



EN 62311: 2008

AS REFERENCED BY TEST PLAN 11647276-TP1V6

RF EXPOSURE ANALYSIS REPORT

FOR

MILLIMETER WAVE RADAR SENSOR DEVELOPMENT BOARD

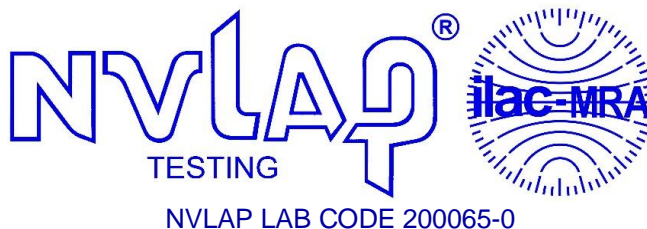
MODELS: AWR1843BOOST, IWR1843BOOST

REPORT NUMBER: 124554995-E3V1

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Prepared for
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12500 TI BLVD.
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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/31/2019	Initial Issue	M. Heckrotte

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: TEXAS INSTRUMENTS
12500 TI BLVD.
DALLAS, TEXAS 75243 USA

EUT DESCRIPTION: MILLIMETER WAVE RADAR SENSOR DEVELOPMENT BOARD

MODEL SERIES: AWR1843BOOST, IWR1843BOOST

SERIAL NUMBERS: 5498400022 (Rev. A) & 5727000006 (Rev. B)

APPLICABLE STANDARDS:	
STANDARD	TEST RESULTS
EN 62311: 2008 as referenced by Test Plan 11647276-TP1V6	Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

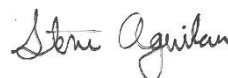
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Approved & Released For
UL Verification Services Inc. By:

Tested By:



MICHAEL HECKROTTE
PRINCIPAL ENGINEER
UL Verification Services Inc.



STEVE AGUILAR
TEST ENGINEER
UL Verification Services Inc.

2. METHODOLOGY

All calculations were made in accordance with EN 62311: 2008.

3. REFERENCES

EIRP measurements are documented in test report UL test reports 12554995-E1V2 and 12554995-E2V2.

4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

5. EUT DESCRIPTION

5.1. DESCRIPTION OF EUT

See Test Plan 11647276-TP1V6

Models AWR1843BOOST and IWR1843BOOST are Millimeter Wave Radar Sensor Development boards.

6. EN 62311 REQUIREMENTS - LIMITATION OF EXPOSURE

6.1. LIMITS

The following Reference levels for electric, magnetic, and /or electromagnetic fields as applicable, are excerpted from Table 2 as given in Council Recommendation 1999/519/EC:

Frequency Range	Equivalent plane wave power density (W/m ²)
2 – 300 GHz	10

6.2. ASSESSMENT METHOD

EN 62311 Clause 7.2 (1) and (2)

Fields at the typical user position are compared to the relevant Reference Levels. Calculations of Power Density are made using the far field equations given in EN 62311 Annex A.2.

The RF Exposure calculations in this report are based on a single band operating configuration where the device is not transmitting simultaneously with any other co-located radio.

6.3. RESULTS

Mode	Center Frequency (GHz)	EIRP (dBm)	EIRP (W)	Separation Distance (m)	Power Density (W/m ²)	Power Density Limit (W/m ²)
300 MHz	76.65	23.63	0.231	0.043	10.00	10
1300 MHz	77.76	20.06	0.101	0.028	10.00	10
4000 MHz	79.00	24.05	0.254	0.045	10.00	10

Average Power is used for the 300 MHz mode.

Peak Power is used for the 1300 MHz and 4 GHz modes.

7. CONCLUSIONS

The EUT complies with the RF Exposure Limits given in Council Recommendation 1999/519/EC for any separation distance greater than or equal to 5 cm under all modes of operation.

END OF REPORT