



Test Report

Prepared for Harman International Industries, Inc.

This report presents Maximum Permissible Exposure for

FPDM KM49 LHD

FPDM DT LHD

Prepared by

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Approved by

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General Manager

Issue date: 03/19/2024

Report No: J23225_FCC_RF_MPE v3

This test result relates only to the described test object.

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The test is traceable to national standard or related international standard

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1. Test Request Information

Test Request #:	7700236325
Test Requested By:	Pranav Patel Harman International Industries, Inc. 30001 Cabot Drive, Novi, MI 48377
Test item Description:	FPDM
Part Number:	FPDM KM49 LHD FPDM DT LHD
DUT Sample Number:	J23225#1, J23225#4
Hardware Version of DUT:	N/A
Software Version of DUT:	N/A
Component Category of DUT:	N/A
FCC ID:	2AHPN-BE2871
Type of Test:	FCC Certification
Test Method:	CFR Title 47 FCC Part 15.247, 1.1307, 1.1310, 2.1091 KDB 447498 D04 General RF Exposure Guidance v01
Deviations from standard:	None
Approved Test Plan Number:	N/A
Test Plan Revision:	N/A
Date test Sample Received:	10-04-2023
Date Test Started:	10-23-2023
Date Test Finished:	03-15-2024

2. Test Laboratory Information

Location of Test Lab:	The radiated and conducted emissions test sites are located at Bureau Veritas 815 N. Opdyke Rd #100, Auburn Hills, MI 48326, Phone: +1-248-836-4700
Key Contact:	Jason Kanakry (General Manager) Jason.Kanakry@BureauVeritas.com Phone: +1-248-836-4747
Laboratory Accreditations:	BUREAU VERITAS CONSUMER PRODUCTS SERVICES, INC is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.
ISO/IEC 17025:2017:	5678.01
FCC Test Site Number:	US1278 (242530)
IC Test Site Number:	US0229 (26240)

3. RF Exposure

3.1 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

3.2 Max Conducted Power and Antenna Information

Band	Antenna Type	Max Conducted Power (dBm)	Max Conducted Power (mW)	EIRP (W)	ERP(mW)	Antenna Gain (dBi)
BT Classic	Integrated PCB antenna	8.381	6.888108827	0.001542055	0.939939715	-6.5

Note:- FPDM KM49 LHD has worst case power compared to FPDM DT LHD, so the MPE Calculations described in this report are based on FPDM KM49 LHD Output power.

3.3 Calculation for MPE

Simultaneous Transmission Configuration-1

Band	Transmit Frequency (MHz)	$\lambda/2\pi$ (m)	Separation Distance (m)	Radio Power (dBm)	Radio Power (W)	Antenna Gain (dBi)	Antenna Gain (Lin eq.)	ERP (W)	Threshold ERP (W)	Result ERP(W)/ERPth
BT Classic	2480	0.019239295	0.2	8.381	0.0068888109	-6.5	0.2238721	0.00093994	0.768	0.00122388

Notes:-

- Minimum separation distance must be $\geq \text{wavelength}/2\pi$ meters
Where Wavelength = $\text{Transmit Frequency} \times 10^6$
- Threshold ERP as per Transmit frequency

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$
1.34-30	$3,450 R^2 / f^2$
30-300	$3.83 R^2$
300-1,500	$0.0128 R^2 f$
1,500-100,000	$19.2 R^2$

3.4 Conclusion

The maximum calculations of above situations, the ERP (W) is less than equal to ERP Threshold.

Document Revisions

Version	Date	Modifier	Changes
1.0	01/15/2024	Aravind Buddana	Initial release
2.0	01/17/2024	Aravind Buddana	Updated FPDM DT LHD Variant
3.0	03/19/2024	Aravind Buddana	Updated the Power and respective calculations data.

End of Report