



TEST REPORT

FCC MPE Test for PWFMDB200
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2107-FI011-R1

DATE OF ISSUE
September 30, 2021

Tested by
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Technical Manager
Jong Seok Lee

Accredited by KOLAS, Republic of KOREA

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PWFMD B200

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Additional Model

-

Applicant

LG Electronics Inc.

170, Seongsanpaechong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, 51533, Republic of Korea

Eut Type
Model Name

Cloud Gateway
PWFMD B200

FCC ID

BEJPWFMD B200

Frequency range

2 412 MHz ~ 2 462 MHz (WLAN)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

This test results were applied only to the test methods required by the standard.

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	July 27, 2021	Initial Release
1	September 30, 2021	Revised the Applicant address on page 2. Page 5, Typo.

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance

KOLAS Statement:

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (KOLAS Accreditation No. KT197)

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

RF Exposure Statement

1. Limit

According to § 1.1310, § 2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3 - 1.34	614	1.63	*(100)	30
1.34 - 30	824/f	2.19/f	*(180/ f ²)	30
30 - 300	27.5	0.073	0.2	30
300 - 1500	f/1500	30
1500 - 100.000	1.0	30

F = frequency in MHz

* = Plane-wave equivalent power density

2. Maximum Permissible Exposure Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = Power input to antenna

G = Power gain to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

3. RESULTS

3-1. DTS

Max Average output Power at antenna input terminal	18.50	dBm
Max Average output Power at antenna input terminal	70.79	mW
Prediction distance	20.00	cm
Prediction frequency	2 412 – 2 462	MHz
Antenna Gain(typical)	2.860	dBi
Antenna Gain(numeric)	1.932	-
Power density at prediction frequency(S)	0.0272	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

2.1091

EIRP	21.36	(dBm)
ERP	19.21	(dBm)
ERP	0.083	(W)
ERP Limit	3.00	(W)
MARGIN	15.56	(dB)