (sections 6.2 and 8 only);
AS/CA S041.1; AS/CA S041.2; AS/CA S043.1;
AS/CA S043.2 (excluding Cl 4.2.6 Vectoring, Appendix 0 Equip. Class
10V);
IC: CS-03, Part VIII, Issue 9, Amendment 6, 2022

***Telecommunications:
Serial***

IMDA TS ADSL;
ITU-T G.992.1, 992.3, 992.5 Annex A (ASDLoPOTS);
MCMC MTSFB TC T010;
TIA-968 B; VDSL01 (section 7);
KS X 3074; KS X 3076;
RRA Announce 2015-104 Annex 12 (GDSDL);
ITU (V.10, V.11, V.28, V.36, X.21);
TBR (1, 2)

Environmental (Building P)**Test Technology:****Test Method(s) ³:**

Environmental

IEC-60068-2-1:2007;
IEC-60068-2-2:2007;
IEC-60068-2-6:2007:Ed.7;
IEC-60068-2-13:1999;
IEC-60068-2-14:2009;
IEC-60068-2-30:2005;
IEC-60068-2-64:2008;
IEC-60068-2-78:2013

Radio (Buildings P, 7 *)****Test Technology:****Test Method(s) ³:**

***Radio:
Spurious Emissions
(Radiated tests only)***

EN 301 511 (sections 4.2.16-19)



Test Technology:**Test Method(s) ³:**

Radio:
Unlicensed
Intentional

ANSI C63.10:2013;
Conformity Assessment Procedure of Radio Equipment
(RRA Announce 2015-135, Jan 5, 2016);
FCC 47 CFR, Part 15 C (using ANSI C63.10:2013) (*up to 40 GHz*);
FCC 47 CFR, Part 15 E (using ANSI C63.10:2013 and
KDB 905462 D02 (v02) [UNII, DFS]);
KDB 558074 (DTS & FHSS); KDB 789033 (Subpart E);
KDB 662911 (MIMO); KDB 987594
HKCA 1039;
LP 0002 (2020) (*up to 40 GHz*), (*excluding Cl. 5.20 (SAR)*);
RSS-210; RSS-247; RSS-248; RSS-GEN;
EN 300 328; EN 301 893;
EN 300 440-1 (sections 7.1, 7.3, and 8.4);
EN 303 413;
SKMM WTS SRD; IMDA TS SRD;
QCVN 54:2020/BTTTT; QCVN 65:2021/BTTTT;

RF Exposure
(*Calculations only*)

RSS-102 (RF Exposure);
EN 50385; IEEE C95.3 (*MPE calculations only*); KDB 447498
FCC 47 CFR, Part 2 (Cl. 2.1091 & 2.1093 (*excluding SAR*))

*** (*Radiated tests only in Building 7*)

OTA (Building P)**Test Technology:****Test Method(s) ³:**

Radio:
OTA-Cellular

CTIA and WFA Test Plan for RF Performance Evaluation of
Wi-Fi Mobile Converged Devices;
CTIA Test Plan for Wireless Device Over-the-Air Performance;
CTIA Test Plan for 2x2 Downlink MIMO and Transmit
Diversity Over-the-Air Performance;
EN 301 908-1 (section 4.2.2);
EN 301 511 (sections 4.2.16-19)

NEBS Service Provider (Building P, 16, 7*)****Test Technology:****Test Method(s) ³:**

Environmental

GR-63, Issue 5 (2017) (*excluding sections 5.2 and 5.5*);
GR-1089, Issue 7 (2017), (*excluding sections 2, 3, 4.3, 4.6.1.2, 4.6.2,
4.6.3, 4.7, 5, 6, 9.11-9.13, and 10.4-10.7*);
GR-1089, Issue 8 (2022), (*excluding sections 2, 3, 4.3, 4.6.1.2, 4.6.2,
4.6.3, 4.7, 5, 6, 7.6 (R7-23 only), 9.11-9.13, and 10.4-10.7*);
GR-3108, Issue 4 (2018) (*excluding sections 4.2.3, 6.2, 6.4, 6.5, and 7*)
GR-3108, Issue 5 (2022) (*excluding sections 4.2.3, 6.2, 6.4, 6.5, and 7*)



EMC/EMI

GR-3108, Issue 4 (2018); GR-3108, Issue 5 (2022)
GR-1089, Issue 7 (2017), sections 2, 3, 4, and 10
(excluding Surge 1.3, clause 4.6.2.1.2.7, and 4.7);
GR-1089, Issue 8 (2022), sections 2, 3, 4, and 10
(excluding Surge 1.3, clause 4.6.2.1.2.7, and 4.7)

*** GR-1089 Radiated Emissions and Radiated Immunity (80MHz-6GHz) only in 16 and 7

SmartGrid (Building P)**Test Technology:****Test Method(s) ³:**

**EMC/EMI/Product
Safety/
Environmental**

IEC 61850-3:2013;
EN 60255-21-1:1995; EN 60255-21-2:1995; EN 60255-21-3:1995;
IEEE 1613.1:2013; IEEE 1613:2009; IEEE 1613A:2011

Marine (Building P)**Test Technology:****Test Method(s) ³:**

EMC/EMI

EN 60945:2002 (sections 9 and 10);
IEC 60533:2015 (excluding special power distribution zone)

Product Safety

IEC 60945:2002 (sections 4.3.2, 5.2.3 [excessive voltage, reversed polarity,
improper phase sequence], 7.2, and 12.1);
IACS Req. 1991/Rev.8 2021 E10 (Cl. 9, Cl. 10);
DNVGL-CG-0339 (Cl. 12, Cl. 13)

Environmental

IEC 60945:2002 (sections 5.2, 8.2, 8.3, 8.4, 8.7, and 11.1)

Marine (Building 16)**Test Technology:****Test Method(s) ³:**

Product Safety

IEC 60945:2002 (sections 4.3.2, 5.2.3 [excessive voltage, reversed polarity,
improper phase sequence], and 7.2);
IACS Req. 1991/Rev.8 2021 E10 (Cl. 9, Cl. 10);
DNVGL-CG-0339 (Cl. 12, Cl. 13)

Railway (Building P)**Test Technology:****Test Method(s) ³:**

EMC/EMI

EN 50121-3-2:2016+A1:2019;
EN 50121-4:2016+A1:2019;
EN 50155:2017



Environmental

EN 50125-1:2014; EN 50125-3:2003;
EN 50155:2021 (excluding sub clauses 13.4.10.5, 13.4.13, and 13.4.12);
IEC 60571:2012:Ed.3;
EN 61373:2010:Ed.2;
IEC 62498-1:2010:Ed.1; IEC 62498-3:2010:Ed.1;
AREMA Part 11.5.1:2021

Product Safety

EN 50153:2014;
EN 50155:2021 (excluding sub clauses 13.4.10, 13.4.12, and 13.4.14);
IEC 60571:2012:Ed.3;
AREMA Part 11.5.1:2021 Cl. 7

Energy Efficiency (Buildings P, 16)

Test Technology:

Test Method(s) ³:

Energy Efficiency

ENERGY STAR® Program Requirements Product Specification for
Computer Servers Version 3.0
ENERGY STAR® Program Requirements Product Specification for
Computer Servers Version 4.0
ENERGY STAR® Product Specification for Large Network Equipment
Version 1.1

On the following products or types of products:

Information Technology Equipment (ITE), Telecommunications Network Equipment (TNE),
Intentional Radiators

¹ Building P: 125 W Tasman Dr, San Jose, CA 95134; Building 16: 3700 Cisco Way, San Jose, CA 95134; Building 7: 425 E Tasman Dr, San Jose, CA 95134

² A2LA provides accreditation to the U.S. EPA's [Conditions and Criteria for Recognition of Laboratories for the ENERGY STAR Program](#) by verifying an organization's compliance to A2LA document [R222 - Specific Requirements - EPA ENERGY STAR Accreditation Program](#) and to the related test methods listed above.

Accreditation by A2LA does not infer Recognition by the EPA for ENERGY STAR testing. Please verify this organization's recognition status at the EPA's website, located at http://www.energystar.gov/index.cfm?fuseaction=recognized_bodies_list.show_RCB_search_form.

³ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA *R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories*.

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1 ⁴:

Rule Subpart/Technology	Test Method	Maximum Frequency
Unintentional Radiators Part 15B	ANSI C63.4:2014	40000 MHz
Intentional Radiators Part 15C	ANSI C63.10:2013	40000 MHz
U-NII without DFS Intentional Radiators Part 15E	ANSI C63.10:2013	40000 MHz
U-NII with DFS Intentional Radiators Part 15E	FCC KDB 905462 D02 (v02)	40000 MHz

⁴ Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (<https://apps.fcc.gov/oetcf/eas/>) for a listing of FCC approved laboratories.





Accredited Laboratory

A2LA has accredited

CISCO SYSTEMS, INC.

San Jose, CA

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the A2LA R222 - Specific Requirements - EPA ENERGY STAR Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 18th day of November 2022.

A blue ink signature of Trace McInturff.

Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1178.01
Valid to November 30, 2024
Revised December 20, 2022

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.