



TEST REPORT

Test Report No. : UL-RPT-RP16171218JD10A

Customer* : Apple Inc.

Model No. / HVIN* : A3534

FCC ID* : BCGA3534 **IC*** : 579C-A3534

Test Standard(s) : FCC Part 15.207
Innovation, Science and Economic Development Canada
RSS-Gen Issue 5 February 2021 Section 8.8

Test Laboratory : UL International (UK) Ltd, Basingstoke, Hampshire, RG24 8AH,
United Kingdom

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5. All information marked with (*) was provided by the Customer, Applicant or Authorised representative
6. Version 2.0 supersedes all previous versions.

Date of Issue: 11 August 2026

Checked by:

Ben Mercer
Digitally signed
by Ben Mercer
Date: 2026.08.11
09:45:40 +01'00'

Ben Mercer

Lead Test Engineer, Radio Laboratory

Company Signatory:

Sarah Williams
Digitally signed
by Sarah Williams
Date: 2026.08.11
09:46:02 +01'00'

Sarah Williams

Staff Engineer, Radio Laboratory



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Applicant Information

Company Name*:	Apple Inc.
Address*:	One Apple Park Way Cupertino, California 95014 U.S.A.
Contact Name*:	Stuart Thomas

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	14/07/2026	Initial Version	Ben Mercer
2.0	11/08/2026	Addressed TCB feedback	Ben Mercer

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1 Attestation of Test Results

1.1 Description of EUT

The equipment under test (EUT) was a desktop computer.*

1.2 General Information

Specification Reference:	47CFR15.207
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.207
Specification Reference:	RSS-Gen Issue 5 February 2021
Specification Title:	General Requirements for Compliance of Radio Apparatus
Site Registration:	FCC: 685609, ISEDC: 20903
FCC Lab. Designation No.:	UK2011
ISEDC CABID:	UK0001
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	12 June 2026 to 18 June 2026

1.3 Summary of Test Results

FCC Clause (47CFR)	ISED Clause	Transmitter Measurement	Result
Part 15.207	RSS-Gen 8.8	AC Conducted Emissions	Complied

1.4 Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom.

UL International (UK) Ltd is accredited by the United Kingdom Accreditation Service (UKAS). UKAS is one of the signatories to the International Laboratory Accreditation Co-operation (ILAC) Arrangement for the mutual recognition of test reports. The tests reported herein have been performed in accordance with its terms of accreditation.

2.2 Methods and Procedures

Reference:	ANSI C63.10-2020
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	#ANSI C63.10-2020/Cor1-2023
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Corrigendum 1
Reference:	#ANSI C63.10-2020+C63.10a-2024
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Amendment 1
Reference:	#ANSI C63.10-2020+Errata to C63.10a-2024
Title:	Errata to American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Amendment 1
Reference:	KDB 174176 D01 Line Conducted FAQ v01r02 August 7, 2025
Title:	AC Power-Line Conducted Emissions Frequently Asked Questions

#The use of ANSI C63.10-2020/Cor1-2023 and C63.10a-2024 does not deviate from the testing procedures of ANSI C63.10-2020

2.3 Calibration and Uncertainty

Measuring Instrument Calibration

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

Measurement Uncertainty & Decision Rule

Overview

No measurement or test can ever be perfect, and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

Decision Rule

Measurement system instrumentation shall be used with an accuracy specification meeting the accuracy specification limits according to IEC/IECEE OD-5014.

As applicable, unless specified otherwise in this quotation, the compliance "Decision Rule" is based on Simple Acceptance. If the measured value is on the limit, the result is defined as a pass. For further information regarding risk assessment refer to ILAC G8:09/2019.

Measurement Uncertainty

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	±3.07 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

2.4 Sample Calculation

Where relevant, the following calculations were used:

AC Conducted Emissions

- The recorded emission level was calculated from the level indicated by the measuring receiver, adjusted by a transducer factor (TDF in dB), using the formula:

$$\text{TDF (dB)} = C_{\text{Att}} \text{ (dB)} + \text{PL}_{\text{Att}} + \text{VDF (dB/m)}$$

Where:

C_{Att} : conducted path attenuation (cables + attenuators)

PL_{Att} : pulse limiter attenuation

VDF: voltage division factor of the LISN

2.5 Test and Measurement Equipment

Test Equipment Used for AC Conducted Emissions

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2037	Thermohygrometer	Testo	608-H1	45124925	18 Dec 2026	12
A649	LISN	Rohde & Schwarz	ESH3-Z5	825562/008	21 Aug 2026	12
A1830	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100668	18 Aug 2026	12
M1124	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100046	29 Oct 2026	12

Test Measurement Software/Firmware Used:

Name	Version	Release Date
Rohde & Schwarz EMC32	6.30.0	2008

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name*:	Apple
Model Name or Number / HVIN*:	A3534
FCC ID*:	BCGA3534
ISED Canada Certification Number*:	579C-A3534

Test Sample Serial Number*:	Hardware Version*:	Software Version*:	Date of Receipt:
L5Q6J36Y22 (<i>Radiated</i>)	REV 1.0	26A285	23 March 2026
GMWPG7X7HL (<i>Radiated</i>)	REV 1.0	26A285	23 March 2026

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Tested Technology:	<i>Bluetooth</i> (Digital Transmission System)	
Type of Unit:	Transceiver	
Modulation:	$\pi/4$ -DQPSK	
Packet Type:	8-DH5	
Data Rate (Mbit/s):	8	
Transmit Frequency Range:	2402 MHz to 2480 MHz	
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)
	Middle	2440

Technology Tested:	WLAN (IEEE 802.11) / Digital Transmission System	
Type of Unit:	Transceiver	
Modulation Type:	QPSK	
Data Rate:	802.11ax HE20 RU 26.0	MCS2
Channel Bandwidth:	20 MHz	
Transmit Frequency Range:	2412 MHz to 2462 MHz	
Transmit Channels Tested:	Channel Number	Channel Frequency (MHz)
	7	2442

Technology Tested:	NarrowBand FHSS	
Type of Unit:	Transceiver	
Modulation:	8PSK	
Packet Type:	HDT4	
Data Rate (Mbit/s):	4	
Transmit Frequency Band:	5725 MHz to 5850 MHz (U-NII-3)	
Transmit Channels Tested:	Channel Number	Channel Number
	-	5785

3.4 Description of Test Setup

Support Equipment

The following support equipment was used to exercise the EUT during testing:

Customer Supplied*:

Description	Brand Name	Model Name or Number	Serial Number
Test Laptop	Apple	MacBook Pro	CFQL62C43K
USB Diagnostic Cable	Apple	Chimp	00902BD2

Laboratory Supplied:

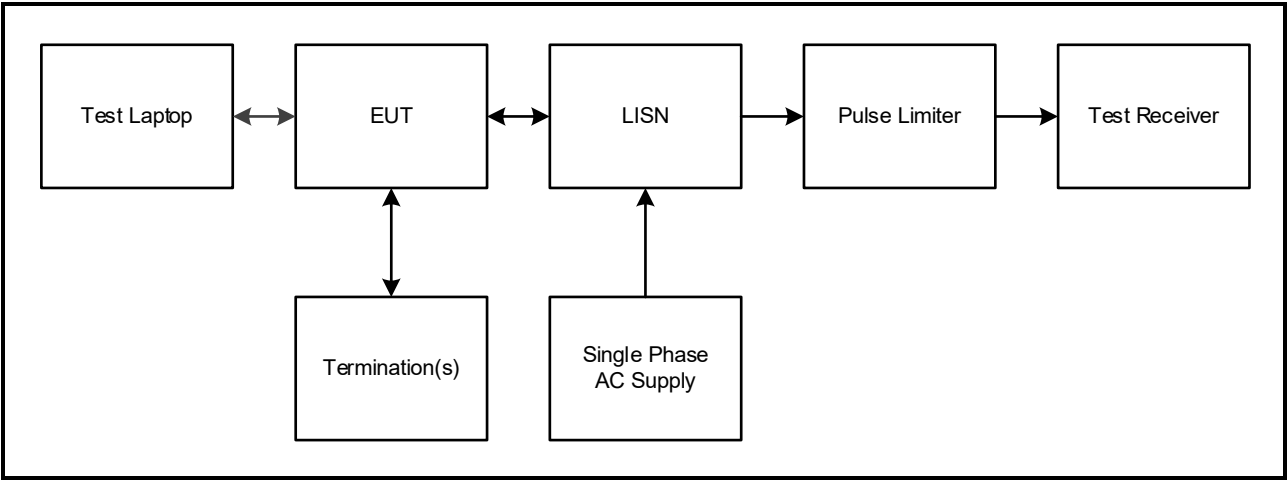
Description	Brand Name	Model Name or Number	Serial Number
USB-C Docking Station	Lenovo	40AS	2KW2WLC8
USB C-A Cable. Length 3m. Quantity 4	Anker	Not marked or stated	Not marked or stated
HDMI Cable. Length 1.5m	Not marked or stated	Not marked or stated	Not marked or stated
Ethernet Cable. Length 2m	Not marked or stated	Not marked or stated	Not marked or stated
Personal Hands Free (PHF)	Not marked or stated	Not marked or stated	Not marked or stated

Operating Modes, Configuration and Peripherals

- Continuously transmitting at maximum power on the relevant channels as required.
- Pre-scans were performed with the EUT transmitting the following technologies:
 - Thread
 - *Bluetooth*
 - 2.4 GHz WLAN
 - 5 GHz WLAN
 - 6 GHz WLAN
 - Narrow Band U-NII-1
 - Narrow Band U-NII-3
 - Narrow Band U-NII-5
 - *Bluetooth* + Narrow Band U-NII-3
 - *Bluetooth* + 2.4 GHz WLAN + Narrow Band U-NII-1.
- Final measurements were performed on the worst-case configuration, which was found to be *Bluetooth* + 2.4 GHz WLAN + Narrow Band U-NII-1.
- Pre-scan plots for all configurations are archived on the company server and available for inspection if required.
- Controlled in test mode using a set of commands entered into a terminal application on the test laptop supplied by the customer. The commands were used to enable a continuous transmission and to select the test channels & packet types as required. The test laptop was connected to the EUT via a USB diagnostic cable.
- The EUT was powered from a 120 VAC 60 Hz single phase mains supply unless otherwise stated.
- All active ports were terminated using appropriate terminations.

Test Setup Diagrams

Test Setup for AC Conducted Emissions



4 AC Power Line Conducted Emissions Test Results

4.1 AC Conducted Spurious Emissions

Test Summary:

Test Engineer:	Nick Tye	Test Dates:	12 June 2026 & 18 June 2026
Test Sample Serial Numbers:	L5Q6J36Y22 and GMWPG7X7HL		

FCC Clause:	Part 15.207
ISED Canada Clause:	RSS-Gen 8.8
Test Method Used:	ANSI C63.10 Section 6.2 / FCC KDB 174176 and notes below

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	54 to 55

Note(s):

1. The EUT was connected to a 120 VAC 60 Hz single phase supply via a LISN.
2. In accordance with FCC KDB 174176 Q4, tests were also performed with a 240 VAC 60 Hz single phase supply as this was within the voltage range marked on the EUT.
3. Preliminary measurements were performed at both 50 Hz and 60 Hz supply frequencies. There was no change to the observed emissions.
4. A pulse limiter was fitted between the LISN and the test receiver.
5. Example plots of the worst-case static configurations, can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.
6. The worst case configuration was *Bluetooth* / 2440 MHz / HDR8 / iPA / Core 2 + 2.4 GHz WLAN / Channel 7 / 802.11ax / RU26.0 / 2Tx CDD (Core 0 + Core 1) + Narrow Band U-NII Band 3 / 5785 MHz / HDT4 / Beamforming / Core 0 + Core 1
7. The emission at 13.56 MHz is an ambient emission.

AC Conducted Spurious Emissions (continued)**Results: Live / Quasi Peak / 120 VAC 60 Hz**

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.303	Live	37.4	60.2	22.8
0.596	Live	26.3	56.0	29.7
1.037	Live	21.1	56.0	34.9
10.001	Live	32.3	60.0	27.7
11.999	Live	13.3	60.0	46.7
16.904	Live	28.2	60.0	31.8

Results: Live / Average / 120 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
1.037	Live	14.0	46.0	32.0
2.634	Live	12.2	46.0	33.8
4.187	Live	16.2	46.0	29.8
6.045	Live	15.1	50.0	34.9
10.001	Live	31.4	50.0	18.6
5.058	Live	23.4	50.0	26.6

Results: Neutral / Quasi Peak / 120 VAC 60 Hz

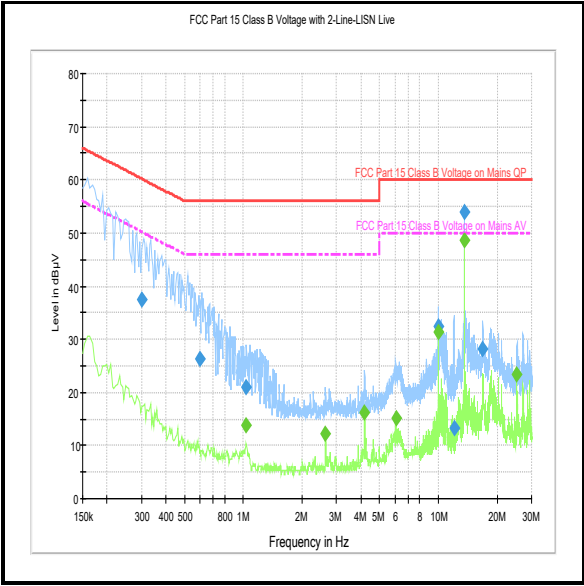
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.267	Neutral	39.4	61.2	21.8
0.411	Neutral	32.6	57.6	25.0
1.050	Neutral	18.0	56.0	38.0
4.182	Neutral	18.9	56.0	37.1
11.999	Neutral	13.2	60.0	46.8
18.609	Neutral	28.2	60.0	31.8

Results: Neutral / Average / 120 VAC 60 Hz

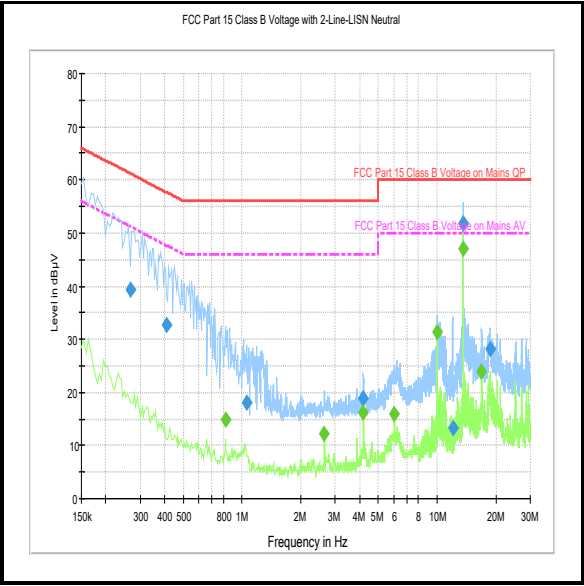
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.821	Neutral	14.8	46.0	31.2
2.634	Neutral	12.1	46.0	33.9
4.187	Neutral	16.1	46.0	29.9
6.041	Neutral	16.0	50.0	34.0
10.001	Neutral	31.3	50.0	18.7
16.899	Neutral	24.0	50.0	26.0

AC Conducted Spurious Emissions (continued)

Results: 120 VAC 60 Hz



Live



Neutral

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

AC Conducted Spurious Emissions (continued)**Results: Live / Quasi Peak / 240 VAC 60 Hz**

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.294	Live	30.4	60.4	30.0
2.634	Live	15.9	56.0	40.1
4.182	Live	20.1	56.0	35.9
6.059	Live	19.5	60.0	40.5
11.999	Live	14.8	60.0	45.2
18.447	Live	31.8	60.0	28.2

Results: Live / Average / 240 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.821	Live	8.5	46.0	37.5
2.634	Live	12.9	46.0	33.1
4.187	Live	17.2	46.0	28.8
6.045	Live	17.2	50.0	32.8
10.001	Live	30.6	50.0	19.4
18.609	Live	28.3	50.0	21.7

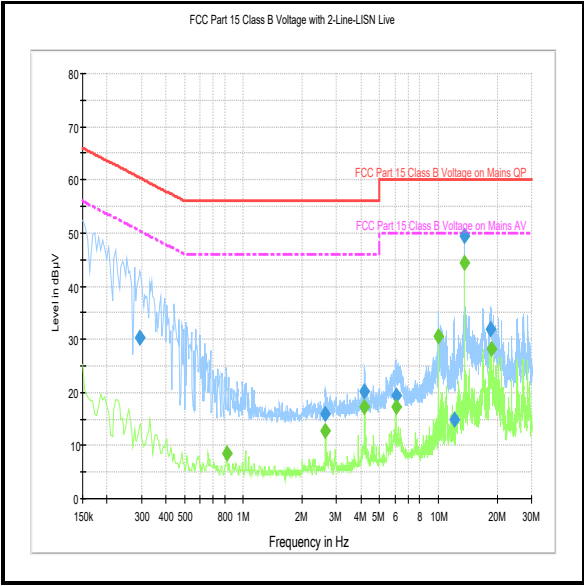
Results: Neutral / Quasi Peak / 240 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.389	Neutral	24.7	58.1	33.4
0.690	Neutral	13.6	56.0	42.4
0.992	Neutral	13.3	56.0	42.7
6.045	Neutral	21.3	60.0	38.7
11.999	Neutral	14.7	60.0	45.3
18.600	Neutral	32.0	60.0	28.0

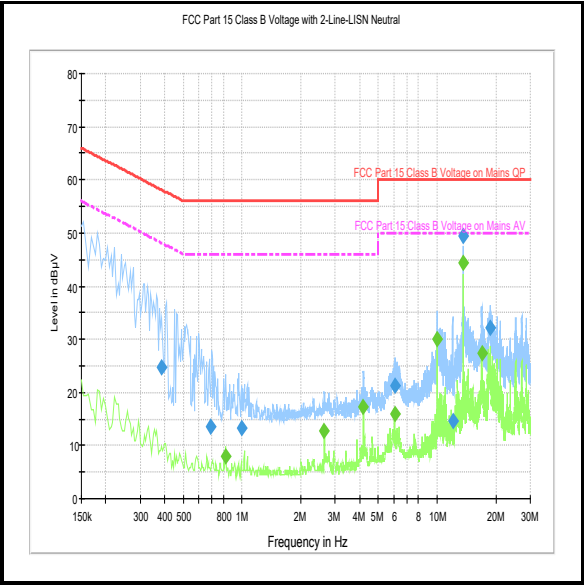
Results: Neutral / Average / 240 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.821	Neutral	7.9	46.0	38.1
2.634	Neutral	12.8	46.0	33.2
4.187	Neutral	17.4	46.0	28.6
6.045	Neutral	16.0	50.0	34.0
10.001	Neutral	30.1	50.0	19.9
16.908	Neutral	27.4	50.0	22.6

AC Conducted Spurious Emissions (continued)
Results: 240 VAC 60 Hz



Live



Neutral

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

--- END OF REPORT ---